

City Hall and Council Building Electrical Distribution Report

City of Winnipeg
20-297-01 | SMS ENGINEERING LTD.

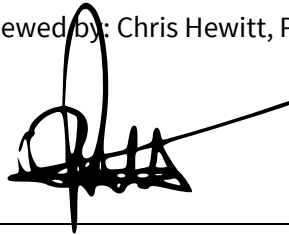
**FINAL Submission – opinion of probable cost Table 4
included**
May 18, 2021



ELECTRICAL
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Reviewed by: Chris Hewitt, P.Eng



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1 GENERAL

SMS Engineering Ltd (SMS) has been commissioned to compile a report which assesses and summarizes the condition of the electrical distribution at 510 Main Street (City Hall and the Council Building). SMS sub-contracted with McCaine Electric, who undertook the following scope of services:

- An electrical load analysis by power quality data logging. In addition to potentially capturing power quality events, this logging was used to determine the electrical load at 4 locations.
- Ultrasonic scanning of electrical equipment (this detects high frequency ultrasonic noise which can be caused by failing electrical components).
- A thermal scan of the main distributions, CDPs (within electrical rooms) and MCCs.
- Contact resistance testing of failed breakers (100A and above).
- Updating of the building's single line diagrams.

In addition to the scope of work conducted by McCaine Electric, SMS was also responsible for determining the existing building electrical load with a view to determining the scope to make potential to changes to the building.

With the exception of the emergency distribution, which was replaced in various phases, starting in 2008/7, much of the electrical distribution has exceeded its service life, and as such, its replacement should be considered.

2 ELECTRICAL DESCRIPTION

The building comprises two electrical services, provided by Manitoba Hydro, which are located in a vault within the City Hall Building. One service is at 600V (supplied from a 1500kVA utility owned transformer) and the other service is at 120/208V (supplied from a 1000kVA utility owned transformer). The two services are metered through one utility meter.

2.1 CITY HALL

The 600V utility transformer supplies electrical power to Distribution B, which is a 600V 3-phase, 3-wire distribution, rated at 3000A.

The distribution contains a newer MasterPact 3200A main air circuit breaker, with an electronic trip and a sub-breaker, which feeds mechanical equipment in the sub-basement. This breaker is older, now obsolete technology.

Distribution B also incorporates a bus-coupled CDP section, rated at 1200A, which, with the exception of one circuit breaker (normal power to L7-ATS01, contains now obsolete circuit breakers. A 500A breaker within this section provides power to the City Hall building (via a connecting tunnel).

The 120/208V utility transformer supplied electrical power to Distribution A, which is a 4000A, 120/208V distribution, with CDP and panel board sections. The main breaker is a newer 4000A Masterpact air circuit breaker. Two circuit breakers (1200A) supply power to the two main 1200A busduct risers, which riser vertically up the building, to supply power to the north and south sides of the building. All circuit breakers within Distribution A are obsolete.

The vertical 1200A busducts are generally unremarkable, and are direct connected via taps boxes, to 120/208V combination distributions located on each floor. These distributions are old, obsolete and cannot be maintained without shutting down power to the whole riser. A failure of a component of either riser would interrupt power to half the building.

Both Distributions A and B appear to be in generally unremarkable condition, but their age, and presence of obsolete breakers should be addressed. As a minimum, consideration should be given to the replacement of all obsolete breakers, with new.

The vertical busduct and the combination distributions on each floor are at end of life, and consideration should be given to their phased replacement. The replacement methodology is beyond the scope of this report. It is recommended that a separate study be commissioned to investigate and make recommendations.

City Hall incorporates a 750kVA emergency power generator and emergency power system. It comprises 4 Automatic Transfer Switches (ATS). One ATS relates to fire pump and the other three relate to emergency power to distributions. The three ATS are fed by emergency CDP, L7-ELD01 which is rated for 1000A, 600V. L2-ELD01 is fed from the generator. The generator and associated downstream distribution is largely newer, having been replaced as part of several phases of projects commencing in 2007/8.

2.2 COUNCIL BUILDING

A 500A circuit breaker in Distribution B in City Hall supplies power at 600V to Distribution A in an electrical room in the Council Building. The electrical room is at the end of the tunnel. Distribution A incorporates a 350kVA dry type transformer, which is interconnected to the 120/208V section of Distribution A, rated at 2000A. The distribution is old, and in poor condition. Its complete replacement should be considered, noting that its failure would result in loss of power to the entire Council Building and its many important functions. Emergency power is also limited in the Council Building, which further adds to the concern, and consideration should also be given to diverting some emergency power over from the City Hall generator to the Council Building to back up essential functions.

3 HISTORICAL ELECTRICAL LOAD SUMMARY

Historical electrical demand loads we provided by Manitoba Hydro. The information provided indicates that the building load consumption is close to 800 kVA, with a 5-year peak consumption of 860 kVA in Sep. 2017 and May. 2018.

The data provided for 2020 is less reliable, since the building was not operating at its normal electrical capacity due to the building being largely vacant due to the pandemic. As a result, the demand loads between March and the end of the year are slightly reduced. Additionally, the electrical demand, especially in the summer, will be affected by seasonal temperature variation.

4 HISTORICAL LOAD DATA

The most recent annual data refers to 2019, as shown in Table 3 below, together with a comparison with the data provided for 2019:

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
2019	738	762	762	771	758	735	708	725	705	714	768	770
2020	741	731	746	716	699	693	701	686	713	651	n/a	n/a

Table 3: Highest recorded average-15-minute demand (kVA) in 2019 with comparison to 2020

5 LOAD ESTIMATE AND EXPANSION CAPACITY

McCaine Electric installed four data loggers, which each logged electrical information for a period of a week. Here, the logged loads of the normal and emergency distributions are provided and compared to the rated capacity of the system to provide the spare capacity for future expansion.

5.1 NORMAL POWER SYSTEM

Given the utility metering is a summation of the 600V and 120/208V services to the building, power measurements were undertaken at the 600V distributions in City Hall and the Council Building and the 120/208V distribution at City Hall. The measurements were undertaken using Fluke PQ meter for one week in the month of December. The obtained results are mentioned below for each distribution:

City Hall Main Distribution A, rated at 4000A, 120/208V		
Phase A: 160A	Phase B: 245A	Phase C: 275A
Electrical demand = 82kVA		
Note, on February 12, 2021, the load was measured at 178kVA		

Table 4a - City Hall Main Distribution A, Load Demand

Notes:

1. The load on Phase A is unbalanced, with respect to Phases B and C. This should be addressed.

2. There is approximately 900kVA spare capacity on the utility's transformer. The distribution switchboard is rated above the transformer's rating, meaning the transformer is the limiting factor.

City Hall Main Distribution B, rated at 3000A, 600V		
Phase A: 700A	Phase B: 700A	Phase C: 700A
Electrical demand = 720kVA		
Note, on February 12, 2021, the load was measured at 525kVA		

Table 4b - City Hall Main Distribution B, Load Demand

Notes:

1. The load well balanced, since the secondary of the utility transformers are wired in delta configuration.
2. There is ample spare capacity on the 600V distribution.
3. There is approximately 780kVA spare capacity on the utility's transformer. The distribution switchboard is rated above the transformer's rating, meaning the transformer is the limiting factor.

Council Building Main Distribution A, rated at 2000A, 120/208V		
Phase A: 158A*	Phase B: 158A*	Phase C: 158A*
Electrical demand = 57kVA		

Table 4c - Council Building Main Distribution A, Load Demand

Notes:

1. The load well balanced, since the secondary of the utility transformers are wired in delta configuration.
2. The loads indicated above are expressed at 120/208V. They were measured on the 600V side of the transformer at 55A, and reflected through the transformer, to the secondary side.
3. The Council Building distribution is fed at 600V from City Hall via a 500A breaker.
4. There is ample spare capacity on both the Council Building Transformer (350kVA) and the 500A breaker.

5.2 EMERGENCY POWER SYSTEM

Only L7-ATS01 has been measured and logged. A load of 130A per phase was recorded. Based on this load, and the overall building load, there is ample spare capacity in the existing emergency power system

6 ULTRASONIC SCANNING

McCaine Electric performed ultrasonic scanning as part of their safety protocols, prior to working on equipment, to detect for signs of electrical failure. No problems were reported.

7 INFRA RED (IR) SCANNING

McCaine Electric performed an IR scan of the building and documented their findings in Appendix B. IR Scanning is a useful preventative maintenance tool used to identify and locate signs of excessive heat, which can be caused by resistance heating. Resistance heating can be caused by loose connections or equipment failure.

While conducting IR scans on a fully loaded system is ideal, it is not always possible to achieve this condition. As a result, it is recommended to do the test when the load is not less than 40% nominal. Given the building is largely unoccupied, due to the global pandemic, the electrical loads were in some cases less than ideal.

An IR Scan provides an absolute temperature (ie the actual measured temperature of the component being scanned). The ambient temperature at the time of scan should be reported and the color legend threshold should be set for each specific device based on the device temperature rise.

Here, the ambient temperature of 20 °C and minimum temp. rise of 55 °C is considered for the system.

Special care must be given to unbalanced colours as it shows imbalanced loading or different contact resistances.

Table 1 below summarizes the recommended activities which are required to be carried out during regular maintenance:

Equipment Name	Equipment Location	Required activity
Disconnect Switch DISC-A21 Cutler Hammer 1HD363NF	Humidifier Mech Room 7-7	Clean all contacts, re-lubricate blades, and testing using a DLRO (DC861 IR1153)
Disconnect Switch DISC-A23 Cutler Hammer 1HD363NF	Humidifier Mech Room 7-7	Clean all contacts, re-lubricate blades, and testing using a DLRO (DC861 IR1153)
Disconnect Switch DISC-A24 Cutler Hammer 1HD362NF	Humidifier Mech Room 7-7	Clean all contacts, re-lubricate blades, and testing using a DLRO (DC861 IR1153)
Disconnect Switch DISC-A57 Cutler Hammer	Humidifier Mech Room 7-4	Clean all contacts, re-lubricate blades, and testing using a DLRO (DC861 IR1153)
Disconnect Switch DISC-A58 Cutler Hammer 1HD363NF	Humidifier Mech Room 7-4	Clean all contacts, re-lubricate blades, and testing using a DLRO (DC861 IR1153)
Breaker BCP-A61 Federal Pioneer NBLP42B	Ups 40 Panel A Computer Room 7-03	Re-terminate all three phases exercise the breaker and retest.
Breaker BCP-A54 Federal Pacific NAKP-42-4L	Panel E Computer Room 7-03	Re-terminate all three phases exercise the breaker and retest.
Breaker BCP-A76 Federal Pacific NALP 30-4AB	Panel B Distribution 600	Replace both Federal 15A 1P NA breakers. Tag the connected load
Breaker BCP-A90 Federal Pacific NALP 30-4AB	Panel B Distribution 400	Replace Federal 15A 1P NA breaker. Directory labels load as "Building Secretary".
Breaker BCP-A149 Federal Pacific NALP 12-4AB	Panel Y B101 Riser	Replace & re-terminate 15A 1P Federal NA breaker. Tag the connected load.
Disconnect Switch DISC-A216 Cutler Hammer IHD363NF	Humidifier Council Fan Room	Clean all contacts, re-lubricate blades, and testing using a DLRO (DC861 IR1153)
Breaker BCP-A118 Federal Pacific NALP 12-4AB	Panel A 2nd Floor Riser	Replace & re-terminate 15A 1P Federal NA breaker. Tag the connected load.

Table 1: Equipment requiring corrective action at the next regular maintenance

Table 2 below summarizes equipment in need of more urgent corrective action:

Equipment Name	Equipment Location	Required activity
Breaker BCP-A115 Federal Pacific NALP 42-4AB	Panel D 2nd Floor Riser	Schedule shut down to clean connection points at lugs and re-terminate B phase connection. If problem persists, replace breaker.
Breaker BCP-A192 Federal Pacific NALP 42-4L	Panel A Sub Basement	Schedule shut down to clean connection points at lugs and re-terminate B phase connection. If problem persists, replace breaker.

Table 2: Equipment requiring immediate action

7.1 THERMAL SCANNING OF THE BUS DUCTS

In the case of the City Hall Building, the busducts are in part located in relatively inaccessible locations, behind the electrical combination distributions on each floor. In addition, each section of busduct contains a joint, which is enclosed under a cover. It is not possible to thermally scan each section and each joint. However, where possible, scans were undertaken. It should be noted that the building 120/208V electrical was relatively low, due to the building's low occupancy, and therefore where IR scanning was undertaken of the busduct, its value is limited.

8 CONTACT RESISTANCE

Contact resistance measurements is a task undertaken if excessive heat is revealed as circuit breakers are IR scanned. The excessive heat could be a sign of an internal high resistance within the breaker at the circuit breaker's contacts. To determine if this is the issue, the contact resistance is measured. No issues were revealed as part of the IR scan, and therefore contact resistance measurements were not required.

9 DISTRIBUTION OBSERVATIONS

While infrared-scanning equipment, McCaine noted some deficiencies, which should be addressed. These are outlined in McCaine's report in Appendix B and summarized in Table 3 below. A number of these items affect safety, and should be addressed immediately.

Equipment Name	Equipment Location	Required activity
Disconnect Switch DISC-A11	Boiler Room 7-8 Emergency Panel elevator Room	Excessive corrosion throughout disconnect. Replace with new 30A 250V 3P 4W SN Fusible Disconnect
Elevator ATS A18 (URGENT)	Boiler Room 7-8	Control transformer has faulted and appears to be left in an unsafe state. Repair components if available, if

		unavailable new switch may be required.
TR-A	Boiler Room 7-8	Excessively dirty and dusty. Clean it.
Breaker BCP-A89	Panel A 4th Floor	CCT 30 has doubled up wires under one breaker. Replace single 15A 1P NA breaker with two NC Breakers.
Panel ZZ	System & Tech Room	Panel is inaccessible to be serviced due to millwork encasing it. Modify to larger door on millwork.
Panel C (URGENT)	Sub Basement Fan Room	Bottom of panel is missing dead front. Order or fabricate replacement.
Panel C	Mayor office Storage	Cannot Access panel due to server rack in the way. Move Rack if possible.
Breaker BCP-A118	Panel A 2 nd Floor	Insulation has shrunk back exposing bare conductors. Re-terminate conductors.
Panel B (URGENT)	Basement Gym	Wires not capped in panel. Cap off wires.

Table 3: Equipment deficiencies

10 POWER QUALITY STUDY

The Manitoba Hydro defines the power quality requirements for point of interconnection (POI) into their system a standard called Power Quality Specification PQS2000. The main parameters of concern in PQS2000 at the POI are Harmonics, Voltage Unbalance, Flicker, Frequency, and Power Factor. Of these items, voltage and frequency is in the utility domain and the grid operator is responsible to provide and maintain a steady voltage and frequency for consumers at the POI.

Maintaining an acceptable level of harmonic distortion and a reasonable power factor is consumer's responsibility. While a full power quality audit and PQS2000 review is beyond the scope of this report, the data logging undertaken by McCaine Electric provides some insight in to how the building is performing against PQS2000.

It is recommended that a PQS2000 compliance study is arranged with Manitoba Hydro.

10.1 CITY HALL MAIN DISTRIBUTION B, RATED AT 3000A, 600V

- Frequency unbalance:

According to the measurement, the grid frequency was in the range of 59.95 to 60.04 which was in acceptable fluctuation range.

- Voltage unbalance:

According to Table 1 in PQS2000, the maximum 4% unbalance in supply voltage should be acceptable at POI. According to the measurement, the voltage unbalance was in the range of 0.05% to 0.45% which was acceptable.

- Flicker

Design limits for flicker levels are outlined in Table 7 of PQS 2000, which specifies the maximum values of $P_{ST}=1$ and $P_{LT}=0.8$. Customer measured limits shall be at or below this value for 99% of measurement period. This measurement could be done using a standard flicker meter. Measurement at the City Hall's Main Distribution B was performed using Fluke meter model 435-II which is not capable of measuring flicker (only 430 and 430-II series measure flicker).

- Power Factor

The power factor measurements were not undertaken. It is required to measure the power factor using an appropriate data logger to evaluate the requirement of reactive compensation.

Given consumers are financially penalized for poor power factor, it is recommended that a power factor study be performed, including measurement and mitigating measures, such as power factor correction.

- Harmonics

It should be noted that the harmonic condition at the POI cannot be addressed here since only the voltage and current THD have been measured and reported and individual harmonic levels have not been measured. This is required in order to create a benchmark for comparing to corresponding tables in PQS2000¹. However, based on the reported data, the current and voltage Total Harmonic Distortion (THD) are as follows:

Current THD: 17% Voltage THD: 0.9%

The THD (voltage) are within the acceptable range.

Regarding current THD, it is not possible to decide whether it is acceptable or not. since it requires the fault level data and individual harmonic levels up to harmonic 35. What can be said is that since the above measurement has been carried out on the

¹ Tables 2 and 5 of PQS2000

secondary of the main transformer and the delta connection of the transformer mitigates the 3rd harmonics, the overall voltage and current THD at the POI will be lower than above-mentioned values.

10.2 CITY HALL MAIN DISTRIBUTION A, RATED AT 4000A, 120V/208V

The log file was not provided at the time of this report, but the following is expected based on the engineering judgment;

- Frequency and Voltage unbalance:

Being connected to the same point of the utility, the voltage and frequency is in the same condition as mentioned for Main Distribution B.

- Flicker and Power Factor

As mentioned above, flicker and power factor condition cannot be addressed based on the logged data.

- Harmonics

Based on the load type and level, and the values recorded at Distribution B, as noted above, it is expected to have an acceptable voltage THD at the POI. Current THD cannot be addressed as noted above.

10.3 COUNCIL BUILDING DISTRIBUTION A, RATED AT 1000A, 120V/208V

The measurement has been done at the primary side of the main transformer.

- Frequency unbalance:

According to the measurement, the grid frequency was in the range of 59.94 to 60.04 which was in acceptable fluctuation range.

- Voltage unbalance:

According to the measurement, the voltage unbalance was in the range of 0.3% to 0.5% which was acceptable.

- Flicker

As mentioned above, assessing the flicker is not possible.

- Power Factor

The power factor measurements were not undertaken. It is required to measure the power factor using an appropriate data logger to evaluate the requirement of reactive compensation.

Given consumers are financially penalized for poor power factor, it is recommended that a power factor study be performed, including measurement and mitigating measures, such as power factor correction.

- Harmonics

It should be noted that the harmonic condition at the POI cannot be addressed here since only the voltage and current THD have been measured and reported and individual harmonic levels have not been measured. This is required in order to create a benchmark for comparing to corresponding tables in PQS2000². However, based on the reported data, the current and voltage Total Harmonic Distortion (THD) are as follows:

Current THD: 7% Voltage THD: 1%

The THD (voltage) are within the acceptable range.

Regarding current THD, it is not possible to decide whether it is acceptable or not, since it requires the fault level data and individual harmonic levels up to harmonic 35. What can be said is that since the above measurement has been carried out on the secondary of the main transformer and the delta connection of the transformer mitigates the 3rd harmonics, the overall voltage and current THD at the POI will be lower than above-mentioned values.

11 RECOMMENDATION

The following actions are recommended. An opinion of probable cost has been indicated against each item. The opinion of probable cost is a Class D level (+/- 25%) and includes contractor mark up and overhead.

1. Perform the corrective measures as indicated in Tables 1 and 2, during the next regular maintenance overhaul. Given the occupancy levels within the building, due to the Pandemic, it is recommended that this work be performed within the coming months. Perform the corrective measures as indicated in Table 2, as soon as possible.

Opinion of probable cost: \$4,500 including RST, excluding GST.

² Tables 2 and 5 of PQS2000

2. Perform corrective measures as outlined in Table 3.

Opinion of probable cost: \$25,500 including RST, excluding GST.

3. Distribute the single phase loads more evenly on the City Hall's Main Distribution A. This distribution will need to occur at the panelboard level. It should be noted that at present, the 120/208V load in the building will not be representative of the normal conditions, since the building's occupancy is low. As such, this measure should be deferred to such a time as the building's normal occupancy is returned.

Opinion of probable cost: \$5,000

4. Commission a PQS2000 study from Manitoba Hydro.

Opinion of probable cost: Usually no cost from the utility

5. Measure the power factor and consider power factor correction measures.

See Table 4 below.

6. Given the age of the main distribution and distributions throughout the building, it is recommended that a plan be created to determine the cost and feasibility of a phased replacement of the entire distribution. This will be a major project, and will require planning and coordination to allow the building to continue to be occupied. City Hall Distributions A and B likely could be upgraded with new circuit breakers, retrofitted in to the existing distributions. Distribution A in the Council Building requires replacement.

See Table 4 below.

7. A protective device coordination and arc flash study is highly recommended to identify and correct any protective device settings which may result in poor electrical protection coordination.

Opinion of probable cost: \$24,000

8. The following table has been created to summarize the major infrastructure recommendations, priorities and opinion of probable costs. The opinions of probable cost in brackets include a 20% contingency and an allowance of 7.5% for engineering fees.

Priority	Description	Opinion of Probable Cost	Year
1	600V/Distribution B (Admin)	\$89641.46 (\$115,637.48)	2021
2	Distribution A 120/208	\$223,068.05 (\$287,757.78)	2022
3	Distribution A (council)	\$137,845.82 (\$177,821.11)	TBD (structural issues to be evaluated)
4	Power factor Correction	\$55,336.74 (\$71,384.39)	2022
5	Distribution B (102)	\$279,933.91 (\$361,114.74)	2023 (or later as required)
6	Bus Duct Riser Distributions	\$480,301.09 (\$619,588.41)	2023 (or later as required)

Table 4 – Opinion of Probable Cost for Major Infrastructure Recommendations

APPENDIX – A – Photographs



Photo 1 – City Hall Distribution B (600V)

Notes:

1. Main breaker is newer



Photo 2 – City Hall Distribution B - Sub-Basement Air Conditioning Breaker

Notes:

1. Breaker is obsolete



Photo 3 –1200A CDP Section of City Hall Distribution B

Notes:

1. Breakers (except L7-ATS01) are obsolete.



Photo 4 – City Hall Distribution B Breaker Supplying Council Building

Notes:

1. Breaker is obsolete. Failure of maintenance of this breaker will interrupt power to the Council Building.



Photo 5 – City Hall Distribution A

Notes:

1. The main breaker is newer
2. The sub-breakers are obsolete.



Photo 6 – Electrical Vault in City Hall



Photo 7 – City Hall Distribution B – Electrical Load on Feb 12, 2021



Photo 8 – City Hall Distribution A – Electrical Load on Feb 12, 2021



Photo 9 – City Hall Combination Distributions (Typical of two per floor, vertically stacked in risers)

Notes:

1. Distributions are obsolete.
2. Maintenance is not possible without isolating whole riser (half of building).



Photo 10 – City Hall Busduct Riser (Typical)

Notes:

1. Box in front of busduct is not accessible
2. Box is a tap, and therefore power to combination distribution cannot be isolated on a per floor basis.



Photo 11 – City Hall MCC

Notes:

1. MCC is obsolete and spare parts will be difficult to source.



Photo 12 – City Hall Sub-Basement Emergency Power Distribution



Photo 13 – City Hall Level 7 Emergency Power Distribution

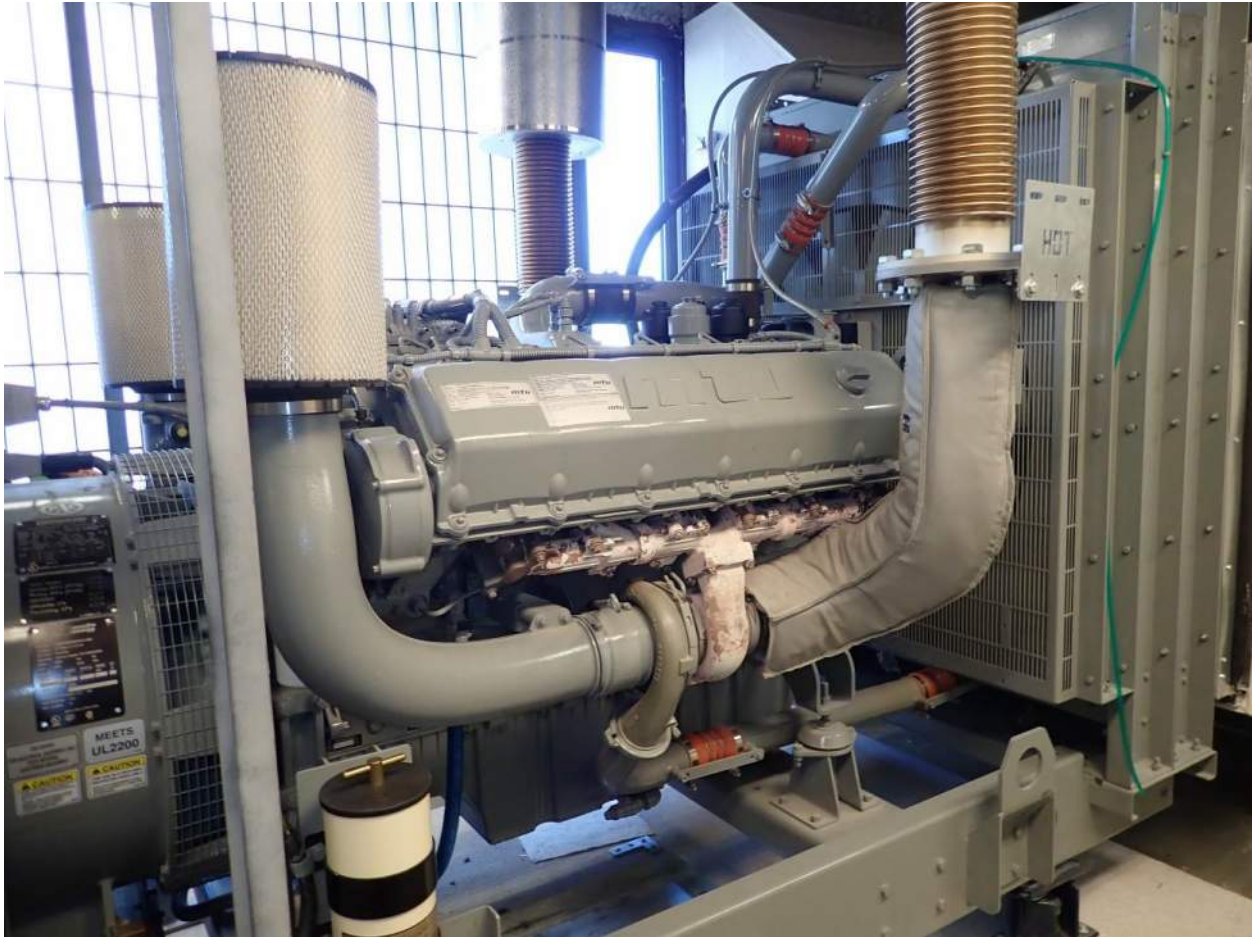


Photo 14 – City Hall Generator (750kVA)



Photo 15 – Council Building Distribution A - Transformer Section

Notes:

1. Transformer and distribution are obsolete and past their end of service life.



Photo 16 – Council Building Distribution A

Notes:

1. Distribution is obsolete and beyond its service life.



Photo 17 – Council Building MCC

Notes:

1. MCC is obsolete and spare parts will be difficult to source.

APPENDIX – B – McCaine Electric Reports

City Hall 510 Main Street



IR Scan
Prepared By:

mCONE™

Member of the **Canem Group**

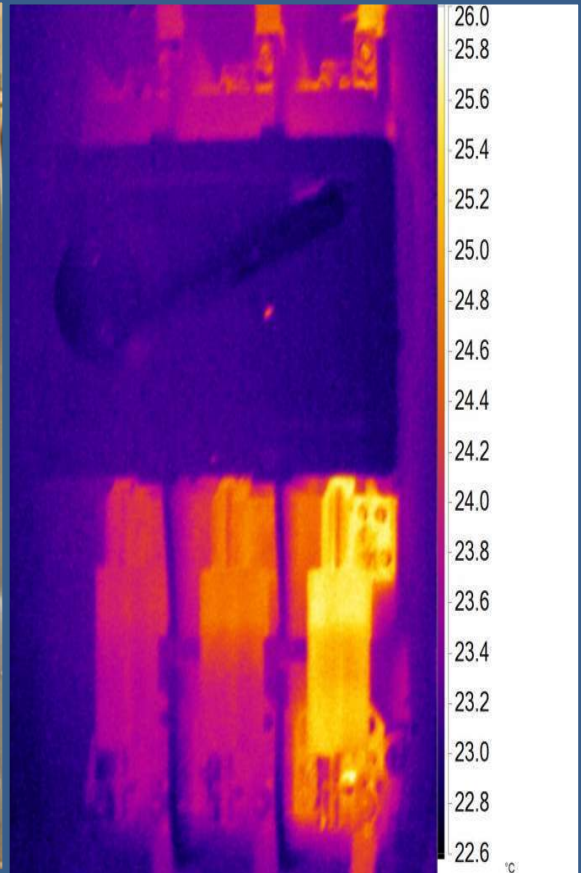
Section

Administration
Building

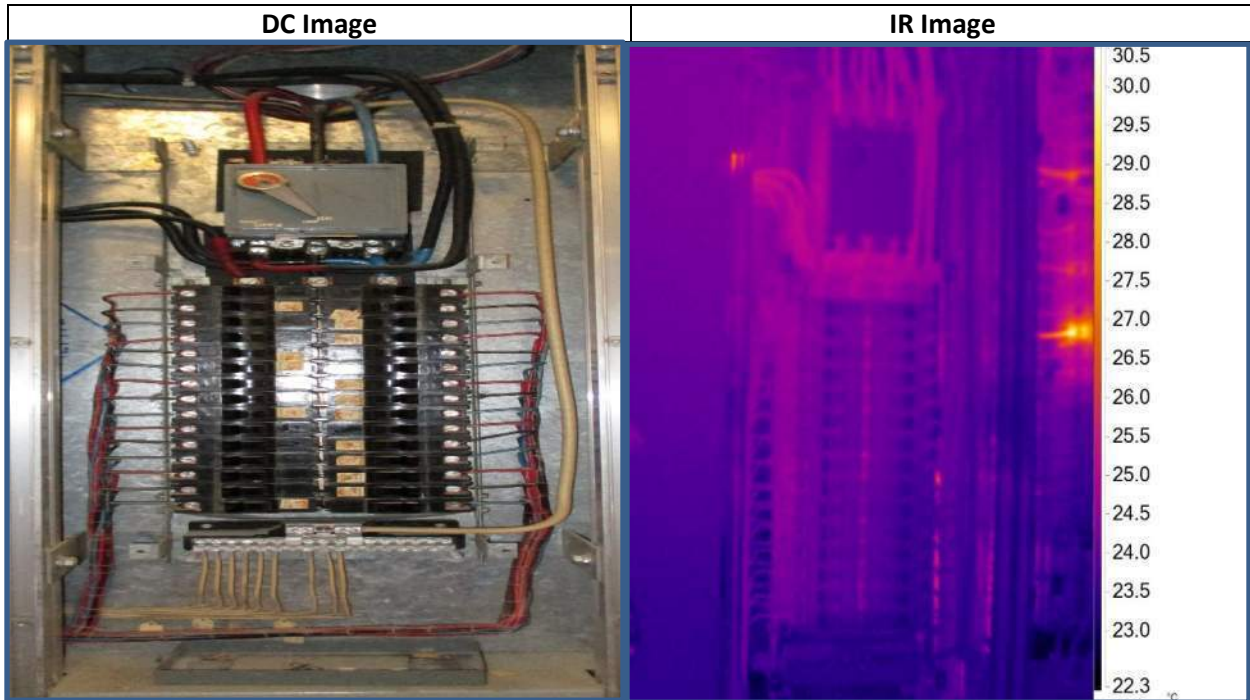
Section

1st
Floor

Location	Distribution 100
Description	Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00124

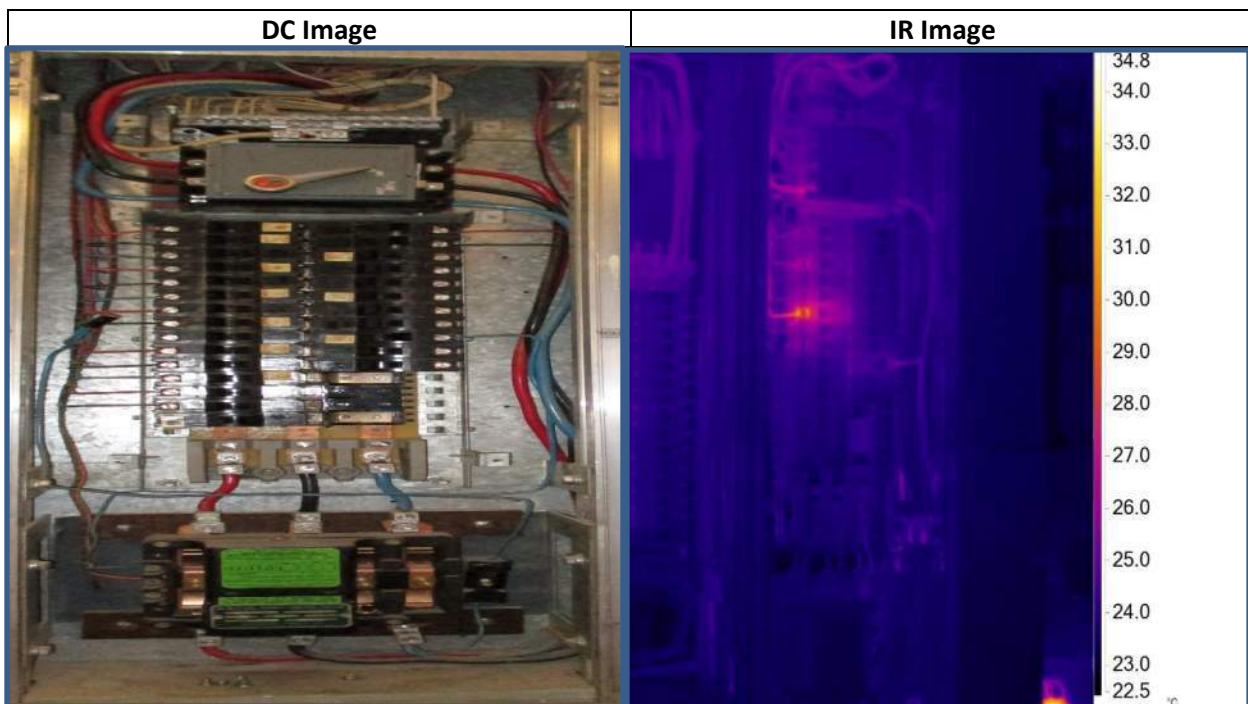
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SN Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 TWU	Safety Notes: DC910 IR1198

Location	Distribution 100
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A00125



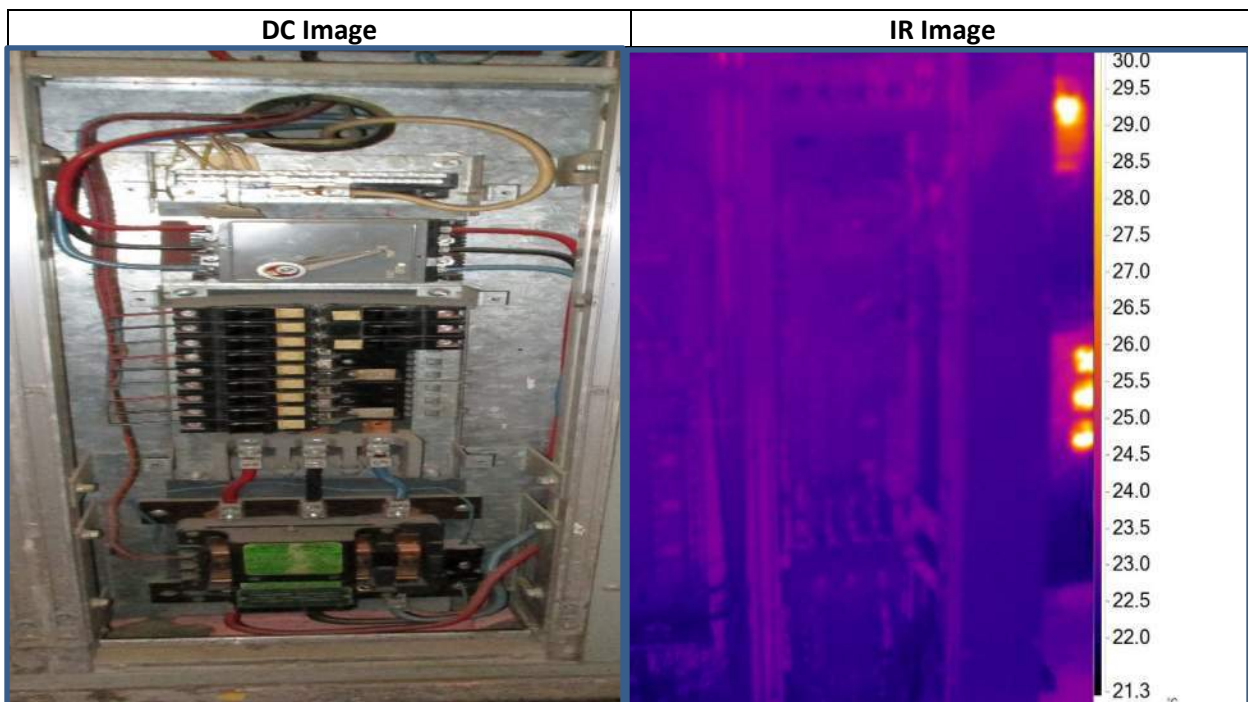
Application Notes:	Safety Notes:
Make: ederal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	DC911 IR1199 MCCB NEF431070R

Location	Distribution 100
Description	Panel K Section 1
System	120/208 3P 4W
ID Tag Number	BCP-A00126



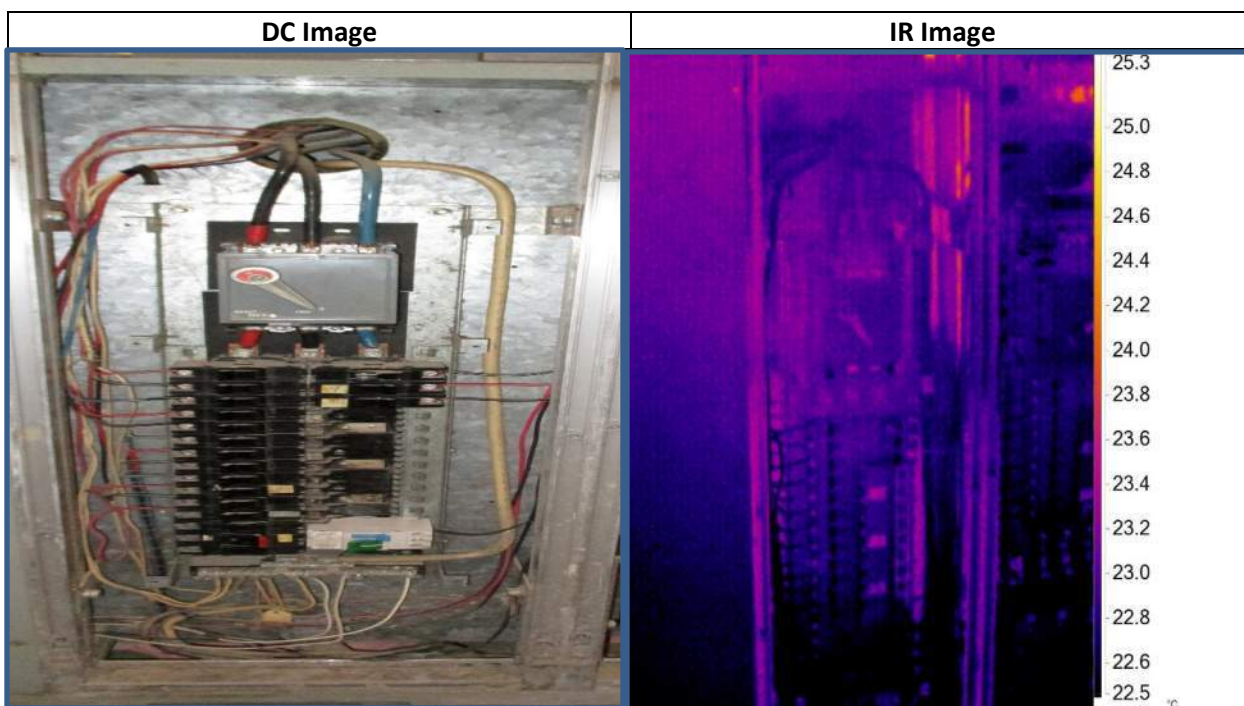
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 26 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC912 IR1200 MCCB NEF431070R
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Location	Distribution 100
Description	Panel K Section 2
System	120/208 3P 4W
ID Tag Number	BCP-A00127



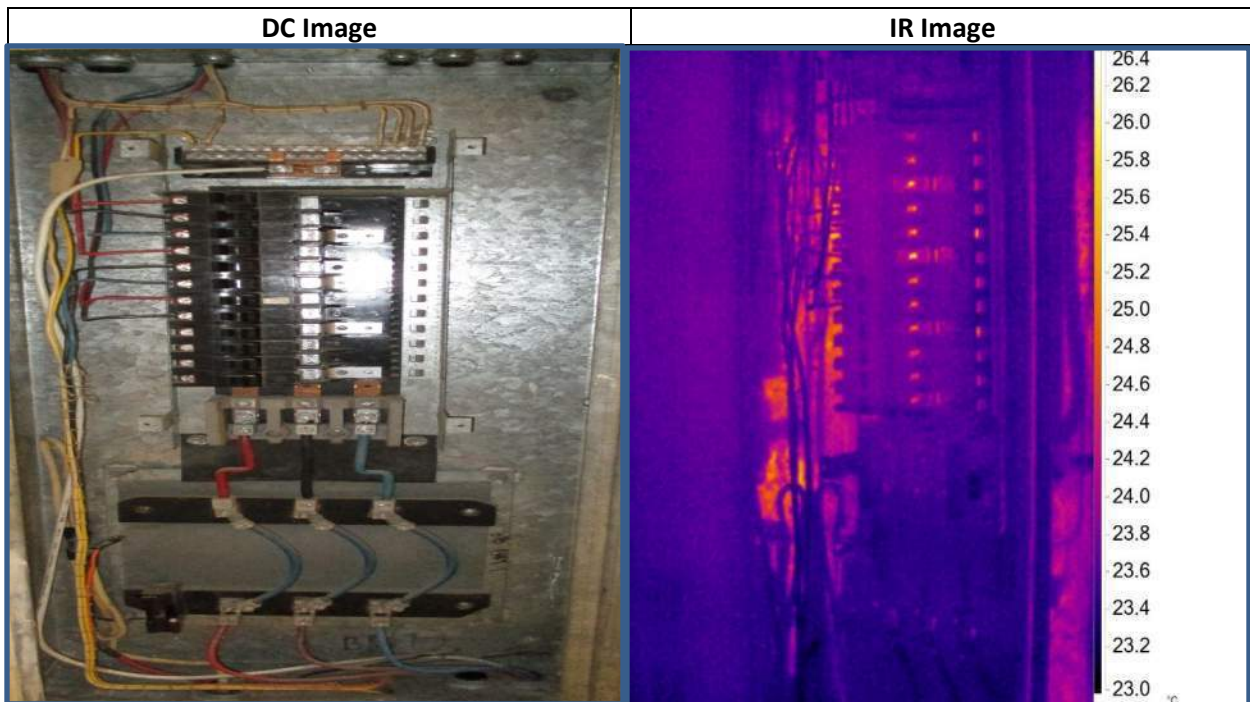
Application Notes: Make: Federal Pacific Model: NALP 18-4 AB Circuits: 18 In Use: 12 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC913 IR1201 MCCB NEF431030
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Location	Distribution 100
Description	Panel MM
System	120/208 3P 4W
ID Tag Number	BCP-A000128



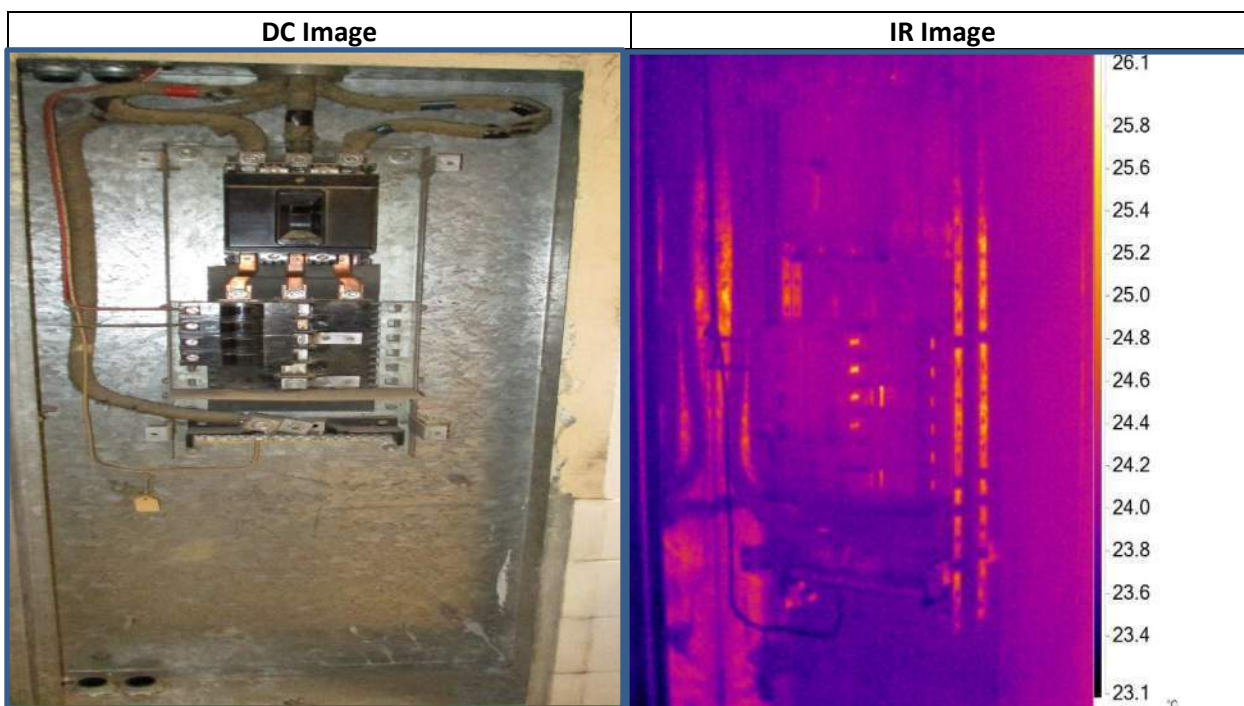
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 20 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC914 IR1202
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Location	Distribution 100
Description	Panel BB
System	120/208 3P 4W
ID Tag Number	BCP-A000129



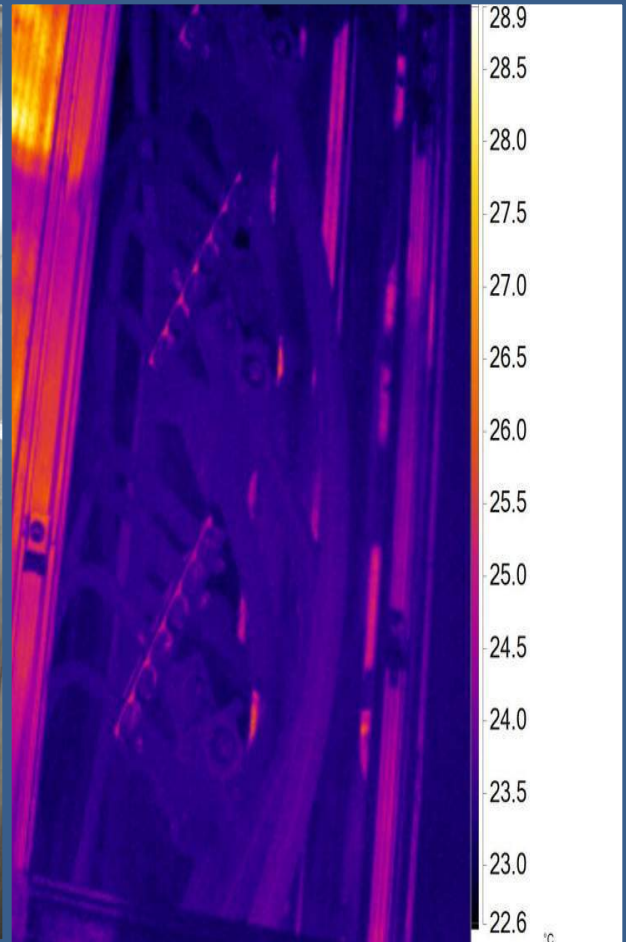
Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 12 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC915 IR1203
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Location	Distribution 100
Description	Panel RR
System	120/208 3P 4W
ID Tag Number	BCP-A00130

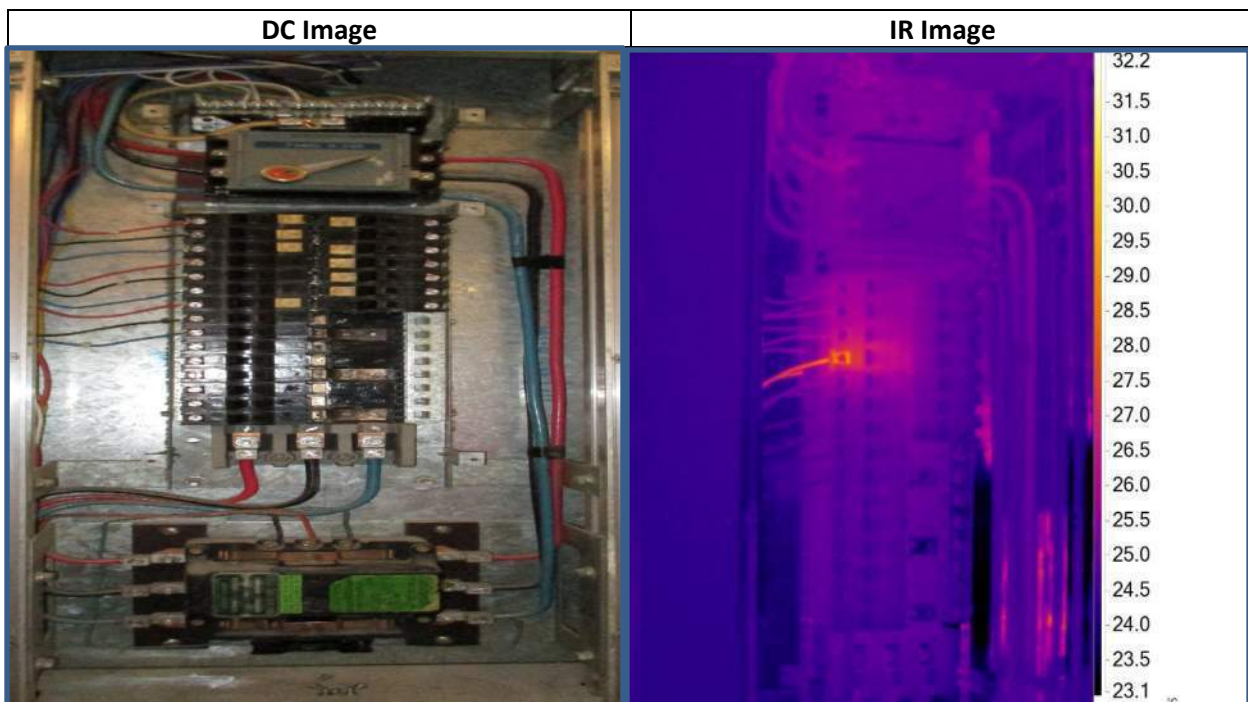


Application Notes: Make: Federal Pacific Model: NALP 12-4 AB Circuits: 12 In Use: 4 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC916 IR1204 MCCB NEF431030
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Location	Distribution 100
Description	Distribution 100 Splitter
System	120/208 3P 4W
ID Tag Number	JB-A00174

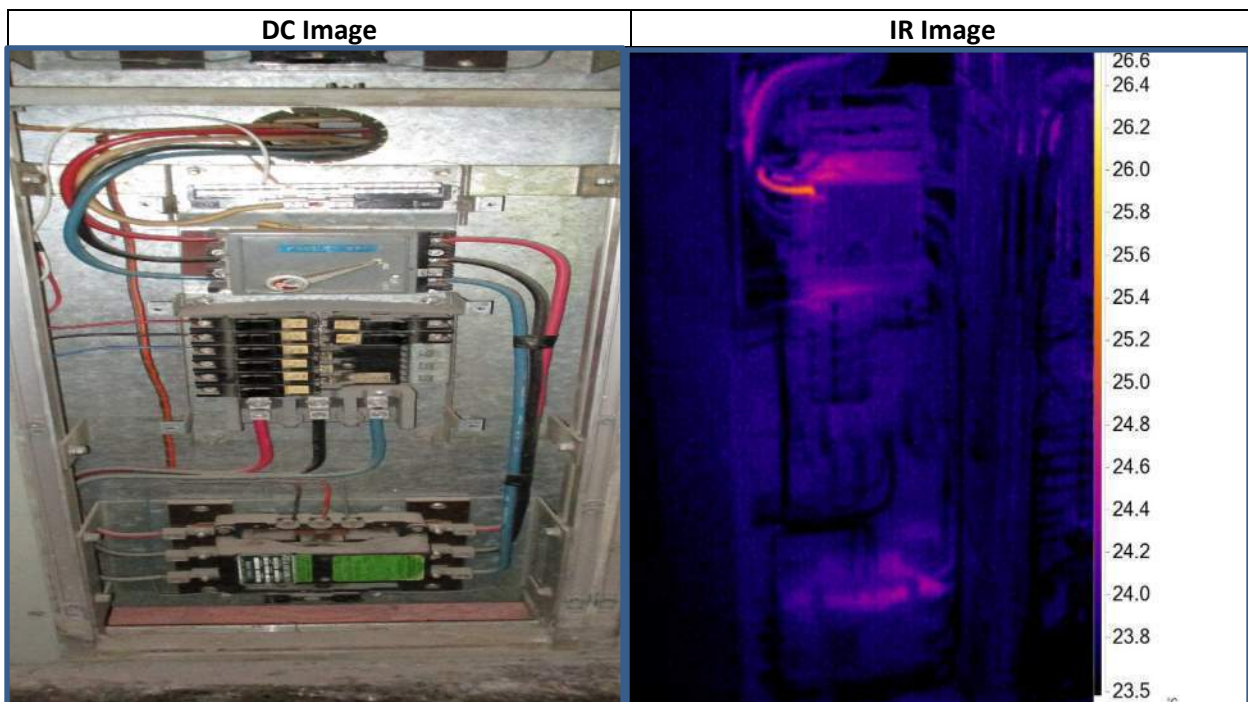
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-47 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU Cu	Safety Notes: DC917 IR1205

Location	Distribution 101
Description	Panel H Section 1
System	120/208 3 P 4W
ID Tag Number	BCP-A00133



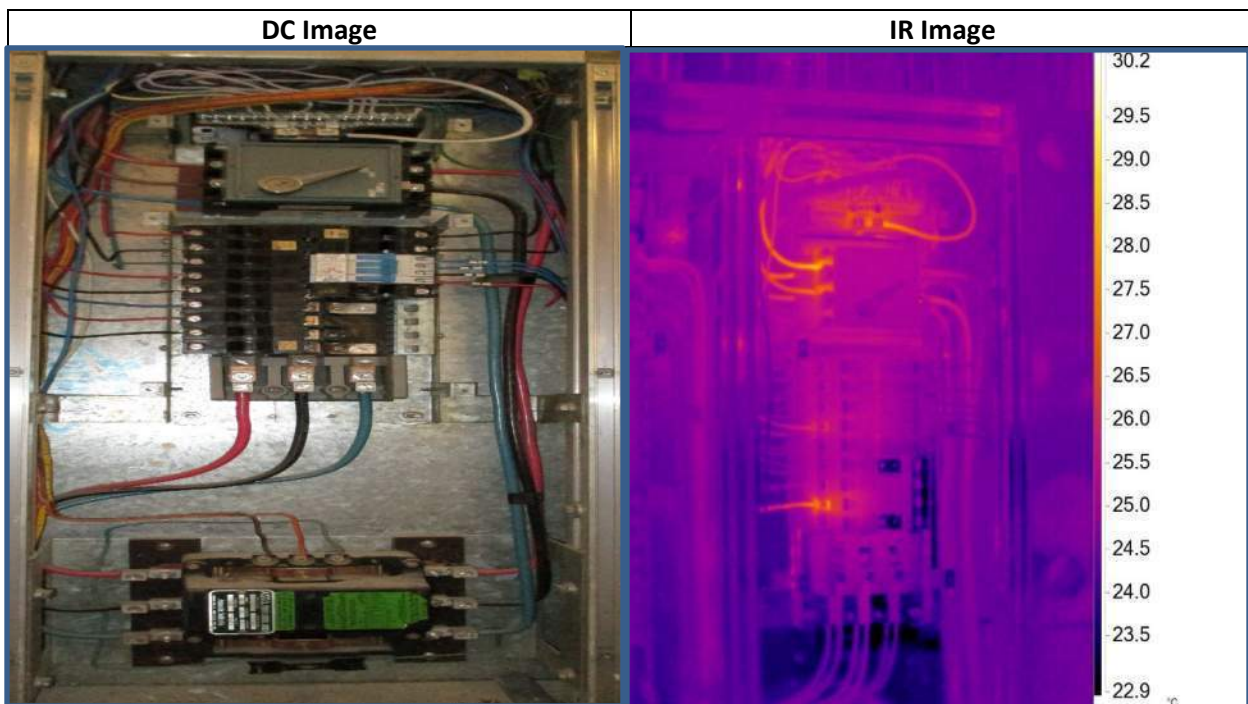
Application Notes: Make: Federal Pacific Model: NALP30-4AB Circuits: 30 In Use: 22 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC919 IR1207 MCCB NEF431070R
--	---

Location	Distribution 101
Description	Panel H Section 2
System	120/208 3P 4W
ID Tag Number	BCP-A00134



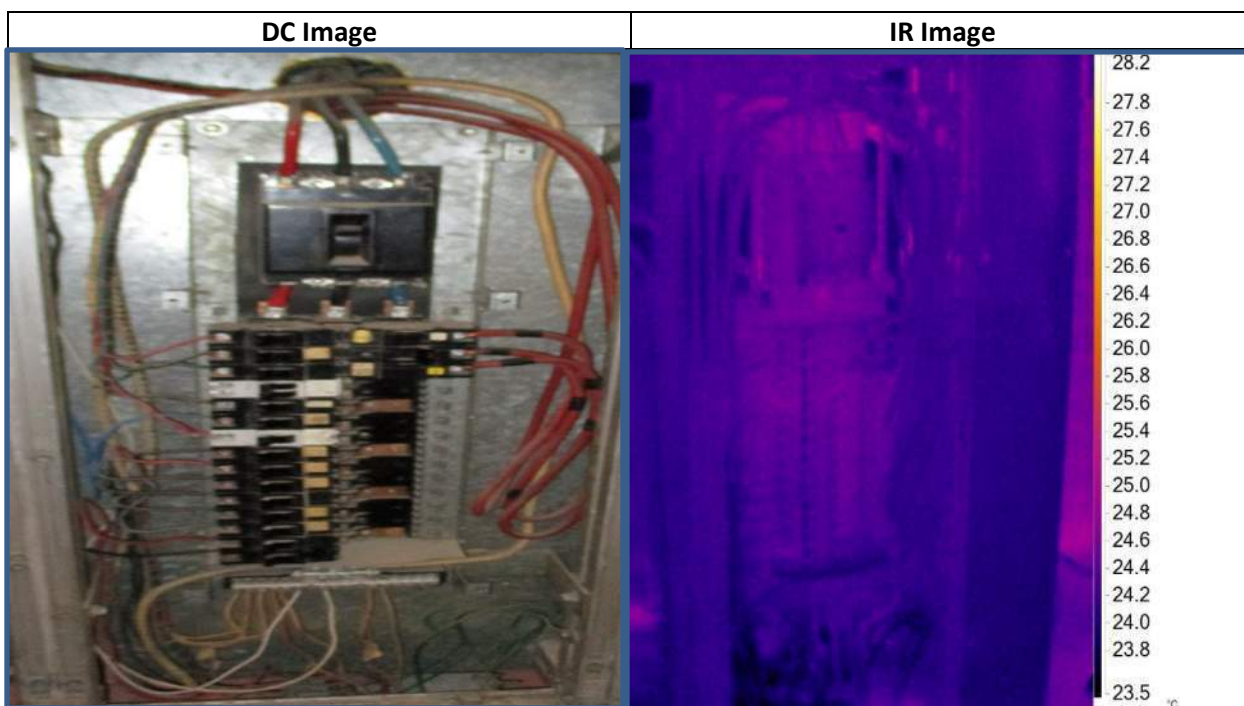
Application Notes: Make: Federal Pacific Model: NALP 12-4 AB Circuits: 12 In Use: 8 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC920 IR1208 MCCB NEF431030R
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Location	Distribution 101
Description	Panel CC
System	120/208 3P 4W
ID Tag Number	BCP-A00135



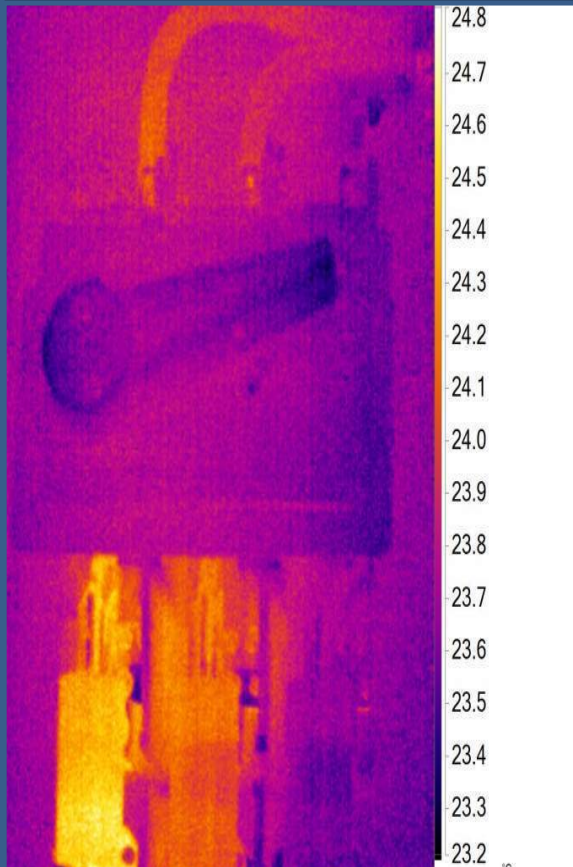
Application Notes: Make: Federal Pacific Model: NALP18-4AB Circuits: 18 In Use: 14 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC921 IR1209 MCCB NEF431050R
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Location	Distribution 101
Description	Panel LL
System	120/208 3P 4W
ID Tag Number	BCP-A00136

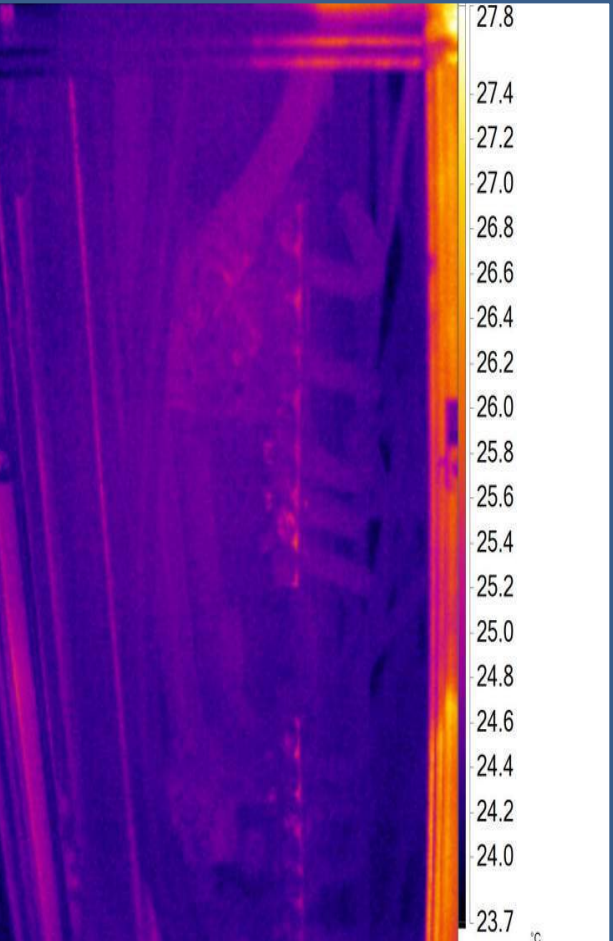


Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 18 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #4 TW Cu	DC922 IR1210

Location	Distribution 101
Description	Distribution 101 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00137

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SN Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 TWU Cu	Safety Notes: DC918 IR1206

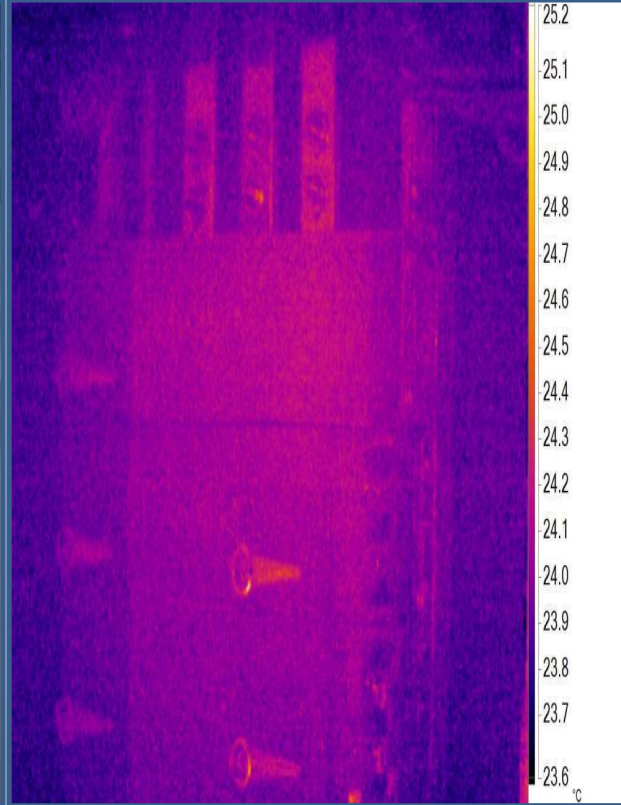
Location	Distribution 101
Description	Distribution 101 main Disconnect
System	120/208 3P 4W
ID Tag Number	JB-A001175

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-52 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU	Safety Notes: DC923 IR1211

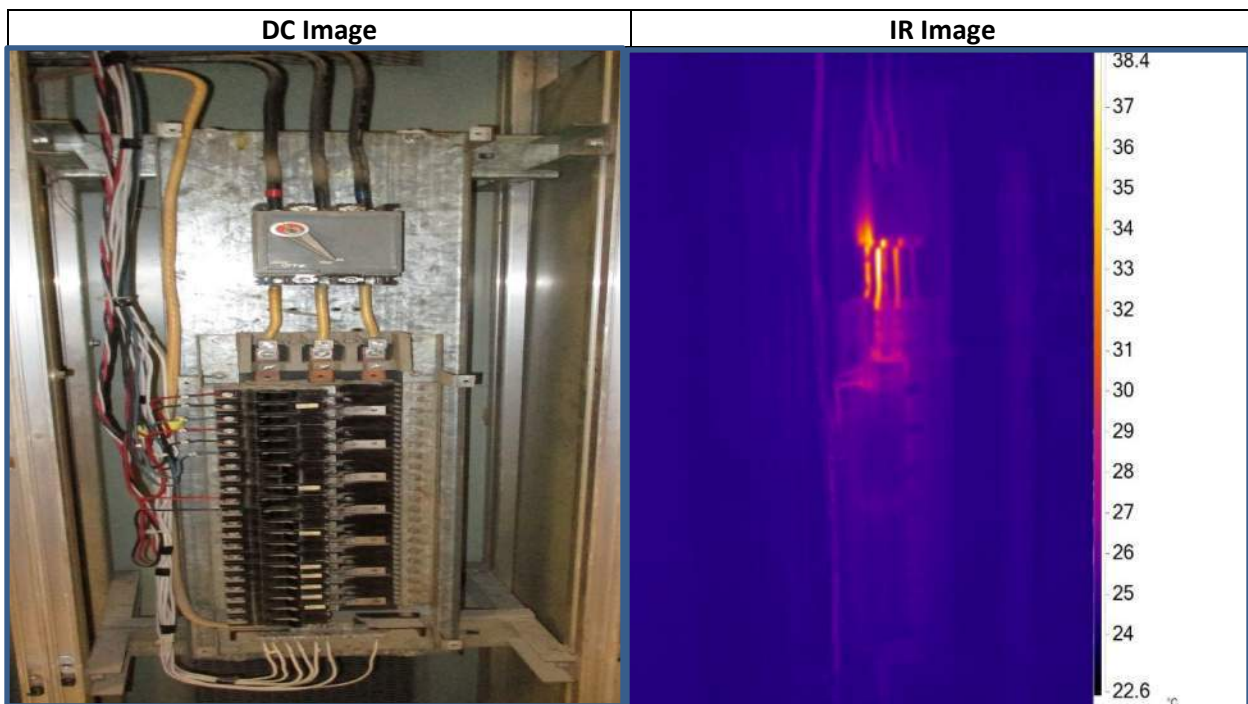
Section

2nd
Floor

Location	Distribution 200
Description	Dist 200
System	120/208 3P 4W
ID Tag Number	DP-A00114

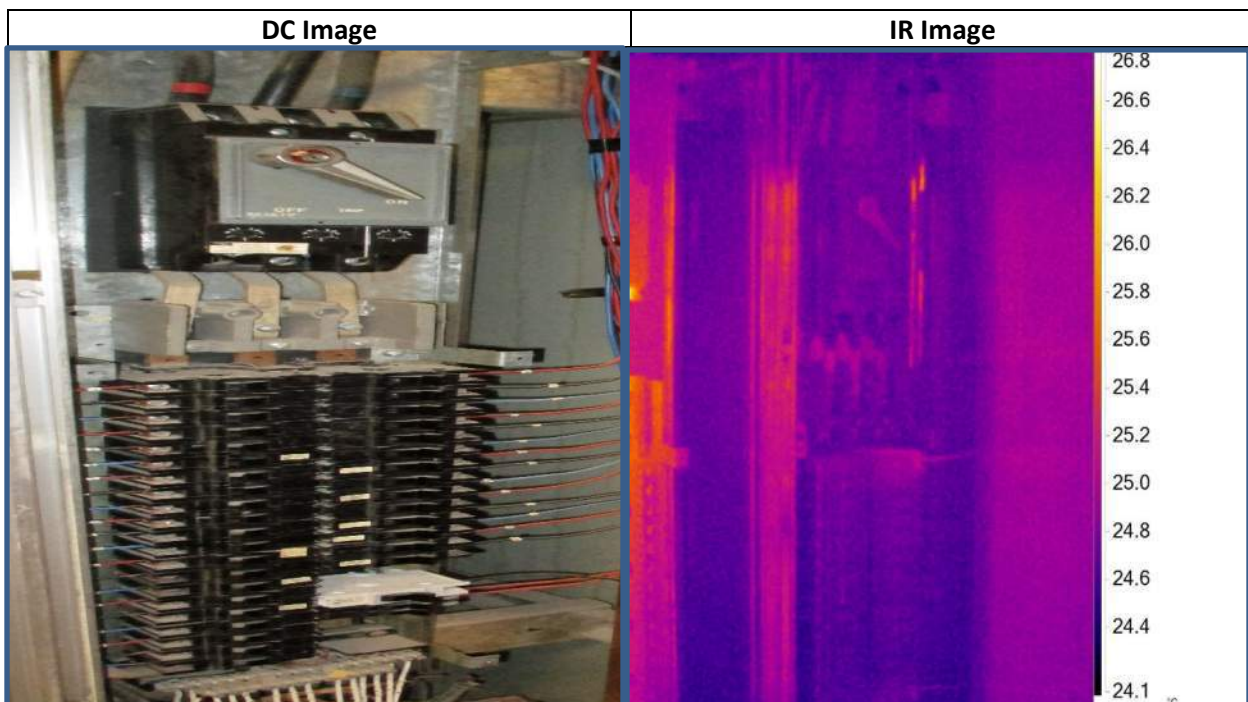
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: CDP-R Voltage: 120/208V Current: 400A Phase: 3 Main Breaker: N/A Breaker Type: NFJ Wire Type: 2'x1/4" Buss#	Safety Notes: DC895 IR1186 Breaker Trip settings: NA

Location	Distribution 200
Description	Panel D
System	120/208
ID Tag Number	BCP-A00115



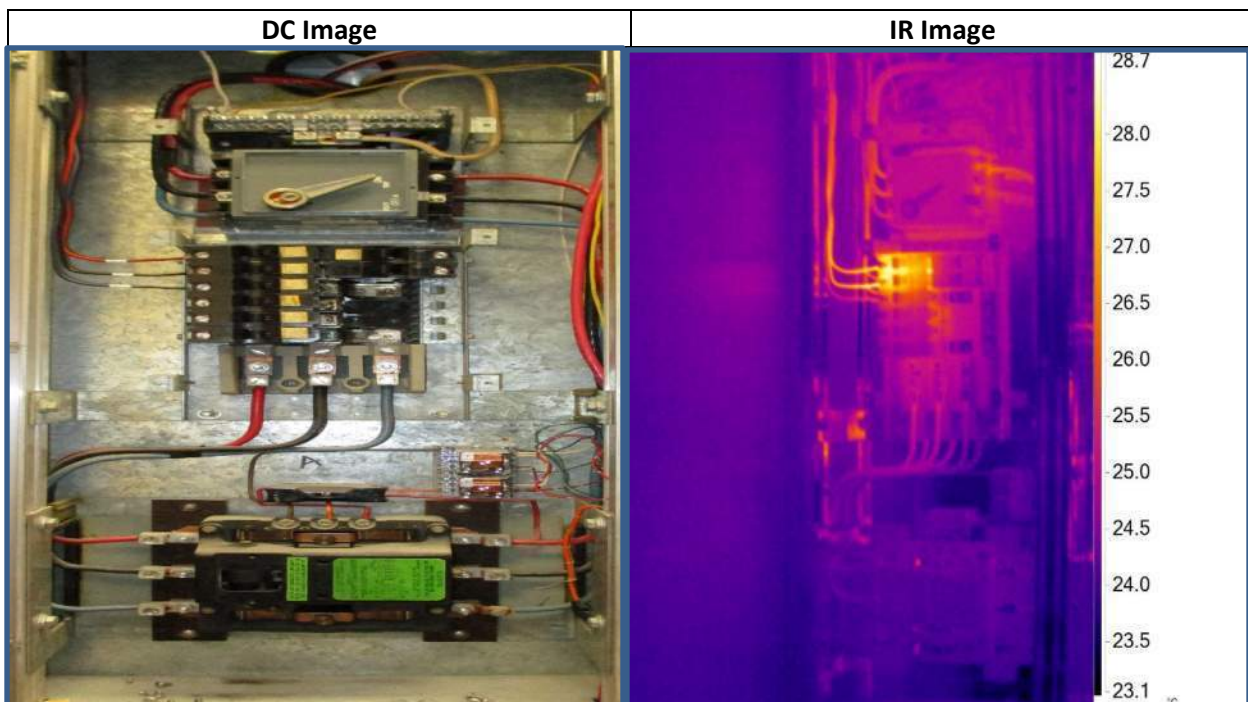
Application Notes: Make: Federal Pacific Model: NALP 42-4AB Circuits: 42 In Use: 21 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 TW	Safety Notes: DC896 IR1187 MCCB NEF431070R See IR Problem Report
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Location	Distribution 200
Description	Panel F
System	120/208 3P 4W
ID Tag Number	BCP-A000116



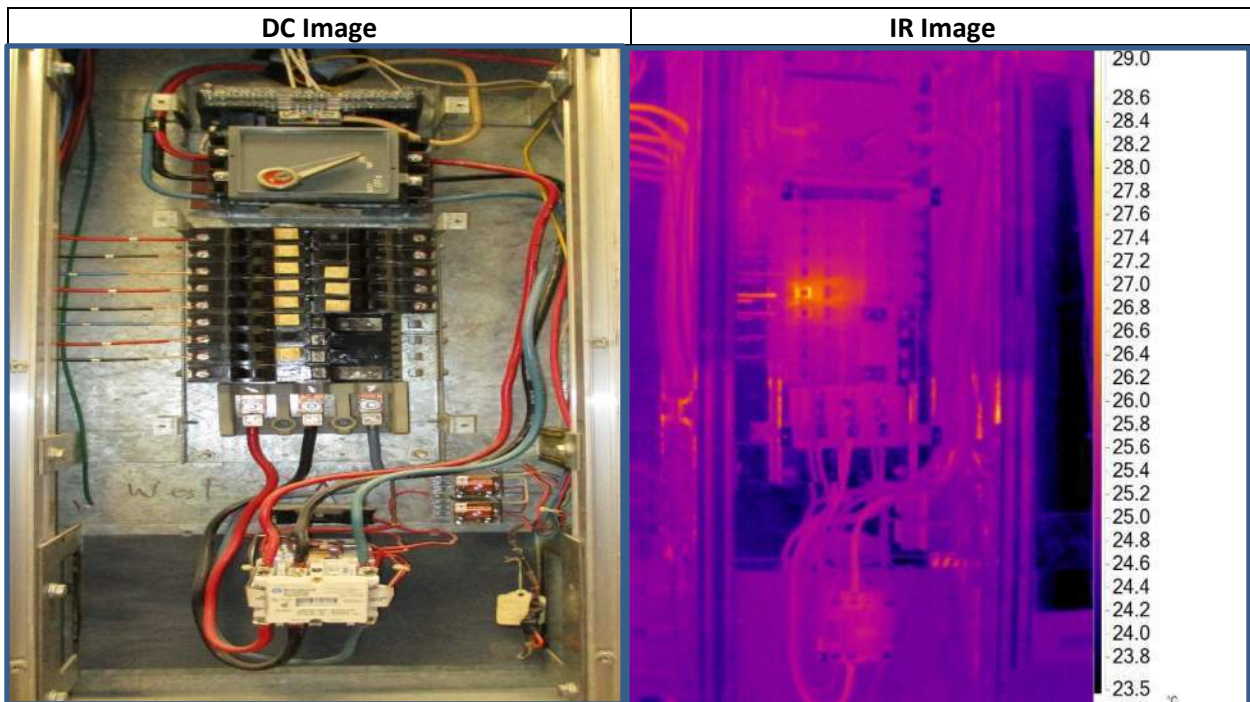
Application Notes: Make: Federal Pacific Model: NALP 42-4AB Circuits: 42 In Use: 37 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 3/0 TW	Safety Notes: DC898 IR1188 MCCB NFJ631200R
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Location	Distribution 201
Description	Panel A Section 1
System	120/208 3P 4W
ID Tag Number	BCP-A000117



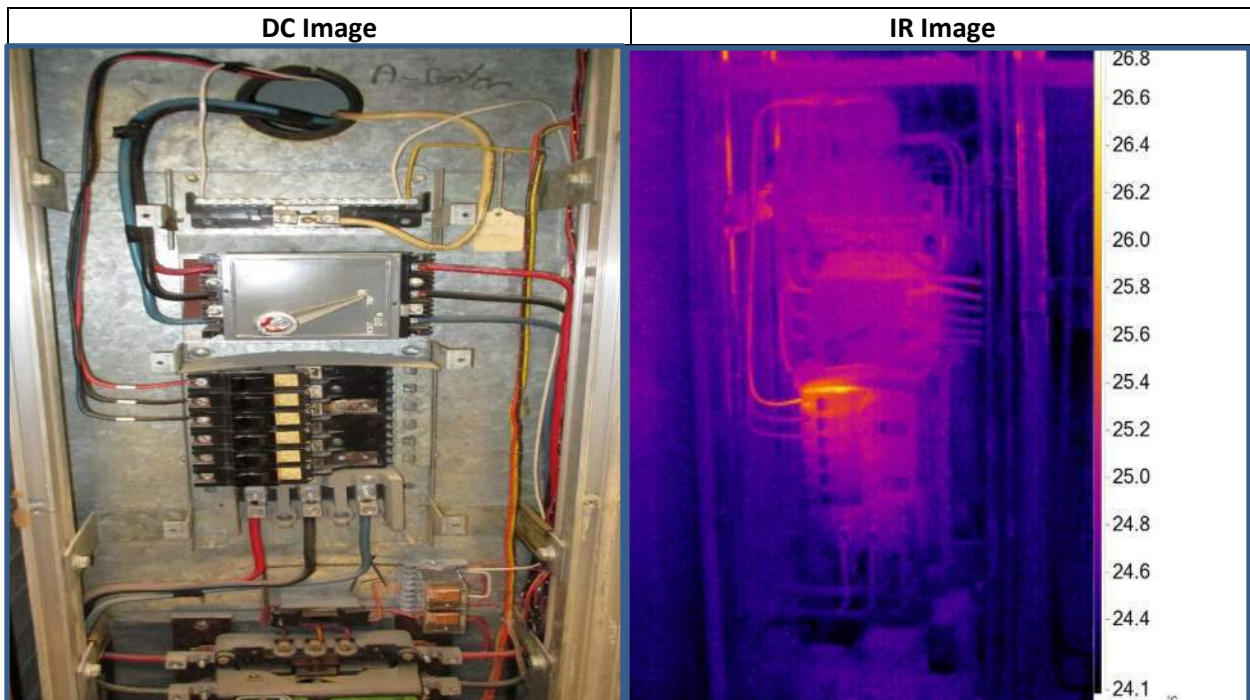
Application Notes: Make: Federal Pacific Model: NALP 12-4AB Circuits: 12 In Use: 8 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 TW Cu	Safety Notes: DC900 IR1190 MCCB NEF431030R See IR Problem Report
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Location	Distribution 201
Description	Panel A Section 2
System	120/208 3P 4W
ID Tag Number	BCP-A000118



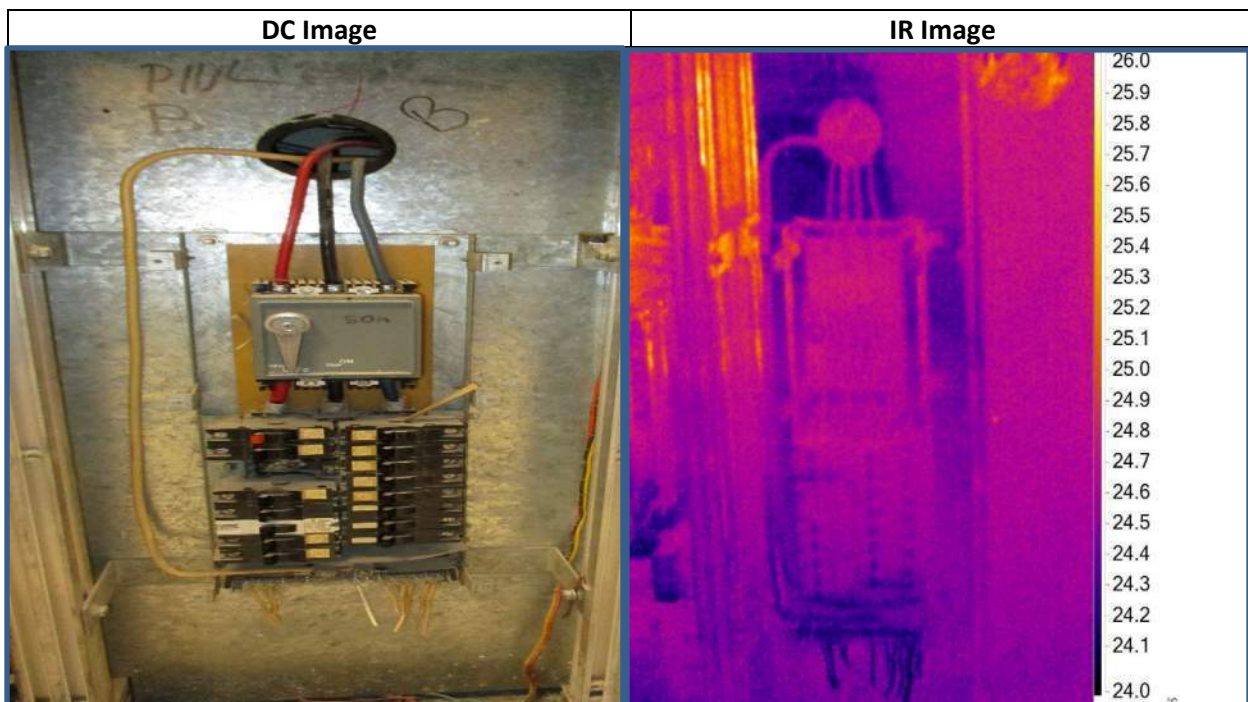
Application Notes: Make: Federal Pacific Model: NALP 18-4AB Circuits: 18 In Use: 14 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 TW Cu	Safety Notes: DC901 IR1191 NEF431050R
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Location	Distribution 201
Description	Panel A Section 3
System	120/208 3P 4W
ID Tag Number	BCP-A000119



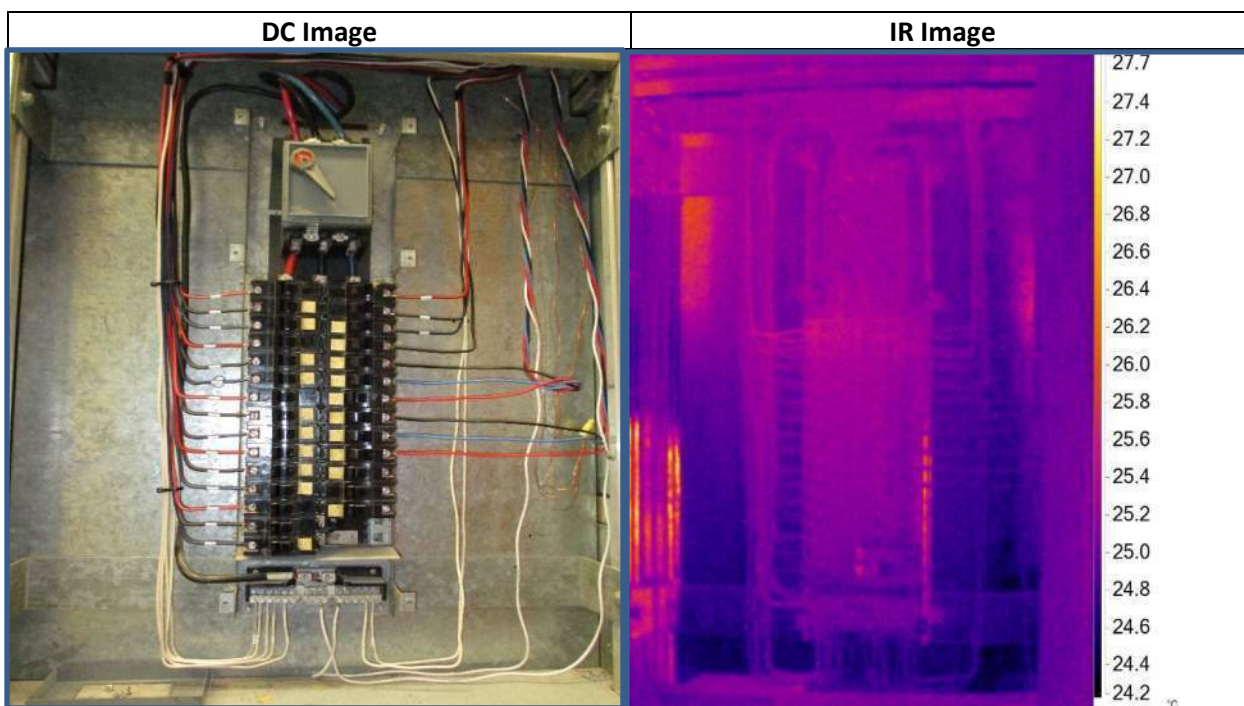
Application Notes: Make: Federal Pacific Model: NALP 12-4AB Circuits: 12 In Use: 6 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 TW Cu	Safety Notes: DC902 IR1192 NEF431030R
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Location	Distribution 201
Description	Panel B
System	120/208 3P 4W
ID Tag Number	BCP-A000120



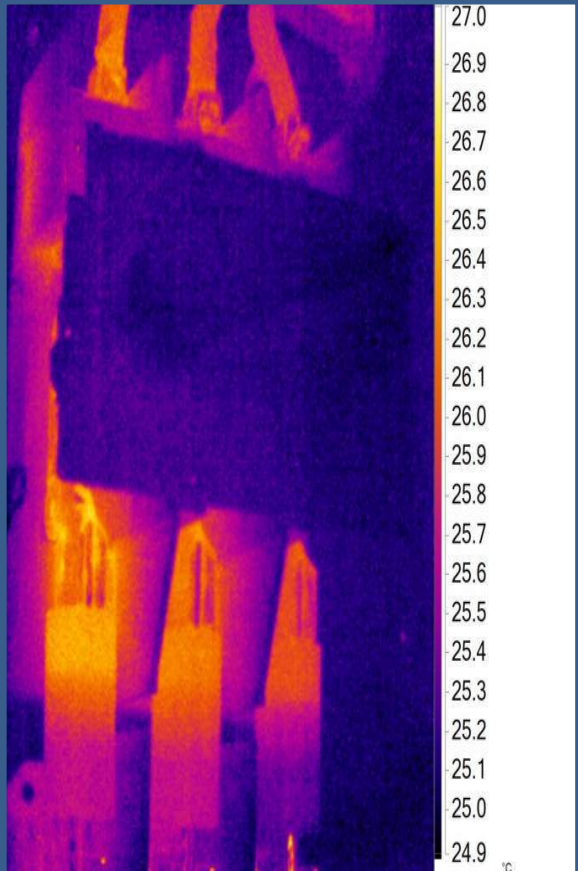
Application Notes: Make: Federal Pacific Model: NALP 18-4AB Circuits: 18 In Use: 15 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 TW Cu	Safety Notes: DC903 IR1193 NEF431050R
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Location	Distribution 201
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A000121

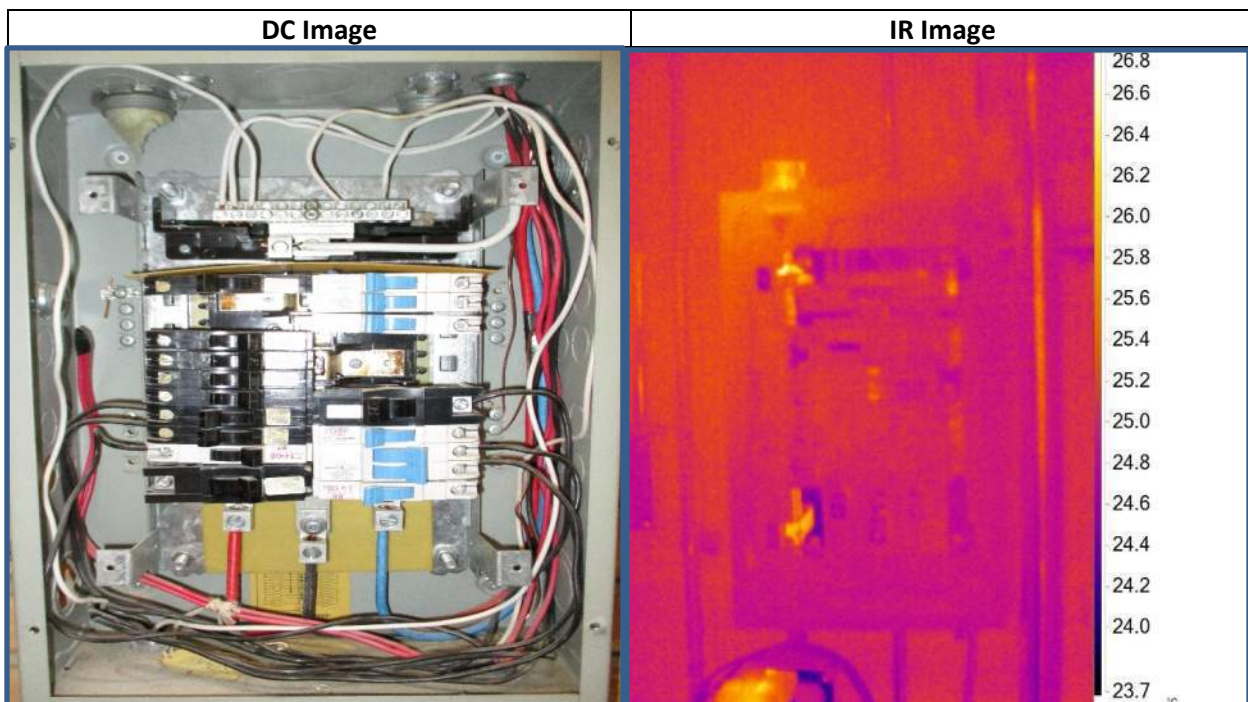


Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 28 Voltage: 120/208V Current: 90A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TWH Cu	Safety Notes: DC904 IR1194 NEF431090R
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Location	Distribution 201
Description	Dist 201 Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00122

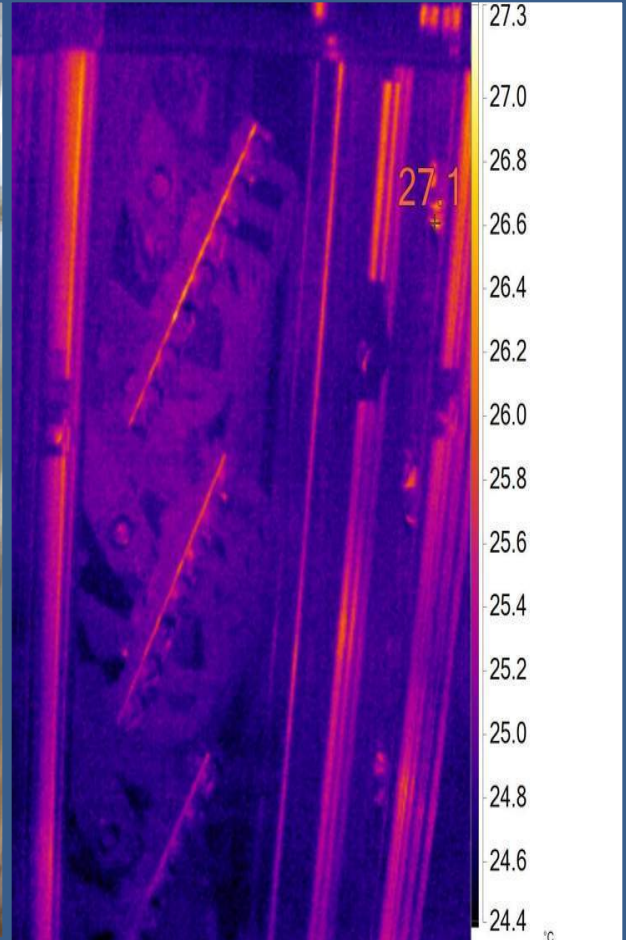
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SN Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 TW Cu	Safety Notes: DC905 IR1195

Location	Distribution 201
Description	Emergency Power
System	120/208 3P 4W
ID Tag Number	BCP-A000123



Application Notes: Make: Federal Pacific Model: NALP 24-4AB Circuits: 24 In Use: 19 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #8 RW cU	Safety Notes: DC906 IR1196
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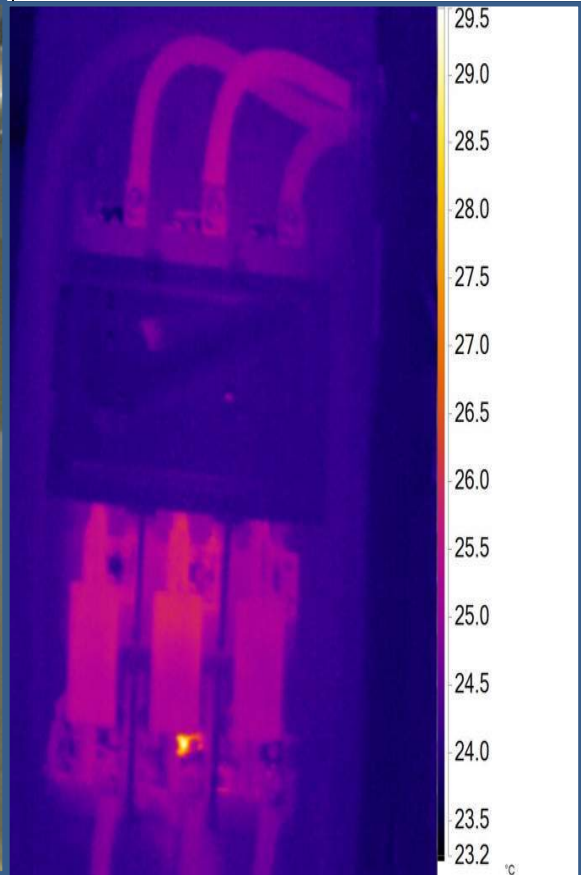
Location	Distribution 201
Description	Dist 201 Splitter
System	120/208 3P 4W
ID Tag Number	JB-A00173

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-51 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU	Safety Notes: DC907 IR1197

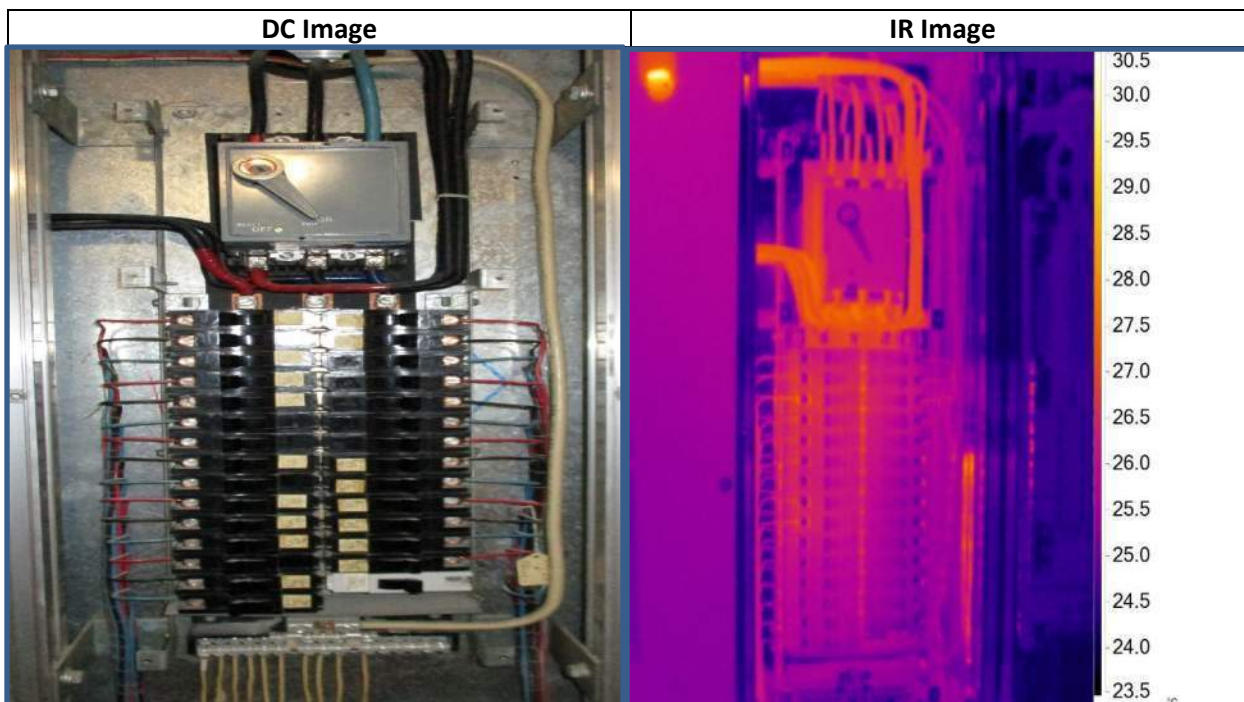
Section

3rd Floor

Location	Distribution 300
Description	Dist 300 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00098

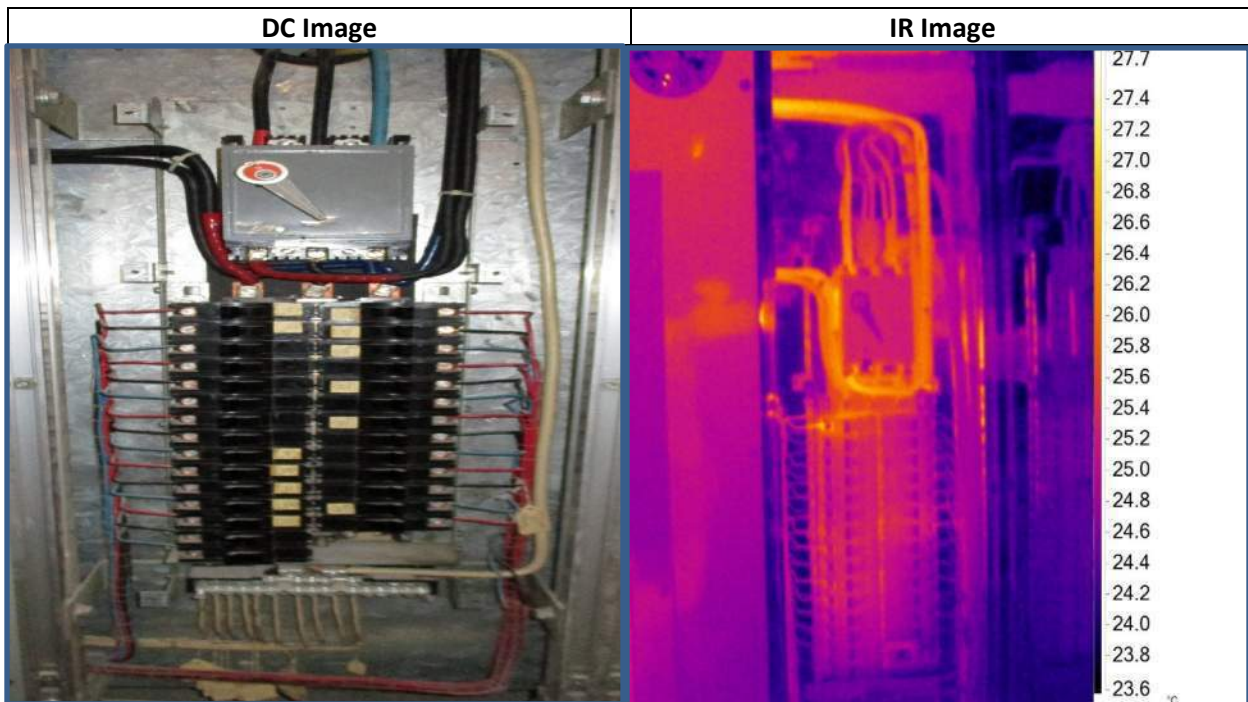
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SN Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL200 Wire Type: 2/0 TWU CU	Safety Notes: DC884 IR1756

Location	Distribution 300
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A00099



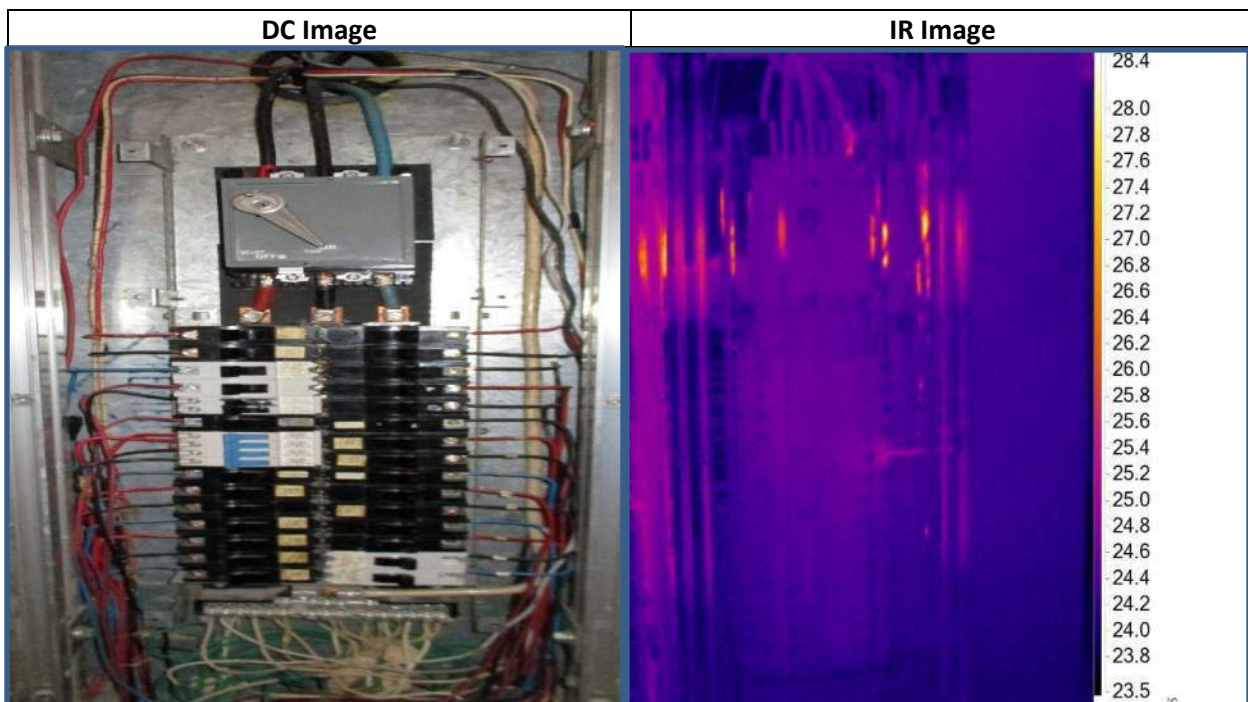
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 29 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TWH Cu	DC885 IR1176 MCCB NEF431070

Location	Distribution 300
Description	Panel B
System	120/208 3P 4W
ID Tag Number	BCP-A00100



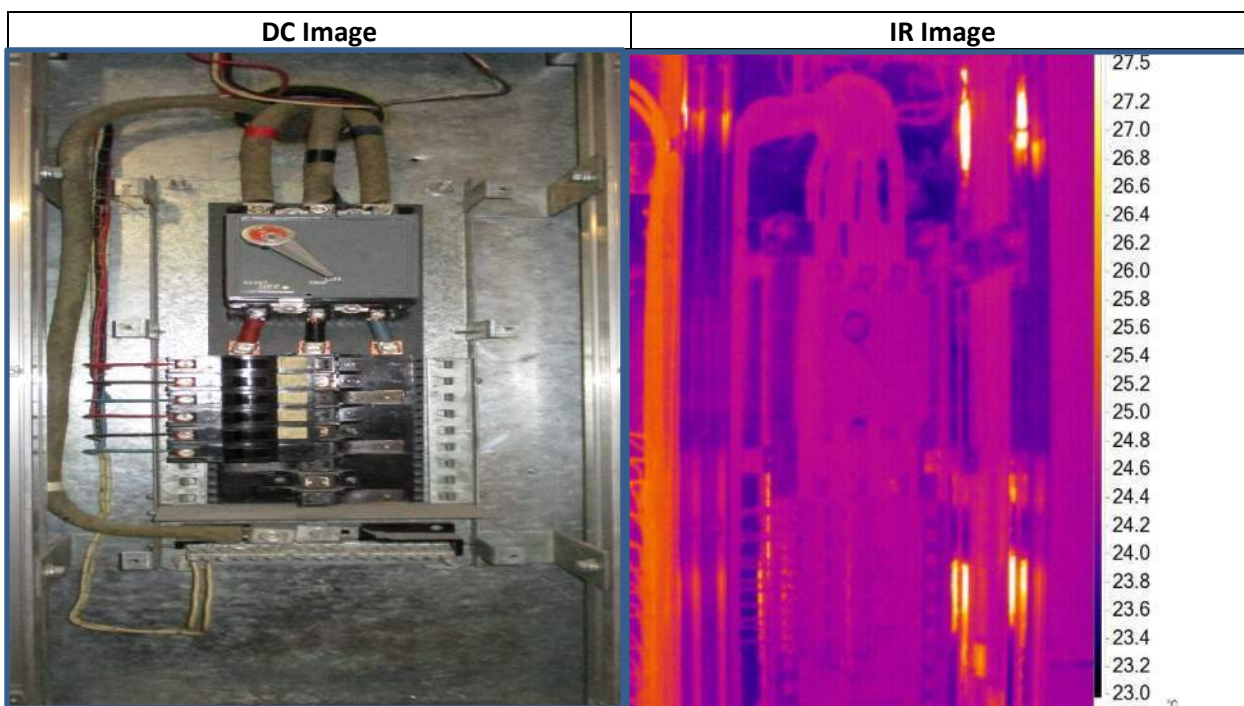
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 28 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TWH Cu	DC886 IR1177 MCCB NEF431070

Location	Distribution 300
Description	Panel E
System	120/208 3P 4W
ID Tag Number	BCP-A00101



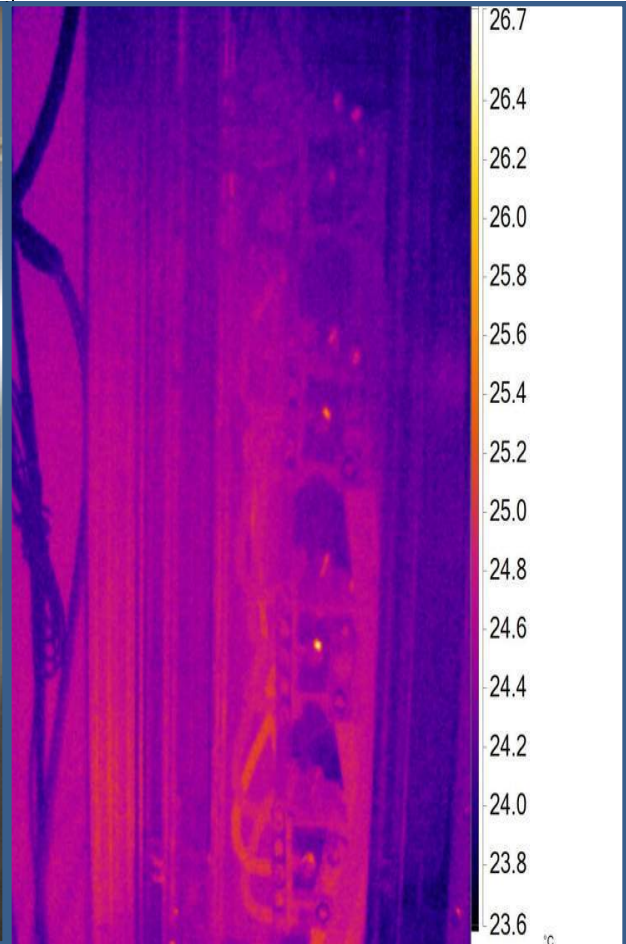
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #4 TWH Cu	DC887 IR1178 MCCB NEF431050

Location	Distribution 300
Description	Panel G
System	120/208 3P 4W
ID Tag Number	BCP-A00102

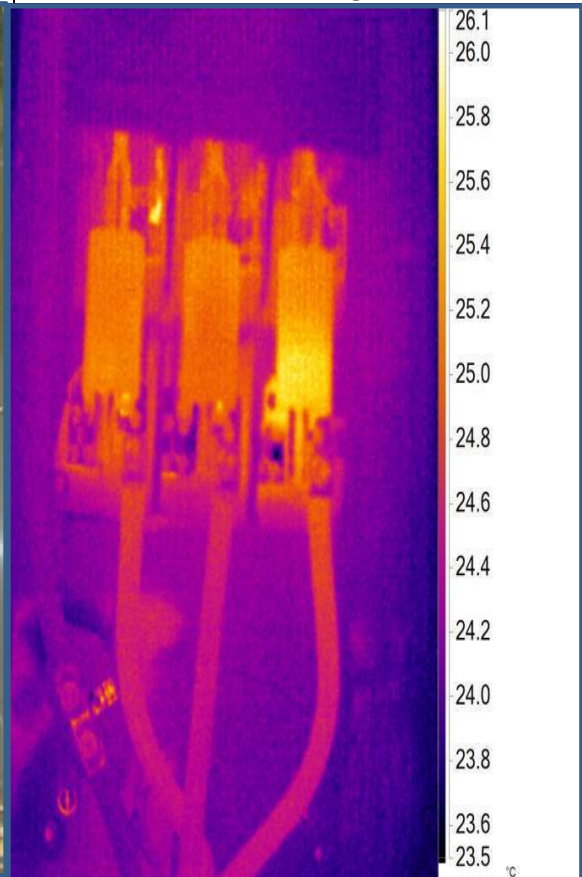


Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 18-4AB Circuits: 18 In Use: 6 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 2/0 TWU Cu	DC888 IR1179 MCCB NEF431030

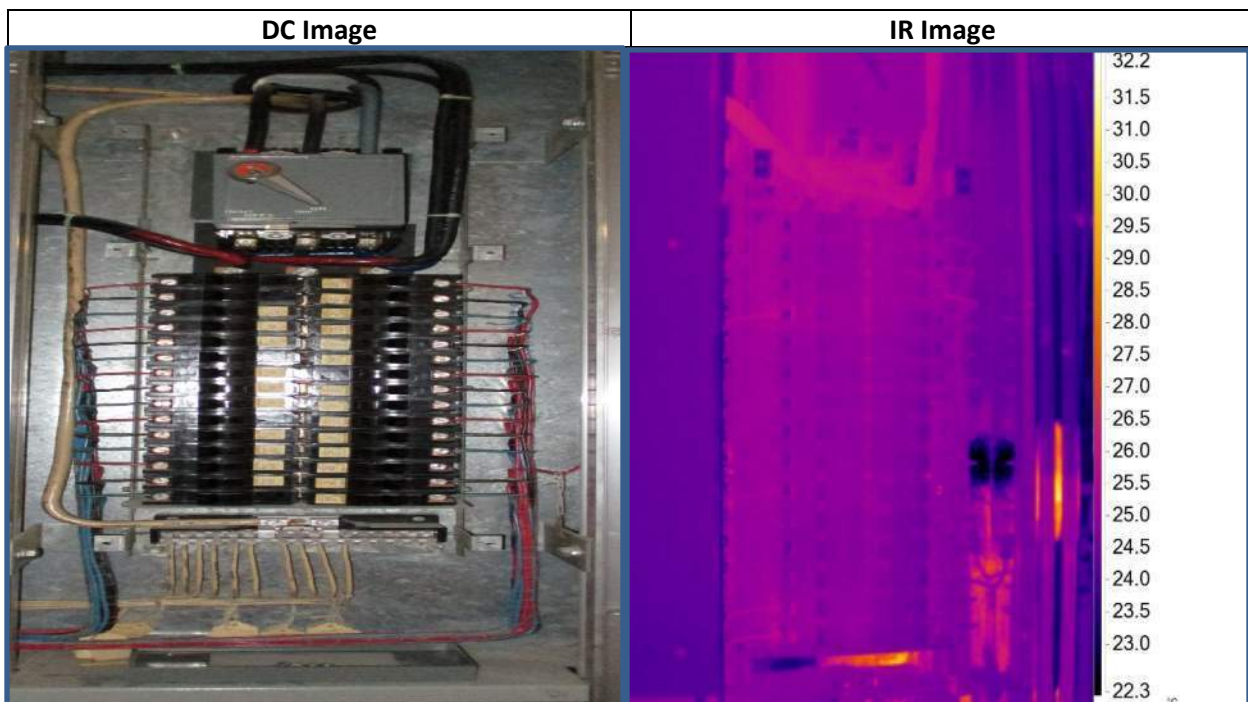
Location	Distribution 300
Description	Dist 300 splitter
System	120/208 3P 4W
ID Tag Number	JB-A00171

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-49 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU Cu	Safety Notes: DC889 IR 1180

Location	Distribution 301
Description	Dist 301 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00103

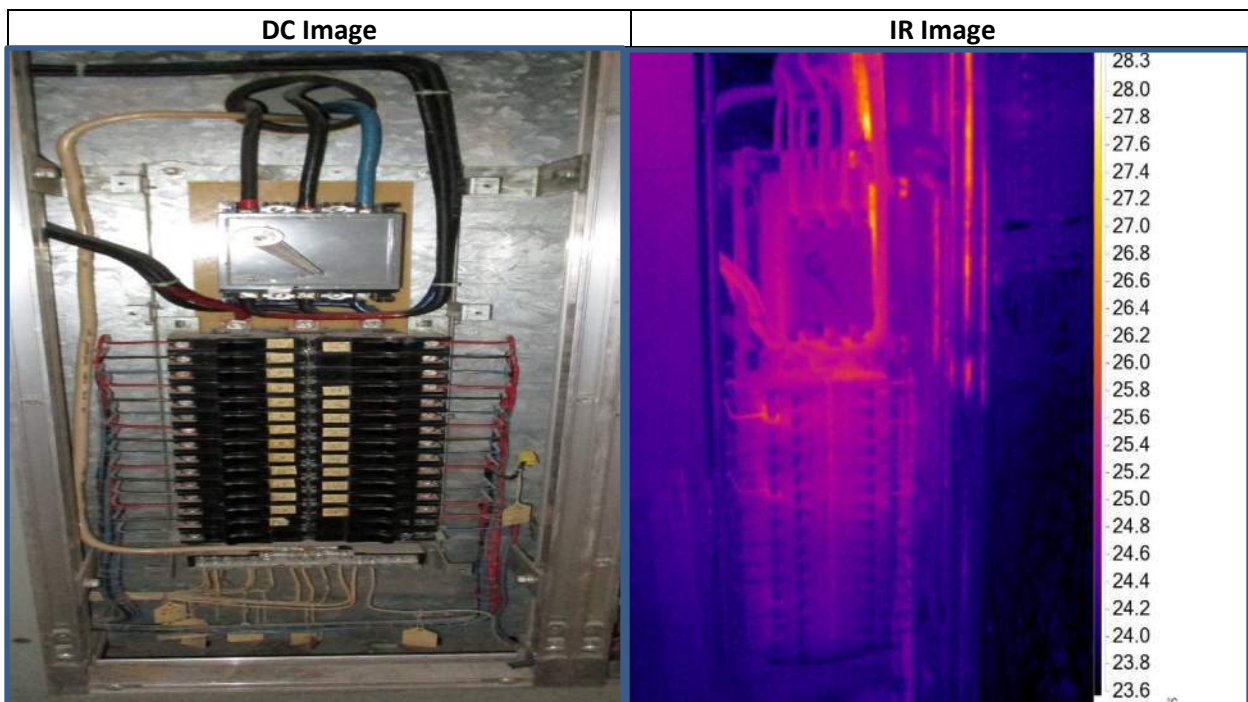
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SN Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 TWU Cu	Safety Notes: DC890 IR1181

Location	Distribution 301
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A00104



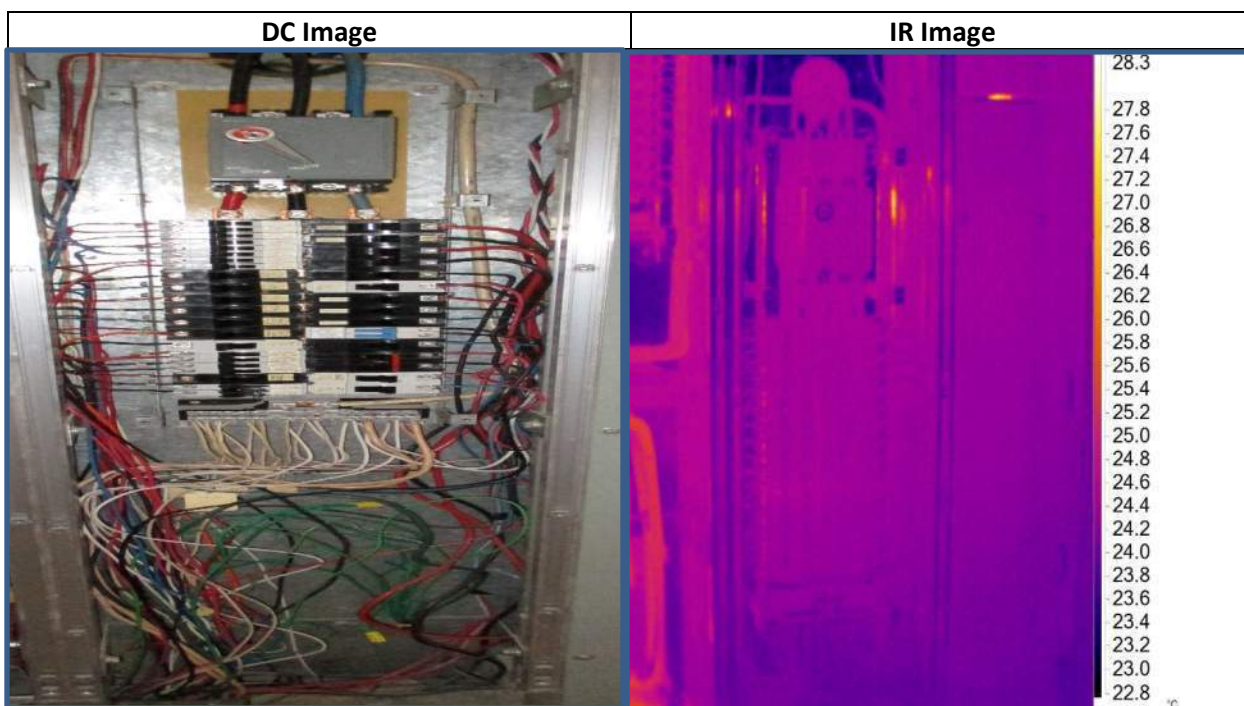
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 TW Cu	Safety Notes: DC891 IR1182 MCCB NEF431070
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Location	Distribution 301
Description	Panel D
System	120/208 3P 4W
ID Tag Number	BCP-A00105



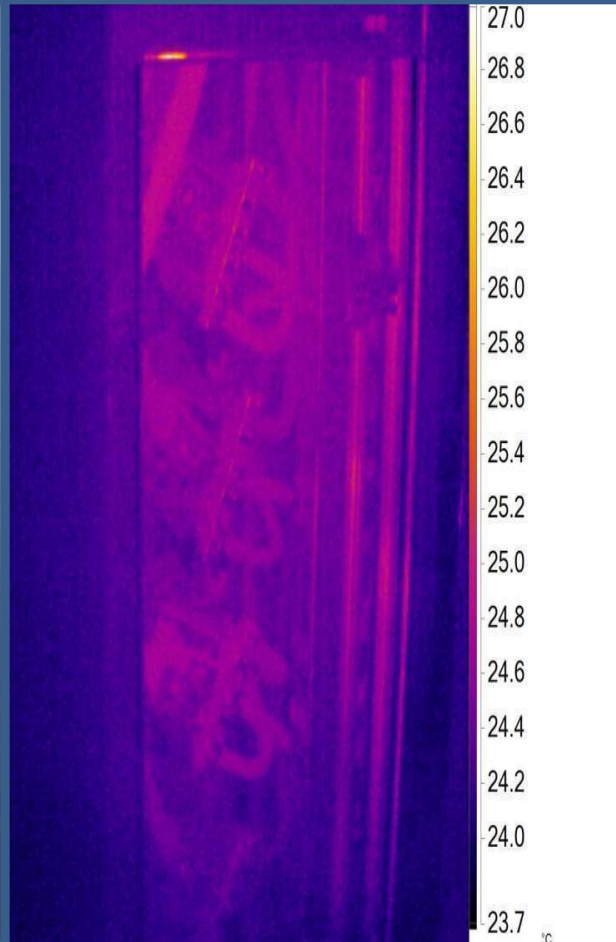
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 TW	Safety Notes: DC892 IR1183 MCCB NEF431070
--	--

Location	Distribution 301
Description	Panel F
System	120/208 3P 4W
ID Tag Number	BCP-A00106



Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #2 TW Cu	Safety Notes: D893 IR1184 MCCB NEF431050
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Location	DistRIBUTION 301
Description	Dist 301 splitter
System	1210/208 3P 4W
ID Tag Number	JB-A00172

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-49 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU Cu	Safety Notes: DC894 IR1185

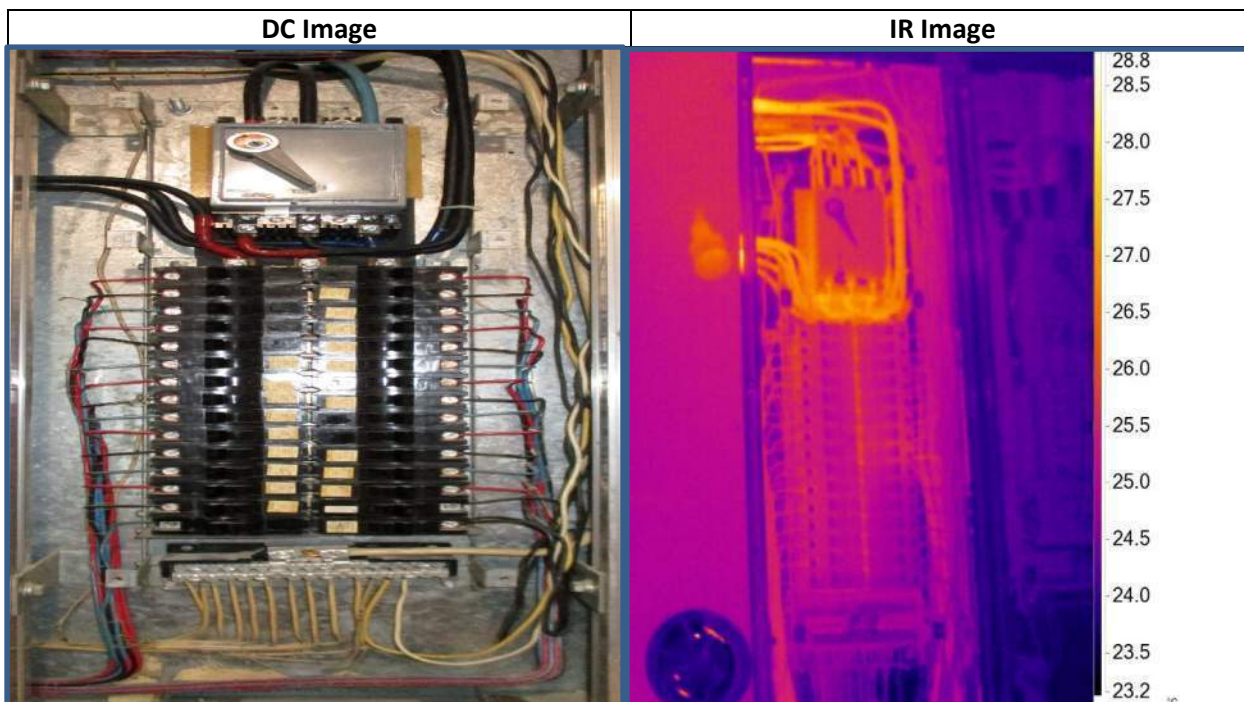
Section

4th Floor

Location	Distribution 400
Description	Dist 400 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00088

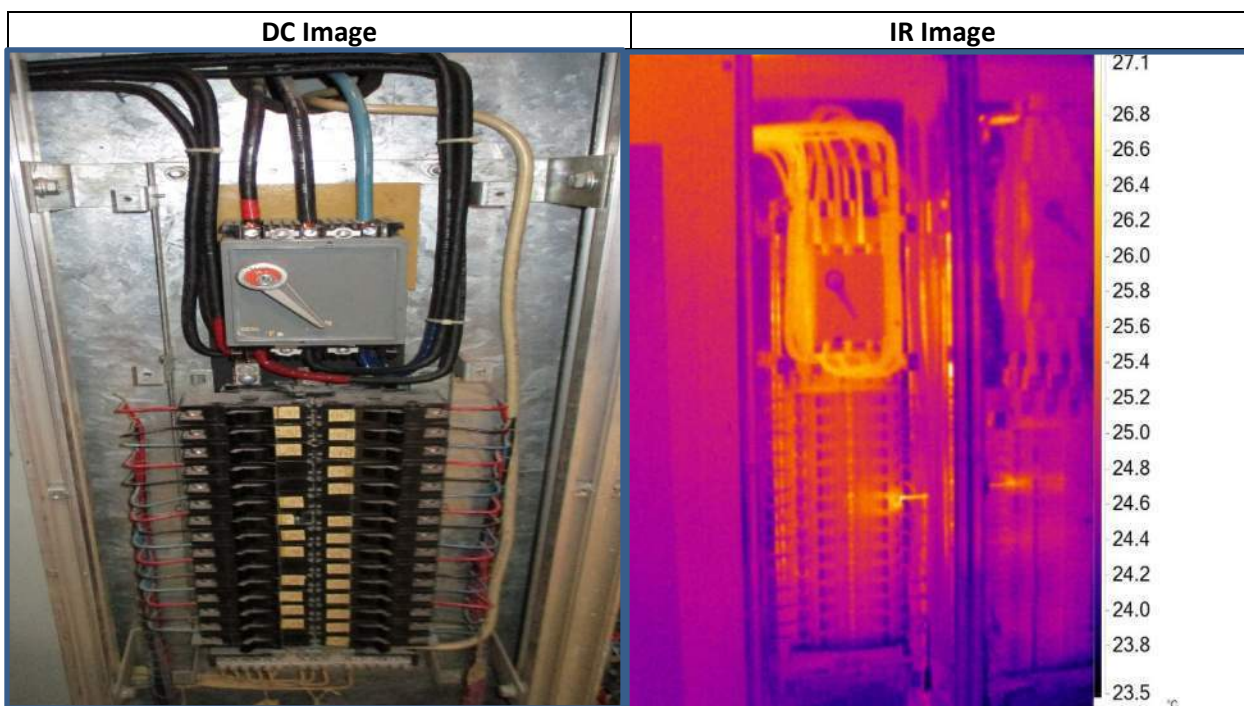
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SN Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 TWU Cu	Safety Notes: Unable to scan due to door being stuck. DC870

Location	Distribution 400
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A00089



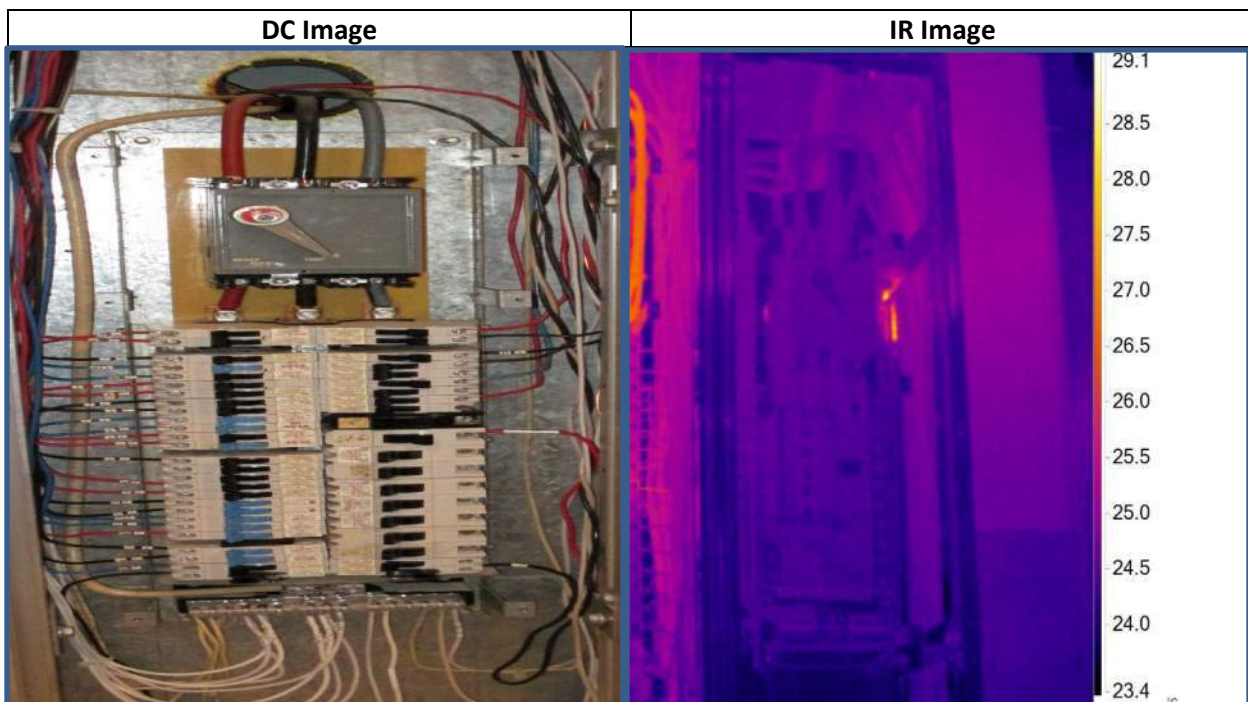
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #3 TW Cu	IR1163 DC871 MCCB NEF431070

Location	Distribution 400
Description	Panel B
System	120/208 3P 4W
ID Tag Number	BCP-A00090



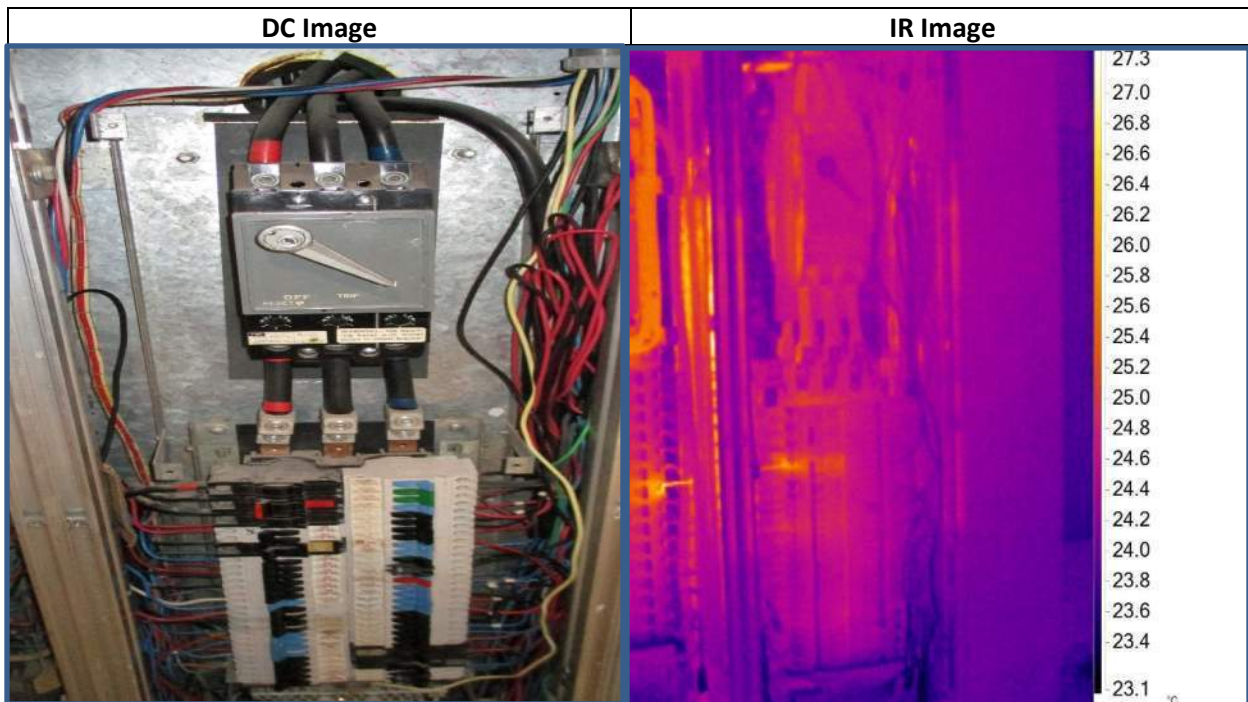
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #3 TW Cu	IR1164 DC872 MCCB NEF431070

Location	Distribution 400
Description	Panel E
System	120/208 3P 4W
ID Tag Number	BCP-A00091



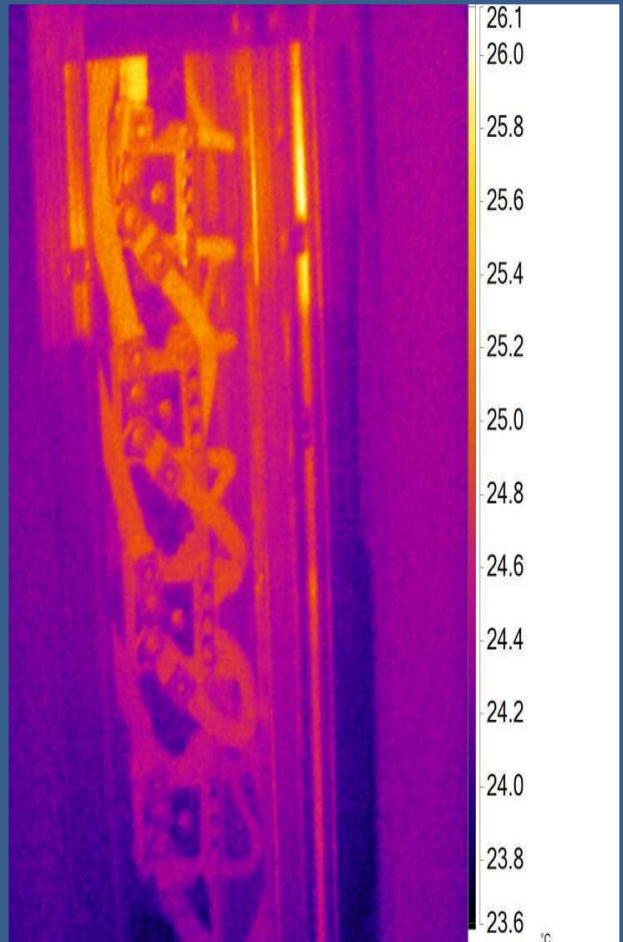
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 150A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 2/0 TWH CU	Safety Notes: IR1165 DC873 MCCB: NFJ631150R
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Location	Distribution 400
Description	Panel G
System	120/208 3P 4W
ID Tag Number	BCP-A00092

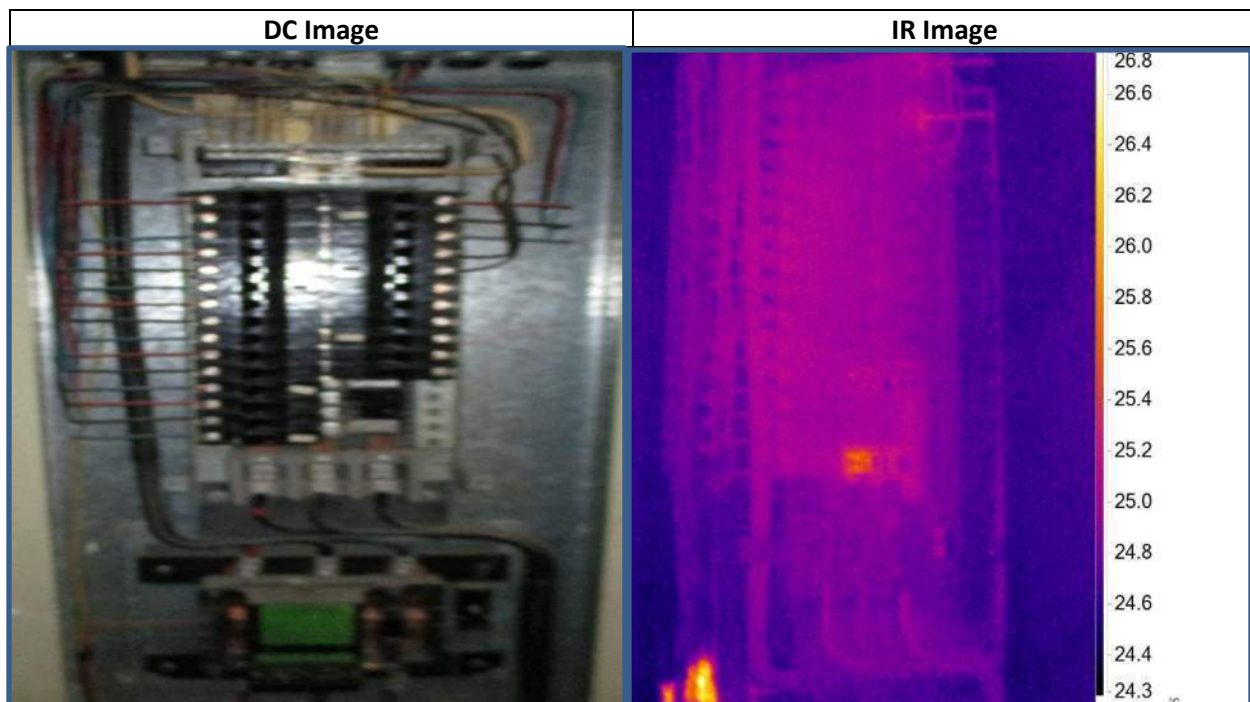


Application Notes: Make: Federal Pacific Model: NALP18-4AB Circuits: 18 In Use: 6 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 2/0 TWU	Safety Notes: IR1166 DC8743 MCCB NEF431030
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Location	Dist
Description	Dist 400 splitter
System	1210/208 3P 4W
ID Tag Number	JB-A00169

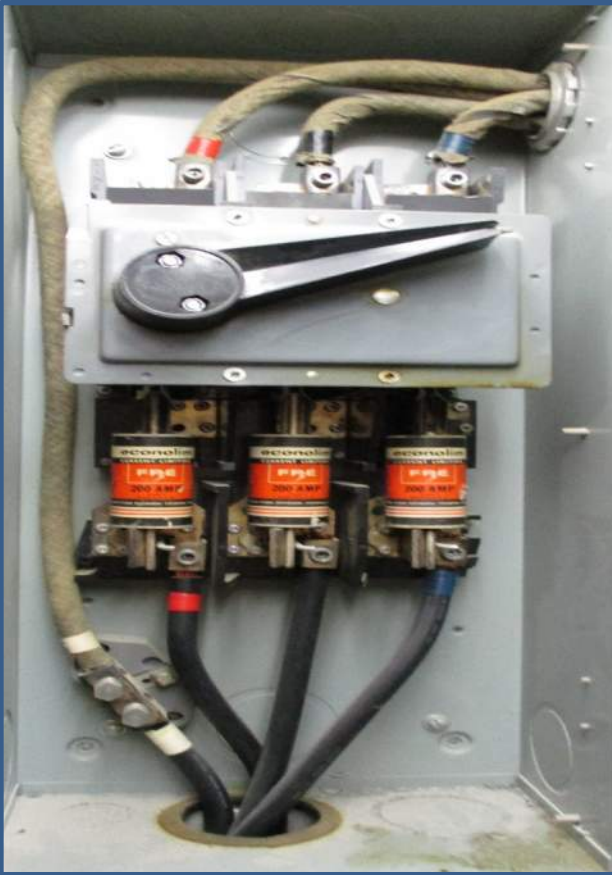
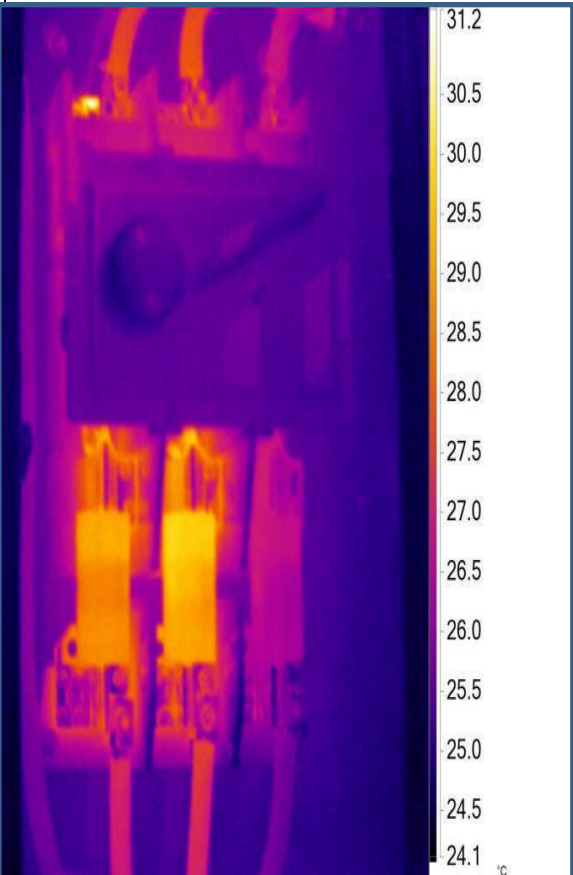
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-49 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU Cu	Safety Notes: IR 1167 DC875

Location	Mens Washroom
Description	Panel AA
System	120/208 3P 4W
ID Tag Number	BCP-A00093

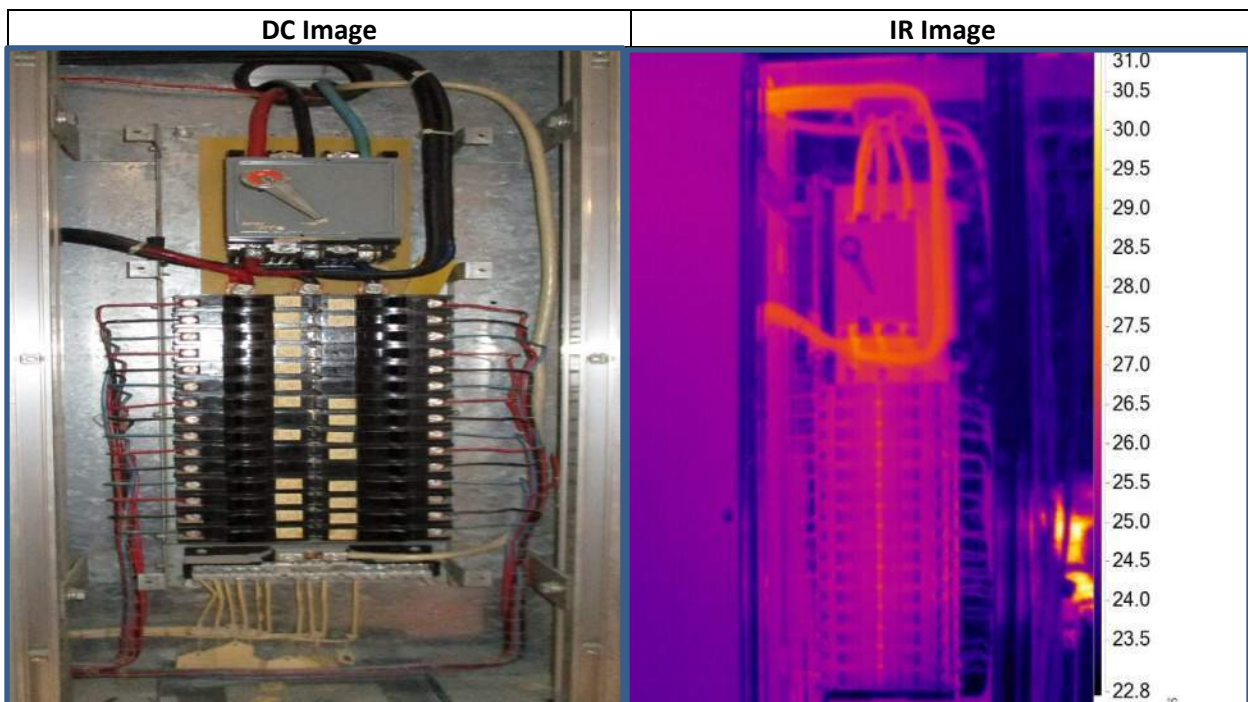


Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4L Circuits: 30 In Use: 26 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 4 TWH CU	IR 1169, DC 878

Location	Distribution 401
Description	Dist 401 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00094

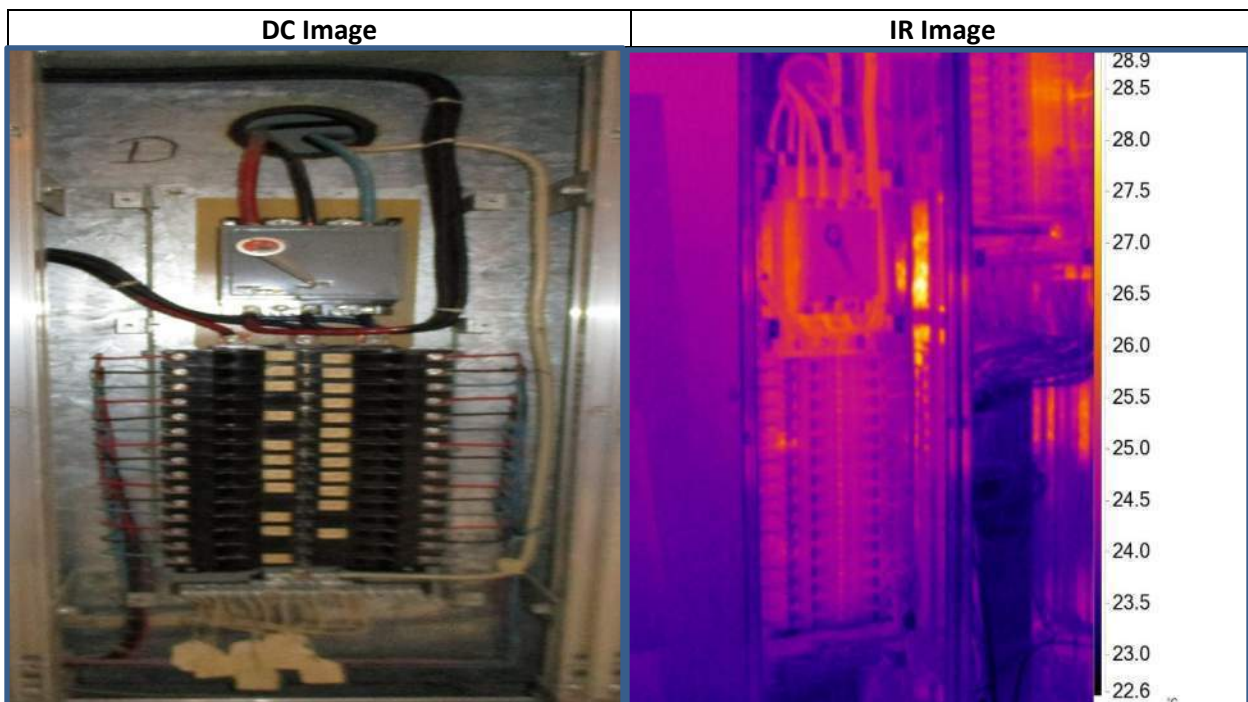
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SI Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 TWU CU	Safety Notes: IR 1174, DC 879

Location	Distribution 401
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A00095



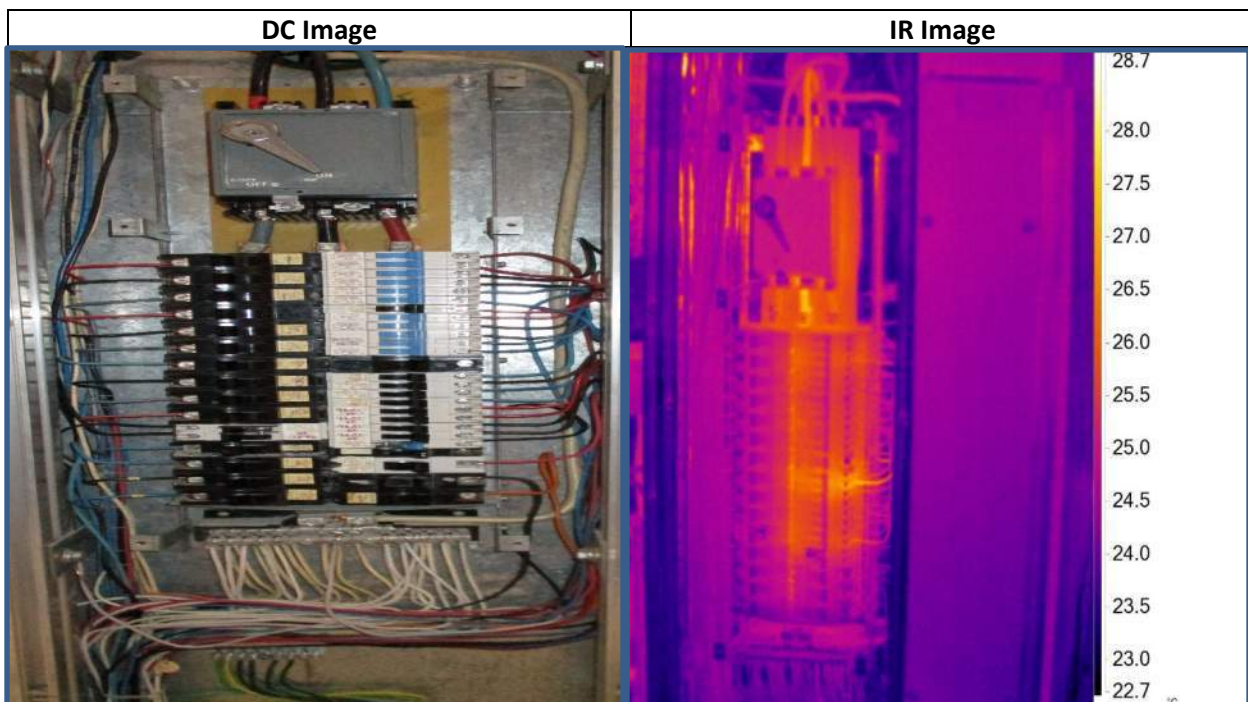
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 4 TWH CU	Safety Notes: IR 1170, DC 880 MCCB NEF431070R
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Location	Distribution 401
Description	Panel D
System	120/208 3P 4W
ID Tag Number	BCP-A00096



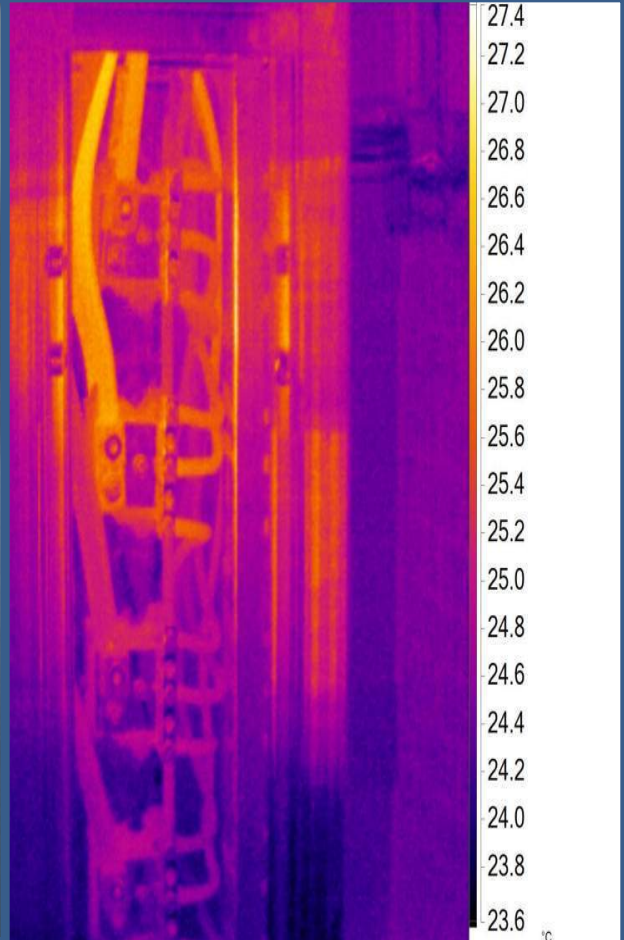
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 4 TWH CU	IR 1171, DC 881 MCCB NEF431070

Location	Distribution 401
Description	Panel F
System	120/208 3P 4W
ID Tag Number	BCP-A00097



Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 4 TWH CU	Safety Notes: IR 1172, DC 882 MCCB NEF431050
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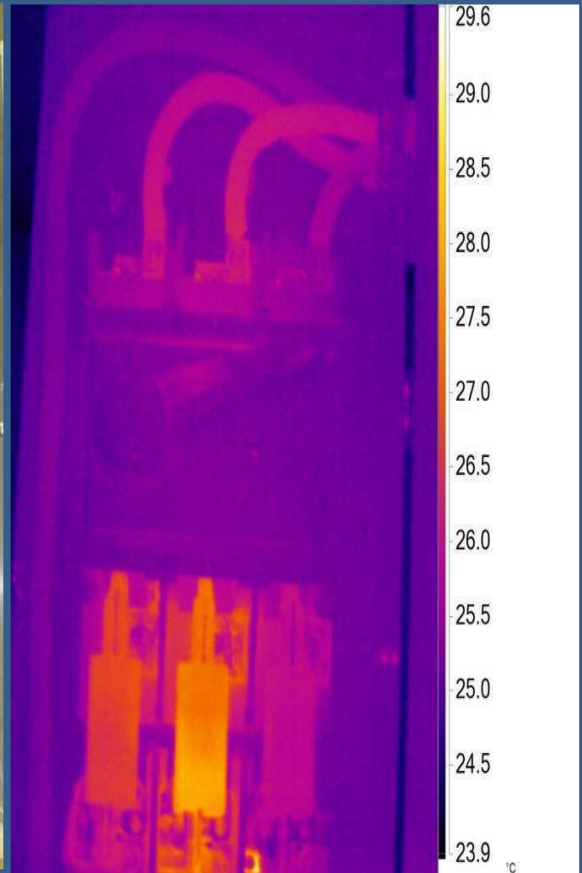
Location	Distribution 401
Description	Dist 401 Splitter
System	120/208 3P 4W
ID Tag Number	JB-A00170

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-49 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU Cu	Safety Notes: IR 1173, DC 883

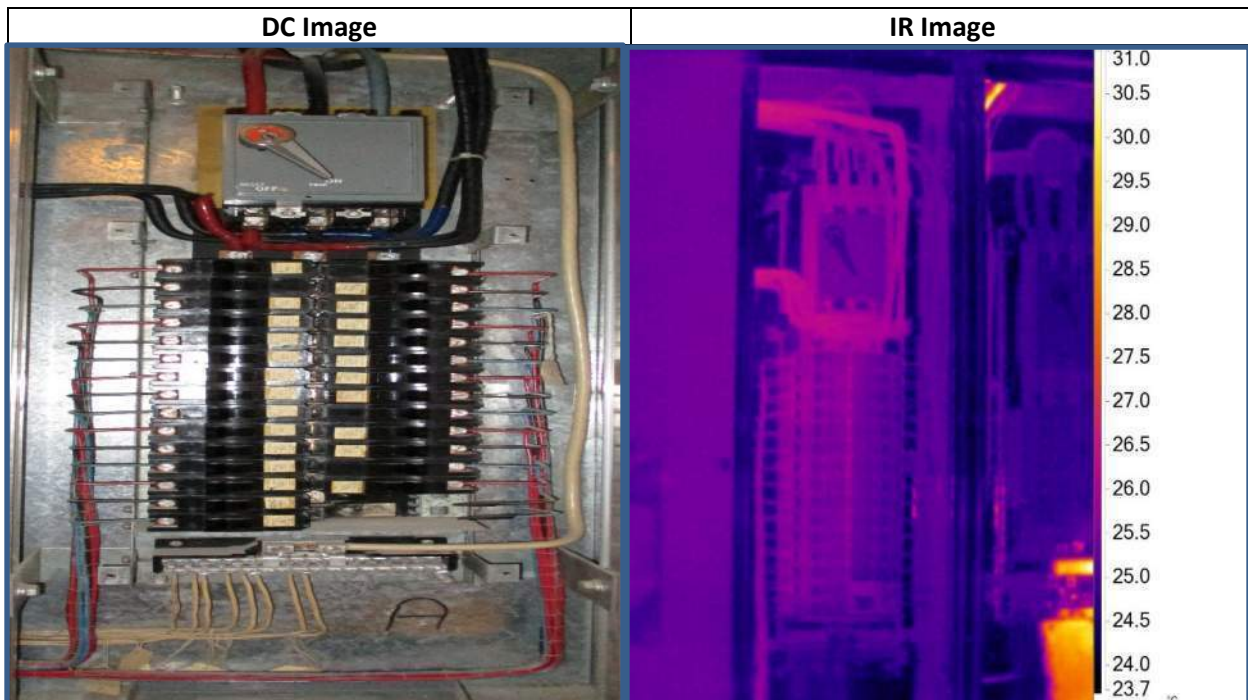
Section

5th Floor

Location	Distribution 500
Description	Dist 500 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00079

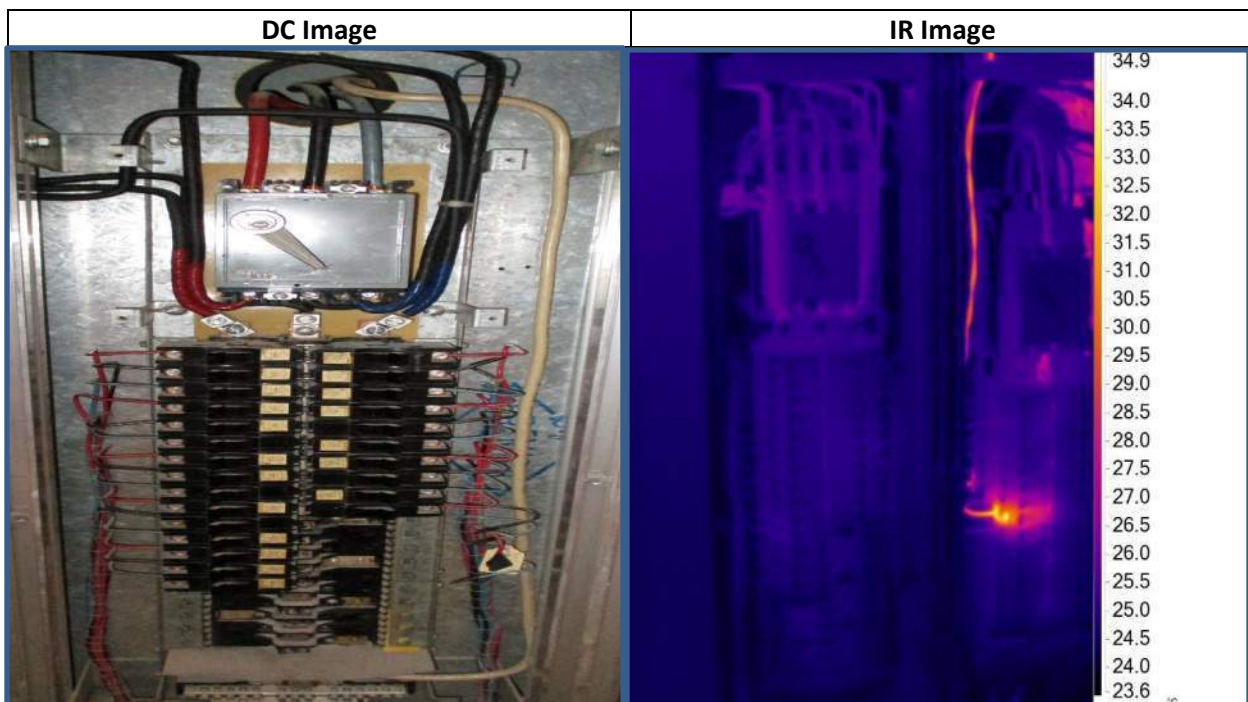
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SI Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 TWU Cu	Safety Notes: DC855 IR1147

Location	Distribution 500
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A00080



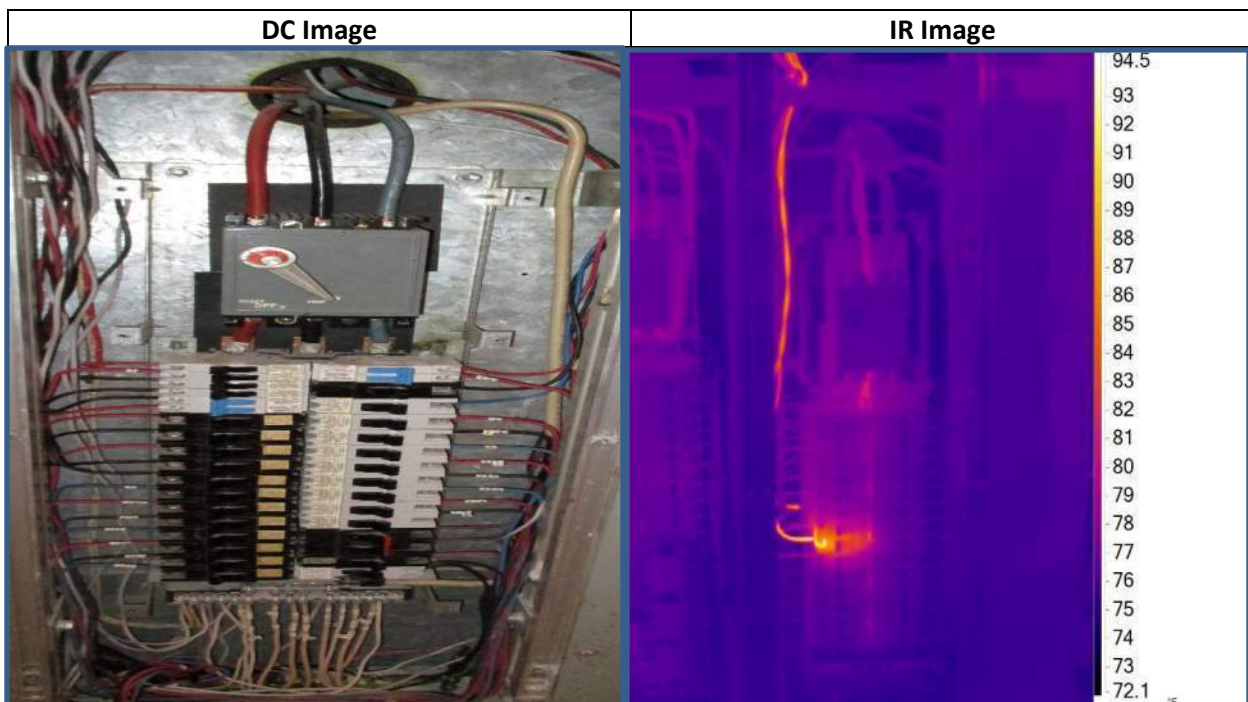
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 28 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 TWU Cu	DC 856 IR1148 MCCB NEF431070

Location	Distribution 500
Description	Panel B
System	120/208 3P 4W
ID Tag Number	BCP-A00081



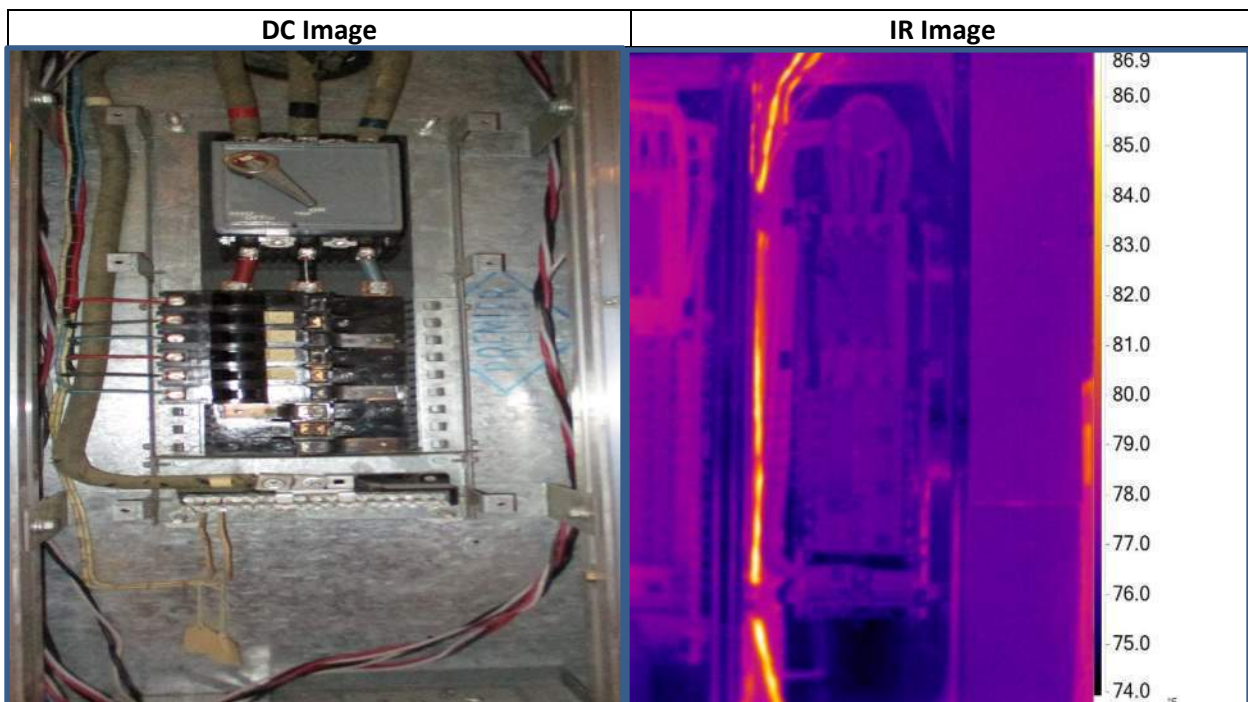
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 42-4AB Circuits: 42 In Use: 25 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 TWU Cu	DC857 IR1149 MCCB NEF431070

Location	Distribution 500
Description	Panel E
System	120/208 3P 4W
ID Tag Number	BCP-A00082



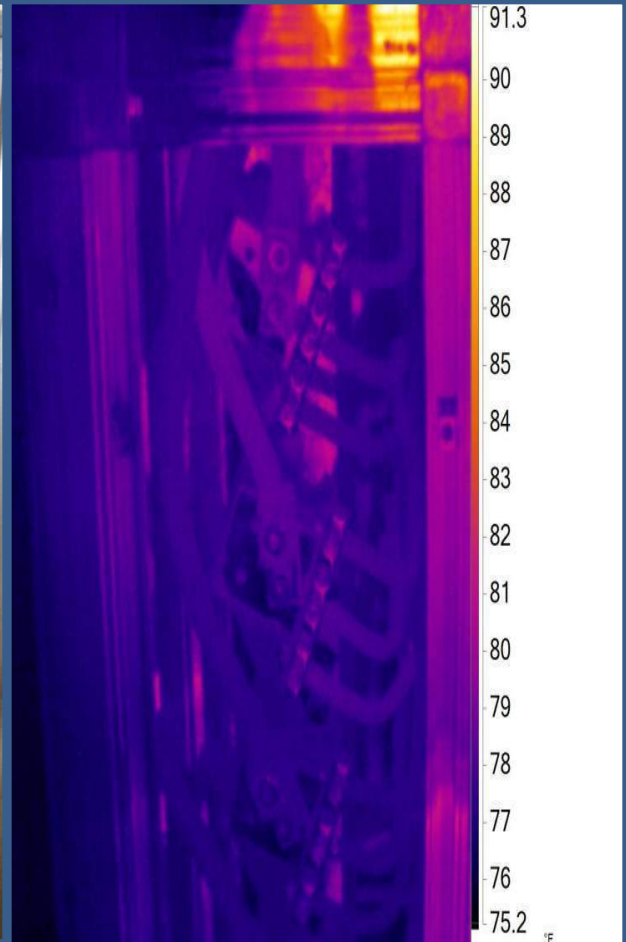
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #2 TWU Cu	Safety Notes: DC858 IR1150 MCCB NEF431050
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Location	Distribution 500
Description	Panel G
System	120/208 3P 4W
ID Tag Number	BCP-A00083

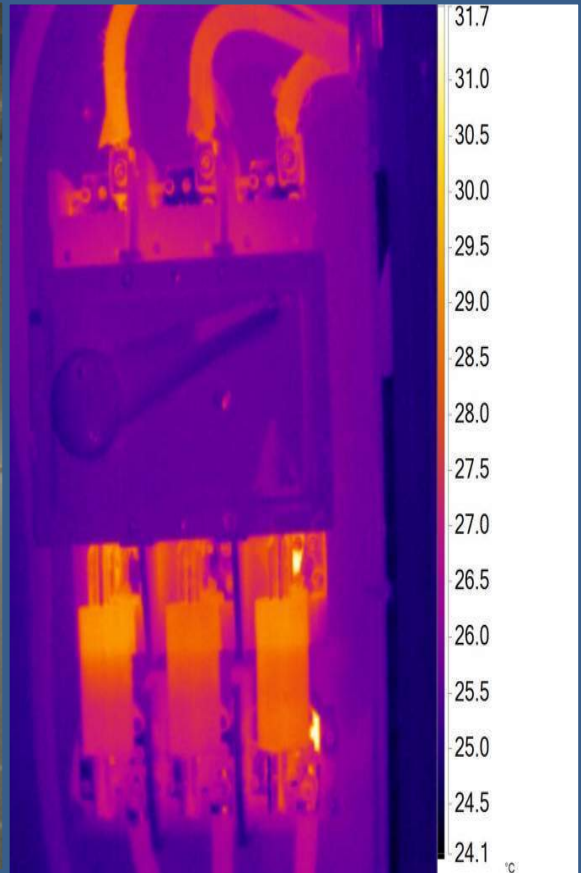


Application Notes: Make: Federal Pacific Model: NALP 18-4AB Circuits: 18 In Use: 6 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 2/0 TWU Cu	Safety Notes: DC859 IR 1151 MCCB NEF431030
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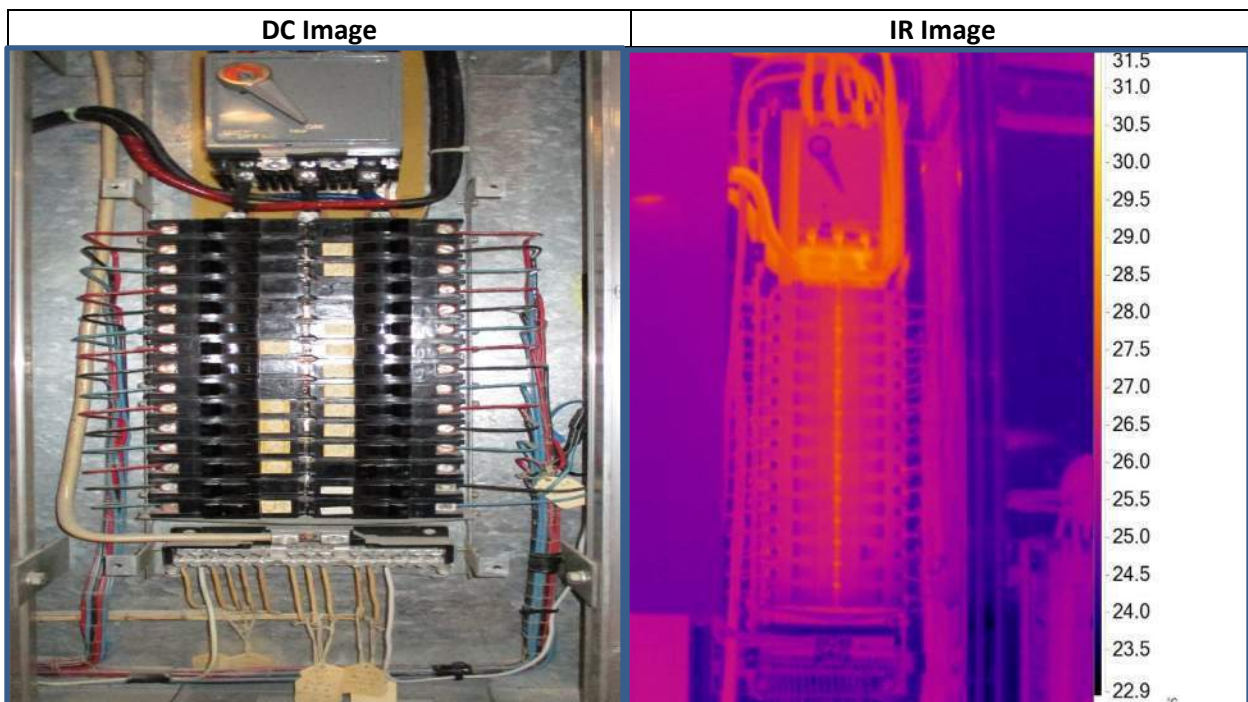
Location	Distribution 500
Description	Dist 500 Splitter
System	120/208 3P 4W
ID Tag Number	JB-A167

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-51 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU Cu	Safety Notes: DC860 IR1152

Location	Distribution 501
Description	Dist 501 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00084

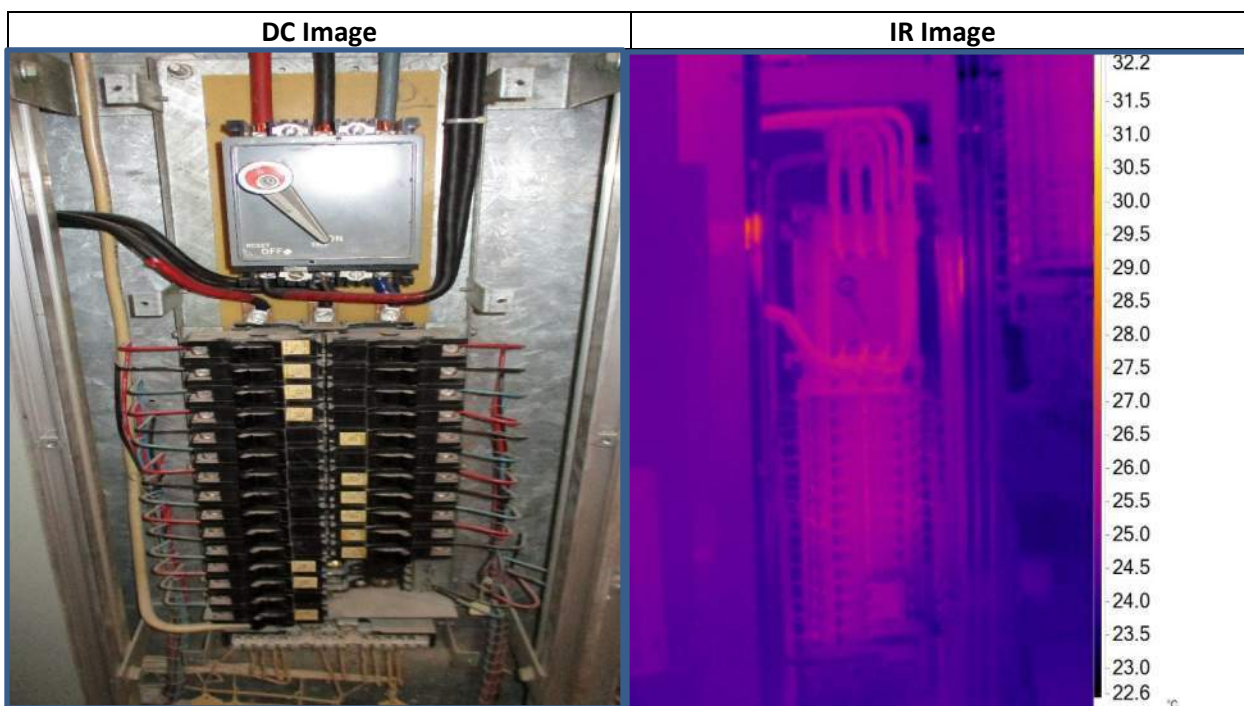
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SI Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL200 Wire Type: RA60 2/0 CU	Safety Notes: DC865 IR1158

Location	Distribution 501
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A00085



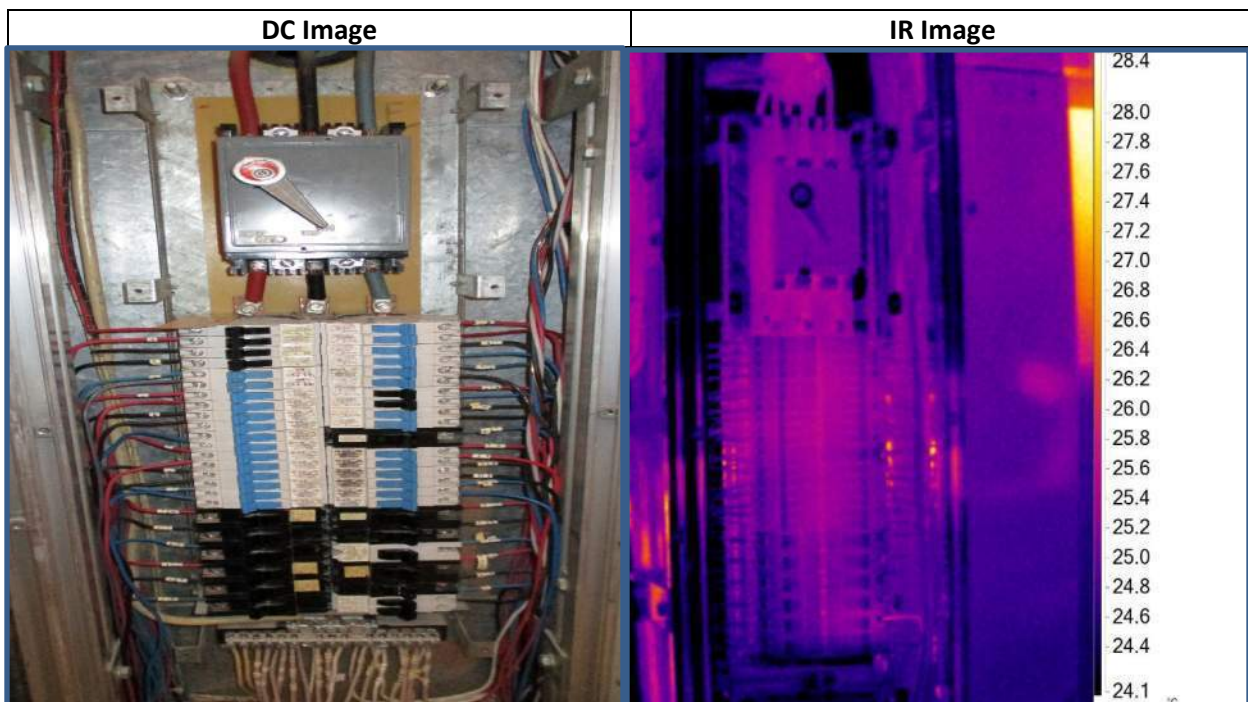
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 4 RW90 CU	DC866 IR1159 MCCB NEF431070

Location	Distribution 501
Description	Panel D
System	120/208 3P 4W
ID Tag Number	BCP-A00086



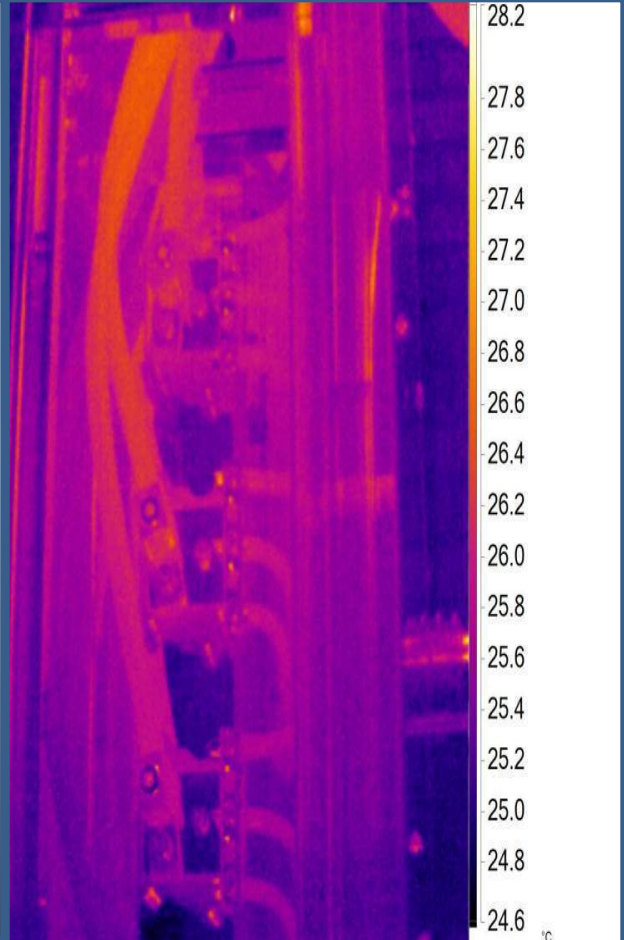
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 26 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 2 TWH 75 CU	DC867 IR1160 MCCB NEF431070

Location	Distribution 501
Description	Panel F
System	120/208 3P 4W
ID Tag Number	BCP-A00087



Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 2 TWH 75 CU	Safety Notes: DC868 IR1161 MCCB NEF431050
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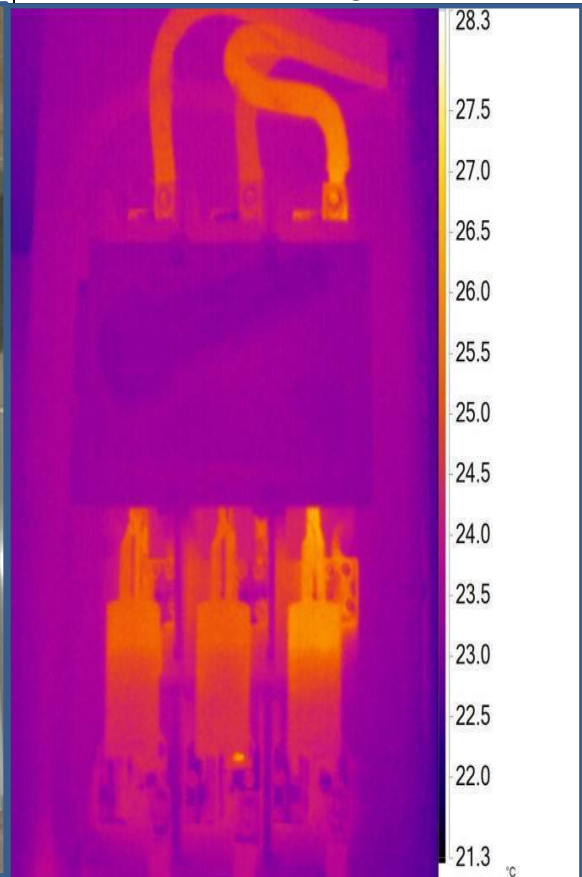
Location	5TH Floor
Description	Dist. 501 Splitter
System	120/208 3P 4W
ID Tag Number	JB-A168

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-56 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU CU	Safety Notes: DC869 IR1162

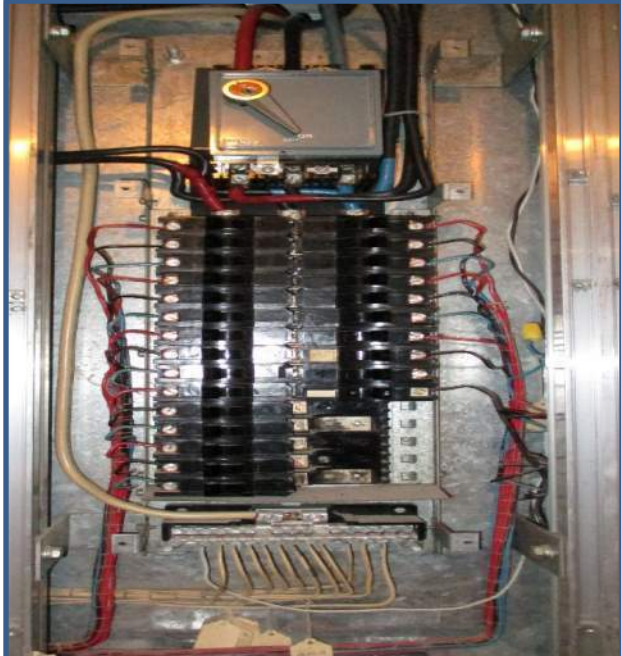
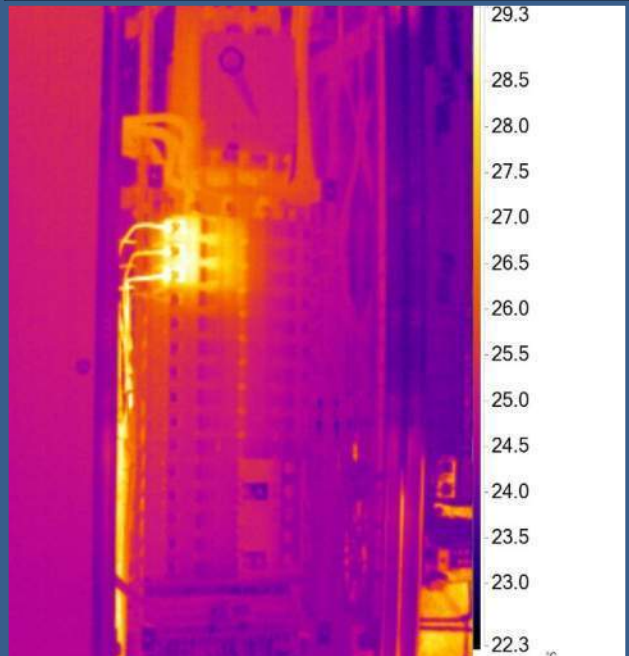
Section

6th Floor

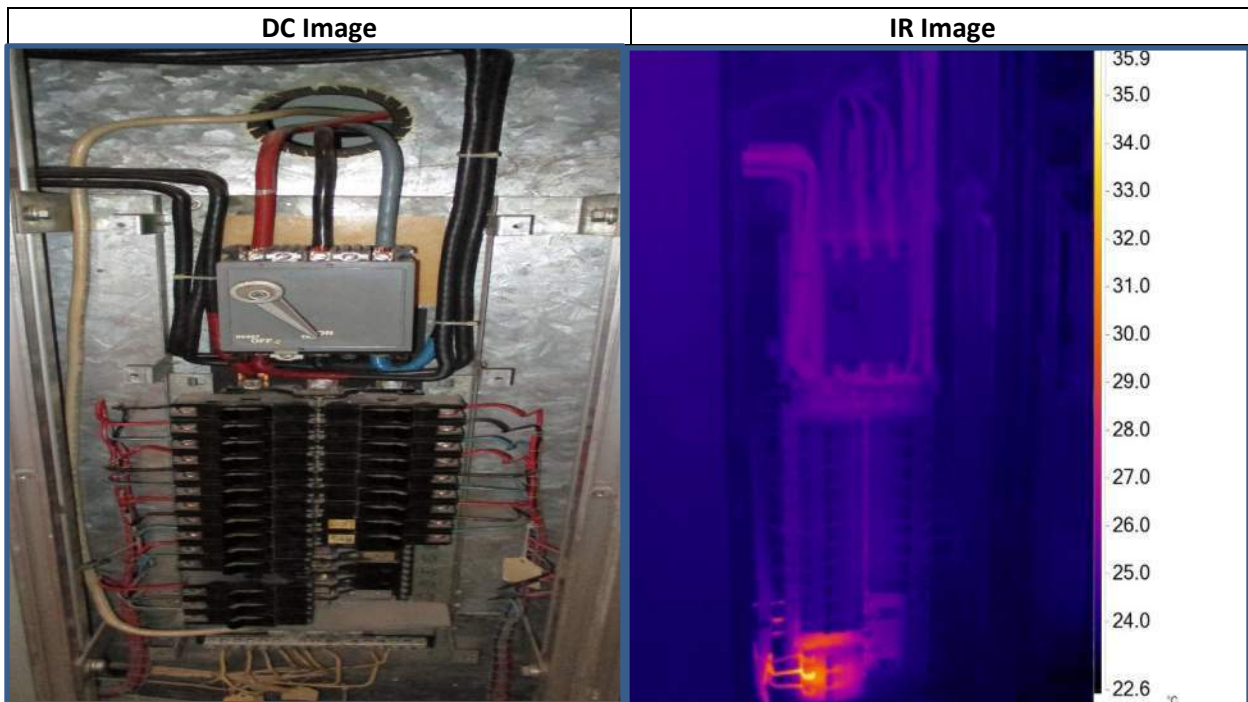
Location	Distribution 600
Description	Dist 600 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00074

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SN Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 TWU Cu	Safety Notes: DC844 IR1135

Location	Distribution 600
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A00075

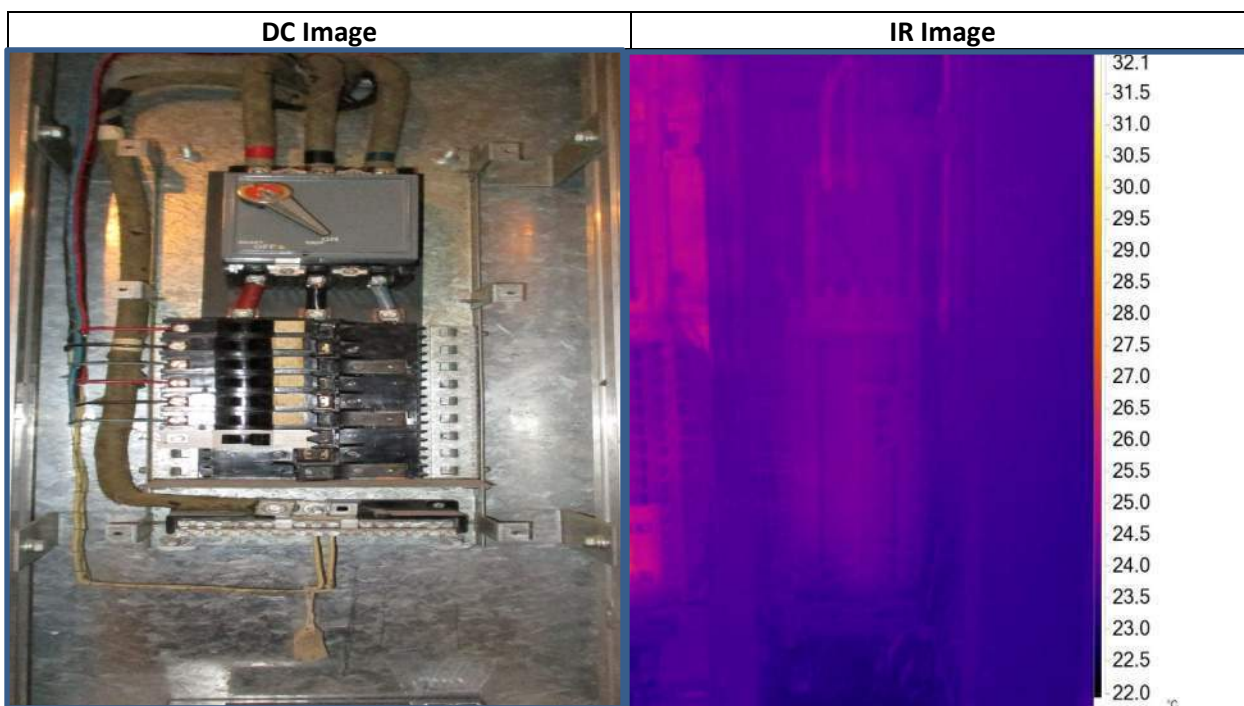
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 25 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 R90 Cu	Safety Notes: DC 845 IR1136 MCCB NEF431070

Location	Distribution 600
Description	Panel B
System	120/208 3P 4W
ID Tag Number	BCP-A00076



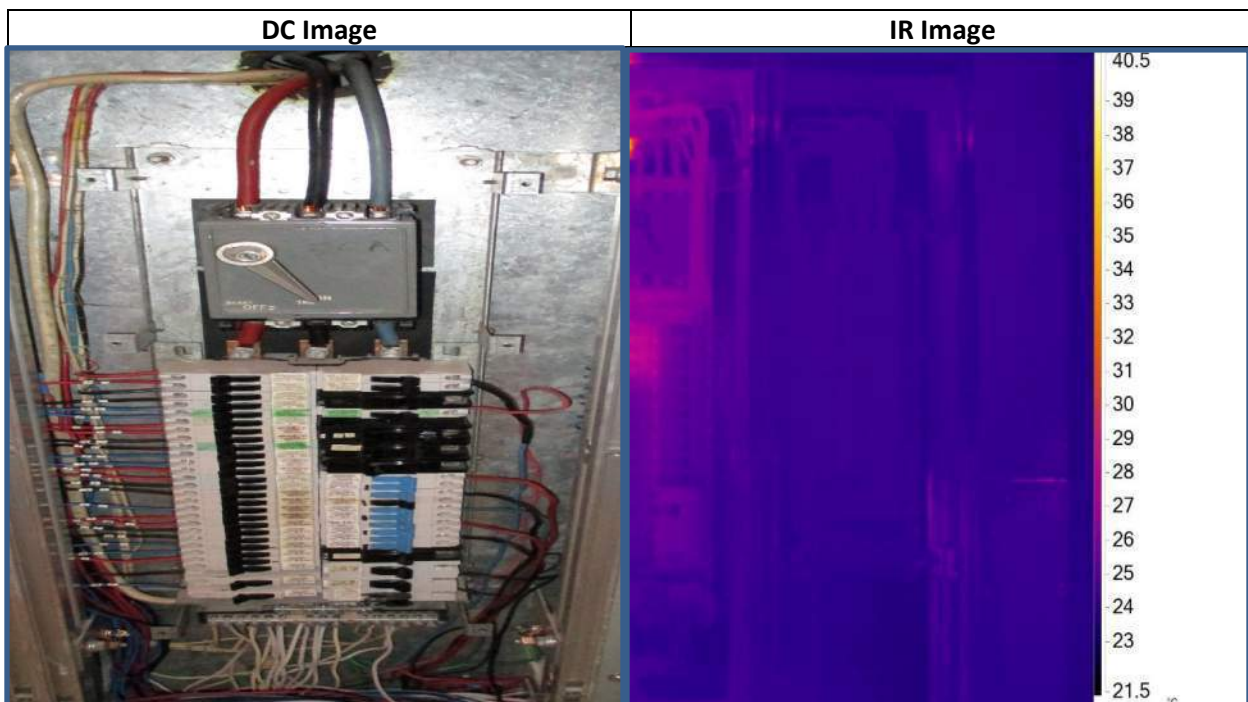
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 23 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 R90 Cu	Safety Notes: DC846 IR1137 MCCB NEF431070 Refer to IR Problems Report
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Location	Distribution 600
Description	Panel E
System	120/208 3P 4W
ID Tag Number	BCP-A00077



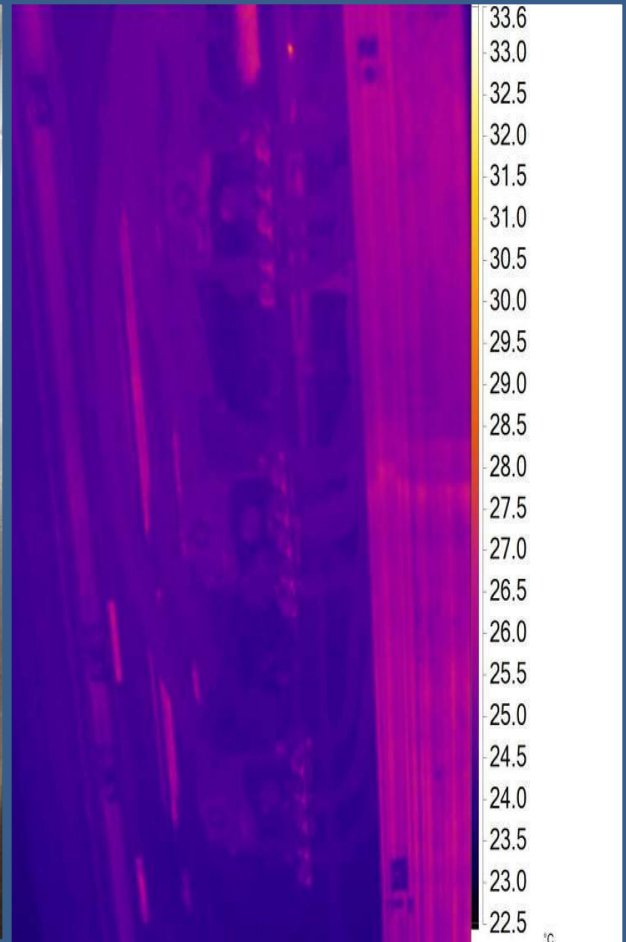
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 60 In Use: 57 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #2R90 Cu	DC847 IR1138 MCCB NEF431050

Location	Distribution 600
Description	Panel G
System	120/208 3P 4W
ID Tag Number	BCP-A00078

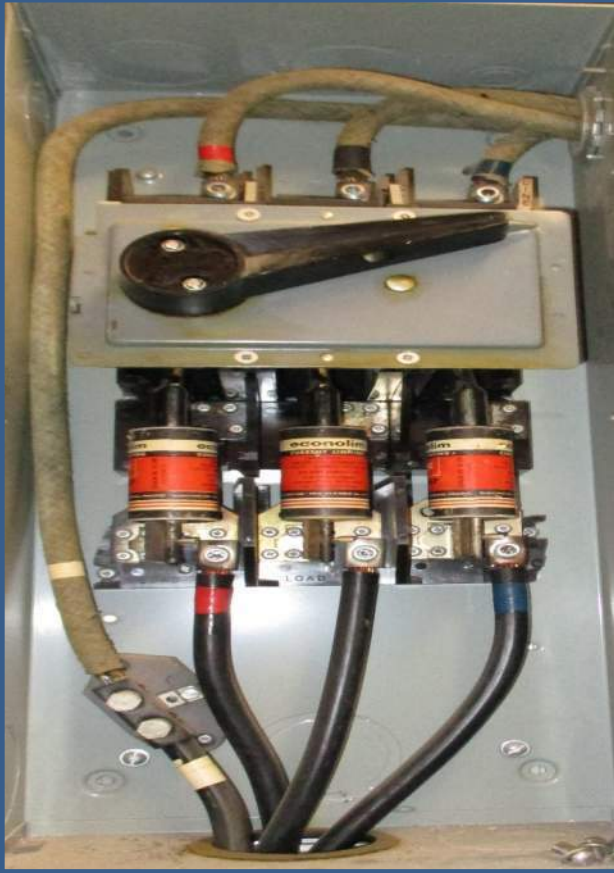
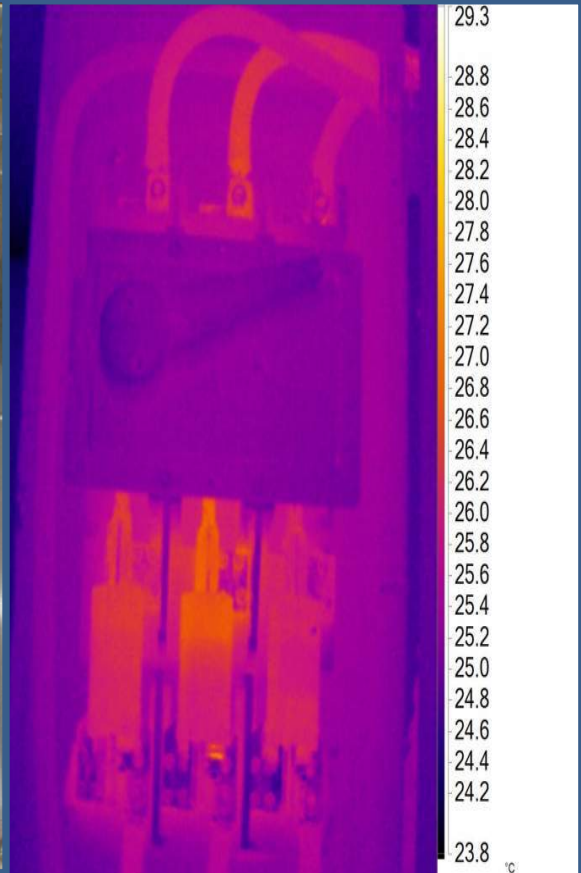


Application Notes: Make: Federal Pacific Model: NALP 18-4AB Circuits: 18 In Use: 7 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 2/0 R90 Cu	Safety Notes: DC848 IR1139 MCCB NEF431030
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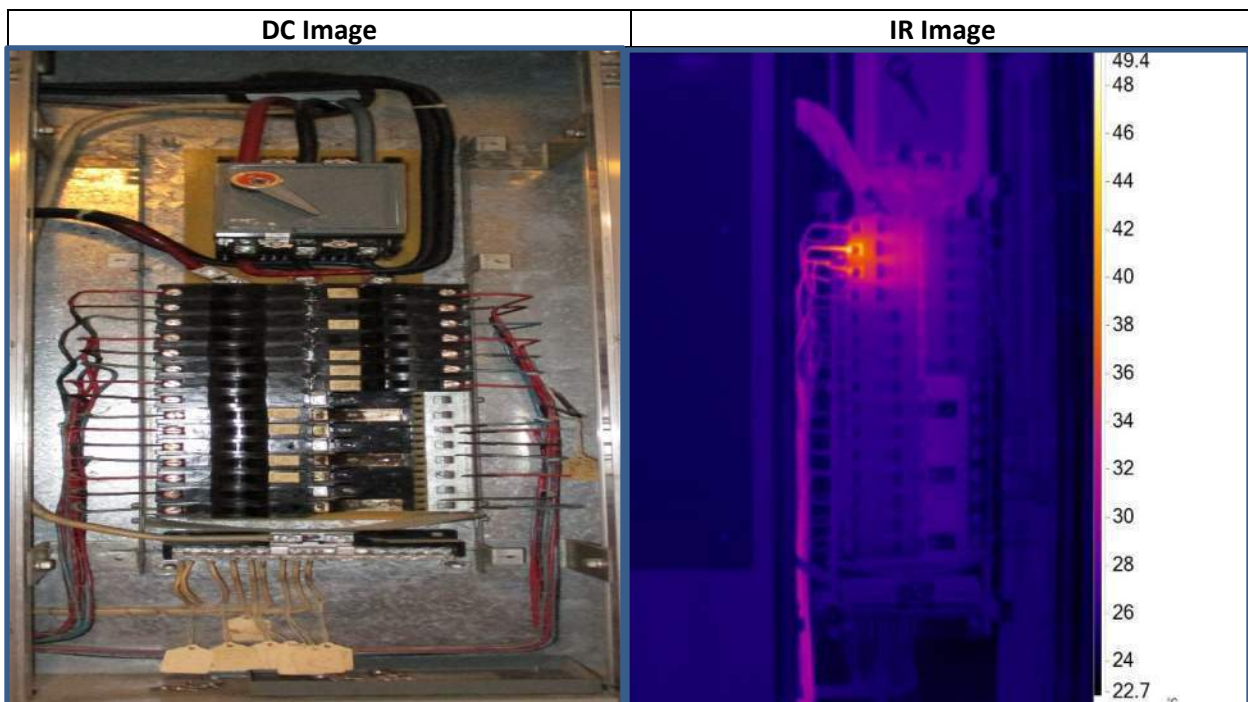
Location	Distribution 600
Description	Dist 600 Splitter
System	120/208 3P 4W
ID Tag Number	JB-A00165

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-50 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU Cu	Safety Notes: DC849 IR1140

Location	Distribution 601
Description	Dist 601 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00070

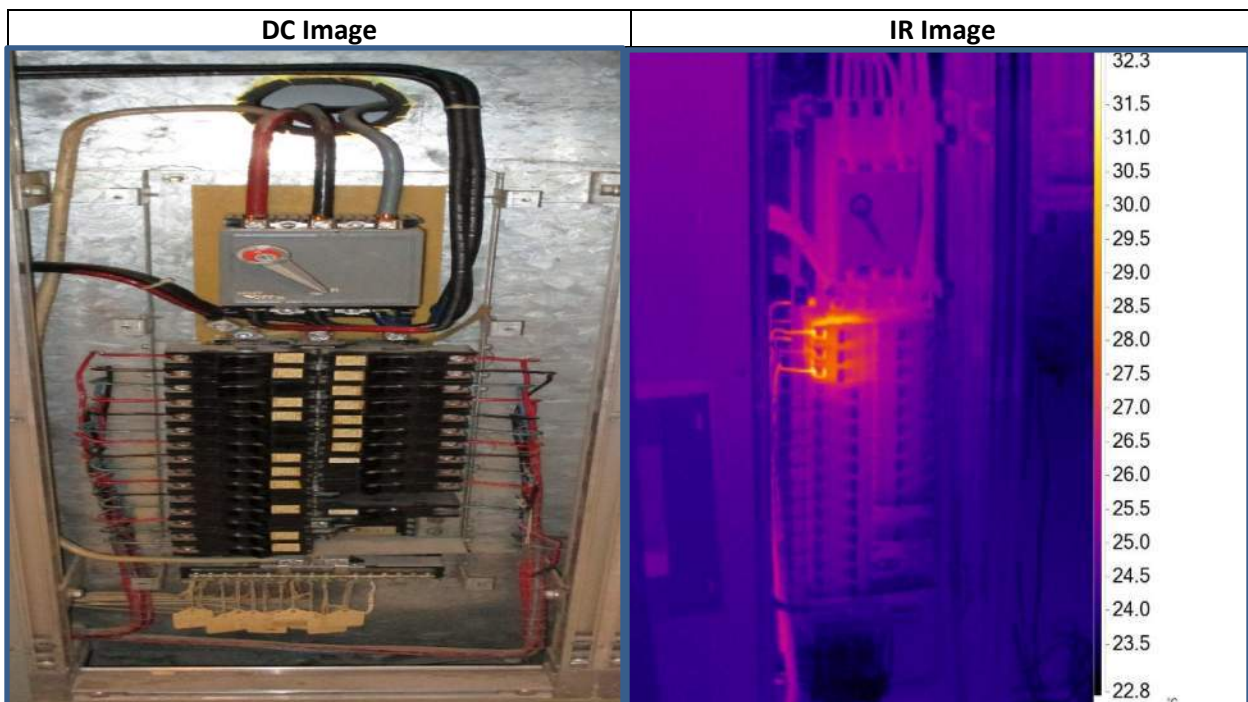
DC Image	IR Image
	 29.3 28.8 28.6 28.4 28.2 28.0 27.8 27.6 27.4 27.2 27.0 26.8 26.6 26.4 26.2 26.0 25.8 25.6 25.4 25.2 25.0 24.8 24.6 24.4 24.2 23.8
Application Notes: Make: Federal Pacific Model: 1232SN Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 TWU Cu	Safety Notes: DC850 IR1141

Location	Distribution 601
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A00071



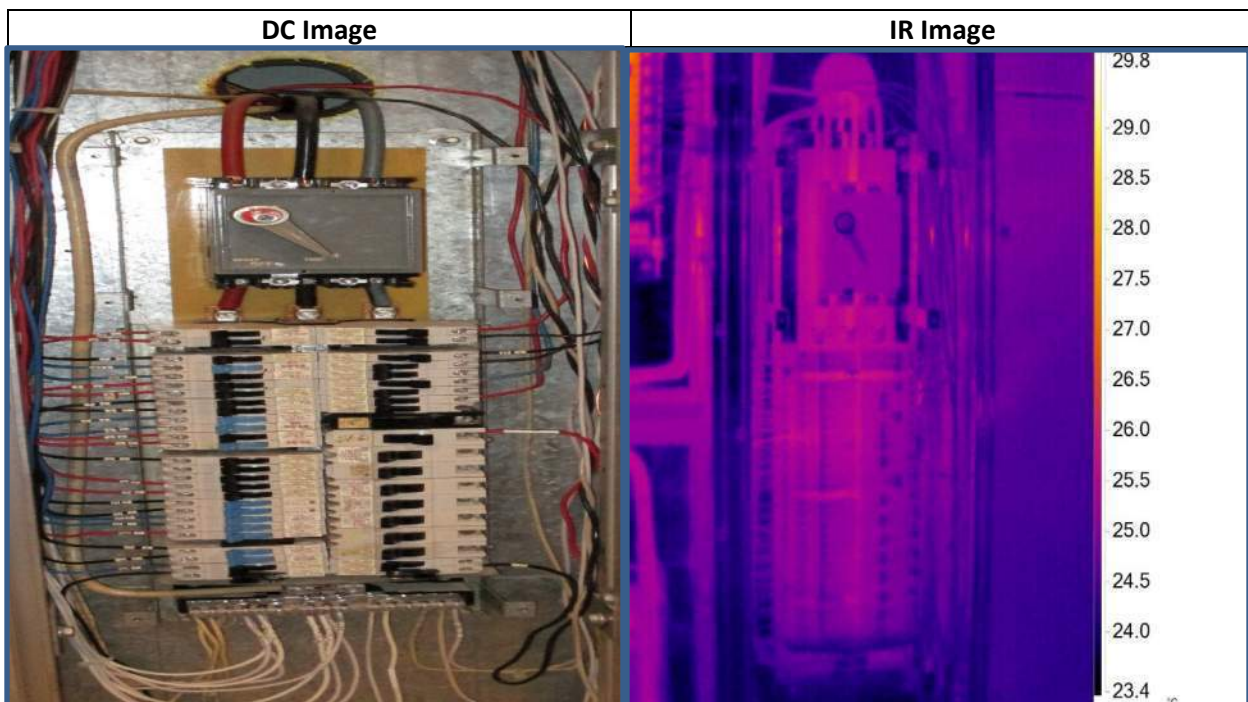
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 22 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 TWU Cu	Safety Notes: DC851 IR1142 MCCB NEF431070
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Location	Distribution 601
Description	Panel D
System	120/208 3P 4W
ID Tag Number	BCP-A00072



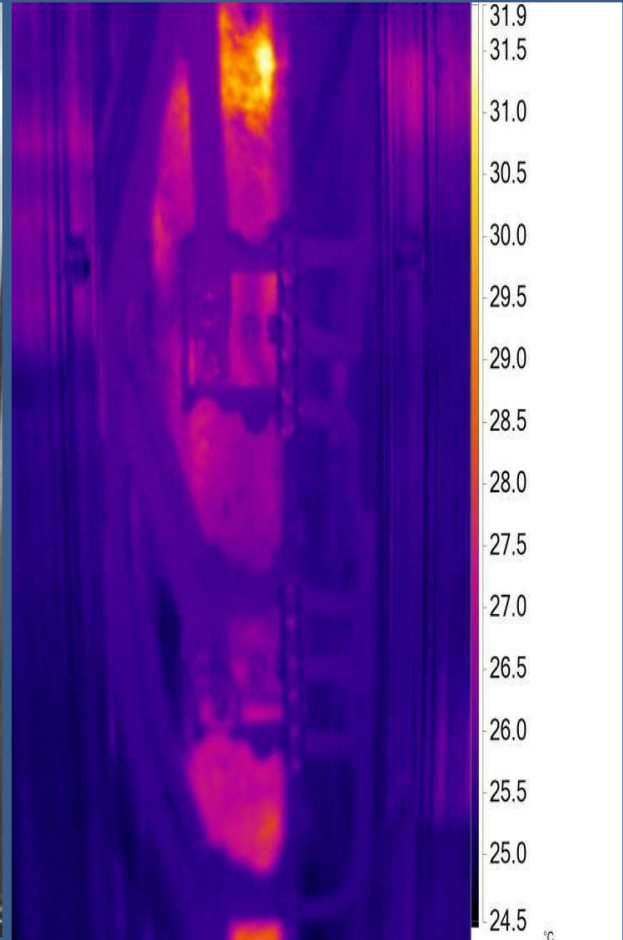
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 26 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 TWU Cu	DC852 IR1143 MCCB NEF431070

Location	Distribution 601
Description	Panel F
System	120/208 3P 4W
ID Tag Number	BCP-A00073



Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 60 In Use: 56 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #2 TWU Cu	Safety Notes: DC853 IR1144 MCCB NEF431050
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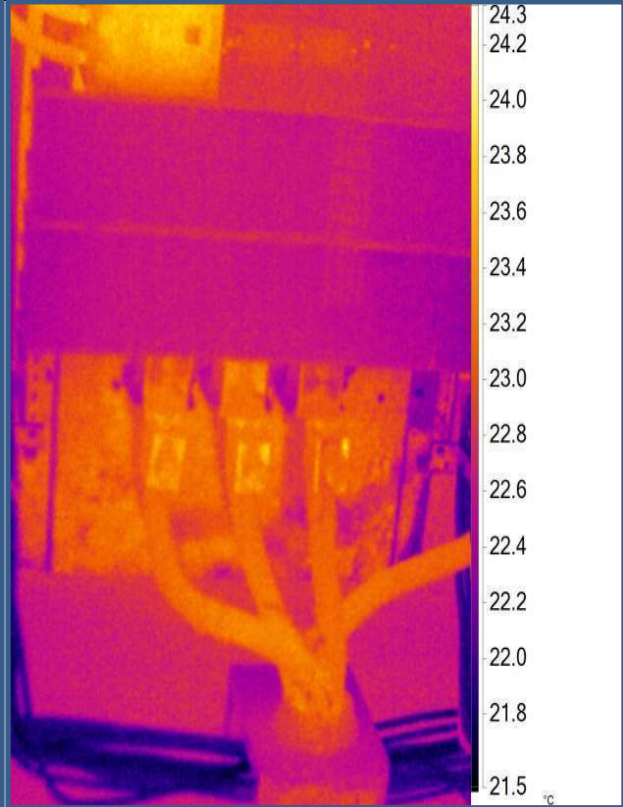
Location	Distribution 601
Description	Dist 601 Splitter
System	120/208 3P 3W
ID Tag Number	JB-A00166

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-57 Voltage: 120/208V Current: 200A Wire Type: 2/0 TWU	Safety Notes: DC 854 IR1145

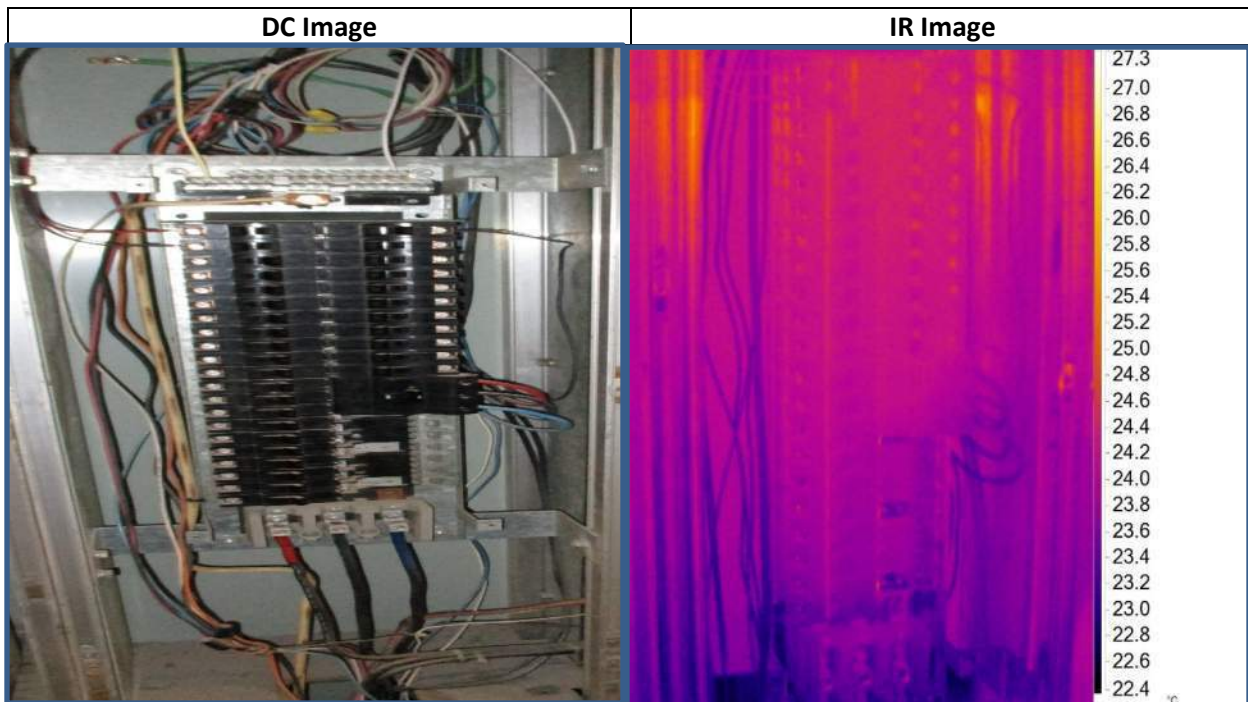
Section

Basement
Garage

Location	Distribution B102
Description	Distribution B102
System	120/208 3P 4W
ID Tag Number	DP-A00138

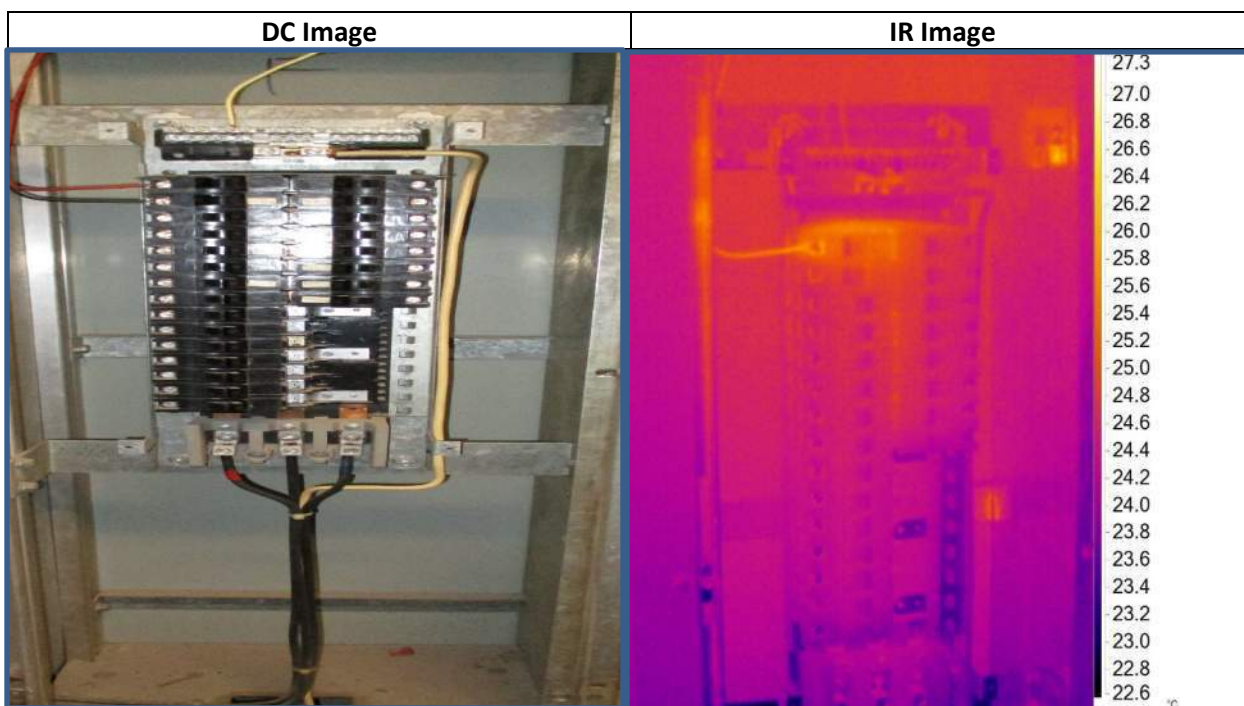
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: CDP-R Voltage: 120/208V Current: 400A Phase: 3 Main Breaker: N/A Breaker Type: Wire Type: 600KCMIL TW Cu	Safety Notes: DC937 IR1225 Breaker Trip settings: N/A

Location	Distribution B102
Description	Panel E
System	120/208 3P 4W
ID Tag Number	BCP-A00139



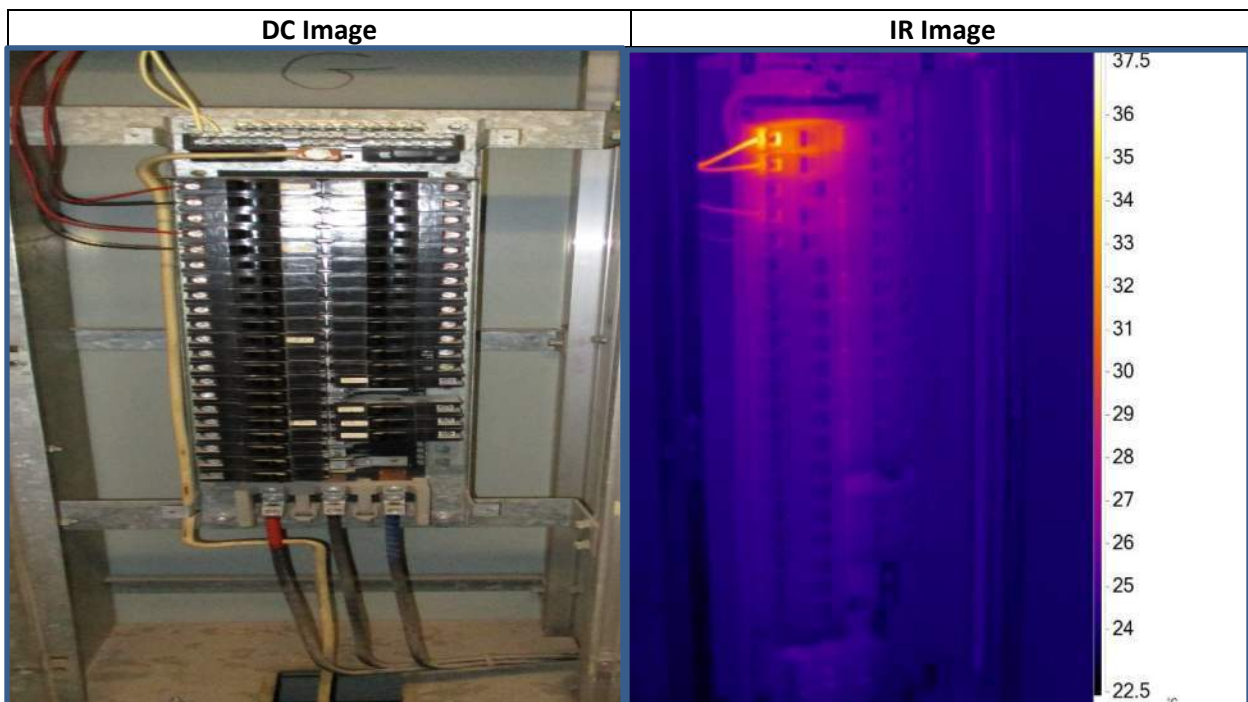
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 42-4L Circuits: 42 In Use: 35 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TWH Cu	DC938 IR1226

Location	Distribution B102
Description	Panel F
System	120/208 3P 4W
ID Tag Number	BCP-A00140



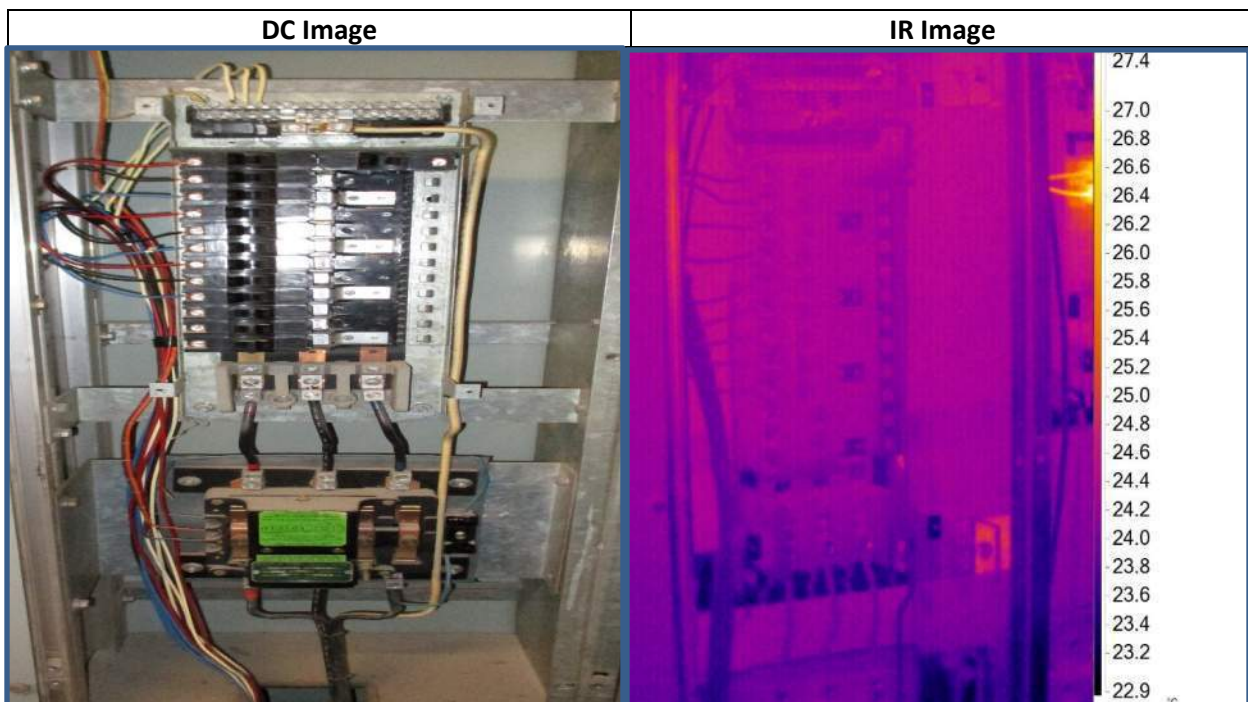
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP30-4L Circuits: 30 In Use: 23 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 RW90 Cu	DC939 IR1227

Location	Distribution B102
Description	Panel G
System	120/208 3P 4W
ID Tag Number	BCP-A00141



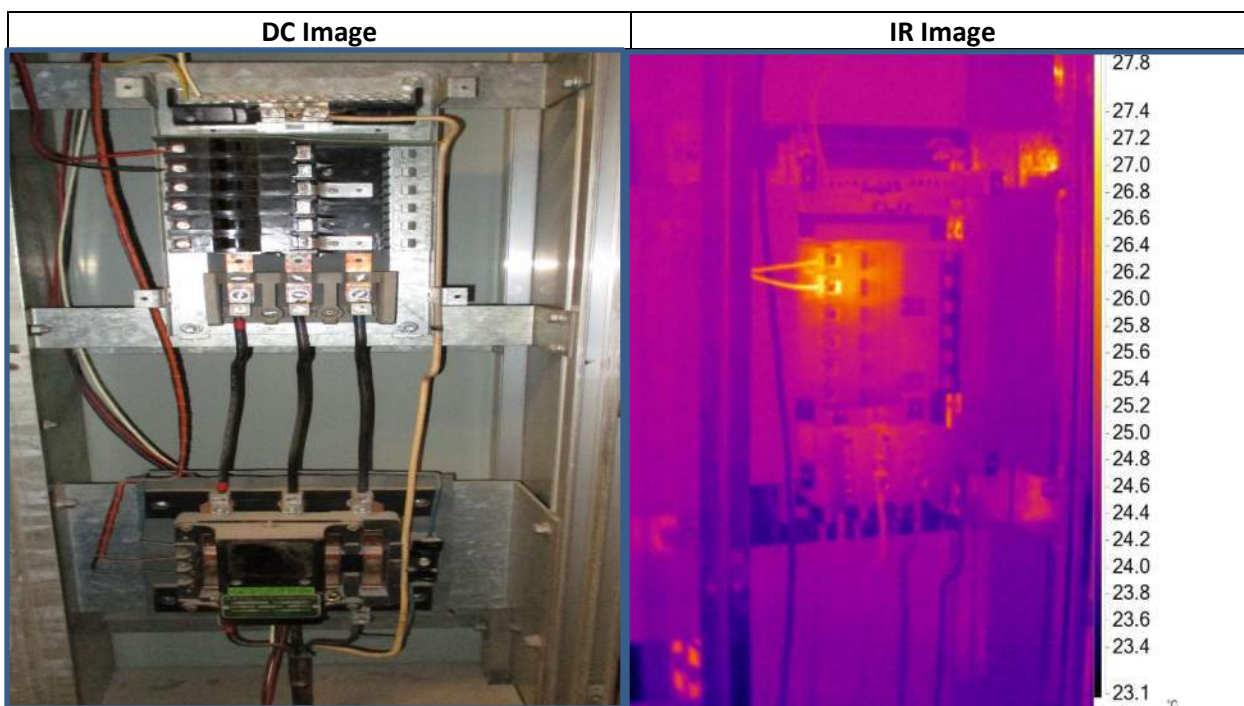
Application Notes: Make: Federal Pacific Model: NALP42-4L Circuits: 42 In Use: 38 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 RW90 Cu	Safety Notes: DC940 IR1228
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Location	Distribution B102
Description	Panel M
System	120/208 3P 4W
ID Tag Number	BCP-A00142



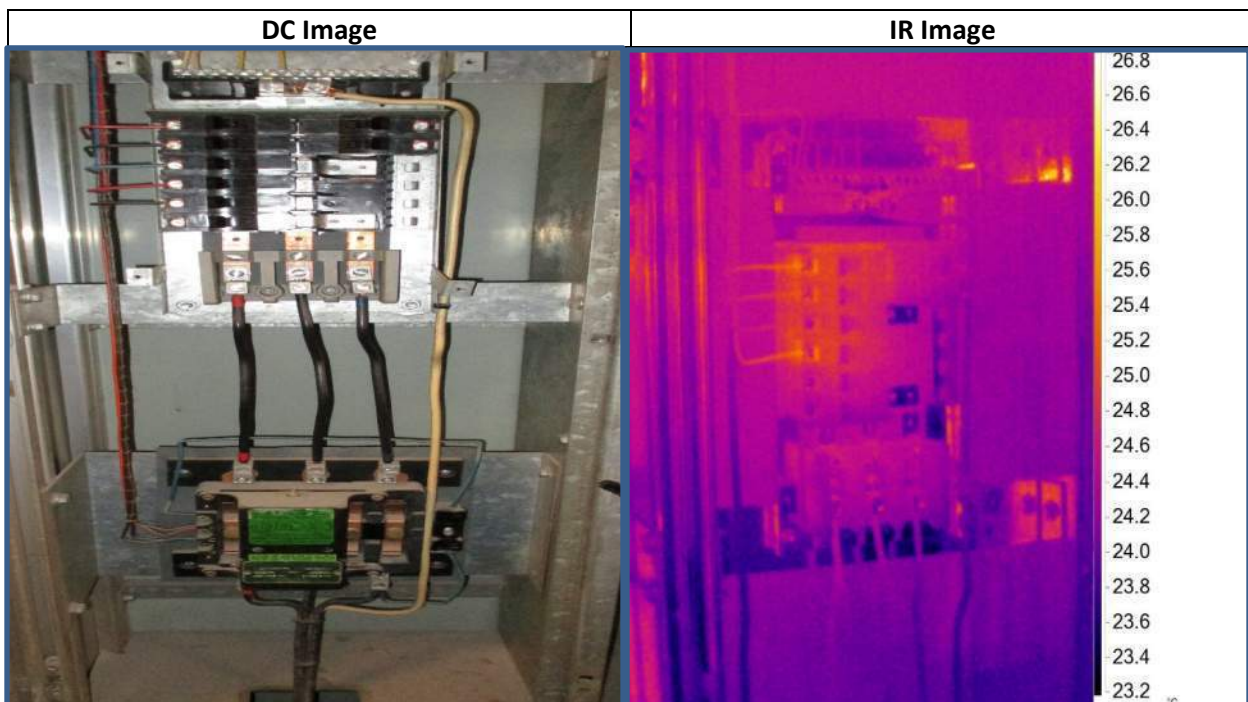
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP24-4L Circuits: 24 In Use: 13 Voltage: 120/208V Current: 40A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TWH Cu	DC941 IR1229

Location	Distribution B102
Description	Panel PP
System	120/208 3P 4W
ID Tag Number	BCP-A00143



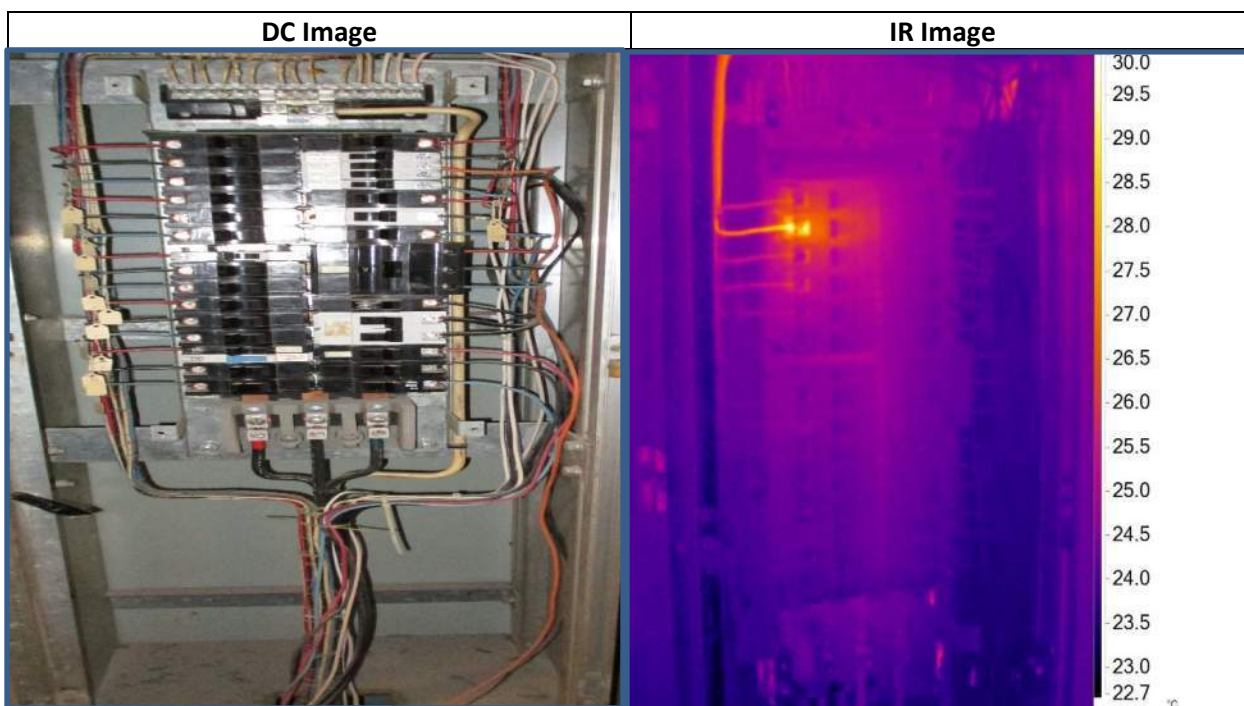
Application Notes: Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 6 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 R90 Cu	Safety Notes: DC942 IR1230
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Location	Distribution B102
Description	Panel V
System	120/208 3P 4W
ID Tag Number	BCP-A00144



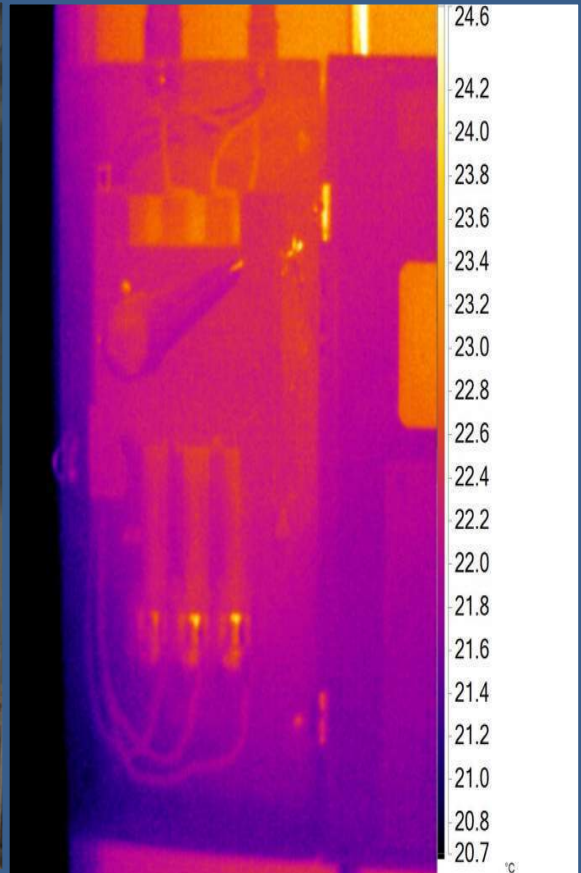
Application Notes: Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 8 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TWH Cu	Safety Notes: DC943 IR1231
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Location	Distribution B102
Description	Panel W
System	120/208 3P 4W
ID Tag Number	BCP-A00145

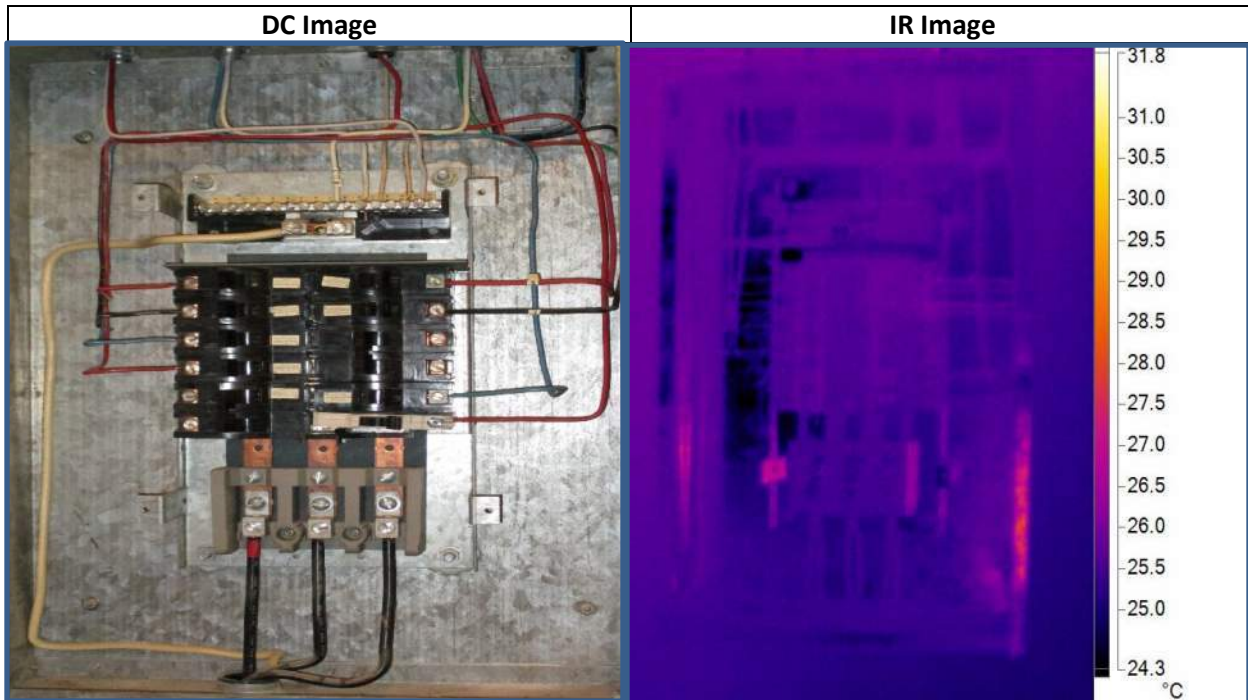


Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4L Circuits: 60 In Use: 59 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #4 TWH Cu	DC944 IR1232

Location	Distribution B102
Description	Ramp Door Disconnect
System	208 3P 3W
ID Tag Number	DISC-A00146

DC Image	IR Image
	
Application Notes: Make: Federal PIONEER Model: 1336 Voltage: 208V Current: 30A Breaker/Fuse Type: NLS15 NRS15 Wire Type: #12 R90 Cu	Safety Notes: DC945 IR1233

Location	Basement Garage
Description	Panel TE
System	120/208 3P 4W
ID Tag Number	BCP-A00264

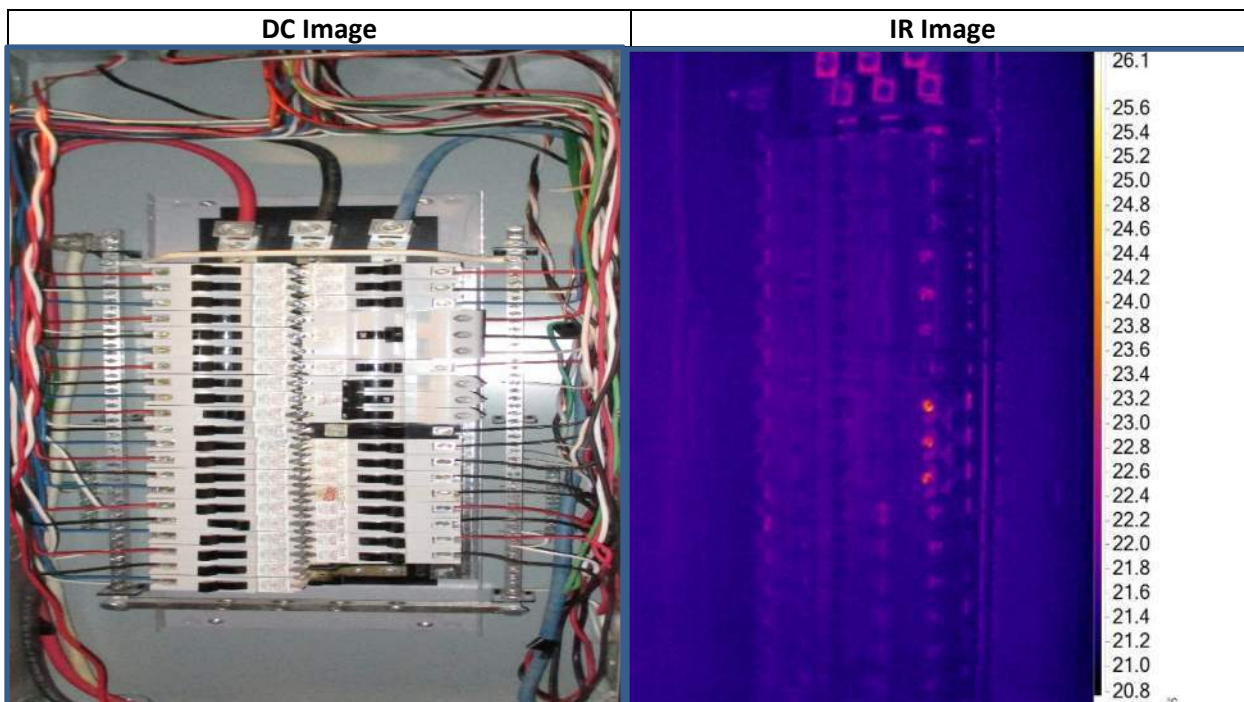


Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 12-4L Circuits: 24 In Use: 23 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #6 TW Cu	DC1047 IR89

Section

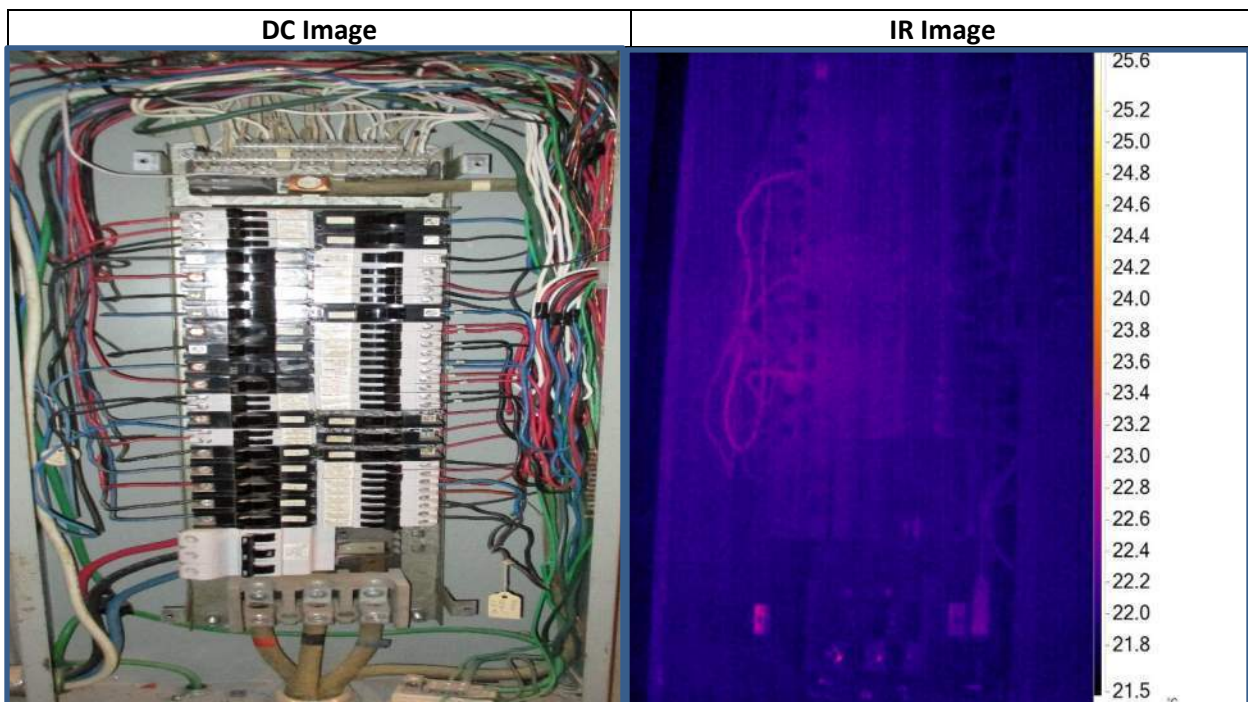
Basement
Gym

Location	Basement Gym
Description	Panel T
System	120/208 3P 4W
ID Tag Number	BCP-A00197



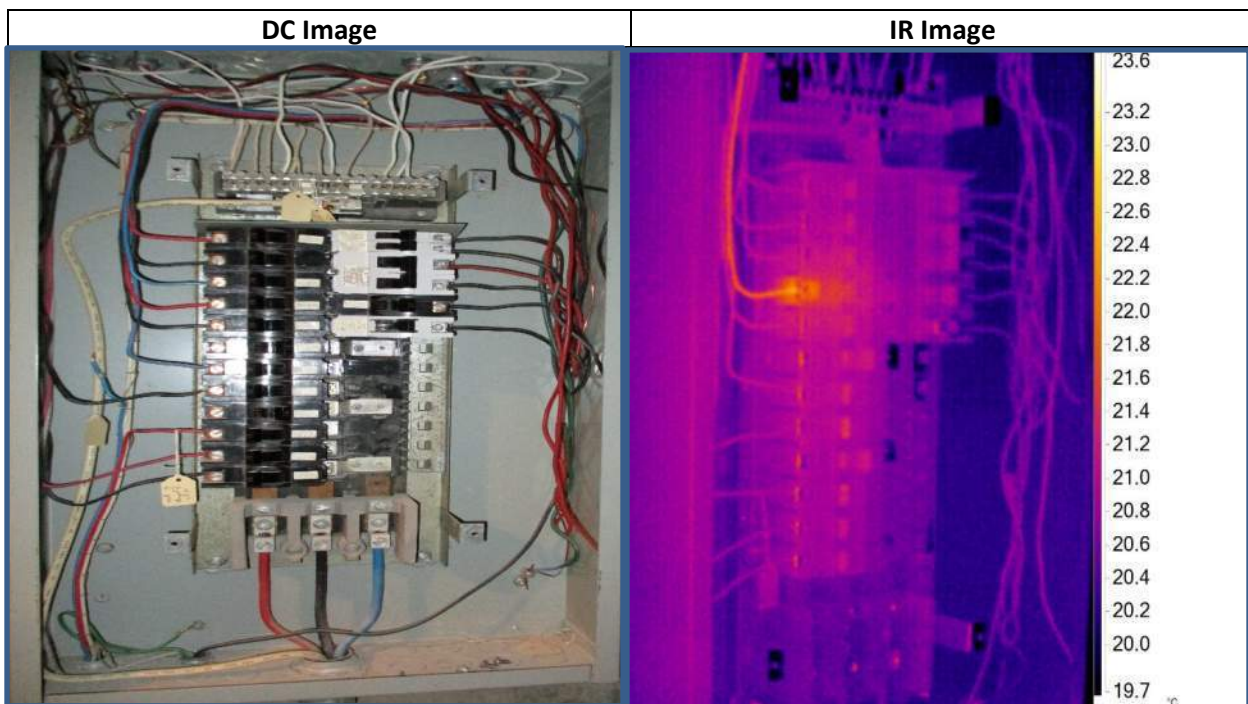
Application Notes:	Safety Notes:
Make: Federal Pioneer Model: NDC 342 Circuits: 42 In Use: 40 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #3 RW90 Cu	DC978 IR1259

Location	Basement Gym
Description	Panel R
System	120/208 3P 4W
ID Tag Number	BCP-A00198



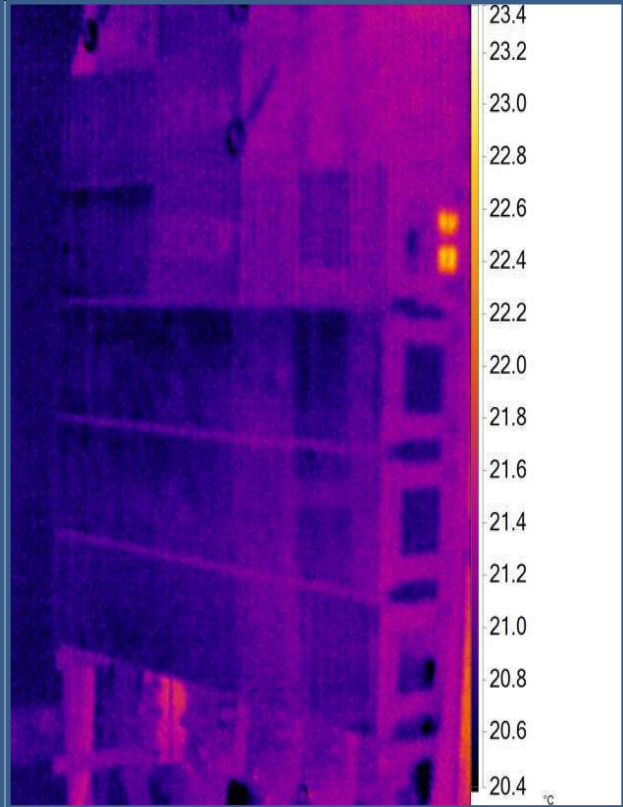
Application Notes: Make: Federal Pacific Model: NALP 42-4L Circuits: 42 In Use: 39 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 2/0 TW Cu	Safety Notes: DC979 IR1260
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Location	Basement Gym
Description	Panel P
System	120/208 3P 4W
ID Tag Number	BCP-A00199

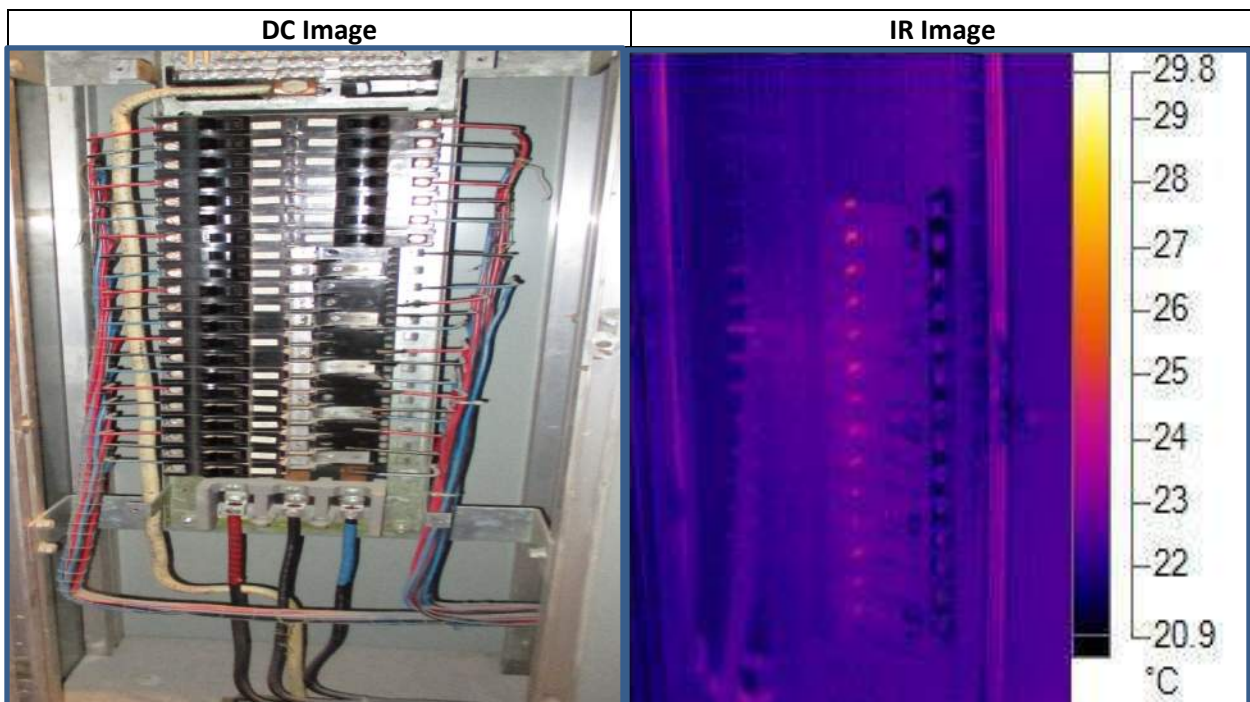


Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 17 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC980 IR1261
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Location	Basement Gym
Description	Distribution B103
System	120/208 3P 4W
ID Tag Number	DP-A00200

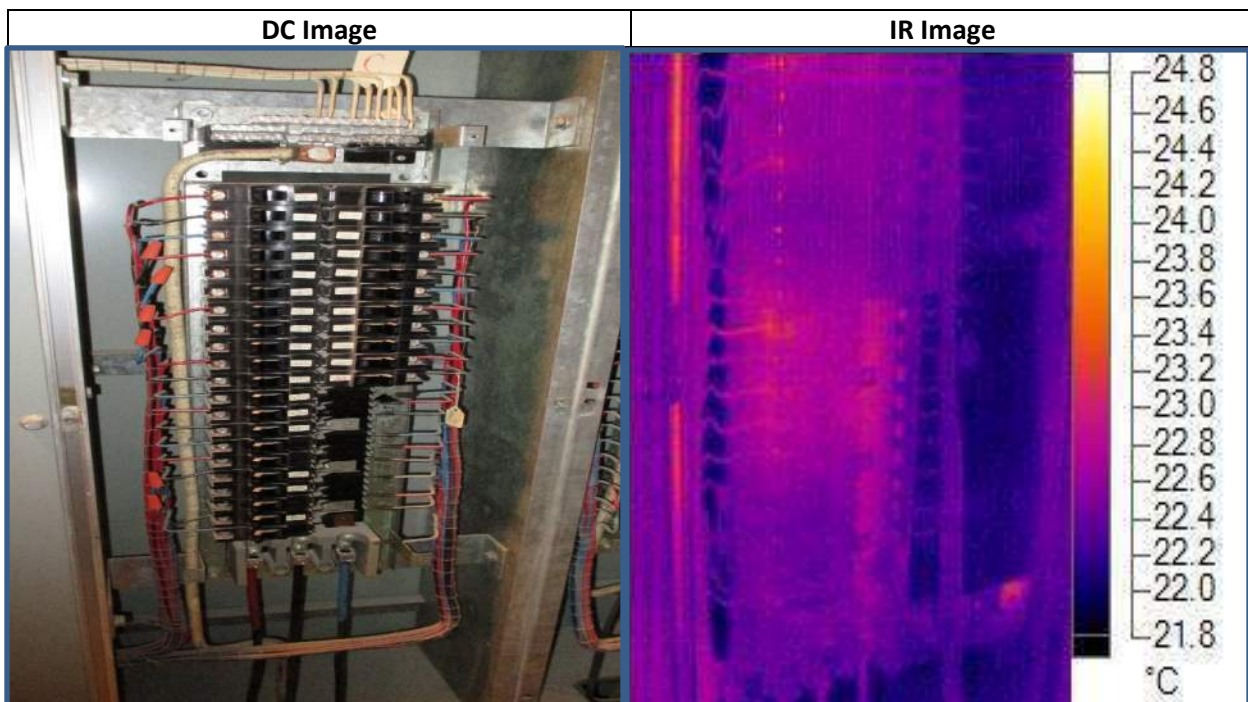
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: CDP-R Voltage: 120/208V Current: 400A Phase: 3 Main Breaker: N/A Breaker Type: NFJ Wire Type: 750 KCMIL TW Cu	Safety Notes: DC981 IR1262 Breaker Trip settings: NA

Location	Basement Gym
Description	Panel D
System	120/208 3P 4W
ID Tag Number	BCP-A00201



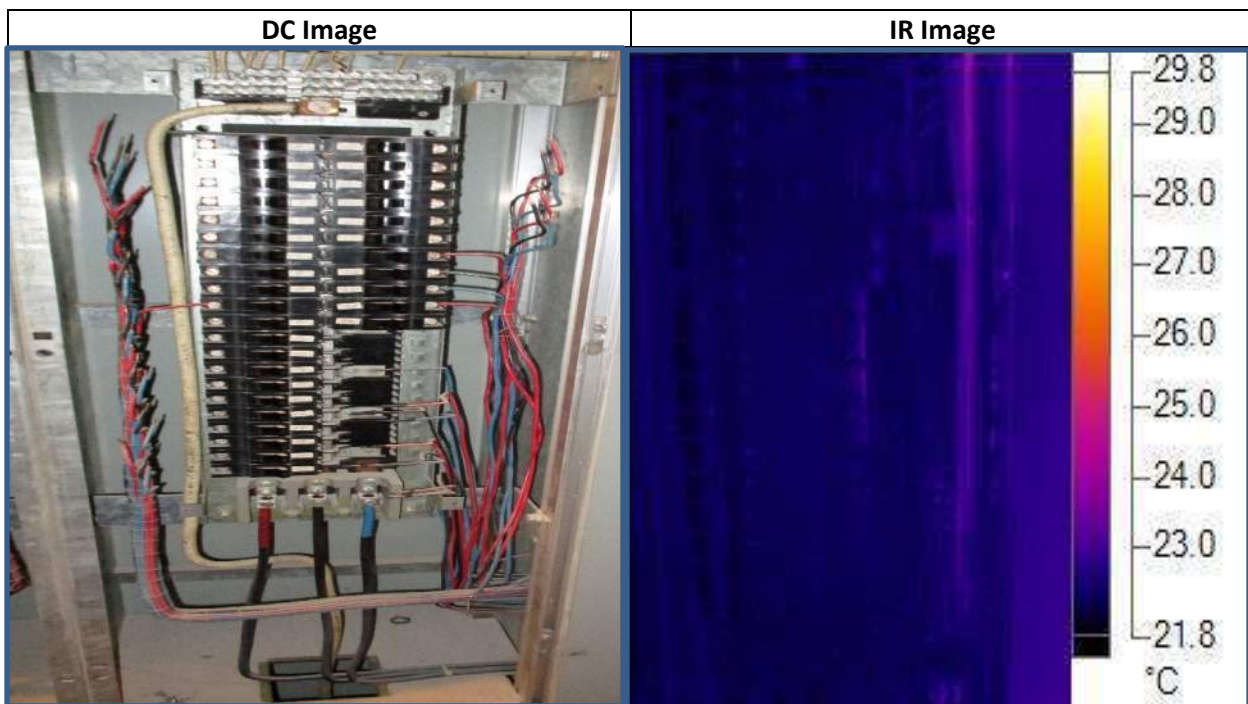
Application Notes: Make: Federal Pacific Model: NALP 42-4L Circuits: 42 In Use: 28 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC982 IR1263
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Location	Basement Gym
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A00202



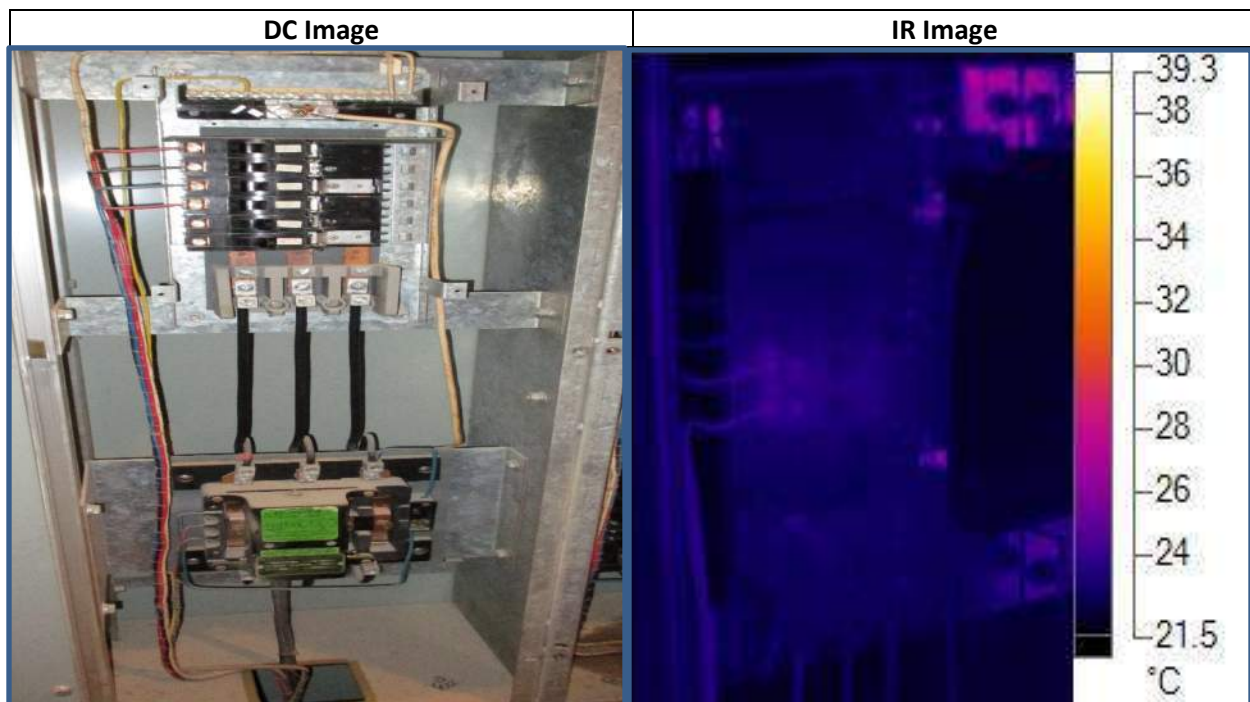
Application Notes: Make: Federal Pacific Model: NALP 42-4L Circuits: 42 In Use: 32 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC983 IR1264
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Location	Basement Gym
Description	Panel B
System	120/208 3P 4W
ID Tag Number	BCP-A00203



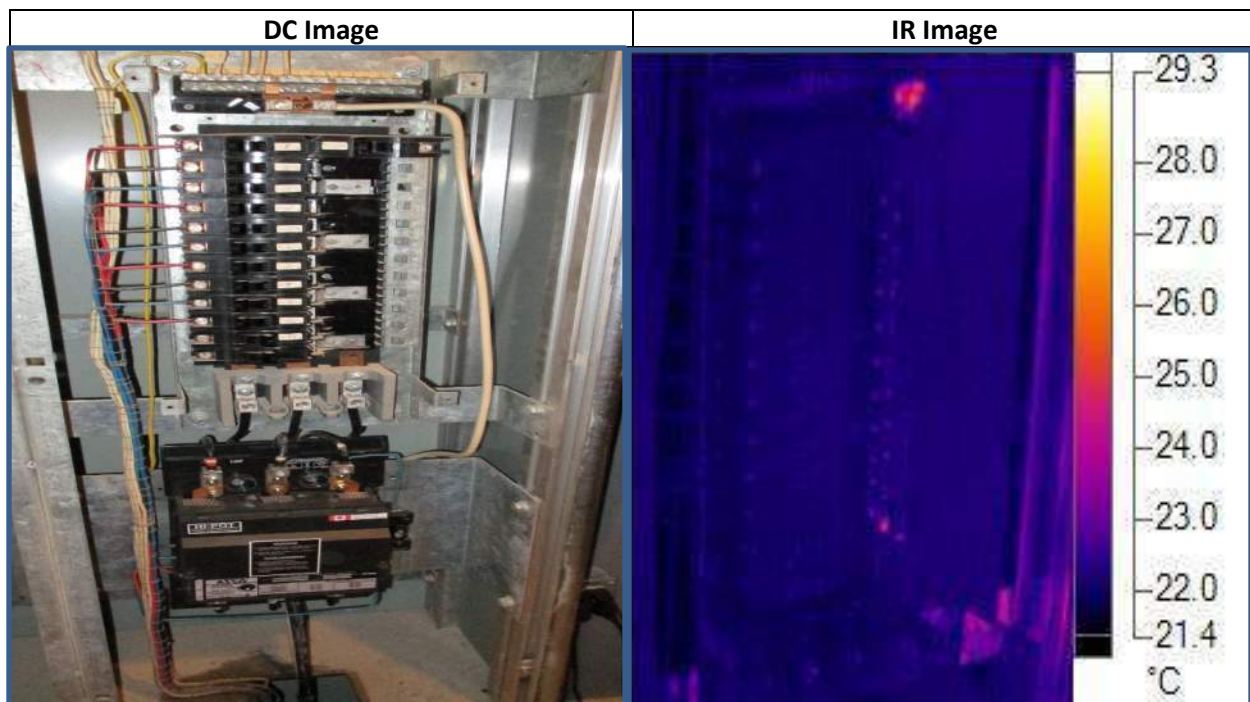
Application Notes: Make: Federal Pacific Model: NALP42-4L Circuits: 42 In Use: 32 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC984 IR1265
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Location	Basement Gym
Description	Panel NN
System	120/208 3P 4W
ID Tag Number	BCP-A00204



Application Notes: Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 6 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 TW Cu	Safety Notes: DC985 IR1266
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Location	Basement Gym
Description	Panel L
System	120/208 3P 4W
ID Tag Number	BCP-A00205



Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 13 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 TW Cu	Safety Notes: DC986 IR1267
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Section

Basement
Main
Distribution A

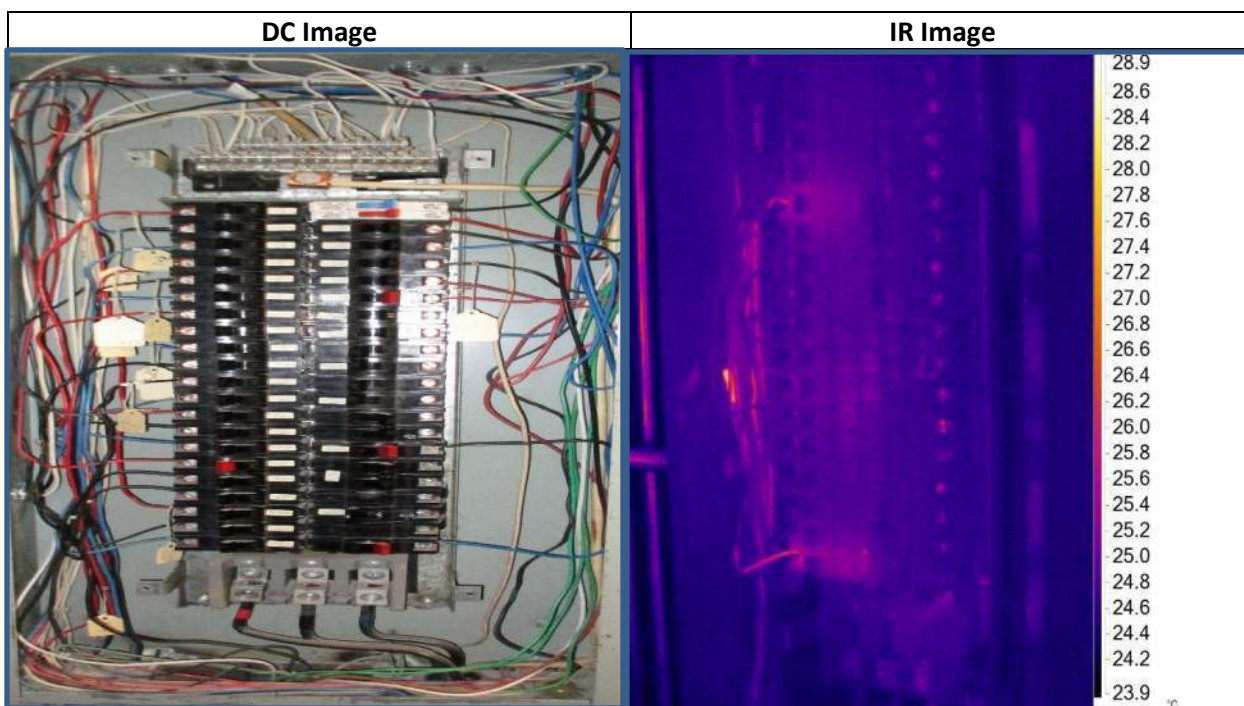
Location	Main Distribution A
Description	Main Distribution 600v
System	600v 3P 3W
ID Tag Number	MCCB-A00158

DC Visual Image Number	IR Visual Image Number
947	Not able to open



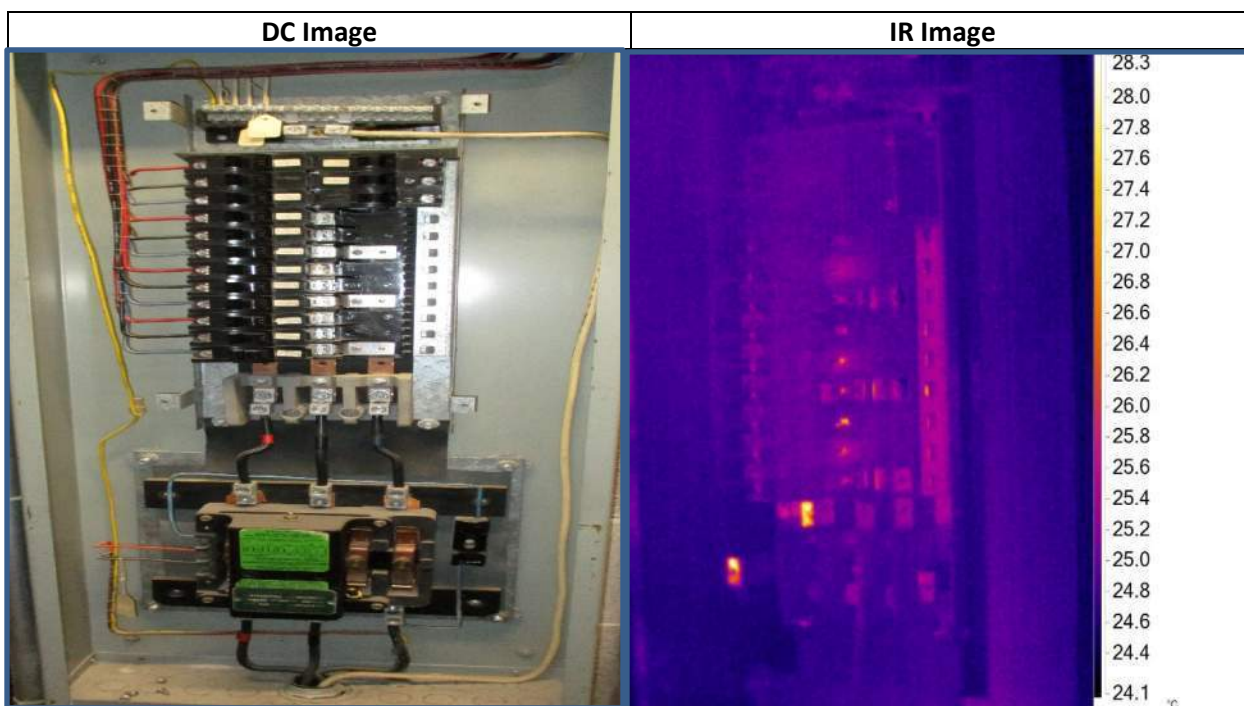
Application Notes:	Safety Notes:
Make: Square D Model: YA8JHR63A3SFFFXJA Voltage: 600V Current: 3200A Breaker Type: NW32L1 KA: 130	Breaker Trip Settings LTDigital ST Digital INSTDigital GFDigital

Location	Main Distribution A
Description	Panel S
System	120/208 3P 4W
ID Tag Number	BCP-A00159



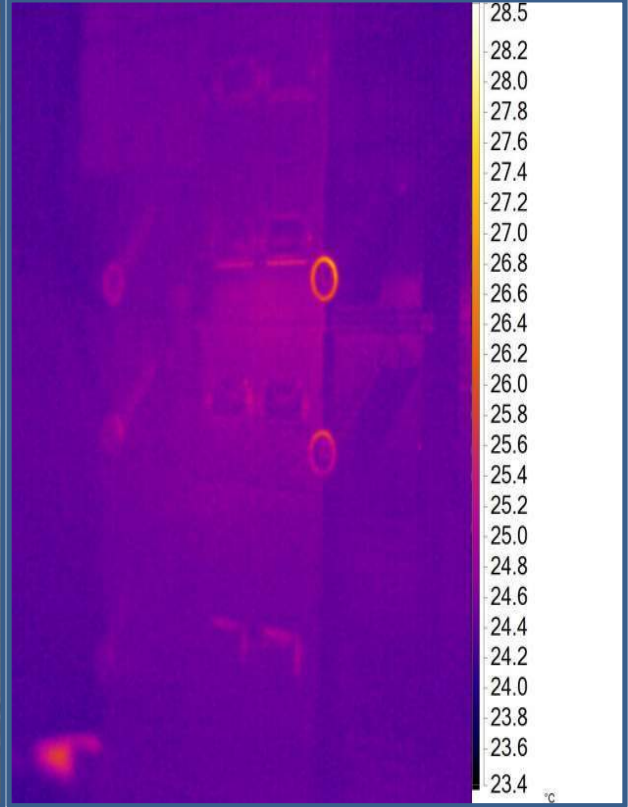
Application Notes: Make: Federal Pacific Model: NALP 42-4I Circuits: 42 In Use: 42 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC948 IR1236

Location	Main Distribution A
Description	Panel EE
System	120/208 3P 4W
ID Tag Number	BCP-A00160

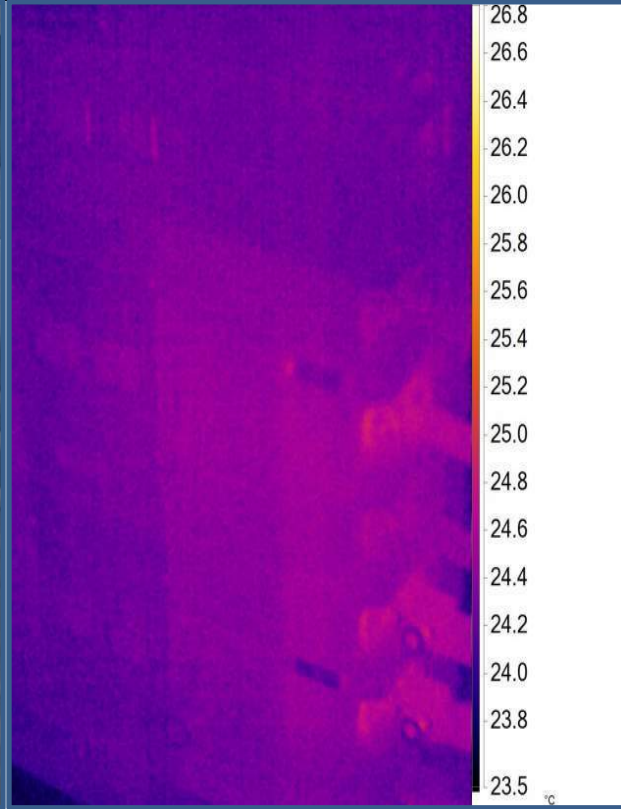


Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 15 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 TW Cu	DC949 IR1237

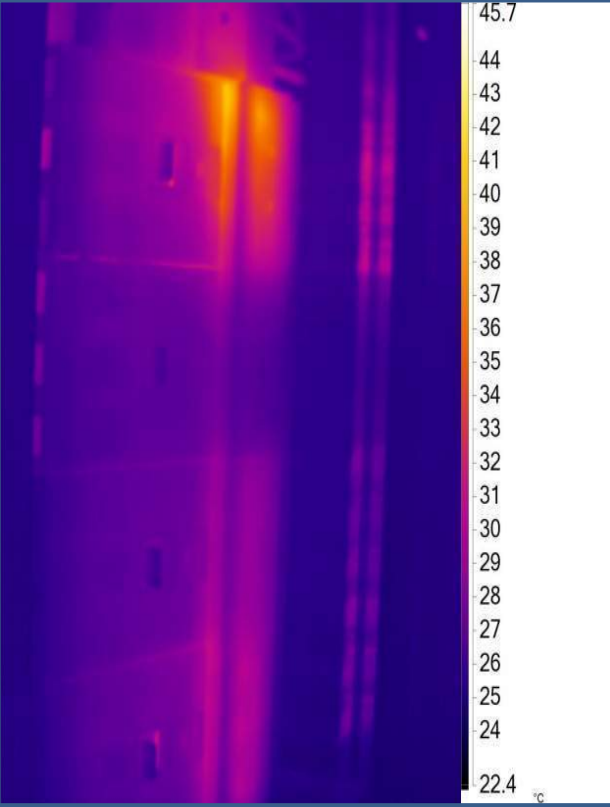
Location	Main Distribution A
Description	Panel A
System	120/208 3P 4W
ID Tag Number	DP-A00161

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: CDP-R Voltage: 120/208V Current: 800A Phase: 3 Main Breaker: N/A Breaker Type: NFJ/TJJ Wire Type: Buss 3" X 1/4" Per Phase	Safety Notes: DC950 IR1234 Breaker Trip settings: N/A

Location	Main Distribution A
Description	Panel B
System	120/208 3P 4W
ID Tag Number	DP-A00162

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: CDP-R Voltage: 120/208V Current: 1000A Phase: 3 Main Breaker: N/A Breaker Type: TJJ Wire Type: Buss 4" X 1/4" Per Phase	Safety Notes: DC951 IR1235 Breaker Trip settings: N/A

Location	Main Distribution A
Description	No Name
System	600V 3P 3W
ID Tag Number	DP-A00176

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX9951-2 Voltage: 600V Current: 3000A Phase: 3 Main Breaker: Square D Breaker Type: NW32L1 Wire Type: 6"x 1/4" X 2" Buss Per Phase	Safety Notes: Breaker Trip settings: N/A

Location	Main Distribution A
Description	Main Distribution 120/208
System	120/208 3P 4W
ID Tag Number	MCCB-A00163

DC Visual Image Number	IR Visual Image Number
952	Not able to open



Application Notes:	Safety Notes:
Make: Square D Model: YA8KKR63A3SFFFXJA Voltage: 120/208V Current: 4000A Breaker Type: NW40L1 KA: 130	Breaker Trip Settings LTDigital ST Digital INSTDigital GFDigital

Location	Main Distribution A
Description	Panel ZZ
System	120/208 3P 4W
ID Tag Number	BCP-A00164

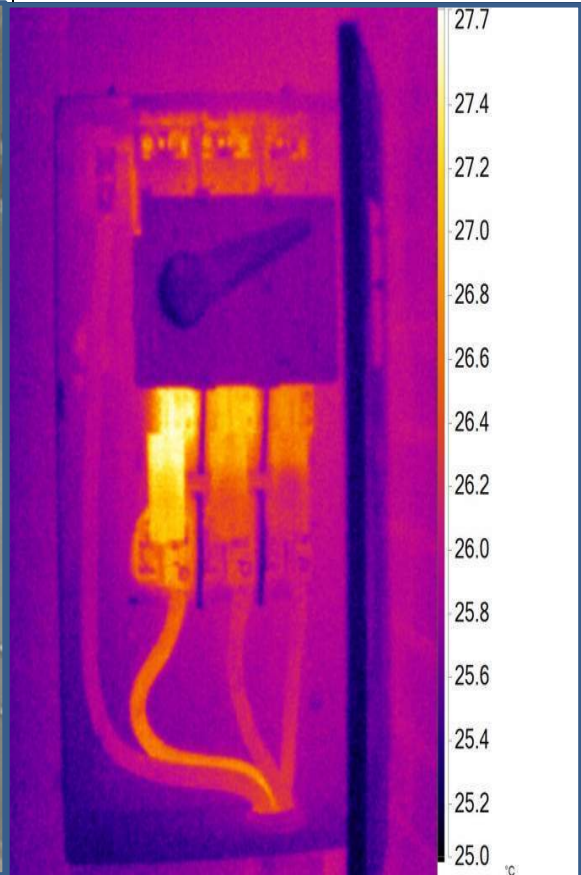
DC Image	IR Image
	

Application Notes:	Safety Notes:
Make: Federal Pioneer Model: 312-24 Circuits: 24 In Use: 15 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NC KA: 10 Wire Type: #4 TW Cu	DC954 Could not scan due to panel being enclosed in wall

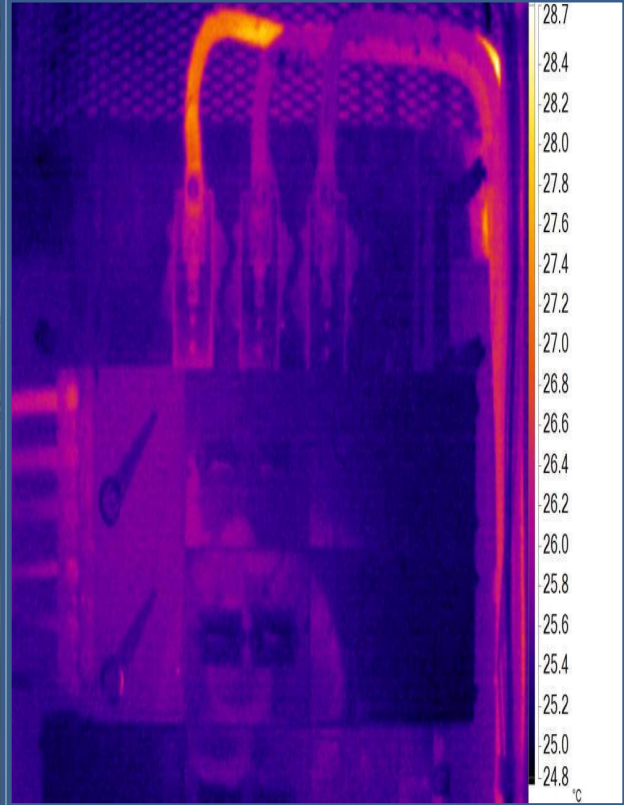
Section

Basement
Riser

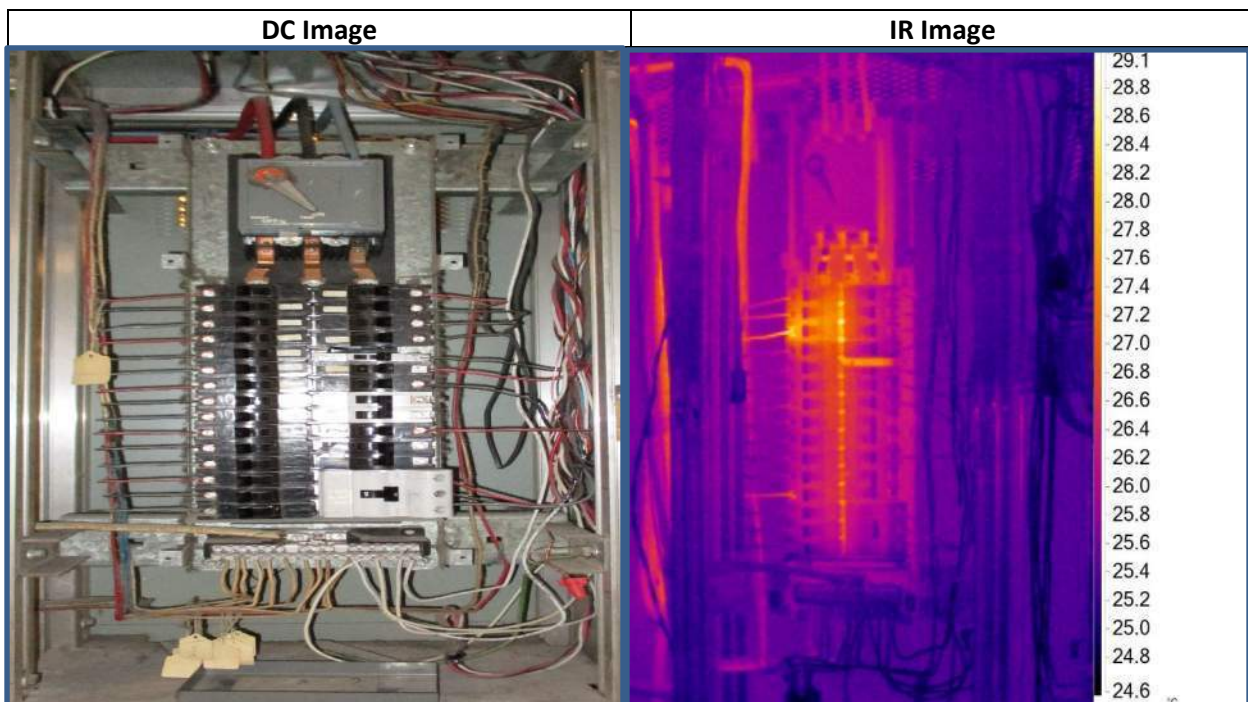
Location	Distribution B101
Description	Distribution B101 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00147

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: 1232SN Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 TWU Cu	Safety Notes: DC924 IR1212

Location	Distribution B101
Description	Dist B101
System	120/208 3P 4W
ID Tag Number	DP-A00148

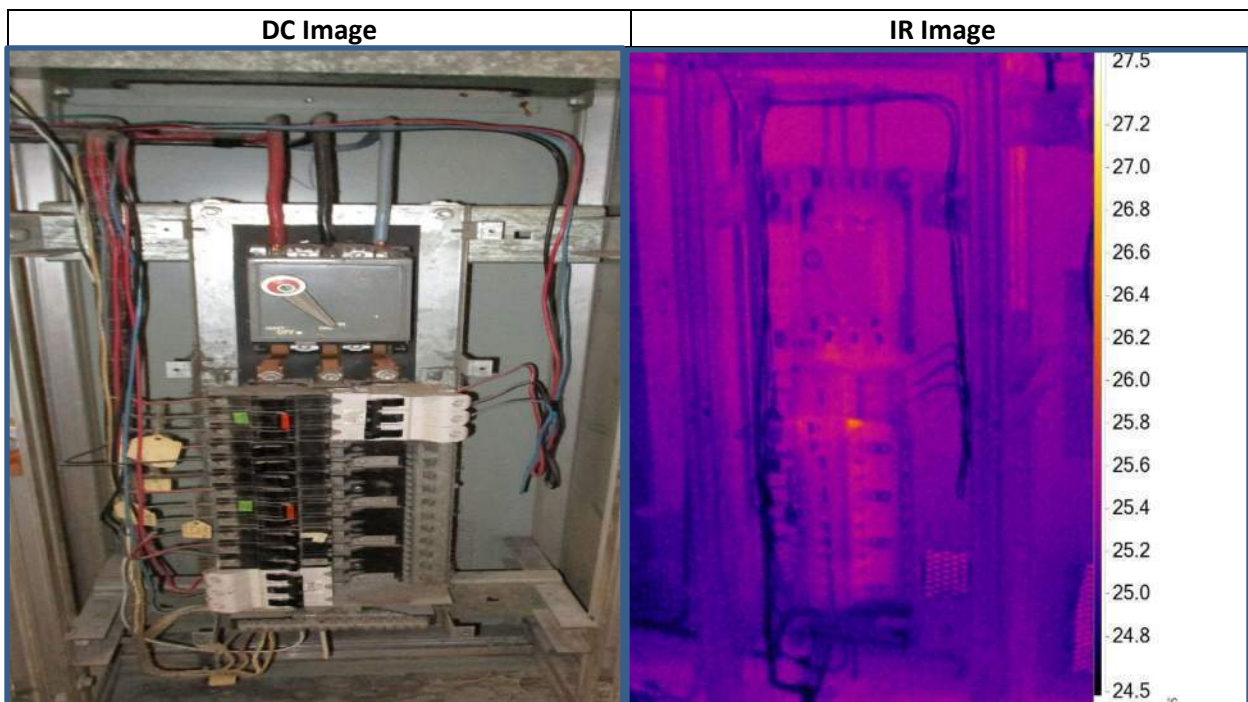
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: CDPR Voltage: 120/208V Current: 400A Phase: 3 Main Breaker: 200 Breaker Type: NEF Wire Type: 2/0 TWU Cu	Safety Notes: Breaker Trip settings: DC925 IR1213

Location	Distribution B101
Description	Panel Y
System	120/208 3P 4W
ID Tag Number	BCP-A00149



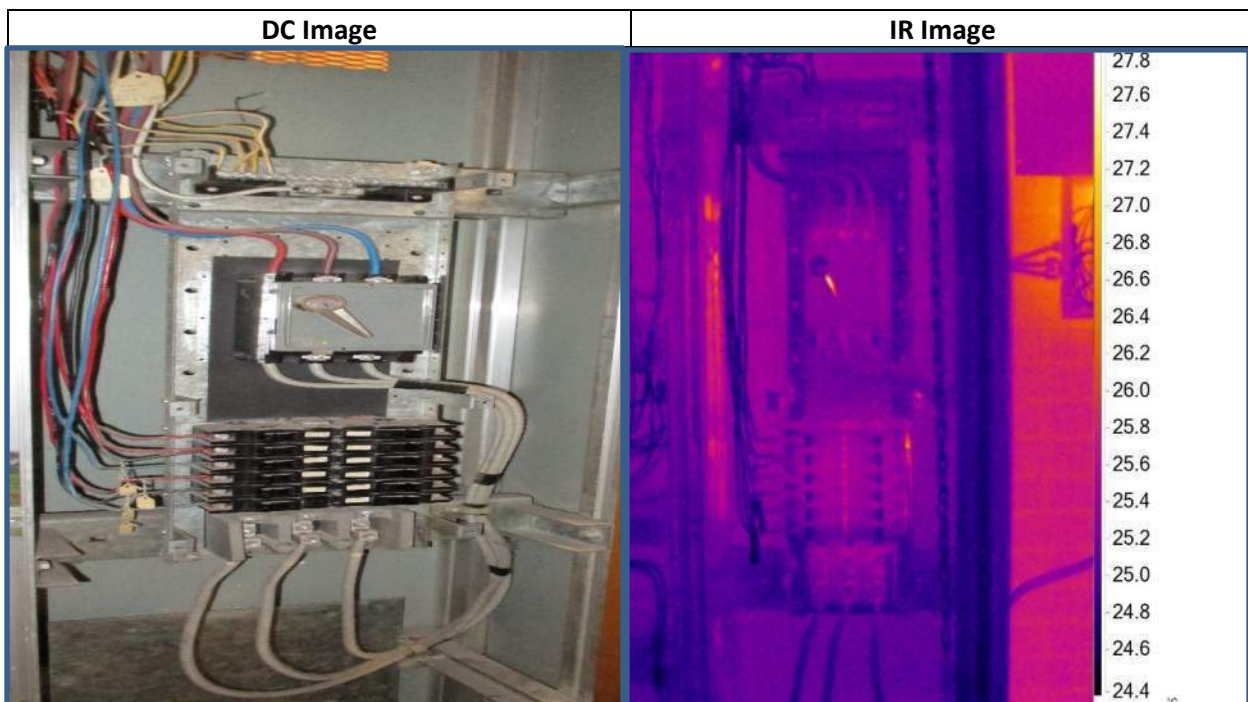
Application Notes: Make: Federal Pacific Model: NALP 12-4AB Circuits: 60 In Use: 59 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #4 TWU Cu	Safety Notes: DC926 IR1214 Guts swapped with panel FF MCCB NEF431070
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Location	Distribution B101
Description	Panel FF
System	120/208 3P 4W
ID Tag Number	BCP-A00150



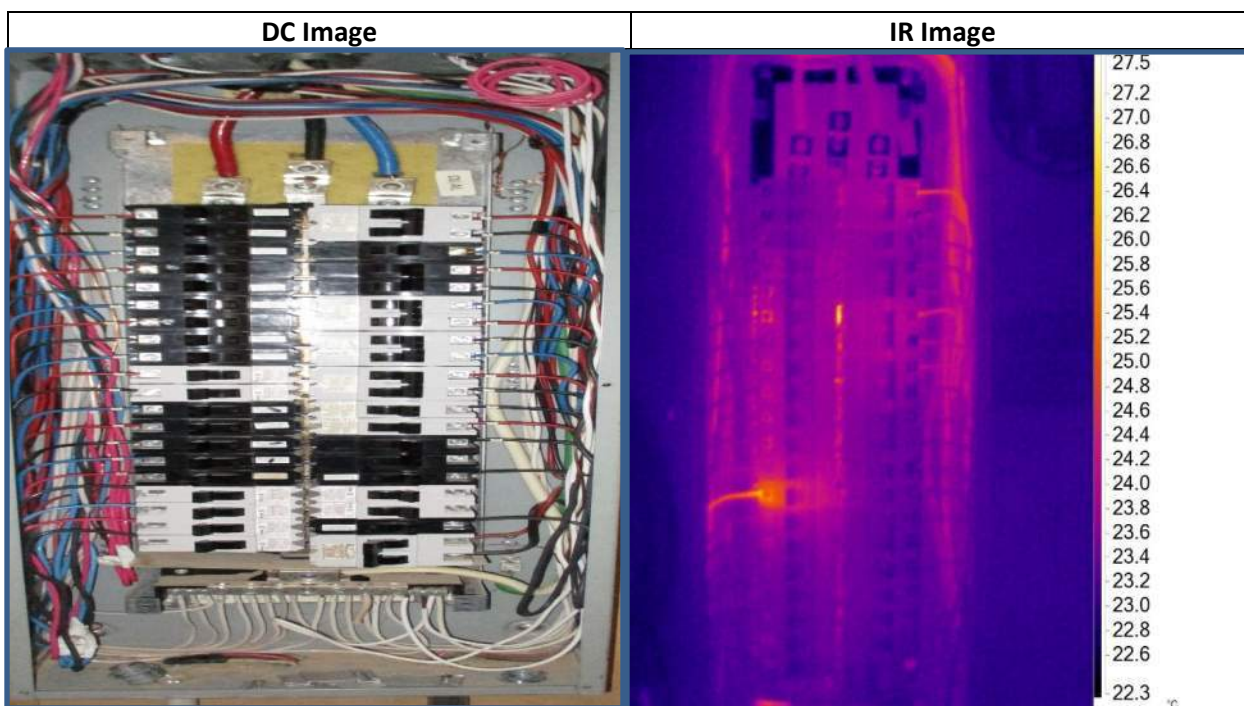
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 12 In Use: 12 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TWU Cu	Safety Notes: DC927 IR1215 Guts swapped with panel Y MCCB NEF431100R
---	--

Location	Distribution B101
Description	Panel N
System	120/208 3P 4W
ID Tag Number	BCP-A00151



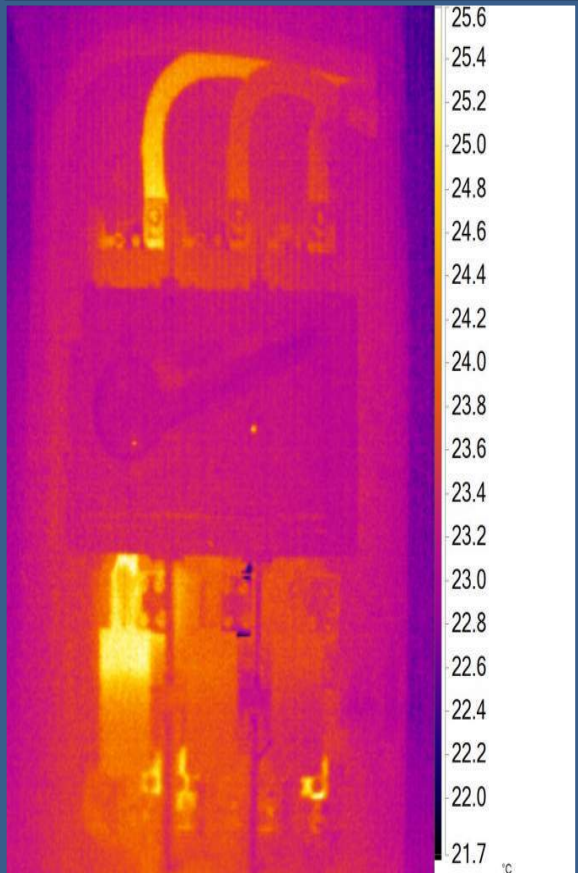
Application Notes: Make: Federal Pacific Model: NALP 30-4 AB Circuits: 30 In Use: 18 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TWU Cu	Safety Notes: DC928 IR1216 MCCB 431100R
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Location	Distribution B101
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A00157

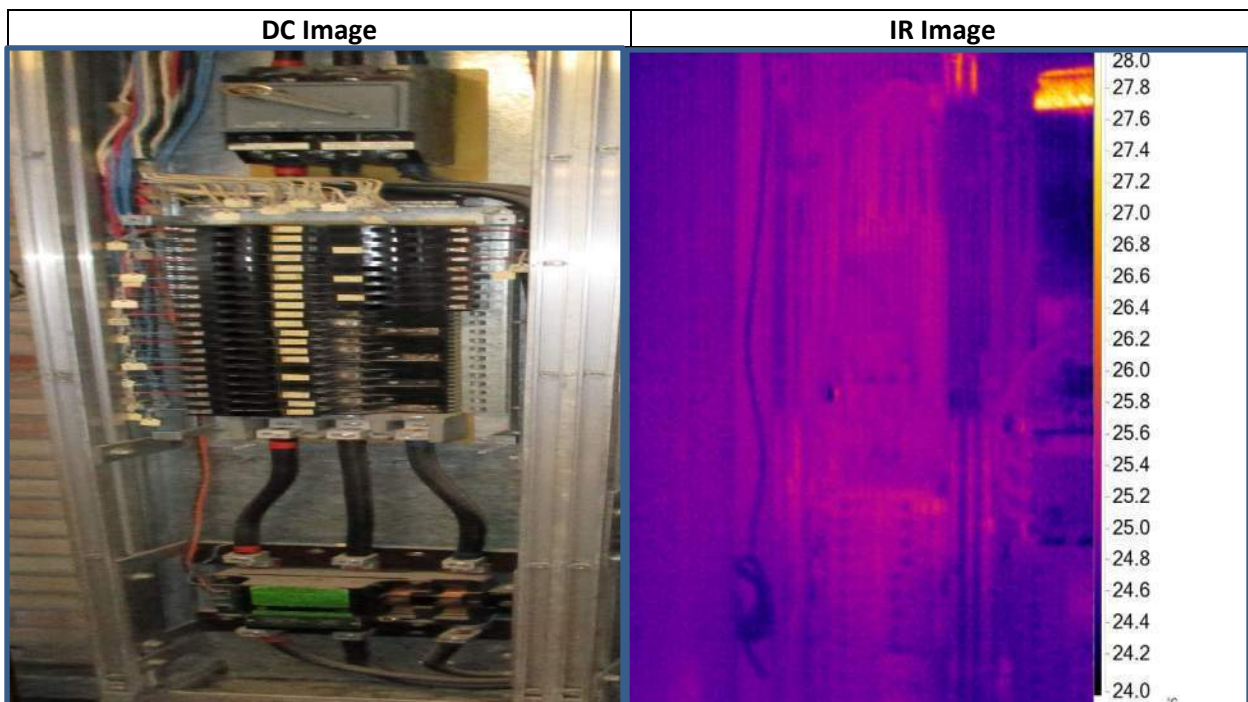


Application Notes: Make: Federal Pioneer Model: 342-0 Circuits: 42 In Use: 41 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TWU Cu	Safety Notes: DC930 IR1218 MCCB NFJ631200R
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Location	Distribution B100
Description	Distribution B100 Main Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00152

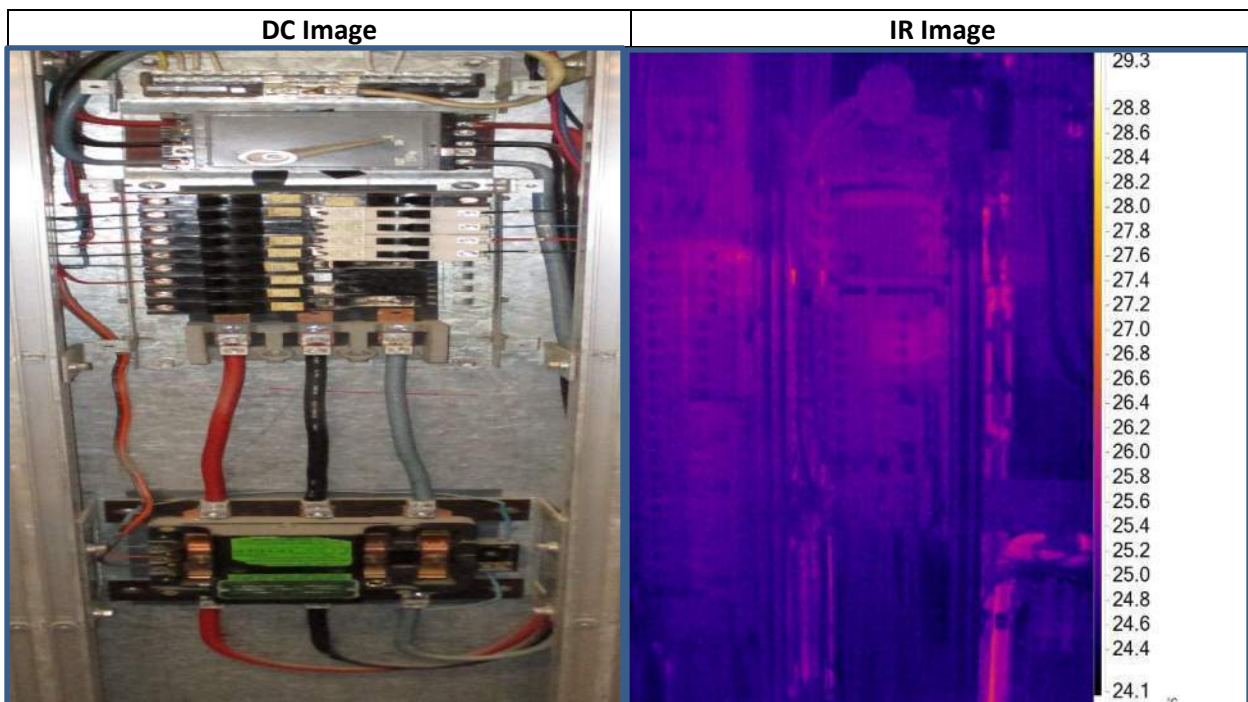
DC Image	IR Image
	 25.6 25.4 25.2 25.0 24.8 24.6 24.4 24.2 24.0 23.8 23.6 23.4 23.2 23.0 22.8 22.6 22.4 22.2 22.0 21.7
Application Notes:	Safety Notes:
Make: Federal Pacific Model: 1232 SN Voltage: 120/208V Current: 200A Breaker/Fuse Type: JCL 200 Wire Type: 2/0 Cu	DC931 IR1219

Location	Distribution B100
Description	Panel DD
System	120/208 3P 4W
ID Tag Number	BCP-A00153



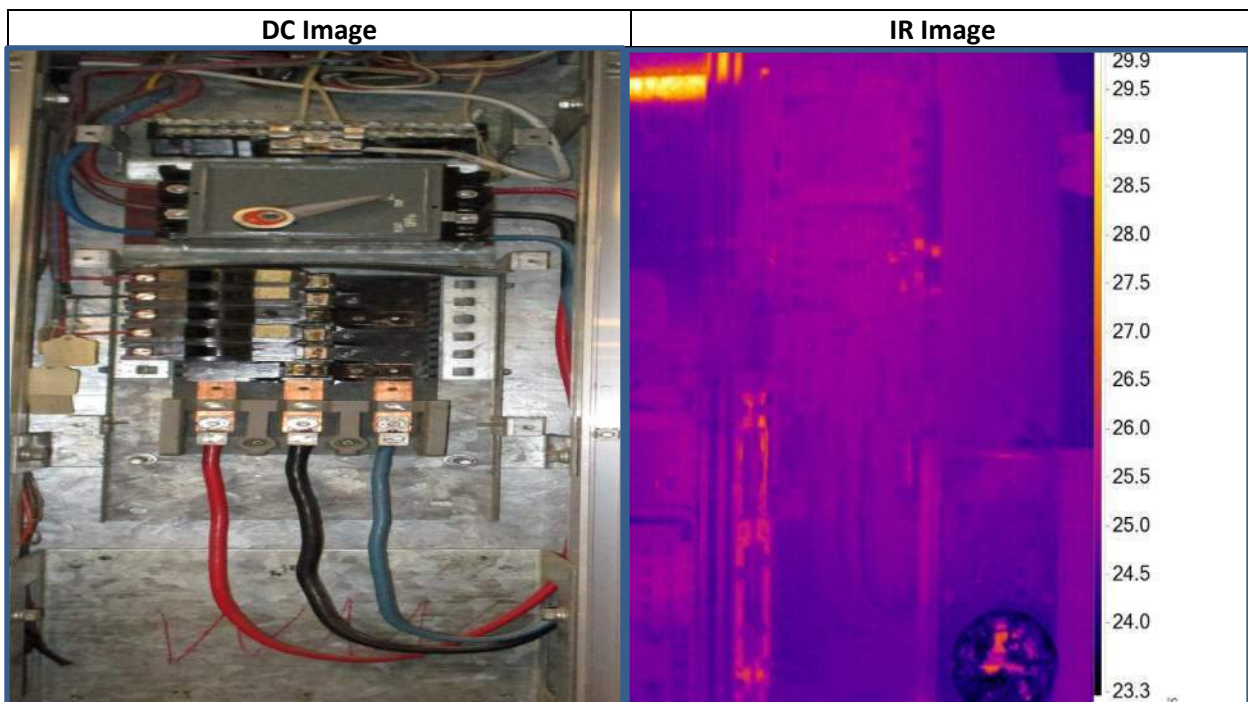
Application Notes: Make: Federal Pacific Model: NALP 42-4AB Circuits: 42 In Use: 30 Voltage: 120/208V Current: 150A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 2/0 TW Cu	Safety Notes: DC932 IR1220 MCCB NFJ631150R
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Location	Distribution B100
Description	Panel Z
System	120/208 3P 4W
ID Tag Number	BCP-A00154



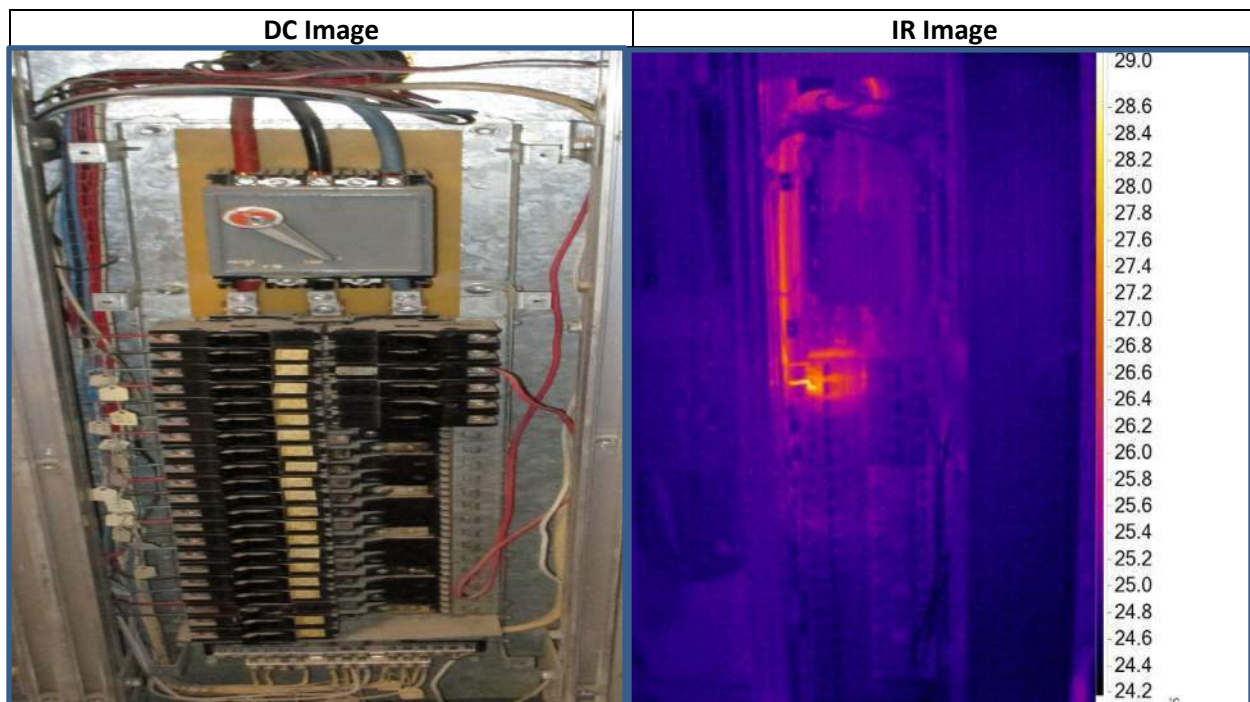
Application Notes: Make: Federal Pacific Model: NALP 18-4AB Circuits: 18 In Use: 14 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 TWH Cu	Safety Notes: DC933 IR1221 MCCB NEF431100R
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Location	Distribution B100
Description	Panel EX
System	120/208 3P 4W
ID Tag Number	BCP-A00155



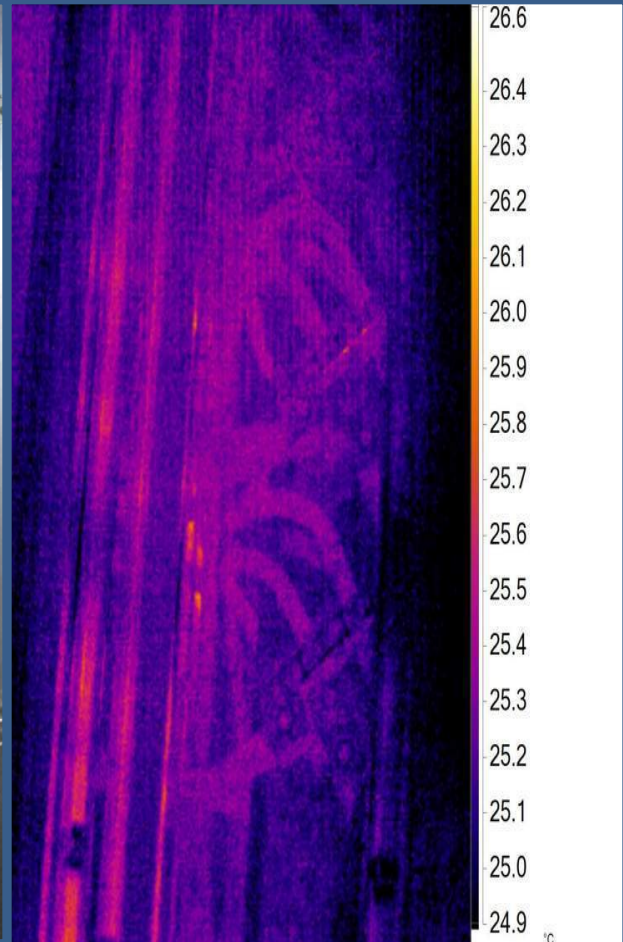
Application Notes: Make: Federal Pacific Model: NALP 12-4AB Circuits: 12 In Use: 5 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TWH Cu	Safety Notes: DC934 IR1222 MCCB NEF431030R
---	---

Location	Distribution B100
Description	Panel U
System	120/208 3P 4W
ID Tag Number	BCP-A00156



Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 42-4AB Circuits: 42 In Use: 27 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 TWH Cu	DC935 IR1223 MCCB NEF431070R

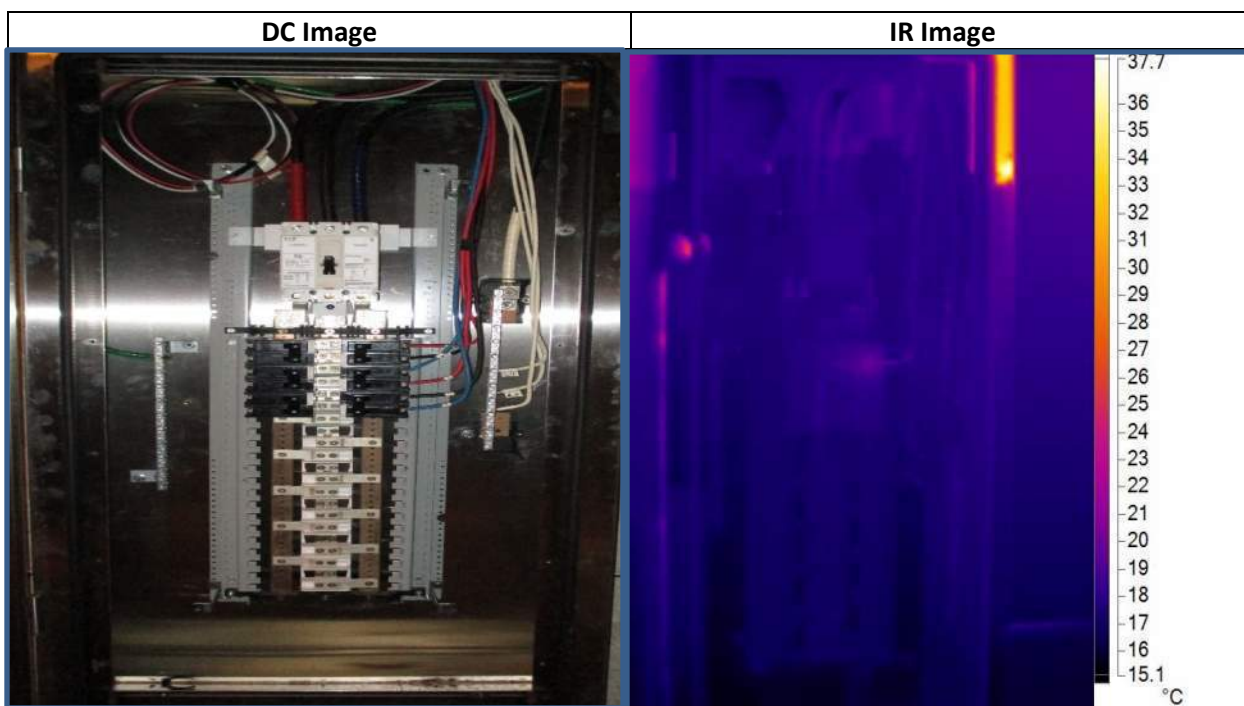
Location	Distribution B100
Description	Dist B100 Splitter
System	120/2083P 4W
ID Tag Number	JB-A00175

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-46 Voltage: 120/208V Current: 200A Wire Type: 2/0 TW	Safety Notes: DC936 IR1224

Section

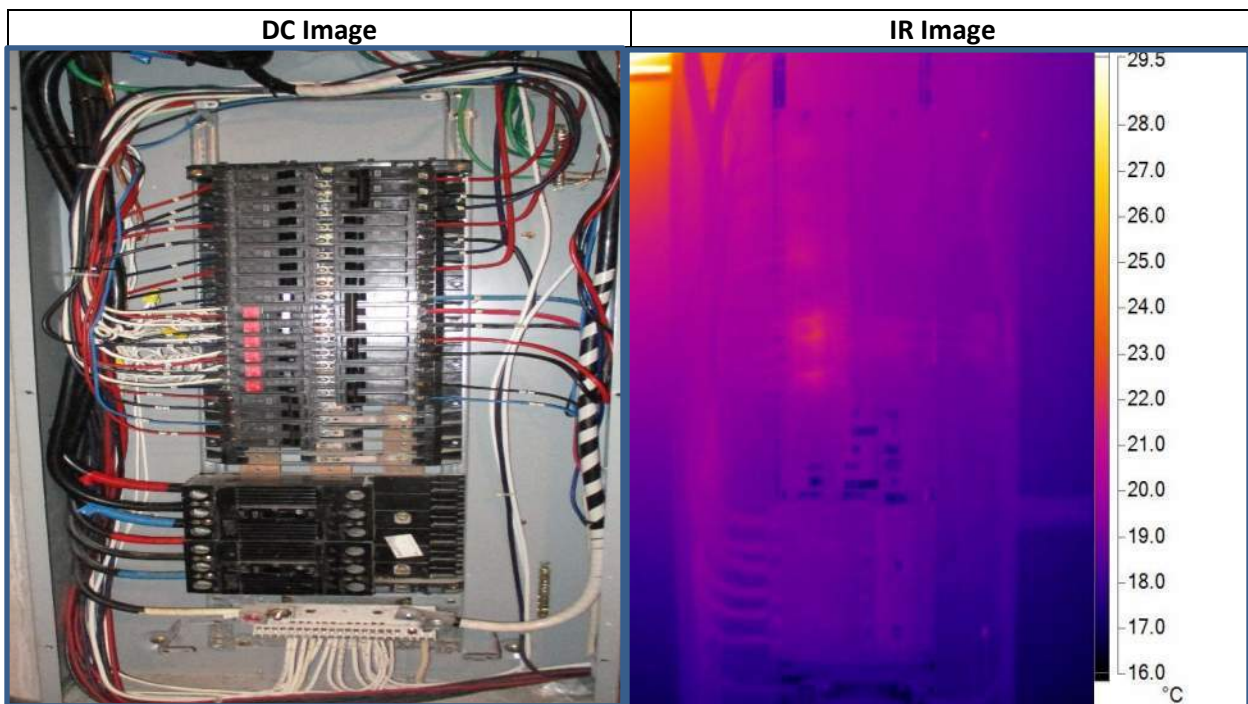
Basement
Tunnel

Location	Basement Tunnel
Description	120/208 3P 4W
System	Panel DP-B
ID Tag Number	BCP-A00258



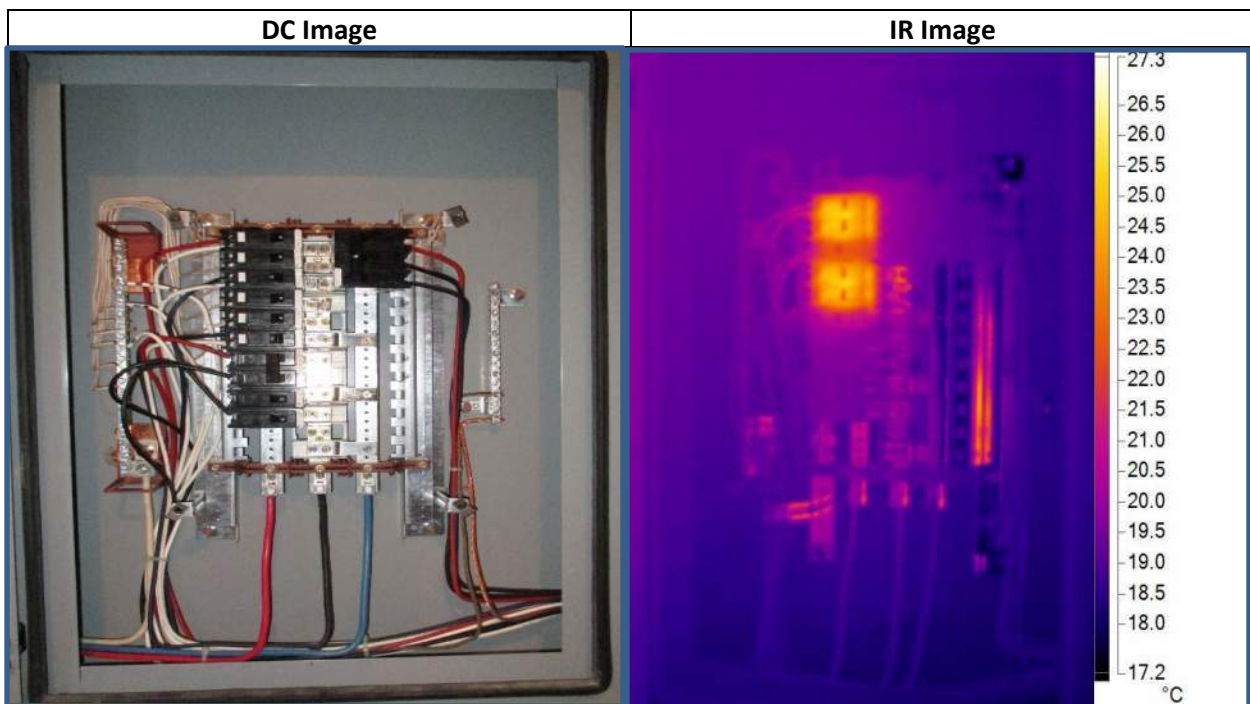
Application Notes:	Safety Notes:
Make: Eaton Model: PRL-1A Circuits: 42 In Use: 12 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: BA, FD KA: 10 Wire Type: 2/0 RW90	DC1041 IR84

Location	Basement Tunnel
Description	120/208 3P 4W
System	Panel LP-A
ID Tag Number	BCP-A00259



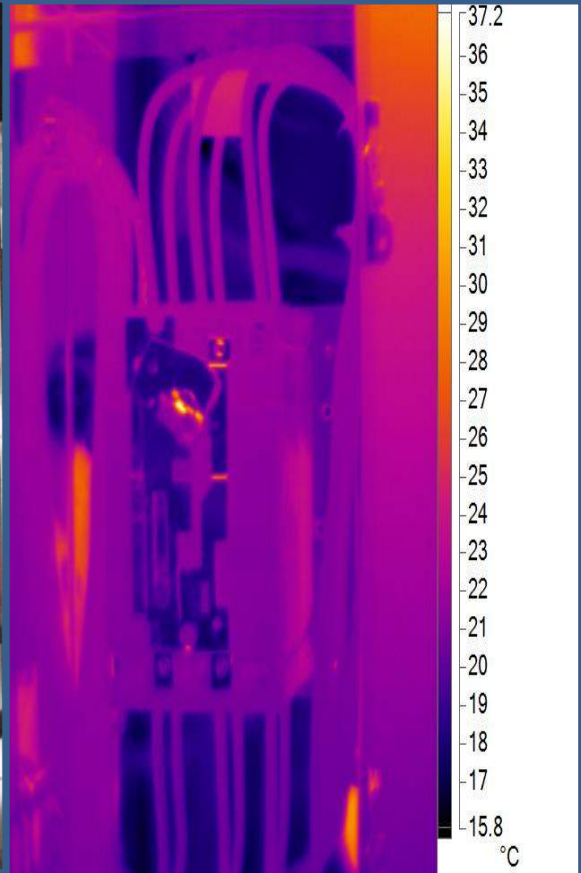
Application Notes:	Safety Notes:
Make: GE Model: AQF3422ABX Circuits: 42 In Use: 35 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: THOB KA: 10 Wire Type: 2/0 RW90 Cu	DC1042 IR85

Location	Basement Tunnel
Description	120/208 3P 4W
System	Panel LP-B
ID Tag Number	BCP-A00260

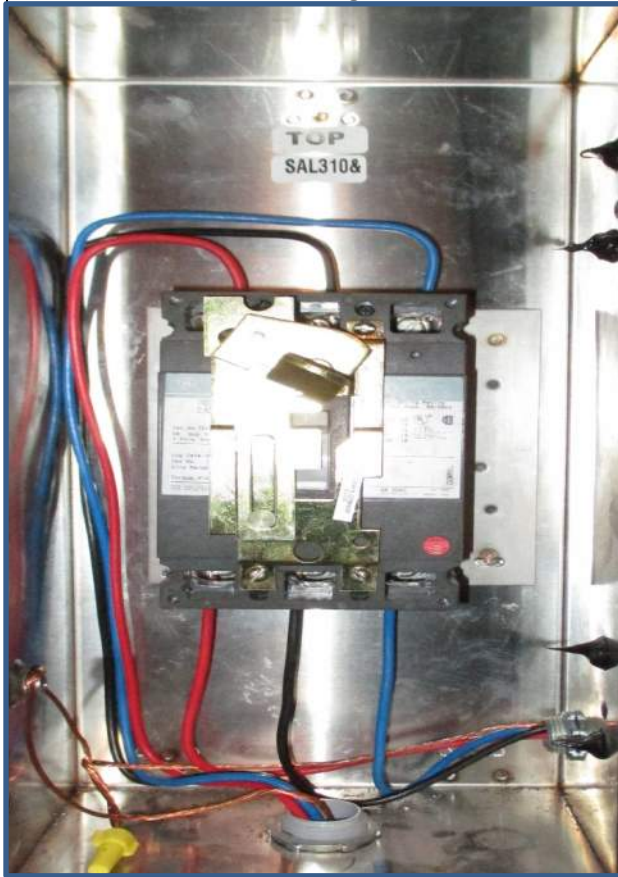
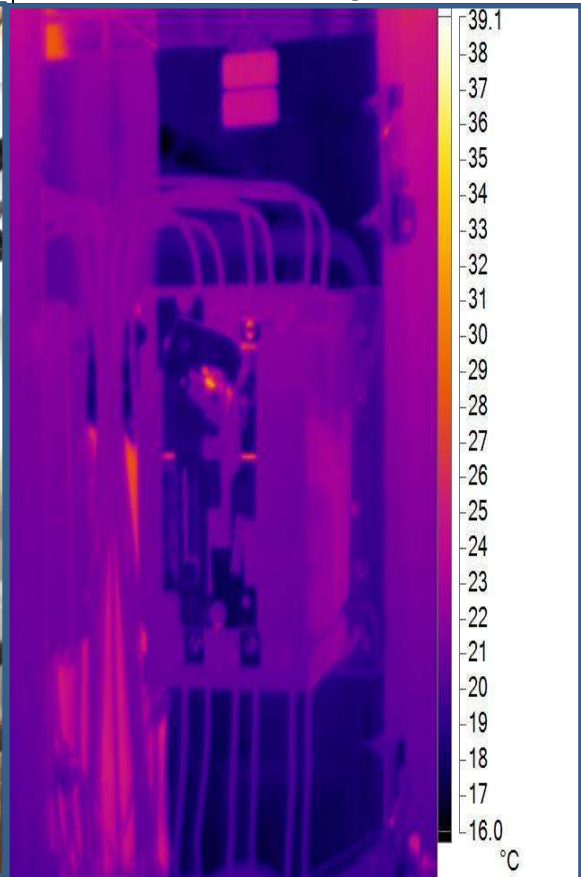


Application Notes: Make: Cutler-Hammer Model: PL1A Circuits: 24 In Use: 13 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: BA KA: 10 Wire Type: #6 RW90 Cu	Safety Notes: DC1043 IR86
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Location	Basement Tunnel
Description	Transformer Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00261

DC Image	IR Image
	
Application Notes: Make: GE Model: TE100CS Voltage: 600V Current: 60A Breaker/Fuse Type: TED136060 Wire Type: #6 RW90 Cu	Safety Notes: DC1044 IR87

Location	Basement Tunnel
Description	Jet Pump Disconnect
System	120/208 3P 4W
ID Tag Number	DISC-A00262

DC Image	IR Image
	
Application Notes: Make: GE Model: TE100CS Voltage: 600V Current: 30A Breaker/Fuse Type: TED136030 Wire Type: #10 RW90 Cu	Safety Notes: DC1045 IR88

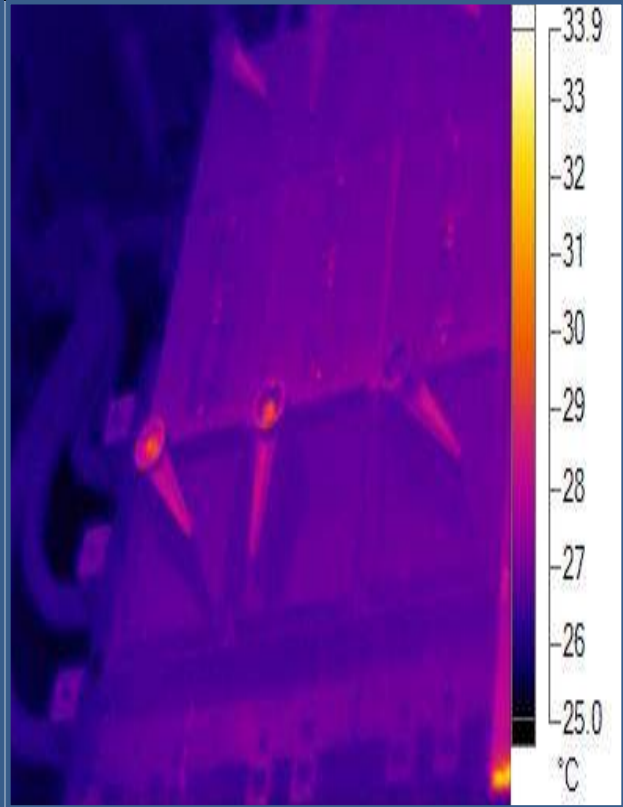
Location	Basement Tunnel
Description	Transformer
System	120/208 3P 4W
ID Tag Number	TRD-A00263

DC Image	IR Image
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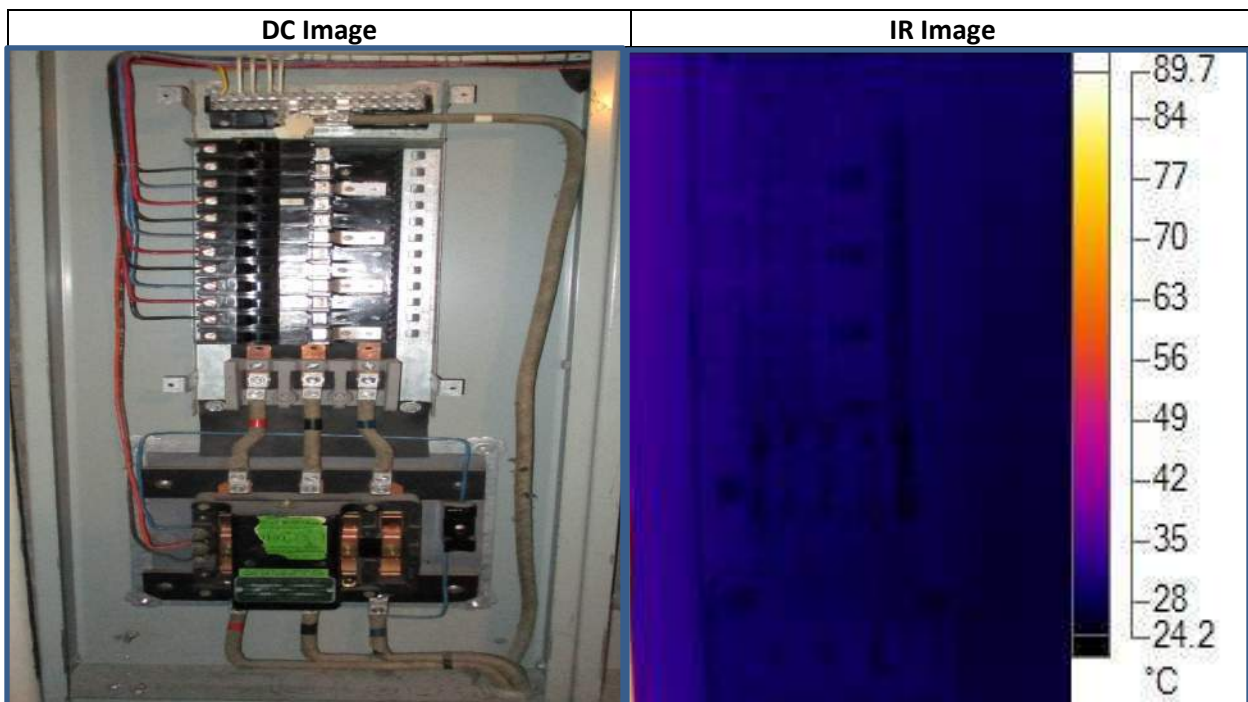


Application Notes:	Safety Notes:
Make: Marcus Model: RET45A1 Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 45 Impedance: 2.2 %Z Phase: 3 Primary Wire: #6 RW90 Cu Secondary Wire: 2/0 RW90 Cu	DC1046 IR Unable to scan while on

Location	Distribution B104
Description	B104
System	120/208 3P 4W
ID Tag Number	DP-A00265

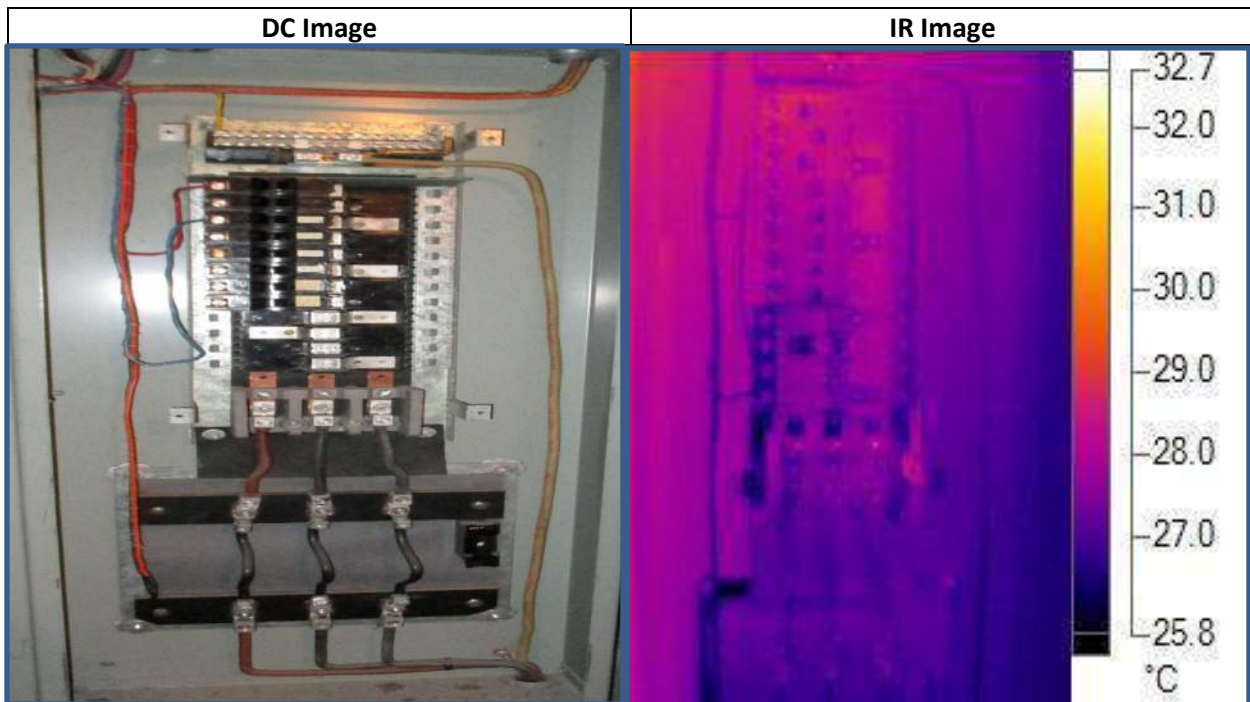
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: CDP-R Voltage: 120/208V Current: 400A Phase: 3 Main Breaker: N/A Breaker Type: NEF Wire Type: 350 KCMIL THW	Safety Notes: DP 1048 IR90 Breaker Trip settings: N/A

Location	Distribution B104
Description	GG
System	120/208 3P 4W
ID Tag Number	BCP-A00266



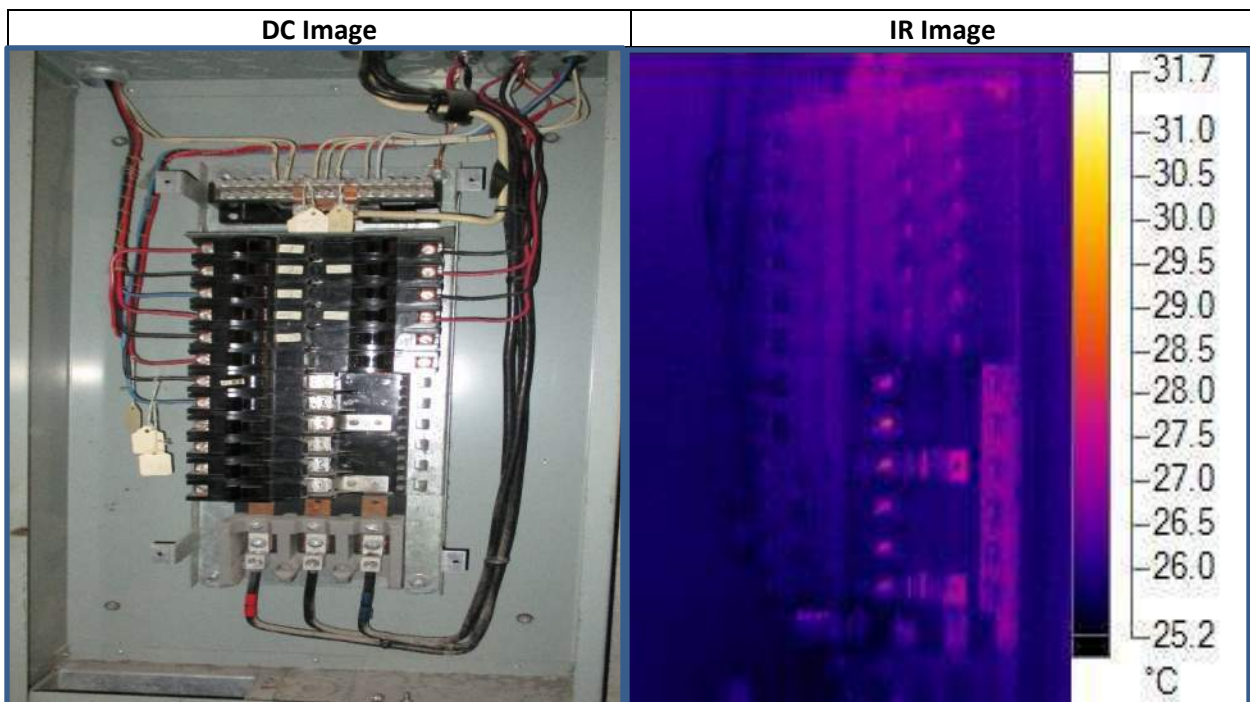
Application Notes: Make: Federal Pacific Model: NALP24-4L Circuits: 24 In Use: 12 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 2/0 THW Teck	Safety Notes: DC1049 IR91
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Location	Distribution B104
Description	HH
System	120/208 3P 4W
ID Tag Number	BCP-A00267



Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 8 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 THW Teck	Safety Notes: DC1050 IR92
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Location	Distribution B104
Description	JJ
System	120/208 3P 4W
ID Tag Number	BCP-A00268

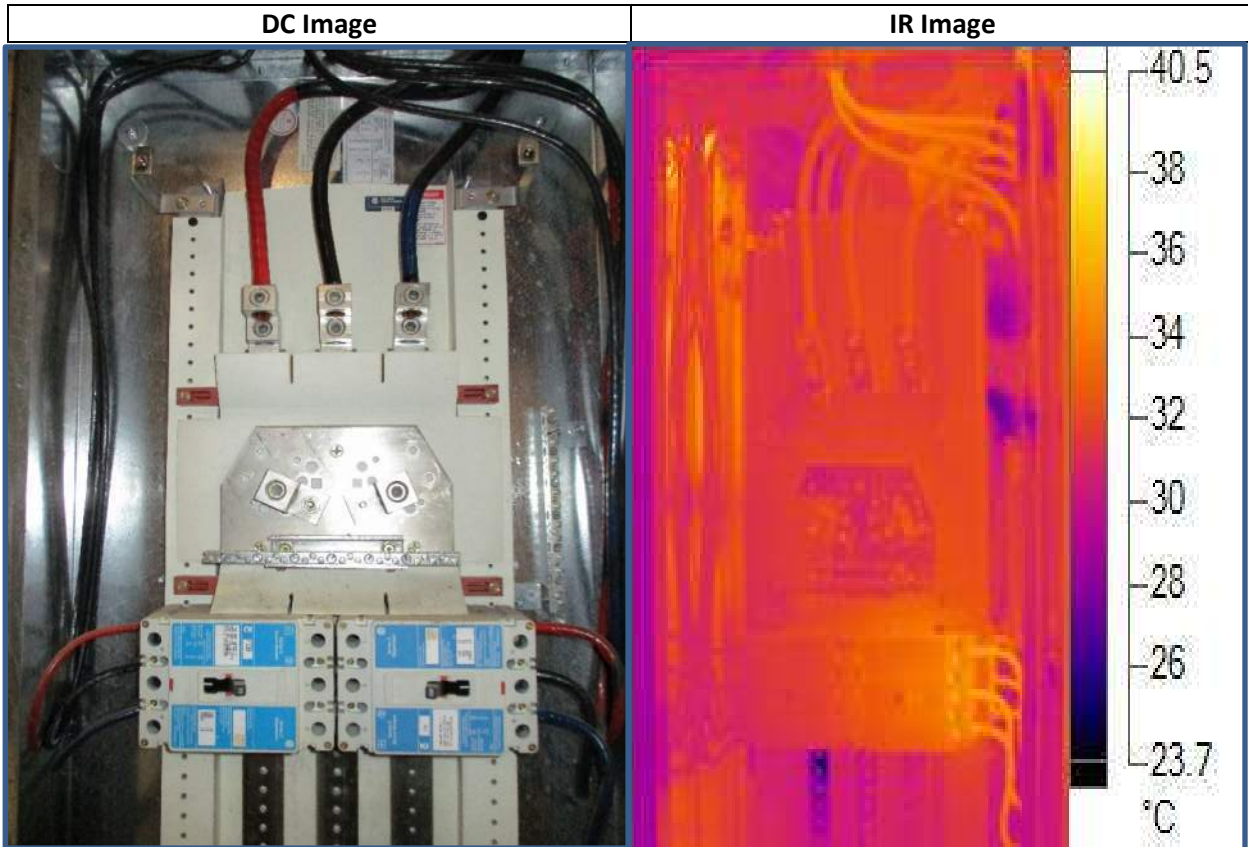


Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 18 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 THW Cu	Safety Notes: DC1051 IR93
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Section

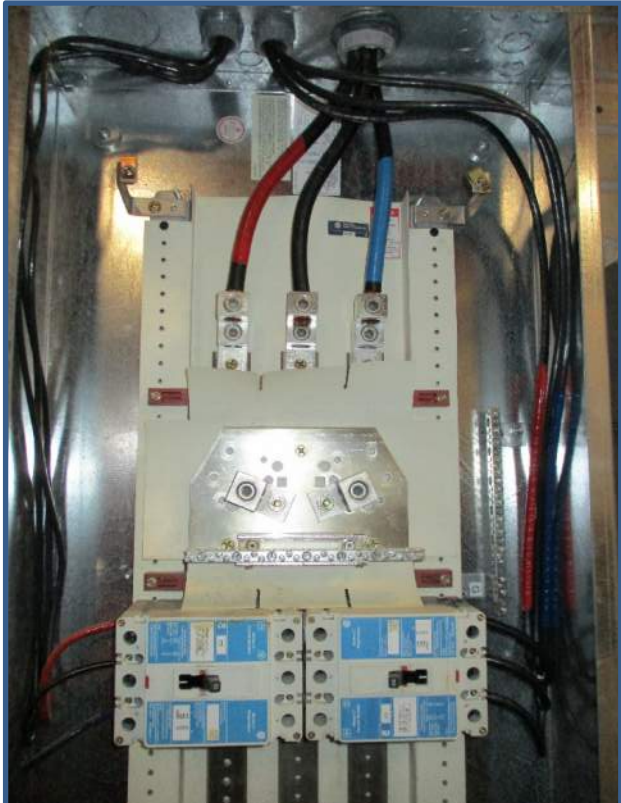
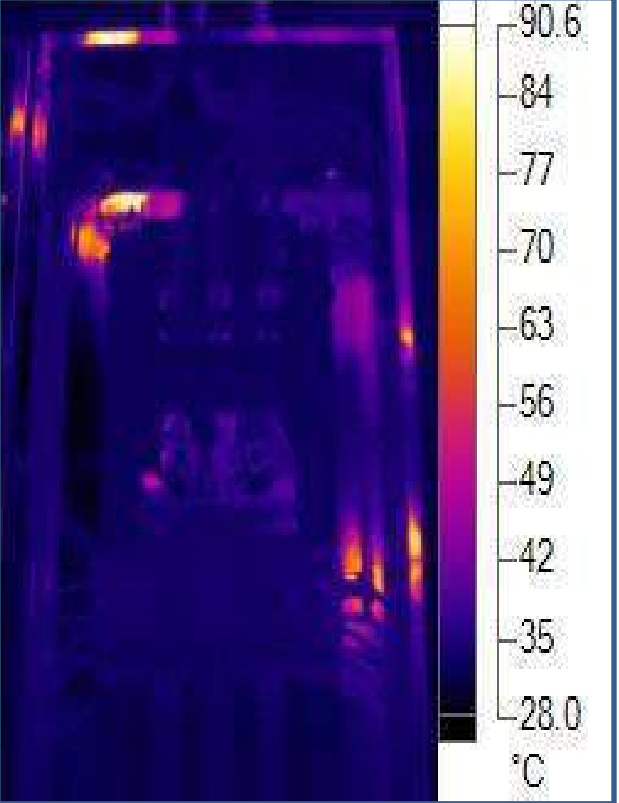
Boiler
Room 7-8

Location	Boiler room 7-8
Description	#1 Cooling Tower
System	347/600V 3p 4w
ID Tag Number	DP-A00000

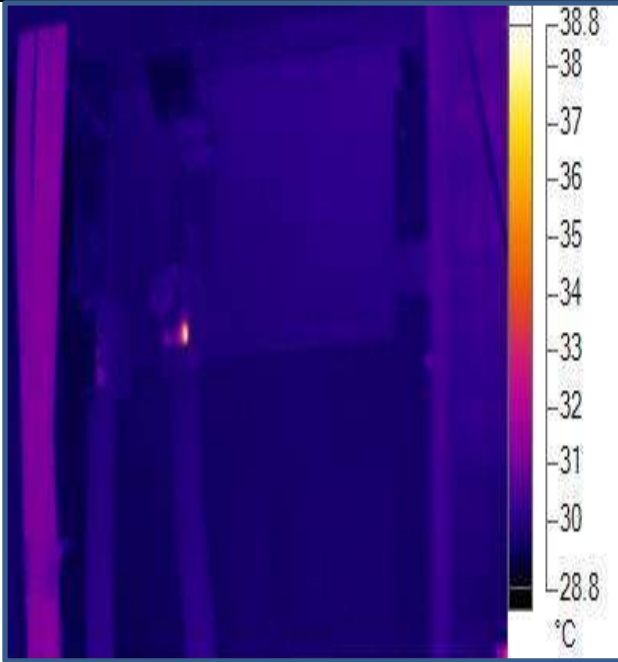


Application Notes: Make: Cutler Model: P3L Voltage: 347/600V Current: 225A Phase: 3 Main Breaker: N/A Breaker Type: FD,FDB Wire Type: 3/0 RW90	Safety Notes: Breaker Trip settings: N/A
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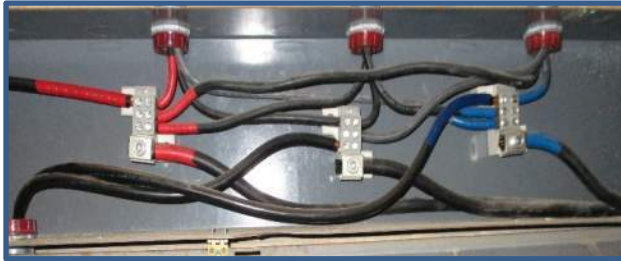
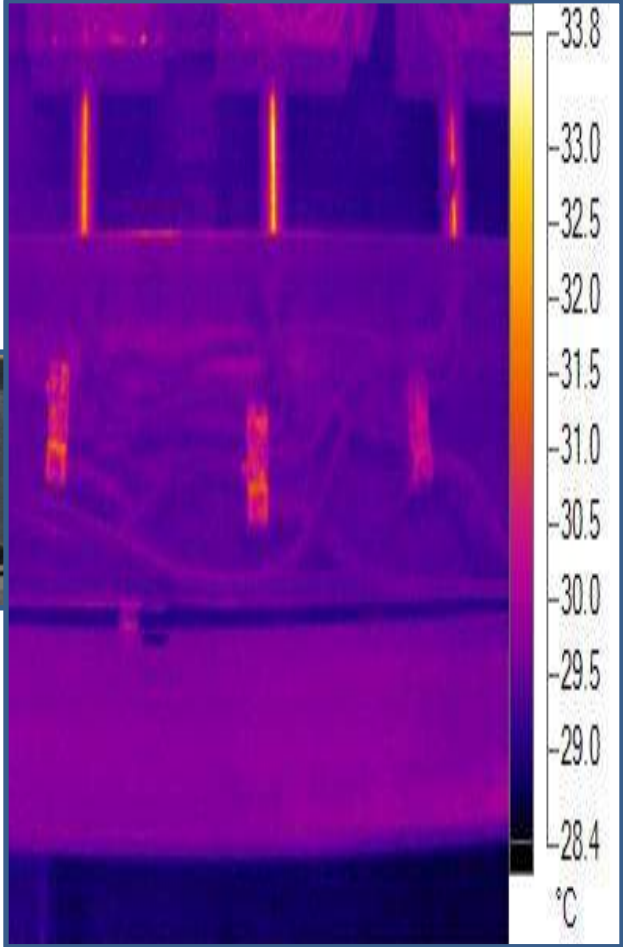
Location	Boiler room 7-8
Description	#2 Cooling Tower
System	347/600V 3P 4W
ID Tag Number	DP-A00001

DC Image	IR Image
	
Application Notes: Make: Cutler Model: P3L Voltage: 347/600VV Current: 225A Phase: 3 Main Breaker: N/A Breaker Type: FD/FDB Wire Type: 3/0 RW90	Safety Notes: Breaker Trip settings: N/A

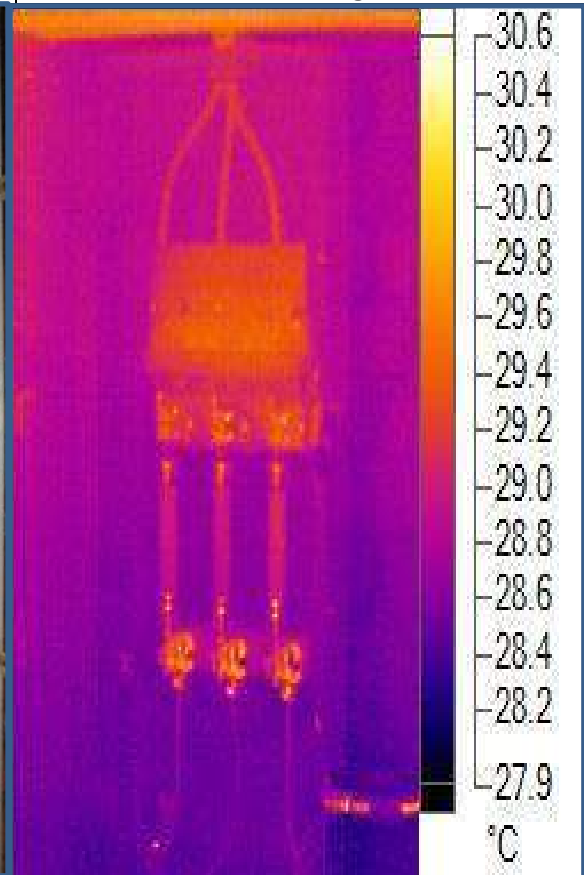
Location	Boiler room 7-8
Description	MCC#2
System	600V 3P 3W
ID Tag Number	MCC-SEC-A00002

DC Image	IR Image
	
Application Notes:	Safety Notes:
Make: Cutler Hammer Model: Unitrol Voltage: 600V Current: U/O Wire Type: 1000KCM RW60 Cu	

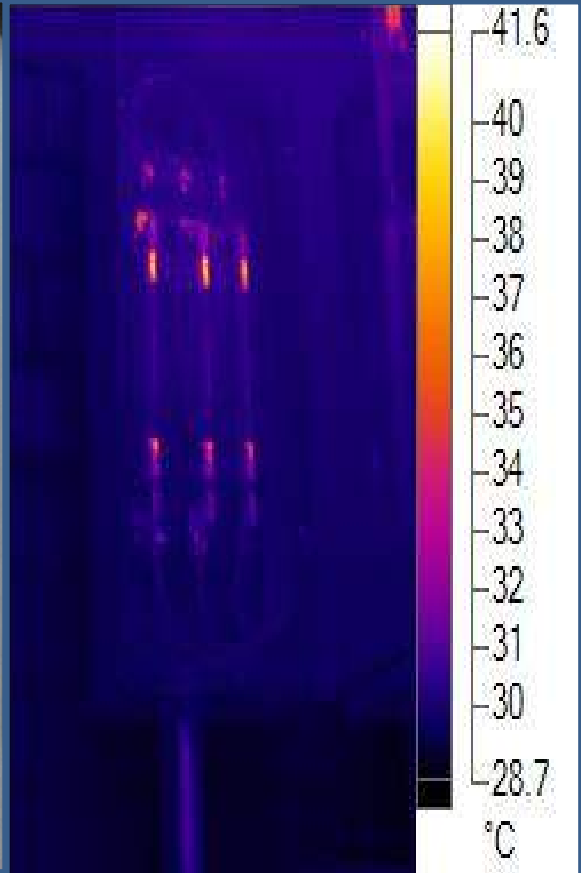
Location	Boiler room 7-8
Description	Elevator Emergency Splitter
System	600V 3P 3W
ID Tag Number	JB-A00004

DC Image	IR Image
	
Application Notes: Make: BEL Model: T5-203 Voltage: 600V Current: 225A Wire Type: 3/0 RW90 CU	Safety Notes:

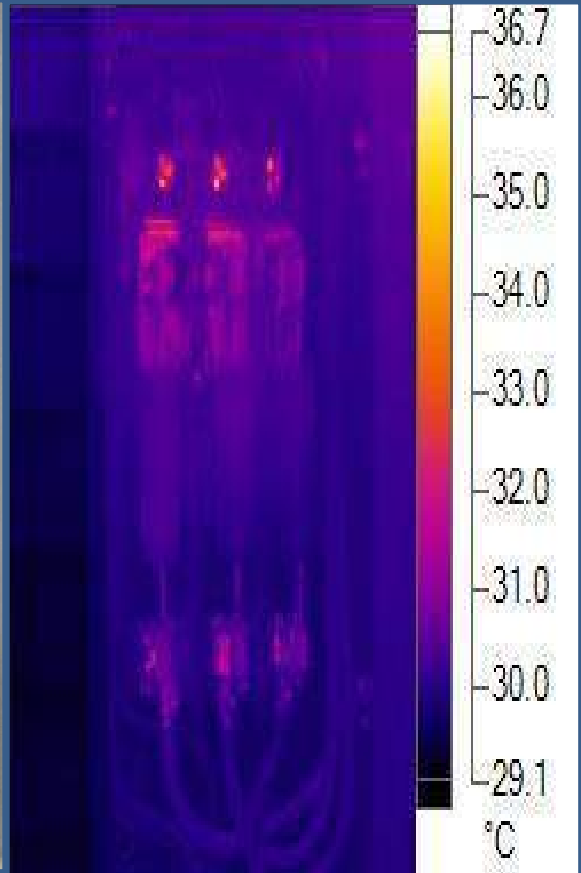
Location	Boiler room 7-8
Description	TR-A
System	600v 3W
ID Tag Number	DISC-A00005

DC Image	IR Image
 A photograph of an electrical panel. It features three large, vertical, cylindrical components (likely fuses or breakers) mounted on a metal base. Wires of various colors (red, blue, green) are connected to the bottom of these components. The panel is labeled "GENERAL ELECTRIC" and "HEAVY DUTY".	 An infrared (IR) image of the same electrical panel. The image shows a color-coded temperature map. A color scale on the right indicates temperatures from 27.9°C (dark purple) to 30.6°C (yellow). The central components and the wires connected to them show higher temperatures, indicated by orange and yellow colors, suggesting they are the primary heat sources.
Application Notes: Make: GE Model: TH3364 Voltage: 600V Current: 200A Breaker/Fuse Type: TRS60R Wire Type: 1 RW90 CU LINE/6 RW90 CU LOAD	Safety Notes:

Location	Boiler room 7-8
Description	Elevator 3
System	600V 3W
ID Tag Number	DISC-A00006

DC Image	IR Image
	
Application Notes: Make: CEB Model: A3036 Voltage: 600V Current: 100A Breaker/Fuse Type: TRS100R Wire Type: 2 RW90 CU	Safety Notes:

Location	Boiler room 7-8
Description	Elevator 2
System	600V
ID Tag Number	DISC-A00007

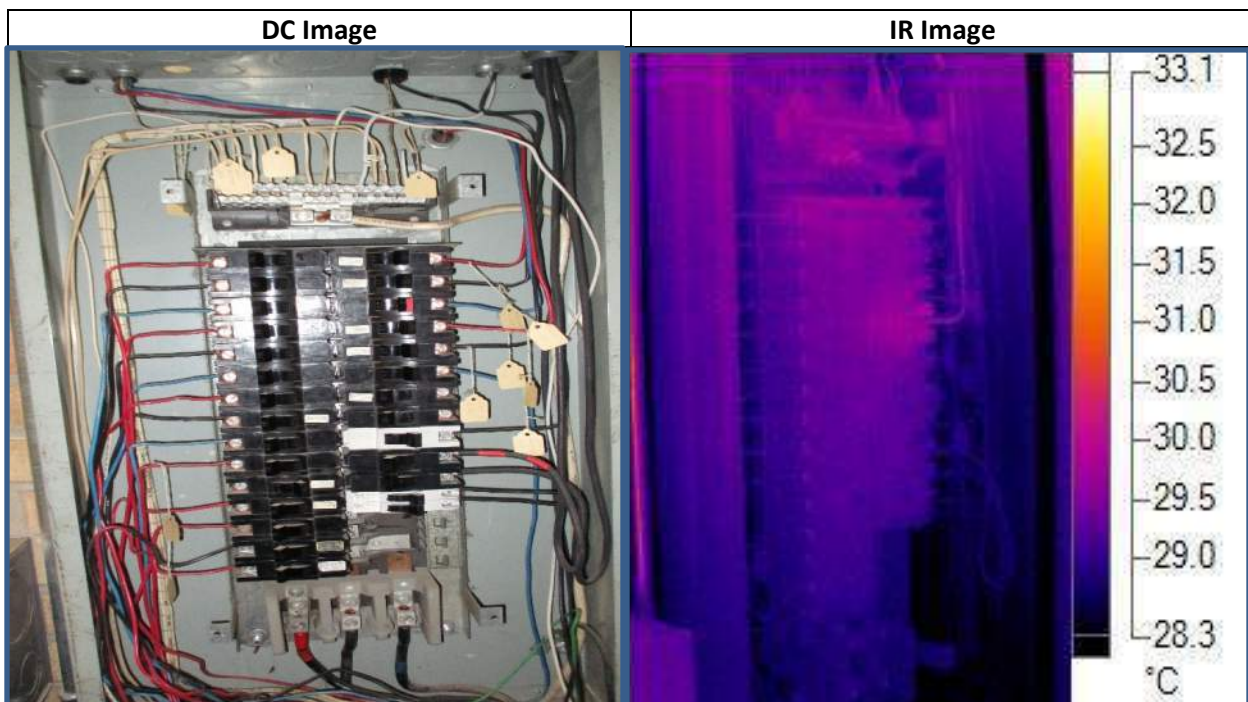
DC Image	IR Image
	
Application Notes: Make: CEB Model: A3036 Voltage: 600V Current: 100A Breaker/Fuse Type: HA100A Wire Type: 2 RW90 CU	Safety Notes:

Location	Boiler room 7-8
Description	Elevator 1
System	600V
ID Tag Number	DISC-A00008



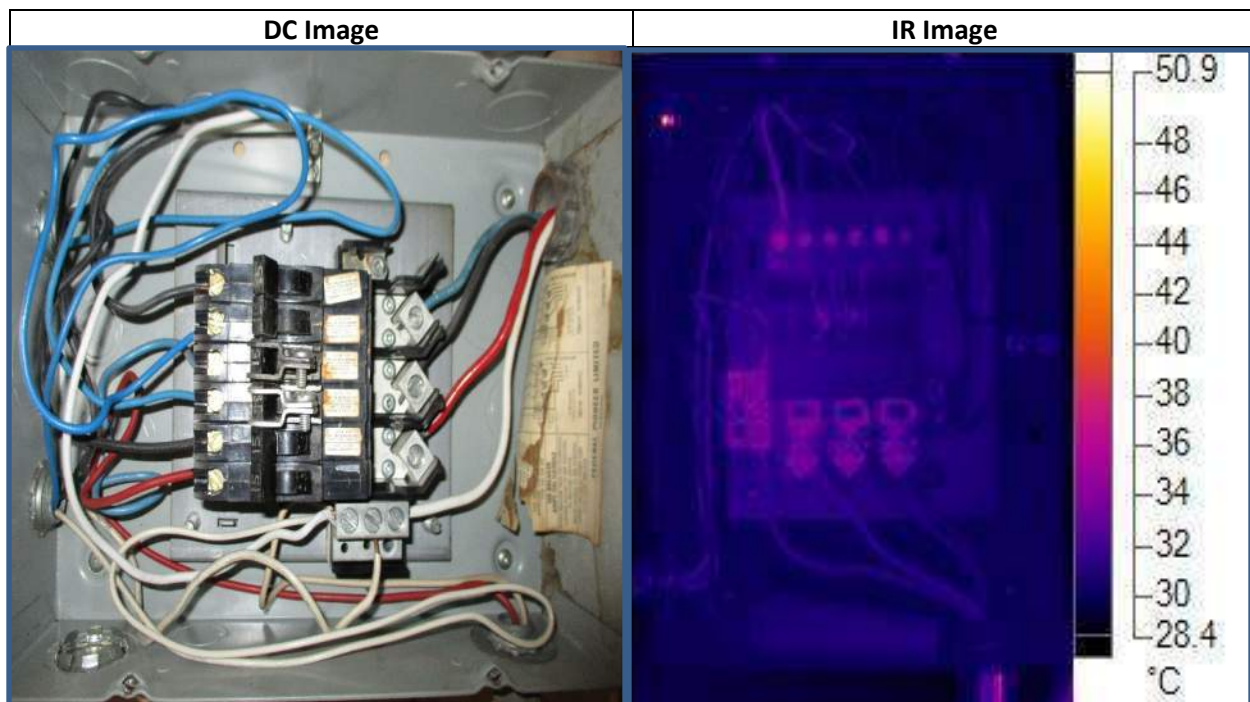
Application Notes:	Safety Notes:
Make: Federal Pioneer Model: 1136 Voltage: 600V Current: 100A Breaker/Fuse Type: CRS100 Wire Type: 2 RW90 CU	

Location	Boiler room 7-8
Description	Panel D
System	120/208V 3P 4W
ID Tag Number	BCP-A00009



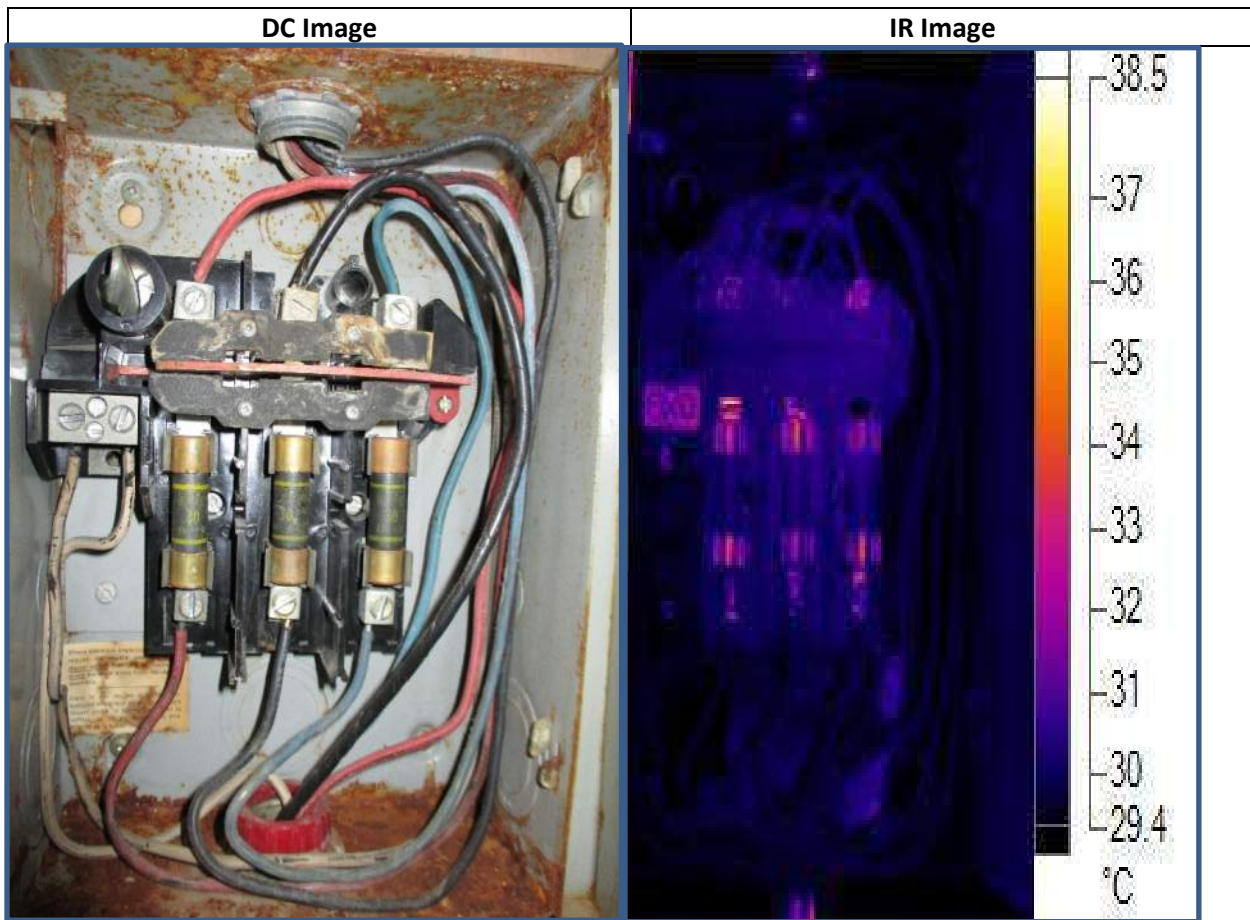
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NACP Circuits: 30 In Use: 27 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #4 TW CU	

Location	Boiler room 7-8
Description	Emergency 7A
System	120/208 3P 4W
ID Tag Number	BCP-A00010



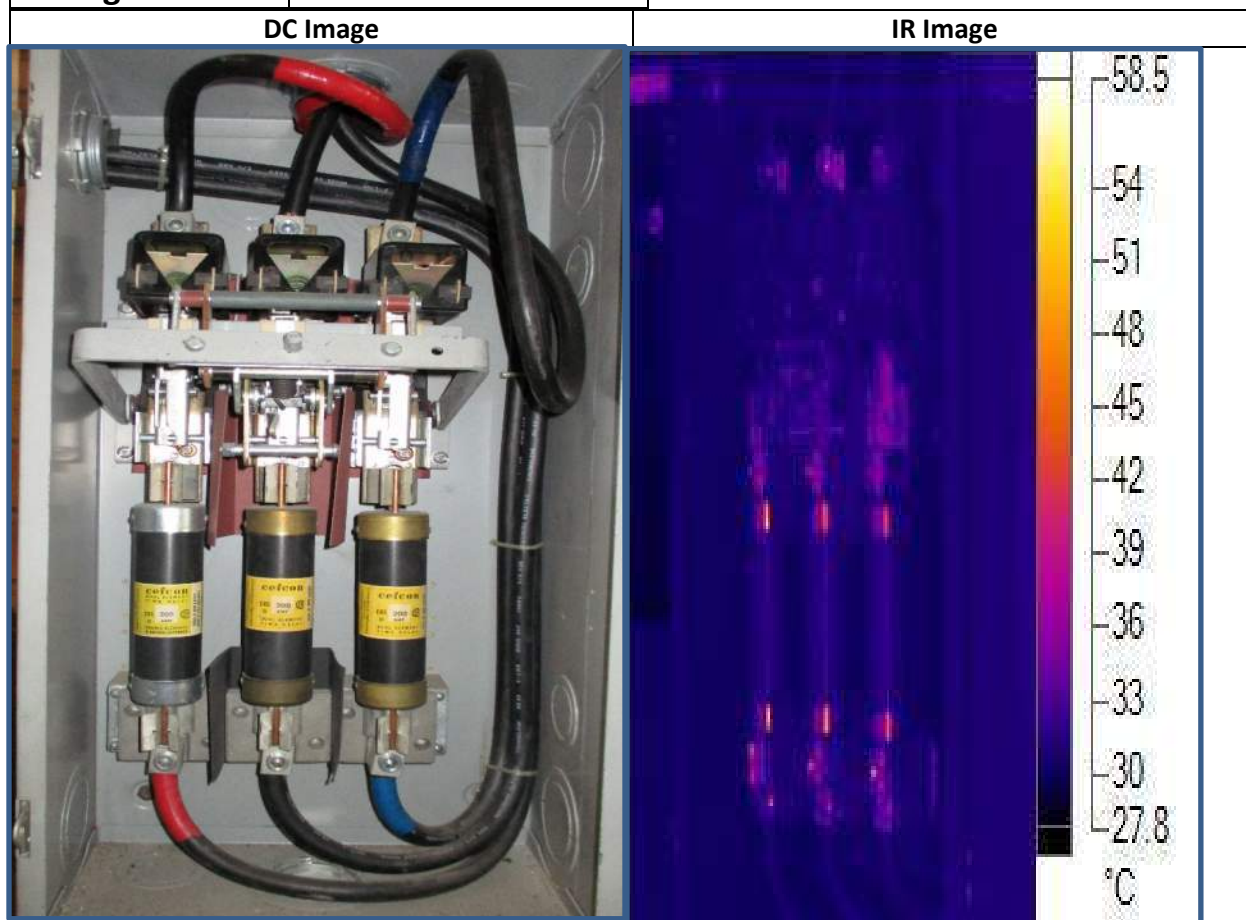
Application Notes:	Safety Notes:
Make: Federal Model: 13100 Circuits: 7 In Use: 6 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NC KA: 10 Wire Type: RW90 # 10Cu	

Location	Boiler room 7-8
Description	Emergency Panel Elevator Room
System	208V 3W
ID Tag Number	DISC-A00011



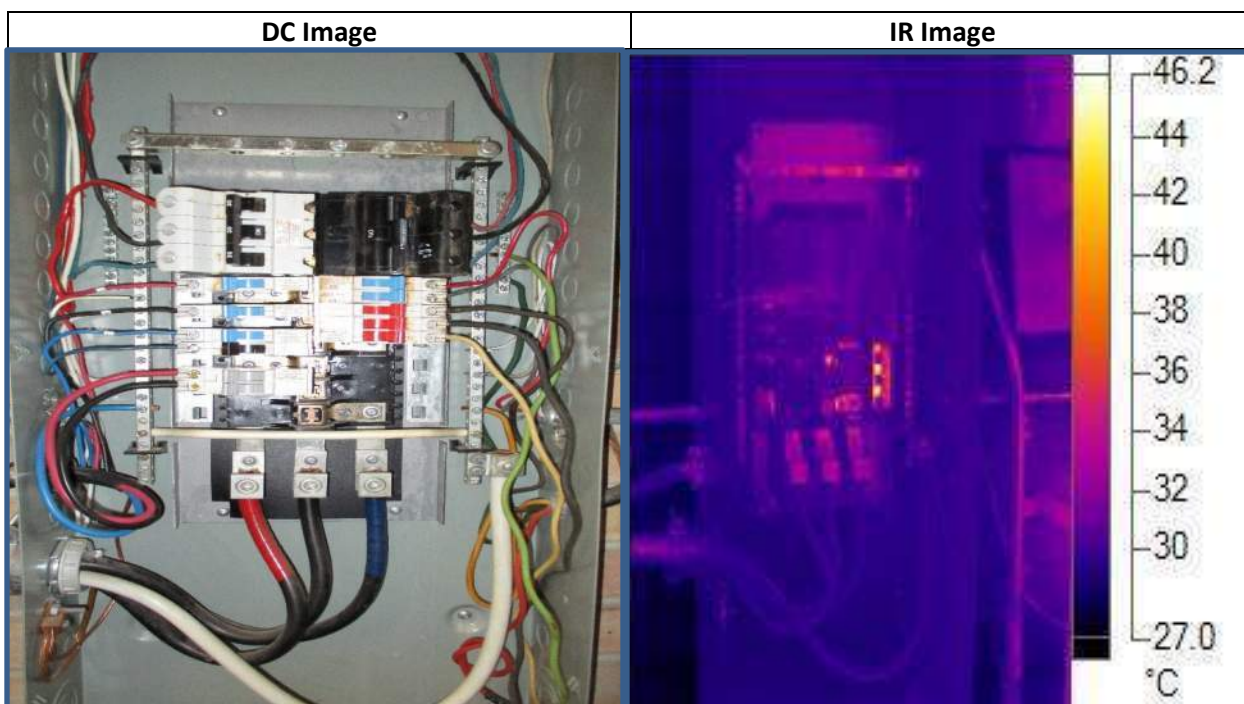
Application Notes:	Safety Notes:
Make: CEB Model: A-1032 Voltage: 250V Current: 30A Breaker/Fuse Type: Cefco 30 Amp Wire Type: RW90 #10	

Location	Boiler room 7-8
Description	Elevator Emergency Splitter
System	600V 3W
ID Tag Number	DISC-A00012



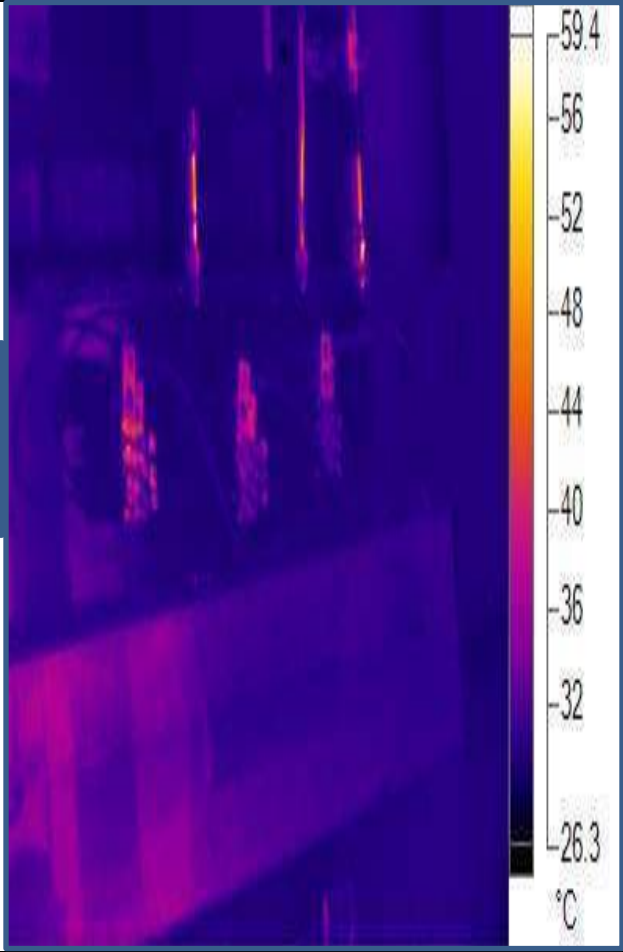
Application Notes:	Safety Notes:
Make: CEB Model: A4036 Voltage: 600V Current: 200A Breaker/Fuse Type: CRS200 Wire Type: 3/0 RW90 Cu	

Location	Boiler room 7-8
Description	Panel E7
System	120/208V 3P 4W
ID Tag Number	BCP-A00013

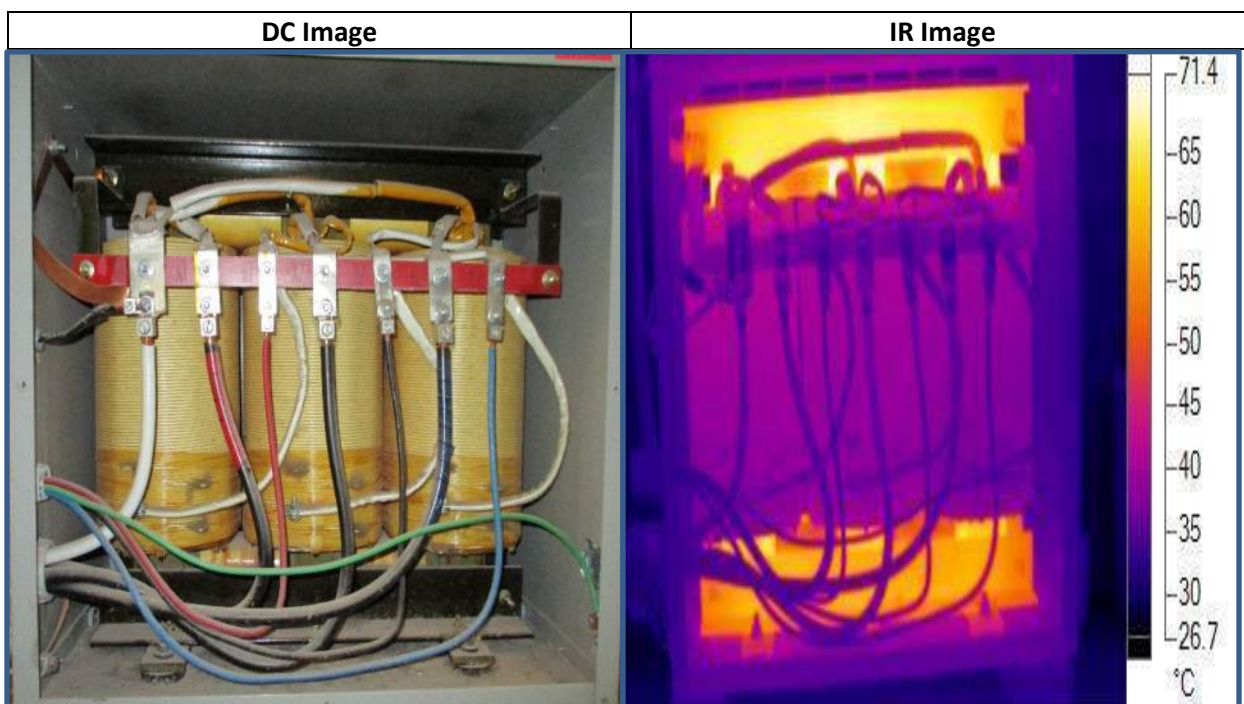


Application Notes:	Safety Notes:
Make: Federal Model: 318-36 Circuits: 36 In Use: 30 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: NC KA: 10 Wire Type: 4C # 2/0 TECK90 CU	

Location	Boiler room 7-8
Description	Boiler emergency Splitter
System	600V
ID Tag Number	JB-A00014

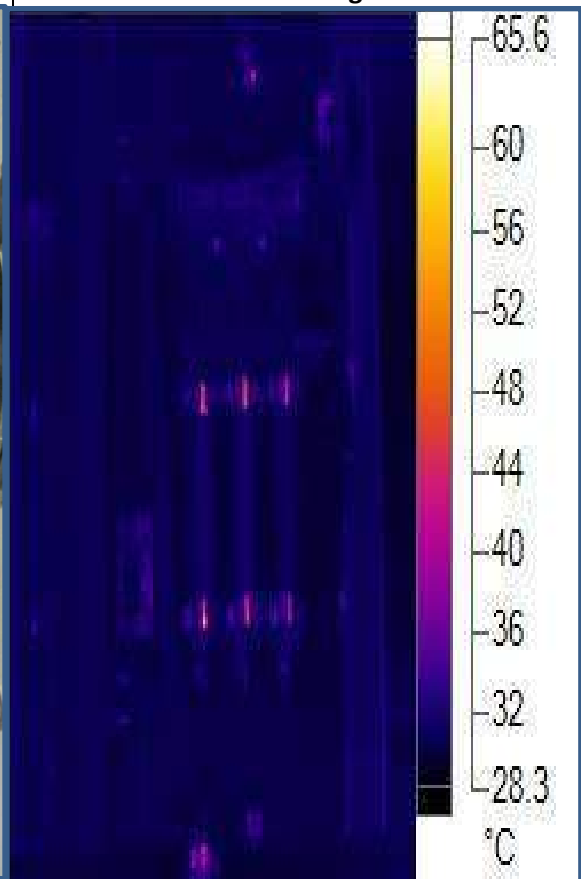
DC Image	IR Image
	
Application Notes:	Safety Notes:
Make: BEL Model: T5-203 Voltage: 600VV Current: 225A Wire Type: 3/0 RW90 CU	

Location	Boiler room 7-8
Description	TR-A
System	600:120/208
ID Tag Number	TRD-A00015

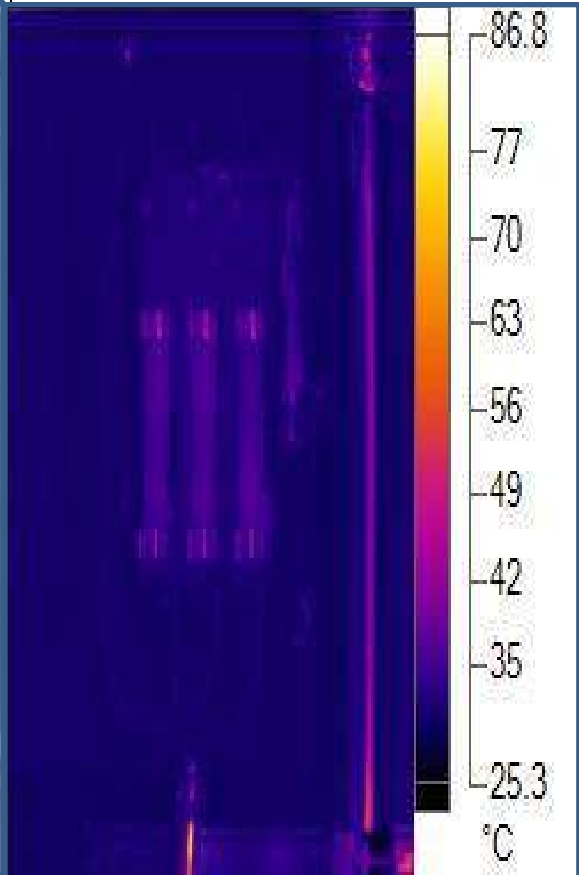


Application Notes:	Safety Notes:
Make: Federal Model: N/A Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 45 Impedance: 6.59 %Z Phase: 3 Primary Wire: 6 RW90 CU Secondary Wire: 4C # 2/0 TECK90 CU	

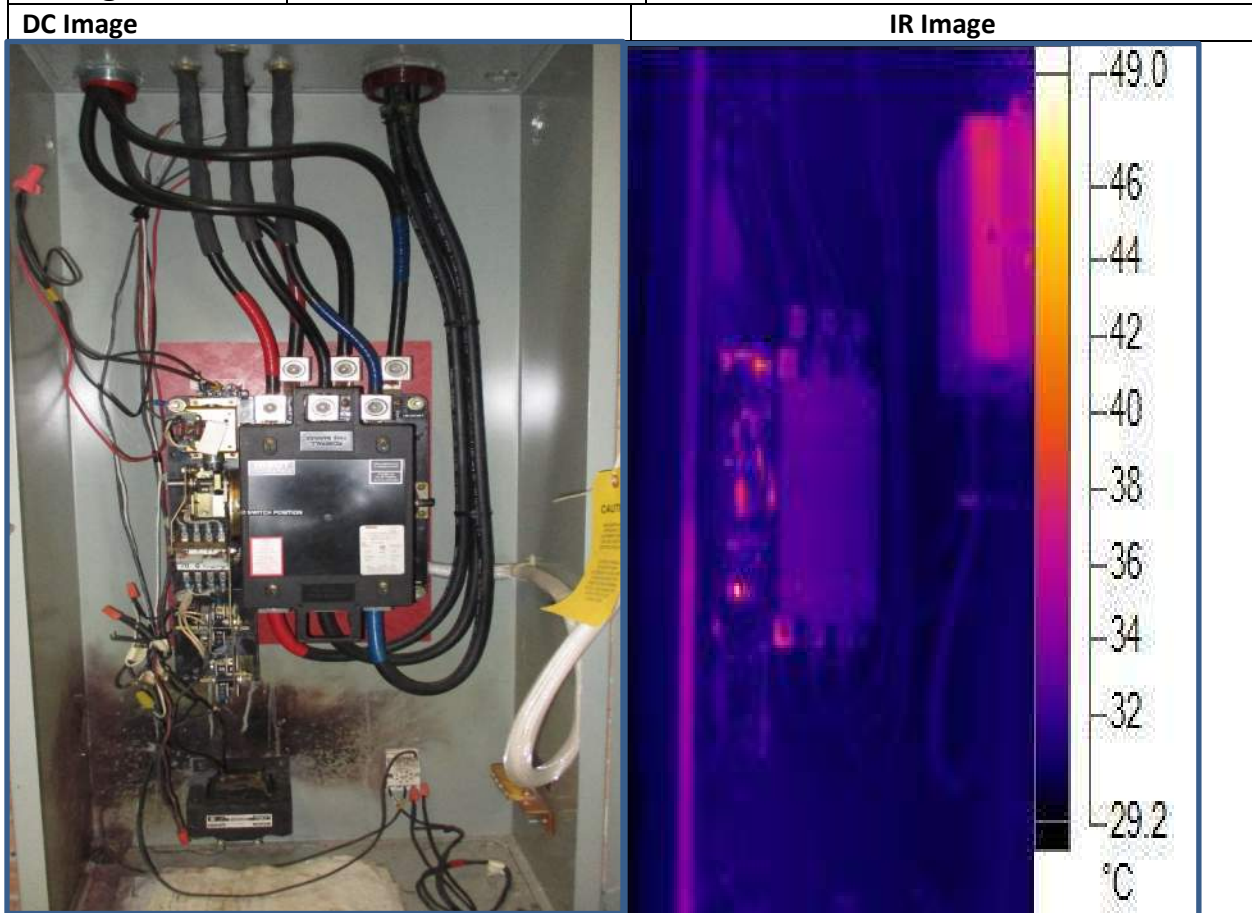
Location	Boiler room 7-8
Description	Boiler B1
System	600V
ID Tag Number	DISC-A00016

DC Image	IR Image
 A photograph of an electrical panel. At the top is a black label that reads "COMMANDER Heavy Duty Service Robust". Below the label are three vertical circuit breakers, each labeled "CRS 50". Wires are connected to the breakers and run down the side of the panel.	 An infrared (IR) image of the same electrical panel. The image shows a color-coded temperature map. A vertical color scale on the right side of the image indicates temperatures in degrees Celsius, ranging from 28.3 (dark blue) to 65.6 (yellow). The breakers and surrounding components show varying temperatures, with some areas appearing warmer (yellow/orange) than others (blue/purple).
Application Notes: Make: Commander Model: HD2036N60A Voltage: 600V Current: 60A Breaker/Fuse Type: CRS50 Wire Type: 6 RW90 CU IN/ 8 RW90 CU OUT	Safety Notes:

Location	Boiler room 7-8
Description	Boiler B3
System	600v
ID Tag Number	DISC-A00017

DC Image	IR Image
	
Application Notes: Make: Eaton Model: 1HD361 Voltage: 600V Current: 30A Breaker/Fuse Type: CRS15 Wire Type: 10 RW90 CU	Safety Notes:

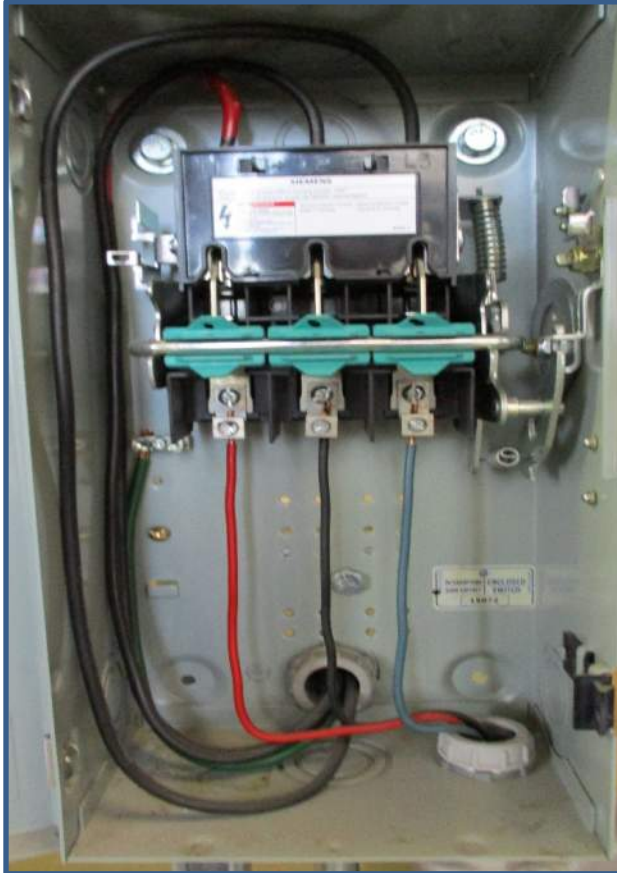
Location	Boiler room 7-8
Description	Elevator Emergency Splitter Auto Transfer
System	600V 3P 3W
ID Tag Number	ATS-A00018



Application Notes:	Safety Notes:
Make: ASCO Model: N/A Voltage: 600V Current: 200A Breaker/Fuse Type: N/A Normal Wire Type: 4/0 RW90 CU Emergency Wire Type: 3/0 RW90 CU Load Wire Type: 2/0 MI CABLE 1 C	

Location	Boiler room 7-8
Description	Boiler #1
System	600V
ID Tag Number	DISC-A00019

DC Image	IR Image
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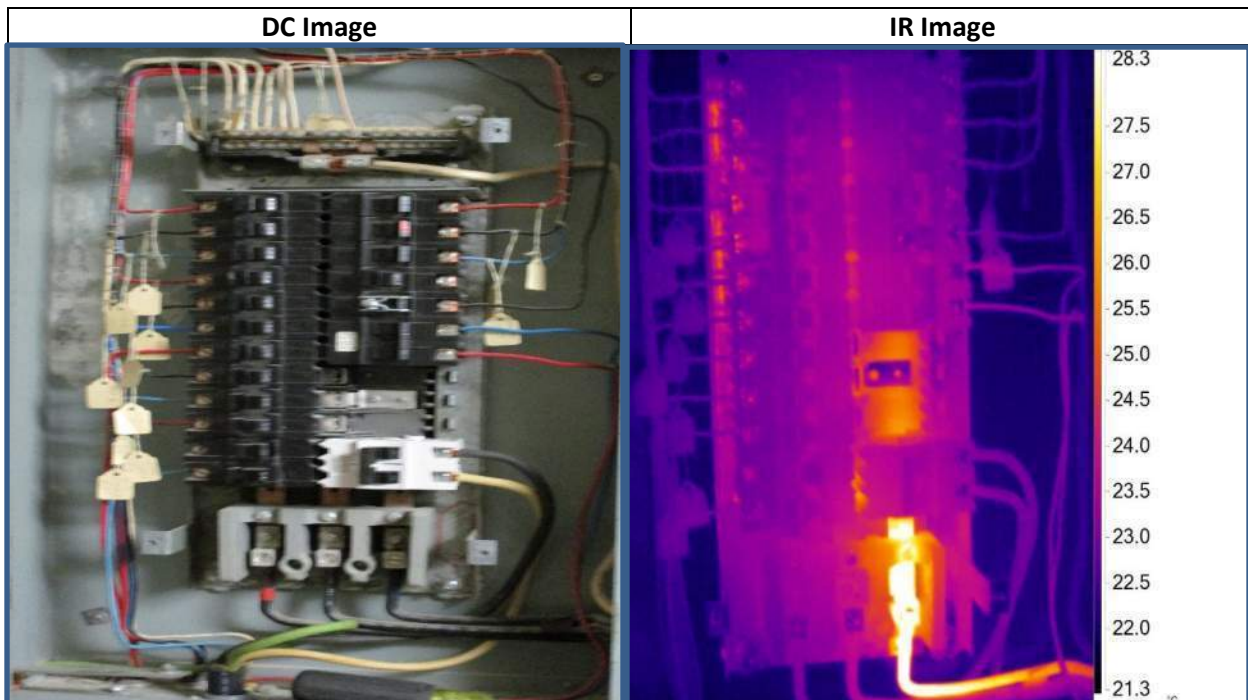


Application Notes:	Safety Notes:
Make: Siemens Model: ID362NF Voltage: 600V Current: 60A Breaker/Fuse Type: N/A Wire Type: 8 RW90 CU IN/10 RW90 OUT	This disconnect was off at time of scan. No IR photo taken.

Section

Computer
Room 7-03

Location	Computer Room 7-03
Description	Panel E
System	120/208V 3P 4W
ID Tag Number	BCP-A00054

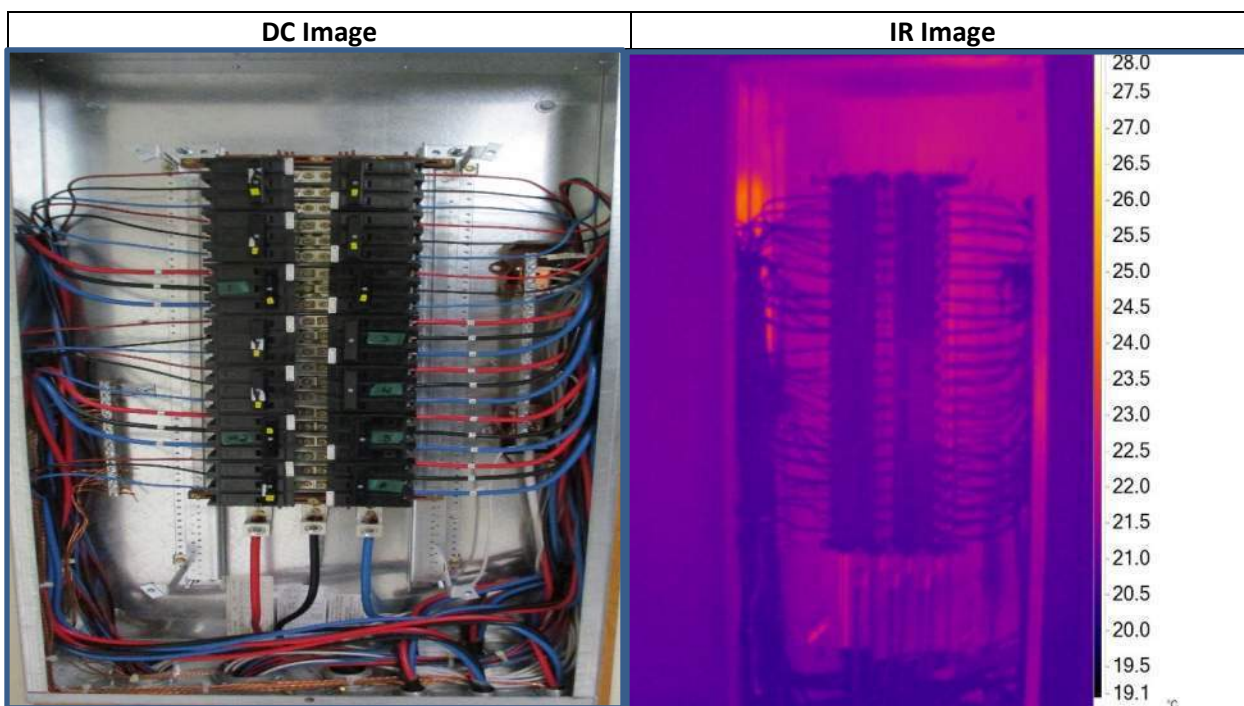


Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP-24-4L Circuits: 22 In Use: 21 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 4 TWH Cu	DC825 IR1117 Refer to IR Problems Report

Location	Computer Room 7-03
Description	Distribution Panel 700
System	120/208v 3P 4W
ID Tag Number	DP-A00055

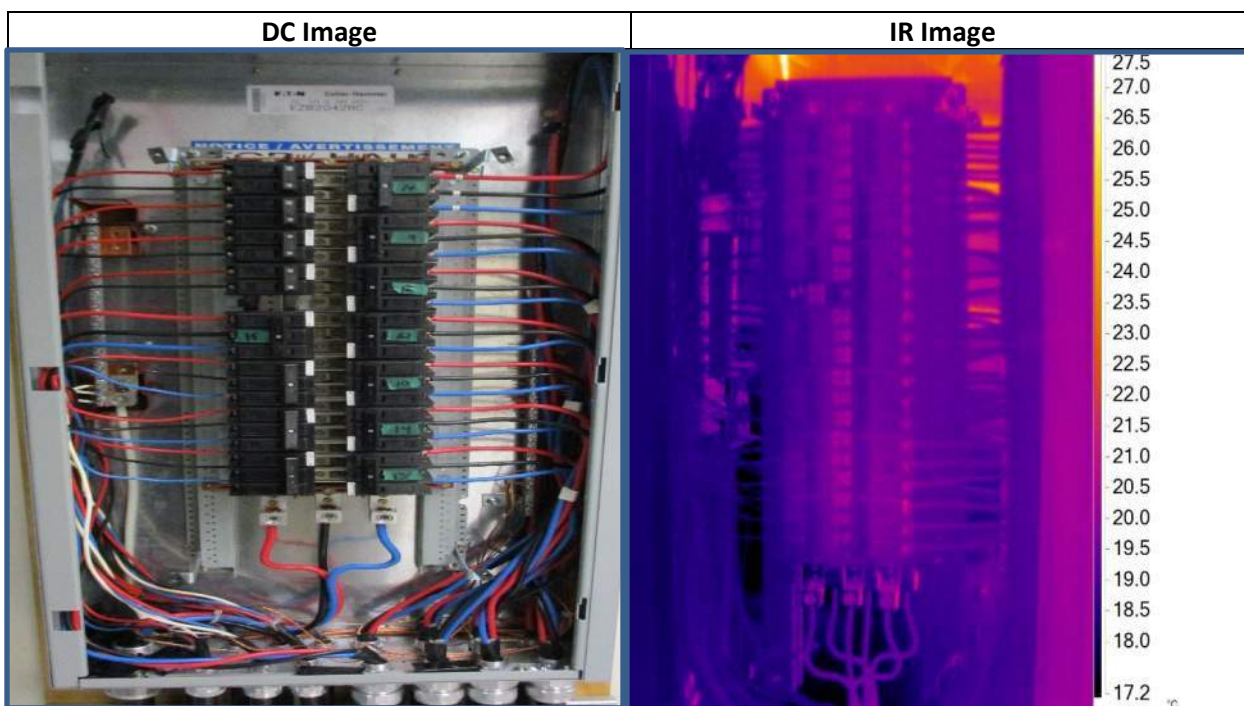
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: CDP-R Voltage: 120/208V Current: 400A Phase: 3 Main Breaker: N/A Breaker Type: SQD,JL Wire Type: RA 90 1 Conductor Teck	Safety Notes: DC826 IR1118 Breaker Trip settings: N/A

Location	Computer Room 7-03
Description	Panel 1
System	120/208 3P 4W
ID Tag Number	BCP-A00059



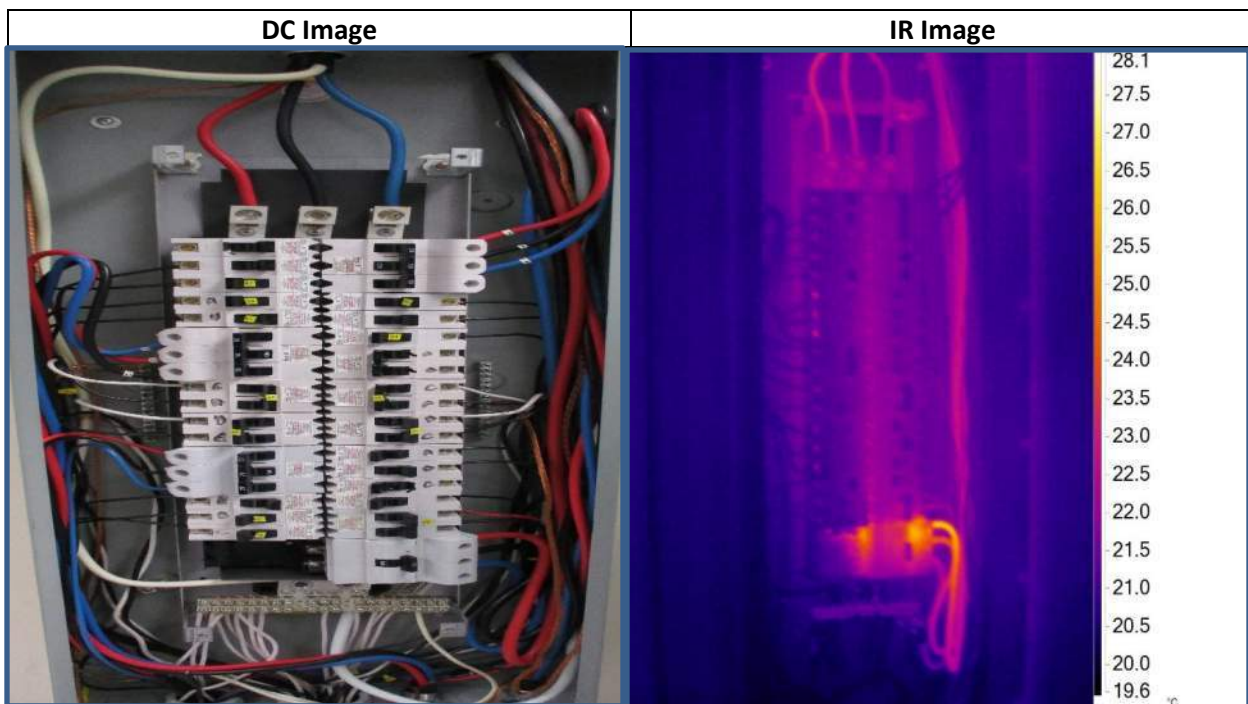
Application Notes:	Safety Notes:
Make: Cutler Model: PL1 A Circuits: 42 In Use: 42 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: BA KA: 10 Wire Type: 3 Teck 90 Cu	DC827 IR1119

Location	Computer Room 7-03
Description	Panel 4
System	120/208V 3P 4W
ID Tag Number	BCP-A00060



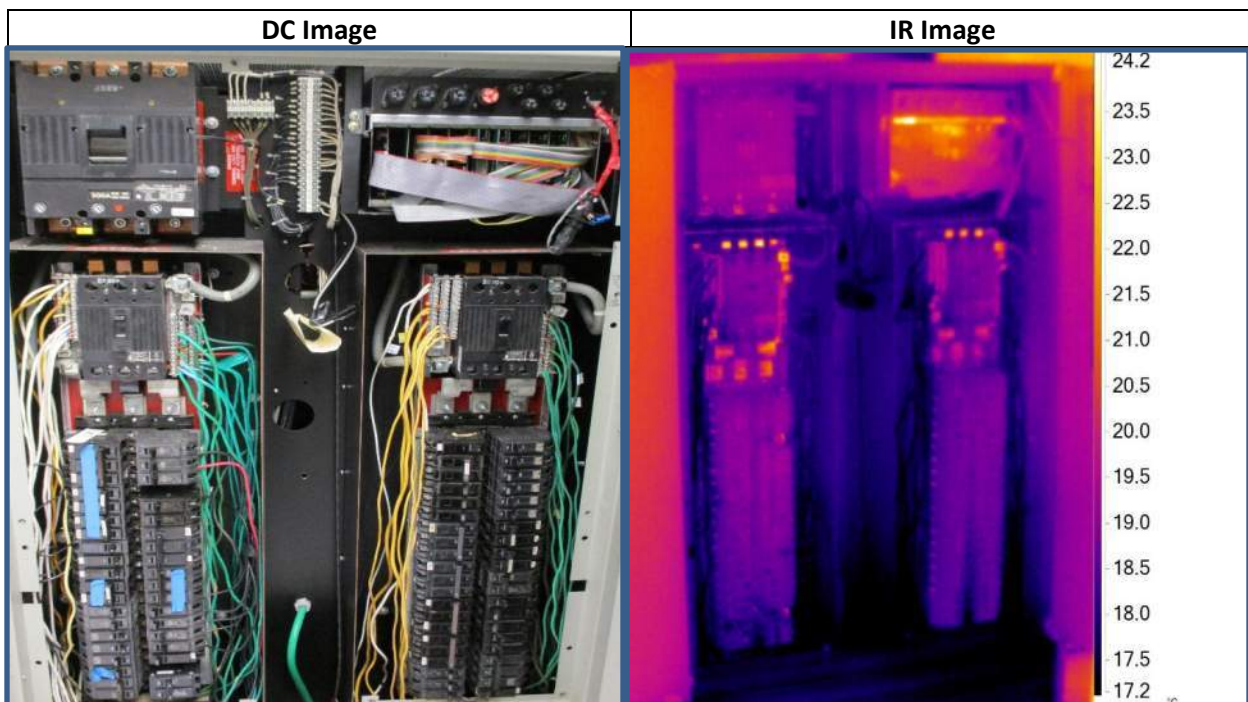
Application Notes:	Safety Notes:
Make: Cutler Model: PRL1a Circuits: 42 In Use: 42 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: BA KA: 10 Wire Type: 3 Teck 90 Cu	DC828 IR1120

Location	Computer Room 7-03
Description	Ups 40 Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A00061



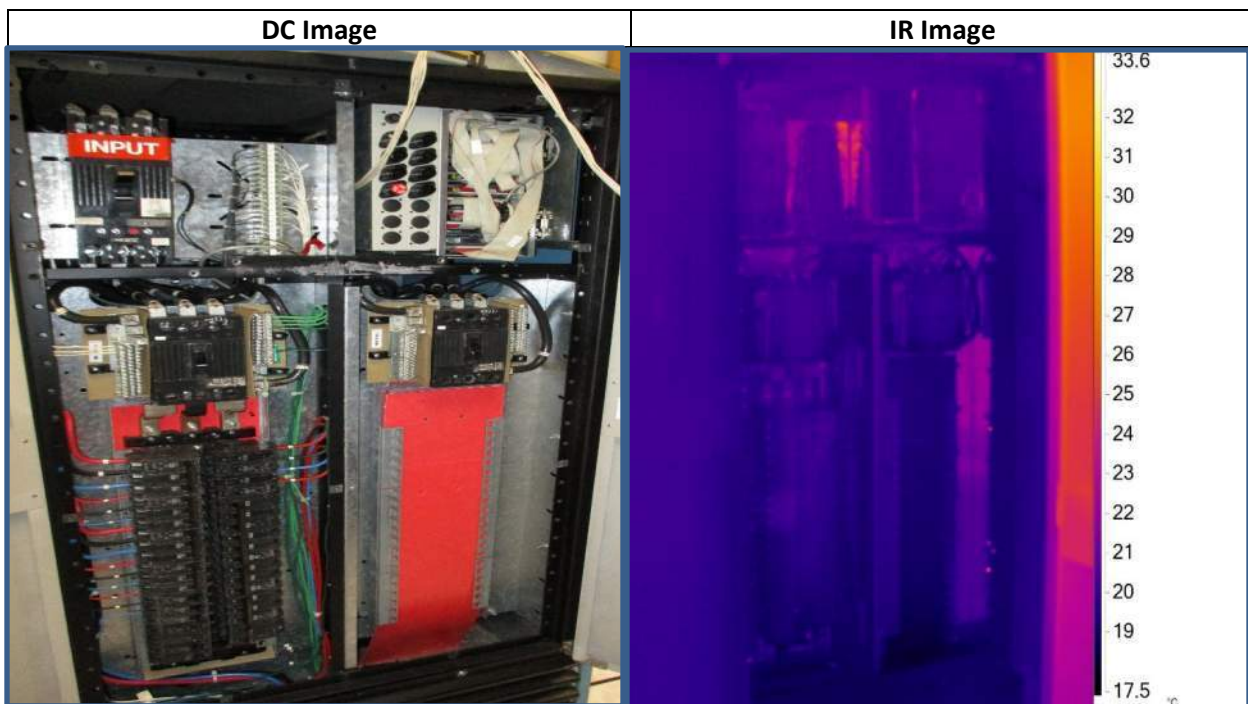
Application Notes:	Safety Notes:
Make: Federal Pioneer Model: NBLP42B Circuits: 42 In Use: 42 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: NB KA: 10 Wire Type: 3 Teck 90 Cu	DC829 IR1121 Refer to IR Problems Report

Location	Computer Room 7-03
Description	Leibert 8 PDV
System	120/208V 3P 4W
ID Tag Number	BCP-A00062



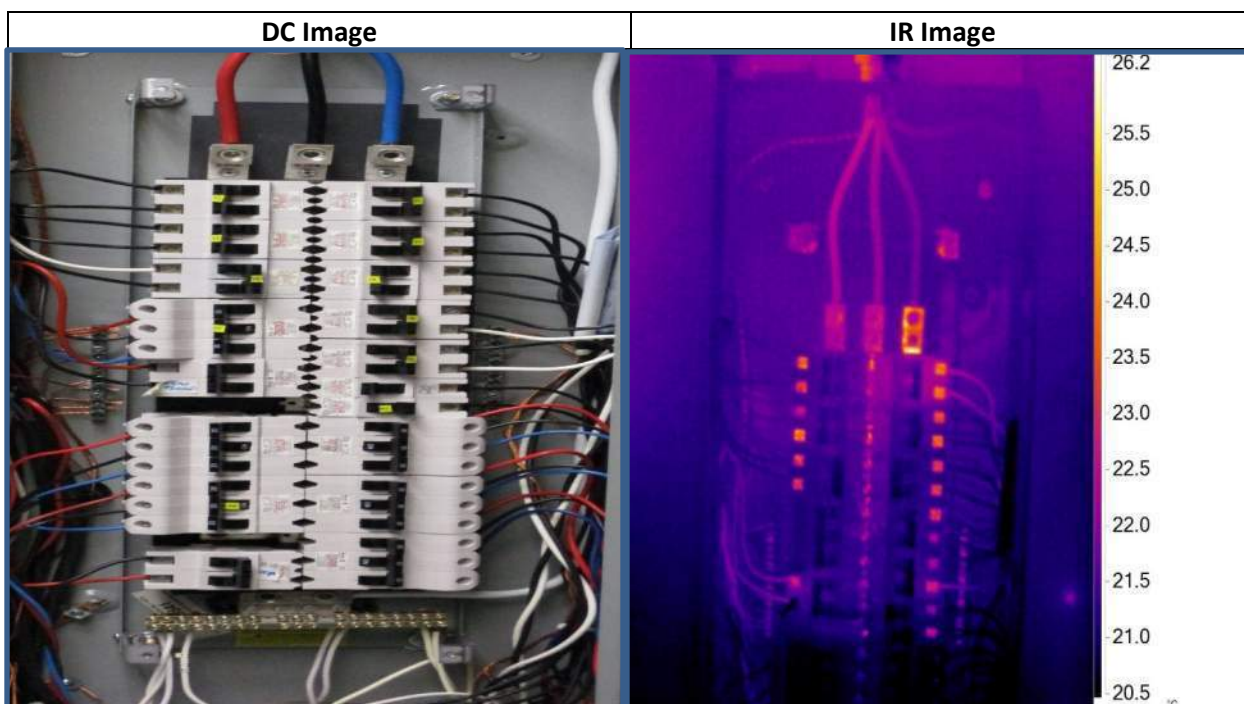
Application Notes:	Safety Notes:
Make: Leibert Model: PPC125C Circuits: 84 In Use: 81 Voltage: 120/208V Current: 361A In 347A Out Phase: 3 Breaker Type: GE THQB KA: 10 Wire Type: U/O	DC830 IR1122

Location	Computer Room 7-03
Description	Leibert 9 PDV
System	600:120/208V 3P 4W
ID Tag Number	BCP-A00069



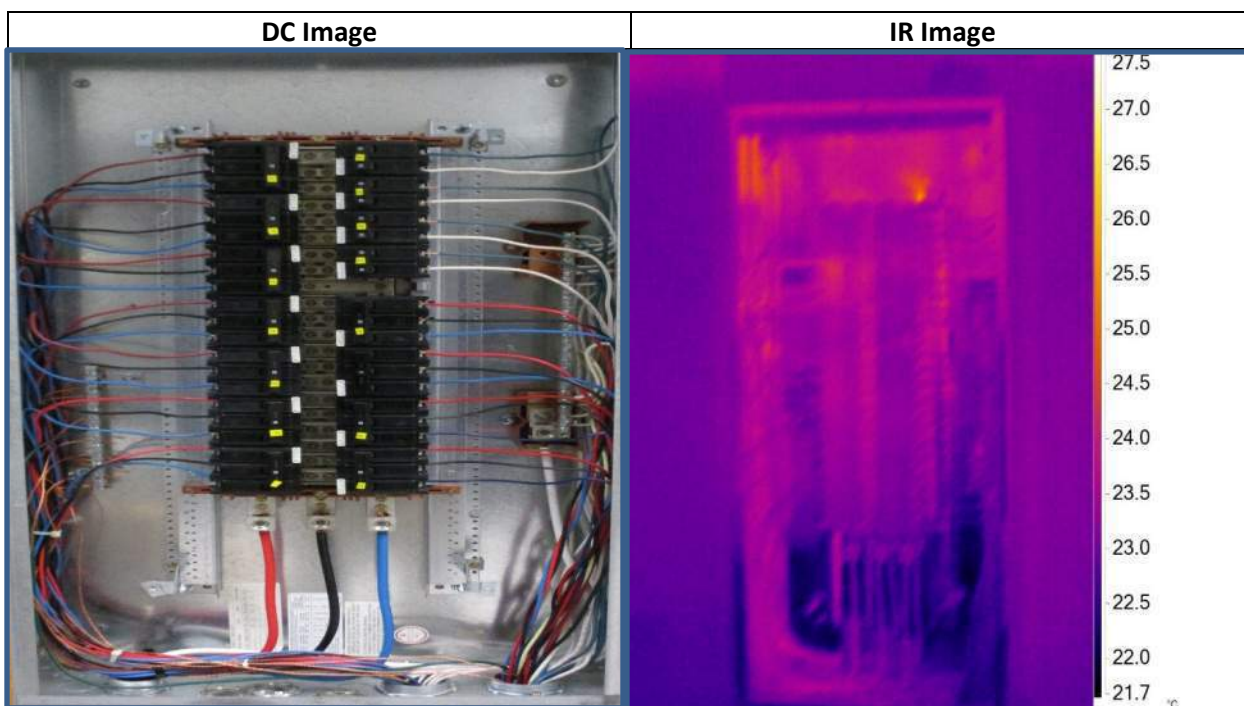
Application Notes:	Safety Notes:
Make: Leibert Model: PPB125C Circuits: 84 In Use: 37 Voltage: 600V In 120/208V Out Current: 130A In 347A Out Phase: 3 Breaker Type: GE THQB KA: 10 Wire Type: U/O	DC837 IR1129

Location	Computer Room 7-03
Description	Ups 40 Panel B
System	120/208V 3P 4W
ID Tag Number	BCP-A00063



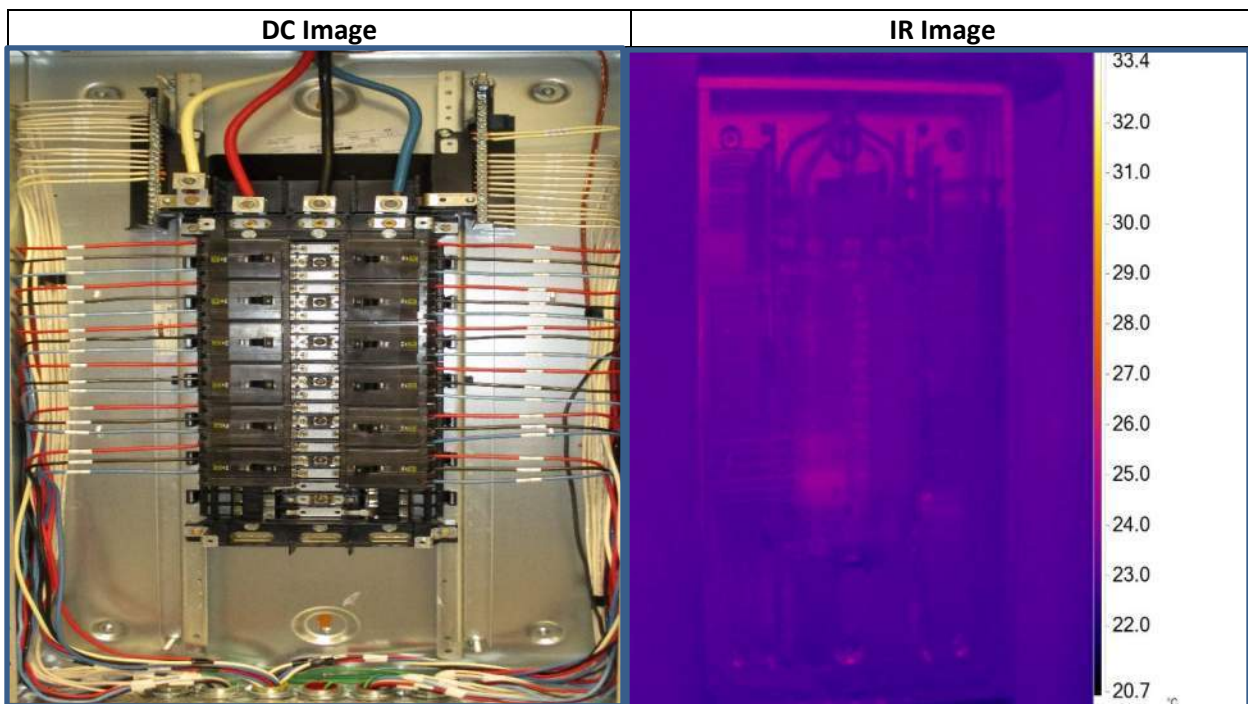
Application Notes: Make: Federal Pioneer Model: NBLP42B-4LI Circuits: 40 In Use: 42 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: NB KA: 10 Wire Type: 3 Teck 90	Safety Notes: DC831 IR1123
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Location	Computer Room 7-03
Description	Panel 2
System	120/208V 3P 4W
ID Tag Number	BCP-A00064



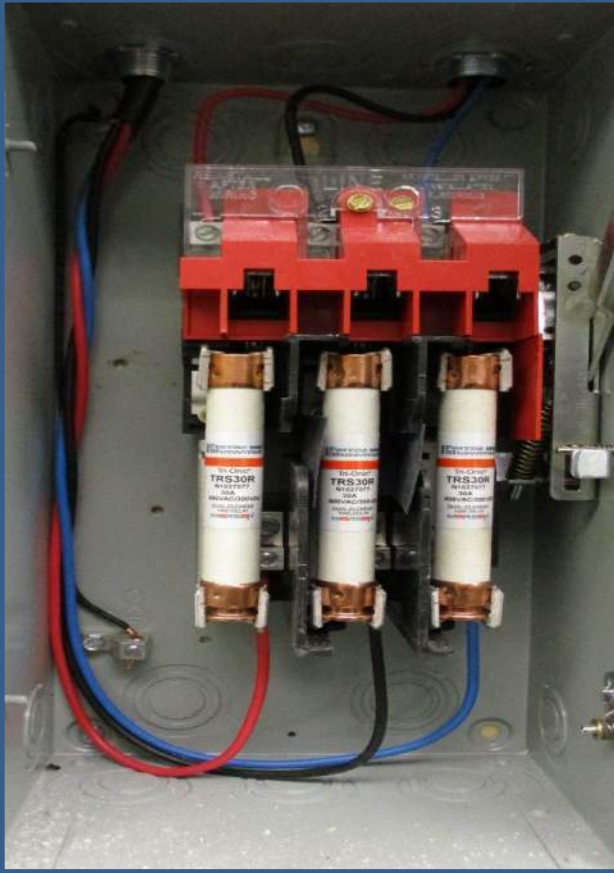
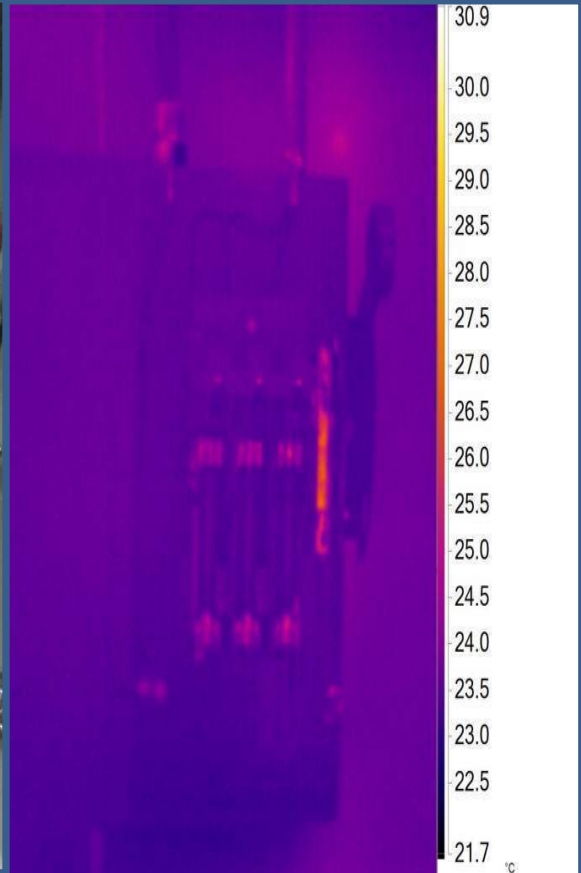
Application Notes:	Safety Notes:
Make: Cutler Model: PL1A Circuits: 41 In Use: 42 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: BA KA: 22 Wire Type: 3 Teck 90	DC832 IR1124

Location	Computer Room 7-03
Description	Panel 6
System	120/208V 3P 4W
ID Tag Number	BCP-A00065

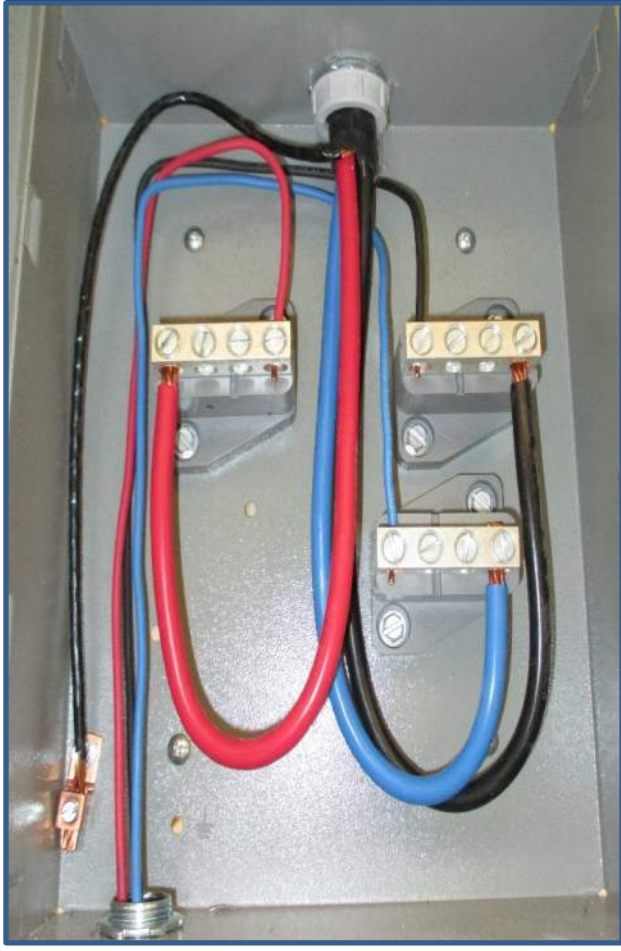


Application Notes:	Safety Notes:
Make: Square D Model: SQD12369337680090001 Circuits: 42 In Use: 36 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: QOB KA: 22 Wire Type: 4C #2 Teck 90Cu	DC833 IR1125

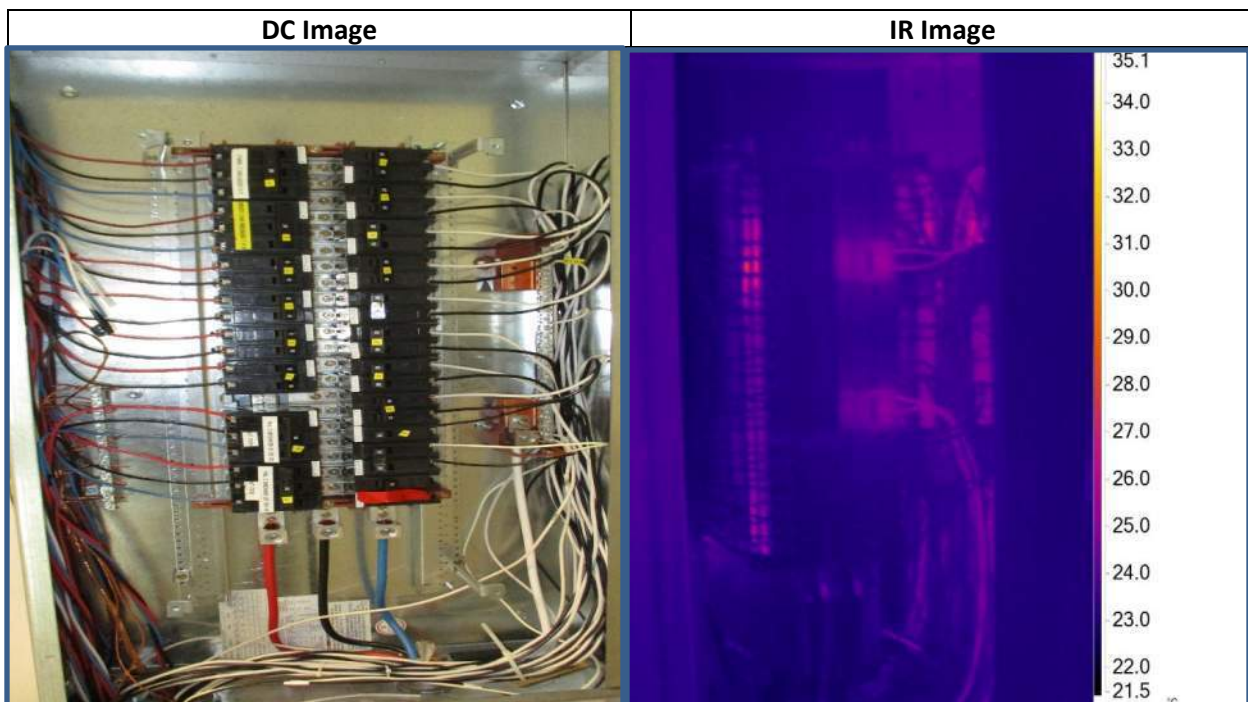
Location	Computer Room 7-03
Description	No Name
System	600V 3P 3W
ID Tag Number	DISC-A00066

DC Image	IR Image
	
Application Notes: Make: Eaton Model: 1HD361 Voltage: 600V Current: 30A Breaker/Fuse Type: TRS30R Wire Type: 10 Teck 90	Safety Notes: DC834 IR1126

Location	Computer Room 7-03
Description	Fed From CDP 800 CCT 1,3,5
System	600V 3P 3W
ID Tag Number	JB-A00067

DC Image	IR Image
	
Application Notes: Make: Bel Model: B103 Voltage: 600V Current: 125A Wire Type: 3 RW 90	Safety Notes: DC835 IR1127

Location	Computer Room 7-03
Description	Panel 3
System	120/208V 3P 4W
ID Tag Number	BCP-A00068

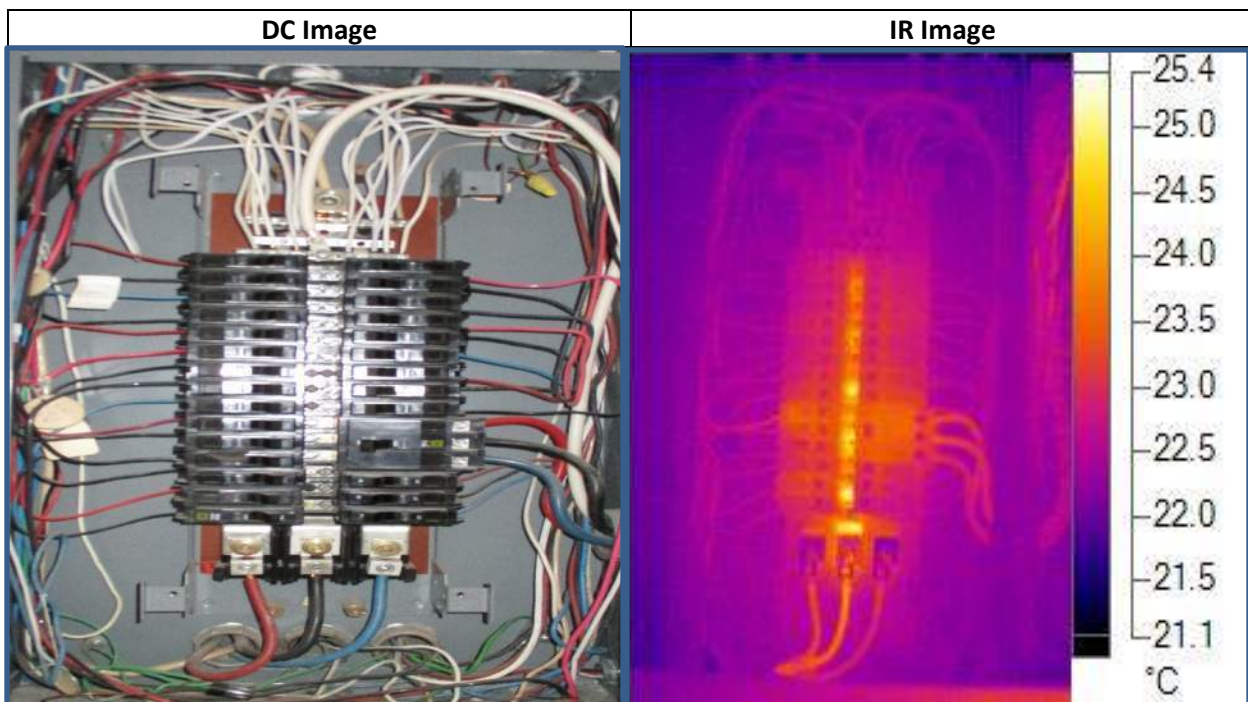


Application Notes: Make: Cutler Model: PL1A Circuits: 42 In Use: 41 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: BA KA: 22 Wire Type: 3 TECK 90 Cu	Safety Notes: DC836 IR1128
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Section

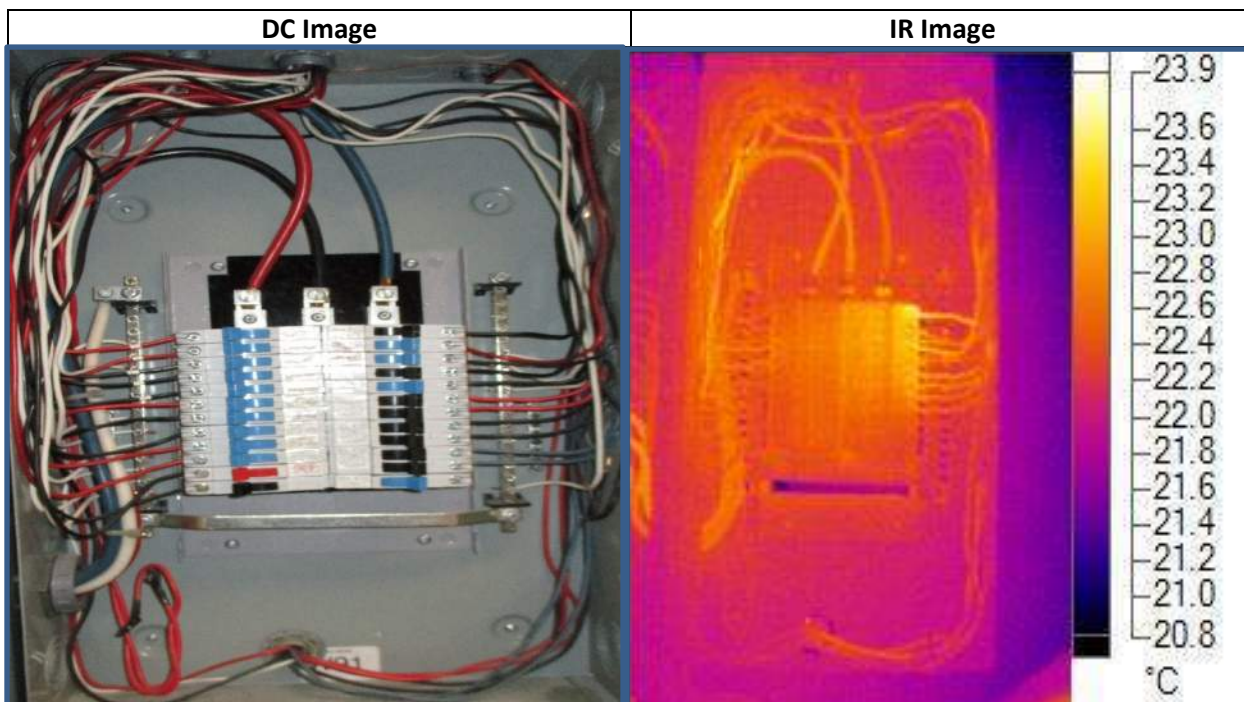
Control
Office

Location	Control Office
Description	Panel EM1
System	120/208v 3p 4w
ID Tag Number	BCP-A282



Application Notes:	Safety Notes:
Make: Square D Model: QBL-430 Circuits: 30 In Use: 30 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: QOB KA: 10 Wire Type: 6 RW90 CU	

Location	Control Office
Description	Panel EM2
System	120/208v 3p 4w
ID Tag Number	BCP-A283

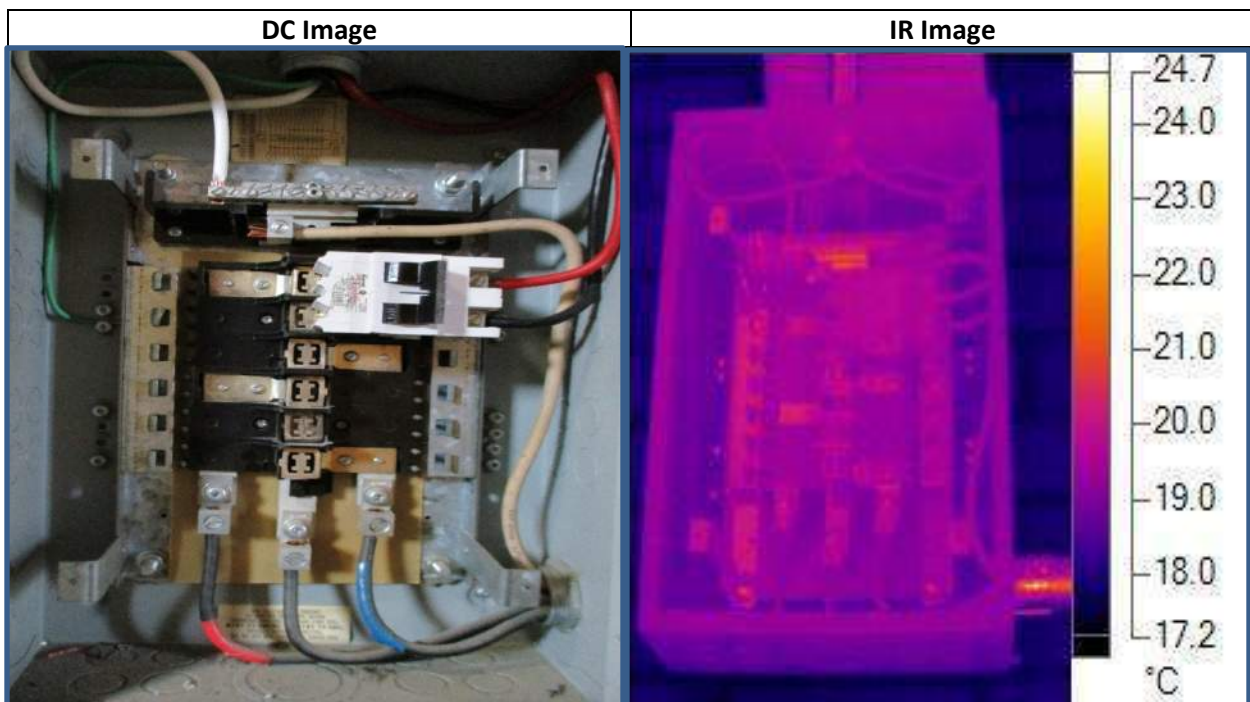


Application Notes:	Safety Notes:
Make: Federal Pioneer Model: 312-24 Circuits: 24 In Use: 24 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NC KA: 10 Wire Type: 4 RW90 CU	

Section

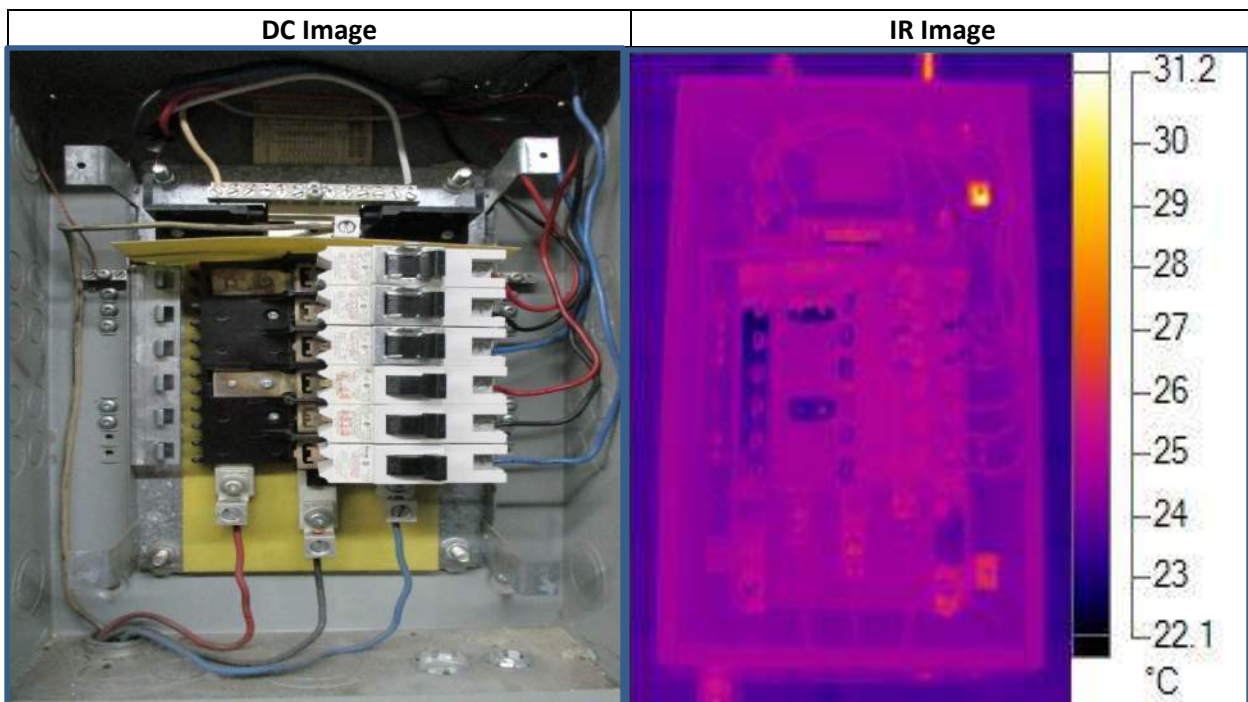
Elevator
Room 8th
Floor

Location	Elevator Room 8th Floor
Description	Clock Panel
System	120/208v 3P 4W
ID Tag Number	BCP-A00107



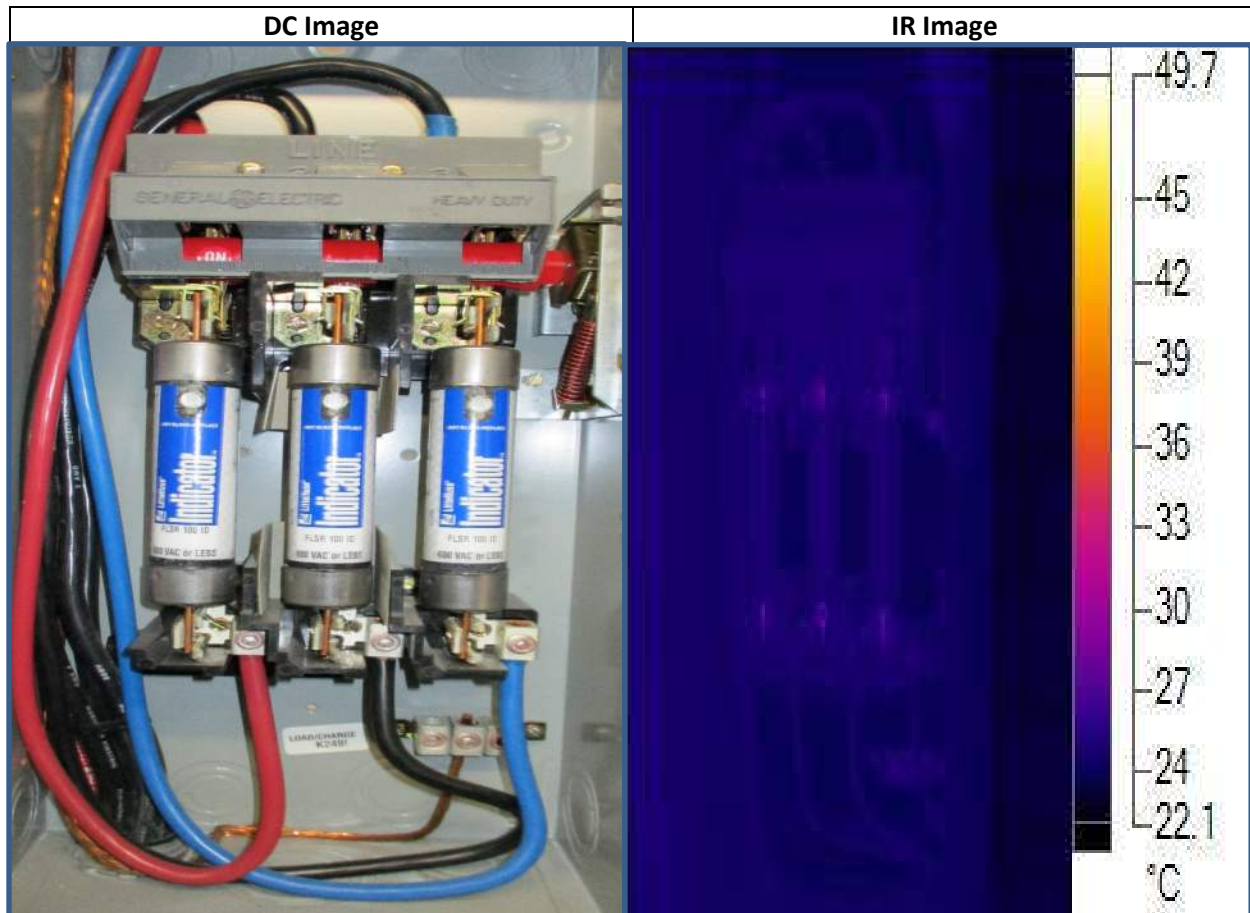
Application Notes:	Safety Notes:
Make: Federal Pioneer Model: 312-24 Circuits: 12 In Use: 2 Voltage: 120/208V Current: 50A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 6 Rw90 Cu	

Location	Elevator Room 8th Floor
Description	Elevator Room Panel
System	120/208V 3P 4W
ID Tag Number	BCP-A00108



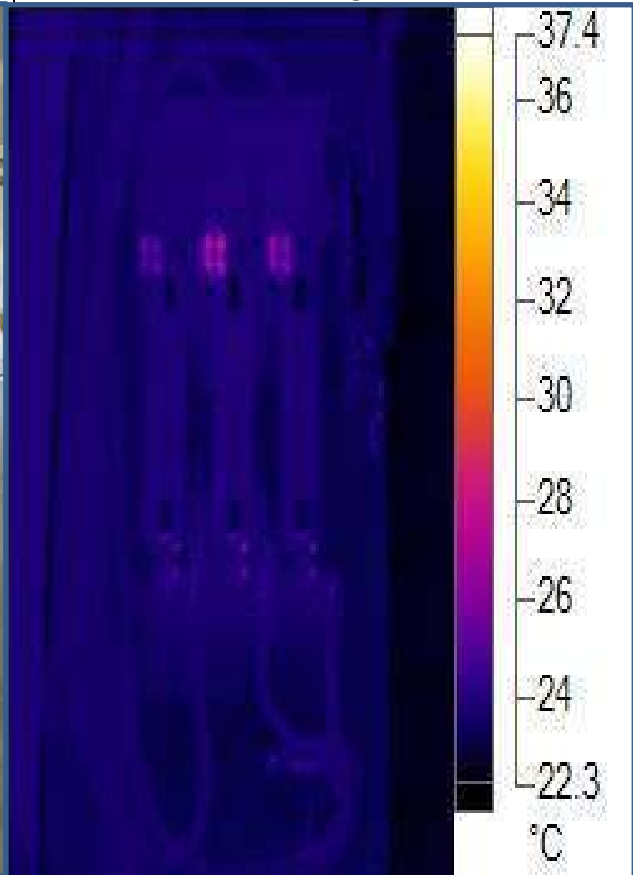
Application Notes:	Safety Notes:
Make: Federal Pioneer Model: 312-24 Circuits: 12 In Use: 6 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 10 Rw90 Cu	

Location	Elevator Room 8th Floor
Description	Elevator 3
System	600V 3P 3W
ID Tag Number	DISC-A00109

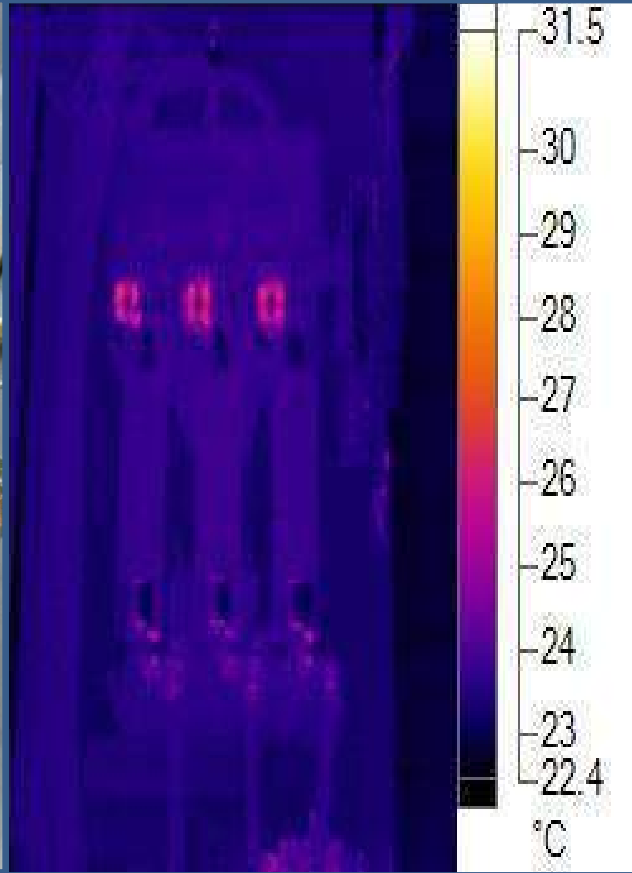


Application Notes:	Safety Notes:
Make: GE Model: TH3362 Voltage: 600V Current: 60A Breaker/Fuse Type: FLSR50ID Wire Type: 3Tw Cu In 6 Teck90 Cu Out	

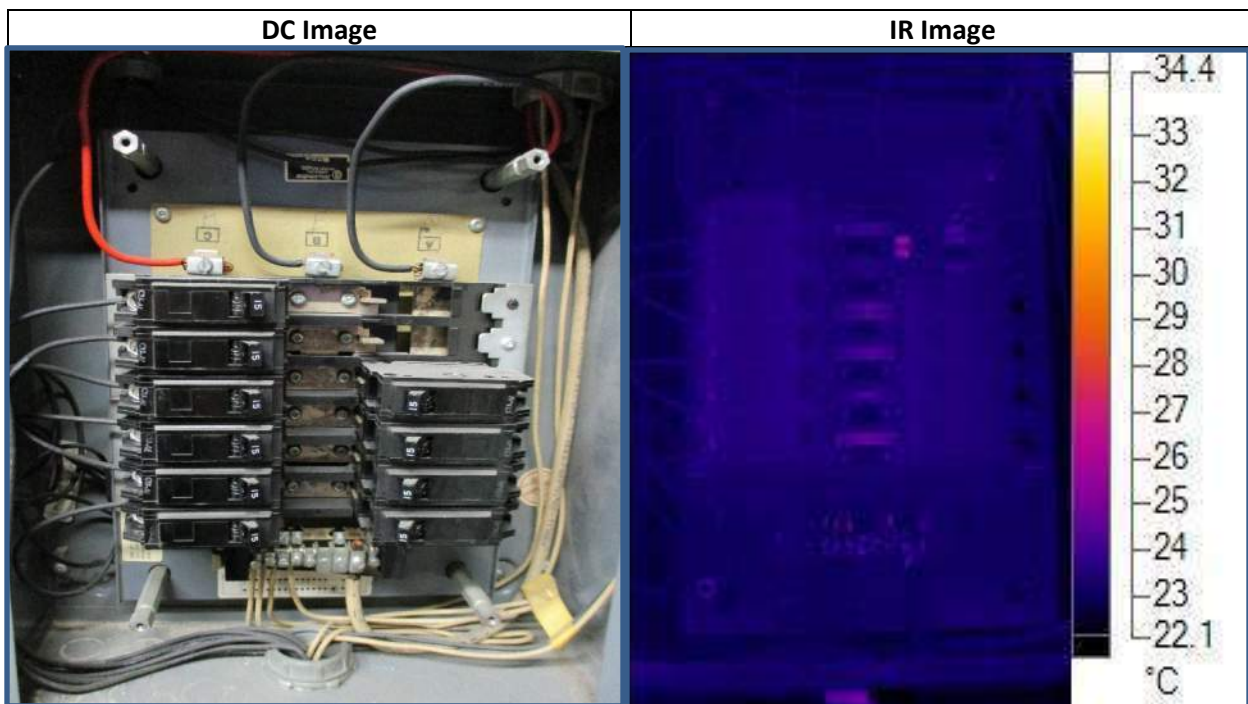
Location	Elevator Room 8th Floor
Description	Elevator 2
System	600V 3P 3W
ID Tag Number	DISC-A00110

DC Image	IR Image
	
Application Notes: Make: GE Model: TH3363 Voltage: 600V Current: 100A Breaker/Fuse Type: FLSR100ID Wire Type: 3Tw Cu In 6 Teck90 Cu Out	Safety Notes:

Location	Elevator Room 8th Floor
Description	Elevator 1
System	600V
ID Tag Number	DISC-A00111

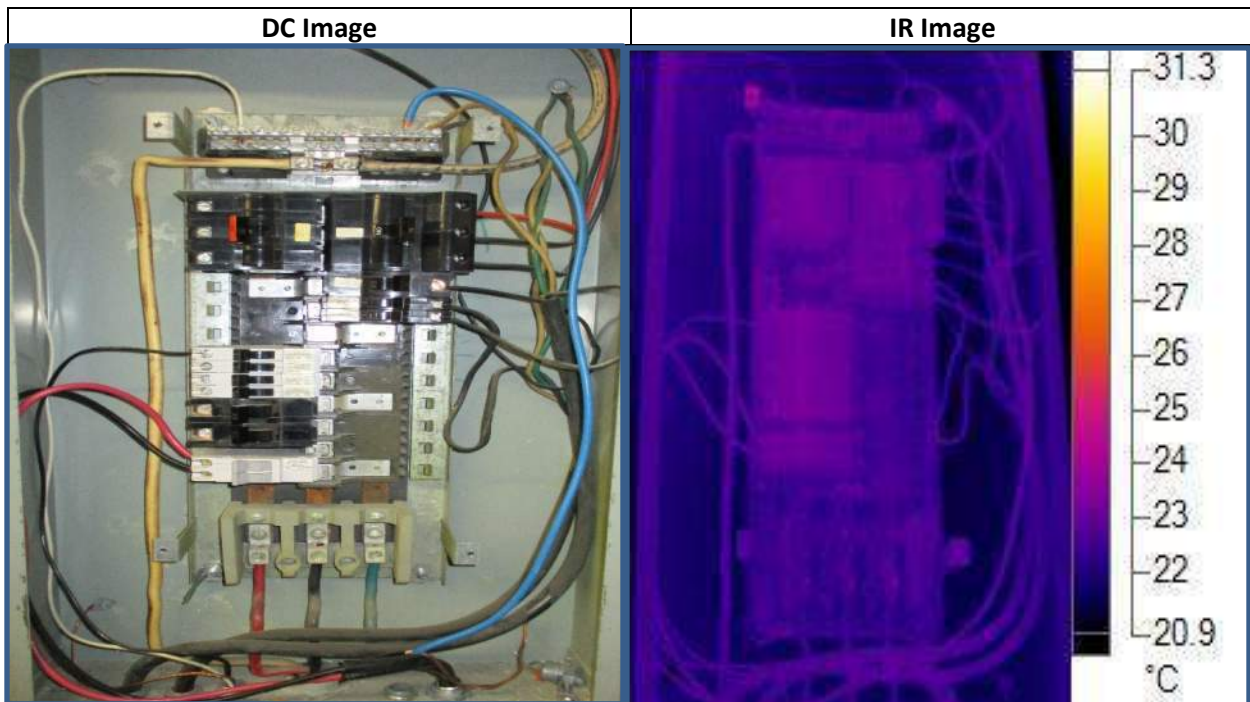
DC Image	IR Image
	
Application Notes: Make: GE Model: TH3363 Voltage: 600V Current: 100A Breaker/Fuse Type: FLSR100ID Wire Type: 3Tw Cu In 6 Teck90 Cu Out	Safety Notes:

Location	Elevator Room 8th Floor
Description	Courtyard Lights Panel
System	120/208V 3P 4W
ID Tag Number	BCP-A00112



Application Notes:	Safety Notes:
Make: GE Model: ANLP Circuits: 12 In Use: 10 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: TQL KA: 10 Wire Type: 10 R90 Cu	

Location	Elevator Room 8th Floor
Description	Panel F
System	120/208V 3P 4W
ID Tag Number	BCP-A00113

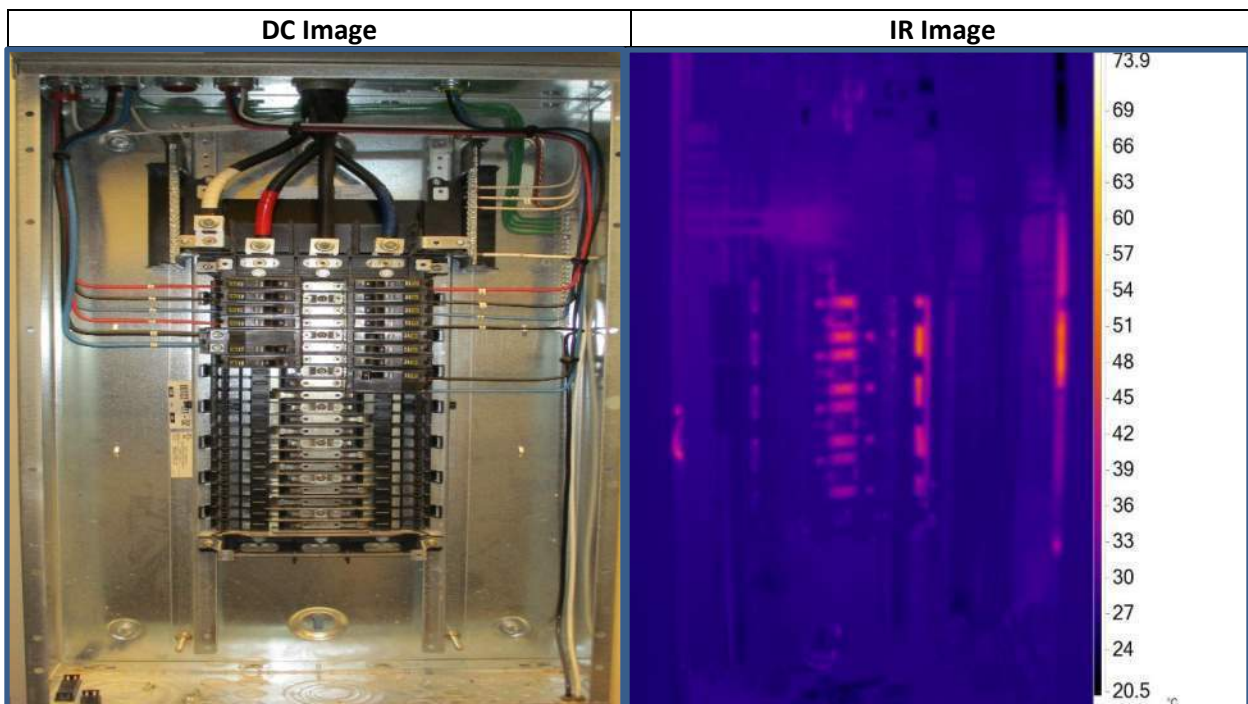


Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 13 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 4 Tw Cu	

Section

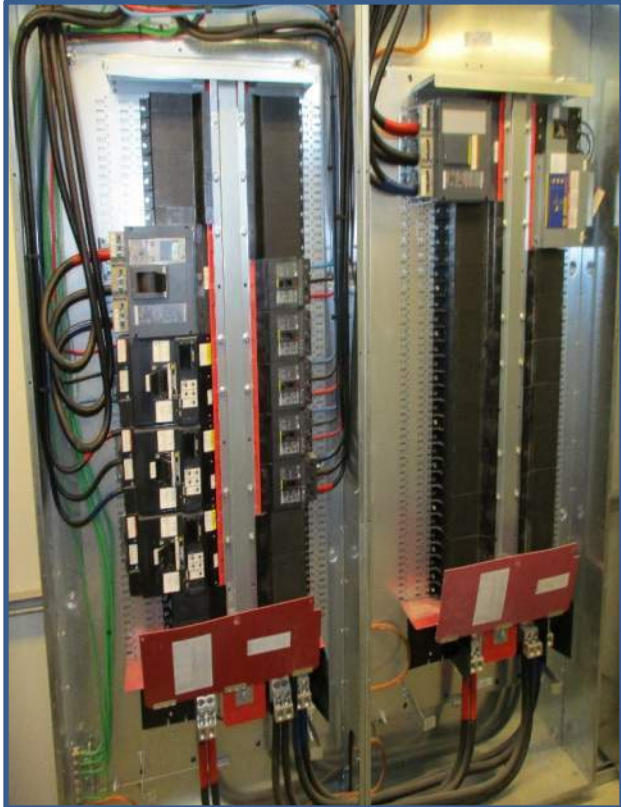
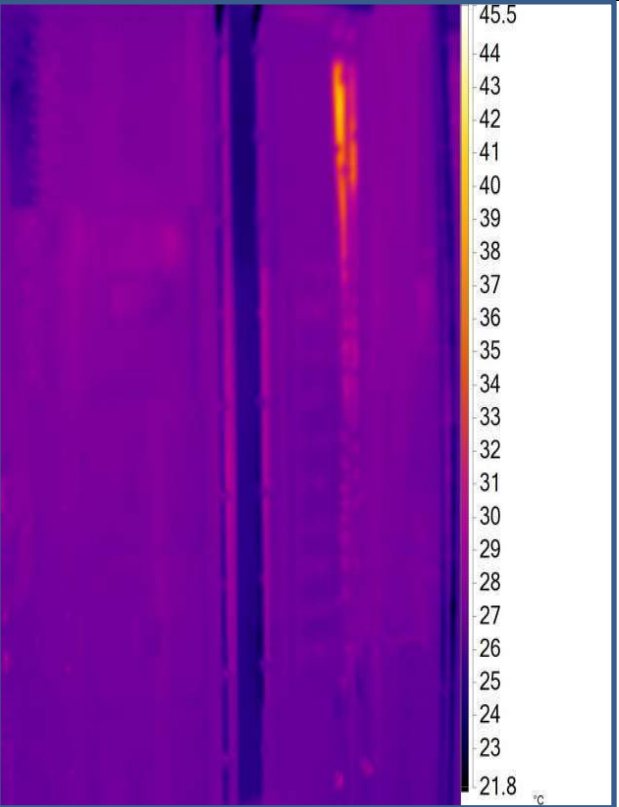
Generator
Room
7th Floor

Location	Generator Room 7 th Floor
Description	Panel GEN
System	120/208v 3P 4W
ID Tag Number	BCP-A00031

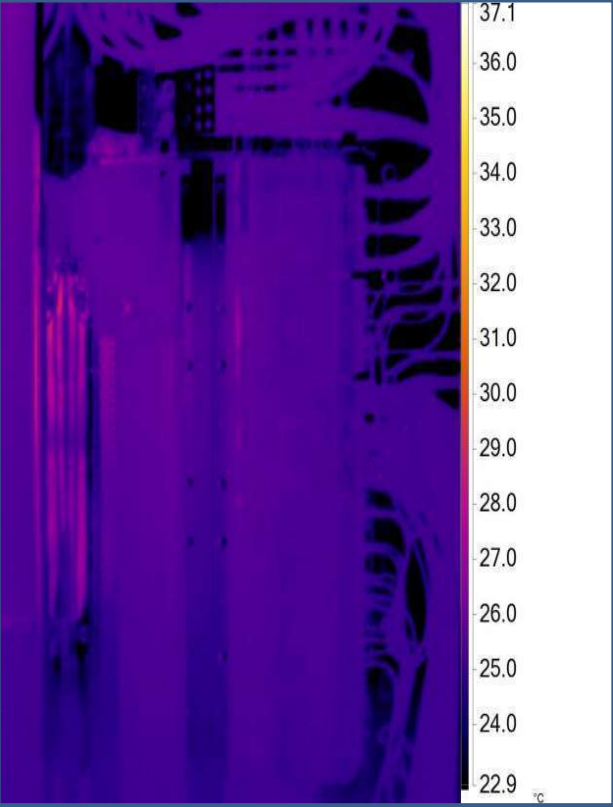


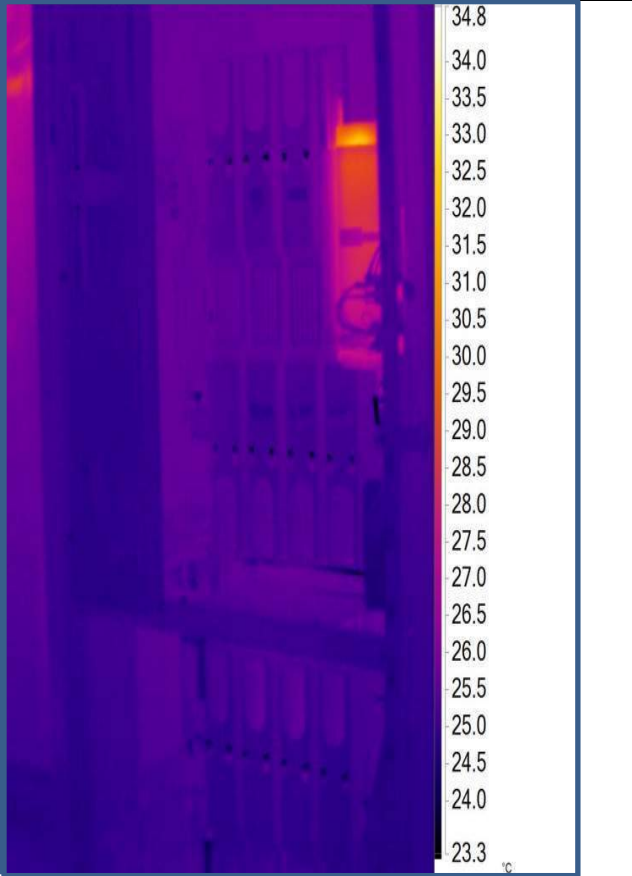
Application Notes:	Safety Notes:
Make: Square D Model: 12272428270100001 Circuits: 42 In Use: 16 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: QOB KA: 22 Wire Type: 2/0 4C Teck 90 Cu	DC808 IR1101

Location	Generator Room 7th Floor
Description	L7-ELD02
System	347/600V
ID Tag Number	DP-A00032

DC Image	IR Image
	
Application Notes: Make: Square D Model: 12272428270010001 Voltage: 347/600V Current: 1000A Phase: 3 Main Breaker: N/A Breaker Type: JL,HL,PK,LXI Wire Type: Parallel 500kcmil 1C Teck 90 Cu	Safety Notes: DC809 IR1102 Breaker Trip settings: N/A

Location	Generator Room 7th Floor
Description	L7-ELD01
System	347/600V 3p 4W
ID Tag Number	DP-A00033

DC Image	IR Image
	
Application Notes: Make: Square D Model: 12272428270140001 Voltage: 347/600V Current: 1000A Phase: 3 Main Breaker: N/A Breaker Type: JL,HL,PK,LXI Wire Type: Parallel 500kcmil 1C Teck 90 Cu	Safety Notes: DC810 IR1103 Breaker Trip settings: N/A

Location	Generator Room 7th Floor
Description	L7-ATS01
System	347/600V 3P 4W
ID Tag Number	ATS-00034
DC Image	IR Image
	
Application Notes:	Safety Notes:
Make: ASCO Model: H07ATBB31000R5XE Voltage: 347/600V Current: 1000A Breaker/Fuse Type: N/A Normal Wire Type: Parallel 750 Kcmil RA90 1C Emergency Wire Type: Parallel 750 Kcmil RA90 1C Load Wire Type: Parallel 750 Kcmil RA90 1C	DC811 IR1104

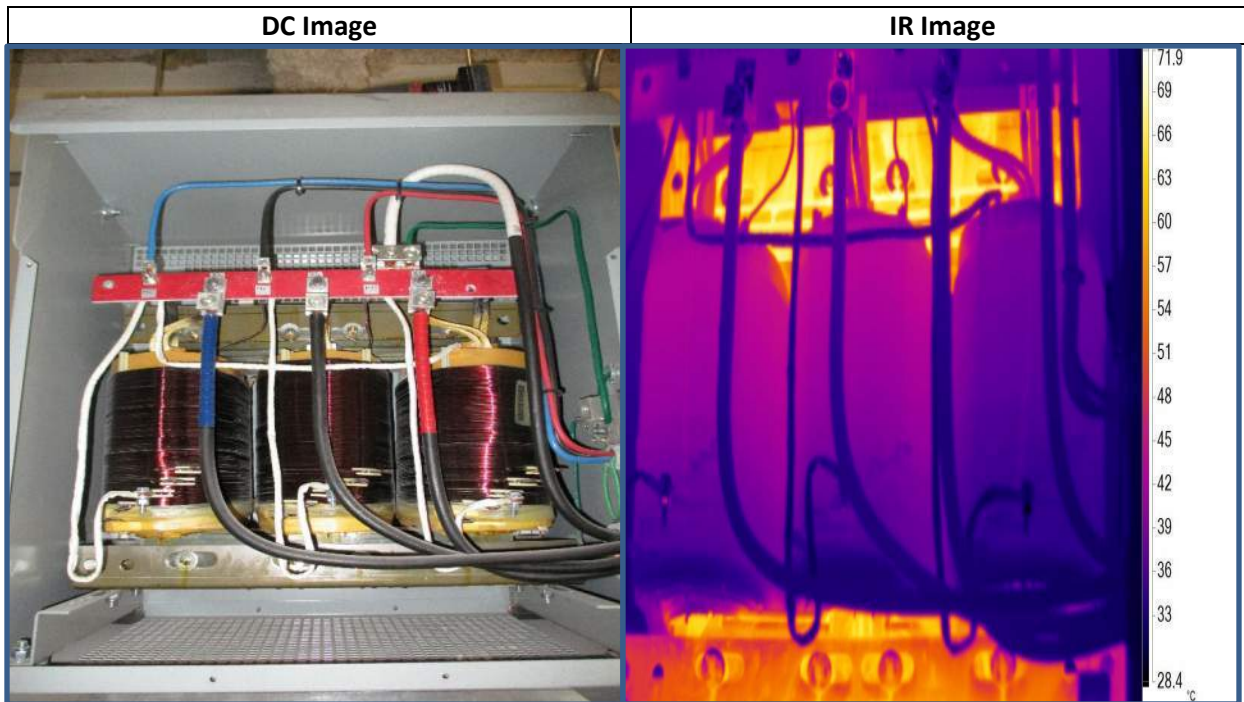
Location	Generator Room 7th Floor
Description	TR-GEN
System	600: 120/208V 3P 4W
ID Tag Number	TRD-A00037

DC Image	IR Image
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Application Notes:	Safety Notes:
Make: Bemag Model: UC3045VK13 Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 45 Impedance: 5.4 %Z Phase: 3 Primary Wire: 3 RW90 Cu Secondary Wire: Not Terminated	DC812 No IR picture was taken as unit was off

Location	Generator Room 7th Floor
Description	TR-UPS 40
System	600: 120/208v 3P 4W
ID Tag Number	TRD-A00038

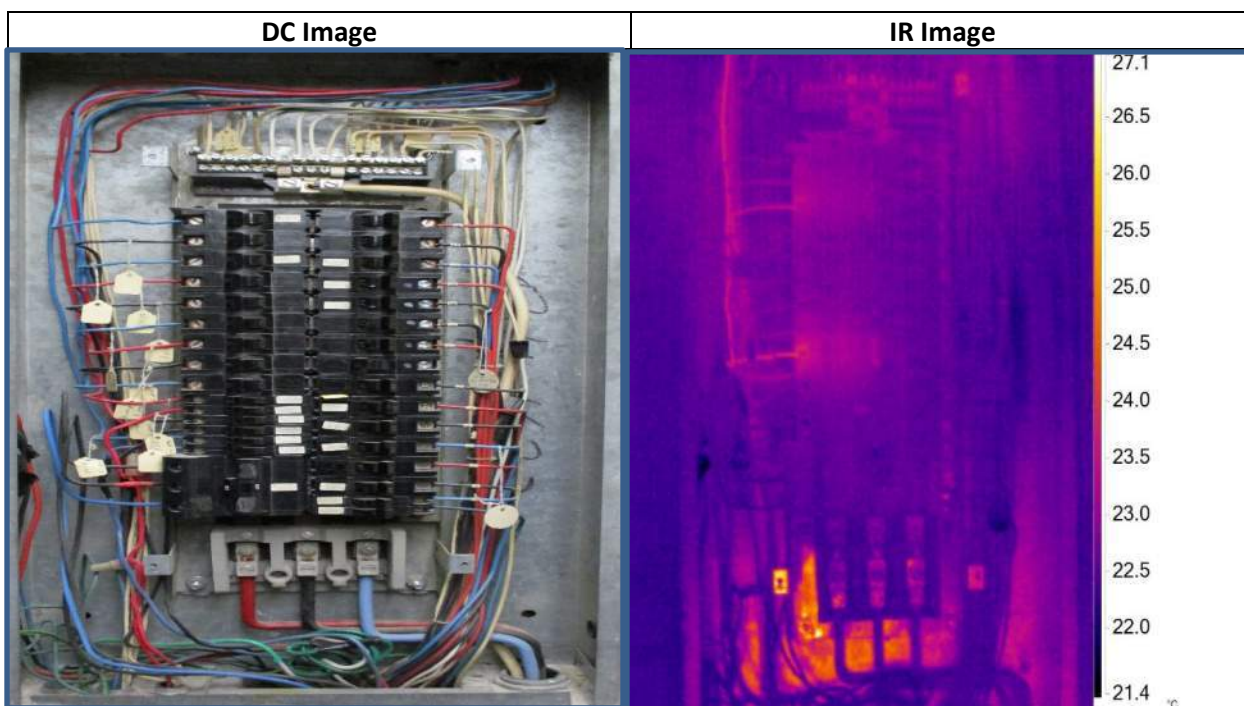


Application Notes:	Safety Notes:
Make: BEMAG Model: UC3075VK13 Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 75 Impedance: 4.8 %Z Phase: 3 Primary Wire: 6 RW90 Cu Secondary Wire: 2/0 RW90 Cu	DC813 IR1105

Section

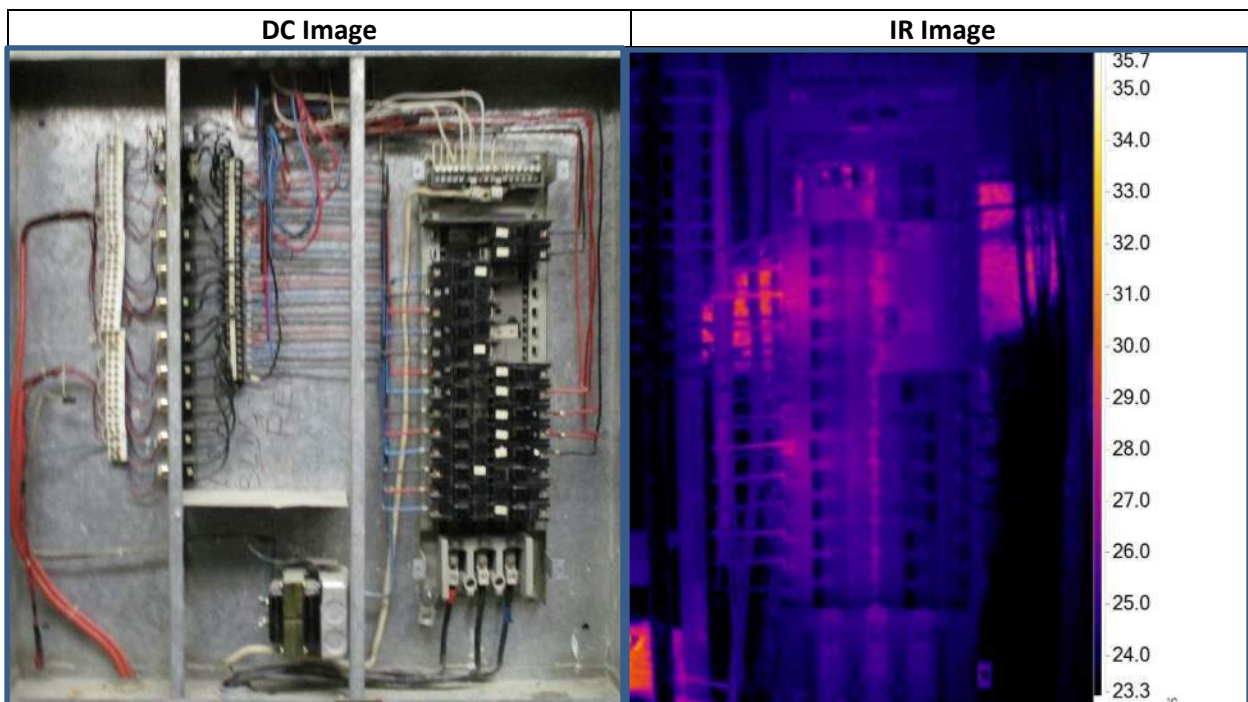
IBM Office
7th Floor

Location	IBM Office
Description	Panel B
System	120/208V 3P 4W
ID Tag Number	BCP-A00039



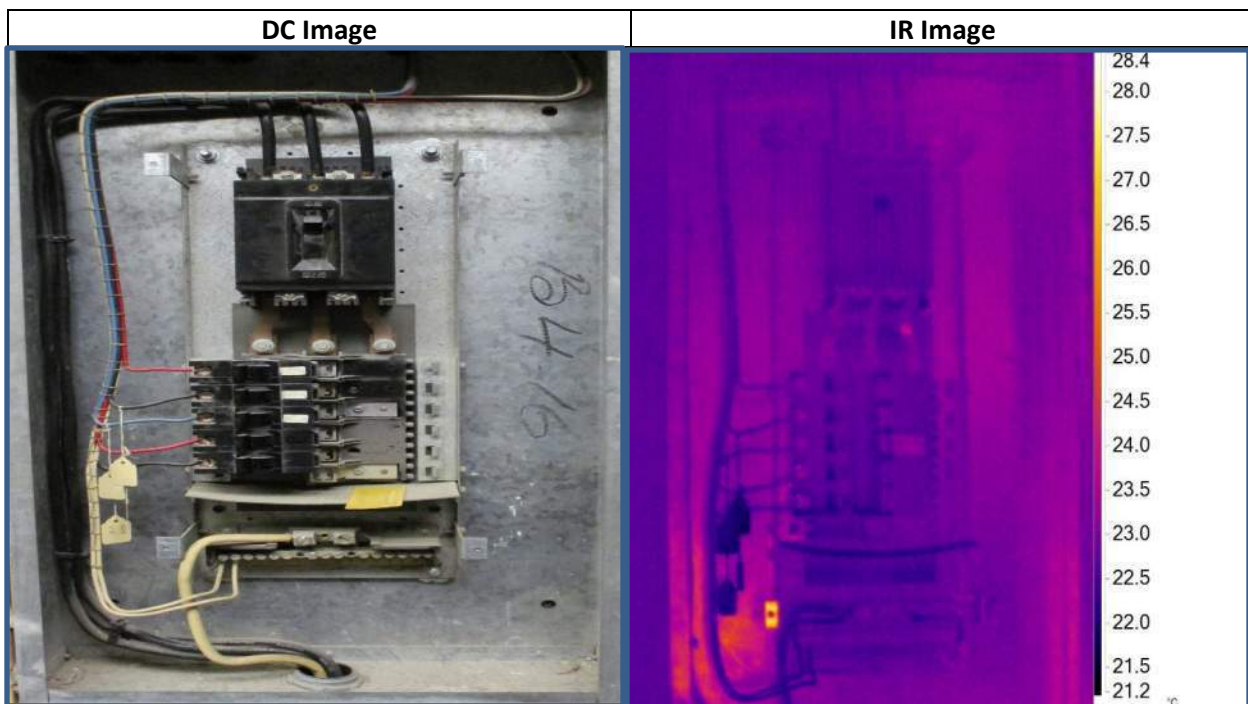
Application Notes: Make: Federal Pacific Model: NALP30-4L Circuits: 30 In Use: 30 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA,NC KA: 10 Wire Type: 3 RW90 Cu	Safety Notes: DC814 IR1107
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Location	IBM Office
Description	Panel A
System	120/208V 3P 4W
ID Tag Number	BCP-A00040



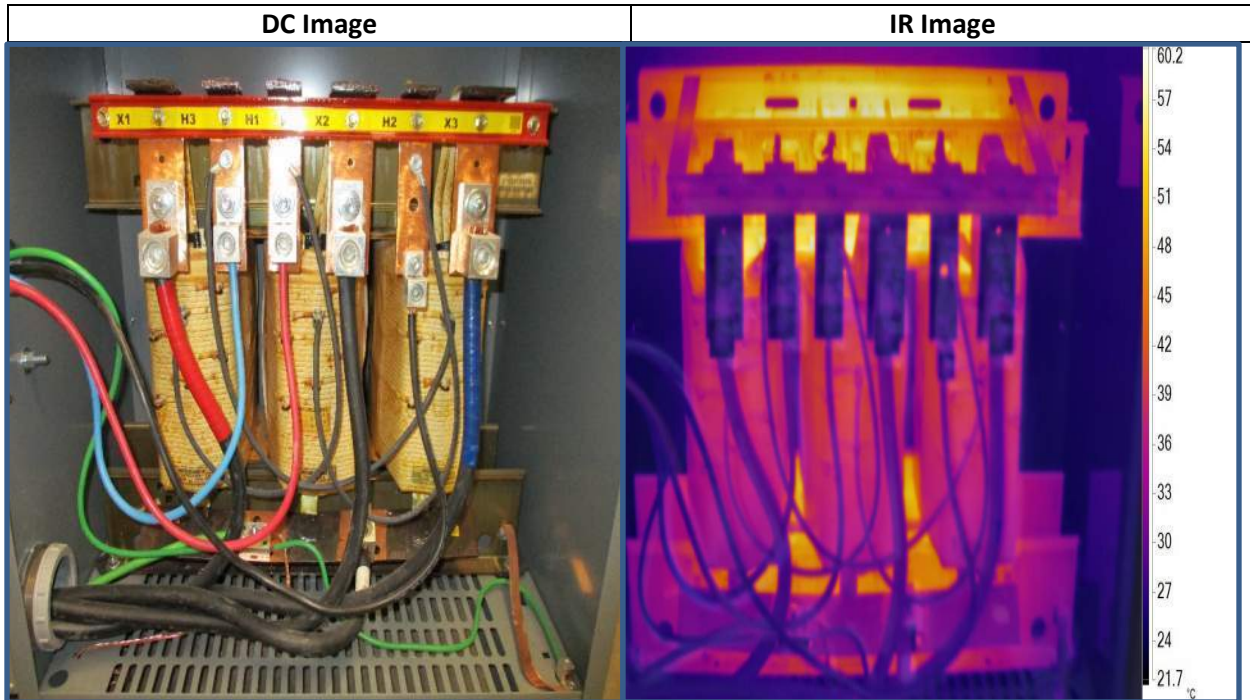
Application Notes: Make: Federal Pacific Model: NALP30-4L Circuits: 30 In Use: 23 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 AWG RW90 CU	Safety Notes: DC815 IR1108
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Location	IBM Office
Description	Panel C
System	120/208V 3P 4W
ID Tag Number	BCP-A00041



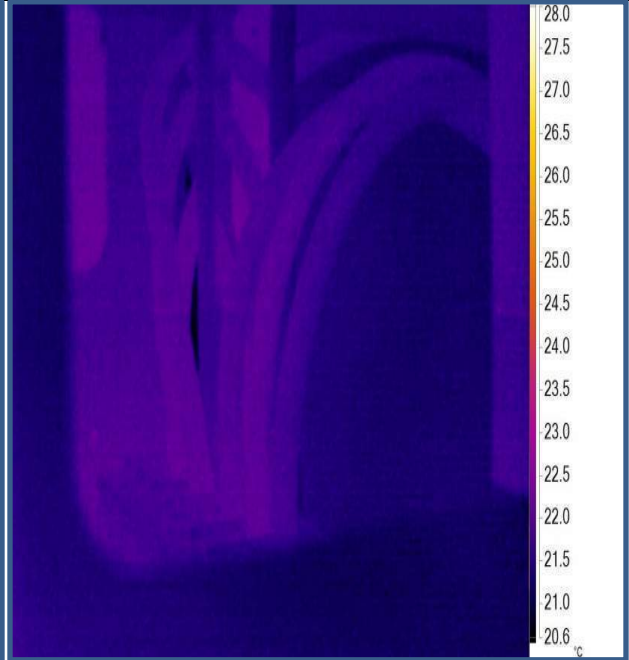
Application Notes: Make: Federal Pacific Model: NALP 12-4AB Circuits: 12 In Use: 5 Voltage: 120/208V Current: 30A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 4 RW90 Cu	Safety Notes: DC816 IR1109
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Location	IBM Office
Description	TR-UPS 03
System	600: 120/208V
ID Tag Number	TRD-A00042

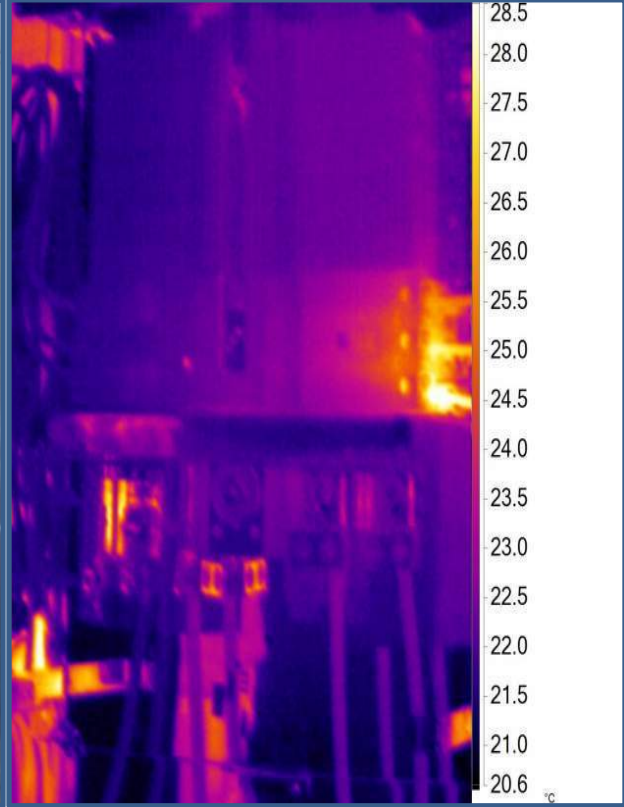


Application Notes:	Safety Notes:
Make: Square D Model: EE75T65HCU Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 75 Impedance: 3.7 %Z Phase: 3 Primary Wire: 3 RW 90 Cu Secondary Wire: 500 Kcmil Cu	DC817 IR1110

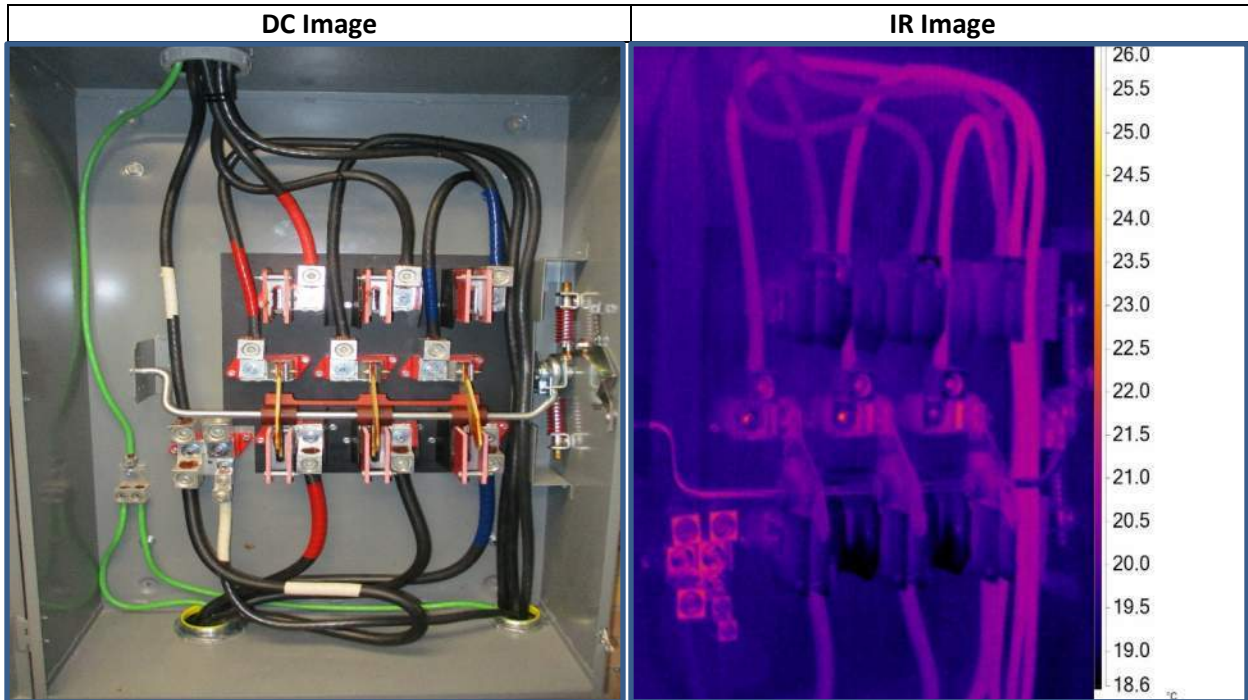
Location	IBM Office
Description	UPS Tie Cabinet
System	208V 3P 3W
ID Tag Number	MTS-A00043

DC Image	IR Image
	
Application Notes: Make: Eaton Powerware Model: KM3X80L011030R-MOB-1DP-H-B Voltage: 208V Current In: 222A Current Out: 444A Breaker/Fuse Type: N/A Wire Type: 350 Kcmil RW90 Cu	Safety Notes: DC818 IR1111

Location	IBM Office
Description	CDP-80-1
System	120/208 3P 4W
ID Tag Number	DP-A00044

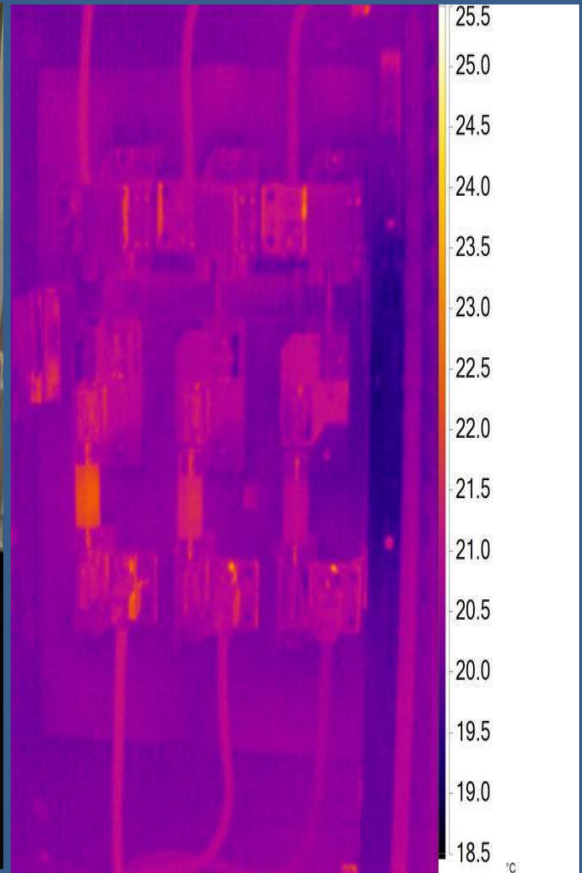
DC Image	IR Image
	
Application Notes: Make: Square D Model: 12369337680080001 Voltage: 120/208V Current: 200A Phase: 3 Main Breaker: N/A Breaker Type: QG Wire Type: 2/0 RW 90 Cu	Safety Notes: DC819 IR1112 Breaker Trip settings: N/A

Location	IBM Office
Description	Manual Transfer Switch
System	600v 3P 3W
ID Tag Number	MTS-A00045

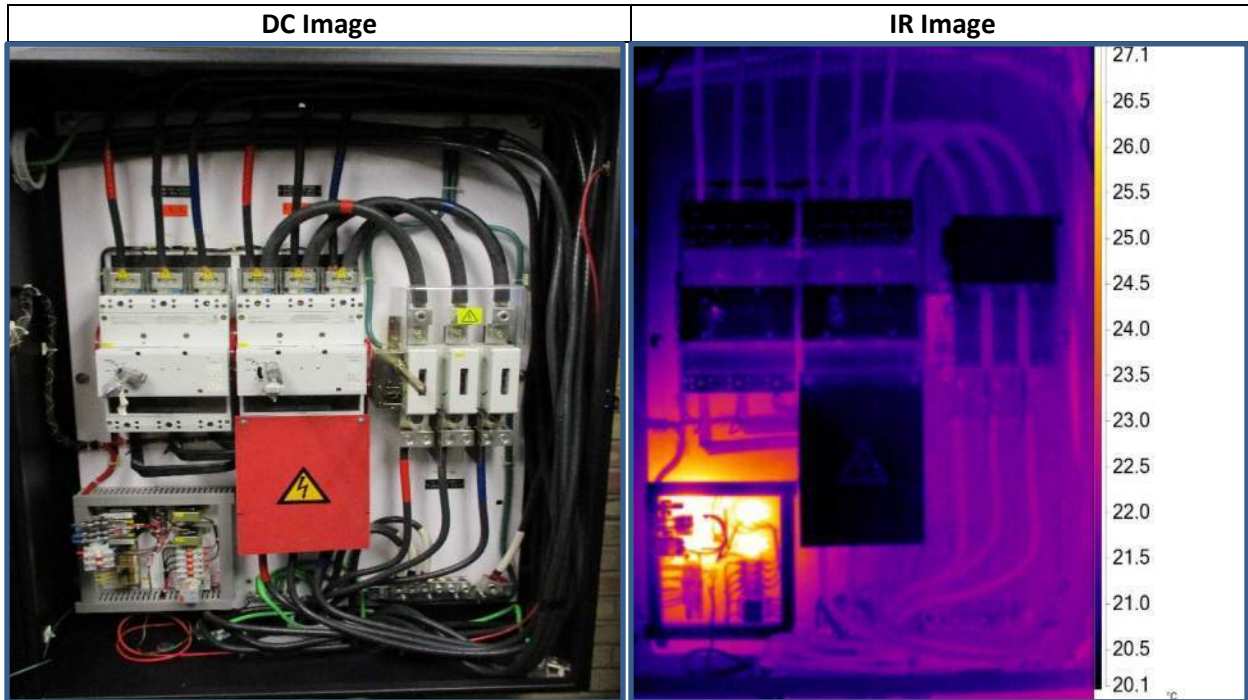


Application Notes:	Safety Notes:
Make: Square D Model: 82345 Voltage: 600V Current: 400A Breaker/Fuse Type: N/A Wire Type Normal: 4/0 RW90 Cu Emergency: 350 Kcmil R90 Cu Load: 4/0 RW90 Cu	DC820 IR1113

Location	IBM Office
Description	CDP-80-1 Disconnect
System	208V 3P 3W
ID Tag Number	DISC-A00046

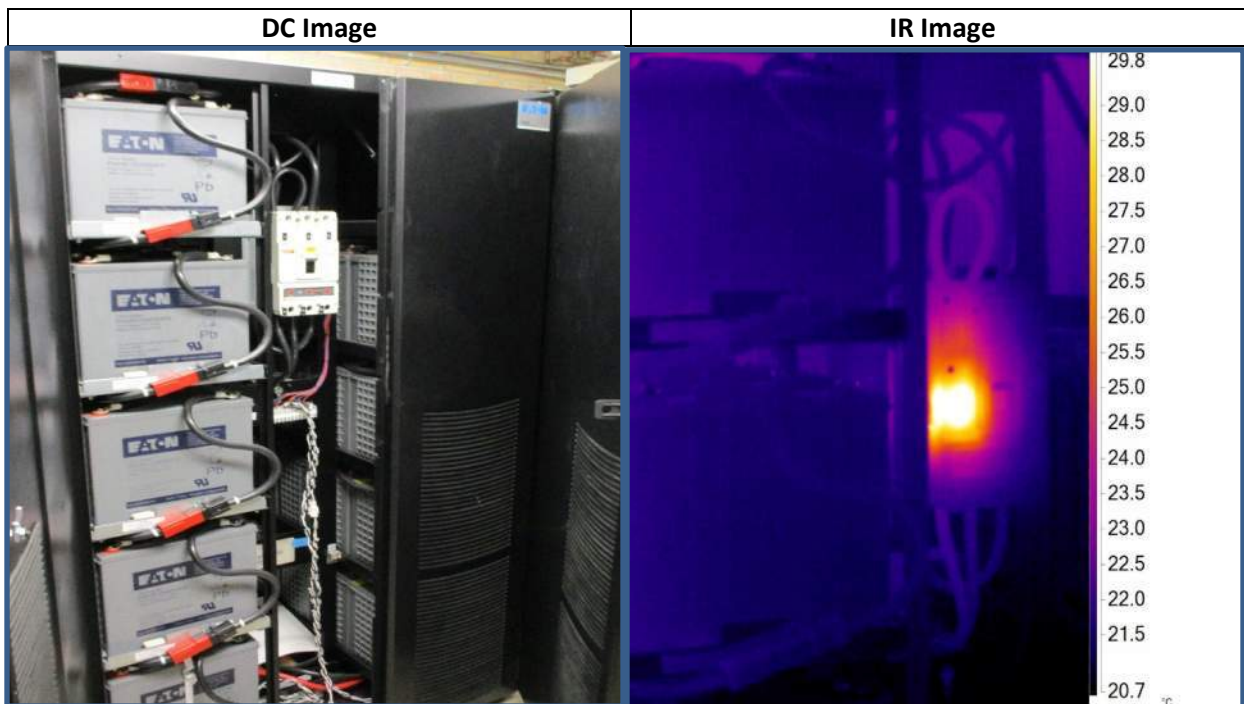
DC Image	IR Image
	
Application Notes: Make: Square D Model: CH325N Voltage: 240V Current: 400A Breaker/Fuse Type: FLNR200ID Wire Type: 4/0	Safety Notes: DC821 IR1114

Location	IBM Office
Description	3 POS MBP 208/208v
System	208V 3P 3W
ID Tag Number	MTS-A00047



Application Notes:	Safety Notes:
Make: Eaton Powerware Model: KM080W31102D1-BLK Voltage: 208V Current in: 256A Current Out: 222A Breaker/Fuse Type: NZM 10-400N-B/A Wire Type: 4/0 RW90 Cu	DC822 IR1115

Location	IBM Office
Description	UPS 3
System	208V 3P 3W
ID Tag Number	UPS-A00048

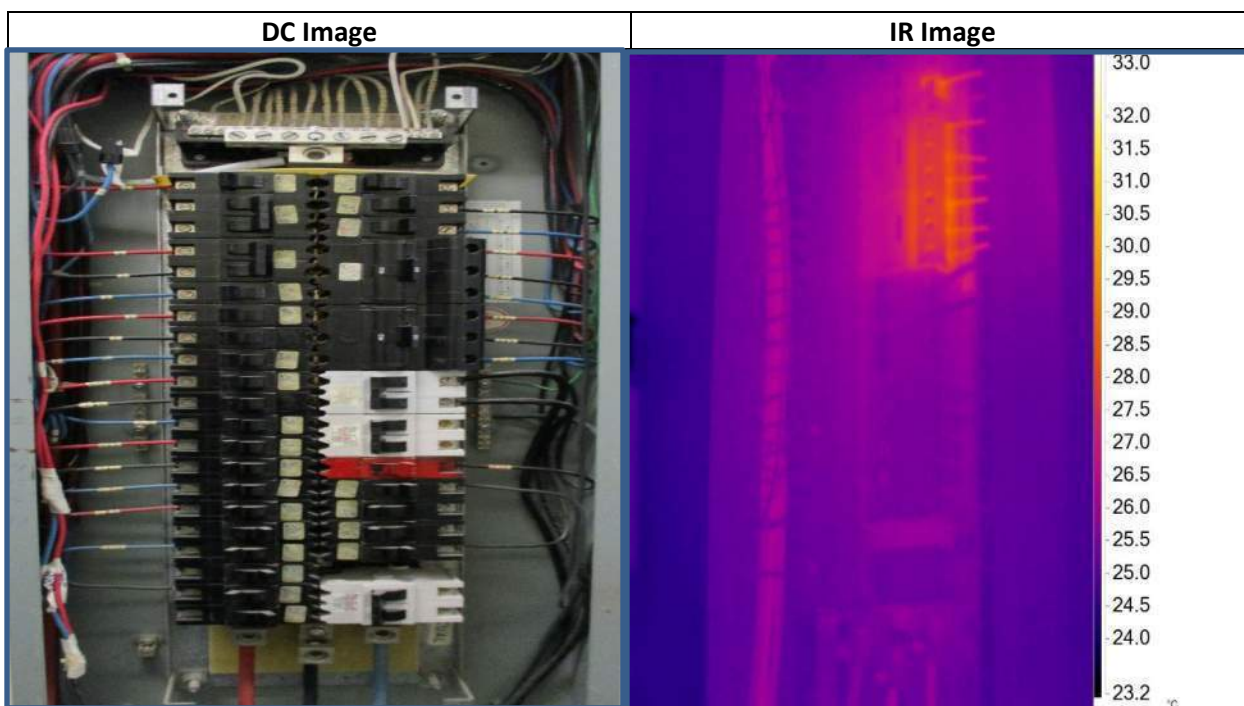


Application Notes:	Safety Notes:
Make: Eaton Model: 9390 Phase: 3 Primary Voltage: 208V Secondary Voltage: 208V KVA: 80 Primary Amps: 240 Secondary Amps: 222 Wire Type: 4/0 R90 Cu	DC824 IR1116

Section

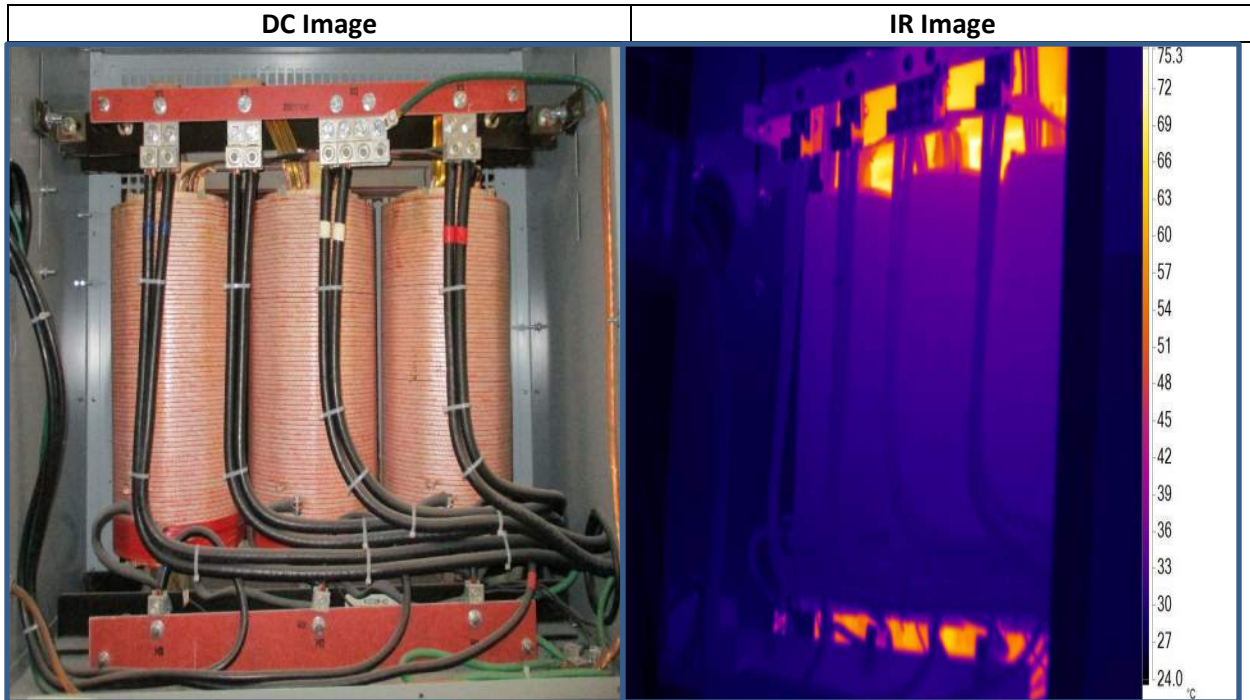
Mech
Room 7-4

Location	Mech Room 7-4
Description	Panel C
System	120/208V 3P 4W
ID Tag Number	BCP-A00025



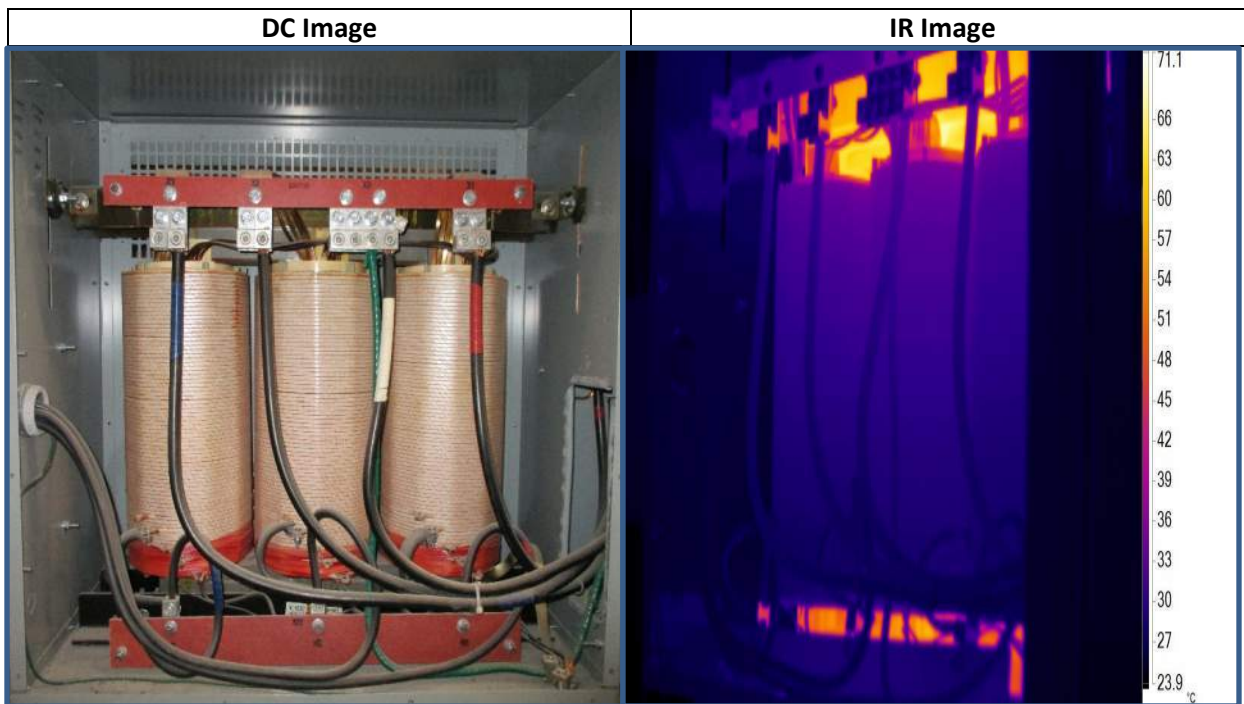
Application Notes:	Safety Notes:
Make: Federal Pioneer Model: NBLP 42-4L Circuits: 42 In Use: 41 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: NB KA: 10 Wire Type: 3 RW90 Cu	DC795 IR1088

Location	Mech Room 7-4
Description	Transformer #2
System	600: 120/208V 3P 4W
ID Tag Number	TRD-A00027



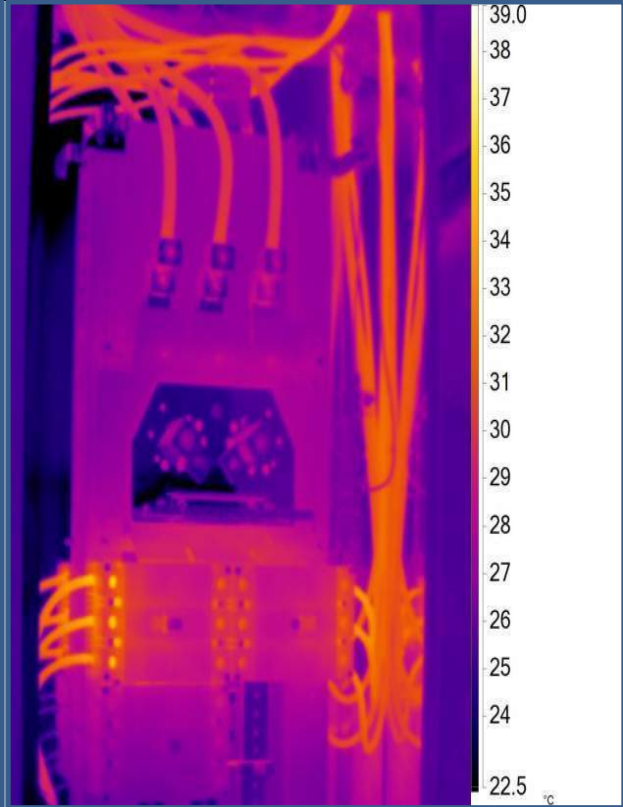
Application Notes:	Safety Notes:
Make: Delta Model: CD3C0112VHA6D1BB Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 112.5 Impedance: 3.82 %Z Phase: 3 Primary Wire: 1/0 RW90 Cu Secondary Wire: 2X 4/0 RW90 Cu	DC898 IR1089

Location	Mech Room 7-4
Description	Transformer #1
System	600: 120/208V 3P 4W
ID Tag Number	TRD-A00028



Application Notes:	Safety Notes:
Make: Delta Model: CD3C0112VHA6D1BB Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 112.5 Impedance: 3.82 %Z Phase: 3 Primary Wire: 3C #1/0 Teck Secondary Wire: 250KCM RA Cu	DC799 IR1090

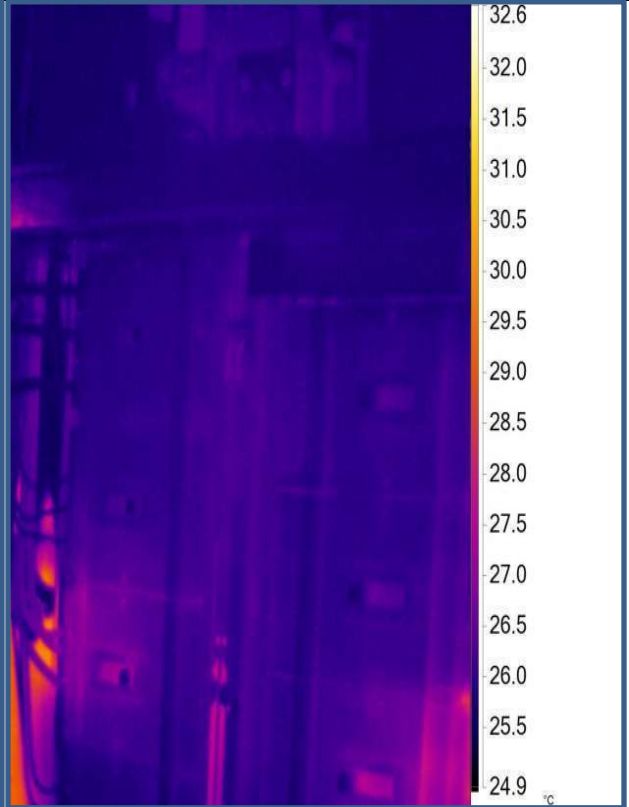
Location	Mech Room 7-4
Description	P3L-1
System	347/600V 3P 4W
ID Tag Number	DP-A00029

DC Image	IR Image
 A photograph of an electrical panel showing a main breaker assembly with three large terminals at the top, connected to red, black, and blue cables. Below the terminals are three blue circuit breakers mounted on a metal rail. The panel is open, revealing the internal components.	 An infrared (IR) image of the same electrical panel. The image shows heat signatures, with the cables and breaker assembly appearing in shades of orange and red, indicating higher temperatures. A color scale on the right side of the image ranges from 22.5 to 39.0 degrees Celsius.
Application Notes: Make: Cutler Hammer Model: P3L Voltage: 347/600V Current: 225A Phase: 3 Main Breaker: N/A Breaker Type: FD, FDB Wire Type:	Safety Notes: DC801 IR1092 Breaker Trip settings:

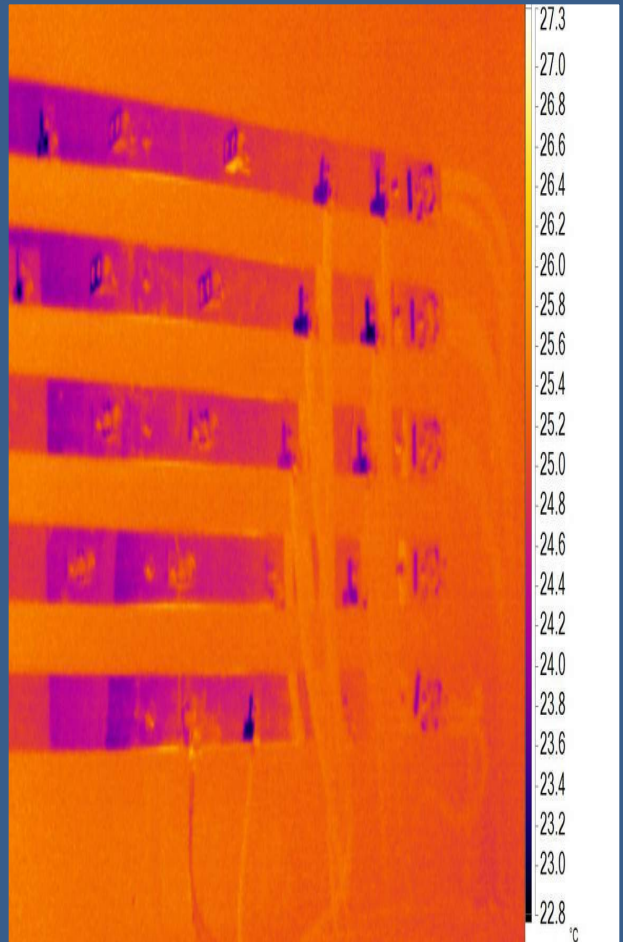
Location	Mech Room 7-4
Description	MCC #3 Part 1
System	600V 3P 3W
ID Tag Number	MCC-SEC-A00030

DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: Unitrol Voltage: 600V Current: 250A Wire Type: U/O	Safety Notes: DC800 IR1091

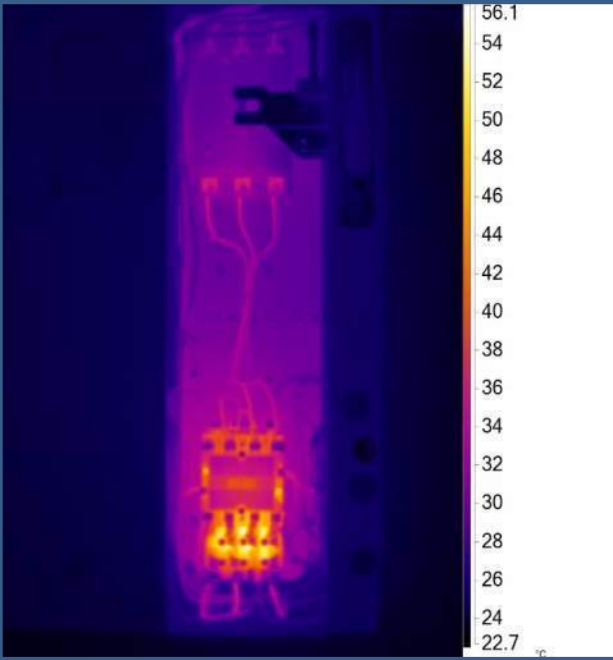
Location	Mech Room 7-4
Description	CDP 800
System	600V 3P 3W
ID Tag Number	DP-A00026

DC Image	IR Image
 A photograph of an electrical control panel. It features a row of three large black circuit breakers mounted on a metal rack. Above them are terminal blocks with various colored wires (red, blue, green, black) connected. A person's hand is visible on the left side of the panel.	 An infrared (IR) thermal image of the same electrical panel. The image shows temperature variations across the components. A color scale on the right side of the image indicates temperatures ranging from 24.9 to 32.6 degrees Celsius. The scale is marked at 24.9, 25.5, 26.0, 26.5, 27.0, 27.5, 28.0, 28.5, 29.0, 29.5, 30.0, 30.5, 31.0, 31.5, 32.0, and 32.6.
Application Notes: Make: Square D Model: 12281186380010001 Voltage: 600V Current: 400A Phase: 3 Main Breaker: N/A Breaker Type: AJ Wire Type: 500KCMIL RW90 Cu	Safety Notes: DC797 IR1087 Breaker Trip settings: N/A

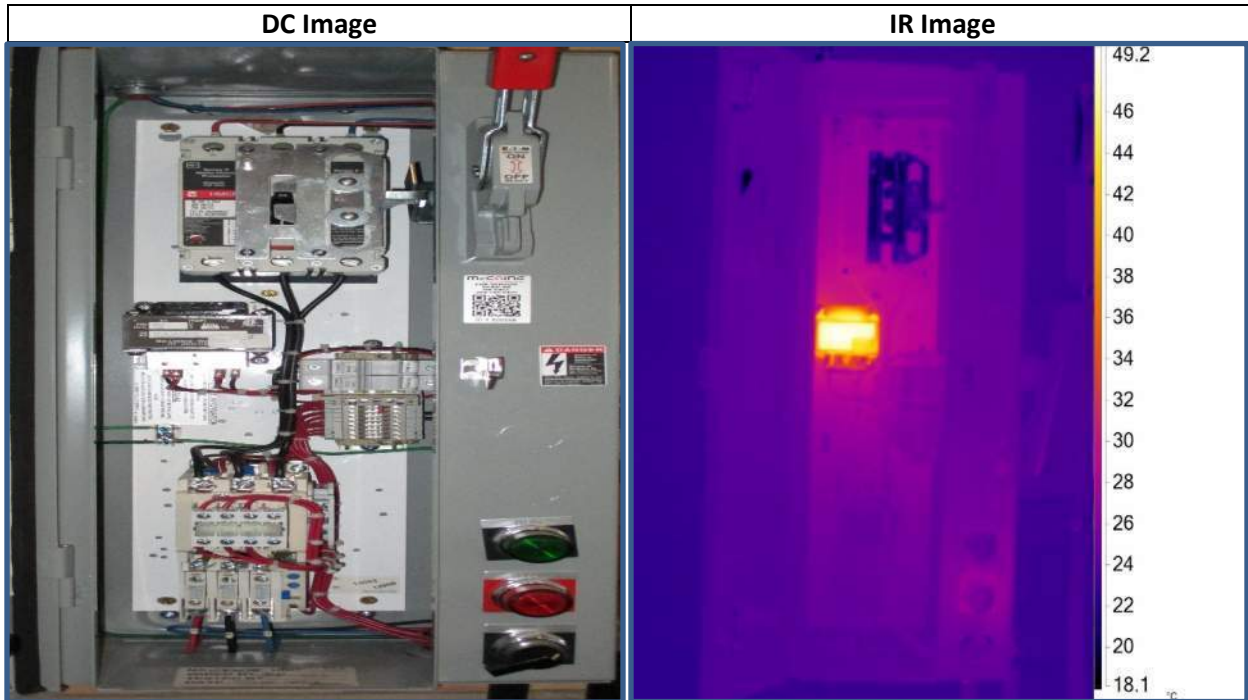
Location	Mech Room 7-4
Description	Splitter
System	120/208 3P 4W
ID Tag Number	JB-A00035

DC Image	IR Image
	
Application Notes: Make: JR Stephenson Model: N/A Voltage: 120/208V Current: 600A Wire Type: Parallel 250 Kcmil Teck 90	Safety Notes: DC802 IR1154

Location	Mech Room 7-4
Description	Fan FF-2
System	208V 3P 3W
ID Tag Number	CMS-A00036

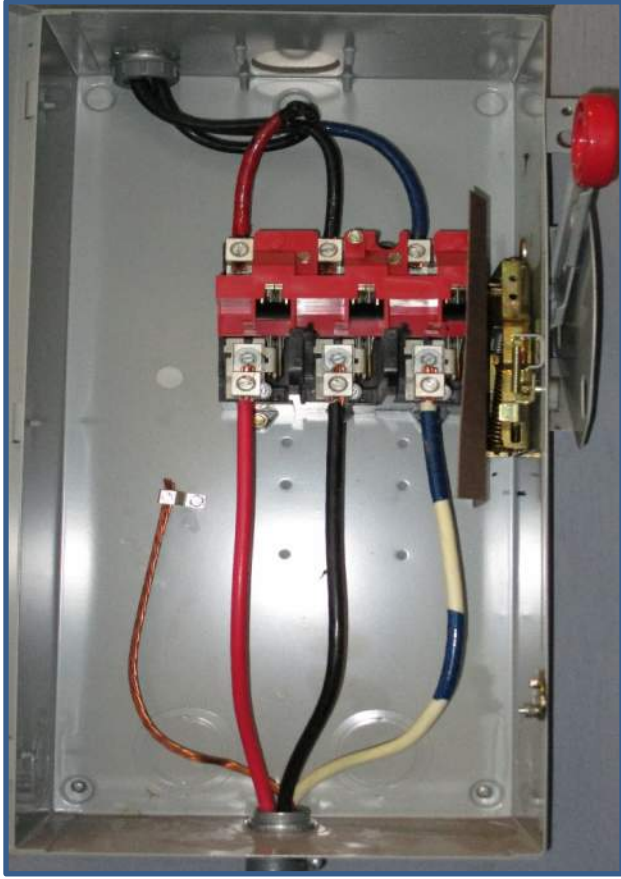
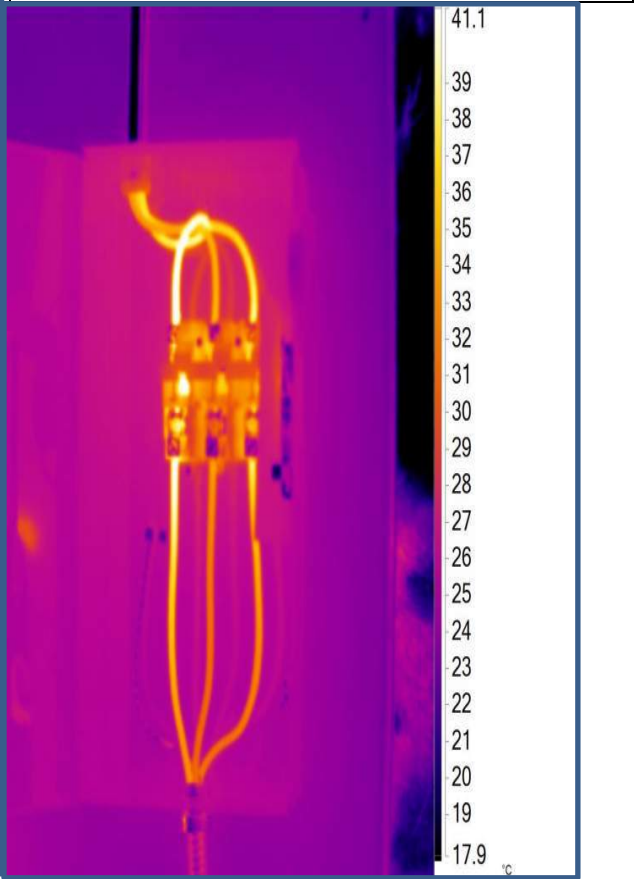
DC Image	IR Image
	
Application Notes: Make: Westinghouse Model: A206SIMDE Voltage: 600V Current: 15A HP: 5 Breaker Type: MCP03150RC Wire Type: 12 RW90 Contactor: A200M1CAC O/L: N/A	Safety Notes: DC803 IR1096

Location	Mech Room 7-4
Description	Pre Action Air Compressor
System	V 3P 3W
ID Tag Number	CMS-A00056

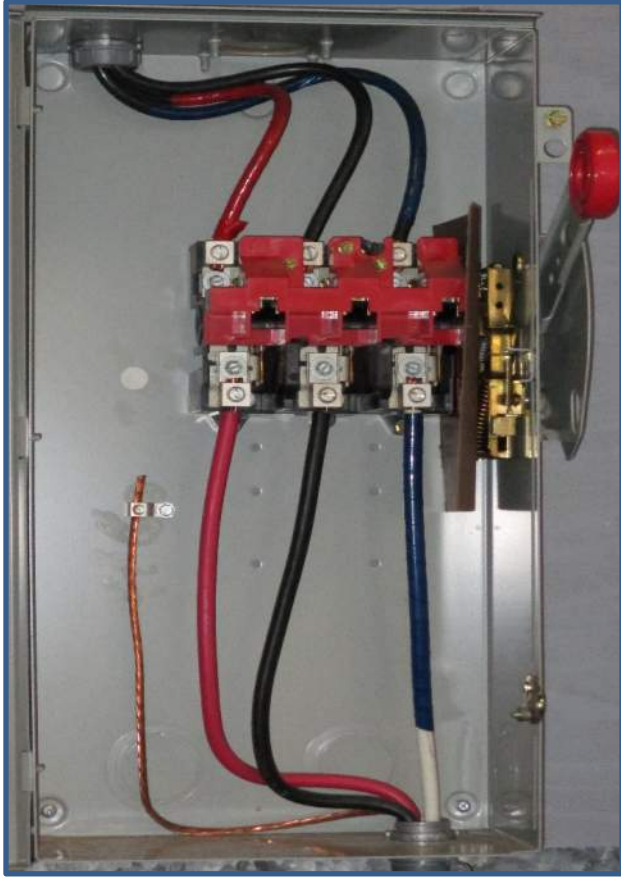
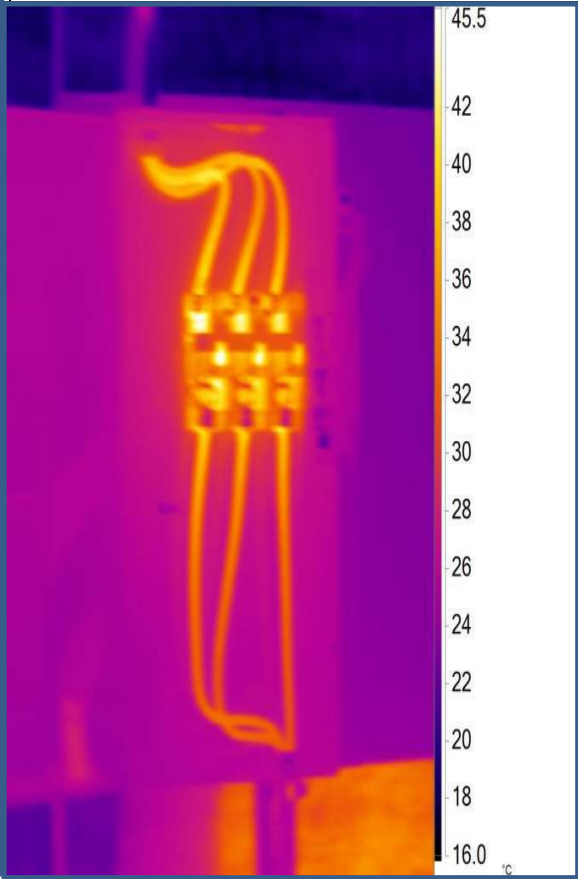


Application Notes:	Safety Notes:
Make: Eaton Model: ECN2411DKE Voltage: 600V Current: 30A HP: 5 Breaker Type: MCP05150RC Wire Type: 12 RW90 Contactor: C320KGS1 O/L: 9.14	DC806 IR1099

Location	Mech Room 7-4
Description	Humidifier
System	600V 3P 3W
ID Tag Number	DISC-A00057

DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: 1HD363NF Voltage: 600V Current: 100A Breaker/Fuse Type: N/A Wire Type: #3 R90 Cu	Safety Notes: DC805 IR1098 Refer to IR Problems

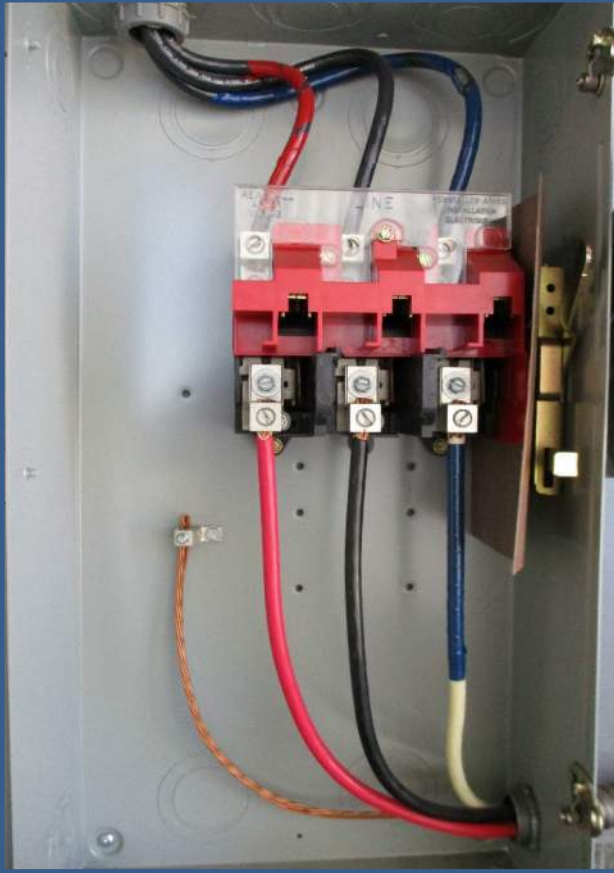
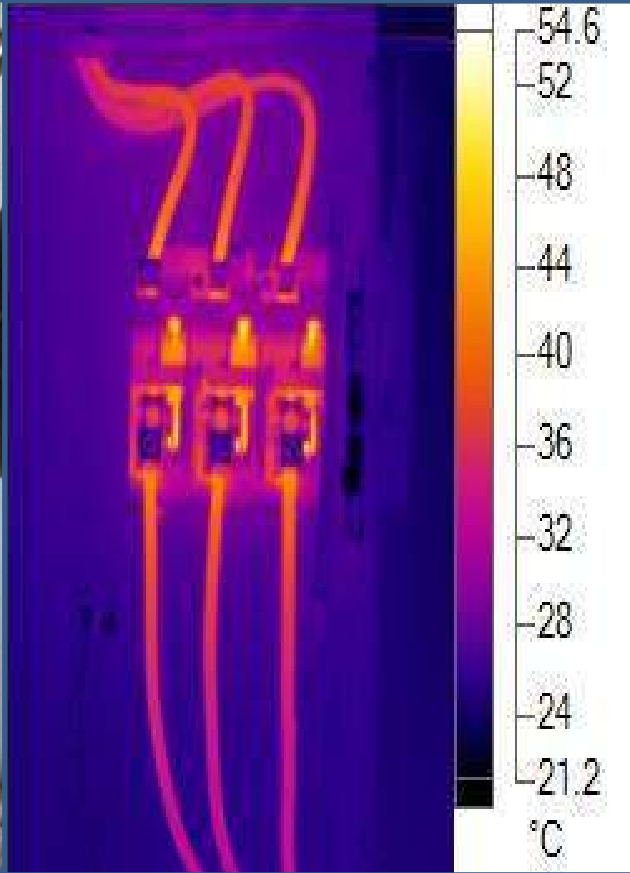
Location	Mech Room 7-4
Description	Humidifier
System	600v 3P3w
ID Tag Number	DISC-A00058

DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: 1HD363NF Voltage: 600V Current: 100A Breaker/Fuse Type: N/A Wire Type: #3 R90 Cu	Safety Notes: DC804 IR1097 Refer to IR Problems sheet.

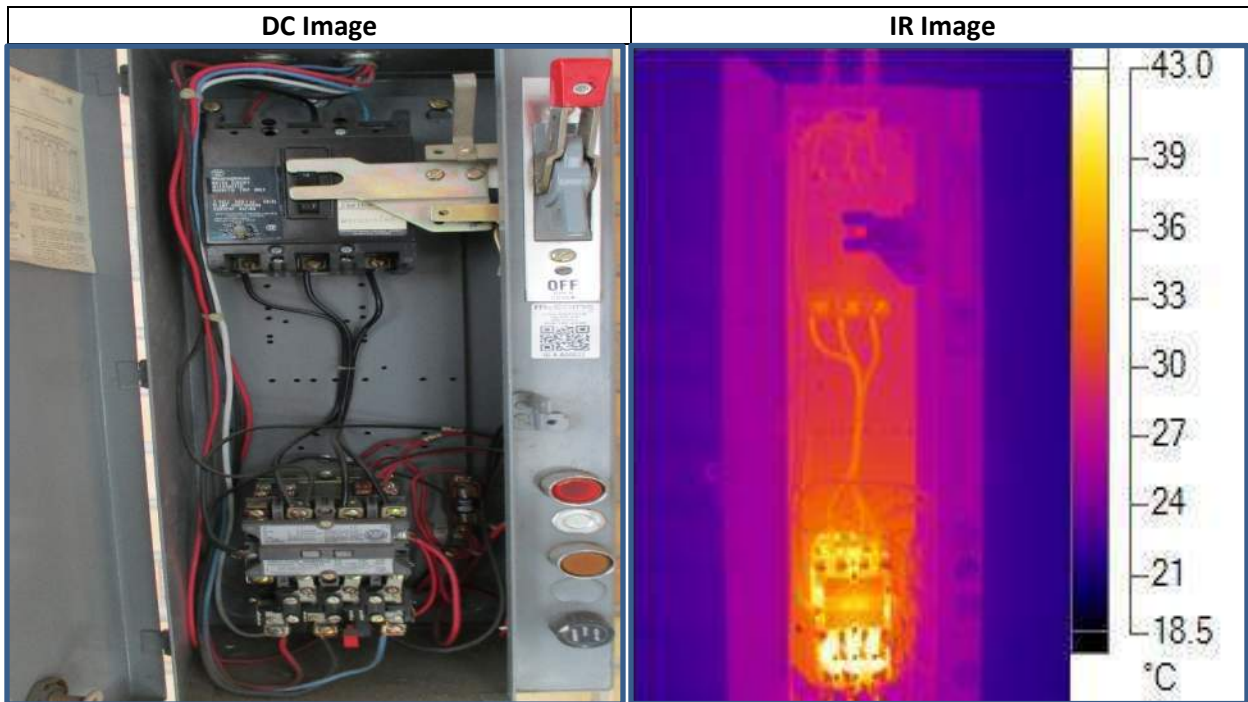
Section

Mech
Room 7-7

Location	Mech Room 7-7
Description	Humidifier
System	600V 3P 3W
ID Tag Number	DISC-A00021

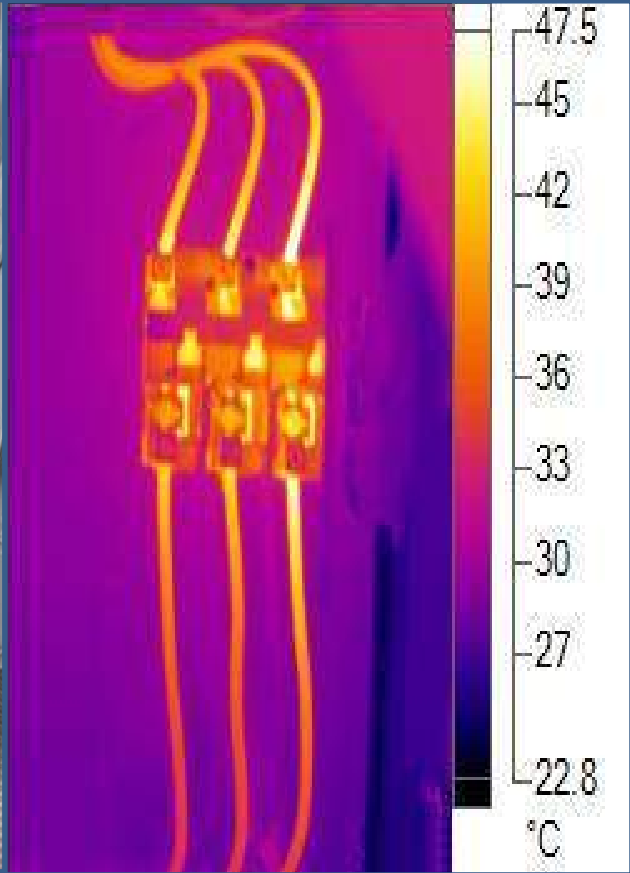
DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: 1HD363NF Voltage: 600V Current: 100A Breaker/Fuse Type: N/A Wire Type: #3 R90 Cu	Safety Notes: See IR Problems City Hall Report

Location	Mech Room 7-7
Description	Humidifier
System	208V 3P 4W
ID Tag Number	CMS-A00022

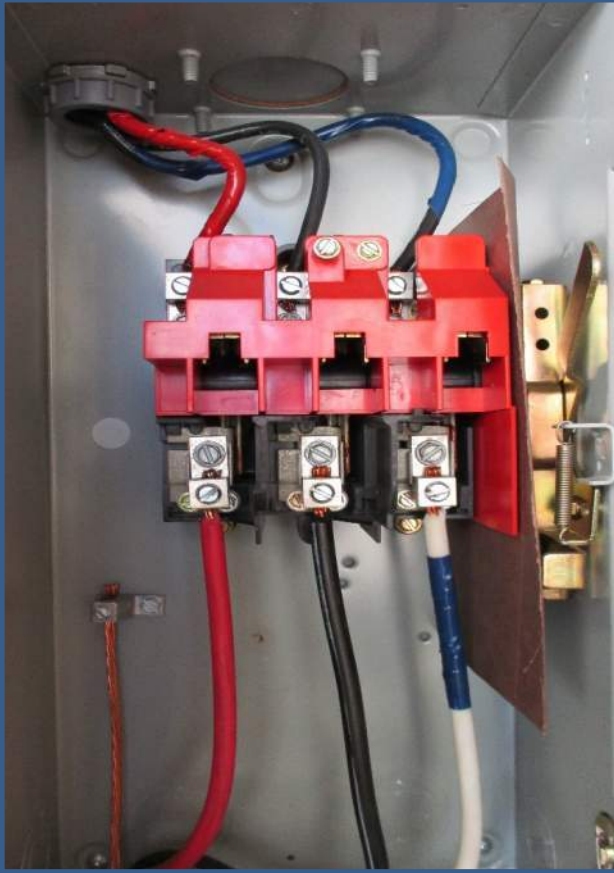
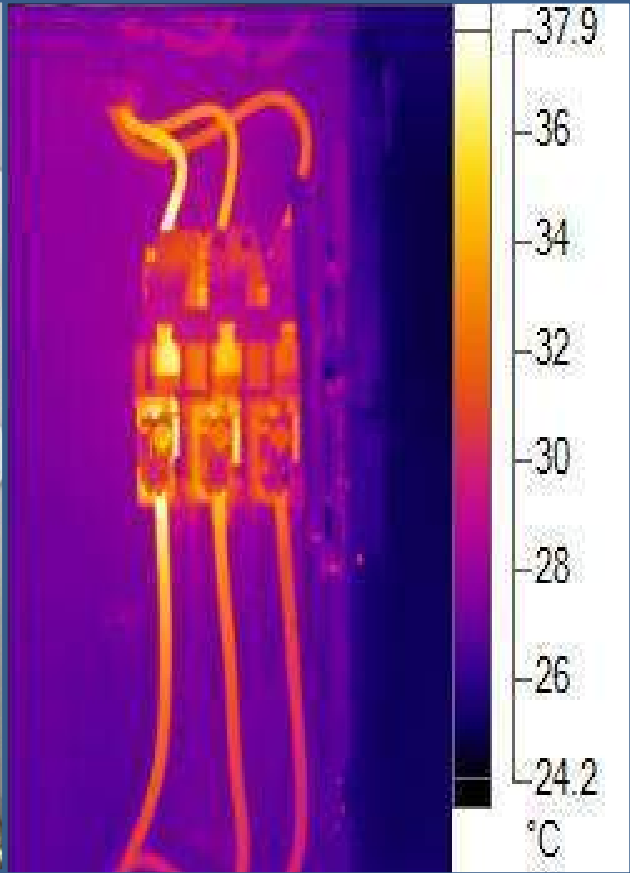


Application Notes:	Safety Notes:
Make: Westinghouse Model: A206SMDE Voltage: 208V Current: 15A HP: 5 Breaker Type: MCP0315ORC Wire Type: Rw90 12 Cu In Rw90 10 Cu Out Contactor: A200M1CAC O/L: 27A	

Location	Mech Room 7-7
Description	Humidifier
System	600V 3P 3W
ID Tag Number	DISC-A00023

DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: IHD363NF Voltage: 600V Current: 100A Breaker/Fuse Type: N/A Wire Type: 3 Rw90 Cu	Safety Notes: See IR Problems City Hall Report

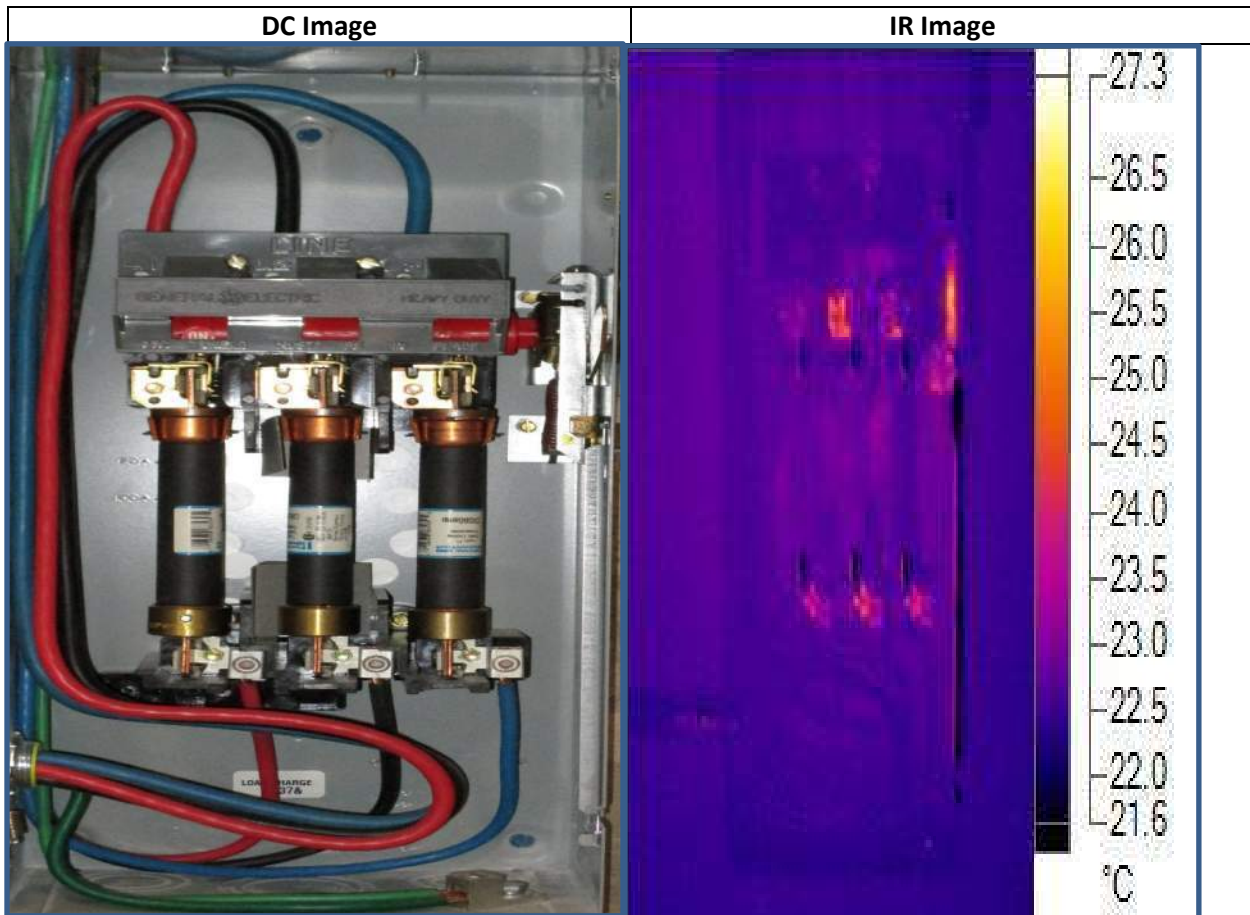
Location	Mech Room 7-7
Description	Humidifier
System	600V 3P 3W
ID Tag Number	DISC-A00024

DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: 3HD362NF Voltage: 600V Current: 60A Breaker/Fuse Type: N/A Wire Type: 6 Rw 90 Cu	Safety Notes: See IR Problems City Hall Report

Section

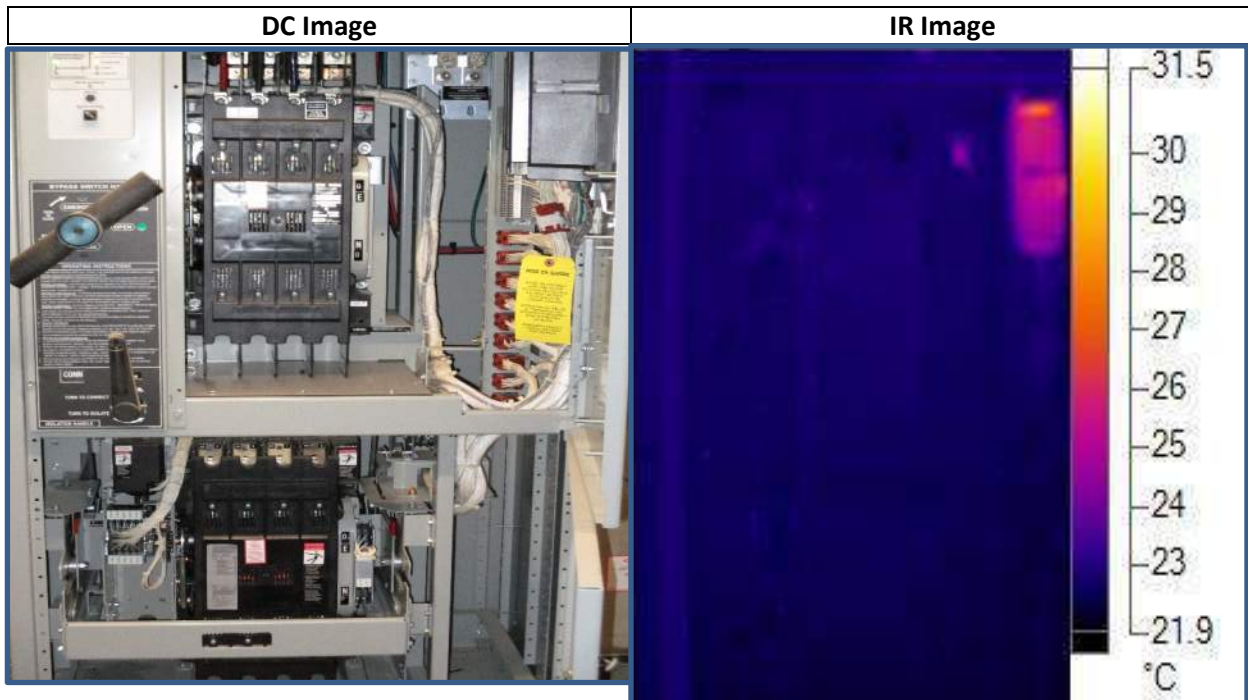
Sub
Basement

Location	Sub Basement
Description	CDP-LS
System	600V 3P 3W
ID Tag Number	DISC- A00177



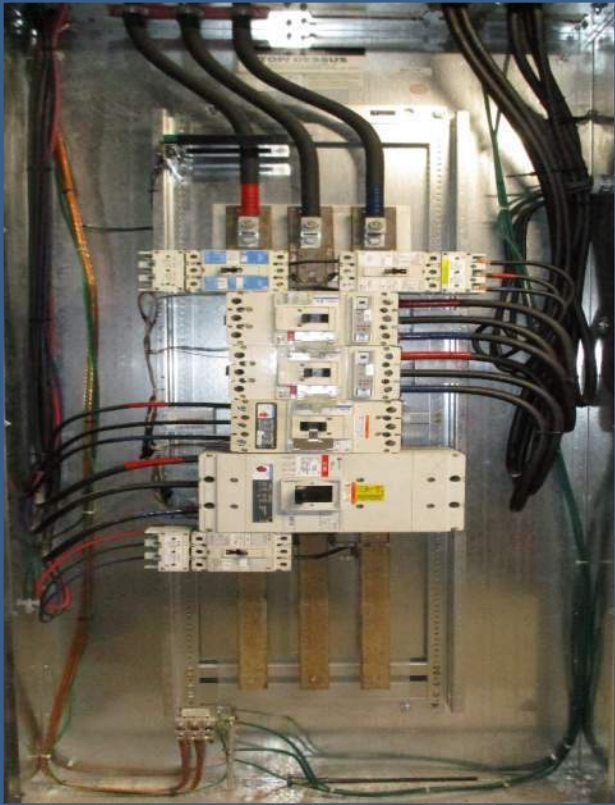
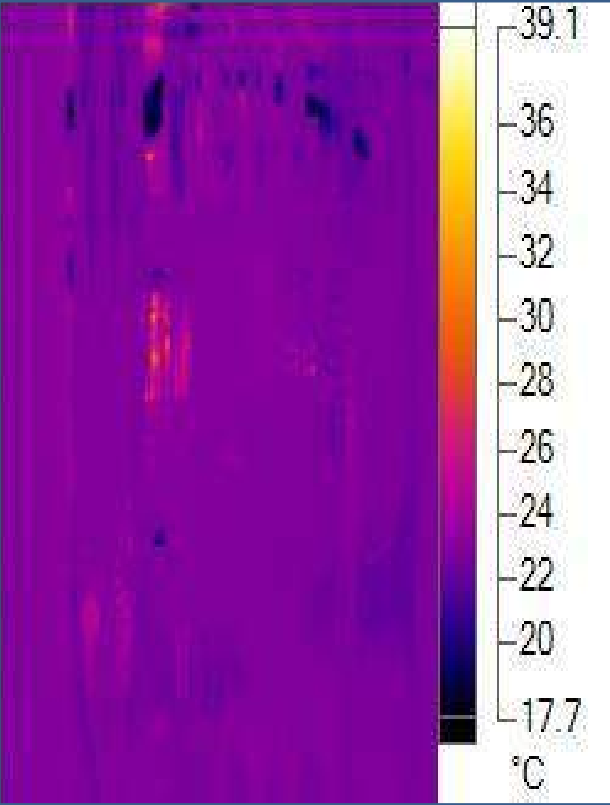
Application Notes:	Safety Notes:
Make: GE Model: TR-1S Voltage: 600V Current: 100A Breaker/Fuse Type: CRS60 Wire Type: #4RW90 In #6RW90 out	DC956 IR1239

Location	Sub Basement
Description	LBS-ATS03
System	347/600V 3P 4W
ID Tag Number	ATS-A00178

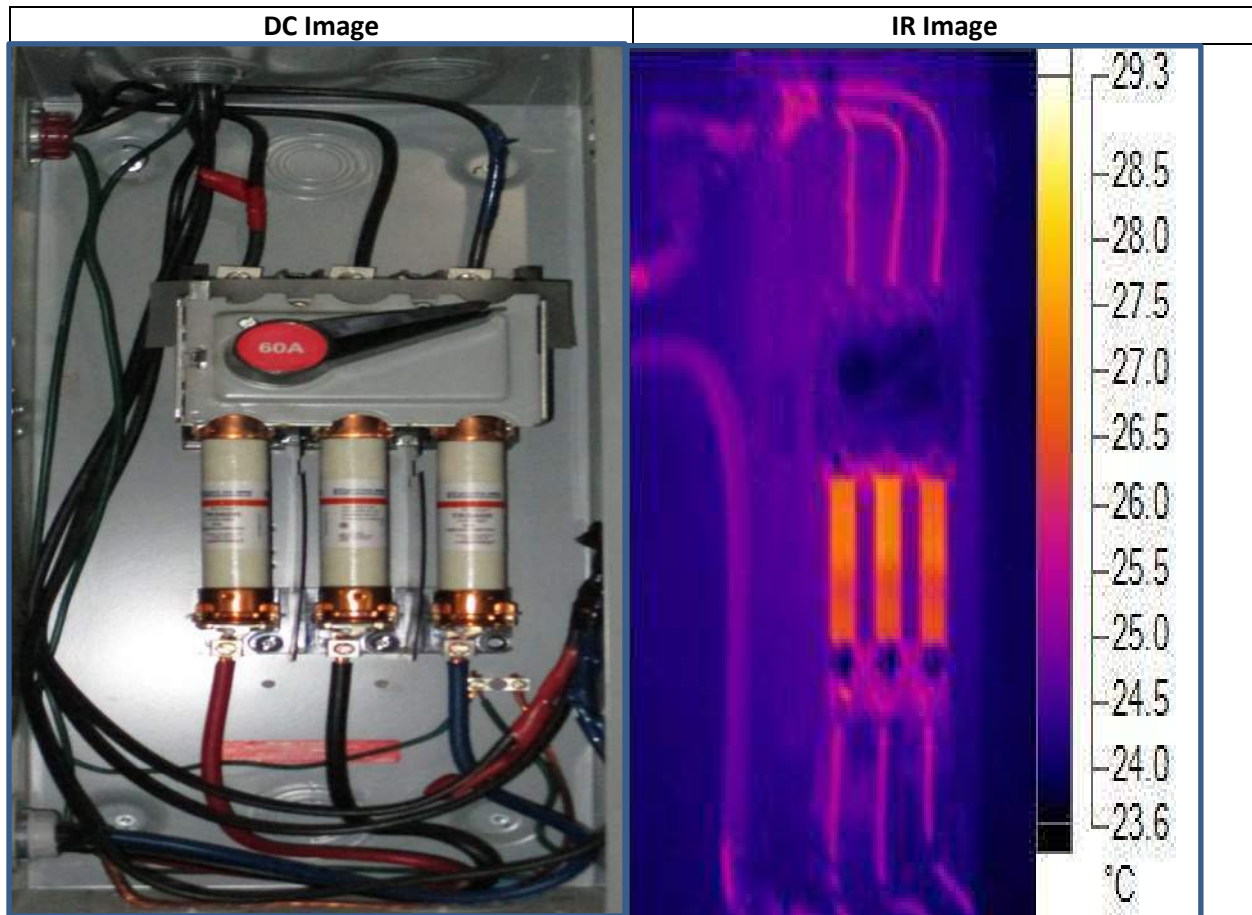


Application Notes:	Safety Notes:
Make: ASCO Model: J07A+BB30150R5XC Voltage: 347/600V Current: 150A Breaker/Fuse Type: J07ATBB30150R5XC Wire Type: 1/0RW90 Cu Normal #2RW90 Cu Emergency Power	DC957 IR1240

Location	Sub Basement
Description	PNL 506-100
System	600V 3P 3W
ID Tag Number	DP-A00179

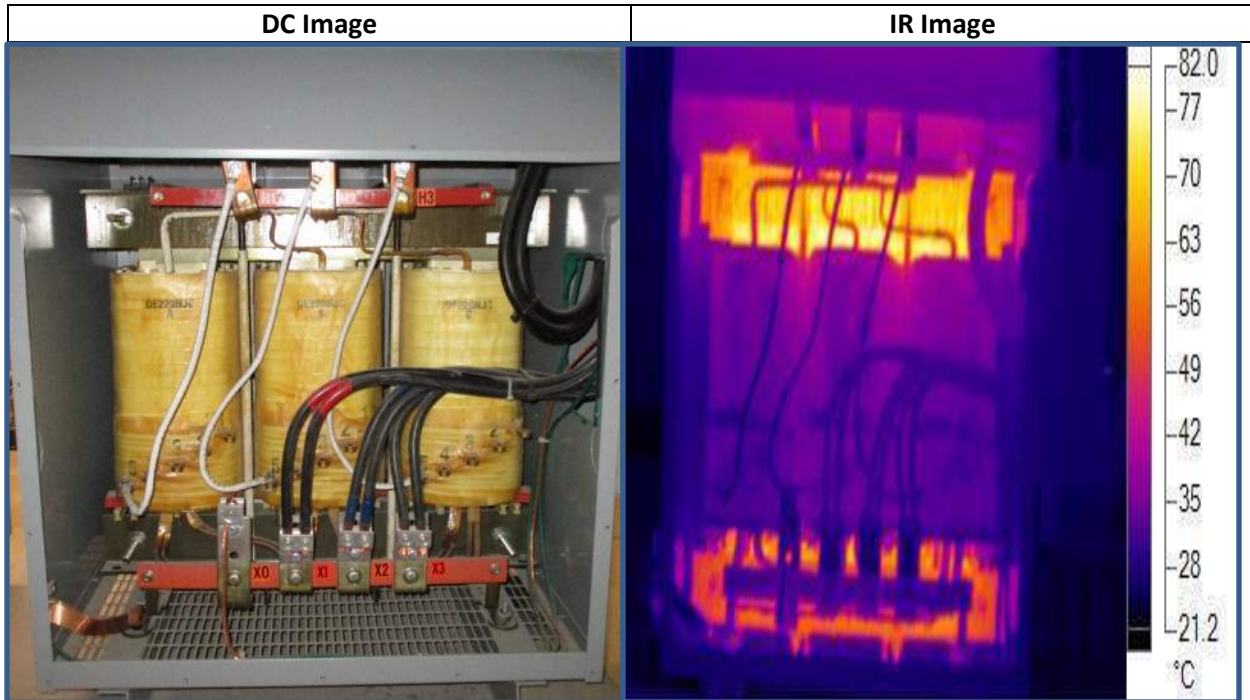
DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: PRL4 Voltage: 600V Current: 1200A Phase: 3 Main Breaker: N/A Breaker Type: FD,KDC,NDC Wire Type: 1000KCMIL Cu	Safety Notes: DC958 IR1241 Breaker Trip settings: N/A

Location	Sub Basement
Description	Compressor 1
System	600V 3P 3W
ID Tag Number	DISC-A00180



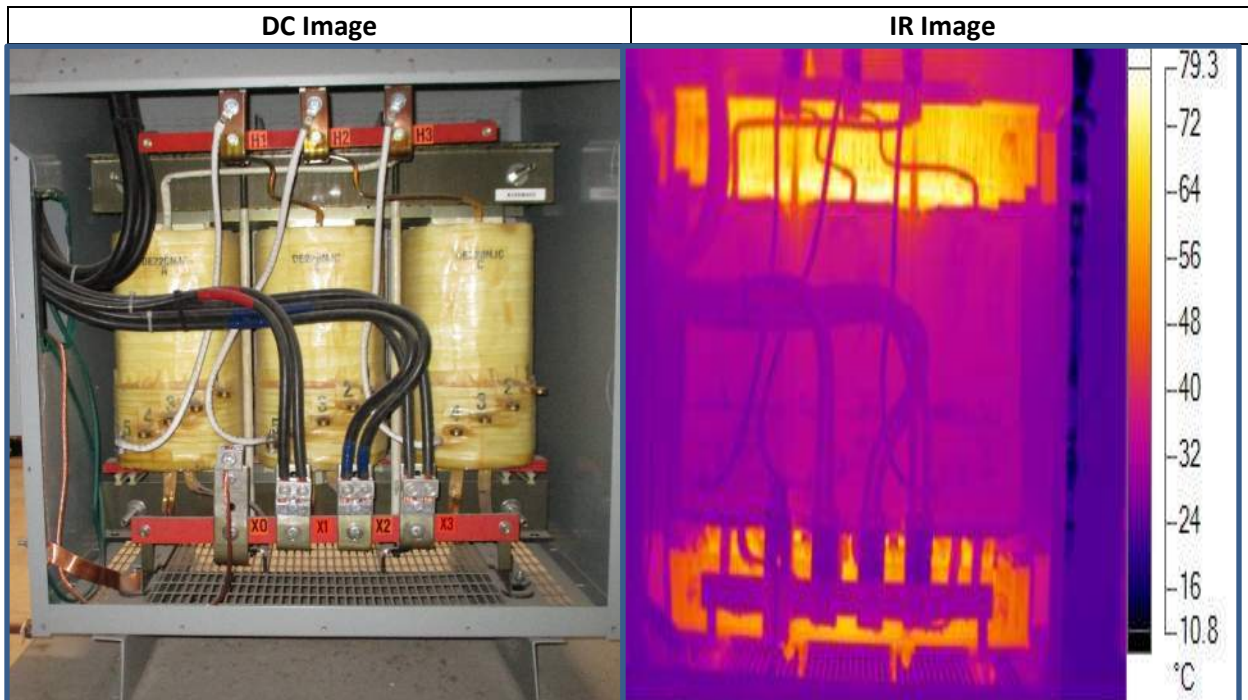
Application Notes:	Safety Notes:
Make: Federal Pioneer Model: 1636 Voltage: 600V Current: 60A Breaker/Fuse Type: TRS 60R Wire Type: 8 RW90 CU In 6 RW90 Cu Out	DC959 IR1242

Location	Sub Basement
Description	Transformer TR#1
System	600: 480V 220KVA
ID Tag Number	TRD-A00181



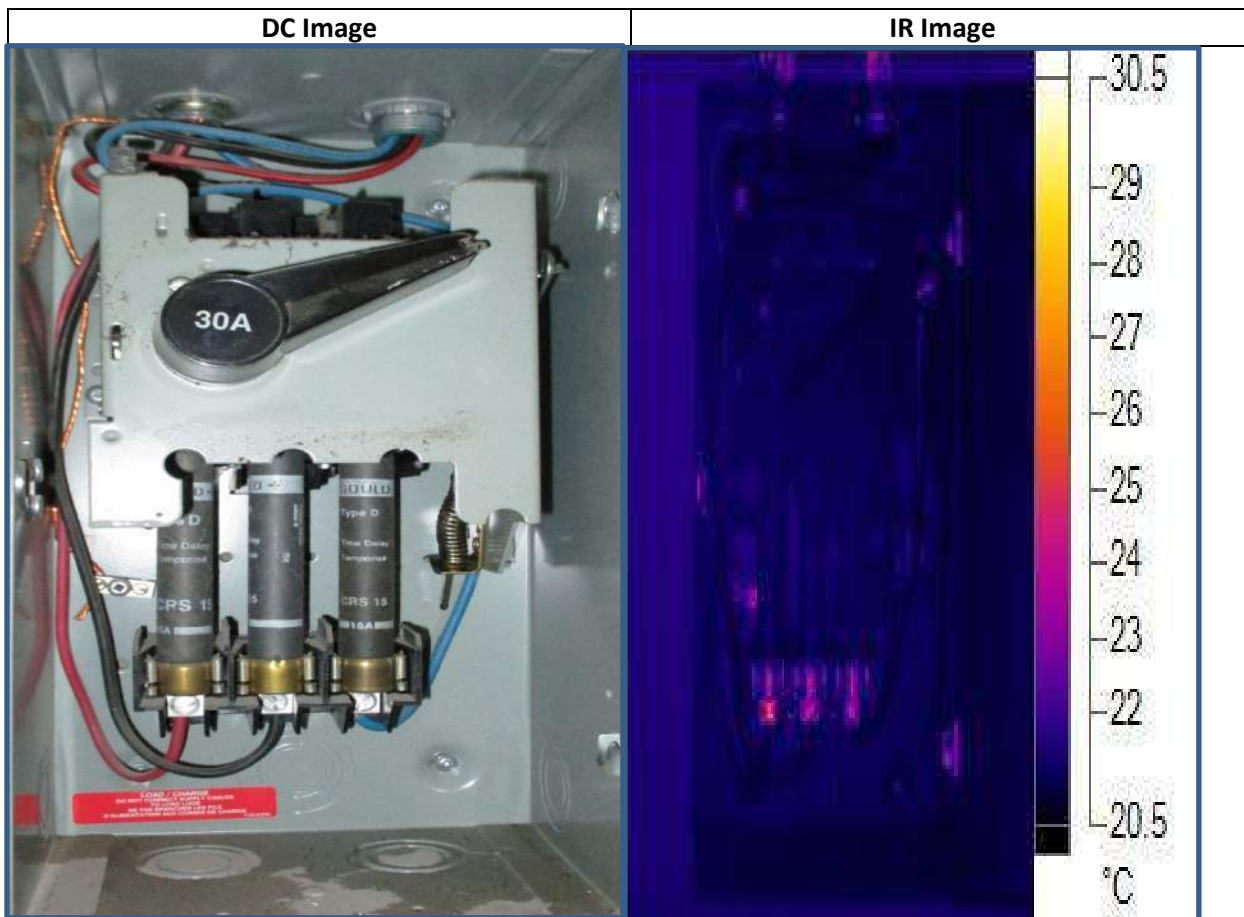
Application Notes:	Safety Notes:
Make: Hammond Model: DE220NJC Primary Voltage: 600V Secondary Voltage: 480V KVA: 220 Impedance: 4.39 %Z Phase: 3 Primary Wire: 350kcmil RW90 Cu Secondary Wire: Parallel 2/0 RW90 Cu	DC960 IR1243

Location	Sub Basement
Description	Transformer TR#2
System	600: 480V 220KVA
ID Tag Number	TRD-A00182



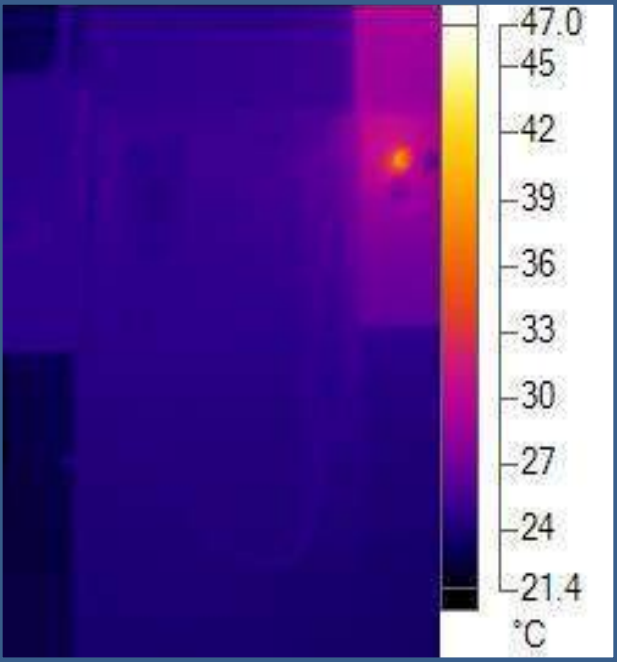
Application Notes:	Safety Notes:
Make: Hammond Model: DE220NJC Primary Voltage: 600V Secondary Voltage: 480V KVA: 220 Impedance: 4.39 %Z Phase: 3 Primary Wire: 350kcmil RW90 Cu Secondary Wire: Parallel 2/0 RW90 Cu	DC961 IR1244

Location	Sub Basement
Description	No Name
System	600V 3P 3W
ID Tag Number	DISC-A00183

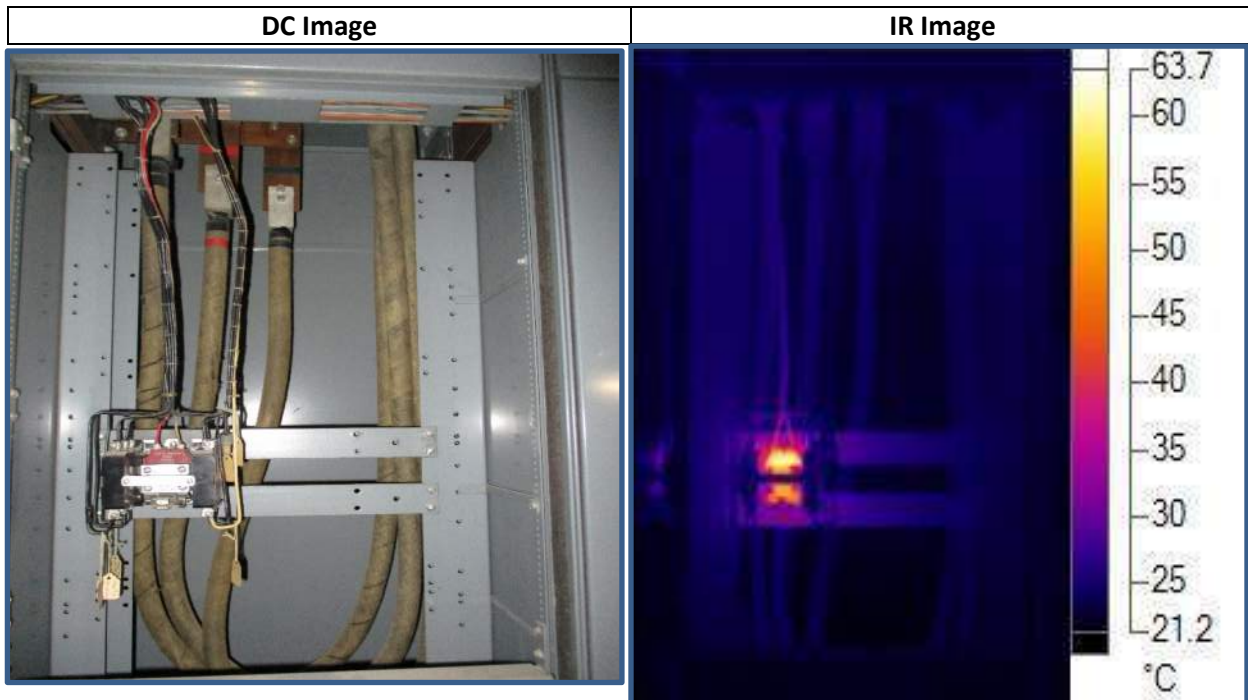


Application Notes:	Safety Notes:
Make: Federal Pioneer Model: 1336 Voltage: 600V Current: 30A Breaker/Fuse Type: CRS15 Wire Type: #10 RW90	DC962IR1245

Location	Sub Basement
Description	MCC#1 Part 1
System	600V 3P 3W
ID Tag Number	MCC-SEC-A00269

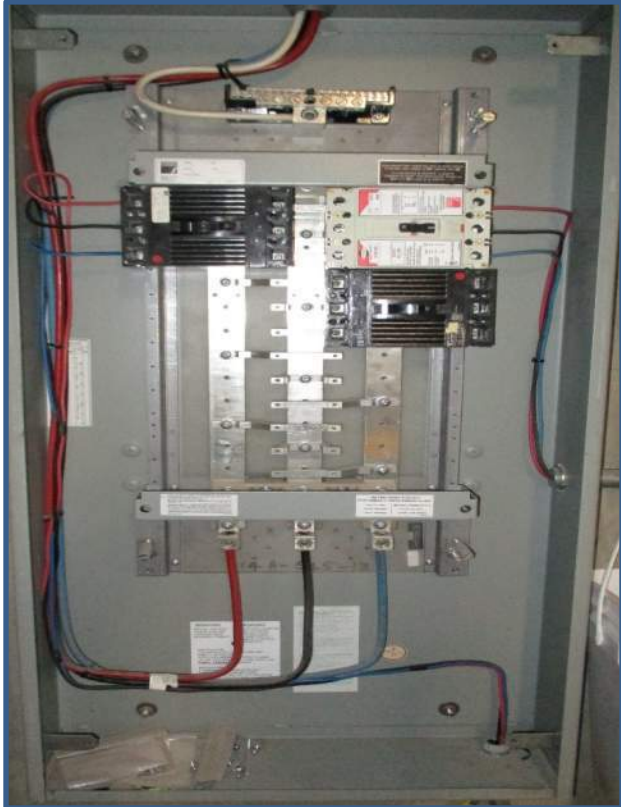
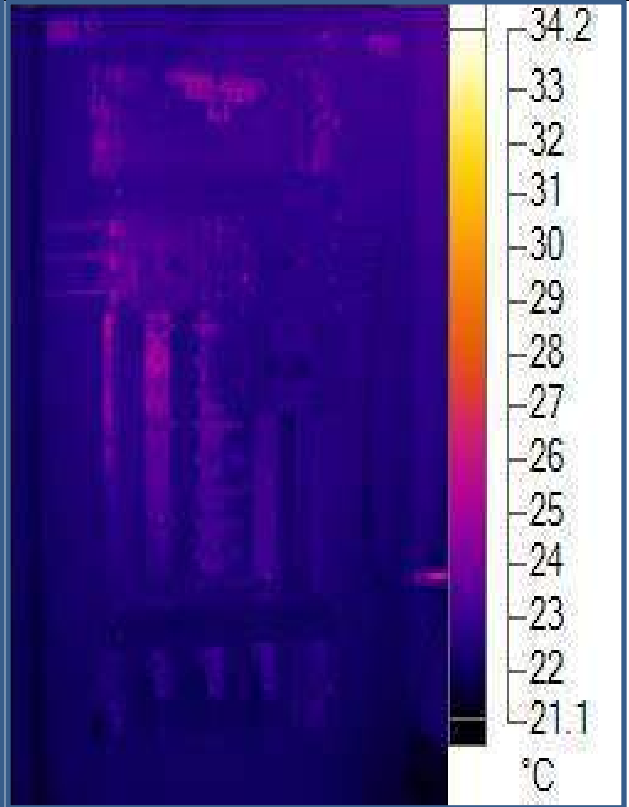
DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: HFF3200L Voltage: 600V Current: 200A Wire Type: 1/0 THW Parallel	Safety Notes: DC1052 IR94

Location	Sub Basement
Description	MCC#1 Part 2
System	600V 3P 3W
ID Tag Number	MCC-SEC-A00184

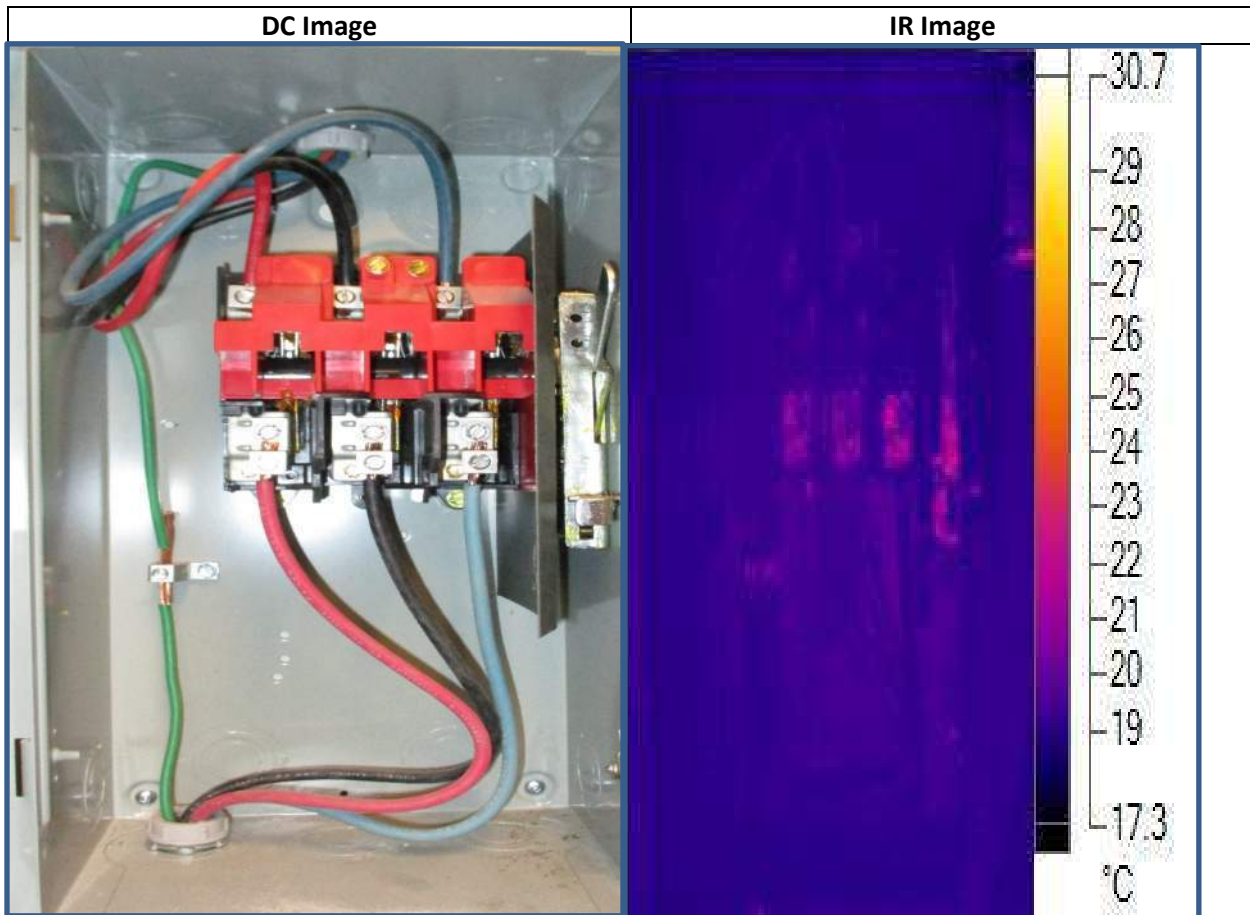


Application Notes:	Safety Notes:
Make: Cutler Hammer Model: 9800 Voltage: 600V Current: 200A Wire Type: 750kcmil Teck 90	DC963 IR1246

Location	Sub Basement
Description	EMC
System	347/600V 3P 4W
ID Tag Number	DP-A00185

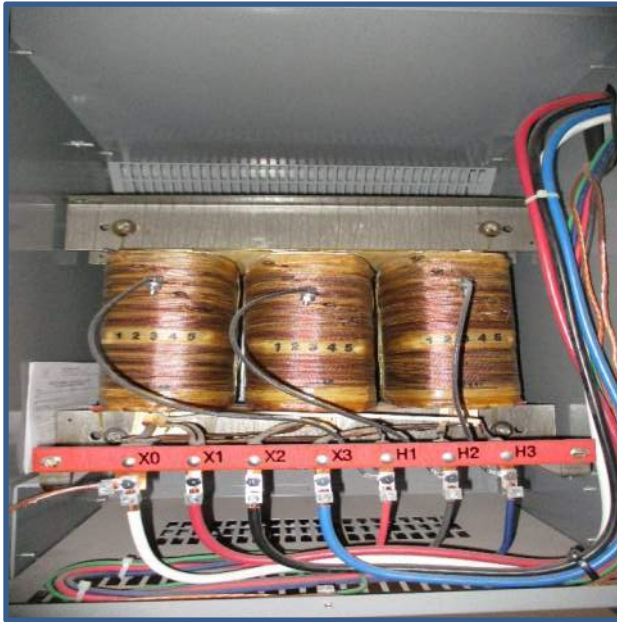
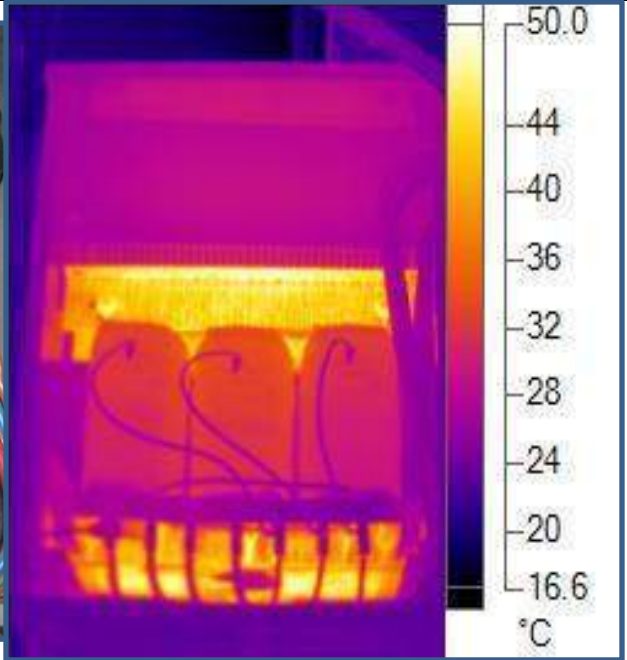
DC Image	IR Image
	
Application Notes: Make: Federal Pioneer Model: NHDP224-46L Voltage: 347/600V Current: 225A Phase: 3 Main Breaker: N/A Breaker Type: CED Wire Type: #3 RW90 Cu	Safety Notes: DC964 IR1247 Breaker Trip settings: N/A

Location	Sub Basement
Description	Disconnect HP-1
System	208V 3P 3W
ID Tag Number	DISC-A00186



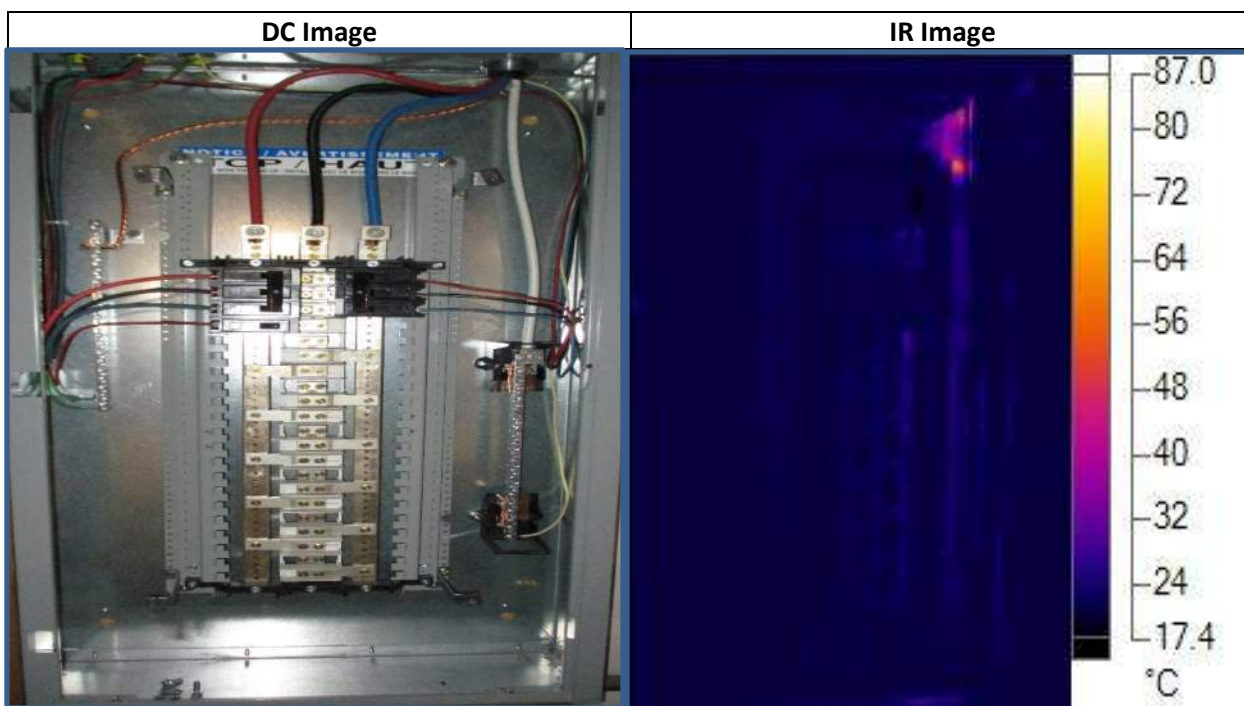
Application Notes:	Safety Notes:
Make: Cutler Hammer Model: IHD362NF Voltage: 208V Current: 60A Breaker/Fuse Type: Non Fusable Wire Type: #8 RW90 CU	DC965 IR1248

Location	Sub Basement
Description	TR-NPP-1
System	600: 120/208V 3P 4W
ID Tag Number	TRD-A00187

DC Image	IR Image
	

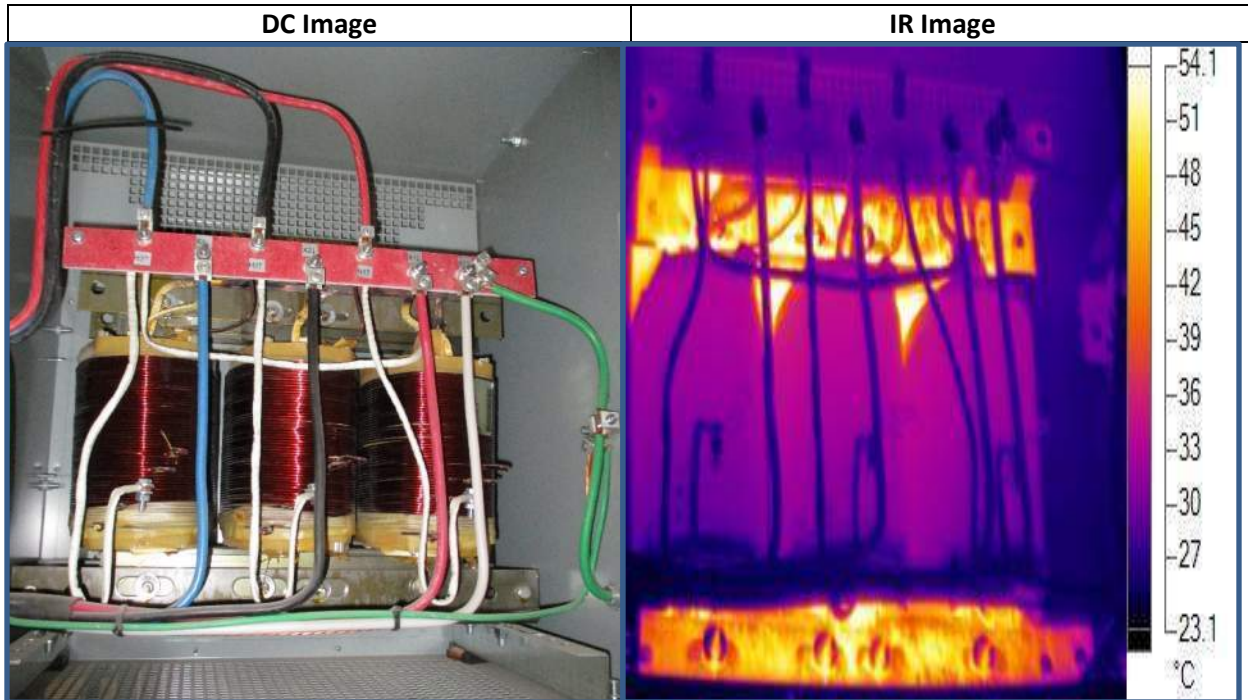
Application Notes: Make: Rex Manufacturing Model: BC30J-M/E3R/K/3 Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 30 Impedance: 6.0 %Z Phase: 3 Primary Wire: #8 RW90 Cu Secondary Wire: #3RW90 Cu	Safety Notes: DC966 IR1249
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Location	Sub Basement
Description	Panel NPP-1
System	120/208V 3P 4W
ID Tag Number	BCP-A00188



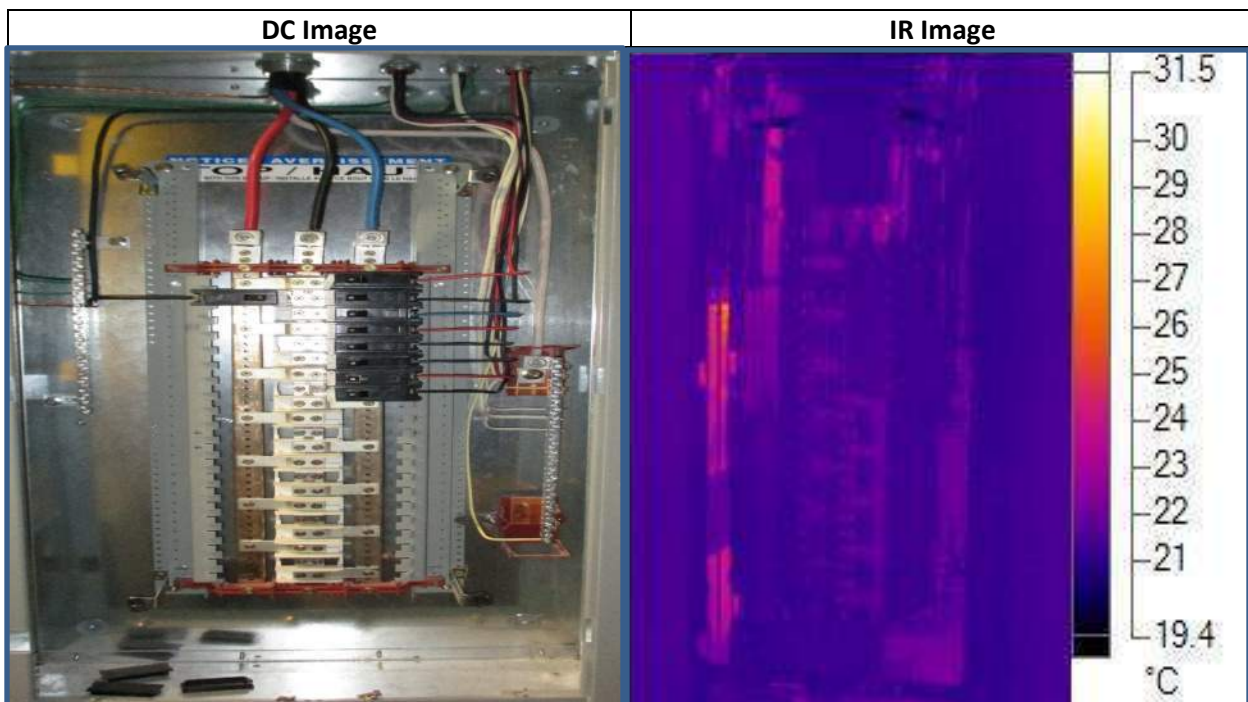
Application Notes:	Safety Notes:
Make: Eaton Model: PRL1A Circuits: 42 In Use: 7 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: BR KA: 10 Wire Type: #3 TECK 90	DC967 IR1250

Location	Sub Basement
Description	TR-EA
System	600: 120/208V 3P 4W
ID Tag Number	TRD-A00270



Application Notes:	Safety Notes:
Make: Bemag Model: UC3030VK13 Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 30 Impedance: 3.6 %Z Phase: 3 Primary Wire: #3 RW90 Cu Secondary Wire: #3RW90 Cu	DC1053 IR95

Location	Sub Basement
Description	Panel EA
System	120/208V 3P 4W
ID Tag Number	BCP-A00189



Application Notes:	Safety Notes:
Make: Eaton Model: PRL1A Circuits: 42 In Use: 9 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: BR KA: 10 Wire Type: #3 TECK 90	DC968 IR1251

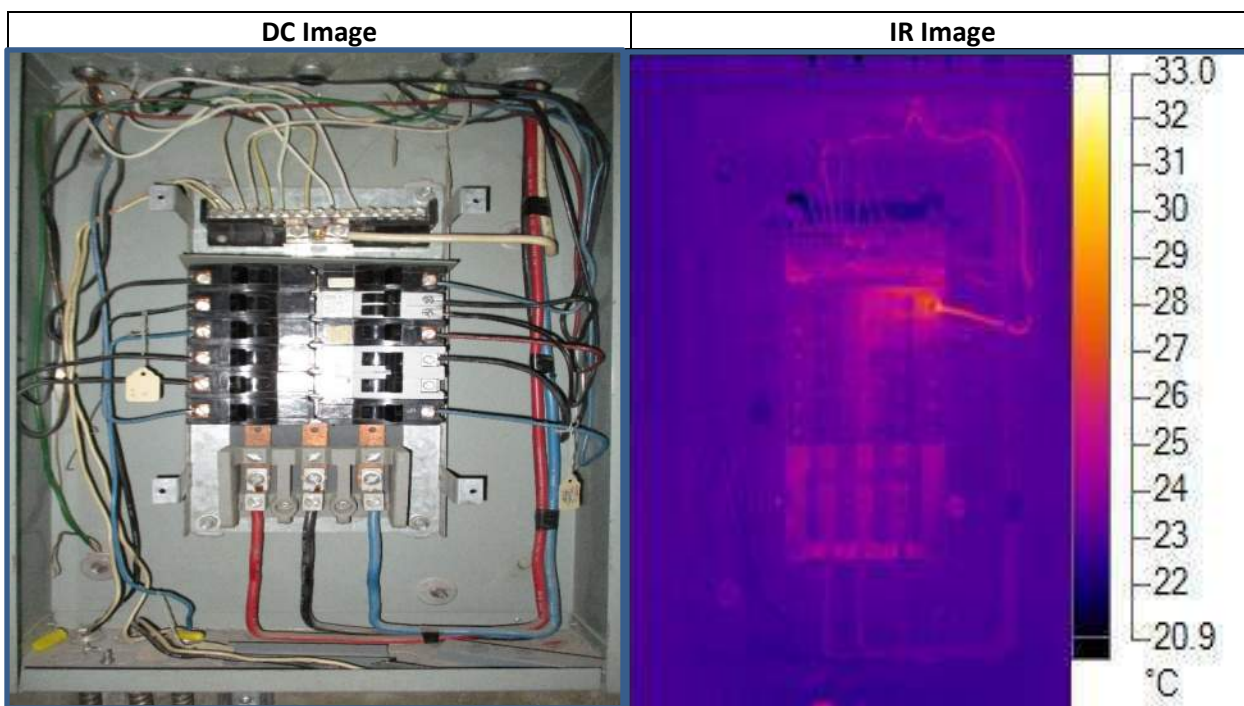
Location	Sub Basement
Description	MCC-1A
System	600V 3P 3W
ID Tag Number	MCC-SEC-A00190

DC Image	IR Image
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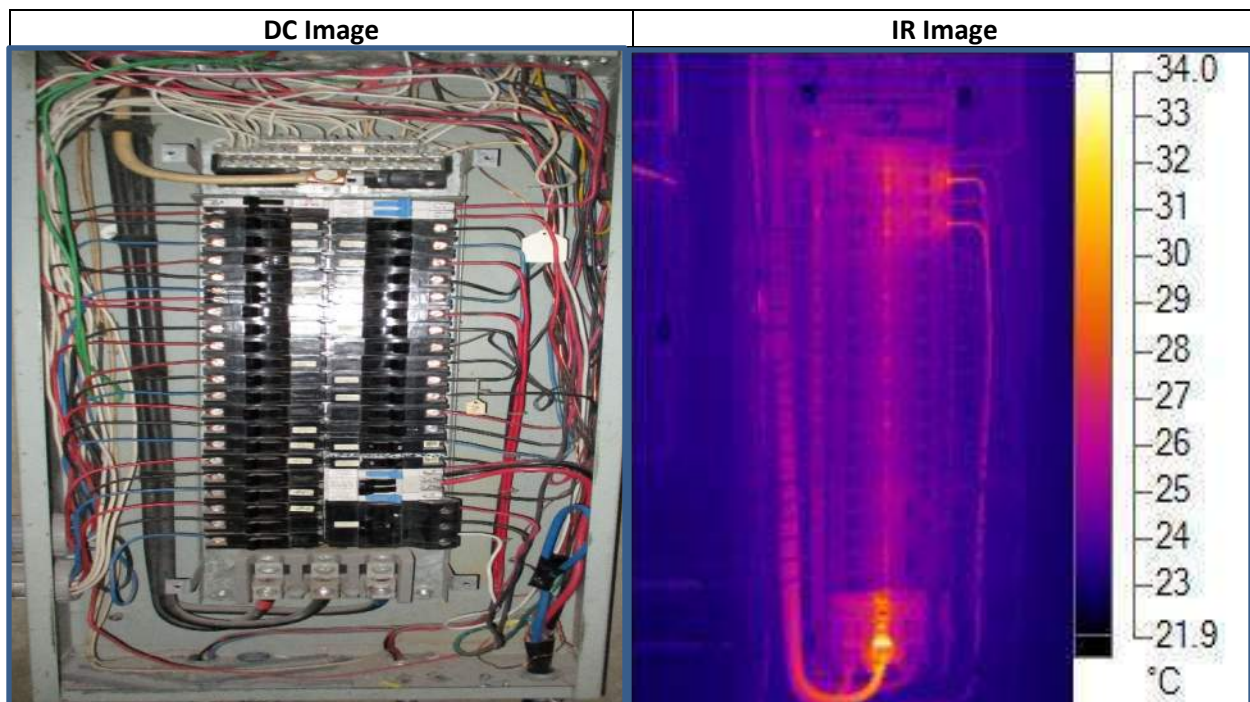
Application Notes:	Safety Notes:
Make: Freedom Series Model: 1200 Voltage: 600V Current: 600A Wire Type: 2/0 RW90	DC969 Unit was off and locked out at time of scan

Location	Sub Basement
Description	Panel VV
System	120/208V 3P 4W
ID Tag Number	BCP-A00191



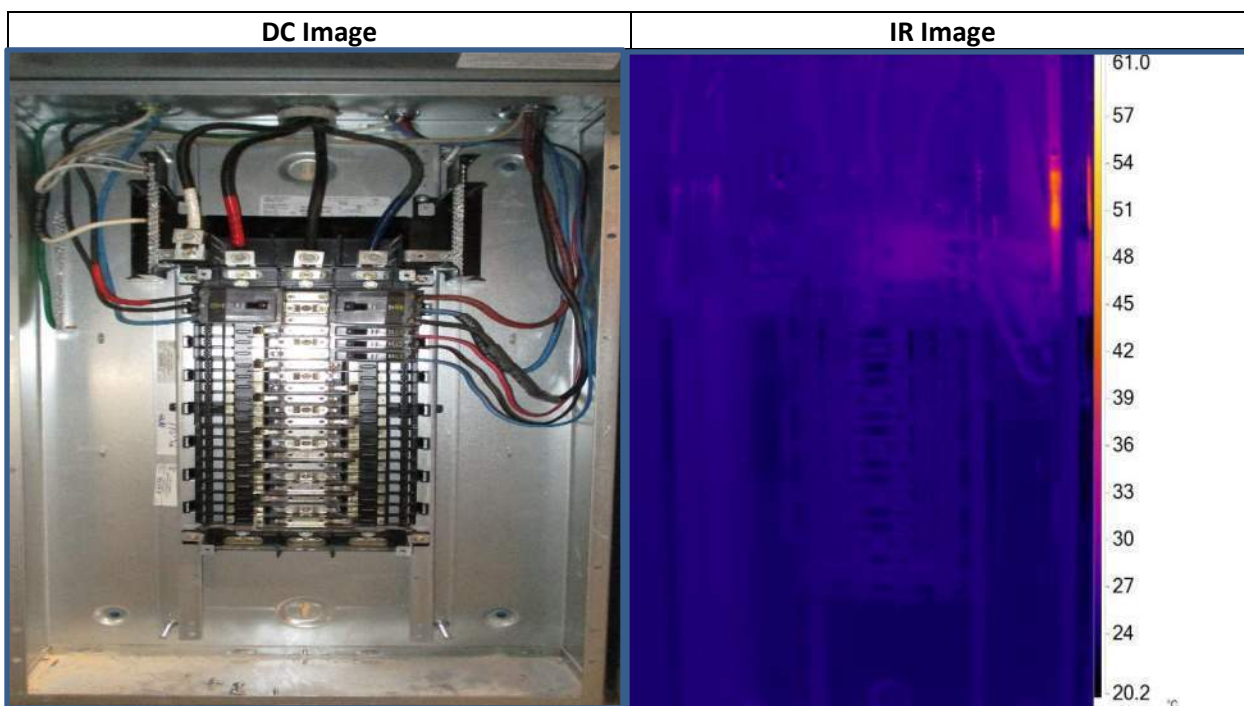
Application Notes:	Safety Notes:
Make: Federal Pioneer Model: NALP 12-4L Circuits: 12 In Use: 12 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #6TW Cu	DC970 IR1252

Location	Sub Basement
Description	Panel A
System	120/208V 3P 4W
ID Tag Number	BCP-A00192



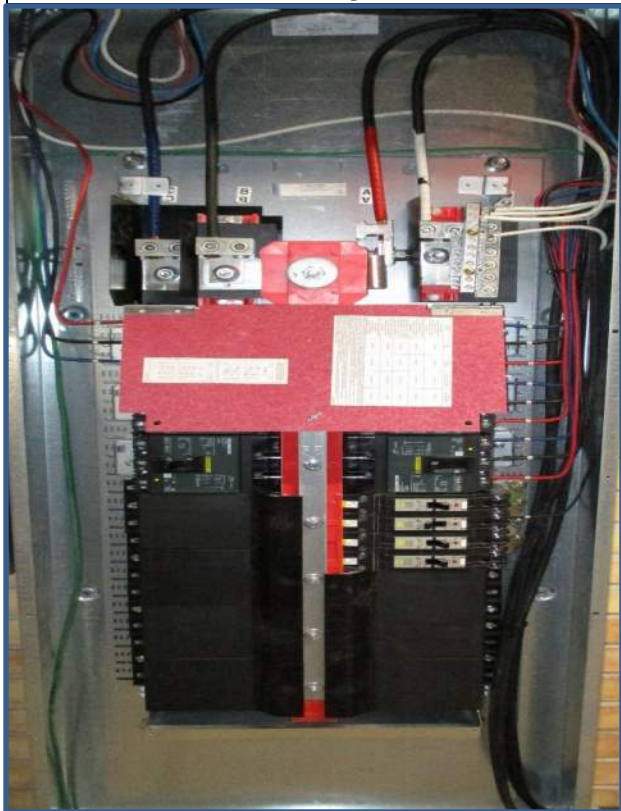
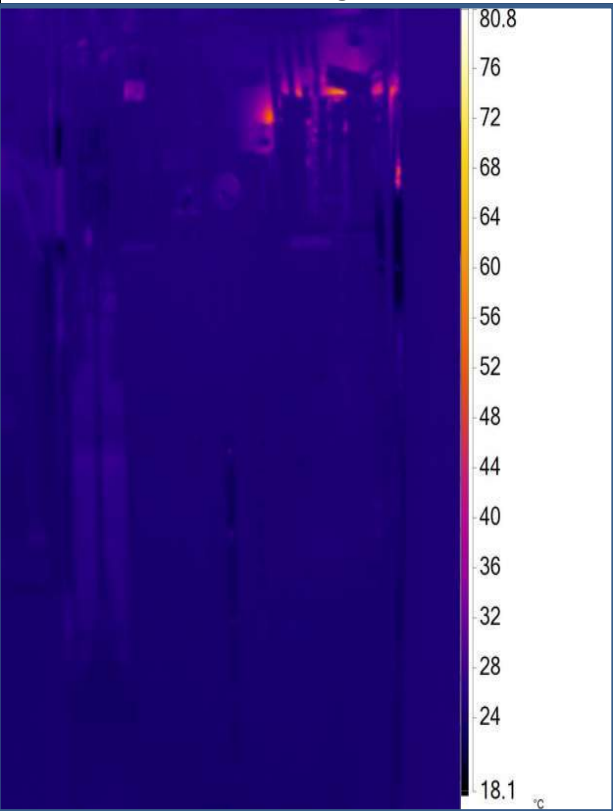
Application Notes:	Safety Notes:
Make: Federal Pioneer Model: NALP 42-4L Circuits: 42 In Use: 42 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 2/0 TW Cu	DC971 IR1253

Location	Sub Basement
Description	CDP-LSA
System	120/208V 3P 4W
ID Tag Number	BCP-A00193

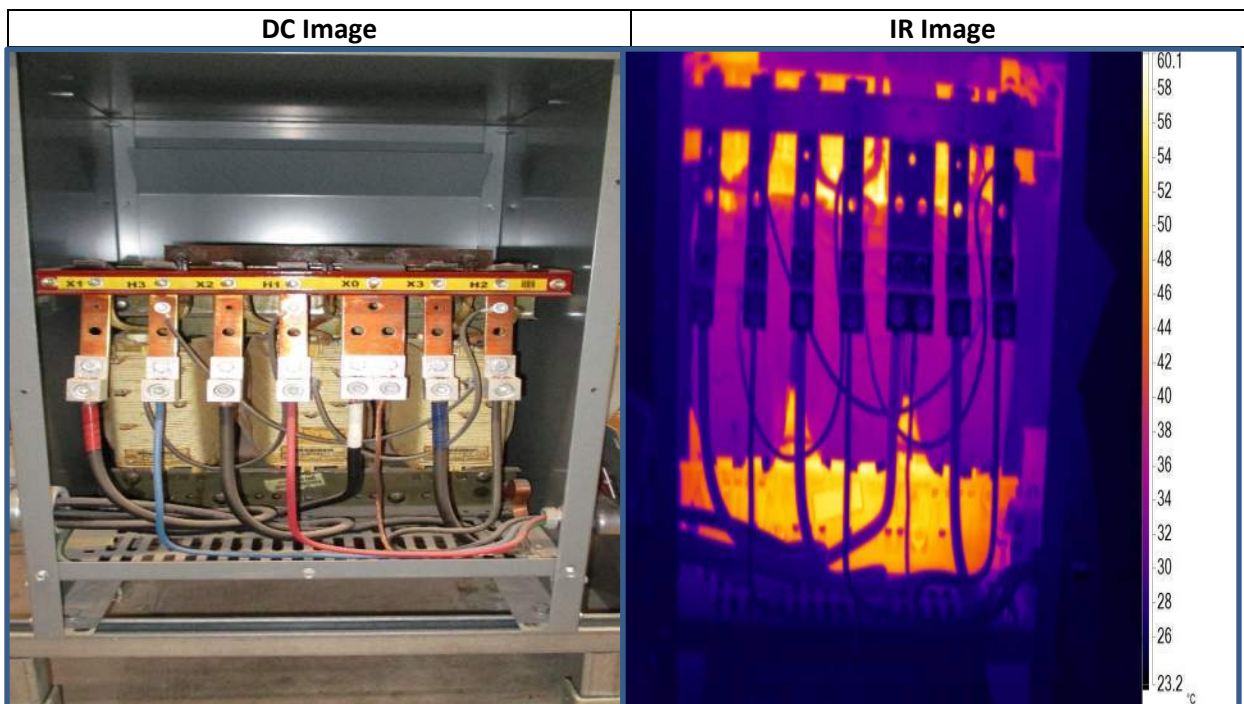


Application Notes:	Safety Notes:
Make: Square D Model: NQ Circuits: 42 In Use: 9 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: BQ KA: 10 Wire Type: #2 RW90 Cu	DC974 IR1255

Location	Sub Basement
Description	CDP-LS
System	120/208V 3P 4W
ID Tag Number	DP-A00194

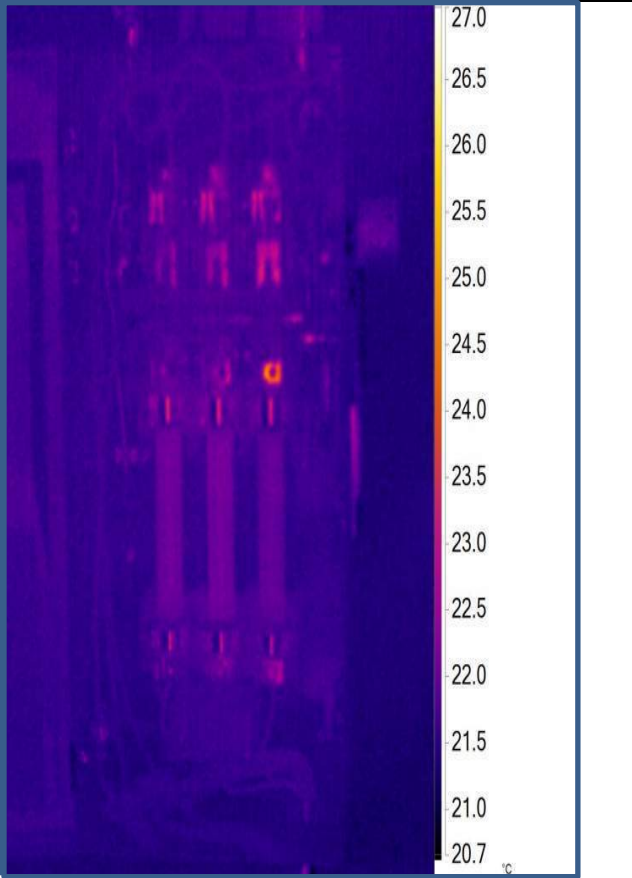
DC Image	IR Image
 A photograph of an electrical control panel. It features a large red main breaker at the top, with several smaller circuit breakers and terminal blocks below it. Numerous colored wires (red, blue, green, black) are connected to the terminals. The panel is mounted on a metal rack.	 An infrared (IR) thermal image of the same electrical panel. The image shows heat signatures, with warmer areas (yellow and red) indicating higher temperatures, particularly around the main breaker and some of the terminal blocks. A color scale on the right side of the image ranges from 18.1 to 80.8 degrees Celsius.
Application Notes: Make: Square D Model: NCN Voltage: 120/208V Current: 600A Phase: 3 Main Breaker: N/A Breaker Type: FA, FGA Wire Type: 2/0 RW 90Cu	Safety Notes: DC975 IR1256 Breaker Trip settings: N/A

Location	Sub Basement
Description	TR-LS
System	600: 120/208V 3P 4W 45KVA
ID Tag Number	TRD-A00195



Application Notes:	Safety Notes:
Make: Sqaur D Model: EE45T65HEU Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 45 Impedance: 4.1 %Z Phase: 3 Primary Wire: 6 RW90 Cu Secondary Wire: 2/0 RW90 Cu	DC976 IR1257

Location	Sub Basement
Description	Ait Make Up A/C
System	600V 3P 3W
ID Tag Number	DISC-A00196

DC Image	IR Image
	
Application Notes: Make: Siemens Model: ID361 Voltage: 600V Current: 30A Breaker/Fuse Type: CRS25 Wire Type: #10 TECK90 CU	Safety Notes: DC 977 IR1258

Location	Sub Basement
Description	Fire Pump Controller
System	600v 3p 3w
ID Tag Number	ATS-A281

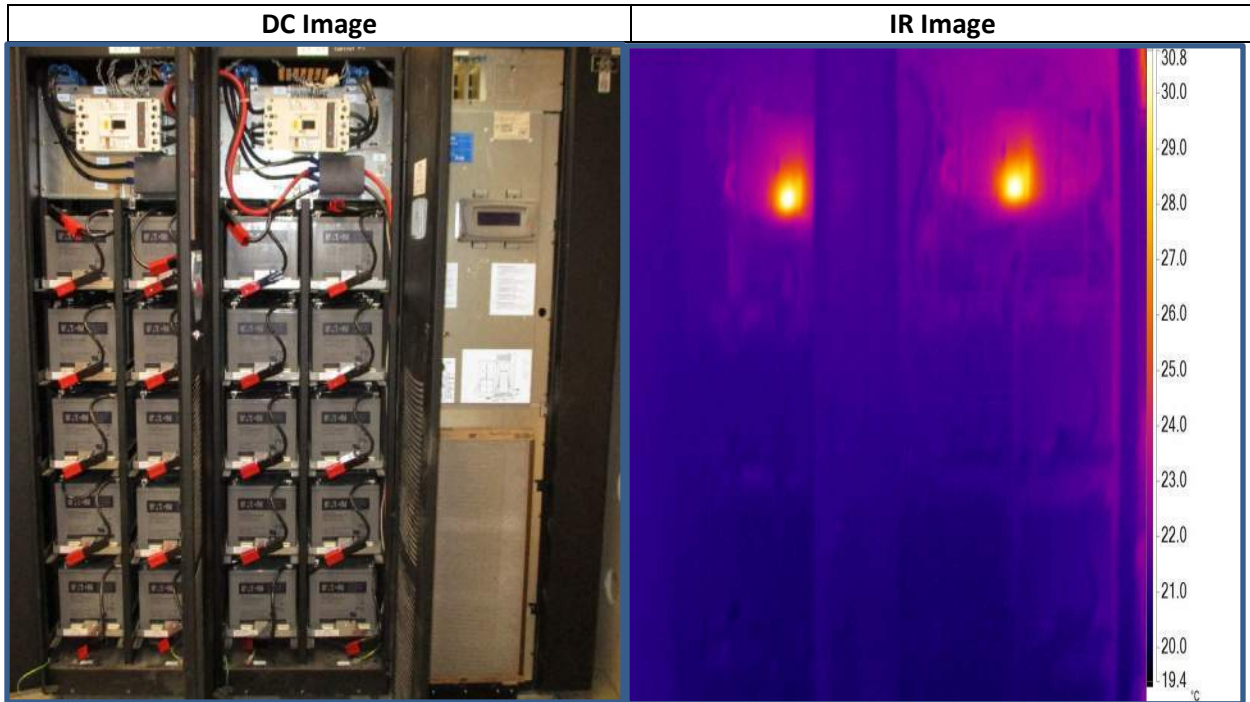
DC Image	IR Image
	

Application Notes:	Safety Notes:
Make: Eaton Model: FT60-60E-L1-B-F2-CX-X1 Voltage: 600V Current: U/OA Breaker/Fuse Type: U/O Wire Type: U/O	Unable to open underload.

Section

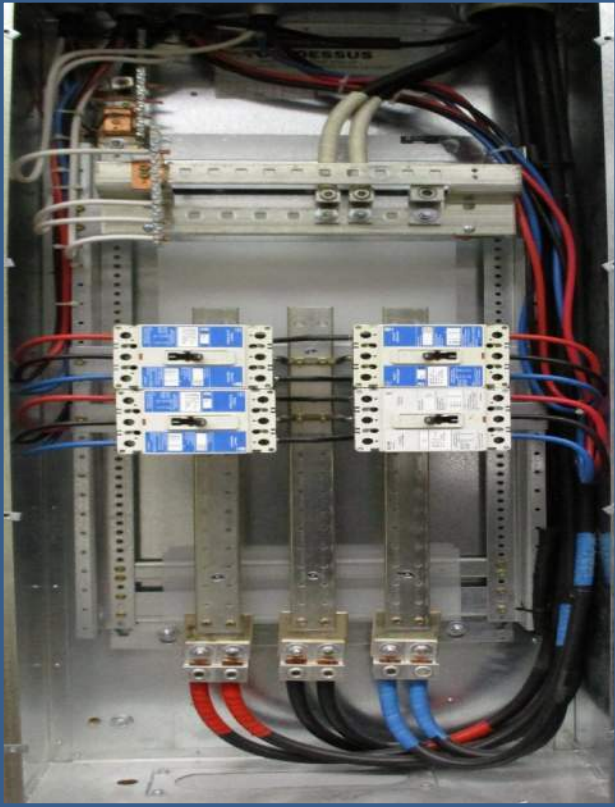
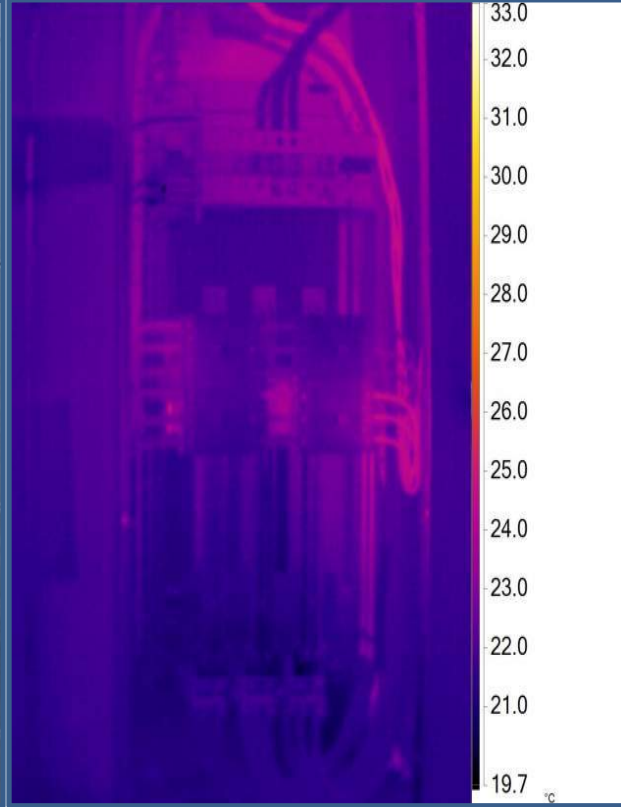
Ups Room
7-04

Location	UPS Room 7-04
Description	West UPS
System	208V 3P 3W
ID Tag Number	UPS-A00049

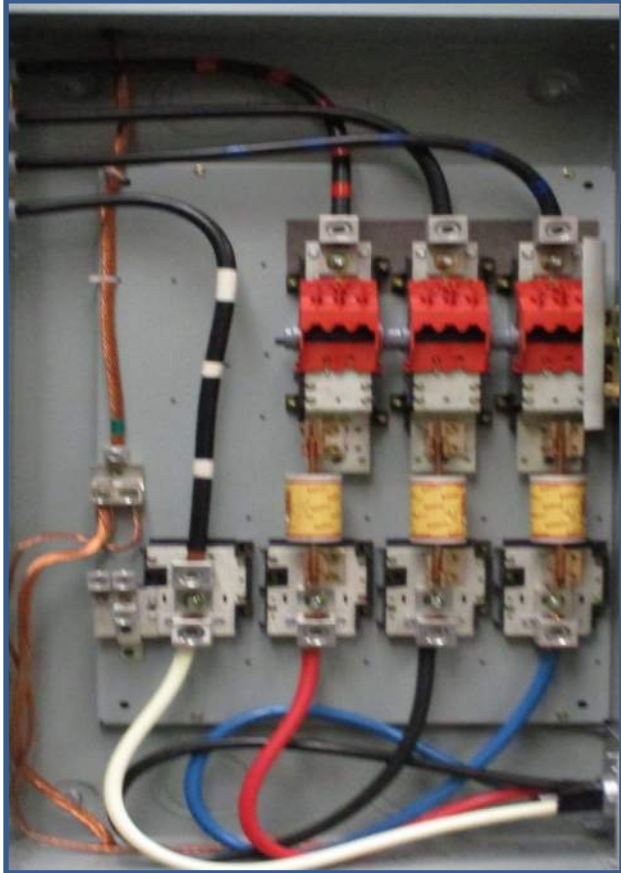
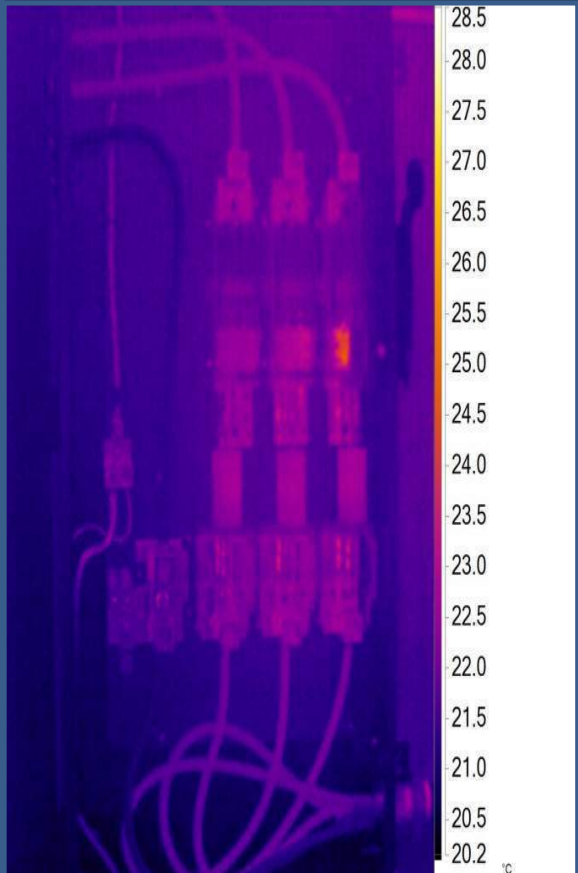


Application Notes:	Safety Notes:
Make: Eaton Model: 80 Phase: 3 Primary Voltage: 208V Secondary Voltage: 208V KVA: 80 Primary Amps: 240 Secondary Amps: 222 Wire Type: 250 Kcmil Coreflex 1C	DC838 IR1130

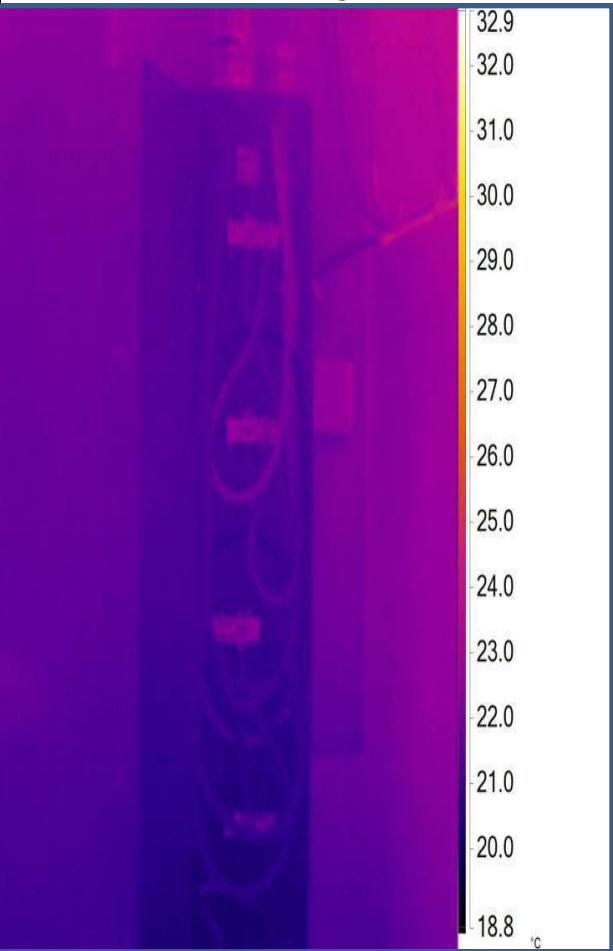
Location	Ups Room 7-04
Description	CDP80
System	120/208V 3P 4W
ID Tag Number	DP-A00050

DC Image	IR Image
	
Application Notes: Make: Cutler Model: Prl4 Voltage: 120/208V Current: 600A Phase: 3 Main Breaker: N/A Breaker Type: FD Wire Type: Parallel 350 Kcmil RW90 Cu	Safety Notes: DC839 IR1131 Breaker Trip settings: N/A

Location	Ups Room 7-04
Description	Panel 800 Breaker 1 Transformer Breaker
System	120/208V 3P 4W
ID Tag Number	DISC-A00051

DC Image	IR Image
	
Application Notes: Make: Eaton Model: G325N Voltage: 240V Current: 400A Breaker/Fuse Type: JKS400 Wire Type: 4C 3/0 1000V Teck 90	Safety Notes: DC840 IR1132

Location	Ups Room 7-04
Description	No Name
System	347/600V 3P 4W
ID Tag Number	JB-A00053

DC Image	IR Image
	
Application Notes: Make: Bel Model: T4404 Voltage: 600V Current: 400A Wire Type: In 350Kcmil RW90, Out 3/0 4W Teck 90 Cu	Safety Notes: DC842 IR1133

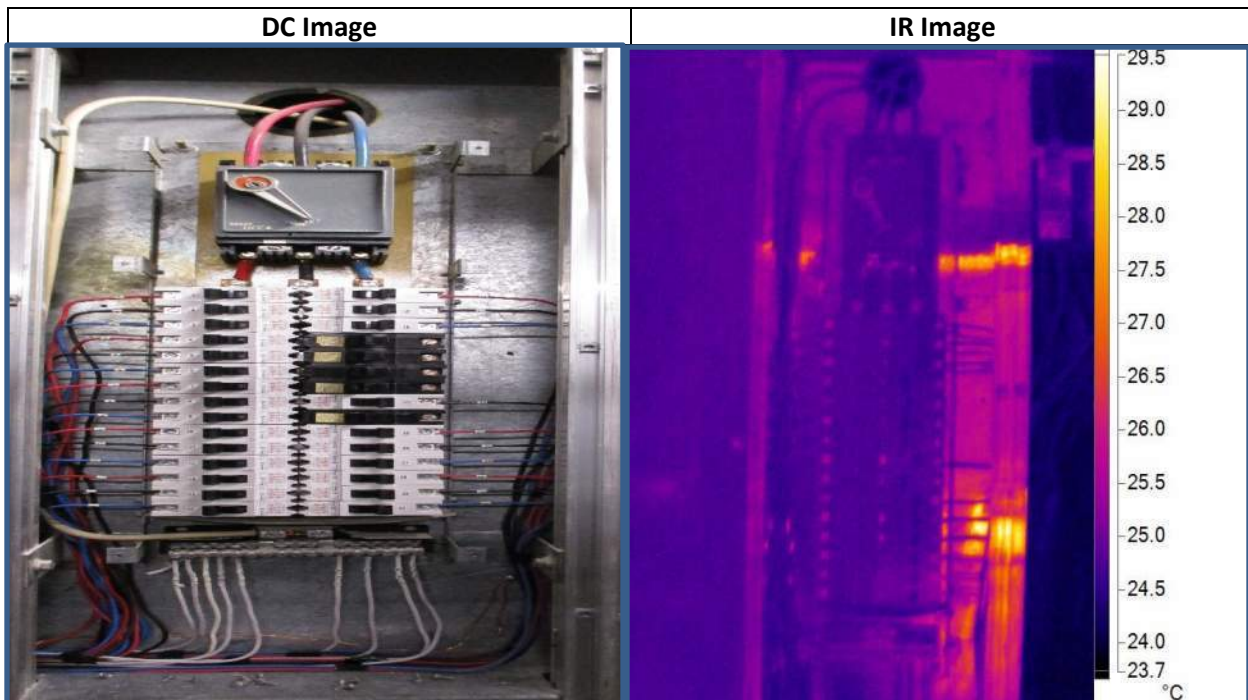
Section

Council
Building

Section

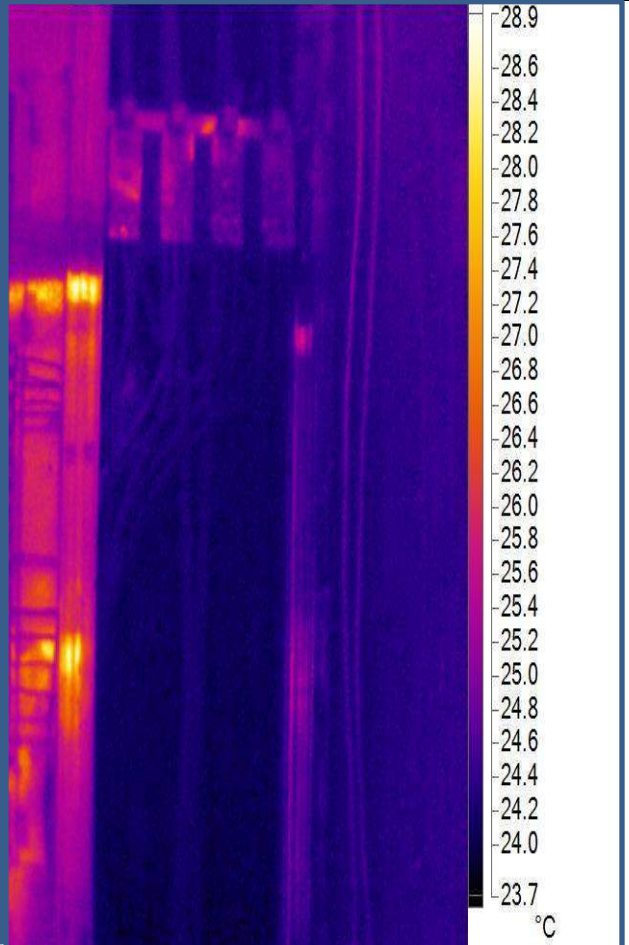
1st
Floor

Location	Distribution 101
Description	Panel D
System	120/208 3P 4W
ID Tag Number	BCP-A00231

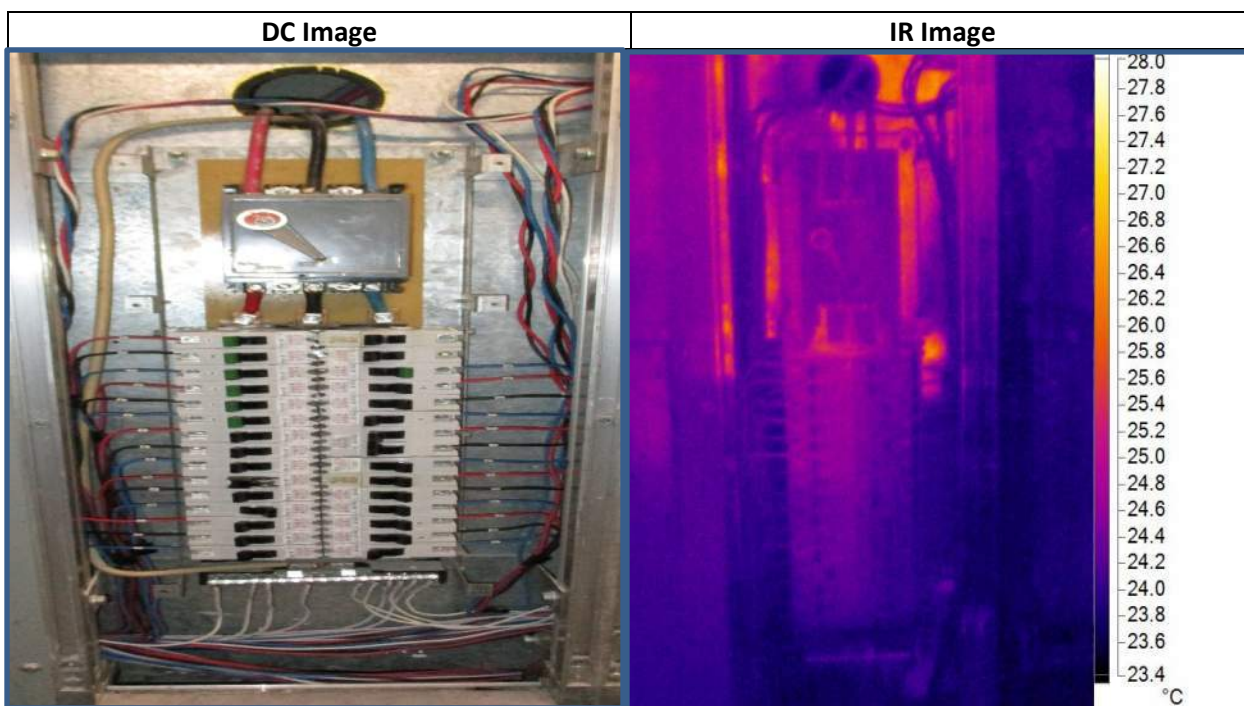


Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	DC1036 IR79

Location	79Distribution 101
Description	Distribution 101 Splitter
System	120/208 3P 4W
ID Tag Number	JB-A00232

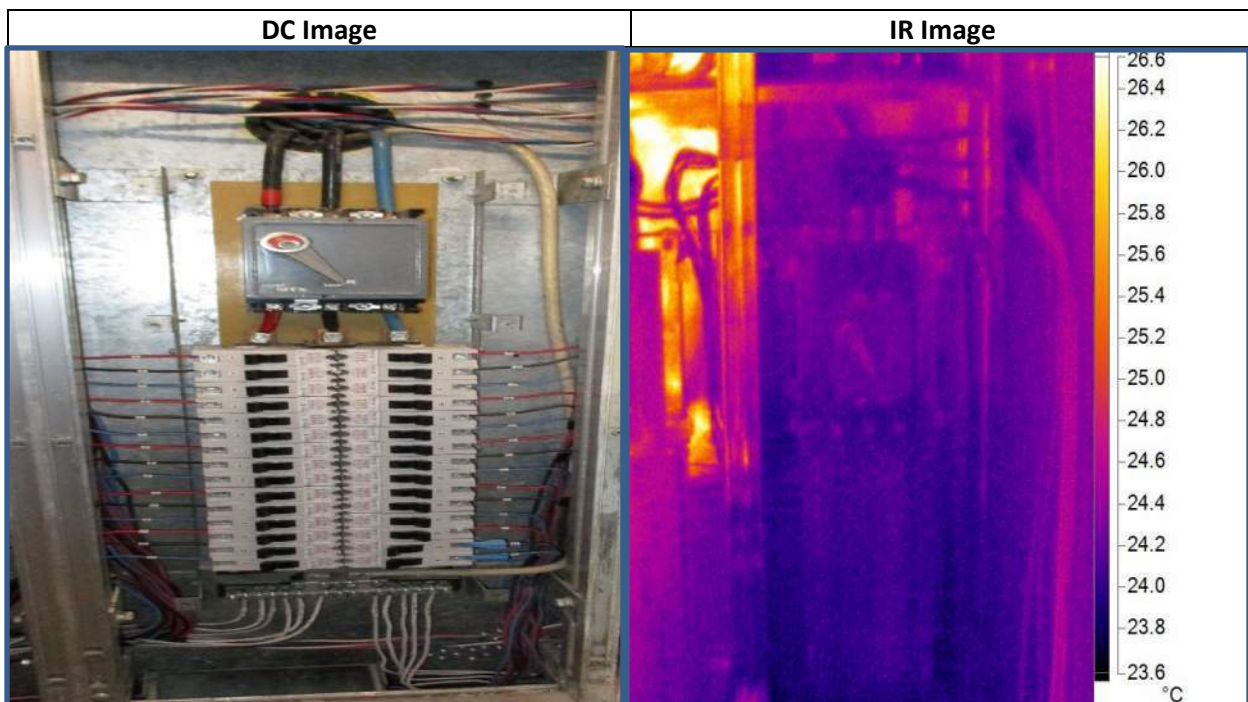
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: FX3339-59 Voltage: 120/208V Current: 200A Wire Type: 250 KCMIL Cu	Safety Notes: DC1037 IR80

Location	Distribution 101
Description	Panel E
System	120/208 3P 4W
ID Tag Number	BCP-A00233



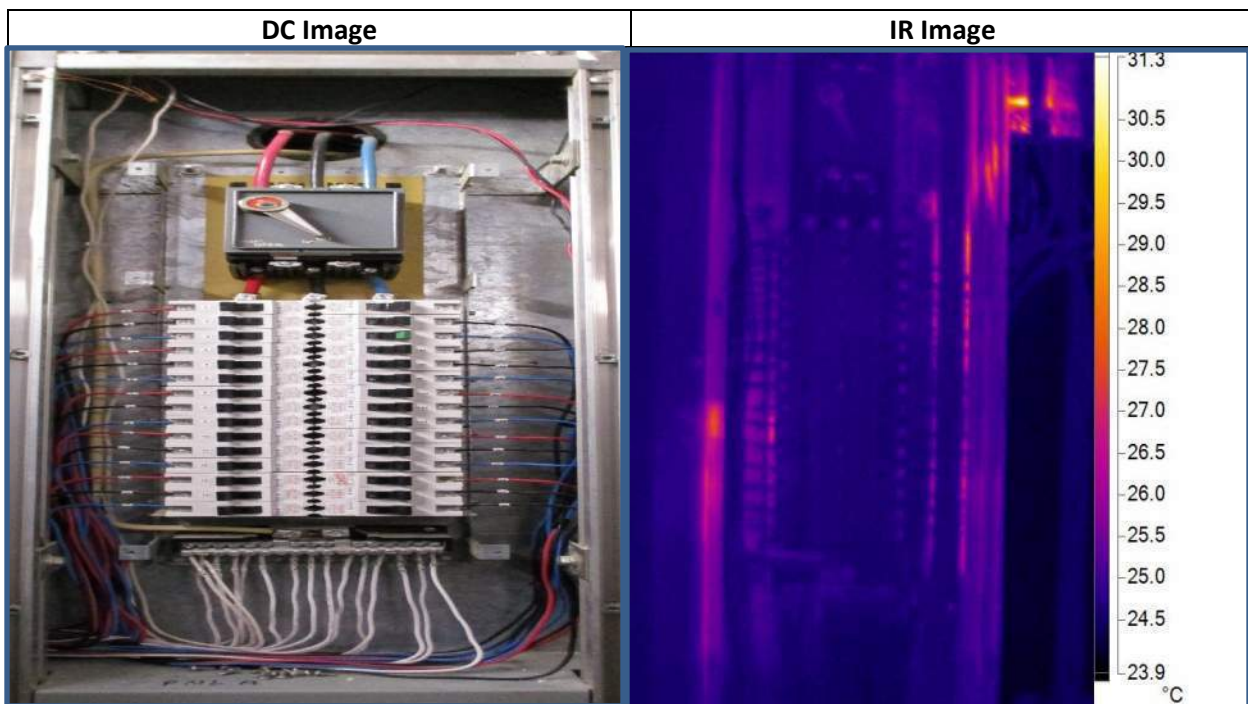
Application Notes: Make: Federal Pacific Model: NALP30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC1038 IR81
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Location	Distribution 101
Description	Panel F
System	120/208 3P 4W
ID Tag Number	BCP-A00234



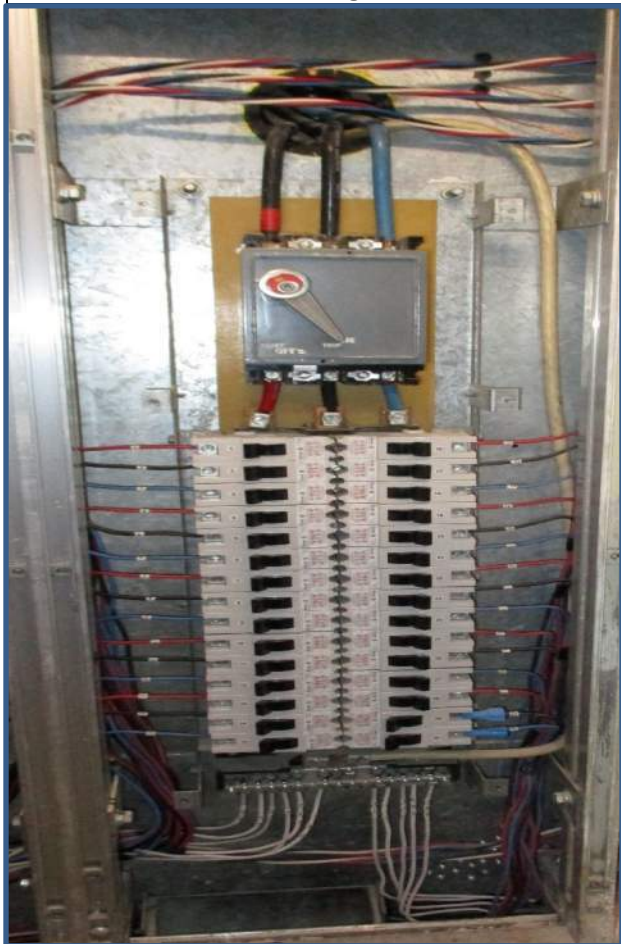
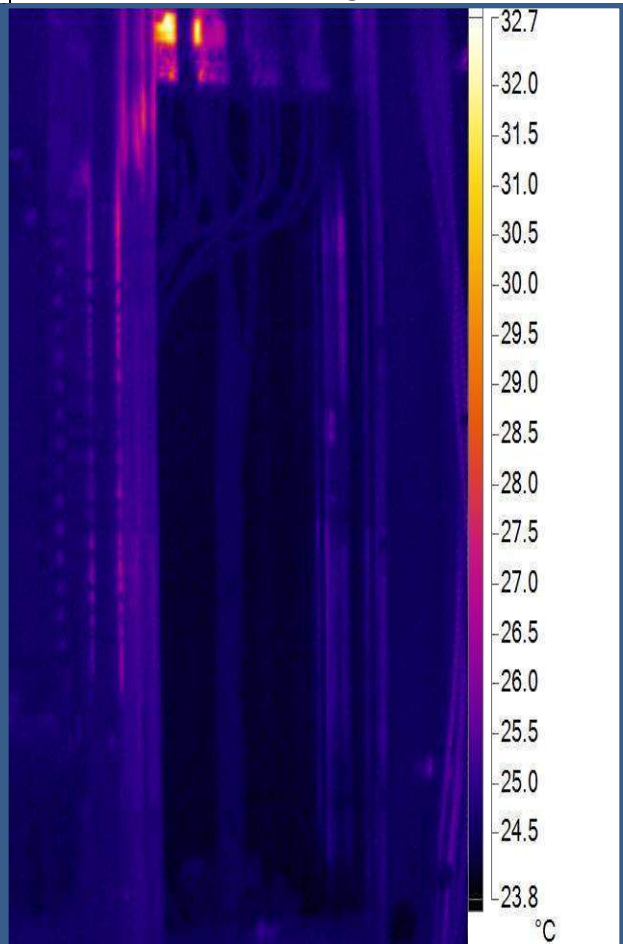
Application Notes: Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 TW Cu	Safety Notes: DC 1039 IR82
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Location	Distribution 100
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A00235

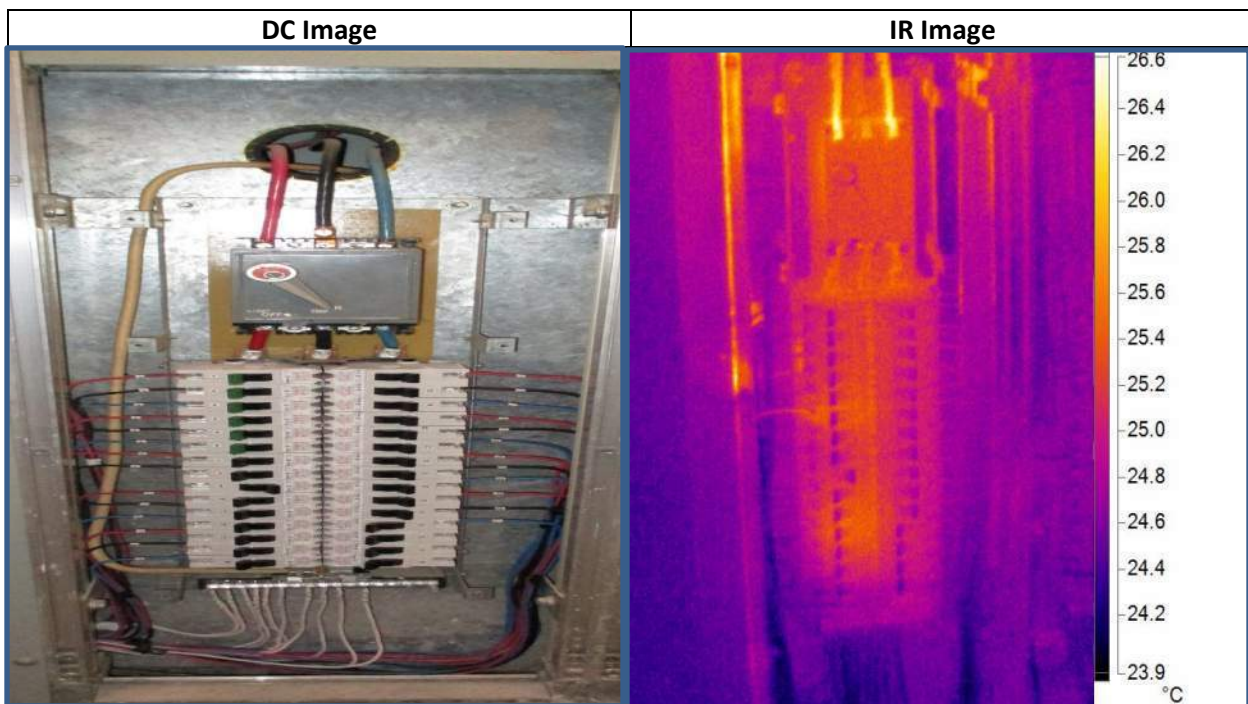


Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	DC1030 IR73

Location	Distribution 100
Description	Distribution 100 Splitter
System	120/208 3P 4W
ID Tag Number	JB-A00236

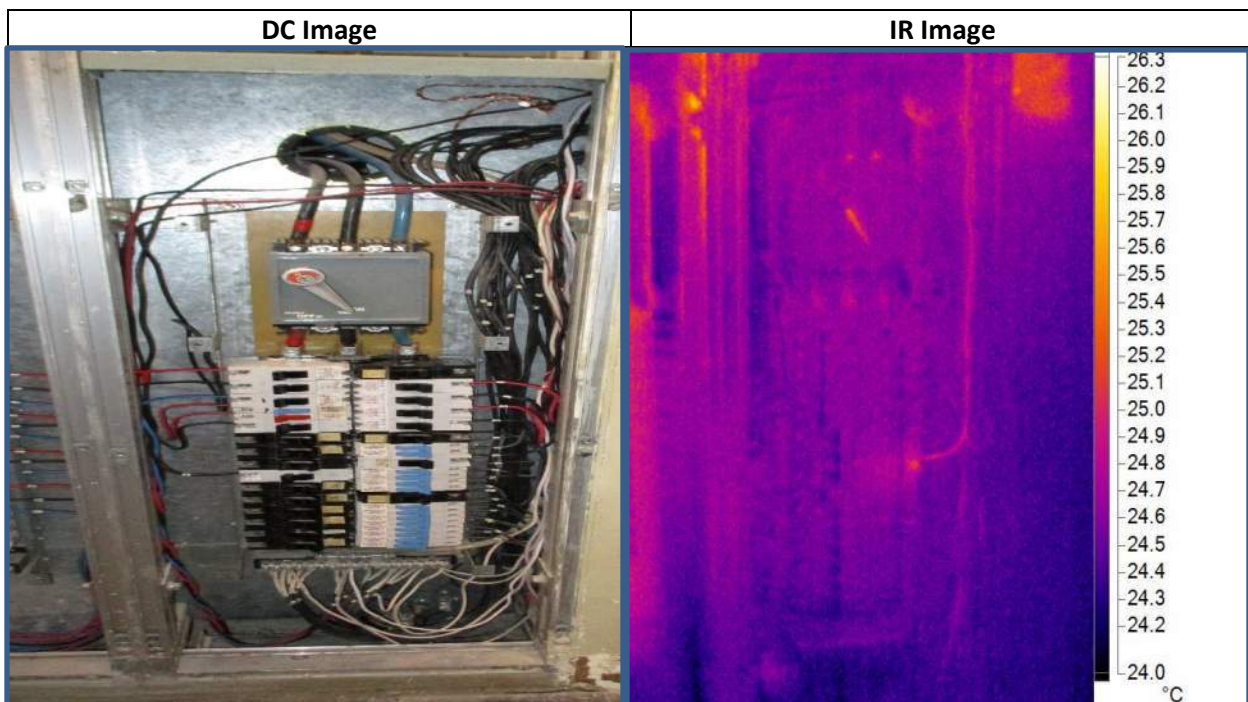
DC Image	IR Image
 A photograph of the interior of an electrical cabinet. It shows a large terminal block with many wires connected, a circuit breaker, and other electrical components. The wires are bundled and organized.	 An infrared (IR) thermal image of the same electrical cabinet. It shows heat signatures, with a color scale on the right ranging from 23.8°C (dark purple) to 32.7°C (yellow). The top of the cabinet shows higher temperatures, indicating potential overheating or high current flow.
Application Notes: Make: Federal Pacific Model: FX3339-58 Voltage: 120/208V Current: 200A Wire Type: 250 KCMIL Cu	Safety Notes: DC1031 IR74

Location	Distribution 100
Description	Panel B
System	120/208 3P 4W
ID Tag Number	BCP-A00237



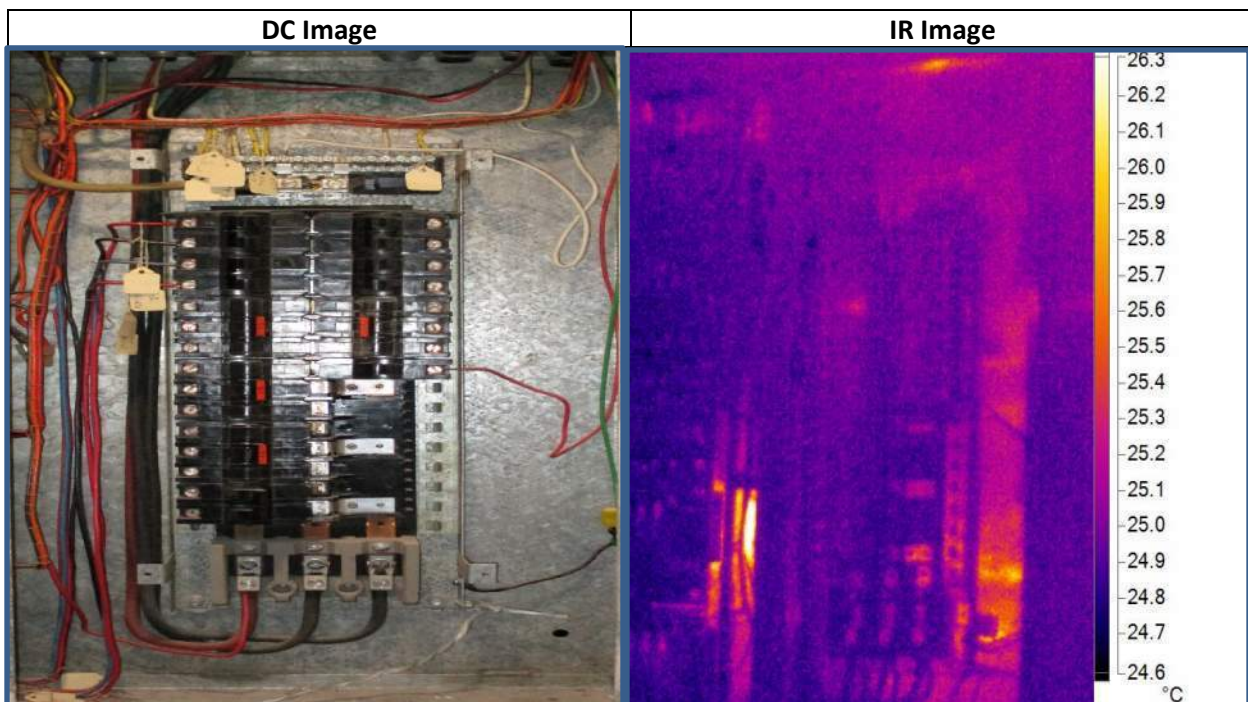
Application Notes: Make: Federal Pacific Model: NALP30-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 70A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC1032 IR75
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Location	Distribution 100
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A00238



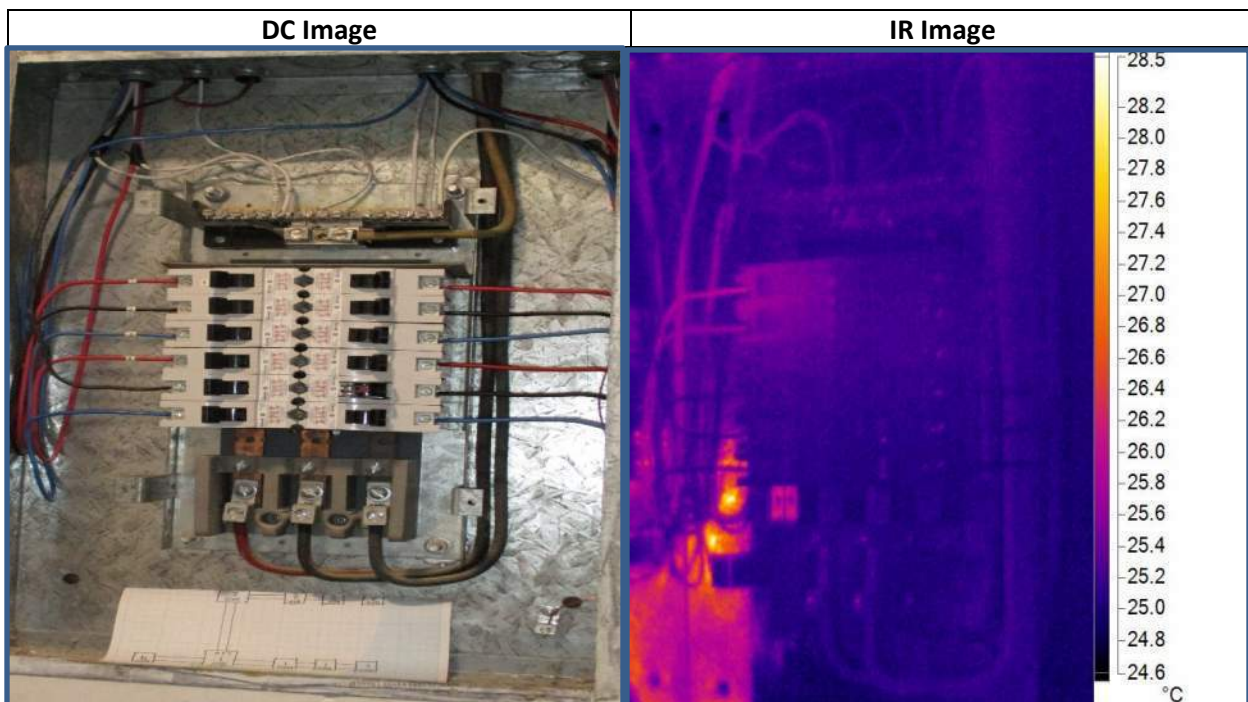
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP-4AB Circuits: 30 In Use: 30 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 2/0 AWG	DC1033 IR76

Location	Security Closet
Description	Panel G
System	120/208 3P 4W
ID Tag Number	BCP-A00241



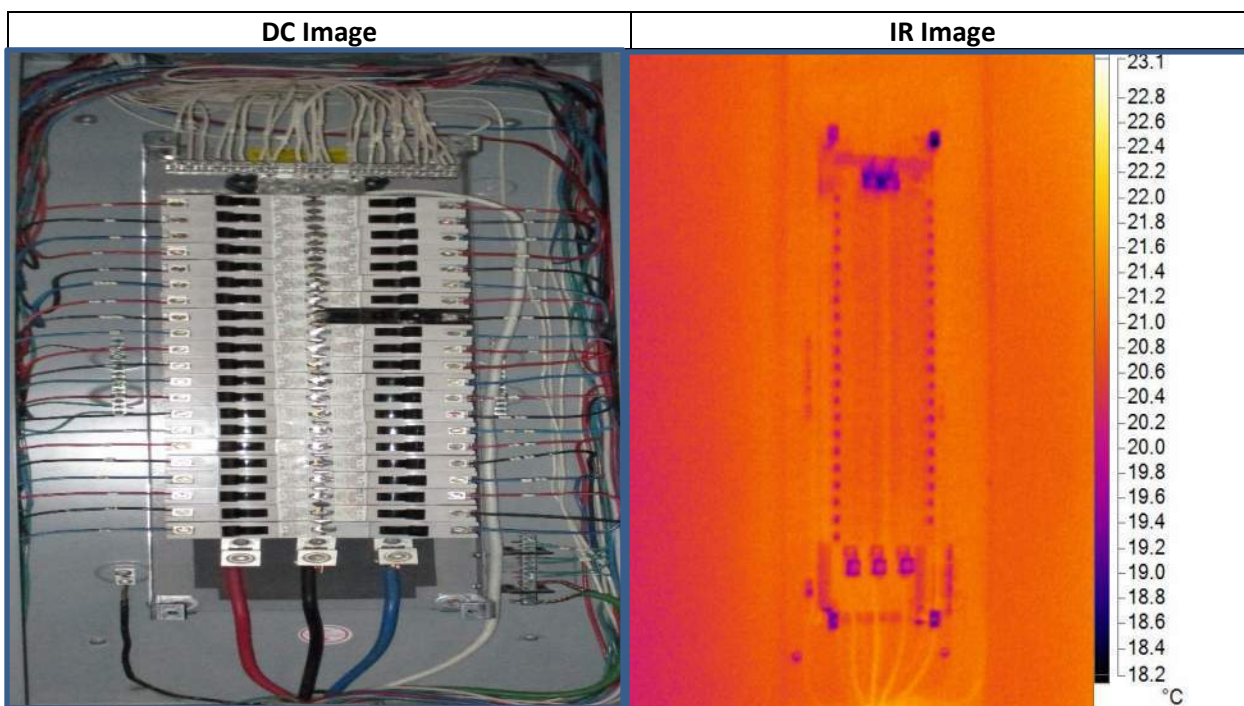
Application Notes: Make: Federal Pacific Model: NALP 30-4L Circuits: 30 In Use: 23 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC1034 IR77
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Location	Security Closet
Description	Panel BB
System	120/208 3P 4W
ID Tag Number	BCP-A00242



Application Notes: Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 12 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 TW Cu	Safety Notes: DC1035 IR78
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Location	South Stairwell
Description	Panel M
System	120/208 3P 4W
ID Tag Number	BCP-A00257

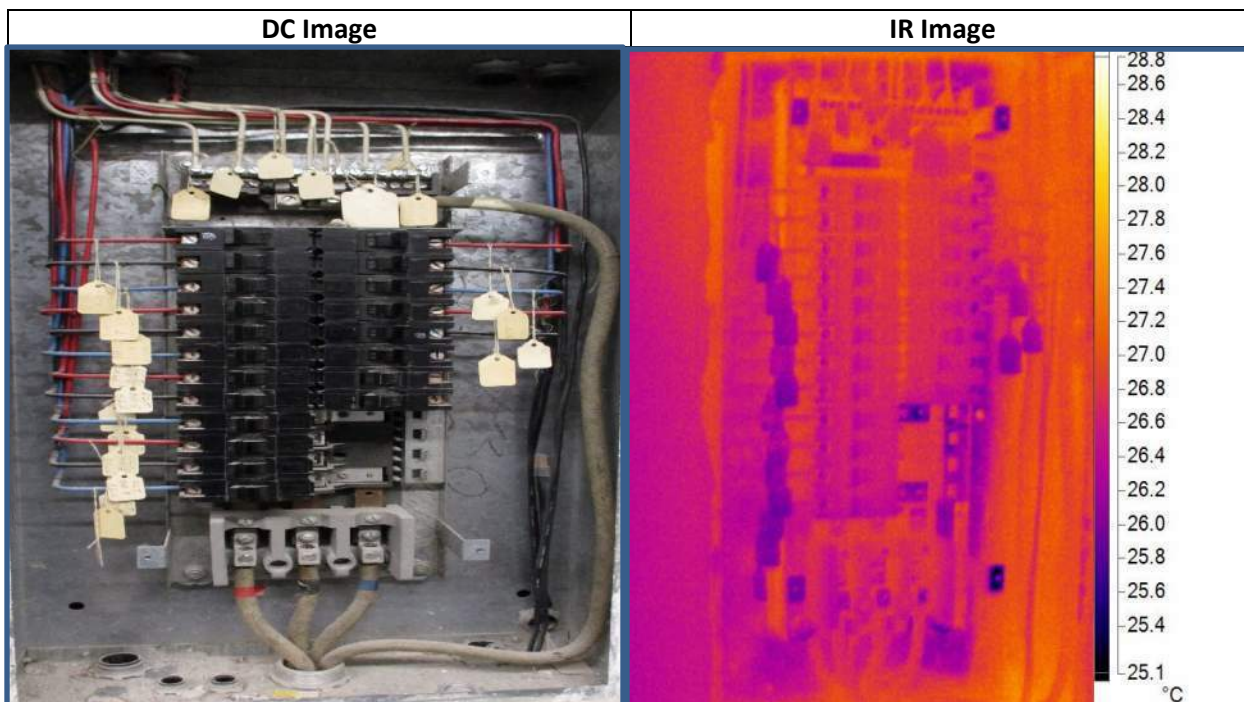


Application Notes: Make: Federal Pioneer Model: NBLP 42B-4L1 Circuits: 42 In Use: 42 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 RW Cu	Safety Notes: DC1040 IR83
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Section

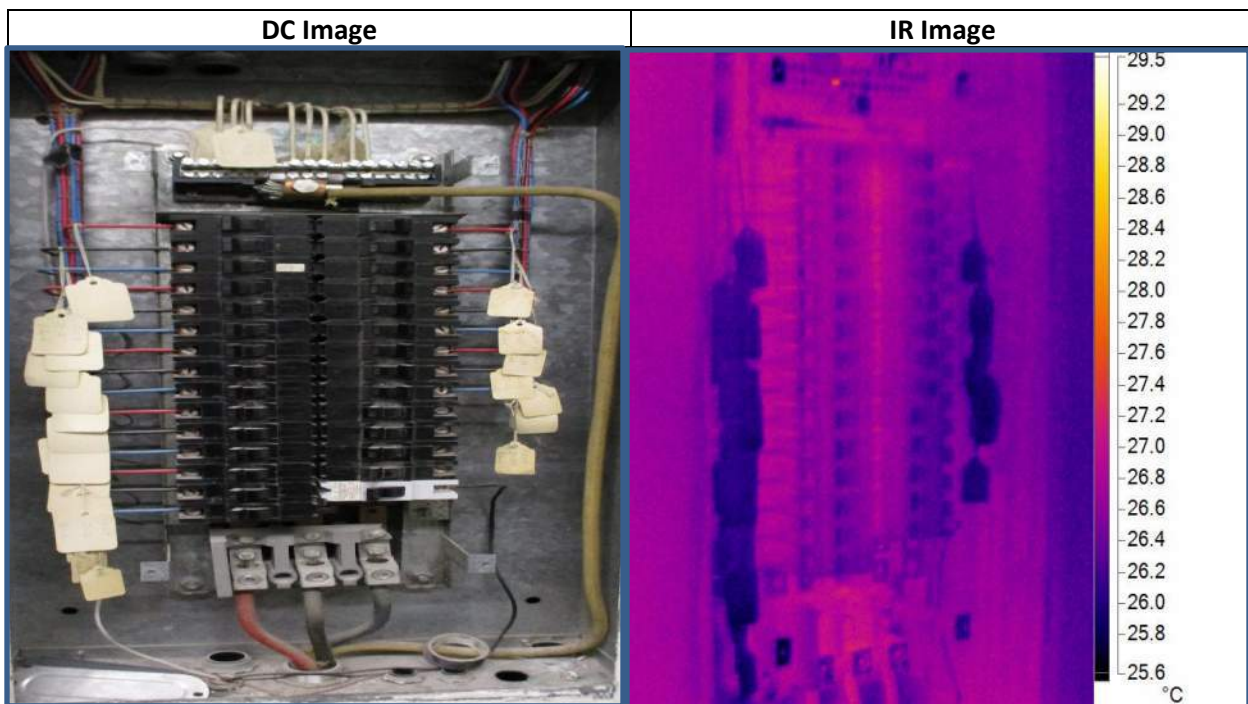
2nd
Floor

Location	Mayors Office Storage
Description	Panel AA
System	120/208 3P 4W
ID Tag Number	BCP-A00243



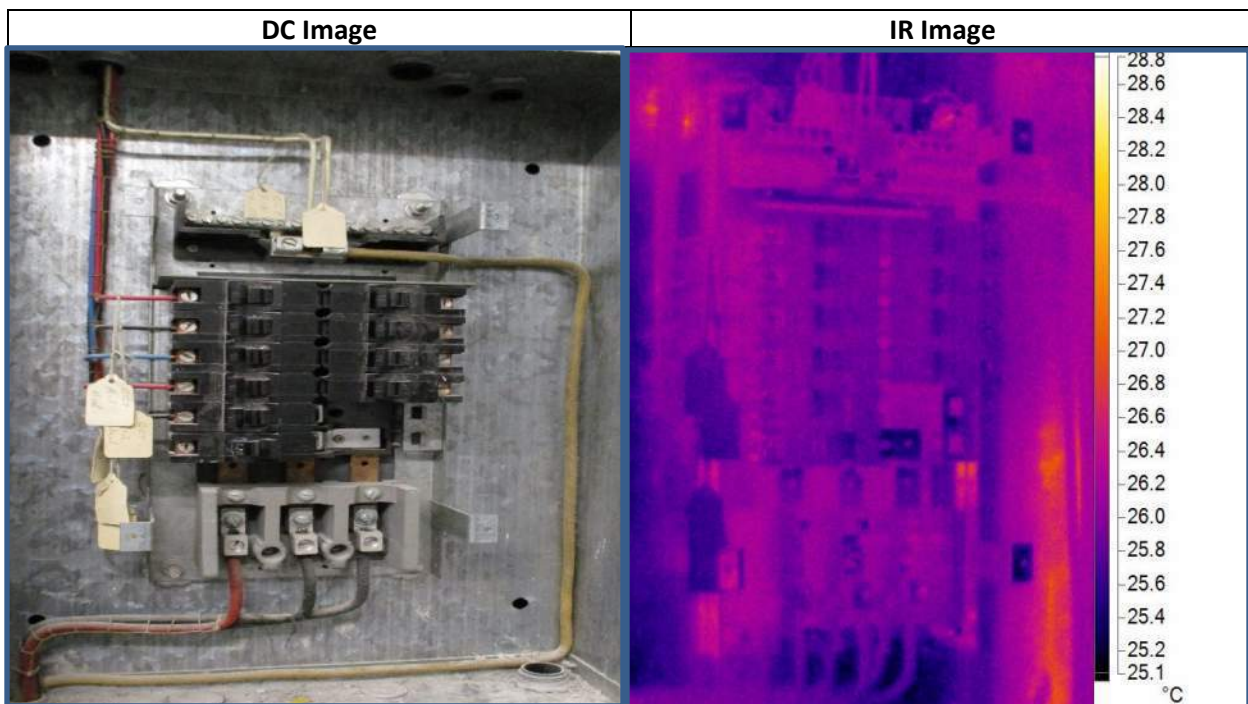
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 20 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 THW Cu	DC1015 IR00060

Location	Mayors Office Storage
Description	Panel J
System	120/208 3P 4W
ID Tag Number	BCP-A00244



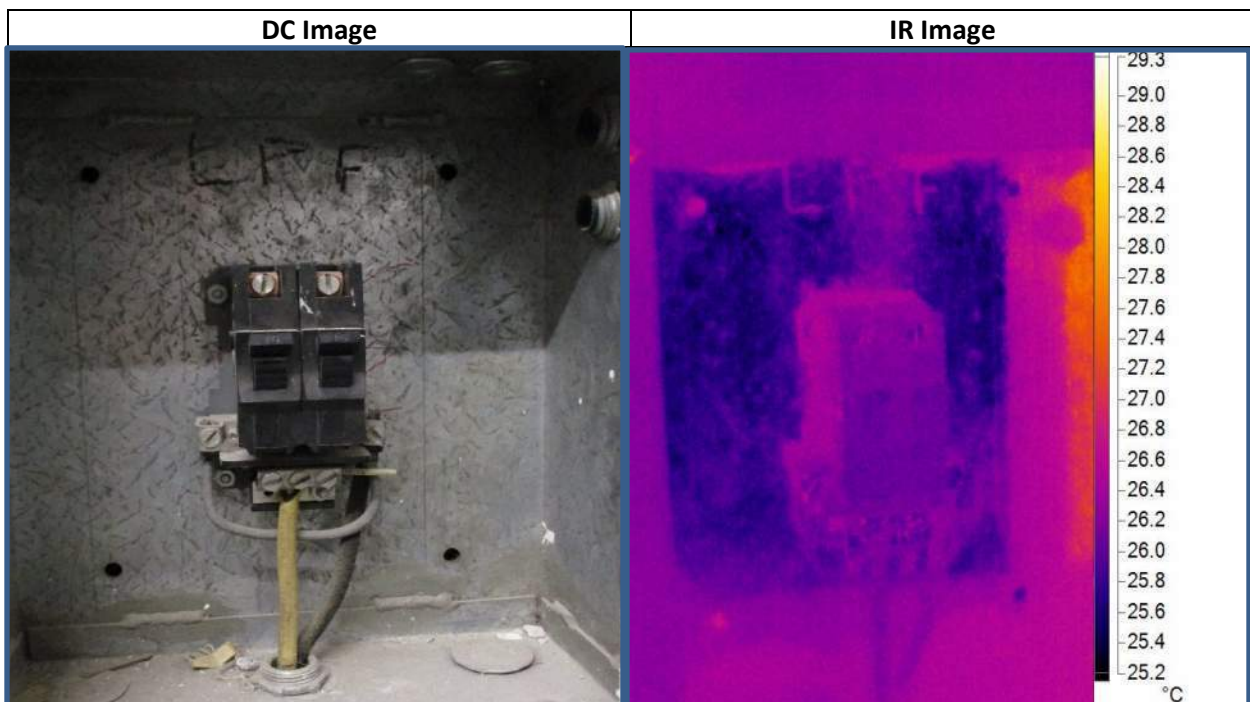
Application Notes: Make: Federal Pacific Model: NALP 30-4L Circuits: 30 In Use: 29 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #1 THW	Safety Notes: DC1016 IR00061
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Location	Mayors Office Storage
Description	Panel R
System	120/208 3P 4W
ID Tag Number	BCP-A00255



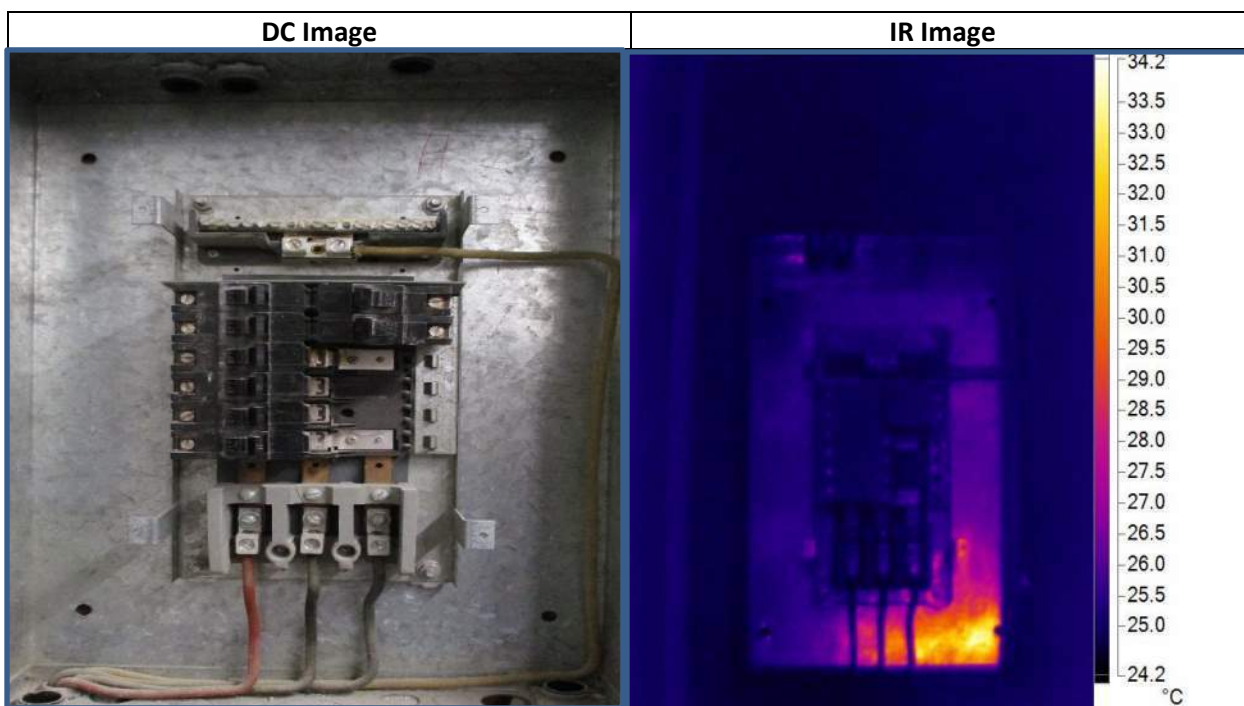
Application Notes: Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 10 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 THW Cu	Safety Notes: DC1017 IR00062
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Location	Mayors Office Storage
Description	Panel F
System	120/208 3P 4W
ID Tag Number	BCP-A00256



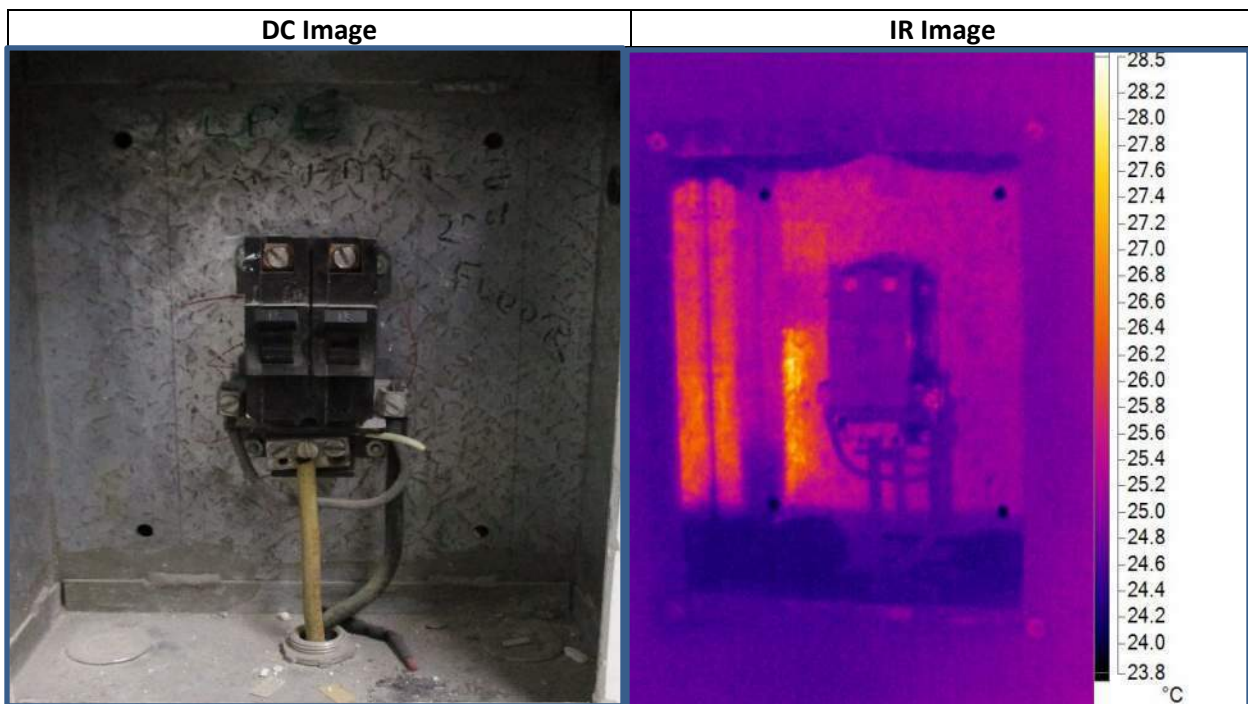
Application Notes:	Safety Notes:
Make: Federal Pacific Model: 102F-Special Circuits: 2 In Use: 2 Voltage: 120/208V Current: 50A Phase: 1 Breaker Type: NA KA: 10 Wire Type: #6 THW Cu	DC1018 IR00063

Location	Mayors Office Storage
Description	Panel H
System	120/208 3P 4W
ID Tag Number	BCP-A00257



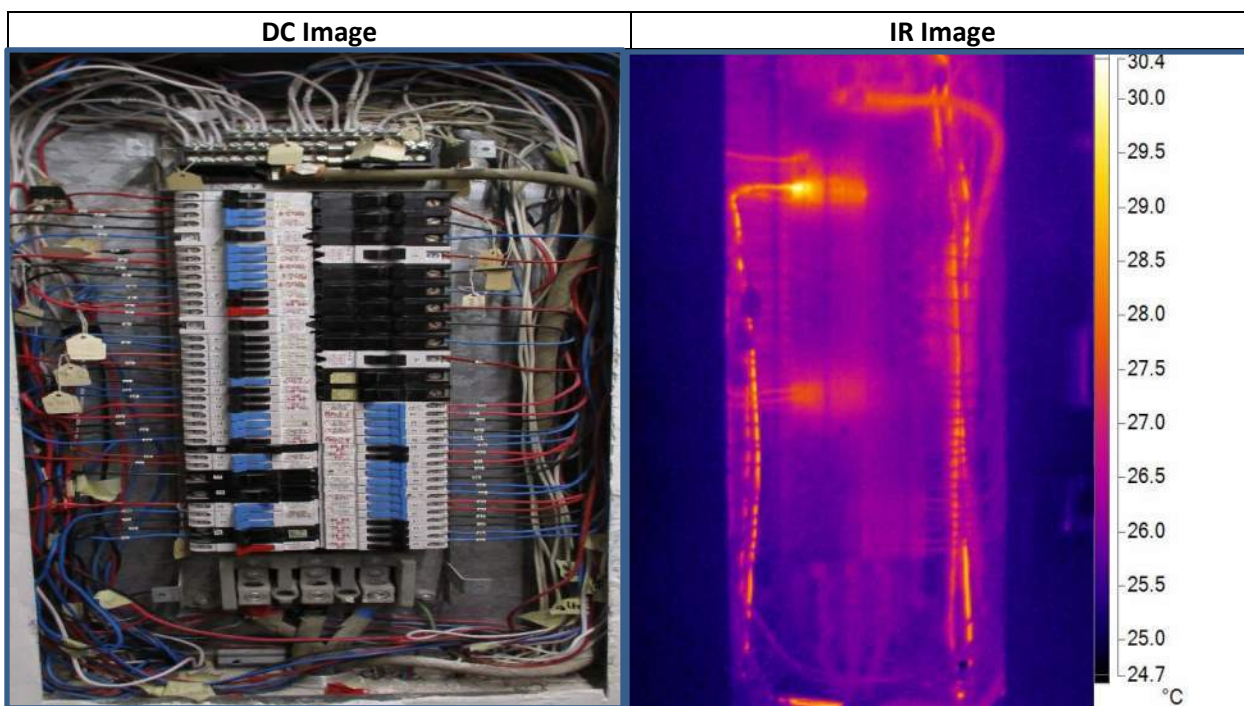
Application Notes: Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 8 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 THW Cu	Safety Notes: DC1019 IR00064
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Location	Mayors Office Storage
Description	Panel E
System	120/208 3P 4W
ID Tag Number	BCP-A00258



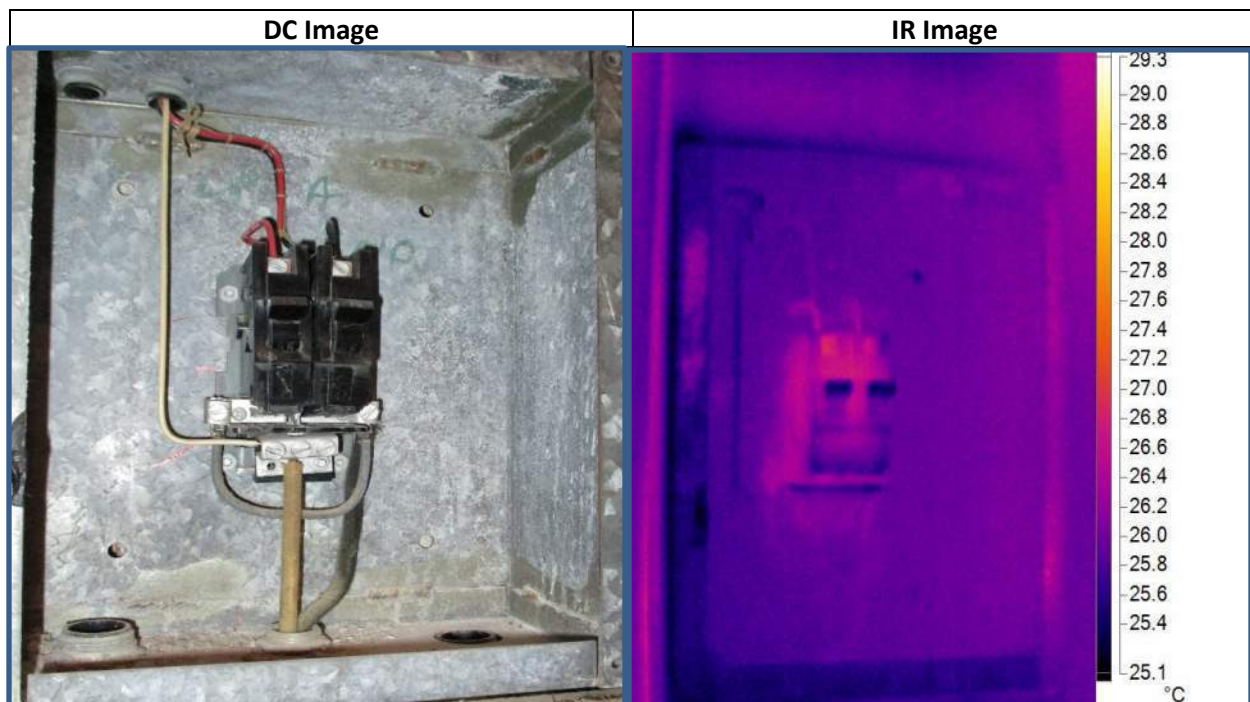
Application Notes:	Safety Notes:
Make: Federal Pacific Model: 102F-Special Circuits: 2 In Use: 2 Voltage: 120/208V Current: 50A Phase: 1 Breaker Type: NA KA: 10 Wire Type: #6 THW	DC1020 IR00065

Location	Mayors Office Storage
Description	Panel G
System	120/208 3P 4W
ID Tag Number	BCP-A00259



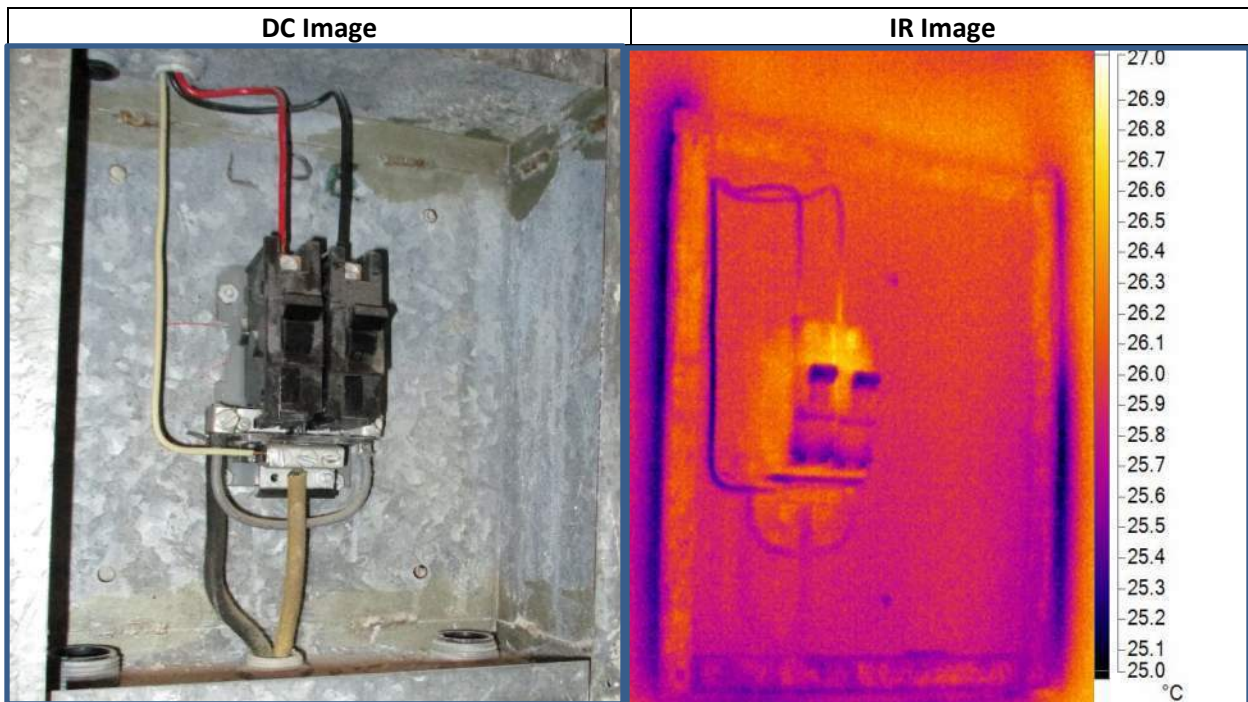
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP42-4L Circuits: 42 In Use: 42 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 2/0 THW Cu	DC1021 IR00066

Location	West Committee Room
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A00251



Application Notes: Make: Federal Pacific Model: 102F-Special Circuits: 2 In Use: 2 Voltage: 120V Current: 50A Phase: 1 Breaker Type: NA KA: 10 Wire Type: #6 THW	Safety Notes: DC1023 IR00068
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Location	West Committee Room
Description	Panel B
System	120/208 3P 4W
ID Tag Number	BCP-A00252



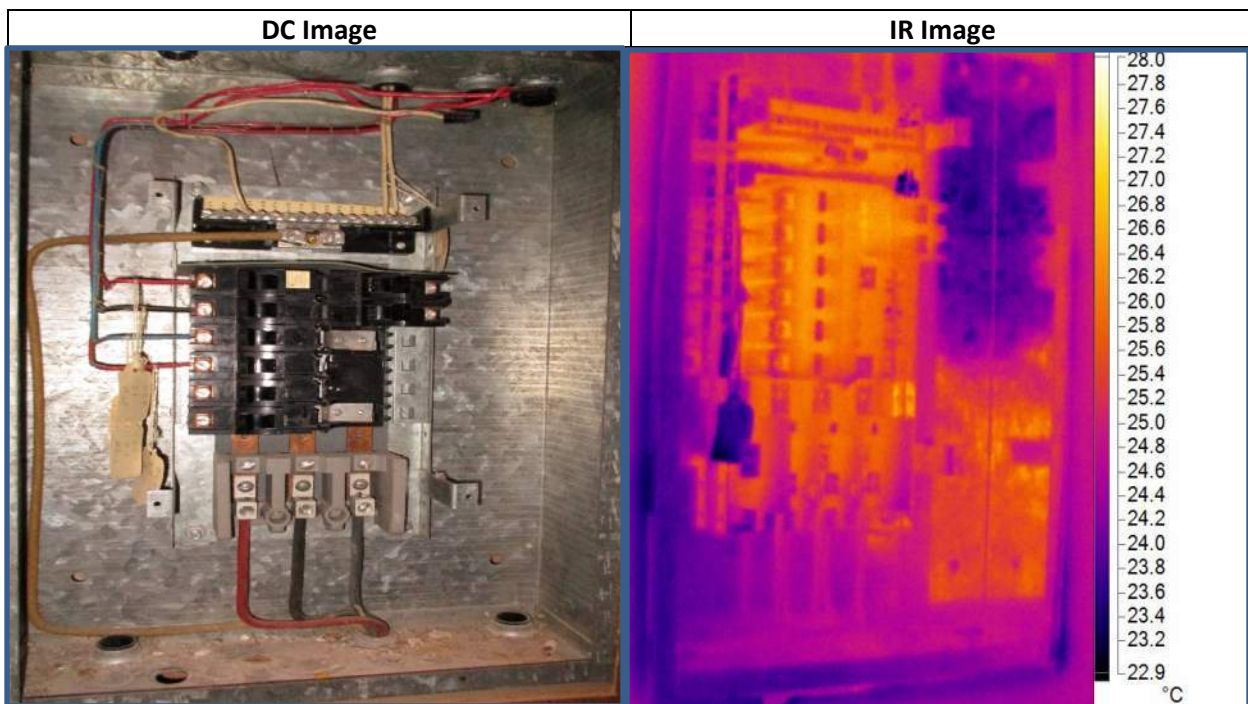
Application Notes:	Safety Notes:
Make: Federal Pacific Model: 102F-Special Circuits: 2 In Use: 2 Voltage: 120V Current: 50A Phase: 1 Breaker Type: NA KA: 10 Wire Type: #6 THW	DC1024 IR00069

Location	West Committee Room
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A00253

DC Image	IR Image
 A photograph of a grey metal electrical panel. A bright light source is visible in the center, creating a glare. To the left of the light is a circular handle. To the right is a small black label with white text that reads 'PANEL C' and a QR code. Further right is another small white label with text.	

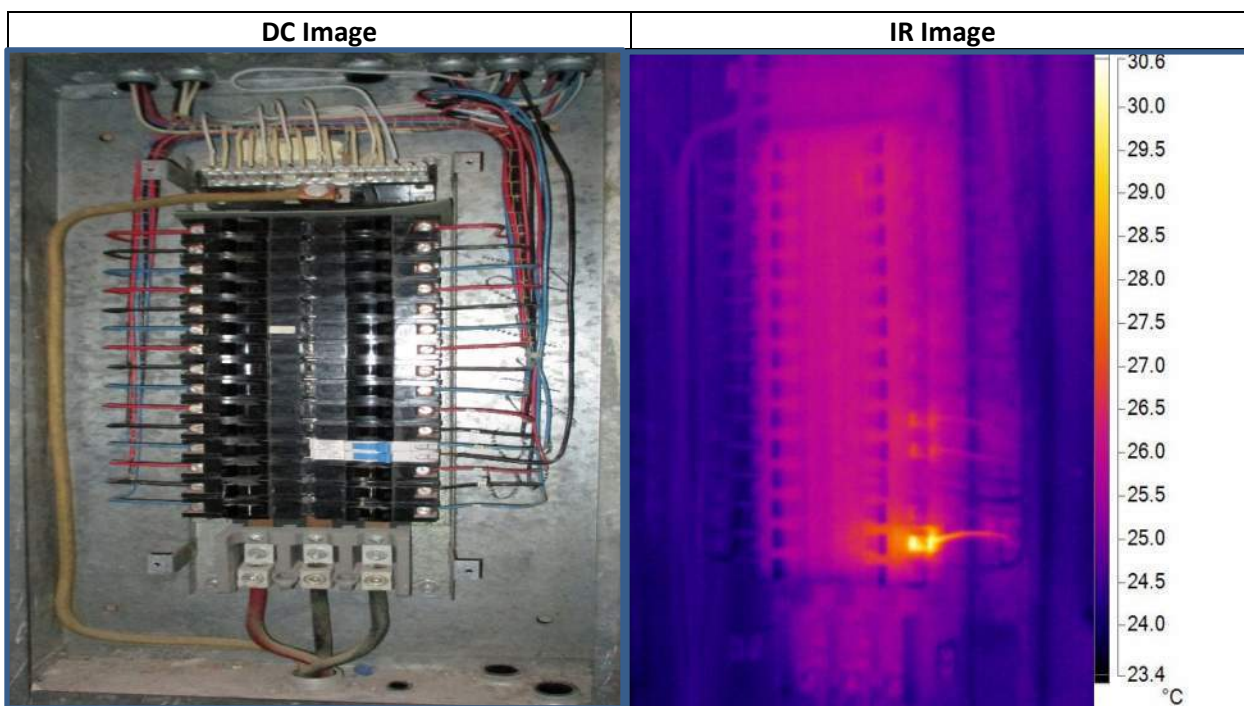
Application Notes: Make: Federal Pacific Model: NALP42-4L Circuits: 42 In Use: 42 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: U/O	Safety Notes: DC1025 IR U/O Unable to open due to server rack blocking panel
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Location	West Committee Room
Description	Panel S
System	120/208 3P 4W
ID Tag Number	BCP-A00254



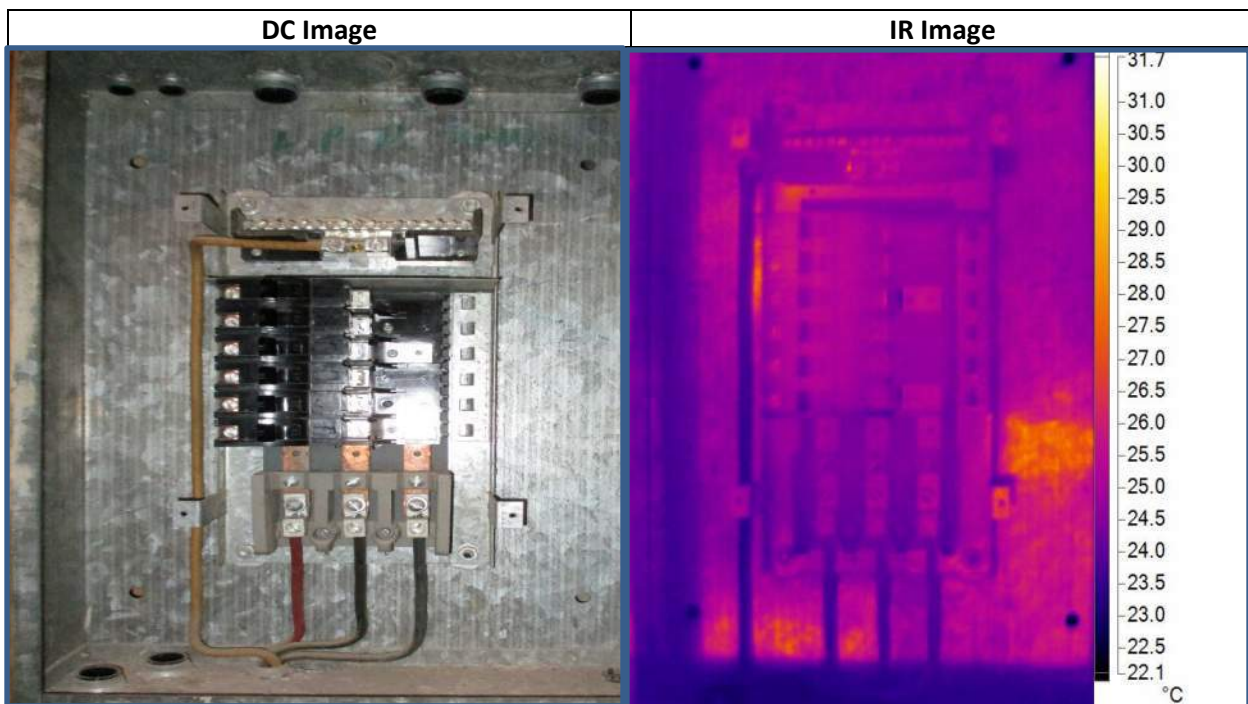
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP12-4L Circuits: 12 In Use: 8 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 THW	DC1026 IR00070

Location	West Committee Room
Description	Panel K
System	120/208 3P 4W
ID Tag Number	BCP-A00255



Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP30-4L Circuits: 30 In Use: 30 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 2/0 THW Cu	DC1027 IR00071

Location	West Committee Room
Description	Panel D
System	120/208 3P 4W
ID Tag Number	BCP-A00256

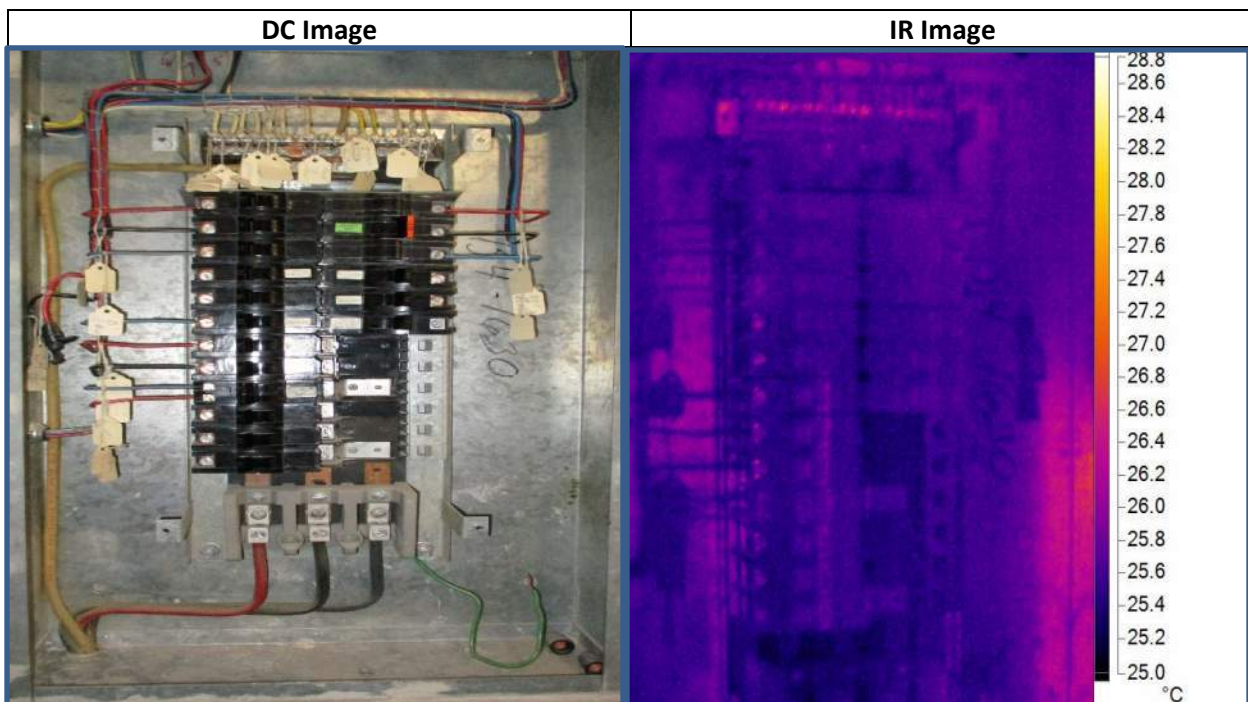


Application Notes: Make: Federal Pacific Model: NALP12-4L Circuits: 12 In Use: 6 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #6 THW	Safety Notes: DC1028 IR00072
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Section

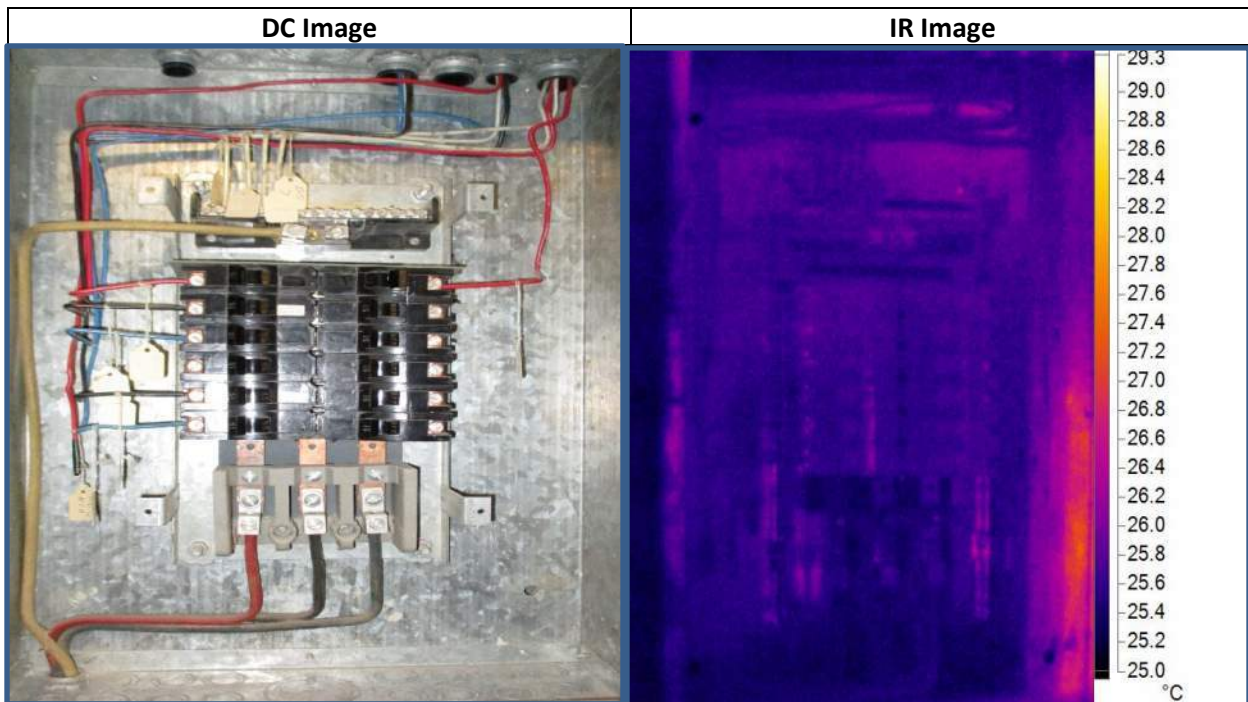
Basement

Location	Council Building Basement
Description	Panel D
System	120/208 3P 4W
ID Tag Number	BCP-A00225



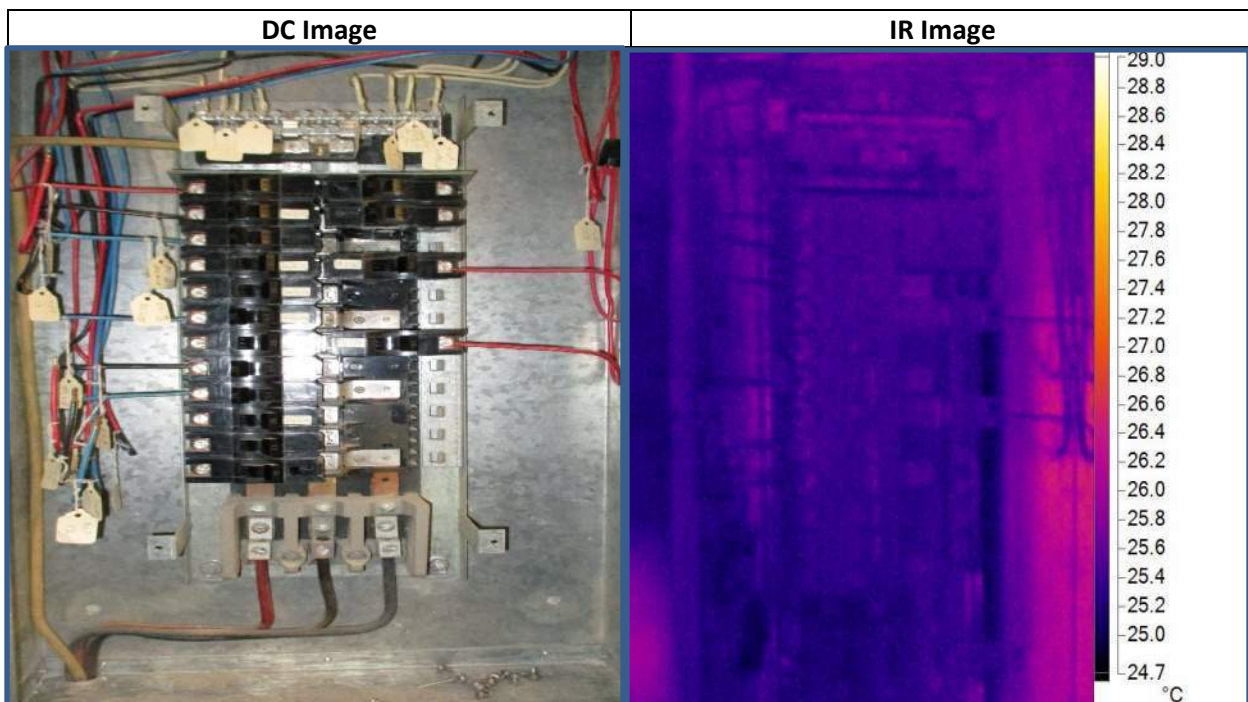
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 18 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	DC1007 IR44

Location	Council Building Basement
Description	Panel DD
System	120/208 3P 4W
ID Tag Number	BCP-A00226



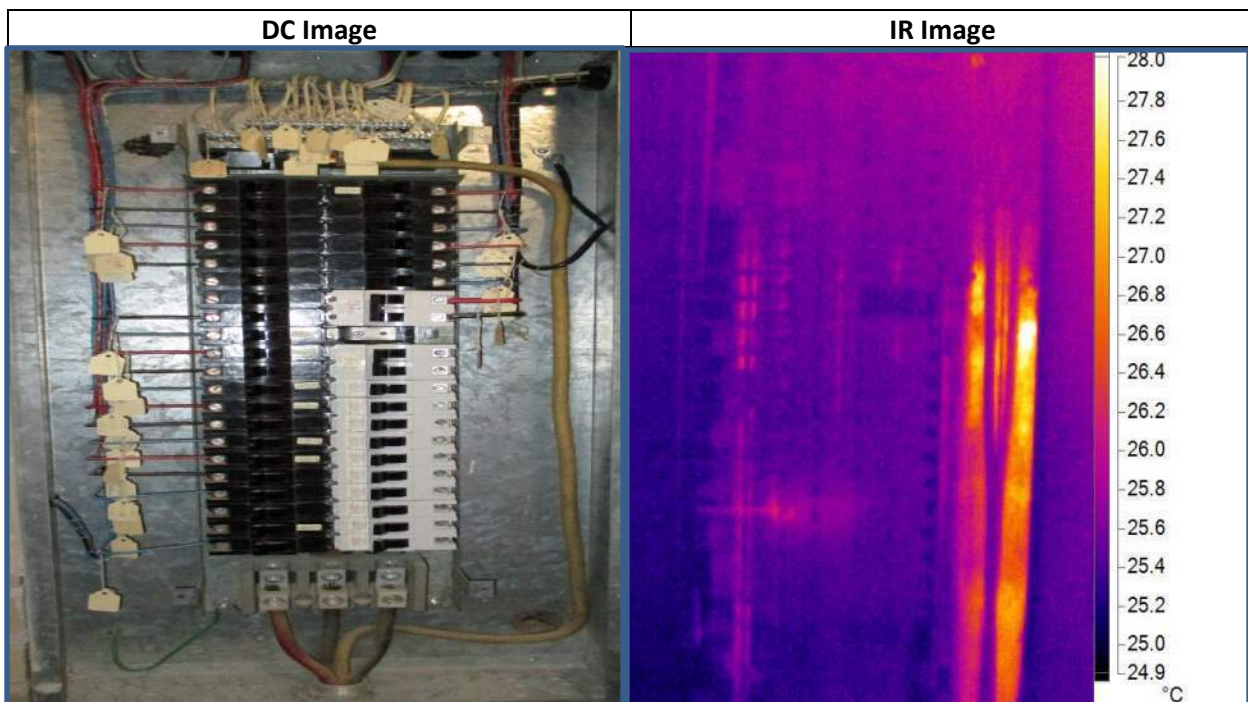
Application Notes: Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 12 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC1008 IR45
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Location	Council Building Basement
Description	Panel CC
System	120/208 3P 4W
ID Tag Number	BCP-A00227



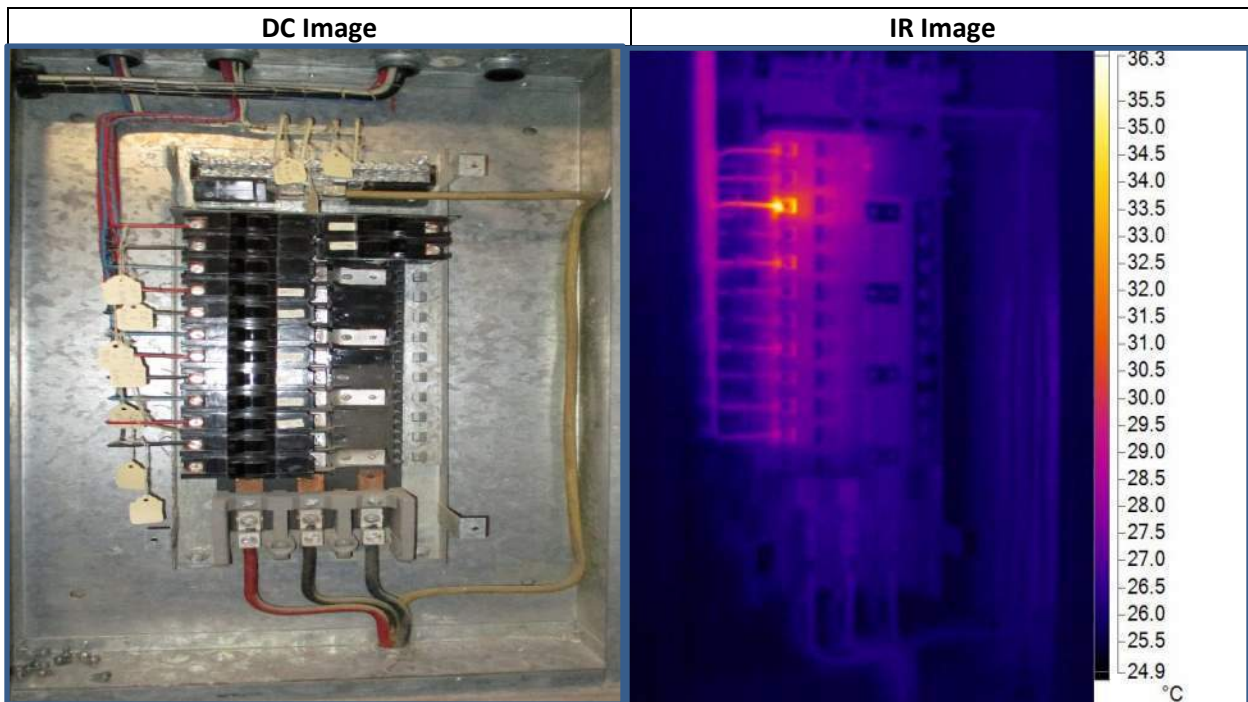
Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 16 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC1009 IR46
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Location	Council Building Basement
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A00228



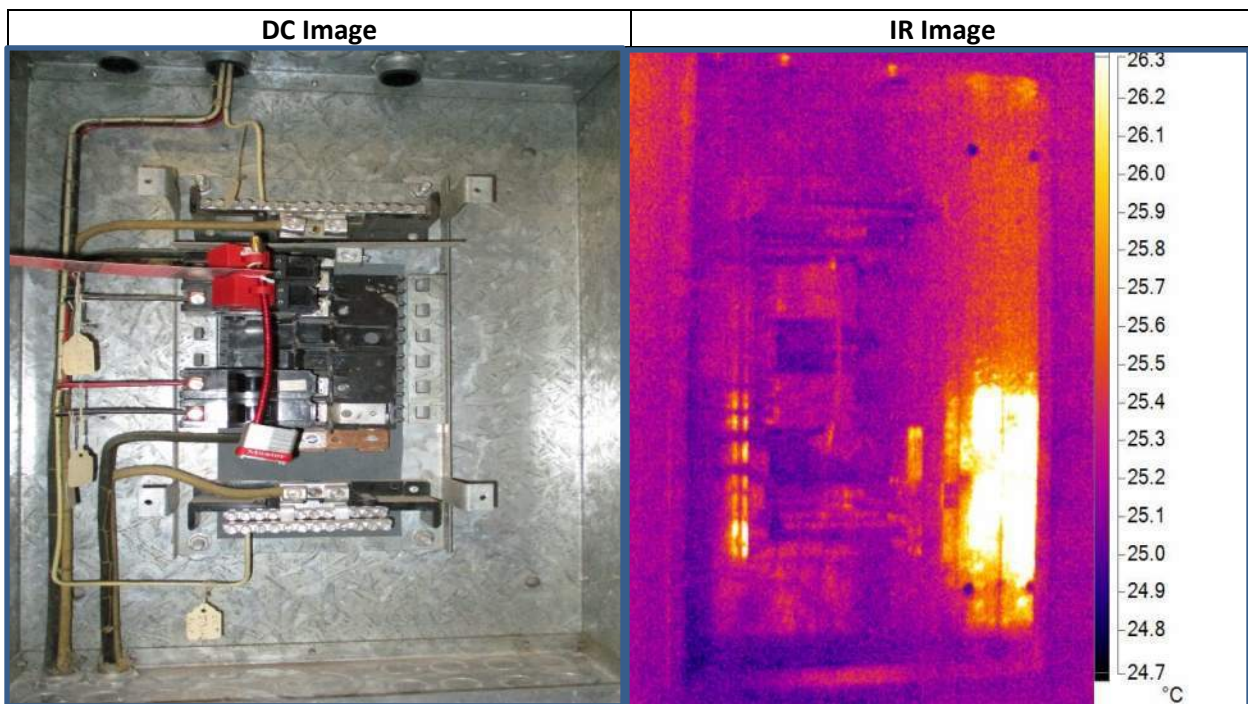
Application Notes: Make: Federal Pacific Model: NALP 42-4L Circuits: 42 In Use: 41 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #1 TW Cu	Safety Notes: DC1010 IR47
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Location	4747Councel Building Basement
Description	Panel G
System	120/208 3P 4W
ID Tag Number	BCP-A00229



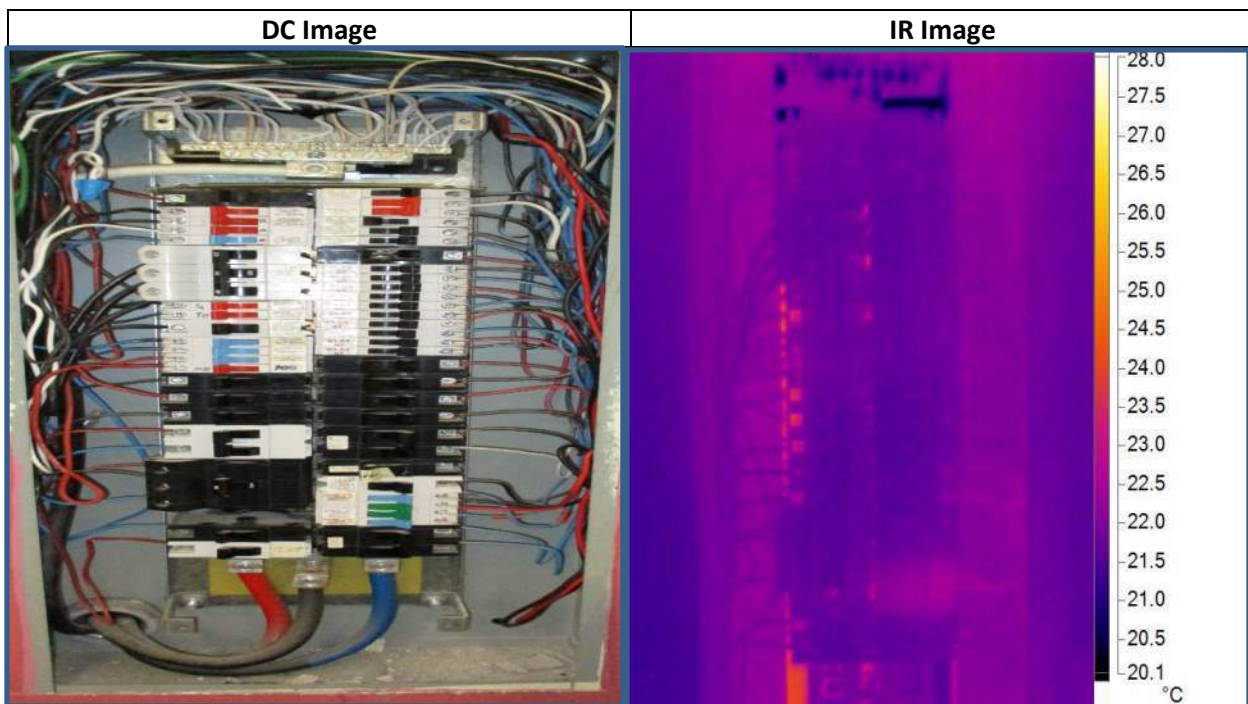
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 14 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	DC1011 IR48

Location	Council Building Basement
Description	Panel JA Panel JB
System	120/208 3P 4W
ID Tag Number	BCP-A00230



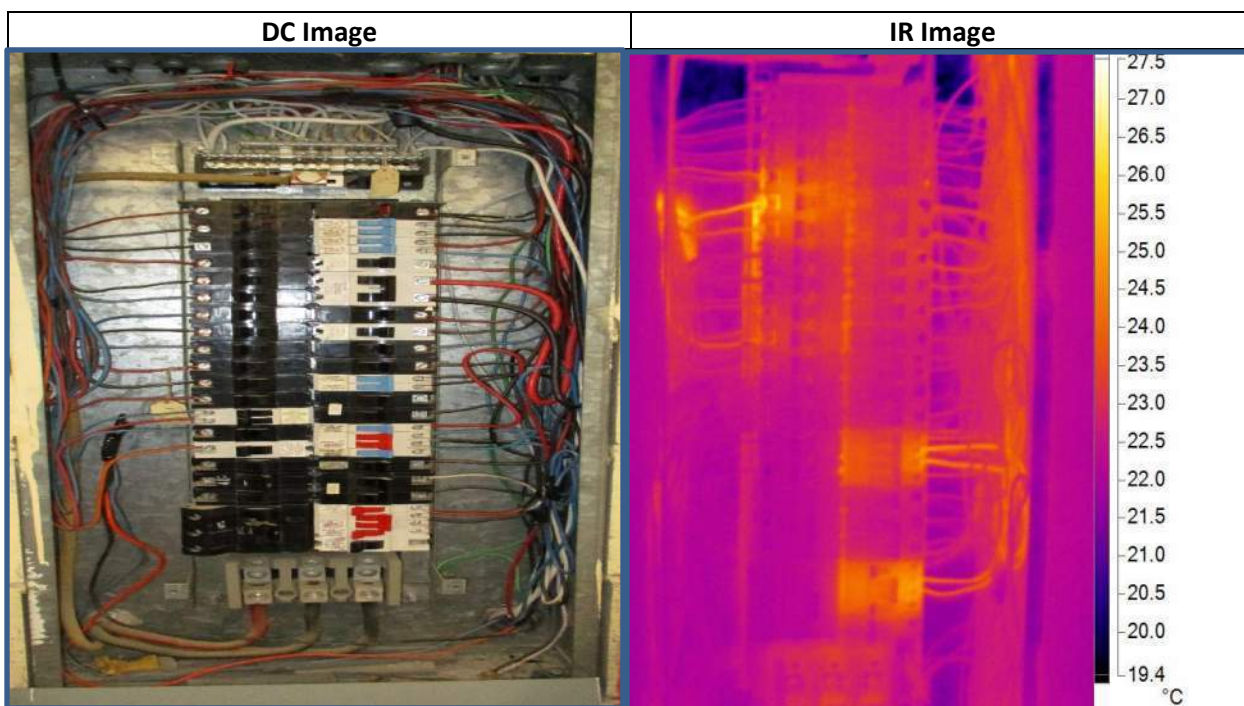
Application Notes: Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 4 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #4 TW Cu	Safety Notes: DC1012 IR49
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Location	Council Building Mailroom
Description	Panel AA
System	120/208 3P 4W
ID Tag Number	BCP-A00239



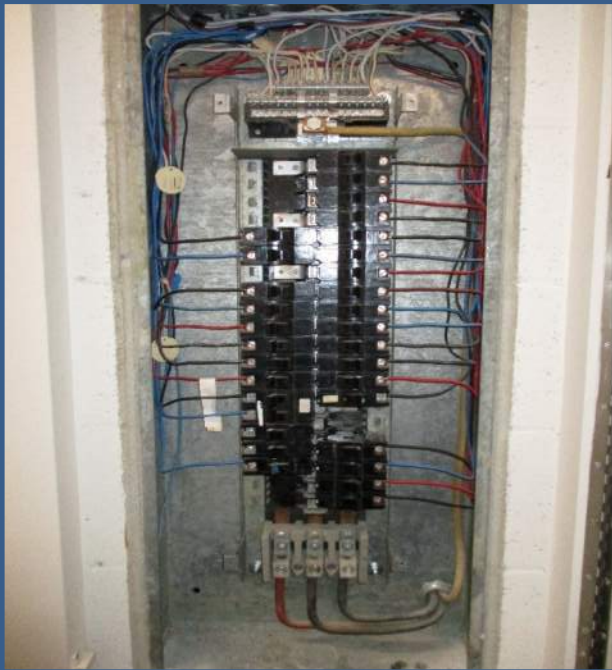
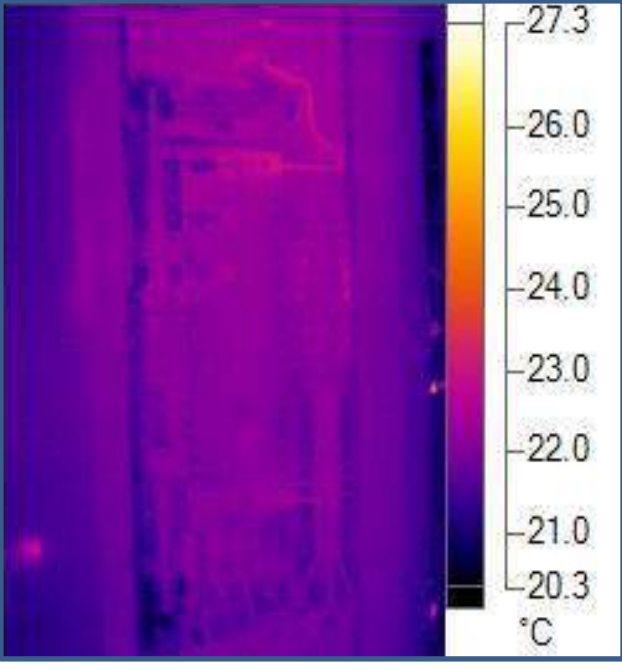
Application Notes: Make: Federal Pacific Model: NALP 42-4L Circuits: 42 In Use: 41 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 2/0 Teck Cu	Safety Notes: DC1013 IR50
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Location	Council Building Mailroom
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A002



Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 42-4L Circuits: 42 In Use: 42 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #1 TW Cu	DC1014 IR51

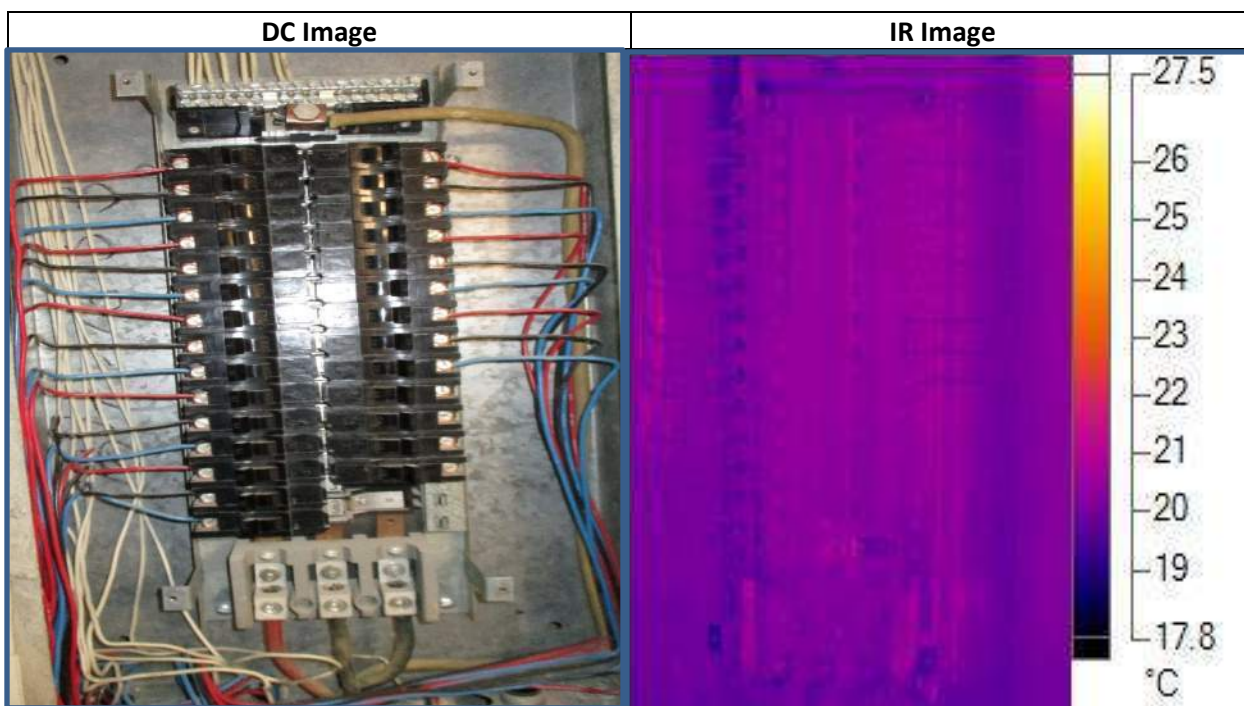
Location	Council Building Basement
Description	Panel B
System	120/208 3P 4W
ID Tag Number	BCP-A00279

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: NALP 42-4L Circuits: 42 In Use: 31 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #3 TW Cu	Safety Notes: DC1059 IR1395

Section

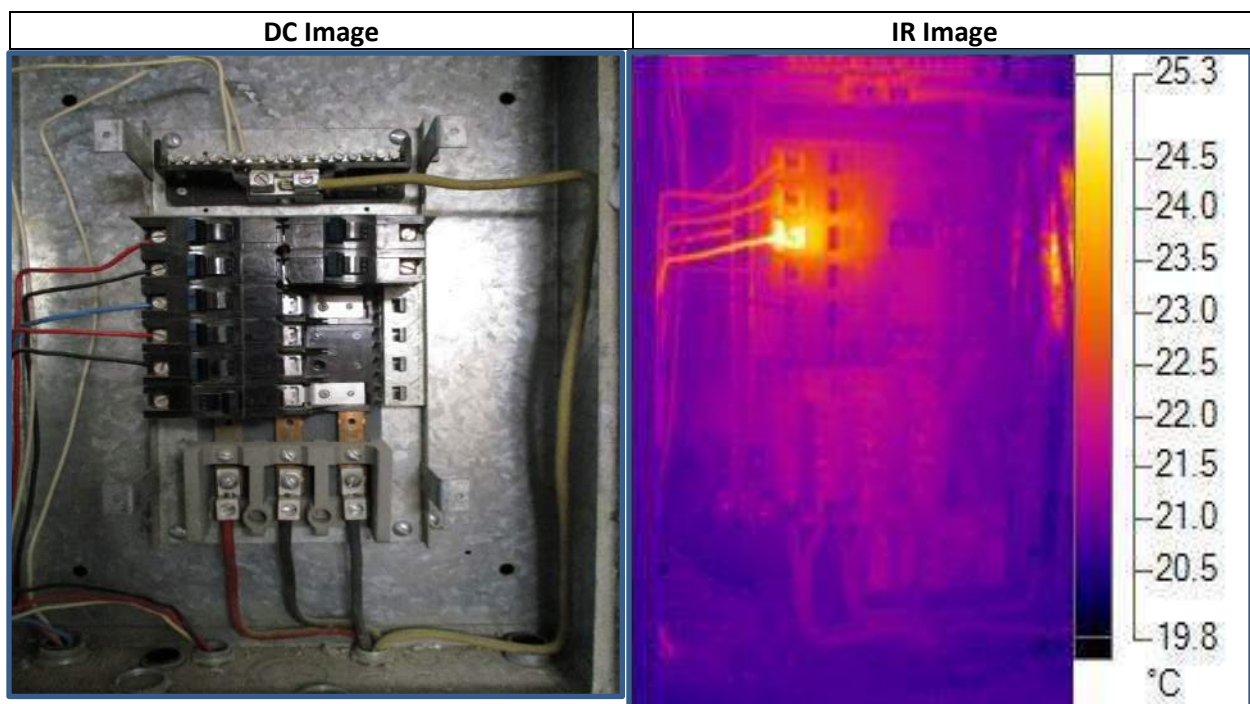
Council
Meeting RM

Location	West Meeting Hall
Description	Panel L
System	120/208 3P 4W
ID Tag Number	BCP-A00274



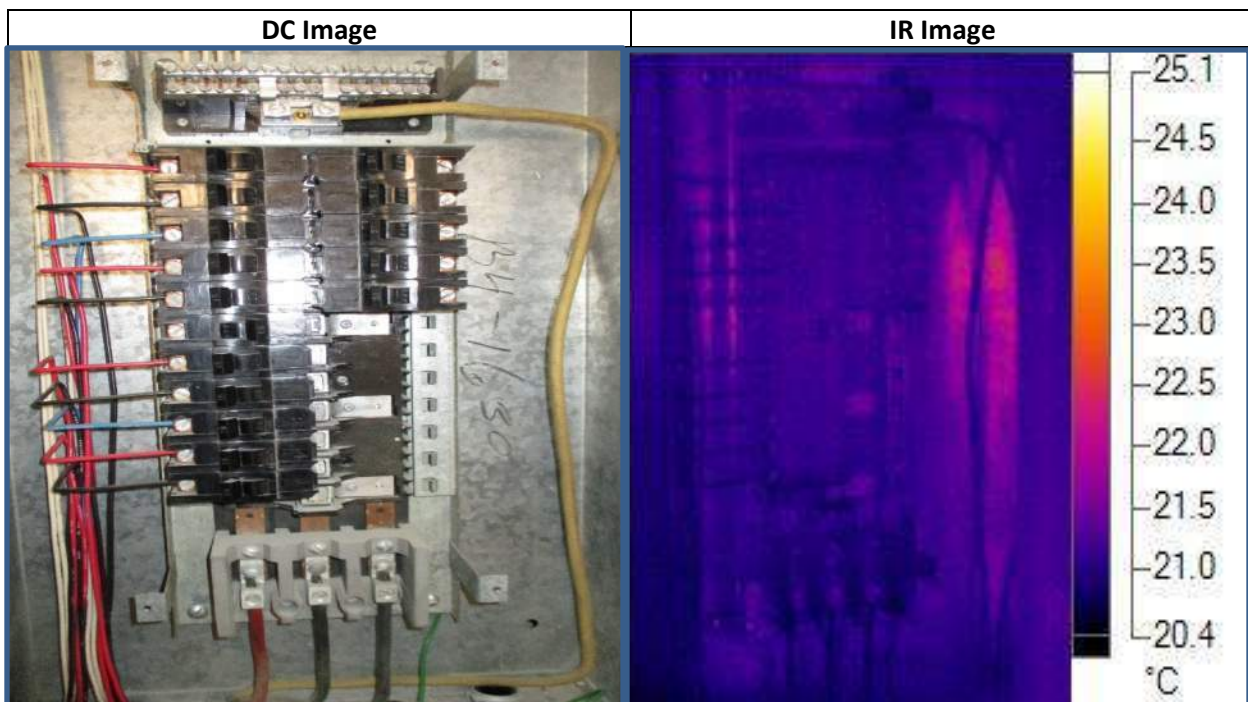
Application Notes: Make: Federal Pacific Model: NALP 30-4L Circuits: 30 In Use: 28 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 1 TW 75 Cu	Safety Notes: DC1056 IR1390
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Location	West Meeting Hall
Description	Panel M
System	120/208 3P 4W
ID Tag Number	BCP-A00275



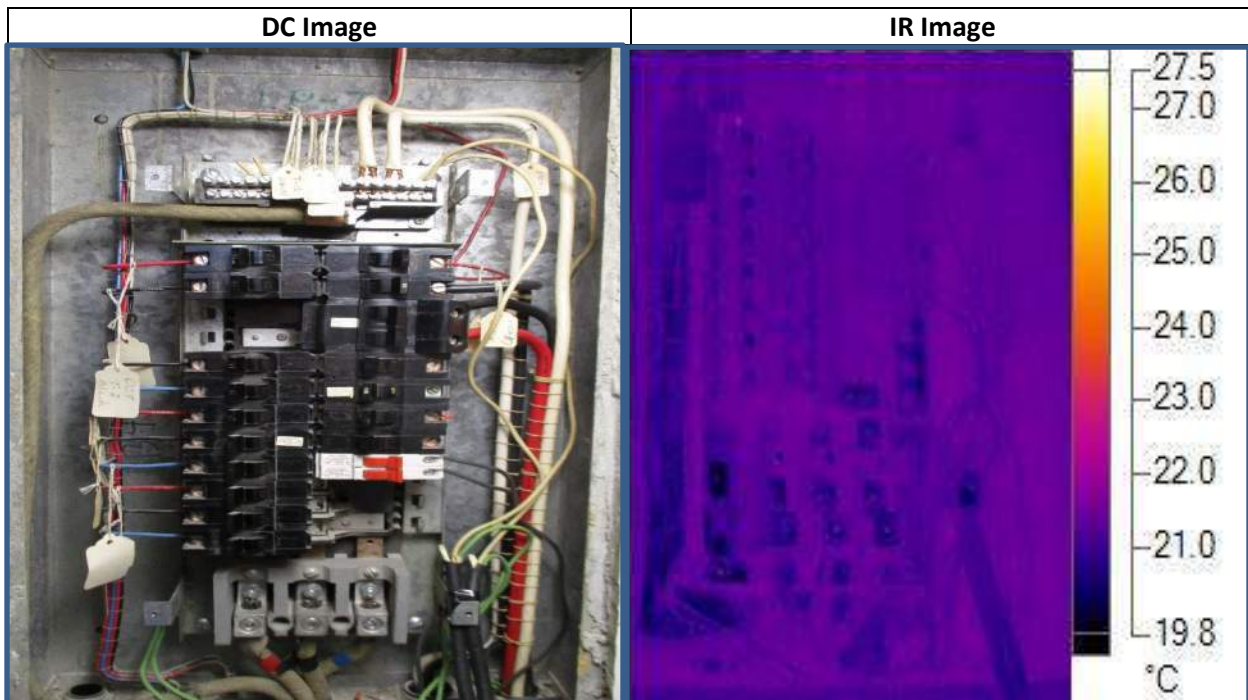
Application Notes: Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 8 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 6 TW 75 Cu	Safety Notes: DC1057 IR1391

Location	West Meeting Hall
Description	Panel N
System	120/208 3P 4W
ID Tag Number	BCP-A00276



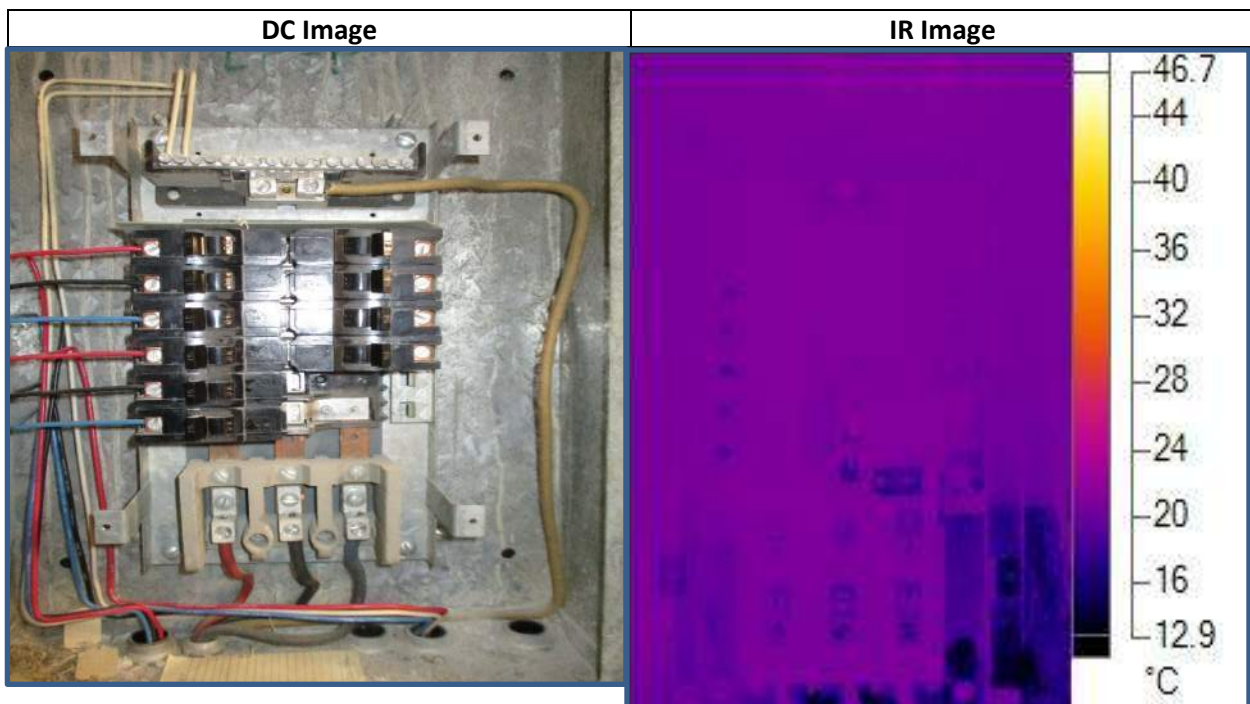
Application Notes: Make: Federal Pacific Model: NALP24-4L Circuits: 24 In Use: 18 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 4 TW75 Cu	Safety Notes: DC1058 IR1392
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Location	West Meeting Hall
Description	Panel T
System	120/208 3P 4W
ID Tag Number	BCP-A00278



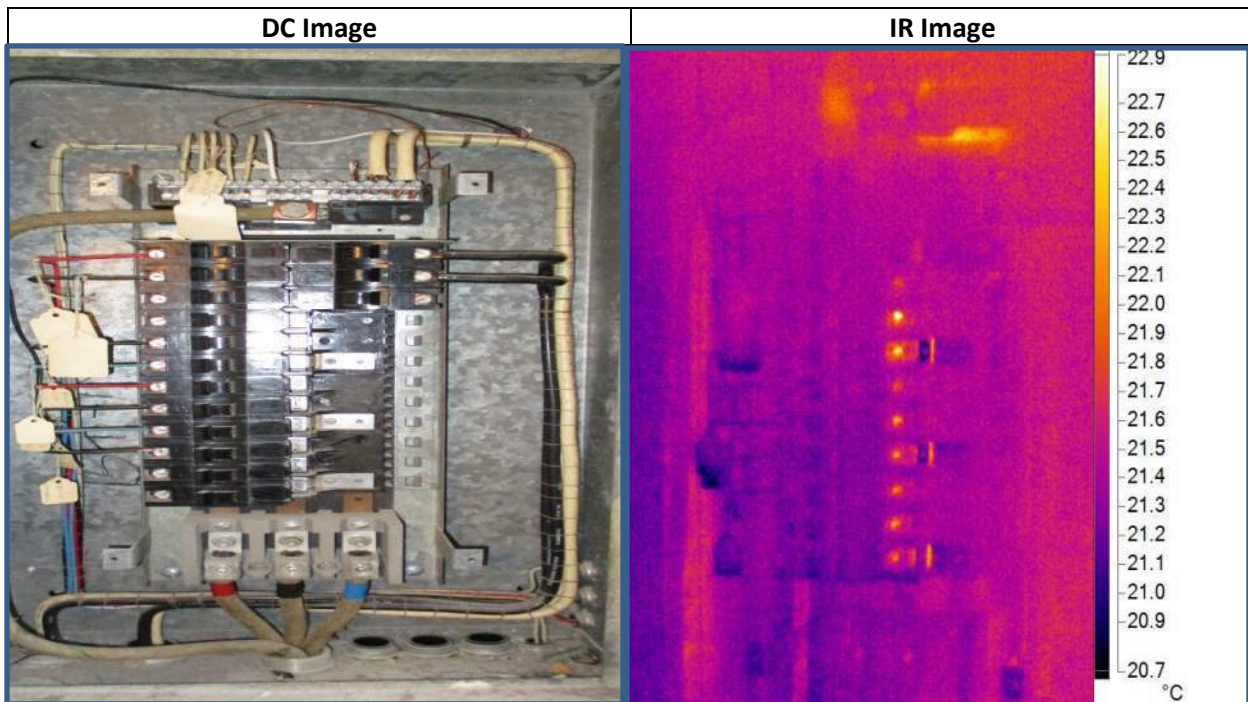
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 21 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: 1/0 TW Cu	DC1062 IR1397

Location	West Meeting Hall
Description	Panel P
System	120/208 3P 4W
ID Tag Number	BCP-A00277



Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 10 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 8 TW75 Cu	DC1061 IR1396

Location	East Meeting Hall
Description	Panel U
System	120/208 3P 4W
ID Tag Number	BCP-A00250

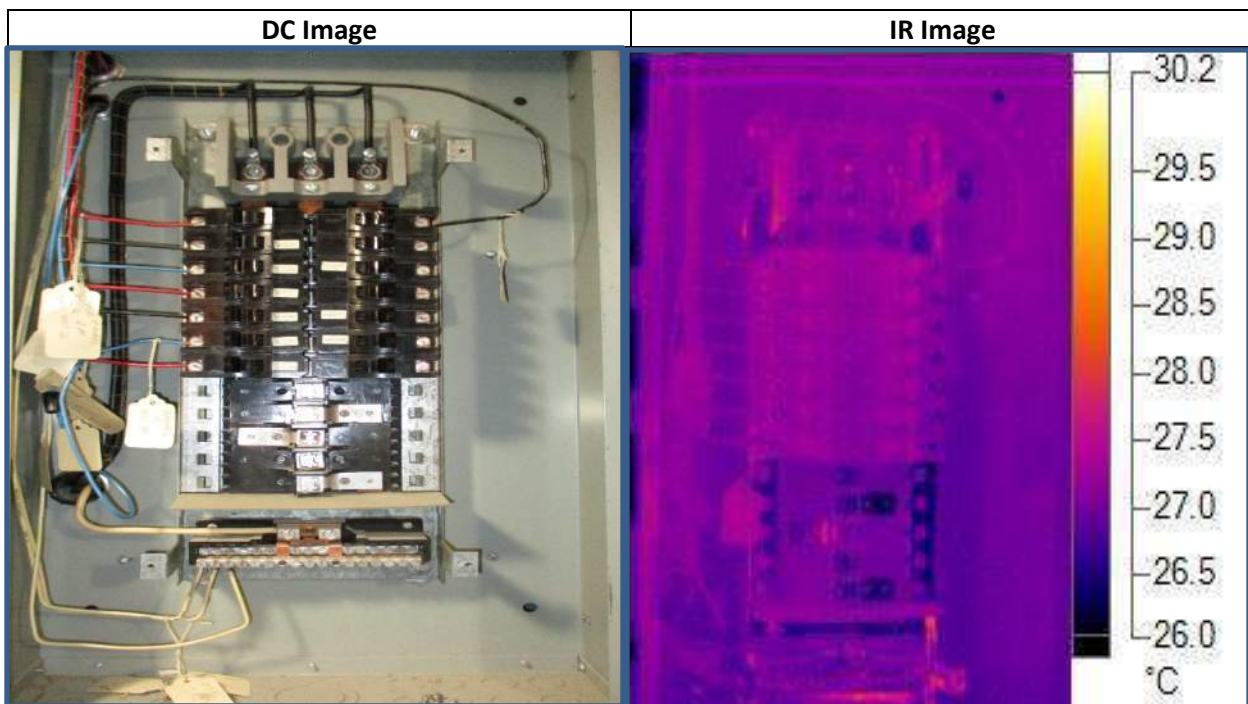


Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 15 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 2/0 THW Cu	Safety Notes: DC1022 IR00067
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Section

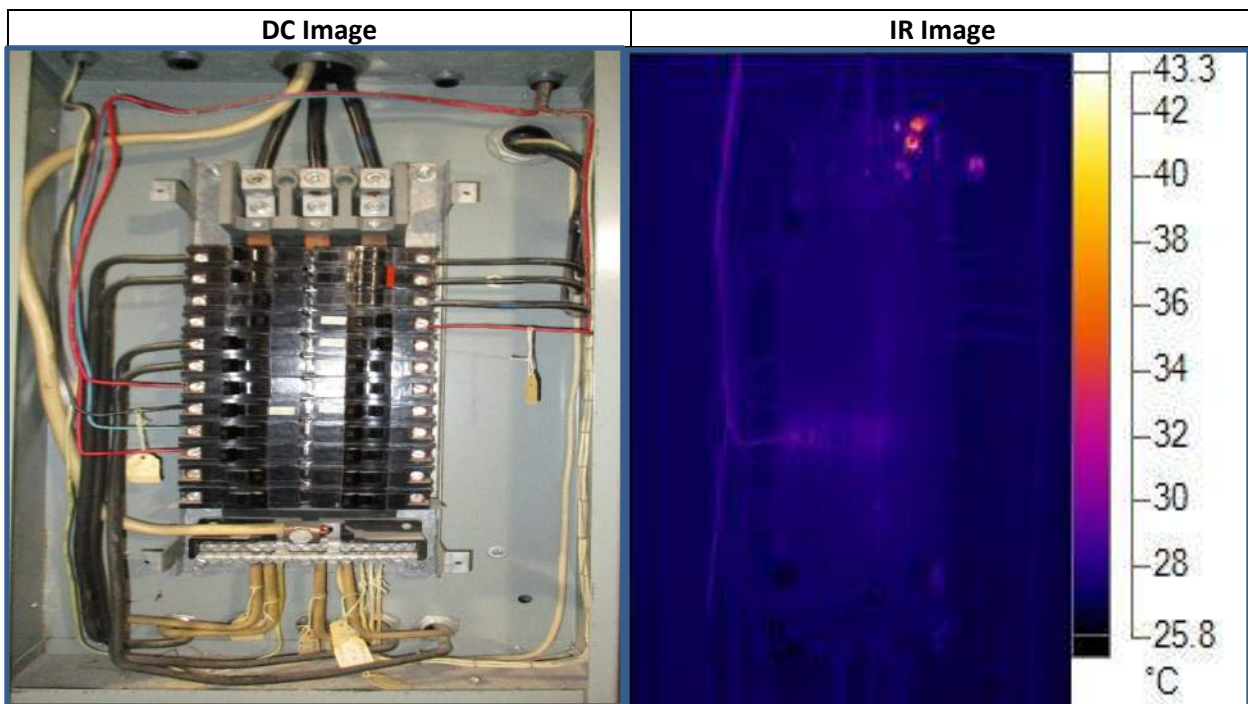
Sub Basement
Distribution A

Location	Distribution A
Description	Panel B
System	120/208V 3P 4W
ID Tag Number	BCP-A00206



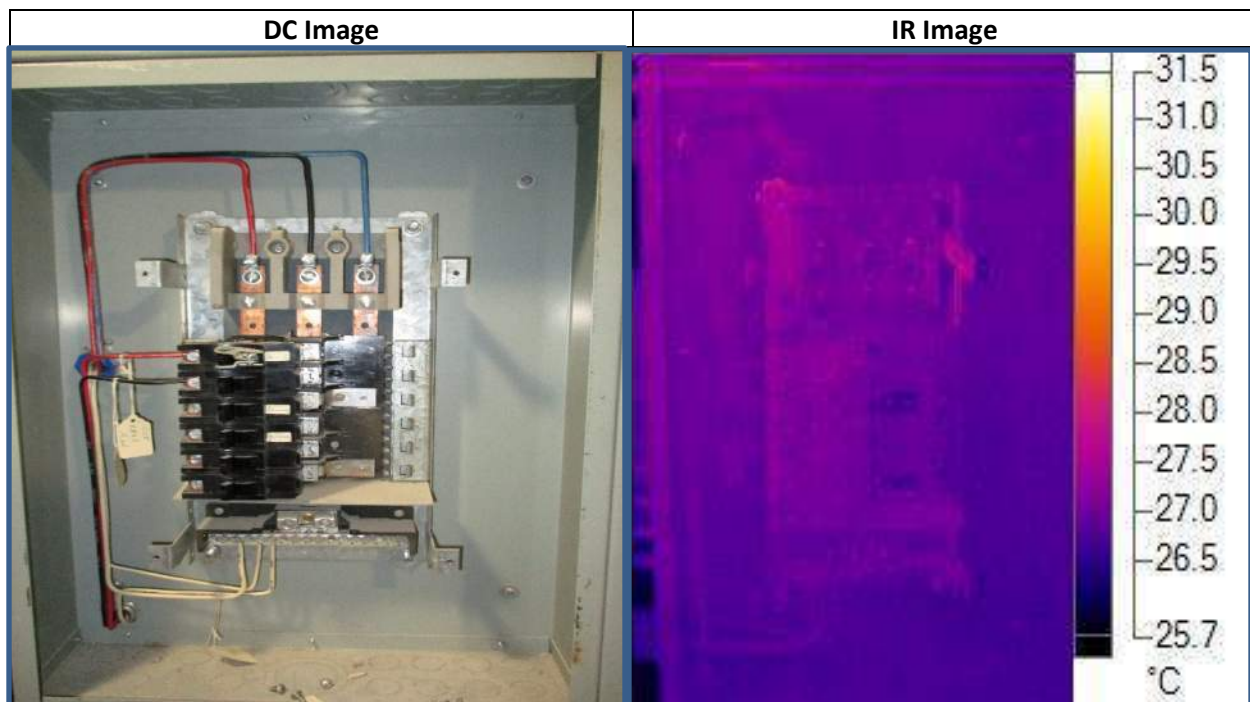
Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 22 In Use: 14 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #8 TW	Safety Notes: DC987 IR1268
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Location	Distribution A
Description	Panel A
System	120/208V 3P 4W
ID Tag Number	BCP-A00207



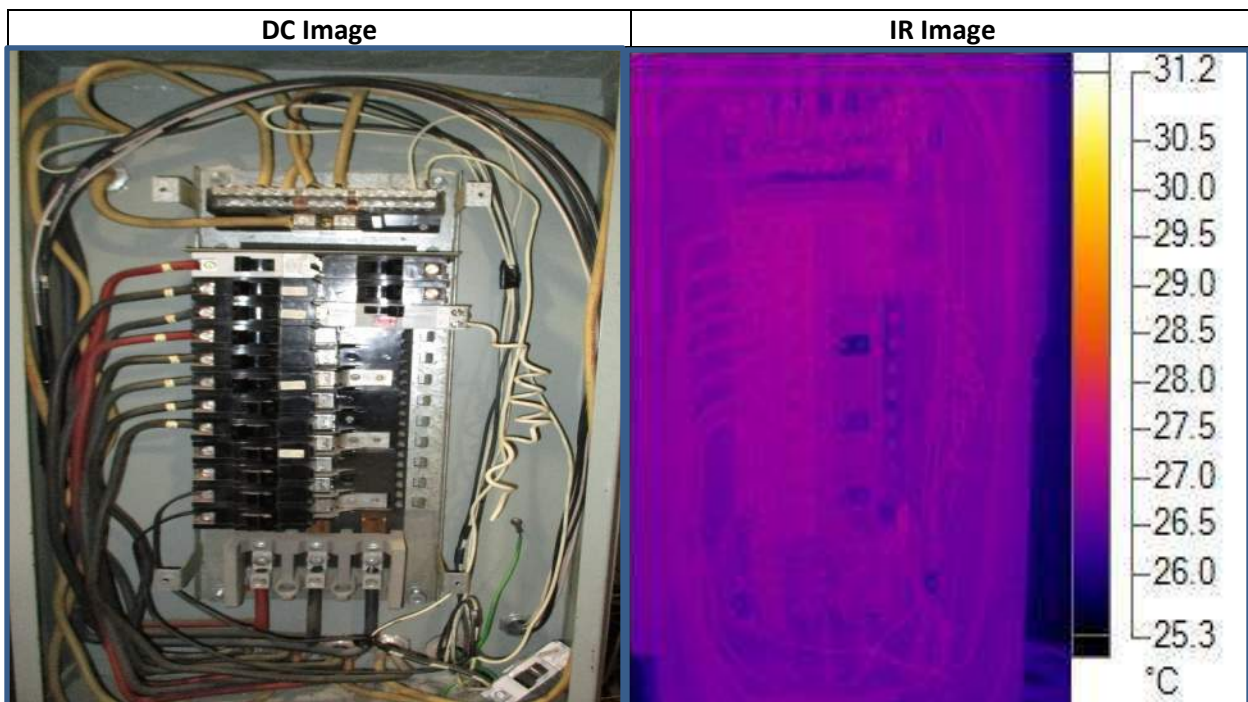
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP24-4L Circuits: 22 In Use: 22 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: 1/0 TWH Cu	DC988 IR1269

Location	Distribution A
Description	Panel EXX
System	120/208V 3P 4W
ID Tag Number	BCP-A00208



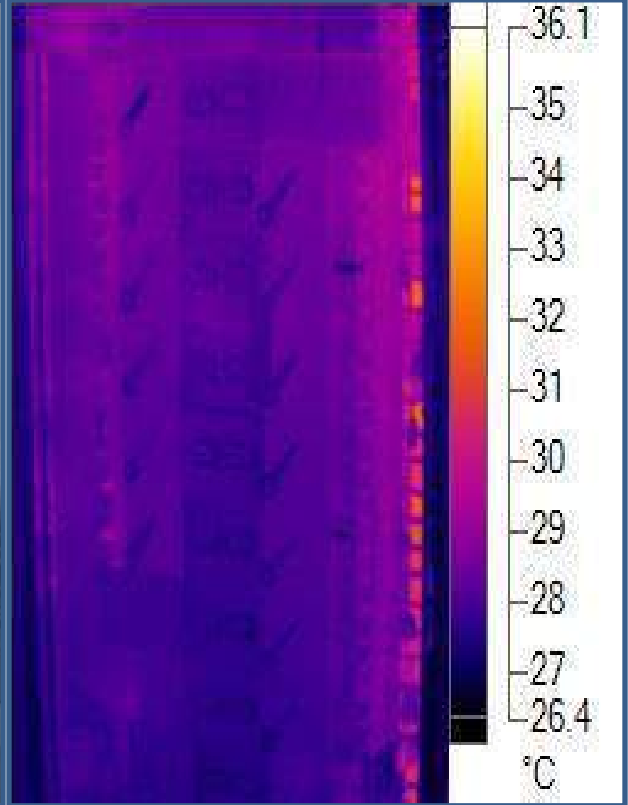
Application Notes:	Safety Notes:
Make: Federal Pacific Model: NALP 12-4L Circuits: 12 In Use: 6 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #10 TW	DC989 IR1270

Location	Distribution A
Description	Panel EE
System	120/208V 3P 4W
ID Tag Number	BCP-AA00209

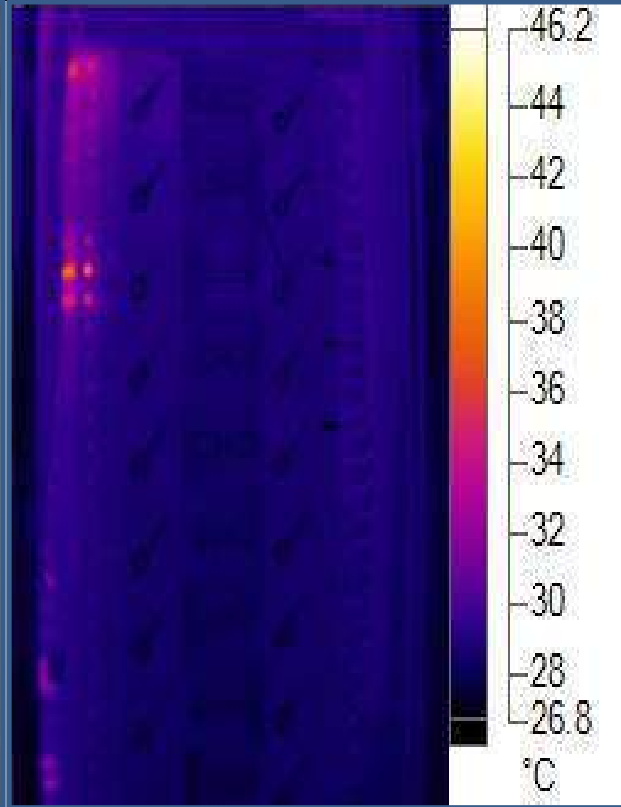


Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 15 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #3 RHH Cu	Safety Notes: DC990 IR1271
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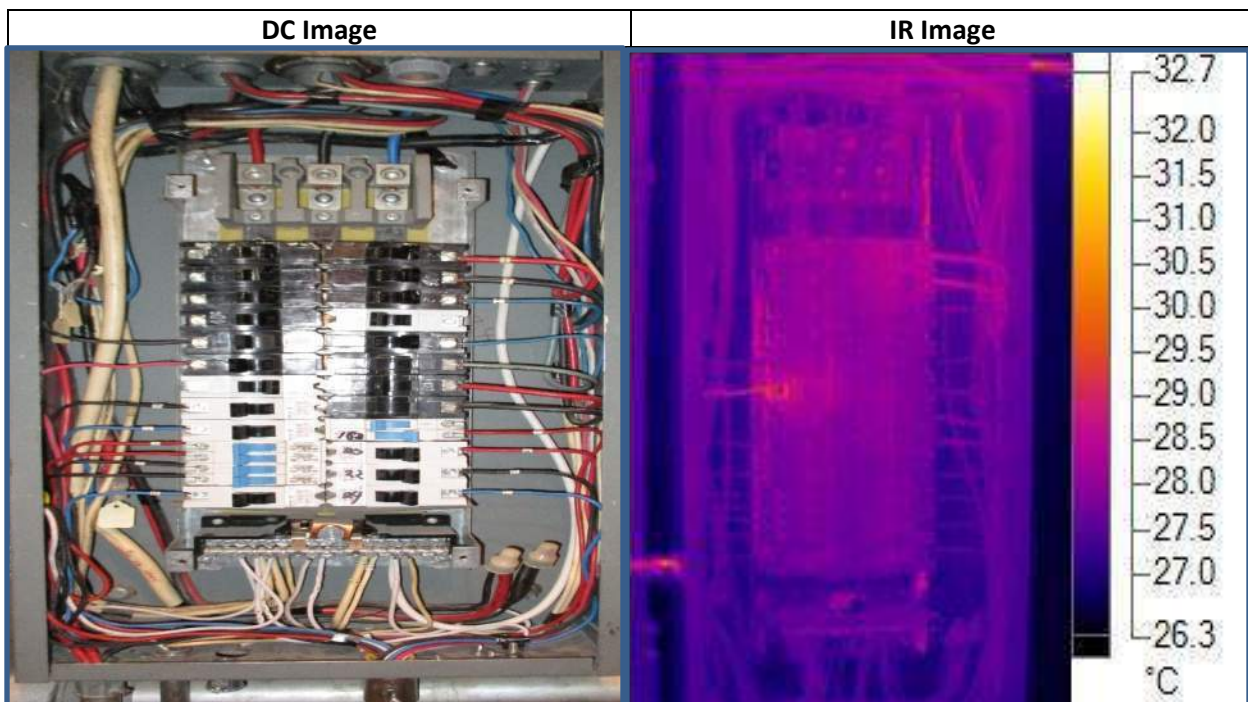
Location	Distribution A
Description	Distribution A
System	120/208V 3P 4W
ID Tag Number	DP-A00210

DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: CDP-R Voltage: 120/208V Current: 600A Phase: 3 Main Breaker: 1200A Breaker Type: HFS Wire Type: 5" X 1/4" Buss Per Phase	Safety Notes: DC991 IR1272 Breaker Trip settings: N/A

Location	Distribution A
Description	Distribution A
System	120/208V 3P 4W
ID Tag Number	DP-A00211

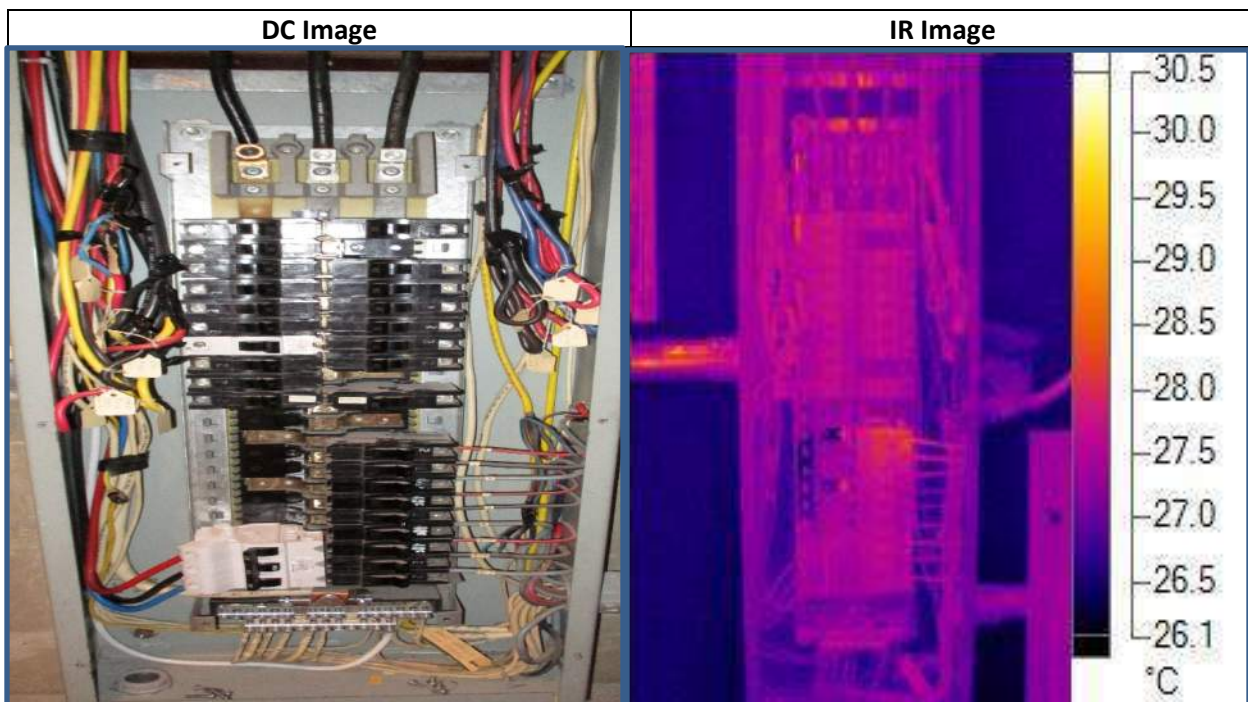
DC Image	IR Image
	
Application Notes: Make: Federal Pacific Model: CDP-R Voltage: 12/2080V Current: 600A Phase: 3 Main Breaker: 1200A Breaker Type: HFS Wire Type: 5" X 1/4" Buss Per Phase	Safety Notes: DC992 IR1273 Breaker Trip settings: N/A

Location	Distribution A
Description	Panel D
System	120/208V 3P 4W
ID Tag Number	BCP-A00212



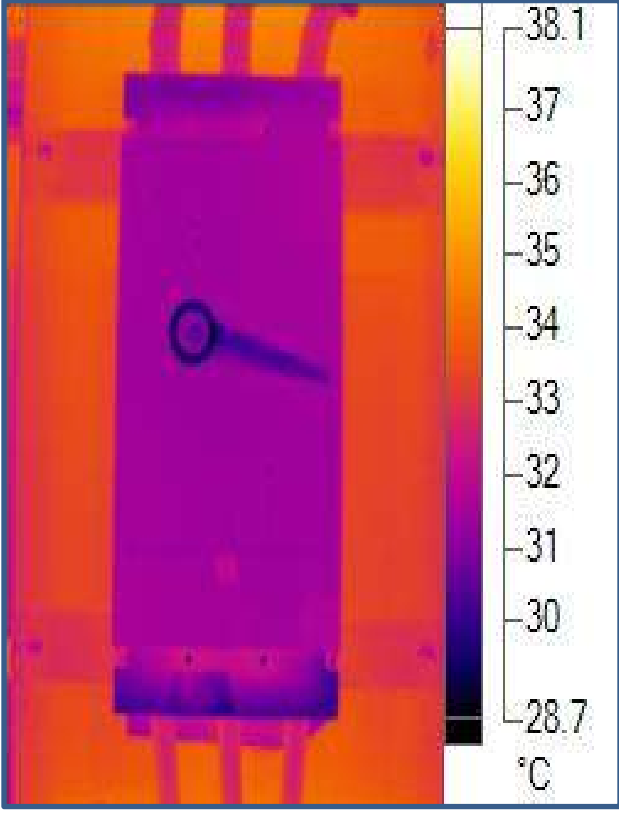
Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 24 In Use: 24 Voltage: 120/208V Current: 100A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #6 TW Cu	Safety Notes: DC993 IR1274
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Location	Distribution A
Description	Panel C
System	120/208V 3P 4W
ID Tag Number	BCP-A00213



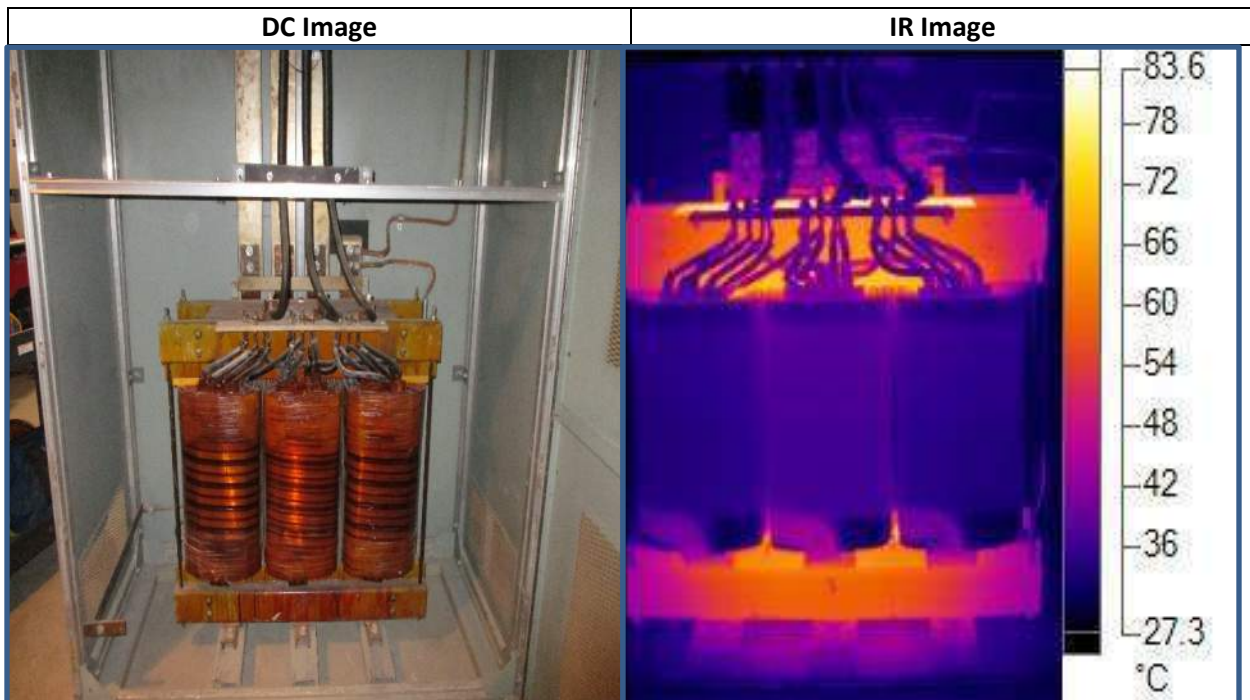
Application Notes: Make: Federal Pacific Model: NALP 24-4L Circuits: 42 In Use: 30 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: NA KA: 10 Wire Type: #2 R75 Cu	Safety Notes: DC994 IR1275
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Location	Distribution A
Description	Distribution A Part B
System	600V 3P 3W
ID Tag Number	MCCB-A00214

DC Visual Image Number	IR Visual Image Number
995	1276
	

Application Notes:	Safety Notes:
Make: Federal Pacific Model: FX9951-3 Voltage: 600V Current: 500A Breaker Type: N/A KA: N/A	Breaker Trip Settings LTN/A STN/A INSTN/A GFN/A

Location	Distribution A
Description	Distribution A Part B
System	600: 120/208V 3P 4W 350KVA
ID Tag Number	TRD-A00215

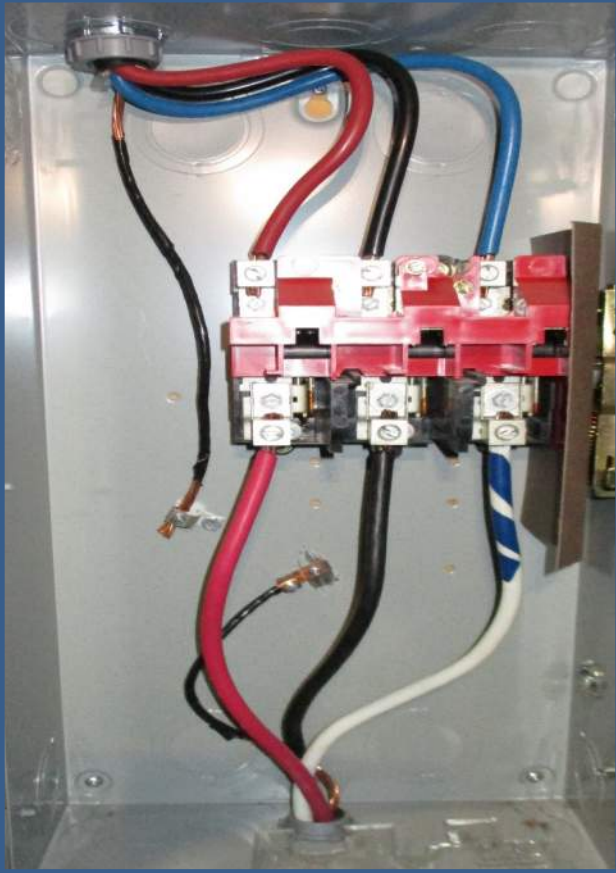


Application Notes:	Safety Notes:
Make: Federal Pacific Model: DRY Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 350 Impedance: 2.27 %Z Phase: 3 Primary Wire: 300 KCMIL TW Secondary Wire: 4" X 1/4" Buss Per Phase	DC996 IR1277

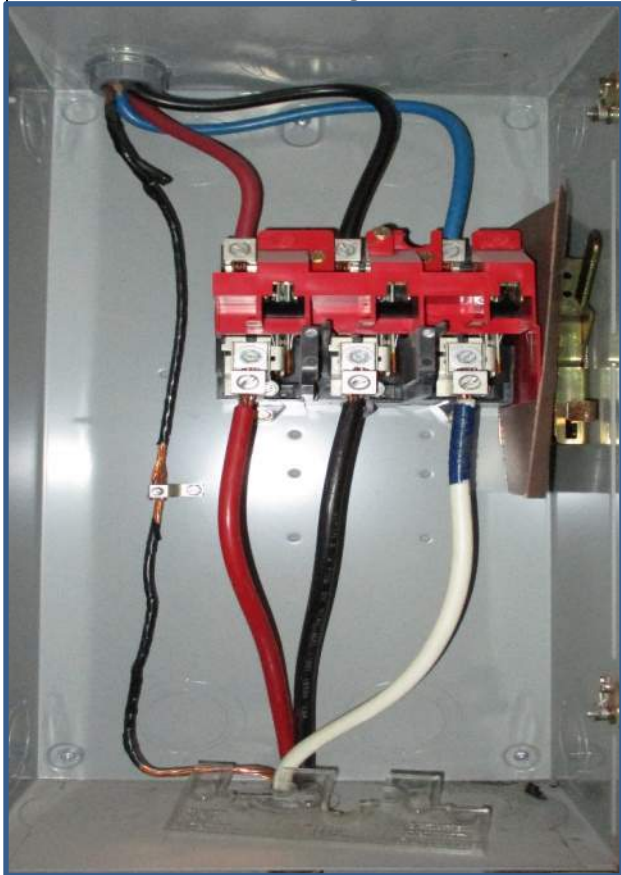
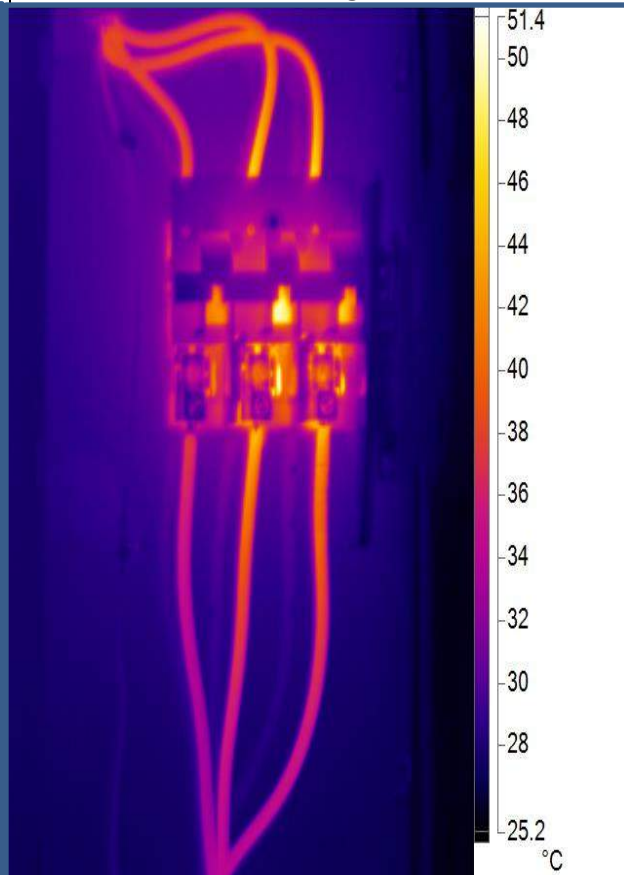
Section

Sub Basement
Fan Room

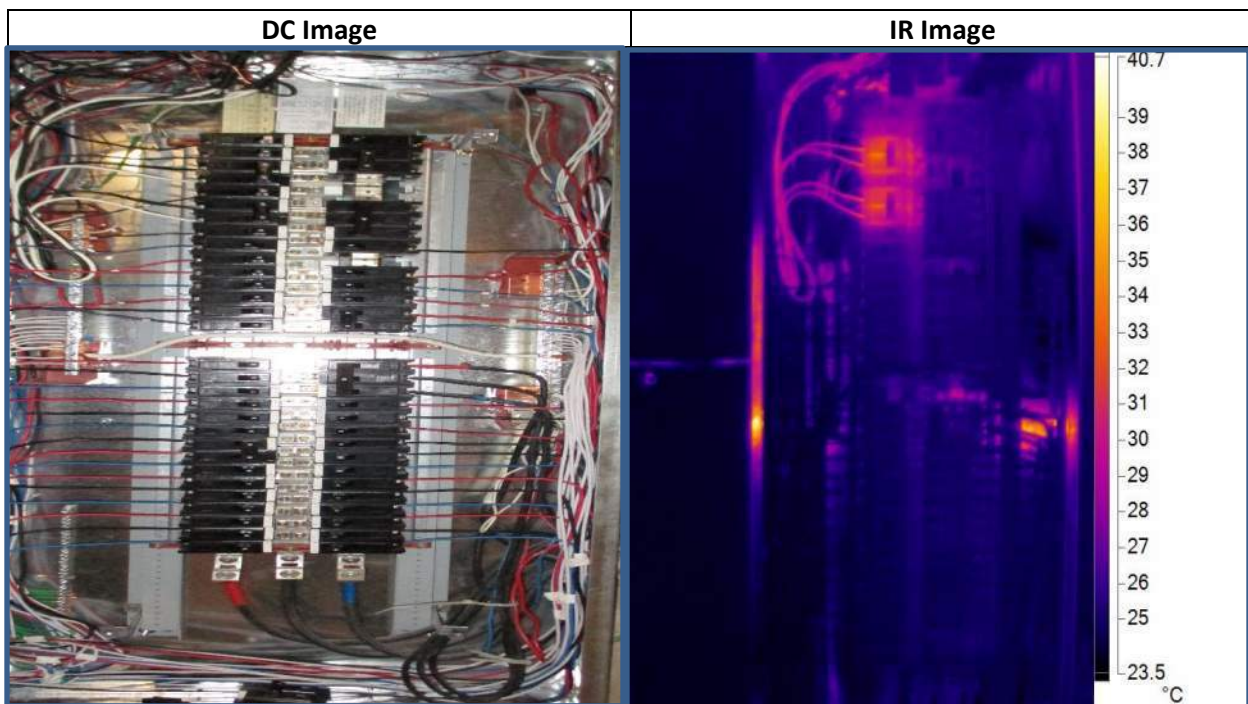
Location	Fan Room
Description	Humidifier
System	600V 3P 3W
ID Tag Number	DISC-A00216

DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: IHD363NF Voltage: 600V Current: 100A Breaker/Fuse Type: N/A Wire Type: #3 Teck 90	Safety Notes: DC997 IR52

Location	Fan Room
Description	Humidifier
System	600V 3P 3W
ID Tag Number	DISC-A00219

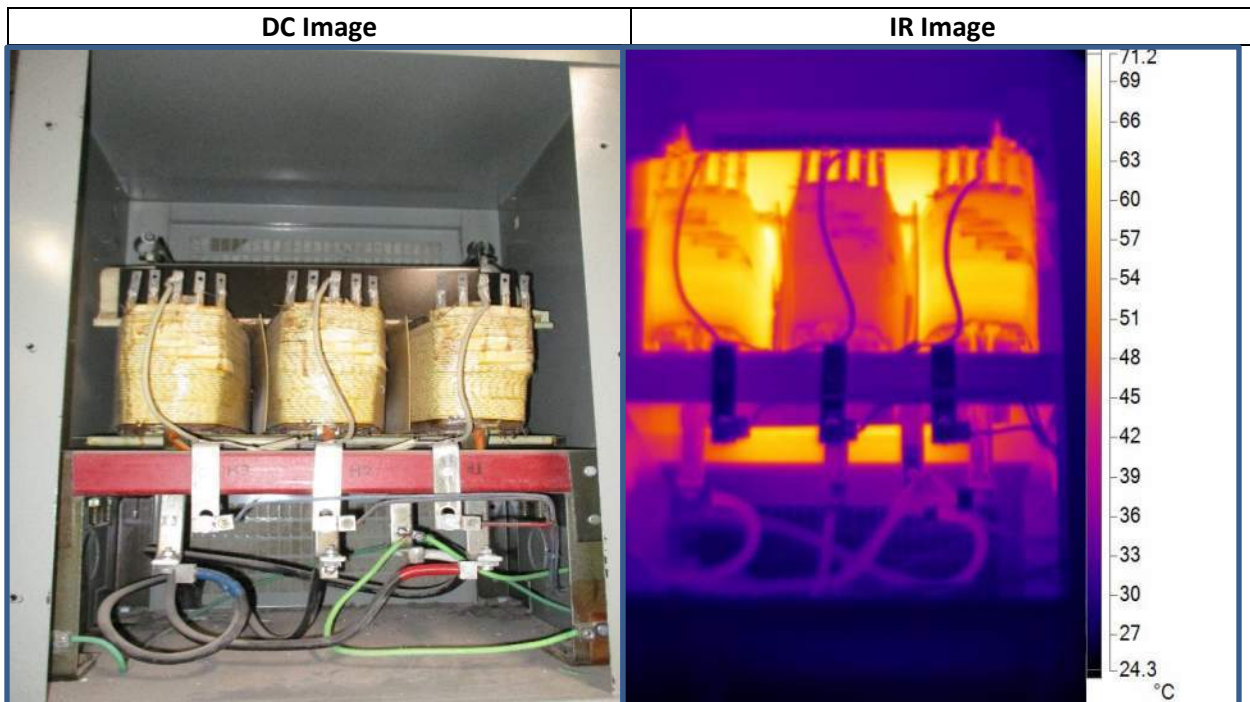
DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: IHD363NF Voltage: 600V Current: 100A Breaker/Fuse Type: N/A Wire Type: #3 Teck 90	Safety Notes: DC999 IR54

Location	Fan Room
Description	Panel EM-3
System	120/208V 3P 4W
ID Tag Number	BCP-A00220



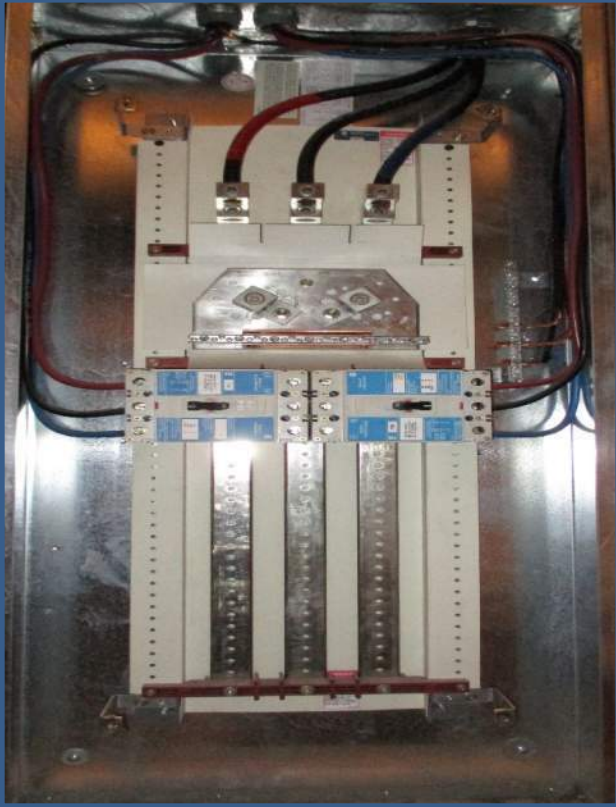
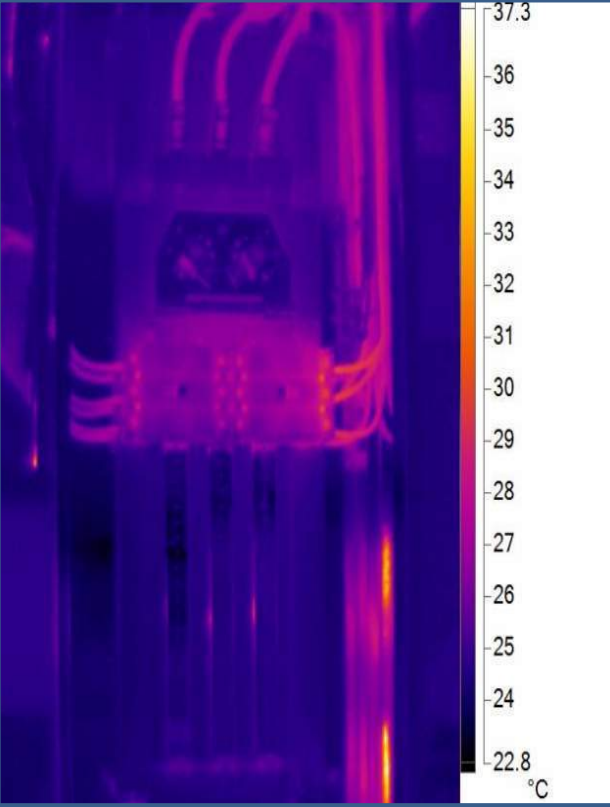
Application Notes: Make: Cutler Hammer Model: PDL1a Circuits: 60 In Use: 56 Voltage: 120/208V Current: 225A Phase: 3 Breaker Type: BA KA: 10 Wire Type: 1/0 RW 90	Safety Notes: DC 1000 IR55
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Location	Fan Room
Description	Trans C
System	600: 120/208V 3P 4W 30KVA
ID Tag Number	TRD-A00221

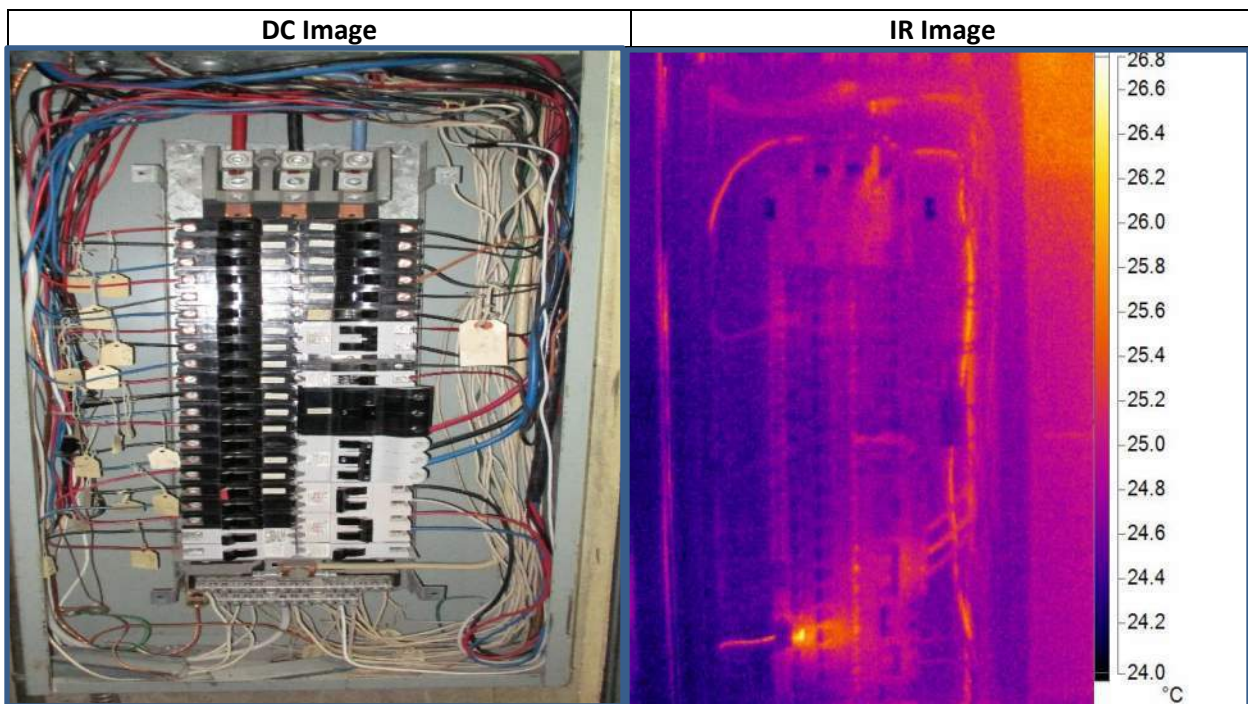


Application Notes:	Safety Notes:
Make: GE Model: ANN Primary Voltage: 600V Secondary Voltage: 120/208V KVA: 30 Impedance: 5.8 %Z Phase: 3 Primary Wire: #10 RW90 CU Secondary Wire: 1/0 RW90 CU	DC1001 IR56

Location	Fan Room
Description	CDP
System	347/600V 3P 4W
ID Tag Number	DP-A00222

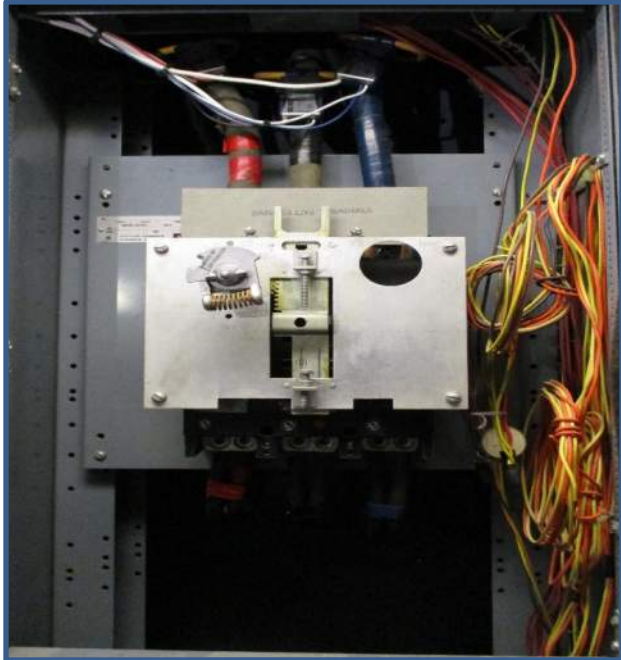
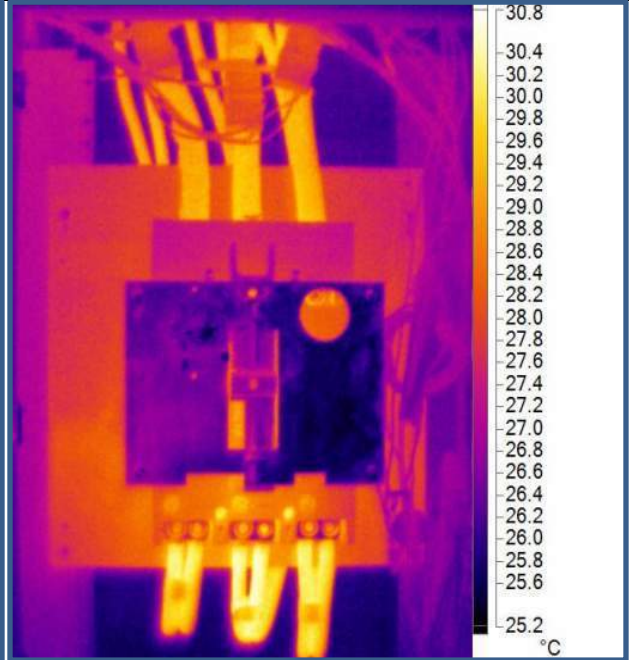
DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: P3L Voltage: 347/600V Current: 225A Phase: 3 Main Breaker: N/A Breaker Type: FDB Wire Type: 3/0	Safety Notes: DC1002 IR57 Breaker Trip settings: N/A

Location	Fan Room
Description	Panel C
System	120/208V 3P 4W
ID Tag Number	BCP-A00223

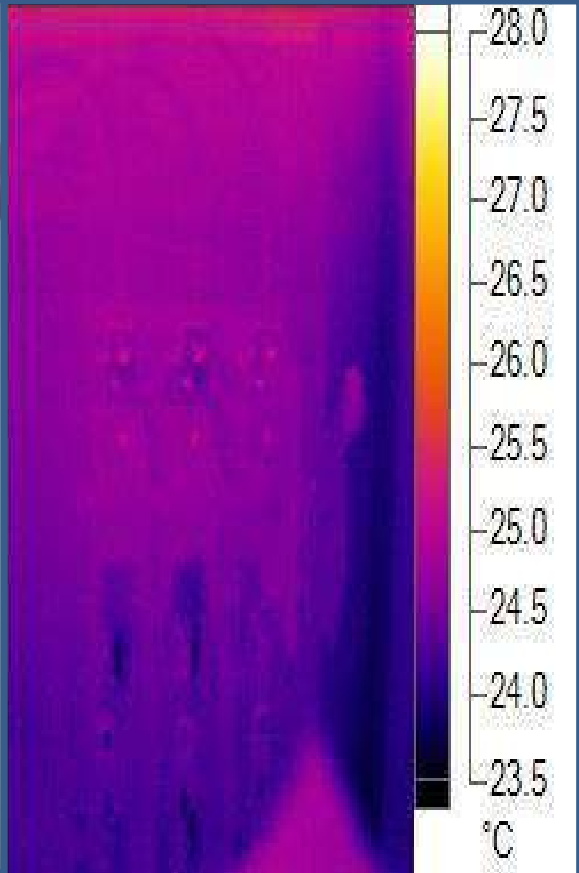


Application Notes: Make: Federal Pioneer Model: NALP 42-4L Circuits: 84 In Use: 83 Voltage: 120/208V Current: 200A Phase: 3 Breaker Type: NA/NC KA: 10 Wire Type: #3 TW	Safety Notes: DC1003 IR58
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Location	Fan Room
Description	MCC#1
System	600V 3P 3W
ID Tag Number	MCC-SEC-A00224

DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: 14934 Voltage: 600V Current: 400A Wire Type: 750KCMIL Cu	Safety Notes: DC1005 IR59 MCCB Federal Pioneer Model CJJ Plug trip set too high

Location	Fan Room
Description	Elevator Disconnect
System	600V 3P 3W
ID Tag Number	DISC-A0280

DC Image	IR Image
	
Application Notes: Make: Cutler Hammer Model: 1HD365 Voltage: 600V Current: 400A Breaker/Fuse Type: FRS-R-100 Wire Type: 1 Conductor 2/0 Teck90 Cu in 4 RW90 Cu out	Safety Notes: DC1063 IR1398

Section

El
Problems
City Hall

Location	Boiler Room 7-8
Description	Emergency Panel Elevator Room
System	120/208 3P 4W
ID Tag Number	DISC-A11

Problem Image	Repaired Image
	
Problem: Excessive corrosion throughout disconnect.	Recommendations: Replace with new 30A 250V 3P 4W SN Fusable Disconnect

Location	Boiler Room 7-8
Description	Elevator Emergency Splitter Auto Transfer
System	600v 3P 3W
ID Tag Number	ATS-A18

Problem Image	Repaired Image
	

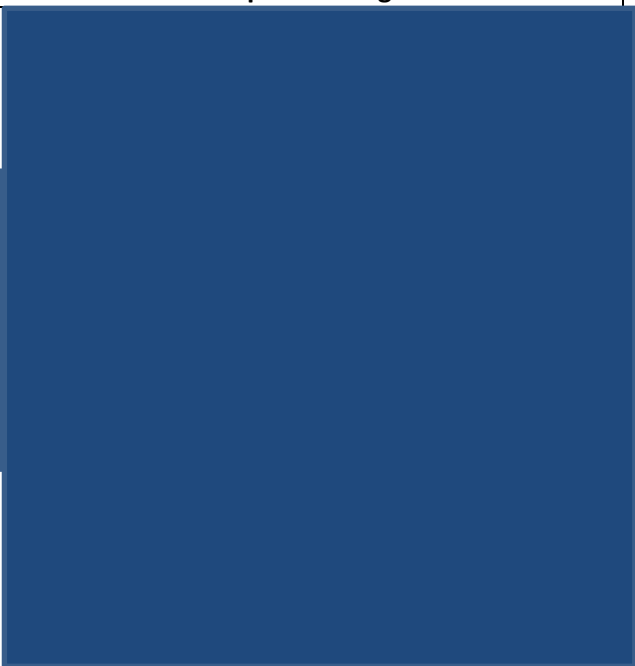
Problem:	Recommendations:
Control transformer has faulted and appears to be left in a unsafe state. Note: Its is very unlikely that the transfer switch will not work automatically.	Repair components if available, If unavailable new switch may be Required

Location	Boiler Room 7-8
Description	TR-A
System	600: 120/208 3P 4W
ID Tag Number	TRD-A15

Problem Image	Repaired Image
	

Problem:	Recommendations:
Excessively dirty/dusty	Clean

Location	4 th Floor
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A89

Problem Image	Repaired Image
	

Problem:	Recommendations:
CCT 30 has doubled up wires under one breaker.	Replace single 15A 1P NA breaker with two NC Breakers.

Location	System & Tech Room
Description	Panel ZZ
System	120/208 3P 4W
ID Tag Number	BCP-A164

Problem Image	Repaired Image
	
Problem:	Recommendations:
Panel is inaccessible to be serviced due to millwork encasing it.	Modify to larger door on millwork

Location	Sub Basement Fan Room
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A223

Problem Image	Repaired Image
	

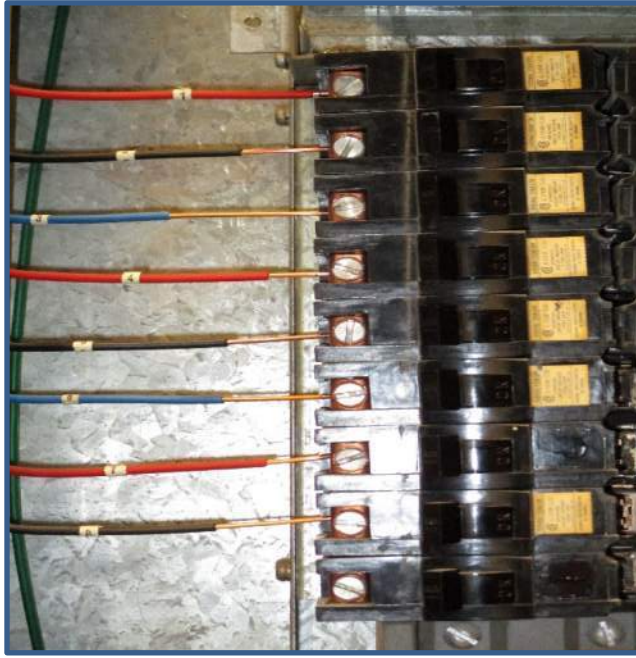
Problem:	Recommendations:
Bottom of panel is missing dead front.	Order or fabricate replacement.

Location	Mayor office storage
Description	Panel C
System	120/208 3P 4W
ID Tag Number	BCP-A253

Problem Image	Repaired Image
	

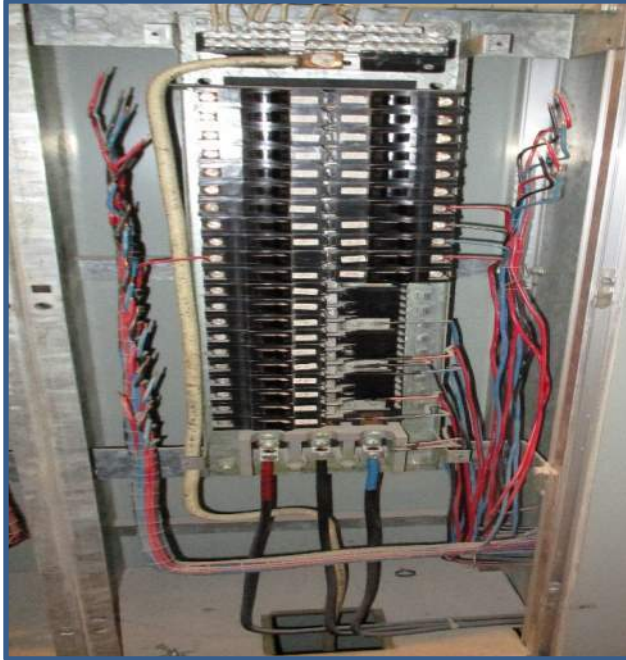
Problem:	Recommendations:
Cannot Access panel due to server rack in the way.	Move Rack if possible.

Location	2 nd Floor
Description	Panel A
System	120/208 3P 4W
ID Tag Number	BCP-A118

Problem Image	Repaired Image
	

Problem:	Recommendations:
Insulation has shrunk back exposing bare conductors.	Retermenate conductors.

Location	Basement Gym
Description	Panel B
System	120/208 3P 4W
ID Tag Number	BCP-A

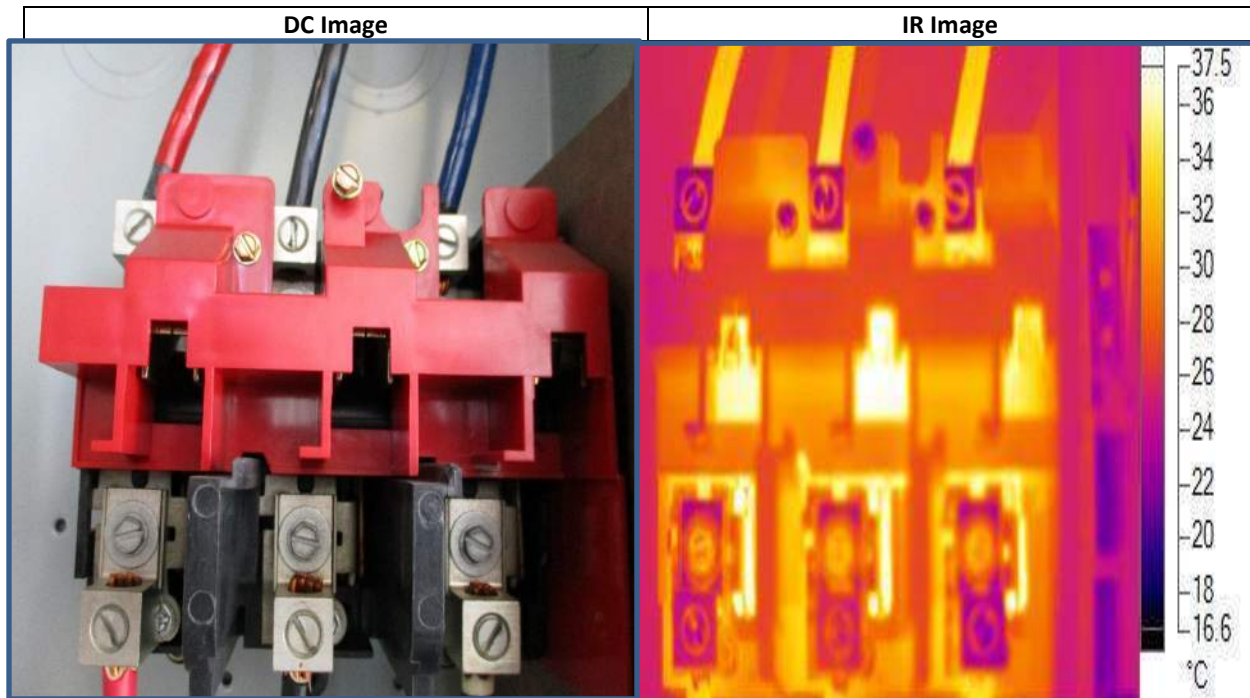
Problem Image	Repaired Image
	
Problem: Wires not capped in panel	Recommendations: Cap off wires.

Section

IR
Problems
City Hall

SEVERITY:	Alert
Humidifier	

Location	Room 7-7 Mech Room
Equipment /Model	Cutler Hammer 1HD363NF
ID Tag Number	DISC-A21



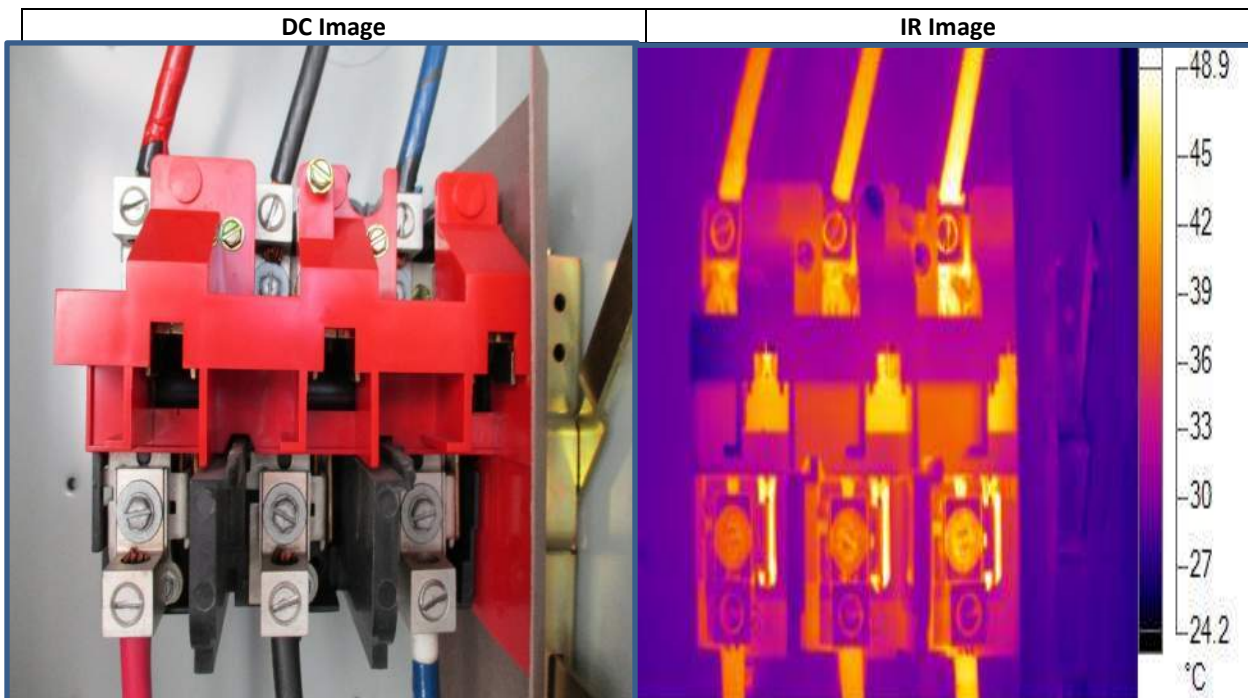
Variables	Phase A	Phase B	Phase C
Circuit Number	A	B	C
Current Rating (Amps)	100	100	100
Current Draw (Amps)	52.4	50.2	52.8
THDC (% THD-F)	1.2	1.6	1.4
Voltage Drop (Volts)	0.109	0.099	0.105

Comments and Recommendations

Excessive voltage drop found across blades of non fusible disconnect. Recommend during a shutdown, cleaning all contacts, relubricating blades, and testing using a DLRO. (DC 782, IR 1073)

SEVERITY:	Alert
Humidifier	

Location	Room 7-7 Mech Room
Equipment /Model	Cutler Hammer 1HD363NF
ID Tag Number	DISC-A23



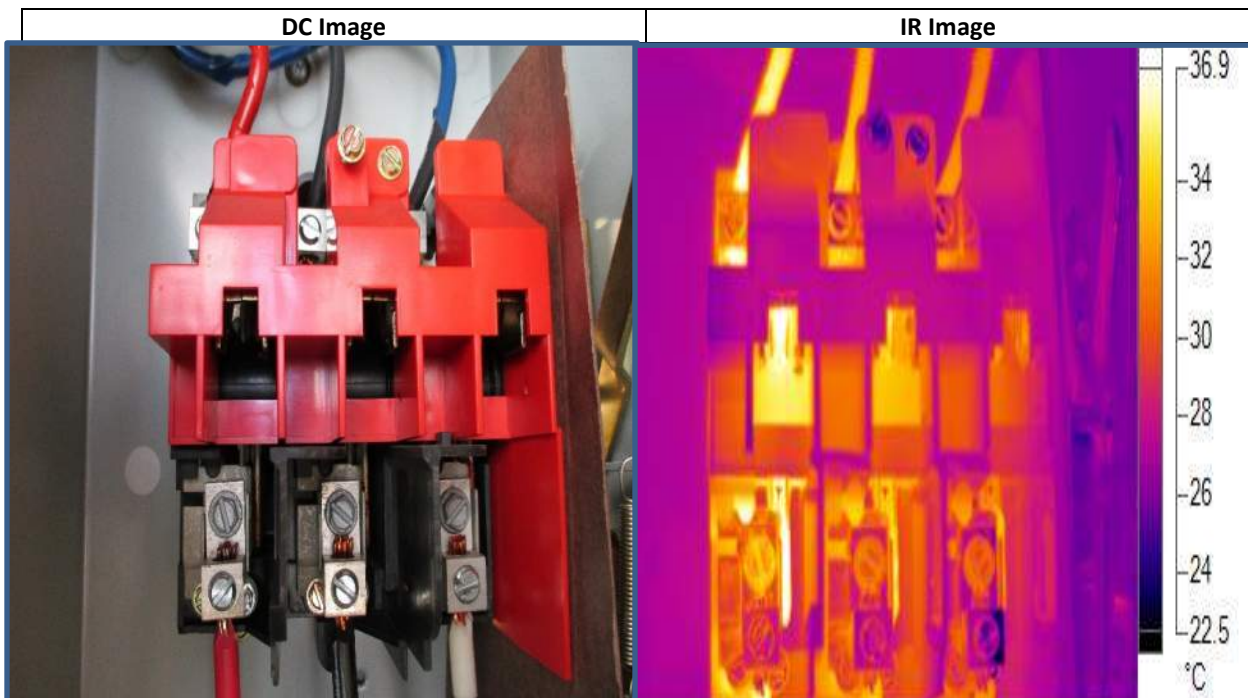
Variables	Phase A	Phase B	Phase C
Circuit Number	A	B	C
Current Rating (Amps)	100	100	100
Current Draw (Amps)	48.3	47.78	49.6
THDC (% THD-F)	1	1.1	1
Voltage Drop (Volts)	.102	.094	.143

Comments and Recommendations

Excessive voltage drop found across blades of non fusible disconnect. Recommend during a shutdown, cleaning all contacts, relubricating blades, and testing using a DLRO. (DC 786, IR 1077)

SEVERITY:	Alert
Humidifier	

Location	Room 7-7 Mech Room
Equipment /Model	Cutler Hammer 1HD362NF
ID Tag Number	DISC-A24



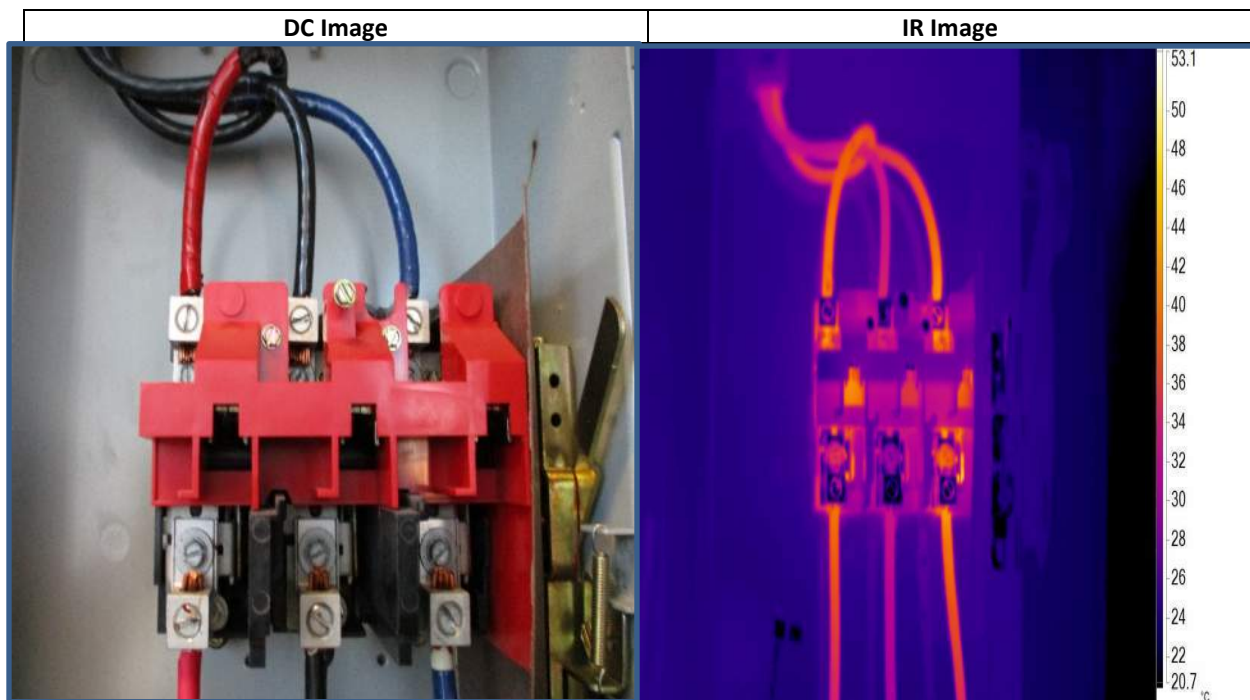
Variables	Phase A	Phase B	Phase C
Circuit Number	A	B	C
Current Rating (Amps)	60	60	60
Current Draw (Amps)	22.7	22.8	24.0
THDC (% THD-F)	1.1	1.4	1.1
Voltage Drop (Volts)	.106	.051	.036

Comments and Recommendations

Excessive voltage drop found across blades of non fusible disconnect. Recommend during a shutdown, cleaning all contacts, relubricating blades, and testing using a DLRO. (DC 787, IR 1078)

SEVERITY:	Alert
Humidifier	

Location	Mech Room 7-4
Equipment /Model	Cutler Hammer
ID Tag Number	DISC-A57



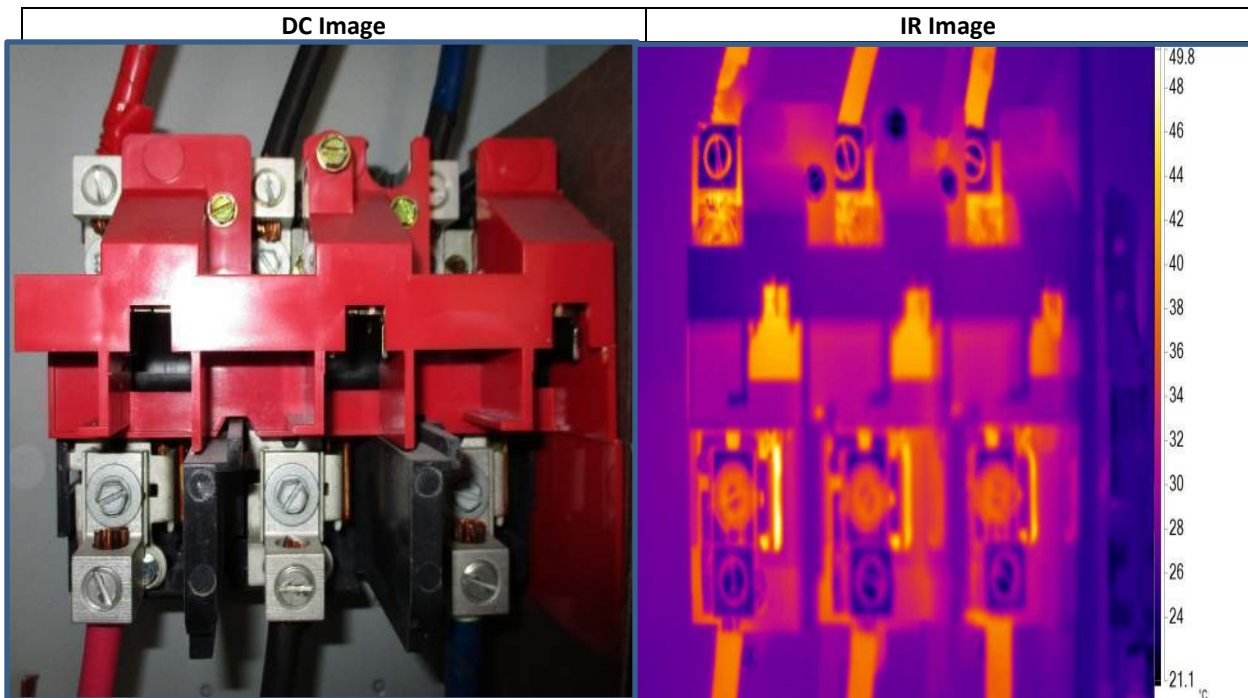
Variables	Phase A	Phase B	Phase C
Circuit Number	A	B	C
Current Rating (Amps)	100	100	100
Current Draw (Amps)	48.1	45.9	47.3
THDC (% THD-F)	1.1	1.1	1.1
Voltage Drop (Volts)	.103	.027	.086

Comments and Recommendations

Excessive voltage drop found across blades of non fusible disconnect. Recommend during a shutdown, cleaning all contacts, relubricating blades, and testing using a DLRO. (DC807 IR1100)

SEVERITY:	Alert
Humidifier	

Location	Mech Room 7-4
Equipment /Model	Cutler Hammer 1HD363NF
ID Tag Number	DISC-A58



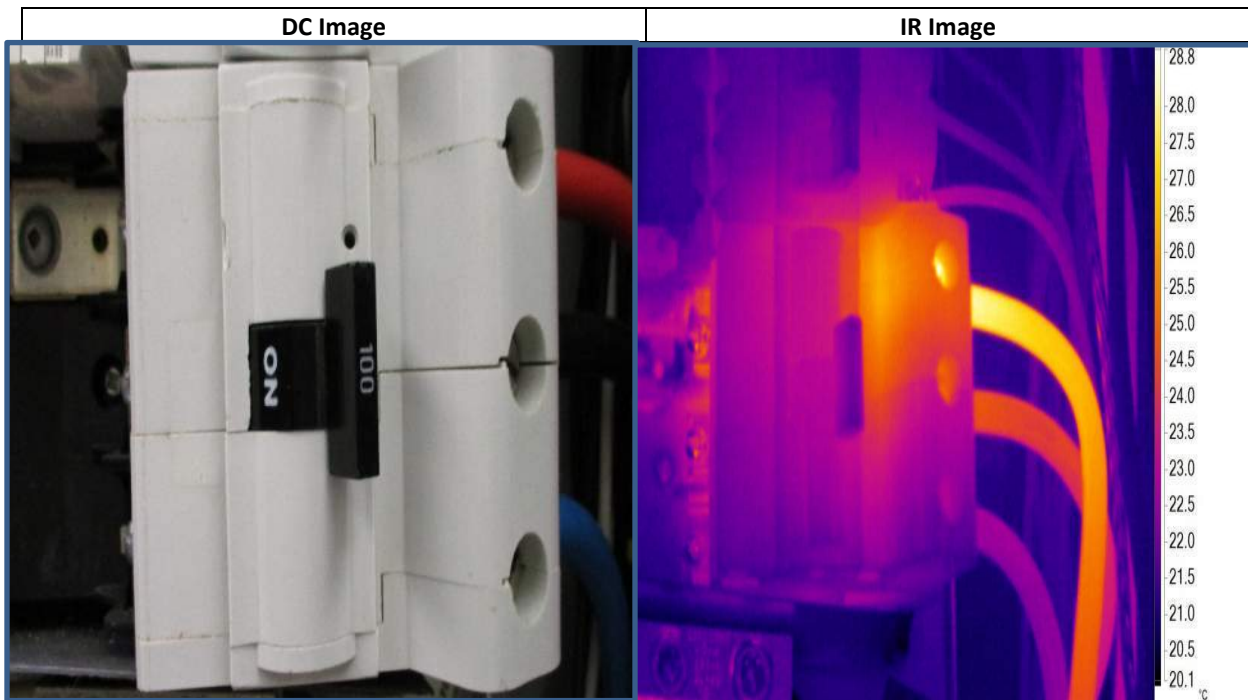
Variables	Phase A	Phase B	Phase C
Circuit Number	A	B	C
Current Rating (Amps)	100	100	100
Current Draw (Amps)	49	48.9	48.6
THDC (% THD-F)	1.0	1.0	1.0
Voltage Drop (Volts)	.94	.64	.83

Comments and Recommendations

Excessive voltage drop found across blades of non fusible disconnect. Recommend during a shutdown, cleaning all contacts, relubricating blades, and testing using a DLRO (DC861 IR1153)

SEVERITY:	Alert
Ups 40 Panel A	

Location	Computer Room 7-03
Equipment /Model	Federal Pioneer NBLP42B
ID Tag Number	BCP-A61



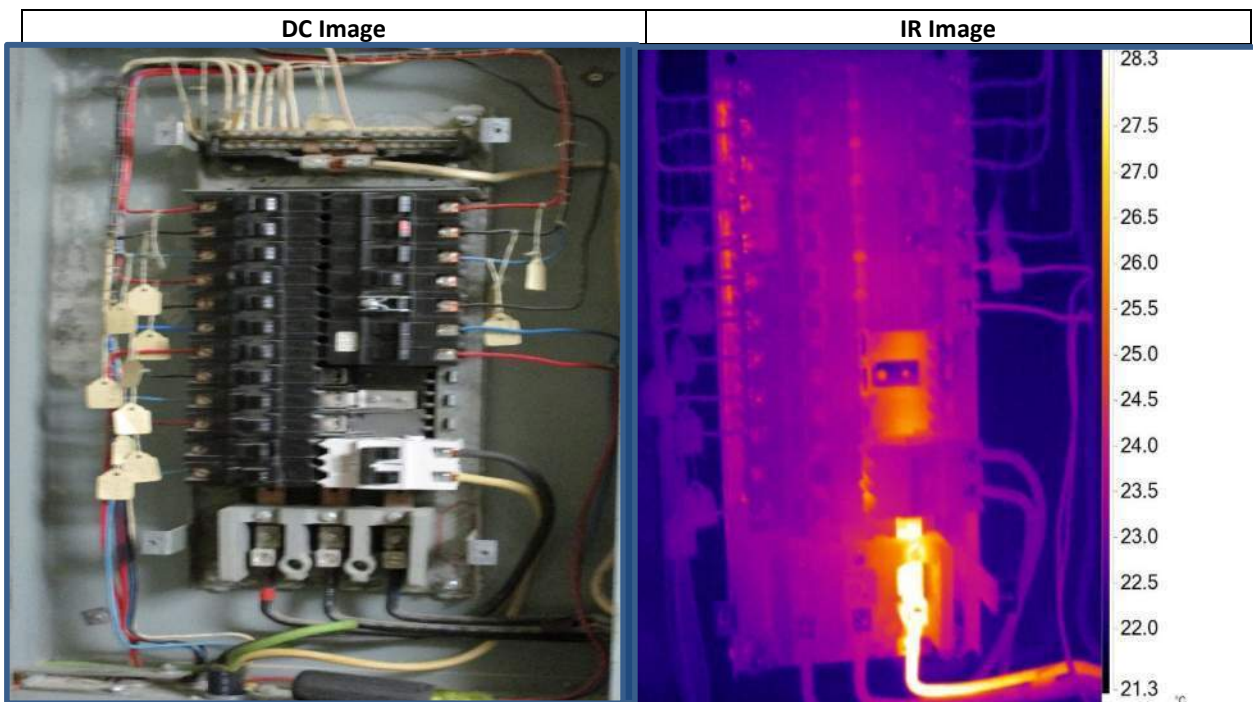
Variables	Phase A	Phase B	Phase C
Circuit Number	38	40	42
Current Rating (Amps)	100	100	100
Current Draw (Amps)	33.5	N/A	14.92
THDC (% THD-F)	2.3	N/A	6.4
Voltage Drop (Volts)	.51	.22	.18

Comments and Recommendations

Schedule shutdown to reterminate all three phases exercise the breaker and retest. (DC862 IR1155)

SEVERITY:	Alert
Panel E	

Location	Computer Room 7-03
Equipment /Model	Federal Pacific NAKP-42-4L
ID Tag Number	BCP-A54



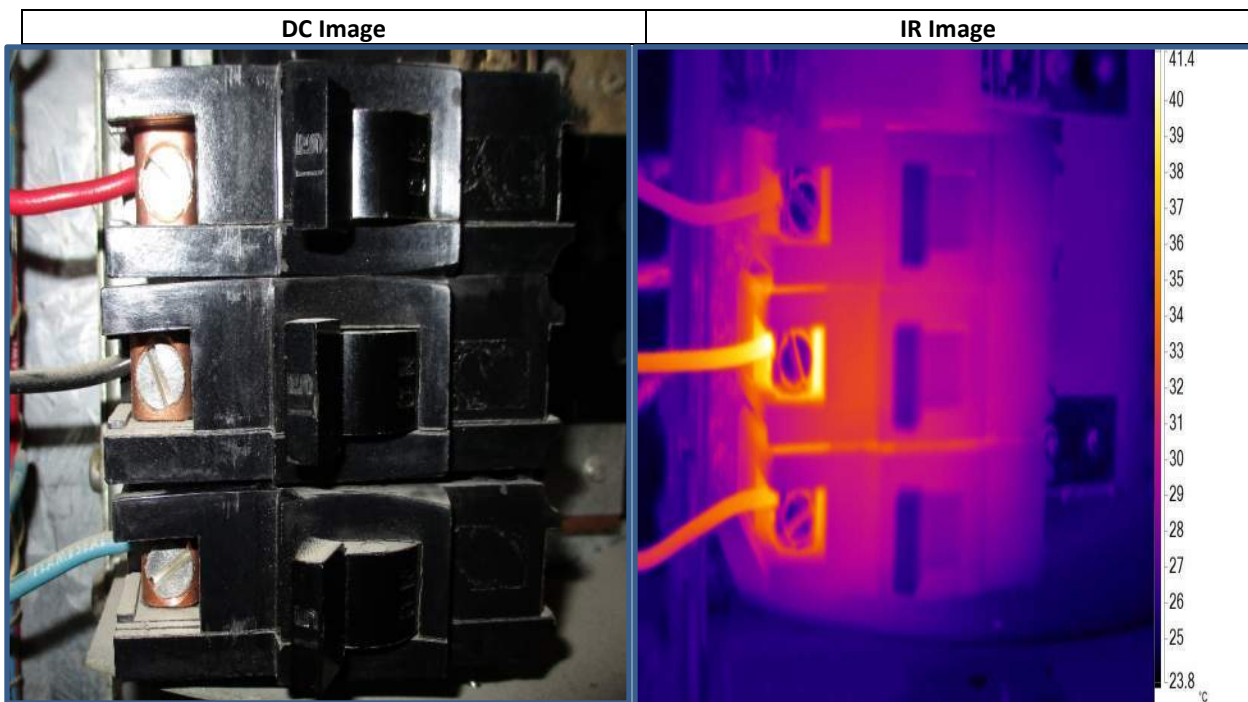
Variables	Phase A	Phase B	Phase C
Circuit Number	A	B	C
Current Rating (Amps)	100	100	100
Current Draw (Amps)	4.93	1.53	5.68
THDC (% THD-F)	10.6	14.9	8.4
Voltage Drop (Volts)	.07	.07	.07

Comments and Recommendations

Schedule shutdown to reterminate all three phases exercise the breaker and retest. (DC825 IR1117)

SEVERITY:	Alert
Panel B	

Location	Distribution 600
Equipment /Model	Federal Pacific NALP 30-4AB
ID Tag Number	BCP-A76



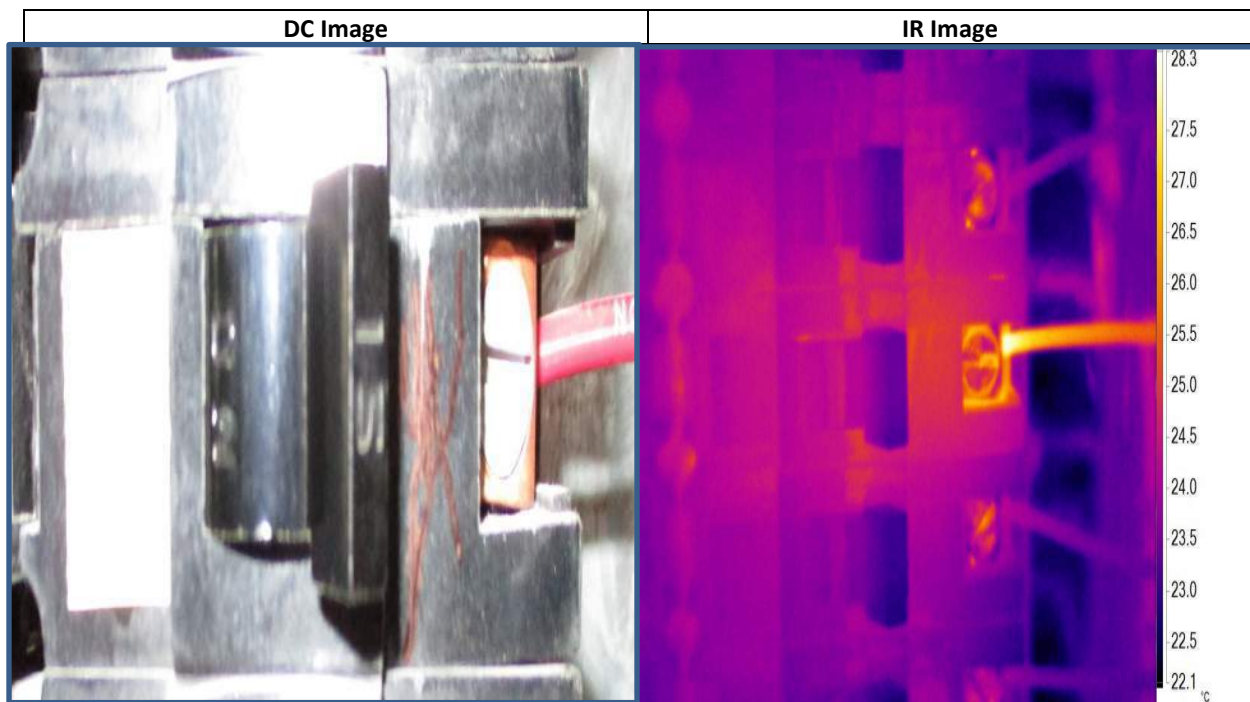
Variables	Phase A	Phase B	Phase C
Circuit Number		14	15
Current Rating (Amps)		15	15
Current Draw (Amps)		10.67	9.36
THDC (% THD-F)		4.6	5.4
Voltage Drop (Volts)		.95	.8

Comments and Recommendations

Schedule a shut down and replace both Federal 15A 1P NA breakers. It is unknown what these breakers feed. (DC864 IR1157)

SEVERITY:	Alert
Panel B	

Location	Distribution 400
Equipment /Model	Federal Pacific NALP 30-4AB
ID Tag Number	BCP-A90



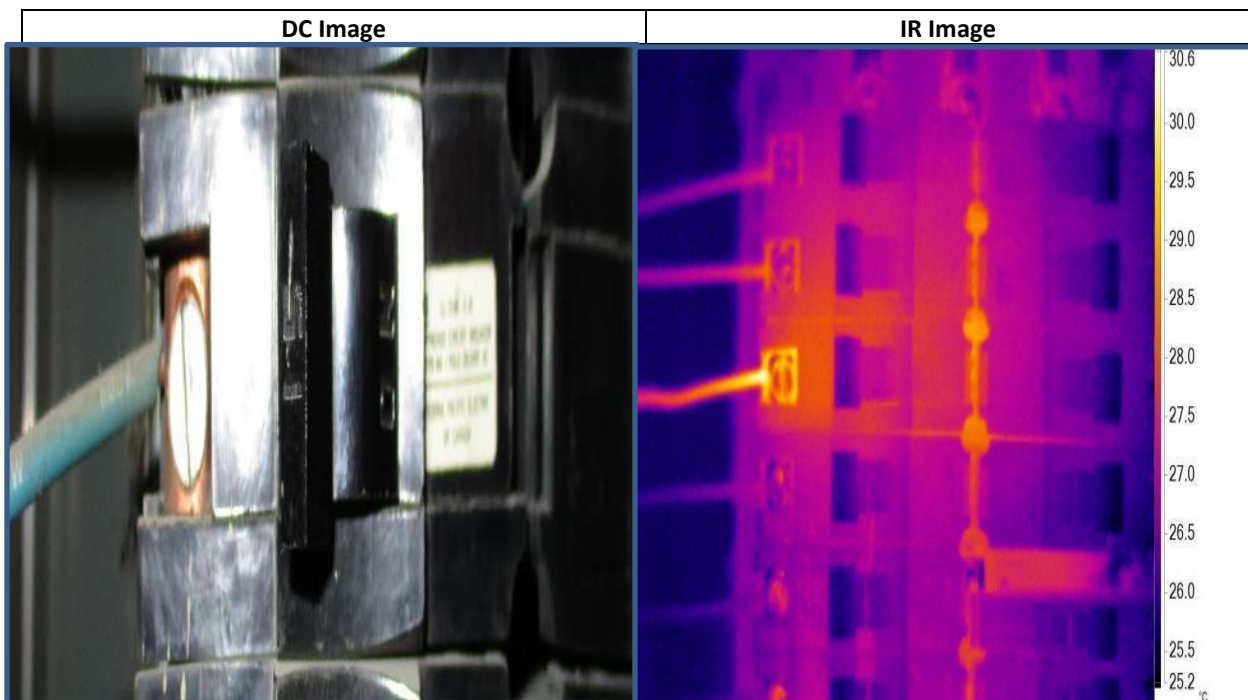
Variables	Phase A	Phase B	Phase C
Circuit Number	22		
Current Rating (Amps)	15		
Current Draw (Amps)	4.26		
THDC (% THD-F)	9.9		
Voltage Drop (Volts)	.61		

Comments and Recommendations

Schedule a shut down and replace Federal 15A 1P NA breaker. Directory labels load as "Building Secretary". (DC877 IR1168)

SEVERITY:	Alert
Panel Y	

Location	B101 Riser
Equipment /Model	Federal Pacific NALP 12-4AB
ID Tag Number	BCP-A149



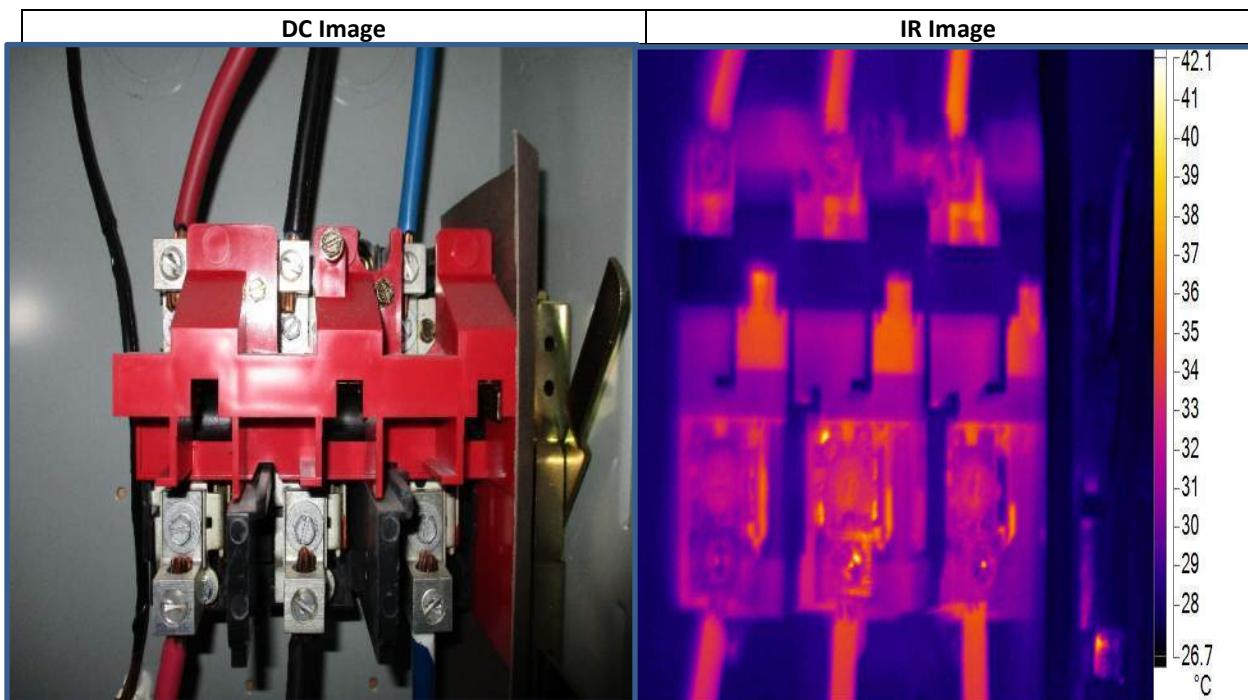
Variables	Phase A	Phase B	Phase C
Circuit Number			3
Current Rating (Amps)			15
Current Draw (Amps)			4.26
THDC (% THD-F)			9.9
Voltage Drop (Volts)			.61

Comments and Recommendations

Replace & reterminate 15A 1P Federal NA breaker. Directory does not indicate what breaker controls.

SEVERITY:	Alert
Humidifier	

Location	Council Fan Room
Equipment /Model	Cutler Hammer IHD363NF
ID Tag Number	DISC-A216



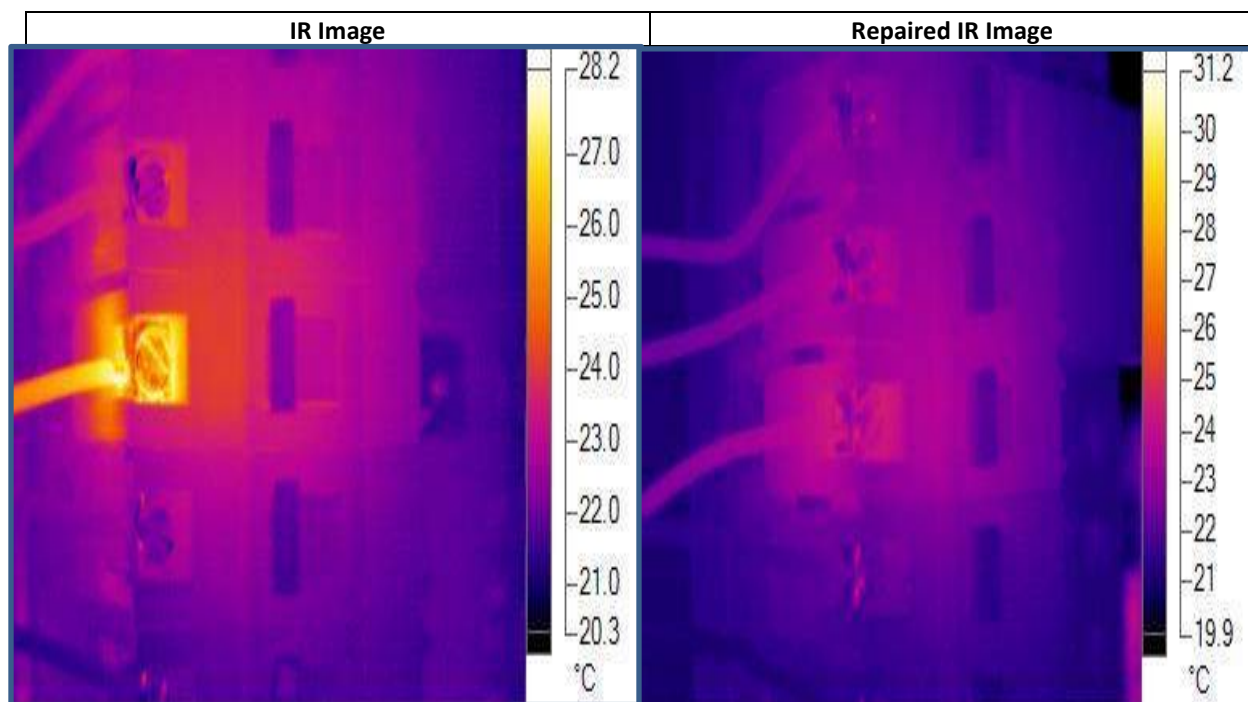
Variables	Phase A	Phase B	Phase C
Circuit Number	A	B	C
Current Rating (Amps)	100	100	100
Current Draw (Amps)	32.1	31.9	31.5
THDC (% THD-F)	1.4	1.3	1.6
Voltage Drop (Volts)	.50	.50	.51

Comments and Recommendations

Excessive voltage drop found across blades of non fusible disconnect. Recommend during a shutdown, cleaning all contacts, relubricating blades, and testing using a DLRO. (DC998 IR53)

SEVERITY:	Alert
Panel M	

Location	Council Meeting Room
Equipment /Model	Federal Pacific NALP 12-4L
ID Tag Number	BCP A275



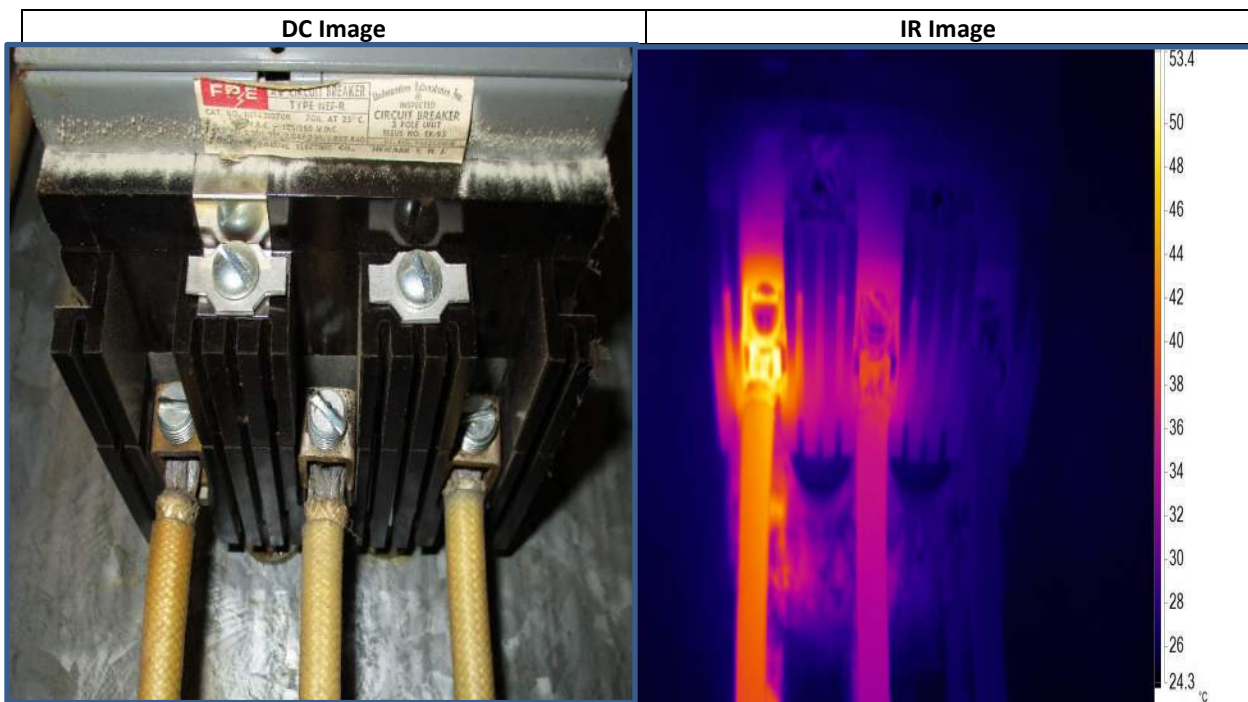
Variables	Phase A	Phase B	Phase C
Circuit Number			3
Current Rating (Amps)			15
Current Draw (Amps)			3.67
THDC (% THD-F)			35.3
Voltage Drop (Volts)			.075

Comments and Recommendations

Was able to tighten and repair termination.(IR1393 IR1394)

SEVERITY:	Alert
Panel D	

Location	2 nd Floor Riser
Equipment /Model	Federal Pacific NALP 42-4AB
ID Tag Number	BCP-A115



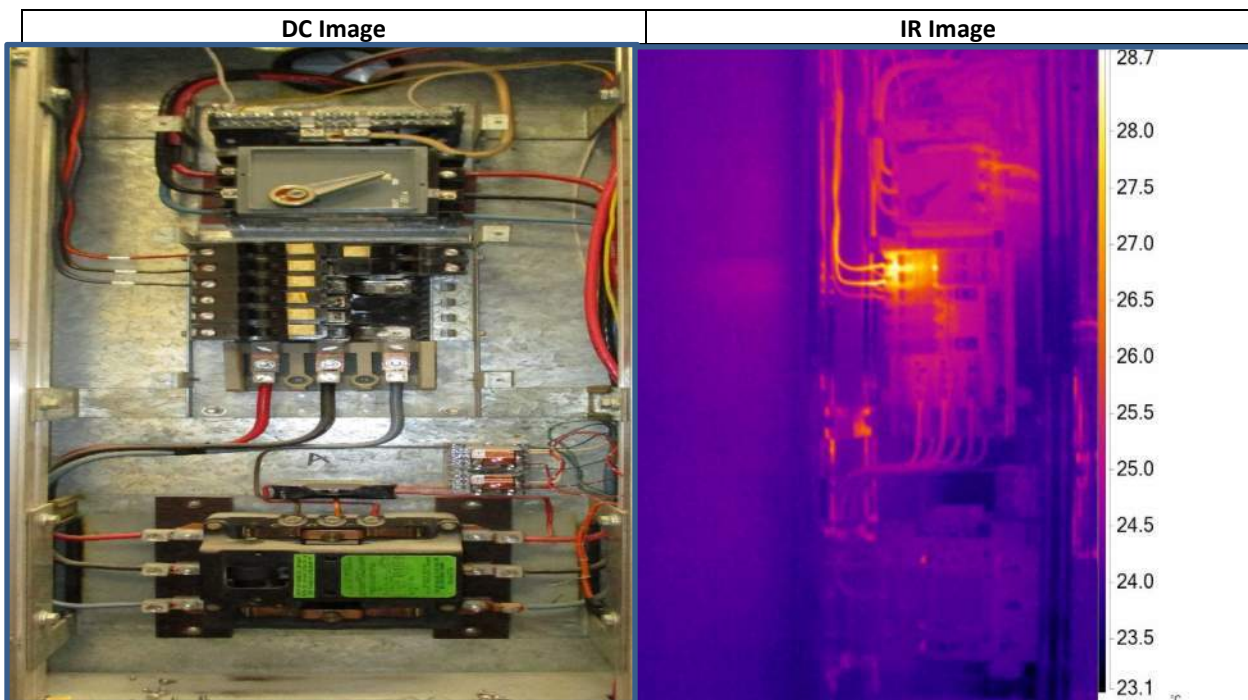
Variables	Phase A	Phase B	Phase C
Circuit Number	A	B	C
Current Rating (Amps)	70	70	70
Current Draw (Amps)	9.67	6.92	1.86
THDC (% THD-F)	3.2	4.0	3.4
Voltage Drop (Volts)	.276	.016	.024

Comments and Recommendations

Schedule shut down to clean & reterminate A phase connection. If problem persists, replace breaker.
(DC899 IR1189)

SEVERITY:	Alert
Panel A	

Location	2 nd Floor Riser
Equipment /Model	Federal Pacific NALP 12-4AB
ID Tag Number	BCP-A118



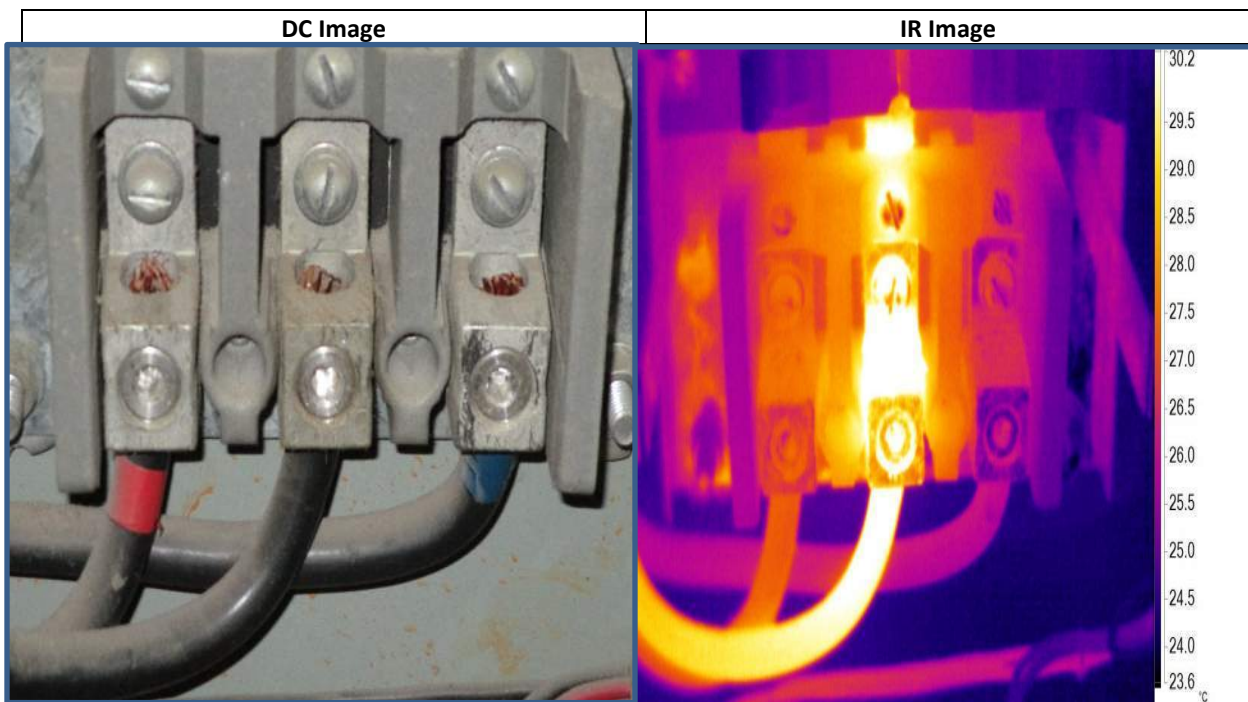
Variables	Phase A	Phase B	Phase C
Circuit Number		2	
Current Rating (Amps)		15	
Current Draw (Amps)		5.8	
THDC (% THD-F)		3.4	
Voltage Drop (Volts)		.106	

Comments and Recommendations

Replace & reterminate 15A 1P Federal NA breaker. Directory does not indicate what breaker controls.

SEVERITY:	Alert
Panel A	

Location	Sub Badement
Equipment /Model	Federal Pacific NALP 42-4L
ID Tag Number	BCP-A192



Variables	Phase A	Phase B	Phase C
Circuit Number	A	B	C
Current Rating (Amps)	225	225	225
Current Draw (Amps)	12.6	10.9	10.6
THDC (% THD-F)			
Voltage Drop (Volts)			

Comments and Recommendations

Schedule a shut down to clean connection points at lugs and reterminate. (DC973 IR1254)

Section

Tests
Sheets

Instrument Information

Model Number	FLUKE 434/435
Serial Number	N/A
Firmware Revision	V02.10

Software Information

Power Log Version	Classic 4.6
FLUKE 345 DLL Version	11.20.2006
FLUKE 430 DLL Version	1.1.0.12

General Information

Recording location
Client
Notes

Measurement Summary

Measurement topology	Wye mode
Application mode	Logger
First recording	2020-12-15 1:12:07 PM 382msec
Last recording	2020-12-17 6:17:07 AM 382msec
Recording interval	0h 5m 0s 0msec
Nominal Voltage	230 V
Nominal Current	N/A
Nominal Frequency	60 Hz

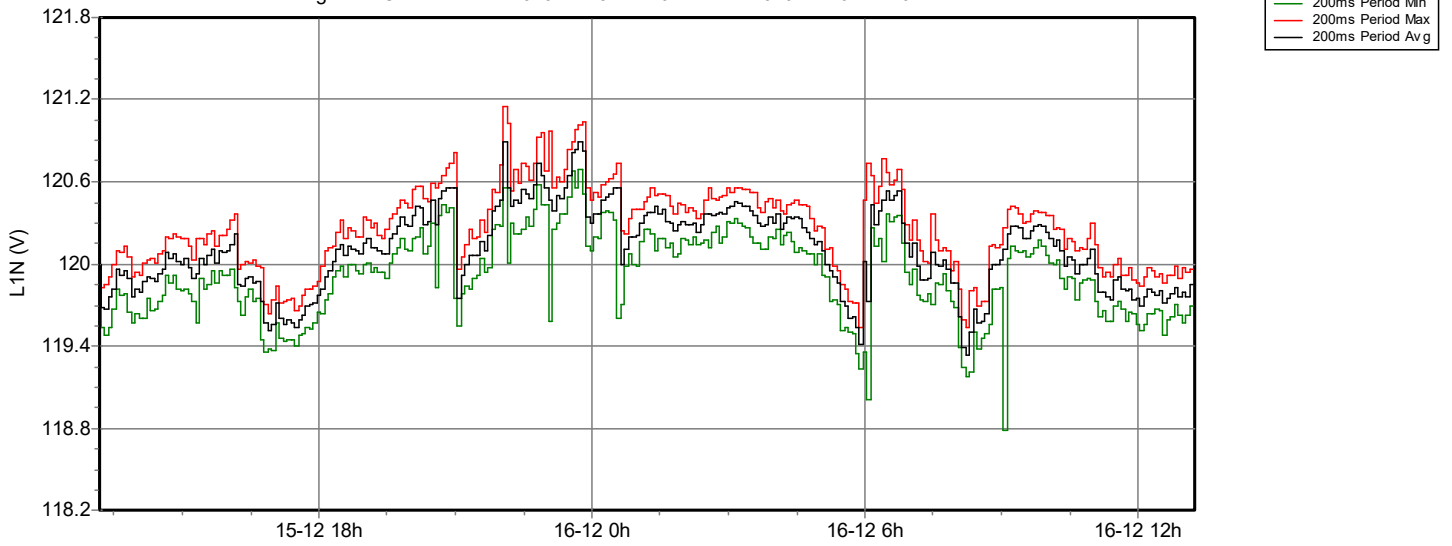
Recording Summary

RMS recordings	494
DC recordings	0
Frequency recordings	494
Unbalance recordings	494
Harmonic recordings	494
Power harmonic recordings	494
Power recordings	494
Energy recordings	0
Flicker recordings	494
Mains signaling recordings	0

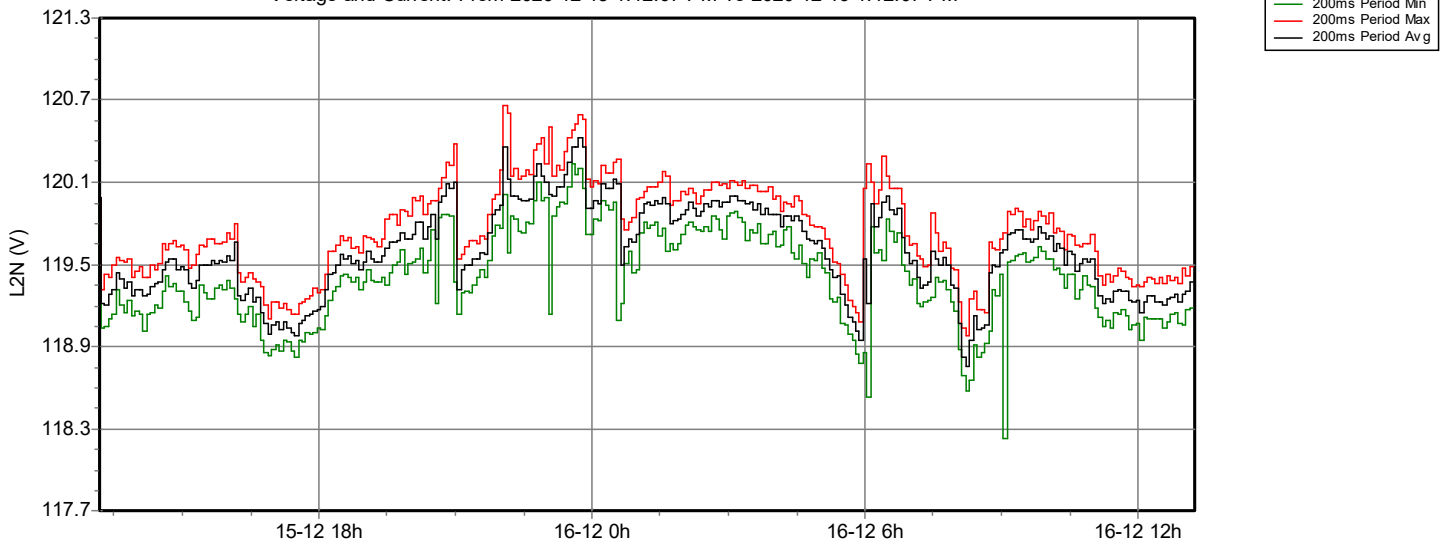
Events Summary

Dips	0
Swells	0
Transients	0
Interruptions	0
Voltage profiles	0
Rapid voltage changes	0
Screens	1
Waveforms	0
Intervals without measurements	0
Inrush current graphics	0

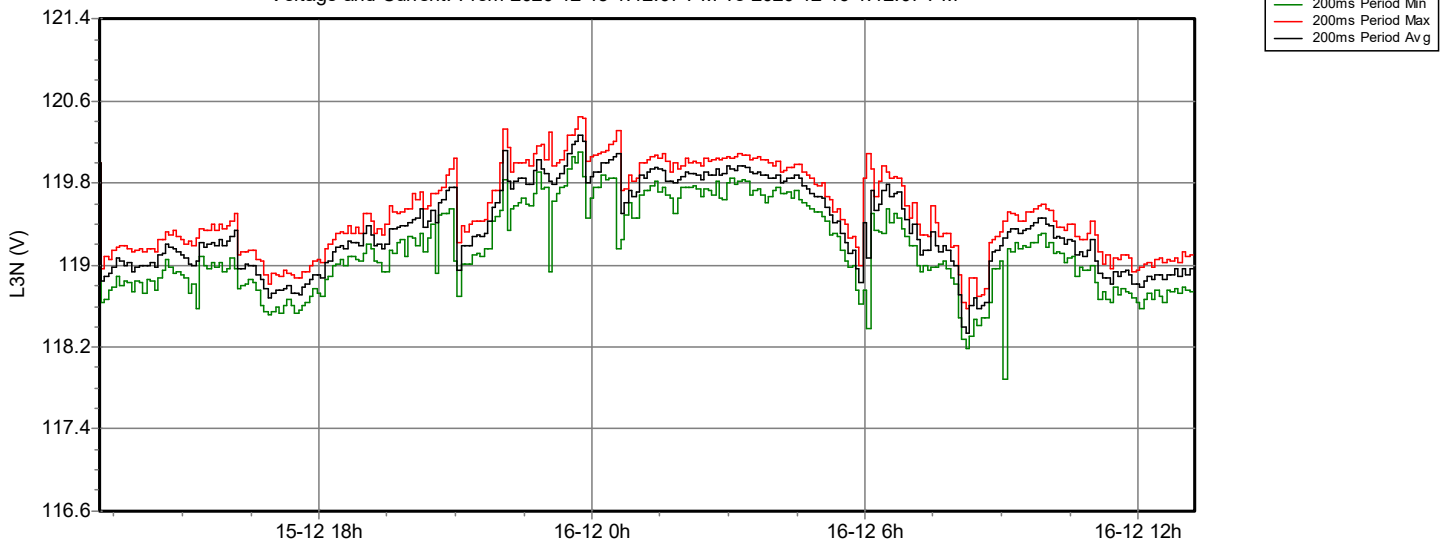
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



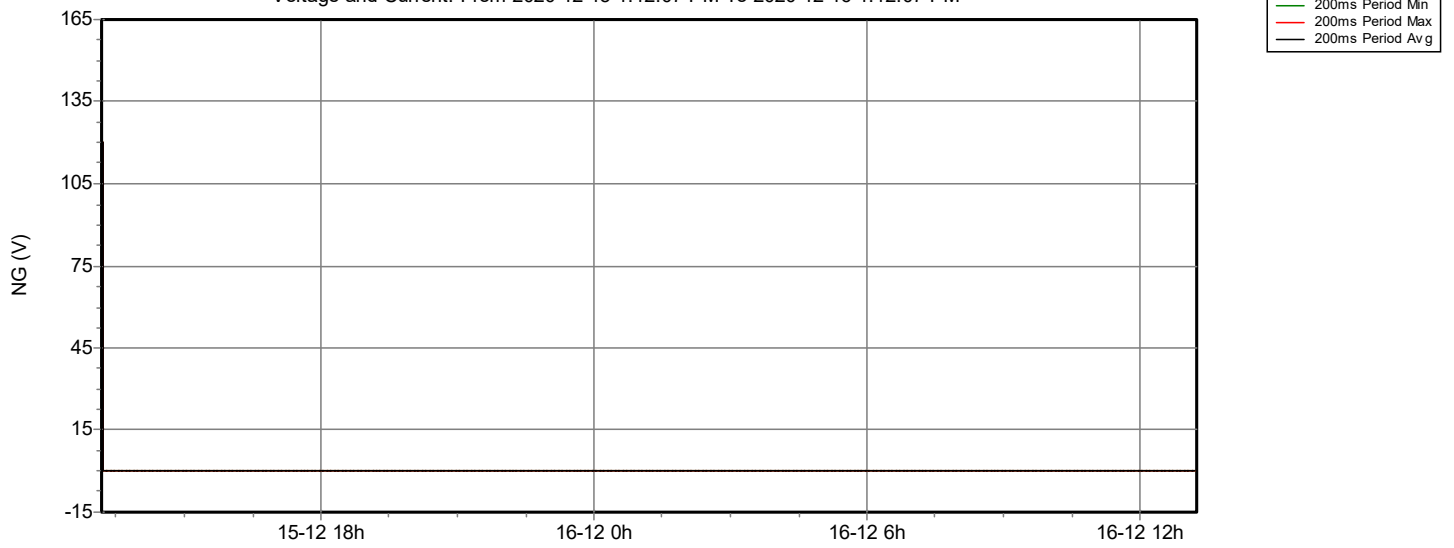
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



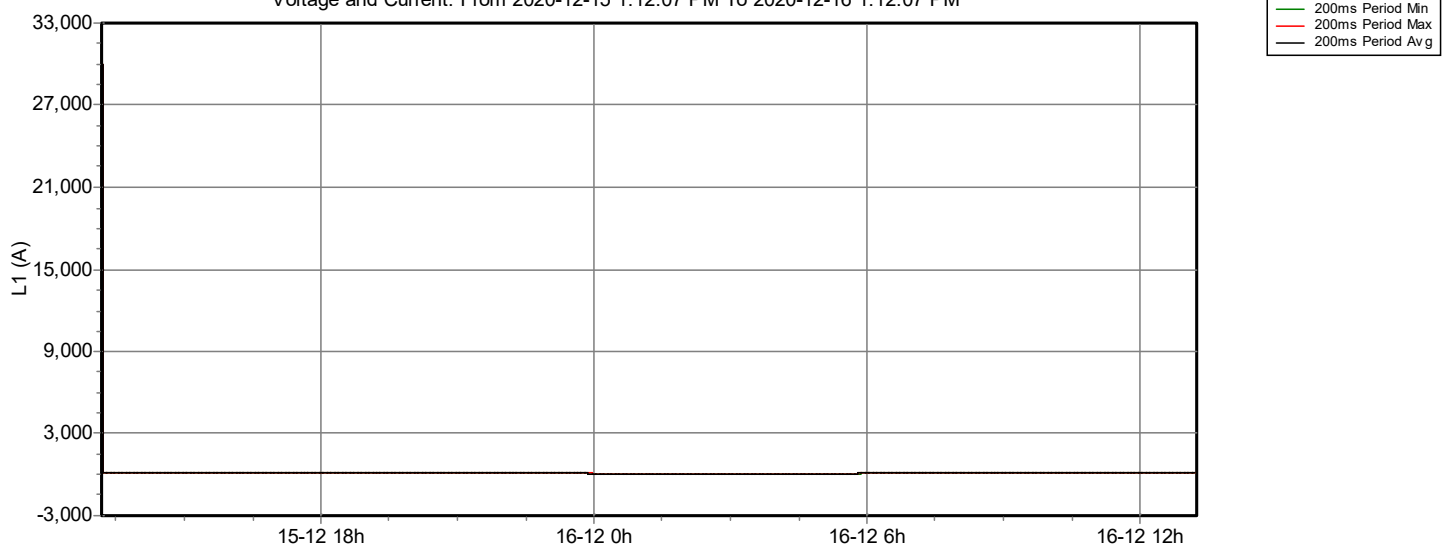
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



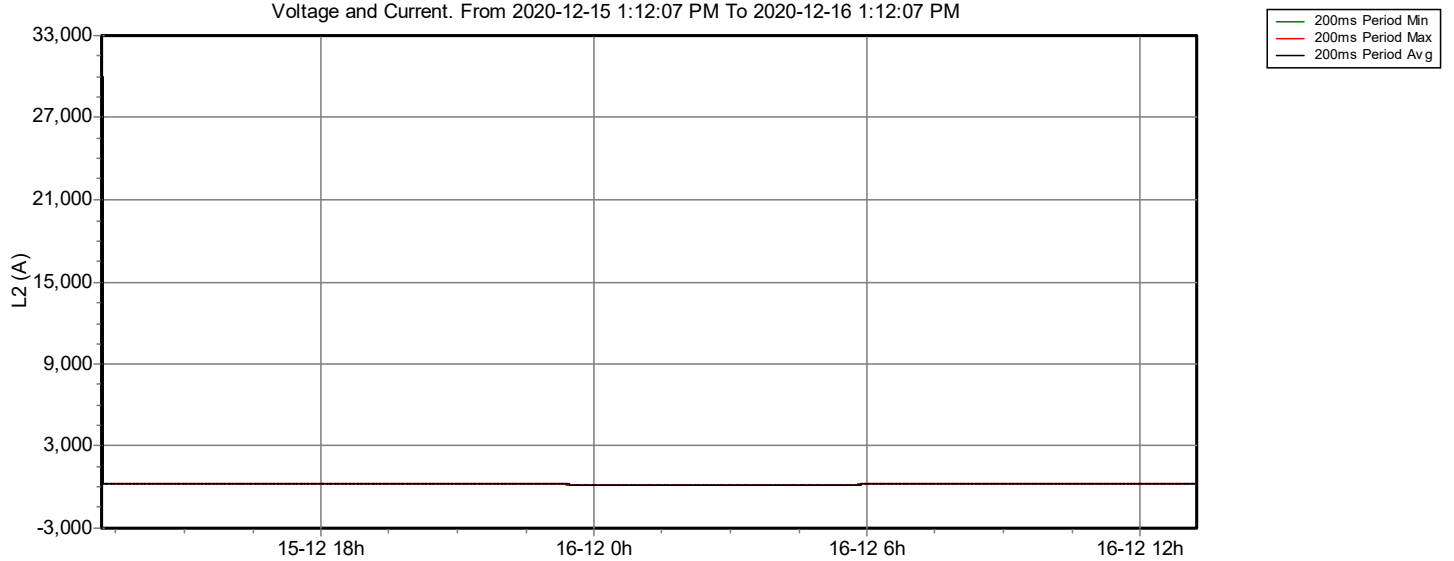
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



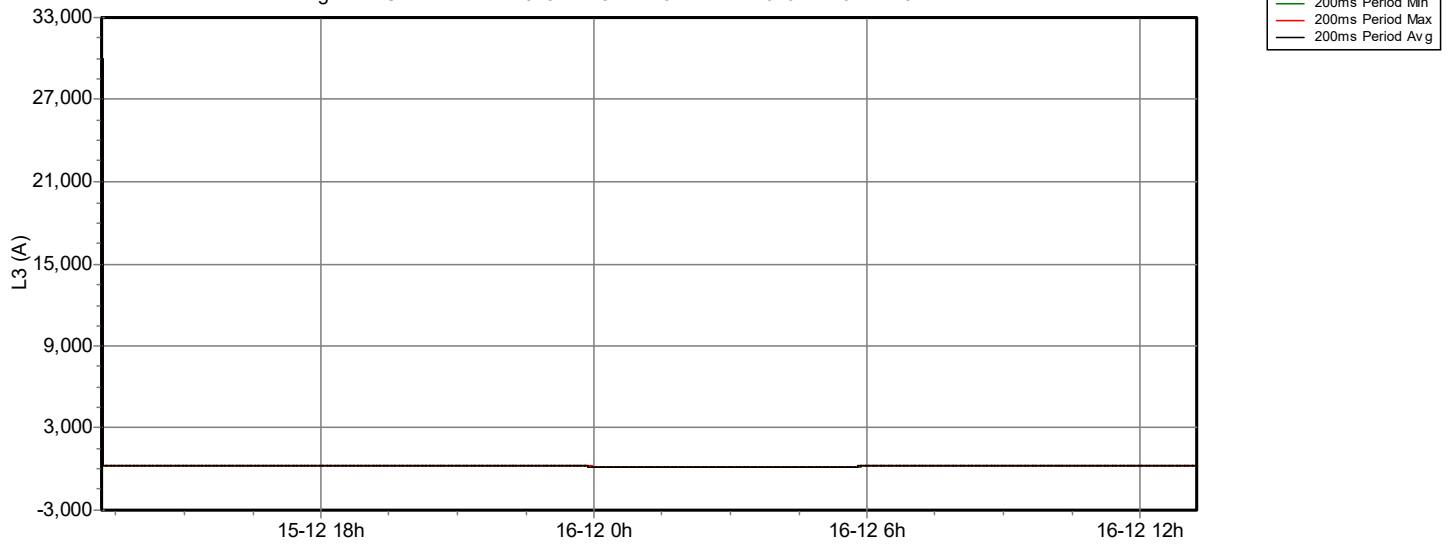
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



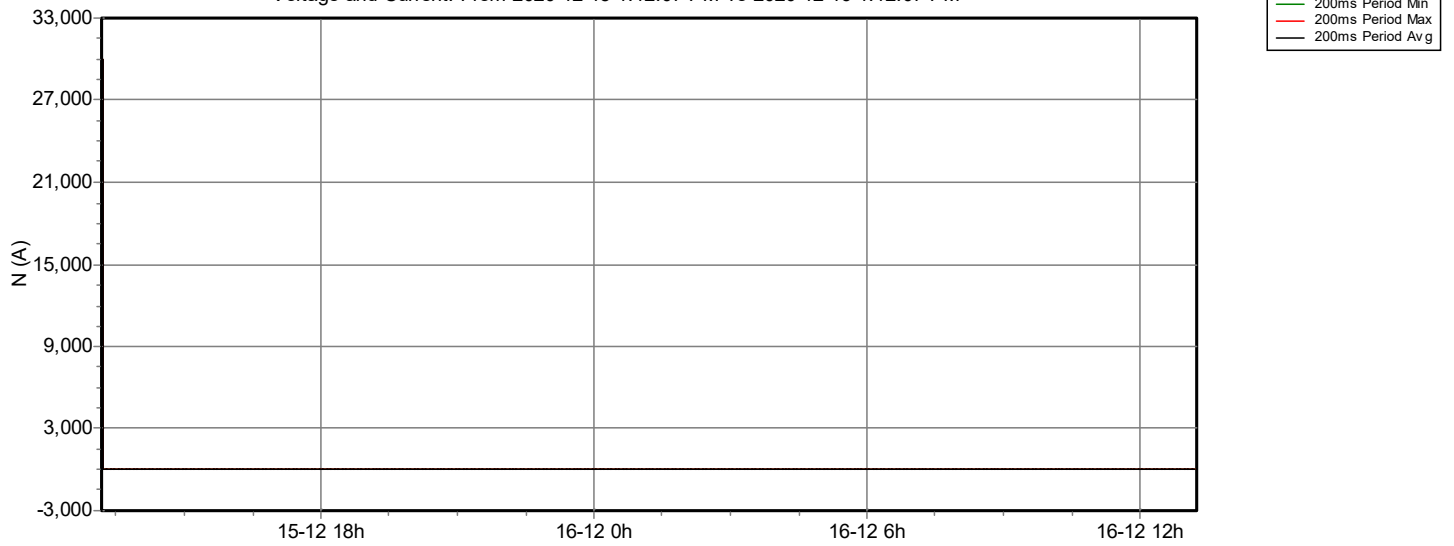
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



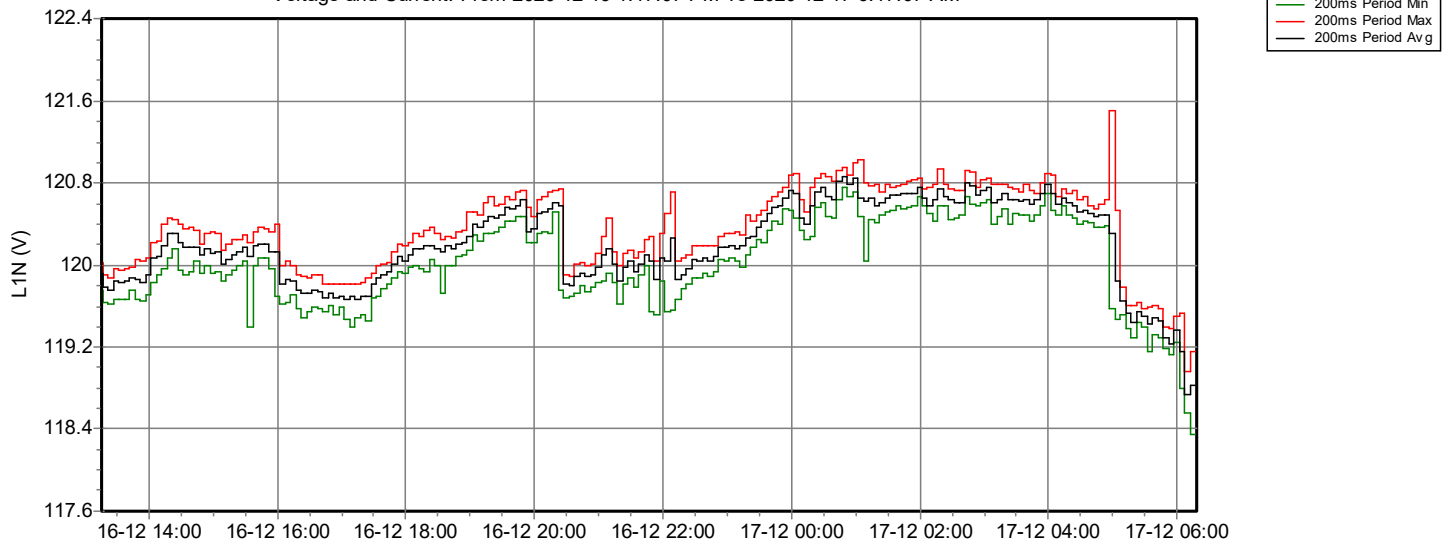
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM

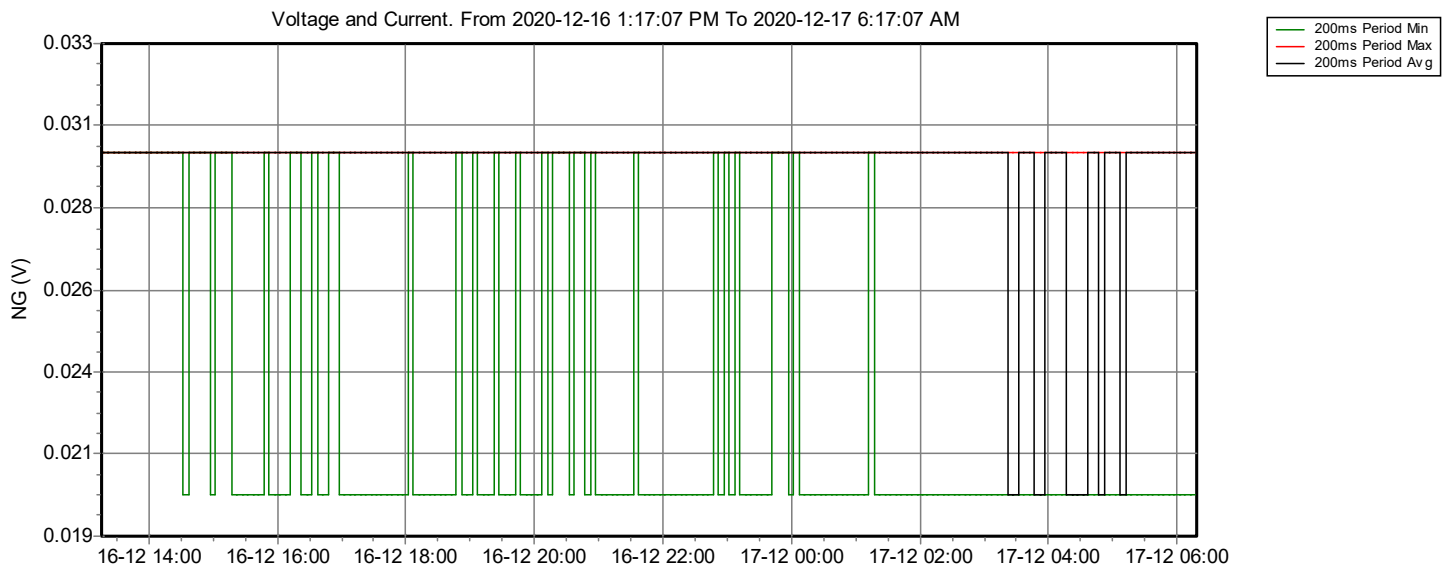
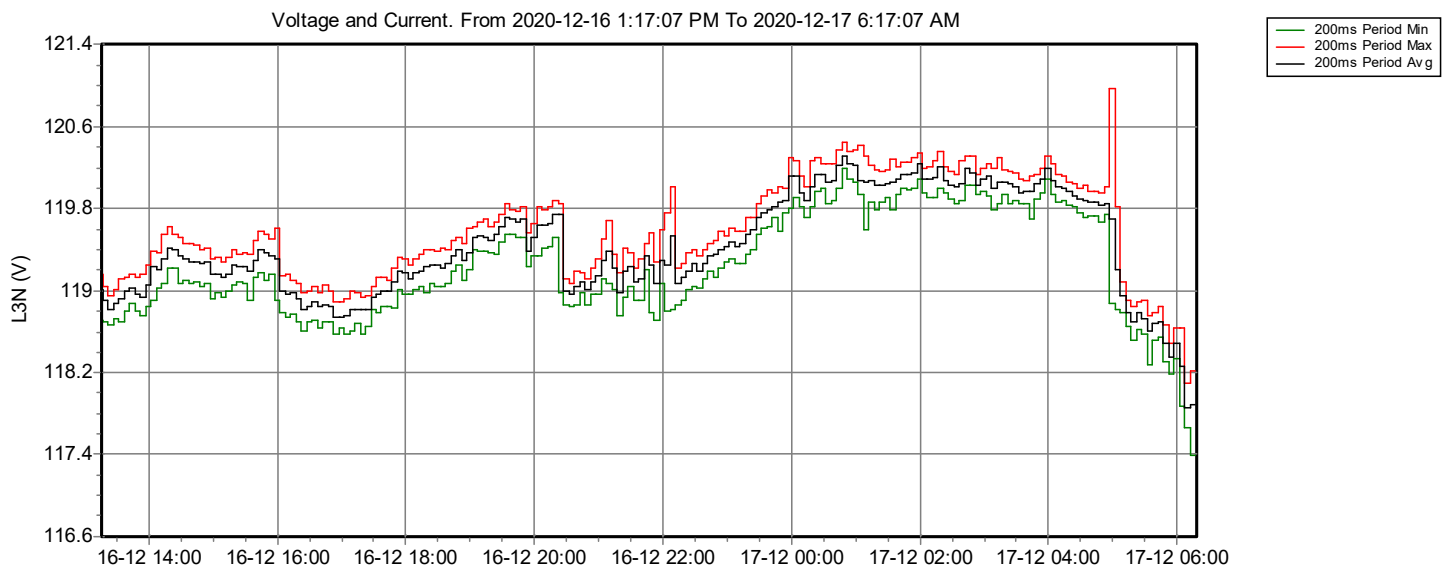
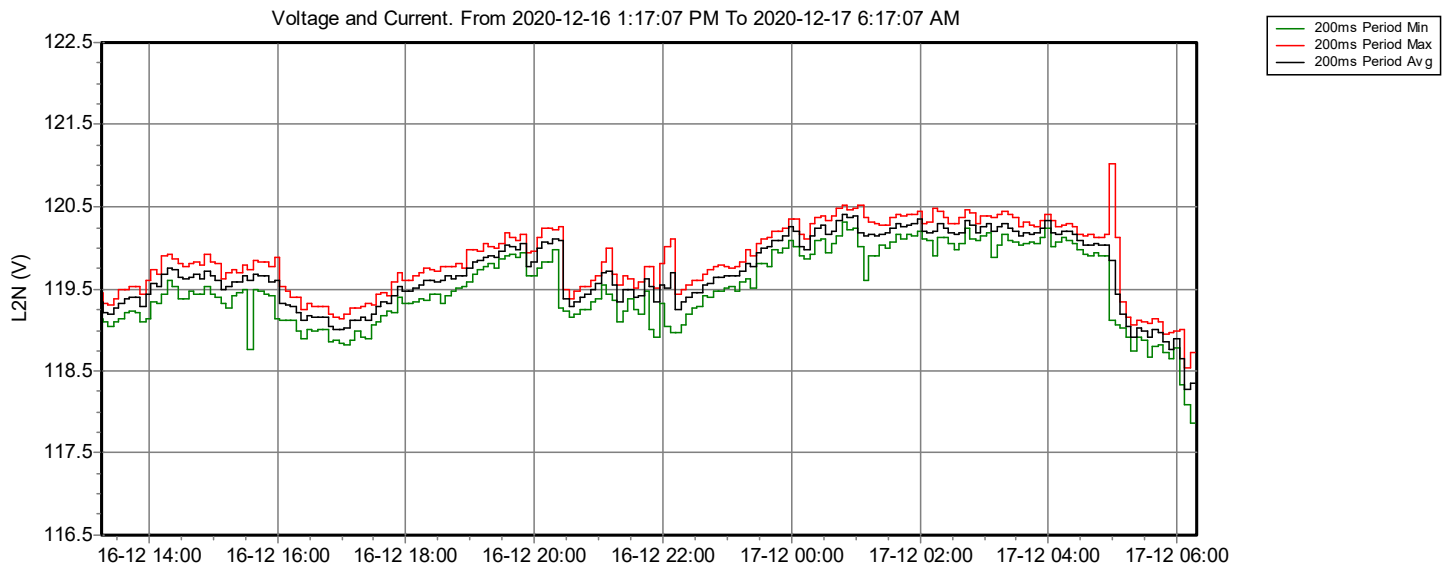


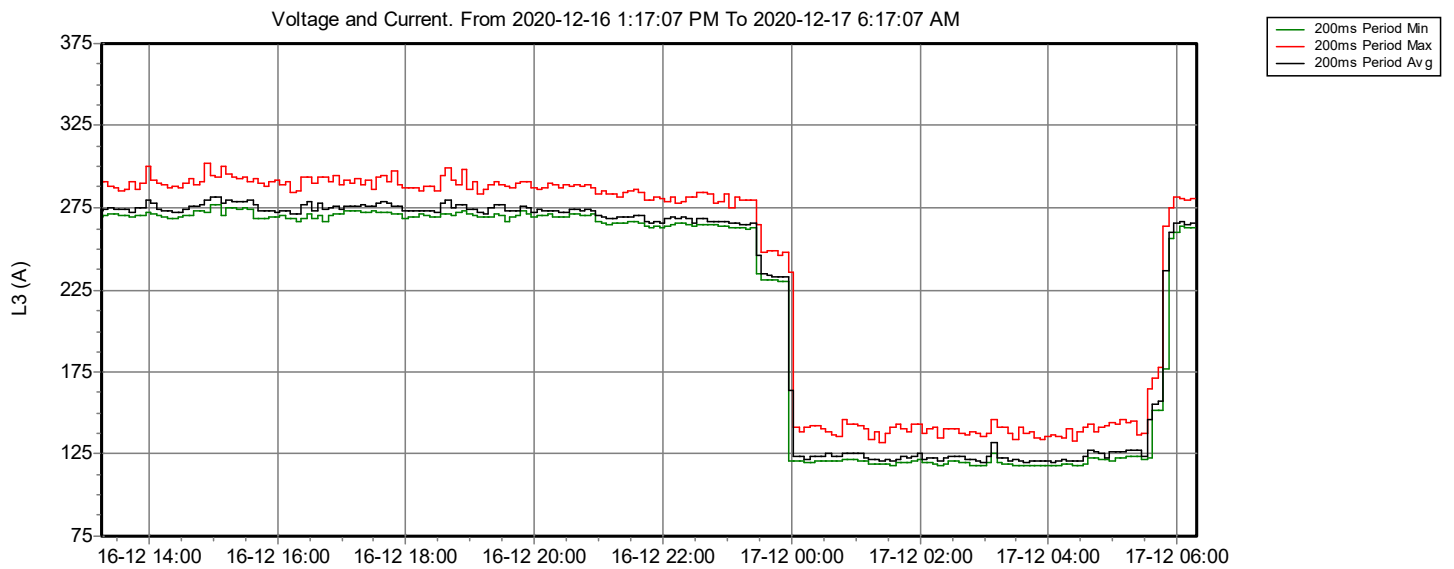
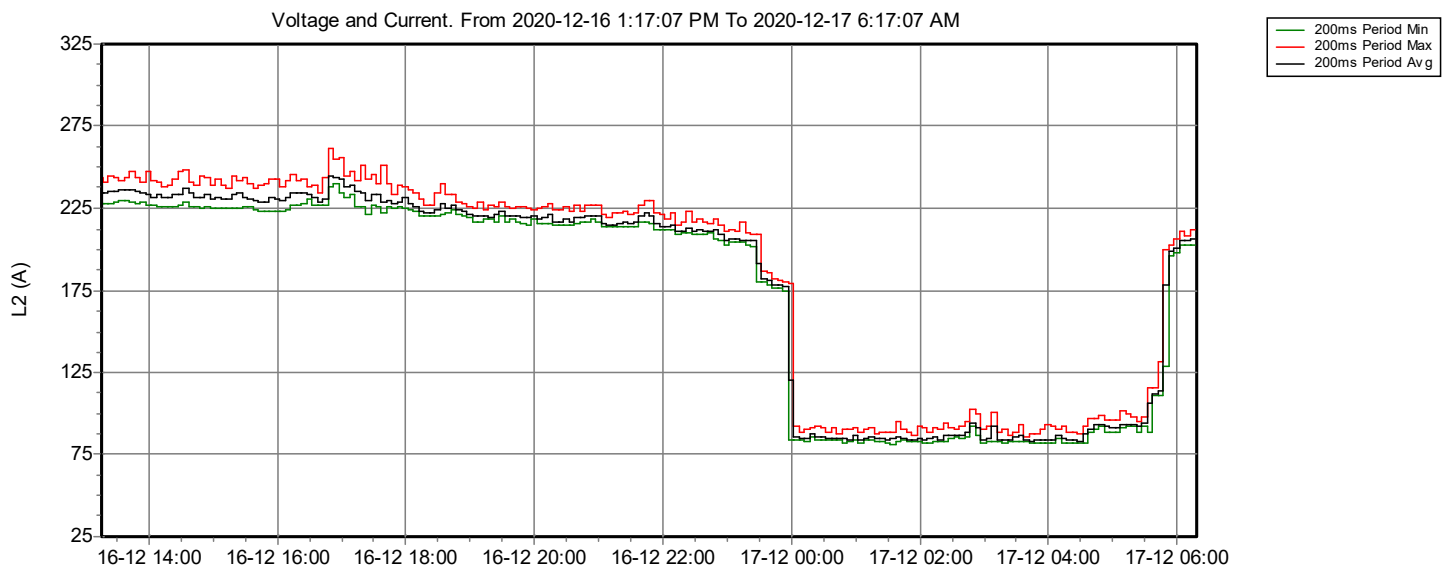
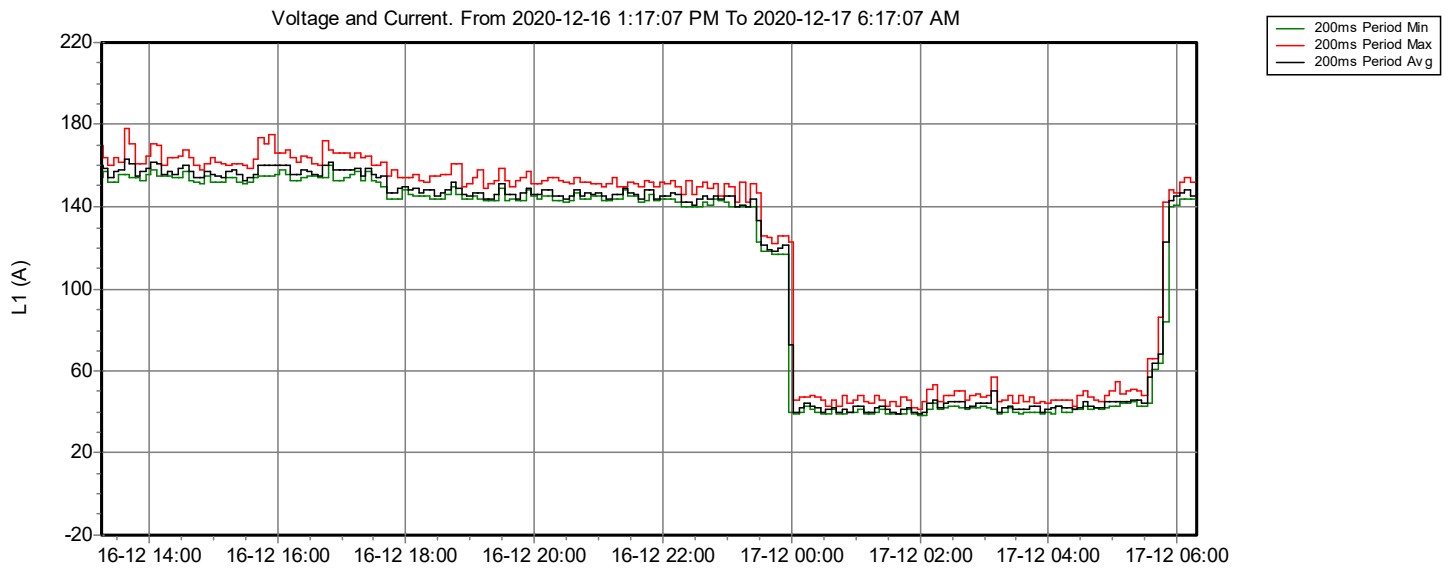
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM

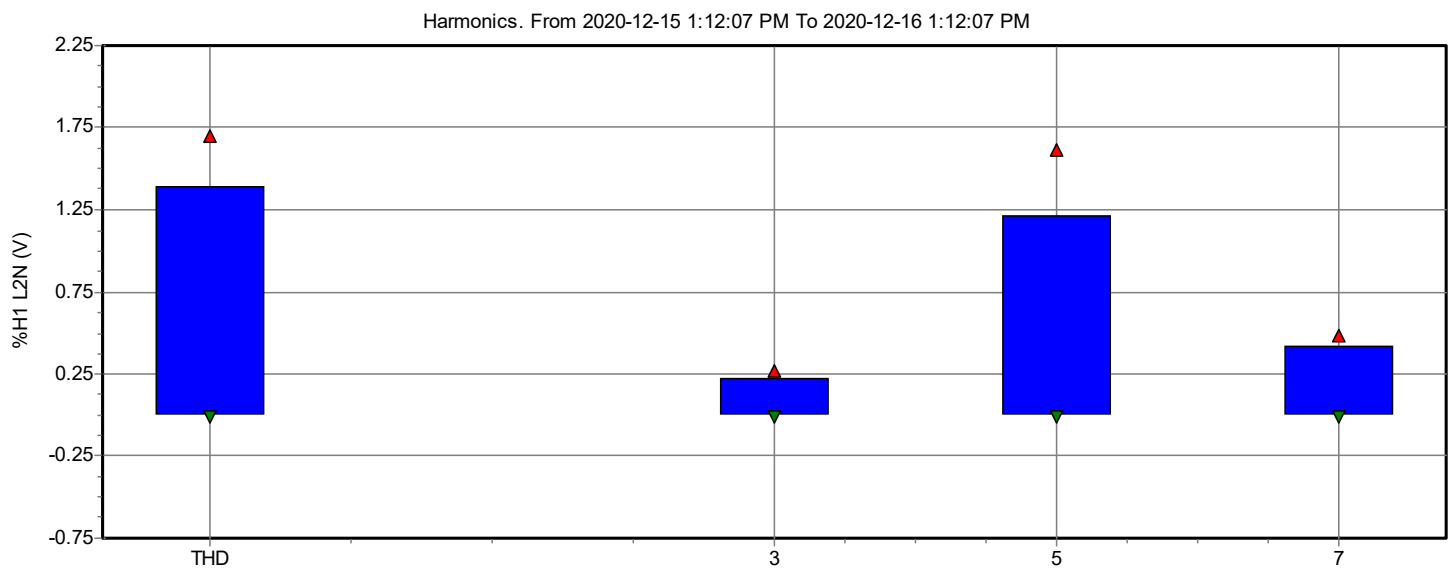
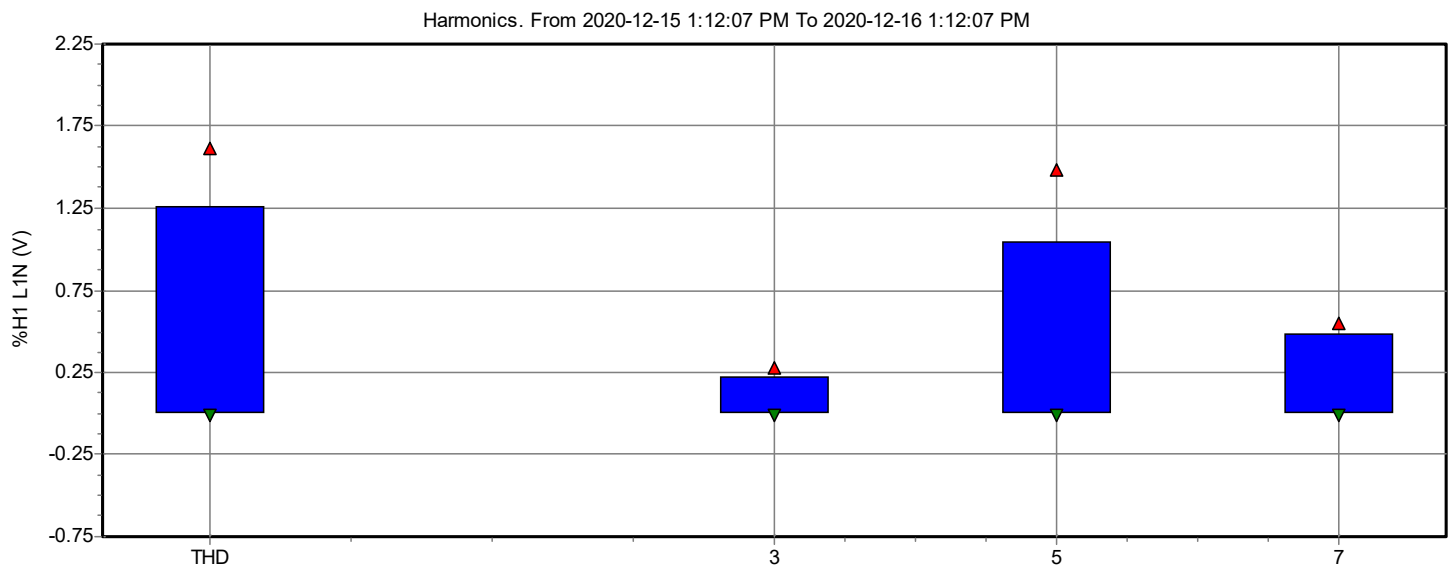
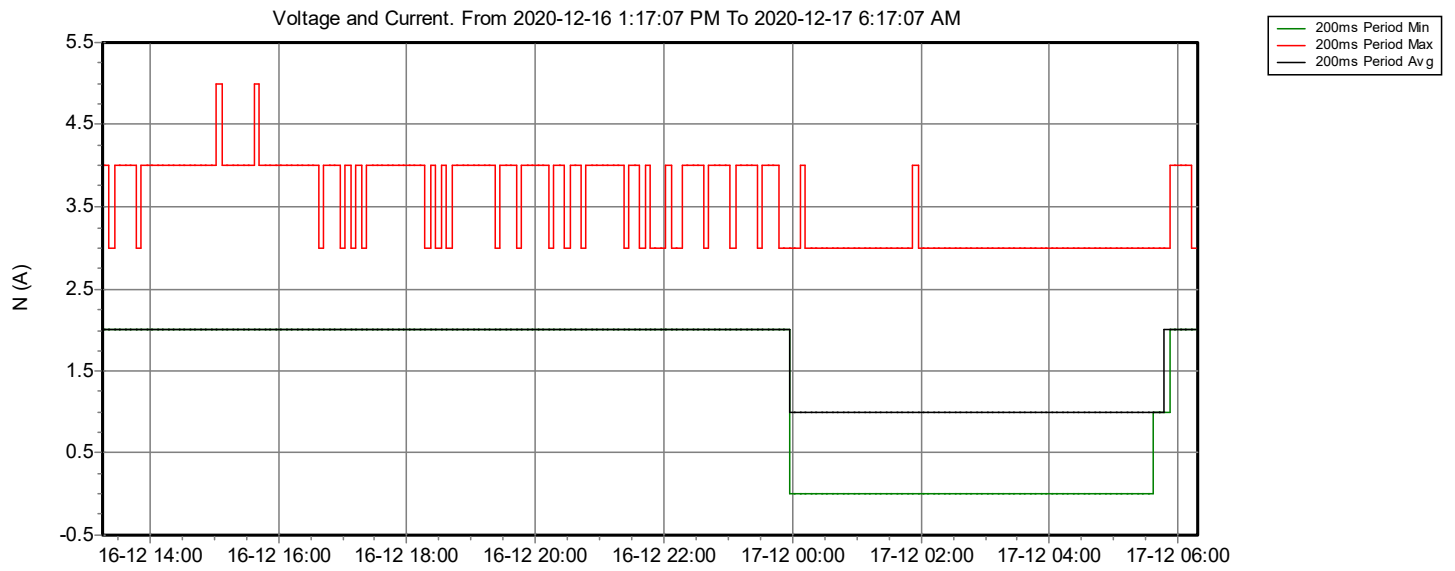


Voltage and Current. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM

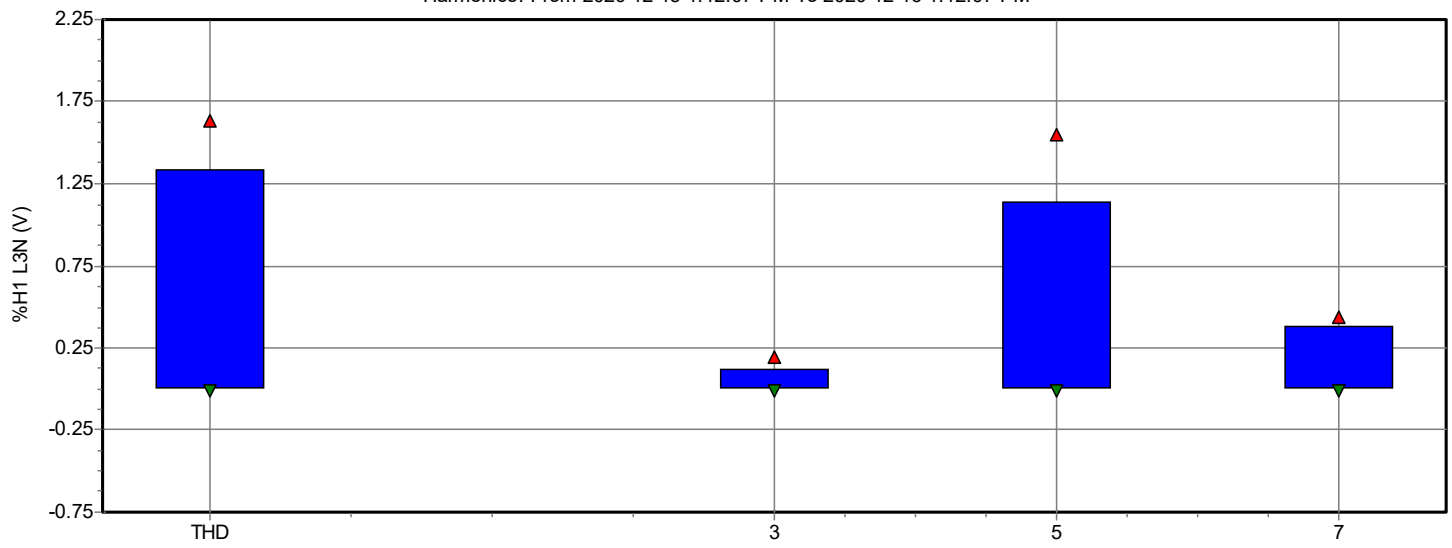




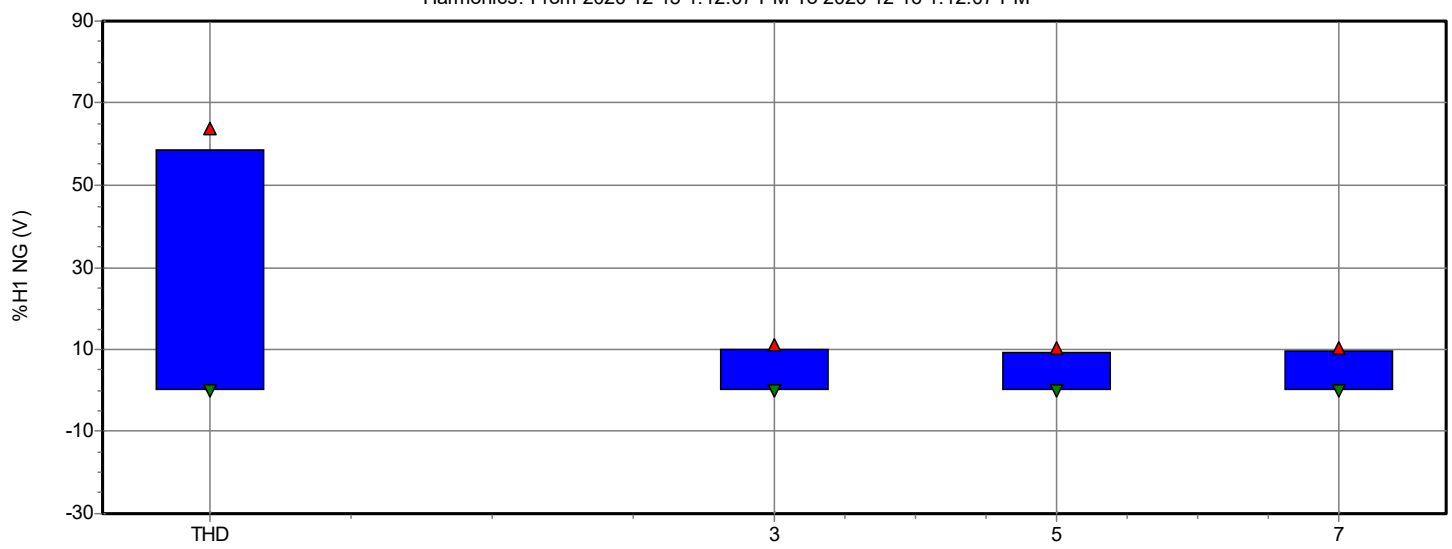




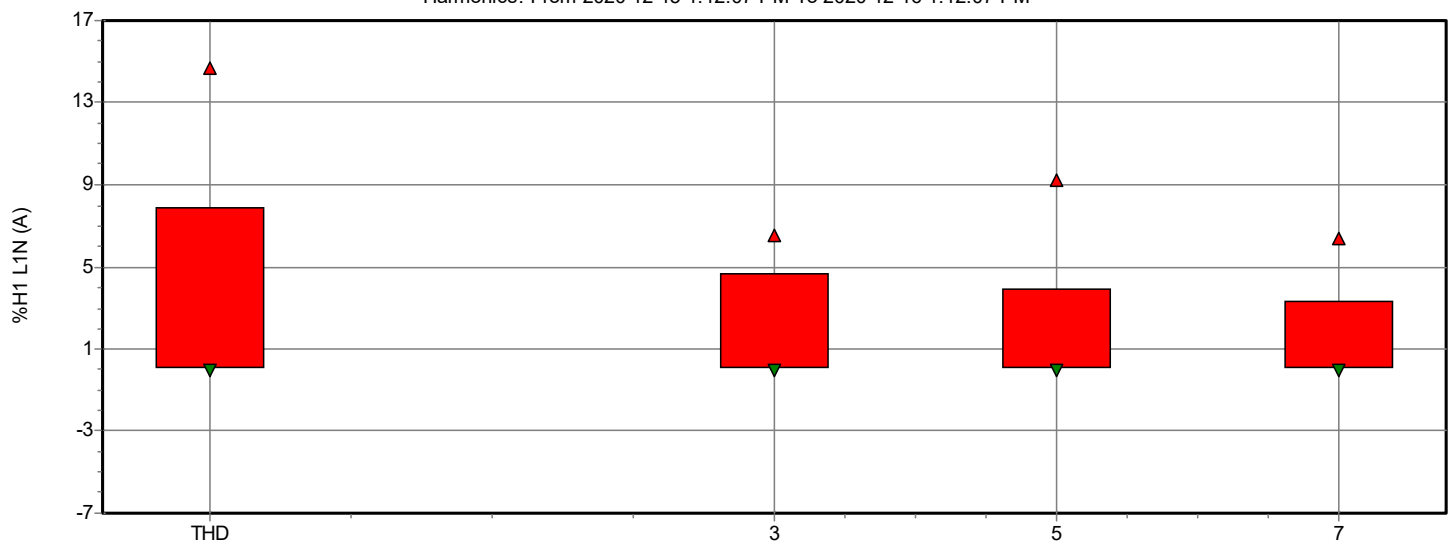
Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



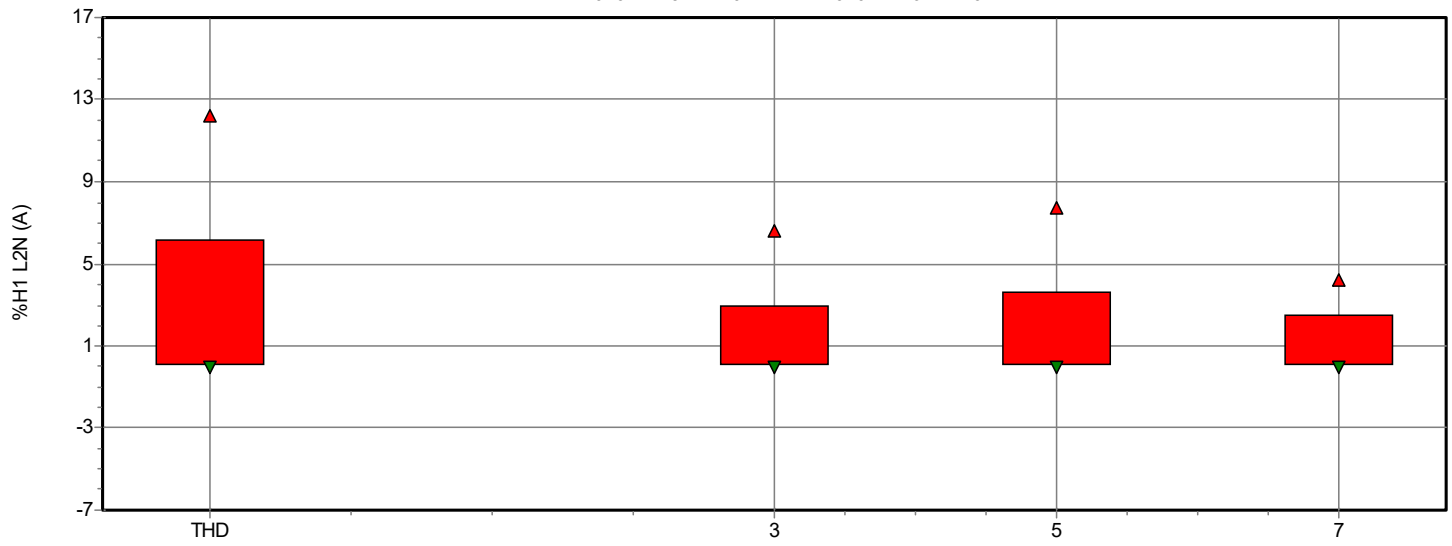
Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



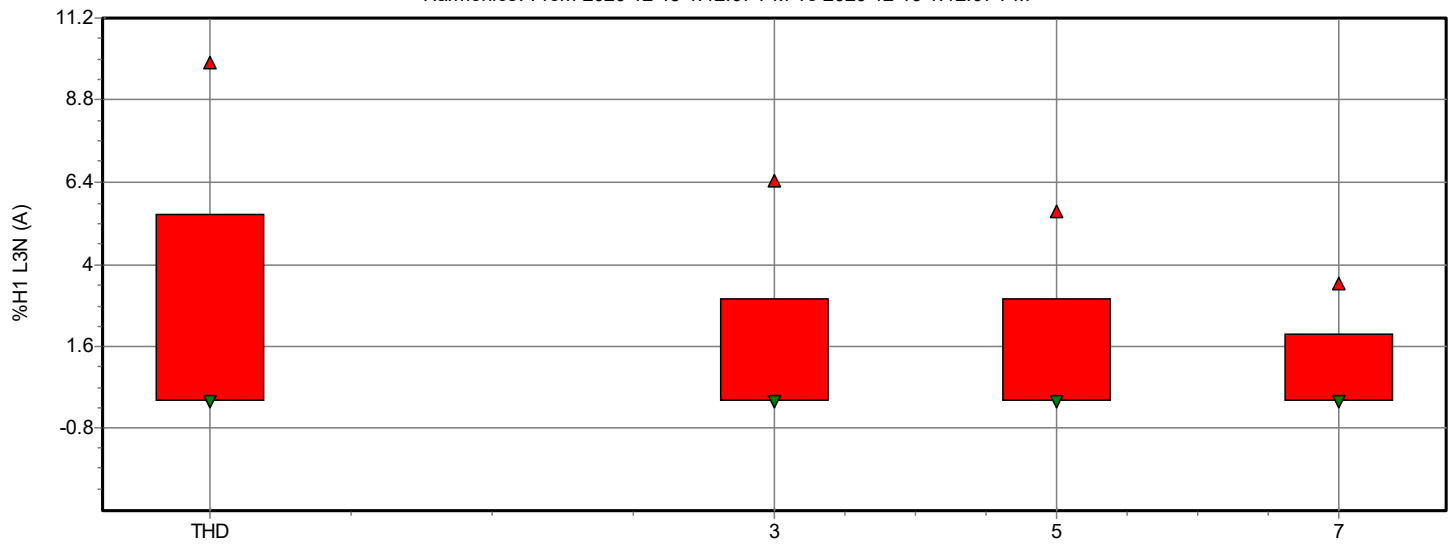
Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



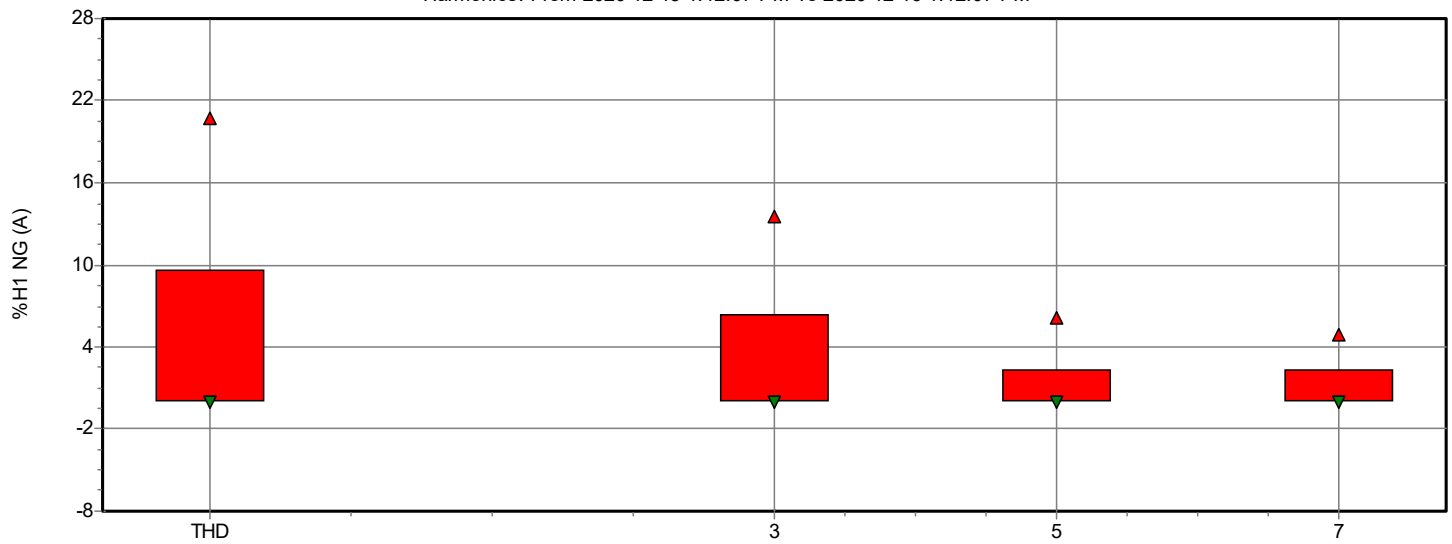
Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



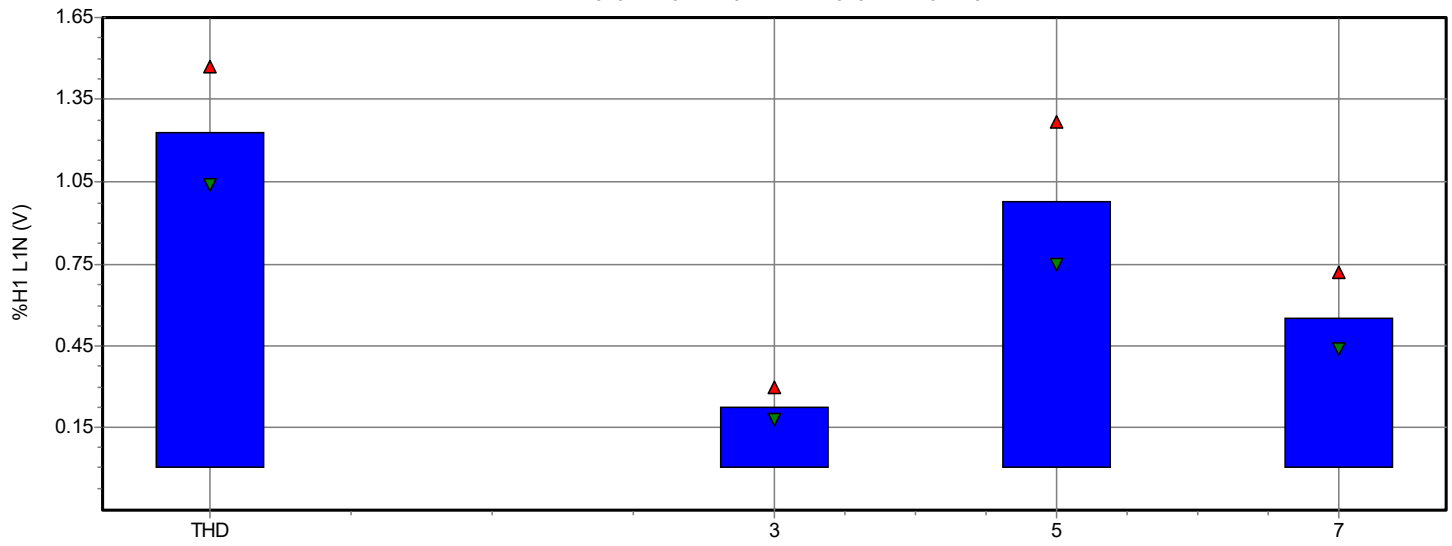
Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



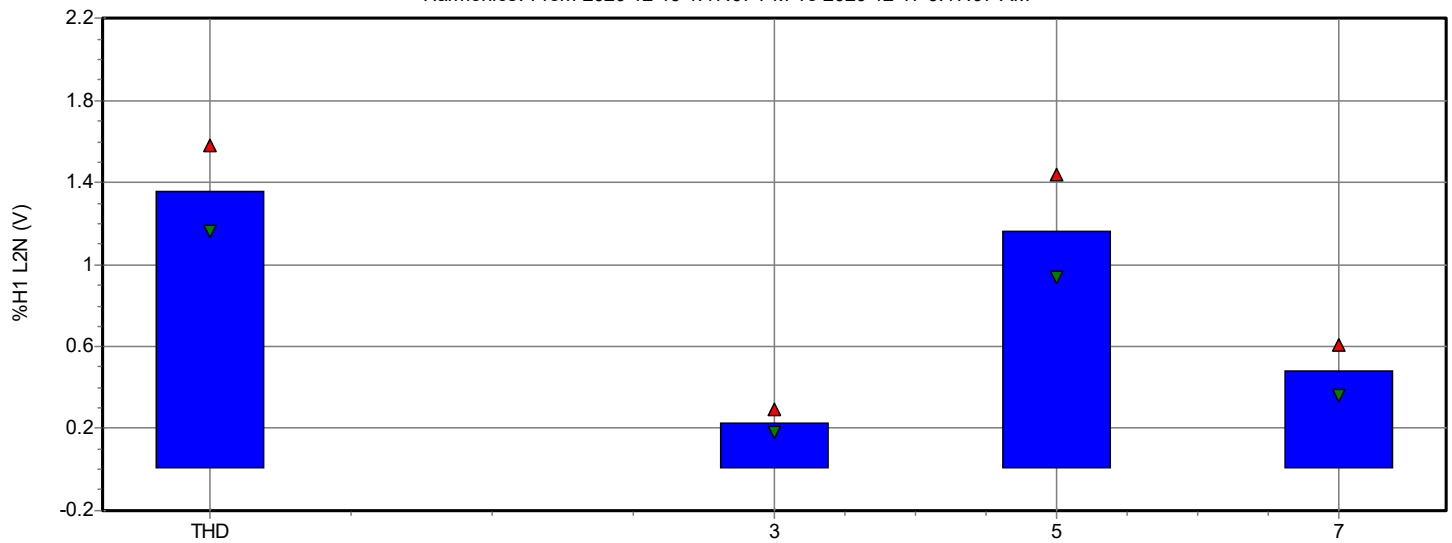
Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



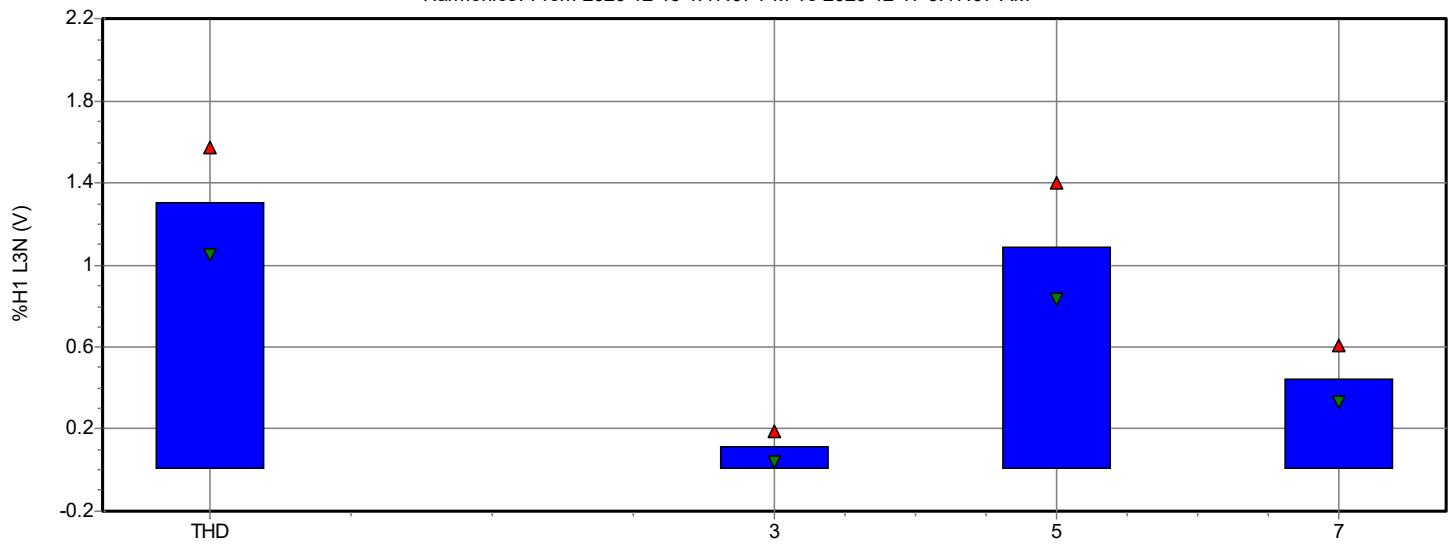
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



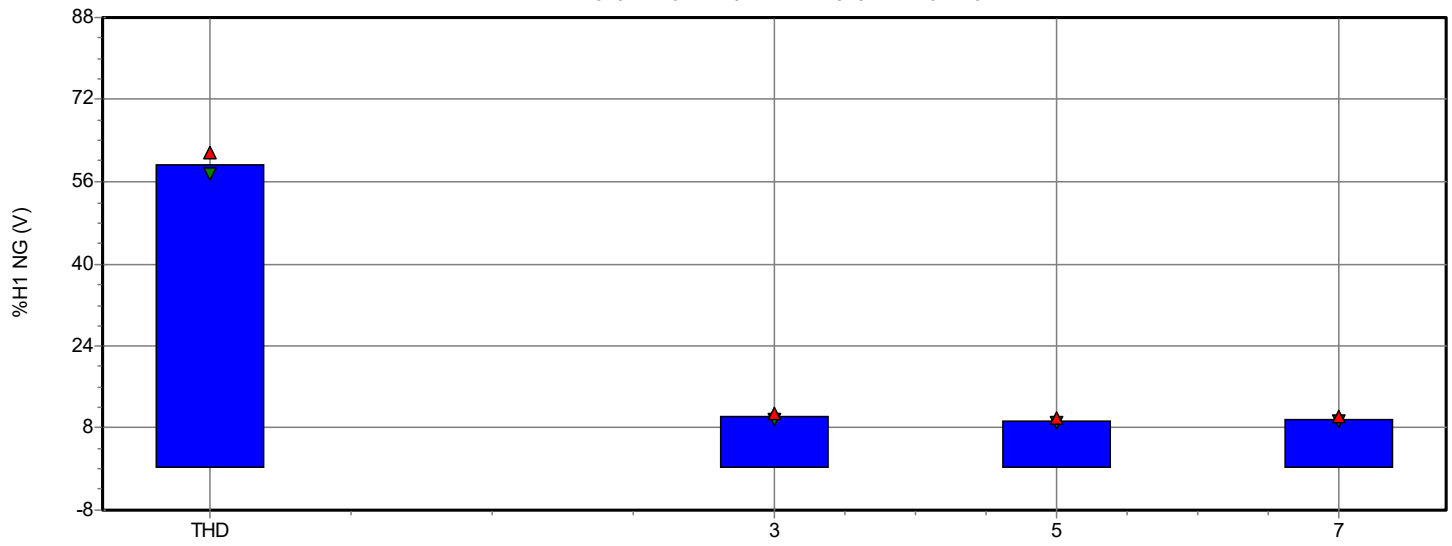
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



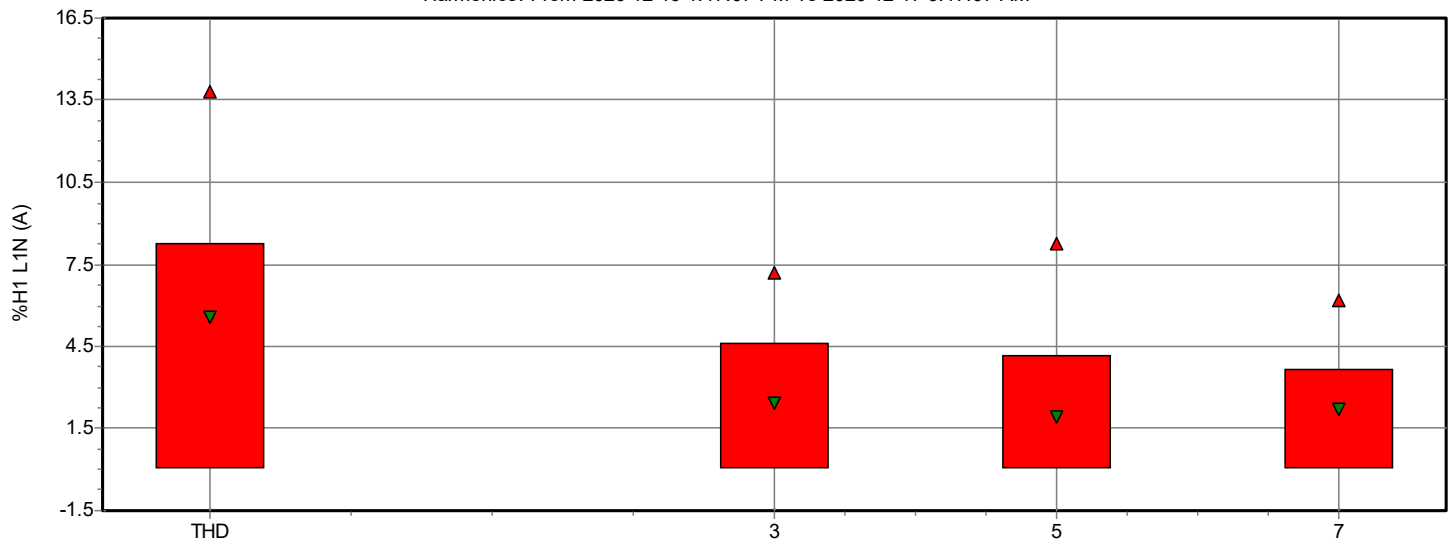
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



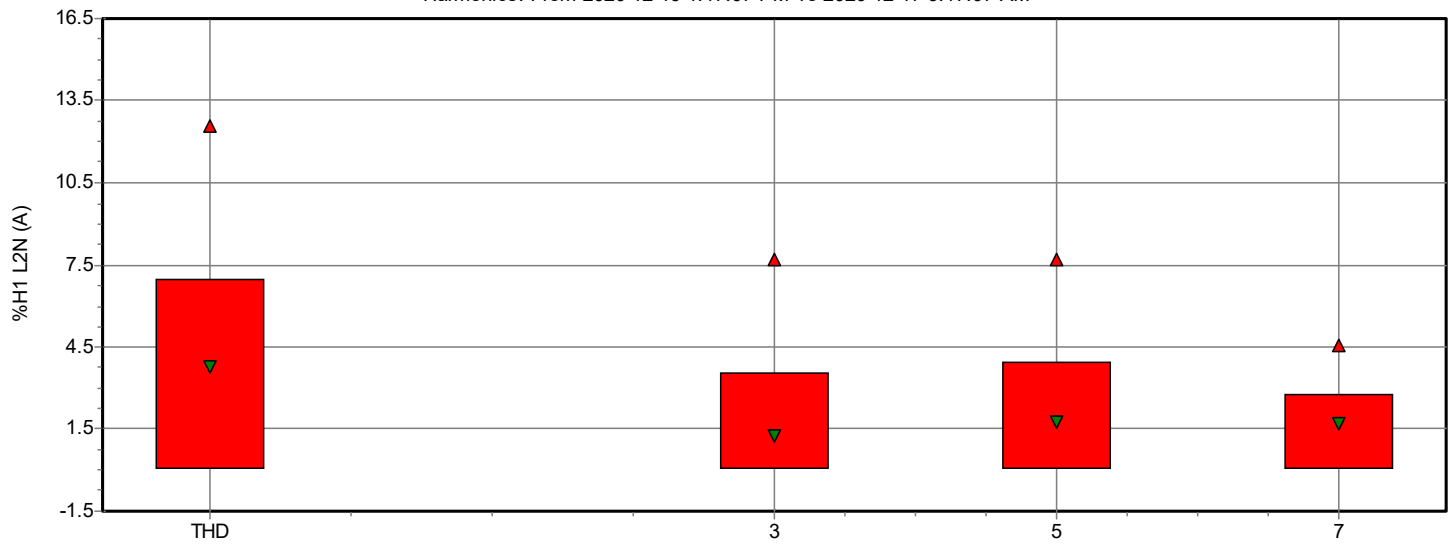
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



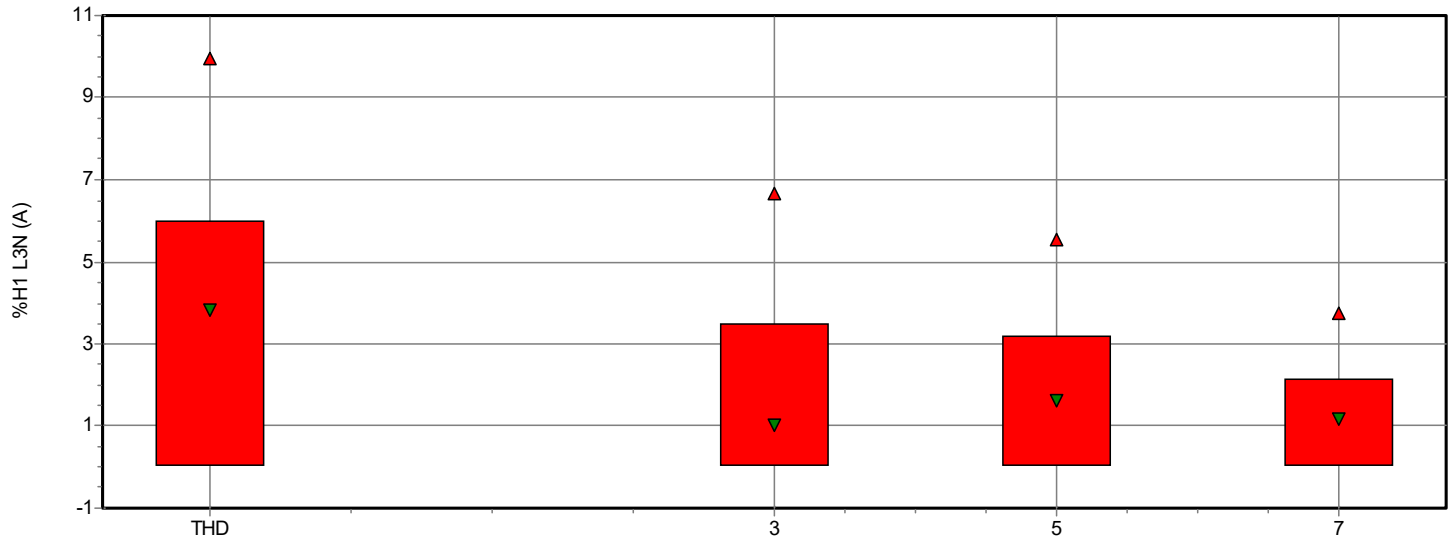
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



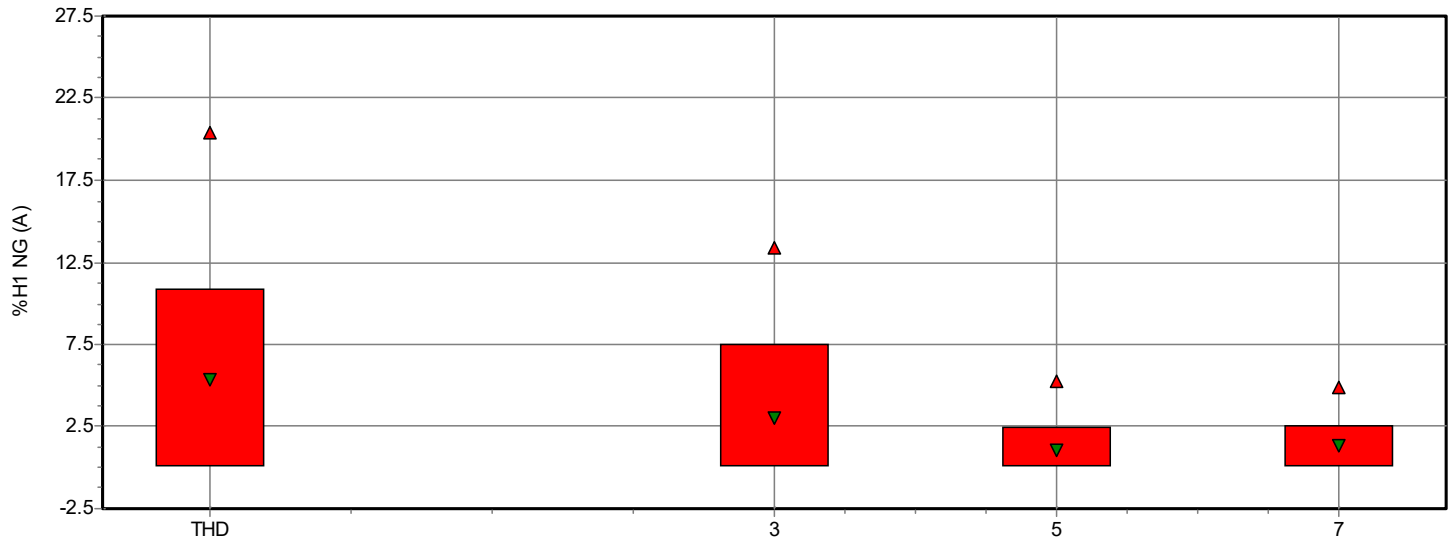
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



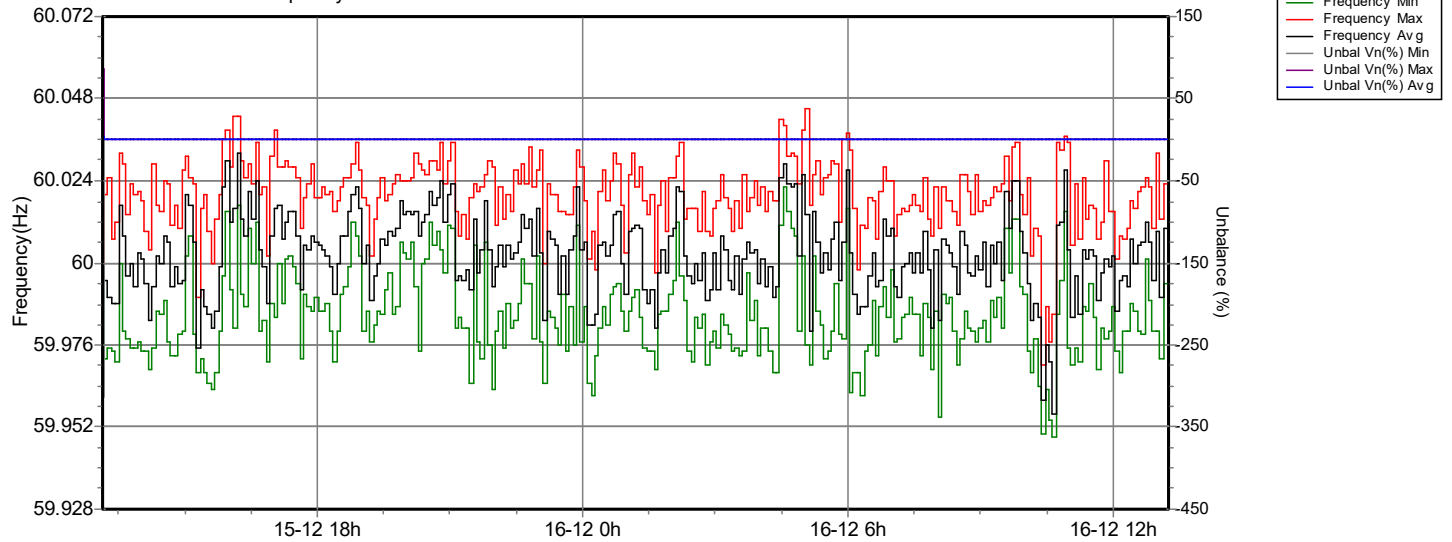
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM

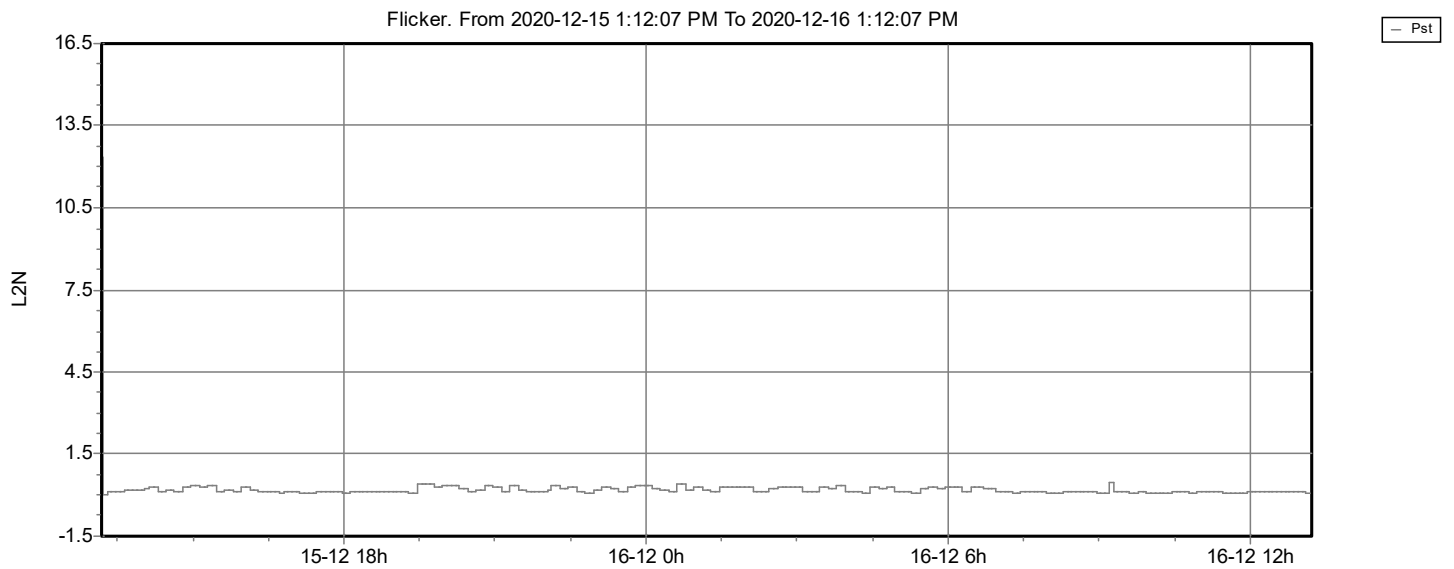
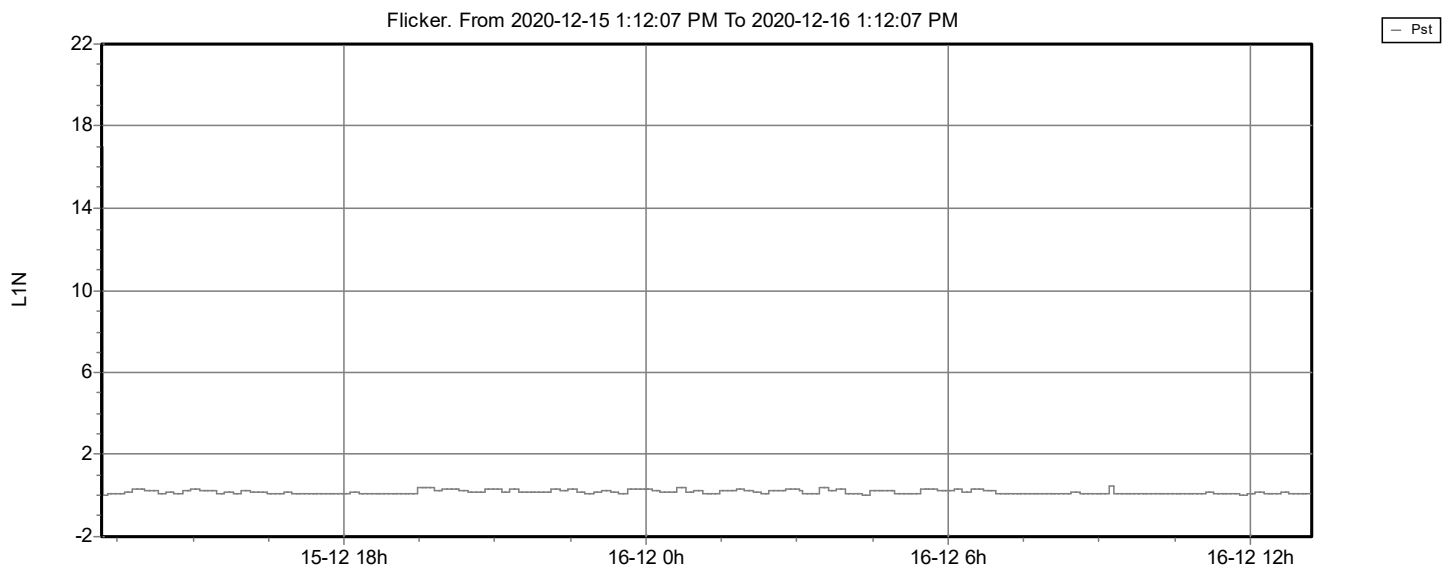
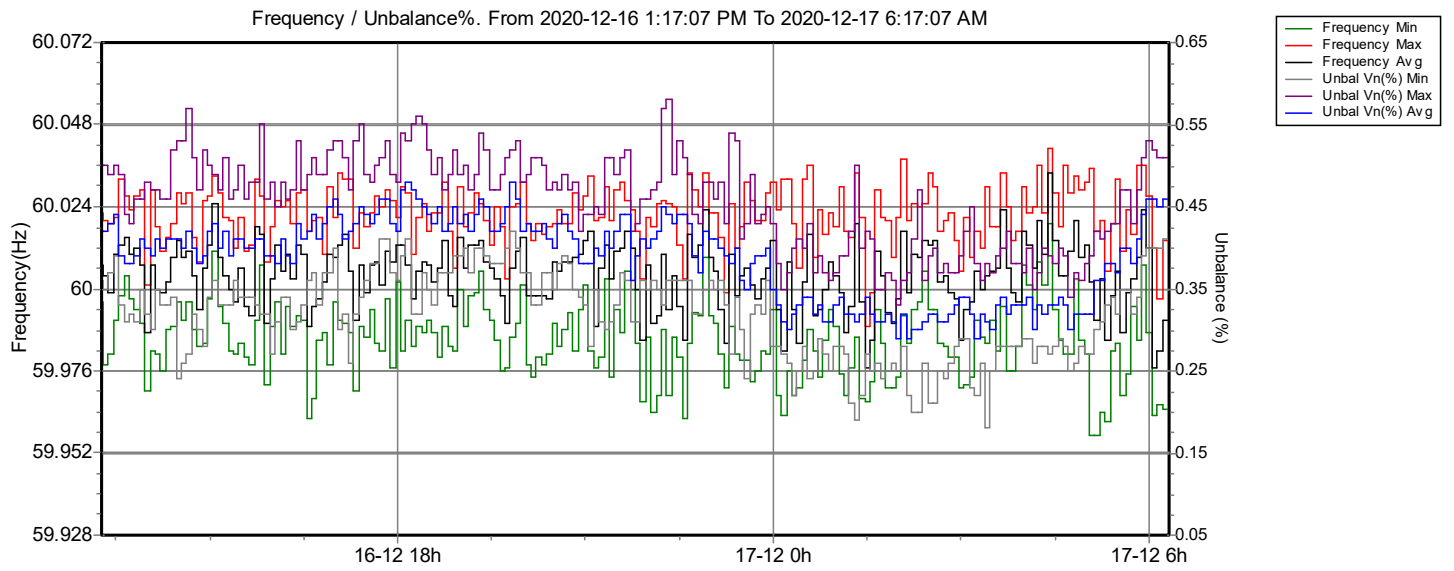


Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM

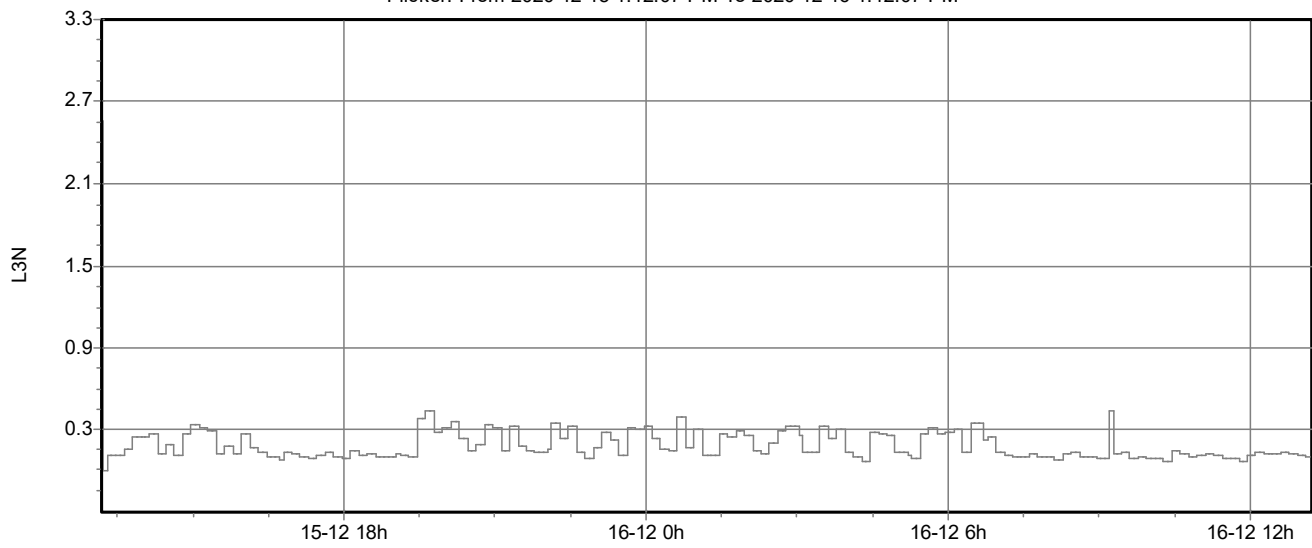


Frequency / Unbalance%. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM

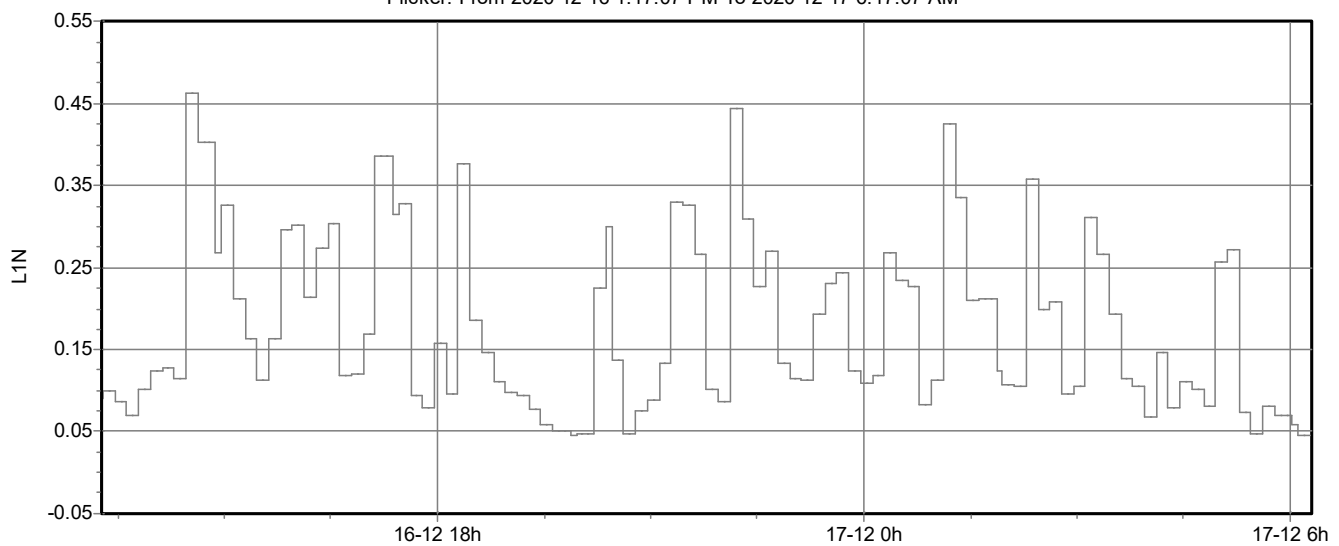




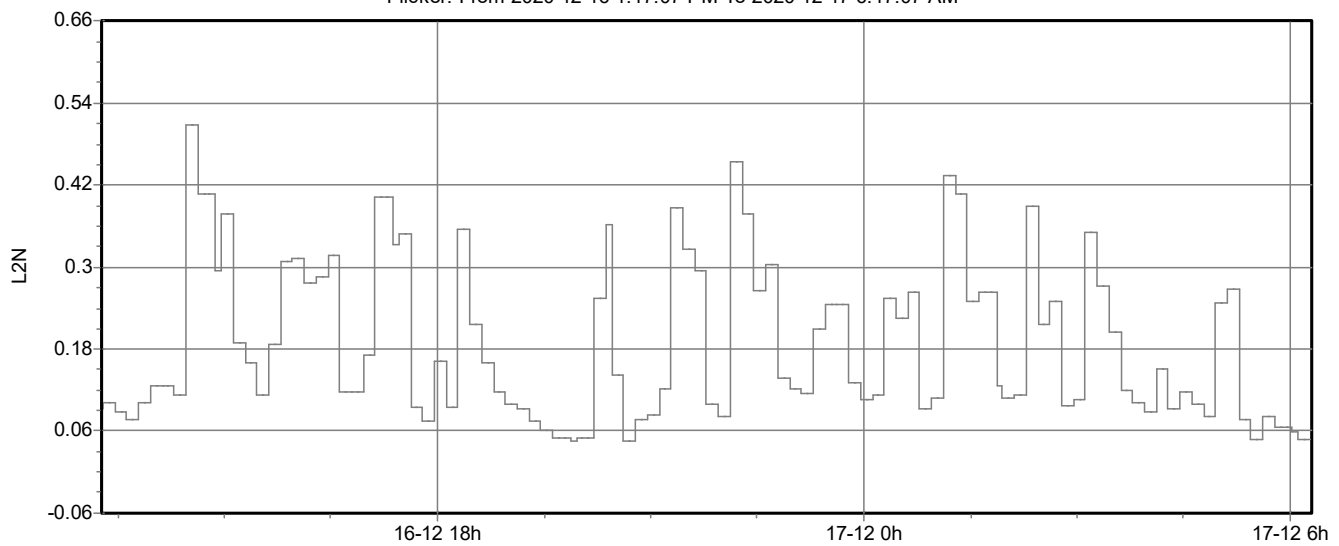
Flicker. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



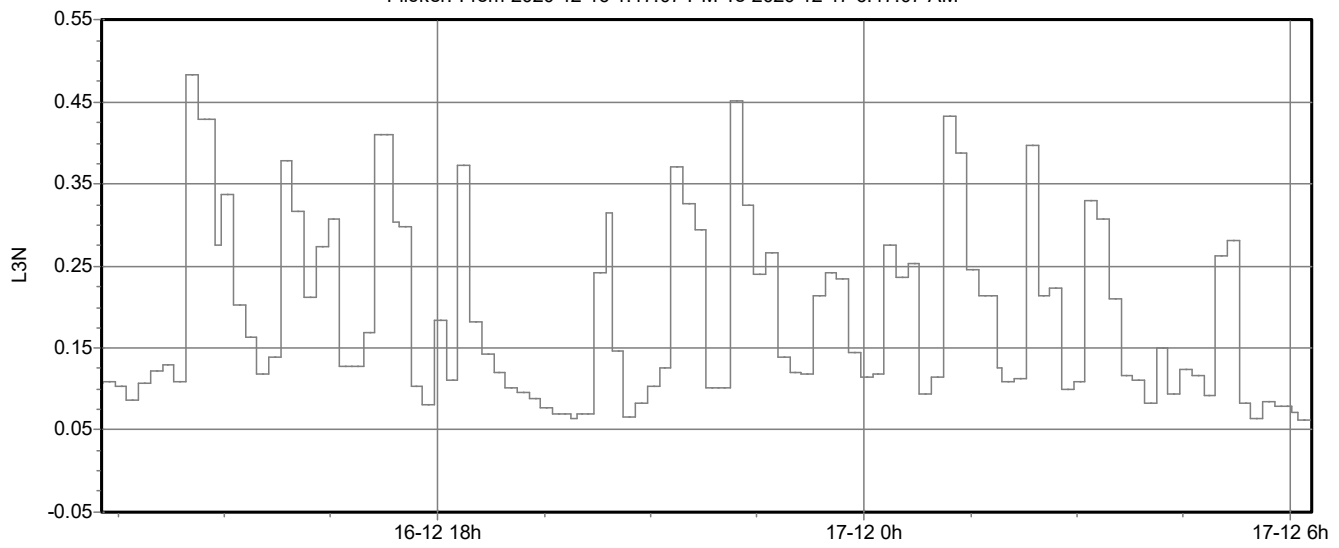
Flicker. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



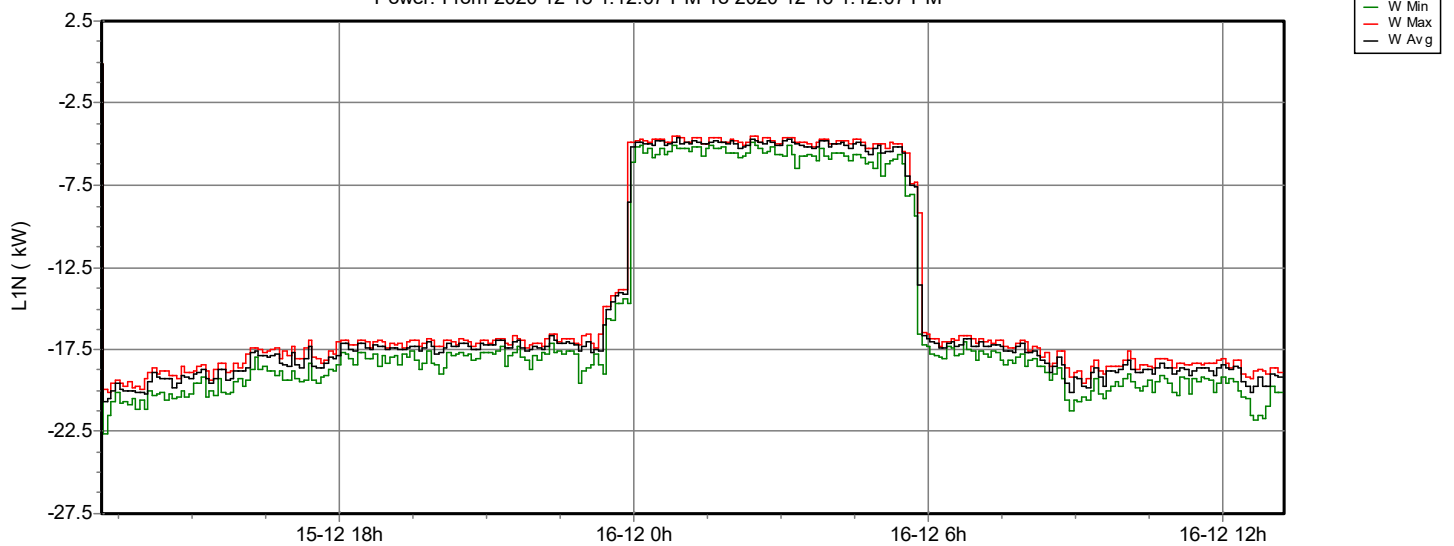
Flicker. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



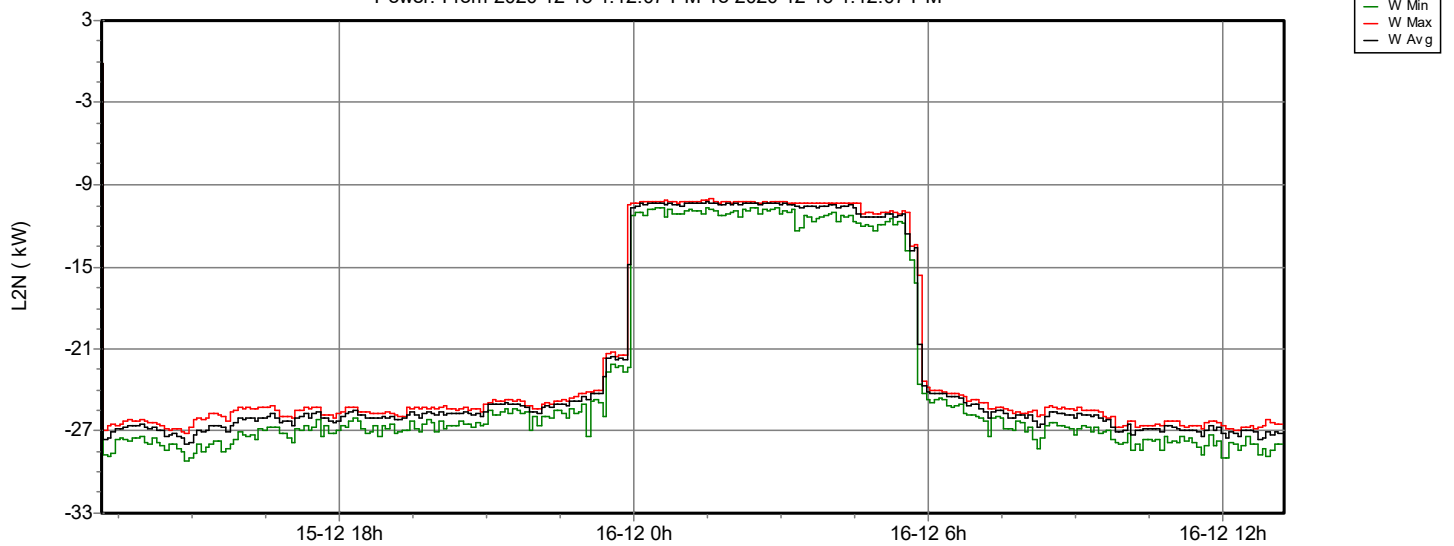
Flicker. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM

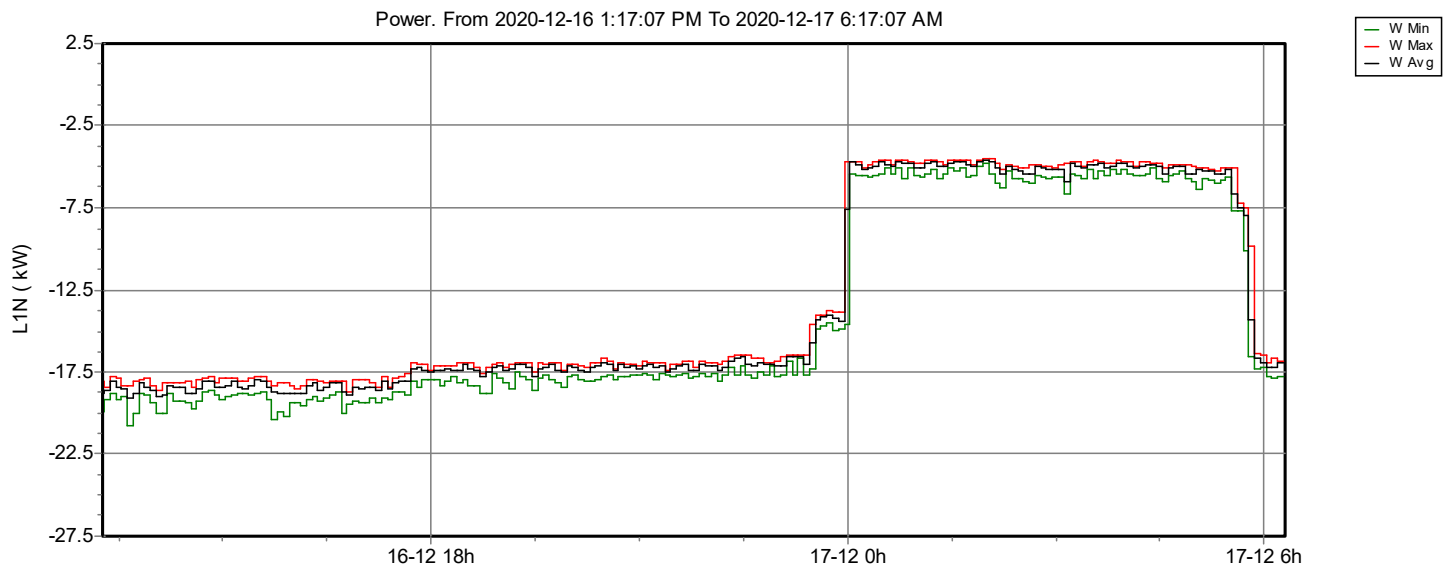
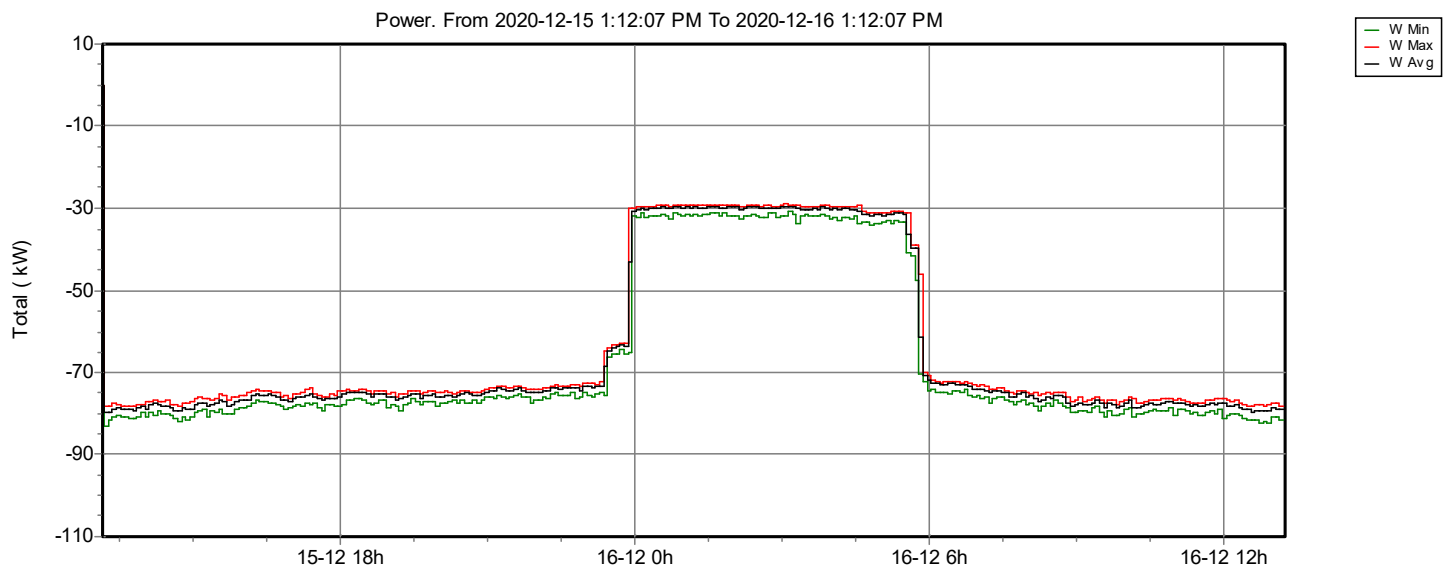
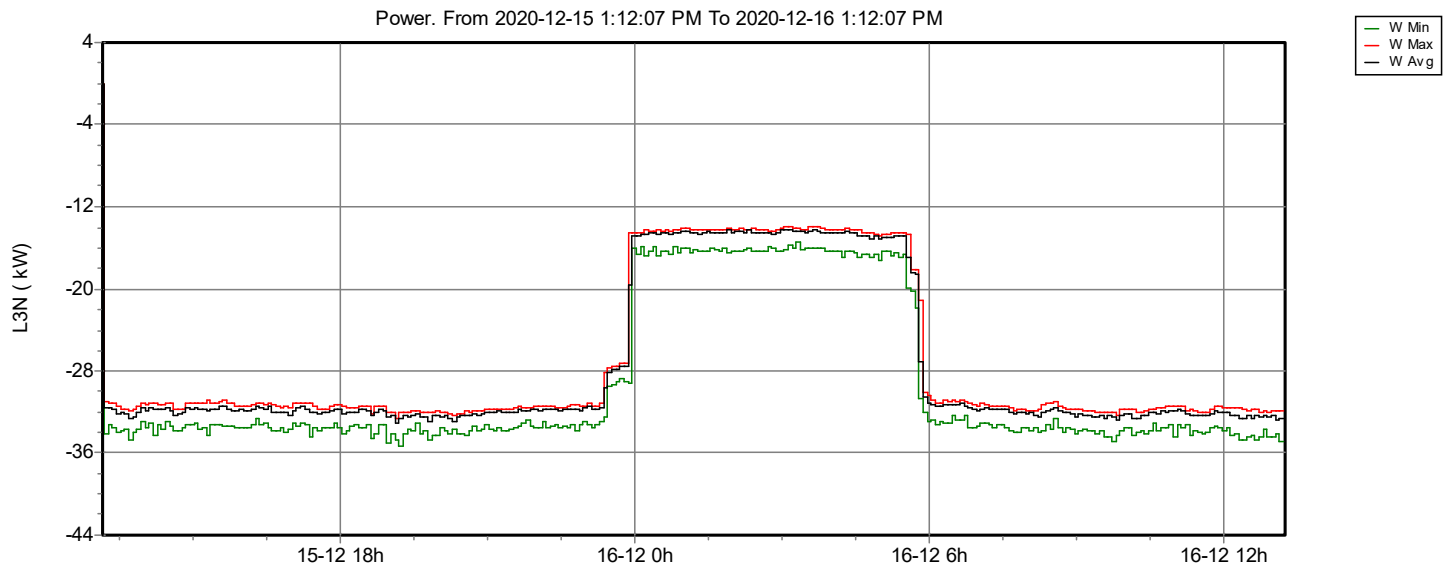


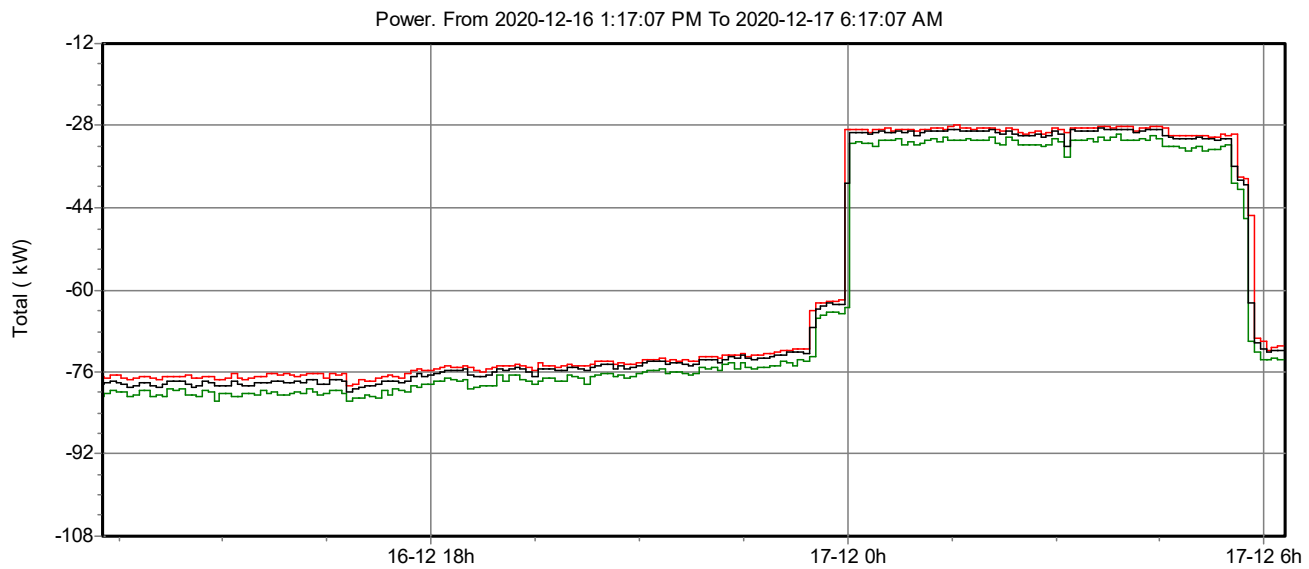
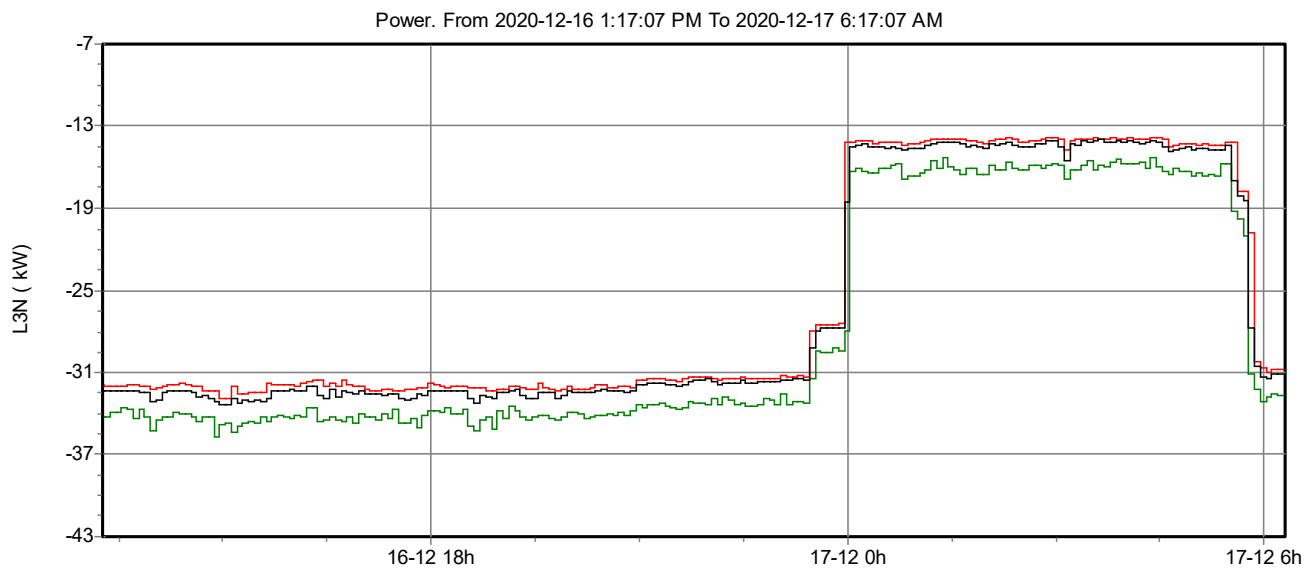
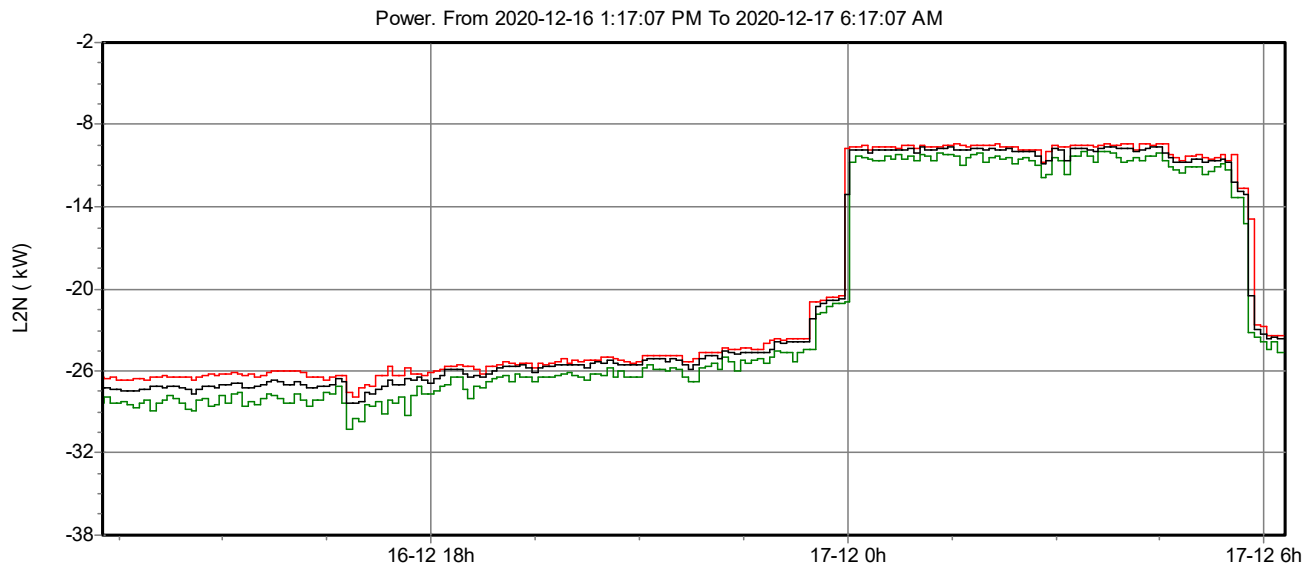
Power. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



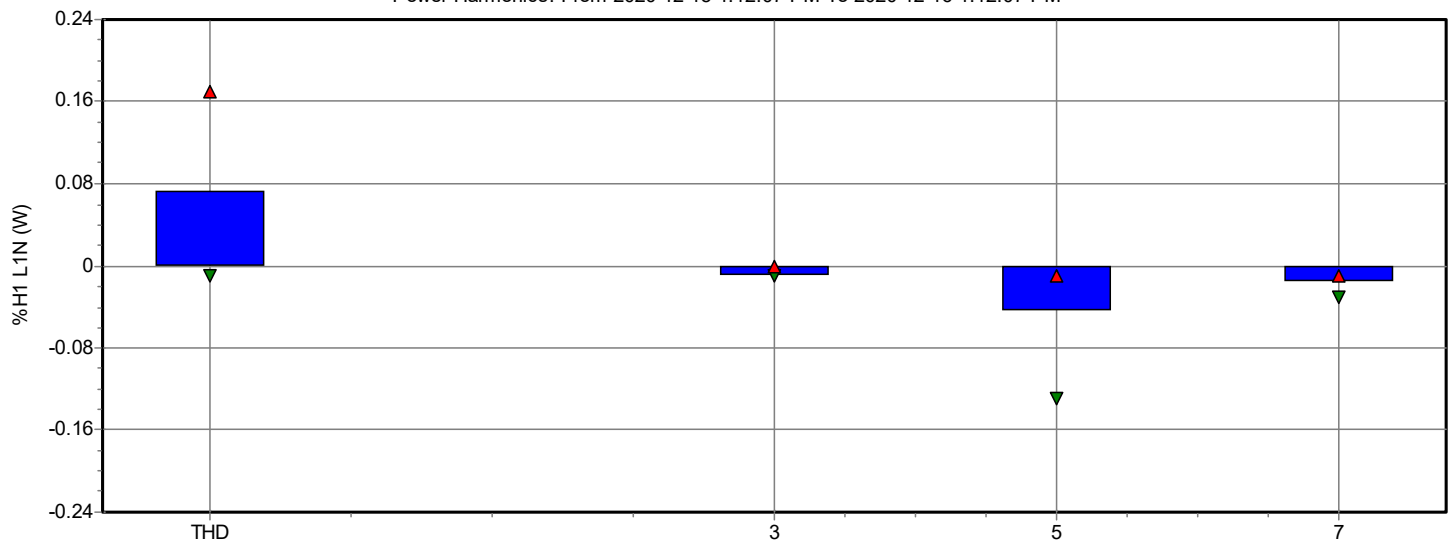
Power. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



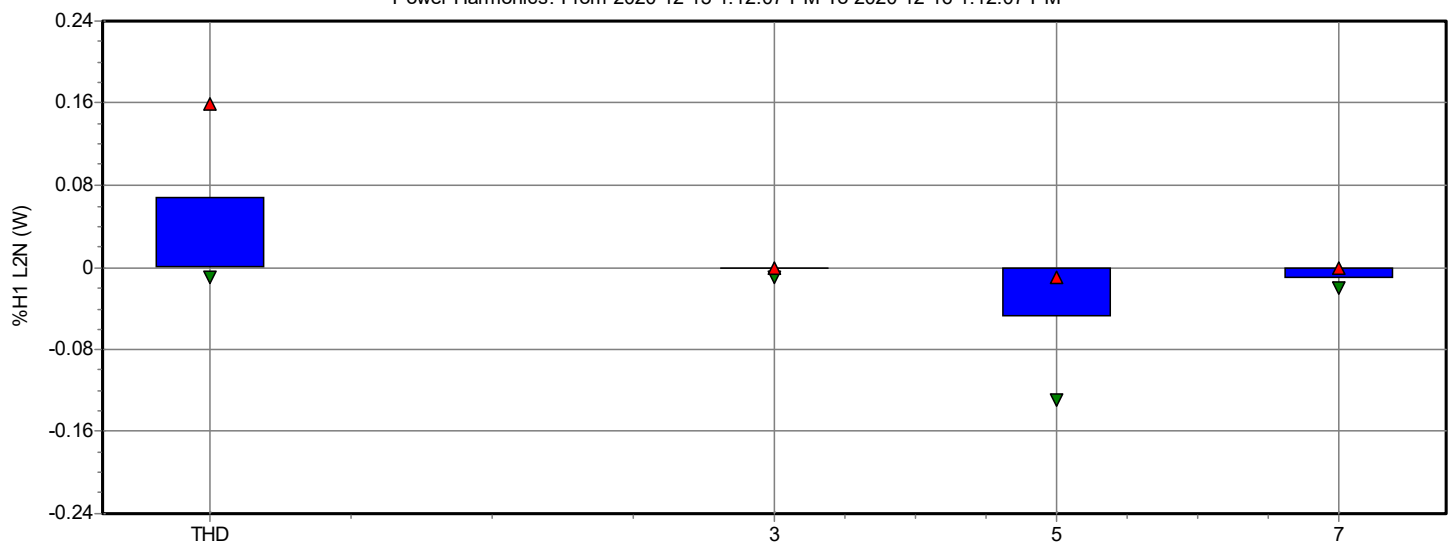




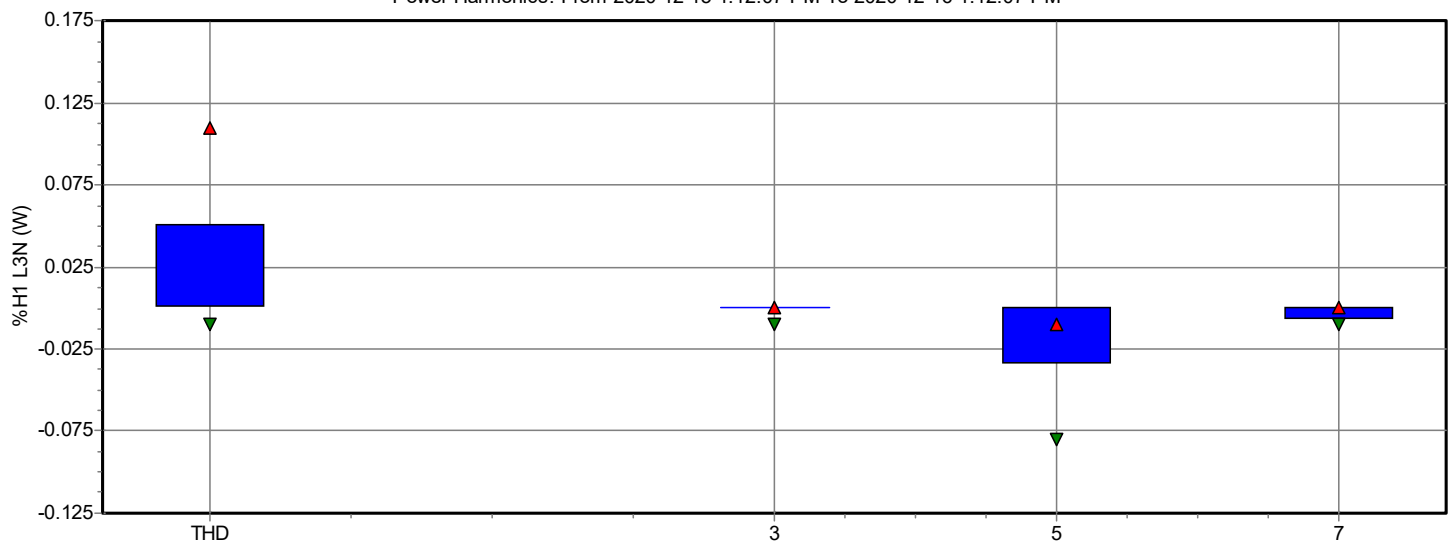
Power Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



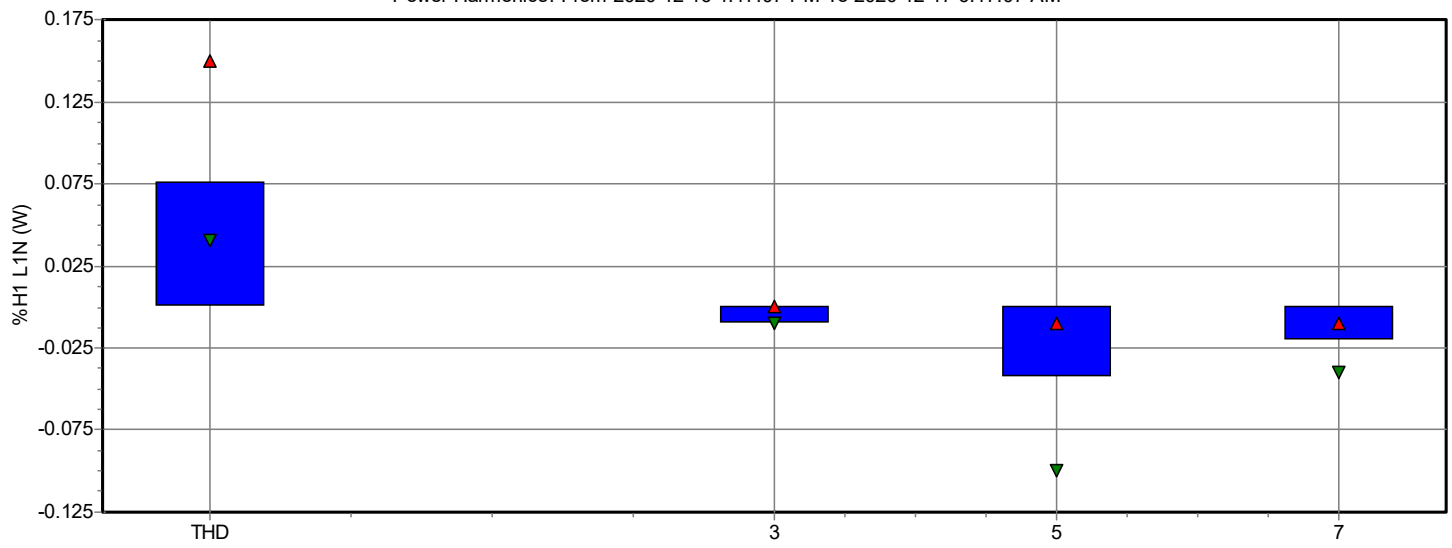
Power Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



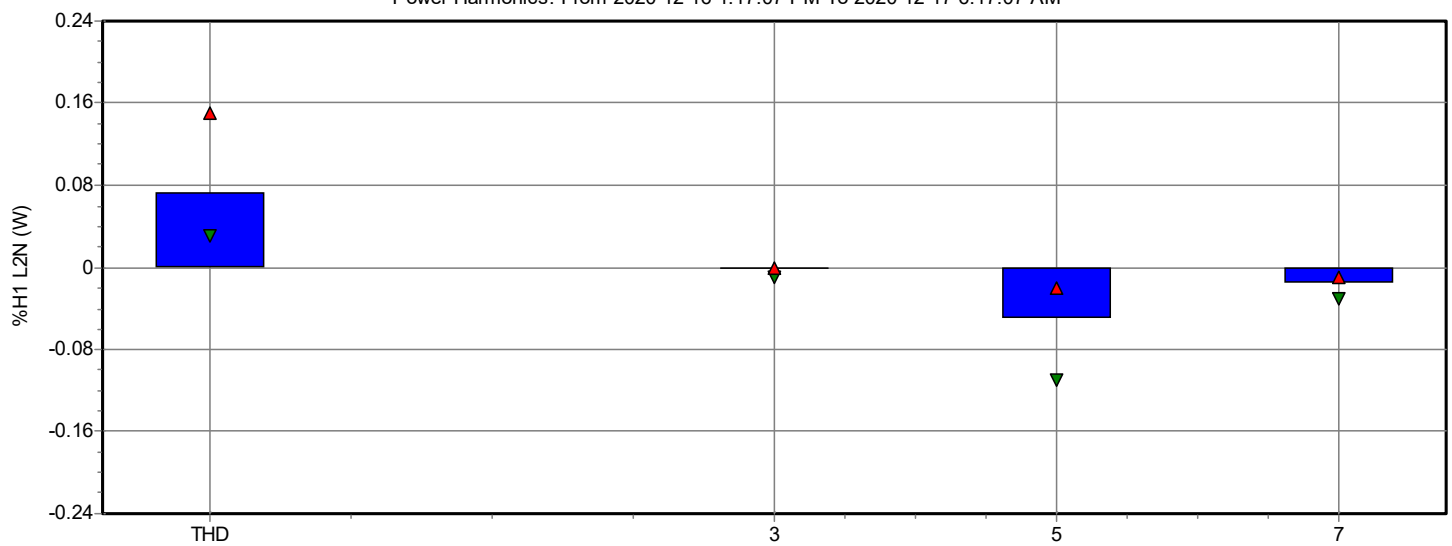
Power Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



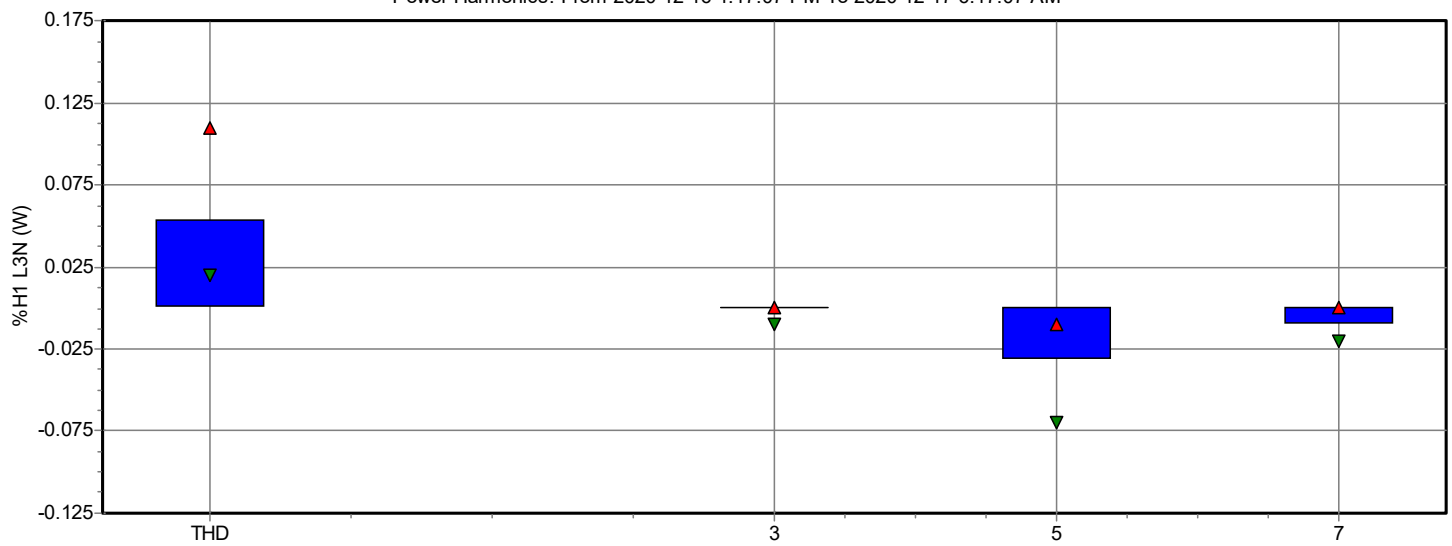
Power Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM

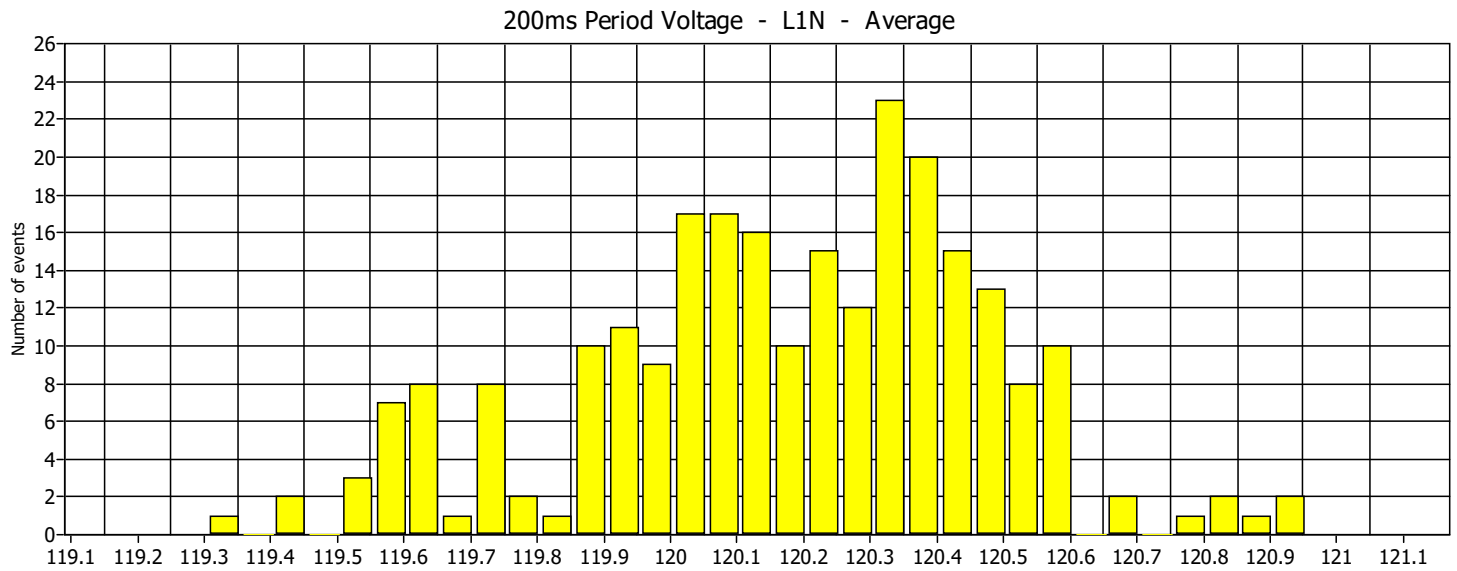


Power Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



Power Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM





Instrument Information

Model Number	FLUKE 434/435
Serial Number	N/A
Firmware Revision	V02.10

Software Information

Power Log Version	Classic 4.6
FLUKE 345 DLL Version	11.20.2006
FLUKE 430 DLL Version	1.1.0.12

General Information

Recording location
Client
Notes

Measurement Summary

Measurement topology	Wye mode
Application mode	Logger
First recording	2020-12-15 1:12:07 PM 382msec
Last recording	2020-12-17 6:17:07 AM 382msec
Recording interval	0h 5m 0s 0msec
Nominal Voltage	230 V
Nominal Current	N/A
Nominal Frequency	60 Hz

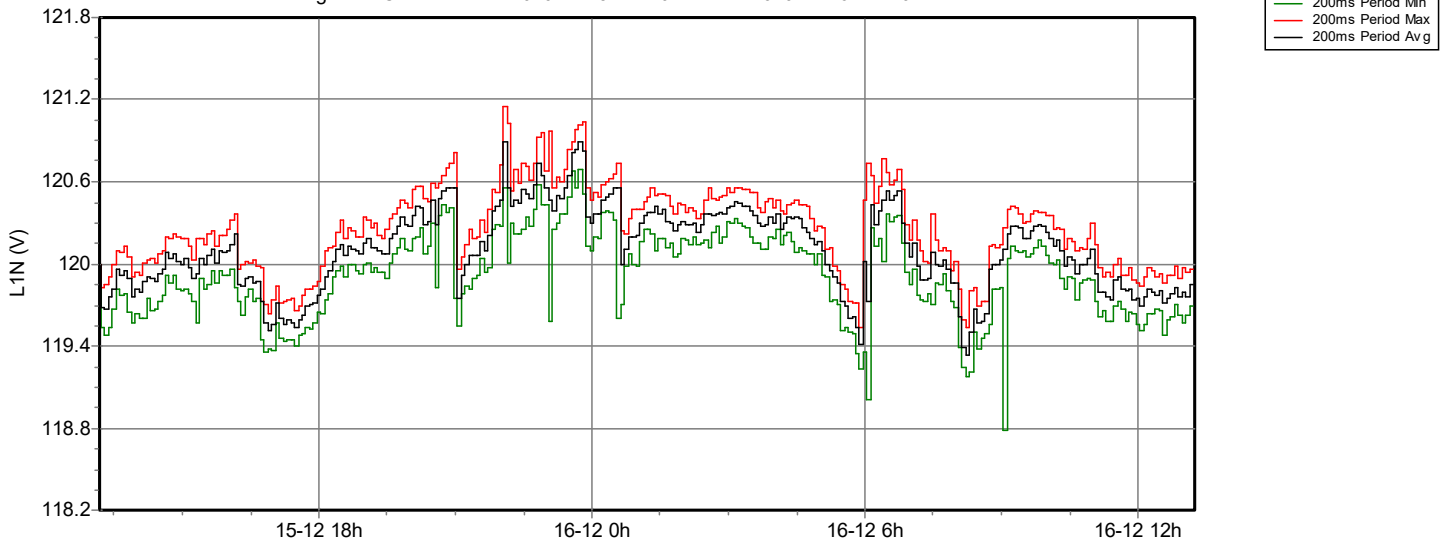
Recording Summary

RMS recordings	494
DC recordings	0
Frequency recordings	494
Unbalance recordings	494
Harmonic recordings	494
Power harmonic recordings	494
Power recordings	494
Energy recordings	0
Flicker recordings	494
Mains signaling recordings	0

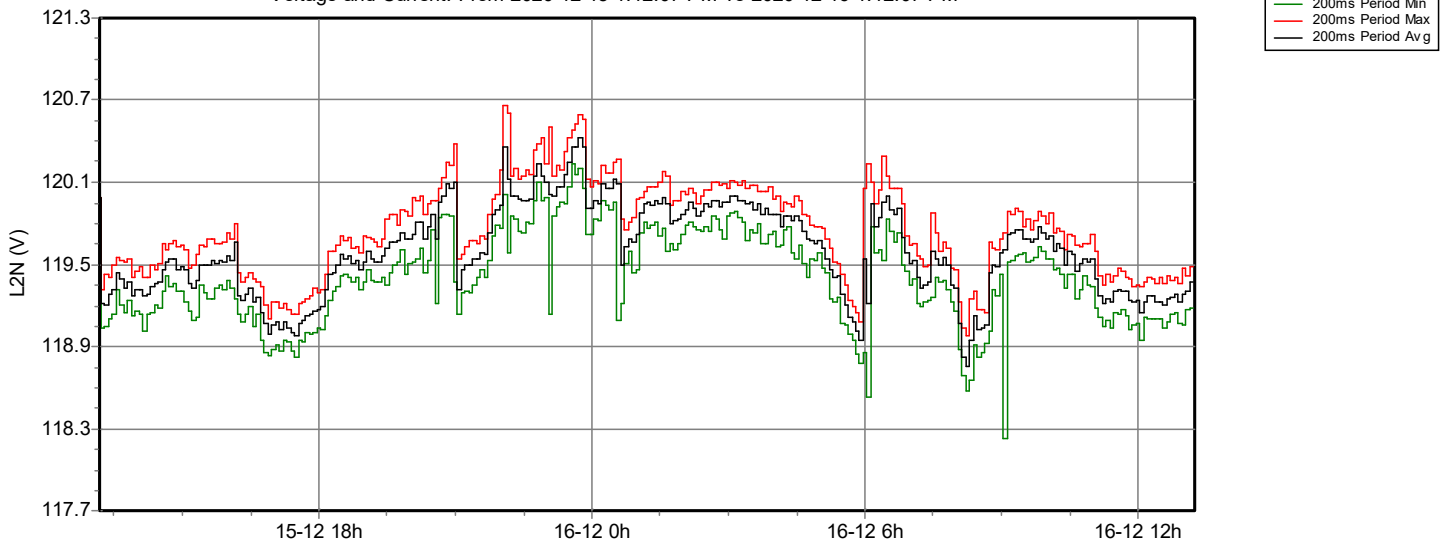
Events Summary

Dips	0
Swells	0
Transients	0
Interruptions	0
Voltage profiles	0
Rapid voltage changes	0
Screens	1
Waveforms	0
Intervals without measurements	0
Inrush current graphics	0

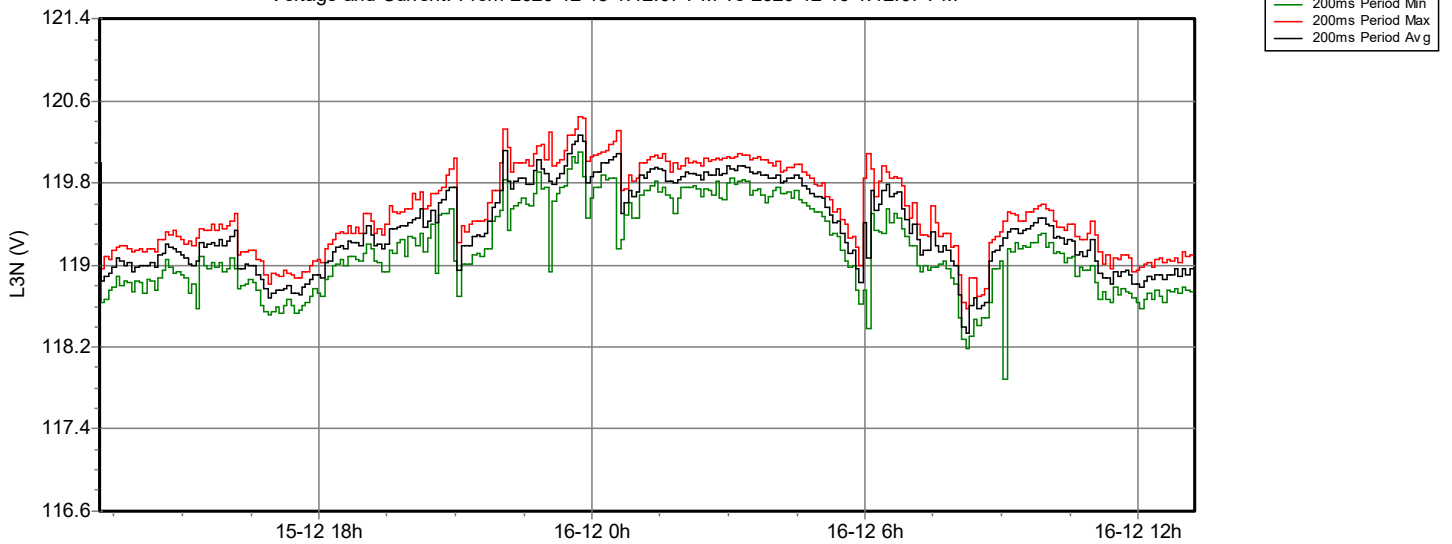
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



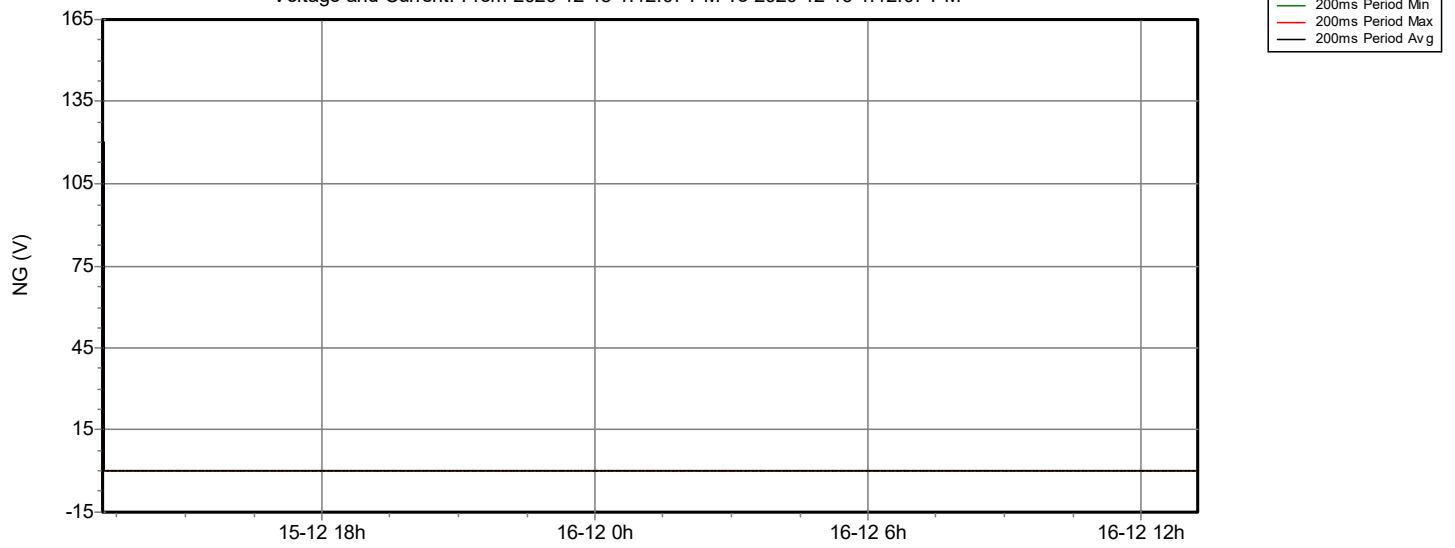
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



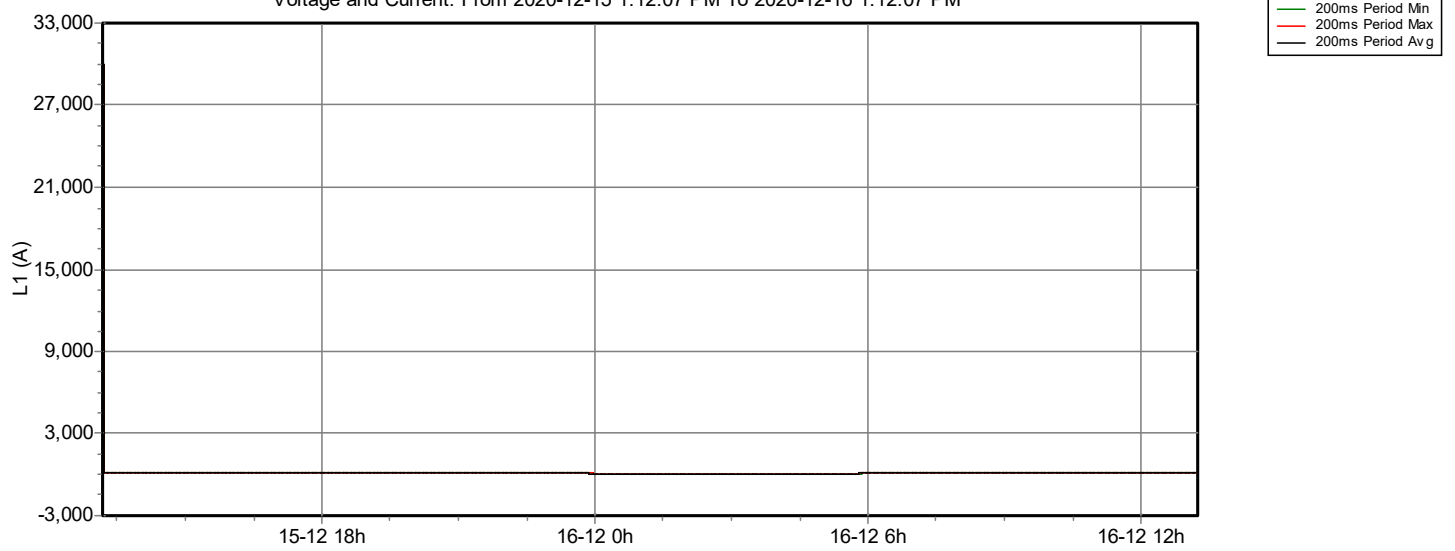
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



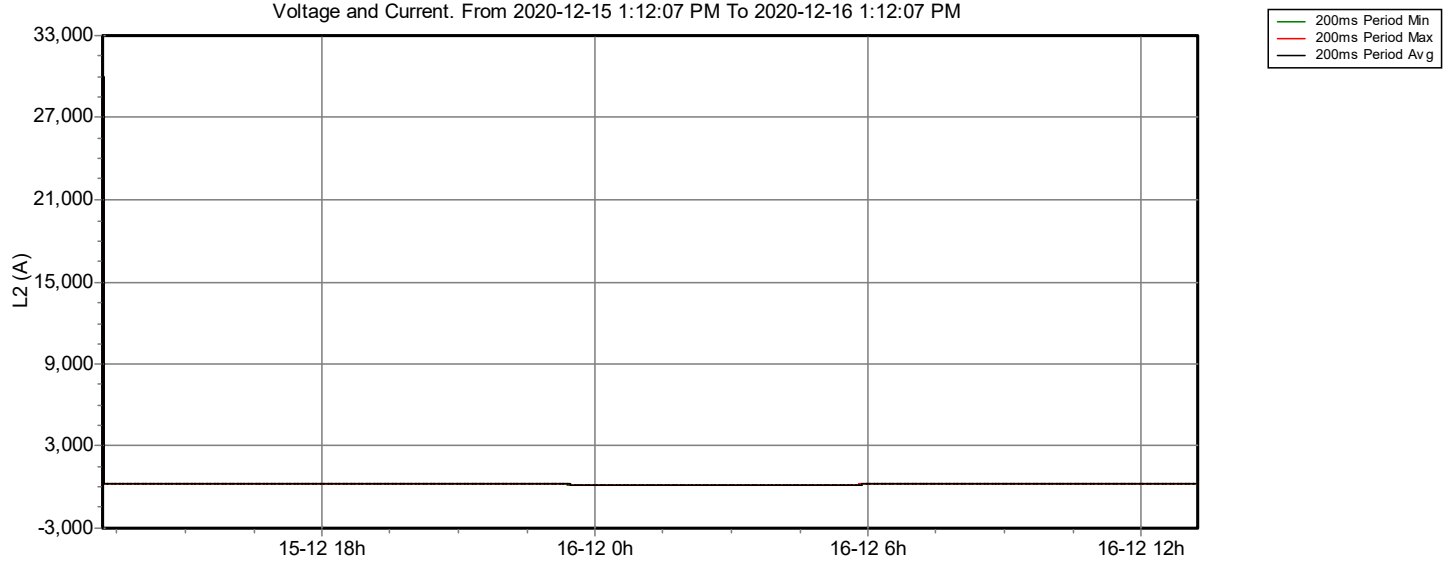
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



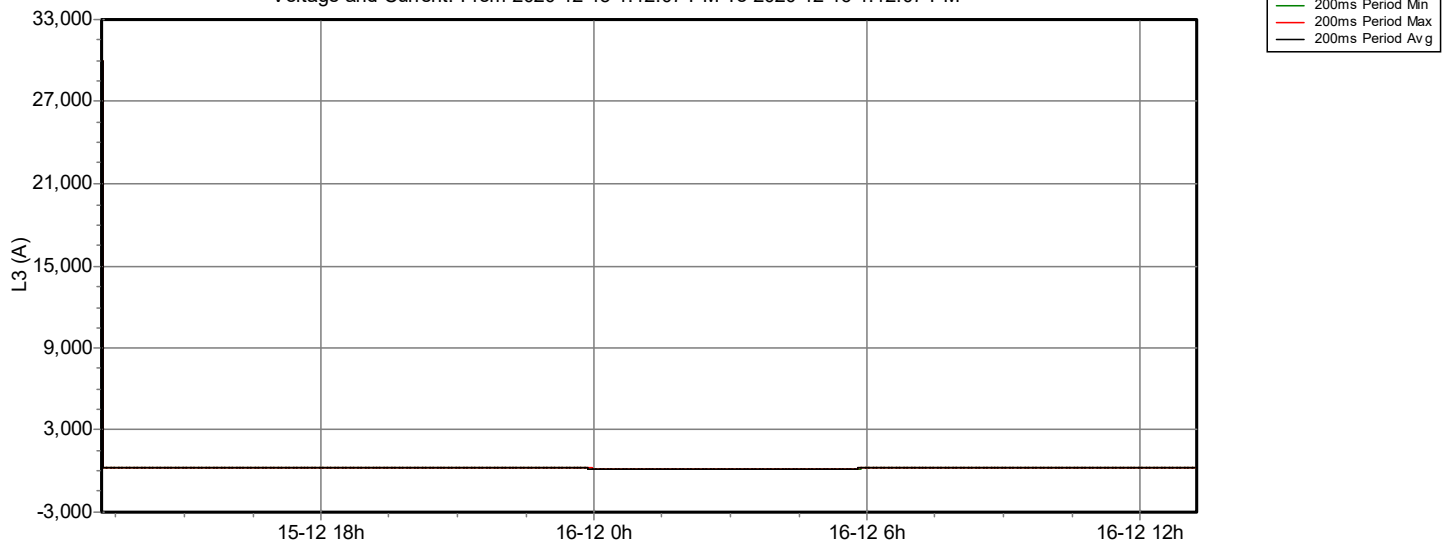
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



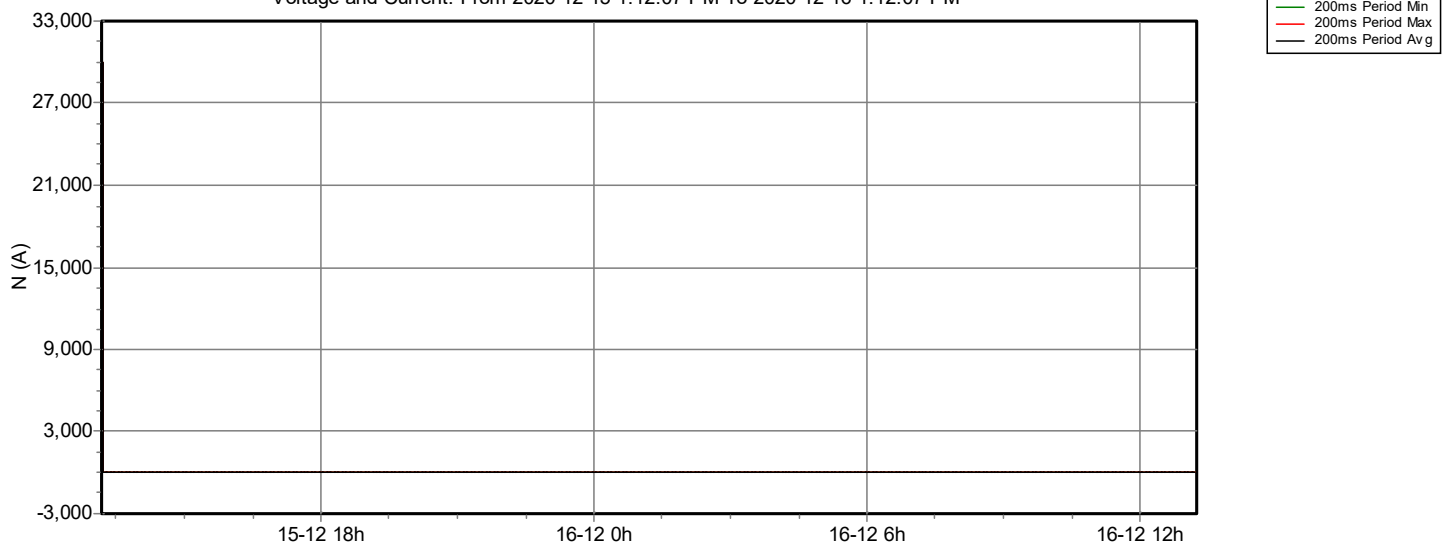
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



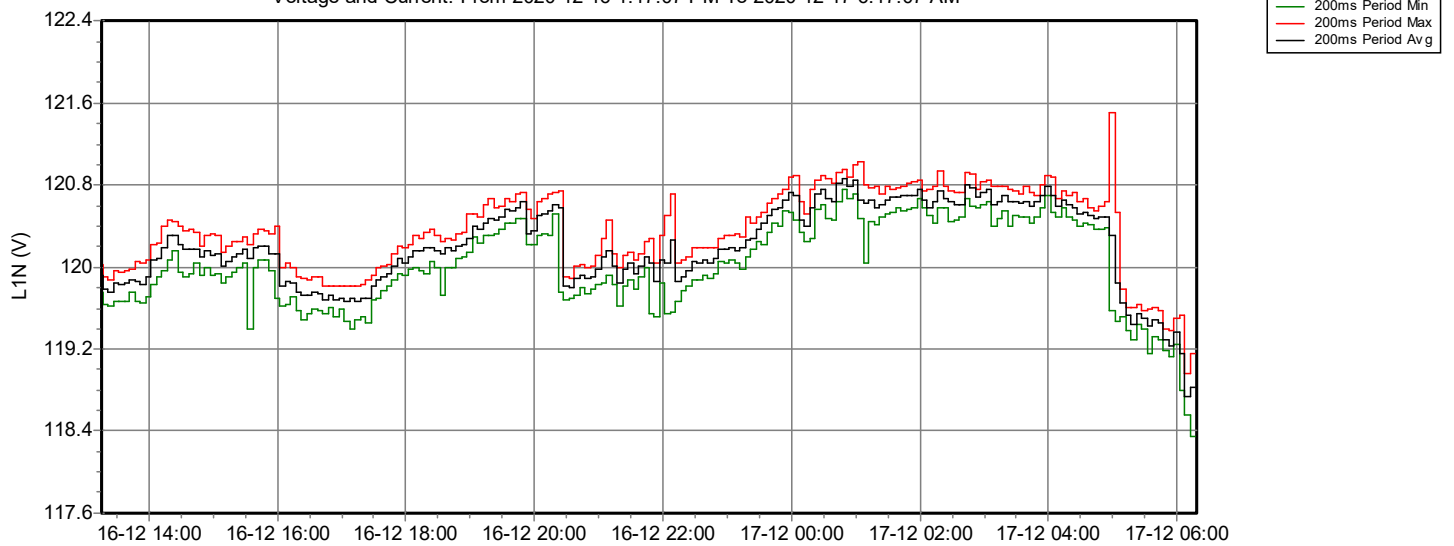
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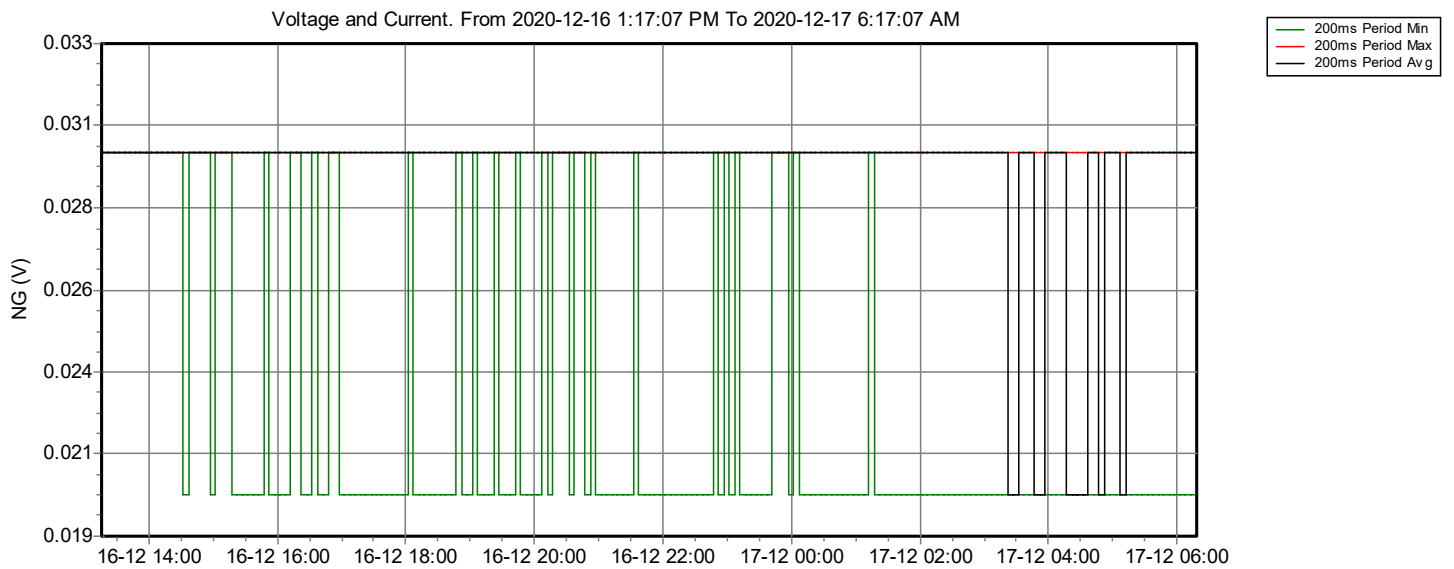
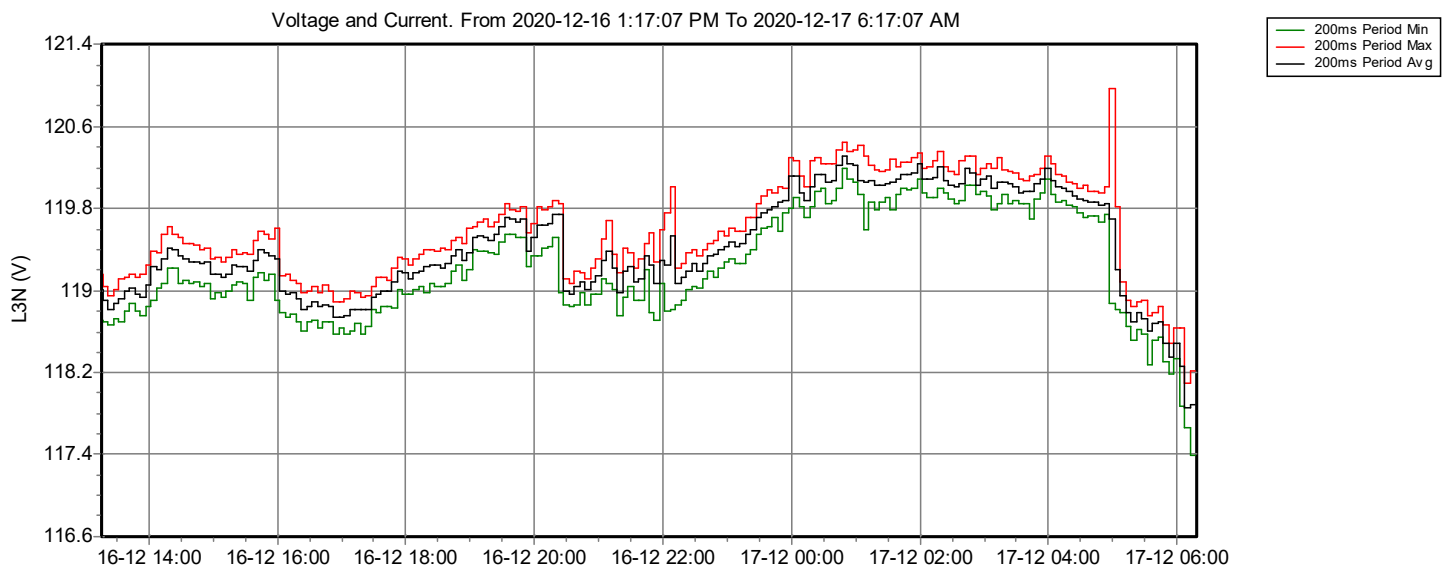
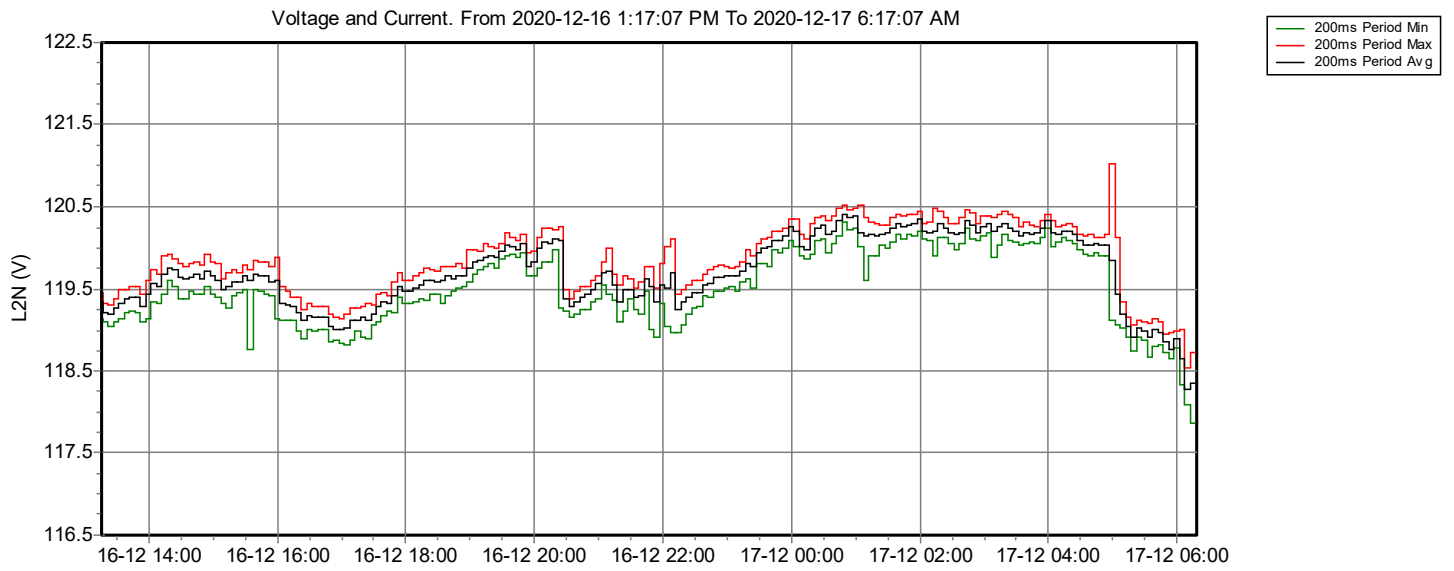


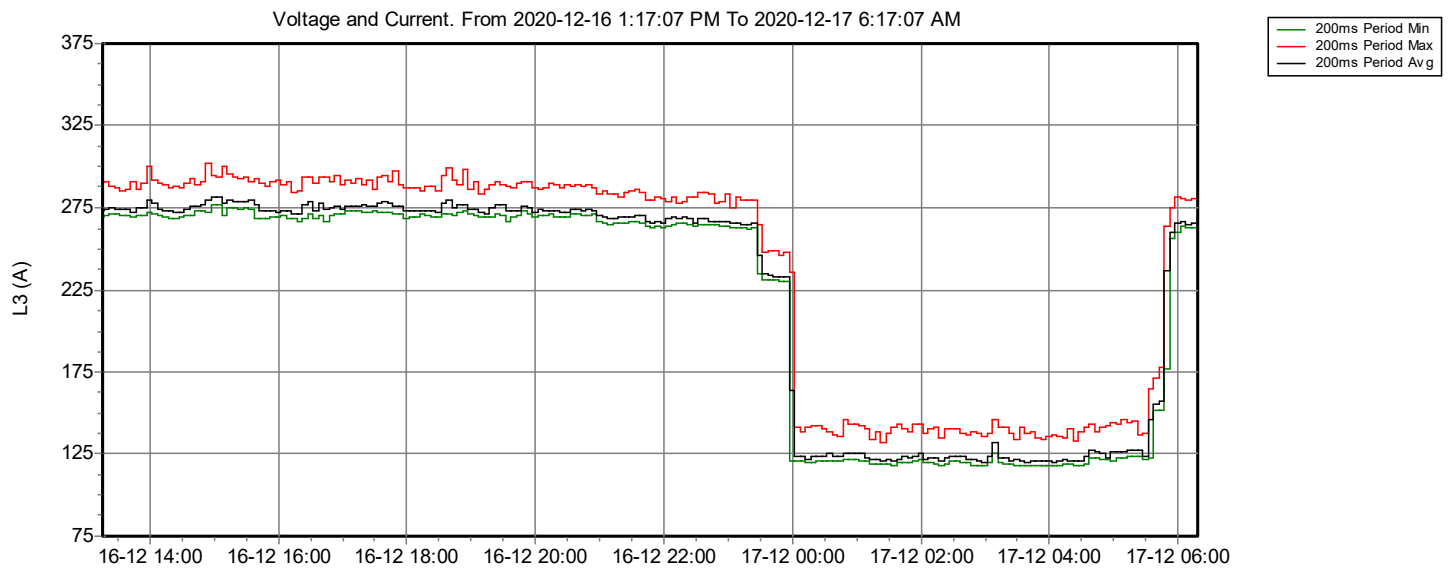
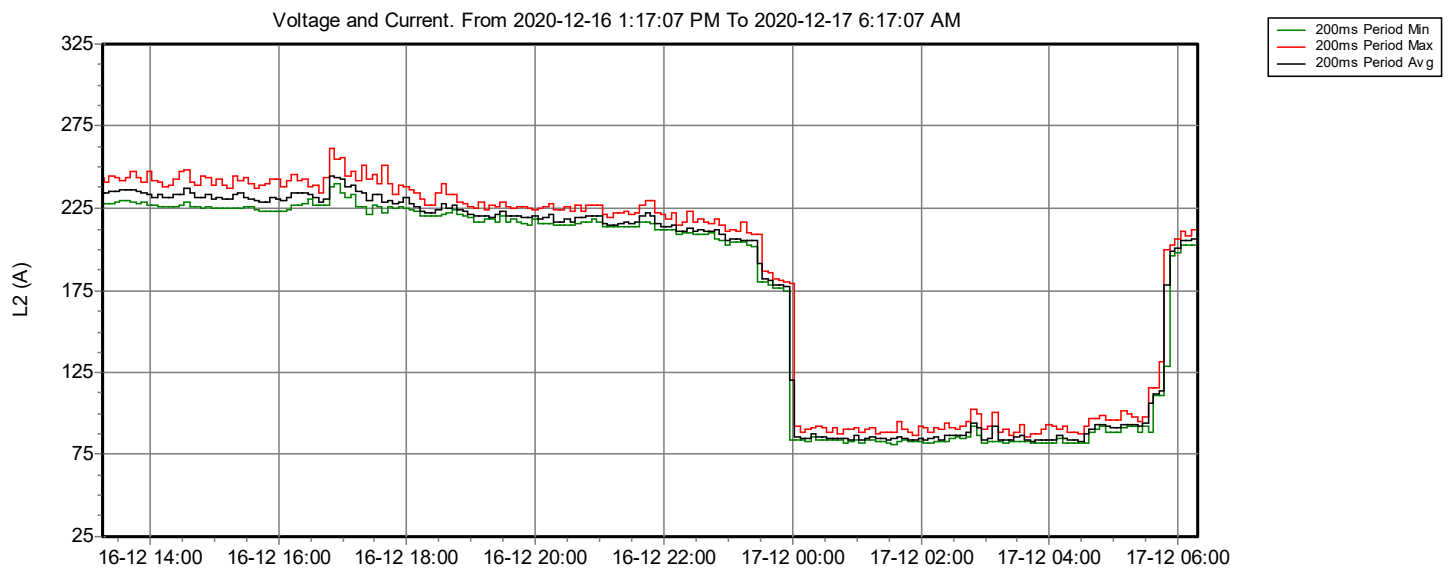
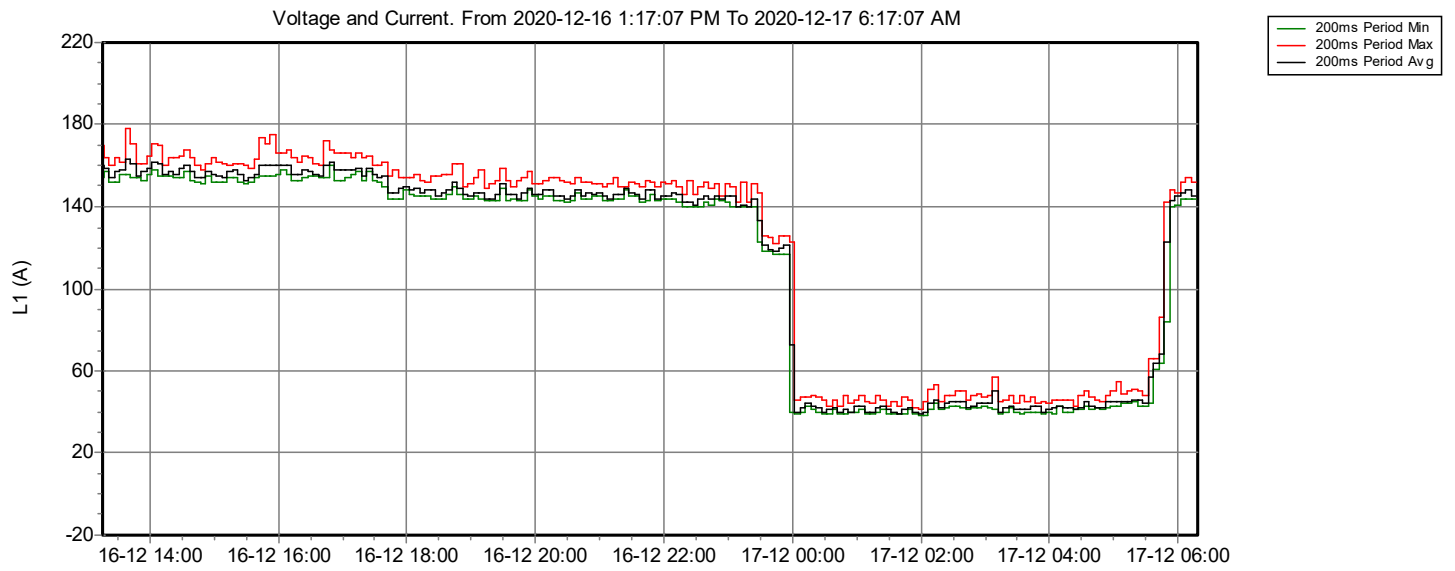
Voltage and Current. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM

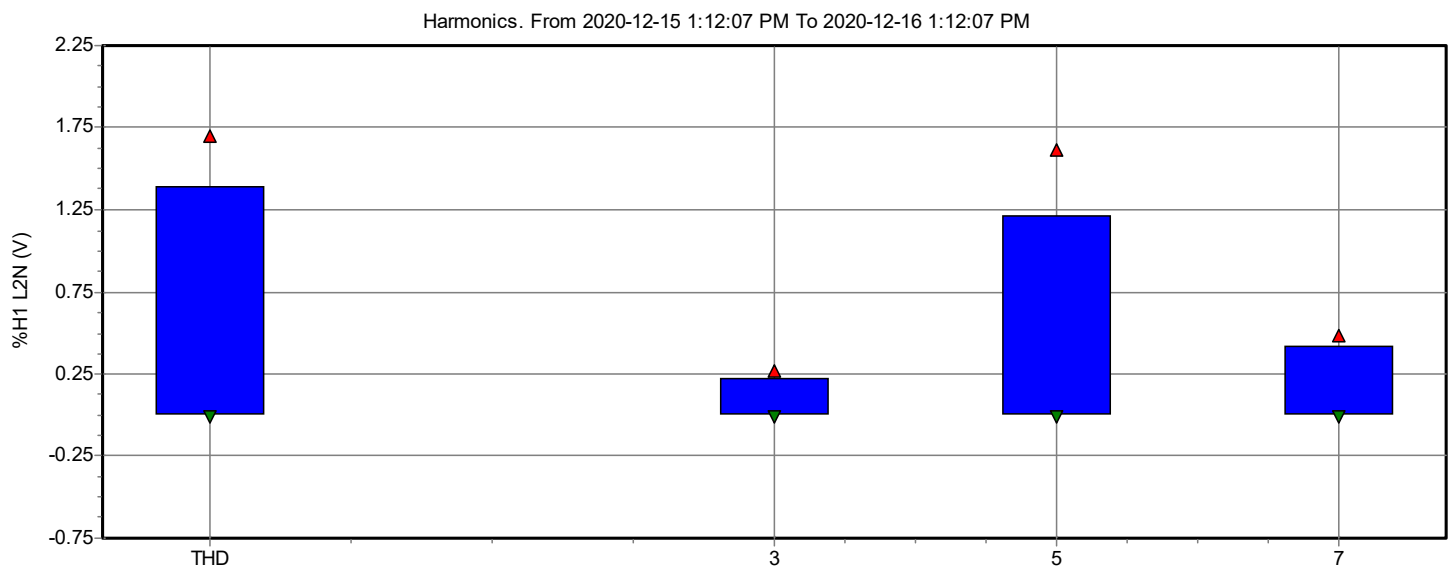
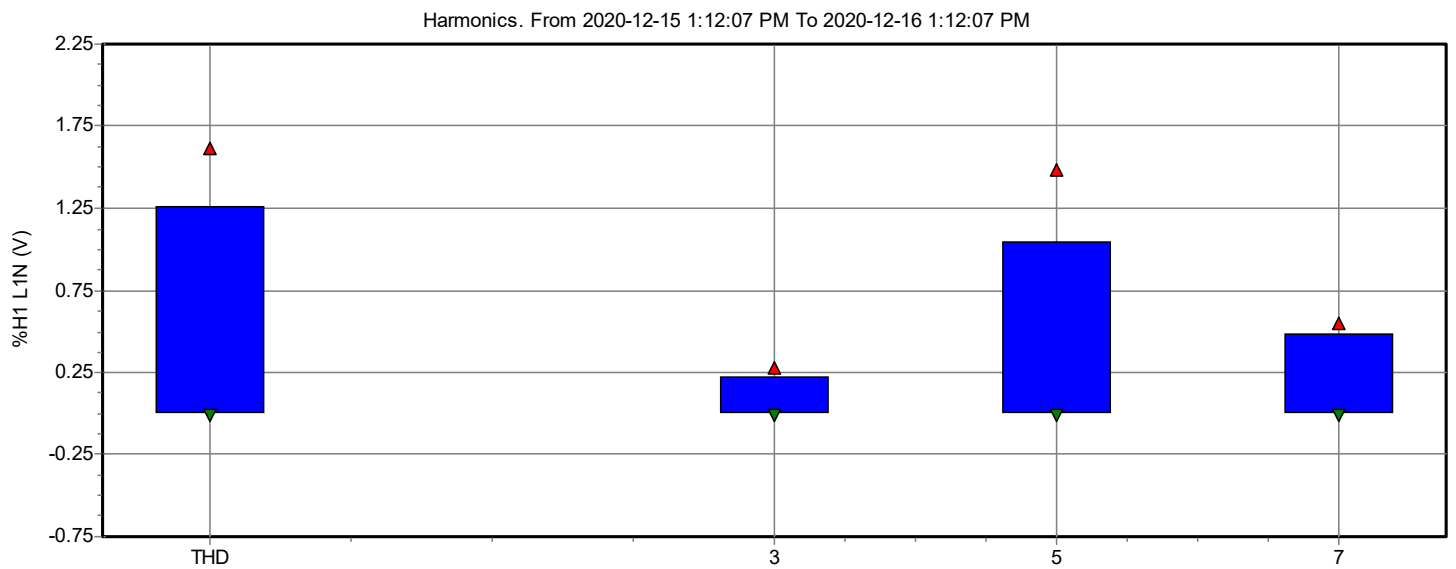
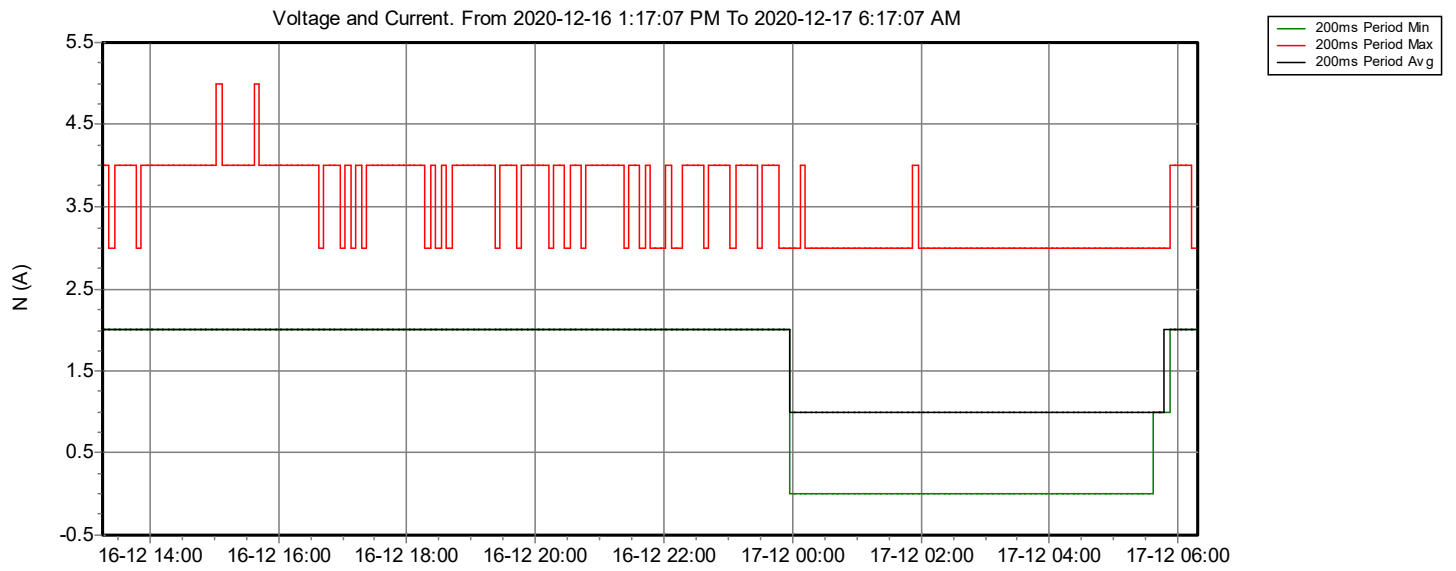


Voltage and Current. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM

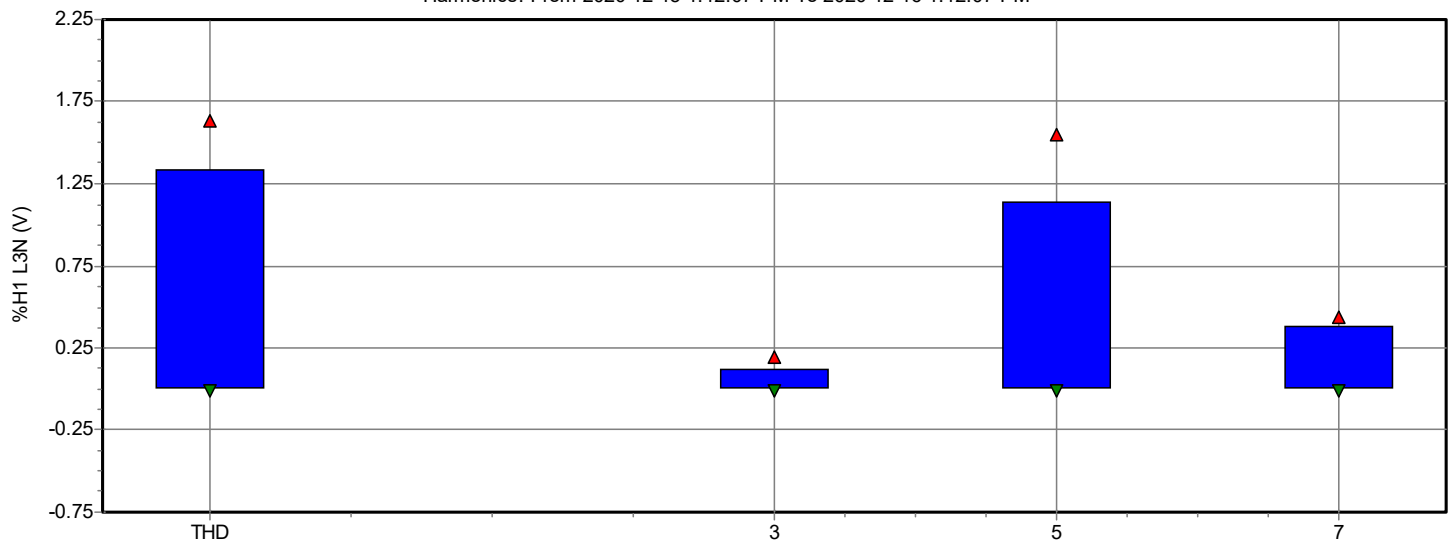




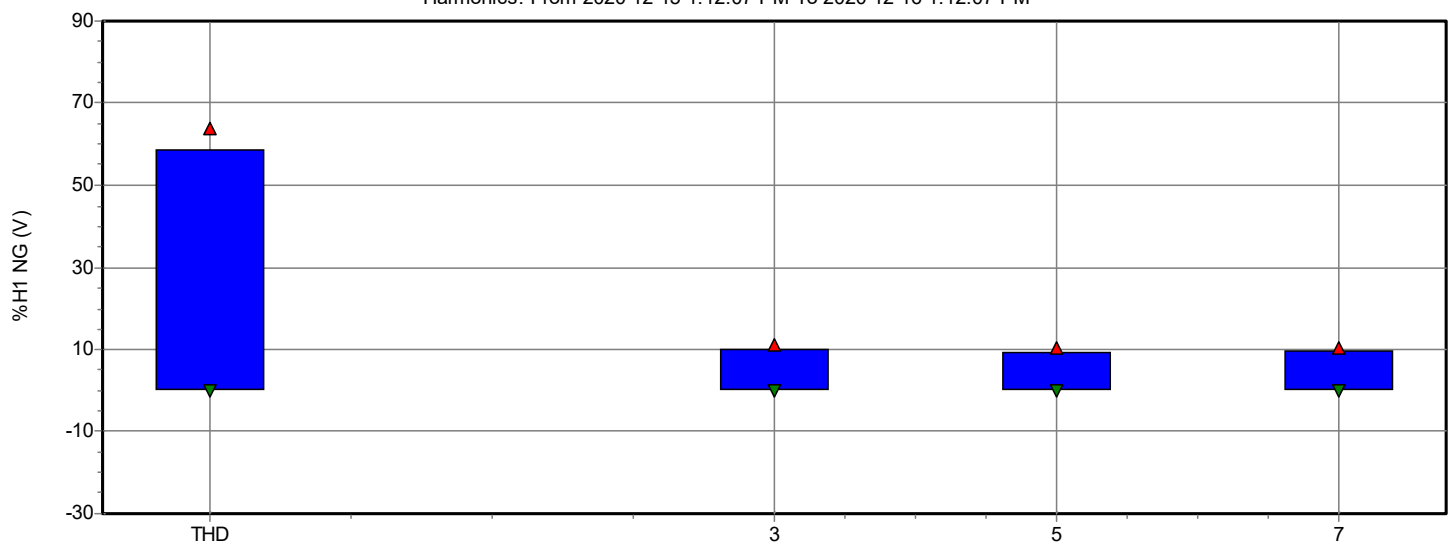




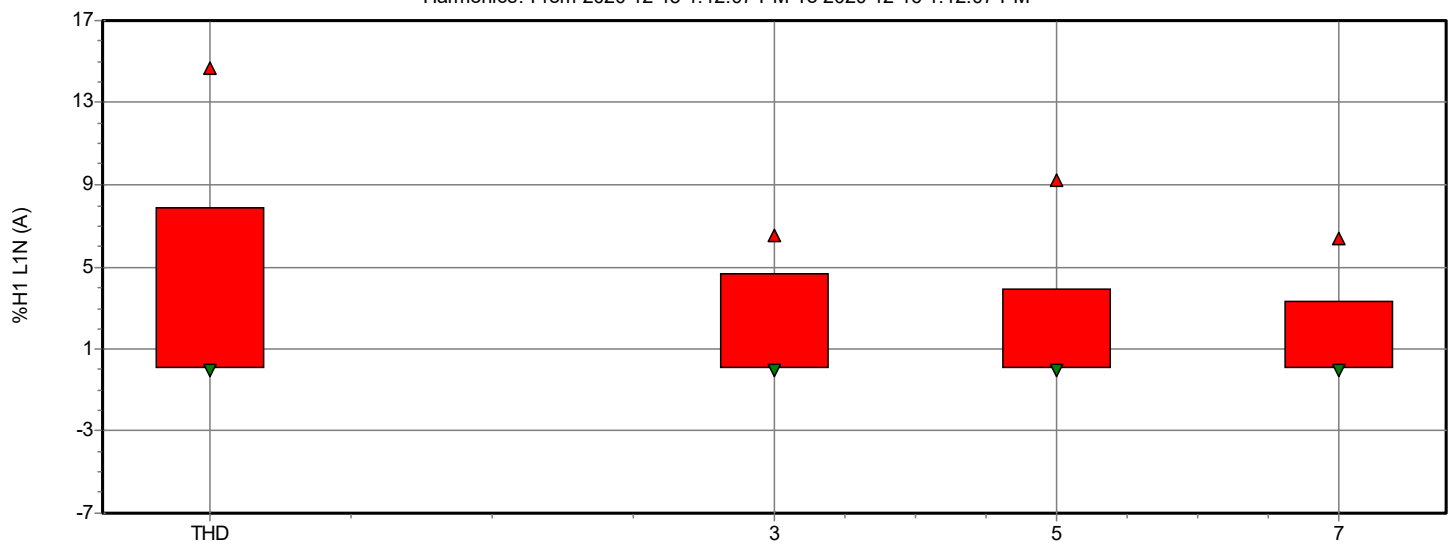
Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



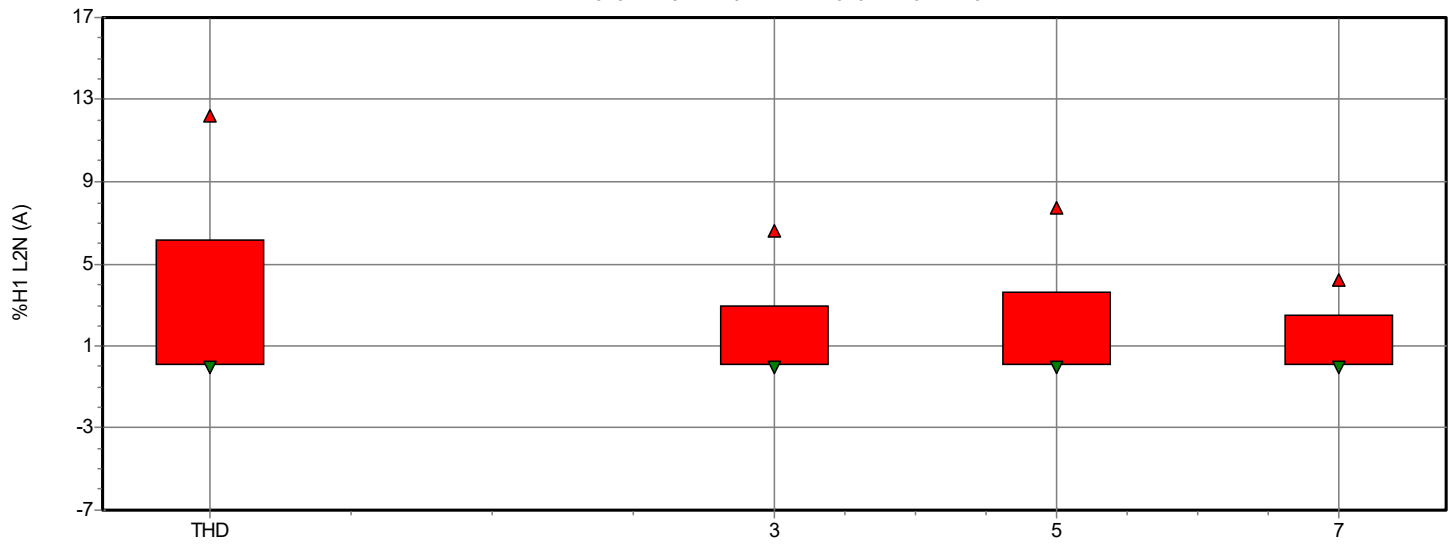
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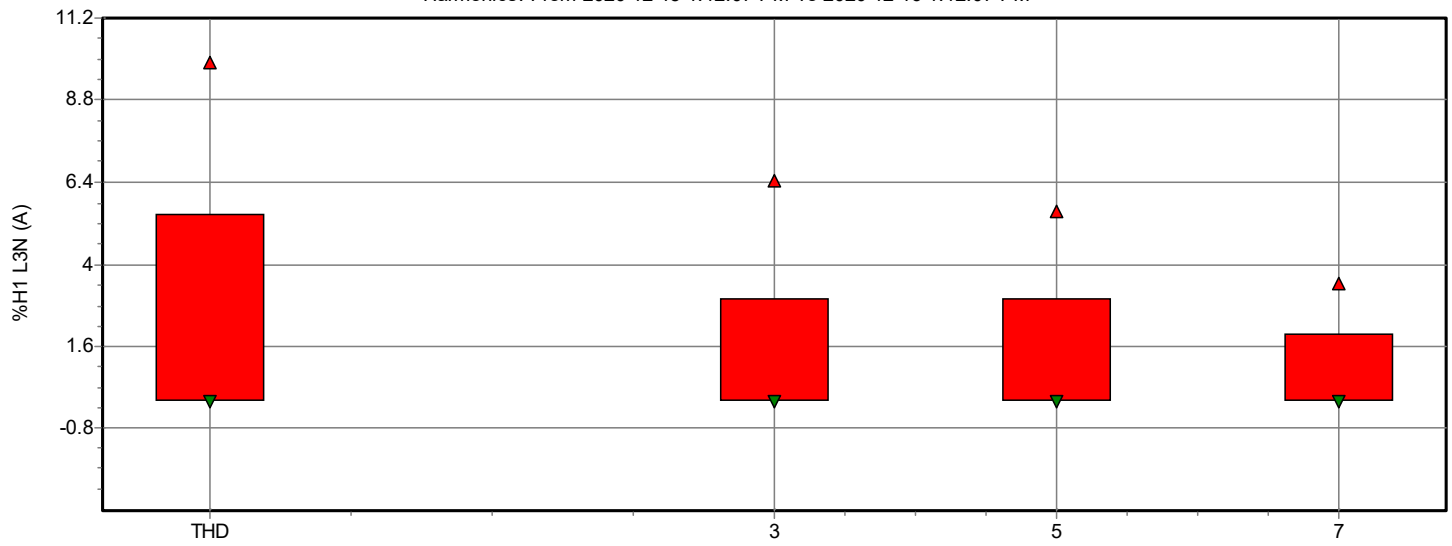
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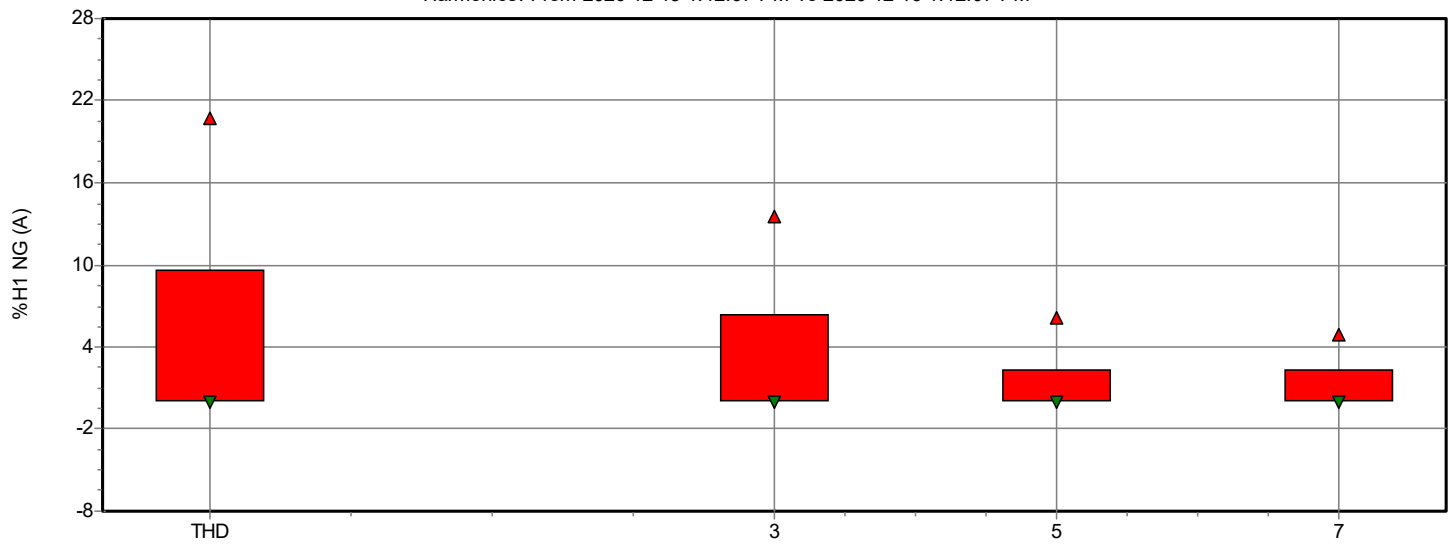
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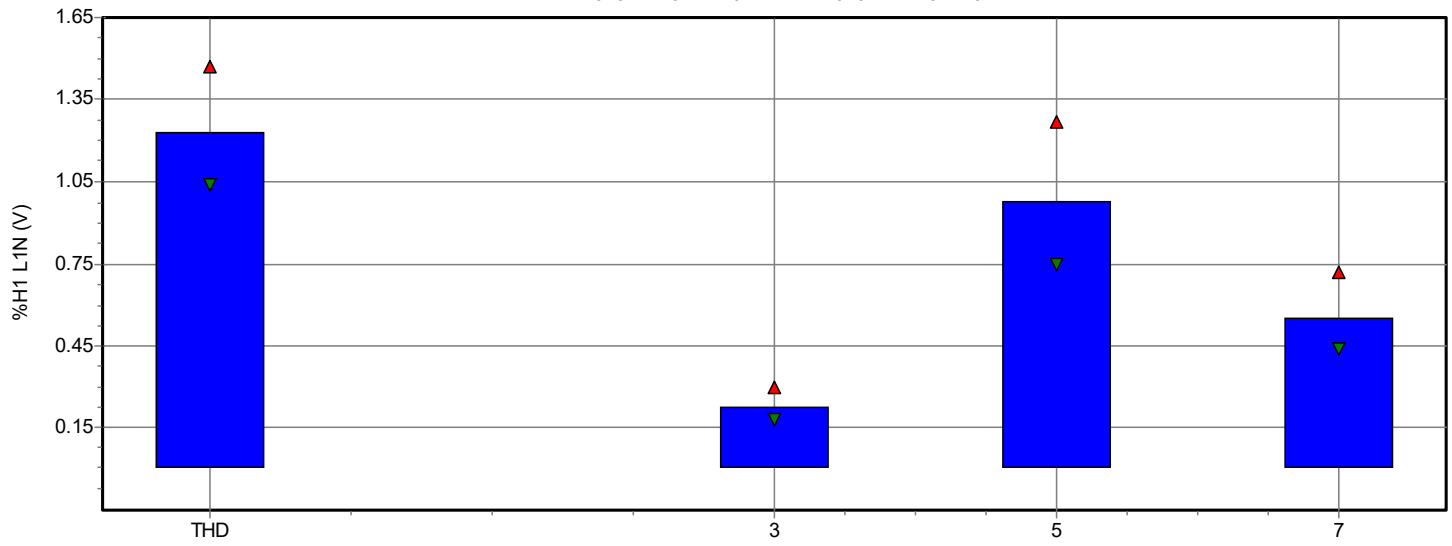
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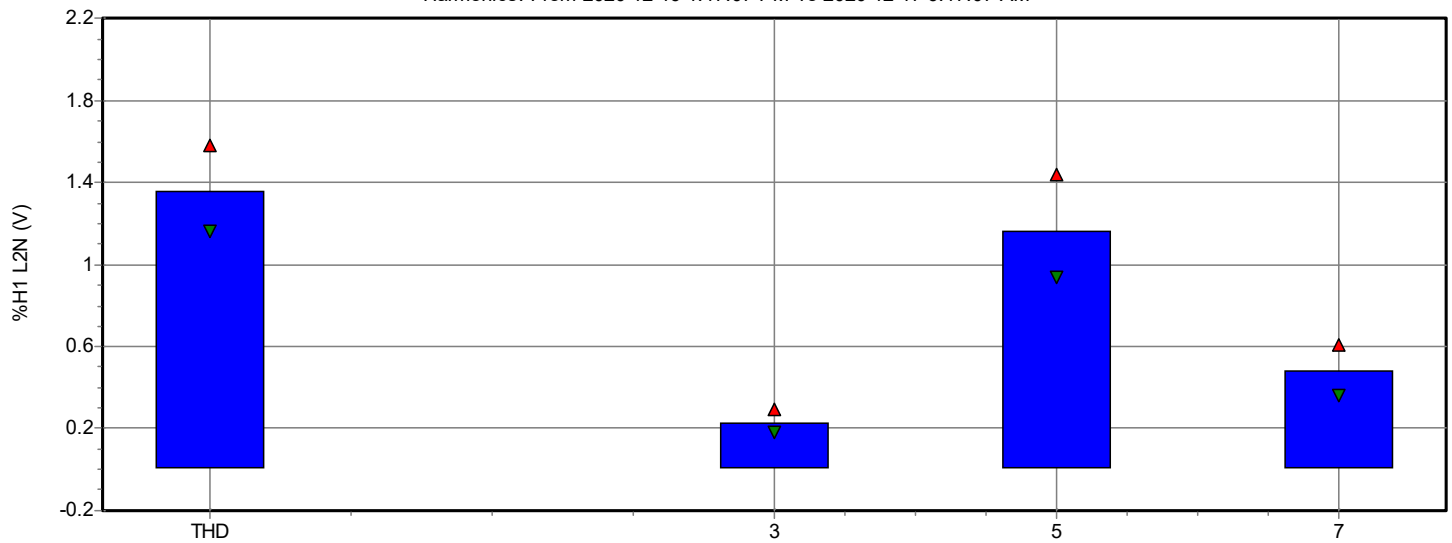
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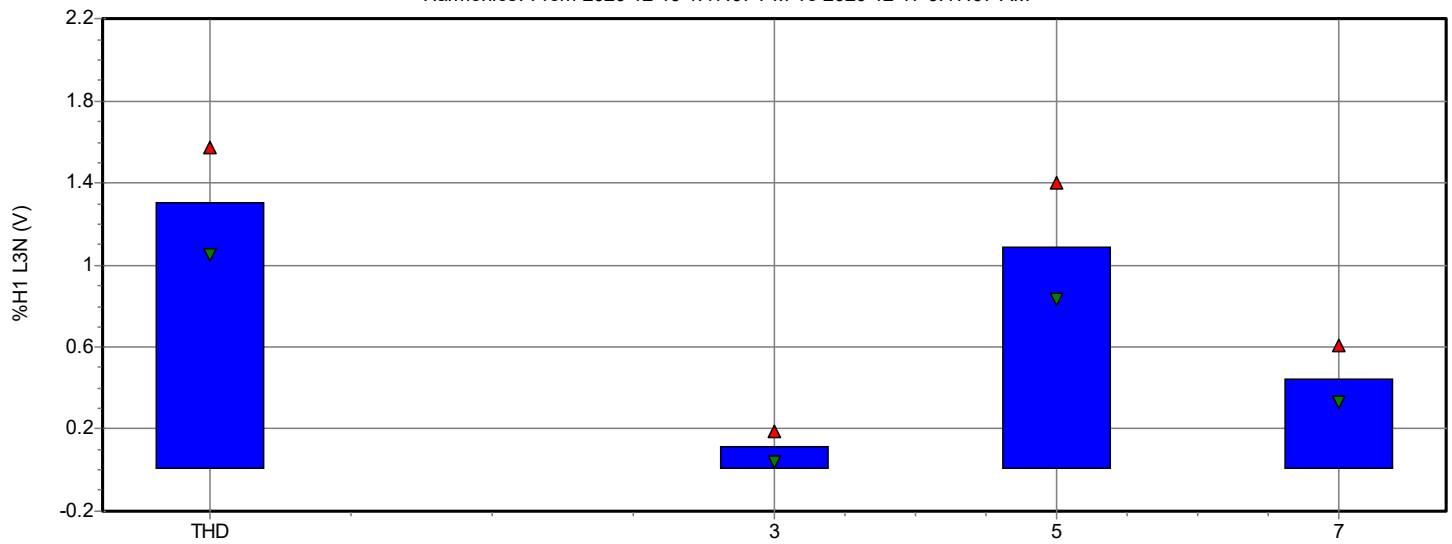
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



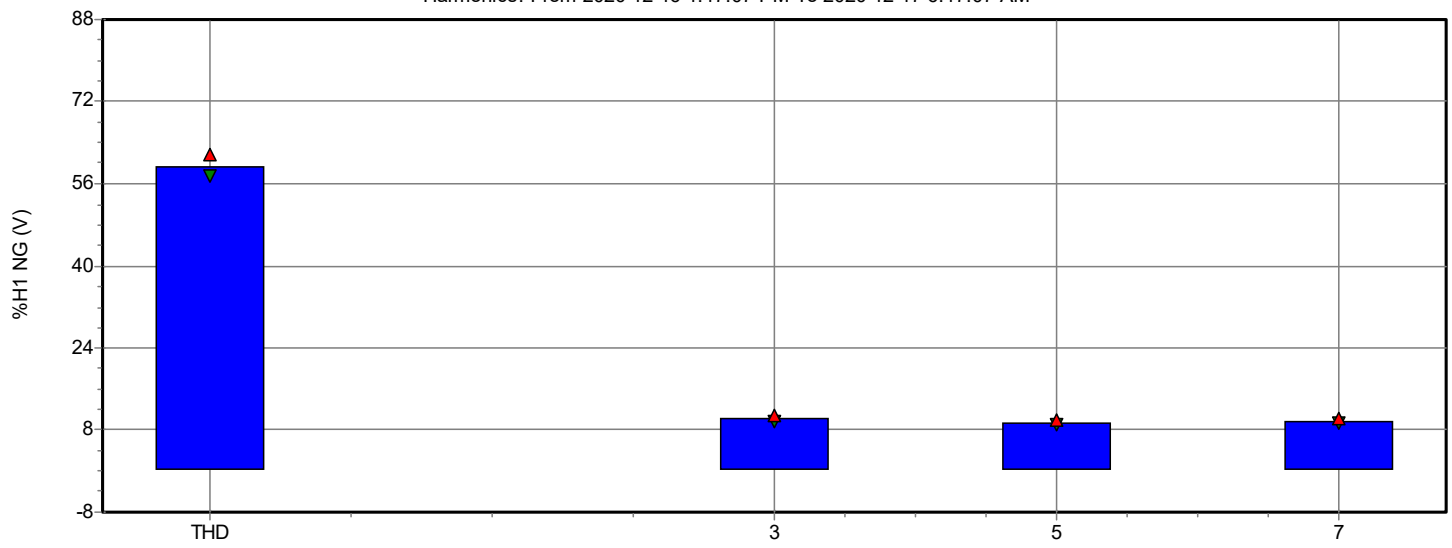
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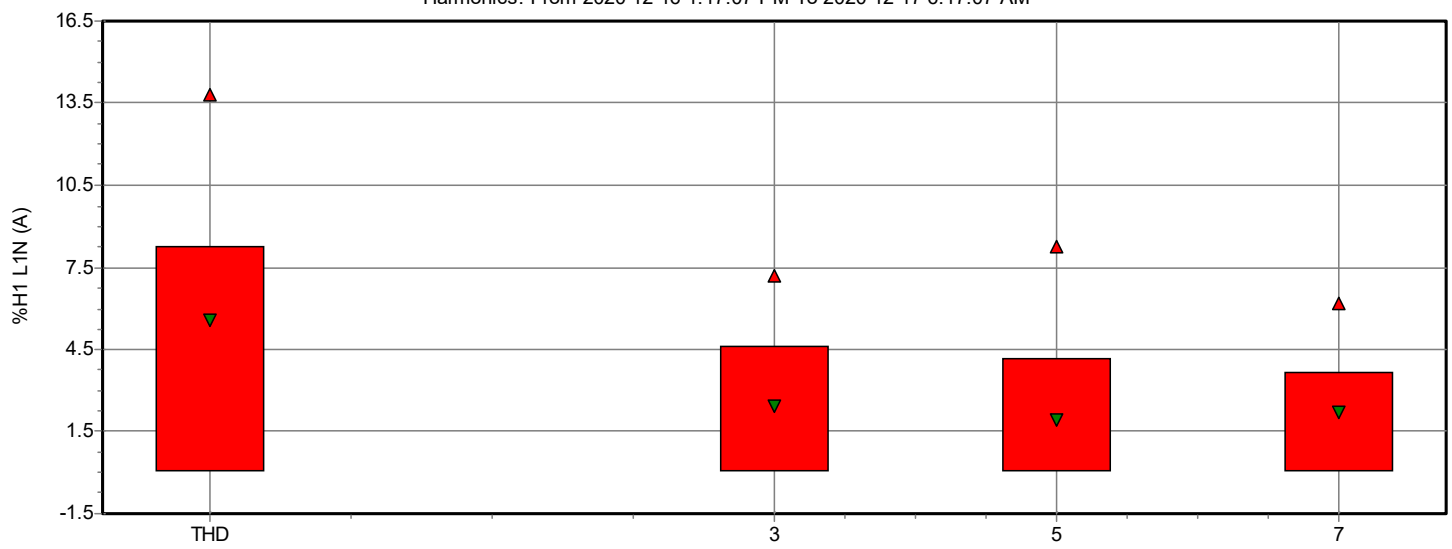
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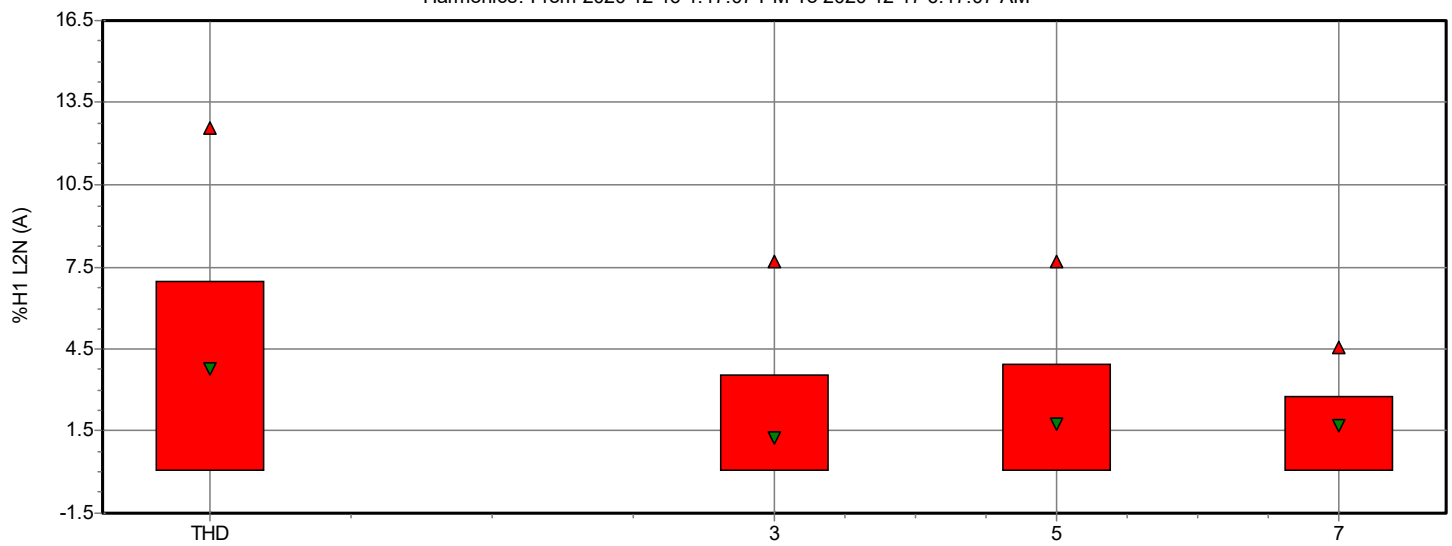
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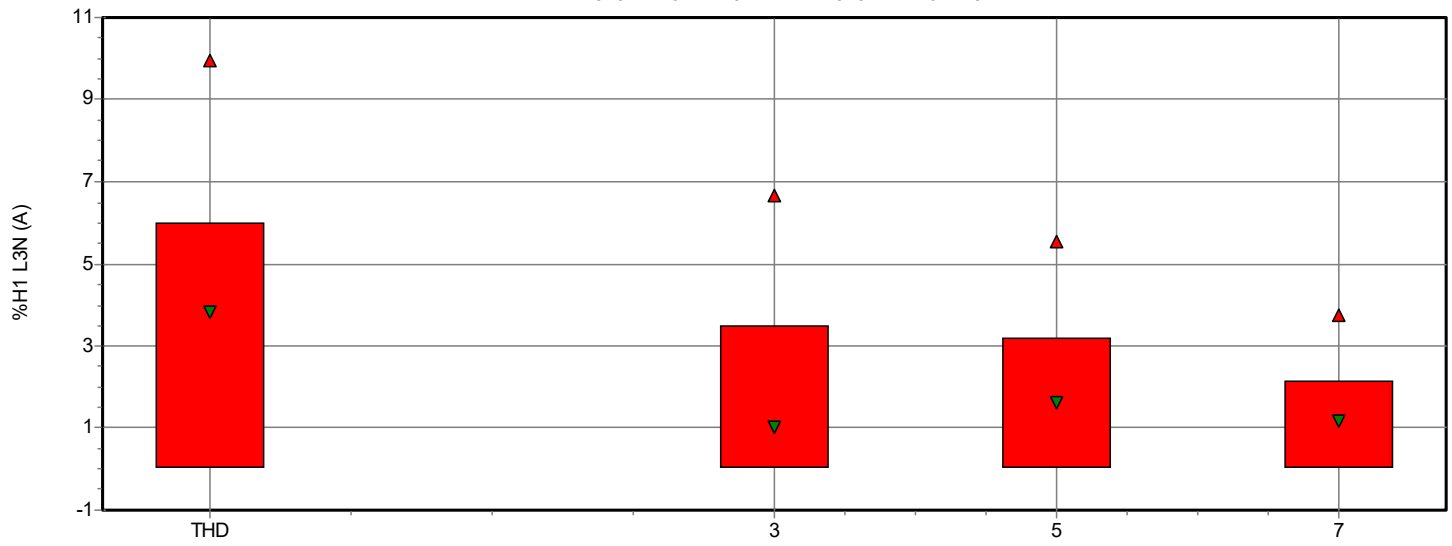
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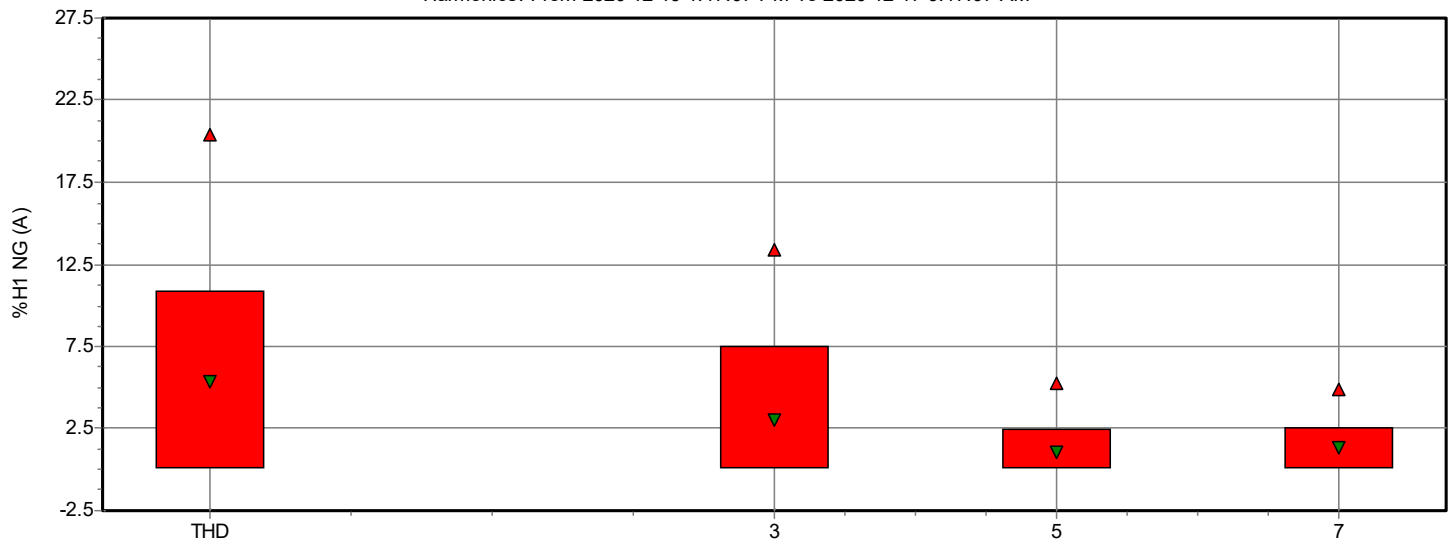
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



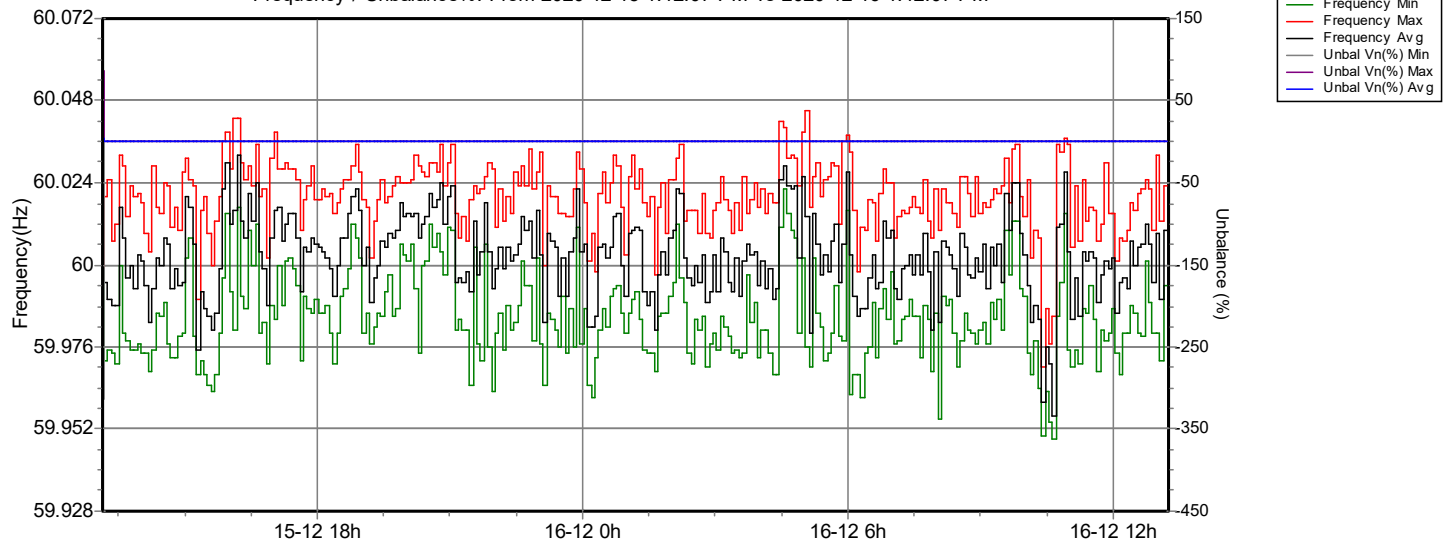
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM

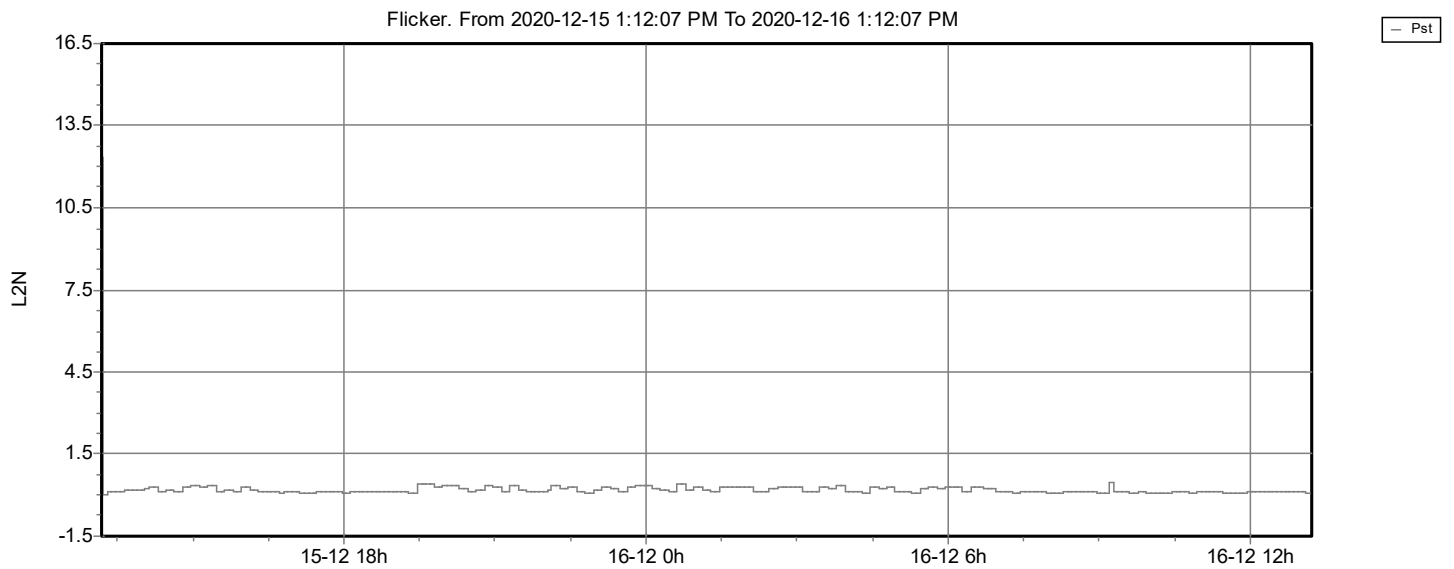
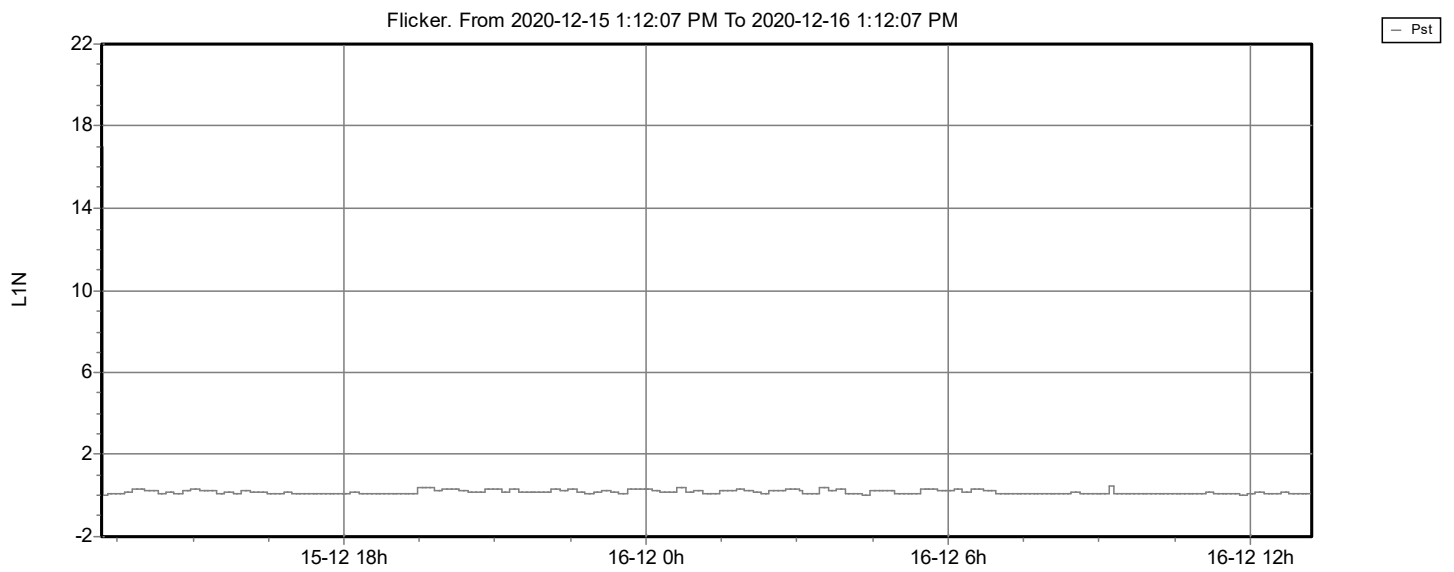
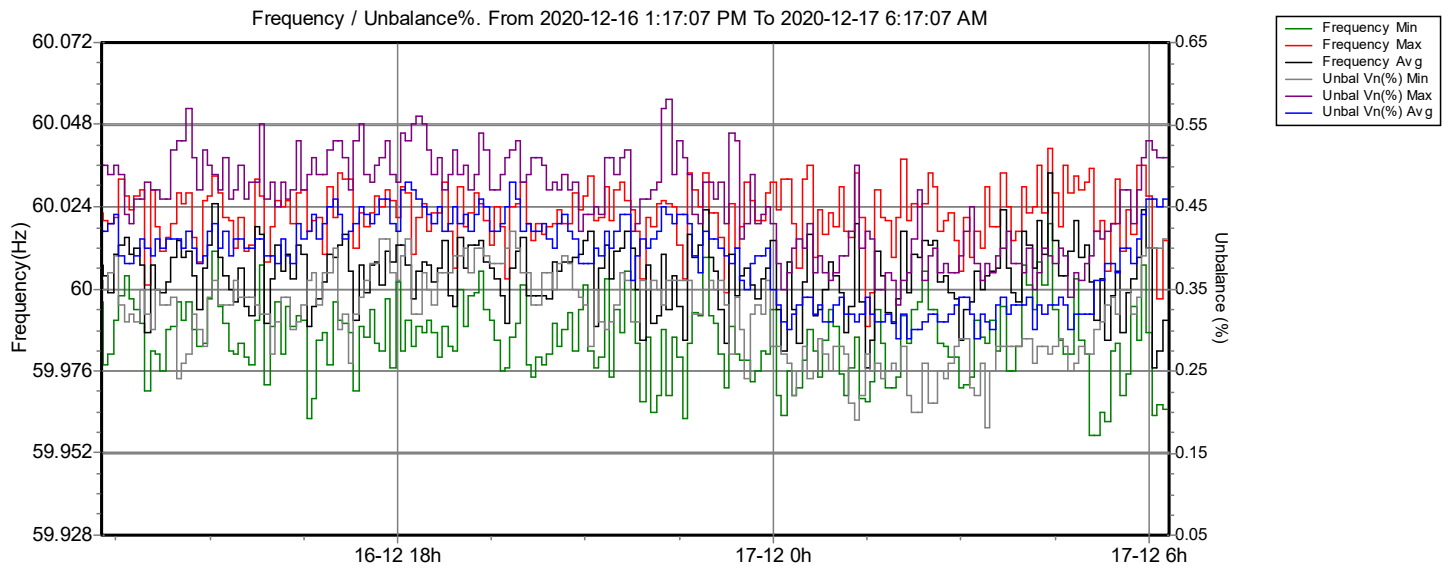


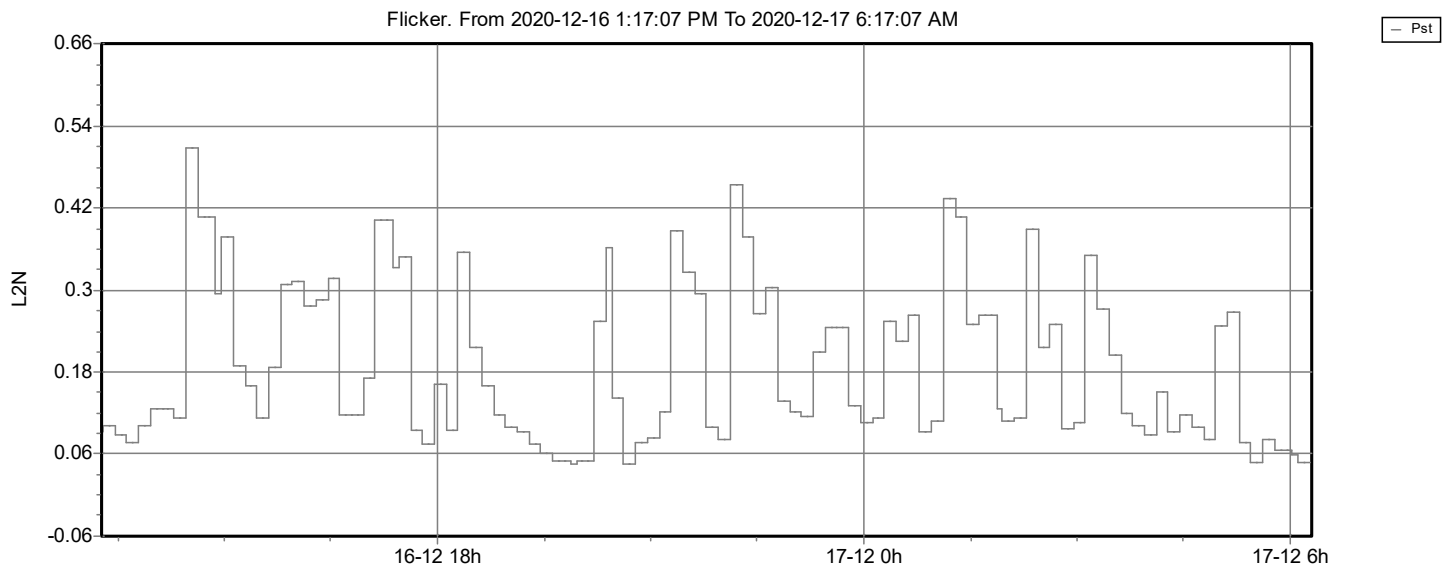
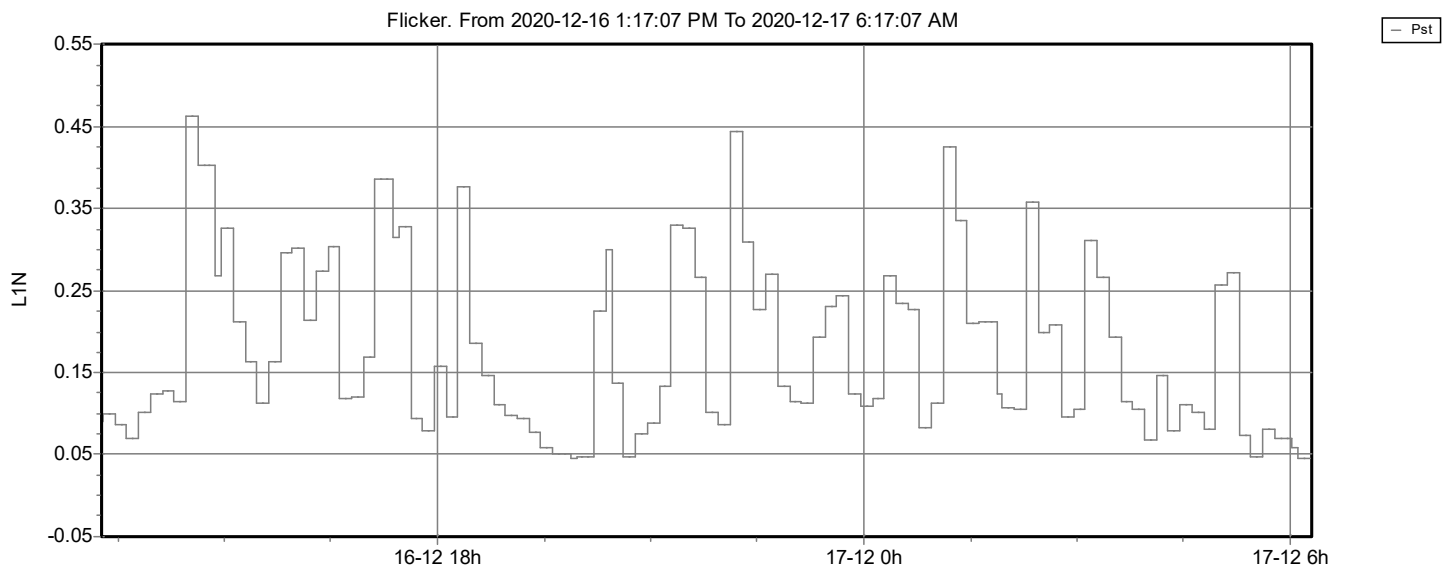
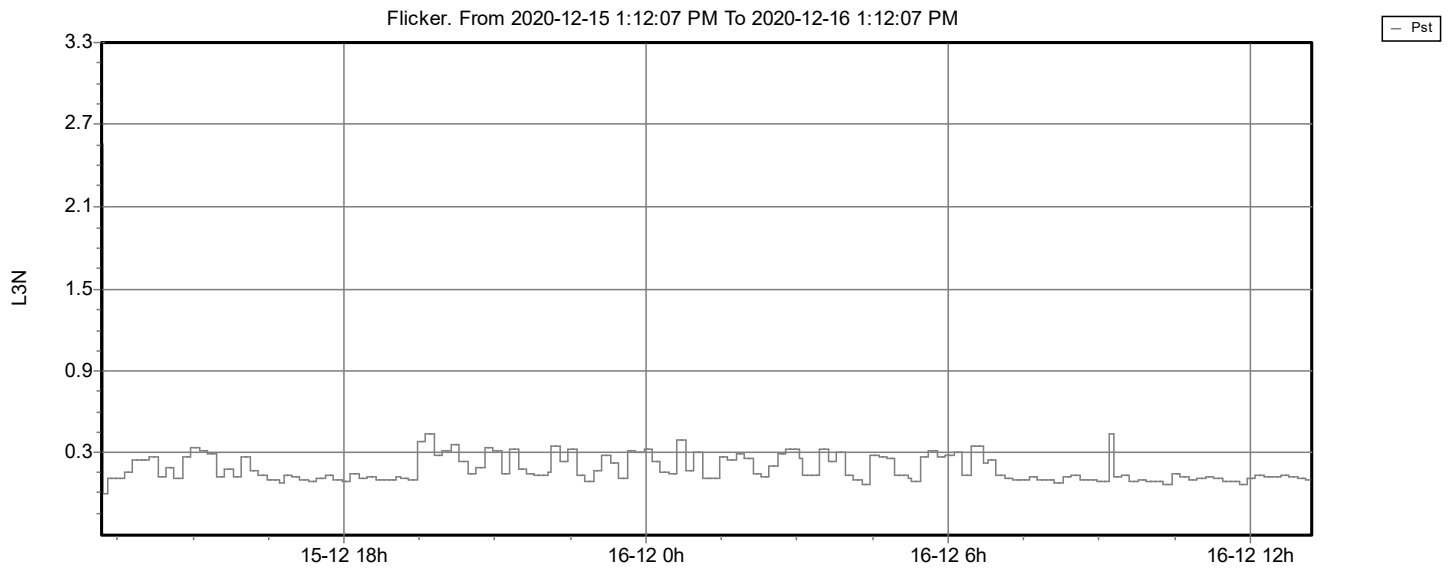
Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM

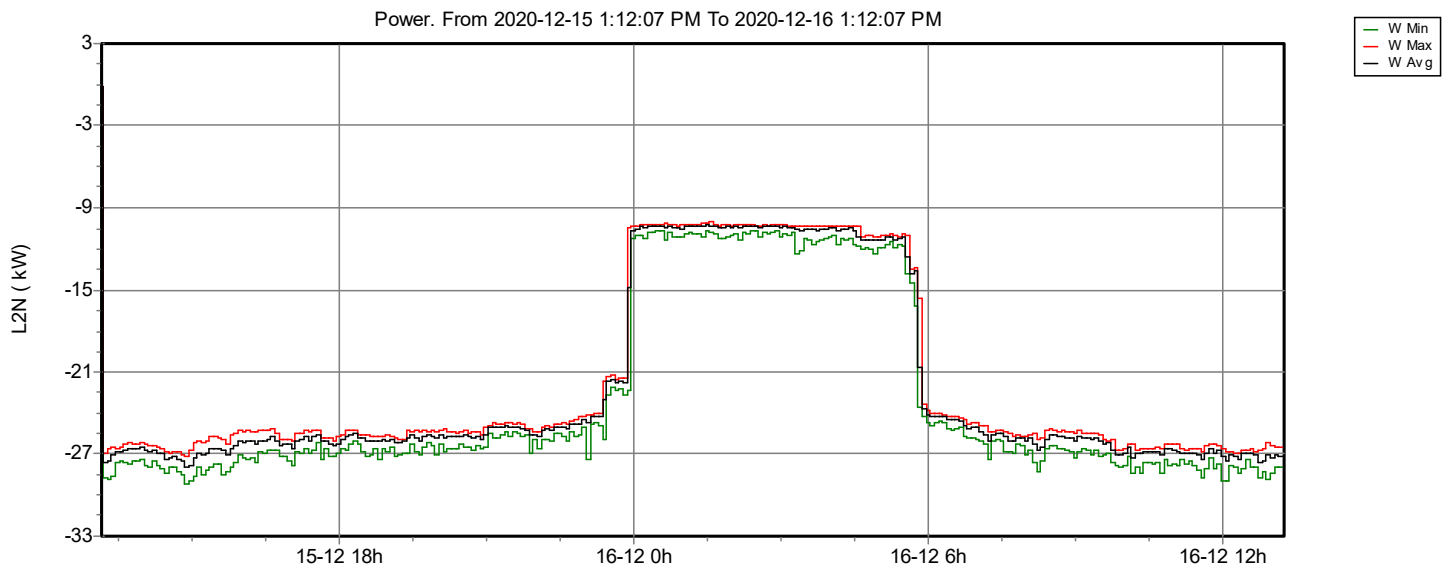
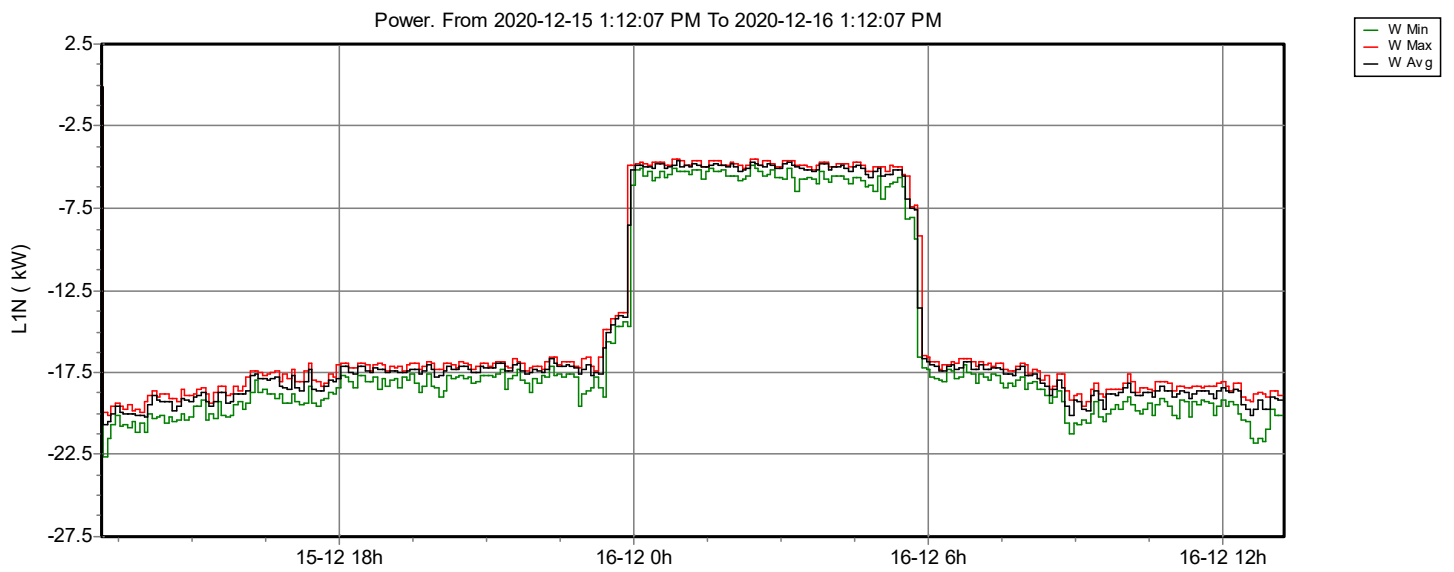
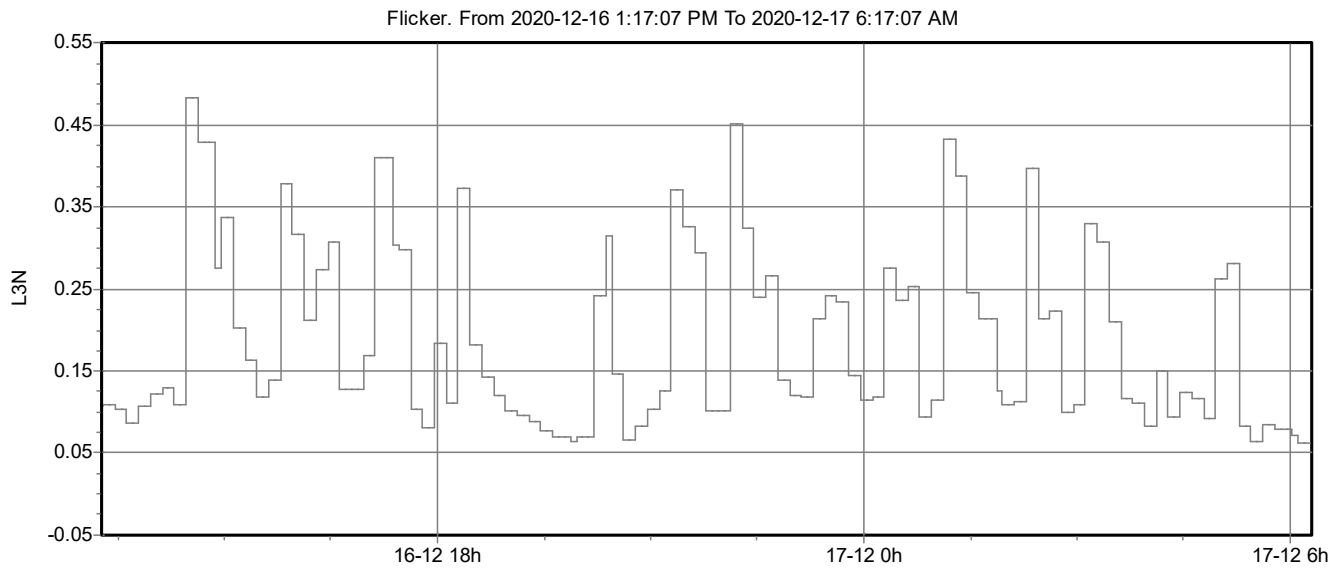


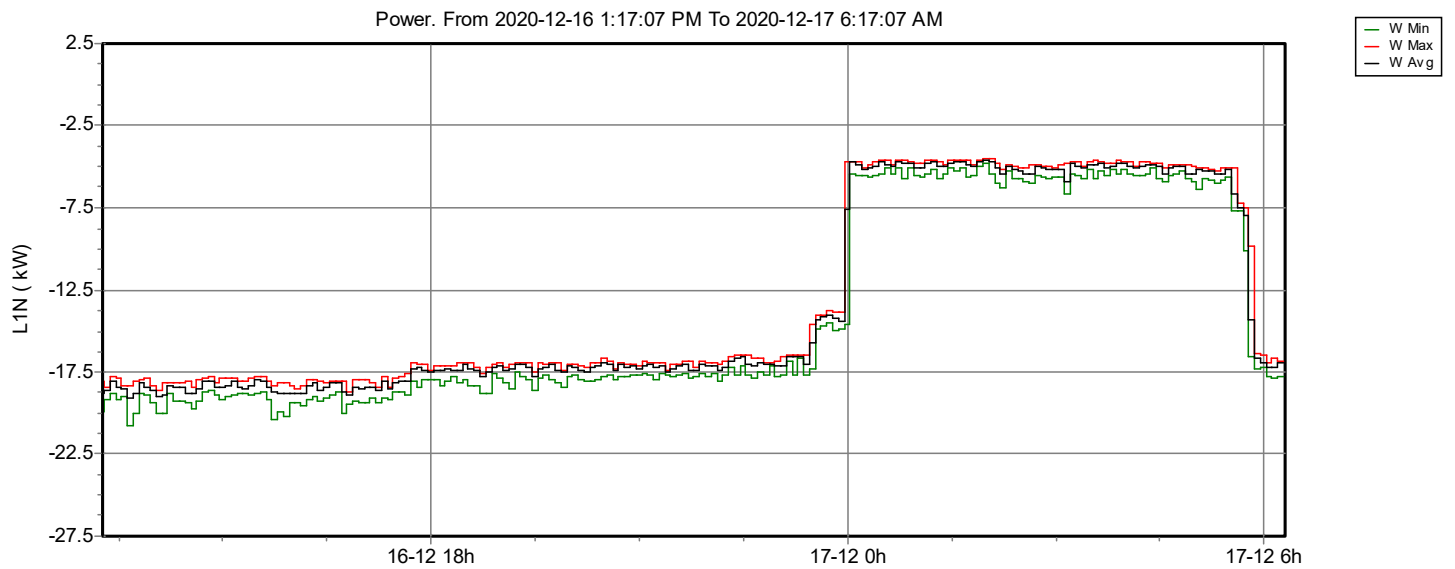
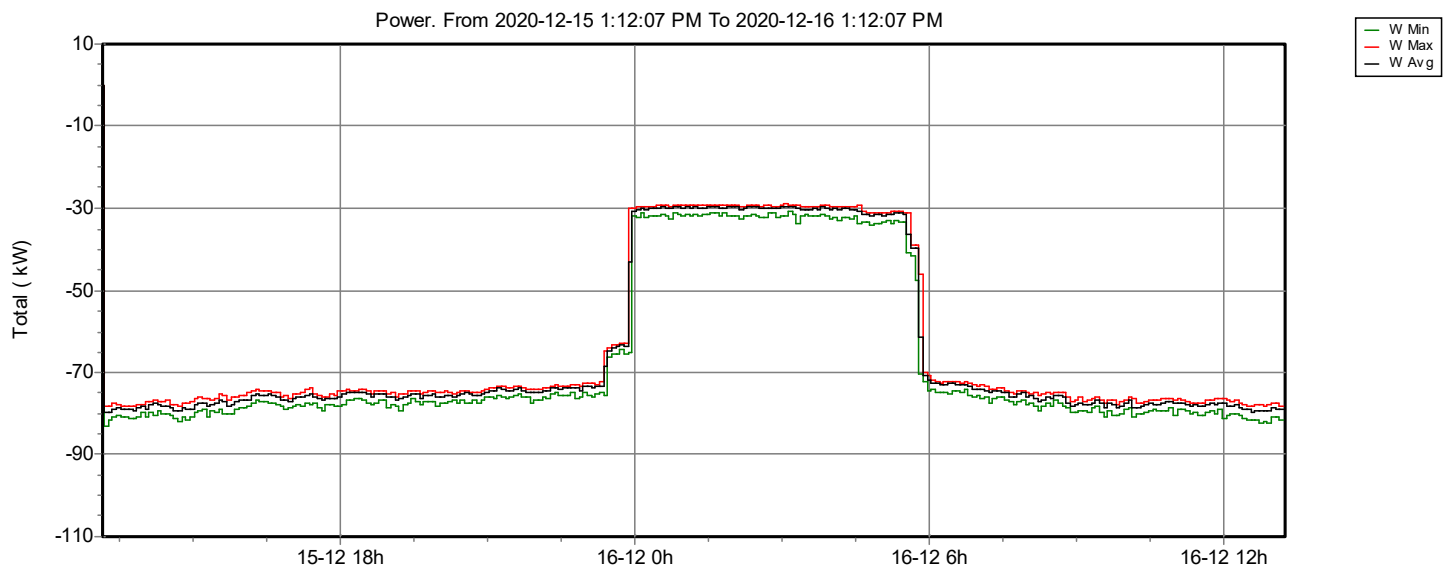
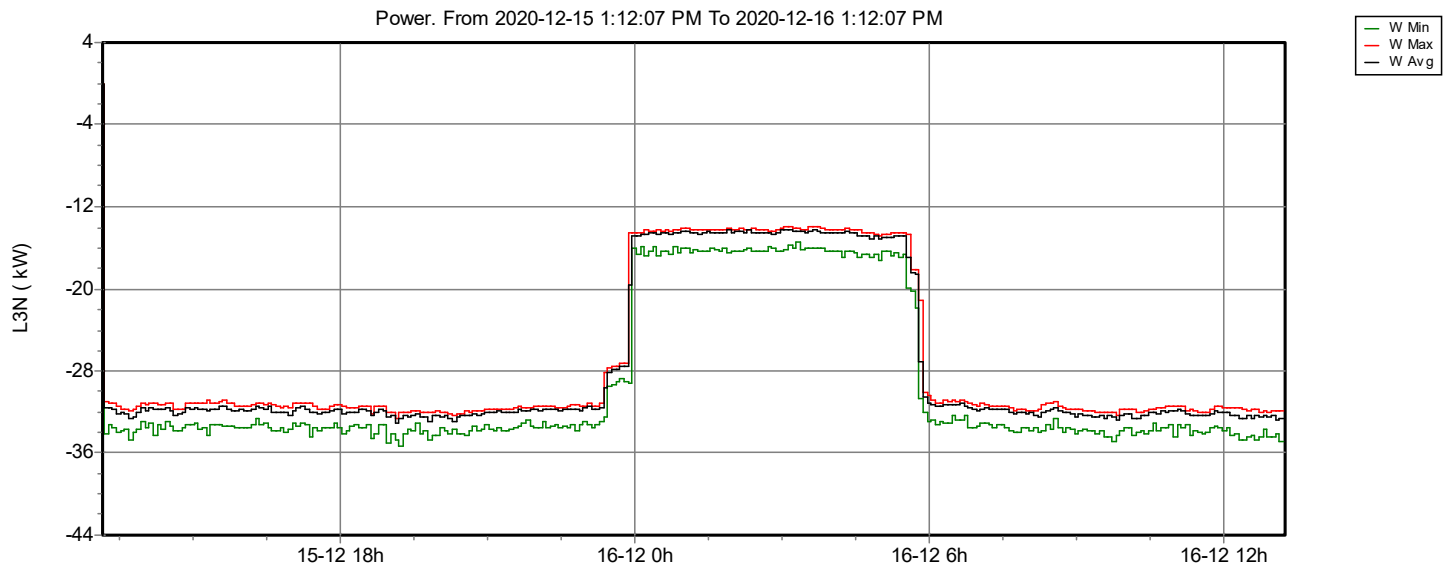
Frequency / Unbalance%. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM

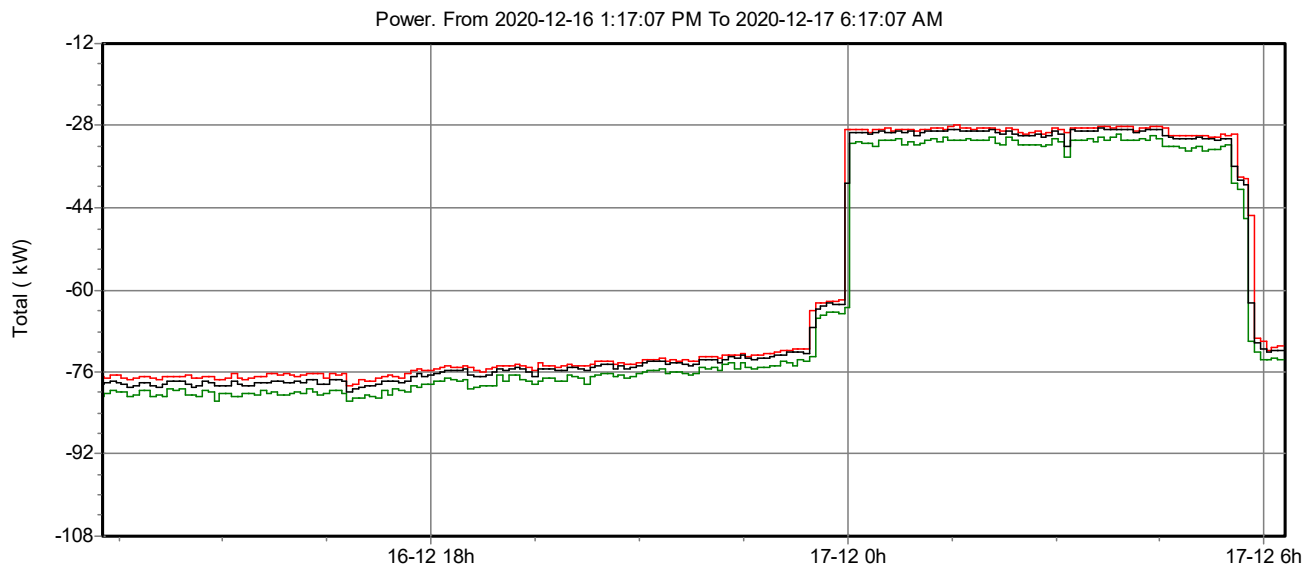
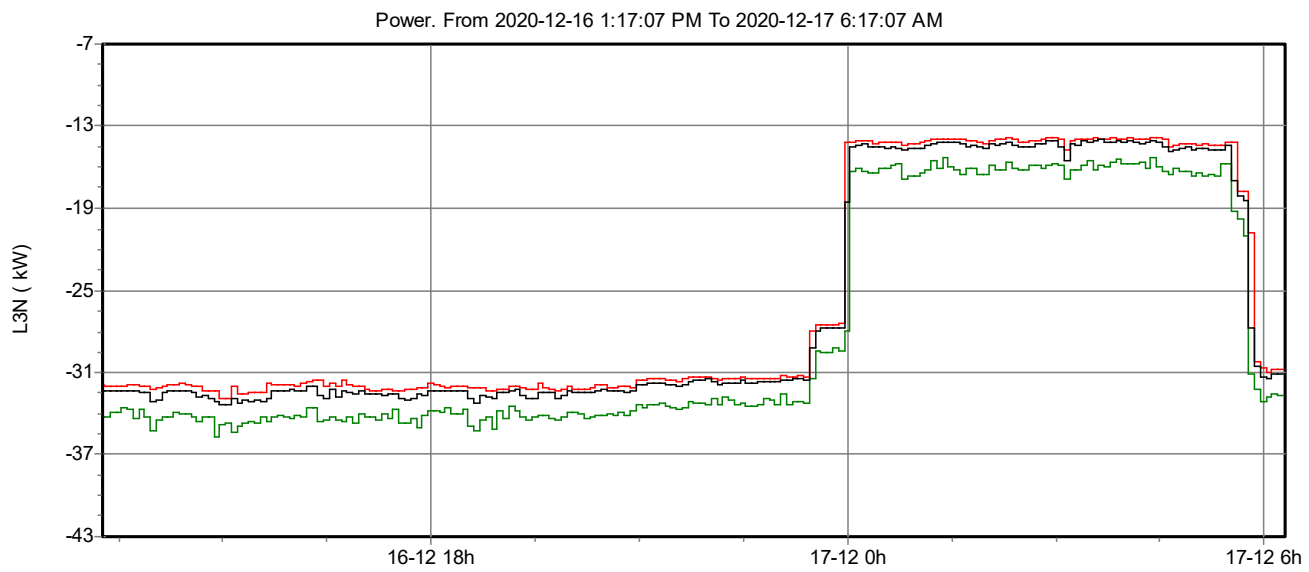
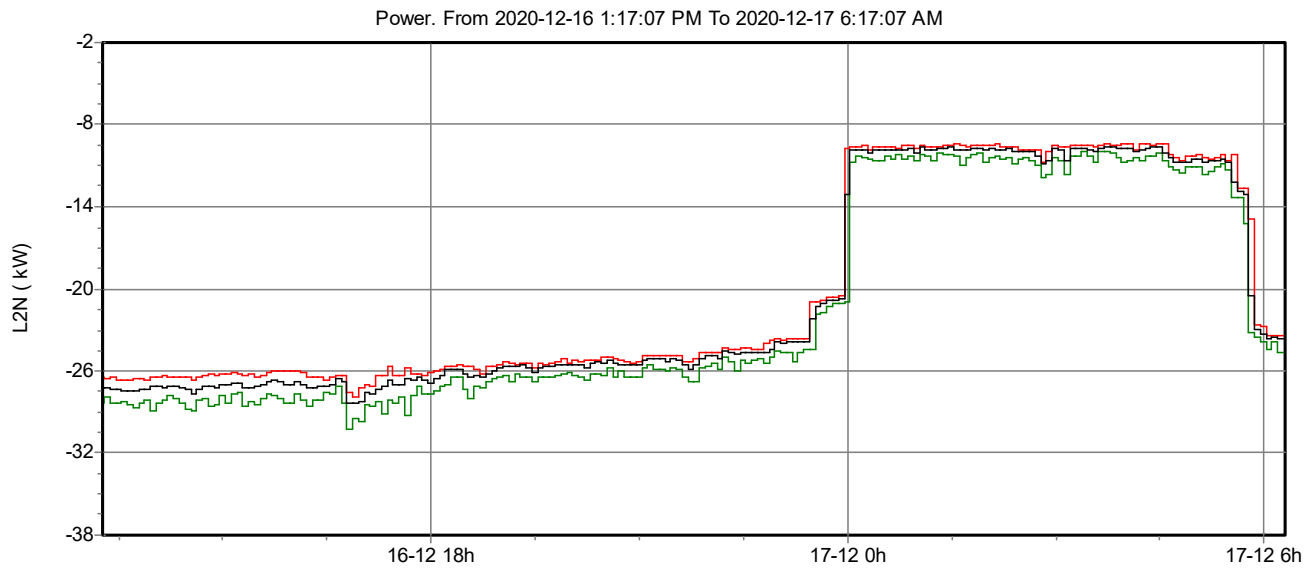




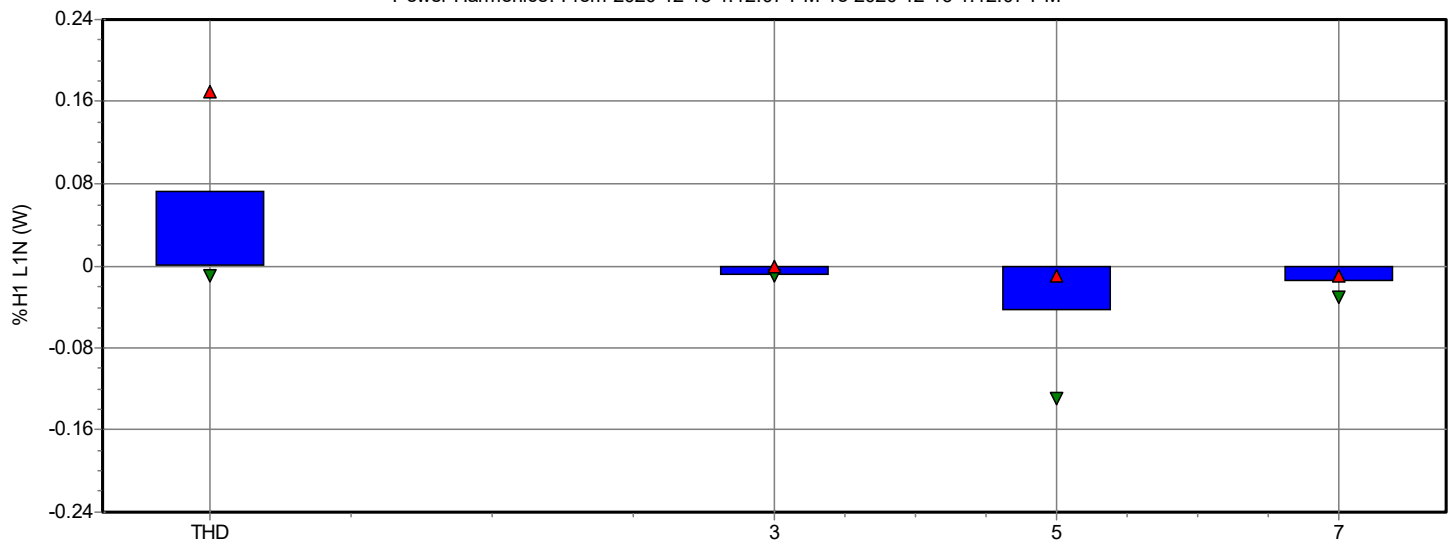




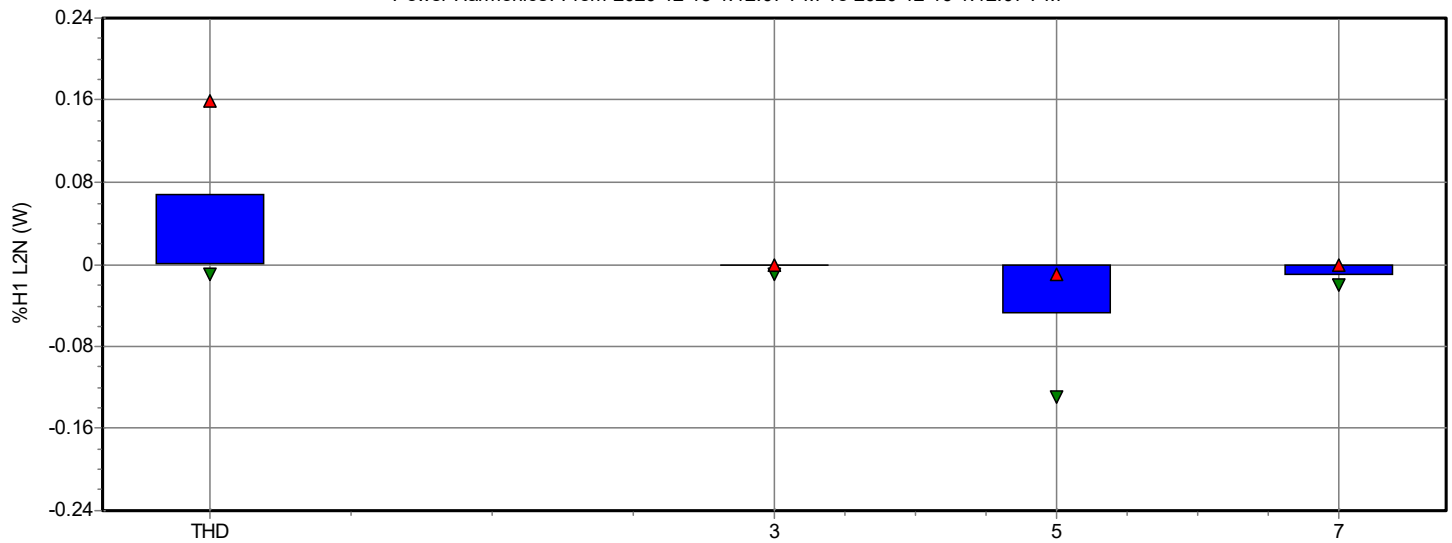




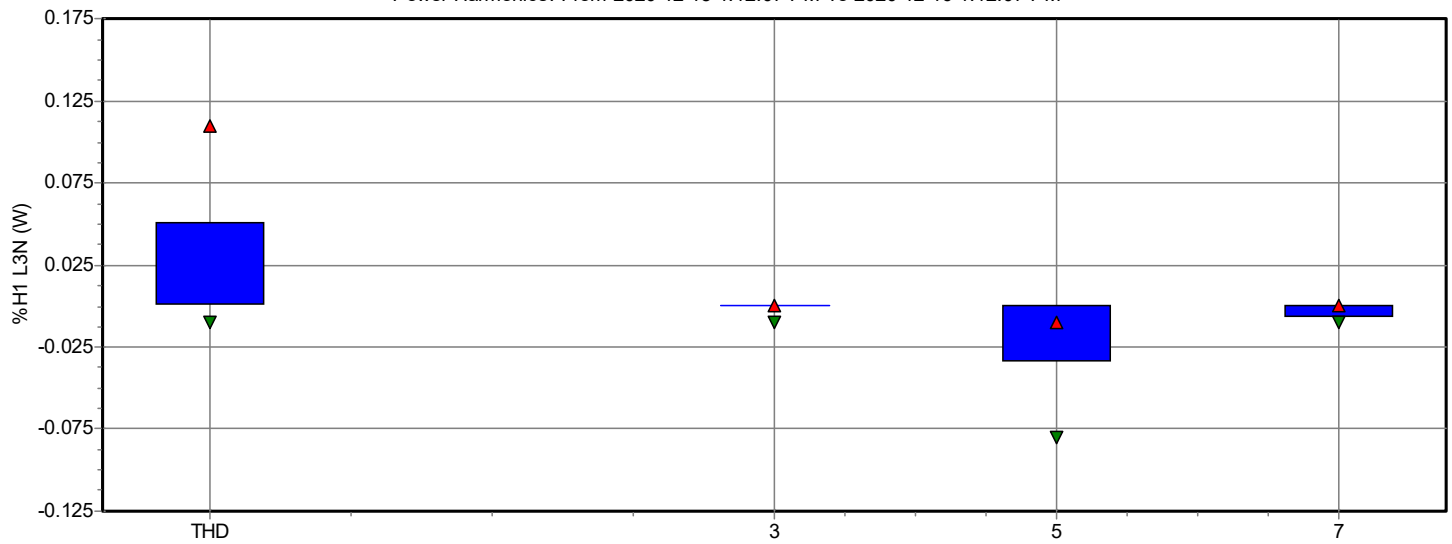
Power Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



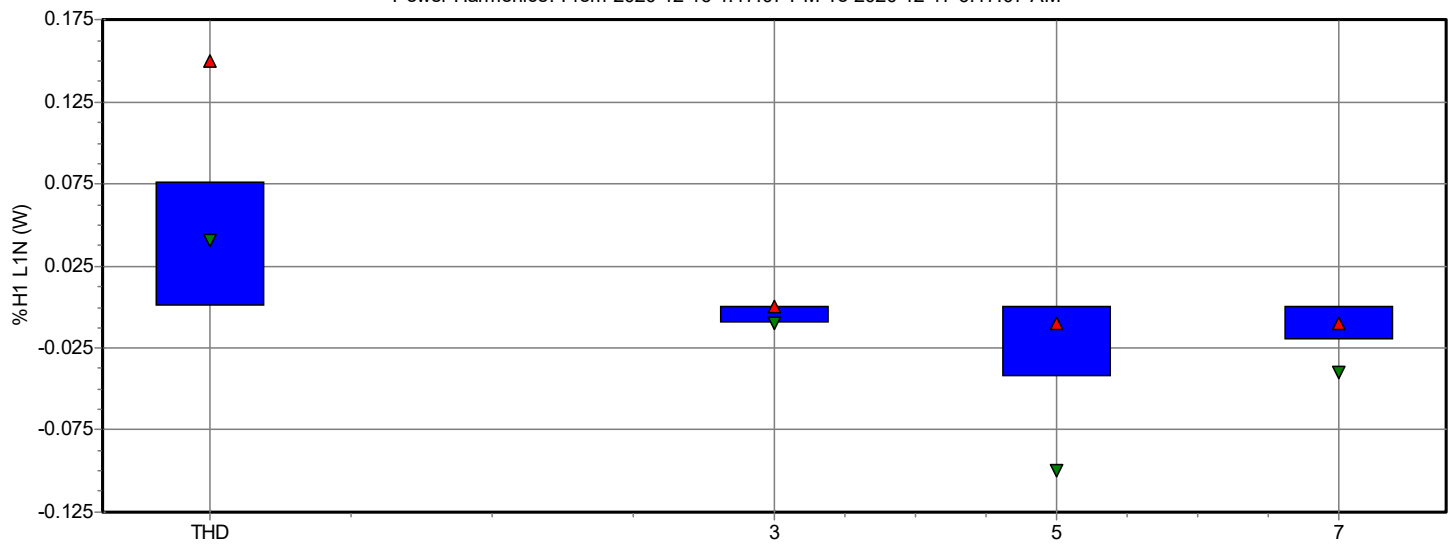
Power Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



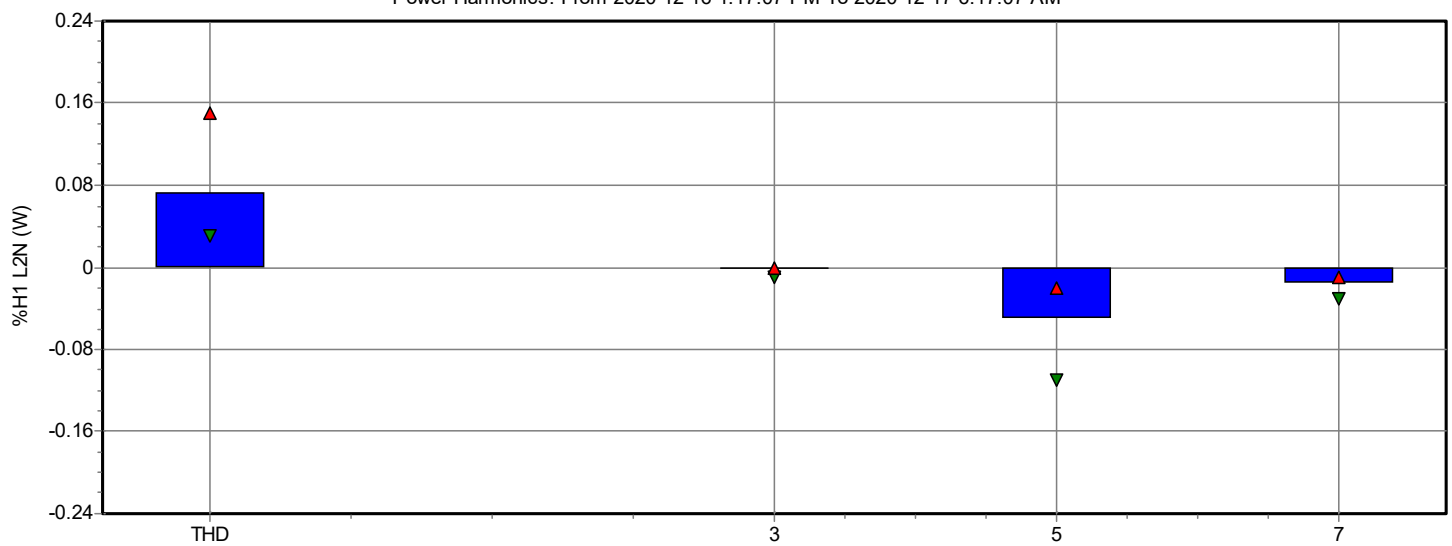
Power Harmonics. From 2020-12-15 1:12:07 PM To 2020-12-16 1:12:07 PM



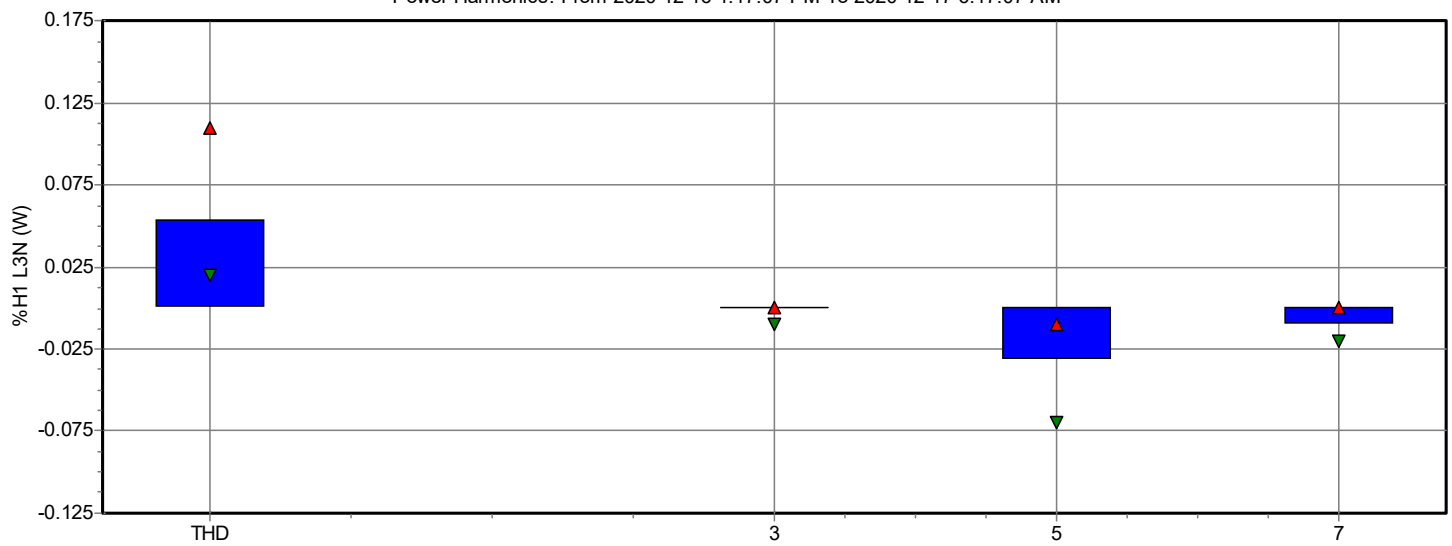
Power Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM

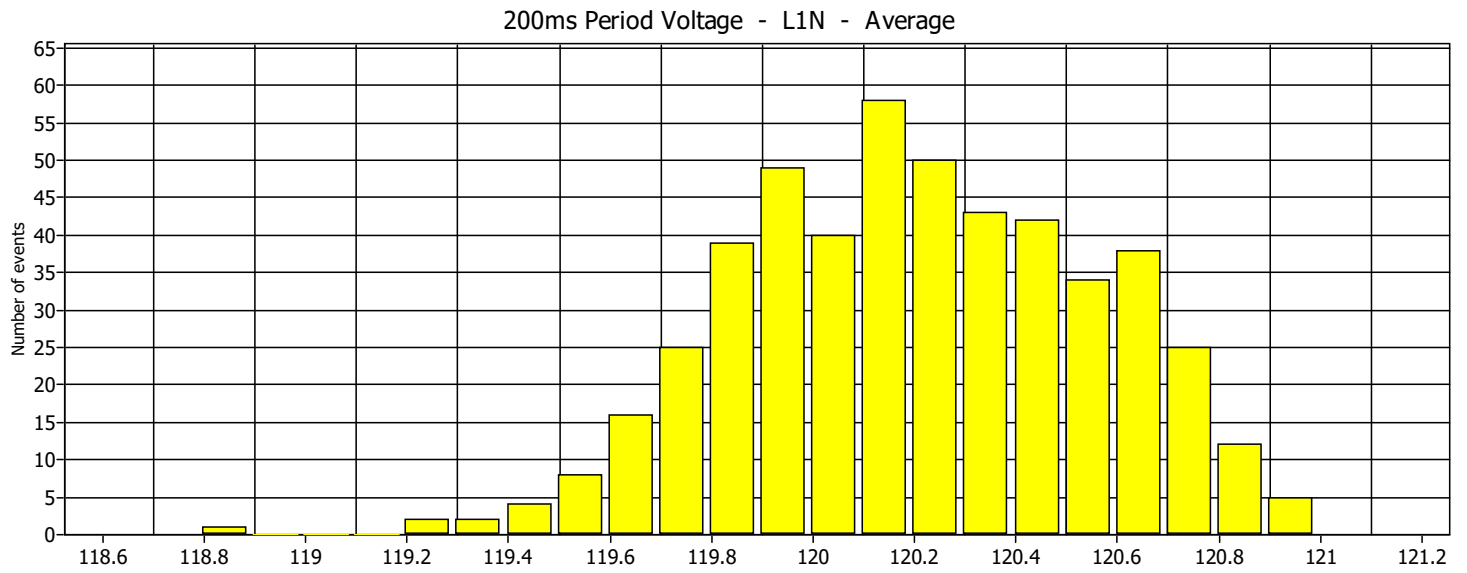


Power Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM



Power Harmonics. From 2020-12-16 1:17:07 PM To 2020-12-17 6:17:07 AM





Instrument Information

Model Number	FLUKE 434/435
Serial Number	N/A
Firmware Revision	V02.10

Software Information

Power Log Version	Classic 4.6
FLUKE 345 DLL Version	11.20.2006
FLUKE 430 DLL Version	1.1.0.12

General Information

Recording location
Client
Notes

Measurement Summary

Measurement topology	3-element delta mode
Application mode	Logger
First recording	2020-12-20 4:39:53 PM 291msec
Last recording	2020-12-27 5:49:53 PM 291msec
Recording interval	0h 5m 0s 0msec
Nominal Voltage	230 V
Nominal Current	N/A
Nominal Frequency	60 Hz

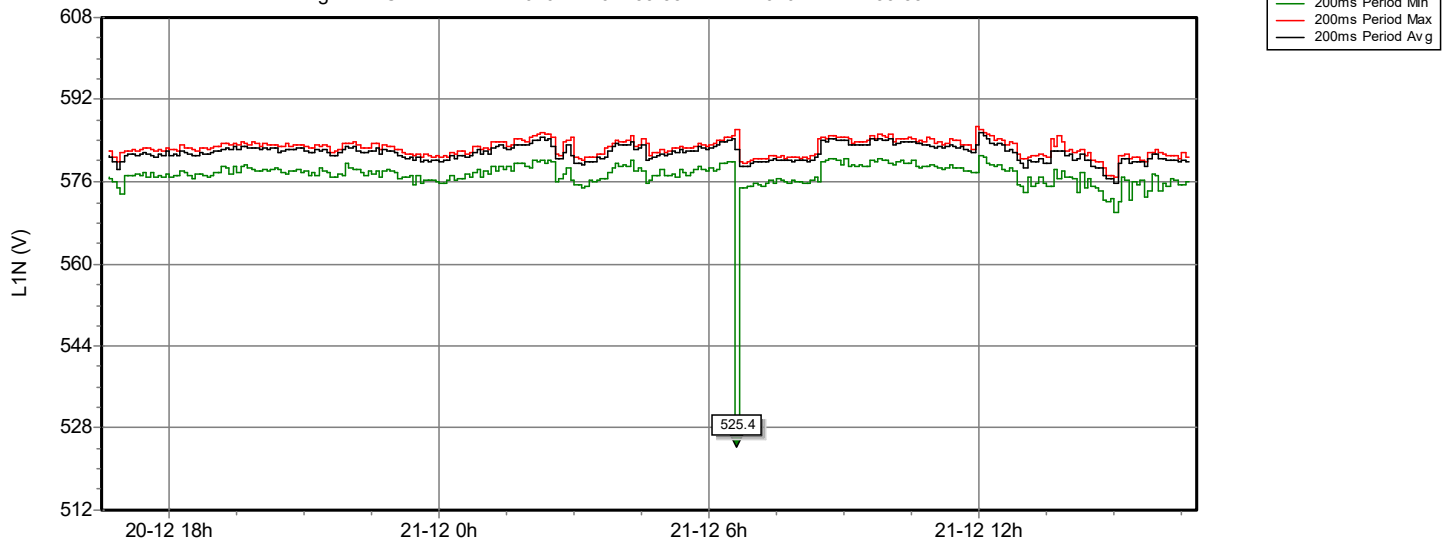
Recording Summary

RMS recordings	2031
DC recordings	0
Frequency recordings	2031
Unbalance recordings	2031
Harmonic recordings	2031
Power harmonic recordings	2031
Power recordings	2031
Energy recordings	0
Flicker recordings	2031
Mains signaling recordings	0

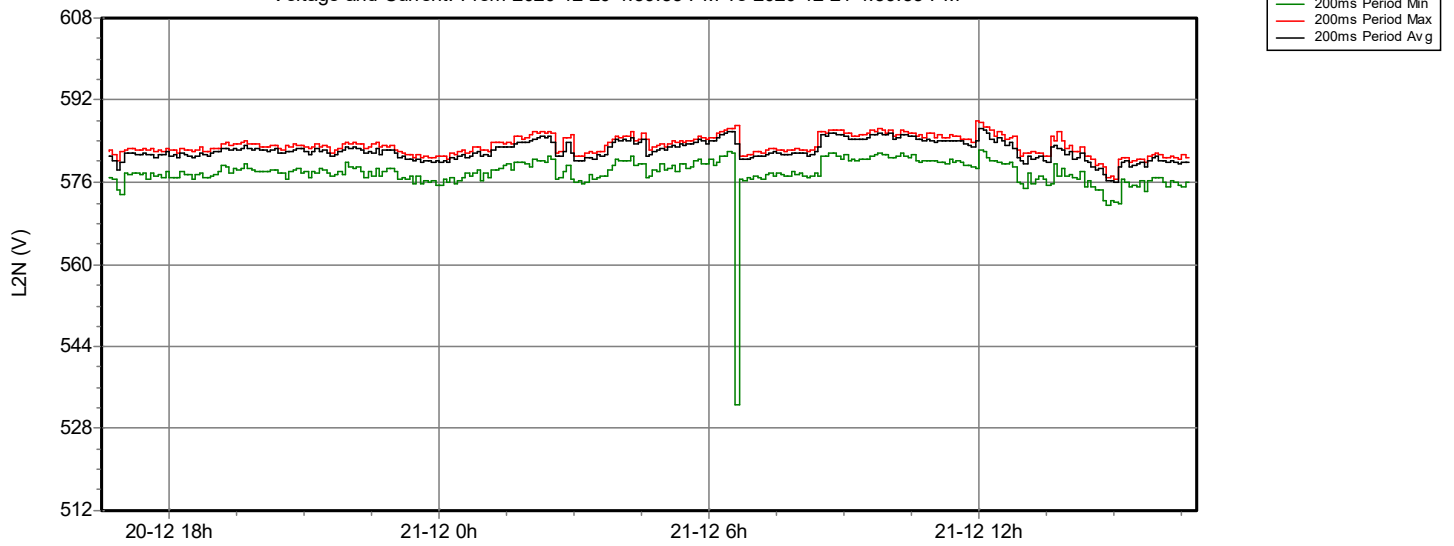
Events Summary

Dips	3
Swells	0
Transients	0
Interruptions	0
Voltage profiles	0
Rapid voltage changes	0
Screens	1
Waveforms	0
Intervals without measurements	0
Inrush current graphics	0

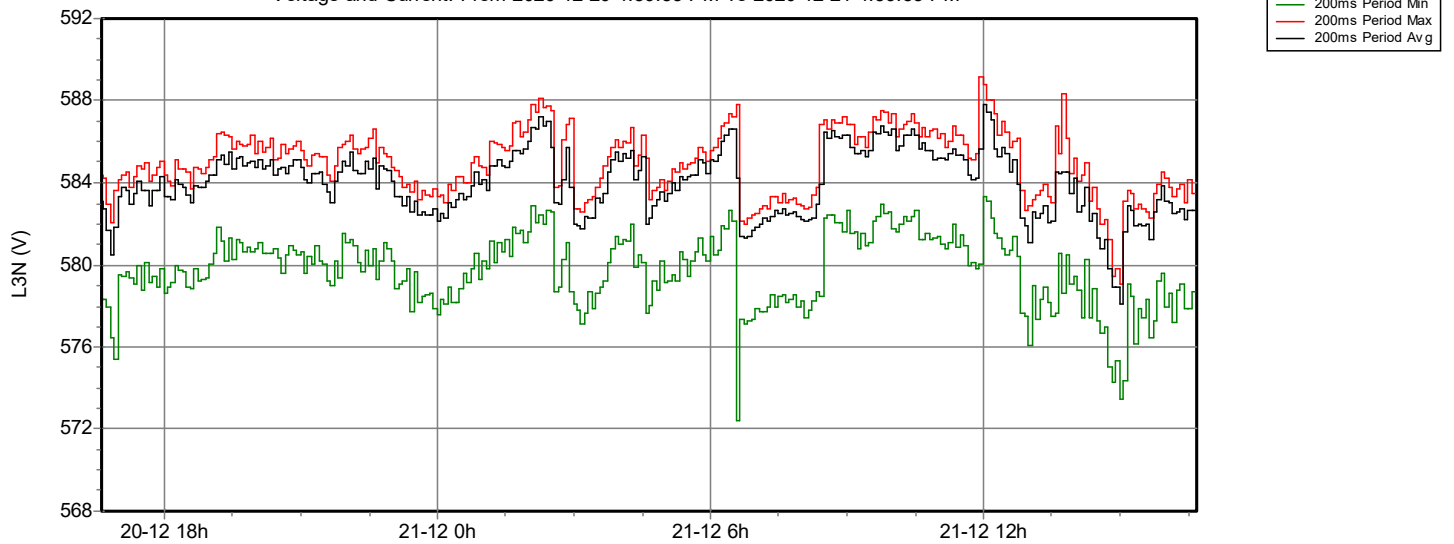
Voltage and Current. From 2020-12-20 4:39:53 PM To 2020-12-21 4:39:53 PM



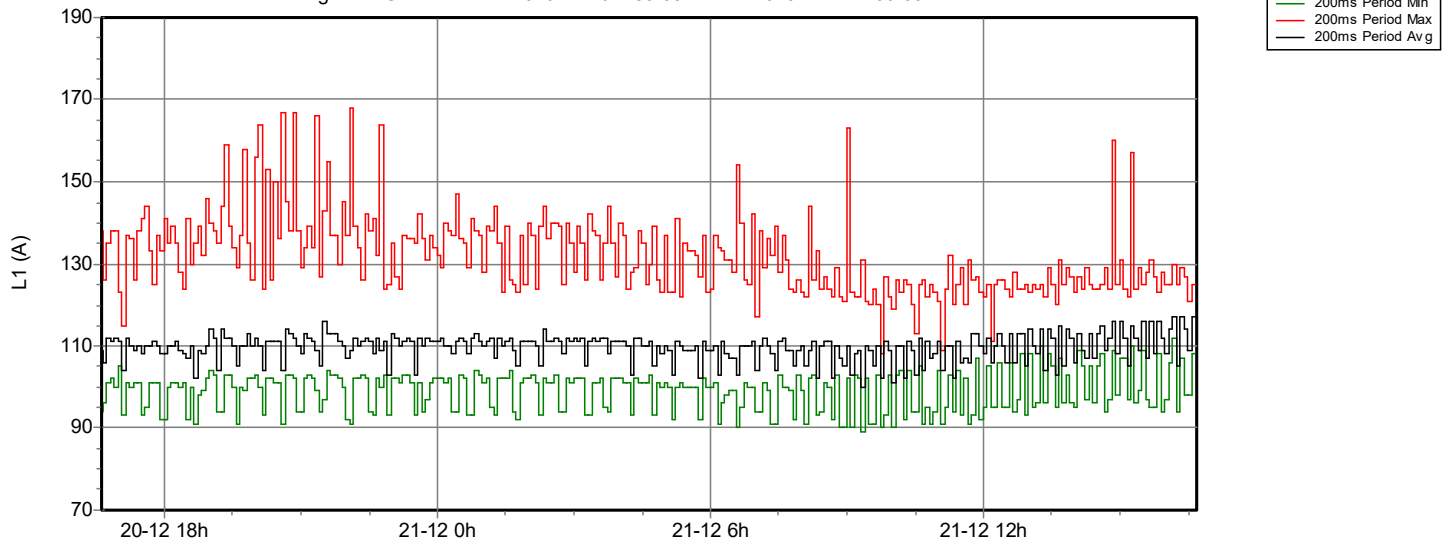
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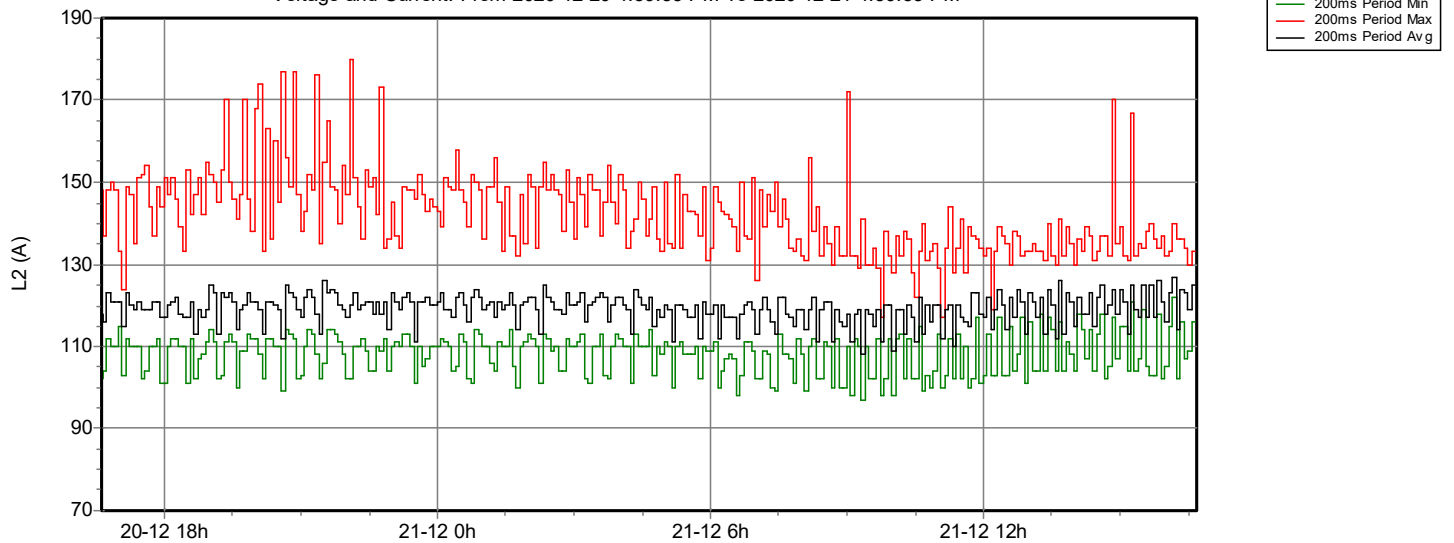
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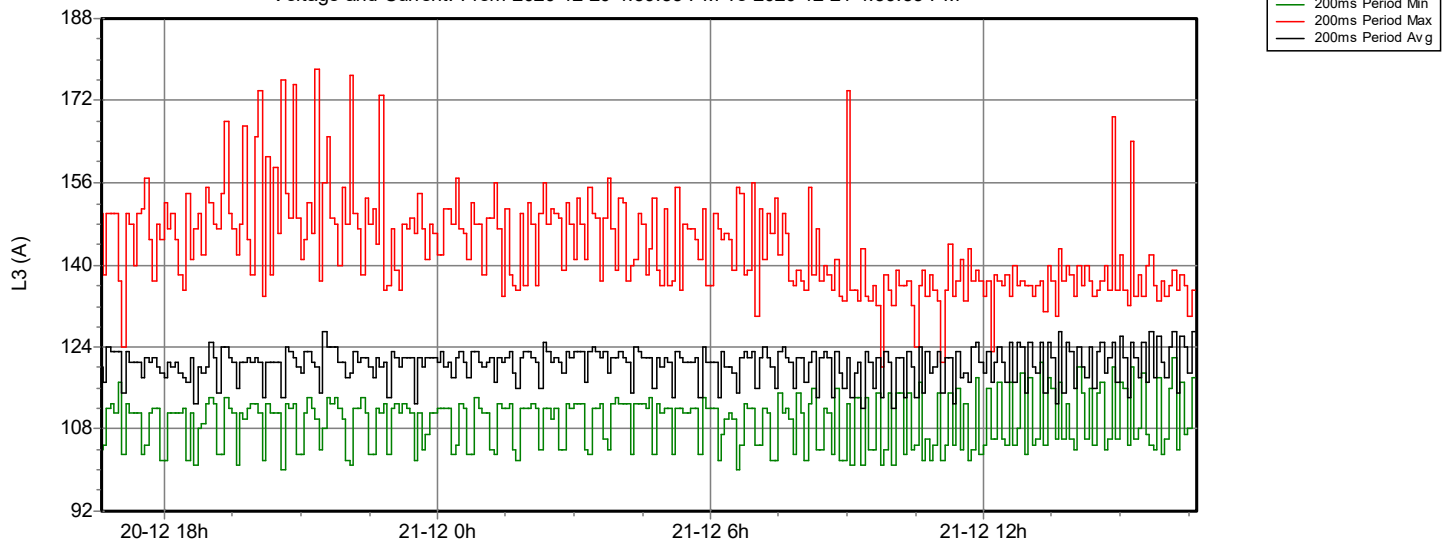
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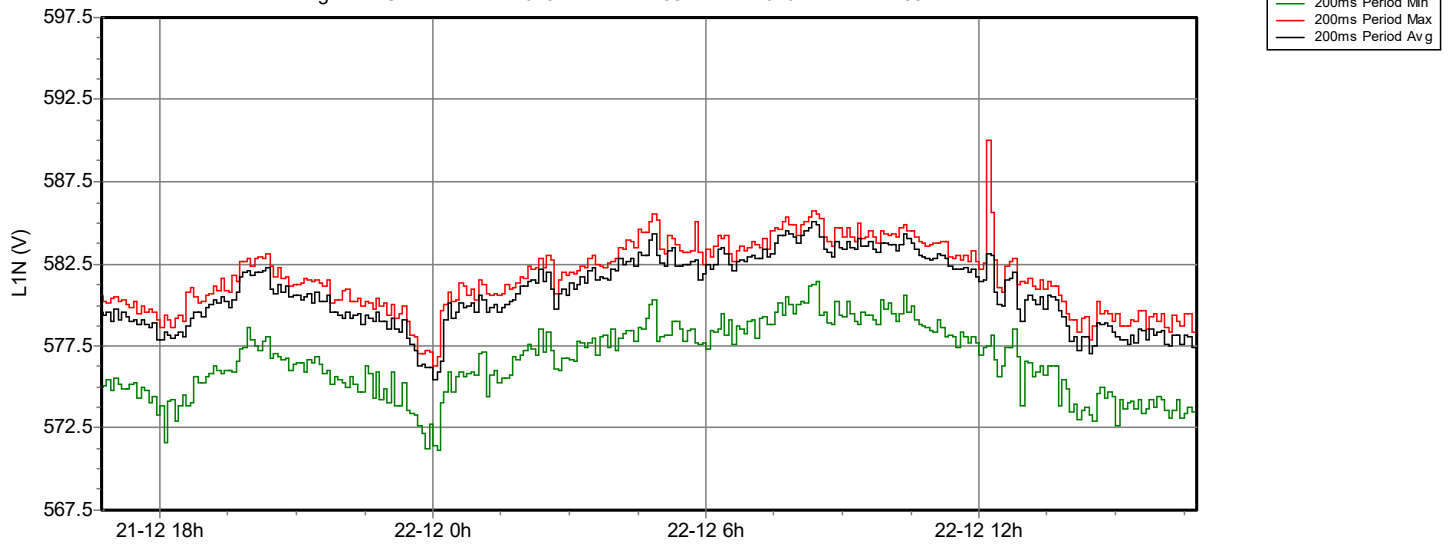
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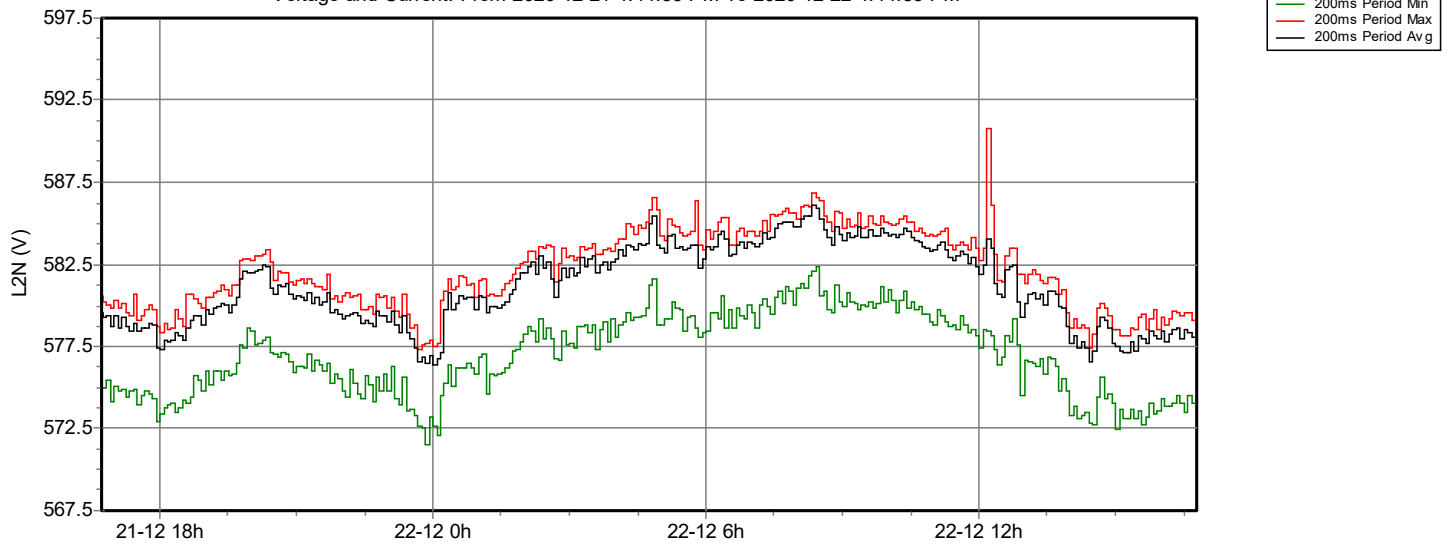
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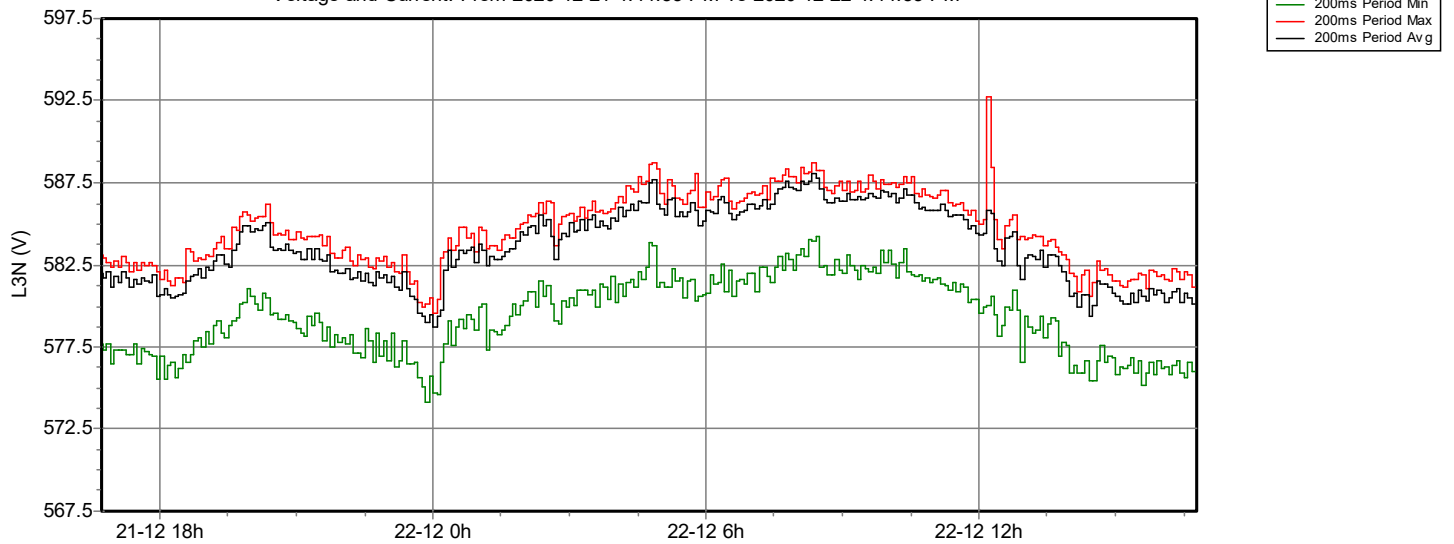
Voltage and Current. From 2020-12-21 4:44:53 PM To 2020-12-22 4:44:53 PM



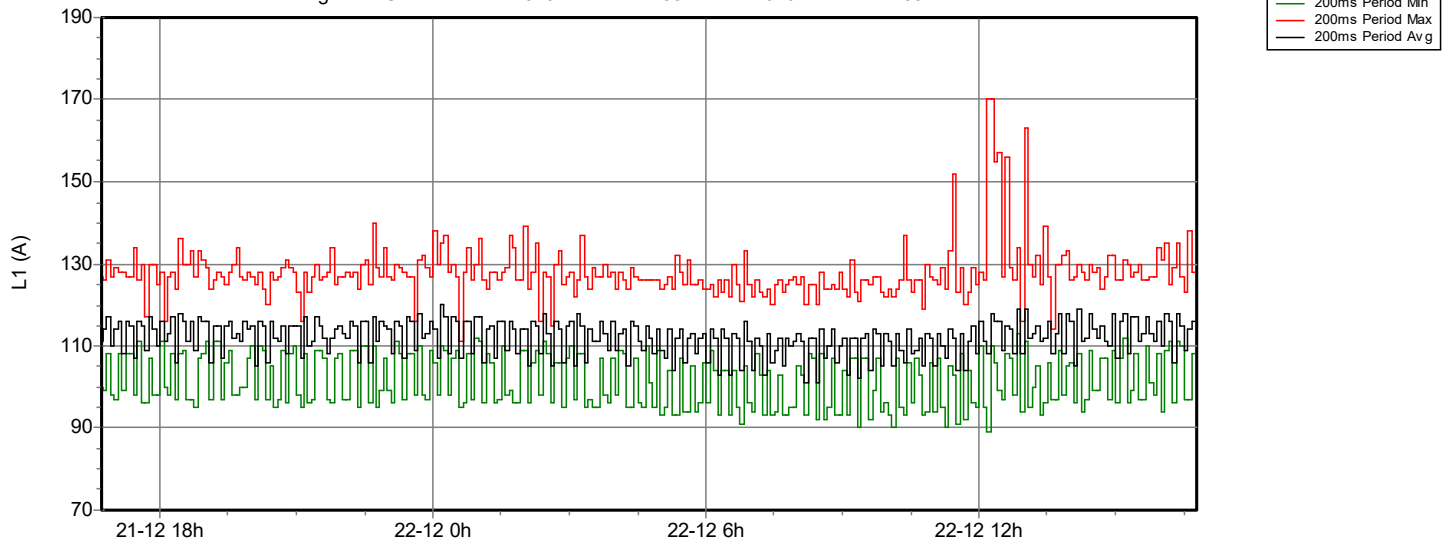
Voltage and Current. From 2020-12-21 4:44:53 PM To 2020-12-22 4:44:53 PM



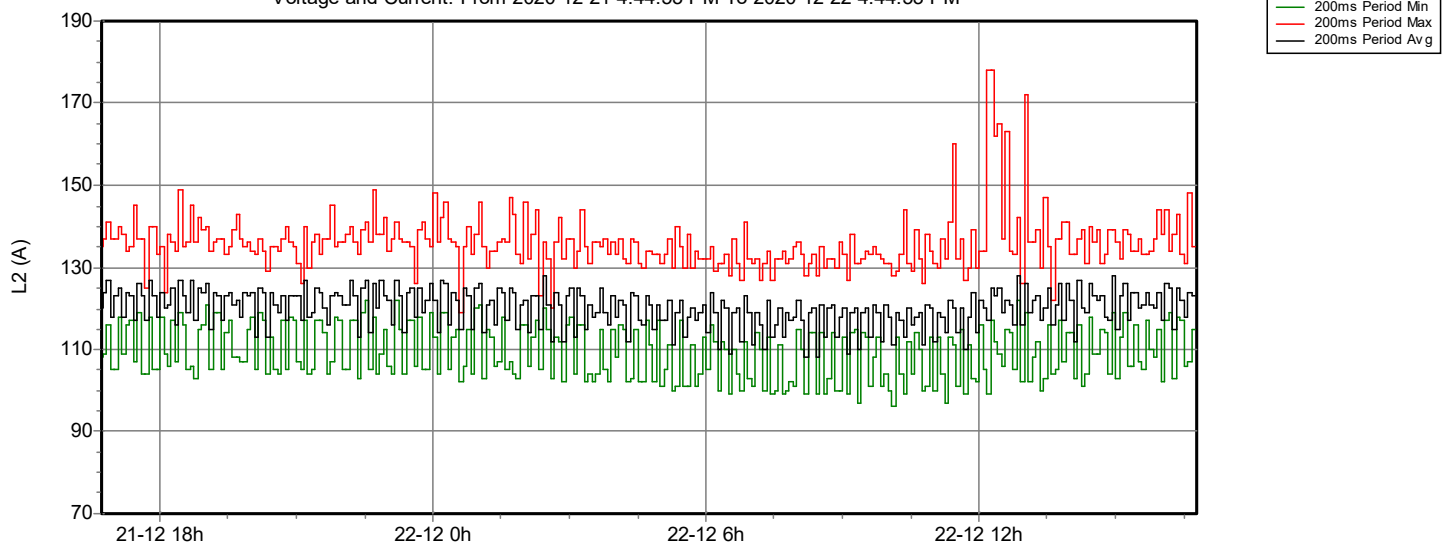
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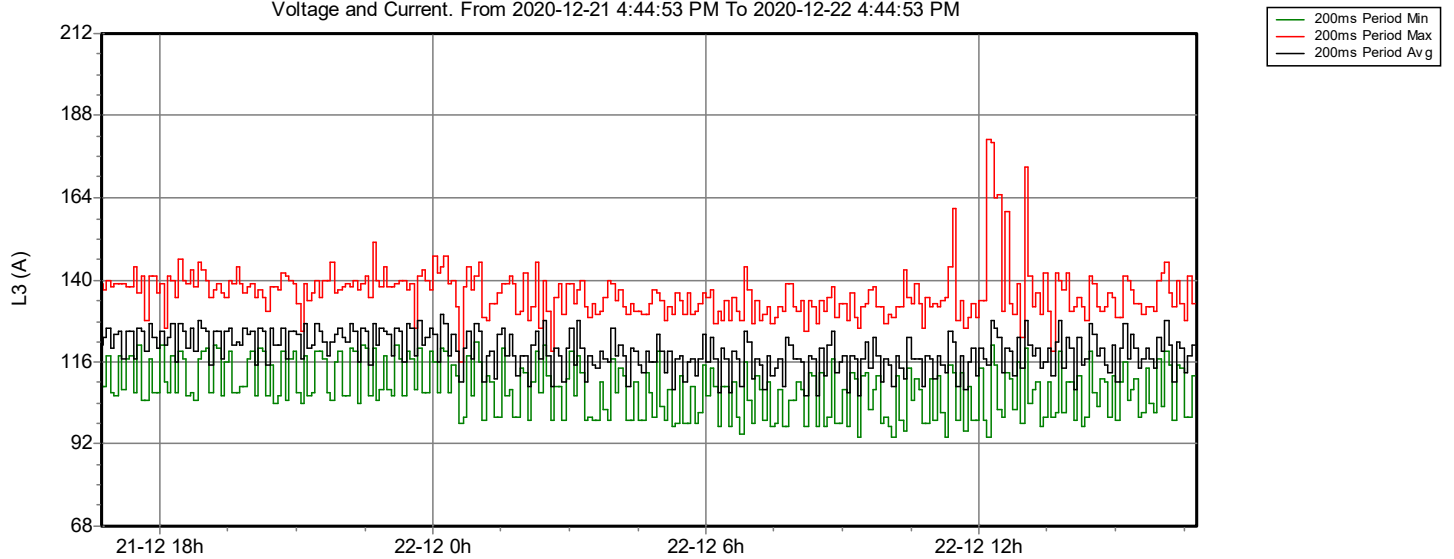
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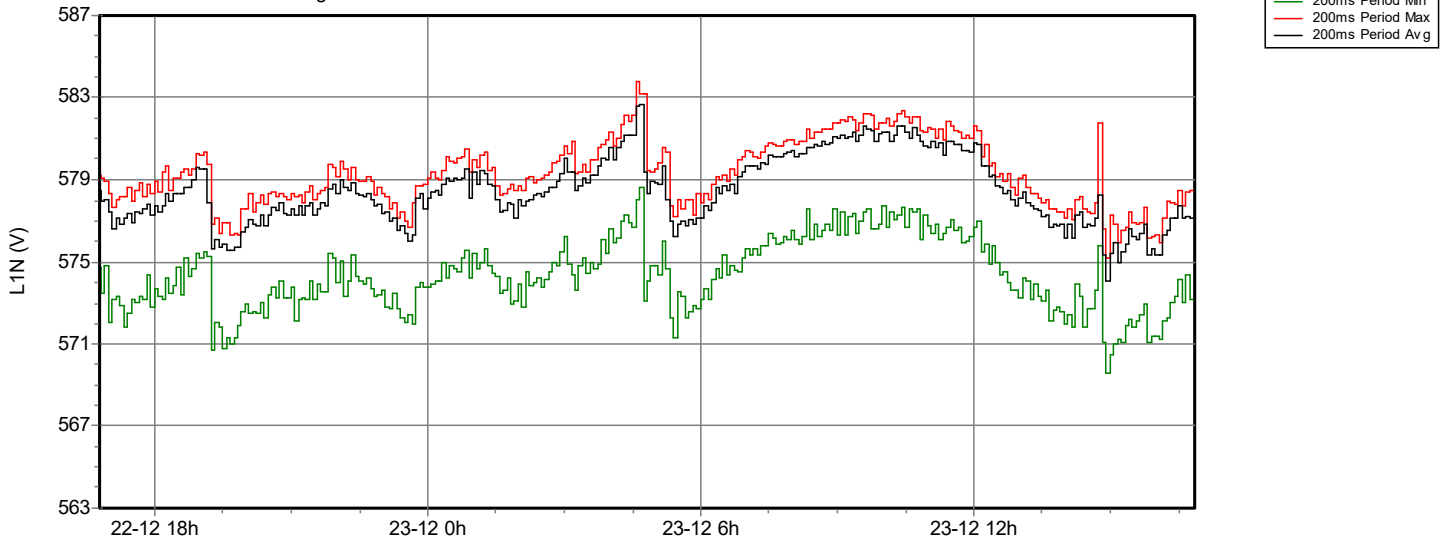
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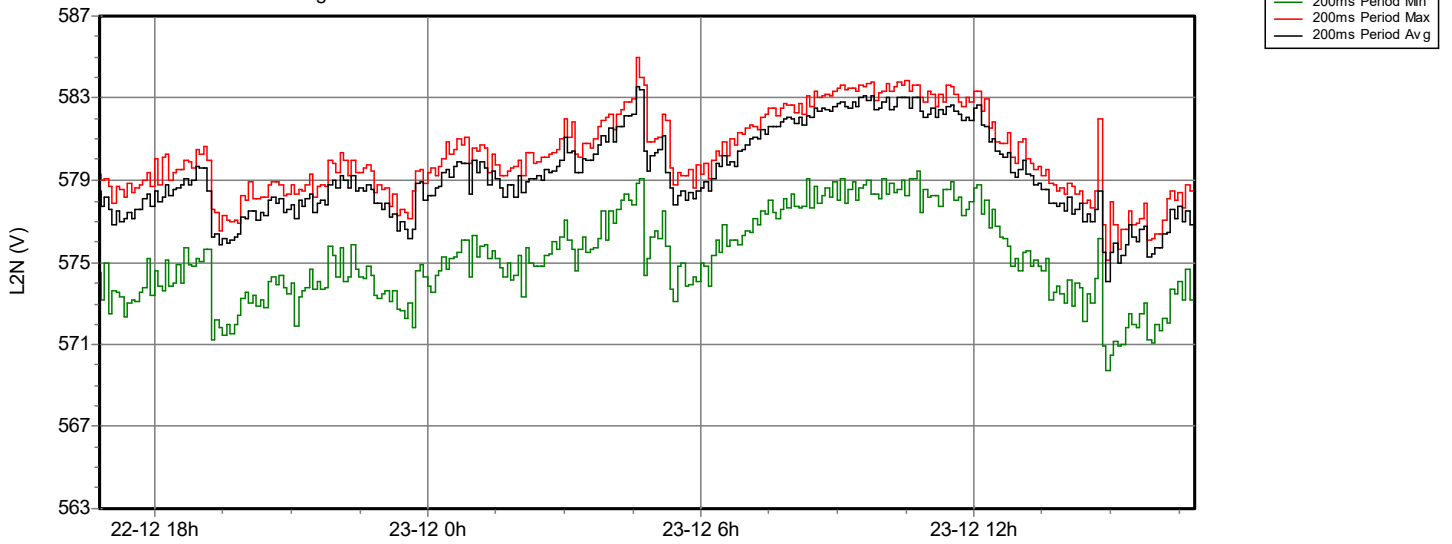
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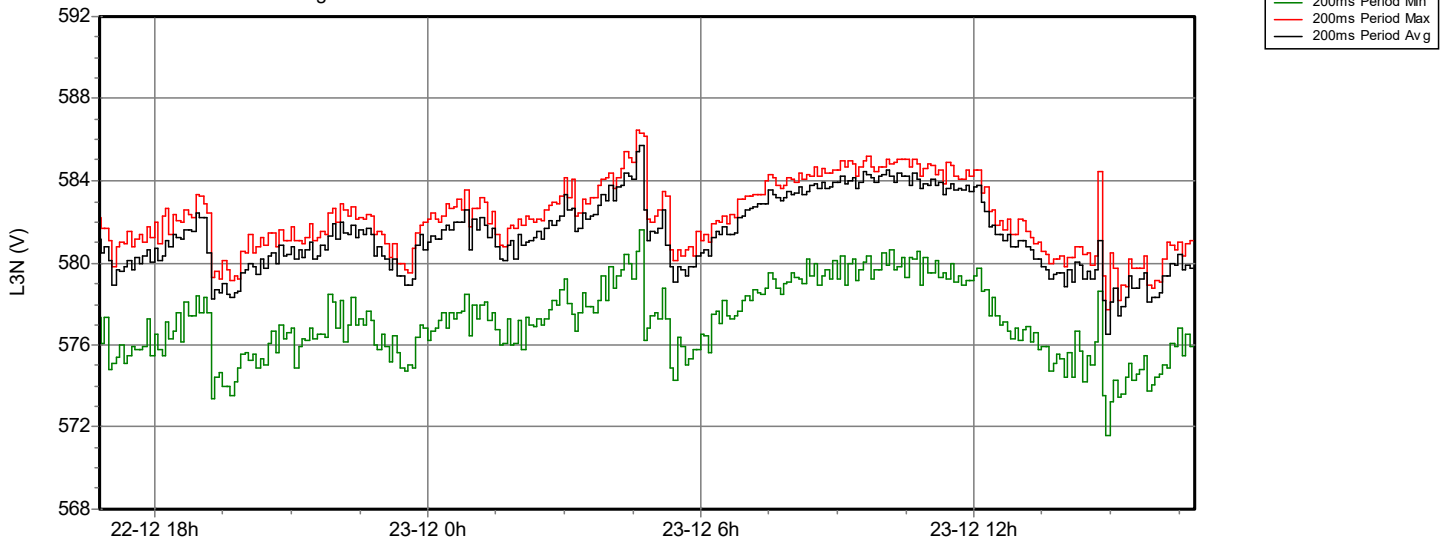
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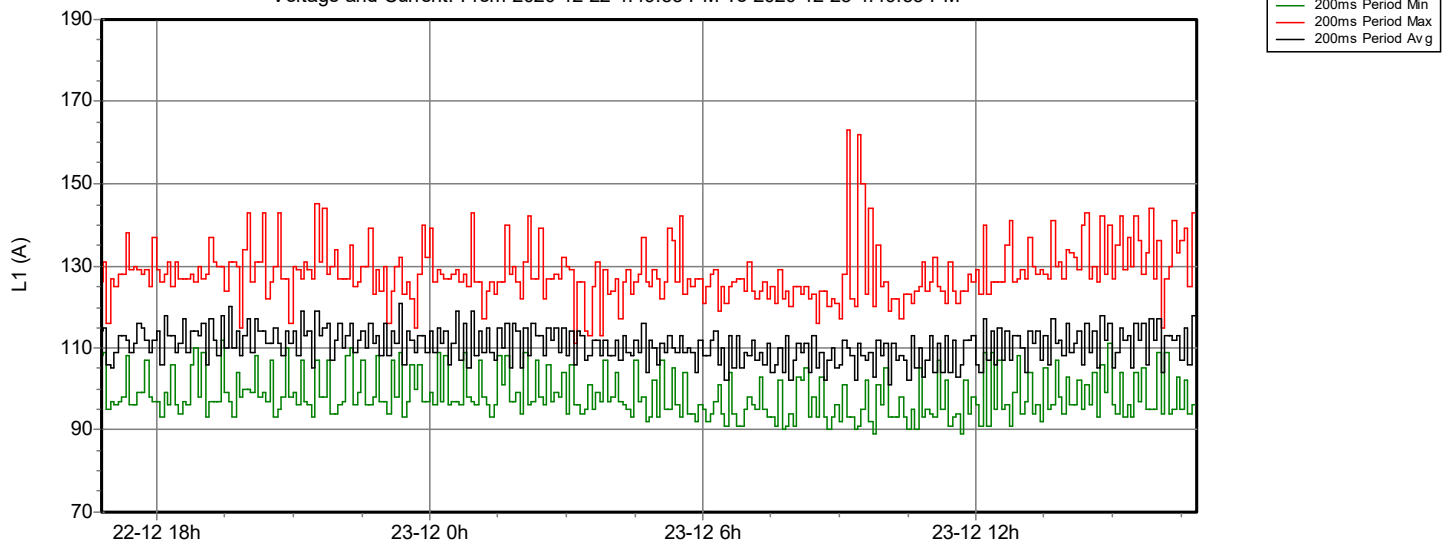
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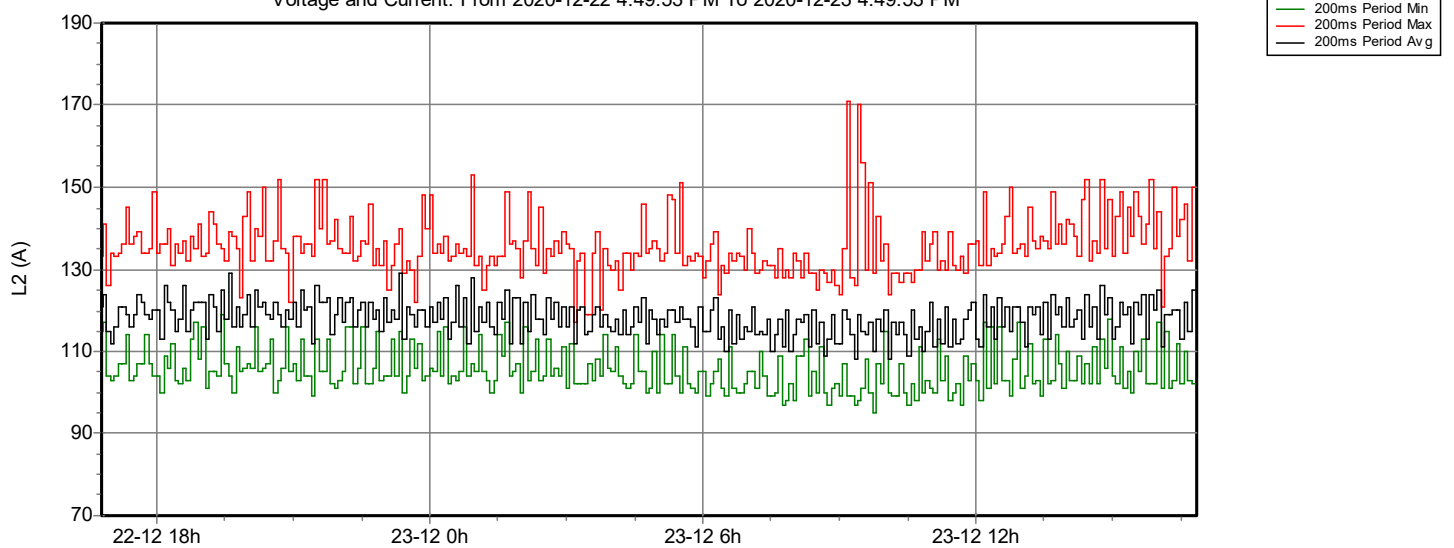
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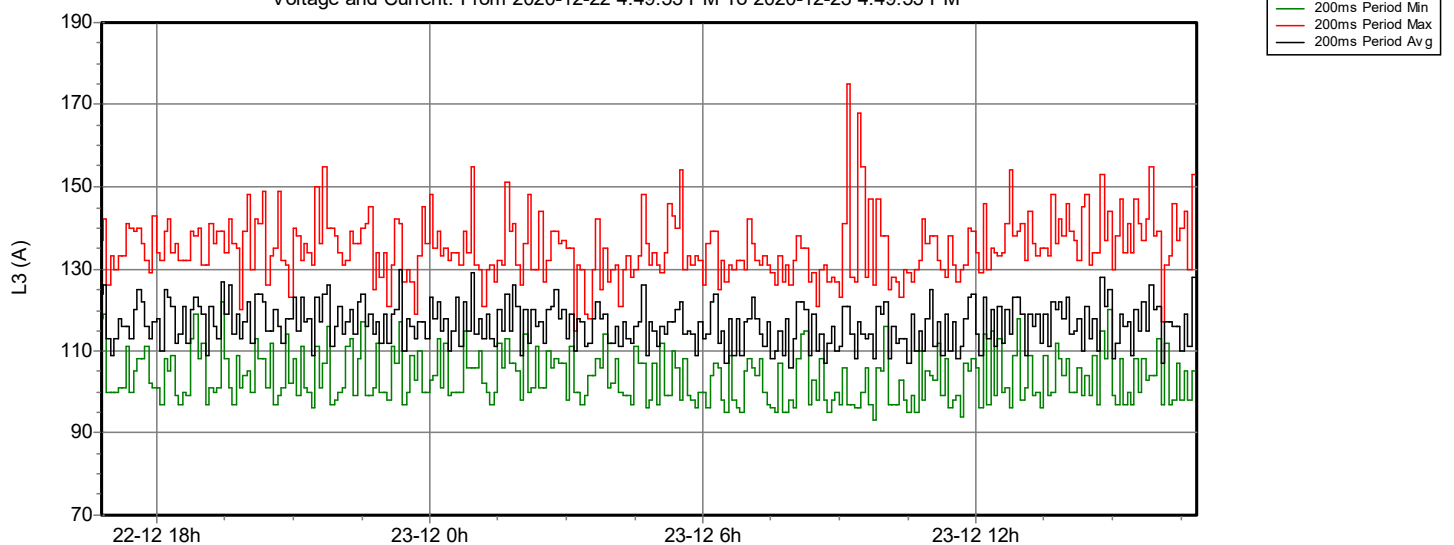
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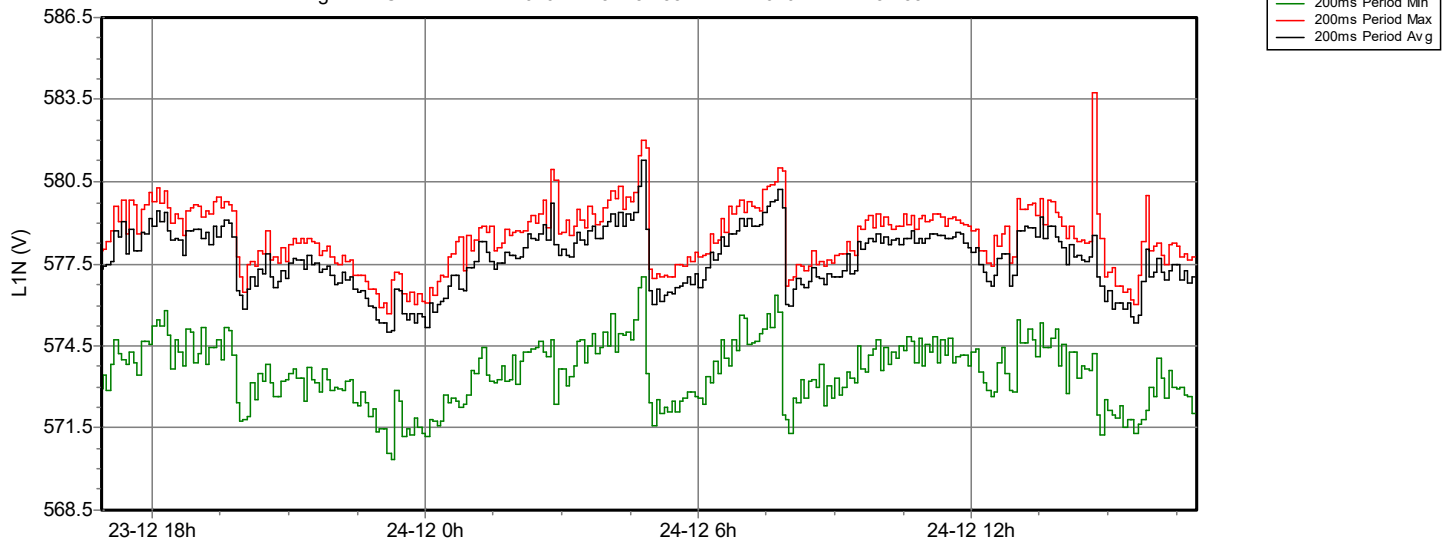
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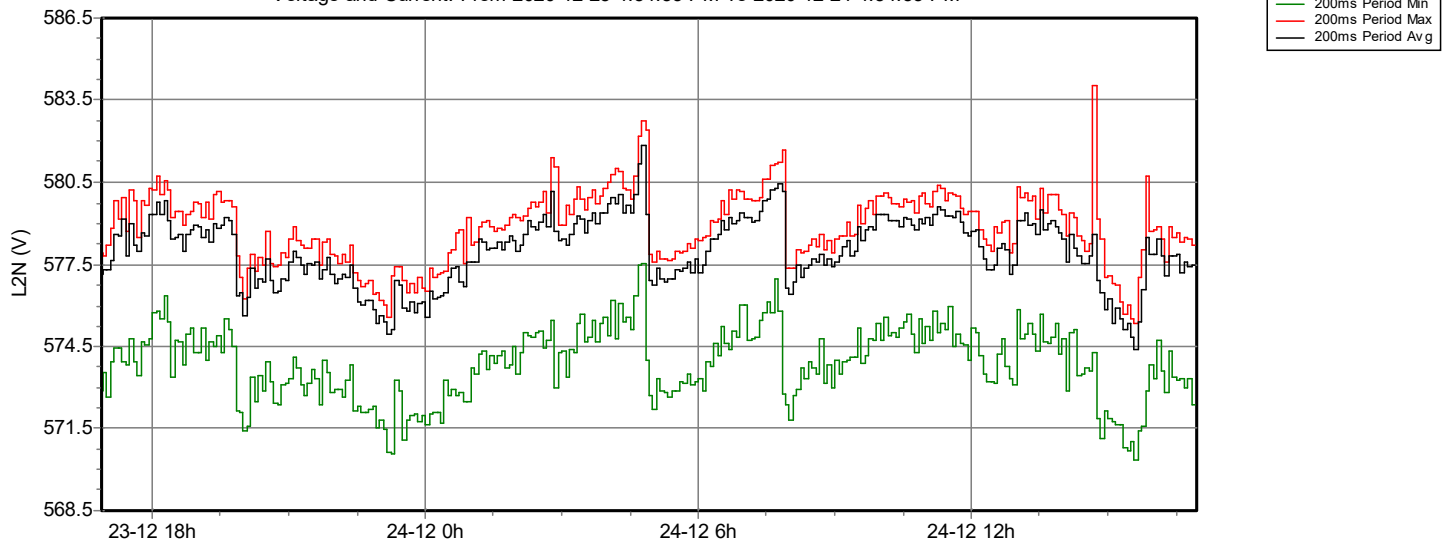
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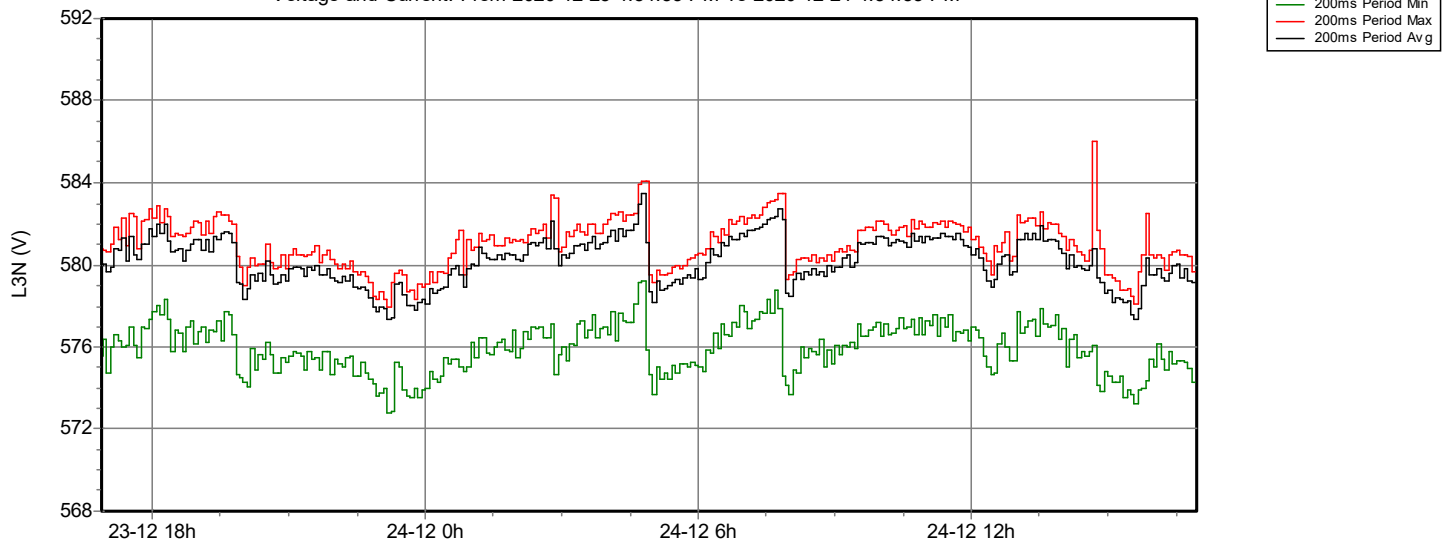
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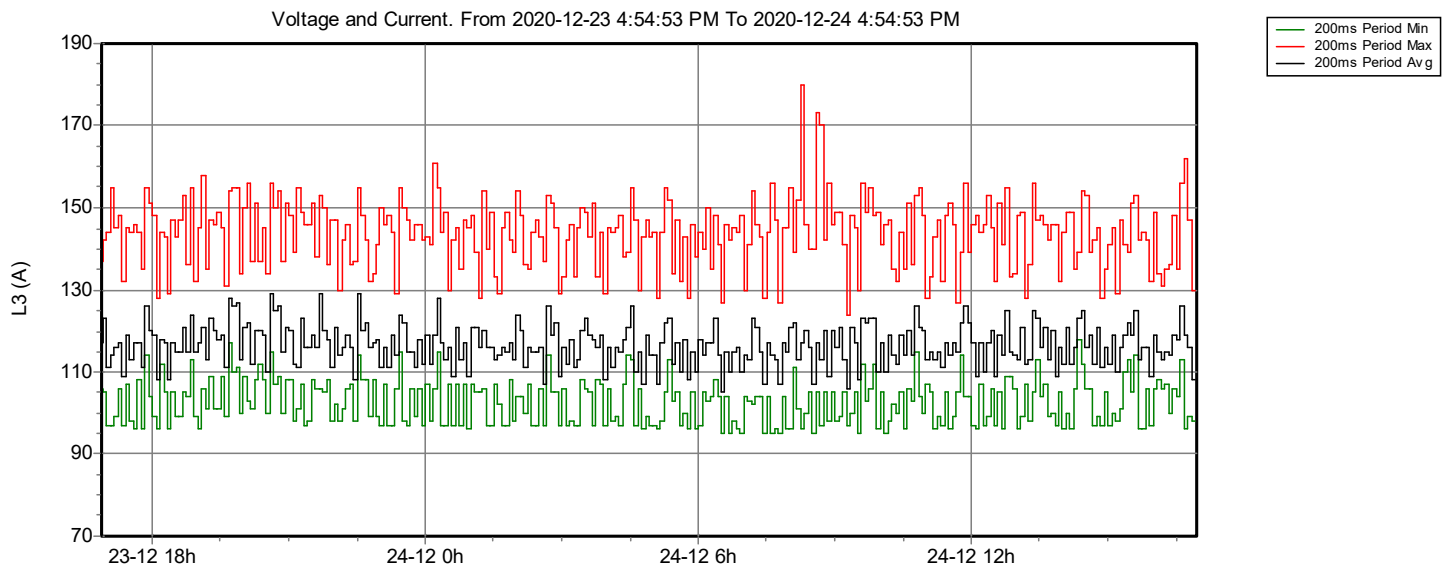
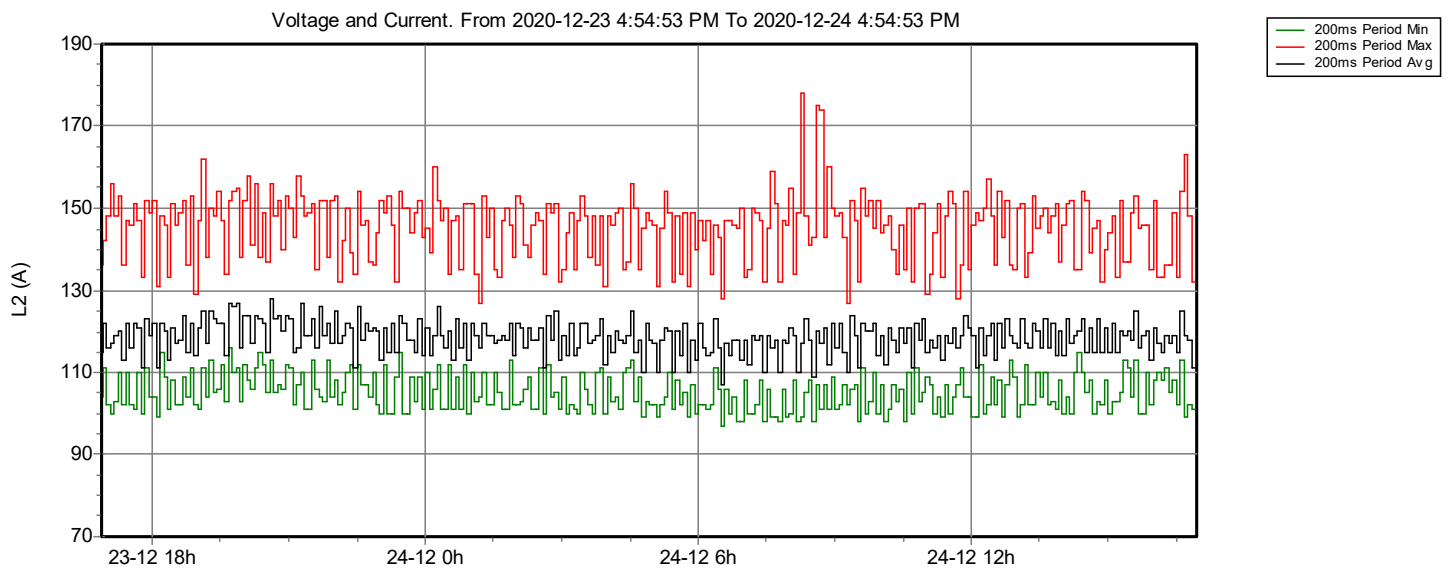
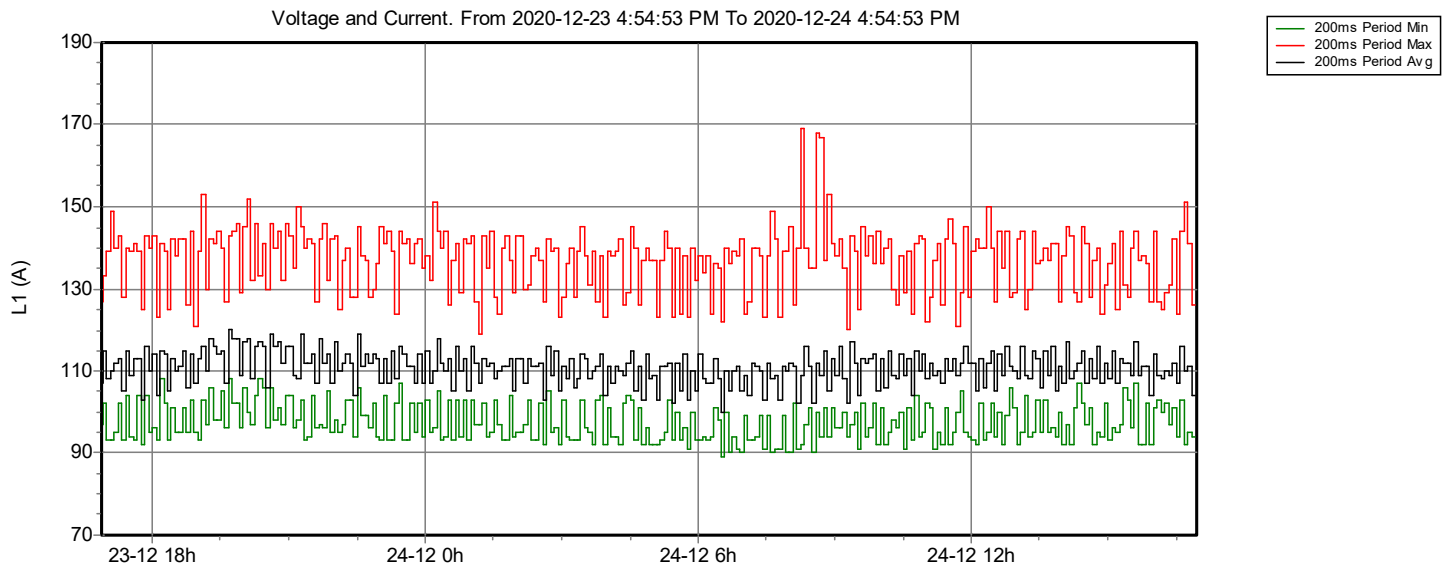


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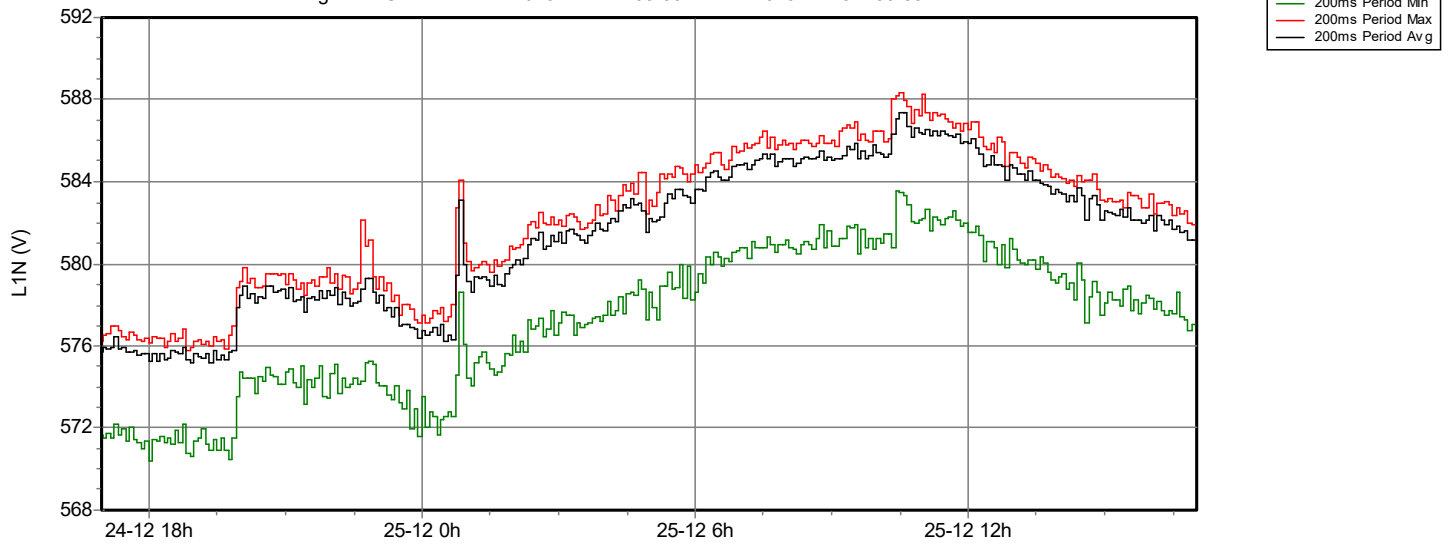


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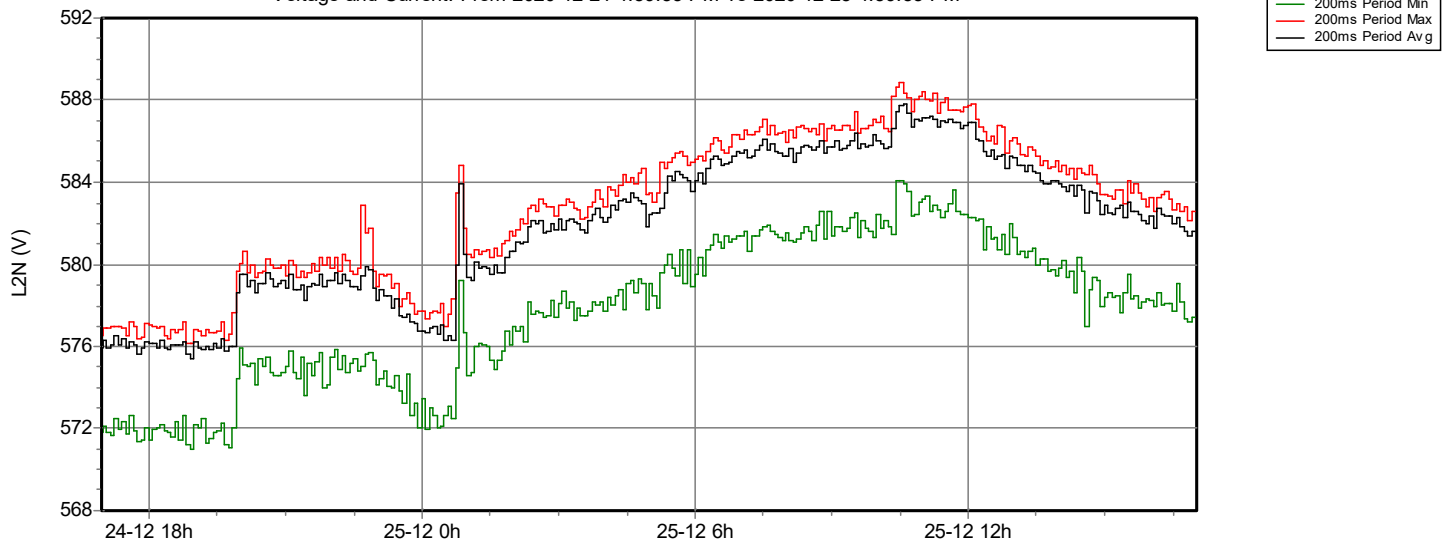




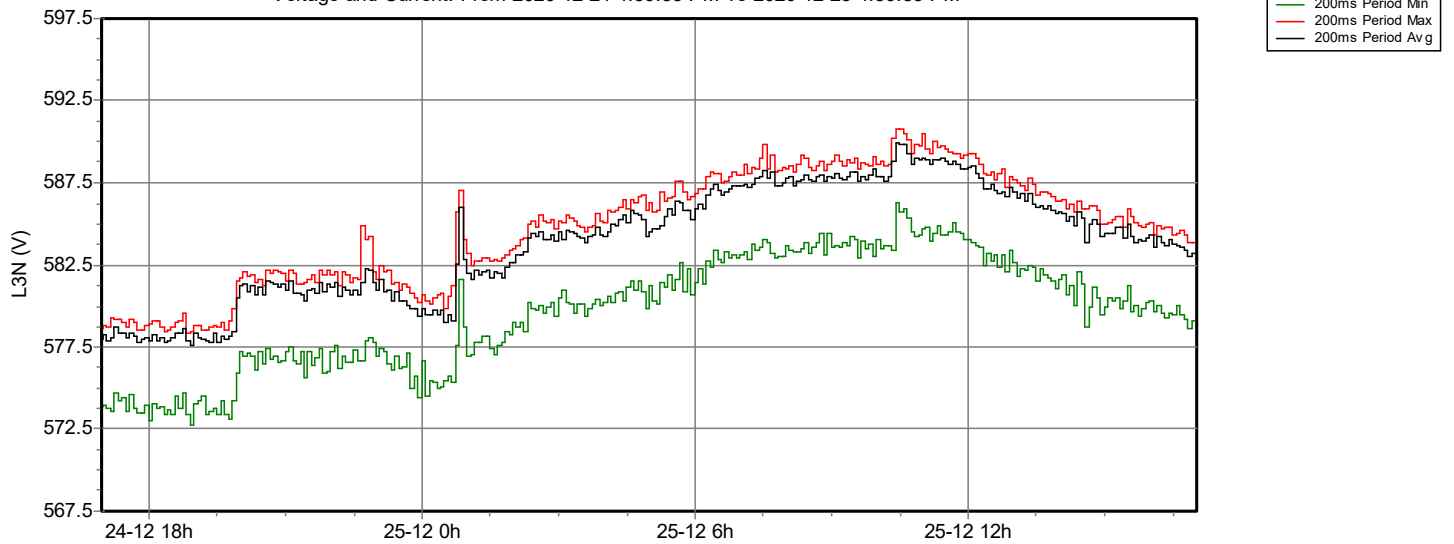
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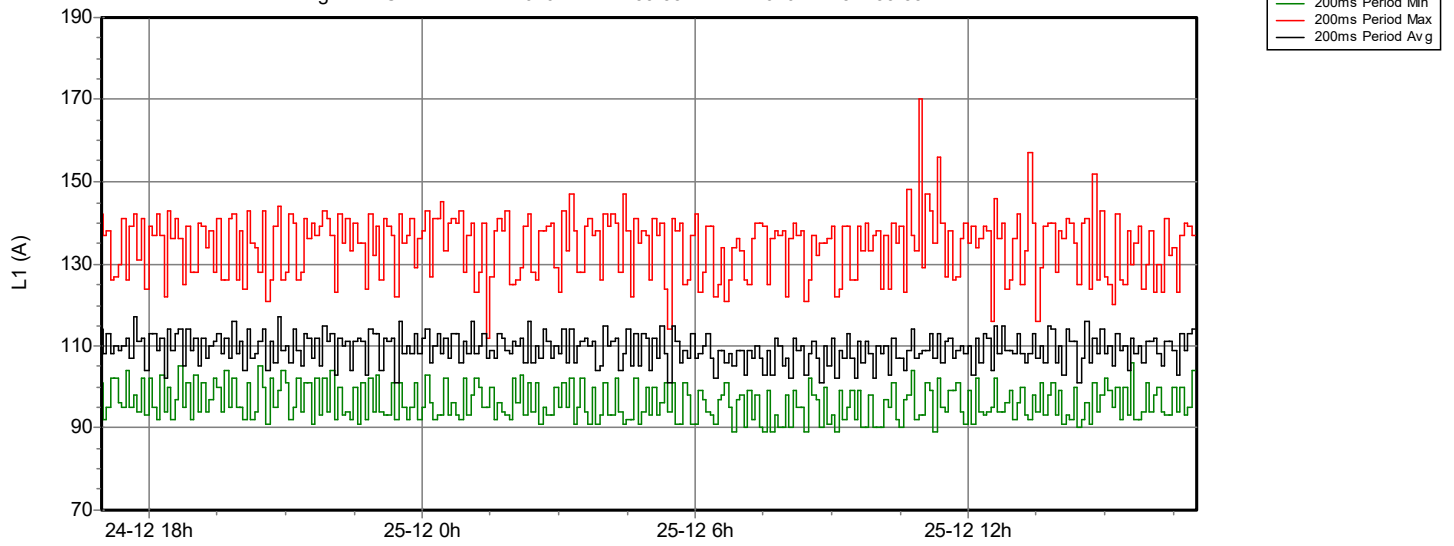
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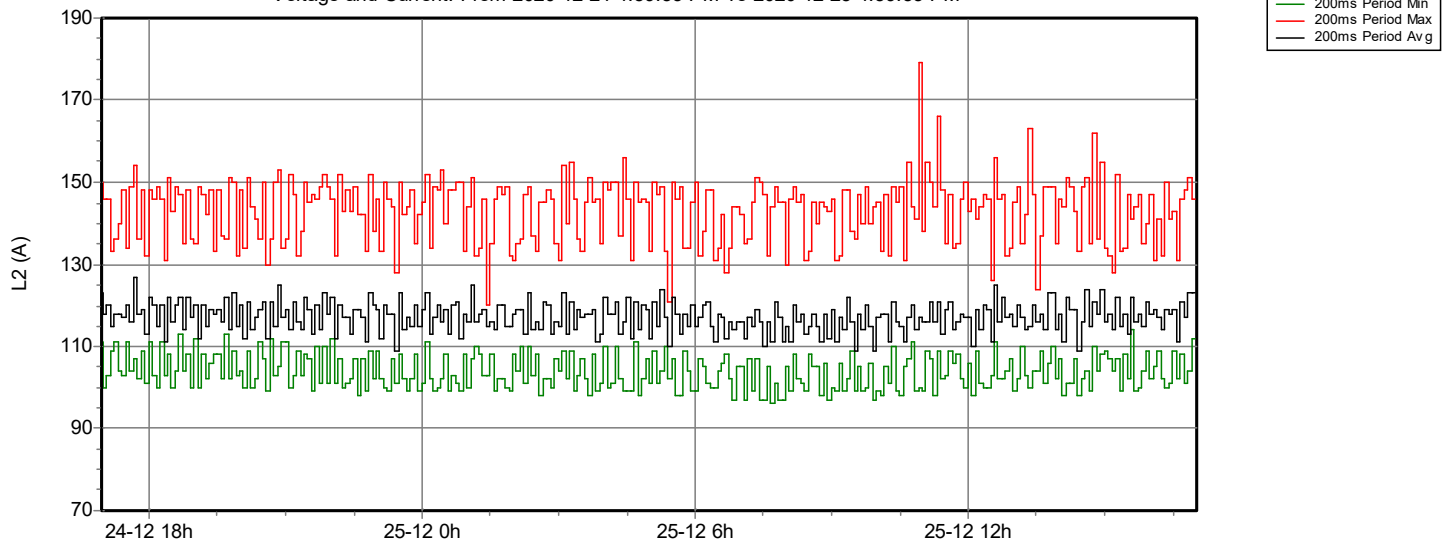
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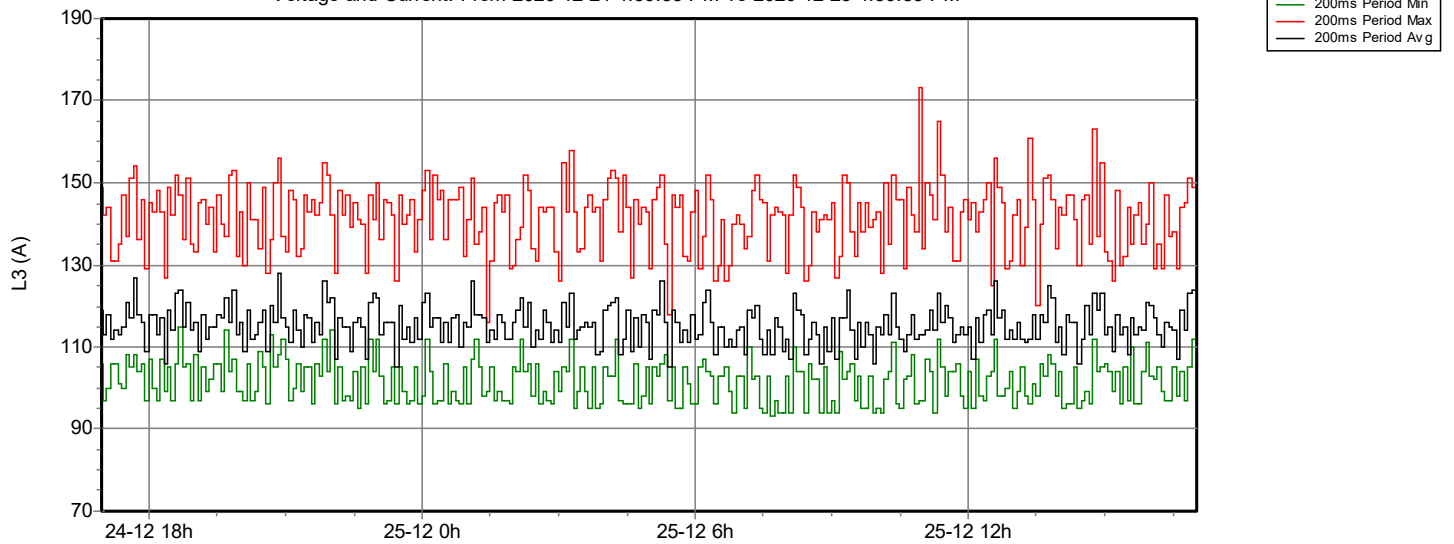
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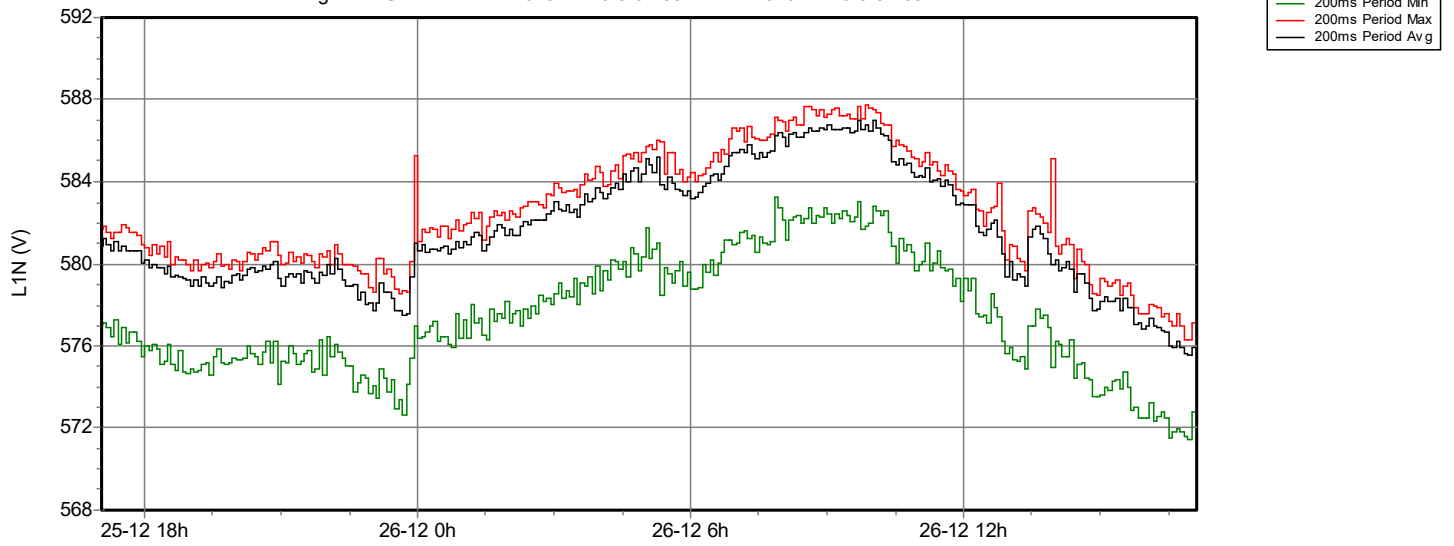
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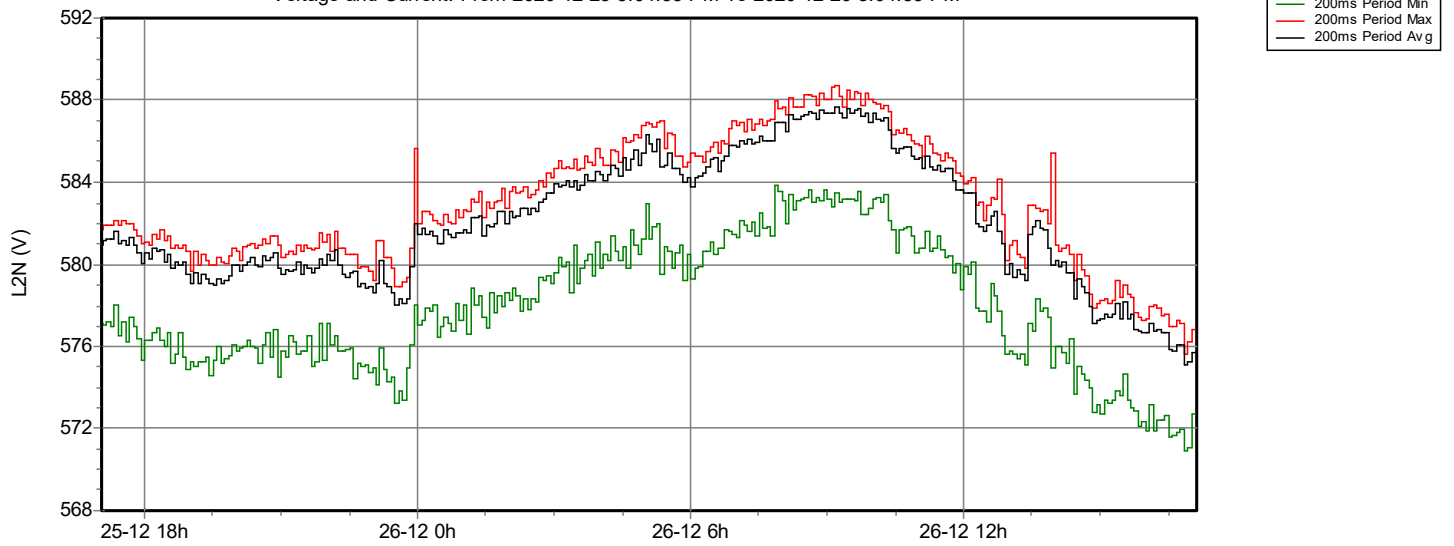
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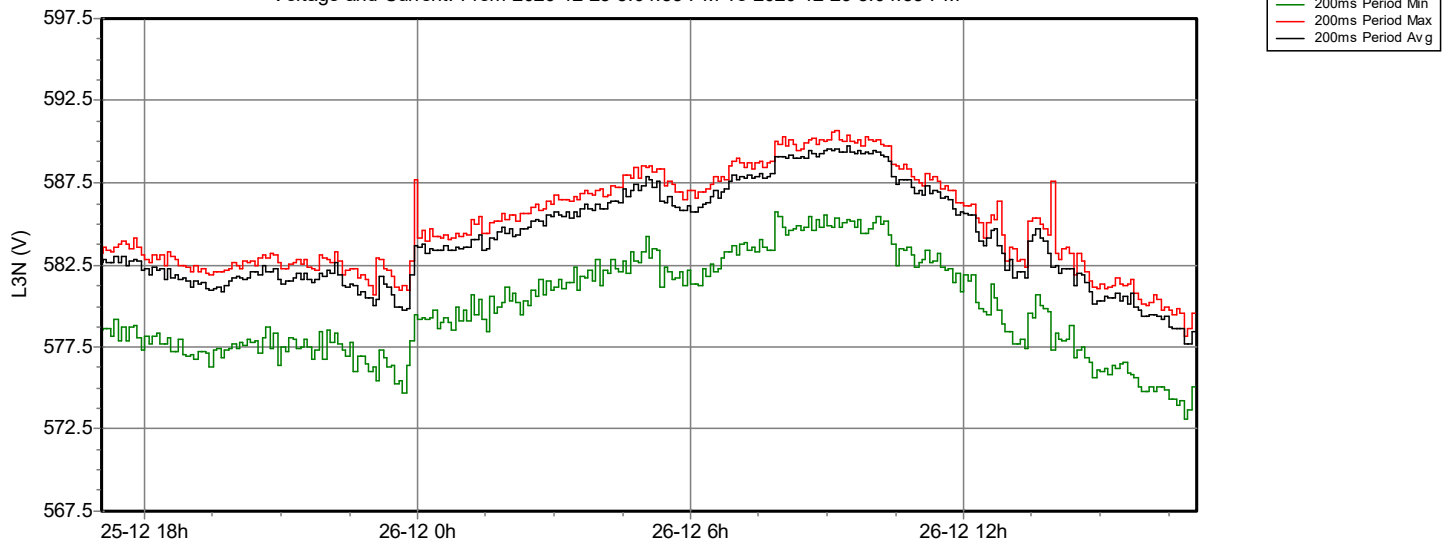
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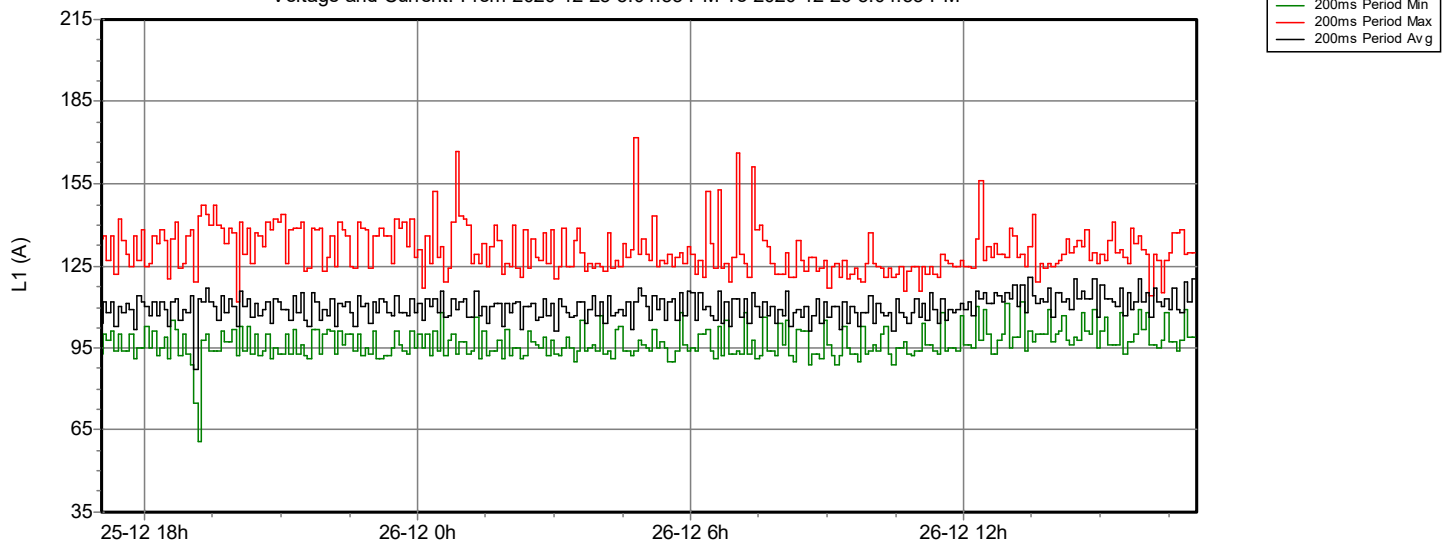
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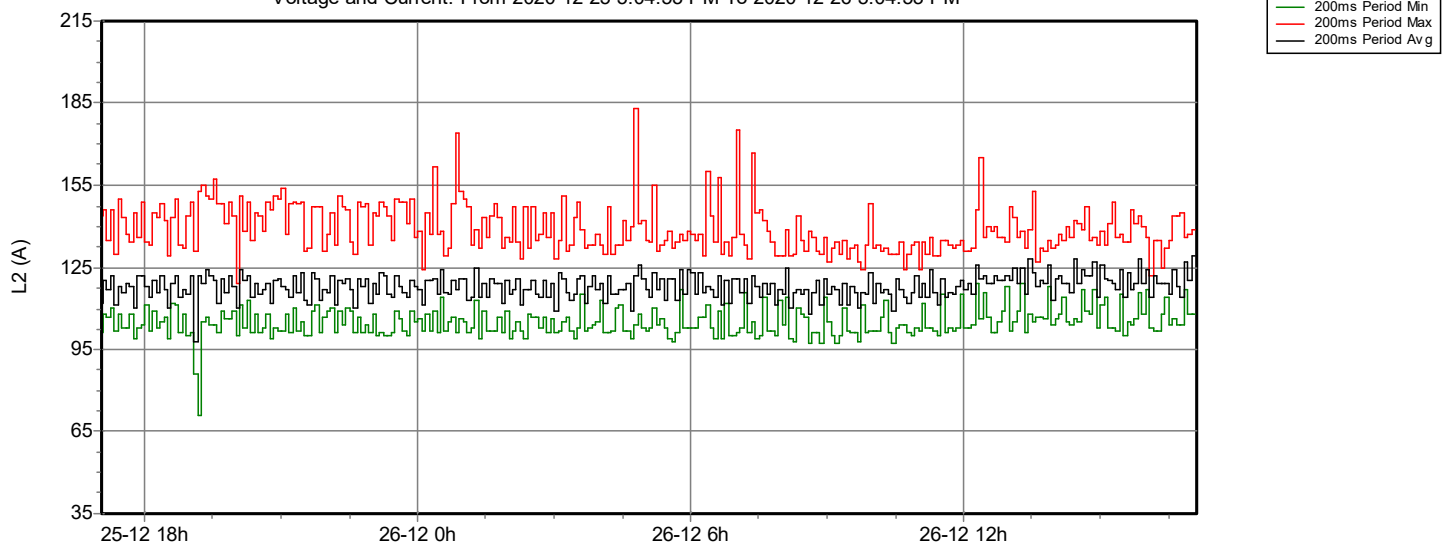
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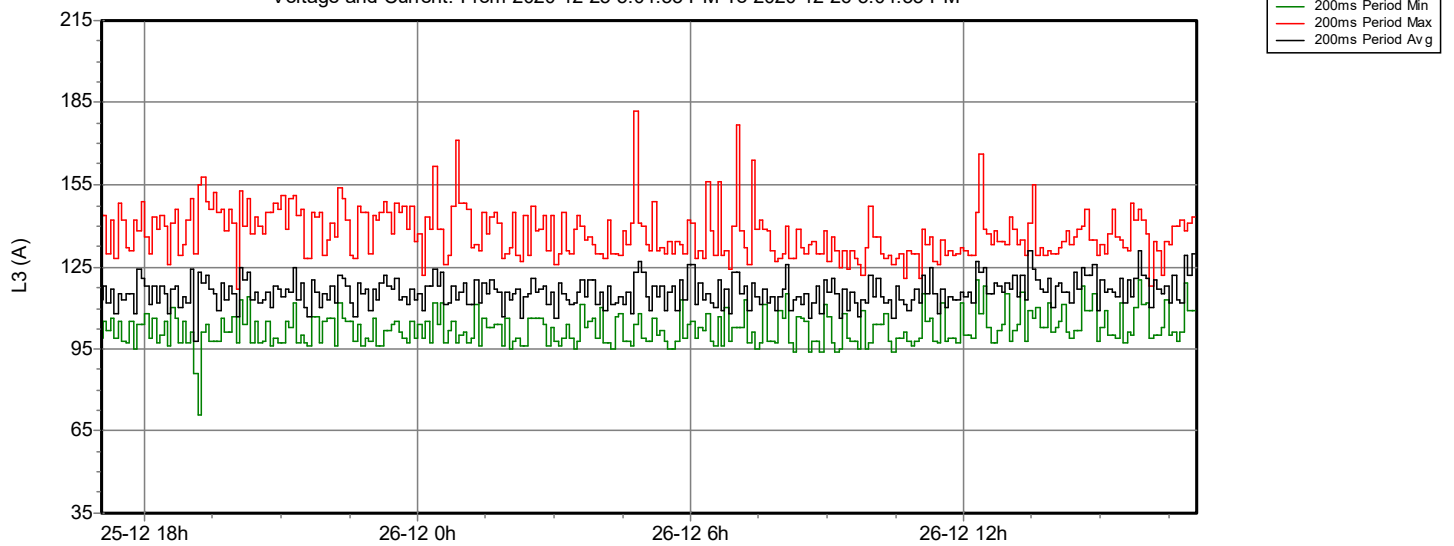
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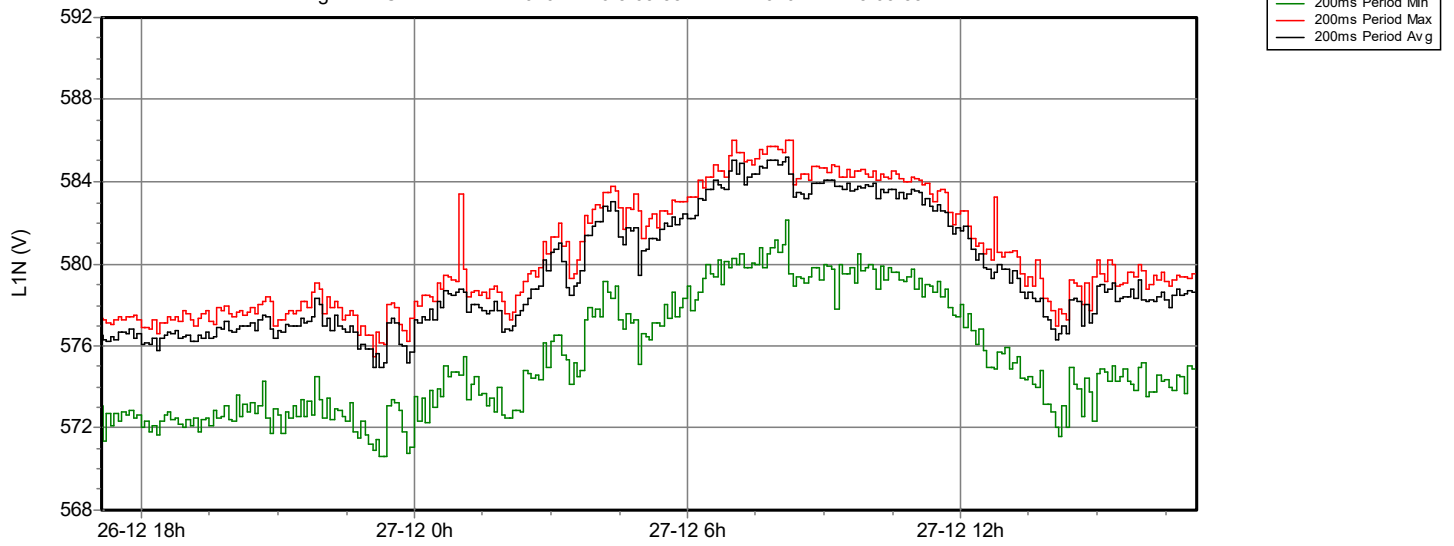
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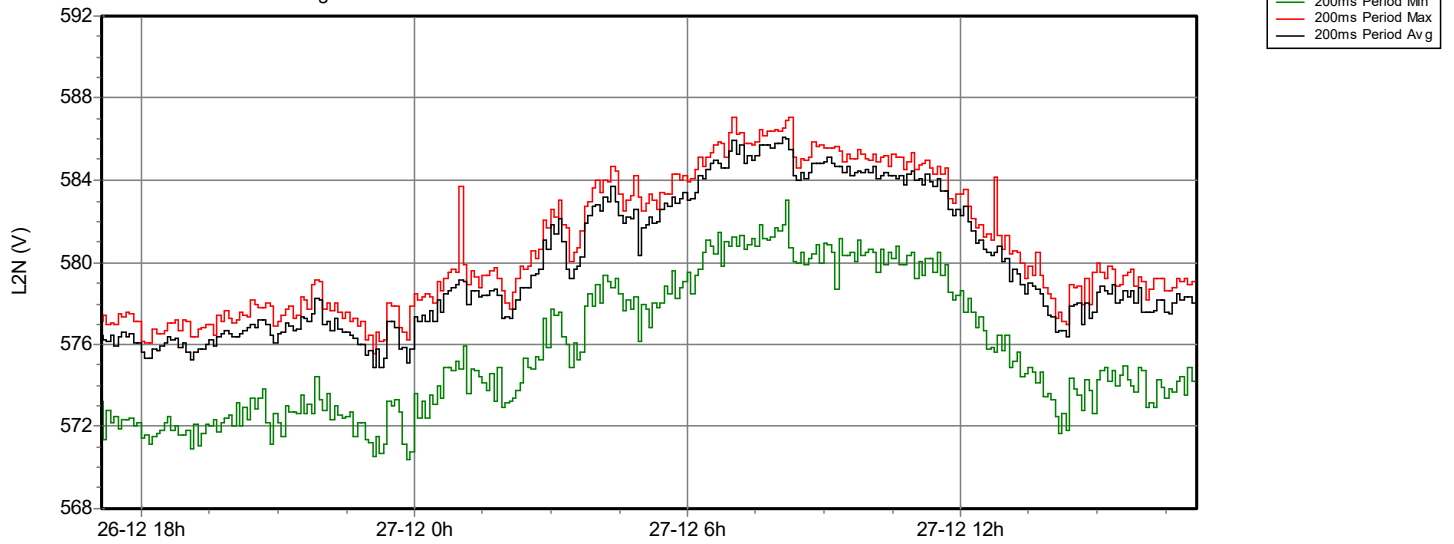
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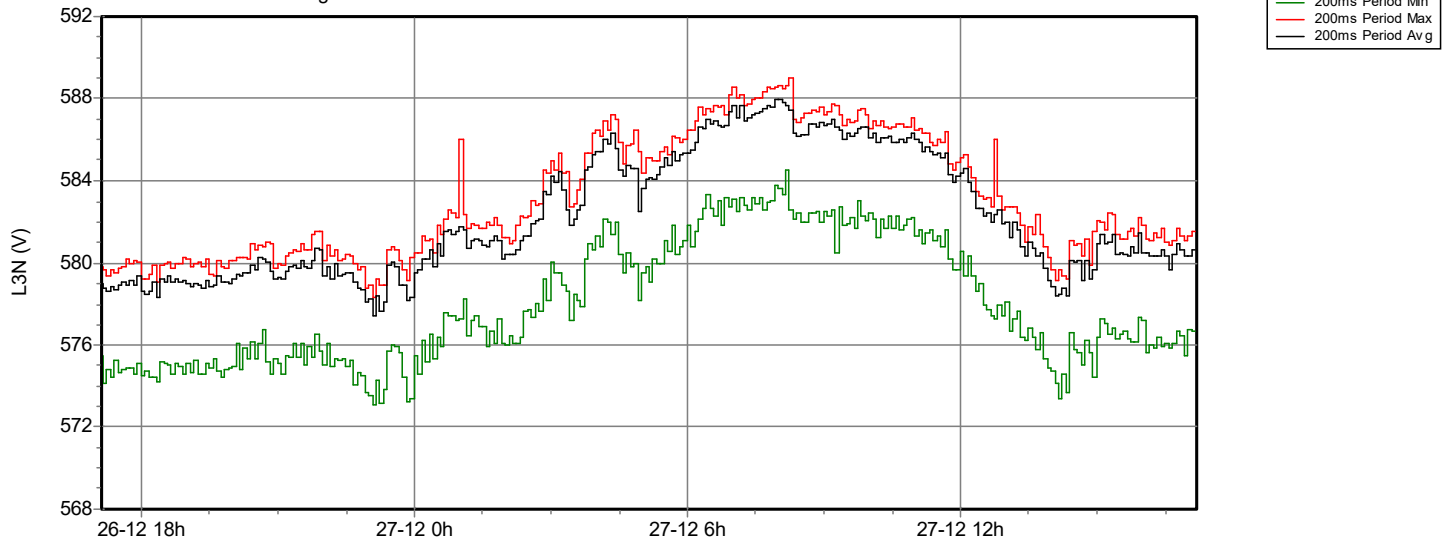
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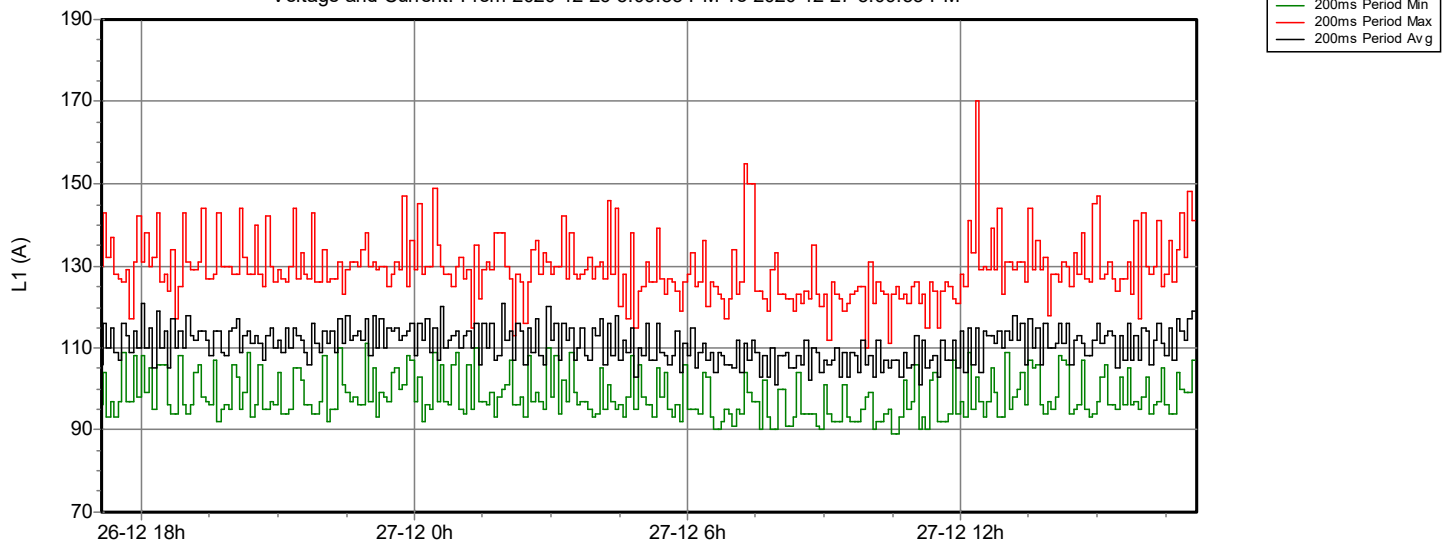
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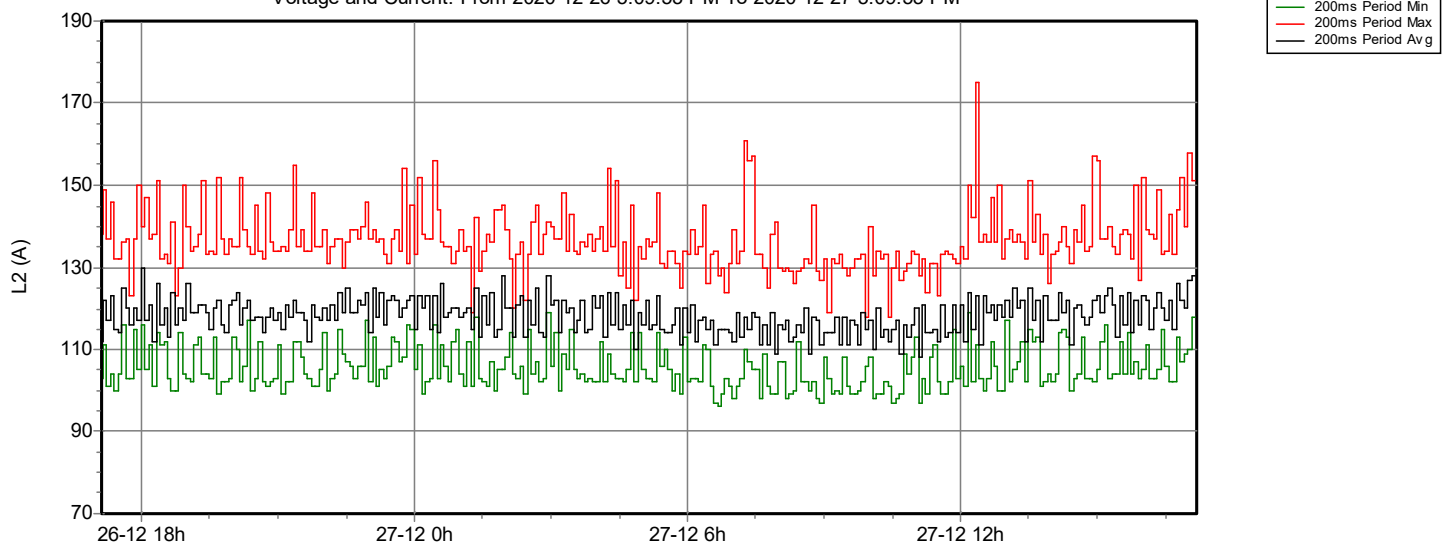
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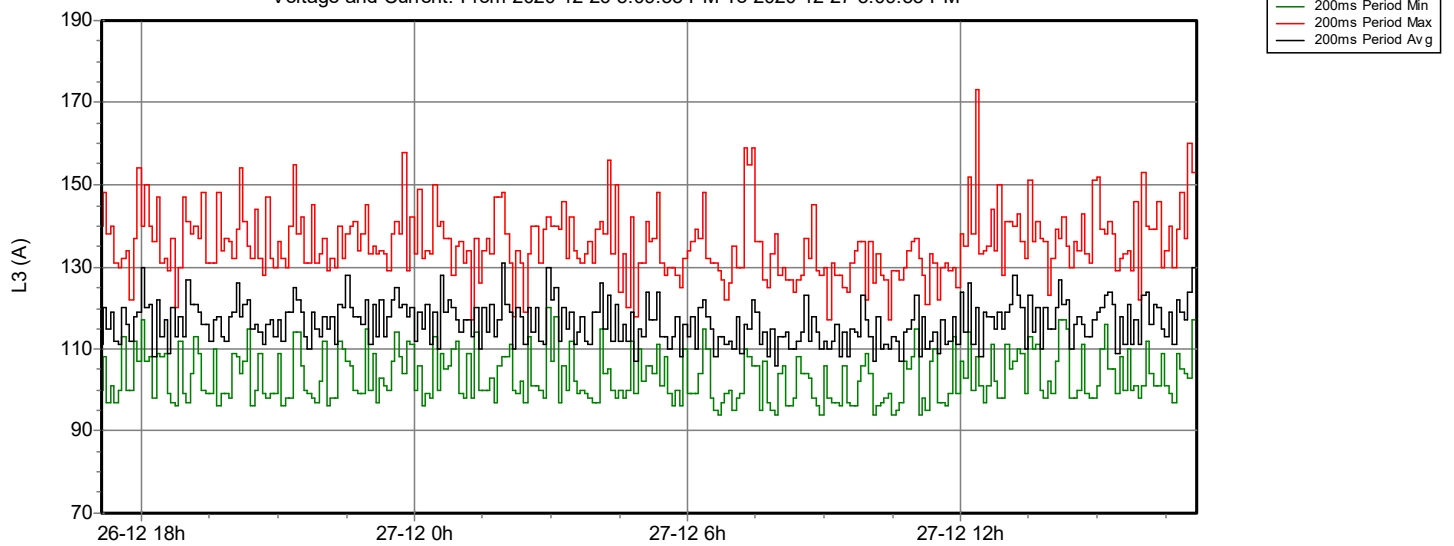
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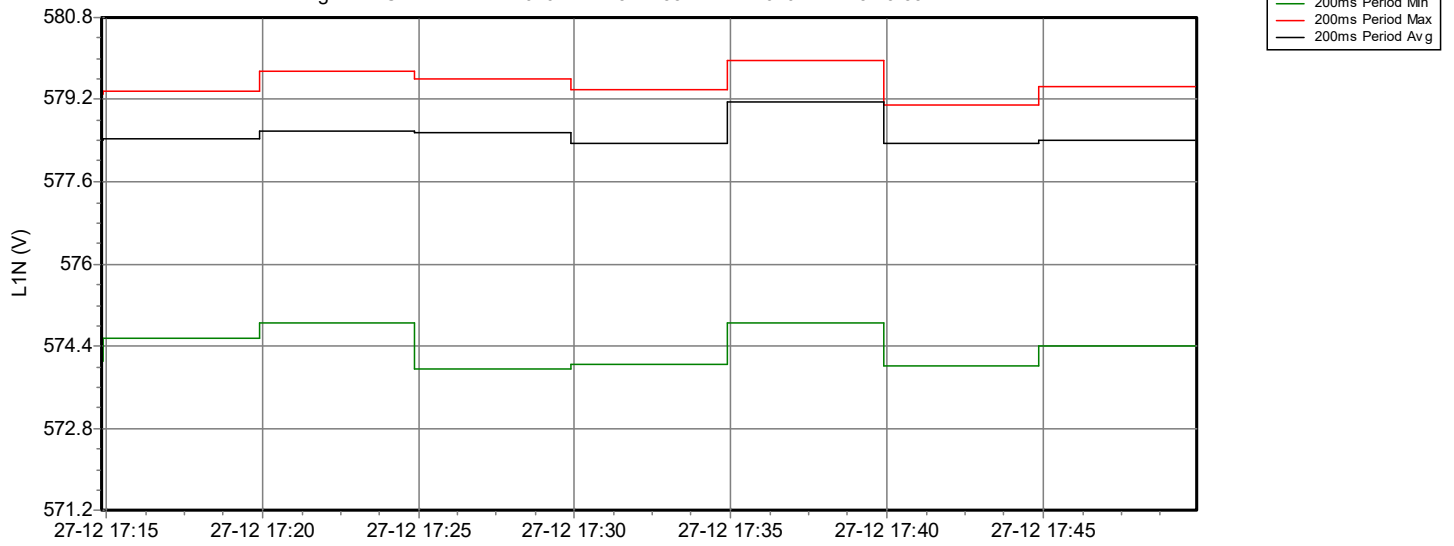
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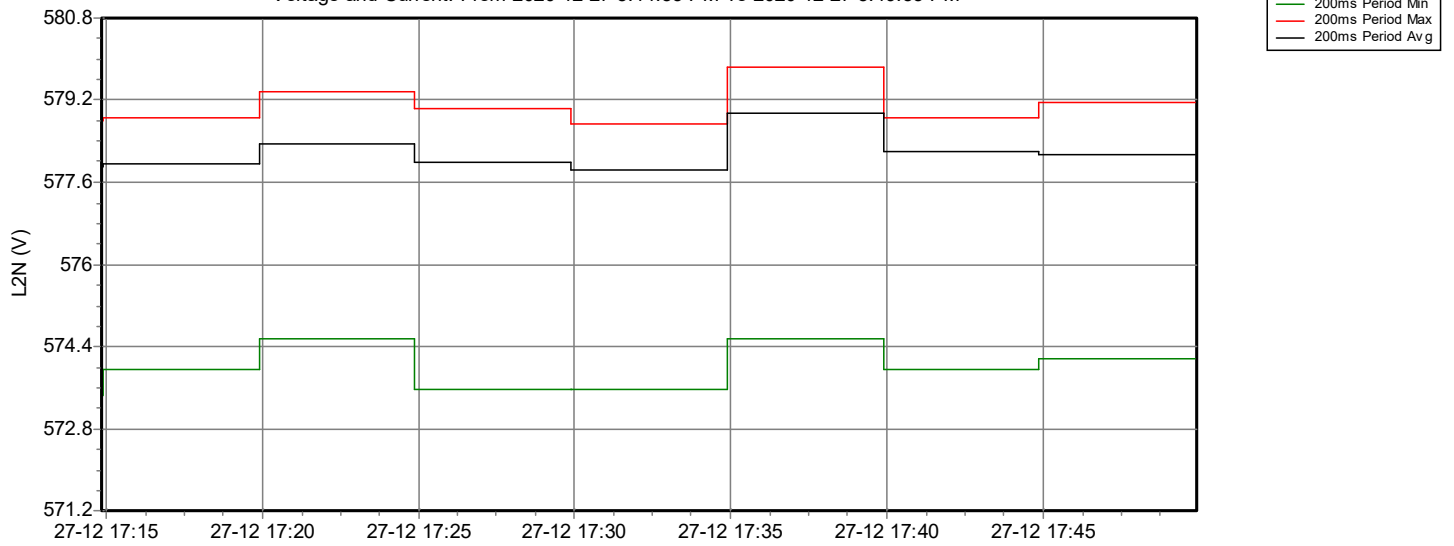
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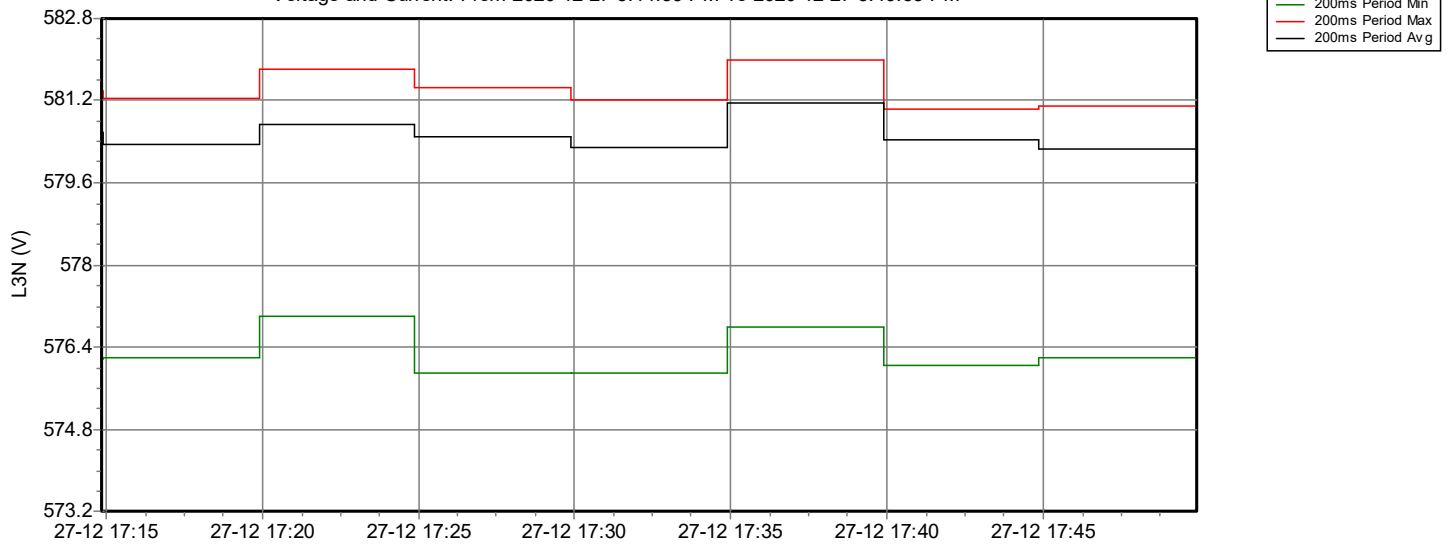
Voltage and Current. From 2020-12-27 5:14:53 PM To 2020-12-27 5:49:53 PM



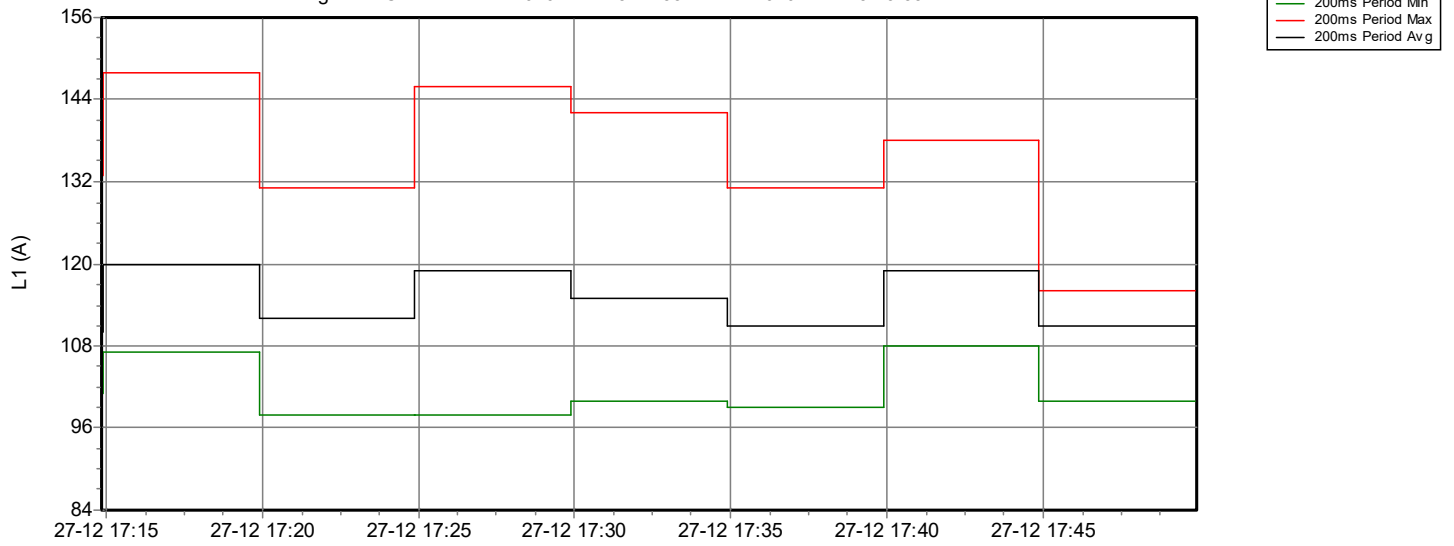
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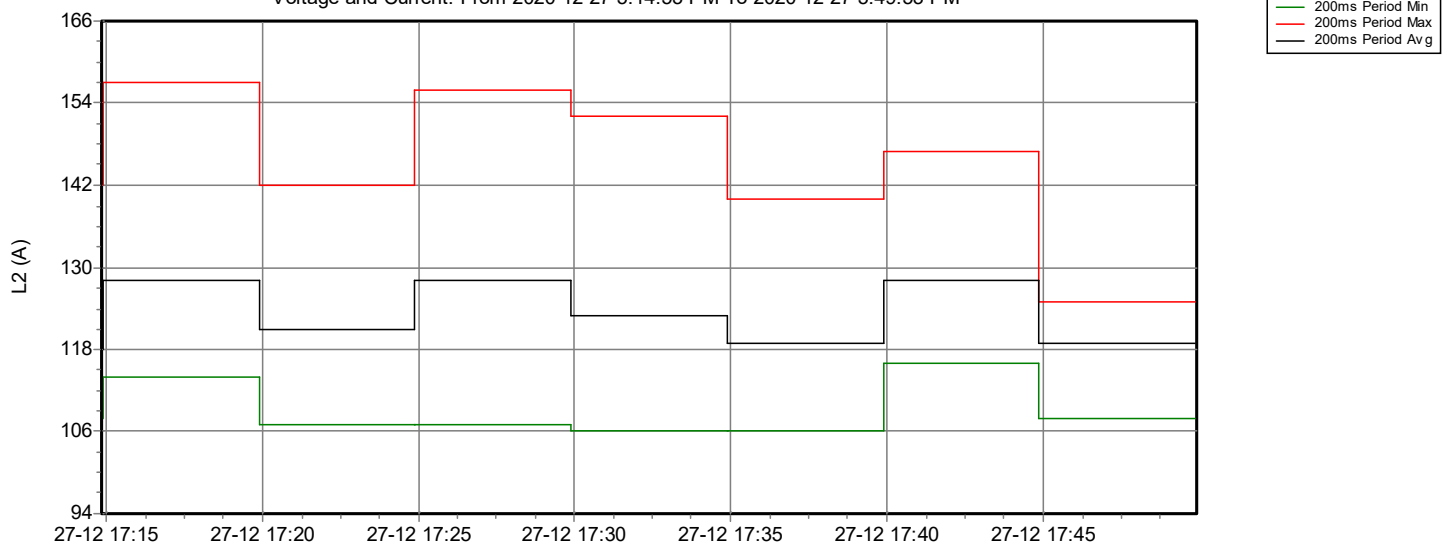
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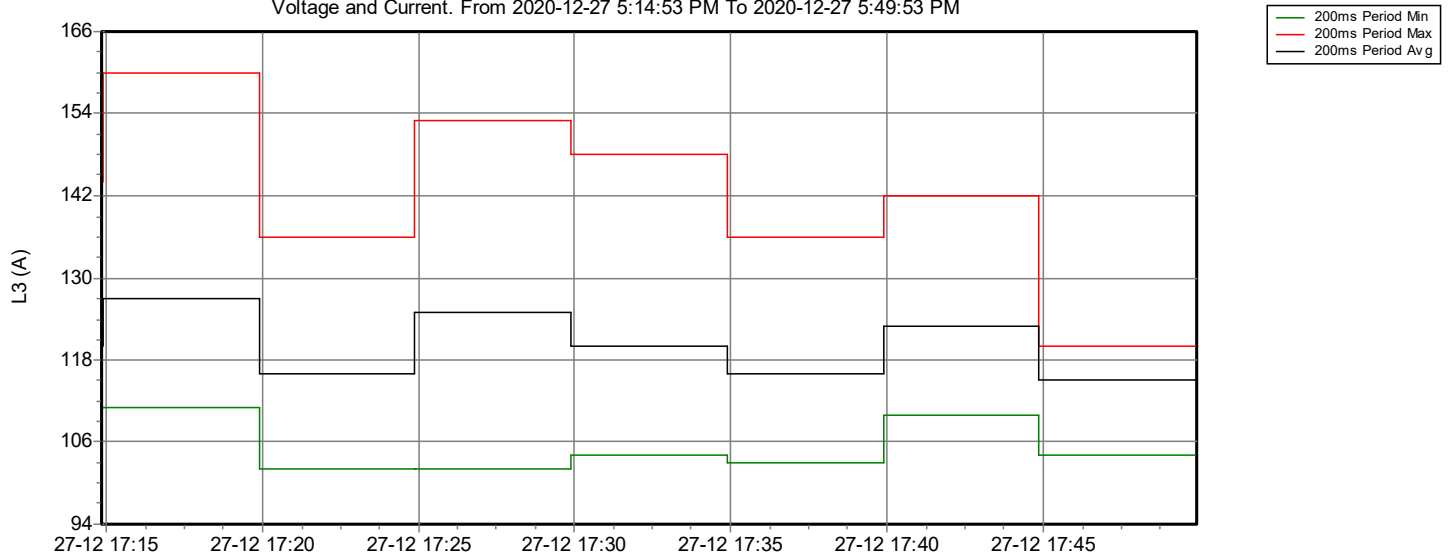
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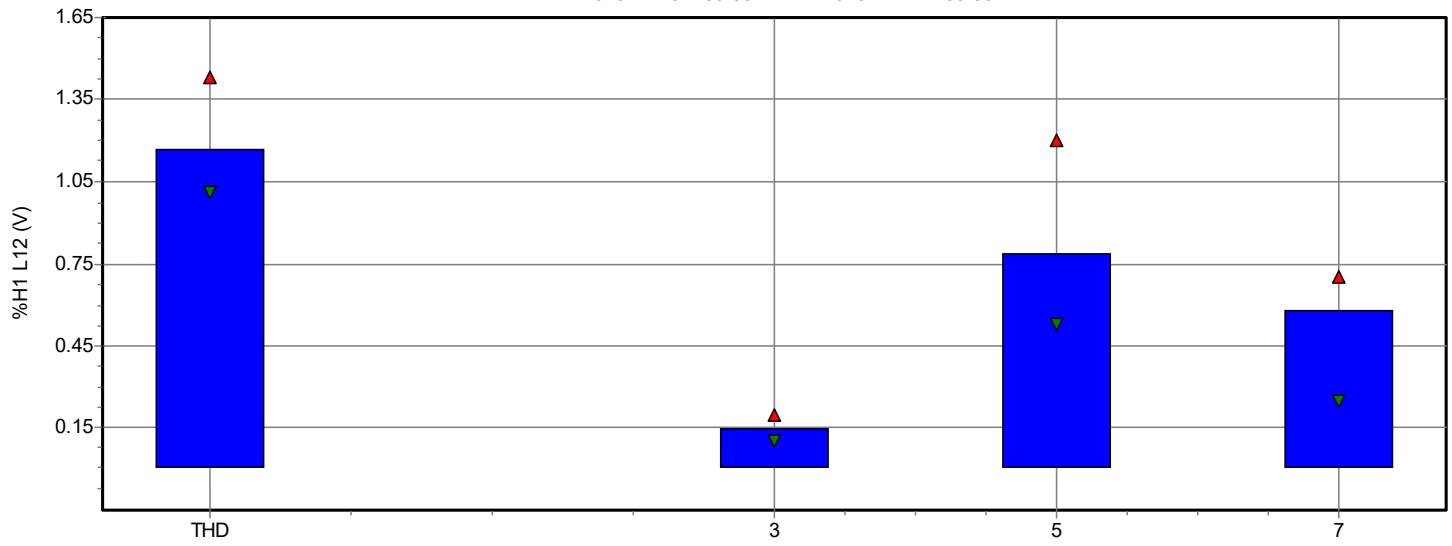
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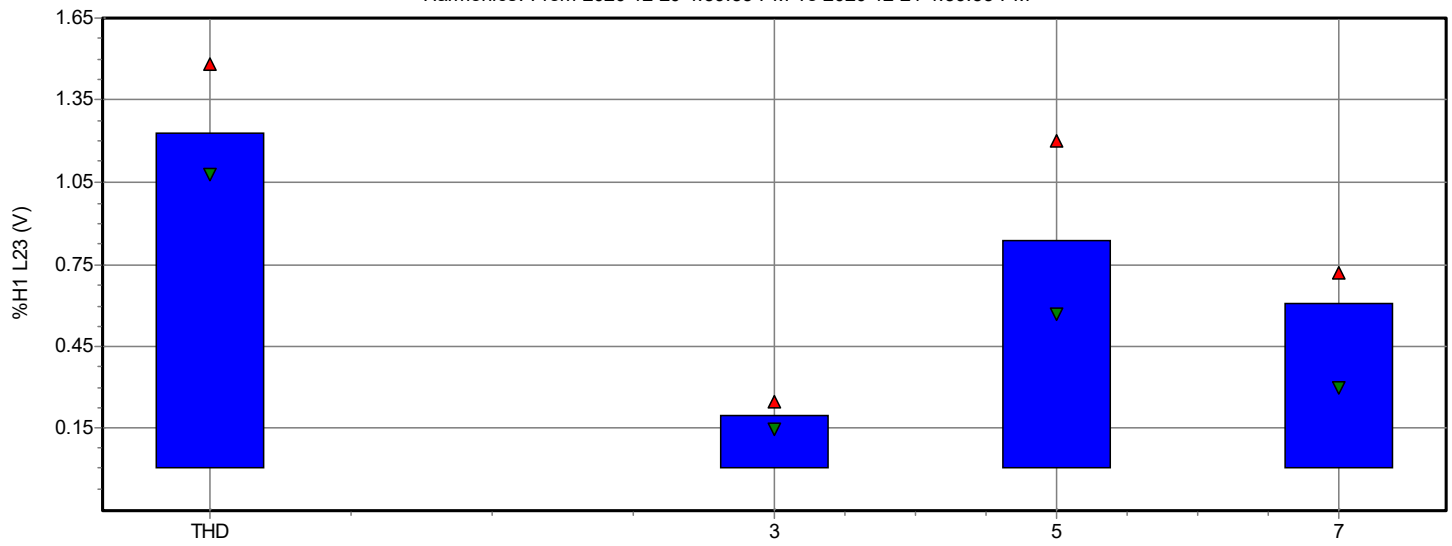
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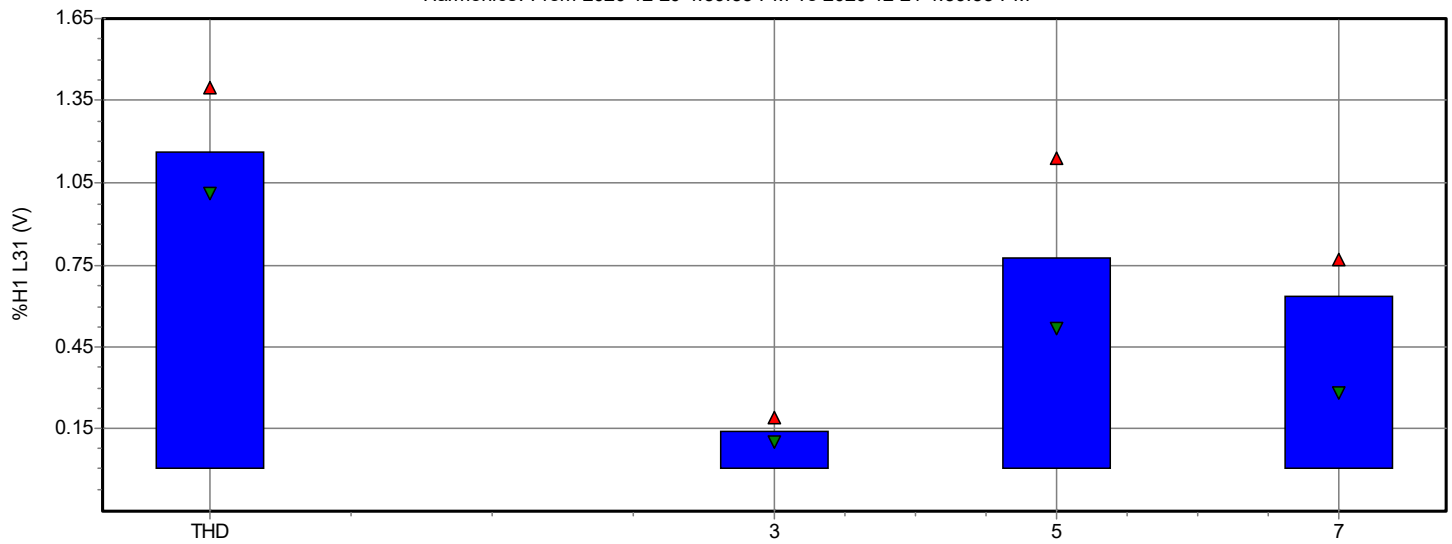
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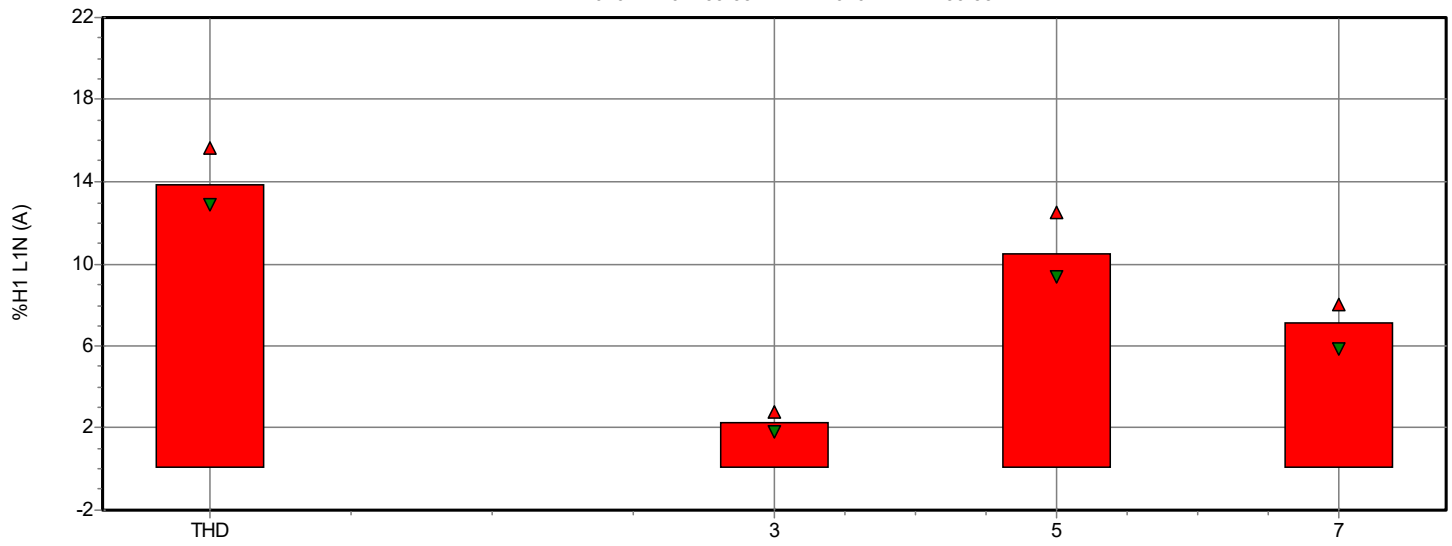
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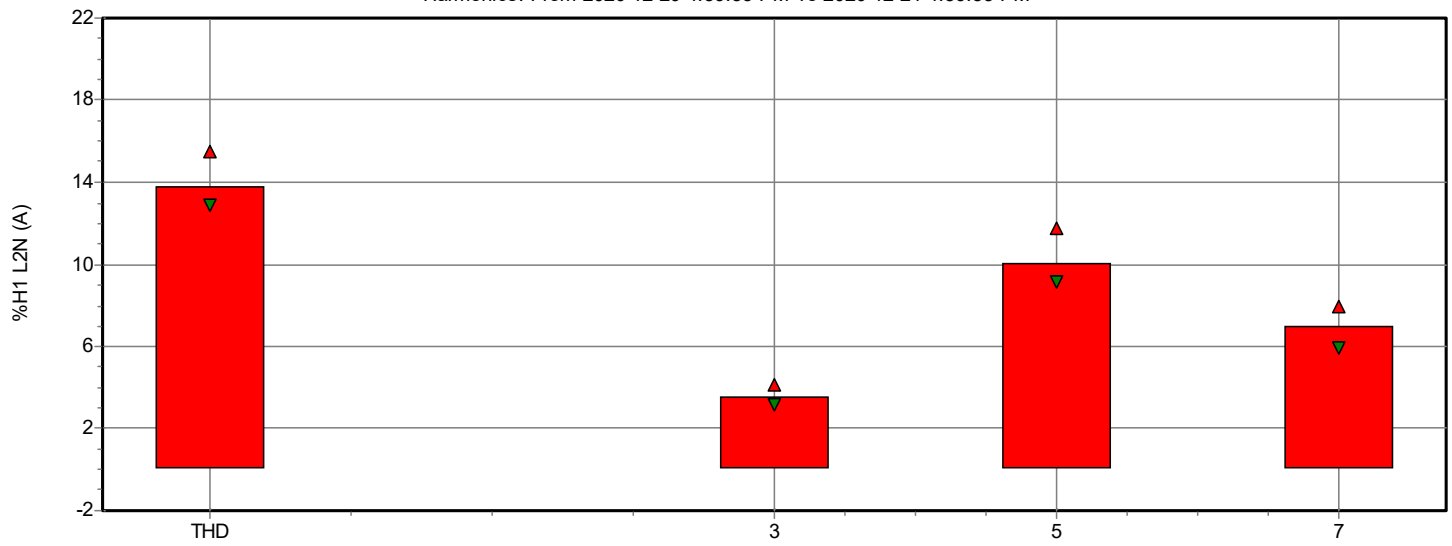
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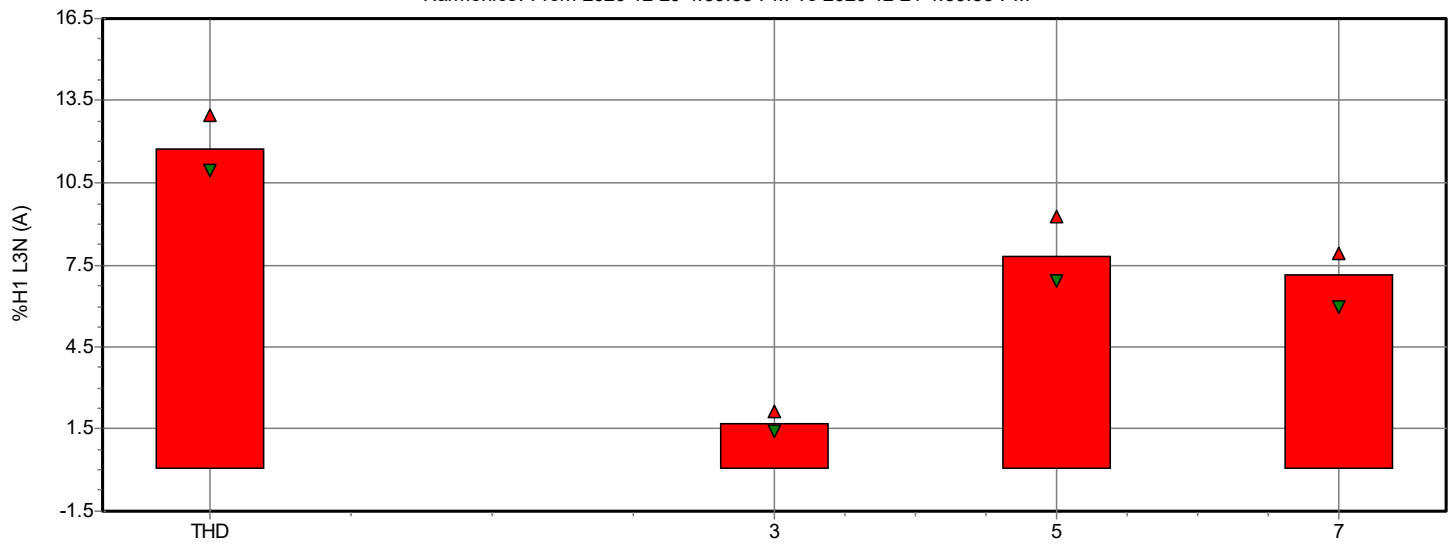
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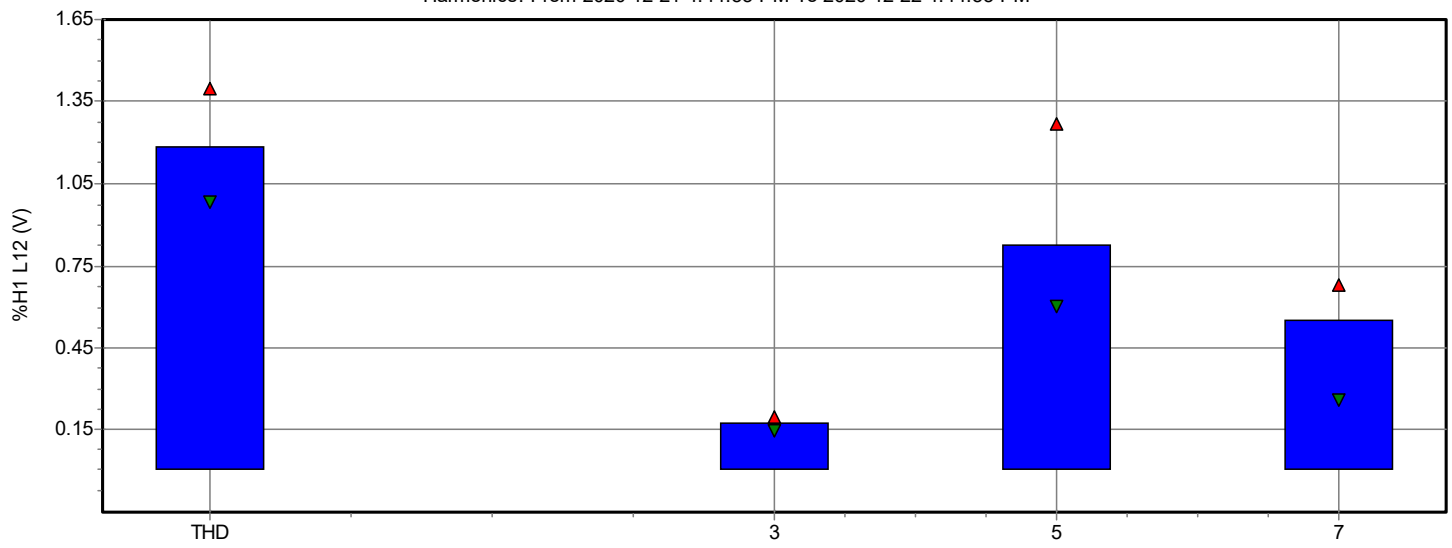
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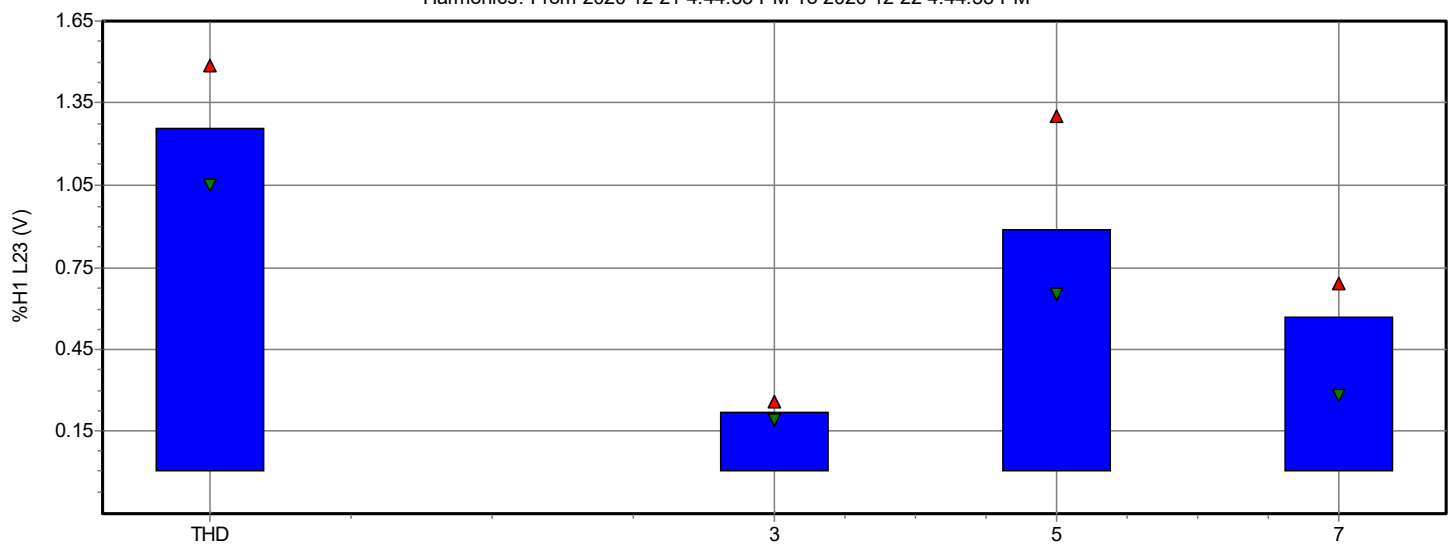
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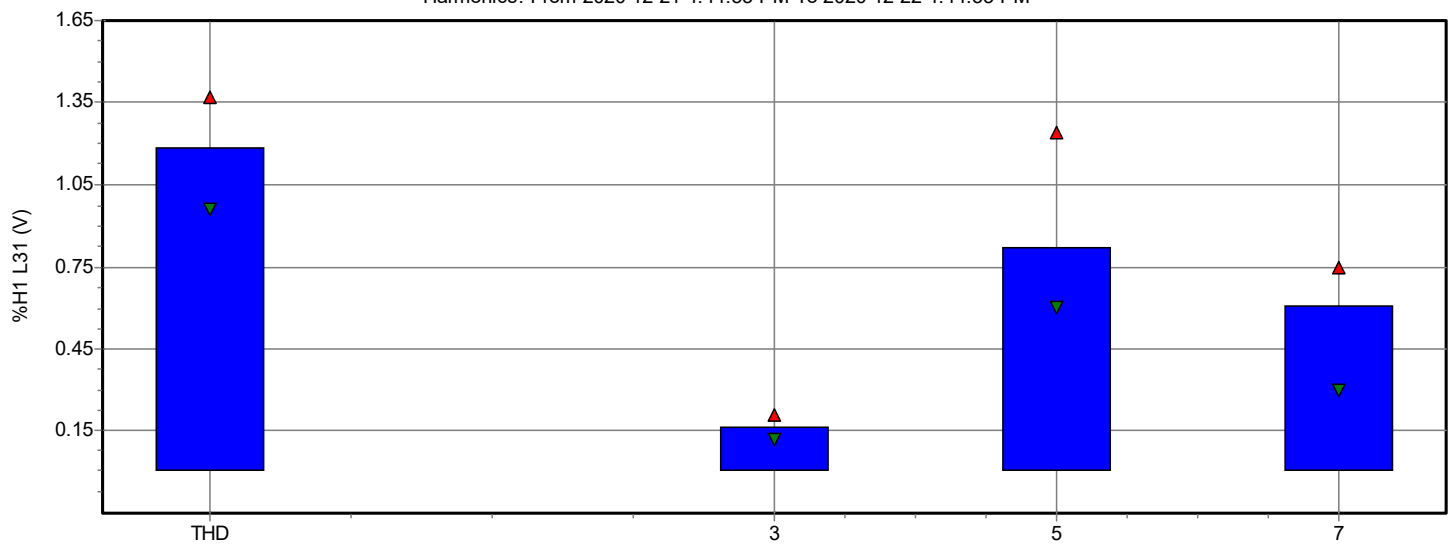
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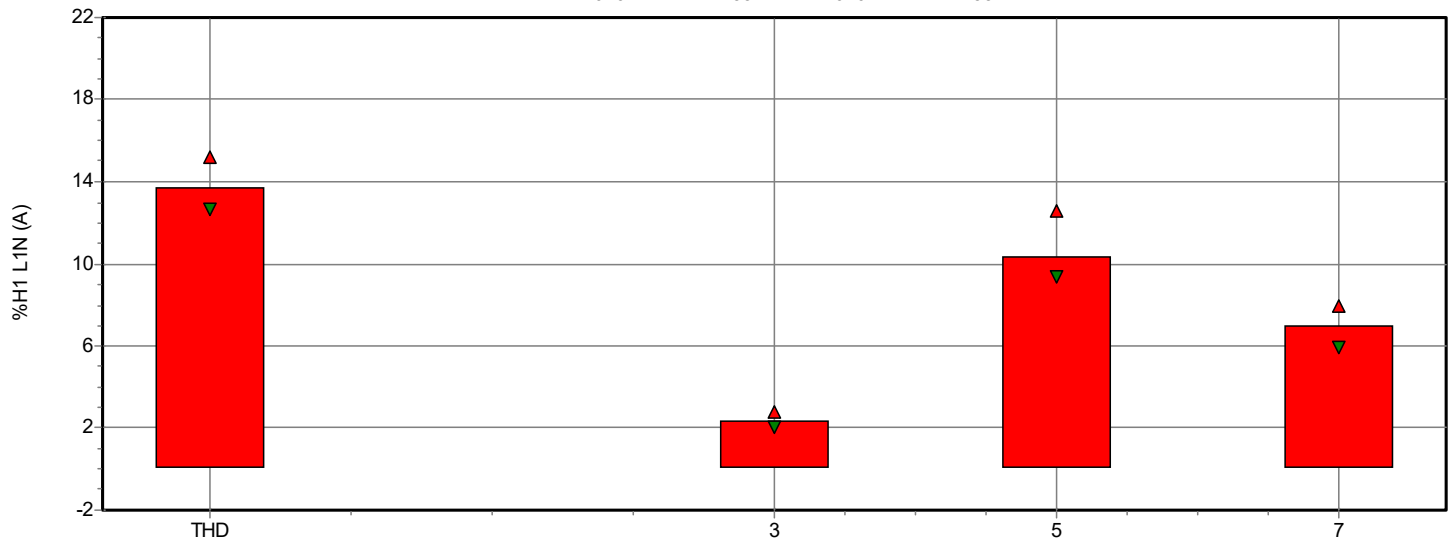
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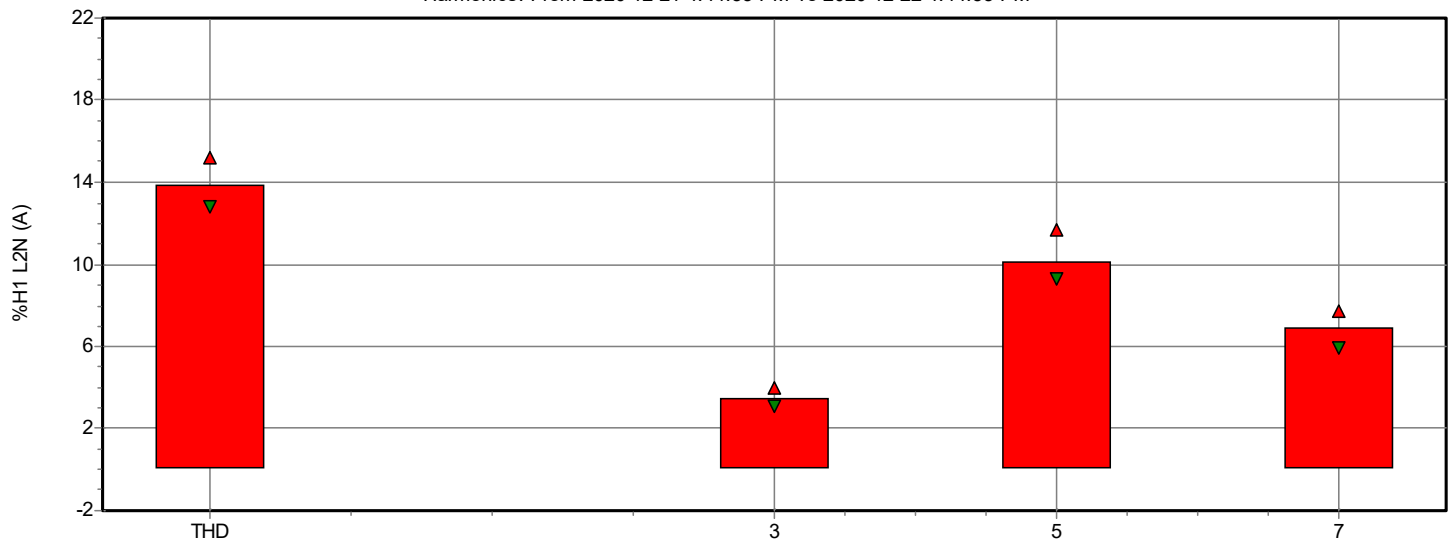
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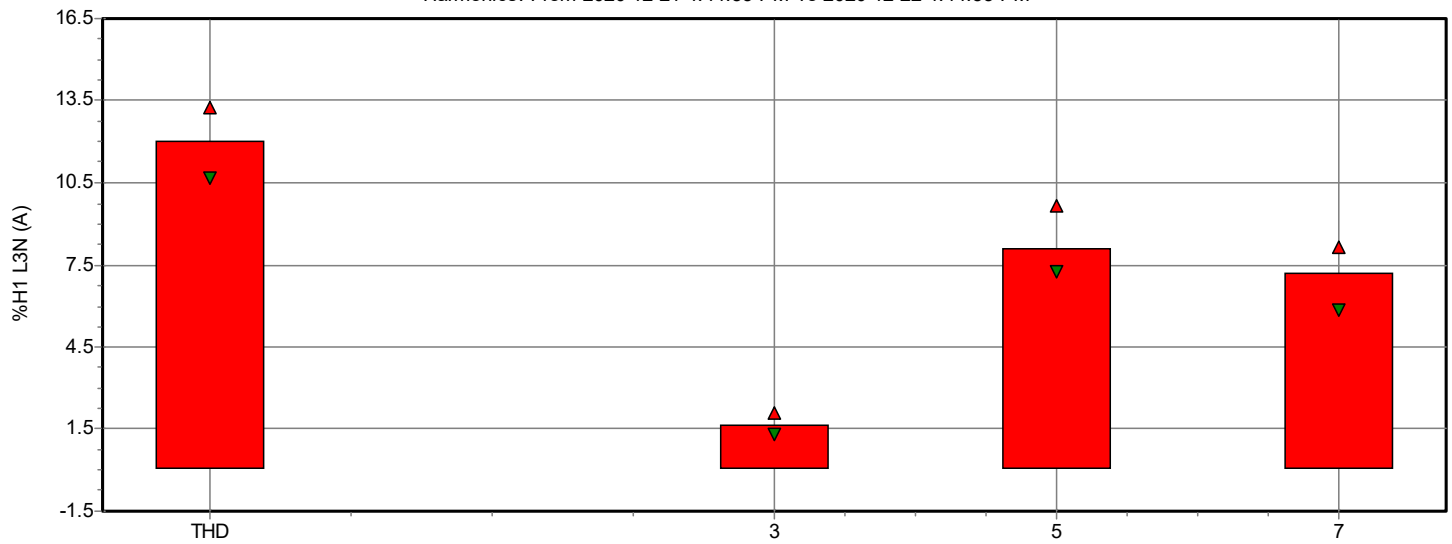
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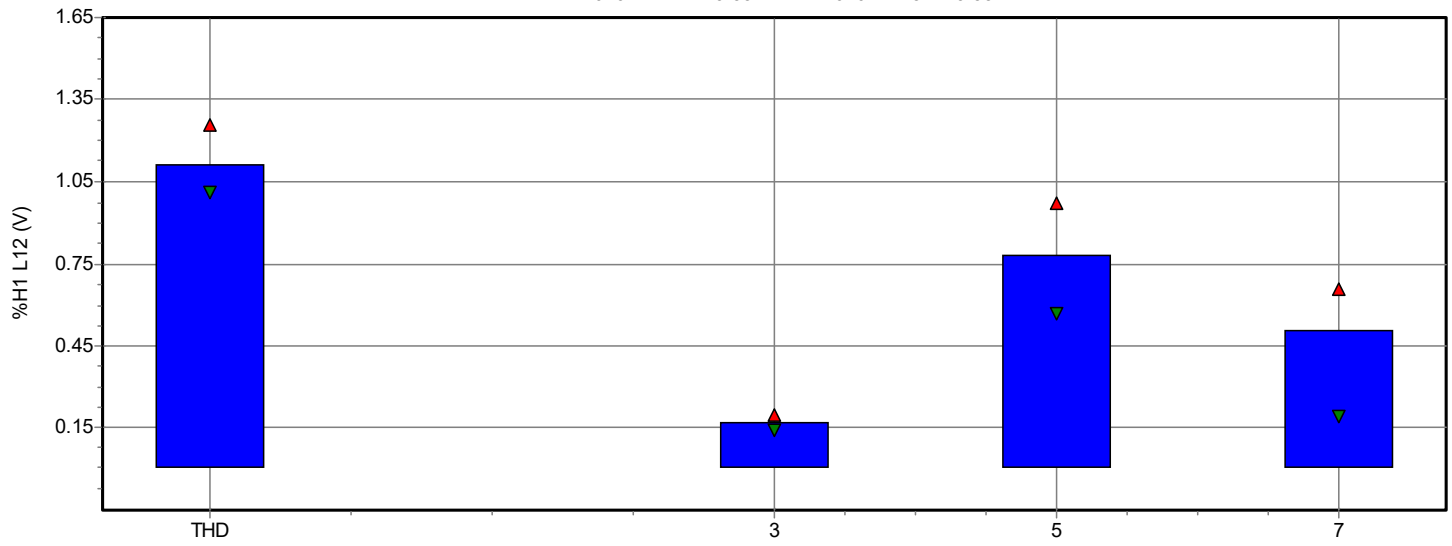
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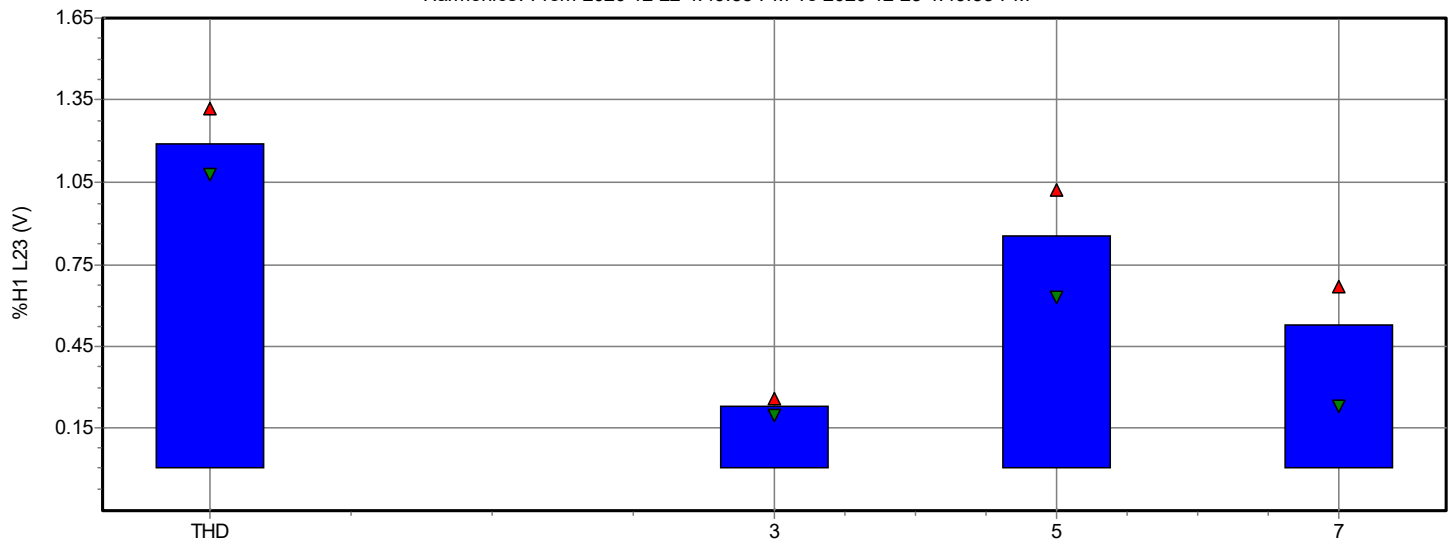
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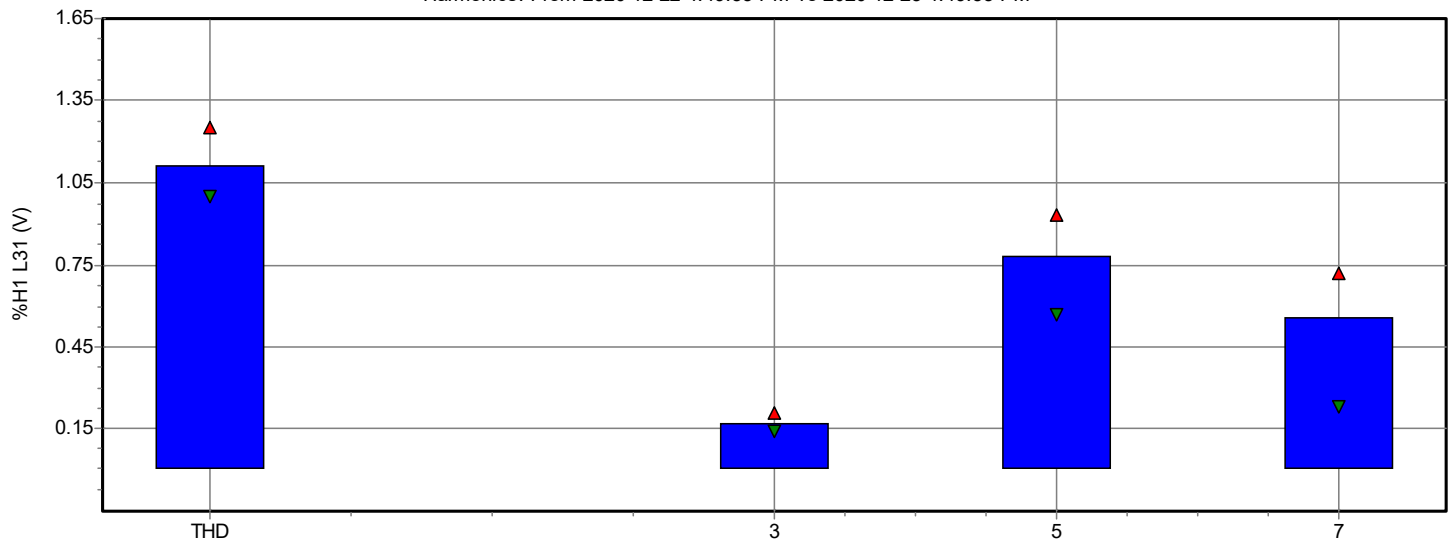
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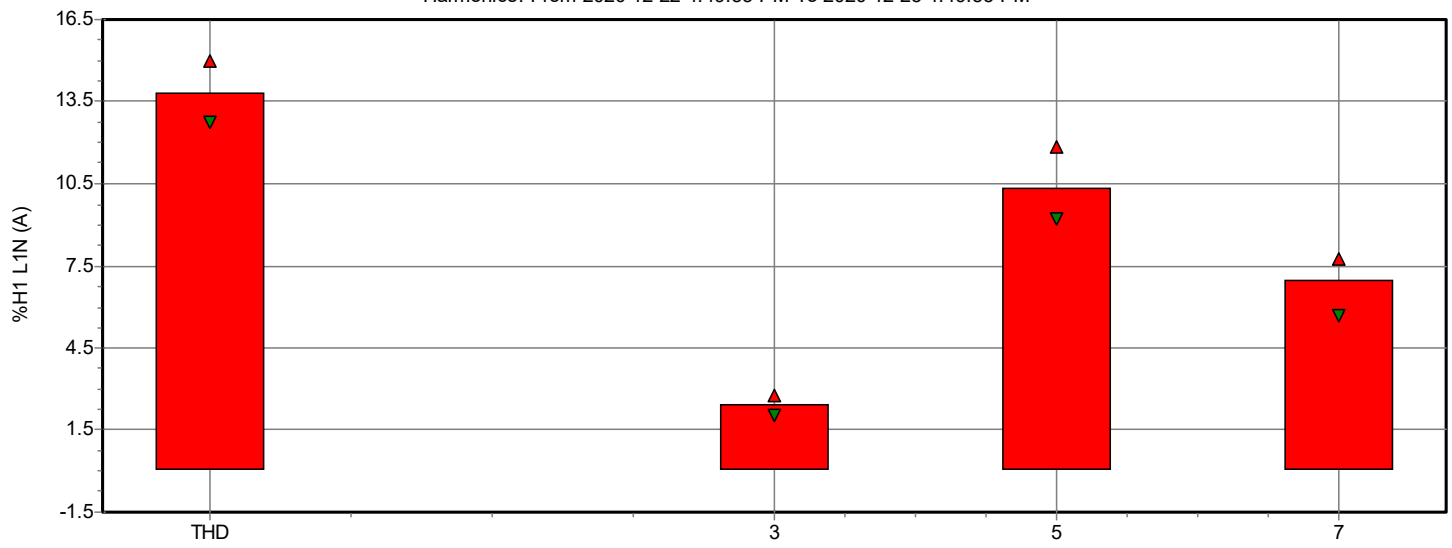
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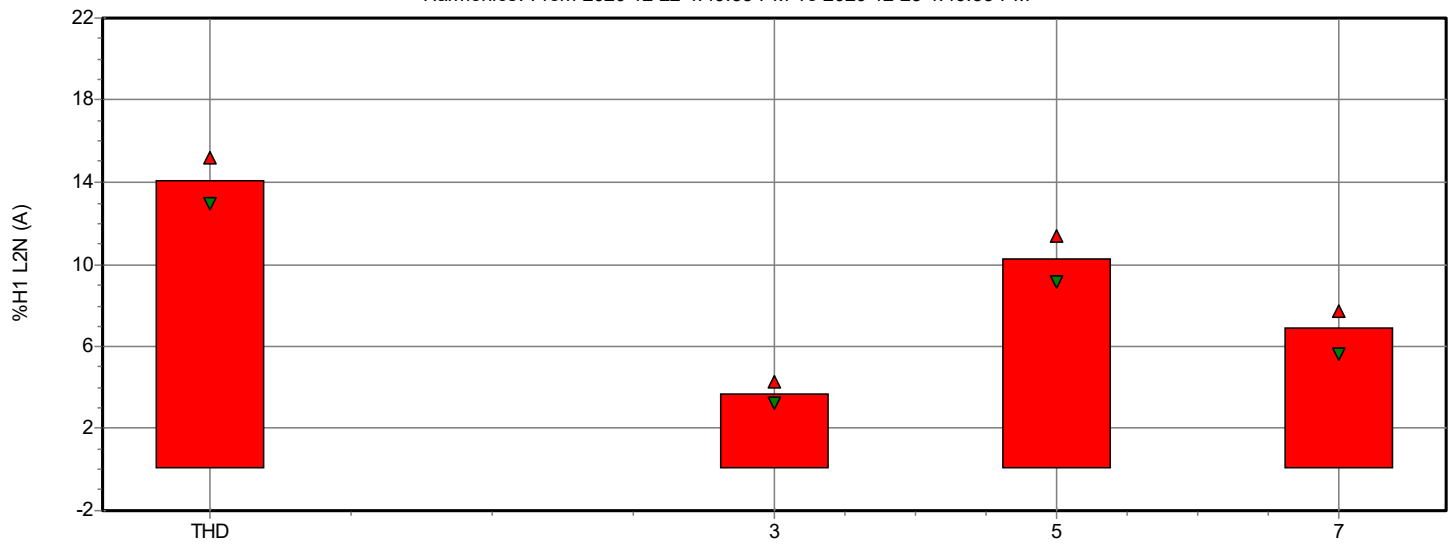
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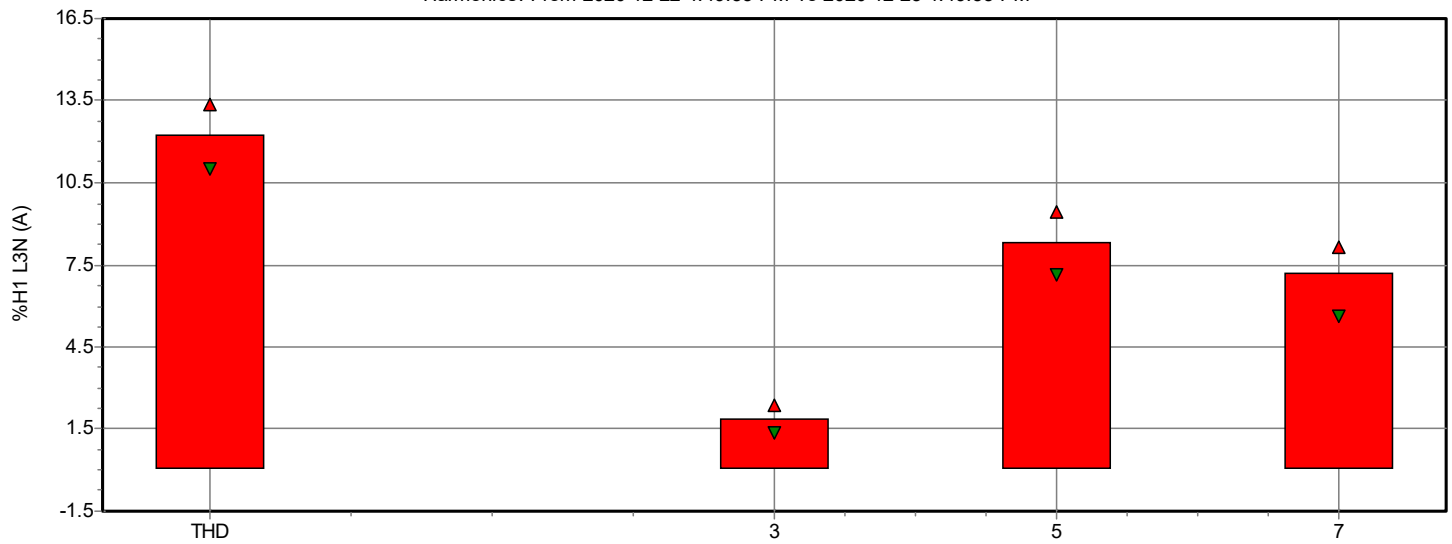
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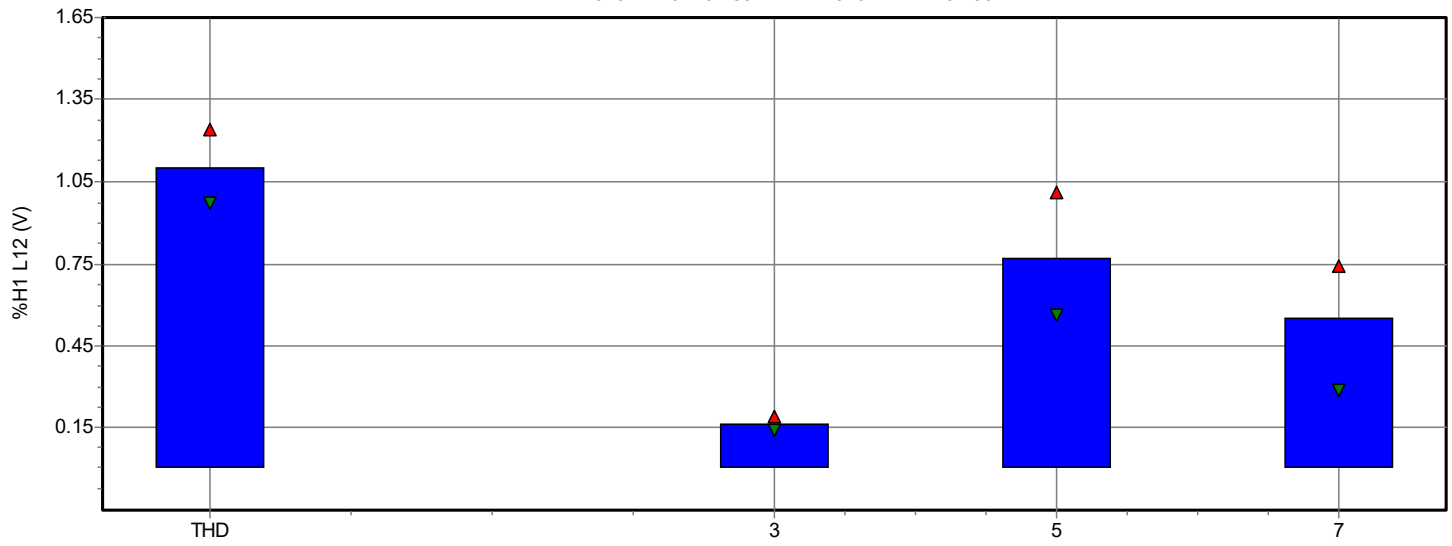
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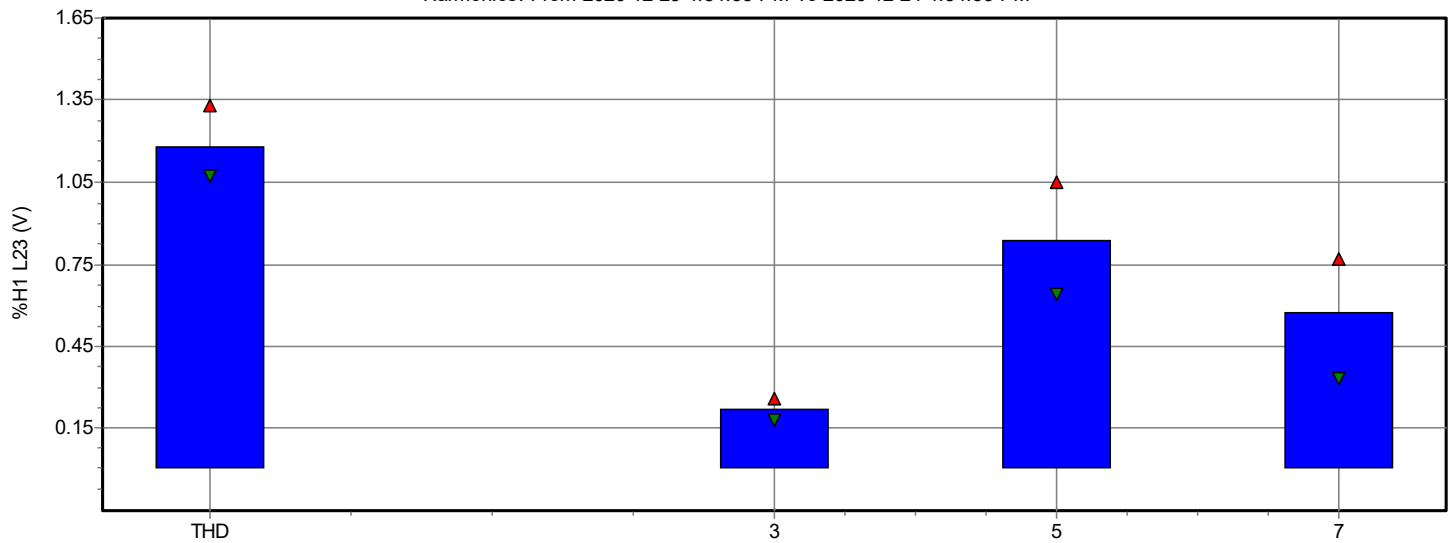
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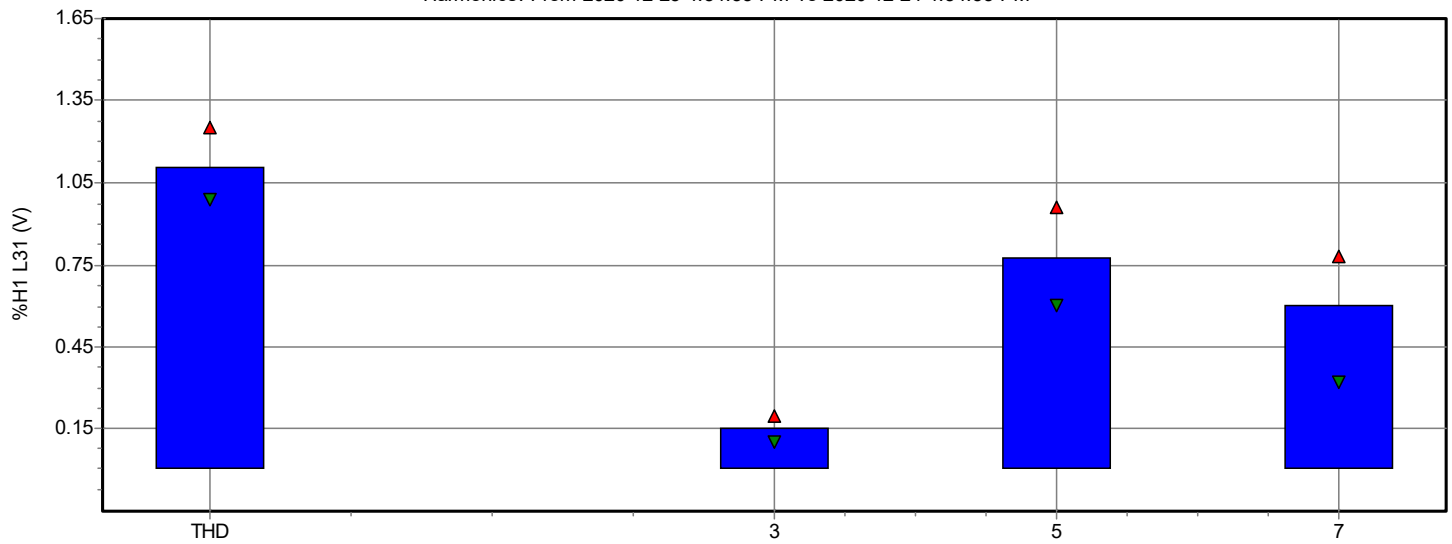
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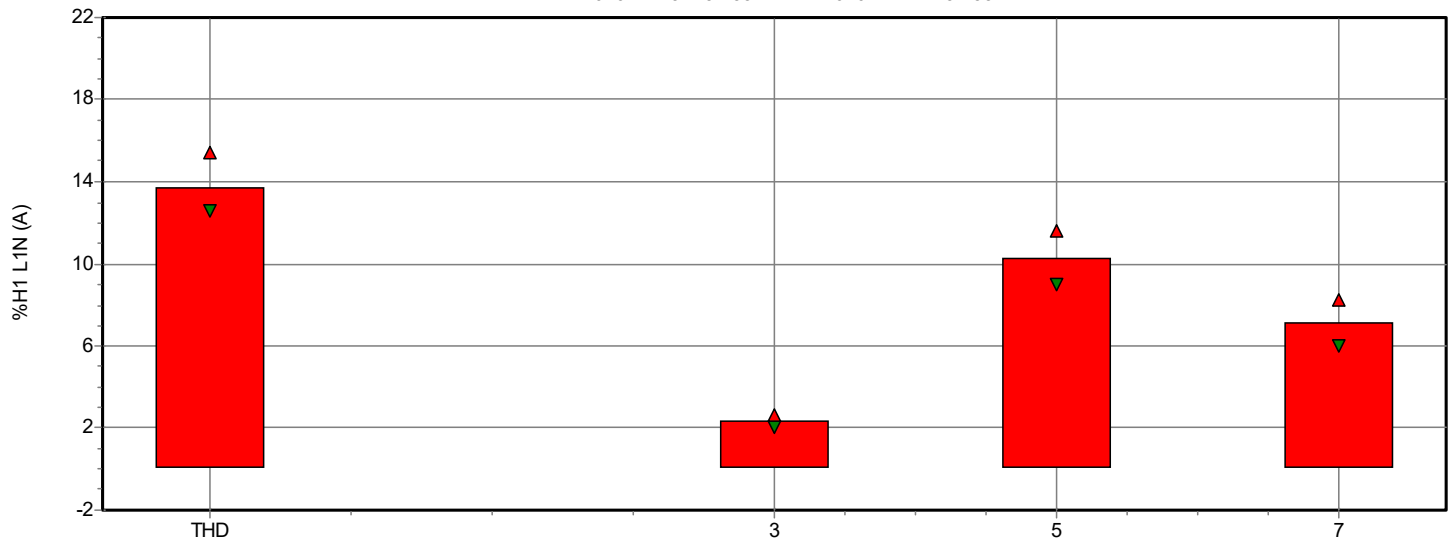
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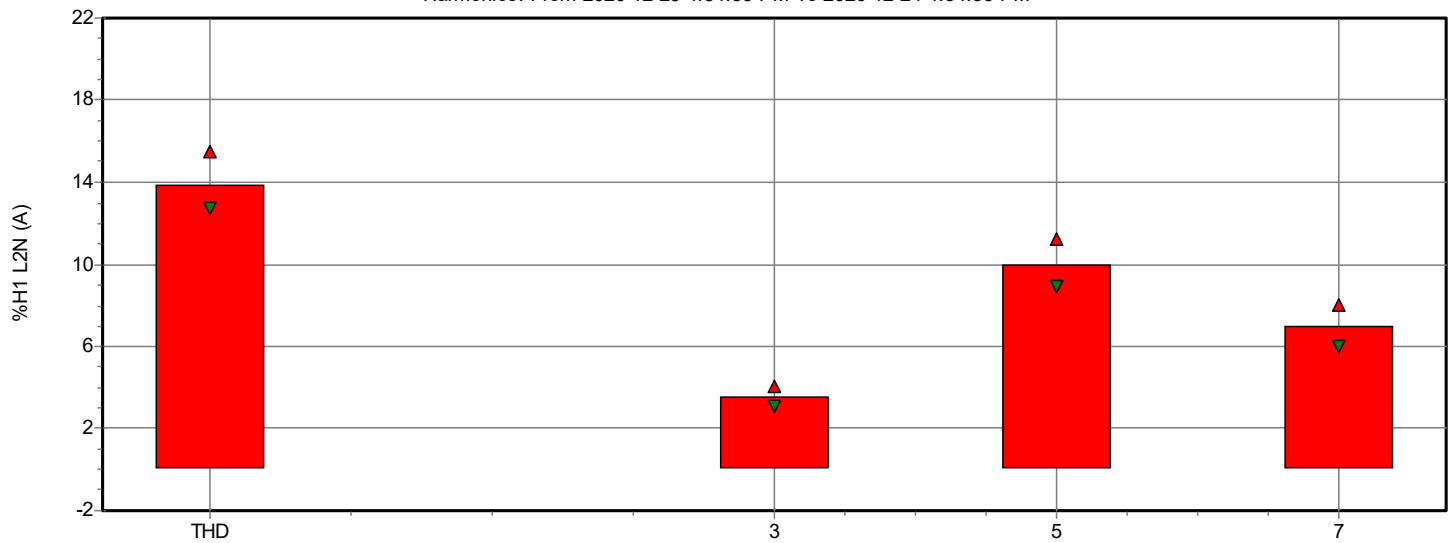
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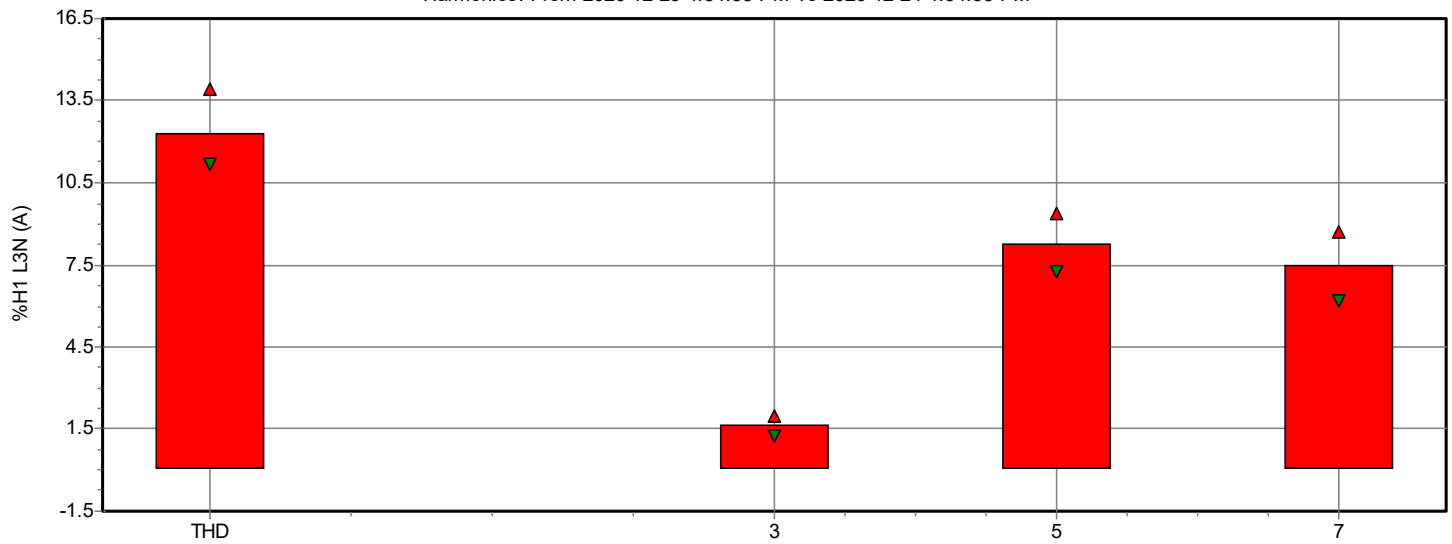
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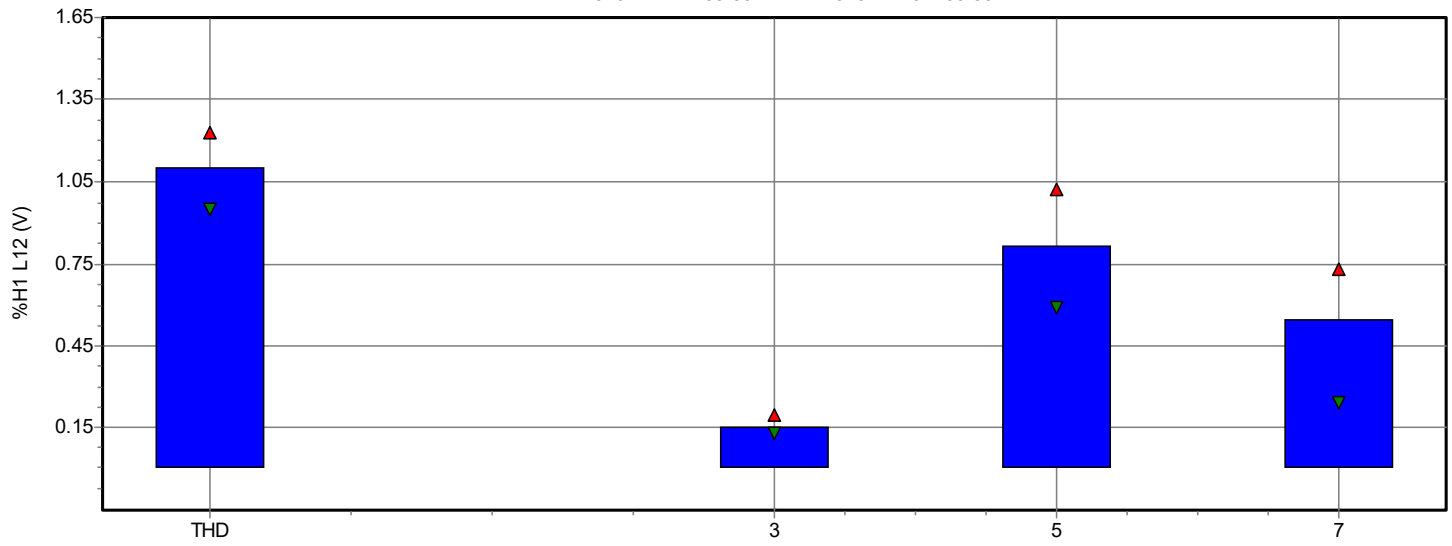
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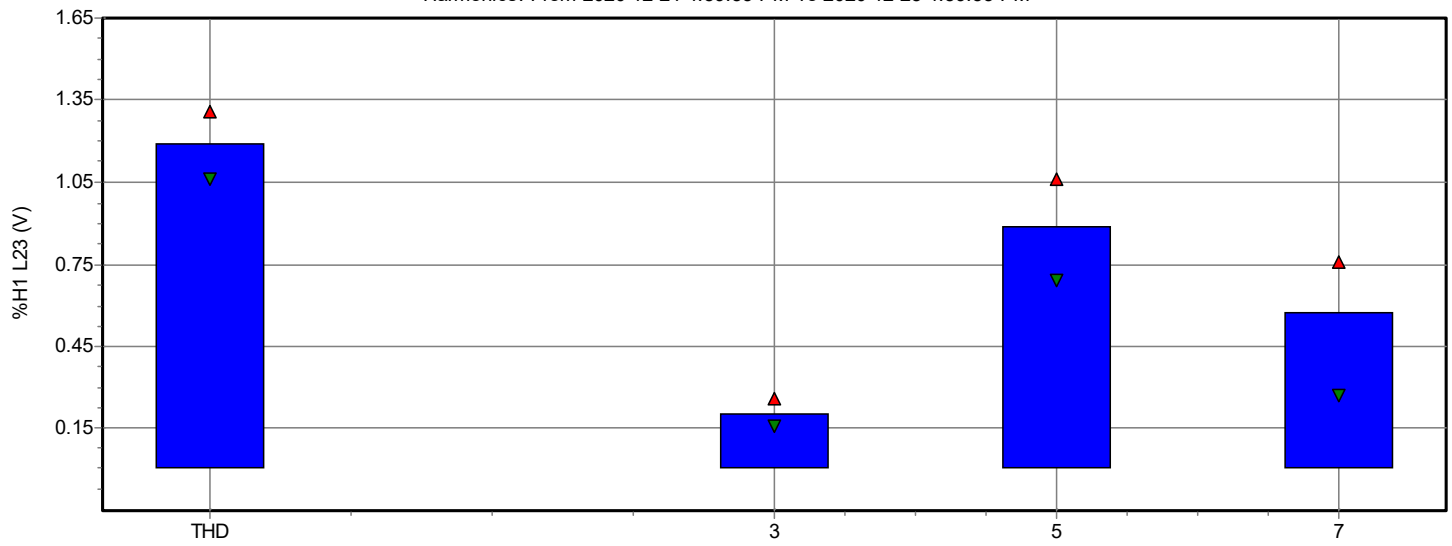
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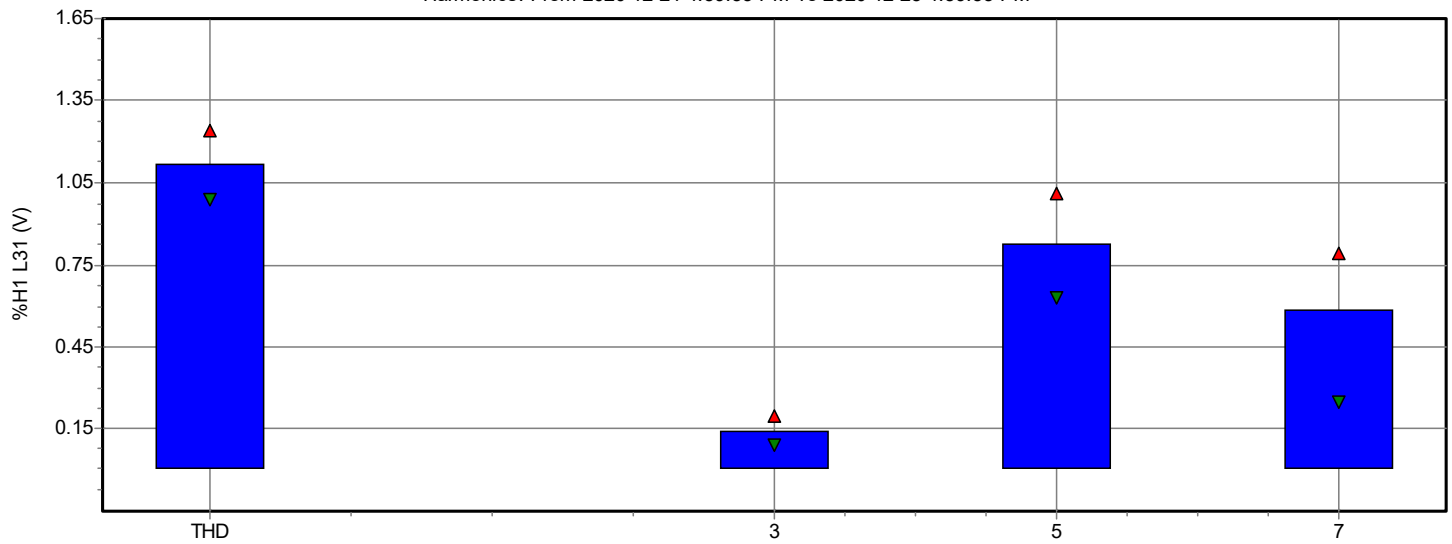
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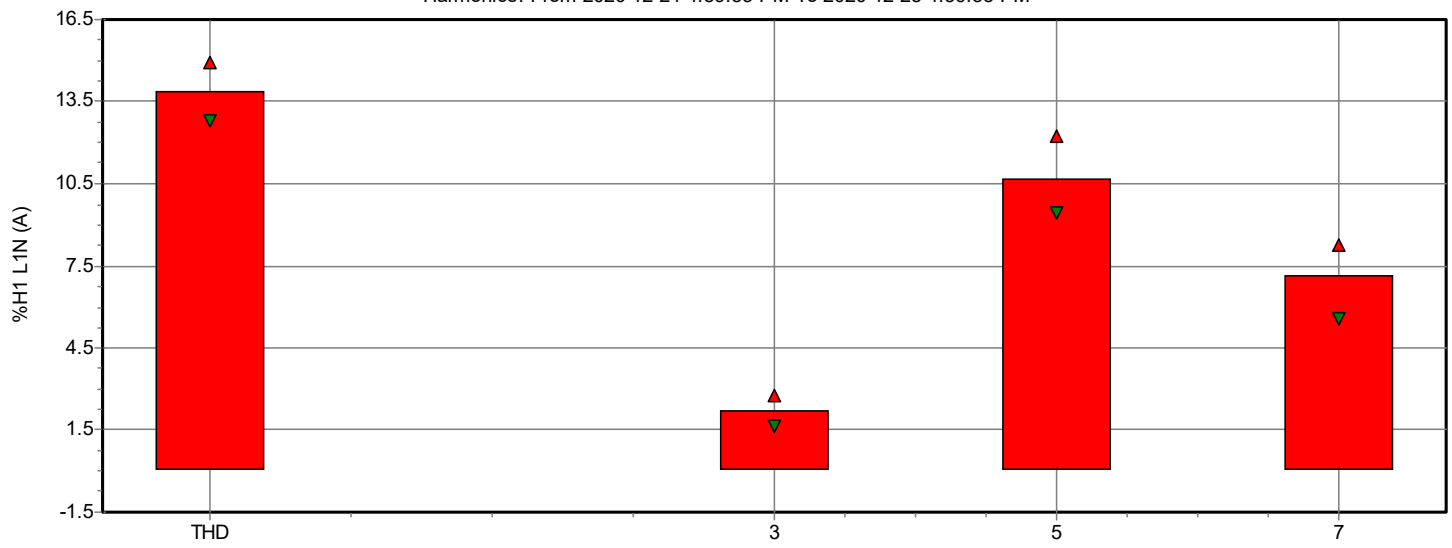
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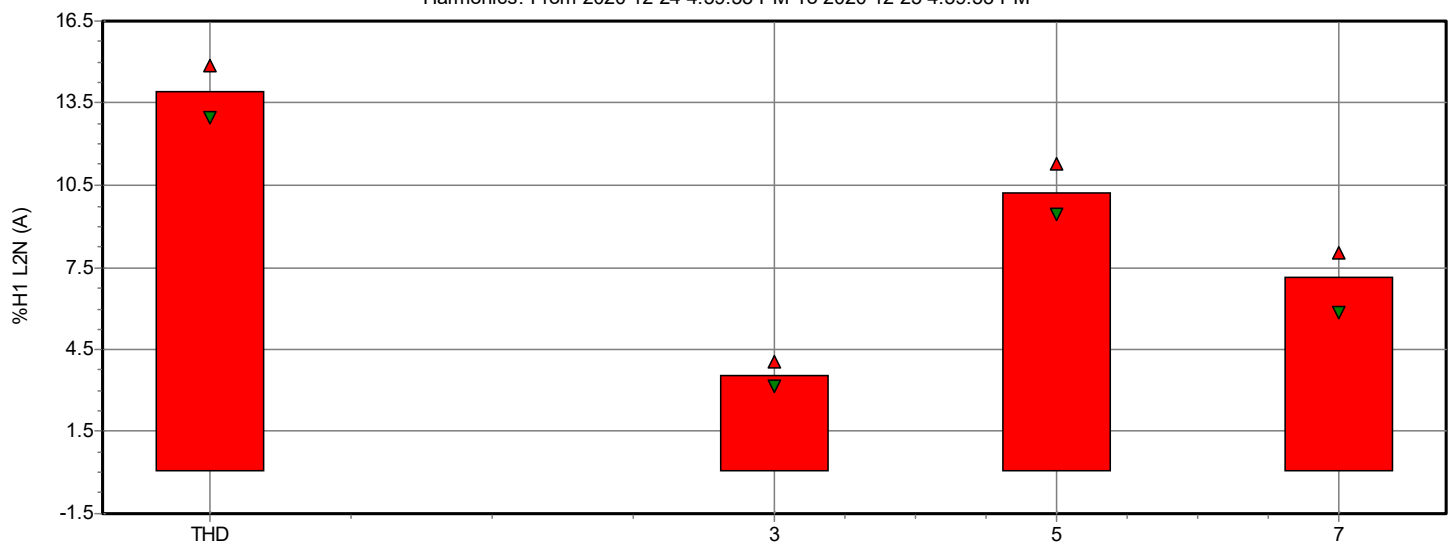
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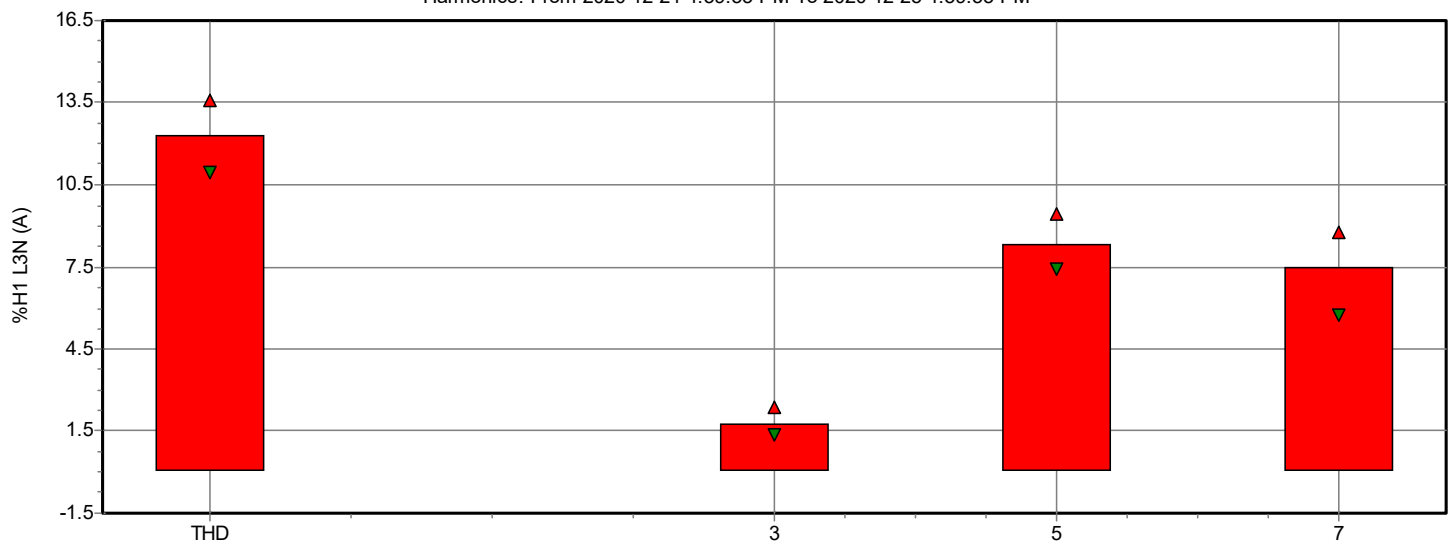
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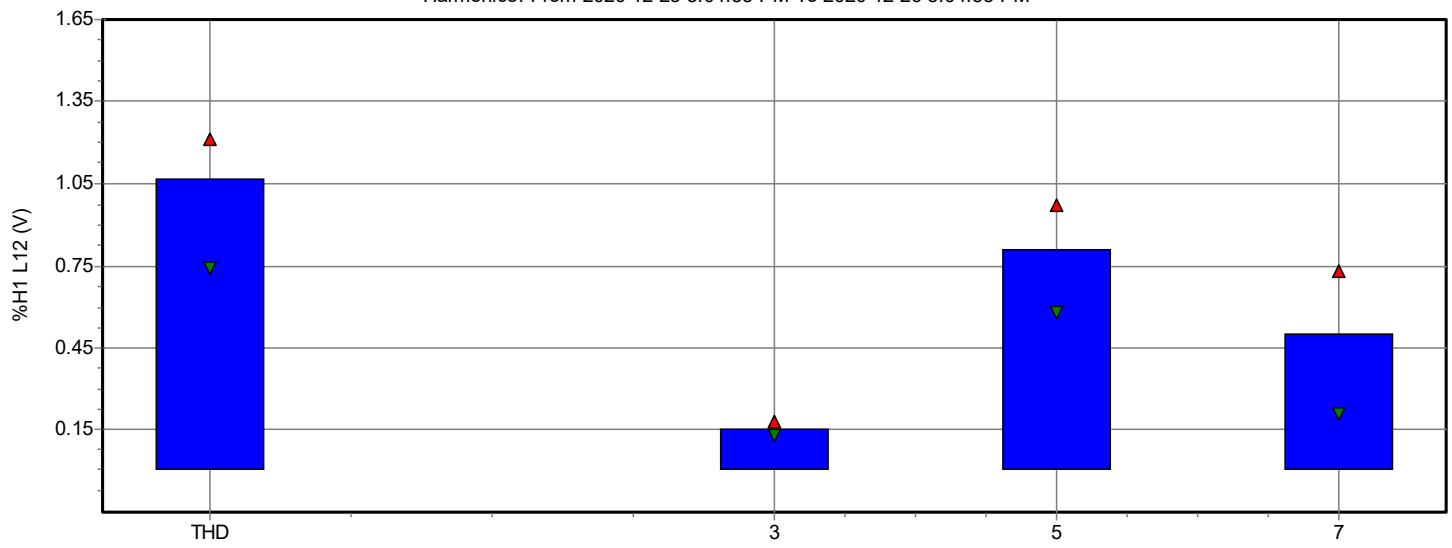
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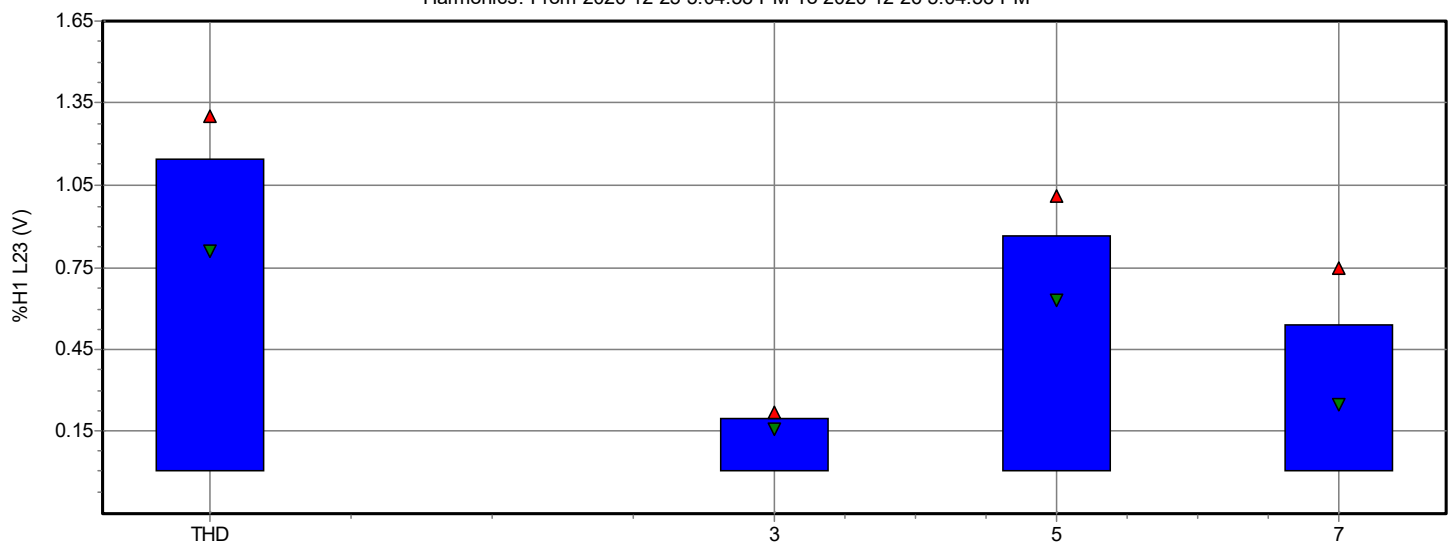
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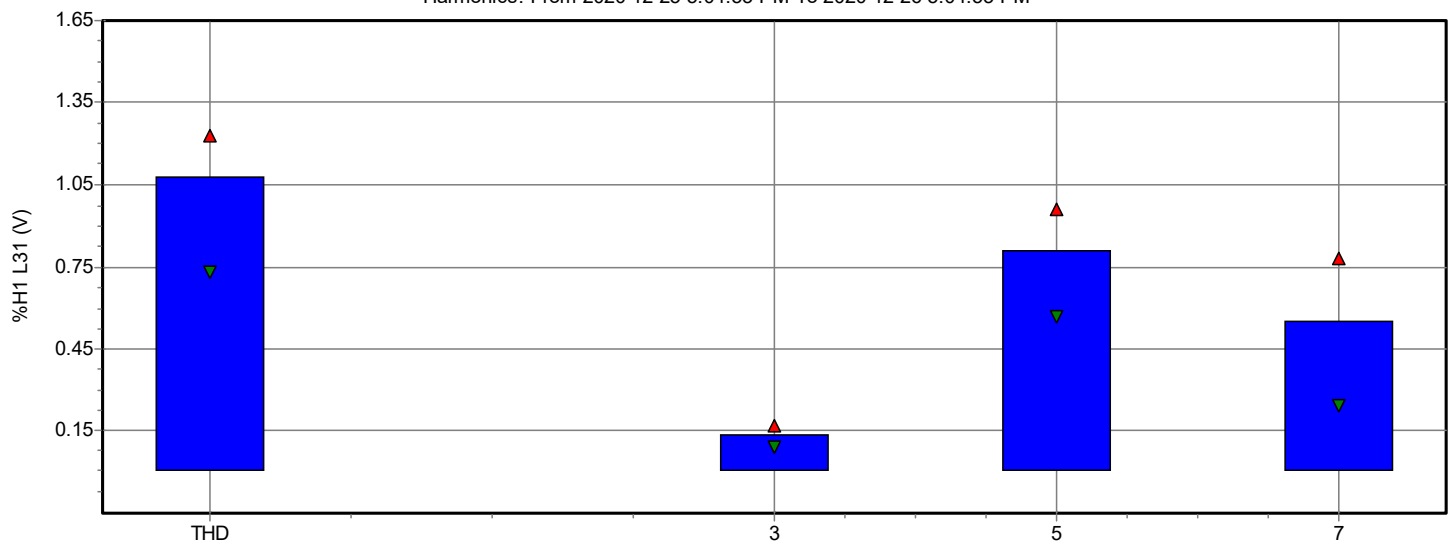
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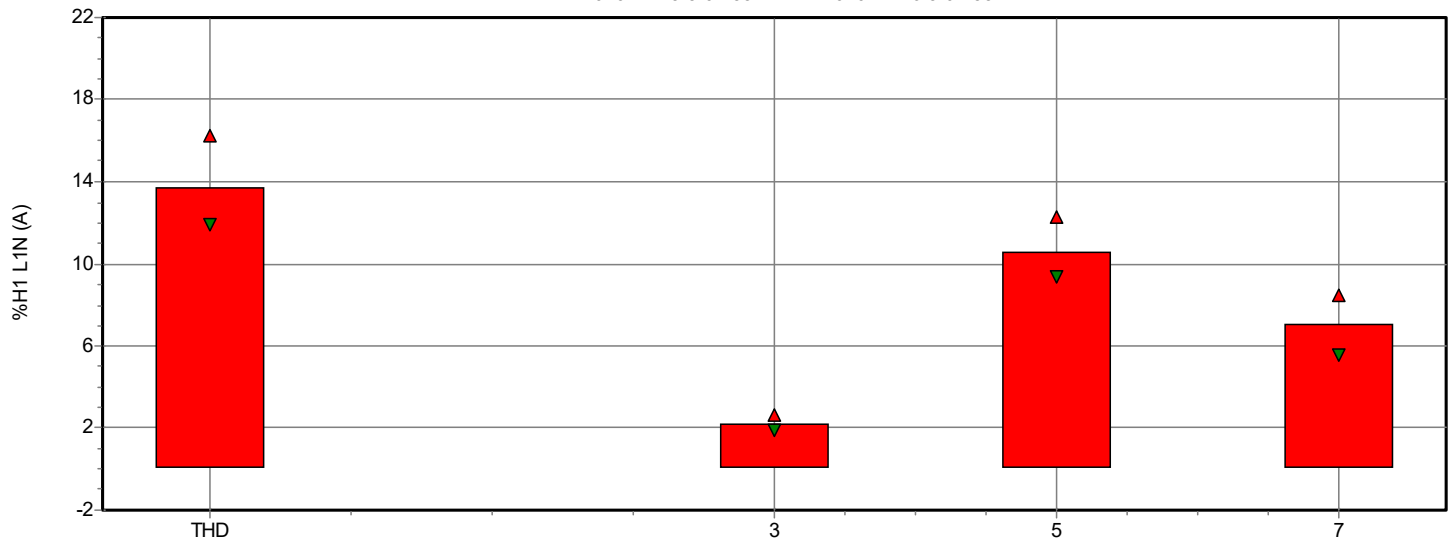
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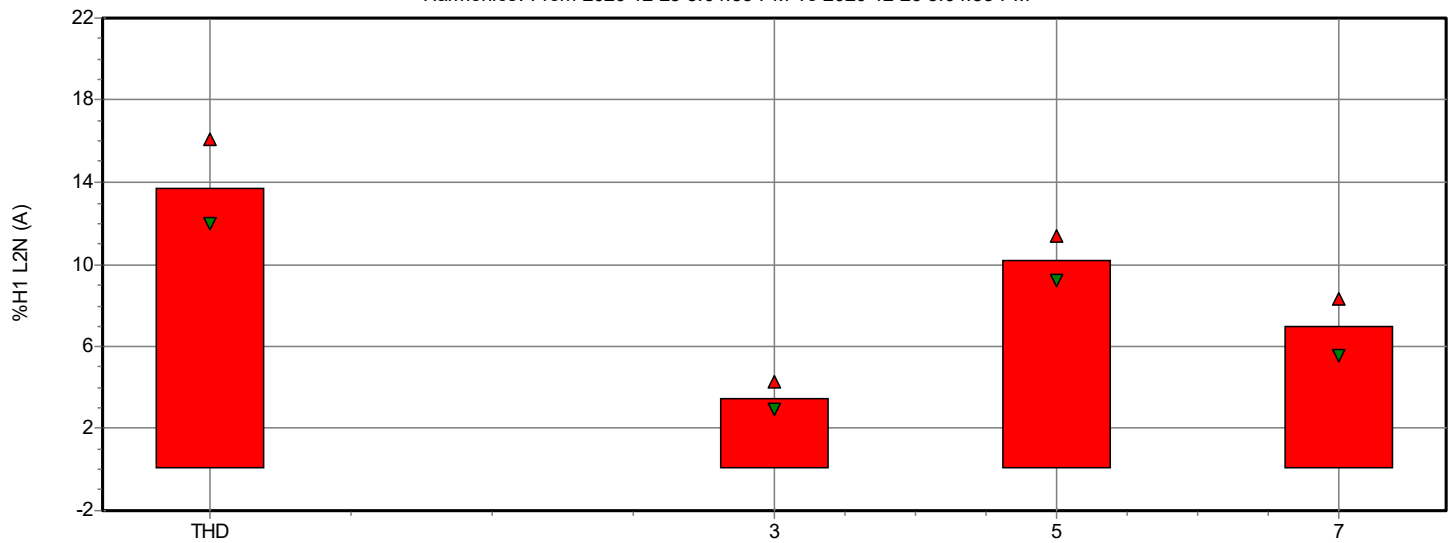
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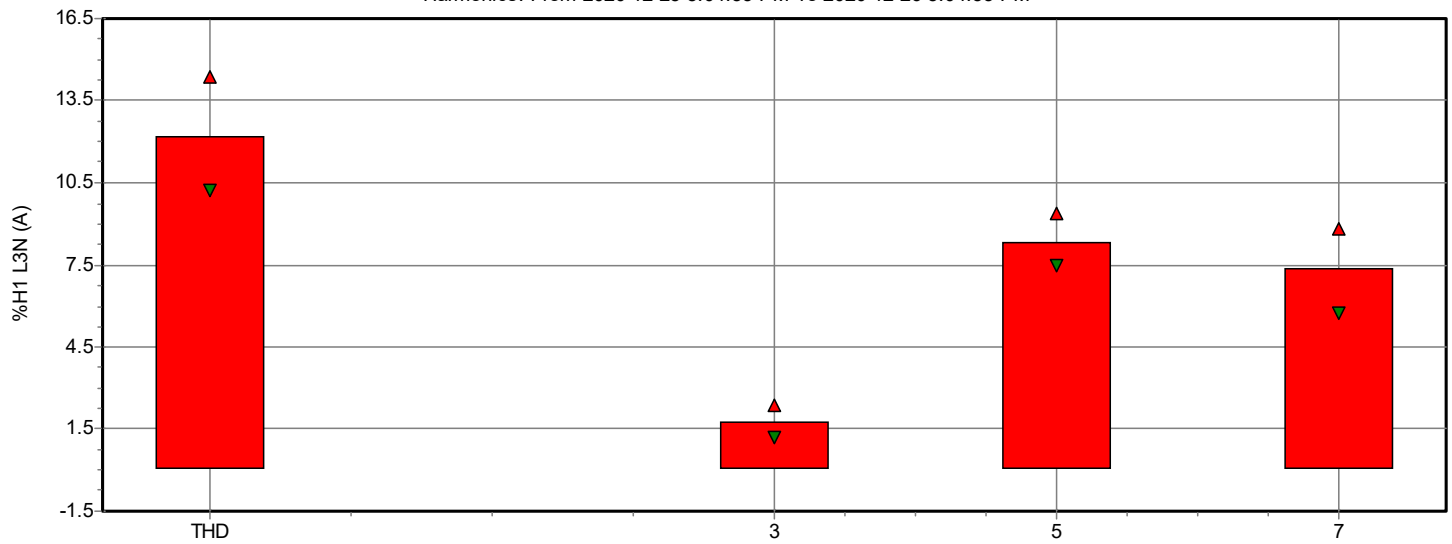
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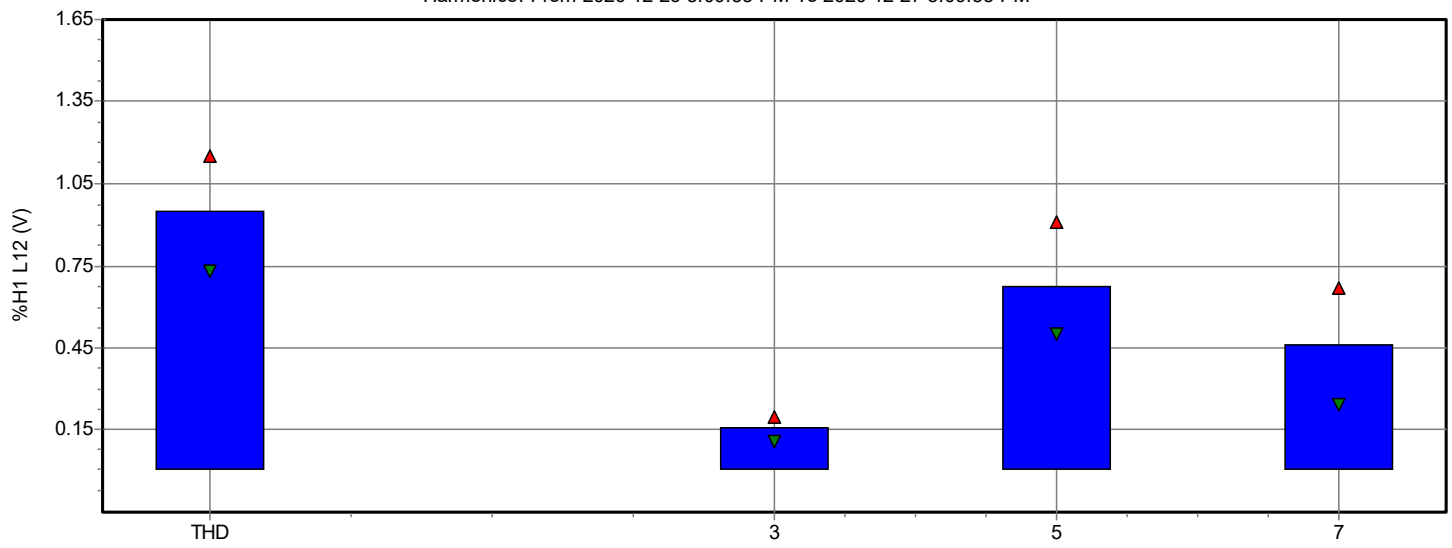
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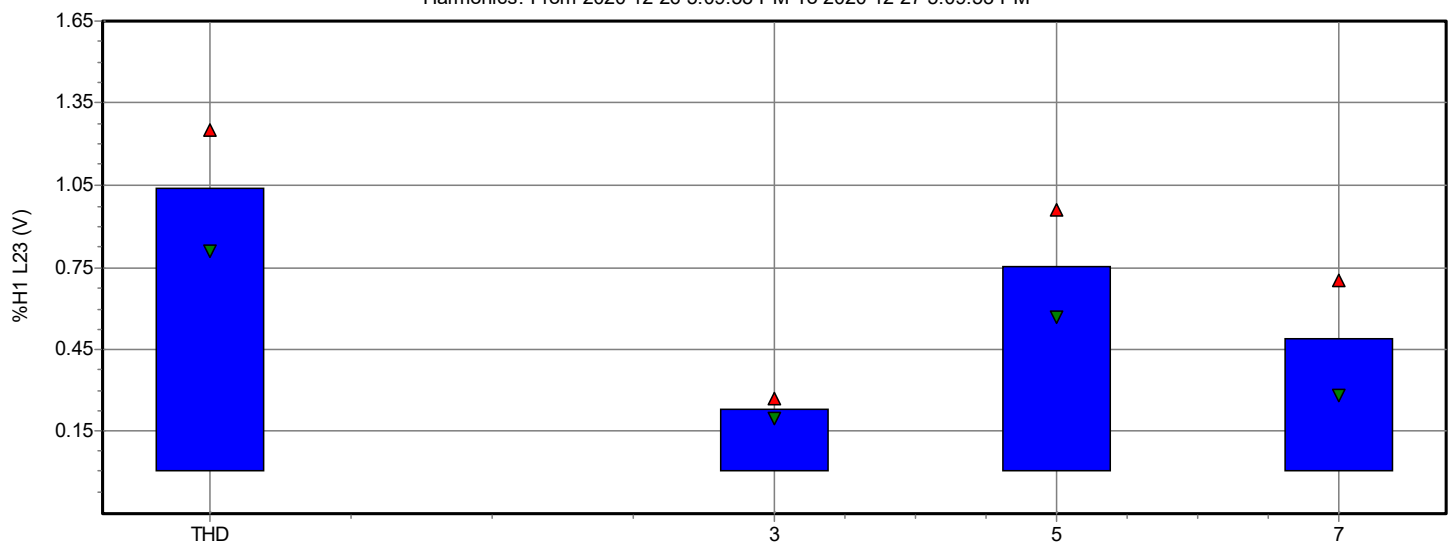
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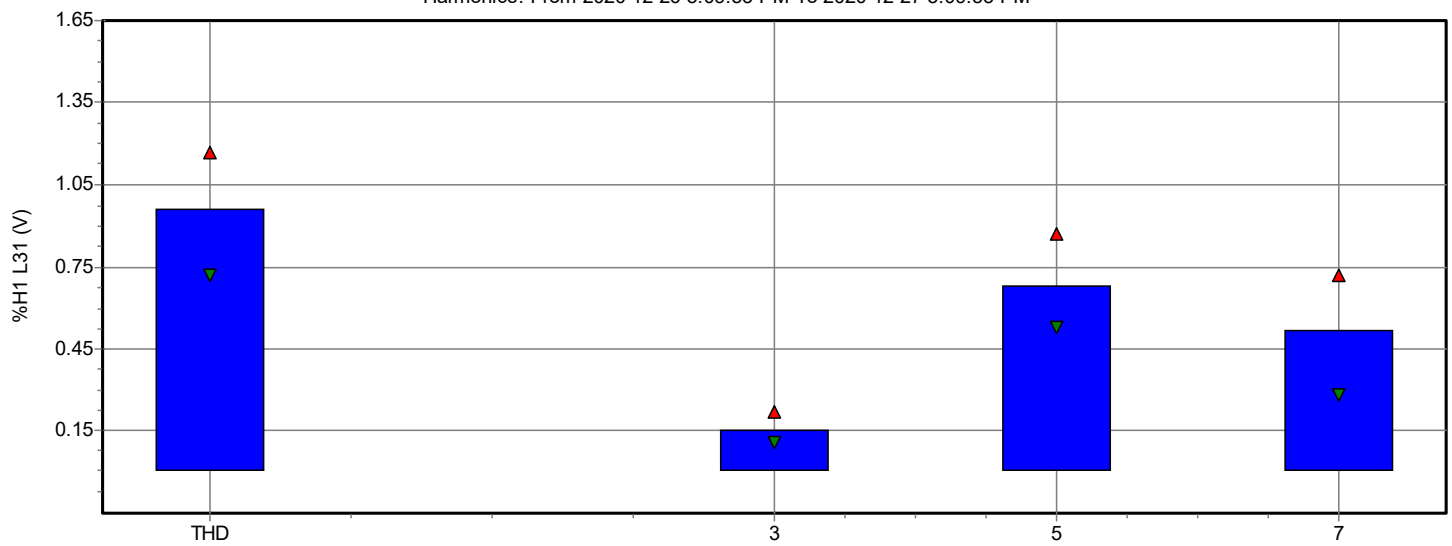
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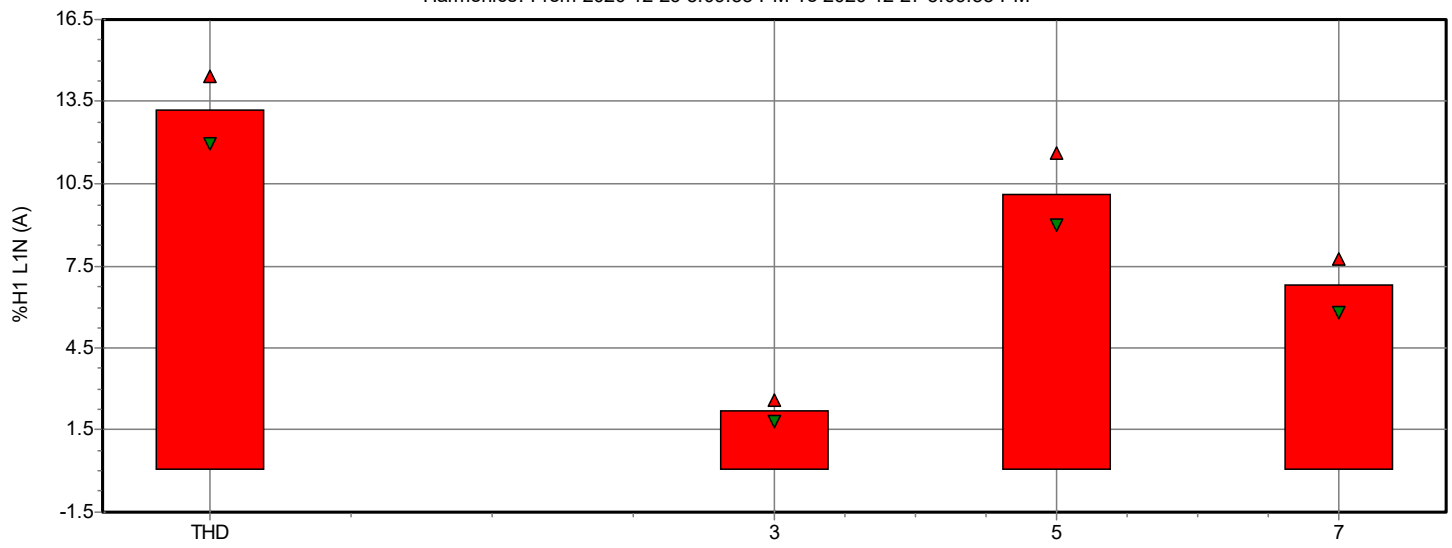
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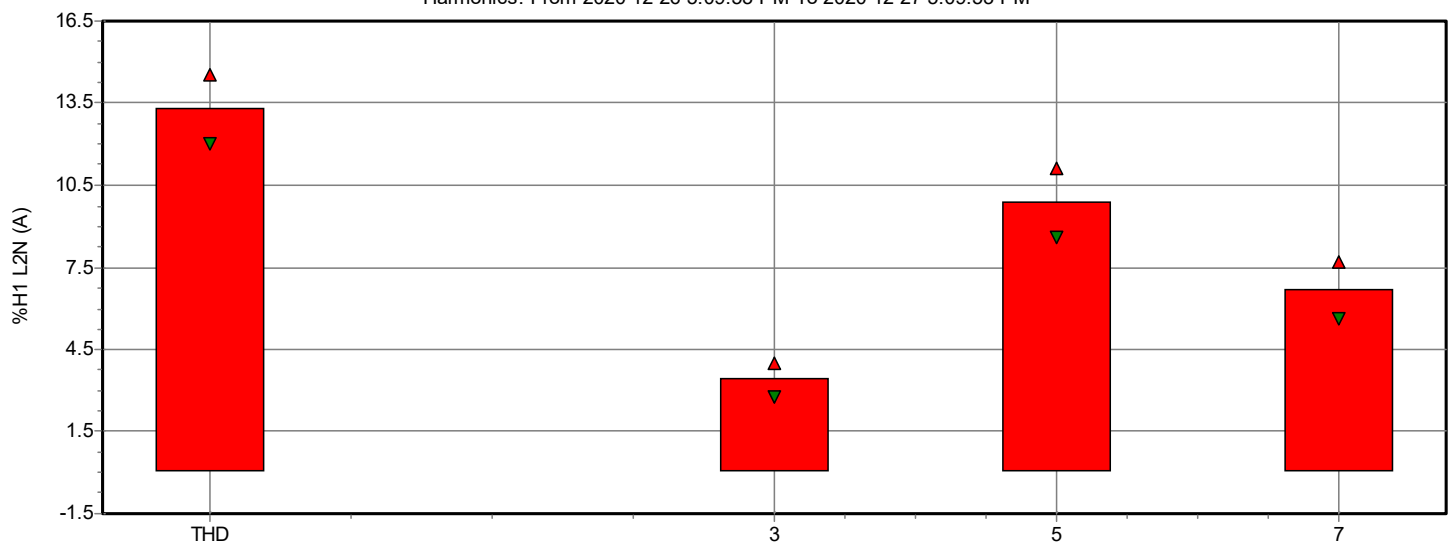
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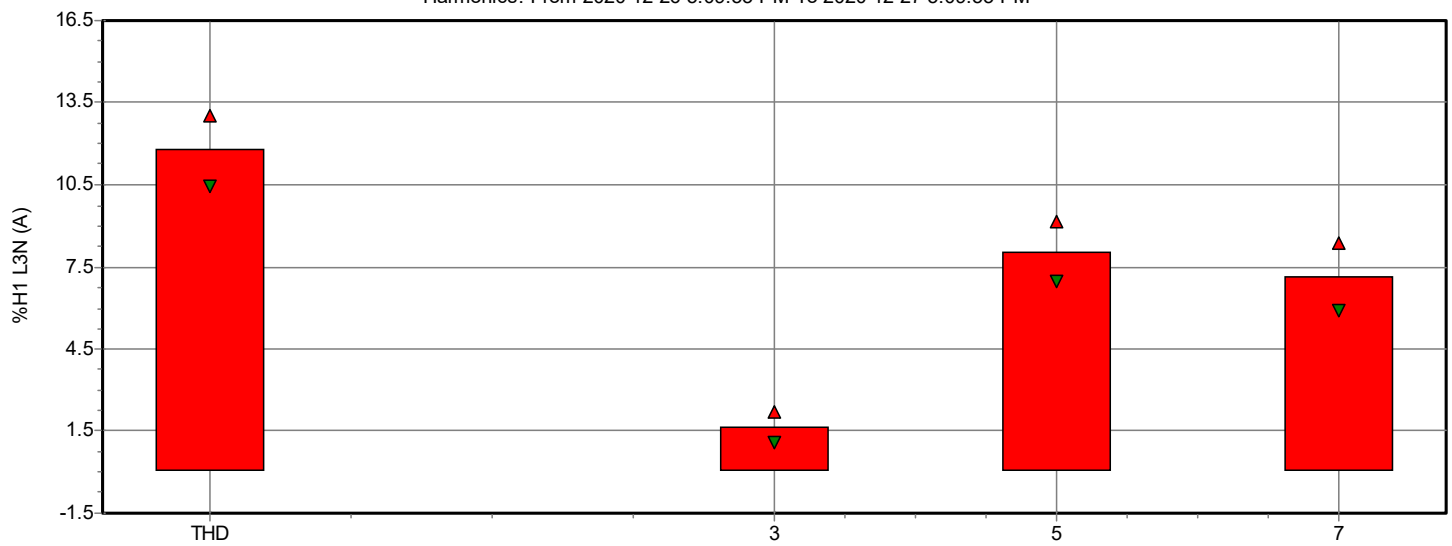
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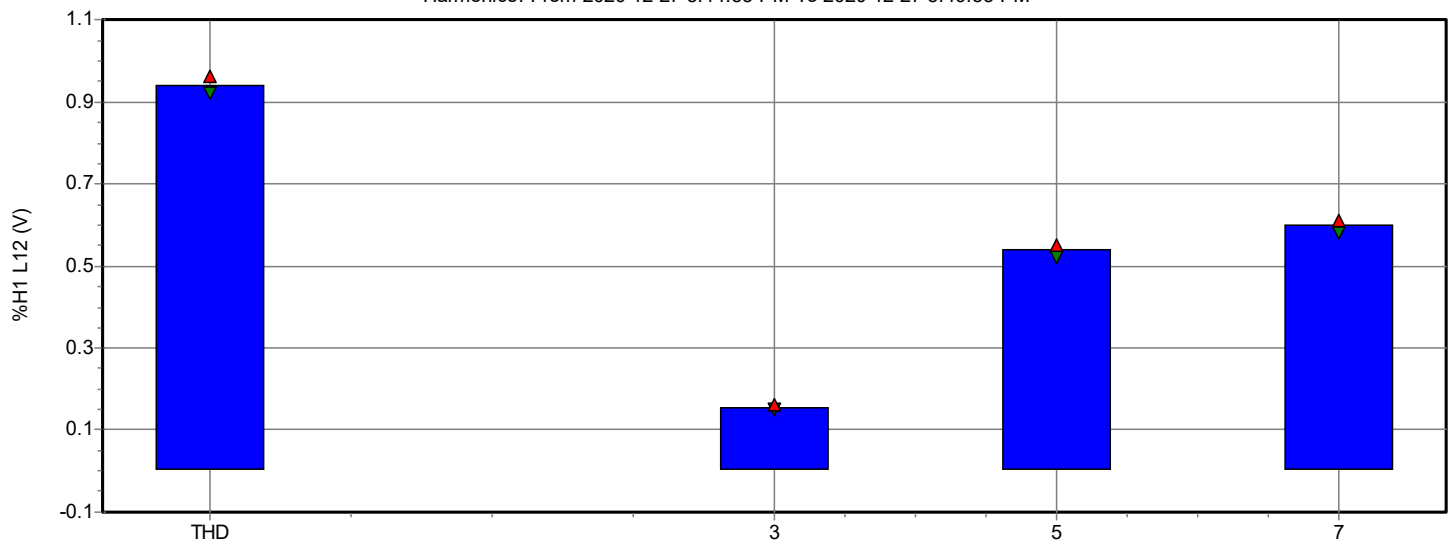
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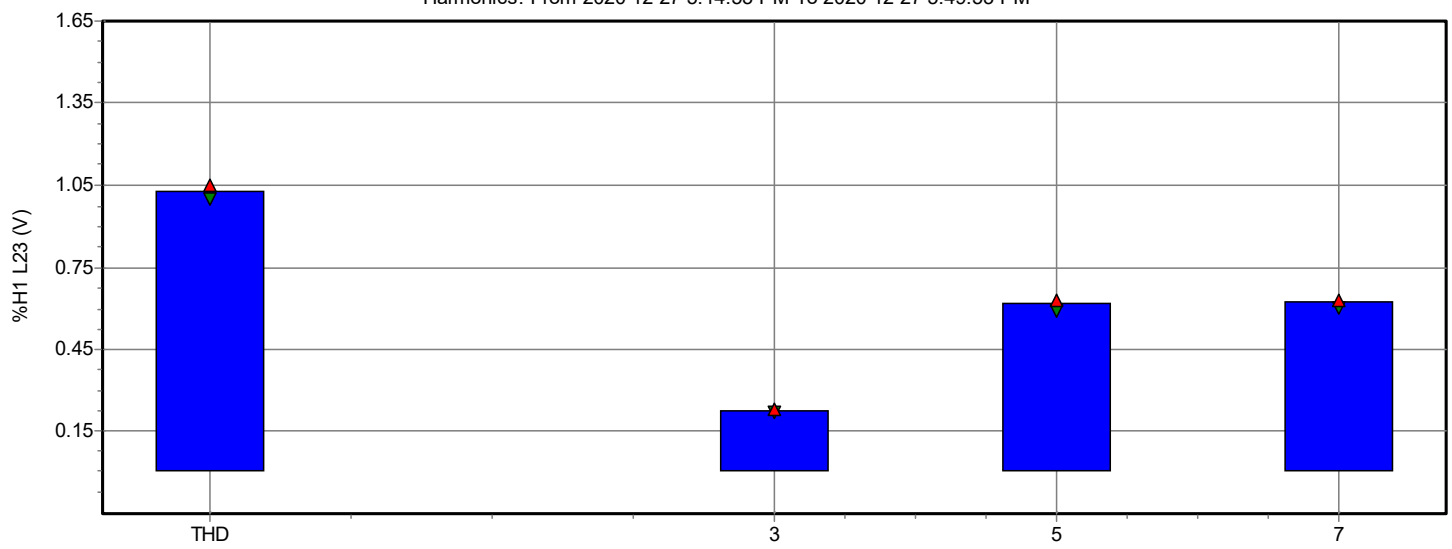
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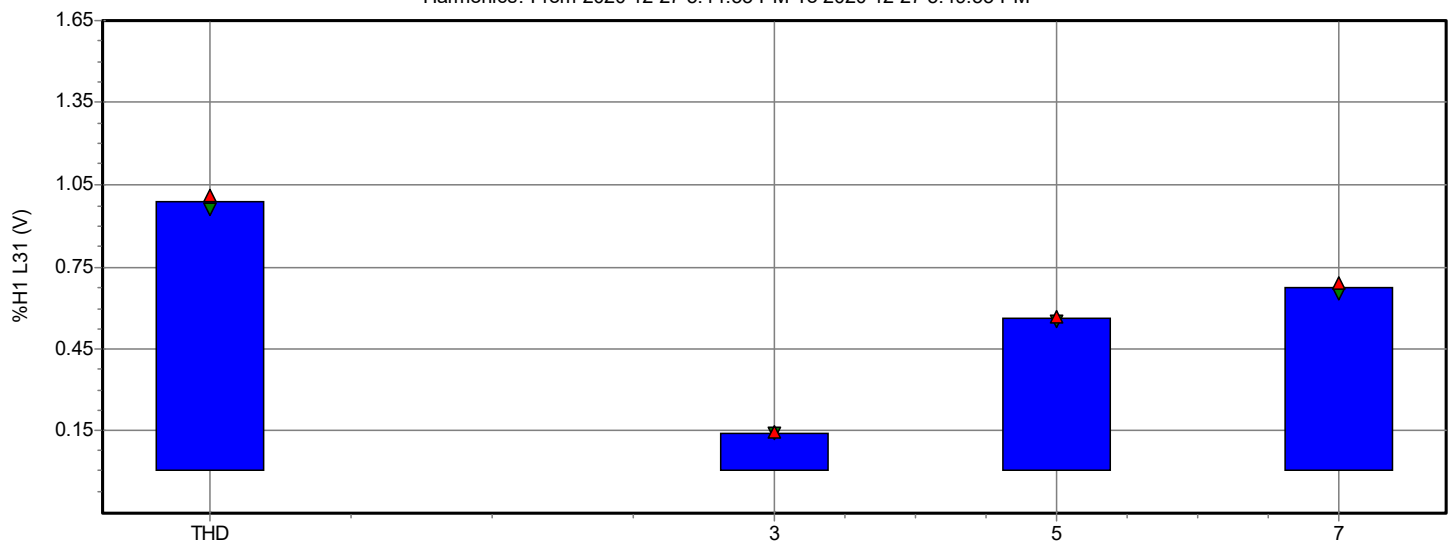
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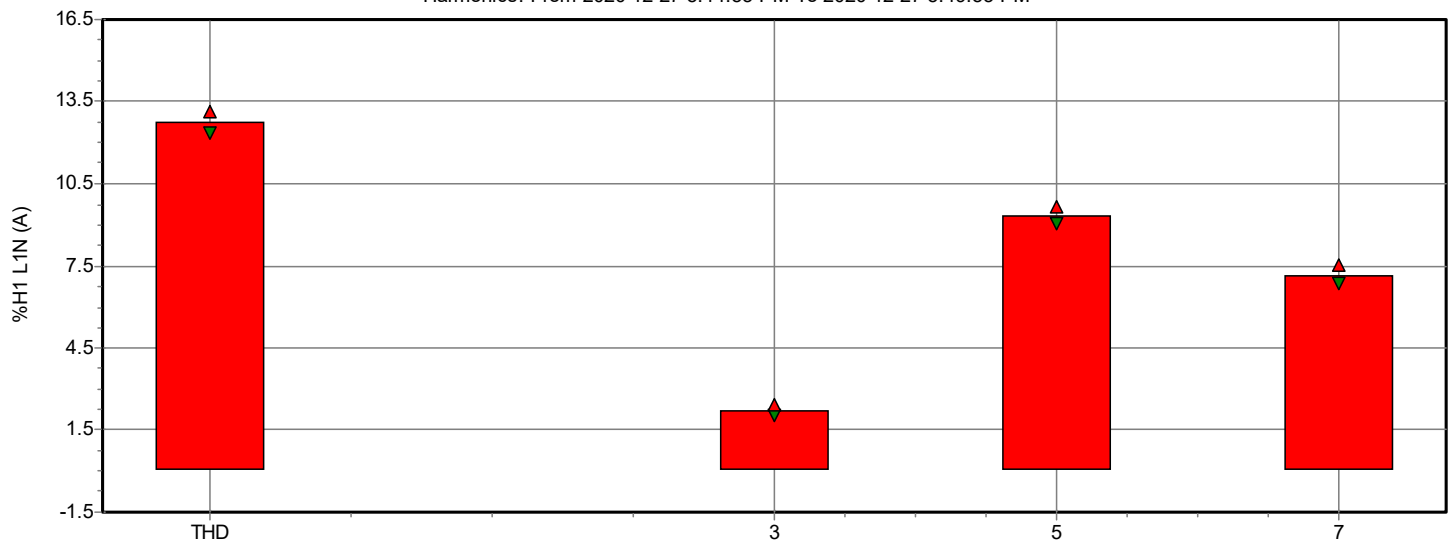
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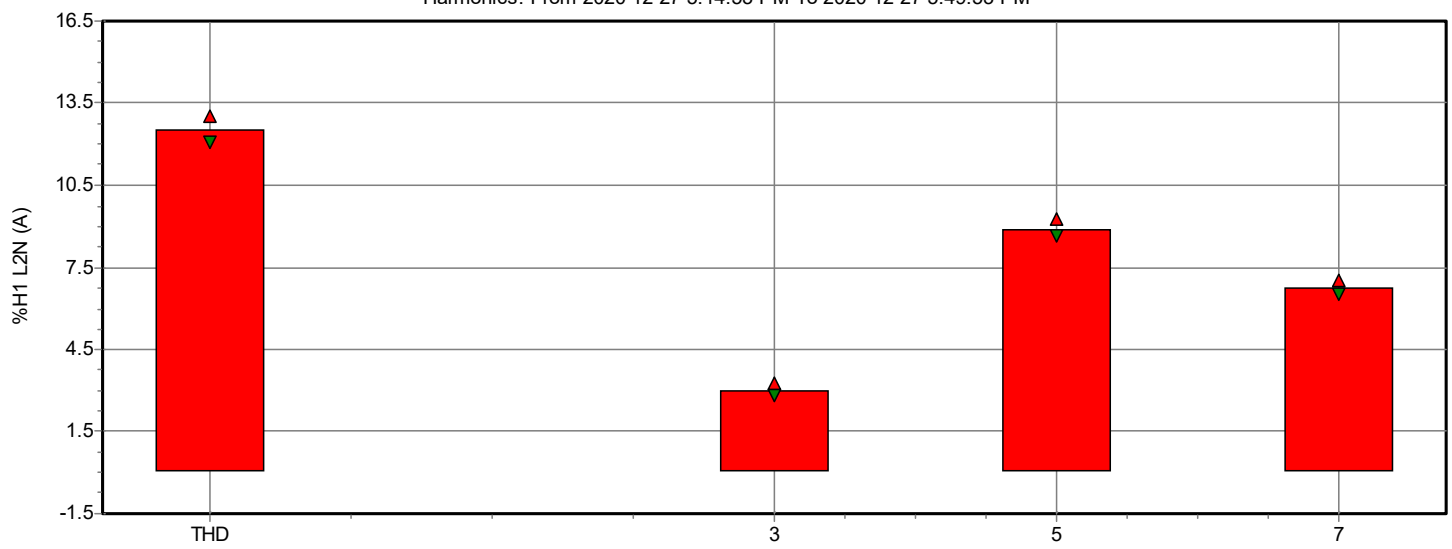
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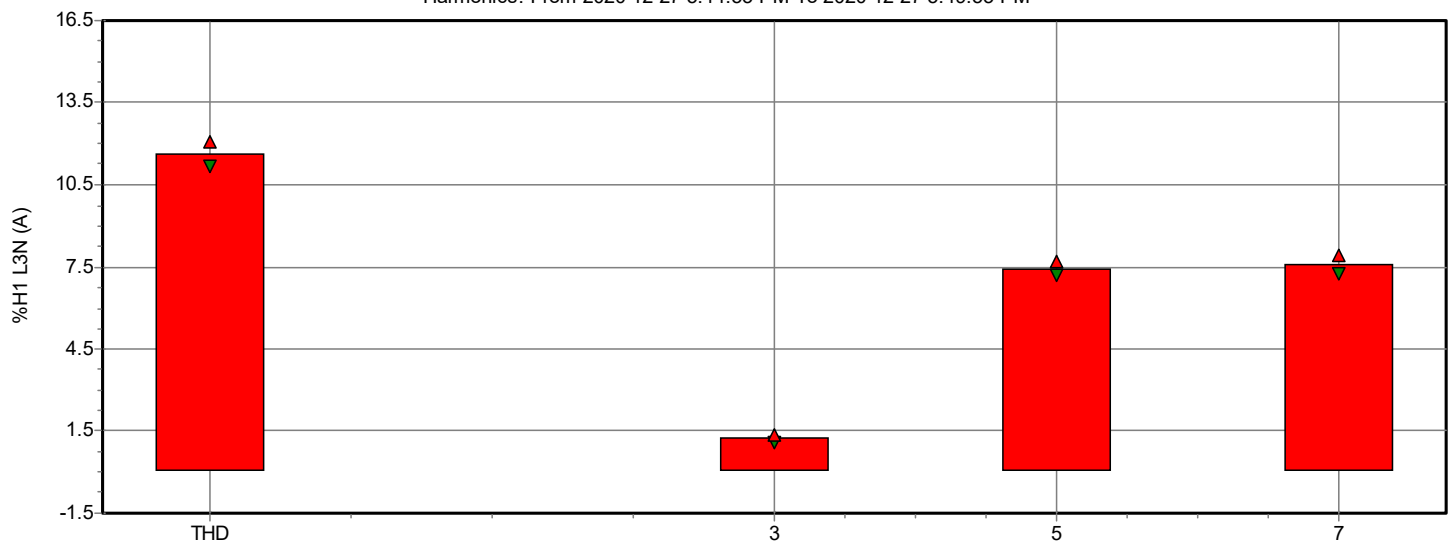
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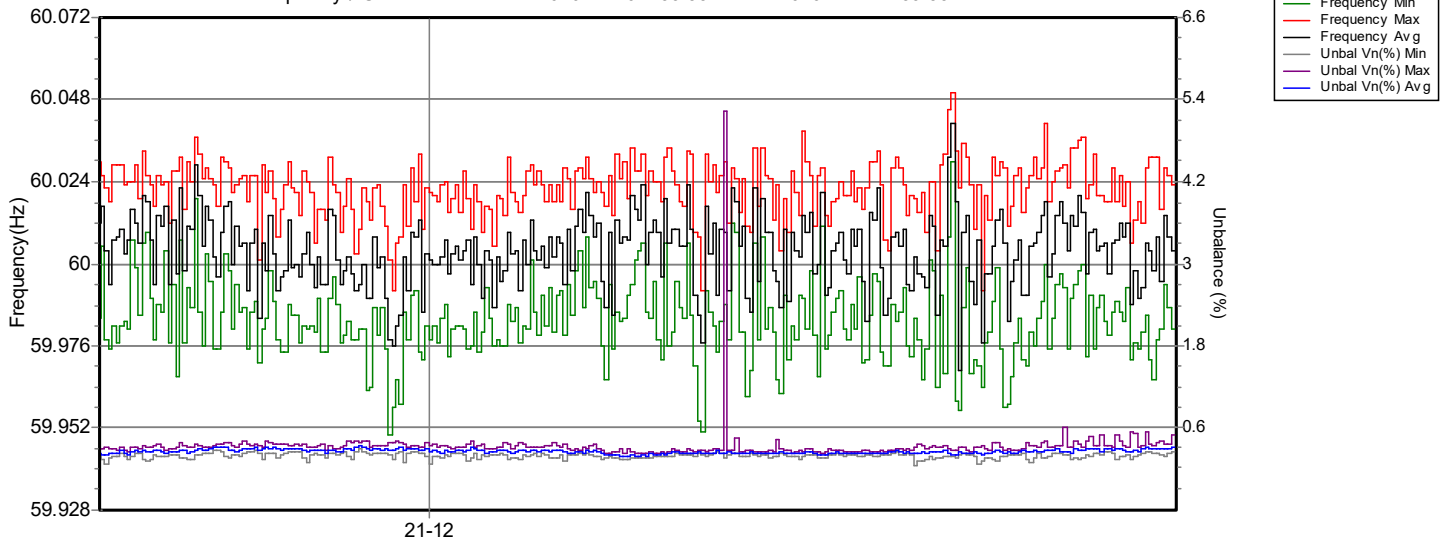
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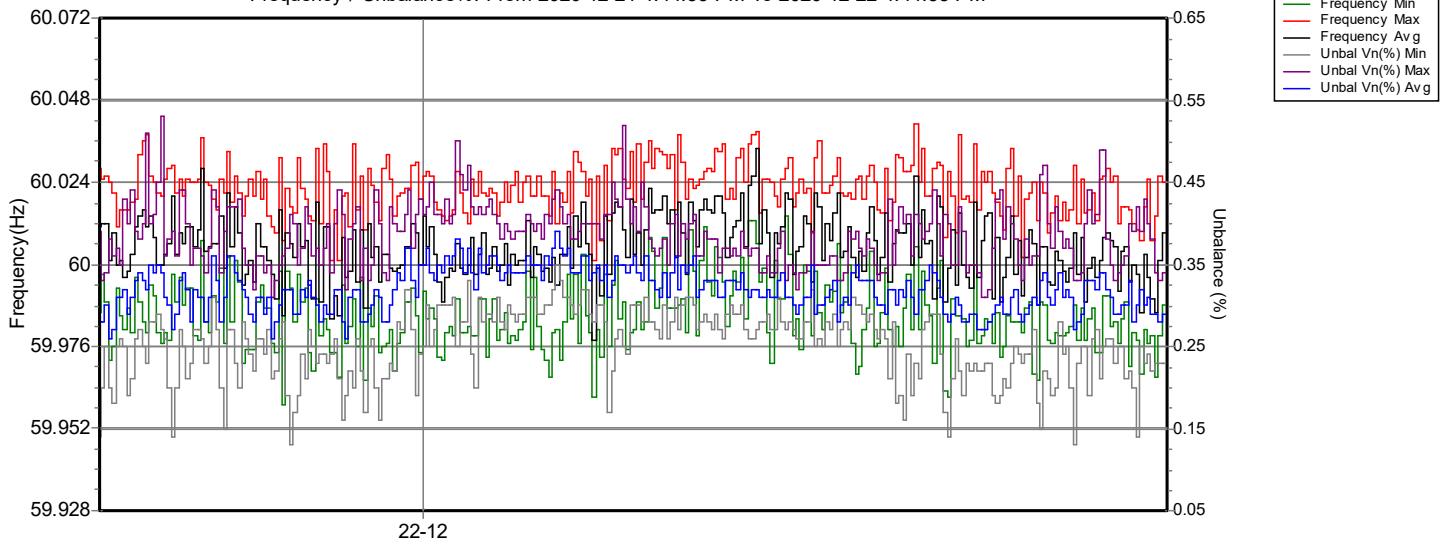
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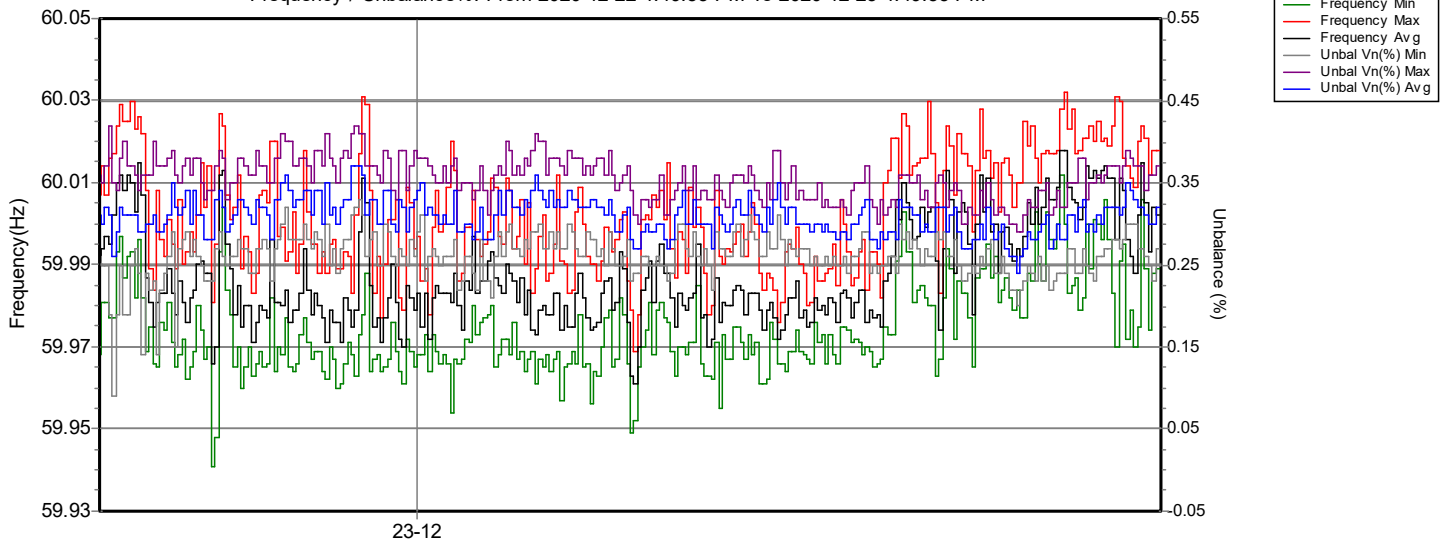
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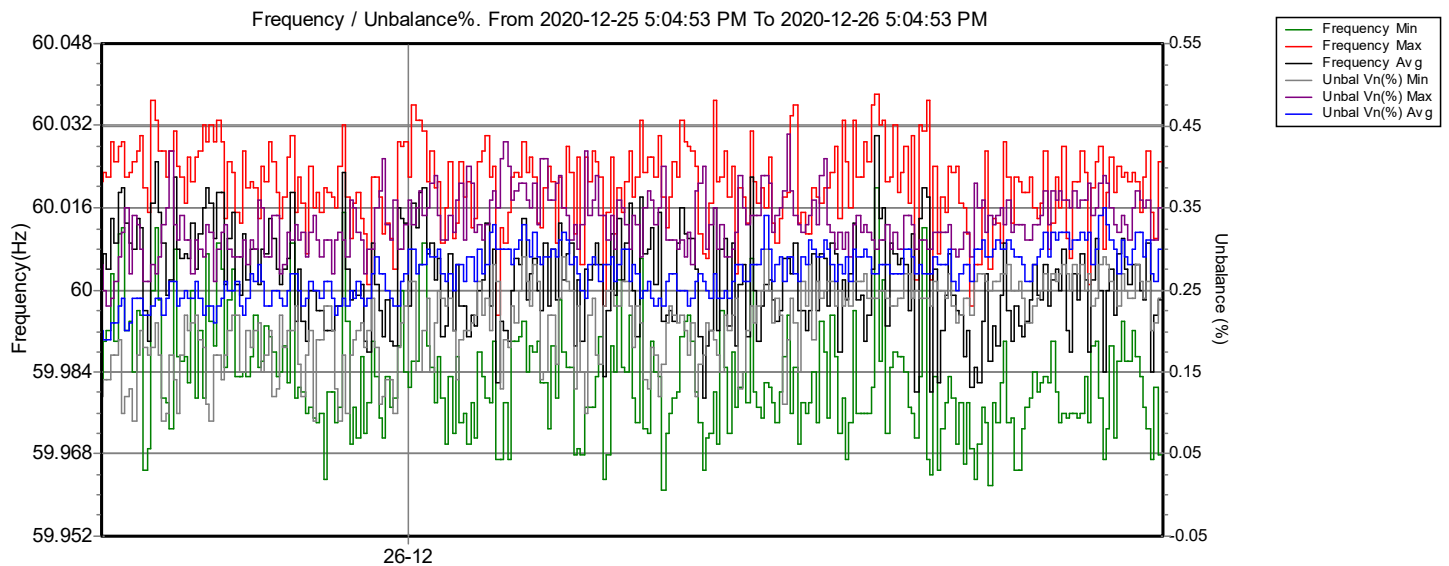
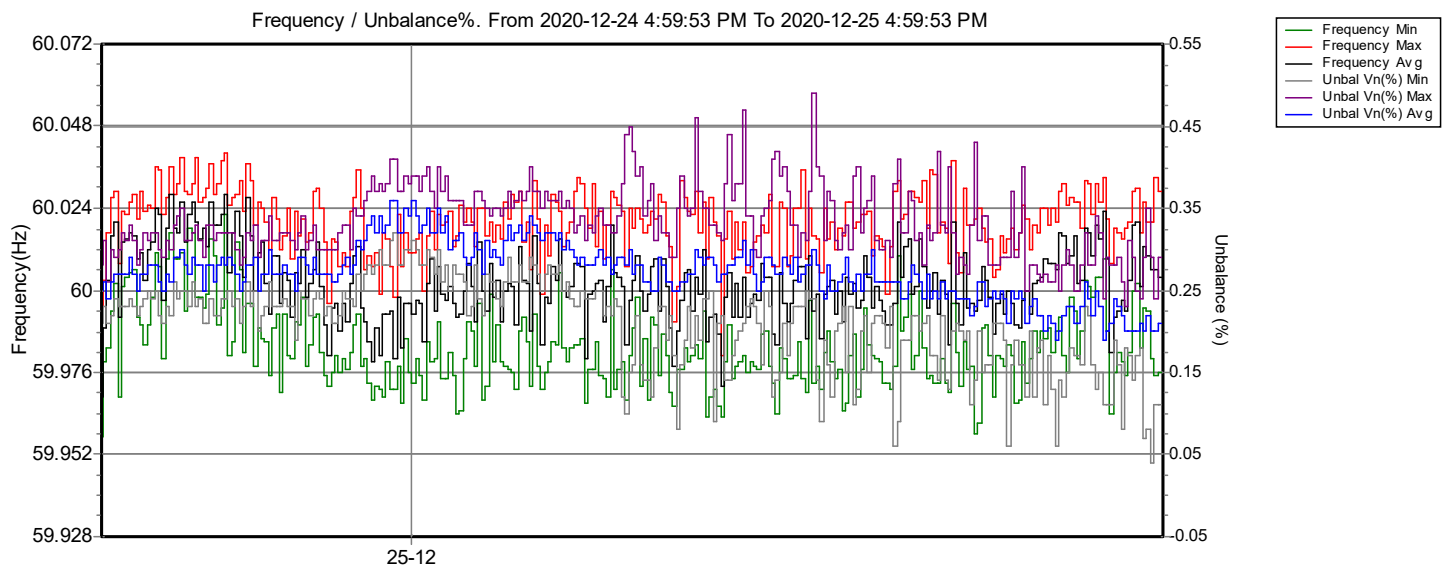
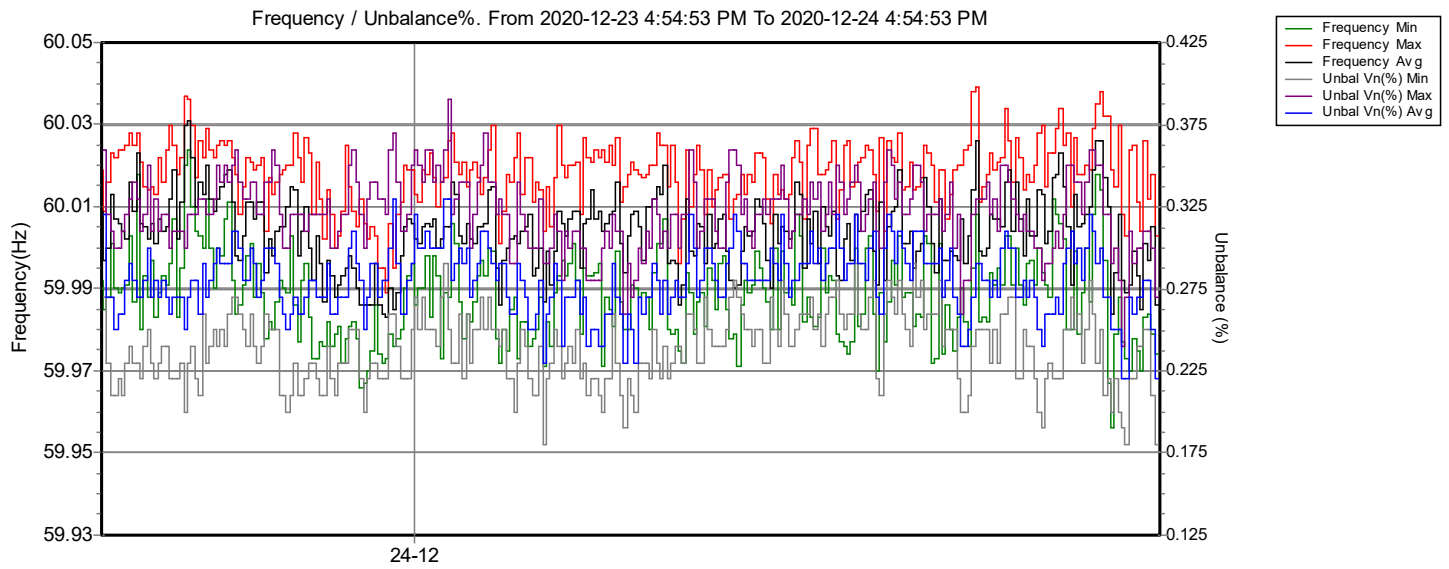


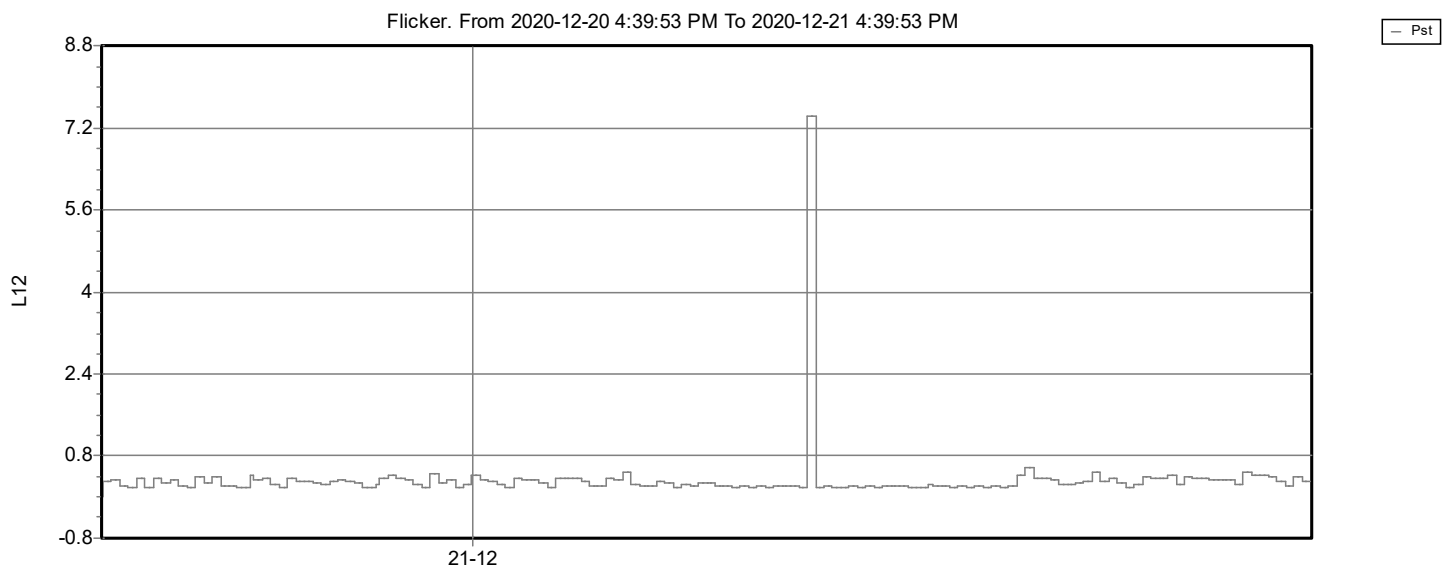
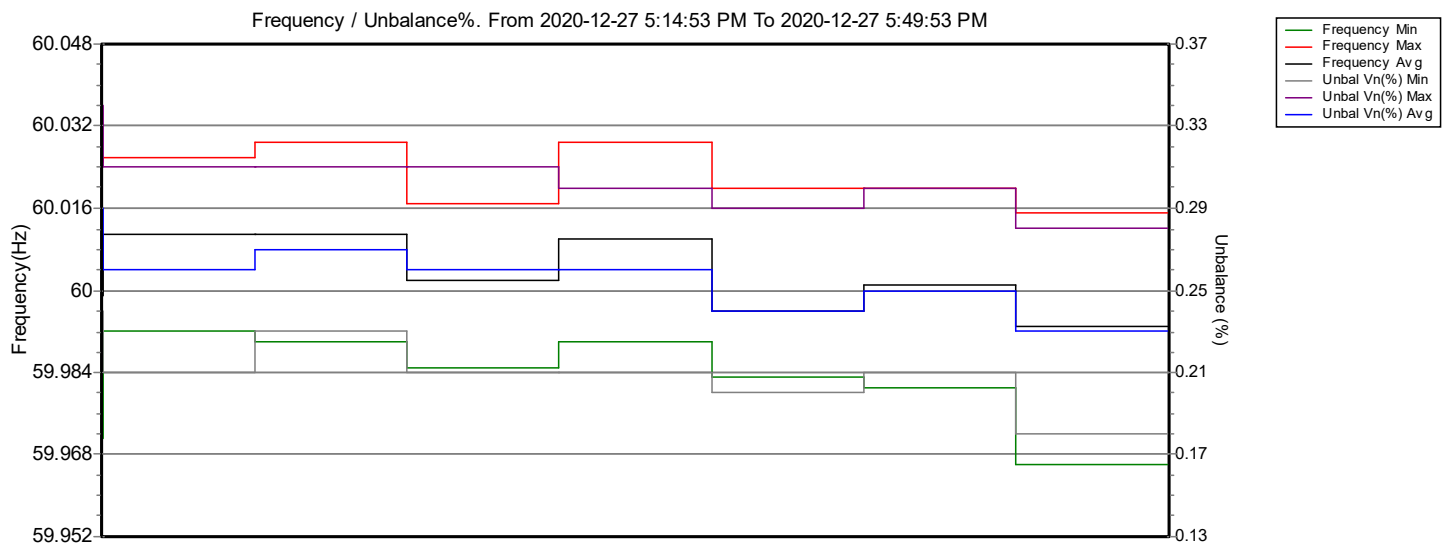
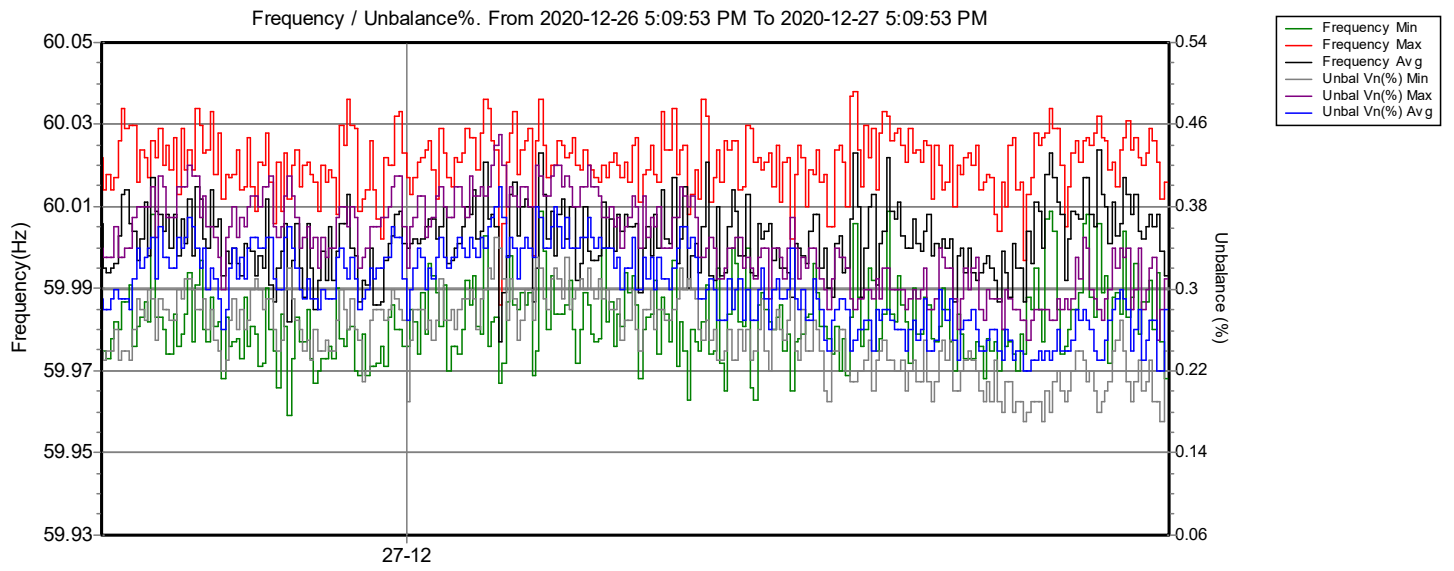
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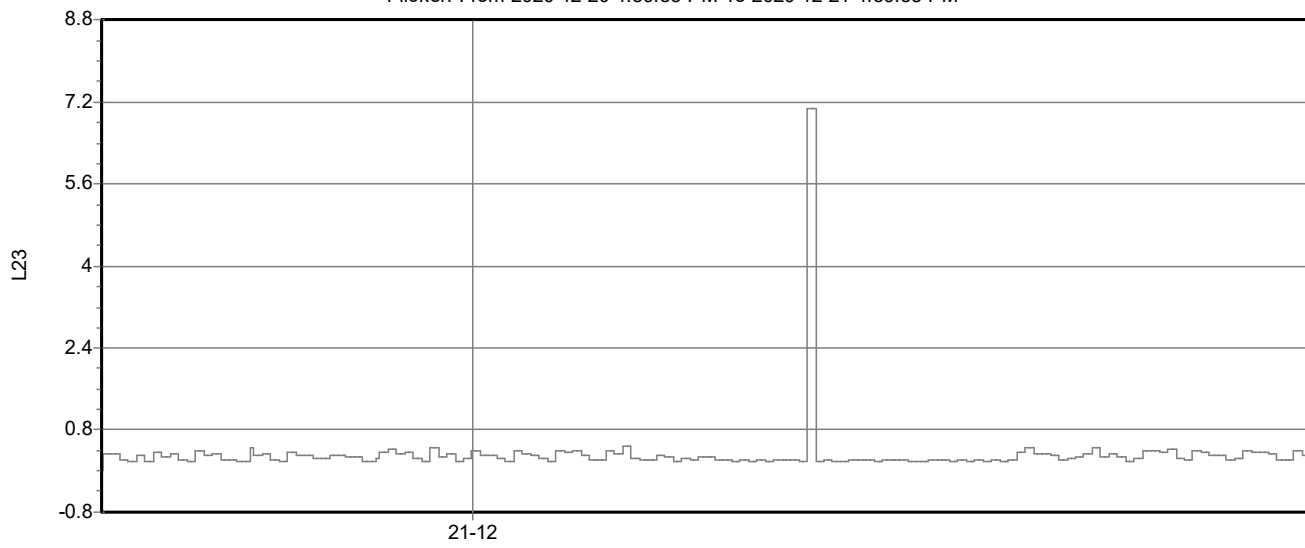
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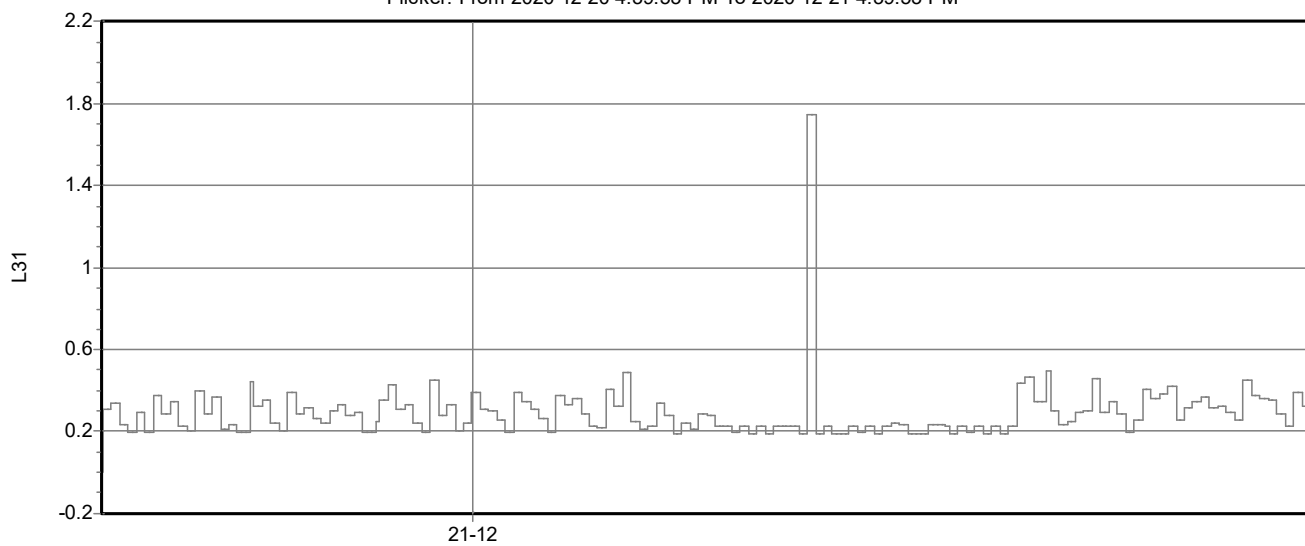




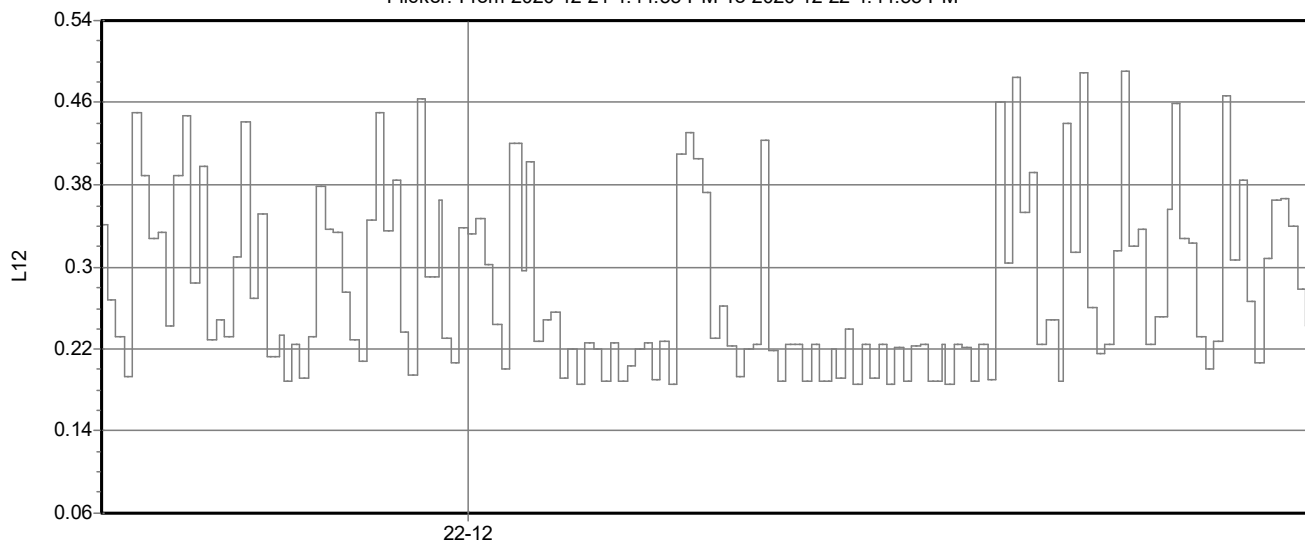
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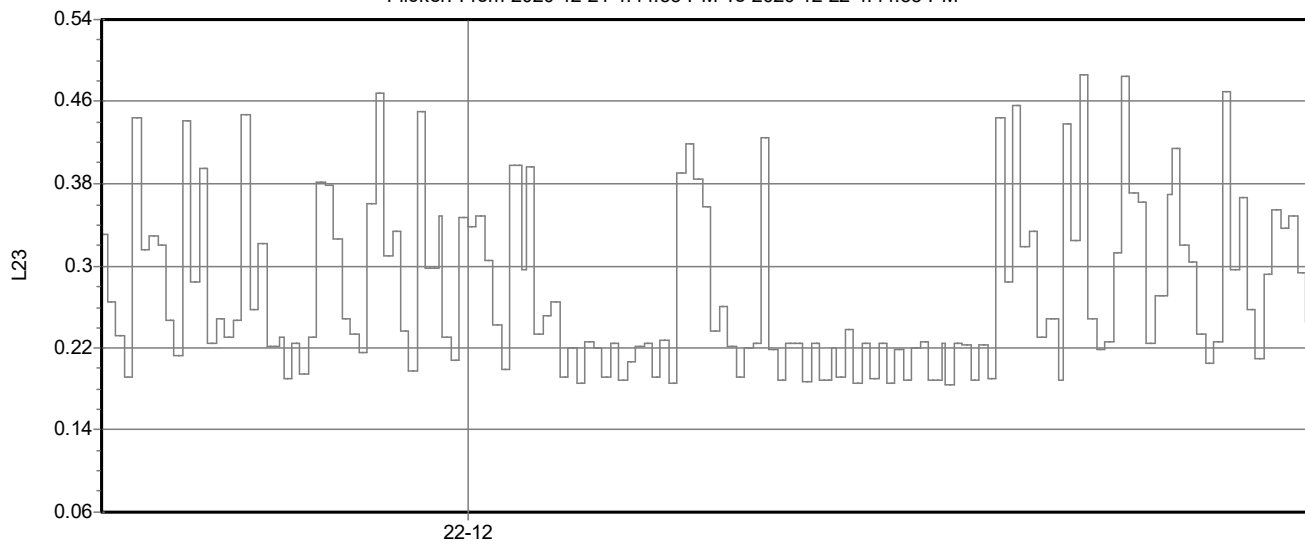
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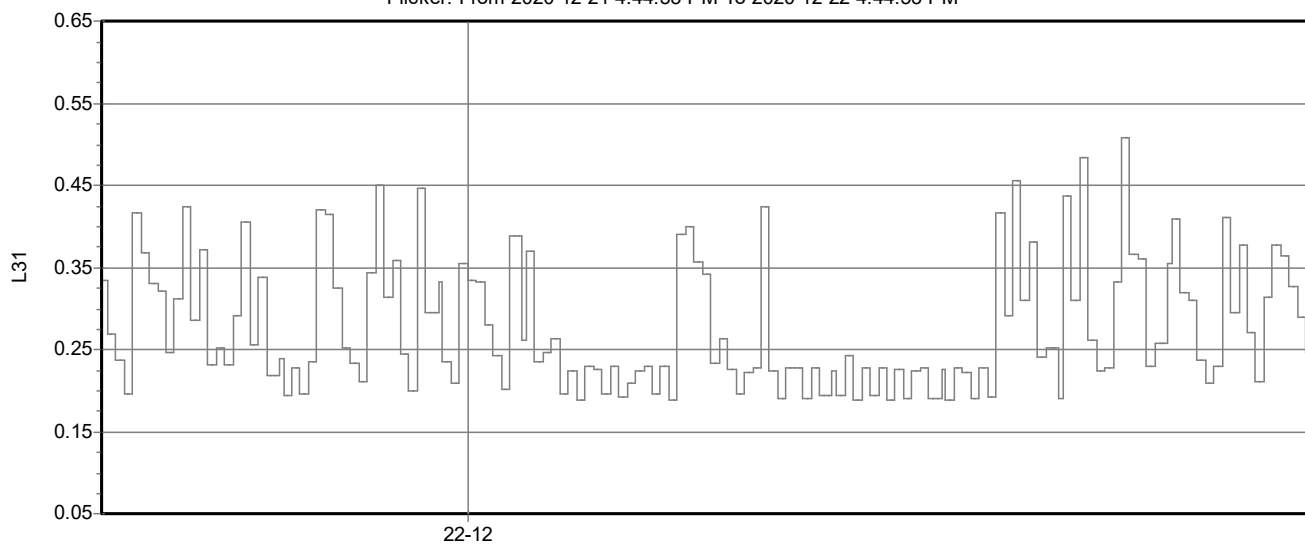
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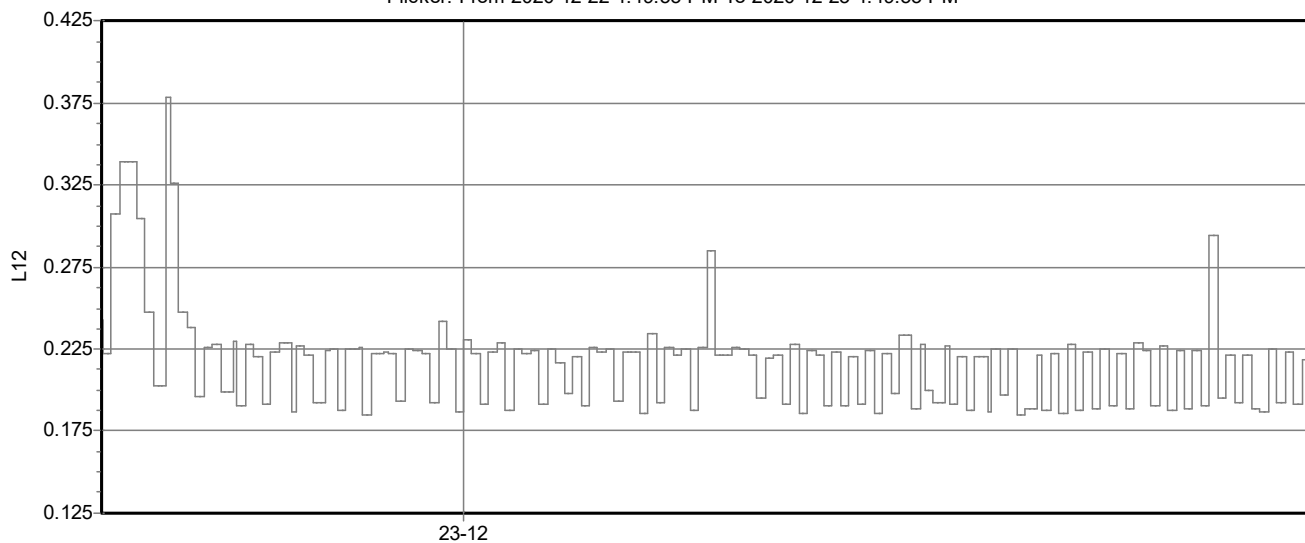
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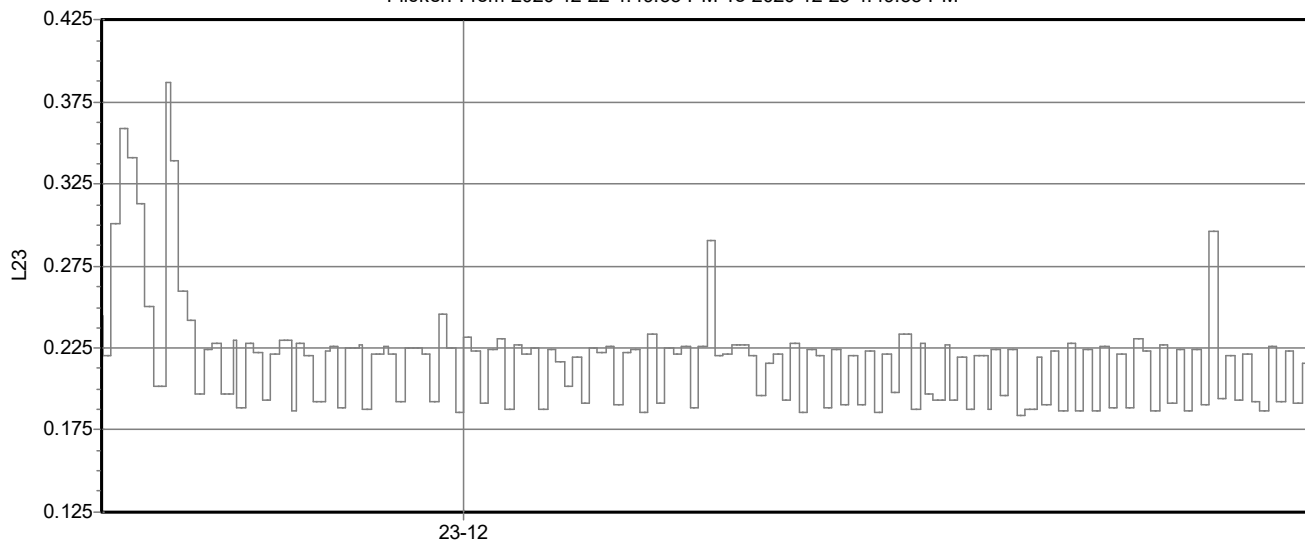
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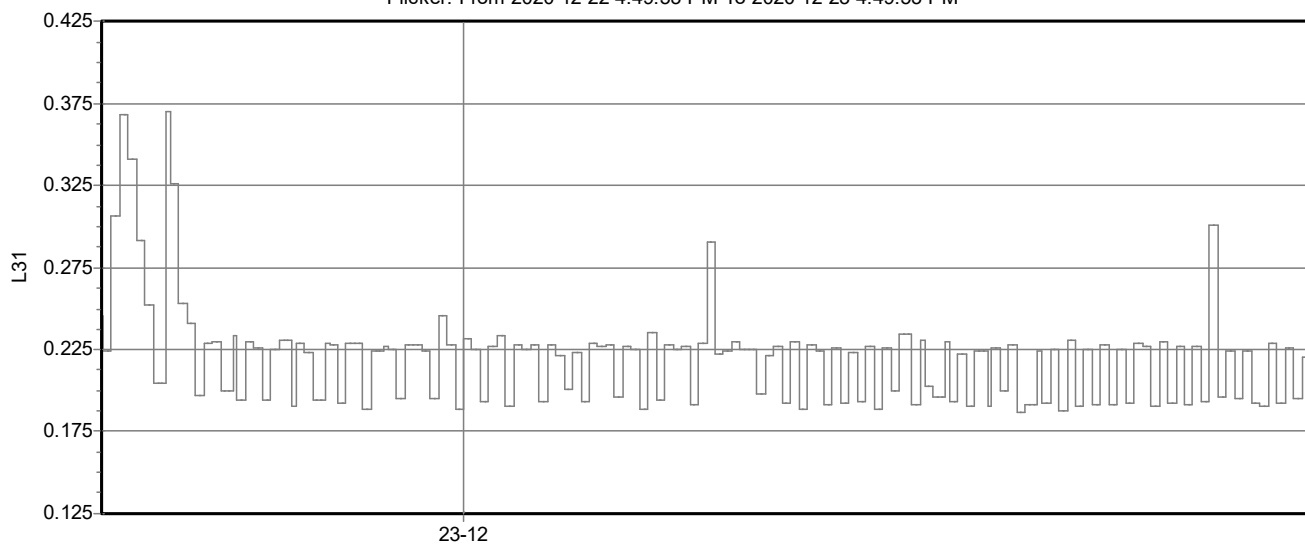
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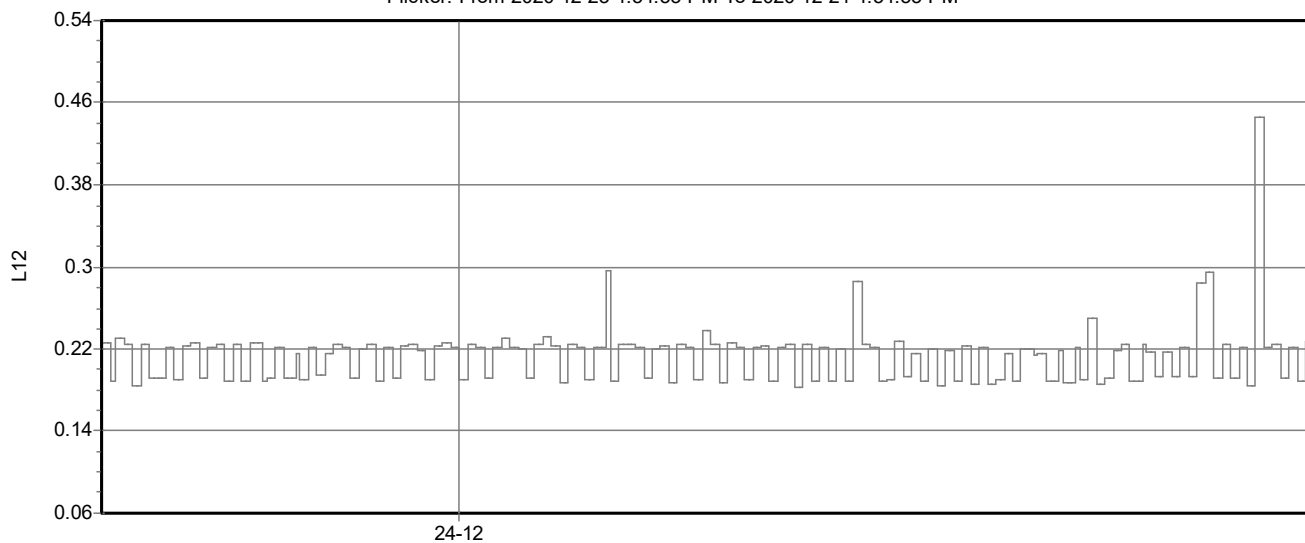
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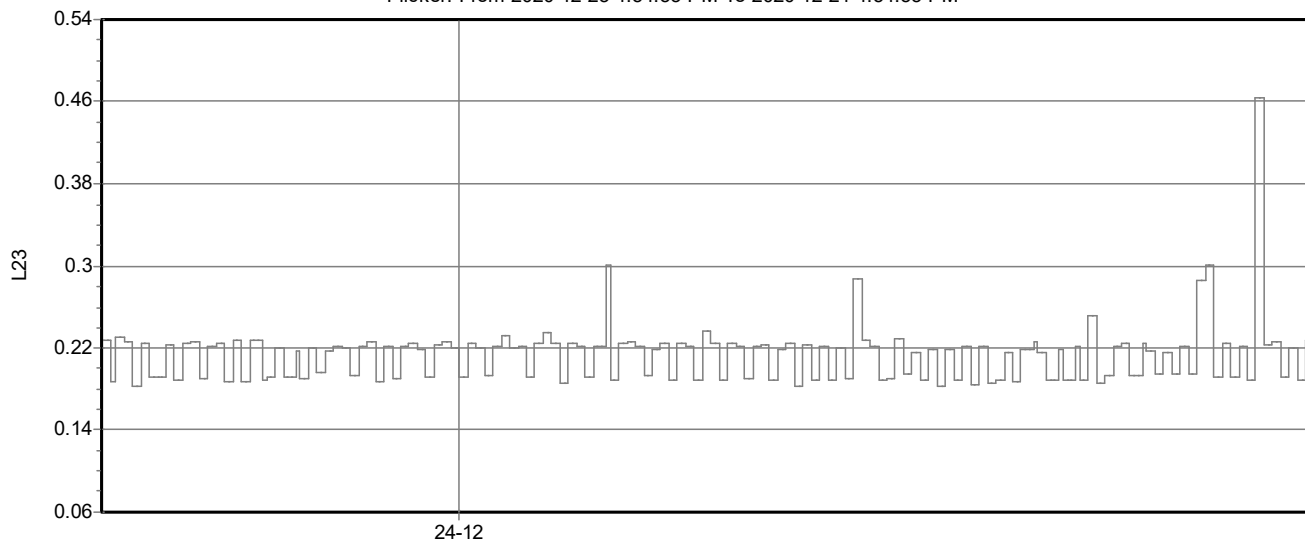
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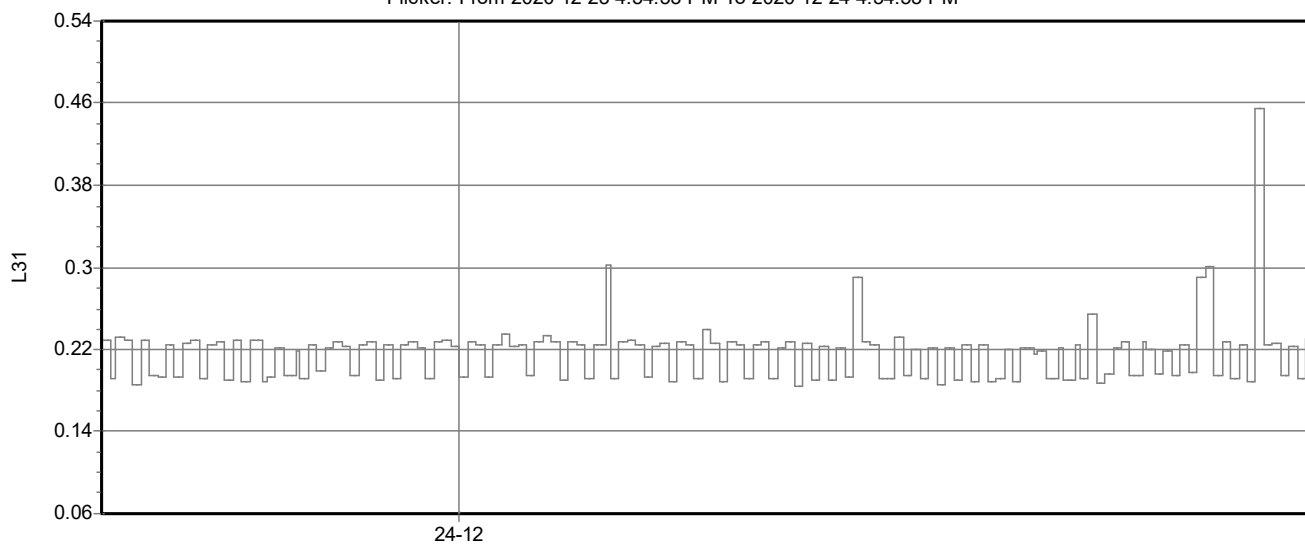
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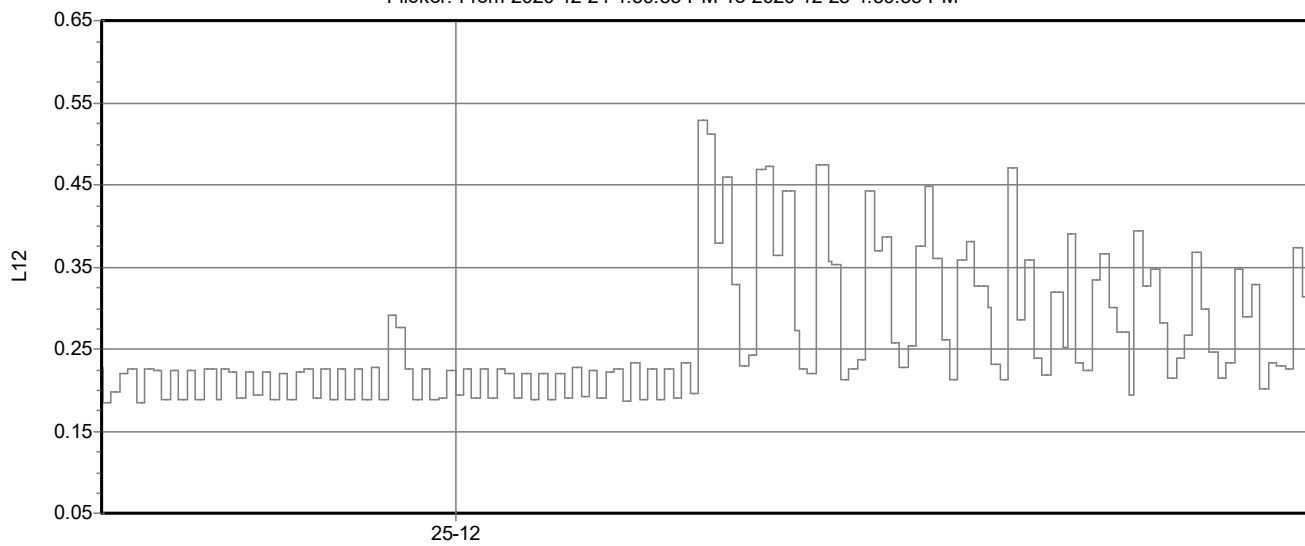
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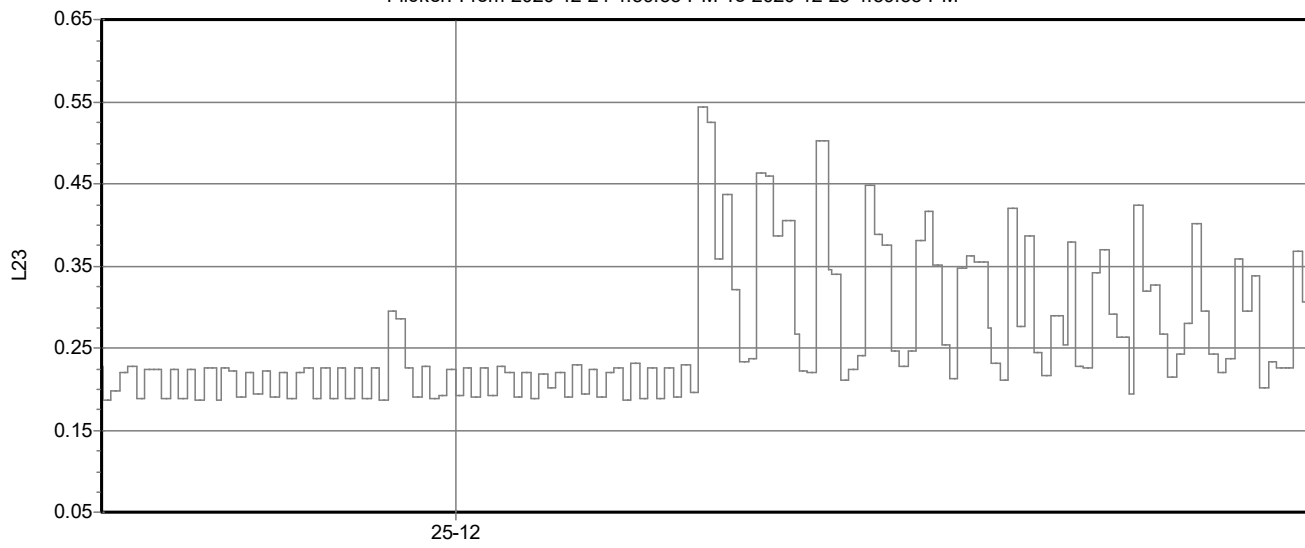
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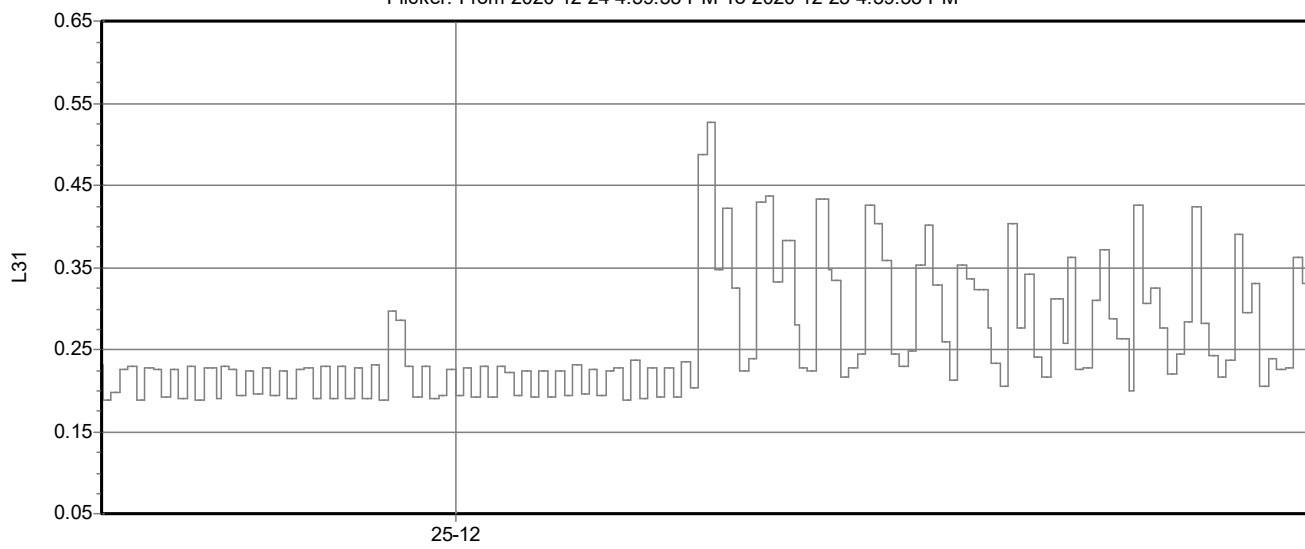
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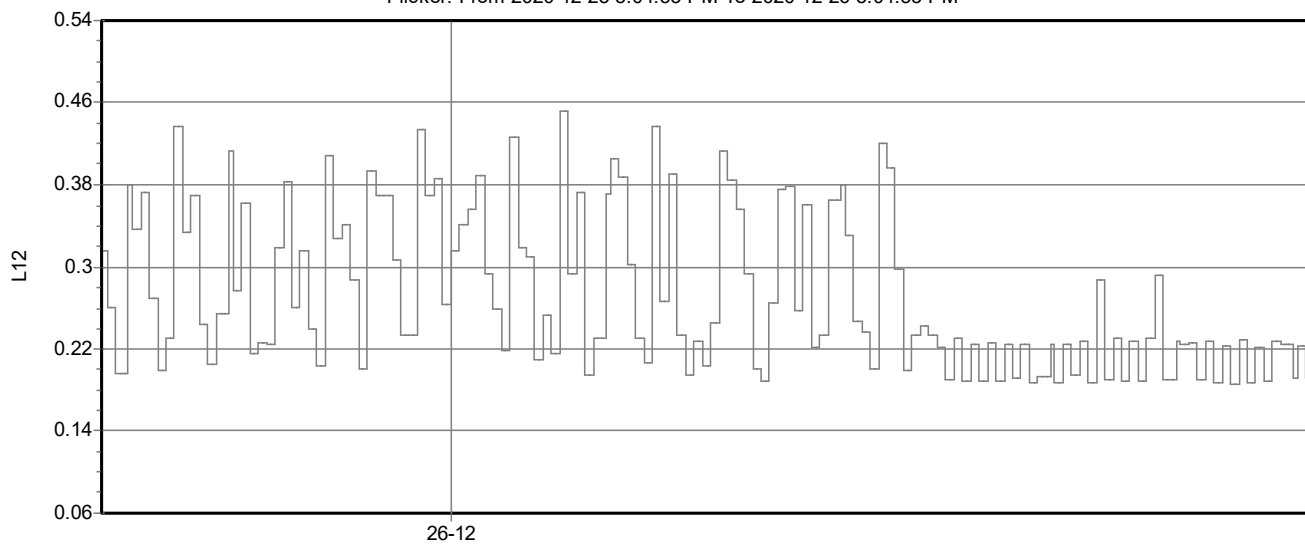
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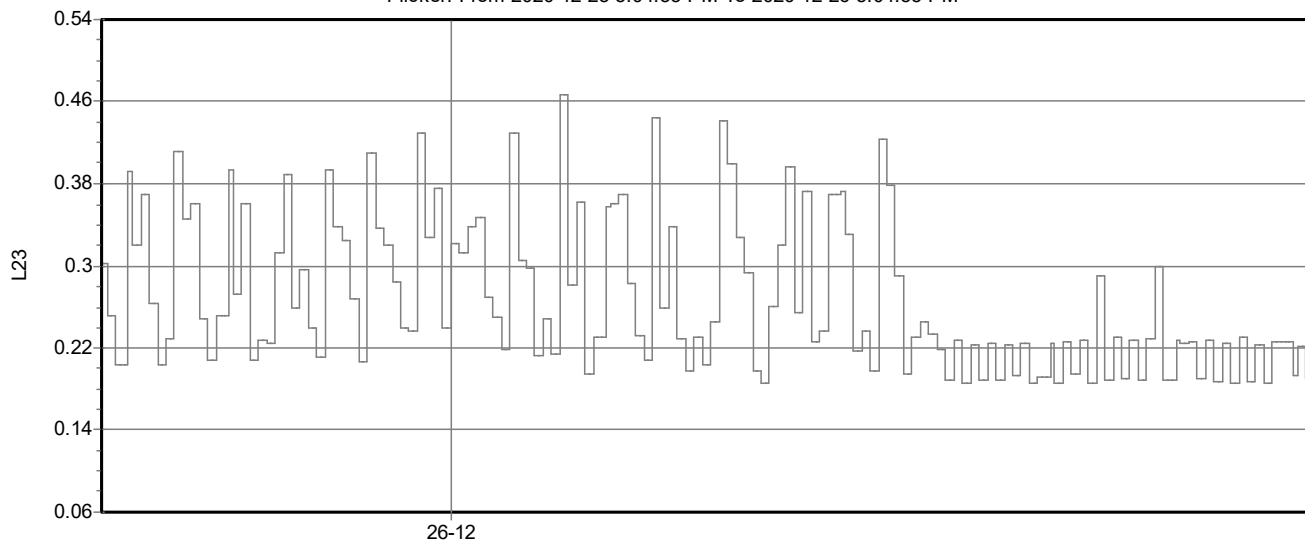
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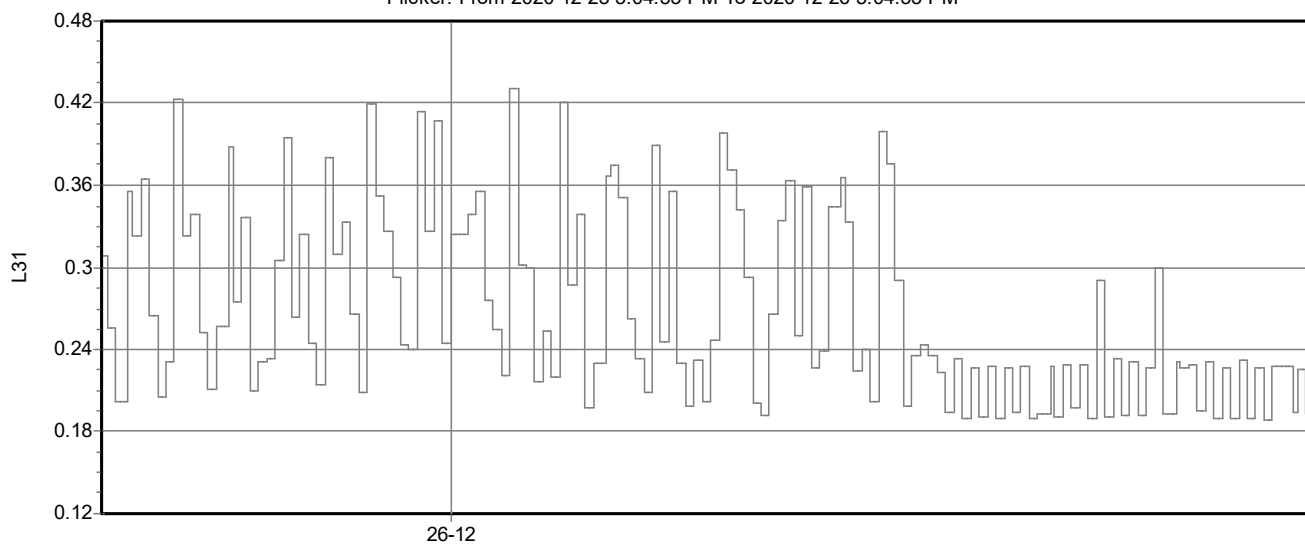
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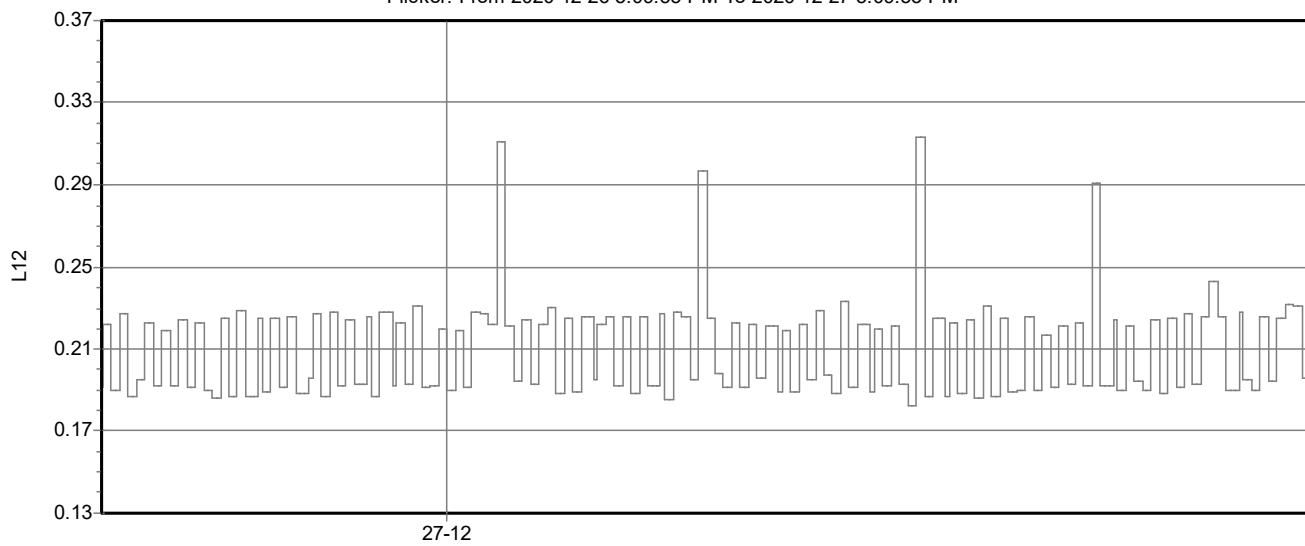
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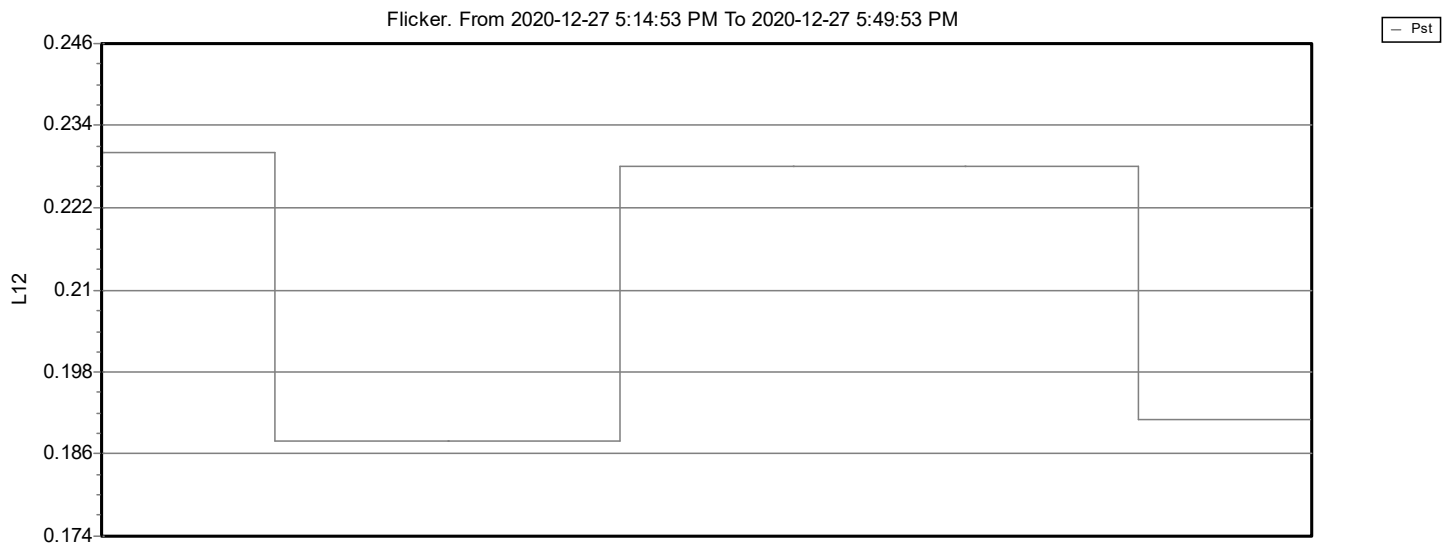
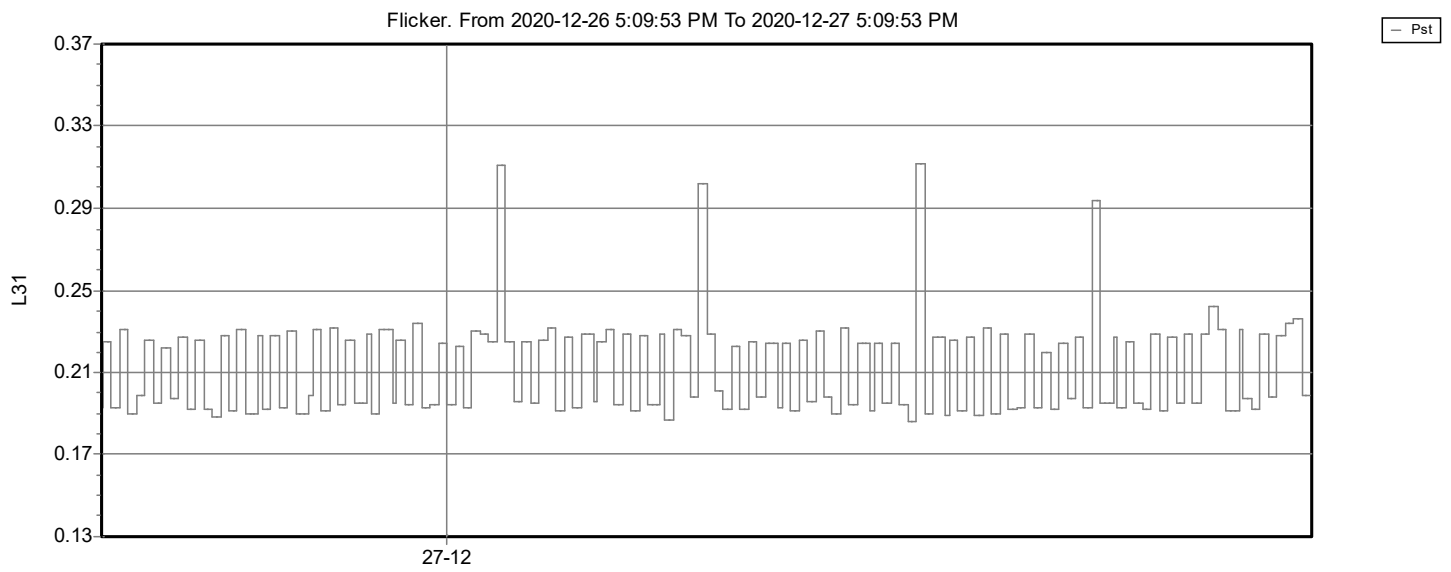
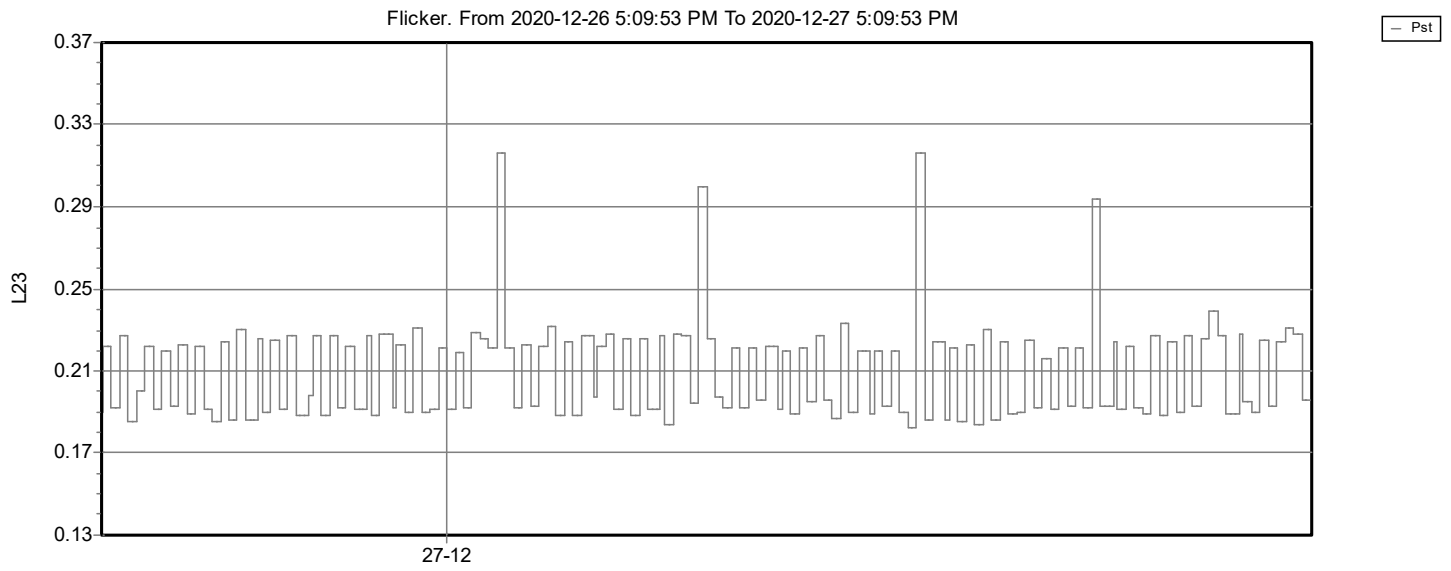


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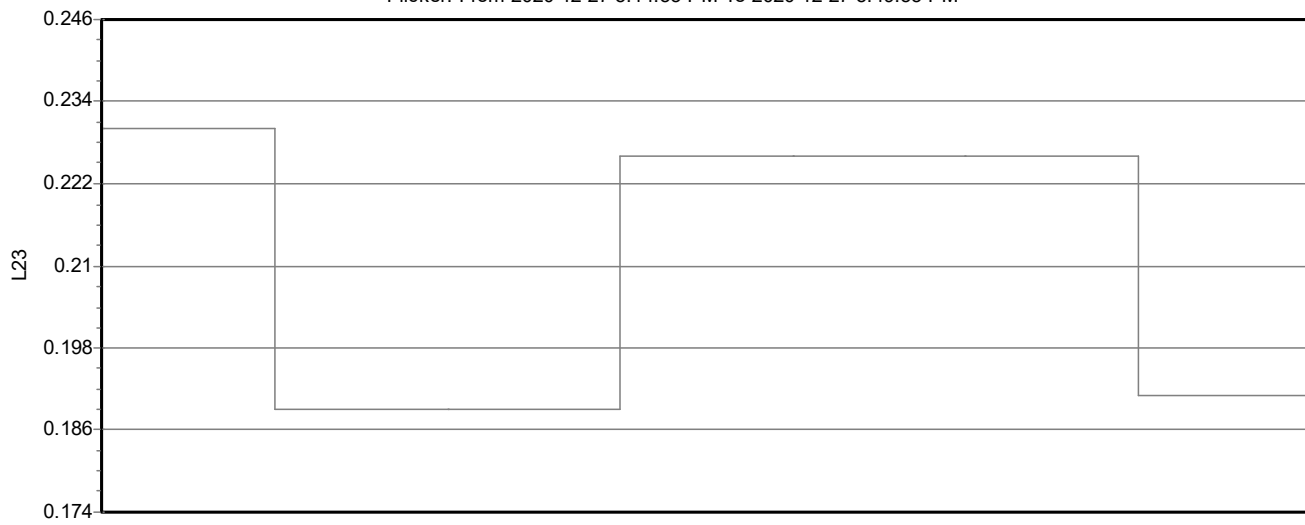


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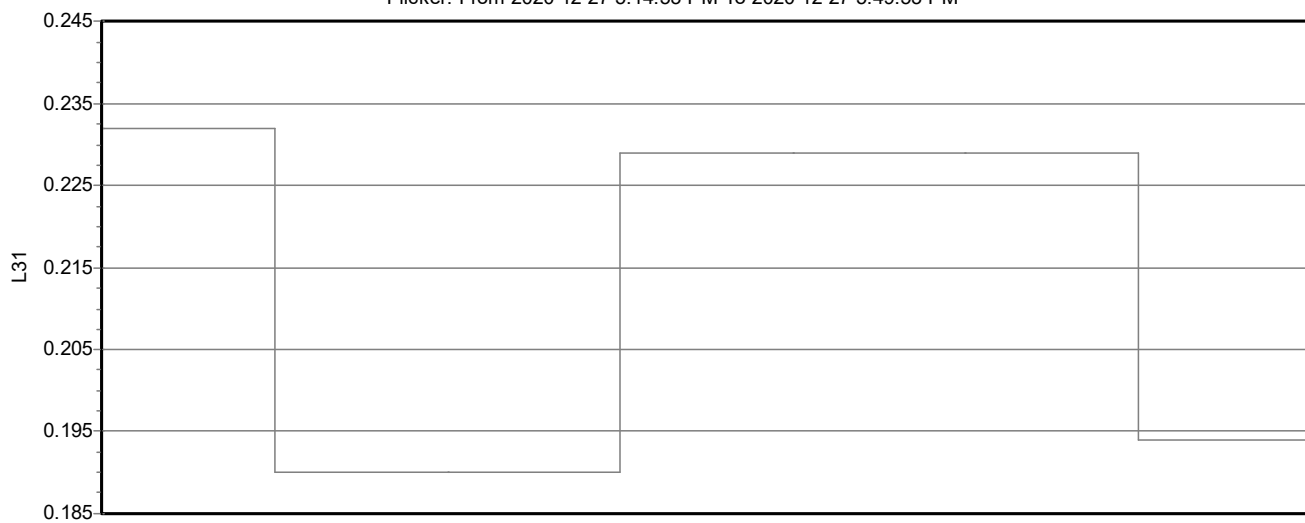




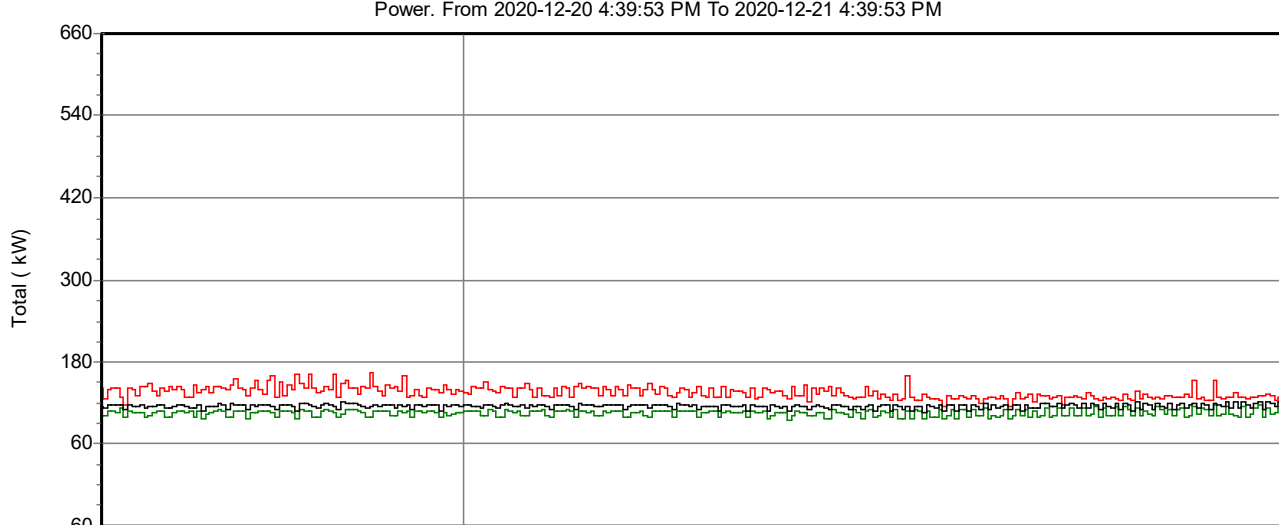
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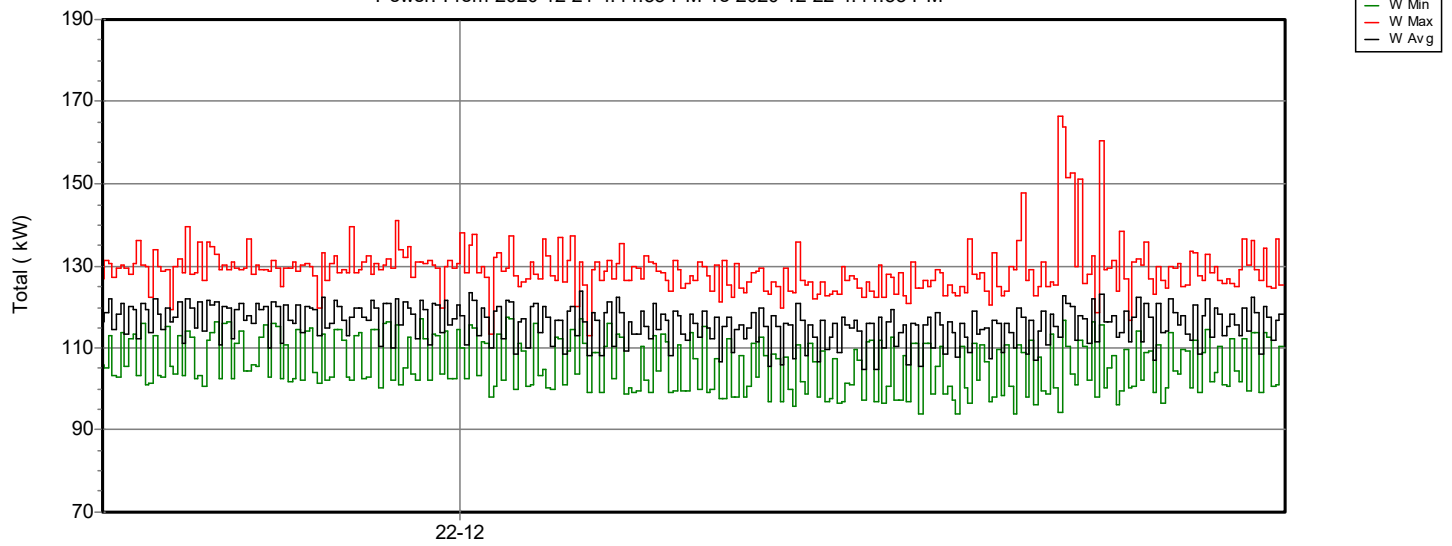
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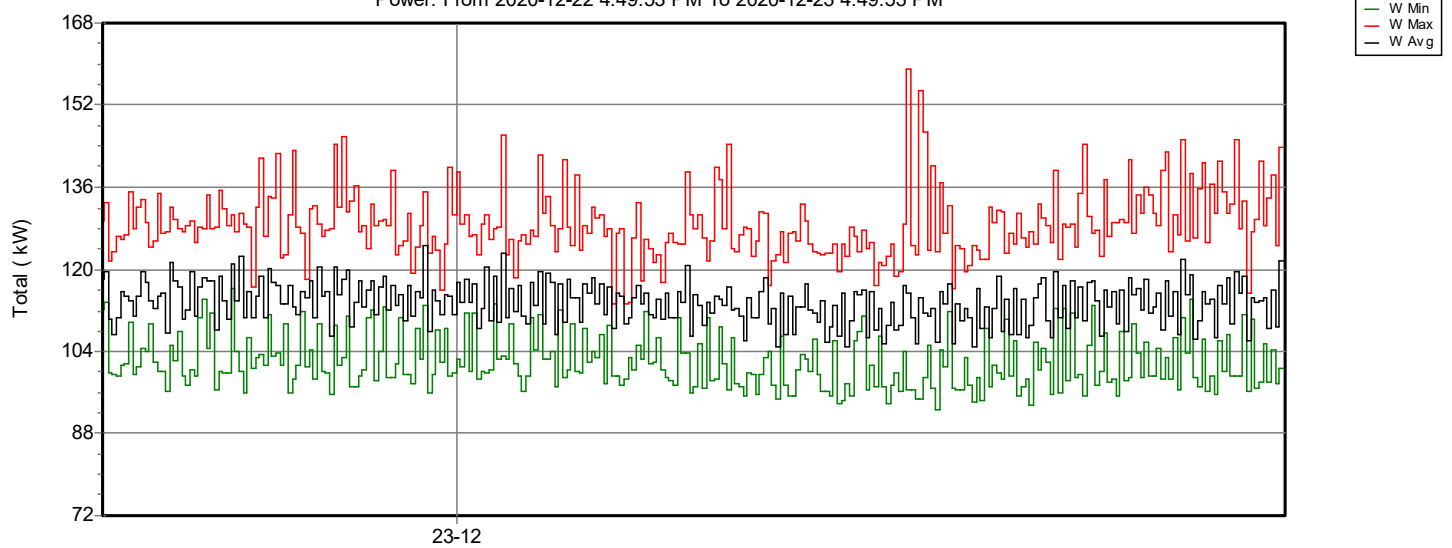
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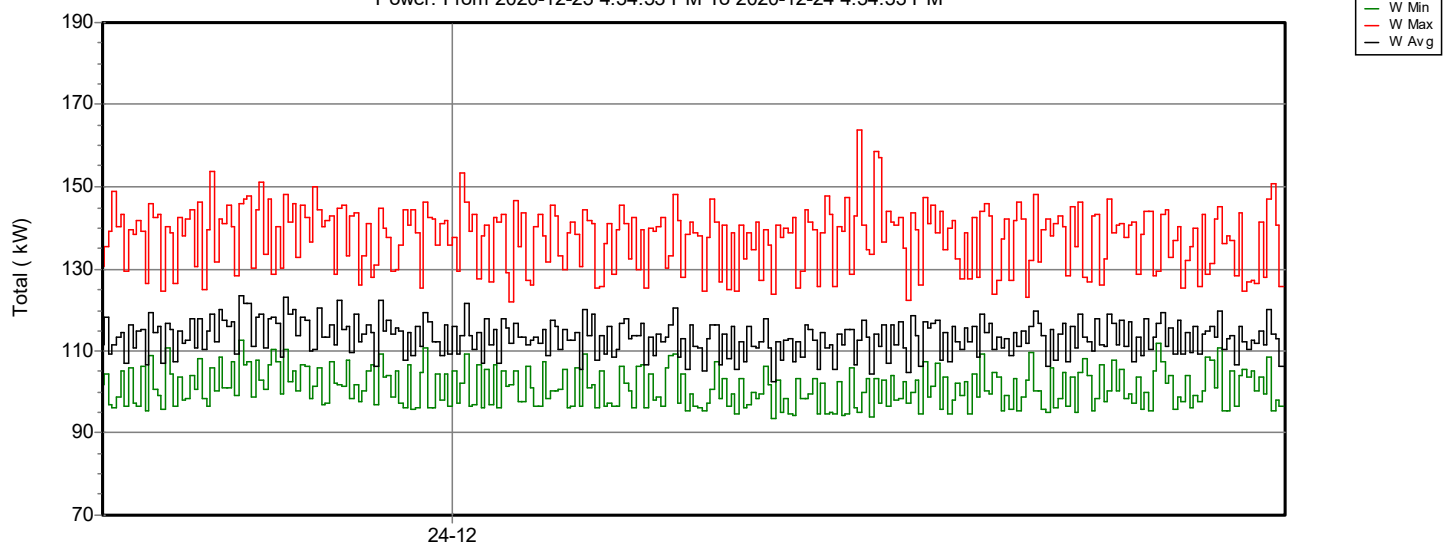
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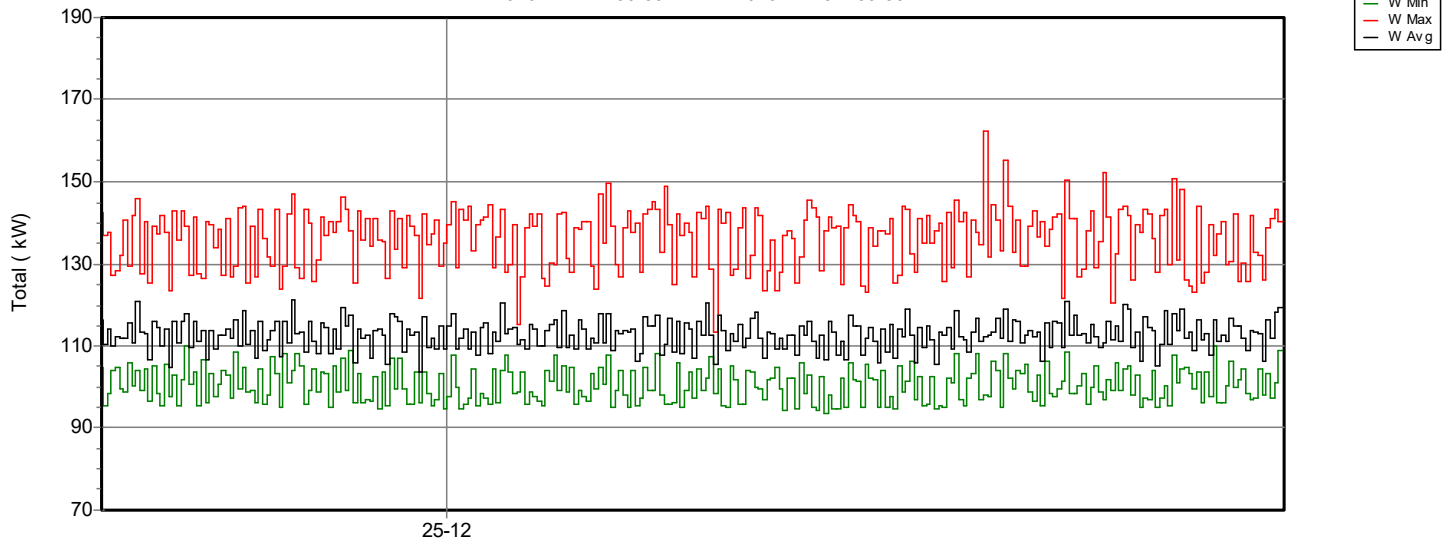
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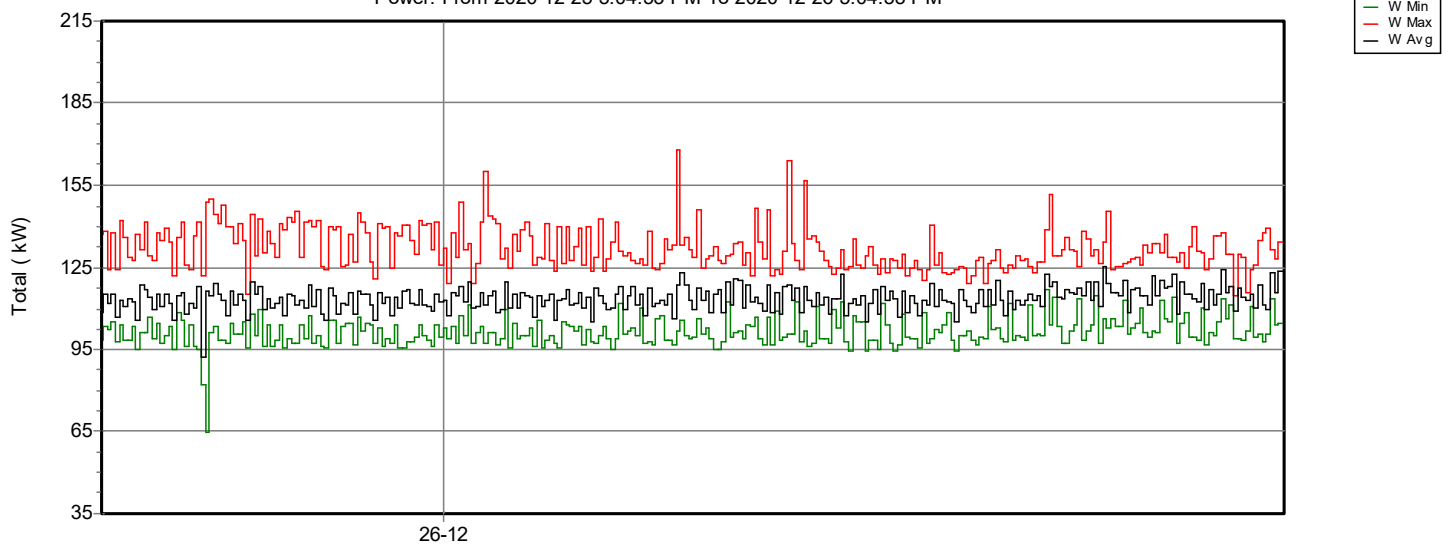
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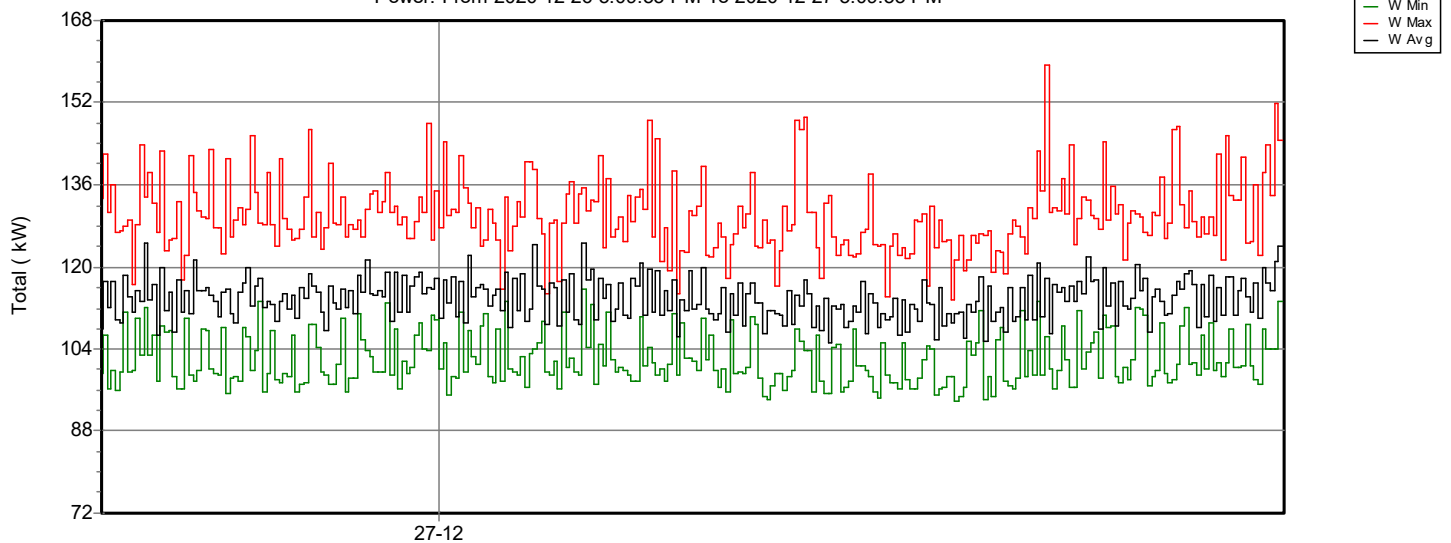
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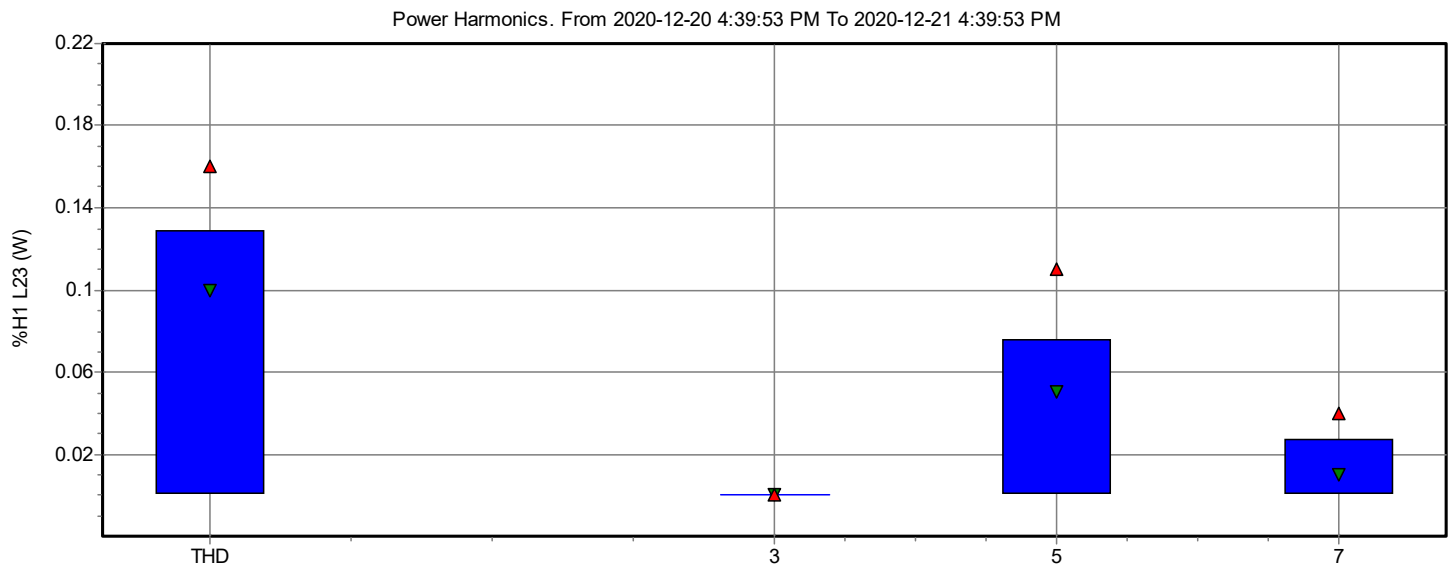
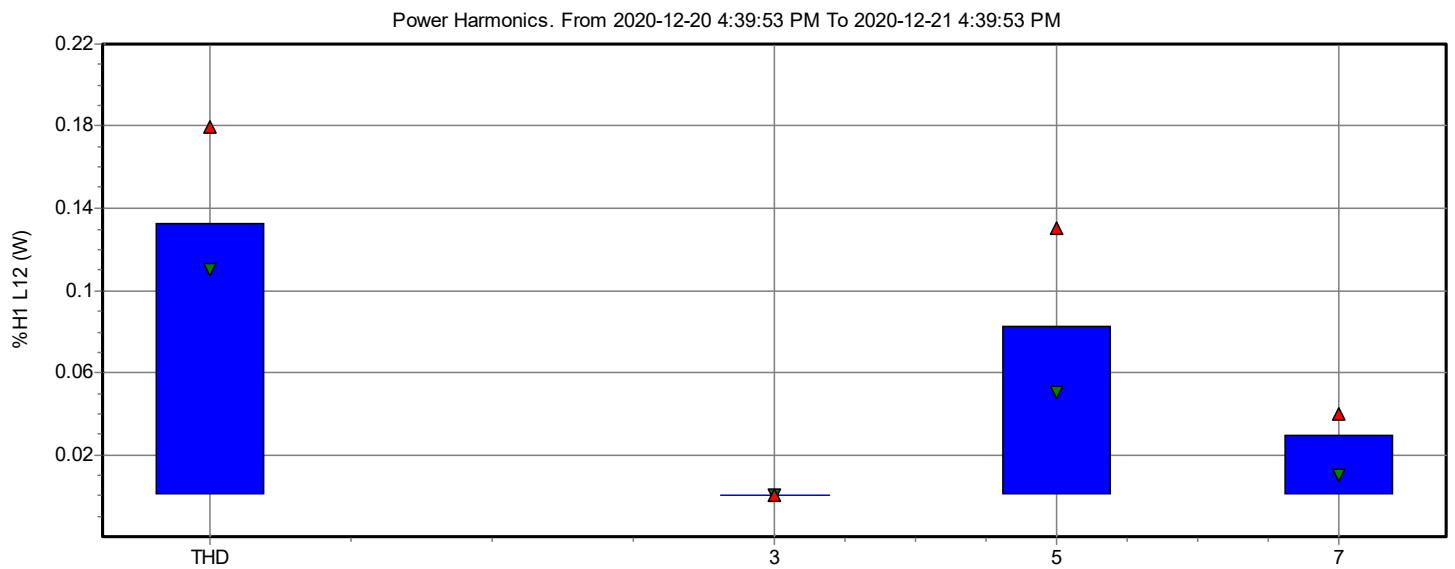
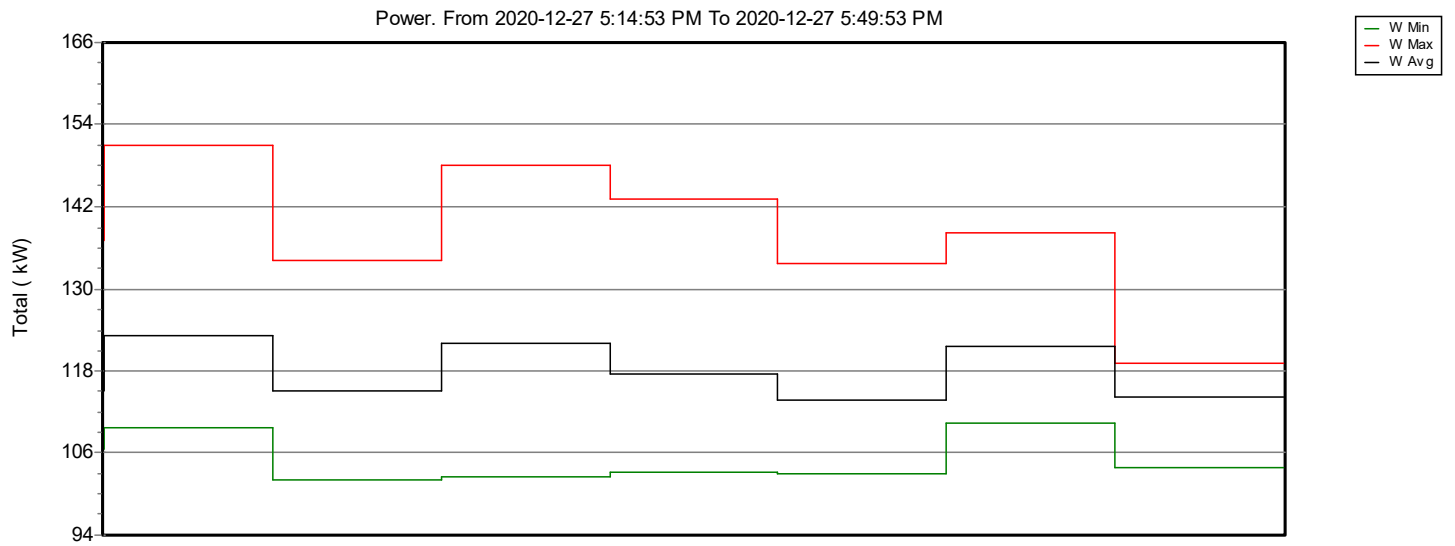


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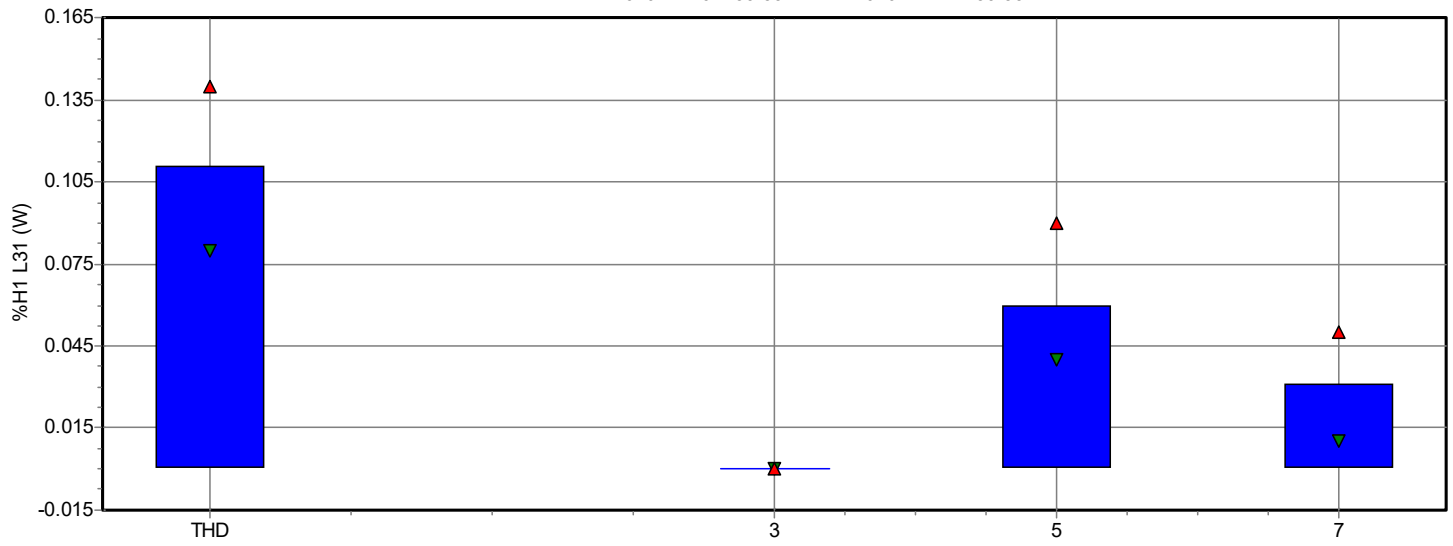


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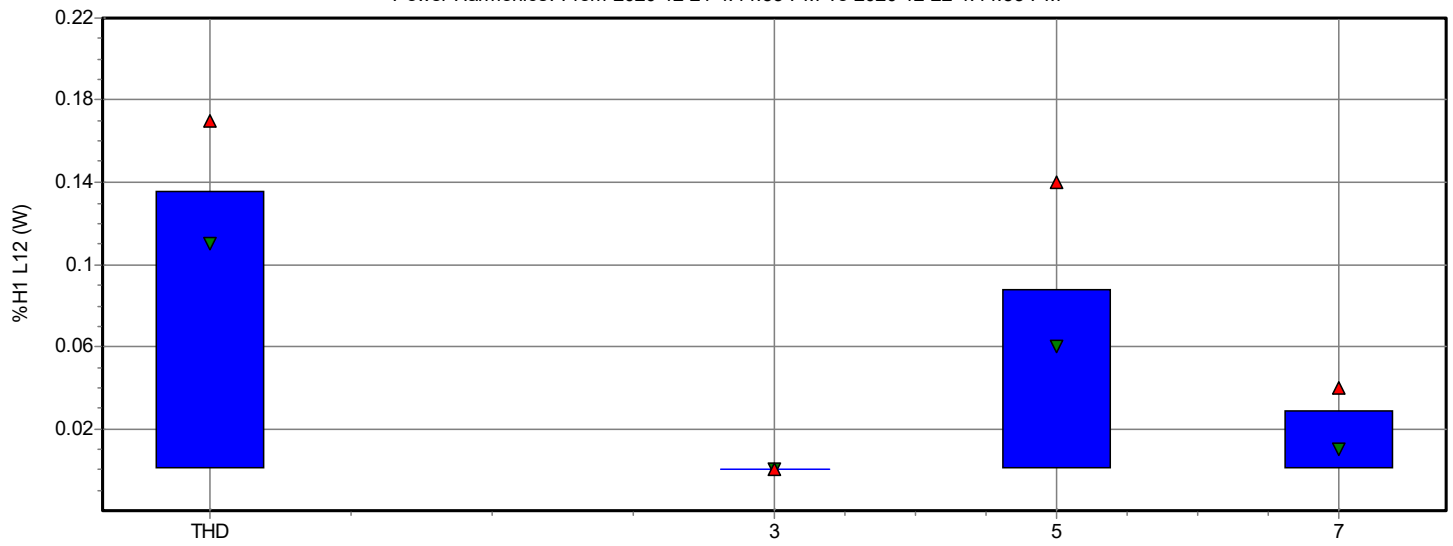




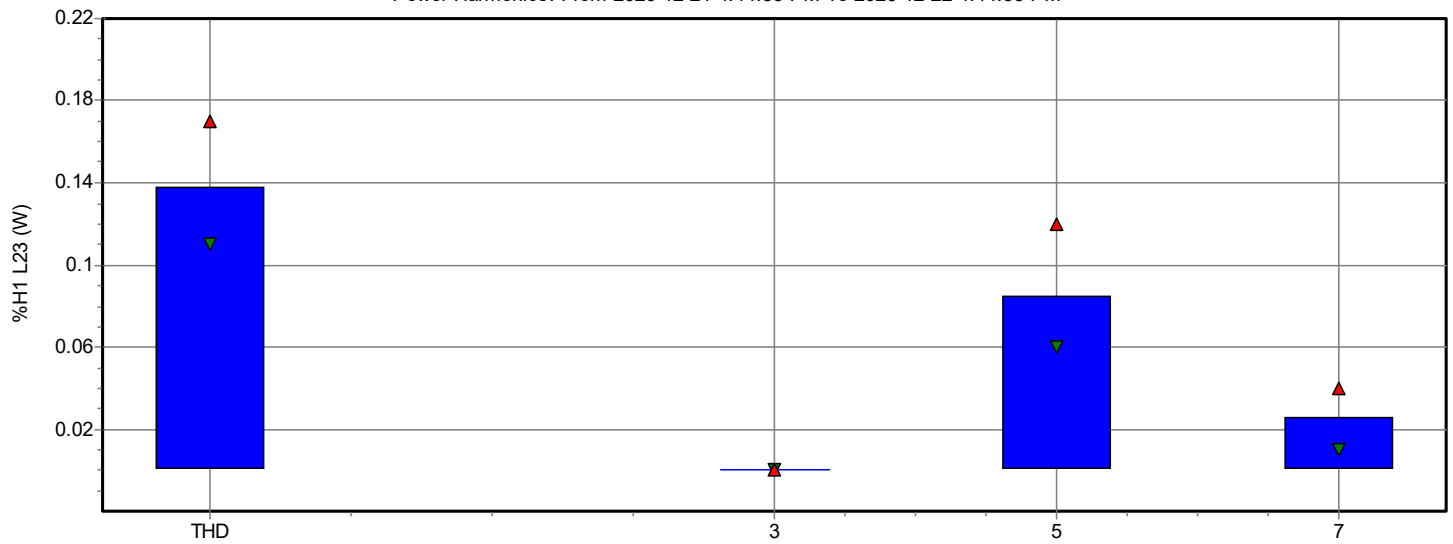
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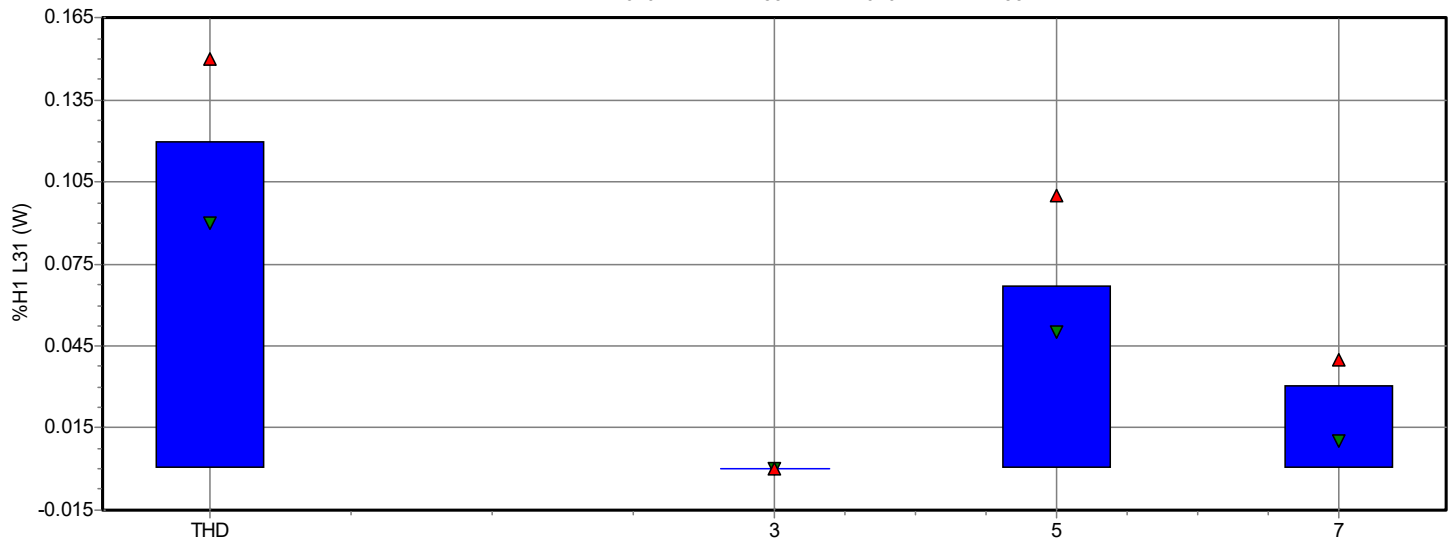
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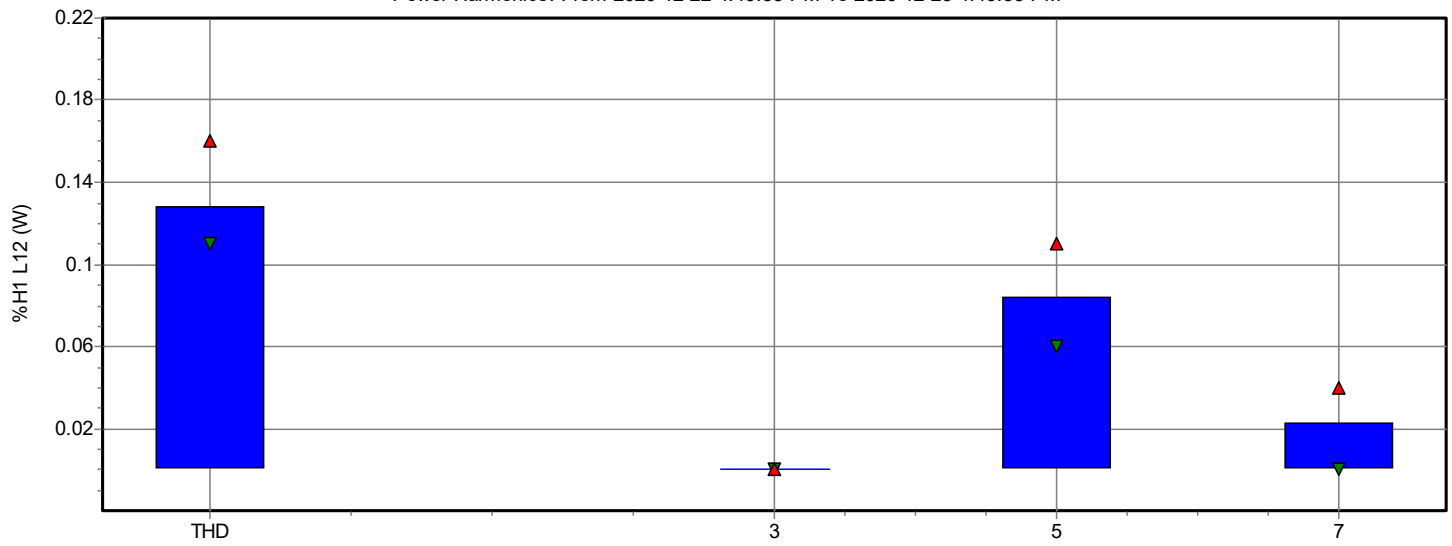
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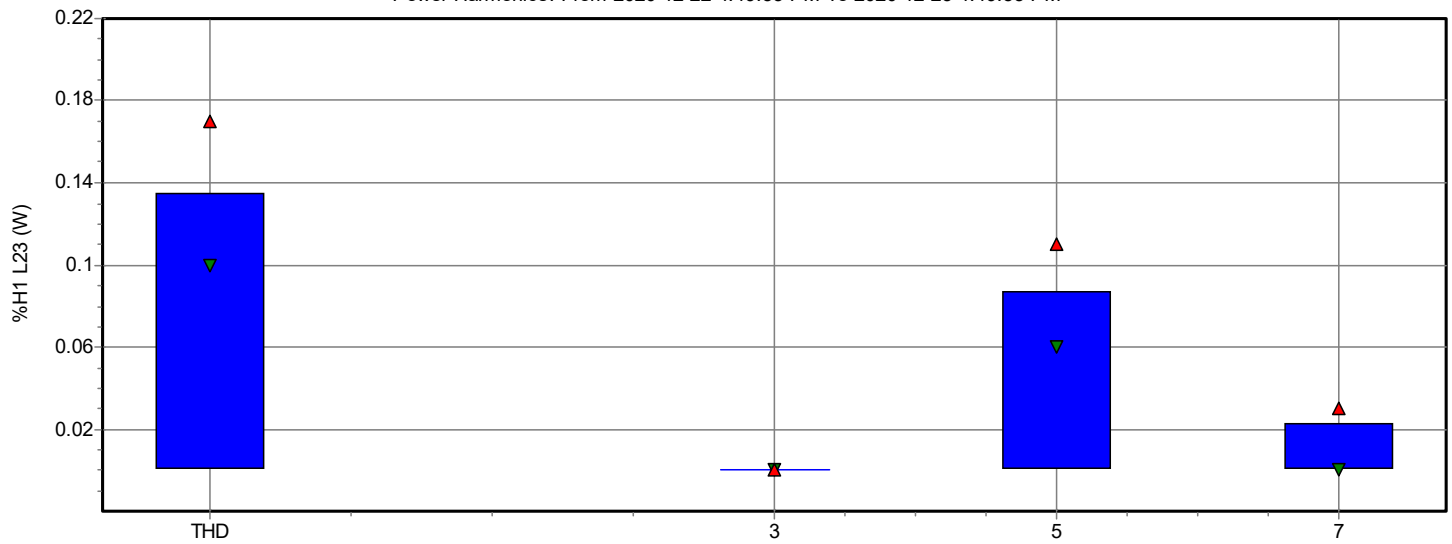
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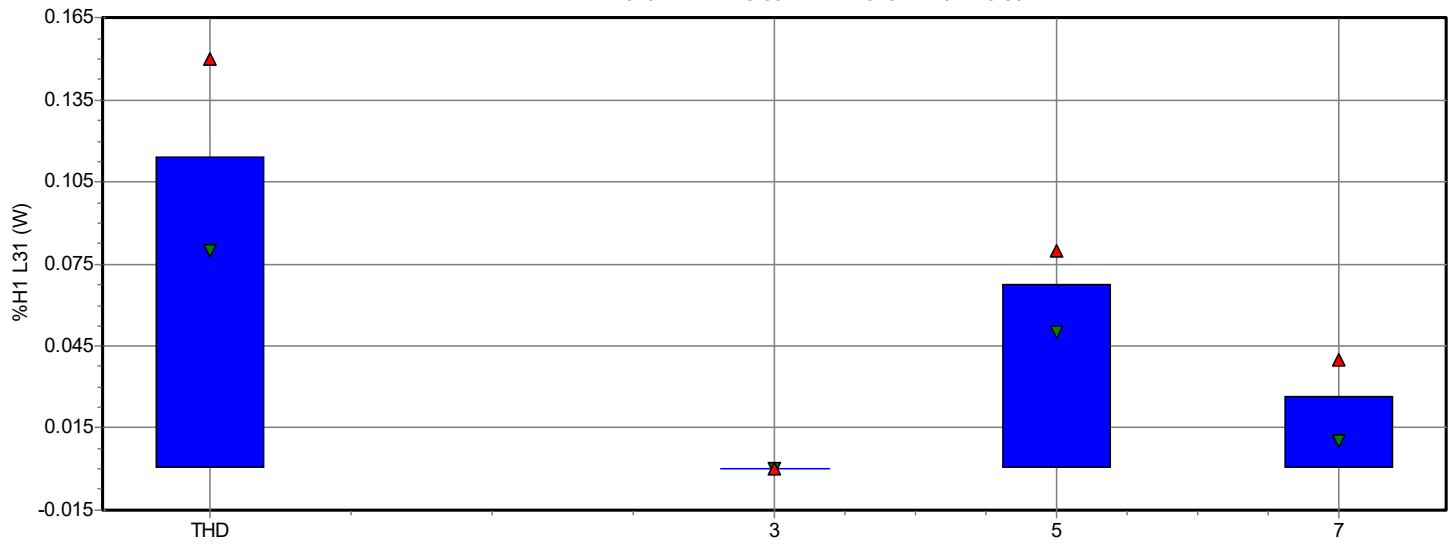
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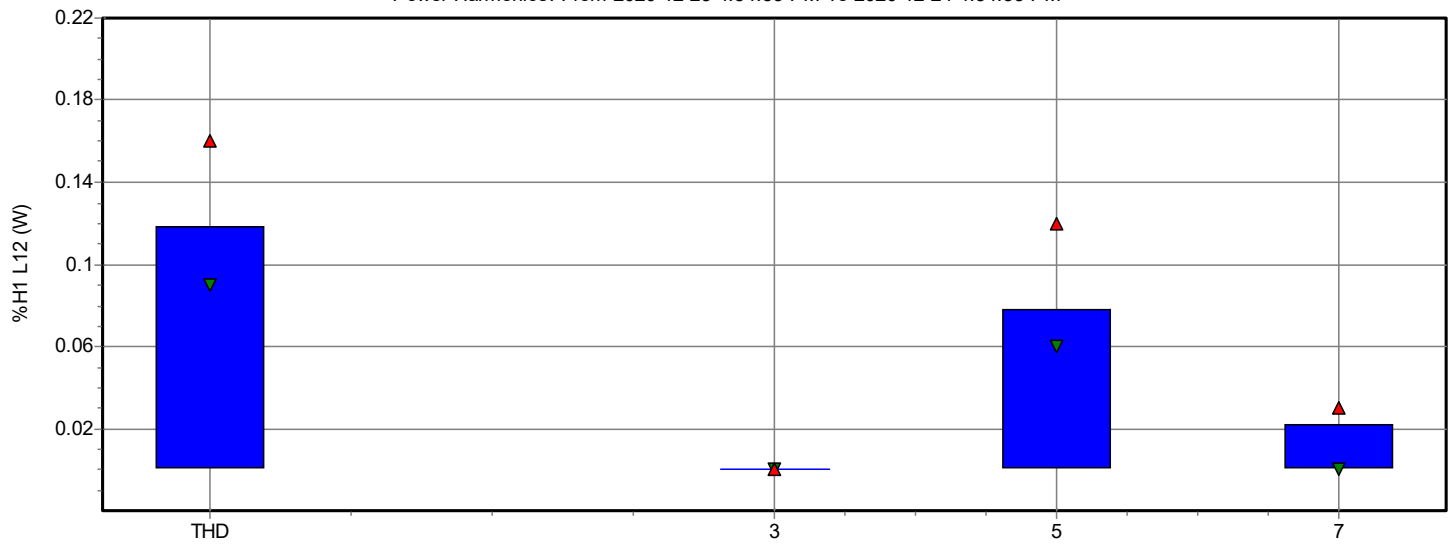
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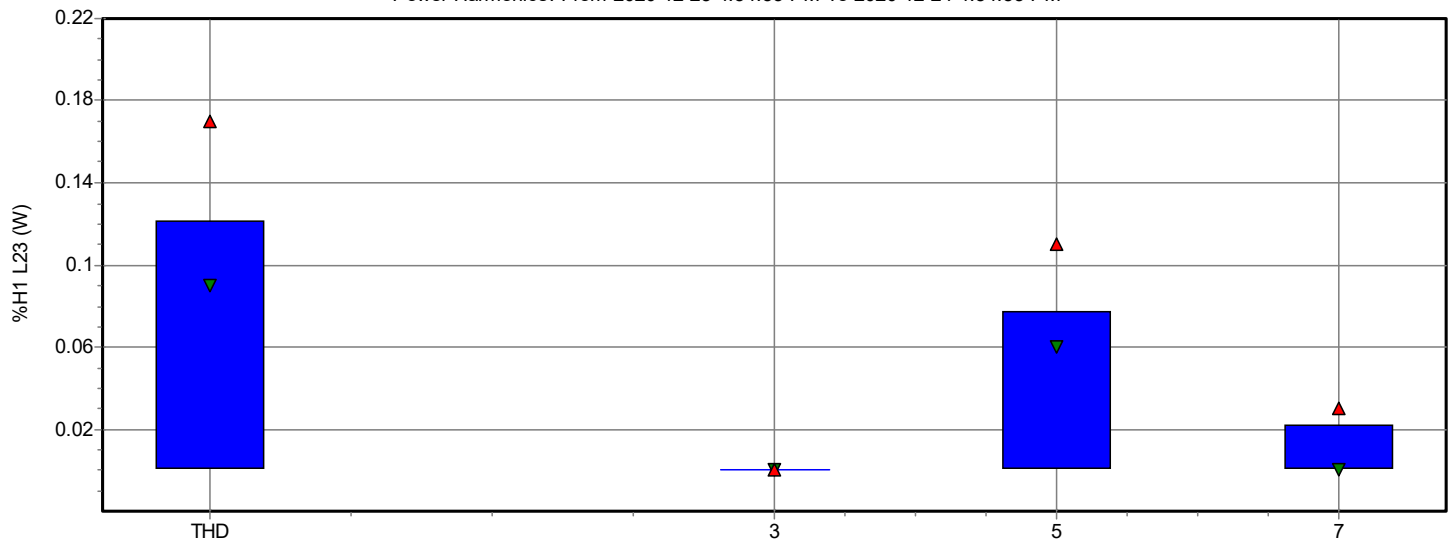
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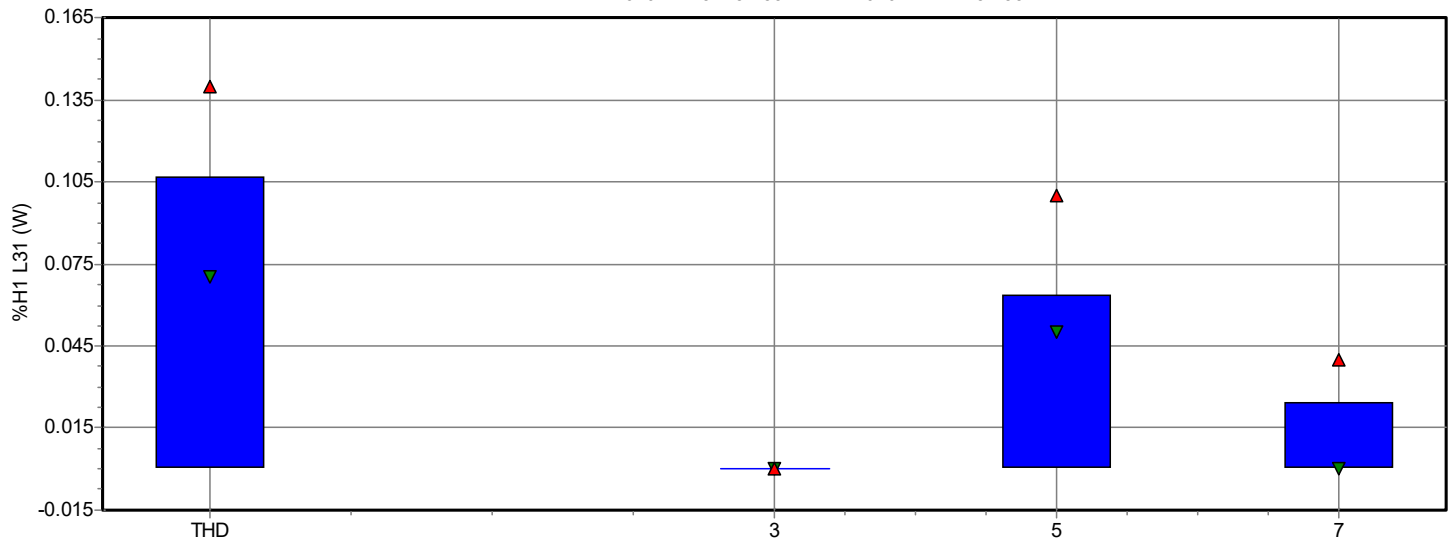
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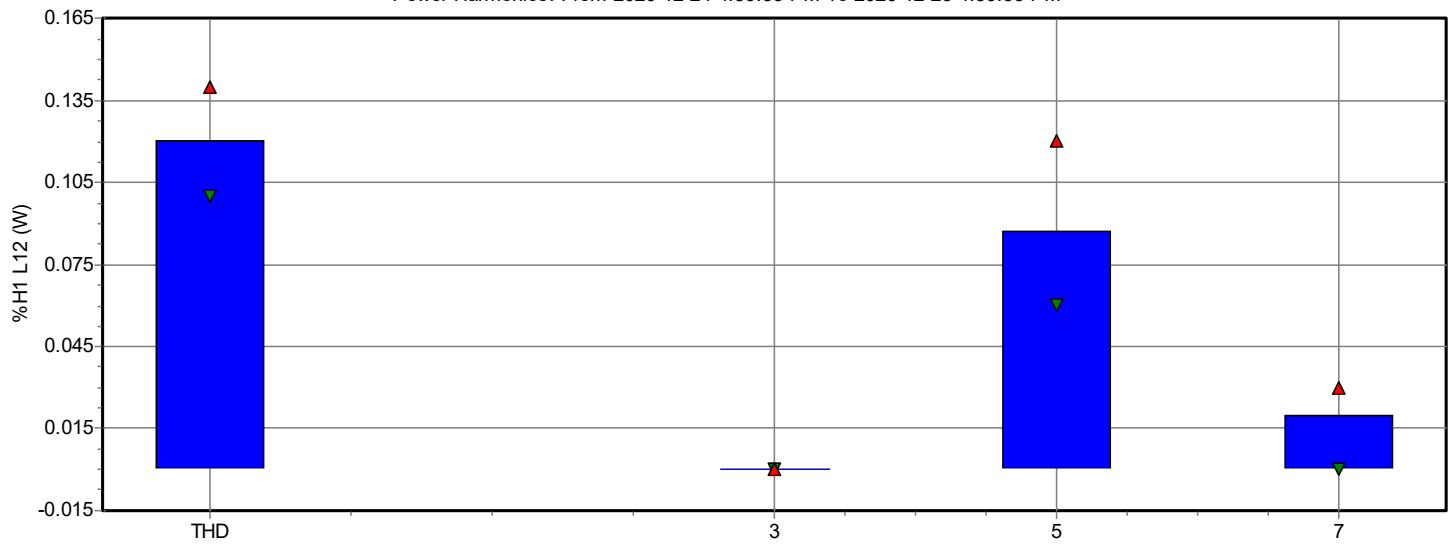
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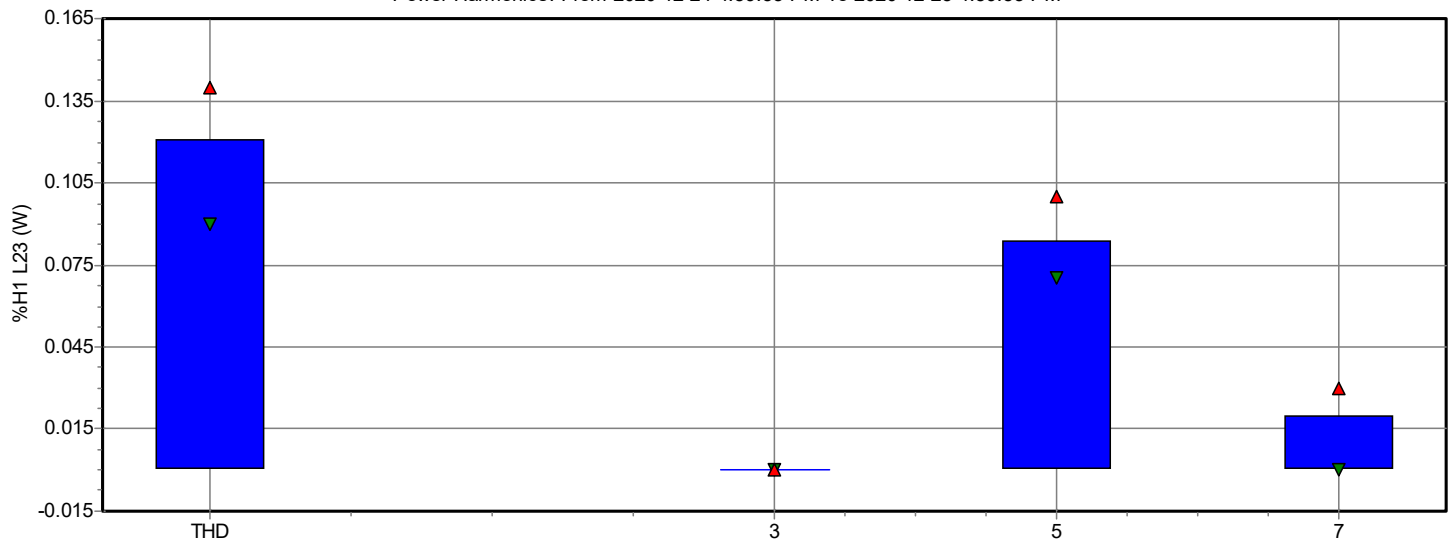
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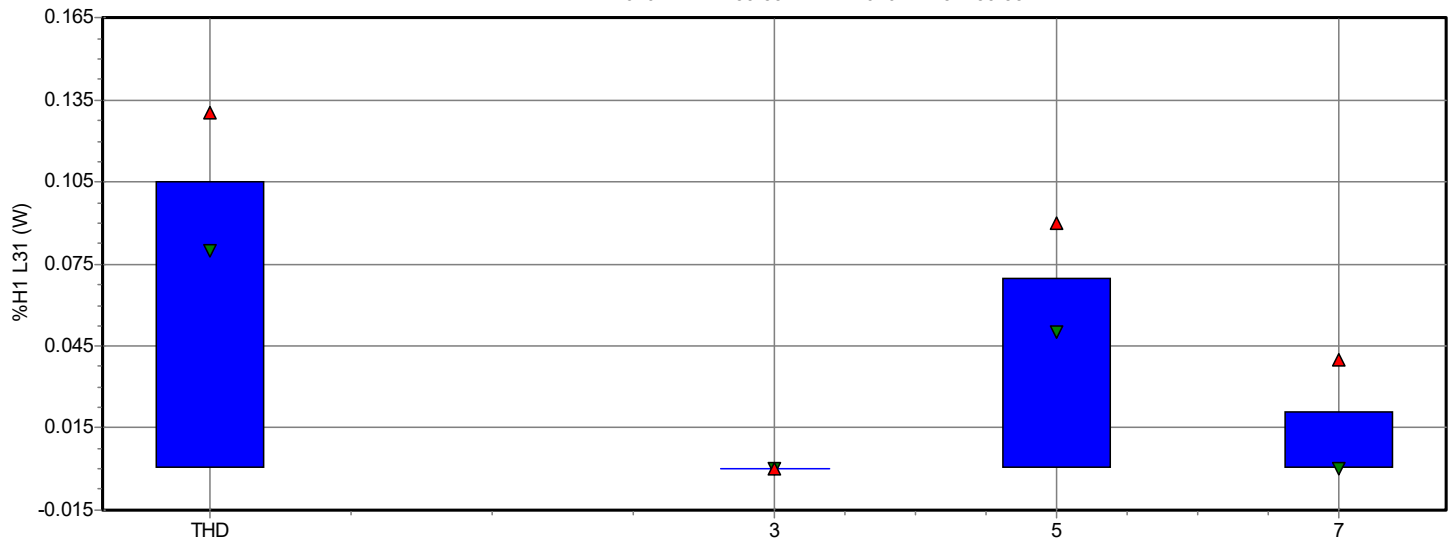
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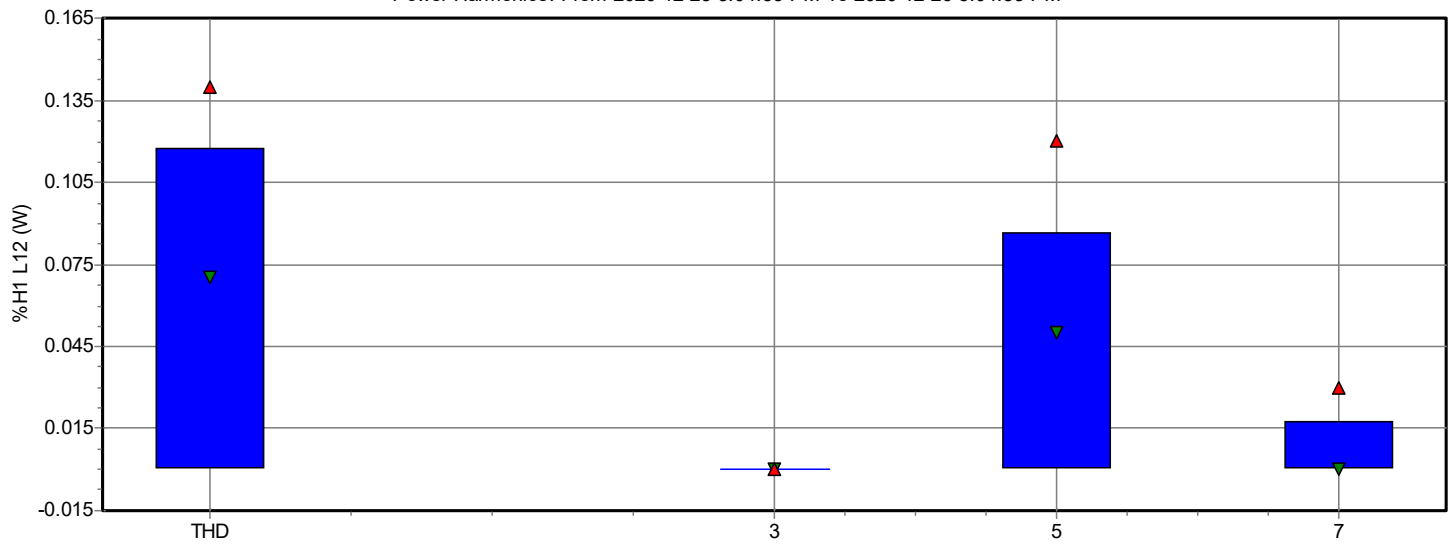
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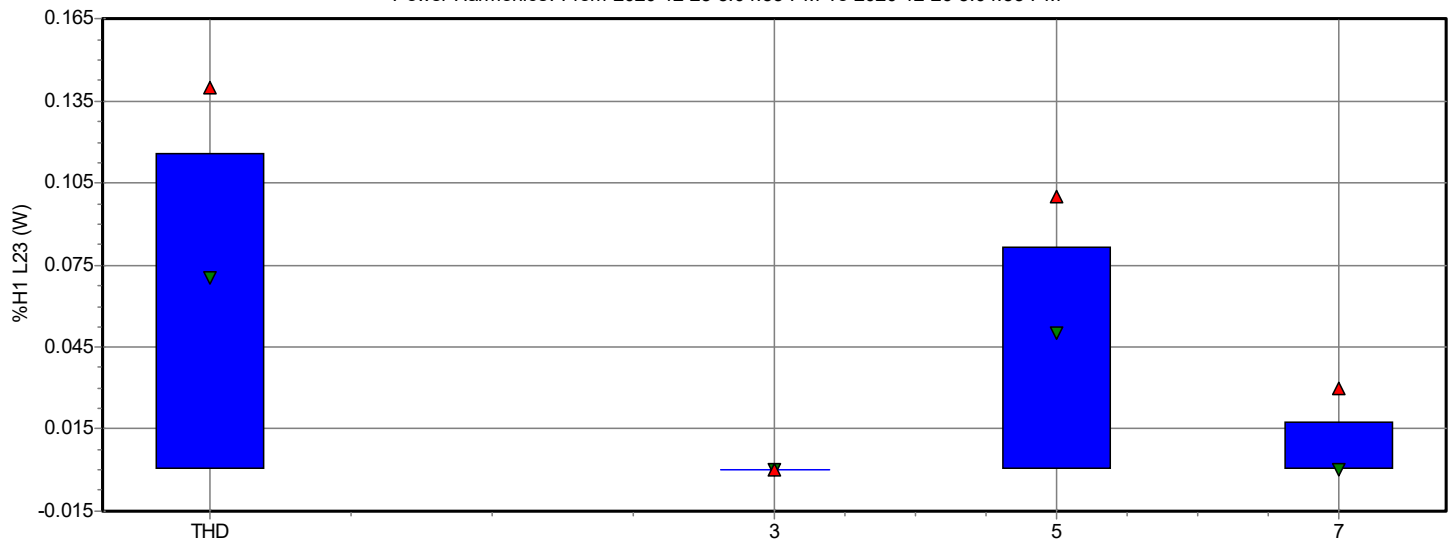
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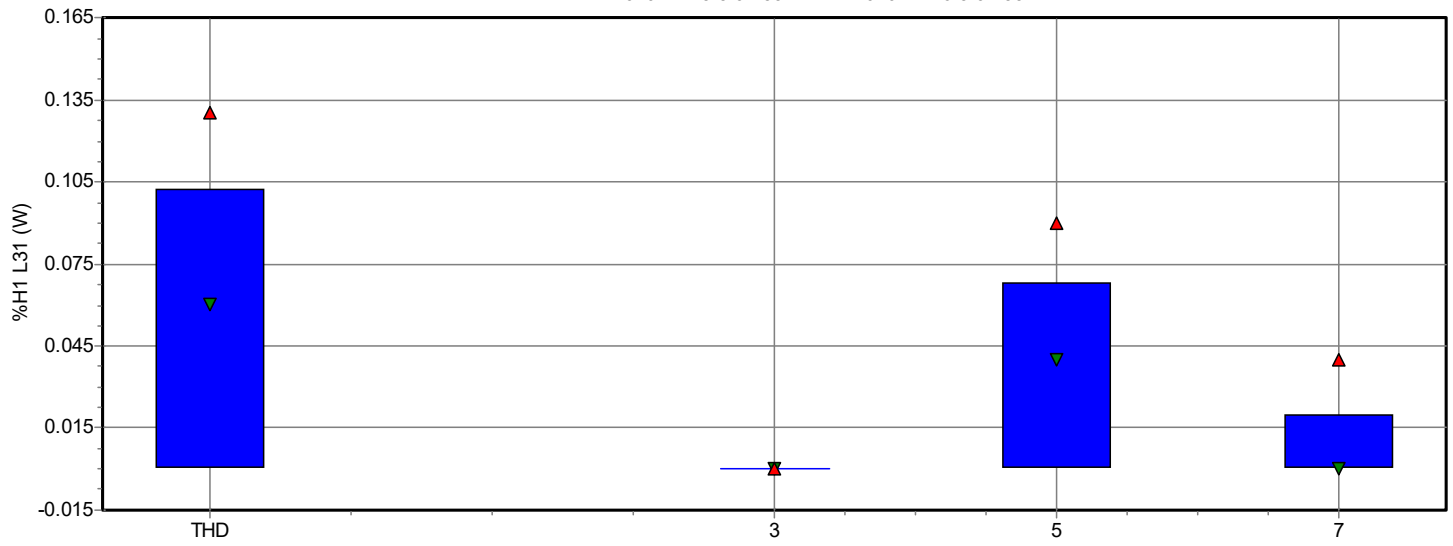
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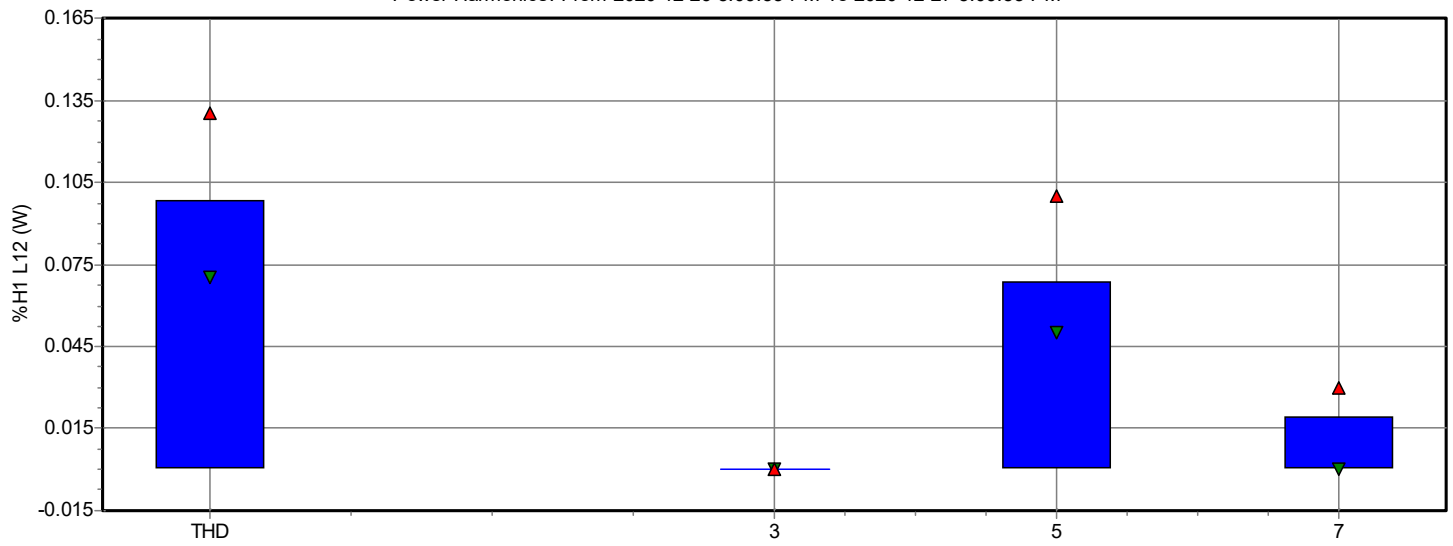
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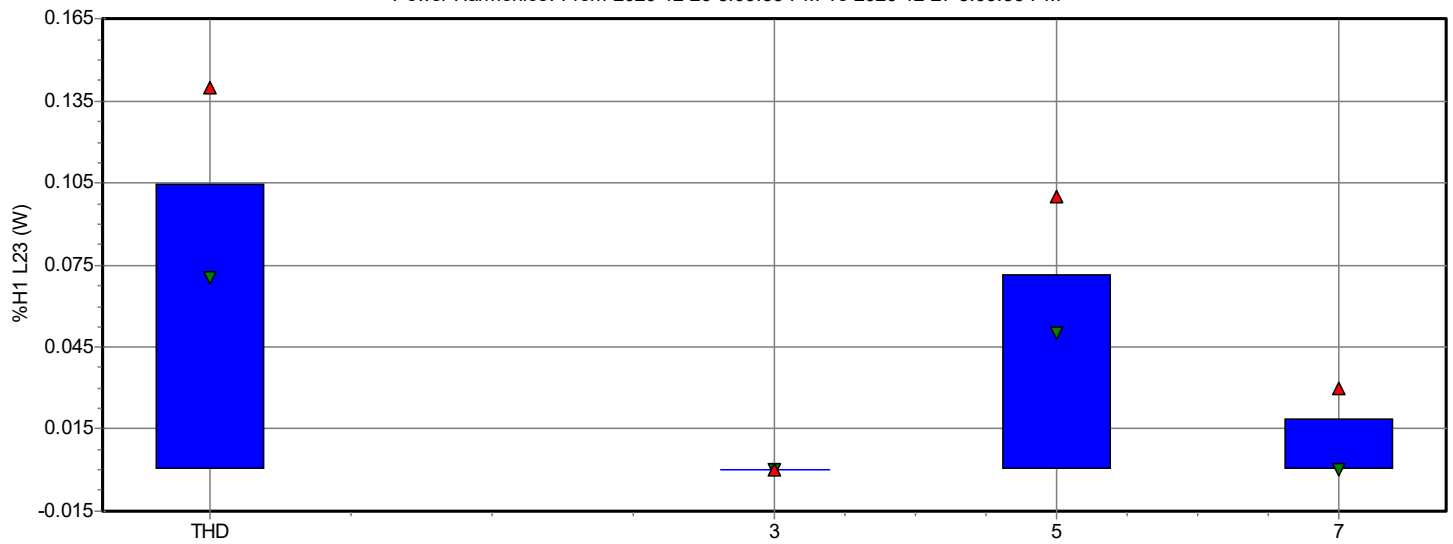
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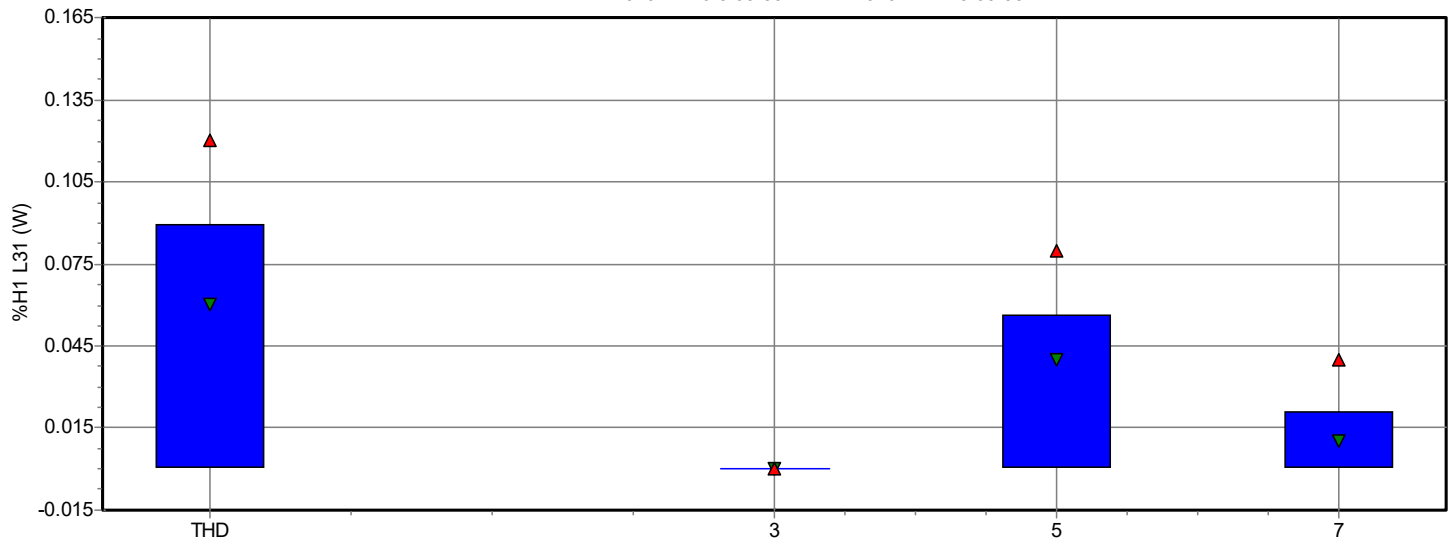
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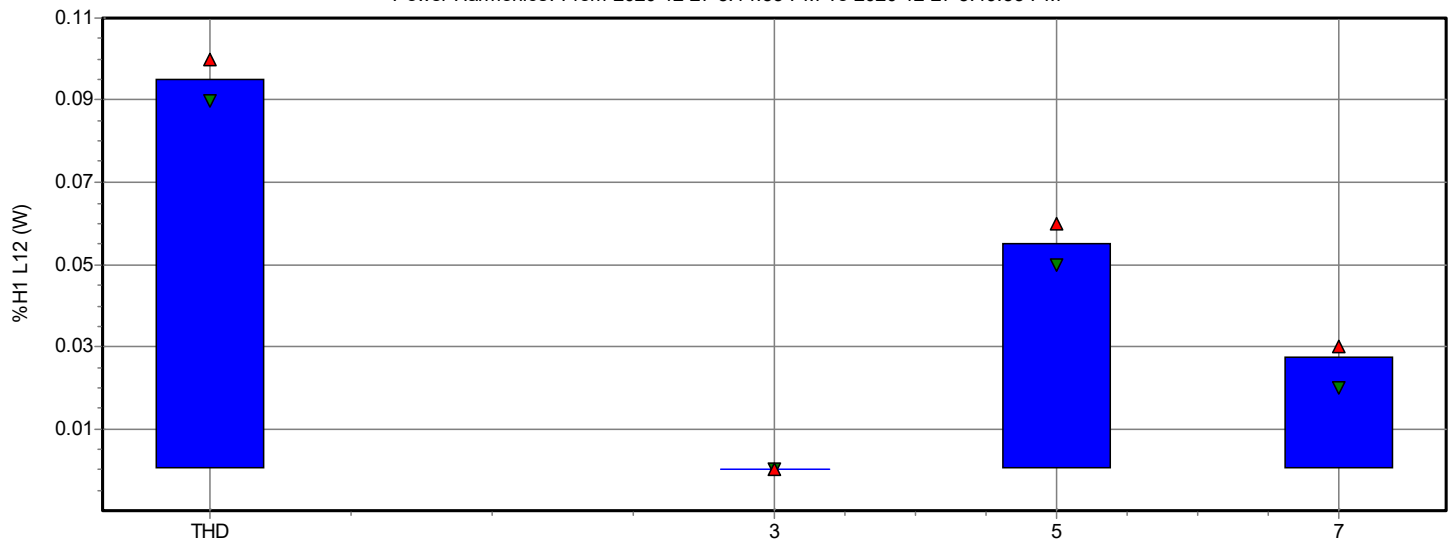
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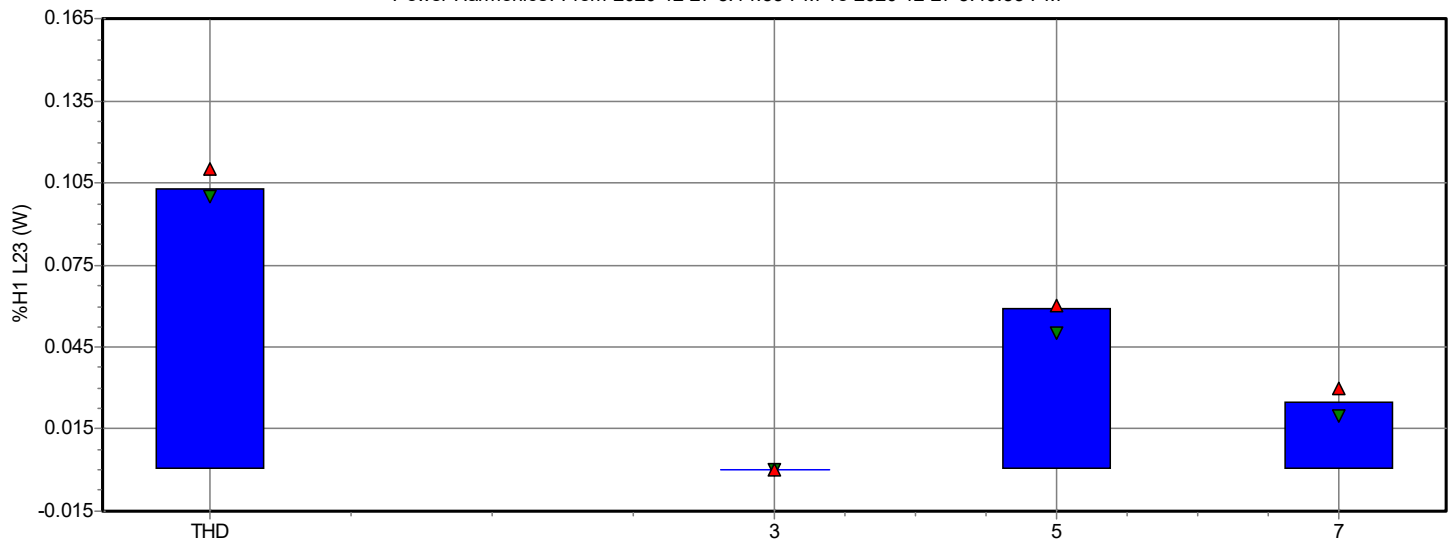
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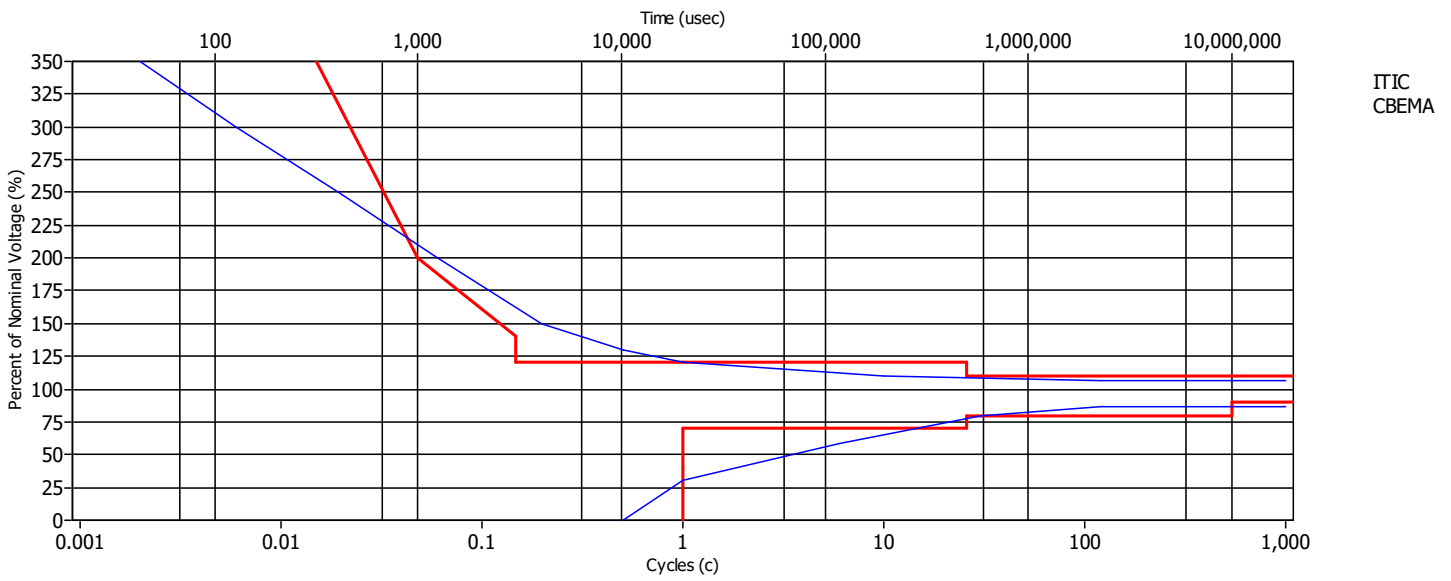
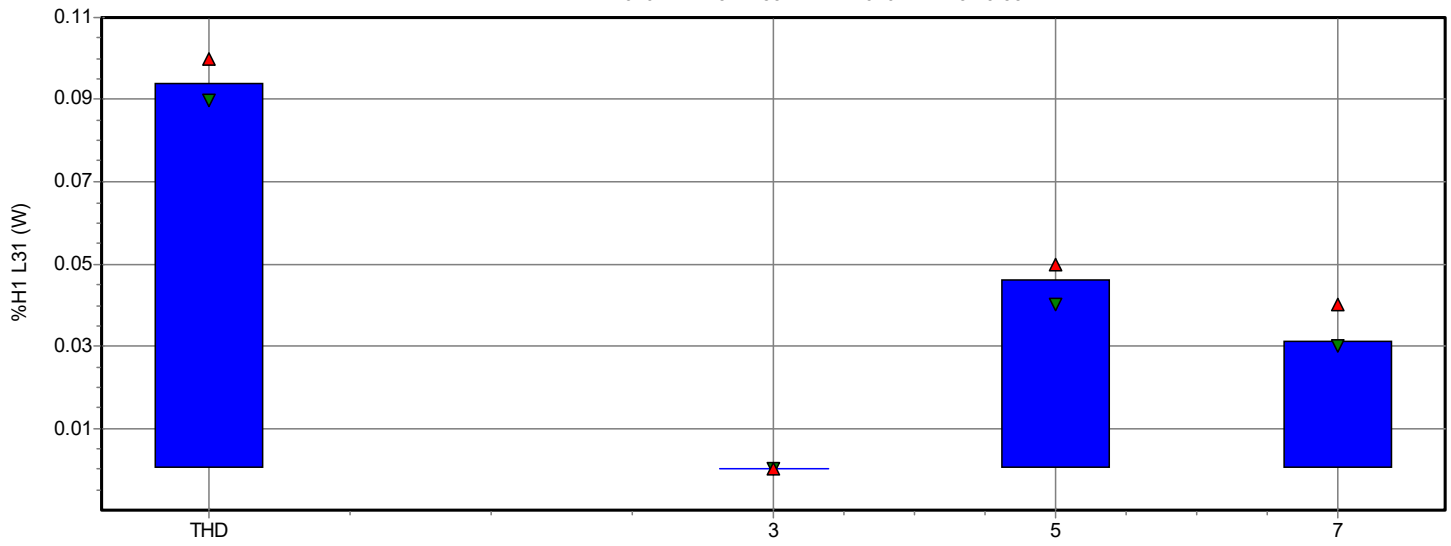
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Power Harmonics. From 2020-12-27 5:14:53 PM To 2020-12-27 5:49:53 PM



Power Harmonics. From 2020-12-27 5:14:53 PM To 2020-12-27 5:49:53 PM



200ms Period Voltage - L1N - Average

