EM235/PM335/PM175 PRO

IEEE 519

Power Quality Recorder

Application Note

BG0675 Rev. A1

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Chapter 1 General

This application note outlines specific features provided by the EM235/PM335/PM175 PRO IEEE 519 compliant PQ recorder.

The accompanying PAS configuration and data acquisition software provides a user with a means for remote configuring the PQ recorder, retrieving and reporting IEEE 519 compliance statistics data.

See Chapter 2 Configuring the IEEE 519 PQ Recorder on how to select and configure the EM235/PM335/PM175 PRO IEEE 519 PQ recorder to get IEEE 519/IEC 61000-4-30 compliant measurements and statistics reports.

1.1 Features

The IEEE 519 PQ recorder provides a user with accurate voltage and current harmonics measurements and statistical reports compliant with the IEEE 519 standard.

The IEEE 519 PQ recorder features:

- IEC 61000-4-30 class A performance compliance
- Monitoring, detecting and recording voltage and current harmonics incidents according to the requirements of IEEE 519
- Collecting statistical information upon IEEE 519 indices including non-compliant time, percentiles, maximum values over a period of time
- Printable IEEE 519 compliance reports
- Configurable voltage and current harmonics indices including weekly/daily compliance limits and percentiles according to the requirements of IEEE 519

Reference documents:

1) IEEE 519 IEEE Standard for Harmonic Control in Electric Power Systems, 2022
2) IEC 61000-4-30 Electromagnetic compatibility (EMC) – Part 4-30: Testing and measurement techniques – Power quality measurements, Edition 3.1, 2021-03.
3) IEC 61000-4-7 Electromagnetic compatibility (EMC) – Part 4-7: Testing and measurement techniques – General guide on harmonics and interharmonics measurements and instrumentation, Edition 2.1, 2009-10.

1.2 IEEE 519 Background, Measurement and Evaluation Techniques

The standard IEEE 519 is to be used for guidance in the design of power systems with nonlinear loads.

This standard defines voltage and current harmonic distortion limits to reduce the potential negative effects on user and system equipment. The limits set are for steady state operating conditions.

The voltage harmonic distortion limits are defined for different nominal voltage levels.

The current harmonic distortion limits are defined for different nominal voltage levels and different ratios between short-circuit current and maximum demand load current.

For the purposes of assessing harmonic levels for comparison with the limits in this document, any instrument used shall comply with the specifications of IEC 61000-4-7 and IEC 61000-4-30, Class A.

1.2.1 Very Short and Short Time Harmonics Measurement

This standard defines limits for very short and short harmonics measurements.

Very short time harmonic values are assessed over a 3-second interval based on an aggregation of 15 consecutive 12 (10) cycle windows for 60 (50) Hz power systems.

Short time harmonic values are assessed over a 10-minute interval based on an aggregation of 200 consecutive very short time values for a specific frequency component.

1.2.2 Statistics Evaluation

Very short and short time harmonic values shall be accumulated over periods of one day and one week, respectively. For very short time harmonic measurements, the 99th percentile value (i.e., the value that is exceeded for 1% of the measurement period) shall be calculated for each 24-hour period for comparison with the limits in par.1.2.3. For short time harmonic measurements, the 95th and 99th percentile values (i.e., those values that are exceeded for 5% and 1% of the measurement period) shall be calculated for each 7-day period for comparison with the limits in par.1.2.3. These statistics shall be used for both voltage and current harmonics with the exception that the weekly 99th percentile short time value is not recommended for use with voltage harmonics. Percentile values shall be computed using a linear interpolation algorithm.

1.2.3 Harmonics Distortion Limits

Voltage Distortion Limits

At the PCC, system owners or operators shall limit line-to-neutral voltage harmonics as follows:

- Daily 99th percentile very short time (3 s) values shall be less than 1.5 times the values given in Table 1.
- Weekly 95th percentile short time (10 min) values shall be less than the values given in Table 1.

All values shall be in percent of the rated power frequency voltage at the PCC. Table 1 applies to voltage harmonics whose frequencies are integer multiples of the power frequency up to and including the 50th harmonic.

Table 1: Voltage distortion limits

Bus voltage V	Individual harmonic (%) h <= 50	Total harmonic distortion THD (%)
V <= 1.0 kV	5.0	8.0
1 kV < V <= 69 kV	3.0	5.0
69 kV < V <= 161 kV	1.5	2.5
161 kV < V	1.0	1.5[a]

a High-voltage systems are allowed to have up to 2.0% THD where the cause is an HVDC terminal whose effects are found to be attenuated at points in the network where future users may be connected

Current Distortion Limits for Systems Nominally Rated 120 V through 69 kV

The limits in this subclause apply to users connected to systems where the rated voltage at the PCC is 120 V to 69 kV. These limits shall not be used for the evaluation of an individual nonlinear load, but rather, for the evaluation of the installation containing such nonlinear loads. At the PCC, users shall limit their harmonic currents as follows:

- Daily 99th percentile very short time (3 s) harmonic currents shall be less than 2.0 times the values given in Table 2.
- Weekly 99th percentile short time (10 min) harmonic currents shall be less than 1.5 times the values given in Table 2.
- Weekly 95th percentile short time (10 min) harmonic currents shall be less than the values given in Table 2.

All values shall be in percent of the maximum demand load current, IL and shall be established at the PCC. Table 2 applies to harmonic currents whose frequencies are integer multiples of the power frequency.

Table 2: Current distortion limits for systems rated 120 V through 69 kV

Maximum harmonic current distortion in percent of I_L						
Individual harmonic order[b]						
I_{SC}/I_L	$2 \le h < 11$[a]	$11 \le h < 17$	$17 \le h < 23$	$23 \le h < 35$	$35 \le h \le 50$	TDD
< 20[c]	4.0	2.0	1.5	0.6	0.3	5.0
20 < 50	7.0	3.5	2.5	1.0	0.5	8.0
50 < 100	10.0	4.5	4.0	1.5	0.7	12.0
100 < 1000	12.0	5.5	5.0	2.0	1.0	15.0
> 1000	15.0	7.0	6.0	2.5	1.4	20.0

a For h ≤ 6, even harmonics are limited to 50% of the harmonic limits shown in the table.

b Current distortions that result in a dc offset, e.g., half-wave converters, are not allowed.

c Power generation facilities are limited to these values of current distortion, regardless of actual I_{sc}/I_L unless covered by other standards with applicable scope.

where:

I_{sc} = maximum short-circuit current at PCC

I_L = maximum demand load current at PCC under normal load operating conditions

Current Distortion Limits for Systems Nominally Rated Above 69 kV through 161 kV

The limits in this subclause apply to users connected to systems where the rated voltage V at the PCC is 69 kV < V ≤ 161 kV. These limits shall not be used for the evaluation of an individual nonlinear load, but rather, for the evaluation of the installation containing such nonlinear loads. At the PCC, users shall limit their harmonic currents as follows:

- Daily 99th percentile very short time (3 s) harmonic currents shall be less than 2.0 times the values given in Table 3.
- Weekly 99th percentile short time (10 min) harmonic currents shall be less than 1.5 times the values given in Table 3.
- Weekly 95th percentile short time (10 min) harmonic currents shall be less than the values given in Table 3.

All values shall be in percent of the maximum demand load current, IL and shall be established at the PCC. Table 3 applies to harmonic currents whose frequencies are integer multiples of the power frequency.

Table 3: Current distortion limits for systems rated from 69 kV through 161 kV

Maximum harmonic current distortion in percent of I_L						
	Individual harmonic order[b]					
I_{SC}/I_L	**2 ≤ *h* <11[a]**	**11≤ *h* < 17**	**17 ≤ *h* < 23**	**23 ≤ *h* < 35**	**35 ≤ *h* ≤ 50**	**TDD**
<20[c]	2.0	1.0	0.75	0.3	0.15	2.5
20 < 50	3.5	1.75	1.25	0.5	0.25	4.0
50 < 100	5.0	2.25	2.0	0.75	0.35	6.0
100 < 1000	6.0	2.75	2.5	1.0	0.5	7.5
> 1000	7.5	3.5	3.0	1.25	0.7	10.0

a For h ≤ 6, even harmonics are limited to 50% of the harmonic limits shown in the table.

b Current distortions that result in a dc offset, e.g., half-wave converters, are not allowed.

c Power generation facilities are limited to these values of current distortion, regardless of actual I_{sc}/I_L unless covered by other standards with applicable scope.

where:

I_{sc} = maximum short-circuit current at PCC

I_L = maximum demand load current at PCC under normal load operating conditions

Current Distortion Limits for Systems Nominally Rated Above 161 kV

The limits in this subclause apply to users connected to general transmission systems where the rated voltage V at the PCC is greater than 161 kV. These limits shall not be used for the evaluation of an individual nonlinear load, but rather, for the evaluation of the installation containing such nonlinear loads. At the PCC, users shall limit their harmonic currents as follows:

- Daily 99th percentile very short time (3 s) harmonic currents shall be less than 2.0 times the values given in Table 4.
- Weekly 99th percentile short time (10 min) harmonic currents shall be less than 1.5 times the values given in Table 4.
- Weekly 95th percentile short time (10 min) harmonic currents shall be less than the values given in Table 4.

All values shall be in percent of the maximum demand load current, IL and shall be established at the PCC. Table 4 applies to harmonic currents whose frequencies are integer multiples of the power frequency.

Table 4: Current distortion limits for systems rated > 161 kV

Maximum harmonic current distortion in percent of I_L						
	Individual harmonic order[b]					
I_{SC}/I_L	**$2 \le h < 11$[a]**	**$11 \le h < 17$**	**$17 \le h < 23$**	**$23 \le h < 35$**	**$35 \le h \le 50$**	**TDD**
<25[c]	1.0	0.5	0.38	0.15	0.1	1.5
25 < 50	2.0	1.0	0.75	0.3	0.15	2.5
>= 50	3.0	1.5	1.15	0.45	0.22	3.75

a For h ≤ 6, even harmonics are limited to 50% of the harmonic limits shown in the table.

b Current distortions that result in a dc offset, e.g., half-wave converters, are not allowed.

c Power generation facilities are limited to these values of current distortion, regardless of actual I_{sc}/I_L unless covered by other standards with applicable scope.

where:

I_{sc} = maximum short-circuit current at PCC

I_L = maximum demand load current at PCC under normal load operating conditions

1.3 IEEE 519 PQ Recorder Overview

1.3.1 Voltage and Current Harmonics Monitoring and Recording

The EM235/PM335/PM175 PRO PQ recorder measures, evaluates and collects voltage and current harmonics information as defined and described in IEEE 519. A detailed description of the IEEE 519 background, measurement and evaluation techniques used by the EM235/PM335/PM175 PRO is given in par.1.2.

All voltage and current harmonics characteristics listed in IEEE 519 are measured using methods compliant with IEC 61000-4-30 Class A measurements. Whenever IEC 61000-4-30 and techniques conflict with IEEE 519 normative requirements, a user is given an option to choose a preferable method.

Monitoring Thresholds and Compliance Limits

Since PQ monitoring is intended both for network power quality assessment and for troubleshooting of power quality related problems, the PQ recorder provides collecting of voltage and current harmonics compliance statistics based on predefined detection thresholds and standard-compliant limits.

The voltage and current harmonics thresholds and compliance limits are normally based on voltage and current harmonics indices provided by IEEE 519, but can be changed by the user via the IEEE 519 Harmonics Setup to meet his particular installation’s requirements.

Compliance Statistics Recording

IEEE 519 compliance statistics are automatically collected during weekly/daily evaluation periods. At the end of every week collected statistical data is recorded to the dedicated IEEE 519 Compliance Statistics Log file.

A week day and time on which a calendar week starts can be configured via the EN50160 Advanced Setup (see the document "EM235/PM335/PM175 PRO EN50160:2022 Power Quality Recorder Application Note").

1.3.2 Special Features

Data Aggregation

EM235/PM335/PM175 PRO provides measurements of voltage and current harmonics with aggregation over time intervals listed in IEC 61000-4-30.

10/12–cycle, 150/180-cycle, 10-min aggregated voltage and current harmonics data is available for monitoring and recording.

Time Stamping

For testing reasons, where power quality related data is to be accompanied by a timestamp, the EM235/PM335/PM175 PRO provides a synchronous polyphase timestamp for latest available 10/12-cycle measurements that can also be applied to all other composite intervals based on these measurements. It is available for monitoring and recording via the present online PQ data group of parameters.

Block Numbering

Block numbering of 10/12-cycle and 150/180-cycle measurements within each 10-min interval is provided for IEC 61000-4-30 testing reasons via the present online PQ data group of parameters.

The block numbers are updated when new data evaluated over the corresponding aggregation interval is available. Block numbers can be effectively used for synchronous and non-overlapping recording of the related power quality data by taking them as setpoint triggers along with a delta operator that responds to a trigger parameter change.

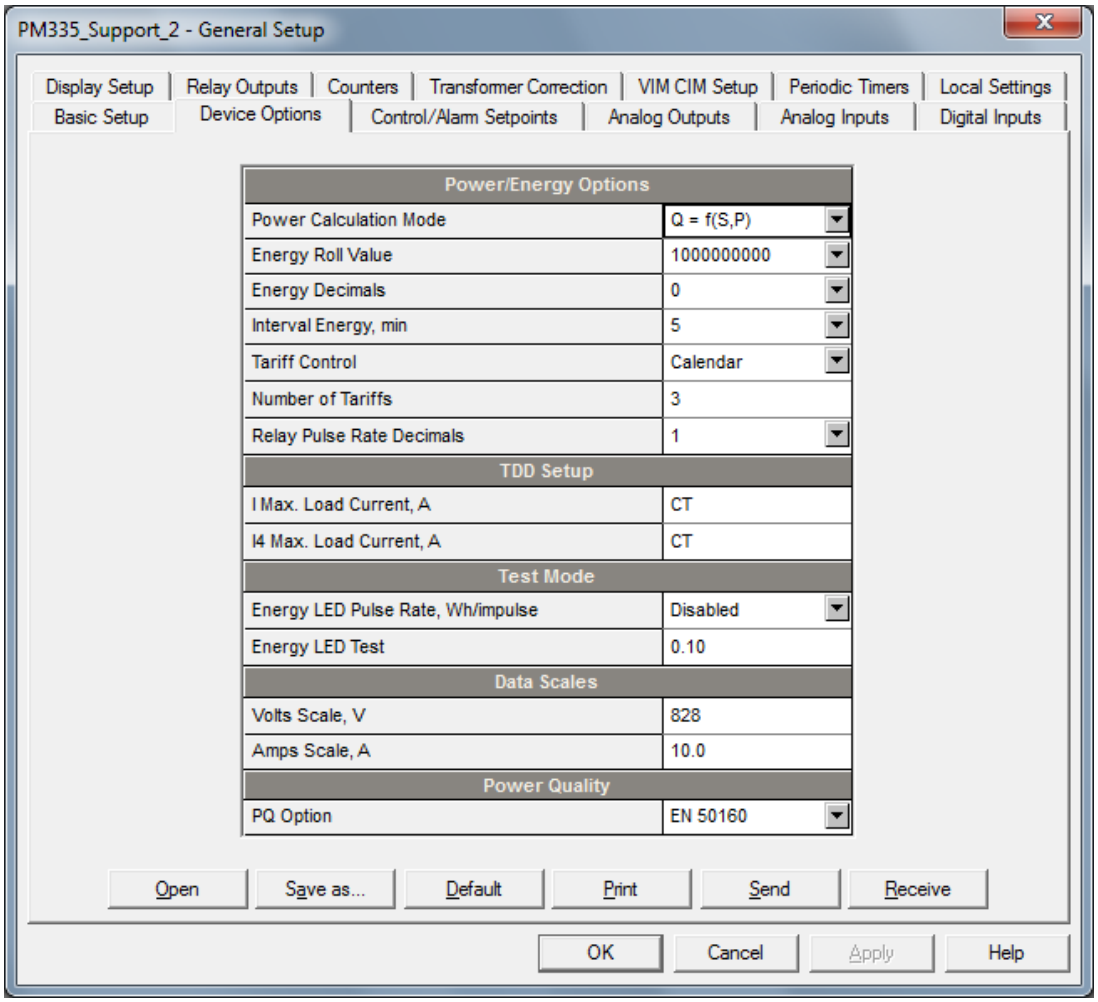
Chapter 2 Configuring the IEEE 519 PQ Recorder

2.1 General Power Quality Related Settings

See the EM235/PM335/PM175 PRO Installation and Operation Manual for common instructions on configuring your device. The following sections outline specific implementation details for operating IEEE 519 PQ recorder.

Firstly, select General Setup in the Meter Setup Menu and then click on Device Options tab.

PQ Option in this menu should be set to EN50160.

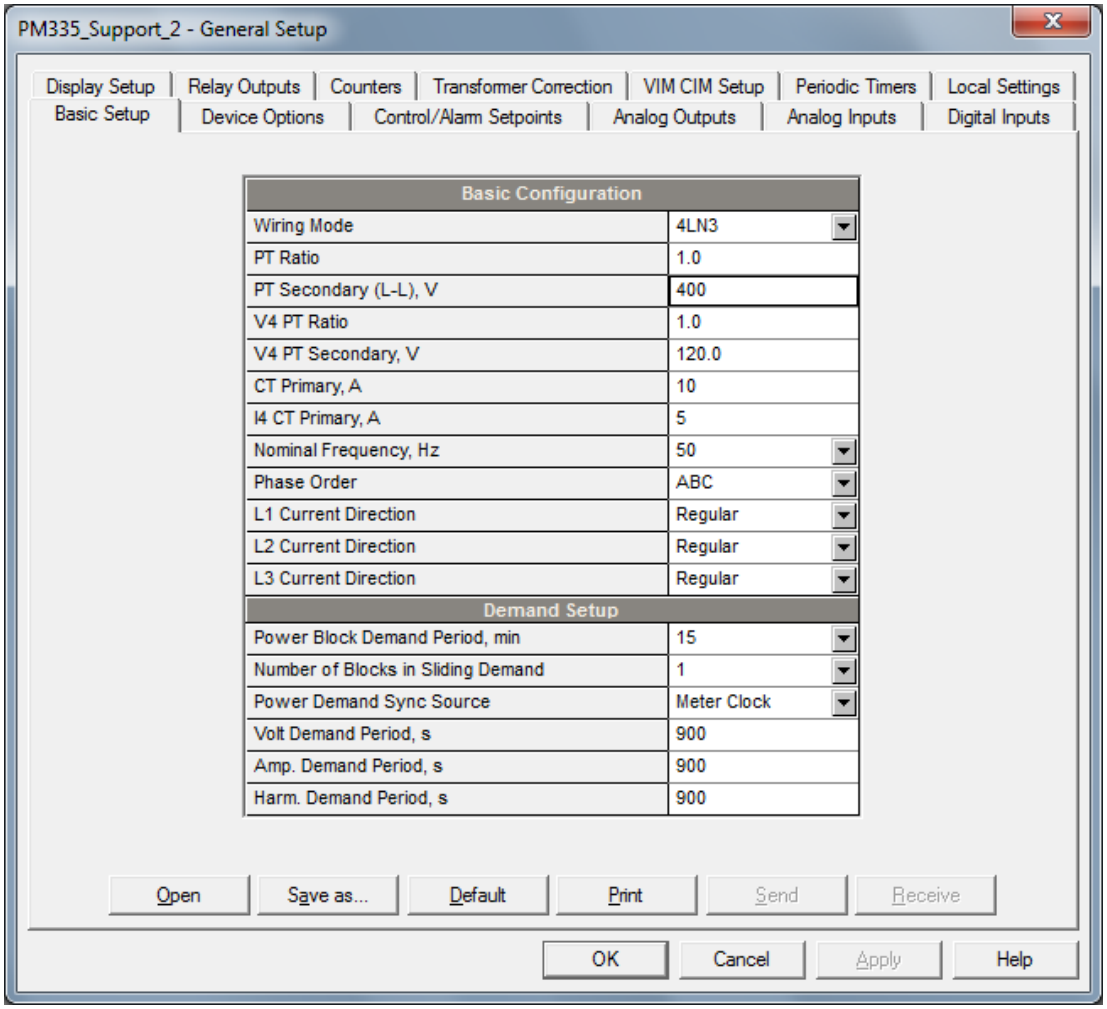


The following device settings affect IEEE 519 evaluation and should be checked prior to running the IEEE 519 PQ recorder.

Reference Voltage

As the general approach of IEEE 519, all voltage and current harmonics thresholds and compliance limits depend on the nominal network voltage that shall be specified by the secondary line-to-line voltage, PT ratio and wiring mode parameters via the Basic setup before running the PQ recorder.

Select General Setup in the Meter Setup Menu, and then in Basic Setup set these parameters according to your network.



CT Primary current

CT Primary current is used as a default value for maximum load current.

CT Primary current shall be specified in Basic Setup (see picture above).

Reference Frequency

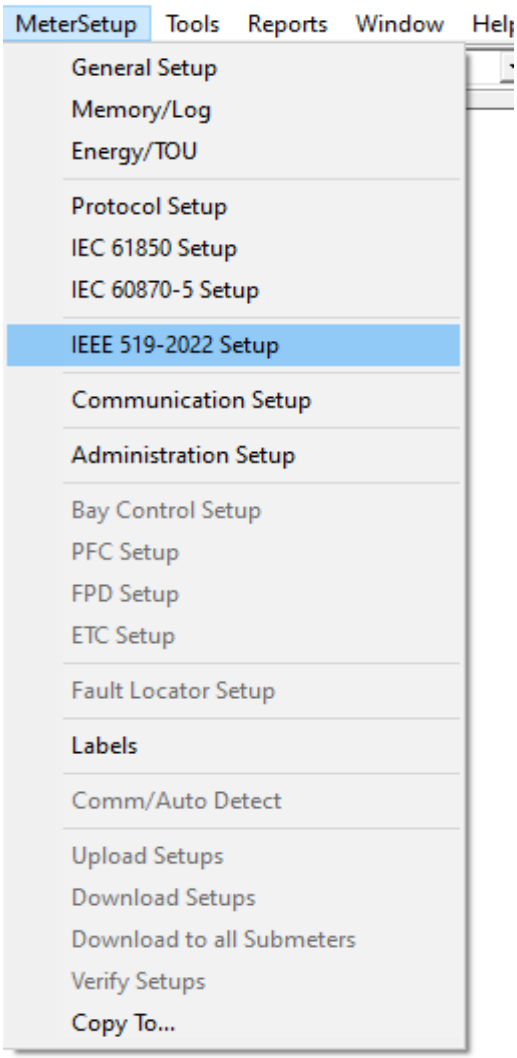
The nominal line frequency is used as a reference for evaluation of voltage and current harmonics measurements. Nominal frequency shall be specified in Basic setup (see picture above).

Maximum Load Current

Maximum load current is used by IEEE 519 PQ Recorder (together with short-circuit current) for proper selection of the current harmonic limits according to IEEE 519 standard requirements. Maximum load current shall be specified in Device Options setup (see picture above). Default value for maximum load current is CT.

2.2 Configuring IEEE 519 Basic Setup

For configuring IEEE 519 setup click in Meter Setup menu on IEEE 519-2022 Setup.



Then in the appeared IEEE 519 Basic Setup check the box "IEEE 519-2022 Standard Support" (see picture below).

Need to define I_{sc} (short-circuit current) in A, that is corresponded with this location.

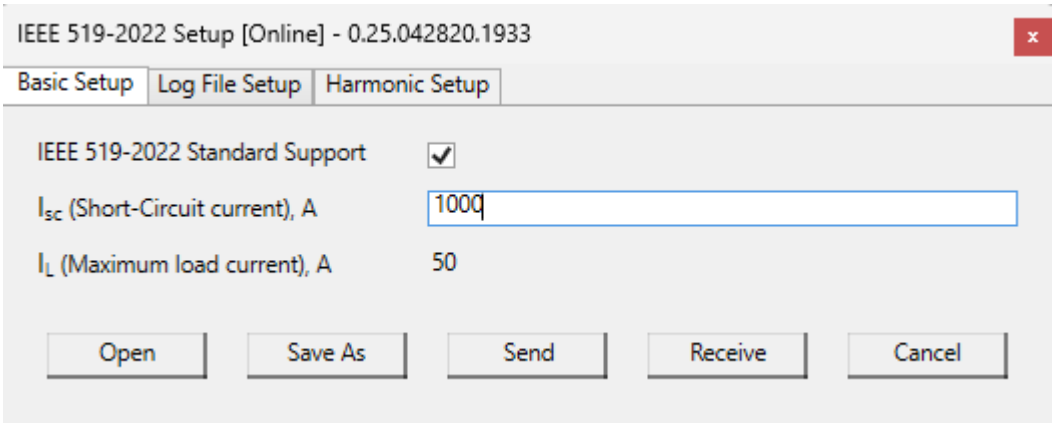
Before defining these parameters, the other menu tabs of this window are invisible.

Also, in this menu is shown I_L (maximum load current in A), that should be defined in PAS menu "Device Options" (see par.2.1 General Power Quality Related Settings).

After all parameters are defined correctly click Send button for sending this setup to the meter.

Also is possible to save IEEE 519 setup for all tabs in the meter file by clicking Save As button.

For getting saved IEEE 519 setup for all tabs from the meter file click Open button.



2.3 Configuring IEEE 519 Log File Setup

Select Log File Setup tab.

This menu shows in on-line mode max. number of records for IEEE 519-2022 Compliance Statistics Log and currently recorded number of records (see picture below).

Max. number of records is factory setting and can't be changed.

IEEE 519-2022 Compliance Statistics Log is recorded by wrap-around way.

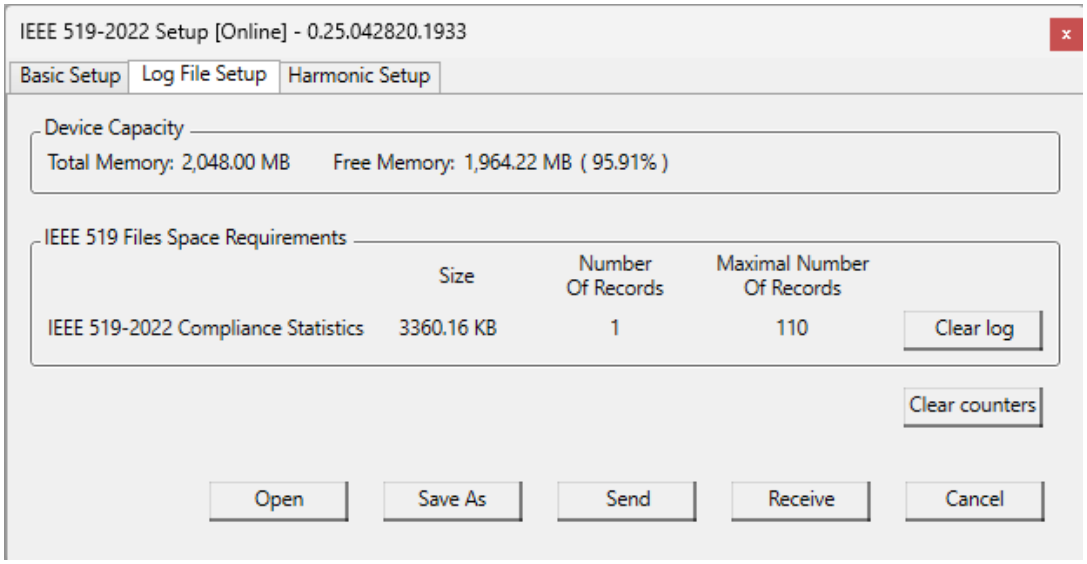
To clear IEEE 519-2022 Compliance Statistics Log in the meter click Clear Log button.

It is possible to save IEEE 519 setup for all tabs in the meter file by clicking Save As button.

For getting saved IEEE 519 setup for all tabs from the meter file click Open button.

The present contents of the IEEE 519 evaluation counters may include undesirable statistical data collected during device testing and deployment that can appear in compliance statistics reports. It is recommended to clear IEEE 519 PQ counters before starting your IEEE 519 evaluation.

To clear present statistics counters, click Clear counters button.



2.4 Configuring IEEE 519 Harmonic Limits Setup

To configure the IEEE 519 voltage and current harmonics compliance limits click on the IEEE 519 Harmonics Setup tab (see picture below).

This setup allows you to define or change detection thresholds and standard compliance limits for voltage THD, current TDD and also individual voltage and current harmonics up to 50th order.

For selecting voltage harmonics limits corresponded with primary nominal voltage (according to setting in Basic Setup of the meter) - click on Default button to the left from the voltage harmonics table. The primary nominal voltage will be shown above voltage harmonics table.

For selecting current harmonics limits corresponded with primary nominal voltage (according to setting in Basic Setup of the meter) and according to ratio Isc/I_L (I_L – maximum load current, should be defined in Device Options setup, Isc – short-circuit current, should be defined in IEEE 519 Basic Setup) – click on Default button to the right from the current harmonics table. The values I_L, Isc and ratio Isc/I_L will be shown above current harmonics table.

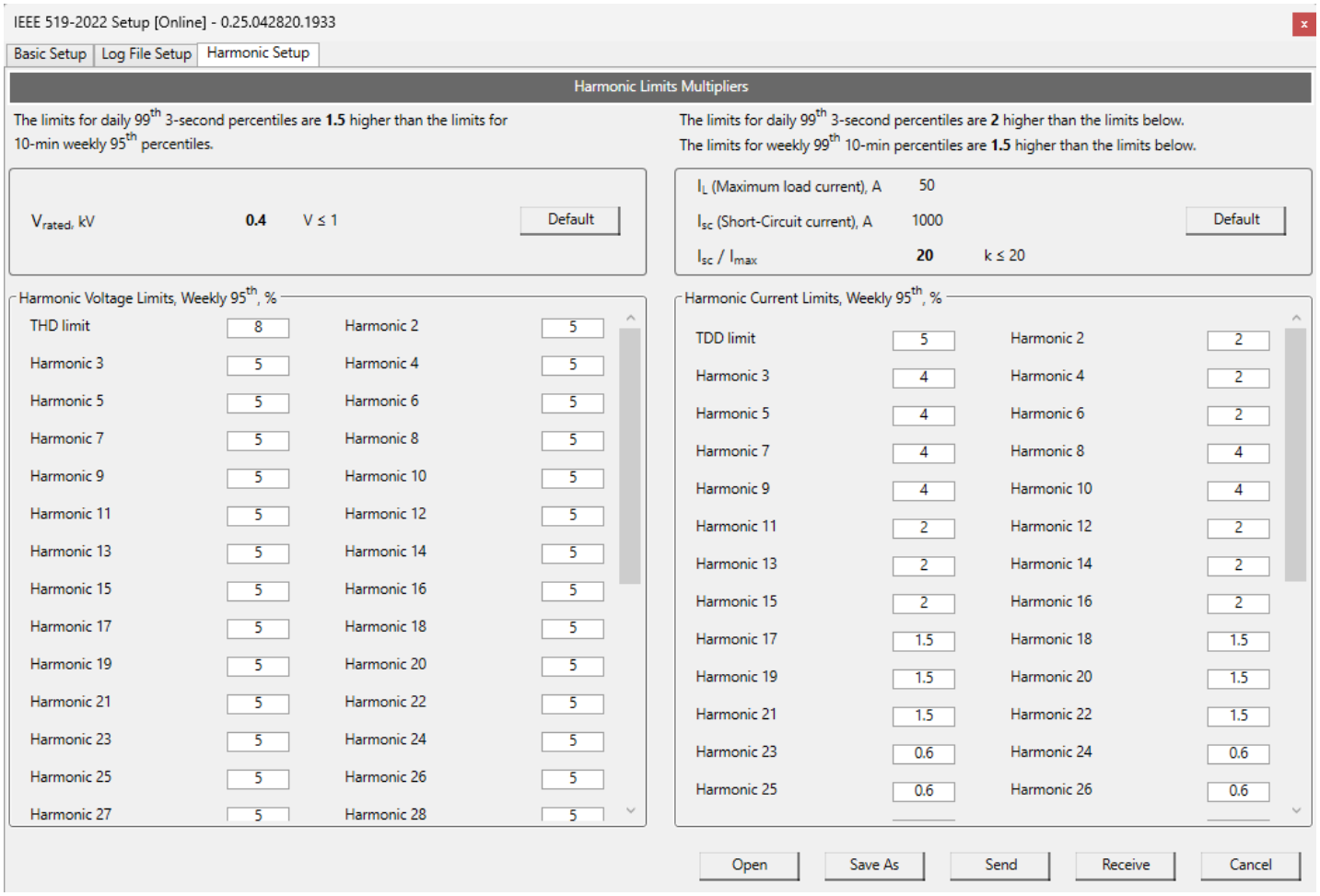
According to IEEE 519 all current harmonics limits are in percent of max. demand load current, so all current harmonics are calculated by the IEEE 519 PQ Recorder also in percent of max. demand load current.

The voltage and current harmonics limits that will be set by Default buttons are according to 95th weekly limits defined in IEEE 519.

After all, parameters are defined correctly click Send button for sending this setup to the meter.

Also is possible to save IEEE 519 setup for all tabs in the meter file by clicking Save As button.

For getting saved IEEE 519 setup for all tabs from the meter file click Open button.

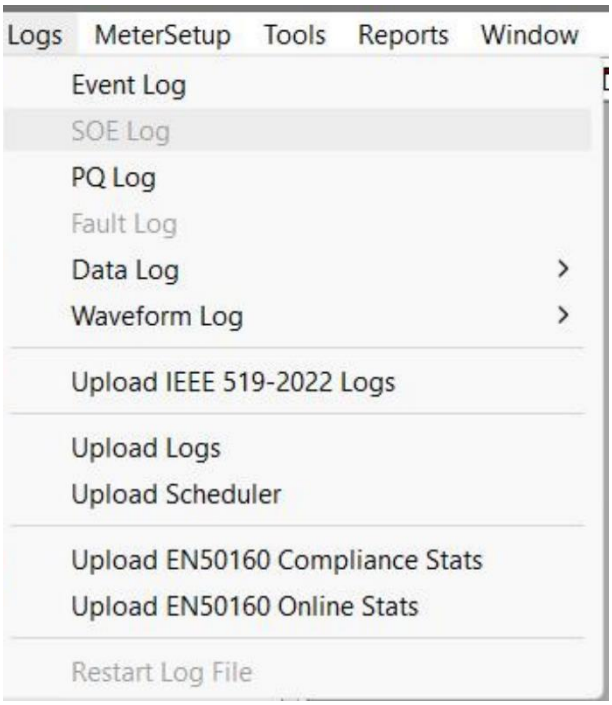


Chapter 3 Operating the IEEE 519 PQ Recorder

3.1 Retrieving IEEE 519 Statistics Files

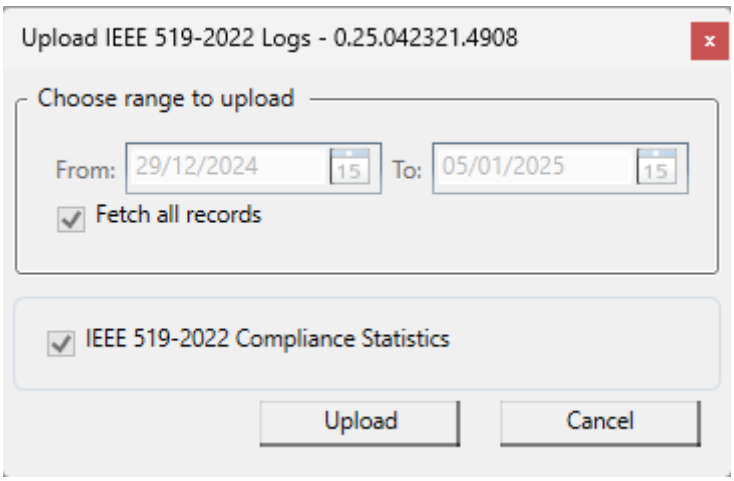
The IEEE 519 compliance statistics can be retrieved by PAS and stored to a database for later analysis.

To retrieve the IEEE 519 compliance statistic, select “Upload IEEE 519-2022 Logs” from the Logs menu. and specify the database to which you want the data to be stored.



After that window "Upload IEEE 519-2022 Logs" appears.

Click Upload button for uploading IEEE 519 Compliance Statistics Log.



In appeared Save As menu specify the database to which you want the data to be stored and click Ok

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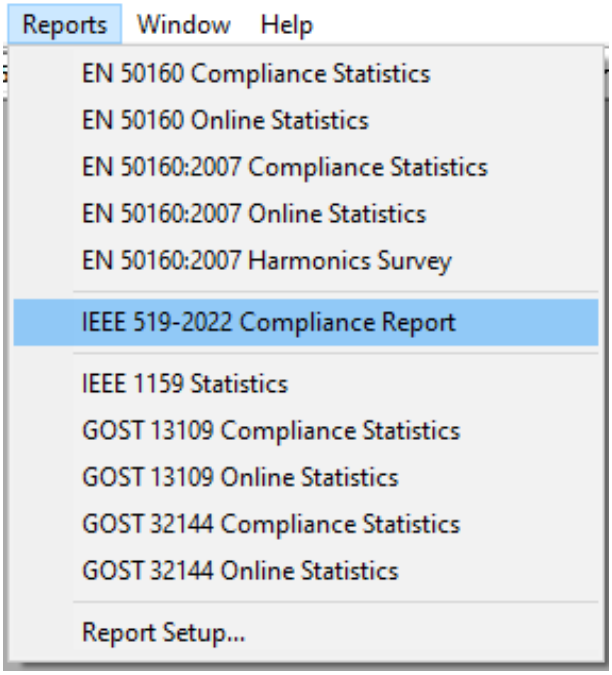
The structure of IEEE 519 Compliance Statistics Log is given in Annex B.

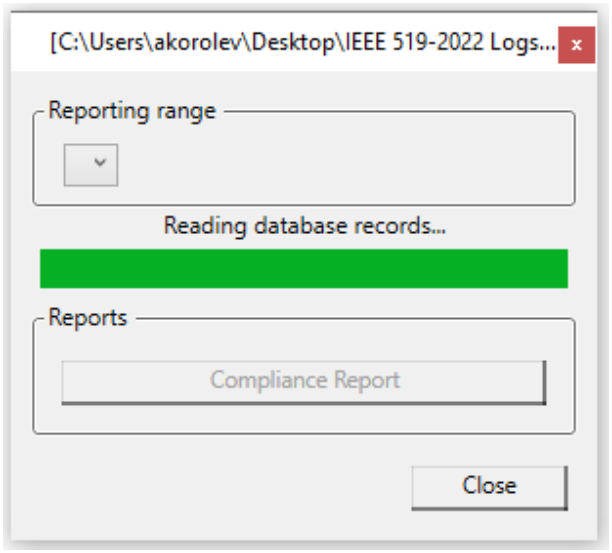
3.2 Viewing IEEE 519 Compliance Report

To get the IEEE 519 Compliance Report, select “IEEE 519-2022 Compliance Report” from the Reports menu.

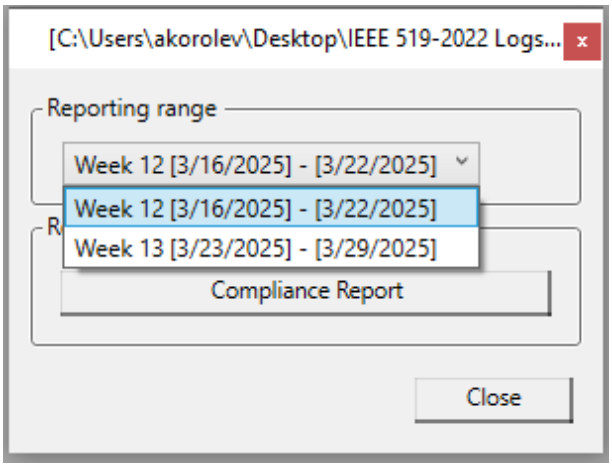


Select the database file where you store the retrieved harmonics statistics data, and then double click on it.

The screen of reading IEEE 519 Compliance Statistics Log appears.



Select required week for getting report, and then click Compliance Report button.



The standard compliance statistics is reported within the selected time range.

The resulted compliance report will be done as PDF file in selected location.

IEEE 519 Compliance Statistics Report includes for selected week summary compliance table that presents harmonics compliance results for all voltage and current channels, and also detailed tables for all kinds of required statistics: weekly 95% for voltage, weekly 95% and 99% for current, and daily 99% for voltage and current for all days of the selected week.

Summary table shows general results for 95% weekly harmonics statistics, 99% weekly harmonics statistics and 99% daily harmonics statistics for all days of selected week.

If some kind of harmonics statistics comply with the standard – in corresponded row is shown "OK",

if some kind of harmonics statistics doesn't comply with the standard – in corresponded row is shown "FAIL" and also failed voltage and current channels.

If for some day of the selected week the data doesn't exist – the corresponded row in the table is empty.

All detailed tables include for voltage THD / current TDD and for all harmonics up to 50th order the following data:

- percent of non-compliance harmonic intervals for the observation period (week or day)
- 95% or 99% harmonic percentile value for the observation period (week or day)
- maximum harmonic value for the observation period (week or day)

If for some day of the selected week the data doesn't exist – the corresponded table is empty.

An example of the IEEE 519 Compliance Report is given in Annex C.

Annex A IEEE 519 Additional Parameters

Designation	Description
Present PQ Measurements	**3-sec values**
V1 THD519, %	V1/V12 Voltage THD (includes harmonics up to 50 order)
V2 THD519, %	V2/V23 Voltage THD (includes harmonics up to 50 order)
V3 THD519, %	V3/V31 Voltage THD (includes harmonics up to 50 order)
I1 TDD519, %	I1 Current TDD (includes harmonics up to 50 order)
I2 TDD519, %	I2 Current TDD (includes harmonics up to 50 order)
I3 TDD519, %	I3 Current TDD (includes harmonics up to 50 order)
Present PQ Measurements	**10-min values**
V1 THD519, %	V1 Voltage THD (includes harmonics up to 50 order)
V2 THD519, %	V2 Voltage THD (includes harmonics up to 50 order)
V3 THD519, %	V3 Voltage THD (includes harmonics up to 50 order)
I1 TDD519, %	I1 Current TDD (includes harmonics up to 50 order)
I2 TDD519, %	I2 Current TDD (includes harmonics up to 50 order)
I3 TDD519, %	I3 Current TDD (includes harmonics up to 50 order)
%HD V1 (3-sec)	**V1/V12 Harmonic Distortions (3-sec values)**
V1 %HD01	H01 Harmonic distortion
V1 %HD02	H02 Harmonic distortion
…	...
V1 %HD50	H50 Harmonic distortion
%HD V2 (3-sec)	**V2/V23 Harmonic Distortions (3-sec values)**
V2 %HD01	H01 Harmonic distortion
V2 %HD02	H02 Harmonic distortion
…	...
V2 %HD50	H50 Harmonic distortion
%HD V3 (3-sec)	**V3/V31 Harmonic Distortions (3-sec values)**
V3 %HD01	H01 Harmonic distortion
V3 %HD02	H02 Harmonic distortion
…	...
V3 %HD50	H50 Harmonic distortion
%HD I1 (3-sec)	**I1 Harmonic Distortions (3-sec values in % of Max.Load Current)**
I1 %HD01	H01 Harmonic distortion
I1 %HD02	H02 Harmonic distortion
…	...
I1 %HD50	H50 Harmonic distortion
%HD I2 (3-sec)	**I2 Harmonic Distortions (3-sec values in % of Max.Load Current)**
I2 %HD01	H01 Harmonic distortion
I2 %HD02	H02 Harmonic distortion

…	...
I2 %HD50	H50 Harmonic distortion
%HD I3 (3-sec)	**I3 Harmonic Distortions (3-sec values in % of Max.Load Current)**
I3 %HD01	H01 Harmonic distortion
I3 %HD02	H02 Harmonic distortion
…	...
I3 %HD50	H50 Harmonic distortion
%HD V1 (10-min)	**V1/V12 Harmonic Distortions (10-min values)**
V1 %HD01	H01 Harmonic distortion
V1 %HD02	H02 Harmonic distortion
…	...
V1 %HD50	H50 Harmonic distortion
%HD V2 (10-min)	**V2/V23 Harmonic Distortions (10-min values)**
V2 %HD01	H01 Harmonic distortion
V2 %HD02	H02 Harmonic distortion
…	...
V2 %HD50	H50 Harmonic distortion
%HD V3 (10-min)	**V3/V31 Harmonic Distortions (10-min values)**
V3 %HD01	H01 Harmonic distortion
V3 %HD02	H02 Harmonic distortion
…	...
V3 %HD50	H50 Harmonic distortion
%HD I1 (10-min)	**I1 Harmonic Distortions (10-min values in % of Max.Load Current)**
I1 %HD01	H01 Harmonic distortion
I1 %HD02	H02 Harmonic distortion
…	...
I1 %HD50	H50 Harmonic distortion
%HD I2 (10-min)	**I2 Harmonic Distortions (10-min values in % of Max.Load Current)**
I2 %HD01	H01 Harmonic distortion
I2 %HD02	H02 Harmonic distortion
…	...
I2 %HD50	H50 Harmonic distortion
%HD I3 (10-min)	**I3 Harmonic Distortions (10-min values in % of Max.Load Current)**
I3 %HD01	H01 Harmonic distortion
I3 %HD02	H02 Harmonic distortion
…	...
I3 %HD50	H50 Harmonic distortion

Annex B IEEE 519 Compliance Statistics Log

The structure of IEEE 519 Harmonics Compliance Statistics Log is below.

The table consists of many sections and split into 2 main parts: daily and weekly.

In both parts sections with compliance and percentiles values are presented one after another for all phases.

File Section	Record Field No.	Point Label	Description
0			**IEEE 519 – Voltages Harmonic Compliance 99'th percentile Day #1**
	1	Nnv_V1_day1	Number of V1 (Phase A/AB) non-valid 3-sec intervals during day1
	2	N_V1_day1	Number of V1 (Phase A/AB) valid 3-sec intervals during day1
	3	THD_N1_V1_99day1	Number of V1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day1
	4	H02_N1_V1_99day1	Number of V1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day1
	52	H50_N1_V1_99day1	Number of V1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day1
	53	THD_V1_99day1_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval THD/TDD during day1
	54	H02_V1_99day1_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H02 during day1
	102	H50_V1_99day1_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H50 during day1
	103	THD_V1_99day1_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval THD/TDD during day1
	104	H02_V1_99day1_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H02 value during day1
	152	H50_V1_99day1_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H50 value during day1
	153	Nnv_V2_day1	Number of V2 (Phase B/BC) non-valid 3-sec intervals during day1
	154	N_V2_day1	Number of V2 (Phase B/BC) valid 3-sec intervals during day1
	155	THD_N1_V2_99day1	Number of V2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day1
	156	H02_N1_V2_99day1	Number of V2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day1
	204	H50_N1_V2_99day1	Number of V2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day1
	205	THD_V2_99day1_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval THD/TDD during day1
	206	H02_V2_99day1_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H02 during day1
	254	H50_V2_99day1_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H50 during day1
	255	THD_V2_99day1_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval THD/TDD during day1
	256	H02_V2_99day1_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H02 value during day1
	304	H50_V2_99day1_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H50 value during day1
	305	Nnv_V3_day1	Number of V3 (Phase C/CA) non-valid 3-sec intervals during day1
	306	N_V3_day1	Number of V3 (Phase C/CA) valid 3-sec intervals during day1

	307	THD_N1_V3_99day1	Number of V3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day1
	308	H02_N1_V3_99day1	Number of V3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day1
	356	H50_N1_V3_99day1	Number of V3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day1
	357	THD_V3_99day1_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval THD/TDD during day1
	358	H02_V3_99day1_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H02 during day1
	406	H50_V3_99day1_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H50 during day1
	407	THD_V3_99day1_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval THD/TDD during day1
	408	H02_V3_99day1_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H02 value during day1
	456	H50_V3_99day1_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H50 value during day1
1			**IEEE 519 – Currents Harmonic Compliance 99'th percentile Day #1**
	1	Nnv_I1_day1	Number of I1 (Phase A/AB) non-valid 3-sec intervals during day1
	2	N_I1_day1	Number of I1 (Phase A/AB) valid 3-sec intervals during day1
	3	THD_N1_I1_99day1	Number of I1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day1
	4	H02_N1_I1_99day1	Number of I1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day1
	52	H50_N1_I1_99day1	Number of I1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day1
	53	THD_I1_99day1_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval THD/TDD during day1
	54	H02_I1_99day1_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H02 during day1
	102	H50_I1_99day1_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H50 during day1
	103	THD_I1_99day1_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval THD/TDD during day1
	104	H02_I1_99day1_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H02 value during day1
	152	H50_I1_99day1_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H50 value during day1
	153	Nnv_I2_day1	Number of I2 (Phase B/BC) non-valid 3-sec intervals during day1
	154	N_I2_day1	Number of I2 (Phase B/BC) valid 3-sec intervals during day1
	155	THD_N1_I2_99day1	Number of I2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day1
	156	H02_N1_I2_99day1	Number of I2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day1
	204	H50_N1_I2_99day1	Number of I2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day1
	205	THD_I2_99day1_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval THD/TDD during day1
	206	H02_I2_99day1_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H02 during day1
	254	H50_I2_99day1_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H50 during day1
	255	THD_I2_99day1_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval THD/TDD during day1
	256	H02_I2_99day1_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H02 value during day1
	304	H50_I2_99day1_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H50 value during day1

	305	Nnv_I3_day1	Number of I3 (Phase C/CA) non-valid 3-sec intervals during day1
	306	N_I3_day1	Number of I3 (Phase C/CA) valid 3-sec intervals during day1
	307	THD_N1_I3_99day1	Number of I3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day1
	308	H02_N1_I3_99day1	Number of I3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day1
	356	H50_N1_I3_99day1	Number of I3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day1
	357	THD_I3_99day1_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval THD/TDD during day1
	358	H02_I3_99day1_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H02 during day1
	406	H50_I3_99day1_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H50 during day1
	407	THD_I3_99day1_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval THD/TDD during day1
	408	H02_I3_99day1_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H02 value during day1
	456	H50_I3_99day1_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H50 value during day1
2			**IEEE 519 – Voltages Harmonic Compliance 99'th percentile Day #2**
	1	Nnv_V1_day2	Number of V1 (Phase A/AB) non-valid 3-sec intervals during day2
	2	N_V1_day2	Number of V1 (Phase A/AB) valid 3-sec intervals during day2
	3	THD_N1_V1_99day2	Number of V1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day2
	4	H02_N1_V1_99day2	Number of V1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day2
	52	H50_N1_V1_99day2	Number of V1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day2
	53	THD_V1_99day2_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval THD/TDD during day2
	54	H02_V1_99day2_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H02 during day2
	102	H50_V1_99day2_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H50 during day2
	103	THD_V1_99day2_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval THD/TDD during day2
	104	H02_V1_99day2_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H02 value during day2
	152	H50_V1_99day2_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H50 value during day2
	153	Nnv_V2_day2	Number of V2 (Phase B/BC) non-valid 3-sec intervals during day2
	154	N_V2_day2	Number of V2 (Phase B/BC) valid 3-sec intervals during day2
	155	THD_N1_V2_99day2	Number of V2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day2
	156	H02_N1_V2_99day2	Number of V2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day2
	204	H50_N1_V2_99day2	Number of V2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day2
	205	THD_V2_99day2_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval THD/TDD during day2
	206	H02_V2_99day2_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H02 during day2
	254	H50_V2_99day2_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H50 during day2
	255	THD_V2_99day2_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval THD/TDD during day2
	256	H02_V2_99day2_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H02 value during day2

	304	H50_V2_99day2_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H50 value during day2
	305	Nnv_V3_day2	Number of V3 (Phase C/CA) non-valid 3-sec intervals during day2
	306	N_V3_day2	Number of V3 (Phase C/CA) valid 3-sec intervals during day2
	307	THD_N1_V3_99day2	Number of V3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day2
	308	H02_N1_V3_99day2	Number of V3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day2
	356	H50_N1_V3_99day2	Number of V3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day2
	357	THD_V3_99day2_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval THD/TDD during day2
	358	H02_V3_99day2_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H02 during day2
	406	H50_V3_99day2_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H50 during day2
	407	THD_V3_99day2_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval THD/TDD during day2
	408	H02_V3_99day2_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H02 value during day2
	456	H50_V3_99day2_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H50 value during day2
3			**IEEE 519 – Currents Harmonic Compliance 99'th percentile Day #2**
	1	Nnv_I1_day2	Number of I1 (Phase A/AB) non-valid 3-sec intervals during day2
	2	N_I1_day2	Number of I1 (Phase A/AB) valid 3-sec intervals during day2
	3	THD_N1_I1_99day2	Number of I1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day2
	4	H02_N1_I1_99day2	Number of I1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day2
	52	H50_N1_I1_99day2	Number of I1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day2
	53	THD_I1_99day2_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval THD/TDD during day2
	54	H02_I1_99day2_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H02 during day2
	102	H50_I1_99day2_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H50 during day2
	103	THD_I1_99day2_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval THD/TDD during day2
	104	H02_I1_99day2_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H02 value during day2
	152	H50_I1_99day2_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H50 value during day2
	153	Nnv_I2_day2	Number of I2 (Phase B/BC) non-valid 3-sec intervals during day2
	154	N_I2_day2	Number of I2 (Phase B/BC) valid 3-sec intervals during day2
	155	THD_N1_I2_99day2	Number of I2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day2
	156	H02_N1_I2_99day2	Number of I2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day2
	204	H50_N1_I2_99day2	Number of I2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day2
	205	THD_I2_99day2_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval THD/TDD during day2
	206	H02_I2_99day2_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H02 during day2
	254	H50_I2_99day2_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H50 during day2

	255	THD_I2_99day2_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval THD/TDD during day2
	256	H02_I2_99day2_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H02 value during day2
	304	H50_I2_99day2_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H50 value during day2
	305	Nnv_I3_day2	Number of I3 (Phase C/CA) non-valid 3-sec intervals during day2
	306	N_I3_day2	Number of I3 (Phase C/CA) valid 3-sec intervals during day2
	307	THD_N1_I3_99day2	Number of I3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day2
	308	H02_N1_I3_99day2	Number of I3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day2
	356	H50_N1_I3_99day2	Number of I3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day2
	357	THD_I3_99day2_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval THD/TDD during day2
	358	H02_I3_99day2_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H02 during day2
	406	H50_I3_99day2_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H50 during day2
	407	THD_I3_99day2_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval THD/TDD during day2
	408	H02_I3_99day2_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H02 value during day2
	456	H50_I3_99day2_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H50 value during day2
4			**IEEE 519 – Voltages Harmonic Compliance 99'th percentile Day #3**
	1	Nnv_V1_day3	Number of V1 (Phase A/AB) non-valid 3-sec intervals during day3
	2	N_V1_day3	Number of V1 (Phase A/AB) valid 3-sec intervals during day3
	3	THD_N1_V1_99day3	Number of V1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day3
	4	H02_N1_V1_99day3	Number of V1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day3
	52	H50_N1_V1_99day3	Number of V1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day3
	53	THD_V1_99day3_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval THD/TDD during day3
	54	H02_V1_99day3_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H02 during day3
	102	H50_V1_99day3_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H50 during day3
	103	THD_V1_99day3_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval THD/TDD during day3
	104	H02_V1_99day3_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H02 value during day3
	152	H50_V1_99day3_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H50 value during day3
	153	Nnv_V2_day3	Number of V2 (Phase B/BC) non-valid 3-sec intervals during day3
	154	N_V2_day3	Number of V2 (Phase B/BC) valid 3-sec intervals during day3
	155	THD_N1_V2_99day3	Number of V2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day3
	156	H02_N1_V2_99day3	Number of V2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day3
	204	H50_N1_V2_99day3	Number of V2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day3
	205	THD_V2_99day3_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval THD/TDD during day3
	206	H02_V2_99day3_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H02 during day3

	254	H50_V2_99day3_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H50 during day3
	255	THD_V2_99day3_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval THD/TDD during day3
	256	H02_V2_99day3_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H02 value during day3
	304	H50_V2_99day3_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H50 value during day3
	305	Nnv_V3_day3	Number of V3 (Phase C/CA) non-valid 3-sec intervals during day3
	306	N_V3_day3	Number of V3 (Phase C/CA) valid 3-sec intervals during day3
	307	THD_N1_V3_99day3	Number of V3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day3
	308	H02_N1_V3_99day3	Number of V3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day3
	356	H50_N1_V3_99day3	Number of V3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day3
	357	THD_V3_99day3_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval THD/TDD during day3
	358	H02_V3_99day3_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H02 during day3
	406	H50_V3_99day3_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H50 during day3
	407	THD_V3_99day3_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval THD/TDD during day3
	408	H02_V3_99day3_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H02 value during day3
	456	H50_V3_99day3_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H50 value during day3
5			**IEEE 519 – Currents Harmonic Compliance 99'th percentile Day #3**
	1	Nnv_I1_day3	Number of I1 (Phase A/AB) non-valid 3-sec intervals during day3
	2	N_I1_day3	Number of I1 (Phase A/AB) valid 3-sec intervals during day3
	3	THD_N1_I1_99day3	Number of I1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day3
	4	H02_N1_I1_99day3	Number of I1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day3
	52	H50_N1_I1_99day3	Number of I1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day3
	53	THD_I1_99day3_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval THD/TDD during day3
	54	H02_I1_99day3_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H02 during day3
	102	H50_I1_99day3_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H50 during day3
	103	THD_I1_99day3_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval THD/TDD during day3
	104	H02_I1_99day3_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H02 value during day3
	152	H50_I1_99day3_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H50 value during day3
	153	Nnv_I2_day3	Number of I2 (Phase B/BC) non-valid 3-sec intervals during day3
	154	N_I2_day3	Number of I2 (Phase B/BC) valid 3-sec intervals during day3
	155	THD_N1_I2_99day3	Number of I2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day3
	156	H02_N1_I2_99day3	Number of I2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day3
	204	H50_N1_I2_99day3	Number of I2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day3

	205	THD_I2_99day3_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval THD/TDD during day3
	206	H02_I2_99day3_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H02 during day3
	254	H50_I2_99day3_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H50 during day3
	255	THD_I2_99day3_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval THD/TDD during day3
	256	H02_I2_99day3_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H02 value during day3
	304	H50_I2_99day3_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H50 value during day3
	305	Nnv_I3_day3	Number of I3 (Phase C/CA) non-valid 3-sec intervals during day3
	306	N_I3_day3	Number of I3 (Phase C/CA) valid 3-sec intervals during day3
	307	THD_N1_I3_99day3	Number of I3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day3
	308	H02_N1_I3_99day3	Number of I3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day3
	356	H50_N1_I3_99day3	Number of I3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day3
	357	THD_I3_99day3_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval THD/TDD during day3
	358	H02_I3_99day3_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H02 during day3
	406	H50_I3_99day3_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H50 during day3
	407	THD_I3_99day3_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval THD/TDD during day3
	408	H02_I3_99day3_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H02 value during day3
	456	H50_I3_99day3_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H50 value during day3
6			**IEEE 519 – Voltages Harmonic Compliance 99'th percentile Day #4**
	1	Nnv_V1_day4	Number of V1 (Phase A/AB) non-valid 3-sec intervals during day4
	2	N_V1_day4	Number of V1 (Phase A/AB) valid 3-sec intervals during day4
	3	THD_N1_V1_99day4	Number of V1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day4
	4	H02_N1_V1_99day4	Number of V1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day4
	52	H50_N1_V1_99day4	Number of V1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day4
	53	THD_V1_99day4_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval THD/TDD during day4
	54	H02_V1_99day4_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H02 during day4
	102	H50_V1_99day4_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H50 during day4
	103	THD_V1_99day4_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval THD/TDD during day4
	104	H02_V1_99day4_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H02 value during day4
	152	H50_V1_99day4_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H50 value during day4
	153	Nnv_V2_day4	Number of V2 (Phase B/BC) non-valid 3-sec intervals during day4
	154	N_V2_day4	Number of V2 (Phase B/BC) valid 3-sec intervals during day4
	155	THD_N1_V2_99day4	Number of V2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day4
	156	H02_N1_V2_99day4	Number of V2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day4

	204	H50_N1_V2_99day4	Number of V2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day4
	205	THD_V2_99day4_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval THD/TDD during day4
	206	H02_V2_99day4_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H02 during day4
	254	H50_V2_99day4_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H50 during day4
	255	THD_V2_99day4_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval THD/TDD during day4
	256	H02_V2_99day4_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H02 value during day4
	304	H50_V2_99day4_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H50 value during day4
	305	Nnv_V3_day4	Number of V3 (Phase C/CA) non-valid 3-sec intervals during day4
	306	N_V3_day4	Number of V3 (Phase C/CA) valid 3-sec intervals during day4
	307	THD_N1_V3_99day4	Number of V3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day4
	308	H02_N1_V3_99day4	Number of V3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day4
	356	H50_N1_V3_99day4	Number of V3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day4
	357	THD_V3_99day4_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval THD/TDD during day4
	358	H02_V3_99day4_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H02 during day4
	406	H50_V3_99day4_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H50 during day4
	407	THD_V3_99day4_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval THD/TDD during day4
	408	H02_V3_99day4_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H02 value during day4
	456	H50_V3_99day4_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H50 value during day4
7			**IEEE 519 – Currents Harmonic Compliance 99'th percentile Day #4**
	1	Nnv_I1_day4	Number of I1 (Phase A/AB) non-valid 3-sec intervals during day4
	2	N_I1_day4	Number of I1 (Phase A/AB) valid 3-sec intervals during day4
	3	THD_N1_I1_99day4	Number of I1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day4
	4	H02_N1_I1_99day4	Number of I1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day4
	52	H50_N1_I1_99day4	Number of I1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day4
	53	THD_I1_99day4_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval THD/TDD during day4
	54	H02_I1_99day4_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H02 during day4
	102	H50_I1_99day4_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H50 during day4
	103	THD_I1_99day4_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval THD/TDD during day4
	104	H02_I1_99day4_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H02 value during day4
	152	H50_I1_99day4_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H50 value during day4
	153	Nnv_I2_day4	Number of I2 (Phase B/BC) non-valid 3-sec intervals during day4
	154	N_I2_day4	Number of I2 (Phase B/BC) valid 3-sec intervals during day4

	155	THD_N1_I2_99day4	Number of I2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day4
	156	H02_N1_I2_99day4	Number of I2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day4
	204	H50_N1_I2_99day4	Number of I2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day4
	205	THD_I2_99day4_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval THD/TDD during day4
	206	H02_I2_99day4_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H02 during day4
	254	H50_I2_99day4_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H50 during day4
	255	THD_I2_99day4_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval THD/TDD during day4
	256	H02_I2_99day4_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H02 value during day4
	304	H50_I2_99day4_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H50 value during day4
	305	Nnv_I3_day4	Number of I3 (Phase C/CA) non-valid 3-sec intervals during day4
	306	N_I3_day4	Number of I3 (Phase C/CA) valid 3-sec intervals during day4
	307	THD_N1_I3_99day4	Number of I3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day4
	308	H02_N1_I3_99day4	Number of I3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day4
	356	H50_N1_I3_99day4	Number of I3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day4
	357	THD_I3_99day4_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval THD/TDD during day4
	358	H02_I3_99day4_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H02 during day4
	406	H50_I3_99day4_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H50 during day4
	407	THD_I3_99day4_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval THD/TDD during day4
	408	H02_I3_99day4_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H02 value during day4
	456	H50_I3_99day4_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H50 value during day4
8			**IEEE 519 – Voltages Harmonic Compliance 99'th percentile Day #5**
	1	Nnv_V1_day5	Number of V1 (Phase A/AB) non-valid 3-sec intervals during day5
	2	N_V1_day5	Number of V1 (Phase A/AB) valid 3-sec intervals during day5
	3	THD_N1_V1_99day5	Number of V1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day5
	4	H02_N1_V1_99day5	Number of V1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day5
	52	H50_N1_V1_99day5	Number of V1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day5
	53	THD_V1_99day5_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval THD/TDD during day5
	54	H02_V1_99day5_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H02 during day5
	102	H50_V1_99day5_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H50 during day5
	103	THD_V1_99day5_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval THD/TDD during day5
	104	H02_V1_99day5_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H02 value during day5
	152	H50_V1_99day5_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H50 value during day5

	153	Nnv_V2_day5	Number of V2 (Phase B/BC) non-valid 3-sec intervals during day5
	154	N_V2_day5	Number of V2 (Phase B/BC) valid 3-sec intervals during day5
	155	THD_N1_V2_99day5	Number of V2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day5
	156	H02_N1_V2_99day5	Number of V2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day5
	204	H50_N1_V2_99day5	Number of V2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day5
	205	THD_V2_99day5_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval THD/TDD during day5
	206	H02_V2_99day5_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H02 during day5
	254	H50_V2_99day5_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H50 during day5
	255	THD_V2_99day5_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval THD/TDD during day5
	256	H02_V2_99day5_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H02 value during day5
	304	H50_V2_99day5_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H50 value during day5
	305	Nnv_V3_day5	Number of V3 (Phase C/CA) non-valid 3-sec intervals during day5
	306	N_V3_day5	Number of V3 (Phase C/CA) valid 3-sec intervals during day5
	307	THD_N1_V3_99day5	Number of V3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day5
	308	H02_N1_V3_99day5	Number of V3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day5
	356	H50_N1_V3_99day5	Number of V3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day5
	357	THD_V3_99day5_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval THD/TDD during day5
	358	H02_V3_99day5_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H02 during day5
	406	H50_V3_99day5_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H50 during day5
	407	THD_V3_99day5_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval THD/TDD during day5
	408	H02_V3_99day5_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H02 value during day5
	456	H50_V3_99day5_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H50 value during day5
9			**IEEE 519 – Currents Harmonic Compliance 99'th percentile Day #5**
	1	Nnv_I1_day5	Number of I1 (Phase A/AB) non-valid 3-sec intervals during day5
	2	N_I1_day5	Number of I1 (Phase A/AB) valid 3-sec intervals during day5
	3	THD_N1_I1_99day5	Number of I1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day5
	4	H02_N1_I1_99day5	Number of I1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day5
	52	H50_N1_I1_99day5	Number of I1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day5
	53	THD_I1_99day5_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval THD/TDD during day5
	54	H02_I1_99day5_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H02 during day5
	102	H50_I1_99day5_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H50 during day5
	103	THD_I1_99day5_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval THD/TDD during day5
	104	H02_I1_99day5_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H02 value during day5

	152	H50_I1_99day5_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H50 value during day5
	153	Nnv_I2_day5	Number of I2 (Phase B/BC) non-valid 3-sec intervals during day5
	154	N_I2_day5	Number of I2 (Phase B/BC) valid 3-sec intervals during day5
	155	THD_N1_I2_99day5	Number of I2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day5
	156	H02_N1_I2_99day5	Number of I2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day5
	204	H50_N1_I2_99day5	Number of I2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day5
	205	THD_I2_99day5_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval THD/TDD during day5
	206	H02_I2_99day5_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H02 during day5
	254	H50_I2_99day5_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H50 during day5
	255	THD_I2_99day5_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval THD/TDD during day5
	256	H02_I2_99day5_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H02 value during day5
	304	H50_I2_99day5_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H50 value during day5
	305	Nnv_I3_day5	Number of I3 (Phase C/CA) non-valid 3-sec intervals during day5
	306	N_I3_day5	Number of I3 (Phase C/CA) valid 3-sec intervals during day5
	307	THD_N1_I3_99day5	Number of I3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day5
	308	H02_N1_I3_99day5	Number of I3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day5
	356	H50_N1_I3_99day5	Number of I3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day5
	357	THD_I3_99day5_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval THD/TDD during day5
	358	H02_I3_99day5_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H02 during day5
	406	H50_I3_99day5_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H50 during day5
	407	THD_I3_99day5_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval THD/TDD during day5
	408	H02_I3_99day5_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H02 value during day5
	456	H50_I3_99day5_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H50 value during day5
10			**IEEE 519 – Voltages Harmonic Compliance 99'th percentile Day #6**
	1	Nnv_V1_day6	Number of V1 (Phase A/AB) non-valid 3-sec intervals during day6
	2	N_V1_day6	Number of V1 (Phase A/AB) valid 3-sec intervals during day6
	3	THD_N1_V1_99day6	Number of V1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day6
	4	H02_N1_V1_99day6	Number of V1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day6
	52	H50_N1_V1_99day6	Number of V1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day6
	53	THD_V1_99day6_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval THD/TDD during day6
	54	H02_V1_99day6_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H02 during day6
	102	H50_V1_99day6_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H50 during day6

	103	THD_V1_99day6_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval THD/TDD during day6
	104	H02_V1_99day6_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H02 value during day6
	152	H50_V1_99day6_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H50 value during day6
	153	Nnv_V2_day6	Number of V2 (Phase B/BC) non-valid 3-sec intervals during day6
	154	N_V2_day6	Number of V2 (Phase B/BC) valid 3-sec intervals during day6
	155	THD_N1_V2_99day6	Number of V2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day6
	156	H02_N1_V2_99day6	Number of V2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day6
	204	H50_N1_V2_99day6	Number of V2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day6
	205	THD_V2_99day6_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval THD/TDD during day6
	206	H02_V2_99day6_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H02 during day6
	254	H50_V2_99day6_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H50 during day6
	255	THD_V2_99day6_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval THD/TDD during day6
	256	H02_V2_99day6_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H02 value during day6
	304	H50_V2_99day6_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H50 value during day6
	305	Nnv_V3_day6	Number of V3 (Phase C/CA) non-valid 3-sec intervals during day6
	306	N_V3_day6	Number of V3 (Phase C/CA) valid 3-sec intervals during day6
	307	THD_N1_V3_99day6	Number of V3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day6
	308	H02_N1_V3_99day6	Number of V3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day6
	356	H50_N1_V3_99day6	Number of V3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day6
	357	THD_V3_99day6_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval THD/TDD during day6
	358	H02_V3_99day6_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H02 during day6
	406	H50_V3_99day6_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H50 during day6
	407	THD_V3_99day6_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval THD/TDD during day6
	408	H02_V3_99day6_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H02 value during day6
	456	H50_V3_99day6_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H50 value during day6
11			**IEEE 519 – Currents Harmonic Compliance 99'th percentile Day #6**
	1	Nnv_I1_day6	Number of I1 (Phase A/AB) non-valid 3-sec intervals during day6
	2	N_I1_day6	Number of I1 (Phase A/AB) valid 3-sec intervals during day6
	3	THD_N1_I1_99day6	Number of I1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day6
	4	H02_N1_I1_99day6	Number of I1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day6
	52	H50_N1_I1_99day6	Number of I1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day6
	53	THD_I1_99day6_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval THD/TDD during day6
	54	H02_I1_99day6_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H02 during day6

	102	H50_I1_99day6_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H50 during day6
	103	THD_I1_99day6_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval THD/TDD during day6
	104	H02_I1_99day6_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H02 value during day6
	152	H50_I1_99day6_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H50 value during day6
	153	Nnv_I2_day6	Number of I2 (Phase B/BC) non-valid 3-sec intervals during day6
	154	N_I2_day6	Number of I2 (Phase B/BC) valid 3-sec intervals during day6
	155	THD_N1_I2_99day6	Number of I2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day6
	156	H02_N1_I2_99day6	Number of I2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day6
	204	H50_N1_I2_99day6	Number of I2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day6
	205	THD_I2_99day6_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval THD/TDD during day6
	206	H02_I2_99day6_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H02 during day6
	254	H50_I2_99day6_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H50 during day6
	255	THD_I2_99day6_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval THD/TDD during day6
	256	H02_I2_99day6_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H02 value during day6
	304	H50_I2_99day6_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H50 value during day6
	305	Nnv_I3_day6	Number of I3 (Phase C/CA) non-valid 3-sec intervals during day6
	306	N_I3_day6	Number of I3 (Phase C/CA) valid 3-sec intervals during day6
	307	THD_N1_I3_99day6	Number of I3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day6
	308	H02_N1_I3_99day6	Number of I3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day6
	356	H50_N1_I3_99day6	Number of I3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day6
	357	THD_I3_99day6_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval THD/TDD during day6
	358	H02_I3_99day6_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H02 during day6
	406	H50_I3_99day6_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H50 during day6
	407	THD_I3_99day6_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval THD/TDD during day6
	408	H02_I3_99day6_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H02 value during day6
	456	H50_I3_99day6_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H50 value during day6
12			**IEEE 519 – Voltages Harmonic Compliance 99'th percentile Day #7**
	1	Nnv_V1_day7	Number of V1 (Phase A/AB) non-valid 3-sec intervals during day7
	2	N_V1_day7	Number of V1 (Phase A/AB) valid 3-sec intervals during day7
	3	THD_N1_V1_99day7	Number of V1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day7
	4	H02_N1_V1_99day7	Number of V1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day7
	52	H50_N1_V1_99day7	Number of V1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day7

	53	THD_V1_99day7_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval THD/TDD during day7
	54	H02_V1_99day7_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H02 during day7
	102	H50_V1_99day7_max1	99'th percentile value (Max1) of V1 (Phase A/AB) 3-sec interval H50 during day7
	103	THD_V1_99day7_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval THD/TDD during day7
	104	H02_V1_99day7_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H02 value during day7
	152	H50_V1_99day7_max2	Maximum (Max2) of V1 (Phase A/AB) 3-sec interval H50 value during day7
	153	Nnv_V2_day7	Number of V2 (Phase B/BC) non-valid 3-sec intervals during day7
	154	N_V2_day7	Number of V2 (Phase B/BC) valid 3-sec intervals during day7
	155	THD_N1_V2_99day7	Number of V2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day7
	156	H02_N1_V2_99day7	Number of V2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day7
	204	H50_N1_V2_99day7	Number of V2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day7
	205	THD_V2_99day7_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval THD/TDD during day7
	206	H02_V2_99day7_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H02 during day7
	254	H50_V2_99day7_max1	99'th percentile value (Max1) of V2 (Phase B/BC) 3-sec interval H50 during day7
	255	THD_V2_99day7_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval THD/TDD during day7
	256	H02_V2_99day7_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H02 value during day7
	304	H50_V2_99day7_max2	Maximum (Max2) of V2 (Phase B/BC) 3-sec interval H50 value during day7
	305	Nnv_V3_day7	Number of V3 (Phase C/CA) non-valid 3-sec intervals during day7
	306	N_V3_day7	Number of V3 (Phase C/CA) valid 3-sec intervals during day7
	307	THD_N1_V3_99day7	Number of V3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day7
	308	H02_N1_V3_99day7	Number of V3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day7
	356	H50_N1_V3_99day7	Number of V3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day7
	357	THD_V3_99day7_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval THD/TDD during day7
	358	H02_V3_99day7_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H02 during day7
	406	H50_V3_99day7_max1	99'th percentile value (Max1) of V3 (Phase C/CA) 3-sec interval H50 during day7
	407	THD_V3_99day7_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval THD/TDD during day7
	408	H02_V3_99day7_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H02 value during day7
	456	H50_V3_99day7_max2	Maximum (Max2) of V3 (Phase C/CA) 3-sec interval H50 value during day7
13			**IEEE 519 – Currents Harmonic Compliance 99'th percentile Day #7**
	1	Nnv_I1_day7	Number of I1 (Phase A/AB) non-valid 3-sec intervals during day7
	2	N_I1_day7	Number of I1 (Phase A/AB) valid 3-sec intervals during day7
	3	THD_N1_I1_99day7	Number of I1 (Phase A/AB) 3-sec interval THD/TDD values exceeding limit during day7
	4	H02_N1_I1_99day7	Number of I1 (Phase A/AB) 3-sec interval H02 values exceeding limit during day7

	52	H50_N1_I1_99day7	Number of I1 (Phase A/AB) 3-sec interval H50 values exceeding limit during day7
	53	THD_I1_99day7_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval THD/TDD during day7
	54	H02_I1_99day7_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H02 during day7
	102	H50_I1_99day7_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 3-sec interval H50 during day7
	103	THD_I1_99day7_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval THD/TDD during day7
	104	H02_I1_99day7_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H02 value during day7
	152	H50_I1_99day7_max2	Maximum (Max2) of I1 (Phase A/AB) 3-sec interval H50 value during day7
	153	Nnv_I2_day7	Number of I2 (Phase B/BC) non-valid 3-sec intervals during day7
	154	N_I2_day7	Number of I2 (Phase B/BC) valid 3-sec intervals during day7
	155	THD_N1_I2_99day7	Number of I2 (Phase B/BC) 3-sec interval THD/TDD values exceeding limit during day7
	156	H02_N1_I2_99day7	Number of I2 (Phase B/BC) 3-sec interval H02 values exceeding limit during day7
	204	H50_N1_I2_99day7	Number of I2 (Phase B/BC) 3-sec interval H50 values exceeding limit during day7
	205	THD_I2_99day7_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval THD/TDD during day7
	206	H02_I2_99day7_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H02 during day7
	254	H50_I2_99day7_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 3-sec interval H50 during day7
	255	THD_I2_99day7_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval THD/TDD during day7
	256	H02_I2_99day7_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H02 value during day7
	304	H50_I2_99day7_max2	Maximum (Max2) of I2 (Phase B/BC) 3-sec interval H50 value during day7
	305	Nnv_I3_day7	Number of I3 (Phase C/CA) non-valid 3-sec intervals during day7
	306	N_I3_day7	Number of I3 (Phase C/CA) valid 3-sec intervals during day7
	307	THD_N1_I3_99day7	Number of I3 (Phase C/CA) 3-sec interval THD/TDD values exceeding limit during day7
	308	H02_N1_I3_99day7	Number of I3 (Phase C/CA) 3-sec interval H02 values exceeding limit during day7
	356	H50_N1_I3_99day7	Number of I3 (Phase C/CA) 3-sec interval H50 values exceeding limit during day7
	357	THD_I3_99day7_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval THD/TDD during day7
	358	H02_I3_99day7_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H02 during day7
	406	H50_I3_99day7_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 3-sec interval H50 during day7
	407	THD_I3_99day7_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval THD/TDD during day7
	408	H02_I3_99day7_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H02 value during day7
	456	H50_I3_99day7_max2	Maximum (Max2) of I3 (Phase C/CA) 3-sec interval H50 value during day7
14			**IEEE 519 – Voltages Harmonic Compliance 95'th percentile Weekly**
	1	Nnv_V1_week	Number of V1 (Phase A/AB) non-valid 10-min intervals during a week
	2	N_V1_week	Number of V1 (Phase A/AB) valid 10-min intervals during a week

3	THD_N1_V1_95week	Number of V1 (Phase A/AB) 10-min interval THD/TDD values exceeding limit during a week
4	H02_N1_V1_95week	Number of V1 (Phase A/AB) 10-min interval H02 values exceeding limit during a week
52	H50_N1_V1_95week	Number of V1 (Phase A/AB) 10-min interval H50 values exceeding limit during a week
53	THD_V1_95week_max1	95'th percentile value (Max1) of V1 (Phase A/AB) 10-min interval THD/TDD during a week
54	H02_V1_95week_max1	95'th percentile value (Max1) of V1 (Phase A/AB) 10-min interval H02 during a week
102	H50_V1_95week_max1	95'th percentile value (Max1) of V1 (Phase A/AB) 10-min interval H50 during a week
103	THD_V1_95week_max2	Maximum (Max2) of V1 (Phase A/AB) 10-min interval THD/TDD during a week
104	H02_V1_95week_max2	Maximum (Max2) of V1 (Phase A/AB) 10-min interval H02 value during a week
152	H50_V1_95week_max2	Maximum (Max2) of V1 (Phase A/AB) 10-min interval H50 value during a week
153	Nnv_V2_week	Number of V2 (Phase B/BC) non-valid 10-min intervals during a week
154	N_V2_week	Number of V2 (Phase B/BC) valid 10-min intervals during a week
155	THD_N1_V2_95week	Number of V2 (Phase B/BC) 10-min interval THD/TDD values exceeding limit during a week
156	H02_N1_V2_95week	Number of V2 (Phase B/BC) 10-min interval H02 values exceeding limit during a week
204	H50_N1_V2_95week	Number of V2 (Phase B/BC) 10-min interval H50 values exceeding limit during a week
205	THD_V2_95week_max1	95'th percentile value (Max1) of V2 (Phase B/BC) 10-min interval THD/TDD during a week
206	H02_V2_95week_max1	95'th percentile value (Max1) of V2 (Phase B/BC) 10-min interval H02 during a week
254	H50_V2_95week_max1	95'th percentile value (Max1) of V2 (Phase B/BC) 10-min interval H50 during a week
255	THD_V2_95week_max2	Maximum (Max2) of V2 (Phase B/BC) 10-min interval THD/TDD during a week
256	H02_V2_95week_max2	Maximum (Max2) of V2 (Phase B/BC) 10-min interval H02 value during a week
304	H50_V2_95week_max2	Maximum (Max2) of V2 (Phase B/BC) 10-min interval H50 value during a week
305	Nnv_V3_week	Number of V3 (Phase C/CA) non-valid 10-min intervals during a week
306	N_V3_week	Number of V3 (Phase C/CA) valid 10-min intervals during a week
307	THD_N1_V3_95week	Number of V3 (Phase C/CA) 10-min interval THD/TDD values exceeding limit during a week
308	H02_N1_V3_95week	Number of V3 (Phase C/CA) 10-min interval H02 values exceeding limit during a week
356	H50_N1_V3_95week	Number of V3 (Phase C/CA) 10-min interval H50 values exceeding limit during a week
357	THD_V3_95week_max1	95'th percentile value (Max1) of V3 (Phase C/CA) 10-min interval THD/TDD during a week
358	H02_V3_95week_max1	95'th percentile value (Max1) of V3 (Phase C/CA) 10-min interval H02 during a week
406	H50_V3_95week_max1	95'th percentile value (Max1) of V3 (Phase C/CA) 10-min interval H50 during a week
407	THD_V3_95week_max2	Maximum (Max2) of V3 (Phase C/CA) 10-min interval THD/TDD during a week
408	H02_V3_95week_max2	Maximum (Max2) of V3 (Phase C/CA) 10-min interval H02 value during a week
456	H50_V3_95week_max2	Maximum (Max2) of V3 (Phase C/CA) 10-min interval H50 value during a week

15			**IEEE 519 – Currents Harmonic Compliance 95'th percentile Weekly**
	1	Nnv_I1_week	Number of I1 (Phase A/AB) non-valid 10-min intervals during a week
	2	N_I1_week	Number of I1 (Phase A/AB) valid 10-min intervals during a week
	3	THD_N1_I1_95week	Number of I1 (Phase A/AB) 10-min interval THD/TDD values exceeding limit during a week
	4	H02_N1_I1_95week	Number of I1 (Phase A/AB) 10-min interval H02 values exceeding limit during a week
	52	H50_N1_I1_95week	Number of I1 (Phase A/AB) 10-min interval H50 values exceeding limit during a week
	53	THD_I1_95week_max1	95'th percentile value (Max1) of I1 (Phase A/AB) 10-min interval THD/TDD during a week
	54	H02_I1_95week_max1	95'th percentile value (Max1) of I1 (Phase A/AB) 10-min interval H02 during a week
	102	H50_I1_95week_max1	95'th percentile value (Max1) of I1 (Phase A/AB) 10-min interval H50 during a week
	103	THD_I1_95week_max2	Maximum (Max2) of I1 (Phase A/AB) 10-min interval THD/TDD during a week
	104	H02_I1_95week_max2	Maximum (Max2) of I1 (Phase A/AB) 10-min interval H02 value during a week
	152	H50_I1_95week_max2	Maximum (Max2) of I1 (Phase A/AB) 10-min interval H50 value during a week
	153	Nnv_I2_week	Number of I2 (Phase B/BC) non-valid 10-min intervals during a week
	154	N_I2_week	Number of I2 (Phase B/BC) valid 10-min intervals during a week
	155	THD_N1_I2_95week	Number of I2 (Phase B/BC) 10-min interval THD/TDD values exceeding limit during a week
	156	H02_N1_I2_95week	Number of I2 (Phase B/BC) 10-min interval H02 values exceeding limit during a week
	204	H50_N1_I2_95week	Number of I2 (Phase B/BC) 10-min interval H50 values exceeding limit during a week
	205	THD_I2_95week_max1	95'th percentile value (Max1) of I2 (Phase B/BC) 10-min interval THD/TDD during a week
	206	H02_I2_95week_max1	95'th percentile value (Max1) of I2 (Phase B/BC) 10-min interval H02 during a week
	254	H50_I2_95week_max1	95'th percentile value (Max1) of I2 (Phase B/BC) 10-min interval H50 during a week
	255	THD_I2_95week_max2	Maximum (Max2) of I2 (Phase B/BC) 10-min interval THD/TDD during a week
	256	H02_I2_95week_max2	Maximum (Max2) of I2 (Phase B/BC) 10-min interval H02 value during a week
	304	H50_I2_95week_max2	Maximum (Max2) of I2 (Phase B/BC) 10-min interval H50 value during a week
	305	Nnv_I3_week	Number of I3 (Phase C/CA) non-valid 10-min intervals during a week
	306	N_I3_week	Number of I3 (Phase C/CA) valid 10-min intervals during a week
	307	THD_N1_I3_95week	Number of I3 (Phase C/CA) 10-min interval THD/TDD values exceeding limit during a week
	308	H02_N1_I3_95week	Number of I3 (Phase C/CA) 10-min interval H02 values exceeding limit during a week
	356	H50_N1_I3_95week	Number of I3 (Phase C/CA) 10-min interval H50 values exceeding limit during a week
	357	THD_I3_95week_max1	95'th percentile value (Max1) of I3 (Phase C/CA) 10-min interval THD/TDD during a week
	358	H02_I3_95week_max1	95'th percentile value (Max1) of I3 (Phase C/CA) 10-min interval H02 during a week
	406	H50_I3_95week_max1	95'th percentile value (Max1) of I3 (Phase C/CA) 10-min interval H50 during a week
	407	THD_I3_95week_max2	Maximum (Max2) of I3 (Phase C/CA) 10-min interval THD/TDD during a week
	408	H02_I3_95week_max2	Maximum (Max2) of I3 (Phase C/CA) 10-min interval H02 value during a week

	456	H50_I3_95week_max2	Maximum (Max2) of I3 (Phase C/CA) 10-min interval H50 value during a week
16			**IEEE 519 – Currents Harmonic Compliance 99'th percentile Weekly**
	1	Nnv_I1_week	Number of I1 (Phase A/AB) non-valid 10-min intervals during a week
	2	N_I1_week	Number of I1 (Phase A/AB) valid 10-min intervals during a week
	3	THD_N1_I1_99week	Number of I1 (Phase A/AB) 10-min interval THD/TDD values exceeding limit during a week
	4	H02_N1_I1_99week	Number of I1 (Phase A/AB) 10-min interval H02 values exceeding limit during a week
	52	H50_N1_I1_99week	Number of I1 (Phase A/AB) 10-min interval H50 values exceeding limit during a week
	53	THD_I1_99week_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 10-min interval THD/TDD during a week
	54	H02_I1_99week_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 10-min interval H02 during a week
	102	H50_I1_99week_max1	99'th percentile value (Max1) of I1 (Phase A/AB) 10-min interval H50 during a week
	103	THD_I1_99week_max2	Maximum (Max2) of I1 (Phase A/AB) 10-min interval THD/TDD during a week
	104	H02_I1_99week_max2	Maximum (Max2) of I1 (Phase A/AB) 10-min interval H02 value during a week
	152	H50_I1_99week_max2	Maximum (Max2) of I1 (Phase A/AB) 10-min interval H50 value during a week
	153	Nnv_I2_week	Number of I2 (Phase B/BC) non-valid 10-min intervals during a week
	154	N_I2_week	Number of I2 (Phase B/BC) valid 10-min intervals during a week
	155	THD_N1_I2_99week	Number of I2 (Phase B/BC) 10-min interval THD/TDD values exceeding limit during a week
	156	H02_N1_I2_99week	Number of I2 (Phase B/BC) 10-min interval H02 values exceeding limit during a week
	204	H50_N1_I2_99week	Number of I2 (Phase B/BC) 10-min interval H50 values exceeding limit during a week
	205	THD_I2_99week_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 10-min interval THD/TDD during a week
	206	H02_I2_99week_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 10-min interval H02 during a week
	254	H50_I2_99week_max1	99'th percentile value (Max1) of I2 (Phase B/BC) 10-min interval H50 during a week
	255	THD_I2_99week_max2	Maximum (Max2) of I2 (Phase B/BC) 10-min interval THD/TDD during a week
	256	H02_I2_99week_max2	Maximum (Max2) of I2 (Phase B/BC) 10-min interval H02 value during a week
	304	H50_I2_99week_max2	Maximum (Max2) of I2 (Phase B/BC) 10-min interval H50 value during a week
	305	Nnv_I3_week	Number of I3 (Phase C/CA) non-valid 10-min intervals during a week
	306	N_I3_week	Number of I3 (Phase C/CA) valid 10-min intervals during a week
	307	THD_N1_I3_99week	Number of I3 (Phase C/CA) 10-min interval THD/TDD values exceeding limit during a week
	308	H02_N1_I3_99week	Number of I3 (Phase C/CA) 10-min interval H02 values exceeding limit during a week
	356	H50_N1_I3_99week	Number of I3 (Phase C/CA) 10-min interval H50 values exceeding limit during a week
	357	THD_I3_99week_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 10-min interval THD/TDD during a week
	358	H02_I3_99week_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 10-min interval H02 during a week
	406	H50_I3_99week_max1	99'th percentile value (Max1) of I3 (Phase C/CA) 10-min interval H50 during a week

	407	THD_I3_99week_max2	Maximum (Max2) of I3 (Phase C/CA) 10-min interval THD/TDD during a week
	408	H02_I3_99week_max2	Maximum (Max2) of I3 (Phase C/CA) 10-min interval H02 value during a week
	456	H50_I3_99week_max2	Maximum (Max2) of I3 (Phase C/CA) 10-min interval H50 value during a week

Annex C IEEE 519 Compliance Statistics Report Example

IEEE 519:2022 Compliance Report

MeterID 686324 **06/05/2025**

29/12/2024– 04/01/2025

Summary Report

Nominal Voltage: 400 V	Max Demand Current: 10 A
Nominal Current: 12 A	Short-Circuit Current: 190 A

Date	Interval	Compliance	Channel
29/12/2024 – 04/01/2025	**Weekly 99th 10-min**	**Pass**	**All**
29/12/2024 – 04/01/2025	**Weekly 95th 10-min**	**Fail**	**V1, V2, V3**
29/12/2024	**Daily 99th 3-second**	**Fail**	**V1, V2, V3**
30/12/2024	**Daily 99th 3-second**	**Pass**	**All**
03/01/2025	**Daily 99th 3-second**	**Pass**	**All**
04/01/2025	**Daily 99th 3-second**	**Pass**	**All**

The presented results of this report are based on the days with available data for the selected week

Detailed Report

Nominal Voltage: 400 V	Max Demand Current: 10 A
Nominal Current: 12 A	Short-Circuit Current: 190 A

Voltage Harmonic Statistics: Weekly 95th percentile short time (10 min)										
Dates: 29/12/2024 – 04/01/2025										
	Phase A			Phase B			Phase C			95th percentile limit, %
Harmonic number	95th percentile, %	Max value, %	Non-complied values, %	95th percentile, %	Max value, %	Non-complied values,%	95th percentile, %	Max value, %	Non-complied values, %	
THD	8.51	36.7	15.385	9.29	37.05	15.385	9.57	36.86	15.385	8
2	0.22	5.15	2.564	0.26	5.14	2.564	0.26	5.13	2.564	5
3	4.5	5.15	2.564	4.5	5.15	2.564	0.15	5.13	2.564	5
4	0.09	5.13	2.564	0.12	5.15	2.564	0.12	5.15	2.564	5
5	6.49	9.1	12.821	3.5	5.16	2.564	4	5.17	2.564	5
6	0.08	5.13	2.564	0.09	5.13	2.564	0.09	5.12	2.564	5
7	0.07	5.12	2.564	0.07	5.14	2.564	5.99	9.42	12.821	5
8	1.02	5.17	2.564	1.01	5.15	2.564	1.01	5.13	2.564	5
9	0.07	5.12	2.564	0.07	5.13	2.564	0.07	5.12	2.564	5
10	0.06	5.12	2.564	0.07	5.14	2.564	0.07	5.16	2.564	5
11	0.06	5.18	2.564	2.99	5.14	2.564	1.36	5.12	2.564	5
12	0.06	5.12	2.564	0.07	5.13	2.564	0.07	5.12	2.564	5
13	0.06	5.11	2.564	1.49	5.14	2.564	1.36	5.17	2.564	5
14	0.06	5.18	2.564	0.06	5.14	2.564	0.06	5.11	2.564	5
15	0.06	5.12	2.564	0.06	5.12	2.564	0.06	5.11	2.564	5
16	0.06	5.1	2.564	0.06	5.14	2.564	0.06	5.18	2.564	5
17	0.05	5.18	2.564	0.05	5.14	2.564	0.06	5.1	2.564	5
18	0.05	5.11	2.564	0.06	5.12	2.564	0.06	5.11	2.564	5
19	1.35	5.09	2.564	0.05	5.14	2.564	5.7	5.98	12.821	5
20	0.05	5.19	2.564	0.06	5.13	2.564	0.06	5.09	2.564	5
21	0.05	5.11	2.564	1.34	5.12	2.564	0.06	5.11	2.564	5
22	0.05	5.09	2.564	0.06	5.15	2.564	0.06	5.19	2.564	5
23	0.05	5.2	2.564	0.37	5.14	2.564	0.05	5.09	2.564	5
24	0.05	5.11	2.564	0.05	5.12	2.564	0.05	5.11	2.564	5
25	1.36	5.09	2.564	1.36	5.16	2.564	0.05	5.2	2.564	5
26	0.05	5.21	2.564	0.05	5.15	2.564	0.05	5.08	2.564	5
27	0.05	5.11	2.564	0.05	5.13	2.564	0.05	5.11	2.564	5
28	0.05	5.08	2.564	0.05	5.15	2.564	0.05	5.2	2.564	5
29	0.05	5.22	2.564	0.05	5.14	2.564	0.05	5.07	2.564	5
30	0.05	5.1	2.564	0.05	5.11	2.564	0.05	5.09	2.564	5
31	0.05	5.06	2.564	0.05	5.14	2.564	0.05	5.2	2.564	5
32	0.05	5.22	2.564	0.05	5.14	2.564	0.05	5.06	2.564	5
33	0.05	5.1	2.564	0.05	5.11	2.564	0.05	5.1	2.564	5
34	0.05	5.06	2.564	0.05	5.14	2.564	0.05	5.21	2.564	5
35	0.05	5.22	2.564	0.05	5.14	2.564	1.35	5.05	2.564	5
36	0.05	5.1	2.564	0.05	5.11	2.564	0.05	5.1	2.564	5
37	0.05	5.05	2.564	0.05	5.14	2.564	1.34	5.22	2.564	5
38	0.05	5.22	2.564	0.05	5.14	2.564	0.05	5.04	2.564	5
39	0.05	5.1	2.564	0.05	5.11	2.564	0.05	5.1	2.564	5
40	0.05	5.04	2.564	0.05	5.14	2.564	0.05	5.22	2.564	5
41	0.05	5.23	2.564	0.05	5.14	2.564	0.05	5.04	2.564	5
42	0.05	5.09	2.564	0.05	5.11	2.564	0.05	5.1	2.564	5
43	0.05	5.03	2.564	0.05	5.15	2.564	0.05	5.23	2.564	5
44	0.05	5.24	2.564	0.05	5.14	2.564	0.05	5.03	2.564	5
45	0.05	5.09	2.564	0.05	5.12	2.564	0.05	5.1	2.564	5
46	0.05	5.03	2.564	0.05	5.14	2.564	0.05	5.24	2.564	5
47	0.05	5.25	2.564	0.05	5.14	2.564	0.05	5.03	2.564	5
48	0.05	5.11	2.564	0.05	5.12	2.564	0.05	5.1	2.564	5
49	0.05	5.02	2.564	0.05	5.15	2.564	0.05	5.25	2.564	5
50	4.09	5.27	2.564	7.28	10.38	12.821	3.89	5.03	2.564	5

Current Harmonic Statistics: Weekly 95th percentile short time (10 min)										
Dates: 29/12/2024 – 04/01/2025										
	Phase A			Phase B			Phase C			95th percentile limit, %
Harmonic number	95th percentile, %	Max value, %	Non-complied values, %	95th percentile, %	Max value, %	Non-complied values,%	95th percentile, %	Max value, %	Non-complied values, %	
TDD	0	0	0	0	0	0	0	0	0	5
2	0	0	0	0	0	0	0	0	0	2
3	0	0	0	0	0	0	0	0	0	4
4	0	0	0	0	0	0	0	0	0	2
5	0	0	0	0	0	0	0	0	0	4
6	0	0	0	0	0	0	0	0	0	2
7	0	0	0	0	0	0	0	0	0	4
8	0	0	0	0	0	0	0	0	0	4
9	0	0	0	0	0	0	0	0	0	4
10	0	0	0	0	0	0	0	0	0	4
11	0	0	0	0	0	0	0	0	0	2
12	0	0	0	0	0	0	0	0	0	2
13	0	0	0	0	0	0	0	0	0	2
14	0	0	0	0	0	0	0	0	0	2
15	0	0	0	0	0	0	0	0	0	2
16	0	0	0	0	0	0	0	0	0	2
17	0	0	0	0	0	0	0	0	0	1.5
18	0	0	0	0	0	0	0	0	0	1.5
19	0	0	0	0	0	0	0	0	0	1.5
20	0	0	0	0	0	0	0	0	0	1.5
21	0	0	0	0	0	0	0	0	0	1.5
22	0	0	0	0	0	0	0	0	0	1.5
23	0	0	0	0	0	0	0	0	0	0.6
24	0	0	0	0	0	0	0	0	0	0.6
25	0	0	0	0	0	0	0	0	0	0.6
26	0	0	0	0	0	0	0	0	0	0.6
27	0	0	0	0	0	0	0	0	0	0.6
28	0	0	0	0	0	0	0	0	0	0.6
29	0	0	0	0	0	0	0	0	0	0.6
30	0	0	0	0	0	0	0	0	0	0.6
31	0	0	0	0	0	0	0	0	0	0.6
32	0	0	0	0	0	0	0	0	0	0.6
33	0	0	0	0	0	0	0	0	0	0.6
34	0	0	0	0	0	0	0	0	0	0.6
35	0	0	0	0	0	0	0	0	0	0.3
36	0	0	0	0	0	0	0	0	0	0.3
37	0	0	0	0	0	0	0	0	0	0.3
38	0	0	0	0	0	0	0	0	0	0.3
39	0	0	0	0	0	0	0	0	0	0.3
40	0	0	0	0	0	0	0	0	0	0.3
41	0	0	0	0	0	0	0	0	0	0.3
42	0	0	0	0	0	0	0	0	0	0.3
43	0	0	0	0	0	0	0	0	0	0.3
44	0	0	0	0	0	0	0	0	0	0.3
45	0	0	0	0	0	0	0	0	0	0.3
46	0	0	0	0	0	0	0	0	0	0.3
47	0	0	0	0	0	0	0	0	0	0.3
48	0	0	0	0	0	0	0	0	0	0.3
49	0	0	0	0	0	0	0	0	0	0.3
50	0	0	0	0	0	0	0	0	0	0.3

Current Harmonic Statistics: Weekly 99th percentile short time (10 min)										
Dates: 29/12/2024 – 04/01/2025										
	Phase A			Phase B			Phase C			99th percentile limit, %
Harmonic number	99th percentile, %	Max value, %	Non-complied values, %	99th percentile, %	Max value, %	Non-complied values,%	99th percentile, %	Max value, %	Non-complied values, %	
TDD	0	0	0	0	0	0	0	0	0	7.5
2	0	0	0	0	0	0	0	0	0	3
3	0	0	0	0	0	0	0	0	0	6
4	0	0	0	0	0	0	0	0	0	3
5	0	0	0	0	0	0	0	0	0	6
6	0	0	0	0	0	0	0	0	0	3
7	0	0	0	0	0	0	0	0	0	6
8	0	0	0	0	0	0	0	0	0	6
9	0	0	0	0	0	0	0	0	0	6
10	0	0	0	0	0	0	0	0	0	6
11	0	0	0	0	0	0	0	0	0	3
12	0	0	0	0	0	0	0	0	0	3
13	0	0	0	0	0	0	0	0	0	3
14	0	0	0	0	0	0	0	0	0	3
15	0	0	0	0	0	0	0	0	0	3
16	0	0	0	0	0	0	0	0	0	3
17	0	0	0	0	0	0	0	0	0	2.25
18	0	0	0	0	0	0	0	0	0	2.25
19	0	0	0	0	0	0	0	0	0	2.25
20	0	0	0	0	0	0	0	0	0	2.25
21	0	0	0	0	0	0	0	0	0	2.25
22	0	0	0	0	0	0	0	0	0	2.25
23	0	0	0	0	0	0	0	0	0	0.9
24	0	0	0	0	0	0	0	0	0	0.9
25	0	0	0	0	0	0	0	0	0	0.9
26	0	0	0	0	0	0	0	0	0	0.9
27	0	0	0	0	0	0	0	0	0	0.9
28	0	0	0	0	0	0	0	0	0	0.9
29	0	0	0	0	0	0	0	0	0	0.9
30	0	0	0	0	0	0	0	0	0	0.9
31	0	0	0	0	0	0	0	0	0	0.9
32	0	0	0	0	0	0	0	0	0	0.9
33	0	0	0	0	0	0	0	0	0	0.9
34	0	0	0	0	0	0	0	0	0	0.9
35	0	0	0	0	0	0	0	0	0	0.45
36	0	0	0	0	0	0	0	0	0	0.45
37	0	0	0	0	0	0	0	0	0	0.45
38	0	0	0	0	0	0	0	0	0	0.45
39	0	0	0	0	0	0	0	0	0	0.45
40	0	0	0	0	0	0	0	0	0	0.45
41	0	0	0	0	0	0	0	0	0	0.45
42	0	0	0	0	0	0	0	0	0	0.45
43	0	0	0	0	0	0	0	0	0	0.45
44	0	0	0	0	0	0	0	0	0	0.45
45	0	0	0	0	0	0	0	0	0	0.45
46	0	0	0	0	0	0	0	0	0	0.45
47	0	0	0	0	0	0	0	0	0	0.45
48	0	0	0	0	0	0	0	0	0	0.45
49	0	0	0	0	0	0	0	0	0	0.45
50	0	0	0	0	0	0	0	0	0	0.45

Voltage Harmonic Statistics: Daily 99th percentile short time (3 s)										
Date: 29/12/2024										
	Phase A			Phase B			Phase C			99th percentile limit, %
Harmonic number	99th percentile, %	Max value, %	Non-complied values, %	99th percentile, %	Max value, %	Non-complied values,%	99th percentile, %	Max value, %	Non-complied values, %	
THD	37.08	37.08	5.284	37.44	37.44	5.284	37.25	37.25	5.284	12
2	5.2	5.2	0	5.19	5.19	0	5.18	5.18	0	7.5
3	5.19	5.19	0	5.19	5.19	0	5.18	5.18	0	7.5
4	5.19	5.19	0	5.2	5.2	0	5.2	5.2	0	7.5
5	9.19	9.19	5.258	5.2	5.2	0	5.21	5.21	0	7.5
6	5.18	5.18	0	5.19	5.19	0	5.18	5.18	0	7.5
7	5.17	5.17	0	5.19	5.19	0	9.51	9.52	5.258	7.5
8	5.22	5.22	0	5.2	5.2	0	5.18	5.18	0	7.5
9	5.17	5.18	0	5.18	5.18	0	5.17	5.17	0	7.5
10	5.17	5.17	0	5.19	5.2	0	5.21	5.21	0	7.5
11	5.23	5.23	0	5.2	5.2	0	5.17	5.18	0	7.5
12	5.17	5.17	0	5.18	5.18	0	5.17	5.17	0	7.5
13	5.17	5.17	0	5.2	5.2	0	5.22	5.22	0	7.5
14	5.23	5.23	0	5.19	5.19	0	5.16	5.16	0	7.5
15	5.17	5.17	0	5.18	5.18	0	5.16	5.17	0	7.5
16	5.15	5.15	0	5.2	5.2	0	5.23	5.23	0	7.5
17	5.24	5.24	0	5.2	5.2	0	5.15	5.15	0	7.5
18	5.16	5.16	0	5.17	5.18	0	5.16	5.16	0	7.5
19	5.14	5.14	0	5.2	5.2	0	6.04	6.04	0	7.5
20	5.25	5.25	0	5.18	5.19	0	5.14	5.14	0	7.5
21	5.16	5.16	0	5.18	5.18	0	5.16	5.16	0	7.5
22	5.14	5.14	0	5.2	5.2	0	5.25	5.25	0	7.5
23	5.26	5.26	0	5.19	5.19	0	5.15	5.15	0	7.5
24	5.16	5.16	0	5.18	5.18	0	5.16	5.16	0	7.5
25	5.14	5.14	0	5.21	5.21	0	5.26	5.26	0	7.5
26	5.27	5.27	0	5.2	5.2	0	5.13	5.13	0	7.5
27	5.16	5.16	0	5.18	5.18	0	5.16	5.16	0	7.5
28	5.13	5.13	0	5.2	5.2	0	5.26	5.26	0	7.5
29	5.28	5.28	0	5.19	5.19	0	5.12	5.12	0	7.5
30	5.15	5.15	0	5.16	5.16	0	5.15	5.15	0	7.5
31	5.11	5.12	0	5.19	5.19	0	5.26	5.26	0	7.5
32	5.28	5.28	0	5.19	5.19	0	5.11	5.11	0	7.5
33	5.15	5.15	0	5.16	5.17	0	5.15	5.15	0	7.5
34	5.11	5.11	0	5.19	5.19	0	5.27	5.27	0	7.5
35	5.28	5.28	0	5.19	5.19	0	5.1	5.1	0	7.5
36	5.15	5.15	0	5.16	5.16	0	5.15	5.15	0	7.5
37	5.1	5.1	0	5.19	5.19	0	5.27	5.27	0	7.5
38	5.28	5.28	0	5.19	5.19	0	5.09	5.1	0	7.5
39	5.15	5.15	0	5.16	5.17	0	5.15	5.15	0	7.5
40	5.09	5.09	0	5.19	5.19	0	5.28	5.28	0	7.5
41	5.29	5.29	0	5.19	5.19	0	5.09	5.09	0	7.5
42	5.15	5.15	0	5.17	5.17	0	5.15	5.15	0	7.5
43	5.08	5.09	0	5.2	5.2	0	5.29	5.29	0	7.5
44	5.3	5.3	0	5.19	5.19	0	5.08	5.08	0	7.5
45	5.15	5.15	0	5.17	5.17	0	5.15	5.15	0	7.5
46	5.08	5.08	0	5.2	5.2	0	5.3	5.3	0	7.5
47	5.31	5.31	0	5.19	5.2	0	5.08	5.08	0	7.5
48	5.16	5.16	0	5.17	5.18	0	5.15	5.15	0	7.5
49	5.07	5.07	0	5.2	5.2	0	5.3	5.3	0	7.5
50	5.31	5.31	0	10.48	10.48	5.258	5.07	5.07	0	7.5

Voltage Harmonic Statistics: Daily 99th percentile short time (3 s)										
Date: 30/12/2024										
	Phase A			Phase B			Phase C			99th percentile limit, %
Harmonic number	99th percentile, %	Max value, %	Non-complied values, %	99th percentile, %	Max value, %	Non-complied values,%	99th percentile, %	Max value, %	Non-complied values, %	
THD	0.11	0.11	0	0.14	0.14	0	0.12	0.12	0	12
2	0.1	0.1	0	0.1	0.1	0	0.1	0.1	0	7.5
3	0.04	0.04	0	0.07	0.07	0	0.05	0.05	0	7.5
4	0.02	0.02	0	0.03	0.03	0	0.03	0.03	0	7.5
5	0.03	0.03	0	0.02	0.02	0	0.02	0.02	0	7.5
6	0.02	0.02	0	0.03	0.03	0	0.02	0.02	0	7.5
7	0.01	0.01	0	0.02	0.02	0	0.02	0.02	0	7.5
8	0.02	0.02	0	0.01	0.01	0	0.01	0.01	0	7.5
9	0.01	0.01	0	0.02	0.02	0	0.02	0.02	0	7.5
10	0	0	0	0.02	0.02	0	0.01	0.01	0	7.5
11	0.01	0.01	0	0	0	0	0	0	0	7.5
12	0	0	0	0.01	0.01	0	0	0	0	7.5
13	0	0	0	0.01	0.01	0	0	0	0	7.5
14	0	0	0	0	0	0	0	0	0	7.5
15	0	0	0	0	0	0	0	0	0	7.5
16	0	0	0	0.01	0.01	0	0	0	0	7.5
17	0	0	0	0	0	0	0	0	0	7.5
18	0	0	0	0	0	0	0	0	0	7.5
19	0	0	0	0	0	0	0	0	0	7.5
20	0	0	0	0	0	0	0	0	0	7.5
21	0	0	0	0	0	0	0	0	0	7.5
22	0	0	0	0	0	0	0	0	0	7.5
23	0	0	0	0	0	0	0	0	0	7.5
24	0	0	0	0	0	0	0	0	0	7.5
25	0	0	0	0	0	0	0	0	0	7.5
26	0	0	0	0	0	0	0	0	0	7.5
27	0	0	0	0	0	0	0	0	0	7.5
28	0	0	0	0	0	0	0	0	0	7.5
29	0	0	0	0	0	0	0	0	0	7.5
30	0	0	0	0	0	0	0	0	0	7.5
31	0	0	0	0	0	0	0	0	0	7.5
32	0	0	0	0	0	0	0	0	0	7.5
33	0	0	0	0	0	0	0	0	0	7.5
34	0	0	0	0	0	0	0	0	0	7.5
35	0	0	0	0	0	0	0	0	0	7.5
36	0	0	0	0	0	0	0	0	0	7.5
37	0	0	0	0	0	0	0	0	0	7.5
38	0	0	0	0	0	0	0	0	0	7.5
39	0	0	0	0	0	0	0	0	0	7.5
40	0	0	0	0	0	0	0	0	0	7.5
41	0	0	0	0	0	0	0	0	0	7.5
42	0	0	0	0	0	0	0	0	0	7.5
43	0	0	0	0	0	0	0	0	0	7.5
44	0	0	0	0	0	0	0	0	0	7.5
45	0	0	0	0	0	0	0	0	0	7.5
46	0	0	0	0	0	0	0	0	0	7.5
47	0	0	0	0	0	0	0	0	0	7.5
48	0	0	0	0	0	0	0	0	0	7.5
49	0	0	0	0	0	0	0	0	0	7.5
50	0	0	0	0	0	0	0	0	0	7.5

Voltage Harmonic Statistics: Daily 99th percentile short time (3 s)										
Date: 03/01/2025										
	Phase A			Phase B			Phase C			99th percentile limit, %
Harmonic number	99th percentile, %	Max value, %	Non-complied values, %	99th percentile, %	Max value, %	Non-complied values,%	99th percentile, %	Max value, %	Non-complied values, %	
THD	0.1	0.1	0	0.08	0.08	0	0.09	0.09	0	12
2	0.08	0.08	0	0.07	0.07	0	0.07	0.07	0	7.5
3	0.03	0.03	0	0.02	0.02	0	0.03	0.03	0	7.5
4	0.03	0.03	0	0.02	0.02	0	0.02	0.02	0	7.5
5	0.02	0.02	0	0.02	0.02	0	0.02	0.02	0	7.5
6	0.02	0.02	0	0	0	0	0.02	0.02	0	7.5
7	0.01	0.01	0	0.01	0.01	0	0.01	0.01	0	7.5
8	0.01	0.01	0	0.01	0.01	0	0.01	0.01	0	7.5
9	0	0	0	0	0	0	0	0	0	7.5
10	0	0	0	0	0	0	0	0	0	7.5
11	0	0	0	0	0	0	0	0	0	7.5
12	0	0	0	0	0	0	0	0	0	7.5
13	0	0	0	0	0	0	0	0	0	7.5
14	0	0	0	0	0	0	0	0	0	7.5
15	0	0	0	0	0	0	0	0	0	7.5
16	0	0	0	0	0	0	0	0	0	7.5
17	0	0	0	0	0	0	0	0	0	7.5
18	0	0	0	0	0	0	0	0	0	7.5
19	0	0	0	0	0	0	0	0	0	7.5
20	0	0	0	0	0	0	0	0	0	7.5
21	0	0	0	0	0	0	0	0	0	7.5
22	0	0	0	0	0	0	0	0	0	7.5
23	0	0	0	0	0	0	0	0	0	7.5
24	0	0	0	0	0	0	0	0	0	7.5
25	0	0	0	0	0	0	0	0	0	7.5
26	0	0	0	0	0	0	0	0	0	7.5
27	0	0	0	0	0	0	0	0	0	7.5
28	0	0	0	0	0	0	0	0	0	7.5
29	0	0	0	0	0	0	0	0	0	7.5
30	0	0	0	0	0	0	0	0	0	7.5
31	0	0	0	0	0	0	0	0	0	7.5
32	0	0	0	0	0	0	0	0	0	7.5
33	0	0	0	0	0	0	0	0	0	7.5
34	0	0	0	0	0	0	0	0	0	7.5
35	0	0	0	0	0	0	0	0	0	7.5
36	0	0	0	0	0	0	0	0	0	7.5
37	0	0	0	0	0	0	0	0	0	7.5
38	0	0	0	0	0	0	0	0	0	7.5
39	0	0	0	0	0	0	0	0	0	7.5
40	0	0	0	0	0	0	0	0	0	7.5
41	0	0	0	0	0	0	0	0	0	7.5
42	0	0	0	0	0	0	0	0	0	7.5
43	0	0	0	0	0	0	0	0	0	7.5
44	0	0	0	0	0	0	0	0	0	7.5
45	0	0	0	0	0	0	0	0	0	7.5
46	0	0	0	0	0	0	0	0	0	7.5
47	0	0	0	0	0	0	0	0	0	7.5
48	0	0	0	0	0	0	0	0	0	7.5
49	0	0	0	0	0	0	0	0	0	7.5
50	0	0	0	0	0	0	0	0	0	7.5

Voltage Harmonic Statistics: Daily 99th percentile short time (3 s)										
Date: 04/01/2025										
	Phase A			Phase B			Phase C			99th percentile limit, %
Harmonic number	99th percentile, %	Max value, %	Non-complied values, %	99th percentile, %	Max value, %	Non-complied values,%	99th percentile, %	Max value, %	Non-complied values, %	
THD	8.48	8.48	0	9.29	9.29	0	9.57	9.57	0	12
2	0	0.13	0	0	0.1	0	0	0.08	0	7.5
3	4.5	4.5	0	4.5	4.5	0	0	0.05	0	7.5
4	0	0.09	0	0	0.07	0	0	0.05	0	7.5
5	6.49	6.49	0	3.5	3.5	0	4	4	0	7.5
6	0	0.07	0	0	0.05	0	0	0.08	0	7.5
7	0	0.03	0	0	0.03	0	5.99	5.99	0	7.5
8	1.01	1.01	0	1	1	0	1	1	0	7.5
9	0	0.03	0	0	0.03	0	0	0.07	0	7.5
10	0	0.02	0	0	0.04	0	0	0.05	0	7.5
11	0	0.02	0	2.99	2.99	0	1.35	1.35	0	7.5
12	0	0.02	0	0	0.05	0	0	0.02	0	7.5
13	0	0.01	0	1.49	1.49	0	1.35	1.35	0	7.5
14	0	0	0	0	0.02	0	0	0.03	0	7.5
15	0	0.01	0	0	0.02	0	0	0.02	0	7.5
16	0	0	0	0	0	0	0	0.02	0	7.5
17	0	0.02	0	0	0	0	0	0.03	0	7.5
18	0	0.02	0	0	0.01	0	0	0.05	0	7.5
19	1.34	1.34	0	0	0.02	0	5.7	5.7	0	7.5
20	0	0.02	0	0	0.02	0	0	0.08	0	7.5
21	0	0.01	0	1.34	1.34	0	0	0.05	0	7.5
22	0	0.01	0	0	0.02	0	0	0.03	0	7.5
23	0	0.01	0	0.35	0.35	0	0	0.02	0	7.5
24	0	0.02	0	0	0.02	0	0	0.03	0	7.5
25	1.35	1.35	0	1.35	1.36	0	0	0.02	0	7.5
26	0	0.02	0	0	0.01	0	0	0.02	0	7.5
27	0	0.01	0	0	0	0	0	0.02	0	7.5
28	0	0	0	0	0	0	0	0.01	0	7.5
29	0	0	0	0	0	0	0	0.01	0	7.5
30	0	0	0	0	0	0	0	0.02	0	7.5
31	0	0	0	0	0	0	0	0.01	0	7.5
32	0	0	0	0	0	0	0	0	0	7.5
33	0	0	0	0	0	0	0	0.01	0	7.5
34	0	0	0	0	0	0	0	0.02	0	7.5
35	0	0	0	0	0	0	1.35	1.35	0	7.5
36	0	0	0	0	0	0	0	0.02	0	7.5
37	0	0	0	0	0	0	1.34	1.34	0	7.5
38	0	0	0	0	0	0	0	0.02	0	7.5
39	0	0	0	0	0	0	0	0.02	0	7.5
40	0	0	0	0	0	0	0	0.01	0	7.5
41	0	0	0	0	0	0	0	0	0	7.5
42	0	0.01	0	0	0	0	0	0.02	0	7.5
43	0	0.01	0	0	0.01	0	0	0.01	0	7.5
44	0	0.01	0	0	0.01	0	0	0.01	0	7.5
45	0	0.02	0	0	0.02	0	0	0.02	0	7.5
46	0	0.02	0	0	0.02	0	0	0.02	0	7.5
47	0	0.03	0	0	0.03	0	0	0.02	0	7.5
48	0	0.04	0	0	0.05	0	0	0.03	0	7.5
49	0	0.06	0	0	0.11	0	0	0.05	0	7.5
50	4.09	4.09	0	7.28	7.29	0	3.89	3.9	0	7.5

Current Harmonic Statistics: Daily 99th percentile short time (3 s)										
Date: 29/12/2024										
	Phase A			Phase B			Phase C			99th percentile limit, %
Harmonic number	99th percentile, %	Max value, %	Non-complied values, %	99th percentile, %	Max value, %	Non-complied values,%	99th percentile, %	Max value, %	Non-complied values, %	
TDD	0	0	0	0	0	0	0	0	0	10
2	0	0	0	0	0	0	0	0	0	4
3	0	0	0	0	0	0	0	0	0	8
4	0	0	0	0	0	0	0	0	0	4
5	0	0	0	0	0	0	0	0	0	8
6	0	0	0	0	0	0	0	0	0	4
7	0	0	0	0	0	0	0	0	0	8
8	0	0	0	0	0	0	0	0	0	8
9	0	0	0	0	0	0	0	0	0	8
10	0	0	0	0	0	0	0	0	0	8
11	0	0	0	0	0	0	0	0	0	4
12	0	0	0	0	0	0	0	0	0	4
13	0	0	0	0	0	0	0	0	0	4
14	0	0	0	0	0	0	0	0	0	4
15	0	0	0	0	0	0	0	0	0	4
16	0	0	0	0	0	0	0	0	0	4
17	0	0	0	0	0	0	0	0	0	3
18	0	0	0	0	0	0	0	0	0	3
19	0	0	0	0	0	0	0	0	0	3
20	0	0	0	0	0	0	0	0	0	3
21	0	0	0	0	0	0	0	0	0	3
22	0	0	0	0	0	0	0	0	0	3
23	0	0	0	0	0	0	0	0	0	1.2
24	0	0	0	0	0	0	0	0	0	1.2
25	0	0	0	0	0	0	0	0	0	1.2
26	0	0	0	0	0	0	0	0	0	1.2
27	0	0	0	0	0	0	0	0	0	1.2
28	0	0	0	0	0	0	0	0	0	1.2
29	0	0	0	0	0	0	0	0	0	1.2
30	0	0	0	0	0	0	0	0	0	1.2
31	0	0	0	0	0	0	0	0	0	1.2
32	0	0	0	0	0	0	0	0	0	1.2
33	0	0	0	0	0	0	0	0	0	1.2
34	0	0	0	0	0	0	0	0	0	1.2
35	0	0	0	0	0	0	0	0	0	0.6
36	0	0	0	0	0	0	0	0	0	0.6
37	0	0	0	0	0	0	0	0	0	0.6
38	0	0	0	0	0	0	0	0	0	0.6
39	0	0	0	0	0	0	0	0	0	0.6
40	0	0	0	0	0	0	0	0	0	0.6
41	0	0	0	0	0	0	0	0	0	0.6
42	0	0	0	0	0	0	0	0	0	0.6
43	0	0	0	0	0	0	0	0	0	0.6
44	0	0	0	0	0	0	0	0	0	0.6
45	0	0	0	0	0	0	0	0	0	0.6
46	0	0	0	0	0	0	0	0	0	0.6
47	0	0	0	0	0	0	0	0	0	0.6
48	0	0	0	0	0	0	0	0	0	0.6
49	0	0	0	0	0	0	0	0	0	0.6
50	0	0	0	0	0	0	0	0	0	0.6

Current Harmonic Statistics: Daily 99th percentile short time (3 s)										
Date: 30/12/2024										
	Phase A			Phase B			Phase C			99th percentile limit, %
Harmonic number	99th percentile, %	Max value, %	Non-complied values, %	99th percentile, %	Max value, %	Non-complied values,%	99th percentile, %	Max value, %	Non-complied values, %	
TDD	0	0	0	0	0	0	0	0	0	10
2	0	0	0	0	0	0	0	0	0	4
3	0	0	0	0	0	0	0	0	0	8
4	0	0	0	0	0	0	0	0	0	4
5	0	0	0	0	0	0	0	0	0	8
6	0	0	0	0	0	0	0	0	0	4
7	0	0	0	0	0	0	0	0	0	8
8	0	0	0	0	0	0	0	0	0	8
9	0	0	0	0	0	0	0	0	0	8
10	0	0	0	0	0	0	0	0	0	8
11	0	0	0	0	0	0	0	0	0	4
12	0	0	0	0	0	0	0	0	0	4
13	0	0	0	0	0	0	0	0	0	4
14	0	0	0	0	0	0	0	0	0	4
15	0	0	0	0	0	0	0	0	0	4
16	0	0	0	0	0	0	0	0	0	4
17	0	0	0	0	0	0	0	0	0	3
18	0	0	0	0	0	0	0	0	0	3
19	0	0	0	0	0	0	0	0	0	3
20	0	0	0	0	0	0	0	0	0	3
21	0	0	0	0	0	0	0	0	0	3
22	0	0	0	0	0	0	0	0	0	3
23	0	0	0	0	0	0	0	0	0	1.2
24	0	0	0	0	0	0	0	0	0	1.2
25	0	0	0	0	0	0	0	0	0	1.2
26	0	0	0	0	0	0	0	0	0	1.2
27	0	0	0	0	0	0	0	0	0	1.2
28	0	0	0	0	0	0	0	0	0	1.2
29	0	0	0	0	0	0	0	0	0	1.2
30	0	0	0	0	0	0	0	0	0	1.2
31	0	0	0	0	0	0	0	0	0	1.2
32	0	0	0	0	0	0	0	0	0	1.2
33	0	0	0	0	0	0	0	0	0	1.2
34	0	0	0	0	0	0	0	0	0	1.2
35	0	0	0	0	0	0	0	0	0	0.6
36	0	0	0	0	0	0	0	0	0	0.6
37	0	0	0	0	0	0	0	0	0	0.6
38	0	0	0	0	0	0	0	0	0	0.6
39	0	0	0	0	0	0	0	0	0	0.6
40	0	0	0	0	0	0	0	0	0	0.6
41	0	0	0	0	0	0	0	0	0	0.6
42	0	0	0	0	0	0	0	0	0	0.6
43	0	0	0	0	0	0	0	0	0	0.6
44	0	0	0	0	0	0	0	0	0	0.6
45	0	0	0	0	0	0	0	0	0	0.6
46	0	0	0	0	0	0	0	0	0	0.6
47	0	0	0	0	0	0	0	0	0	0.6
48	0	0	0	0	0	0	0	0	0	0.6
49	0	0	0	0	0	0	0	0	0	0.6
50	0	0	0	0	0	0	0	0	0	0.6

Current Harmonic Statistics: Daily 99th percentile short time (3 s)										
Date: 03/01/2025										
	Phase A			Phase B			Phase C			99th percentile limit, %
Harmonic number	99th percentile, %	Max value, %	Non-complied values, %	99th percentile, %	Max value, %	Non-complied values,%	99th percentile, %	Max value, %	Non-complied values, %	
TDD	0	0	0	0	0	0	0	0	0	10
2	0	0	0	0	0	0	0	0	0	4
3	0	0	0	0	0	0	0	0	0	8
4	0	0	0	0	0	0	0	0	0	4
5	0	0	0	0	0	0	0	0	0	8
6	0	0	0	0	0	0	0	0	0	4
7	0	0	0	0	0	0	0	0	0	8
8	0	0	0	0	0	0	0	0	0	8
9	0	0	0	0	0	0	0	0	0	8
10	0	0	0	0	0	0	0	0	0	8
11	0	0	0	0	0	0	0	0	0	4
12	0	0	0	0	0	0	0	0	0	4
13	0	0	0	0	0	0	0	0	0	4
14	0	0	0	0	0	0	0	0	0	4
15	0	0	0	0	0	0	0	0	0	4
16	0	0	0	0	0	0	0	0	0	4
17	0	0	0	0	0	0	0	0	0	3
18	0	0	0	0	0	0	0	0	0	3
19	0	0	0	0	0	0	0	0	0	3
20	0	0	0	0	0	0	0	0	0	3
21	0	0	0	0	0	0	0	0	0	3
22	0	0	0	0	0	0	0	0	0	3
23	0	0	0	0	0	0	0	0	0	1.2
24	0	0	0	0	0	0	0	0	0	1.2
25	0	0	0	0	0	0	0	0	0	1.2
26	0	0	0	0	0	0	0	0	0	1.2
27	0	0	0	0	0	0	0	0	0	1.2
28	0	0	0	0	0	0	0	0	0	1.2
29	0	0	0	0	0	0	0	0	0	1.2
30	0	0	0	0	0	0	0	0	0	1.2
31	0	0	0	0	0	0	0	0	0	1.2
32	0	0	0	0	0	0	0	0	0	1.2
33	0	0	0	0	0	0	0	0	0	1.2
34	0	0	0	0	0	0	0	0	0	1.2
35	0	0	0	0	0	0	0	0	0	0.6
36	0	0	0	0	0	0	0	0	0	0.6
37	0	0	0	0	0	0	0	0	0	0.6
38	0	0	0	0	0	0	0	0	0	0.6
39	0	0	0	0	0	0	0	0	0	0.6
40	0	0	0	0	0	0	0	0	0	0.6
41	0	0	0	0	0	0	0	0	0	0.6
42	0	0	0	0	0	0	0	0	0	0.6
43	0	0	0	0	0	0	0	0	0	0.6
44	0	0	0	0	0	0	0	0	0	0.6
45	0	0	0	0	0	0	0	0	0	0.6
46	0	0	0	0	0	0	0	0	0	0.6
47	0	0	0	0	0	0	0	0	0	0.6
48	0	0	0	0	0	0	0	0	0	0.6
49	0	0	0	0	0	0	0	0	0	0.6
50	0	0	0	0	0	0	0	0	0	0.6

Current Harmonic Statistics: Daily 99th percentile short time (3 s)										
Date: 04/01/2025										
	Phase A			Phase B			Phase C			99th percentile limit, %
Harmonic number	99th percentile, %	Max value, %	Non-complied values, %	99th percentile, %	Max value, %	Non-complied values,%	99th percentile, %	Max value, %	Non-complied values, %	
TDD	0	0	0	0	0	0	0	0	0	10
2	0	0	0	0	0	0	0	0	0	4
3	0	0	0	0	0	0	0	0	0	8
4	0	0	0	0	0	0	0	0	0	4
5	0	0	0	0	0	0	0	0	0	8
6	0	0	0	0	0	0	0	0	0	4
7	0	0	0	0	0	0	0	0	0	8
8	0	0	0	0	0	0	0	0	0	8
9	0	0	0	0	0	0	0	0	0	8
10	0	0	0	0	0	0	0	0	0	8
11	0	0	0	0	0	0	0	0	0	4
12	0	0	0	0	0	0	0	0	0	4
13	0	0	0	0	0	0	0	0	0	4
14	0	0	0	0	0	0	0	0	0	4
15	0	0	0	0	0	0	0	0	0	4
16	0	0	0	0	0	0	0	0	0	4
17	0	0	0	0	0	0	0	0	0	3
18	0	0	0	0	0	0	0	0	0	3
19	0	0	0	0	0	0	0	0	0	3
20	0	0	0	0	0	0	0	0	0	3
21	0	0	0	0	0	0	0	0	0	3
22	0	0	0	0	0	0	0	0	0	3
23	0	0	0	0	0	0	0	0	0	1.2
24	0	0	0	0	0	0	0	0	0	1.2
25	0	0	0	0	0	0	0	0	0	1.2
26	0	0	0	0	0	0	0	0	0	1.2
27	0	0	0	0	0	0	0	0	0	1.2
28	0	0	0	0	0	0	0	0	0	1.2
29	0	0	0	0	0	0	0	0	0	1.2
30	0	0	0	0	0	0	0	0	0	1.2
31	0	0	0	0	0	0	0	0	0	1.2
32	0	0	0	0	0	0	0	0	0	1.2
33	0	0	0	0	0	0	0	0	0	1.2
34	0	0	0	0	0	0	0	0	0	1.2
35	0	0	0	0	0	0	0	0	0	0.6
36	0	0	0	0	0	0	0	0	0	0.6
37	0	0	0	0	0	0	0	0	0	0.6
38	0	0	0	0	0	0	0	0	0	0.6
39	0	0	0	0	0	0	0	0	0	0.6
40	0	0	0	0	0	0	0	0	0	0.6
41	0	0	0	0	0	0	0	0	0	0.6
42	0	0	0	0	0	0	0	0	0	0.6
43	0	0	0	0	0	0	0	0	0	0.6
44	0	0	0	0	0	0	0	0	0	0.6
45	0	0	0	0	0	0	0	0	0	0.6
46	0	0	0	0	0	0	0	0	0	0.6
47	0	0	0	0	0	0	0	0	0	0.6
48	0	0	0	0	0	0	0	0	0	0.6
49	0	0	0	0	0	0	0	0	0	0.6
50	0	0	0	0	0	0	0	0	0	0.6