



EMC TEST REPORT

Applicant Nokia ShangHai Bell Co., Ltd.
FCC ID 2ADZRG2425GB
Product 7368 ISAM ONT
Brand NOKIA
Model G-2425G-B NAR
Report No. R2006B0104-E1
Issue Date August 19, 2020

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC Code CFR47 Part15B (2019)/ ANSI C63.4 (2014)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Wei Liu

Guangchang Fan

Performed by: Wei Liu/ Manager

Approved by: Guangchang Fan/ Director

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Summary of measurement results

| Number | Test Case | Clause in FCC Rules | Conclusion |
|---|--------------------|---------------------------------|------------|
| 1 | Radiated Emission | FCC Part15.109, ANSI C63.4-2014 | PASS |
| 2 | Conducted Emission | FCC Part15.107, ANSI C63.4-2014 | PASS |
| Test Date: June 23, 2020 ~ June 24, 2020 | | | |
| Note: All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. | | | |

G-2425G-B NAR (Report No.: R2006B0104-E1) is a variant model of G-2425G-B (Report No.: R2002B0017-E1). The Applicant declares that the only differences between the original and the variant is the deference of DC power chip, boost circuit of the voice part and the power adapter and the rest parts of the two models is the same. All test items were tested in this report.

1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein .Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

1.3 Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China
City: Shanghai
Post code: 201201
Country: P. R. China
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Website: <http://www.ta-shanghai.com>
E-mail: fanguangchang@ta-shanghai.com

2 General Description of Equipment under Test

2.1 Applicant and Manufacturer Information

| | |
|-----------------------------|--|
| Applicant | Nokia ShangHai Bell Co., Ltd. |
| Applicant address | No. 388, Ningqiao Rd. Pilot Free Trade Zone, Shanghai, China |
| Manufacturer | TAICANG T&W ELECTRONICS CO., LTD |
| Manufacturer address | 89# Jiang Nan RD, Lu Du TownTaicang, Jiangsu, China |

2.2 General information

| EUT Description | | | |
|---|--|---------------|---------------|
| Device Type: | Movable Device | | |
| Model: | G-2425G-B NAR | | |
| SN: | 1# | | |
| HW Version: | PEM2 | | |
| SW Version: | / | | |
| Antenna Type: | Internal Antenna | | |
| Frequency: | Band | Tx (MHz) | Rx (MHz) |
| | WIFI 2.4G: | 2400 ~ 2483.5 | 2400 ~ 2483.5 |
| | WIFI 5G(U-NII-1): | 5150 ~ 5250 | 5150 ~ 5250 |
| | WIFI 5G(U-NII-2A): | 5250 ~ 5350 | 5250 ~ 5350 |
| | WIFI 5G(U-NII-2C): | 5470 ~ 5725 | 5470 ~ 5725 |
| Modulation: | WLAN 802.11b: DSSS | | |
| | WLAN 802.11a/g/n/ac: OFDM | | |
| EUT Accessory | | | |
| Adapter 1 | Manufacturer: MOSO Power Supply Technology CO.,LTD Model: MSS-V3000WR120-042A0-US | | |
| Adapter 2 | Manufacturer: ShenZhen SOY Technology Co.,Ltd Model: SUN-1200300 | | |
| Note: The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant. | | | |

**Information of Configuration:**

| No. | Name | Model/Code No. | Edition | Serial No. or Quantity |
|-----|---------------|-------------------------|---------|------------------------|
| 1 | EMA-G-2425G-B | 3FE48308AA | PEM2 | PEM |
| 2 | Power adapter | SUN-1200300 | A/0 | -- |
| 3 | Power adapter | MSS-V3000WR120-042A0-US | A/0 | -- |
| 4 | UPS | DTC36U12V3-G | A/0 | -- |
| 5 | UPS | PS36L-P7 | A/0 | -- |

| ONT Mnemonic | Kit Code | EMA Code | Part Description | Power Adaptor and UPS |
|--------------|------------|------------|---|--|
| G-2425G-B | 3FE48293AB | 3FE48308AA | Wi-Fi GPON RGW,2POTS,4GE 4x4 11n,4x4 11ac,NAR,US | SOY: SUN-1200300 MOSO: MSS-V3000WR120-042A0-US CyberPower: DTC36U12V3 PSI:PS36L-P7 |
| | 3FE48293AE | 3FE48308AA | Wi-Fi GPON RGW,2POTS,4GE 4x4 11n,4x4 11ac,NAR,US | SOY: SUN-1200300 MOSO: MSS-V3000WR120-042A0-US CyberPower: DTC36U12V3 PSI:PS36L-P7 |

Auxiliary equipment details:

| No. | Name | Brand name | Model | NSB code | Valid Until |
|-----|-------------|----------------|-----------|------------------|---------------------|
| 1 | Test Center | Spirent | DE48E0 | DC2228 | No Cal. Required |
| 2 | PC | Lenovo | T61 | 7661MC4L3KW965 | No Cal. Required |
| 3 | PC | Lenovo | T61 | 7661MC4L3KW959 | No Cal. Required |
| 4 | OLT | Alcatel-Lucent | OS6250-24 | 90273409L3283189 | No Cal. Required |

Information of Ports:

| No. | Port name | Number | Shielded or unshielded | Cable type (optic, twisted pair, etc.) | Max. Cable length |
|-----|-----------|--------|------------------------|--|-------------------|
| 1 | AC port | 1 | Unshielded | -- | -- |
| 2 | GE | 4 | Unshielded | -- | -- |
| 3 | USB | 2 | shielded | -- | -- |
| 4 | POTS | 2 | Unshielded | -- | -- |



2.3 Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test standards

FCC Code CFR47 Part15B (2019)

ANSI C63.4 (2014)

3 Test Case Results

3.1 Radiated Emission

Ambient condition

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 24°C~26°C | 45%~50% | 102.5kPa |

Methods of Measurement

The EUT is placed on a non-metallic table 0.8m above the horizontal metal reference ground plane. The distance between EUT and receive antenna should be 3 meters. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2014. Sweep the whole frequency band through the range from 30MHz to the 5th harmonic of the carrier. During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees for detecting the maximum of radiated signal level.

The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing. During the test, the EUT is worked at maximum output power.

Set the spectrum analyzer in the following:

Below 1GHz:

RBW=100 kHz / VBW=300 kHz / Sweep=AUTO

Above 1GHz:

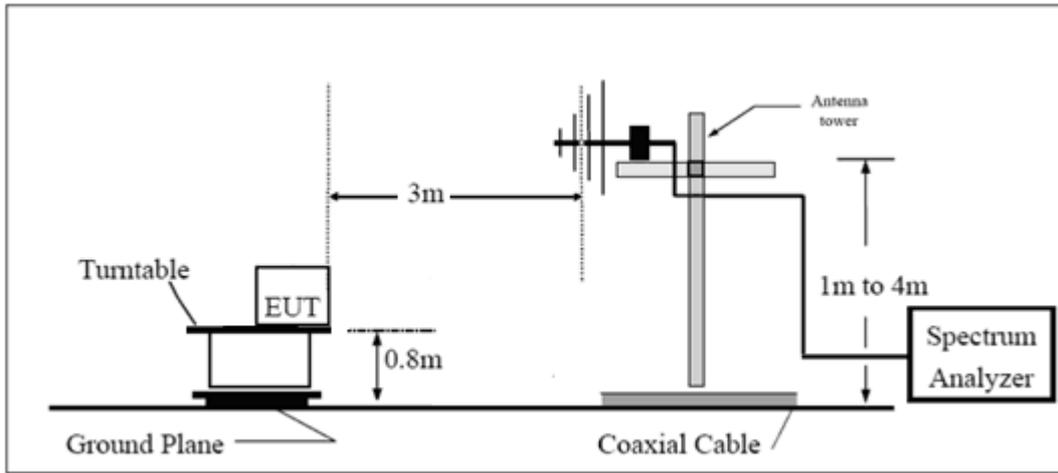
(a) PEAK Detector: RBW=1MHz / VBW=3MHz / Sweep=AUTO

(b) AVERAGE Detector: RBW=1MHz / VBW=3MHz / Sweep=AUTO

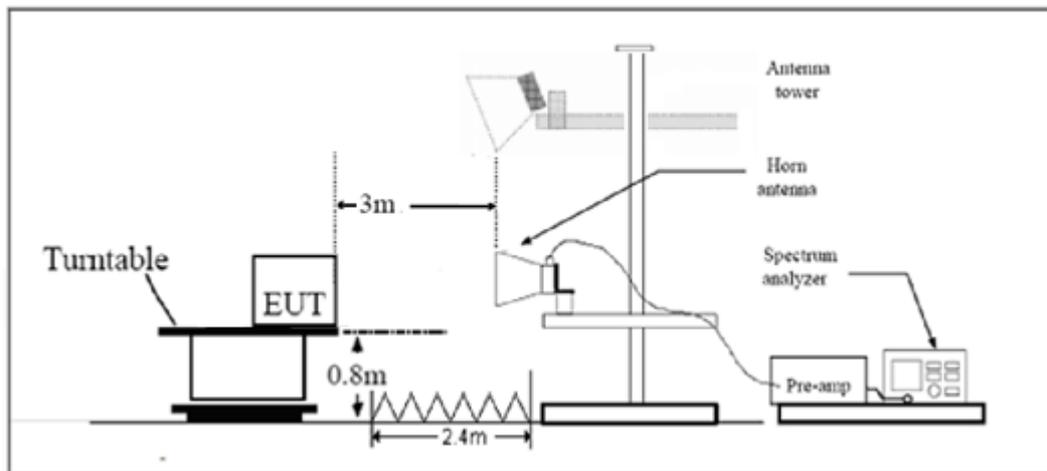
The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

Test Setup

Below 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Antenna Tower meets ANSI C63.4 requirements for measurements above 1 GHz by keeping the antenna aimed at the EUT during the antenna's ascent/ descent along the antenna mast.

Limits

| Frequency (MHz) | Field Strength (dB μ V/m) | Detector |
|---|-------------------------------|-----------------|
| 30 -88 | 40.0 | Quasi-peak |
| 88-216 | 43.5 | Quasi-peak |
| 216 – 960 | 46.0 | Quasi-peak |
| 960-1000 | 54.0 | Quasi-peak |
| 1000-5 th harmonic of the highest frequency or 40GHz, which is lower | 54 74 | Average Peak |

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

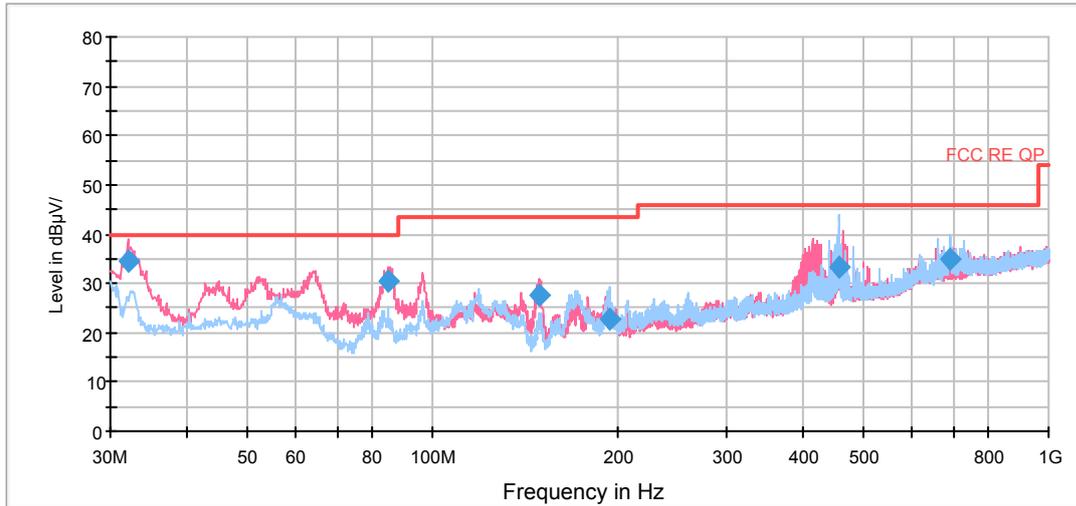
| Frequency | Uncertainty |
|----------------|-------------|
| 30MHz~200MHz | 4.17 dB |
| 200MHz~1000MHz | 4.84 dB |
| 1GHz~18GHz | 4.35 dB |
| 18GHz~26.5GHz | 5.90 dB |
| 26.5GHz~40GHz | 5.92 dB |

Test Results

Sweep the whole frequency band through the range from 30MHz to the 5th harmonic of the carrier, the Emissions in the frequency band 18GHz- 26.5GHz is more than 20dB below the limit are not reported.

The following graphs display the maximum values of horizontal and vertical by software. For above 1GHz, Blue trace uses the peak detection, Green trace uses the average detection.

Adapter 1

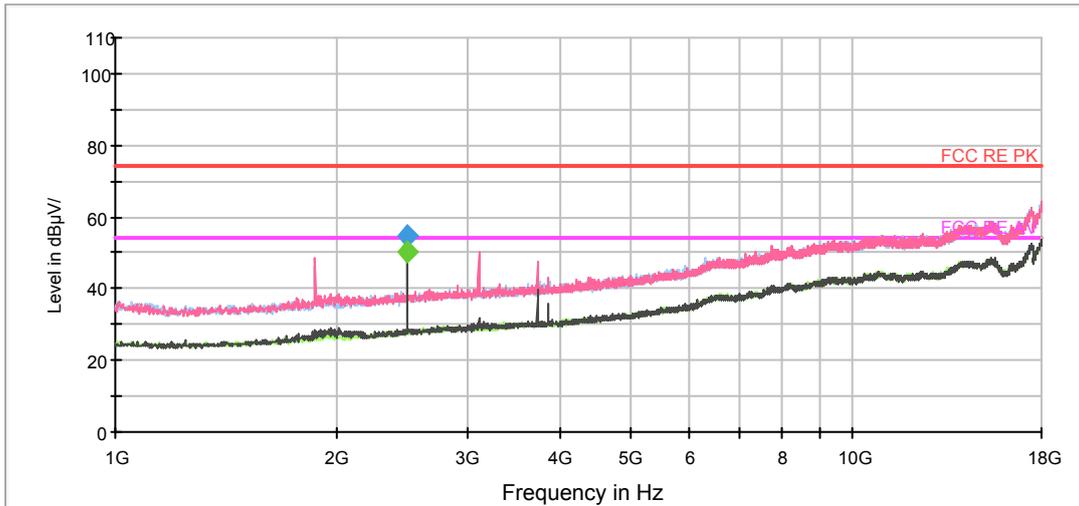


Radiated Emission from 30MHz to 1GHz

| Frequency (MHz) | Quasi-Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 32.121250 | 34.5 | 100.0 | V | 37.0 | 12.6 | 5.5 | 40.0 |
| 84.501250 | 30.6 | 125.0 | V | 102.0 | 9.8 | 9.4 | 40.0 |
| 148.642500 | 27.5 | 100.0 | V | 138.0 | 9.8 | 16.0 | 43.5 |
| 194.192500 | 22.8 | 125.0 | H | 240.0 | 13.3 | 20.7 | 43.5 |
| 457.871250 | 33.4 | 189.0 | H | 227.0 | 19.5 | 12.6 | 46.0 |
| 691.560000 | 35.1 | 114.0 | H | 187.0 | 23.3 | 10.9 | 46.0 |

Remark: 1. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

2. Margin = Limit – Quasi-Peak

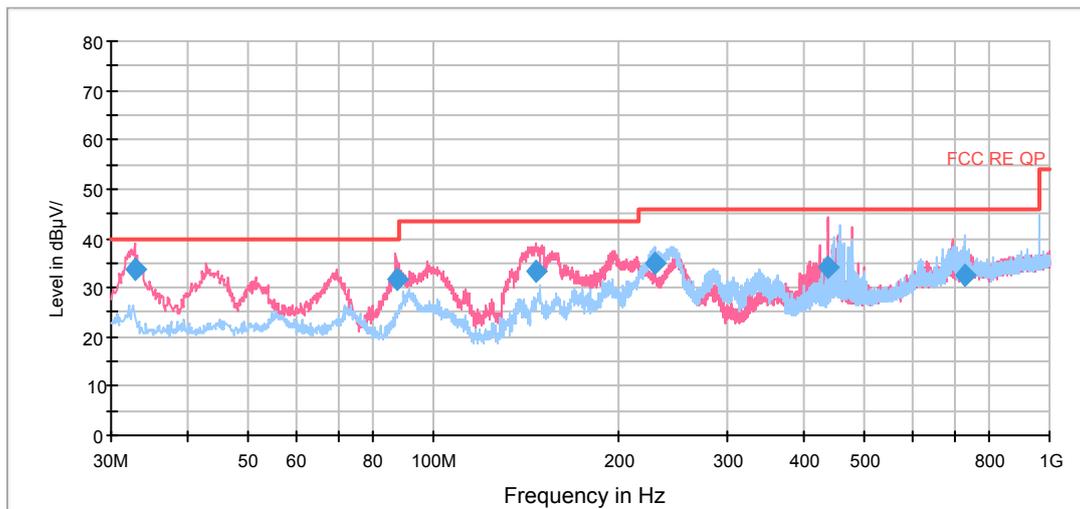


Radiated Emission from 1GHz to 18GHz

| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 2488.081250 | 54.7 | 100.0 | V | 192.0 | -6.4 | 19.3 | 74.0 |

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 2488.333750 | 50.1 | 100.0 | V | 192.0 | -6.4 | 3.9 | 54.0 |

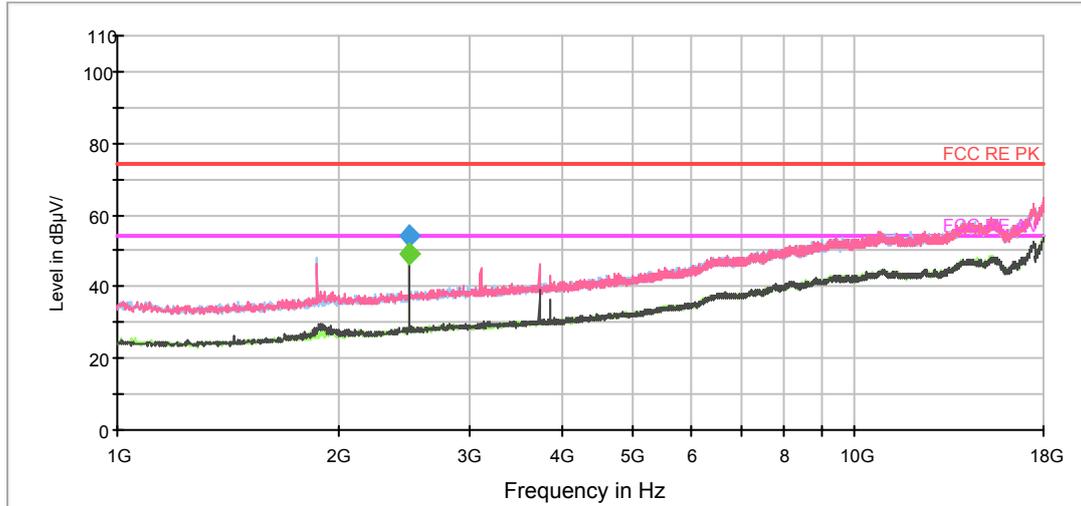
Adapter 2



Radiated Emission from 30MHz to 1GHz

| Frequency (MHz) | Quasi-Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 32.728750 | 33.8 | 100.0 | V | 44.0 | 12.8 | 6.2 | 40.0 |
| 87.047500 | 31.7 | 125.0 | V | 281.0 | 10.6 | 8.3 | 40.0 |
| 147.107500 | 33.2 | 100.0 | V | 230.0 | 9.8 | 10.3 | 43.5 |
| 229.436250 | 34.8 | 125.0 | H | 306.0 | 14.1 | 11.2 | 46.0 |
| 438.430000 | 34.0 | 125.0 | V | 212.0 | 19.4 | 12.0 | 46.0 |
| 727.005000 | 32.5 | 217.0 | H | 57.0 | 23.8 | 13.5 | 46.0 |

- Remark: 1. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)**
2. Margin = Limit – Quasi-Peak

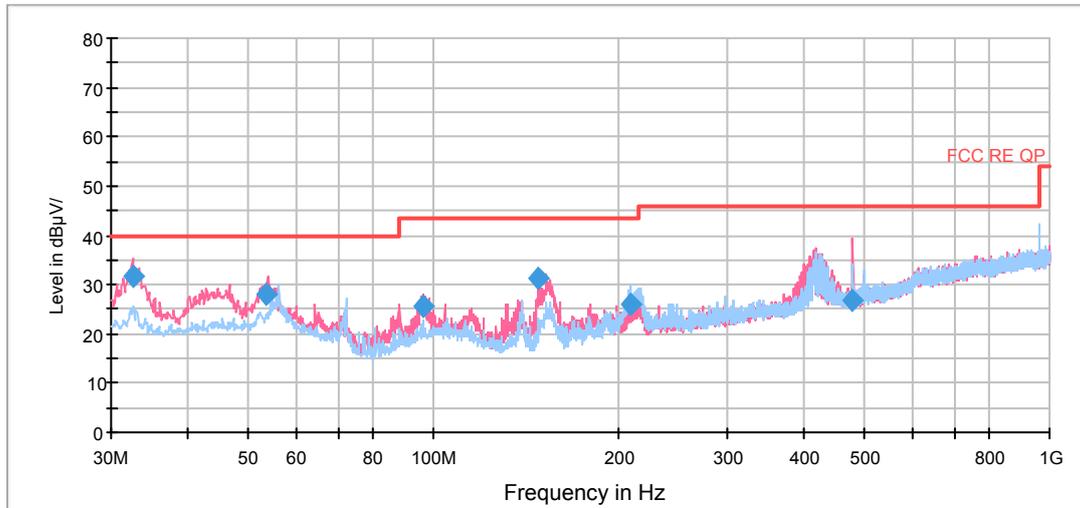


Radiated Emission from 1GHz to 18GHz

| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 2488.295000 | 54.3 | 100.0 | V | 200.0 | -6.4 | 19.7 | 74.0 |

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 2488.377500 | 49.3 | 100.0 | V | 200.0 | -6.4 | 4.7 | 54.0 |

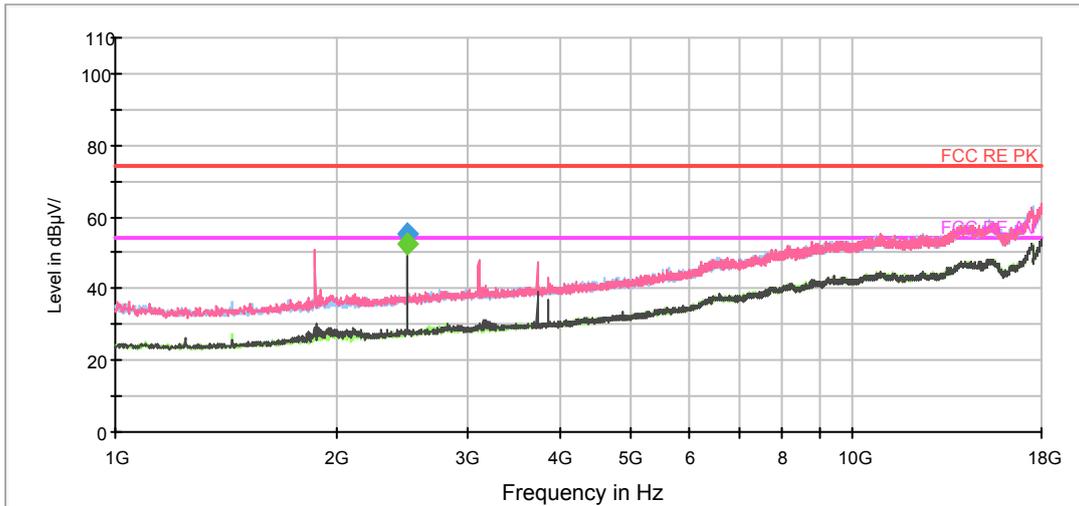
DTC36U12V3-G



Radiated Emission from 30MHz to 1GHz

| Frequency (MHz) | Quasi-Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 32.586250 | 31.6 | 100.0 | V | 43.0 | 12.7 | 8.4 | 40.0 |
| 53.568750 | 27.9 | 100.0 | V | 310.0 | 13.9 | 12.1 | 40.0 |
| 96.403750 | 25.7 | 100.0 | V | 283.0 | 13.1 | 17.8 | 43.5 |
| 148.137500 | 31.2 | 100.0 | V | 132.0 | 9.8 | 12.3 | 43.5 |
| 208.883750 | 25.9 | 125.0 | H | 292.0 | 12.5 | 17.6 | 43.5 |
| 479.800000 | 26.8 | 100.0 | V | 152.0 | 20.1 | 19.2 | 46.0 |

Remark: 1. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)
2. Margin = Limit – Quasi-Peak

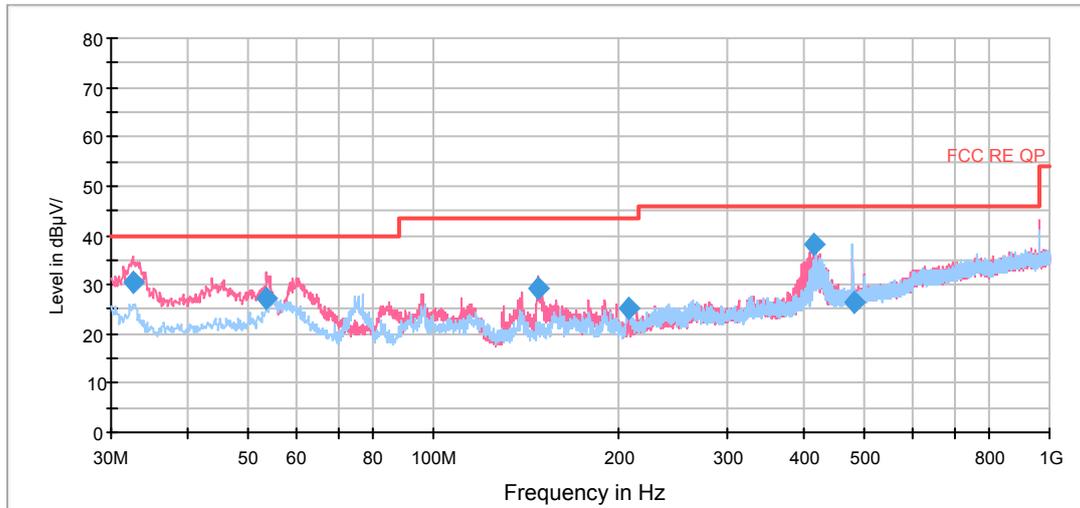


Radiated Emission from 1GHz to 18GHz

| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 2488.347500 | 55.3 | 100.0 | V | 195.0 | -6.4 | 18.7 | 74.0 |

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 2488.293750 | 52.2 | 100.0 | V | 195.0 | -6.4 | 0.9 | 54.0 |

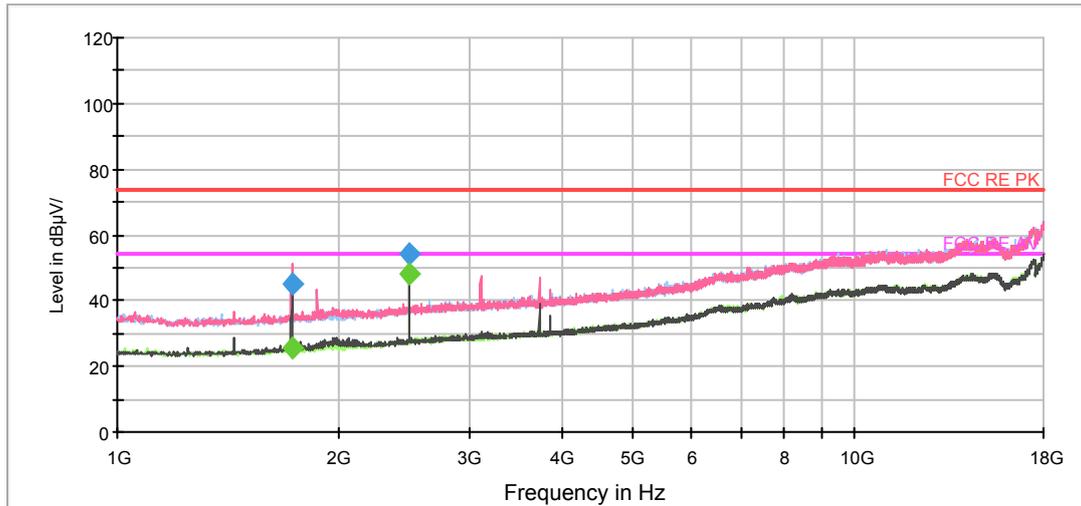
PS36L-P7



Radiated Emission from 30MHz to 1GHz

| Frequency (MHz) | Quasi-Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 32.586250 | 30.5 | 100.0 | V | 337.0 | 12.7 | 9.5 | 40.0 |
| 53.568750 | 27.1 | 100.0 | V | 294.0 | 13.9 | 12.9 | 40.0 |
| 148.137500 | 29.4 | 100.0 | V | 127.0 | 9.8 | 14.1 | 43.5 |
| 207.792500 | 25.2 | 125.0 | H | 340.0 | 12.4 | 18.3 | 43.5 |
| 414.766250 | 38.2 | 125.0 | V | 185.0 | 19.0 | 7.8 | 46.0 |
| 480.238750 | 26.6 | 225.0 | H | 332.0 | 20.1 | 19.4 | 46.0 |

Remark: 1. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)
 2. Margin = Limit – Quasi-Peak



Radiated Emission from 1GHz to 18GHz

| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 1722.880000 | 44.9 | 200.0 | V | 346.0 | -9.6 | 29.1 | 74.0 |
| 2488.375000 | 54.3 | 100.0 | V | 195.0 | -6.4 | 19.7 | 74.0 |

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|---------------------|-------------|----------------|
| 1726.720000 | 25.6 | 200.0 | V | 346.0 | -9.6 | 28.4 | 54.0 |
| 2488.308750 | 48.1 | 100.0 | H | 164.0 | -6.4 | 5.9 | 54.0 |

3.2 Conducted Emission

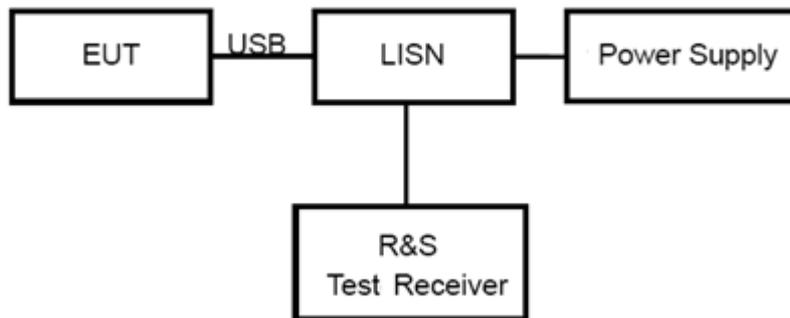
Ambient condition

| | | |
|-------------|-------------------|----------|
| Temperature | Relative humidity | Pressure |
| 24°C ~26°C | 50%~55% | 102.5kPa |

Methods of Measurement

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2014. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, VBW is set to 30kHz. The measurement result should include both L line and N line.

Test Setup



Note: Power Supply is AC Power source and it is used to change the voltage 120V/60Hz.

Limits

| Frequency (MHz) | Conducted Limits(dBμV) | |
|-----------------|------------------------|------------|
| | Quasi-peak | Average |
| 0.15 - 0.5 | 66 to 56 * | 56 to 46 * |
| 0.5 - 5 | 56 | 46 |
| 5 - 30 | 60 | 50 |

*: Decreases with the logarithm of the frequency.

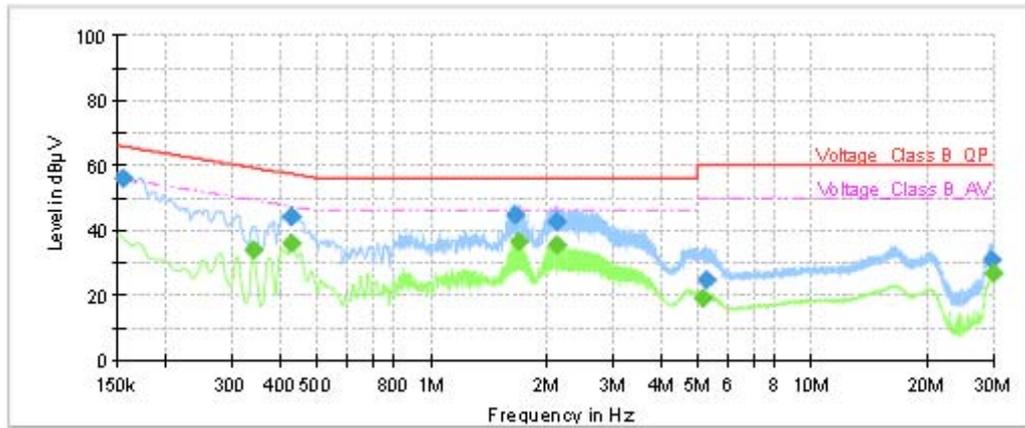
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$. $U = 2.57$ dB.

Test Results

Following plots, Blue trace uses the peak detection; Green trace uses the average detection.

Adapter 1

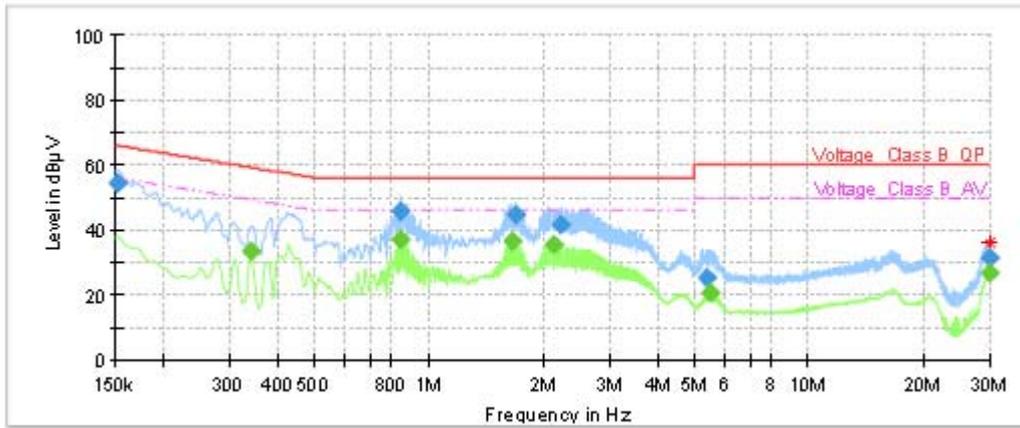


| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.15 | 55.93 | --- | 65.75 | 9.82 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.34 | --- | 33.97 | 49.17 | 15.20 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.43 | 44.18 | --- | 57.32 | 13.14 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.43 | --- | 36.08 | 47.27 | 11.19 | 1000.0 | 9.000 | L1 | ON | 19 |
| 1.66 | 44.71 | --- | 56.00 | 11.29 | 1000.0 | 9.000 | L1 | ON | 19 |
| 1.69 | --- | 36.17 | 46.00 | 9.83 | 1000.0 | 9.000 | L1 | ON | 19 |
| 2.13 | 42.49 | --- | 56.00 | 13.51 | 1000.0 | 9.000 | L1 | ON | 19 |
| 2.14 | --- | 35.25 | 46.00 | 10.75 | 1000.0 | 9.000 | L1 | ON | 19 |
| 5.17 | --- | 18.78 | 50.00 | 31.22 | 1000.0 | 9.000 | L1 | ON | 19 |
| 5.27 | 24.68 | --- | 60.00 | 35.32 | 1000.0 | 9.000 | L1 | ON | 19 |
| 29.81 | 30.95 | --- | 60.00 | 29.05 | 1000.0 | 9.000 | L1 | ON | 20 |
| 29.97 | --- | 26.51 | 50.00 | 23.49 | 1000.0 | 9.000 | L1 | ON | 20 |

Remark: Correct factor=cable loss + LISN factor

L line

Conducted Emission from 150 KHz to 30 MHz



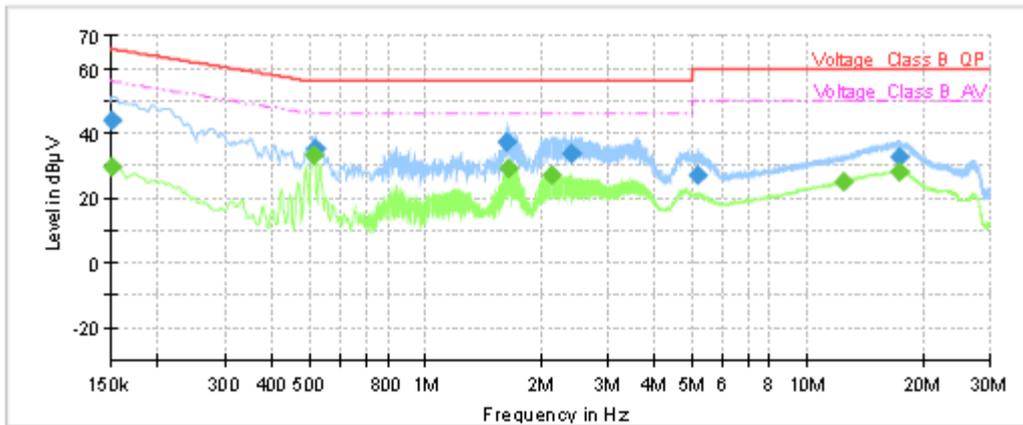
| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.15 | 54.35 | --- | 65.88 | 11.53 | 1000.0 | 9.000 | N | ON | 19 |
| 0.34 | --- | 33.37 | 49.17 | 15.80 | 1000.0 | 9.000 | N | ON | 19 |
| 0.85 | --- | 37.07 | 46.00 | 8.93 | 1000.0 | 9.000 | N | ON | 19 |
| 0.85 | 45.81 | --- | 56.00 | 10.19 | 1000.0 | 9.000 | N | ON | 19 |
| 1.66 | --- | 36.55 | 46.00 | 9.45 | 1000.0 | 9.000 | N | ON | 19 |
| 1.69 | 44.41 | --- | 56.00 | 11.59 | 1000.0 | 9.000 | N | ON | 19 |
| 2.14 | --- | 35.37 | 46.00 | 10.63 | 1000.0 | 9.000 | N | ON | 19 |
| 2.23 | 41.42 | --- | 56.00 | 14.58 | 1000.0 | 9.000 | N | ON | 19 |
| 5.37 | 25.14 | --- | 60.00 | 34.86 | 1000.0 | 9.000 | N | ON | 19 |
| 5.54 | --- | 20.67 | 50.00 | 29.33 | 1000.0 | 9.000 | N | ON | 19 |
| 29.96 | --- | 26.67 | 50.00 | 23.33 | 1000.0 | 9.000 | N | ON | 20 |
| 29.97 | 31.39 | --- | 60.00 | 28.61 | 1000.0 | 9.000 | N | ON | 20 |

Remark: Correct factor=cable loss + LISN factor

N line

Conducted Emission from 150 KHz to 30 MHz

Adapter 2

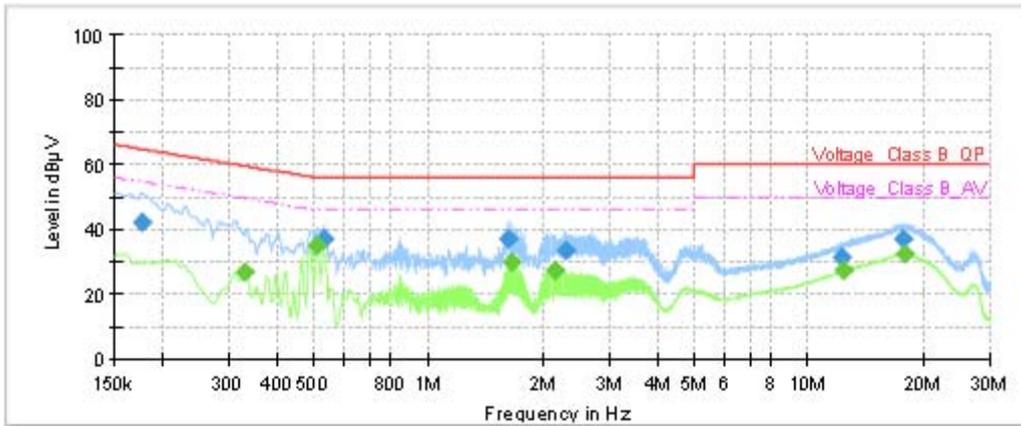


| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.15 | --- | 29.28 | 55.88 | 26.60 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.15 | 44.02 | --- | 65.88 | 21.86 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.51 | --- | 33.13 | 46.00 | 12.87 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.51 | 35.37 | --- | 56.00 | 20.63 | 1000.0 | 9.000 | L1 | ON | 19 |
| 1.63 | 37.14 | --- | 56.00 | 18.86 | 1000.0 | 9.000 | L1 | ON | 19 |
| 1.66 | --- | 29.02 | 46.00 | 16.98 | 1000.0 | 9.000 | L1 | ON | 19 |
| 2.14 | --- | 27.08 | 46.00 | 18.92 | 1000.0 | 9.000 | L1 | ON | 19 |
| 2.43 | 33.40 | --- | 56.00 | 22.60 | 1000.0 | 9.000 | L1 | ON | 19 |
| 5.15 | 26.99 | --- | 60.00 | 33.01 | 1000.0 | 9.000 | L1 | ON | 19 |
| 12.39 | --- | 25.07 | 50.00 | 24.93 | 1000.0 | 9.000 | L1 | ON | 19 |
| 17.40 | --- | 28.09 | 50.00 | 21.91 | 1000.0 | 9.000 | L1 | ON | 20 |
| 17.44 | 32.66 | --- | 60.00 | 27.34 | 1000.0 | 9.000 | L1 | ON | 20 |

Remark: Correct factor=cable loss + LISN factor

L line

Conducted Emission from 150 KHz to 30 MHz



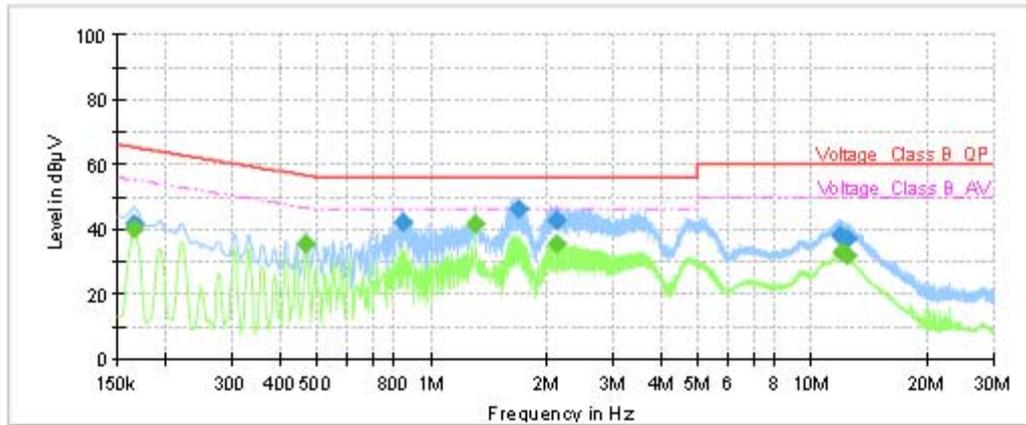
| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.18 | 41.95 | --- | 64.63 | 22.67 | 1000.0 | 9.000 | N | ON | 19 |
| 0.33 | --- | 26.74 | 49.45 | 22.72 | 1000.0 | 9.000 | N | ON | 19 |
| 0.51 | --- | 34.87 | 46.00 | 11.13 | 1000.0 | 9.000 | N | ON | 19 |
| 0.53 | 36.97 | --- | 56.00 | 19.03 | 1000.0 | 9.000 | N | ON | 19 |
| 1.63 | 37.06 | --- | 56.00 | 18.94 | 1000.0 | 9.000 | N | ON | 19 |
| 1.66 | --- | 29.71 | 46.00 | 16.29 | 1000.0 | 9.000 | N | ON | 19 |
| 2.17 | --- | 27.02 | 46.00 | 18.98 | 1000.0 | 9.000 | N | ON | 19 |
| 2.30 | 33.31 | --- | 56.00 | 22.69 | 1000.0 | 9.000 | N | ON | 19 |
| 12.28 | 31.04 | --- | 60.00 | 28.96 | 1000.0 | 9.000 | N | ON | 19 |
| 12.38 | --- | 27.21 | 50.00 | 22.79 | 1000.0 | 9.000 | N | ON | 19 |
| 17.72 | 37.09 | --- | 60.00 | 22.91 | 1000.0 | 9.000 | N | ON | 19 |
| 17.98 | --- | 32.36 | 50.00 | 17.64 | 1000.0 | 9.000 | N | ON | 19 |

Remark: Correct factor=cable loss + LISN factor

N line

Conducted Emission from 150 KHz to 30 MHz

DTC36U12V3-G

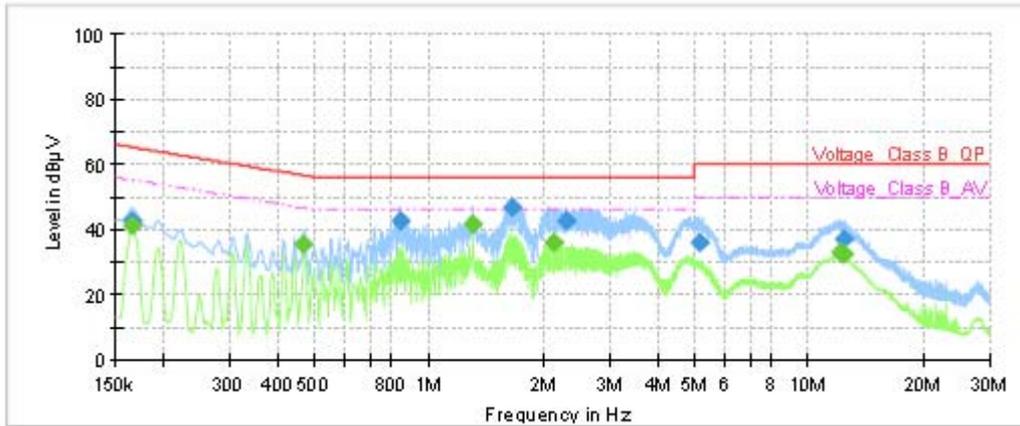


| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.17 | --- | 40.16 | 55.17 | 15.01 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.17 | 41.53 | --- | 65.17 | 23.64 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.47 | --- | 35.57 | 46.52 | 10.95 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.85 | 41.93 | --- | 56.00 | 14.07 | 1000.0 | 9.000 | L1 | ON | 19 |
| 1.31 | --- | 41.51 | 46.00 | 4.49 | 1000.0 | 9.000 | L1 | ON | 19 |
| 1.69 | 46.05 | --- | 56.00 | 9.95 | 1000.0 | 9.000 | L1 | ON | 19 |
| 2.13 | 42.67 | --- | 56.00 | 13.33 | 1000.0 | 9.000 | L1 | ON | 19 |
| 2.14 | --- | 35.32 | 46.00 | 10.68 | 1000.0 | 9.000 | L1 | ON | 19 |
| 11.81 | 37.90 | --- | 60.00 | 22.10 | 1000.0 | 9.000 | L1 | ON | 19 |
| 11.95 | --- | 32.99 | 50.00 | 17.01 | 1000.0 | 9.000 | L1 | ON | 19 |
| 12.45 | 36.81 | --- | 60.00 | 23.19 | 1000.0 | 9.000 | L1 | ON | 19 |
| 12.45 | --- | 31.67 | 50.00 | 18.33 | 1000.0 | 9.000 | L1 | ON | 19 |

Remark: Correct factor=cable loss + LISN factor

L line

Conducted Emission from 150 KHz to 30 MHz



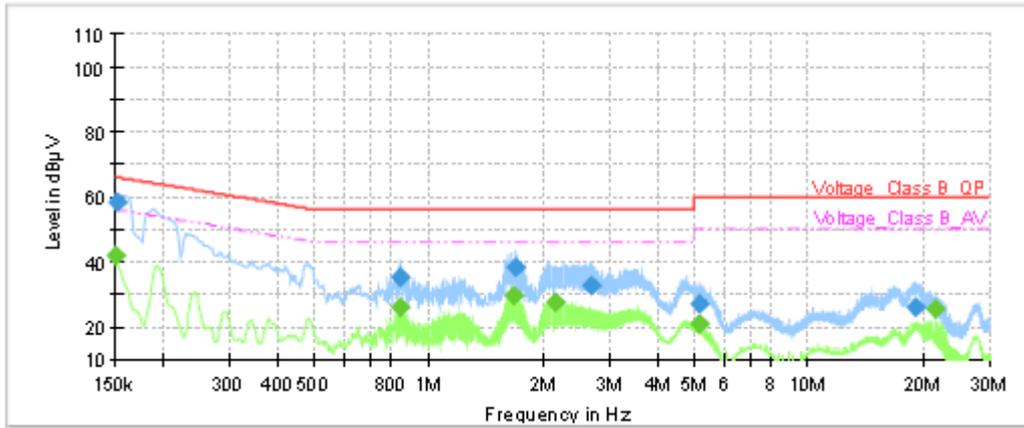
| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.17 | --- | 41.06 | 55.17 | 14.11 | 1000.0 | 9.000 | N | ON | 19 |
| 0.17 | 42.36 | --- | 65.17 | 22.81 | 1000.0 | 9.000 | N | ON | 19 |
| 0.47 | --- | 35.44 | 46.52 | 11.08 | 1000.0 | 9.000 | N | ON | 19 |
| 0.85 | 42.77 | --- | 56.00 | 13.23 | 1000.0 | 9.000 | N | ON | 19 |
| 1.31 | --- | 41.34 | 46.00 | 4.66 | 1000.0 | 9.000 | N | ON | 19 |
| 1.66 | 46.46 | --- | 56.00 | 9.54 | 1000.0 | 9.000 | N | ON | 19 |
| 2.14 | --- | 35.67 | 46.00 | 10.33 | 1000.0 | 9.000 | N | ON | 19 |
| 2.30 | 42.45 | --- | 56.00 | 13.55 | 1000.0 | 9.000 | N | ON | 19 |
| 5.16 | 36.12 | --- | 60.00 | 23.88 | 1000.0 | 9.000 | N | ON | 19 |
| 12.14 | --- | 32.83 | 50.00 | 17.17 | 1000.0 | 9.000 | N | ON | 19 |
| 12.41 | 37.15 | --- | 60.00 | 22.85 | 1000.0 | 9.000 | N | ON | 19 |
| 12.41 | --- | 32.07 | 50.00 | 17.93 | 1000.0 | 9.000 | N | ON | 19 |

Remark: Correct factor=cable loss + LISN factor

N line

Conducted Emission from 150 KHz to 30 MHz

PS36L-P7

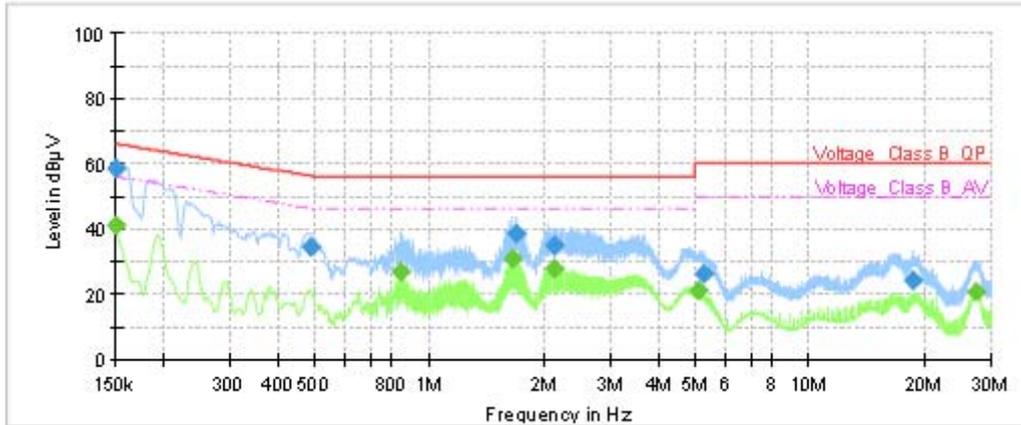


| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.15 | --- | 42.00 | 56.00 | 14.00 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.15 | 58.43 | --- | 65.88 | 7.45 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.85 | --- | 25.95 | 46.00 | 20.05 | 1000.0 | 9.000 | L1 | ON | 19 |
| 0.85 | 34.91 | --- | 56.00 | 21.09 | 1000.0 | 9.000 | L1 | ON | 19 |
| 1.68 | --- | 29.66 | 46.00 | 16.34 | 1000.0 | 9.000 | L1 | ON | 19 |
| 1.69 | 38.46 | --- | 56.00 | 17.54 | 1000.0 | 9.000 | L1 | ON | 19 |
| 2.15 | --- | 27.45 | 46.00 | 18.55 | 1000.0 | 9.000 | L1 | ON | 19 |
| 2.67 | 32.48 | --- | 56.00 | 23.52 | 1000.0 | 9.000 | L1 | ON | 19 |
| 5.18 | --- | 20.80 | 50.00 | 29.20 | 1000.0 | 9.000 | L1 | ON | 19 |
| 5.19 | 26.91 | --- | 60.00 | 33.09 | 1000.0 | 9.000 | L1 | ON | 19 |
| 19.25 | 25.70 | --- | 60.00 | 34.30 | 1000.0 | 9.000 | L1 | ON | 20 |
| 21.66 | --- | 25.25 | 50.00 | 24.75 | 1000.0 | 9.000 | L1 | ON | 20 |

Remark: Correct factor=cable loss + LISN factor

L line

Conducted Emission from 150 KHz to 30 MHz



| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.15 | --- | 41.18 | 56.00 | 14.82 | 1000.0 | 9.000 | N | ON | 19 |
| 0.15 | 58.21 | --- | 66.00 | 7.79 | 1000.0 | 9.000 | N | ON | 19 |
| 0.49 | 34.16 | --- | 56.21 | 22.05 | 1000.0 | 9.000 | N | ON | 19 |
| 0.85 | --- | 26.63 | 46.00 | 19.37 | 1000.0 | 9.000 | N | ON | 19 |
| 1.66 | --- | 30.73 | 46.00 | 15.27 | 1000.0 | 9.000 | N | ON | 19 |
| 1.69 | 38.41 | --- | 56.00 | 17.59 | 1000.0 | 9.000 | N | ON | 19 |
| 2.13 | 34.86 | --- | 56.00 | 21.14 | 1000.0 | 9.000 | N | ON | 19 |
| 2.14 | --- | 27.83 | 46.00 | 18.17 | 1000.0 | 9.000 | N | ON | 19 |
| 5.14 | --- | 21.23 | 50.00 | 28.77 | 1000.0 | 9.000 | N | ON | 19 |
| 5.28 | 26.39 | --- | 60.00 | 33.61 | 1000.0 | 9.000 | N | ON | 19 |
| 18.83 | 24.16 | --- | 60.00 | 35.84 | 1000.0 | 9.000 | N | ON | 19 |
| 27.39 | --- | 20.62 | 50.00 | 29.38 | 1000.0 | 9.000 | N | ON | 20 |

Remark: Correct factor=cable loss + LISN factor

N line

Conducted Emission from 150 KHz to 30 MHz

4 Main Test Instruments

| Name | Manufacturer | Type | Serial Number | Calibration Date | Expiration Time |
|-------------------------|--------------|-------------------|---------------|------------------|-----------------|
| Spectrum Analyzer | R&S | FSV40 | 15195-01-00 | 2020-05-17 | 2021-05-16 |
| EMI Test Receiver | R&S | ESCI | 100948 | 2020-05-17 | 2021-05-16 |
| Trilog Antenna | SCHWARZBECK | VULB 9163 | 391 | 2019-12-16 | 2021-12-15 |
| Horn Antenna | R&S | HF907 | 102723 | 2018-08-11 | 2021-08-10 |
| Horn Antenna | ETS-Lindgren | 3160-09 | 00102643 | 2018-06-20 | 2021-06-19 |
| Standard Gain Horn | STEATITE | QSH-SL-26-40-K-15 | 16779 | 2019-12-24 | 2021-12-23 |
| EMI Test Receiver | R&S | ESR | 101667 | 2020-05-17 | 2021-05-16 |
| LISN | R&S | ENV216 | 101171 | 2018-12-15 | 2021-12-14 |
| Bore Sight Antenna mast | ETS | 2171B | 00058752 | / | / |
| Test software | EMC32 | R&S | 9.26.0 | / | / |

*****END OF REPORT *****