



# **CERTIFICATION TEST REPORT**

**Report Number. :** 11783639-E8V3

**Applicant :** SONY MOBILE COMMUNICATIONS INC.  
4-12-3 HIGASHI-SHINAGAWA,  
SHINAGAWA -KU,TOKYO, 140-0002, JAPAN

**FCC ID :** PY7-88607S

**EUT Description :** GSM/WCDMA/LTE Phone with BT,DTS/UNII a/b/g/n/ac, GPS & NFC

**Test Standard(s) :** FCC 47 CFR PART 15 SUBPART B

**Date Of Issue:**

August 10, 2017

**Prepared by:**

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NVLAP LAB CODE 200065-0

Revision History

| Rev. | Issue Date | Revisions                       | Revised By |
|------|------------|---------------------------------|------------|
| V1   | 08/03/17   | Initial Issue                   | D. Corona  |
| V2   | 08/08/17   | Updated Section 6.3             | D. Corona  |
| V3   | 08/10/17   | Updated Note Statement (page 9) | D. Corona  |

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## 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** SONY MOBILE COMMUNICATIONS, INC.

**EUT DESCRIPTION:** GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac, GPS & NFC.

**SERIAL NUMBER:** BH9000MD83

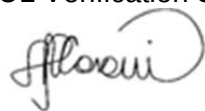
**DATE TESTED:** July 07 to 11, 2017

| APPLICABLE STANDARDS         |              |
|------------------------------|--------------|
| STANDARD                     | TEST RESULTS |
| FCC 47 CFR PART 15 SUBPART B | Pass         |

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2014.

## 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

| 47173 Benicia Street                                       | 47266 Benicia Street                            |
|------------------------------------------------------------|-------------------------------------------------|
| <input checked="" type="checkbox"/> Chamber A(IC: 2324B-1) | <input type="checkbox"/> Chamber D(IC: 22541-1) |
| <input type="checkbox"/> Chamber B(IC: 2324B-2)            | <input type="checkbox"/> Chamber E(IC: 22541-2) |
| <input type="checkbox"/> Chamber C(IC: 2324B-3)            | <input type="checkbox"/> Chamber F(IC: 22541-3) |
|                                                            | <input type="checkbox"/> Chamber G(IC: 22541-4) |
|                                                            | <input type="checkbox"/> Chamber H(IC: 22541-5) |

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. Chambers A through C are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-3, respectively. Chambers D through H are covered under Industry Canada company address code 22541 with site numbers 22541 -1 through 22541-5, respectively.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

### 4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned}\text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamplifier Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m}\end{aligned}$$

### 4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| Parameter                                           | Uncertainty |
|-----------------------------------------------------|-------------|
| Worst Case Conducted Disturbance, 9KHz to 0.15 MHz  | 3.84 dB     |
| Worst Case Conducted Disturbance, 0.15 to 30 MHz    | 3.65 dB     |
| Worst Case Radiated Disturbance, 9KHz to 30 MHz     | 3.15 dB     |
| Worst Case Radiated Disturbance, 30 to 1000 MHz     | 5.36 dB     |
| Worst Case Radiated Disturbance, 1000 to 18000 MHz  | 4.32 dB     |
| Worst Case Radiated Disturbance, 18000 to 26000 MHz | 4.45 dB     |
| Worst Case Radiated Disturbance, 26000 to 40000 MHz | 5.24 dB     |

Uncertainty figures are valid to a confidence level of 95%.

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac, GPS & NFC.

#### GENERAL INFORMATION

|                                                |         |
|------------------------------------------------|---------|
| Highest frequency generated or used by the EUT | 5825GHz |
|------------------------------------------------|---------|

### 5.2. TEST CONFIGURATIONS

The following configuration was tested:

| EUT Configuration | Description                                                                                                                                                                                                    |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                 | Laptop Sync Mode - The EUT was configured as table top equipment. The EUT is installed in a typical configuration. The EUT is connected to a laptop via USB, is charging and transferring data via the laptop. |
| 2                 | Charging - The EUT was configured as table top equipment. The EUT is installed in a typical configuration. The EUT is connected to an AC adapter for charging and in a functional mode.                        |

### 5.3. MODE(S) OF OPERATION

| Mode          | Description                                                                                                                       |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Sync mode     | Data transfer; Sync video file from laptop to EUT and continued playing video during testing.                                     |
| Charging Mode | Charging with supplied USB charger. EUT and its charger shall be on back edge of table, with charger connected to extension cord. |

### 5.4. SOFTWARE AND FIRMWARE

The software version installed in the EUT during testing was 0.274.

### 5.5. MODIFICATIONS

No modifications were made during testing.

## 5.6. DETAILS OF TESTED SYSTEM

### SUPPORT EQUIPMENT & PERIPHERALS

| Support Equipment List |              |               |                      |        |
|------------------------|--------------|---------------|----------------------|--------|
| Description            | Manufacturer | Model         | Serial Number        | FCC ID |
| Laptop                 | Lenovo       | 2349CW5       | PB05HPL              | DoC    |
| Earphone               | Sony         | N/A           | N/A                  | N/A    |
| AC Adapter             | Lenovo       | ADLX90NLT2A   | 11S45N0307ZLZ436RDM2 | N/A    |
| Mouse                  | Logitech     | M-U0026       | 1304HS02AX68         | N/A    |
| Keyboard               | Lenovo       | KU-0225       | 54Y9400              | N/A    |
| Switch                 | Netgear      | FS105 v2      | 1D52163304A74        | DoC    |
| AC Adapter             | Netgear      | FA-0751000SUA | 332-10154-01         | N/A    |

### I/O CABLES

| I/O Cable List |          |                      |                |            |                  |                                 |
|----------------|----------|----------------------|----------------|------------|------------------|---------------------------------|
| Cable No       | Port     | # of identical ports | Connector Type | Cable Type | Cable Length (m) | Remarks                         |
| 1              | DC Power | 2                    | Power          | Shielded   | 1.2m             | N/A                             |
| 2              | Audio    | 1                    | Mini-Jack      | Unshielded | 1m               | N/A                             |
| 3              | USB      | 1                    | Mini-USB       | Shielded   | 0.9 m            | UCB20 cable from EUT to Laptop  |
| 3              | USB      | 2                    | USB            | Shielded   | 2m               | From laptop to keyboard & mouse |
| 4              | AC Power | 2                    | IEC            | Unshielded | 1m               | N/A                             |
| 5              | Ethernet | 1                    | RJ45           | Unshielded | 2m               | N/A                             |

### TEST SETUP

The EUT is installed in a typical configuration. Test software exercised the EUT.

## 6. REUSE OF TEST DATA

### 6.1. INTRODUCTION

According to the manufacturer, FCC ID: PY7-65365K and FCC ID: PY7-88607S unlicensed radios (WLAN/BT/BLE/NFC) are electrically identical. They share the same chipset, same power and same antenna performance including antenna gain. The FCC ID: PY7-65365K test data shall remain representative of FCC ID: PY7-88607S so, FCC ID: PY7-88607S leverages test data from FCC ID: PY7-65365K.

The applicant takes full responsibility that the test data as referenced in this section represents compliance for this FCC ID.

### 6.2. DEVICES DIFFERENCES

Difference between PY7-65365K and PY7-88607S:

Various components were removed from PY7-65365K to establish PY7-88607S; such components are related only to the cellular part and there are no changes in non-cellular (WLAN/BT/BLE/NFC) parts, which are electronically identical.

### 6.3. RADIATED EMISSIONS VERIFICATION

Radiated emissions were fully re-evaluated against FCC Part 15B requirements for digital devices and results indicated no significant differences between the two versions

NOTE: AC Main Line Conducted Emissions please refer to 11785223-E8V2 FCC Report 15B.

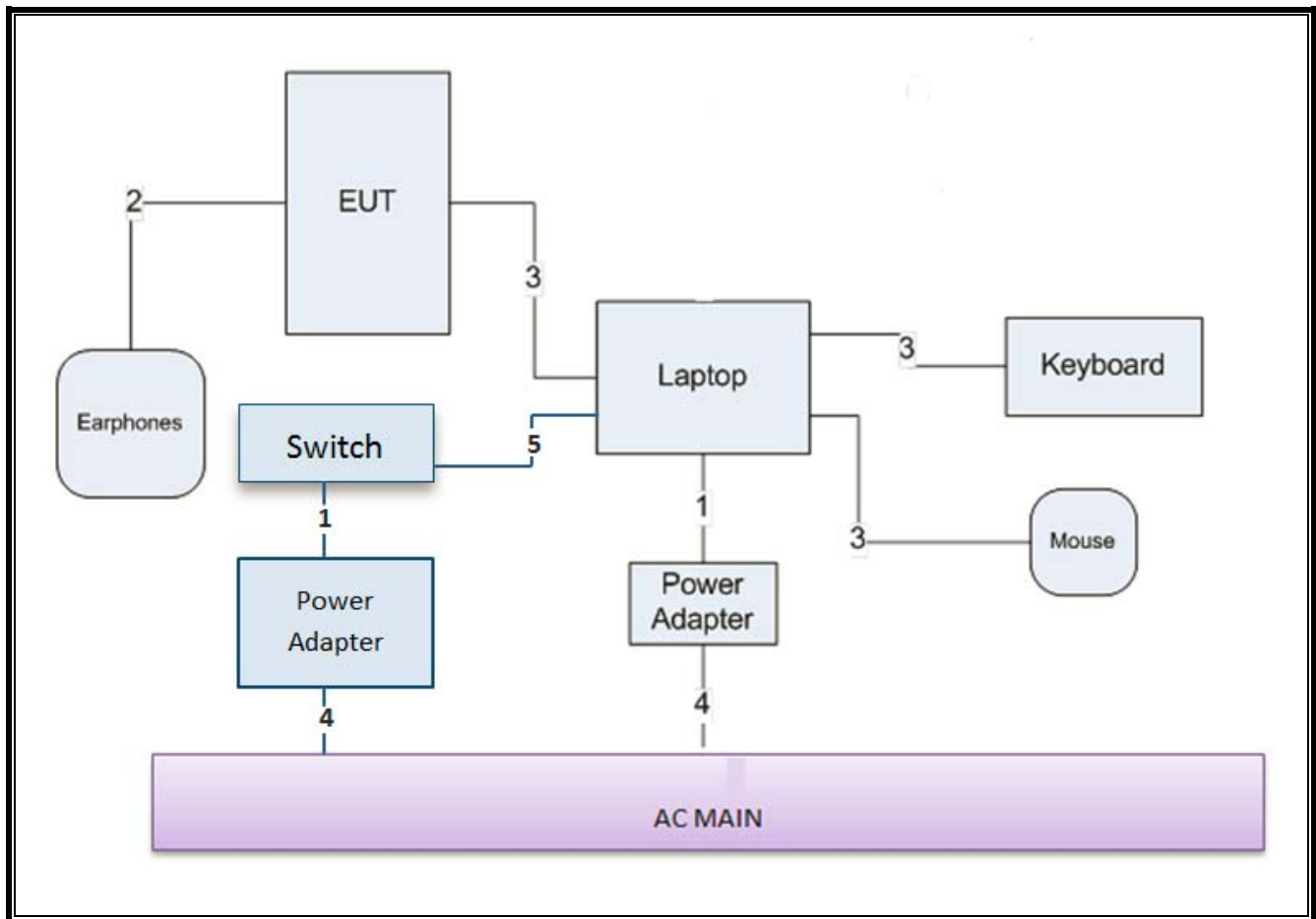
PY7-88607S and PY7-65365K using only one power charger

### 6.4. REFERENCE DETAIL

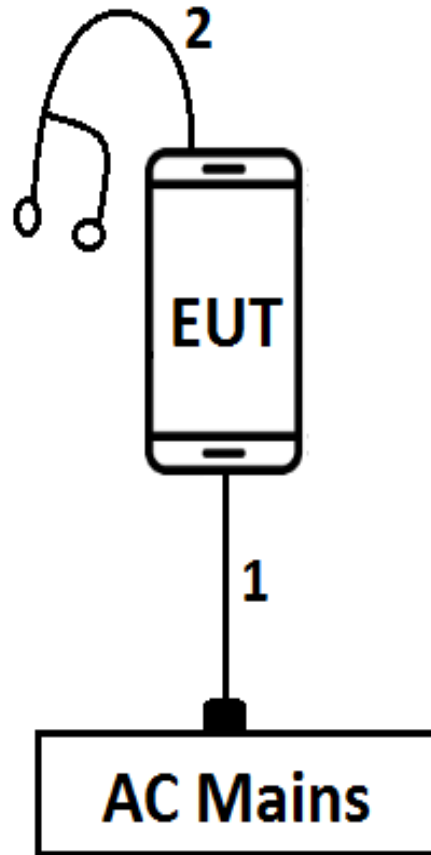
| Equipment Class | Reference FCC ID | Report Title/Section                |
|-----------------|------------------|-------------------------------------|
| DSS (BT)        | PY7-65365K       | 11785223-E2V1 FCC Report BT         |
| DTS (BLE)       | PY7-65365K       | 11785223-E3V2 FCC Report BLE        |
| DTS (WLAN)      | PY7-65365K       | 11785223-E4V3 FCC Report DTS        |
| UNII (WLAN)     | PY7-65365K       | 11785223-E5V3 FCC Report UNII       |
| NFC             | PY7-65365K       | 11785223-E7V2 FCC Report NFC        |
| JBP             | PY7-65365K       | <b>11785223-E8V2 FCC Report 15B</b> |

**SETUP DIAGRAM**

**Sync Mode**



## Charging Mode



## 7. APPLICABLE EMISSIONS LIMITS AND TEST RESULTS

### 7.1. EMISSIONS TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

| Test Equipment List                         |                 |                        |          |          |          |
|---------------------------------------------|-----------------|------------------------|----------|----------|----------|
| Description                                 | Manufacturer    | Model                  | T Number | Cal Date | Cal Due  |
| Amplifier, 1 to 18 GHz                      | Miteq           | AFS43-00101800-25-S-42 | 493      | 02/15/17 | 02/15/18 |
| Amplifier, 1 to 8 GHz                       | Miteq           | AMF-4D-01000800-30-29P | 1170     | 04/28/17 | 04/28/18 |
| Amplifier, 10KHz to 1GHz, 32dB              | Keysight        | 8447D                  | 300      | 11/10/16 | 11/10/17 |
| Antenna, Broadband Hybrid, 30MHz to 2000MHz | Sunol Sciences  | JB3                    | 130      | 09/23/16 | 09/23/17 |
| PXA Spectrum Analyzer, 3Hz to 44GHz         | Agilent         | N9030A                 | 1466     | 04/11/17 | 04/11/18 |
| 18 - 26.5 GHz Horn Antenna                  | Seavey Division | MWH-1826/B             | 449      | 06/12/17 | 06/12/18 |
| 26.5 - 40 GHz Horn Antenna                  | ARA             | MWH-2640/B             | 446      | 06/12/17 | 06/12/18 |
| Pre-Amp 1-26.5 GHz                          | Agilent         | 8449B                  | 404      | 07/05/17 | 07/05/18 |
| Pre-Amp, 26-40GHz                           | MITEQ           | NSP4000-SP2            | 88       | 04/29/17 | 04/29/18 |
| Spectrum Analyzer                           | Agilent         | 8564E                  | 106      | 09/07/16 | 09/07/17 |

| Test Software List |              |        |                       |
|--------------------|--------------|--------|-----------------------|
| Description        | Manufacturer | Model  | Version               |
| Radiated Software  | UL           | UL EMC | Ver 9.5, Dec 01, 2016 |

## 7.2. RADIATED EMISSIONS LIMITS AND RESULTS

### LIMIT

FCC Part 15 Subpart B

§15.109 (a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

| Limits for radiated disturbance of Class B ITE at measuring distance of 3 m |                             |                           |
|-----------------------------------------------------------------------------|-----------------------------|---------------------------|
| Frequency range (MHz)                                                       | Field Strength Limit (uV/m) | Quasi-Peak Limit (dBμV/m) |
| 30 to 88                                                                    | 100                         | 40                        |
| 88 to 216                                                                   | 150                         | 43.5                      |
| 216 to 960                                                                  | 200                         | 46                        |
| Above 960 MHz                                                               | 500                         | 54                        |
| Note: The lower limit shall apply at the transition frequency.              |                             |                           |
| Frequency (MHz)                                                             | Peak (dBuV/m) Limit         | Average (dBuV/m) Limit    |
| Above 1000                                                                  | 74                          | 54                        |

### TEST PROCEDURE

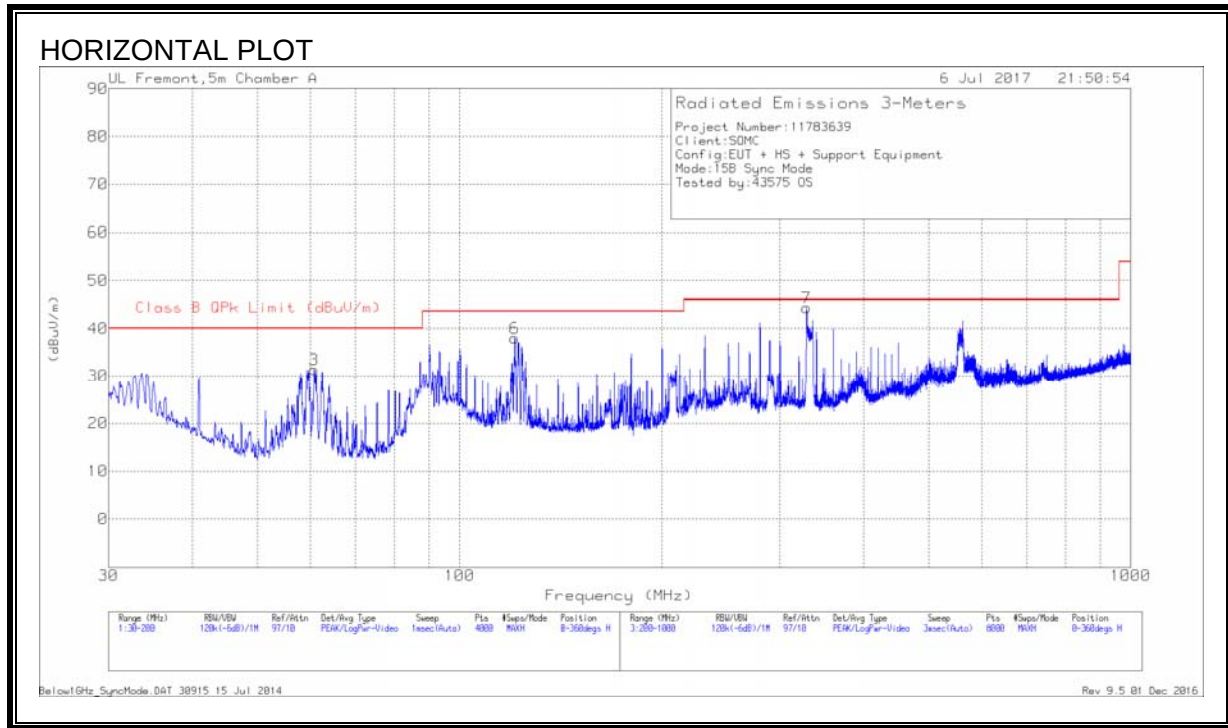
ANSI C63.4: 2014

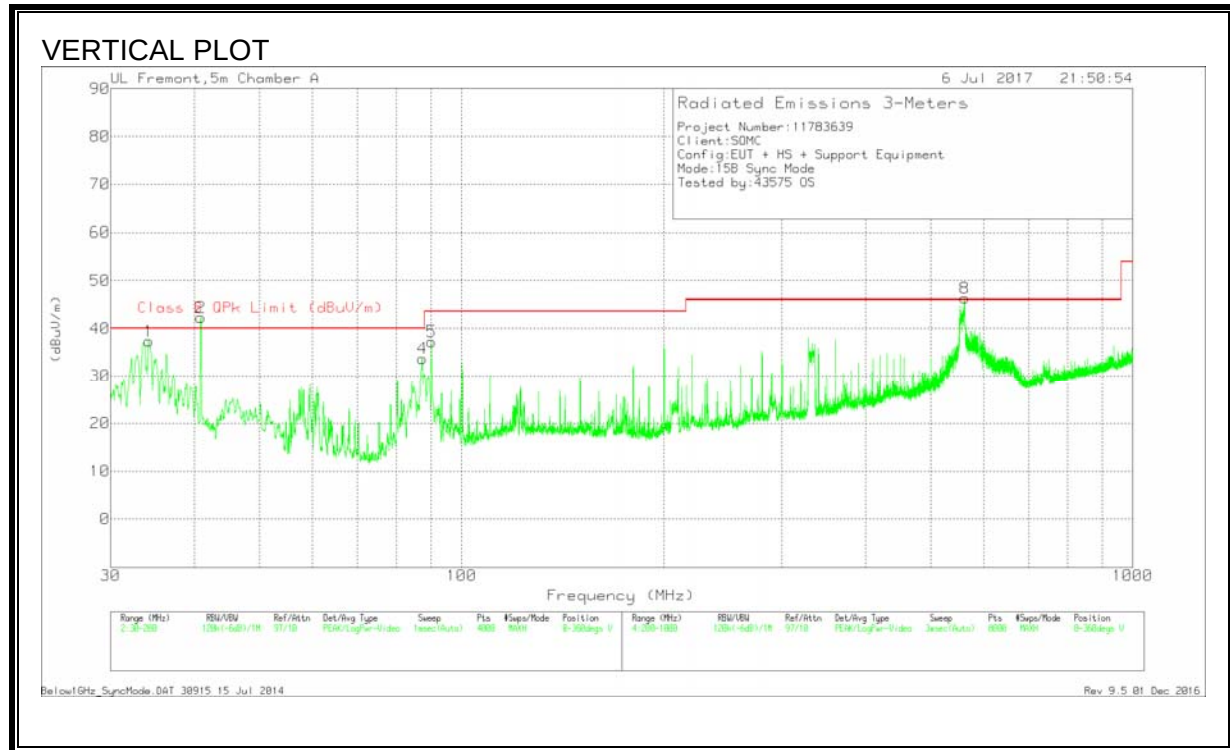
The highest frequency generated or used in the EUT is 5.8 GHz therefore the frequency range was investigated from 30 MHz to 40 GHz.

| Highest frequency generated or used in the device or on which the device operates or tunes (MHz) | Upper frequency of measurement range (MHz)                                      |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Below 108                                                                                        | 1000                                                                            |
| 108-500                                                                                          | 2000                                                                            |
| 500-1000                                                                                         | 5000                                                                            |
| Above 1000                                                                                       | 5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower |

## RESULTS

### 7.2.1. RADIATED EMISSIONS 30 TO 1000 MHz (SYNC MODE)





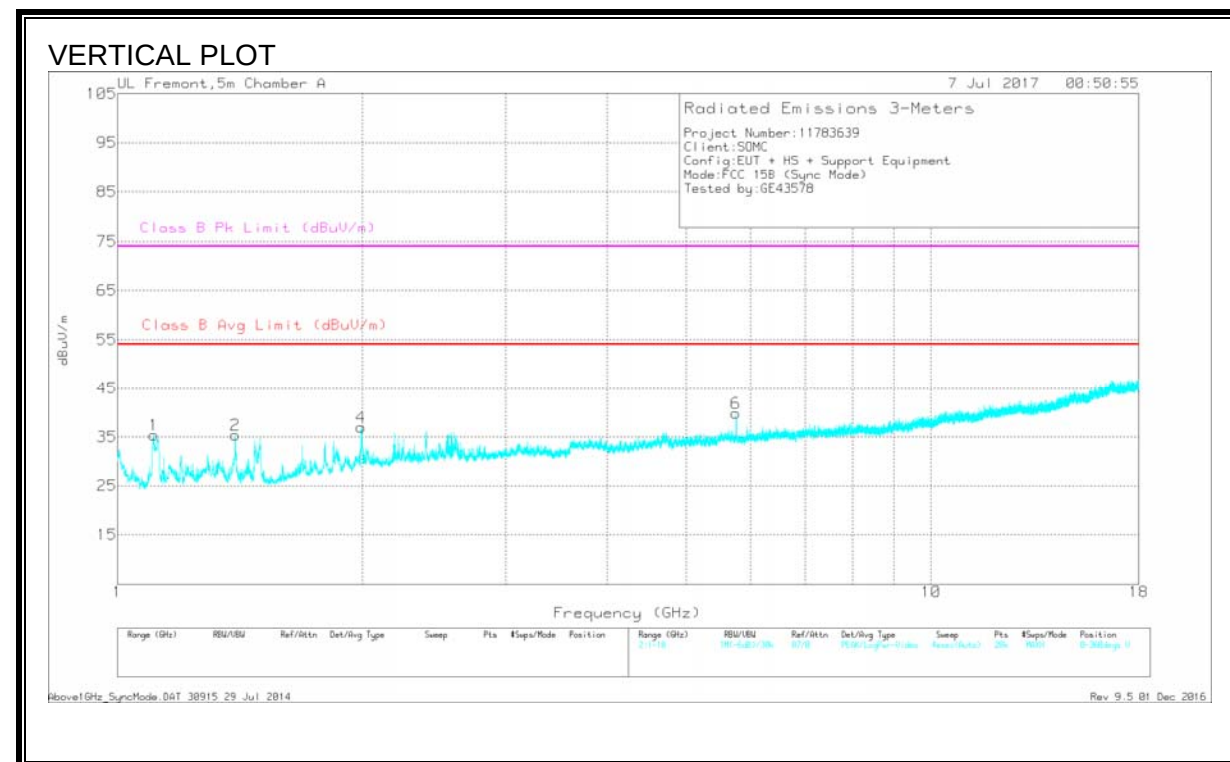
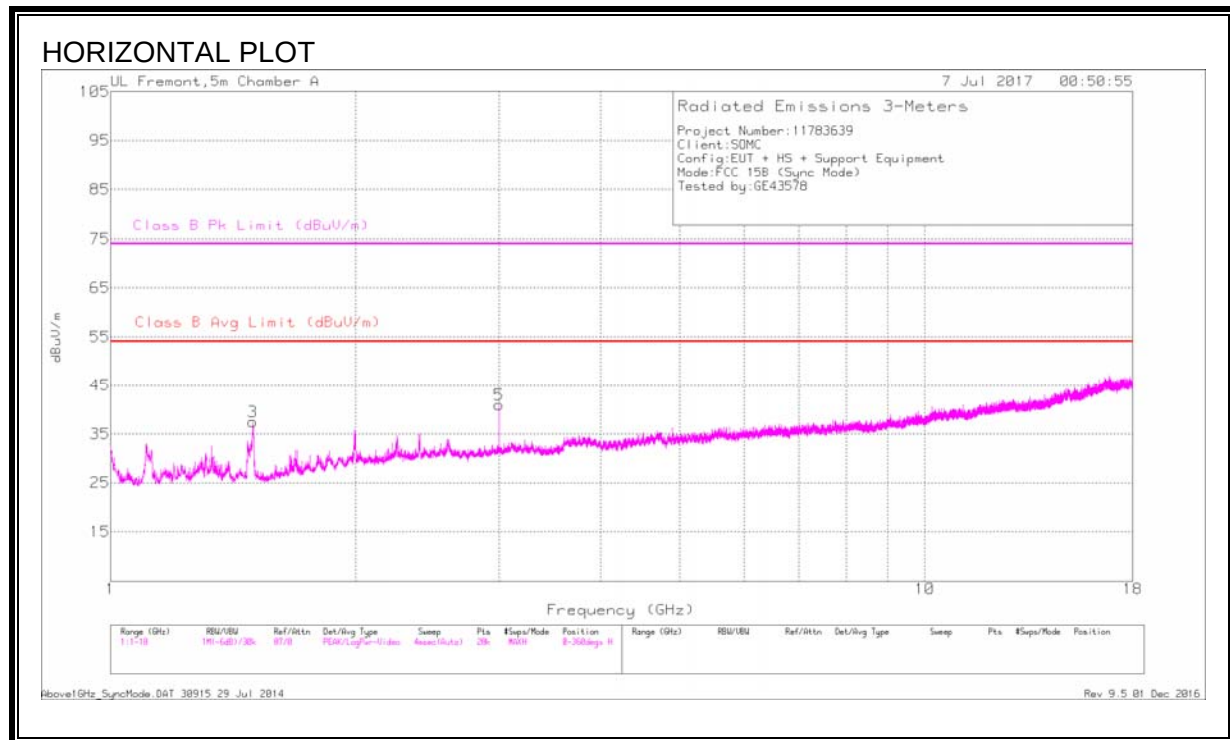
## HORIZONTAL AND VERTICAL DATA

### Radiated Emissions

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AF T408 (dB/m) | Amp/Cbl (dB) | Corrected Reading (dBuV/m) | Class B QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|--------------|----------------------------|----------------------------|-------------|----------------|-------------|----------|
| 1      | 33.9844         | 36.27                | Qp  | 22.1           | -27.2        | 31.17                      | 40                         | -8.83       | 47             | 101         | V        |
| 2      | 40.807          | 21.9                 | Qp  | 17.3           | -27.1        | 12.1                       | 40                         | -27.9       | 250            | 153         | V        |
| 3      | 60.7355         | 46.56                | Pk  | 11.6           | -26.8        | 31.36                      | 40                         | -8.64       | 0-360          | 400         | H        |
| 4      | 87.3899         | 48.94                | Pk  | 11.3           | -26.5        | 33.74                      | 40                         | -6.26       | 0-360          | 100         | V        |
| 5      | 90.1956         | 51.99                | Pk  | 11.7           | -26.4        | 37.29                      | 43.52                      | -6.23       | 0-360          | 100         | V        |
| 6      | 120.752         | 37.71                | Qp  | 17.7           | -26          | 29.41                      | 43.52                      | -14.11      | 18             | 238         | H        |
| 7      | 329.2363        | 41.28                | Qp  | 17.9           | -24.3        | 34.88                      | 46.02                      | -11.14      | 74             | 224         | H        |
| 8      | 562.3355        | 34.26                | Qp  | 22.3           | -24.5        | 32.06                      | 46.02                      | -13.96      | 359            | 102         | V        |

Qp - Quasi-Peak detector

## 7.2.2. RADIATED EMISSIONS 1GHz to 18GHz (SYNC MODE)



## HORIZONTAL AND VERTICAL DATA

### Radiated Emissions

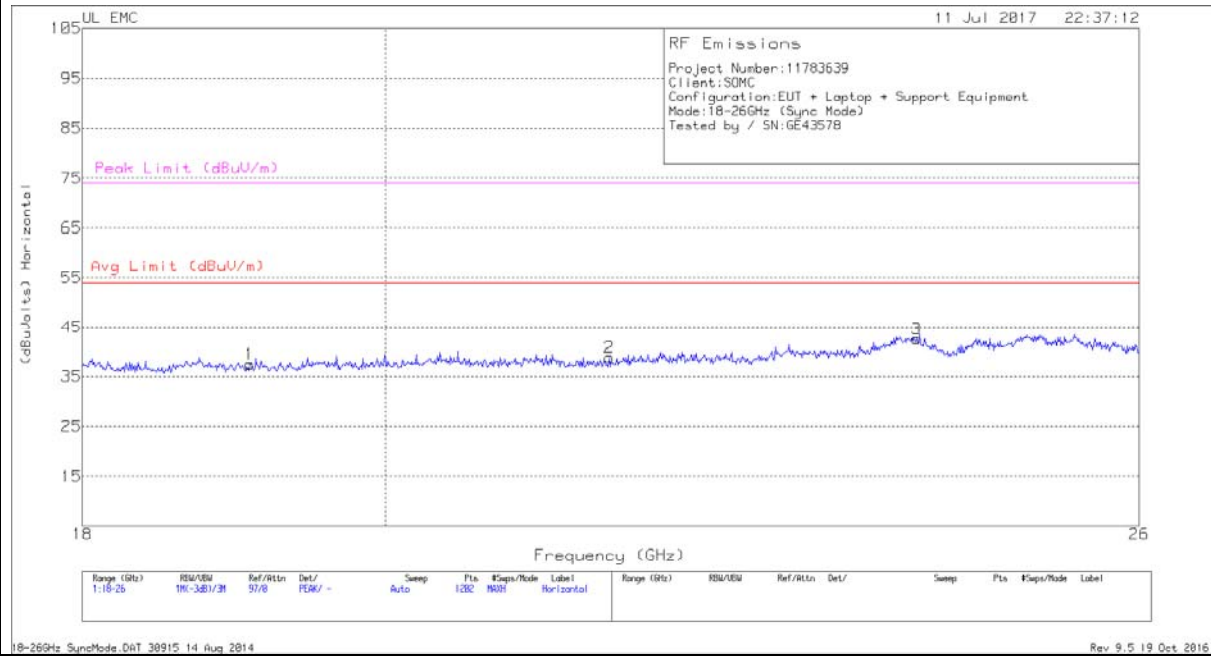
| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T863 (dB/m) | Amp/Cbl (dB) | Corrected Reading dBuV/m | Class B Avg Limit (dBuV/m) | Margin (dB) | Class B Pk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|--------------|--------------------------|----------------------------|-------------|---------------------------|-------------|----------------|-------------|----------|
| 1      | 1.111           | 44.6                 | Pk  | 27.6           | -34.3        | 37.9                     | -                          | -           | 74                        | -36.1       | 69             | 340         | V        |
|        | 1.111           | 29.8                 | Av  | 27.6           | -34.3        | 23.1                     | 54                         | -30.9       | -                         | -           | 69             | 340         | V        |
| 2      | 1.395           | 52.78                | Pk  | 28.2           | -33.8        | 47.18                    | -                          | -           | 74                        | -26.82      | 71             | 138         | V        |
|        | 1.395           | 29.11                | Av  | 28.2           | -33.8        | 23.51                    | 54                         | -30.49      | -                         | -           | 71             | 138         | V        |
| 3      | 1.493           | 38.1                 | Av  | 28.2           | -33.6        | 32.7                     | 54                         | -21.3       | -                         | -           | 120            | 148         | H        |
|        | 1.494           | 52.91                | Pk  | 28.2           | -33.5        | 47.61                    | -                          | -           | 74                        | -26.39      | 120            | 115         | H        |
| 4      | 1.993           | 45.65                | Pk  | 31.3           | -32.9        | 44.05                    | -                          | -           | 74                        | -29.95      | 209            | 178         | V        |
|        | 1.993           | 26.99                | Av  | 31.3           | -32.9        | 25.39                    | 54                         | -28.61      | -                         | -           | 209            | 178         | V        |
| 5      | 3               | 46.51                | Pk  | 32.8           | -31.4        | 47.91                    | -                          | -           | 74                        | -26.09      | 77             | 387         | H        |
|        | 3               | 26.61                | Av  | 32.8           | -31.4        | 28.01                    | 54                         | -25.99      | -                         | -           | 77             | 387         | H        |
| 6      | 5.76            | 41.5                 | Pk  | 35             | -29.5        | 47                       | -                          | -           | 74                        | -27         | 2              | 173         | V        |
|        | 5.76            | 34.35                | Av  | 35             | -29.5        | 39.85                    | 54                         | -14.15      | -                         | -           | 2              | 173         | V        |

Pk - Peak detector

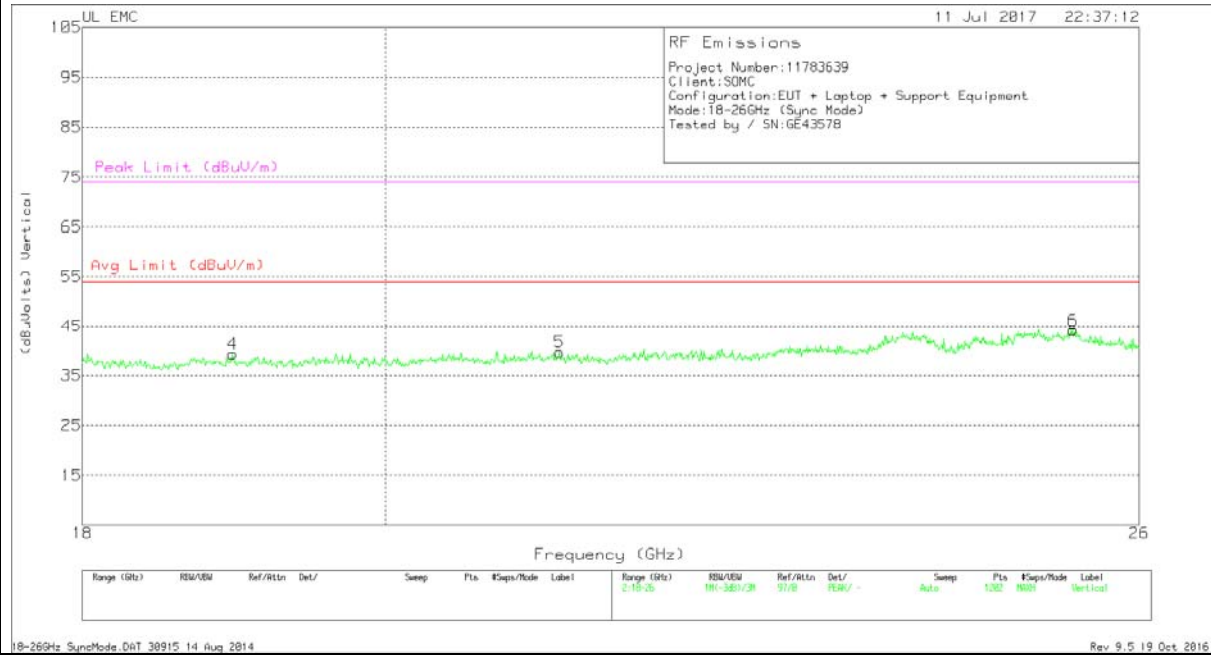
Av - Average detection

### 7.2.3. RADIATED EMISSIONS 18 to 26 GHz (SYNC MODE)

#### HORIZONTAL PLOT



#### VERTICAL PLOT



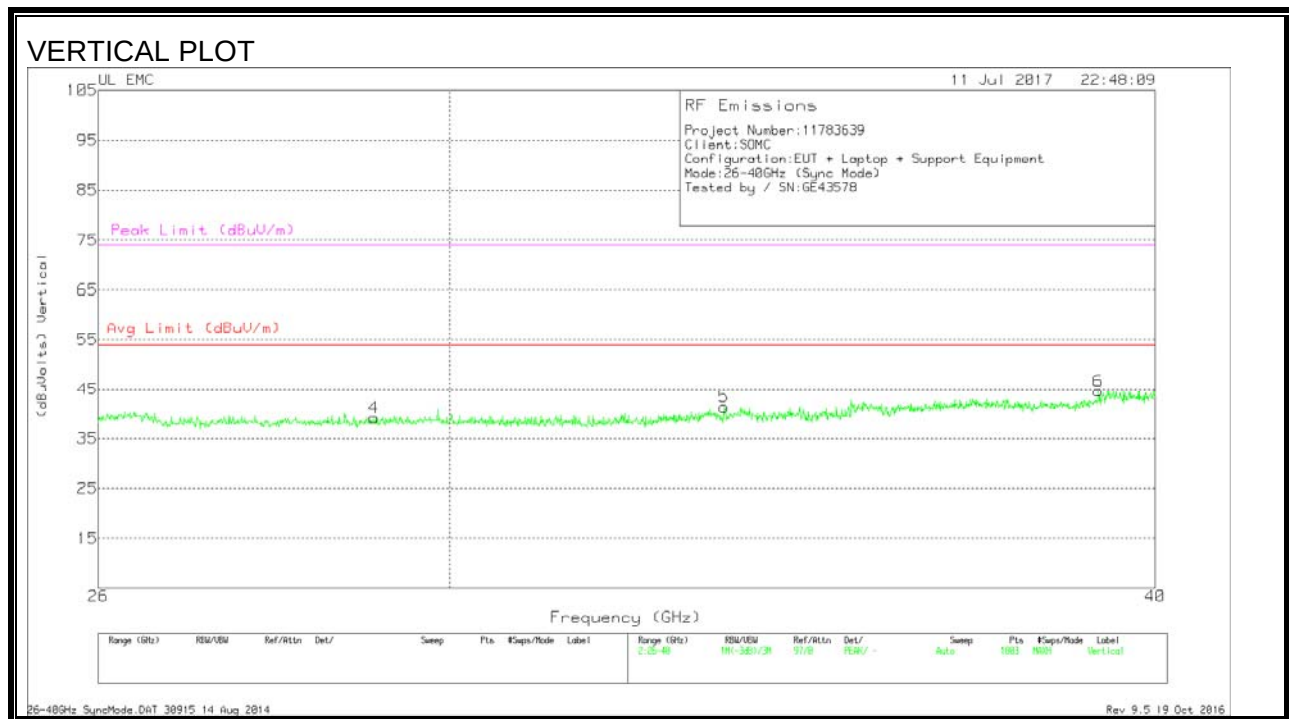
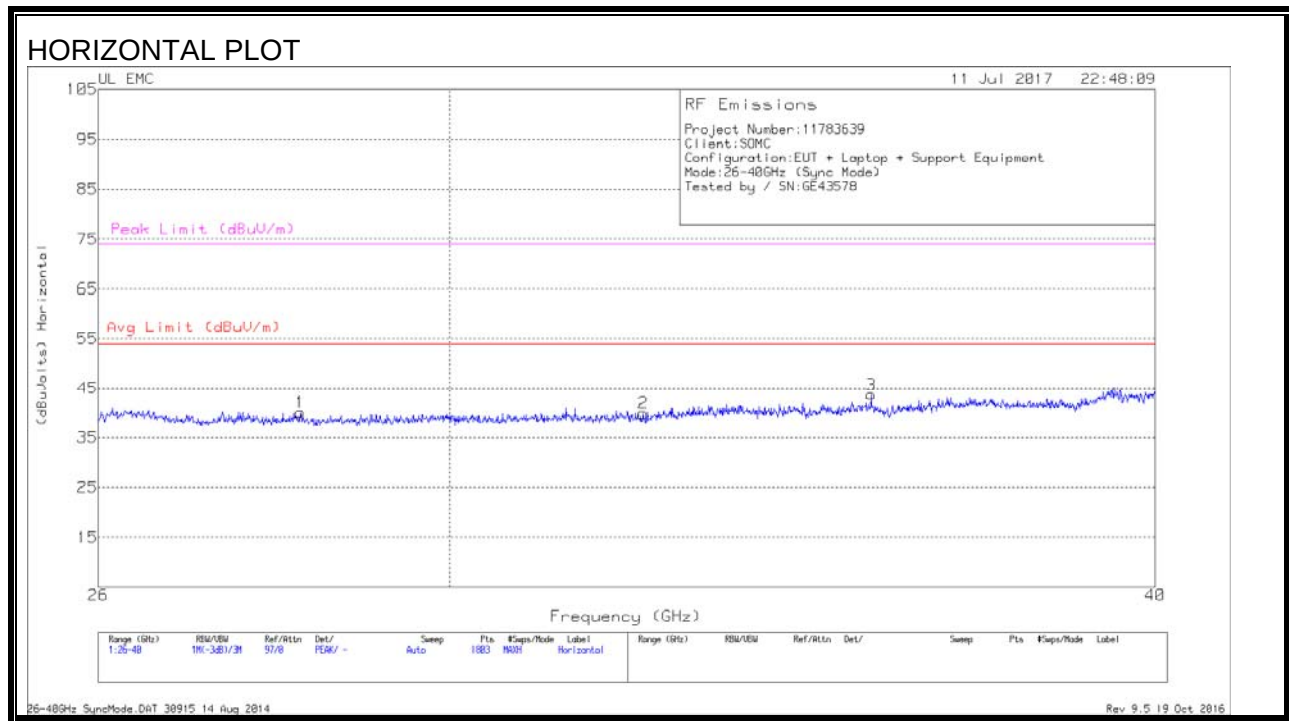
## HORIZONTAL AND VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | T449 AF (dB/m) | Amp/Cbl (dB) | Dist Corr (dB) | Corrected Reading (dBuVolts) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) |
|--------|-----------------|----------------------|-----|----------------|--------------|----------------|------------------------------|--------------------|-------------|---------------------|----------------|
| 1      | 19.079          | 39.4                 | Pk  | 32.5           | -24.9        | -9.5           | 37.5                         | 54                 | -16.5       | 74                  | -36.5          |
| 2      | 21.624          | 40.33                | Pk  | 33.2           | -25.2        | -9.5           | 38.83                        | 54                 | -15.17      | 74                  | -35.17         |
| 3      | 24.062          | 42.77                | Pk  | 33.9           | -24.5        | -9.5           | 42.67                        | 54                 | -11.33      | 74                  | -31.33         |
| 4      | 18.966          | 41.63                | Pk  | 32.4           | -25.2        | -9.5           | 39.33                        | 54                 | -14.67      | 74                  | -34.67         |
| 5      | 21.251          | 41.57                | Pk  | 33             | -25.4        | -9.5           | 39.67                        | 54                 | -14.33      | 74                  | -34.33         |
| 6      | 25.407          | 43.67                | Pk  | 34.4           | -24.4        | -9.5           | 44.17                        | 54                 | -9.83       | 74                  | -29.83         |

Pk - Peak detector

## 7.2.4. RADIATED EMISSIONS 26 to 40 GHz (SYNC MODE)



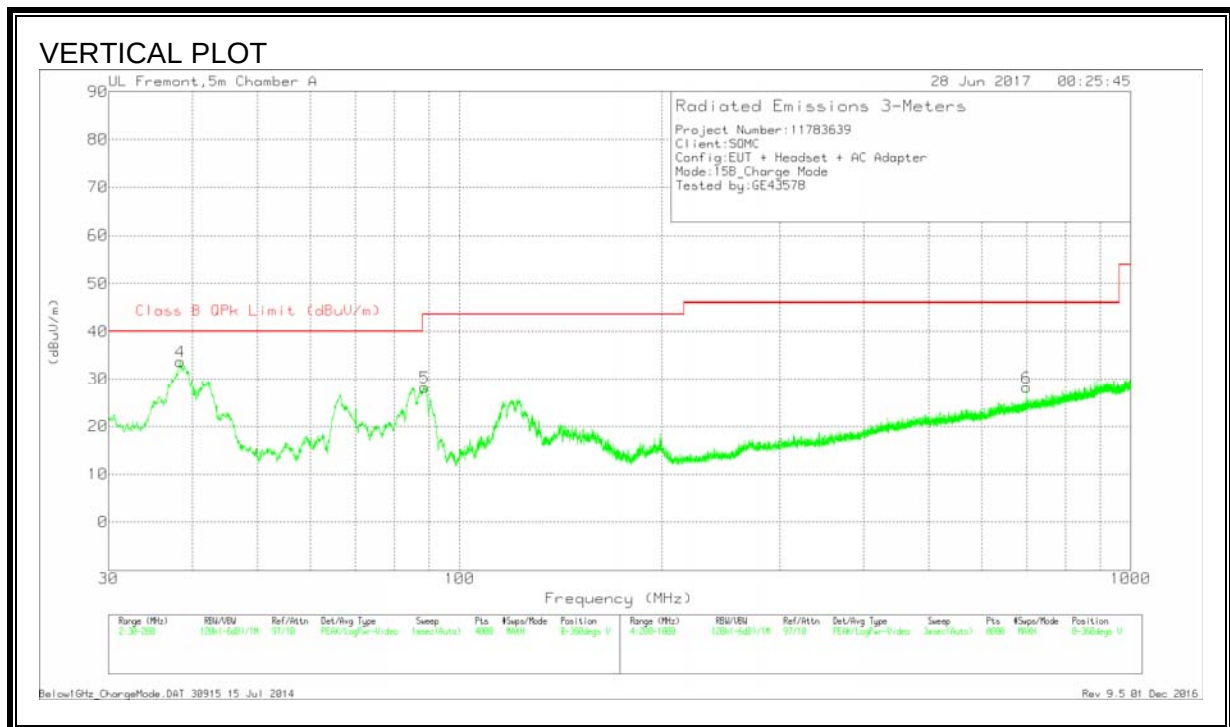
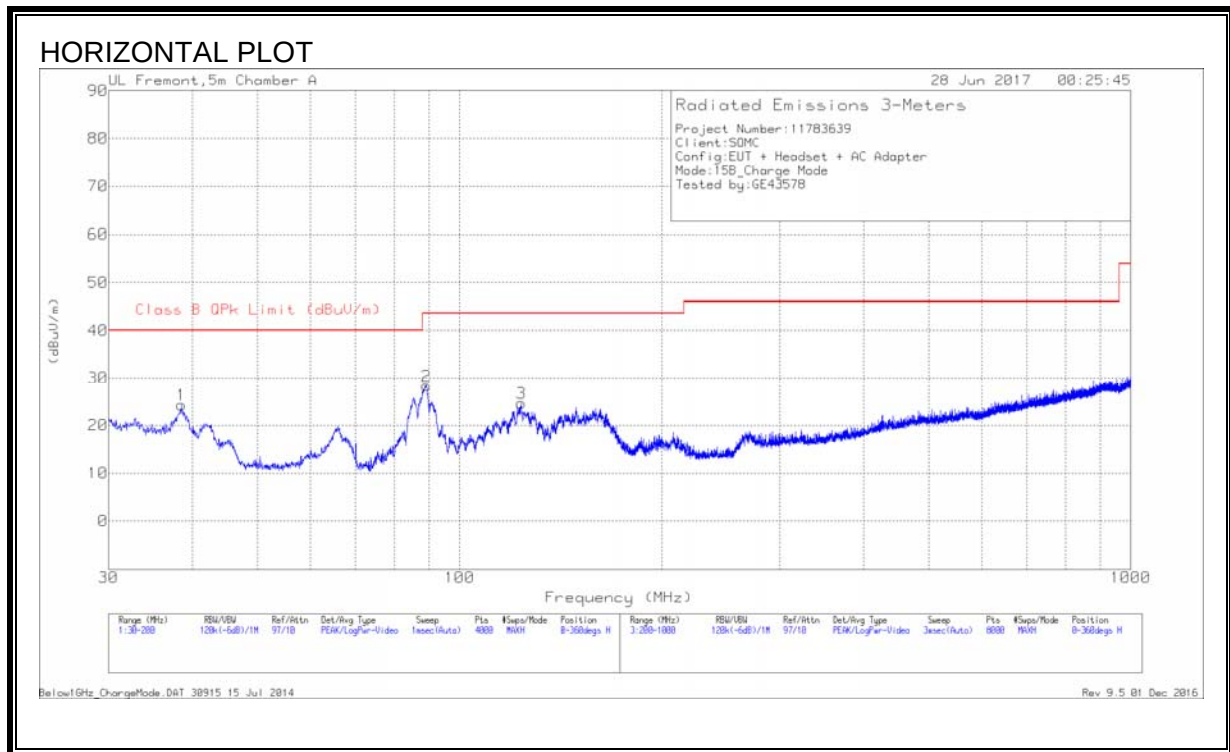
## HORIZONTAL AND VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | T90 AF (dB/m) | Amp/Cbl (dB) | Dist Corr (dB) | Corrected Reading (dBuVolts) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) |
|--------|-----------------|----------------------|-----|---------------|--------------|----------------|------------------------------|--------------------|-------------|---------------------|----------------|
| 1      | 28.23           | 45.6                 | Pk  | 35.9          | -32          | -9.5           | 40                           | 54                 | -14         | 74                  | -34            |
| 2      | 32.464          | 46.33                | Pk  | 36.2          | -33.2        | -9.5           | 39.83                        | 54                 | -14.17      | 74                  | -34.17         |
| 3      | 35.626          | 49.67                | Pk  | 37.6          | -34.1        | -9.5           | 43.67                        | 54                 | -10.33      | 74                  | -30.33         |
| 4      | 29.092          | 45.37                | Pk  | 35.9          | -32.6        | -9.5           | 39.17                        | 54                 | -14.83      | 74                  | -34.83         |
| 5      | 33.552          | 47.33                | Pk  | 37            | -33.5        | -9.5           | 41.33                        | 54                 | -12.67      | 74                  | -32.67         |
| 6      | 39.083          | 49.17                | Pk  | 37.7          | -32.7        | -9.5           | 44.67                        | 54                 | -9.33       | 74                  | -29.33         |

Pk - Peak detector

## 7.2.5. RADIATED EMISSIONS 30 TO 1000 MHz (CHARGING MODE)



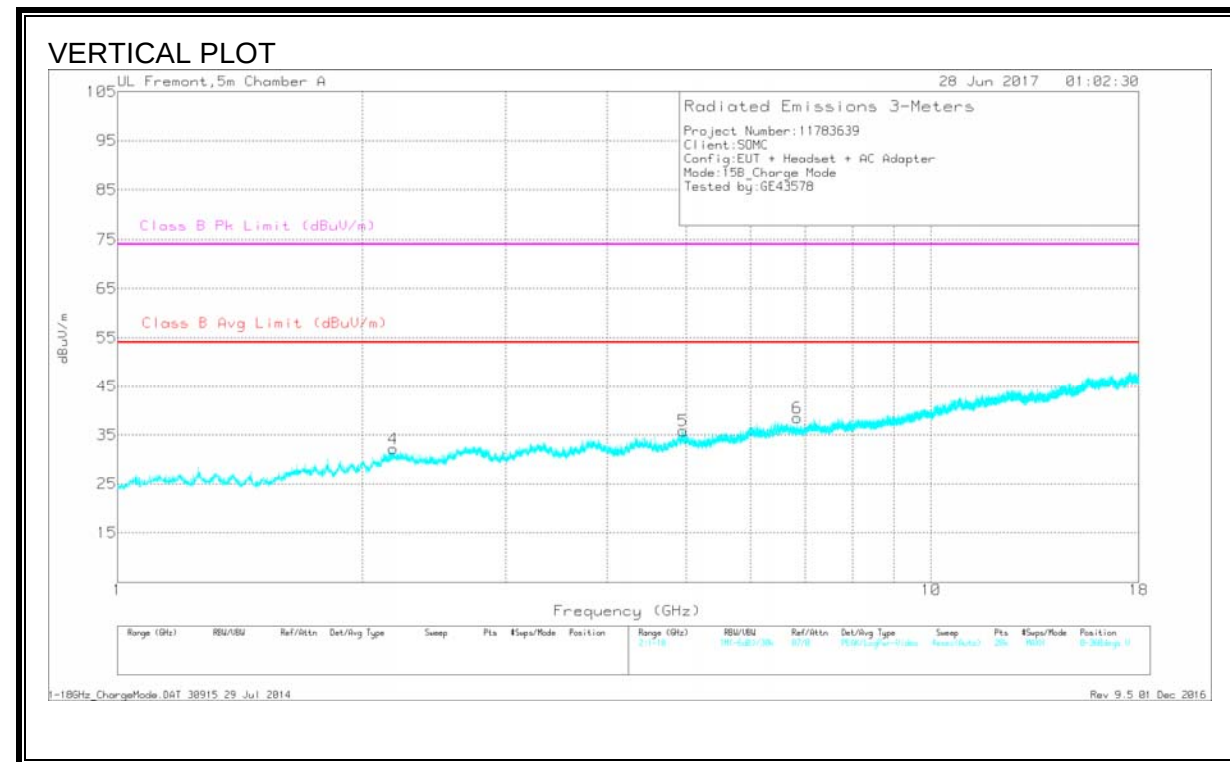
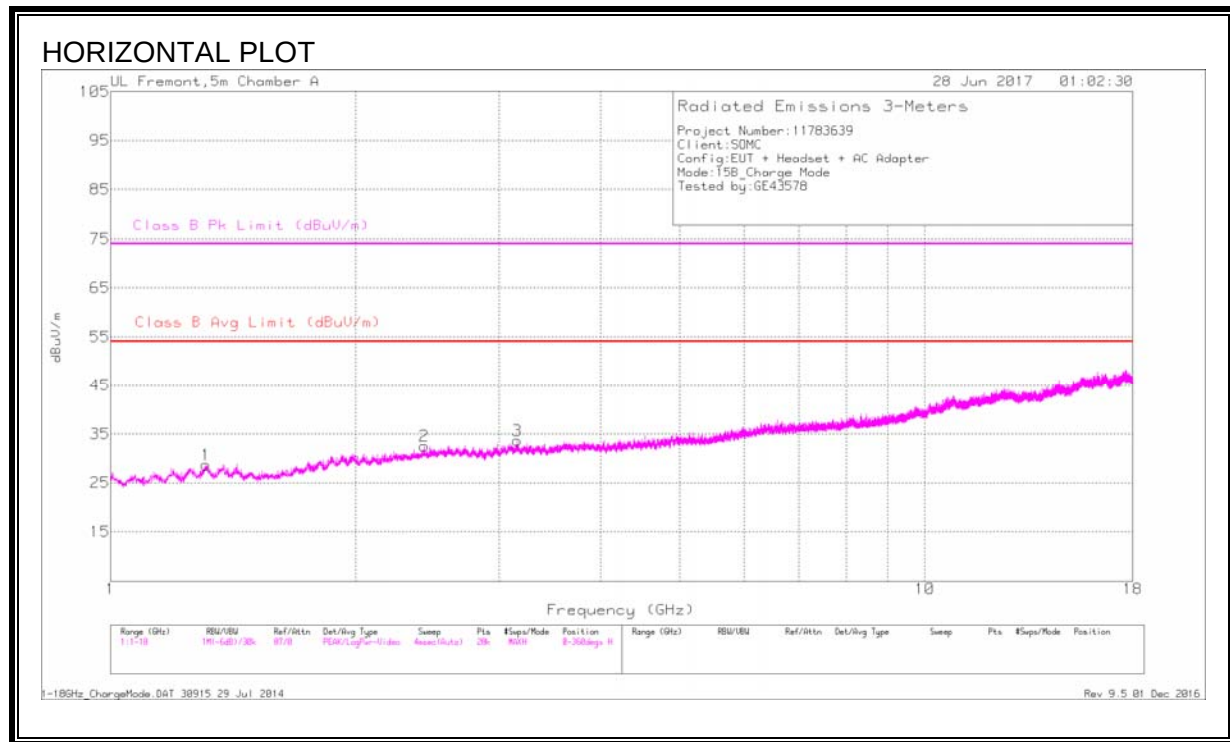
## HORIZONTAL AND VERTICAL DATA

### Radiated Emissions

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | AF T130 (dB/m) | Amp/Cbl (dB/m) | Corrected Reading (dBuV/m) | Class B QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|----------------|----------------------------|----------------------------|-------------|----------------|-------------|----------|
| 4      | 38.3322         | 45.63                | Pk  | 19.2           | -31.1          | 33.73                      | 40                         | -6.27       | 0-360          | 100         | V        |
| 1      | 38.5022         | 36.34                | Pk  | 19             | -31.1          | 24.24                      | 40                         | -15.76      | 0-360          | 400         | H        |
| 5      | 88.7077         | 47.22                | Pk  | 11.6           | -30.6          | 28.22                      | 43.52                      | -15.3       | 0-360          | 100         | V        |
| 2      | 89.2178         | 47.36                | Pk  | 11.6           | -30.6          | 28.36                      | 43.52                      | -15.16      | 0-360          | 200         | H        |
| 3      | 123.6092        | 37.21                | Pk  | 17.9           | -30.4          | 24.71                      | 43.52                      | -18.81      | 0-360          | 200         | H        |
| 6      | 699.865         | 32.27                | Pk  | 24.2           | -28.3          | 28.17                      | 46.02                      | -17.85      | 0-360          | 100         | V        |

Qp - Quasi-Peak detector

## 7.2.6. RADIATED EMISSIONS 1GHz to 18GHz (CHARGING MODE)



## HORIZONTAL AND VERTICAL DATA

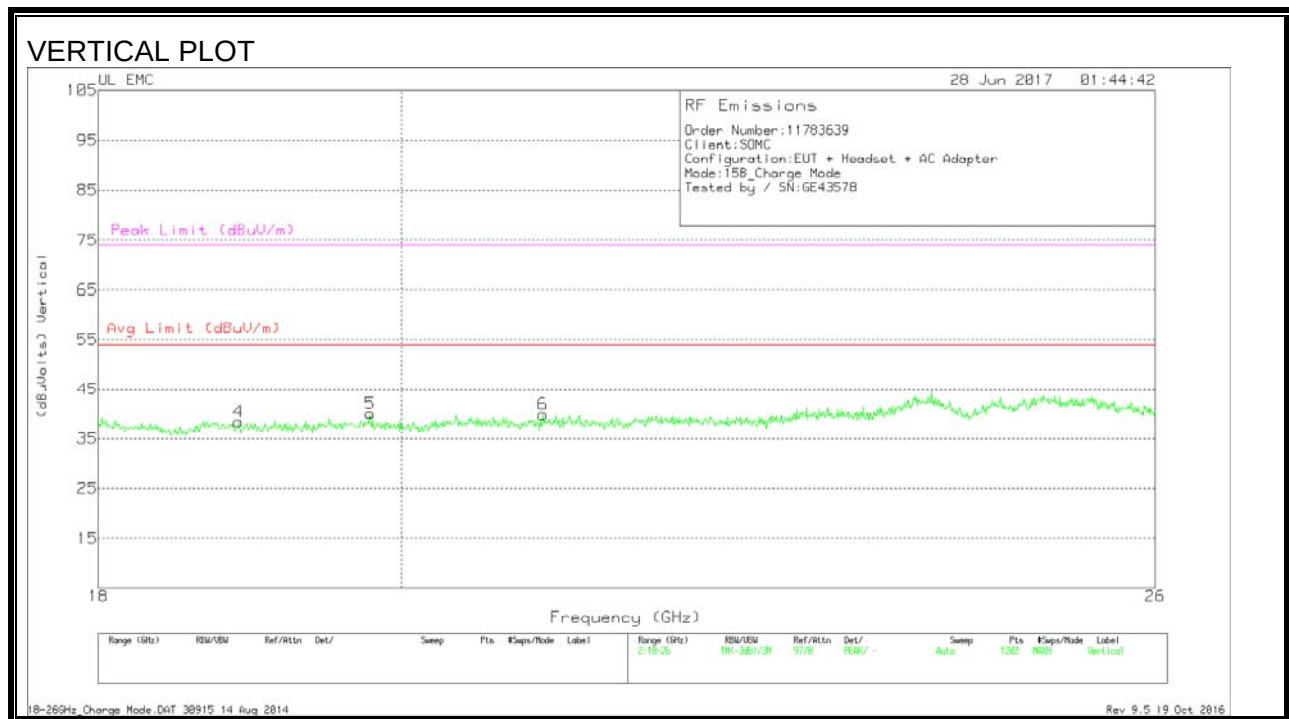
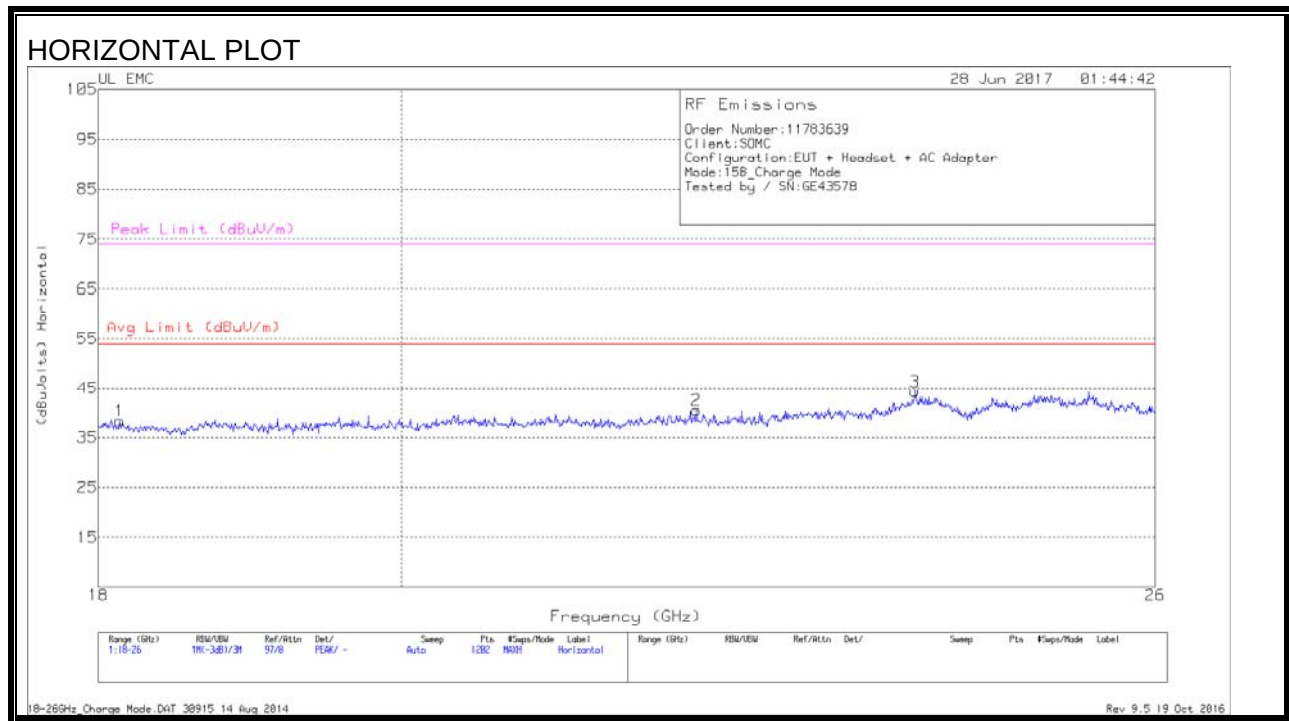
### Radiated Emissions

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | AF T711 (dB/m) | Amp/Cbl (dB) | Corrected Reading dBuV/m | Class B Avg Limit (dBuV/m) | Margin (dB) | Class B Pk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------------|--------------|--------------------------|----------------------------|-------------|---------------------------|-------------|----------------|-------------|----------|
| 1      | 1.309           | 27.64                | Av  | 29.5           | -33.3        | 23.84                    | 54                         | -30.16      | -                         | -           | 216            | 360         | H        |
|        | 1.309           | 39.8                 | Pk  | 29.5           | -33.3        | 36                       | -                          | -           | 74                        | -38         | 216            | 360         | H        |
| 4      | 2.184           | 39.09                | Pk  | 31.5           | -32          | 38.59                    | -                          | -           | 74                        | -35.41      | 34             | 200         | V        |
|        | 2.184           | 26.32                | Av  | 31.5           | -32          | 25.82                    | 54                         | -28.18      | -                         | -           | 34             | 200         | V        |
| 2      | 2.424           | 38.95                | Pk  | 32.3           | -31.6        | 39.65                    | -                          | -           | 74                        | -34.35      | 256            | 102         | H        |
|        | 2.424           | 26.23                | Av  | 32.3           | -31.6        | 26.93                    | 54                         | -27.07      | -                         | -           | 256            | 102         | H        |
| 3      | 3.156           | 38.9                 | Pk  | 33             | -30.4        | 41.5                     | -                          | -           | 74                        | -32.5       | 132            | 102         | H        |
|        | 3.156           | 25.58                | Av  | 33             | -30.4        | 28.18                    | 54                         | -25.82      | -                         | -           | 132            | 102         | H        |
| 5      | 4.953           | 37.61                | Pk  | 34.1           | -28.3        | 43.41                    | -                          | -           | 74                        | -30.59      | 228            | 200         | V        |
|        | 4.953           | 23.95                | Av  | 34.1           | -28.3        | 29.75                    | 54                         | -24.25      | -                         | -           | 228            | 200         | V        |
| 6      | 6.845           | 34.74                | Pk  | 35.5           | -24.5        | 45.74                    | -                          | -           | 74                        | -28.26      | 346            | 200         | V        |
|        | 6.845           | 21.56                | Av  | 35.5           | -24.5        | 32.56                    | 54                         | -21.44      | -                         | -           | 346            | 200         | V        |

Pk - Peak detector

Av - Average detection

## 7.2.7. RADIATED EMISSIONS 18 to 26 GHz (CHARGING MODE)



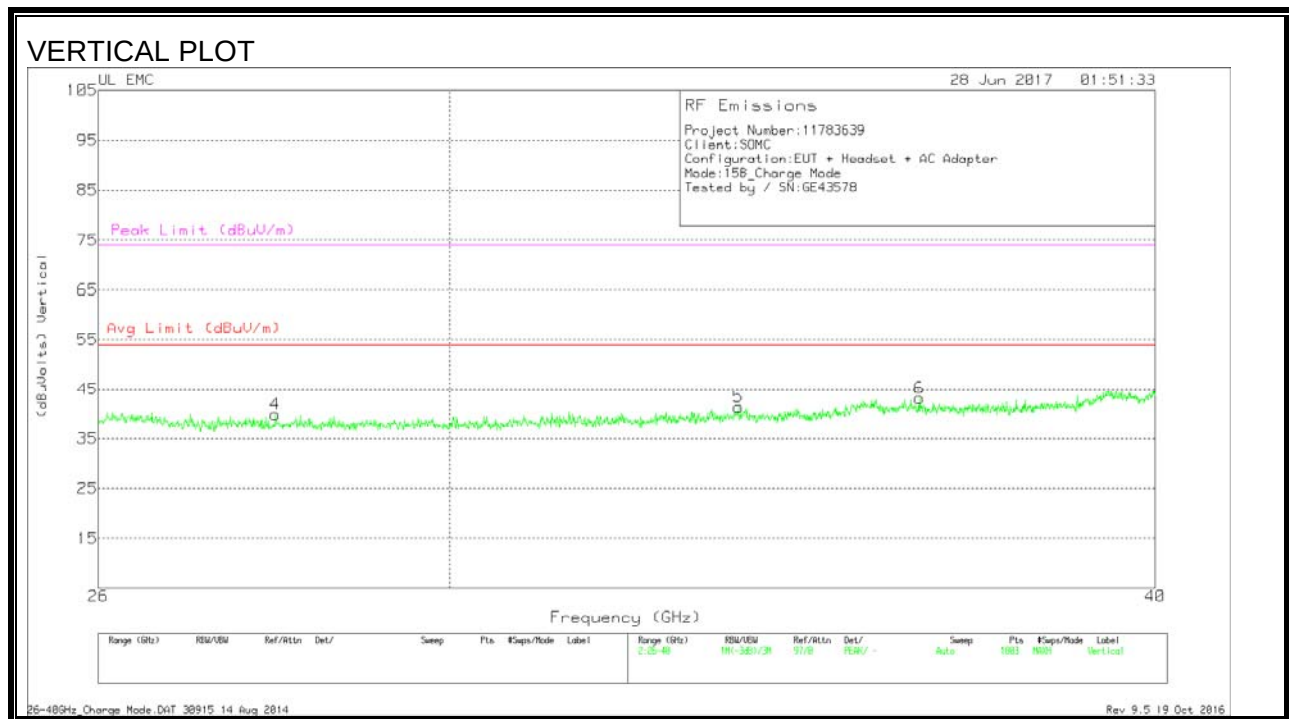
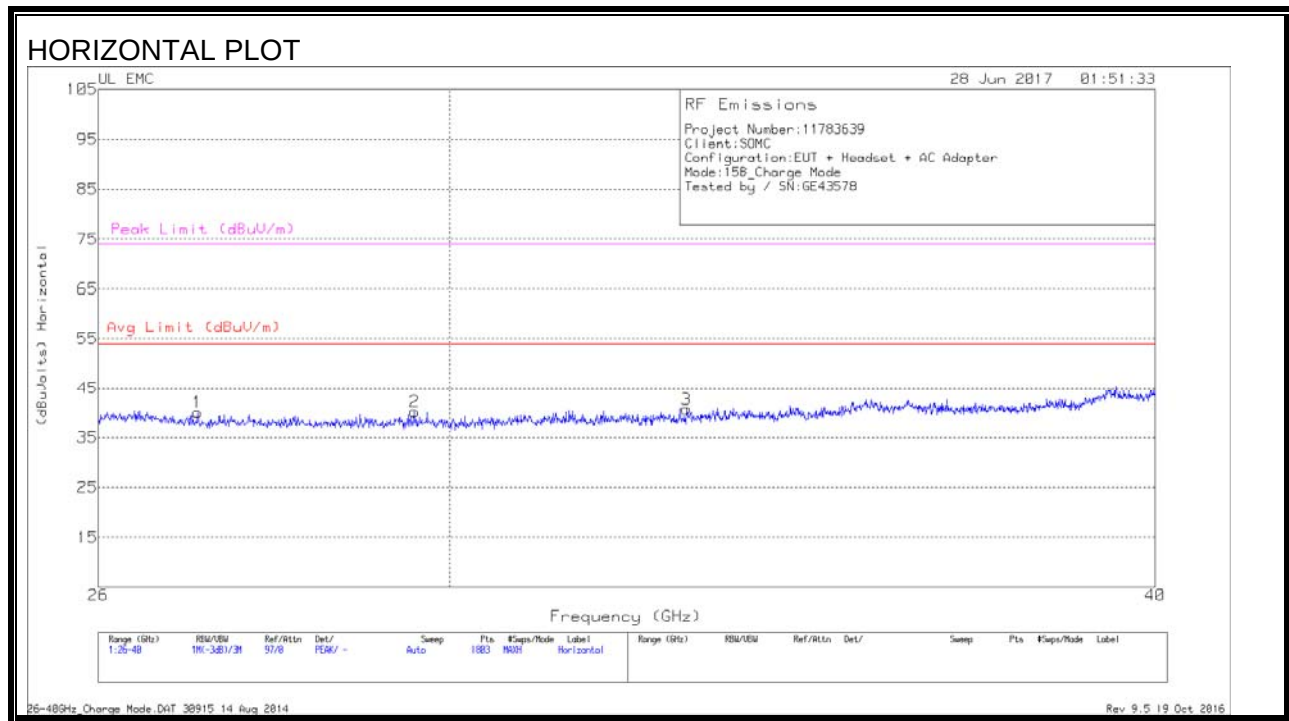
## HORIZONTAL AND VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | T449 AF (dB/m) | Amp/Cbl (dB) | Dist Corr (dB) | Corrected Reading (dBuVolts) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) |
|--------|-----------------|----------------------|-----|----------------|--------------|----------------|------------------------------|--------------------|-------------|---------------------|----------------|
| 1      | 18.133          | 41.23                | Pk  | 32.3           | -25.7        | -9.5           | 38.33                        | 54                 | -15.67      | 74                  | -35.67         |
| 2      | 22.163          | 41.3                 | Pk  | 33.4           | -24.7        | -9.5           | 40.5                         | 54                 | -13.5       | 74                  | -33.5          |
| 3      | 23.915          | 43.83                | Pk  | 33.9           | -23.9        | -9.5           | 44.33                        | 54                 | -9.67       | 74                  | -29.67         |
| 4      | 18.899          | 40.83                | Pk  | 32.4           | -25.4        | -9.5           | 38.33                        | 54                 | -15.67      | 74                  | -35.67         |
| 5      | 19.785          | 41.5                 | Pk  | 32.7           | -24.7        | -9.5           | 40                           | 54                 | -14         | 74                  | -34            |
| 6      | 21.011          | 41.73                | Pk  | 33.2           | -25.6        | -9.5           | 39.83                        | 54                 | -14.17      | 74                  | -34.17         |

Pk - Peak detector

## 7.2.8. RADIATED EMISSIONS 26 to 40 GHz (CHARGING MODE)



## HORIZONTAL AND VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | T90 AF (dB/m) | Amp/Cbl (dB) | Dist Corr (dB) | Corrected Reading (dBuVolts) | Avg Limit (dBuV/m) | Margin (dB) | Peak Limit (dBuV/m) | PK Margin (dB) |
|--------|-----------------|----------------------|-----|---------------|--------------|----------------|------------------------------|--------------------|-------------|---------------------|----------------|
| 1      | 27.072          | 45.3                 | Pk  | 35.5          | -31.3        | -9.5           | 40                           | 54                 | -14         | 74                  | -34            |
| 2      | 29.574          | 46.37                | Pk  | 36            | -32.7        | -9.5           | 40.17                        | 54                 | -13.83      | 74                  | -33.83         |
| 3      | 33.039          | 46.77                | Pk  | 36.7          | -33.3        | -9.5           | 40.67                        | 54                 | -13.33      | 74                  | -33.33         |
| 4      | 27.942          | 45.73                | Pk  | 35.8          | -32.2        | -9.5           | 39.83                        | 54                 | -14.17      | 74                  | -34.17         |
| 5      | 33.754          | 47.53                | Pk  | 36.8          | -33.5        | -9.5           | 41.33                        | 54                 | -12.67      | 74                  | -32.67         |
| 6      | 36.333          | 50.17                | Pk  | 37.2          | -34.7        | -9.5           | 43.17                        | 54                 | -10.83      | 74                  | -30.83         |

Pk - Peak detector

### **7.3. AC MAINS LINE CONDUCTED EMISSIONS**

#### **RESULTS**

*Please refer to report "11785223-E8V2 FCC Report 15B", Section 6.3.*