



**FCC 47 CFR PART 15 SUBPART B**

**CERTIFICATION TEST REPORT**

**FOR**

**GSM/WCDMA/LTE Phone + BT/BLE, DTS/UNII a/b/g/n, ANT+ and NFC**

**MODEL NUMBER : SM-A605GN/DS, SM-A605GN**

**FCC ID: A3LSMA605GN**

**REPORT NUMBER: 4788371689-E8V1**

**ISSUE DATE: MAR 24, 2018**

*Prepared for*

**SAMSUNG ELECTRONICS CO., LTD.  
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,  
GYEONGGI-DO, 16677, KOREA**

*Prepared by*

**UL Korea, Ltd.**

**26th floor, 152, Teheran-ro, Gangnam-gu Seoul, 06236, Korea**

**Suwon Test Site: UL Korea, Ltd. Suwon Laboratory**

**218 Maeyeong-ro, Yeongtong-gu,  
Suwon-si, Gyeonggi-do, 16675, Korea**

**TEL: (031) 337-9902**

**FAX: (031) 213-5433**



**ACCREDITED\***

Testing  
Laboratory

**TL-637**

Revision History

| Rev. | Issue Date | Revisions     | Revised By  |
|------|------------|---------------|-------------|
| V1   | 03/24/18   | Initial issue | Sangyun Kim |

## TABLE OF CONTENTS

|                                                    |           |
|----------------------------------------------------|-----------|
| <b>1. ATTESTATION OF TEST RESULTS .....</b>        | <b>4</b>  |
| <b>2. TEST METHODOLOGY .....</b>                   | <b>5</b>  |
| <b>3. FACILITIES AND ACCREDITATION .....</b>       | <b>5</b>  |
| <b>4. CALIBRATION AND UNCERTAINTY .....</b>        | <b>5</b>  |
| 4.1. MEASURING INSTRUMENT CALIBRATION.....         | 5         |
| 4.2. SAMPLE CALCULATION.....                       | 5         |
| 4.3. MEASUREMENT UNCERTAINTY .....                 | 6         |
| <b>5. EQUIPMENT UNDER TEST .....</b>               | <b>7</b>  |
| 5.1. DESCRIPTION OF EUT.....                       | 7         |
| 5.2. PRELIMINARY TEST CONFIGURATIONS.....          | 7         |
| 5.3. MODE(S) OF OPERATION INVESTIGATED.....        | 7         |
| 5.4. MODIFICATIONS.....                            | 7         |
| 5.5. DETAILS OF TESTED SYSTEM.....                 | 8         |
| <b>6. TEST AND MEASUREMENT EQUIPMENT .....</b>     | <b>10</b> |
| <b>7. APPLICABLE LIMITS AND TEST RESULTS .....</b> | <b>11</b> |
| 7.1. RADIATED EMISSIONS .....                      | 11        |
| 7.2. AC MAINS LINE CONDUCTED EMISSIONS.....        | 18        |
| <b>8. SETUP PHOTOS.....</b>                        | <b>23</b> |

## 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** SAMSUNG ELECTRONICS CO., LTD.  
**EUT DESCRIPTION:** GSM/WCDMA/LTE Phone + BT/BLE, DTS/UNII a/b/g/n, ANT+ and NFC  
**MODEL NUMBER:** SM-A605GN/DS, SM-A605GN  
**SERIAL NUMBER:** R38K10CXCDR  
**DATE TESTED:** MAR 22, 2018 - MAR 23, 2018

| APPLICABLE STANDARDS  |              |
|-----------------------|--------------|
| STANDARD              | TEST RESULTS |
| FCC 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.

Approved & Released For  
UL Korea, Ltd. By:



Changyoung Choi  
Suwon Lab Engineer  
UL Korea, Ltd.

Tested By:



Sangyun Kim  
Suwon Lab Engineer  
UL Korea, Ltd.

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2014, FCC CFR 47 Part 2, FCC CFR 47 Part 15.

## 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea. Line conducted emissions are measured only at the 218 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.

| 218 Maeyeong-ro                     |           |
|-------------------------------------|-----------|
| <input checked="" type="checkbox"/> | Chamber 1 |
| <input type="checkbox"/>            | Chamber 2 |
| <input type="checkbox"/>            | Chamber 3 |

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at <http://www.iasonline.org/PDF/TL/TL-637.pdf>.

## 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:

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

### 4.3. MEASUREMENT UNCERTAINTY

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

| PARAMETER                             | UNCERTAINTY |
|---------------------------------------|-------------|
| Conducted Disturbance, 0.15 to 30 MHz | 2.32 dB     |
| Radiated Disturbance, Below 1GHz      | 3.86 dB     |
| Radiated Disturbance, Above 1 GHz     | 5.97 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 + BT/BLE, DTS/UNII a/b/g/n, ANT+ and NFC

#### GENERAL INFORMATION

|                                                  |                                                                   |
|--------------------------------------------------|-------------------------------------------------------------------|
| Type of device                                   | Class B personal computers and peripherals                        |
| AC adapter power requirements                    | 100-240 VAC / 50-60 Hz, 1.5 A                                     |
| List of frequencies generated or used by the EUT | 30 GHz (5 <sup>th</sup> harmonic of the frequency of 5.8GHz WLAN) |

### 5.2. PRELIMINARY TEST CONFIGURATIONS

The EUT was investigated in three orthogonal orientations X, Y, Z it was determined that X orientation with data transfer was worst-case; therefore, all final radiated testing was performed with the EUT in X orientation with data transfer.

### 5.3. MODE(S) OF OPERATION INVESTIGATED

| Mode          | Description               |
|---------------|---------------------------|
| Data transfer | Copy files from PC to EUT |

### 5.4. MODIFICATIONS

No modifications were made during testing.

## 5.5. DETAILS OF TESTED SYSTEM

### SUPPORT EQUIPMENT & PERIPHERALS

| Support Equipment List |              |             |                           |            |
|------------------------|--------------|-------------|---------------------------|------------|
| Description            | Manufacturer | Model       | Serial Number             | FCC ID/DoC |
| PC                     | HP           | C8N27AV     | CZC4125J25                | DoC        |
| LCD monitor            | Samsung      | LS24D390    | 0K2PHTQFC02186R           | DoC        |
| AC/DC Adapter          | Samsung      | A2514_DSM   | CN07BN4400719ASE38FC2Y3T7 | DoC        |
| Micro SD card          | Samsung      | 64G         | -                         | DoC        |
| Mouse                  | Logitech     | U0026       | 1451HS05S6G8              | DoC        |
| Keyboard               | Logitech     | Y-U0009     | 1410MG00RVY8              | DoC        |
| Earphone               | Samsung      | GH59-14677A | -                         | -          |

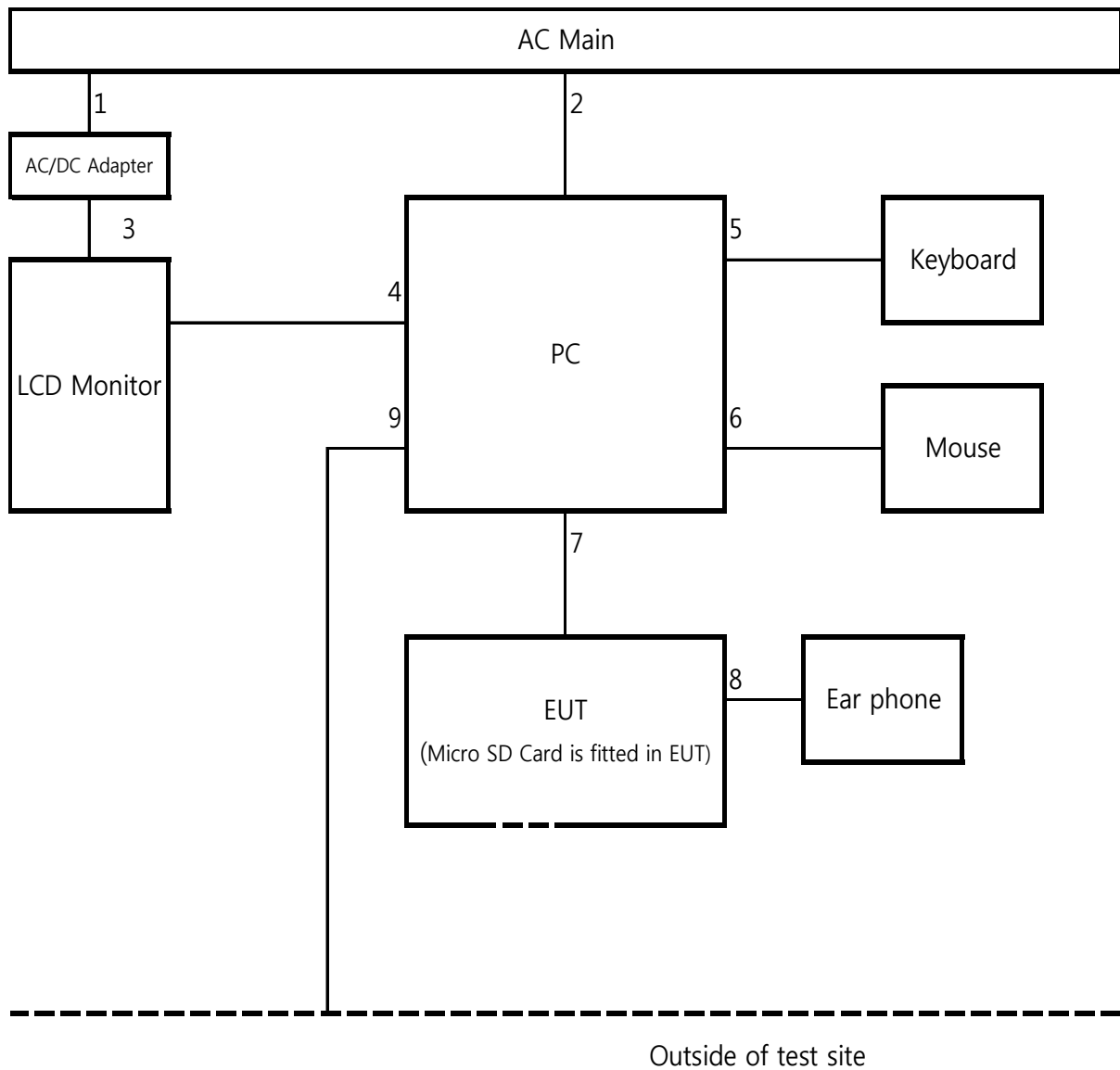
### I/O CABLES

| I/O Cable List |          |                      |                |            |                 |                                           |
|----------------|----------|----------------------|----------------|------------|-----------------|-------------------------------------------|
| Cable No       | Port     | # of identical ports | Connector Type | Cable Type | Cable Length(m) | Remarks                                   |
| 1              | AC Power | 1                    | Power          | Unshielded | 1.5m            | From AC/DC Adapter to AC Main             |
| 2              | AC Power | 1                    | Power          | Unshielded | 1.5m            | From PC to AC Main                        |
| 3              | DC Power | 1                    | Power          | Unshielded | 1.2m            | From LCD Monitor to AC/DC Adpater         |
| 4              | D-SUB    | 1                    | D-SUB          | Shielded   | 1.2m            | From LCD Monitor to PC                    |
| 5              | USB      | 1                    | USB            | Shielded   | 1.2m            | From Keyboard to PC                       |
| 6              | USB      | 1                    | USB            | Shielded   | 1.5m            | From Mouse to PC                          |
| 7              | USB      | 1                    | USB            | Shielded   | 0.6m            | From EUT to PC                            |
| 8              | Earphone | 1                    | Mini-Jack      | Shielded   | 0.8m            | From EUT to Earphone                      |
| 9              | LAN      | 1                    | RJ-45          | Shielded   | 0.8m            | From PC to Ethernet(Outside of test site) |

### TEST SETUP

The EUT is installed in a typical configuration. Copy files from PC to EUT.

**TEST SETUP DIAGRAM**



## 6. 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                  | S/N      | Cal Due  |
| Antenna, Bilog, 30MHz-1GHz | SCHWARZBECK  | VULB9163               | 750      | 08-31-19 |
| Antenna, Bilog, 30MHz-1GHz | SCHWARZBECK  | VULB9163               | 749      | 09-14-19 |
| Antenna, Bilog, 30MHz-1GHz | SCHWARZBECK  | VULB9163               | 845      | 08-31-19 |
| Antenna, Horn, 18 GHz      | ETS          | 3115                   | 00167211 | 10-14-18 |
| Antenna, Horn, 18 GHz      | ETS          | 3115                   | 00161451 | 03-10-19 |
| Antenna, Horn, 18 GHz      | ETS          | 3117                   | 00168724 | 05-31-19 |
| Antenna, Horn, 18 GHz      | ETS          | 3117                   | 00168717 | 05-31-19 |
| Antenna, Horn, 18 GHz      | ETS          | 3117                   | 00205959 | 11-29-18 |
| Antenna, Horn, 40 GHz      | ETS          | 3116C                  | 00166155 | 12-04-19 |
| Antenna, Horn, 40 GHz      | ETS          | 3116C                  | 00168645 | 12-04-19 |
| Antenna, Horn, 40 GHz      | ETS          | 3116C-PA               | 00168841 | 11-13-19 |
| Preamplifier, 1000 MHz     | Sonoma       | 310N                   | 341282   | 08-09-18 |
| Preamplifier, 1000 MHz     | Sonoma       | 310N                   | 351741   | 08-07-18 |
| Preamplifier, 1000 MHz     | Sonoma       | 310N                   | 370599   | 08-10-18 |
| Preamplifier, 18 GHz       | Miteq        | AFS42-00101800-25-S-42 | 1876511  | 08-08-18 |
| Preamplifier, 18 GHz       | Miteq        | AFS42-00101800-25-S-42 | 1896138  | 08-08-18 |
| Preamplifier, 18 GHz       | Miteq        | AFS42-00101800-25-S-42 | 2029169  | 08-11-18 |
| EMI Test Receive, 40 GHz   | R&S          | ESU40                  | 100439   | 08-08-18 |
| EMI Test Receive, 40 GHz   | R&S          | ESU40                  | 100457   | 08-08-18 |
| EMI Test Receive, 44 GHz   | R&S          | ESW44                  | 101590   | 08-09-18 |
| EMI Test Receive, 3 GHz    | R&S          | ESR3                   | 101832   | 08-07-18 |
| LISN                       | R&S          | ENV-216                | 101837   | 08-09-18 |
| UL Software                |              |                        |          |          |
| Description                | Manufacturer | Model                  | Version  |          |
| Radiated software          | UL           | UL EMC                 | Ver 9.5  |          |
| AC Line Conducted software | UL           | UL EMC                 | Ver 9.5  |          |

## 7. APPLICABLE LIMITS AND TEST RESULTS

### 7.1. RADIATED EMISSIONS

#### TEST PROCEDURE

ANSI C63.4: 2014

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

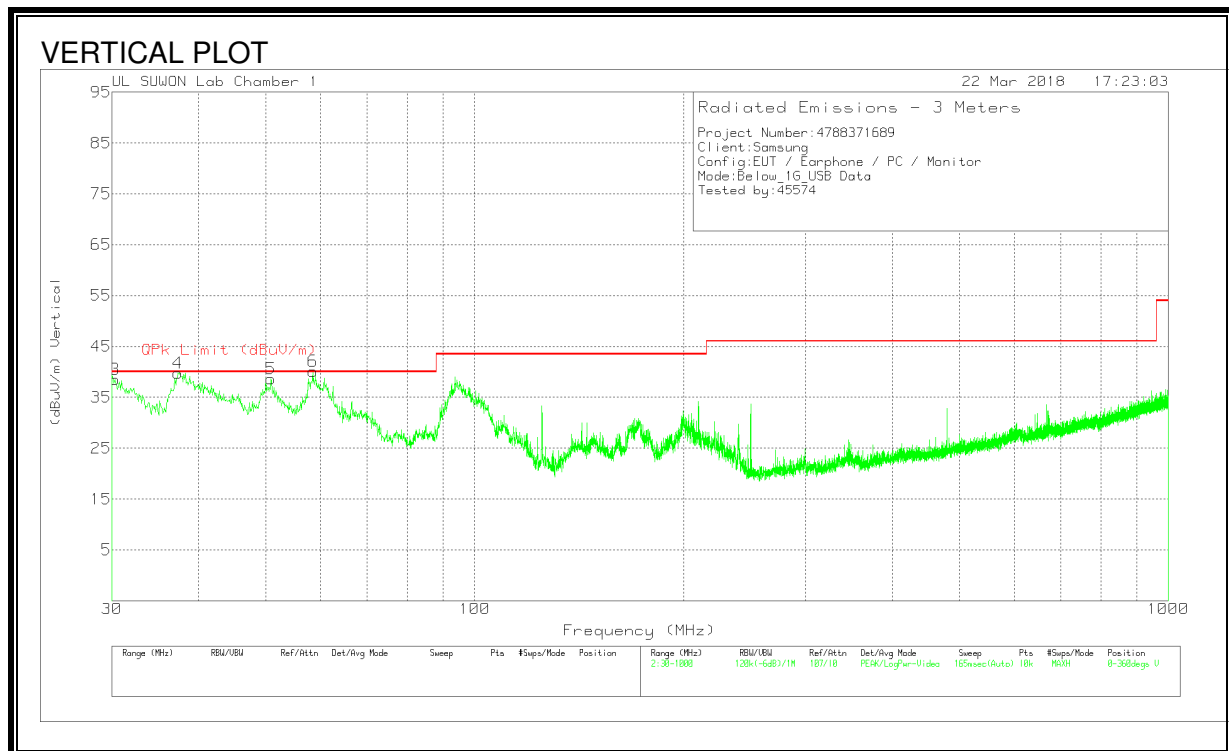
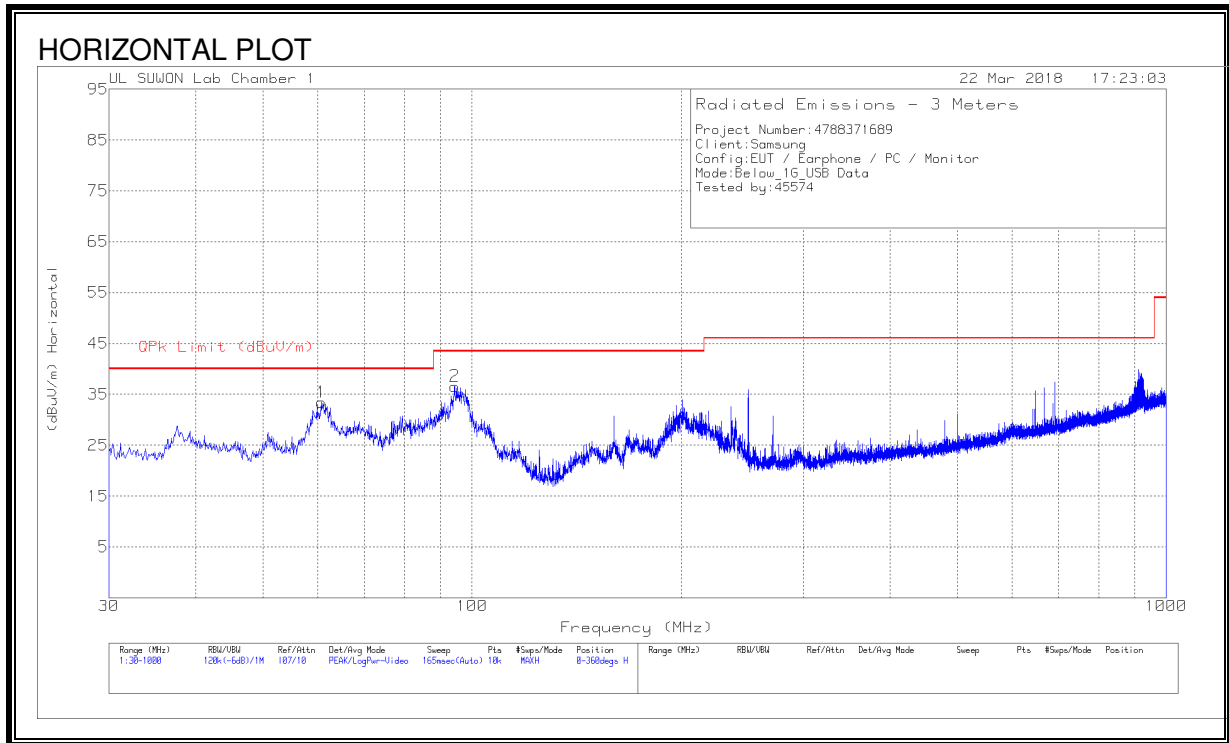
#### LIMIT

§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<br>(MHz)                                                    | Quasi-peak limits<br>(dB $\mu$ V/m) |
| 30 to 88                                                                    | 40                                  |
| 88 to 216                                                                   | 43.5                                |
| 216 to 960                                                                  | 46                                  |
| Above 960 MHz                                                               | 54                                  |
| Note: The lower limit shall apply at the transition frequency.              |                                     |

## RESULTS

### RADIATED EMISSIONS 30 TO 1000 MHz



## HORIZONTAL AND VERTICAL DATA

### Trace Markers

| Marker | Frequency (MHz) | Meter Reading (dBuV) | Det | 750_20170831 | 30-1000MHz[dB] | Corrected Reading (dBuV/m) | QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|--------------|----------------|----------------------------|--------------------|-------------|----------------|-------------|----------|
| 1      | 60.749          | 44.36                | Pk  | 18.2         | -29.1          | 33.46                      | 40                 | -6.54       | 0-360          | 400         | H        |
| 2      | 94.408          | 48.49                | Pk  | 16.6         | -28.5          | 36.59                      | 43.52              | -6.93       | 0-360          | 300         | H        |
| 3      | 30.291          | 52.24                | Pk  | 16           | -29.7          | 38.54                      | 40                 | -1.46       | 0-360          | 100         | V        |
| 4      | 37.372          | 52.1                 | Pk  | 17.5         | -29.8          | 39.8                       | 40                 | -.2         | 0-360          | 100         | V        |
| 5      | 50.855          | 47.92                | Pk  | 19.8         | -29.1          | 38.62                      | 40                 | -1.38       | 0-360          | 100         | V        |
| 6      | 58.421          | 50.51                | Pk  | 18.7         | -29.1          | 40.11                      | 40                 | .11         | 0-360          | 100         | V        |

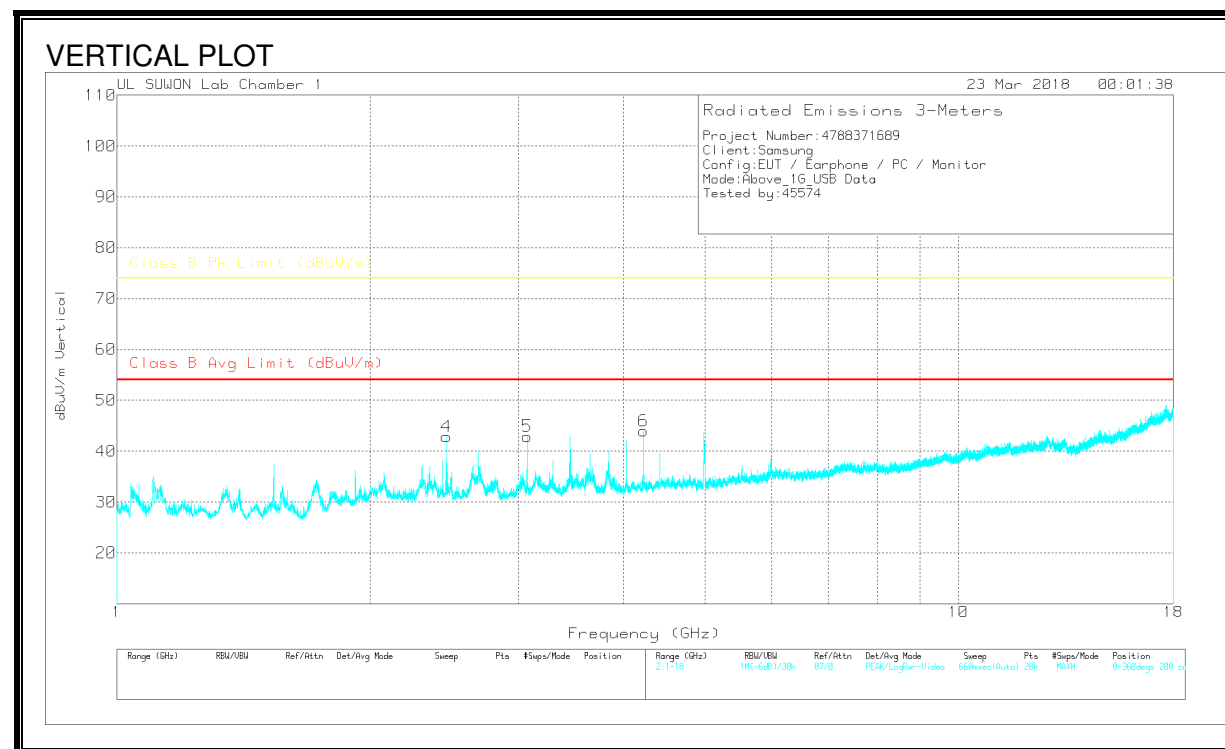
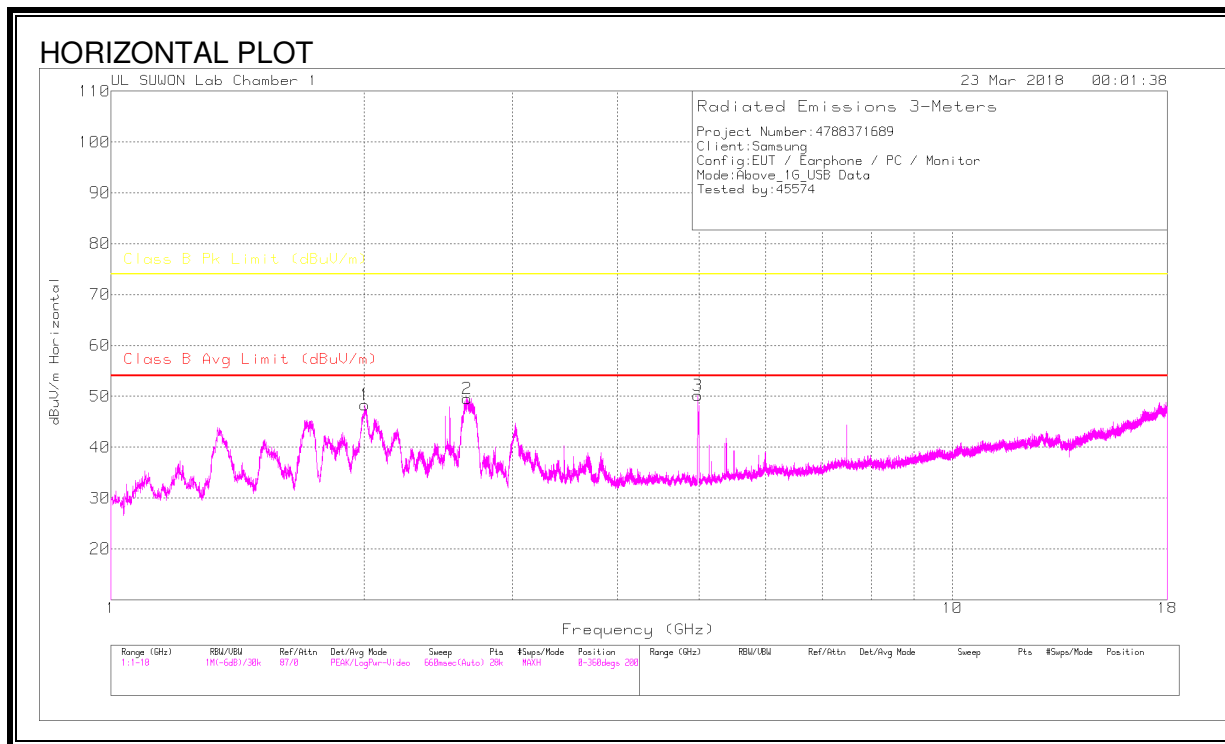
Pk - Peak detector

### Radiated Emissions

| Frequency (MHz) | Meter Reading (dBuV) | Det | 750_20170831 | 30-1000MHz[dB] | Corrected Reading (dBuV/m) | QPk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|--------------|----------------|----------------------------|--------------------|-------------|----------------|-------------|----------|
| 30.291          | 48.68                | Qp  | 16           | -29.7          | 34.98                      | 40                 | -5.02       | 322            | 100         | V        |
| 37.372          | 47.92                | Qp  | 17.5         | -29.8          | 35.62                      | 40                 | -4.38       | 123            | 103         | V        |
| 50.855          | 43.09                | Qp  | 19.8         | -29.1          | 33.79                      | 40                 | -6.21       | 271            | 100         | V        |
| 58.421          | 45.39                | Qp  | 18.7         | -29.1          | 34.99                      | 40                 | -5.01       | 329            | 101         | V        |

Qp - Quasi-Peak detector

**RADIATED EMISSIONS 1GHz to 18GHz**



## HORIZONTAL AND VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 1-18GHz(dB) | Corrected Reading dBuV/m | Class B Avg Limit (dBuV/m) | Av(CISPR)Margin (dB) | Class B Pk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|---------------|-------------|--------------------------|----------------------------|----------------------|---------------------------|-------------|----------------|-------------|----------|
| 1      | 2.002           | 52.67                | PK  | 31.5          | -35.8       | 48.37                    | -                          | -                    | -                         | -           | 0-360          | 100         | H        |
| 2      | 2.649           | 52.35                | PK  | 31.9          | -34.7       | 49.55                    | -                          | -                    | -                         | -           | 0-360          | 200         | H        |
| 3      | 4.978           | 48.11                | PK  | 33.8          | -31.7       | 50.21                    | -                          | -                    | -                         | -           | 0-360          | 100         | H        |
| 4      | 2.464           | 46.38                | PK  | 31.5          | -35         | 42.88                    | -                          | -                    | -                         | -           | 0-360          | 100         | V        |
| 5      | 3.072           | 44.33                | PK  | 32.5          | -33.9       | 42.93                    | -                          | -                    | -                         | -           | 0-360          | 200         | V        |
| 6      | 4.224           | 43.6                 | PK  | 33.1          | -32.7       | 44                       | -                          | -                    | -                         | -           | 0-360          | 100         | V        |

PK – Peak Detector

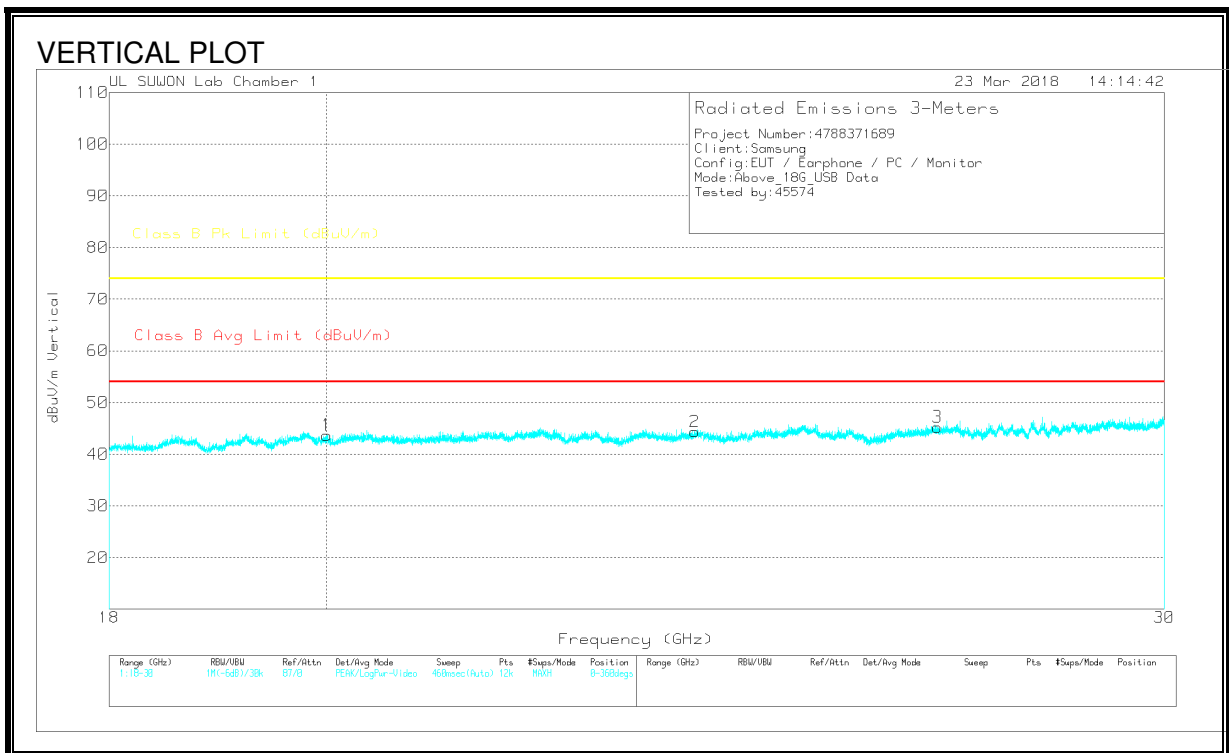
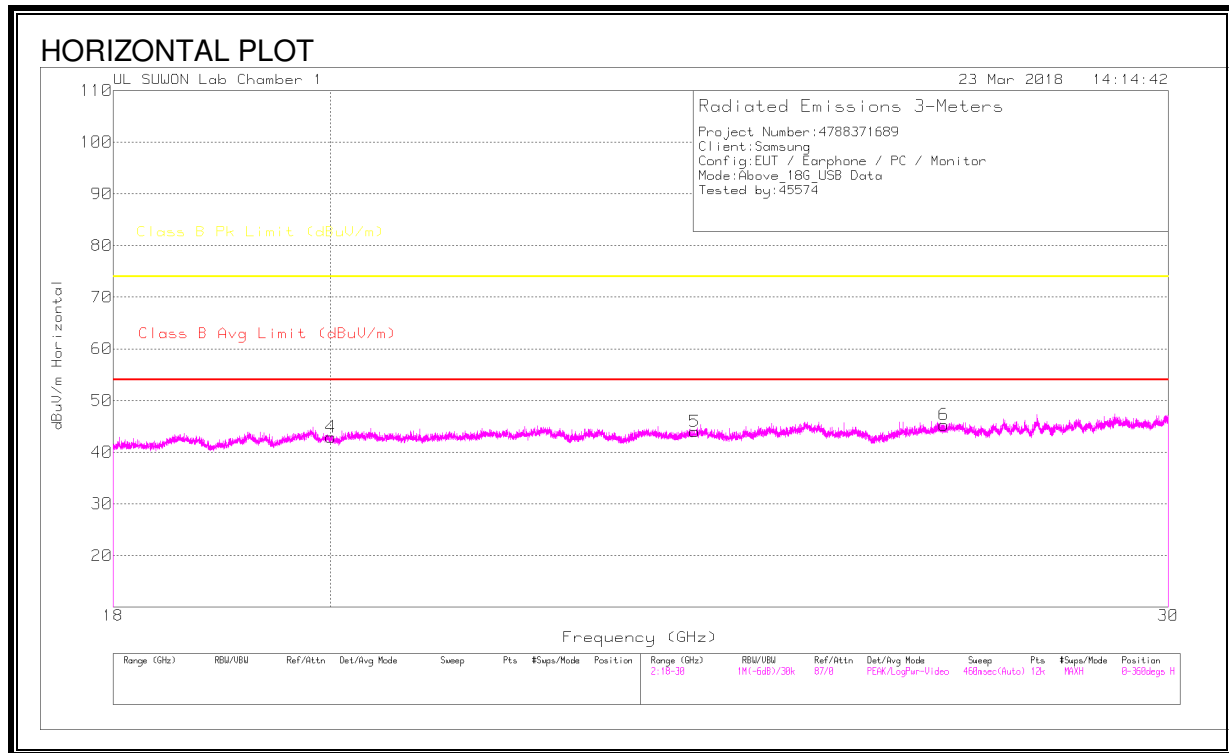
### Radiated Emissions

| Frequency (GHz) | Meter Reading (dBuV) | Det | 3117_00168717 | 1-18GHz(dB) | Corrected Reading dBuV/m | Class B Avg Limit (dBuV/m) | Av(CISPR)Margin (dB) | Class B Pk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|-----------------|----------------------|-----|---------------|-------------|--------------------------|----------------------------|----------------------|---------------------------|-------------|----------------|-------------|----------|
| 2.002           | 53.37                | Pk  | 31.5          | -35.8       | 49.07                    | -                          | -                    | 74                        | -24.93      | 251            | 112         | H        |
| 2.002           | 31.46                | Ca  | 31.5          | -35.8       | 27.16                    | 54                         | -26.84               | 74                        | -46.84      | 251            | 112         | H        |
| 2.649           | 55.39                | Pk  | 31.9          | -34.7       | 52.59                    | -                          | -                    | 74                        | -21.41      | 277            | 221         | H        |
| 2.649           | 30.33                | Ca  | 31.9          | -34.7       | 27.53                    | 54                         | -26.47               | 74                        | -46.47      | 277            | 221         | H        |
| 4.978           | 45.15                | Pk  | 33.8          | -31.7       | 47.25                    | -                          | -                    | 74                        | -26.75      | 208            | 169         | H        |
| 4.978           | 27.76                | Ca  | 33.8          | -31.7       | 29.86                    | 54                         | -24.14               | 74                        | -44.14      | 208            | 169         | H        |
| 2.464           | 57.07                | Pk  | 31.5          | -35         | 53.57                    | -                          | -                    | 74                        | -20.43      | 201            | 101         | V        |
| 2.464           | 33.44                | Ca  | 31.5          | -35         | 29.94                    | 54                         | -24.06               | 74                        | -44.06      | 201            | 101         | V        |
| 3.072           | 41.76                | Pk  | 32.5          | -33.9       | 40.36                    | -                          | -                    | 74                        | -33.64      | 105            | 268         | V        |
| 3.072           | 28.66                | Ca  | 32.5          | -33.9       | 27.26                    | 54                         | -26.74               | 74                        | -46.74      | 105            | 268         | V        |
| 4.224           | 42.56                | Pk  | 33.1          | -32.7       | 42.96                    | -                          | -                    | 74                        | -31.04      | 171            | 136         | V        |
| 4.224           | 28.86                | Ca  | 33.1          | -32.7       | 29.26                    | 54                         | -24.74               | 74                        | -44.74      | 171            | 136         | V        |

Pk - Peak detector

Ca - CISPR average detection

**RADIATED EMISSIONS 18GHz to 30GHz**



## HORIZONTAL AND VERTICAL DATA

### Trace Markers

| Marker | Frequency (GHz) | Meter Reading (dBuV) | Det | 3116C-PA | 18-40GHz(dB) | Corrected Reading dBuV/m | Class B Avg Limit (dBuV/m) | Av(CISPR)Margin (dB) | Class B Pk Limit (dBuV/m) | Margin (dB) | Azimuth (Degs) | Height (cm) | Polarity |
|--------|-----------------|----------------------|-----|----------|--------------|--------------------------|----------------------------|----------------------|---------------------------|-------------|----------------|-------------|----------|
| 1      | 20.001          | 19.16                | PK  | 7.8      | 16.7         | 43.66                    | -                          | -                    | 74                        | -30.34      | 0-360          | 100         | V        |
| 2      | 23.903          | 15.28                | PK  | 10.8     | 18.3         | 44.38                    | -                          | -                    | 74                        | -29.62      | 0-360          | 100         | V        |
| 3      | 26.876          | 16.04                | PK  | 9.9      | 19.3         | 45.24                    | -                          | -                    | 74                        | -28.76      | 0-360          | 100         | V        |
| 4      | 20.002          | 18.43                | PK  | 7.8      | 16.7         | 42.93                    | -                          | -                    | 74                        | -31.07      | 0-360          | 100         | H        |
| 5      | 23.854          | 14.9                 | PK  | 10.8     | 18.3         | 44                       | -                          | -                    | 74                        | -30         | 0-360          | 100         | H        |
| 6      | 26.913          | 15.99                | PK  | 10       | 19.3         | 45.29                    | -                          | -                    | 74                        | -28.71      | 0-360          | 100         | H        |

### PK- Peak Detector

Note: Only peak measurement was performed. Because peak measurement result of unwanted emission is less than average limit (54dBuV/m).

## 7.2. AC MAINS LINE CONDUCTED EMISSIONS

### TEST PROCEDURE

ANSI C63.4: 2014

### LIMIT

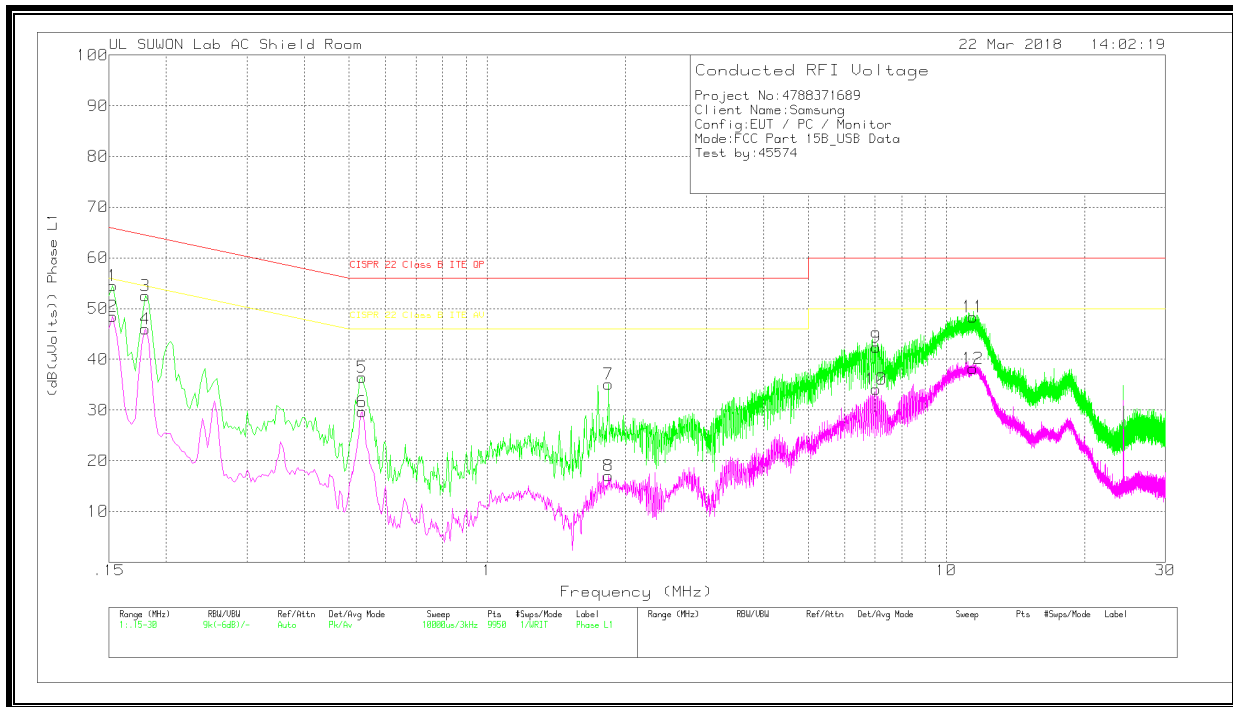
§15.107 (a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

| Frequency range<br>(MHz)                                                                                                                                                         | Limits (dB $\mu$ V) |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------|
|                                                                                                                                                                                  | Quasi-peak          | Average  |
| 0.15 to 0.50                                                                                                                                                                     | 66 to 56            | 56 to 46 |
| 0.50 to 5                                                                                                                                                                        | 56                  | 46       |
| 5 to 30                                                                                                                                                                          | 60                  | 50       |
| Notes:<br>1. The lower limit shall apply at the transition frequencies<br>2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz. |                     |          |

### RESULTS

## 6 WORST EMISSIONS

### Line-L1 .15 - 30MHz



## LINE 1 RESULTS

### Trace Markers

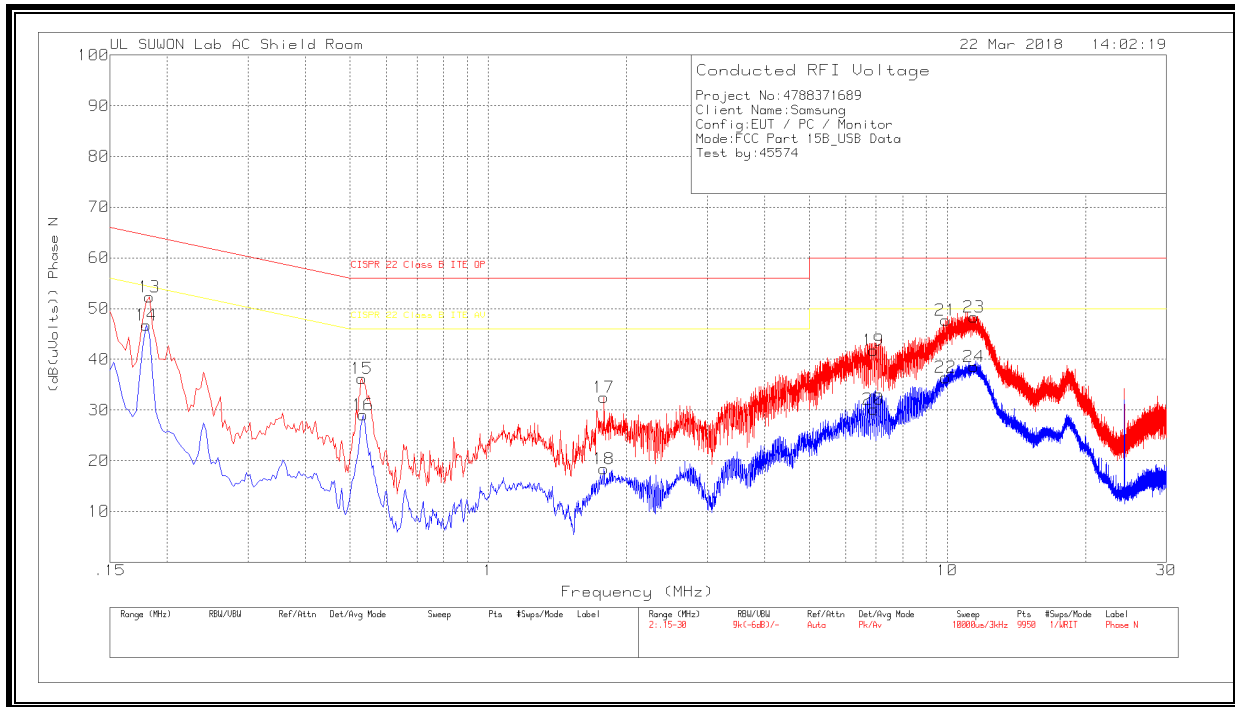
Range 1: Phase L1 .15 - 30MHz

| Marker | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Det | 101837_L1_wit<br>hout extension | CABLELOSS(dB) | Corrected<br>Reading<br>(dB(uVolts)) | CISPR 22 Class<br>B ITE QP | Margin<br>(dB) | CISPR 22 Class<br>B ITE AV | Margin<br>(dB) |
|--------|--------------------|----------------------------|-----|---------------------------------|---------------|--------------------------------------|----------------------------|----------------|----------------------------|----------------|
| 1      | .153               | 44.68                      | Pk  | 9.7                             | .1            | 54.48                                | 65.84                      | -11.36         | -                          | -              |
| 2      | .153               | 38.71                      | Av  | 9.7                             | .1            | 48.51                                | -                          | -              | 55.84                      | -7.33          |
| 3      | .18                | 42.43                      | Pk  | 9.9                             | .2            | 52.53                                | 64.49                      | -11.96         | -                          | -              |
| 4      | .18                | 35.84                      | Av  | 9.9                             | .2            | 45.94                                | -                          | -              | 54.49                      | -8.55          |
| 5      | .534               | 26.45                      | Pk  | 9.8                             | .2            | 36.45                                | 56                         | -19.55         | -                          | -              |
| 6      | .534               | 19.7                       | Av  | 9.8                             | .2            | 29.7                                 | -                          | -              | 46                         | -16.3          |
| 7      | 1.839              | 25.18                      | Pk  | 9.6                             | .3            | 35.08                                | 56                         | -20.92         | -                          | -              |
| 8      | 1.839              | 7.18                       | Av  | 9.6                             | .3            | 17.08                                | -                          | -              | 46                         | -28.92         |
| 9      | 7.029              | 32.44                      | Pk  | 9.7                             | .3            | 42.44                                | 60                         | -17.56         | -                          | -              |
| 10     | 7.029              | 24.08                      | Av  | 9.7                             | .3            | 34.08                                | -                          | -              | 50                         | -15.92         |
| 11     | 11.418             | 38.39                      | Pk  | 9.7                             | .3            | 48.39                                | 60                         | -11.61         | -                          | -              |
| 12     | 11.421             | 28.21                      | Av  | 9.7                             | .3            | 38.21                                | -                          | -              | 50                         | -11.79         |

Pk - Peak detector

Av - Average detection

## Line-L2 .15 - 30MHz



## LINE 2 RESULTS

### Trace Markers

Range 2: Phase N .15 - 30MHz

| Marker | Frequency<br>(MHz) | Meter<br>Reading<br>(dBuV) | Det | 101837_N_with<br>out extension | CABLELOSS(dB) | Corrected<br>Reading<br>(dB(uVolts)) | CISPR 22 Class<br>B ITE QP | Margin<br>(dB) | CISPR 22 Class<br>B ITE AV | Margin<br>(dB) |
|--------|--------------------|----------------------------|-----|--------------------------------|---------------|--------------------------------------|----------------------------|----------------|----------------------------|----------------|
| 13     | .183               | 42.18                      | Pk  | 9.9                            | .2            | 52.28                                | 64.35                      | -12.07         | -                          | -              |
| 14     | .18                | 36.58                      | Av  | 9.9                            | .2            | 46.68                                | -                          | -              | 54.49                      | -7.81          |
| 15     | .531               | 26.17                      | Pk  | 9.8                            | .2            | 36.17                                | 56                         | -19.83         | -                          | -              |
| 16     | .534               | 19.02                      | Av  | 9.8                            | .2            | 29.02                                | -                          | -              | 46                         | -16.98         |
| 17     | 1.788              | 22.65                      | Pk  | 9.6                            | .3            | 32.55                                | 56                         | -23.45         | -                          | -              |
| 18     | 1.788              | 8.47                       | Av  | 9.6                            | .3            | 18.37                                | -                          | -              | 46                         | -27.63         |
| 19     | 6.909              | 31.81                      | Pk  | 9.7                            | .3            | 41.81                                | 60                         | -18.19         | -                          | -              |
| 20     | 6.909              | 20.14                      | Av  | 9.7                            | .3            | 30.14                                | -                          | -              | 50                         | -19.86         |
| 21     | 9.93               | 37.56                      | Pk  | 9.7                            | .4            | 47.66                                | 60                         | -12.34         | -                          | -              |
| 22     | 9.924              | 26.3                       | Av  | 9.7                            | .4            | 36.4                                 | -                          | -              | 50                         | -13.6          |
| 23     | 11.43              | 38.35                      | Pk  | 9.7                            | .3            | 48.35                                | 60                         | -11.65         | -                          | -              |
| 24     | 11.415             | 28.61                      | Av  | 9.7                            | .3            | 38.61                                | -                          | -              | 50                         | -11.39         |

Pk - Peak detector

Av - Average detection