

# CERTIFICATION TEST REPORT

**Report Number.** : 4790841159-E2V2

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

**Model** : SM-X510

**FCC ID** : A3LSMX510

**IC** : 649E-SMX510

**EUT Description** : BT/BLE Tablet + DTS/UNII a/b/g/n/ac/ax and Digitizer

**Test Standard(s)** : FCC 47 CFR PART 15 SUBPART C  
INDUSTRY CANADA RSS-247 Issue 2  
INDUSTRY CANADA RSS-GEN Issue 5

**Date Of Issue:**

2023-08-01

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Revision History



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Rev.	Issue Date	Revisions	Revised By
V1	2023-07-19	Initial issue	Yeonhee Lim
V2	2023-08-01	Updated to address TCB's question	Yeonhee Lim

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## TABLE OF CONTENTS

<b>1. ATTESTATION OF TEST RESULTS .....</b>	<b>5</b>
<b>2. TEST METHODOLOGY .....</b>	<b>6</b>
<b>3. FACILITIES AND ACCREDITATION .....</b>	<b>6</b>
<b>4. DECISION RULES AND MEASUREMENT UNCERTAINTY .....</b>	<b>7</b>
4.1. METROLOGICAL TRACEABILITY.....	7
4.2. SAMPLE CALCULATION.....	7
4.3. MEASUREMENT UNCERTAINTY .....	7
4.4. DECISION RULES.....	7
<b>5. EQUIPMENT UNDER TEST.....</b>	<b>8</b>
5.1. EUT DESCRIPTION.....	8
5.2. MAXIMUM OUTPUT POWER.....	8
5.3. DESCRIPTION OF AVAILABLE ANTENNAS .....	8
5.4. WORST-CASE CONFIGURATION AND MODE .....	9
5.5. DESCRIPTION OF TEST SETUP.....	10
<b>6. TEST AND MEASUREMENT EQUIPMENT .....</b>	<b>12</b>
<b>7. TEST RESULTS SUMMARY .....</b>	<b>13</b>
<b>8. MEASUREMENT METHOD.....</b>	<b>14</b>
<b>9. ANTENNA PORT TEST RESULTS .....</b>	<b>15</b>
9.1. ON TIME AND DUTY CYCLE .....	15
9.2. 6 dB BANDWIDTH & 99% BANDWIDTH .....	16
9.2.1. Test data.....	16
9.2.2. 6 dB BANDWIDTH PLOTS .....	17
9.2.3. 99% BANDWIDTH PLOTS .....	18
9.3. OUTPUT POWER.....	19
9.3.1. Test data.....	19
9.3.2. PEAK POWER PLOTS.....	20
9.4. AVERAGE POWER .....	21
9.4.1. Test data.....	21
9.5. POWER SPECTRAL DENSITY .....	22
9.5.1. Test data.....	22
9.5.2. PSD TEST PLOTS .....	23
9.6. CONDUCTED SPURIOUS EMISSIONS .....	24
9.6.1. Test plot.....	25



# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** SAMSUNG ELECTRONICS CO., LTD.  
**EUT DESCRIPTION:** BT/BLE Tablet + DTS/UNII a/b/g/n/ac/ax and Digitizer.  
**MODEL NUMBER:** SM-X510  
**SERIAL NUMBER:** 74ab47181e397ece (CONDUCTED);  
R32W5013ELY (RADIATED);  
**DATE TESTED:** 2023-06-29 ~ 2023-07-19;

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
47 CFR Part 15 Subpart C	Complies
INDUSTRY CANADA RSS-247 Issue 2	Complies
INDUSTRY CANADA RSS-GEN Issue 5	Complies

UL KOREA LTD. 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 KOREA LTD. 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 KOREA LTD. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL KOREA LTD. 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 IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released For  
UL KOREA LTD. By:



Seokhwan Hong  
Suwon Lab Engineer  
UL KOREA LTD.

Tested By:



Yeonhee Lim  
Suwon Lab Engineer  
UL KOREA LTD.

## 2. TEST METHODOLOGY

1. FCC CFR 47 Part 2.
2. FCC CFR 47 Part 15.
3. KDB 558074 D01 15.247 Meas Guidance v05r02.
4. ANSI C63.10-2013.
5. IC RSS-GEN Issue 5.
6. IC RSS-247 Issue 2.

## 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(3m semi-anechoic chamber)
<input checked="" type="checkbox"/>	Chamber 2(3m semi-anechoic chamber)
<input checked="" type="checkbox"/>	Chamber 3(3m semi-anechoic chamber)
<input type="checkbox"/>	Chamber 4(3m Full-anechoic chamber)
<input type="checkbox"/>	Chamber 5(3m Full-anechoic chamber)

Used ISED Test Site Reg.(company number): 2324L  
CAB Identifier: KR0161

UL KOREA LTD. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at <https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf>.

## 4. DECISION RULES AND MEASUREMENT UNCERTAINTY

### 4.1. METROLOGICAL TRACEABILITY

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:

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

$$\begin{aligned} \text{AC Corrected Reading (dBuV)} &= \text{Measured Voltage (dBuV)} + \text{Extension Cord} \\ &\text{Loss (dB)} + \text{Cable Loss (dB)} \\ 44.72 \text{ dBuV} &= 34.72 \text{ dBuV} + 9.9 \text{ dB} + 0.1 \text{ dB} \end{aligned}$$

### 4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
RF Output Power	1.30 dB
Power Spectral Density	1.30 dB
Occupied Bandwidth	0.20 %
Conducted Spurious Emissions	1.30 dB
Conducted Disturbance, 0.15 to 30 MHz	2.80 dB
Radiated Disturbance, 30 MHz to 1 GHz	3.92 dB
Radiated Disturbance, 1 GHz to 18 GHz	5.06 dB
Radiated Disturbance, 18 GHz to 40 GHz	6.02 dB

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

### 4.4. DECISION RULES

Decision rule for statement(s) of conformity is based on Procedure 2, Clause 4.4.3 in IEC Guide 115:2021.

## 5. EQUIPMENT UNDER TEST

### 5.1. EUT DESCRIPTION

The EUT is a BT/BLE Tablet + DTS/UNII a/b/g/n/ac/ax, and Digitizer.  
This test report addresses the DTS (BLE) operational mode.

### 5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

Frequency Range[MHz]	Mode	Power Mode	Output Power [dBm]	Output Power [mW]
2 402 ~ 2 480	500 kbps (37 pkt)	Peak	9.180	8.279
		Average	8.878	7.723
	2 Mbps (37pkt)	Peak	9.210	8.337
		Average	8.662	7.349

### 5.3. DESCRIPTION OF AVAILABLE ANTENNAS

An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

**The internal antenna was Permanently attached.  
Therefore this E.U.T Complies with the requirement of §15.203.**

The radio utilizes an internal antennas with ANT1 maximum gain of -4.80 dBi.



### 5.4. WORST-CASE CONFIGURATION AND MODE

Radiated emission below 1GHz and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

Radiated emission above 1GHz was performed with the EUT set to transmit low/mid/high channels.

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

All radiated and power line conducted tests were performed attached with travel adapter for the worst-case condition mode.

#### Power verification

The Output Power of all data rate are all investigated, the 500 kbps (37 pkt) and 2 Mbps (37 pkt) power is the worst case for symbol rate. All tests were performed in these two modes.

Symbol Rate [Ms/s]	Mode	Freq. [MHz]	Conducted Burst Avg [dBm]	Symbol Rate [Ms/s]	Mode	Freq. [MHz]	Conducted Burst Avg [dBm]
<b>1</b>	1 Mbps 37 pkt	2 402	8.860	<b>2</b>	2 Mbps 37 pkt	<b>2 402</b>	<b>8.662</b>
		2 440	8.334			2 440	8.131
		2 480	8.671			2 480	8.499
	1 Mbps 255 pkt	2 402	8.859		2 Mbps 255 pkt	2 402	8.572
		2 440	8.333			2 440	8.110
		2 480	8.603			2 480	8.387
<b>1</b> <b>Coded S=8</b>	125 kbps 37 pkt	2 402	8.836	<b>1</b> <b>Coded S=2</b>	500 kbps 37 pkt	<b>2 402</b>	<b>8.878</b>
		2 440	8.301			2 440	8.364
		2 480	8.617			2 480	8.697
	125 kbps 255 pkt	2 402	8.790		500 kbps 255 pkt	2 402	8.811
		2 440	8.285			2 440	8.303
		2 480	8.600			2 480	8.602

## 5.5. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Charger	SAMSUNG	EP-TA800	R37M9KML7D2DK3	N/A
Data Cable	SAMSUNG	EP-DN980	GH39-02115A	N/A

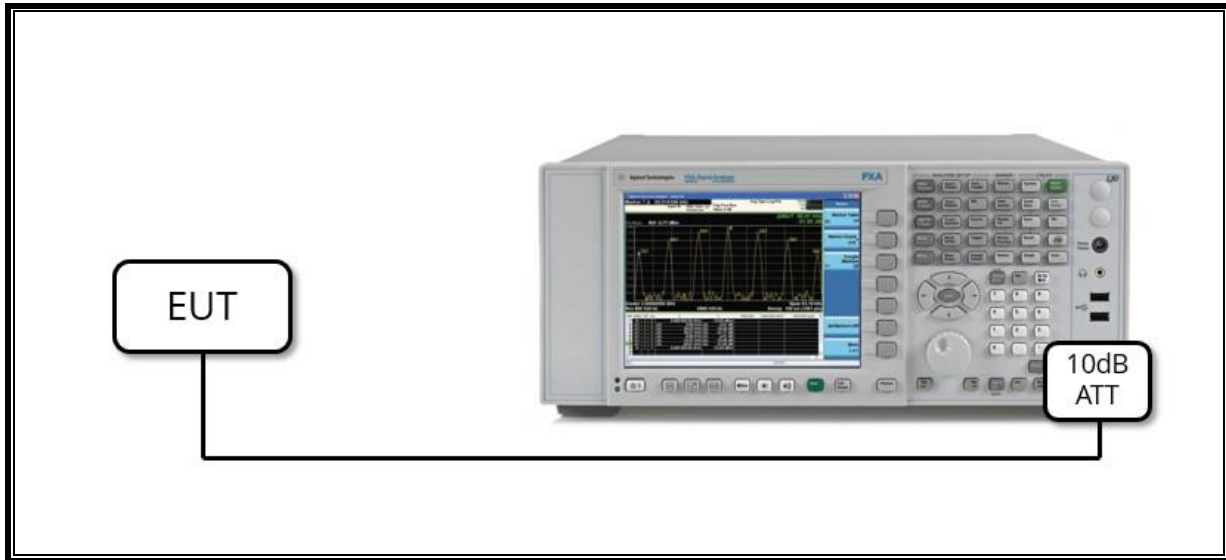
### I/O CABLE

I/O Cable List						
Cable No.	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	1	C Type	Shielded	1.0 m	N/A

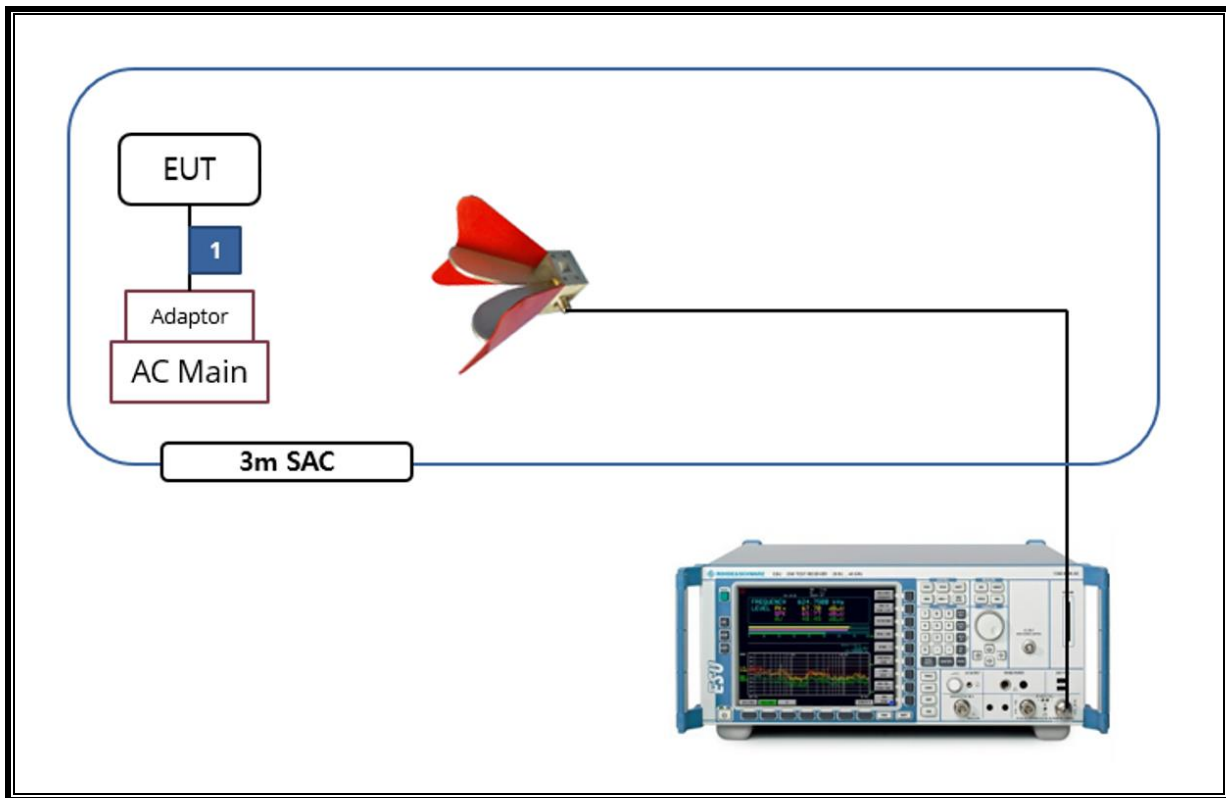
### TEST SETUP

The EUT is a stand-alone unit during the tests.  
Test software in hidden menu exercised the EUT to enable BLE mode.

**SETUP DIAGRAM FOR TESTS (CONDUCTED TEST SETUP)**



**SETUP DIAGRAM FOR TESTS (RADIATED TEST SETUP)**



## 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	2024-08-15
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	2024-08-15
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	2024-08-15
Antenna, Horn, 18 GHz	ETS	3115	00167211	2024-08-04
Antenna, Horn, 18 GHz	ETS	3115	00161451	2024-08-21
Antenna, Horn, 18 GHz	ETS	3117	00168724	2024-08-04
Antenna, Horn, 18 GHz	ETS	3117	00168717	2024-08-21
Antenna, Horn, 40 GHz	ETS	3116C	00166155	2024-08-02
Preamplifier	ETS	3115-PA	00167475	2023-08-04
Preamplifier	ETS	3116C-PA	00168841	2023-08-04
Preamplifier, 1000 MHz	Sonoma	310N	341282	2023-08-02
Preamplifier, 1000 MHz	Sonoma	310N	351741	2023-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	2023-08-01
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029169	2023-08-01
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54170614	2023-08-03
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54490312	2023-08-01
Spectrum Analyzer, 44 GHz	KEYSIGHT	N9030B	MY60070693	2024-01-09
Spectrum Analyzer, 44 GHz	KEYSIGHT	N9040B	MY60080268	2024-01-09
Average Power Sensor	Agilent / HP	U2000A	MY54270007	2023-08-03
Average Power Sensor	Agilent / HP	U2000A	MY54260010	2023-08-03
Attenuator	PASTERNAK	PE7087-10	A001	2023-08-03
Attenuator	PASTERNAK	PE7087-10	A008	2023-08-03
Attenuator	PASTERNAK	PE7004-10	2	2023-08-01
Attenuator	PASTERNAK	PE7087-10	A009	2023-08-03
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2023-08-02
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2023-07-29
EMI Test Receive, 3 GHz	R&S	ESR3	101832	2023-08-01
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	009	2023-08-02
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	015	2023-08-01
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	020	2023-08-01
High Pass Filter 3GHz	Micro-Tronics	HPM17543	010	2023-08-02
High Pass Filter 3GHz	Micro-Tronics	HPM17543	020	2023-08-01
High Pass Filter 6GHz	Micro-Tronics	HPS17542	009	2023-08-02
High Pass Filter 6GHz	Micro-Tronics	HPS17542	021	2023-08-01
LISN	R&S	ENV-216	101837	2023-08-04
Antenna, Loop, 9kHz-30MHz	R&S	HFH2-Z2	100418	2023-10-06
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. TEST RESULTS SUMMARY

FCC Part Section	IC Section	Test Description	Test Limit	Test Condition	Test Result
15.247 (a)(2)	RSS-247 5.2(a)	Occupied Bandwidth(6dB)	> 500kHz	Conducted	Complies
2.1051, 15.247(d)	RSS-247 5.5	Band Edge / Conducted Spurious Emission	-30 dBc		Complies
15.247 (b)(3)	RSS-247 5.4(d)	TX conducted output power	< 30 dBm		Complies
15.247(e)	RSS-247 5.4(b)	PSD	< 8 dBm/3kHz		Complies
15.207(a)	RSS-GEN Clause 7&8.9	AC Power Line conducted emissions	Section 11	Power Line conducted	Complies
15.205, 15.209	RSS-GEN Clause 8.8	Radiated Spurious Emission	< 54dBuV/m(Av)	Radiated	Complies

For ISED, updated 99% Bandwidth data.

## 8. MEASUREMENT METHOD

6 dB BW : ANSI C63.10-2013, Section 11.8.2 Option 2

Occupied Bandwidth (99%) : ANSI C63.10-2013, Section 6.9.3

OUTPUT POWER : ANSI C63.10-2013, Section 11.9.1.1 RBW  $\geq$  DTS bandwidth

POWER SPECTRAL DENSITY : ANSI C63.10-2013, Section 11.10.2 Method PKPSD (peak PSD)

Out-of-band Emissions (Conducted) : ANSI C63.10-2013, Section 11.11 Emissions in nonrestricted frequency bands

Out-of-band Emissions in Non-restricted Bands: ANSI C63.10-2013, Section 11.11 Emissions in nonrestricted frequency bands

Out-of-band Emissions in Restricted Bands : ANSI C63.10-2013, Section 11.12 Emissions in restricted frequency bands

AC Power Line Conducted Emission : ANSI C63.10-2013, Section 6.2

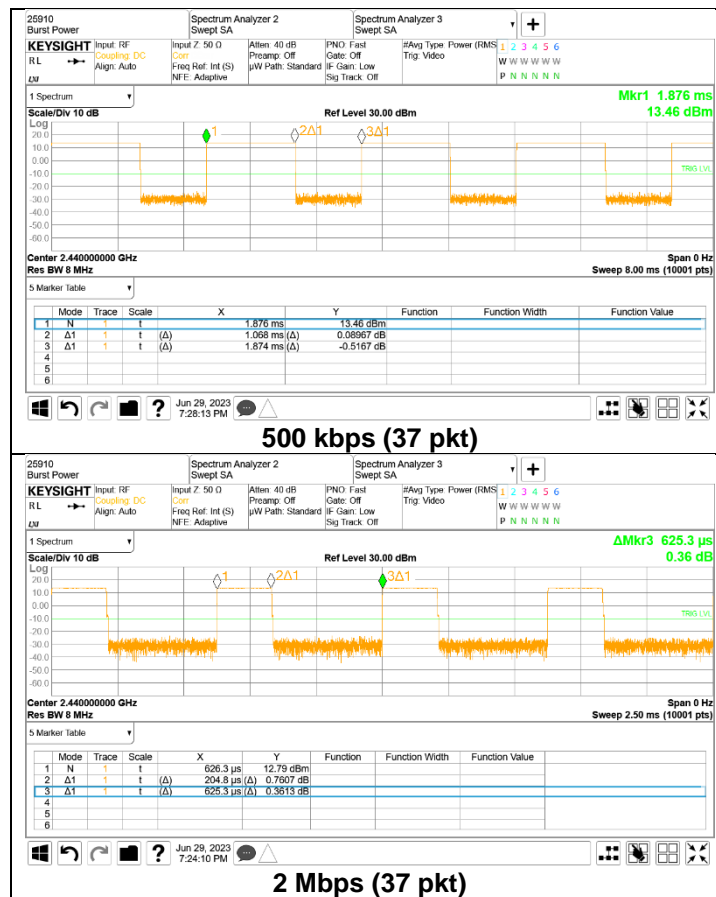
## 9. ANTENNA PORT TEST RESULTS

### 9.1. ON TIME AND DUTY CYCLE

#### LIMITS

None; for reporting purposes only.

Mode	On time [msec]	Period [msec]	Duty cycle x [Linear]	Duty Cycle [%]	Duty Cycle Correction Factor [dB]	1/T Minimum VBW [kHz]
<b>2 400 ~ 2 483.5 MHz Bands</b>						
500 kbps [37pkt]	1.068	1.874	0.570	56.990	2.44	0.94
2 Mbps [37pkt]	0.205	0.625	0.328	32.774	4.84	4.88



## 9.2. 6 dB BANDWIDTH & 99% BANDWIDTH

### LIMITS

FCC §15.247 (a) (2)

RSS-247 5.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

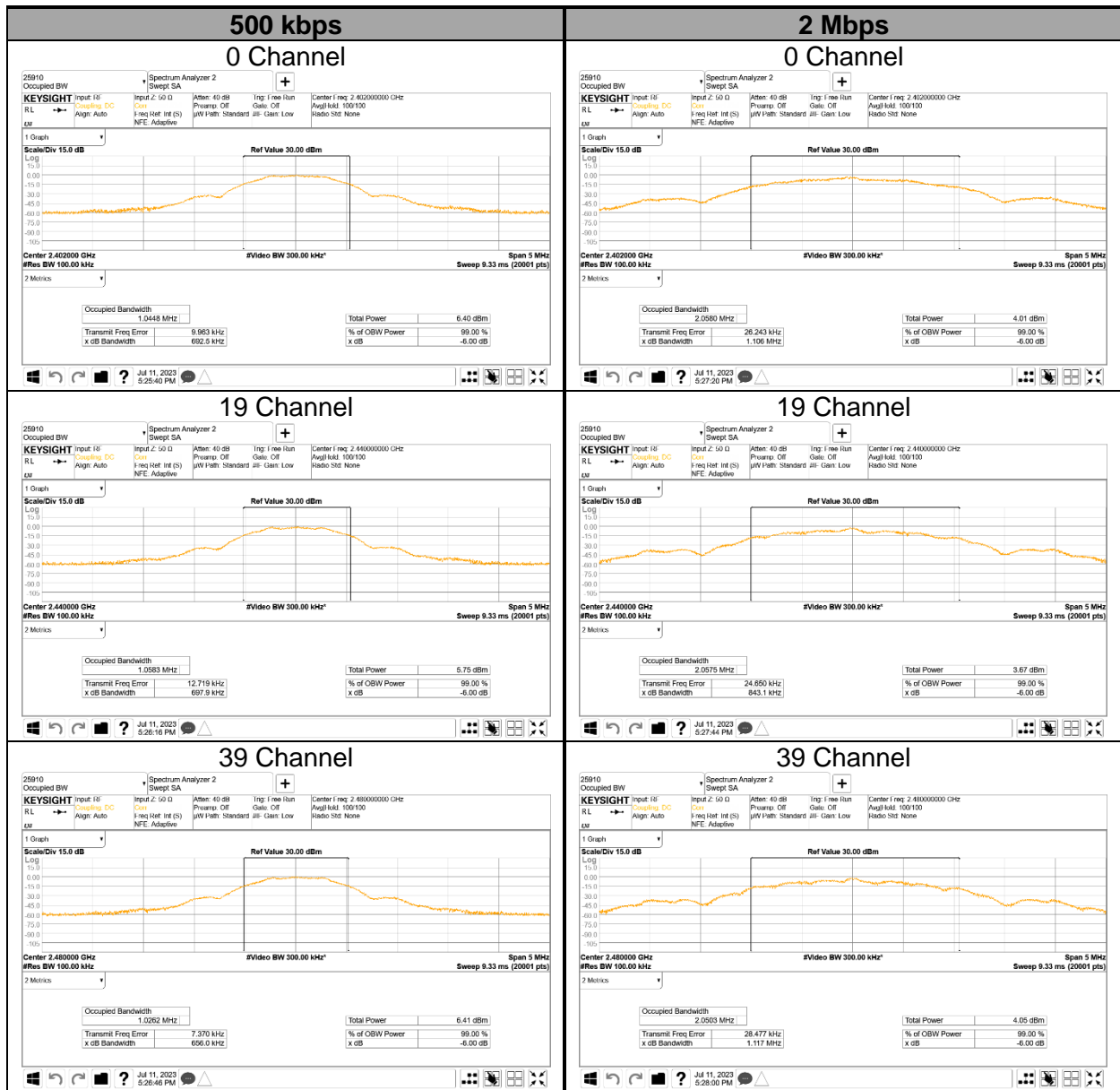
### RESULTS

#### 9.2.1. Test data

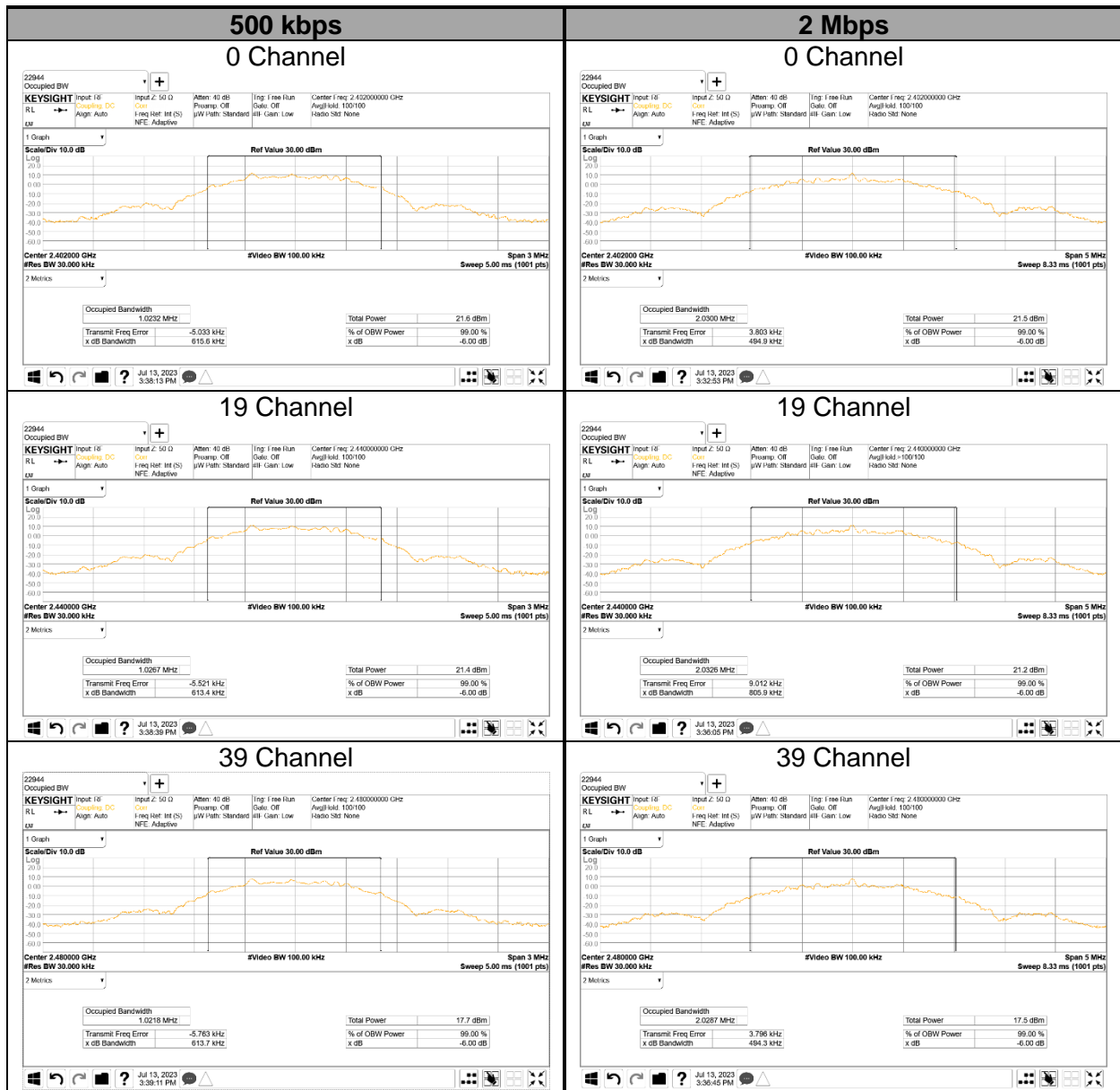
Mode	Channel	Frequency [MHz]	6 dB Bandwidth [kHz]	Minimum Limit [kHz]	99% Bandwidth [kHz]
500 kbps (37pkt)	0	2 402	<b>692.5</b>	500.0	1023.2
	19	2 440	697.9		1026.7
	39	2 480	656.0		1021.8
2 Mbps (37pkt)	0	2 402	1106.0		2030.0
	19	2 440	843.1		2032.6
	39	2 480	1117.0		2028.7
<b>Worst</b>			<b>692.5</b>		2032.6



### 9.2.2. 6 dB BANDWIDTH PLOTS



### 9.2.3. 99% BANDWIDTH PLOTS



### 9.3. OUTPUT POWER

#### LIMITS

FCC §15.247 (b) (3)

RSS-247 (5.4) (d)

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

#### TEST PROCEDURE

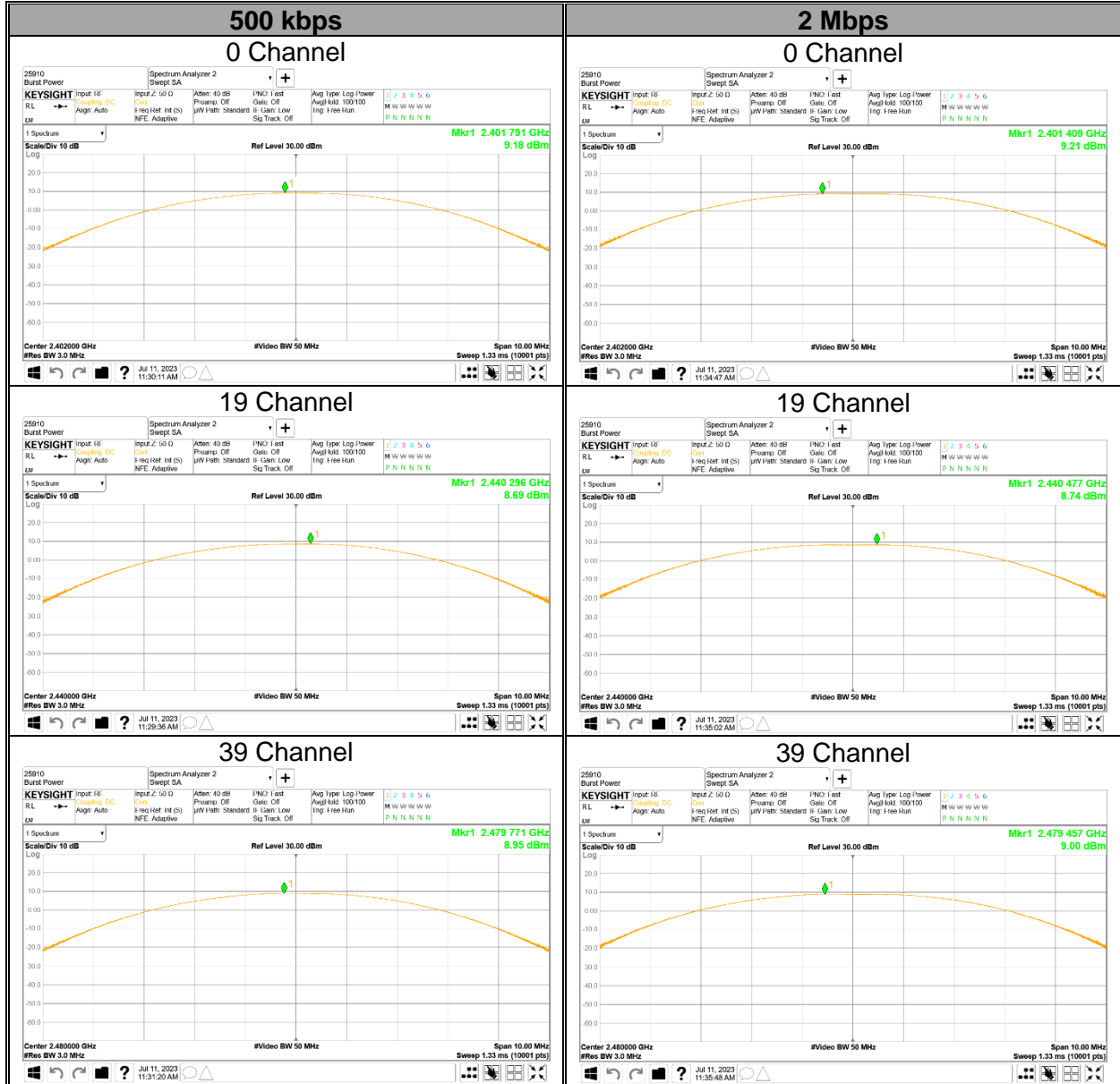
Peak power is measured using ANSI C63.10(2013) under section 11.9.1.1 utilizing spectrum analyzer

#### RESULTS

##### 9.3.1. Test data

Mode	Channel	Frequency [MHz]	Peak Output Power [dBm]	Limit [dBm]	Margin [dB]
500 kbps (37 pkt)	0	2 402	9.180	30.000	-20.820
	19	2 440	8.690		-21.310
	39	2 480	8.950		-21.050
2 Mbps (37 pkt)	0	2 402	<b>9.210</b>		<b>-20.790</b>
	19	2 440	8.740		-21.260
	39	2 480	9.000		-21.000
Worst			<b>9.210</b>	<b>-20.790</b>	

### 9.3.2. PEAK POWER PLOTS



## 9.4. AVERAGE POWER

### LIMITS

None; for reporting purposes only.

### TEST PROCEDURE

Measurements perform using a wideband RF frame average power sensor. The cable assembly insertion loss and duty cycle correction factor were entered as an offset in the power meter to allow for direct reading of power.

### RESULTS

#### 9.4.1. Test data

Mode	Channel	Frequency [MHz]	Average Output Power [dBm]	Average Output Power [mW]
500 kbps (37 pkt)	0	2 402	<b>8.878</b>	<b>7.723</b>
	19	2 440	8.364	6.861
	39	2 480	8.697	7.408
2 Mbps (37 pkt)	0	2 402	<b>8.662</b>	<b>7.349</b>
	19	2 440	8.131	6.503
	39	2 480	8.499	7.078

## 9.5. POWER SPECTRAL DENSITY

### LIMITS

FCC §15.247 (e)

RSS-247 (5.2) (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

### TEST PROCEDURE

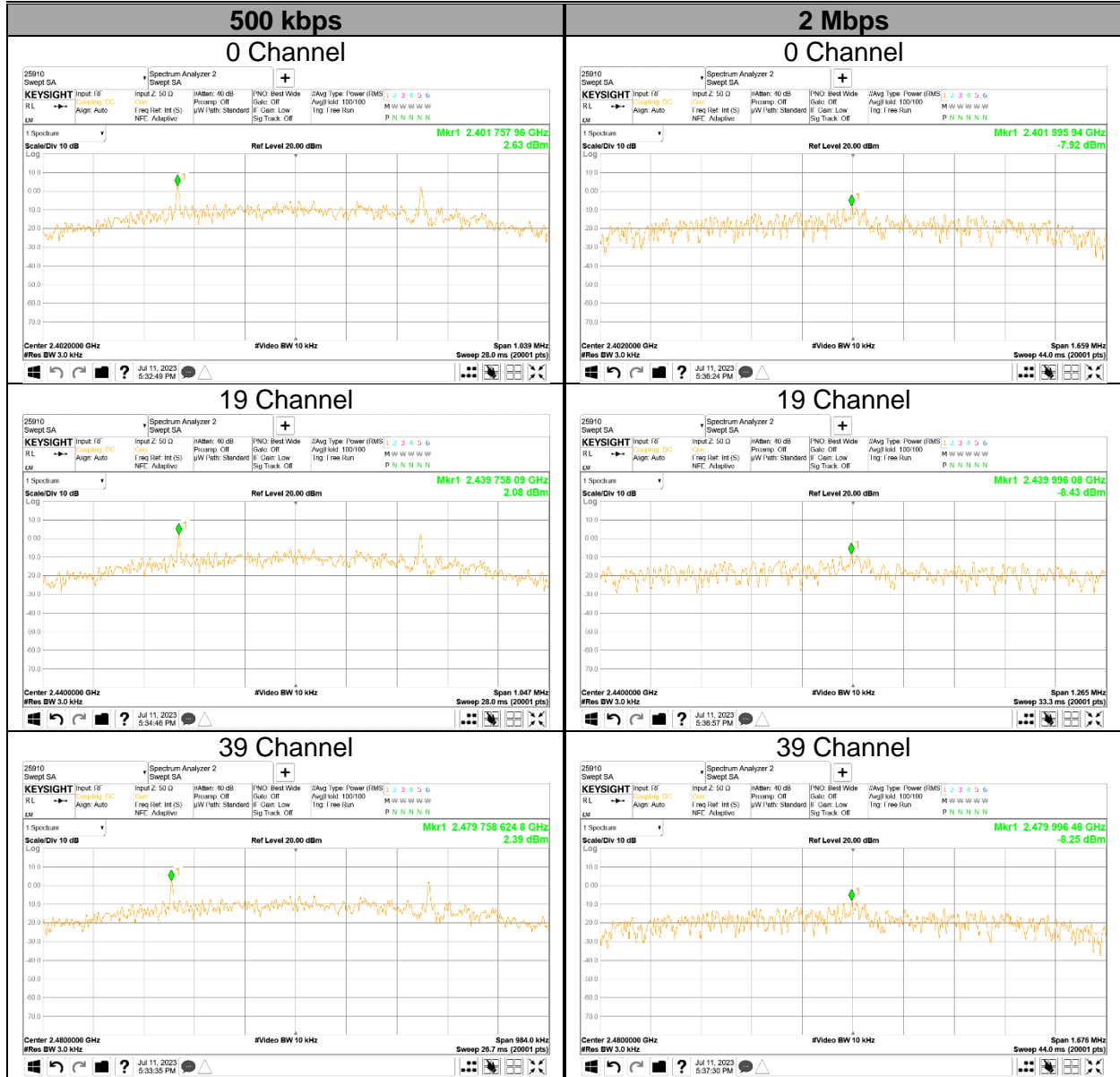
ANSI C63.10-2013, Section 11.10.2 Method PKPSD (peak PSD)

### RESULTS

#### 9.5.1. Test data

Mode	Channel	Frequency [MHz]	PSD [dBm/3kHz]	Limit [dBm/3kHz]	Margin [dB]
500 kbps (37 pkt)	0	2 402	<b>2.63</b>	8.00	<b>-5.37</b>
	19	2 440	2.08		-5.92
	39	2 480	2.39		-5.61
2 Mbps (37pkt)	0	2 402	-7.92		-15.92
	19	2 440	-8.43		-16.43
	39	2 480	-8.25		-16.25
Worst			<b>2.63</b>		<b>-5.37</b>

### 9.5.2. PSD TEST PLOTS



## 9.6. CONDUCTED SPURIOUS EMISSIONS

### LIMITS

FCC §15.247 (d)

RSS-247 (5.5)

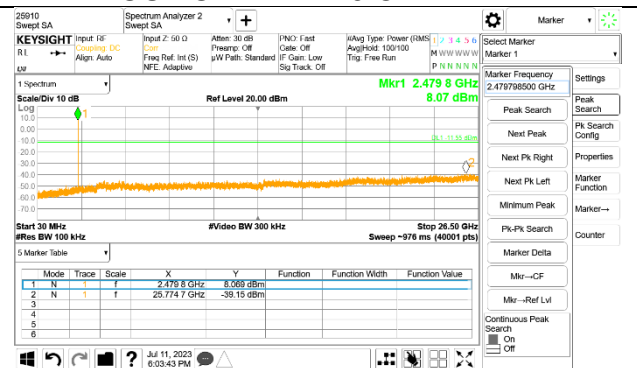
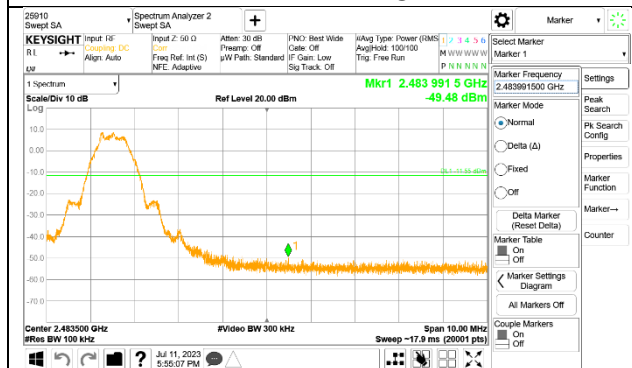
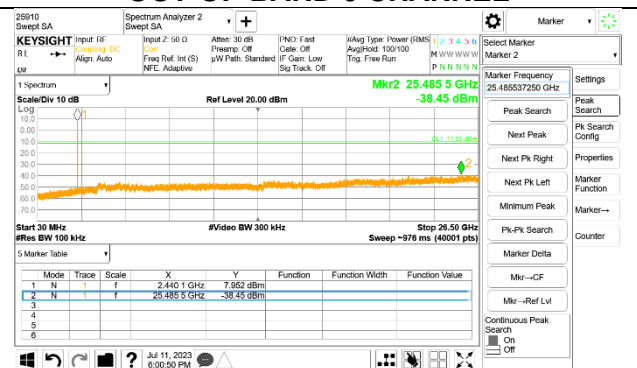
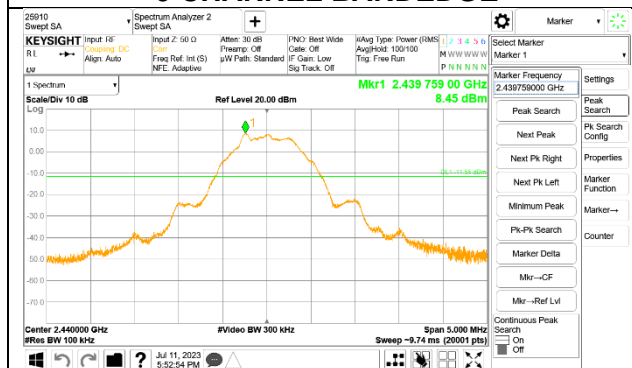
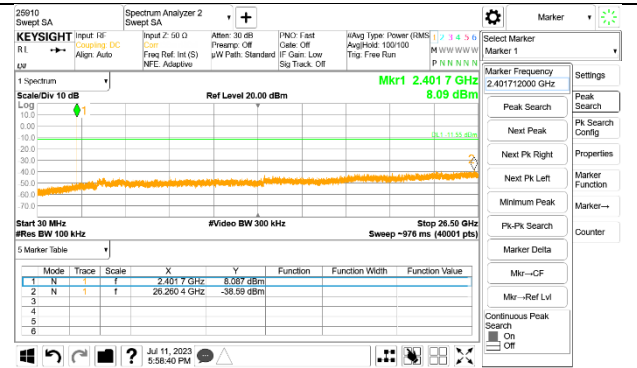
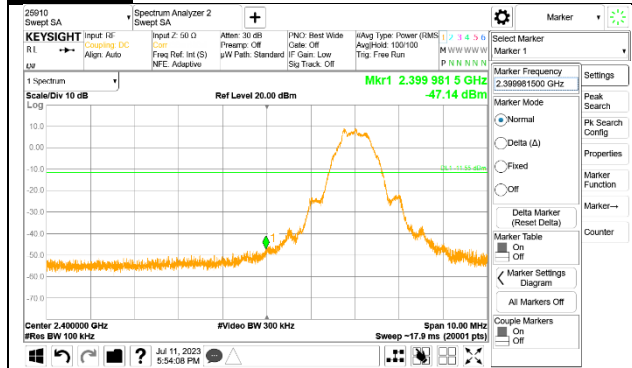
Output power was measured based on the use of a peak measurement.  
Therefore, spurious emissions are required to be 20 dBc.

### RESULTS

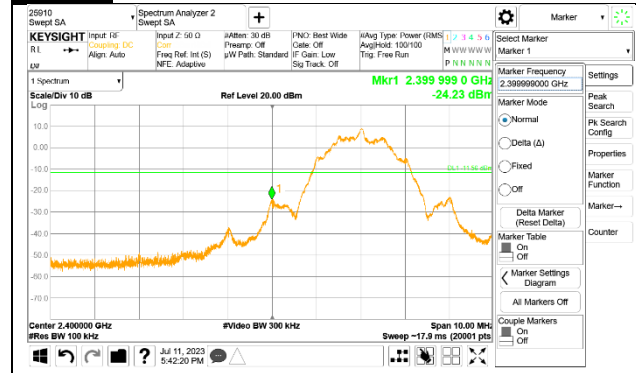


### 9.6.1. Test plot

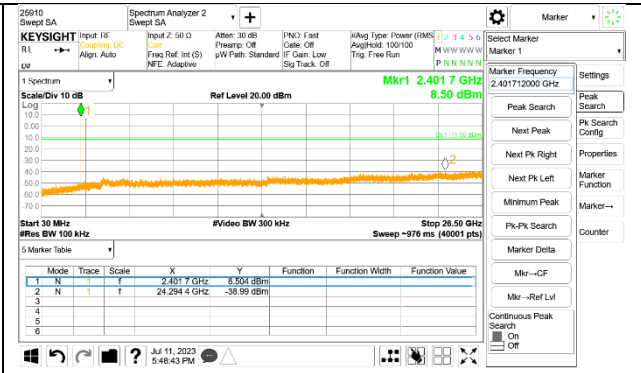
#### 500 kbps



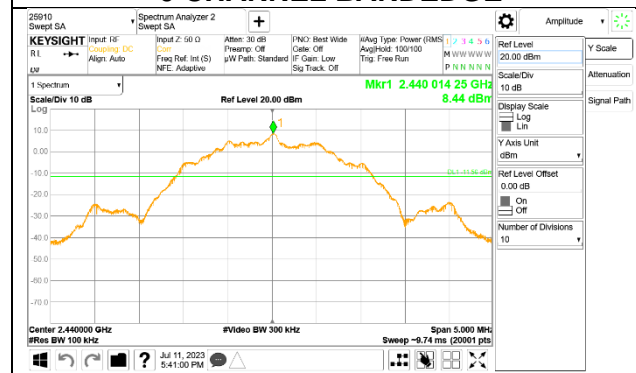
2 Mbps



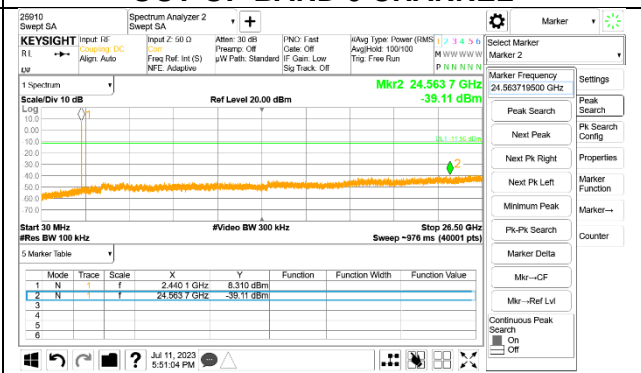
0 CHANNEL BANDEDGE



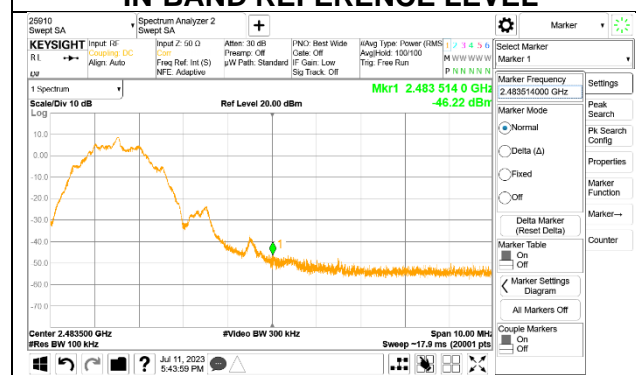
OUT-OF-BAND 0 CHANNEL



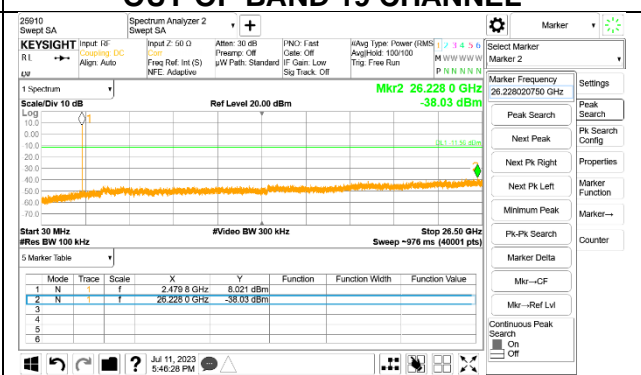
IN-BAND REFERENCE LEVEL



OUT-OF-BAND 19 CHANNEL



39 CHANNEL BANDEDGE



OUT-OF-BAND 39 CHANNEL

## 10. RADIATED TEST RESULTS

### 10.1. LIMITS AND PROCEDURE

#### LIMITS

FCC §15.205 and §15.209

IC RSS-Gen (8.9) & (8.10)

FCC §15.209 (a)

Frequency (MHz)	E-Field Strength (mV/meter)	Measurement Distance (m)
0.009–0.490	2400/F(kHz)	300
0.490–1.705	24000/F(kHz)	30
1.705–30.0	30	30
30–88	100	3
88 to 216	150	3
216 to 960	200	3
Above 960 MHz	500	3

Note: The lower limit shall apply at the transition frequency.

\*\* Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g. §§ 15.231 and 15.241.

IC RSS-GEN Sections 8.9 and 8.10.

Frequency (MHz)	H-Field Strength (mA/meter)	Measurement Distance (m)
0.009–0.490	6.37/F(kHz)	300
0.490–1.705	63.7/F(kHz)	30
1.705–30.0	0.08	30

Sample calculation (FCC Part 15.209 verse IC RSS-GEN 8.9)

FCC and IC limit are similar or have more margin, so FCC measurement data meets IC limit.

Standard \ Range	0.009 ~ 0.490	0.490 ~ 1.705	1.705 ~ 30.0
<b>FCC(E-field)</b>	<b>48.52 ~ 13.80</b>	<b>33.80 ~ 22.97</b>	<b>29.54</b>
IC(H-field)	-3.00 ~ -37.72	-17.72 ~ -28.55	-21.94
<b>IC(H-field to E-field)<sup>Note1</sup></b>	<b>48.50 ~ 13.78</b>	<b>33.78 ~ 22.95</b>	<b>29.56</b>

Note1.  $\text{dB}\mu\text{A/m} + 51.5 = \text{dB}\mu\text{V/m}$

## TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz and 150 cm for above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor for average measurements. (Restricted band-edge, Final detection of spurious harmonic emissions)  
Duty cycle factor =  $10 \log(1/x)$ . For this sample: For 500 kbps, DCF =  $10 \log(1/0.570) = 2.441$  dB (Spectrum Analyzer round it up to 2.44 dB) and for 2 Mbps, DCF =  $10 \log(1/0.328) = 4.841$  dB (Spectrum Analyzer round it up to 4.84 dB).

Pre-scans to detect harmonic and spurious emissions, the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 kHz for peak measurements.

The spectrum from 1 GHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.  
(From 30MHz to 1GHz, test was performed with the EUT set to transmit at the channel with highest output power)

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

Note: Emission was pre-scanned from 9kHz to 30MHz; No emissions were detected which was at least 20dB below the specification limit (consider distance correction factor). Per FCC part 15.31(o), test results were not reported.

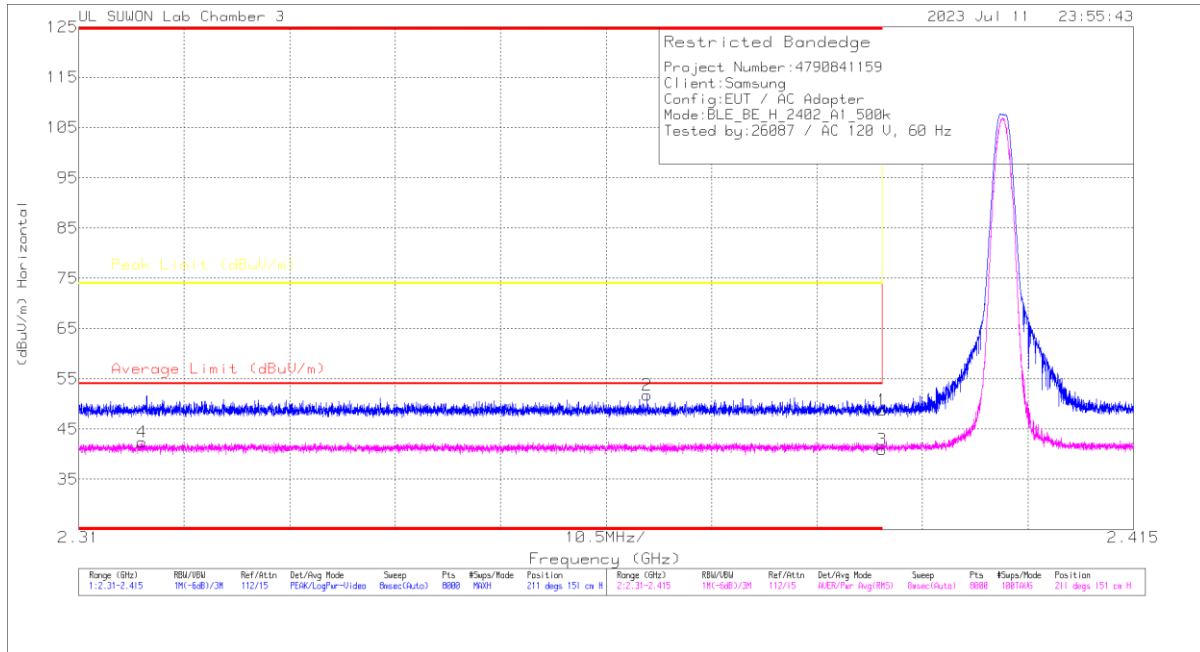
Although these tests were performed other than open field test site, adequate comparison measurements were confirmed against 30 m open are test site.  
Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field based on KDB 414788.

## 10.2. TRANSMITTER ABOVE 1 GHz

### 10.2.1. 500 kbps

#### BANDEDGE (0 CHANNEL)

#### HORIZONTAL RESULT

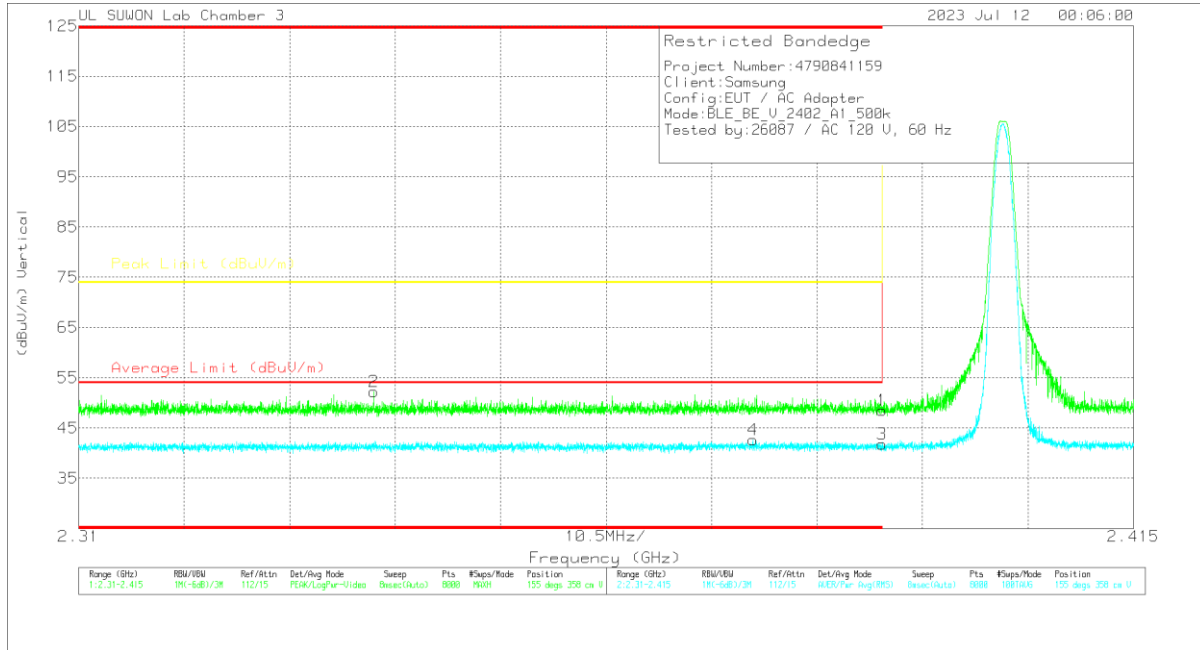


#### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Acimuth (Degs)	Height (cm)	Polarity
1	* 2.309	41.81	Pk	32.1	-25.1	0	48.81	-	-	74	-25.19	211	151	H
2	* 2.36656	44.87	Pk	32	-25.1	0	51.77	-	-	74	-22.23	211	151	H
3	* 2.39	31.45	RMS	32.1	-25.1	2.44	40.89	54	-13.11	-	-	211	151	H
4	* 2.31631	33.22	RMS	31.9	-25.1	2.44	42.46	54	-11.54	-	-	211	151	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK - Peak detector  
 RMS - RMS detection

### VERTICAL RESULT



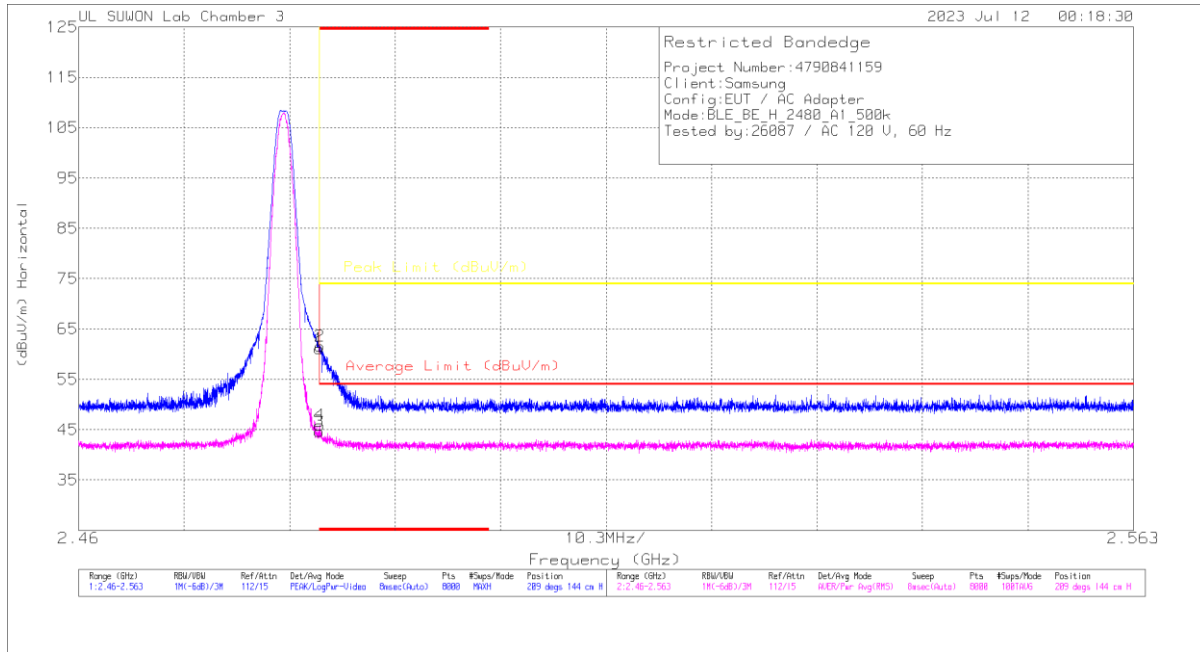
### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.51	Pk	32.1	-25.1	0	48.51	-	-	74	-25.49	155	358	V
2	* 2.33939	45.47	Pk	32	-25.2	0	52.27	-	-	74	-21.73	155	358	V
3	* 2.39	32.29	RMS	32.1	-25.1	2.44	41.73	54	-12.27	-	-	155	358	V
4	* 2.37712	33.27	RMS	32.1	-25.1	2.44	42.71	54	-11.29	-	-	155	358	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 Pk - Peak detector  
 RMS - RMS detection

**BANDEDGE (39 CHANNEL)**

**HORIZONTAL RESULT**

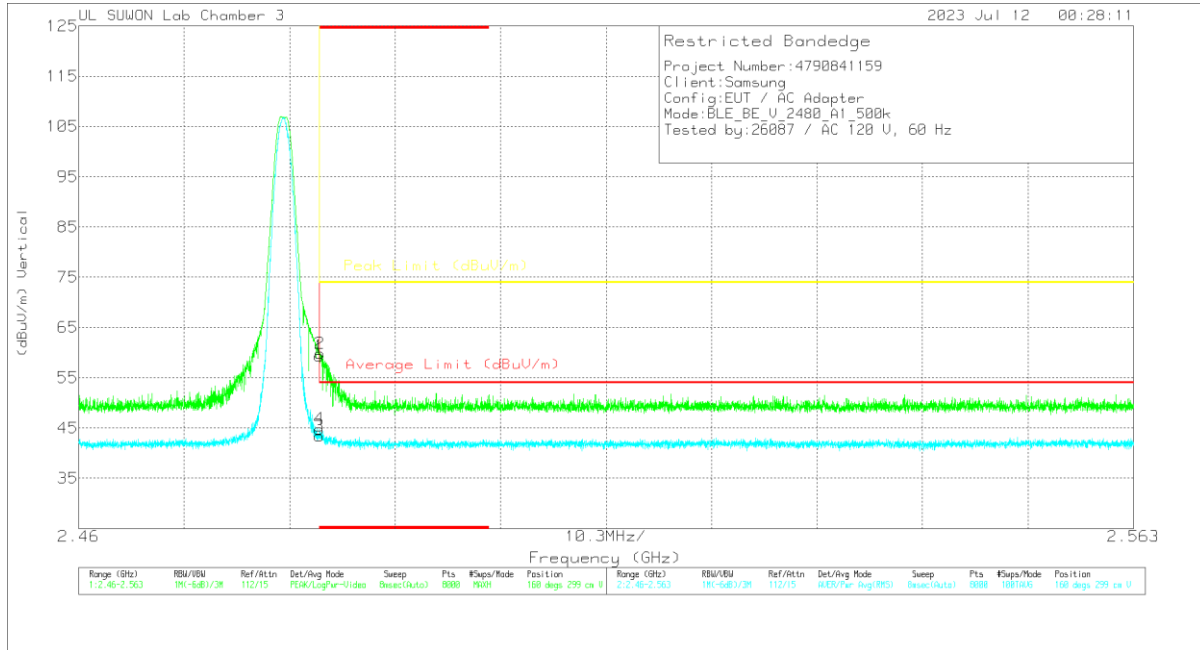


**Trace Markers**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	53.74	PK	32.4	-25	0	61.14	-	-	74	-12.86	209	144	H
2	* 2.48356	54.16	PK	32.4	-25	0	61.56	-	-	74	-12.44	209	144	H
3	* 2.4835	34.86	RMS	32.4	-25	2.44	44.7	54	-9.3	-	-	209	144	H
4	* 2.48353	36.04	RMS	32.4	-25	2.44	45.88	54	-8.12	-	-	209	144	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK - Peak detector  
 RMS - RMS detection

### VERTICAL RESULT



### Trace Markers

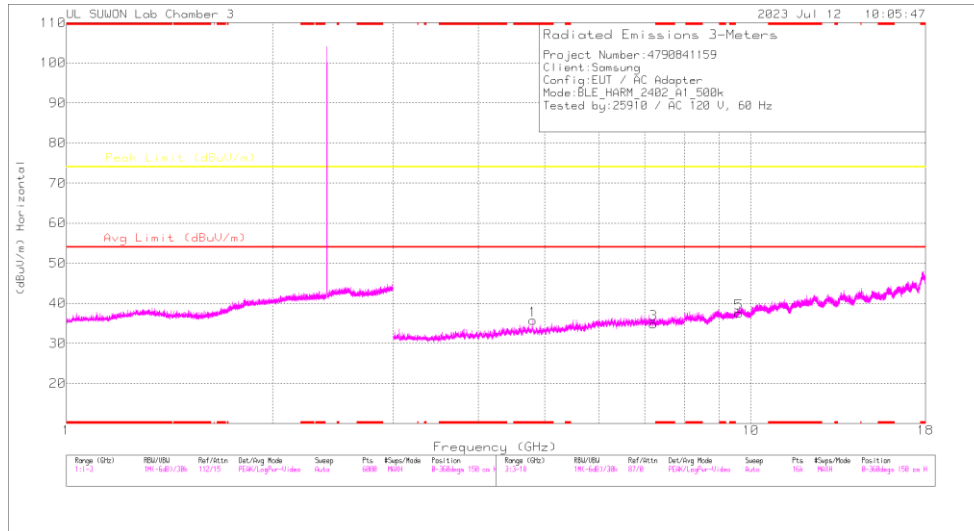
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	51.92	Pk	32.4	-25	0	59.32	-	-	74	-14.68	160	299	V
2	* 2.48358	52.45	Pk	32.4	-25	0	59.85	-	-	74	-14.15	160	299	V
3	* 2.4835	33.62	RMS	32.4	-25	2.44	43.46	54	-10.54	-	-	160	299	V
4	* 2.48351	34.99	RMS	32.4	-25	2.44	44.83	54	-9.17	-	-	160	299	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 Pk - Peak detector  
 RMS - RMS detection

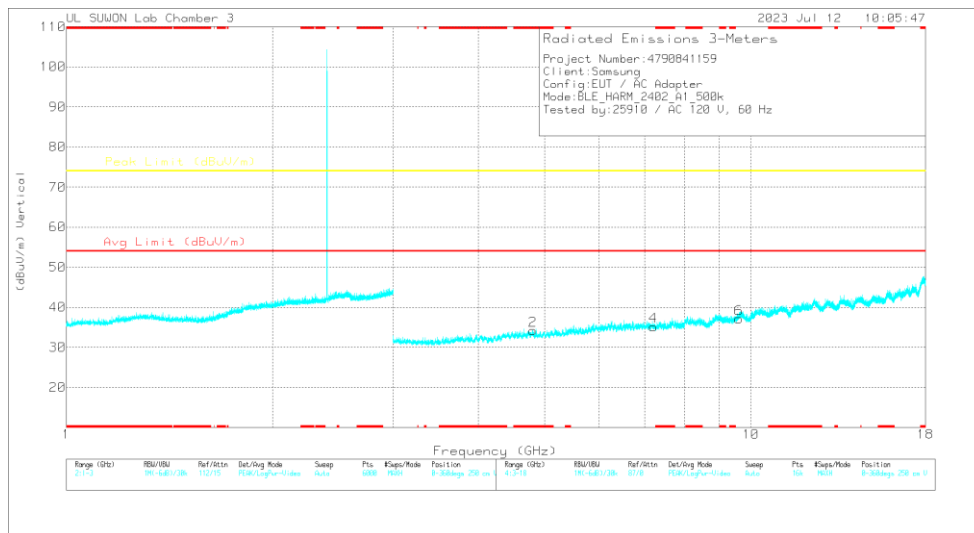


### HARMONICS AND SPURIOUS EMISSIONS

#### 0 CHANNEL RESULTS



#### HORIZONTAL



#### VERTICAL

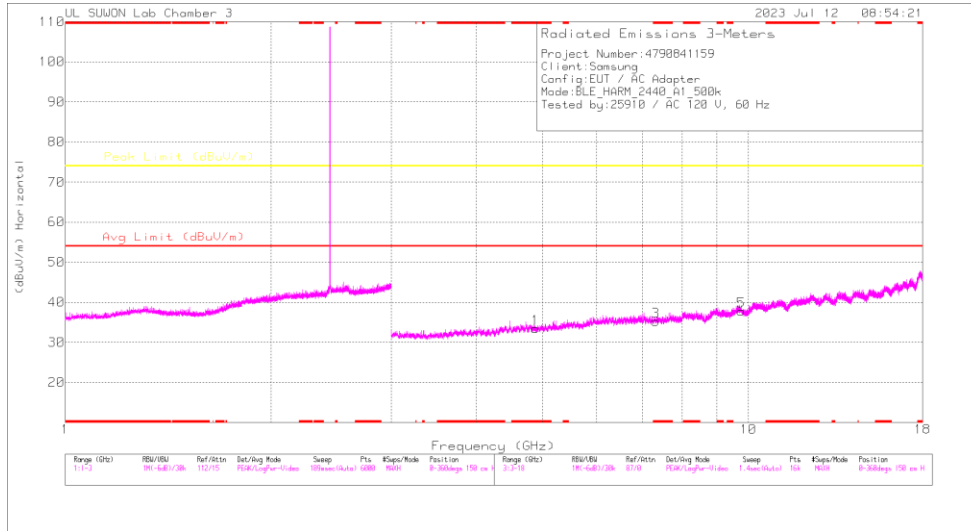
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

#### Radiated Emissions

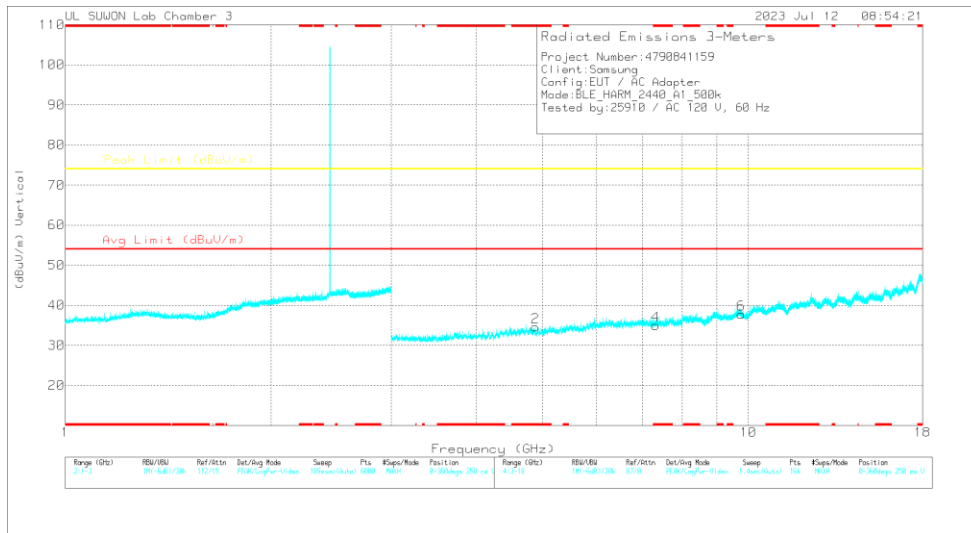
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0021895 7	3GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.8043	41.36	PK2	34.3	-30.1	0	45.56	-	-	74	-28.44	197	103	H
* 4.8043	30.51	MAV1	34.3	-30.1	2.44	37.15	54	-16.85	-	-	197	103	H
* 4.80351	40.17	PK2	34.3	-30.1	0	44.37	-	-	74	-29.63	154	100	V
* 4.80426	28.56	MAV1	34.3	-30.1	2.44	35.2	54	-18.8	-	-	154	100	V
7.20749	35.72	PK2	35.8	-25.8	0	45.72	-	-	74	-28.28	0	100	H
7.20787	35.23	PK2	35.8	-25.9	0	45.13	-	-	74	-28.87	0	100	V
9.60529	33.5	PK2	36.7	-21.6	0	48.6	-	-	74	-25.4	0	100	H
9.6081	32.92	PK2	36.7	-21.7	0	47.92	-	-	74	-26.08	0	100	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average

### 19 CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

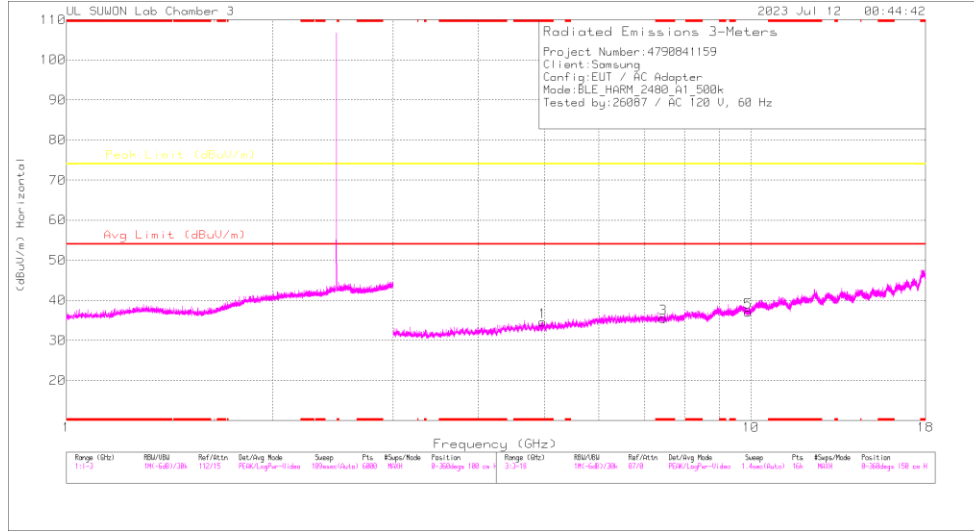
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

#### Radiated Emissions

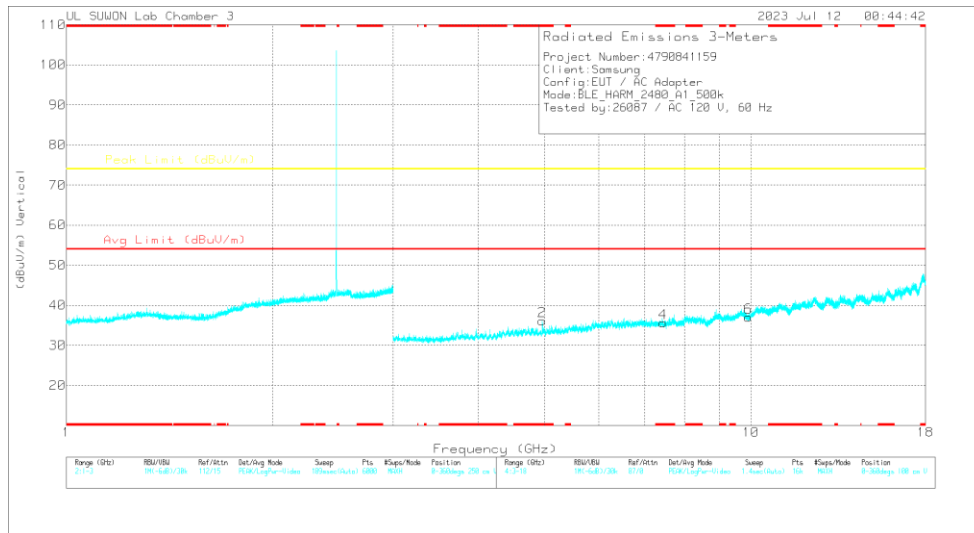
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0021895 7	3GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.88026	40.47	PK2	34.2	-30.9	0	43.77	-	-	74	-30.23	195	112	H
* 4.87972	29.65	MAV1	34.2	-30.9	2.44	35.39	54	-18.61	-	-	195	112	H
* 4.8781	40.39	PK2	34.2	-30.8	0	43.79	-	-	74	-30.21	152	100	V
* 4.87971	28.73	MAV1	34.2	-30.9	2.44	34.47	54	-19.53	-	-	152	100	V
* 7.31588	35.2	PK2	35.8	-25.4	0	45.6	-	-	74	-28.4	0	100	H
* 7.31899	35.29	PK2	35.8	-25.4	0	45.69	-	-	74	-28.31	0	100	V
9.76213	31.86	PK2	36.9	-21.1	0	47.66	-	-	74	-26.34	0	100	H
9.76072	31.84	PK2	36.9	-21.2	0	47.54	-	-	74	-26.46	0	100	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average

### 39 CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

### Radiated Emissions

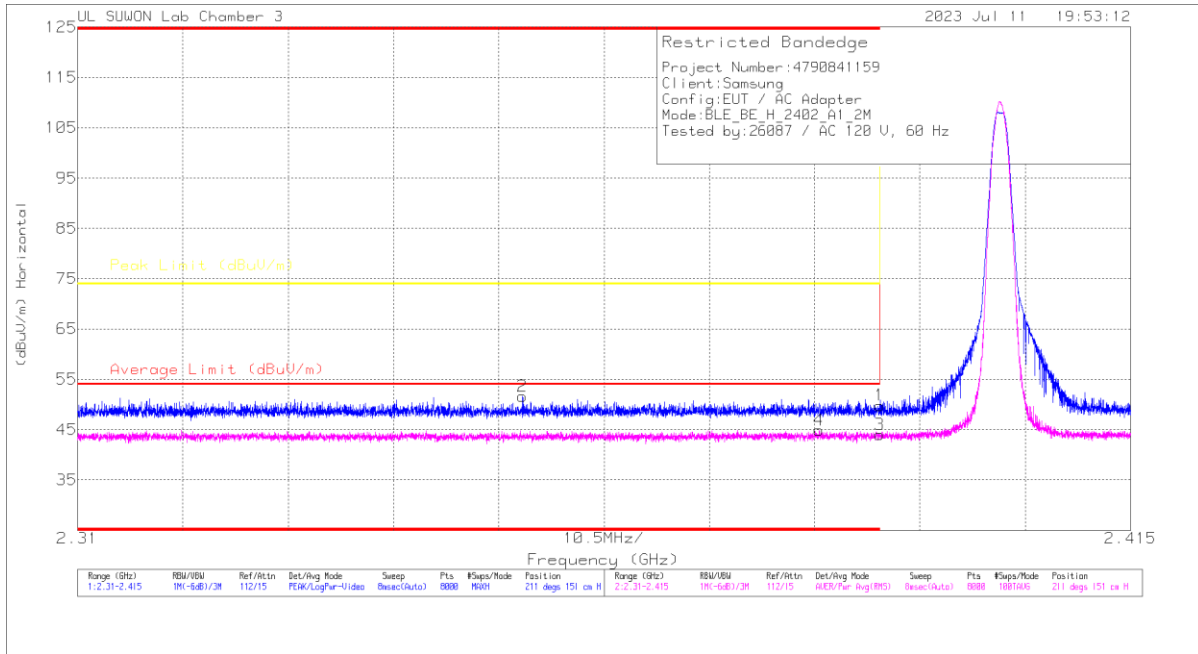
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0021895 7	3GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.96065	41.3	PK2	34.3	-30.5	0	45.1	-	-	74	-28.9	202	115	H
* 4.96016	30.79	MAV1	34.3	-30.5	2.44	37.03	54	-16.97	-	-	202	115	H
* 4.95943	40.39	PK2	34.3	-30.5	0	44.19	-	-	74	-29.81	153	101	V
* 4.96002	29.64	MAV1	34.3	-30.5	2.44	35.88	54	-18.12	-	-	153	101	V
* 7.43274	35.2	PK2	35.7	-25	0	45.9	-	-	74	-28.1	0	100	H
* 7.447	34.85	PK2	35.7	-25.2	0	45.35	-	-	74	-28.65	0	100	V
9.92387	32.18	PK2	37.1	-21.4	0	47.88	-	-	74	-26.12	0	100	H
9.92356	31.94	PK2	37.1	-21.4	0	47.64	-	-	74	-26.36	0	100	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average

**10.2.2. 2 Mbps**

**BANDEDGE (0 CHANNEL)**

**HORIZONTAL RESULT**

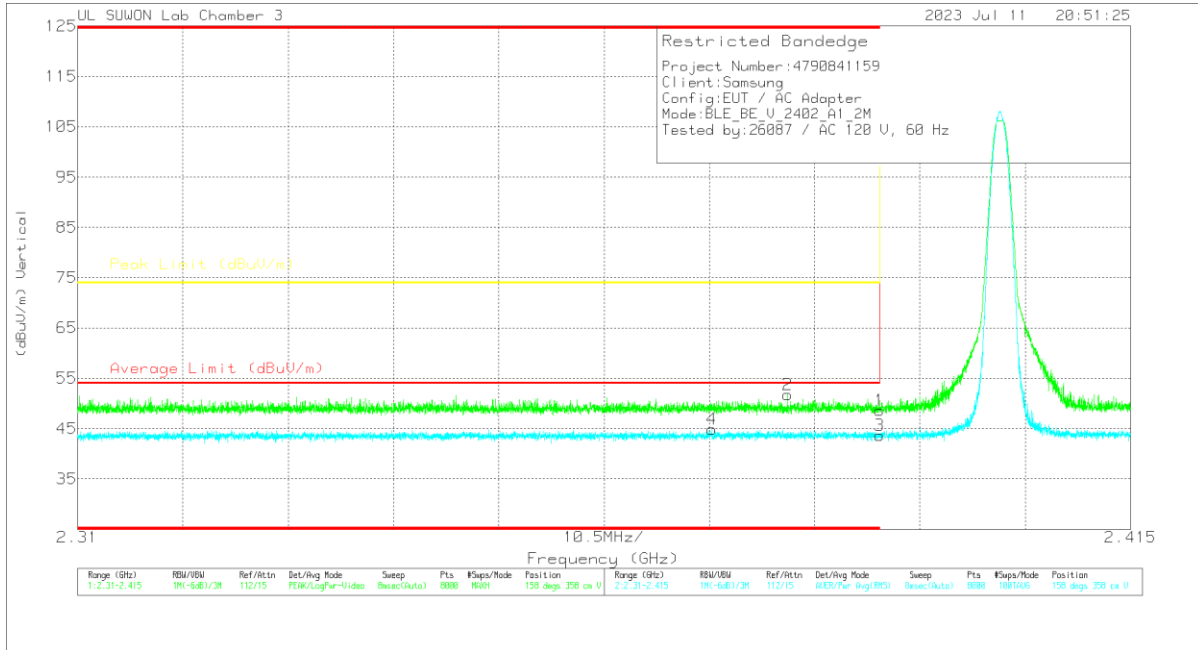


**Trace Markers**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.82	Pk	32.1	-25.1	0	49.82	-	-	74	-24.18	211	151	H
2	* 2.35438	44.68	Pk	32	-25.1	0	51.68	-	-	74	-22.42	211	151	H
3	* 2.39	32.22	RMS	32.1	-25.1	4.84	44.06	54	-9.94	-	-	211	151	H
4	* 2.38392	33.09	RMS	32.1	-25.1	4.84	44.93	54	-9.07	-	-	211	151	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 Pk - Peak detector  
 RMS - RMS detection

### VERTICAL RESULT



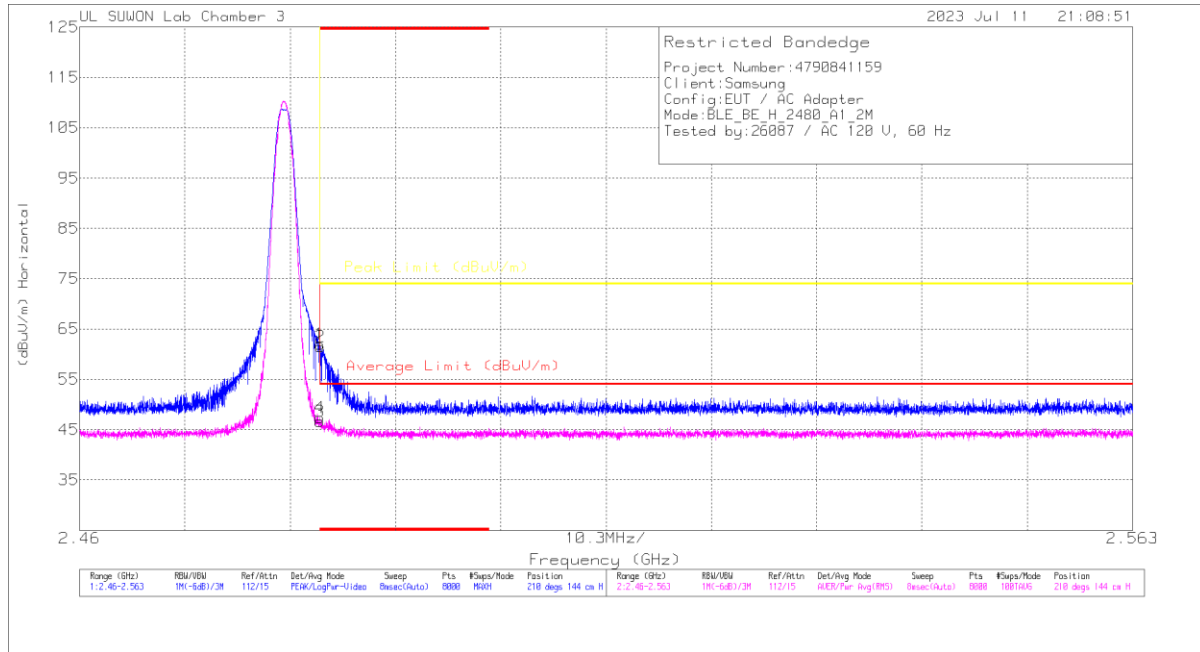
### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	41.58	Pk	32.1	-25.1	0	48.58	-	-	74	-25.42	158	358	V
2	* 2.38081	44.75	Pk	32.1	-25.1	0	51.75	-	-	74	-22.25	158	358	V
3	* 2.39	31.81	RMS	32.1	-25.1	4.84	43.65	54	-10.35	-	-	158	358	V
4	* 2.37323	33.14	RMS	32	-25.1	4.84	44.88	54	-9.12	-	-	158	358	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 Pk - Peak detector  
 RMS - RMS detection

**BANDEDGE (39 CHANNEL)**

**HORIZONTAL RESULT**

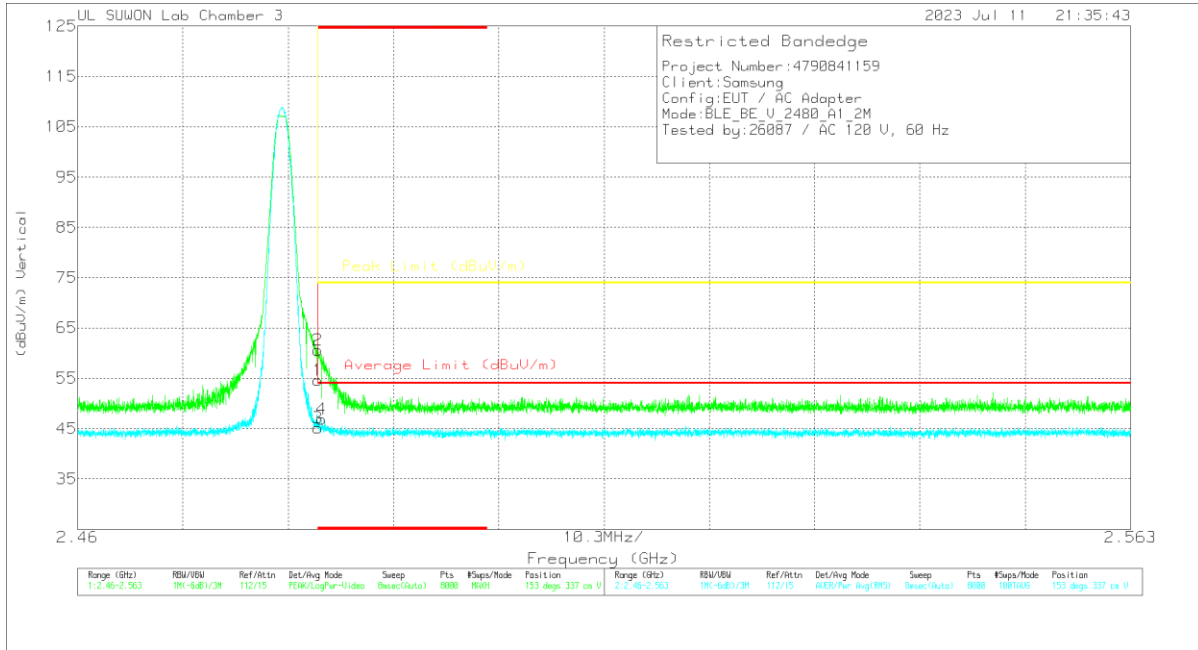


**Trace Markers**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218657	10dB_ATT(dB)	DC Cor (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	54.52	Pk	32.4	-25	0	61.92	-	-	74	-12.08	210	144	H
2	* 2.48355	54.11	Pk	32.4	-25	0	61.51	-	-	74	-12.49	210	144	H
3	* 2.4835	34.36	RMS	32.4	-25	4.84	46.5	54	-7.4	-	-	210	144	H
4	* 2.48351	35.1	RMS	32.4	-25	4.84	47.34	54	-6.66	-	-	210	144	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 Pk - Peak detector  
 RMS - RMS detection

### VERTICAL RESULT



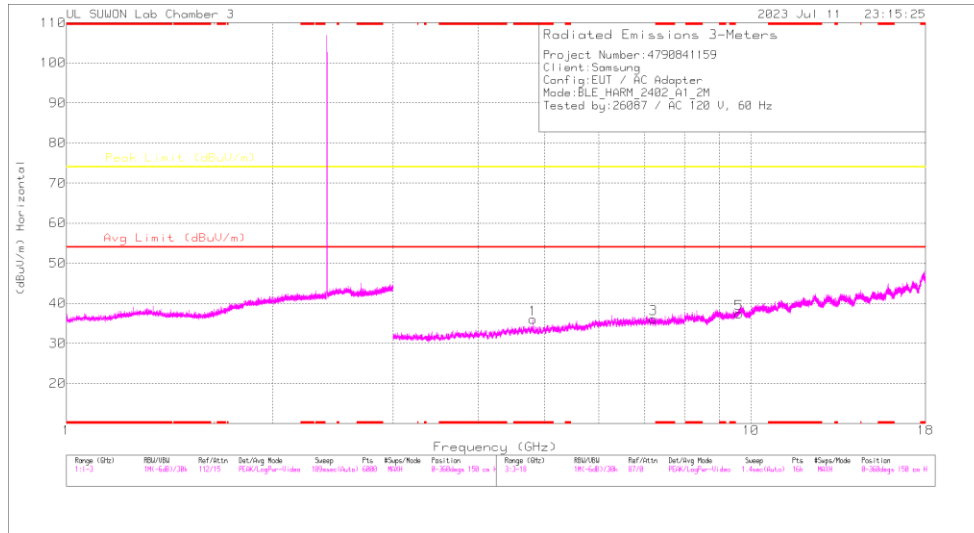
### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117_00218957	10dB_ATT(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	47.22	Pk	32.4	-25	0	54.62	-	-	74	-19.38	153	337	V
2	* 2.48351	53.16	Pk	32.4	-25	0	60.56	-	-	74	-13.44	153	337	V
3	* 2.4835	32.95	RMS	32.4	-25	4.84	45.19	54	-8.81	-	-	153	337	V
4	* 2.48386	34.64	RMS	32.4	-25	4.84	46.88	54	-7.12	-	-	153	337	V

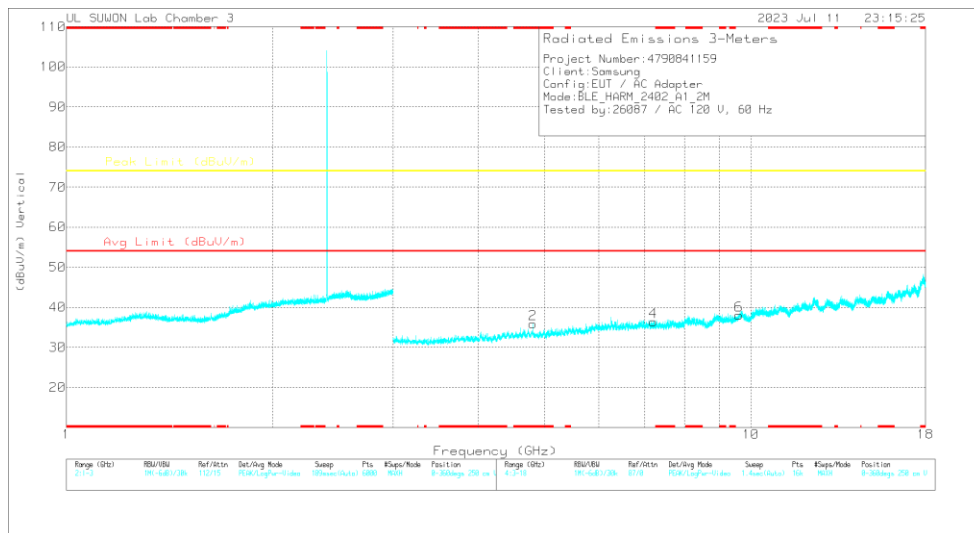
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 Pk - Peak detector  
 RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS

### 0 CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

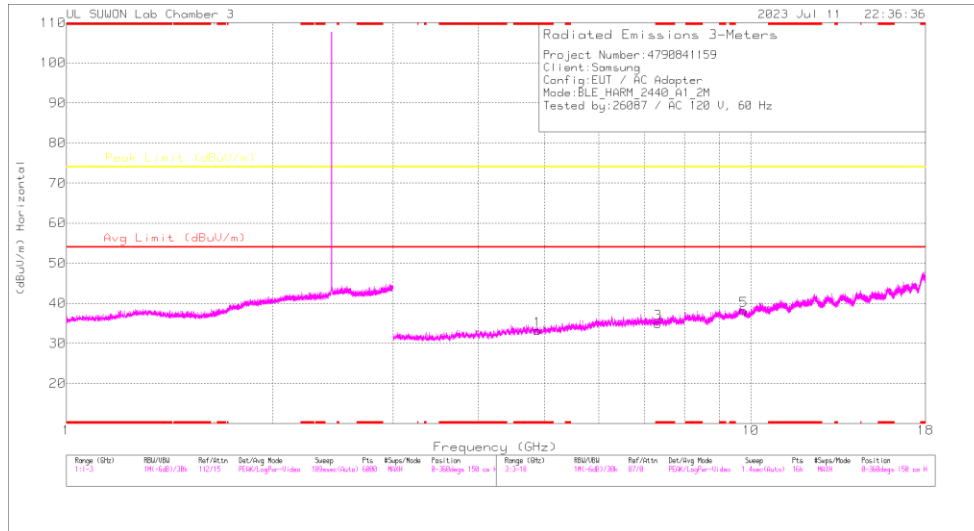
### Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0021895 7	3GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.80425	41.49	PK2	34.3	-30.1	0	45.69	-	-	74	-28.31	202	107	H
* 4.80359	31.3	MAV1	34.3	-30.1	4.84	40.34	54	-13.66	-	-	202	107	H
* 4.80463	39.84	PK2	34.3	-30.1	0	44.04	-	-	74	-29.96	154	101	V
* 4.80402	29.01	MAV1	34.3	-30.1	4.84	38.05	54	-15.95	-	-	154	101	V
7.20386	35.8	PK2	35.8	-25.8	0	45.8	-	-	74	-28.2	0	100	H
7.20708	36.13	PK2	35.8	-25.8	0	46.13	-	-	74	-27.87	0	100	V
9.60573	32.42	PK2	36.7	-21.6	0	47.52	-	-	74	-26.48	0	100	H
9.61045	32.49	PK2	36.7	-21.7	0	47.49	-	-	74	-26.51	0	100	V

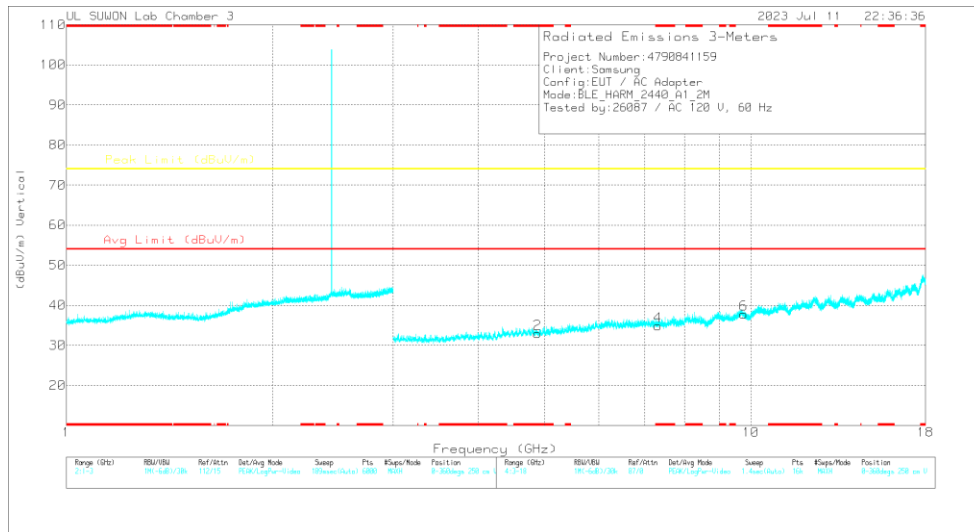
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average



### 19 CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

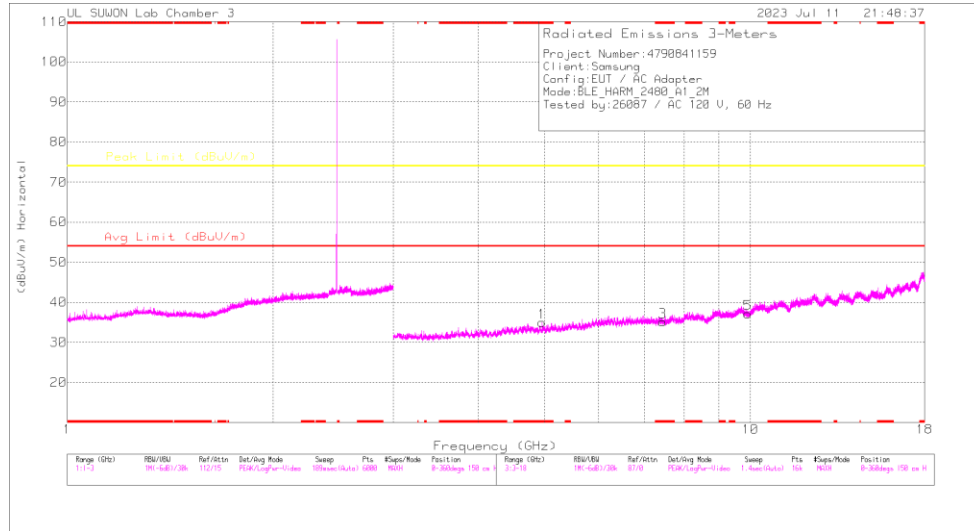
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

### Radiated Emissions

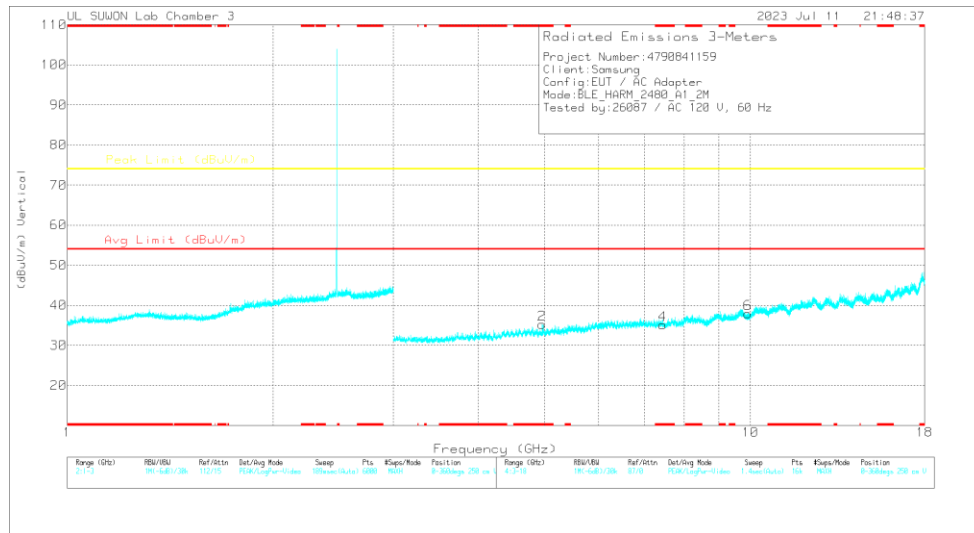
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0021895 7	3GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.87935	40.63	PK2	34.2	-30.8	0	44.03	-	-	74	-29.97	201	110	H
* 4.87955	30.06	MAV1	34.2	-30.8	4.84	38.3	54	-15.7	-	-	201	110	H
* 4.88034	40.49	PK2	34.2	-30.9	0	43.79	-	-	74	-30.21	156	100	V
* 4.88029	29.02	MAV1	34.2	-30.9	4.84	37.16	54	-16.84	-	-	156	100	V
* 7.32063	34.93	PK2	35.8	-25.3	0	45.43	-	-	74	-28.57	0	100	H
* 7.31433	35.18	PK2	35.8	-25.5	0	45.48	-	-	74	-28.52	0	100	V
9.75751	32.41	PK2	36.9	-21.1	0	48.21	-	-	74	-25.79	0	100	H
9.75594	32.19	PK2	36.9	-21.2	0	47.89	-	-	74	-26.11	0	100	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average

### 39 CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

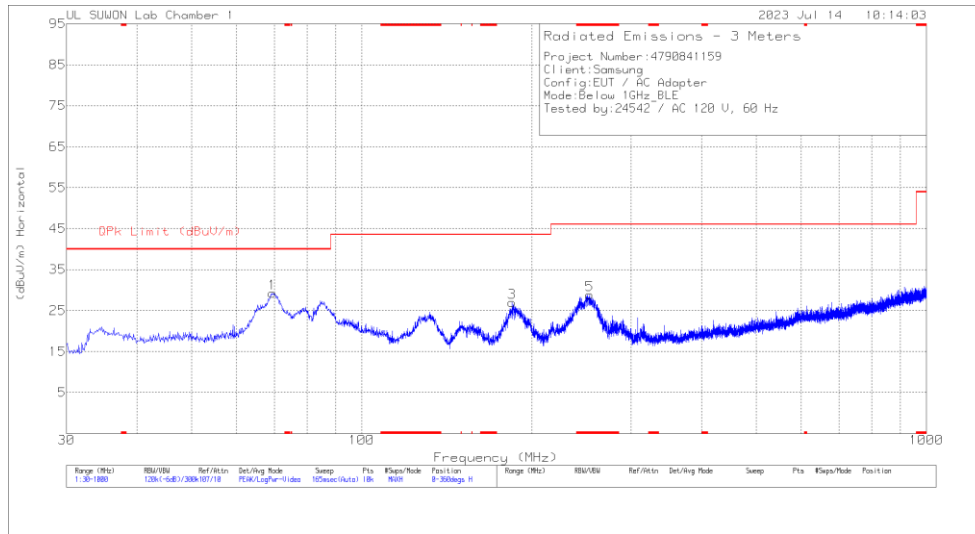
### Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0021895 7	3GHz_HP(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.9595	41	PK2	34.3	-30.5	0	44.8	-	-	74	-29.2	204	100	H
* 4.95994	30.47	MAV1	34.3	-30.5	4.84	39.11	54	-14.89	-	-	204	100	H
* 4.96103	39.97	PK2	34.3	-30.5	0	43.77	-	-	74	-30.23	154	100	V
* 4.96006	29.5	MAV1	34.3	-30.5	4.84	38.14	54	-15.86	-	-	154	100	V
* 7.43626	35.32	PK2	35.7	-25.1	0	45.92	-	-	74	-28.08	0	100	H
* 7.43479	34.9	PK2	35.7	-25.1	0	45.5	-	-	74	-28.5	0	100	V
9.92406	31.49	PK2	37.1	-21.4	0	47.19	-	-	74	-26.81	0	100	H
9.91573	31.15	PK2	37.1	-21.3	0	46.95	-	-	74	-27.05	0	100	V

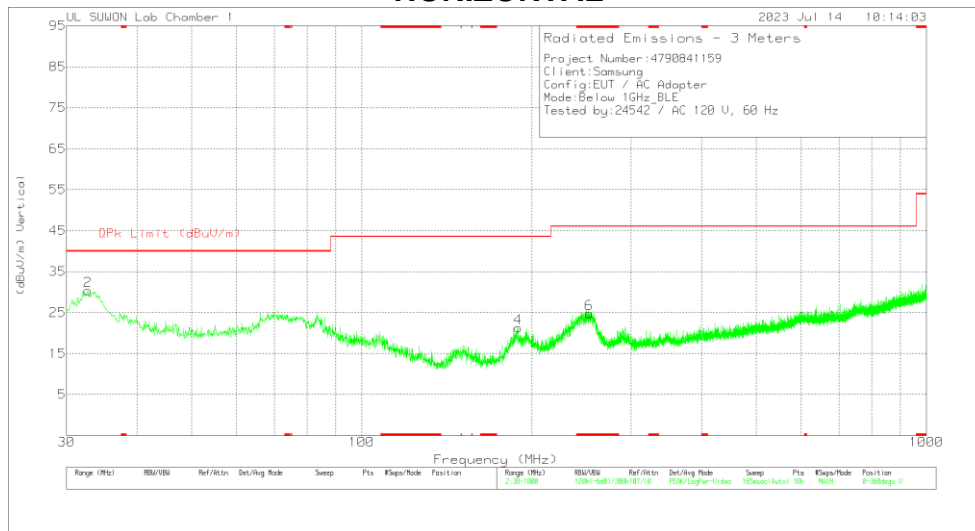
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK2 - KDB558074 Method: Maximum Peak  
 MAV1 - KDB558074 Option 1 Maximum RMS Average

### 10.3. WORST CASE BELOW 1 GHz

#### SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)



**HORIZONTAL**



**VERTICAL**

#### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_749	Below_1G(dB)	Corrected Reading (dBuV/m)	QPK Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	69.479	44.98	Pk	15.7	-31.4	29.28	40	-10.72	0-360	200	H
3	184.521	41.89	Pk	15.9	-30.8	26.99	43.52	-16.53	0-360	100	H
5	* 253.1	40.69	Pk	18.7	-30.5	28.89	46.02	-17.13	0-360	100	H
2	32.716	46.53	Pk	15.7	-31.9	30.33	40	-9.67	0-360	100	V
4	189.08	35.75	Pk	16.3	-30.8	21.25	43.52	-22.27	0-360	100	V
6	* 252.712	36.62	Pk	18.7	-30.6	24.72	46.02	-21.3	0-360	100	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 Pk - Peak detector

## 11. AC POWER LINE CONDUCTED EMISSIONS

### LIMITS

FCC §15.207 (a)

IC RSS-Gen (7) & (8.8)

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 <sup>*</sup>	56 to 46 <sup>*</sup>
0.5-5	56	46
5-30	60	50

<sup>\*</sup> Decreases with the logarithm of the frequency.

### TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

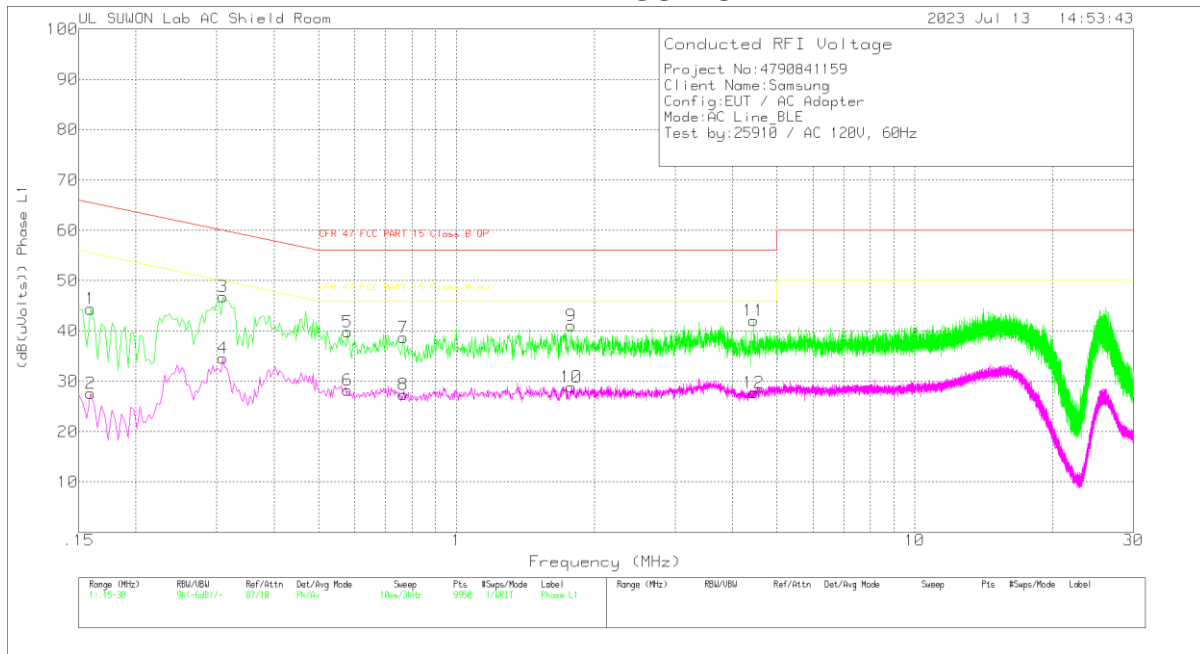
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

### RESULTS

### 11.1. AC Power Line

#### LINE 1 RESULTS



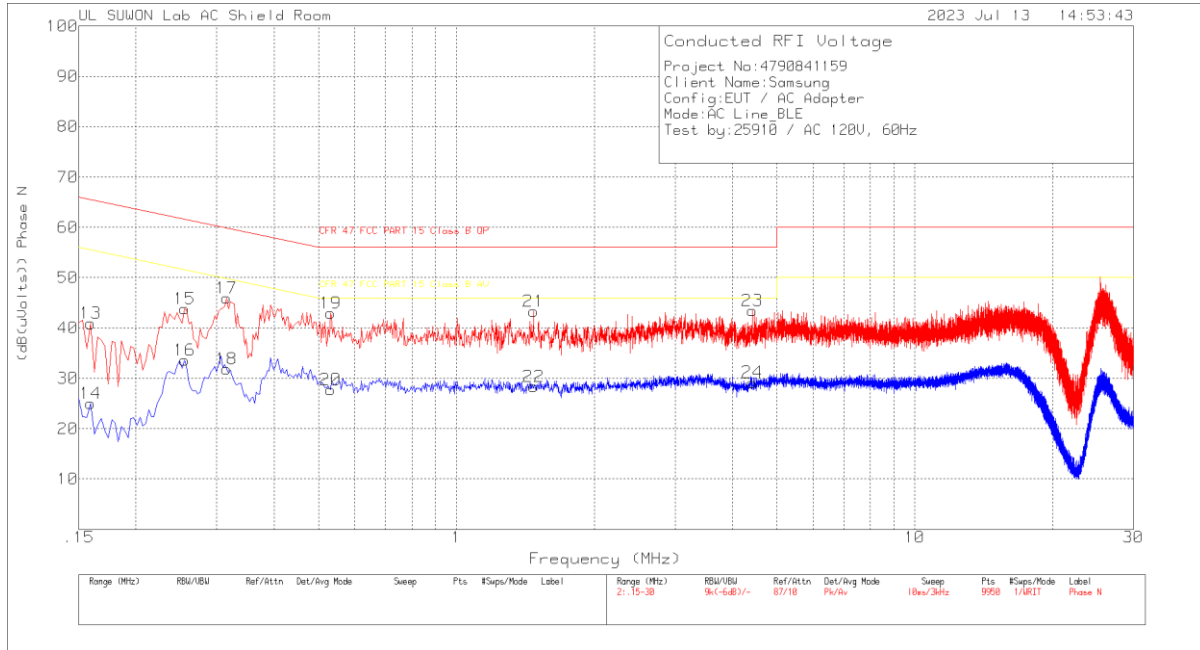
#### Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_AU TO_With EX_L1[dB]	CABLELOS S[dB]	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.159	34.79	Pk	9.5	.1	44.39	65.52	-21.13	-	-
2	.159	18.05	Av	9.5	.1	27.65	-	-	55.52	-27.87
3	.309	37.14	Pk	9.5	.2	46.84	60	-13.16	-	-
4	.309	24.94	Av	9.5	.2	34.64	-	-	50	-15.36
5	.579	30.05	Pk	9.6	.2	39.85	56	-16.15	-	-
6	.579	18.44	Av	9.6	.2	28.24	-	-	46	-17.76
7	.765	28.93	Pk	9.6	.2	38.73	56	-17.27	-	-
8	.765	17.56	Av	9.6	.2	27.36	-	-	46	-18.64
9	1.779	31.13	Pk	9.6	.3	41.03	56	-14.97	-	-
10	1.779	18.96	Av	9.6	.3	28.86	-	-	46	-17.14
11	4.455	32.15	Pk	9.6	.3	42.05	56	-13.95	-	-
12	4.455	17.8	Av	9.6	.3	27.7	-	-	46	-18.3

Pk - Peak detector  
 Av - Average detection

### LINE 2 RESULTS



#### Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_AU TO_With EX_N[dB]	CABLELOS S[dB]	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.159	31.3	Pk	9.5	.1	40.9	65.52	-24.62	-	-
14	.159	15.43	Av	9.5	.1	25.03	-	-	55.52	-30.49
15	.255	34.13	Pk	9.5	.2	43.83	61.59	-17.76	-	-
16	.255	23.88	Av	9.5	.2	33.58	-	-	51.59	-18.01
17	.315	36.22	Pk	9.5	.2	45.92	59.84	-13.92	-	-
18	.315	22.12	Av	9.5	.2	31.82	-	-	49.84	-18.02
19	.531	33.1	Pk	9.6	.2	42.9	56	-13.1	-	-
20	.531	17.94	Av	9.6	.2	27.74	-	-	46	-18.26
21	1.473	33.45	Pk	9.6	.3	43.35	56	-12.65	-	-
22	1.473	18.42	Av	9.6	.3	28.32	-	-	46	-17.68
23	4.422	33.53	Pk	9.6	.3	43.43	56	-12.57	-	-
24	4.422	19.28	Av	9.6	.3	29.18	-	-	46	-16.82

Pk - Peak detector  
 Av - Average detection

## END OF TEST REPORT