

CERTIFICATION TEST REPORT

Report Number. : 4790976523-E8V2

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

Model : SM-S921U, SM-S921U1

FCC ID : A3LSMS921U

EUT Description : GSM/WCDMA/LTE 5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax,
NFC and WPT

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

Date Of Issue:

2023-10-30

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

Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V1	2023-10-27	Initial issue	Dexter(Hyunsik) Yun
V2	2023-10-30	Updated to address TCB's question	Dexter(Hyunsik) Yun

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	5
2. TEST METHODOLOGY	6
3. FACILITIES AND ACCREDITATION	6
4. DECISION RULES AND MEASUREMENT UNCERTAINTY	7
4.1. METROLOGICAL TRACEABILITY.....	7
4.2. SAMPLE CALCULATION.....	7
4.3. MEASUREMENT UNCERTAINTY	7
4.4. DECISION RULES.....	7
5. EQUIPMENT UNDER TEST.....	8
5.1. EUT DESCRIPTION.....	8
5.2. MAXIMUM OUTPUT POWER.....	8
5.3. DESCRIPTION OF AVAILABLE ANTENNAS	9
5.4. WORST-CASE CONFIGURATION AND MODE	10
5.5. DESCRIPTION OF TEST SETUP.....	12
6. MEASUREMENT METHOD.....	14
7. TEST AND MEASUREMENT EQUIPMENT	15
8. TEST RESULTS SUMMARY.....	16
9. ANTENNA PORT TEST RESULTS.....	17
9.1. ON TIME AND DUTY CYCLE	17
9.2. 6 dB BANDWIDTH	18
9.2.1. Test data.....	18
9.2.2. 6 dB BANDWIDTH PLOTS	19
9.3. OUTPUT POWER.....	21
9.3.1. DIVERSITY MODE TEST DATA.....	21
9.3.2. DUAL MODE TEST DATA.....	22
9.3.3. PEAK POWER PLOTS.....	23
9.4. AVERAGE POWER	27
9.4.1. DIVERSITY MODE TEST DATA.....	27
9.4.2. DUAL MODE TEST DATA.....	28
9.5. POWER SPECTRAL DENSITY	29
9.5.1. Test data.....	29
9.5.2. PSD TEST PLOTS	30
9.6. CONDUCTED SPURIOUS EMISSIONS	32

9.6.1. Test plot.....	33
10. RADIATED TEST RESULTS	37
10.1. LIMITS AND PROCEDURE	37
10.2. TRANSMITTER ABOVE 1 GHz	39
10.2.1. 1 Mbps ANT1	39
10.2.2. 1 Mbps ANT2	46
10.2.3. 1 Mbps DUAL	53
10.2.4. 2 Mbps ANT1	60
10.2.5. 2 Mbps ANT2	67
10.2.6. 2 Mbps DUAL	74
10.3. WORST CASE BELOW 1 GHz	81
11. AC POWER LINE CONDUCTED EMISSIONS	82
11.1. AC Power Line	83

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.

EUT DESCRIPTION: GSM/WCDMA/LTE 5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC and WPT

MODEL NUMBER: SM-S921U, SM-S921U1

SERIAL NUMBER: R3CW90BXLKA, R3CW90BXLGJ (CONDUCTED);
R3CW90BXLCD, R3CW90BXLFV (RADIATED);

DATE TESTED: 2023-10-05 ~ 2023-10-30

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
47 CFR Part 15 Subpart C	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:



Dexter(Hyunsik) Yun
Suwon Lab Engineer
UL KOREA LTD.

2. TEST METHODOLOGY

1. FCC 47 CFR Part 2.
2. FCC 47 CFR Part 15.
3. KDB 558074 D01 15.247 Meas Guidance v05r02.
4. KDB 662911 D01 v02r01
5. ANSI C63.10-2013.

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)

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
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 GSM/WCDMA/LTE 5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC and WPT. This test report addresses the DTS (BLE) operational mode.

Representative model	Difference	Derivative model
		SM-S921U1
SM-S921U	Hardware	Same
	Software	The UI has changed according to Service Provider

The model SM-S921U was used for final testing and is representative of the test results in this report.

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	1 Mbps (37pkt)	Peak	21.360	136.773
		Average	20.802	120.282
	2Mbps (37 pkt)	Peak	21.190	131.522
		Average	20.554	113.606

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 a internal antenna, with a maximum gain of:

Frequency Band[MHz]	ANT1 Gain [dBi]	ANT2 Gain [dBi]	Correlated Chains Directional Gain[dBi]
DTS 2400 – 2483.5	-2.44	-3.89	-0.12

Directional gain for the MIMO operations is determined using KDB 662911 D01 Multiple Transmitter Output section F (2)(d)(1) for *Unequal antenna gains, with equal transmit powers*. The gain is calculated using the formula for correlated transmissions across the two transmit antennas.

Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$ dBi.

Sample calculation for this device with $N_{ANT} = 2$

Directional gain = $10 \log[(10^{-3.5/20} + 10^{-7.1/20})^2 / 2] = -2.1$ dBi

“BT/WIFI #1_2.4GHz” and “BT/WIFI #2_2.4GHz (SUB6_Ant J)” as indicated in antenna specification are written as ANT1 and ANT2 in this report.

5.4. WORST-CASE CONFIGURATION AND MODE

Both Bluetooth LE Diversity mode and DUAL mode have been investigated and confirmed.

The fundamentals of the EUT were investigated in three orthogonal orientations X, Y and Z. It was determined that below table's orientation was the worst-case orientation.

ANT1	ANT2	DUAL
X	X	X

For conducted power test, both Diversity and DUAL mode were verified and reported. In DUAL mode, except power test, no noticeable data was found. Tests was performed on Diversity mode.

Diversity mode test was performed on SISO and DUAL iPA mode.

Radiated and power line conducted tests were performed with EUT connected to AC power adapter as the worst-case configuration. Radiated harmonics spurious 1~18 GHz Low/Mid/High channels, 18-26GHz were performed with the EUT set at the Diversity and DUAL 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.

For Radiated band-edge and spurious test, tests were performed on Diversity mode and DUAL mode.

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 1 Mbps(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]
1	1 Mbps 37 pkt ANT1	2 402	20.802	2	2 Mbps 37 pkt ANT1	2 402	20.554
		2 440	19.175			2 440	19.008
		2 480	19.282			2 480	19.199
	1 Mbps 37 pkt ANT2	2 402	16.482		2 Mbps 37 pkt ANT2	2 402	16.837
		2 440	17.354			2 440	17.926
		2 480	14.554			2 480	14.878
	1 Mbps 255 pkt ANT1	2 402	20.523		2 Mbps 255 pkt ANT1	2 402	20.272
		2 440	19.032			2 440	18.780
		2 480	19.296			2 480	19.139
	1 Mbps 255 pkt ANT2	2 402	16.750		2 Mbps 255 pkt ANT2	2 402	16.945
		2 440	17.352			2 440	17.838
		2 480	14.971			2 480	14.556
1 Coded S=8	125 kbps 37 pkt ANT1	2 402	10.580	1 Coded S=2	500 kbps 37 pkt ANT1	2 402	10.759
		2 440	9.911			2 440	9.877
		2 480	10.549			2 480	10.542
	125 kbps 37 pkt ANT2	2 402	8.774		500 kbps 37 pkt ANT2	2 402	8.678
		2 440	9.245			2 440	9.274
		2 480	6.661			2 480	6.593
	125 kbps 255 pkt ANT1	2 402	10.663		500 kbps 255 pkt ANT1	2 402	10.695
		2 440	9.814			2 440	9.832
		2 480	10.473			2 480	6.635
	125 kbps 255 pkt ANT2	2 402	8.769		500 kbps 255 pkt ANT2	2 402	8.774
		2 440	9.525			2 440	9.475
		2 480	6.543			2 480	6.500

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Charger	SAMSUNG	EP-TA800	R37MC7MHS27DK3	N/A
Data Cable	SAMSUNG	EP-DN980	GH39-02111A	N/A

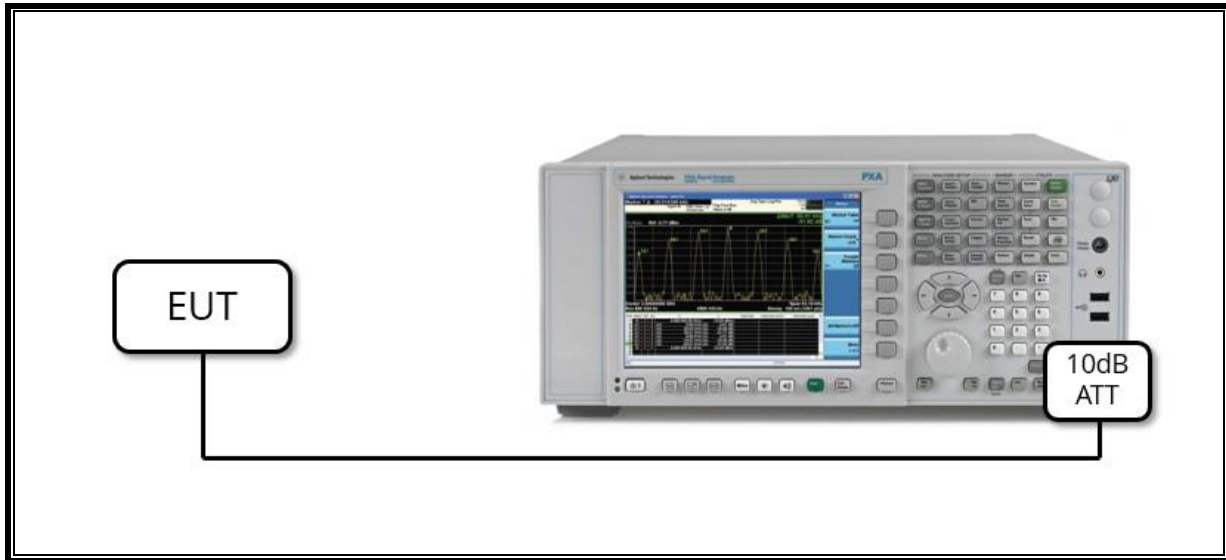
I/O CABLE

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

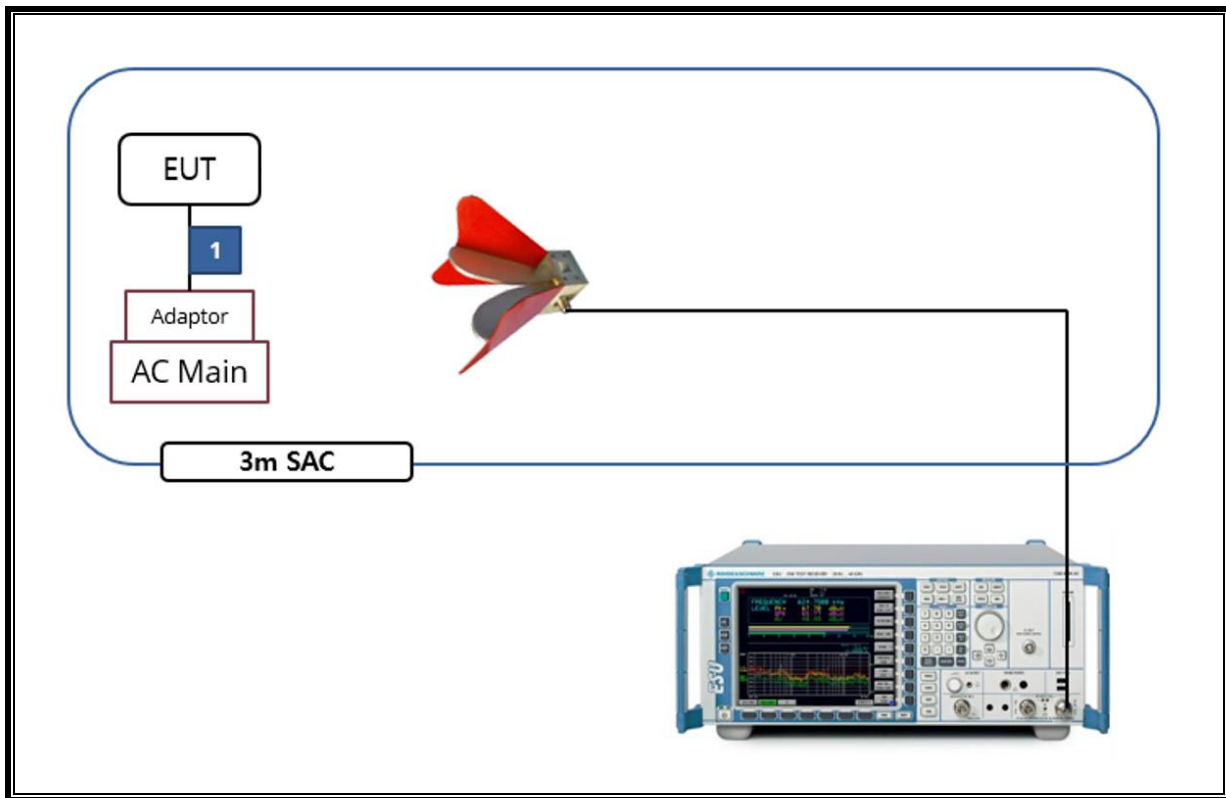
TEST SETUP

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. MEASUREMENT METHOD

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

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

7. 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, Horn, 18 GHz	ETS	3117	00168717	2024-08-21
Antenna, Horn, 40 GHz	ETS	3116C	00166155	2024-08-02
Preamplifier	ETS	3116C-PA	00168841	2024-07-25
Preamplifier, 1000 MHz	Sonoma	310N	341282	2024-07-24
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029169	2024-07-24
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	2024-07-23
Average Power Sensor	Agilent / HP	U2000A	MY54260010	2024-07-24
Attenuator	PASTERNAK	PE7087-10	A001	2024-07-23
Attenuator	PASTERNAK	PE7087-10	A008	2024-07-27
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2024-07-23
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2024-07-24
EMI Test Receive, 3 GHz	R&S	ESR3	101832	2024-07-23
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	009	2024-07-23
High Pass Filter 3GHz	Micro-Tronics	HPM17543	010	2024-07-23
High Pass Filter 6GHz	Micro-Tronics	HPS17542	021	2024-07-24
LISN	R&S	ENV-216	101837	2024-07-23
Antenna, Loop, 9kHz-30MHz	R&S	HFH2-Z2	100418	2025-09-06
UL Software				
Description	Manufacturer	Model	Version	
Radiated software	UL	UL EMC	Ver 9.5	
AC Line Conducted software	UL	UL EMC	Ver 9.5	

8. TEST RESULTS SUMMARY

FCC Part Section	Test Description	Test Limit	Test Condition	Test Result
15.247 (a)(2)	Occupied Bandwidth(6dB)	> 500kHz	Conducted	Complies
2.1051, 15.247(d)	Band Edge / Conducted Spurious Emission	-20 dBc		Complies
15.247 (b)(3)	TX conducted output power	< 30 dBm		Complies
15.247(e)	PSD	< 8 dBm/3kHz		Complies
15.207(a)	AC Power Line conducted emissions	Section 11	Power Line conducted	Complies
15.205, 15.209	Radiated Spurious Emission	< 54dBuV/m(Av)	Radiated	Complies

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]
2 400 ~ 2 483.5 MHz Bands						
1 Mbps [37pkt]	0.390	0.755	0.517	51.656	2.87	2.56
2 Mbps [37pkt]	0.207	0.535	0.387	38.692	4.12	4.83



9.2. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

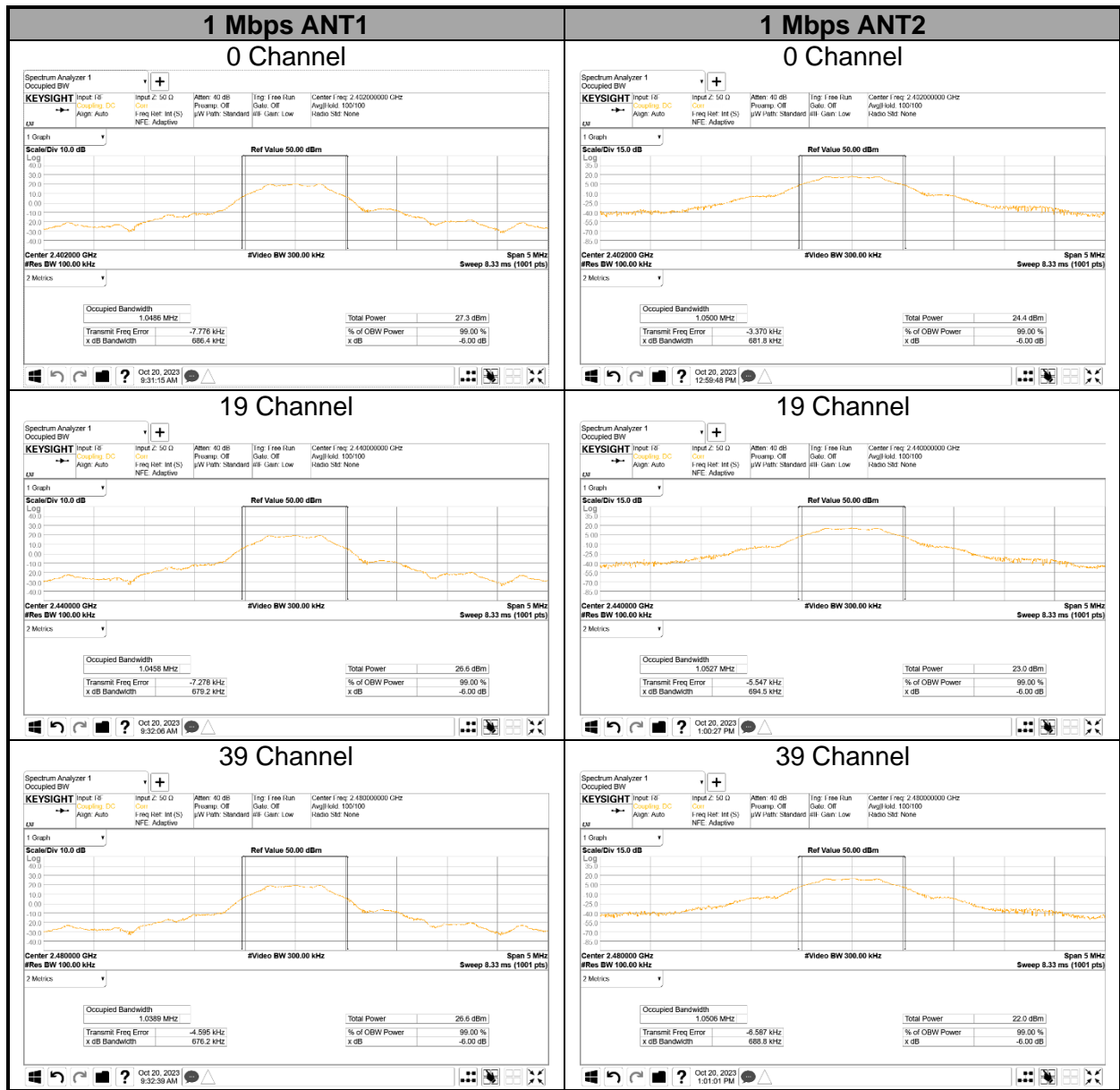
The minimum 6 dB bandwidth shall be at least 500 kHz.

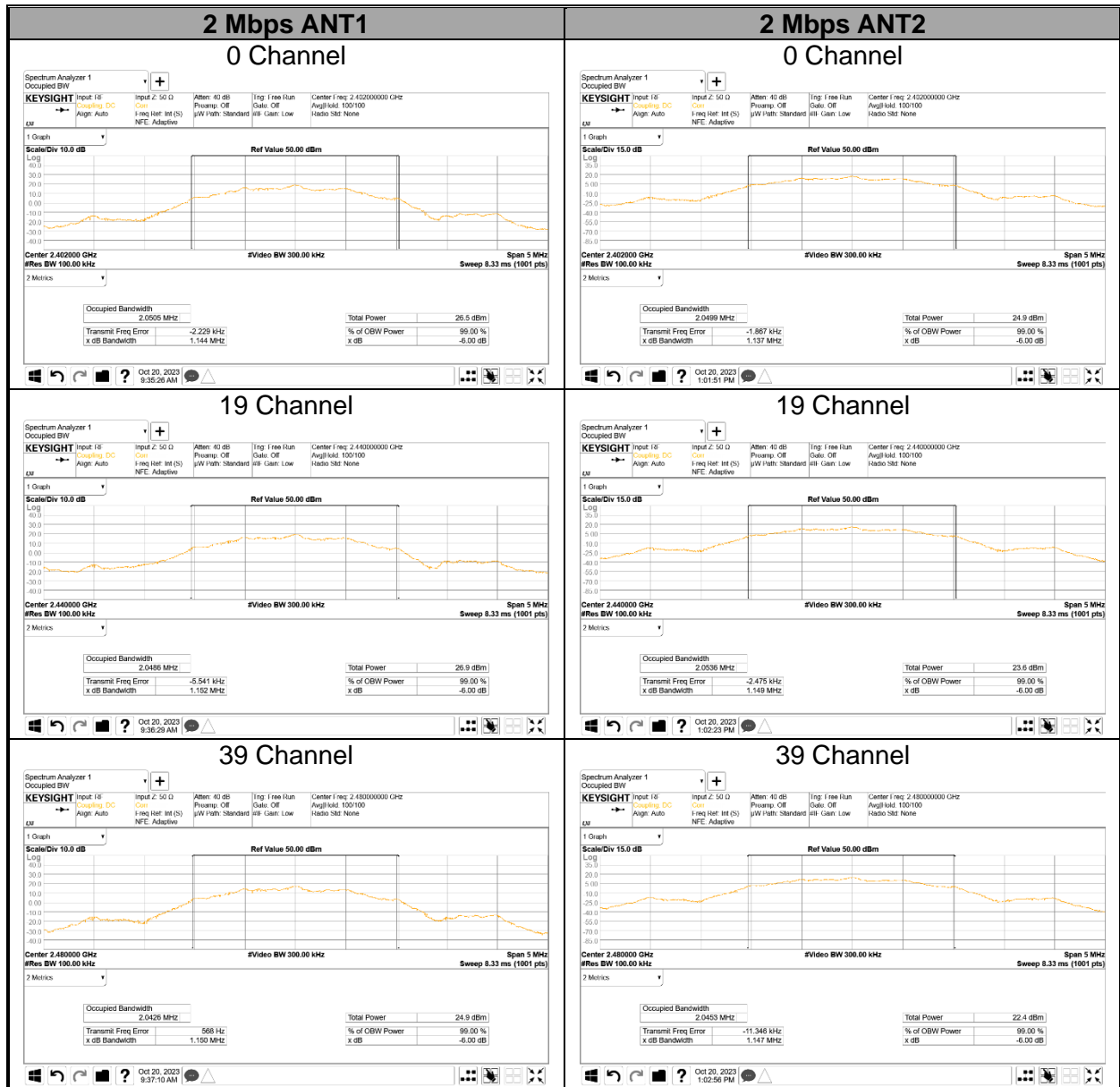
RESULTS

9.2.1. Test data

Mode	Antenna	Channel	Frequency [MHz]	6 dB Bandwidth [kHz]	Minimum Limit [kHz]
1 Mbps (37pkt)	ANT1	0	2 402	686.4	500.0
		19	2 440	679.2	
		39	2 480	676.2	
	ANT2	0	2 402	681.8	
		19	2 440	694.5	
		39	2 480	688.8	
2 Mbps (37pkt)	ANT1	0	2 402	1 144.0	
		19	2 440	1 152.0	
		39	2 480	1 150.0	
	ANT2	0	2 402	1 137.0	
		19	2 440	1 149.0	
		39	2 480	1 147.0	
Worst				676.2	500.0

9.2.2. 6 dB BANDWIDTH PLOTS





9.3. OUTPUT POWER

LIMITS

FCC §15.247 (b) (3)

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(RBW \cong DTS bandwidth).

RESULTS

9.3.1. DIVERSITY MODE TEST DATA

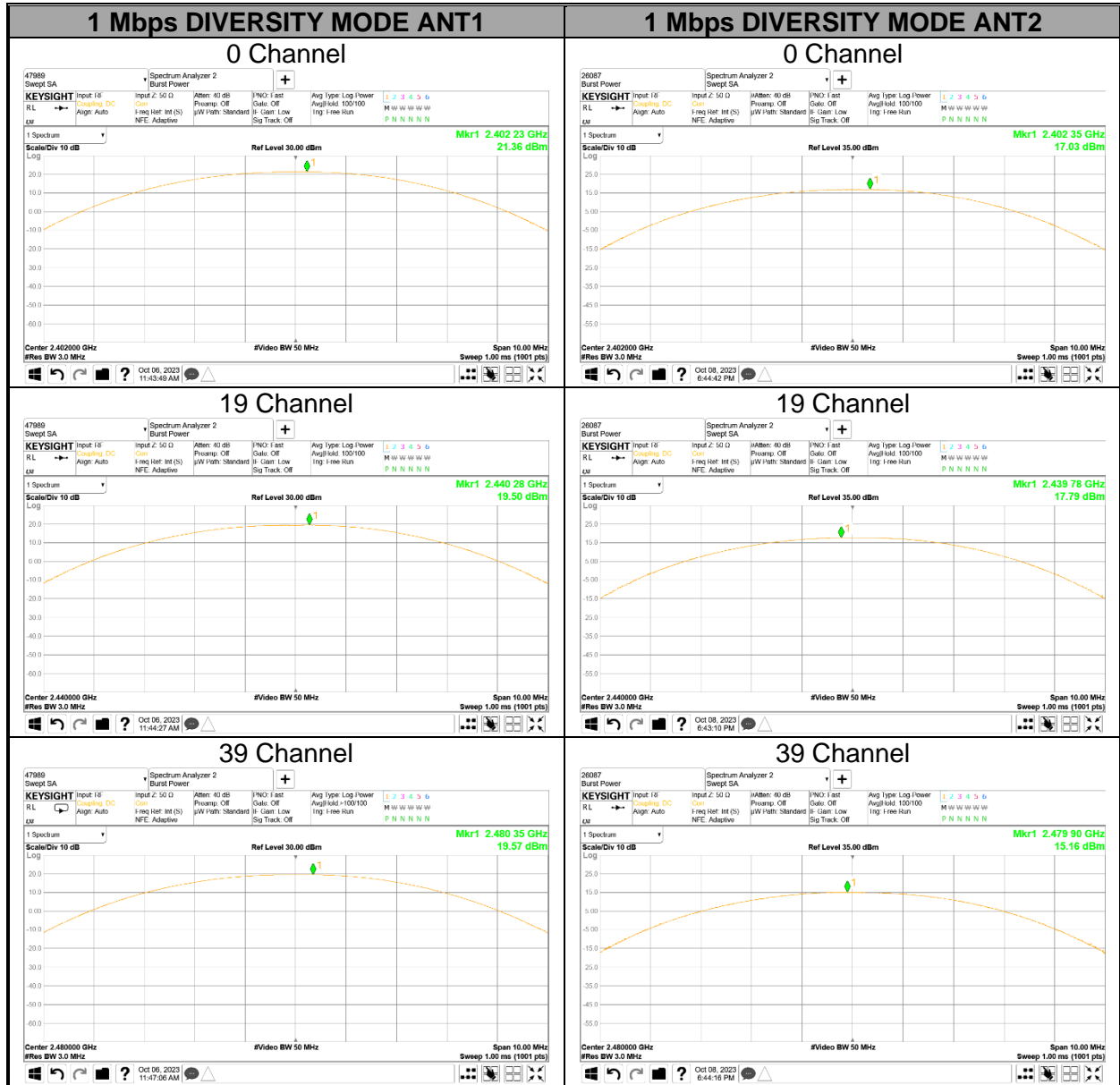
Mode	Antenna	Channel	Frequency [MHz]	Peak Output Power [dBm]	Limit [dBm]	Margin [dB]
1 Mbps (37 pkt)	ANT1	0	2 402	21.36	30.000	-8.64
		19	2 440	19.50		-10.50
		39	2 480	19.57		-10.43
	ANT2	0	2 402	17.03		-12.97
		19	2 440	17.79		-12.21
		39	2 480	15.16		-14.84
2 Mbps (37 pkt)	ANT1	0	2 402	21.19		-8.81
		19	2 440	19.51		-10.49
		39	2 480	19.69		-10.31
	ANT2	0	2 402	17.42		-12.58
		19	2 440	18.56		-11.44
		39	2 480	15.80		-14.20
Worst				21.36		-8.64

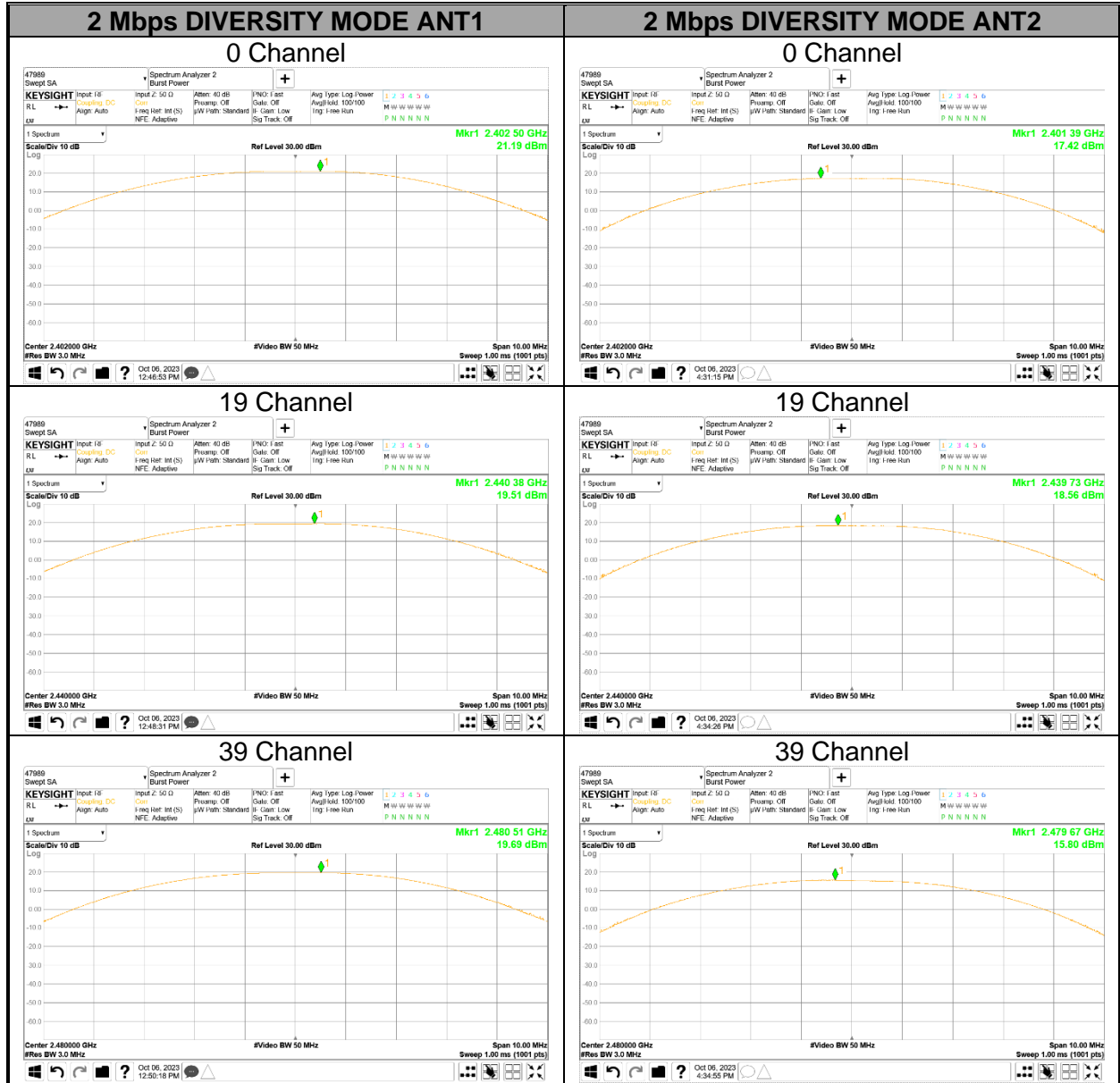
9.3.2. DUAL MODE TEST DATA

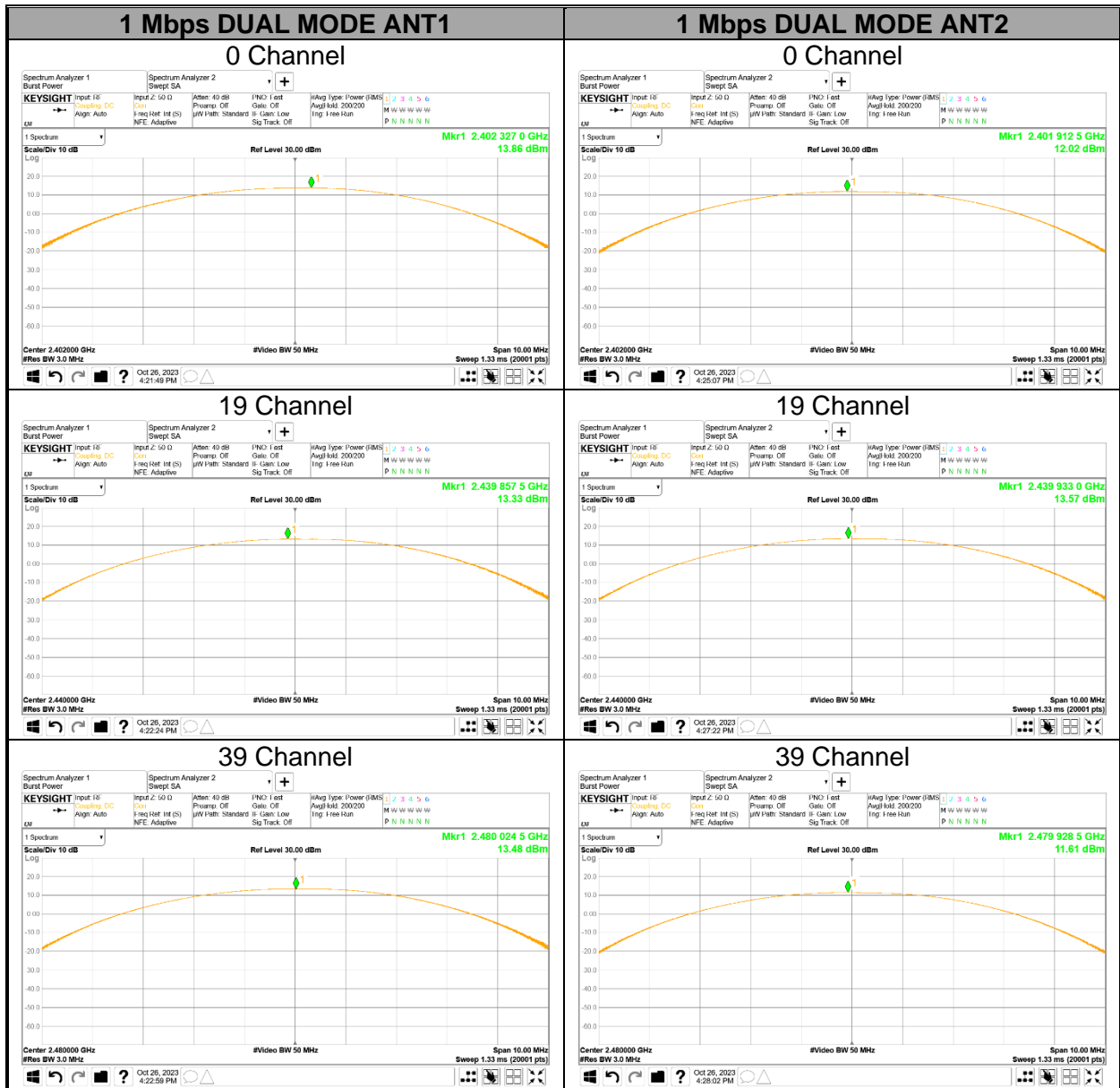
Mode	Antenna	Channel	Frequency [MHz]	Peak Output Power [dBm]	Limit [dBm]	Margin [dB]
1 Mbps (37 pkt)	DUAL ANT1	0	2 402	13.86	30.000	
		19	2 440	13.33		
		39	2 480	13.48		
	DUAL ANT2	0	2 402	12.02		
		19	2 440	13.57		
		39	2 480	11.61		
	DUAL ANT1+2	0	2 402	16.05		-13.95
		19	2 440	16.46		-13.54
		39	2 480	15.66		-14.34
2 Mbps (37 pkt)	DUAL ANT1	0	2 402	13.86	30.000	
		19	2 440	13.32		
		39	2 480	13.48		
	DUAL ANT2	0	2 402	12.08		
		19	2 440	13.66		
		39	2 480	11.73		
	DUAL ANT1+2	0	2 402	16.07		-13.93
		19	2 440	16.50		-13.50
		39	2 480	15.70		-14.30
Worst				16.50		-13.50

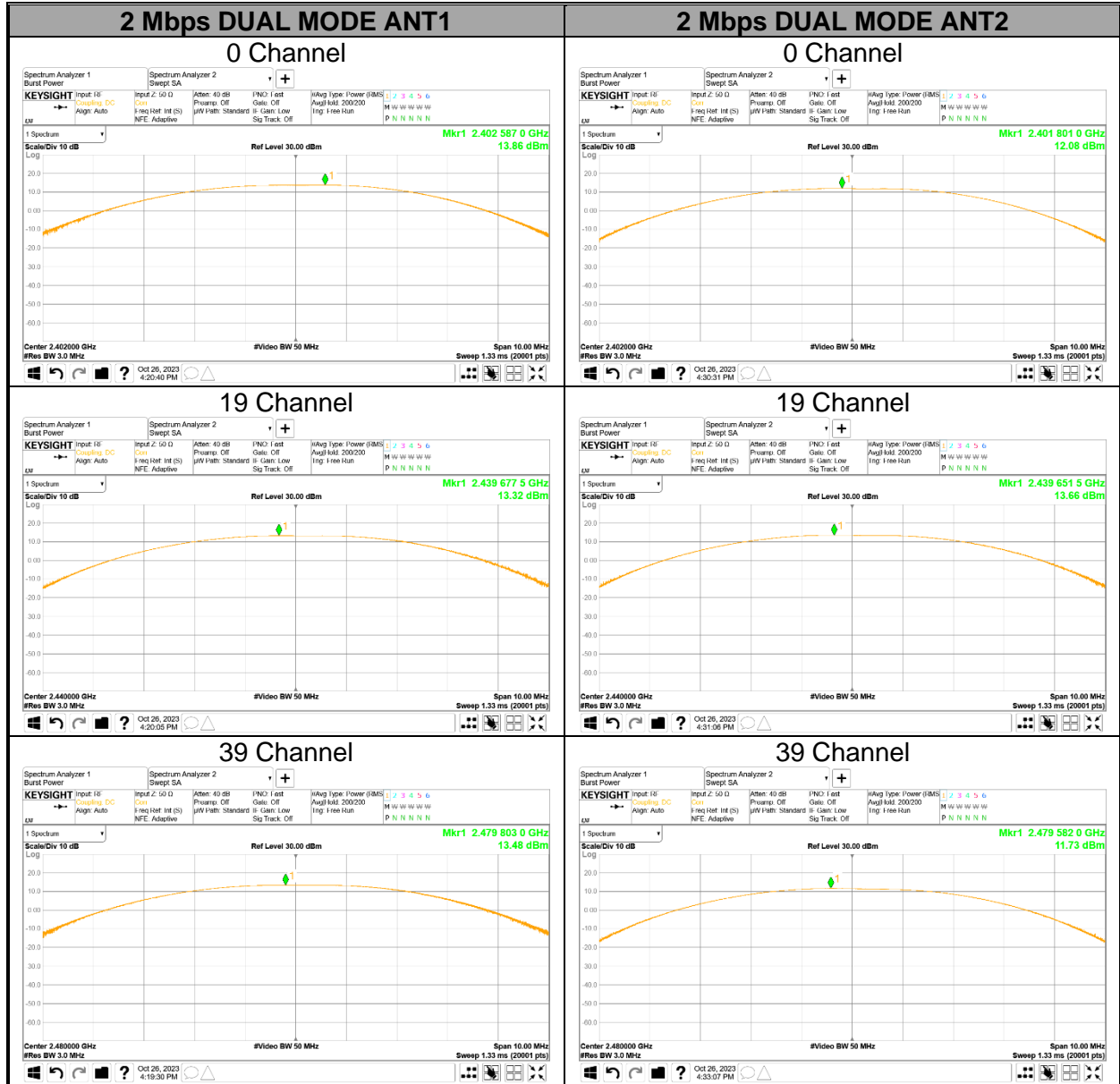
Note. Since sum of correlated antenna gain(-0.12 dBi) does not exceed 6dBi, the test limit was set to 30 dBm.

9.3.3. 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. DIVERSITY MODE TEST DATA

Mode	Antenna	Channel	Frequency [MHz]	Average Output Power [dBm]	Average Output Power [mW]
1 Mbps (37pkt)	ANT1	0	2 402	20.802	120.282
		19	2 440	19.175	82.699
		39	2 480	19.282	84.762
	ANT2	0	2 402	16.482	44.484
		19	2 440	17.354	54.375
		39	2 480	14.554	28.536
2 Mbps (37 pkt)	ANT1	0	2 402	20.554	113.606
		19	2 440	19.008	79.579
		39	2 480	19.199	83.157
	ANT2	0	2 402	16.837	48.273
		19	2 440	17.926	62.030
		39	2 480	14.878	30.747

9.4.2. DUAL MODE TEST DATA

Mode	Antenna	Channel	Frequency [MHz]	Average Output Power [dBm]	Average Output Power [mW]
1 Mbps (37pkt)	DUAL ANT1	0	2 402	13.40	
		19	2 440	13.04	
		39	2 480	13.13	
	DUAL ANT2	0	2 402	11.78	
		19	2 440	13.52	
		39	2 480	11.26	
	DUAL ANT1+2	0	2 402	15.68	36.95
		19	2 440	16.29	42.61
		39	2 480	15.30	33.92
2 Mbps (37 pkt)	DUAL ANT1	0	2 402	13.36	
		19	2 440	12.85	
		39	2 480	13.02	
	DUAL ANT2	0	2 402	11.61	
		19	2 440	13.18	
		39	2 480	11.16	
	DUAL ANT1+2	0	2 402	15.58	36.15
		19	2 440	16.03	40.08
		39	2 480	15.20	33.09

9.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (e)

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

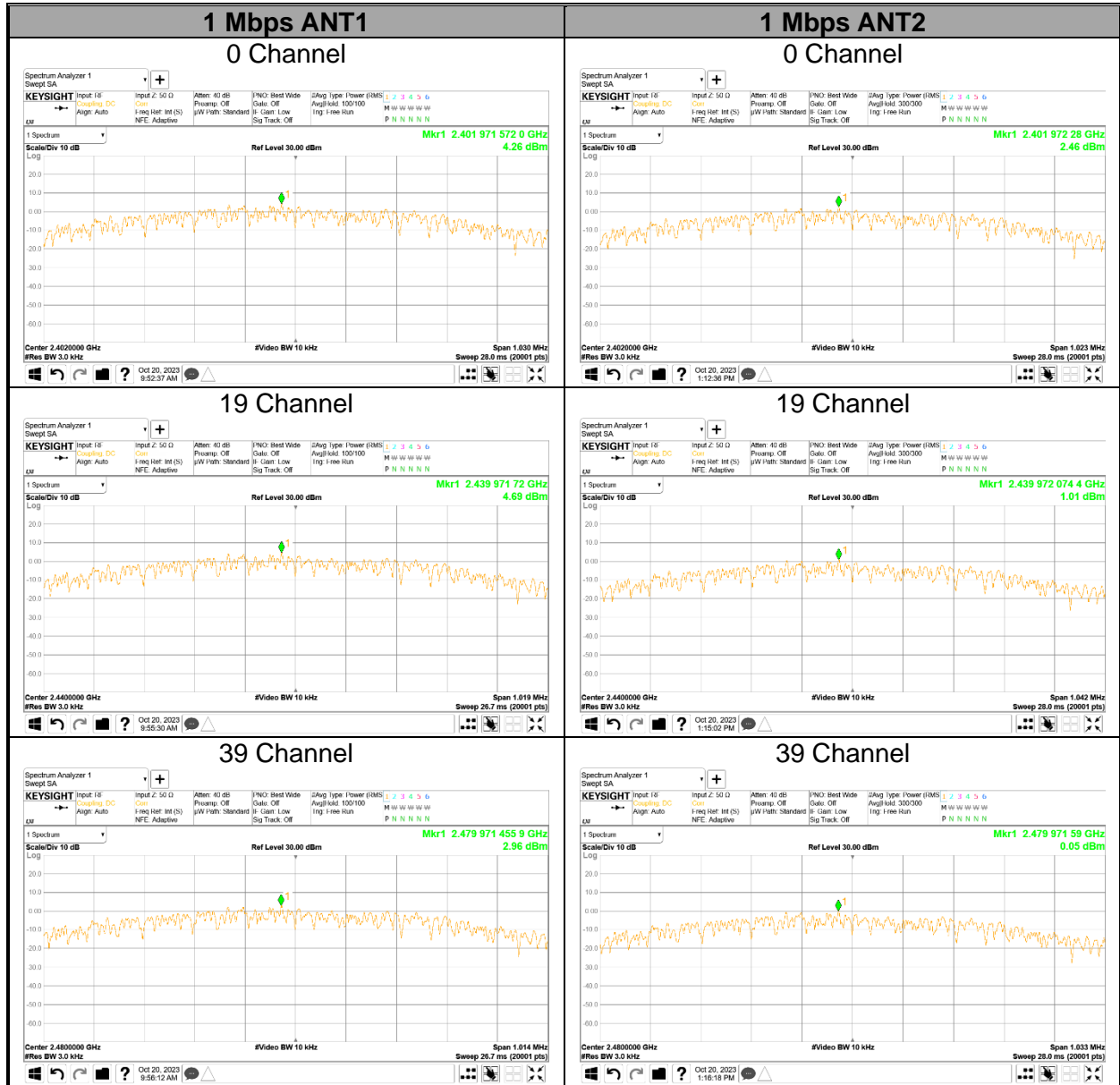
ANSI C63.10-2013, Section 11.10.2 Method PKPSD (peak PSD)

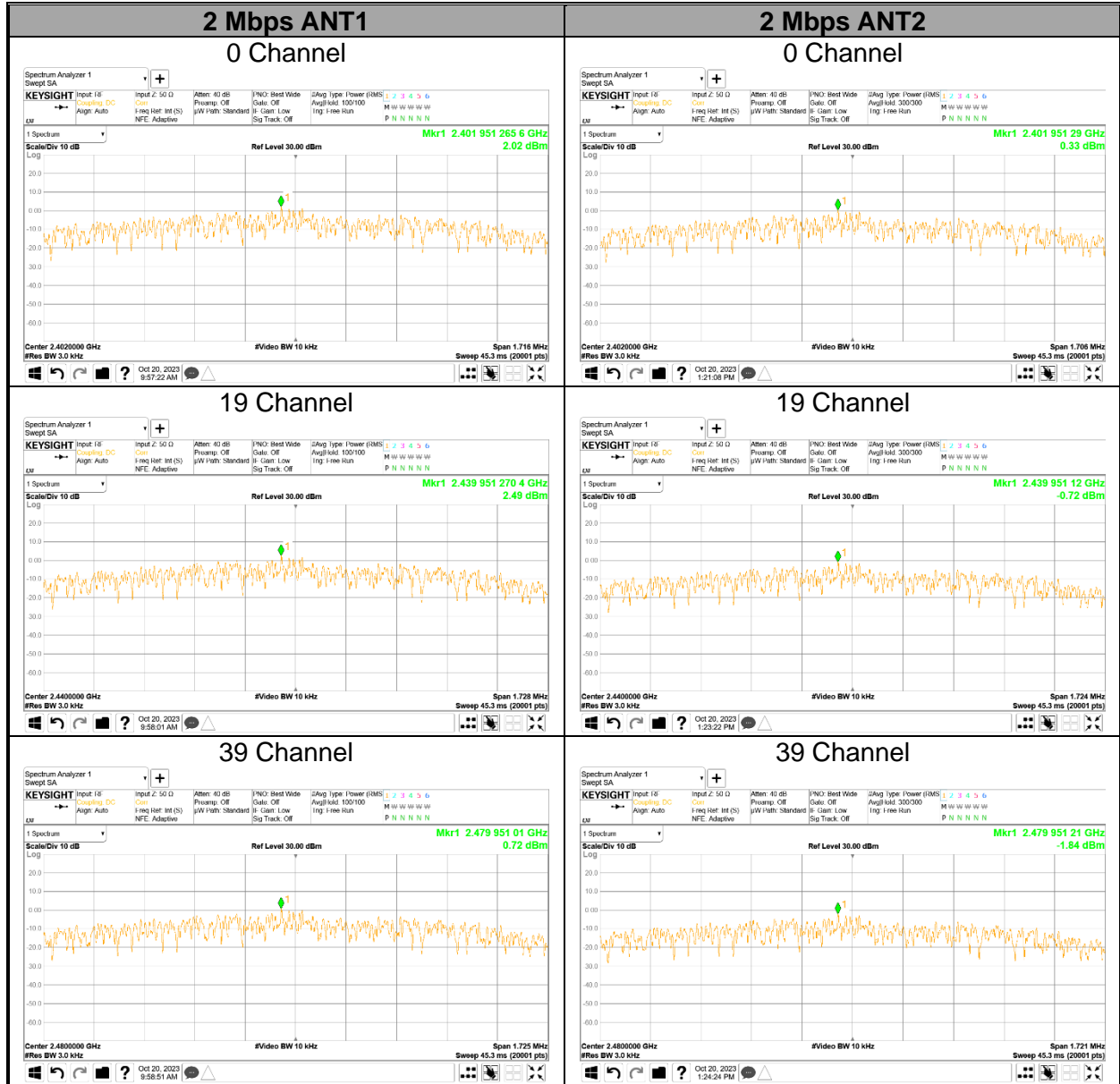
RESULTS

9.5.1. Test data

Mode	Antenna	Channel	Frequency [MHz]	PSD [dBm/3kHz]	Limit [dBm/3kHz]	Margin [dB]
1 Mbps (37pkt)	ANT1	0	2 402	4.26	8.00	-3.74
		19	2 440	4.69		-3.31
		39	2 480	2.96		-5.04
	ANT2	0	2 402	2.46		-5.54
		19	2 440	1.01		-6.99
		39	2 480	0.05		-7.95
2 Mbps (37 pkt)	ANT1	0	2 402	2.02		-5.98
		19	2 440	2.49		-5.51
		39	2 480	0.72		-7.28
	ANT2	0	2 402	0.33	-7.67	
		19	2 440	-0.72	-8.72	
		39	2 480	-1.84	-9.84	
Worst				4.69	-3.31	

9.5.2. PSD TEST PLOTS





9.6. CONDUCTED SPURIOUS EMISSIONS

LIMITS

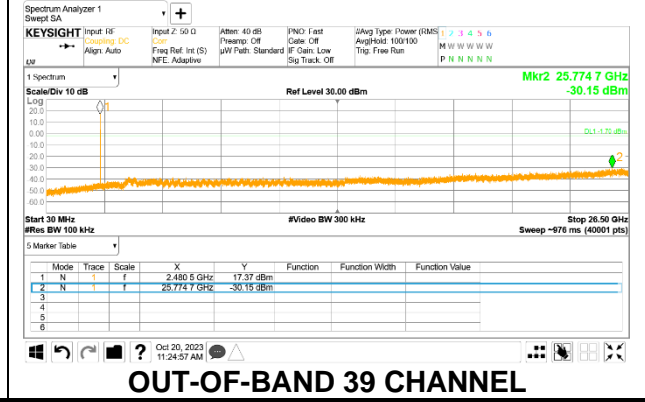
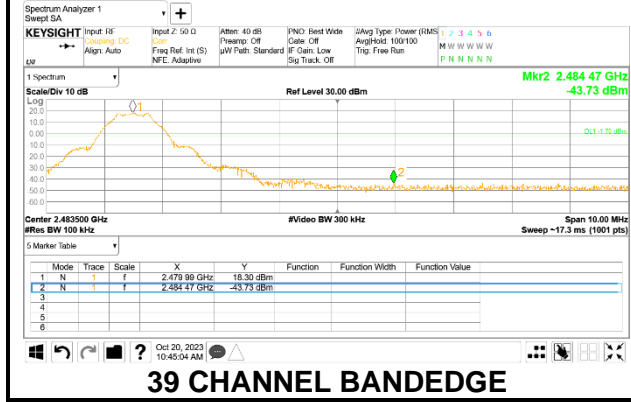
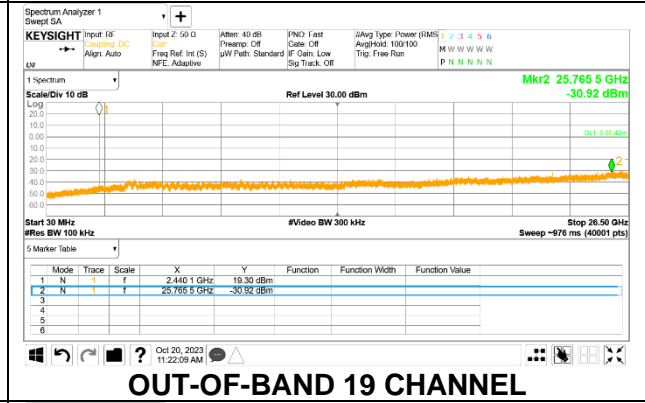
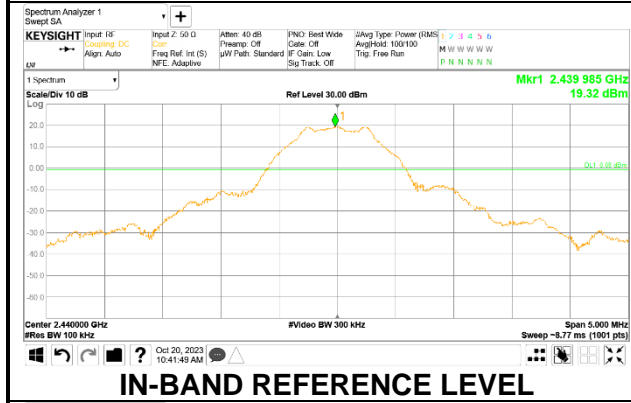
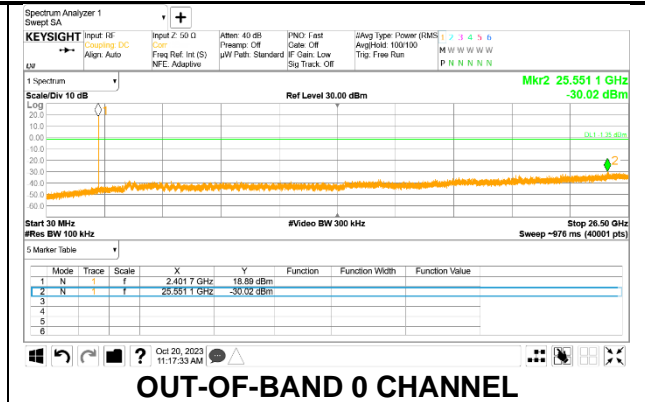
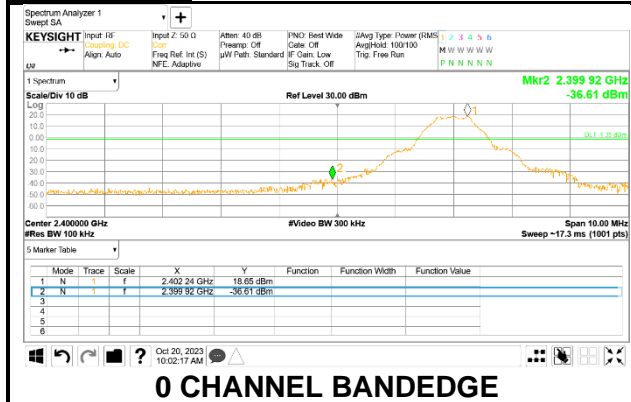
FCC §15.247 (d)

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

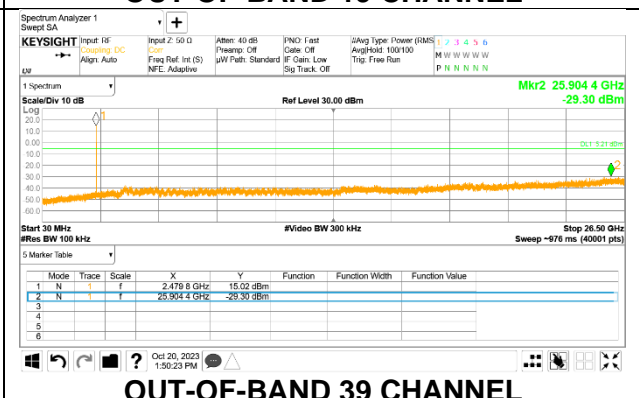
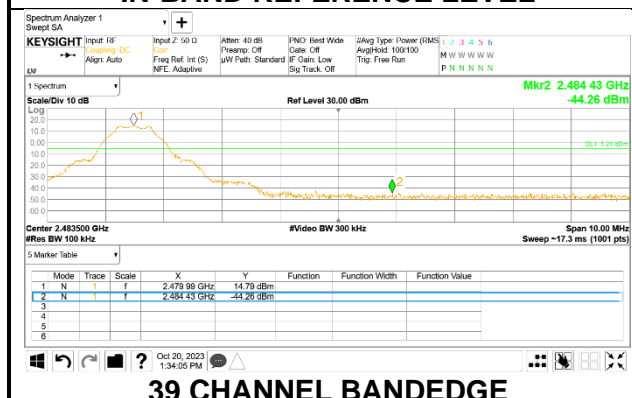
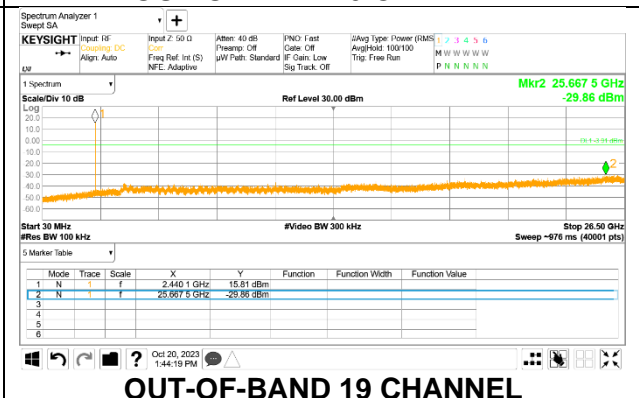
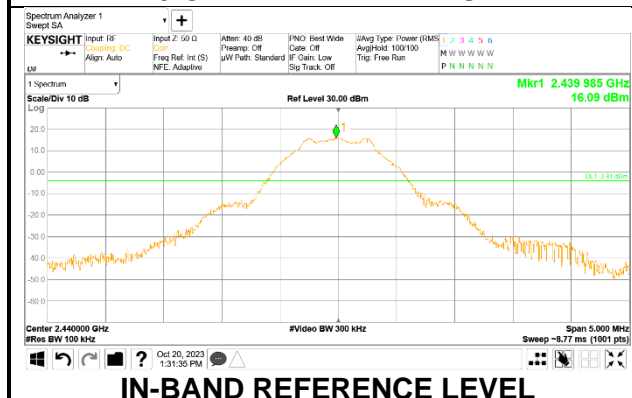
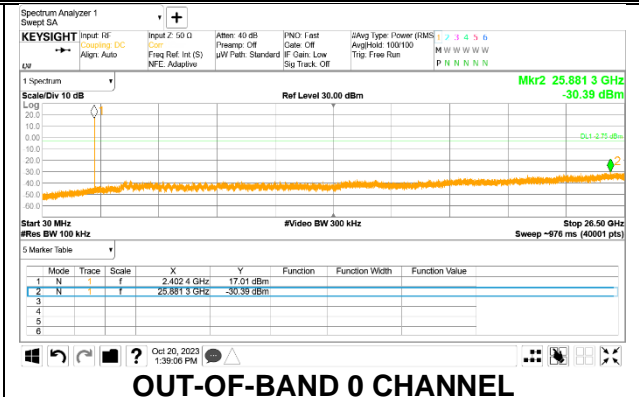
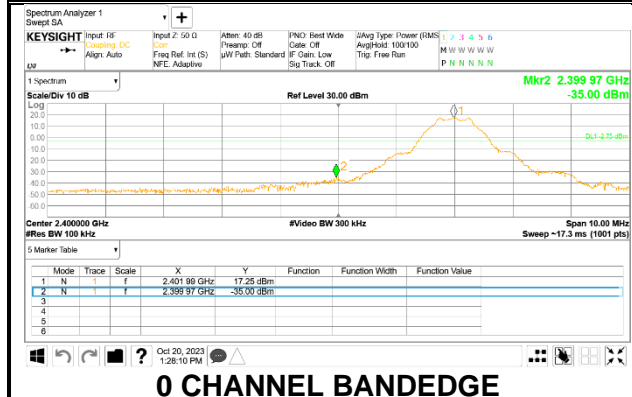
RESULTS

9.6.1. Test plot

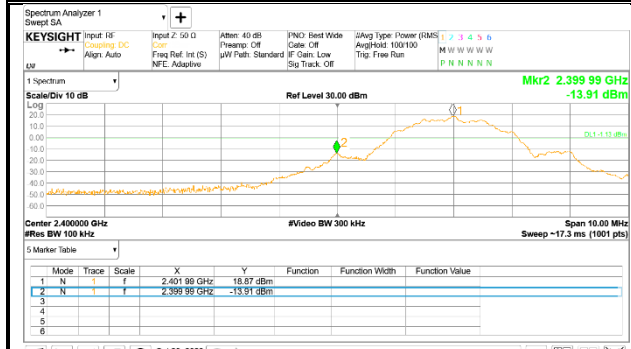
1 Mbps ANT1



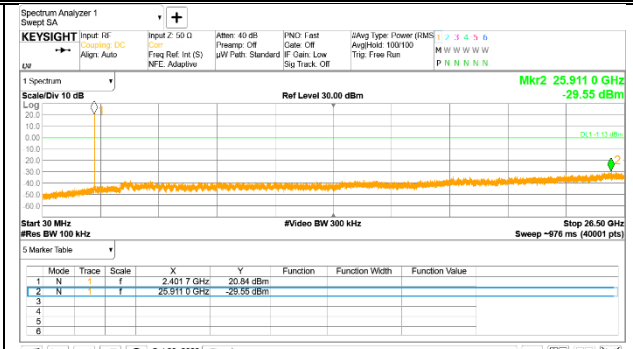
1 Mbps ANT2



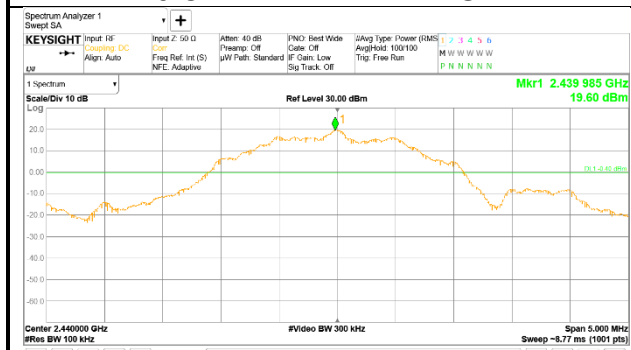
2 Mbps ANT1



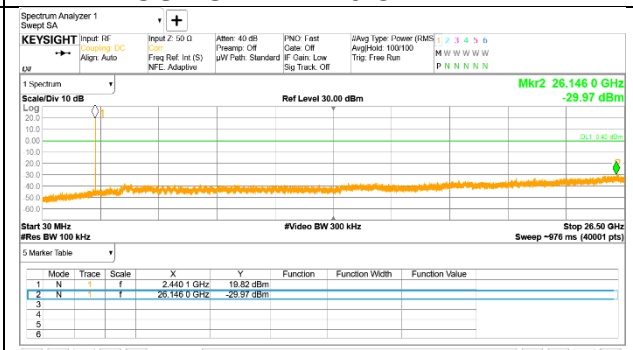
0 CHANNEL BANDEDGE



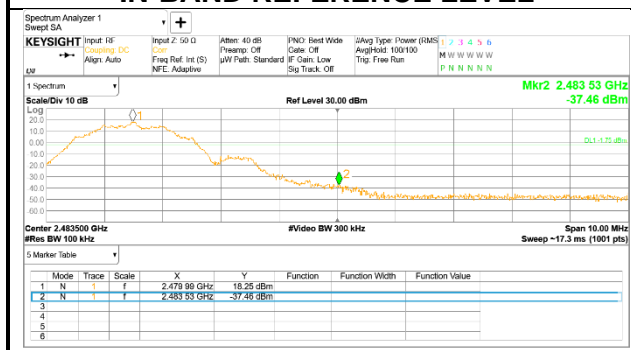
OUT-OF-BAND 0 CHANNEL



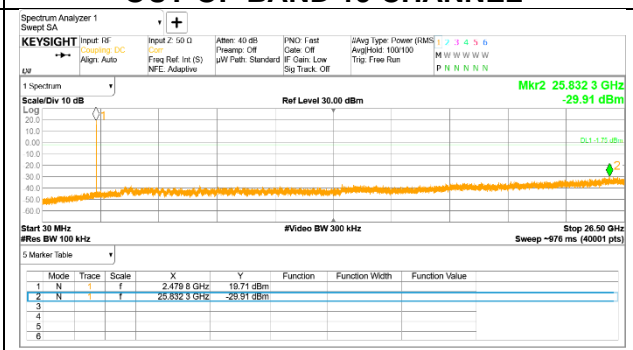
IN-BAND REFERENCE LEVEL



OUT-OF-BAND 19 CHANNEL

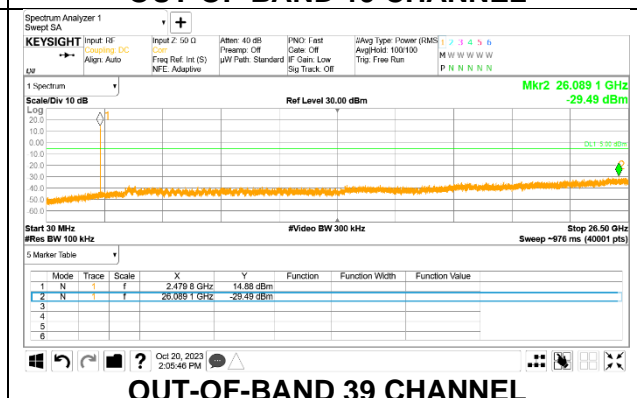
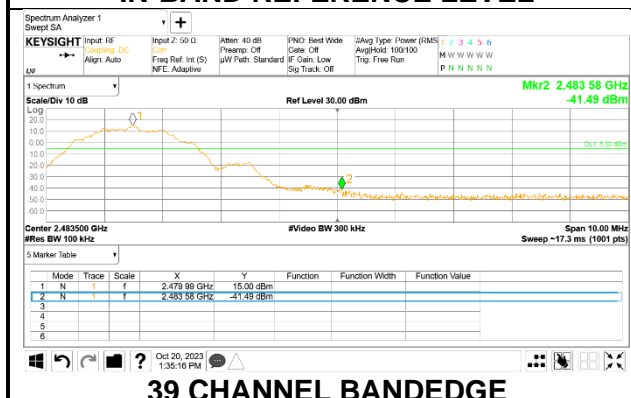
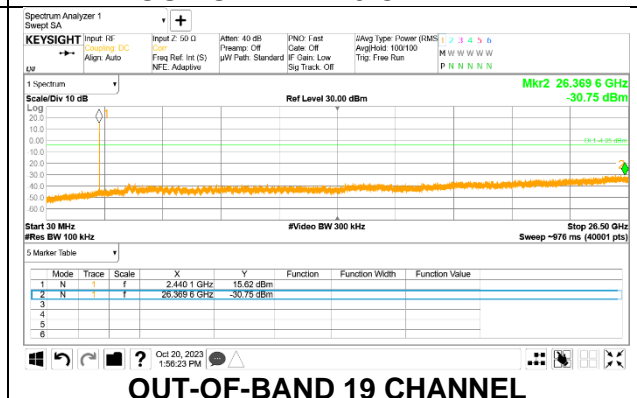
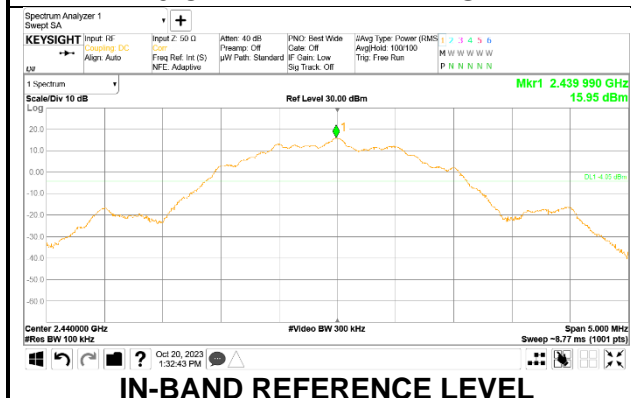
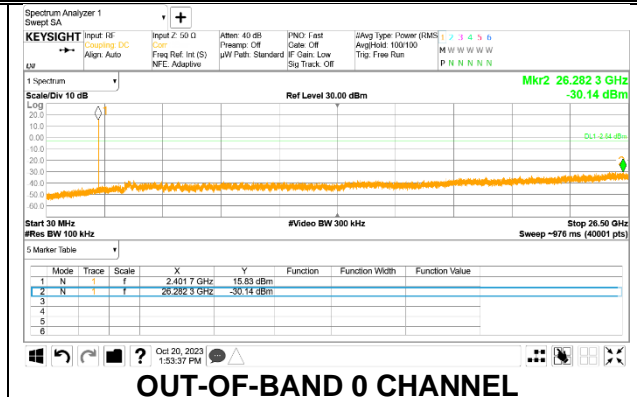
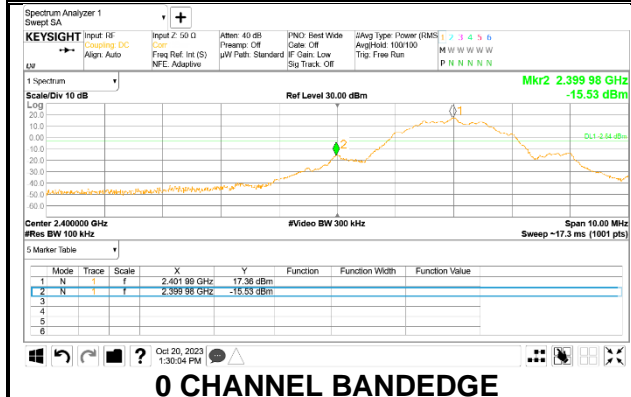


39 CHANNEL BANDEDGE



OUT-OF-BAND 39 CHANNEL

2 Mbps ANT2



10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Limits for radiated disturbance of an intentional radiator		
Frequency range (MHz)	Limits ($\mu\text{V}/\text{m}$)	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 - 216	150**	3
216 – 960	200**	3
Above 960	500	3

** 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.

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 1 Mbps, DCF = $10\log(1/0.517)=2.869$ dB (Spectrum Analyzer round it up to 2.87 dB) and for 2 Mbps, DCF = $10\log(1/0.387)=4.124$ dB (Spectrum Analyzer round it up to 4.12 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.

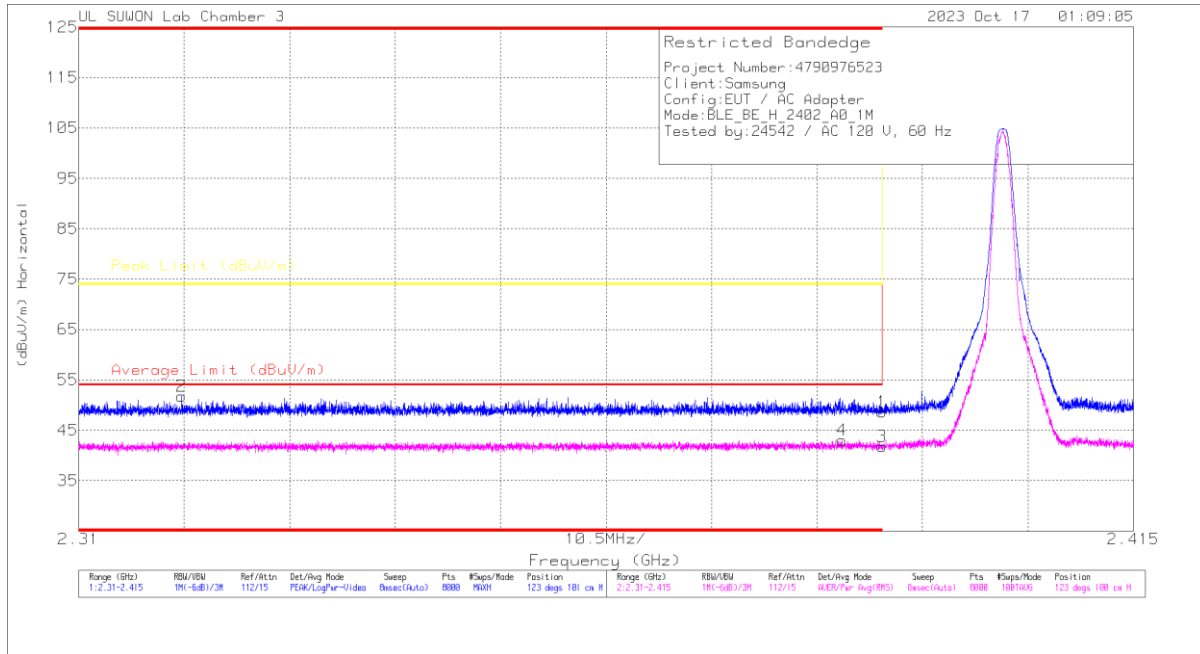
Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the one of tests made in an open field based on KDB 414788.

10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. 1 Mbps ANT1

BANDEDGE (0 CHANNEL)

HORIZONTAL RESULT

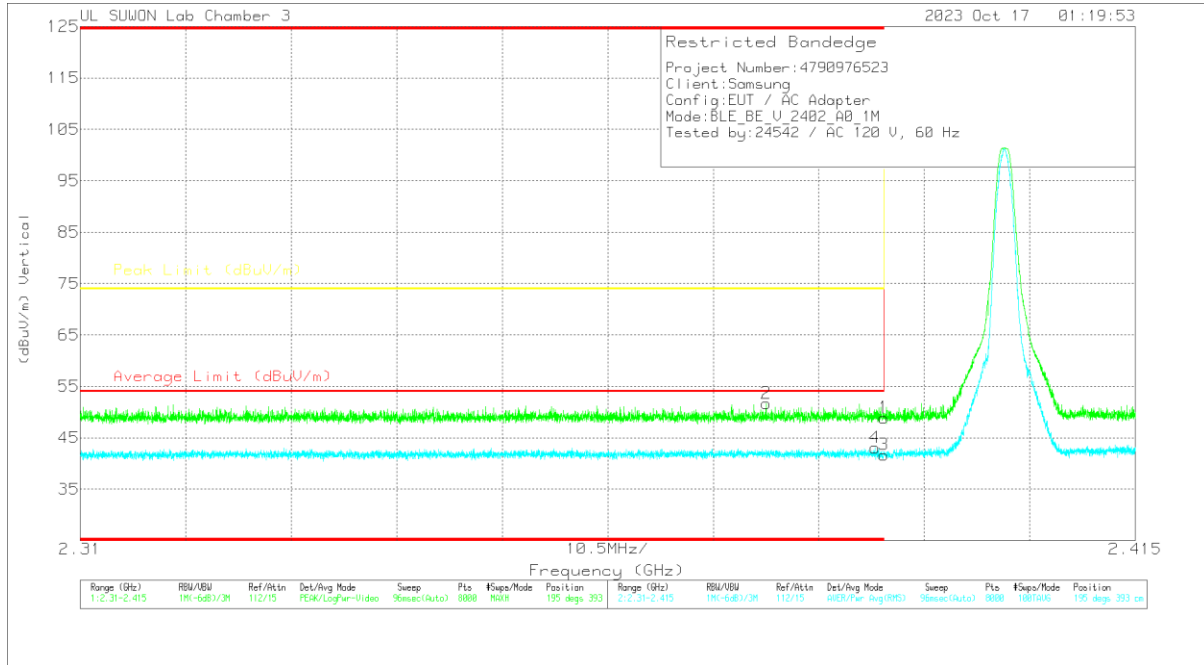


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1m))	Path Loss(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	41.38	Pk	32.1	-24.8	0	48.68	-	-	74	-25.32	123	101	H
2	* 2.32024	44.63	Pk	31.9	-24.8	0	51.73	-	-	74	-22.27	123	101	H
3	* 2.39	31.63	RMS	32.1	-24.8	2.87	41.8	54	-12.2	-	-	123	100	H
4	* 2.38598	32.95	RMS	32.1	-24.9	2.87	43.02	54	-10.98	-	-	123	100	H

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

VERTICAL RESULT



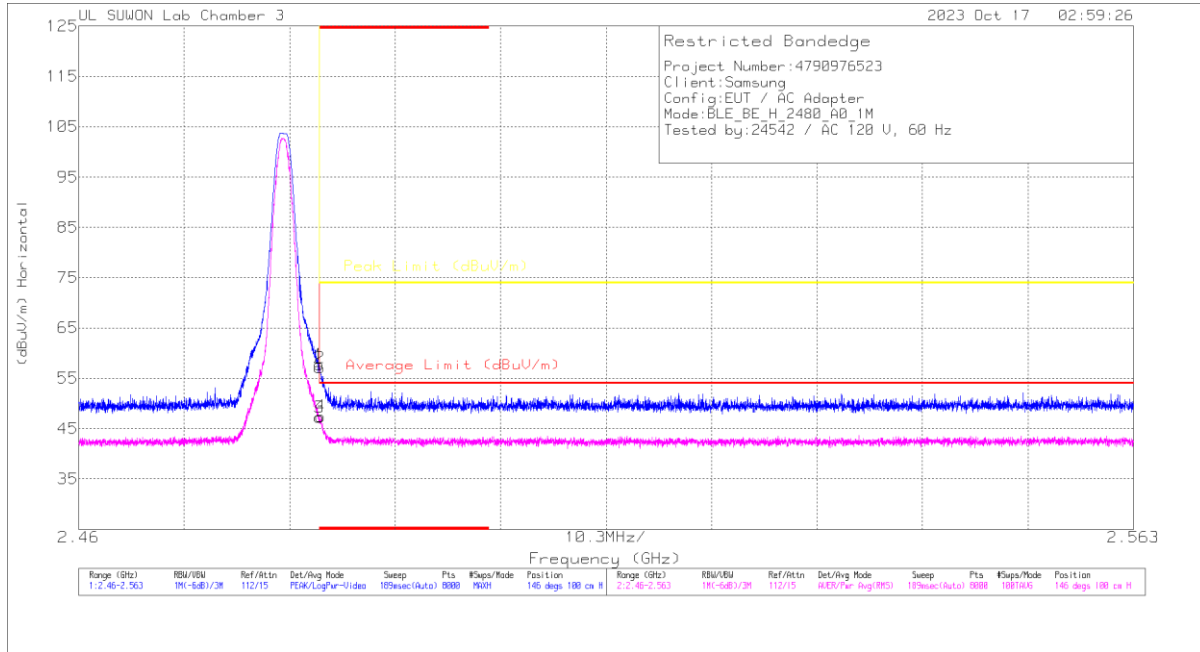
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1m))	Path Loss(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	-24.8	0	48.88	-	-	74	-25.12	195	393	V
2	* 2.37826	44.41	Pk	32.1	-24.8	0	51.71	-	-	74	-22.29	195	393	V
3	* 2.39	31.52	RMS	32.1	-24.8	2.87	41.69	54	-12.31	-	-	195	393	V
4	* 2.38912	32.89	RMS	32.1	-24.8	2.87	43.06	54	-10.94	-	-	195	393	V

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

BANDEDGE (39 CHANNEL)

HORIZONTAL RESULT

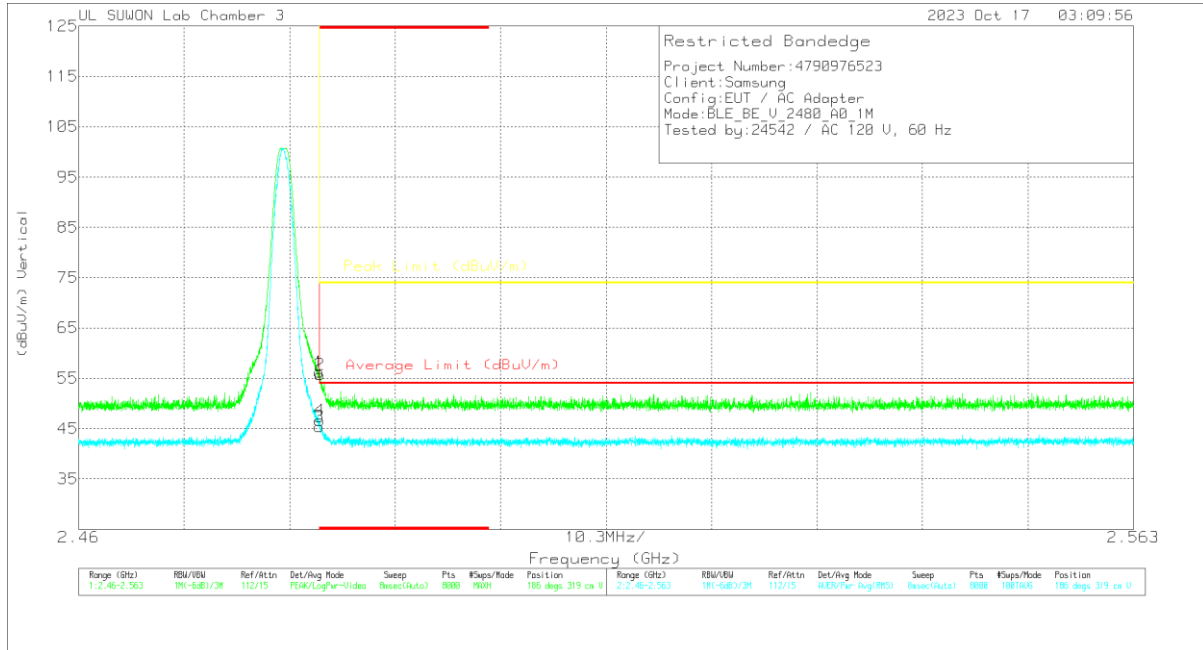


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1m))	Path Loss(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	50.16	Pk	32.4	-24.8	0	57.76	-	-	74	-16.24	146	100	H
2	* 2.48353	49.49	Pk	32.4	-24.8	0	57.09	-	-	74	-16.91	146	100	H
3	* 2.4835	36.75	RMS	32.4	-24.8	2.87	47.22	54	-6.78	-	-	146	100	H
4	* 2.4836	36.98	RMS	32.4	-24.8	2.87	47.45	54	-6.55	-	-	146	100	H

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

VERTICAL RESULT



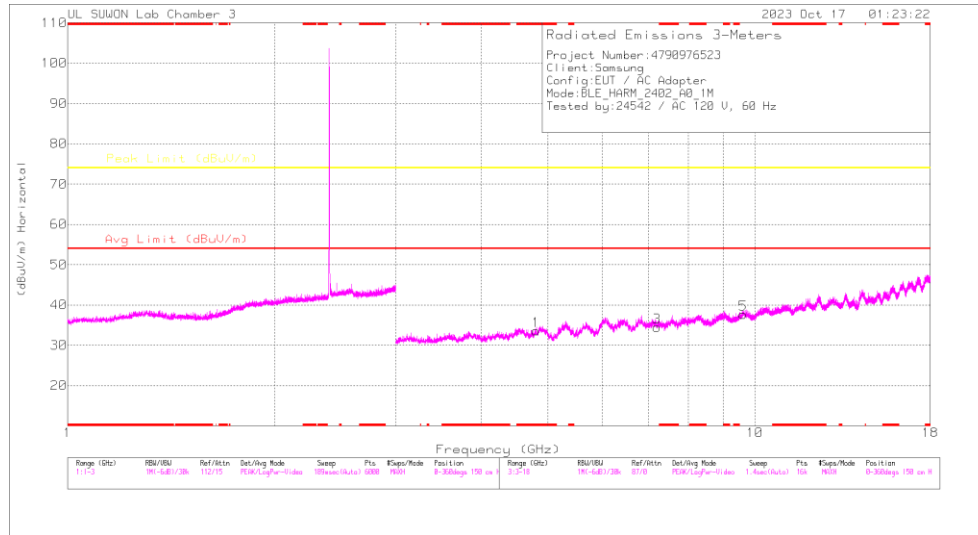
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1m))	Path Loss(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	49.65	Pk	32.4	-24.8	0	56.25	-	-	74	-17.75	186	319	V
2	* 2.48358	48.16	Pk	32.4	-24.8	0	55.76	-	-	74	-18.24	186	319	V
3	* 2.4835	34.89	RMS	32.4	-24.8	2.87	45.36	54	-8.64	-	-	186	319	V
4	* 2.48353	36.15	RMS	32.4	-24.8	2.87	46.62	54	-7.38	-	-	186	319	V

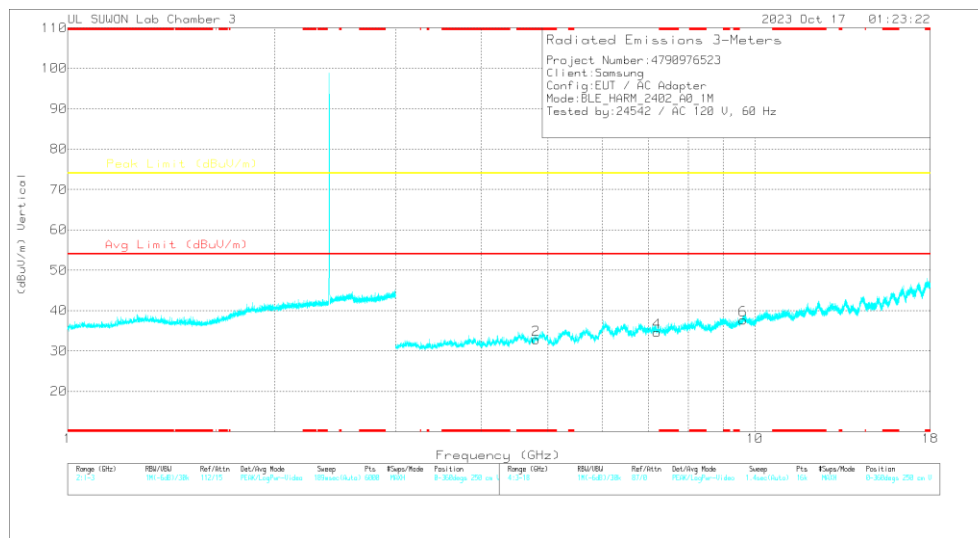
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector
 RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

0 CHANNEL RESULTS



HORIZONTAL



VERTICAL

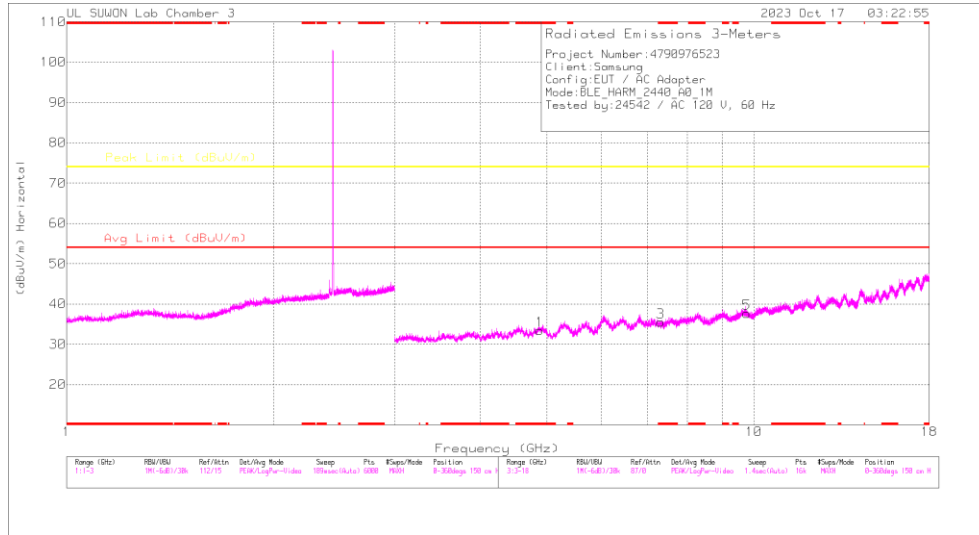
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

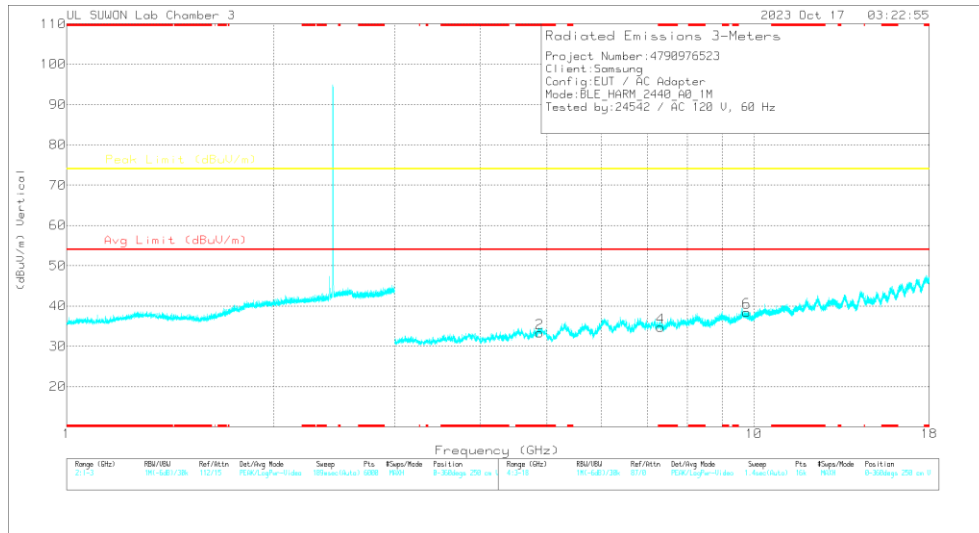
Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1/m))	Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.8003	39.5	PK2	34.3	-30.1	0	43.7	-	-	74	-30.3	0	100	H
* 4.80405	39.66	PK2	34.3	-30.1	0	43.86	-	-	74	-30.14	0	100	V
7.20541	34.91	PK2	35.8	-25.9	0	44.81	-	-	74	-29.19	0	100	H
7.20589	35.48	PK2	35.8	-25.9	0	45.38	-	-	74	-28.62	0	100	V
9.60788	32.68	PK2	36.7	-21.7	0	47.68	-	-	74	-26.32	0	100	H
9.61124	32.68	PK2	36.7	-21.8	0	47.58	-	-	74	-26.42	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK2 - KDB558074 Method: Maximum Peak

19 CHANNEL RESULTS



HORIZONTAL



VERTICAL

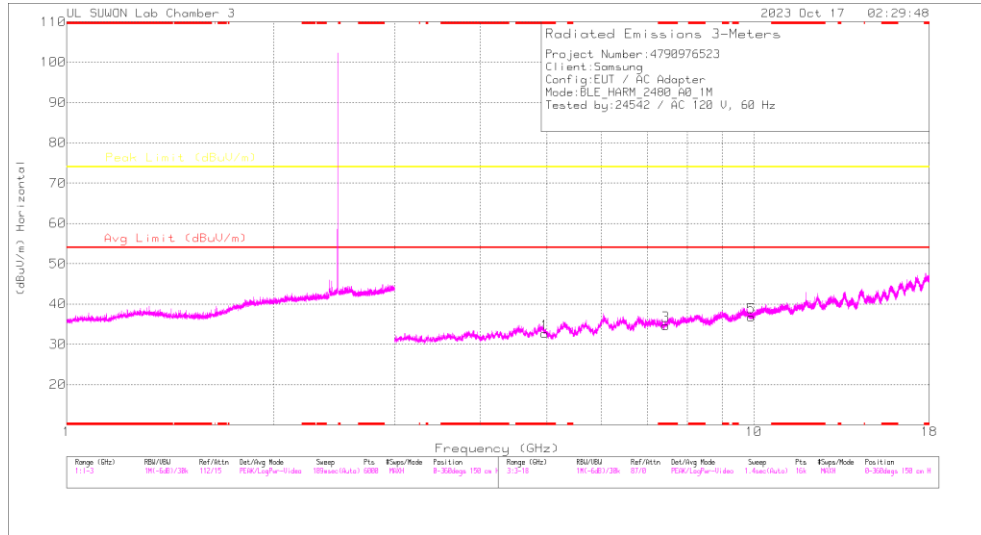
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

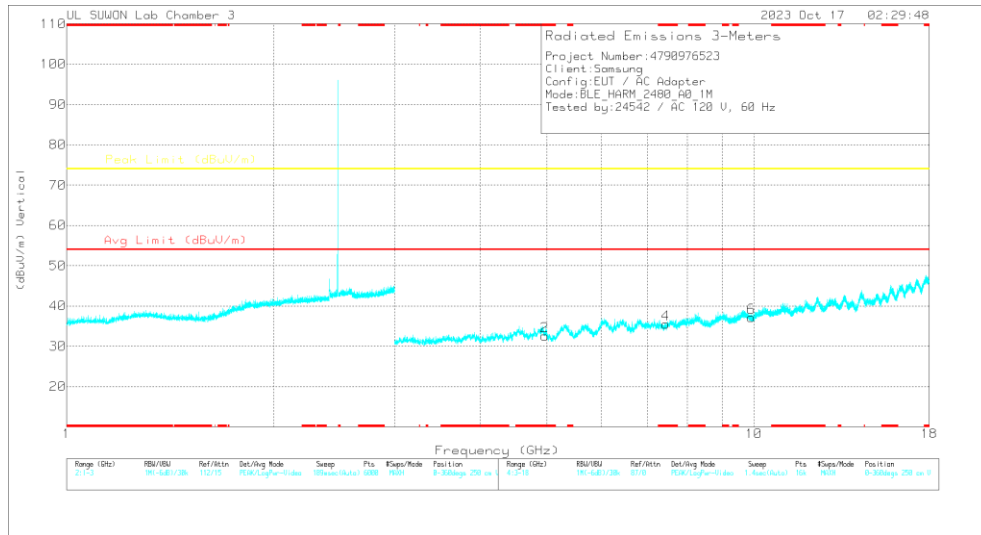
Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1/m))	Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.88021	39.61	PK2	34.2	-29.9	0	43.91	-	-	74	-30.09	0	100	H
* 4.88405	40.1	PK2	34.2	-29.9	0	44.4	-	-	74	-29.6	0	100	V
* 7.31899	34.95	PK2	35.8	-25.4	0	45.35	-	-	74	-28.65	0	100	H
* 7.32322	34.86	PK2	35.8	-25.5	0	45.16	-	-	74	-28.84	0	100	V
9.75824	32.33	PK2	36.9	-21.5	0	47.73	-	-	74	-26.27	0	100	H
9.75918	32.83	PK2	36.9	-21.5	0	48.23	-	-	74	-25.77	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK2 - KDB558074 Method: Maximum Peak

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

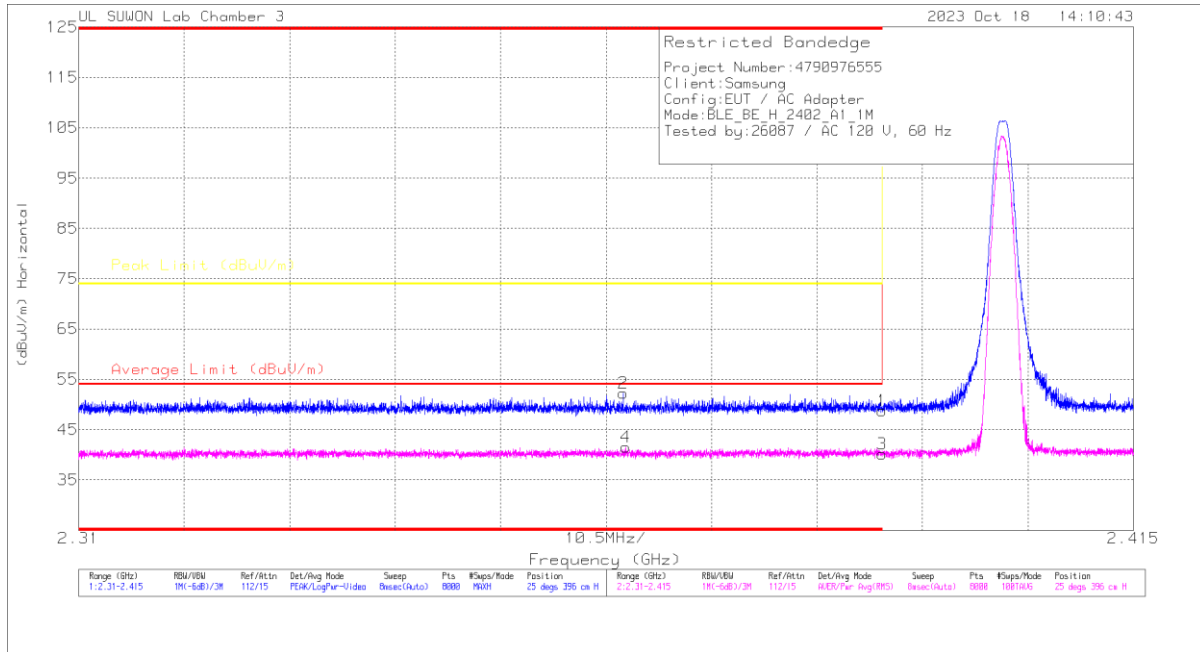
Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1/m))	Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.96004	39.43	PK2	34.3	-30	0	43.73	-	-	74	-30.27	0	100	H
* 4.95929	39.54	PK2	34.3	-30	0	43.84	-	-	74	-30.16	0	100	V
* 7.43855	35.12	PK2	35.7	-25.2	0	45.62	-	-	74	-28.38	0	100	H
* 7.43721	34.67	PK2	35.7	-25.2	0	45.17	-	-	74	-28.83	0	100	V
9.92491	32.6	PK2	37.1	-21.3	0	48.4	-	-	74	-25.6	0	100	H
9.91536	31.46	PK2	37.1	-21.4	0	47.16	-	-	74	-26.84	0	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK2 - KDB558074 Method: Maximum Peak

10.2.2. 1 Mbps ANT2

BANDEDGE (0 CHANNEL)

HORIZONTAL RESULT

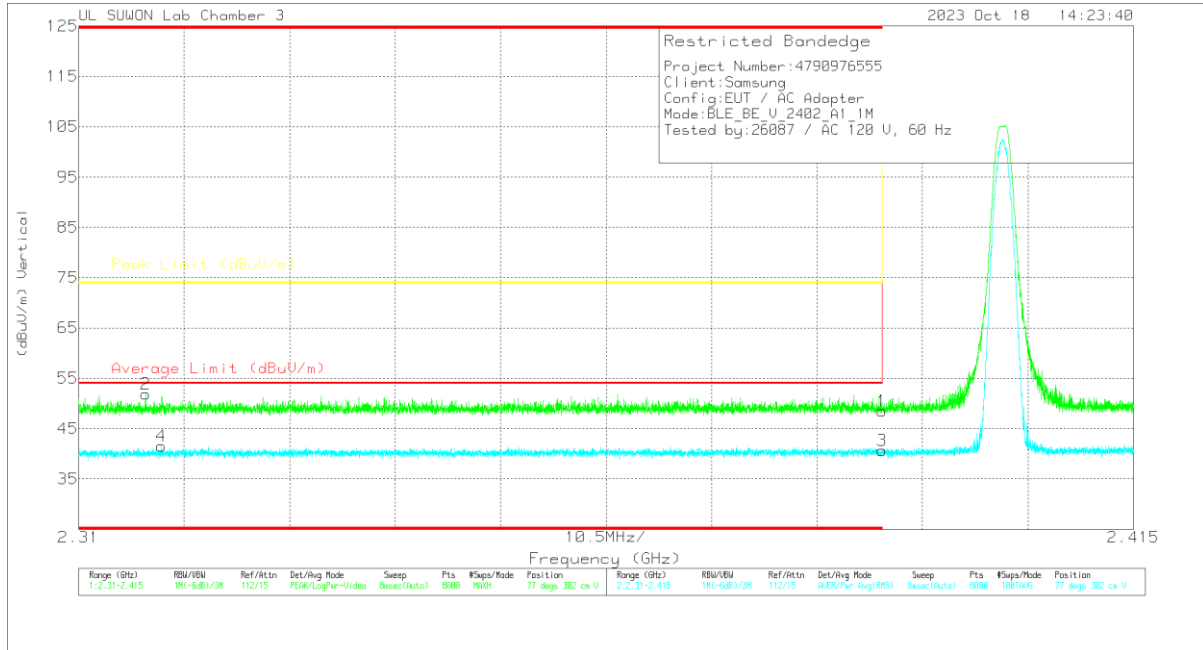


Trace Markers

Marker	Frequency (GHz)	Meas Reading (dBuV)	Det	Antenna Correction Factor (dB/11m)	Path Loss (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	* 2.30	41.41	Pk	32.1	-24.8	0	48.71	-	-	74	-25.29	25	396	H
2	* 2.3642	45.12	Pk	32	-24.9	0	52.22	-	-	74	-21.78	25	396	H
3	* 2.30	31.71	RMS	32.1	-24.8	2.87	41.88	54	-12.12	-	-	25	396	H
4	* 2.36444	33.23	RMS	32	-24.9	2.87	43.2	54	-10.8	-	-	25	396	H

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

VERTICAL RESULT



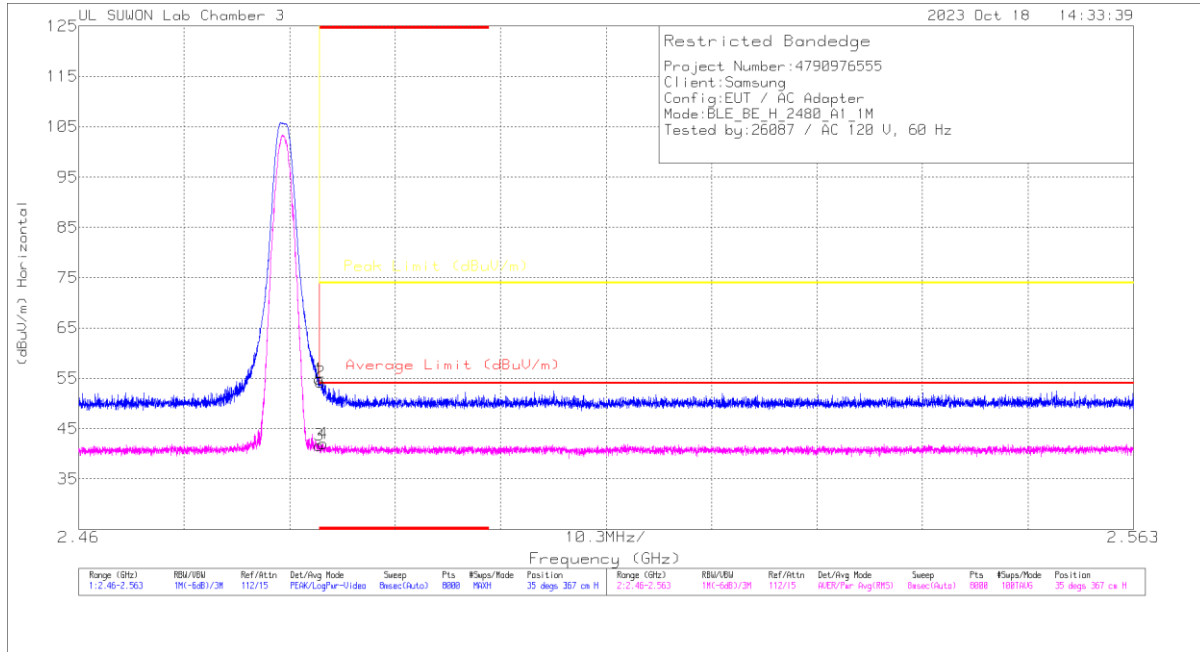
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1m))	Path Loss(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	* 2.239	41.16	Pk	32.1	-24.8	0	48.46	-	-	74	-25.54	77	302	V
2	* 2.31664	44.72	Pk	31.9	-24.8	0	51.82	-	-	74	-22.18	77	302	V
3	* 2.39	32.23	RMS	32.1	-24.8	2.87	42.4	54	-11.6	-	-	77	302	V
4	* 2.31824	33.35	RMS	31.9	-24.9	2.87	43.22	54	-10.78	-	-	77	302	V

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

BANDEDGE (39 CHANNEL)

HORIZONTAL RESULT



Trace Markers

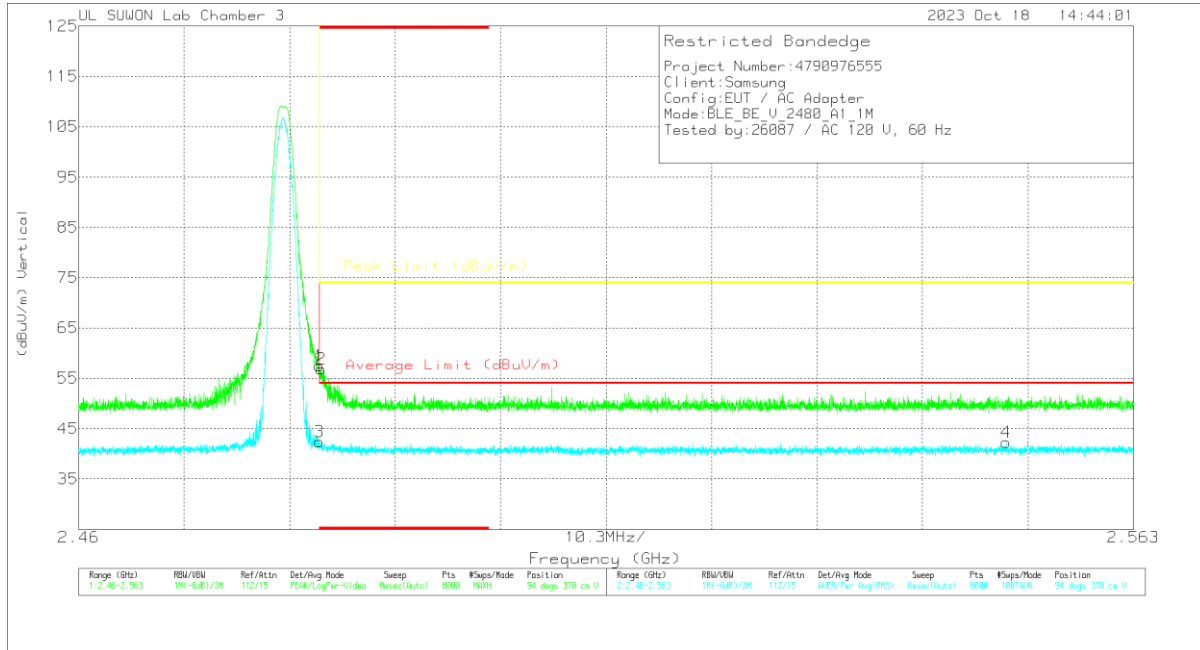
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1m))	Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	47.22	Pk	32.4	-24.8	0	54.82	-	-	74	-19.18	35	367	H
2	* 2.48362	46.67	Pk	32.4	-24.8	0	54.27	-	-	74	-19.73	35	367	H
3	* 2.4835	32.97	RMS	32.4	-24.8	2.87	43.44	54	-10.56	-	-	35	367	H
4	* 2.48384	33.32	RMS	32.4	-24.8	2.87	43.79	54	-10.21	-	-	35	367	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



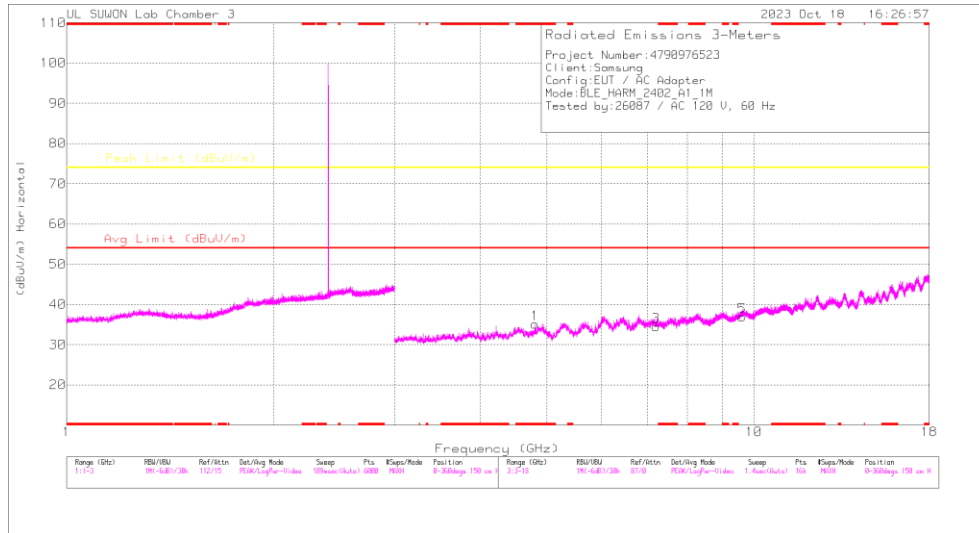
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1m))	Path Loss(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	49.92	Pk	32.4	-24.8	0	57.52	-	-	74	-16.48	94	370	V
2	* 2.48368	49.27	Pk	32.4	-24.8	0	56.87	-	-	74	-17.13	94	370	V
3	* 2.4835	33.63	RMS	32.4	-24.8	2.87	44.1	54	-9.9	-	-	94	370	V
4	2.55058	33.39	RMS	32.4	-24.7	2.87	43.96	54	-10.04	-	-	94	370	V

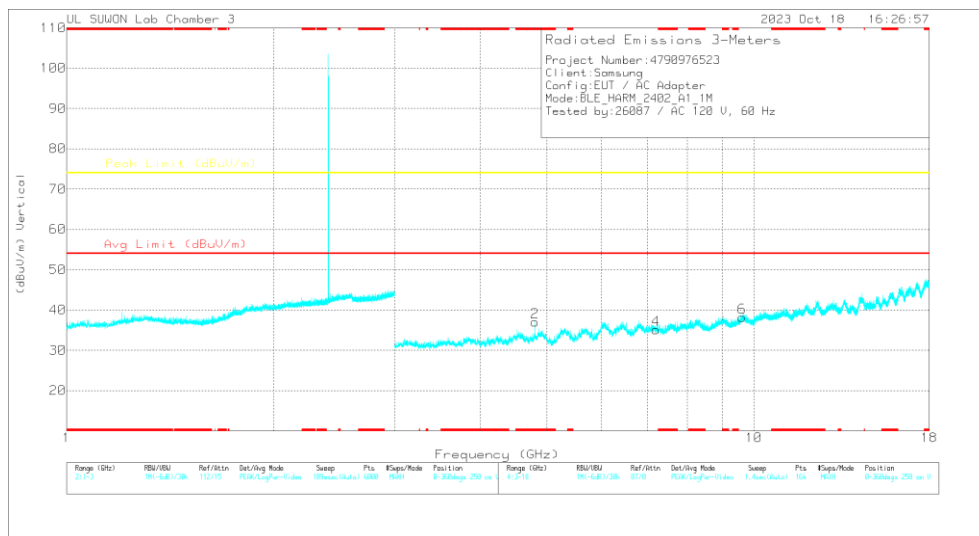
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 Pk - Peak detector
 RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

0 CHANNEL RESULTS



HORIZONTAL



VERTICAL

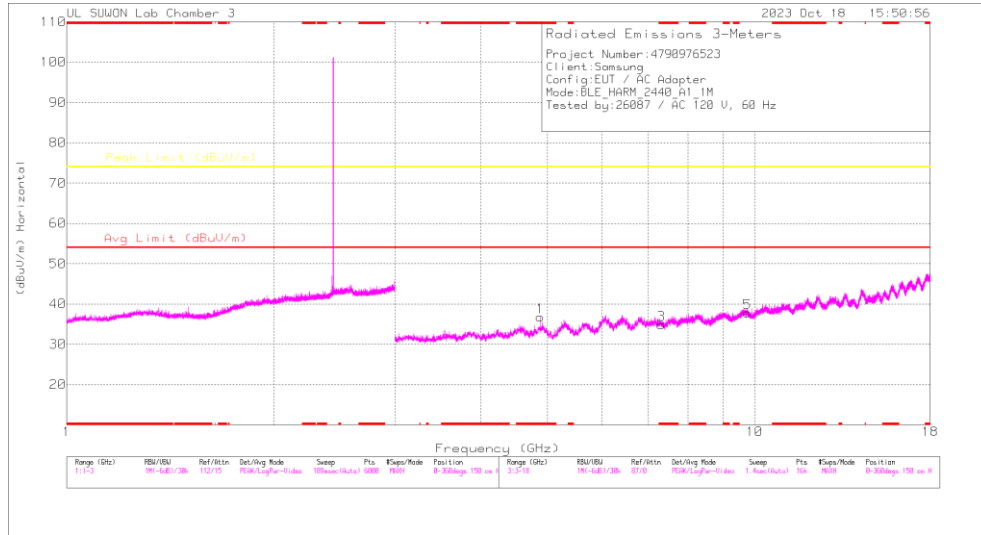
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

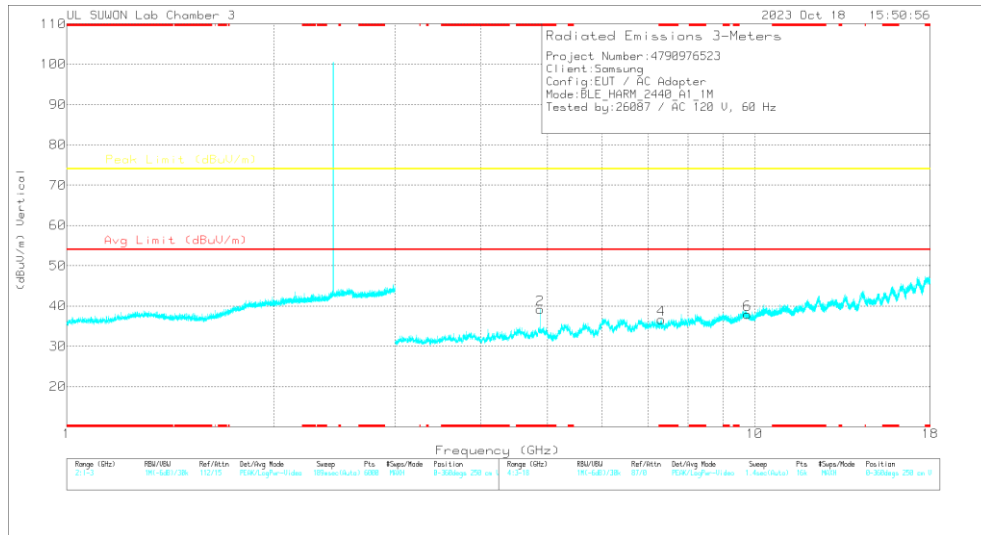
Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1/m))	Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.80353	41.46	PK2	34.3	-30.1	0	45.66	-	-	74	-28.34	216	119	H
* 4.80394	30.23	MAV1	34.3	-30.1	2.87	37.3	54	-16.7	-	-	216	119	H
* 4.80366	43.24	PK2	34.3	-30.1	0	47.44	-	-	74	-26.56	261	100	V
* 4.80355	32.63	MAV1	34.3	-30.1	2.87	39.7	54	-14.3	-	-	261	100	V
7.20563	35.62	PK2	35.8	-25.9	0	45.52	-	-	74	-28.48	0	100	H
7.20676	36.11	PK2	35.8	-25.9	0	46.01	-	-	74	-27.99	0	100	V
9.60976	32.63	PK2	36.7	-21.7	0	47.63	-	-	74	-26.37	0	100	H
9.60702	33.27	PK2	36.7	-21.8	0	48.17	-	-	74	-25.83	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

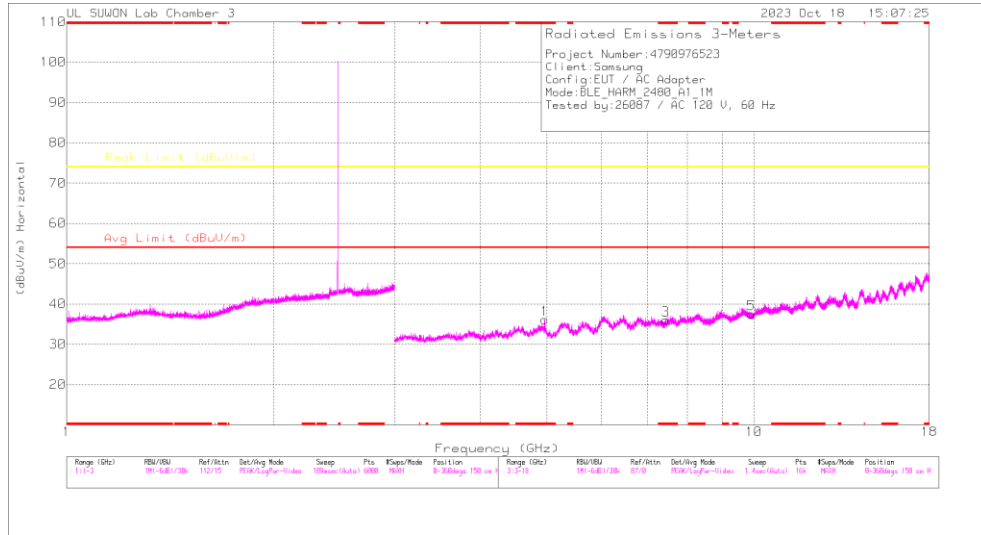
Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

Radiated Emissions

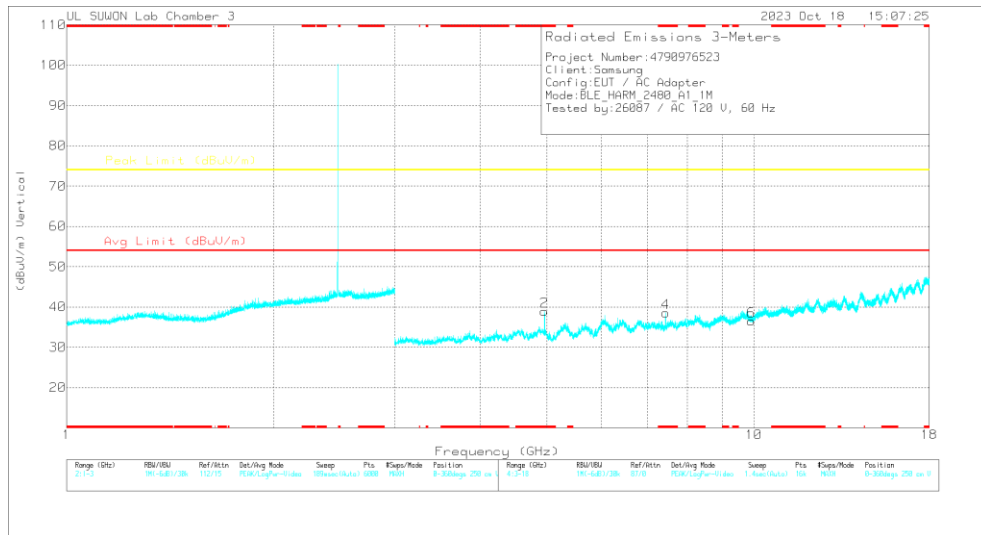
Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1/1m))	Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.88054	42.08	PK2	34.2	-29.9	0	46.38	-	-	74	-27.62	221	100	H
* 4.87991	31.21	MAV1	34.2	-29.9	2.87	38.38	54	-15.62	-	-	221	100	H
* 4.87966	43.7	PK2	34.2	-29.9	0	48	-	-	74	-26	89	100	V
* 4.8796	33.91	MAV1	34.2	-29.9	2.87	41.08	54	-12.92	-	-	89	100	V
* 7.32003	35.28	PK2	35.8	-25.5	0	45.56	-	-	74	-28.44	0	100	H
* 7.31918	36.28	PK2	35.8	-25.5	0	46.58	-	-	74	-27.42	323	112	V
* 7.31933	25.07	MAV1	35.8	-25.5	2.87	38.24	54	-15.76	-	-	323	112	V
9.76035	33.03	PK2	36.9	-21.5	0	48.43	-	-	74	-25.57	0	100	H
9.76031	32.2	PK2	36.9	-21.5	0	47.6	-	-	74	-26.4	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

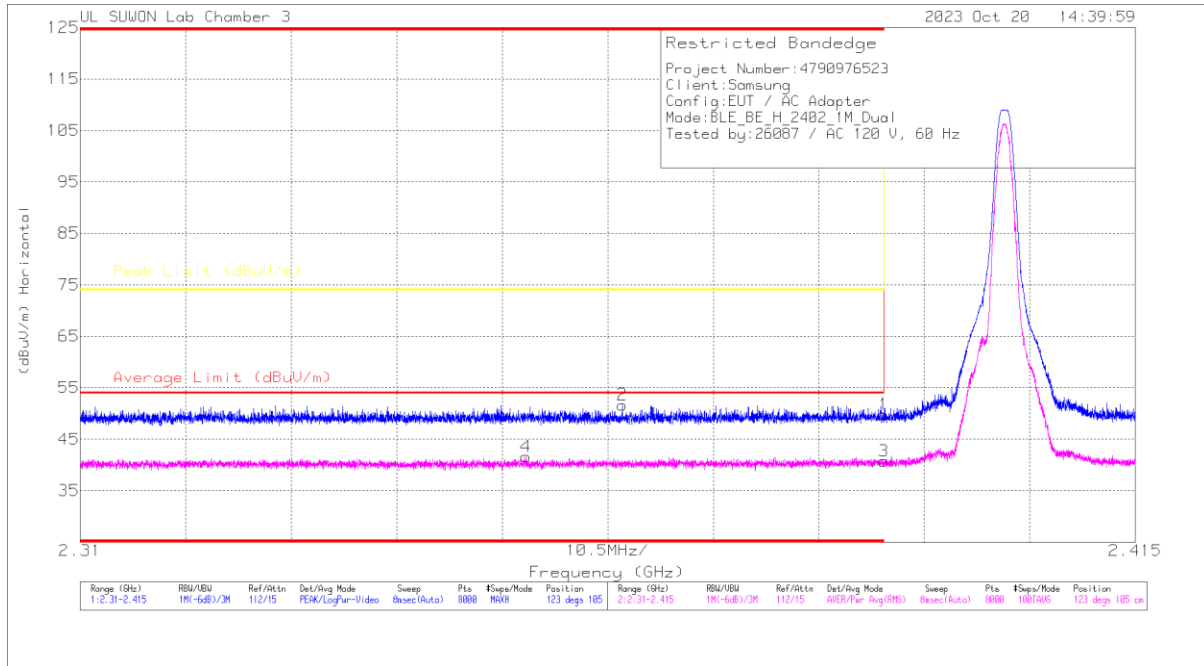
Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB(1/m))	Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.9596	42.12	PK2	34.3	-30	0	46.42	-	-	74	-27.58	21	100	H
* 4.9598	31.63	MAV1	34.3	-30	2.87	38.8	54	-15.2	-	-	21	100	H
* 4.95951	43.36	PK2	34.3	-30	0	47.66	-	-	74	-26.34	100	103	V
* 4.96012	33.73	MAV1	34.3	-30	2.87	40.9	54	-13.1	-	-	100	103	V
* 7.44051	38.42	PK2	35.7	-25.2	0	46.92	-	-	74	-27.08	6	119	H
* 7.43927	25.22	MAV1	35.7	-25.2	2.87	38.59	54	-15.41	-	-	6	119	H
* 7.43923	37.33	PK2	35.7	-25.2	0	47.83	-	-	74	-26.17	336	117	V
* 7.43955	26.26	MAV1	35.7	-25.2	2.87	39.63	54	-14.37	-	-	336	117	V
9.91868	31.63	PK2	37.1	-21.3	0	47.43	-	-	74	-26.57	0	100	H
9.92052	31.89	PK2	37.1	-21.4	0	47.59	-	-	74	-26.41	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

10.2.3. 1 Mbps DUAL

BANDEDGE (0 CHANNEL)

HORIZONTAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Correction Factor(dB/1m)	Path Loss(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	42.5	Pk	32.1	-24.8	0	49.8	-	-	74	-24.2	123	105	H
2	* 2.36395	44.57	Pk	32	-24.9	0	51.67	-	-	74	-22.33	123	105	H
3	* 2.39	32.29	RMS	32.1	-24.8	2.87	42.46	54	-11.54	-	-	123	105	H
4	* 2.35437	33.24	RMS	32	-24.8	2.87	43.31	54	-10.69	-	-	123	105	H

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