



# CERTIFICATION TEST REPORT

**Report Number. :** S-4791706652-E1V1

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

**Model :** SM-L330

**FCC ID :** A3LSML330

**EUT Description :** BT/BLE Smart Wearable + DTS/UNII a/b/g/n

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

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Revision History

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## 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** SAMSUNG ELECTRONICS CO., LTD.

**EUT DESCRIPTION:** BT/BLE Smart Wearable + DTS/UNII a/b/g/n

**MODEL NUMBER:** SM-L330

**SERIAL NUMBER:** R3AY400QL6J, R3AY400QL3L (RADIATED)

**DATE TESTED:** 2025-04-22 - 2025-04-30

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
47 CFR Part 15 Subpart C	Complies
47 CFR Part 15 Subpart E	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.

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## 1.1. INTRODUCTION OF TEST DATA REUSE

This report references test data from FCC ID: A3LSML335 (FCC 47 CFR Part 15C & E). This data reuse has been conducted in accordance with KDB 484596 D01 Referencing Test Data v03 criteria, and RF performance equivalence between the two models (A3LSML335 and A3LSML330) has been verified through spot-check measurements. The applicant takes full responsibility that the test data referenced in this report represent compliance for this FCC ID.

## 1.2. DIFFERENCE

Key differences between A3LSML335 and A3LSML330:

### 1. RF Circuit Modifications:

- The A3LSML335 Main RF licensed related circuits have been physically depopulated, including all cellular functionality components.
- In the variant model, the part number has been changed which represents the exclusion of eSIM functionality at the chipset block level while maintaining the same physical form factor.
- This change is not visually identifiable but is documented in the component specifications.

### 2. Common Elements:

- The A3LSML330 BT/WIFI block diagram and antenna structure remain identical to the A3LSML335.
- All other aspects including form factors, materials, functions, PCB layouts, and common components are the same between both models.

## 1.3. DEVIATION CRITERIA

1. RF spot-check justification based on worst-case configuration per KDB 484596 D01 Referencing Test Data v03 Section 3.2
  - Spot-check measurements shall be made in correspondence to the worst-case scenario reported in the reference device filing, i.e., for those conditions that are the closest to non-compliance.
  - For EMC compliance test data (e.g., spurious emissions limits), the deviation between the variant and the parent model, for both field and power quantities, is expressed as:

$$d_{dB} = | V_{dB} - R_{dB} |$$

where  $V_{dB}$  is the variant spot-check level in dB, and  $R_{dB}$  is the corresponding reference measurement level in dB for the parent model. The spot-check will be deemed acceptable when:

$$d_{dB} \leq d_{dBmax}$$

where  $d_{dBmax}$  is the maximum deviation  $d_{dB}$  allowed for the EMC data for the spot-check to be considered acceptable. The definition of  $d_{dBmax}$  is based on "how far" the reference data  $R_{dB}$  is from the compliance threshold  $C_{dB}$  (also expressed in dB), for the test under consideration. More specifically, if  $M_{dB}$  is the margin in dB from the compliance limit, expressed as

$$M_{dB} = | C_{dB} - R_{dB} |$$

then  $d_{dBmax}$  is defined as a function of  $M_{dB}$ , which increases linearly from 3 dB to 6 dB, according to:

$$d_{dBmax}(M_{dB}) = \begin{cases} (3 + M_{dB}/20) \text{ dB, for } 0 \leq M_{dB} \leq 60 \text{ dB} \\ 6 \text{ dB, for } M_{dB} > 60 \text{ dB} \end{cases}$$

2. The conducted powers of the variant model will be spot checked to be within the tune-up tolerance.

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{CRITERIA} &= 3 + (\text{Test limit} - \text{Measured original value})/20 \\ &3 + (54 \text{ dBuV/m} - 40.22 \text{ dBuV/m})/20 = 3.69 \text{ dB} \end{aligned}$$

## 1.4. SPOT-CHECK VERIFICATION DATA

(Worst case of the radiated spurious emissions)

Band	Test Item	Mode	Frequency	Test Limit	Original model	Spot check model	Deviation [dB]	Criteria Value[dB]	Remark
					SM-L335U Results	SM-L330 Results			
					FCC ID : A3LSML335	FCC ID : A3LSML330			
DTS WLAN (2.4GHz)	BANDEDGE	802.11b	2462 MHz	54.00 dBuV/m	40.22 dBuV/m	39.94 dBuV/m	-0.28 dB	3.69 dB	
	RSE	802.11b	4824 MHz	54.00 dBuV/m	35.57 dBuV/m	35.37 dBuV/m	-0.20 dB	3.92 dB	
	BANDEDGE	802.11g	2472 MHz	54.00 dBuV/m	50.03 dBuV/m	50.76 dBuV/m	0.73 dB	3.20 dB	
	RSE	802.11g	9848 MHz	74.00 dBuV/m	48.48 dBuV/m	48.55 dBuV/m	0.07 dB	4.28 dB	Note1
	BANDEDGE	802.11n HT20	2472 MHz	54.00 dBuV/m	50.47 dBuV/m	52.86 dBuV/m	2.39 dB	3.18 dB	
DTS BLE 1M	BANDEDGE	1Mbps	2480 MHz	54.00 dBuV/m	41.46 dBuV/m	41.56 dBuV/m	0.10 dB	3.63 dB	
	RSE	1Mbps	9760 MHz	74.00 dBuV/m	48.55 dBuV/m	48.45 dBuV/m	-0.10 dB	4.27 dB	Note1
	BANDEDGE	2Mbps	2478 MHz	54.00 dBuV/m	44.50 dBuV/m	44.48 dBuV/m	-0.02 dB	3.48 dB	
DTS BLE 2M	RSE	2Mbps	9760 MHz	74.00 dBuV/m	48.48 dBuV/m	48.42 dBuV/m	-0.06 dB	4.28 dB	Note1
	BANDEDGE	GFSK	2480 MHz	54.00 dBuV/m	37.20 dBuV/m	37.98 dBuV/m	0.78 dB	3.84 dB	
DSS BT BDR	RSE	GFSK	4804 MHz	54.00 dBuV/m	29.79 dBuV/m	32.57 dBuV/m	2.78 dB	4.21 dB	
DSS BT EDR	BANDEDGE	8PSK	2480 MHz	54.00 dBuV/m	37.20 dBuV/m	37.18 dBuV/m	-0.02 dB	3.84 dB	
	RSE	8PSK	4804 MHz	54.00 dBuV/m	31.33 dBuV/m	33.62 dBuV/m	2.29 dB	4.13 dB	
NII WLAN (5GHz)	BANDEDGE	UNII-1 802.11a	5180 MHz	54.00 dBuV/m	48.01 dBuV/m	49.33 dBuV/m	1.32 dB	3.30 dB	
	RSE	UNII-1 802.11a	15720 MHz	54.00 dBuV/m	43.75 dBuV/m	42.84 dBuV/m	-0.91 dB	3.51 dB	Note1
	BANDEDGE	UNII-2A 802.11a	5320 MHz	54.00 dBuV/m	43.50 dBuV/m	46.03 dBuV/m	2.53 dB	3.53 dB	
	RSE	UNII-2A 802.11a	15780 MHz	54.00 dBuV/m	43.64 dBuV/m	43.00 dBuV/m	-0.64 dB	3.52 dB	Note1
	BANDEDGE	UNII-2C 802.11n HT20	5700 MHz	68.20 dBuV/m	65.77 dBuV/m	64.70 dBuV/m	-1.07 dB	3.12 dB	
	RSE	UNII-2C 802.11a	16500 MHz	68.20 dBuV/m	57.18 dBuV/m	57.04 dBuV/m	-0.14 dB	3.55 dB	Note1
	BANDEDGE	UNII-3 802.11n HT20	5825 MHz	-27.00 dBm	-34.32 dBm	-34.13 dBm	0.19 dB	3.37 dB	
	RSE	UNII-3 802.11a	17235 MHz	68.20 dBuV/m	57.01 dBuV/m	57.11 dBuV/m	0.10 dB	3.56 dB	Note1
	BANDEDGE	UNII-4 802.11a	5885 MHz	68.14 dBuV/m	44.82 dBuV/m	44.99 dBuV/m	0.17 dB	4.17 dB	
	RSE	UNII-4 802.11a	17655 MHz	68.20 dBuV/m	57.27 dBuV/m	57.45 dBuV/m	0.18 dB	3.55 dB	Note1

Note1. Noise floor

Comparison of two models, deviation is within FCC Technical Limits.

## 1.5. REFERENCE DETAIL

Reference application that contains the reused reference data in the individual test reports:

Equipment Class	Reference FCC ID (Parent)	Application Type	Reference Test report number	Exhibit Type	Variant Test Report Number	Data Re-used
DTS	A3LSML335	Original Grant	S-4791706372-E5 (DTS)	Test Report	S-4791706652-E1 (DTS, BLE, BT, UNII)	All
DTS	A3LSML335	Original Grant	S-4791706372-E6 (Bluetooth LE)	Test Report		All
DSS	A3LSML335	Original Grant	S-4791706372-E7 (Bluetooth)	Test Report		All
NII	A3LSML335	Original Grant	S-4791706372-E8 (UNII)	Test Report	S-4791706652-E1 (DTS, BLE, BT, UNII)	All
					S-4791706652-E2 (DFS)	Fully Tested

## 2. TEST METHODOLOGY

1. FCC 47 CFR Part 2.
2. FCC 47 CFR Part 15.
3. KDB 558074 D01 DTS Meas Guidance v05r02.
4. KDB 789033 D02 General UNII Test Procedures New Rules v02r01
5. KDB 291074 D02 v01
6. KDB 484596 Referencing Test Data v03
7. ANSI C63.10-2020.

## 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. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

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

### 4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

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

### 4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Radiated Disturbance, 9 kHz to 30 MHz	2.41 dB
Radiated Disturbance, 30 MHz to 1 GHz	3.69 dB
Radiated Disturbance, 1 GHz to 18 GHz	5.18 dB
Radiated Disturbance, Above 18 GHz	5.07 dB

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

### 4.4. DECISION RULE

Decision rule for statement(s) of conformity is based on Clause 4.4.3 in IEC Guide 115:2023.

## 5. EQUIPMENT UNDER TEST

### 5.1. EUT DESCRIPTION

The EUT is a BT/BLE Smart Wearable + DTS/UNII a/b/g/n.

This test report addresses the DTS, NII, Bluetooth LE, Bluetooth operational mode.

#### WiFi operating mode

Frequency rage	Mode	ANT 1
2.4GHz (2412 MHz ~ 2472 MHz)	802.11b SISO	TX/RX
	802.11g SISO	
	802.11n(HT20) SISO	
5GHz (5150 MHz ~ 5925 MHz)	802.11a SISO	TX/RX
	802.11n HT20 SISO	

#### Bluetooth & Bluetooth LE operating mode

Frequency rage	Mode	ANT1
2.4GHz BLE (2 402 MHz ~ 2 480 MHz)	1Mbps	TX/RX
	2Mbps	
2.4GHz BT (2 402 MHz ~ 2 480 MHz)	Basic GFSK	TX/RX
	Enhanced Pi/4-DPSK	
	Enhanced 8PSK	

### 5.2. WORST-CASE CONFIGURATION AND MODE

The fundamentals of the EUT were investigated in three orthogonal orientations X, Y and Z on 1TX SISO mode. It was determined that the worst-case orientation follows the worst axis of the parent model.

Radiated harmonics spurious 1~18 GHz Low/Mid/High channels, 18-26GHz were performed with the EUT set at the worst mode.

Based on the baseline scan, the worst-case data rates follow those of the parent model.

### 5.3. DESCRIPTION OF TEST SETUP

#### SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Charger	SAMSUNG	EP-TA800	R37XBMJF8FBDKA	N/A
Wireless Charger	SAMSUNG	EP-OL300	-	-

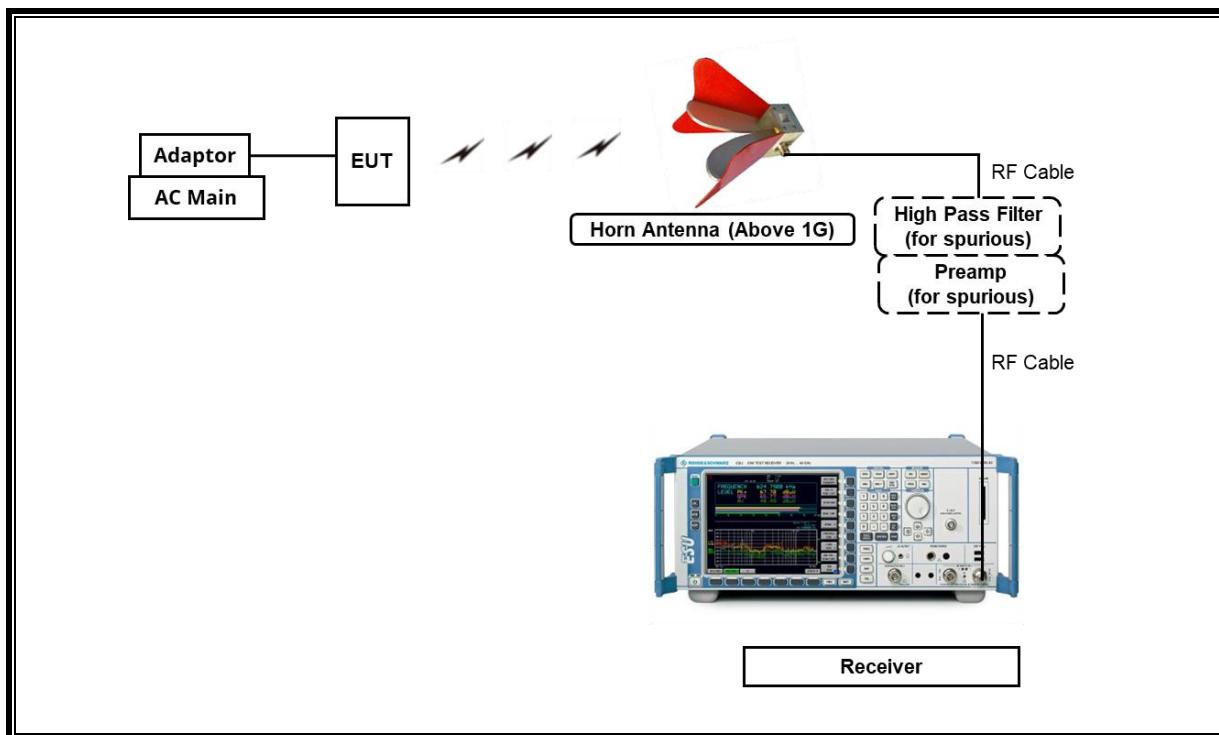
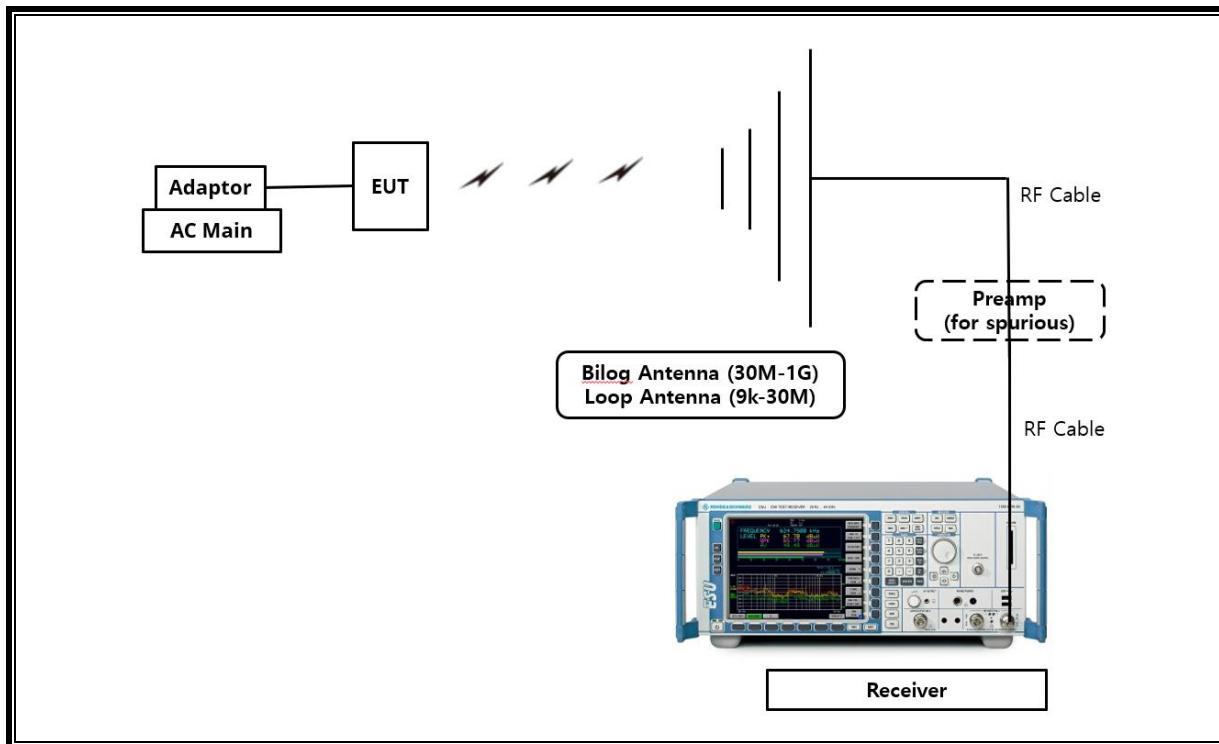
#### I/O CABLE

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	0.8 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 DTS mode.

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



## 6. MEASUREMENT METHOD

### **2.4GHz WLAN & Bluetooth LE**

Out-of-band Emissions in Non-restricted Bands: ANSI C63.10-2020, Section 11.11 Emissions in nonrestricted frequency bands

Out-of-band Emissions in Restricted Bands: ANSI C63.10-2020, Section 11.12 Emissions in restricted frequency bands

### **5 GHz WLAN**

Unwanted emissions in restricted bands : KDB 789033 D02 v02r01, Section II.G.3 – II.G.6.

Unwanted emissions in non-restricted bands : KDB 789033 D02 v02r01, Section II.G.3 – II.G.6.

### **Bluetooth**

Out-of-band Emissions in Non-restricted Bands: ANSI C63.10-2020, Section 7.8.8

Out-of-band Emissions in Restricted Bands: ANSI C63.10-2020, Section 7.8.8

## 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	VULB 9163	750	2026-07-30
Antenna, BiLog, 30MHz-1GHz	SCHWARZBECK	VULB 9163	845	2026-07-30
Antenna, BiLog, 30MHz-1GHz	SCHWARZBECK	VULB 9163	749	2026-08-12
Antenna, Horn, 18 GHz	ETS	3115	00167211	2026-07-17
Antenna, Horn, 18 GHz	ETS	3115	00161451	2026-07-17
Antenna, Horn, 18 GHz	ETS	3117	00168724	2026-07-17
Antenna, Horn, 18 GHz	ETS	3117	00168717	2026-07-17
Antenna, Horn, 18 GHz	ETS	3117	00218957	N/A
Antenna, Horn, 40 GHz	ETS	3116C	00166155	2026-07-23
Antenna, Horn, 40 GHz	ETS	3116C	00168645	2025-10-06
Preamplifier	ETS	3116C-PA	00168841	2025-07-25
Preamplifier, 1000 MHz	Sonoma	310N	341282	2025-07-22
Preamplifier, 1000 MHz	Sonoma	310N	351741	2025-07-22
Preamplifier, 1000 MHz	Sonoma	310N	370599	2025-07-22
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029169	2025-07-23
Preamplifier, 18 GHz	B&Z Technologies, LLC	BZR-01001800-231040-182020	28451	2025-07-22
Preamplifier, 18 GHz	B&Z Technologies, LLC	BZR-01001800-231040-181515	23576	2025-07-25
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54170614	2025-07-24
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54490312	2026-01-02
EMI Test Receiver, 44 GHz	R&S	ESW44	101590	2025-07-23
Spectrum Analyzer, 44 GHz	KEYSIGHT	N9030B	MY60070693	2026-01-02
RF Switching Unit	TA Engineering	TA-018S-16	SW-1	N/A
Average Power Sensor	Agilent / HP	U2000A	MY54270007	2025-07-23
Average Power Sensor	Agilent / HP	U2000A	MY54260010	2025-07-23
Attenuator	PASTERNAK	PE7087-10	A001	2025-07-23
Attenuator	PASTERNAK	PE7087-10	A008	2025-07-23
Attenuator	PASTERNAK	PE7004-10	2	2025-07-23
Attenuator	PASTERNAK	PE7087-10	A009	2025-07-23
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2025-07-23
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2025-07-22
EMI Test Receive, 3 GHz	R&S	ESR 3	101832	2025-07-22
Notch Filter	Micro-Tronics	BRM50702-02	G037	2025-07-24
Notch Filter	Micro-Tronics	BRM50716-2	006	2025-07-23
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	009	2025-07-22
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	015	2025-07-22
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	020	2025-07-23
High Pass Filter 3GHz	Micro-Tronics	HPM17543	010	2025-07-22
High Pass Filter 3GHz	Micro-Tronics	HPM17543	015	2025-07-22
High Pass Filter 3GHz	Micro-Tronics	HPM17543	20	2025-07-23
High Pass Filter 6GHz	Micro-Tronics	HPS17542	009	2025-07-22
High Pass Filter 6GHz	Micro-Tronics	HPS17542	016	2025-07-22
High Pass Filter 6GHz	Micro-Tronics	HPS17542	21	2025-07-23
Antenna, Loop, 9kHz-30MHz	R&S	HFH2-Z2	100418	2025-09-07
Termination	WEINSCHEL	M1406A	T09	2025-07-23
Attenuator	WEINSCHEL	WA76-30-21	A015	2025-07-23
UL Software				
Description	Manufacturer	Model	Version	
Radiated software	UL	UL EMC	Ver 9.5	

## 8. RADIATED SPOT-CHECK TEST RESULTS

### LIMITS

FCC §15.205 and §15.209

Limits for radiated disturbance of an intentional radiator		
Frequency range (MHz)	Limits ( $\mu$ V/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.

FCC Part 15.205 (a) : Only spurious emissions are permitted in any of the frequency bands listed below :

MHz	MHz	MHz	MHz	GHz	GHz
0.009 ~ 0.110	8.41425 ~ 8.41475	108 ~ 121.94	1300 ~ 1427	4.5 ~ 5.15	14.47 ~ 14.5
0.495 ~ 0.505	12.29 ~ 12.293	123 ~ 138	1435 ~ 1626.5	5.35 ~ 5.46	15.35 ~ 16.2
2.1735 ~ 2.1905	12.51975 ~ 12.52025	149.9 ~ 150.05	1645.5 ~ 1646.5	7.25 ~ 7.75	17.7 ~ 21.4
4.125 ~ 4.128	12.57675 ~ 12.57725	156.52475 ~	1660 ~ 1710	8.025 ~ 8.5	22.01 ~ 23.12
4.17725 ~ 4.17775	13.36 ~ 13.41	156.52525	1718.8 ~ 1722.2	9.0 ~ 9.2	23.6 ~ 24.0
4.20725 ~ 4.20775	16.42 ~ 16.423	156.7 ~ 156.9	2200 ~ 2300	9.3 ~ 9.5	31.2 ~ 31.8
6.215 ~ 6.218	16.69475 ~ 16.69525	162.0125 ~	2310 ~ 2390	10.6 ~ 12.7	36.43 ~ 36.5
6.26775 ~ 6.26825	16.80425 ~ 16.80475	167.17	2483.5 ~ 2500	13.25 ~ 13.4	Above 38.6
6.31175 ~ 6.31225	25.5 ~ 25.67	167.72 ~ 173.2	2655 ~ 2900		
8.291 ~ 8.294	37.5 ~ 38.25	240 ~ 285	3260 ~ 3267		
8.362 ~ 8.366	73 ~ 74.6	322 ~ 335.4	3332 ~ 3339		
8.37625 ~ 8.38675	74.8 ~ 75.2	399.90 ~ 410	3345.8 ~ 3358		
		608 ~ 614	3600 ~ 4400		
		960 ~ 1240			

- FCC Part 15.205(b) : The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

## **TEST PROCEDURE**

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1 GHz and 150 cm for above 1 GHz. 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 2.4 GHz & 5 GHz WLAN & Bluetooth measurements above 1 GHz, the resolution bandwidth is set to 1 MHz. The video bandwidth is set to 3 MHz for peak measurements, and a duty cycle factor is added for average measurements.

(Restricted bandedge, Final detection of spurious harmonic emissions)

For Bluetooth 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 1/T (on time) for average measurement.

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 each applicable 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 9 kHz to 30 MHz; 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 area 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.

The radiated band edge with the measurement antenna in the vertical polarity represented the worst case compared to the horizontal polarity, and results for all cases were reported. For measurements with the antenna in the horizontal polarity, only the worst case channel was reported.

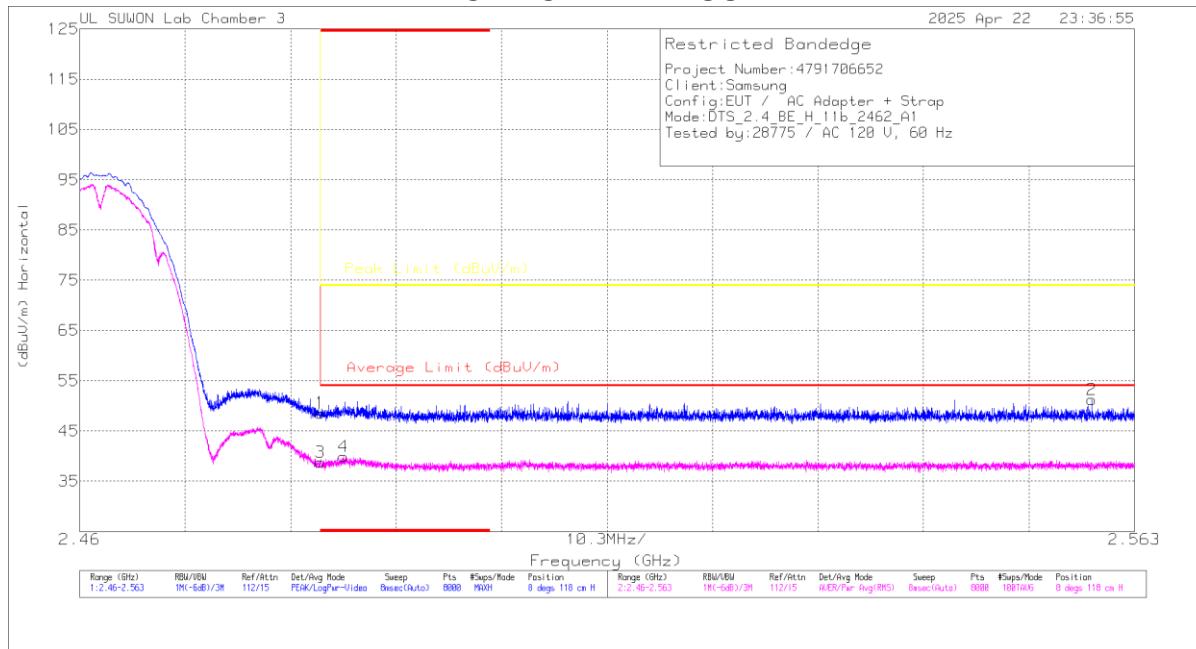
## 8.1. 2.4 GHz WLAN SPOT-CHECK TEST RESULT

### 8.1.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND

#### 1TX Antenna 1

#### BANDEDGE (WORST CASE: 11 CHANNEL)

#### HORIZONTAL RESULT



#### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dB/m)	10dB_Path Loss(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	41.07	Pk	32.4	-24.9	0	48.57	-	-	74	-25.43	8	118	H
2	2.55883	43.7	Pk	32.4	-24.8	0	51.3	-	-	74	-22.7	8	118	H
3	* 2.4835	31.25	RMS	32.4	-24.9	0	38.75	54	-15.25	-	-	8	118	H
4	* 2.48578	32.44	RMS	32.4	-24.9	0	39.94	54	-14.06	-	-	8	118	H

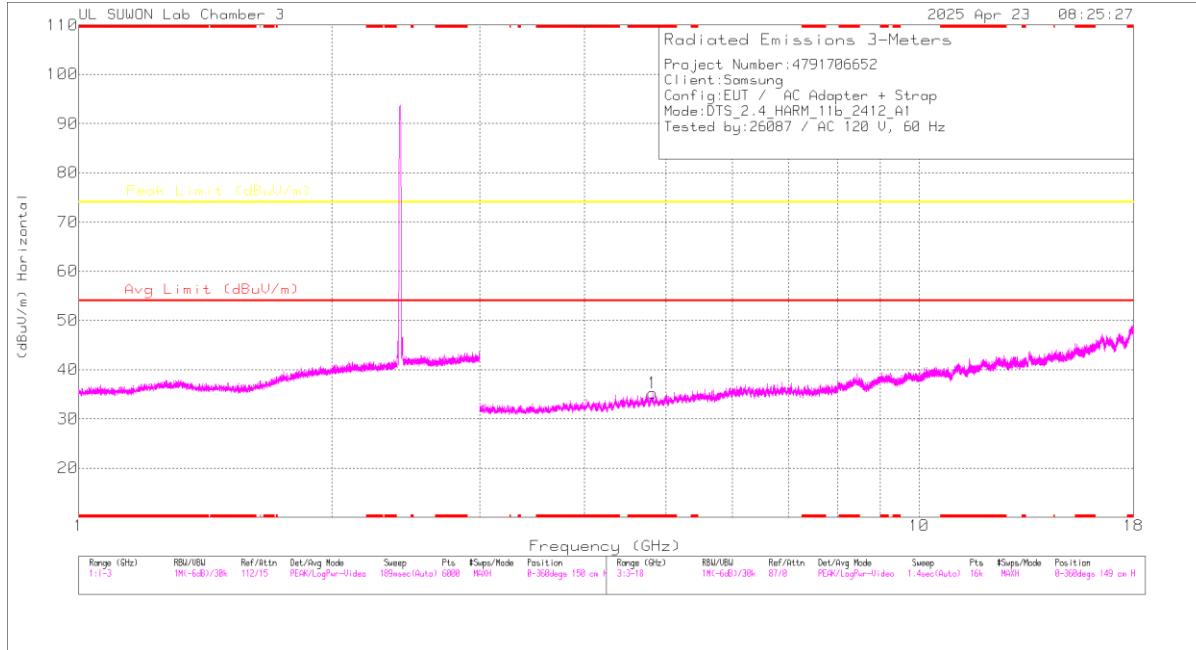
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 1 CHANNEL)

### CH 1 RESULTS



### HORIZONTAL

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 Factor (dB/m)	3GHz HP 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
* 4.82391	40.45	PK2	34.3	-30	0	44.75	-	-	74	-29.25	187	118	H
* 4.82404	31.17	MAv1	34.3	-30.1	0	35.37	54	-18.63	-	-	187	118	H

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

PK2 - KDB558074 Method: Maximum Peak

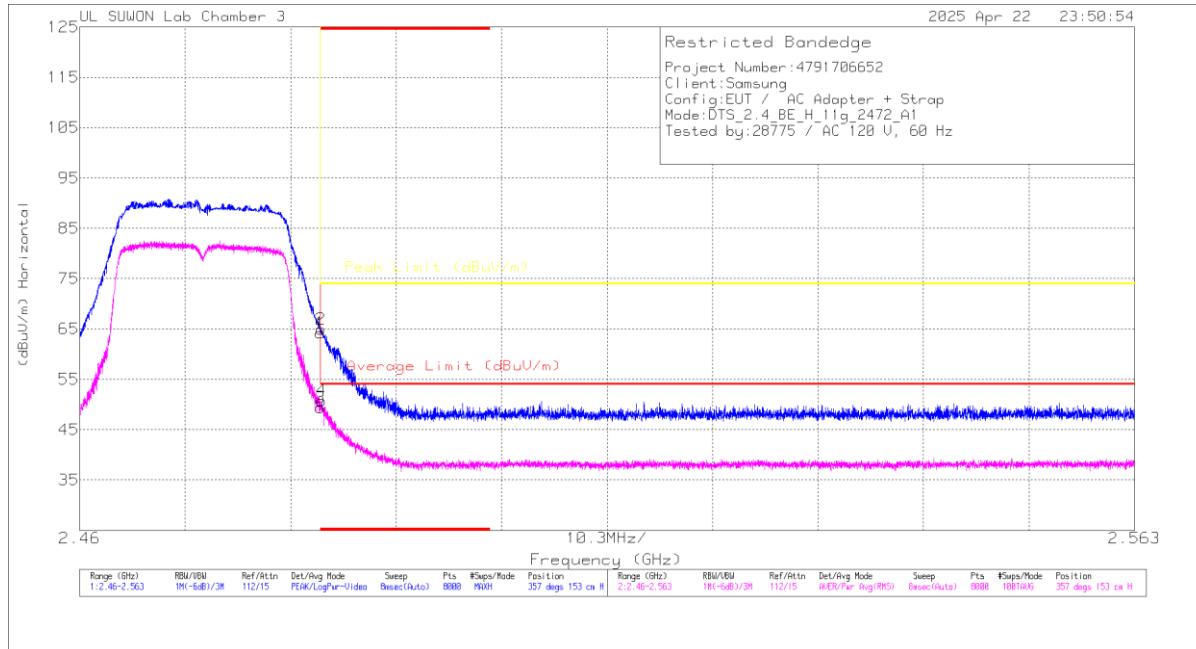
MAv1 - KDB558074 Option 1 Maximum RMS Average

## 8.1.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

### 1TX Antenna 1

#### BANDEDGE (WORST CASE: 13 CHANNEL)

#### HORIZONTAL RESULT



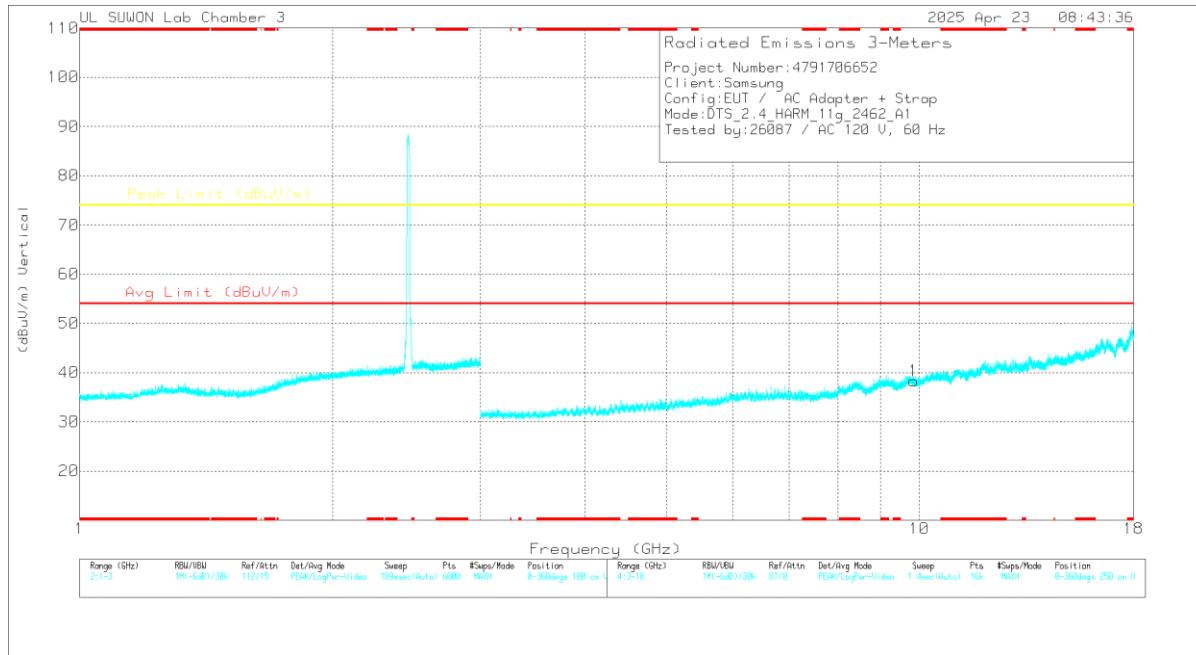
#### Trace Markers

Marker	Frequency (GHz)	Metering Point (dBuV/m)	Det	Antenna_Factor (dB/m)	10dB_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	56.75	Pk	32.4	-24.9	0	64.25	-	-	74	-9.75	357	153	H
2	* 2.48355	57.46	Pk	32.4	-24.9	0	64.96	-	-	74	-9.04	357	153	H
3	* 2.4835	41.68	RMS	32.4	-24.9	24	49.42	54	-4.58	-	-	357	153	H
4	* 2.48363	43.02	RMS	32.4	-24.9	24	50.76	54	-3.24	-	-	357	153	H

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

## HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 11 CHANNEL)

### CH 11 RESULTS



### 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 Factor (dB/m)	3GHz_HP 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
9.85033	32.75	PK2	37.1	-21.3	0	48.55	-	-	74	-25.45	0	100	V

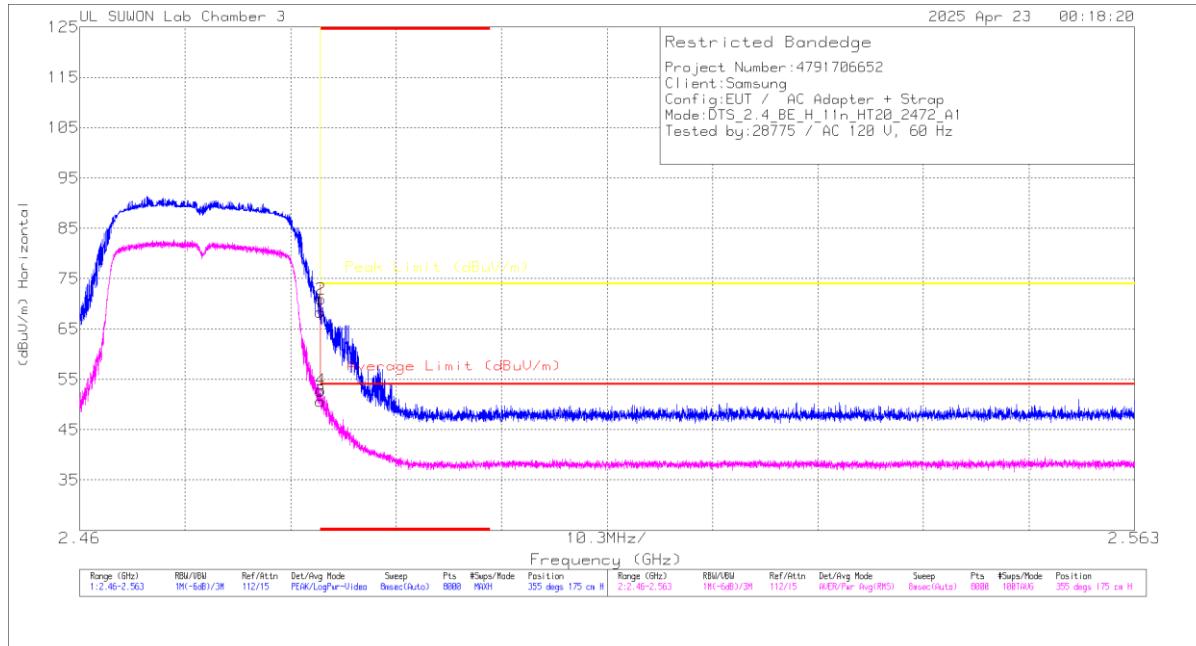
PK2 - KDB558074 Method: Maximum Peak

### 8.1.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

#### 1TX Antenna 1

#### BANDEDGE (WORST CASE: 13 CHANNEL)

#### HORIZONTAL RESULT



#### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dB/m)	10dB_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	60.86	Pk	32.4	-24.9	0	68.36	-	-	74	-5.64	355	175	H
2	*2.48358	63.5	Pk	32.4	-24.9	0	71	-	-	74	-3	355	175	H
3	*2.4835	43.03	RMS	32.4	-24.9	.12	50.65	54	-3.35	-	-	355	175	H
4	*2.48356	45.24	RMS	32.4	-24.9	.12	52.86	54	-1.14	-	-	355	175	H

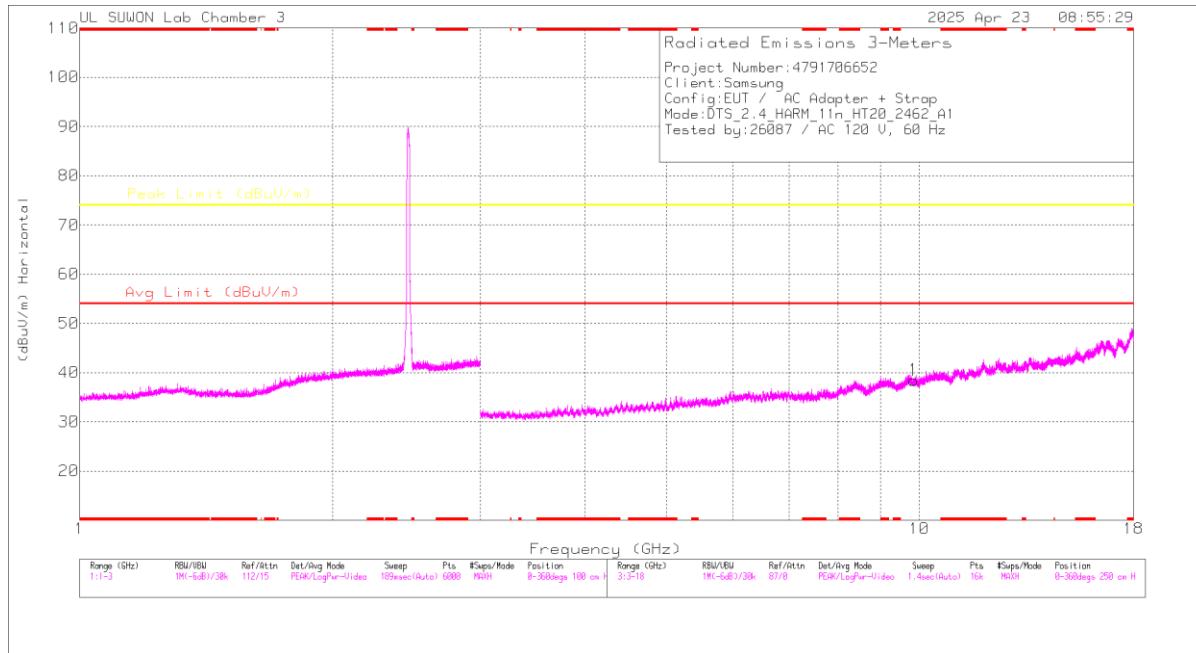
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 11 CHANNEL)

### CH 11 RESULTS



### HORIZONTAL

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

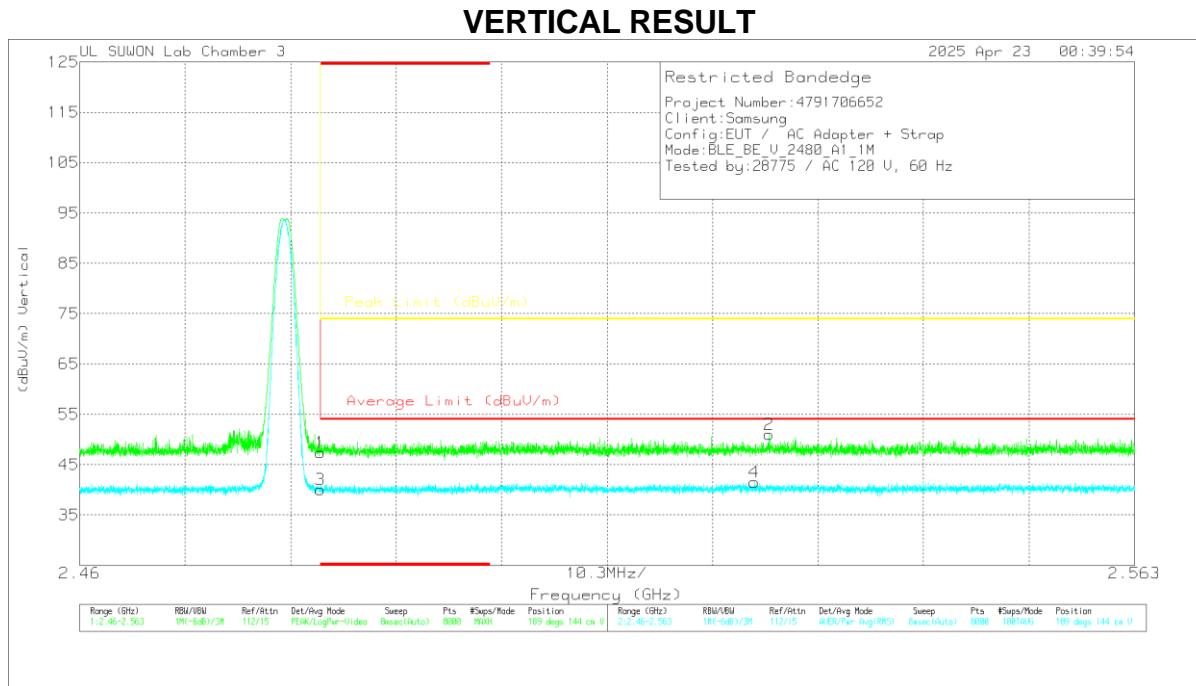
Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Factor (dB/m)	3GHz_HP Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.849	32.18	PK2	37.1	-21.3	0	47.98	-	-	74	-26.02	0	100	H

PK2 - KDB558074 Method: Maximum Peak

## 8.2. BLUETOOTH LE SPOT-CHECK TEST RESULT

### 8.2.1. TX ABOVE 1 GHz BLUETOOTH LE 1 Mbps

#### BANDEDGE (WORST CASE : 2480 MHz, ANT1)



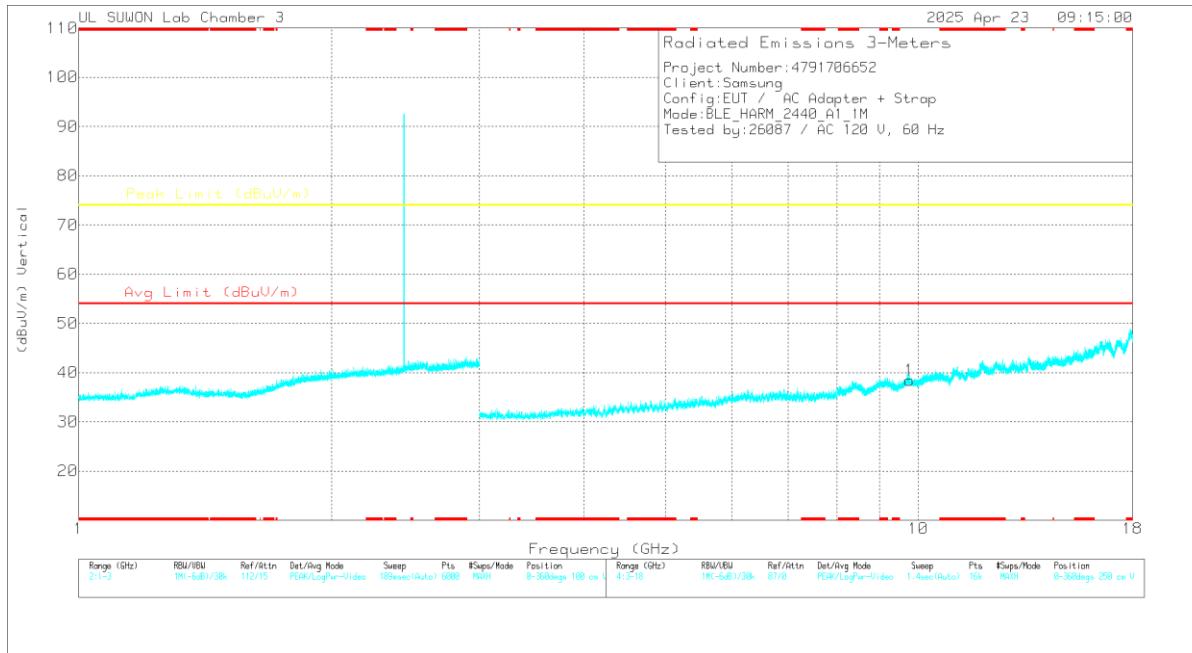
#### Trace Markers

Marker	Frequency (GHz)	Marker Reading (dBmV)	Det	Antenna_Factor (dB/m)	10dB_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBmV/m)	Average Limit (dBm/m)	Margin (dB)	Peak Limit (dBm/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	39.94	PK	32.4	-24.9	0	47.44	-	-	74	-26.56	189	144	V
2	2.52733	43.36	PK	32.4	-24.8	0	50.96	-	-	74	-23.04	189	144	V
3	* 2.4835	30.39	RMS	32.4	-24.9	2.13	40.02	54	-13.98	-	-	189	144	V
4	2.52588	31.73	RMS	32.4	-24.7	2.13	41.56	54	-12.44	-	-	189	144	V

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

## HARMONICS AND SPURIOUS EMISSIONS (WORST CASE : 2440 MHz, ANT1)

### 2440 MHz RESULTS



### 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

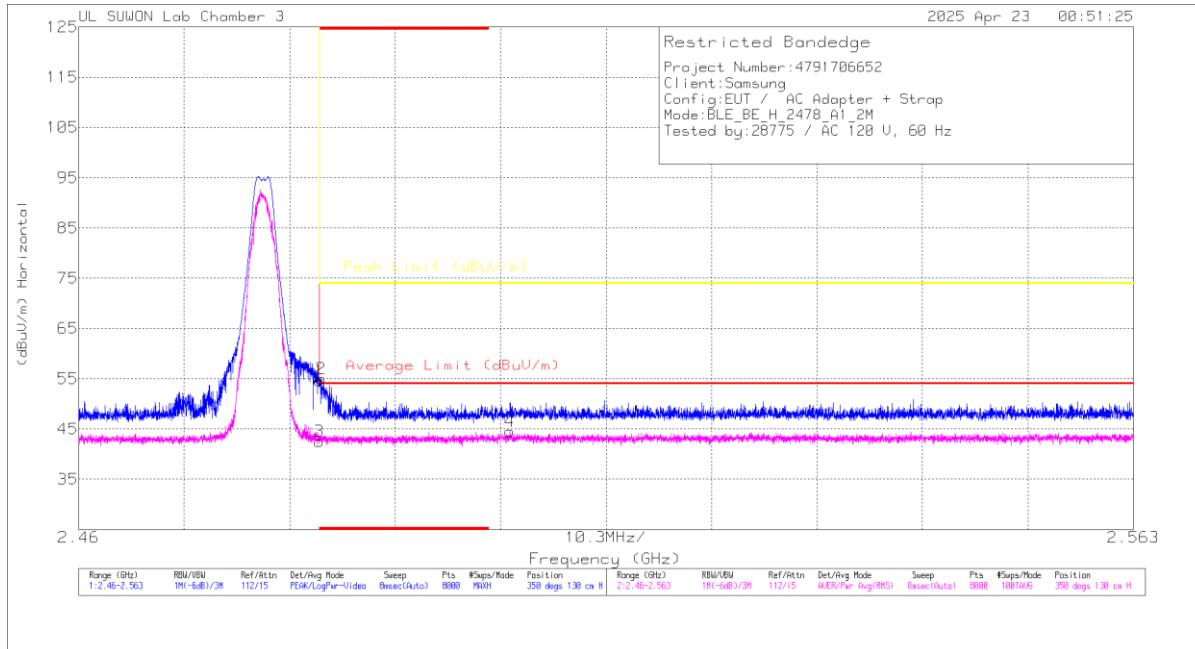
Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dB/m)	3GHz_HP_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.76372	32.75	PK2	36.9	-21.2	0	48.45	-	-	74	-25.55	0	100	V

PK2 - KDB558074 Method: Maximum Peak

## 8.2.2. TX ABOVE 1 GHz BLUETOOTH LE 2 Mbps

### BANDEDGE (WORST CASE : 2478 MHz, ANT1)

#### HORIZONTAL RESULT



#### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV/m)	Det	Antenna_Factor (dB/m)	10dB_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuU/m)	Margin (dB)	Peak Limit (dBuU/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	47.14	Pk	32.4	-24.9	0	54.64	-	-	74	-19.36	350	130	H
2	* 2.48367	47.53	Pk	32.4	-24.9	0	55.03	-	-	74	-18.97	350	130	H
3	* 2.4835	29.99	RMS	32.4	-24.9	5.04	42.53	54	-11.47	-	-	350	130	H
4	2.50212	31.74	RMS	32.4	-24.7	5.04	44.48	54	-9.52	-	-	350	130	H

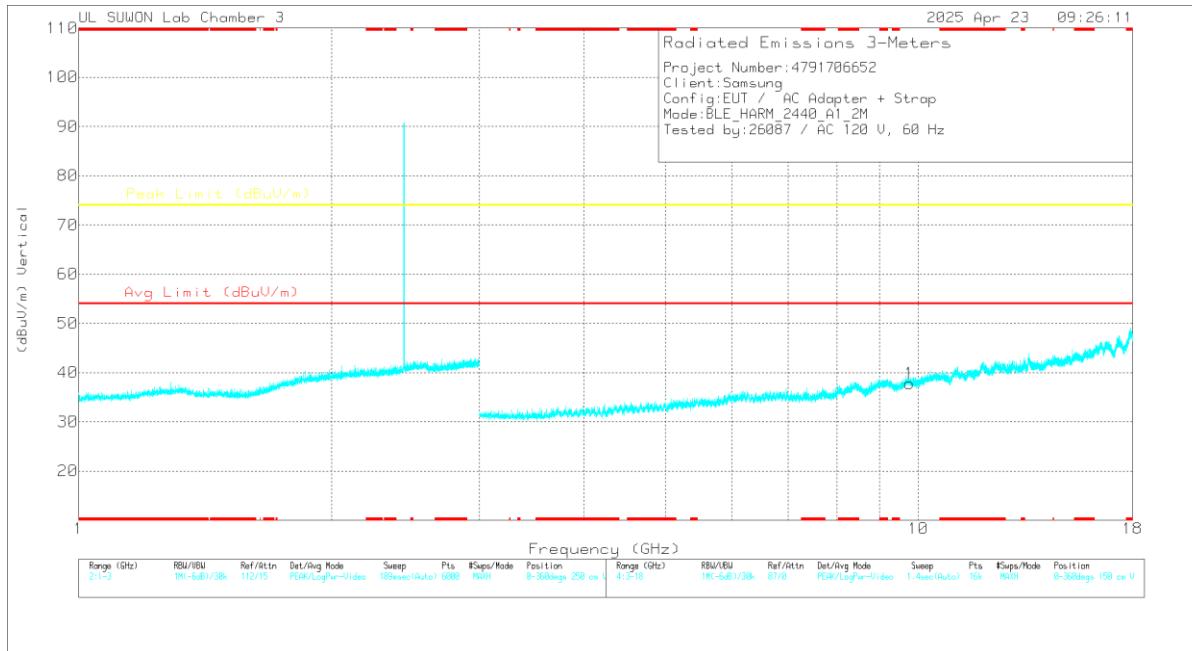
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS (WORST CASE : 2440 MHz, ANT1)

### 2440 MHz RESULTS



### 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

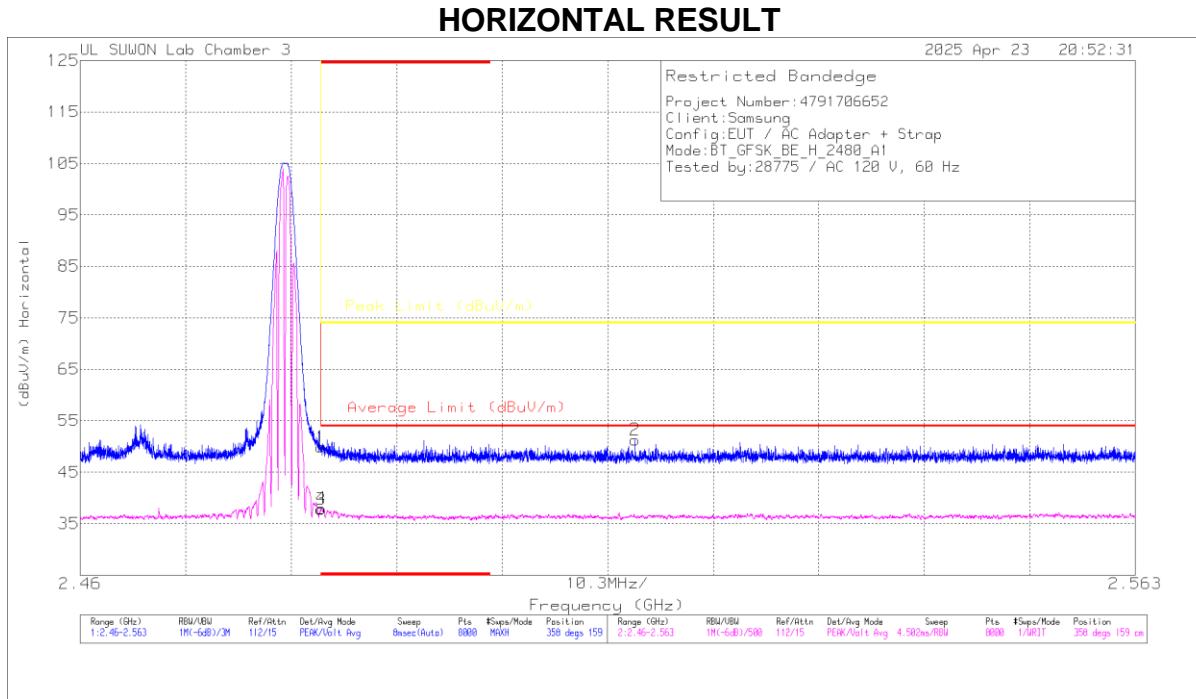
Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Factor (dB/m)	3GHz_HP_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9.75964	32.82	PK2	36.9	-21.3	0	48.42	-	-	74	-25.58	0	100	V

PK2 - KDB558074 Method: Maximum Peak

## 8.3. BLUETOOTH SPOT-CHECK TEST RESULT

### 8.3.1. BLUETOOTH BASIC DATA RATE GFSK MODULATION

#### BANDEDGE (WORST CASE: 78 CHANNEL, ANT1)



#### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Factor (dB/m)	10dB_Path Loss(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	42.4	PK	32.4	-24.9	49.9	-	-	74	-24.1	358	159	H
2	2.51415	43.68	Pk	32.4	-24.8	51.28	-	-	74	-22.72	358	159	H
3	* 2.4835	30.31	VA1T	32.4	-24.9	37.81	54	-16.19	-	-	358	159	H
4	* 2.48354	30.48	VA1T	32.4	-24.9	37.98	54	-16.02	-	-	358	159	H

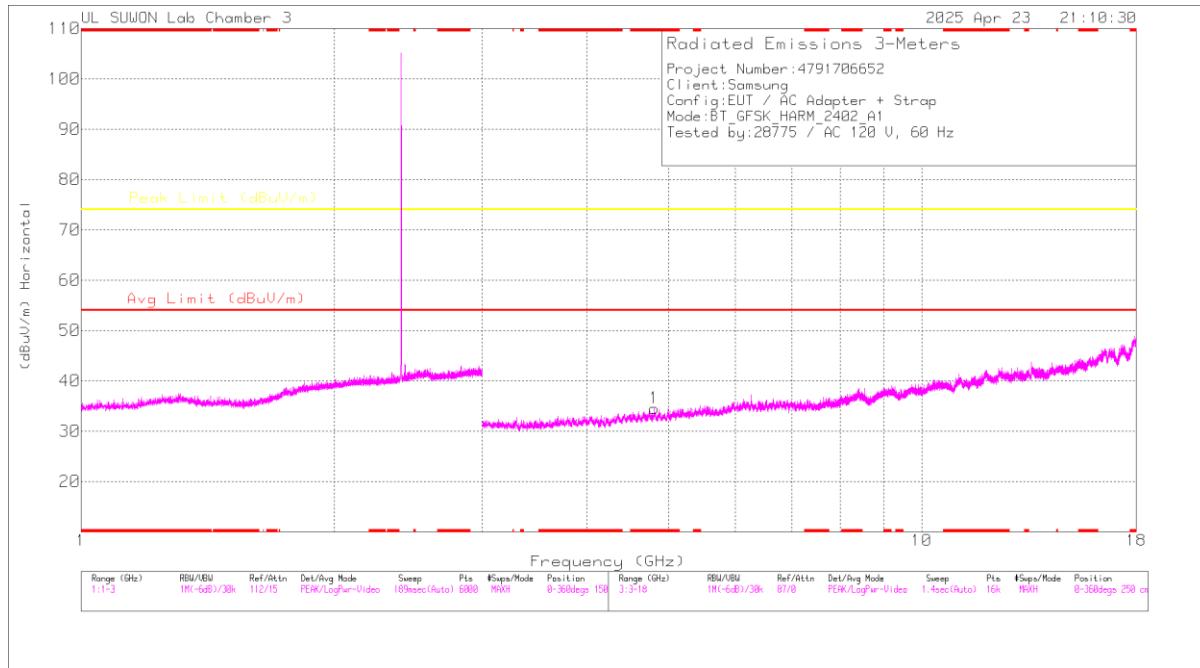
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 0 CHANNEL, ANT1)

### 0 CHANNEL RESULTS



### HORIZONTAL

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 Factor (dB/m)	3GHz HP_Pat h Loss(dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.80388	38.43	PKFH	34.3	-29.8	42.93	-	-	74	-31.07	193	121	H
* 4.80389	28.07	VA1T	34.3	-29.8	32.57	54	-21.43	-	-	193	121	H

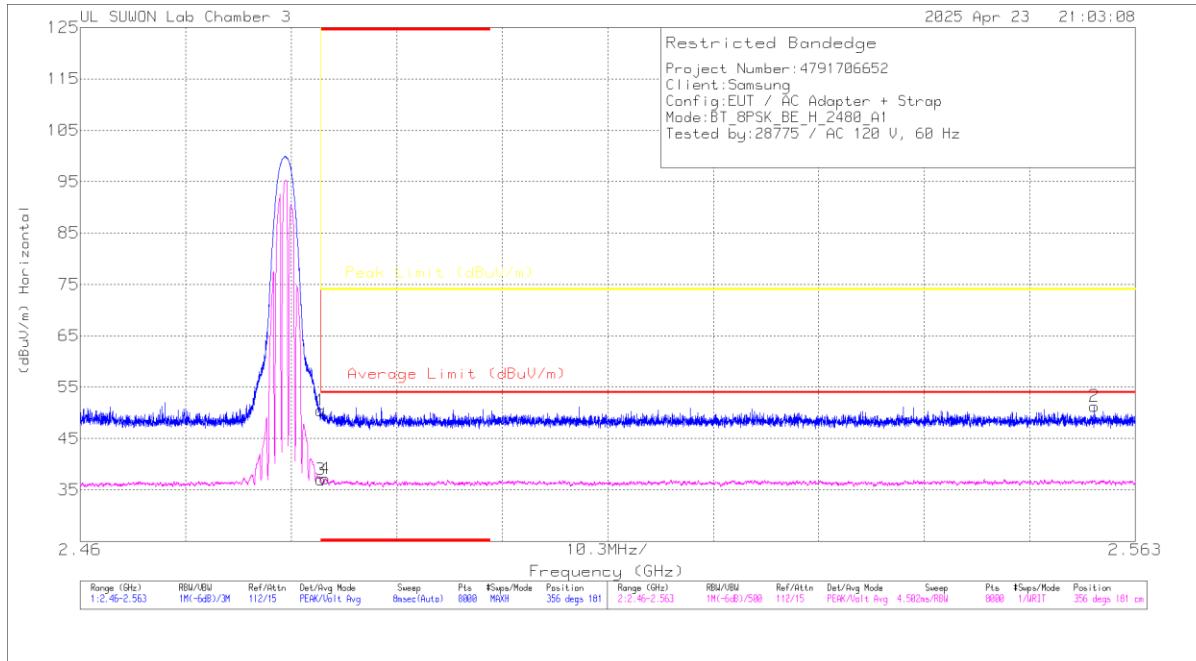
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak  
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

### 8.3.2. BLUETOOTH ENHANCED DATA RATE 8PSK MODULATION

#### BANDEDGE (WORST CASE: 78 CHANNEL, ANT1)

##### HORIZONTAL RESULT



##### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna Factor (dB/m)	10dB Path Loss(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	42.99	Pk	32.4	-24.9	50.49	-	-	74	-23.51	356	181	H
2	2.559	43.7	Pk	32.4	-24.8	51.3	-	-	74	-22.7	356	181	H
3	* 2.4835	29.54	VA1T	32.4	-24.9	37.04	54	-16.96	-	-	356	181	H
4	* 2.48391	29.68	VA1T	32.4	-24.9	37.18	54	-16.82	-	-	356	181	H

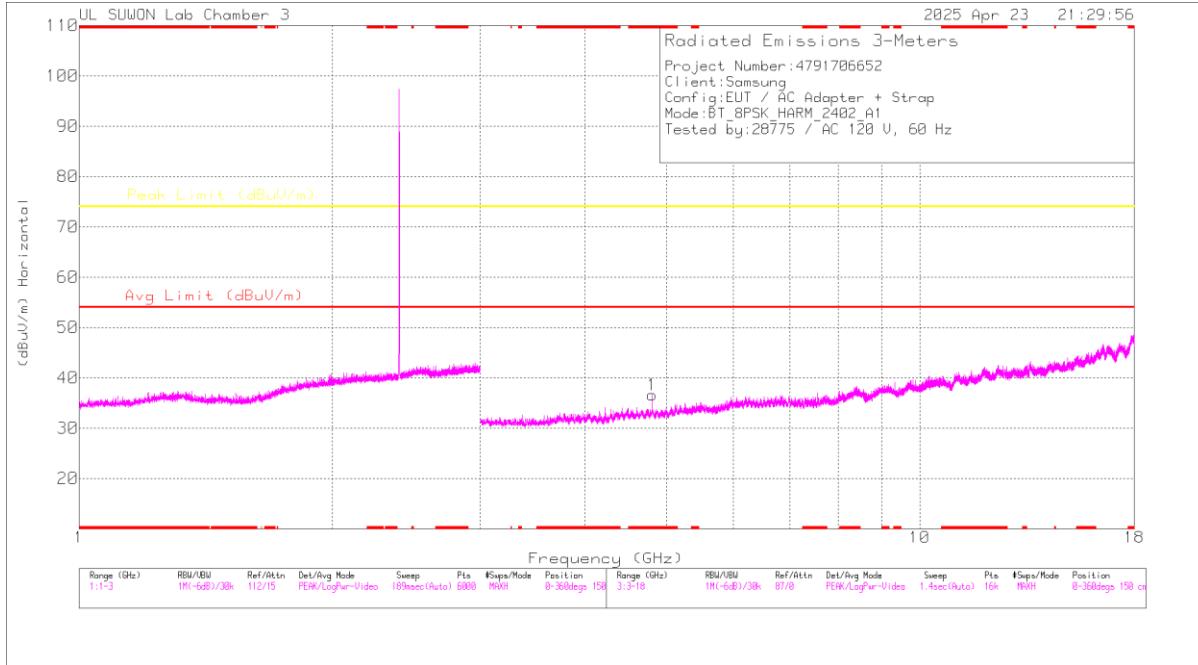
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 0 CHANNEL, ANT1)

### 0 CHANNEL RESULTS



### HORIZONTAL

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_Factor (dB/m)	3GHz_HP_Pat h Loss(dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.8044	39.44	PKFH	34.3	-29.8	43.94	-	-	74	-30.06	185	110	H
* 4.80399	29.12	VA1T	34.3	-29.8	33.62	54	-20.38	-	-	185	110	H

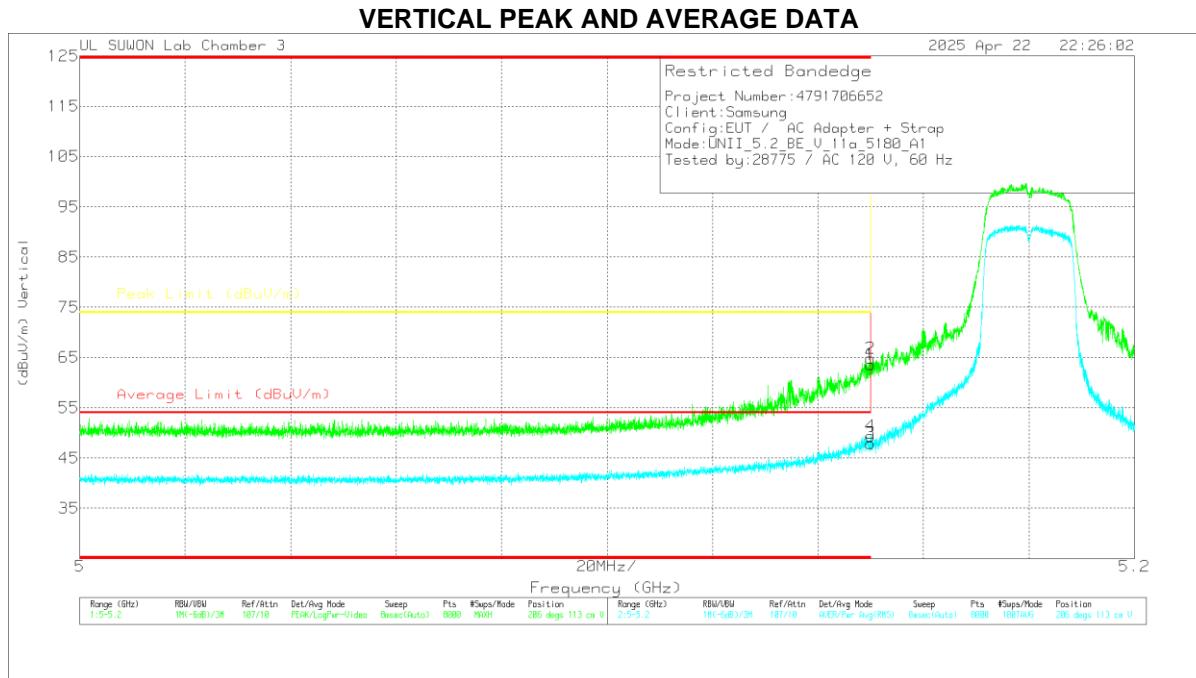
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH FHSS/BT RB=100k for Frequencies<1GHz / RB=1MHz for Frequencies>1GHz, VB=3 x RB, Peak  
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

## 8.4. 5 GHz WLAN SPOT-CHECK TEST RESULT

### 8.4.1. TX ABOVE 1 GHz 1TX MODE IN THE 5.2 GHz BAND

#### BANDEDGE (WORST CASE: 802.11a / 5180 MHz)



#### Trace Markers

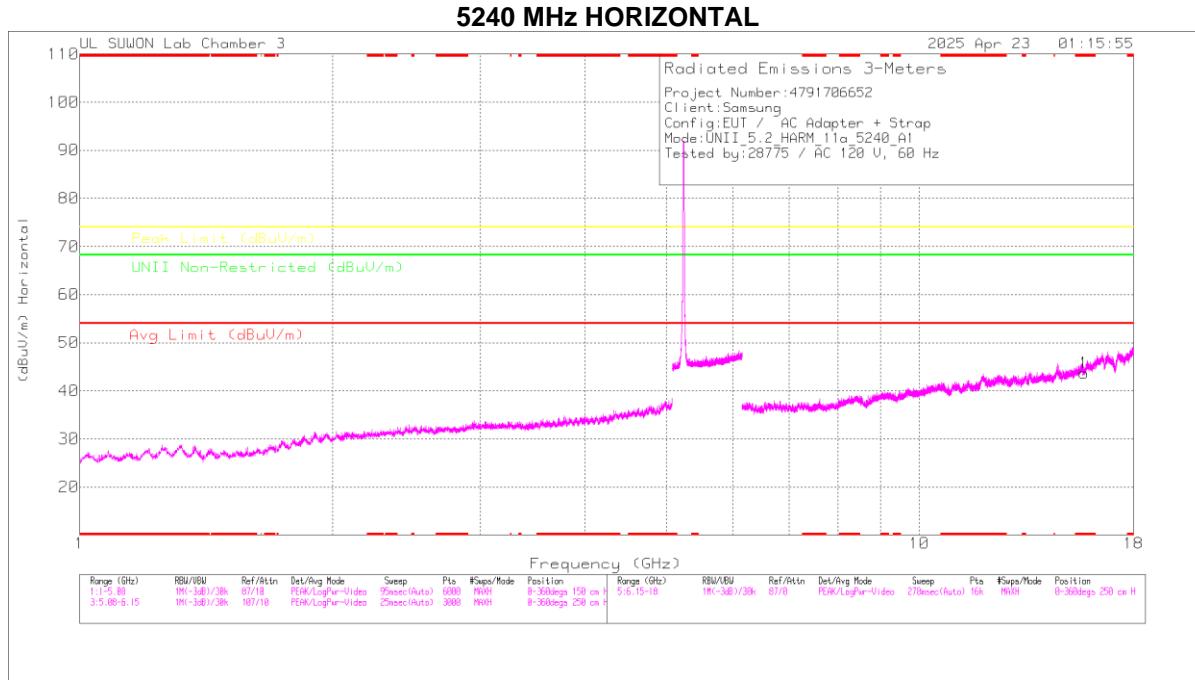
Marker	Frequency (GHz)	Meter Reading (dBuV)	Deg	Antenna_Factor (dB/m)	10dB_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.14999	49.71	Pk	34.4	-20.5	0	63.61	-	-	74	-10.39	206	113	V
2	* 5.14997	50.95	Pk	34.4	-20.5	0	64.85	-	-	74	-9.15	206	113	V
3	* 5.14999	33.83	RMS	34.4	-20.5	.22	47.95	54	-6.05	-	-	206	113	V
4	* 5.14997	35.21	RMS	34.4	-20.5	.22	49.33	54	-4.67	-	-	206	113	V

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

Pk - Peak detector

RMS - RMS detection

**HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11a / 5240 MHz )**



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

**5240 MHz DATA**

**Radiated Emissions**

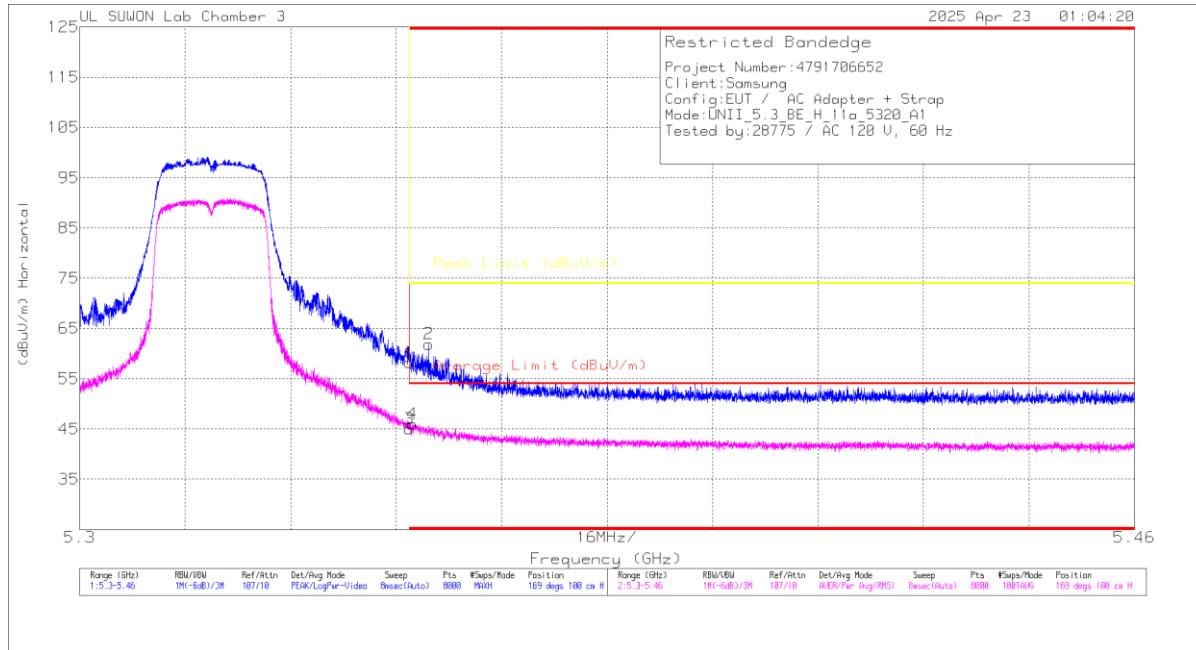
Frequency (GHz)	Meas Reading (dBuU/m)	Det	Antenna Factor (dBm)	6GHz, HP, Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuU/m)	Avg Limit (dBuU/m)	Margin (dB)	Peak Limit (dBuU/m)	Margin (dB)	UNII Non-Restricted (dBuU/m)	Margin (dB)	Azimuth (deg)	Height (cm)	Polarity
* 15.72412	22.72	ADR	40.4	-20.5	.22	42.84	54	-11.16	-	-	*	-	0	100	H

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
ADR - U-NII AD primary method, RMS average

## 8.4.2. TX ABOVE 1 GHz 1TX MODE IN THE 5.3 GHz BAND

### BANDEDGE (WORST CASE: 802.11a / 5320 MHz Upper)

#### HORIZONTAL PEAK AND AVERAGE DATA



#### Trace Markers

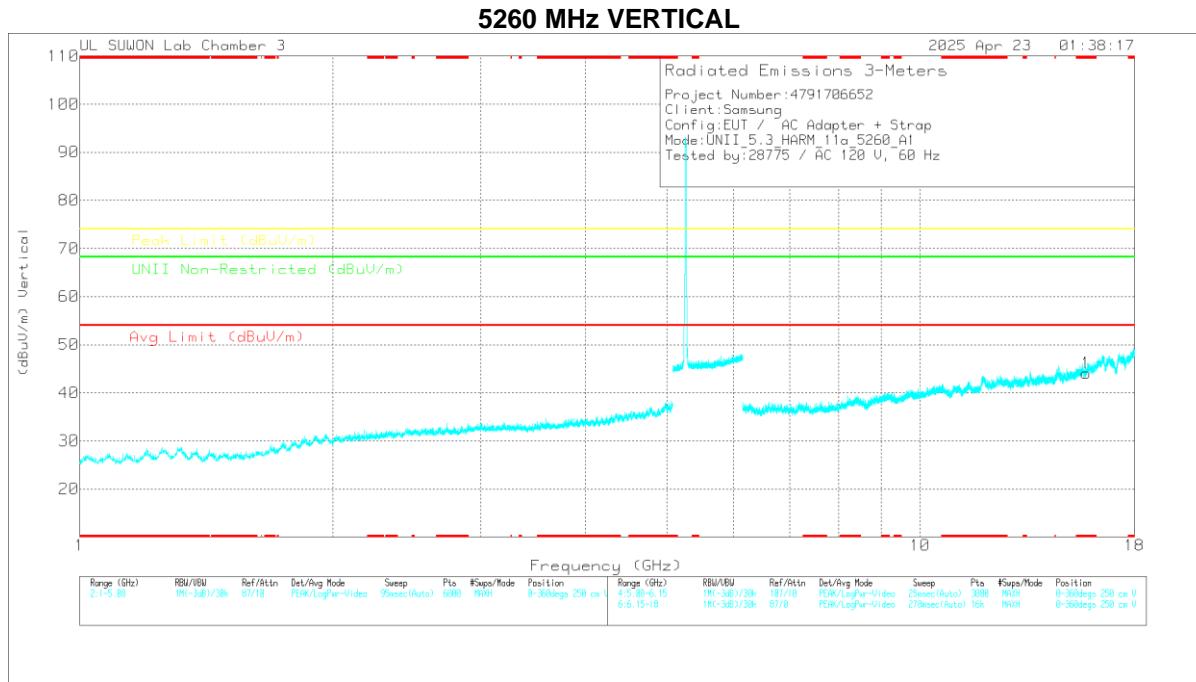
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dB/m)	10dB_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35001	43.59	Pk	34.7	-20.1	0	58.19	-	-	74	-15.81	169	100	H
2	* 5.35293	47.41	Pk	34.7	-20.2	0	61.91	-	-	74	-12.09	169	100	H
3	* 5.35001	30.25	RMS	34.7	-20.1	.22	45.07	54	-8.93	-	-	169	100	H
4	* 5.35049	31.21	RMS	34.7	-20.1	.22	46.03	54	-7.97	-	-	169	100	H

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

PK - Peak detector

RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11a / 5260 MHz)



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## 5260 MHz DATA

### Radiated Emissions

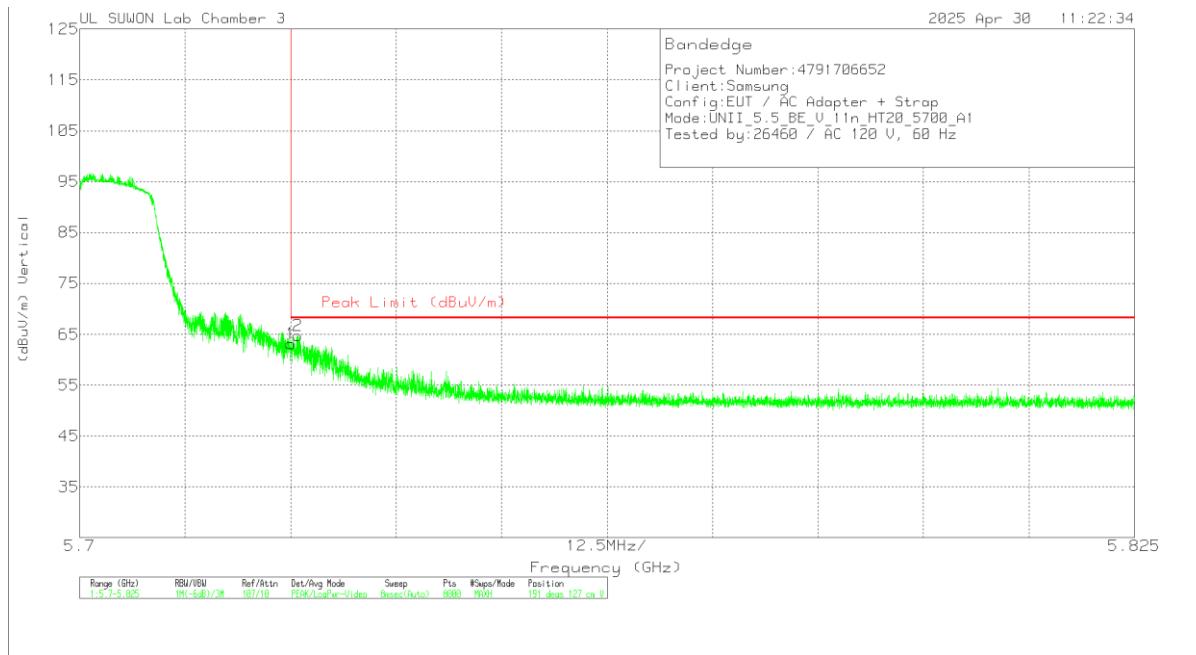
Frequency (GHz)	Meas Reading (dBuV/m)	Dc	Antenna Factor (dBi)	6GHz_HP_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Degree)	Height (cm)	Polarity
* 15.77892	22.58	ADR	40.6	-20.4	.22	43	54	-11	-	-	-	-	360	100	V

\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
ADR - U-NII AD primary method, RMS average

### 8.4.3. TX ABOVE 1 GHz 1TX MODE IN THE 5.5 GHz BAND

#### BANDEDGE (WORST CASE: 802.11n HT20 / 5700 MHz)

##### VERTICAL PEAK DATA

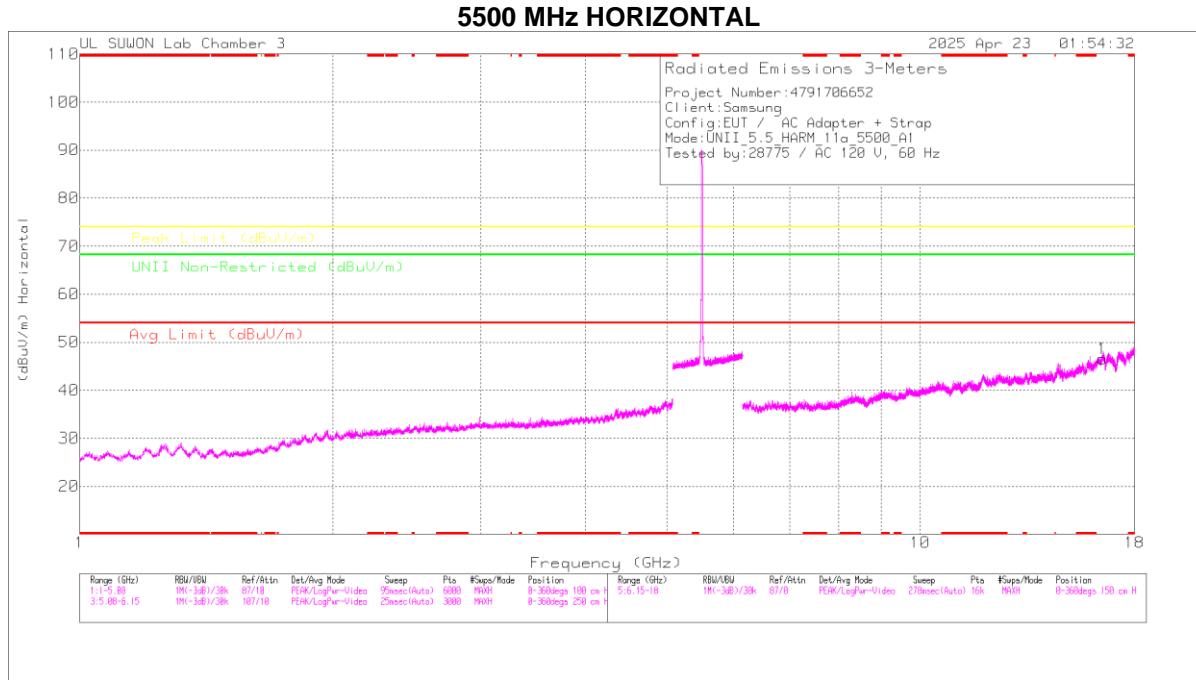


#### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	Antenna_Factor (dB/m)	10dB_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBm)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	47.67	Pk	35	-19.5	0	63.17	68.2	-5.03	191	127	V
2	5.72586	49.2	Pk	35	-19.5	0	64.7	68.2	-3.5	191	127	V

Pk - Peak detector

**HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11a / 5500 MHz)**



Note. Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

**5500 MHz DATA**

**Radiated Emissions**

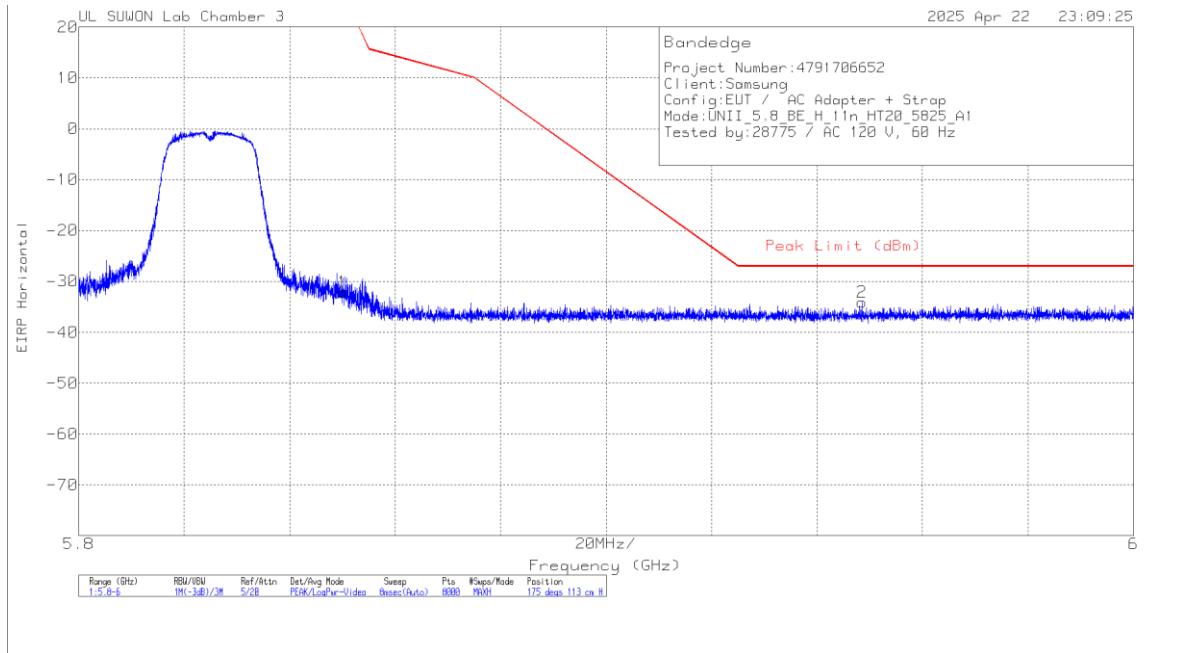
Frequency (GHz)	Marker Reading (dBuV)	Det	Antenna Factor (dB/m)	6GHz_HP_Path Loss(dB)	DC Corr (dB)	Connected Ant (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Deg)	Height (cm)	Polarity
16.4979	34.34	PK-U	41.6	-18.9	0	57.04	-	-	-	-	68.2	-11.16	0	100	H

PK-U - U-NII: Maximum Peak

#### 8.4.4. TX ABOVE 1 GHz 1TX MODE IN THE 5.8 GHz BAND

##### BANDEdge (WORST CASE: 802.11n HT20 / 5825 MHz)

##### HORIZONTAL PEAK DATA

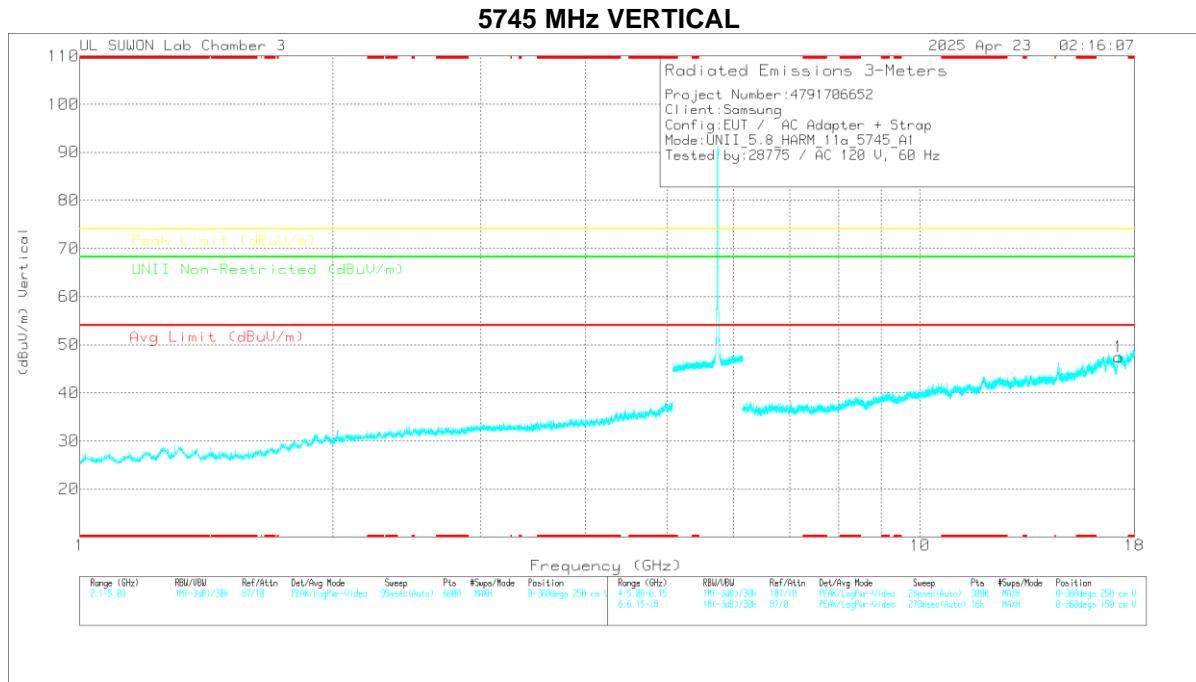


##### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	Antenna_Factor (dBi/m)	10dB_Path Loss(dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85001	-59.7	Pk	35.2	-19.4	11.8	0	-32.1	26.99	-59.09	175	113	H
2	5.94849	-62.23	Pk	35.6	-19.3	11.8	0	-34.13	-27	-7.13	175	113	H

Pk - Peak detector

**HARMONICS AND SPURIOUS EMISSIONS (WORST CASE: 802.11a / 5745 MHz)**



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

**5745 MHz DATA**

**Radiated Emissions**

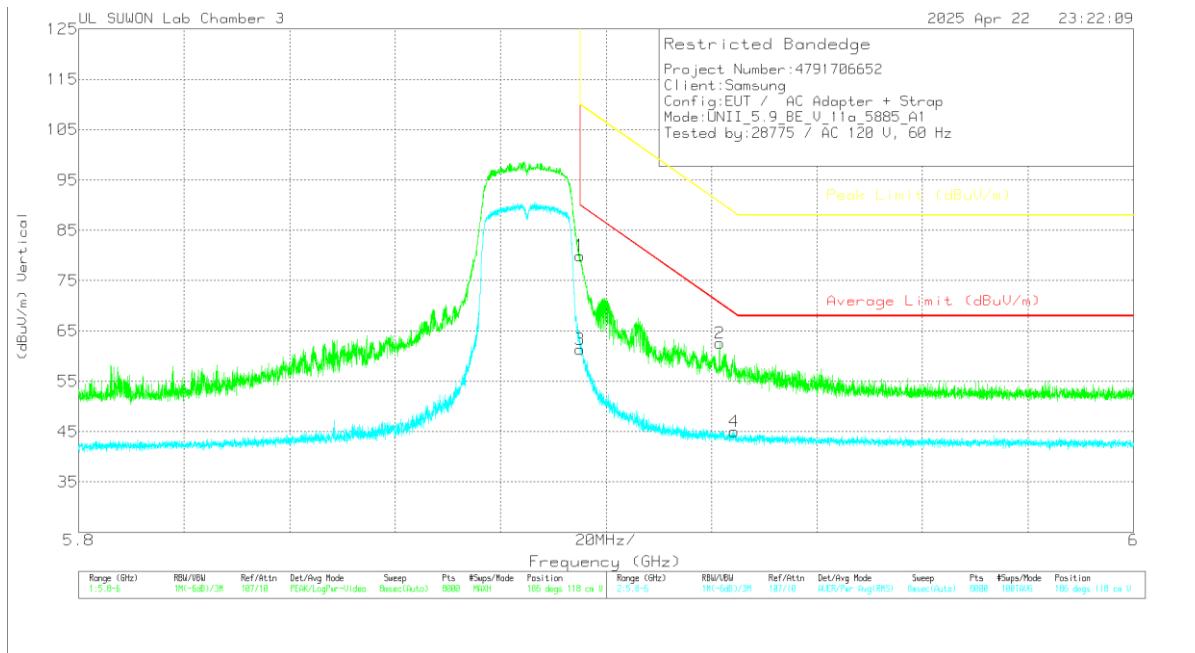
Frequency (GHz)	Mean Reading (dBuV)	Dif	Antenna Factor (dBm)	6GHz_HP_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	Margin (dB)	Azimuth (Deg)	Height (cm)	Polarity
17.23336	32.61	PK-U	41.1	-16.6	0	57.11	-	-	-	-	68.2	-11.09	0	100	V

PK-U - U-NII: Maximum Peak

## 8.4.5. TX ABOVE 1 GHz 1TX MODE IN THE 5.9 GHz BAND

### BANDEDGE (WORST CASE: 802.11a / 5885 MHz)

#### VERTICAL PEAK AND AVERAGE DATA



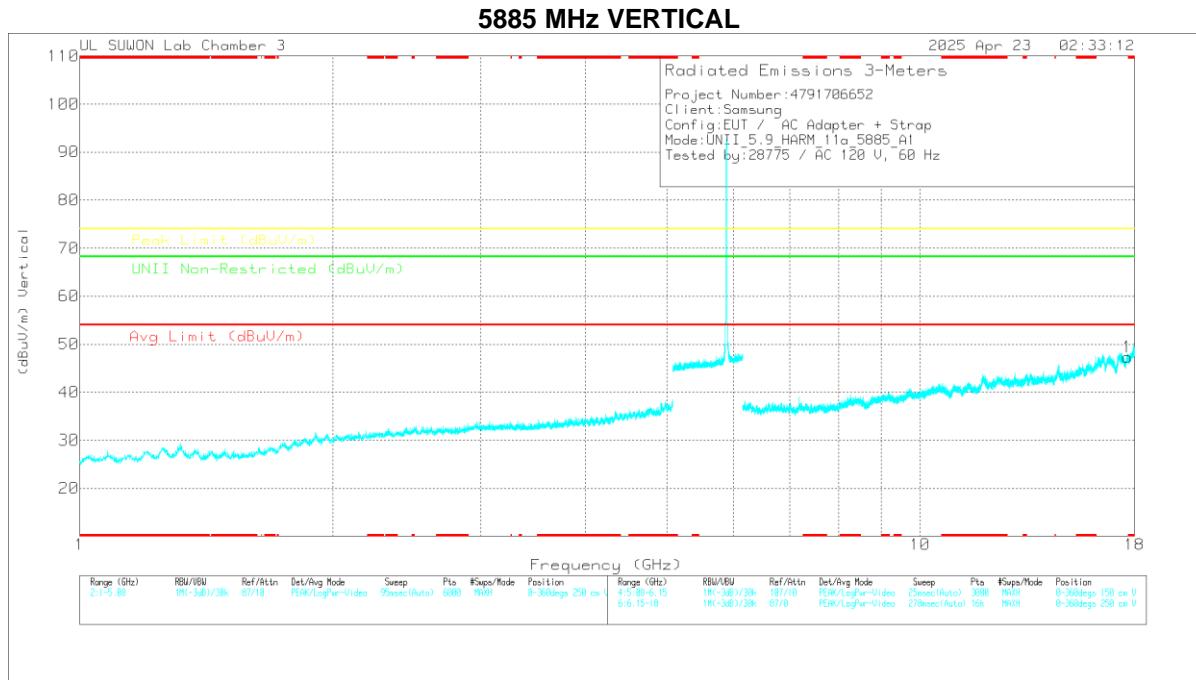
#### Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	Antenna_Factor (dB/m)	10dB_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	5.89501	43.31	Pk	35.4	-19.4	0	79.96	-	-	109.99	-30.01	186	118	V
2	5.92151	46.43	Pk	35.5	-19.3	0	62.63	-	-	90.56	-27.93	186	118	V
3	5.89501	45.09	RMS	35.4	-19.4	.22	61.31	89.99	-26.68	-	-	186	118	V
4	5.92429	28.57	RMS	35.5	-19.3	.22	44.99	68.52	-23.53	-	-	186	118	V

Pk - Peak detector

RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS(WORST CASE: 802.11a / 5885 MHz)



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## 5885 MHz DATA

### Radiated Emissions

Frequency (GHz)	Mean Reading (dBuV)	Dif	Antenna Factor (dBm)	6GHz_HP_Path Loss(dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuU/m)	Margin (dB)	Azimuth (Degree)	Height (cm)	Polarity
17.65401	31.55	PK-U	41.3	-15.4	0	57.45	-	-	-	-	68.2	-10.75	0	100	V

PK-U - U-NII: Maximum Peak

## END OF TEST REPORT