

TEST REPORT

FCC DTS ax, be Test for SM-F766B
Certification

APPLICANT
SAMSUNG Electronics Co., Ltd.

REPORT NO.
HCT-RF-2505-FC009-R1

DATE OF ISSUE
May 27, 2025

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Applicant

SAMSUNG Electronics Co., Ltd.

129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea

Product Name

Mobile Phone

Model Name

SM-F766B

FCC ID

A3LSMF766B

Date of Test

February 26, 2025 ~ May 07, 2025

FCC Classification

Digital Transmission System(DTS)

Test Standard Used

FCC Rule Part(s): Part 15.247

Test Results

PASS

Location of Test

☒ Permanent Testing Lab ☐ On Site Testing Lab

(Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	May 07, 2025	Initial Release
1	May 27, 2025	Revised the Power Supply Voltage. (DC 3.88 V → DC 3.90 V)

Notice

Content

Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the FCC Rules under normal use and maintenance.

The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated.

The test results have only been applied with the test methods required by the standard(s).

The laboratory is not accredited for the test results marked *.

Information provided by the applicant is marked **.

Test results provided by external providers are marked ***.

When confirmation of authenticity of this test report is required, please contact www.hct.co.kr

The test results in this test report are not associated with the ((KS Q) ISO/IEC 17025) accreditation by KOLAS (Korea Laboratory Accreditation Scheme) / A2LA (American Association for Laboratory Accreditation) that are under the ILAC (International Laboratory Accreditation Cooperation) Mutual Recognition Agreement (MRA).

Data referencing: DTS ax, be Report (Ch.1~Ch.11) (FCC ID: A3LSMF766U, Report No. HCT-RF-2504-FC039)

Full test: Ch.12~Ch.13.

CONTENTS

1. EUT DESCRIPTION	5
ANTENNA CONFIGURATIONS	6
2. TEST METHODOLOGY	8
EUT CONFIGURATION	8
EUT EXERCISE	8
GENERAL TEST PROCEDURES	8
DESCRIPTION OF TEST MODES	8
3. INSTRUMENT CALIBRATION	9
4. FACILITIES AND ACCREDITATIONS	9
FACILITIES	9
EQUIPMENT	9
5. ANTENNA REQUIREMENTS	10
6. MEASUREMENT UNCERTAINTY	10
7. DESCRIPTION OF TESTS	11
8. SUMMARY OF TEST RESULTS & DATA REFERENCING	28
9. TEST RESULT	30
9.1 DUTY CYCLE	30
9.2 6 dB BANDWIDTH	33
9.3 OUTPUT POWER	37
9.4 POWER SPECTRAL DENSITY	39
9.5 BAND EDGE / CONDUCTED SPURIOUS EMISSIONS	42
9.6 RADIATED SPURIOUS EMISSIONS	49
9.7 RADIATED RESTRICTED BAND EDGES	55
9.7.1 Channel 1, 11	55
9.7.2 Channel 12, 13	59
10. LIST OF TEST EQUIPMENT	63
11. ANNEX A_ TEST SETUP PHOTO	65

1. EUT DESCRIPTION

Model	SM-F766B		
Additional Model	-		
EUT Type	Mobile Phone		
Power Supply	DC 3.90 V		
Frequency Range	2 412 MHz ~ 2 472 MHz		
Max. RF Output Power	<u>Peak Power</u>	SISO(Ant.1)	26.79 dBm
		SISO(Ant.2)	24.98 dBm
		MIMO_CDD(Ant.1+ Ant.2)	28.98 dBm
	<u>Average Power</u>	SISO(Ant.1)	17.73 dBm
		SISO(Ant.2)	16.44 dBm
		MIMO_CDD(Ant.1+ Ant.2)	20.11 dBm
Modulation Type	OFDM, OFDMA		
Number of Channels	13 Channels		
Antenna Specification	Type: Metal		
Serial number	Conducted : R3CY30SC51D Radiated : R3CY209A87R		
Serial number(Ch. 12, 13)	Conducted : R3CY2080L6K Radiated : R3CY30RT30P		

ANTENNA CONFIGURATIONS

1. Antenna configuration

Configurations	SISO		MIMO	
	ANT.1	ANT.2	CDD	SDM
802.11ax(HE20)	O	O	O	O
802.11be(EHT20)	O	O	O	O
802.11be(EHT20)_MRU	O	O	O	O

Note:

- (1) O = Support, X = Not Support
- (2) SISO = Single Input Single Output
- (3) SDM = Spatial Diversity Multiplexing
- (4) CDD = Cyclic Delay Diversity

2.This device supports simultaneous transmission operation, which allows for two channels to operate independent of one another in the 2.4 GHz and 5 GHz or 6GHz Bands simultaneously on each antenna.

Simultaneous transmission Scenario	2.4 GHz WiFi Ant.1	2.4 GHz WiFi Ant.2	5 GHz WiFi Ant.1	5 GHz WiFi Ant.2	6 GHz WiFi Ant.1	6 GHz WiFi Ant.2	BT Ant.1	BT Ant.2	Test Case
Dual Bluetooth + 5 GHz WiFi MIMO			on	on			on	on	Scenario1
Dual Bluetooth + 6 GHz WiFi MIMO					on	on	on	on	
2.4 GHz WiFi MIMO + 5 GHz WiFi MIMO	on	on	on	on					Scenario2
2.4 GHz WiFi MIMO + 6 GHz WiFi MIMO	on	on			on	on			
Bluetooth ANT.1 + 2.4 GHz WiFi ANT.2 + 5 GHz WiFi MIMO		on	on	on			on		Scenario3
Bluetooth ANT.1 + 2.4 GHz WiFi ANT.2 + 6 GHz WiFi MIMO		on			on	on	on		

3. Directional Gain Calculation

According to KDB 662911 D01 Multiple Transmitter Output v02r01 F 2) e) (iii), f) ii)

$$\text{Directional Gain(CDD)} = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left(\sum_{k=1}^{N_{ANT}} g_{j,k} \right)^2}{N_{ANT}} \right]$$

$$\text{Directional gain(SDM)} = G_{\max} + 10 \cdot \text{LOG}(N_{ANT}/N_{SS})$$

Ant Gain (dBi)		N_{ANT}/N_{SS}	Directional Gain (dBi)	
			CDD	SDM
ANT.1	-5.15	2/2	-3.23	-5.15
ANT.2	-7.48			

Note

According to ANSI C63.10-2013 section 14.4.3, the directional gain is calculated using the formula, where G_N is the gain of the nth antenna and N_{ANT} is the total number of antennas used.

$$\text{Directional gain(CDD)} = 10 \cdot \log \left(\left(10^{(ANT.0 \text{ Gain}/20)} + 10^{(ANT.1 \text{ Gain}/20)} \right)^2 / 2 \right) \text{ dBi}$$

$$\text{Directional gain(SDM)} = G_{\max} + 10 \cdot \log(N_{ANT}/N_{SS})$$

Sample MIMO Calculation:

Ex) ANT.1 : 11.58 dBm ANT.2 : 12.08 dBm

$$\text{MIMO} = \text{ANT.1} + \text{ANT.2}$$

$$(11.58 \text{ dBm} + 12.08 \text{ dBm}) = (14.387 \text{ mW} + 16.143 \text{ mW}) = 30.53 \text{ mW} = 14.88 \text{ dBm}$$

2. TEST METHODOLOGY

FCC KDB 558074 D01 15.247 Meas Guidance v05r02 dated April 02, 2019 entitled “guidance for compliance measurements on digital transmission system, frequency hopping spread spectrum system, and hybrid system devices and the measurement procedure described in ANSI C63.10(Version : 2013) ‘the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices’.

EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

EUT EXERCISE

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 6.2 of ANSI C63.10. (Version :2013) Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane below 1 GHz. Above 1 GHz with 1.5 m using absorbers between the EUT and receive antenna. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 6.6.5 of ANSI C63.10. (Version: 2013)

DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

3. INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment's, which is traceable to recognized national standards.

Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5 (Version : 2017).

4. FACILITIES AND ACCREDITATIONS

FACILITIES

The SAC(Semi-Anechoic Chamber) and conducted measurement facility used to collect the radiated data are located at the 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA.

The site is constructed in conformance with the requirements of ANSI C63.4. (Version :2014) and CISPR Publication 22.

Detailed description of test facility was submitted to the Commission and accepted dated March 11, 2024 (Registration Number: KR0032).

EQUIPMENT

Radiated emissions are measured with one or more of the following types of Linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

5. ANTENNA REQUIREMENTS

According to FCC 47 CFR § 15.203:

“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.”

- (1) The antennas of this E.U.T are permanently attached.
- (2) The E.U.T Complies with the requirement of § 15.203

6. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013.

All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95 % level of confidence.

The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

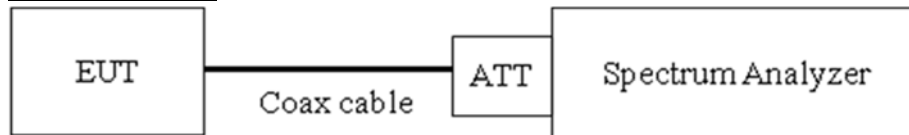
Parameter	Expanded Uncertainty ($\pm$ kHz)
X dB, 99% Bandwidth	95 (Confidence level about 95 %, $k=2$)
Frequency stability	28 (Confidence level about 95 %, $k=2$)

Parameter	Expanded Uncertainty ($\pm$ dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.54 (Confidence level about 95 %, $k=2$)
Conducted Output Power(Power Meter)	0.54 (Confidence level about 95 %, $k=2$)
Conducted Output Power(Signal Analyzer)	0.68 (Confidence level about 95 %, $k=2$)
Power Spectral Density	1.03 (Confidence level about 95 %, $k=2$)
Band Edge (Out of Band Emissions)	0.70 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.36 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.68 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.75 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.82 (Confidence level about 95 %, $k=2$)

7. DESCRIPTION OF TESTS

7.1. Duty Cycle

Test Configuration



Test Procedure

The transmitter output is connected to the Spectrum Analyzer.

We tested according to the zero-span measurement method.

The largest available value of RBW is 8 MHz and VBW is 50 MHz.

The zero-span method of measuring duty cycle shall not be used if $T \leq 6.25$ microseconds. ($50/6.25 = 8$)

The zero-span method was used because all measured T data are > 6.25 microseconds and both RBW and VBW are $> 50/T$.

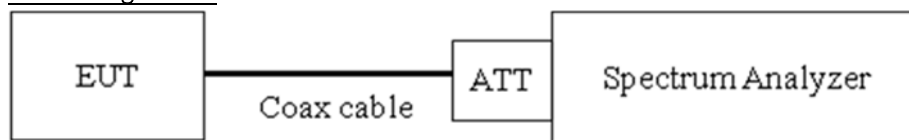
1. RBW = 8 MHz (the largest available value)
2. VBW = 8 MHz ($\geq$ RBW)
3. SPAN = 0 Hz
4. Detector = Peak
5. Number of points in sweep > 100
6. Trace mode = Clear write
7. Measure T_{total} and T_{on}
8. Calculate Duty Cycle = T_{on} / T_{total} and Duty Cycle Factor = $10\log(1/\text{Duty Cycle})$

7.2. 6 dB Bandwidth

Limit

The minimum permissible 6 dB bandwidth is 500 kHz.

Test Configuration



Test Procedure

The transmitter output is connected to the Spectrum Analyzer.

The Spectrum Analyzer is set to (Procedure 11.8.1 in ANSI 63.10-2013)

- 1) RBW = 100 kHz
- 2) VBW $\geq 3 \times$ RBW
- 3) Detector = Peak
- 4) Trace mode = max hold
- 5) Sweep = auto couple
- 6) Allow the trace to stabilize
- 7) We tested 6 dB bandwidth using the automatic bandwidth measurement capability of a spectrum analyzer. X dB is set 6 dB.

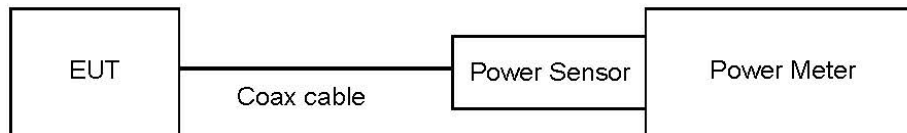
Note : We tested OBW using the automatic bandwidth measurement capability of a spectrum analyzer.

7.3. Output Power

Limit

The maximum permissible conducted output power is 1 Watt.

Test Configuration



Test Procedure

The transmitter output is connected to the Power Meter.

- Peak Power (Procedure 11.9.1.3 in ANSI 63.10-2013)
: Measure the peak power of the transmitter.
- Average Power (Procedure 11.9.2.3 in ANSI 63.10-2013)
 - 1) Measure the duty cycle.
 - 2) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
 - 3) Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Sample Calculation

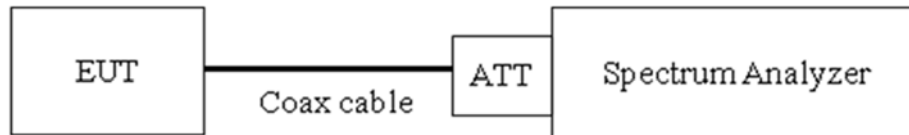
- Conducted Output Power(Peak) = Measured Value + ATT loss + Cable loss
- Conducted Output Power(Average) = Measured Value + ATT loss + Cable loss + Duty Cycle Factor

7.4. Power Spectral Density

Limit

The transmitter power density average over 1-second interval shall not be greater than 8 dBm in any 3 kHz BW.

Test Configuration



Test Procedure

The transmitter output is connected to the Spectrum Analyzer.

We tested according to Procedure 8.4 in KDB 558074 v05r02, Procedure 11.10 in ANSI 63.10-2013.

The spectrum analyzer is set to :

- 1) Set analyzer center frequency to DTS channel center frequency.
- 2) Set span to at least 1.5 times the OBW.
- 3) $RBW = 3 \text{ kHz} \leq RBW \leq 100 \text{ kHz}$.
- 4) $VBW \geq 3 \times RBW$.
- 5) Sweep = auto couple
- 6) Detector = power averaging (rms) or sample detector (when rms not available).
- 7) Ensure that the number of measurement points in the sweep $\geq [2 \times \text{span} / RBW]$.
- 8) Employ trace averaging (rms) mode over a minimum of 100 traces
- 9) Use the peak marker function to determine the maximum amplitude level.
- 10) Use the peak marker function to determine the maximum amplitude level within the RBW.
If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.
- 11) if then duty factor shall be added to adjust the result if the duty cycle is less than 98 %

Sample Calculation

- Power Spectral Density = Measured Value + ATT loss + Cable loss + Duty Cycle Factor

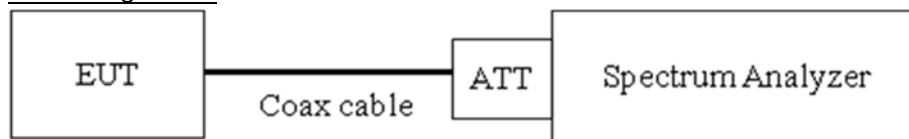
7.5. Conducted Band Edge (Out of Band Emissions) & Conducted Spurious Emissions

Limit

The maximum conducted (Average) output power was used to demonstrate compliance, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least relative to the maximum in-band peak PSD level in 100 kHz.

[Conducted > 30 dBc]

Test Configuration



Test Procedure

The transmitter output is connected to the spectrum analyzer.

(Procedure 11.11 in ANSI 63.10-2013)

- 1) RBW = 100 kHz
- 2) VBW $\geq 3 \times$ RBW
- 3) Set span to encompass the spectrum to be examined
- 4) Detector = Peak
- 5) Trace Mode = max hold
- 6) Sweep time = auto couple
- 7) Allow trace to fully stabilize.
- 8) Use peak marker function to determine the maximum amplitude level.

Measurements are made over the 30 MHz to 25 GHz range with the transmitter set to the lowest, middle, and highest channels.

Factors for frequency

Freq(MHz)	Ant.1 Factor(dB)	Ant.2 Factor(dB)
30	10.43	10.05
100	10.44	10.06
200	10.47	10.09
300	10.45	10.07
400	10.50	10.12
500	10.54	10.16
600	10.57	10.19
700	10.71	10.33
800	10.83	10.45
900	10.93	10.55
1000	10.95	10.57
2000	10.95	10.57
2400	11.00	10.62
2500	11.00	10.62
3000	11.21	10.83
4000	11.65	11.27
5000	12.53	12.15
6000	12.53	12.15
7000	12.61	12.23
8000	12.62	12.24
9000	12.66	12.28
10000	12.73	12.35
11000	12.72	12.34
12000	12.75	12.37
13000	12.77	12.39
14000	12.90	12.52
15000	12.85	12.47
16000	12.91	12.53
17000	12.95	12.57
18000	12.99	12.61
19000	13.05	12.67
20000	13.09	12.71
21000	13.11	12.73
22000	13.15	12.77
23000	13.22	12.84
24000	13.26	12.88
25000	13.27	12.89
26000	13.31	12.93

Note : 1. 2400 ~ 2500 MHz is fundamental frequency range.

2. Factor = Attenuator loss + Cable loss

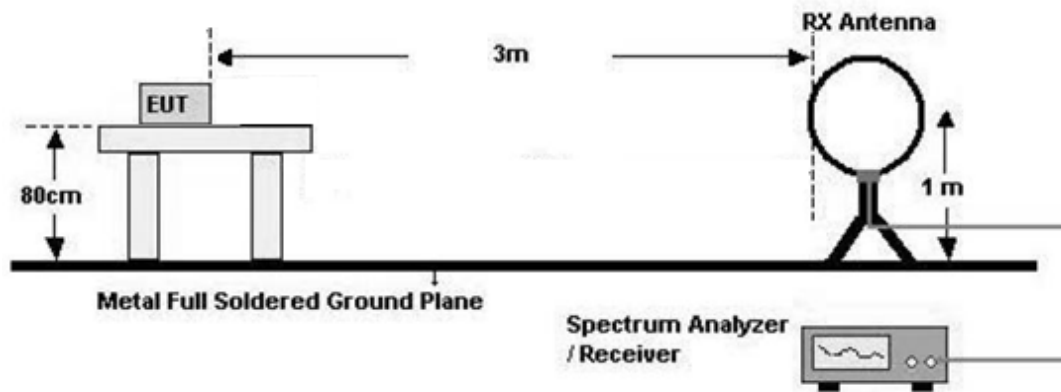
7.6. Radiated Test

Limit

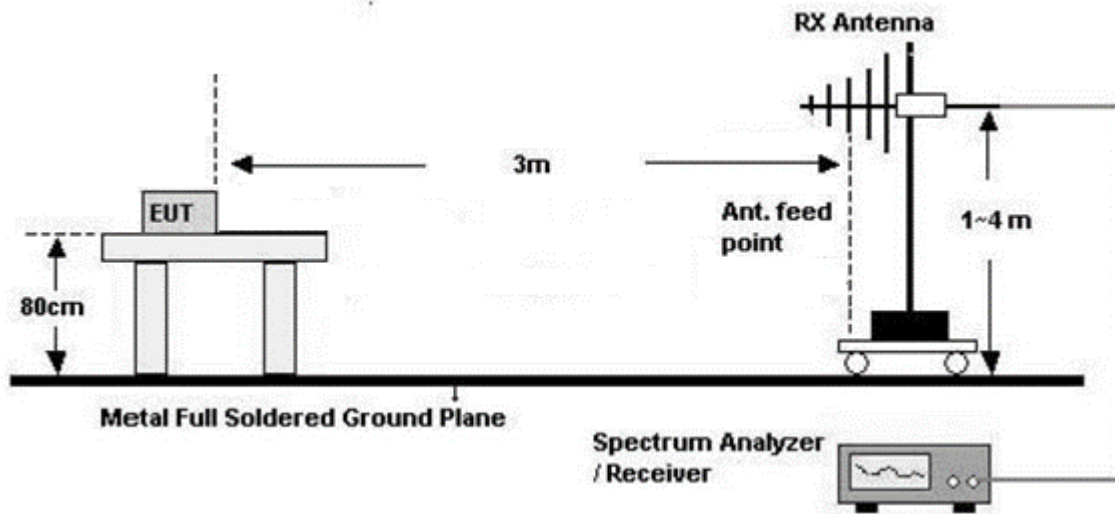
Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measurement Distance (m)
0.009 – 0.490	$2400/F(\text{kHz})$	300
0.490 – 1.705	$24000/F(\text{kHz})$	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Configuration

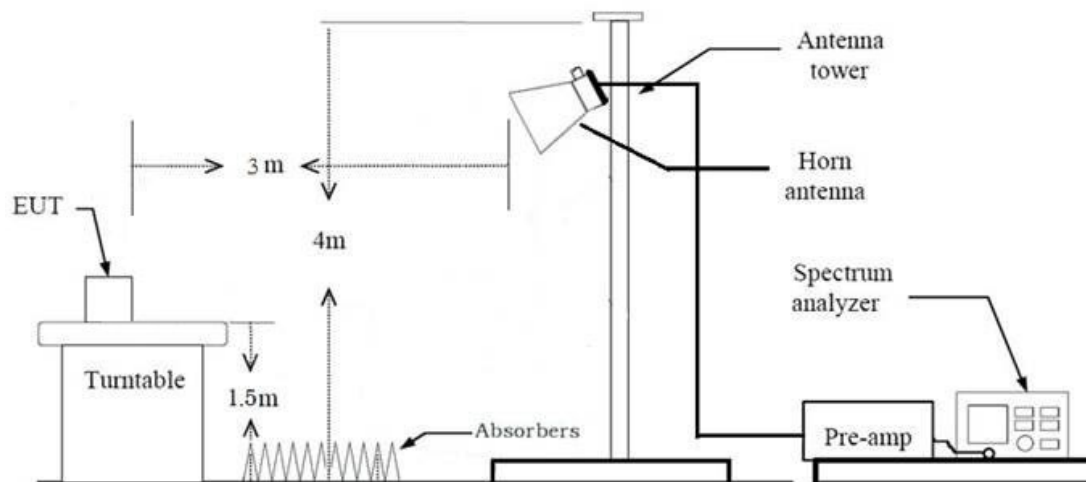
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



Test Procedure of Radiated spurious emissions (Below 30 MHz)

1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The loop antenna was placed at a location 3 m from the EUT
3. The EUT is placed on a turntable, which is 0.8 m above ground plane.
4. We have done x, y, z planes in EUT and horizontal and vertical polarization and Parallel to the ground plane in detecting antenna.
5. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
6. Distance Correction Factor(0.009 MHz – 0.490 MHz) = $40\log(3\text{ m}/300\text{ m}) = -80\text{ dB}$
Measurement Distance : 3 m
7. Distance Correction Factor(0.490 MHz – 30 MHz) = $40\log(3\text{ m}/30\text{ m}) = -40\text{ dB}$
Measurement Distance : 3 m
8. Spectrum Setting
 - Frequency Range = 9 kHz ~ 30 MHz
 - Detector = Peak
 - Trace = Max hold
 - RBW = 9 kHz
 - VBW $\geq 3 \times$ RBW
9. Total = Measured value + Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F)
10. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

KDB 414788 OFS and Chamber Correlation Justification

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

Test Procedure of Radiated spurious emissions (Below 1 GHz)

1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The EUT is placed on a turntable, which is 0.8 m above ground plane.
3. The Hybrid antenna was placed at a location 3 m from the EUT, which is varied from 1 m to 4 m to find out the highest emissions.
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
6. Spectrum Setting

(1) Measurement Type(Peak):

- Measured Frequency Range : 30 MHz – 1 GHz
- Detector = Peak
- Trace = Max hold
- RBW = 100 kHz
- VBW $\geq 3 \times$ RBW

(2) Measurement Type(Quasi-peak):

- Measured Frequency Range : 30 MHz – 1 GHz
- Detector = Quasi-Peak
- RBW = 120 kHz

In general, (1) is used mainly

7. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L)
8. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

Test Procedure of Radiated spurious emissions (Above 1 GHz)

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
3. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
4. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
6. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
7. The unit was tested with its standard battery.
8. Spectrum Setting (Method 8.6 in KDB 558074 v05r02, Procedure 11.12 in ANSI 63.10-2013)

(1) Measurement Type(Peak):

- Measured Frequency Range : 1 GHz – 25 GHz
- Detector = Peak
- Trace = Maxhold

- RBW = 1 MHz

- VBW $\geq 3 \times$ RBW

(2) Measurement Type(Average): Duty cycle $\geq 98 \%$

- Measured Frequency Range : 1 GHz – 25 GHz

- Detector = RMS

- Averaging type = power (*i.e.*, RMS)

- RBW = 1 MHz

- VBW $\geq 3 \times$ RBW

- Sweep time = auto.

- Trace mode = average (at least 100 traces).

(3) Measurement Type(Average): Duty cycle $< 98 \%$, duty cycle variations are less than $\pm 2 \%$

- Measured Frequency Range : 1 GHz – 25 GHz

- Detector = RMS

- Averaging type = power (*i.e.*, RMS)

- RBW = 1 MHz

- VBW $\geq 3 \times$ RBW

- Sweep time = auto.

- Trace mode = average (at least 100 traces).

- Correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 % duty cycle.

- Duty Cycle Factor (dB) : Please refer to the please refer to section 9.1.

9. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

10. Distance extrapolation factor = $20 \log (\text{test distance} / \text{specific distance})$ (dB)

11. Total(Measurement Type : Peak)

= Measured value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(A.G) + Distance Factor(D.F)

Total(Measurement Type : Average, Duty cycle $\geq 98 \%$)

= Measured value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(A.G) + Distance Factor(D.F)

Total(Measurement Type : Average, Duty cycle $< 98 \%$)

= Measured value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(A.G) + Distance Factor(D.F)

+ Duty Cycle Factor

Test Procedure of Radiated Restricted Band Edge

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
3. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
4. EUT is set 3 m away from the receiving antenna, which is varied from 1 m to 4 m to find out the highest emissions.
5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
6. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
7. The unit was tested with its standard battery.
8. Spectrum Setting
 - (1) Measurement Type(Peak):
 - Measured Frequency Range : 2310 MHz ~ 2390 MHz/ 2483.5 MHz ~ 2500 MHz
 - Detector = Peak
 - Trace = Max hold
 - RBW = 1 MHz
 - VBW $\geq 3 \times$ RBW
 - (2) Measurement Type(Average): Duty cycle $\geq 98 \%$,
 - Measured Frequency Range : 2310 MHz ~ 2390 MHz / 2483.5 MHz ~ 2500 MHz
 - Detector = RMS
 - Averaging type = power (*i.e.*, RMS)
 - RBW = 1 MHz
 - VBW $\geq 3 \times$ RBW
 - Sweep time = auto.
 - Trace mode = average (at least 100 traces).
 - (3) Measurement Type(Average): Duty cycle $< 98 \%$, duty cycle variations are less than $\pm 2 \%$
 - Measured Frequency Range : 2310 MHz ~ 2390 MHz / 2483.5 MHz ~ 2500 MHz
 - Detector = RMS
 - Averaging type = power (*i.e.*, RMS)
 - RBW = 1 MHz
 - VBW $\geq 3 \times$ RBW
 - Sweep time = auto.
 - Trace mode = average (at least 100 traces).
 - Correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 % duty cycle.
 - Duty Cycle Factor (dB) : Please refer to the please refer to section 9.1.

9. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

10. Distance extrapolation factor = $20\log(\text{test distance} / \text{specific distance})$ (dB)

11. Total (Measurement Type : Peak)

= Peak Measured Value

Total(Measurement Type : Average, Duty cycle $\geq 98\%$)

= Average Measured Value

Total(Measurement Type : Average, Duty cycle < 98 %)

= Average Measured Value + Duty Cycle Factor

- We apply to the offset in the range 1 GHz - 18 GHz.

- The offset = Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F)

7.7. AC Power line Conducted Emissions

Limit

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN).

Frequency Range (MHz)	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56 ^(a)	56 to 46 ^(a)
0.50 to 5	56	46
5 to 30	60	50

^(a)Decreases with the logarithm of the frequency.

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Annex A for the actual connections between EUT and support equipment.

Test Procedure

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors : Quasi Peak and Average Detector.

Sample Calculation

Quasi-peak (Final Result) = Measured Value + Correction Factor

7.8. Test RU offset for Tones

BW (MHz)	SRU/MRU	Tones (T)	RU offset	Test RU offset		
				Low	Mid	High
20	SRU	26	0~8	0	4	8
		52	37~40	37	38	40
		106	53~54	53	-	54
		242	61	-	61	-
	MRU	52 + 26	70 ~ 72	70	71	72
		106 + 26	82 ~ 83	82	-	83

7.9. Worst case configuration and mode

Conducted test

1. All data rate of operation were investigated and the worst case results are reported.

(Worst case : MCS0)

2. Band Edge

: All Mode (Channel, Tones, RU Offset) of operation were investigated and the worst case configuration results are reported.

Tones	SRU/MRU	Channel	RU Index
26	SRU	1, 11, 12, 13	0, 8
52		1, 11, 12, 13	37, 40
106		1, 11, 12, 13	53, 54
242		1, 11, 12, 13	61
SU		1, 11, 12, 13	-
52T + 26T	MRU	1, 11, 12, 13	70, 72
106T + 26T		1, 11, 12, 13	82, 83

3. We performed all tests for both 802.11ax and 802.11be, and to simplify the report, we have included only the 802.11be data.

Radiated test

1. All modes of operation were investigated and the worst case configuration results are reported.

- Mode : Stand alone, Stand alone + External accessories (Earphone, etc)

- Worst case : Stand alone

2. The EUT was tested in three modes(Open, Half-open, Closed), the worst case configuration results are reported.

- Radiated Spurious Emissions Worst case : Open mode

- Radiated Restricted Band Edge : Open mode

3. All data rate of operation were investigated and the worst case results are reported.

(Worst case : MCS 0)

4. All Antenna of operation were investigated and the worst case results are reported

- Antenna Operation Type : SISO, MIMO_CDD(Ant.1+Ant.2), MIMO_SDM(Ant.1+Ant.2)

- Worst case: MIMO_CDD(Ant.1+Ant.2)

5. EUT Axis

- Radiated Spurious Emissions : Z

- Radiated Restricted Band Edge : X

6. All position of loop antenna were investigated and the test result is a no critical peak found at all positions.

- Position : Horizontal, Vertical, Parallel to the ground plane

7. All mode(Tone, RU Offset) of operation were investigated and the worst case configuration results are reported

8. We performed all tests for both 802.11ax and 802.11be, and to simplify the report, we have included only the 802.11be data.

[RSE Worst case]

BW (MHz)	Test		Tones (T)	Offset
20	RSE	SRU	26	4
			242	61
		MRU	52+26	71
			106+26	82

[Bandedge Worst case]

BW (MHz)	Test		Tones (T)	Offset	
				Lower	Upper
20	Band Edge	SRU	26	0	8
			52	37	40
			106	53	54
			242	61	61
			SU	-	-
		MRU	52+26	70	72
			106+26	82	83

Radiated test(Simultaneous transmission Scenario)

1. Please refer to the [DTS], [BT], [UNII ax, be] Test Report.

AC Power line Conducted Emissions

1. Please refer to the [DTS] Test Report.

8. SUMMARY OF TEST RESULTS & DATA REFERENCING

8.1. Test result

Test Description	FCC Part Section(s)	Test Limit	Test Condition	Test Result
6 dB Bandwidth	§ 15.247(a)(2)	> 500 kHz	Conducted	PASS
Conducted Maximum Output Power	§ 15.247(b)(3)	< 1 Watt		PASS
Power Spectral Density	§ 15.247(e)	< 8 dBm / 3 kHz Band		PASS
Band Edge (Out of Band Emissions)	§ 15.247(d)	Conducted > 30 dBc		PASS
AC Power line Conducted Emissions	§ 15.207	cf. Section 7.7		PASS (Note1)
Radiated Spurious Emissions	§ 15.247(d), 15.205, 15.209	cf. Section 7.6	Radiated	PASS
Radiated Restricted Band Edge	§ 15.247(d), 15.205, 15.209	cf. Section 7.6		PASS

Note:

1. Please refer to the [DTS] Test Report.
2. The decision rule applies 'simple acceptance'

8.2. Data Referencing

Equipment Class	Rule Part	Test item	Data Referencing	Comments
DTS (WLAN 2.4GHz)	15.247(a)(2)	6 dB Bandwidth	Y	-
	15.247(b)(3)	Conducted Maximum output power	Y	Spot-check
	15.247(e).	Power Spectral Density	Y	-
	15.247(d)	Band Edge (Out of Band Emissions)	Y	-
	15.207	AC Power line conducted Emissions	Y	Spot-check
	15.247(d) 15.205 15.209	Radiated Spurious Emissions	Y	Spot-check
	15.247(d) 15.205 15.209	Radiated Restricted Band Edge	Y	Spot-check

Spot-Check Result

1. Data was leveraged from model SM-F766U for the certification of SM-F766B.
2. Please refer to the [FCC Evaluation] Report.

9. TEST RESULT

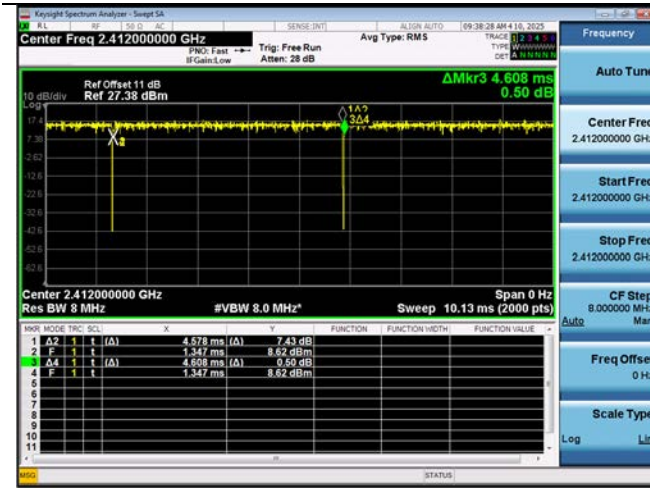
9.1 DUTY CYCLE

Mode	Tone (T)	Worst Data rate	T _{on} (ms)	T _{total} (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11be (EHT20)	26	MCS0	4.578	4.608	0.993	0.028
	52	MCS0	4.568	4.599	0.993	0.029
	106	MCS0	2.492	2.514	0.991	0.038
	242	MCS0	1.123	1.146	0.980	0.088
	52+26	MCS0	3.502	3.529	0.992	0.033
	106+26	MCS0	2.028	2.054	0.987	0.055
802.11be (SU)	BW 20	MCS0	5.459	5.481	0.996	0.017

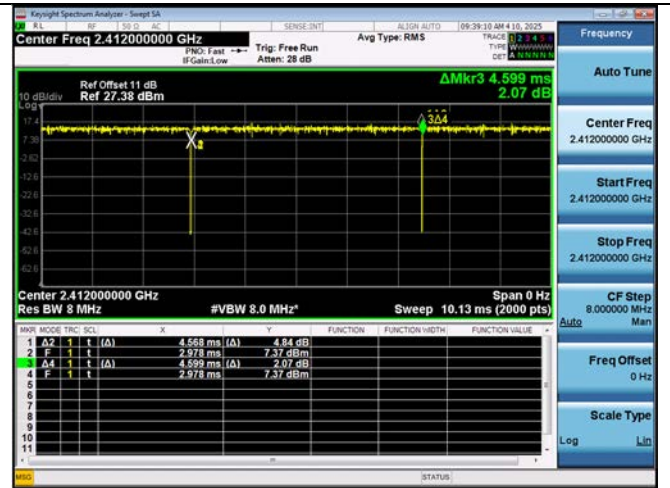
Test Plots

Note: In order to simplify the report, attached plots were only the lowest data rate.

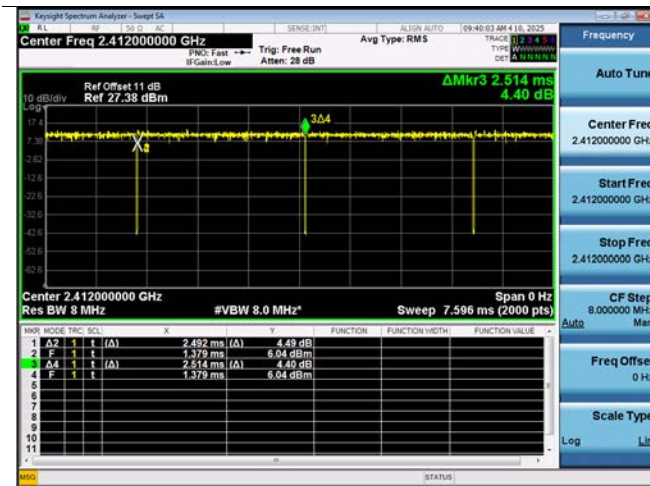
26 Tones (MCS 0)



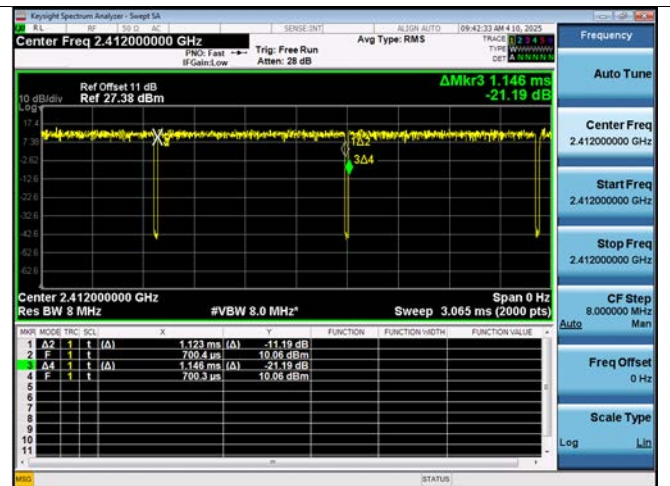
52 Tones (MCS 0)



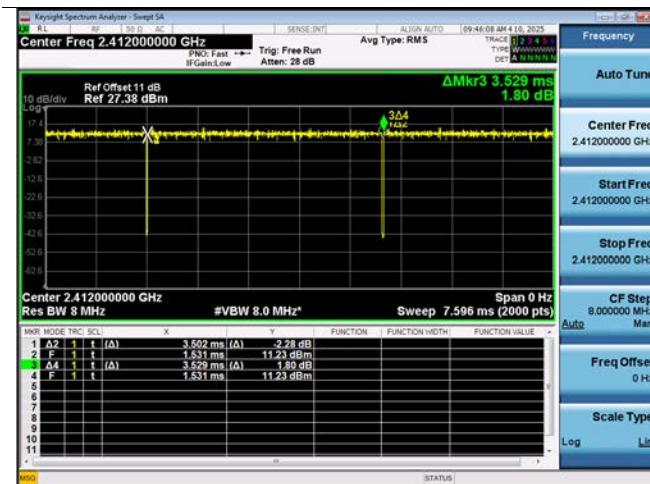
106 Tones (MCS 0)



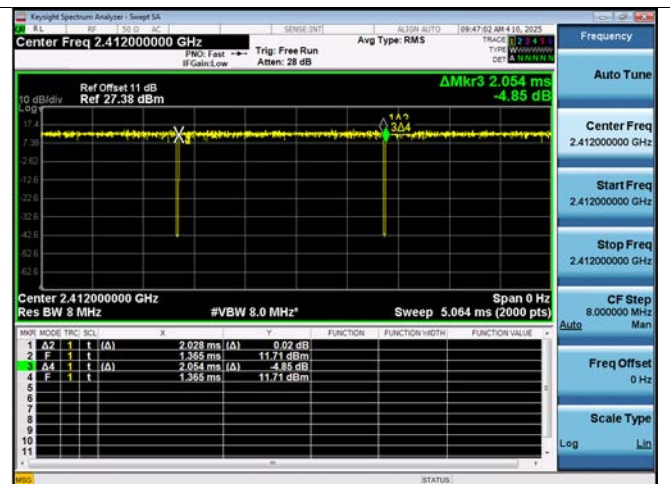
242 Tones (MCS 0)



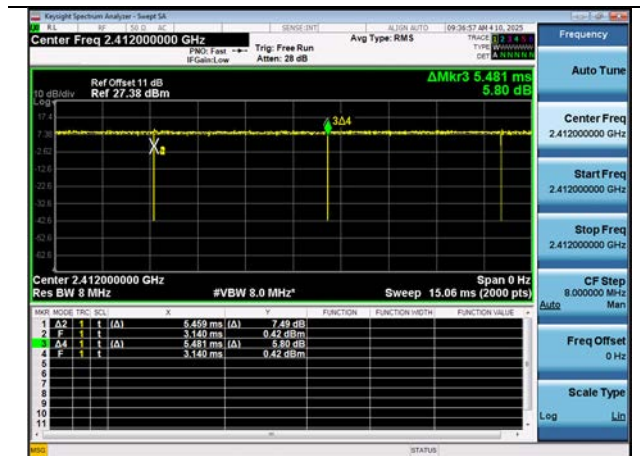
52 Tones + 26 Tones (MCS 0)



106 Tones + 26 Tones (MCS 0)



SU



9.2 6 dB BANDWIDTH

Limit : > 500 kHz

[ANT.1]

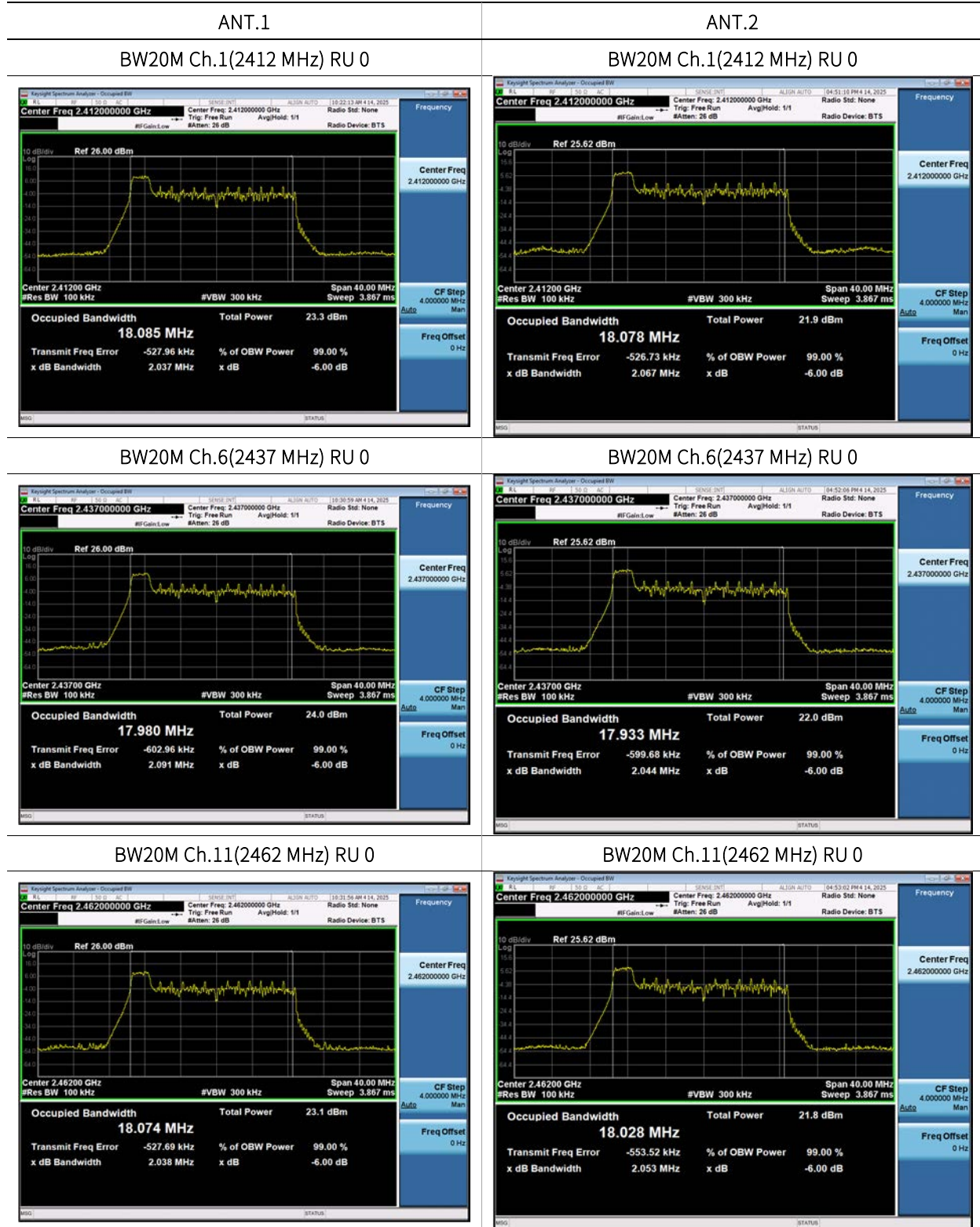
Mode	Freq. [MHz]	CH.	6dB Bandwidth [MHz]			99% Occupied Bandwidth [MHz]		
			RU Index : Low	RU Index : Mid	RU Index : High	RU Index : Low	RU Index : Mid	RU Index : High
			ANT1	ANT1	ANT1	ANT1	ANT1	ANT1
EHT20 26T	2412	1	2.037	2.650	2.094	18.085	17.023	18.016
	2437	6	2.091	2.702	2.103	17.980	16.898	18.034
	2462	11	2.038	2.694	2.101	18.074	16.883	17.957
	2467	12	2.061	2.705	2.091	17.958	16.956	18.099
	2472	13	2.047	2.685	2.098	17.818	16.889	18.229
EHT20 52T	2412	1	17.01	15.02	17.00	18.031	17.037	18.000
	2437	6	10.72	15.05	17.00	17.935	16.965	18.052
	2462	11	17.00	13.78	15.77	17.995	16.956	17.930
	2467	12	10.76	12.53	16.98	17.942	17.030	18.038
	2472	13	10.35	13.50	16.99	17.759	16.967	18.080
EHT20 106T	2412	1	17.21	-	17.18	18.176	-	18.076
	2437	6	17.19	-	17.15	18.020	-	18.137
	2462	11	17.19	-	17.16	18.102	-	17.985
	2467	12	17.20	-	18.35	18.036	-	18.188
	2472	13	17.19	-	18.34	17.941	-	18.197
EHT20 242T	2412	1	-	19.06	-	-	18.962	-
	2437	6	-	19.02	-	-	18.922	-
	2462	11	-	19.00	-	-	18.910	-
	2467	12	-	19.02	-	-	18.930	-
	2472	13	-	18.95	-	-	18.901	-
EHT20 SU	2412	1	-	19.06	-	-	18.933	-
	2437	6	-	19.02	-	-	18.905	-
	2462	11	-	19.00	-	-	18.888	-
	2467	12	-	18.99	-	-	18.902	-
	2472	13	-	18.82	-	-	18.884	-

[ANT.2]

Mode	Freq. [MHz]	CH.	6dB Bandwidth [MHz]			99% Occupied Bandwidth [MHz]		
			RU Index : Low	RU Index : Mid	RU Index : High	RU Index : Low	RU Index : Mid	RU Index : High
			ANT2	ANT2	ANT2	ANT2	ANT2	ANT2
EHT20 26T	2412	1	2.067	2.697	2.092	18.078	17.092	17.998
	2437	6	2.044	2.694	2.061	17.933	16.987	18.120
	2462	11	2.053	2.692	2.087	18.028	16.856	18.045
	2467	12	2.037	2.666	2.095	18.017	17.011	18.075
	2472	13	2.055	2.694	2.092	17.996	17.054	18.084
EHT20 52T	2412	1	17.04	13.87	4.073	18.050	17.140	17.946
	2437	6	4.083	13.83	17.02	17.933	17.043	18.102
	2462	11	10.76	15.02	16.96	17.932	17.068	18.008
	2467	12	12.41	15.04	17.00	17.982	17.050	18.058
	2472	13	11.60	15.07	17.01	17.978	17.058	18.030
EHT20 106T	2412	1	17.21	-	17.17	18.211	-	18.114
	2437	6	17.20	-	17.16	18.025	-	18.187
	2462	11	17.21	-	17.16	18.089	-	18.178
	2467	12	17.20	-	17.18	18.055	-	18.196
	2472	13	17.19	-	17.18	18.080	-	18.198
EHT20 242T	2412	1	-	19.04	-	-	18.953	-
	2437	6	-	19.03	-	-	18.936	-
	2462	11	-	19.03	-	-	18.942	-
	2467	12	-	19.04	-	-	18.944	-
	2472	13	-	19.03	-	-	18.944	-
EHT20 SU	2412	1	-	19.03	-	-	18.925	-
	2437	6	-	19.02	-	-	18.915	-
	2462	11	-	19.04	-	-	18.924	-
	2467	12	-	19.04	-	-	18.927	-
	2472	13	-	19.07	-	-	18.925	-

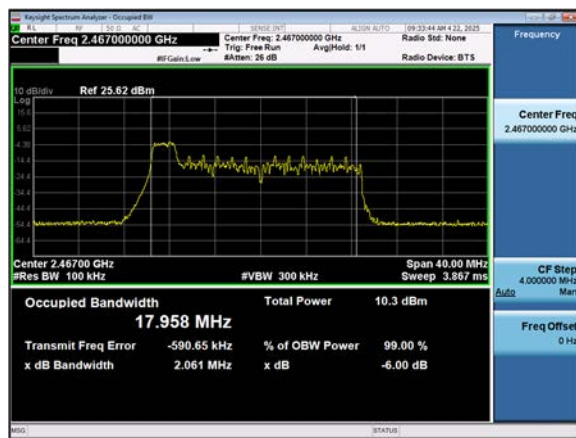
Test Plots

Note: In order to simplify the report, attached plots were only the most narrow 6 dB BW channel.



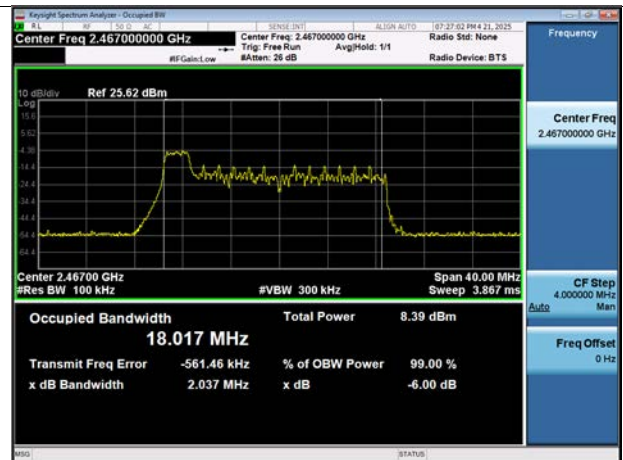
ANT.1

BW20M Ch.12(2467 MHz) RU 0

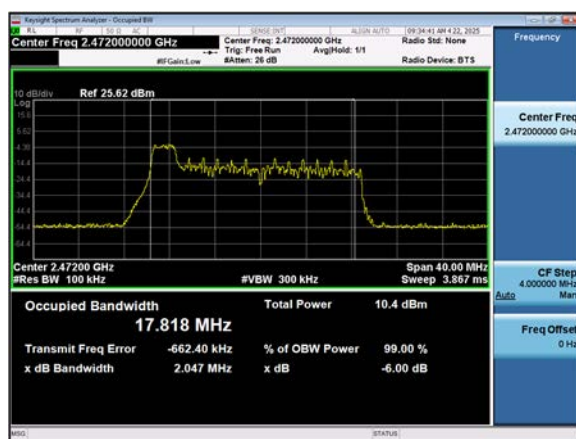


ANT.2

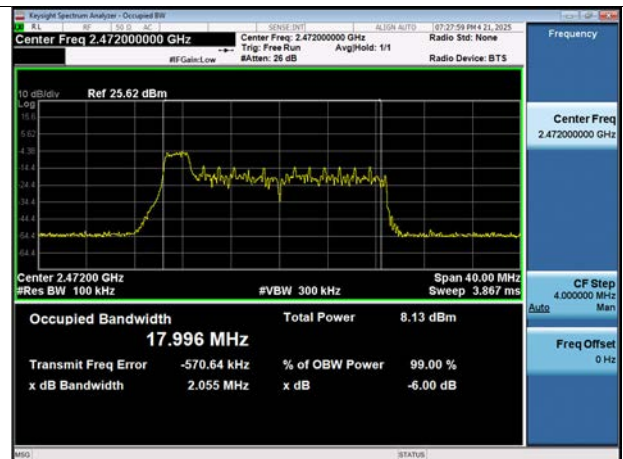
BW20M Ch.12(2467 MHz) RU 0



BW20M Ch.13(2472 MHz) RU 0



BW20M Ch.13(2472 MHz) RU 0



9.3 OUTPUT POWER

Note:

1. MIMO Peak Power = $10 \cdot \log((10^{(\text{Ant.1 Peak power}/10)}) + (10^{(\text{Ant.2 Peak power}/10)}))$

Peak Power

[MIMO_CDD(Ant.1+Ant.2)]

Mode	Freq. [MHz]	CH.	Total Peak Power [dBm]									Limit [dBm]
			RU Index : Low			RU Index : Mid			RU Index : High			
			ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	
EHT20 26T	2412	1	23.90	22.47	26.25	23.26	22.26	25.80	23.91	22.81	26.41	30
	2437	6	24.12	22.50	26.40	23.91	21.95	26.05	23.67	21.95	25.90	30
	2462	11	23.62	22.51	26.11	23.98	21.97	26.10	24.07	22.36	26.31	30
	2467	12	10.91	8.81	13.00	10.78	8.57	12.82	10.63	8.76	12.81	30
	2472	13	11.21	8.72	13.15	10.35	8.13	12.39	9.68	8.36	12.08	30
EHT20 52T	2412	1	24.86	23.48	27.23	24.36	23.20	26.83	25.17	23.92	27.60	30
	2437	6	24.99	23.55	27.34	24.87	23.30	27.16	24.84	23.12	27.08	30
	2462	11	24.75	23.39	27.13	24.99	23.19	27.19	25.45	23.45	27.58	30
	2467	12	10.82	8.98	13.01	10.70	8.74	12.84	10.77	8.96	12.97	30
	2472	13	11.01	8.74	13.03	10.69	8.59	12.78	10.01	8.41	12.29	30
EHT20 106T	2412	1	25.73	24.25	28.06	-	-	-	25.91	24.61	28.32	30
	2437	6	25.89	24.15	28.12	-	-	-	25.85	24.07	28.06	30
	2462	11	26.00	24.35	28.26	-	-	-	26.16	24.25	28.32	30
	2467	12	10.56	8.47	12.65	-	-	-	10.44	8.23	12.48	30
	2472	13	10.40	8.10	12.41	-	-	-	9.81	7.83	11.94	30
EHT20 242T	2412	1	-	-	-	26.61	24.98	28.88	-	-	-	30
	2437	6	-	-	-	26.68	24.81	28.86	-	-	-	30
	2462	11	-	-	-	26.01	24.16	28.19	-	-	-	30
	2467	12	-	-	-	8.96	6.96	11.08	-	-	-	30
	2472	13	-	-	-	9.31	7.06	11.34	-	-	-	30
EHT20 SU	2412	1	-	-	-	26.56	24.87	28.81	-	-	-	30
	2437	6	-	-	-	26.71	24.68	28.82	-	-	-	30
	2462	11	-	-	-	26.79	24.94	28.98	-	-	-	30
	2467	12	-	-	-	9.09	6.98	11.17	-	-	-	30
	2472	13	-	-	-	9.31	7.25	11.41	-	-	-	30
EHT20 52T+26T	2412	1	24.43	23.24	26.89	24.19	22.97	26.63	24.45	23.44	26.99	30
	2437	6	24.83	23.30	27.14	24.70	23.03	26.95	24.58	23.03	26.88	30
	2462	11	24.72	23.20	27.03	24.57	23.02	26.88	24.94	23.35	27.23	30
	2467	12	10.98	9.03	13.12	10.87	8.85	12.99	10.69	8.82	12.87	30
	2472	13	11.01	8.62	12.99	10.65	8.40	12.68	10.28	8.41	12.45	30
EHT20 106T+26T	2412	1	24.72	24.31	27.53	-	-	-	25.18	24.83	28.02	30
	2437	6	24.66	24.24	27.47	-	-	-	24.51	24.29	27.41	30
	2462	11	24.71	24.41	27.57	-	-	-	24.82	24.73	27.79	30
	2467	12	9.84	7.78	11.94	-	-	-	10.00	8.00	12.12	30
	2472	13	9.96	7.50	11.91	-	-	-	9.67	7.50	11.73	30

Average Power

[MIMO_CDD(Ant.1+Ant.2)]

Note:

1. Total Power [dBm] = Measured Power [dBm] + Duty Cycle Factor [dB]

Mode	Freq. [MHz]	CH.	Total Average Power [dBm]									Limit [dBm]
			RU Index : Low			RU Index : Mid			RU Index : High			
			ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	
EHT20 26T	2412	1	13.59	12.11	15.92	13.00	11.61	15.37	13.85	12.49	16.23	30
	2437	6	13.84	12.12	16.07	13.72	11.44	15.74	13.47	11.43	15.58	30
	2462	11	13.19	12.11	15.69	13.67	11.54	15.74	13.73	11.90	15.92	30
	2467	12	0.84	-1.38	2.88	0.34	-2.08	2.31	0.26	-1.85	2.34	30
	2472	13	0.88	-1.50	2.86	0.33	-2.18	2.26	-0.83	-1.93	1.67	30
EHT20 52T	2412	1	14.63	13.07	16.93	14.30	12.68	16.58	14.85	13.39	17.19	30
	2437	6	14.88	13.20	17.13	14.83	12.86	16.97	14.42	12.45	16.56	30
	2462	11	14.39	13.12	16.81	14.57	12.73	16.76	14.84	12.90	16.99	30
	2467	12	0.71	-1.44	2.78	0.49	-1.75	2.52	0.19	-1.86	2.30	30
	2472	13	0.89	-1.67	2.81	0.53	-2.12	2.41	-0.58	-2.12	1.73	30
EHT20 106T	2412	1	16.35	14.86	18.68	-	-	-	16.55	15.15	18.92	30
	2437	6	16.82	15.08	19.05	-	-	-	16.43	14.46	18.57	30
	2462	11	16.45	15.02	18.80	-	-	-	16.87	14.92	19.01	30
	2467	12	0.55	-1.78	2.55	-	-	-	0.18	-2.10	2.20	30
	2472	13	0.63	-2.08	2.49	-	-	-	-0.42	-1.90	1.91	30
EHT20 242T	2412	1	-	-	-	17.65	16.44	20.10	-	-	-	30
	2437	6	-	-	-	17.73	16.37	20.11	-	-	-	30
	2462	11	-	-	-	16.89	15.40	19.22	-	-	-	30
	2467	12	-	-	-	0.22	-1.89	2.30	-	-	-	30
	2472	13	-	-	-	0.49	-1.79	2.51	-	-	-	30
EHT20 SU	2412	1	-	-	-	17.33	15.95	19.70	-	-	-	30
	2437	6	-	-	-	17.38	15.90	19.71	-	-	-	30
	2462	11	-	-	-	17.45	15.97	19.78	-	-	-	30
	2467	12	-	-	-	0.02	-2.10	2.10	-	-	-	30
	2472	13	-	-	-	0.26	-1.92	2.32	-	-	-	30
EHT20 52T+26T	2412	1	14.44	12.82	16.72	14.29	12.70	16.58	14.47	13.08	16.84	30
	2437	6	14.84	13.05	17.05	14.75	12.89	16.93	14.41	12.61	16.61	30
	2462	11	14.64	12.93	16.88	14.72	12.82	16.88	14.70	12.88	16.89	30
	2467	12	0.66	-1.68	2.66	0.50	-1.83	2.50	0.36	-1.90	2.39	30
	2472	13	0.70	-1.96	2.58	0.48	-2.14	2.37	-0.10	-2.27	1.96	30
EHT20 106T+26T	2412	1	16.27	14.68	18.56	-	-	-	16.44	14.95	18.77	30
	2437	6	16.71	14.90	18.91	-	-	-	16.41	14.50	18.57	30
	2462	11	16.54	14.86	18.79	-	-	-	16.85	14.68	18.91	30
	2467	12	0.49	-1.86	2.48	-	-	-	0.19	-2.08	2.21	30
	2472	13	0.52	-2.19	2.38	-	-	-	-0.16	-2.48	1.84	30

9.4 POWER SPECTRAL DENSITY

Note:

1. MIMO Total PSD = $10 \cdot \log(((10^{\text{Ant.1 PSD}/10}) + (10^{\text{Ant.2 PSD}/10})))$
2. Total PSD = Measured Value + Duty Cycle Factor

[MIMO_CDD(Ant.1+Ant.2)]

Mode	Freq. [MHz]	CH.	Total Power Spectral Density [dBm/MHz]									Limit [dBm/3 kHz]
			RU Index : Low			RU Index : Mid			RU Index : High			
			ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	
EHT20 26T	2412	1	-3.731	-5.070	-1.339	-4.317	-5.489	-1.853	-3.455	-4.587	-0.974	8
	2437	6	-3.244	-4.799	-0.942	-3.408	-5.527	-1.329	-3.730	-5.675	-1.584	8
	2462	11	-4.031	-4.897	-1.432	-3.692	-5.607	-1.534	-3.622	-5.245	-1.348	8
	2467	12	-16.542	-18.307	-14.325	-17.088	-18.889	-14.886	-17.153	-18.728	-14.859	8
	2472	13	-16.249	-18.571	-14.246	-17.193	-19.480	-15.177	-18.021	-19.135	-15.532	8
EHT20 52T	2412	1	-5.591	-7.082	-3.263	-6.008	-7.460	-3.663	-5.176	-6.747	-2.881	8
	2437	6	-5.431	-6.823	-3.061	-5.340	-7.139	-3.137	-5.908	-7.621	-3.670	8
	2462	11	-5.848	-7.070	-3.406	-5.501	-7.266	-3.284	-5.306	-7.284	-3.173	8
	2467	12	-19.448	-21.307	-17.268	-19.657	-21.540	-17.487	-19.800	-21.840	-17.691	8
	2472	13	-19.288	-21.580	-17.274	-19.770	-21.968	-17.721	-20.722	-22.220	-18.396	8
EHT20 106T	2412	1	-6.577	-8.220	-4.311	-	-	-	-5.952	-7.202	-3.522	8
	2437	6	-6.279	-7.791	-3.959	-	-	-	-6.648	-8.530	-4.478	8
	2462	11	-6.482	-7.873	-4.112	-	-	-	-5.973	-7.877	-3.811	8
	2467	12	-22.359	-24.305	-20.214	-	-	-	-22.690	-24.679	-20.561	8
	2472	13	-22.228	-24.855	-20.336	-	-	-	-23.055	-25.133	-20.961	8
EHT20 242T	2412	1	-	-	-	-7.919	-9.240	-5.519	-	-	-	8
	2437	6	-	-	-	-7.840	-9.423	-5.549	-	-	-	8
	2462	11	-	-	-	-8.594	-10.182	-6.306	-	-	-	8
	2467	12	-	-	-	-25.325	-27.151	-23.132	-	-	-	8
	2472	13	-	-	-	-24.562	-26.936	-22.578	-	-	-	8
EHT20 SU	2412	1	-	-	-	-9.205	-10.832	-6.932	-	-	-	8
	2437	6	-	-	-	-9.226	-11.060	-7.037	-	-	-	8
	2462	11	-	-	-	-8.923	-11.054	-6.849	-	-	-	8
	2467	12	-	-	-	-26.833	-28.729	-24.668	-	-	-	8
	2472	13	-	-	-	-26.161	-28.514	-24.170	-	-	-	8
EHT20 52T+26T	2412	1	-7.252	-8.759	-4.930	-7.429	-9.271	-5.243	-7.180	-8.418	-4.745	8
	2437	6	-6.794	-8.537	-4.568	-6.700	-8.952	-4.671	-7.285	-9.251	-5.147	8
	2462	11	-6.864	-8.763	-4.700	-7.019	-9.051	-4.907	-6.623	-8.988	-4.636	8
	2467	12	-20.919	-22.821	-18.756	-21.271	-23.285	-19.152	-21.487	-23.279	-19.281	8
	2472	13	-20.821	-23.107	-18.805	-21.314	-23.556	-19.282	-21.977	-23.660	-19.727	8
EHT20 106T+26T	2412	1	-7.495	-9.098	-5.213	-	-	-	-7.247	-8.514	-4.824	8
	2437	6	-7.004	-8.707	-4.762	-	-	-	-7.463	-9.493	-5.350	8
	2462	11	-7.217	-8.923	-4.976	-	-	-	-6.763	-8.987	-4.724	8
	2467	12	-23.416	-25.477	-21.315	-	-	-	-23.606	-25.696	-21.516	8
	2472	13	-23.185	-25.524	-21.189	-	-	-	-23.739	-26.202	-21.788	8

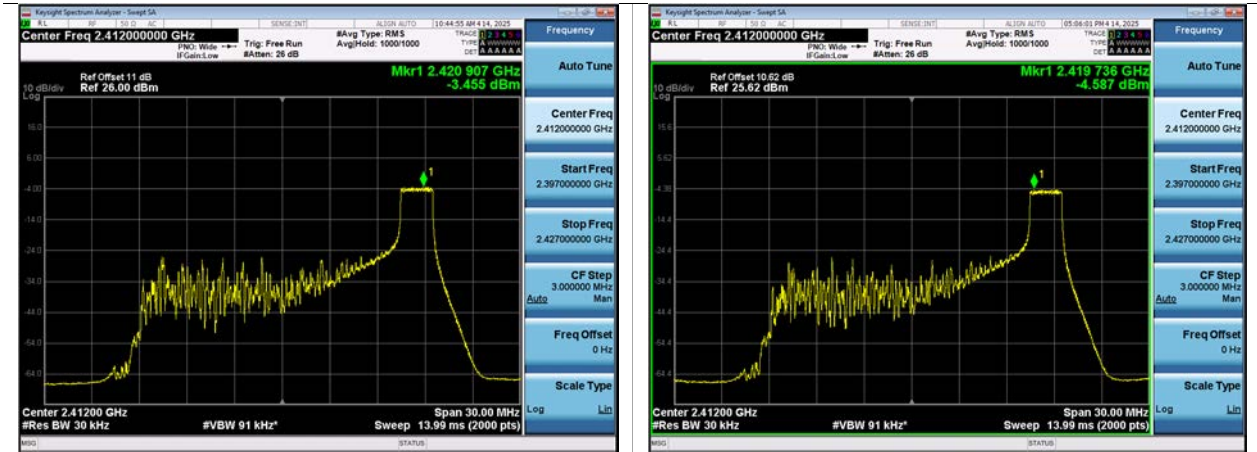
Test Plots

Note: In order to simplify the report, attached plots were only the worst case PSD channel.

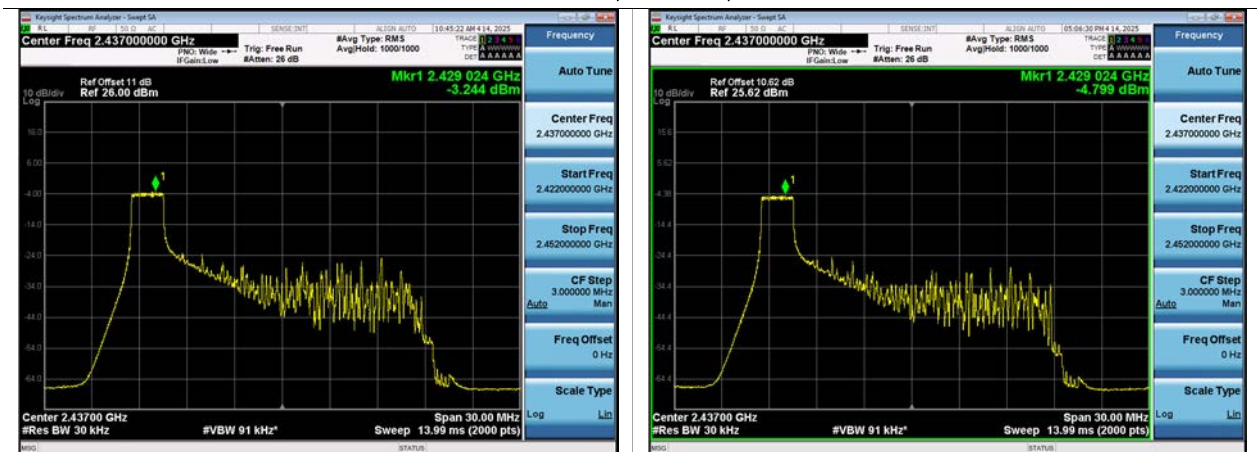
ANT.1

ANT.2

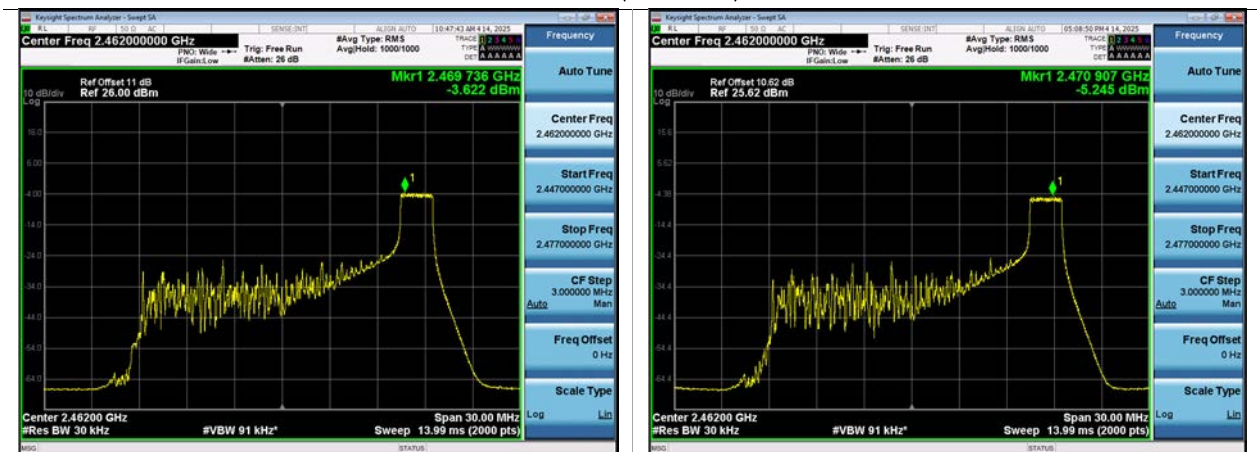
BW20M Ch.1(2412 MHz) RU 8



BW20M Ch.6(2437 MHz) RU 0



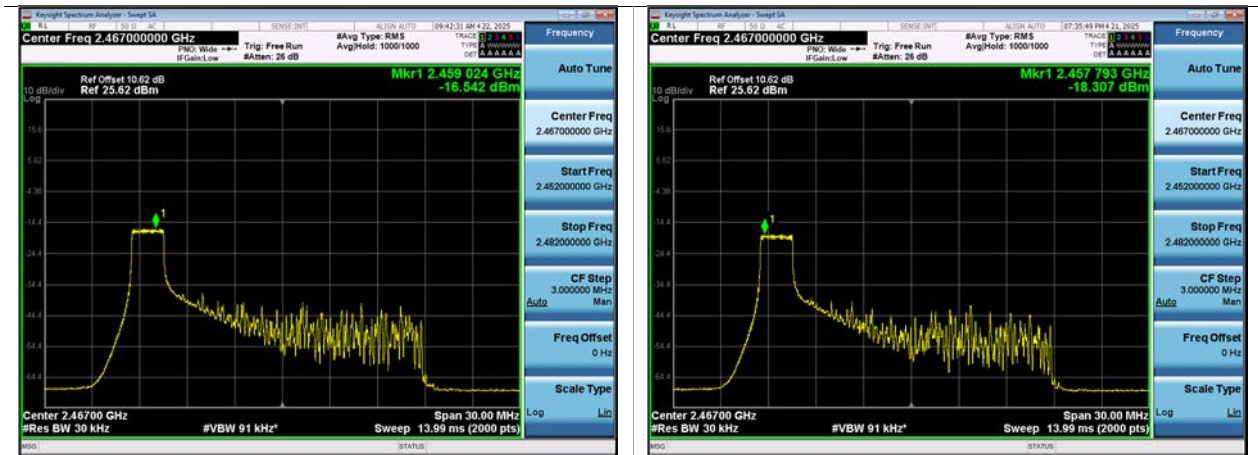
BW20M Ch.11(2462 MHz) RU 8



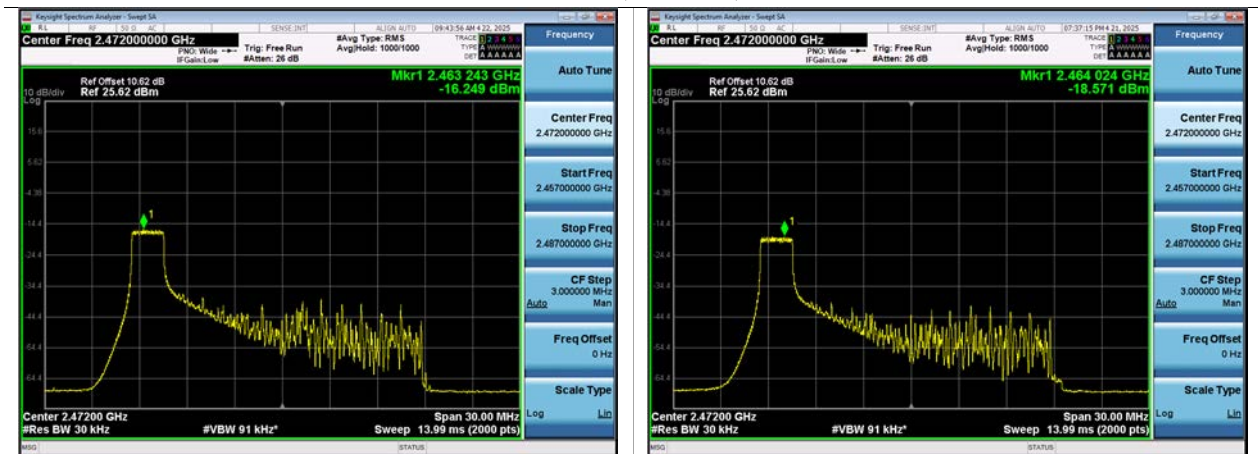
ANT.1

ANT.2

BW20M Ch.12(2467 MHz) RU 0



BW20M Ch.13(2472 MHz) RU 0



9.5 BAND EDGE / CONDUCTED SPURIOUS EMISSIONS

Band Edge

Limit : 30 dBc

[ANT.1]

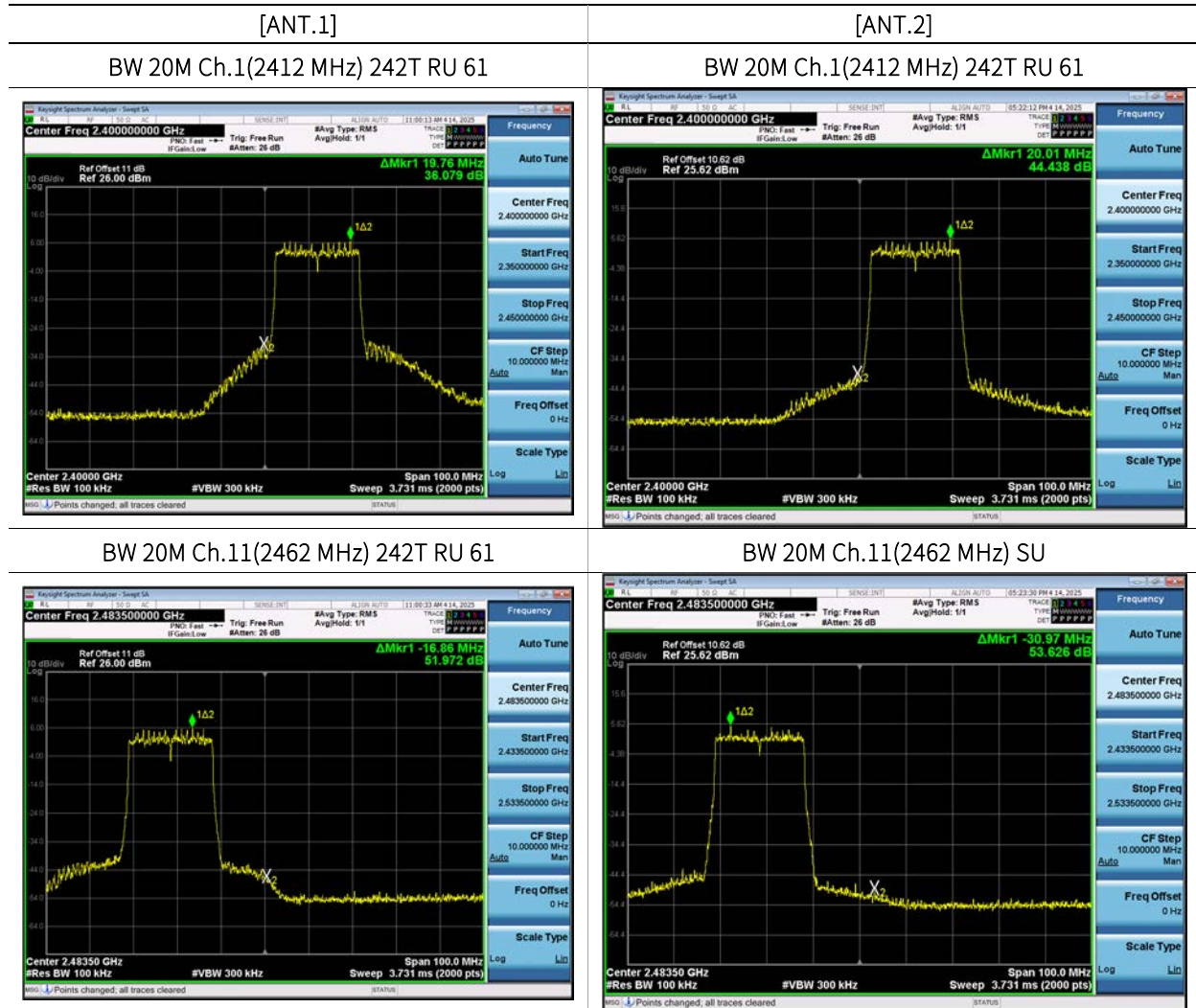
Mode	Freq. [MHz]	CH.	RU Index	Measured Position	Band edge [dB]
EHT20 26T	2412	1	Low	Lowest Bandedge	55.991
	2462	11	High	Highest Bandedge	61.206
	2467	12	High	Highest Bandedge	47.565
	2472	13	High	Highest Bandedge	46.606
EHT20 52T	2412	1	Low	Lowest Bandedge	45.502
	2462	11	High	Highest Bandedge	60.551
	2467	12	High	Highest Bandedge	44.727
	2472	13	High	Highest Bandedge	44.006
EHT20 106T	2412	1	Low	Lowest Bandedge	41.804
	2462	11	High	Highest Bandedge	57.403
	2467	12	High	Highest Bandedge	41.440
	2472	13	High	Highest Bandedge	40.710
EHT20 242T	2412	1	Low	Lowest Bandedge	36.079
	2462	11	High	Highest Bandedge	51.972
	2467	12	High	Highest Bandedge	40.364
	2472	13	High	Highest Bandedge	40.854
EHT20 SU	2412	1	Low	Lowest Bandedge	41.398
	2462	11	High	Highest Bandedge	52.568
	2467	12	High	Highest Bandedge	40.747
	2472	13	High	Highest Bandedge	41.302
EHT20 52T+26T	2412	1	Low	Lowest Bandedge	51.259
	2462	11	High	Highest Bandedge	56.390
	2467	12	High	Highest Bandedge	43.700
	2472	13	High	Highest Bandedge	42.746
EHT20 106T+26T	2412	1	Low	Lowest Bandedge	43.451
	2462	11	High	Highest Bandedge	56.867
	2467	12	High	Highest Bandedge	40.893
	2472	13	High	Highest Bandedge	40.258

[ANT.2]

Mode	Freq. [MHz]	CH.	RU Index	Measured Position	Band edge [dB]
EHT20 26T	2412	1	Low	Lowest Bandedge	54.308
	2462	11	High	Highest Bandedge	59.112
	2467	12	High	Highest Bandedge	46.037
	2472	13	High	Highest Bandedge	44.016
EHT20 52T	2412	1	Low	Lowest Bandedge	49.867
	2462	11	High	Highest Bandedge	58.171
	2467	12	High	Highest Bandedge	43.115
	2472	13	High	Highest Bandedge	43.618
EHT20 106T	2412	1	Low	Lowest Bandedge	48.061
	2462	11	High	Highest Bandedge	56.491
	2467	12	High	Highest Bandedge	40.857
	2472	13	High	Highest Bandedge	38.873
EHT20 242T	2412	1	Low	Lowest Bandedge	44.438
	2462	11	High	Highest Bandedge	54.293
	2467	12	High	Highest Bandedge	38.938
	2472	13	High	Highest Bandedge	39.095
EHT20 SU	2412	1	Low	Lowest Bandedge	46.040
	2462	11	High	Highest Bandedge	53.626
	2467	12	High	Highest Bandedge	38.221
	2472	13	High	Highest Bandedge	36.709
EHT20 52T+26T	2412	1	Low	Lowest Bandedge	53.035
	2462	11	High	Highest Bandedge	56.420
	2467	12	High	Highest Bandedge	40.684
	2472	13	High	Highest Bandedge	39.635
EHT20 106T+26T	2412	1	Low	Lowest Bandedge	46.905
	2462	11	High	Highest Bandedge	56.162
	2467	12	High	Highest Bandedge	39.066
	2472	13	High	Highest Bandedge	38.763

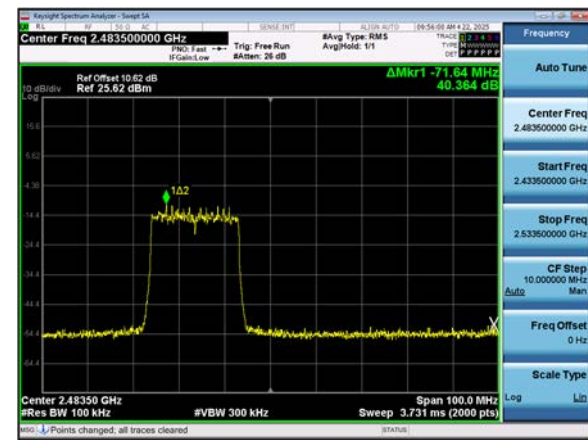
Test Plots

Note: In order to simplify the report, attached plots were only the worst case.



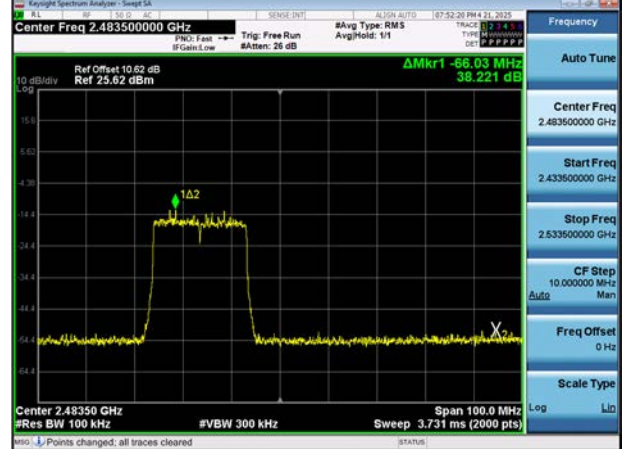
[ANT.1]

BW 20M Ch.12(2467 MHz) 242T RU 61

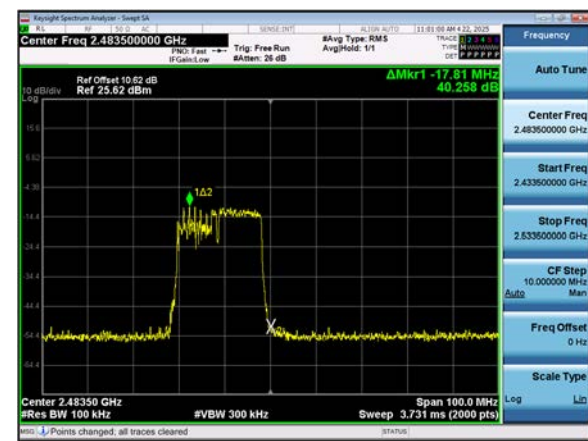


[ANT.2]

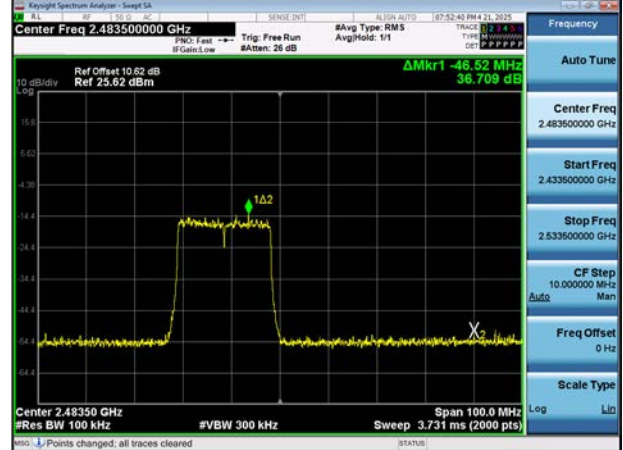
BW 20M Ch.12(2467 MHz) SU



BW 20M Ch.13(2472 MHz) 106T+26T RU 83



BW 20M Ch.13(2472 MHz) SU



Conducted Spurious Emissions

Limit : 30 dBc

[ANT.1]

Mode	Freq. [MHz]	CH.	Conducted Spurious Emissions [dB]		
			RU Index : Low	RU Index : Mid	RU Index : High
			ANT1	ANT1	ANT1
EHT20 26T	2412	1	61.135	59.503	62.157
	2437	6	64.544	62.239	62.963
	2462	11	61.932	62.180	61.440
	2467	12	49.090	46.642	47.758
	2472	13	49.455	47.107	47.363
EHT20 52T	2412	1	60.129	59.470	60.301
	2437	6	60.282	61.107	60.885
	2462	11	60.007	60.352	60.333
	2467	12	46.664	47.016	45.807
	2472	13	46.793	44.479	43.869
EHT20 106T	2412	1	59.142	-	59.171
	2437	6	58.854	-	58.664
	2462	11	58.253	-	60.193
	2467	12	42.386	-	43.530
	2472	13	45.690	-	41.346
EHT20 242T	2412	1	-	58.652	-
	2437	6	-	57.583	-
	2462	11	-	59.958	-
	2467	12	-	41.574	-
	2472	13	-	44.313	-
EHT20 SU	2412	1	-	58.457	-
	2437	6	-	58.272	-
	2462	11	-	60.114	-
	2467	12	-	40.911	-
	2472	13	-	40.442	-
EHT20 52T+26T	2412	1	59.203	59.524	58.885
	2437	6	58.375	60.554	58.410
	2462	11	59.191	59.931	57.290
	2467	12	44.332	43.981	43.546
	2472	13	43.728	43.677	44.657
EHT20 106T+52T	2412	1	59.554	-	58.955
	2437	6	59.429	-	59.565
	2462	11	59.305	-	59.165
	2467	12	43.752	-	41.236
	2472	13	43.364	-	42.257

[ANT.2]

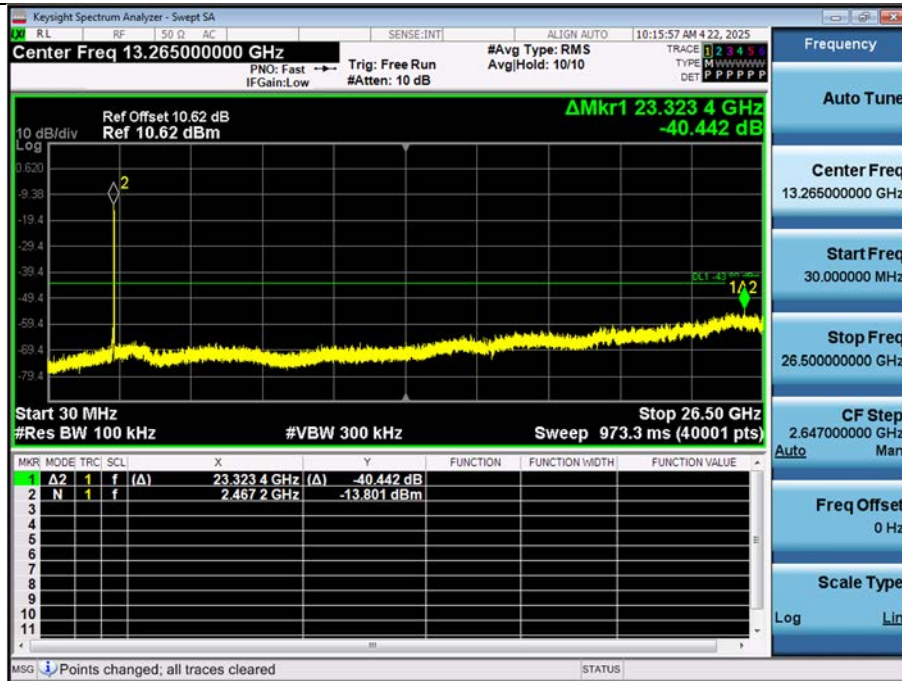
Mode	Freq. [MHz]	CH.	Conducted Spurious Emissions [dB]		
			RU Index : Low	RU Index : Mid	RU Index : High
			ANT2	ANT2	ANT2
EHT20 26T	2412	1	59.439	59.941	62.364
	2437	6	62.107	61.279	62.194
	2462	11	59.764	58.731	58.738
	2467	12	47.864	46.666	45.507
	2472	13	47.938	45.376	46.491
EHT20 52T	2412	1	59.890	59.396	59.602
	2437	6	58.973	58.939	58.436
	2462	11	58.934	59.531	58.921
	2467	12	46.006	44.336	43.402
	2472	13	46.016	42.195	44.101
EHT20 106T	2412	1	57.951	-	57.923
	2437	6	58.695	-	59.381
	2462	11	58.516	-	58.571
	2467	12	41.488	-	40.416
	2472	13	41.346	-	42.034
EHT20 242T	2412	1	-	57.651	-
	2437	6	-	57.484	-
	2462	11	-	57.433	-
	2467	12	-	39.880	-
	2472	13	-	39.028	-
EHT20 SU	2412	1	-	58.212	-
	2437	6	-	57.316	-
	2462	11	-	58.019	-
	2467	12	-	39.811	-
	2472	13	-	38.751	-
EHT20 52T+26T	2412	1	57.474	55.777	58.101
	2437	6	58.310	57.876	58.572
	2462	11	56.960	56.525	57.923
	2467	12	42.887	41.854	43.259
	2472	13	44.598	42.608	42.920
EHT20 106T+52T	2412	1	55.288	-	57.227
	2437	6	57.611	-	56.582
	2462	11	57.184	-	56.655
	2467	12	41.652	-	40.639
	2472	13	40.395	-	40.018

Test Plots

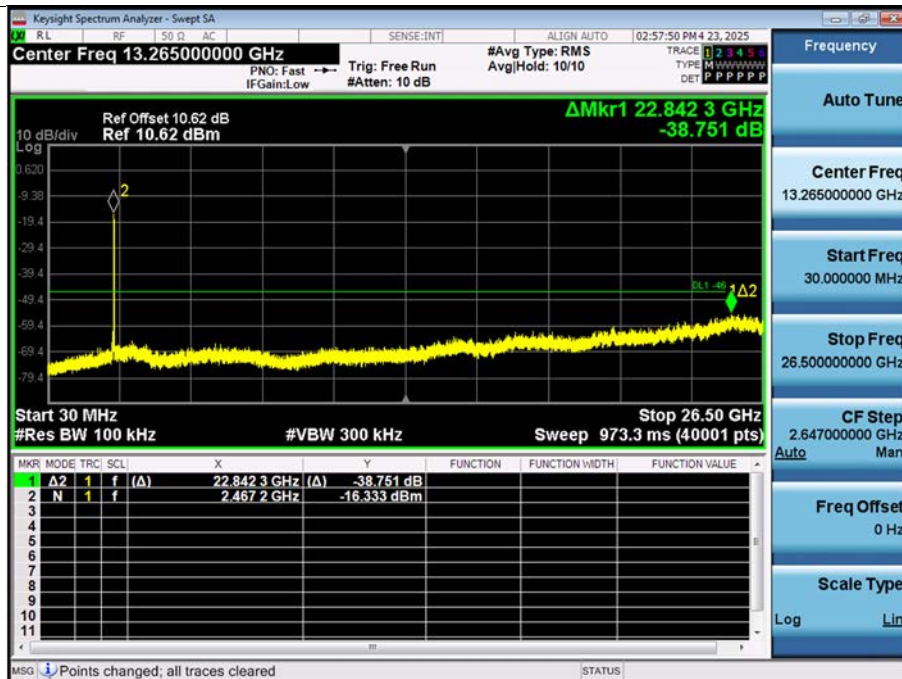
Note:

In order to simplify the report, attached plots were only the worst case.

[ANT.1] BW 20M Ch.13(2 472 MHz) SU



[ANT.2] BW 20M Ch.13(2 472 MHz) SU



Limit

ANT.1 : -43.801 dBm, ANT.2 : -46.333 dBm

9.6 RADIATED SPURIOUS EMISSIONS

Frequency Range : 9 kHz – 30 MHz

Frequency	Measured Value	A.F+C.L+D.F	POL	Total	Limit	Margin
[MHz]	[dBμV/m]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]

No Critical peaks found

Note:

1. The Measured of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
2. Distance extrapolation factor = $40\log(\text{specific distance} / \text{test distance})$ (dB)
3. Limit line = specific Limits (dBμV) + Distance extrapolation factor

Frequency Range : Below 1 GHz

Frequency	Measured Value	A.F+C.L	POL	Total	Limit	Margin
[MHz]	[dBμV/m]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]

No Critical peaks found

Note:

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.

Frequency Range : Above 1 GHz

[MIMO_CDD(Ant.1+Ant.2)]

Band : DTS			Operation Mode :		802.11be 26T RU4			
CH.1 2412 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4824	45.00	0.00	3.91	V	48.91	73.98	25.07	PK
4824	32.33	0.00	3.91	V	36.24	53.98	17.74	AV
7236	42.40	0.00	9.99	V	52.39	73.98	21.59	PK
7236	29.29	0.00	9.99	V	39.28	53.98	14.70	AV
4824	45.23	0.00	3.91	H	49.14	73.98	24.84	PK
4824	32.47	0.00	3.91	H	36.38	53.98	17.60	AV
7236	43.04	0.00	9.99	H	53.03	73.98	20.95	PK
7236	29.85	0.00	9.99	H	39.84	53.98	14.14	AV

Band : DTS			Operation Mode :		802.11be 26T RU4			
CH.6 2437 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4874	43.28	0.00	4.16	V	47.44	73.98	26.54	PK
4874	30.99	0.00	4.16	V	35.15	53.98	18.83	AV
7311	40.80	0.00	10.47	V	51.27	73.98	22.71	PK
7311	29.36	0.00	10.47	V	39.83	53.98	14.15	AV
4874	44.20	0.00	4.16	H	48.36	73.98	25.62	PK
4874	31.35	0.00	4.16	H	35.51	53.98	18.47	AV
7311	40.84	0.00	10.47	H	51.31	73.98	22.67	PK
7311	29.50	0.00	10.47	H	39.97	53.98	14.01	AV

Band : DTS			Operation Mode :		802.11be 26T RU4			
CH.11 2462 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4924	42.97	0.00	3.45	V	46.42	73.98	27.56	PK
4924	30.55	0.00	3.45	V	34.00	53.98	19.98	AV
7386	41.44	0.00	11.22	V	52.66	73.98	21.32	PK
7386	29.16	0.00	11.22	V	40.38	53.98	13.60	AV
4924	43.33	0.00	3.45	H	46.78	73.98	27.20	PK
4924	31.46	0.00	3.45	H	34.91	53.98	19.07	AV
7386	42.02	0.00	11.22	H	53.24	73.98	20.74	PK
7386	29.27	0.00	11.22	H	40.49	53.98	13.49	AV

Band : DTS			Operation Mode :		802.11be 242T RU61			
CH.1 2412 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4824	43.57	0.00	3.91	V	47.48	73.98	26.50	PK
4824	31.59	0.00	3.91	V	35.50	53.98	18.48	AV
7236	41.49	0.00	9.99	V	51.48	73.98	22.50	PK
7236	29.61	0.00	9.99	V	39.60	53.98	14.38	AV
4824	44.40	0.00	3.91	H	48.31	73.98	25.67	PK
4824	31.64	0.00	3.91	H	35.55	53.98	18.43	AV
7236	42.66	0.00	9.99	H	52.65	73.98	21.33	PK
7236	29.81	0.00	9.99	H	39.80	53.98	14.18	AV

Band : DTS			Operation Mode :		802.11be 242T RU61			
CH.6 2437 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4874	42.29	0.00	4.16	V	46.45	73.98	27.53	PK
4874	30.44	0.00	4.16	V	34.60	53.98	19.38	AV
7311	41.27	0.00	10.47	V	51.74	73.98	22.24	PK
7311	29.45	0.00	10.47	V	39.92	53.98	14.06	AV
4874	42.75	0.00	4.16	H	46.91	73.98	27.07	PK
4874	30.60	0.00	4.16	H	34.76	53.98	19.22	AV
7311	41.92	0.00	10.47	H	52.39	73.98	21.59	PK
7311	29.60	0.00	10.47	H	40.07	53.98	13.91	AV

Band : DTS			Operation Mode :		802.11be 242T RU61			
CH.11 2462 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4924	42.56	0.00	3.45	V	46.01	73.98	27.97	PK
4924	31.14	0.00	3.45	V	34.59	53.98	19.39	AV
7386	41.00	0.00	11.22	V	52.22	73.98	21.76	PK
7386	29.14	0.00	11.22	V	40.36	53.98	13.62	AV
4924	43.15	0.00	3.45	H	46.60	73.98	27.38	PK
4924	31.36	0.00	3.45	H	34.81	53.98	19.17	AV
7386	41.11	0.00	11.22	H	52.33	73.98	21.65	PK
7386	29.18	0.00	11.22	H	40.40	53.98	13.58	AV

Band : DTS			Operation Mode :		802.11be 52+26T MRU71			
CH.1 2412 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4824	43.30	0.00	3.91	V	47.21	73.98	26.77	PK
4824	31.58	0.00	3.91	V	35.49	53.98	18.49	AV
7236	41.99	0.00	9.99	V	51.98	73.98	22.00	PK
7236	27.41	0.00	9.99	V	37.40	53.98	16.58	AV
4824	44.31	0.00	3.91	H	48.22	73.98	25.76	PK
4824	32.00	0.00	3.91	H	35.91	53.98	18.07	AV
7236	42.18	0.00	9.99	H	52.17	73.98	21.81	PK
7236	29.72	0.00	9.99	H	39.71	53.98	14.27	AV

Band : DTS			Operation Mode :		802.11be 52+26T MRU71			
CH.6 2437 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4874	42.51	0.00	4.16	V	46.67	73.98	27.31	PK
4874	30.49	0.00	4.16	V	34.65	53.98	19.33	AV
7311	41.69	0.00	10.47	V	52.16	73.98	21.82	PK
7311	29.58	0.00	10.47	V	40.05	53.98	13.93	AV
4874	42.80	0.00	4.16	H	46.96	73.98	27.02	PK
4874	30.52	0.00	4.16	H	34.68	53.98	19.30	AV
7311	41.85	0.00	10.47	H	52.32	73.98	21.66	PK
7311	29.63	0.00	10.47	H	40.10	53.98	13.88	AV

Band : DTS			Operation Mode :		802.11be 52+26T MRU71			
CH.11 2462 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4924	42.14	0.00	3.45	V	45.59	73.98	28.39	PK
4924	31.09	0.00	3.45	V	34.54	53.98	19.44	AV
7386	41.84	0.00	11.22	V	53.06	73.98	20.92	PK
7386	29.15	0.00	11.22	V	40.37	53.98	13.61	AV
4924	42.61	0.00	3.45	H	46.06	73.98	27.92	PK
4924	31.15	0.00	3.45	H	34.60	53.98	19.38	AV
7386	41.89	0.00	11.22	H	53.11	73.98	20.87	PK
7386	29.16	0.00	11.22	H	40.38	53.98	13.60	AV

Band : DTS			Operation Mode :		802.11be 106+26T MRU82			
CH.1 2412 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4824	43.27	0.00	3.91	V	47.18	73.98	26.80	PK
4824	31.57	0.00	3.91	V	35.48	53.98	18.50	AV
7236	41.14	0.00	9.99	V	51.13	73.98	22.85	PK
7236	27.58	0.00	9.99	V	37.57	53.98	16.41	AV
4824	43.45	0.00	3.91	H	47.36	73.98	26.62	PK
4824	31.60	0.00	3.91	H	35.51	53.98	18.47	AV
7236	42.69	0.00	9.99	H	52.68	73.98	21.30	PK
7236	29.76	0.00	9.99	H	39.75	53.98	14.23	AV

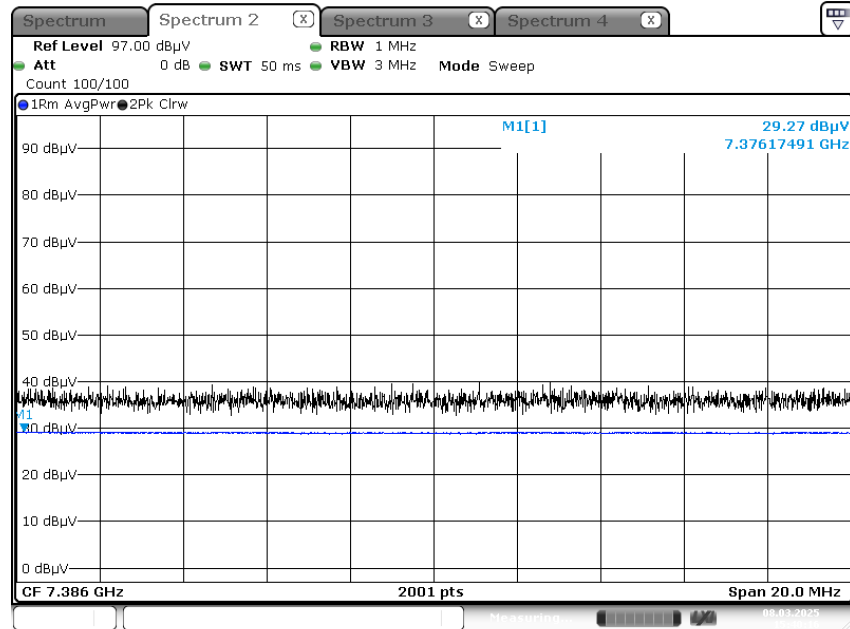
Band : DTS			Operation Mode :		802.11be 106+26T MRU82			
CH.6 2437 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4874	42.54	0.00	4.16	V	46.70	73.98	27.28	PK
4874	30.59	0.00	4.16	V	34.75	53.98	19.23	AV
7311	41.77	0.00	10.47	V	52.24	73.98	21.74	PK
7311	29.61	0.00	10.47	V	40.08	53.98	13.90	AV
4874	42.76	0.00	4.16	H	46.92	73.98	27.06	PK
4874	30.87	0.00	4.16	H	35.03	53.98	18.95	AV
7311	41.90	0.00	10.47	H	52.37	73.98	21.61	PK
7311	29.68	0.00	10.47	H	40.15	53.98	13.83	AV

Band : DTS			Operation Mode :		802.11be 106+26T MRU82			
CH.11 2462 MHz			Transfer Rate :		MCS 0			
Frequency [MHz]	Measured value [dBμV]	D.C.F [dB]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4924	42.88	0.00	3.45	V	46.33	73.98	27.65	PK
4924	31.27	0.00	3.45	V	34.72	53.98	19.26	AV
7386	40.87	0.00	11.22	V	52.09	73.98	21.89	PK
7386	29.10	0.00	11.22	V	40.32	53.98	13.66	AV
4924	44.67	0.00	3.45	H	48.12	73.98	25.86	PK
4924	31.53	0.00	3.45	H	34.98	53.98	19.00	AV
7386	40.97	0.00	11.22	H	52.19	73.98	21.79	PK
7386	29.12	0.00	11.22	H	40.34	53.98	13.64	AV

Test Plots(26T RU 4)

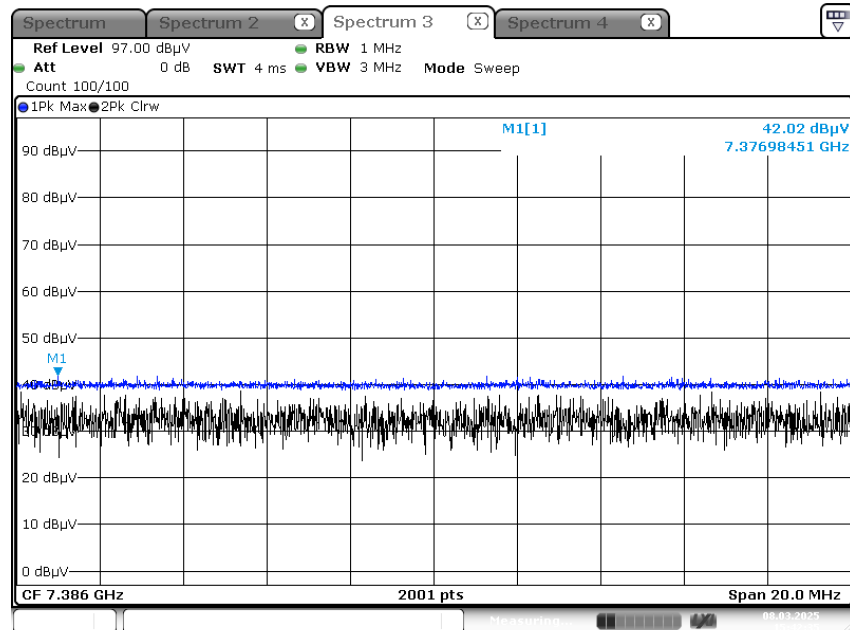
Note: In order to simplify, Plots of worst case are only reported.

Radiated Spurious Emissions plot – Average result (802.11be(EHT20), Ch.11 3rd Harmonic, Z-H)



Date: 8.MAR.2025 15:40:17

Radiated Spurious Emissions plot – Peak result (802.11be(EHT20), Ch.11 3rd Harmonic, Z-H)



Date: 8.MAR.2025 15:42:36

9.7 RADIATED RESTRICTED BAND EDGES

Note : # integration method Used (ANSI C63.10 Section11.13.3)

[MIMO_CDD(Ant.1+Ant.2)]

9.7.1 Channel 1, 11

802.11be(MCS0)			EHT20			SU		
Channel	CH 1		Freq	2412 MHz				
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2390.0	57.93	0.00	-	H	57.93	73.98	16.05	PK
2390.0	45.50	0.00	-	H	45.50	53.98	8.48	AV

802.11be(MCS0)			EHT20			SU		
Channel	CH 11		Freq	2462 MHz				
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	68.03	0.00	-	H	68.03	73.98	5.95	PK
2483.5	51.60	0.00	-	H	51.60	53.98	2.38	AV

802.11be(MCS0)			EHT20			242T		
Channel	CH 1		Freq	2412 MHz		RU offset	61	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2390.0	66.62	0.00	-	H	66.62	73.98	7.36	PK
2390.0	49.84	0.00	-	H	49.84	53.98	4.14	AV

802.11be(MCS0)			EHT20			242T		
Channel	CH 11		Freq	2462 MHz		RU offset	61	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	64.15	0.00	-	H	64.15	73.98	9.83	PK
2483.5	51.61	0.00	-	H	51.61	53.98	2.37	AV

802.11be(MCS0)			EHT20			242T		
Channel	CH 10		Freq	2457 MHz		RU offset	61	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	68.48	0.00	-	H	68.48	73.98	5.50	PK
2483.5	50.52	0.00	-	H	50.52	53.98	3.46	AV

802.11be(MCS0)			EHT20	106T				
Channel	CH 1		Freq	2412 MHz		RU offset	53	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2390.0	56.41	0.00	-	H	56.41	73.98	17.57	PK
2390.0	43.26	0.00	-	H	43.26	53.98	10.72	AV

802.11be(MCS0)			EHT20	106T				
Channel	CH 11		Freq	2462 MHz		RU offset	54	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	62.52	0.00	-	H	62.52	73.98	11.46	PK
2483.5	44.12	0.00	-	H	44.12	53.98	9.86	AV

802.11be(MCS0)			EHT20	52T				
Channel	CH 1		Freq	2412 MHz		RU offset	37	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2390.0	55.26	0.00	-	H	55.26	73.98	18.72	PK
2390.0	43.23	0.00	-	H	43.23	53.98	10.75	AV

802.11be(MCS0)			EHT20	52T				
Channel	CH 11		Freq	2462 MHz		RU offset	40	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	57.93	0.00	-	H	57.93	73.98	16.05	PK
2483.5	42.81	0.00	-	H	42.81	53.98	11.17	AV

802.11be(MCS0)			EHT20	26T				
Channel	CH 1		Freq	2412 MHz		RU offset	0	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2390.0	55.74	0.00	-	H	55.74	73.98	18.24	PK
2390.0	43.20	0.00	-	H	43.20	53.98	10.78	AV

802.11be(MCS0)			EHT20	26T				
Channel	CH 11		Freq	2462 MHz		RU offset	8	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	56.87	0.00	-	H	56.87	73.98	17.11	PK
2483.5	42.75	0.00	-	H	42.75	53.98	11.23	AV

802.11be(MCS0)			EHT20	52T+26T				
Channel	CH 1		Freq	2412 MHz		RU offset	70	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2390.0	61.46	0.00	-	H	61.46	73.98	12.52	PK
2390.0	44.00	0.00	-	H	44.00	53.98	9.98	AV

802.11be(MCS0)			EHT20	52T+26T				
Channel	CH 11		Freq	2462 MHz		RU offset	72	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	57.04	0.00	-	H	57.04	73.98	16.94	PK
2483.5	42.84	0.00	-	H	42.84	53.98	11.14	AV

802.11be(MCS0)			EHT20	106T+26T				
Channel	CH 1		Freq	2412 MHz		RU offset	82	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2390.0	57.07	0.00	-	H	57.07	73.98	16.91	PK
2390.0	43.22	0.00	-	H	43.22	53.98	10.76	AV

802.11be(MCS0)			EHT20	106T+26T				
Channel	CH 11		Freq	2462 MHz		RU offset	83	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	65.66	0.00	-	H	65.66	73.98	8.32	PK
2483.5	46.14	0.00	-	H	46.14	53.98	7.84	AV

802.11be(MCS0)			EHT20	52T+26T				
Channel	CH 1		Freq	2412 MHz		RU offset	70	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2390.0	61.46	0.00	-	H	61.46	73.98	12.52	PK
2390.0	44.00	0.00	-	H	44.00	53.98	9.98	AV

802.11be(MCS0)			EHT20	52T+26T				
Channel	CH 11		Freq	2462 MHz		RU offset	72	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	57.04	0.00	-	H	57.04	73.98	16.94	PK
2483.5	42.84	0.00	-	H	42.84	53.98	11.14	AV

802.11be(MCS0)			EHT20	106T+26T				
Channel	CH 1		Freq	2412 MHz		RU offset	82	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2390.0	57.07	0.00	-	H	57.07	73.98	16.91	PK
2390.0	43.22	0.00	-	H	43.22	53.98	10.76	AV

802.11be(MCS0)			EHT20	106T+26T				
Channel	CH 11		Freq	2462 MHz		RU offset	83	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	65.66	0.00	-	H	65.66	73.98	8.32	PK
2483.5	46.14	0.00	-	H	46.14	53.98	7.84	AV

9.7.2 Channel 12, 13

802.11be(MCS0)			EHT20			SU		
Channel	CH 12		Freq	2467 MHz				
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	54.79	0.00	-	H	54.79	73.98	19.19	PK
2483.5	42.72	0.00	-	H	42.72	53.98	11.26	AV

802.11be(MCS0)			EHT20			SU		
Channel	CH 13		Freq	2472 MHz				
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	60.26	0.00	-	H	60.26	73.98	13.72	PK
2483.5	44.11	0.00	-	H	44.11	53.98	9.87	AV

802.11be(MCS0)			EHT20	242T				
Channel	CH 12		Freq	2467 MHz		RU offset	61	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	54.76	0.00	-	H	54.76	73.98	19.22	PK
2483.5	42.94	0.00	-	H	42.94	53.98	11.04	AV

802.11be(MCS0)			EHT20	242T				
Channel	CH 13		Freq	2472 MHz		RU offset	61	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	60.77	0.00	-	H	60.77	73.98	13.21	PK
2483.5	44.21	0.00	-	H	44.21	53.98	9.77	AV

802.11be(MCS0)			EHT20	106T				
Channel	CH 12		Freq	2467 MHz		RU offset	54	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	55.29	0.00	-	H	55.29	73.98	18.69	PK
2483.5	42.57	0.00	-	H	42.57	53.98	11.41	AV

802.11be(MCS0)			EHT20	106T				
Channel	CH 13		Freq	2472 MHz		RU offset	54	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	64.30	0.00	-	H	64.30	73.98	9.68	PK
2483.5	44.77	0.00	-	H	44.77	53.98	9.21	AV

802.11be(MCS0)			EHT20	52T				
Channel	CH 12		Freq	2467 MHz		RU offset	40	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	54.65	0.00	-	H	54.65	73.98	19.33	PK
2483.5	42.57	0.00	-	H	42.57	53.98	11.41	AV

802.11be(MCS0)			EHT20	52T				
Channel	CH 13		Freq	2472 MHz		RU offset	40	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	65.36	0.00	-	H	65.36	73.98	8.62	PK
2483.5	45.87	0.00	-	H	45.87	53.98	8.11	AV

802.11be(MCS0)			EHT20	26T				
Channel	CH 12		Freq	2467 MHz		RU offset	8	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	54.90	0.00	-	H	54.90	73.98	19.08	PK
2483.5	42.61	0.00	-	H	42.61	53.98	11.37	AV

802.11be(MCS0)			EHT20	26T				
Channel	CH 13		Freq	2472 MHz		RU offset	8	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	68.20	0.00	-	H	68.20	73.98	5.78	PK
2483.5	46.54	0.00	-	H	46.54	53.98	7.44	AV

802.11be(MCS0)			EHT20	52T+26T				
Channel	CH 12		Freq	2467 MHz		RU offset	72	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	54.86	0.00	-	H	54.86	73.98	19.12	PK
2483.5	42.62	0.00	-	H	42.62	53.98	11.36	AV

802.11be(MCS0)			EHT20	52T+26T				
Channel	CH 13		Freq	2472 MHz		RU offset	72	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	58.01	0.00	-	H	58.01	73.98	15.97	PK
2483.5	43.20	0.00	-	H	43.20	53.98	10.78	AV

802.11be(MCS0)			EHT20	106T+26T				
Channel	CH 12		Freq	2467 MHz		RU offset	83	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	54.38	0.00	-	H	54.38	73.98	19.60	PK
2483.5	42.64	0.00	-	H	42.64	53.98	11.34	AV

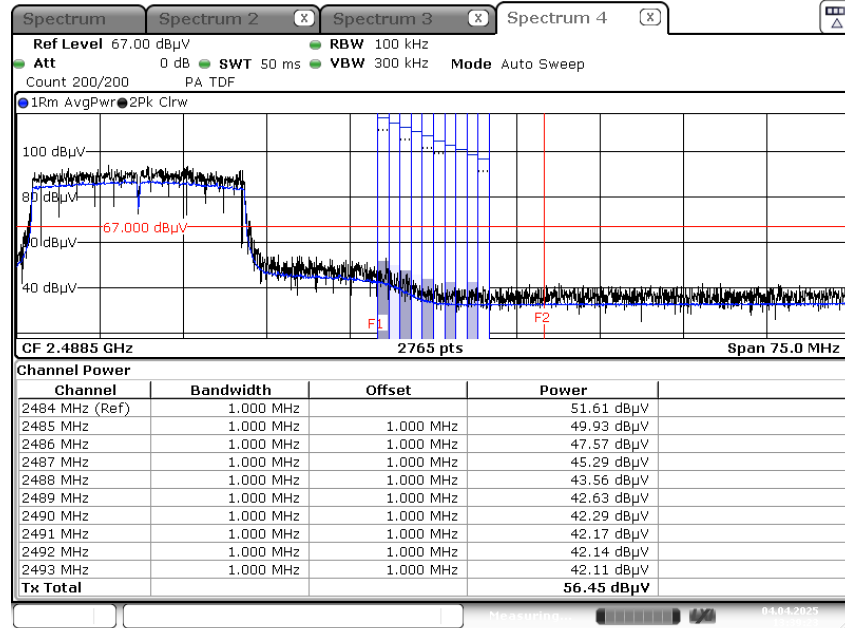
802.11be(MCS0)			EHT20	106T+26T				
Channel	CH 13		Freq	2472 MHz		RU offset	83	
Frequency	Measured Value	Duty Cycle Factor	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin	Measurement Type
[MHz]	[dBμV]	[dB]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]	
2483.5	63.73	0.00	-	H	63.73	73.98	10.25	PK
2483.5	44.59	0.00	-	H	44.59	53.98	9.39	AV

Test Plots

[MIMO_CDD(Ant.1+Ant.2)]

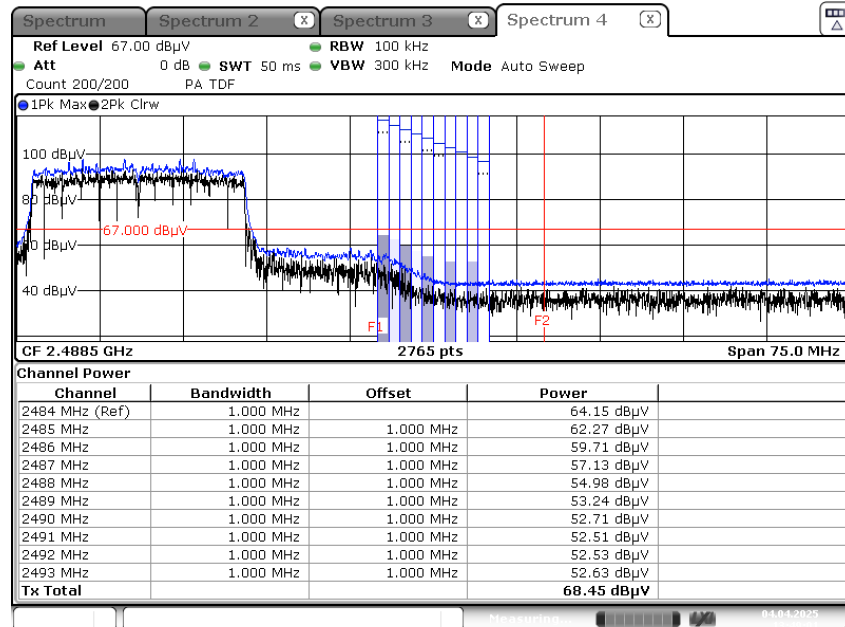
Note: In order to simplify the report, Plots of worst case are only reported.

Integration method Used_ Average result(802.11be EHT20, MCS0, 242 Tone RU 61 ch. 1, X-H)



Date: 4.APR.2025 13:39:22

Integration method Used_ Peak result(802.11be EHT20, MCS0, 242 Tone RU 61 ch. 1, X-H)



Date: 4.APR.2025 13:49:00

10. LIST OF TEST EQUIPMENT

Conducted Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
LISN	ENV216	Rohde & Schwarz	102245	07/17/2025	Annual
EMI Test Receiver	ESR	Rohde & Schwarz	101910	07/02/2025	Annual
Temperature Chamber	SU-642	ESPEC	93022487	06/27/2025	Annual
Signal Analyzer	N9030A	Keysight	MY55410508	08/23/2025	Annual
Power Measurement Set	OSP 120	Rohde & Schwarz	100935	08/01/2025	Annual
Power Meter	N1911A	Agilent	MY45100523	02/21/2026	Annual
Power Sensor	N1921A	Agilent	MY57820067	02/04/2026	Annual
Directional Coupler	87300B	Agilent	3116A03621	10/21/2025	Annual
Power Splitter	11667B	Hewlett Packard	10545	01/23/2026	Annual
DC Power Supply	E3632A	Agilent	KR75305528	12/24/2025	Annual
Attenuator(10 dB)(DC-26.5 GHz)	8493C-010	Agilent	08285	05/28/2025	Annual
Attenuator(20 dB)	18N-20dB	Rohde & Schwarz	8	02/18/2026	Annual
Software	EMC32	Rohde & Schwarz	N/A	N/A	N/A
FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	HCT CO., LTD.	N/A	N/A	N/A
Bluetooth Tester	CBT	Rohde & Schwarz	100752	12/27/2025	Annual

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

Radiated Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Controller(Antenna mast)	CO3000	Innco system	CO3000-4p	N/A	N/A
Antenna Position Tower	MA4640/800-XP-EP	Innco system	S3AM	07/30/2025	Annual
Controller	EM2090	Emco	060520	N/A	N/A
Turn Table	N/A	Ets	N/A	N/A	N/A
Amp & Filter Bank Switch Controller	FBSM-01A	TNM system	0	N/A	N/A
Loop Antenna	FMZB 1513	Rohde & Schwarz	1513-333	03/07/2026	Biennial
Hybrid Antenna	VULB 9168	Schwarzbeck	9168-0895	08/28/2026	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	9120D-1191	11/07/2025	Biennial
Horn Antenna(15 GHz ~ 40 GHz)	BBHA9170	Schwarzbeck	BBHA9170124	03/23/2027	Biennial
Band Reject Filter	WRCJV2400/2483.5-2370/2520-60/12SS	Wainwright Instruments	2	12/26/2025	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	5	06/04/2025	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	6	06/04/2025	Annual
Band Reject Filter	WRCJV5100/5850-40/50-8EEK	Wainwright Instruments	1	01/09/2026	Annual
RF Switching System	FBSR-03A (3G HPF+LNA)	T&M SYSTEM	S3L1	10/31/2025	Annual
RF Switching System	FBSR-03A (10dB ATT+LNA)	T&M SYSTEM	S3L2	10/31/2025	Annual
RF Switching System	FBSR-03A (7G HPF+LNA)	T&M SYSTEM	S3L3	10/31/2025	Annual
RF Switching System	FBSR-03A (3dB ATT+LNA)	T&M SYSTEM	S3L4	10/31/2025	Annual
Power Amplifier	CBL18265035	CERNEX	22966	11/07/2025	Annual
Power Amplifier	CBL26405040	CERNEX	25956	02/19/2026	Annual
Bluetooth Tester	TC-3000C	TESCOM	3000C000175	03/12/2026	Annual
Spectrum Analyzer	FSV40 (9 kHz ~ 40 GHz)	Rohde & Schwarz	100900	08/27/2025	Annual

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
3. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5(Version : 2017).

11. ANNEX A_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-2505-FC009-P