FCC Part 15, Subpart C
Test Report

FCC ID:	2AR2STAM6500
Applicant:	MMD Hong Kong Holding Limited
Address:	Units 1208-11, 12th Floor, C-Bons International Center, 108 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong
Manufacturer:	MMD Hong Kong Holding Limited
Address:	Units 1208-11, 12th Floor, C-Bons International Center, 108 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong
Product:	Micro Music System
Brand(s):	PHILIPS or
Test Model(s):	TAM6500/37
Series Model(s):	TAM6500, TAM6500/10, TAM6500/05, TAM6500/yy (yy=00-99 or nil, for country code)
Test Date:	Dec. 01, 2025 ~ Dec. 24, 2025
Issued Date:	Dec. 25, 2025
Issued By:	Hwa-Hsing (Dongguan) Testing Co., Ltd.
Address:	No.101, Building N1, Yuyuan 2 Road, Yuyuan Industrial Park, AronngJiang Town, Dongguan City, People's Republic of China
Test Firm Registration No.:	915896
Designation No.:	CN1255
Standards:	FCC CFR 47 Part 2, Subpart J FCC CFR 47 Part 15, Subpart C

The above equipment has been tested by **Hwa-Hsing (Dongguan) Testing Co., Ltd.**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Nature Lee

Nature Lee

Reviewed by : Sye Yang

Sye Yang

Approved by : Scott He

Scott He

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Release Control Record

Issue No.	Description	Date Issued
25112601-RF-US-02	Original Release	Dec. 25, 2025

1. Summary of Test Results

FCC CFR 47 Part 15, Subpart C			
FCC Clause	Test Item	Result	Remarks
15.207	AC Power Conducted Emission	Pass	Meet the requirement
15.247(a)	Emission Bandwidth Measurement	Pass	Meet the requirement
15.247(d)	Conducted Spurious Emissions	Pass	Meet the requirement
15.205 15.209 15.247(d)	Radiated Spurious Emission	Pass	Meet the requirement
15.247(e)	Power Spectral Density Measurement	Pass	Meet the requirement
15.247(b)	Maximum Output Power	Pass	Meet the requirement
15.203	Antenna Requirement	Pass	Meet the requirement
NOTE1: The above test items were tested in accordance with the C63.10 2020 standard for all the requirements. NOTE2: According to FCC OET KDB 558074, the report use radiated measurements in the restricted frequency bands. In addition, the radiated test is also performed to ensure the emissions emanating from the device cabinet also comply with the applicable limits.			

1.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

The listed uncertainties are the worst cases uncertainty for the entire range of measurement. Please note that the uncertainty values are provided for informational purposes only and are not used in determining the PASS/FAIL results.

Measurement	Frequency	Expended Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.66 dB
Radiated Emissions up to 1 GHz	9KHz ~ 30MHz	2.16 dB
	30MHz ~ 1000MHz	3.56 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	4.71 dB
	6GHz~18GHz	4.84 dB
	18GHz ~ 40GHz	5.73 dB

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

1.2 Modification Record

There were no modifications required for compliance.

2. General Information

2.1 General Description of EUT

Product(s)	Micro Music System
Test Model(s)	TAM6500/37
Sample No.	HX2511260101, HX2511260102
Series Model(s)	TAM6500, TAM6500/10, TAM6500/05, TAM6500/yy (yy=00-99 or nil, for country code)
Status of EUT	Engineering Prototype
Power Supply Rating	AC 100-240V 50/60Hz 40W
Modulation Type	GFSK for DTS
Transfer Rate	1 Mbps, 2Mbps
Operating Frequency	2402 ~ 2480MHz
Number of Channel	40
Maximum Output Power	4.21dBm (Peak)
Antenna Type and Antenna Gain	FPC Antenna, 4.27dBi
Antenna Connector	N/A
Accessory Device	AC cable 140cm

Note:

1. Please refer to the EUT photo document (Reference No.: 25112601-01&02) for detailed product photo.
2. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.
3. Hwa-Hsing (Dongguan) Testing Co., Ltd. is not responsible for the accuracy of the information provided by the manufacturer.
4. For the test results, the EUT had been tested with all conditions, and only the worst case was shown in the test report.
5. Model differences: These models are only different from model name for trade purpose.

2.2 Description of Test Channels

40 channels are provided to BT-LE (1Mbps, 2Mbps):

CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

2.3 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable test items	X-Axis	Y-Axis	Z-Axis	Voltage Supply
Conducted	AC Power Conducted Emission	N/A	N/A	N/A	AC 120V
Radiated	Radiated Emissions	√	√	√	AC 120V
Antenna Port Conducted Measurement	Band Edge Measurement	N/A	N/A	N/A	
	Antenna Port Emission	N/A	N/A	N/A	
	6dB Bandwidth	N/A	N/A	N/A	
	Occupied Bandwidth Measurement	N/A	N/A	N/A	
	Conducted power	N/A	N/A	N/A	
	Power Spectral Density	N/A	N/A	N/A	

1. *: The EUT had been pre-tested on the positioned of each 3 Axis. The worst case was found when positioned on **Z-plane**.
2. "N/A" means Not Applicable.

Test Condition:

Applicable test items	Environmental Conditions	Test Date	Tested by
Radiated Emissions	24.0deg. C, 55%RH	Dec. 16, 2025	Aron
Antenna Port Conducted Measurement	25.5deg. C, 58%RH	Dec. 04, 2025	Yonah Wu

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.
- Following channel(s) was (were) selected for the final test as listed below.

Radiated Emission Test (Above 1GHz):

EUT Configure Mode	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
-	0 to 39	0,19, 39	GFSK	1
-	0 to 39	0,19, 39	GFSK	2

Radiated Emission Test (Below 1GHz):

EUT Configure Mode	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
-	0 to 39	0,19, 39	GFSK	1
-	0 to 39	0,19, 39	GFSK	2

Power Line Conducted Emission Test:

EUT Configure Mode	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
-	0 to 39	19	GFSK	1
-	0 to 39	19	GFSK	2

Antenna Port Conducted Measurement:

*This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

EUT Configure Mode	Available Channel	Tested Channel	Modulation Type	Data Rate (Mbps)
-	0 to 39	0,19, 39	GFSK	1
-	0 to 39	0,19, 39	GFSK	2

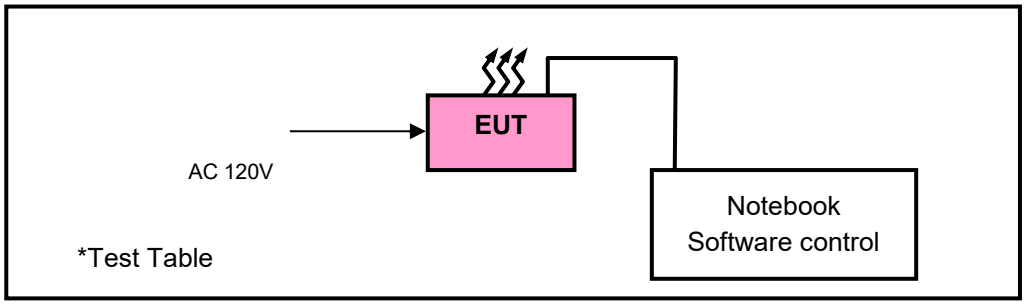
2.4 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand	Model No.	Serial No.	FCC ID
1	Notebook	ARONWEI	NbD-WFH9	EUEPM21725002655	N/A
2	Notebook	DELL	Inspiron 14R Aluminum Edition	6WPG9-63PV4-RBPF2-T6RHW-W9GBP	N/A

No.	Signal Cable Description of The Above Support Units
1.	USB extension cord: Unshielded, Detachable 1.2m;

2.5 Configuration of System under Test



3. Test Types and Results

3.1 Radiated Emission and Band-edge Measurement

3.1.1 Limits of radiated emission and band-edge measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
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

Note:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

3.1.2 Test Instruments

Radiated emission below 30MHz:

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	100962	2026-07-23
3m Semi-anechoic Chamber	MAORUI	9m*6m*6m	HS-2018037	2026-03-13*
Test software	FARAD	FARAD	EZ_EMCV1.1.4.2	N/A
Loop Antenna	EMCI	HLA 6121	56735	2026-05-19
Antenna Tower	MF	MFA-440H	NA	NA
Turn Table	MF	MFT-201SS	NA	NA
Antenna Tower&Turn Table Controller	MF	MF-7802	NA	NA

Frequency Range below 1GHz:

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver (9kHz~3GHz)	Rohde&Schwarz	ESPI 7	101978	2026-07-23
Broadband antenna (25MHz~2500MHz)	Schwarzbeck	VULB 9168	937	2026-07-25
3m Semi-anechoic Chamber	MAORUI	9m*6m*6m	HS-2018037	2026-03-13*
Signal Amplifier (30MHz~1000MHz)	Com-power	PAM-103	18020051	2026-07-23
Attenuator	R&S	TS2GA-6dB	18101101	N/A
Test software	FARAD	EZ_EMC V1.1.4.2	N/A	N/A
Broadcast test system	R&S	SFU	100410	2026-07-23
Coaxial cable	N/A	N/A	HS-EMC-100	2026-07-23
Coaxial cable	N/A	N/A	HS-EMC-101/102	2026-07-23

Frequency Range above 1GHz:

Equipment	Manufacturer	Model No.	Serial No.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESPI 7	101978	2026-07-23
3m Semi-anechoic Chamber	MAORUI	9m*6m*6m	HS-2018037	2026-03-13*
Test software	FARAD	EZ_EMCV1.1.4.2	N/A	N/A
Digital Multimeter	FLUKE	15B+	43512617WS	2026-07-28
Horn Antenna	Schwarzbeck	BBHA 9120 D	1959	2026-08-02
Spectrum Analyzer	Rohde&Schwarz	FSV-40N	101783	2026-07-23
Broadband Coaxial Preamplifier	Schwarzbeck	BBV 9718	25	2026-07-23
Pre-Amplifier	EMCI	EMC 184045SE	9870709	2026-07-30
Spectrum	Keysight	N9020A	MY51240612	2026-07-23
Broadcast test system	R&S	SFU	100410	2026-07-23
Antenna Tower	MF	MFA-440H	NA	NA
Turn Table	MF	MFT-201SS	NA	NA
Antenna Tower&Turn Table Controller	MF	MF-7802	NA	NA
Coaxial cable	N/A	N/A	HS-EMC-103	2026-07-23
Coaxial cable	N/A	N/A	HS-EMC-104/105	2026-07-23

Note:
1. The calibration interval of the above test instruments is 12 months or 36 months (*).
2. The test was performed in 966.

3.1.3 Test Procedures

a. Peak emission levels are measured by setting the instrument as follow:

1) RBW & VBW setting as a function of frequency:

Frequency	RBW	VBW
9kHz~150kHz	200Hz	600Hz
0.15MHz~30MHz	9kHz	30kHz
30MHz~1000MHz	120kHz	300kHz
>1000MHz	1MHz	3MHz

2) Detector = peak.
3) Sweep time = auto.
4) Trace mode = max hold.
5) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be lengthened for low-duty-cycle applications.)

Note: If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement

b. Average emission levels are measured by setting the instrument as follow:

- **Trace averaging with continuous EUT transmission at full power**

If the EUT can be configured or modified to transmit continuously (D ≥ 98%). then the average emission levels shall be measured using the following method (with EUT transmitting continuously):

1) RBW=1 MHz (unless otherwise specified).
2) VBW ≥ 3 *RBW.
3) Detector =RMS
4) Sweep time = auto.
5) Perform a trace average of at least 100 traces.

- **Trace averaging across ON and OFF times of the EUT transmissions followed by duty cycle correction**

If continuous transmission of the EUT (D ≥ 98%) cannot be achieved and the duty cycle is constant (duty cycle variations are less than ±2%). then the following procedure shall be used

1) The EUT shall be configured to operate at the maximum achievable duty cycle.
2) Measure the duty cycle D of the transmitter output signal as described in ANSI C63.10.
3) RBW=1 MHz (unless otherwise specified).
4) VBW ≥ 3 *RBW.
5) Detector =RMS
6) Sweep time = auto.
7) Perform a trace average of at least 100 traces.

A correction factor shall be added to the measurement results prior to comparing with the emission limit to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:

*If power averaging (rms) mode was used in step 5). then the applicable correction factor is [10 10g (1/ D)], where D is the duty cycle.

**If linear voltage averaging mode was used in step f). then the applicable correction factor is [20 10g (1/D)], where D is the duty cycle.

***If a specific emission is demonstrated to be continuous (D > 98%) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that.

- **Reduced VBW Averaqing across ON and OFF times of the EUT transmissions with max hold**

If continuous transmission of the EUT (D > 98%) cannot be achieved and the duty cycle is not constant (duty cycle variations exceed ±2%), then the following procedure shall be used:

1) RBW = 1 MHz
2) VBW ≥ 1/T.
3) Detector =peak
4) Sweep time = auto.
5) Trace mode = max hold.
6) Allow max hold to run for at least [50 x (1/ D)] traces

c. The EUT was placed on the top of a rotating table 0.8 meters (below 1GHz) / 1.5 meters (Above 1GHz) above the reference ground. The table was rotated 360 degrees to determine the position of the highest radiation.
d. The EUT was set 3 meters away from the interference-receiving antenna (Below 1GHz) & (Above 1GHz), which was mounted on the top of a variable-height antenna tower.
e. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
f. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
g. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
h. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

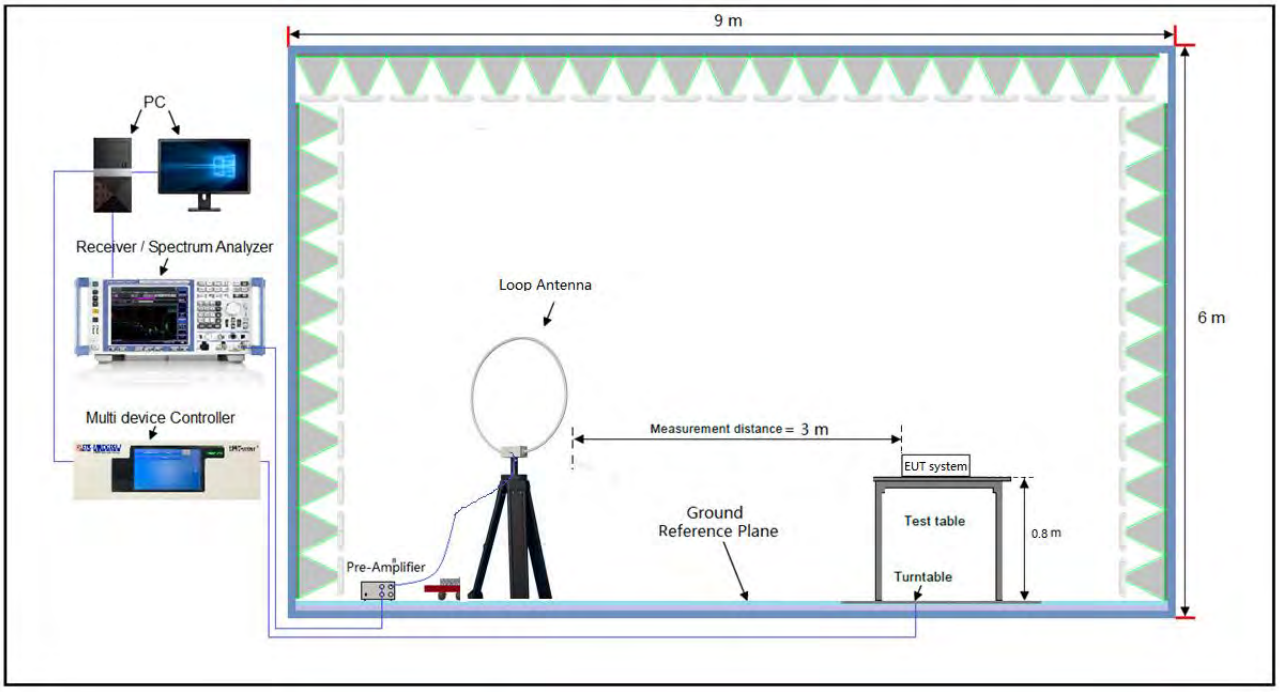
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz & 360kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth =3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth =1/T for Average (Duty cycle < 98 %) detection at frequency above 1 GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is =10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

3.1.4 Deviation from Test Standard

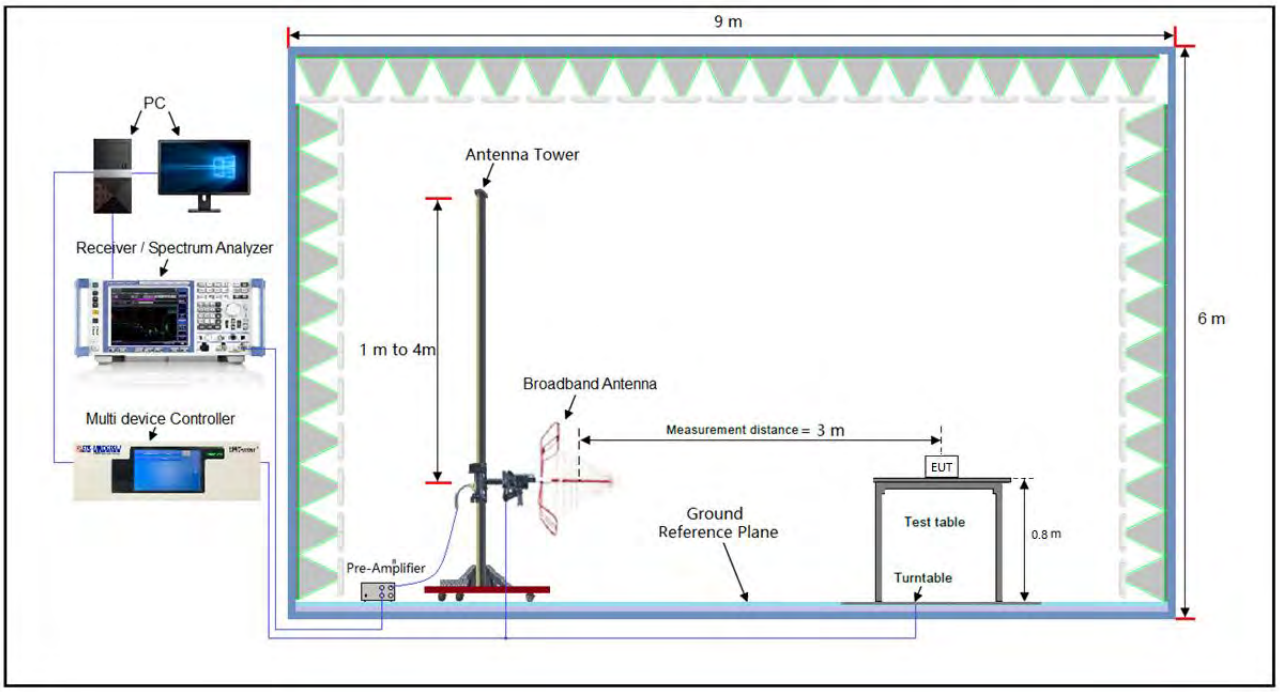
No deviation.

3.1.5 Test Setup

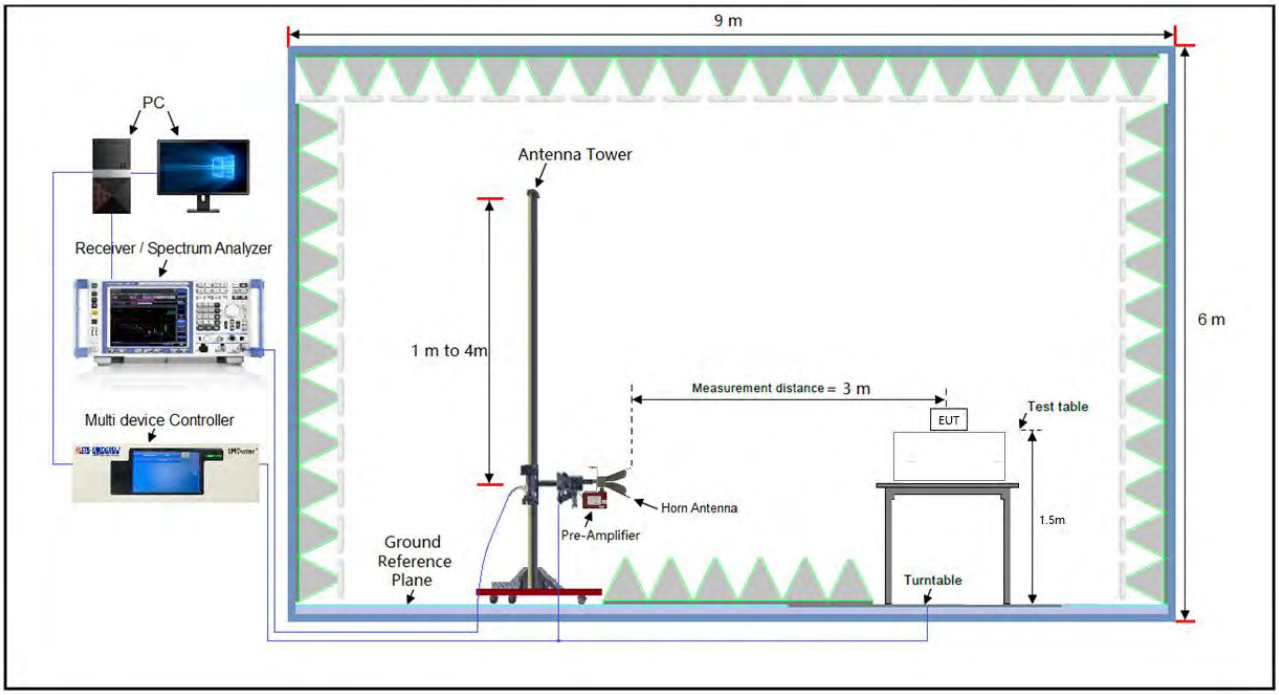
Radiated emission below 30MHz:



Frequency Range below 1GHz:



Frequency Range above 1GHz:



For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.1.6 EUT Operating Conditions

a. Placed the EUT on the testing table.

b. Set the EUT under transmission condition continuously at specific channel frequency.

3.1.7 Test Results

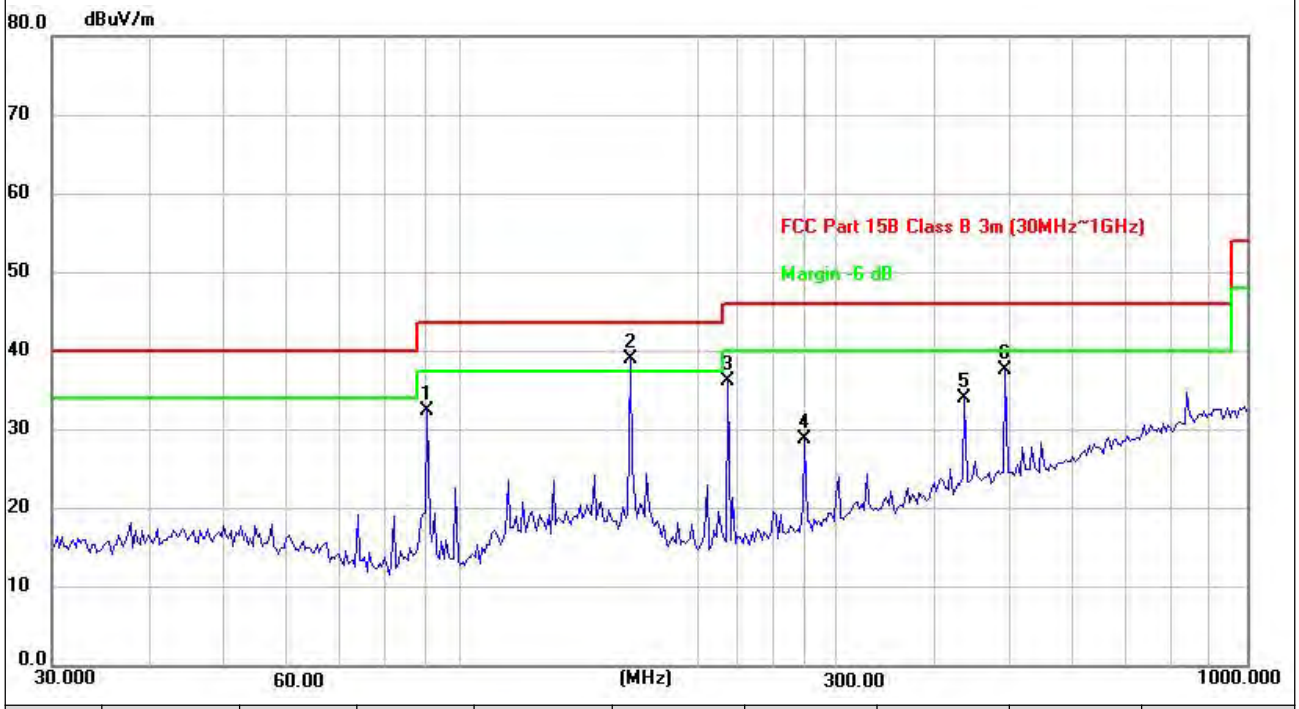
9kHz ~ 30MHz Data:

The amplitude of spurious emissions attenuated more than 20dB below the permissible value is not required to be report.

30MHz ~ 1GHz Worst-Case Data:

Test Channel	Channel 0	Frequency Range	30MHz ~ 1GHz
Detector Function	Peak (PK) Quasi-peak (QP)	Tested By	Aron

Antennal Polarity &Test Distance: Horizontal at 3m



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1	90.2204	51.82	-19.49	32.33	43.50	-11.17	peak	224	161
2	163.7550	52.65	-13.56	39.09	43.50	-4.41	peak	276	143
3	218.3084	53.26	-17.15	36.11	46.00	-9.89	peak	300	247
4	273.2340	42.91	-14.14	28.77	46.00	-17.23	peak	368	168
5	437.1200	42.60	-8.65	33.95	46.00	-12.05	peak	106	235
6	492.4685	44.98	-7.43	37.55	46.00	-8.45	peak	176	39

Remarks:

1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value

Test Channel	Channel 0	Frequency Range	30MHz ~ 1GHz
Detector Function	Peak (PK) Quasi-peak (QP)	Tested By	Aron

Antennal Polarity& Test Distance: Vertical at 3m

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1	37.2854	41.51	-15.86	25.65	40.00	-14.35	peak	177	356
2	40.8445	46.03	-15.38	30.65	40.00	-9.35	peak	133	360
3	54.4515	39.88	-15.38	24.50	40.00	-15.50	peak	338	341
4	57.1914	42.78	-16.10	26.68	40.00	-13.32	peak	254	198
5	163.7550	49.21	-13.56	35.65	43.50	-7.85	peak	205	224
6	492.4685	41.93	-7.43	34.50	46.00	-11.50	peak	371	198

Remarks:

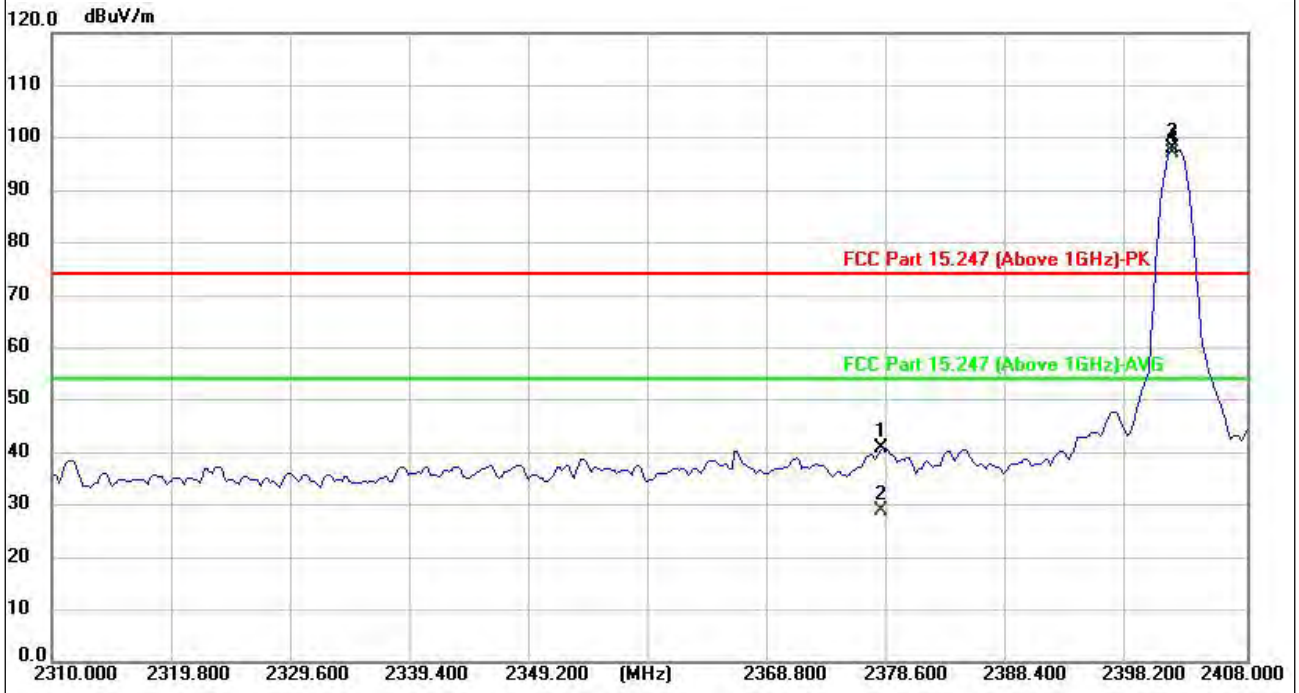
1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value

Above 1GHz Data:

BLE-1Mbps

Test channel	Channel 0	Frequency Range	Above 1GHz
Detector Function	Peak (PK) Average (AVG)	Tested By	Aron

Antennal Polarity& Test distance: Horizontal at 3 M



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1	2378.148	42.31	-1.36	40.95	74.00	-33.05	peak	117	259
2	2378.148	30.26	-1.36	28.90	54.00	-25.10	AVG	117	259
3 #	2402.108	99.08	-1.22	97.86			peak	117	259
4 #	2402.108	98.30	-1.22	97.08			AVG	117	259
5	4804.000	42.58	2.45	45.03	74.00	-28.97	peak	181	55
6	4804.000	33.14	2.45	35.59	54.00	-18.41	AVG	181	55
7	7206.000	39.17	9.90	49.07	74.00	-24.93	peak	158	203
8	7206.000	29.50	9.90	39.40	54.00	-14.60	AVG	158	203

Remarks:

1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value
3. #: Fundamental frequency.
4. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Test channel	Channel 0	Frequency Range	Above 1GHz
Detector Function	Peak (PK) Average (AVG)	Tested By	Aron

Antennal Polarity& Test Distance: Vertical at 3m

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1	2387.575	43.15	-1.31	41.84	74.00	-32.16	peak	239	135
2	2387.575	32.94	-1.31	31.63	54.00	-22.37	AVG	239	135
3 #	2401.912	104.45	-1.22	103.23			peak	239	135
4 #	2401.912	103.81	-1.22	102.59			AVG	239	135
5	4804.000	43.27	2.45	45.72	74.00	-28.28	peak	327	295
6	4804.000	34.35	2.45	36.80	54.00	-17.20	AVG	327	295
7	7206.000	40.49	9.90	50.39	74.00	-23.61	peak	128	164
8	7206.000	29.82	9.90	39.72	54.00	-14.28	AVG	128	164

Remarks:

1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value
3. #: Fundamental frequency.
4. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Test channel	Channel 19	Frequency Range	Above 1GHz
Detector Function	Peak (PK) Average (AVG)	Tested By	Aron

Antennal Polarity& Test Distance: Horizontal at 3m									
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1#	2440.000	100.09	-0.98	99.11			peak	130	249
2#	2440.000	99.84	-0.98	98.86			AVG	130	249
3	4880.000	42.79	2.63	45.42	74.00	-28.58	peak	100	251
4	4880.000	33.48	2.63	36.11	54.00	-17.89	AVG	100	251
5	7320.000	39.73	10.20	49.93	74.00	-24.07	peak	162	284
6	7320.000	29.31	10.20	39.51	54.00	-14.49	AVG	162	284
Antennal Polarity& Test Distance: Vertical at 3 M									
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1#	2440.000	101.57	-0.98	100.59			peak	139	254
2#	2440.000	100.97	-0.98	99.99			AVG	139	254
3	4880.000	42.90	2.63	45.53	74.00	-28.47	peak	309	44
4	4880.000	34.53	2.63	37.16	54.00	-16.84	AVG	309	44
5	7320.000	39.82	10.20	50.02	74.00	-23.98	peak	102	342
6	7320.000	29.34	10.20	39.54	54.00	-14.46	AVG	102	342

Remarks:

1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value
3. #: Fundamental frequency.
4. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Test channel	Channel 39	Frequency Range	Above 1GHz
Detector Function	Peak (PK) Average (AVG)	Tested By	Aron

Antennal Polarity& Test Distance: Horizontal at 3 M

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1#	2480.248	96.61	-0.72	95.89			peak	187	360
2#	2480.248	96.02	-0.72	95.30			AVG	187	360
3	2483.500	43.32	-0.69	42.63	74.00	-31.37	peak	187	360
4	2483.500	34.91	-0.69	34.22	54.00	-19.78	AVG	187	360
5	4960.000	42.03	2.82	44.85	74.00	-29.15	peak	144	58
6	4960.000	32.82	2.82	35.64	54.00	-18.36	AVG	144	58
7	7440.000	39.72	10.51	50.23	74.00	-23.77	peak	244	119
8	7440.000	29.04	10.51	39.55	54.00	-14.45	AVG	244	119

Remarks:

1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value
3. #: Fundamental frequency.
4. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Test channel	Channel 39	Frequency Range	Above 1GHz
Detector Function	Peak (PK) Average (AVG)	Tested By	Aron

Antennal Polarity& Test Distance: Vertical at 3 M

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1#	2479.856	103.32	-0.72	102.60			peak	201	142
2#	2479.856	102.67	-0.72	101.95			AVG	201	142
3	2483.500	49.42	-0.69	48.73	74.00	-25.27	peak	201	142
4	2483.500	40.75	-0.69	40.06	54.00	-13.94	AVG	201	142
5	4960.000	44.45	2.82	47.27	74.00	-26.73	peak	188	111
6	4960.000	37.24	2.82	40.06	54.00	-13.94	AVG	188	111
7	7440.000	40.66	10.51	51.17	74.00	-22.83	peak	266	184
8	7440.000	29.83	10.51	40.34	54.00	-13.66	AVG	266	184

Remarks:

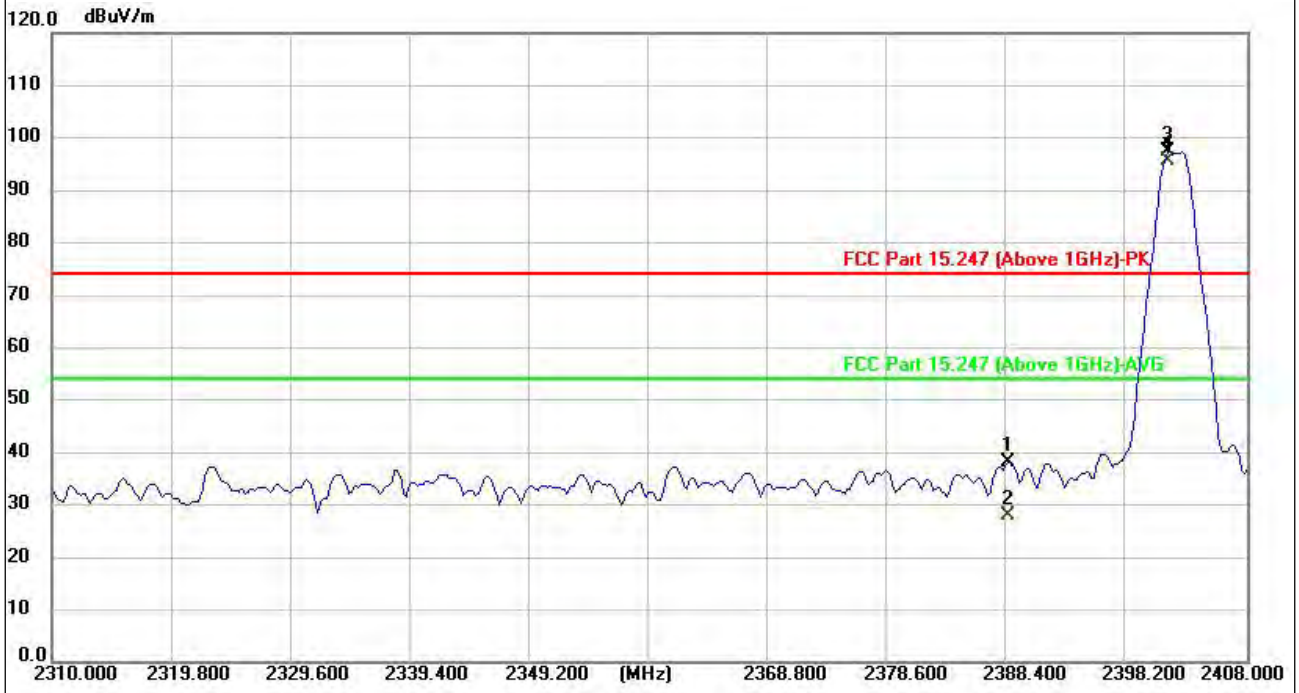
1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value
3. #: Fundamental frequency.
4. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Above 1GHz Data:

BLE-2Mbps

Test channel	Channel 0	Frequency Range	Above 1GHz
Detector Function	Peak (PK) Average (AVG)	Tested By	Aron

Antennal Polarity& Test distance: Horizontal at 3 M



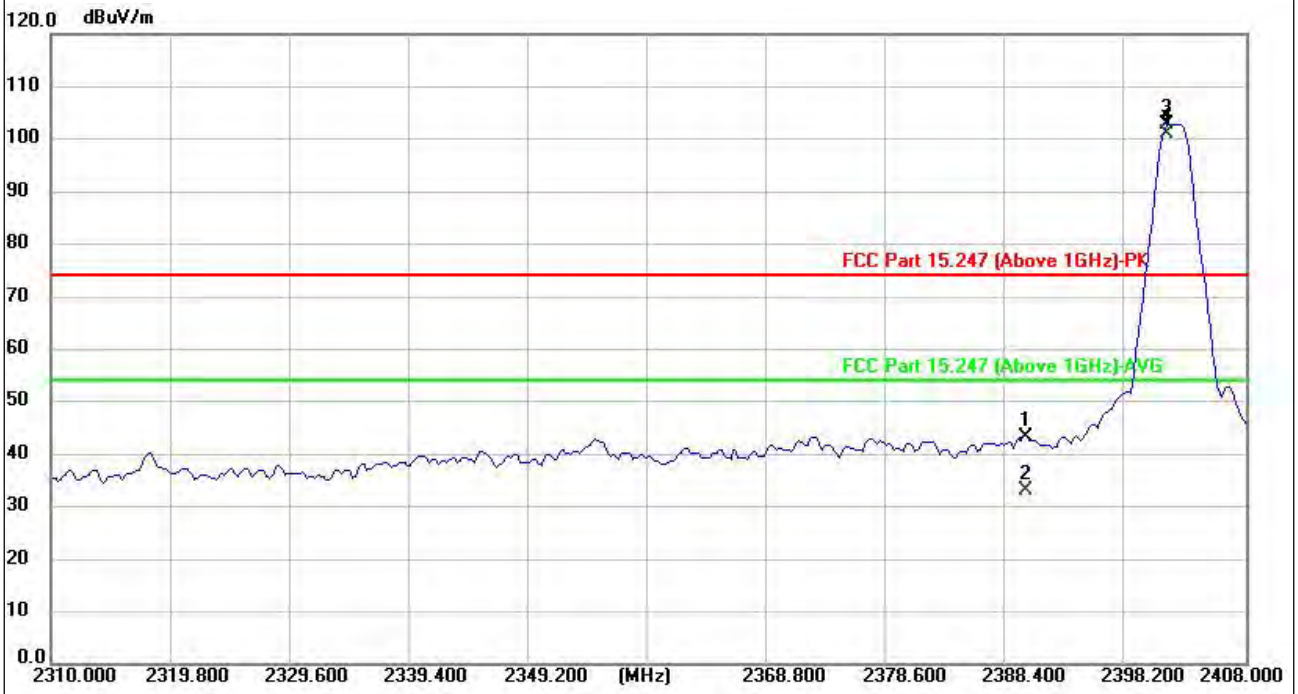
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1	2388.557	39.49	-1.30	38.19	74.00	-35.81	peak	211	257
2	2388.557	29.28	-1.30	27.98	54.00	-26.02	AVG	211	257
3 #	2401.715	98.62	-1.22	97.40			peak	211	257
4 #	2401.715	96.97	-1.22	95.75			AVG	211	257
5	4804.000	41.40	2.45	43.85	74.00	-30.15	peak	400	306
6	4804.000	31.41	2.45	33.86	54.00	-20.14	AVG	400	306
7	7206.000	39.23	9.90	49.13	74.00	-24.87	peak	164	205
8	7206.000	29.49	9.90	39.39	54.00	-14.61	AVG	164	205

Remarks:

1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value
3. #: Fundamental frequency.
4. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Test channel	Channel 0	Frequency Range	Above 1GHz
Detector Function	Peak (PK) Average (AVG)	Tested By	Aron

Antennal Polarity& Test Distance: Vertical at 3m



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1	2390.000	44.67	-1.30	43.37	74.00	-30.63	peak	214	140
2	2390.000	34.38	-1.30	33.08	54.00	-20.92	AVG	214	140
3 #	2401.715	104.14	-1.22	102.92			peak	214	140
4 #	2401.715	102.34	-1.22	101.12			AVG	214	140
5	4804.000	42.89	2.45	45.34	74.00	-28.66	peak	362	225
6	4804.000	30.81	2.45	33.26	54.00	-20.74	AVG	362	225
7	7206.000	40.16	9.90	50.06	74.00	-23.94	peak	152	12
8	7206.000	30.02	9.90	39.92	54.00	-14.08	AVG	152	12

Remarks:

1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value
3. #: Fundamental frequency.
4. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Test channel	Channel 19	Frequency Range	Above 1GHz
Detector Function	Peak (PK) Average (AVG)	Tested By	Aron

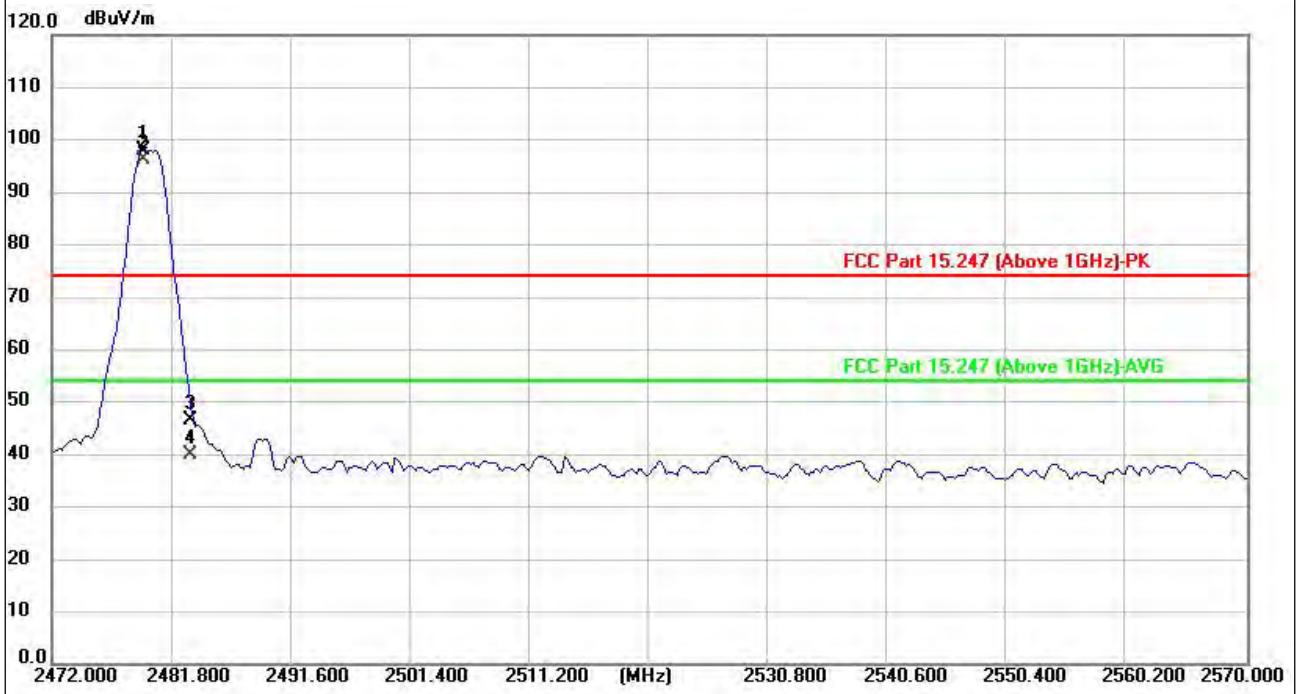
Antennal Polarity& Test Distance: Horizontal at 3m									
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1#	2440.000	100.06	-0.98	99.08			peak	130	250
2#	2440.000	98.43	-0.98	97.45			AVG	130	250
3	4880.000	42.15	2.63	44.78	74.00	-29.22	peak	295	22
4	4880.000	32.16	2.63	34.79	54.00	-19.21	AVG	295	22
5	7320.000	39.98	10.20	50.18	74.00	-23.82	peak	294	164
6	7320.000	29.17	10.20	39.37	54.00	-14.63	AVG	294	164
Antennal Polarity& Test Distance: Vertical at 3 M									
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1#	2440.000	100.82	-0.98	99.84			peak	223	257
2#	2440.000	100.17	-0.98	99.19			AVG	223	257
3	4880.000	44.28	2.63	46.91	74.00	-27.09	peak	364	225
4	4880.000	34.29	2.63	36.92	54.00	-17.08	AVG	364	225
5	7320.000	40.98	10.20	51.18	74.00	-22.82	peak	152	26
6	7320.000	29.38	10.20	39.58	54.00	-14.42	AVG	152	26

Remarks:

1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value
3. #: Fundamental frequency.
4. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Test channel	Channel 39	Frequency Range	Above 1GHz
Detector Function	Peak (PK) Average (AVG)	Tested By	Aron

Antennal Polarity& Test Distance: Horizontal at 3 M



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1#	2479.463	98.64	-0.72	97.92			peak	131	247
2#	2479.463	97.00	-0.72	96.28			AVG	131	247
3	2483.500	47.26	-0.69	46.57	74.00	-27.43	peak	131	247
4	2483.500	40.78	-0.69	40.09	54.00	-13.91	AVG	131	247
5	4960.000	42.15	2.82	44.97	74.00	-29.03	peak	148	57
6	4960.000	31.48	2.82	34.30	54.00	-19.70	AVG	148	57
7	7440.000	40.17	10.51	50.68	74.00	-23.32	peak	127	55
8	7440.000	29.16	10.51	39.67	54.00	-14.33	AVG	127	55

Remarks:

1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value
3. #: Fundamental frequency.
4. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

Test channel	Channel 39	Frequency Range	1GHz ~ 25GHz
Detector Function	Peak (PK) Average (AVG)	Tested By	Aron

Antennal Polarity& Test Distance: Vertical at 3 M

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Angle (Degree)
1#	2479.463	102.73	-0.72	102.01			peak	207	142
2#	2479.463	101.00	-0.72	100.28			AVG	207	142
3	2483.500	51.03	-0.69	50.34	74.00	-23.66	peak	207	142
4	2483.500	44.70	-0.69	44.01	54.00	-9.99	AVG	207	142
5	4960.000	41.12	2.82	43.94	74.00	-30.06	peak	400	338
6	4960.000	31.76	2.82	34.58	54.00	-19.42	AVG	400	338
7	7440.000	40.04	10.51	50.55	74.00	-23.45	peak	263	148
8	7440.000	29.39	10.51	39.90	54.00	-14.10	AVG	263	148

Remarks:

1. Emission Level = Read Level + Factor (Antenna Factor + Cable Loss - Preamp Factor)
2. Margin value = Emission level – Limit value
3. #: Fundamental frequency.
4. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

3.2 Conducted Emission Measurement

3.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note:
1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3.2.2 Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Next Cal. Date
EMI Test Receiver (10kHz~7GHz)	Rohde&Schwarz	ESR7	101961	2026-07-23
2 Line V-Network LISN	Rohde&Schwarz	ENV216	3560.6550.15	2026-07-23
Test software	FARAD	EZ_EMC V1.1.4.2	N/A	N/A
Broadcast test system	R&S	SFU	100410	2026-07-23

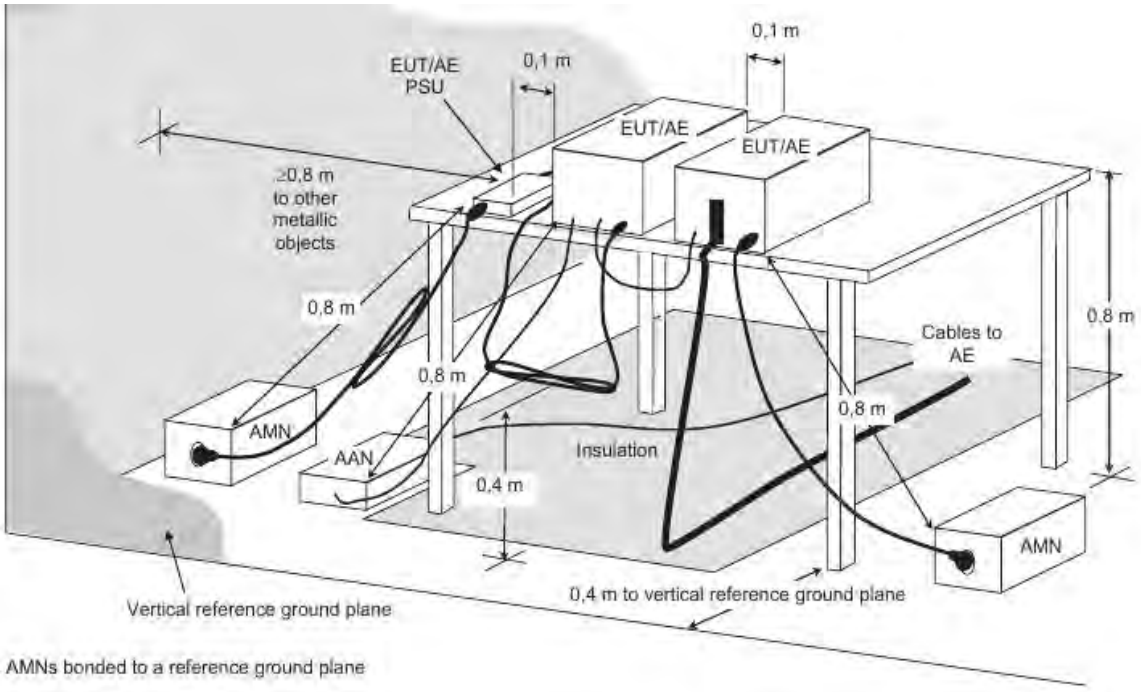
Note:
1. The calibration interval of the above test instruments is 12 months and calibrated by LISAI/CHINA.
2. The test was performed in Shielded Room 743.

3.2.3 Test Procedures

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit – 20dB)was not recorded.

Note: All modes of operation were investigated and the worst-case emissions are reported.

3.2.4 Test Setup



For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.2.5 EUT Operating Condition

Set the EUT under transmission condition continuously at specific channel frequency.

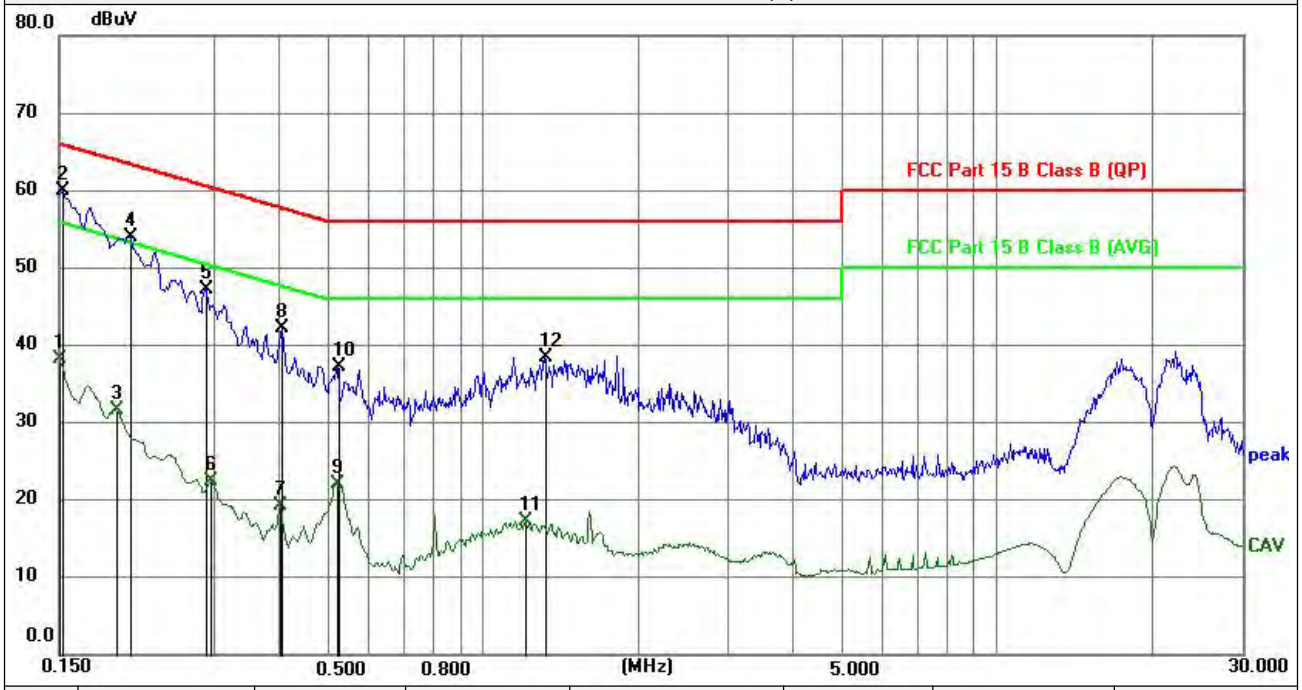
3.2.6 Deviation from Test Standard

No deviation.

3.2.7 Test Results

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase of Power: Line (L)



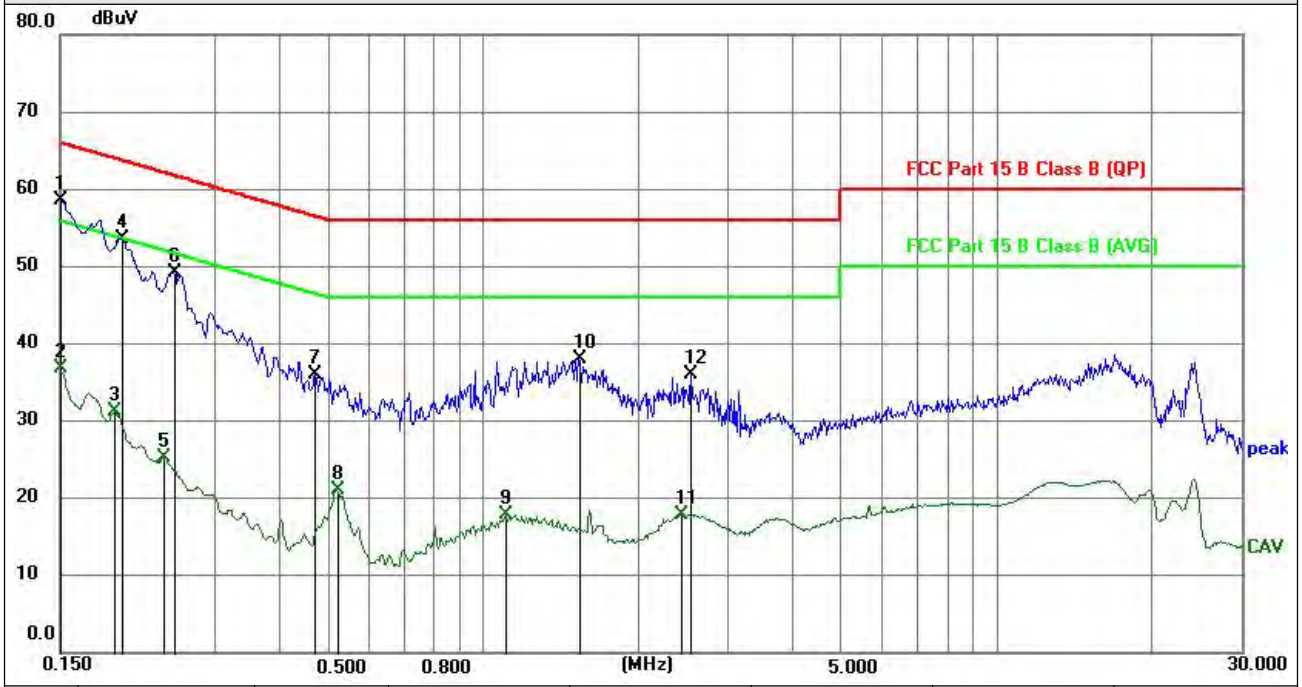
No.	Frequency	Reading	Correct Factor	Emission Level	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	Det.
1	0.1500	28.16	10.11	38.27	56.00	-17.73	AVG
2	0.1522	49.92	10.10	60.02	65.88	-5.86	peak
3	0.1928	21.62	10.04	31.66	53.92	-22.26	AVG
4	0.2040	43.96	10.03	53.99	63.45	-9.46	peak
5	0.2895	37.25	10.03	47.28	60.54	-13.26	peak
6	0.2962	12.36	10.03	22.39	50.35	-27.96	AVG
7	0.4042	9.20	9.96	19.16	47.77	-28.61	AVG
8	0.4065	32.23	9.96	42.19	57.72	-15.53	peak
9	0.5190	12.13	9.99	22.12	46.00	-23.88	AVG
10	0.5212	27.26	9.99	37.25	56.00	-18.75	peak
11	1.2120	7.40	9.92	17.32	46.00	-28.68	AVG
12	1.3178	28.42	9.91	38.33	56.00	-17.67	peak

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz

Phase of Power: Neutral (N)



No.	Frequency	Reading	Correct Factor	Emission Level	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	Det.
1	0.1500	48.44	10.11	58.55	66.00	-7.45	peak
2	0.1500	26.69	10.11	36.80	56.00	-19.20	AVG
3	0.1905	21.09	10.04	31.13	54.01	-22.88	AVG
4	0.1973	43.54	10.03	53.57	63.72	-10.15	peak
5	0.2378	15.18	10.03	25.21	52.17	-26.96	AVG
6	0.2490	39.24	10.03	49.27	61.79	-12.52	peak
7	0.4717	25.94	9.98	35.92	56.48	-20.56	peak
8	0.5190	11.00	9.99	20.99	46.00	-25.01	AVG
9	1.1085	7.91	9.93	17.84	46.00	-28.16	AVG
10	1.5428	28.05	9.90	37.95	56.00	-18.05	peak
11	2.4248	8.07	9.84	17.91	46.00	-28.09	AVG
12	2.5485	26.23	9.82	36.05	56.00	-19.95	peak

Remarks:

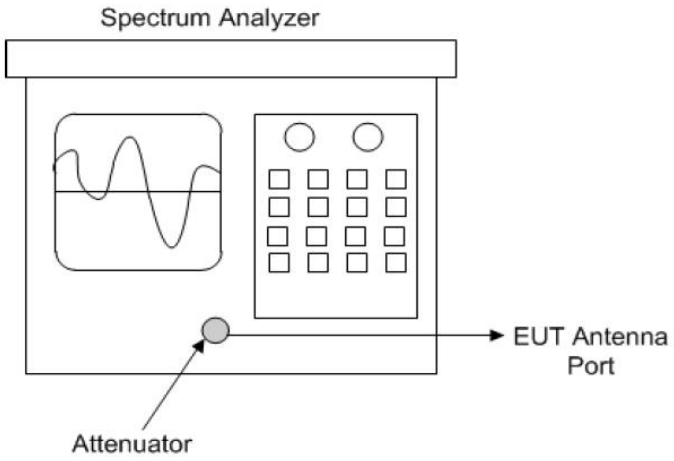
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

3.3 6dB Bandwidth Measurement

3.3.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 500 kHz(0.5 MHz).

3.3.2 Test Setup



Spectrum analyzer test configuration

3.3.3 Test Instruments

Refer to section 5 to get information of above instrument.

3.3.4 Test Procedure

Option 1:

a. Set resolution bandwidth (RBW) = 100kHz
b. Set the video bandwidth (VBW) ≥ 3 x RBW
c. Detector = Peak.
d. Trace mode = max hold.
e. Sweep = auto couple.
f. Allow the trace to stabilize.
g. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

Option 2:

The automatic bandwidth measurement capability of an instrument may be employed using the dB bandwidth mode with *X* set to 6 dB. if the functionality described in 11.8.1 (i.e. RBW= 100 kHz. VBW ≥ 3*RBW. and peak detector with maximum hold) is implemented by the instrumentation function. When using this capability. care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥6 dB

3.3.5 Deviation from Test Standard

No deviation.

3.3.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.3.7 Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.664	2401.720	2402.384	0.5	PASS
		2440	0.656	2439.732	2440.388	0.5	PASS
		2480	0.648	2479.736	2480.384	0.5	PASS
BLE_2M	Ant1	2402	1.136	2401.484	2402.620	0.5	PASS
		2440	1.116	2439.488	2440.604	0.5	PASS
		2480	1.136	2479.496	2480.632	0.5	PASS

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

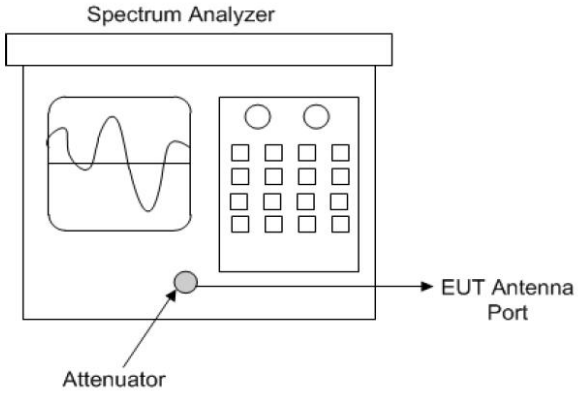
BLE_2M_Ant1_2402

BLE_2M_Ant1_2440

BLE_2M_Ant1_2480

3.4 Occupied Bandwidth Measurement

3.4.1 Test Setup



3.4.2 Test Instruments

Refer to section 5 to get information of above instrument.

3.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to peak. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

3.4.4 Deviation from Test Standard

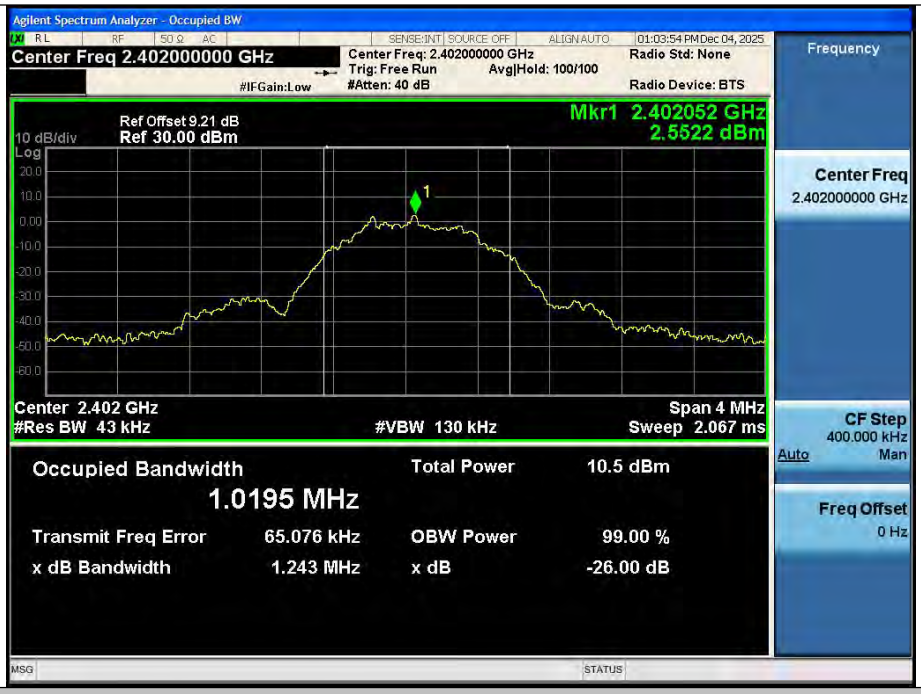
No deviation.

3.4.5 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

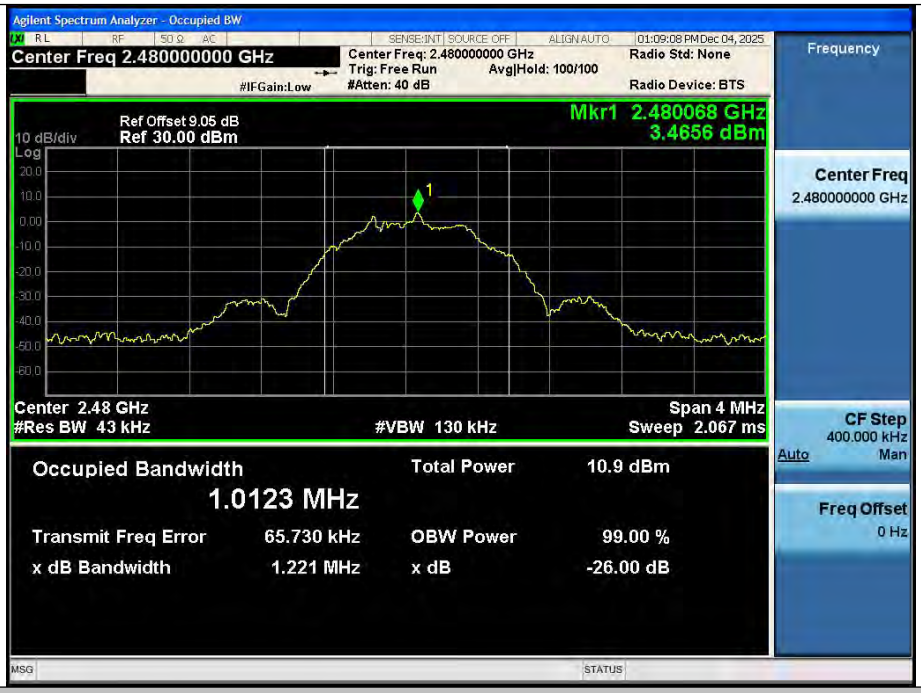
3.4.6 Test Results

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]
BLE_1M	Ant1	2402	1.0195	2401.555	2402.575
		2440	1.0097	2439.561	2440.570
		2480	1.0123	2479.560	2480.572
BLE_2M	Ant1	2402	2.0203	2401.068	2403.088
		2440	2.0008	2439.073	2441.074
		2480	2.0006	2479.081	2481.082

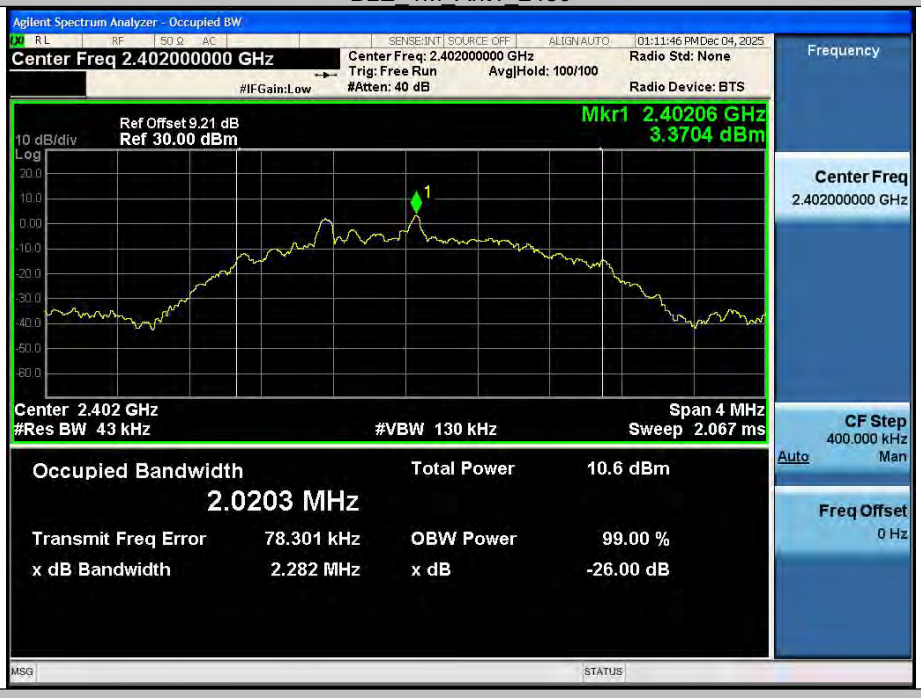


BLE_1M_Ant1_2402

BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402

BLE_2M_Ant1_2440

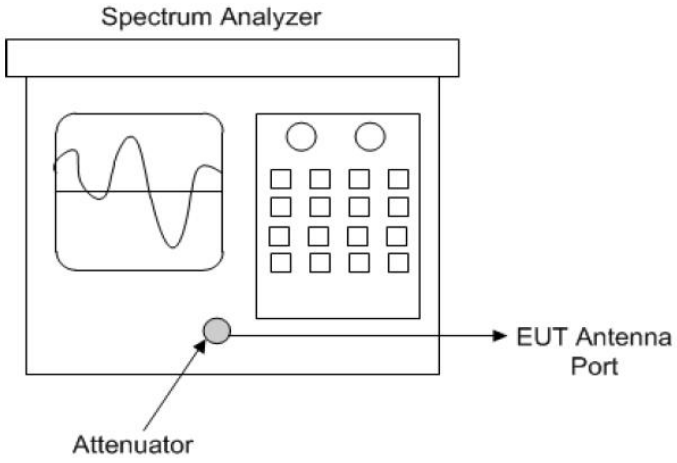
BLE_2M_Ant1_2480

3.5 Conducted Output Power Measurement

3.5.1 Limits of Conducted Output Power Measurement

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt(30dBm).

3.5.2 Test Setup



Spectrum analyzer output power test configuration

3.5.3 Test Instruments

Refer to section 5 to get information of above instrument.

3.5.4 Test Procedures

Measurement using a spectrum analyzer (SA)，Selection of test method：

The proper test method is selected based on the following criteria:

a) **Method AVGSA-1 or method AVGSA-1A (alternative)** shall be applied if either of the following conditions can be satisfied:
1) The EUT transmits continuously (or with a D> 98%).
2) Sweep triggering can be implemented in such a way that the device transmits at the maximum power control level throughout the duration of each of the instrument sweeps to be averaged. This condition can generally be achieved by triggering the instrument's sweep if the duration of the sweep (with the instrument configured as in method AVGSA-1) is equal to or shorter than the duration T of each transmission from the EUT, and if those transmissions exhibit full power throughout their durations.

b) **Method AVGSA-2 or method AVGSA-2A (alternative)** shall be applied if the conditions of the preceding item a) cannot be achieved and the transmissions exhibit a constant duty cycle during the measurement duration. Duty cycle will be considered to be constant if variations are less than +2%.

c) **Method AVGSA-3 or method AVGSA-3A** (alternative) shall be applied if the conditions of the preceding item a) and item b) cannot be achieved.

☒ Measurement using a spectrum analyzer (SA)，Selection of test method：

☒ Maximum peak conducted output power

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:

a) Set the RBW > DTS bandwidth.

b) Set VBW> [3 x RBW]

c) Set span > [3 x RBW]

d) Sweep time = auto couple.

e) Detector = peak

f) Trace mode = max hold.

g) Allow trace to fully stabilize.

h) Use peak marker function to determine the peak amplitude level.

☒ Maximum conducted (average) output power (Method AVGSA-2):

a) Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
b) Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
c) SA Setting:
1* Set span to at least 1.5 times the OBW
2* Set sweep trigger to "free run."
3* Set RBW= 1% to 5% of the OBW. not to exceed 1MHz.
4* Set VBW ≥ 3 x RBW
5* Number of points in sweep≥ 2 x span /RBW. (This gives bin-to-bin spacing ≤ RBW / 2. so that narrowband signals are not lost between frequency bins).
6* Sweep time ≤ (number of points in sweep) x T. where T is defined in 11.6. If this gives a sweep time less than the auto sweep time of the instrument. then method AVGSA-3 shall not be used (use AVGSA-3A). The purpose of this step is so that the averaging time in each bin is less than or equal to the minimum time of a transmission.
7* Detector =RMS (power averaging).
8* Trace mode =max hold.
9* Allow max hold to run for at least 60 s or longer as needed to allow the trace to stabilize.
10* Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function with band limits set equal to the OBW band edges. If the instrument does not have a band power function. then sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW
d. Measure the captured power within the band and recording the plot.
e. Repeat above procedures until all frequencies required were complete.

3.5.5 Deviation from Test Standard

No deviation.

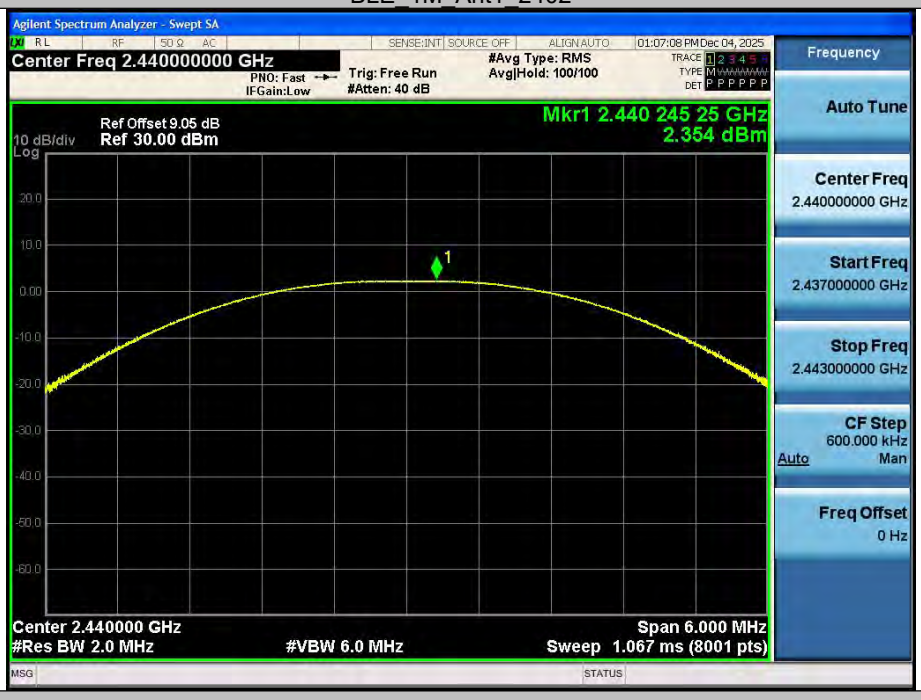
3.5.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.5.7 Test Results

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	3.83	≤30	PASS
		2440	2.35	≤30	PASS
		2480	4.21	≤30	PASS
BLE_2M	Ant1	2402	3.79	≤30	PASS
		2440	2.33	≤30	PASS
		2480	4.18	≤30	PASS

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

BLE_2M_Ant1_2402

BLE_2M_Ant1_2440

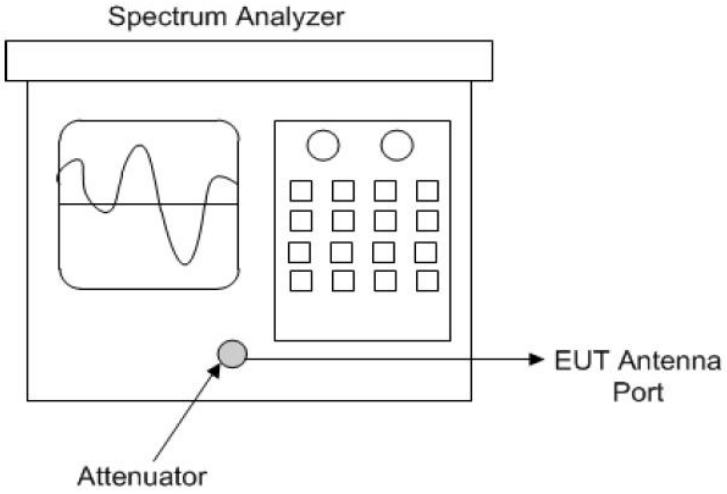
BLE_2M_Ant1_2480

3.6 Power Spectral Density Measurement

3.6.1 Limits of Power Spectral Density Measurement

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

3.6.2 Test Setup



Spectrum analyzer test configuration

3.6.3 Test Instruments

Refer to section 5 to get information of above instrument.

3.6.4 Test Procedure

a. **Method AVGPSD-1 or method AVGPSD-1A (alternative)** shall be applied if either of the following conditions can be satisfied:
   1) The EUT transmits continuously (or with a D ≥98%).
   2) Sweep triggering can be implemented in such a way that the device transmits at the maximum power control level throughout the duration of each of the instrument sweeps to be averaged. This condition can generally be achieved by triggering the instrument's sweep if the duration of the sweep is equal to or shorter than the duration I of each transmission from the EUT, and if those transmissions exhibit full power throughout these durations.

b. **Method AVGPSD-2 or method AVGPSD-2A (alternative)** shall be applied if the conditions of the preceding item a) cannot be achieved. and the transmissions exhibit a constant duty cycle during the measurement duration. Duty cycle will be considered to be constant if variations are less than ±2%.

c. **Method AVGPSD-3 or method AVGPSD-3A (alternative)** shall be applied if the conditions of the preceding paragraphs a) and b) cannot be achieved.

Method AVGPSD-3:

Method AVGPSD-3 uses mms detection across ON and OFE times of the EUT with max hold. The following procedure is applicable when the EUT cannot be configured to transmit continuously (i.e. D<98%), when sweep triggering/signal gating cannot be used to measure only when the EUT is transmitting at its maximum power control level. and when the transmission duty cycle is not constant (i.e., duty cycle variations exceed ±2%).

SA Setting:

a. Set the instrument span to a minimum of 1.5 times the OBW.
b. Set sweep trigger to "free run."
c. Set the RBW = 3 kHz, VBW =10 kHz,
d. Detector = RMS (power averaging).
e. Sweep time = Auto couple,
f. Allow max hold to run for at least 60 s or longer as needed to allow the trace to stabilize.
g. Use the peak marker function to determine the maximum PSD level

- If the measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span to meet the minimum measurement point requirement as the RBW is reduced).

3.6.5 Deviation from Test Standard

No deviation.

3.6.6 EUT Operating Condition

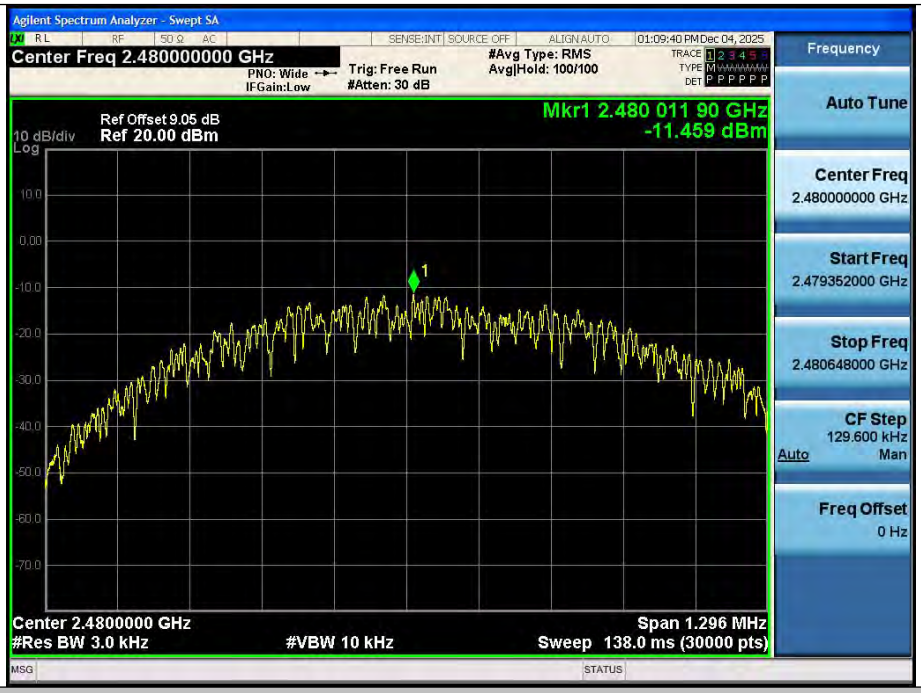
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.6.7 Test Results

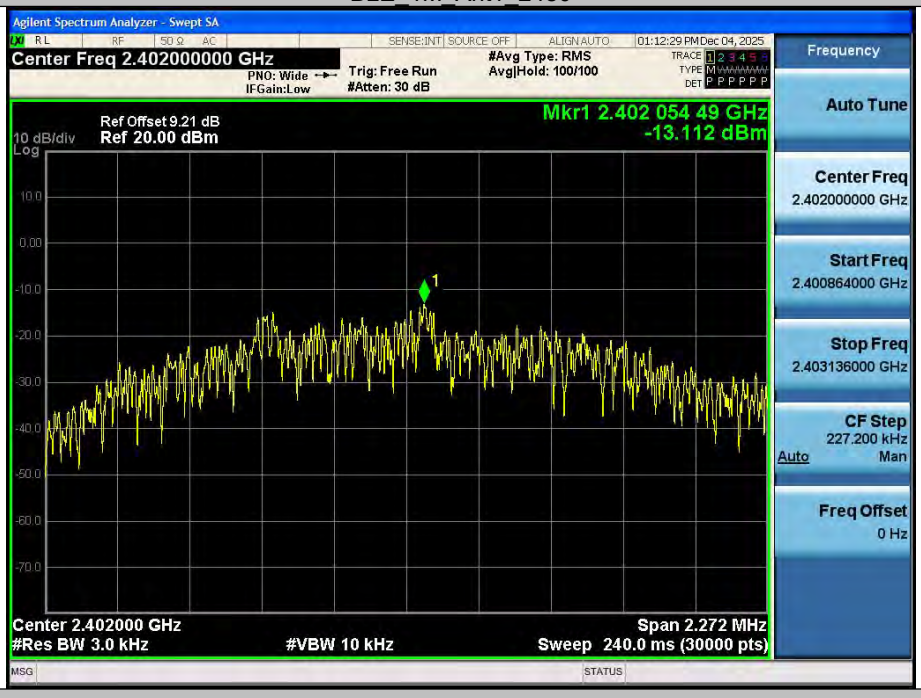
Test Mode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-11.78	≤8.00	PASS
		2440	-13.48	≤8.00	PASS
		2480	-11.46	≤8.00	PASS
BLE_2M	Ant1	2402	-13.11	≤8.00	PASS
		2440	-15.21	≤8.00	PASS
		2480	-13.33	≤8.00	PASS

BLE_1M_Ant1_2402

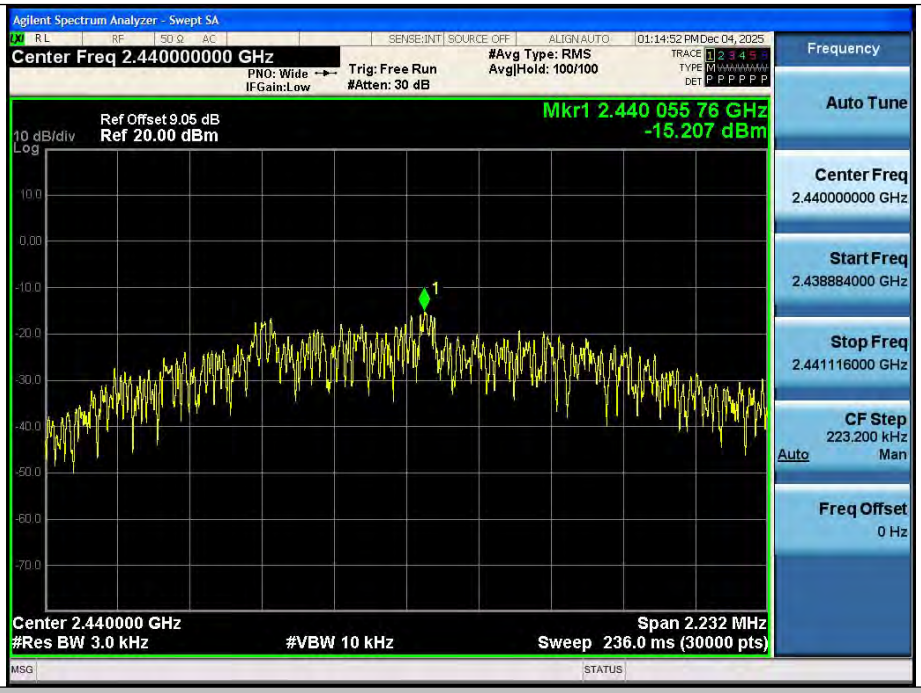
BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440

BLE_2M_Ant1_2480

3.7 Conducted Out of Band Emission Measurement

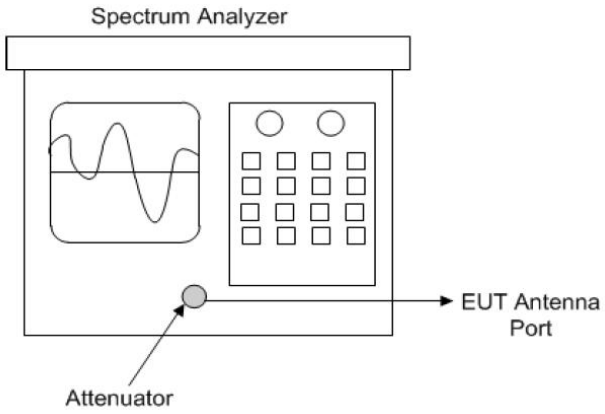
3.7.1 Limits of Conducted Out of Band Emission Measurement

a. **If the maximum peak conducted output power procedure was used to determine compliance as described in 11.9.1**, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).

b. **If maximum conducted (average) output power was used to determine compliance as described in 11.9.2**. then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

3.7.2 Test Setup

- DTS emissions in non-restricted frequency bands of ANSI C63.10 is applicable.
- DTS emissions in restricted frequency bands of ANSI C63.10 is applicable.



Spectrum analyzer test configuration

3.7.3 Test Instruments

Refer to section 5 to get information of above instrument.

3.7.4 Test Procedure

a. Establish a reference level by using the following procedure:

1) Set instrument center frequency to DTS channel center frequency.
2) Set the span to 21.5 times the DTS bandwidth)
3) Set the RBW= 100 kHz)
4) Set the VBW ≥3 x RBW
5) Detector = peak
6) Sweep time = auto coupling
7) Trace mode =max hold
8) Allow trace to fully stabilize
9) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

b. Establish an emission level by using the following procedure:

1) Set the center frequency and span to encompass frequency range to be measured.
2) Set the RBW = 100 kHz
3) Set the VBW ≥ 300 kHz.
4) Detector = peak.
5) Sweep time = auto couple.
6) Trace mode = max hold.
7) Allow trace to fully stabilize.
8) Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

3.7.5 Deviation from Test Standard

No deviation.

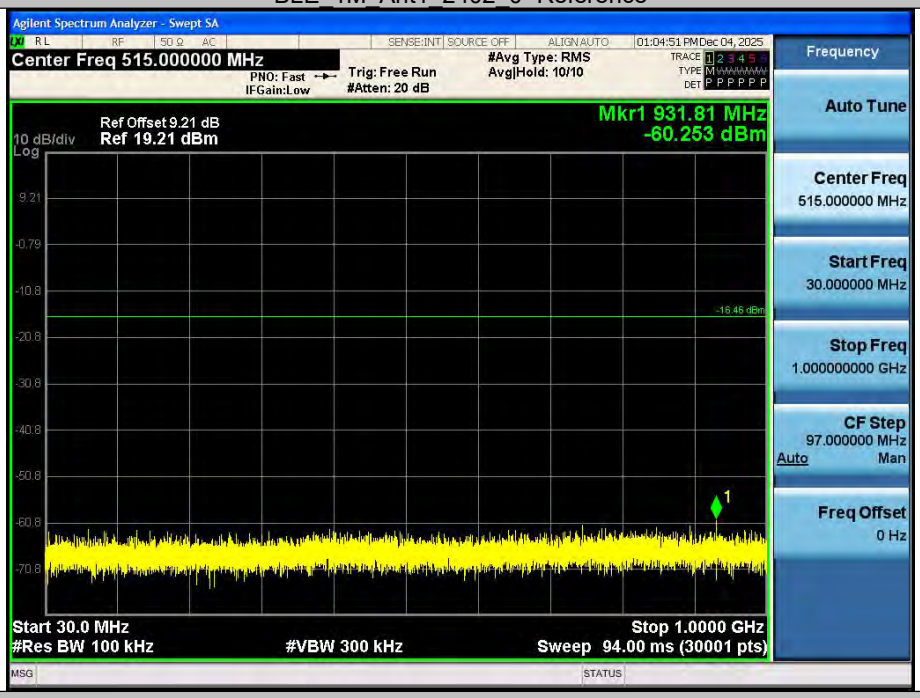
3.7.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

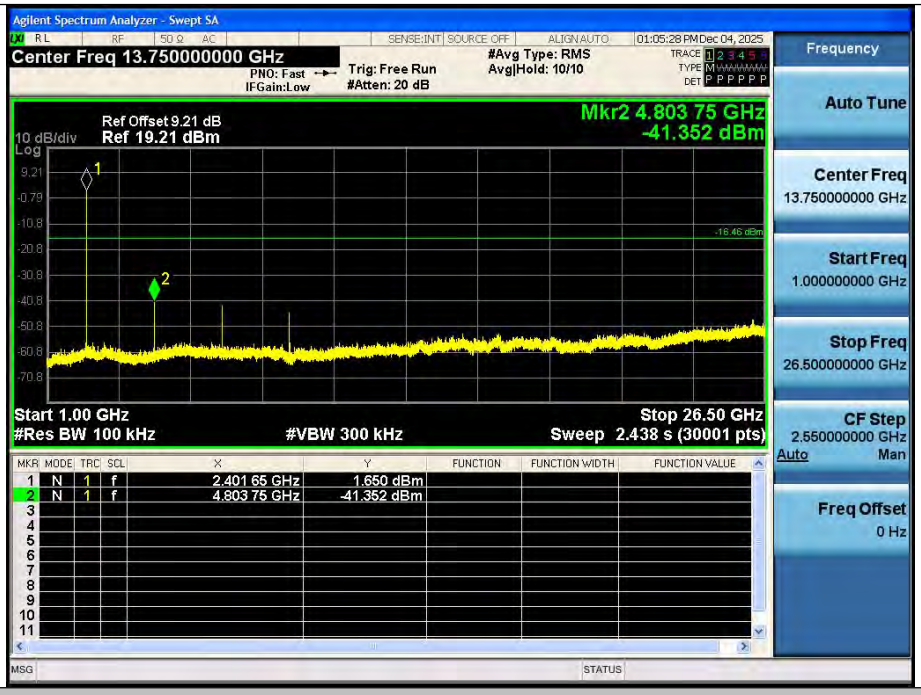
3.7.7 Test results

The spectrum plots are attached on the following images. Mkr1 of 0~Reference indicates the highest level, Mkr1 of 30~1000 and 1000~26500 indicates the 20dB offset below highest level. It shows compliance with the requirement.

BLE_1M_Ant1_2402_0~Reference

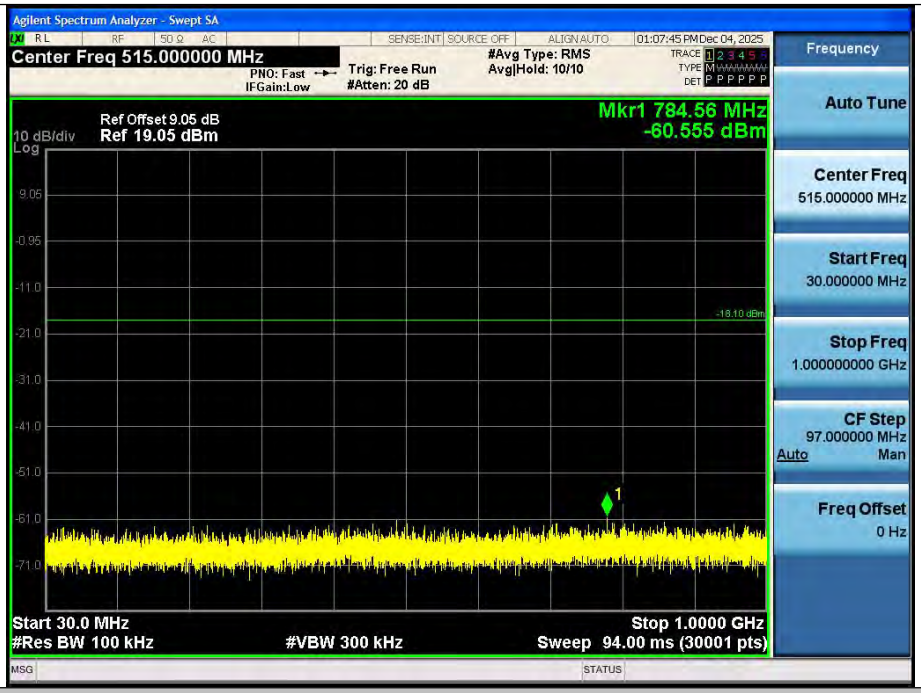


BLE_1M_Ant1_2402_30~1000

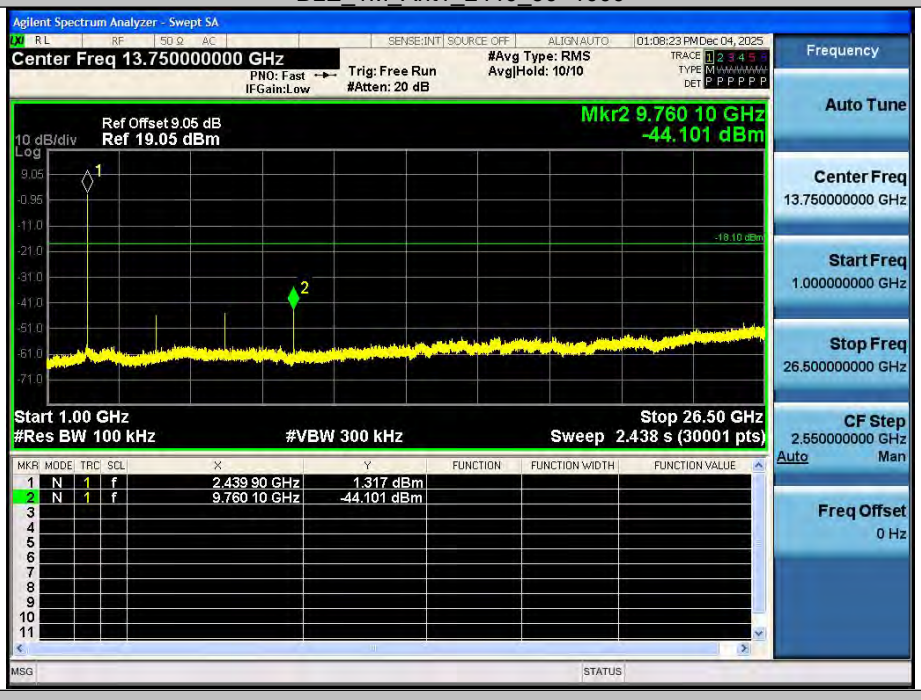


BLE_1M_Ant1_2402_1000~26500

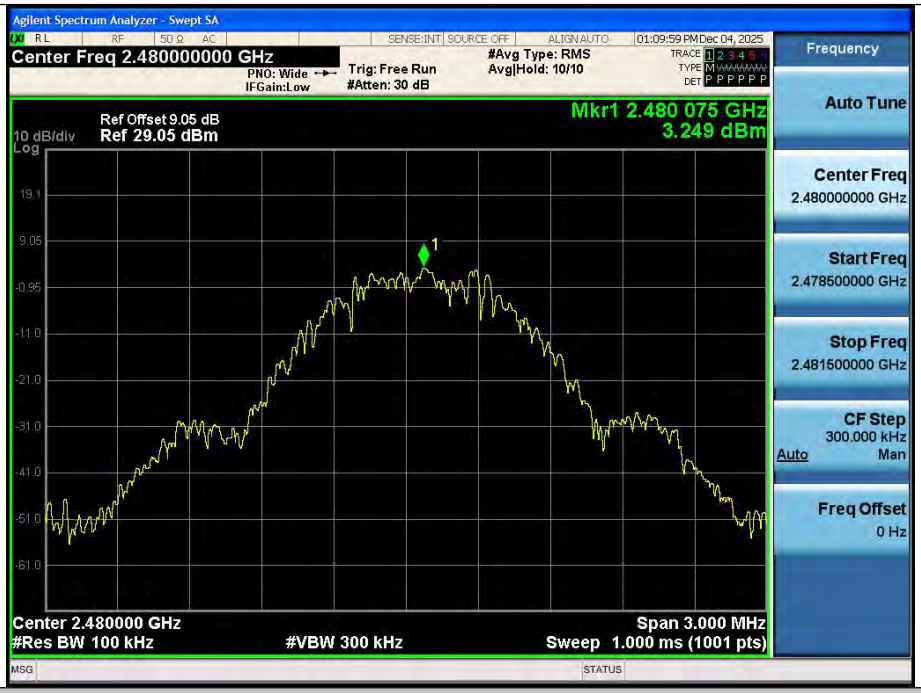
BLE_1M_Ant1_2440_0~Reference



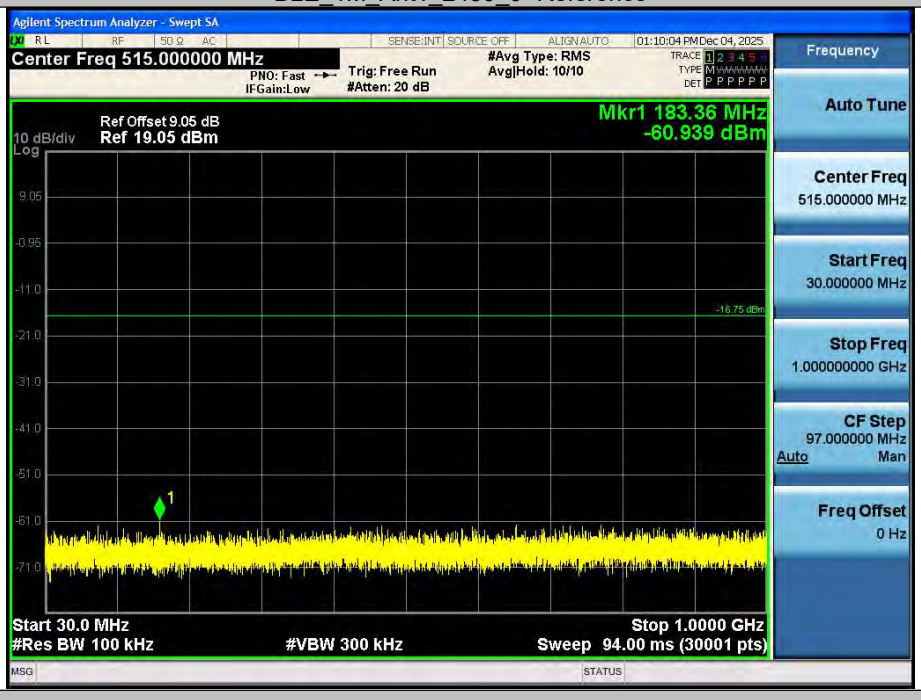
BLE_1M_Ant1_2440_30~1000



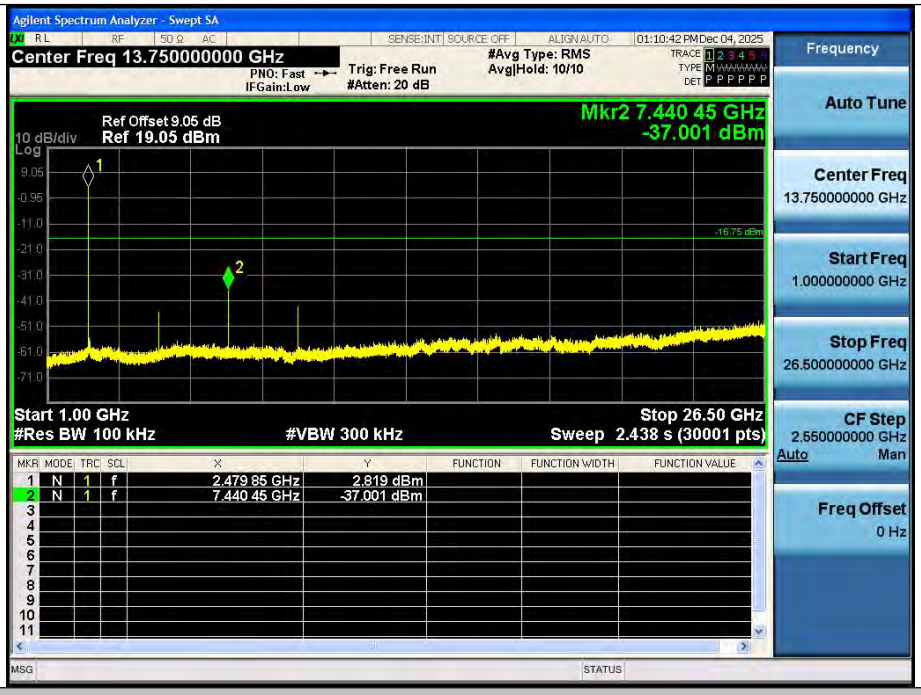
BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference

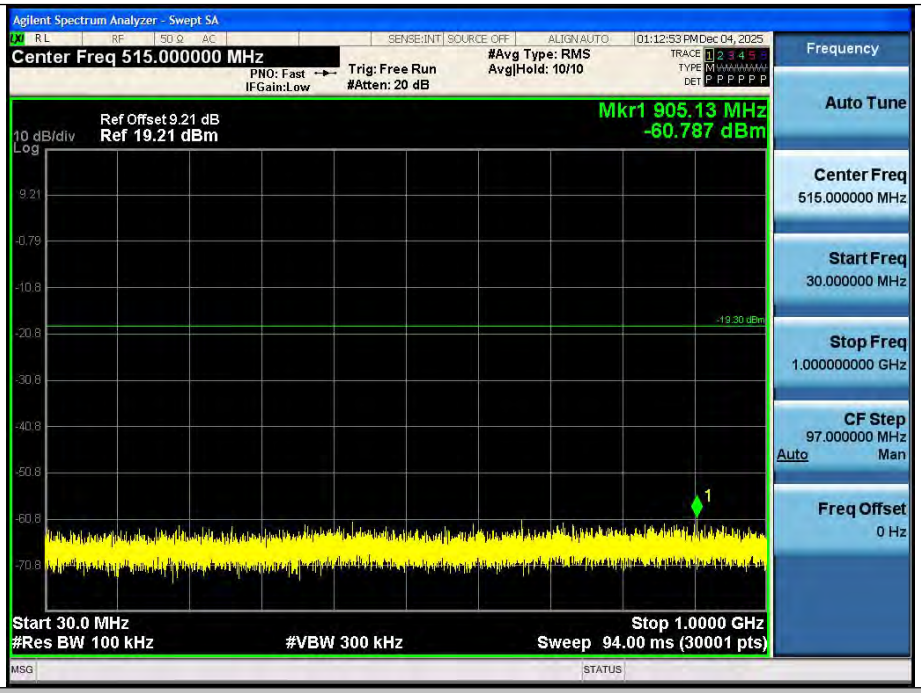


BLE_1M_Ant1_2480_30~1000

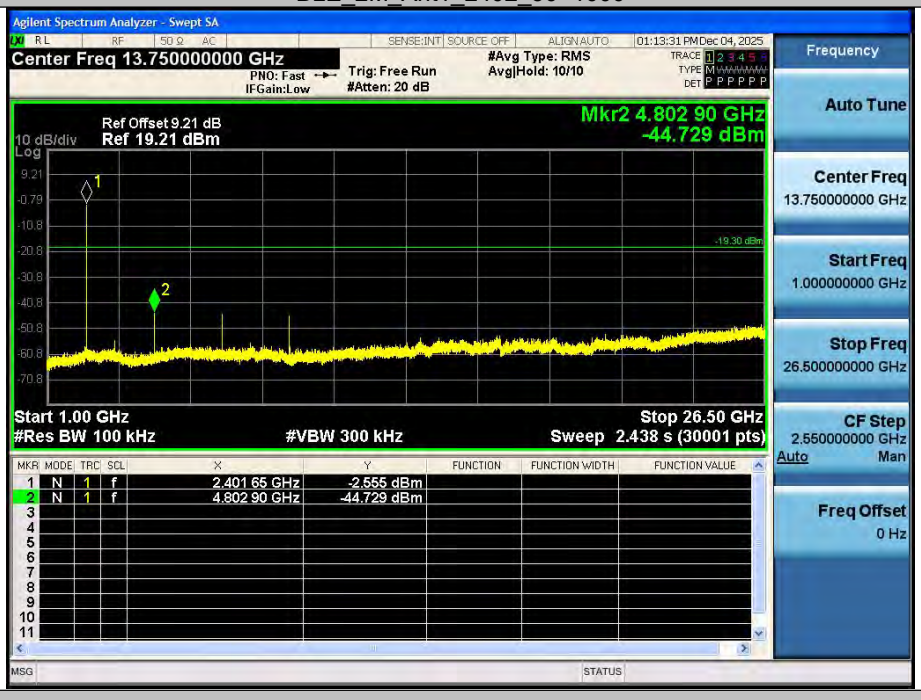


BLE_1M_Ant1_2480_1000~26500

BLE_2M_Ant1_2402_0~Reference

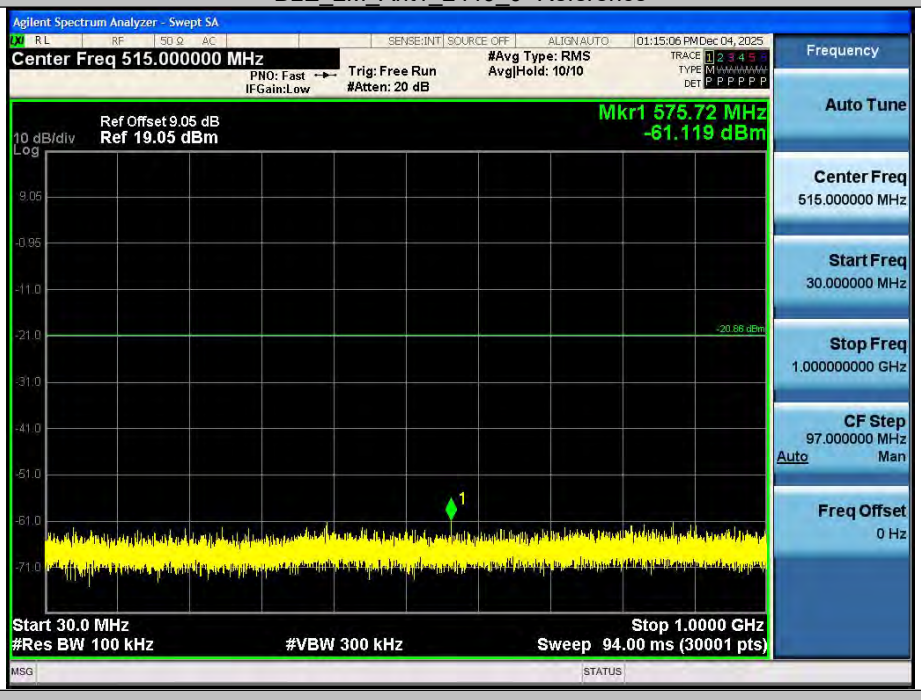


BLE_2M_Ant1_2402_30~1000

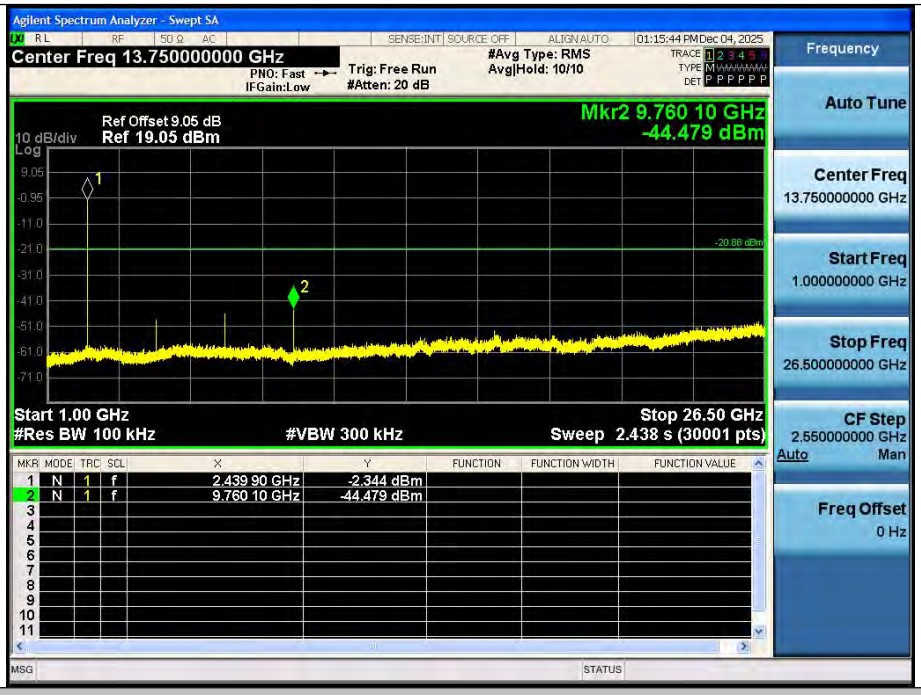


BLE_2M_Ant1_2402_1000~26500

BLE_2M_Ant1_2440_0~Reference

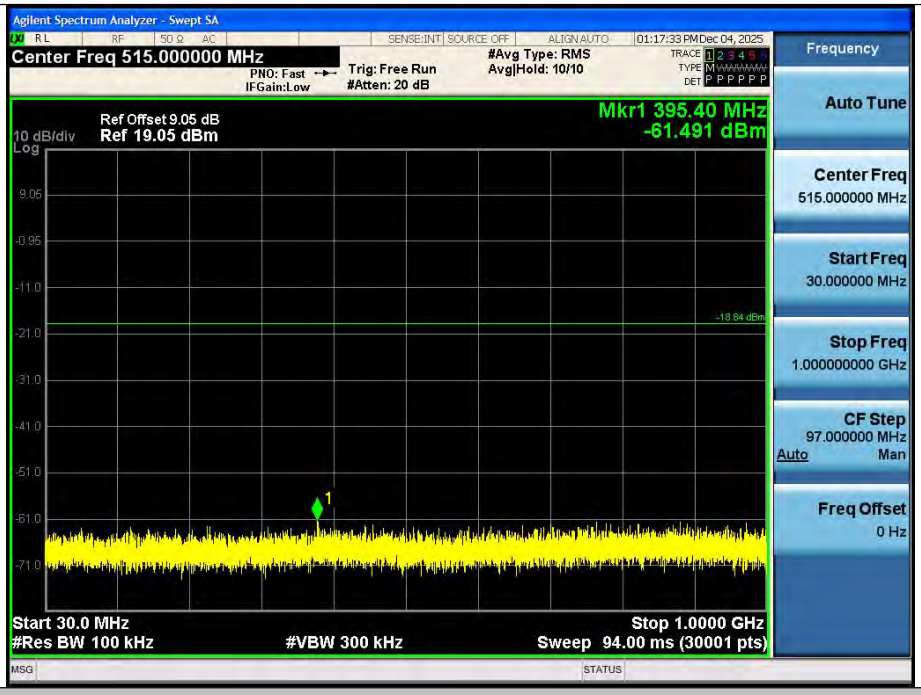


BLE_2M_Ant1_2440_30~1000

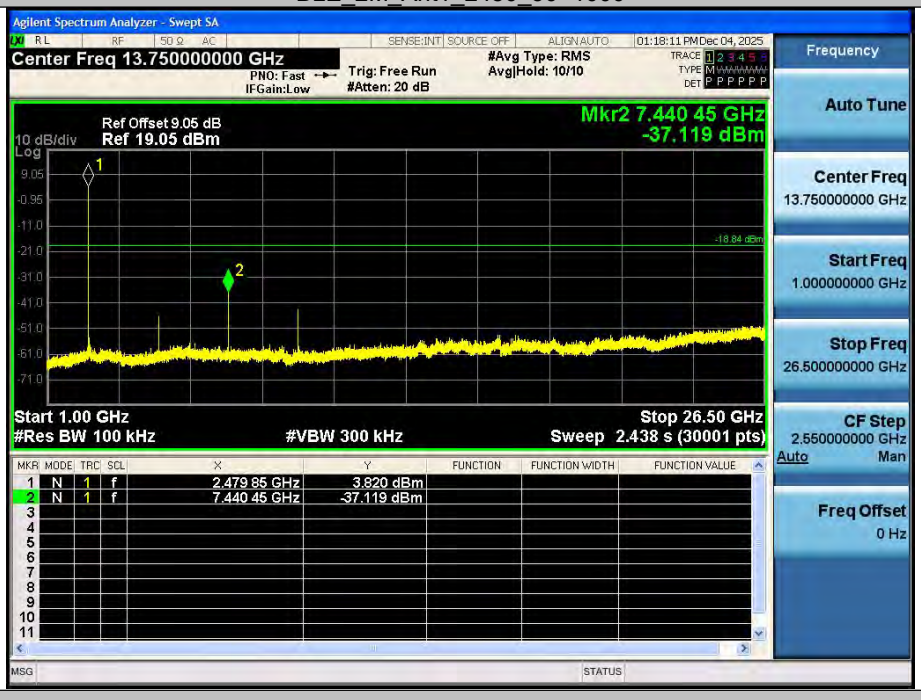


BLE_2M_Ant1_2440_1000~26500

BLE_2M_Ant1_2480_0~Reference

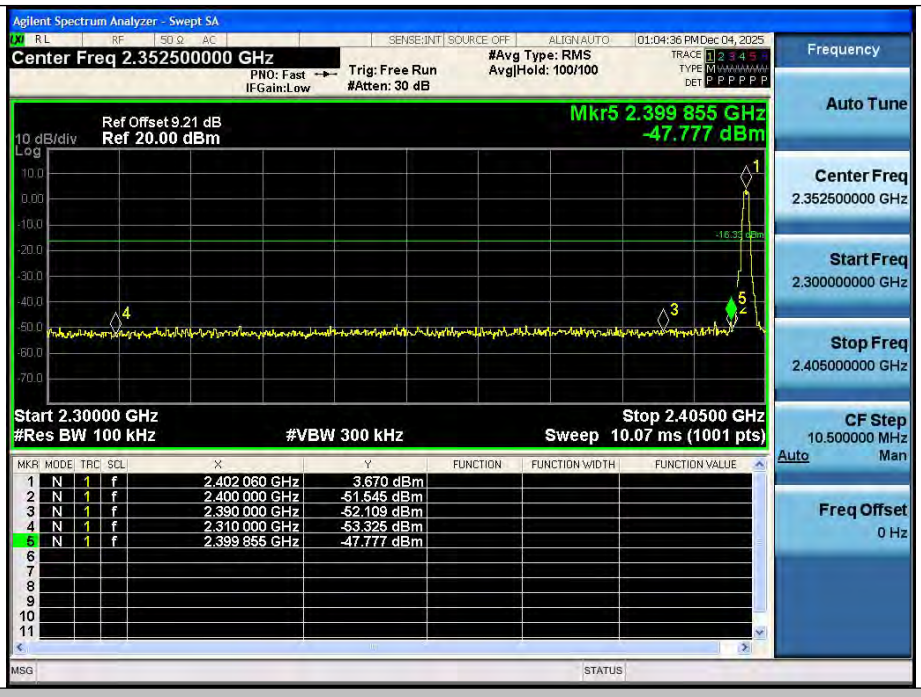


BLE_2M_Ant1_2480_30~1000

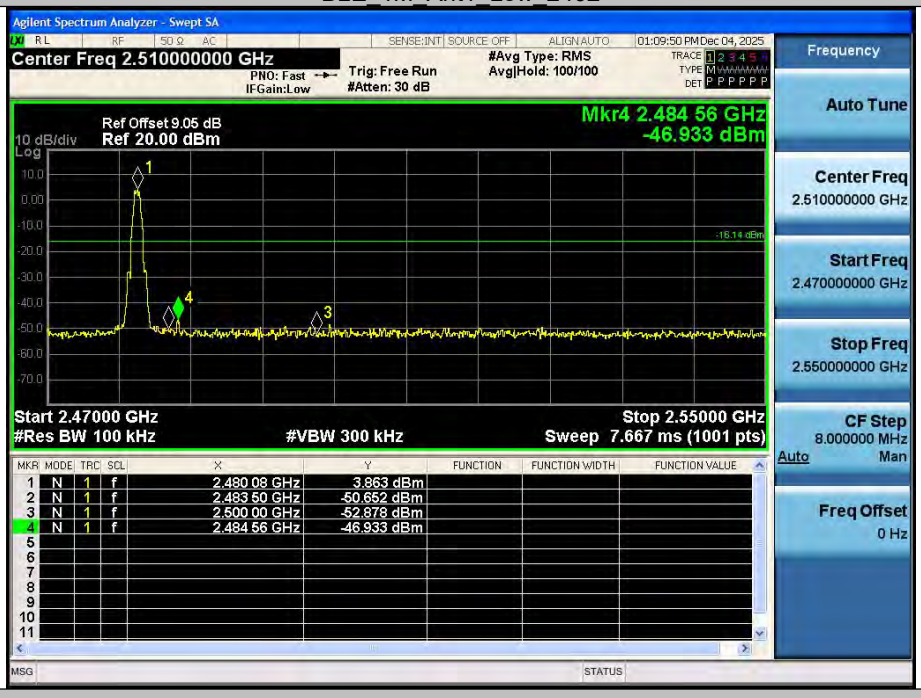


BLE_2M_Ant1_2480_1000~26500

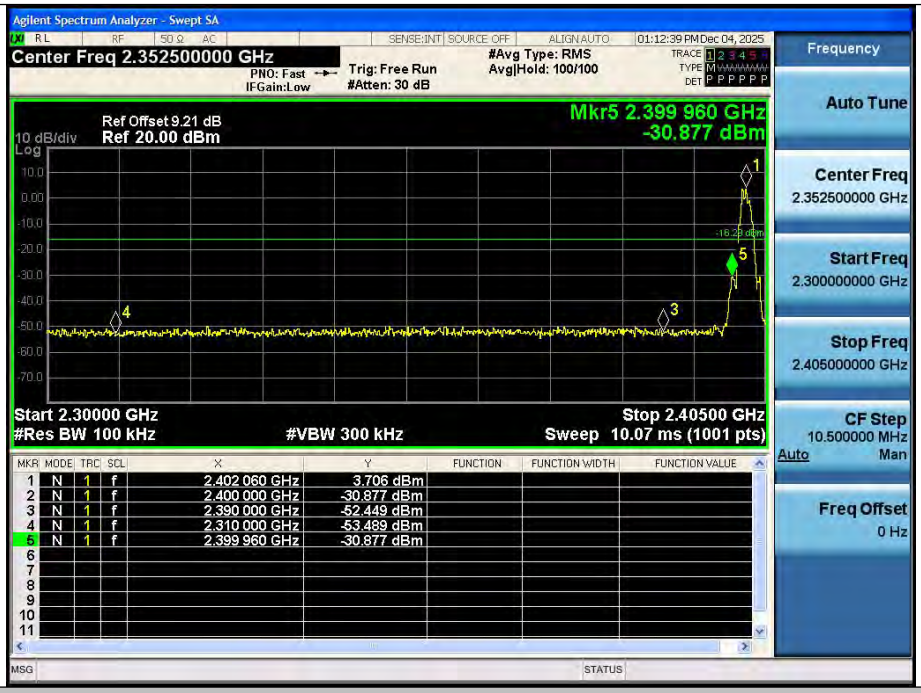
Mkr1 indicates the highest level, other indicates the 20dB offset below highest level. It shows compliance with the requirement.



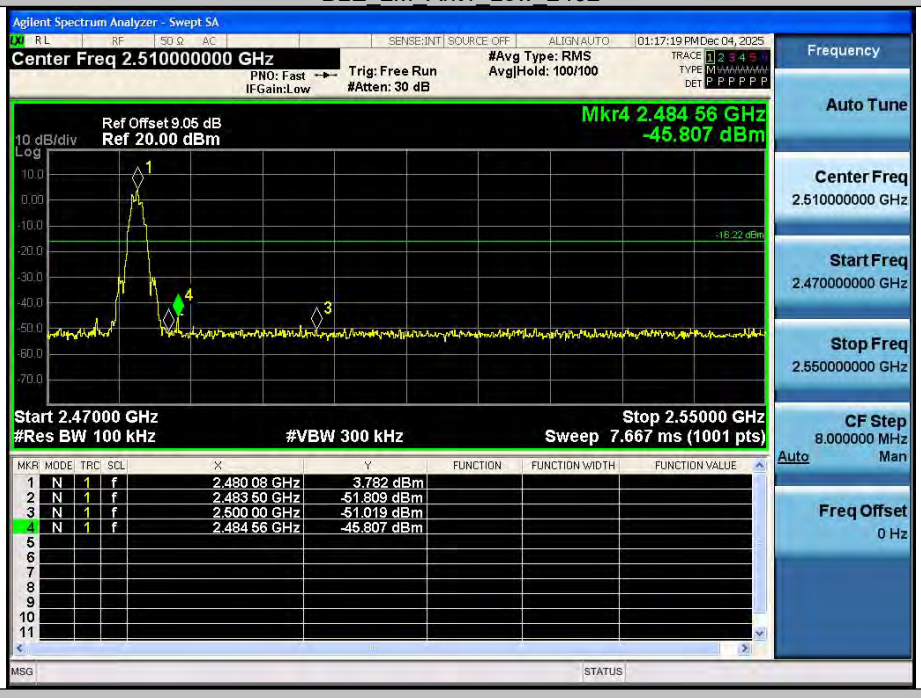
BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2402



BLE_2M_Ant1_High_2480

3.8 Antenna Application

3.8.1 Antenna Requirement

Standard	Requirement
FCC CFR Part 15.203	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

3.8.2 Test Results

☑	Antenna use a permanently attached antenna which is not replaceable.
☐	Not using a standard antenna jack or electrical connector for antenna replacement
☐	The antenna has to be professionally installed (please provide method of installation)

Please refer to the attached document Internal Photos to show the antenna

4. Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

5. Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Next Cal. Date
Spectrum	Keysight	N9020A	MY51240612	2026-07-23
Power Meter 10Hz~18GHz	Tonscend	JS0806-2	188060126	2026-07-23
Spectrum Analyzer	Rohde&Schwarz	FSV-40N	101783	2026-07-23
Signal generator	Keysight	E4421	GB40051020	2026-05-18
Universal Switch Control Unit	Rohde&Schwarz	CMW500	12010002k50	2026-07-23
Humidity tester	JingcAronng	GSP-8A	CMA22B000592	2026-07-28
Test Software	Tonscend	JS0806-2	188060126	2026-07-23

Note: 1. The calibration interval of the above test instruments is 12 months.
2. The test was performed in RF Chamber.

Appendix – Information on The Testing Laboratories

We, Hwa-Hsing (Dongguan) Testing Co., Ltd., A global provider of TESTING and CERTIFICATION services for consumer products, electronic products and wireless information technology products. Adhering to the core values “HONEST and TRUSTWORTHY, OBJECTIVE and IMPARTIALITY, RIGOROUS and AFFICIENT”, commitment to provide professional, perfect and efficient comprehensive ONE-STOP solution of TESTING and CERTIFICATION services for Manufacturers, Buyers, Traders, Brands, Retailers. Assist client to better manage risk, protect their brands, reduce costs and cut time to over 150 markets in global. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Contact Tel: 0769-85598986
Email:service-hs@lyns-tci.com
Web Site: www.lyns-tci.com

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