TEST REPORT

Report No.: TWN2506340-02E

Applicant: YAU WAI TRADING

Product: EVPAD Player

Model No.: EVPAD-12P, EVPAD-12S

Trademark: EVPAD

Test Standards: FCC Part 15.247

Test Result: It is herewith confirmed and found to comply with the requirements set up by ANSI C63.10, FCC Part 15.247 for the evaluation of electromagnetic compatibility

Approved By:

Terry Tang

Manager

Dated: June 19, 2024

Results appearing herein relate only to the sample tested
The technical reports is issued errors and omissions exempt and is subject to withdrawal at

SHENZHEN TIMEWAY TESTING LABORATORIES

Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le Village, Nanshan District, Shenzhen, China
Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timeway-lab.com

Special Statement:

FCC-Registration No.: 744189

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 744189.

Industry Canada (IC) —Registration No.:5205A

The EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 5205A.

A2LA (Certification Number:5013.01)

The EMC Laboratory has been accredited by the American Association for Laboratory Accreditation (A2LA). Certification Number:5013.01

CAB identifier: CN0033

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Test Report Conclusion

Content

1.0	**General Details** ……	4
1.1	Test Lab Details……	4
1.2	Applicant Details……	4
1.3	Description of EUT ……	4
1.4	Submitted Sample……	4
1.5	Test Duration……	5
1.6	Test Uncertainty……	5
1.7	Test By……	5
2.0	**List of Measurement Equipment**……	6
3.0	**Technical Details**……	7
3.1	Summary of Test Results……	7
3.2	Test Standards……	7
4.0	EUT Modification……	7
5.0	Power Line Conducted Emission Test……	8
5.1	Schematics of the Test……	8
5.2	Test Method and Test Procedure……	8
5.3	Configuration of the EUT……	8
5.4	EUT Operating Condition……	9
5.5	Conducted Emission Limit……	9
5.6	Test Result……	9
6.0	**Radiated Emission test**……	12
6.1	Test Method and Test Procedure……	12
6.2	Configuration of the EUT……	13
6.3	EUT Operation Condition……	13
6.4	Radiated Emission Limit……	13
7.0	6dB Bandwidth Measurement Bandwidth……	19
8.0	Maximum Peak Output Power……	24
9.0	Power Spectral Density Measurement……	29
10.0	Out of Band Measurement……	34
11.0	Antenna Requirement……	42
12.0	FCC ID Label……	43
13.0	Photo of Test Setup and EUT View……	44

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1.0 General Details

1.1 Test Lab Details

Name: SHENZHEN TIMEWAY TESTING LABORATORIES.
Address: Zone C, 1st Floor, Block B, Jun Xiang Da Building, Zhongshan Park Road West, Tong Le Village, Nanshan District, Shenzhen, China
Telephone: (755) 83448688
Fax: (755) 83442996

1.2 Applicant Details

Applicant: YAU WAI TRADING
Address: WORKSHOP NO. 14, 4TH FLOOR LAURELS INDUSTRIAL CENTRE NO. 32 TAI YAU STREET KOWLOON, HONG KONG, China

1.3 Description of EUT

Product: EVPAD Player
Manufacturer: YAU WAI TRADING
Address: WORKSHOP NO. 14, 4TH FLOOR LAURELS INDUSTRIAL CENTRE NO. 32 TAI YAU STREET KOWLOON, HONG KONG, China
Trademark: EVPAD
Additional Trademark: N/A
Model Number: EVPAD-12P
Additional Model Number: EVPAD-12S
Hardware Version: V12
Software Version: V12
Serial No.: 00226e3a012a
Type of Modulation GFSK (Bluetooth BLE)
Frequency range 2402-2480MHz
Frequency Selection By software
Channel Number 40
Rating: Input: DC5.0V, 2A
Power Supply: Model: MDL010-0502000ZU
Input: 100-240V~, 50/60Hz, 0.45A; Output: DC5V, 2A,10W

1.4 Submitted Sample: 2 Samples

1.5 Test Duration

2025-06-05 to 2025-06-19

1.6 Test Uncertainty

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Conducted Emissions Uncertainty =3.6dB

Radiated Emissions below 1GHz Uncertainty =4.7dB

Radiated Emissions above 1GHz Uncertainty =6.0dB

Conducted Power Uncertainty =6.0dB

Occupied Channel Bandwidth Uncertainty =5%

Note: The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

1.7 Test Engineer

The sample tested by _____

Print Name: Andy Xiang

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2.0 Test Equipment					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2024-07-12	2025-07-11
LISN	R&S	EZH3-Z5	100294	2024-07-12	2025-07-11
LISN	R&S	EZH3-Z5	100253	2024-07-12	2025-07-11
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2024-07-12	2025-07-11
Loop Antenna	EMCO	6507	00078608	2022-07-18	2025-07-17
Spectrum	R&S	FSIQ26	100292	2024-07-12	2025-07-11
Horn Antenna	A-INFO	LB-180400-KF	J211060660	2022-07-18	2025-07-17
Horn Antenna	R&S	BBHA 9120D	9120D-631	2022-07-18	2025-07-17
Power meter	Anritsu	ML2487A	6K00003613	2024-07-12	2025-07-11
Power sensor	Anritsu	MA2491A	32263	2024-07-12	2025-07-11
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2022-07-18	2025-07-17
9*6*6 Anechoic	--	--	N/A	2022-07-26	2025-07-25
EMI Test Receiver	RS	ESVB	826156/011	2024-07-12	2025-07-11
EMI Test Receiver	RS	ESCS 30	834115/006	2024-07-12	2025-07-11
Spectrum	HP/Agilent	E4407B	MY50441392	2024-07-12	2025-07-11
Spectrum	RS	FSP	1164.4391.38	2024-07-12	2025-07-11
RF Cable	Zhengdi	ZT26-NJ-NJ-8M/FA	--	2024-07-12	2025-07-11
RF Cable	Zhengdi	7m	--	2024-07-12	2025-07-11
Pre-Amplifier	Schwarebeck	BBV9743	#218	2024-07-12	2025-07-11
Pre-Amplifier	HP/Agilent	8449B	3008A00160	2024-07-12	2025-07-11
LISN	SCHAFFNER	NNB42	00012	2024-07-12	2025-07-11
ESPI Test Receiver	R&S	ESPI 3	100379	2024-07-12	2025-07-11
LISN	R&S	EZH3-Z5	100294	2024-07-12	2025-07-11

2.2 Automation Test Software

For Conducted Emission Test

Name	Version
EZ-EMC	Ver.EMC-CON 3A1.1

For Radiated Emissions

Name	Version
EMI Test Software BL410-EV18.91	V18.905
EMI Test Software BL410-EV18.806 High Frequency	V18.06

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3.0 Technical Details

3.1 Summary of test results

The EUT has been tested according to the following specifications:

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.207	Conducted Emission Test	Pass	Complies
FCC Part 15 Subpart C Paragraph 15.247(a)(2) Limit	Spectrum bandwidth of a Orthogonal Frequency Division Multiplex System Limit: 6dB bandwidth>500kHz	Pass	Complies
FCC Part 15, Paragraph 15.247(b)	Maximum peak output power Limit: max. 30dBm	Pass	Complies
FCC Part 15, Paragraph 15.205 & 15.209	Transmitter Radiated Emission Limit: Table 15.209	Pass	Complies
FCC Part 15, Paragraph 15.247(e)	Power Spectral Density Limit: max. 8dBm	Pass	Complies
FCC Part 15, Paragraph 15.247(d)	Out of Band Emission and Restricted Band Radiation Limit: 20dB less than peak value of fundamental frequency Restricted band limit: Table 15.209	Pass	Complies

3.2 Test Standards

FCC Part 15 Subpart & Subpart C, Paragraph 15.247

4.0 EUT Modification

No modification by SHENZHEN TIMEWAY TESTING LABORATORIES.

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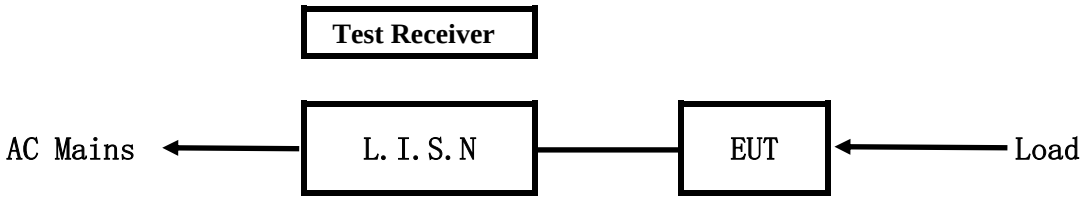
5.0 Power Line Conducted Emission Test

5.1 Schematics of the test



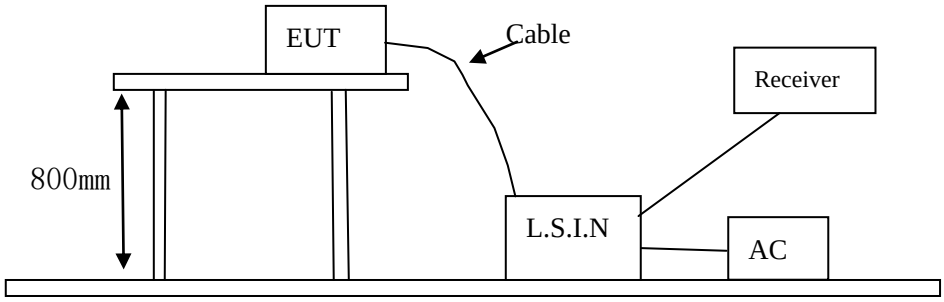
EUT: Equipment Under Test

5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.10-2013.The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.10 –2013.

Test Voltage: 120V~, 60Hz

Block diagram of Test setup



5.3 Configuration of the EUT

The EUT was configured according to ANSI C63.10-2013. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

A. EUT

Device	Manufacturer	Model	FCC ID
EVPAD Player	YAU WAI TRADING	EVPAD-12P, EVPAD-12S	2A4G812P12S

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B. Internal Device

Device	Manufacturer	Model	Rating

C. Peripherals

Device	Manufacturer	Model	Rating
N/A			

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.10-2013.

A Setup the EUT and simulators as shown on follow

B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph 15.207

Frequency (MHz)	Limits (dB μ V)	
	Quasi-peak Level	Average Level
0.15 ～ 0.50	66.0～56.0*	56.0～46.0*
0.50 ～ 5.00	56.0	46.0
5.00 ～ 30.00	60.0	50.0

Notes: 1. *Decreasing linearly with logarithm of frequency.

2. The tighter limit shall apply at the transition frequencies

5.6 Test Results

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

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A: Conducted Emission on Live Terminal (150kHz to 30MHz)

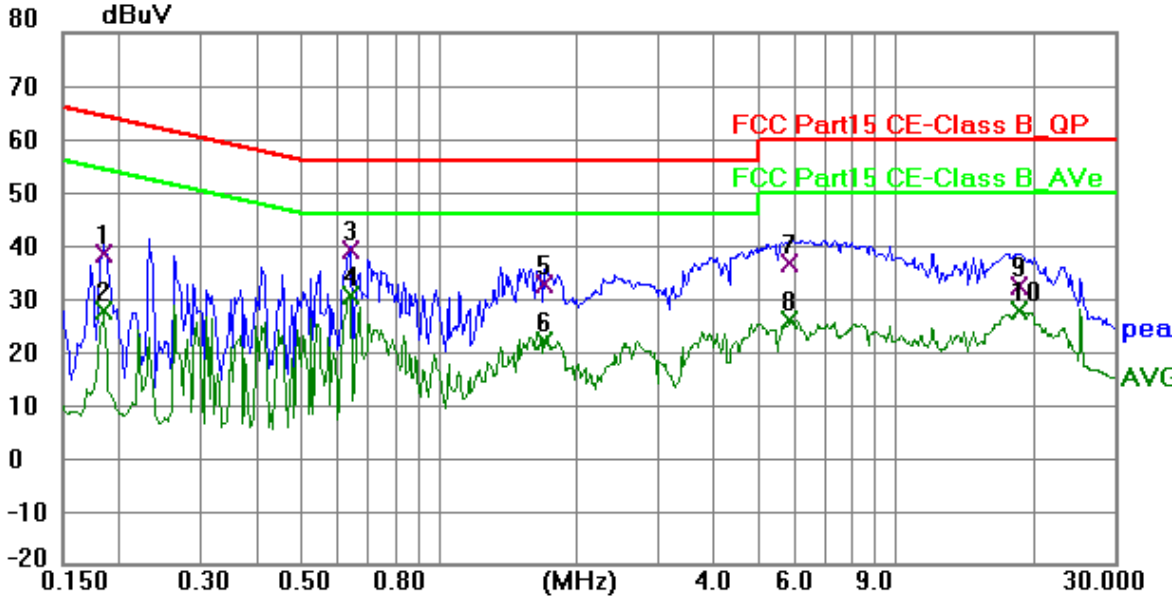
EUT Operating Environment

Temperature: 26℃ Humidity: 65%RH Atmospheric Pressure: 101 kPa

EUT set Condition: Keep Bluetooth Transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1850	28.11	10.33	38.44	64.26	-25.82	QP	P
2	0.1850	17.44	10.33	27.77	54.26	-26.49	AVG	P
3	0.6375	28.50	10.44	38.94	56.00	-17.06	QP	P
4	0.6375	20.24	10.44	30.68	46.00	-15.32	AVG	P
5	1.7022	21.76	11.08	32.84	56.00	-23.16	QP	P
6	1.7022	10.84	11.08	21.92	46.00	-24.08	AVG	P
7	5.8626	24.24	12.53	36.77	60.00	-23.23	QP	P
8	5.8626	13.53	12.53	26.06	50.00	-23.94	AVG	P
9	18.6117	16.11	16.08	32.19	60.00	-27.81	QP	P
10	18.6117	11.66	16.08	27.74	50.00	-22.26	AVG	P

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B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

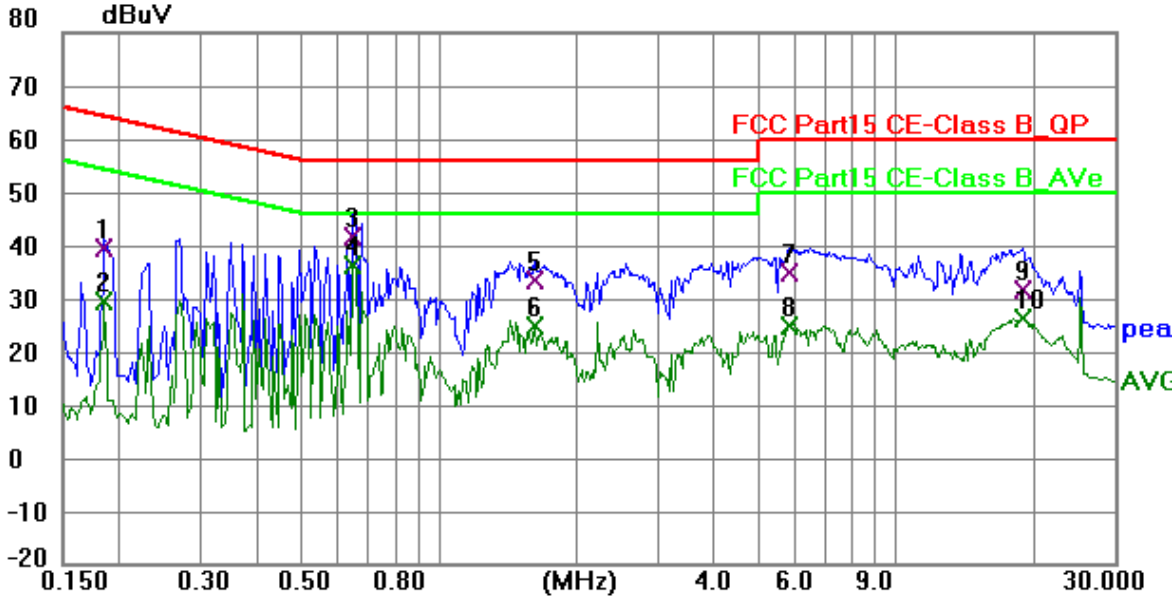
EUT Operating Environment

Temperature: 26℃ Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Keep Bluetooth Transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1850	29.07	10.33	39.40	64.26	-24.86	QP	P
2	0.1850	19.04	10.33	29.37	54.26	-24.89	AVG	P
3	0.6492	31.16	10.44	41.60	56.00	-14.40	QP	P
4	0.6492	25.97	10.44	36.41	46.00	-9.59	AVG	P
5	1.6164	22.21	11.01	33.22	56.00	-22.78	QP	P
6	1.6164	13.87	11.01	24.88	46.00	-21.12	AVG	P
7	5.8431	22.26	12.53	34.79	60.00	-25.21	QP	P
8	5.8431	12.42	12.53	24.95	50.00	-25.05	AVG	P
9	18.8379	15.40	16.14	31.54	60.00	-28.46	QP	P
10	18.8379	10.13	16.14	26.27	50.00	-23.73	AVG	P

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6 Radiated Emission Test

6.1 Test Method and test Procedure:

(1) The EUT was tested according to ANSI C63.10-2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No.744189

(2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10-2013.

(3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are Quasi-peak values with a resolution bandwidth of 120 kHz. For measurement above 1GHz, peak values with RBW=1MHz VBW=3MHz and PK detector. AV value with RBW=1MHz, VBW=3MHz and RMS detector. Measurements were made at 3 meters.

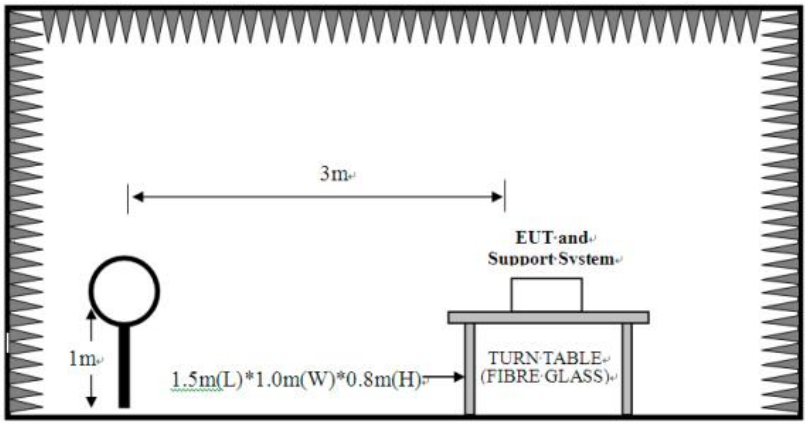
(4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.

(5) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limit), and are distinguished with a "**QP**" in the data table.

(6) The antenna polarization: Vertical polarization and Horizontal polarization.

Block diagram of Test setup

For radiated emissions from 9kHz to 30MHz



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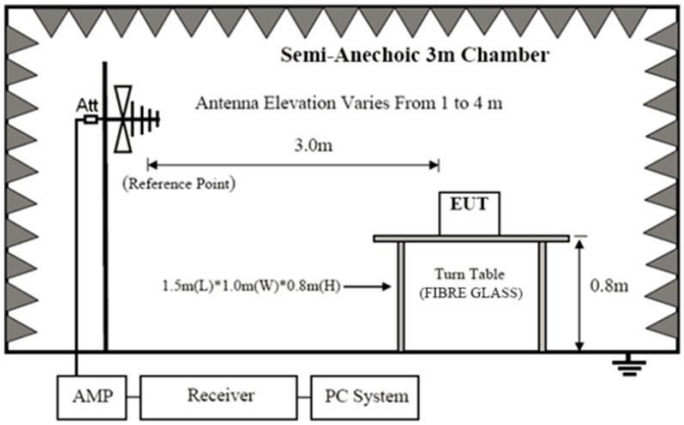
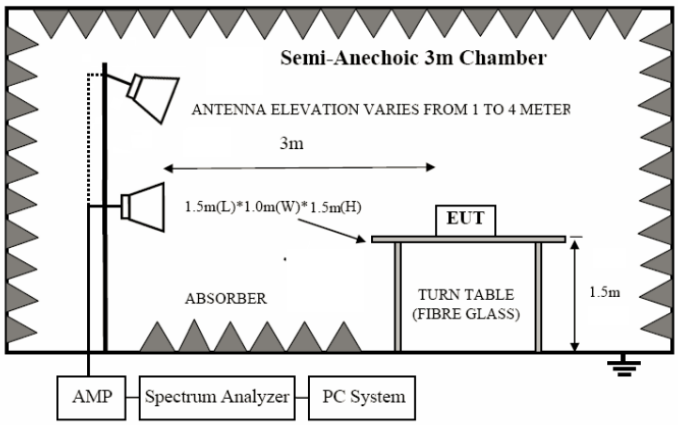
For radiated emissions from 30MHz to1GHz



For radiated emissions above 1GHz



6.2 Configuration of The EUT

Same as section 5.3 of this report

6.3 EUT Operating Condition

Same as section 5.4 of this report.

6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

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Frequencies in restricted band are complied to limit on Paragraph 15.209

Frequency Range (MHz)	Distance (m)	Field strength (dB μ V/m)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note: 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

2. In the Above Table, the higher limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT

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Test result

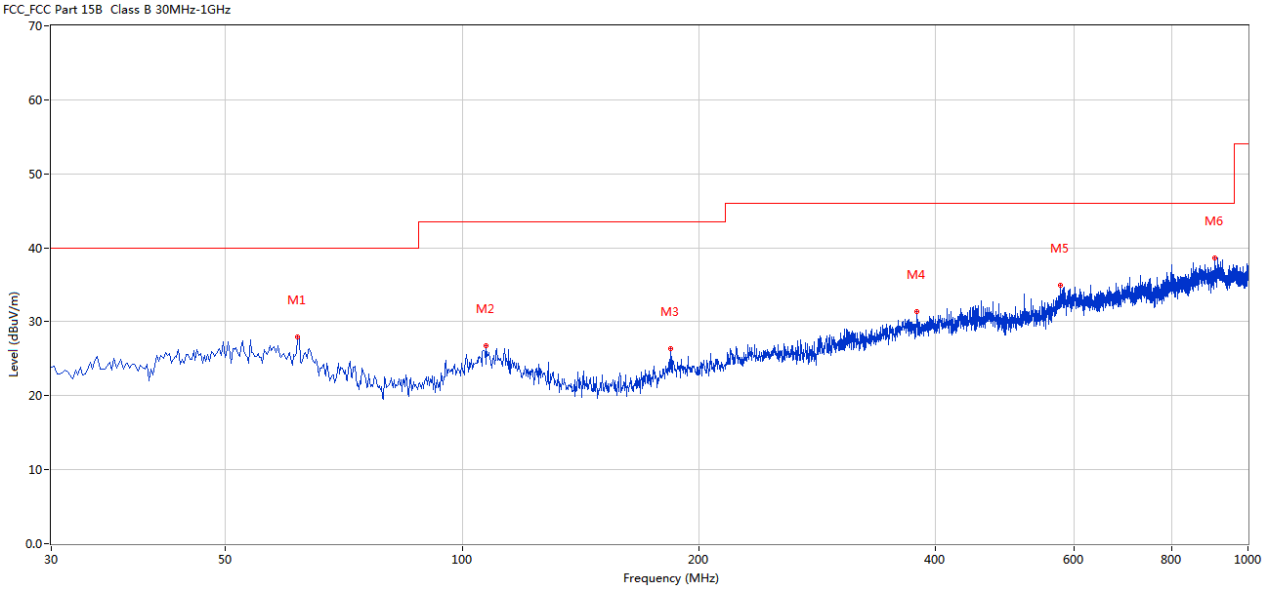
General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: **Keep Bluetooth Transmitting**

Results: **Pass**

Test Figure:



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	61.760	28.01	-5.55	40.0	11.99	Peak	15.00	100	Horizontal	Pass
2	107.338	26.80	-6.07	43.5	16.70	Peak	65.00	100	Horizontal	Pass
3	184.434	26.36	-7.25	43.5	17.14	Peak	55.00	100	Horizontal	Pass
4	378.870	31.40	-2.15	46.0	14.60	Peak	104.00	100	Horizontal	Pass
5	577.428	34.95	1.45	46.0	11.05	Peak	230.00	100	Horizontal	Pass
6	908.358	38.65	5.12	46.0	7.35	Peak	303.00	100	Horizontal	Pass

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Test result

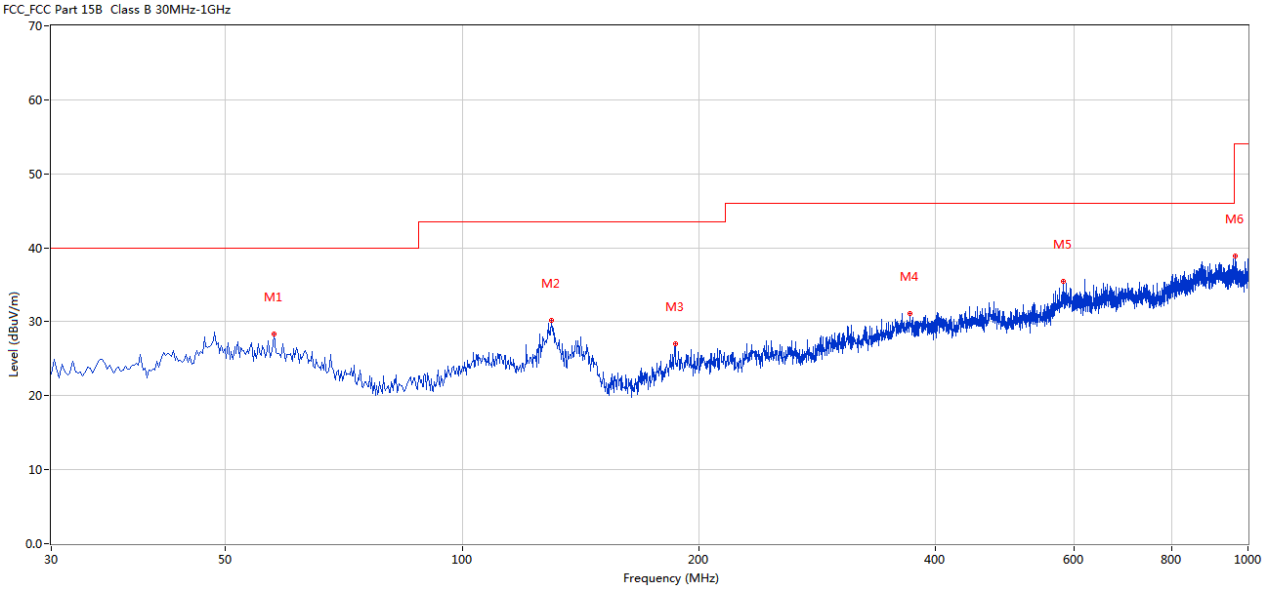
General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: **Keep Transmitting**

Results: **Pass**

Test Figure:



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	57.638	28.34	-4.91	40.0	11.66	Peak	44.00	100	Vertical	Pass
2	129.885	30.24	-8.55	43.5	13.26	Peak	12.00	100	Vertical	Pass
3	186.858	26.98	-7.26	43.5	16.52	Peak	194.00	100	Vertical	Pass
4	371.597	31.09	-1.79	46.0	14.91	Peak	289.00	100	Vertical	Pass
5	582.277	35.41	1.76	46.0	10.59	Peak	188.00	100	Vertical	Pass
6	964.846	38.88	5.16	54.0	15.12	Peak	77.00	100	Vertical	Pass

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Operation Mode: Transmitting under Low Channel (2402MHz)

Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dB μ V/m)
4804	--	H	74(Peak)/ 54(AV)
4804	--	V	74(Peak)/ 54(AV)
7206	--	H/V	74(Peak)/ 54(AV)
9608	--	H/V	74(Peak)/ 54(AV)
12010	--	H/V	74(Peak)/ 54(AV)
14412	--	H/V	74(Peak)/ 54(AV)
16814	--	H/V	74(Peak)/ 54(AV)
19216	--	H/V	74(Peak)/ 54(AV)
21618	--	H/V	74(Peak)/ 54(AV)
24020	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured

Operation Mode: Transmitting g under Middle Channel (2440MHz)

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
4880	--	H	74(Peak)/ 54(AV)
4880	--	V	74(Peak)/ 54(AV)
7320	--	H/V	74(Peak)/ 54(AV)
9760	--	H/V	74(Peak)/ 54(AV)
12200	--	H/V	74(Peak)/ 54(AV)
14640	--	H/V	74(Peak)/ 54(AV)
17080	--	H/V	74(Peak)/ 54(AV)
19520	--	H/V	74(Peak)/ 54(AV)
21960	--	H/V	74(Peak)/ 54(AV)
24400	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured

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Operation Mode: Transmitting under High Channel (2480MHz)

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
4960	--	H	74(Peak)/ 54(AV)
4960	--	V	74(Peak)/ 54(AV)
7440	--	H/V	74(Peak)/ 54(AV)
9920	--	H/V	74(Peak)/ 54(AV)
12400	--	H/V	74(Peak)/ 54(AV)
14880	--	H/V	74(Peak)/ 54(AV)
17360	--	H/V	74(Peak)/ 54(AV)
19840	--	H/V	74(Peak)/ 54(AV)
22320	--	H/V	74(Peak)/ 54(AV)
24800	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit
2. Remark "---" means that the emissions level is too low to be measured

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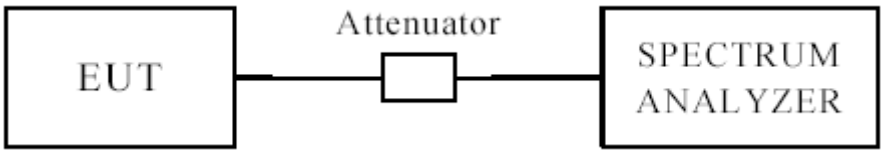
7.0 6dB Bandwidth Measurement

7.1 Test Setup



7.2 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500 kHz

7.3 Test Procedure

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

7.4 Test Result

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Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.647	0.5	Pass
		2440		0.657	0.5	Pass
		2480		0.695	0.5	Pass
	BLE 2M	2402		1.247	0.5	Pass
		2440		1.23	0.5	Pass
		2480		1.238	0.5	Pass

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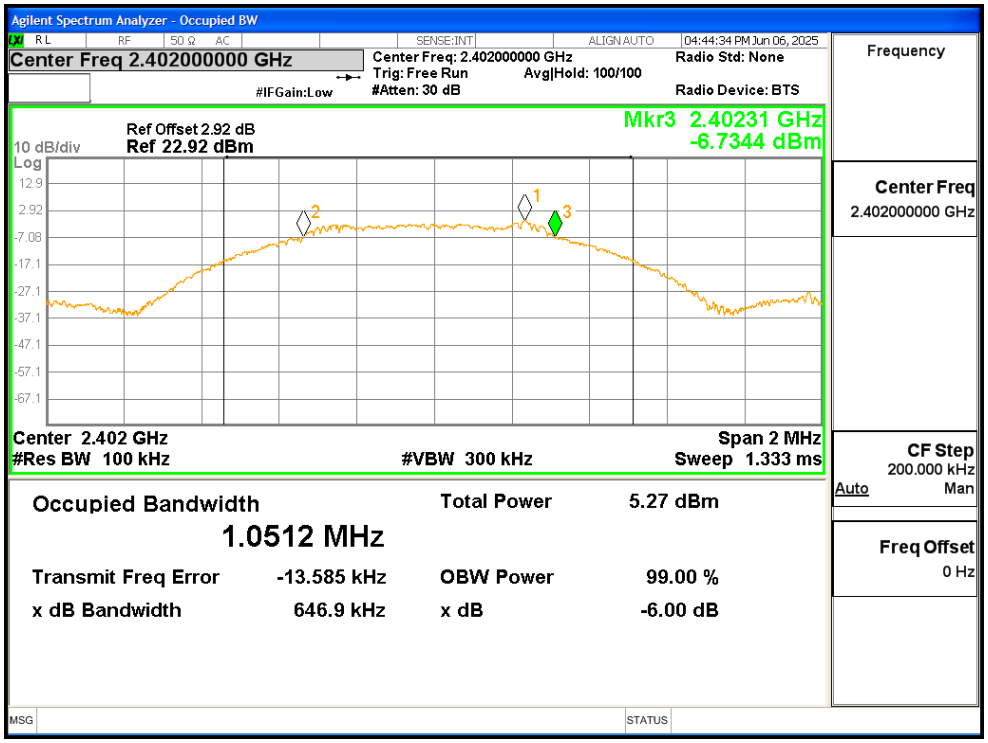
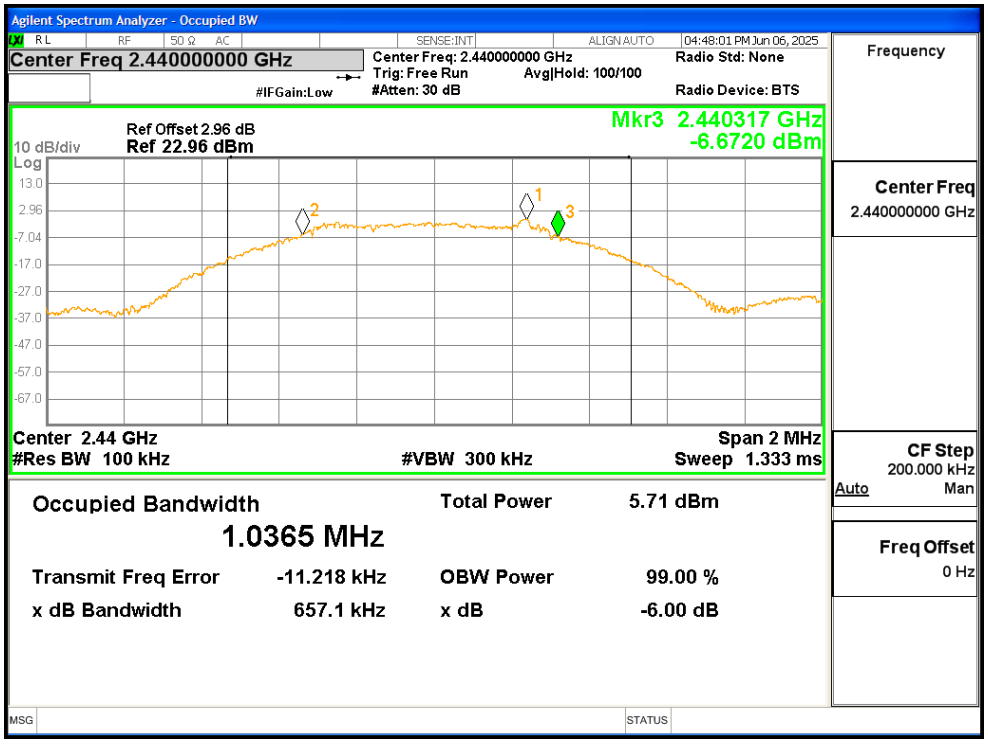
Test Graphs

-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1



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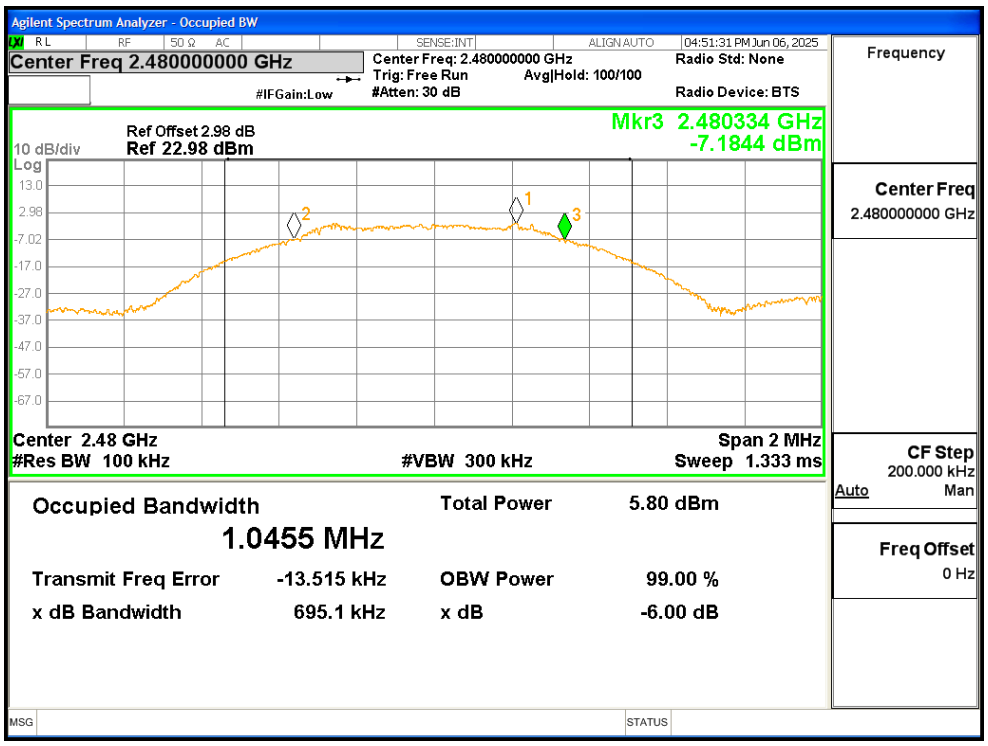
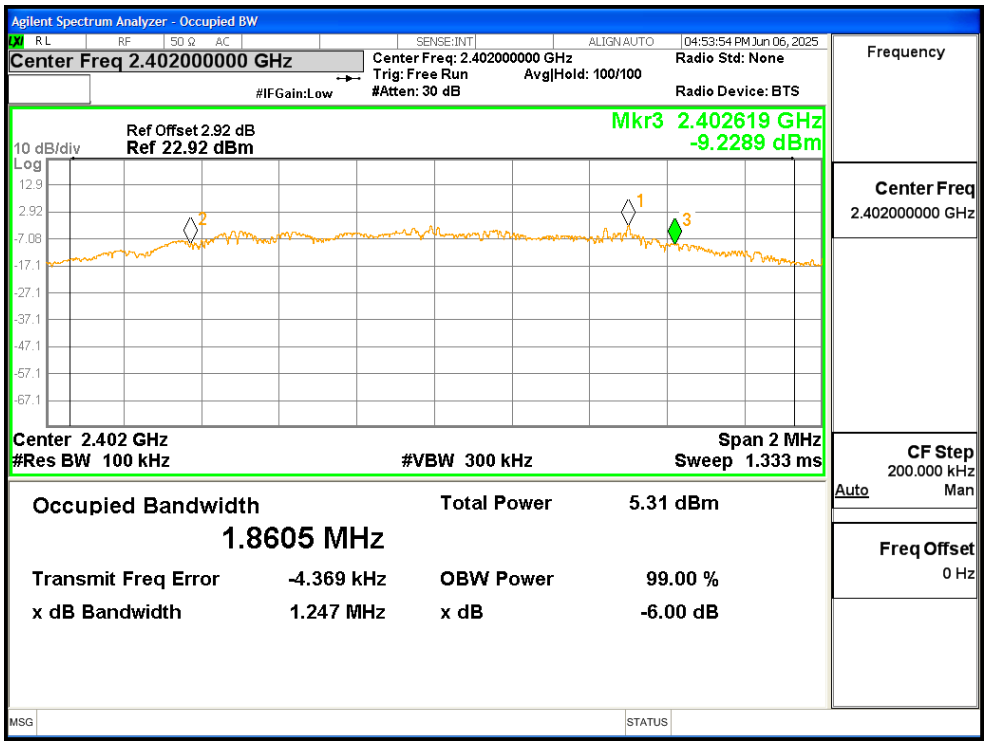
-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2402MHz Ant1



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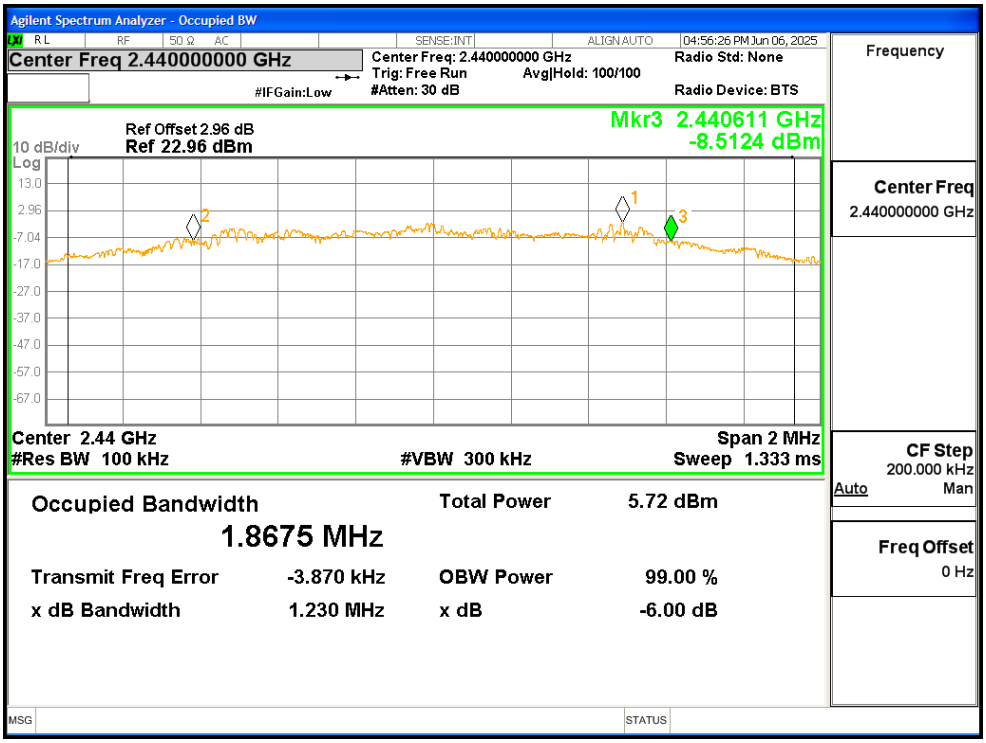
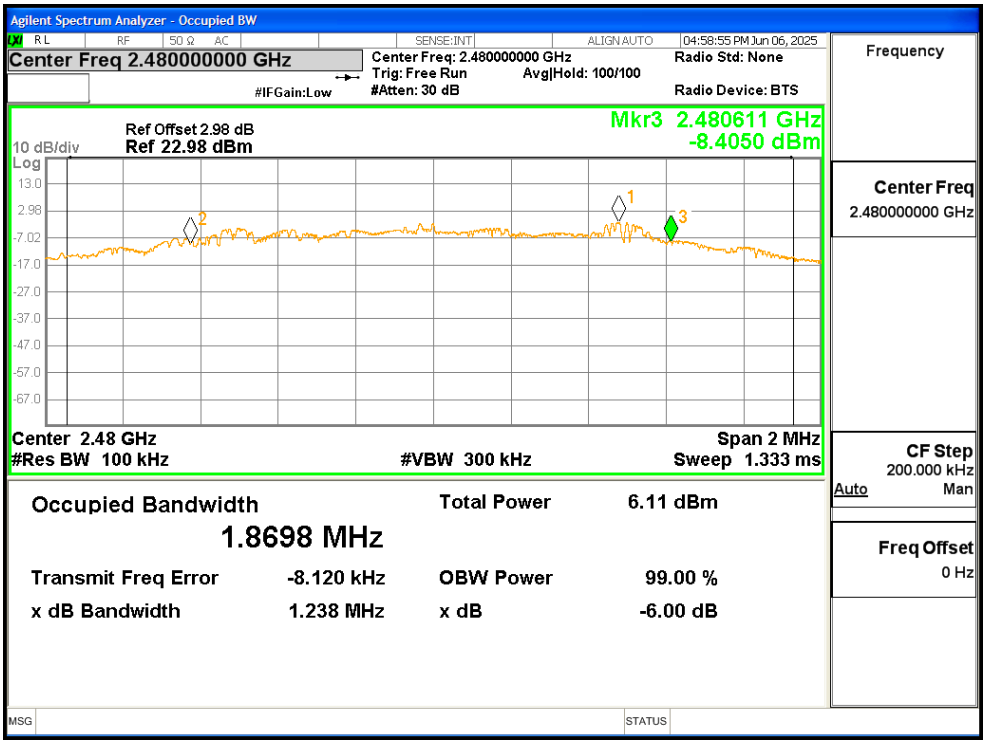
-6dB Bandwidth NVNT BLE 2M 2440MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2480MHz Ant1



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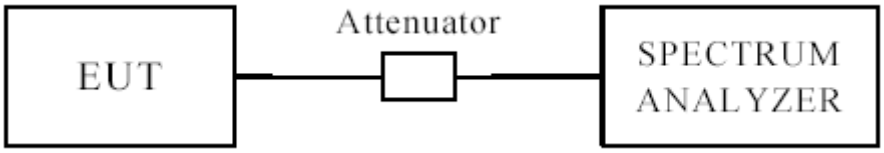
8. Maximum Output Power

8.1 Test Setup



8.2 Limits of Maximum Output Power

The Maximum Output Power Measurement is 30dBm.

8.3 Test Procedure

The RF power output was measured with a Power meter connected to the RF Antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate centre frequency.

Note: The Peak power was measured.

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8.4Test Results

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-0.692	0	-0.692	30	Pass
		2440		-0.242	0	-0.242	30	Pass
		2480		-0.034	0	-0.034	30	Pass
	BLE 2M	2402		-0.698	0	-0.698	30	Pass
		2440		-0.229	0	-0.229	30	Pass
		2480		-0.012	0	-0.012	30	Pass

Note: 1. the result basic equation calculation as follow:

Max. Power Output = Power Reading + Cable loss + Attenuator

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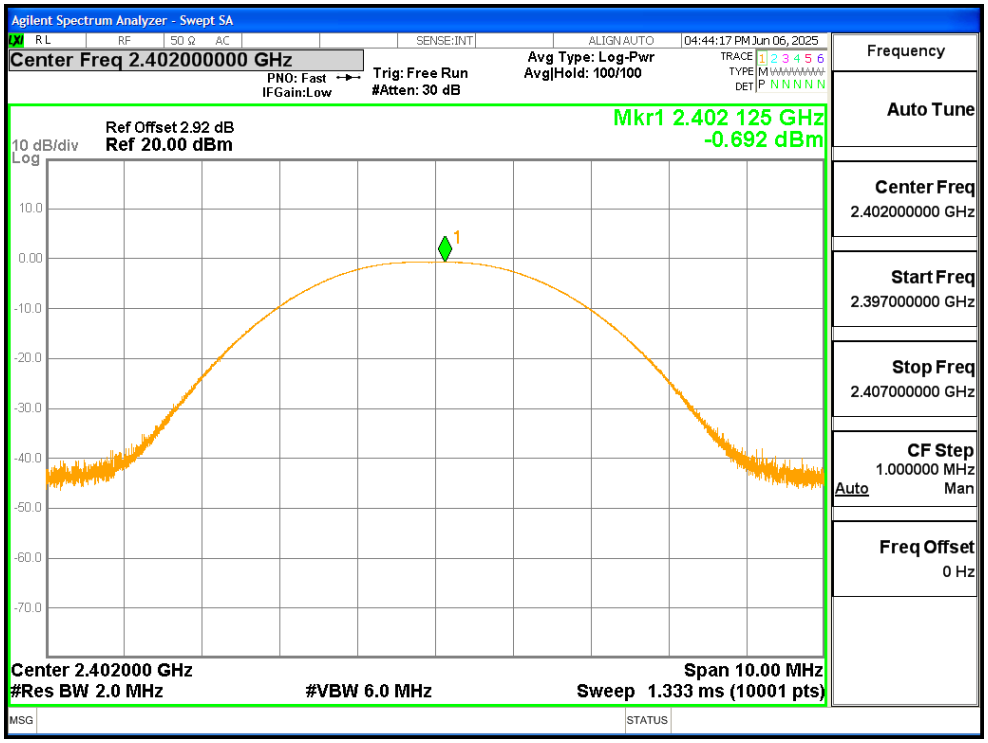
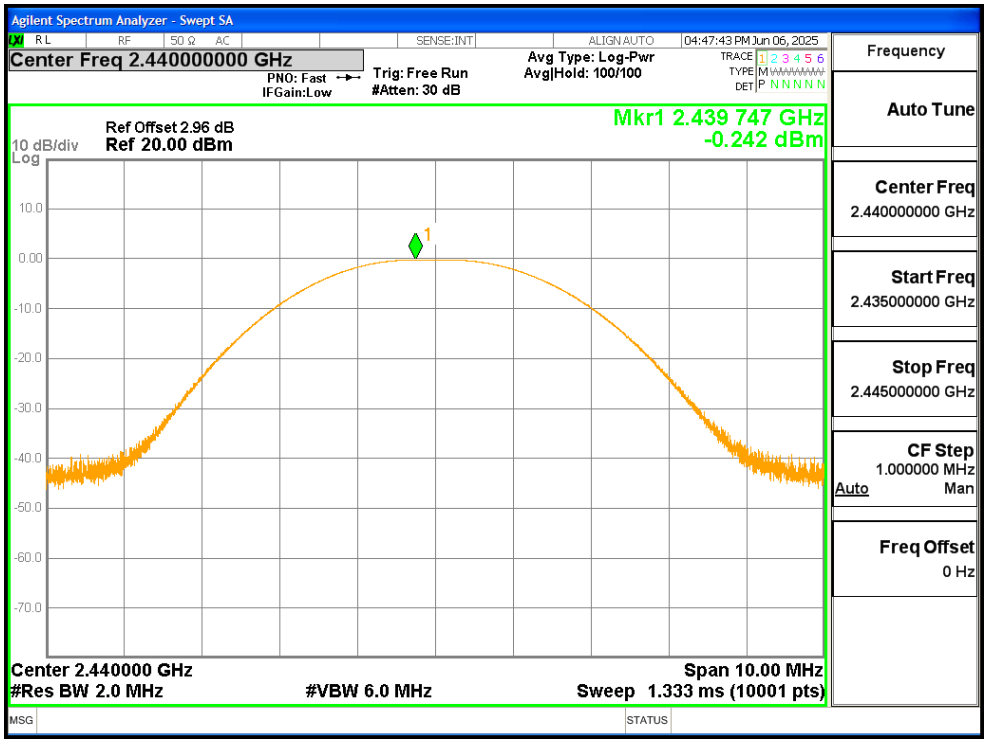
Test Graphs

Power NVNT BLE 1M 2402MHz Ant1



Power NVNT BLE 1M 2440MHz Ant1



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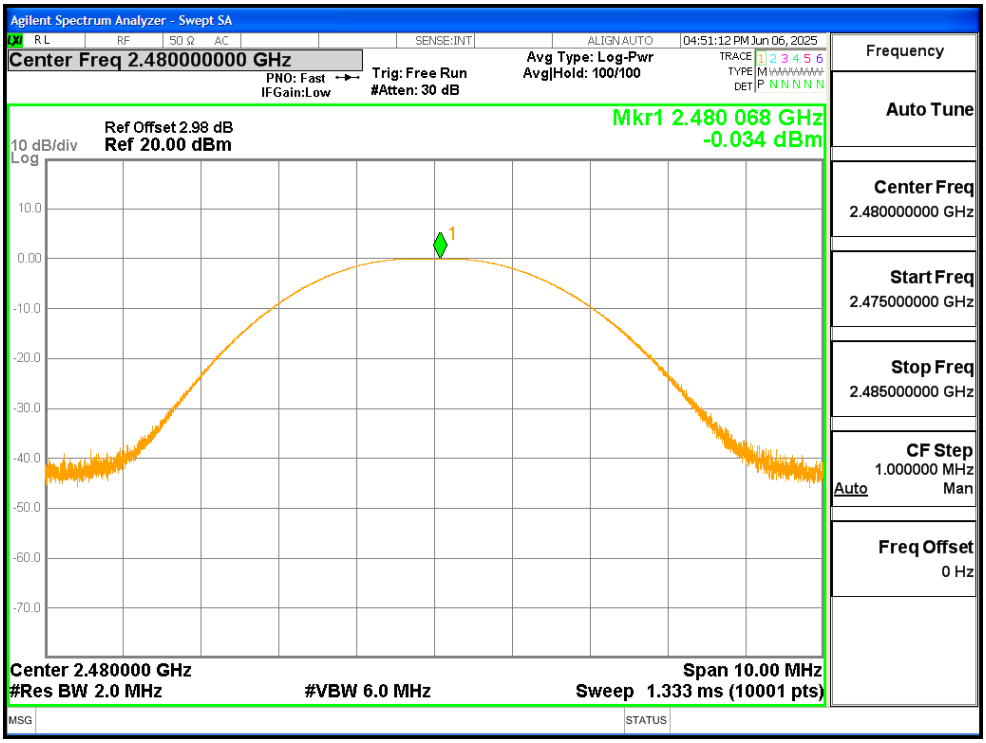
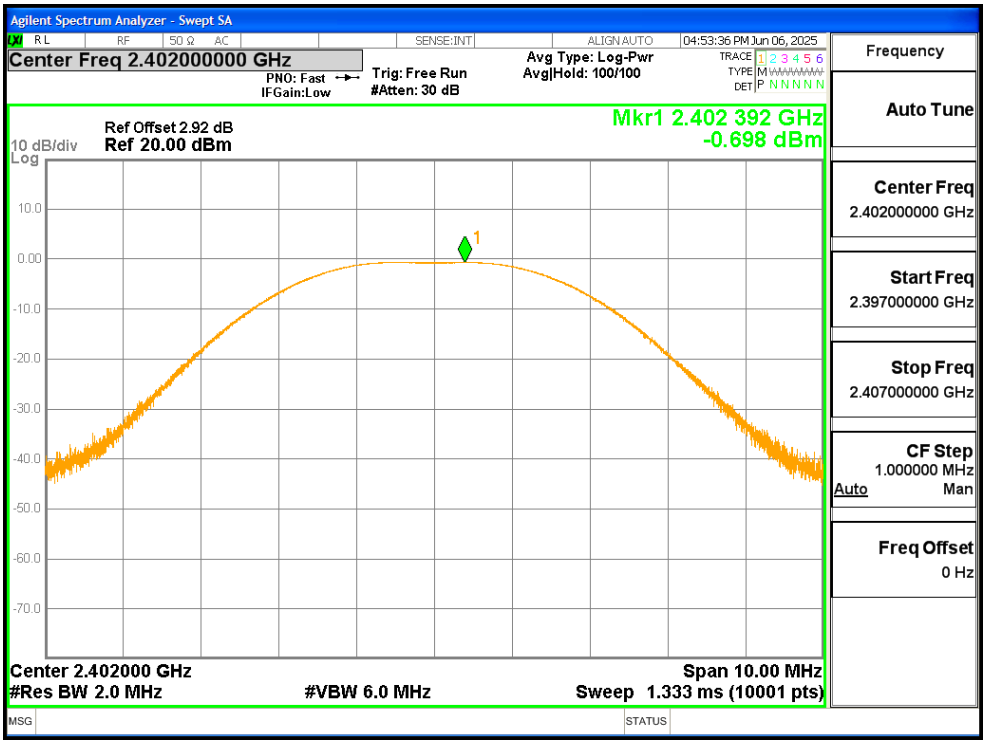
Power NVNT BLE 1M 2480MHz Ant1



Power NVNT BLE 2M 2402MHz Ant1



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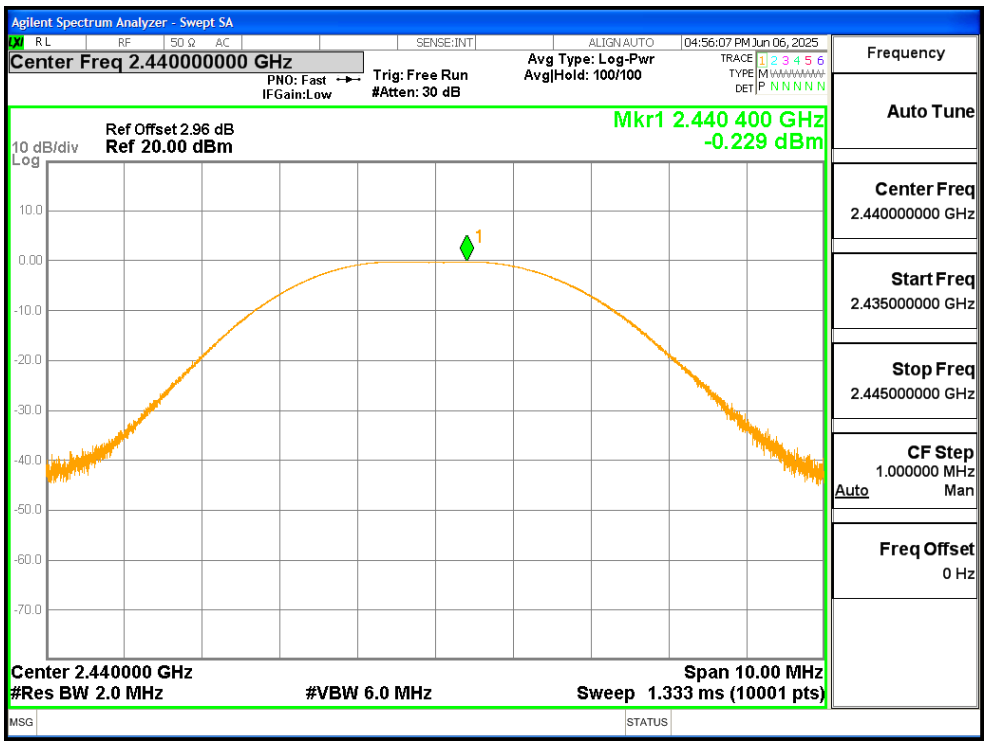
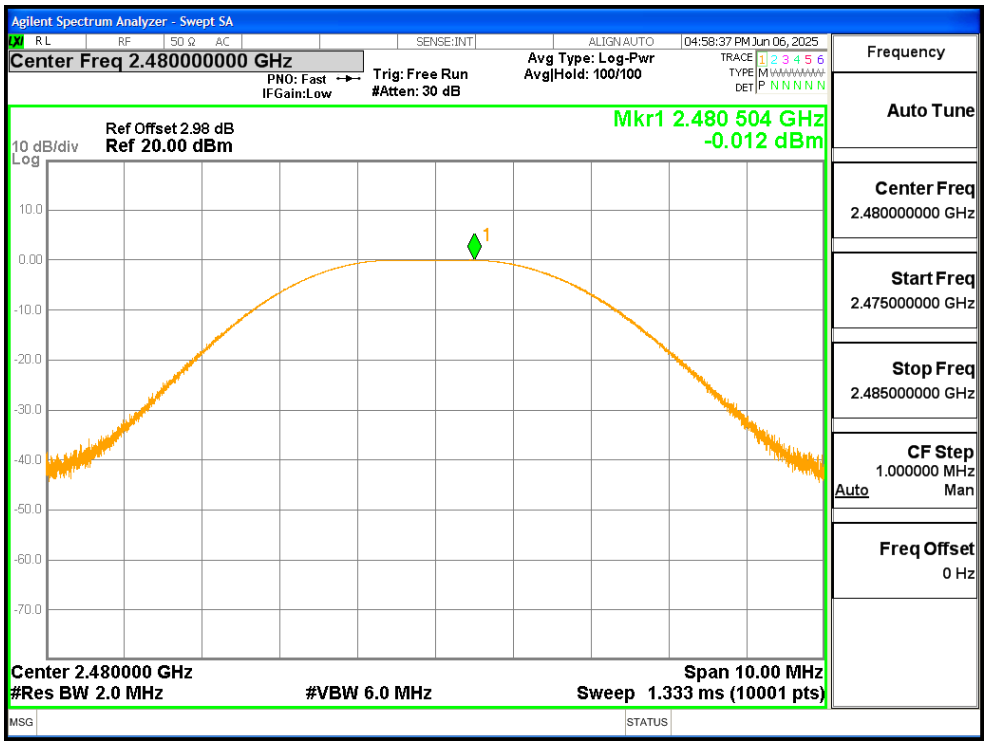
Power NVNT BLE 2M 2440MHz Ant1



Power NVNT BLE 2M 2480MHz Ant1



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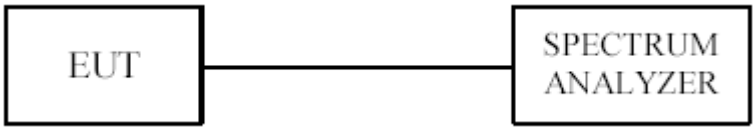
9. Power Spectral Density Measurement

9.1 Test Setup



9.2 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm/3kHz.

9.3 Test Procedure

1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
2. Set the RBW = 3 kHz.
3. Set the VBW ≥ 10 kHz.
4. Set the span to 1.5 times the DTS channel bandwidth.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.
11. The resulting peak PSD level must be ≤ 8 dBm/3kHz.

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9.4Test Result

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-16.81	0	-16.81	8	Pass
		2440		-16.31	0	-16.31	8	Pass
		2480		-16.11	0	-16.11	8	Pass
	BLE 2M	2402		-20.02	0	-20.02	8	Pass
		2440		-19.59	0	-19.59	8	Pass
		2480		-19.46	0	-19.46	8	Pass

Note: The result basic equation calculation as follow:

Peak Power Output = Peak Power Reading + Cable loss

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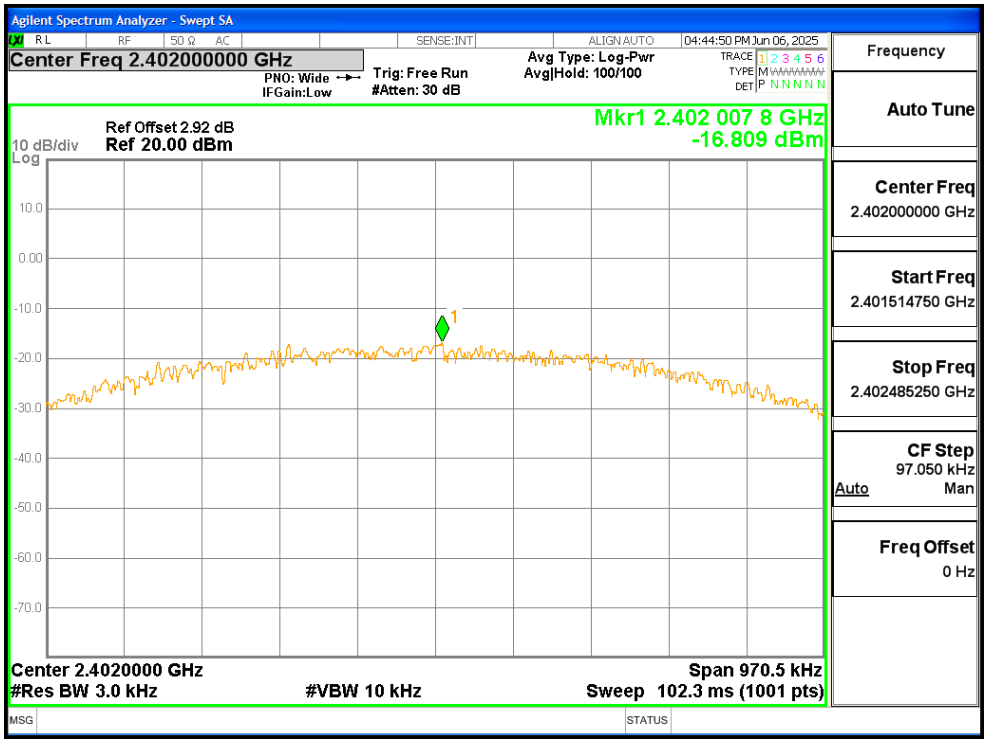
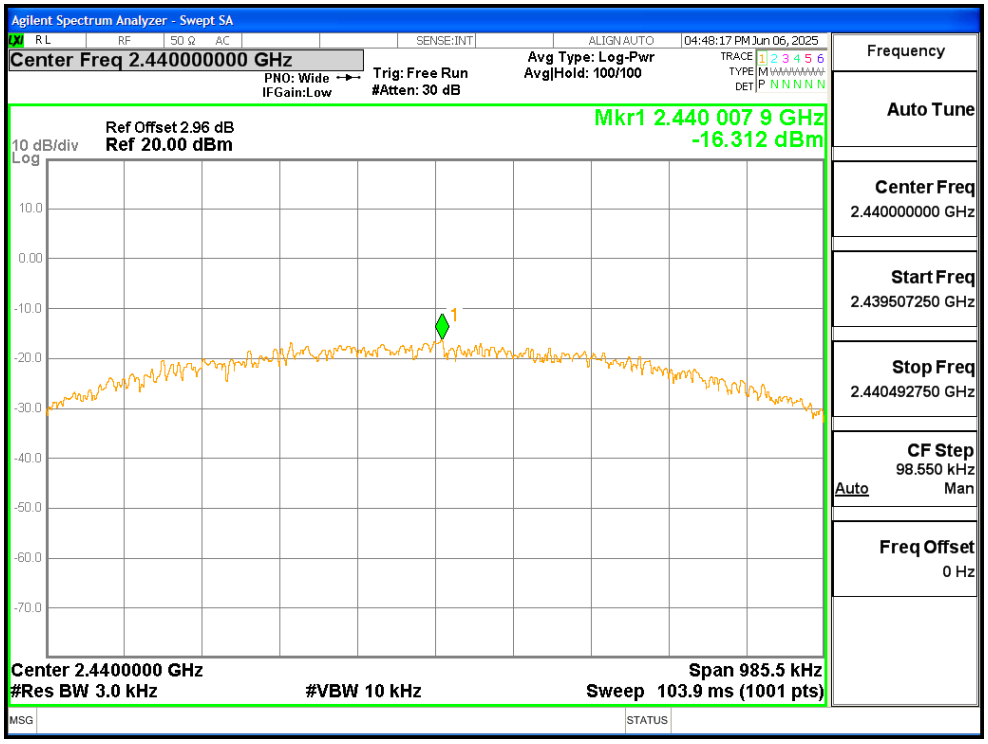
Test Graphs

PSD NVNT BLE 1M 2402MHz Ant1



PSD NVNT BLE 1M 2440MHz Ant1



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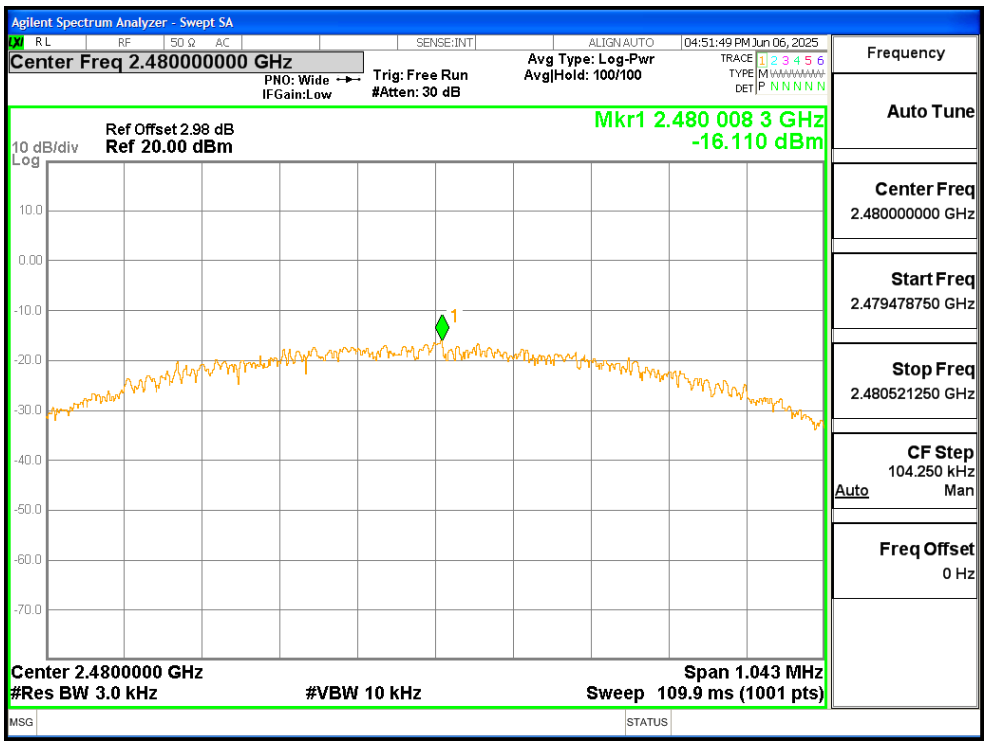
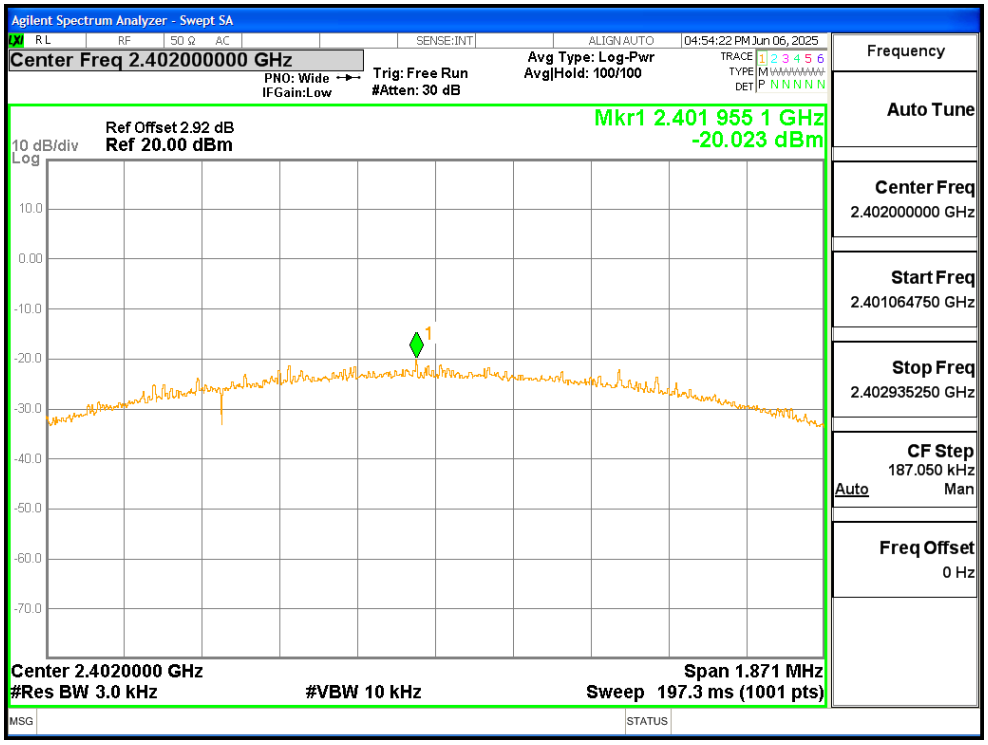
PSD NVNT BLE 1M 2480MHz Ant1



PSD NVNT BLE 2M 2402MHz Ant1



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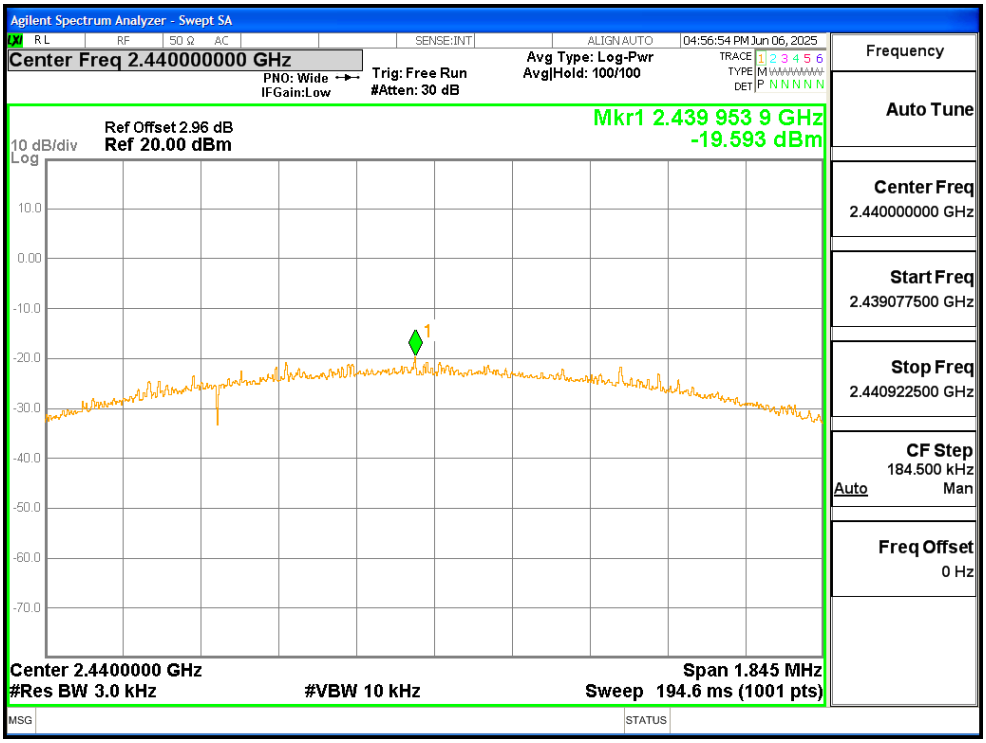
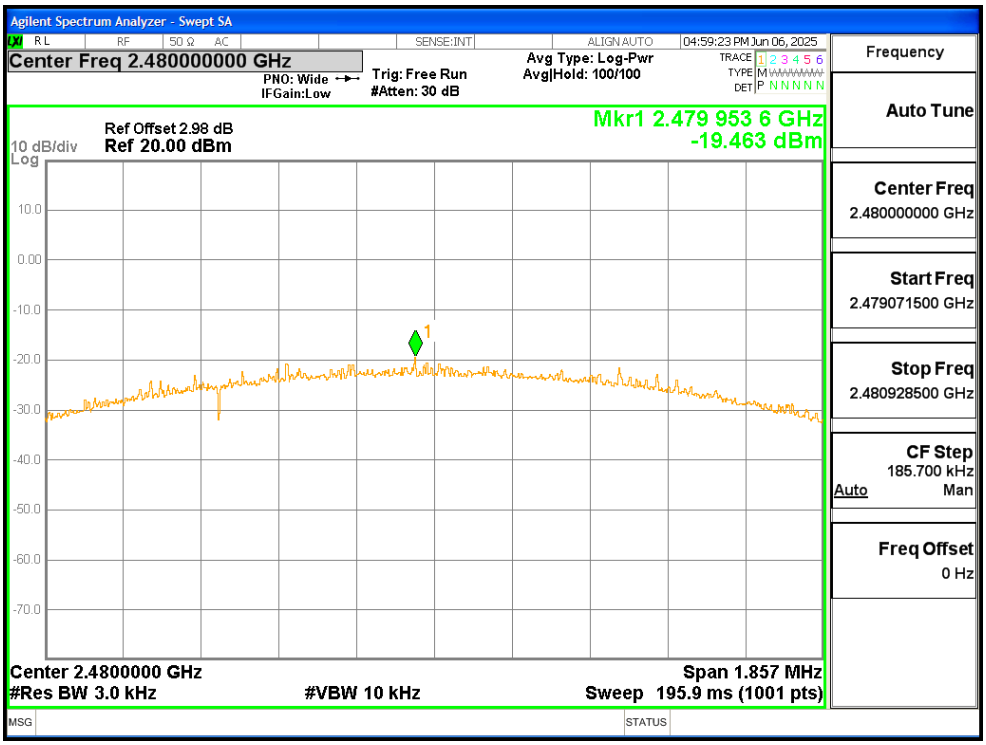
PSD NVNT BLE 2M 2440MHz Ant1



PSD NVNT BLE 2M 2480MHz Ant1



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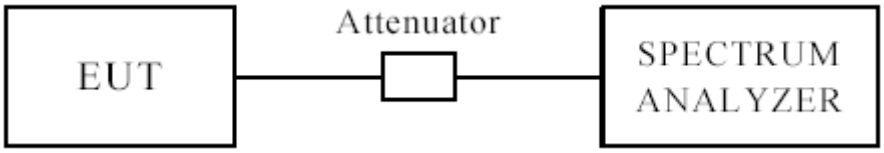
10 Out of Band Measurement

10.1 Test Setup for band edge



The restricted band requirement based on radiated emission test; please see the clause 6 for the test setup

10.2 Limits of Out of Band Emissions Measurement

1. Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).
2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

10.3 Test Procedure

For signals in the restricted bands above and below the 2.4-2.483GHz allocated band a measurement was made of Radiated emission test. (Peak values with RBW=1MHz, VBW=3MHz and PK detector. AV value with RBW=1MHz, VBW=3MHz and RMS detector)

For bandage test, the spectrum set as follows: RBW=100 kHz, VBW=300 kHz. A conducted measurement used

10.4 Test Result

Please see next pages

Note: 1. For band-edge measurement, the frequency from 30MHz-25GHz was tested. And It met the FCC rule.

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Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-43.07	-20	Pass
		2480		-52.56	-20	Pass
	BLE 2M	2402		-32.91	-20	Pass
		2480		-50.2	-20	Pass

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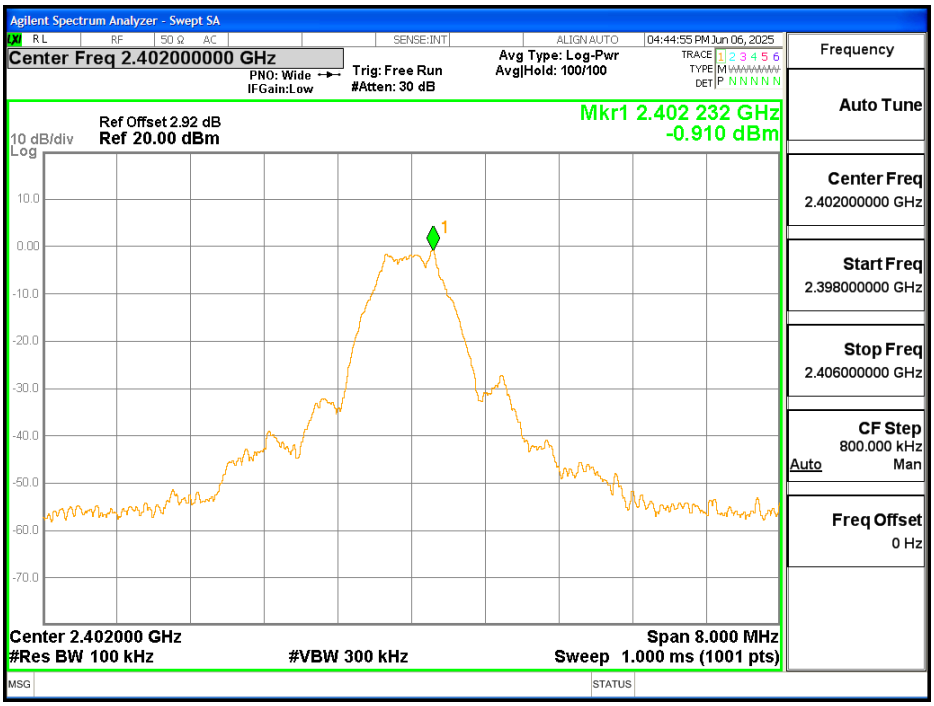
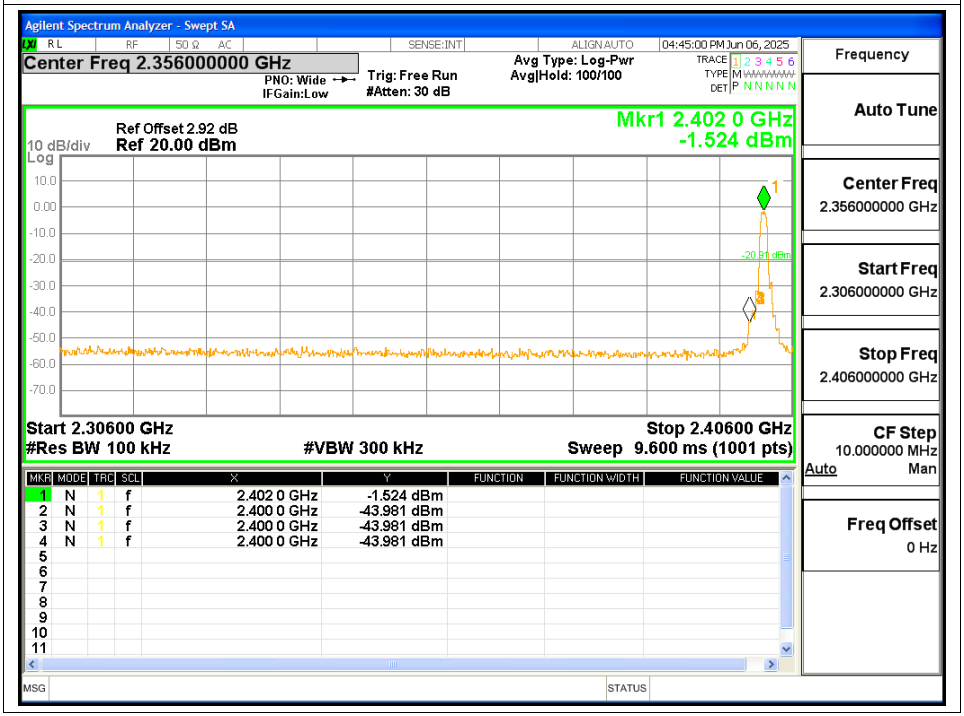
Test Graphs

Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



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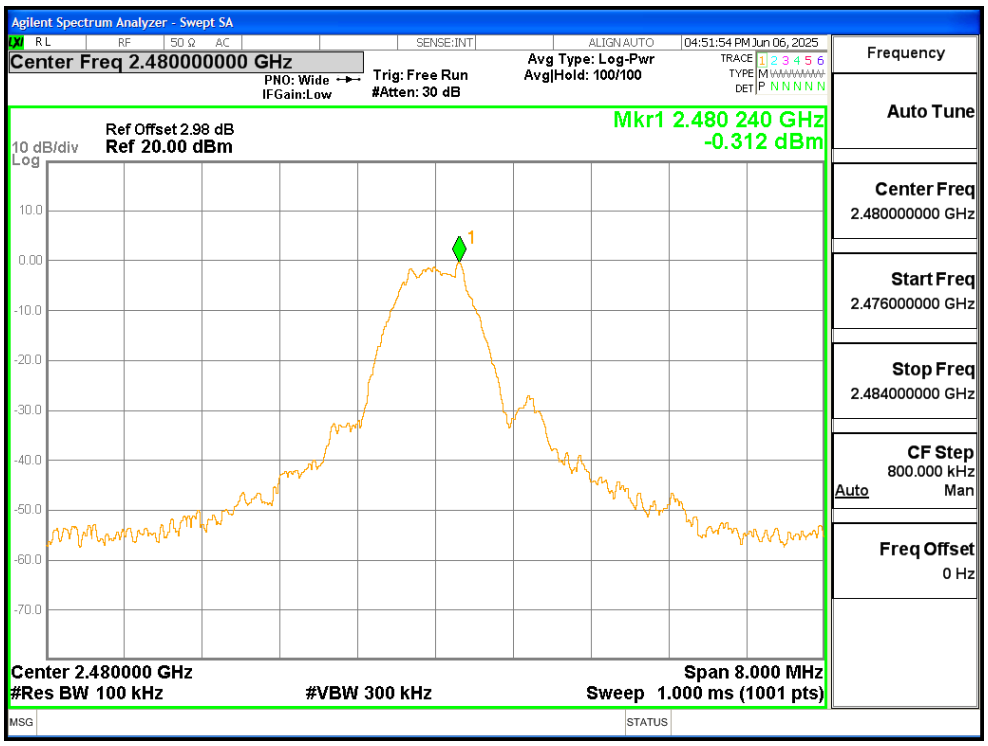
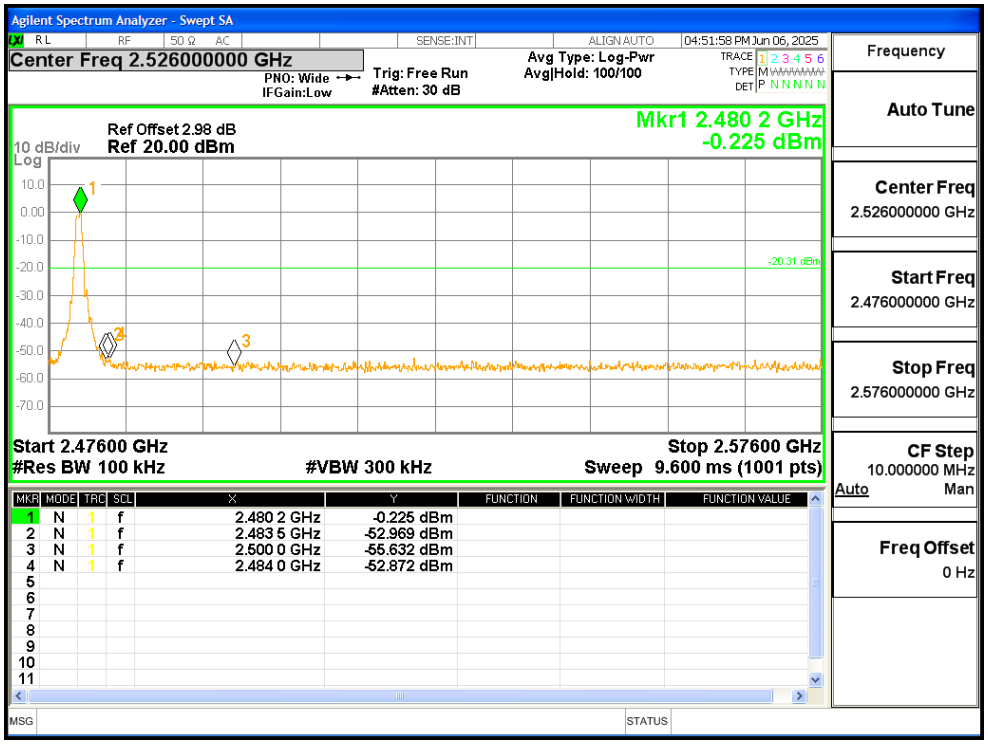
Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



Band Edge NVNT BLE 1M 2480MHz Ant1 Emission



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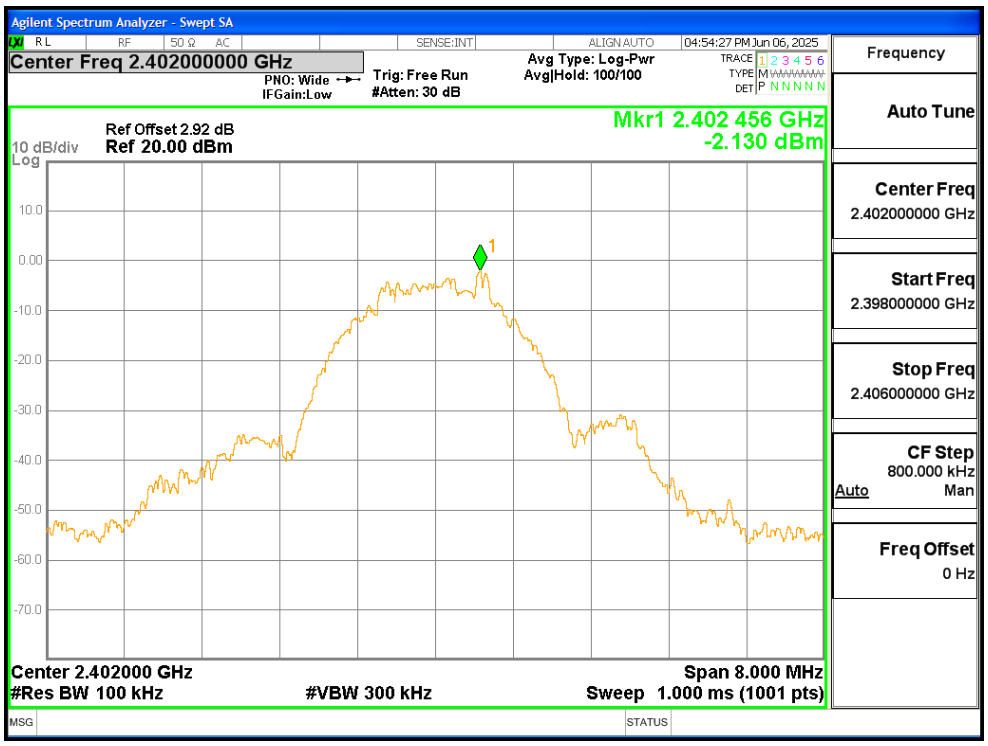
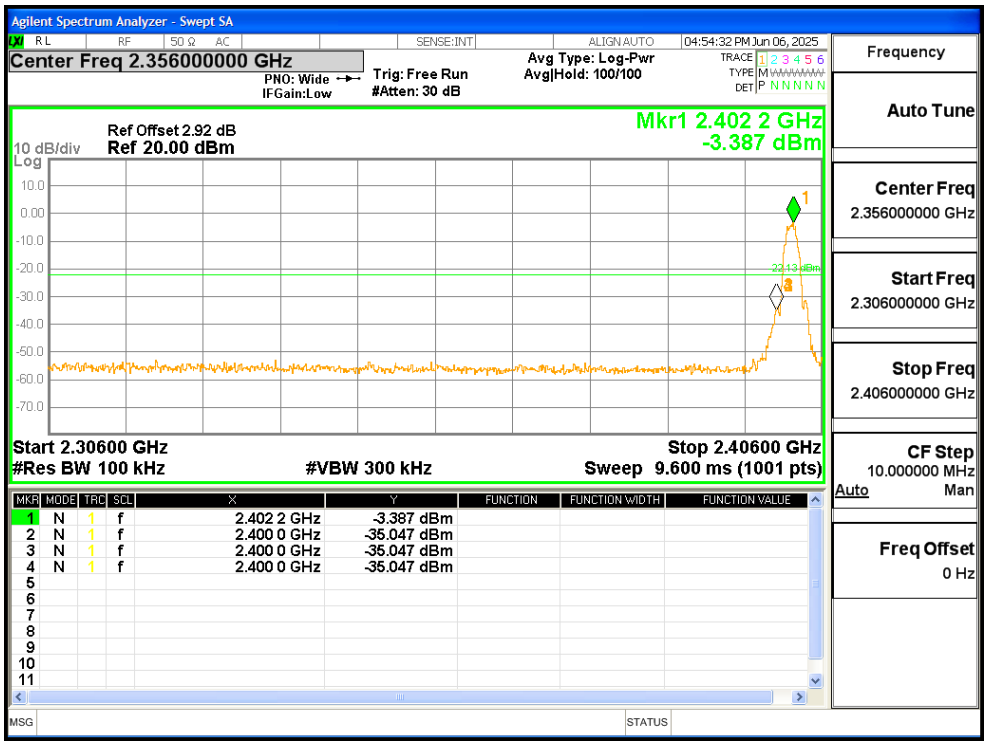
Band Edge NVNT BLE 2M 2402MHz Ant1 Ref



Band Edge NVNT BLE 2M 2402MHz Ant1 Emission



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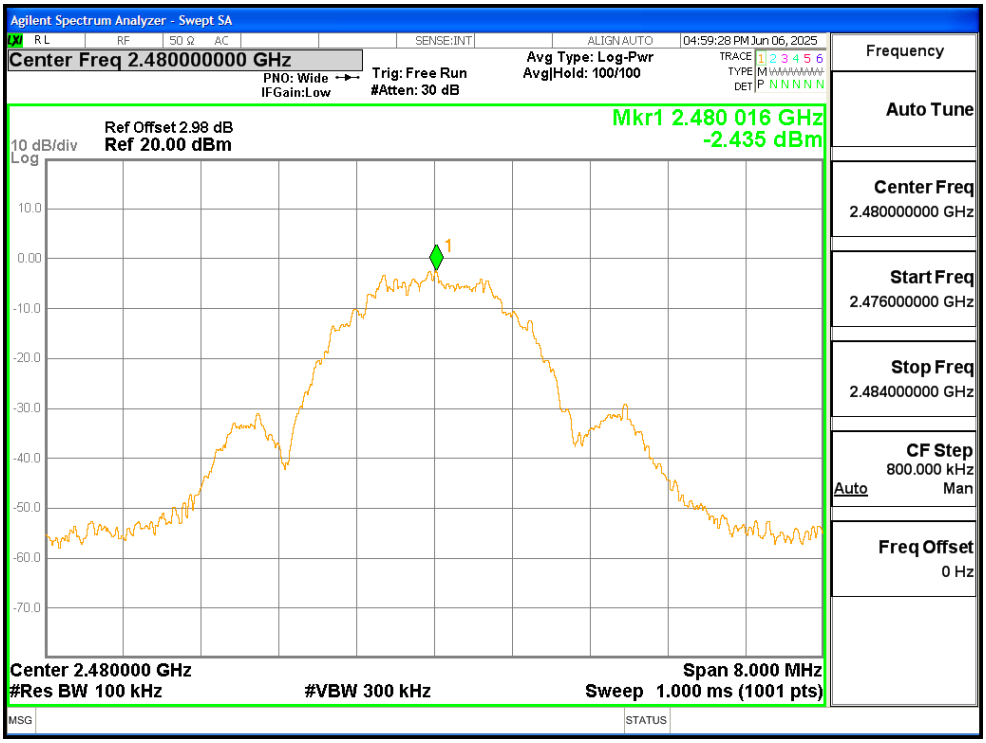
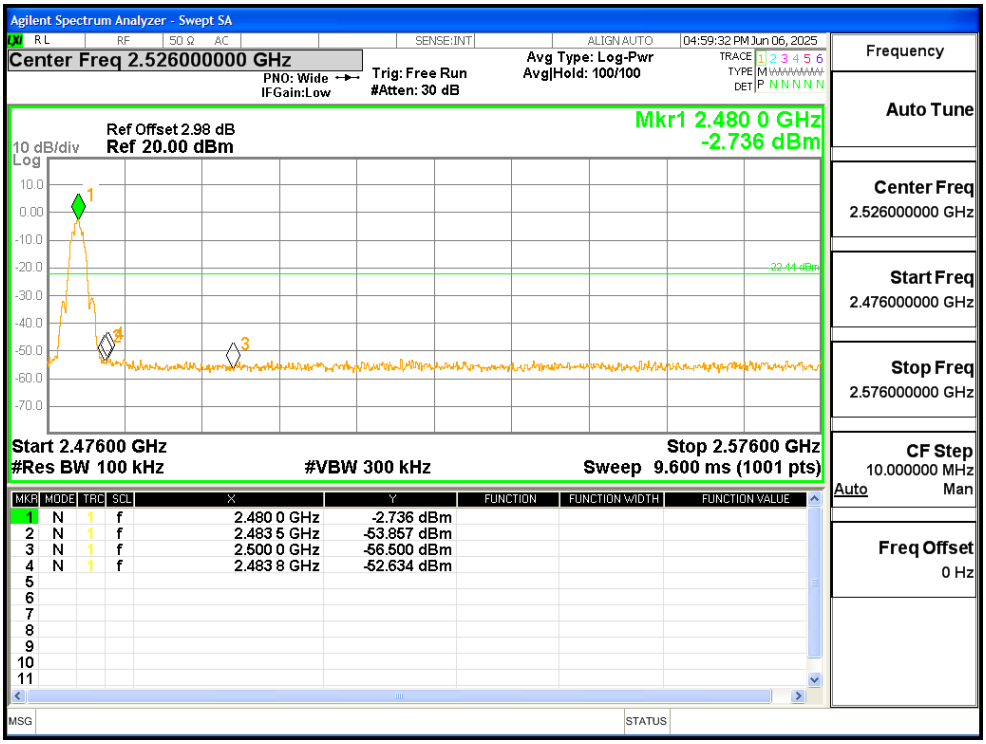
Band Edge NVNT BLE 2M 2480MHz Ant1 Ref



Band Edge NVNT BLE 2M 2480MHz Ant1 Emission



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Conducted Emissions at antenna Port

Test Figures above 1GHz:

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-39.1	-20	Pass
		2440		-42.74	-20	Pass
		2480		-41.91	-20	Pass
	BLE 2M	2402		-40.98	-20	Pass
		2440		-41.93	-20	Pass
		2480		-41.11	-20	Pass

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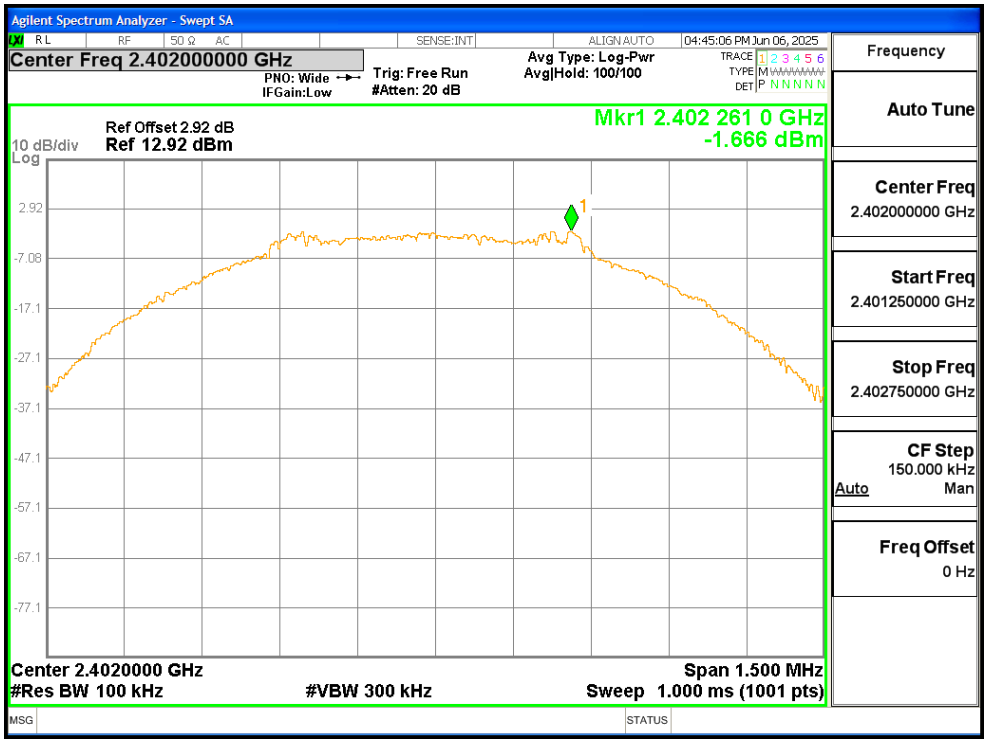
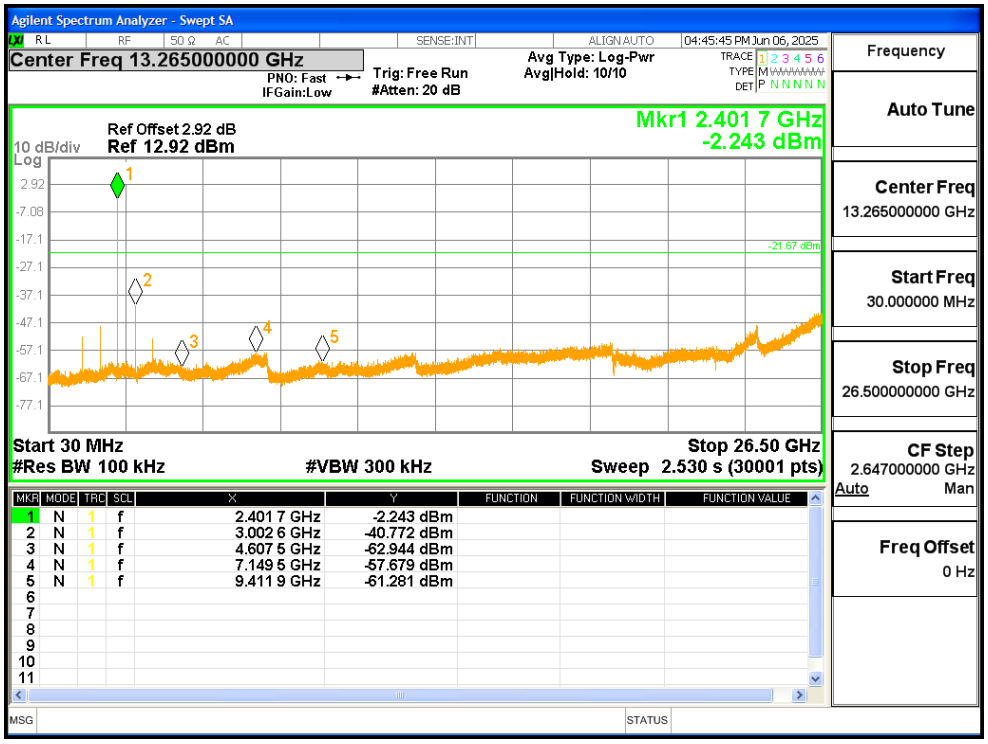
Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



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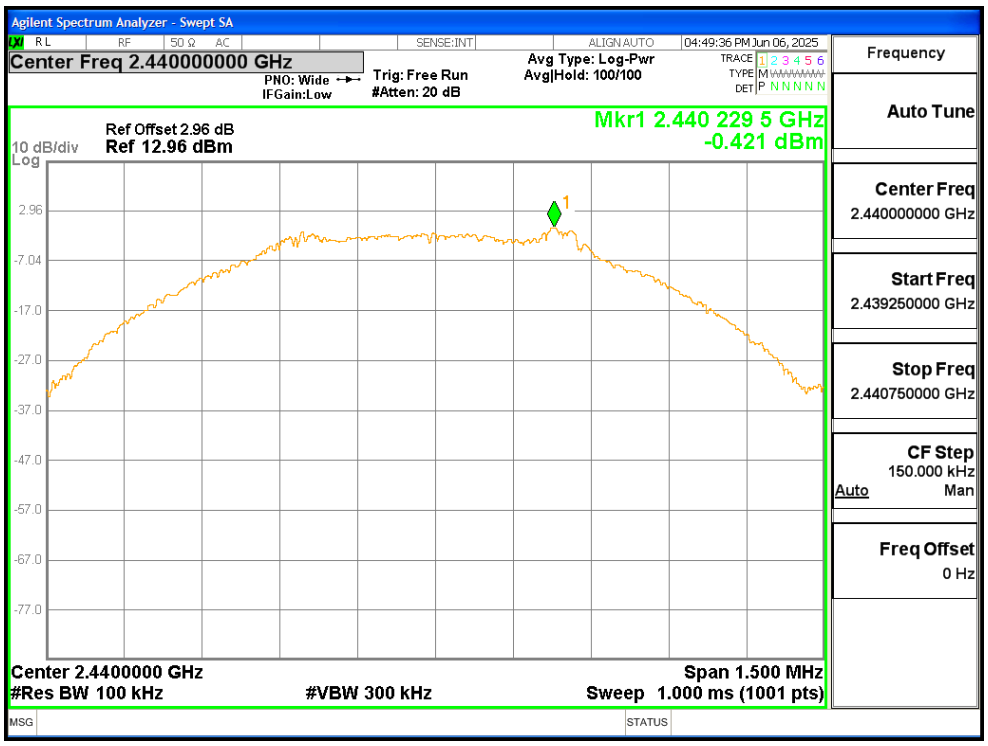
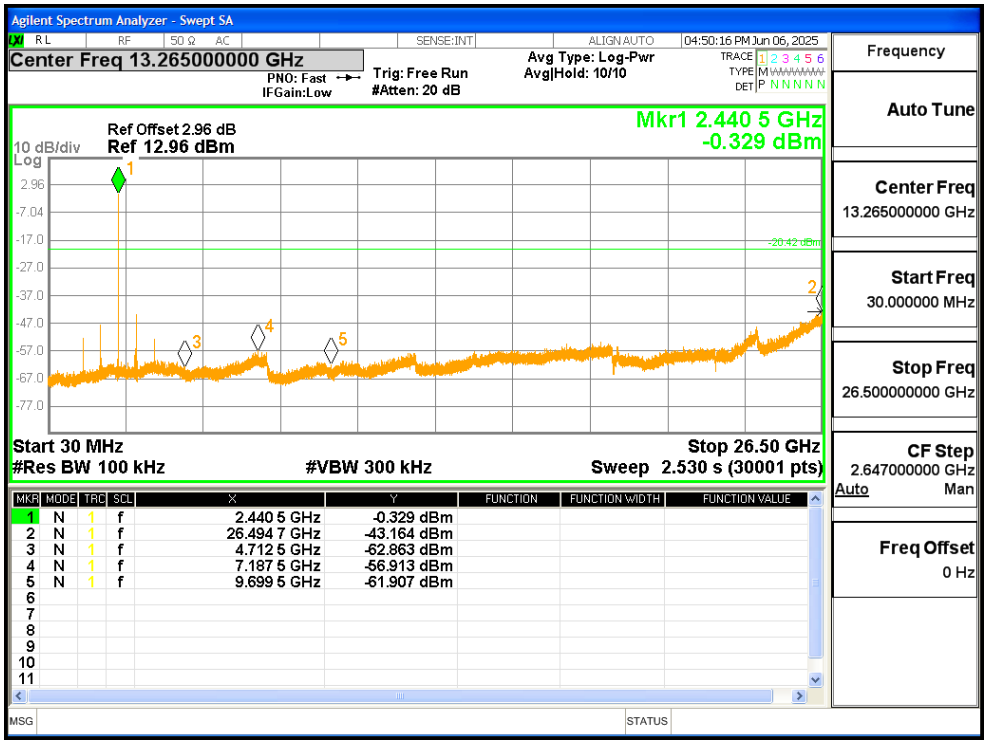
Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



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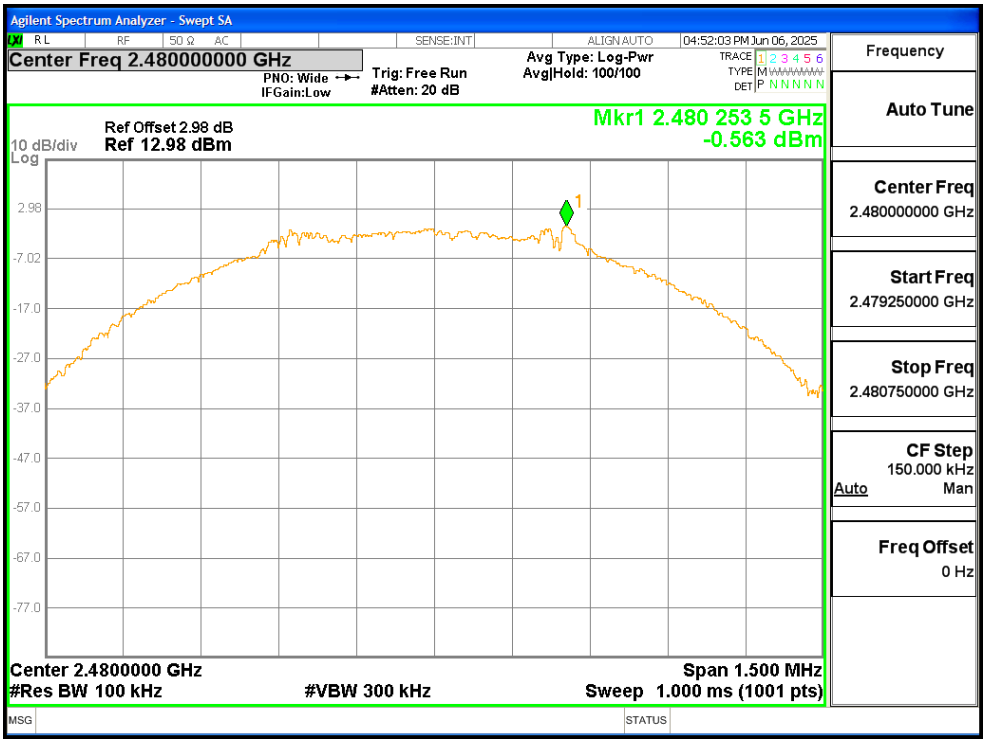
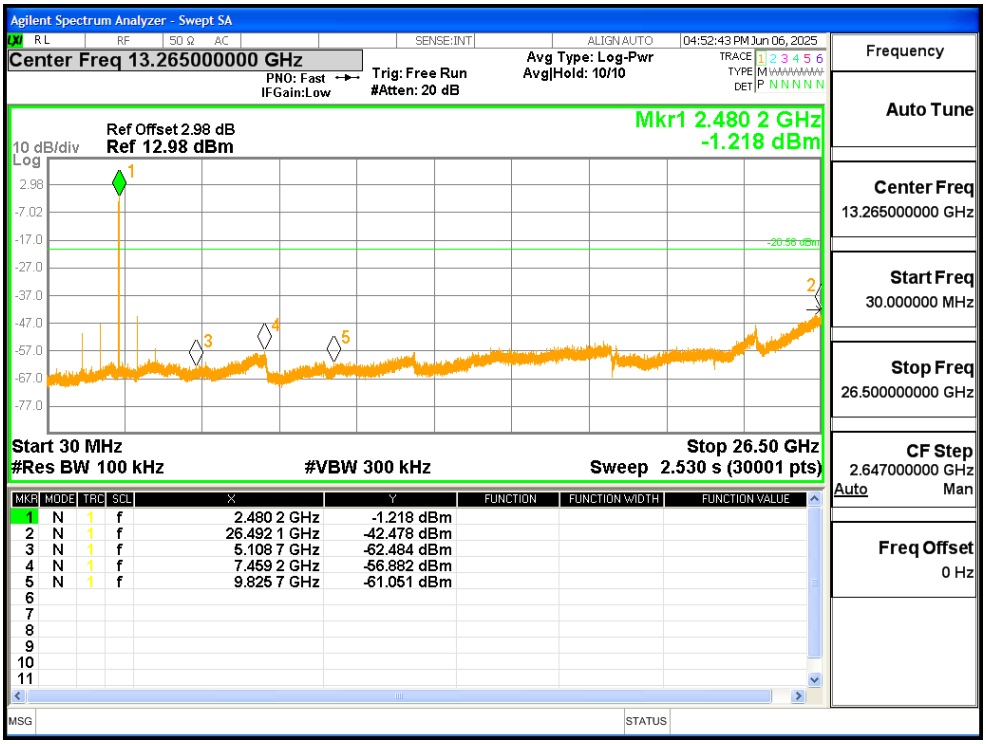
Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



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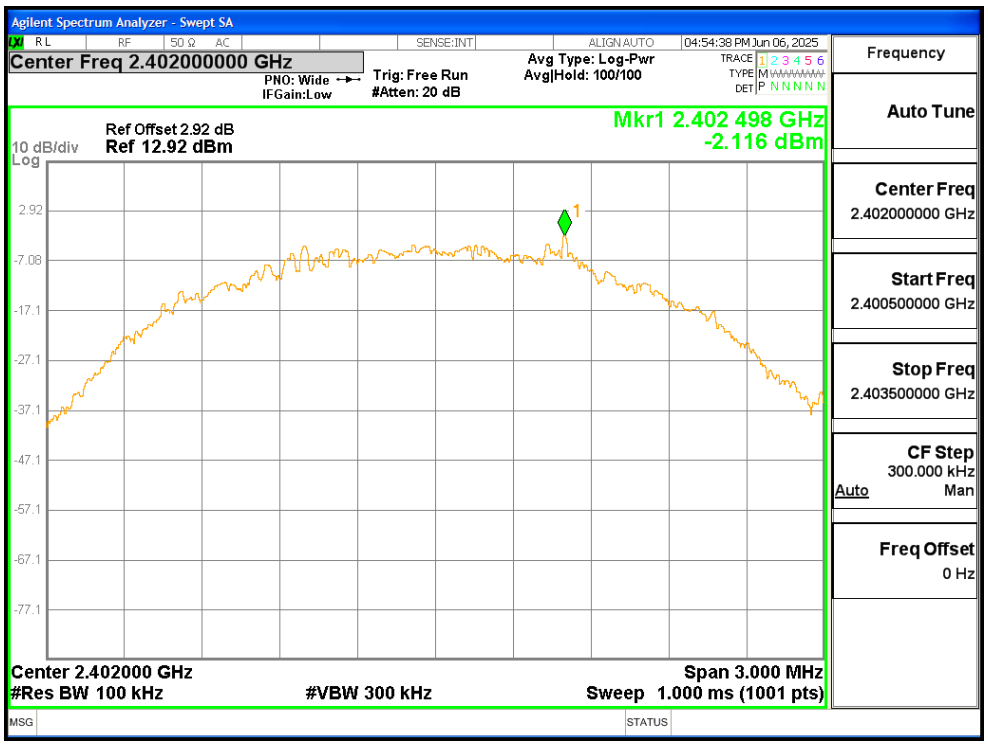
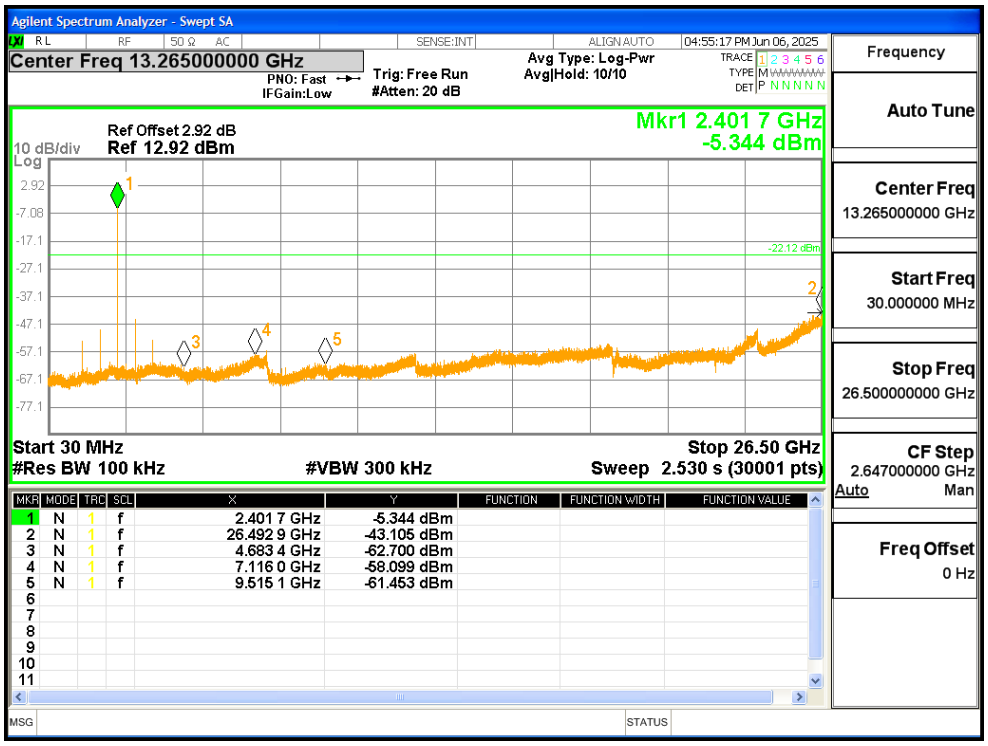
Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Emission



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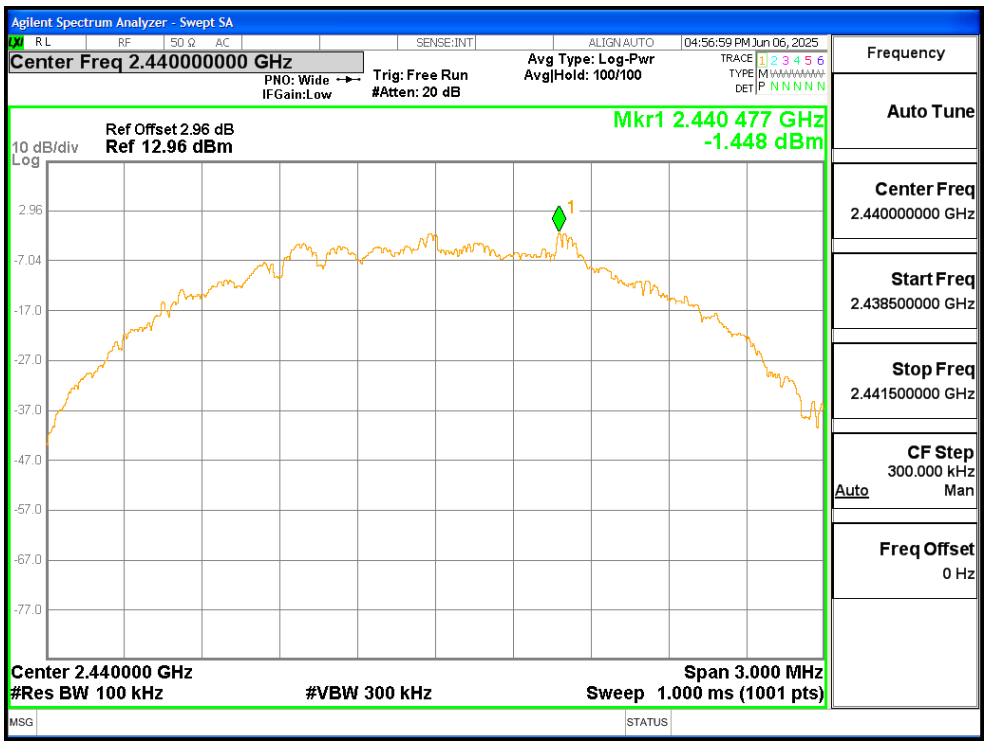
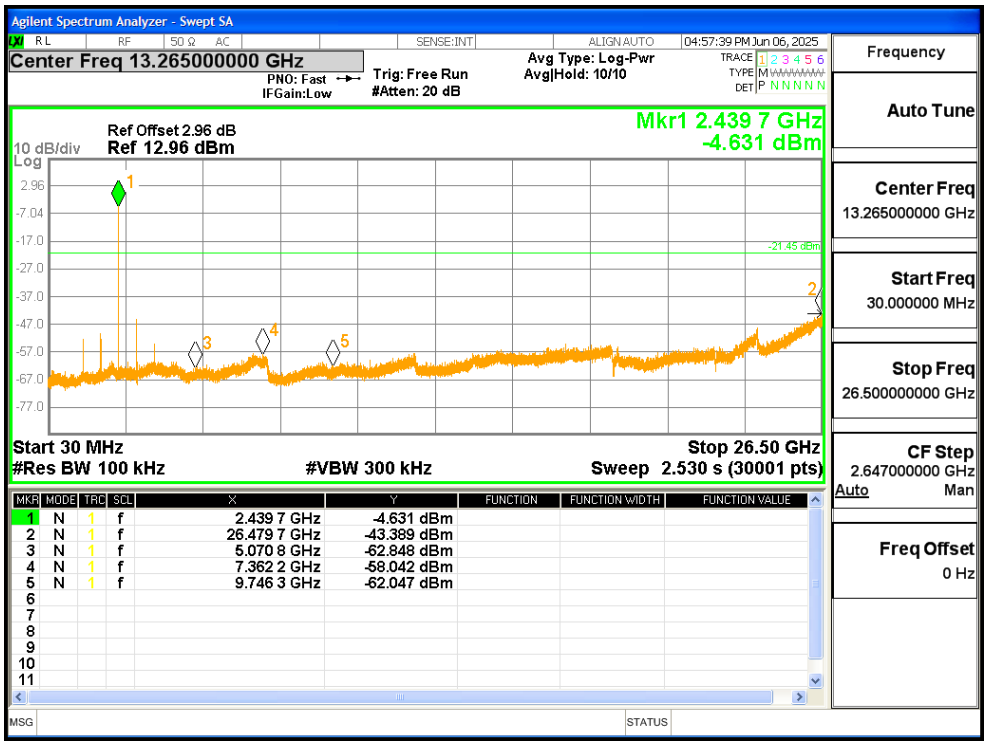
Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Emission



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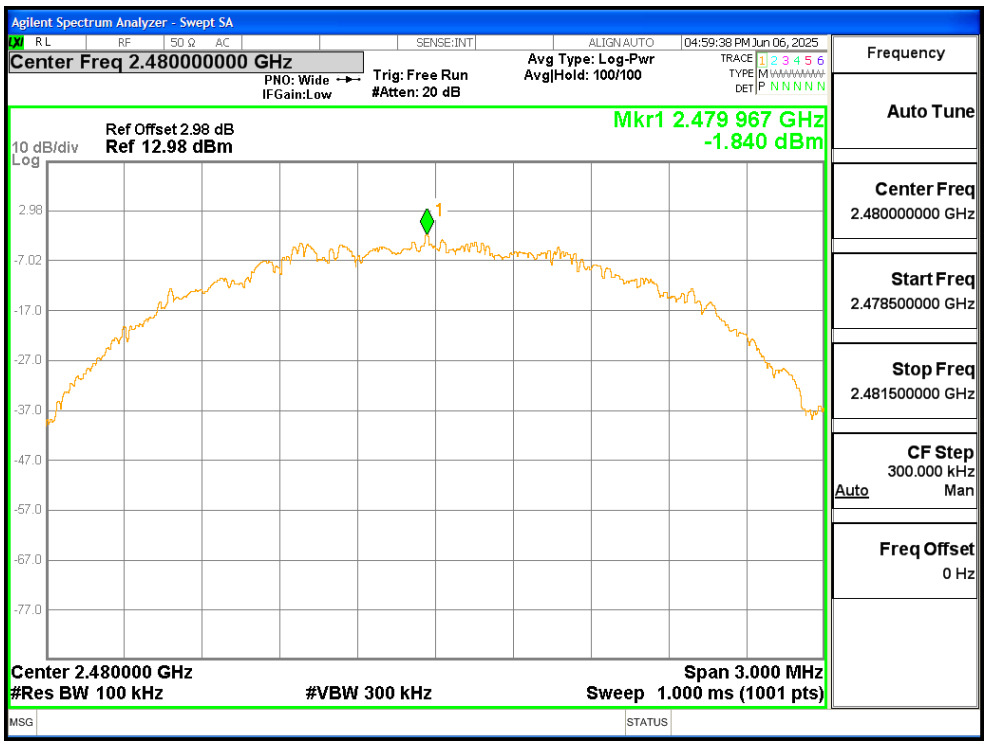
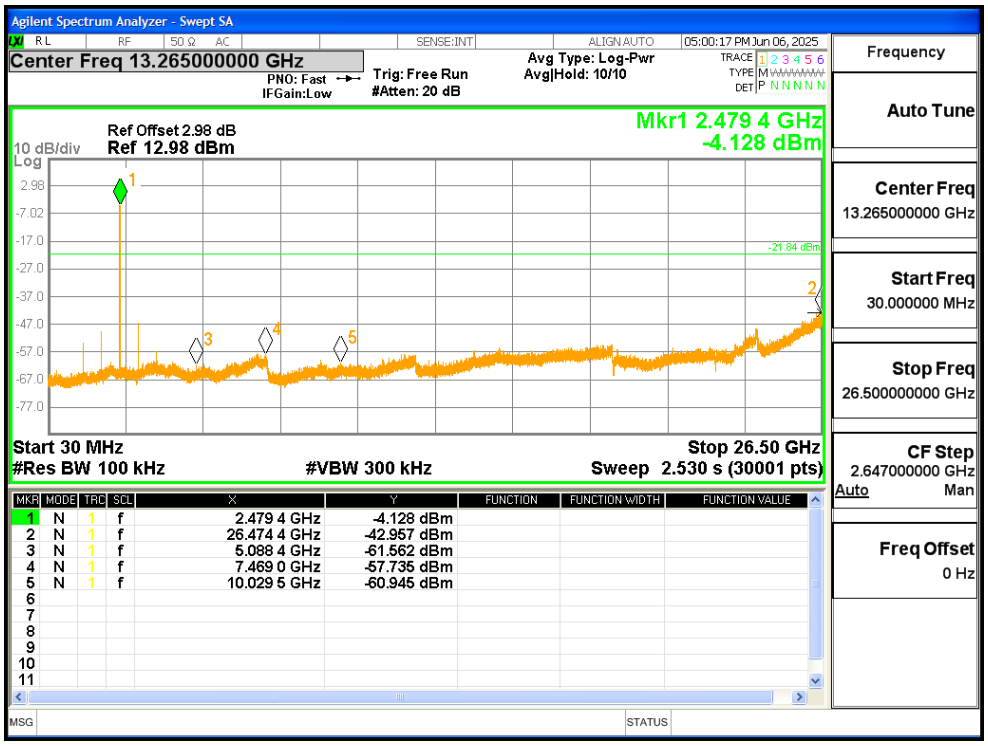
Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Emission



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Restricted band Measurement

EUT	EVPAD Player			Model	EVPAD-12P
Mode	Keeping Transmitting			Test Voltage	120V~
Temperature	24 deg. C,			Humidity	56% RH
Test Result:	Pass			Detector	PK
BLE-1M, Low Channel, Horizontal					
2390	PK (dBμV/m)	41.36	Limit		74(dBμV/m)
	AV (dBμV/m)	--			54(dBμV/m)
BLE-1M, Low Channel Vertical					
2390	PK (dBμV/m)	40.17	Limit		74(dBμV/m)
	AV (dBμV/m)	--			54(dBμV/m)

Restricted band Measurement

EUT	EVPAD Player			Model	EVPAD-12P
Mode	Keeping Transmitting			Test Voltage	120V~
Temperature	24 deg. C,			Humidity	56% RH
Test Result:	Pass			Detector	PK
BLE-1M, High Channel, Horizontal					
2483.5	PK (dBμV/m)	56.29	Limit		74(dBμV/m)
	AV (dBμV/m)	42.35			54(dBμV/m)
BLE-1M, High Channel, Vertical					
2483.5	PK (dBμV/m)	45.61	Limit		74(dBμV/m)
	AV (dBμV/m)	--			54(dBμV/m)

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Restricted band Measurement

EUT	EVPAD Player			Model	EVPAD-12P
Mode	Keeping Transmitting			Test Voltage	120V~
Temperature	24 deg. C,			Humidity	56% RH
Test Result:	Pass			Detector	PK
BLE-2M, Low Channel, Horizontal					
2390	PK (dBμV/m)	41.73	Limit	74(dBμV/m)	
	AV (dBμV/m)	--		54(dBμV/m)	
BLE-2M, Low Channel Vertical					
2390	PK (dBμV/m)	40.25	Limit	74(dBμV/m)	
	AV (dBμV/m)	--		54(dBμV/m)	

Restricted band Measurement

EUT	EVPAD Player			Model	EVPAD-12P
Mode	Keeping Transmitting			Test Voltage	120V~
Temperature	24 deg. C,			Humidity	56% RH
Test Result:	Pass			Detector	PK
BLE-2M, High Channel, Horizontal					
2483.5	PK (dBμV/m)	57.83	Limit	74(dBμV/m)	
	AV (dBμV/m)	43.71		54(dBμV/m)	
BLE-2M, High Channel, Vertical					
2483.5	PK (dBμV/m)	47.69	Limit	74(dBμV/m)	
	AV (dBμV/m)	--		54(dBμV/m)	

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11.0 Antenna Requirement

11.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 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.

And according to FCC 47 CFR Section 15.247 (b), if transmitter antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the mount in dB that the directional gain of the antenna exceeds 6 dBi.

11.2 Antenna Connected construction

FPC antenna used. The gain of the antennas is 0.31dBi (Get from the antenna specification provided the manufacturer)

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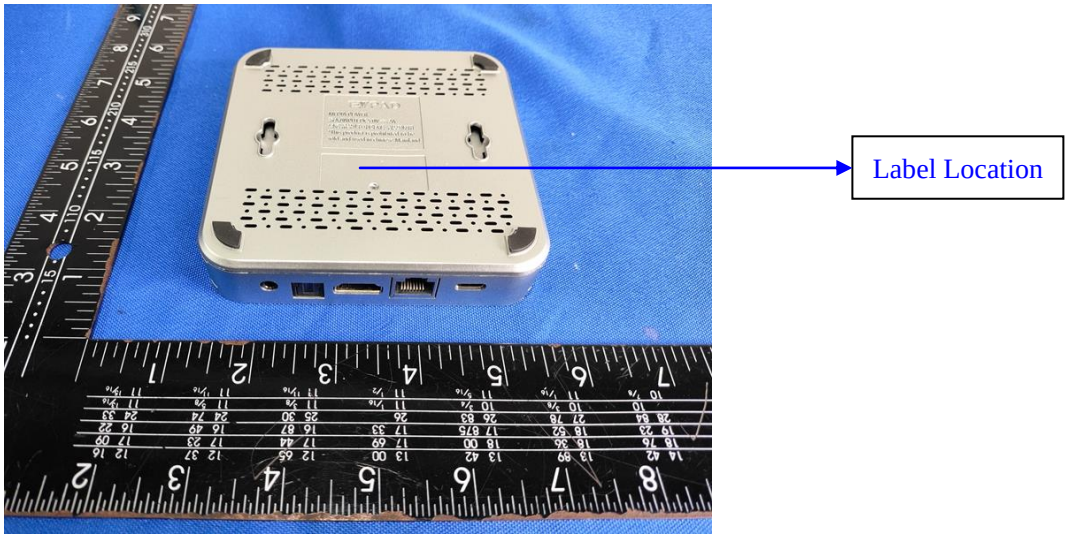
12.0 FCC ID Label

FCC ID: 2A4G812P12S

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Mark Location:



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13.0 Photo of testing

Conducted Emission Test Setup:

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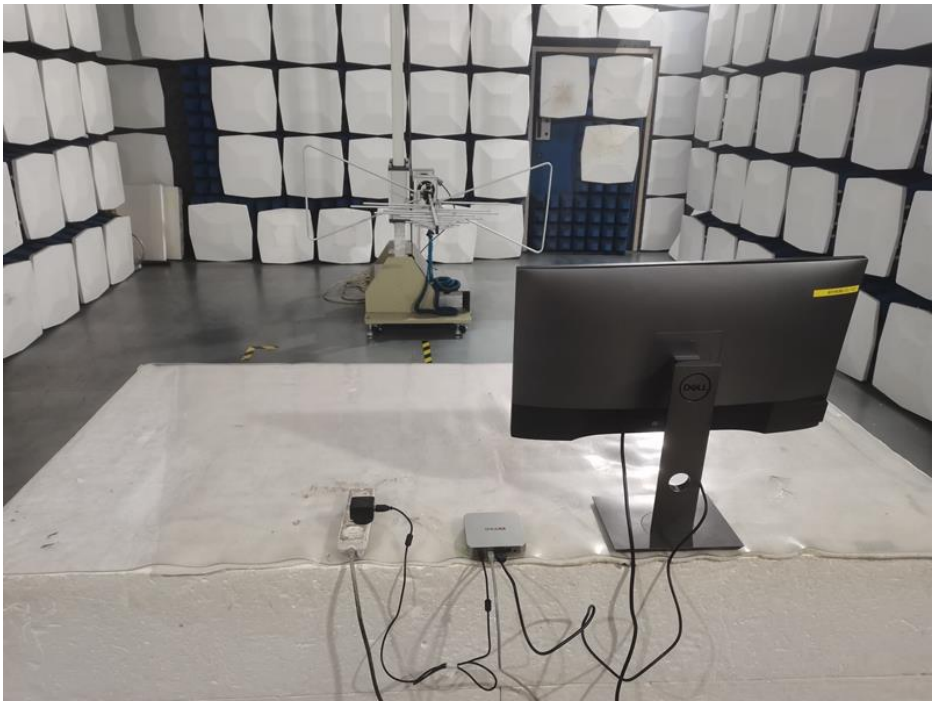
Radiated Emission Test Setup:



Photographs – EUT

Please refer test report TWN2506340-01E

End of the report

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