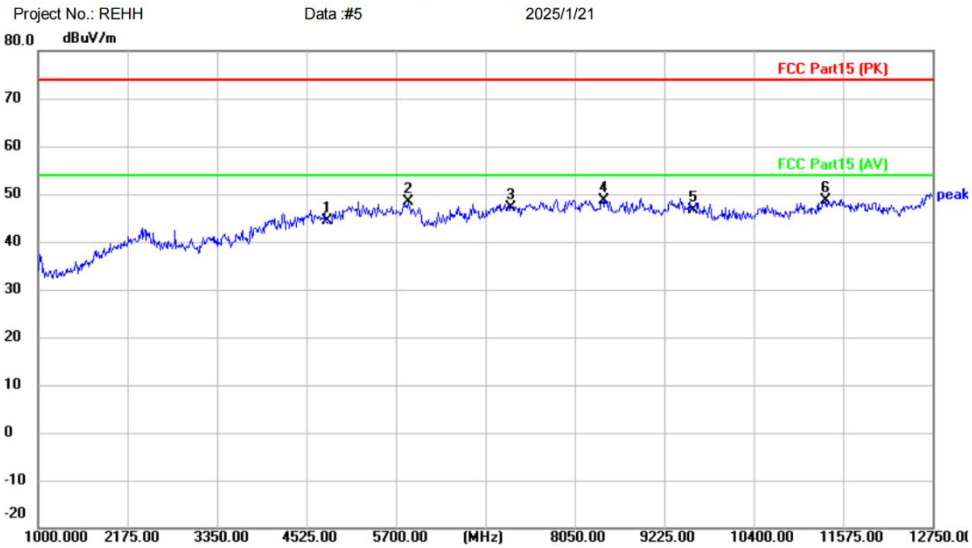
Remark: During the test, pre-scan the GFSK, pi/4DQPSK, 8DPSK mode, and found the GFSK mode which it is worse case.

Above 1GHz:

[Test mode: TX low channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: True Wireless Earbuds
M/N: Epic Open Sport
Mode: BT-TX-2402-L
Note:

Polarization: *Horizontal*
Power:

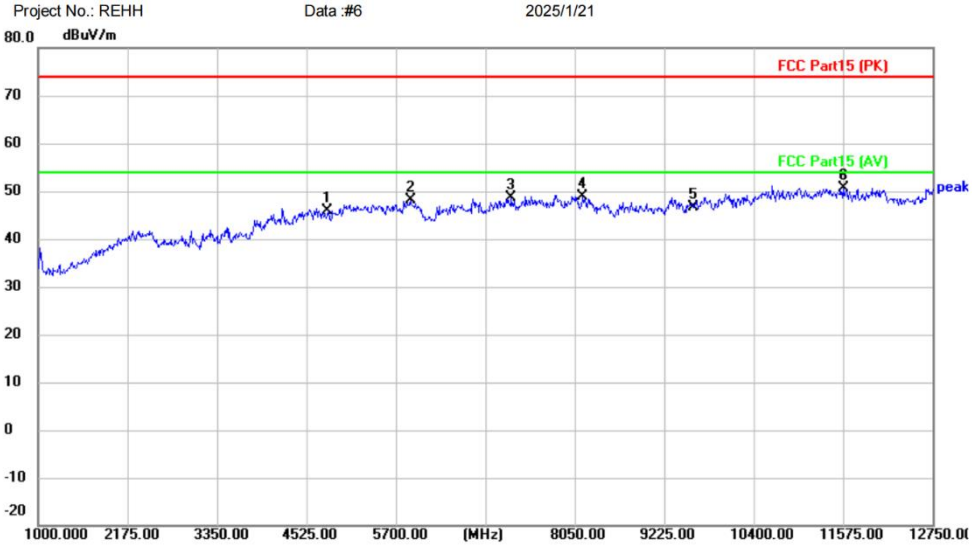
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4804.000	37.97	6.31	44.28	74.00	-29.72	peak	
2		5864.500	39.48	8.93	48.41	74.00	-25.59	peak	
3		7206.000	36.74	10.39	47.13	74.00	-26.87	peak	
4	*	8426.000	37.42	11.31	48.73	74.00	-25.27	peak	
5		9608.000	33.50	13.01	46.51	74.00	-27.49	peak	
6		11351.75	34.77	13.74	48.51	74.00	-25.49	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only
Receiver: ESR_1 Spectrum Analyzer: FSP40

Test Result: Pass

[Test mode: TX low channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: True Wireless Earbuds
M/N: Epic Open Sport
Mode: BT-TX-2402-L
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

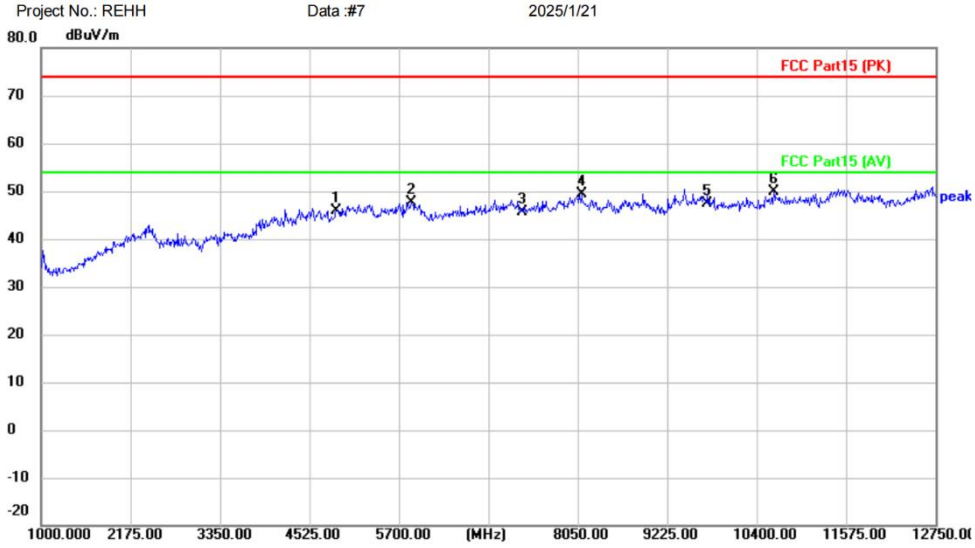
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4804.000	39.57	6.31	45.88	74.00	-28.12	peak	
2		5888.000	39.08	9.05	48.13	74.00	-25.87	peak	
3		7206.000	38.16	10.39	48.55	74.00	-25.45	peak	
4		8155.750	37.38	11.49	48.87	74.00	-25.13	peak	
5		9608.000	33.56	13.01	46.57	74.00	-27.43	peak	
6	*	11575.00	35.72	14.79	50.51	74.00	-23.49	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1 Spectrum Analyzer: FSP40

Test Result: Pass

[Test mode: TX middle channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: True Wireless Earbuds
M/N: Epic Open Sport
Mode: BT-TX-2441-L
Note:

Polarization: *Horizontal*
Power:

Temperature: (C)
Humidity: %RH

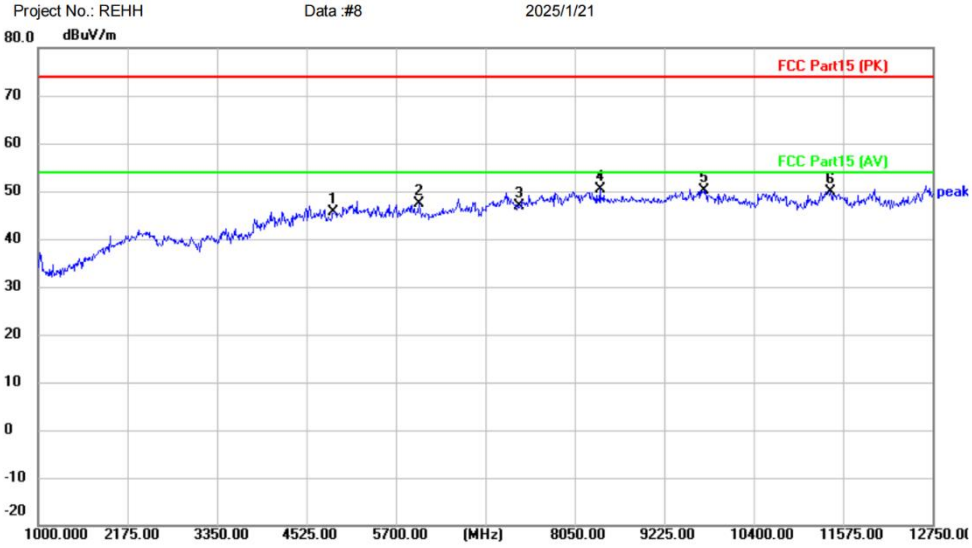
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4882.000	39.49	6.43	45.92	74.00	-28.08	peak	
2		5864.500	38.65	8.93	47.58	74.00	-26.42	peak	
3		7323.000	35.53	10.17	45.70	74.00	-28.30	peak	
4		8097.000	37.60	11.79	49.39	74.00	-24.61	peak	
5		9764.000	33.56	13.76	47.32	74.00	-26.68	peak	
6	*	10623.25	36.38	13.42	49.80	74.00	-24.20	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1 Spectrum Analyzer: FSP40

Test Result: Pass

[Test mode: TX middle channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: True Wireless Earbuds
M/N: Epic Open Sport
Mode: BT-TX-2441-L
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

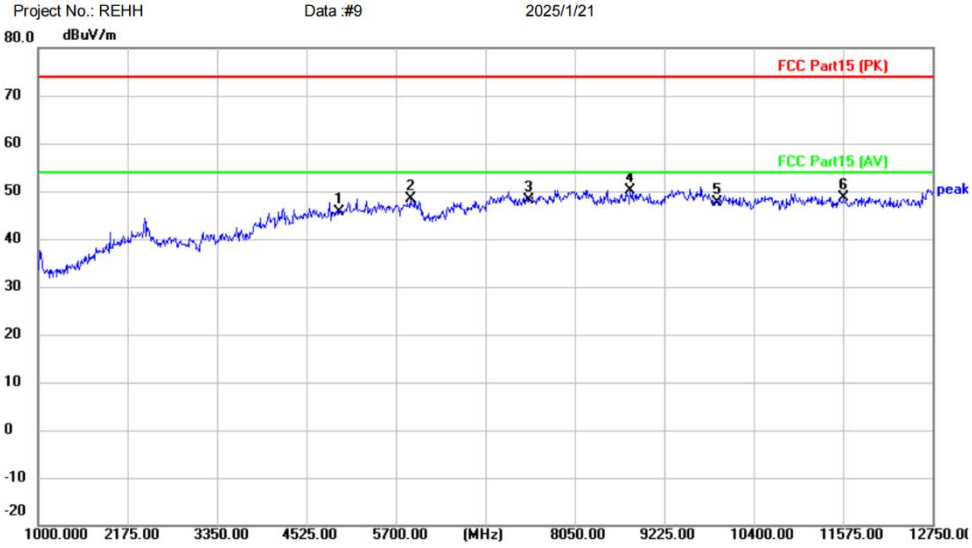
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4882.000	39.10	6.43	45.53	74.00	-28.47	peak	
2		6005.500	41.55	5.84	47.39	74.00	-26.61	peak	
3		7323.000	36.71	10.17	46.88	74.00	-27.12	peak	
4	*	8379.000	39.35	11.01	50.36	74.00	-23.64	peak	
5		9764.000	36.43	13.76	50.19	74.00	-23.81	peak	
6		11410.50	35.60	14.33	49.93	74.00	-24.07	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1 Spectrum Analyzer: FSP40

Test Result: Pass

[Test mode: TX High channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: True Wireless Earbuds
M/N: Epic Open Sport
Mode: BT-TX-2480-L
Note:

Polarization: *Horizontal*
Power:

Temperature: (C)
Humidity: %RH

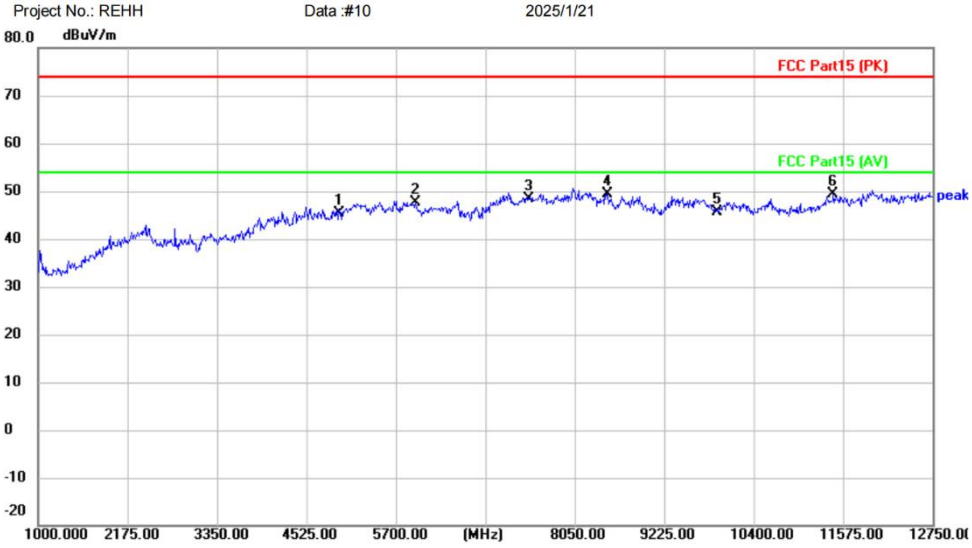
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4960.000	38.30	7.41	45.71	74.00	-28.29	peak	
2		5888.000	39.24	9.05	48.29	74.00	-25.71	peak	
3		7440.000	37.17	11.03	48.20	74.00	-25.80	peak	
4	*	8778.500	38.01	12.07	50.08	74.00	-23.92	peak	
5		9920.000	34.55	13.16	47.71	74.00	-26.29	peak	
6		11586.75	33.95	14.79	48.74	74.00	-25.26	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1 Spectrum Analyzer: FSP40

Test Result: Pass

[Test mode: TX High channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: True Wireless Earbuds
M/N: Epic Open Sport
Mode: BT-TX-2480-L
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4960.000	37.93	7.41	45.34	74.00	-28.66	peak	
2		5958.500	38.52	9.01	47.53	74.00	-26.47	peak	
3		7440.000	37.38	11.03	48.41	74.00	-25.59	peak	
4		8484.750	37.88	11.43	49.31	74.00	-24.69	peak	
5		9920.000	32.46	13.16	45.62	74.00	-28.38	peak	
6	*	11445.75	34.82	14.55	49.37	74.00	-24.63	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1 Spectrum Analyzer: FSP40

Test Result: Pass

6.11 Radiated emissions which fall in the restricted bands

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.10.5
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

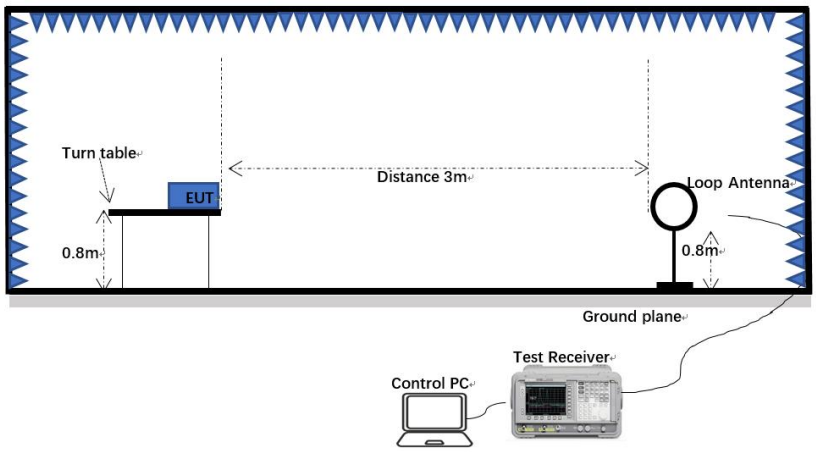
6.11.1 Limit

Frequency(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

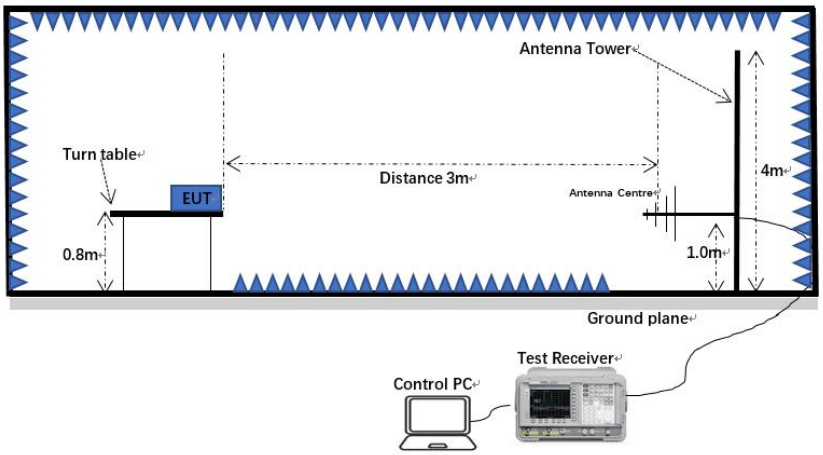
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

6.11.2 Test setup

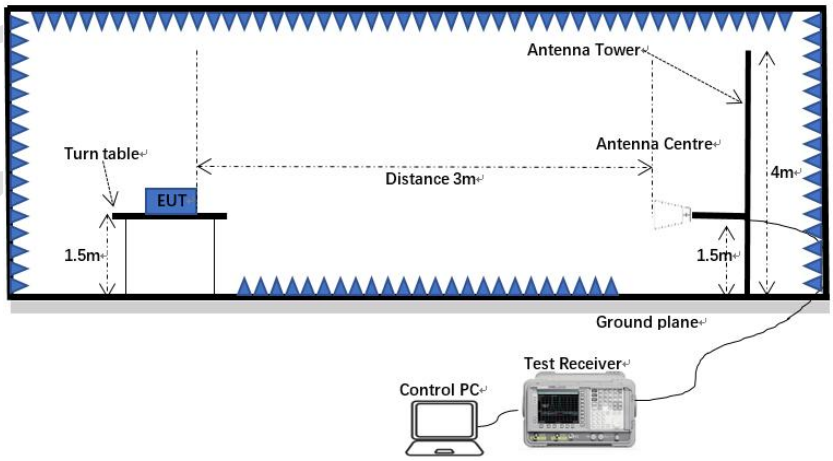
Below 1GHz：



30MHz-1GHz：



Above 1GHz：



6.11.3 Procedure

a) For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b) For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

c) The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

d) The antenna height 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.

e) 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

f) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

g) If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

h) Test the EUT in the lowest channel, the middle channel, the highest channel.

i) The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

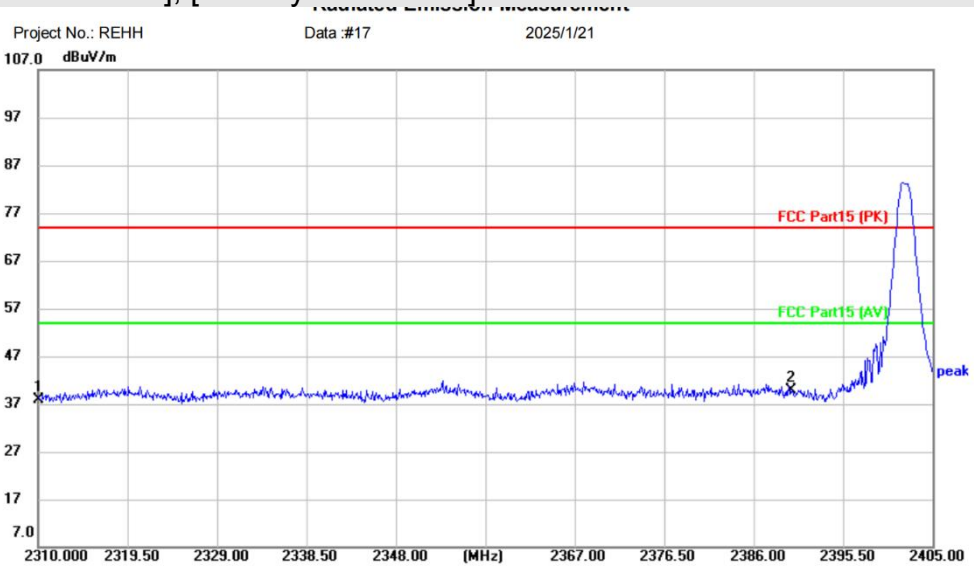
j) Repeat above procedures until all frequencies measured was complete.

Note 1: Level (dBuV) = Reading (dBuV) + Factor (dB/m)
Note 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report. all modes have been tested, and only the worst mode is showed in the report.

6.11.4 Test data

Remark: During the test, pre-scan the GFSK, pi/4DQPSK, 8DPSK mode, and found the GFSK mode which it is worse case.

[Test mode: TX low channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: True Wireless Earbuds
M/N: Epic Open Sport
Mode: BT-2402-L
Note:

Polarization: *Horizontal*
Power:

Temperature: (C)
Humidity: %RH

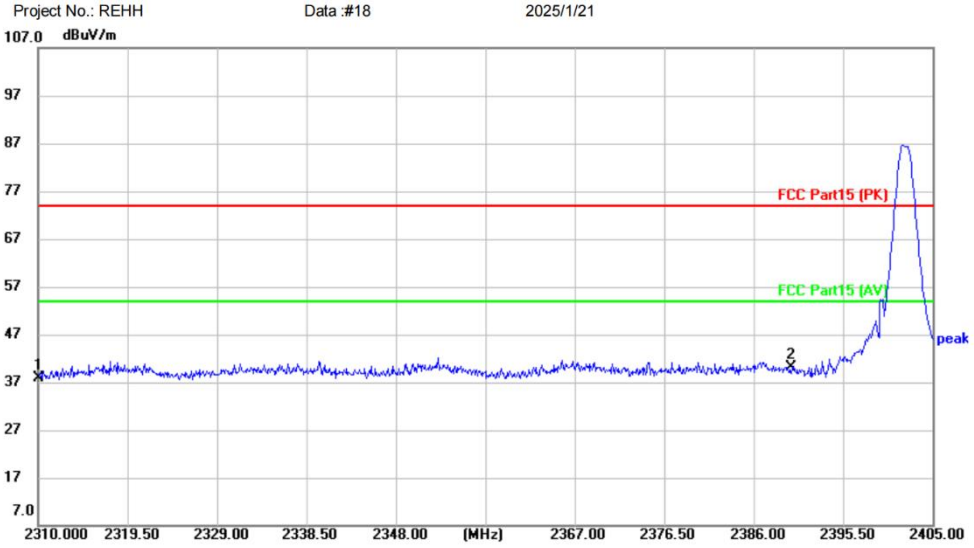
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2310.000	40.84	-2.87	37.97	74.00	-36.03	peak	
2	*	2390.000	42.41	-2.44	39.97	74.00	-34.03	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1 Spectrum Analyzer: FSP40

Test Result: Pass

[Test mode:TX low channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: True Wireless Earbuds
M/N: Epic Open Sport
Mode: BT-2402-L
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

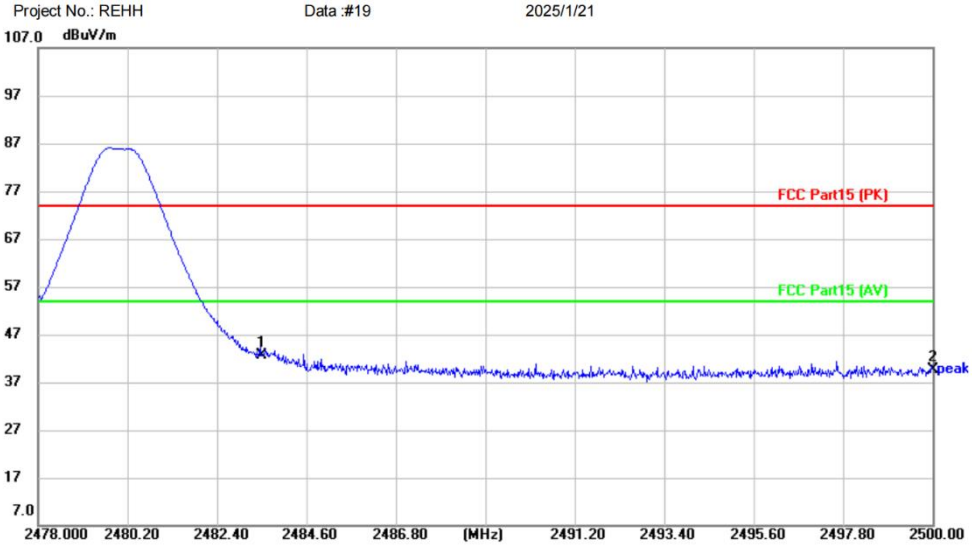
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2310.000	40.68	-2.87	37.81	74.00	-36.19	peak	
2	*	2390.000	42.47	-2.44	40.03	74.00	-33.97	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1 Spectrum Analyzer: FSP40

Test Result: Pass

[Test mode: TX High channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: True Wireless Earbuds
M/N: Epic Open Sport
Mode: BT-2480-L
Note:

Polarization: *Horizontal*
Power:

Temperature: (C)
Humidity: %RH

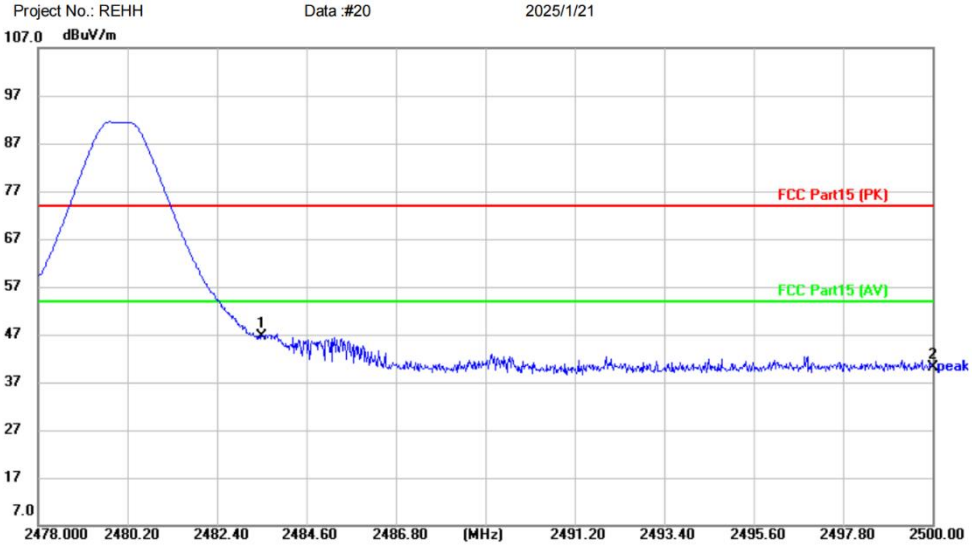
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2483.500	45.66	-2.91	42.75	74.00	-31.25	peak	
2		2500.000	42.66	-3.00	39.66	74.00	-34.34	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1 Spectrum Analyzer: FSP40

Test Result: Pass

[Test mode:TX High channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: True Wireless Earbuds
M/N: Epic Open Sport
Mode: BT-2480-L
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2483.500	49.46	-2.91	46.55	74.00	-27.45	peak	
2		2500.000	43.03	-3.00	40.03	74.00	-33.97	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1 Spectrum Analyzer: FSP40

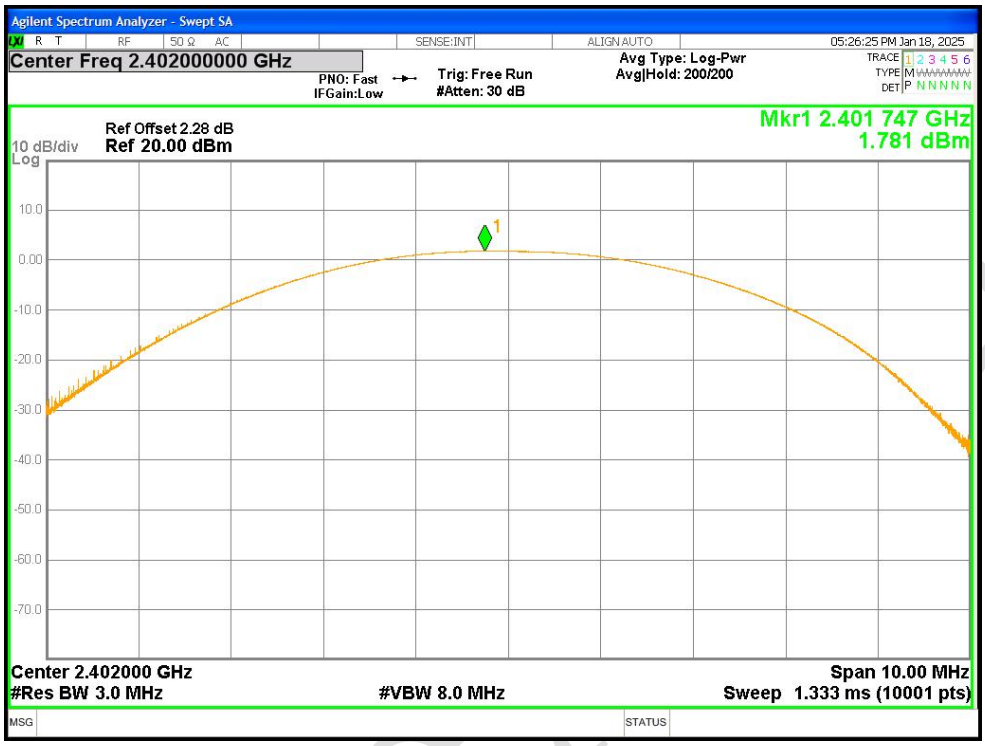
Test Result: Pass

7 Appendix A

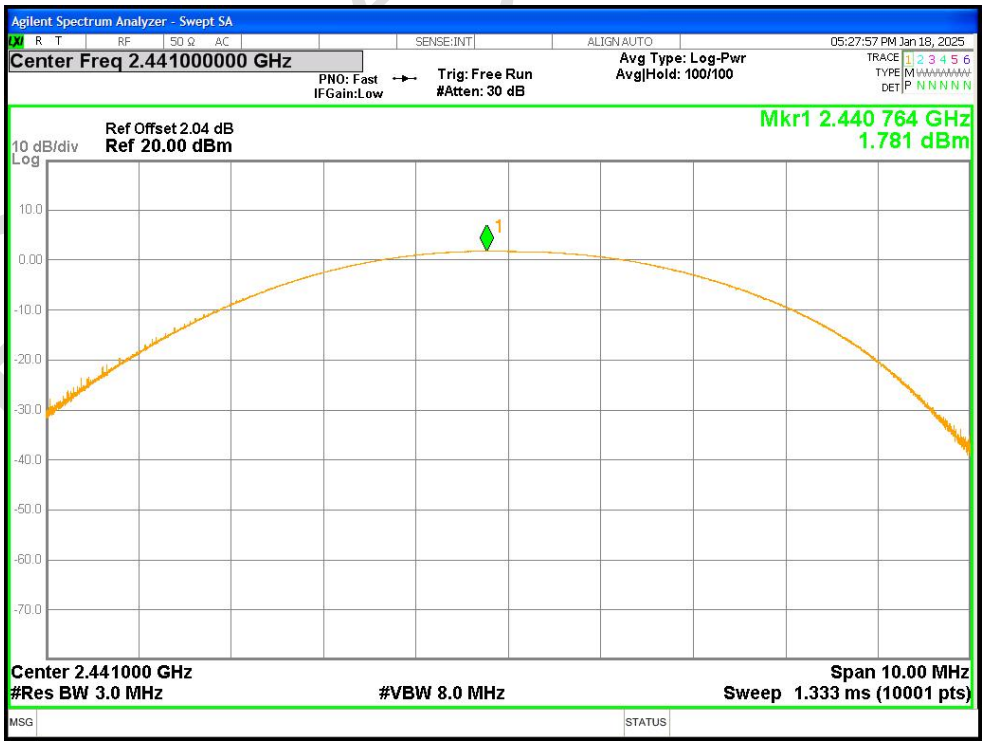
7.1 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	1.781	21	Pass
NVNT	1-DH1	2441	Ant1	1.781	21	Pass
NVNT	1-DH1	2480	Ant1	2.437	21	Pass
NVNT	2-DH1	2402	Ant1	2.64	21	Pass
NVNT	2-DH1	2441	Ant1	2.592	21	Pass
NVNT	2-DH1	2480	Ant1	3.289	21	Pass
NVNT	3-DH1	2402	Ant1	3.213	21	Pass
NVNT	3-DH1	2441	Ant1	3.21	21	Pass
NVNT	3-DH1	2480	Ant1	3.815	21	Pass

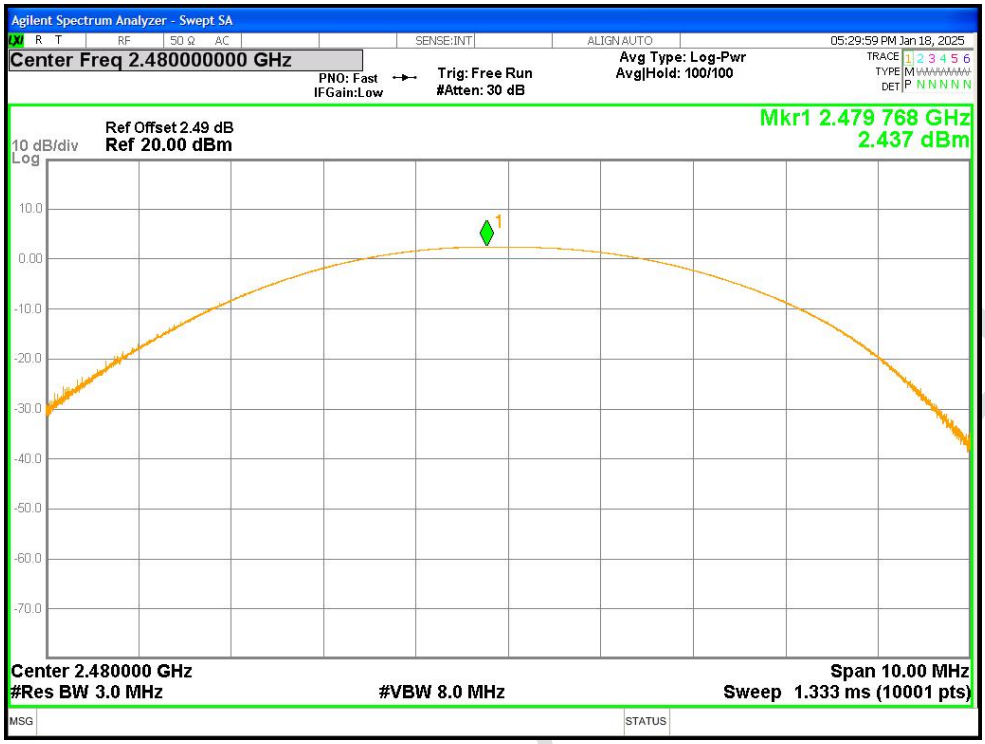
Power NVNT 1-DH1 2402MHz Ant1



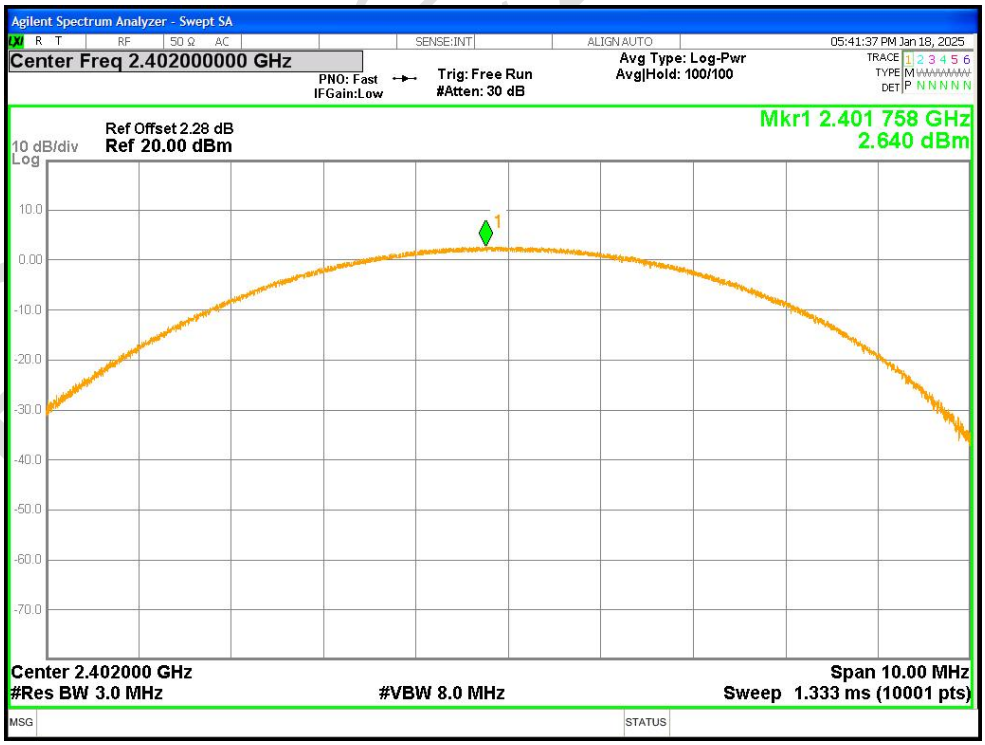
Power NVNT 1-DH1 2441MHz Ant1



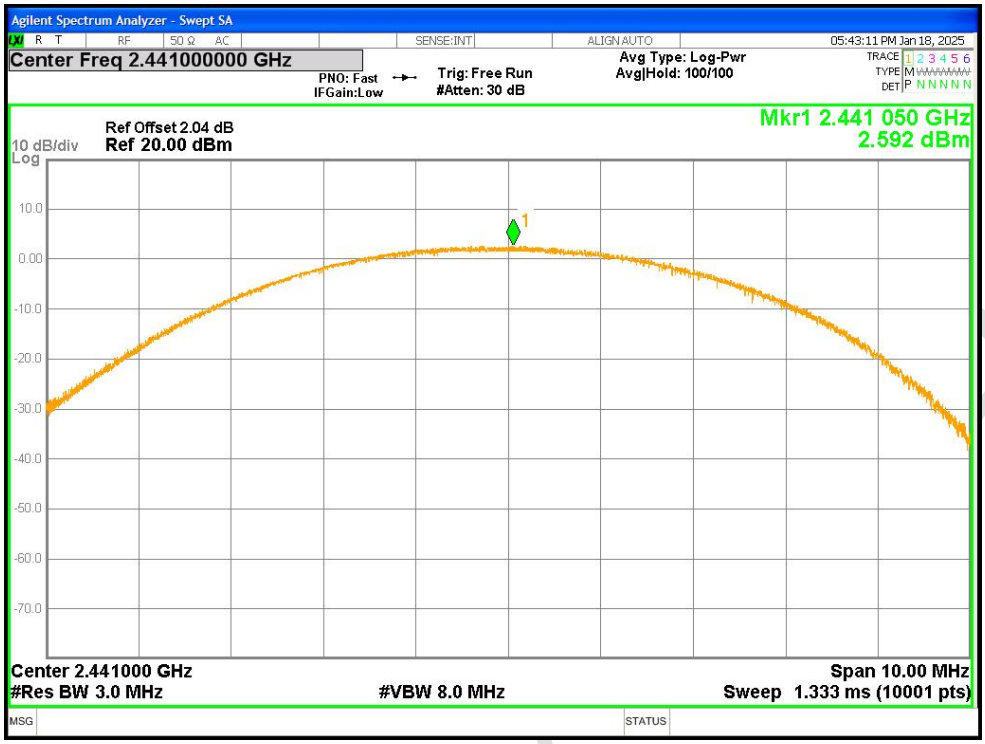
Power NVNT 1-DH1 2480MHz Ant1



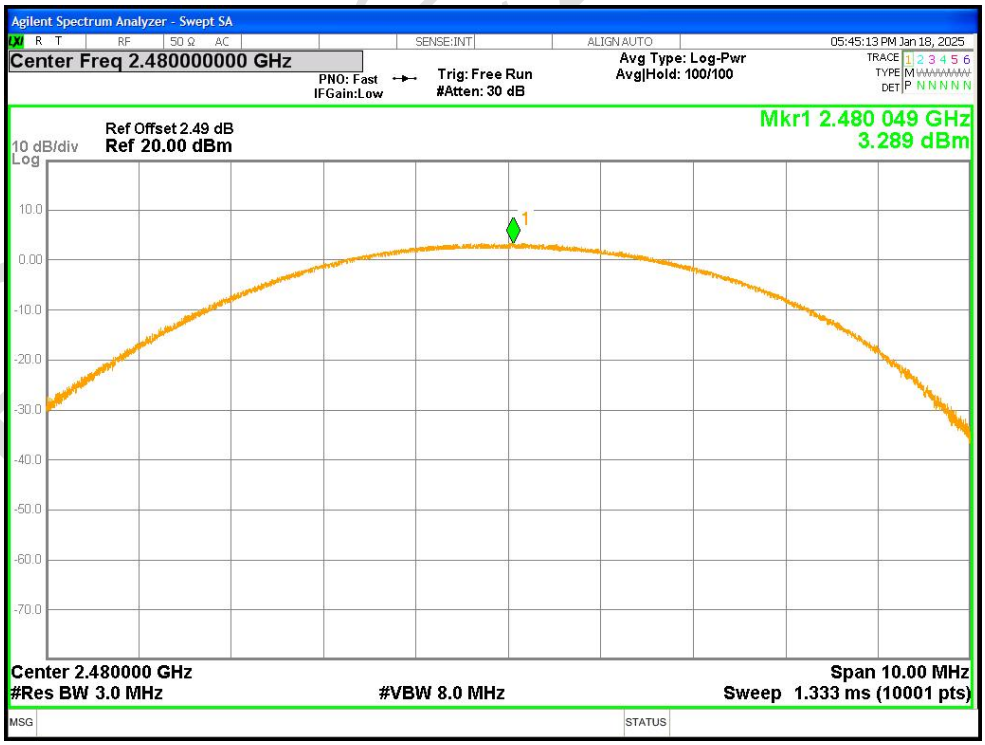
Power NVNT 2-DH1 2402MHz Ant1



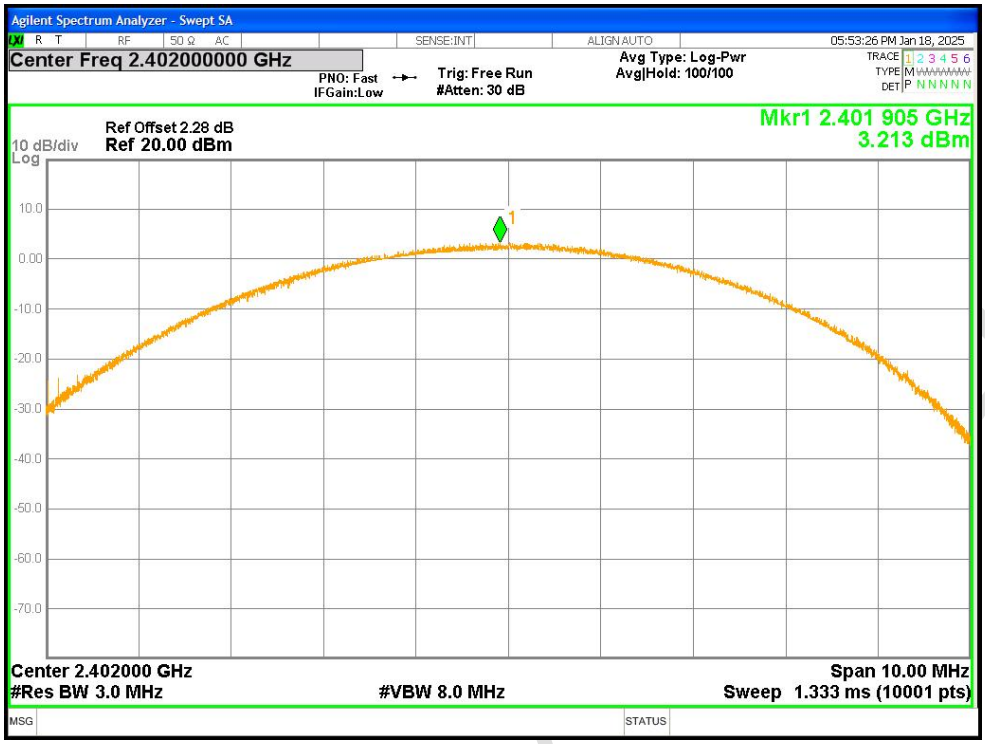
Power NVNT 2-DH1 2441MHz Ant1



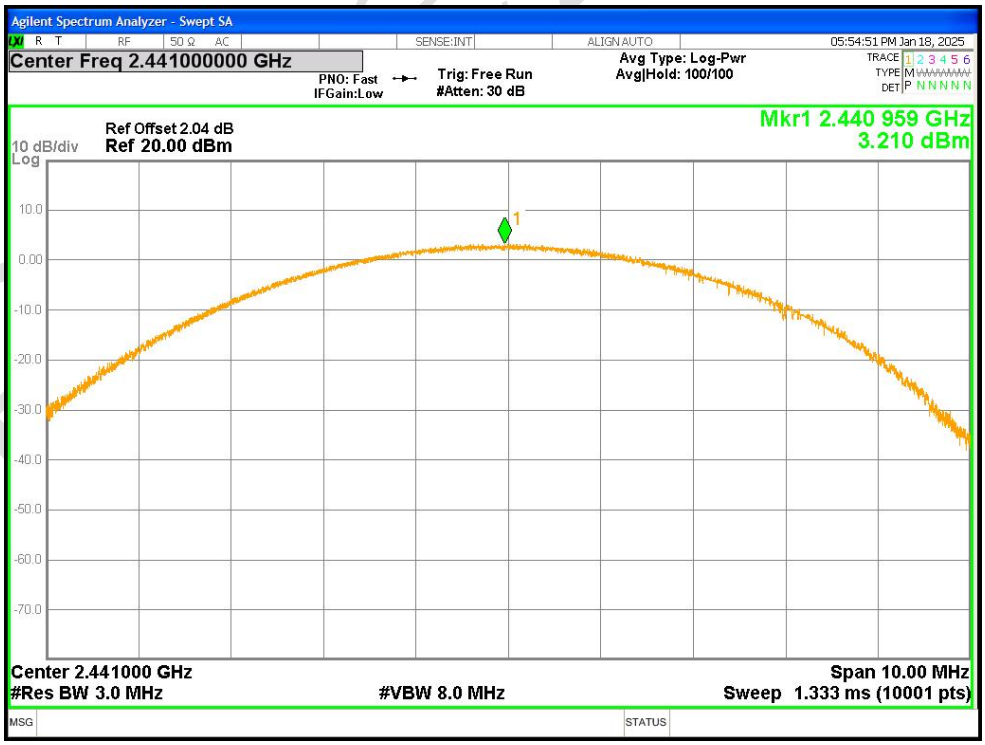
Power NVNT 2-DH1 2480MHz Ant1



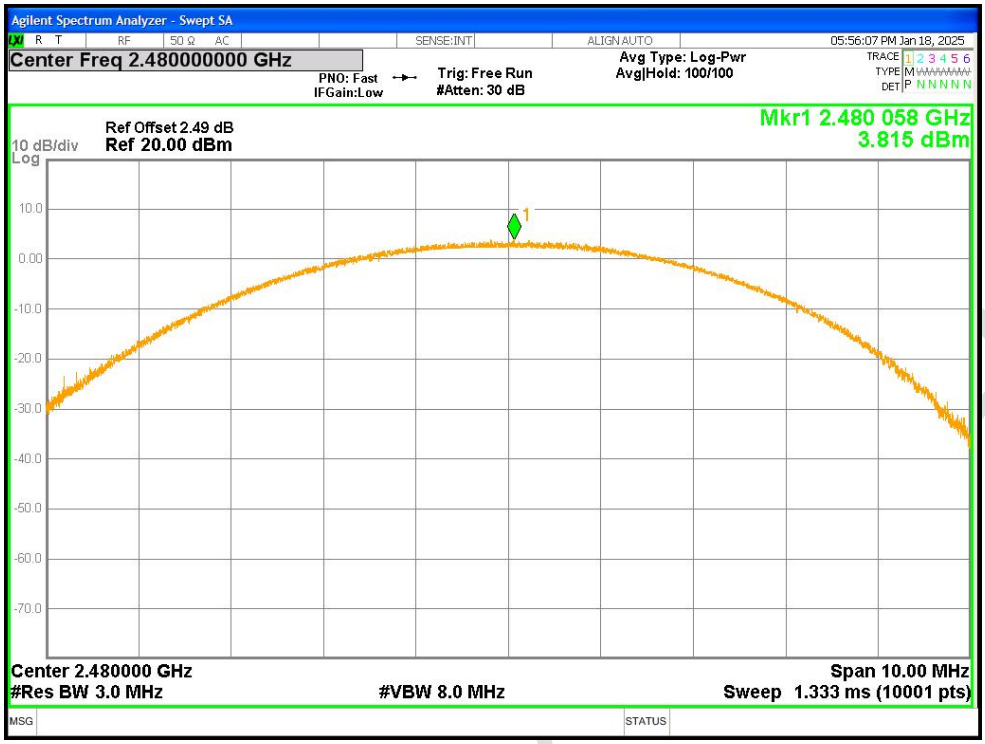
Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



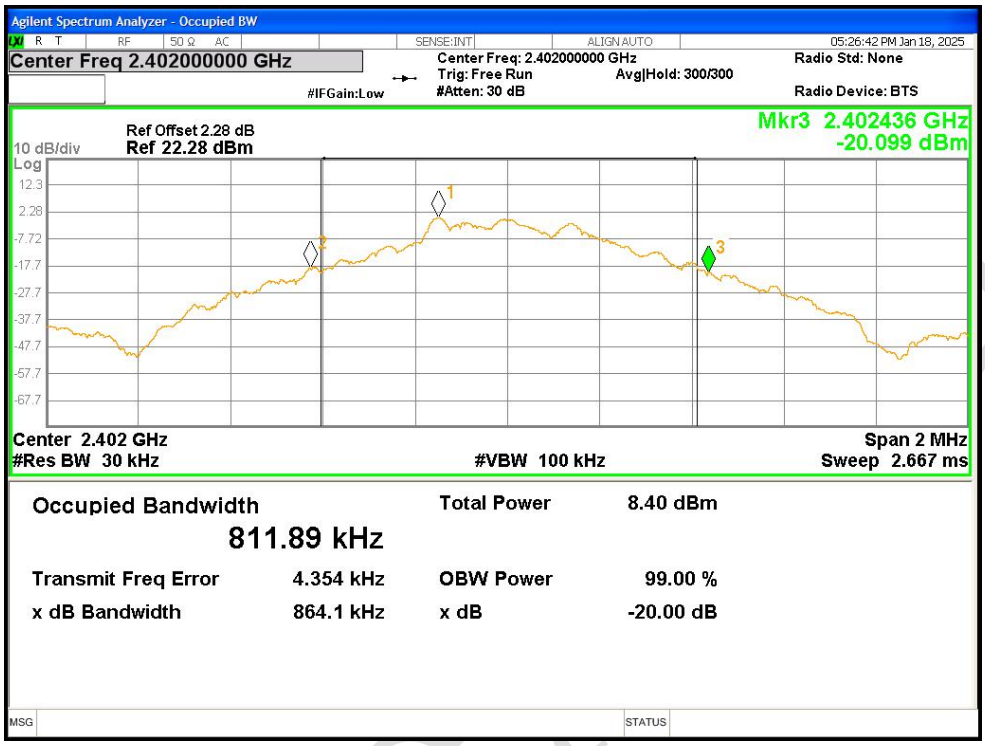
Power NVNT 3-DH1 2480MHz Ant1



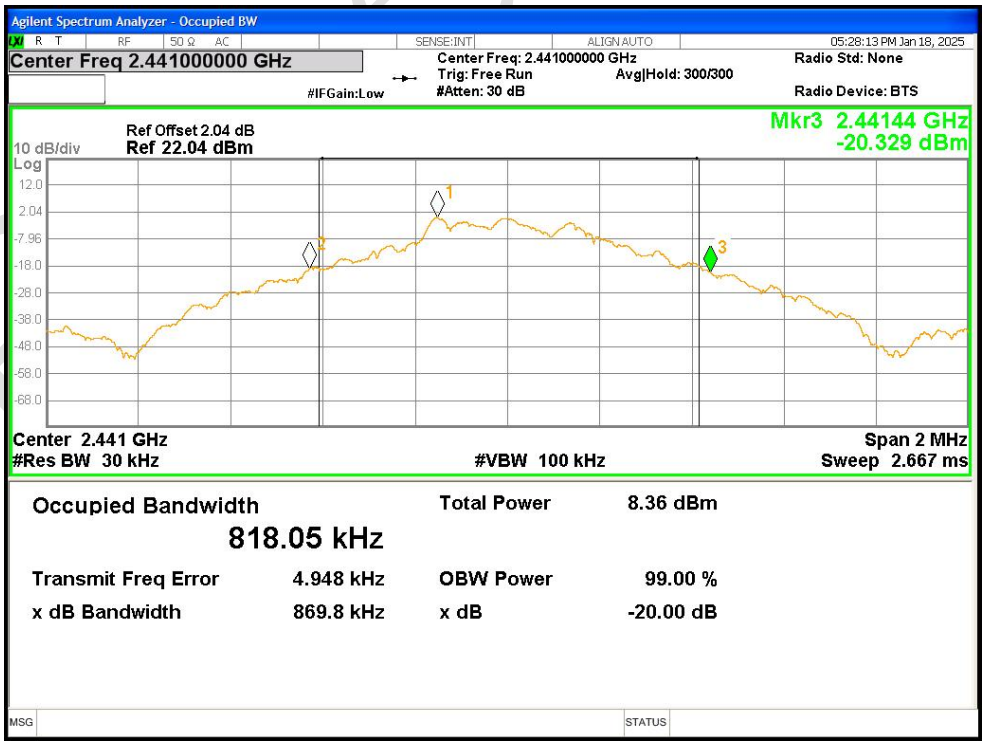
7.2 -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.864	N/A	Pass
NVNT	1-DH1	2441	Ant1	0.87	N/A	Pass
NVNT	1-DH1	2480	Ant1	0.874	N/A	Pass
NVNT	2-DH1	2402	Ant1	1.24	N/A	Pass
NVNT	2-DH1	2441	Ant1	1.244	N/A	Pass
NVNT	2-DH1	2480	Ant1	1.248	N/A	Pass
NVNT	3-DH1	2402	Ant1	1.241	N/A	Pass
NVNT	3-DH1	2441	Ant1	1.233	N/A	Pass
NVNT	3-DH1	2480	Ant1	1.237	N/A	Pass

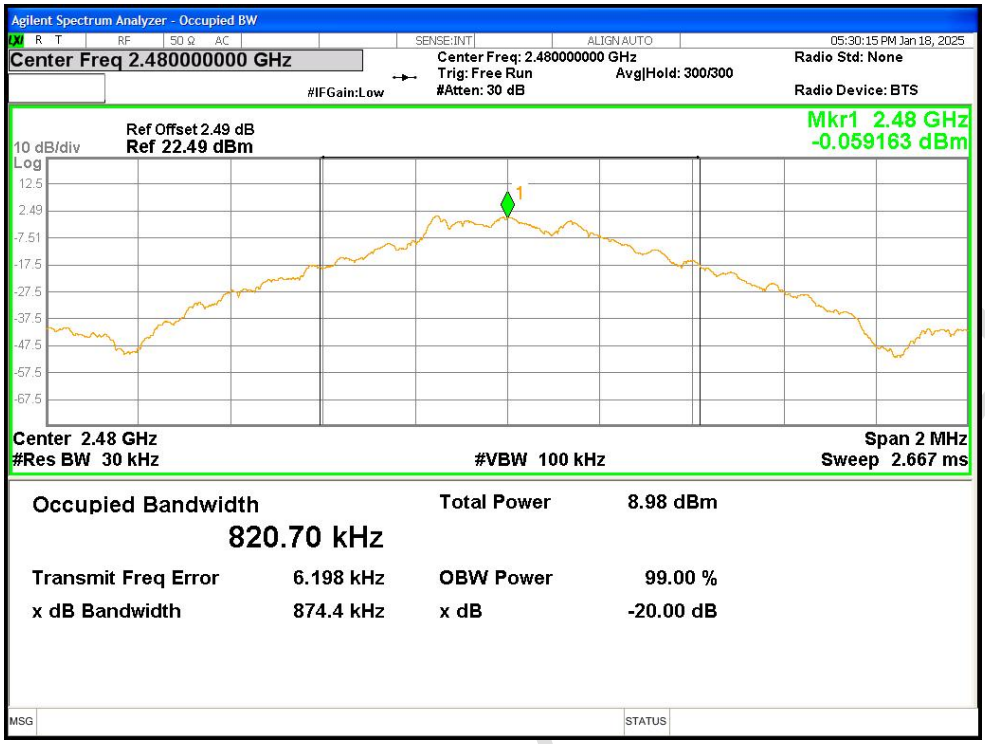
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



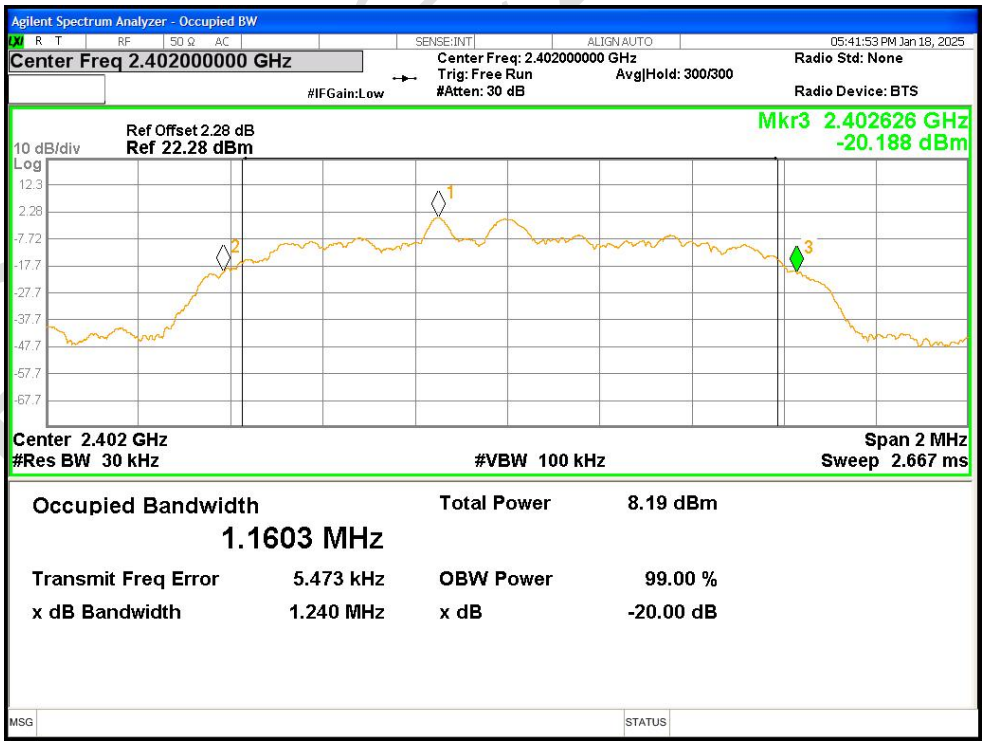
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



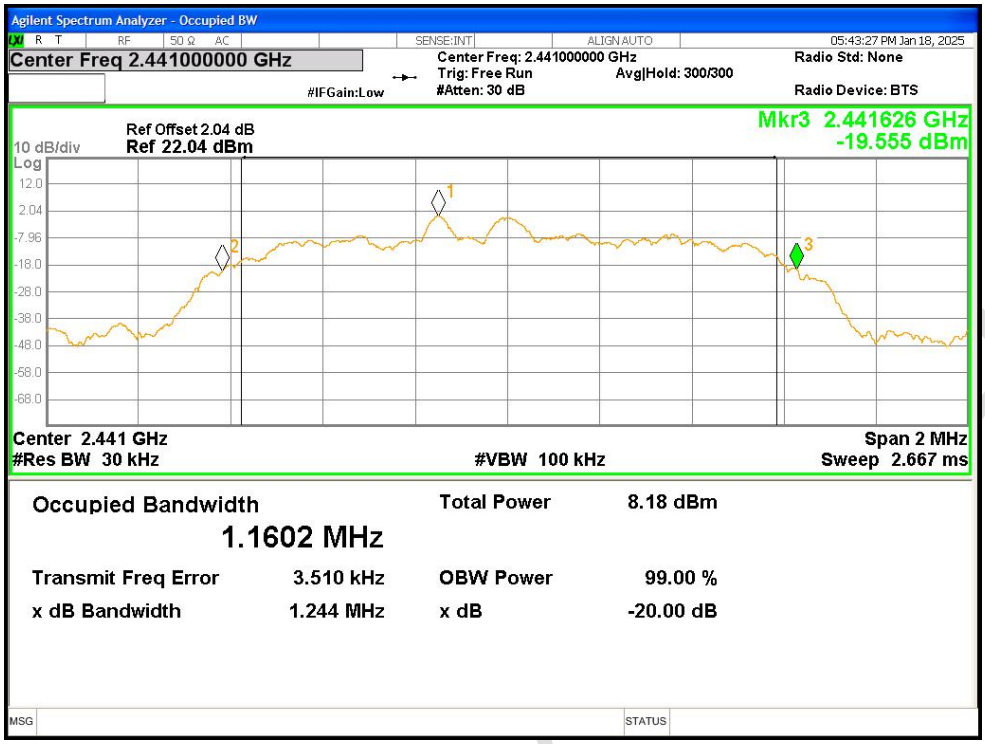
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



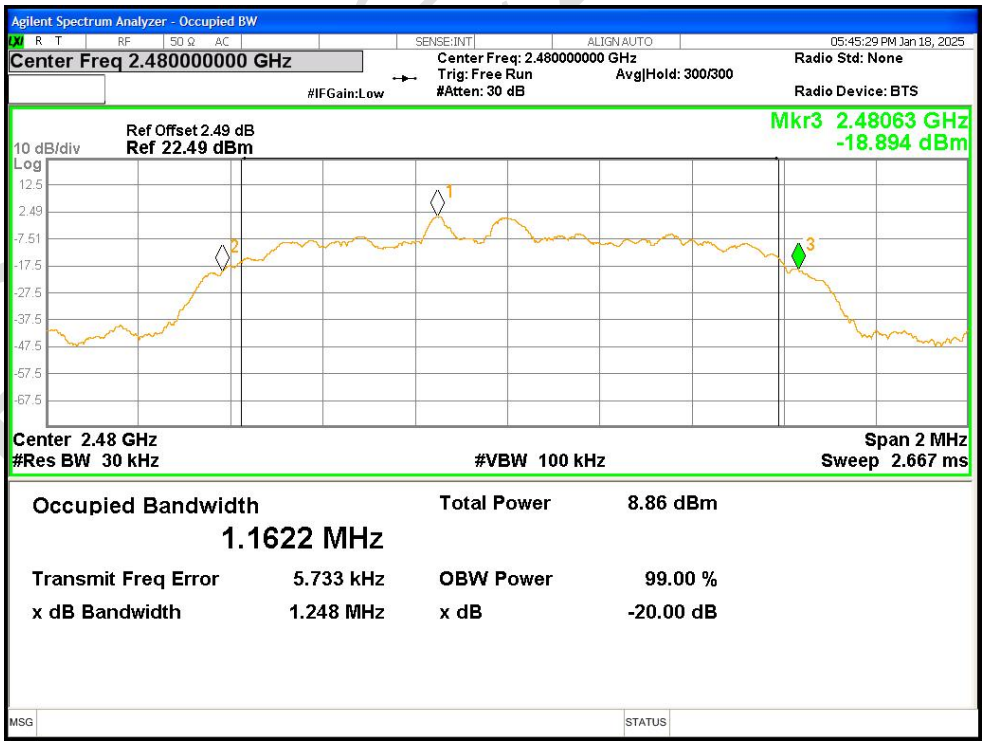
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



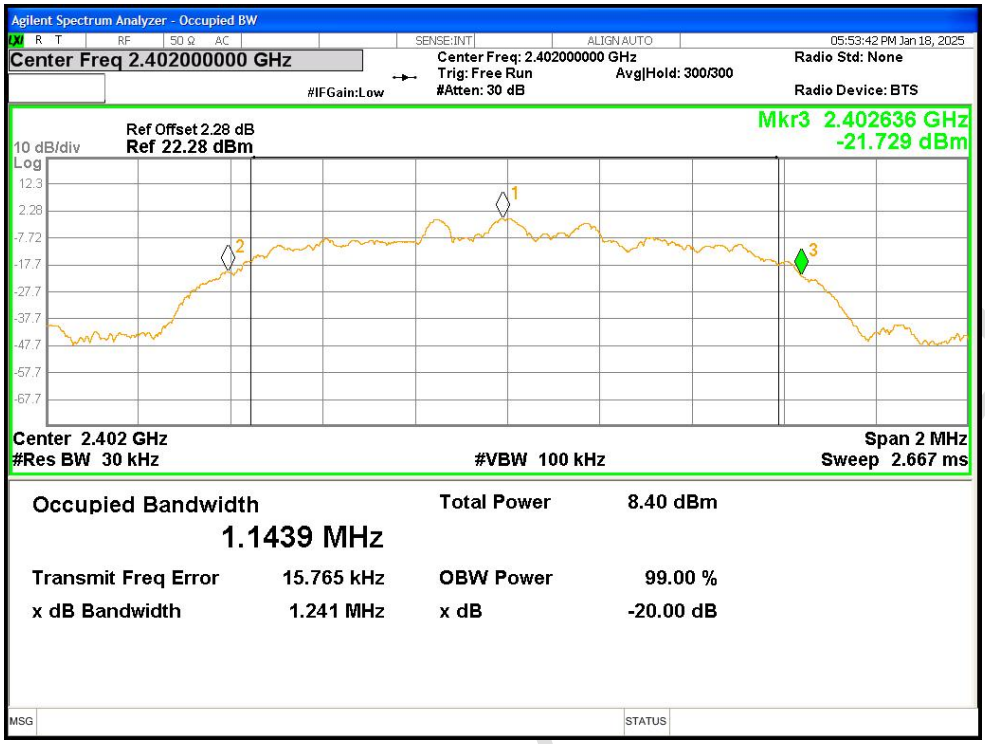
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



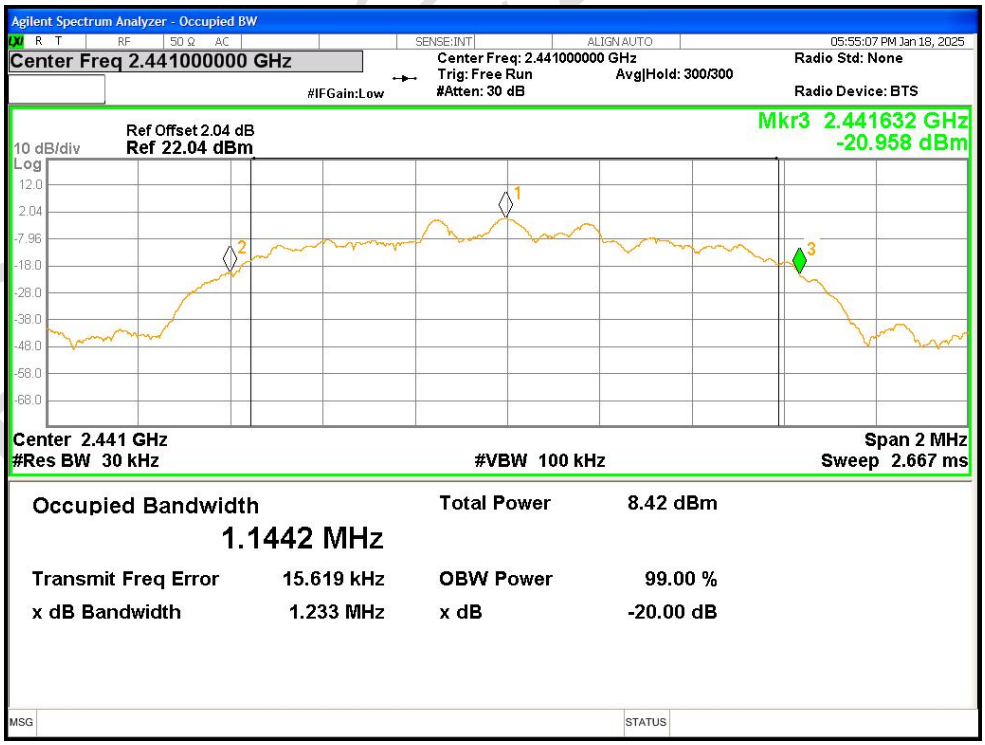
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1



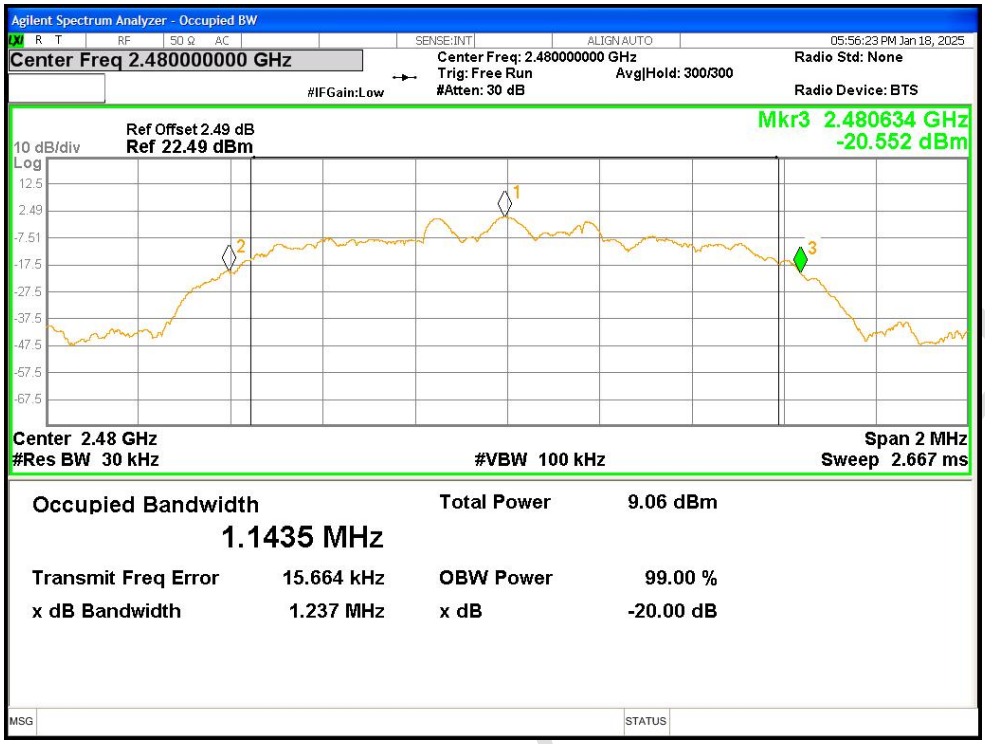
-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



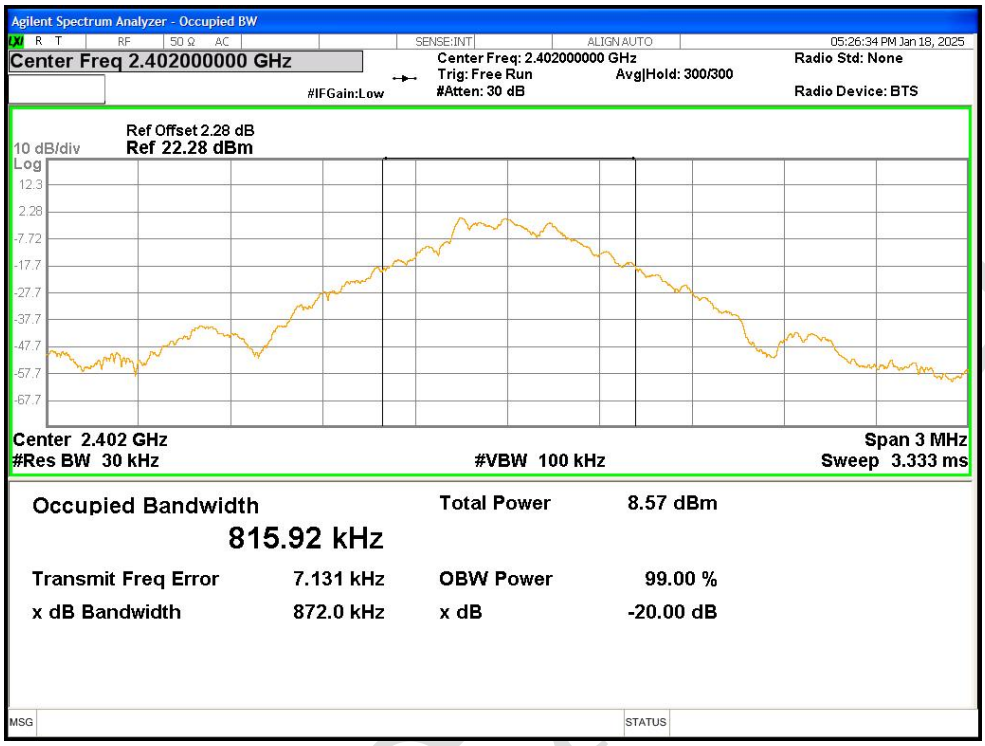
-20dB Bandwidth NVNT 3-DH1 2480MHz Ant1



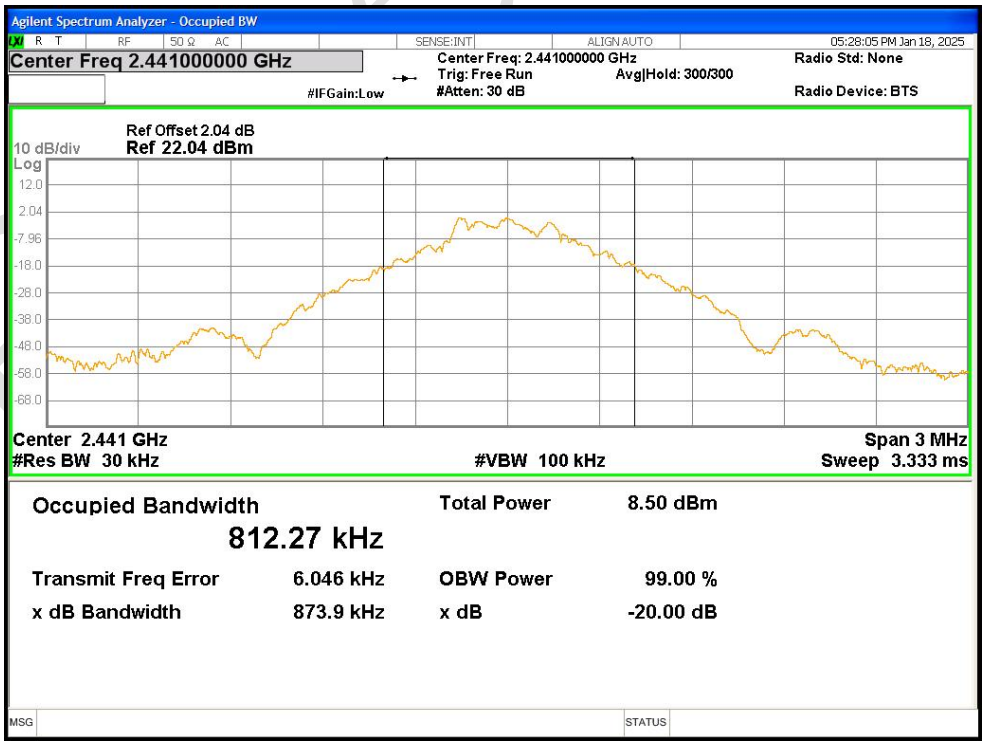
7.3 Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.81592
NVNT	1-DH1	2441	Ant1	0.81227
NVNT	1-DH1	2480	Ant1	0.81750
NVNT	2-DH1	2402	Ant1	1.1616
NVNT	2-DH1	2441	Ant1	1.1618
NVNT	2-DH1	2480	Ant1	1.1631
NVNT	3-DH1	2402	Ant1	1.1475
NVNT	3-DH1	2441	Ant1	1.1456
NVNT	3-DH1	2480	Ant1	1.1443

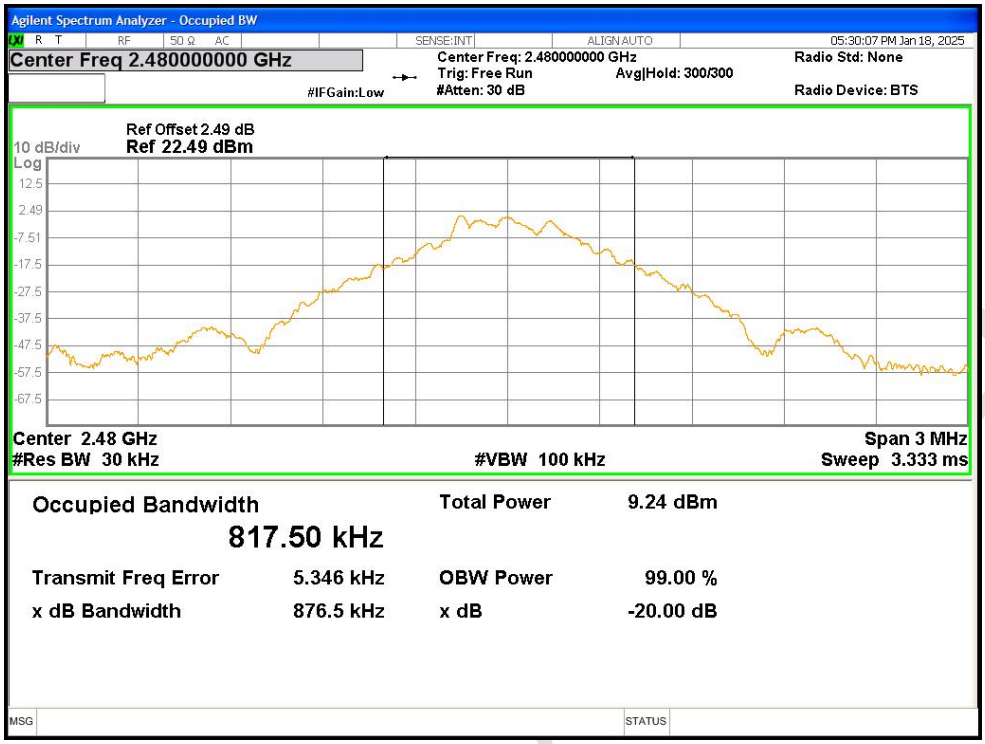
OBW NVNT 1-DH1 2402MHz Ant1



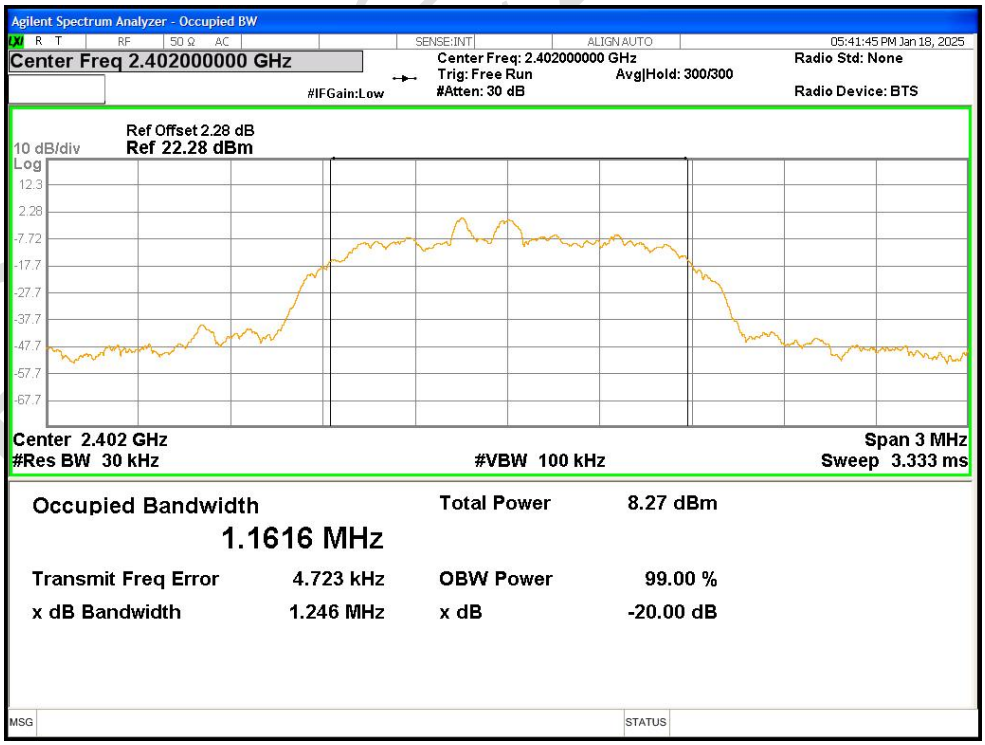
OBW NVNT 1-DH1 2441MHz Ant1



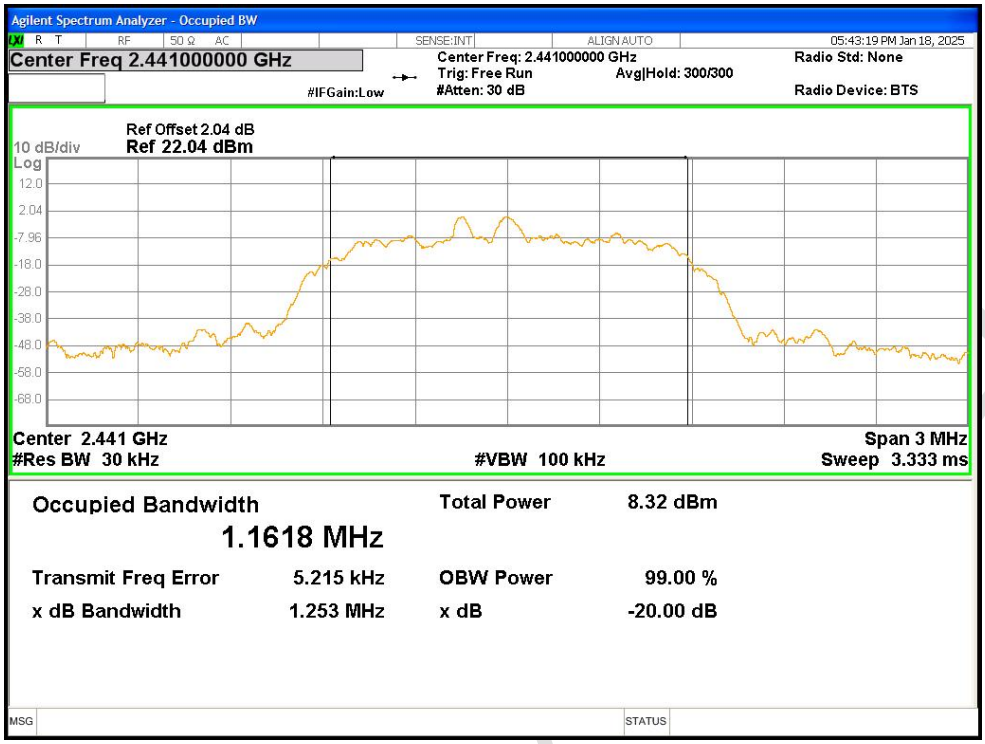
OBW NVNT 1-DH1 2480MHz Ant1



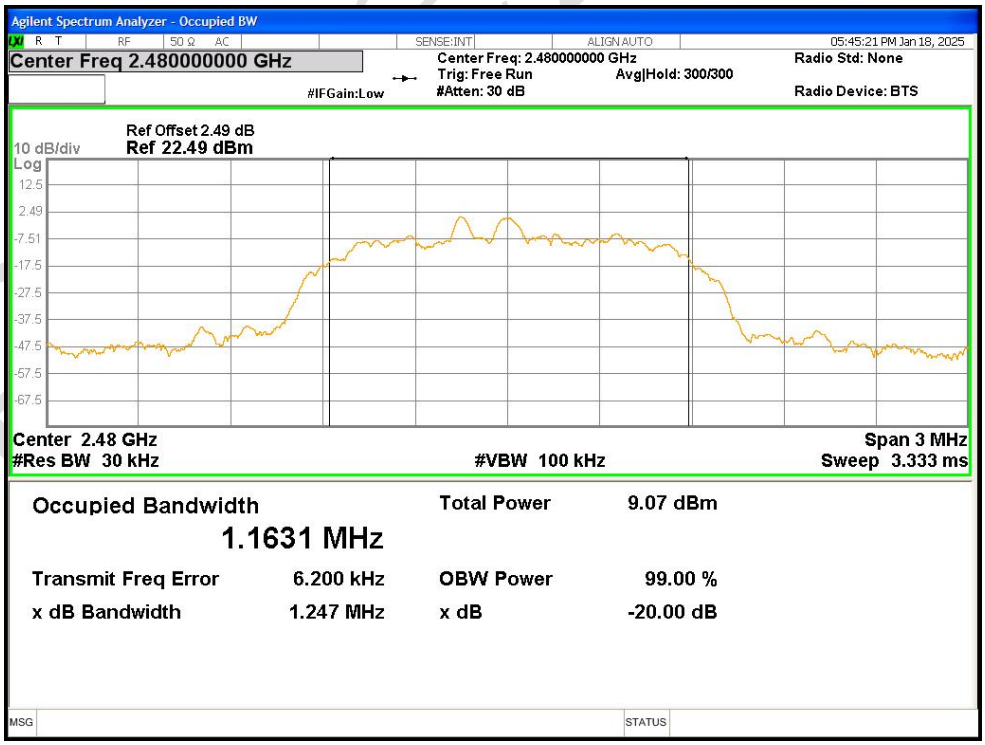
OBW NVNT 2-DH1 2402MHz Ant1



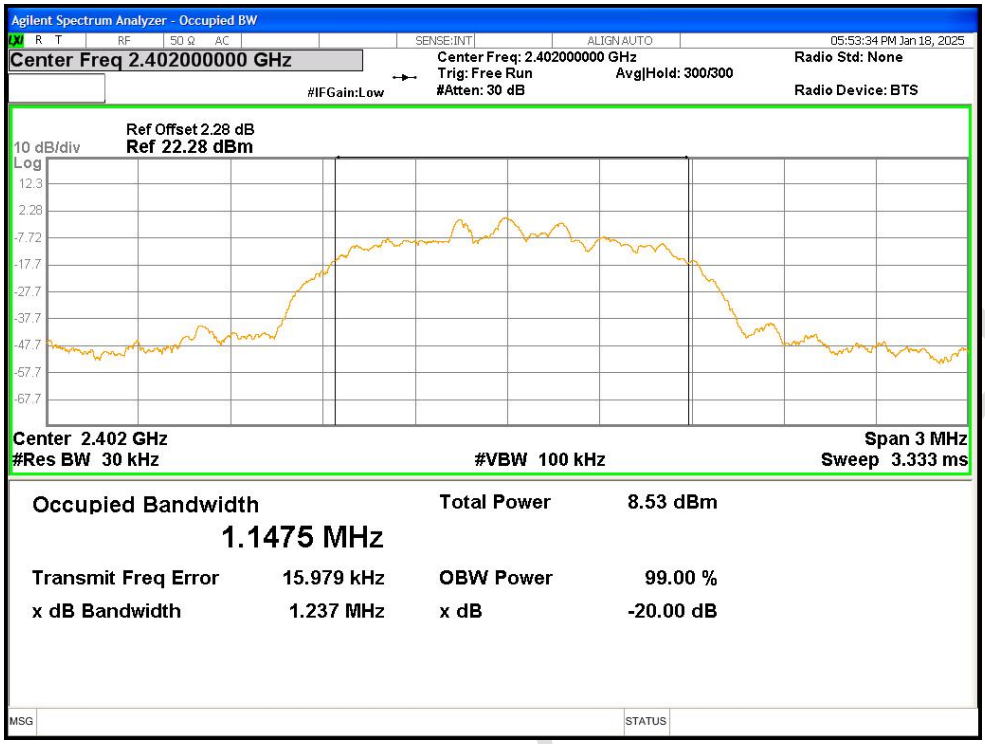
OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1



OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1