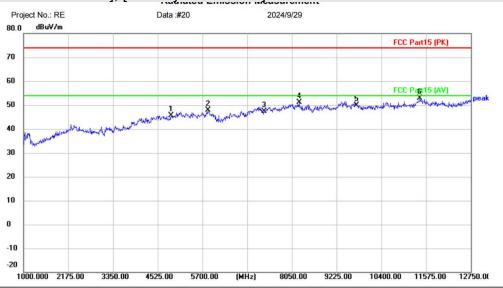


# [Test mode: TX middle channel]; [Polarity: Horizontal]



Site

Limit: FCC Part15 (PK)
EUT: Bluetooth headphones

M/N: NU-TV002 Mode: BT TX 2441

Note:

Polarization:	Horizontal	Temperature:	(C)
Power:		Humidity:	%RH

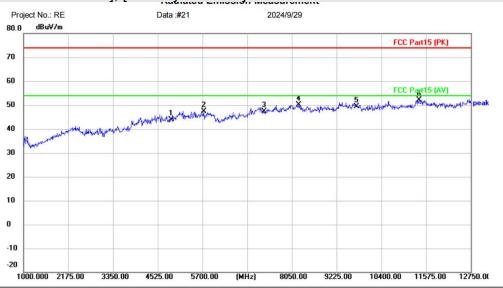
No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4882.000	39.15	6.43	45.58	74.00	-28.42	peak	
2		5841.000	39.00	8.89	47.89	74.00	-26.11	peak	
3		7323.000	37.14	10.17	47.31	74.00	-26.69	peak	
4		8238.000	39.77	11.26	51.03	74.00	-22.97	peak	
5		9764.000	36.02	13.76	49.78	74.00	-24.22	peak	
6	*	11410.50	38.09	14.88	52.97	74.00	-21.03	peak	

\*:Maximum data x:Over limit !:over margin

Receiver: ESR\_1 Spectrum Analyzer: FSP40



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



Site

Limit: FCC Part15 (PK) EUT: Bluetooth headphones

M/N: NU-TV002 Mode: BT TX 2441

Note:

Polarization:	Vertical	Temperature:	(C)
Power:		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	37.44	6.43	43.87	74.00	-30.13	peak	
2		5735.250	39.16	8.32	47.48	74.00	-26.52	peak	
3		7323.000	37.25	10.17	47.42	74.00	-26.58	peak	
4		8226.250	38.86	11.34	50.20	74.00	-23.80	peak	
5		9764.000	35.58	13.76	49.34	74.00	-24.66	peak	
6	*	11387.00	37.43	14.69	52.12	74.00	-21.88	peak	

\*:Maximum data x:Over limit !:over margin

Receiver: ESR\_1 Spectrum Analyzer: FSP40

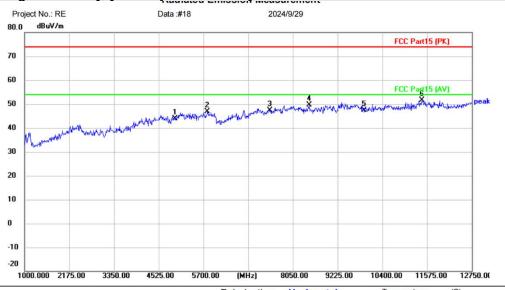
**Test Result: Pass** 

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



Site

Limit: FCC Part15 (PK)
EUT: Bluetooth headphones

M/N: NU-TV002 Mode: BT TX 2480

Note:

Polarization:	Horizontal	Temperature:	(C)
Power:		Humidity:	%RH

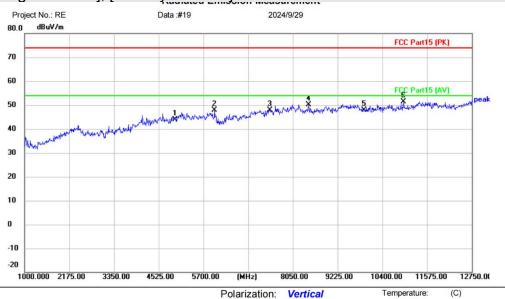
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4960.000	36.52	7.41	43.93	74.00	-30.07	peak	
2		5805.750	37.83	9.00	46.83	74.00	-27.17	peak	
3		7440.000	36.25	11.03	47.28	74.00	-26.72	peak	
4		8484.750	38.08	11.43	49.51	74.00	-24.49	peak	
5		9920.000	34.24	13.16	47.40	74.00	-26.60	peak	
6	*	11434.00	36.68	15.01	51.69	74.00	-22.31	peak	

\*:Maximum data x:Over limit !:over margin

Receiver: ESR\_1 Spectrum Analyzer: FSP40



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



Site

Limit: FCC Part15 (PK)
EUT: Bluetooth headphones

M/N: NU-TV002 Mode: BT TX 2480

Note:

Polarization:	Vertical	Temperature:	(C
Power:		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	36.41	7.41	43.82	74.00	-30.18	peak	
2		5993.750	38.98	8.96	47.94	74.00	-26.06	peak	
3		7440.000	36.94	11.03	47.97	74.00	-26.03	peak	
4		8461.250	38.55	11.47	50.02	74.00	-23.98	peak	
5		9920.000	34.64	13.16	47.80	74.00	-26.20	peak	
6	*	10952.25	37.49	13.81	51.30	74.00	-22.70	peak	

\*:Maximum data x:Over limit !:over margin

Receiver: ESR\_1 Spectrum Analyzer: FSP40



### 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

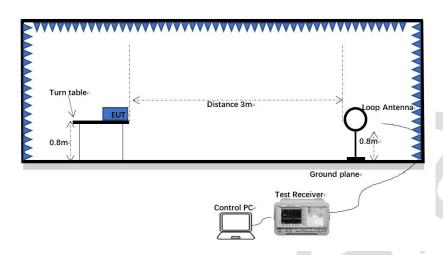
Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

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.

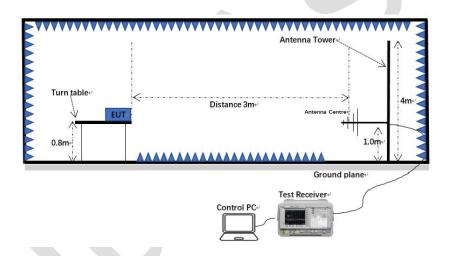


### 6.11.2 Test setup

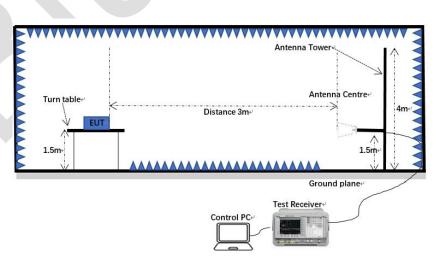
### Below 1GHz:



### 30MHz-1GHz:



### Above 1GHz:



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Page 37 of 82

#### 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.

Humidity:

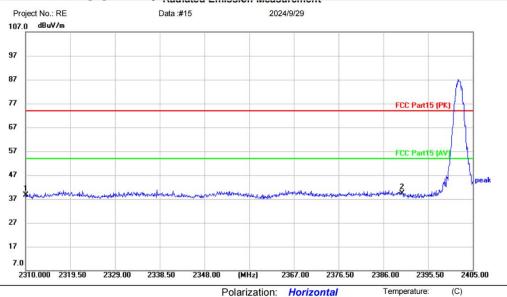
%RH



#### 6.11.4 Test data

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

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



Limit: FCC Part15 (PK)

EUT: Bluetooth headphones

M/N: NU-TV002 Mode: BT TX 2402

Note:

Site

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2310.000	41.47	-2.87	38.60	74.00	-35.40	peak	
2	*	2390.000	41.84	-2.44	39.40	74.00	-34.60	peak	

Power:

\*:Maximum data x:Over limit !:over margin

Receiver: ESR\_1 Spectrum Analyzer: FSP40

**Test Result: Pass** 

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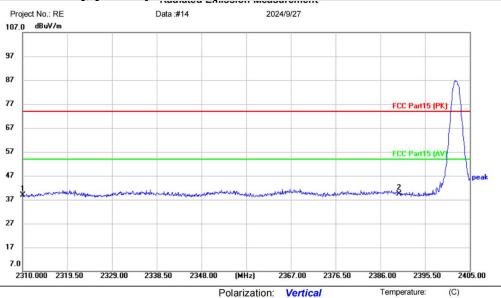
Tel: +86-755-23059481

Humidity:

%RH



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



Site

Limit: FCC Part15 (PK)
EUT: Bluetooth headphones

M/N: NU-TV002 Mode: BT TX 2402

Note:

No.	MI	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
			MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		23	10.000	41.64	-2.87	38.77	74.00	-35.23	peak	
2	*	239	90.000	41.86	-2.44	39.42	74.00	-34.58	peak	

Power:

\*:Maximum data x:Over limit !:over margin

Receiver: ESR\_1 Spectrum Analyzer: FSP40

**Test Result: Pass** 

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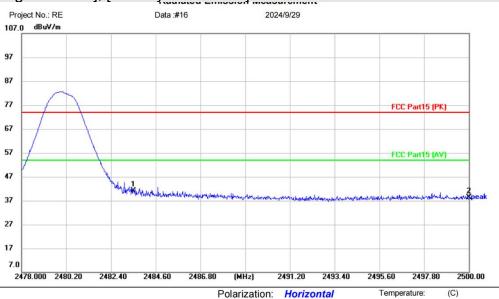
Tel: +86-755-23059481

Humidity:

%RH



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



Site

Limit: FCC Part15 (PK) EUT: Bluetooth headphones

M/N: NU-TV002 Mode: BT TX 2480

Note:

ding	Correct	Measure-	210111			

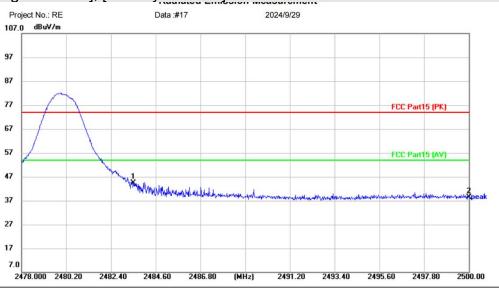
No.	M	k. Freq.	Level	Factor	ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2483.500	44.06	-2.91	41.15	74.00	-32.85	peak	
2		2500.000	41.31	-3.00	38.31	74.00	-35.69	peak	

Power:

*:Maximum	data	x:Over limit	!:over margin			Reference Only
Receiver:	ESR	1		Spectrum Analyzer:	FSP40	



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



Site

Limit: FCC Part15 (PK)
EUT: Bluetooth headphones

M/N: NU-TV002 Mode: BT TX 2480

Note:

Polarization: Vertical Temperature: (C)
Power: 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	47.25	-2.91	44.34	74.00	-29.66	peak	
2		2500.000	41.43	-3.00	38.43	74.00	-35.57	peak	

\*:Maximum data x:Over limit !:over margin

Receiver: ESR\_1 Spectrum Analyzer: FSP40



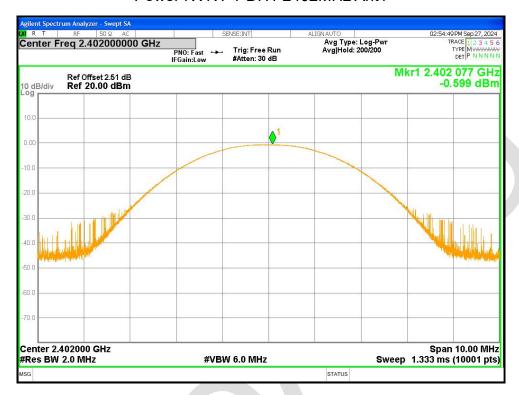
# 7 Appendix A

### **Maximum Conducted Output Power**

	•					
Condition	Mode	Frequency	Antenna	Conducted	Limit	Verdict
		(MHz)		Power	(dBm)	
				(dBm)		
NVNT	1-DH1	2402	Ant1	-0.599	21	Pass
NVNT	1-DH1	2441	Ant1	-0.802	21	Pass
NVNT	1-DH1	2480	Ant1	-0.991	21	Pass
NVNT	2-DH1	2402	Ant1	1.32	21	Pass
NVNT	2-DH1	2441	Ant1	1.21	21	Pass
NVNT	2-DH1	2480	Ant1	0.96	21	Pass



#### Power NVNT 1-DH1 2402MHz Ant1



### Power NVNT 1-DH1 2441MHz Ant1



Power NVNT 1-DH1 2480MHz Ant1

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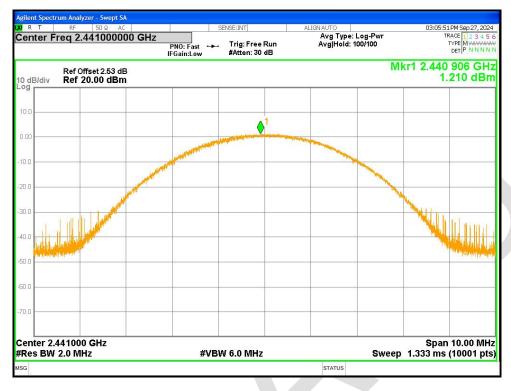


### Power NVNT 2-DH1 2402MHz Ant1

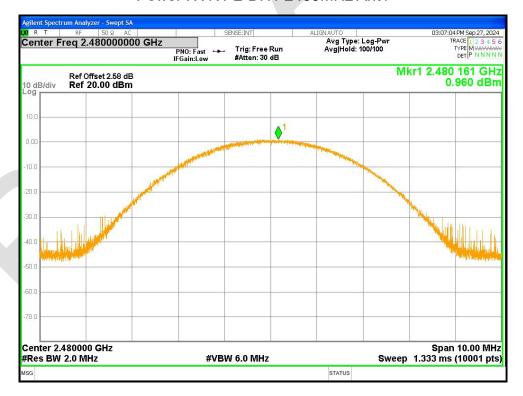


Power NVNT 2-DH1 2441MHz Ant1





### Power NVNT 2-DH1 2480MHz Ant1





#### -20dB Bandwidth

Condition	Mode	Frequency	Antenna	-20 dB	Limit -20 dB	Verdict
		(MHz)		Bandwidth	Bandwidth	
				(MHz)	(MHz)	
NVNT	1-DH1	2402	Ant1	0.876	N/A	Pass
NVNT	1-DH1	2441	Ant1	0.873	N/A	Pass
NVNT	1-DH1	2480	Ant1	0.875	N/A	Pass
NVNT	2-DH1	2402	Ant1	1.249	N/A	Pass
NVNT	2-DH1	2441	Ant1	1.259	N/A	Pass
NVNT	2-DH1	2480	Ant1	1.253	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







### **Occupied Channel Bandwidth**

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.78667
NVNT	1-DH1	2441	Ant1	0.80237
NVNT	1-DH1	2480	Ant1	0.80412
NVNT	2-DH1	2402	Ant1	1.1498
NVNT	2-DH1	2441	Ant1	1.1519
NVNT	2-DH1	2480	Ant1	1.1517

### 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







#### **Band Edge**

Condition	Mode	Frequenc y (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hoppi ng	-53.83	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hoppi ng	-53.29	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hoppi ng	-54.22	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hoppi ng	-52.82	-20	Pass

# Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



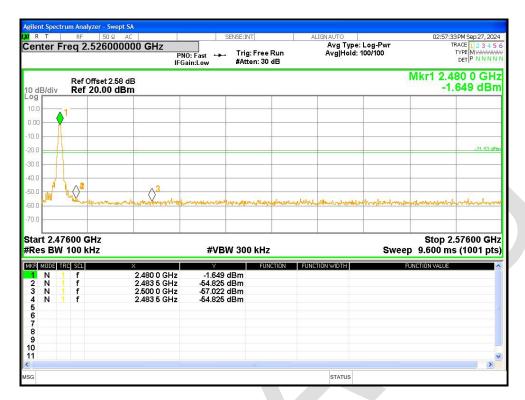


Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref

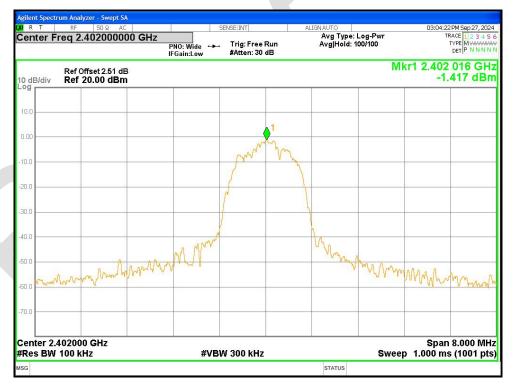


Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



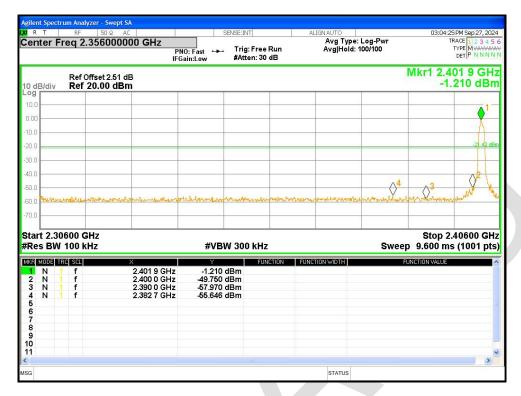


Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref

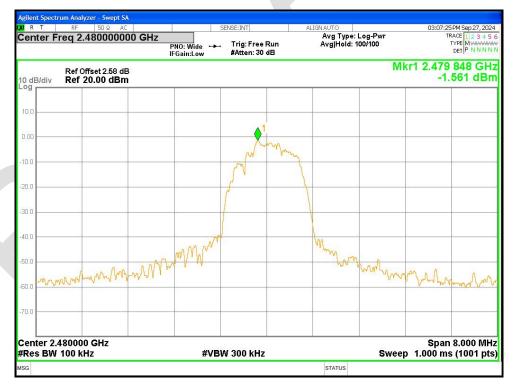


Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission





Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission







#### **Band Edge(Hopping)**

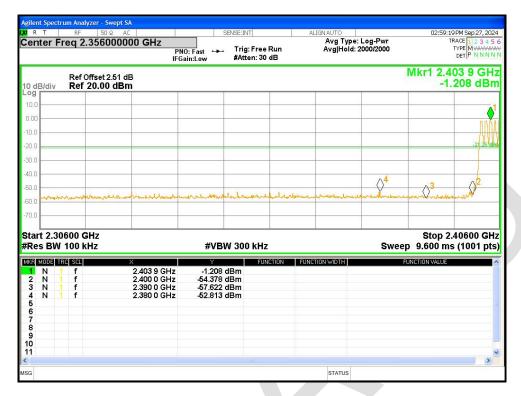
Condition	Mode	Frequenc	Antenna	Hopping	Max	Limit	Verdict
		y (MHz)		Mode	Value	(dBc)	
					(dBc)		
NVNT	1-DH1	2402	Ant1	Hopping	-51.55	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-51.53	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-52.13	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-51.01	-20	Pass

### Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission





Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission