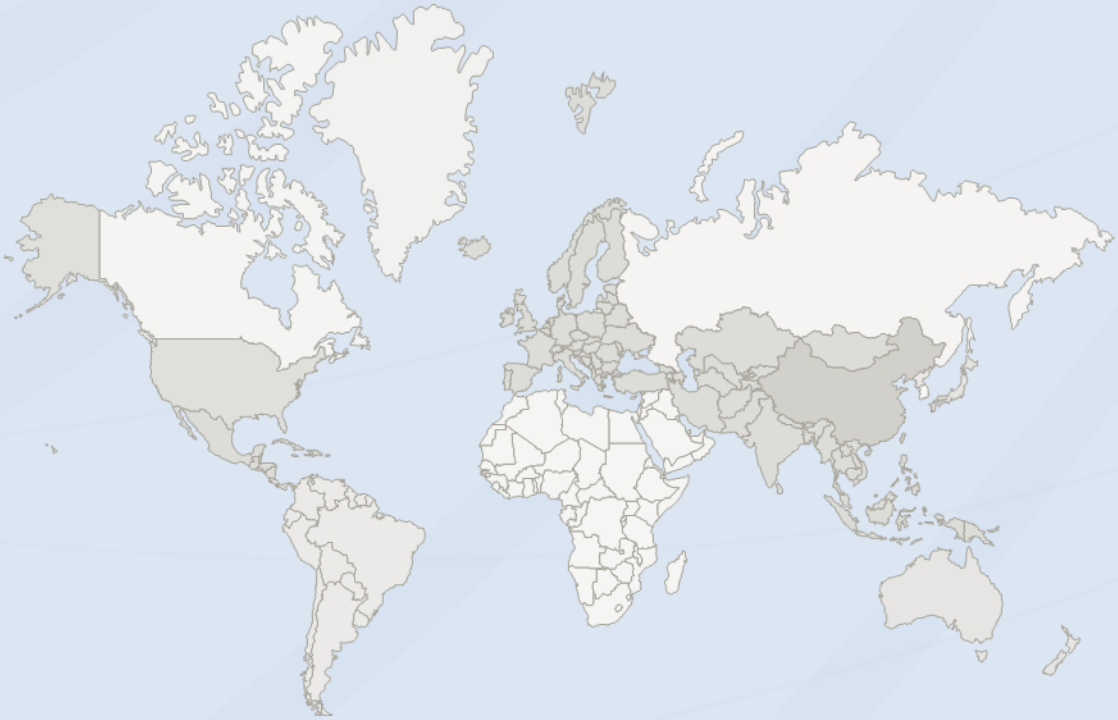
FCC TEST REPORT

Report No. NTC-ER2504048

Applicant's name..... Guangzhou Zhuo Rui Smart Home Technology Co., LTD

Address..... Room 911, 912 No.8 East Pazhou Avenue, Haizhu District, Guangzhou



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TEST REPORT DECLARE

FCC ID	:	2BB2A-BM064
Equipment under Test	:	LED BATHROOM MIRROR
Model /Type	:	BM064-15291
Listed Models	:	BM064-5171，BM064-6176，BM064-6181，BM064-6191 BM064-7191，BM064-7691，BM064-8191，BM064-9191 BM064-10161，BM064-10171，BM064-10181，BM064-10681 BM064-10691，BM064-12161，BM064-12171，BM064-12176 BM064-12181，BM064-12191，BM064-121101，BM064-13976 BM064-13991，BM064-15271，BM064-15276，BM064-15291 BM064-152101，BM064-18281，BM064-18291，BM064-21381 BM064-21391，BM064-213101，BM064-24391
Trade Mark	:	N/A
Applicant	:	Guangzhou Zhuo Rui Smart Home Technology Co., LTD
Address	:	Room 911, 912 No.8 East Pazhou Avenue, Haizhu District, Guangzhou
Manufacturer	:	Guangzhou Zhuo Rui Smart Home Technology Co., LTD
Address	:	Room 911, 912 No.8 East Pazhou Avenue, Haizhu District, Guangzhou
Test Laboratory	:	Dongguan New Testing Centre Co., Ltd
Address	:	1F & 3F, No. 1 the 1st North Industry Road Songshan Lake Science & Technology Park Dongguan, People’s Republic of China 523808

Test Standard Used:

FCC Part 15.247: Operation within the bands 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz, ANSI C63.10:2020.

We Declare:

The equipment described above is tested by Dongguan New Testing Centre Co., Ltd and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Dongguan New Testing Centre Co., Ltd is assumed of full responsibility for the accuracy and completeness of these tests.

After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.

Report No.:	NTC-ER2504048		
Date of Test:	May.15,2025 to May.27,2025	**Date of Report.:**	May.30,2025

Prepared By: ***Approved By:***

Taylor chen

Taylor Chen/Engineer ***Dave Gao/LAB Manager***

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan New Testing Centre Co., Ltd

** Modified History **

Revisions	Description	Issued Data	Report No.	Remark
Version 1.0	Initial Test Report Release	2025-05-27	NTC-ER2504048	Dave Gao

1. Summary of test results

Description of Test Item	Standard	Results
Antenna Requirement	Section 15.247(c)	PASS
Conduction Emissions	Section 15.207(a)	PASS
Radiated Emissions	Section 15.247(d)	PASS
Carrier Frequencies Separated	Section 15.247(a)(1)	PASS
Hopping Channel Number	Section 15.247(a)(1) (iii)	PASS
Dwell Time	Section 15.247(a)(1) (iii)	PASS
Maximum Peak Output Power	Section 15.247(b)	PASS
Band edge	Section 15.247(d)	PASS
Conducted Spurious Emissions	Section 15.247(d)	PASS

2. General test information

2.1. Description of EUT

Product Name:	LED BATHROOM MIRROR
Model/Type reference:	BM064-15291
Power supply:	Input:AC 100~120V 50/60Hz
Bluetooth :	
Supported type:	Bluetooth BR/EDR
Modulation:	GFSK, π/4DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79
Channel separation:	1MHz
Hardware Version:	V1.0
Software Version:	V1.0
Antenna type:	PCB Antenna
Antenna gain:	1.13dBi

Note1: For more details, please refer to the user's manual of the EUT.

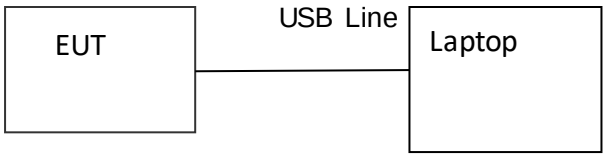
Note2: Antenna gain provided by the applicant.

2.2. Detail models

Model	Rating	Note
BM064-5171	AC 100~120V 50/60Hz	N/A
BM064-6176		
BM064-6181		
BM064-6191		
BM064-7191		
BM064-7691		
BM064-8191		
BM064-9191		
BM064-10161		
BM064-10171		
BM064-10181		
BM064-10681		
BM064-10691		
BM064-12161		
BM064-12171		
BM064-12176		
BM064-12181		
BM064-12191		
BM064-121101		
BM064-13976		
BM064-13991		
BM064-15271		
BM064-15276		
BM064-15291		
BM064-152101		
BM064-18281		
BM064-18291		
BM064-21381		
BM064-21391		
BM064-213101		
BM064-24391		

2.3. Block diagram EUT configuration for test

1. Block diagram of EUT configuration (TX Mode)



Note:

1.Connect the EUT as above block diagram of configuration, Run the software, set the transmit serial port/power/channel/packet type/data type/hopping or not, send configuration, than EUT enter the TX mode.

2.Set EUT in continuous transmission signal mode.

3.Using the laptop and the transform board to control the fixed transmitting frequency and other test mode. After finishing the test setting, the notebook and the transform board will be removed during measurements.

2.4. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

(1) Test frequencies:

According to the 15.31(m) Measurements on intentional radiators or receivers, other than TV broadcast receivers, shall be performed and. If required reported for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table:

Frequency range over which device operates	Number of frequencies	Location in the range of operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3	1 near top, 1 near middle and 1 near bottom

(2) Frequency range of radiated measurements:

According to the 15.33, the test range will be up to the tenth harmonic of the highest fundamental frequency.

Description of Test Modes and Test Frequency

The Applicant provides communication tools software to control the EUT for staying in continuous transmitting (Duty Cycle more than 98%) and receiving mode for testing .There are 79 channels provided to the EUT and Channel 00/39/78 were selected to test.

(3) Operation Frequency：

Channel	Frequency (MHz)
00	**2402**
01	2403
⋮	⋮
38	2440
39	**2441**
40	2442
⋮	⋮
77	2479
78	**2480**

Test Items	Worst case
Conducted Emissions	DH5 Middle channel
Radiated Emissions and Band Edge	DH5
Maximum Conducted Output Power	DH5/2DH5/3DH5
20dB Bandwidth	DH5/2DH5/3DH5
Frequency Separation	DH5/2DH5/3DH5 Middle channel
Number of hopping frequency	DH5/2DH5/3DH5
Time of Occupancy (Dwell Time)	DH1/DH3/DH5 Middle channel 2DH1/2DH3/2DH5 Middle channel 3DH1/3DH3/3DH5 Middle channel
Out-of-band Emissions	DH5/2DH5/3DH5

Preliminary tests were performed in each mode and packet length of BT, and found worst case as bellow, finally test were conducted at those mode and recorded in this report.

2.5. Measurement uncertainty

Test Item	Uncertainty
Uncertainty for Conduction emission test	2.44dB
Uncertainty for Radiation Emission test (30MHz – 1GHz)	3.14 dB (Polarize: V)
	3.16 dB (Polarize: H)
Uncertainty for Radiation Emission test (1GHz – 18GHz)	4.27 dB (Polarize: V)
	4.51 dB (Polarize: H)
Uncertainty for conducted RF Power	0.63dB
Stop Transmitting Time Test	±0.5%
Uncertainty for frequency error	5.8 x 10-8

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

2.6. Test Peripheral List

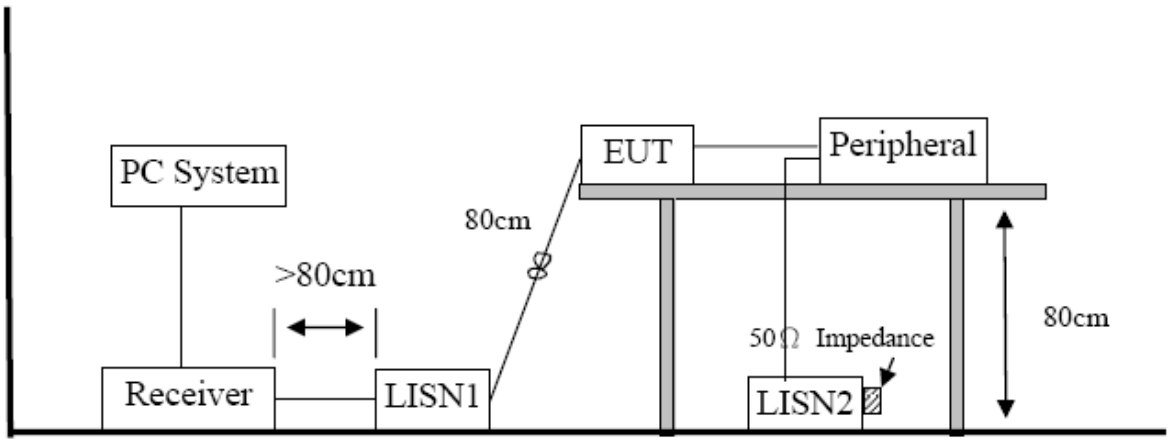
No.	Equipment	Manufacturer	FCC approved	Model No.	Serial No.	signal cable
1	Lap top	lenovo	DOC	7457	7457A82	N/A

3. Power Line Conducted Emission Test

3.1. Test equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Test Receiver	R&S	ESPI	100146	2025-05-08	1 Year
2	LISN	R&S	ENV216	3650.6550.06	2025-05-08	1 Year
3	LISN	KHC	KH3765	37650053	2025-05-08	1 Year
4	8-WIRE ISN for CAT6	R&S	ENY81-CA6	101862	2025-05-08	1 Year
5	RF Cable	HUBER	SUCOFLEX100	30722/4E	2025-05-08	2 Year
6	MEASUREMENT SOFTWARE	FARAD	EZ-EMC(VER:1.1.4.2)	N/A	N/A	N/A

3.2. BLOCK DIAGRAM OF TEST SETUP



3.3. Power Line Conducted Emission Limits (Class B)

Frequency			Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz	~	500kHz	66 ~ 56*	56 ~ 46*
500kHz	~	5MHz	56	46
5MHz	~	30MHz	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

3.4. Test Procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.3 and test equipment as described in clause 3.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.3 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

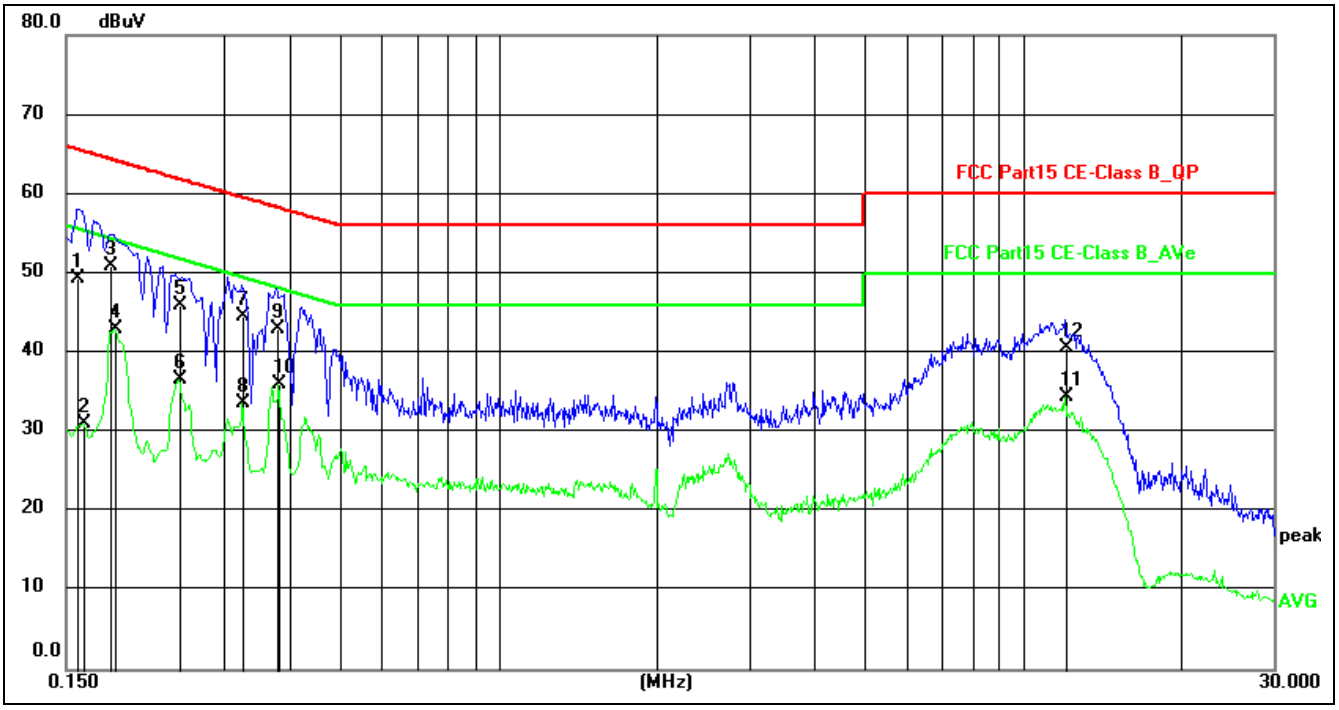
The bandwidth of test receiver is set at 9 KHz.

3.5. Test Result

PASS. (See below detailed test result)

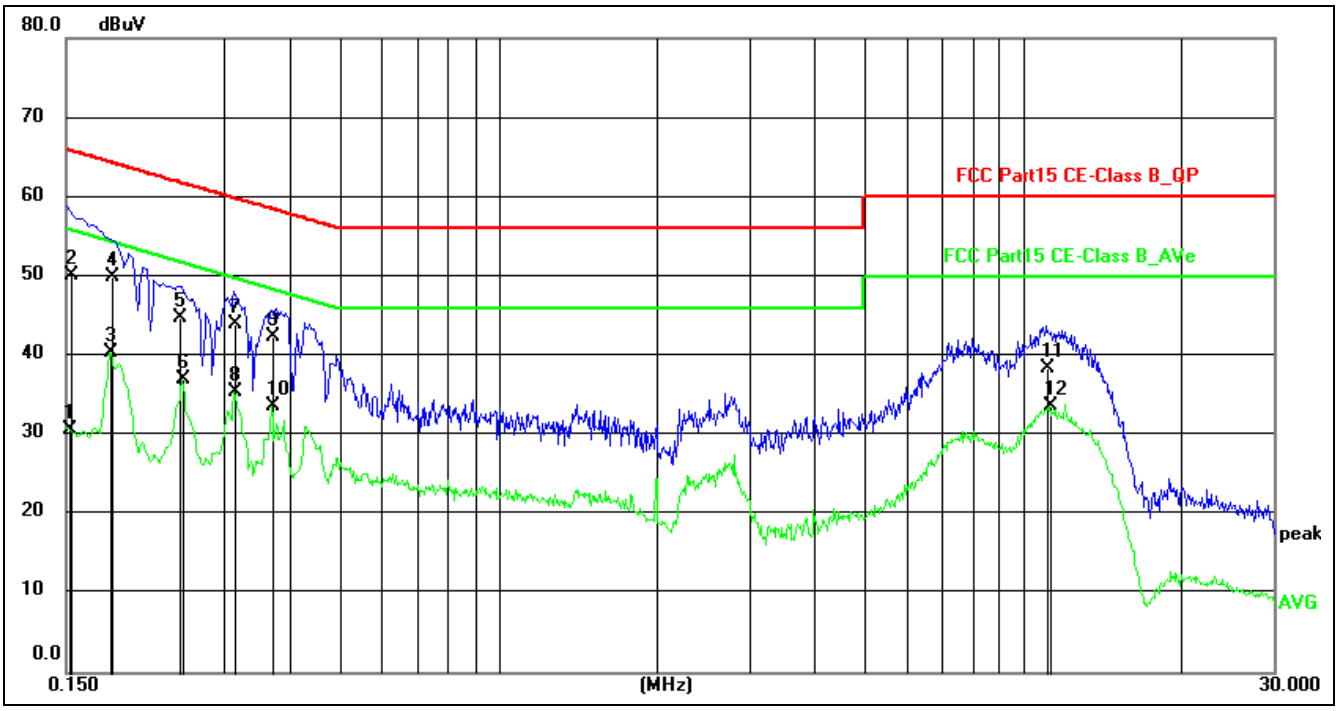
Note1: All emissions not reported below are too low against the prescribed limits.
Note2: "-----" means Peak detection; "-----" means Average detection
Note3: Measurement = Reading Level + Factor, Margin= Measurement-Limit
Note4:All modes of GFSK, Pi/4 DQPSK, and 8DPSK were test at Low, Middle, and High channel; only the worst result of GFSK Middle Channel was reported as below:

Conducted Emission Test Result



Site:	**844LAB**	**Phase:N**	**Temperature(C):24(C)**
Limit:	**FCC Part15 CE-Class B_QP**		**Humidity(%):63%**
EUT:	**LED**	**Test Time:**	**2025/5/15 15:58:46**
M/N.:	**BM064-15291**	**Power Rating:**	**AC120V/60Hz**
Mode:	**BT+LED**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure-ment(dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
1	0.1580	38.88	10.42	49.30	65.57	-16.27	QP	
2	0.1620	20.59	10.42	31.01	55.36	-24.35	AVG	
3	0.1819	40.40	10.42	50.82	64.40	-13.58	QP	
4 *	0.1860	32.49	10.42	42.91	54.21	-11.30	AVG	
5	0.2460	35.47	10.43	45.90	61.89	-15.99	QP	
6	0.2460	26.16	10.43	36.59	51.89	-15.30	AVG	
7	0.3260	34.03	10.45	44.48	59.55	-15.07	QP	
8	0.3260	23.17	10.45	33.62	49.55	-15.93	AVG	
9	0.3780	32.57	10.45	43.02	58.32	-15.30	QP	
10	0.3820	25.60	10.45	36.05	48.24	-12.19	AVG	
11	12.0019	23.99	10.38	34.37	50.00	-15.63	AVG	
12	12.0020	30.26	10.38	40.64	60.00	-19.36	QP	



Site:	**844LAB**	**Phase:L1**	**Temperature(C):24(C)**
Limit:	**FCC Part15 CE-Class B_QP**		**Humidity(%):63%**
EUT:	**LED**	**Test Time:**	**2025/5/15 16:01:22**
M/N.:	**BM064-15291**	**Power Rating:**	**AC120V/60Hz**
Mode:	**BT+LED**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure-ment(dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
1	0.1524	20.25	10.43	30.68	55.87	-25.19	AVG	
2	0.1539	39.61	10.43	50.04	65.79	-15.75	QP	
3 *	0.1819	29.97	10.44	40.41	54.40	-13.99	AVG	
4	0.1825	39.55	10.44	49.99	64.37	-14.38	QP	
5	0.2460	34.42	10.44	44.86	61.89	-17.03	QP	
6	0.2500	26.66	10.44	37.10	51.76	-14.66	AVG	
7	0.3140	33.48	10.45	43.93	59.86	-15.93	QP	
8	0.3140	25.07	10.45	35.52	49.86	-14.34	AVG	
9	0.3700	31.84	10.46	42.30	58.50	-16.20	QP	
10	0.3700	23.27	10.46	33.73	48.50	-14.77	AVG	
11	11.1140	27.91	10.47	38.38	60.00	-21.62	QP	
12	11.2219	23.15	10.47	33.62	50.00	-16.38	AVG	

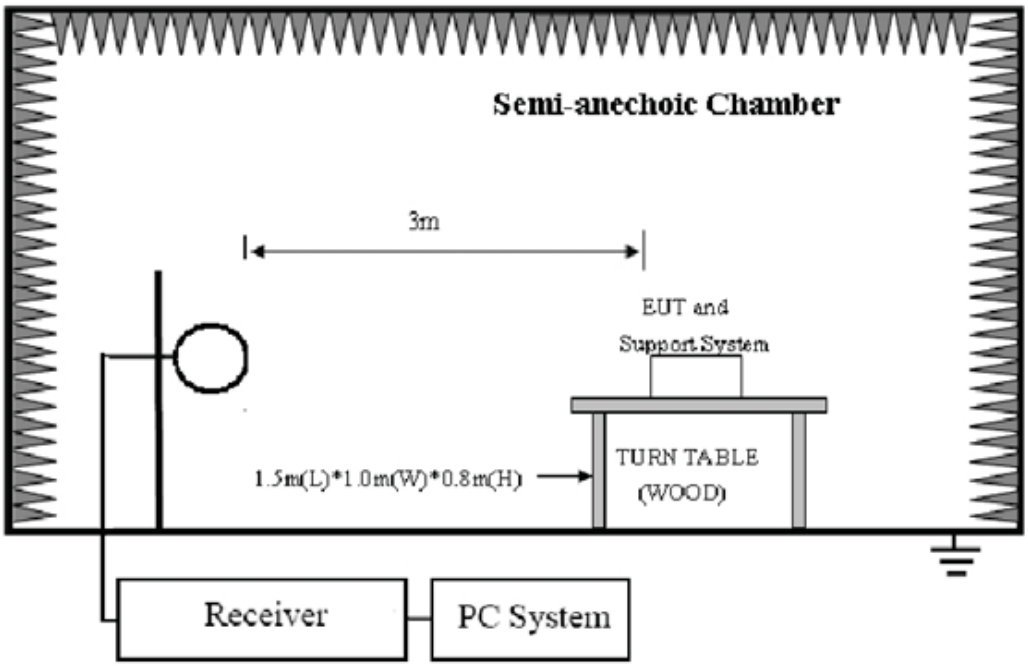
4. Radiated emission test

4.1. Test equipment

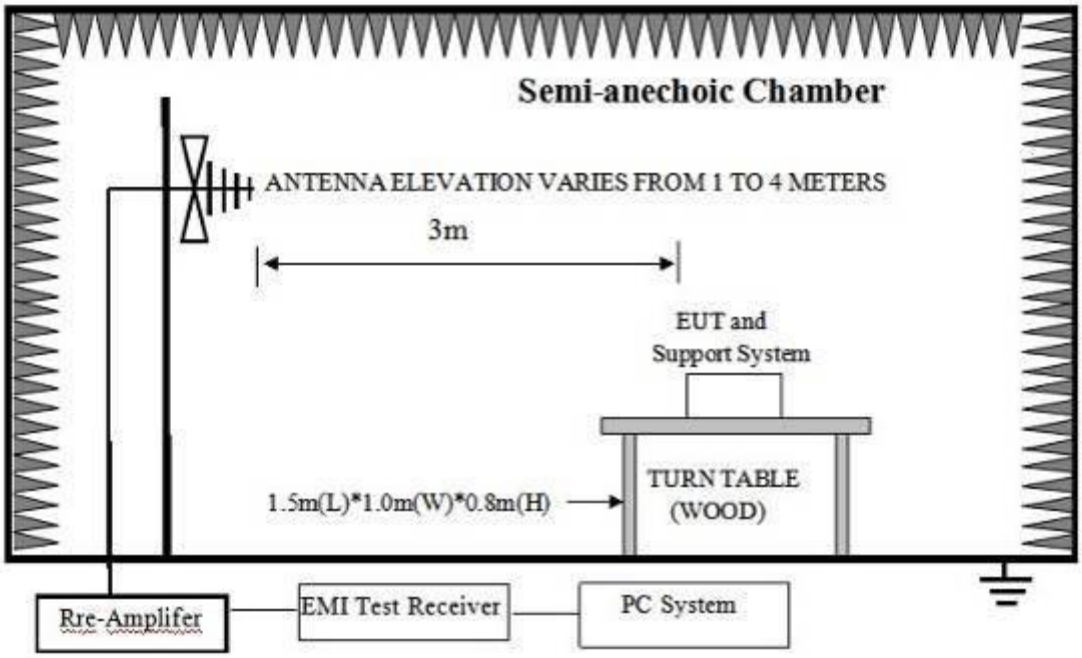
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	EMI Test Receiver	R&S	ESR	7250-304067528	2025-05-08	1Year
2	Trilog Broadband Antenna	Schwarzbeck	VULB9168	00969	2025-05-08	2 Year
3	Horn antenna	Schwarzbeck	BBHA9120D	453	2025-05-08	2Year
4	Pre-amplifier	Agilent	8449B	3008A04721	2025-05-08	1Year
5	Double Ridged Horn Antenna	A.H. System	SAS-574	584	2025-05-08	1Year
6	Active Loop antenna	Schwarzbeck	FMZB-1519	1519-038	2025-05-08	1Year
7	Pre-amplifier	R&S	8447F	3113A04553	2025-05-08	1Year
8	RF Cable	GORE	OSQ01Q01078.7	SN15458473	2025-05-08	2Year
9	RF Cable	ESCO	ETS-LINGREN	RFC-SMS-100-SMS-340-IN	2025-05-08	2Year
10	Measurement software	Farad	EZ-EMC(VER:1.1.4.2)	N/A	N/A	N/A

4.2. Block diagram of test setup

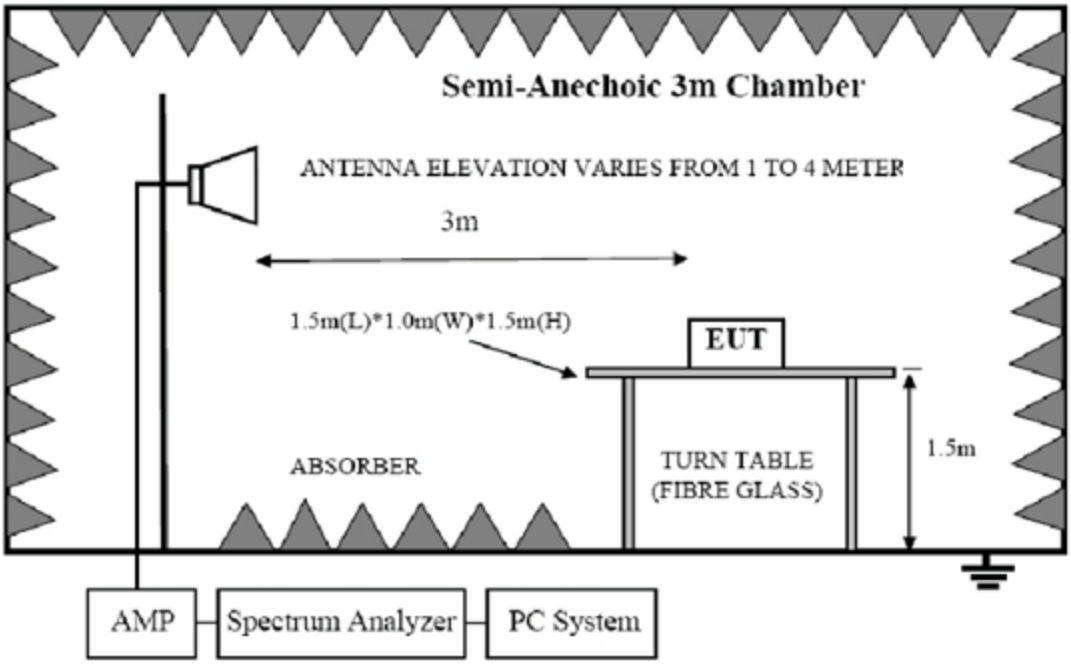
In 3m Anechoic Chamber Test Setup Diagram for 9KHz to 30MHz:



In 3m Anechoic Chamber Test Setup Diagram for 30MHz to 1GHz:



In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz:



4.3. Limit

FCC 15.205 Restricted frequency band:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])

FCC 15.209 Limit

Frequency (MHz)	Distance (Meters)	Field Strengths Limits dB(μV)/m
30--88	3	40.0
88--216	3	43.5
216--960	3	46.0
960--1000	3	54.0
Above 1GHz	3	Peak: 74.0
	3	Average:54.0

Note: (1) The smaller limit shall apply at the cross point between two frequency bands.

(2)Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

(3)The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90KHz, 110-490KHz and above 1000MHz.Radiated emissions limits in these three bands are based on measurements employing an average detector.

(4) At frequencies below 30MHz, measurement may be performed at a distance closer then that specified, and the limit at closer measurement distance can be extrapolated by below formula:

Limit3m(dBuV/m)= Limit30m(dBuV/m) + 40Log(30m/3m)

(5)All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.4. Test Procedure

Procedure of Preliminary Test

Configuration EUT to simulate typical usage as described in clause 2.3 and test equipment as described in clause 4.2 of this report.

Mains cables, telephone lines or other connections to auxiliary equipment located outside the test are shall drape to the floor, be fitted with ferrite clamps or ferrite tubes placed on the floor at the point where the cable reaches the floor and then routed to the place where they leave the turntable. No extension cords shall be used to mains receptacle.

EUT height should be 0.8m for below 1GHz and 1.5m for above 1GHz at ground with absorbers.

The antenna was placed at 3 meter away from the EUT as stated in ANSI C63.10. The antenna connected to the Spectrum Analyzer via a cable and at times a pre-amplifier would be used.

The Analyzer / Receiver quickly scanned from 30MHz to 18GHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.

The X, Y, Z three axial are tested and the report only the worst case.

The emissions from 9KHz to 1GHz, QP or average values were measured with EMI receiver with below RBW:

Frequency band	RBW
9KHz-150KHz	200Hz
150KHz-30MHz	9KHz
30MHz-1GHz	120KHz

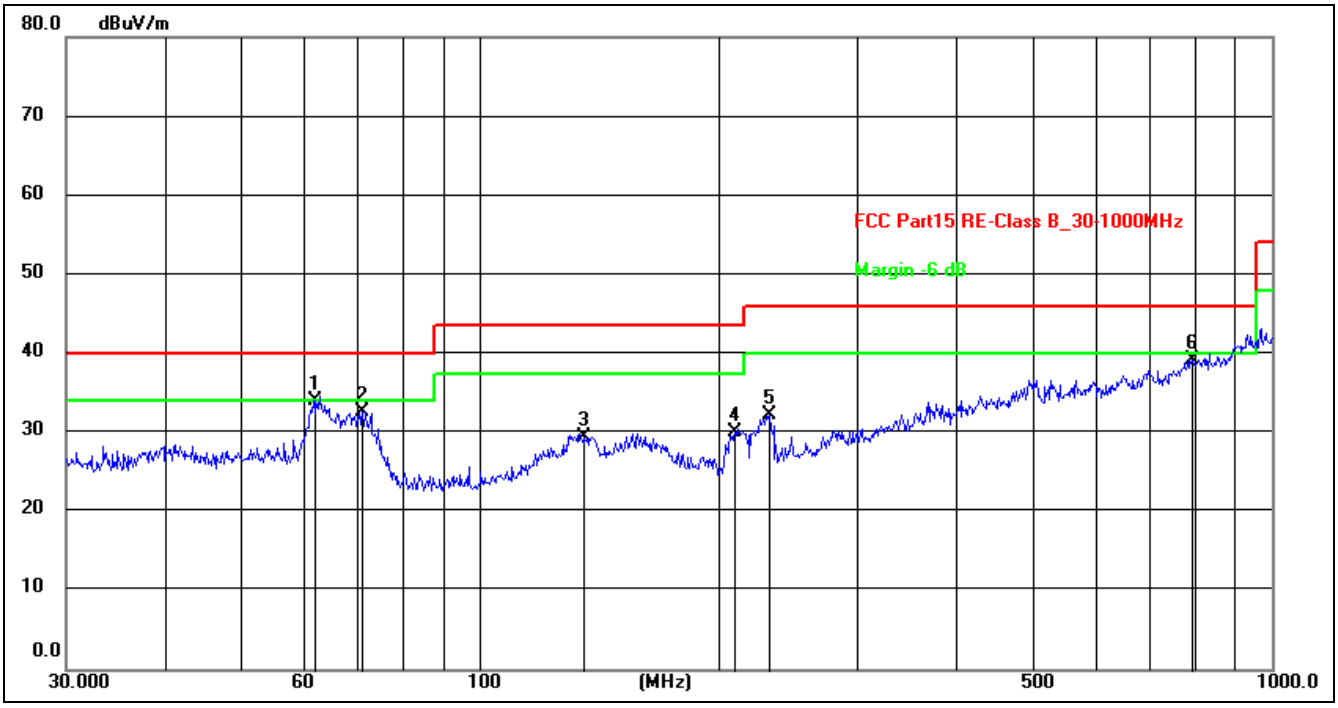
For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RMS detector RBW 1MHz VBW 3MHz for Average measure.

4.5. Test result

PASS. (See below detailed test result)

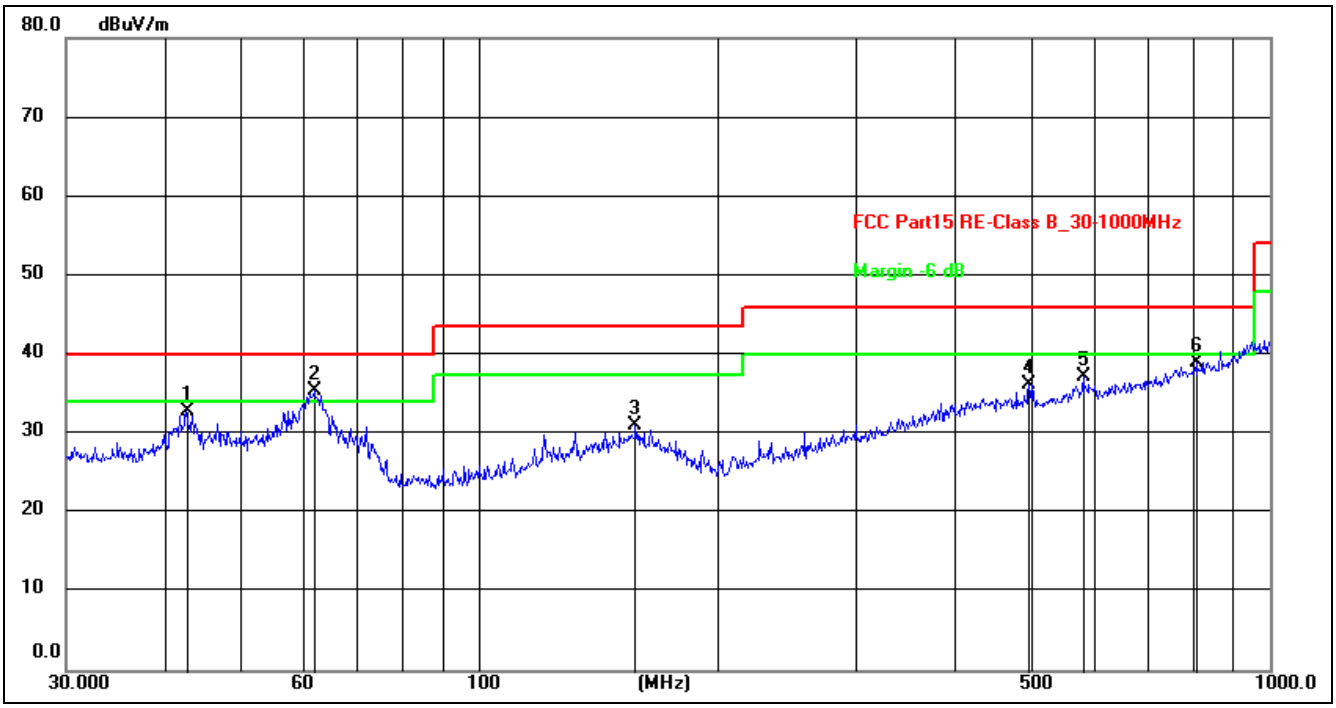
All the emissions except fundamental emission from 9 KHz to 40GHz were comply with FCC PART 15.209 limits limit.
Note1: For emissions above 1GHz. If peak results comply with AV limit,
AV Result is deemed to comply with AV limit.
Note2: Level = Reading Level + Factor, Margin= Level-Limit
Note3: We measured Radiated Emission at GFSK, π/4 DQPSK and 8DPSK mode
from 9 KHz to 25GHz and recorded worst case at GFSK DH5 mode.
Note4: For below 1GHz testing recorded worst at GFSK DH5 low channel.

Radiated Emission Test Result



Site:	**966LAB**	**Antenna::Horizontal**	**Temperature(C):24(C)**
Limit:	**FCC Part15 RE-Class B_30-1000MHz**		**Humidity(%):60%**
EUT:	**LED BATHROOM MIRROR**	**Test Time:**	**2025/5/15 15:25:51**
M/N.:	**BM064-15291**	**Power Rating:**	**AC 120V/60Hz**
Mode:	**BT+LED**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1 *	61.9950	21.40	12.70	34.10	40.00	-5.90	peak	200	320	
2	71.0803	21.53	11.08	32.61	40.00	-7.39	peak	200	320	
3	135.0318	15.77	13.78	29.55	43.50	-13.95	peak	200	285	
4	210.0481	18.52	11.47	29.99	43.50	-13.51	peak	200	206	
5	232.5318	20.29	11.93	32.22	46.00	-13.78	peak	100	186	
6	793.3958	14.80	24.47	39.27	46.00	-6.73	peak	200	281	



Site:	**966LAB**	**Antenna::Vertical**	**Temperature(C):24(C)**
Limit:	**FCC Part15 RE-Class B_30-1000MHz**		**Humidity(%):60%**
EUT:	**LED BATHROOM MIRROR**	**Test Time:**	**2025/5/15 15:28:26**
M/N.:	**BM064-15291**	**Power Rating:**	**AC 120V/60Hz**
Mode:	**BT+LED**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	42.6000	18.14	14.62	32.76	40.00	-7.24	peak	100	145	
2 *	61.7781	22.22	13.29	35.51	40.00	-4.49	peak	200	182	
3	157.5588	15.64	15.45	31.09	43.50	-12.41	peak	100	4	
4	495.9344	17.48	18.75	36.23	46.00	-9.77	peak	100	346	
5	580.7026	16.80	20.45	37.25	46.00	-8.75	peak	100	97	
6	807.4291	15.22	23.78	39.00	46.00	-7.00	peak	100	252	

For 1GHz to 25GHz

Note: 1. GFSK, Pi/4 DQPSK and 8DPSK all have been tested, only worse case GFSK is reported.
2. 8~25GHz at least have 20dB margin. No recording in the test report.

GFSK (above 1GHz)

Frequency(MHz)			2402		Polarity			HORIZONTAL	
Frequncy (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (Db)	Preampli -fier (dB)	Correction Factor (dB/m)
4804.00	60.15	PK	74.00	-13.85	55.78	33.35	6.91	35.89	4.37
4804.00	45.33	AV	54.00	-8.67	40.96	33.35	6.91	35.89	4.37
7206.00	55.23	PK	74.00	-18.77	44.23	36.85	9.18	35.03	11.00
7206.00	44.02	AV	54.00	-9.98	33.02	36.85	9.18	35.03	11.00

Frequency(MHz)			2402		Polarity			HORIZONTAL	
Frequncy (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (Db)	Preampli -fier (dB)	Correction Factor (dB/m)
4804.00	61.27	PK	74.00	-12.73	56.90	33.35	6.91	35.89	4.37
4804.00	44.67	AV	54.00	-9.33	40.30	33.35	6.91	35.89	4.37
7206.00	53.21	PK	74.00	-20.79	42.21	36.85	9.18	35.03	11.00
7206.00	43.86	AV	54.00	-10.14	32.86	36.85	9.18	35.03	11.00

Frequency(MHz)			2441		Polarity			HORIZONTAL	
Frequncy (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (Db)	Preampli -fier (dB)	Correction Factor (dB/m)
4882.00	61.35	PK	74.00	-12.65	55.28	33.42	6.95	34.30	6.07
4882.00	44.89	AV	54.00	-9.11	38.82	33.42	6.95	34.30	6.07
7323.00	54.36	PK	74.00	-19.64	42.77	37.36	9.23	35.00	11.59
7323.00	43.32	AV	54.00	-10.68	31.73	37.36	9.23	35.00	11.59

Frequency(MHz)			2441		Polarity			HORIZONTAL	
Frequncy (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (Db)	Preampli -fier (dB)	Correction Factor (dB/m)
4882.00	60.11	PK	74.00	-13.89	54.04	33.42	6.95	34.30	6.07
4882.00	43.81	AV	54.00	-10.19	37.74	33.42	6.95	34.30	6.07
7323.00	63.59	PK	74.00	-10.41	52.00	37.36	9.23	35.00	11.59
7323.00	43.96	AV	54.00	-10.04	32.37	37.36	9.23	35.00	11.59

Frequency(MHz)			2480		Polarity			HORIZONTAL	
Frequncy (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (Db)	Preampli -fier (dB)	Correction Factor (dB/m)
4960.00	61.02	PK	74.00	-12.98	56.08	33.86	7.00	35.92	4.94
4960.00	43.56	AV	54.00	-10.44	38.62	33.86	7.00	35.92	4.94
7440.00	53.34	PK	74.00	-20.66	41.09	37.94	9.28	34.97	12.25
7440.00	42.94	AV	54.00	-11.06	30.69	37.94	9.28	34.97	12.25

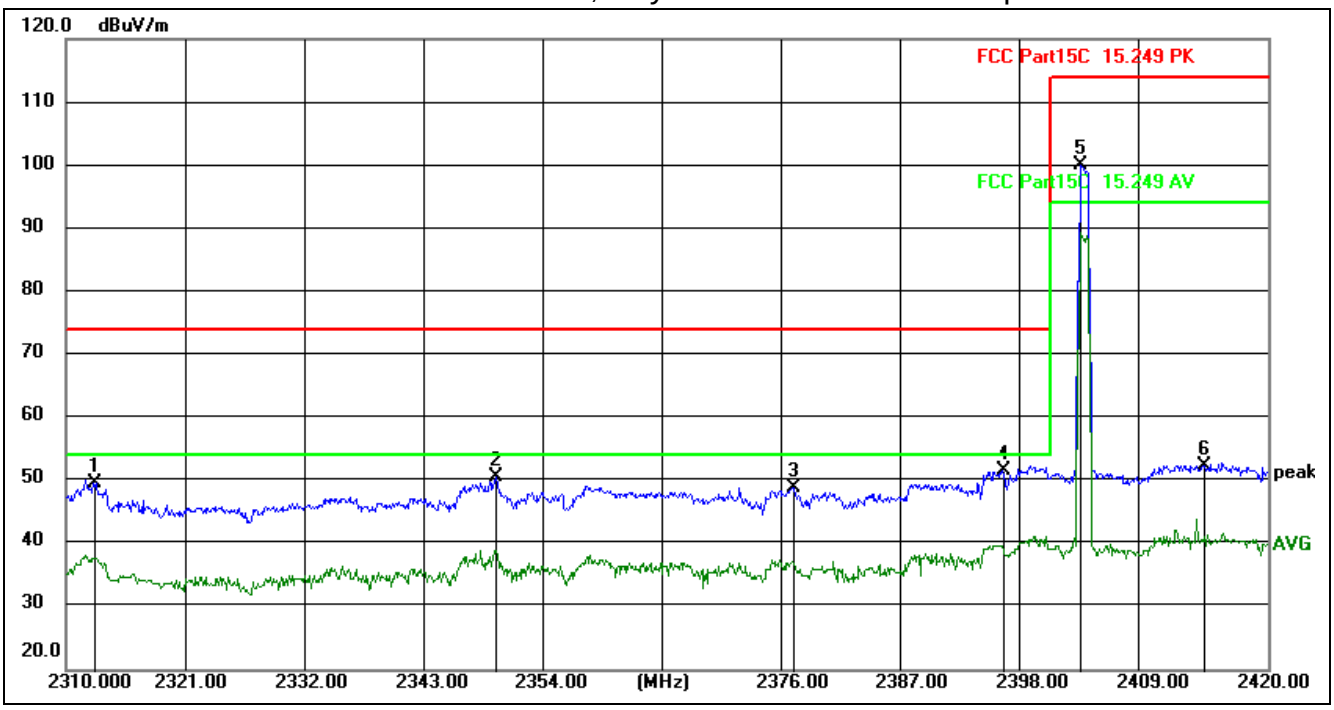
Frequency(MHz)			2480		Polarity			HORIZONTAL	
Frequncy (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (Db)	Preampli -fier (dB)	Correction Factor (dB/m)
4960.00	60.68	PK	74.00	-13.32	55.74	33.86	7.00	35.92	4.94
4960.00	43.36	AV	54.00	-10.64	38.42	33.86	7.00	35.92	4.94
7440.00	50.02	PK	74.00	-23.98	37.77	37.94	9.28	34.97	12.25
7440.00	42.06	AV	54.00	-11.94	29.81	37.94	9.28	34.97	12.25

REMARKS:

(1) Emission level (dBuV/m) =Raw Value (dBuV)+Correction Factor (dB/m)
(2) Correction Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
(3) Margin value = Limit value- Emission level.
(4) -- Mean the PK detector measured value is below average limit.
(5) The other emission levels were very low against the limit.
(6) RBW1MHz VBW3MHz Peak detector is for PK value; RBW 1MHz VBW10Hz Peak detector is for AV value.

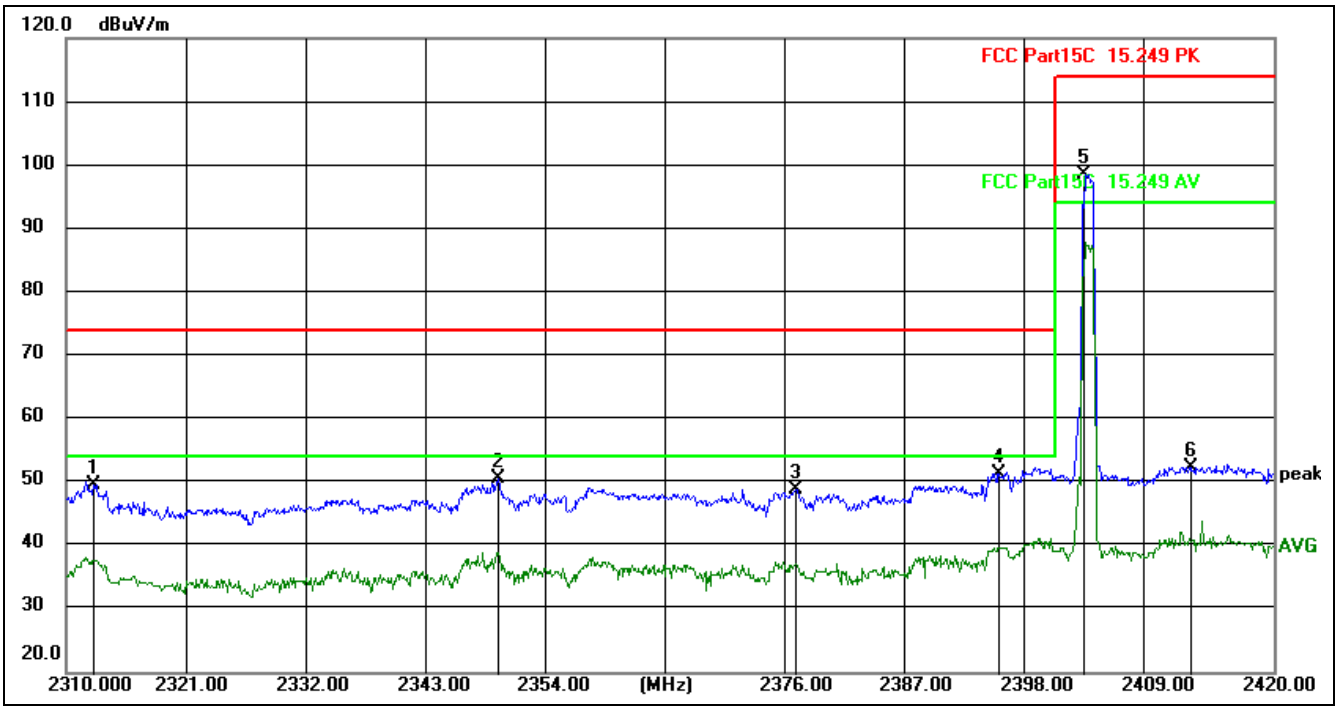
Results of Band Edges Test (Radiated)

Note：All modulations have been tested, only worse case GFSK is reported.



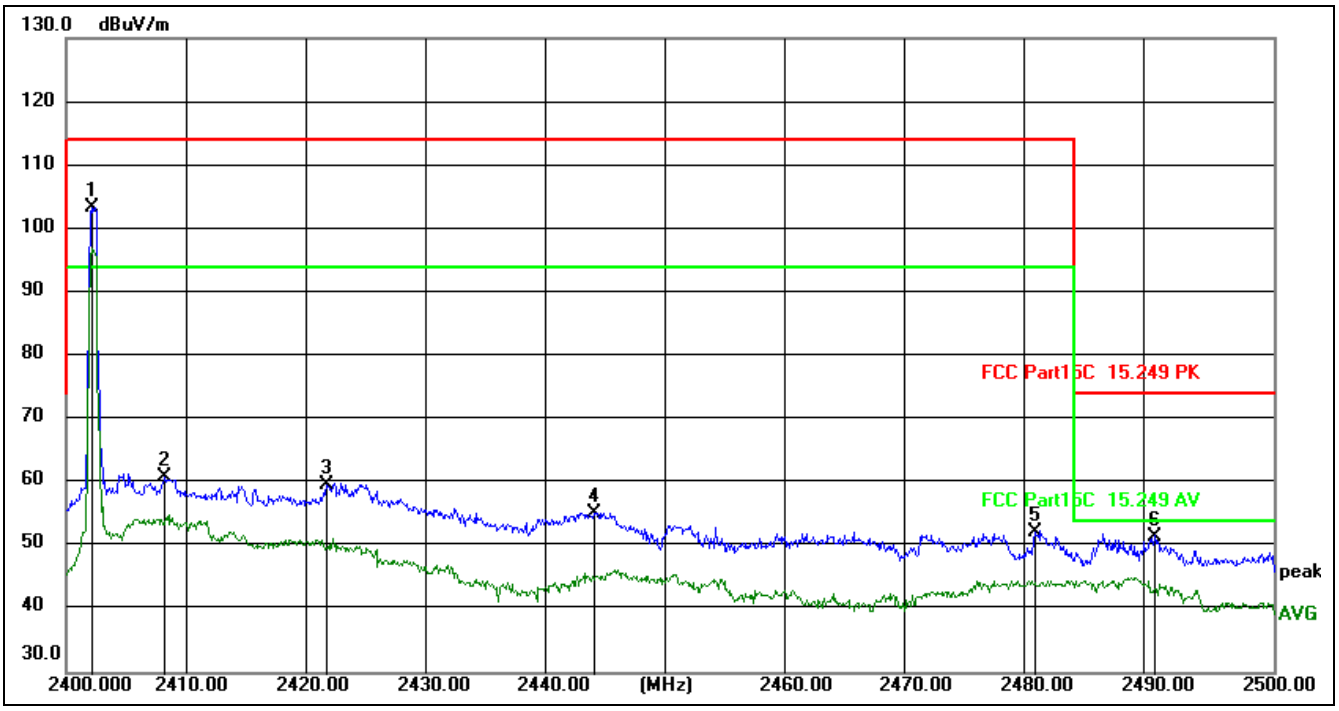
Site:	**966LAB**	**Antenna::Horizontal**	**Temperature(C):24(C)**
Limit:	**FCC Part15C 15.249 PK**		**Humidity(%):60%**
EUT:	**LED BATHROOM MIRROR**	**Test Time:**	**2025/5/27 15:29:00**
M/N.:	**BM064-15291**	**Power Rating:**	**DC**
Mode:	**Working**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	2312.533	44.28	5.49	49.77	74.00	-24.23	peak			
2	2349.419	45.09	5.52	50.61	74.00	-23.39	peak			
3	2376.507	43.41	5.55	48.96	74.00	-25.04	peak			
4	2395.666	46.08	5.57	51.65	74.00	-22.35	peak			
5 *	2402.823	94.53	5.57	100.10	114.00	-13.90	peak			
6	2414.164	46.90	5.59	52.49	114.00	-61.51	peak			



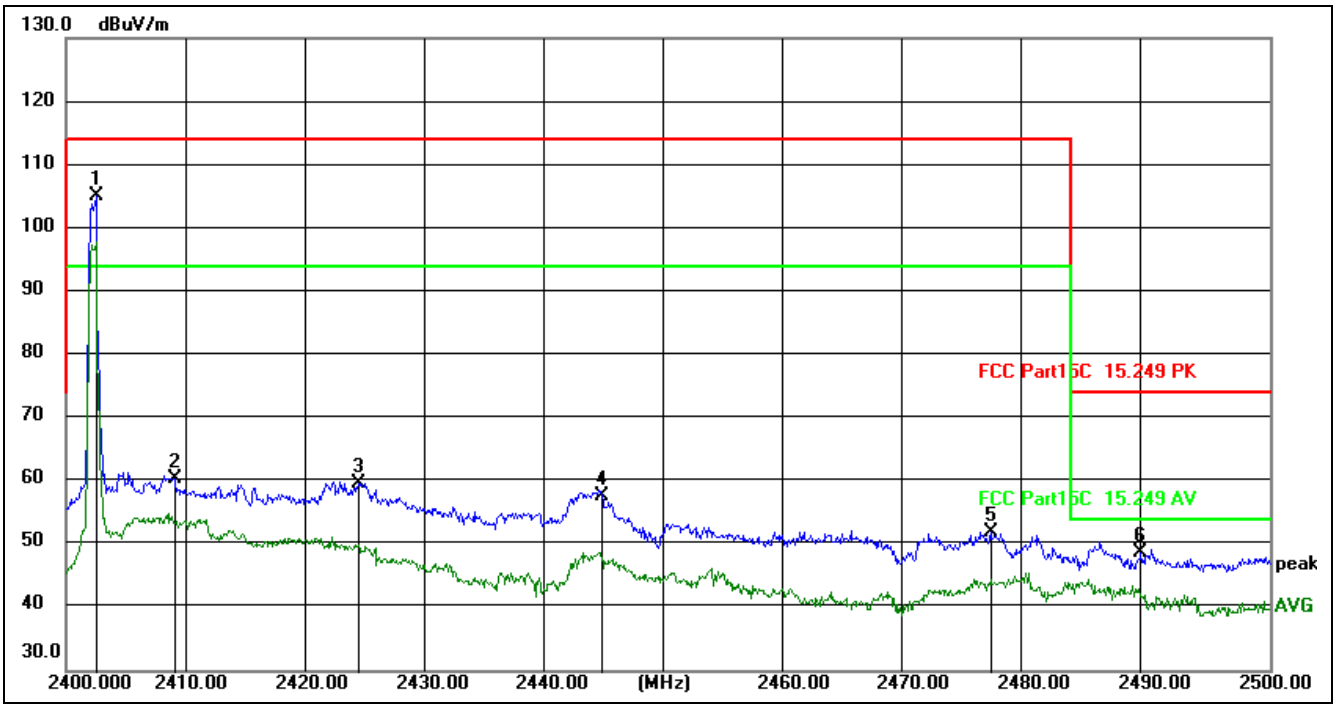
Site:	**966LAB**	**Antenna::Vertical**	**Temperature(C):24(C)**
Limit:	**FCC Part15C 15.249 PK**		**Humidity(%):60%**
EUT:	**LED BATHROOM MIRROR**	**Test Time:**	**2025/5/27 15:29:00**
M/N.:	**BM064-15291**	**Power Rating:**	**DC**
Mode:	**Working**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	2312.532	44.28	5.49	49.77	74.00	-24.23	peak			
2	2349.419	45.09	5.52	50.61	74.00	-23.39	peak			
3	2376.506	43.41	5.55	48.96	74.00	-25.04	peak			
4	2395.005	45.87	5.57	51.44	74.00	-22.56	peak			
5 *	2402.623	93.03	5.57	98.60	114.00	-15.40	peak			
6	2412.512	46.86	5.58	52.44	114.00	-61.56	peak			



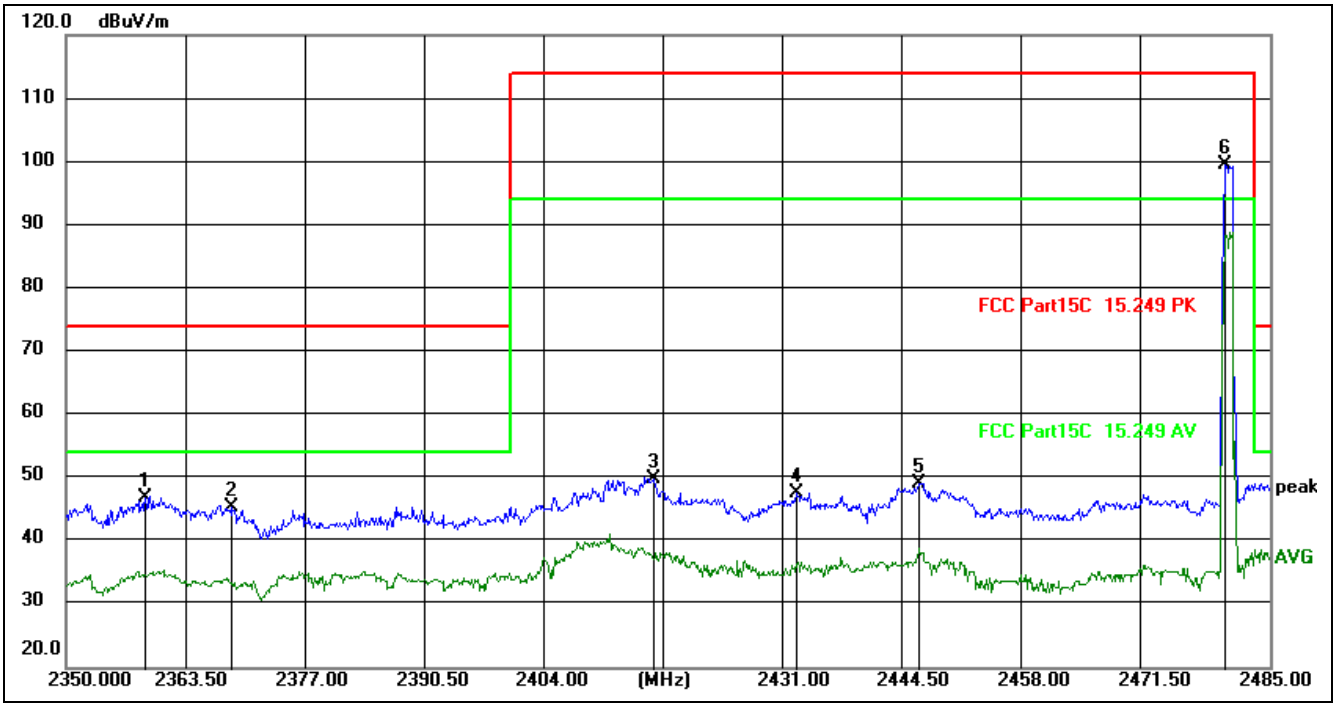
Site:	**966LAB**	**Antenna::Horizontal**	**Temperature(C):24(C)**
Limit:	**FCC Part15C 15.249 PK**		**Humidity(%):60%**
EUT:	**LED BATHROOM MIRROR**	**Test Time:**	**2025/5/27 15:50:44**
M/N.:	**BM064-15291**	**Power Rating:**	**DC**
Mode:	**Working**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1 *	2402.100	97.67	5.57	103.24	114.00	-10.76	peak			
2	2408.200	55.21	5.58	60.79	114.00	-53.21	peak			
3	2421.600	54.10	5.59	59.69	114.00	-54.31	peak			
4	2443.700	49.59	5.61	55.20	114.00	-58.80	peak			
5	2480.200	46.53	5.65	52.18	114.00	-61.82	peak			
6	2490.100	45.76	5.66	51.42	74.00	-22.58	peak			



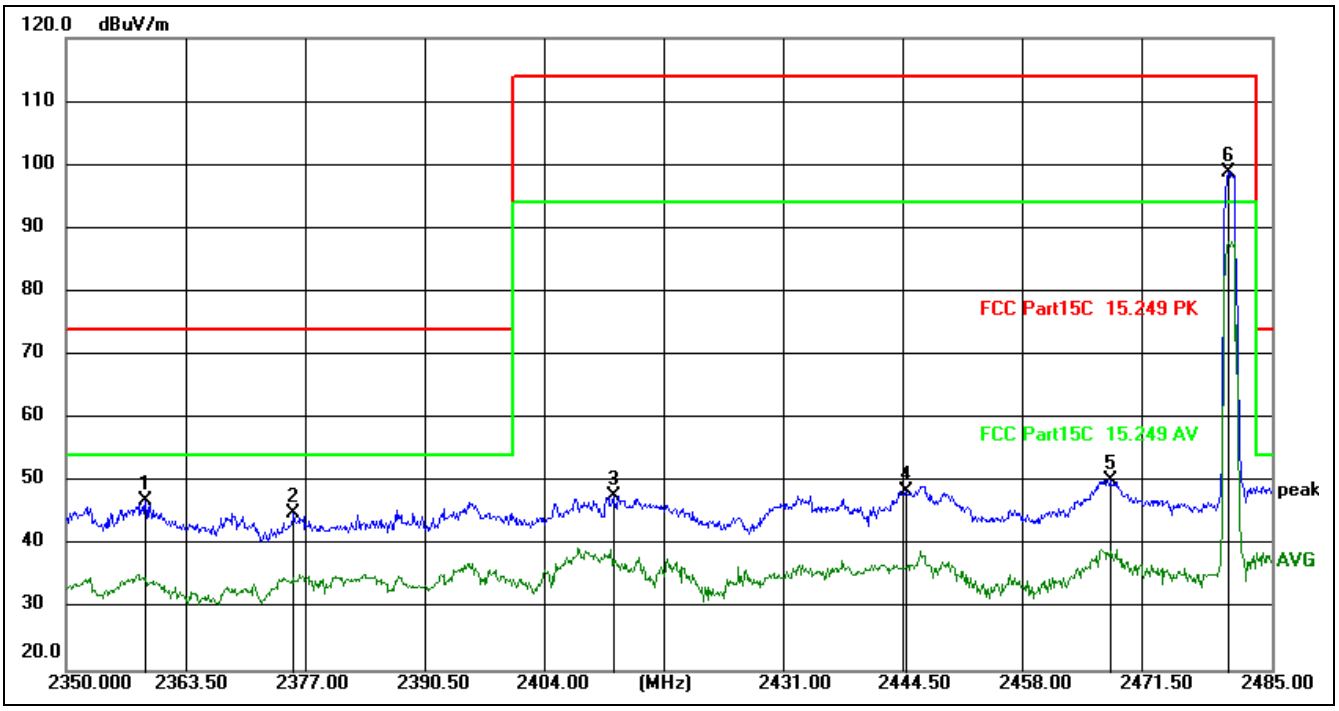
Site:	**966LAB**	**Antenna::Vertical**	**Temperature(C):24(C)**
Limit:	**FCC Part15C 15.249 PK**		**Humidity(%):60%**
EUT:	**LED BATHROOM MIRROR**	**Test Time:**	**2025/5/27 15:50:44**
M/N.:	**BM064-15291**	**Power Rating:**	**DC**
Mode:	**Working**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1 *	2402.500	99.55	5.57	105.12	114.00	-8.88	peak			
2	2409.000	54.82	5.58	60.40	114.00	-53.60	peak			
3	2424.300	54.04	5.60	59.64	114.00	-54.36	peak			
4	2444.500	51.97	5.62	57.59	114.00	-56.41	peak			
5	2476.800	46.28	5.65	51.93	114.00	-62.07	peak			
6	2489.300	43.04	5.66	48.70	74.00	-25.30	peak			



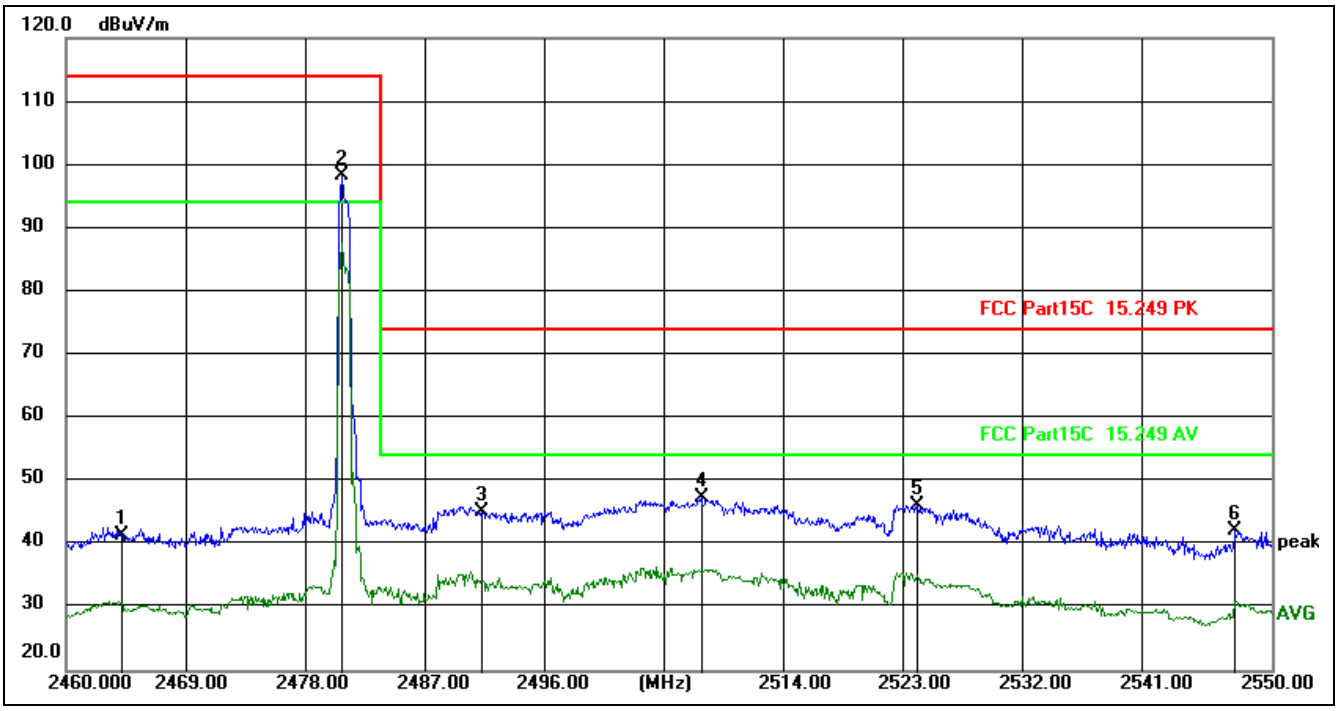
Site:	**966LAB**	**Antenna::Horizontal**	**Temperature(C):24(C)**
Limit:	**FCC Part15C 15.249 PK**		**Humidity(%):60%**
EUT:	**LED BATHROOM MIRROR**	**Test Time:**	**2025/5/27 16:39:25**
M/N.:	**BM064-15291**	**Power Rating:**	**DC**
Mode:	**Working**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	2358.910	41.28	5.53	46.81	74.00	-27.19	peak			
2	2368.630	39.91	5.54	45.45	74.00	-28.55	peak			
3	2415.880	44.31	5.59	49.90	114.00	-64.10	peak			
4	2431.945	41.99	5.60	47.59	114.00	-66.41	peak			
5	2445.580	43.66	5.62	49.28	114.00	-64.72	peak			
6 *	2480.005	93.87	5.65	99.52	114.00	-14.48	peak			



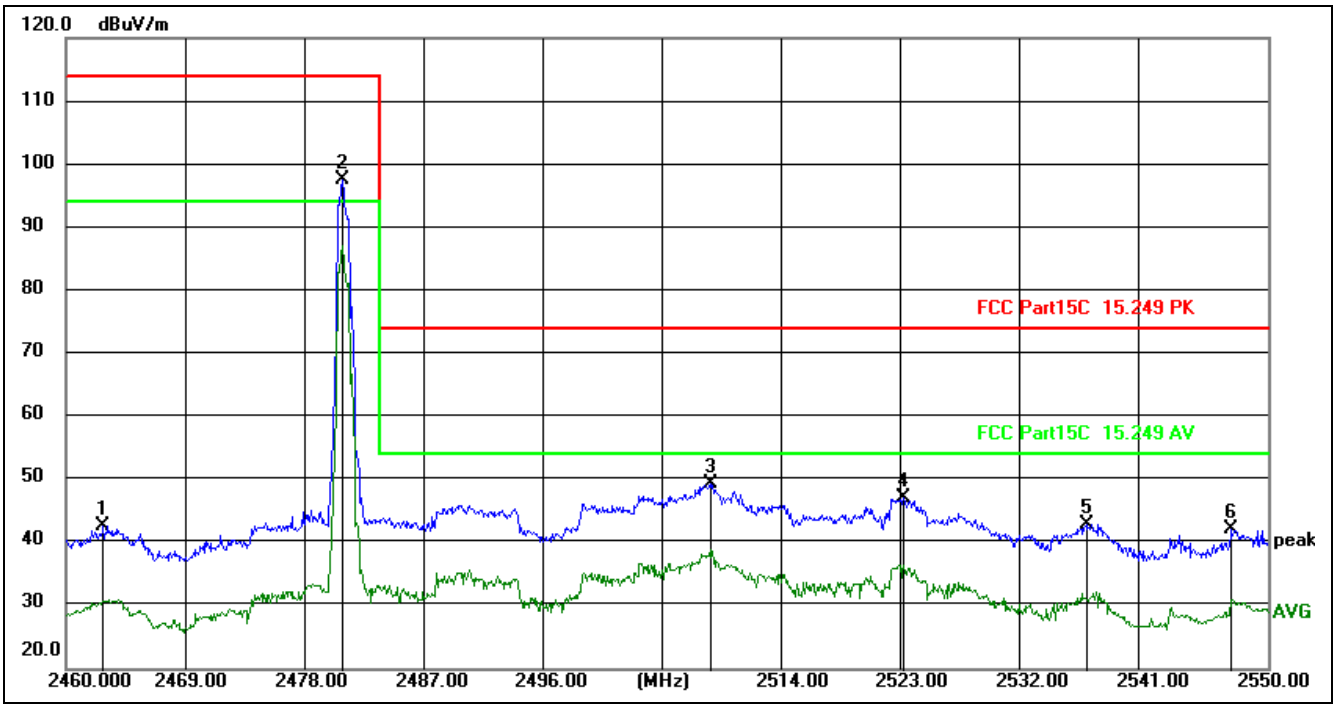
Site:	**966LAB**	**Antenna::Vertical**	**Temperature(C):24(C)**
Limit:	**FCC Part15C 15.249 PK**		**Humidity(%):60%**
EUT:	**LED BATHROOM MIRROR**	**Test Time:**	**2025/5/27 16:39:25**
M/N.:	**BM064-15291**	**Power Rating:**	**DC**
Mode:	**Working**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	2358.910	41.28	5.53	46.81	74.00	-27.19	peak			
2	2375.515	39.48	5.55	45.03	74.00	-28.97	peak			
3	2411.290	42.16	5.58	47.74	114.00	-66.26	peak			
4	2444.095	42.84	5.62	48.46	114.00	-65.54	peak			
5	2466.910	44.46	5.64	50.10	114.00	-63.90	peak			
6 *	2480.140	93.13	5.65	98.78	114.00	-15.22	peak			



Site:	**966LAB**	**Antenna::Horizontal**	**Temperature(C):24(C)**
Limit:	**FCC Part15C 15.249 PK**		**Humidity(%):60%**
EUT:	**LED BATHROOM MIRROR**	**Test Time:**	**2025/5/27 16:52:12**
M/N.:	**BM064-15291**	**Power Rating:**	**DC**
Mode:	**Working**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	2464.140	35.93	5.63	41.56	114.00	-72.44	peak			
2 *	2480.610	92.59	5.65	98.24	114.00	-15.76	peak			
3	2491.050	39.62	5.66	45.28	74.00	-28.72	peak			
4	2507.430	41.77	5.68	47.45	74.00	-26.55	peak			
5	2523.540	40.43	5.71	46.14	74.00	-27.86	peak			
6	2547.300	36.55	5.74	42.29	74.00	-31.71	peak			



Site:	**966LAB**	**Antenna::Vertical**	**Temperature(C):24(C)**
Limit:	**FCC Part15C 15.249 PK**		**Humidity(%):60%**
EUT:	**LED BATHROOM MIRROR**	**Test Time:**	**2025/5/27 16:52:12**
M/N.:	**BM064-15291**	**Power Rating:**	**DC**
Mode:	**Working**	**Test Engineer:**	
Note:			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)	Remark
1	2462.790	37.17	5.63	42.80	114.00	-71.20	peak			
2 *	2480.700	91.83	5.65	97.48	114.00	-16.52	peak			
3	2508.240	43.80	5.68	49.48	74.00	-24.52	peak			
4	2522.730	41.35	5.71	47.06	74.00	-26.94	peak			
5	2536.410	37.32	5.73	43.05	74.00	-30.95	peak			
6	2547.300	36.55	5.74	42.29	74.00	-31.71	peak			

REMARKS:

(1) Emission level (dBuV/m) =Raw Value (dBuV)+Correction Factor (dB/m)
(2) Correction Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
(3) Margin value = Limit value- Emission level.
(4) -- Mean the PK detector measured value is below average limit.
(5) The other emission levels were very low against the limit.
(6) RBW1MHz VBW3MHz Peak detector is for PK value; RBW 1MHz VBW10Hz Peak detector is for AV value.
(7) For fundamental frequency, RBW 3MHz VBW 3MHz Peak detector is for PK Value; RMS detector is for AV value.

5. Maximum Peak Output Power

5.1. Applied procedures / Limit

15.247(a) (1) Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.
15.247(b) (1) For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

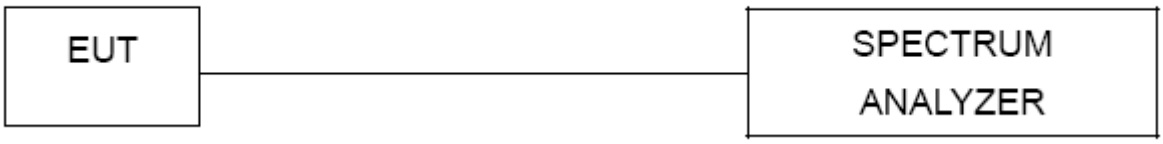
5.2. Test procedure

(1) Connected the antenna port to the Spectrum Analyzer, set the Spectrum Analyzer as Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel RBW > the 20 dB bandwidth of the emission being measured, VBW ≥ RBW, Sweep = auto Detector function = peak, Trace = max hold
(2) The EUT should be transmitting at its maximum data rate. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power.
(3) The above procedure shall be repeated at the lowest, the middle, and the highest frequency of the stated frequency range with modulated mode. Also shall be performed at different modes of operation.

5.3. Deviation from standard

No deviation.

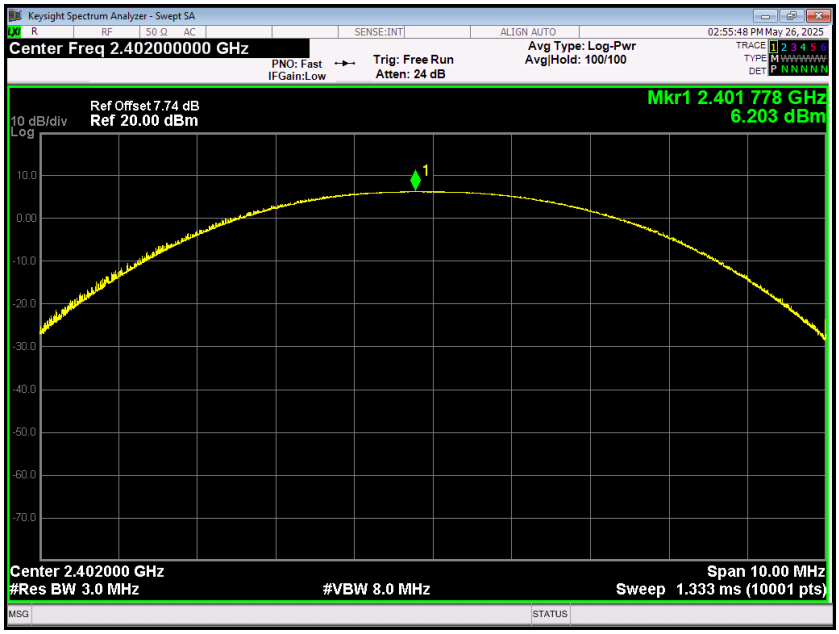
5.4. Test setup



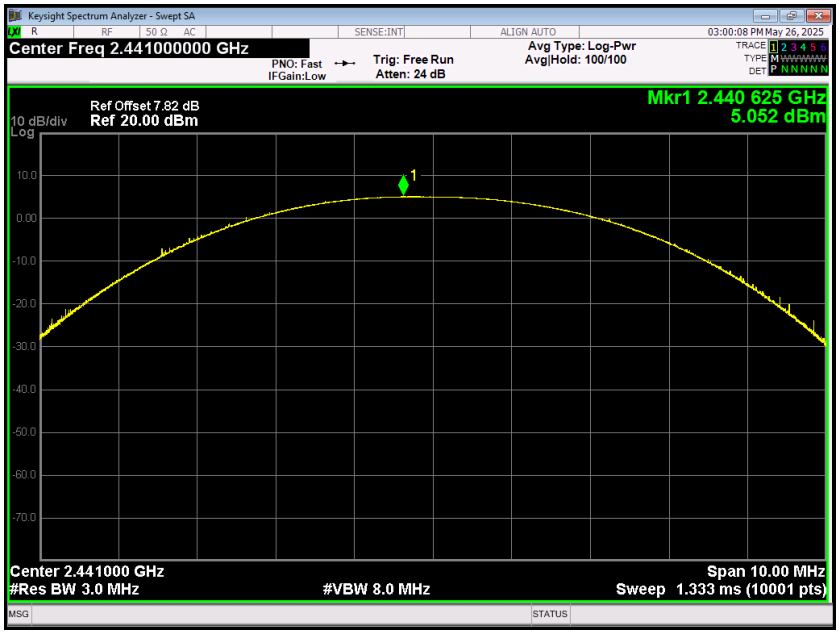
5.5. TEST RESULTS

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant 1	6.203	0	6.203	21	Pass
NVNT	1-DH5	2441	Ant 1	5.052	0	5.052	21	Pass
NVNT	1-DH5	2480	Ant 1	4.04	0	4.04	21	Pass

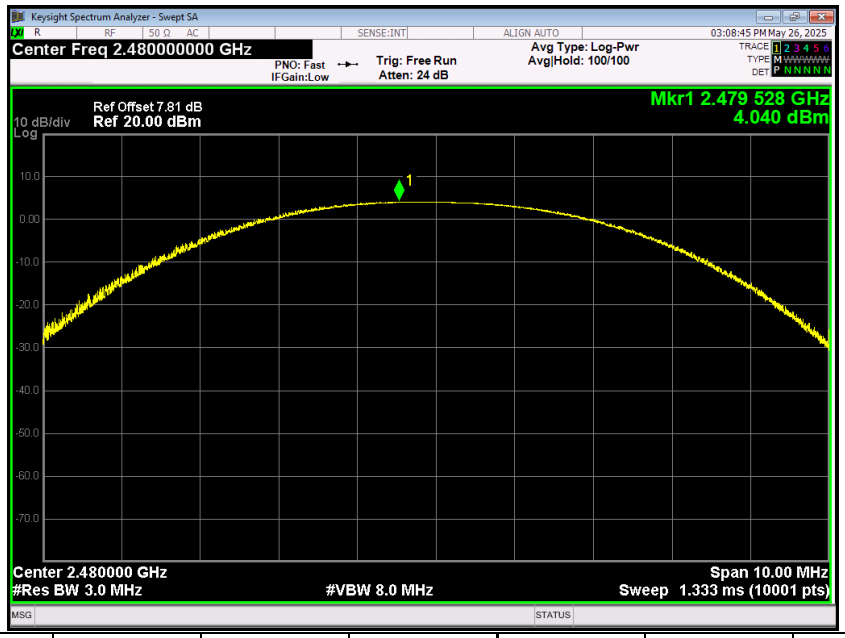
Power NVNT 1-DH5 2402MHz Ant1



Power NVNT 1-DH5 2441MHz Ant1

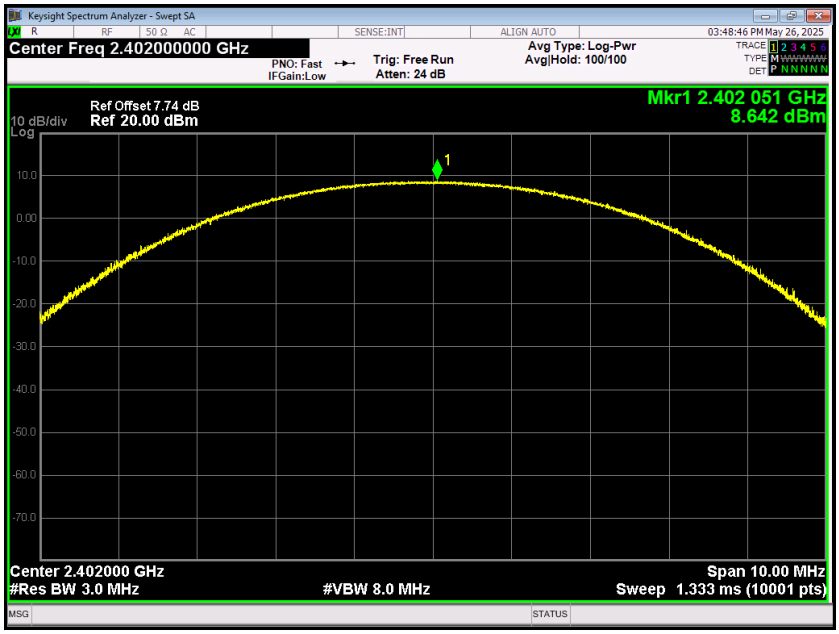


Power NVNT 1-DH5 2480MHz Ant1

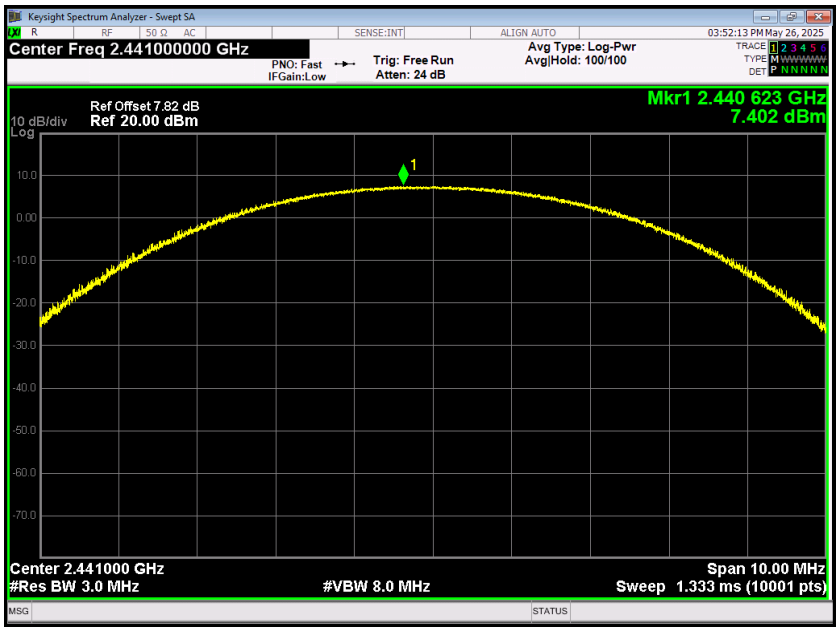


Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	2-DH5	2402	Ant 1	8.642	0	8.642	21	Pass
NVNT	2-DH5	2441	Ant 1	7.402	0	7.402	21	Pass
NVNT	2-DH5	2480	Ant 1	6.434	0	6.434	21	Pass

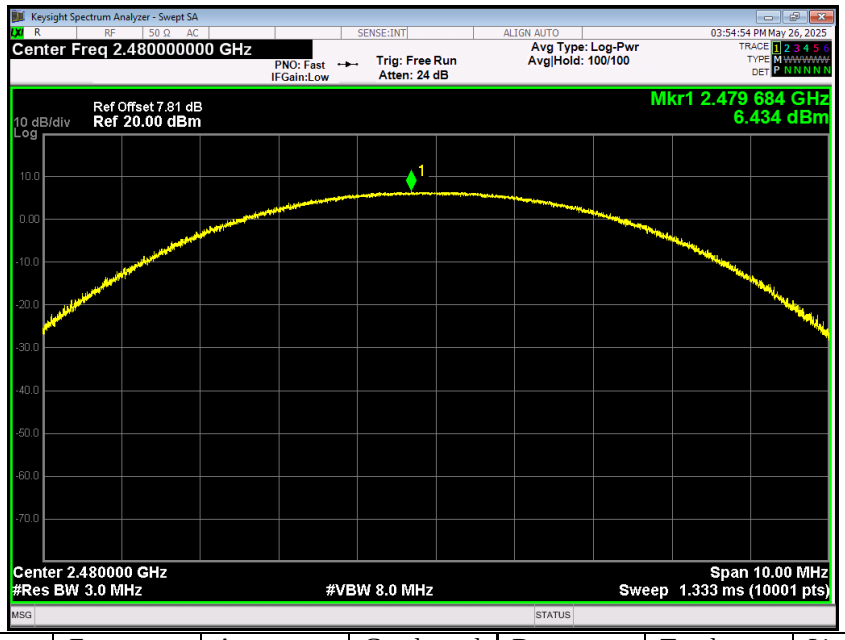
Power NVNT 2-DH5 2402MHz Ant1



Power NVNT 2-DH5 2441MHz Ant1

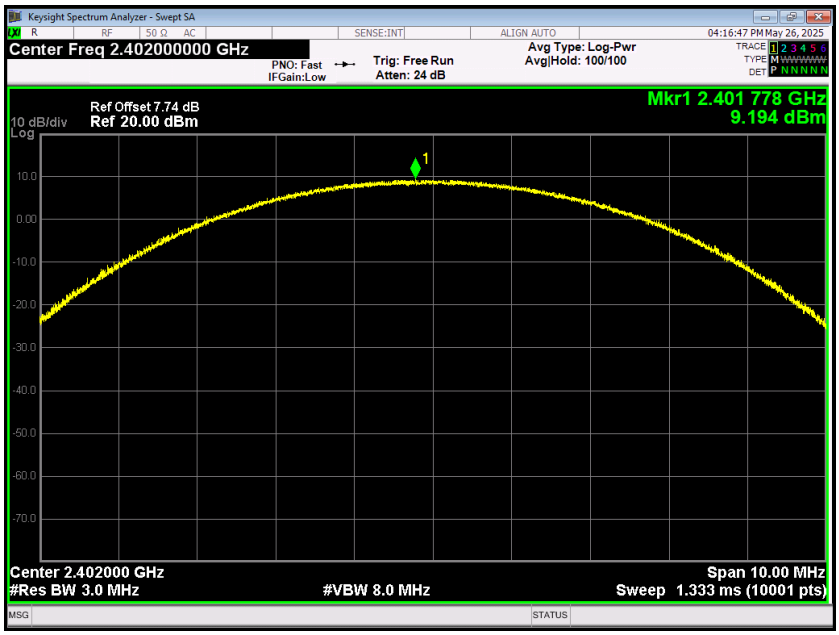


Power NVNT 2-DH5 2480MHz Ant1

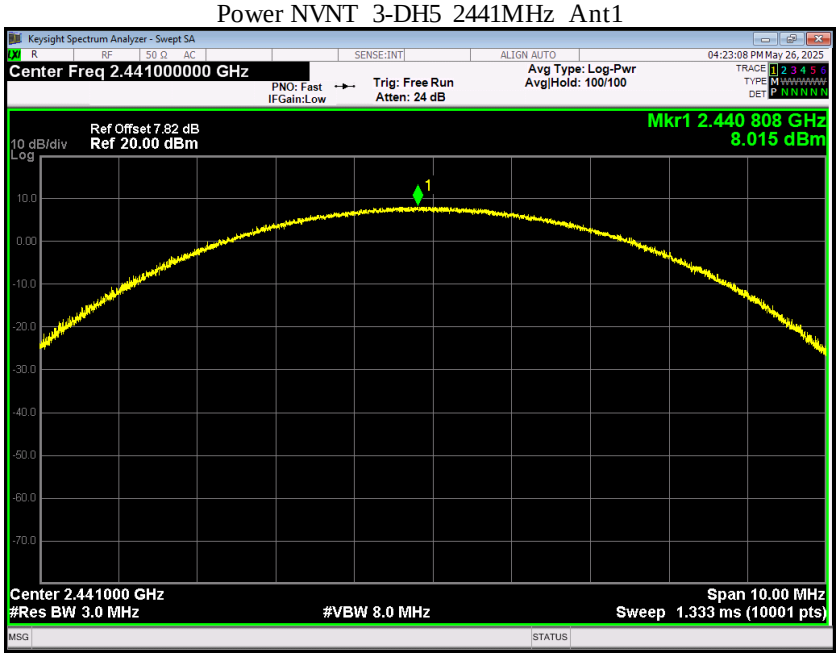


Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	3-DH5	2402	Ant 1	9.194	0	9.194	21	Pass
NVNT	3-DH5	2441	Ant 1	8.015	0	8.015	21	Pass
NVNT	3-DH5	2480	Ant 1	7.192	0	7.192	21	Pass

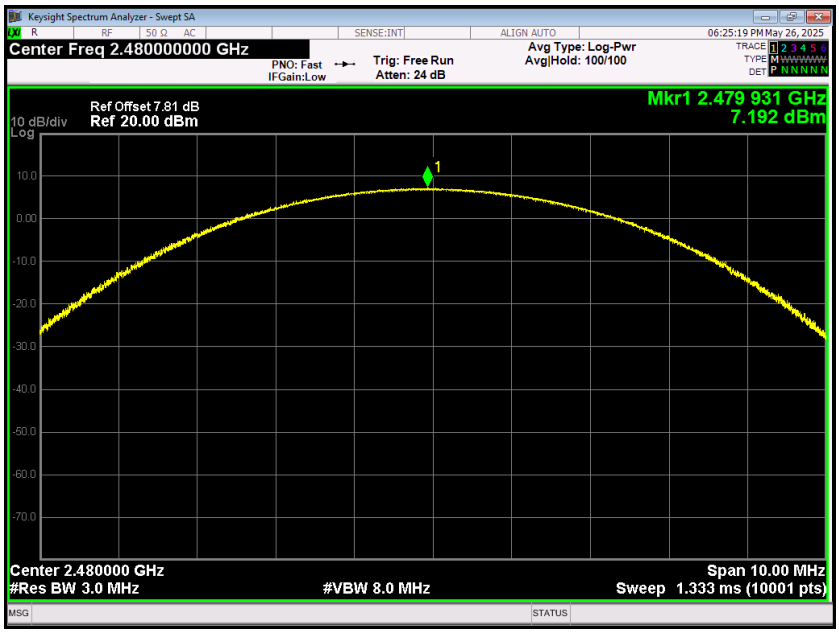
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



Power NVNT 3-DH5 2480MHz Ant1



6. BANDWIDTH TEST

6.1. Applied procedures / Limit

For frequency hopping system operating in the 2400-2483.5MHz, If the 20dB bandwidth of hopping channel is greater than 25kHz, two-thirds 20dBbandwidth of hopping channel shell be a minimum limit for the hopping channel separation.

6.2. Test procedure

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel
RBW ≥ 1% of the 20 dB bandwidth, VBW ≥ RBW, Sweep = auto, Detector function = peak
Trace = max hold

6.3. Deviation from standard

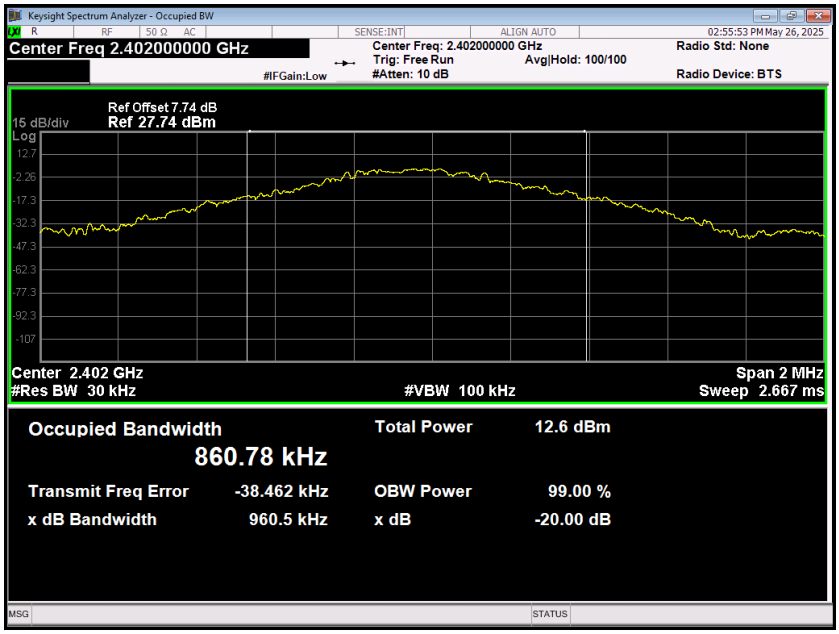
No deviation.

6.4. Test setup

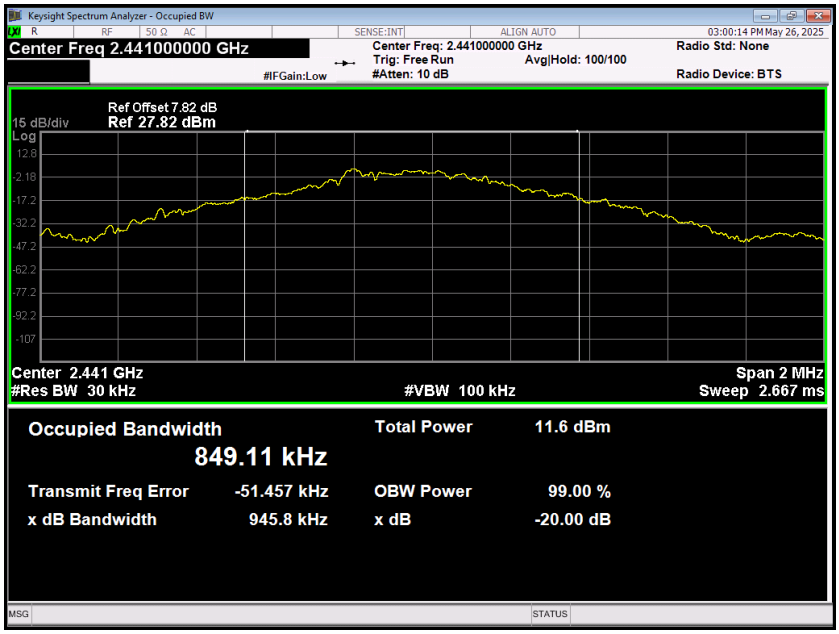
6.5. Test results

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant 1	0.8608	0.9605	0	Pass
NVNT	1-DH5	2441	Ant 1	0.8491	0.9458	0	Pass
NVNT	1-DH5	2480	Ant 1	0.9157	1.1014	0	Pass

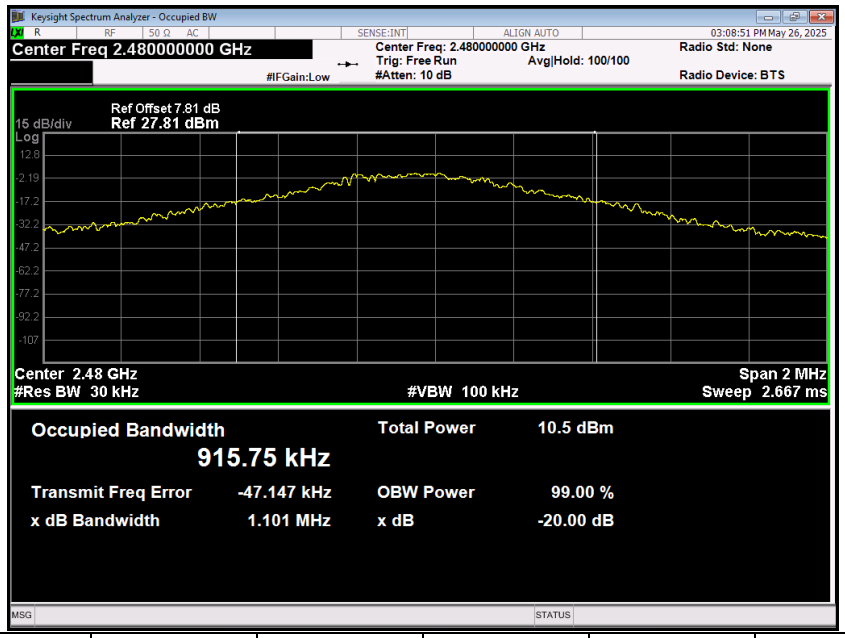
OBW NVNT 1-DH5 2402MHz Ant1



OBW NVNT 1-DH5 2441MHz Ant1

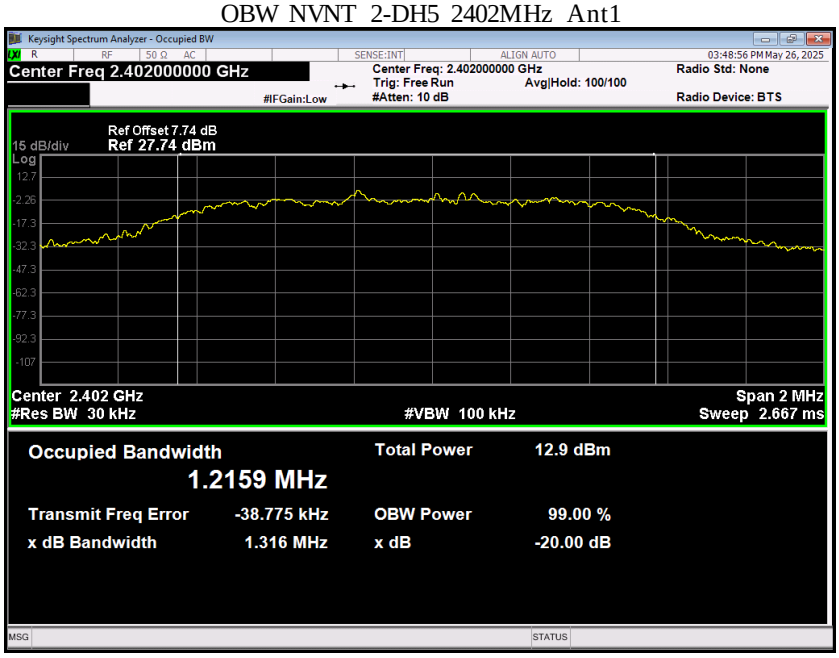


OBW NVNT 1-DH5 2480MHz Ant1

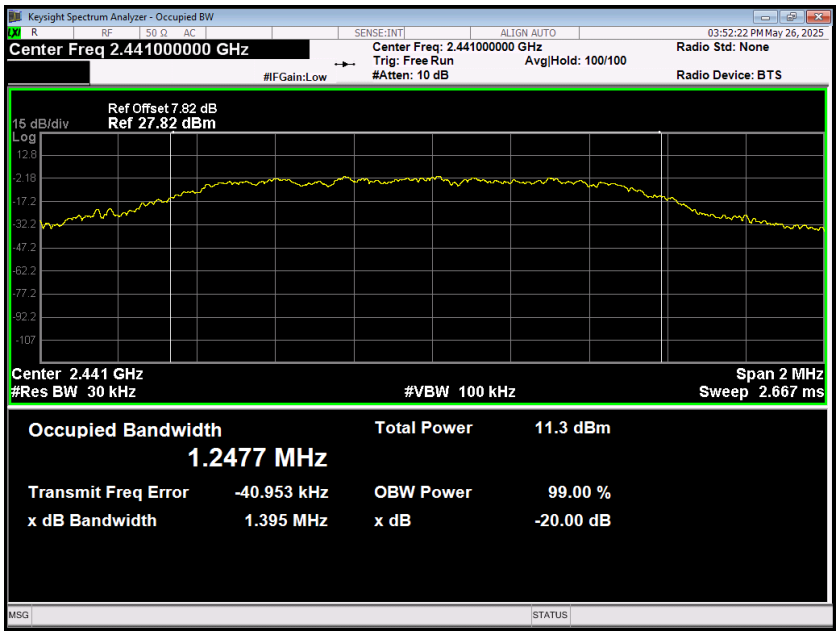


Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	2-DH5	2402	Ant 1	1.2159	1.3157	0	Pass
NVNT	2-DH5	2441	Ant 1	1.2477	1.3953	0	Pass
NVNT	2-DH5	2480	Ant 1	1.2328	1.3346	0	Pass

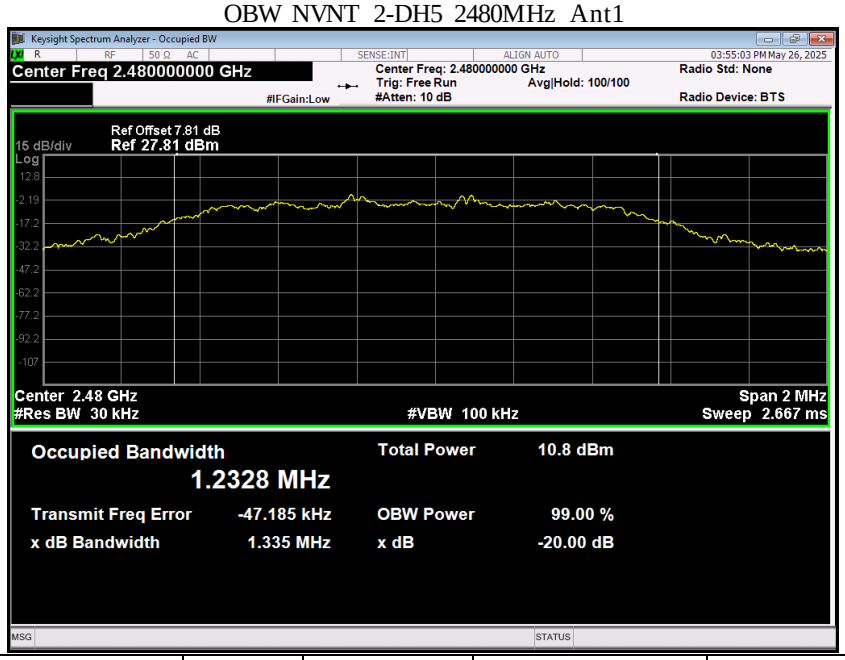
OBW NVNT 2-DH5 2402MHz Ant1



OBW NVNT 2-DH5 2441MHz Ant1

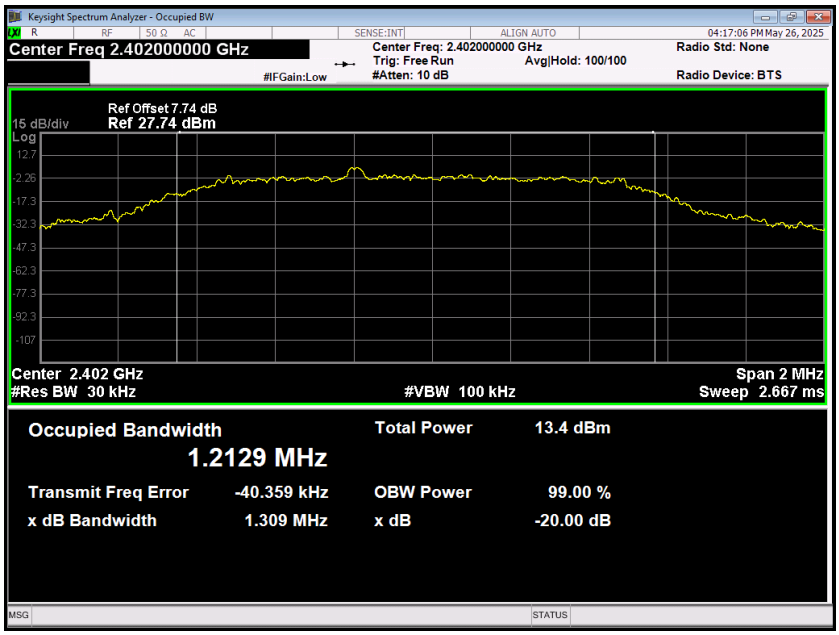


OBW NVNT 2-DH5 2480MHz Ant1

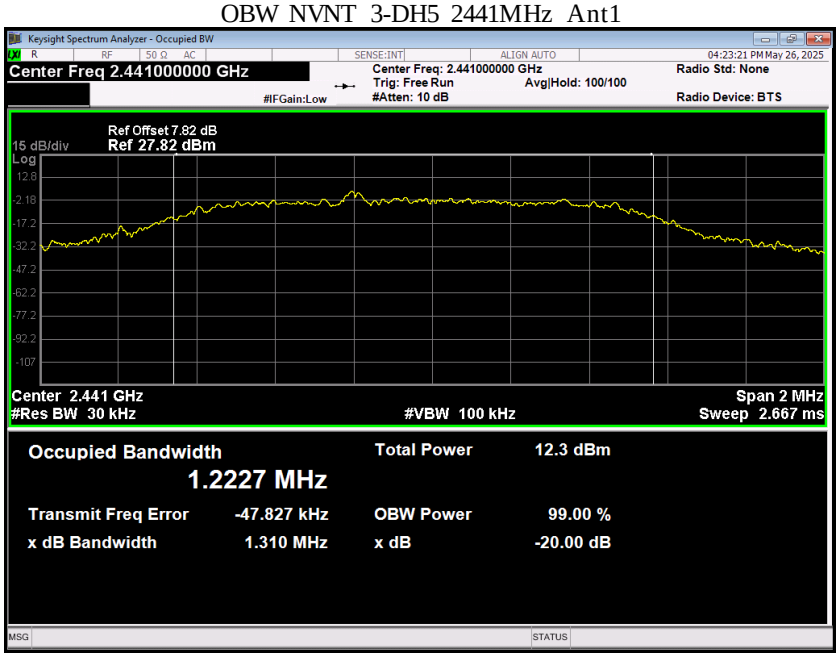


Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	3-DH5	2402	Ant 1	1.2129	1.3092	0	Pass
NVNT	3-DH5	2441	Ant 1	1.2227	1.3104	0	Pass
NVNT	3-DH5	2480	Ant 1	1.1723	1.2787	0	Pass

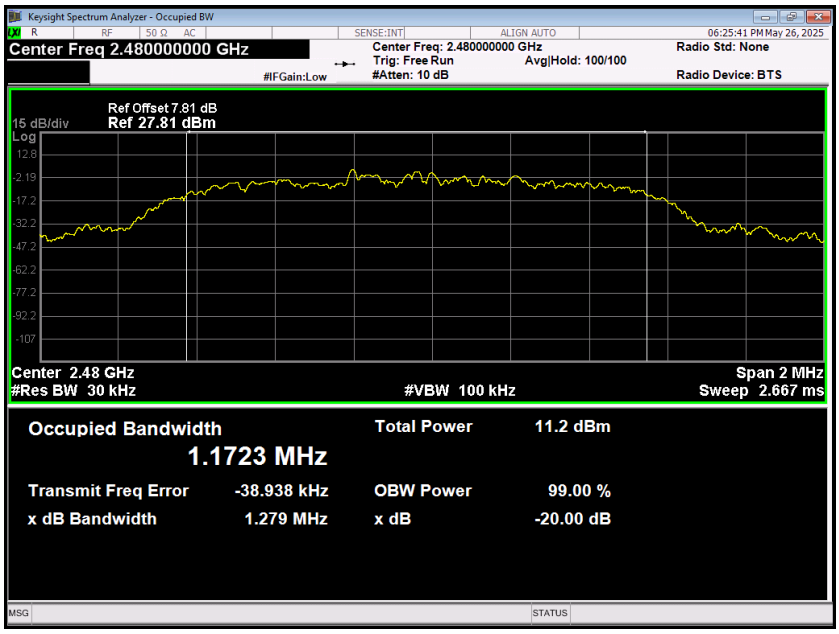
OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1



OBW NVNT 3-DH5 2480MHz Ant1



7. Carrier Frequencies Separated

7.1. Applied procedures / Limit

15.247(a) (1) Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

7.2. Test procedure

(1) Connected the antenna port to the Spectrum Analyzer, set the Spectrum Analyzer as Span = wide enough to capture the peaks of two adjacent channels, Resolution (or IF) Bandwidth (RBW) ≥ 1% of the span, Video (or Average) Bandwidth (VBW) ≥ RBW Sweep = auto, Detector function = peak, Trace = max hold

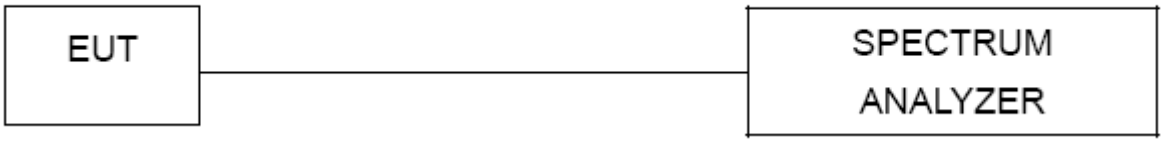
(2) The EUT should be transmitting at its maximum data rate. Use the marker-delta function to determine the separation between the peaks of the adjacent channels.

(3) The above procedure shall be repeated at the lowest, the middle, and the highest frequency of the stated frequency range with modulated mode. also shall be performed at different modes of operation.

7.3. Deviation from standard

No deviation.

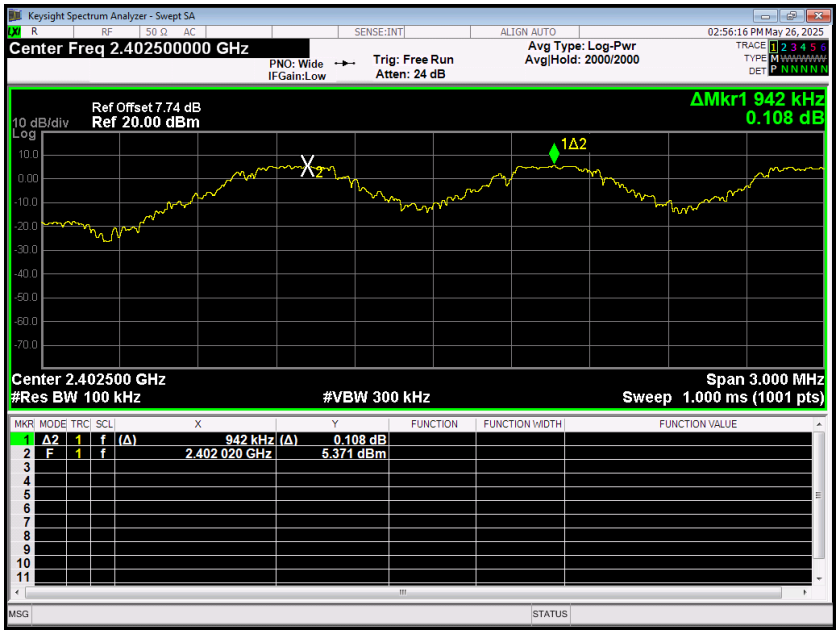
7.4. Test setup



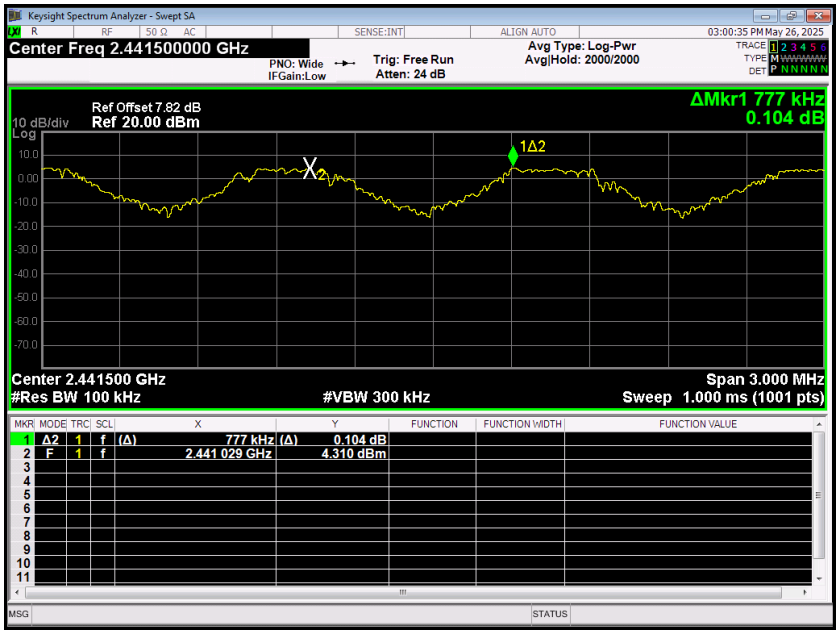
7.5. Test results

Condition	Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	2402.02	2402.962	0.942	0.64	Pass
NVNT	1-DH5	2441.029	2441.806	0.777	0.631	Pass
NVNT	1-DH5	2478.813	2479.926	1.113	0.734	Pass

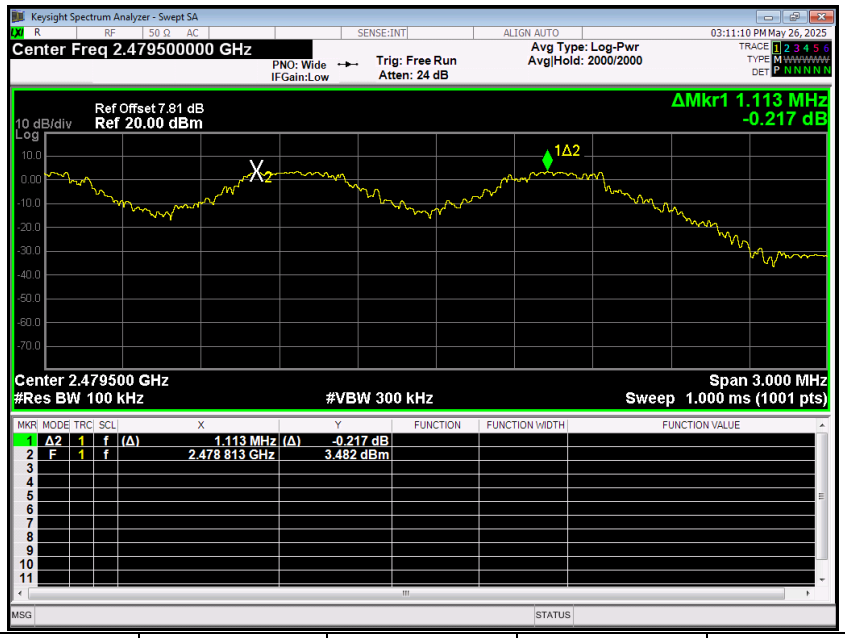
CFS NVNT 1-DH5 2402MHz



CFS NVNT 1-DH5 2441MHz

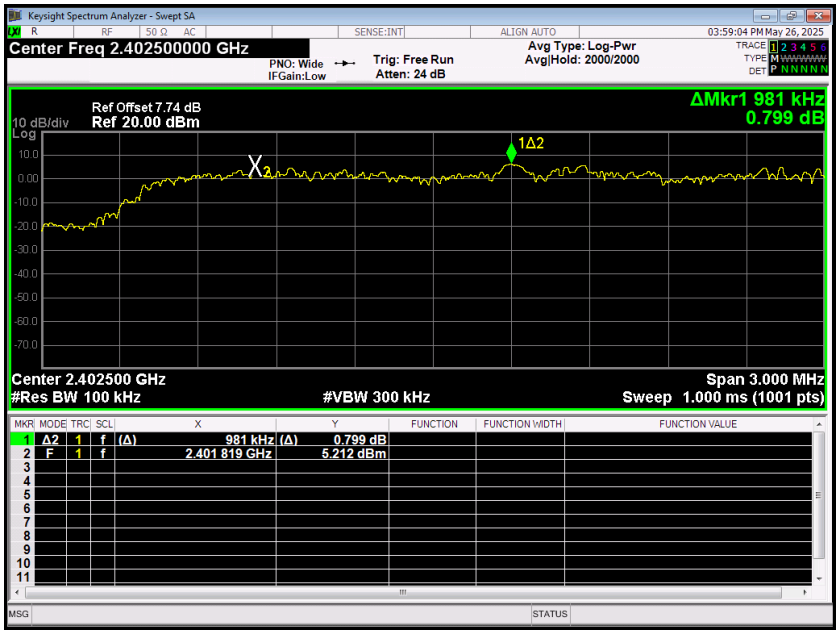


CFS NVNT 1-DH5 2480MHz

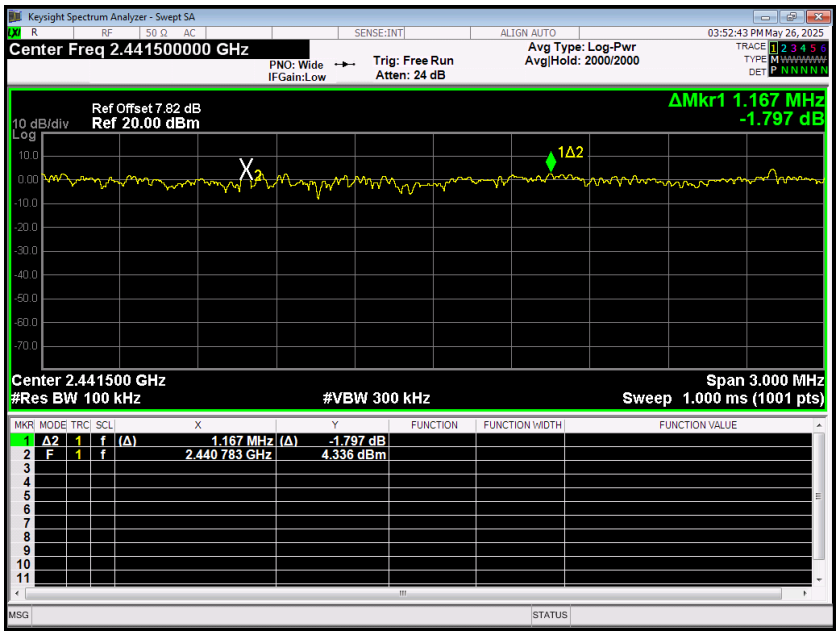


Condition	Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	2-DH5	2401.819	2402.8	0.981	0.89	Pass
NVNT	2-DH5	2440.783	2441.95	1.167	0.93	Pass
NVNT	2-DH5	2479.02	2479.98	0.96	0.89	Pass

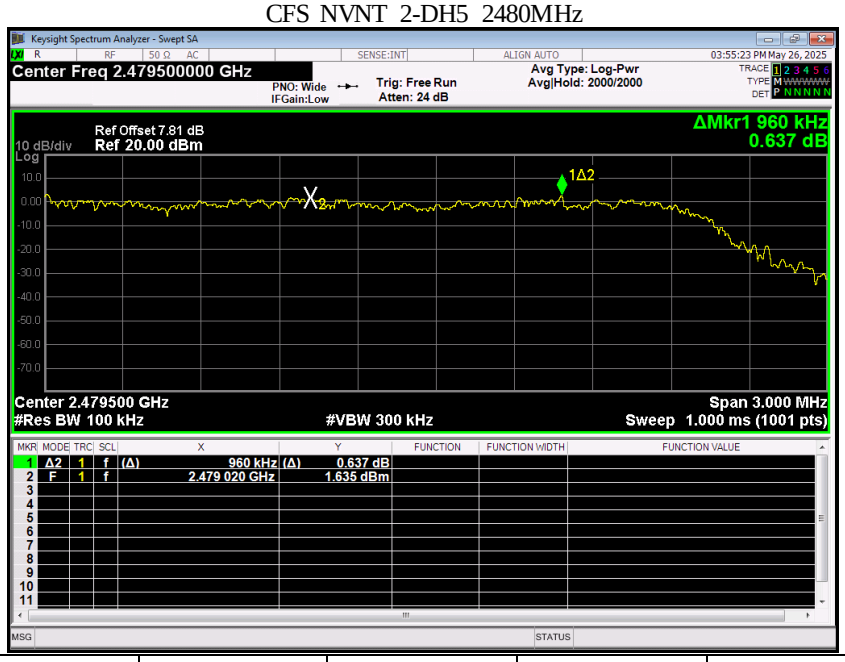
CFS NVNT 2-DH5 2402MHz



CFS NVNT 2-DH5 2441MHz



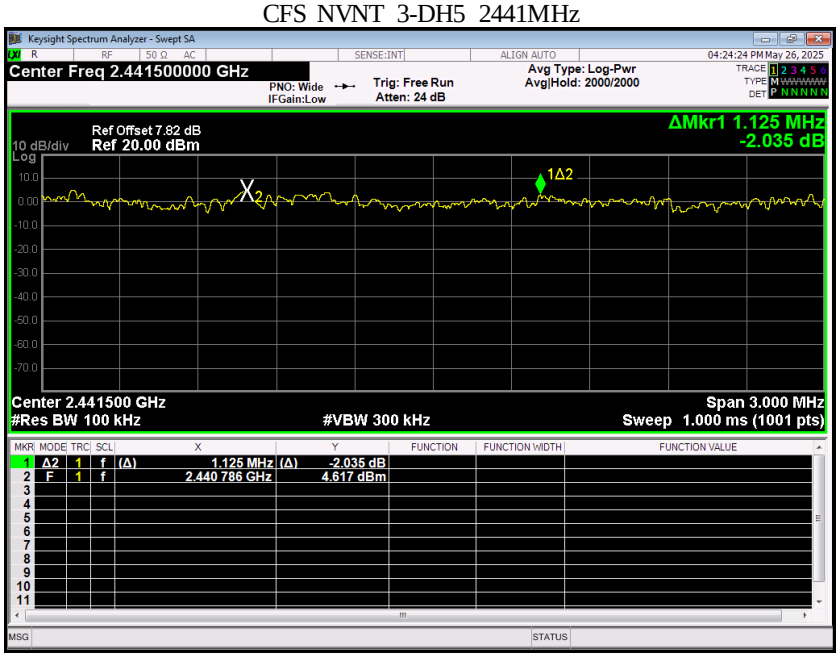
CFS NVNT 2-DH5 2480MHz



Condition	Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	3-DH5	2402.038	2402.959	0.921	0.852	Pass
NVNT	3-DH5	2440.786	2441.911	1.125	0.874	Pass
NVNT	3-DH5	2478.798	2479.8	1.002	0.852	Pass

CFS NVNT 3-DH5 2402MHz

CFS NVNT 3-DH5 2441MHz



CFS NVNT 3-DH5 2480MHz

8. Hopping Channel Number

8.1. Applied procedures / Limit

15.247(a) (1) (iii) Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

8.2. Test procedure

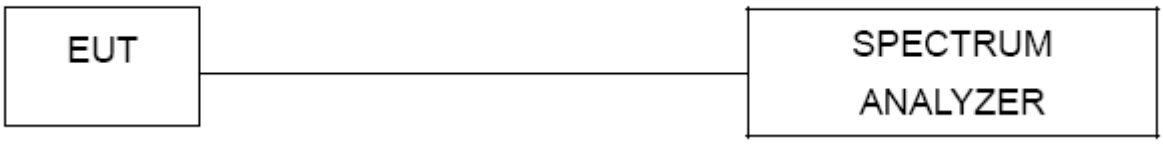
(1) Connected the antenna port to the Spectrum Analyzer , set the Spectrum Analyzer as Span = the frequency band of operation, RBW ≥ 1% of the span, VBW ≥ RBW Sweep = auto Detector function = peak, Trace = max hold

(2) The EUT should be have its hopping function enabled. Maxhold and record hopping channels It may prove necessary to break the span up to sections, in order to clearly show all of the hopping frequencies.

8.3. Deviation from standard

No deviation.

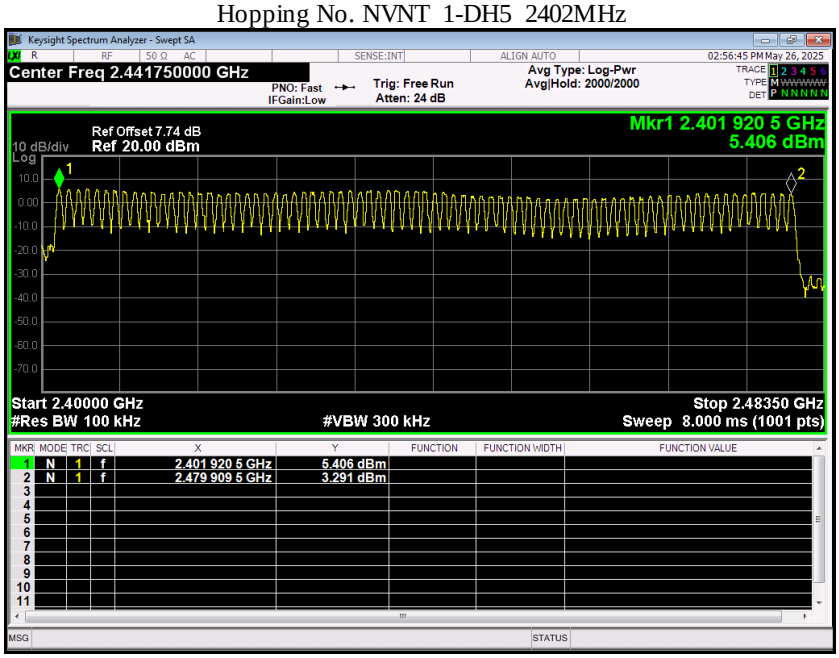
8.4. Test setup



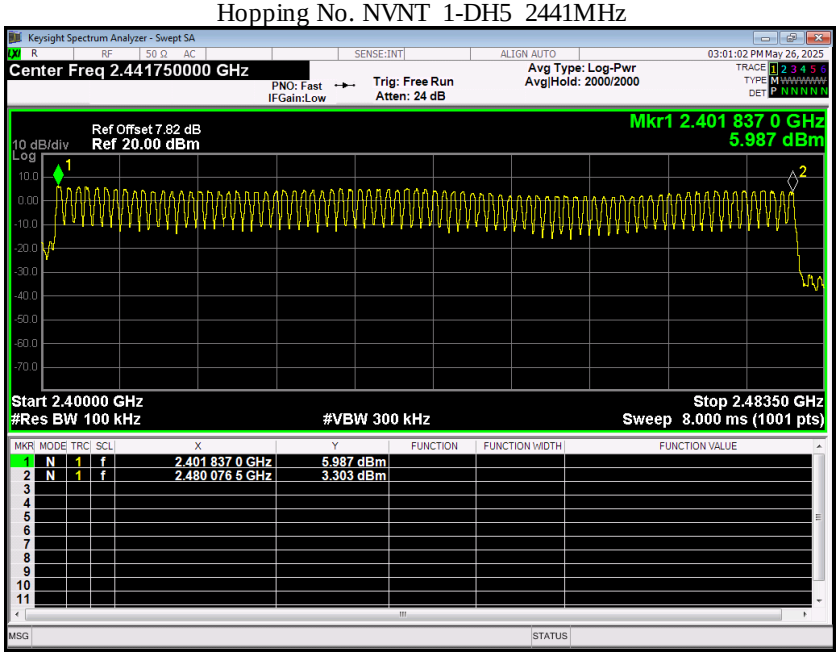
8.5. Test result

Condition	Mode	Hopping Number	Limit	Verdict
NVNT	1-DH5	79	15	Pass
NVNT	1-DH5	79	15	Pass
NVNT	1-DH5	79	15	Pass

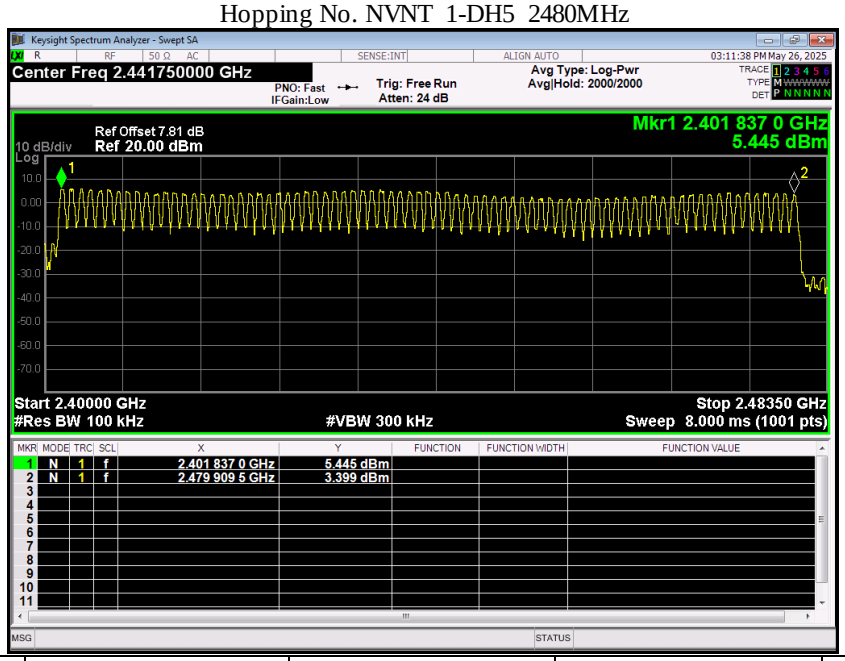
Hopping No. NVNT 1-DH5 2402MHz



Hopping No. NVNT 1-DH5 2441MHz

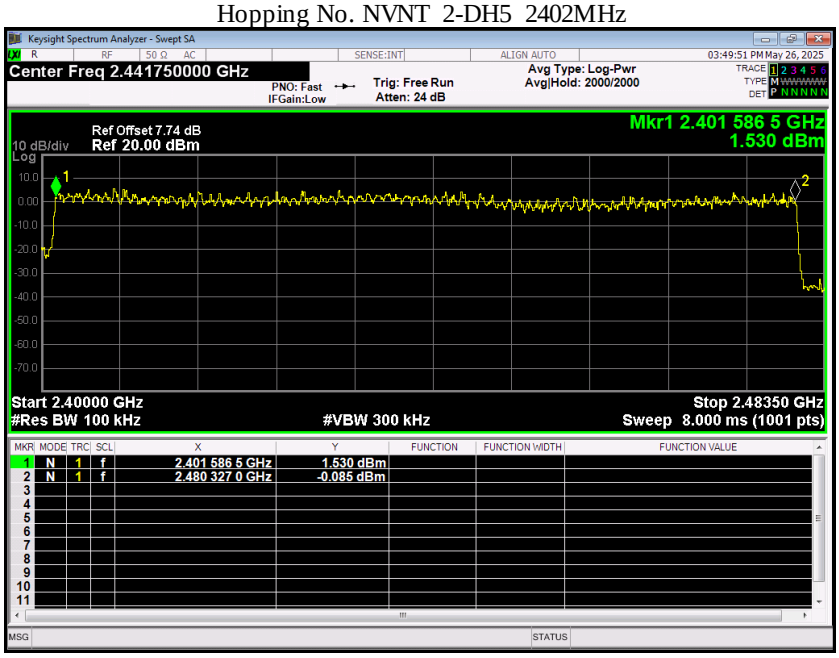


Hopping No. NVNT 1-DH5 2480MHz

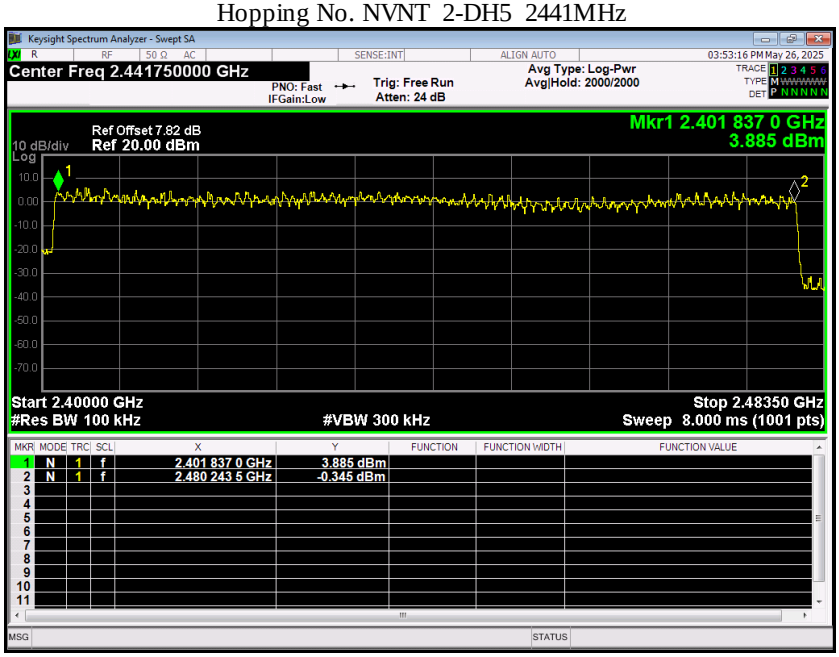


Condition	Mode	Hopping Number	Limit	Verdict
NVNT	2-DH5	79	15	Pass
NVNT	2-DH5	79	15	Pass
NVNT	2-DH5	79	15	Pass

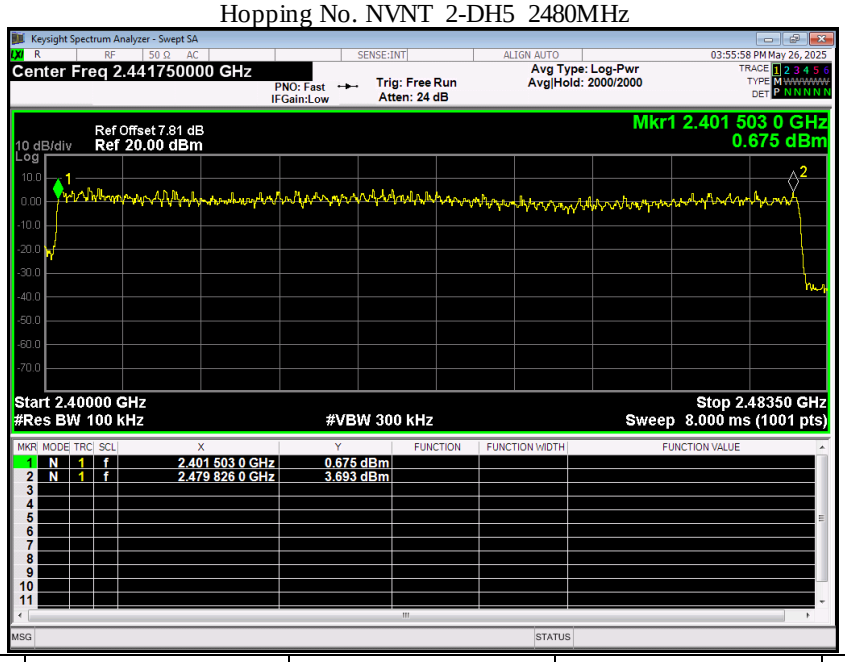
Hopping No. NVNT 2-DH5 2402MHz



Hopping No. NVNT 2-DH5 2441MHz

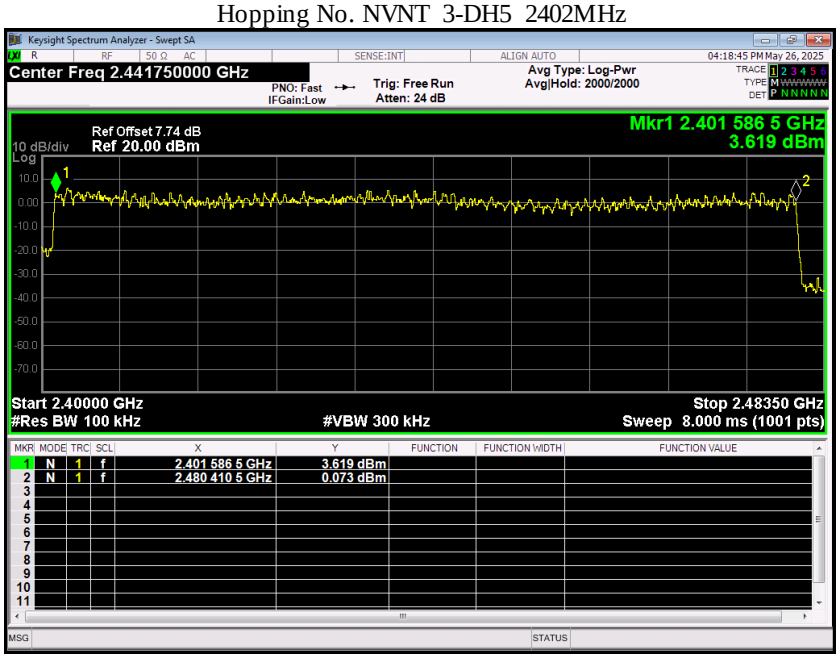


Hopping No. NVNT 2-DH5 2480MHz

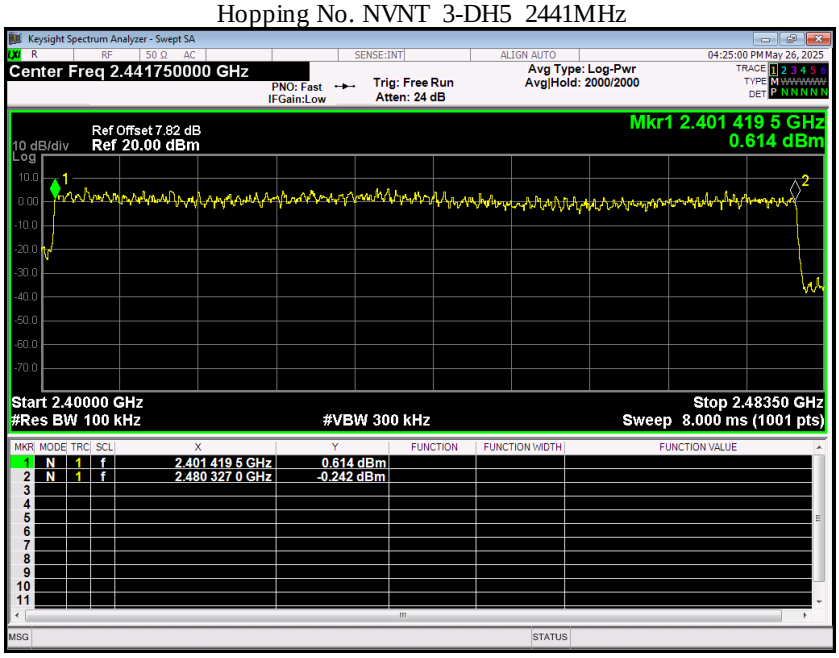


Condition	Mode	Hopping Number	Limit	Verdict
NVNT	3-DH5	79	15	Pass
NVNT	3-DH5	79	15	Pass
NVNT	3-DH5	79	15	Pass

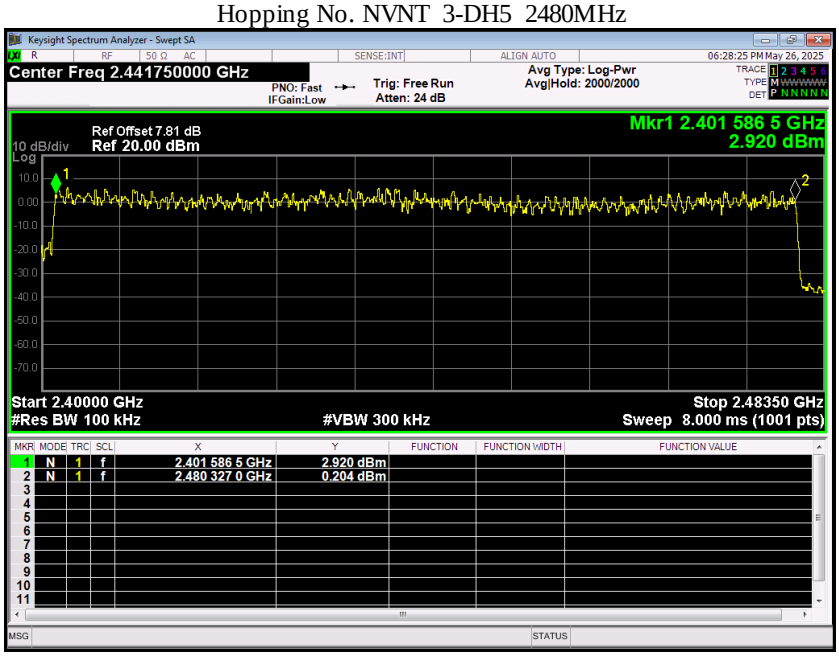
Hopping No. NVNT 3-DH5 2402MHz



Hopping No. NVNT 3-DH5 2441MHz



Hopping No. NVNT 3-DH5 2480MHz



9. Dwell time

9.1. Applied procedures / Limit

15.247(a) (1) (iii) Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

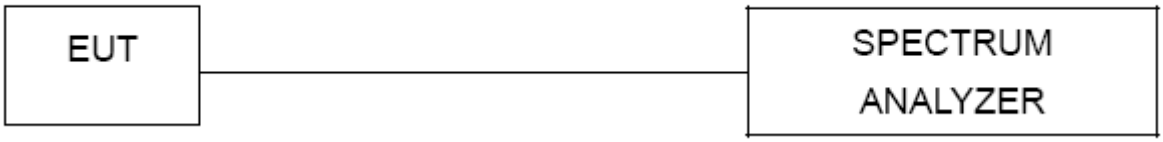
9.2. Test procedure

(1) Place the EUT on the table in the chamber or connect the antenna port of the EUT to spectrum analyzer and set it in transmitting mode.
(2) Set RBW of spectrum analyzer to 1MHz, VBW ≥ RBW
(3) Use a video trigger with the trigger level set to enable triggering only on full pulses.
(4) Sweep Time is more than once pulse time.
(5) Set the center frequency on any frequency would be measure and set the frequency span to zero span.
(6) Measure the maximum time duration of one single pulse.
(7) Set the EUT for DH5, DH3 and DH1 packet transmitting.
(8) Measure the maximum time duration of one single pulse.
(9) A Period Time = 79*0.4=31.6 S
DH1 Time Slot: Reading * (1600/2)*31.6/79
DH3 Time Slot: Reading * (1600/4)*31.6/79
DH5 Time Slot: Reading * (1600/6)*31.6/79

9.3. Deviation from standard

No deviation.

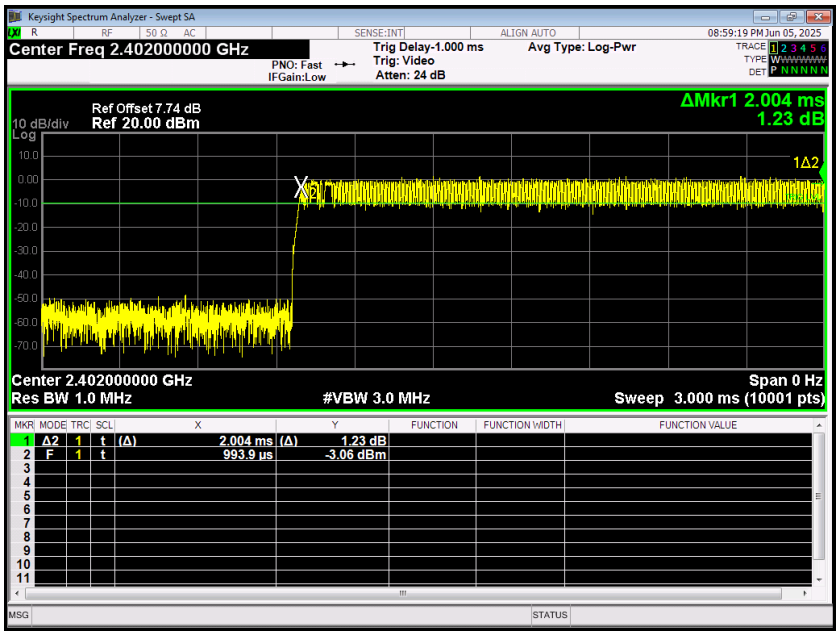
9.4. Test setup



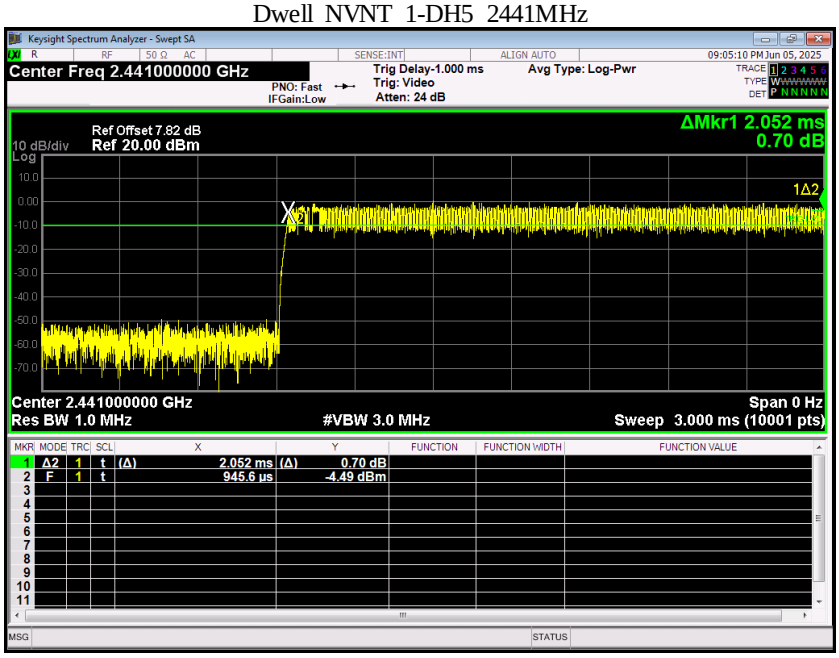
Test result

Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	2.004	213.76	31600	400	Pass
NVNT	1-DH5	2441	2.052	218.88	31600	400	Pass
NVNT	1-DH5	2480	1.986	211.84	31600	400	Pass

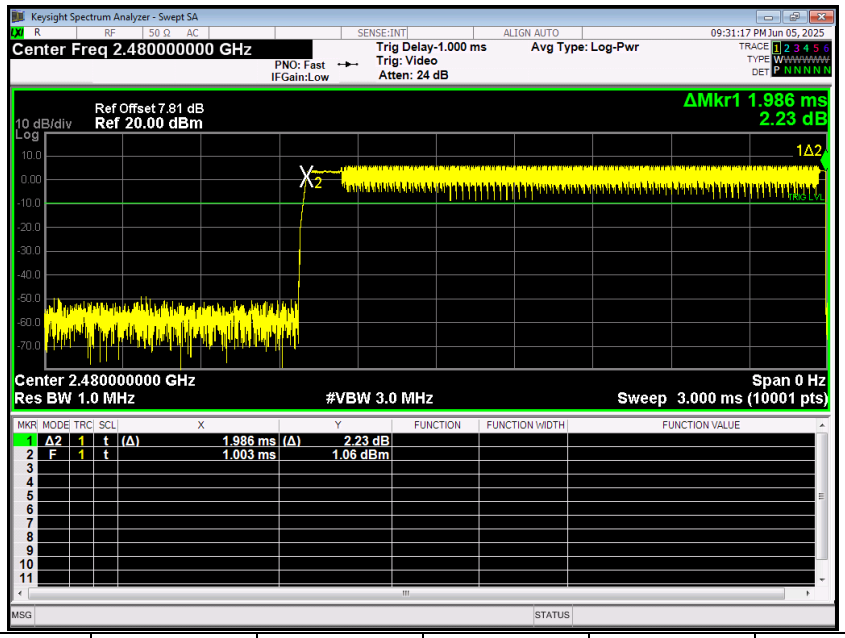
Dwell NVNT 1-DH5 2402MHz



Dwell NVNT 1-DH5 2441MHz

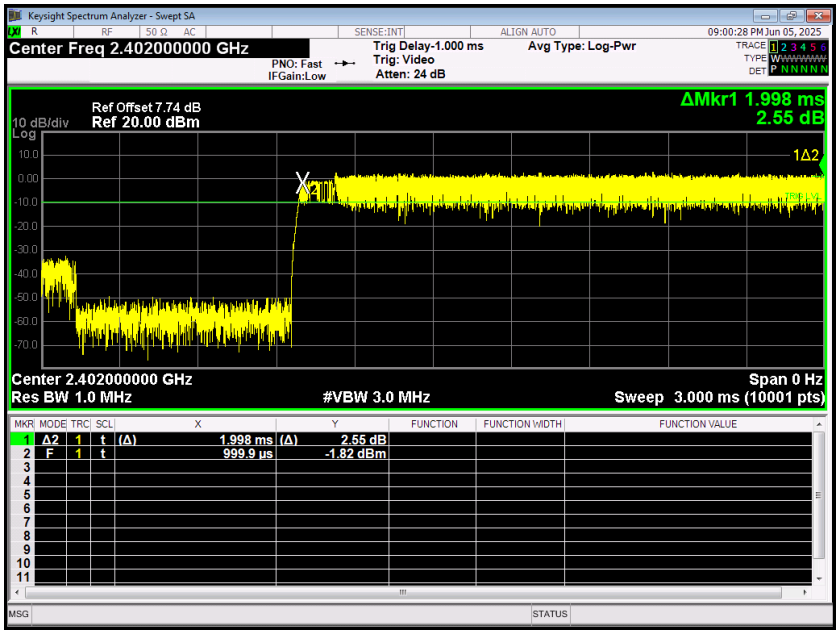


Dwell NVNT 1-DH5 2480MHz

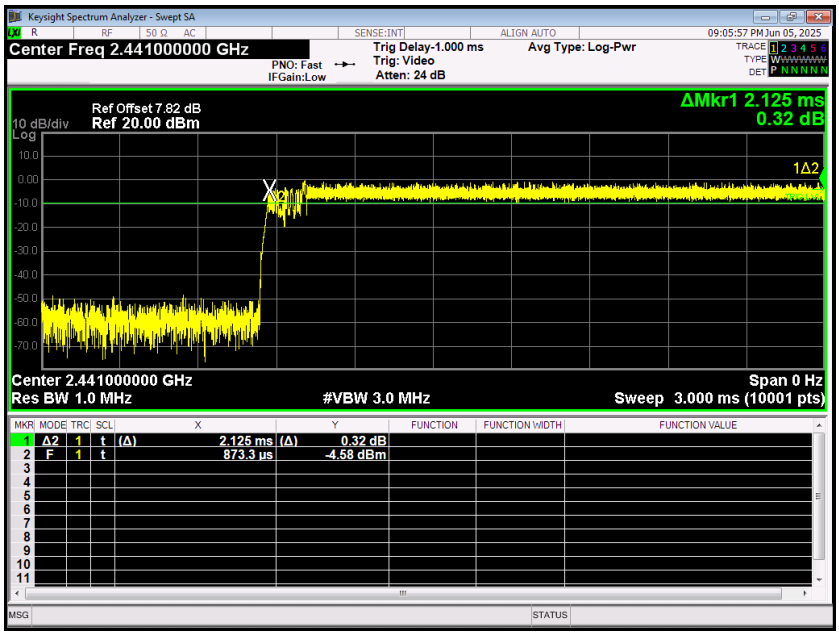


Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	2-DH5	2402	1.998	213.12	31600	400	Pass
NVNT	2-DH5	2441	2.125	226.667	31600	400	Pass
NVNT	2-DH5	2480	2.132	227.413	31600	400	Pass

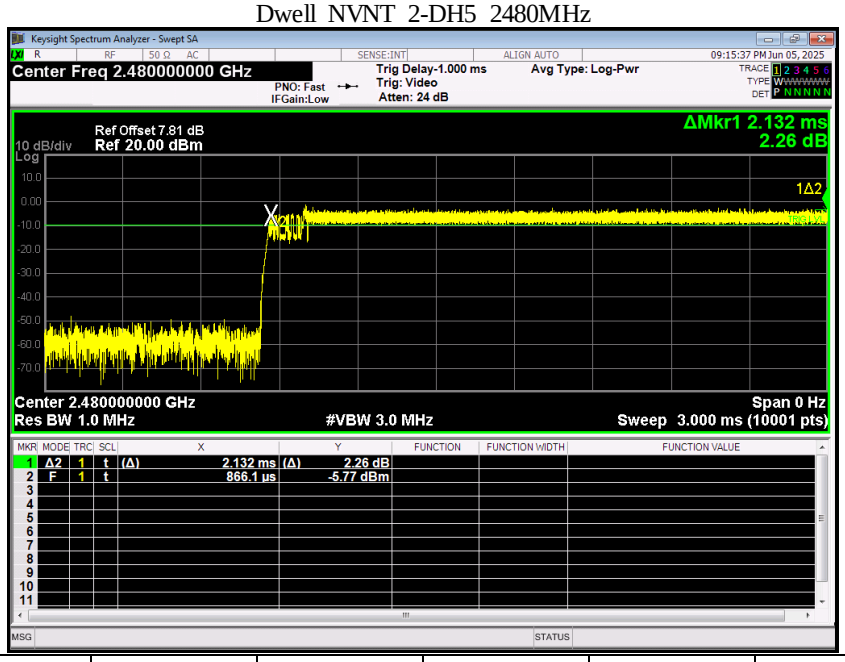
Dwell NVNT 2-DH5 2402MHz



Dwell NVNT 2-DH5 2441MHz

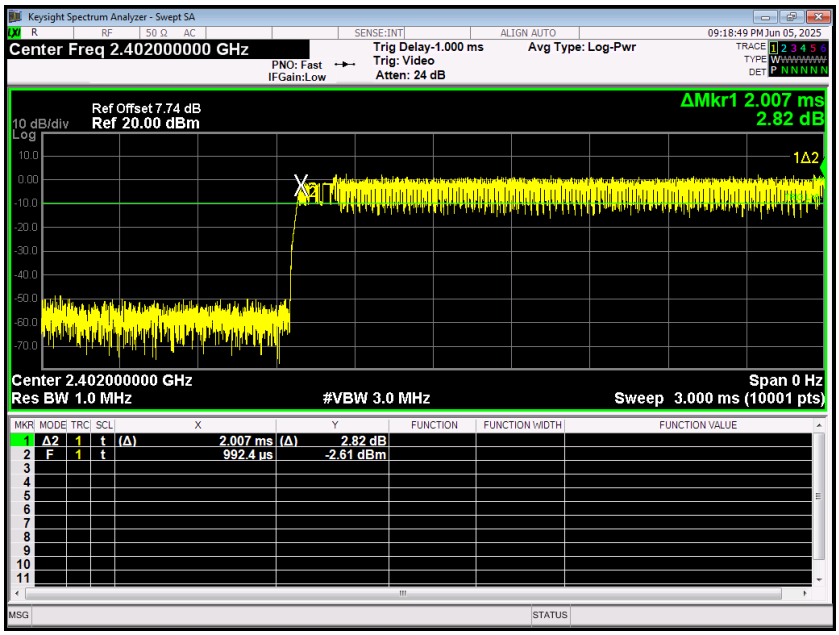


Dwell NVNT 2-DH5 2480MHz

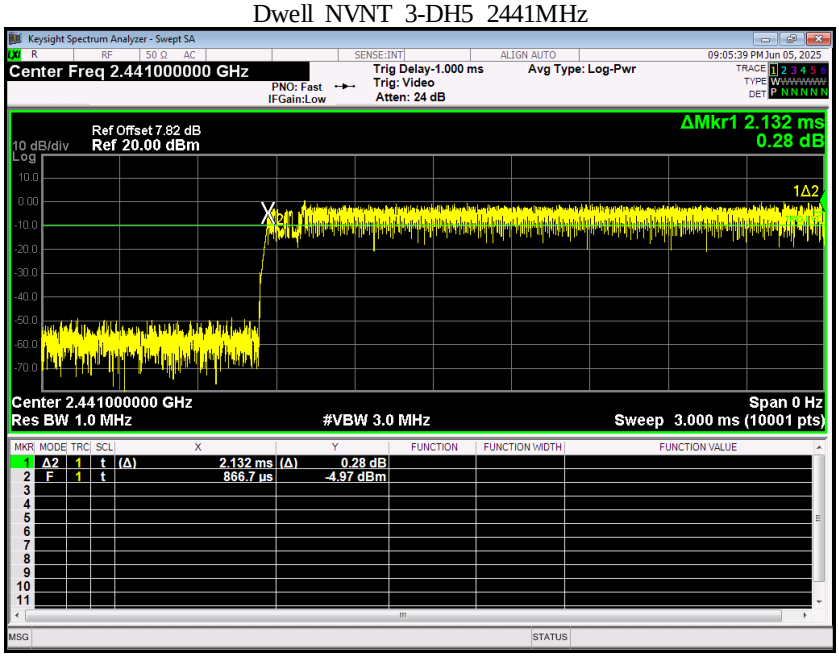


Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	3-DH5	2402	2.007	214.08	31600	400	Pass
NVNT	3-DH5	2441	2.132	227.413	31600	400	Pass
NVNT	3-DH5	2480	1.894	202.027	31600	400	Pass

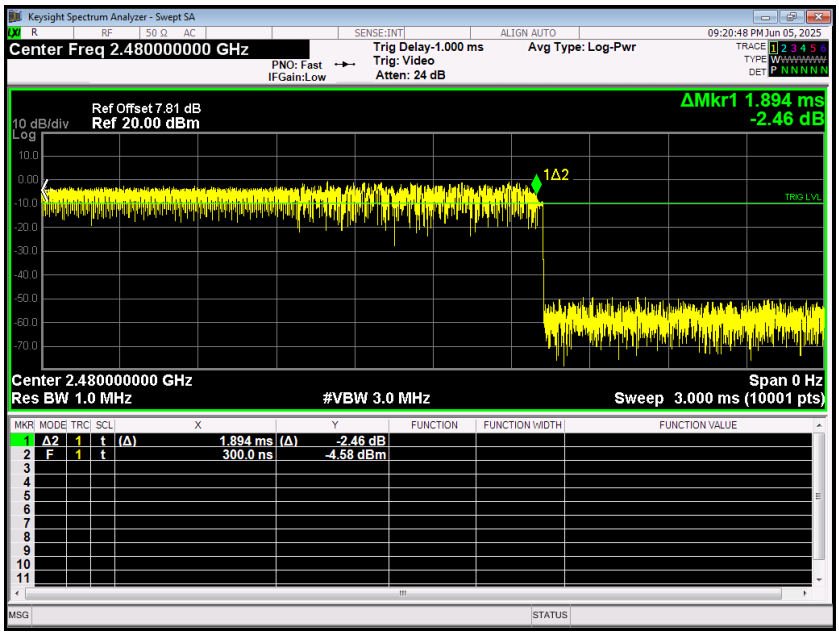
Dwell NVNT 3-DH5 2402MHz



Dwell NVNT 3-DH5 2441MHz



Dwell NVNT 3-DH5 2480MHz



10. Band edge

10.1. Applied procedures / Limit

15.247(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

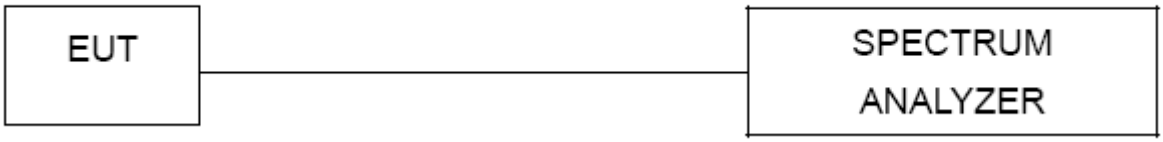
10.2. Test procedure

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. Span = wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products which fall outside of the authorized band of operation, RBW ≥ 1% of the span, VBW ≥ RBW, Sweep = auto,
Detector function = peak, Trace = max hold

10.3. Deviation from standard

No deviation.

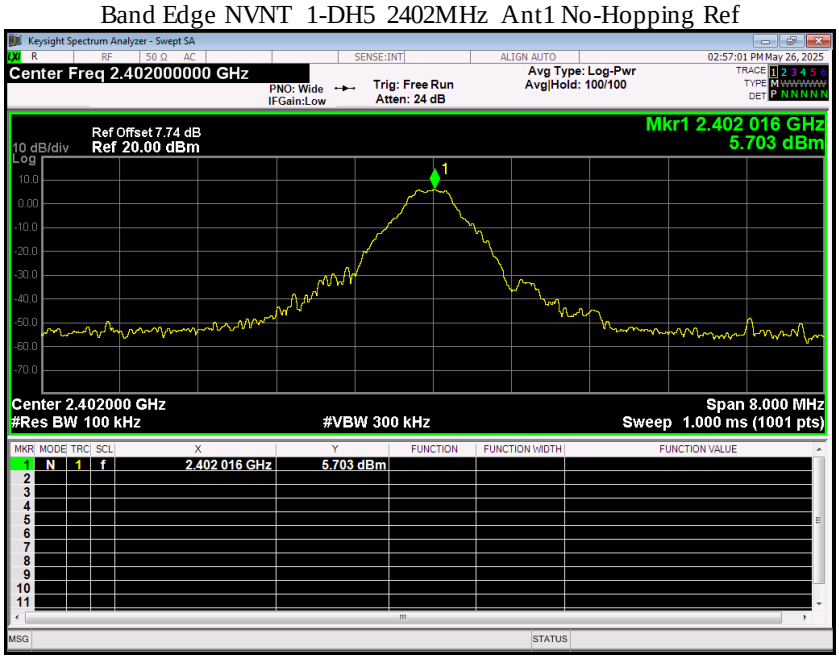
10.4. Test setup



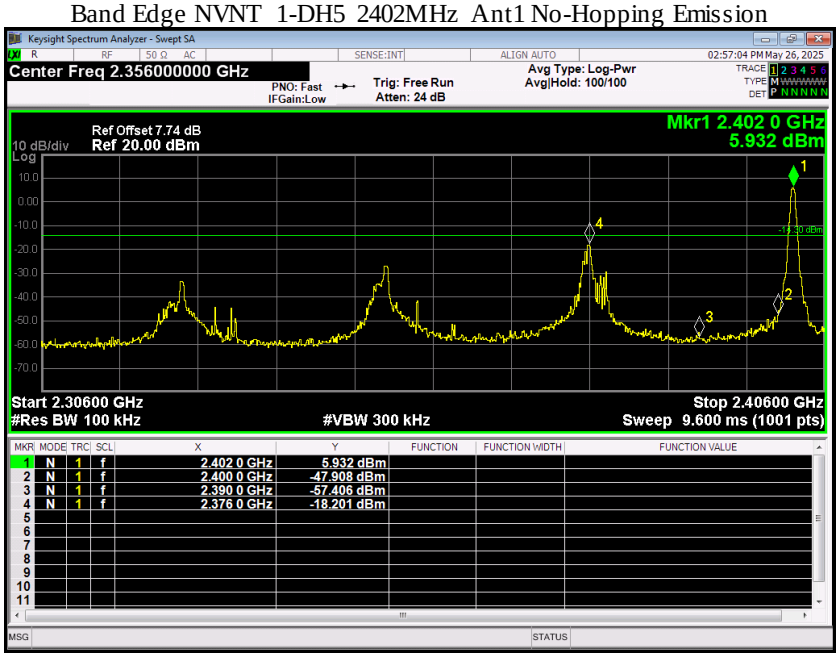
10.5. Test results

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant 1	No-Hopping	-23.903	-20	Pass
NVNT	1-DH5	2480	Ant 1	No-Hopping	-58.409	-20	Pass

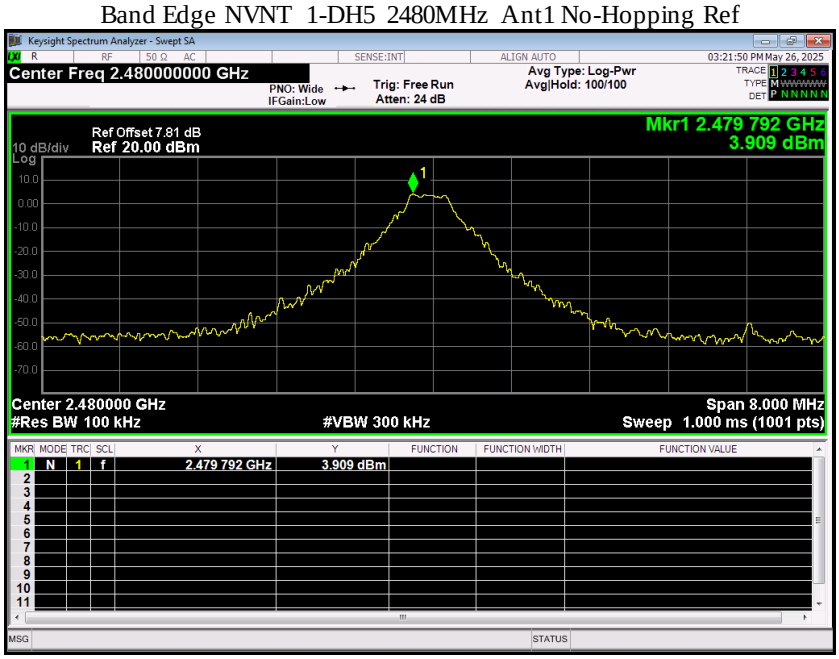
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



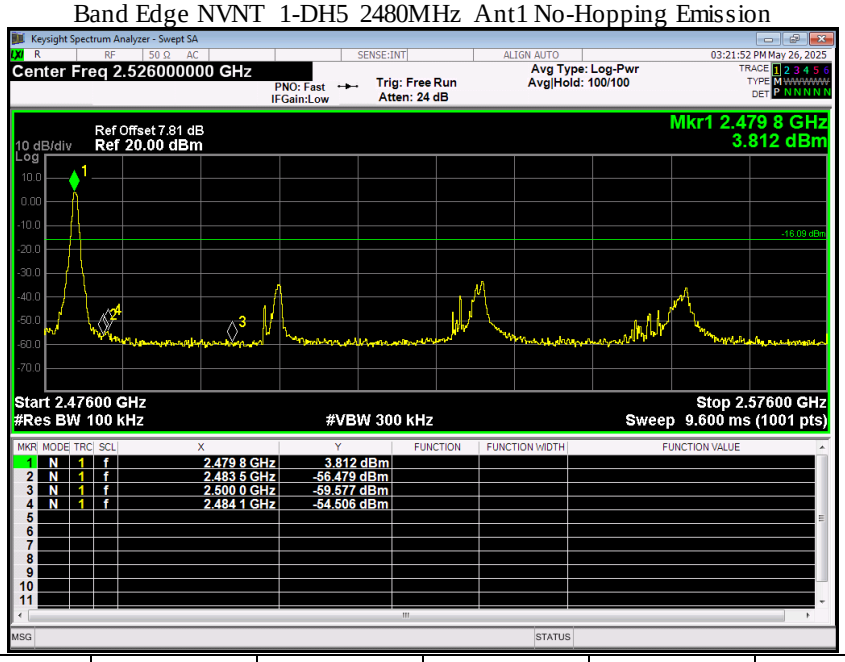
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

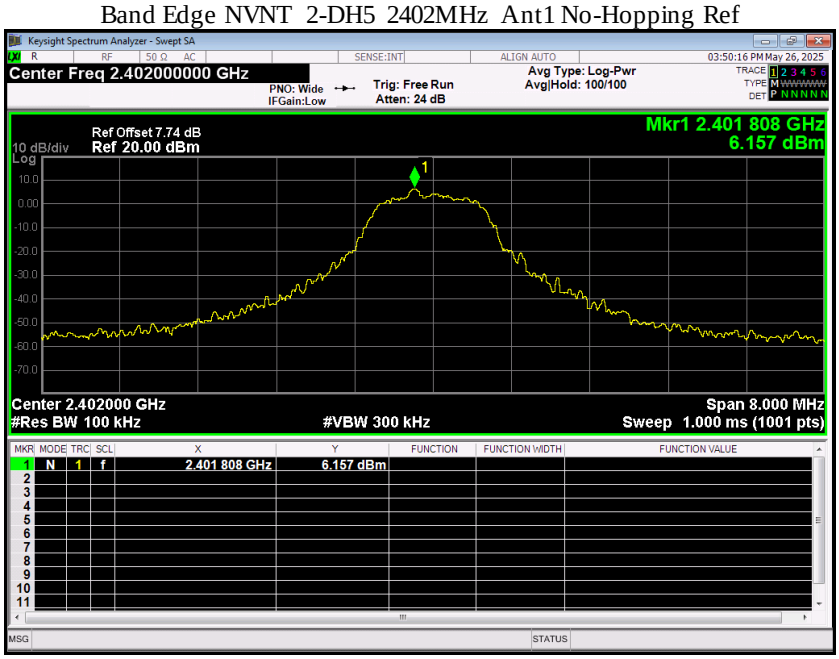


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

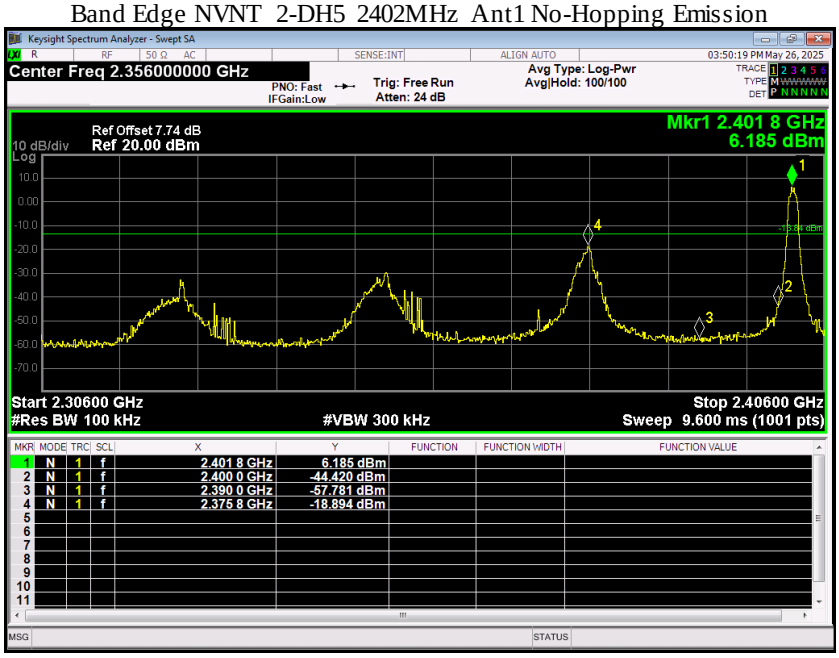


Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2-DH5	2402	Ant 1	No-Hopping	-25.047	-20	Pass
NVNT	2-DH5	2480	Ant 1	No-Hopping	-59.693	-20	Pass

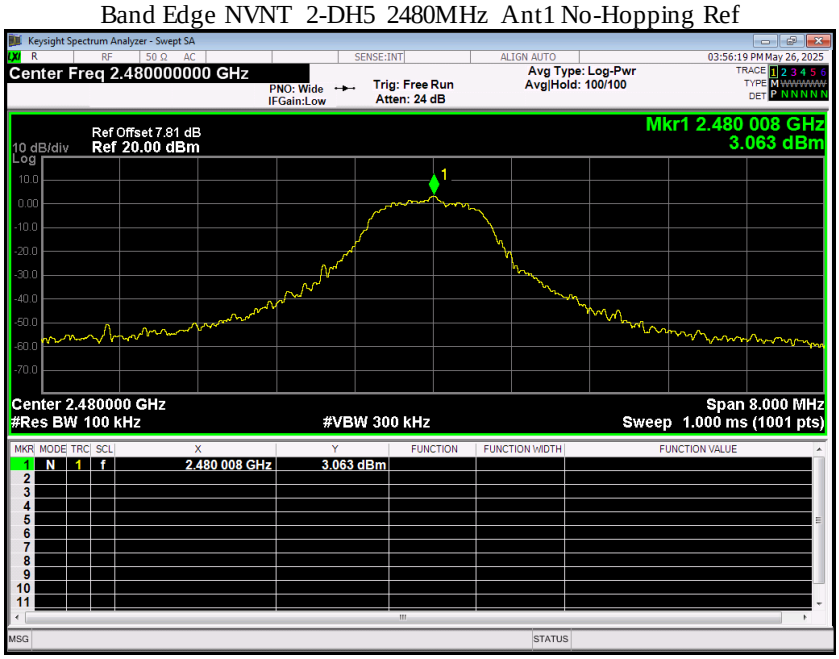
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



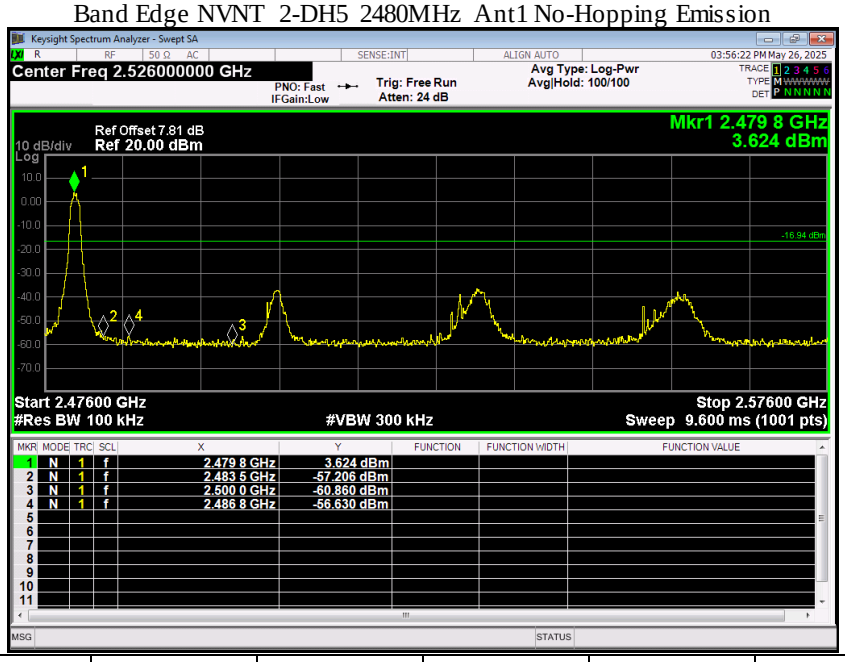
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref

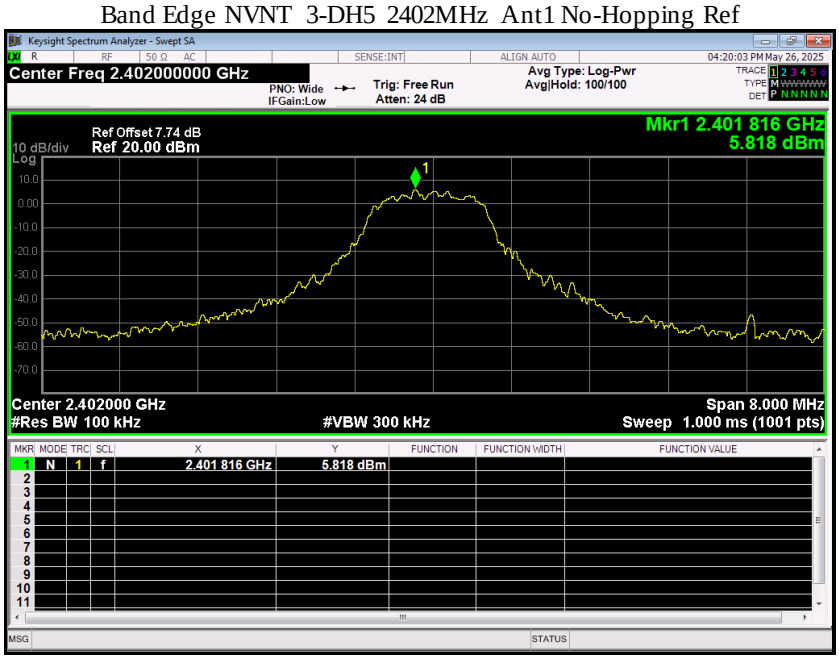
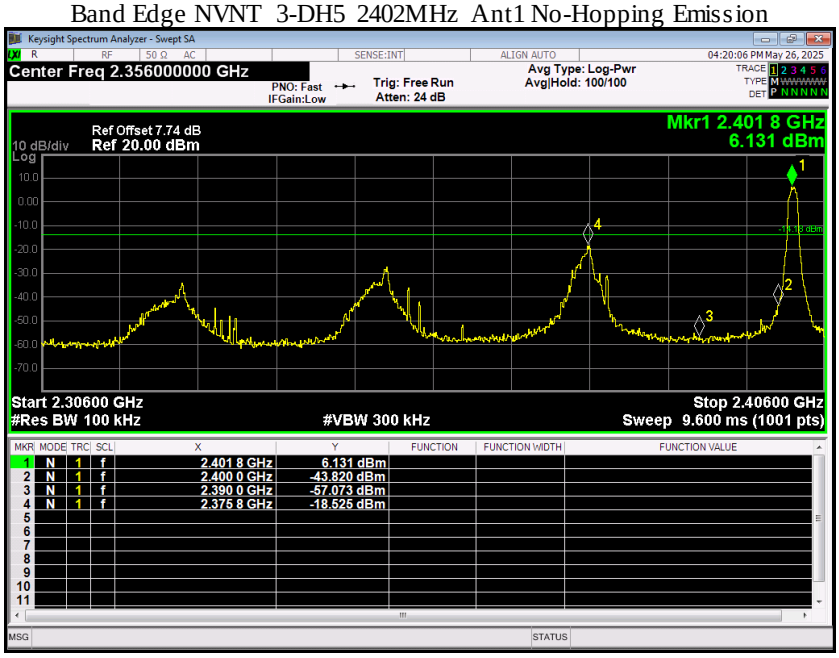


Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	3-DH5	2402	Ant 1	No-Hopping	-24.338	-20	Pass
NVNT	3-DH5	2480	Ant 1	No-Hopping	-59.221	-20	Pass

Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission