

FCC and ISED CERTIFICATION TEST REPORT

Report No.: DDT-B25020806-9E02

Applicant	:	Beijing Xiaomi Electronics Co., Ltd
Address	:	Room 802, Floor 8, Building 5, No.15 KeChuang 10th Road, Beijing Economic and Technological Development Zone, Beijing City, China.
Equipment under Test	:	Xiaomi Sound Party
Model No.	:	MDZ-39-DB
Trade Mark	:	XIAOMI; Xiaomi; 
FCC ID	:	2AIMR-MDZ39DB
IC	:	25940-MDZ39DB
Manufacturer	:	Beijing Xiaomi Electronics Co., Ltd
Address	:	Room 802, Floor 8, Building 5, No.15 KeChuang 10th Road, Beijing Economic and Technological Development Zone, Beijing City, China.

Issued By: Tianjin Dongdian Testing Service Co., Ltd.

Address: Building D-1, No. 29, Weisi Road, Microelectronics Industrial Park
Development Area, Tianjin, China.

Tel: +86-22-58038033, E-mail: info@ddt.com, <http://www.ddttest.com>



REPORT

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Test Report Declare

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Trade Mark	:	XIAOMI; Xiaomi; 
Manufacturer	:	Beijing Xiaomi Electronics Co., Ltd
Address	:	Room 802, Floor 8, Building 5, No.15 KeChuang 10th Road, Beijing Economic and Technological Development Zone, Beijing City, China.

Test Standard Used:

FCC Rules and Regulations Part 15 Subpart C, RSS-247 Issue 3 August 2023.

RSS-Gen Issue 5, Apr. 2018

Test Procedure Used:

ANSI C63.10:2020,

We Declare:

The equipment described above is tested by Tianjin Dongdian Testing Service 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 Tianjin Dongdian Testing Service 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&IC standards.

Report No.:	DDT-B25020806-9E02		
Date of Receipt:	Feb. 11, 2025	Date of Test:	Feb. 11, 2025 ~ Feb. 20, 2025

Prepared By:

Novak Wei

Novak Wei/Engineer

Approved By:

Aaron Zhang

Aaron Zhang/Manager

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

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Mar. 01, 2025	

1. Summary of Test Results

No.	Test Parameter	Clause No.	Condition	Result
1	Maximum Peak Output Power	FCC Part 15: 15.247(b)(1) RSS-247 Issue 3 clause 5.4(b)	/	Pass
2	20 dB Bandwidth	FCC Part 15: 15.247(a)(1) RSS-247 Issue 3 clause 5.1(a)	/	Pass
4	Carrier Frequency Separation	FCC Part 15: 15.247(a)(1) RSS-247 Issue 3 clause 5.1(b)	/	Pass
5	Number of Hopping Channel	FCC Part 15: 15.247(a)(1)(iii) RSS-247 Issue 3 clause 5.1(d)	/	Pass
6	Dwell Time	FCC Part 15: 15.247(a)(1)(iii) RSS-247 Issue 3 clause 5.1(d)	/	Pass
7	RF Conducted Spurious Emissions	FCC Part 15: 15.247(d) RSS-247 Issue 3 clause 5.5	/	Pass
8	Radiated Emission	FCC Part 15: 15.205, FCC Part 15: 15.209, FCC Part 15: 15.247(d) RSS-247 Issue 3 clause 5.5, RSS-Gen Issue 5 clause 8.9, RSS-Gen Issue 5 clause 8.10	/	Pass
9	Band Edge Compliance	FCC Part 15: 15.205, FCC Part 15: 15.209, FCC Part 15: 15.247(d) RSS-247 Issue 3 clause 5.5, RSS-Gen Issue 5 clause 8.9, RSS-Gen Issue 5 clause 8.10	/	Pass
10	Antenna Requirement	FCC Part 15: 15.203 RSS-Gen Issue 5 clause 6.8	/	Pass
11	Power Line Conducted Emissions	FCC Part 15: 15.207(a) RSS-Gen Issue 5 clause 8.8	/	Pass
Note: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device or no need to test according to standard.				

2. General Test Information

2.1. Description of EUT

EUT Name	: Xiaomi Sound Party
Model Number	: MDZ-39-DB
EUT Function Description	: Please refer to user manual of this device
Power Supply	: DC 7.3 V by internal battery
Radio Specification	: Bluetooth V5.4
Operation Frequency	: 2402 MHz - 2480 MHz
Modulation	: GFSK, $\pi/4$ -DQPSK, 8DPSK
Data Rate	: 1 Mbps, 2 Mbps, 3 Mbps,
Antenna Type	: PCB antenna, maximum PK gain: 2.73 dBi
Sample Number	: N/A

Channel information					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	27	2429	54	2456
1	2403	28	2430	55	2457
2	2404	29	2431	56	2458
3	2405	30	2432	57	2459
4	2406	31	2433	58	2460
5	2407	32	2434	59	2461
6	2408	33	2435	60	2462
7	2409	34	2436	61	2463
8	2410	35	2437	62	2464
9	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479

24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		

2.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description	Other
N/A	N/A	N/A	N/A	N/A

2.3. Block diagram of EUT configuration for test

EUT

2.4. Decision of final test mode

Test software: FCC_assist_1.0.2.2

The test software was used to control EUT work in Continuous Tx mode, and select test channel, wireless mode as below table.

The pathloss of external cable: 0.5 dB (According to the manufacturer's claims)

Tested mode, channel, information			
Mode	Setting Tx Power	Channel	Frequency (MHz)
GFSK hopping on Tx mode	10	CH0 to CH78	2402 to 2480
$\pi/4$ -DQPSK hopping on Tx mode	10	CH0 to CH78	2402 to 2480
8DPSK hopping on Tx mode	10	CH0 to CH78	2402 to 2480
GFSK hopping off Tx mode	10	CH0	2402
	10	CH39	2441
	10	CH78	2480
$\pi/4$ -DQPSK hopping off Tx mode	10	CH0	2402
	10	CH39	2441
	10	CH78	2480
8DPSK hopping off Tx mode	10	CH0	2402
	10	CH39	2441
	10	CH78	2480
Worst-case data rates were: GFSK mode: DH5, $\pi/4$ -DQPSK mode: 2DH5, 8DPSK mode: 3DH5			

2.5. Deviations of test standard

No deviation.

2.6. Test environment conditions

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

Temperature range:	+21°C to +25 °C
Humidity range:	25% to 75%
Pressure range:	86 kPa to 106 kPa

Note: The specific temperature and humidity information of each test item refers to the temperature and humidity record in the corresponding test data.

2.7. Test laboratory

Tianjin Dongdian Testing Service Co., Ltd.

Address: Building D-1, No. 19, Weisi Road, Microelectronics Industrial Park Development Area, Tianjin, China.

Tel: +86-22-58038033, <http://www.ddttest.com>, Email: ddt@dgddt.com

NVLAP (National Voluntary Laboratory Accreditation Program) CODE: 500036-0

CNAS (China National Accreditation Service for Conformity Assessment) CODE: L13402

FCC Designation Number: CN5004; FCC Test Firm Registration Number: 368676

ISED (Innovation, Science and Economic Development Canada) Company Number: 27768

Conformity Assessment Body Identifier: CN0125

VCCI Facility Registration Number: C-20089, T-20093, R-20125, G-20122

2.8. Measurement uncertainty

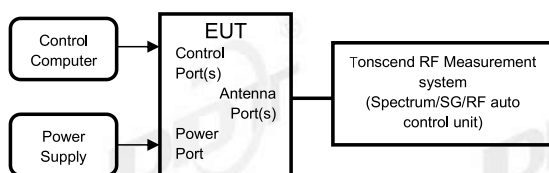
Test Item	Uncertainty
Bandwidth	0.14%
Peak Output Power (Conducted) (Spectrum Analyzer)	0.12 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$); 0.32 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Peak Output Power (Conducted) (Power Sensor)	0.51 dB
Power Spectral Density	0.12 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$); 0.32 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Frequencies Stability	6.7×10^{-8} (Antenna couple method) 3.4×10^{-8} (Conducted method)
Conducted Spurious Emissions	0.12 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$); 0.32 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$); 0.52 dB ($8 \text{ GHz} \leq f < 22 \text{ GHz}$)
Uncertainty for Radio Frequency (RBW < 20 kHz)	3×10^{-7}
Temperature	$\pm 2^{\circ}\text{C}$
Humidity	$\pm 1\%$
Uncertainty for Radiation Emission Test (30 MHz - 1 GHz)	2.72 dB (Antenna Polarize: V) 2.72 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission Test (1 GHz - 40 GHz)	2.74 dB (1 - 6 GHz) 2.72 dB (6 GHz - 18 GHz) 3.54 dB (18 GHz - 26 GHz) 4.30 dB (26 GHz - 40 GHz)
Uncertainty for Power Line Conduction Emission Test	3.40 dB (150 kHz - 30 MHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3. Equipment Used During Conductive Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
RF Connected Test (MWRFTest system)					
EXG Analog Signal Generator	Keysight	N5173B	MY53270968	2024/03/22	1 Year
MXG Vector Signal Generator	Keysight	N5182A	MY50143288	2024/02/21	1 Year
PXA Signal Analyzer	Keysight	N9030B	MY56320639	2024/04/01	1 Year
PXA Signal Analyzer	Keysight	N9010A	MY53281492	2024/02/21	1 Year
Wideband Radio Communication Tester	R&S	CMW500	158800	2024/02/21	1 Year
Power Sensor	KEYSIGHT	U2021XA	MY59150007	2024/02/21	1 Year
Test Software	MWRFTest	MTS8310	V03	N/A	N/A
Radiated Emission -10m EMI Chamber					
Broadband Horn Antenna	TESEQ	BHA 9118	31754	2023/10/11	2 Year
Broad Band Horn Antenna	Com-Power	AHA-840	10100024	2023/10/16	2 Year
Active Loop Antenna	R&S	HFH2-Z2	100269	2024/08/25	2 Year
Amplifier	CMO-MW	DPA8 1000 1800	09211739	2024/02/18	1 Year
Amplifier	CMO-MW	DPA8 1000 1800	09211739	2025/02/17	1 Year
EMI Test Receiver	R&S	ESCI	101024	2024/02/18	1 Year
EMI Test Receiver	R&S	ESCI	101024	2025/02/17	1 Year
EMI Test Receiver	R&S	ESCI	101030	2024/02/18	1 Year
EMI Test Receiver	R&S	ESCI	101030	2025/02/17	1 Year
EMI Test Receiver	R&S	ESU26	100244	2024/02/18	1 Year
EMI Test Receiver	R&S	ESU26	100244	2025/02/17	1 Year
EXA Signal Analyzer	Keysight	N9010A	MY53281492	2024/02/21	1 Year
EXA Signal Analyzer	Keysight	N9010A	MY53281492	2025/02/20	1 Year
Bilog Antenna	TESEQ	CBL6112D	29068	2024/10/10	2 Year
Bilog Antenna	TESEQ	CBL6112D	29069	2024/10/10	2 Year
Amplifier	Sonoma	310N	300913	2024/02/18	1 Year
Amplifier	Sonoma	310N	300913	2025/02/17	1 Year
Amplifier	Sonoma	310N	334532	2024/02/18	1 Year
Amplifier	Sonoma	310N	334532	2025/02/17	1 Year
Ant Mast	Innco	MA4000	N/A	N/A	N/A
Ant Mast	Innco	MA4000	N/A	N/A	N/A
Mast Controller	Innco	CO2000	N/A	N/A	N/A
Mast Controller	Innco	CO2000	N/A	N/A	N/A
RF Selector 4CH	TOYO	NS4904N	Selector1	N/A	N/A
RF Selector 4CH	TOYO	NS4904N	Selector2	N/A	N/A
Test software	TOYO	EP5/RSE	Ver 1.9.1	N/A	N/A
Test software	Audix	E3	V 6.11111b	N/A	N/A

4. 20 dB Bandwidth

4.1. Block diagram of test setup



4.2. Limits

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

4.3. Test procedure

- (1) The test according to ANSI C63.10-2013 clause 6.9.2.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously
- (4) Use the following spectrum analyzer settings for the 20 dB bandwidth measurement:

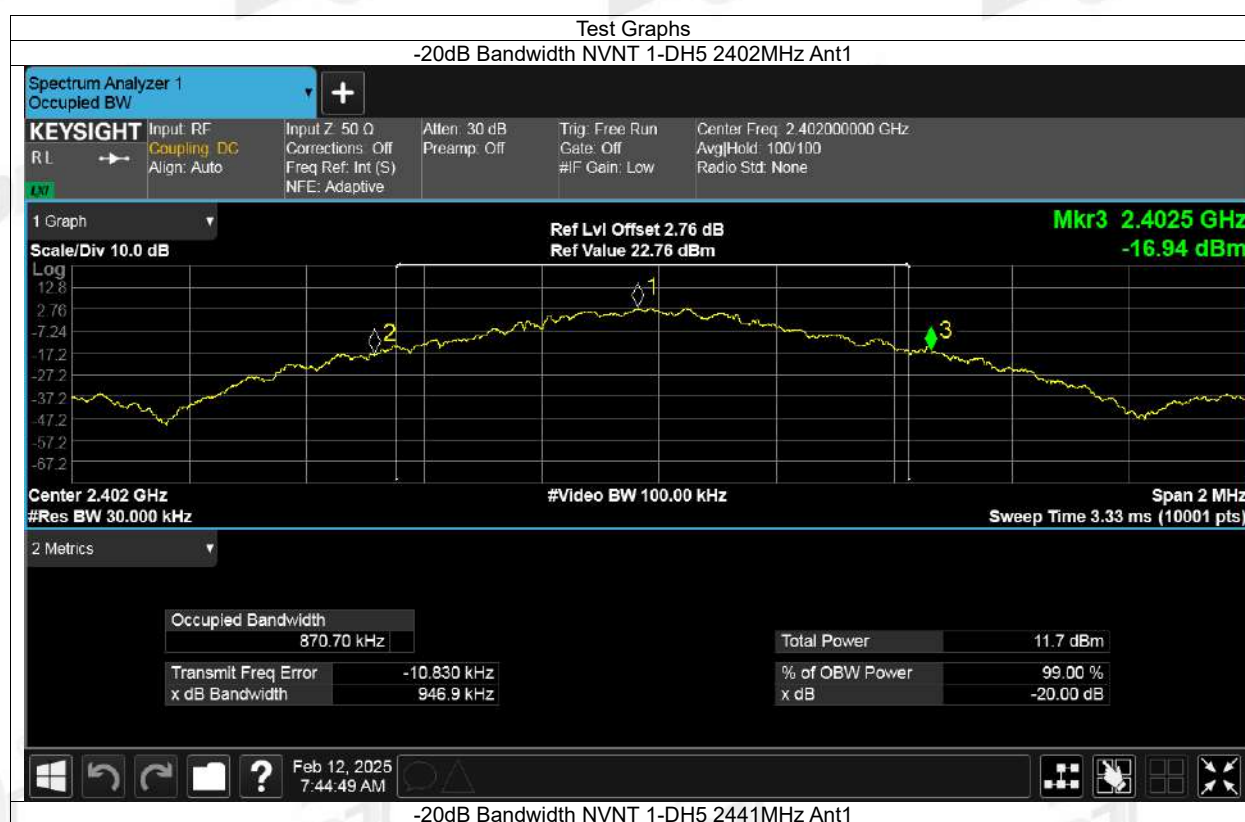
RBW:	1% to 5% of the OBW
VBW:	approximately three times RBW
Span:	between 2 times and 5 times the OBW
Detector Mode:	Peak
Sweep time:	Auto
Trace mode:	Max hold

- (5) Measure and record the results in the report.

4.4. Test result

Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Verdict
1-DH5	2402	Ant1	0.947	Pass
1-DH5	2441	Ant1	0.945	Pass
1-DH5	2480	Ant1	0.96	Pass
2-DH5	2402	Ant1	1.325	Pass
2-DH5	2441	Ant1	1.282	Pass
2-DH5	2480	Ant1	1.31	Pass
3-DH5	2402	Ant1	1.337	Pass
3-DH5	2441	Ant1	1.285	Pass
3-DH5	2480	Ant1	1.279	Pass

4.5. Test graphs





-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



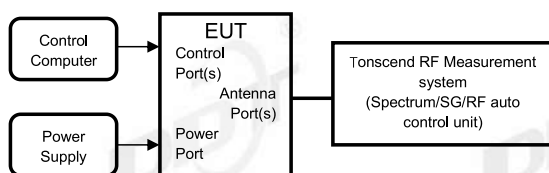


-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1



5. 99% Bandwidth

5.1. Block diagram of test setup



5.2. Limits

Just for Report.

5.3. Test procedure

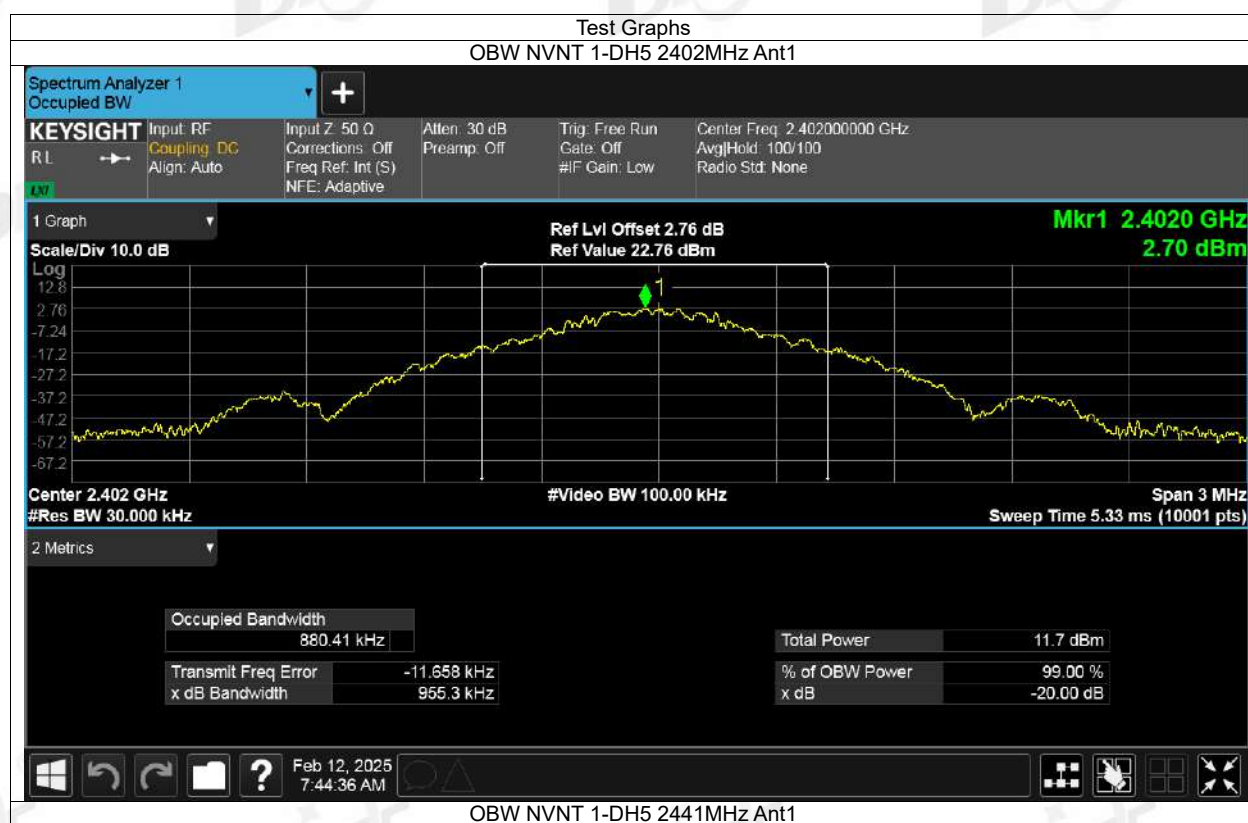
- (1) The test according to ANSI C63.10-2013 clause 6.9.3.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously
- (4) Use the following spectrum analyzer settings for the 99% bandwidth measurement:

RBW:	1% to 5% of the OBW
VBW:	approximately three times RBW
Span:	between 1.5 times and 5.0 times the OBW
Detector Mode:	Peak
Sweep time:	Auto
Trace mode:	Max hold
- (5) Measure and record the results in the report.

5.4. Test result

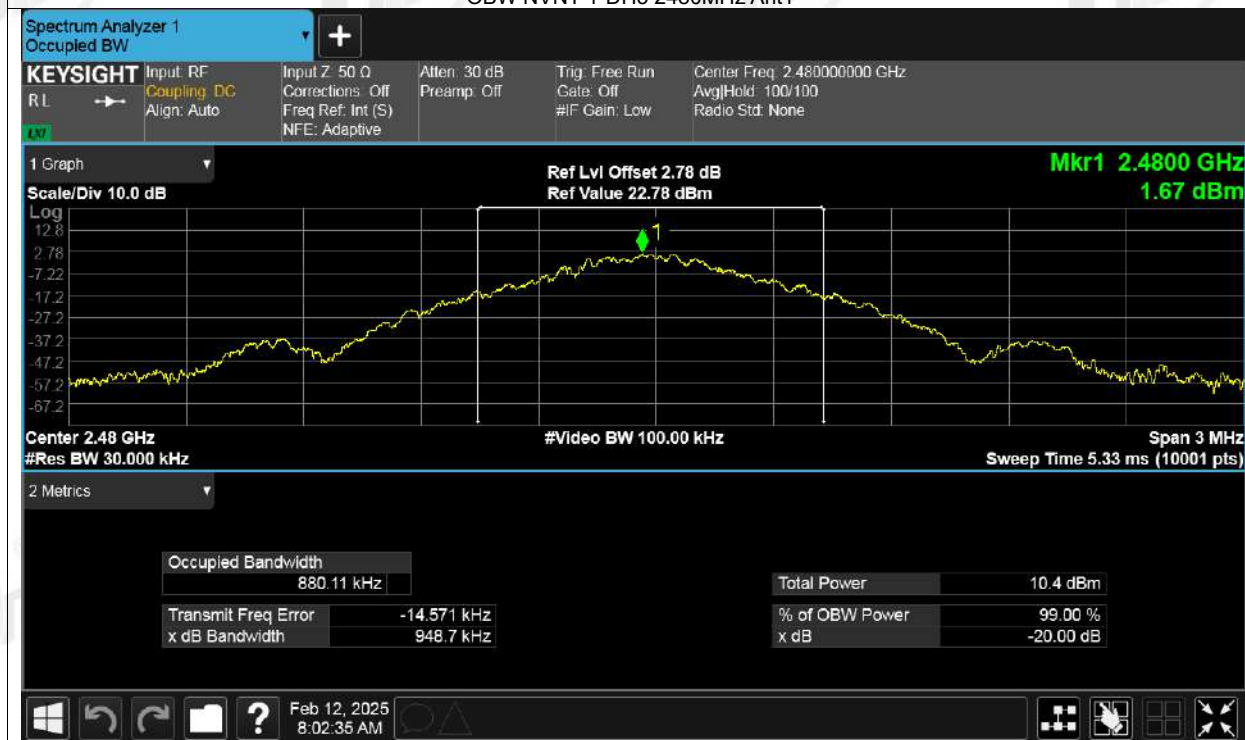
Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
DH5	Ant1	2402	0.88	2401.4330	2402.3480
		2441	0.877	2440.4330	2441.3420
		2480	0.88	2479.4240	2480.3360
2DH5	Ant1	2402	1.179	2401.3100	2402.5070
		2441	1.186	2440.3070	2441.4980
		2480	1.18	2479.3010	2480.4980
3DH5	Ant1	2402	1.185	2401.3100	2402.5040
		2441	1.188	2440.2980	2441.4920
		2480	1.186	2479.2980	2480.4920

5.5. Test graphs





OBW NVNT 1-DH5 2480MHz Ant1



OBW NVNT 2-DH5 2402MHz Ant1



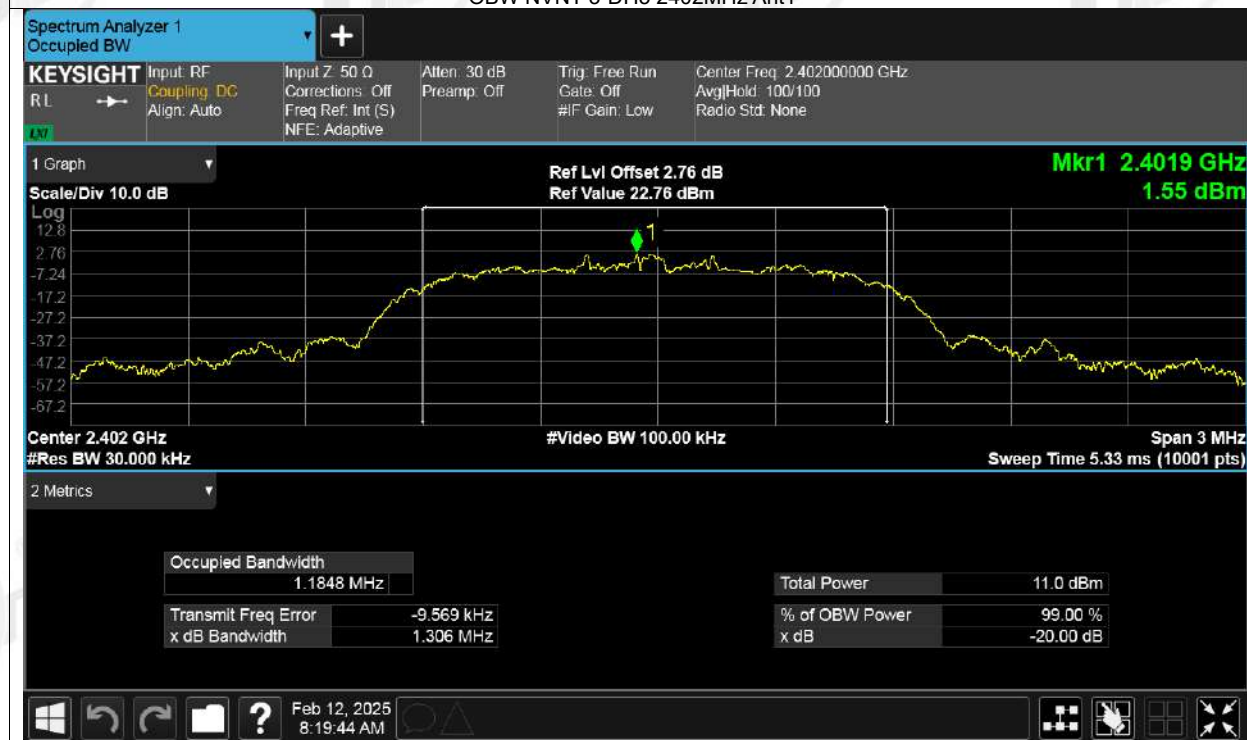
OBW NVNT 2-DH5 2441MHz Ant1



OBW NVNT 2-DH5 2480MHz Ant1



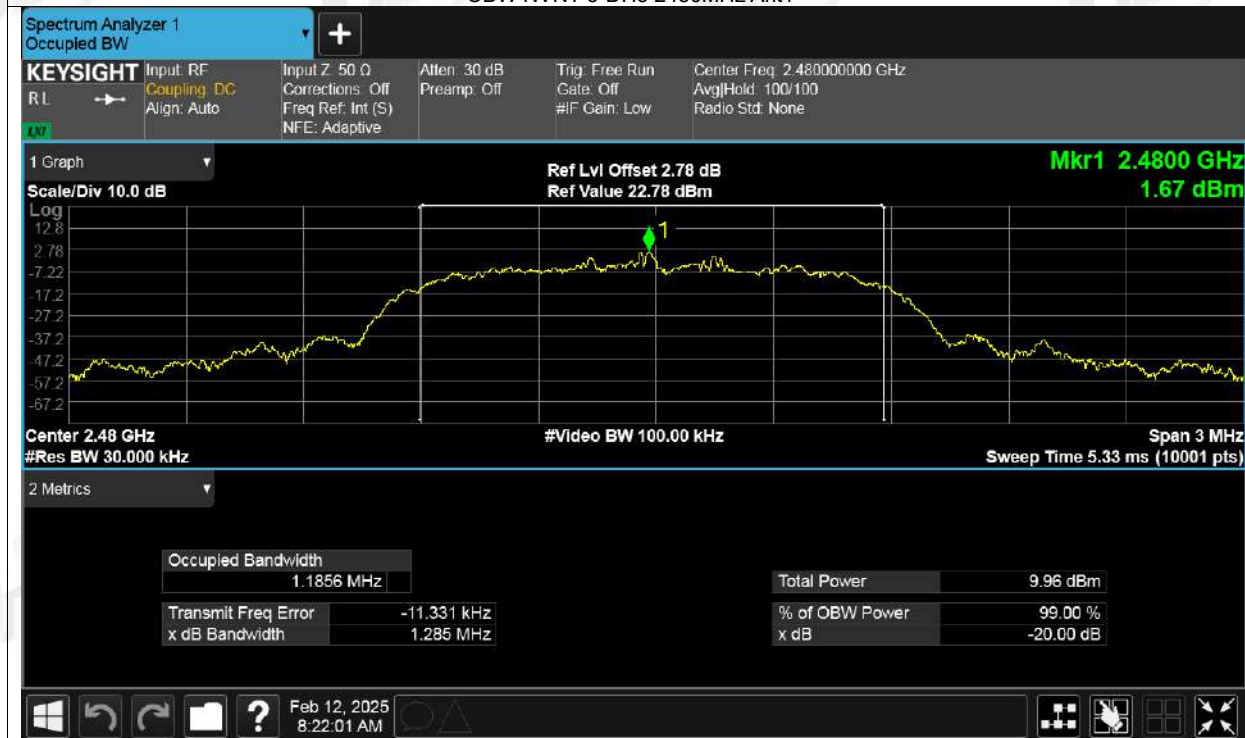
OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1

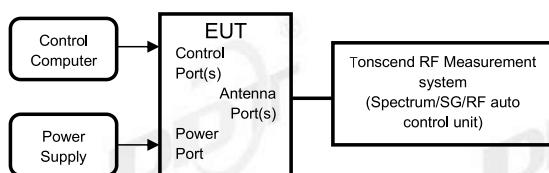


OBW NVNT 3-DH5 2480MHz Ant1



6. Maximum Peak Output Power

6.1. Block diagram of test setup



6.2. Limits

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: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts, the e.i.r.p shall not exceed 4W.

6.3. Test procedure

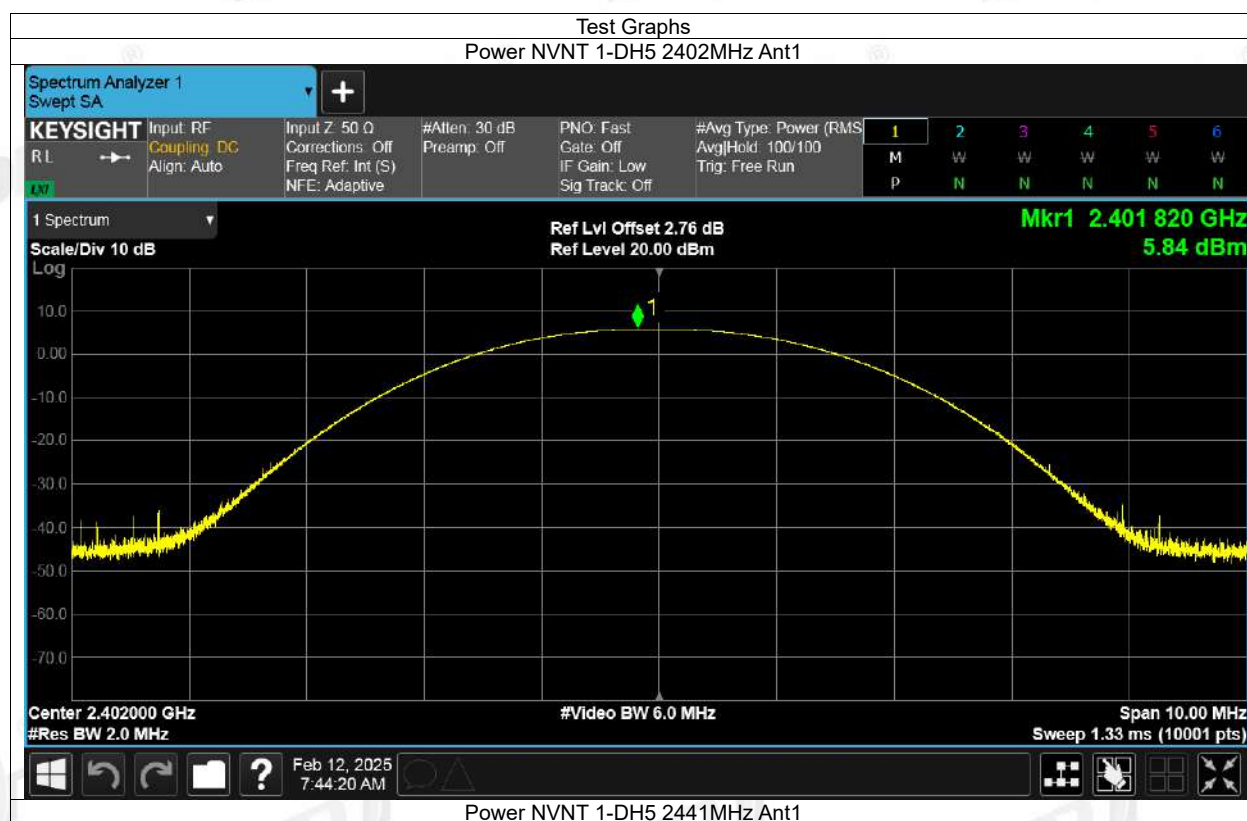
- (1) The test according to ANSI C63.10-2013 clause 7.8.5.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results.
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously.
- (4) Use the following spectrum analyzer settings for the maximum peak output power measurement:

RBW:	> 20 dB bandwidth of the emission being measured.
VBW:	$VBW \geq RBW$.
Span:	Approximately five times the 20 dB bandwidth, centered on a hopping channel.
Detector Mode:	Peak
Sweep time:	Auto
Trace mode:	Max hold
- (5) Use the marker-to-peak function to set the marker to the peak of the emission and record the results in the report.

6.4. Test result

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
DH5	Ant1	2402	5.84	≤20.97	8.57	≤30	PASS
		2441	5.33	≤20.97	8.06	≤30	PASS
		2480	4.56	≤20.97	7.29	≤30	PASS
2DH5	Ant1	2402	6.6	≤20.97	9.33	≤30	PASS
		2441	6.28	≤20.97	9.01	≤30	PASS
		2480	5.5	≤20.97	8.23	≤30	PASS
3DH5	Ant1	2402	7.05	≤20.97	9.78	≤30	PASS
		2441	6.73	≤20.97	9.46	≤30	PASS
		2480	5.89	≤20.97	8.62	≤30	PASS

6.5. Test graphs





Power NVNT 1-DH5 2480MHz Ant1



Power NVNT 2-DH5 2402MHz Ant1



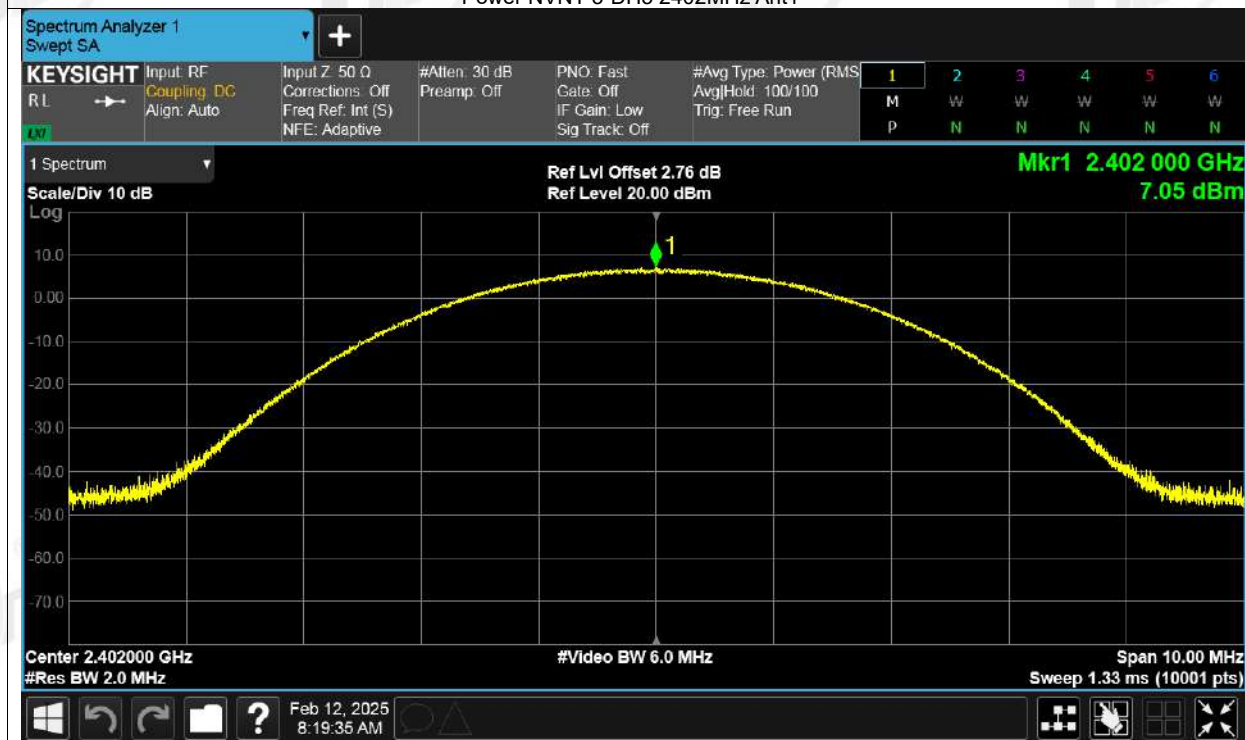
Power NVNT 2-DH5 2441MHz Ant1



Power NVNT 2-DH5 2480MHz Ant1



Power NVNT 3-DH5 2402MHz Ant1

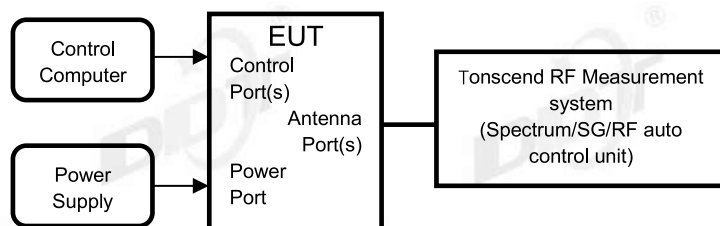


Power NVNT 3-DH5 2441MHz Ant1



7. Carrier Frequency Separation

7.1. Block diagram of test setup



7.2. Limits

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.

7.3. Test procedure

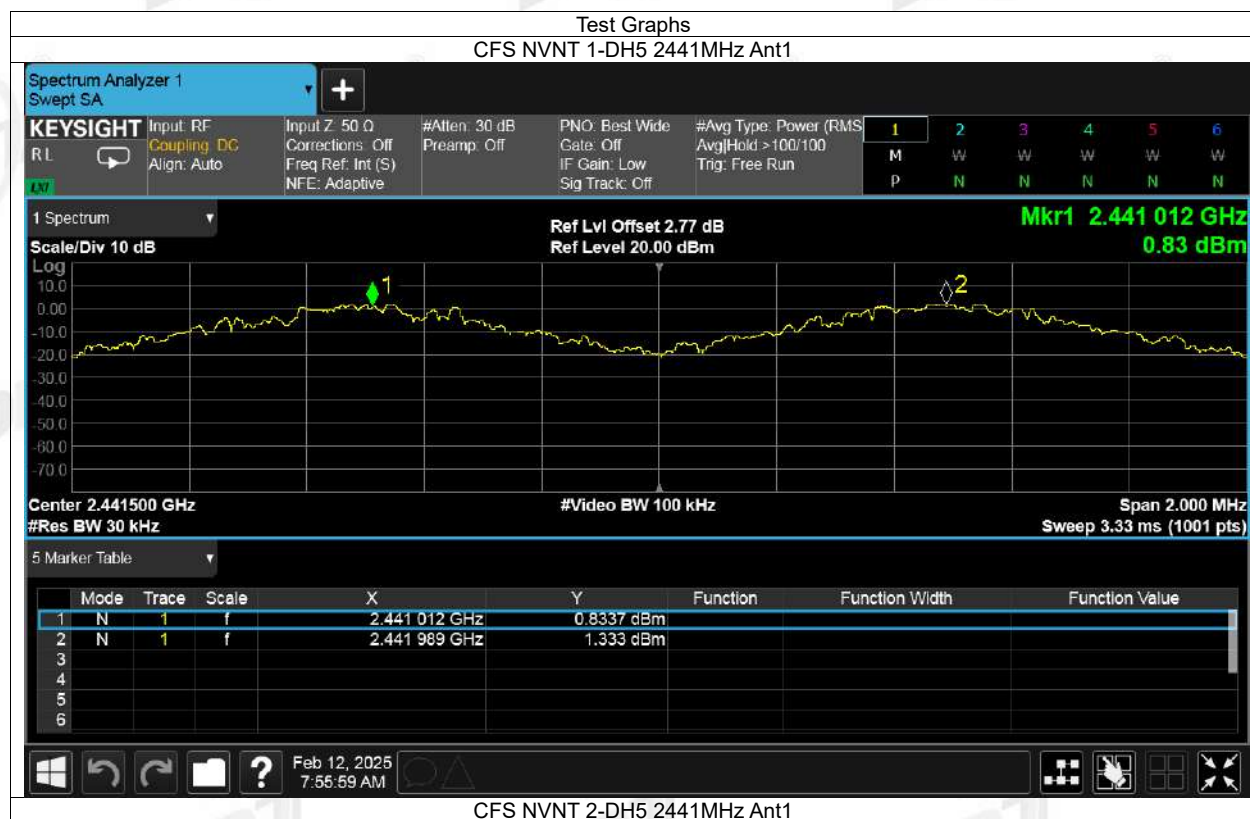
- (1) The test according to ANSI C63.10-2013 clause 7.8.2.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results.
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously.
- (4) Use the following spectrum analyzer settings for the maximum peak output power measurement:

RBW:	approximately 30% of the channel spacing
VBW:	VBW ≥ RBW.
Span:	Wide enough to capture the peaks of two adjacent channels.
Detector Mode:	Peak
Sweep time:	Auto
Trace mode:	Max hold
- (5) Use the marker-delta function to determine the separation between the peaks of the adjacent channels and record the results in the report.

7.4. Test result

Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	0.977	≥ 0.667	PASS
2DH5	Ant1	Hop	0.914	≥ 0.880	PASS
3DH5	Ant1	Hop	0.997	≥ 0.867	PASS

7.5. Test graphs



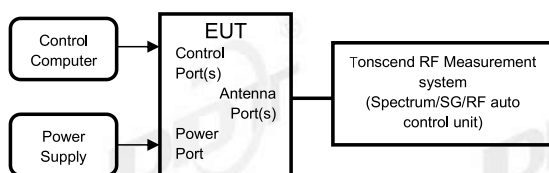


CFS NVNT 3-DH5 2441MHz Ant1



8. Dwell Time

8.1. Block diagram of test setup



8.2. Limits

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.

8.3. Test procedure

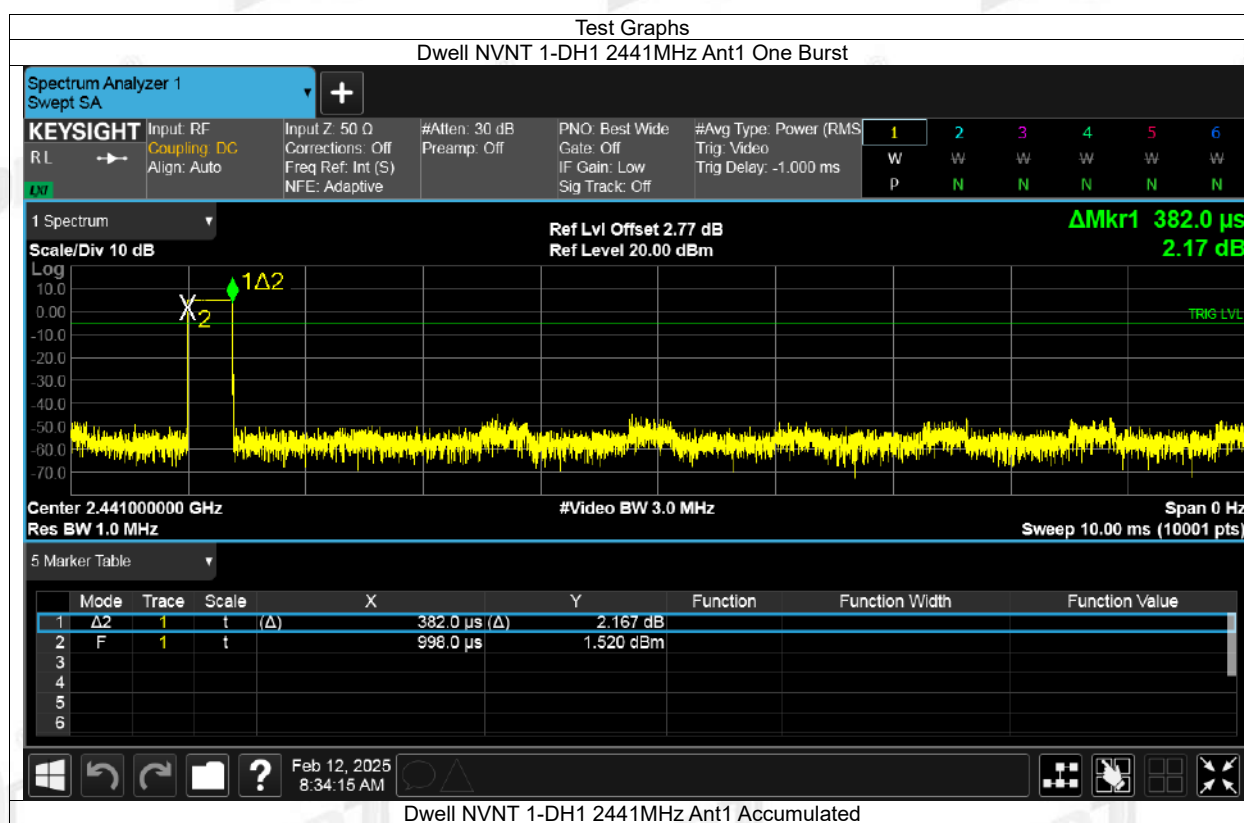
- (1) The test according to ANSI C63.10-2013 clause 7.8.4.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results.
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously.
- (4) Use the following spectrum analyzer settings for the maximum peak output power measurement:

RBW:	≤ channel spacing and where possible RBW should be set $\gg 1 / T$
VBW:	$VBW \geq RBW$.
Span:	Zero span, centered on a hopping channel.
Detector Mode:	Peak
Sweep time:	Auto
Trace mode:	Clear Write.
- (5) The test period: $T = 0.4 \text{ Second/Channel} \times 79 \text{ Channel} = 31.6 \text{ s}$
- (6) Measure the hopping number and on time of each pulse with spectrum analyzer in zero span set, and calculate dwell time with formula Dwell time = total hops * pulse's on time.
- (7) Measure and record the results in the report.

8.4. Test result

Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Burst Count	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
1-DH1	2441	Ant1	0.382	318	121.476	31600	400	Pass
1-DH3	2441	Ant1	1.638	164	268.632	31600	400	Pass
1-DH5	2441	Ant1	2.886	86	248.196	31600	400	Pass
2-DH1	2441	Ant1	0.392	320	125.44	31600	400	Pass
2-DH3	2441	Ant1	1.644	150	246.6	31600	400	Pass
2-DH5	2441	Ant1	2.892	104	300.768	31600	400	Pass
3-DH1	2441	Ant1	0.392	319	125.048	31600	400	Pass
3-DH3	2441	Ant1	1.643	156	256.308	31600	400	Pass
3-DH5	2441	Ant1	2.894	99	286.506	31600	400	Pass

8.5. Test graphs



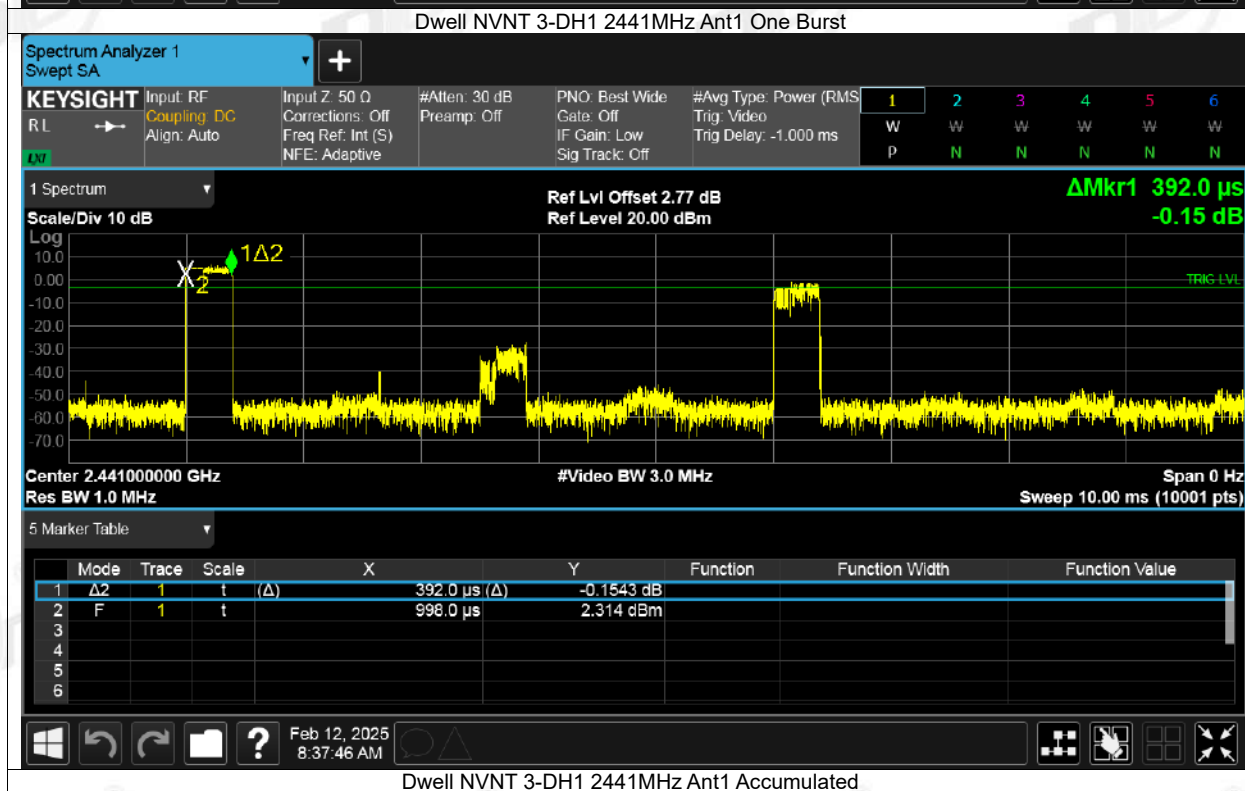
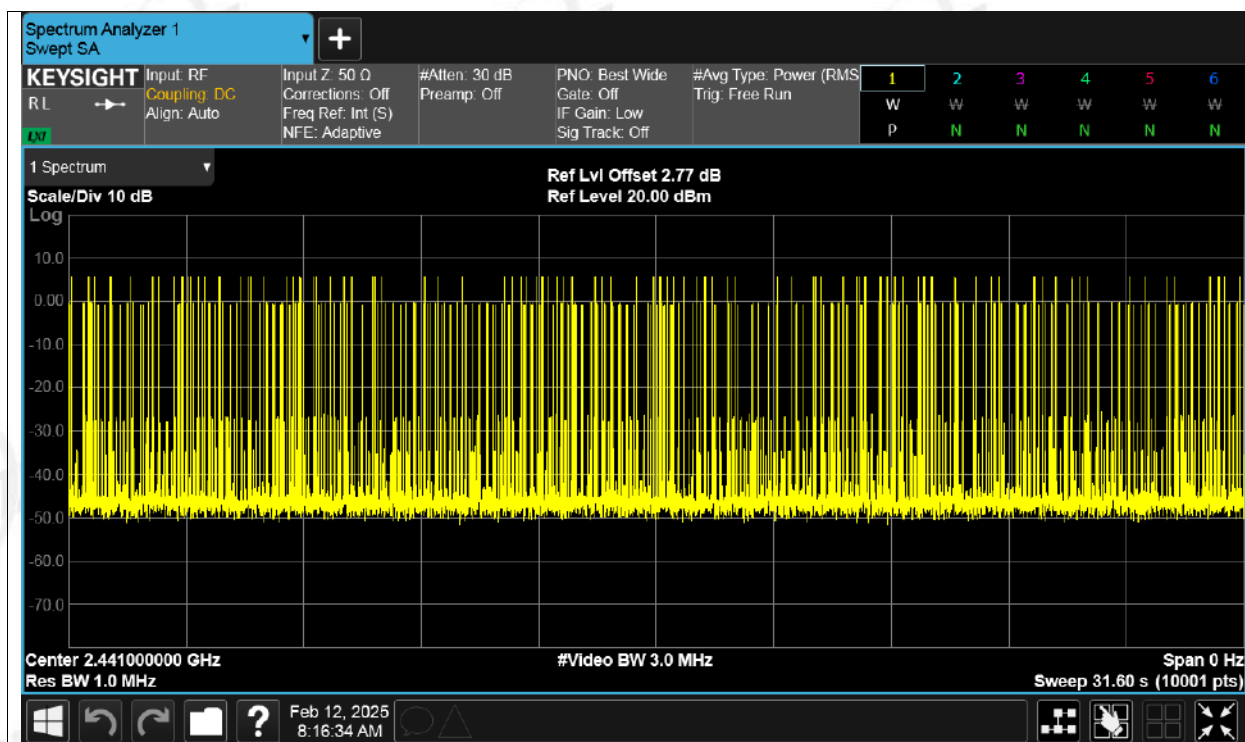








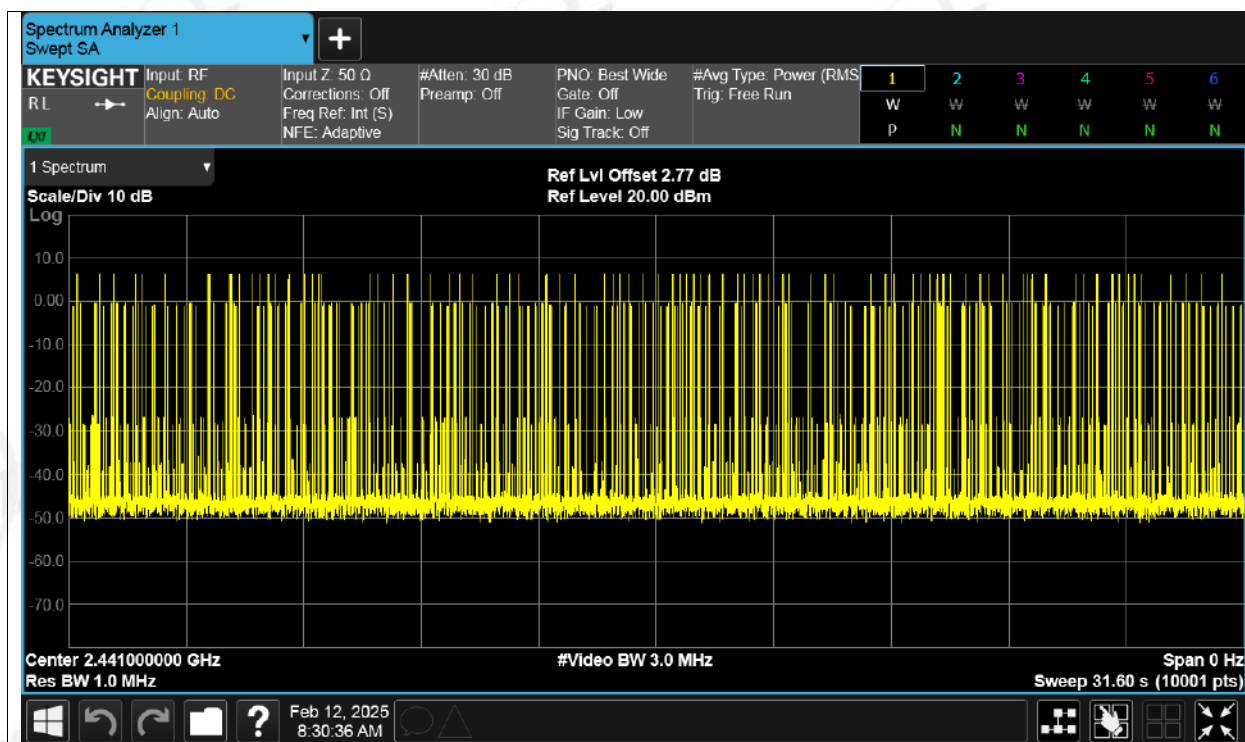




Dwell NVNT 3-DH1 2441MHz Ant1 Accumulated

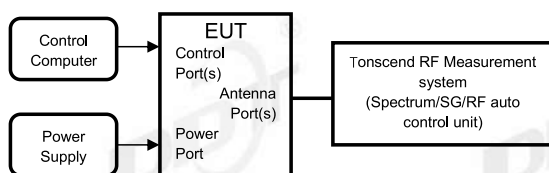






9. Number of Hopping Channel

9.1. Block diagram of test setup



9.2. Limits

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

9.3. Test procedure

- (1) The test according to ANSI C63.10-2013 clause 7.8.3.
- (2) Connect EUT's antenna output to spectrum analyzer by RF cable, the path loss was compensated to the results.
- (3) Set the EUT as maximum power setting and enable the EUT transmit continuously.
- (4) Use the following spectrum analyzer settings for the maximum peak output power measurement:

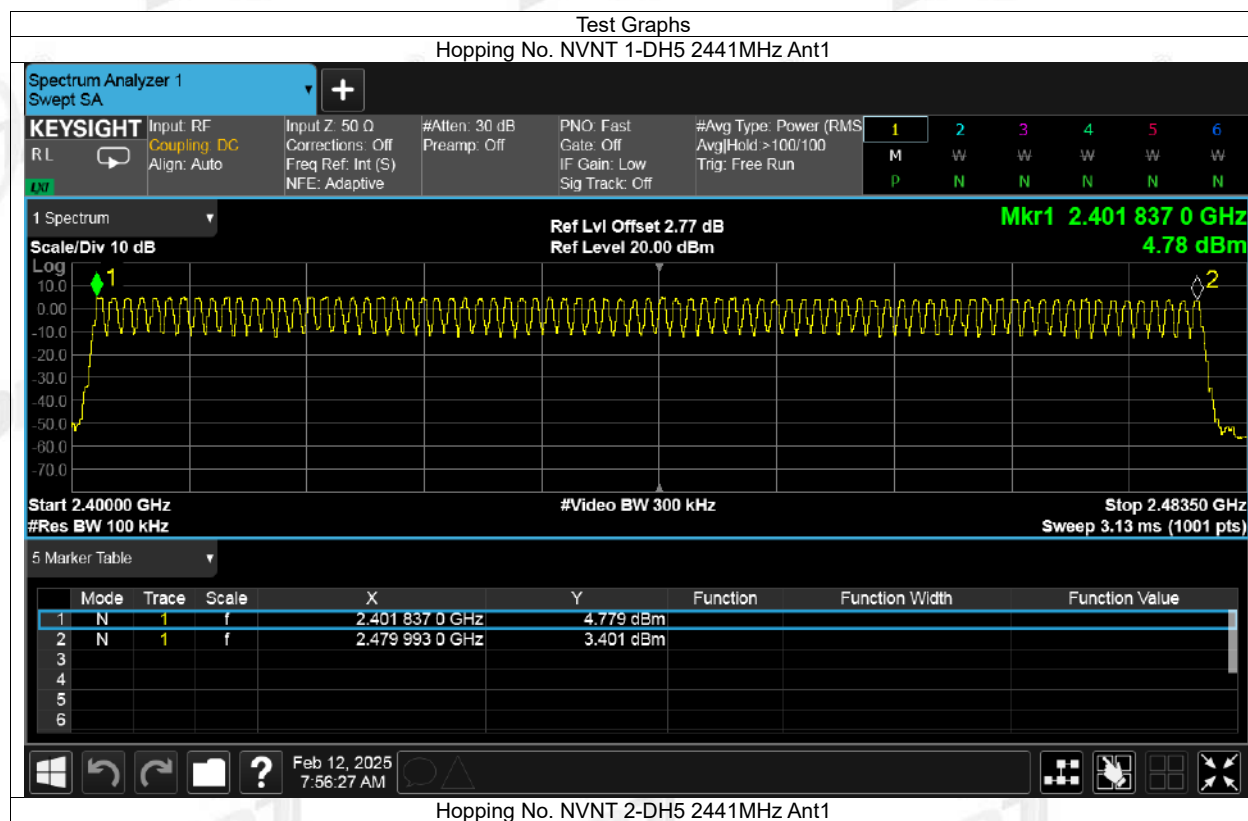
RBW:	RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.
VBW:	VBW $\geq$ RBW.
Span:	The frequency band of operation
Detector Mode:	Peak
Sweep time:	Auto
Trace mode:	Max hold

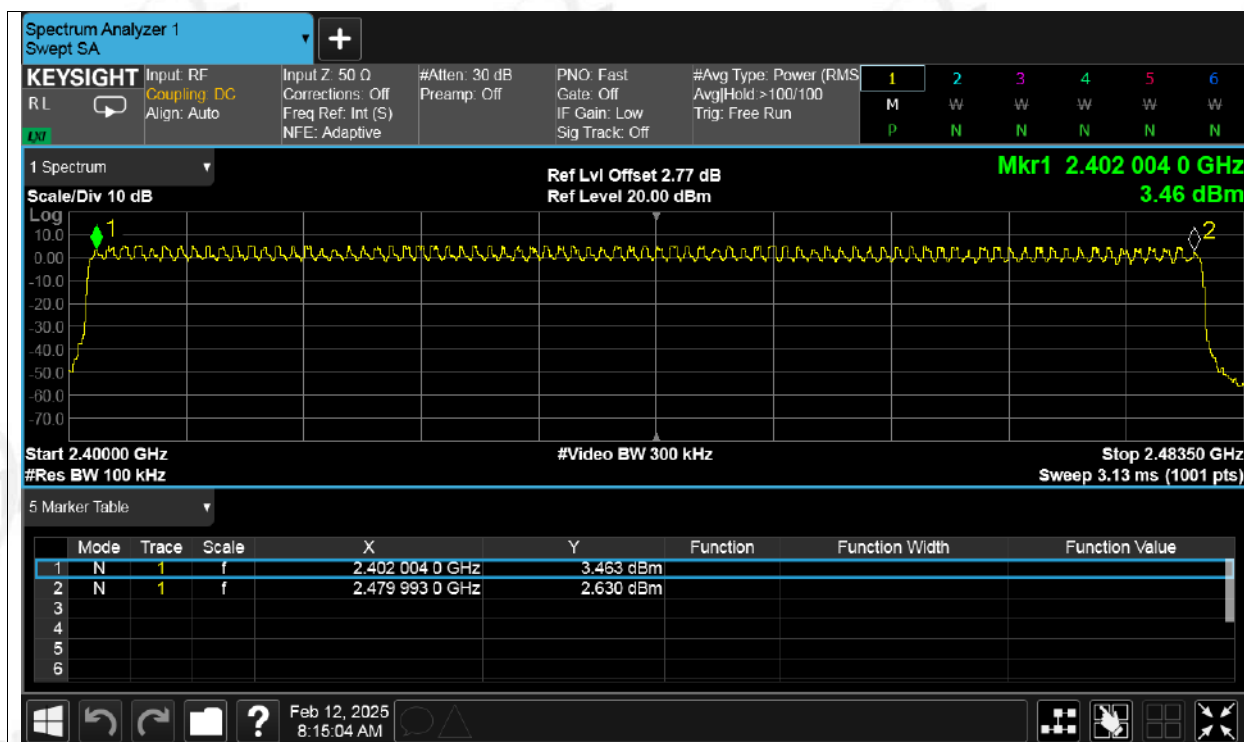
- (5) Measure the hopping number and record the results in the report.
- (6) Measure and record the results in the report.

9.4. Test result

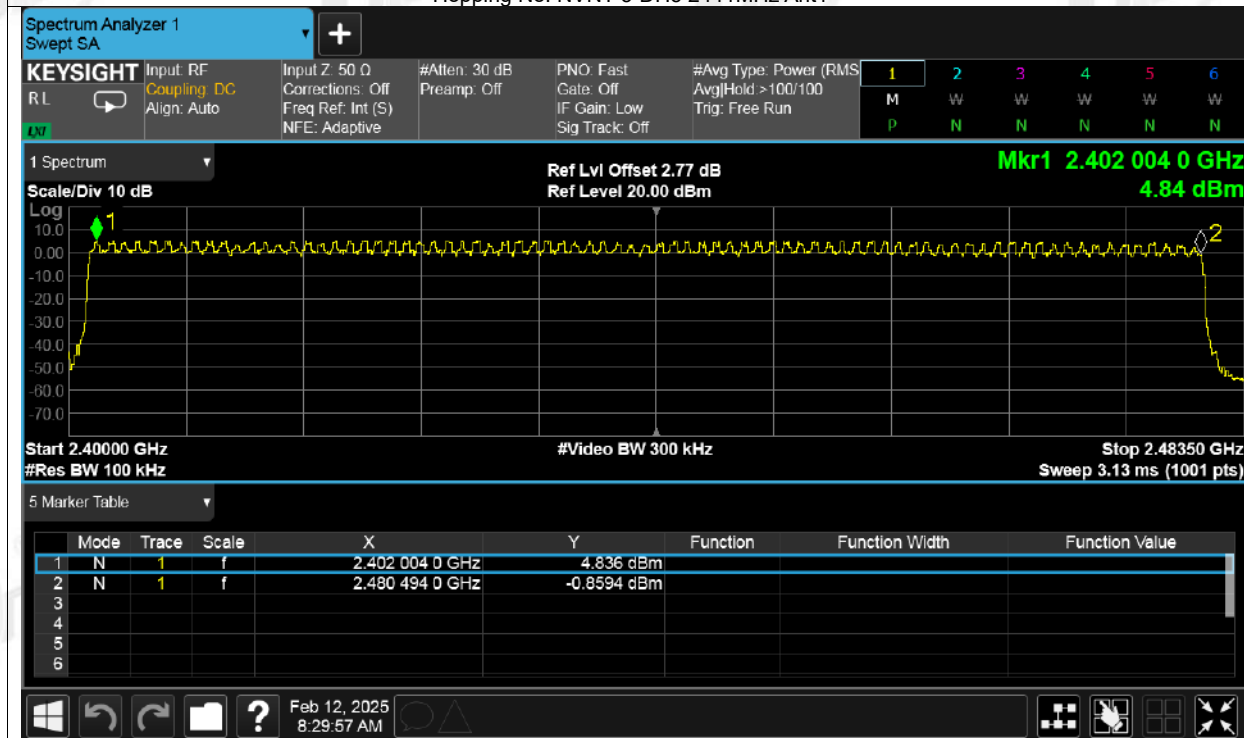
Test Mode	Antenna	Frequency [MHz]	Result [Num]	Limit [Num]	Verdict
DH5	Ant1	Hop	79	≥ 15	PASS
2DH5	Ant1	Hop	79	≥ 15	PASS
3DH5	Ant1	Hop	79	≥ 15	PASS

9.5. Test graphs



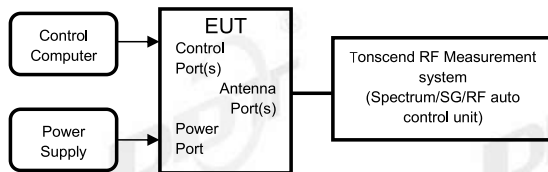


Hopping No. NVNT 3-DH5 2441MHz Ant1



10. Band Edge Compliance (Conducted Method)

10.1. Block diagram of test setup



10.2. Limit

All restriction band should comply with 15.209, other emission should be at least 20dB below the fundamental.

10.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

(2) Establish a reference level by using the following procedure:

Center frequency	DTS Channel center frequency
RBW:	100 kHz
VBW:	300 kHz
Span	1.5 times the DTS bandwidth
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.

(4) Set the spectrum analyzer as follows:

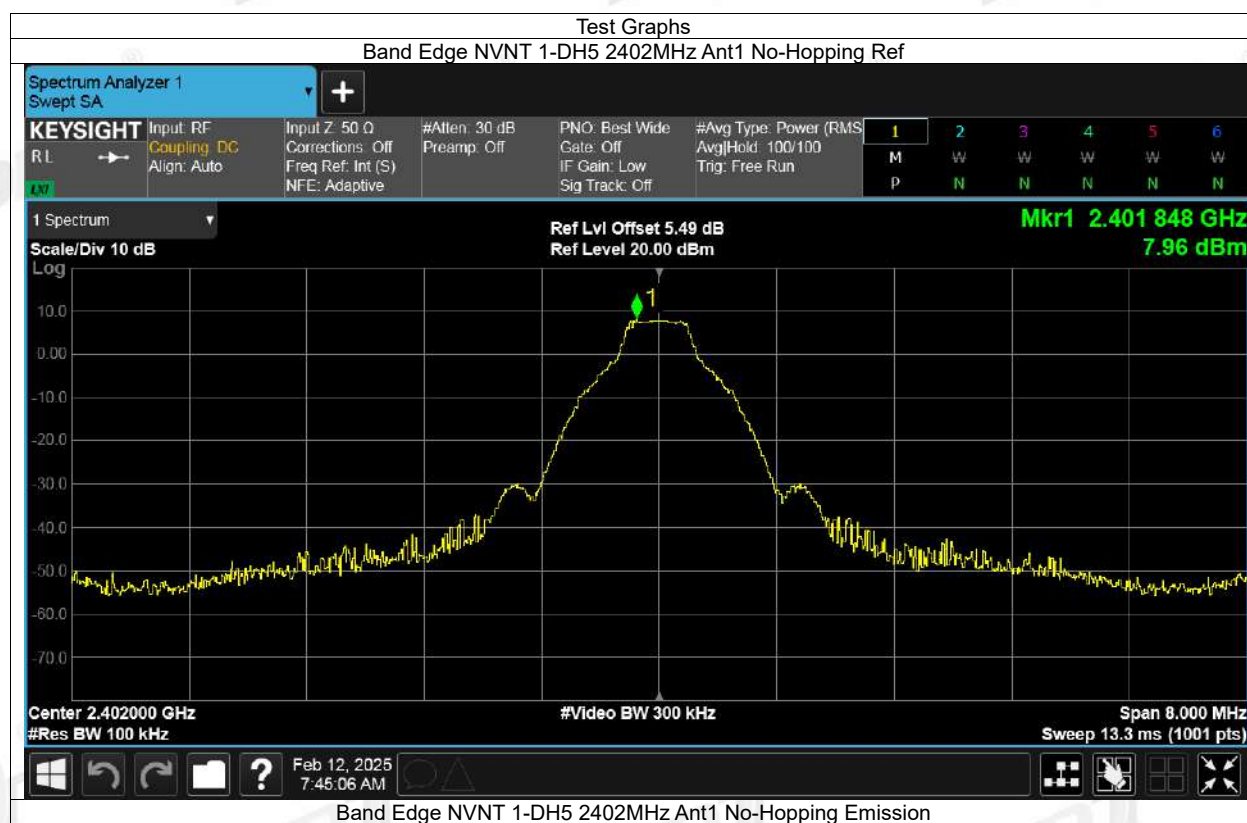
RBW:	100 kHz
VBW:	300 kHz
Span	Encompass frequency range to be measured
Number of measurement points	$\geq \text{span/RBW}$
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

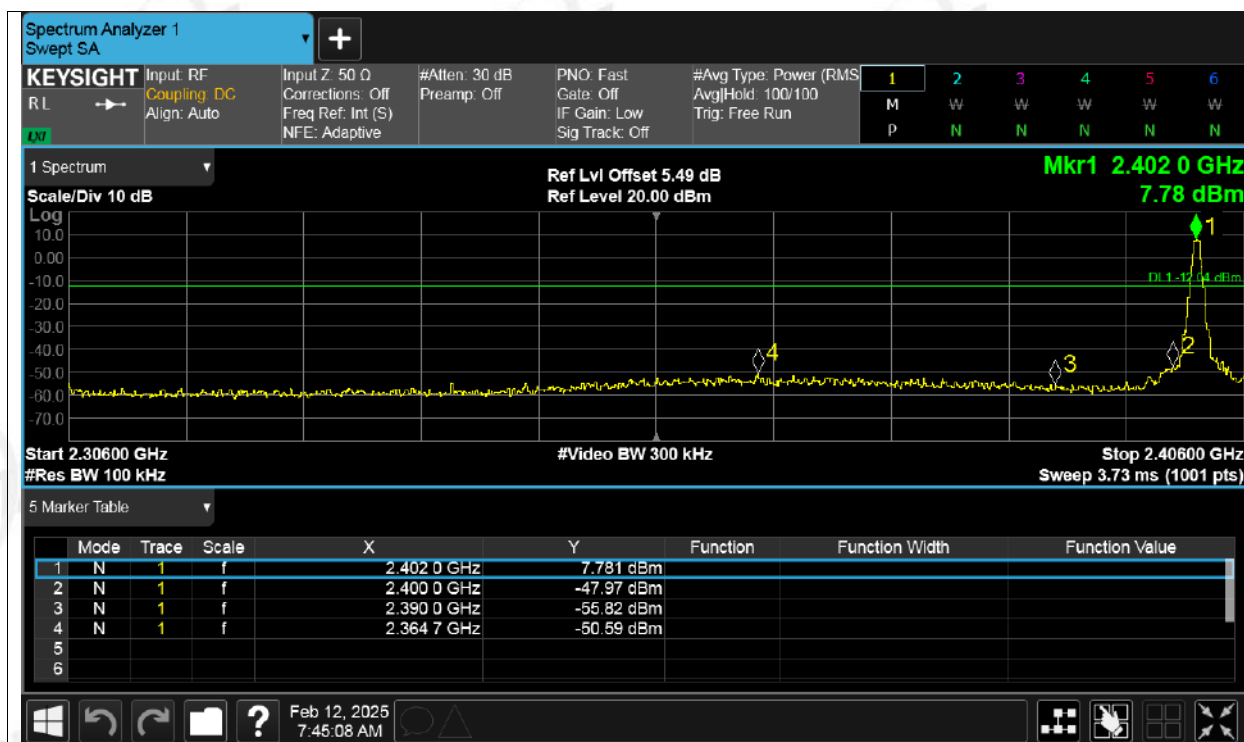
(5) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude of all unwanted emissions outside of the authorized frequency band

10.4. Test result

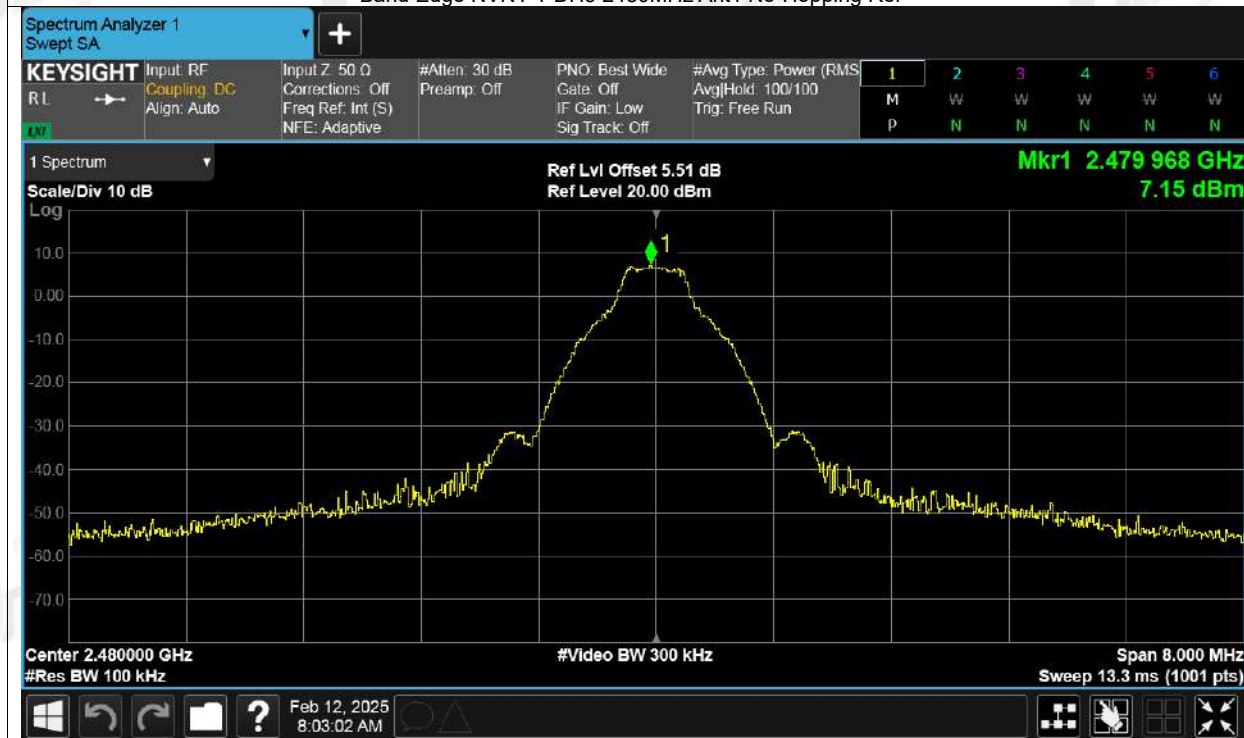
Mode	Freq. (MHz)	Verdict
GFSK	Hopping off 2402	Pass
	Hopping off 2480	Pass
	Hopping on	Pass
$\pi/4$ -DQPSK	Hopping off 2402	Pass
	Hopping off 2480	Pass
	Hopping on	Pass
8DPSK	Hopping off 2402	Pass
	Hopping off 2480	Pass
	Hopping on	Pass

10.5. Test graphs

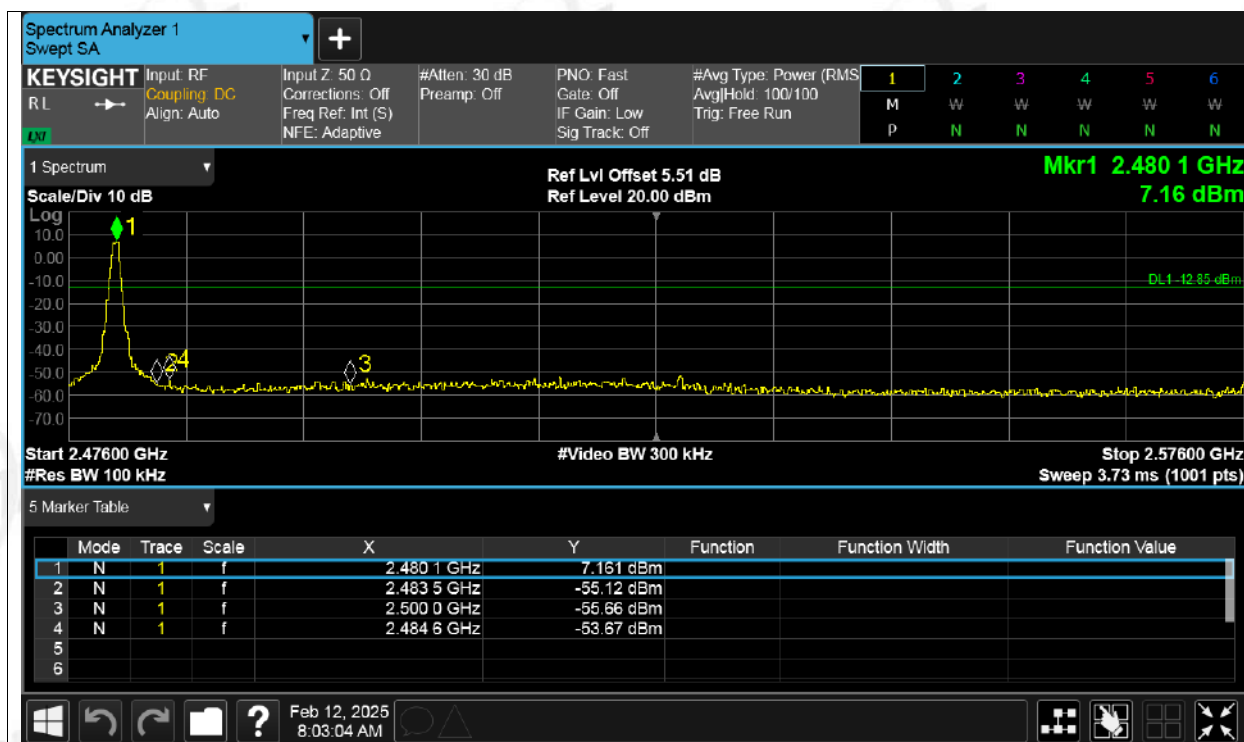




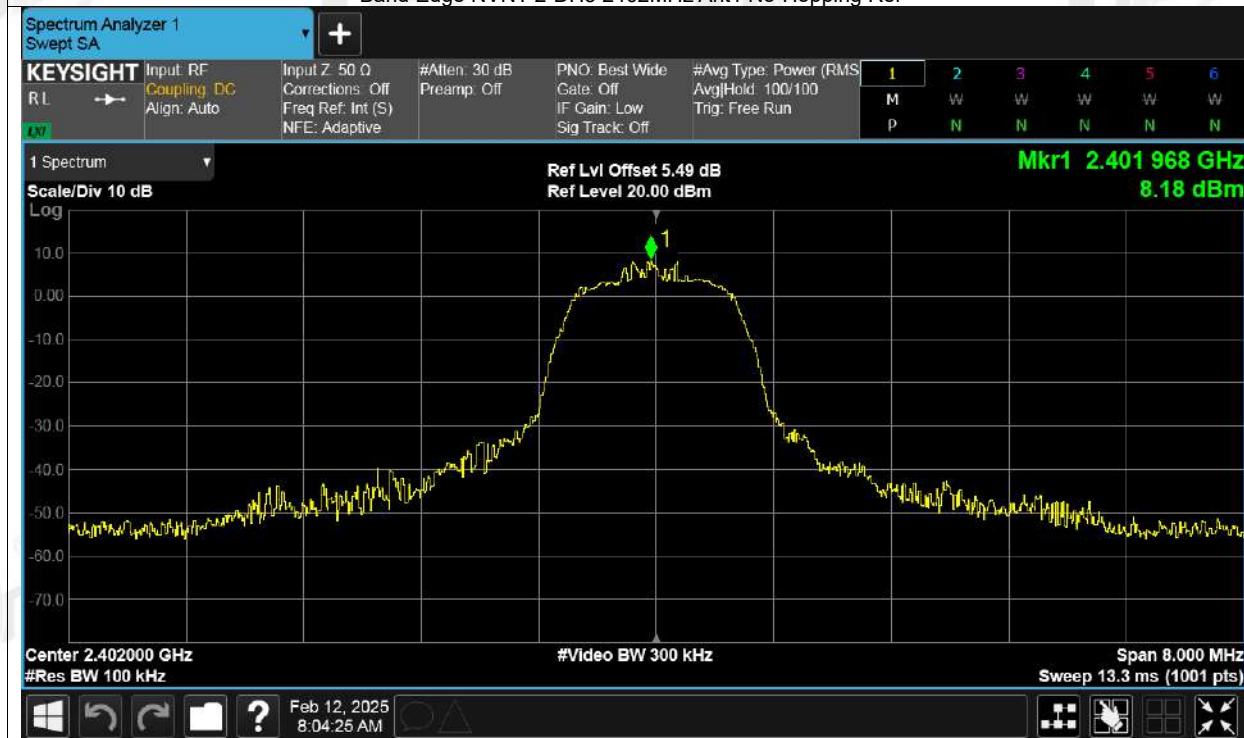
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



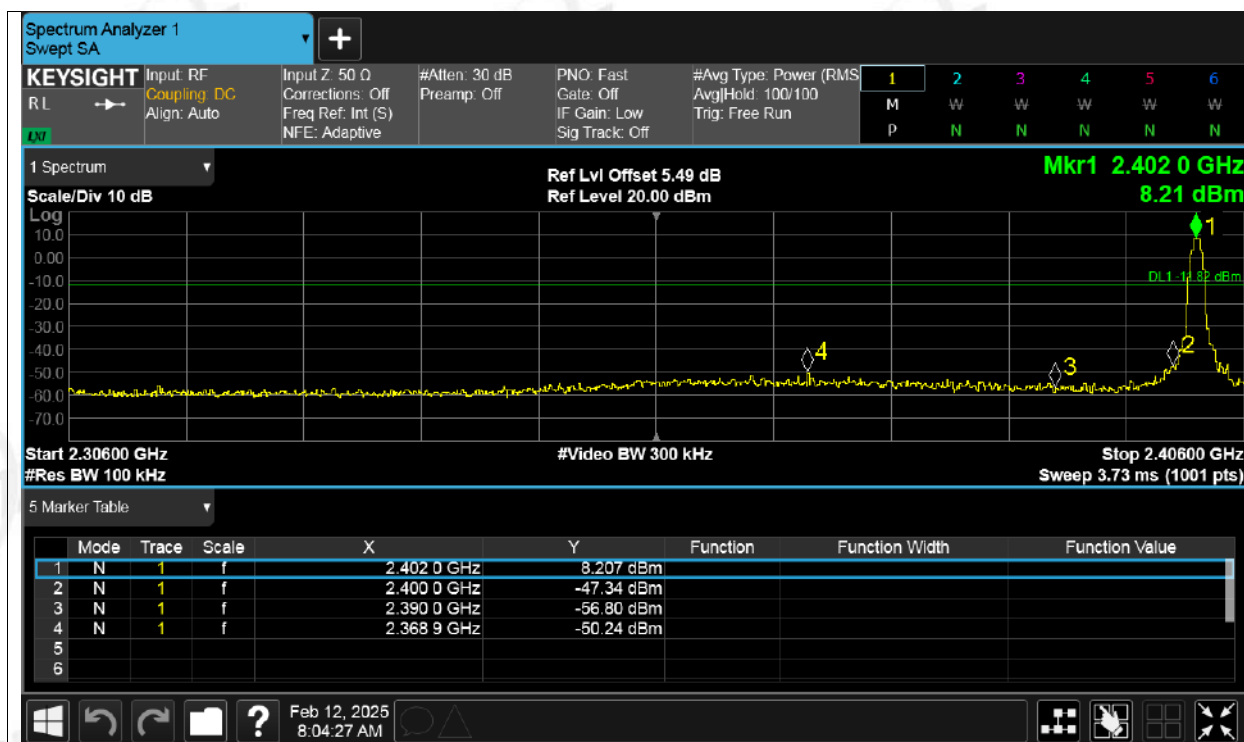
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



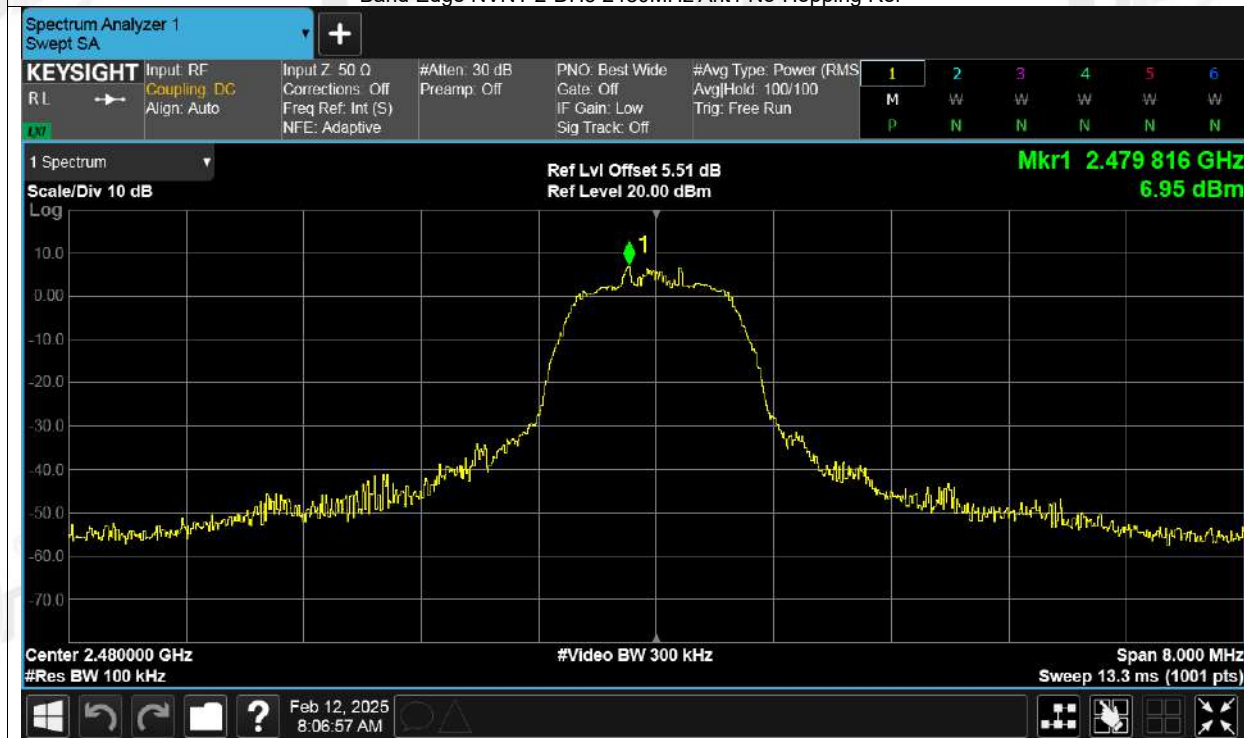
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



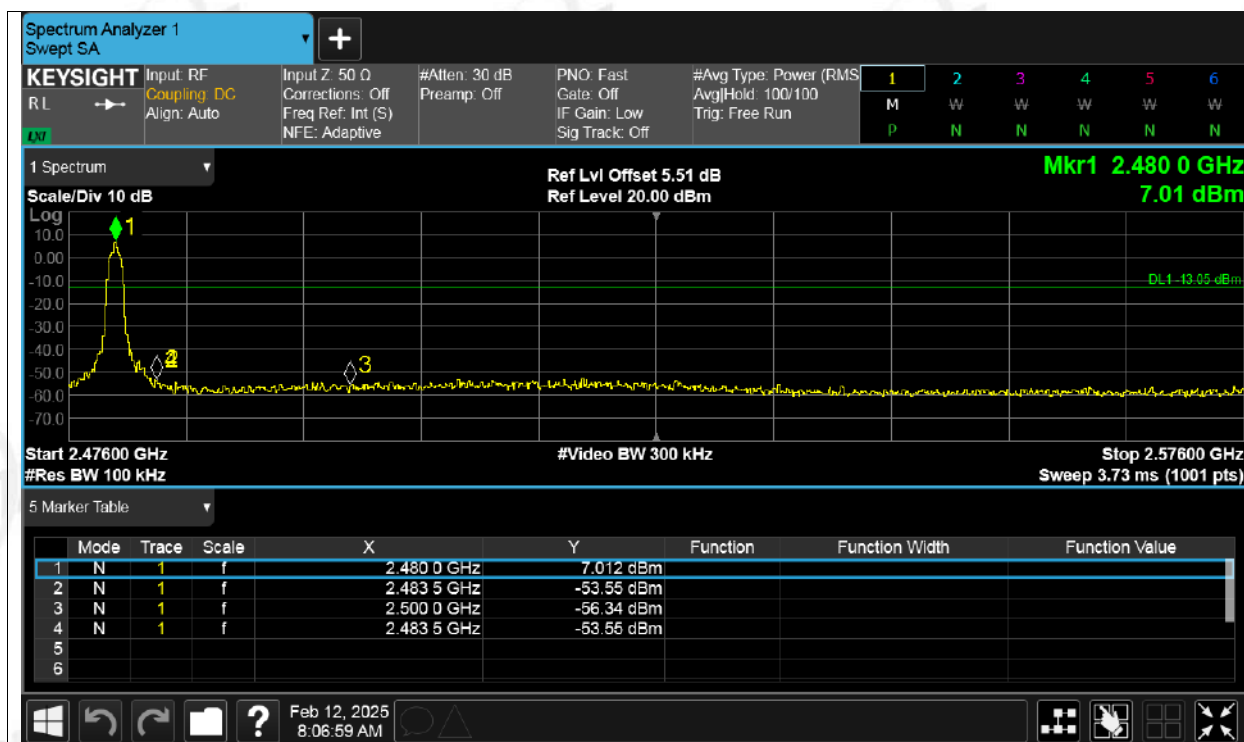
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



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



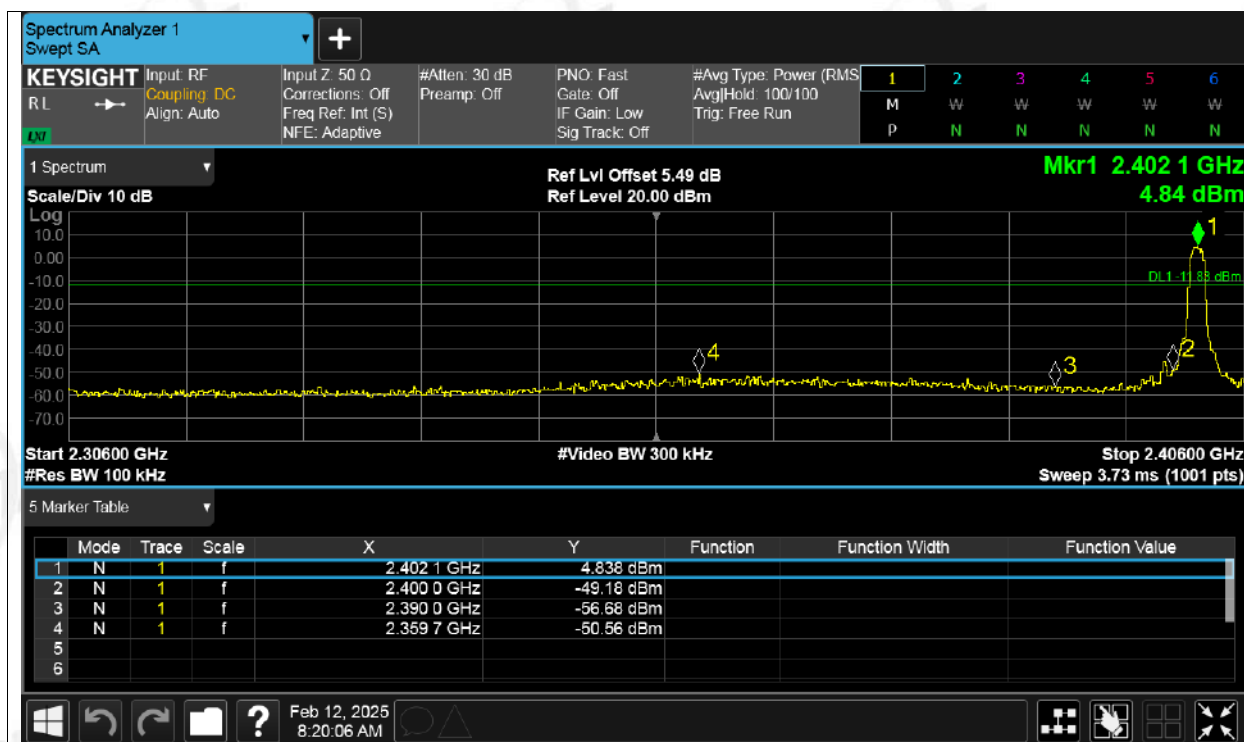
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



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



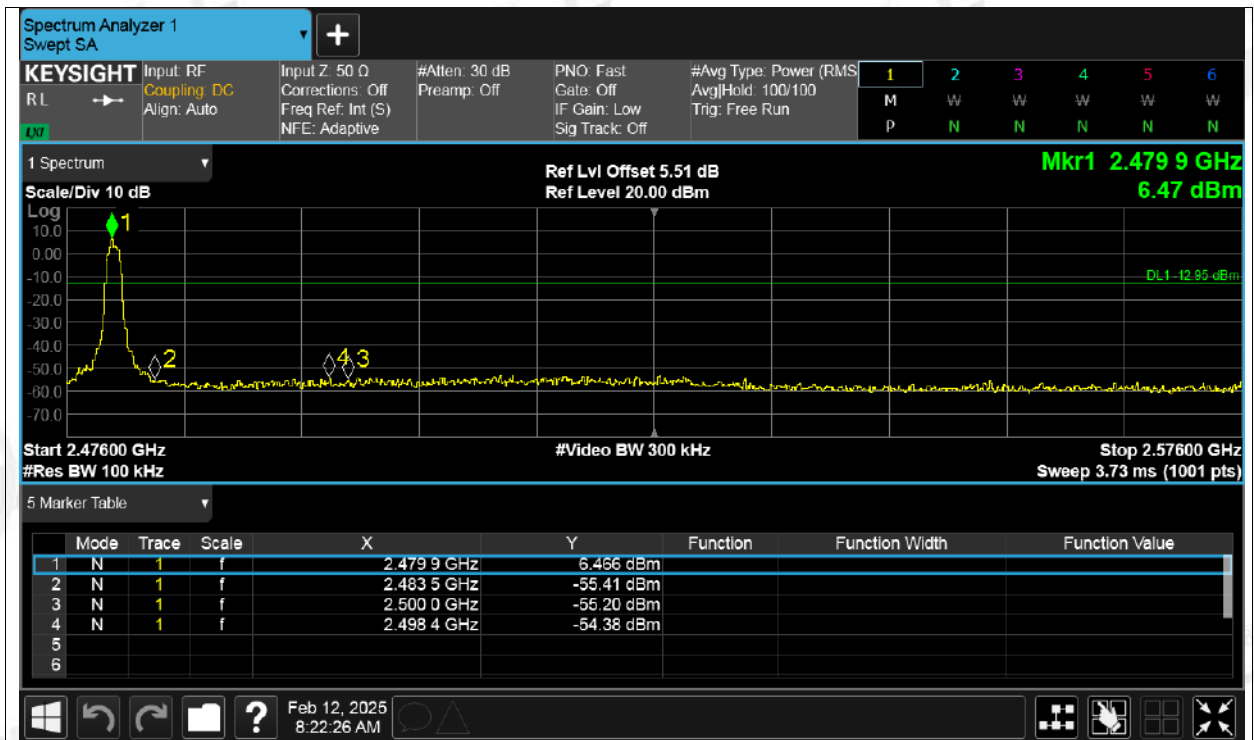
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref

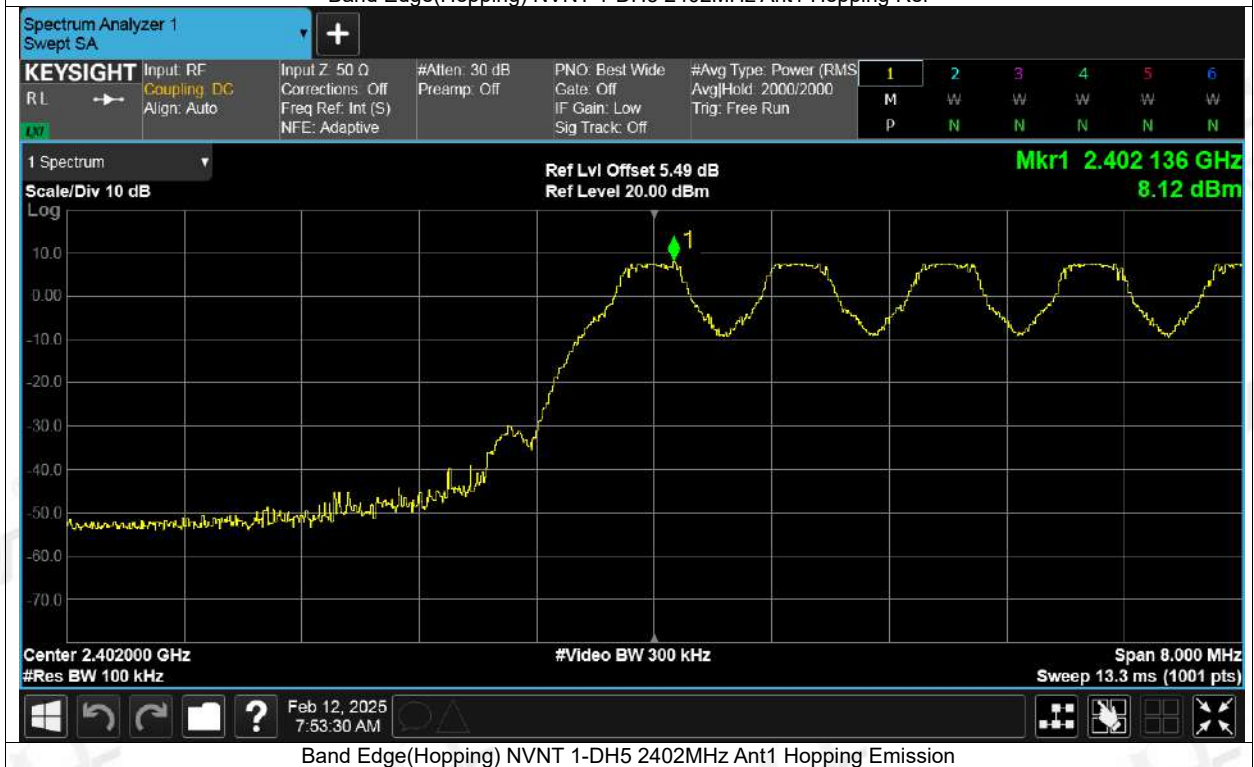


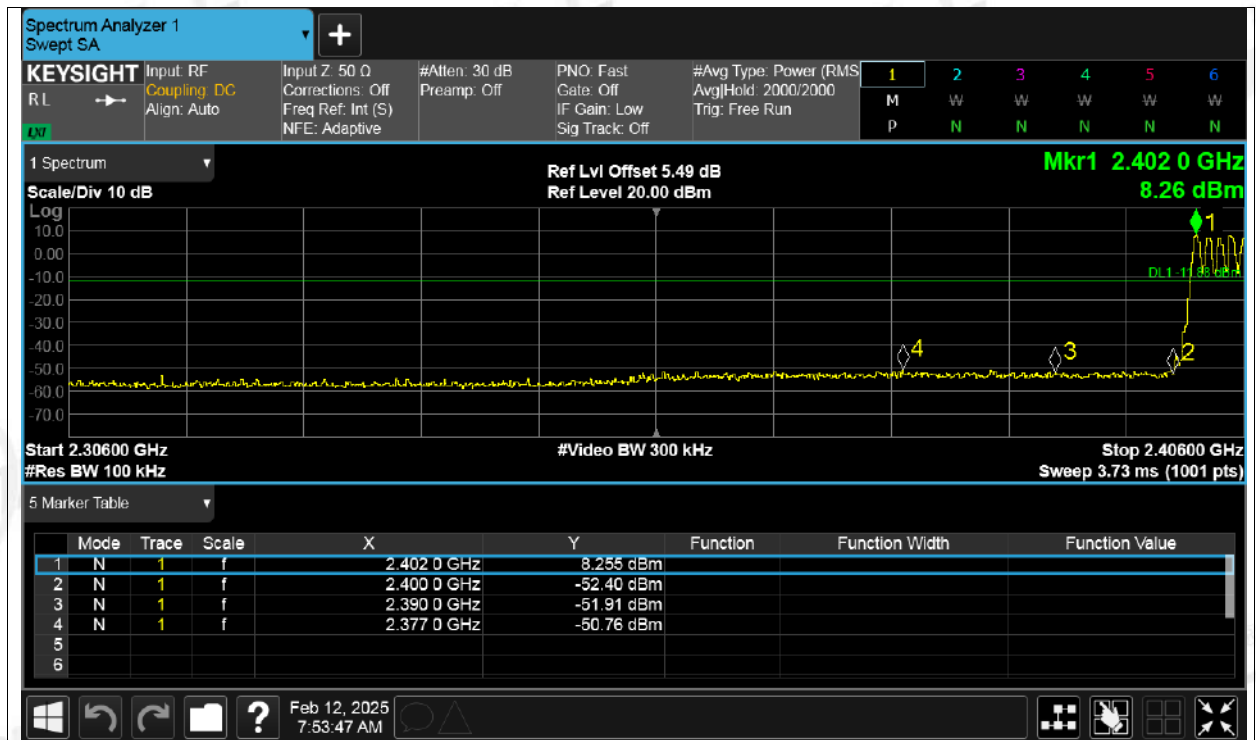
Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Emission



Test Graphs

Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref

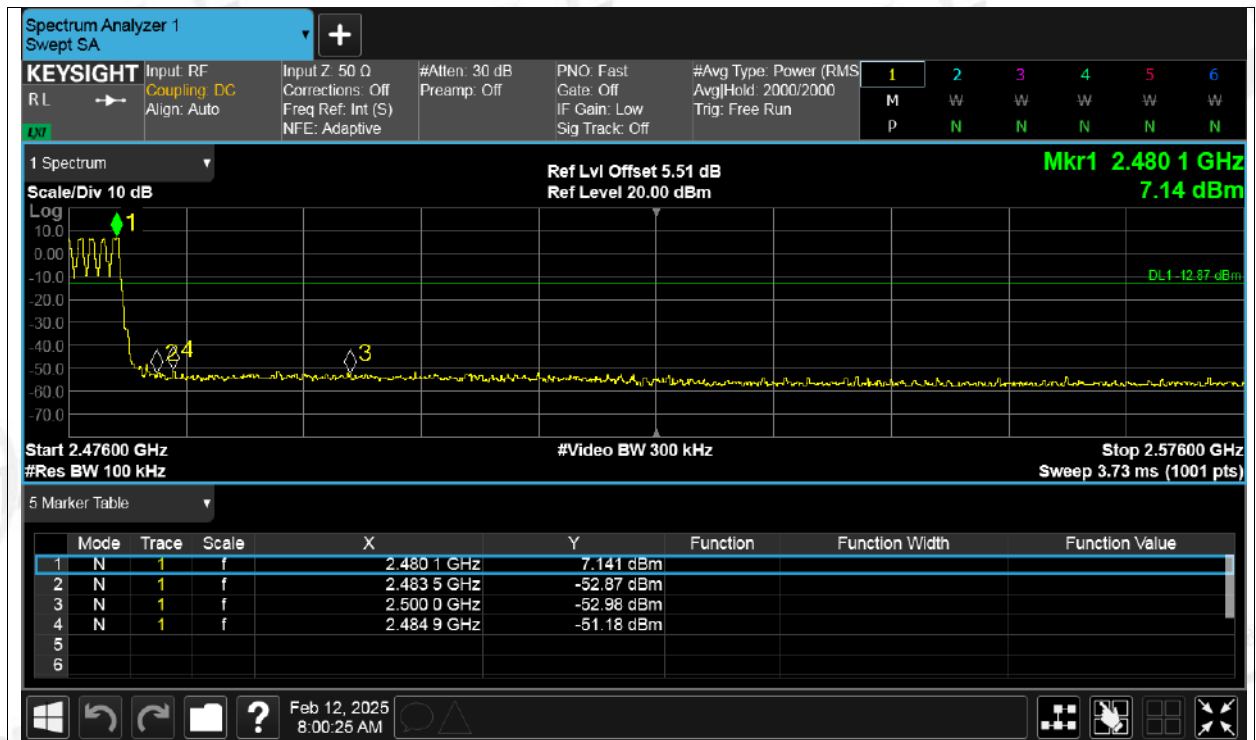




Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



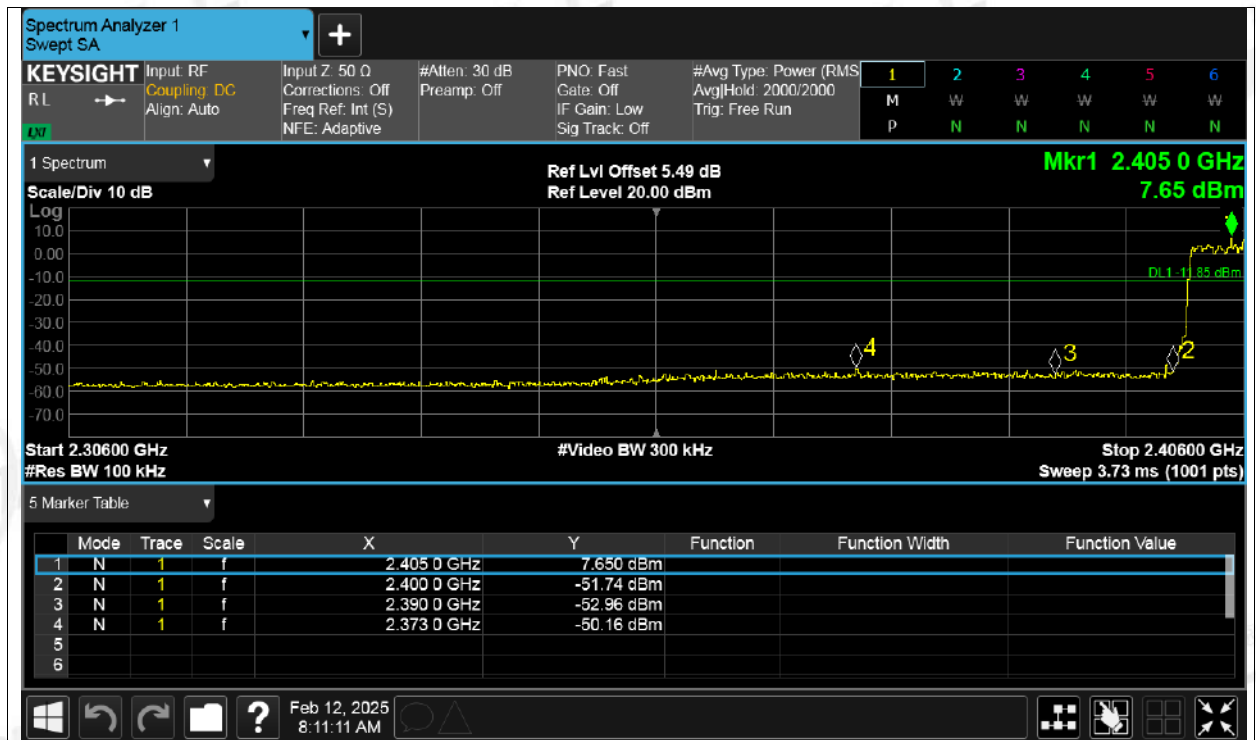
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



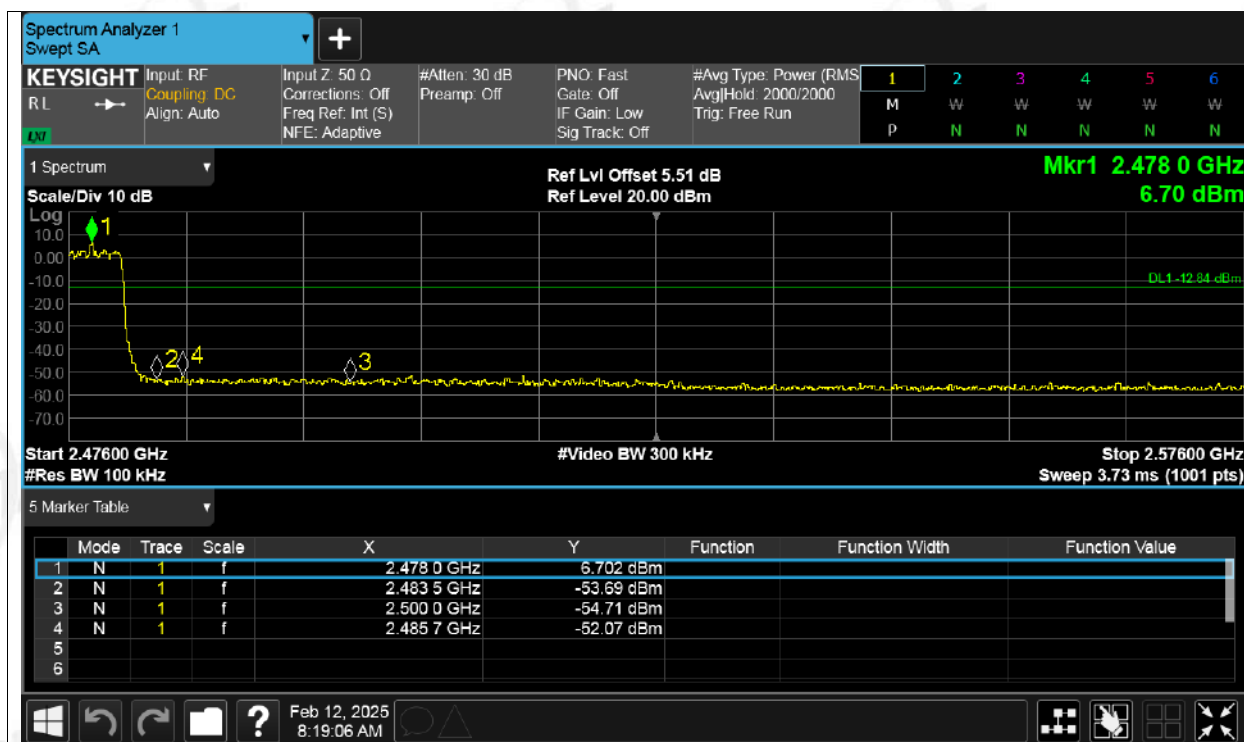
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



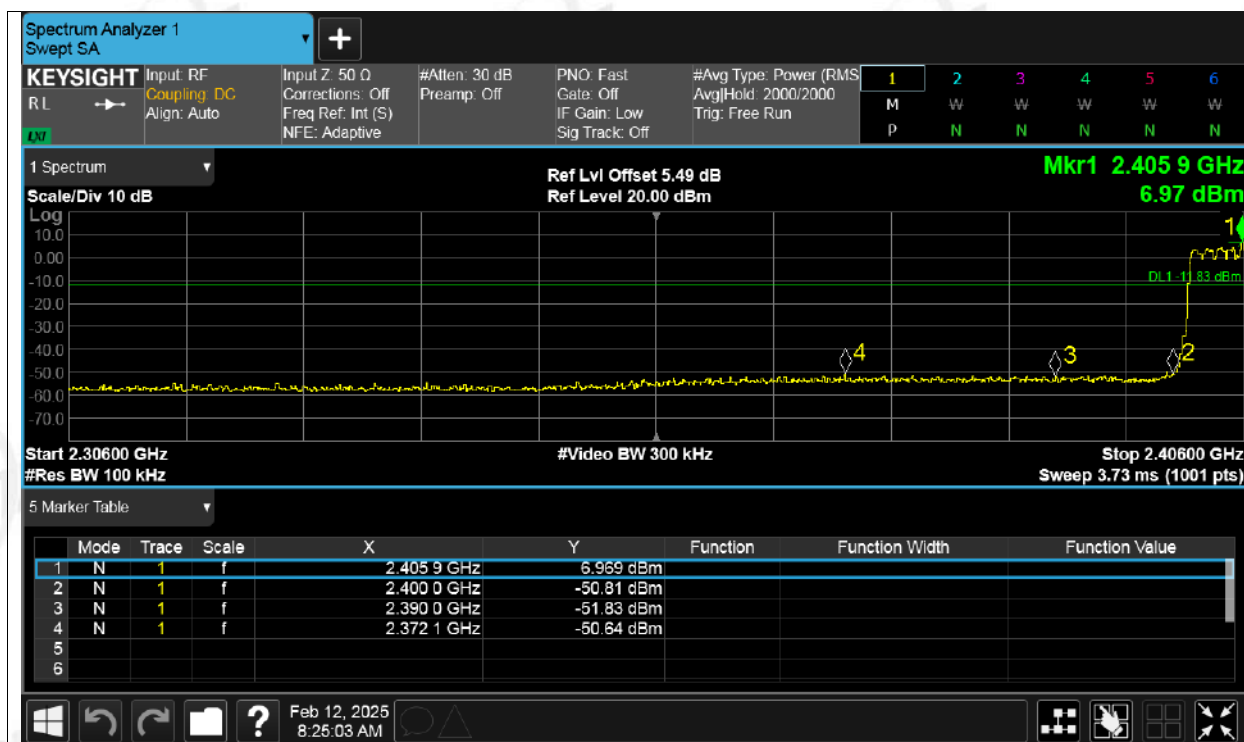
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



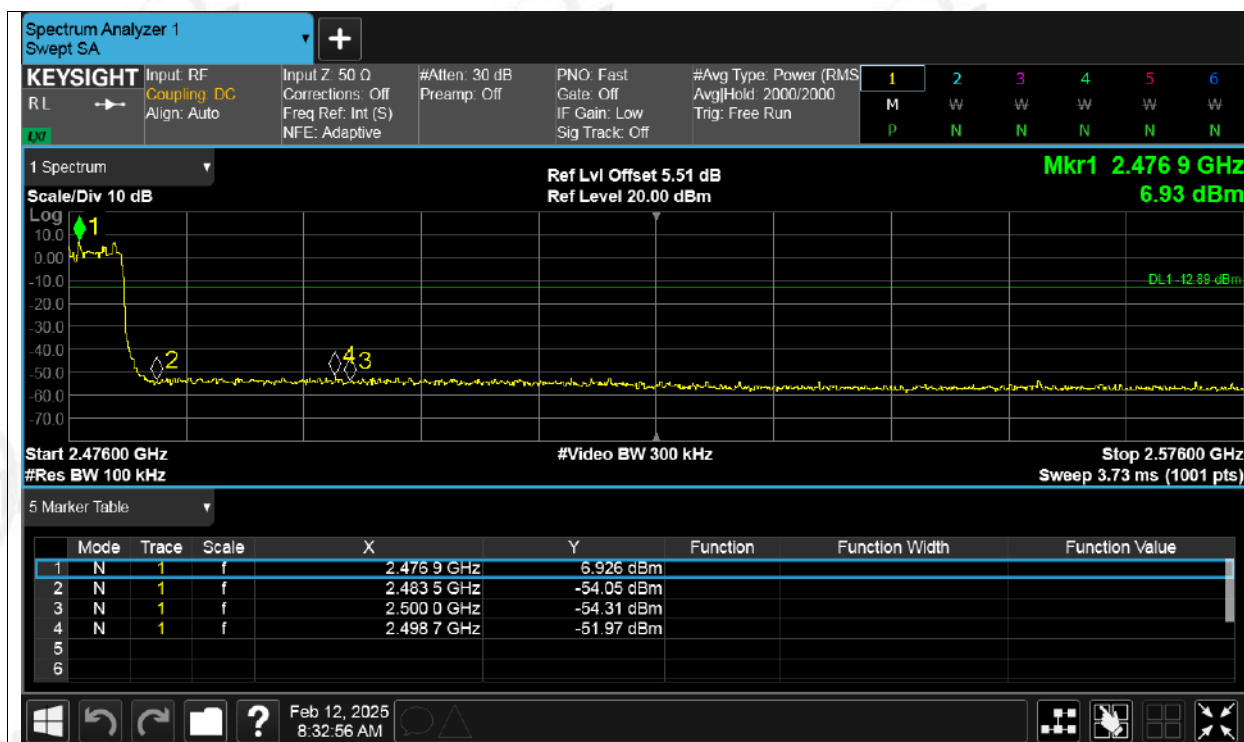
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref

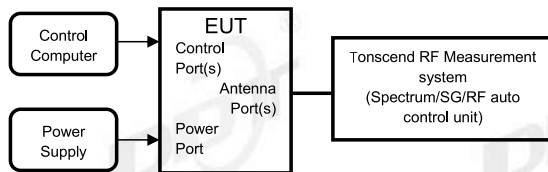


Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Emission



11. RF Conducted Spurious Emissions

11.1. Block diagram of test setup



11.2. Limits

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum 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.

11.3. Test procedure

- (1) Connect EUT's antenna output to spectrum analyzer by RF cable.
- (2) Establish a reference level by using the following procedure:

Center frequency	Test frequency
RBW:	100 kHz
VBW:	300 kHz
Span	Wide enough to capture the peak level of the in-band emission
Detector Mode:	Peak
Sweep time:	Auto
Trace mode	Max hold
- (3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.
- (4) Set the spectrum analyzer as follows:

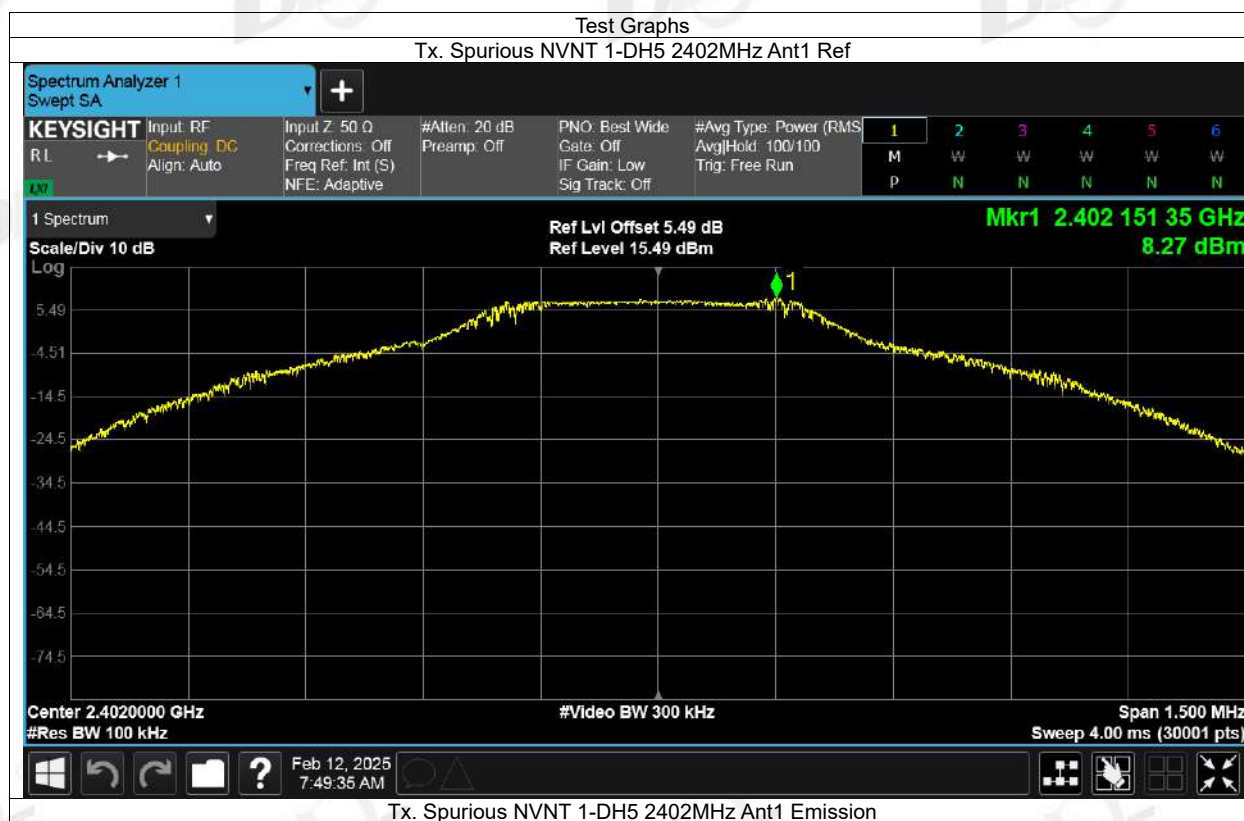
RBW:	100 kHz
VBW:	300 kHz
Span	Encompass frequency range to be measured
Number of measurement points	$\geq \text{Span/RBW}$
Detector Mode:	Peak
Sweep time:	Auto
Trace mode	Max hold

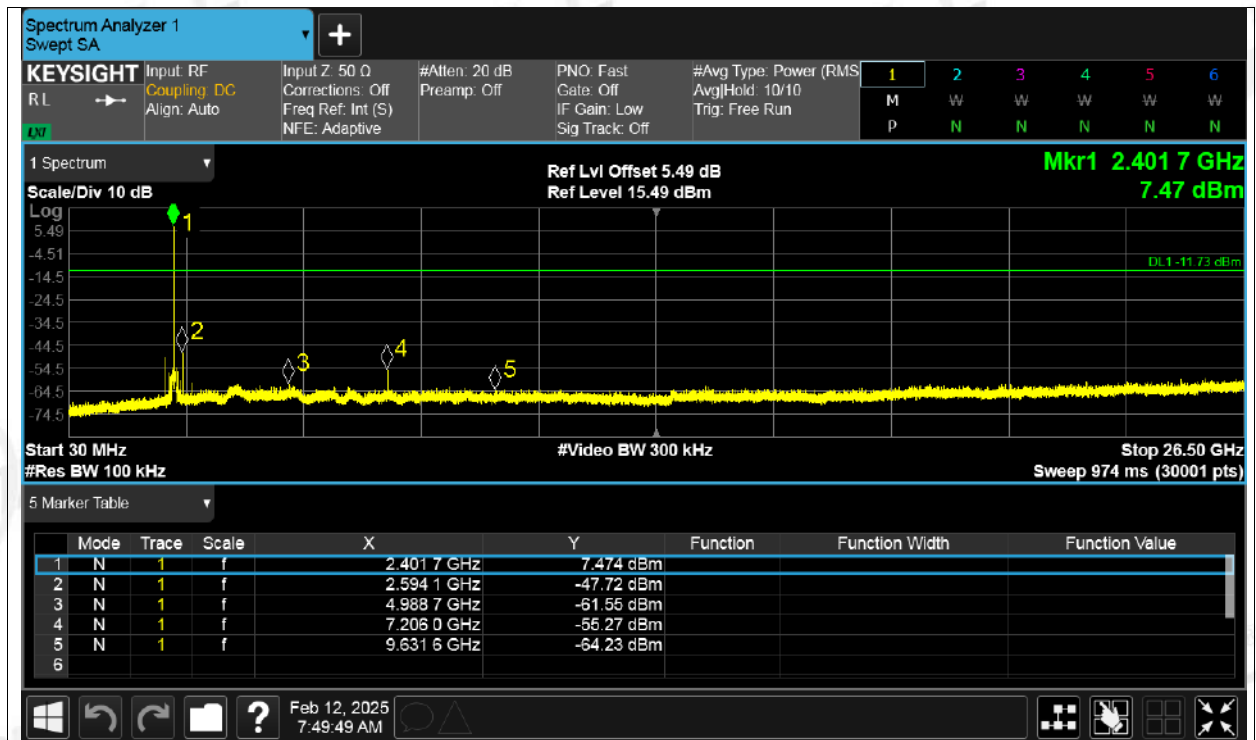
Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude of all unwanted emissions outside of the authorized frequency band

11.4. Test result

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
1-DH5	2402	Ant1	-55.99	-20	Pass
1-DH5	2441	Ant1	-56.62	-20	Pass
1-DH5	2480	Ant1	-56.35	-20	Pass
2-DH5	2402	Ant1	-57.17	-20	Pass
2-DH5	2441	Ant1	-60.36	-20	Pass
2-DH5	2480	Ant1	-59.45	-20	Pass
3-DH5	2402	Ant1	-59.17	-20	Pass
3-DH5	2441	Ant1	-59.63	-20	Pass
3-DH5	2480	Ant1	-55.95	-20	Pass

11.5. Test graphs

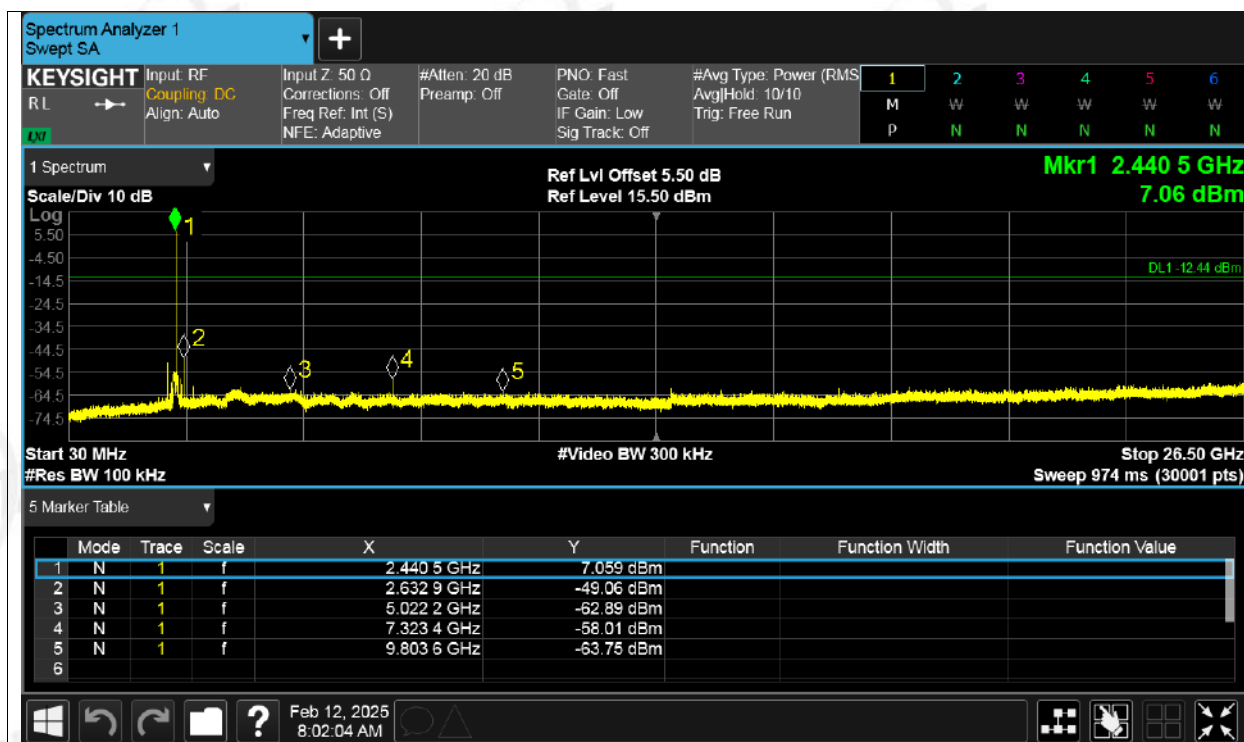




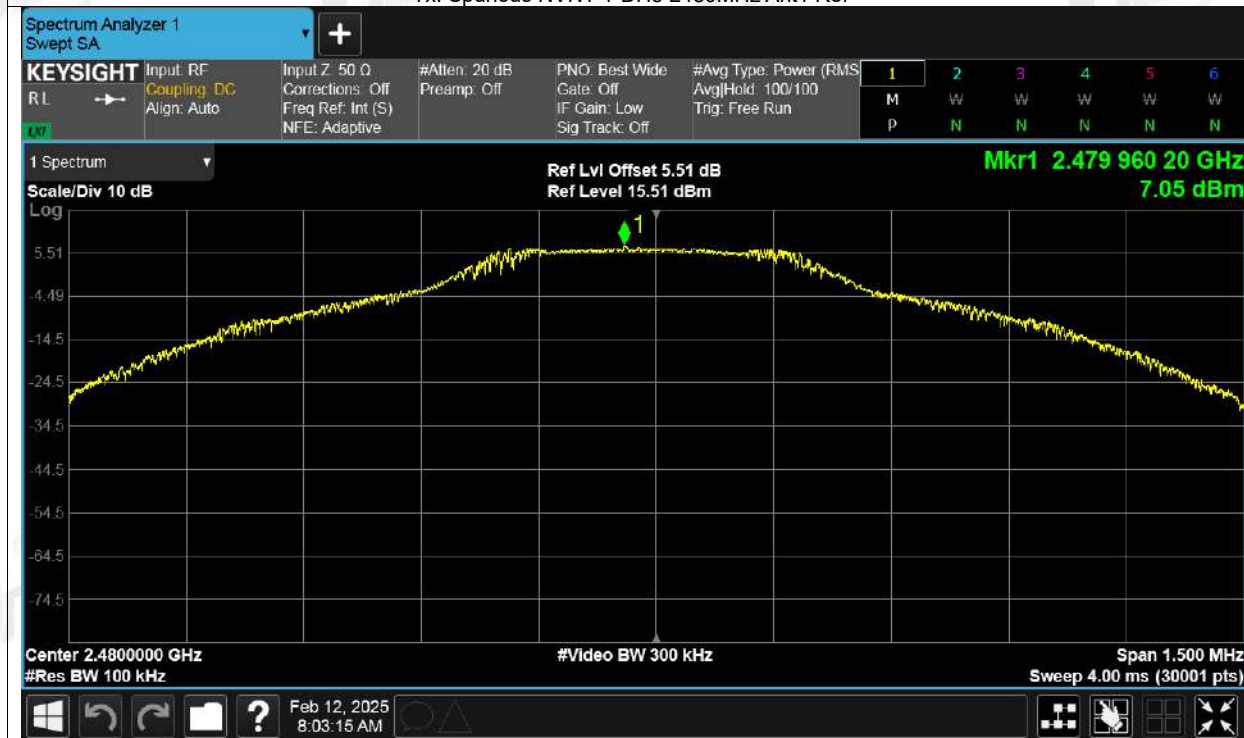
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



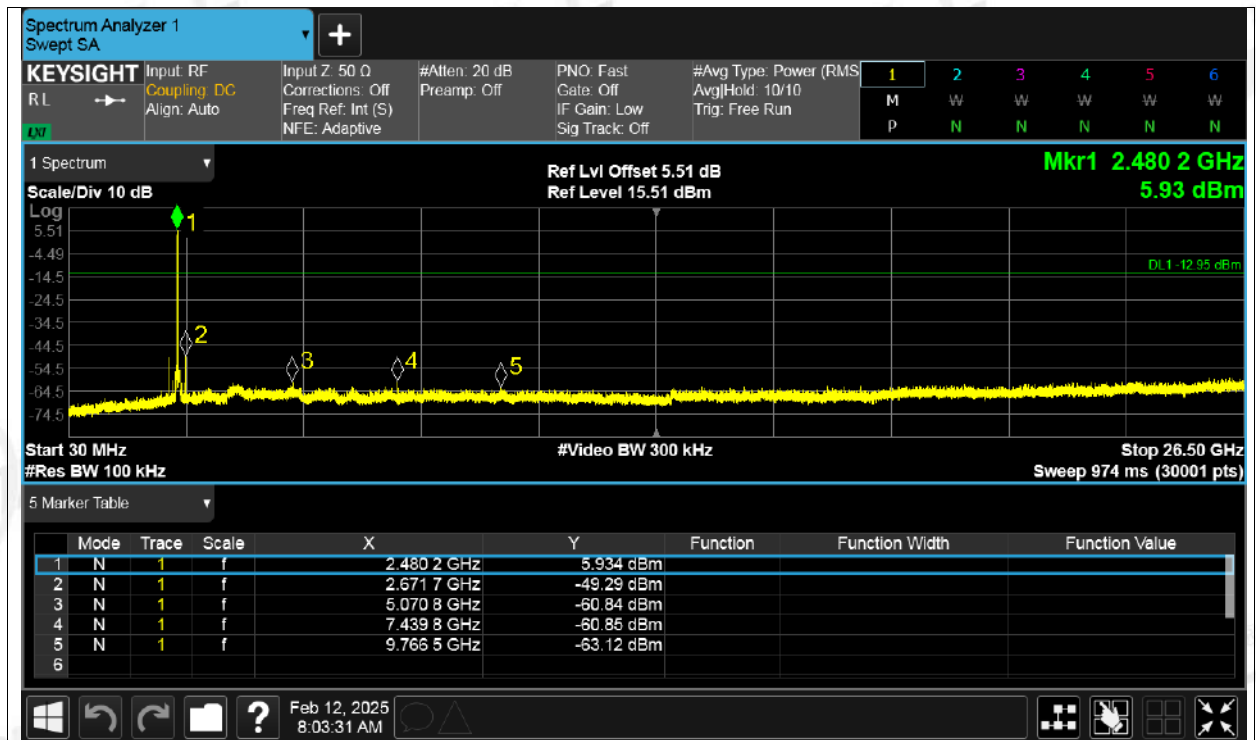
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



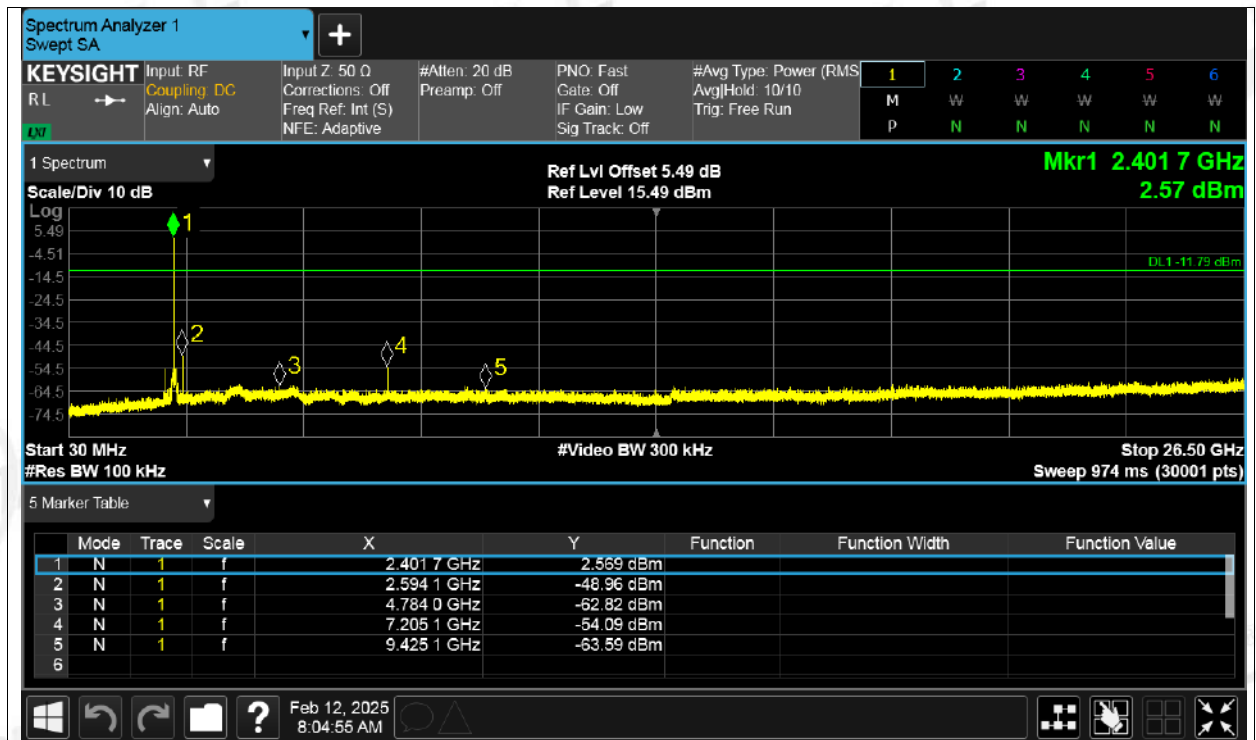
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



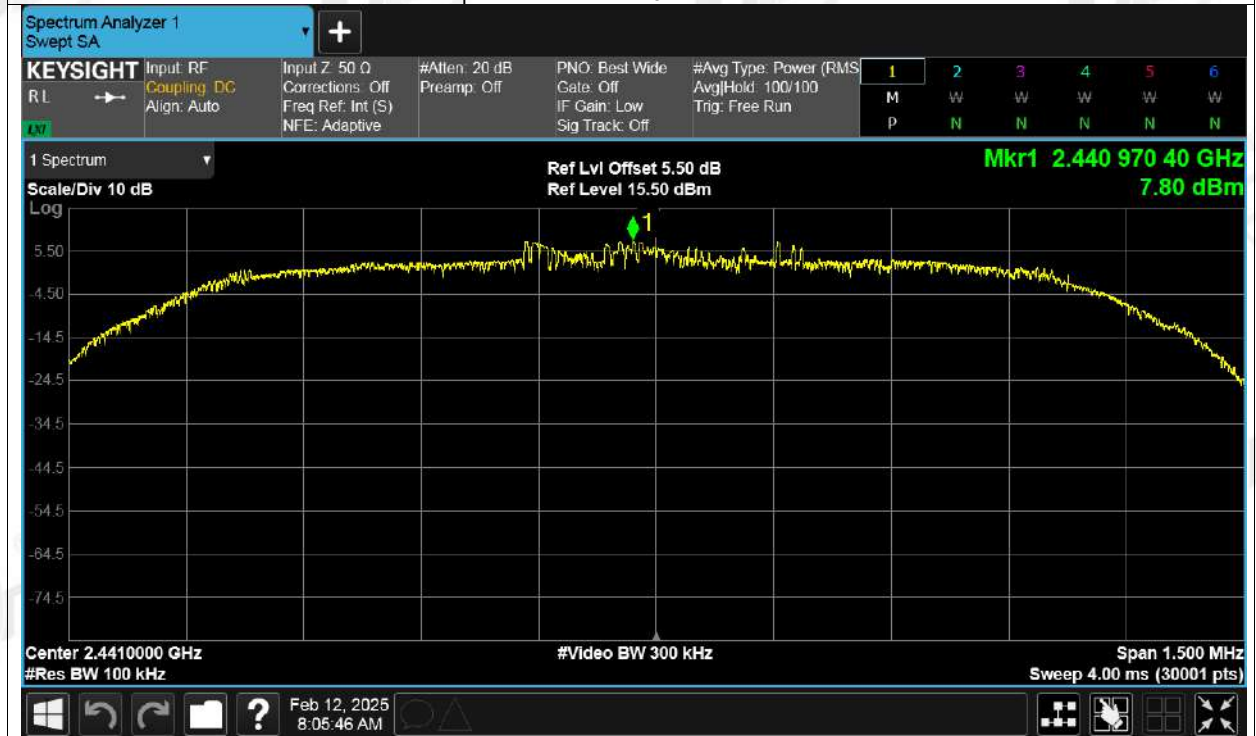
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



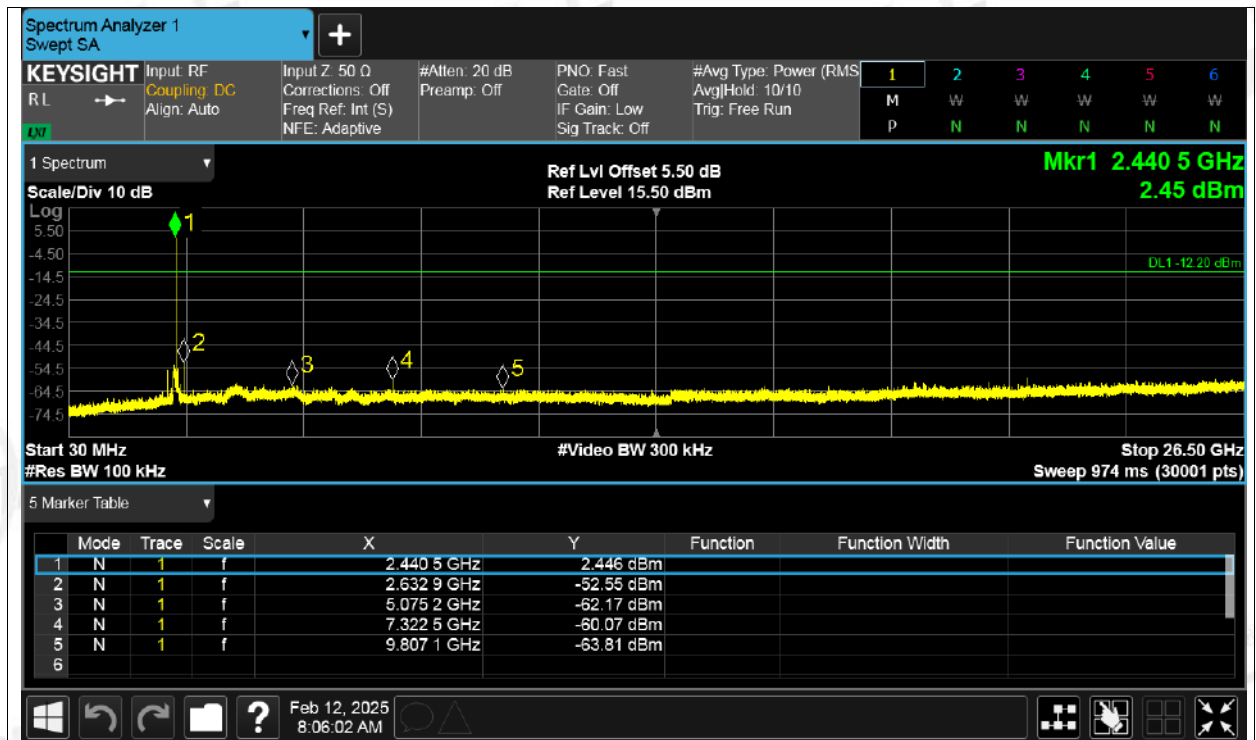
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



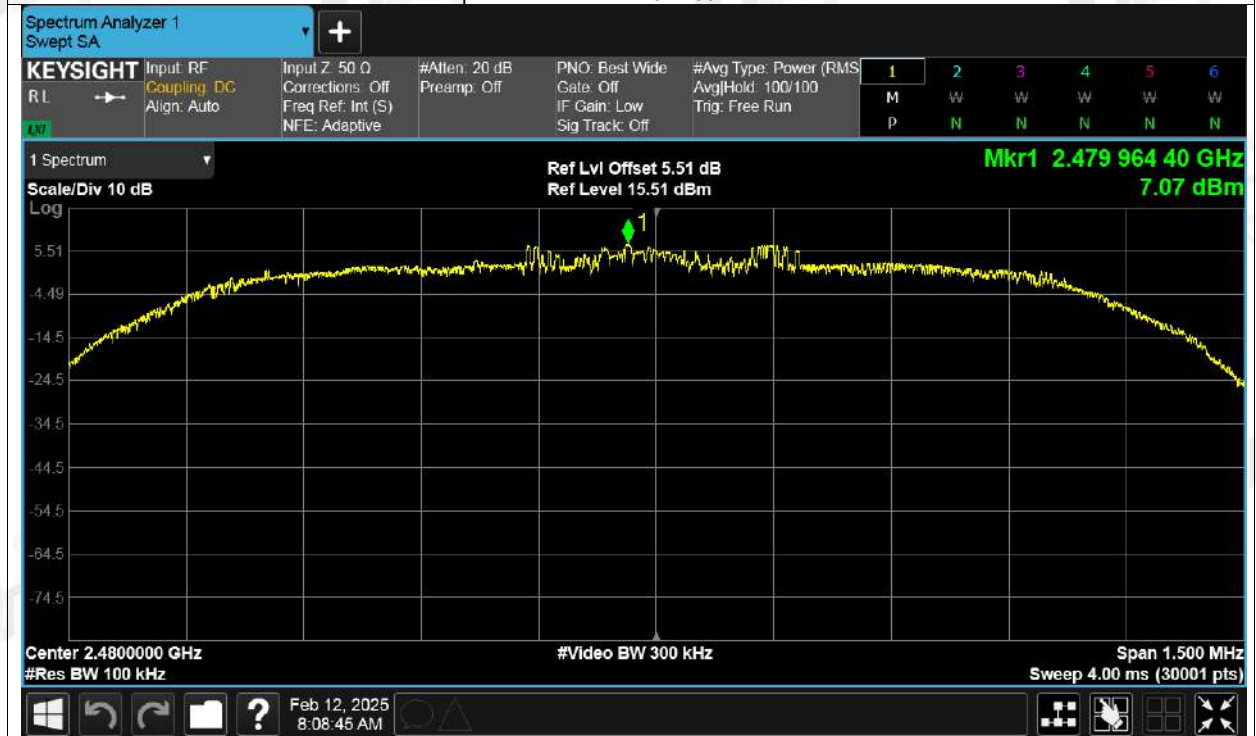
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



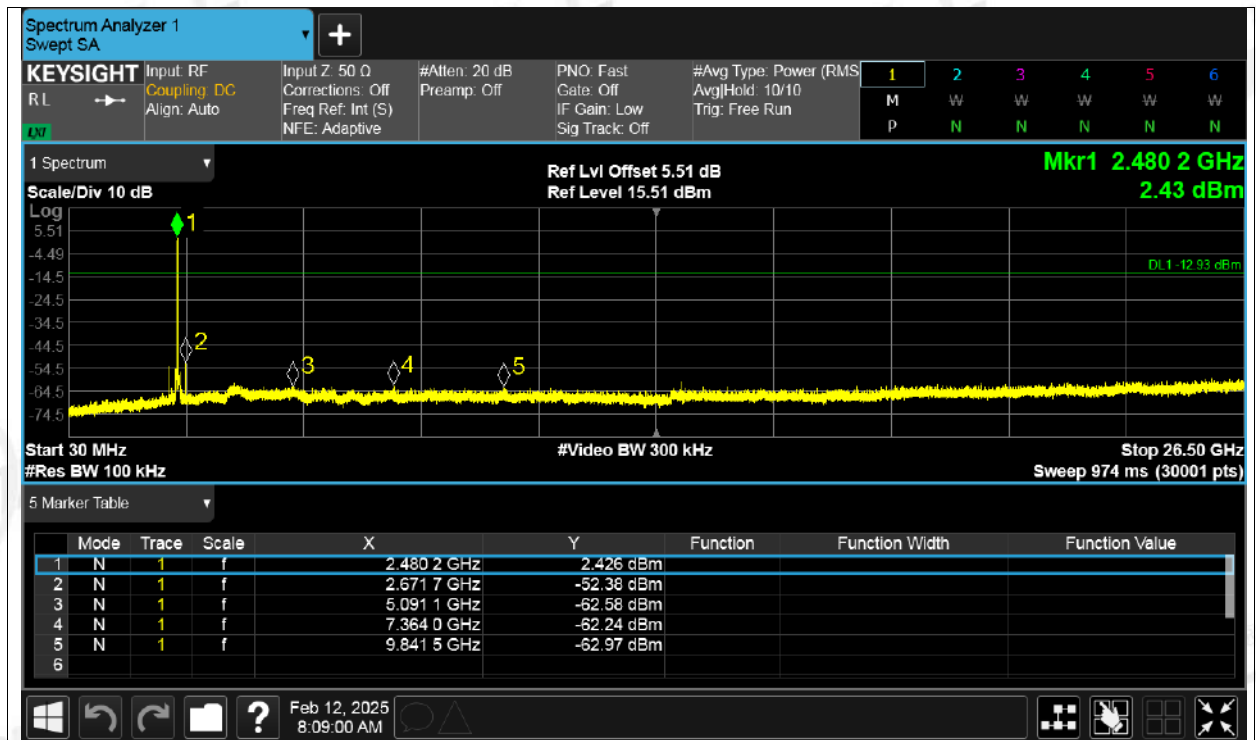
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



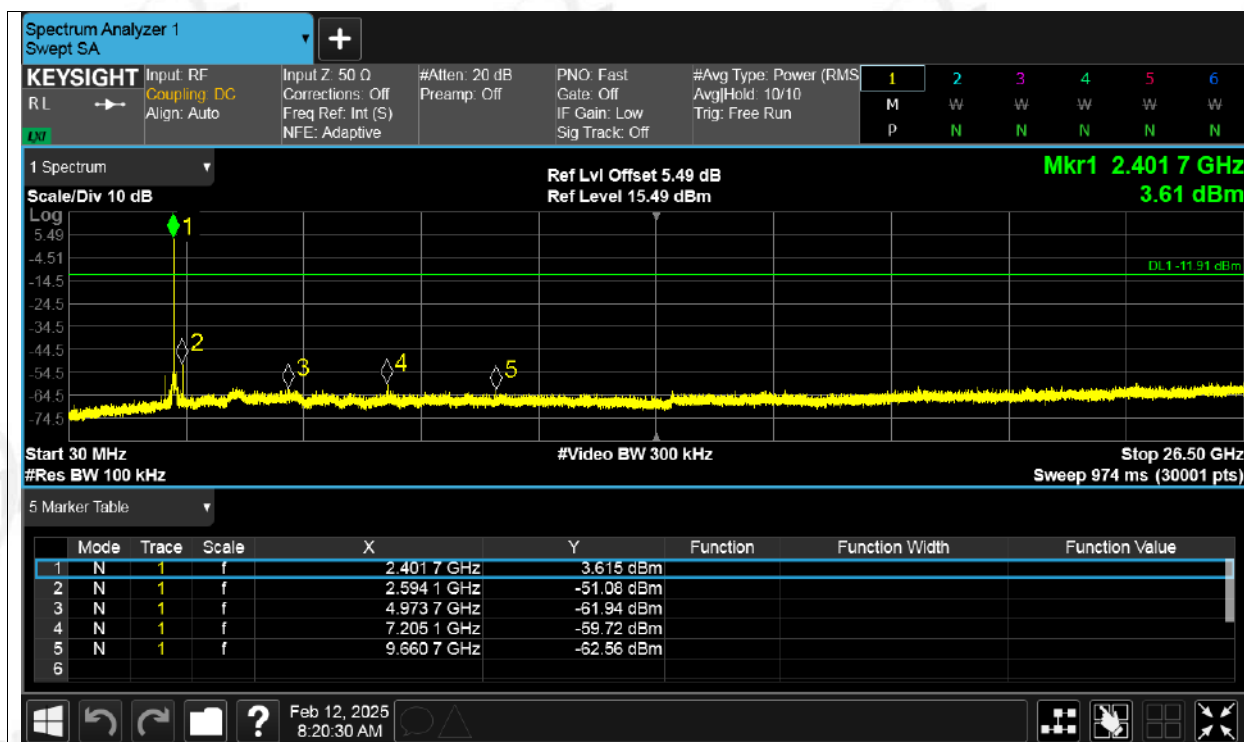
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



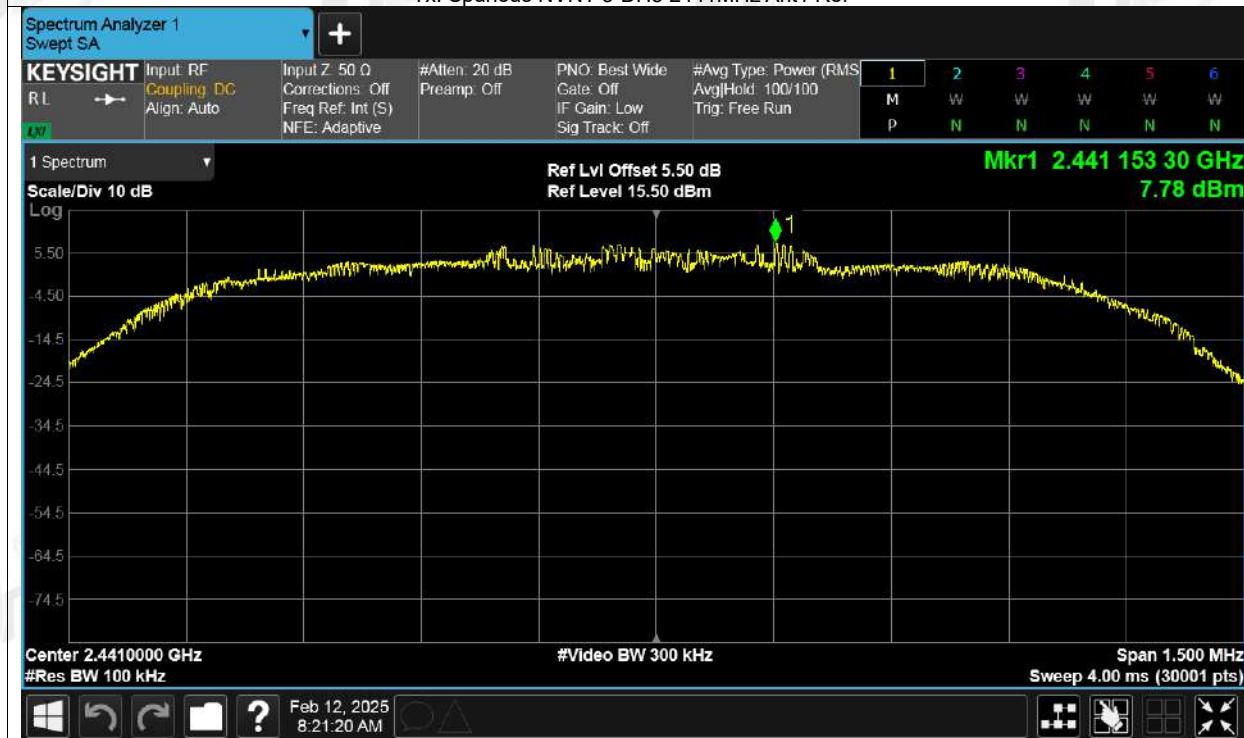
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



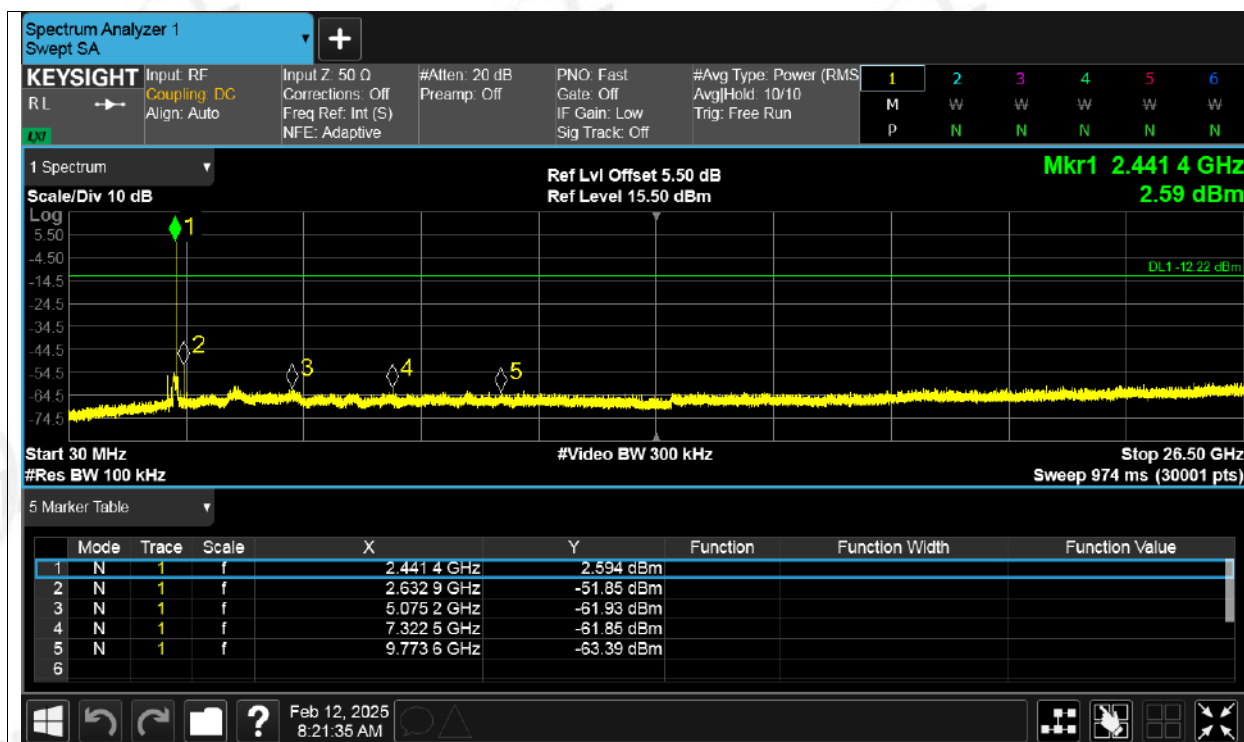
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



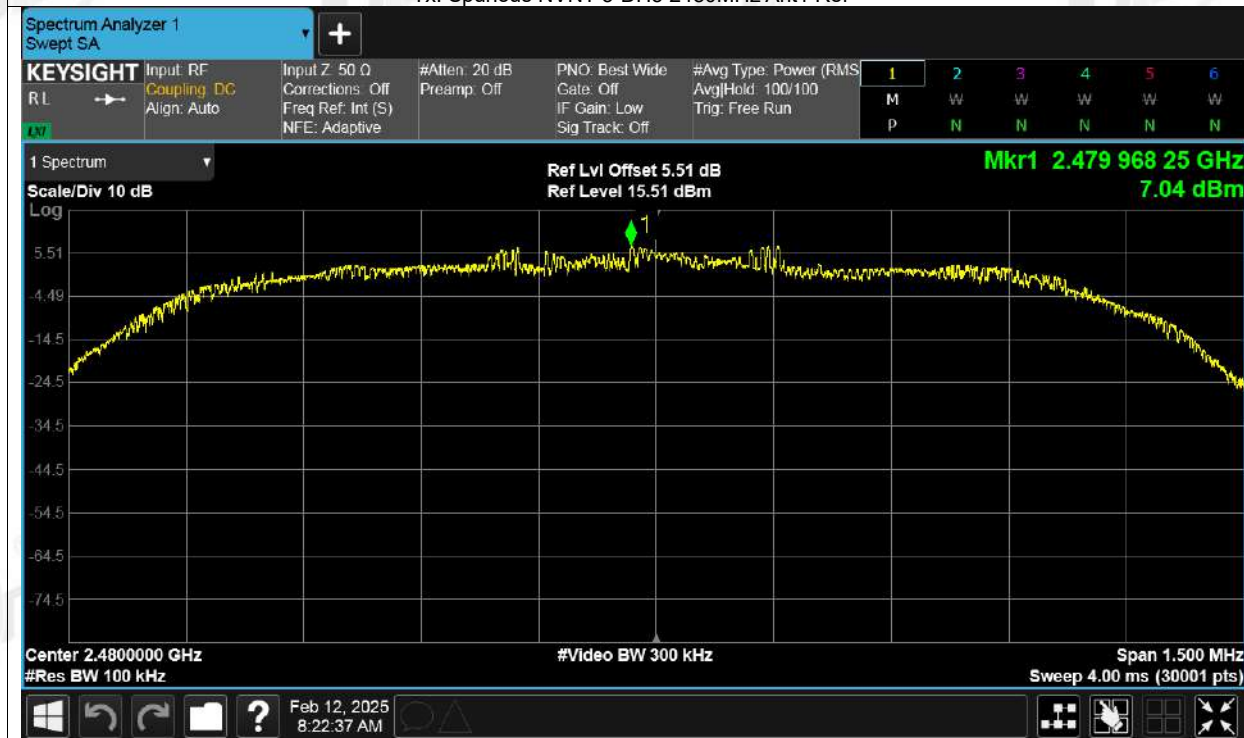
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



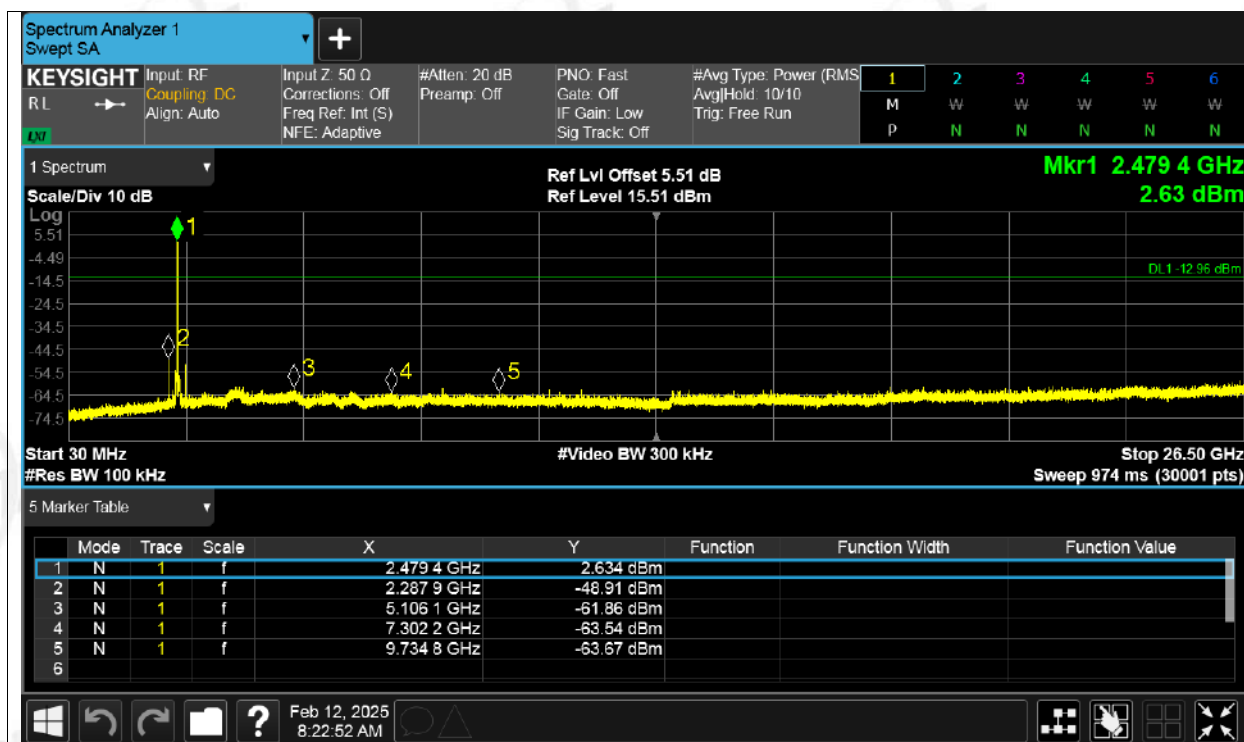
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission



12. Antenna Requirements

12.1. Limit

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For intentional device, according to RSS-Gen issue 5 section 6.8.

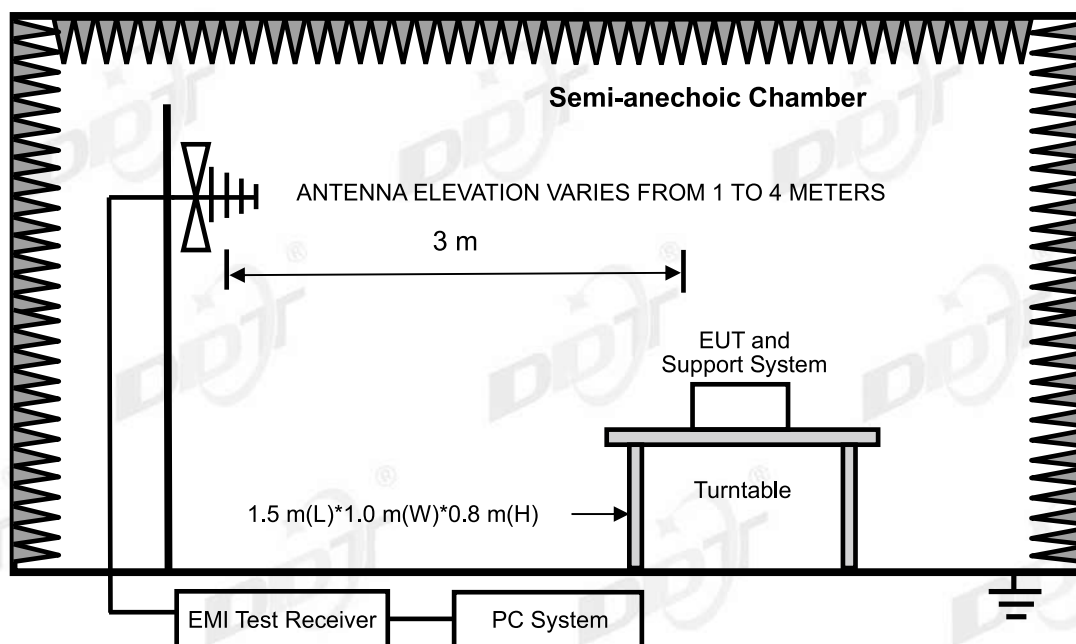
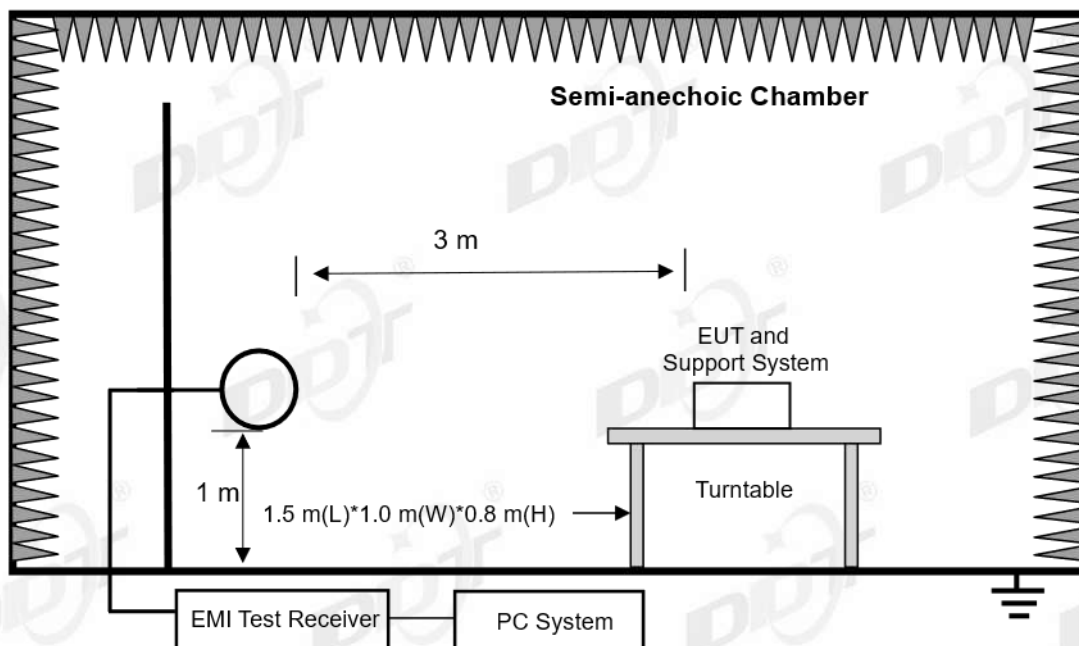
The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

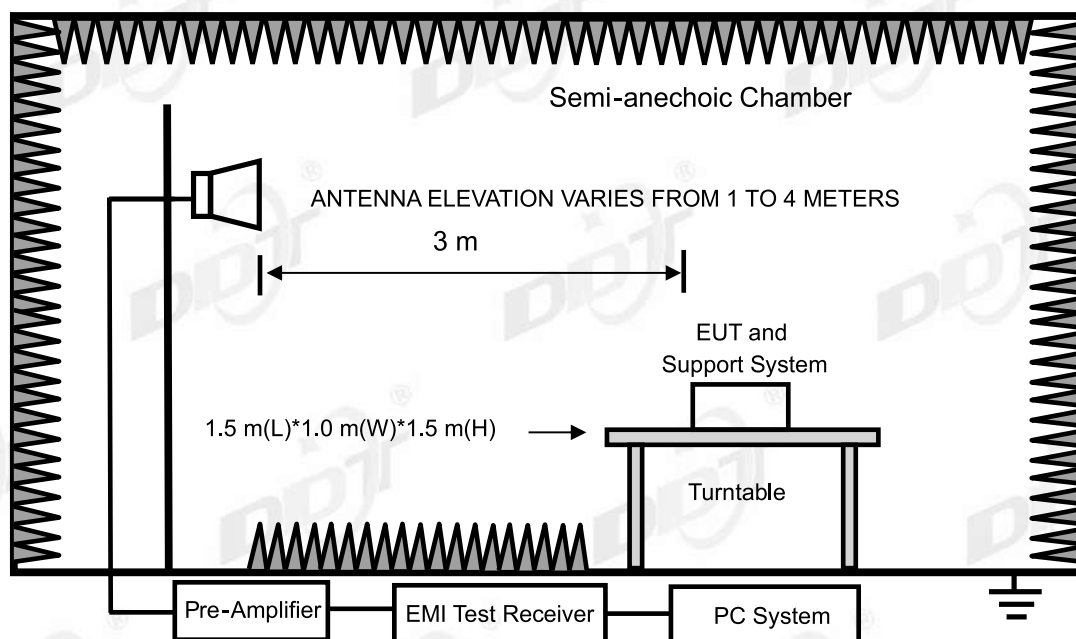
12.2. Result

The antenna used for this product is PCB antenna and no antenna other than that furnished by the responsible party shall be used with the device, maximum antenna gain is 2.73 dBi.

13. Radiated Emission

13.1. Block diagram of test setup





13.2. Limits

(1) 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
4.1772&4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.2072&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
13.36-13.41			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

²Above 38.6

RSS-Gen section 8.10 Restricted frequency bands*

MHz	MHz	MHz	GHz
0.090-0.110	12.51975-12.52025	240-285	3.5-4.4
0.495-0.505	12.57675-12.57725	322-335.4	4.5-5.15
2.1735-2.1905	13.36-13.41	399.9-410	5.35-5.46
3.020-3.026	16.42-16.423	608-614	7.25-7.75
4.125-4.128	16.69475-16.69525	960-1427	8.025-8.5
4.1772&4.17775	16.80425-16.80475	1435-1626.5	9.0-9.2
4.2072&4.20775	25.5-25.67	1645.5-1646.5	9.3-9.5
5.677-5.683	37.5-38.25	1660-1710	10.6-12.7
6.215-6.218	73-74.6	1718.8-1722.2	13.25-13.4
6.26775-6.26825	74.8-75.2	2200-2300	14.47-14.5
6.31175-6.31225	108-138	2310-2390	15.35-16.2
8.291-8.294	149.9-150.05	2483.5-2500	17.7-21.4
8.362-8.366	156.52475-156.52525	2655-2900	22.01-23.12
8.37625-8.38675	156.7-156.9	3260-3267	23.6-24.0
8.41425-8.41475	162.0125-167.17	3332-3339	31.2-31.8
12.29-12.293	167.72-173.2	3345.8-3358	36.43-36.5
			Above 38.6

* Certain frequency bands listed in table and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

(2) FCC 15.209 Limit & RSS-Gen section 8.9 Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		uV/m	dBuV/m
0.009 ~ 0.490	300	2400/F(kHz)	67.6-20log(F)
0.490 ~ 1.705	30	24000/F(kHz)	87.6-20log(F)
1.705 ~ 30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dBuV/m (Peak) 54.0 dBuV/m (Average)	

Note:

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

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

$$\text{Limit}_{3\text{m}}(\text{dBuV/m}) = \text{Limit}_{30\text{m}}(\text{dBuV/m}) + 40\text{Log}(30\text{m}/3\text{m})$$

(3) Limit for this EUT

The emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, and the emissions appearing within RSS-Gen section 8.10 Restricted frequency bands shall not exceed the limits shown in RSS-Gen section 8.9, all the other emissions shall be at least 20 dB below the fundamental emissions or comply with 15.209 limits and RSS-Gen section 8.9 limits.

13.3. Test procedure

(1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber for below 1G and 150 cm above the ground plane inside a fully-anechoic chamber for above 1G.

(2) Test antenna was located 3 m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used	Test antenna distance
9 kHz - 30 MHz	Active Loop antenna	3 m
30 MHz - 1 GHz	Trilog Broadband Antenna	3 m
1 GHz - 18 GHz	Double Ridged Horn Antenna(1 GHz-18 GHz)	3 m
18 GHz - 40 GHz	Horn Antenna(18 GHz-40 GHz)	1 m

According ANSI C63.10:2013 clause 6.4.6 and 6.5.3, for measurements below 30 MHz, Antenna was located 3 m from EUT, the loop antenna was positioned in three antenna orientations (parallel, perpendicular, and round-parallel), for each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable, and the lowest height of the magnetic antenna shall be 1 m above the ground. For measurement above 30MHz, the trilog Broadband Antenna or Horn Antenna was located 3m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

(3) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9 kHz to 25 GHz:

(a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1 m to 4 m (Except loop antenna, it's fixed 1 m above ground.)

(b) Change work frequency or channel of device if practicable.

(c) Change modulation type of device if practicable.

(d) Change power supply range from 85% to 115% of the rated supply voltage

(e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9 kHz to 25 GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 18 GHz to 25 GHz, so below final test was performed with frequency range from 9 kHz to 18 GHz.

(4) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1 m and 4 m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ANSI C63.10:2013 on Radiated Emission test.

(5) The emissions from 9 kHz to 1 GHz were measured based on CISPR QP detector except for the frequency bands 9 - 90 kHz, 110 - 490 kHz, for emissions from 9 kHz - 90 kHz, 110 kHz - 490 kHz and above 1 GHz were measured based on average detector, for emissions above 1 GHz, peak emissions also be measured and need comply with Peak limit.

(6) The emissions from 9 kHz to 1 GHz, QP or average values were measured with EMI receiver with below RBW.

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

(7) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz, VBW is set at 3 MHz for Peak measure; According ANSI C63.10:2013 clause 4.1.4.2.2 procedure for average measure.

(8) For portable device, X axis, Y axis, Z axis are tested, and worse setup is reported.

(9) For 30 MHz ~ 25 GHz: (Scan with GFSK, p/4-DQPSK and 8DPSK, the worst case GFSK is record and reported)

(10) For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in worst mode.

13.4. Test result

PASS. (See below detailed test result)

Radiated Emission test (9 KHz – 30 MHz)

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

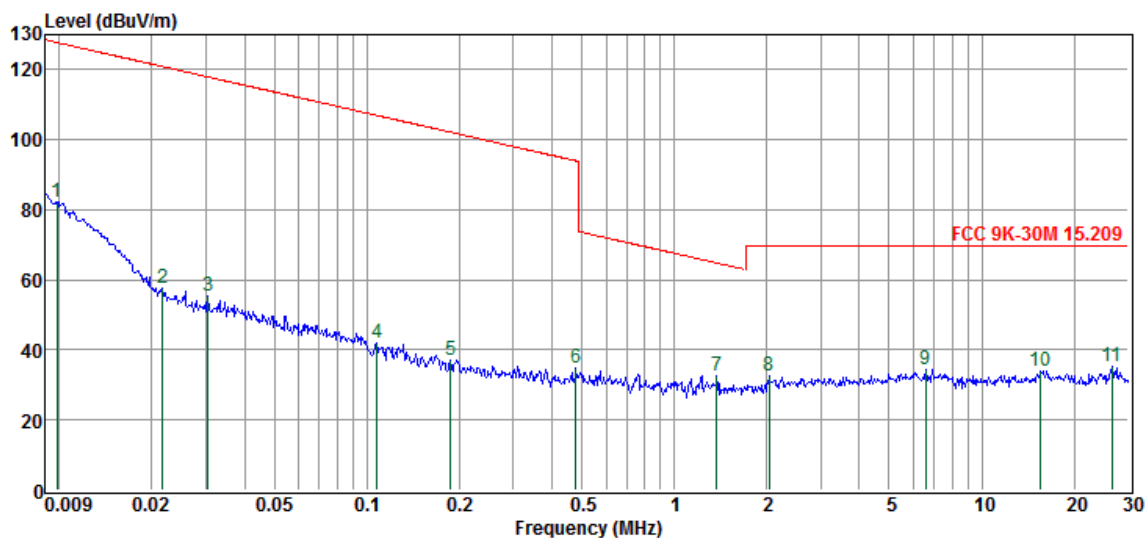
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx Mode

Memo : BT DH5 2402MHz

Data: 53



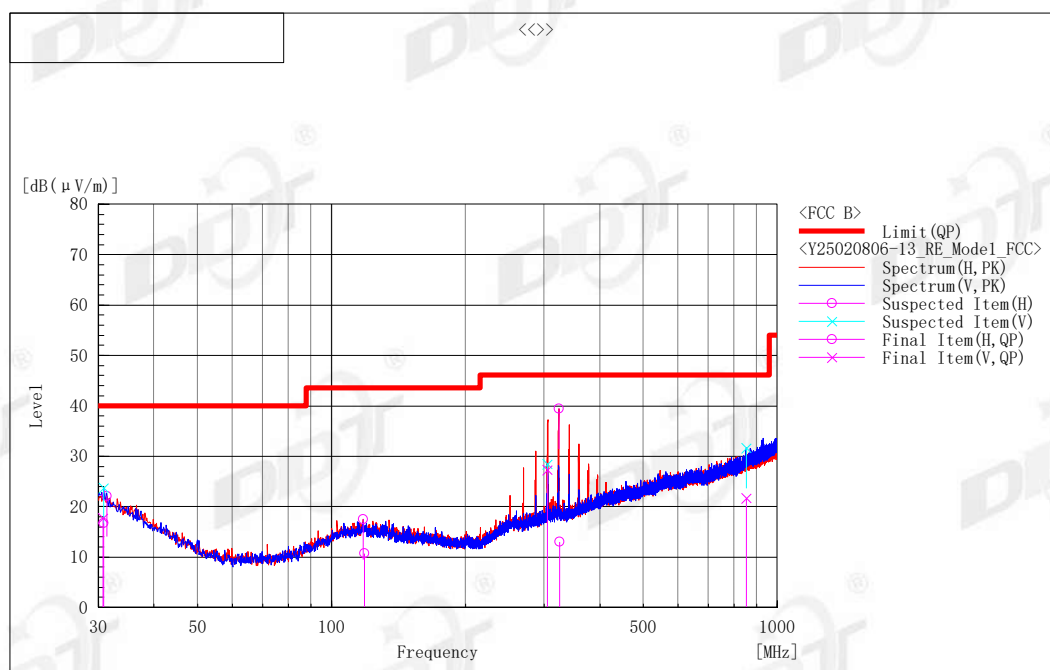
Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detect or	Polarization
1	0.01	62.55	19.58	0.03	82.16	127.74	-45.58	Peak	parallel
2	0.02	37.86	19.79	0.03	57.68	120.91	-63.23	Peak	parallel
3	0.03	35.80	19.75	0.03	55.58	117.95	-62.37	Peak	parallel
4	0.11	22.12	19.69	0.03	41.84	106.95	-65.11	Peak	parallel
5	0.19	17.62	19.61	0.02	37.25	102.16	-64.91	Peak	parallel
6	0.48	14.95	19.70	0.03	34.68	93.98	-59.30	Peak	parallel
7	1.38	12.68	19.95	0.07	32.70	64.83	-32.13	Peak	parallel
8	2.03	12.46	19.90	0.10	32.46	69.54	-37.08	Peak	parallel
9	6.58	14.29	20.00	0.21	34.50	69.54	-35.04	Peak	parallel
10	15.55	13.81	19.95	0.39	34.15	69.54	-35.39	Peak	parallel
11	26.56	14.31	20.33	0.51	35.15	69.54	-34.39	Peak	parallel

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - AMP Factor.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: 9k-150kHz, RBW: 200Hz; 150k-30Mhz, RBW: 9kHz, Sweep time: auto.

Radiated Emission test (30 MHz – 1 GHz)



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB (μV)]	c.f [dB (1/m)]	Result QP [dB (μV/m)]	Limit QP [dB (μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]	System
1	30.858	H	21.8	-5.1	16.7	40.0	23.3	391.0	19.6	1
2	118.483	H	21.2	-10.5	10.7	43.5	32.8	385.0	64.7	1
3	324.300	H	19.8	-6.8	13.0	46.0	33.0	111.0	197.8	1
4	30.695	V	23.2	-5.5	17.7	40.0	22.3	287.0	51.5	2
5	305.057	V	34.4	-7.1	27.3	46.0	18.7	312.0	137.4	2
6	852.915	V	17.3	4.4	21.7	46.0	24.3	106.0	168.6	2

Note) Receiving antenna polarization: Horizontal and/or Vertical

Test Distance: 3 m, Antenna Height: 1 m to 4 m

Level QP (Quasi-Peak) = Reading QP + Factor (Antenna Factor + Cable Loss - Amp. Gain)

Margin QP (Quasi-Peak) = Limit - Level QP

Radiated Emission test (1 GHz – 3GHz)

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

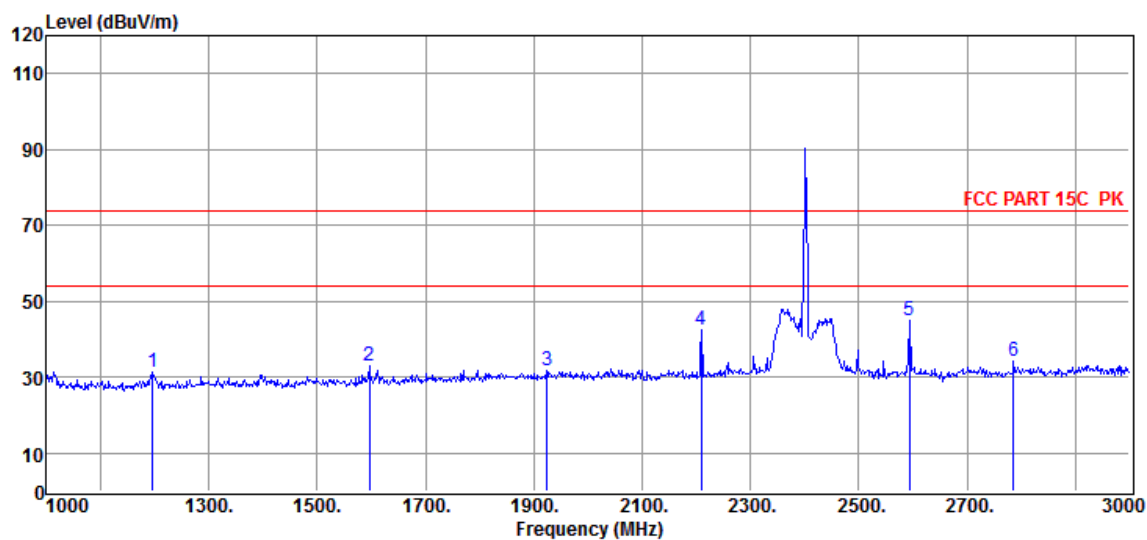
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2402MHz

Data: 55



Item	Freq.	Read Level	Antenna Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBuV)	(dB/m)	dB	(dBuV/m)	(dBuV/m)	(dB)		
1	1196.00	47.51	24.67	-40.78	31.40	74.00	-42.60	Peak	HORIZONTAL
2	1596.00	47.53	26.20	-40.69	33.04	74.00	-40.96	Peak	HORIZONTAL
3	1924.00	44.06	27.90	-40.37	31.59	74.00	-42.41	Peak	HORIZONTAL
4	2210.00	54.33	28.34	-40.03	42.64	74.00	-31.36	Peak	HORIZONTAL
5	2594.00	56.14	28.66	-39.81	44.99	74.00	-29.01	Peak	HORIZONTAL
6	2786.00	44.54	29.20	-39.58	34.16	74.00	-39.84	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

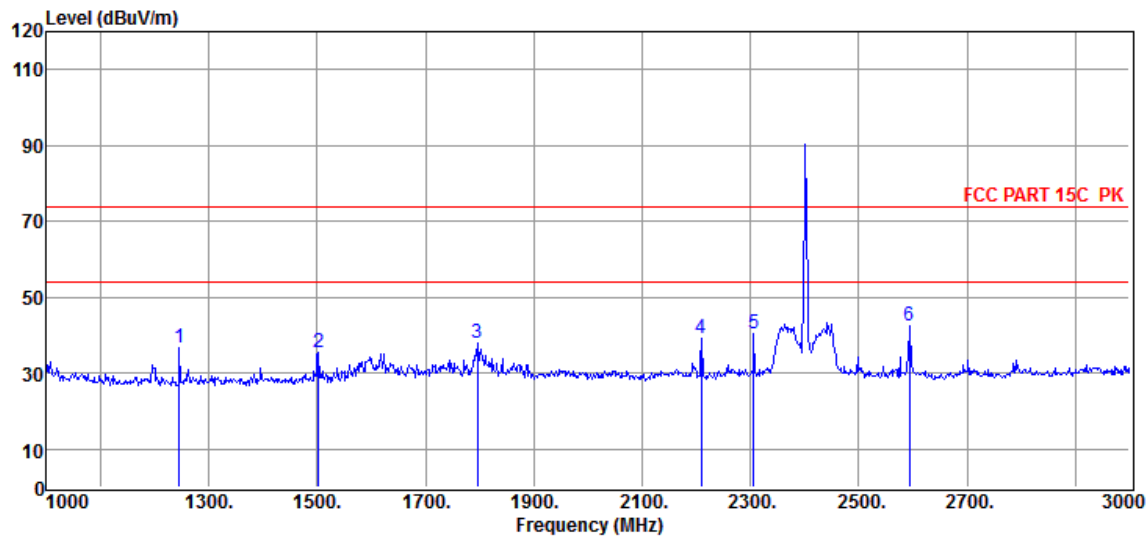
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2402MHz

Data: 56



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	1246.00	52.51	24.84	-40.69	36.66	74.00	-37.34	Peak	VERTICAL
2	1502.00	50.27	25.71	-40.51	35.47	74.00	-38.53	Peak	VERTICAL
3	1796.00	51.38	27.24	-40.48	38.14	74.00	-35.86	Peak	VERTICAL
4	2210.00	50.67	28.34	-40.03	38.98	74.00	-35.02	Peak	VERTICAL
5	2306.00	52.14	28.36	-40.14	40.36	74.00	-33.64	Peak	VERTICAL
6	2594.00	53.49	28.66	-39.81	42.34	74.00	-31.66	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

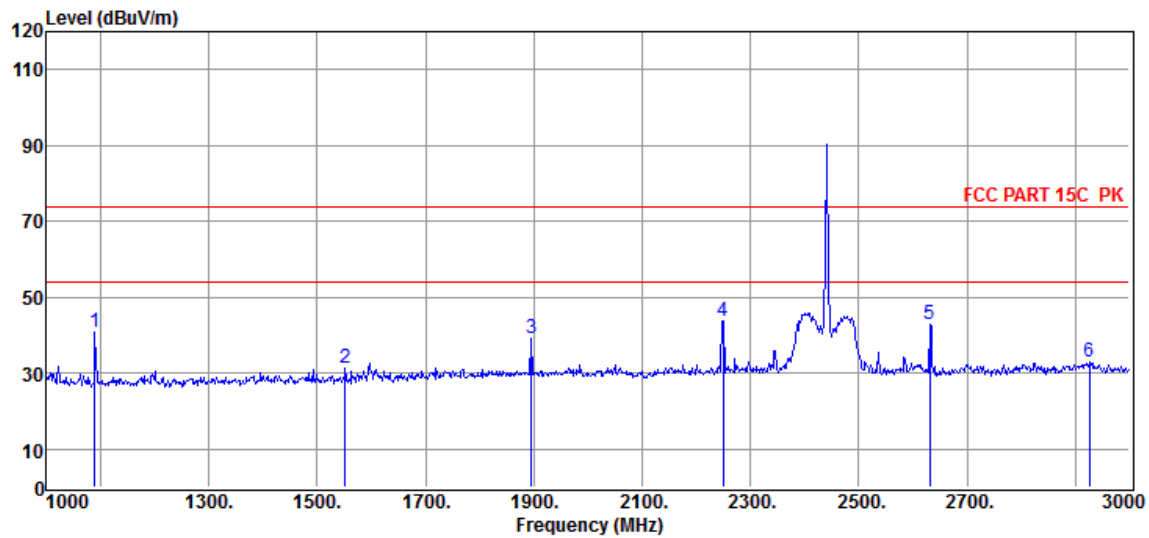
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2440MHz

Data: 57



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1090.00	57.33	24.31	-41	40.64	74.00	-33.36	Peak	HORIZONTAL
2	1552.00	45.88	25.97	-40.71	31.14	74.00	-42.86	Peak	HORIZONTAL
3	1896.00	51.89	27.76	-40.55	39.10	74.00	-34.90	Peak	HORIZONTAL
4	2250.00	55.59	28.35	-40.11	43.83	74.00	-30.17	Peak	HORIZONTAL
5	2632.00	53.71	28.77	-39.77	42.71	74.00	-31.29	Peak	HORIZONTAL
6	2926.00	42.93	29.59	-39.48	33.04	74.00	-40.96	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

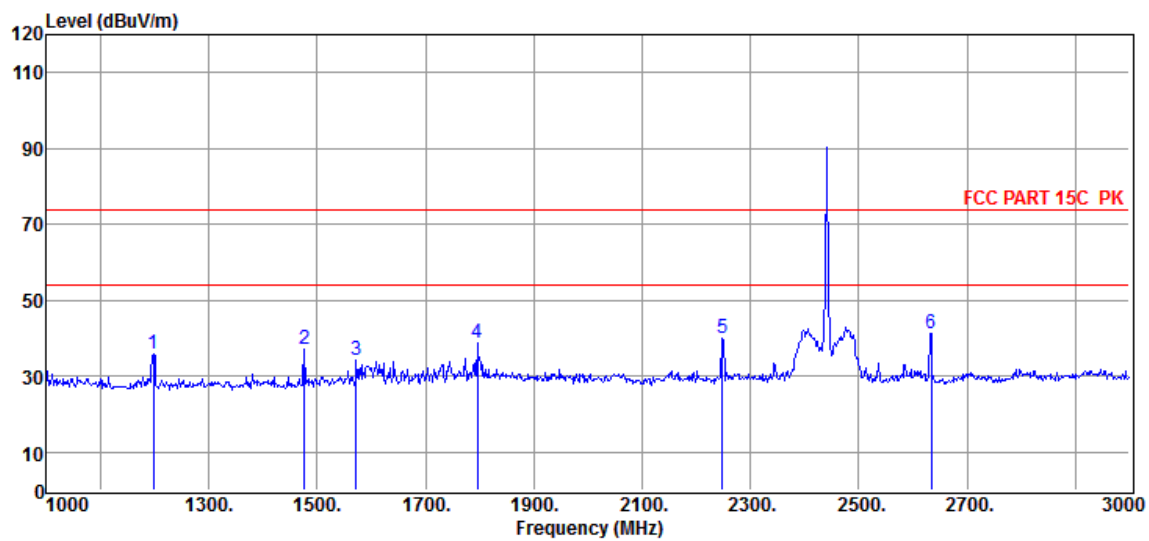
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2440MHz

Data: 58



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1198.00	52.05	24.67	-40.76	35.96	74.00	-38.04	Peak	VERTICAL
2	1476.00	52.03	25.62	-40.6	37.05	74.00	-36.95	Peak	VERTICAL
3	1572.00	48.87	26.07	-40.7	34.24	74.00	-39.76	Peak	VERTICAL
4	1796.00	52.11	27.24	-40.48	38.87	74.00	-35.13	Peak	VERTICAL
5	2248.00	51.72	28.35	-40.11	39.96	74.00	-34.04	Peak	VERTICAL
6	2634.00	52.20	28.78	-39.77	41.21	74.00	-32.79	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

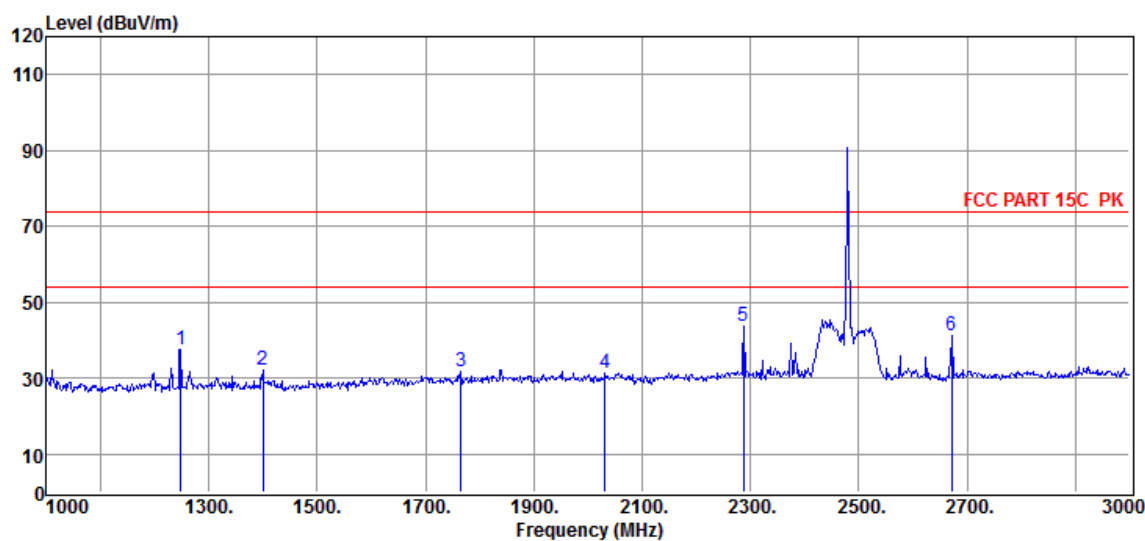
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2480MHz

Data: 59



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	1248.00	53.43	24.84	-40.68	37.59	74.00	-36.41	Peak	HORIZONTAL
2	1400.00	47.41	25.36	-40.71	32.06	74.00	-41.94	Peak	HORIZONTAL
3	1766.00	45.15	27.08	-40.54	31.69	74.00	-42.31	Peak	HORIZONTAL
4	2032.00	43.38	28.31	-40.43	31.26	74.00	-42.74	Peak	HORIZONTAL
5	2288.00	55.47	28.36	-40.16	43.67	74.00	-30.33	Peak	HORIZONTAL
6	2672.00	52.16	28.88	-39.76	41.28	74.00	-32.72	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

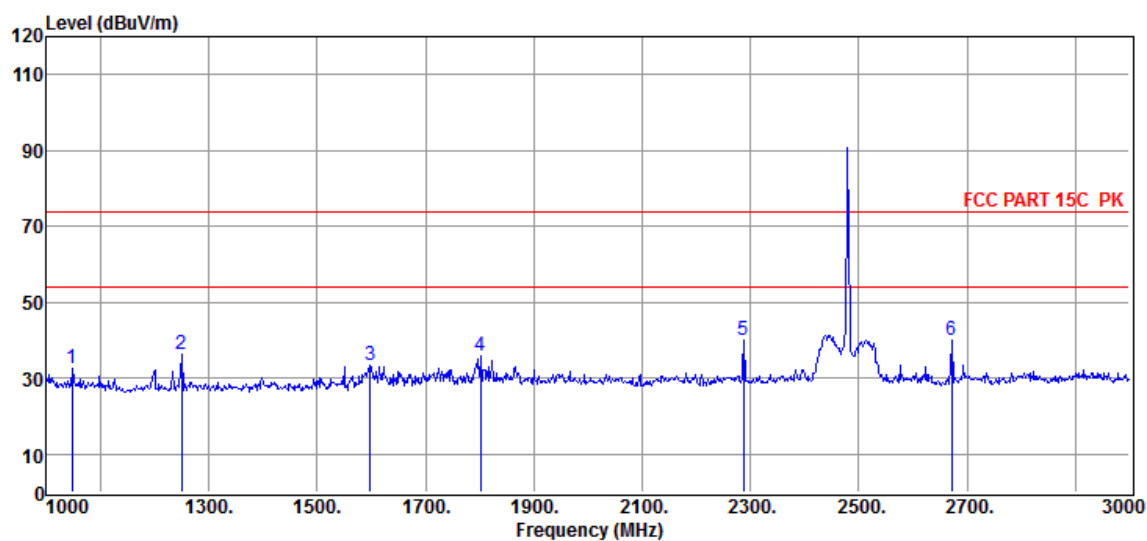
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2480MHz

Data: 60



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	1048.00	49.42	24.16	-41.05	32.53	74.00	-41.47	Peak	VERTICAL
2	1250.00	52.06	24.85	-40.68	36.23	74.00	-37.77	Peak	VERTICAL
3	1598.00	48.02	26.21	-40.69	33.54	74.00	-40.46	Peak	VERTICAL
4	1802.00	49.03	27.27	-40.47	35.83	74.00	-38.17	Peak	VERTICAL
5	2288.00	51.64	28.36	-40.16	39.84	74.00	-34.16	Peak	VERTICAL
6	2672.00	51.03	28.88	-39.76	40.15	74.00	-33.85	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission test (3 GHz – 18GHz)

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

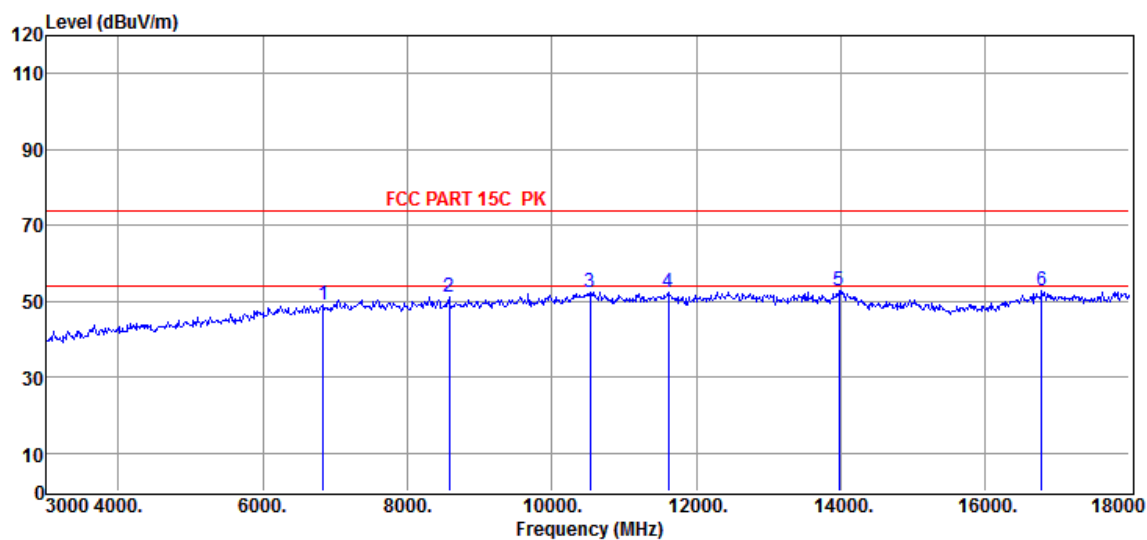
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2402MHz

Data: 73



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6840.00	40.12	37.31	-28.41	49.02	74.00	-24.98	Peak	HORIZONTAL
2	8580.00	41.11	37.95	-27.85	51.21	74.00	-22.79	Peak	HORIZONTAL
3	10530.00	38.99	38.99	-25.44	52.54	74.00	-21.46	Peak	HORIZONTAL
4	11610.00	38.56	38.78	-25.08	52.26	74.00	-21.74	Peak	HORIZONTAL
5	13980.00	37.45	40.81	-25.55	52.71	74.00	-21.29	Peak	HORIZONTAL
6	16785.00	33.93	41.71	-23	52.64	74.00	-21.36	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

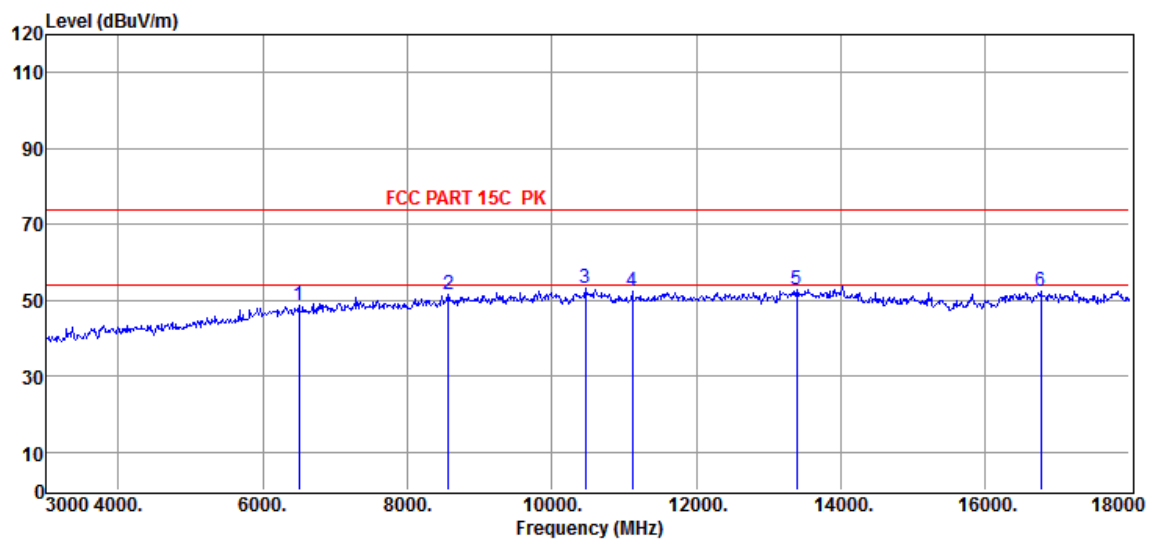
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2402MHz

Data: 74



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	6495.00	40.57	36.69	-28.8	48.46	74.00	-25.54	Peak	VERTICAL
2	8565.00	41.35	37.94	-27.87	51.42	74.00	-22.58	Peak	VERTICAL
3	10470.00	39.61	38.99	-25.45	53.15	74.00	-20.85	Peak	VERTICAL
4	11115.00	39.96	38.88	-26.53	52.31	74.00	-21.69	Peak	VERTICAL
5	13395.00	37.91	40.90	-25.85	52.96	74.00	-21.04	Peak	VERTICAL
6	16770.00	33.87	41.66	-23.1	52.43	74.00	-21.57	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

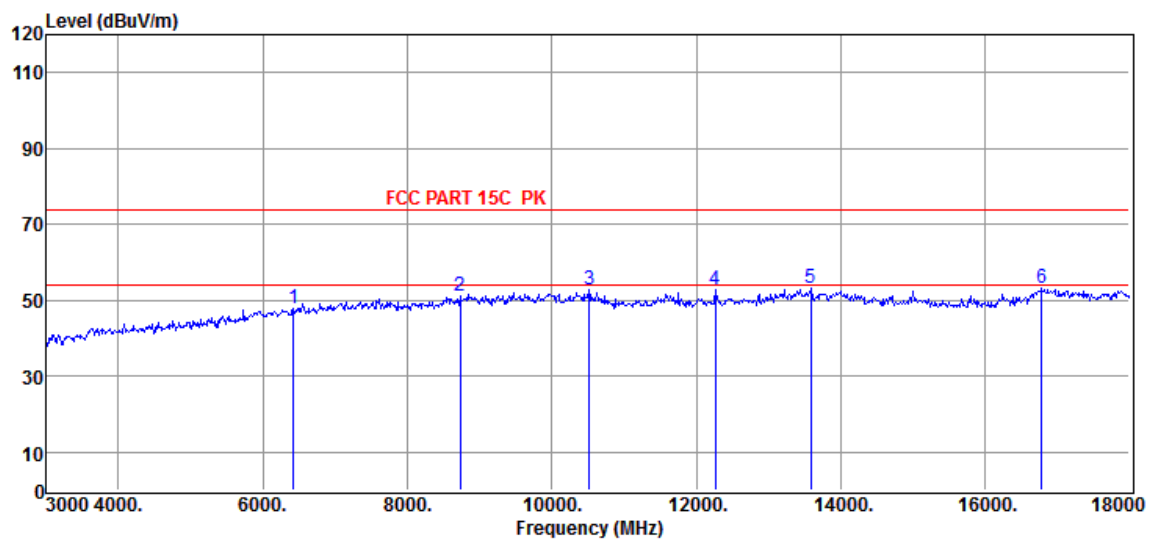
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2440MHz

Data: 75



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	6420.00	40.09	36.60	-28.84	47.85	74.00	-26.15	Peak	HORIZONTAL
2	8730.00	40.85	38.04	-27.96	50.93	74.00	-23.07	Peak	HORIZONTAL
3	10515.00	39.29	39.00	-25.44	52.85	74.00	-21.15	Peak	HORIZONTAL
4	12270.00	39.54	39.02	-25.73	52.83	74.00	-21.17	Peak	HORIZONTAL
5	13590.00	38.43	40.96	-26.06	53.33	74.00	-20.67	Peak	HORIZONTAL
6	16785.00	34.28	41.71	-23	52.99	74.00	-21.01	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

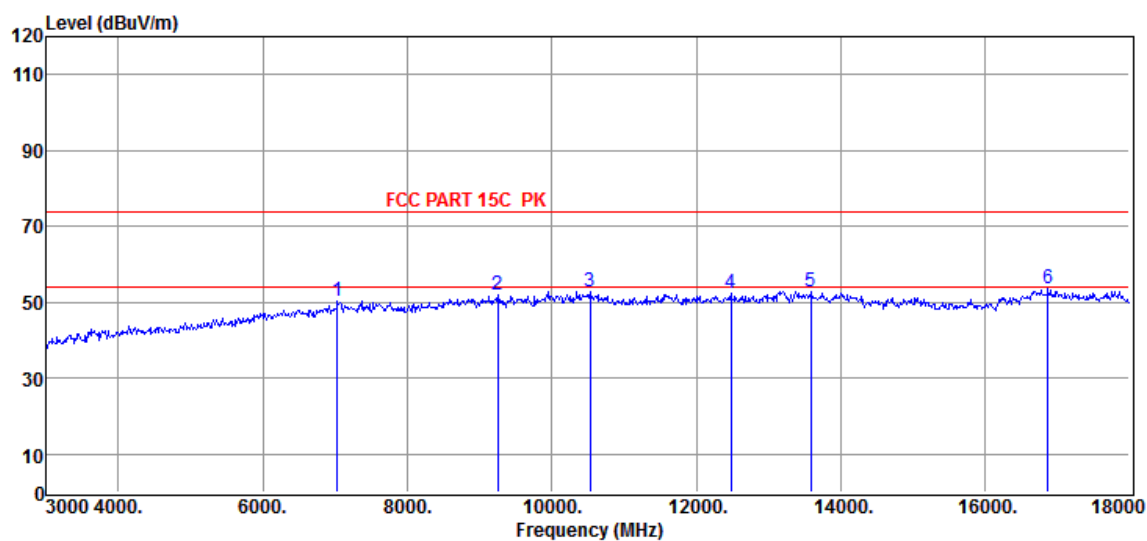
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2440MHz

Data: 76



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	7035.00	41.10	37.63	-28.33	50.40	74.00	-23.60	Peak	VERTICAL
2	9255.00	41.28	38.35	-27.77	51.86	74.00	-22.14	Peak	VERTICAL
3	10530.00	39.33	38.99	-25.44	52.88	74.00	-21.12	Peak	VERTICAL
4	12480.00	38.78	39.28	-25.76	52.30	74.00	-21.70	Peak	VERTICAL
5	13590.00	38.00	40.96	-26.06	52.90	74.00	-21.10	Peak	VERTICAL
6	16875.00	34.84	42.00	-23.31	53.53	74.00	-20.47	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

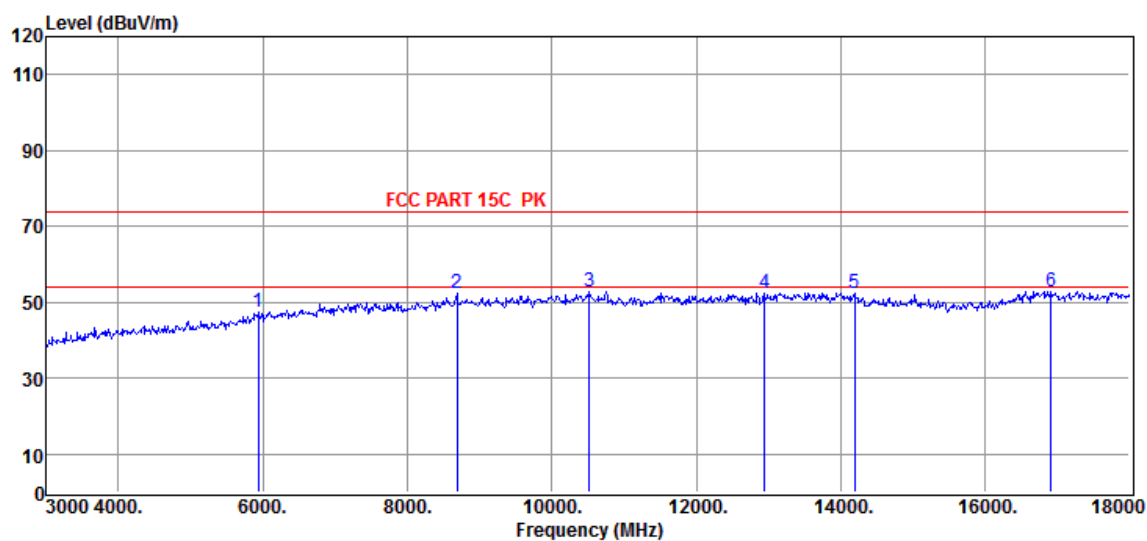
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2480MHz

Data: 77



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5940.00	40.59	35.92	-28.94	47.57	74.00	-26.43	Peak	HORIZONTAL
2	8685.00	42.29	38.01	-28.07	52.23	74.00	-21.77	Peak	HORIZONTAL
3	10515.00	39.30	39.00	-25.44	52.86	74.00	-21.14	Peak	HORIZONTAL
4	12945.00	38.46	40.37	-26.54	52.29	74.00	-21.71	Peak	HORIZONTAL
5	14190.00	37.65	40.53	-25.65	52.53	74.00	-21.47	Peak	HORIZONTAL
6	16920.00	34.40	42.14	-23.56	52.98	74.00	-21.02	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

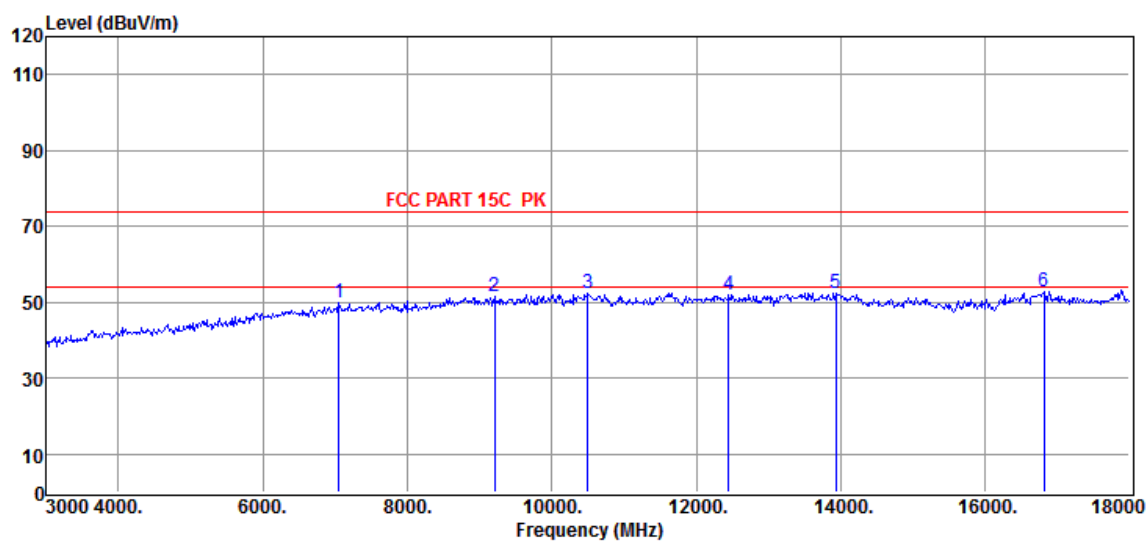
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2480MHz

Data: 78



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	7050.00	40.56	37.64	-28.23	49.97	74.00	-24.03	Peak	VERTICAL
2	9210.00	40.99	38.33	-27.93	51.39	74.00	-22.61	Peak	VERTICAL
3	10500.00	38.91	39.00	-25.45	52.46	74.00	-21.54	Peak	VERTICAL
4	12450.00	38.41	39.24	-25.67	51.98	74.00	-22.02	Peak	VERTICAL
5	13935.00	37.18	40.83	-25.67	52.34	74.00	-21.66	Peak	VERTICAL
6	16815.00	34.00	41.81	-22.97	52.84	74.00	-21.16	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission test (18 GHz – 26.5GHz)

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

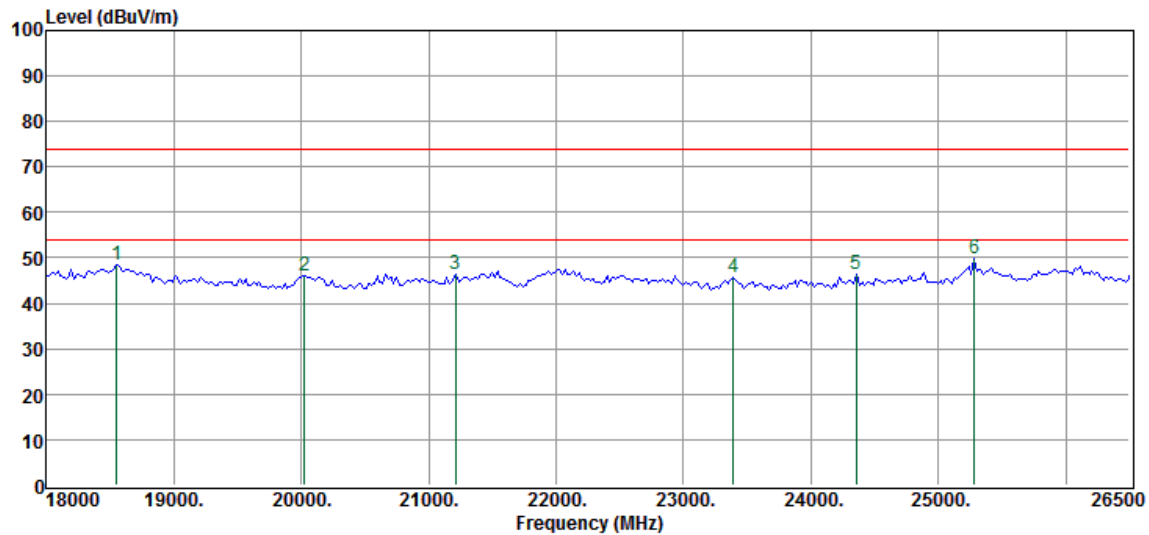
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2402MHz

Data: 85



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	18550.00	42.38	-2.38	0.00	8.48	48.48	74.00	-25.52	Peak	HORIZONTAL
2	20024.00	41.42	-4.42	0.00	8.92	45.92	74.00	-28.08	Peak	HORIZONTAL
3	21212.00	42.88	-5.12	0.00	8.69	46.45	74.00	-27.55	Peak	HORIZONTAL
4	23390.00	41.60	-4.83	0.00	8.77	45.54	74.00	-28.46	Peak	HORIZONTAL
5	24358.00	42.35	-5.38	0.00	9.50	46.47	74.00	-27.53	Peak	HORIZONTAL
6	25282.00	45.30	-4.84	0.00	9.42	49.88	74.00	-24.12	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

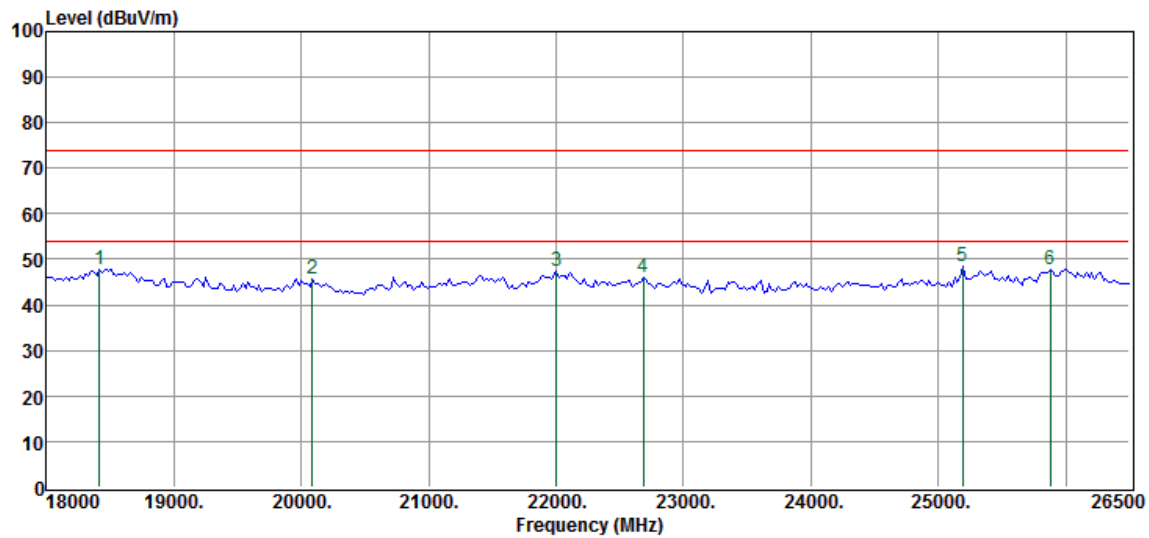
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2402MHz

Data: 86



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	18418.00	41.62	-2.26	0.00	8.47	47.83	74.00	-26.17	Peak	VERTICAL
2	20090.00	41.48	-4.43	0.00	8.79	45.84	74.00	-28.16	Peak	VERTICAL
3	22004.00	43.67	-5.10	0.00	8.96	47.53	74.00	-26.47	Peak	VERTICAL
4	22686.00	42.28	-4.71	0.00	8.37	45.94	74.00	-28.06	Peak	VERTICAL
5	25194.00	43.81	-4.90	0.00	9.40	48.31	74.00	-25.69	Peak	VERTICAL
6	25876.00	42.73	-4.71	0.00	9.79	47.81	74.00	-26.19	Peak	VERTICAL

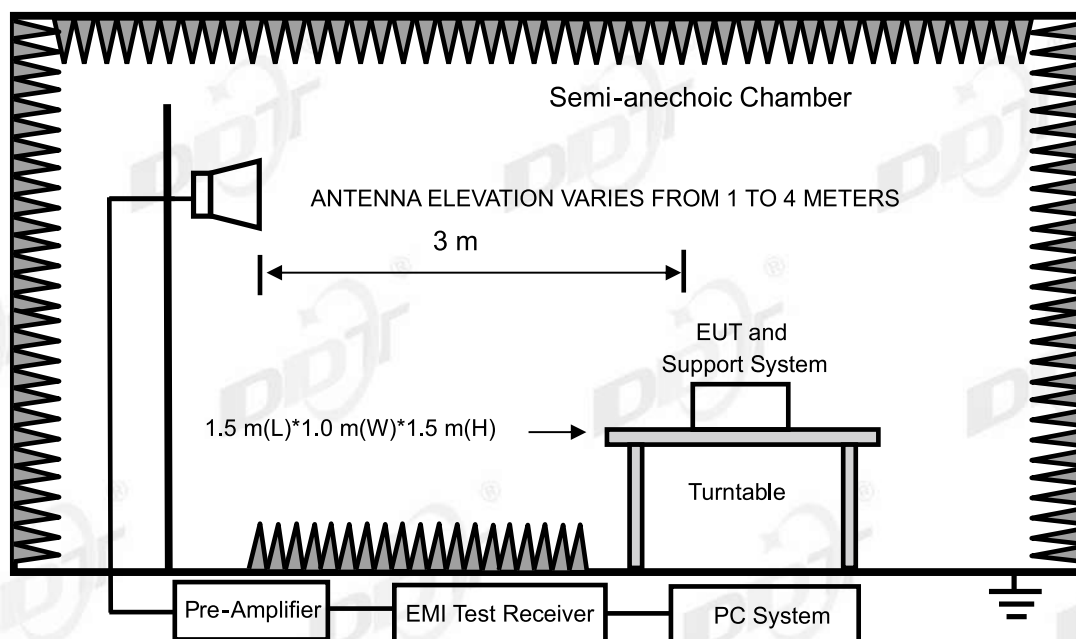
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

14. Band Edge Compliance

14.1. Block diagram of test setup



14.2. Limits

All restriction band should comply with 15.209 and RSS-Gen section 8.9 limits, other emission should be at least 20 dB below the fundamental.

14.3. Test procedure

Same with Radiated Emission except change investigated frequency range.

Remark: All restriction band have been tested, and only the worst case is shown in report. According to the results of the radiated Emission test, it can be judged that the horizontal direction is the Worst case

14.4. Test result

PASS. (See below detailed test result)

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

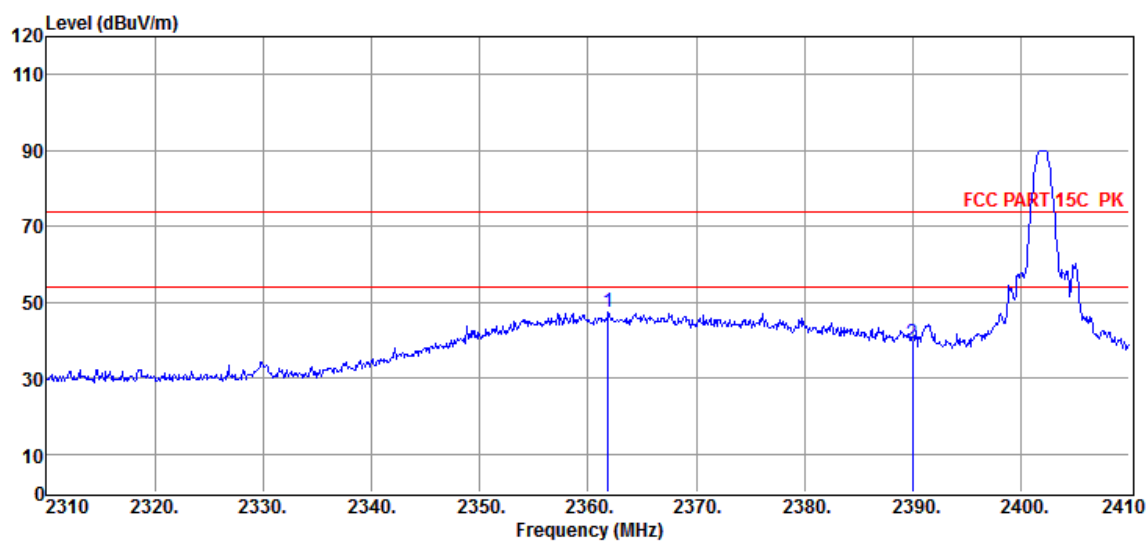
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2402MHz

Data: 91



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2361.90	58.76	28.37	-39.86	47.27	74.00	-26.73	Peak	HORIZONTAL
2	2390.00	50.83	28.38	-39.91	39.30	74.00	-34.70	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

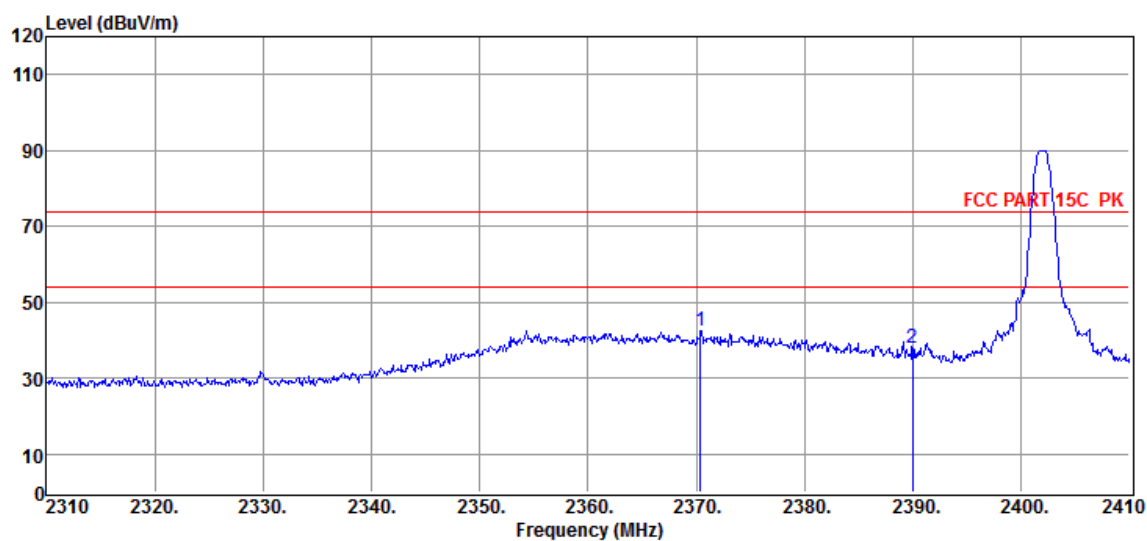
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2402MHz

Data: 92



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2370.40	54.05	28.37	-39.87	42.55	74.00	-31.45	Peak	VERTICAL
2	2390.00	49.48	28.38	-39.91	37.95	74.00	-36.05	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

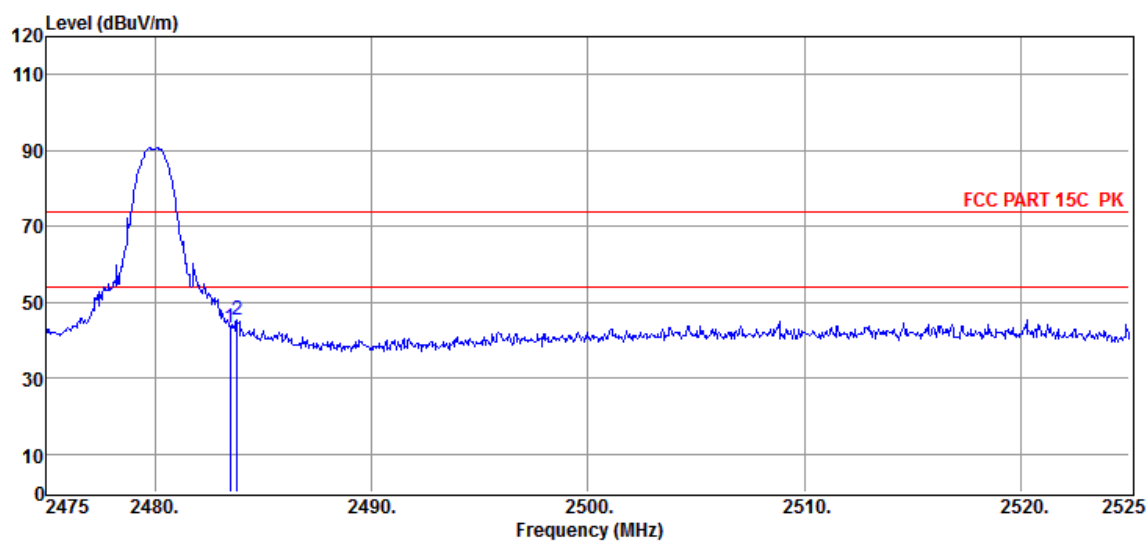
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2480MHz

Data: 93



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	54.66	28.40	-39.95	43.11	74.00	-30.89	Peak	HORIZONTAL
2	2483.80	56.88	28.40	-39.95	45.33	74.00	-28.67	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

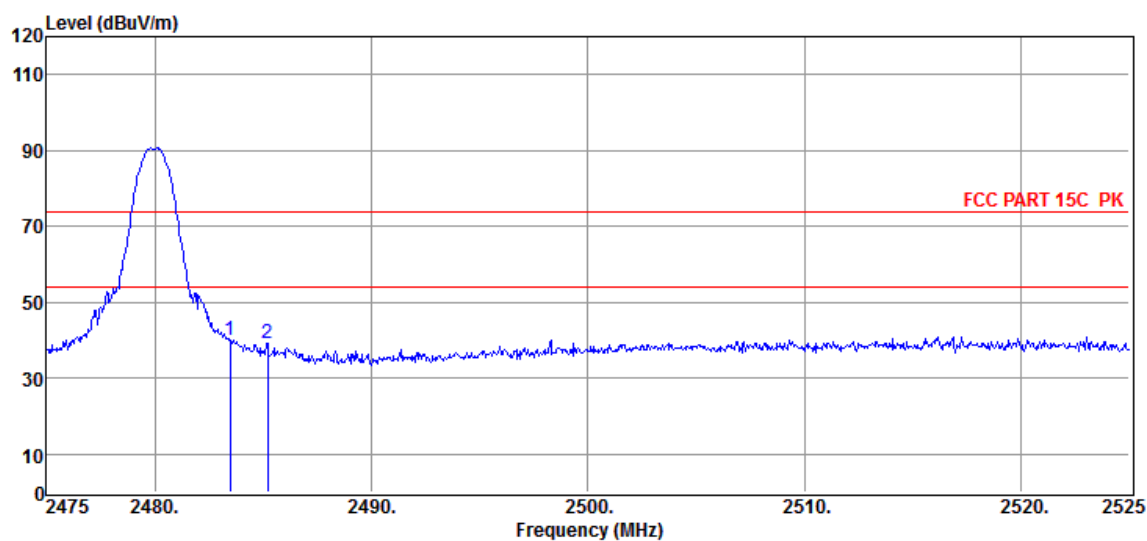
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT DH5 2480MHz

Data: 94



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	51.37	28.40	-39.95	39.82	74.00	-34.18	Peak	VERTICAL
2	2485.20	50.88	28.40	-39.95	39.33	74.00	-34.67	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

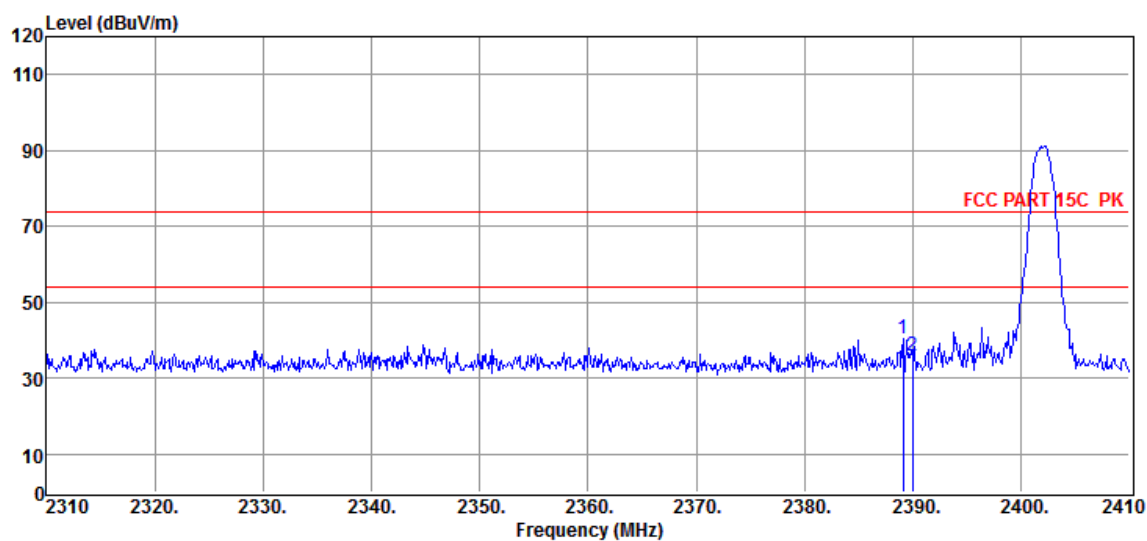
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT 2DH5 2402MHz

Data: 95



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2389.10	51.91	28.38	43.78	3.87	40.38	74.00	-33.62	Peak	HORIZONTAL
2	2390.00	47.45	28.38	43.78	3.87	35.92	74.00	-38.08	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss – PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

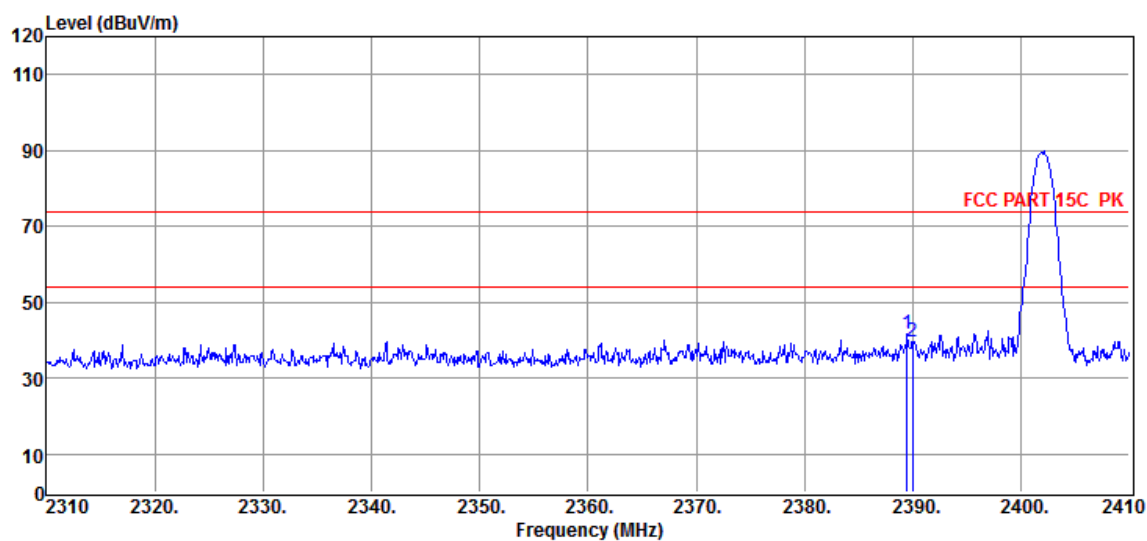
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT 2DH5 2402MHz

Data: 96



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2389.50	53.23	28.38	43.78	3.87	41.70	74.00	-32.30	Peak	VERTICAL
2	2390.00	51.23	28.38	43.78	3.87	39.70	74.00	-34.30	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss – PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

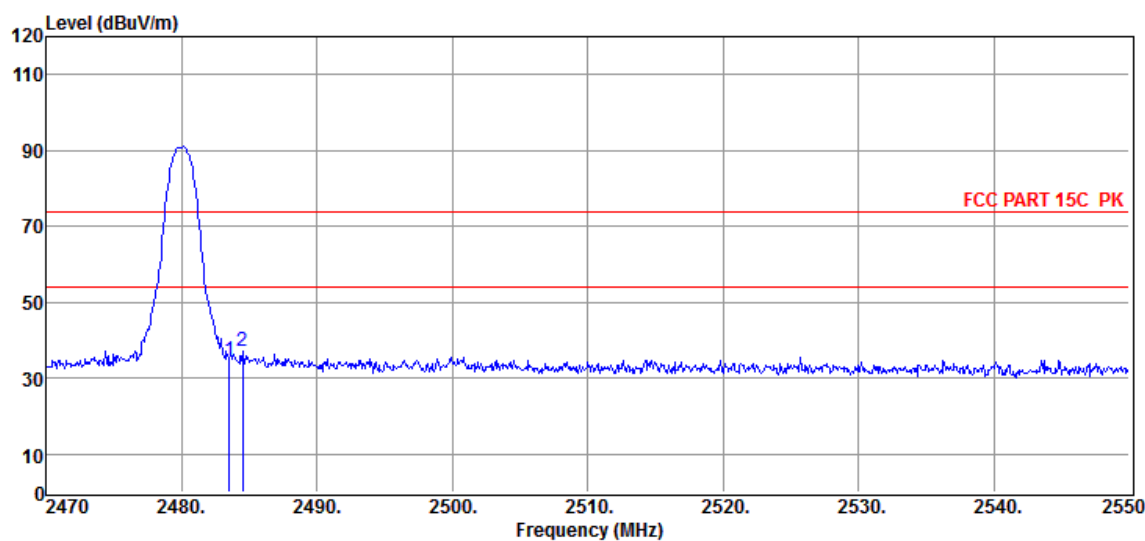
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT 2DH5 2480MHz

Data: 97



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	46.16	28.40	43.75	3.80	34.61	74.00	-39.39	Peak	HORIZONTAL
2	2484.48	48.47	28.40	43.75	3.80	36.92	74.00	-37.08	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss – PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

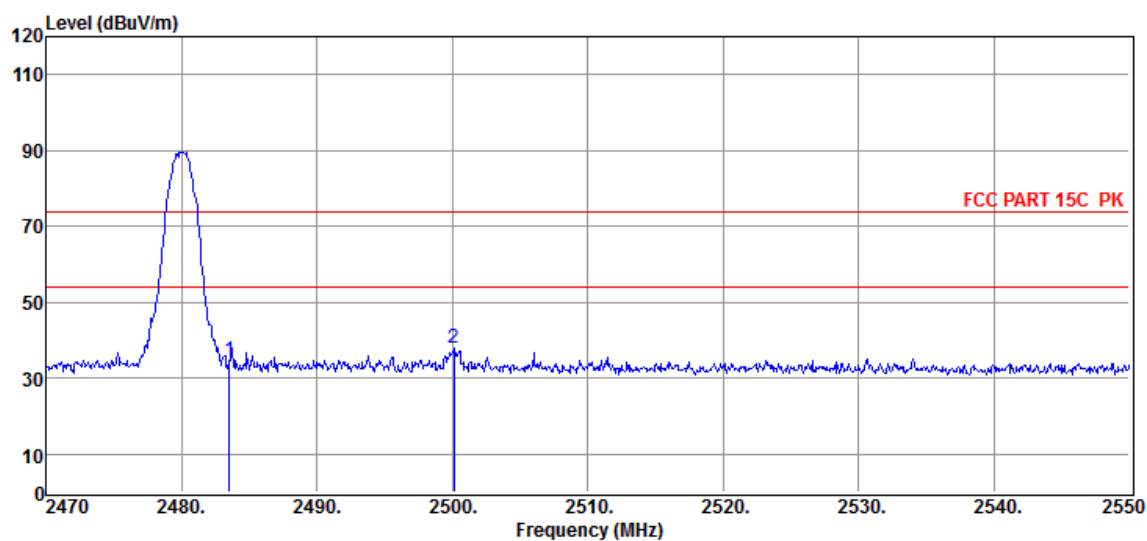
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT 2DH5 2480MHz

Data: 98



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	46.10	28.40	43.75	3.80	34.55	74.00	-39.45	Peak	VERTICAL
2	2500.08	49.39	28.40	43.75	3.79	37.83	74.00	-36.17	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss – PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

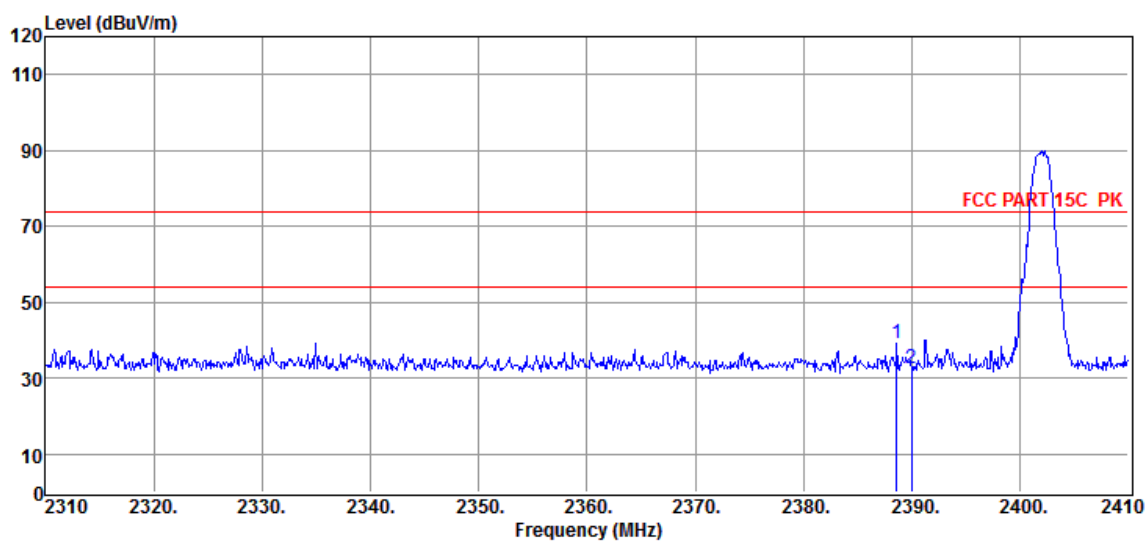
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT 3DH5 2402MHz

Data: 99



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2388.60	50.70	28.38	43.78	3.88	39.18	74.00	-34.82	Peak	HORIZONTAL
2	2390.00	44.31	28.38	43.78	3.87	32.78	74.00	-41.22	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss – PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

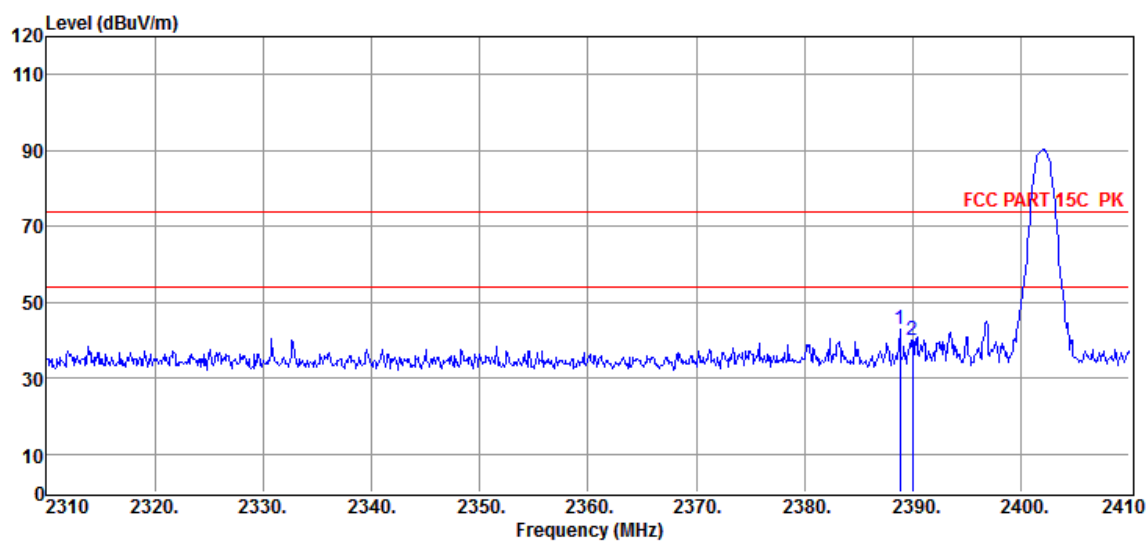
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT 3DH5 2402MHz

Data: 100



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2388.80	54.29	28.38	43.78	3.87	42.76	74.00	-31.24	Peak	VERTICAL
2	2390.00	51.47	28.38	43.78	3.87	39.94	74.00	-34.06	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss – PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

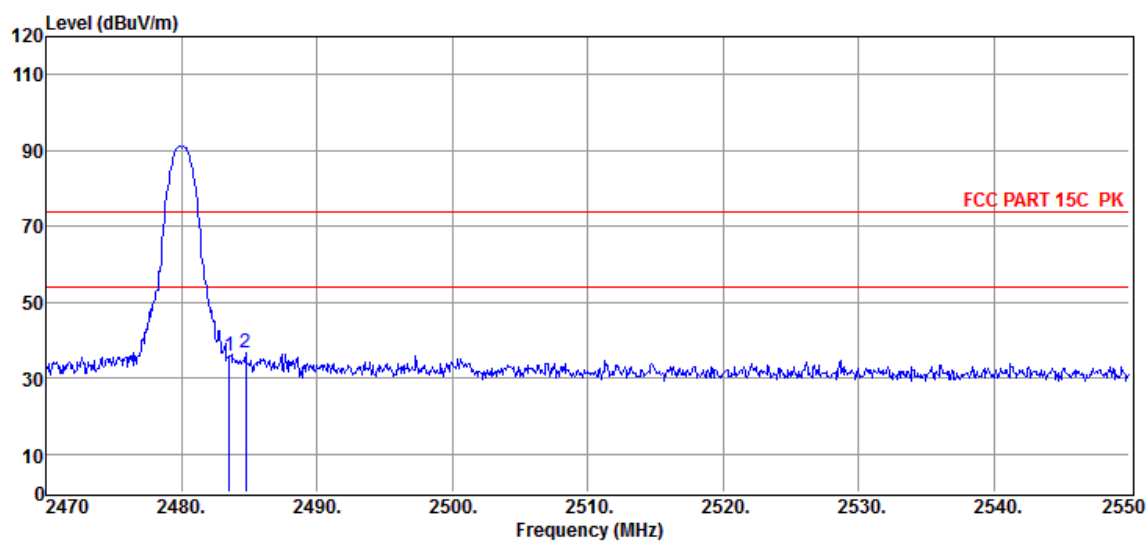
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT 3DH5 2480MHz

Data: 101



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	47.63	28.40	43.75	3.80	36.08	74.00	-37.92	Peak	HORIZONTAL
2	2484.72	48.20	28.40	43.75	3.80	36.65	74.00	-37.35	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss – PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

Radiated Emission Test Result

Test Site : 10m Chamber

Test Date : 02-20-2025

Tested By : Novak Wei

EUT : Xiaomi Sound Party

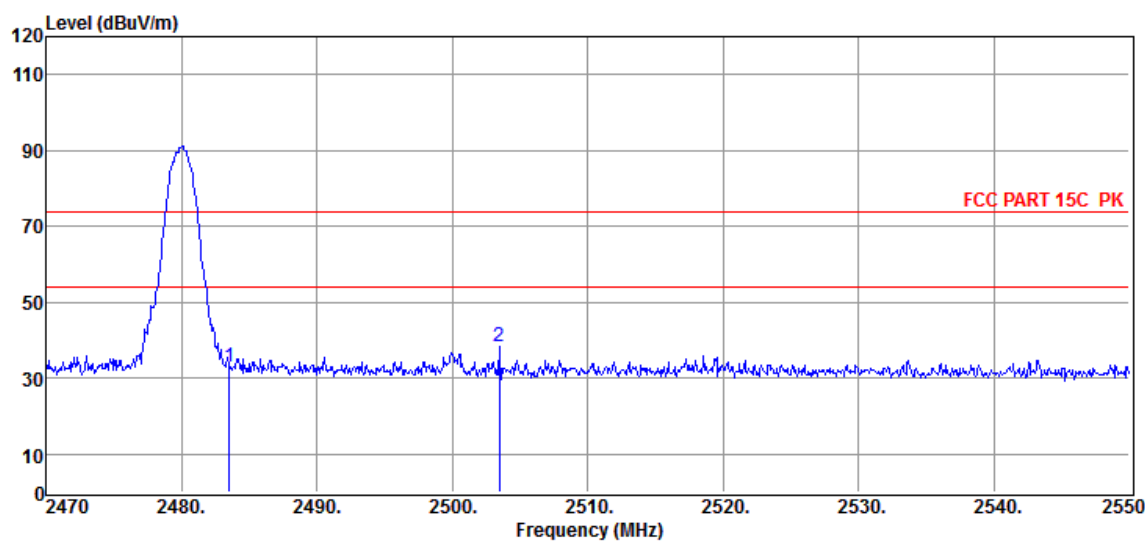
Model Number : MDZ-39-DB

Power Supply : Battery

Test Mode : Tx mode

Memo : BT 3DH5 2480MHz

Data: 102



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	44.34	28.40	43.75	3.80	32.79	74.00	-41.21	Peak	VERTICAL
2	2503.44	50.07	28.41	43.75	3.80	38.53	74.00	-35.47	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss – PRM Factor.

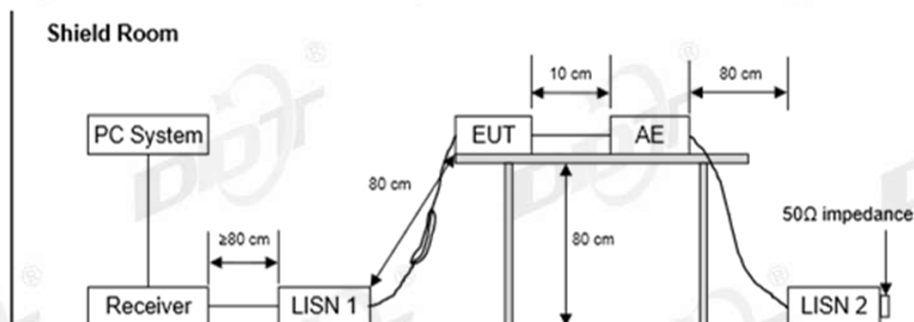
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4. Margin = Result Level - Limit.

15. Power Line Conducted Emissions

15.1. Block diagram of test setup



15.2. Limits

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

Note 1: * Decreasing linearly with logarithm of frequency.

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

15.3. Test procedure

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

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 30 MHz 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 2.4 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.

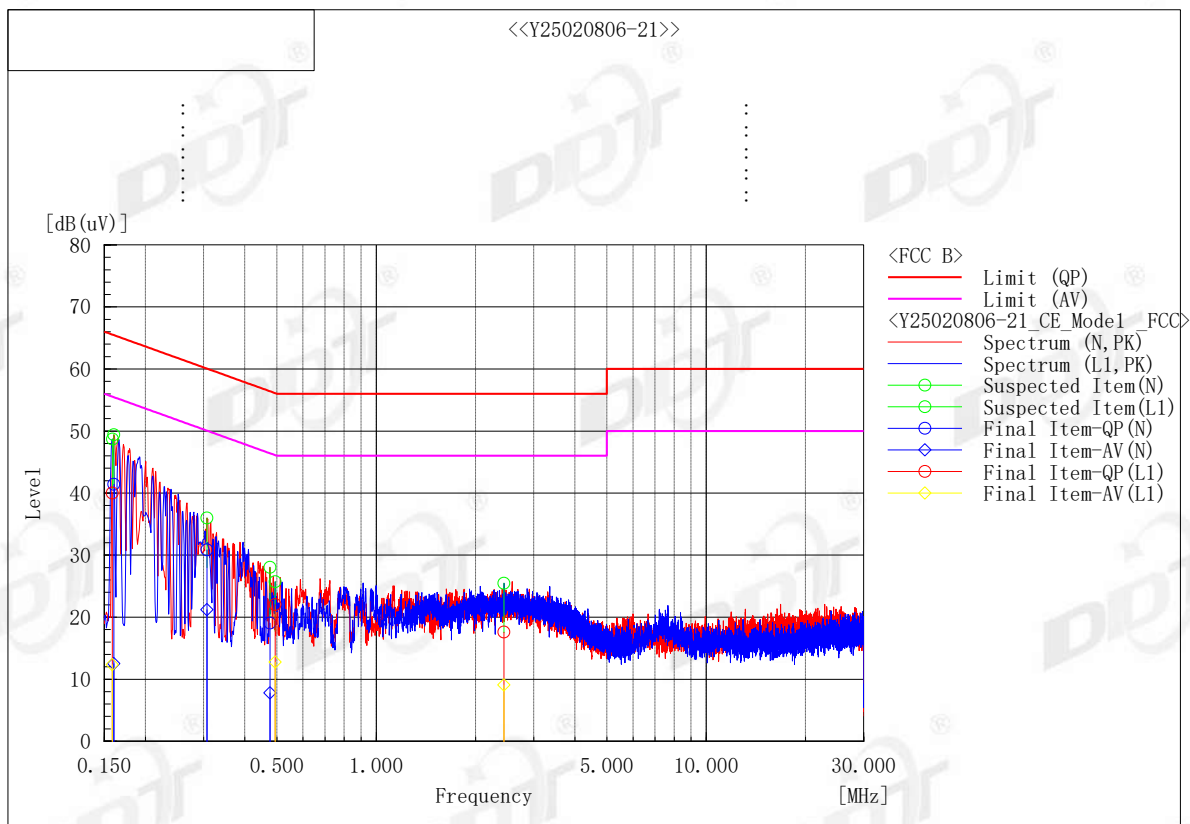
Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

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

The bandwidth of test receiver is set at 9 kHz.

15.4. Test result

Pass



Final Result

--- N Phase ---

No.	Frequency	Reading QP	Reading CAV	c. f	Result QP	Result CAV	Limit QP	Limit AV	Margin QP	Margin CAV
	[MHz]	[dB(uV)]	[dB(uV)]	[dB]	[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB]	[dB]
1	0.16024	31.6	2.7	9.8	41.4	12.5	65.5	55.5	24.1	43.0
2	0.30707	21.1	11.4	9.8	30.9	21.2	60.0	50.0	29.1	28.8
3	0.47656	9.3	-2.0	9.8	19.1	7.8	56.4	46.4	37.3	38.6

--- L1 Phase ---

No.	Frequency	Reading QP	Reading CAV	c. f	Result QP	Result CAV	Limit QP	Limit AV	Margin QP	Margin CAV
	[MHz]	[dB(uV)]	[dB(uV)]	[dB]	[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB(uV)]	[dB]	[dB]
1	0.15866	30.2	2.5	9.8	40.0	12.3	65.5	55.5	25.5	43.2
2	0.49395	12.2	3.0	9.8	22.0	12.8	56.1	46.1	34.1	33.3
3	2.43936	7.7	-0.8	9.9	17.6	9.1	56.0	46.0	38.4	36.9

16. Test Setup Photograph

Please find the Test Setup Photograph in APPENDIXES

17. Photos of the EUT

Please find the photos of EUT in APPENDIXES.

END OF REPORT