



RF MEASUREMENT REPORT

FCC ID: Z9G-EDF279
Applicant: Edifier International Limited
Product: Wireless Noise Cancelling Neckband Headphones
Model No.: EDF200169
Brand Name: EDIFIER
FCC Classification: FCC Part 15 Spread Spectrum Transmitter (DSS)
FCC Rule Part(s): Part15 Subpart C (Section 15.247)
Result: Complies
Received Date: 2025-01-11
Test Date: 2025-01-13 ~ 2025-01-16

Reviewed By:

Denise Zhou

Approved By:

Robin Wu



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Shenzhen) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
R25S2025018-U201	V01	Initial Report	2025-02-07	Valid

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1. General Information

1.1. Applicant

Edifier International Limited

P.O. Box 6264 General Post Office, Hong Kong

1.2. Manufacturer

Beijing Edifier Technology Co., Ltd.

815, Floor 8, Shuangqiao Building, No.68, North Fourth Ring West Road, Haidian District, 100080 Beijing,
P.R. China

1.3. Testing Facility

☐	Test Site – MRT Suzhou Laboratory				
	Laboratory Location (Suzhou - Wuzhong)				
	D8 Building, No.2 Tian’edang Rd., Wuzhong Economic Development Zone, Suzhou, China				
	Laboratory Location (Suzhou - SIP)				
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China				
	Laboratory Location (Suzhou - Wujiang)				
	Building 1, No.1 Xingdong Road, Wujiang, Suzhou, Jiangsu, People’s Republic of China				
☒	Laboratory Accreditations				
	A2LA: 3628.01		CNAS: L10551		
	FCC: CN1166		ISED: CN0001		
	VCCI:	☐ R-20025	☐ G-20034	☐ C-20020	☐ T-20020
		☐ R-20141	☐ G-20134	☐ C-20103	☐ T-20104
☒	Test Site – MRT Shenzhen Laboratory				
	Laboratory Location (Shenzhen)				
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China				
	Laboratory Accreditations				
	A2LA: 3628.02		CNAS: L10551		
FCC: CN1284		ISED: CN0105			
☐	Test Site – MRT Taiwan Laboratory				
	Laboratory Location (Taiwan)				
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)				
	Laboratory Accreditations				
	TAF: 3261				
FCC: 291082, TW3261		ISED: TW3261			

1.4. Product Information

Product Name	Wireless Noise Cancelling Neckband Headphones
Model No.	EDF200169
EUT Identification No.	20250111Sample#02 (For Radiated) 20250111Sample#03 (For Conducted)
Bluetooth Specification	v5.4 Dual mode
Antenna Information	Refer to Section 1.5
Operating Temperature	0-45 °C
Power Type	By Battery
Product Voltage	5VDC 500mA
Rechargeable Li-ion Battery	Model: 500838 Rated: 3.8V 150mAh Manufacturer: Dongguan Golden Cel Battery Co.,Ltd
Remark: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

1.5. Radio Specification under Test

Operating Frequency	2402~2480MHz
Channel Number	79
Type of modulation	GFSK, $\pi/4$ DQPSK
Data Rate	1Mbps, 2Mbps
Antenna Type	FPC Antenna
Antenna Gain	2.0dBi

Note:

- 15.247(g): In accordance with the Bluetooth Industry Standard, the system is designed to comply with all of the regulations in Section 15.247 when the transmitter is presented with a continuous data (or information) system.
- 15.247(h): In accordance with the Bluetooth Industry Standard, the system does not coordinate its channels selection/ hopping sequence with other frequency hopping systems for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters.
- 15.247(h): The EUT employs Adaptive Frequency Hopping (AFH) which identifies sources of interference namely devices operating in 802.11 WLAN and excludes them from the list of available channels. The process of re-mapping reduces the number of test channels from 79 channels to a minimum number of 20 channels.

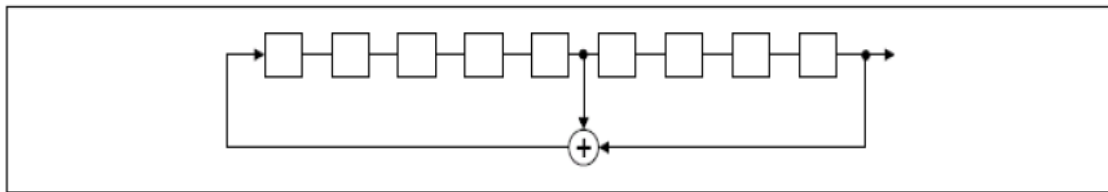
1.6. Working Frequencies

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2403 MHz	02	2404 MHz
03	2405 MHz	04	2406 MHz	05	2407 MHz
06	2408 MHz	07	2409 MHz	08	2410 MHz
09	2411 MHz	10	2412 MHz	11	2413 MHz
12	2414 MHz	13	2415 MHz	14	2416 MHz
15	2417 MHz	16	2418 MHz	17	2419 MHz
18	2420 MHz	19	2421 MHz	20	2422 MHz
21	2423 MHz	22	2424 MHz	23	2425 MHz
24	2426 MHz	25	2427 MHz	26	2428 MHz
27	2429 MHz	28	2430 MHz	29	2431 MHz
30	2432 MHz	31	2433 MHz	32	2434 MHz
33	2435 MHz	34	2436 MHz	35	2437 MHz
36	2438 MHz	37	2439 MHz	38	2440 MHz
39	2441 MHz	40	2442 MHz	41	2443 MHz
42	2444 MHz	43	2445 MHz	44	2446 MHz
45	2447 MHz	46	2448 MHz	47	2449 MHz
48	2450 MHz	49	2451 MHz	50	2452 MHz
51	2453 MHz	52	2454 MHz	53	2455 MHz
54	2456 MHz	55	2457 MHz	56	2458 MHz
57	2459 MHz	58	2460 MHz	59	2461 MHz
60	2462 MHz	61	2463 MHz	62	2464 MHz
63	2465 MHz	64	2466 MHz	65	2467 MHz
66	2468 MHz	67	2469 MHz	68	2470 MHz
69	2471 MHz	70	2472 MHz	71	2473 MHz
72	2474 MHz	73	2475 MHz	74	2476 MHz
75	2477 MHz	76	2478 MHz	77	2479 MHz
78	2480 MHz	-	-	-	-

1.7. Pseudorandom Frequency Hopping Sequence

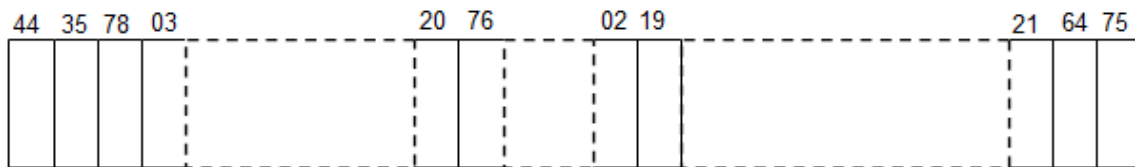
The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONES; i.e. the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence: $2^9 - 1 = 511$ bits
- Longest sequence of zeros: 8 (non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

An example of Pseudorandom Frequency Hopping Sequence as follow:



Each frequency used equally on the average by each transmitter.

The system receivers have input bandwidths that match the hopping channel bandwidths of their Corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

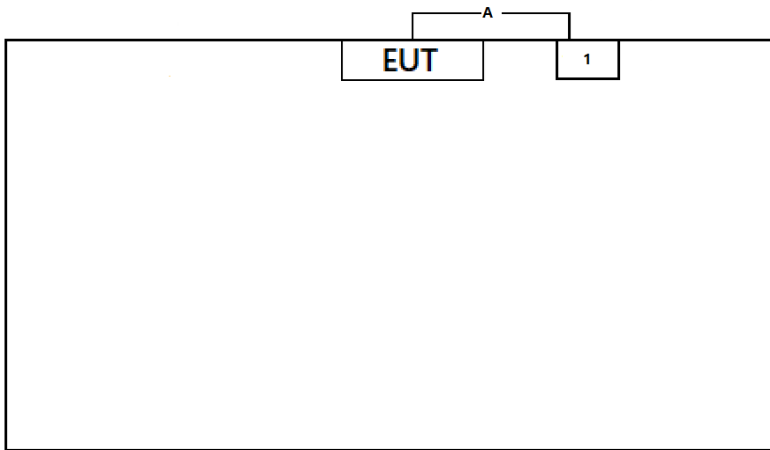
2. Test Configuration

2.1. Test Mode

Mode 1: Transmit by DH5
Mode 2: Transmit by 2DH5
Mode 3: Transmit by 2DH1
Mode 4: Transmit by 2DH3
Mode 5: Transmit by 2DH5

2.2. Test System Connection Diagram

The device was tested per the guidance ANSI C63.10: 2013 was used to reference the appropriate EUT setup for radiated emissions testing and AC line conducted testing.

Connection Diagram			
			
Cable Type		Cable Spec.	
A	USB Cable	Non-Shielding	
Product		Manufacturer	Model No.
1	Notebook	HP	735G5

2.3. Test Software

The test utility software used during testing was “BT_Tool”, and the version was v1.1.2.

2.4. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15.247
- KDB 558074 D01v05r02
- ANSI C63.10-2013

2.5. Test Environment Condition

Ambient Temperature	15 ~ 35 °C
Relative Humidity	20 ~75 %RH

3. Antenna Requirement

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

- The antenna of the device is **permanently attached**.
- There are no provisions for connection to an external antenna.

Conclusion:

The unit complies with the requirement of §15.203.

4. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
Anechoic Chamber	BOOMWAVE	NS-AC1	MRTSUE06496	1 year	2025-07-05	NS-AC1
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2025-09-09	NS-AC1
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06573	1 year	2025-05-12	NS-AC1
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06572	1 year	2025-03-15	NS-AC1
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06574	1 year	2025-07-06	NS-AC1
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06292	1 year	2025-10-20	NS-AC1
Preamplifier	EMCI	EMC184045SE	MRTSUE06641	1 year	2026-01-05	NS-AC1
EMI Test Receiver	R&S	ESR3	MRTSUE06575	1 year	2025-06-10	NS-AC1
Signal Analyzer	Agilent	N9010A	MRTSUE06195	1 year	2025-11-26	NS-AC1 /NS-SR1
Thermohygrometer	testo	608-H1	MRTSUE11294	1 year	2024-05-15	2025-05-14
USB Power Sensor	Keysight	U2021XA	MRTSUE06581	1 year	2025-06-29	NS-SR1
Thermohygrometer	testo	608-H1	MRTSUE11295	1 year	2025-05-14	NS-SR1
Attenuator	MVE	MVE2213	MRTSUE11070	1 year	2025-06-06	NS
Cable	UCwave	UCE500	NS-Test Cable 02	Note	Note	NS

Note: The loss of the RF cable will be measured before testing.

Software	Version	Function
EMI Software	V3.0.0	EMI Test Software
BenchVue Power Meter	2021	Power
Agilent Power Panel	V 3.9	Power
Controller_T-E-TAC-2	1.02	RE Antenna & Turntable

5. Decision Rules and Measurement Uncertainty

5.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2.
(Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

AC Conducted Emission Measurement
The maximum measurement uncertainty is evaluated as: 9kHz~150kHz: 3.58dB 150kHz~30MHz: 3.20dB
Radiated Emission Measurement
The maximum measurement uncertainty is evaluated as: Coaxial: 9kHz~30MHz: 2.72dB Coplanar: 9kHz~30MHz: 2.74dB Horizontal: 30MHz~200MHz: 3.67dB 200MHz~1GHz: 4.12dB 1GHz~40GHz: 5.07dB Vertical: 30MHz~200MHz: 4.07dB 200MHz~1GHz: 5.37dB 1GHz~40GHz: 4.97dB
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 2.6dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.4dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 2.6dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.2%

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.247(a)(1)	20dB Bandwidth	Conducted	Pass
15.247(b)(1)	Peak Transmitter Output Power		Pass
15.247(a)(1)	Carrier Frequency Separation		Pass
15.247(a)(1)(iii)	Number of Channels		Pass
15.247(a)(1)(iii)	Time of Occupancy		Pass
15.247(d)	Band Edge / Out- of-Band Emissions		Pass
15.205, 15.209	General Field Strength (Restricted Bands and Radiated Emission)	Radiated	Pass
15.207	AC Conducted Emissions 150kHz - 30MHz	Line Conducted	N/A

Notes:

- The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.

6.2. Occupied Bandwidth Measurement

6.2.1. Test Limit

N/A

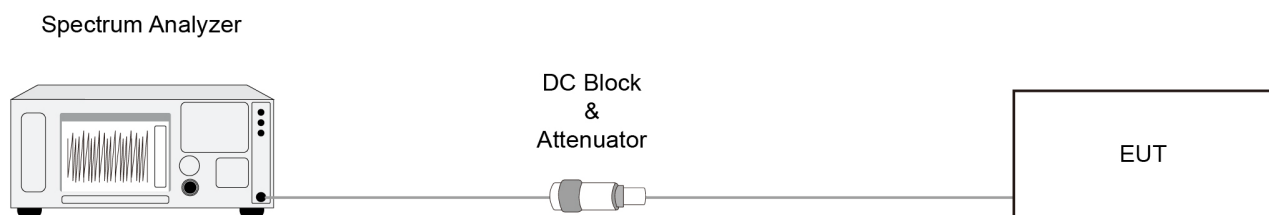
6.2.2. Test Procedure

ANSI C63.10-2013 - Section 6.9.2 (20dB Bandwidth)

6.2.3. Test Setting

1. Set RBW = 1% to 5% of the 20dB bandwidth
2. VBW = approximately three times RBW
3. Span = approximately 2 to 5 times the 20dB bandwidth, centered on a hopping channel
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. Allow the trace to stabilize
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

6.2.4. Test Setup



6.2.5. Test Result

Refer to Appendix A.2.

6.3. Output Power Measurement

6.3.1. Test Limit

For frequency hopping systems operating in the 2400-2483.5MHz band employing at least 75 non-overlapping hopping channels: 1watt (30dBm). For all other frequency hopping systems in the 2400 - 2483.5MHz band: 0.125 watt (20.97dBm).

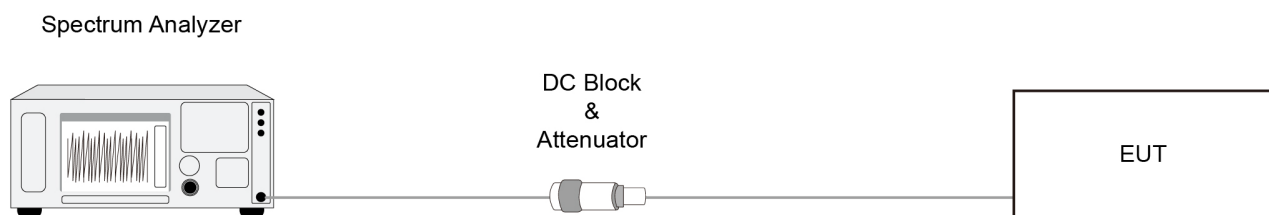
6.3.2. Test Procedure

ANSI C63.10-2013 - Section 7.8.5

6.3.3. Test Setting

1. Set RBW $\geq$ the 20 dB bandwidth of the emission being measured.
2. VBW $\geq$ RBW
3. Span = approximately five times the 20dB bandwidth, centered on a hopping channel
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. 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 (don't forget added the external attenuation and cable loss)

6.3.4. Test Setup



6.3.5. Test Result

Refer to Appendix A.3.

6.4. Carrier Frequency Separation Measurement

6.4.1. Test Limit

The minimum permissible channel separation for this system is $\frac{2}{3}$ the value of the 20dB BW.

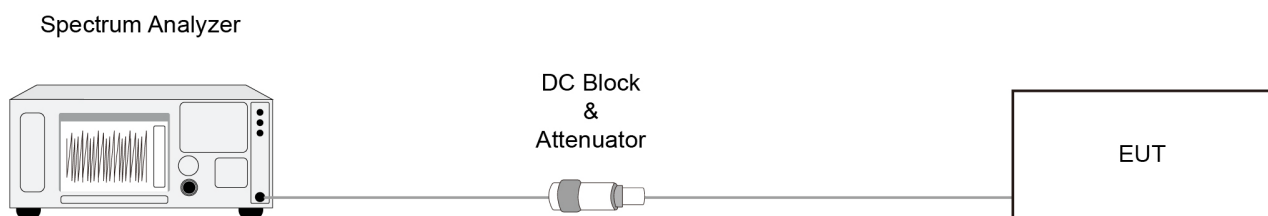
6.4.2. Test Procedure

ANSI C63.10-2013 - Section 7.8.2.

6.4.3. Test Setting

1. Span = wide enough to capture the peaks of two adjacent channels.
2. Start with the RBW set to approximately 30% of the channel spacing; adjust as necessary to best identify the center of each individual channel.
3. VBW $\geq$ RBW
4. Sweep time = Auto couple
5. Detector = Peak
6. Trace mode = Max hold
7. Allowed the trace to stabilize
8. Use the marker-delta function to determine the separation between the peaks of the adjacent channels.

6.4.4. Test Setup



6.4.5. Test Result

Refer to Appendix A.4.

6.5. Number of Hopping Channels Measurement

6.5.1. Test Limit

This frequency hopping system must employ a minimum of 15 hopping channels.

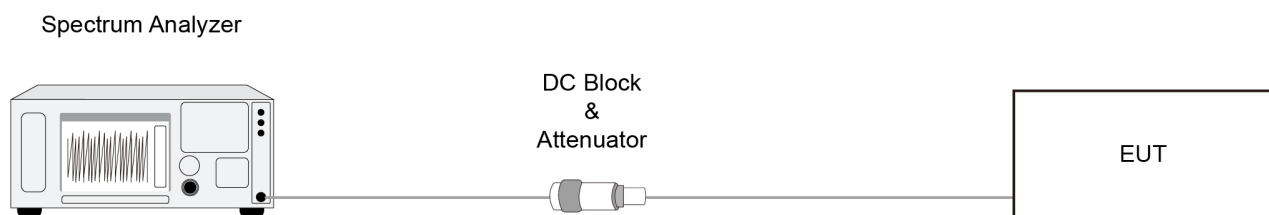
6.5.2. Test Procedure

ANSI C63.10-2013 - Section 7.8.3.

6.5.3. Test Setting

1. Span = the frequency band of operation. Depending on the number of channels the device supports, it may be necessary to divide the frequency range of operation across multiple spans, to allow the individual channels to be clearly seen.
2. To identify clearly the individual channels, set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.
3. VBW $\geq$ RBW
4. Sweep time = Auto couple
5. Detector = Peak
6. Trace mode = Max hold
7. Allow the trace to stabilize

6.5.4. Test Setup



6.5.5. Test Result

Refer to Appendix A.5.

6.6. Time of Occupancy Measurement

6.6.1. Test Limit

The maximum permissible time of occupancy is 400ms within a period of 400ms multiplied by the number of hopping channels employed.

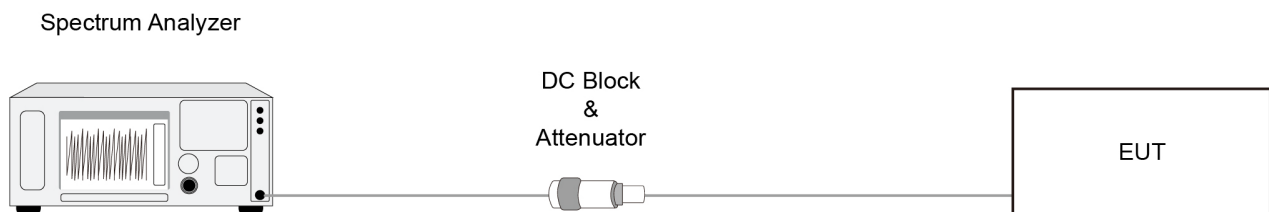
6.6.2. Test Procedure

ANSI C63.10-2013 - Section 7.8.4.

6.6.3. Test Setting

1. Span = zero span, centered on a hopping channel.
2. RBW shall be $\leq$ channel spacing and where possible RBW should be set $\gg 1 / T$, where T is the expected dwell time per channel.
3. VBW $\geq$ RBW
4. Sweep time = as necessary to capture the entire dwell time per hopping channel
5. Detector = Peak
6. Trace mode = max hold
7. Use the marker-delta function to determine the transmit time per hop. If this value varies with different modes of operation (data rate, modulation format, number of hopping channels, etc.), then repeat this test for each variation in transmit time. An oscilloscope may be used instead of a spectrum analyzer. The EUT shall show compliance with the appropriate regulatory limit for the number of hopping channels. A plot of the data shall be included in the test report.

6.6.4. Test Setup



6.6.5. Test Result

Refer to Appendix A.6.

6.7. Band-edge Compliance Measurement

6.7.1. Test Limit

The maximum permissible emission level is 20dBc. Any emissions were lying outside of the emission bandwidth and in authorized band edges to a field strength limit specified in Section 15.209 of the Title 47 CFR.

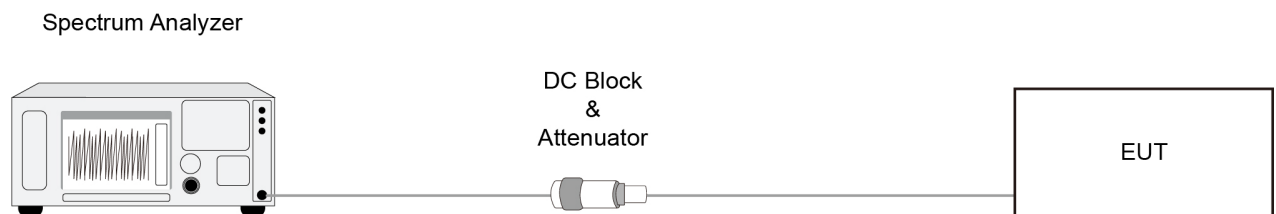
6.7.2. Test Procedure

ANSI C63.10-2013 - Section 6.10.4.

6.7.3. Test Setting

1. 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.
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize
8. Allow the trace to stabilize. Set the marker on the emission at the band edge, or on the highest modulation product outside of the band, if this level is greater than that at the band edge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission.

6.7.4. Test Setup



6.7.5. Test Result

Refer to Appendix A.7.

6.8. Conducted Spurious Emissions Measurement

6.8.1. Test Limit

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 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, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

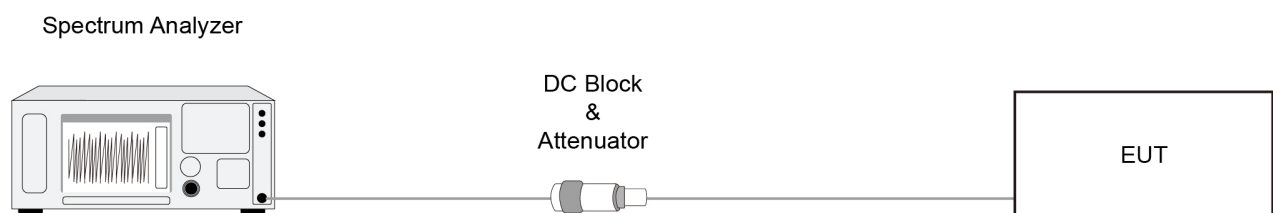
6.8.2. Test Procedure

ANSI C63.10-2013 - Section 7.8.8.

6.8.3. Test Setting

1. Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
2. RBW = 100KHz
3. VBW = 300KHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize
8. Set the marker on the peak of any spurious emission recorded. The level displayed must comply with the limit specified in this section.

6.8.4. Test Setup



6.8.5. Test Result

Refer to Appendix A.8.

6.9. Radiated Spurious Emission Measurement

6.9.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [$\mu\text{V/m}$]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.9.2. Test Procedure

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

6.9.3. Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000 MHz	1 MHz

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

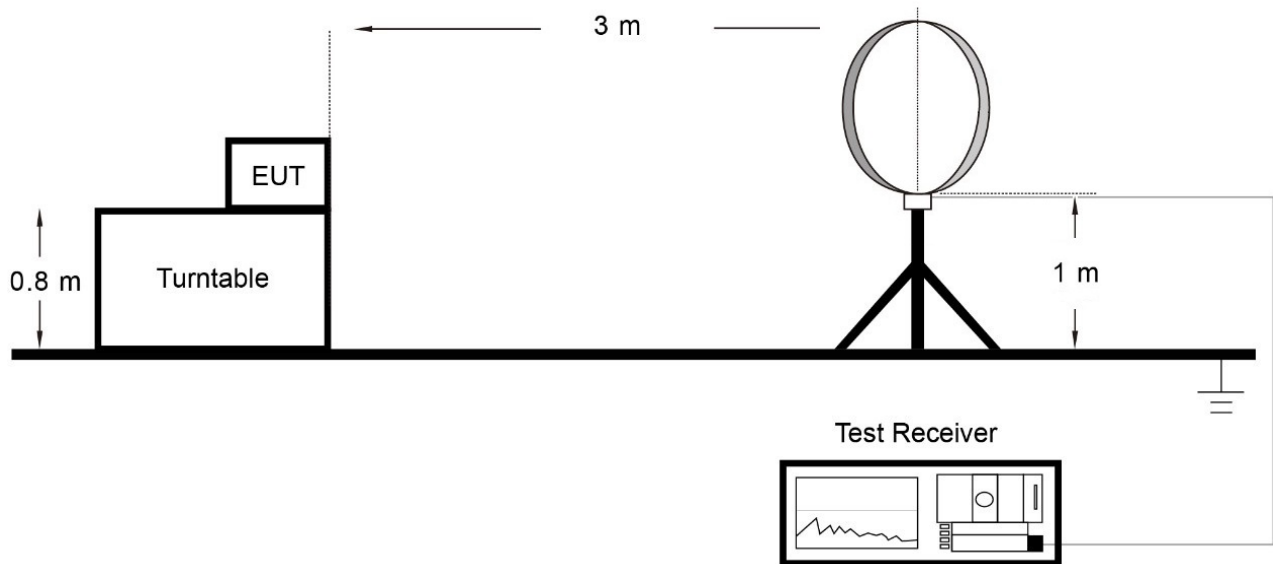
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

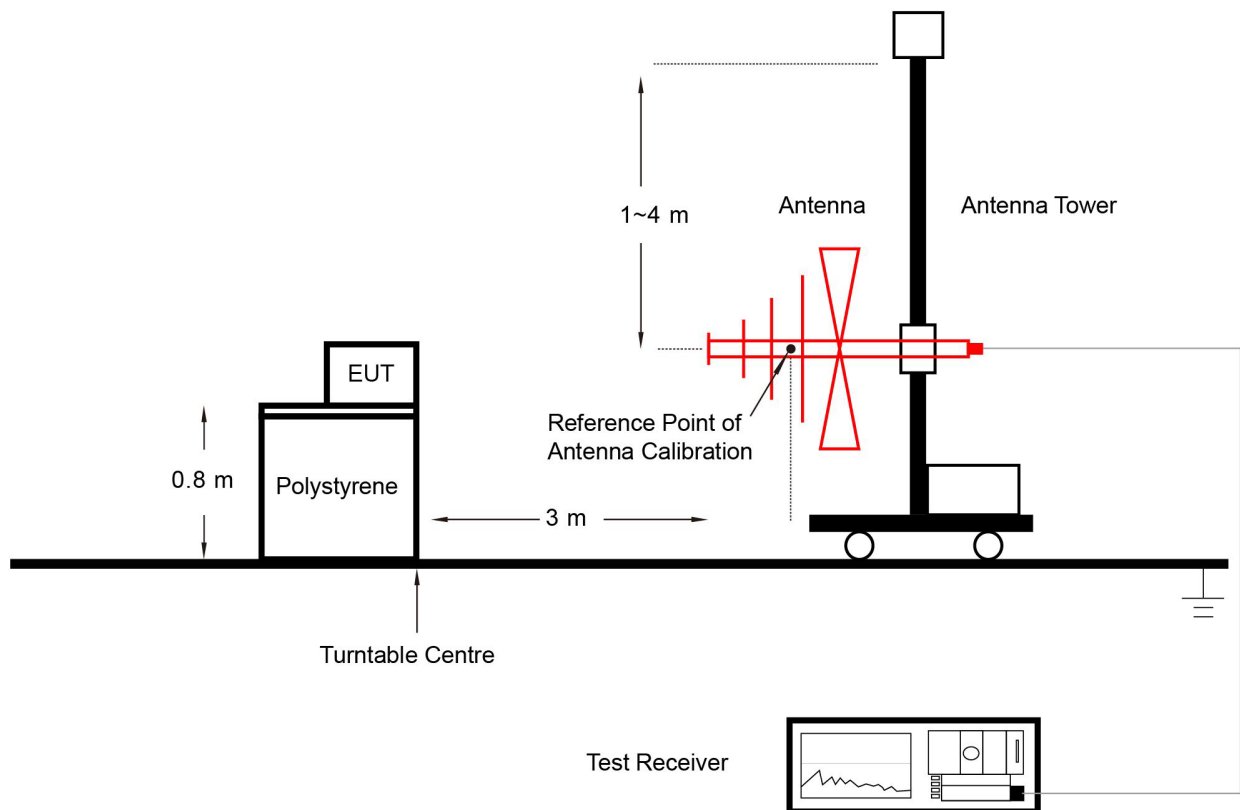
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; if the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10Hz
If the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$. T is the minimum transmission duration.
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

6.9.4. Test Setup

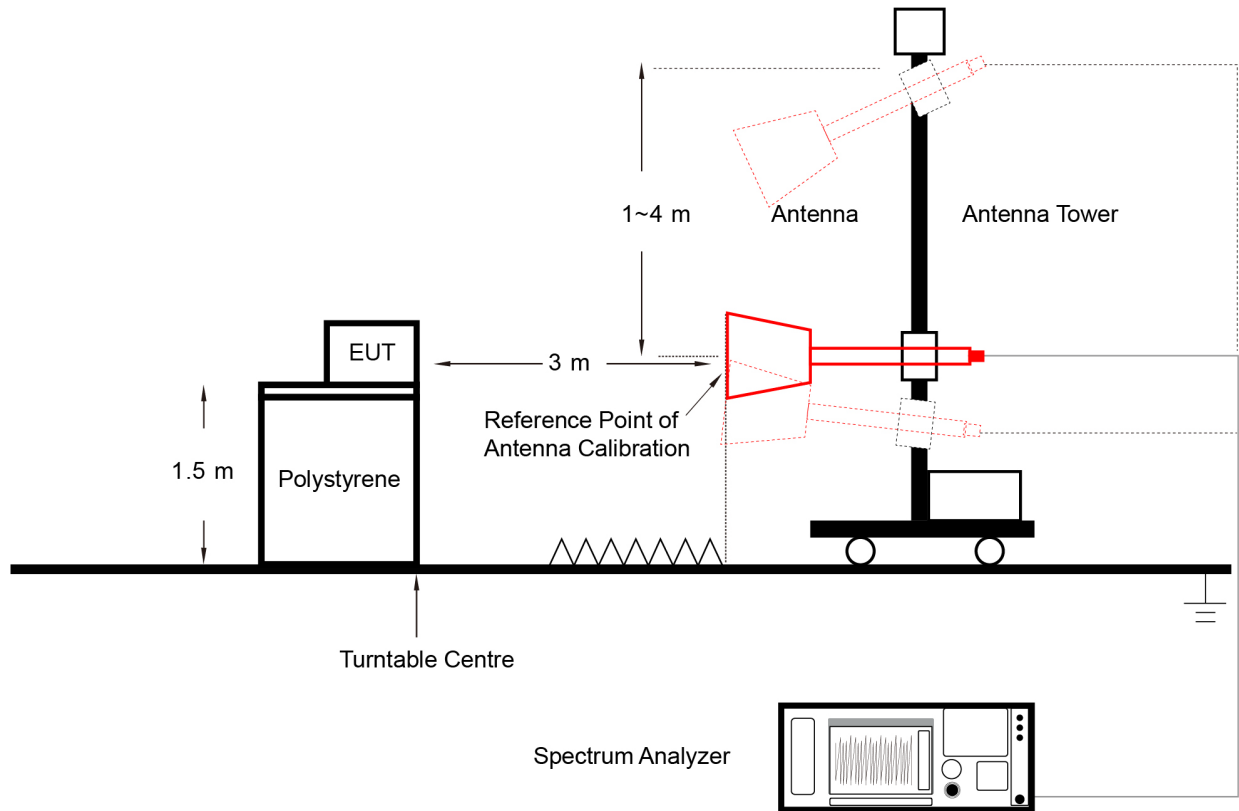
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



6.9.5. Test Result

Refer to Appendix A.9.

6.10. Radiated Restricted Band Edge Measurement

6.10.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (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)
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [$\mu\text{V/m}$]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.10.2. Test Procedure

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

6.10.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

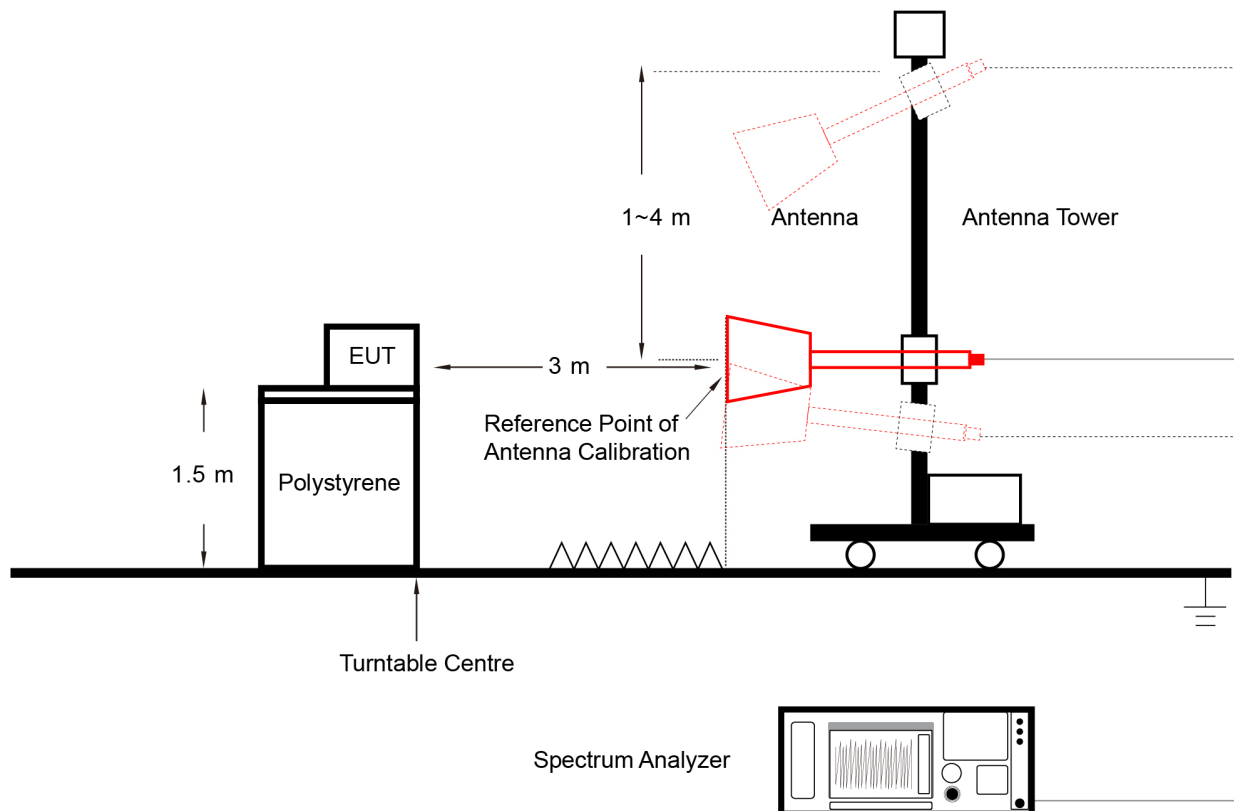
Average Measurements above 1GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; if the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10Hz

If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.

4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

6.10.4. Test Setup



6.10.5. Test Result

Refer to Appendix A.10.

6.11. AC Conducted Emissions Measurement

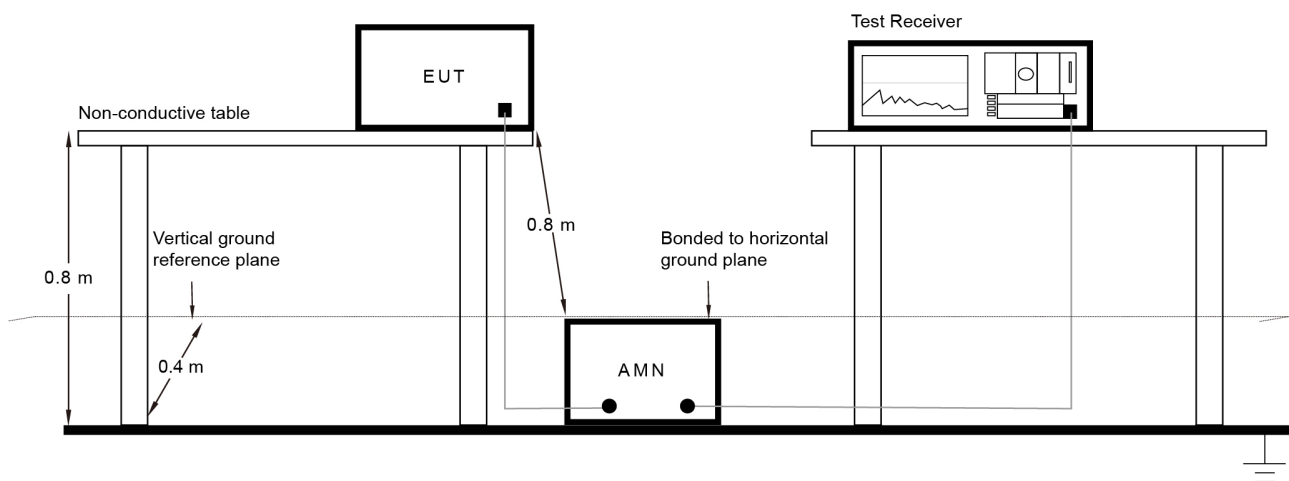
6.11.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	Average (dB μ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

6.11.2. Test Setup



6.11.3. Test Result

The EUT is powered by battery, so this item is not applicable.

Appendix A - Test Result

A.1 Duty Cycle Test Result

Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2025-01-15		

Test Mode		Duty Cycle	
DH5		77.33%	
2DH5		77.33%	

Duty Cycle	
DH5 (T = 2.900ms)	2DH5 (T = 2.900ms)

Keysight Spectrum Analyzer - Sweep SA

Center Freq 2.441000000 GHz

Ref Offset 11.3 dB

Ref 20.00 dBm

ΔMkr3 3.750 ms

0.04 dB

Center 2.441000000 GHz

Res BW 8 MHz

#VBW 50 MHz

Sweep 20.00 ms (2001 pts)

CF Step 8.000000 MHz

Auto

Freq Offset 0 Hz

Scale Type Log

Keysight Spectrum Analyzer - Sweep SA

Marker 3 Δ 3.750000 ms

Ref Offset 11.3 dB

Ref 20.00 dBm

ΔMkr3 3.750 ms

-0.02 dB

Center 2.441000000 GHz

Res BW 8 MHz

#VBW 50 MHz

Sweep 20.00 ms (2001 pts)

CF Step 8.000000 MHz

Auto

Freq Offset 0 Hz

Scale Type Log

A.2 20dB Bandwidth Test Result

Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2025-01-14		

Test Mode	Channel No.	Frequency (MHz)	20dB Bandwidth (kHz)	Result
DH5	00	2402	947.4	Pass
DH5	39	2441	947.0	Pass
DH5	78	2480	946.9	Pass
2DH5	00	2402	1184.0	Pass
2DH5	39	2441	1183.0	Pass
2DH5	78	2480	1187.0	Pass

DH5 20dB Bandwidth

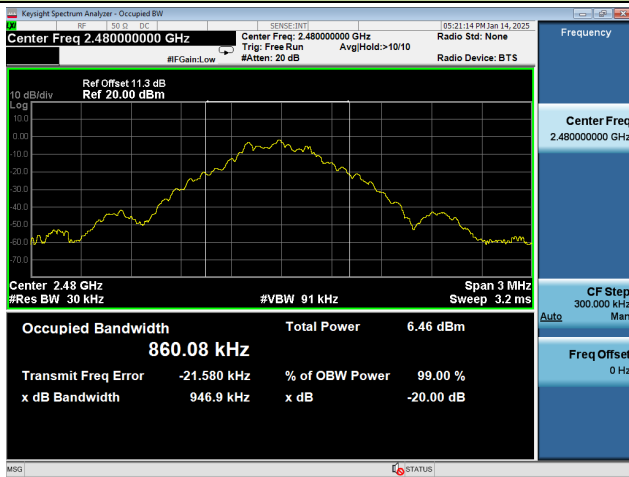
Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)



2DH5 20dB Bandwidth

Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)



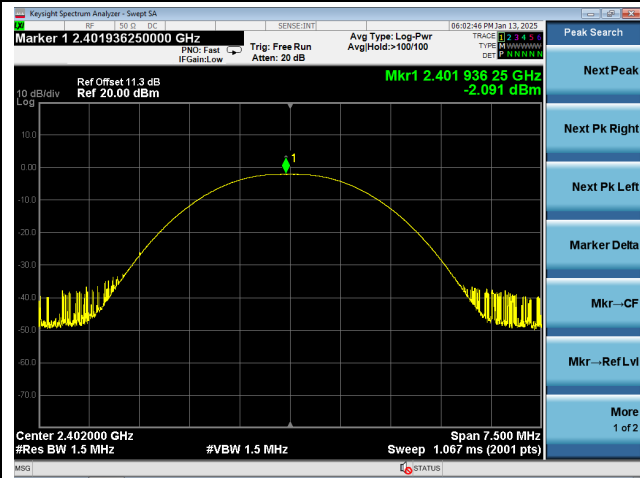
A.3 Output Power Test Result

Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2025-01-13		

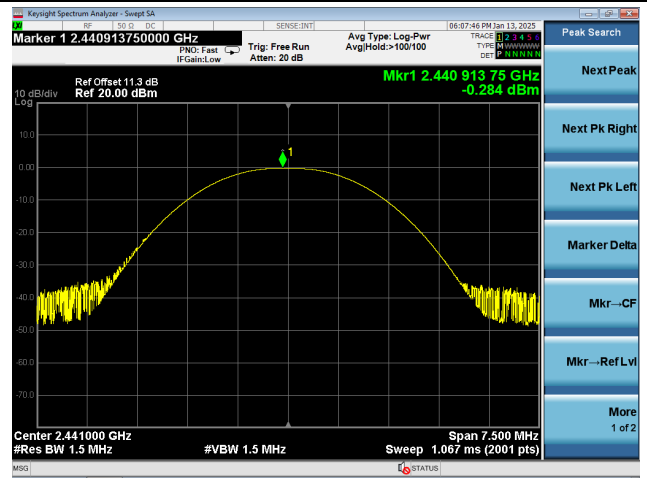
Test Mode	Channel No.	Frequency (MHz)	Output Power (dBm)	Power Limit (dBm)
DH5	00	2402	-2.091	≤ 20.97
DH5	39	2441	-0.284	≤ 20.97
DH5	78	2480	-0.465	≤ 20.97
2DH5	00	2402	-2.190	≤ 20.97
2DH5	39	2441	-0.299	≤ 20.97
2DH5	78	2480	-0.501	≤ 20.97

DH5 Output Power

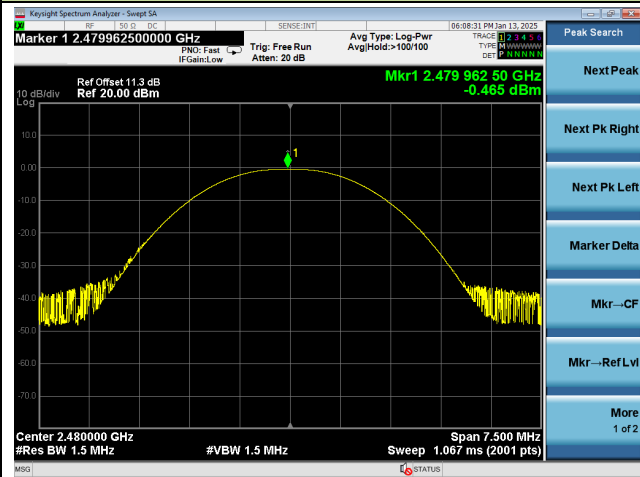
Channel 00 (2402MHz)



Channel 39 (2441MHz)

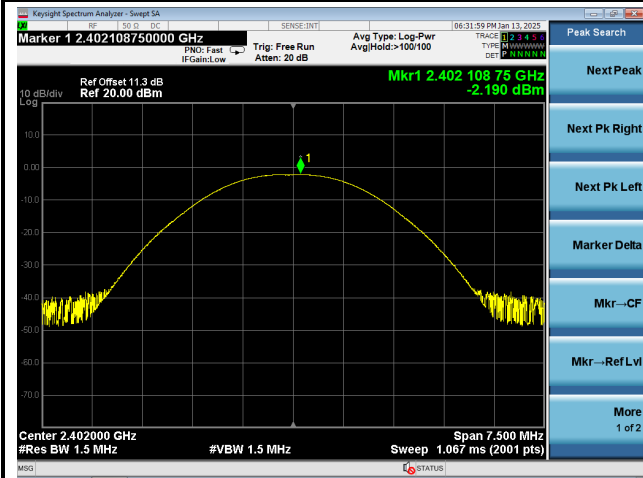


Channel 78 (2480MHz)

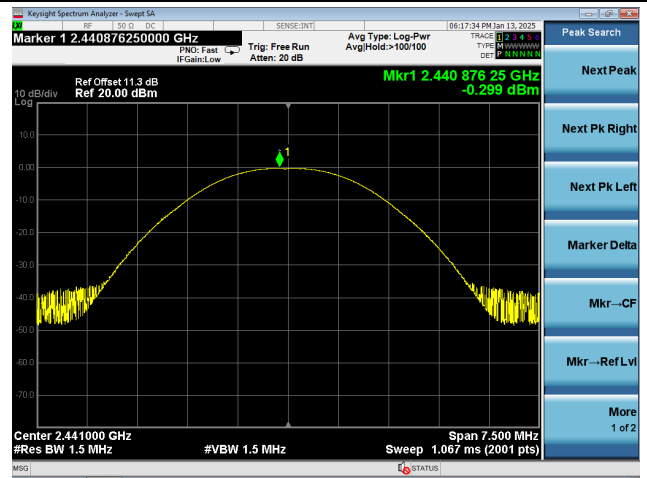


2DH5 Output Power

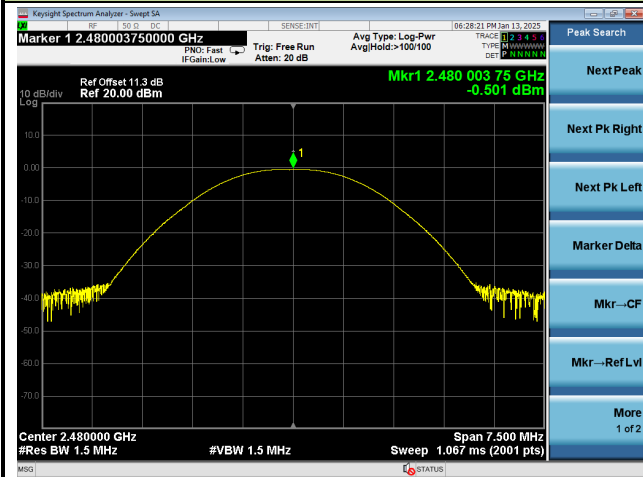
Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)



A.4 Carrier Frequency Separation Test Result

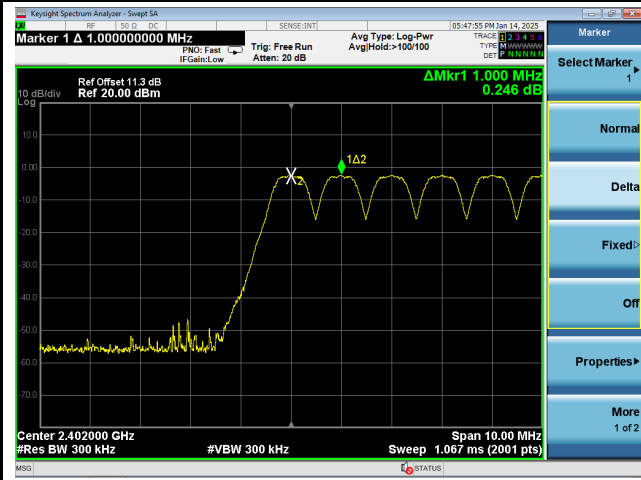
Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2025-01-14		

Test Mode	Channel No.	Frequency (MHz)	Carrier Frequency Separation (kHz)	Limit (kHz)	Result
DH5	00	2402	1000	≥ 631.60	Pass
DH5	39	2441	1000	≥ 631.33	Pass
DH5	78	2480	1000	≥ 631.27	Pass
2DH5	00	2402	1000	≥ 789.33	Pass
2DH5	39	2441	1000	≥ 788.67	Pass
2DH5	78	2480	1000	≥ 791.33	Pass

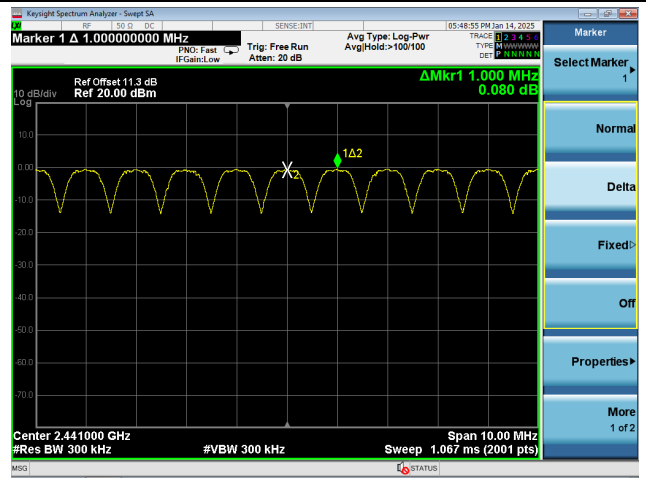
Note: The Limit is 2/3 the value of the 20dB BW.

DH5 Carrier Frequency Separation

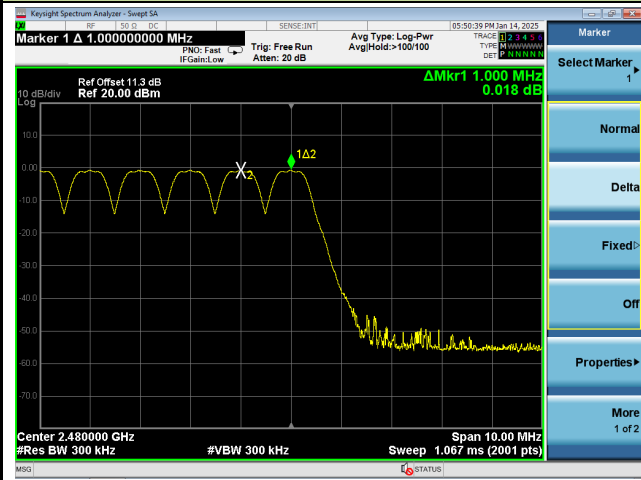
Channel 00 (2402MHz)



Channel 39 (2441MHz)

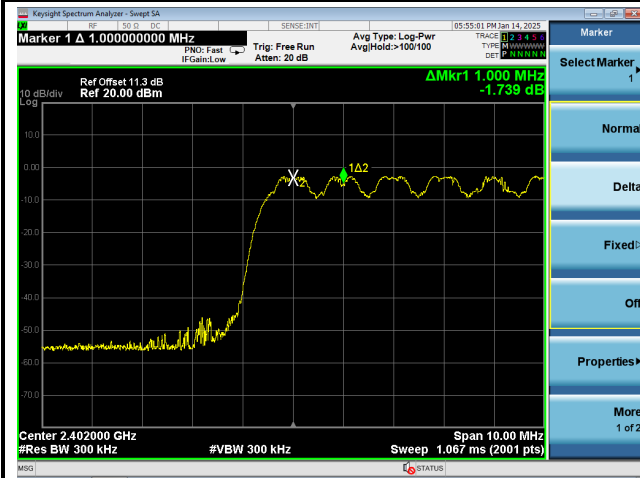


Channel 78 (2480MHz)

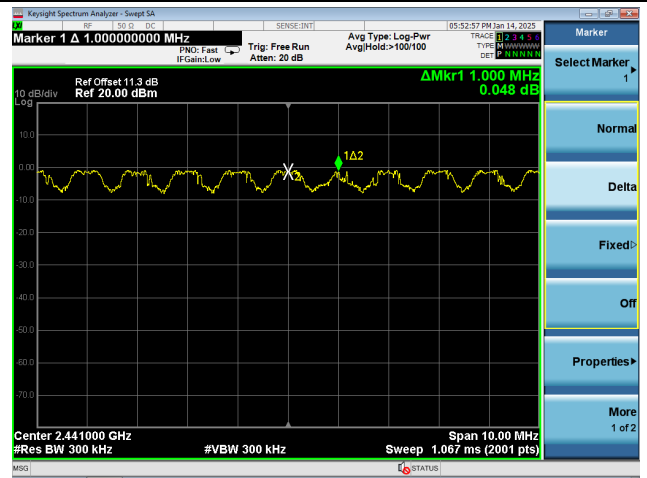


2DH5 Carrier Frequency Separation

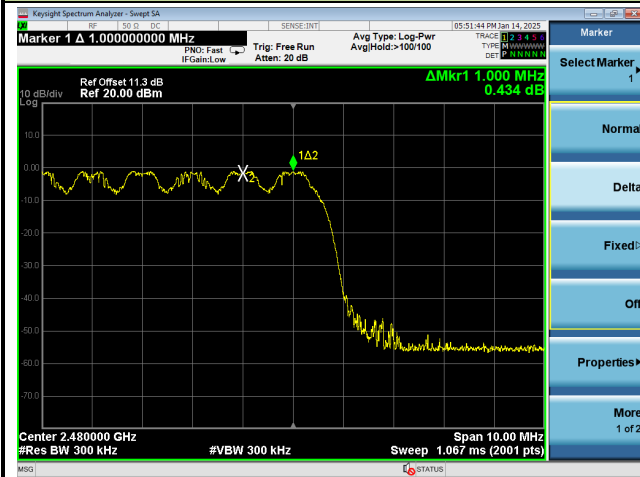
Channel 00 (2402MHz)



Channel 39 (2441MHz)



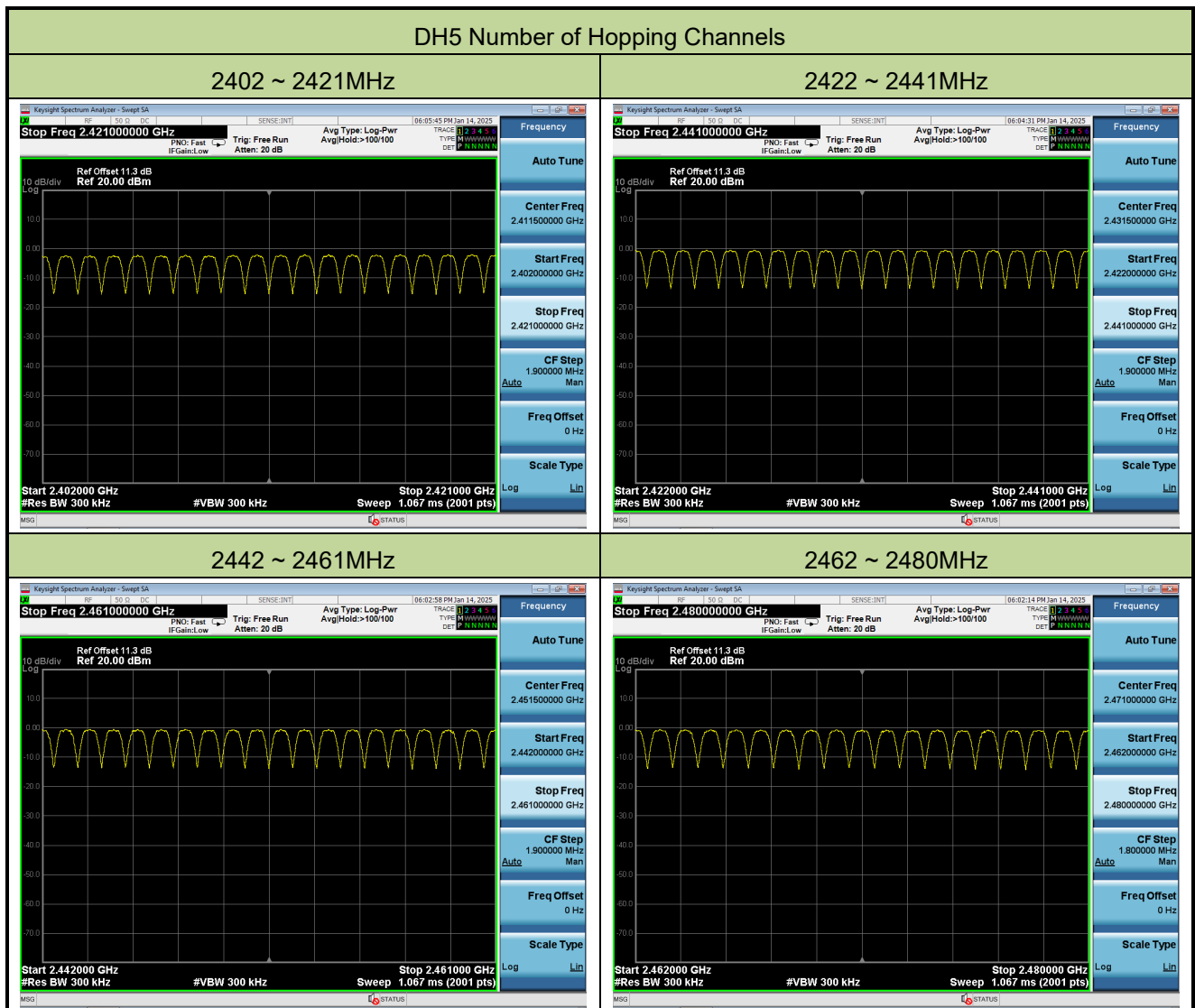
Channel 78 (2480MHz)



A.5 Number of Hopping Channels Test Result

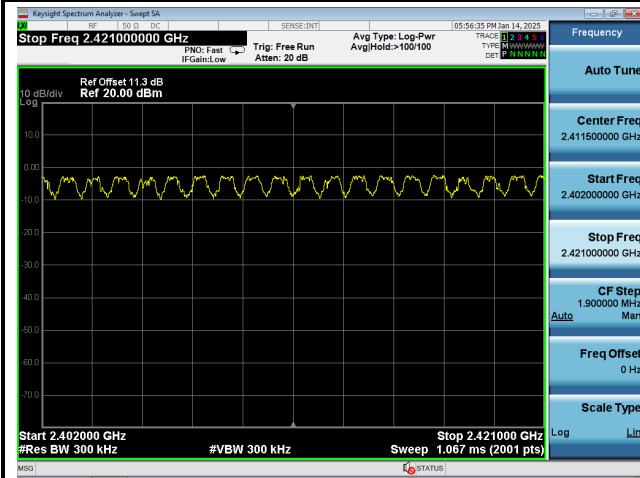
Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2025-01-15		

Test Mode (Hopping)	Channel Numbers	Frequency (MHz)	Limit (Hopping Channels)	Result
DH5	79	2402~2480	≥ 15	Pass
2DH5	79	2402~2480	≥ 15	Pass

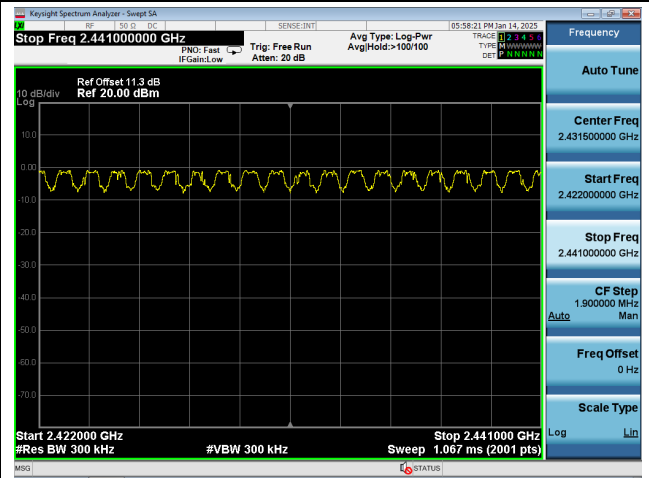


2DH5 Number of Hopping Channels

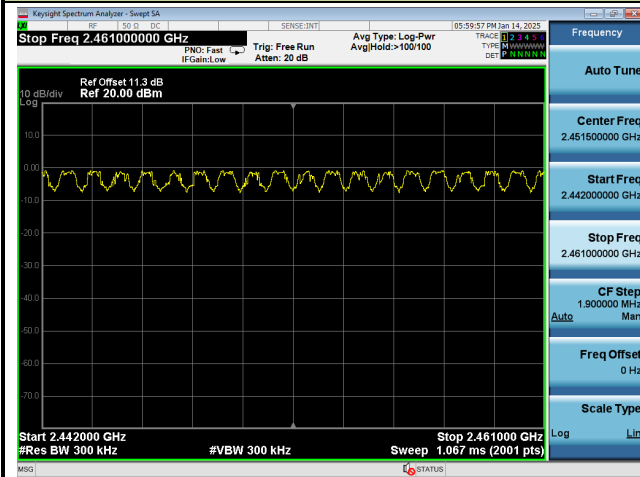
2402 ~ 2421MHz



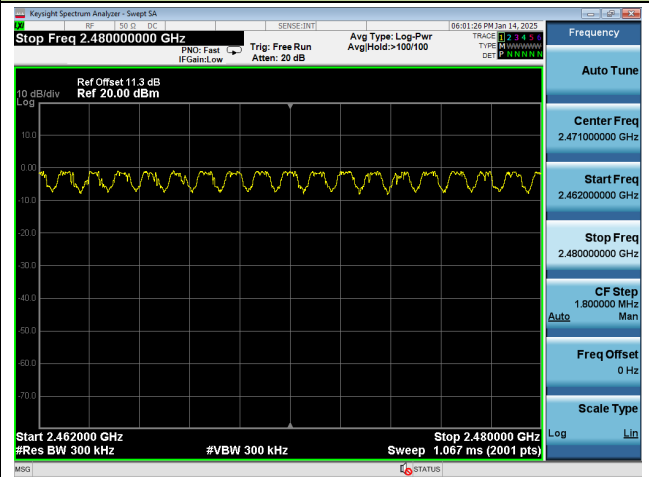
2422 ~ 2441MHz



2442 ~ 2461MHz



2462 ~ 2480MHz



A.6 Time of Occupancy Test Result

Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2025-01-15		

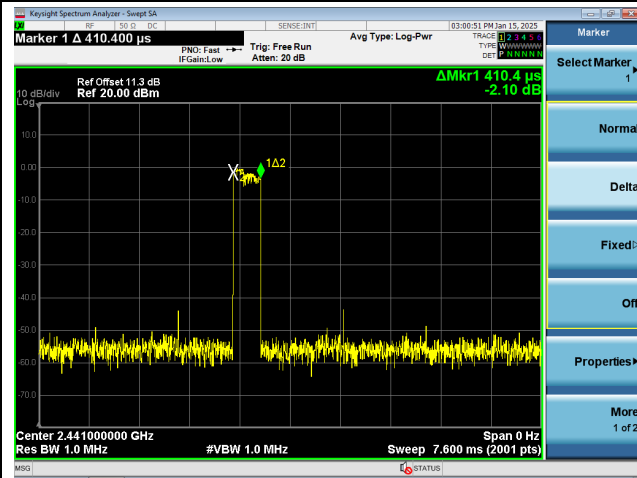
Test Mode	Channel No.	Frequency (MHz)	Transmit Time Per Hop (ms)	Observation Period (s)	Number of Hops in Sweep Time	Number of Hops in Observation Period	Time of Occupancy (ms)	Limit (ms)	Result
2DH1	00~78	2402~2480	0.4104	31.6	59	311	127.63	≤ 400	Pass
2DH3	00~78	2402~2480	1.665	31.6	28	147	244.76	≤ 400	Pass
2DH5	00~78	2402~2480	2.875	31.6	18	95	273.13	≤ 400	Pass

Notes:

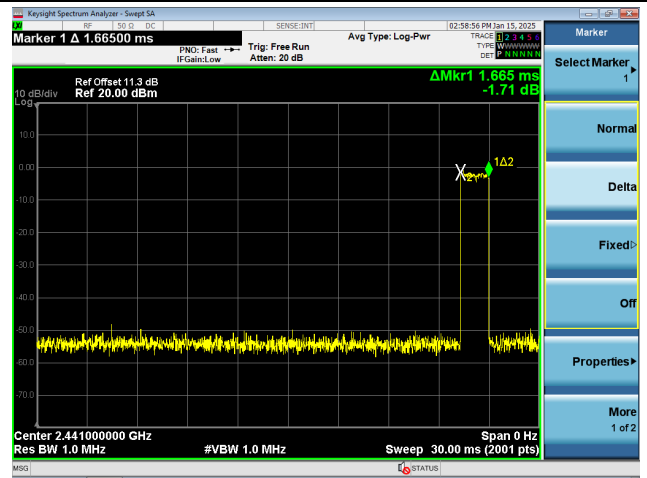
1. Number of Hops in Observation Period = Number of Hops in Sweep Time * (Observation Period / Sweep Time), Sweep Time = 6.002s.
2. Time of Occupancy (ms) = Transmit Time Per Hop (ms) * Number of Hops in Observation Period

Transmit Time Per Hop

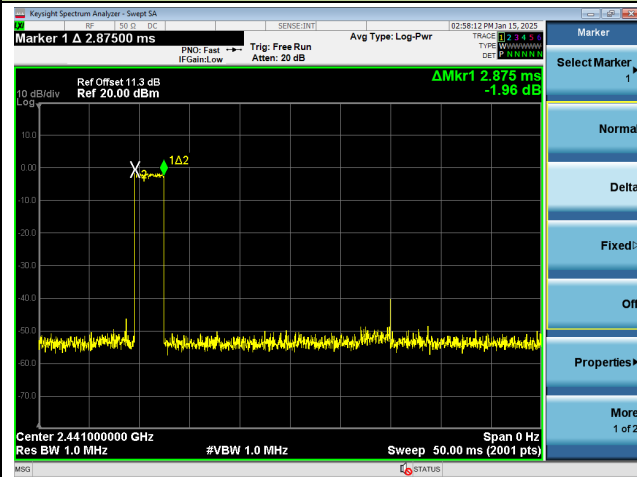
2DH1



2DH3

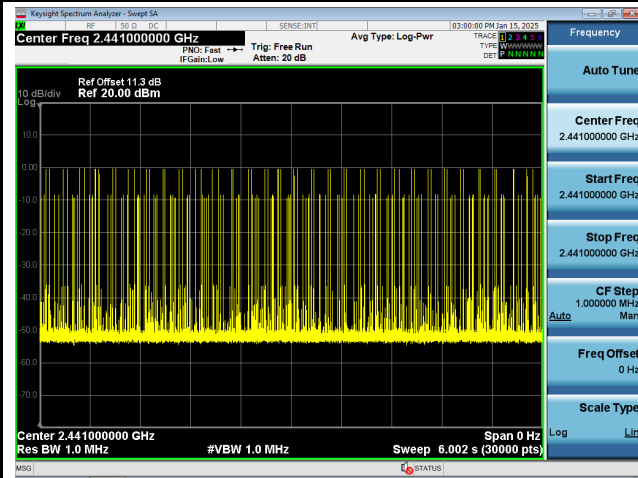


2DH5

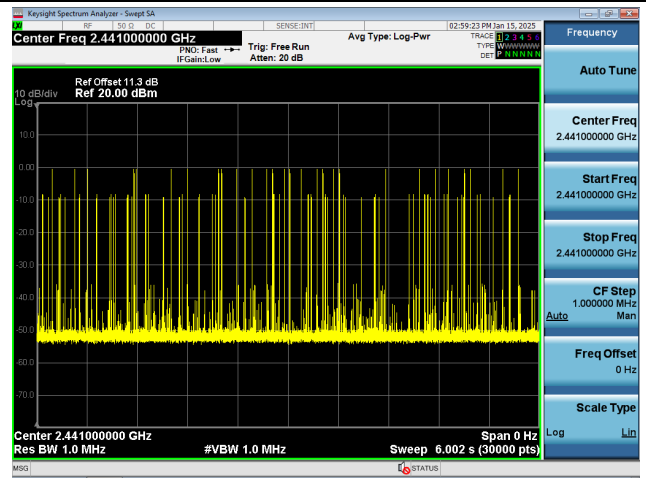


Number of Hops in Sweep Time

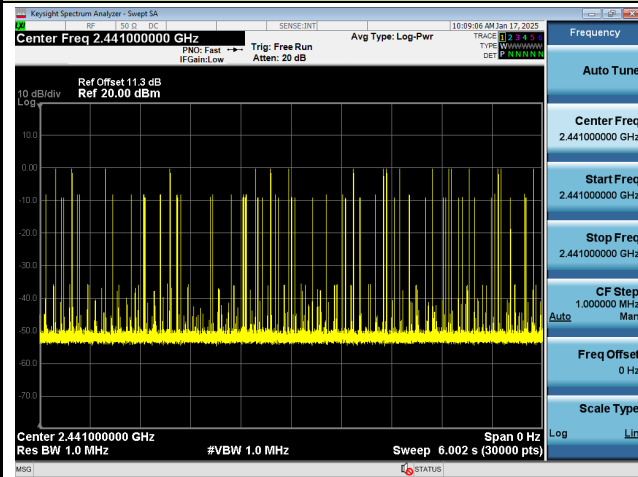
2DH1



2DH3



2DH5



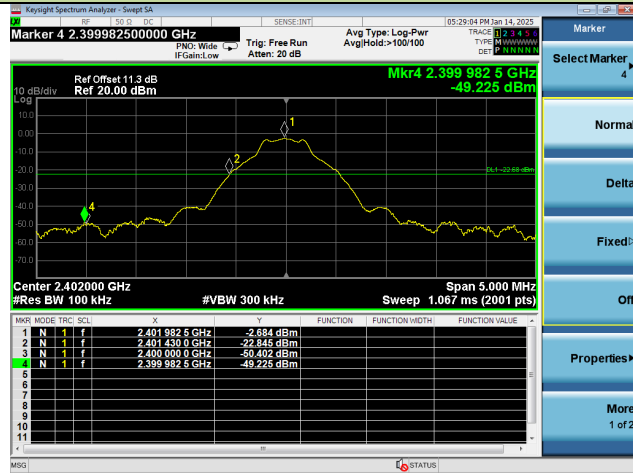
A.7 Band-edge Compliance Test Result

Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2025-01-14		

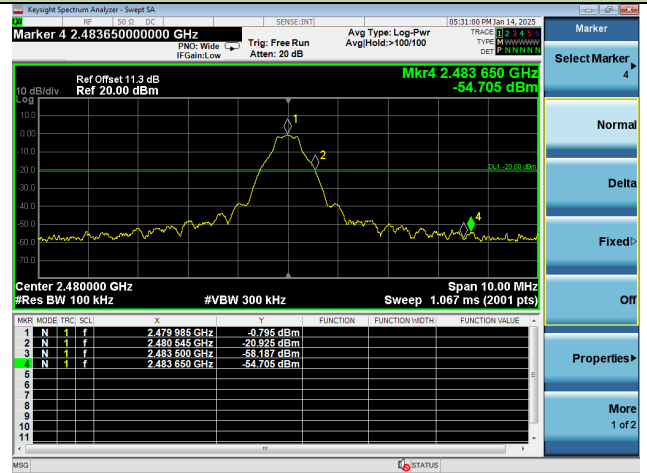
Test Mode	Channel No.	Frequency (MHz)	Limit	Result
DH5	00	2402	20dBc	Pass
DH5	78	2480	20dBc	Pass
2DH5	00	2402	20dBc	Pass
2DH5	78	2480	20dBc	Pass

Band-edge Compliance

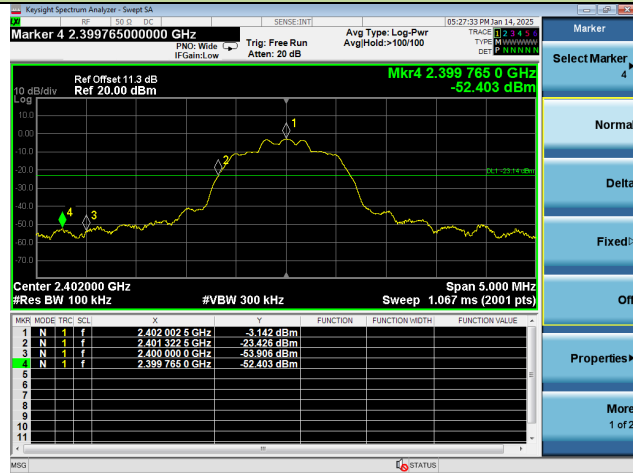
DH5 - Channel 00 (2402MHz)



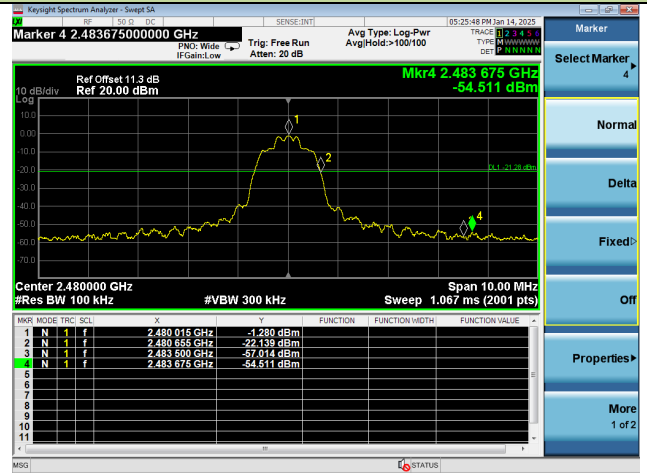
DH5 - Channel 78 (2480MHz)



2DH5 - Channel 00 (2402MHz)

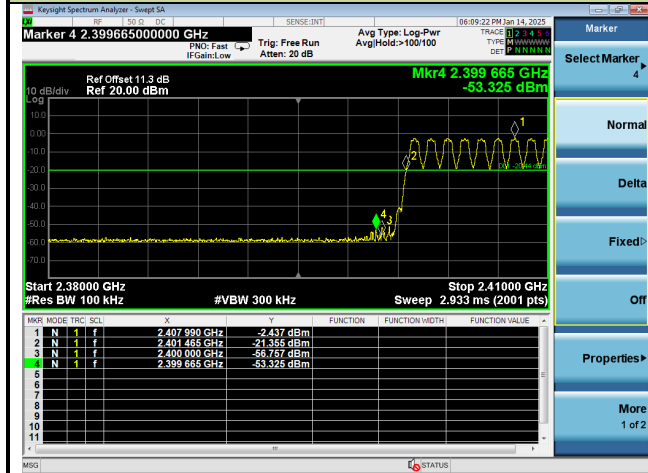


2DH5 - Channel 78 (2480MHz)

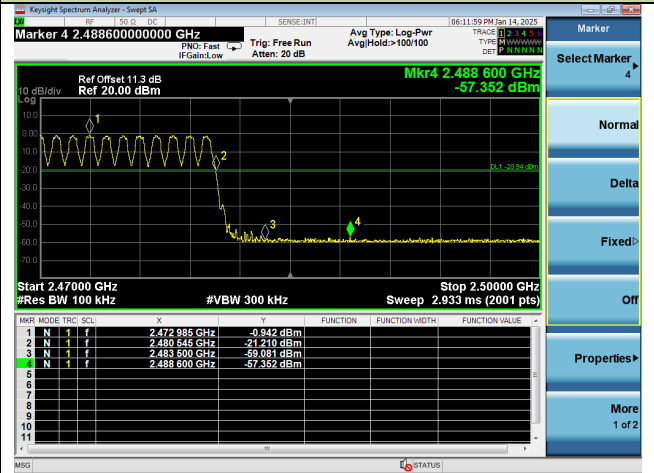


Operation Frequency Range of 20dBc Bandwidth within Hopping Mode

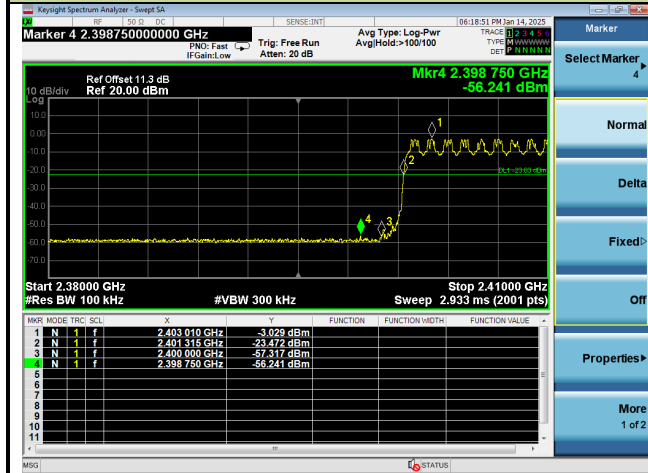
DH5 - Channel 00 (2402MHz)



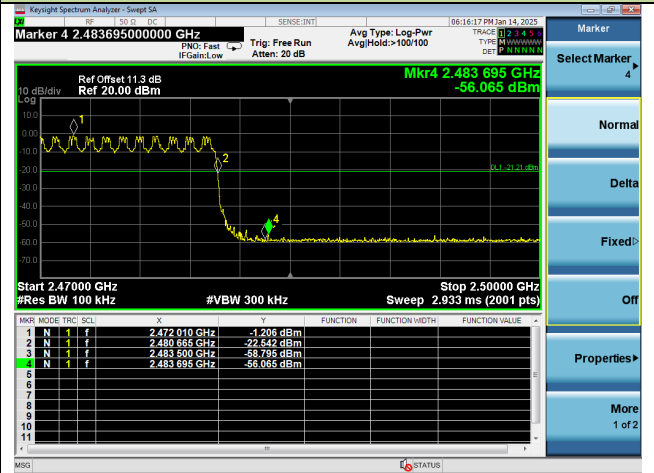
DH5 - Channel 78 (2480MHz)



2DH5 - Channel 00 (2402MHz)



2DH5 - Channel 78 (2480MHz)



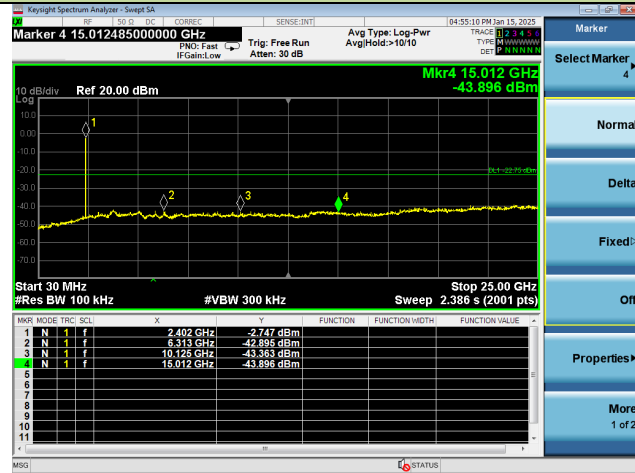
A.8 Conducted Spurious Emissions Test Result

Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2025-01-15		

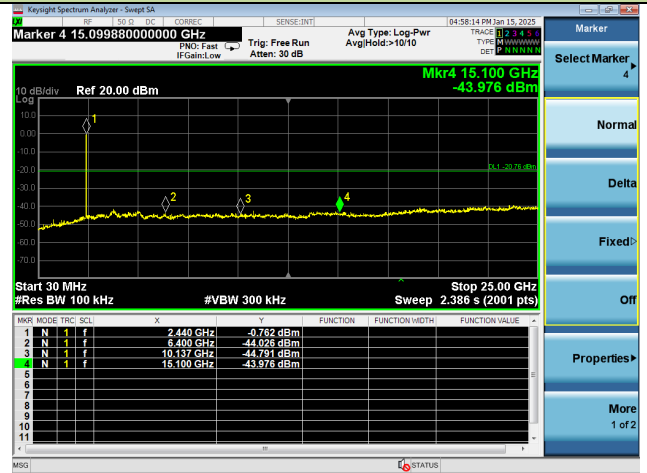
Test Mode	Channel No.	Frequency (MHz)	Limit	Result
DH5	00	2402	20dBc	Pass
DH5	39	2441	20dBc	Pass
DH5	78	2480	20dBc	Pass
2DH5	00	2402	20dBc	Pass
2DH5	39	2441	20dBc	Pass
2DH5	78	2480	20dBc	Pass

DH5 Conducted Spurious Emissions

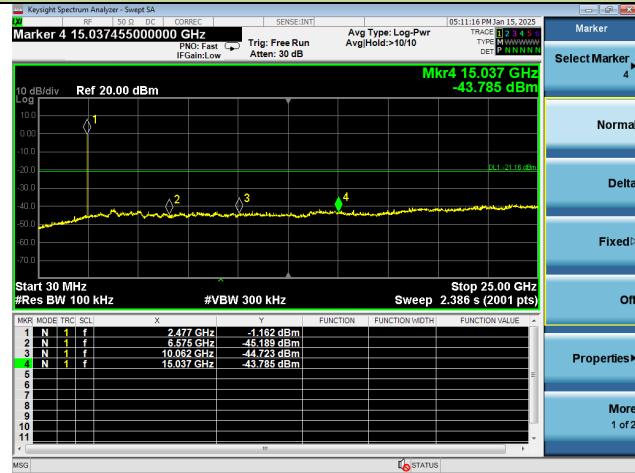
Channel 00 (2402MHz)



Channel 39 (2441MHz)

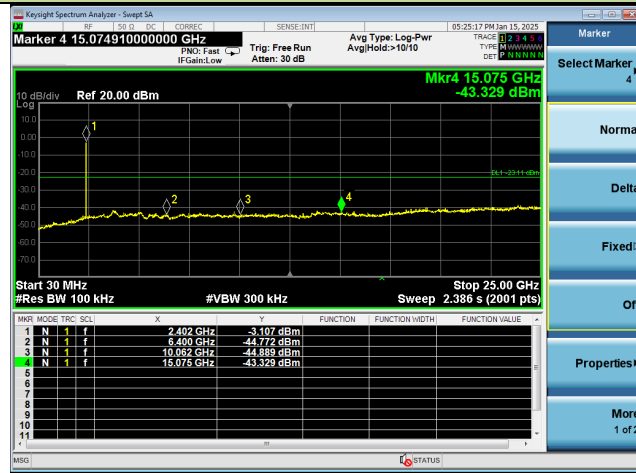


Channel 78 (2480MHz)

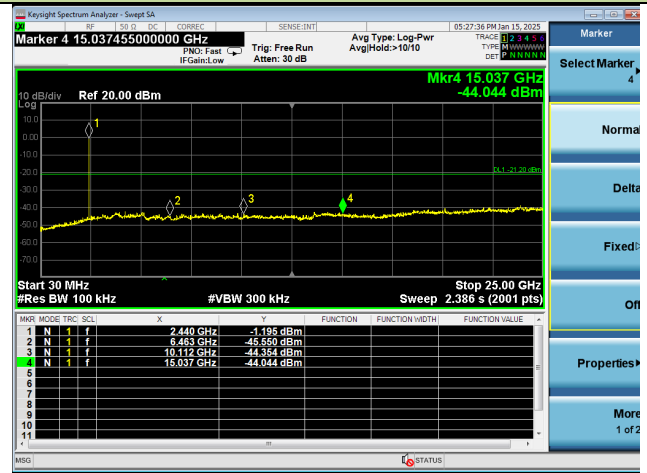


2DH5 Conducted Spurious Emissions

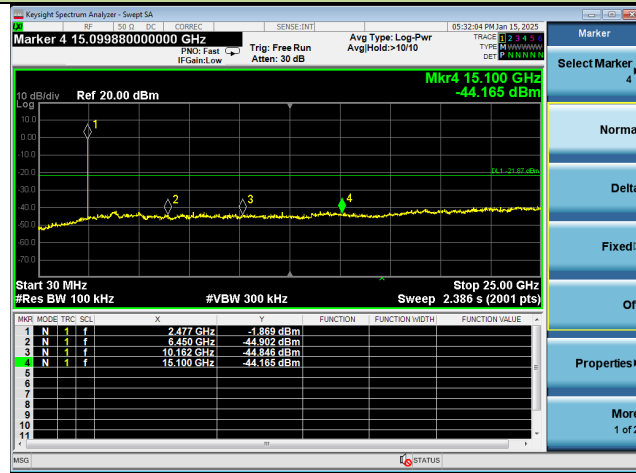
Channel 00 (2402MHz)



Channel 39 (2441MHz)



Channel 78 (2480MHz)



A.9 Radiated Spurious Emission Test Result

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2025-01-16	Test Mode:	DH5
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
00	4978.0	35.9	4.7	40.6	74	-33.4	Peak	Horizontal
	8072.0	35.3	9.4	44.7	74	-29.3	Peak	Horizontal
	11472.0	34.3	15.7	50.0	74	-24.0	Peak	Horizontal
	4867.5	36.7	4.3	41.0	74	-33.0	Peak	Vertical
	8131.5	35.6	9.6	45.2	74	-28.8	Peak	Vertical
	11140.5	33.8	15.5	49.3	74	-24.7	Peak	Vertical
39	4884.5	36.9	4.1	41.0	74	-33.0	Peak	Horizontal
	8080.5	35.1	9.5	44.6	74	-29.4	Peak	Horizontal
	11429.5	33.7	15.7	49.4	74	-24.6	Peak	Horizontal
	5037.5	36.7	4.7	41.4	74	-32.6	Peak	Vertical
	7451.5	33.8	10.2	44.0	74	-30.0	Peak	Vertical
	10953.5	33.2	14.8	48.0	74	-26.0	Peak	Vertical
78	4910.0	36.2	4.6	40.8	74	-33.2	Peak	Horizontal
	8327.0	34.8	9.4	44.2	74	-29.8	Peak	Horizontal
	10936.5	33.7	15.1	48.8	74	-25.2	Peak	Horizontal
	4808.0	37.3	4.0	41.3	74	-32.7	Peak	Vertical
	7281.5	34.6	9.8	44.4	74	-29.6	Peak	Vertical
	10953.5	34.1	14.8	48.9	74	-25.1	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m) Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)								

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2025-01-16	Test Mode:	2DH5
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

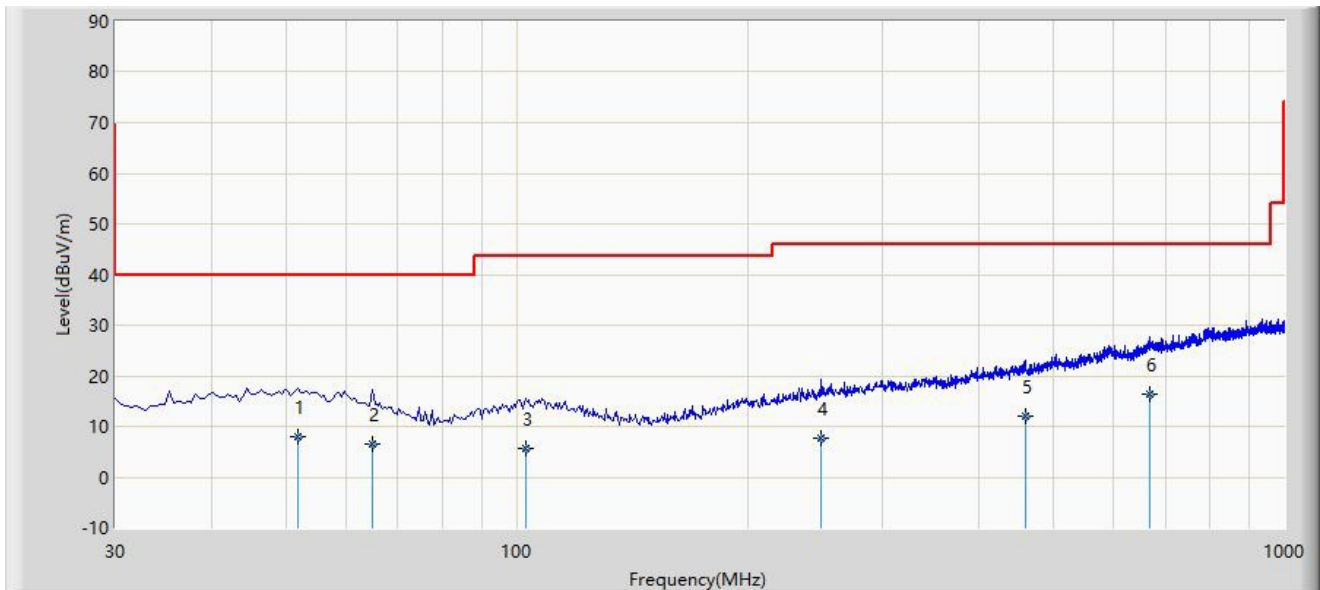
Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
00	4961.0	36.2	4.8	41.0	74	-33.0	Peak	Horizontal
	8097.5	35.5	9.5	45.0	74	-29.0	Peak	Horizontal
	11038.5	33.7	15.1	48.8	74	-25.2	Peak	Horizontal
	3975.0	40.3	-1.5	38.8	74	-35.2	Peak	Vertical
	7358.0	34.8	10.0	44.8	74	-29.2	Peak	Vertical
	10885.5	33.0	15.0	48.0	74	-26.0	Peak	Vertical
39	4357.5	39.3	0.4	39.7	74	-34.3	Peak	Horizontal
	8199.5	34.1	9.6	43.7	74	-30.3	Peak	Horizontal
	10945.0	33.7	15.1	48.8	74	-25.2	Peak	Horizontal
	4952.5	36.8	4.6	41.4	74	-32.6	Peak	Vertical
	7281.5	35.1	9.8	44.9	74	-29.1	Peak	Vertical
	10928.0	33.2	15.0	48.2	74	-25.8	Peak	Vertical
78	4884.5	37.1	4.1	41.2	74	-32.8	Peak	Horizontal
	8327.0	34.9	9.4	44.3	74	-29.7	Peak	Horizontal
	11038.5	34.0	15.1	49.1	74	-24.9	Peak	Horizontal
	4876.0	37.0	4.2	41.2	74	-32.8	Peak	Vertical
	8267.5	36.2	9.2	45.4	74	-28.6	Peak	Vertical
	10928.0	34.3	15.0	49.3	74	-24.7	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The Result of Radiated Emission below 1GHz:

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_Part15.209_RSE(3m)	Engineer: Ted Chen
Probe: NS-AC1_VULB9162	Polarity: Horizontal
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by DH5 at 2441MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		51.825	7.978	-10.600	-32.022	40.000	18.578	QP
2		64.920	6.436	-9.700	-33.564	40.000	16.136	QP
3		102.750	5.571	-10.800	-37.929	43.500	16.371	QP
4		249.705	7.764	-10.000	-38.236	46.000	17.764	QP
5		459.710	12.098	-9.800	-33.902	46.000	21.899	QP
6	*	667.290	16.452	-9.800	-29.548	46.000	26.252	QP

Note 1: " * ", means this data is the worst emission level.

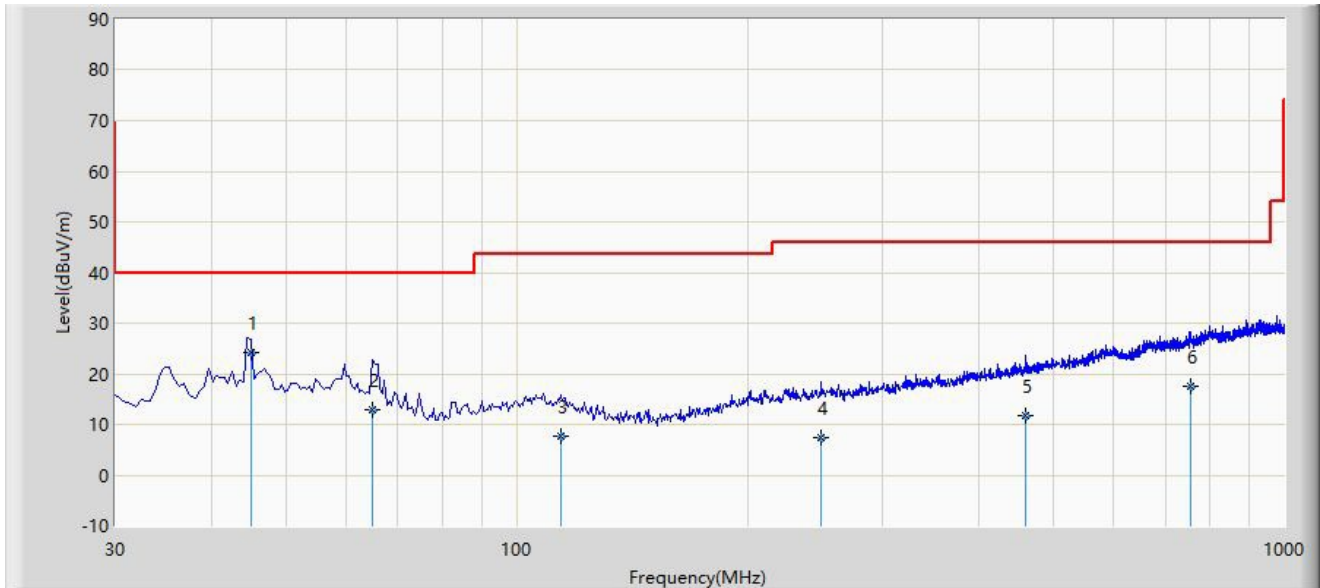
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value.

Therefore, the data is not presented in the report.

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_Part15.209_RSE(3m)	Engineer: Ted Chen
Probe: NS-AC1_VULB9162	Polarity: Vertical
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by DH5 at 2441MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	45.035	24.089	5.600	-15.911	40.000	18.489	QP
2		64.920	12.936	-3.200	-27.064	40.000	16.136	QP
3		114.390	7.749	-8.200	-35.751	43.500	15.948	QP
4		249.705	7.264	-10.500	-38.736	46.000	17.764	QP
5		461.165	11.691	-10.200	-34.309	46.000	21.891	QP
6		755.075	17.499	-9.500	-28.501	46.000	26.999	QP

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

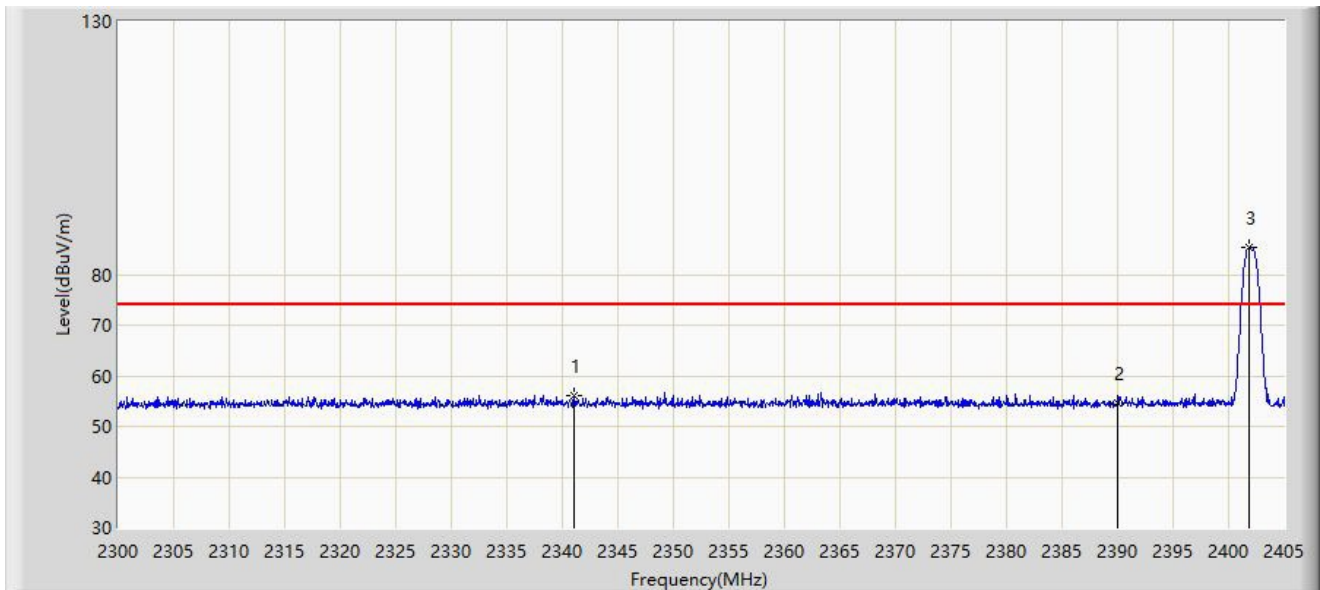
Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value.

Therefore, the data is not presented in the report.

A.10 Radiated Restricted Band Edge Test Result

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by DH5 at 2402MHz	



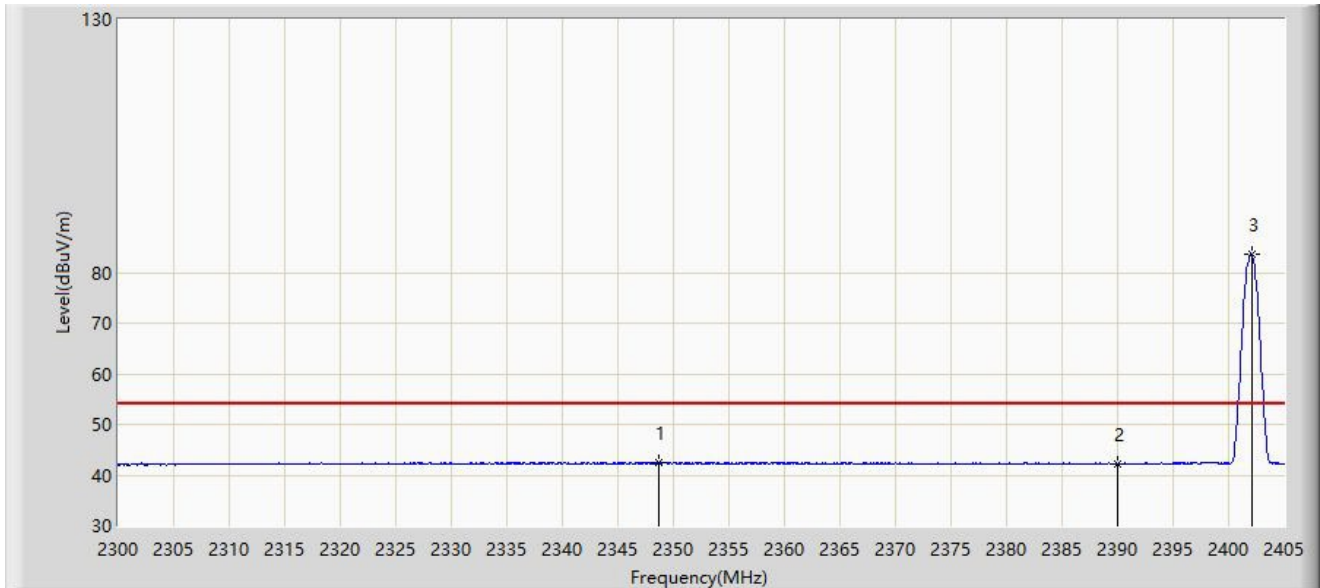
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2341.107	56.011	25.118	-17.989	74.000	30.894	PK
2		2390.000	54.594	23.854	-19.406	74.000	30.740	PK
3		2401.798	85.318	54.570	N/A	N/A	30.748	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by DH5 at 2402MHz	



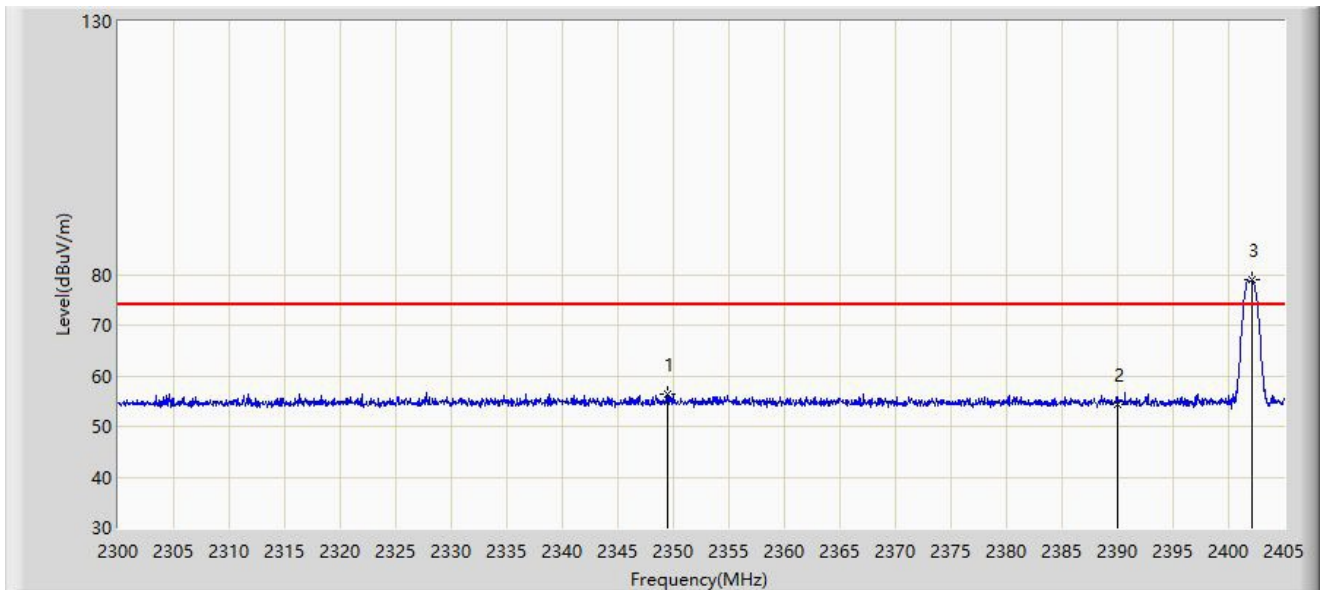
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2348.667	42.593	11.729	-11.407	54.000	30.864	AV
2		2390.000	42.273	11.533	-11.727	54.000	30.740	AV
3		2402.060	83.765	53.017	N/A	N/A	30.748	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by DH5 at 2402MHz	



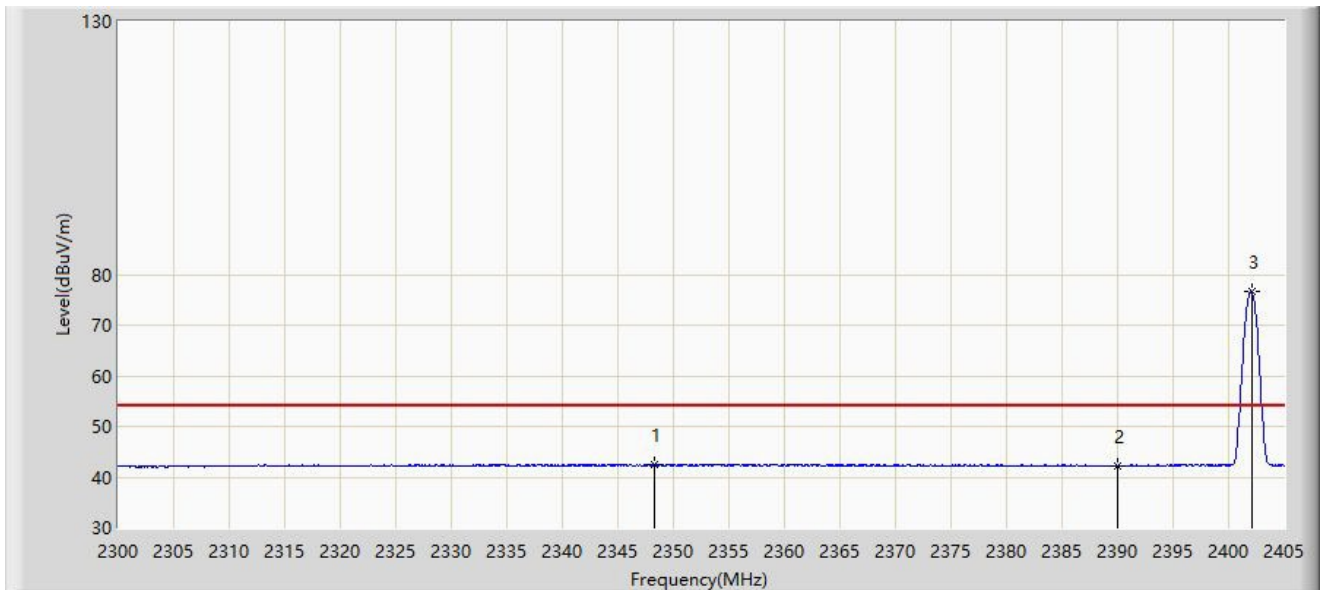
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2349.455	56.333	25.473	-17.667	74.000	30.860	PK
2		2390.000	54.398	23.658	-19.602	74.000	30.740	PK
3		2402.060	78.871	48.123	N/A	N/A	30.748	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by DH5 at 2402MHz	



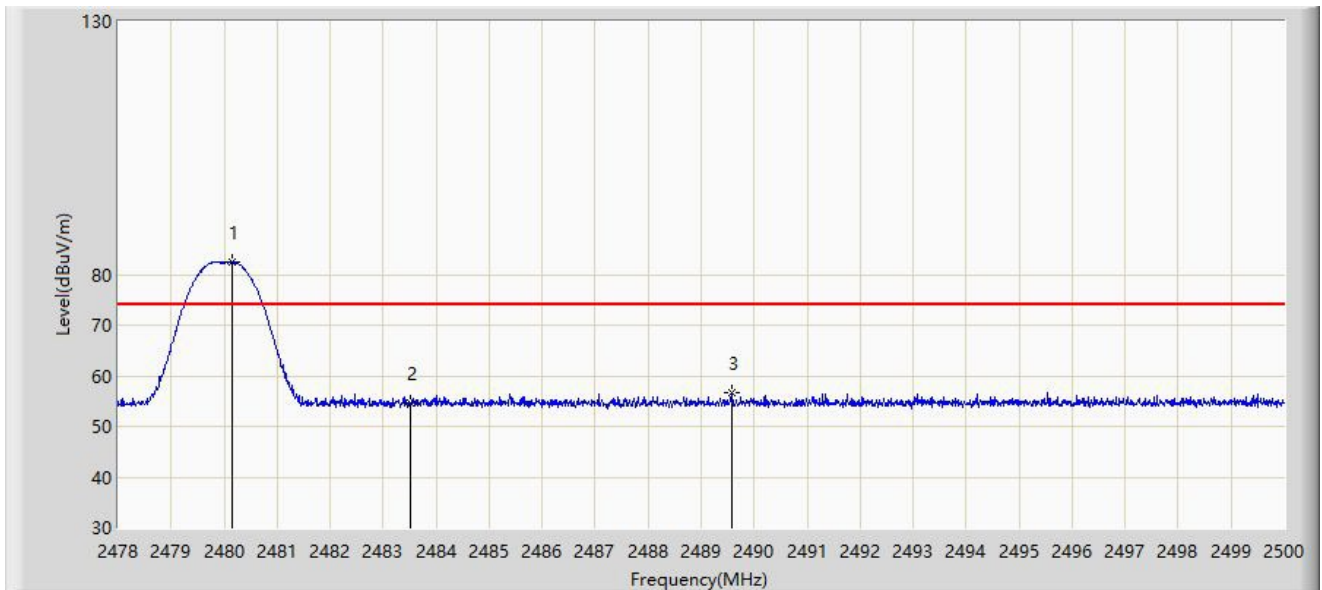
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2348.300	42.559	11.694	-11.441	54.000	30.866	AV
2		2390.000	42.231	11.491	-11.769	54.000	30.740	AV
3		2402.060	76.779	46.031	N/A	N/A	30.748	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by DH5 at 2480MHz	



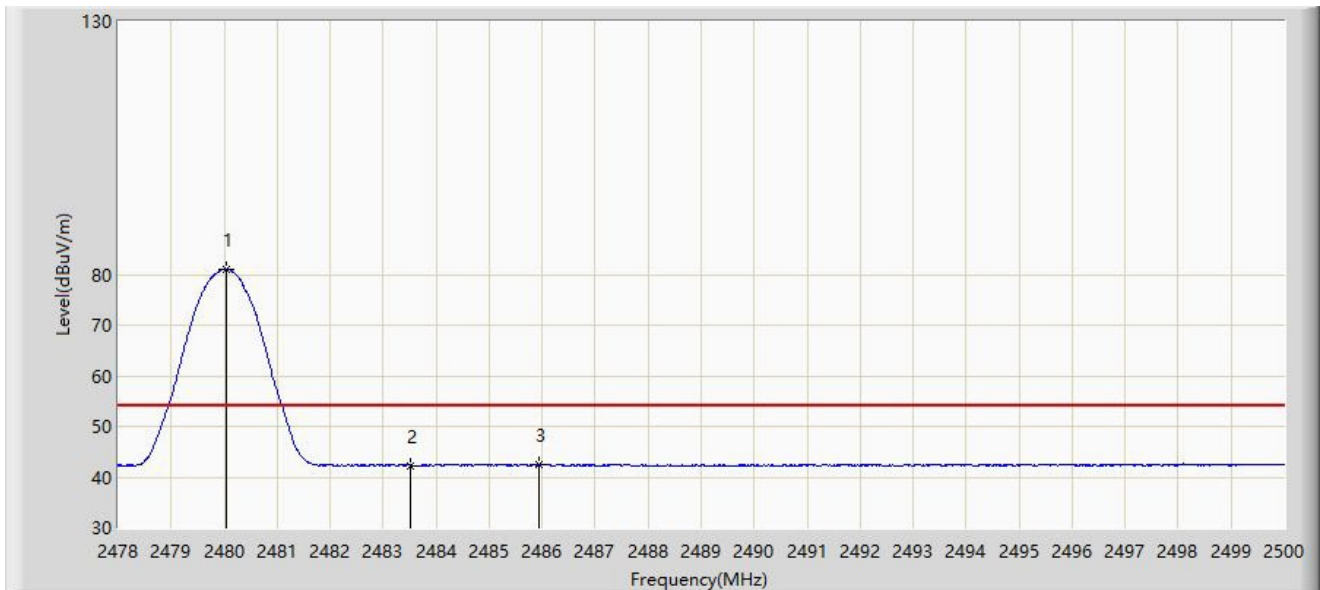
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.145	82.451	51.824	N/A	N/A	30.626	PK
2		2483.500	54.614	23.968	-19.386	74.000	30.646	PK
3	*	2489.572	56.595	25.914	-17.405	74.000	30.681	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by DH5 at 2480MHz	



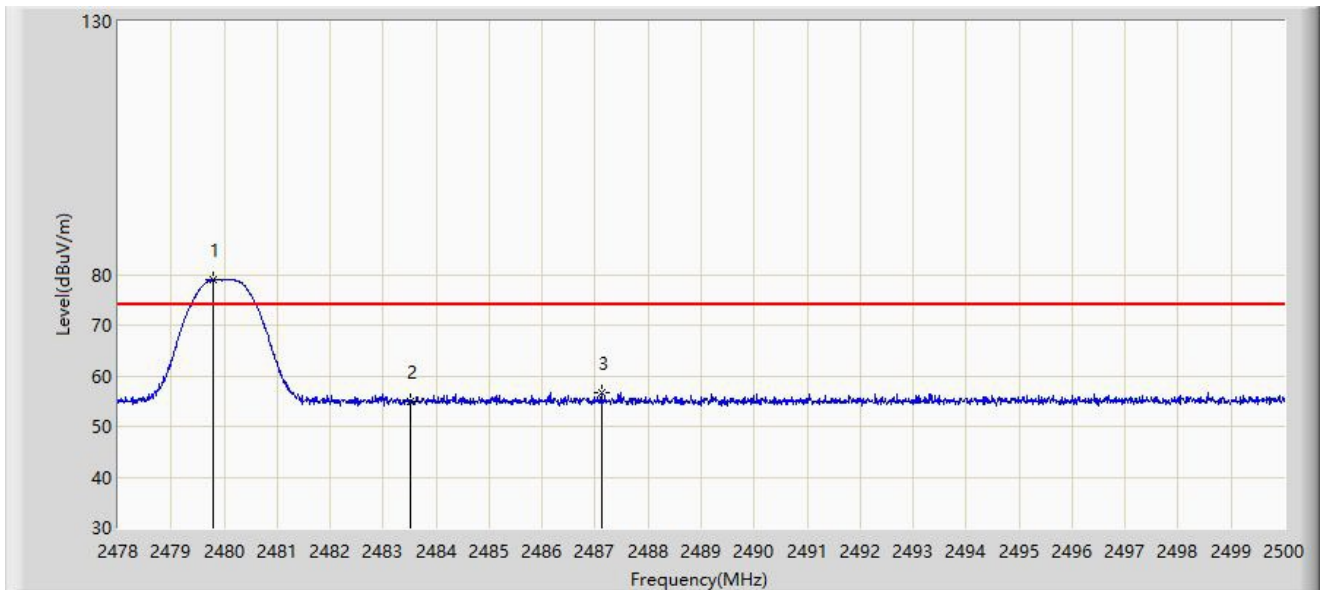
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.035	81.114	50.488	N/A	N/A	30.626	AV
2		2483.500	42.314	11.668	-11.686	54.000	30.646	AV
3	*	2485.942	42.578	11.918	-11.422	54.000	30.660	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by DH5 at 2480MHz	



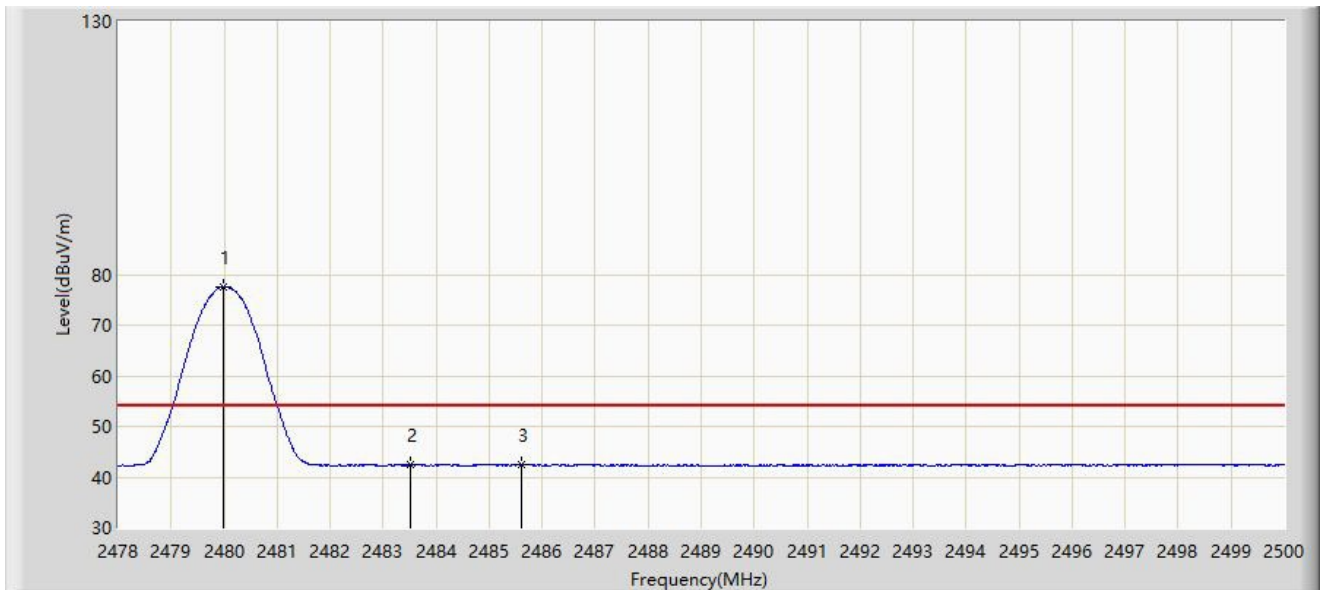
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.804	79.065	48.440	N/A	N/A	30.624	PK
2		2483.500	54.921	24.275	-19.079	74.000	30.646	PK
3	*	2487.119	56.712	26.045	-17.288	74.000	30.666	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by DH5 at 2480MHz	



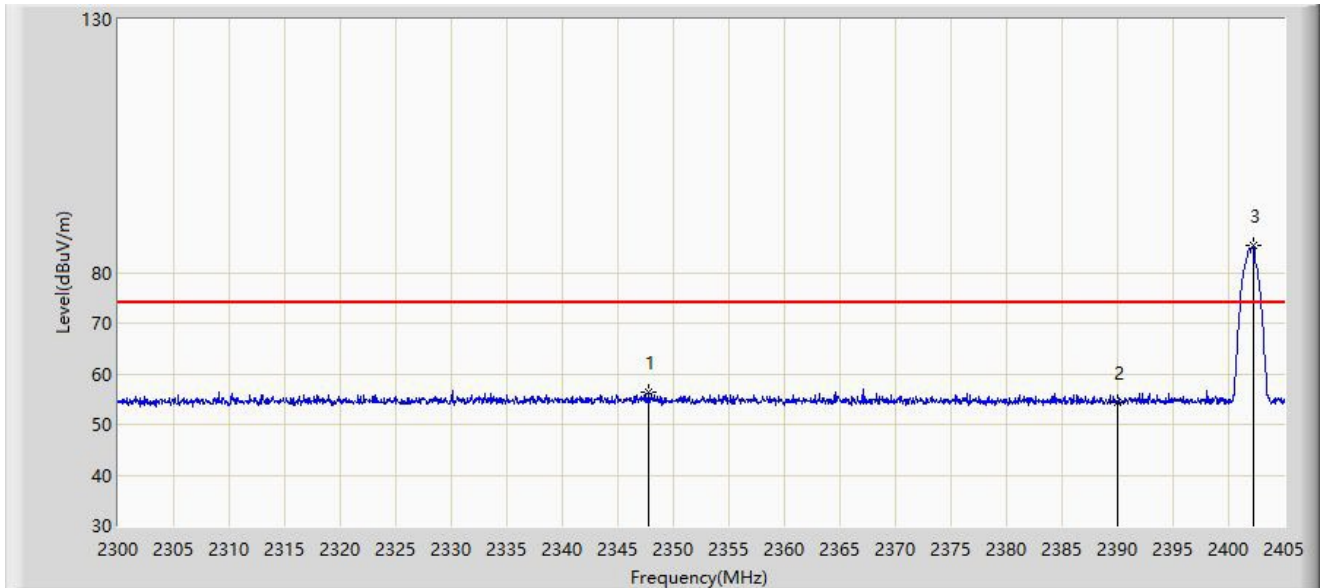
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.991	77.659	47.033	N/A	N/A	30.625	AV
2		2483.500	42.326	11.680	-11.674	54.000	30.646	AV
3	*	2485.612	42.547	11.889	-11.453	54.000	30.658	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by 2DH5 at 2402MHz	



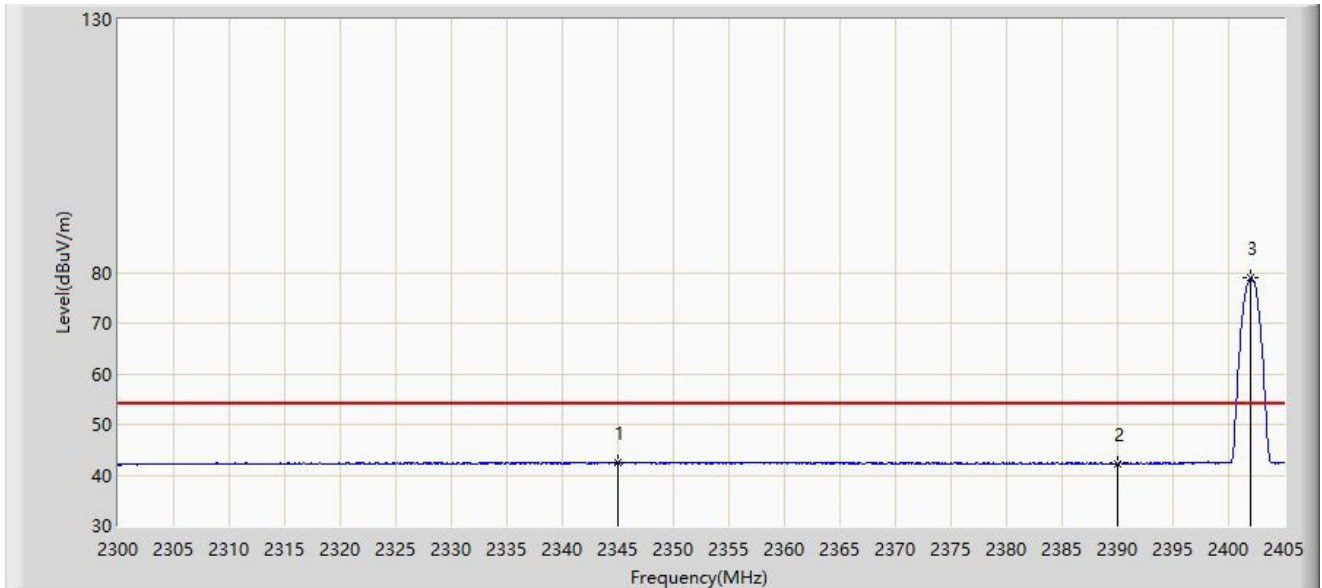
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2347.827	56.309	25.442	-17.691	74.000	30.867	PK
2		2390.000	54.367	23.627	-19.633	74.000	30.740	PK
3		2402.218	85.232	54.484	N/A	N/A	30.748	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by 2DH5 at 2402MHz	



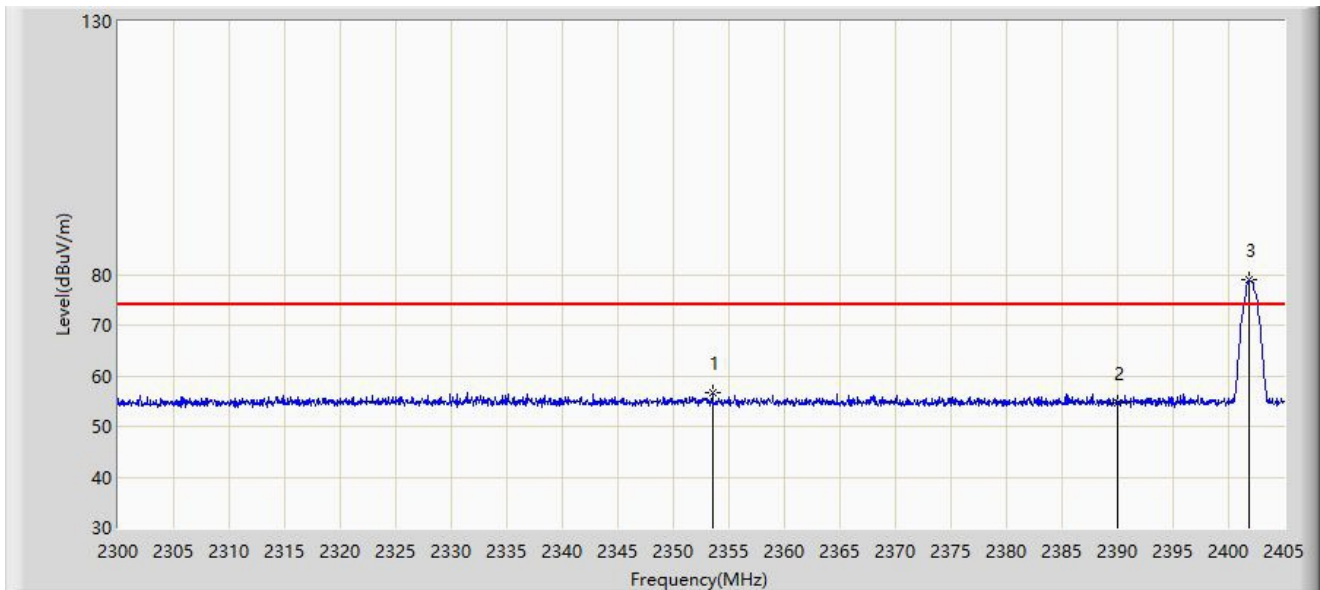
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2344.992	42.594	11.715	-11.406	54.000	30.880	AV
2		2390.000	42.235	11.495	-11.765	54.000	30.740	AV
3		2402.008	79.082	48.334	N/A	N/A	30.748	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by 2DH5 at 2402MHz	



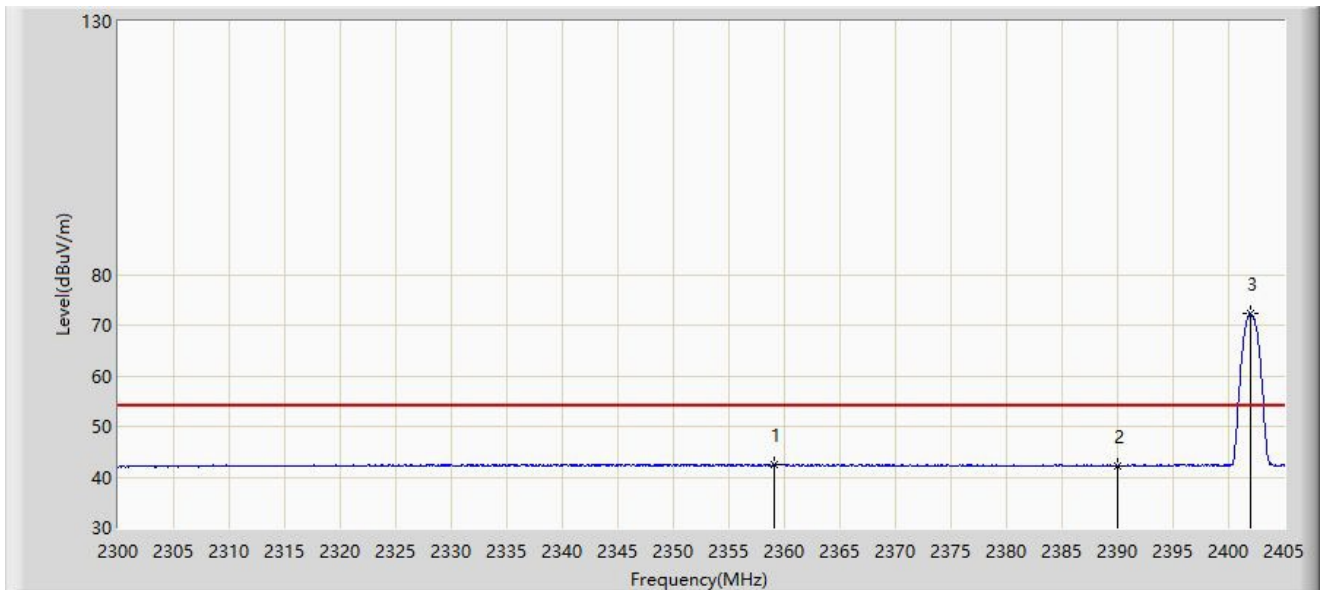
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2353.498	56.525	25.682	-17.475	74.000	30.843	PK
2		2390.000	54.722	23.982	-19.278	74.000	30.740	PK
3		2401.798	78.850	48.102	N/A	N/A	30.748	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by 2DH5 at 2402MHz	



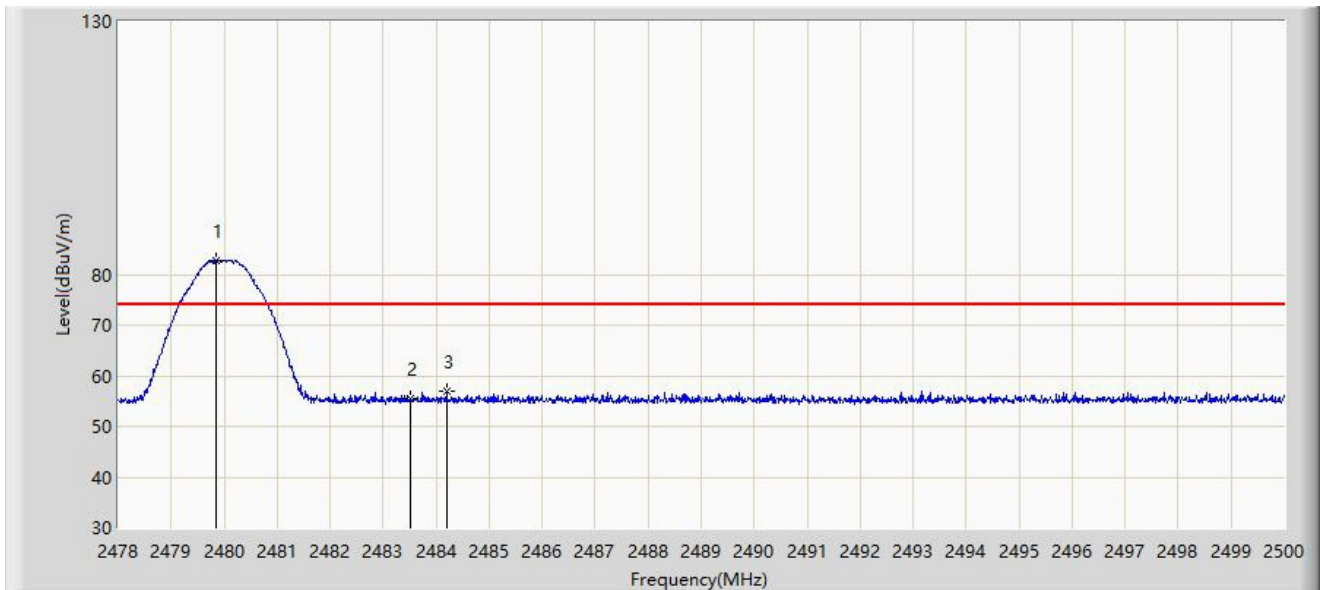
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2359.062	42.411	11.592	-11.589	54.000	30.819	AV
2		2390.000	42.200	11.460	-11.800	54.000	30.740	AV
3		2401.955	72.350	41.602	N/A	N/A	30.748	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by 2DH5 at 2480MHz	



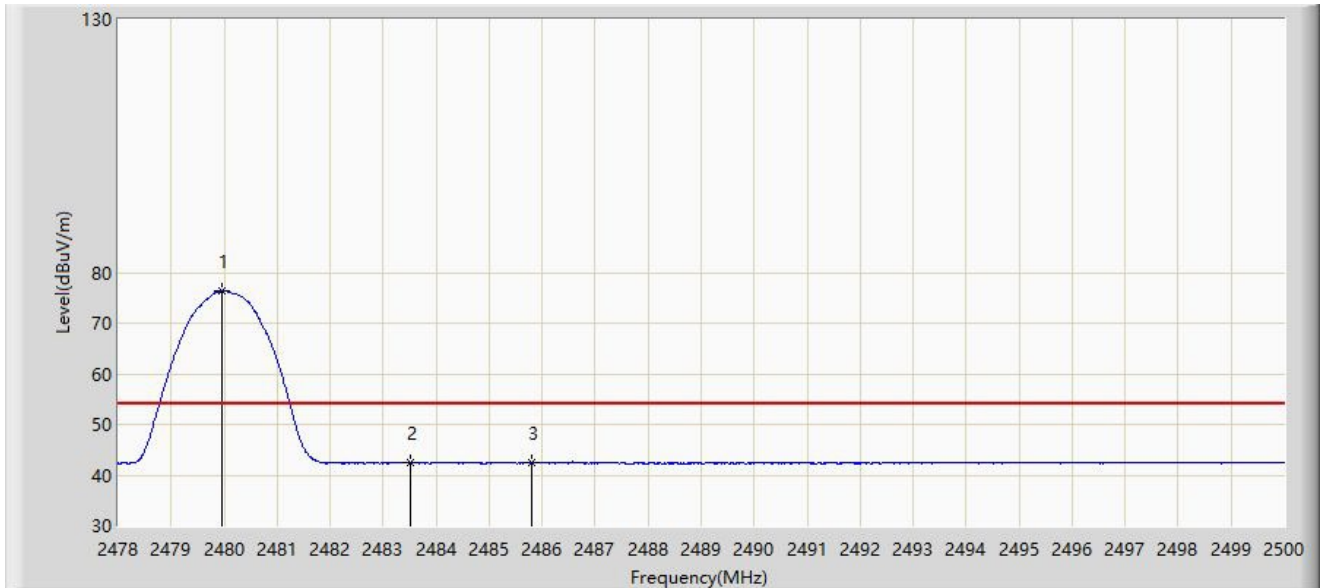
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.848	82.818	52.193	N/A	N/A	30.625	PK
2		2483.500	55.480	24.834	-18.520	74.000	30.646	PK
3	*	2484.193	56.834	26.184	-17.166	74.000	30.650	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by 2DH5 at 2480MHz	



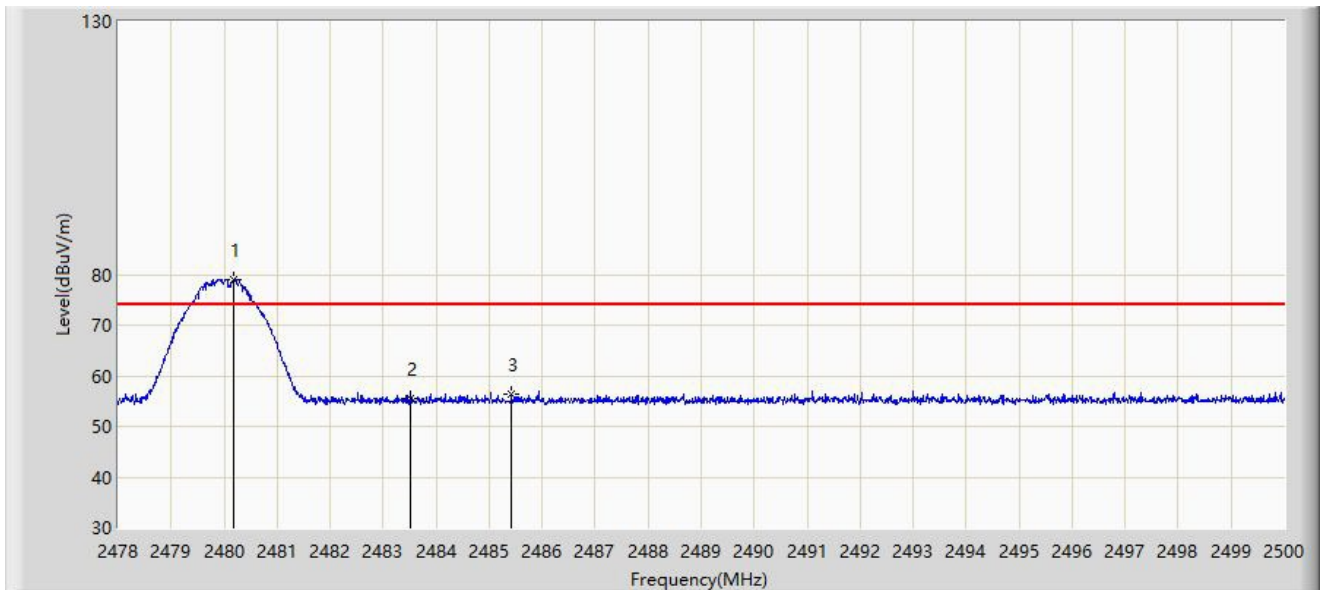
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.969	76.398	45.772	N/A	N/A	30.625	AV
2		2483.500	42.430	11.784	-11.570	54.000	30.646	AV
3	*	2485.810	42.590	11.931	-11.410	54.000	30.659	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by 2DH5 at 2480MHz	



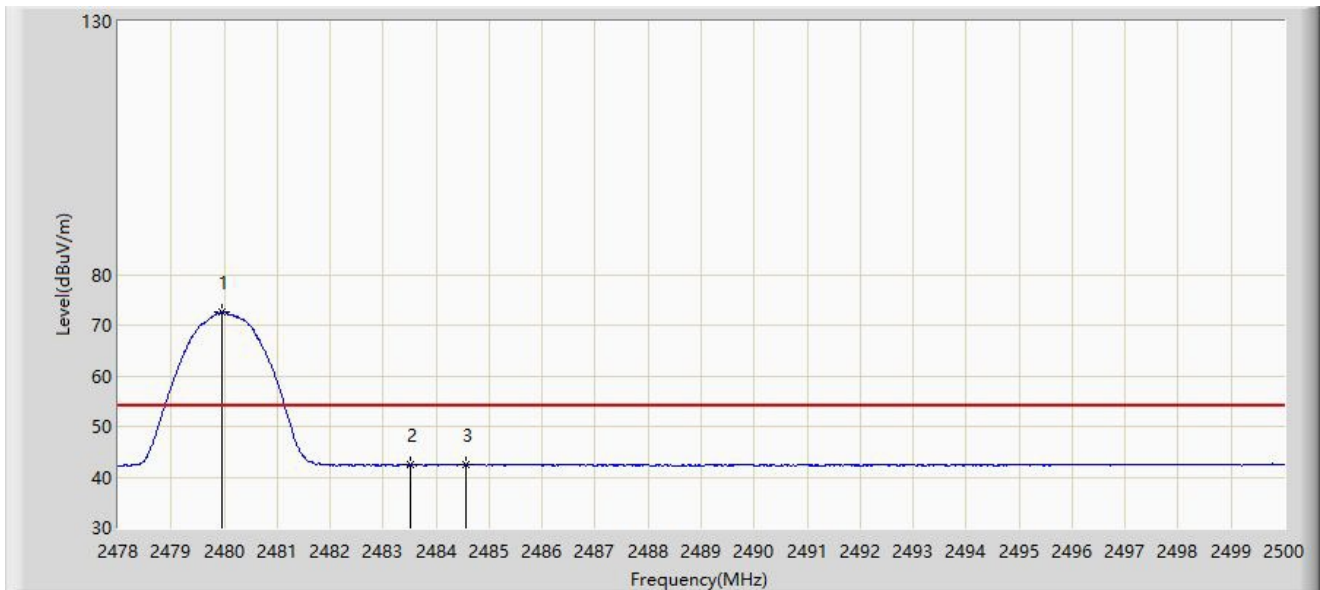
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.167	79.078	48.451	N/A	N/A	30.626	PK
2		2483.500	55.442	24.796	-18.558	74.000	30.646	PK
3	*	2485.414	56.295	25.638	-17.705	74.000	30.657	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2025-01-16
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: Wireless Noise Cancelling Neckband Headphones	Power: By Battery
Test Mode: Transmit by 2DH5 at 2480MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.969	72.603	41.977	N/A	N/A	30.625	AV
2		2483.500	42.350	11.704	-11.650	54.000	30.646	AV
3	*	2484.556	42.589	11.937	-11.411	54.000	30.652	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Appendix B - Test Setup Photograph

Refer to "R25S2025018-UT" file.

Appendix C - EUT Photograph

Refer to "R25S2025018-UE" file.

_____ The End _____