

Prüfbericht-Nr.: <i>Test report no.:</i>	CN25763V 001	Auftrags-Nr.: <i>Order no.:</i>	326095777	Seite 1 von 82 Page 1 of 82
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	1288983	Auftragsdatum: <i>Order date:</i>	2025-02-20	
Auftraggeber: <i>Client:</i>	IKEA of Sweden AB Box 702, SE-343 81 Älmhult, Sweden			
Prüfgegenstand: <i>Test item:</i>	KALLSUP			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	E2507			
Auftrags-Inhalt: <i>Order content:</i>	Test Report			
Prüfgrundlage: <i>Test specification:</i>	FCC CFR47 Part 15, Subpart C Section 15.247 RSS-Gen Issue 5, Amendment 2, February 2021 RSS-247 Issue 3, August 2023 ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2025-02-21 2025-04-07	Refer to photo document.		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003928047-015 A003964068-005~006			
Prüfzeitraum: <i>Testing period:</i>	2025-03-05 ~ 2025-05-15			
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland (Shanghai) Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shanghai) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>	<input checked="" type="checkbox"/> <u>Hongfei Wu</u>	genehmigt von: <i>authorized by:</i>	<input checked="" type="checkbox"/> <u>Yanli Fan</u>	
Datum: <i>Date:</i>	2025-09-05 <small>Signed by: Hongfei Wu</small>	Datum: <i>Date:</i>	2025-09-05 <small>Signed by: Yanli Fan</small>	
Stellung / Position:	Sachverständige(r)/Expert	Stellung / Position:	Sachverständige(r)/Expert	
Sonstiges / Other:	FCC ID: FHO-E2507 IC: 10912A-E2507 HVIN: E2507 PMN: KALLSUP			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>			
<small>* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet</small>				
<small>* Legend: P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested</small>				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

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Anmerkungen
Remarks

1	<p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfbedingungen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p>
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3	<p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>
4	<p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2023, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2023, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p>

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT*RESULT: Pass***5.1.2 20dB & 99% BANDWIDTH***RESULT: Pass***5.1.3 PEAK OUTPUT POWER***RESULT: Pass***5.1.4 FREQUENCY SEPARATION***RESULT: Pass***5.1.5 NUMBER OF HOPPING FREQUENCY***RESULT: Pass***5.1.6 TIME OF OCCUPANCY***RESULT: Pass***5.1.7 CONDUCTED BAND EDGE AND OUT-OF BAND EMISSIONS***RESULT: Pass***5.2.1 CONDUCTED EMISSION***RESULT: Pass***5.3.1 RADIATED BAND-EDGE***RESULT: Pass***5.3.2 RADIATED SPURIOUS EMISSION***RESULT: Pass*

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1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

2. Test Sites

2.1 Test Facilities

TÜV Rheinland (Shanghai) Co., Ltd.

Workshop14, North Half of Workshop 10 and Workshop 16, Pingqian (Taicang) Modern Industrial Park, No.525, Yuewang Lingang South Road, Shaxi, Taicang, Jiangsu, China

The used test equipment is in accordance with CISPR 16 for measurement of radio interference.

The Federal Communications Commission has reviewed the technical characteristics of the radiated and conducted emission facility, and has found these test facilities to be in compliance with the requirements of section 2.948 of the FCC rules. The description of the test facility is listed under FCC registration number 930979.

The Innovation, Science and Economic Development Canada has reviewed the technical characteristics of the radiated and conducted emission facility, and has found these test facilities to be in compliance. The description of the test facility is listed under chambers filing number 33038.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Equip.	Description	Model	Manufacturer	Due Date DD.MM.YYYY
EMC-C-196	Wireless connectivity tester	CMW270	Rohde & Schwarz	23.08.2025
EMC-C-302	Signal generator	SMB100B (6 GHz)	Rohde & Schwarz	10.12.2025
EMC-C-303	Vector Signal generator	SMW200A	Rohde & Schwarz	10.12.2025
EMC-C-304	OSP	OSP-B157W8	Rohde & Schwarz	10.12.2025
EMC-C-161	Spectrum analyser	FSV40	Rohde&Schwarz	15.07.2025
EMC-C-018	Double ridged horn antenna	BBHA 9120 D	Schwarzbeck	24.03.2026
EMC-C-066	EMI test receiver	ESCI	Rohde&Schwarz	27.10.2025
EMC-C-068	Broadband horn antenna	BBHA 9170	Schwarzbeck	18.06.2028
EMC-C-155	BiLog antenna	CBL 6112D	Teseq	24.03.2026
EMC-C-175	Preamplifier	EMC051845SE	EMCI Taiwan	24.07.2025
EMC-C-176	Preamplifier	EMC184045SE	EMCI Taiwan	24.07.2025
EMC-C-001	3 m semi-anechoic chamber	SAC3	Frankonia	03.12.2026
EMC-C-141	Shielded enclosure	10.055x3.605x3.000	Frankonia	08.11.2028
EMC-C-195	EMI test receiver	ESR3	Rohde&Schwarz	03.08.2025
EMC-C-190	Artificial mains network	ENV432	Rohde&Schwarz	11.10.2025
EMC-C-045	Dual display multimeter	F45	Fluke	28.06.2025
software				
EMC-S-036	RF measurement software	WMS32-WB (11.40.00)	Rohde&Schwarz	NA
EMC-S-032	EMI measurement software	EMC32-E+ (10.60.20)	Rohde&Schwarz	NA
EMC-S-028	EMI measurement software	EMC32-E+ (10.60.20)	Rohde&Schwarz	NA

2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

Table 2: Measurement Uncertainty

Measurement Type	Frequency	Uncertainty
Antenna Port Conducted Emission	< 1GHz	±0.39dB
	> 1GHz	±0.68dB
Conducted Emission	150kHz - 30MHz	±2.33dB
Radiated Emission	9kHz - 30MHz	±2.93dB
	30MHz - 1GHz	±5.34dB
	> 1GHz	±5.40dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT (Equipment Under Test) is a Bluetooth speaker.
The aim of this report is to evaluate RF character of Bluetooth Classic of the EUT.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Description of EUT	
Product Name:	KALLSUP
Model No.:	E2507
Operation Voltage:	DC 5V (USB Type C) DC 3.6V (Li-ion Battery)
RF Technical:	1) Bluetooth Classic 2) Bluetooth Low Energy
Technical Specification of Bluetooth Classic	
Frequency Range:	2402~2480MHz
Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
Antenna Type:	PCB Antenna
Antenna Gain:	2.49 dBi (declared by client)

Table 4: RF Channel List

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

3.3 Independent Operation Modes

Test frequencies are lowest channel: 2402 MHz, middle channel: 2441 MHz, highest channel: 2480 MHz and hopping mode.

The basic operation modes are:

- A. Bluetooth Classic transmitting mode
- B. Radio operating mode

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024.

Test Software: FCC_assist_1.0.2.2

Table 5: Power parameter value

Mode	Power Parameter Setting Value
BR	3.0
EDR	3.0

4.3 Special Accessories and Auxiliary Equipment

Table 6: Special Accessories

Accessories	Parameter
RF Cable between the antenna port and test system	Cable loss: 0.5dB

Note: The RfCable used in the test was provided by

- Client
 Test Lab

And the cable loss has been factored in the related test.

Table 7: Auxiliary Equipment

Equipment	Manufacturer	Model
Laptop	Lenovo	21AJ-S57N0J
Mobile phone	Apple	iPhone 15
Computer	Lenovo	ThinkPad T450
Power supply	IKEA	ICPSW5-5NA-1

4.4 Countermeasures to achieve EMC Compliance

Null.

5. Test Results

5.1 Conducted Testing at Antenna Port

5.1.1 Antenna Requirement

RESULT: **Pass**

According to the manufacturer declared, the EUT has one PCB antenna, the directional gain of antenna is 2.49 dBi and the antenna is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Table 8: Antenna Requirement

FCC 15.203 – Antenna Requirement 1	
Requirement:	No antenna other than that furnished by the responsible party shall be used with the device
Results:	Antenna type: PCB antenna
Verdict:	Pass

FCC 15.204 – Antenna Requirement 2	
Requirement:	An intentional radiator may be operated only with the antenna with which it is authorized. If an antenna is marketed with the intentional radiator, it shall be of a type which is authorized with the intentional radiator.
Results:	Only one PCB antenna can be used
Verdict:	Pass

RSS-Gen 6.4 – External Control	
Requirement:	The device shall not have any external controls accessible to the user that enable it to be adjusted, selected or programmed to operate in violation of the regulatory requirements, including RSS-Gen and the applicable RSSs
Results:	The device does not have any transmitter external controls accessible to the user that can be adjusted and operated in violation of the limits of this standard.
Verdict:	PASS

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Page 14 of 82**RSS-Gen 6.8 – Antenna Requirement**

Requirement: When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer.

Results:

a) Antenna Type:	PCB Antenna
b) Manufacture:	N/A
c) Model No.:	N/A
d) Gain with reference to an isotropic radiator:	2.49 dBi

Verdict: PASS

5.1.2 20dB & 99% Bandwidth**RESULT:****Pass**

Date of testing : 2025-04-30
Ambient temperature : 21.4°C
Relative humidity : 53.5%
Atmospheric pressure : 101kPa
Test requirement : FCC Part 15.247(a)(1)
RSS-247 Issue 3, August 2023, Clause 5.1(a)
RSS-Gen Issue 5, Amendment 2, February 2021,
Clause 6.7
Test procedure : ANSI C63.10-2020+Cor. 1-2023+C63.10a-
2024+Errata to C63.10a-2024
Test voltage : DC 3.6V
Test modes applied : A

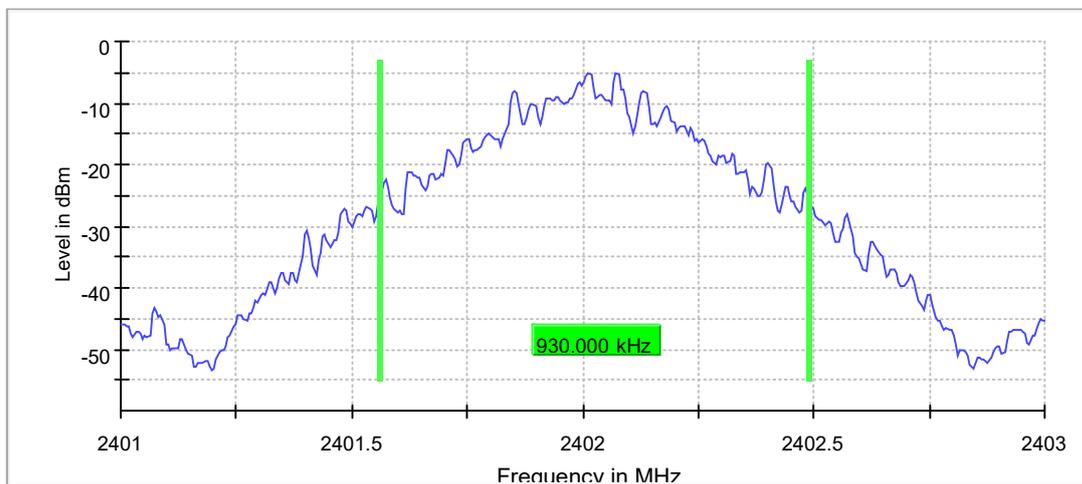
Emission Bandwidth 20 dB (1-DH5, 2402 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	0.930000	---	---	2401.562500	2402.492500

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	-4.9	PASS

20 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweptime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.08 dB	0.50 dB

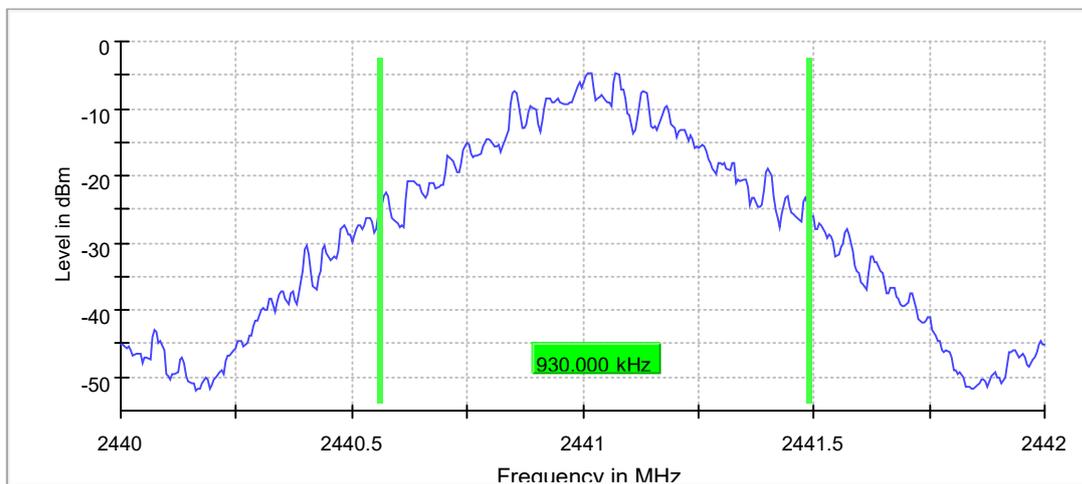
Emission Bandwidth 20 dB (1-DH5, 2441 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2441.000000	0.930000	---	---	2440.562500	2441.492500

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2441.000000	-4.5	PASS

20 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweptime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.17 dB	0.50 dB

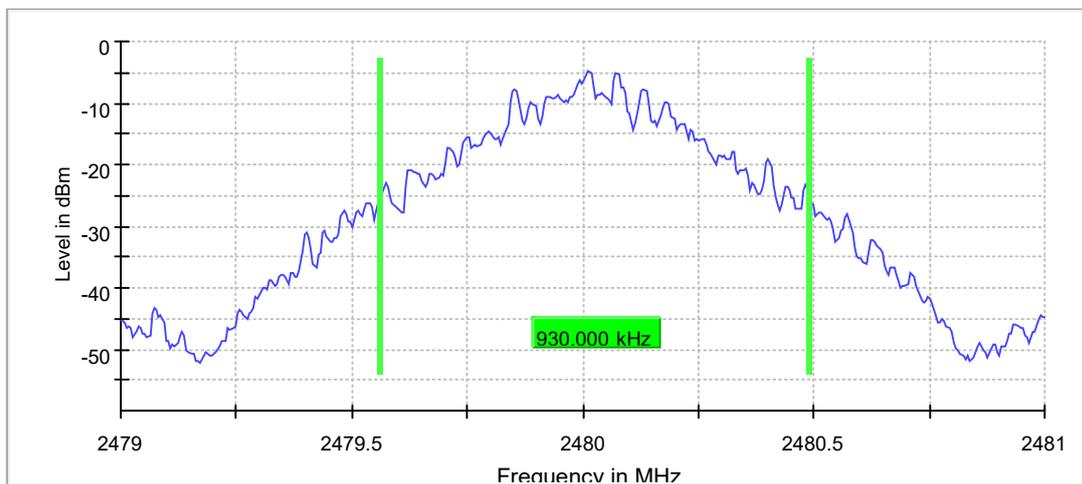
Emission Bandwidth 20 dB (1-DH5, 2480 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	0.930000	---	---	2479.562500	2480.492500

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	-4.8	PASS

20 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	7 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.25 dB	0.50 dB

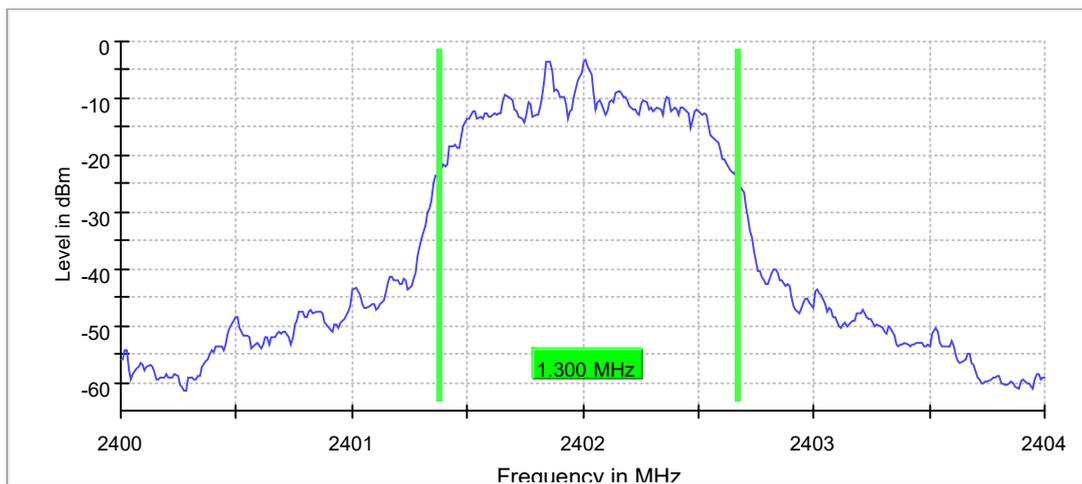
Emission Bandwidth 20 dB (2-DH5, 2402 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.300000	---	---	2401.375000	2402.675000

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	-3.2	PASS

20 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweptime	94.824 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.08 dB	0.50 dB

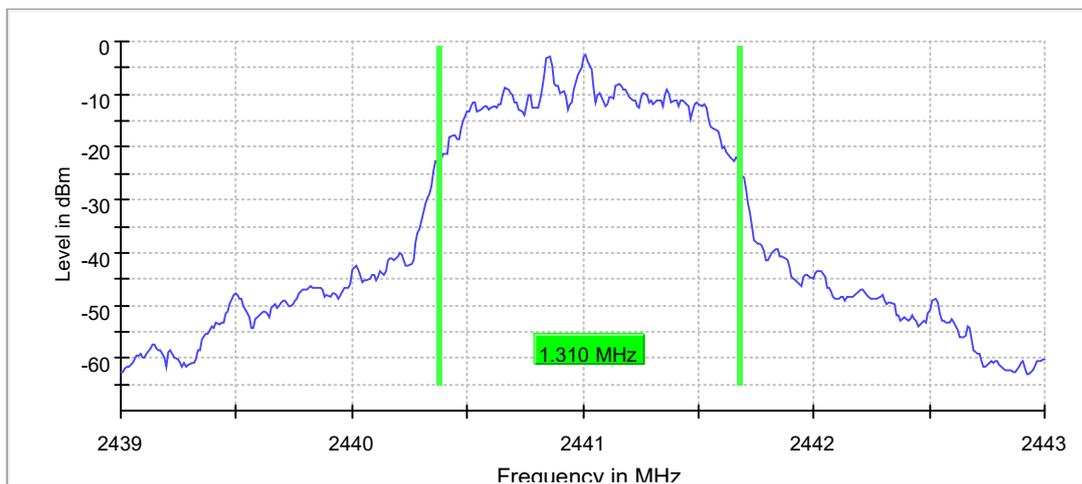
Emission Bandwidth 20 dB (2-DH5, 2441 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2441.000000	1.310000	---	---	2440.375000	2441.685000

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2441.000000	-2.6	PASS

20 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweptime	94.824 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.08 dB	0.50 dB

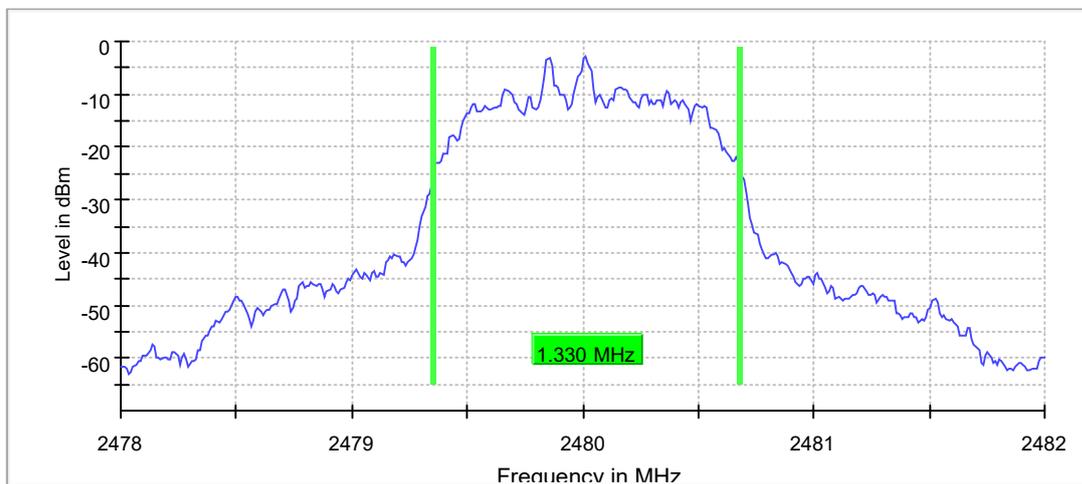
Emission Bandwidth 20 dB (2-DH5, 2480 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.330000	---	---	2479.355000	2480.685000

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	-2.9	PASS

20 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.824 μ s	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.12 dB	0.50 dB

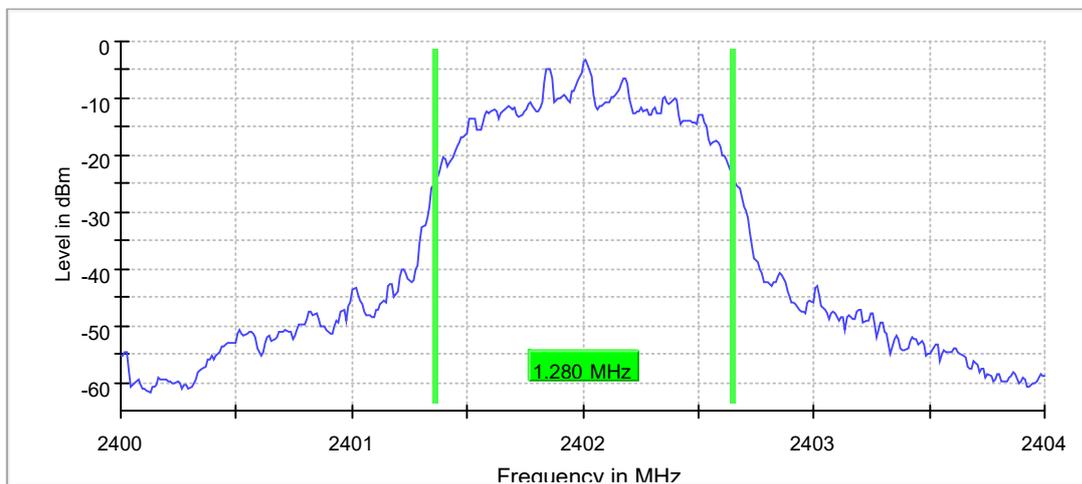
Emission Bandwidth 20 dB (3-DH5, 2402 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.280000	---	---	2401.365000	2402.645000

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	-3.2	PASS

20 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.824 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.08 dB	0.50 dB

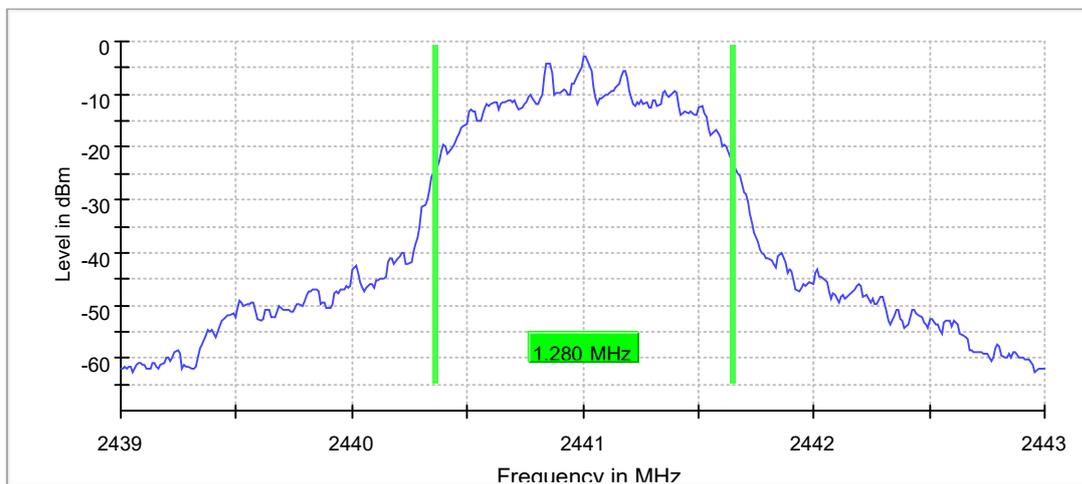
Emission Bandwidth 20 dB (3-DH5, 2441 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2441.000000	1.280000	---	---	2440.365000	2441.645000

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2441.000000	-2.6	PASS

20 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweptime	94.824 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.39 dB	0.50 dB

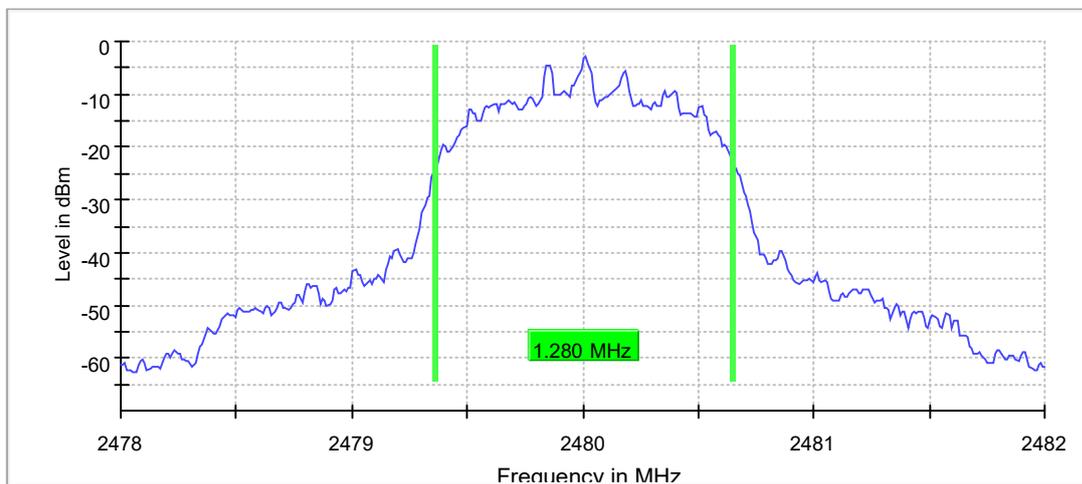
Emission Bandwidth 20 dB (3-DH5, 2480 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.280000	---	---	2479.365000	2480.645000

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	-2.8	PASS

20 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweptime	94.824 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	12 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.16 dB	0.50 dB

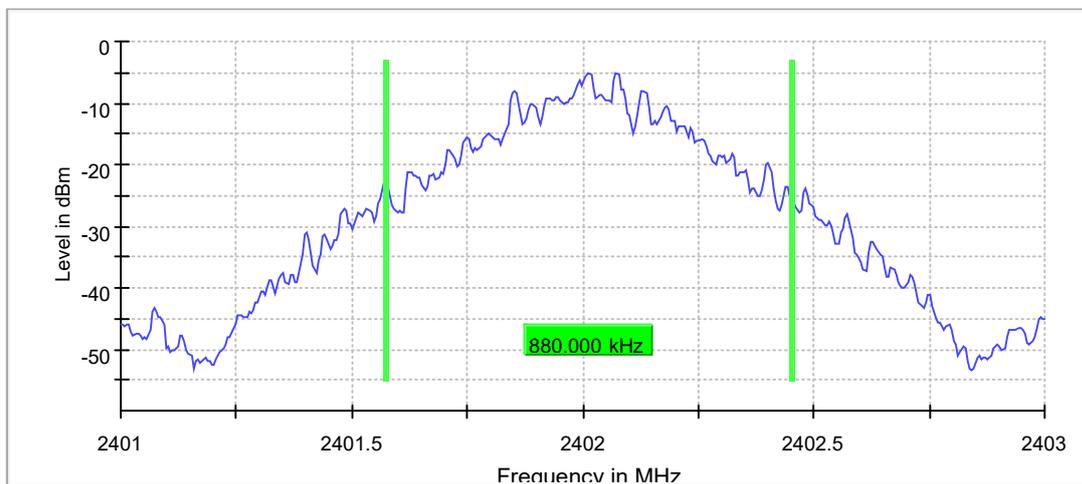
Occupied Channel Bandwidth 99% (1-DH5, 2402 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	0.880000	---	---	2401.572500	2402.452500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS

99 % Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.15 dB	0.30 dB

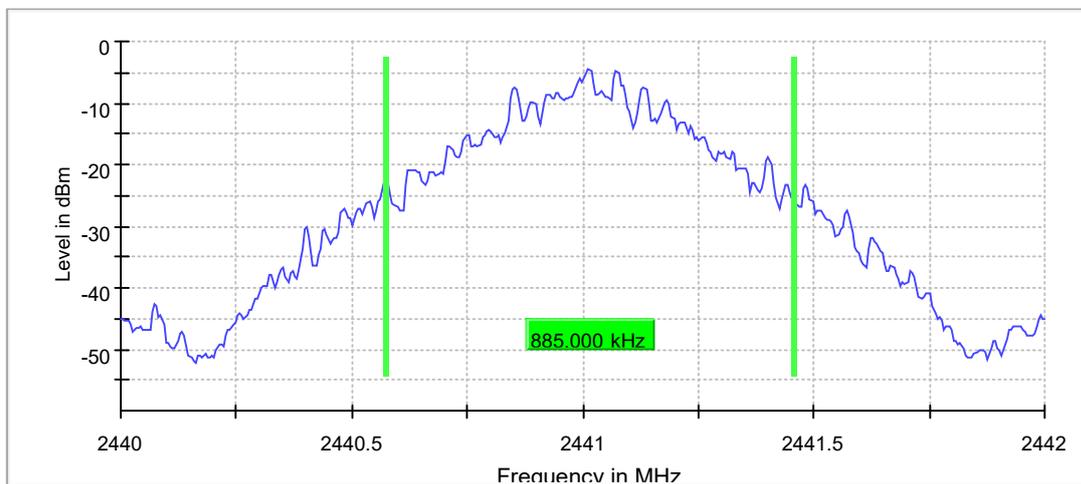
Occupied Channel Bandwidth 99% (1-DH5, 2441 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2441.000000	0.885000	---	---	2440.572500	2441.457500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2441.000000	PASS

99 % Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.20 dB	0.30 dB

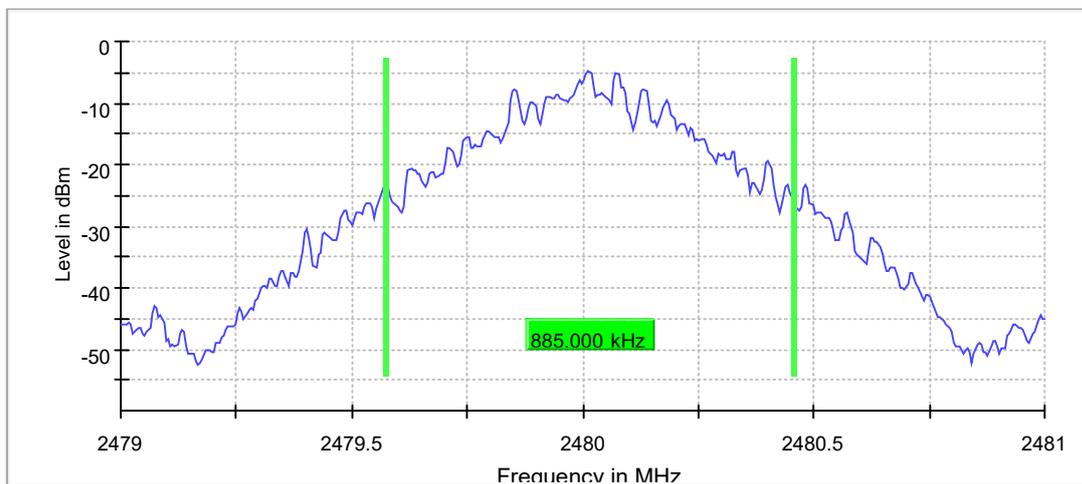
Occupied Channel Bandwidth 99% (1-DH5, 2480 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	0.885000	---	---	2479.572500	2480.457500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS

99 % Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	8 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.18 dB	0.30 dB

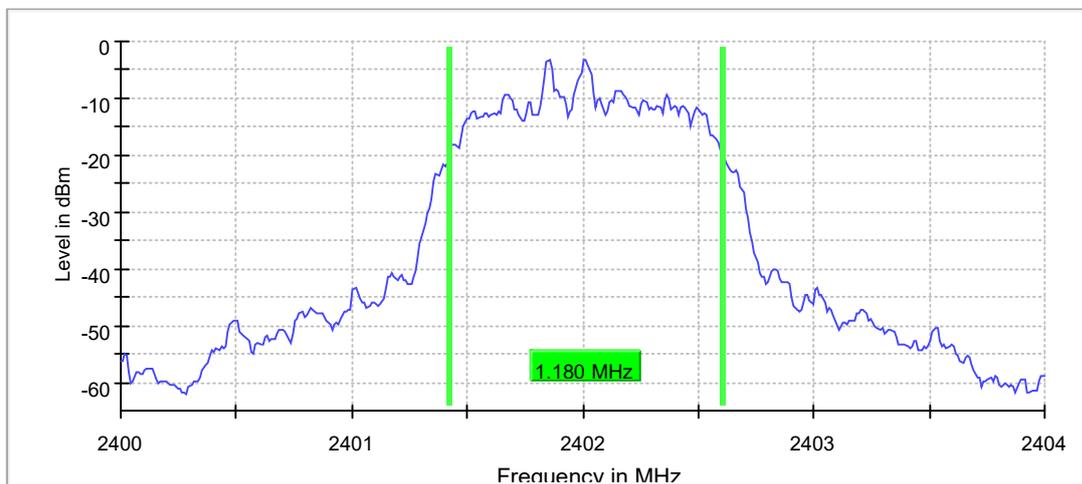
Occupied Channel Bandwidth 99% (2-DH5, 2402 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.180000	---	---	2401.425000	2402.605000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS

99 % Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.824 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	8 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.04 dB	0.30 dB

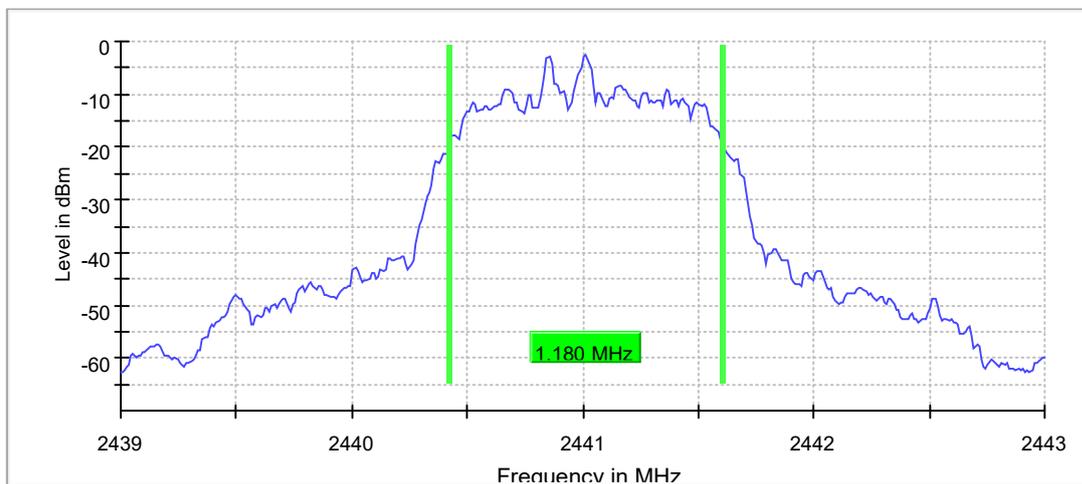
Occupied Channel Bandwidth 99% (2-DH5, 2441 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2441.000000	1.180000	---	---	2440.425000	2441.605000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2441.000000	PASS

99 % Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.824 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.21 dB	0.30 dB

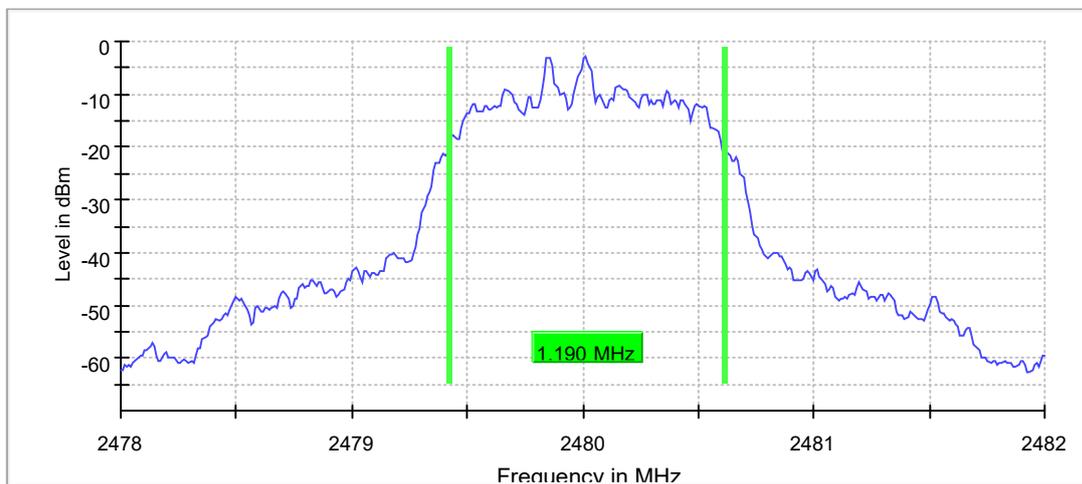
Occupied Channel Bandwidth 99% (2-DH5, 2480 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.190000	---	---	2479.425000	2480.615000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS

99 % Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.824 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.12 dB	0.30 dB

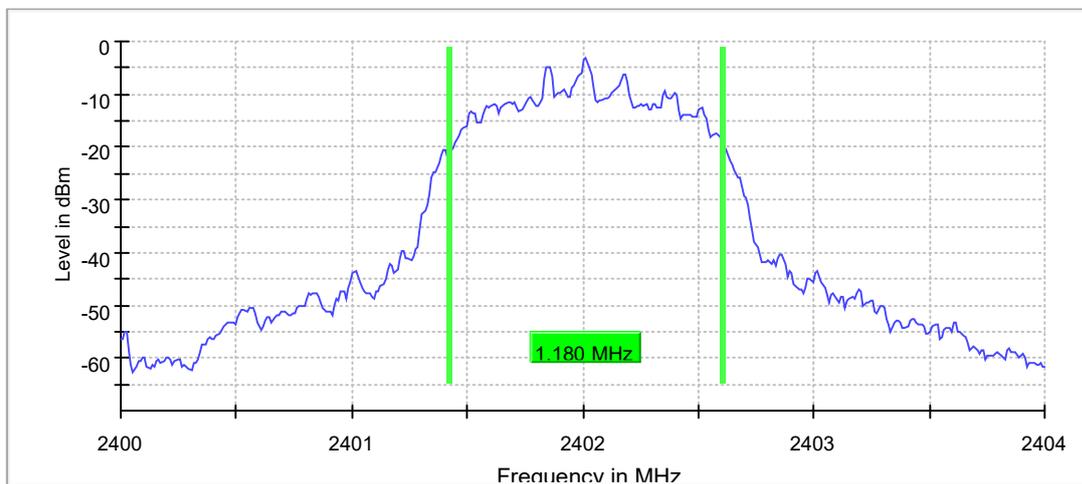
Occupied Channel Bandwidth 99% (3-DH5, 2402 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.180000	---	---	2401.425000	2402.605000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS

99 % Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.824 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.11 dB	0.30 dB

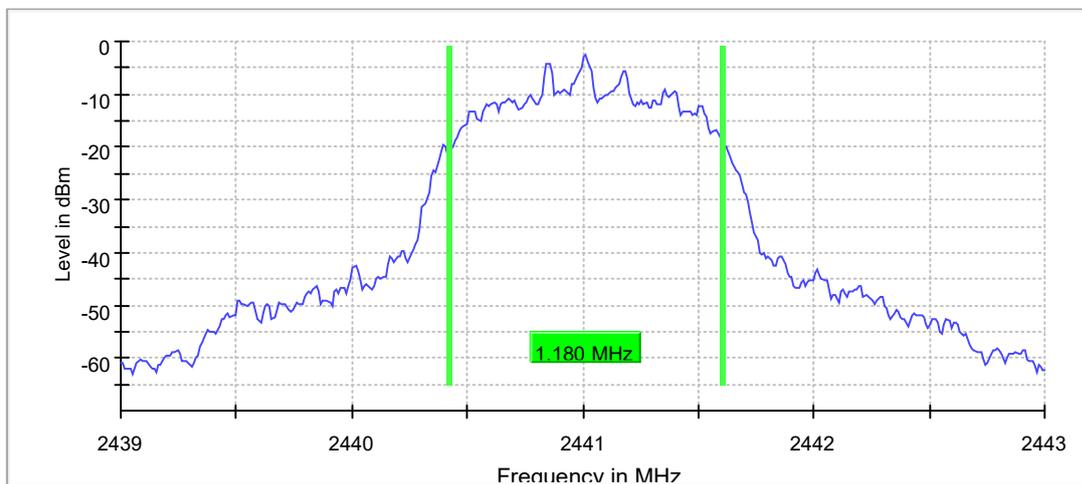
Occupied Channel Bandwidth 99% (3-DH5, 2441 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2441.000000	1.180000	---	---	2440.425000	2441.605000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2441.000000	PASS

99 % Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.824 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.07 dB	0.30 dB

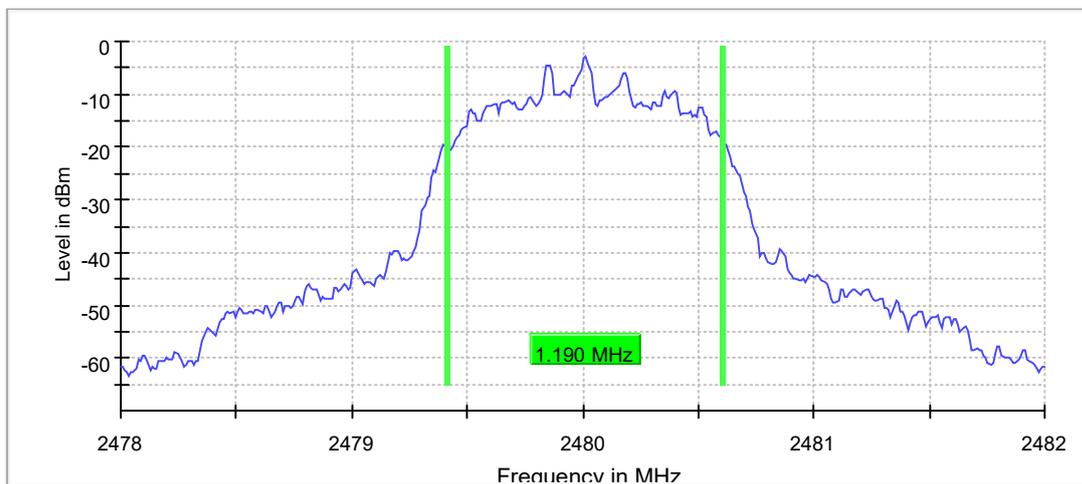
Occupied Channel Bandwidth 99% (3-DH5, 2480 MHz)

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.190000	---	---	2479.415000	2480.605000

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS

99 % Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48200 GHz	2.48200 GHz
Span	4.000 MHz	4.000 MHz
RBW	20.000 kHz	>= 20.000 kHz
VBW	100.000 kHz	>= 60.000 kHz
SweepPoints	400	~ 400
Sweeptime	94.824 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.12 dB	0.30 dB

5.1.4 Frequency Separation

RESULT:**Pass**

Date of testing : 2025-04-30
Ambient temperature : 21.7°C
Relative humidity : 53.2%
Atmospheric pressure : 101kPa
Test requirement : FCC Part 15.247(a)(1)
RSS-247 Issue 3, August 2023, Clause 5.1(b)
Test procedure : ANSI C63.10-2020+Cor. 1-2023+C63.10a-
2024+Errata to C63.10a-2024
Test voltage : DC 3.6V
Test modes applied : A

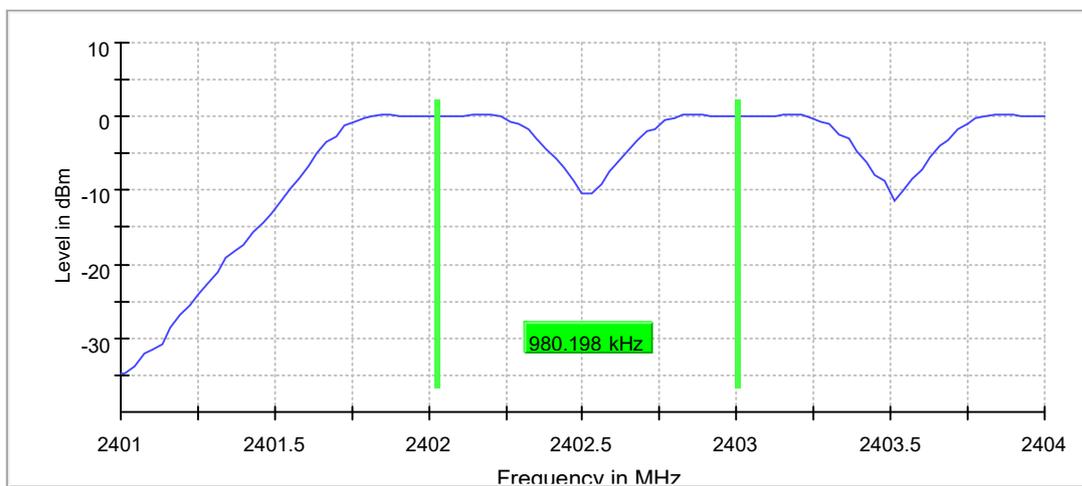
Carrier Frequency Separation (1-DH5, 2402 MHz)

DUT Frequency (MHz)	Frequency Separation (MHz)	Limit Min (MHz)	Limit Max (MHz)	Center Frequency low Channel (MHz)	Center Frequency high Channel (MHz)
2402.000000	0.980198	0.620000	---	2402.024752	2403.004950

(continuation of the "Result" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS

CFS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	17 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.23 dB	0.50 dB

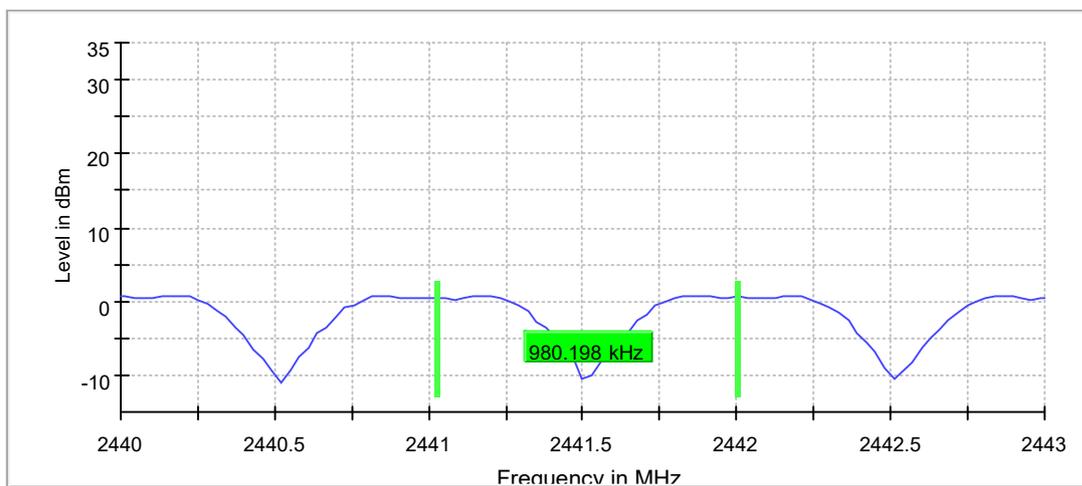
Carrier Frequency Separation (1-DH5, 2441 MHz)

DUT Frequency (MHz)	Frequency Separation (MHz)	Limit Min (MHz)	Limit Max (MHz)	Center Frequency low Channel (MHz)	Center Frequency high Channel (MHz)
2441.000000	0.980198	0.620000	---	2441.024752	2442.004950

(continuation of the "Result" table from column 6 ...)

DUT Frequency (MHz)	Result
2441.000000	PASS

CFS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.00 dB	0.50 dB

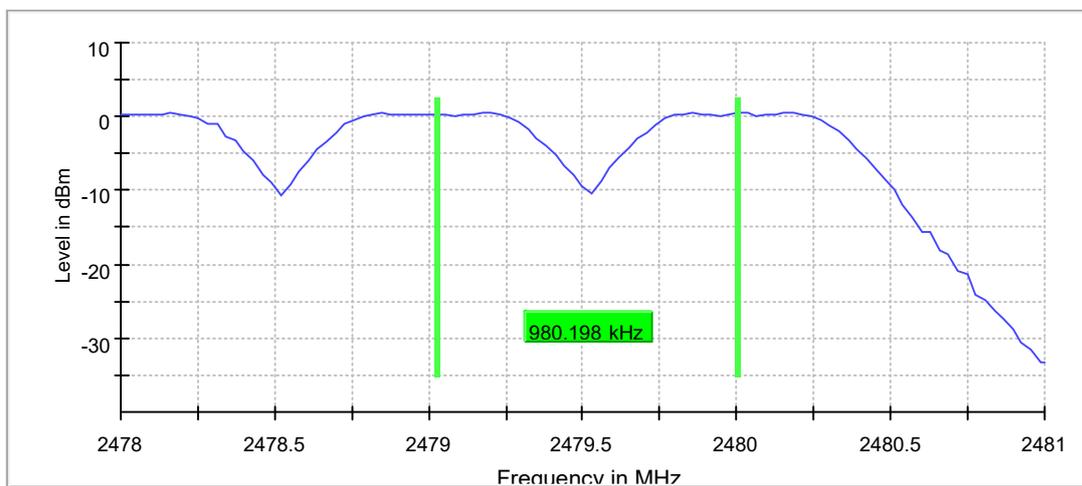
Carrier Frequency Separation (1-DH5, 2480 MHz)

DUT Frequency (MHz)	Frequency Separation (MHz)	Limit Min (MHz)	Limit Max (MHz)	Center Frequency low Channel (MHz)	Center Frequency high Channel (MHz)
2480.000000	0.980198	0.620000	---	2479.024752	2480.004950

(continuation of the "Result" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS

CFS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	20 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.09 dB	0.50 dB

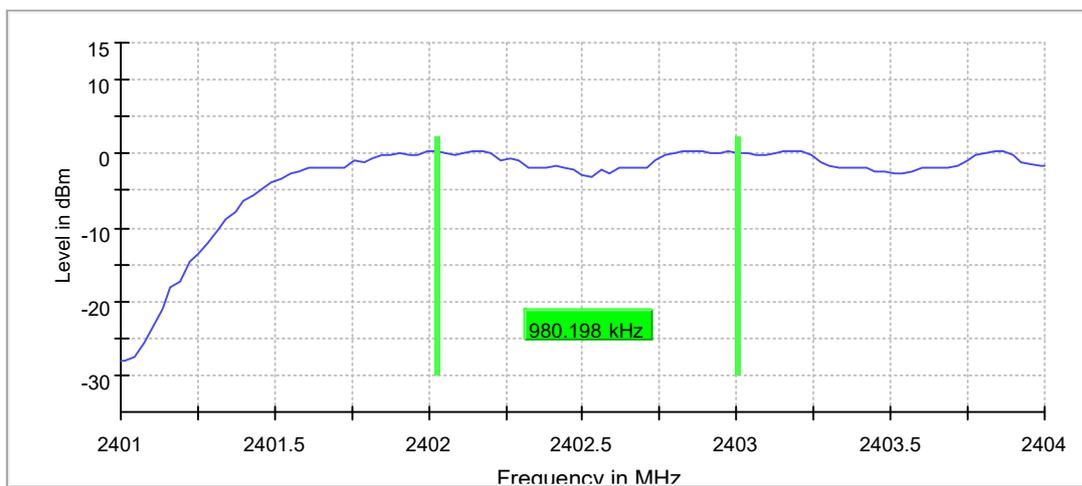
Carrier Frequency Separation (2-DH5, 2402 MHz)

DUT Frequency (MHz)	Frequency Separation (MHz)	Limit Min (MHz)	Limit Max (MHz)	Center Frequency low Channel (MHz)	Center Frequency high Channel (MHz)
2402.000000	0.980198	0.866667	---	2402.024752	2403.004950

(continuation of the "Result" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS

CFS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	42 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.12 dB	0.50 dB

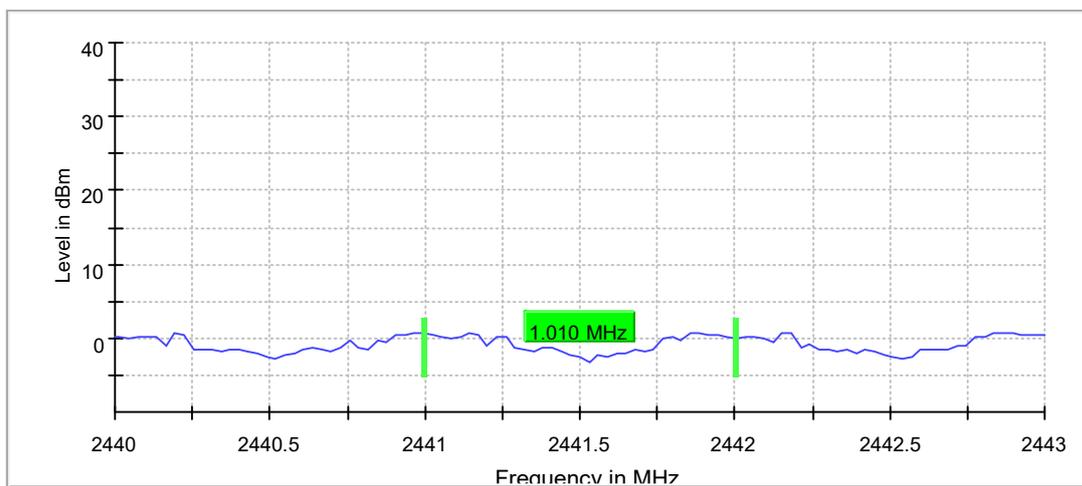
Carrier Frequency Separation (2-DH5, 2441 MHz)

DUT Frequency (MHz)	Frequency Separation (MHz)	Limit Min (MHz)	Limit Max (MHz)	Center Frequency low Channel (MHz)	Center Frequency high Channel (MHz)
2441.000000	1.009900	0.873333	---	2440.995050	2442.004950

(continuation of the "Result" table from column 6 ...)

DUT Frequency (MHz)	Result
2441.000000	PASS

CFS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.00 dB	0.50 dB

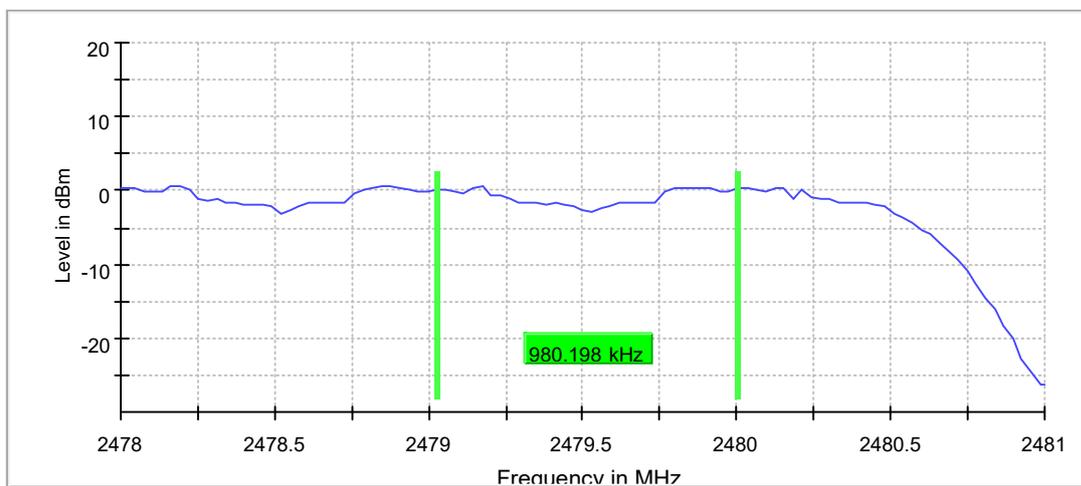
Carrier Frequency Separation (2-DH5, 2480 MHz)

DUT Frequency (MHz)	Frequency Separation (MHz)	Limit Min (MHz)	Limit Max (MHz)	Center Frequency low Channel (MHz)	Center Frequency high Channel (MHz)
2480.000000	0.980198	0.886667	---	2479.024752	2480.004950

(continuation of the "Result" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS

CFS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	43 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.14 dB	0.50 dB

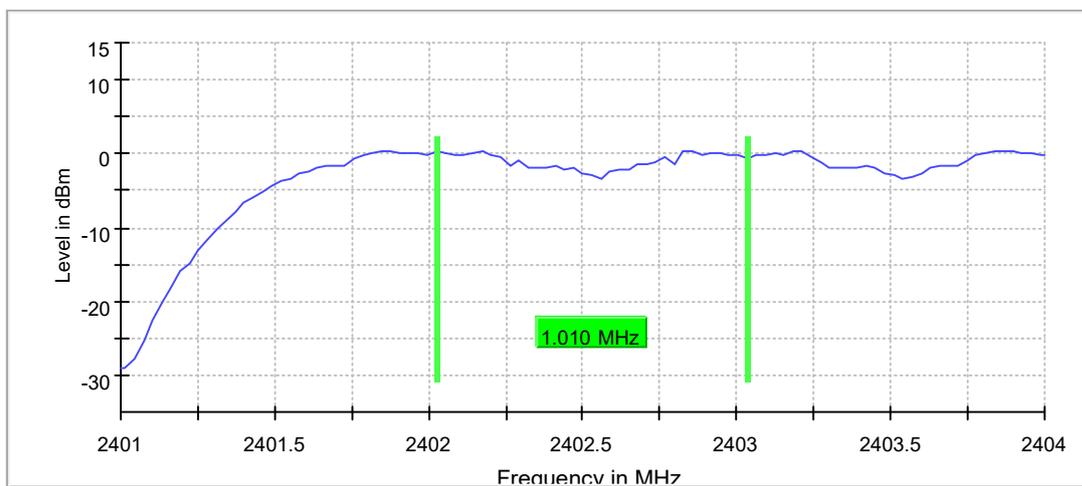
Carrier Frequency Separation (3-DH5, 2402 MHz)

DUT Frequency (MHz)	Frequency Separation (MHz)	Limit Min (MHz)	Limit Max (MHz)	Center Frequency low Channel (MHz)	Center Frequency high Channel (MHz)
2402.000000	1.009901	0.853333	---	2402.024752	2403.034653

(continuation of the "Result" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS

CFS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40400 GHz	2.40400 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	55 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.00 dB	0.50 dB

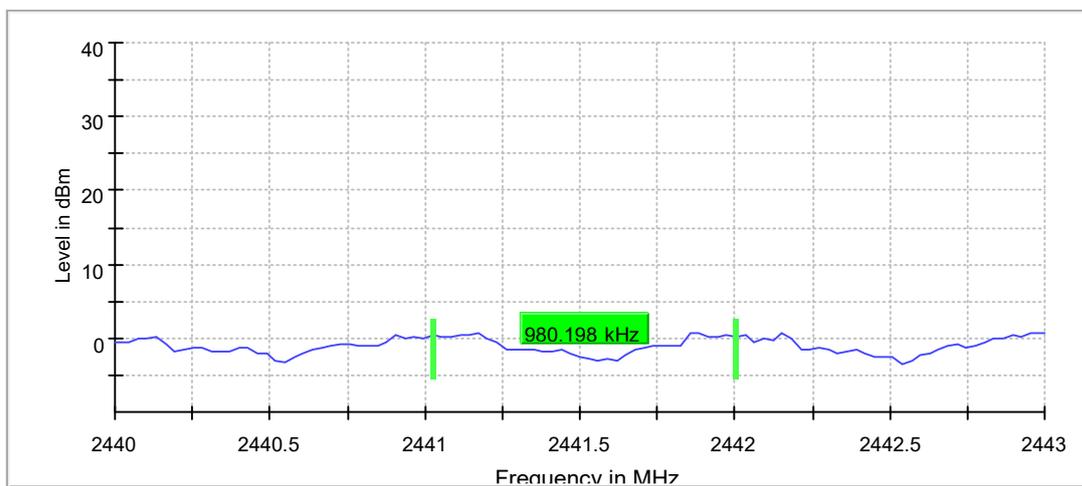
Carrier Frequency Separation (3-DH5, 2441 MHz)

DUT Frequency (MHz)	Frequency Separation (MHz)	Limit Min (MHz)	Limit Max (MHz)	Center Frequency low Channel (MHz)	Center Frequency high Channel (MHz)
2441.000000	0.980198	0.853333	---	2441.024752	2442.004950

(continuation of the "Result" table from column 6 ...)

DUT Frequency (MHz)	Result
2441.000000	PASS

CFS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	13 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.00 dB	0.50 dB

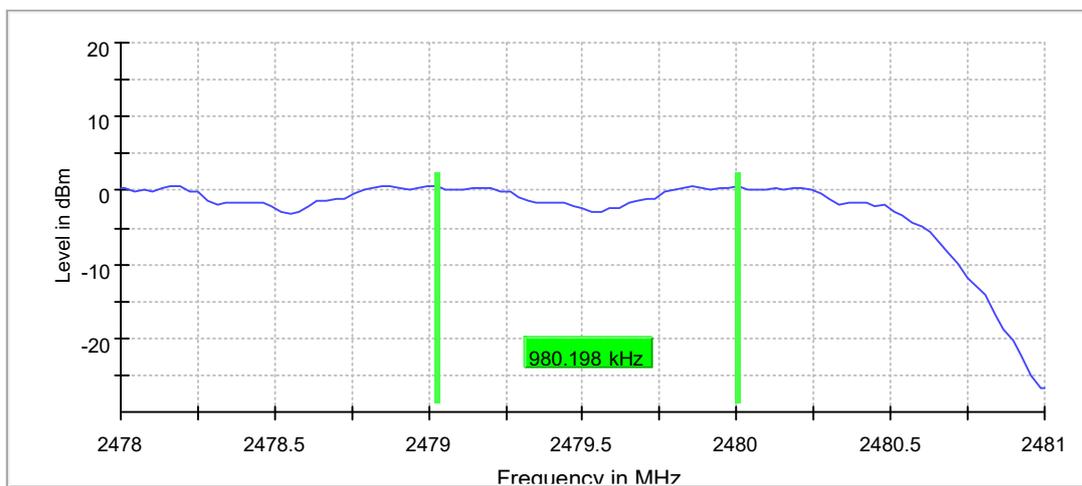
Carrier Frequency Separation (3-DH5, 2480 MHz)

DUT Frequency (MHz)	Frequency Separation (MHz)	Limit Min (MHz)	Limit Max (MHz)	Center Frequency low Channel (MHz)	Center Frequency high Channel (MHz)
2480.000000	0.980198	0.853333	---	2479.024752	2480.004950

(continuation of the "Result" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS

CFS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47800 GHz	2.47800 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	3.000 MHz	3.000 MHz
RBW	300.000 kHz	<= 300.000 kHz
VBW	300.000 kHz	>= 300.000 kHz
SweepPoints	101	~ 10
Sweeptime	1.000 ms	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	45 / max. 150	max. 150
Stable	10 / 10	10
Max Stable Difference	0.34 dB	0.50 dB

5.1.5 Number of Hopping Frequency

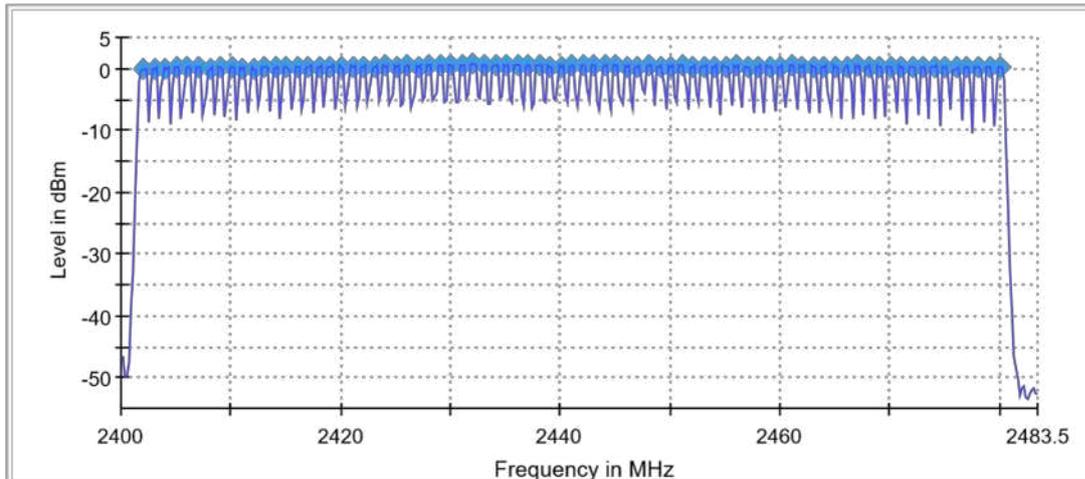
RESULT:**Pass**

Date of testing : 2025-04-30
Ambient temperature : 21.5°C
Relative humidity : 53.8%
Atmospheric pressure : 101kPa
Test requirement : FCC 15.247(a)(1)(iii)
RSS-247 Issue 3, August 2023, Clause 5.1(d)
Test procedure : ANSI C63.10-2020+Cor. 1-2023+C63.10a-
2024+Errata to C63.10a-2024
Test voltage : DC 3.6V
Test modes applied : A

Hopping Frequencies (1-DH5)

Channels	Limit Min	Limit Max	Result
79	15	---	PASS

Sequence



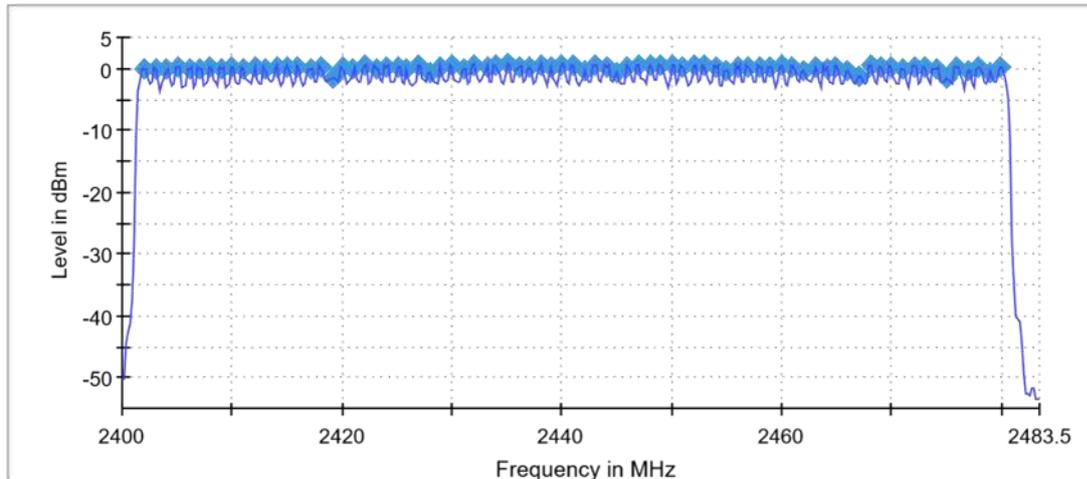
Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	200.000 kHz	<= 299.000 kHz
VBW	200.000 kHz	>= 200.000 kHz
SweepPoints	418	~ 418
Sweeptime	1.060 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	59 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.44 dB	0.50 dB

Hopping Frequencies (2-DH5)

Channels	Limit Min	Limit Max	Result
79	15	---	PASS

Sequence



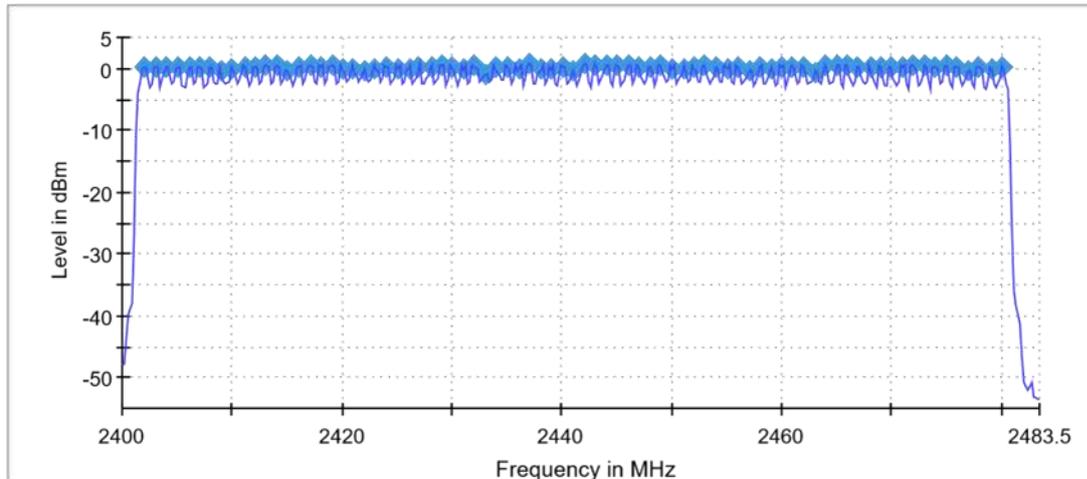
Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	200.000 kHz	<= 299.000 kHz
VBW	200.000 kHz	>= 200.000 kHz
SweepPoints	418	~ 418
Sweeptime	1.060 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	110 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.35 dB	0.50 dB

Hopping Frequencies (3-DH5)

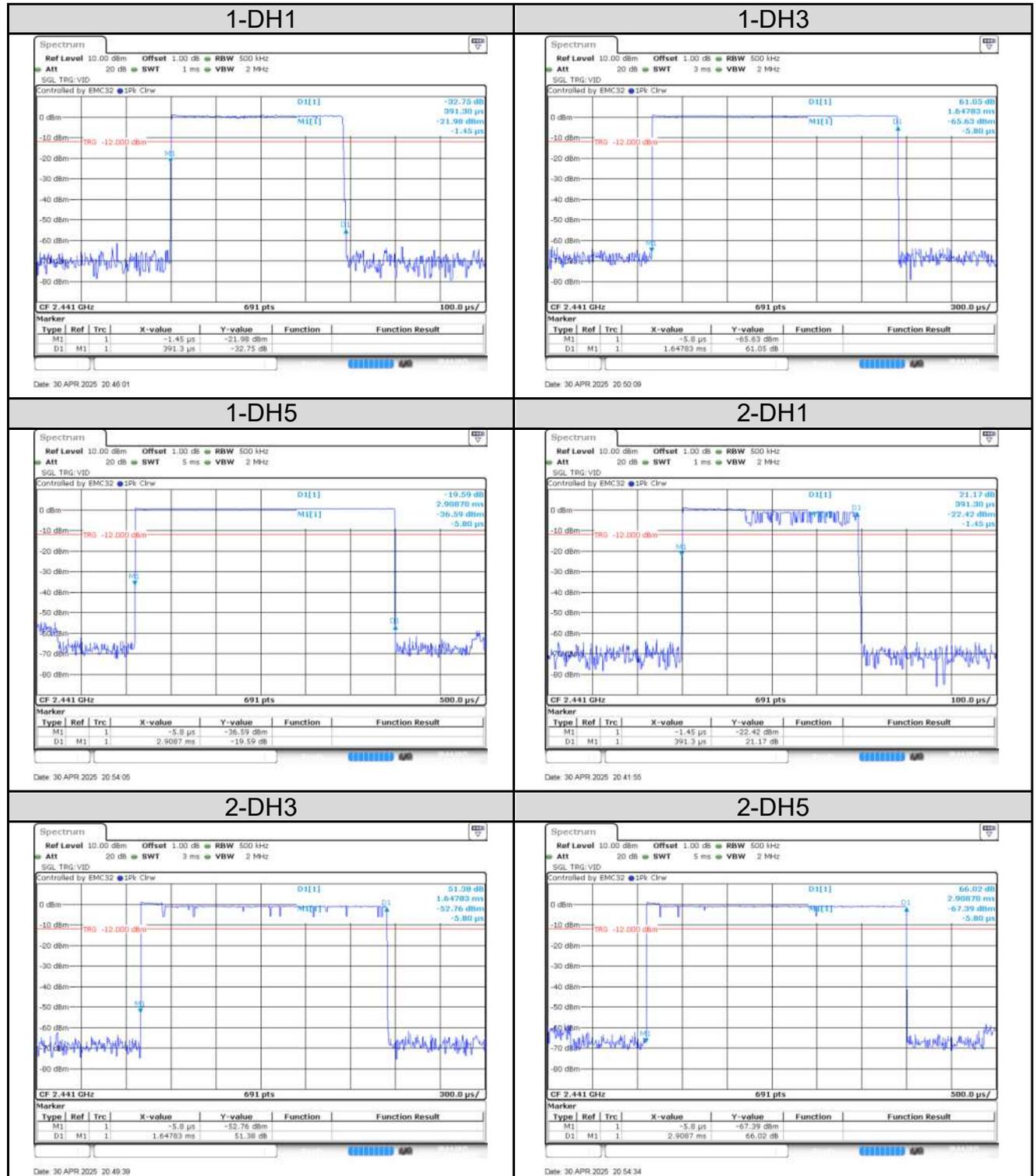
Channels	Limit Min	Limit Max	Result
79	15	---	PASS

Sequence



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	200.000 kHz	<= 299.000 kHz
VBW	200.000 kHz	>= 200.000 kHz
SweepPoints	418	~ 418
Sweeptime	1.060 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	131 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.00 dB	0.50 dB

Figure 1: Dwell Time


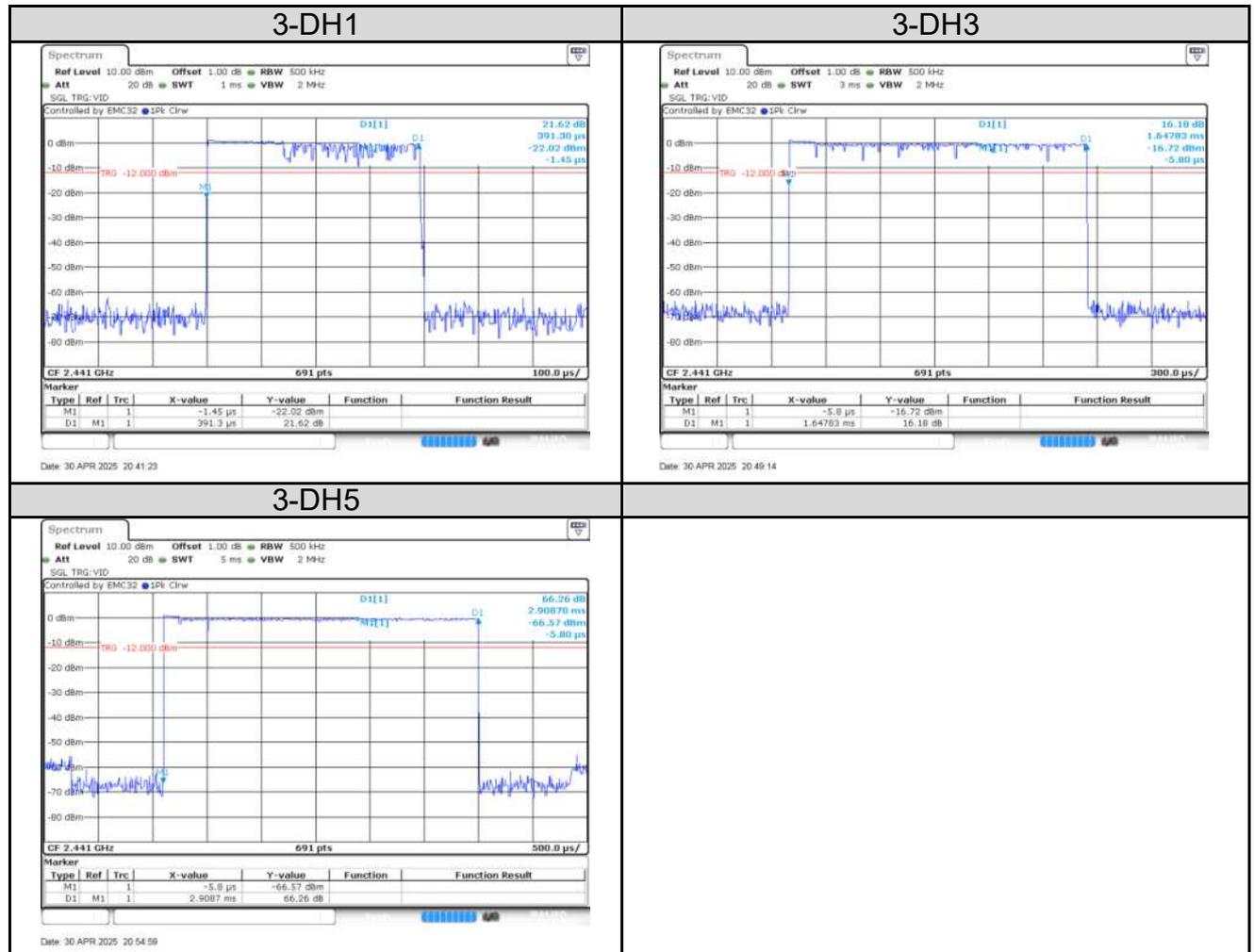
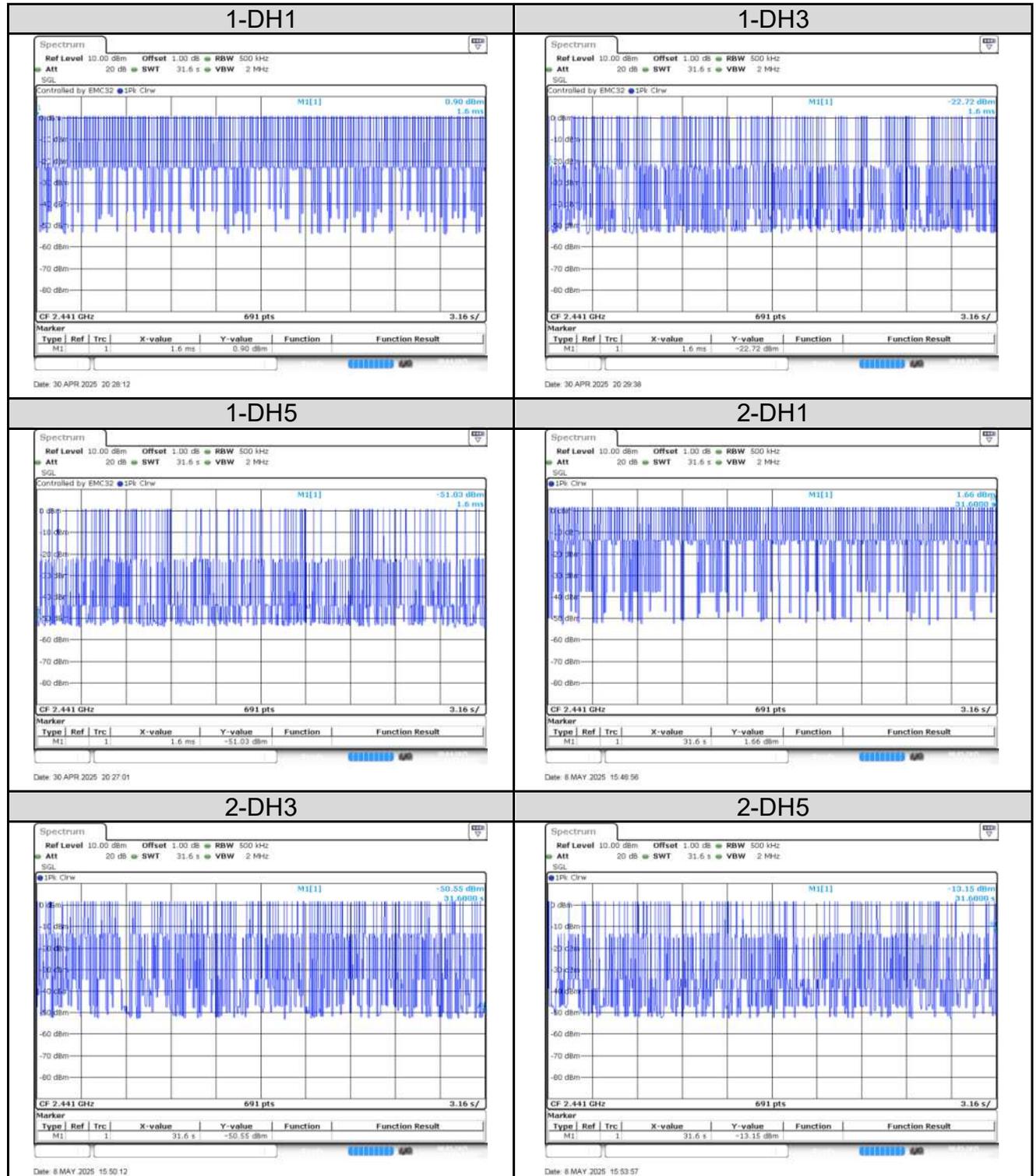
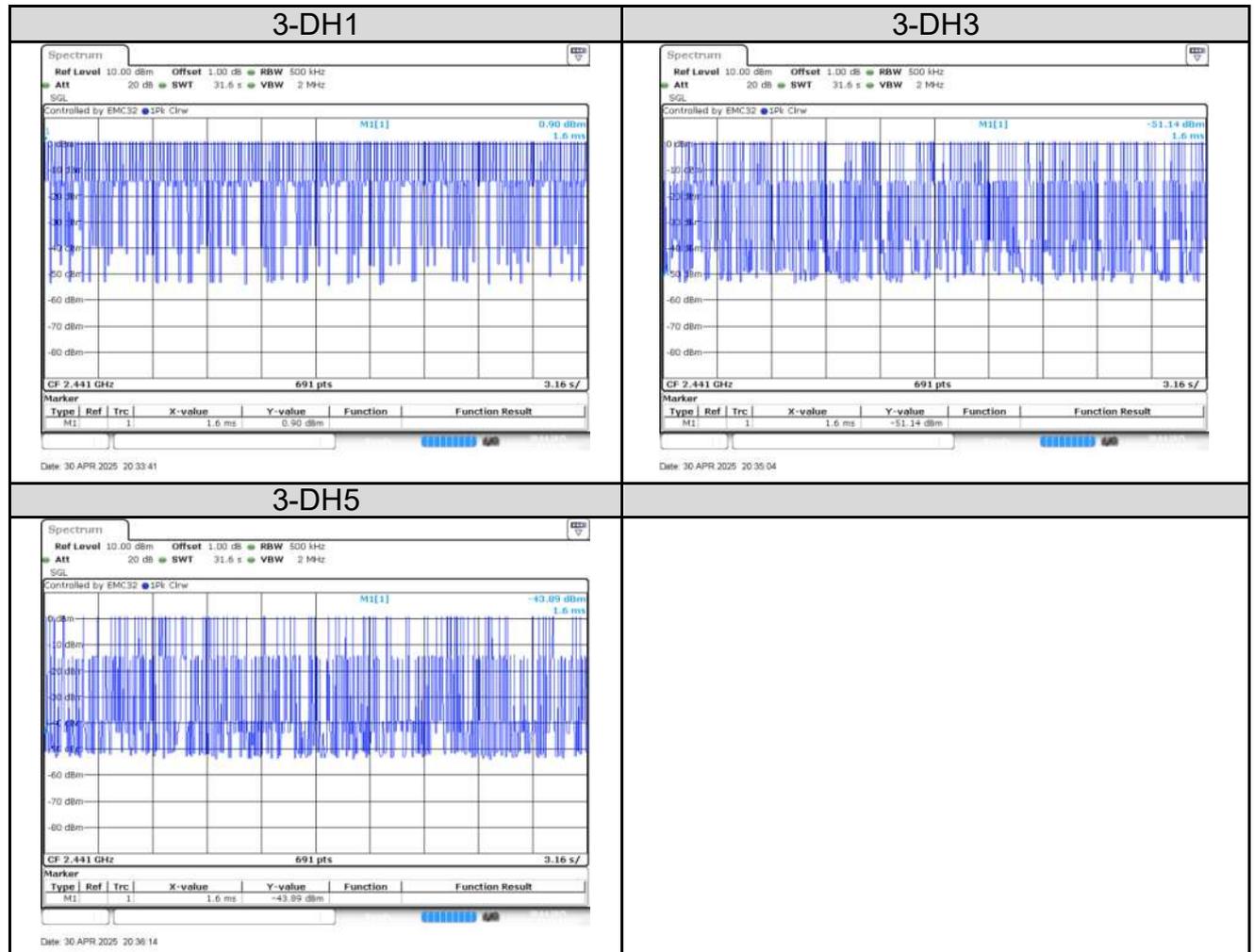


Figure 2: Number of Hops


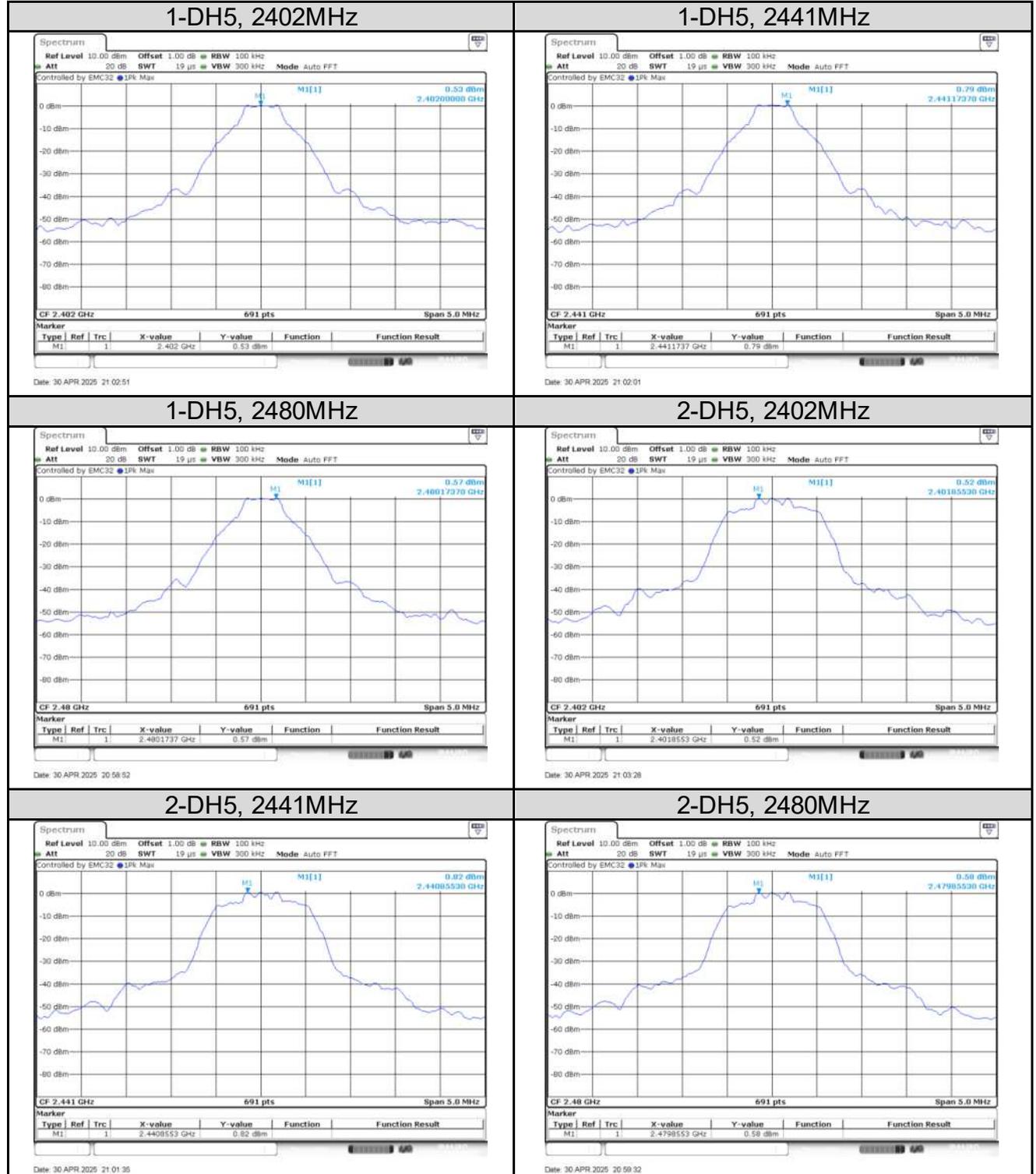


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5.1.7 Conducted Band Edge and out-of Band Emissions

RESULT:**Pass**

Date of testing : 2025-04-30, 2025-05-08
Ambient temperature : 21.2°C, 22.8°C
Relative humidity : 53.8%, 55.3%
Atmospheric pressure : 101kPa
Test requirement : FCC Part 15.247(d)
RSS-247 Issue 3, August 2023, Clause 5.5
Test procedure : ANSI C63.10-2020+Cor. 1-2023+C63.10a-
2024+Errata to C63.10a-2024
Test voltage : DC 3.6V
Test modes applied : A

Figure 3: Reference Level


3-DH5, 2402MHz

3-DH5, 2441MHz

3-DH5, 2480MHz

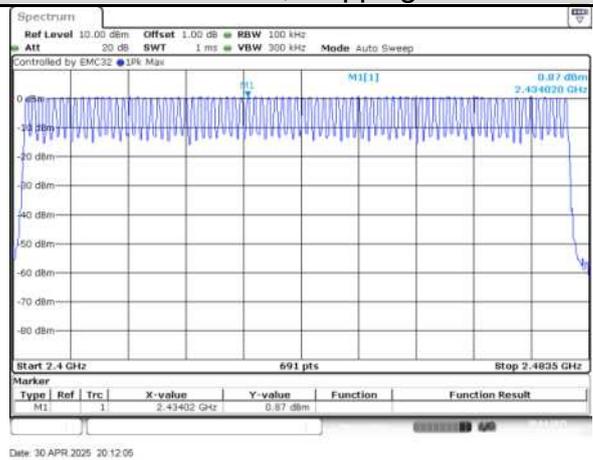
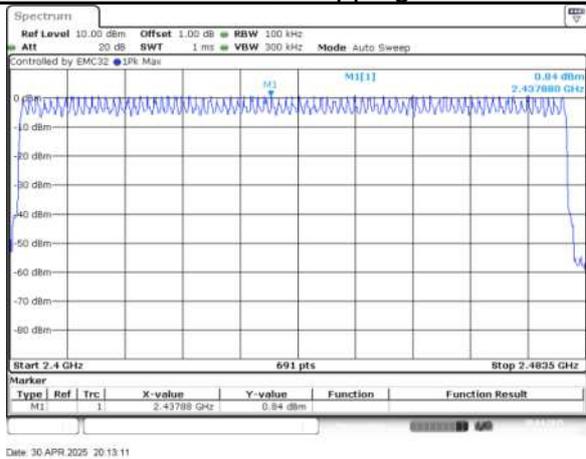
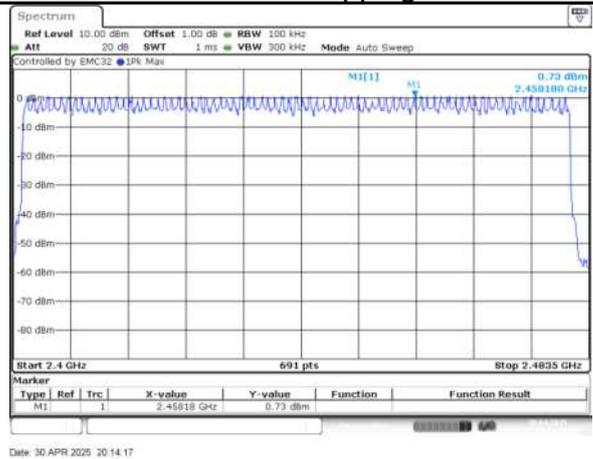
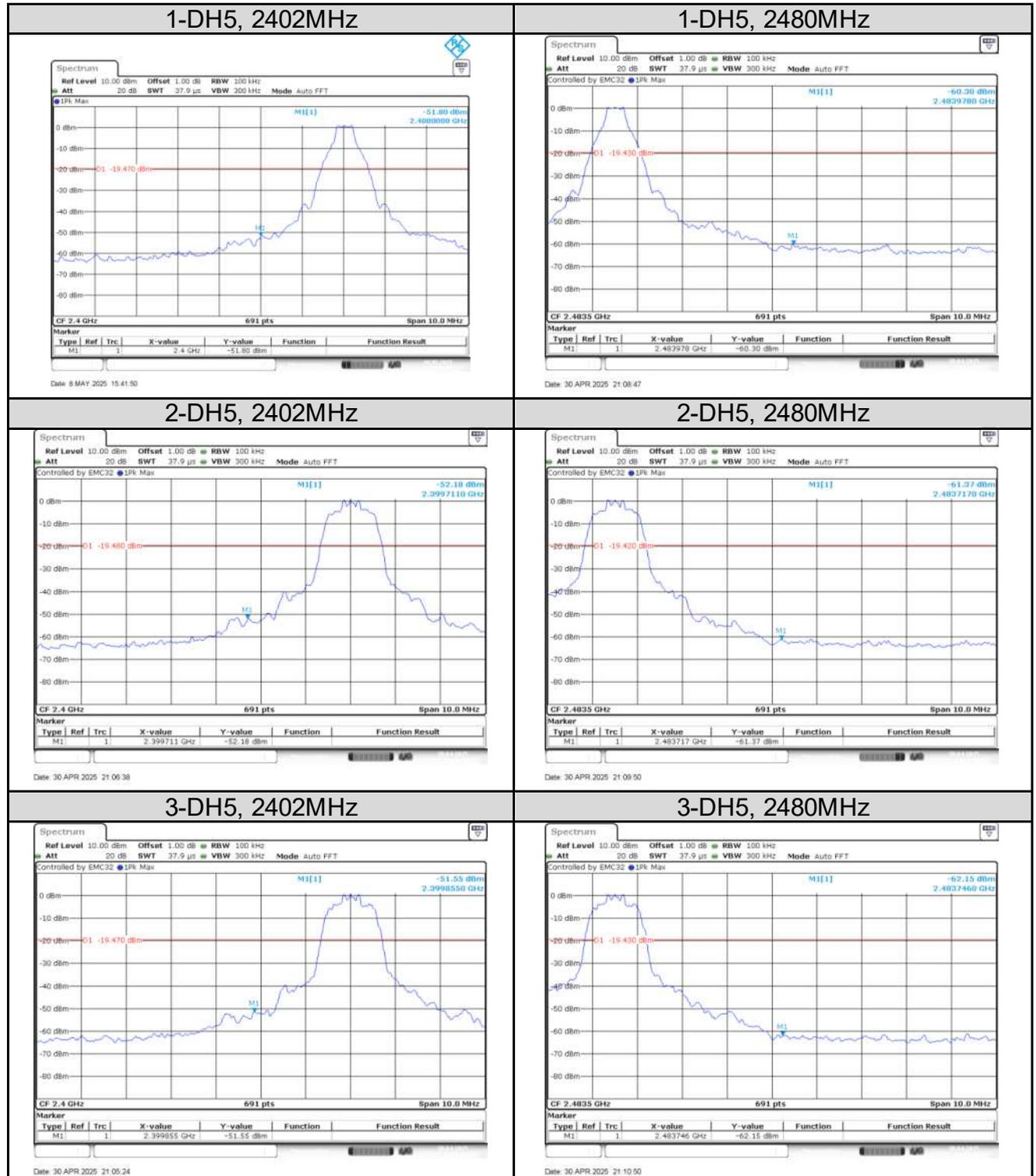
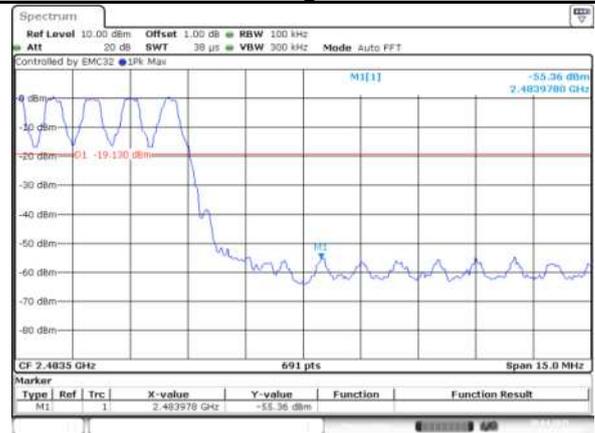
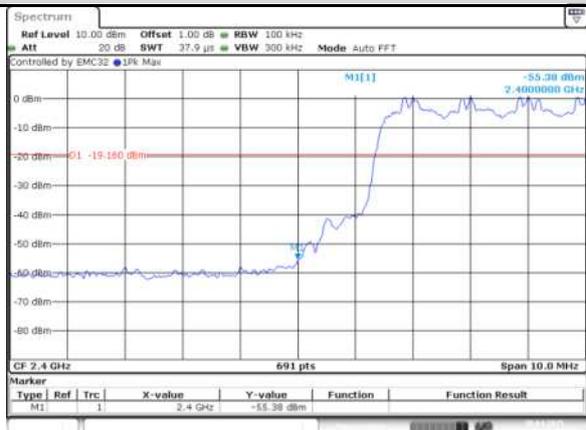
1-DH5, Hopping

2-DH5, Hopping

3-DH5, Hopping


Figure 4: Conducted Band Edge


1-DH5, lower band

1-DH5, higher band

2-DH5 lower band

2-DH5 higher band

3-DH5 lower band

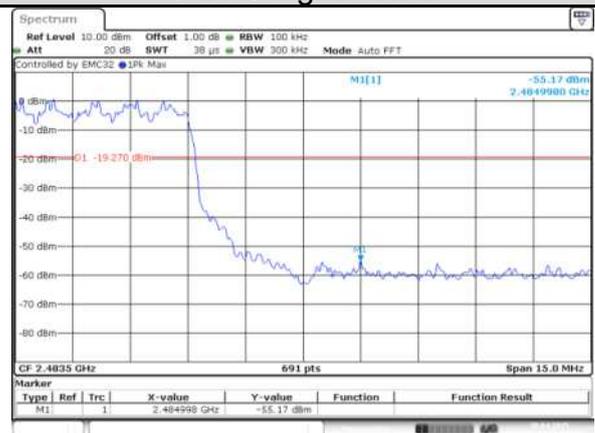
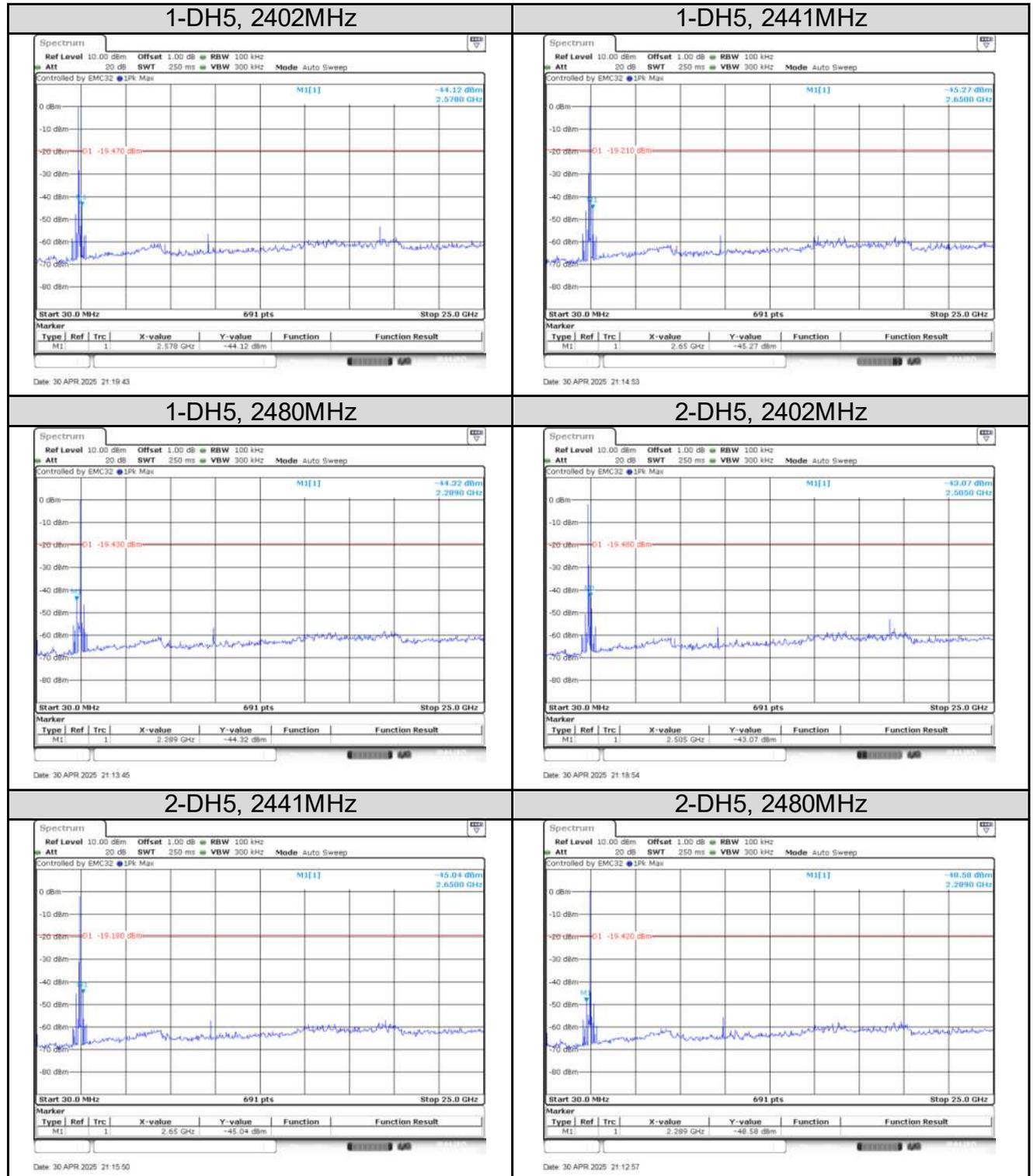
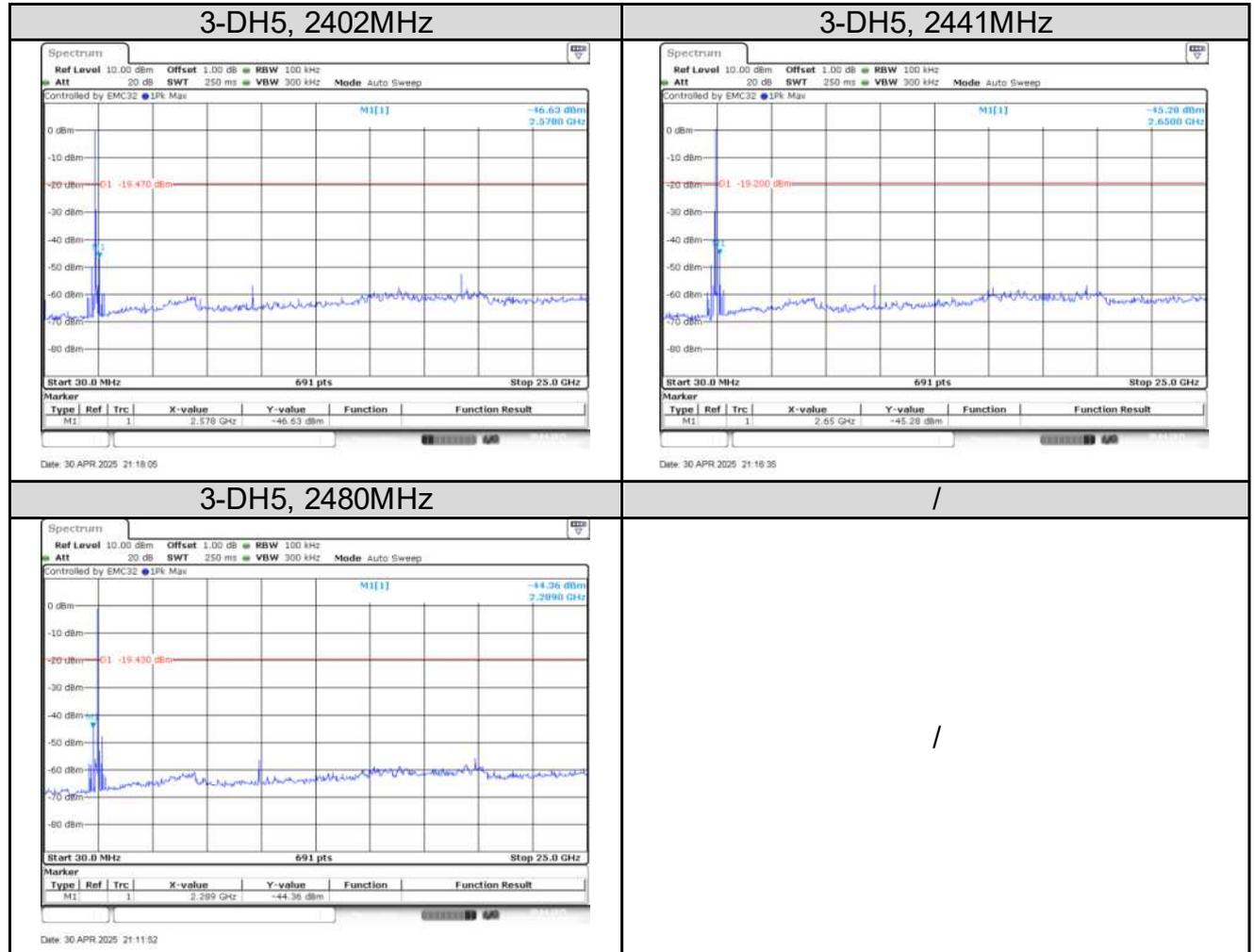
3-DH5 higher band


Figure 5: Conducted Spurious Emission


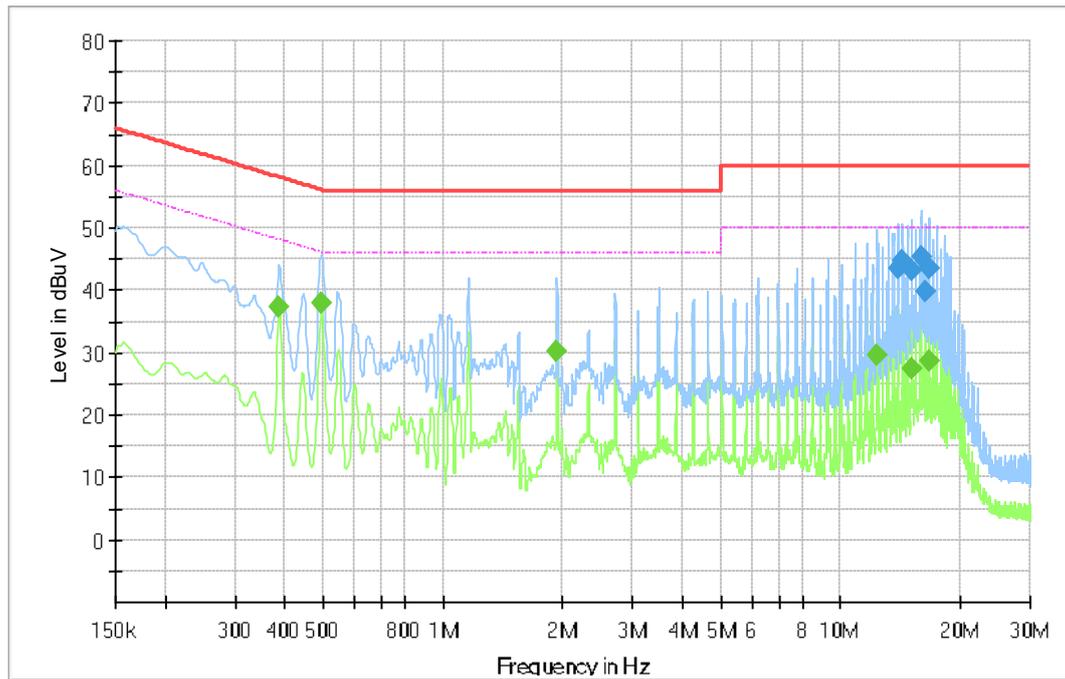


5.2 Emission in the Frequency Range up to 30MHz

5.2.1 Conducted Emission

RESULT:**Pass**

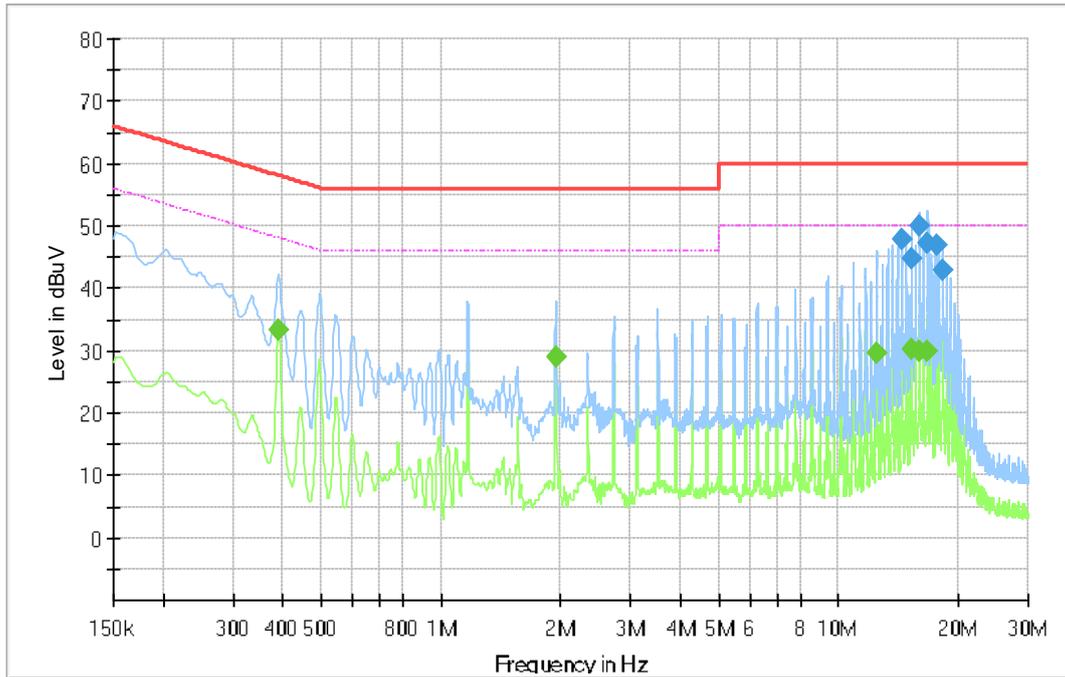
Date of testing	:	2025-03-05~2025.04.01
Ambient temperature	:	22.4°C
Relative humidity	:	50.0%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.207 (a) RSS-Gen Issue 5, Amendment 2, February 2021, Clause 8.8
Test procedure	:	ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024
Test voltage	:	AC 120V, 60Hz
Test modes applied	:	B

Figure 6: Conducted Emission, L

Final Result QPK

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
13.947000	43.56	60.00	16.44	L1	10.8
14.354250	44.78	60.00	15.22	L1	10.8
15.121500	43.11	60.00	16.89	L1	10.8
15.906750	45.27	60.00	14.73	L1	10.9
16.271250	39.89	60.00	20.11	L1	10.9
16.683000	43.61	60.00	16.39	L1	10.9

Final Result CAV

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.386250	37.17	48.14	10.97	L1	10.3
0.494250	37.79	46.10	8.30	L1	10.3
1.936500	30.28	46.00	15.72	L1	10.1
12.396750	29.71	50.00	20.29	L1	10.8
15.119250	27.40	50.00	22.60	L1	10.8
16.671750	28.52	50.00	21.48	L1	10.9

Figure 7: Conducted Emission, N

Final Result QPK

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
14.460000	47.95	60.00	12.05	N	11.1
15.231750	44.86	60.00	15.14	N	11.1
16.023750	50.07	60.00	9.93	N	11.2
16.795500	47.21	60.00	12.79	N	11.2
17.587500	46.88	60.00	13.12	N	11.2
18.354750	42.75	60.00	17.25	N	11.2

Final Result CAV

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.390750	33.43	48.05	14.62	N	10.4
1.950000	28.86	46.00	17.14	N	10.5
12.486750	29.56	50.00	20.44	N	11.1
15.231750	30.12	50.00	19.88	N	11.1
16.008000	29.80	50.00	20.20	N	11.2
16.793250	29.99	50.00	20.01	N	11.2

5.3 Emission in the Frequency Range above 30MHz

5.3.1 Radiated Band-Edge

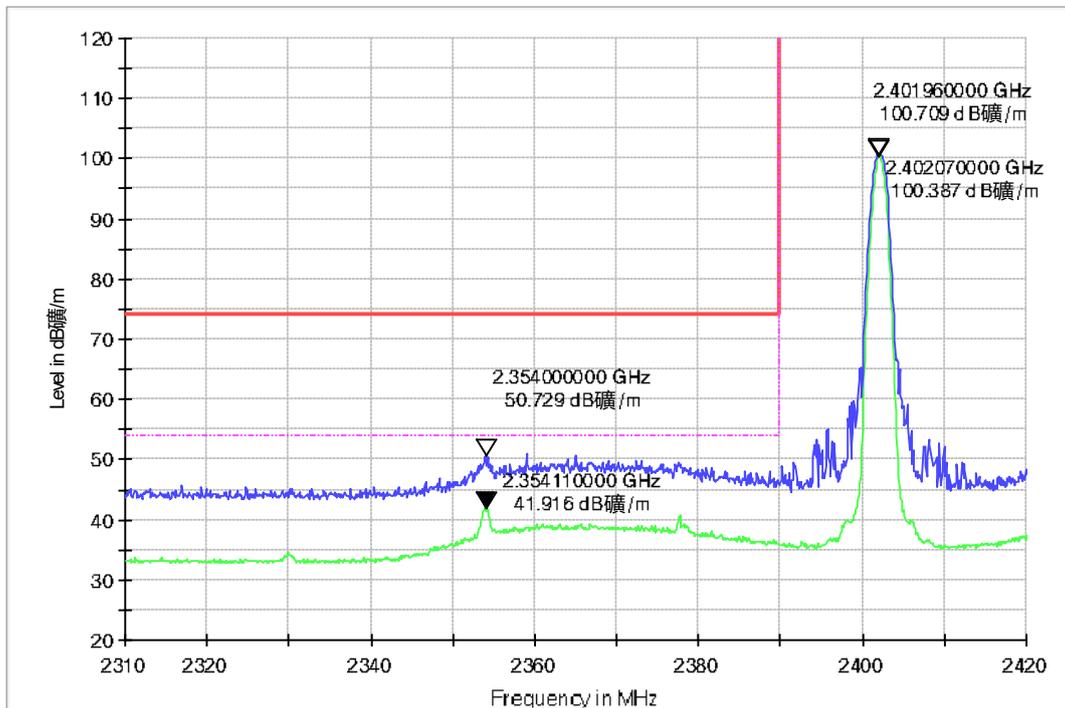
RESULT:**Pass**

Date of testing	:	2025-04-25
Ambient temperature	:	22.5°C
Relative humidity	:	55.5%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.247(d) FCC Part 15.205(a) FCC Part 15.209(a) RSS-Gen Issue 5, Amendment 2, February 2021, Clause 8.9 RSS-Gen Issue 5, Amendment 2, February 2021, Clause 8.10 RSS-247 Issue 3, August 2023, Clause 5.5
Test procedure	:	ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024
Test voltage	:	DC 3.6V
Test modes applied	:	A

Note:

All the test modes were applied, only the worst case were shown in this report.

Figure 8: Radiated Band-Edge, 1-DH5, 2402, H

 XXY-2310⁺ 2410 BE 1-18GHz_HL050_FSV40_Pre-10-YUNFANG

Figure 9: Radiated Band-Edge, 1-DH5, 2402, V

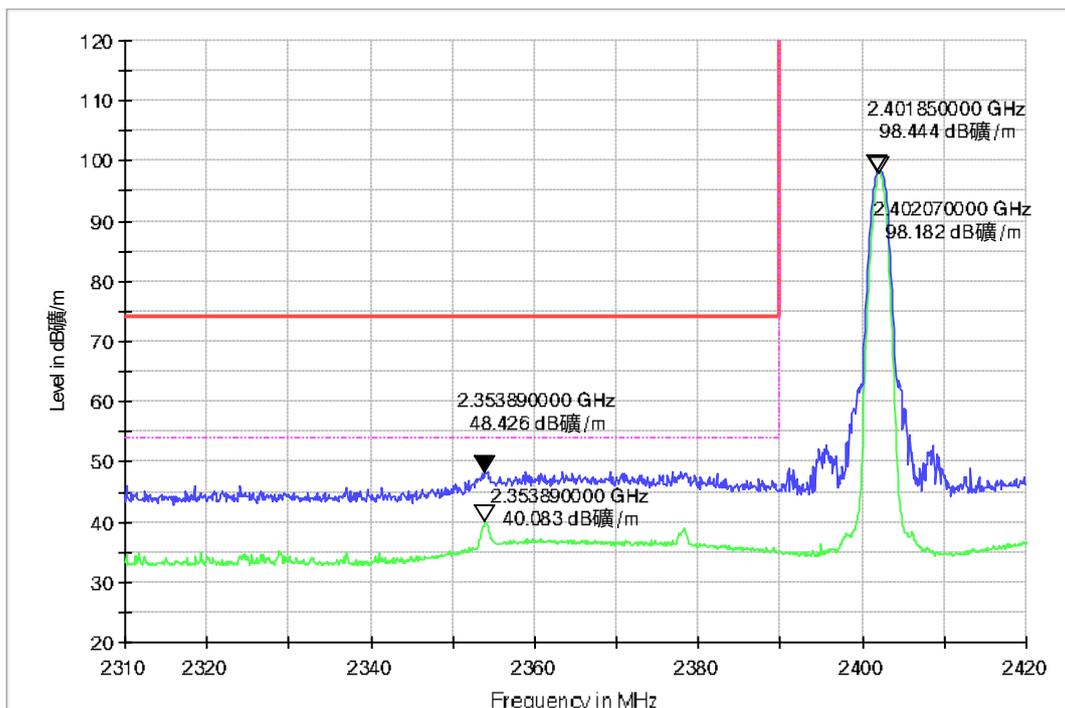
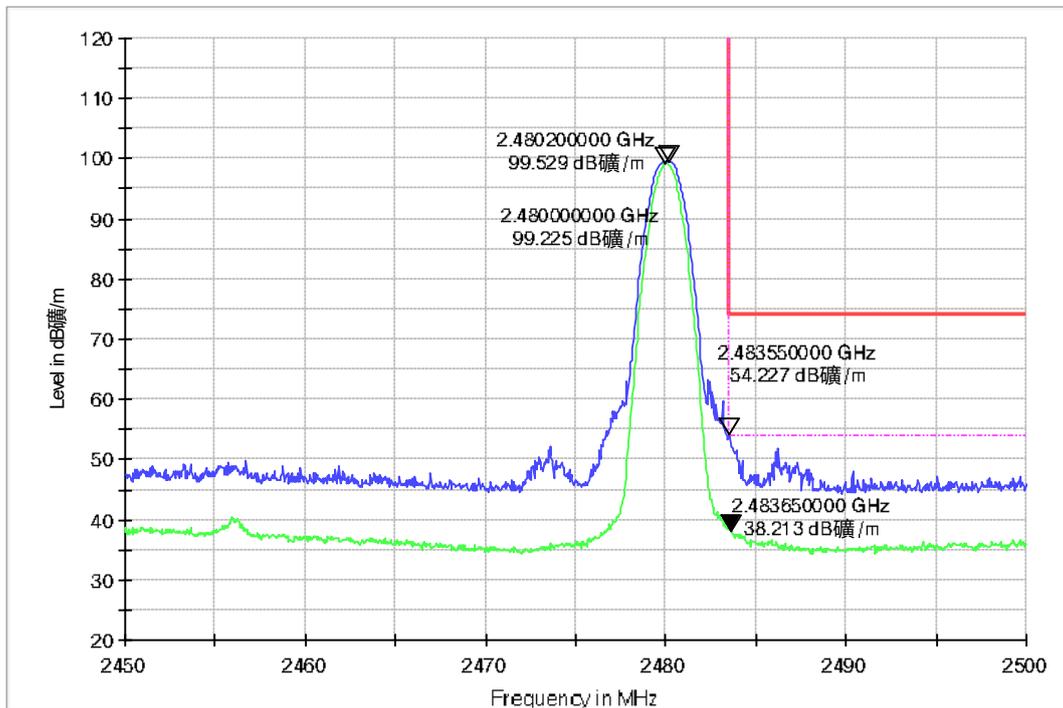
 XXY-2310⁺ 2410 BE 1-18GHz_HL050_FSV40_Pre-10-YUNFANG


Figure 10: Radiated Band-Edge, 1-DH5, 2480, H

XXY-2470° 2500 BE_1-18GHz_HL050_FSV40_Pre-10-YUNFANG


Figure 11: Radiated Band-Edge, 1-DH5, 2480, V

XXY-2470° 2500 BE_1-18GHz_HL050_FSV40_Pre-10-YUNFANG

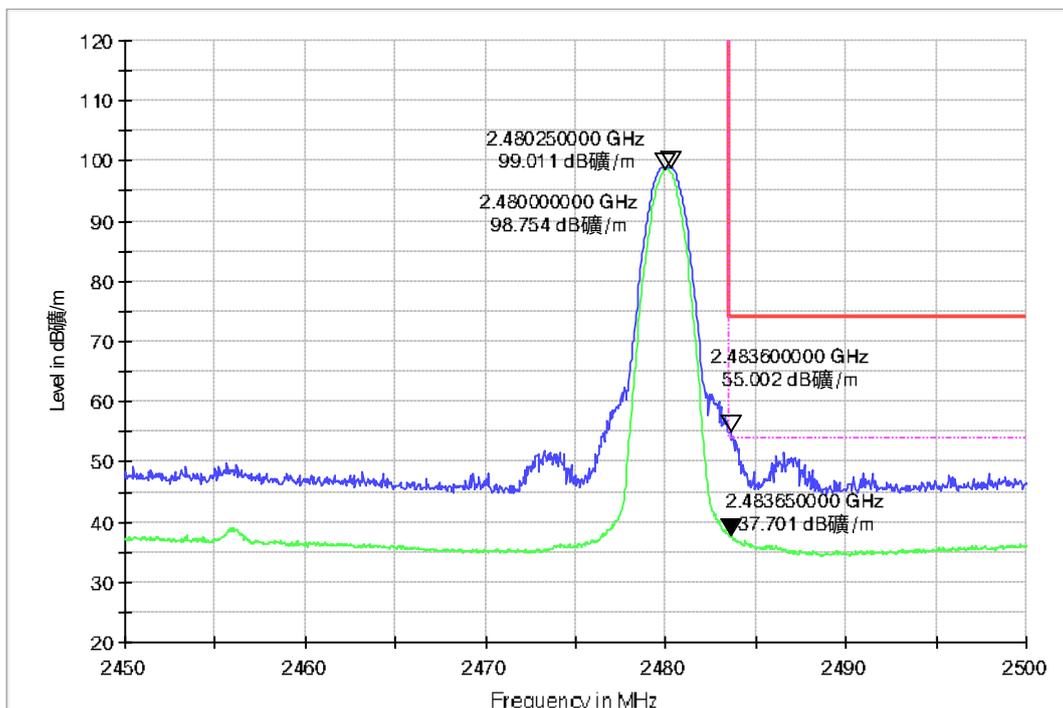
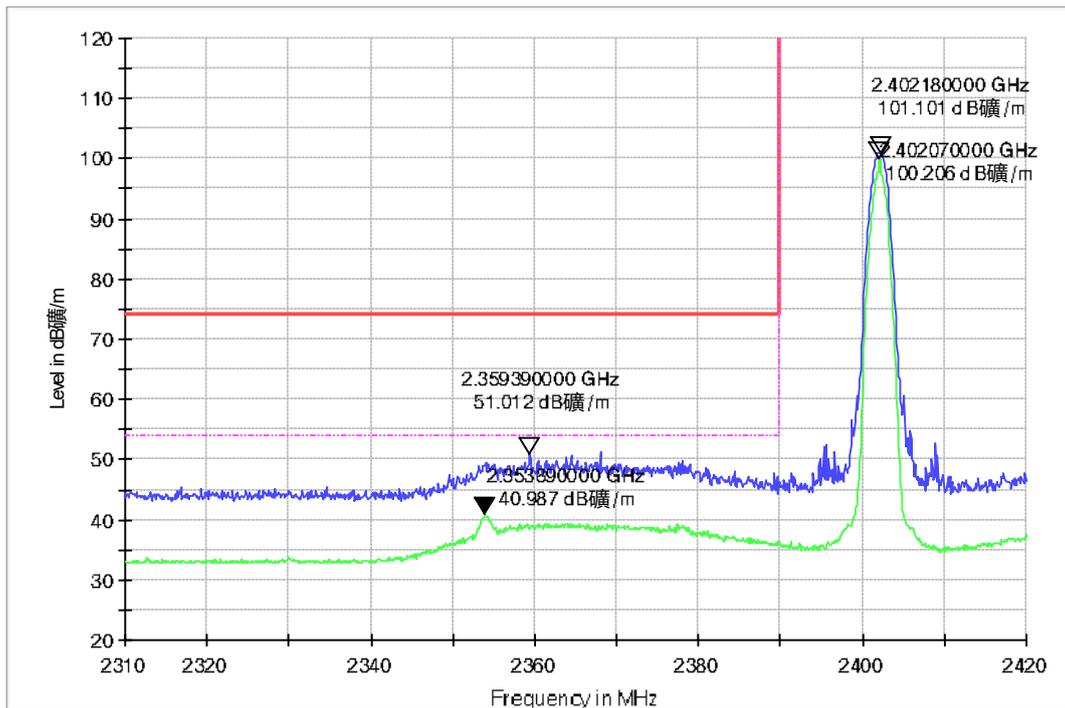


Figure 12: Radiated Band-Edge, 3-DH5, 2402, H

 XXY-2310⁺ 2410 BE 1-18GHz_HL050_FSV40_Pre-10-YUNFANG

Figure 13: Radiated Band-Edge, 3-DH5, 2402, V

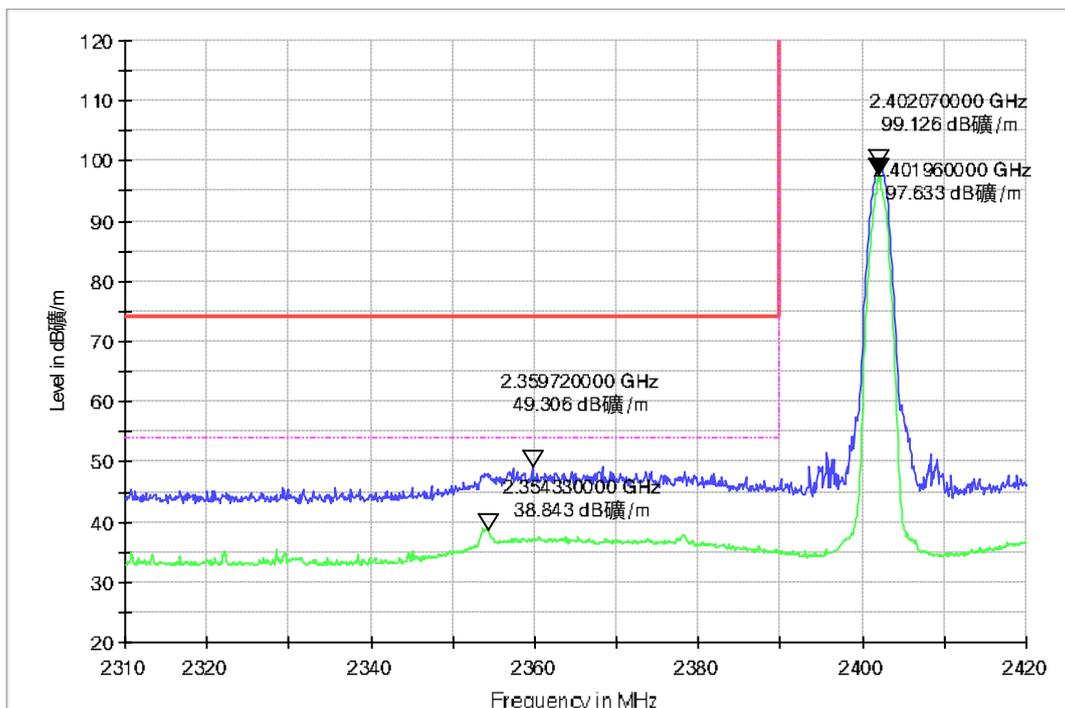
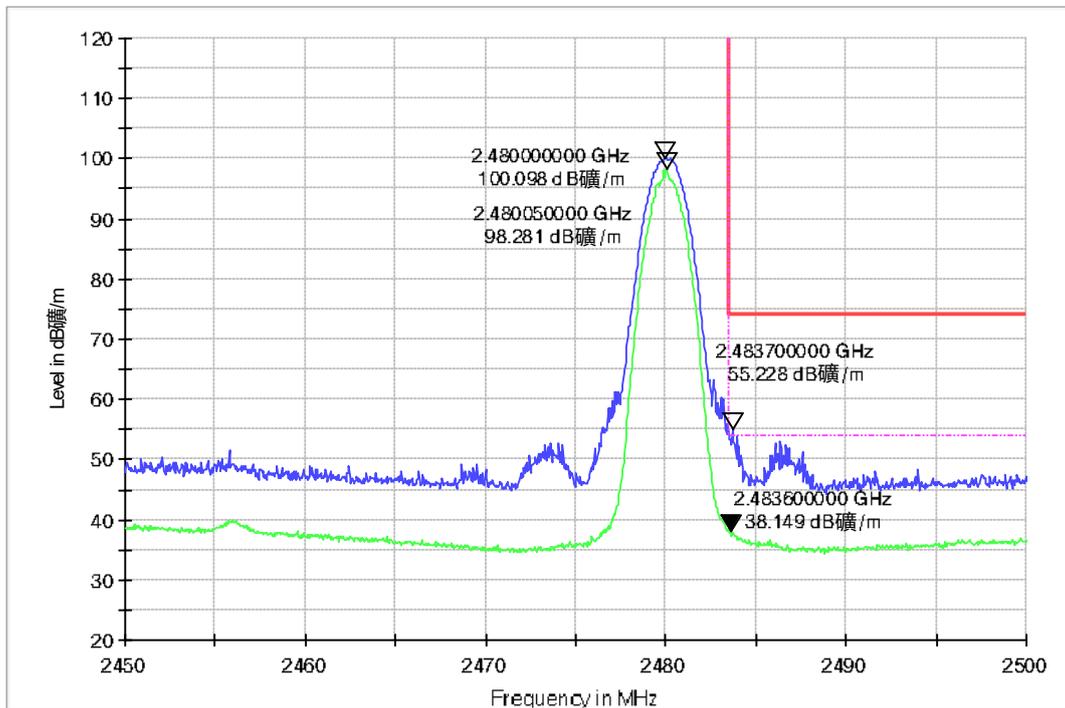
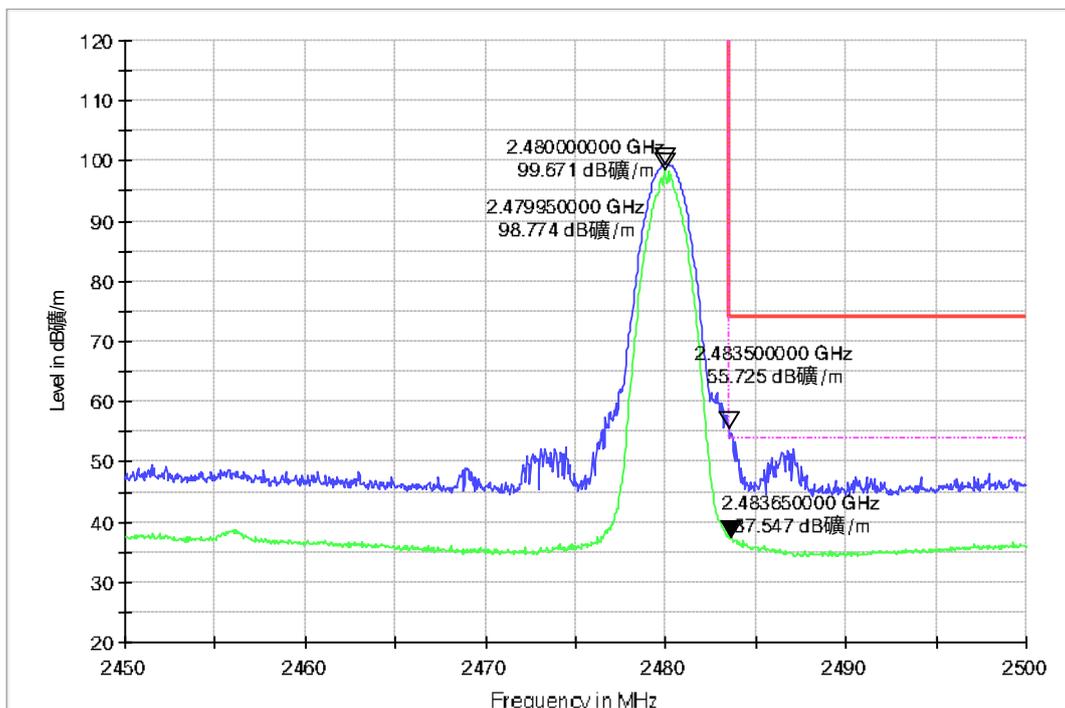
 XXY-2310⁺ 2410 BE 1-18GHz_HL050_FSV40_Pre-10-YUNFANG


Figure 14: Radiated Band-Edge, 3-DH5, 2480, H

XXY-2470° 2500 BE_1-18GHz_HL050_FSV40_Pre-10-YUNFANG


Figure 15: Radiated Band-Edge, 3-DH5, 2480, V

XXY-2470° 2500 BE_1-18GHz_HL050_FSV40_Pre-10-YUNFANG



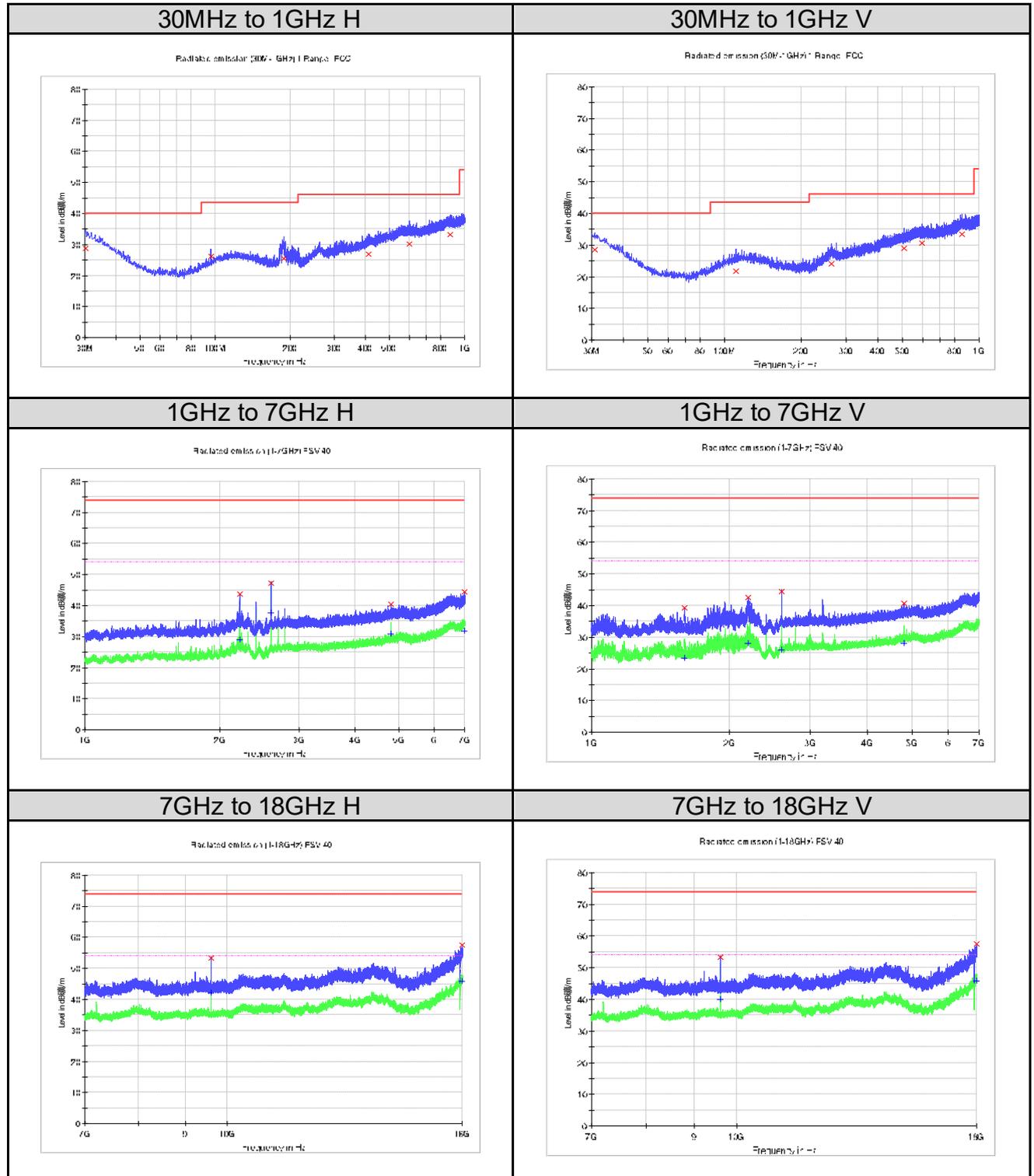
5.3.2 Radiated Spurious Emission

RESULT:**Pass**

Date of testing	:	2025-04-30
Ambient temperature	:	22.5°C
Relative humidity	:	55.1%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.247(d) FCC Part 15.209(a) RSS-Gen Issue 5, Amendment 2, February 2021, Clause 8.9 RSS-247 Issue 3, August 2023, Clause 5.5
Test procedure	:	ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024
Test voltage	:	DC 3.6V
Test modes applied	:	A

Note:

1. All the test modes were applied, only the worst case were shown in this report.
2. For the frequency range from 18GHz to 25GHz, no emission was found.

Figure 16: Radiated Spurious Emission, 1-DH5, 2402MHz


Limit and Margin
QP

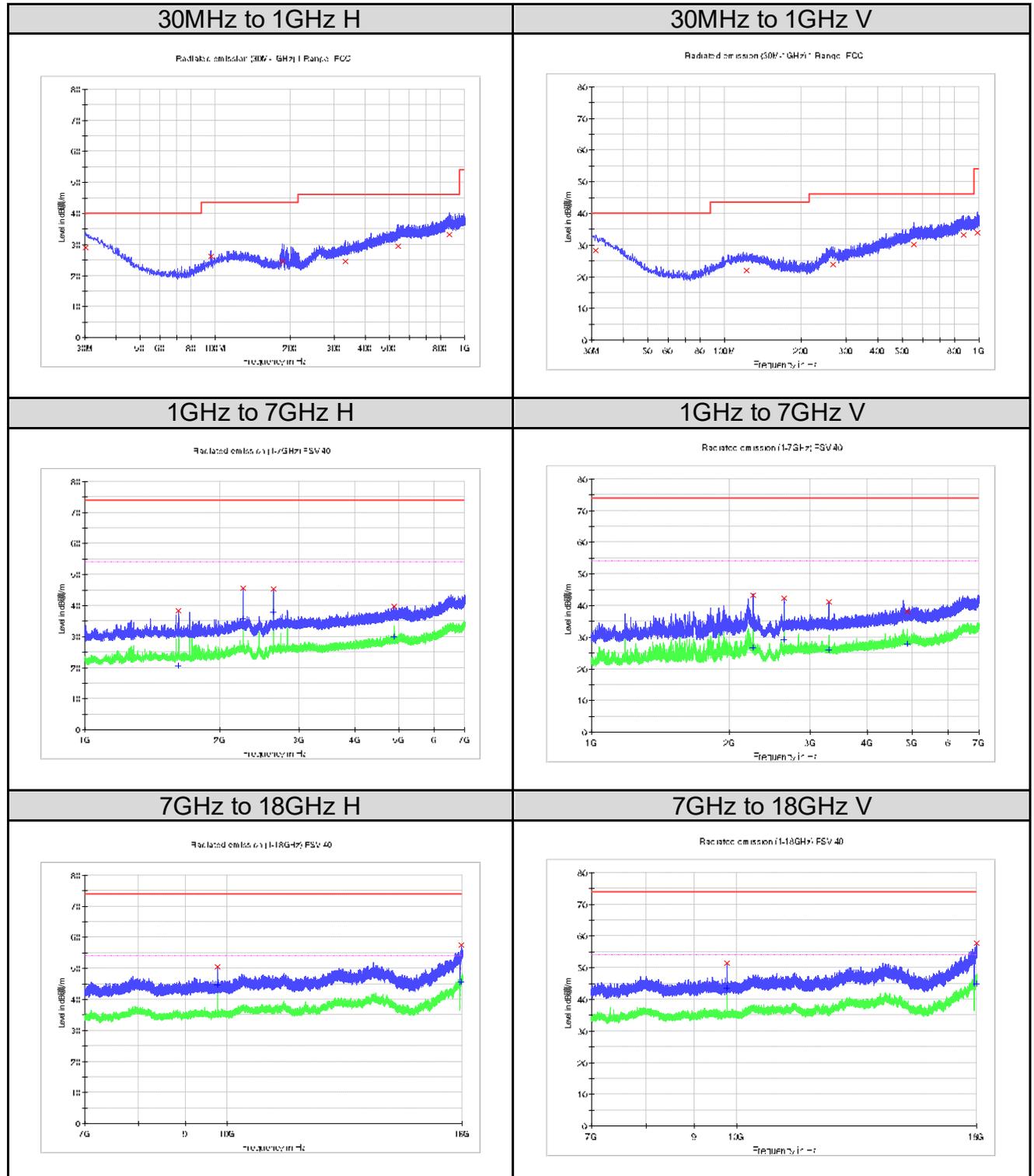
Frequency (MHz)	QuasiPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.242500	28.8	H	25.5	11.2	40.0
95.960000	26.2	H	16.9	17.4	43.5
187.867500	25.5	H	16.0	18.0	43.5
413.392500	26.9	H	23.7	19.1	46.0
601.572500	30.1	H	26.7	15.9	46.0
872.808750	33.2	H	28.6	12.8	46.0
30.848750	28.5	V	25.2	11.5	40.0
110.752500	21.7	V	18.7	21.8	43.5
262.557500	24.1	V	21.0	21.9	46.0
507.967500	28.9	V	25.3	17.1	46.0
596.843750	30.6	V	26.6	15.5	46.0
859.107500	33.4	V	29.0	12.6	46.0

PK

Frequency (MHz)	MaxPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
2210.090909	43.8	H	-15.7	30.2	74.0
2593.818182	47.3	H	-15.8	26.7	74.0
4804.272727	40.4	H	-11.4	33.6	74.0
6989.363636	44.5	H	-6.6	29.5	74.0
9608.031250	53.2	H	-4.8	20.8	74.0
17988.312500	57.4	H	12.2	16.6	74.0
1592.909091	39.4	V	-18.9	34.6	74.0
2194.818182	42.7	V	-15.8	31.3	74.0
2594.090909	44.4	V	-15.8	29.6	74.0
4804.000000	40.7	V	-11.4	33.3	74.0
9608.031250	53.2	V	-4.8	20.8	74.0
17988.312500	57.4	V	12.2	16.6	74.0

AV

Frequency (MHz)	Average (dBµV/m)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
2210.090909	29.1	H	-15.7	24.9	54.0
2593.818182	37.6	H	-15.8	16.4	54.0
4804.272727	30.9	H	-11.4	23.2	54.0
6989.363636	31.7	H	-6.6	22.3	54.0
9608.031250	42.0	H	-4.8	12.0	54.0
17988.312500	45.9	H	12.2	8.1	54.0
1592.909091	23.3	V	-18.9	30.7	54.0
2194.818182	28.0	V	-15.8	26.0	54.0
2594.090909	26.0	V	-15.8	28.0	54.0
4804.000000	28.1	V	-11.4	26.0	54.0
9608.031250	40.0	V	-4.8	14.0	54.0
17988.312500	45.9	V	12.2	8.1	54.0

Figure 17: Radiated Spurious Emission, 1-DH5, 2441MHz


Limit and Margin
QP

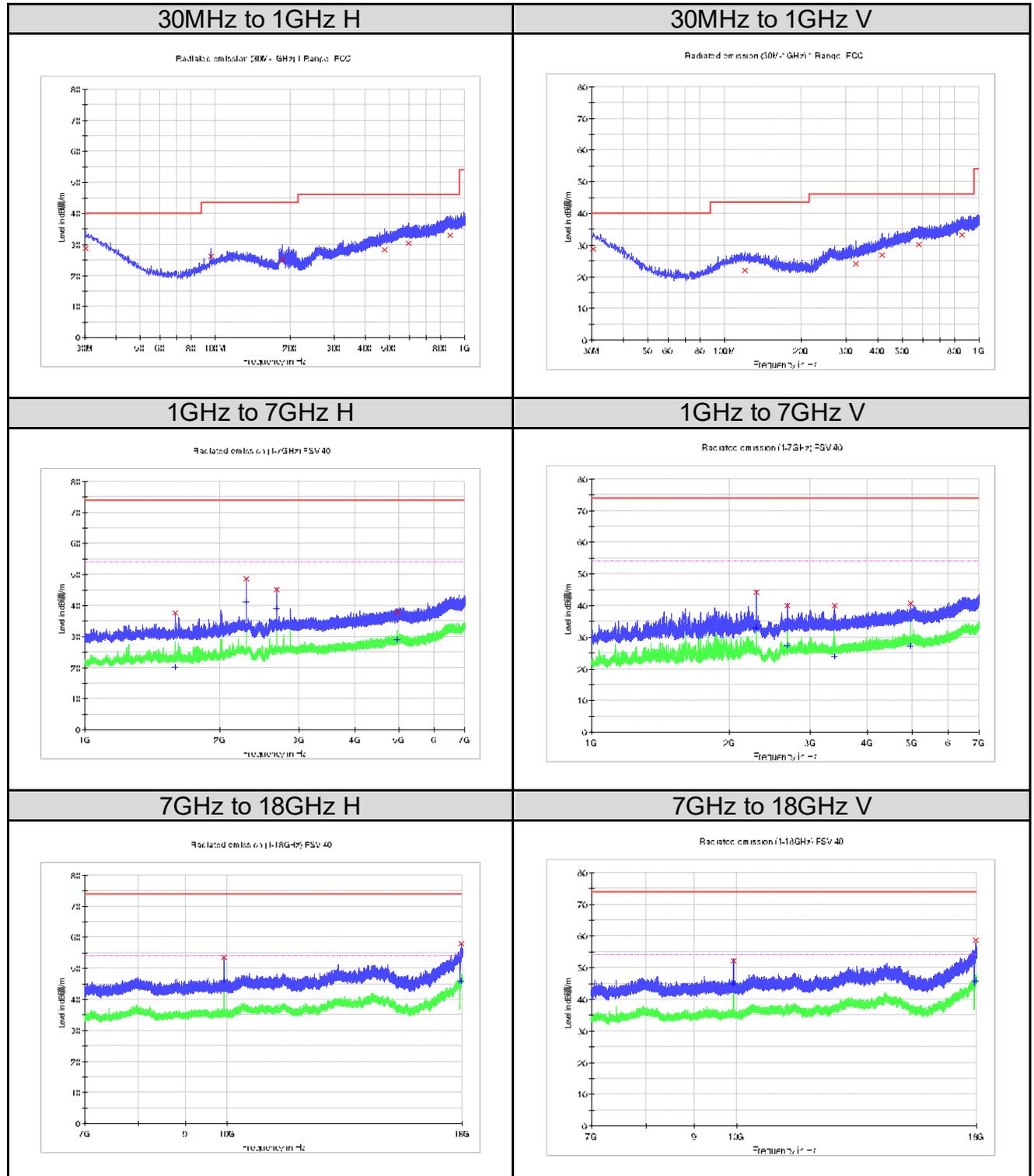
Frequency (MHz)	QuasiPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.121250	28.9	H	25.6	11.1	40.0
95.960000	26.2	H	16.9	17.3	43.5
186.048750	24.6	H	16.0	18.9	43.5
333.731250	24.6	H	21.1	21.5	46.0
541.553750	29.6	H	26.2	16.4	46.0
867.958750	33.2	H	28.8	12.8	46.0
31.091250	28.4	V	25.1	11.6	40.0
121.665000	22.0	V	19.0	21.5	43.5
266.195000	23.9	V	20.8	22.1	46.0
553.678750	30.1	V	26.6	15.9	46.0
867.716250	33.2	V	28.8	12.8	46.0
986.420000	34.0	V	29.8	20.0	54.0

PK

Frequency (MHz)	MaxPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1618.000000	38.4	H	-19.0	35.7	74.0
2249.090909	45.6	H	-15.6	28.4	74.0
2632.818182	45.4	H	-15.7	28.6	74.0
4882.272727	39.8	H	-11.3	34.2	74.0
9764.093750	50.5	H	-4.2	23.5	74.0
17965.625000	57.6	H	11.8	16.4	74.0
2248.818182	43.3	V	-15.6	30.7	74.0
2633.090909	42.4	V	-15.7	31.6	74.0
3296.090909	41.1	V	-14.9	32.9	74.0
4882.000000	38.1	V	-11.3	35.9	74.0
9764.093750	51.5	V	-4.2	22.5	74.0
17996.562500	57.7	V	12.3	16.3	74.0

AV

Frequency (MHz)	Average (dBµV/m)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1618.000000	20.6	H	-19.0	33.5	54.0
2249.090909	35.7	H	-15.6	18.3	54.0
2632.818182	37.8	H	-15.7	16.2	54.0
4882.272727	30.0	H	-11.3	24.0	54.0
9764.093750	44.6	H	-4.2	9.4	54.0
17965.625000	45.6	H	11.8	8.4	54.0
2248.818182	26.6	V	-15.6	27.4	54.0
2633.090909	29.3	V	-15.7	24.8	54.0
3296.090909	26.0	V	-14.9	28.0	54.0
4882.000000	27.8	V	-11.3	26.2	54.0
9764.093750	43.4	V	-4.2	10.6	54.0
17996.562500	44.9	V	12.3	9.1	54.0

Figure 18: Radiated Spurious Emission, 1-DH5, 2480MHz


Limit and Margin
QP

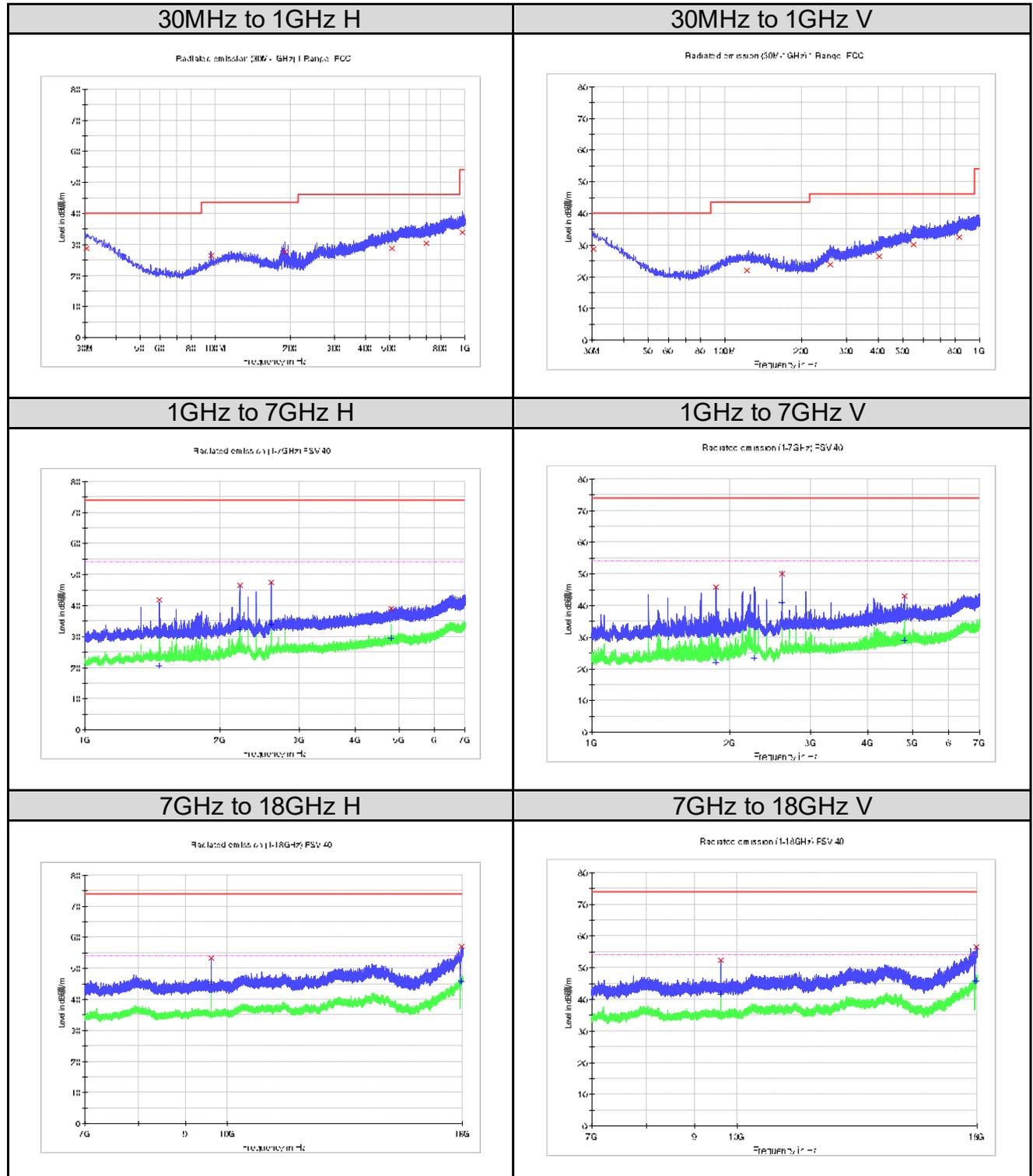
Frequency (MHz)	QuasiPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.121250	28.8	H	25.6	11.2	40.0
95.960000	26.3	H	16.9	17.2	43.5
185.927500	25.3	H	16.0	18.2	43.5
479.473750	28.3	H	25.0	17.7	46.0
596.358750	30.4	H	26.6	15.6	46.0
878.265000	33.1	H	28.5	12.9	46.0
30.485000	28.8	V	25.4	11.3	40.0
120.452500	22.0	V	19.0	21.5	43.5
327.668750	24.2	V	21.0	21.8	46.0
414.847500	27.0	V	23.8	19.0	46.0
577.201250	30.2	V	26.6	15.8	46.0
853.287500	33.3	V	29.0	12.7	46.0

PK

Frequency (MHz)	MaxPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1590.454546	37.7	H	-18.9	36.4	74.0
2288.090909	48.6	H	-15.8	25.4	74.0
2671.818182	45.1	H	-15.5	28.9	74.0
4959.727273	38.0	H	-11.2	36.0	74.0
9919.812500	53.7	H	-4.0	20.3	74.0
17976.968750	58.0	H	12.0	16.0	74.0
2288.090909	44.3	V	-15.8	29.7	74.0
2671.818182	40.1	V	-15.5	33.9	74.0
3393.181818	40.1	V	-15.0	33.9	74.0
4960.272727	40.6	V	-11.1	33.4	74.0
9920.156250	52.1	V	-4.0	21.9	74.0
17978.687500	58.8	V	12.0	15.2	74.0

AV

Frequency (MHz)	Average (dBµV/m)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1590.454546	20.1	H	-18.9	33.9	54.0
2288.090909	41.2	H	-15.8	12.8	54.0
2671.818182	39.0	H	-15.5	15.0	54.0
4959.727273	29.0	H	-11.2	25.0	54.0
9919.812500	46.0	H	-4.0	8.0	54.0
17976.968750	45.8	H	12.0	8.2	54.0
2288.090909	32.9	V	-15.8	21.1	54.0
2671.818182	27.4	V	-15.5	26.7	54.0
3393.181818	23.8	V	-15.0	30.2	54.0
4960.272727	27.1	V	-11.1	26.9	54.0
9920.156250	45.0	V	-4.0	9.0	54.0
17978.687500	45.8	V	12.0	8.2	54.0

Figure 19: Radiated Spurious Emission, 3-DH5, 2402MHz


Limit and Margin
QP

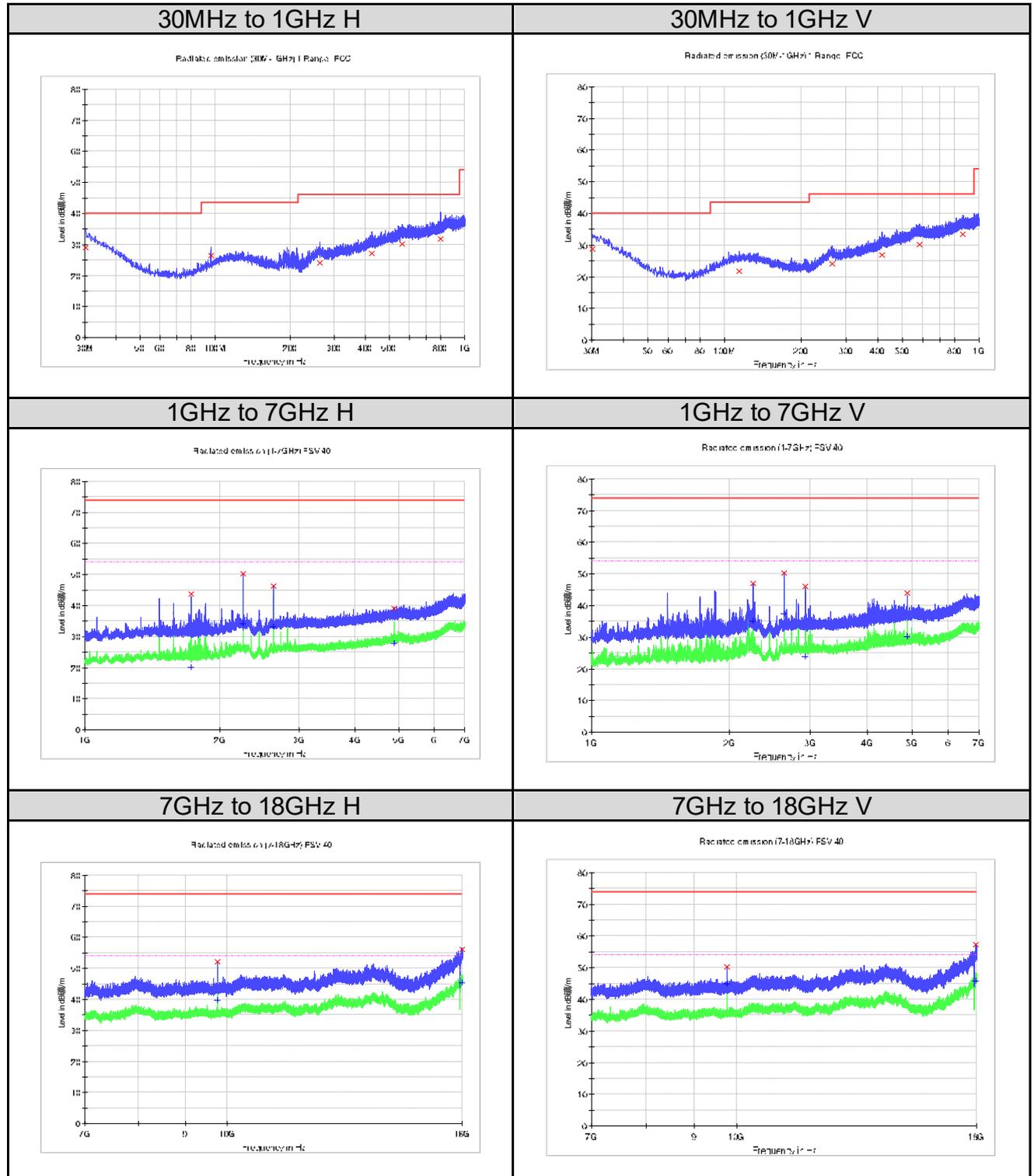
Frequency (MHz)	QuasiPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.363750	28.8	H	25.5	11.2	40.0
95.960000	26.4	H	16.9	17.1	43.5
189.565000	27.6	H	16.0	16.0	43.5
512.575000	28.7	H	25.3	17.3	46.0
703.180000	30.4	H	26.9	15.6	46.0
974.780000	33.8	H	29.7	20.2	54.0
30.363750	28.7	V	25.5	11.3	40.0
121.665000	22.0	V	19.0	21.5	43.5
259.405000	23.9	V	20.8	22.1	46.0
404.056250	26.4	V	23.2	19.6	46.0
551.860000	30.1	V	26.6	15.9	46.0
833.160000	32.6	V	28.6	13.4	46.0

PK

Frequency (MHz)	MaxPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1461.454546	41.9	H	-18.7	32.1	74.0
2210.090909	46.6	H	-15.7	27.4	74.0
2594.363636	47.5	H	-15.8	26.5	74.0
4804.272727	39.1	H	-11.4	34.9	74.0
9608.031250	53.2	H	-4.8	20.8	74.0
17971.812500	57.0	H	11.9	17.0	74.0
1865.363636	45.9	V	-18.4	28.1	74.0
2259.727273	49.3	V	-15.6	24.7	74.0
2594.090909	50.2	V	-15.8	23.8	74.0
4804.000000	43.1	V	-11.4	30.9	74.0
9607.687500	52.3	V	-4.8	21.7	74.0
17979.718750	56.7	V	12.0	17.3	74.0

AV

Frequency (MHz)	Average (dBµV/m)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1461.454546	20.6	H	-18.7	33.4	54.0
2210.090909	32.2	H	-15.7	21.8	54.0
2594.363636	34.0	H	-15.8	20.0	54.0
4804.272727	29.5	H	-11.4	24.5	54.0
9608.031250	45.6	H	-4.8	8.4	54.0
17971.812500	46.0	H	11.9	8.0	54.0
1865.363636	22.0	V	-18.4	32.0	54.0
2259.727273	23.4	V	-15.6	30.6	54.0
2594.090909	40.8	V	-15.8	13.2	54.0
4804.000000	29.0	V	-11.4	25.0	54.0
9607.687500	41.6	V	-4.8	12.4	54.0
17979.718750	45.9	V	12.0	8.1	54.0

Figure 20: Radiated Spurious Emission, 3-DH5, 2441MHz


Limit and Margin
QP

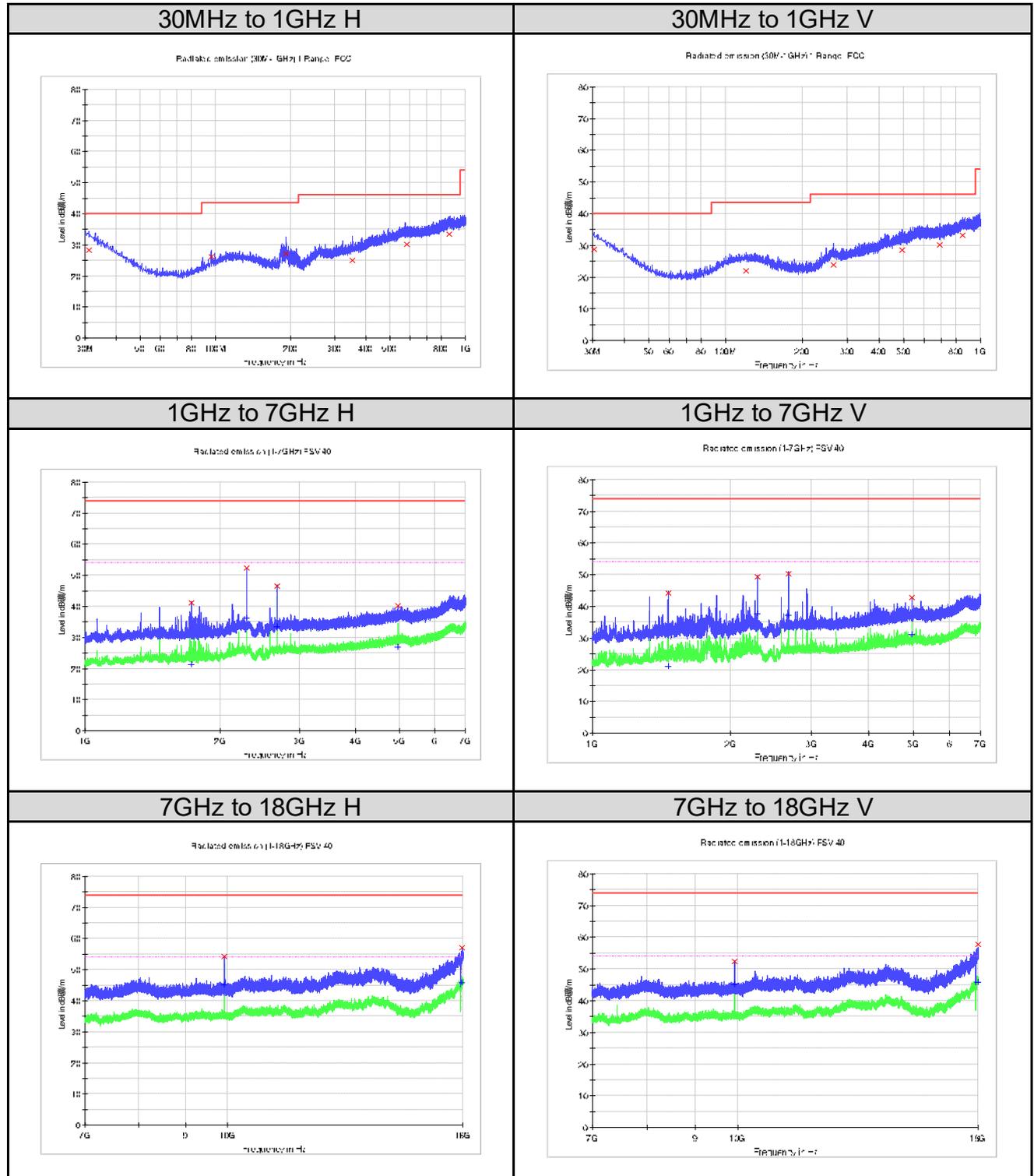
Frequency (MHz)	QuasiPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.121250	28.9	H	25.6	11.1	40.0
95.960000	26.3	H	16.9	17.2	43.5
262.436250	24.1	H	21.0	21.9	46.0
423.456250	27.1	H	23.9	18.9	46.0
563.500000	30.2	H	26.7	15.8	46.0
799.331250	31.8	H	28.1	14.2	46.0
30.242500	28.8	V	25.5	11.2	40.0
113.905000	21.8	V	18.9	21.7	43.5
263.891250	24.0	V	21.0	22.0	46.0
414.120000	26.9	V	23.7	19.1	46.0
584.961250	30.2	V	26.6	15.8	46.0
862.138750	33.4	V	28.9	12.6	46.0

PK

Frequency (MHz)	MaxPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1725.727273	43.8	H	-18.9	30.2	74.0
2248.818182	50.3	H	-15.6	23.7	74.0
2633.090909	46.4	H	-15.7	27.6	74.0
4882.272727	39.2	H	-11.3	34.8	74.0
9764.093750	52.1	H	-4.2	21.9	74.0
17992.093750	56.1	H	12.2	18.0	74.0
2248.545455	47.0	V	-15.6	27.0	74.0
2632.818182	50.3	V	-15.7	23.7	74.0
2927.636364	46.0	V	-15.1	28.0	74.0
4882.000000	43.9	V	-11.3	30.1	74.0
9764.093750	50.3	V	-4.2	23.7	74.0
17974.218750	57.3	V	11.9	16.7	74.0

AV

Frequency (MHz)	Average (dBµV/m)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1725.727273	20.2	H	-18.9	33.8	54.0
2248.818182	34.2	H	-15.6	19.8	54.0
2633.090909	33.3	H	-15.7	20.7	54.0
4882.272727	27.9	H	-11.3	26.1	54.0
9764.093750	39.7	H	-4.2	14.3	54.0
17992.093750	45.5	H	12.2	8.5	54.0
2248.545455	35.0	V	-15.6	19.0	54.0
2632.818182	37.5	V	-15.7	16.6	54.0
2927.636364	24.0	V	-15.1	30.0	54.0
4882.000000	30.1	V	-11.3	23.9	54.0
9764.093750	44.9	V	-4.2	9.1	54.0
17974.218750	45.9	V	11.9	8.1	54.0

Figure 21: Radiated Spurious Emission, 3-DH5, 2480MHz


Limit and Margin
QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
31.091250	28.4	H	25.1	11.6	40.0
95.960000	26.2	H	16.9	17.3	43.5
191.868750	27.2	H	16.0	16.3	43.5
352.403750	25.0	H	21.7	21.0	46.0
583.142500	30.2	H	26.6	15.8	46.0
864.078750	33.4	H	28.9	12.6	46.0
30.363750	28.8	V	25.5	11.2	40.0
120.088750	22.0	V	19.0	21.6	43.5
265.346250	23.9	V	20.9	22.1	46.0
493.660000	28.6	V	25.2	17.5	46.0
689.963750	30.3	V	26.7	15.7	46.0
853.045000	33.3	V	29.0	12.7	46.0

PK

Frequency (MHz)	MaxPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1726.818182	41.1	H	-18.9	32.9	74.0
2287.818182	52.4	H	-15.8	21.6	74.0
2671.818182	46.6	H	-15.5	27.5	74.0
4960.545455	40.3	H	-11.1	33.7	74.0
9919.812500	54.4	H	-4.0	19.7	74.0
17979.031250	57.1	H	12.0	16.9	74.0
1464.727273	44.1	V	-18.7	29.9	74.0
2288.090909	49.5	V	-15.8	24.5	74.0
2672.090909	50.4	V	-15.5	23.7	74.0
4960.000000	42.7	V	-11.2	31.3	74.0
9920.156250	52.3	V	-4.0	21.7	74.0
17982.125000	57.7	V	12.1	16.3	74.0

AV

Frequency (MHz)	Average (dBµV/m)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1726.818182	21.3	H	-18.9	32.7	54.0
2287.818182	36.2	H	-15.8	17.8	54.0
2671.818182	33.5	H	-15.5	20.5	54.0
4960.545455	26.8	H	-11.1	27.2	54.0
9919.812500	45.2	H	-4.0	8.8	54.0
17979.031250	45.8	H	12.0	8.2	54.0
1464.727273	21.1	V	-18.7	32.9	54.0
2288.090909	37.7	V	-15.8	16.3	54.0
2672.090909	37.3	V	-15.5	16.7	54.0
4960.000000	31.0	V	-11.2	23.0	54.0
9920.156250	45.1	V	-4.0	8.9	54.0
17982.125000	45.8	V	12.1	8.2	54.0

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