

Prüfbericht-Nr.: Test report no.:	CN25NYHJ 001	Auftrags-Nr.: Order no.:	326069310	Seite 1 von 54 Page 1 of 54
Kunden-Referenz-Nr.: Client reference no.:	1288983	Auftragsdatum: Order date:	2024-12-18	
Auftraggeber: Client:	IKEA of Sweden AB Box 702, SE-343 81 Älmhult, Sweden			
Prüfgegenstand: Test item:	Self-ballasted LED lamps			
Bezeichnung / Typ-Nr.: Identification / Type no.:	LED2407G8NA			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	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: 2013			
Wareneingangsdatum: Date of sample receipt:	2025-03-27	Refer to photo document.		
Prüfmuster-Nr.: Test sample no:	A003957107-007			
Prüfzeitraum: Testing period:	Refer to test report			
Ort der Prüfung: Place of testing:	TÜV Rheinland (Shanghai) Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shanghai) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:	☒ <u>Hongfei Wu</u>		genehmigt von: authorized by:	☒ <u>Elliot Zhang</u>
Datum: Date:	2025-06-11	Signed by: Hongfei Wu	Datum: Date:	2025-06-11 Signed by: Elliot Zhang
Stellung / Position:	Sachverständige(r)/Expert		Stellung / Position:	Sachverständige(r)/Expert
Sonstiges / Other:	FCC ID: FHO-LED2407G8NA IC: 10912A-LED2407G8NA HVIN: LED2407G8NA PMN: KAJPLATS This report is for BLE.			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* 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
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

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3	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. <i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i> <i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i>
4	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 115:2021, 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 bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. <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 115:2021, 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>

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 6dB & 99% BANDWIDTH

RESULT: Pass

5.1.3 OUTPUT POWER

RESULT: Pass

5.1.4 POWER SPECTRAL DENSITY

RESULT: Pass

5.1.5 CONDUCTED BAND EDGE AND OUT-OF BAND EMISSIONS

RESULT: Pass

5.2.1 CONDUCTED EMISSION

RESULT: N/A

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
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-MEB (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 LED lamp which supports Bluetooth, Zigbee and Thread.

The aim of this report is to evaluate RF character of BLE of the EUT.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Description of EUT	
Product Name:	Self-ballasted LED lamps
Model No.:	LED2407G8NA
Operation Voltage:	AC 120V, 60Hz
Test Voltage:	DC 3.3V for RF conducted and radiated test AC 120V, 60Hz for conducted emission test
RF Technical:	1) BLE 2) Zigbee 3) Thread
Technical Specification of BLE	
RF IC:	SiMG301
Frequency Range:	2402~2480MHz
Modulation Type:	GFSK
Data Rate:	1Mbps, 2Mbps
Antenna Type:	PCB Antenna
Antenna Gain:	-1.06 dBi (declared by client)

Table 4: Operation Channel List

RF Channel	Frequency [MHz]	RF Channel	Frequency [MHz]	RF Channel	Frequency [MHz]	RF Channel	Frequency [MHz]
00	2402	10	2422	20	2442	30	2462
01	2404	11	2424	21	2444	31	2464
02	2406	12	2426	22	2446	32	2466
03	2408	13	2428	23	2448	33	2468
04	2410	14	2430	24	2450	34	2470
05	2412	15	2432	25	2452	35	2472
06	2414	16	2434	26	2454	36	2474
07	2416	17	2436	27	2456	37	2476
08	2418	18	2438	28	2458	38	2478
09	2420	19	2440	29	2460	39	2480

3.3 Independent Operation Modes

Test frequencies are lowest channel: 2402 MHz, middle channel: 2442 MHz and highest channel: 2480 MHz

The basic operation modes are:

- A. BLE 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: 2013.

Test Software: sscom 5.13.1

Table 5: Power parameter value

Mode	Power Parameter Setting Value
BLE	10

4.3 Special Accessories and Auxiliary Equipment

Table 6: Auxiliary Equipment

Equipment	Manufacturer	Model
Laptop	Lenovo	21AJ-S57N0J
Mobile phone	Apple	iPhone 15
Loudspeaker	Apple	HomePod mini
Remote control	IKEA	E2489

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 internal PCB antenna, the directional gain of antenna is -1.06 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 7: 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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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:	-1.06 dBi

Verdict: PASS

5.1.2 6dB & 99% Bandwidth**RESULT:****Pass**

Date of testing	:	2025-05-08
Ambient temperature	:	23.5°C
Relative humidity	:	59.5%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.247(a)(2) RSS-247 Issue 3, August 2023, Clause 5.2(a) RSS-Gen Issue 5, Amendment 2, February 2021, Clause 6.7
Test procedure	:	ANSI C63.10: 2013
Test voltage	:	DC 3.3V
Test modes applied	:	A

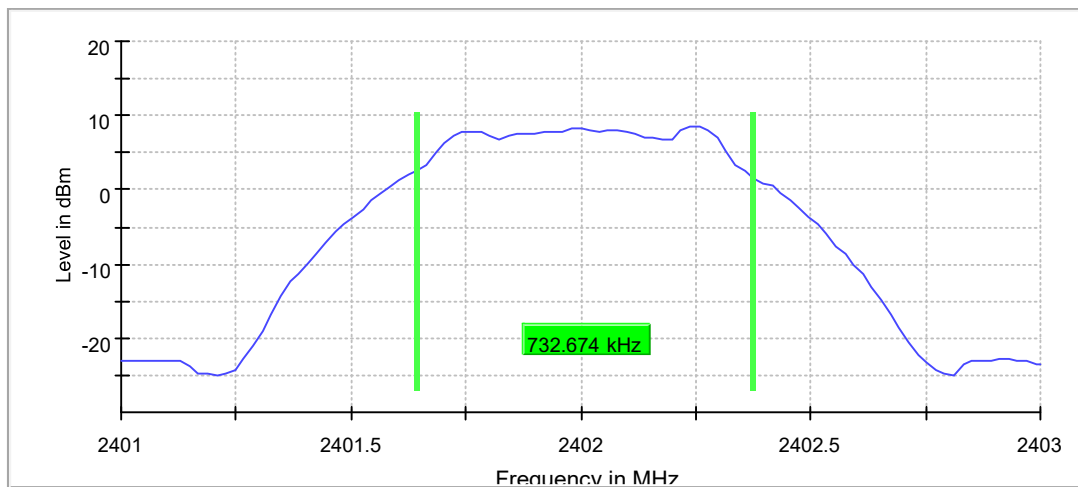
6dB Bandwidth, 1Mbps, 2402MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	0.732674	0.500000	---	2401.643564	2402.376238

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	8.6	PASS

6 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	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	18.938 µs	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	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	0.05 dB	0.50 dB

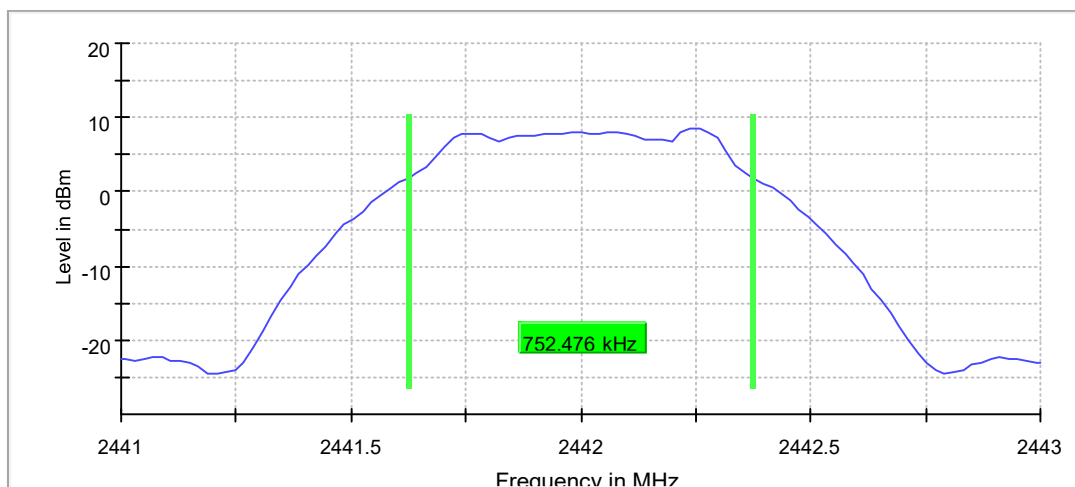
6dB Bandwidth, 1Mbps, 2442MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2442.000000	0.752476	0.500000	---	2441.623762	2442.376238

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2442.000000	8.6	PASS

6 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44100 GHz	2.44100 GHz
Stop Frequency	2.44300 GHz	2.44300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	18.938 µs	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	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	0.10 dB	0.50 dB

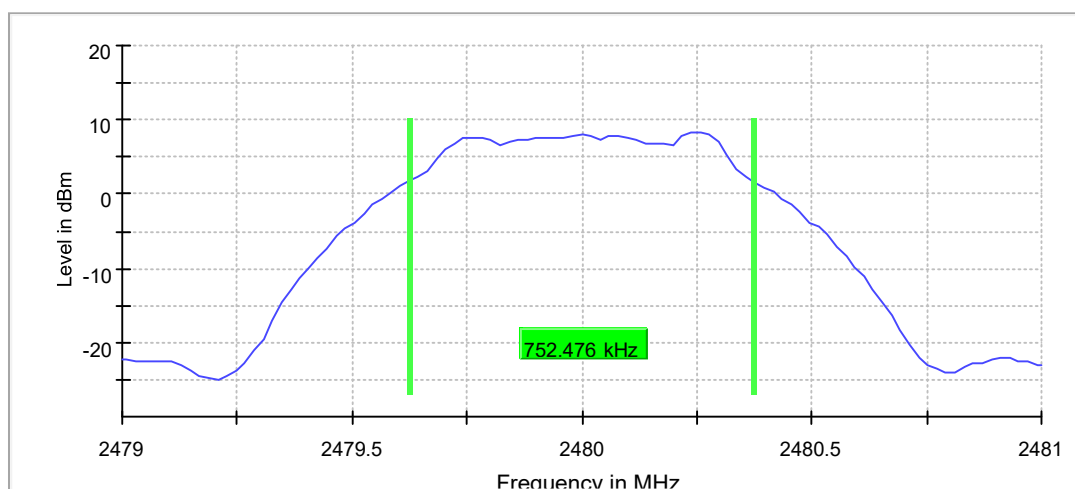
6dB Bandwidth, 1Mbps, 2480MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	0.752476	0.500000	---	2479.623762	2480.376238

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	8.4	PASS

6 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	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweptime	18.938 µs	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
Sweptype	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	11 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.02 dB	0.50 dB

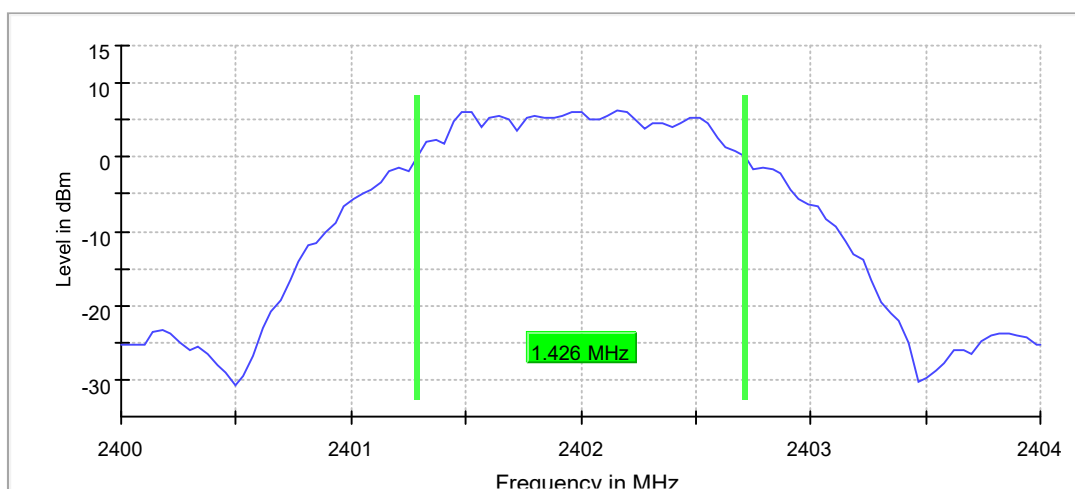
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6dB Bandwidth, 2Mbps, 2402MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.425742	0.500000	---	2401.287129	2402.712871

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	6.2	PASS

6 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	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 80
Sweeptime	18.938 µs	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	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	0.08 dB	0.50 dB

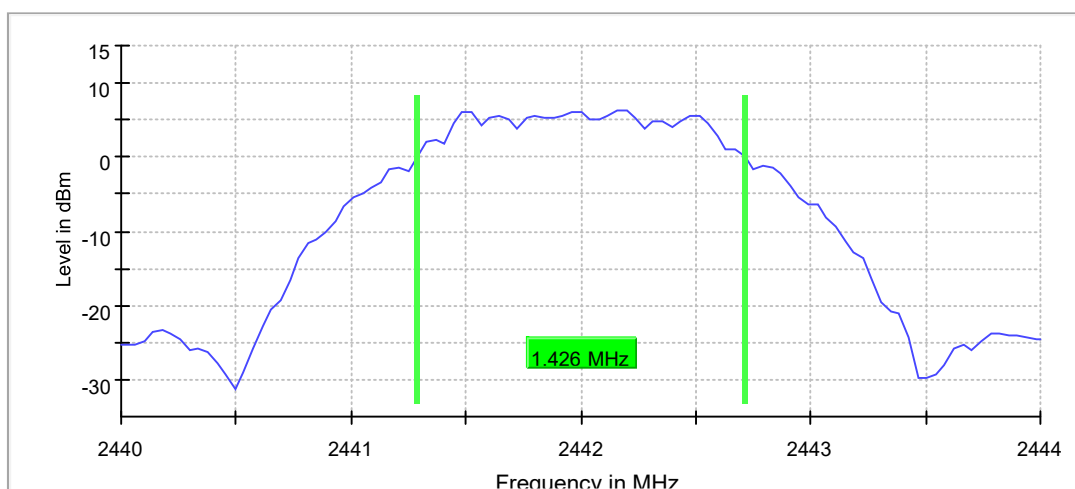
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6dB Bandwidth, 2Mbps, 2442MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2442.000000	1.425742	0.500000	---	2441.287129	2442.712871

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2442.000000	6.3	PASS

6 dB Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44400 GHz	2.44400 GHz
Span	4.000 MHz	4.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 80
Sweeptime	18.938 µs	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	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	0.05 dB	0.50 dB

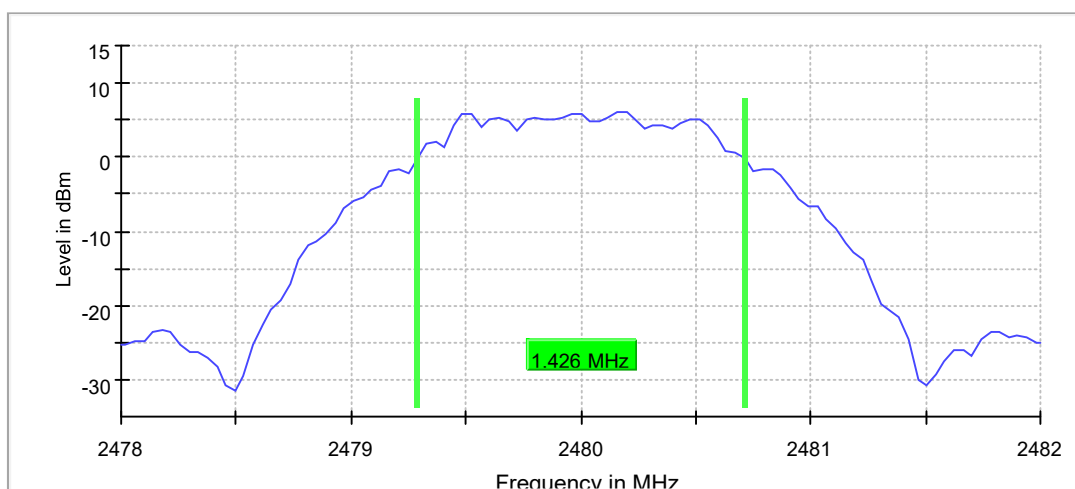
6dB Bandwidth, 2Mbps, 2480MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.425742	0.500000	---	2479.287129	2480.712871

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

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	6.1	PASS

6 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	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 80
Sweeptime	18.938 µs	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	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	0.07 dB	0.50 dB

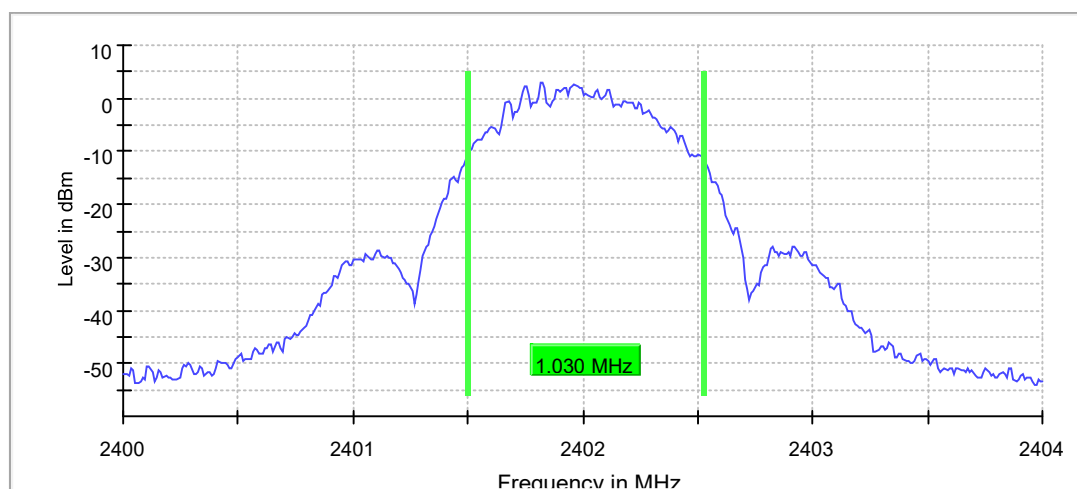
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99% Occupied Channel Bandwidth, 1Mbps, 2402MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.030000	---	---	2401.495000	2402.525000

(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	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	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	0.05 dB	0.30 dB

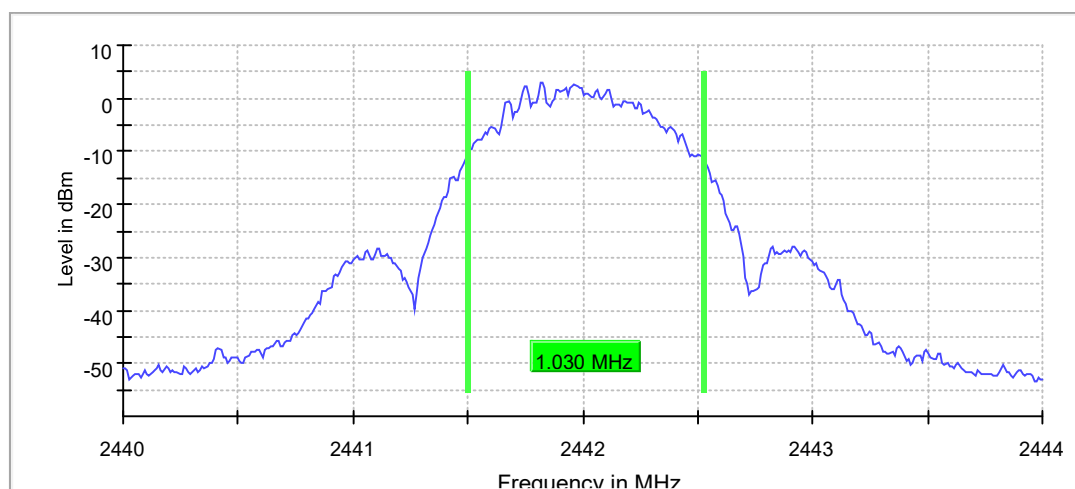
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99% Occupied Channel Bandwidth, 1Mbps, 2442MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2442.000000	1.030000	---	---	2441.495000	2442.525000

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

DUT Frequency (MHz)	Result
2442.000000	PASS

99 % Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44400 GHz	2.44400 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	100	100
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	0.13 dB	0.30 dB

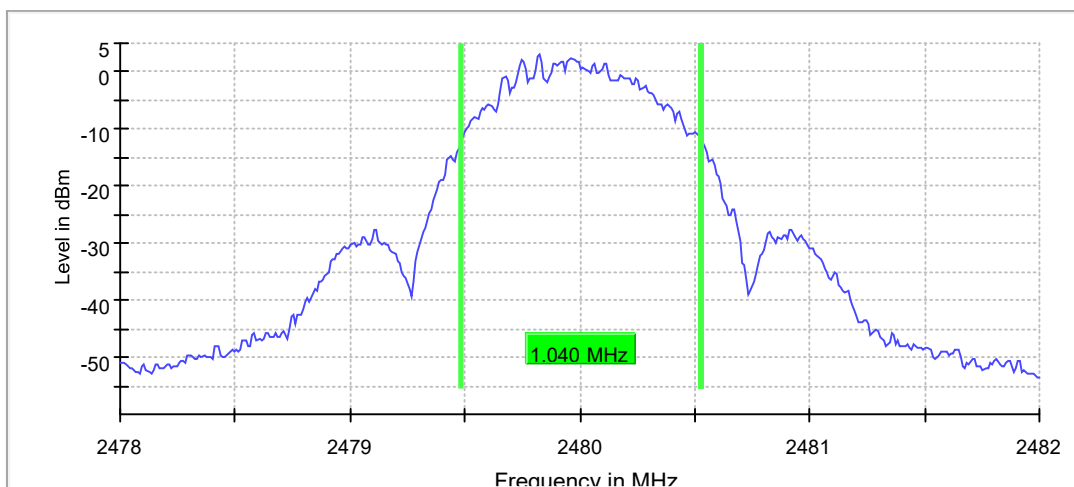
99% Occupied Channel Bandwidth, 1Mbps, 2480MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.040000	---	---	2479.485000	2480.525000

(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	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	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	0.05 dB	0.30 dB

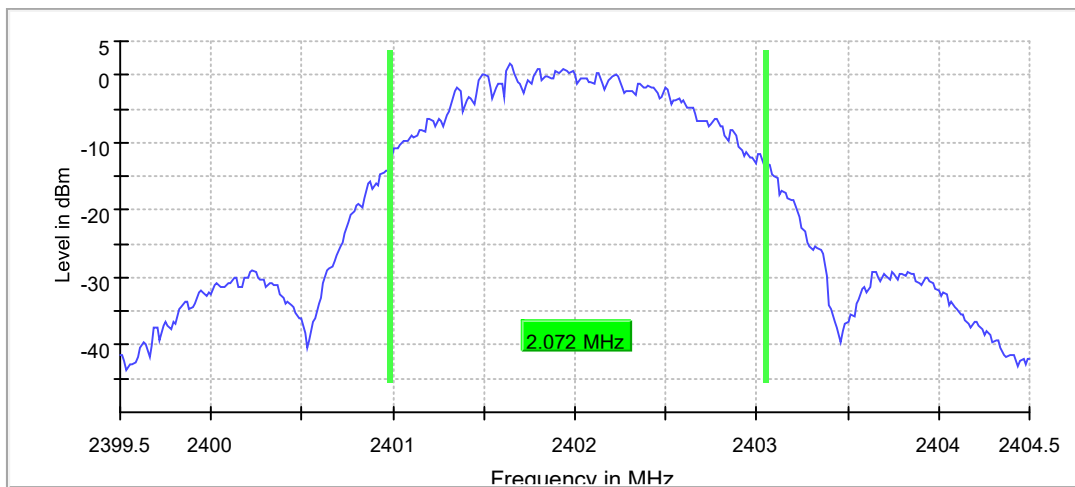
99% Occupied Channel Bandwidth, 2Mbps, 2402MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	2.072072	---	---	2400.978979	2403.051051

(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	2.39950 GHz	2.39950 GHz
Stop Frequency	2.40450 GHz	2.40450 GHz
Span	5.000 MHz	5.000 MHz
RBW	30.000 kHz	>= 25.000 kHz
VBW	100.000 kHz	>= 90.000 kHz
SweepPoints	333	~ 333
Sweeptime	63.218 µs	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	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	0.06 dB	0.30 dB

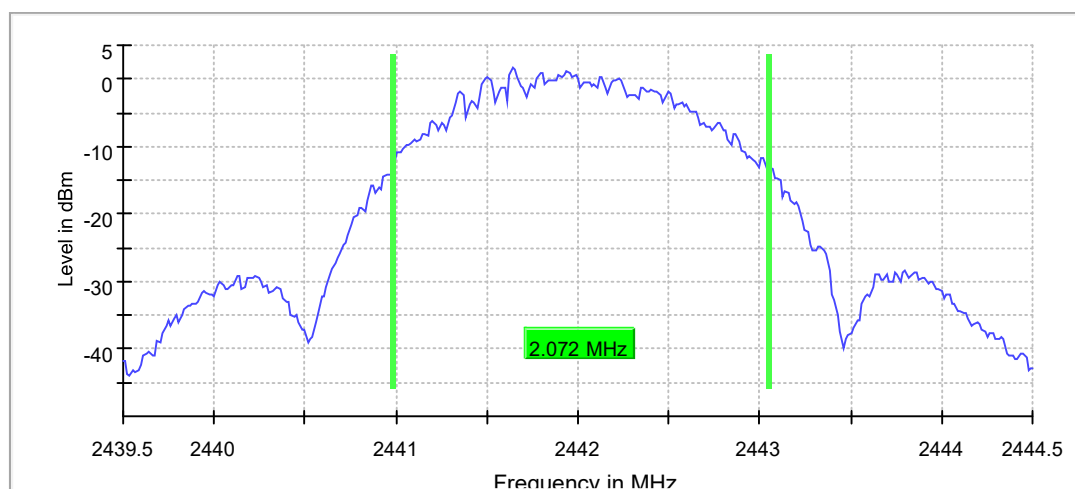
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99% Occupied Channel Bandwidth, 2Mbps, 2442MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2442.000000	2.072072	---	---	2440.978979	2443.051051

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

DUT Frequency (MHz)	Result
2442.000000	PASS

99 % Bandwidth


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43950 GHz	2.43950 GHz
Stop Frequency	2.44450 GHz	2.44450 GHz
Span	5.000 MHz	5.000 MHz
RBW	30.000 kHz	>= 25.000 kHz
VBW	100.000 kHz	>= 90.000 kHz
SweepPoints	333	~ 333
Sweeptime	63.218 µs	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	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	0.11 dB	0.30 dB

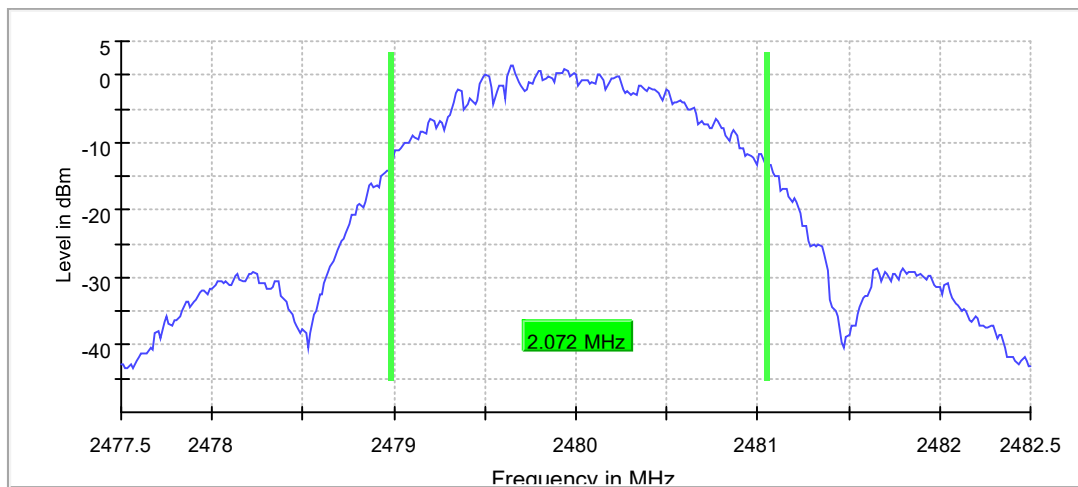
99% Occupied Channel Bandwidth, 2Mbps, 2480MHz

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	2.072072	---	---	2478.978979	2481.051051

(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	2.47750 GHz	2.47750 GHz
Stop Frequency	2.48250 GHz	2.48250 GHz
Span	5.000 MHz	5.000 MHz
RBW	30.000 kHz	>= 25.000 kHz
VBW	100.000 kHz	>= 90.000 kHz
SweepPoints	333	~ 333
Sweeptime	63.218 µs	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	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	0.07 dB	0.30 dB

5.1.3 Output Power

RESULT:**Pass**

Date of testing : 2025-05-08
Ambient temperature : 23.5°C
Relative humidity : 59.5%
Atmospheric pressure : 101kPa
Test requirement : FCC Part 15.247(b)(3)
RSS-247 Issue 3, August 2023, Clause 5.4(d)
Test procedure : ANSI C63.10: 2013
Test voltage : DC 3.3V
Test modes applied : A

Table 8: Peak Output Power

Data Rate	Frequency [MHz]	Peak Conducted Output Power [dBm]	Limit [dBm]
1Mbps	2402	9.5	30
1Mbps	2442	9.4	30
1Mbps	2480	9.3	30
2Mbps	2402	9.5	30
2Mbps	2442	9.4	30
2Mbps	2480	9.2	30

Note:

1. The cable loss is taken into account in results.
2. EIRP=Conducted Output Power + Antenna Gain (-1.06dBi), which is far below the 4 W (36dBm).

5.1.4 Power Spectral Density

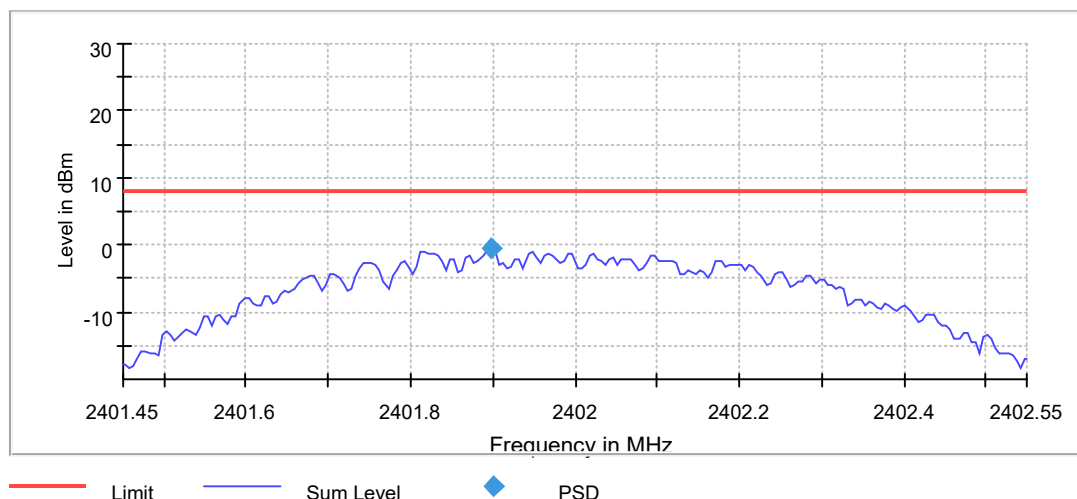
RESULT:**Pass**

Date of testing	:	2025-05-08
Ambient temperature	:	23.5°C
Relative humidity	:	59.5%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.247(e) RSS-247 Issue 3, August 2023, Clause 5.2(b)
Test procedure	:	ANSI C63.10: 2013
Test voltage	:	DC 3.3V
Test modes applied	:	A

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Power Spectral Density, 1Mbps, 2402MHz

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2401.897592	-0.393	8.0	PASS

Peak Power Spectral Density

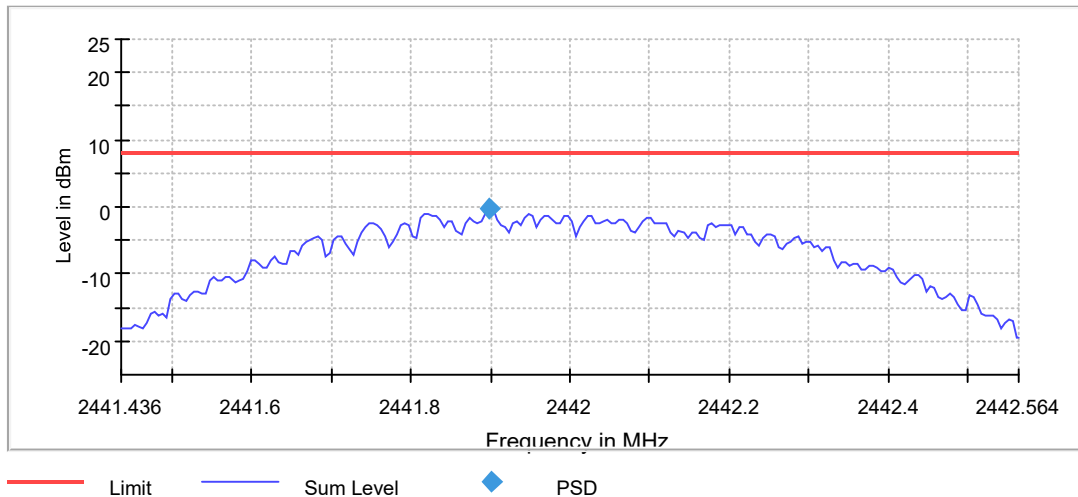

Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40145 GHz	2.40145 GHz
Stop Frequency	2.40255 GHz	2.40255 GHz
Span	1.099 MHz	1.099 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	220	~ 220
Sweeptime	1.100 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	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.13 dB	0.50 dB

Power Spectral Density, 1Mbps, 2442MHz

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2442.000000	2441.897617	-0.327	8.0	PASS

Peak Power Spectral Density

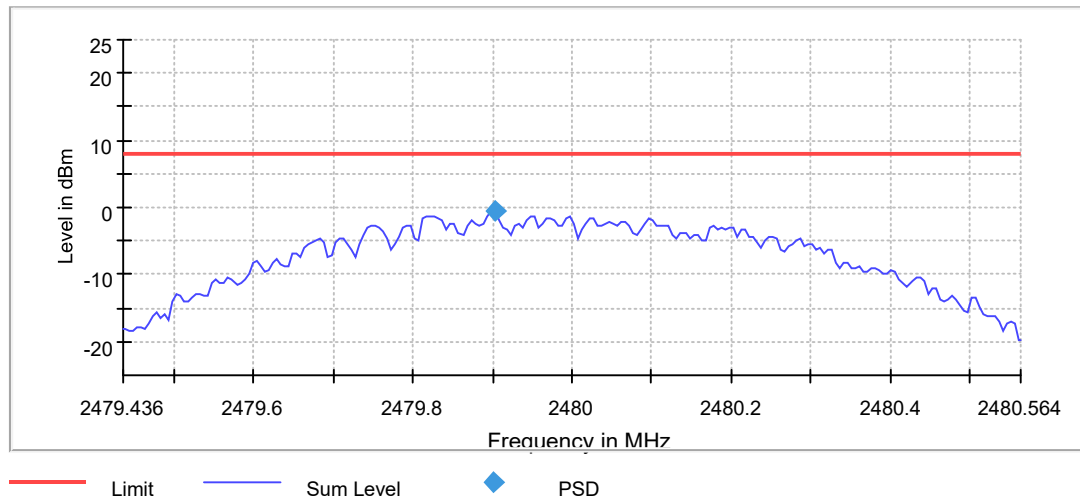

Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44144 GHz	2.44144 GHz
Stop Frequency	2.44256 GHz	2.44256 GHz
Span	1.129 MHz	1.129 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	226	~ 226
Sweeptime	1.130 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	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.18 dB	0.50 dB

Power Spectral Density, 1Mbps, 2480MHz

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2479.902611	-0.612	8.0	PASS

Peak Power Spectral Density

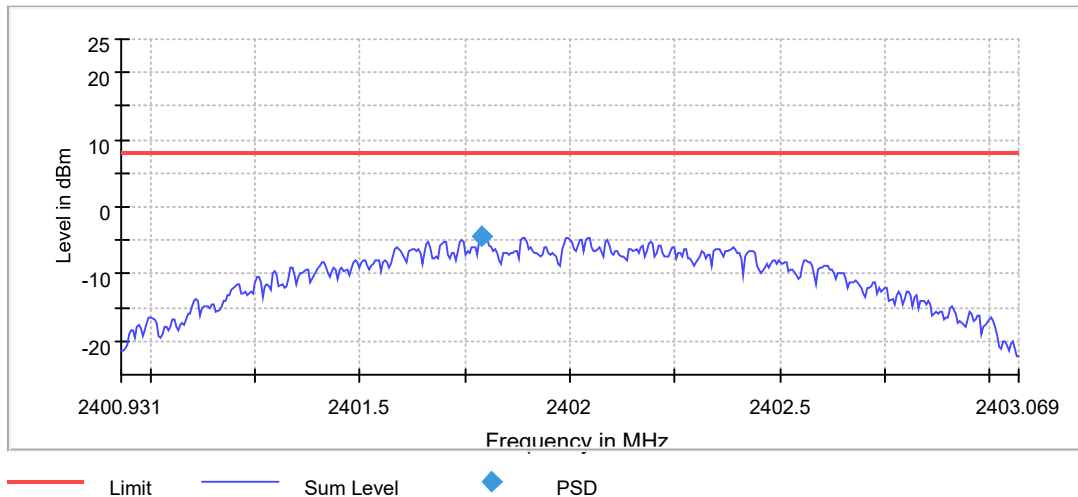

Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47944 GHz	2.47944 GHz
Stop Frequency	2.48056 GHz	2.48056 GHz
Span	1.129 MHz	1.129 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	226	~ 226
Sweeptime	1.130 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	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.08 dB	0.50 dB

Power Spectral Density, 2Mbps, 2402MHz

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2402.000000	2401.787638	-4.261	8.0	PASS

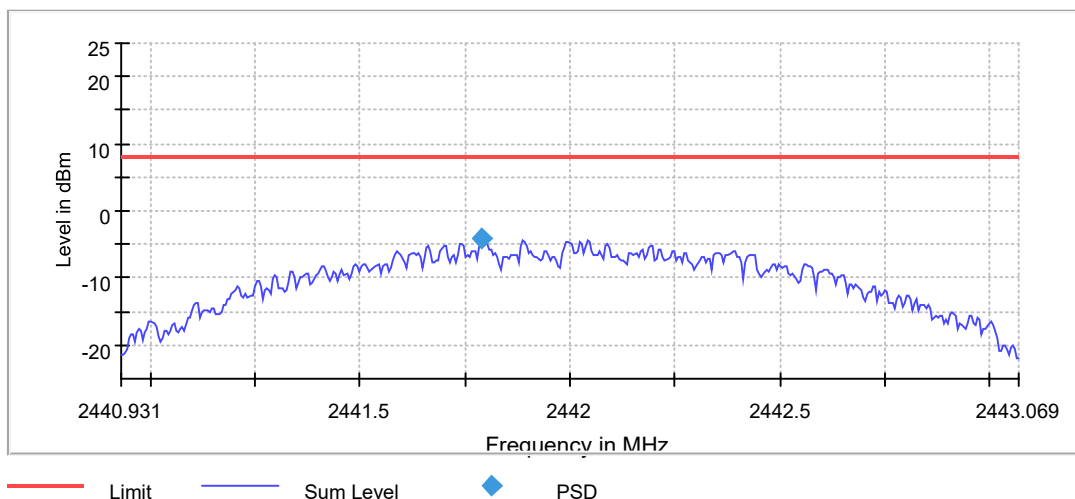
Peak Power Spectral Density


Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40093 GHz	2.40093 GHz
Stop Frequency	2.40307 GHz	2.40307 GHz
Span	2.139 MHz	2.139 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	428	~ 428
Sweptime	2.140 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	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.09 dB	0.50 dB

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Power Spectral Density, 2Mbps, 2442MHz

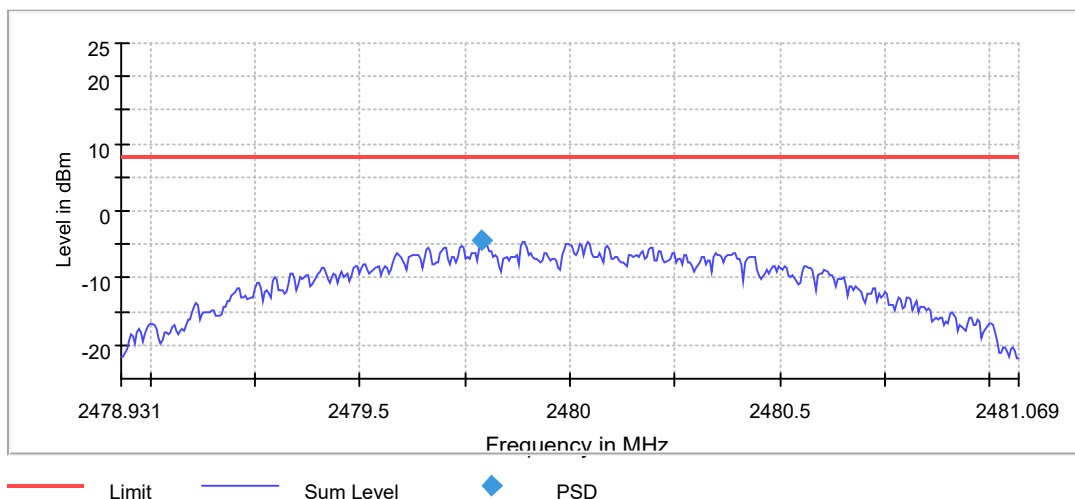
DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2442.000000	2441.787638	-4.216	8.0	PASS

Peak Power Spectral Density

Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44093 GHz	2.44093 GHz
Stop Frequency	2.44307 GHz	2.44307 GHz
Span	2.139 MHz	2.139 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	428	~ 428
Sweptime	2.140 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	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.08 dB	0.50 dB

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Power Spectral Density, 2Mbps, 2480MHz

DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
2480.000000	2479.787638	-4.478	8.0	PASS

Peak Power Spectral Density

Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47893 GHz	2.47893 GHz
Stop Frequency	2.48107 GHz	2.48107 GHz
Span	2.139 MHz	2.139 MHz
RBW	10.000 kHz	<= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	428	~ 428
Sweeptime	2.140 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	Sweep
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	3 / max. 150	max. 150
Stable	2 / 2	2
Max Stable Difference	0.07 dB	0.50 dB

5.1.5 Conducted Band Edge and out-of Band Emissions

RESULT:**Pass**

Date of testing	:	2025-05-08
Ambient temperature	:	23.5°C
Relative humidity	:	59.5%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.247(d) RSS-247 Issue 3, August 2023, Clause 5.5
Test procedure	:	ANSI C63.10: 2013
Test voltage	:	DC 3.3V
Test modes applied	:	A

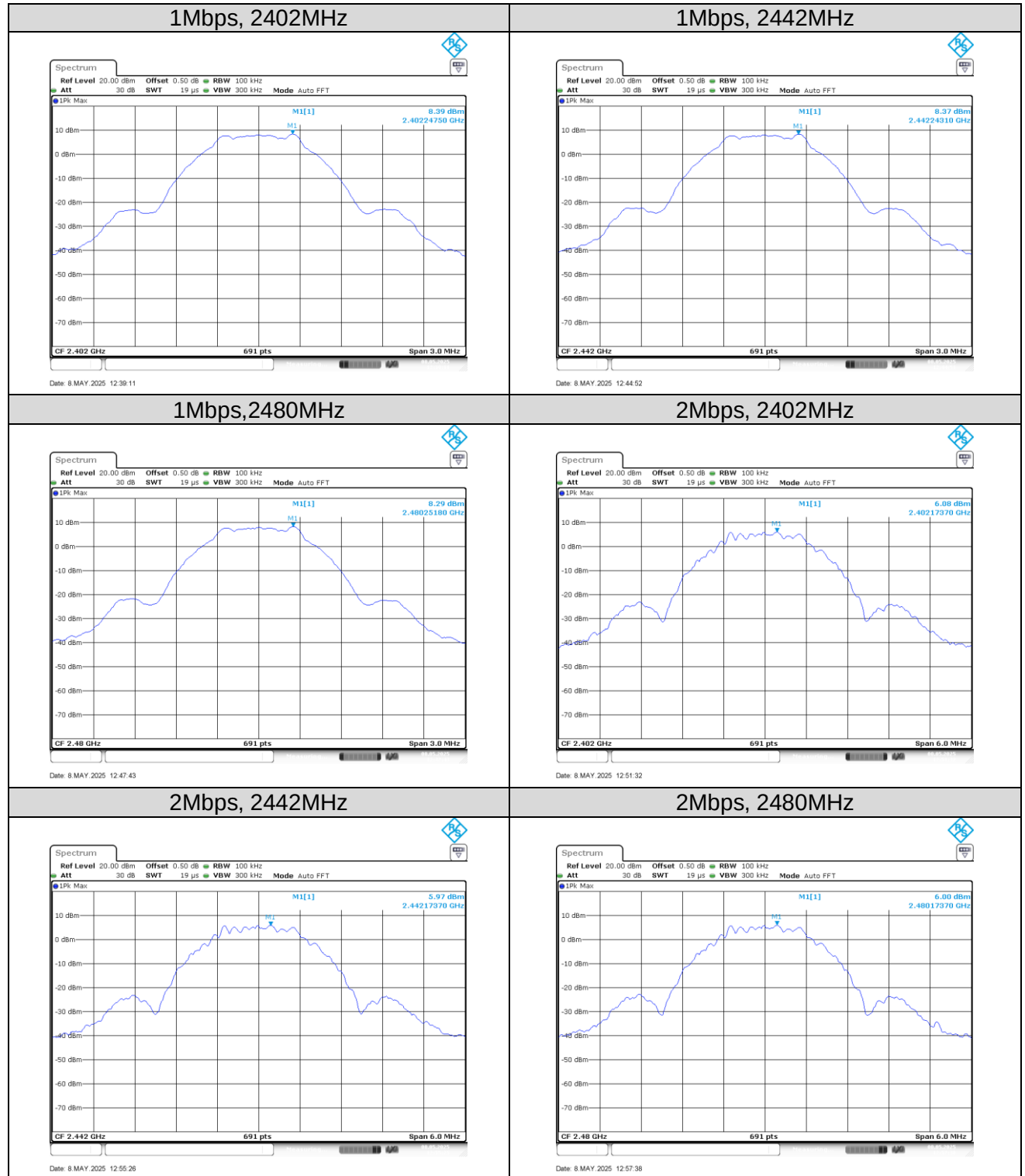
Figure 1: Reference level


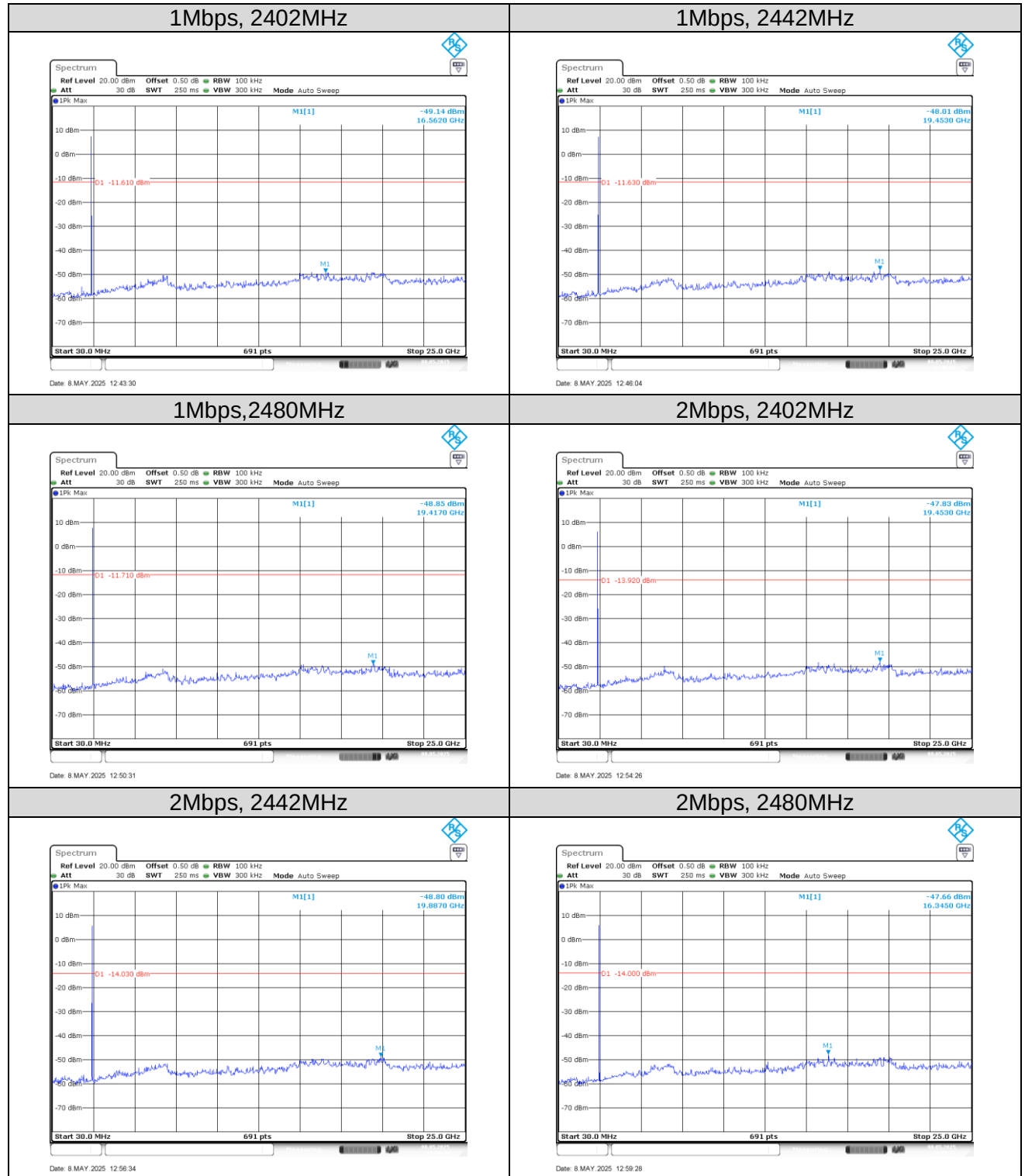
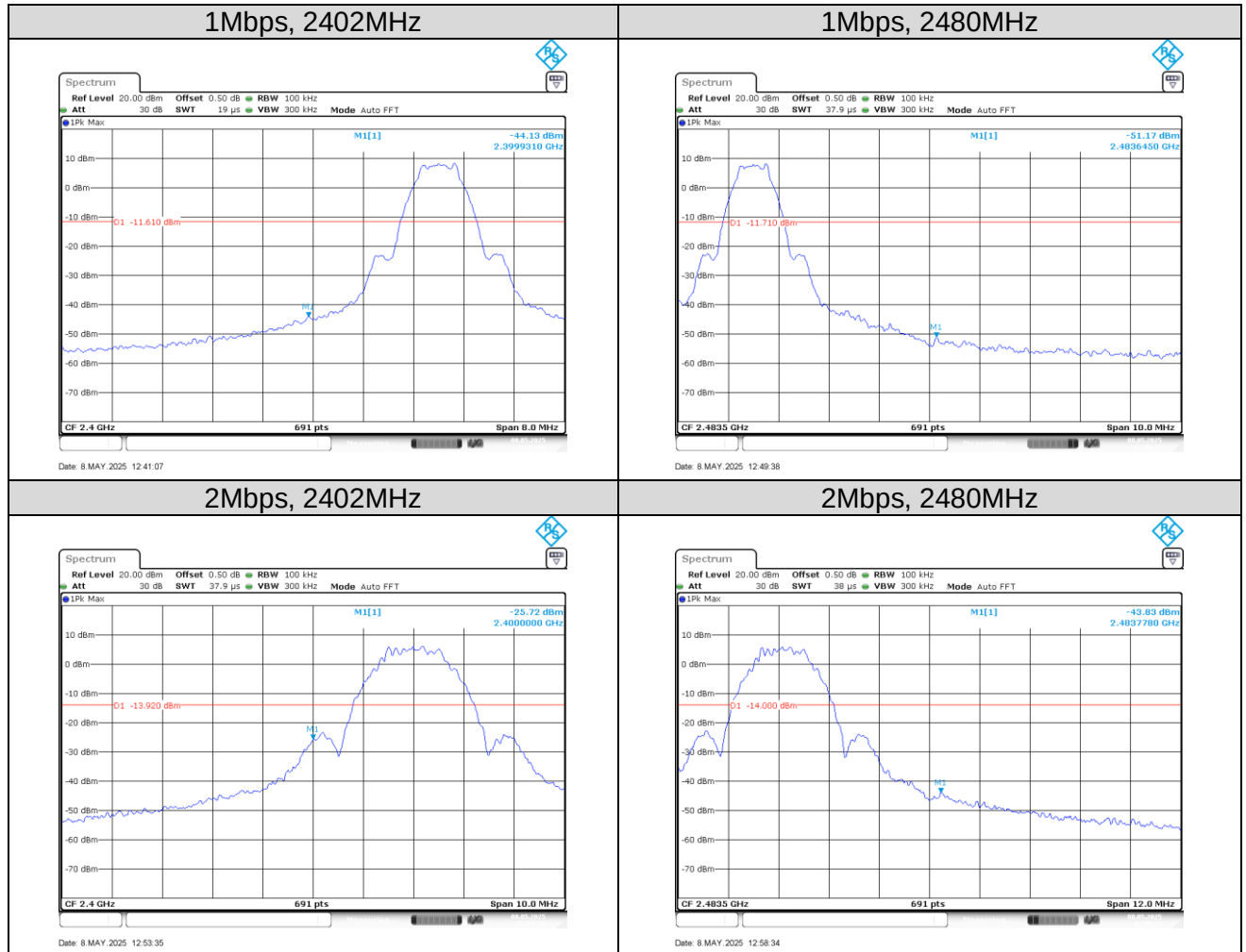
Figure 2: Conducted Spurious Emission


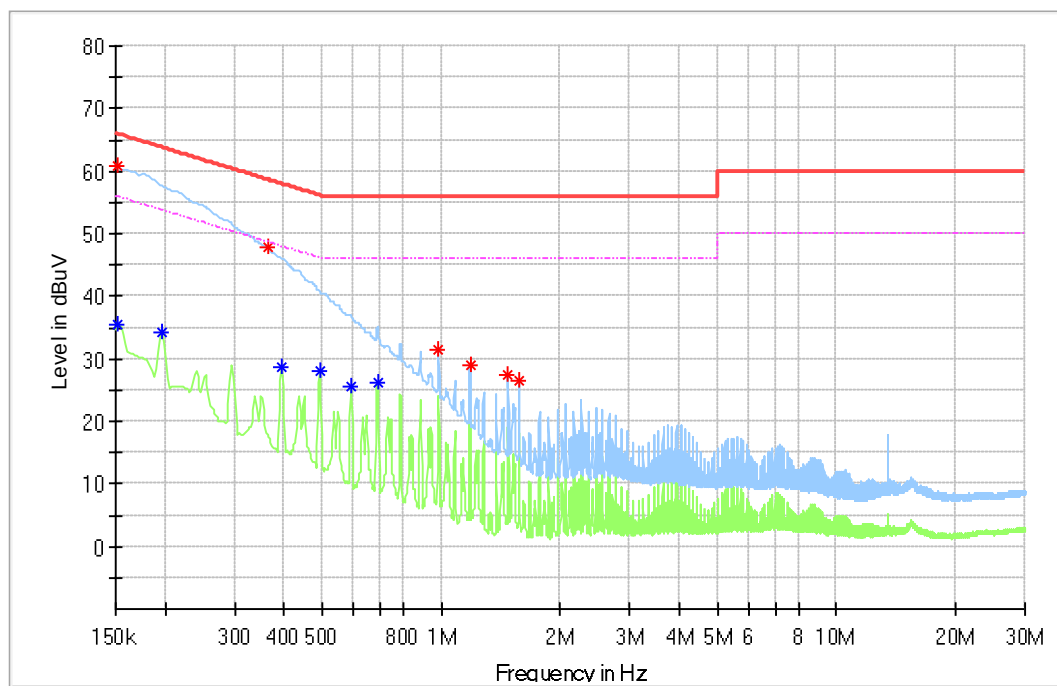
Figure 3: Conducted Band Edge


5.2 Emission in the Frequency Range up to 30MHz

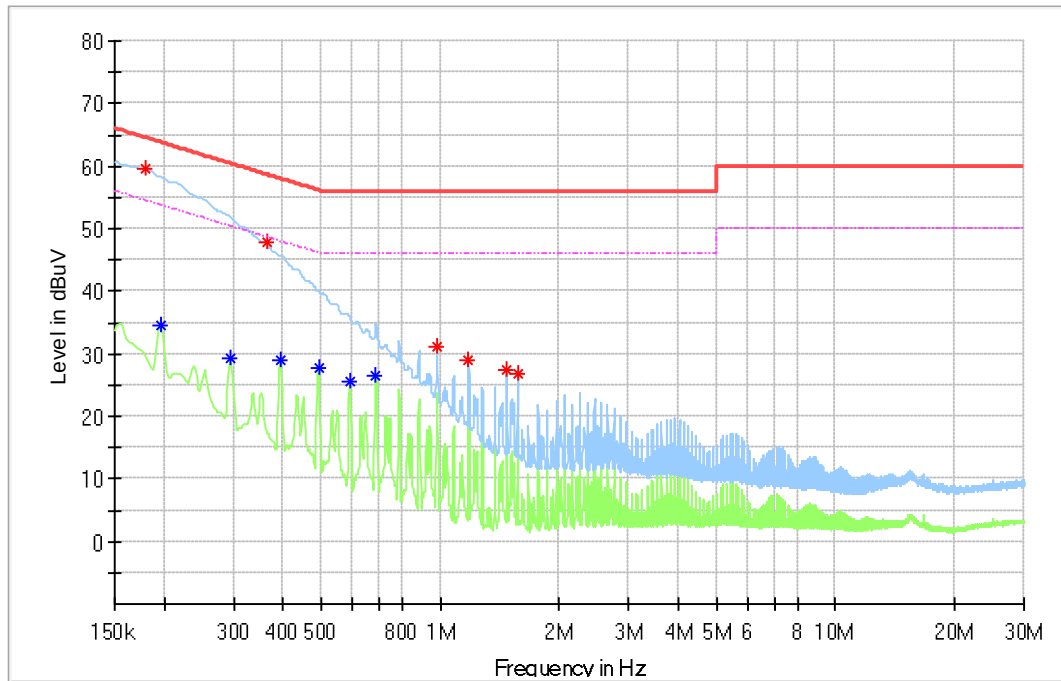
5.2.1 Conducted Emission

RESULT:**Pass**

Date of testing	:	2025-04-11
Ambient temperature	:	20.1°C
Relative humidity	:	49.5%
Atmospheric pressure	:	101kPa
Test requirement	:	FCC Part 15.207 (a) RSS-Gen Issue 5, Amendment 2, February 2021, Clause 8.8
Test procedure	:	KDB 558074 D01v05r02 ANSI C63.10: 2013
Test voltage	:	AC 120V, 60Hz
Test modes applied	:	B

Figure 4: Conducted Emission, L

Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.152250	60.89	---	65.88	4.98	L1	10.3
0.152250	---	35.54	55.88	20.34	L1	10.3
0.197250	---	34.11	53.73	19.62	L1	10.3
0.363750	47.86	---	58.64	10.78	L1	10.3
0.393000	---	28.72	48.00	19.28	L1	10.3
0.492000	---	27.96	46.13	18.17	L1	10.3
0.591000	---	25.69	46.00	20.31	L1	10.3
0.690000	---	26.29	46.00	19.71	L1	10.3
0.984750	31.46	---	56.00	24.54	L1	10.7
1.182750	29.00	---	56.00	27.00	L1	10.6
1.477500	27.36	---	56.00	28.64	L1	10.4
1.576500	26.55	---	56.00	29.45	L1	10.3

Figure 5: Conducted Emission, N

Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.179250	59.64	---	64.52	4.88	1000.0	9.000	N	10.6
0.197250	---	34.58	53.73	19.15	1000.0	9.000	N	10.8
0.294000	---	29.17	50.41	21.24	1000.0	9.000	N	10.5
0.363750	47.68	---	58.64	10.96	1000.0	9.000	N	10.4
0.393000	---	28.89	48.00	19.11	1000.0	9.000	N	10.4
0.492000	---	27.77	46.13	18.36	1000.0	9.000	N	10.2
0.588750	---	25.44	46.00	20.56	1000.0	9.000	N	10.3
0.687750	---	26.53	46.00	19.47	1000.0	9.000	N	10.4
0.982500	31.03	---	56.00	24.97	1000.0	9.000	N	10.4
1.180500	29.02	---	56.00	26.98	1000.0	9.000	N	10.4
1.475250	27.30	---	56.00	28.70	1000.0	9.000	N	10.4
1.572000	26.80	---	56.00	29.20	1000.0	9.000	N	10.5

5.3 Emission in the Frequency Range above 30MHz

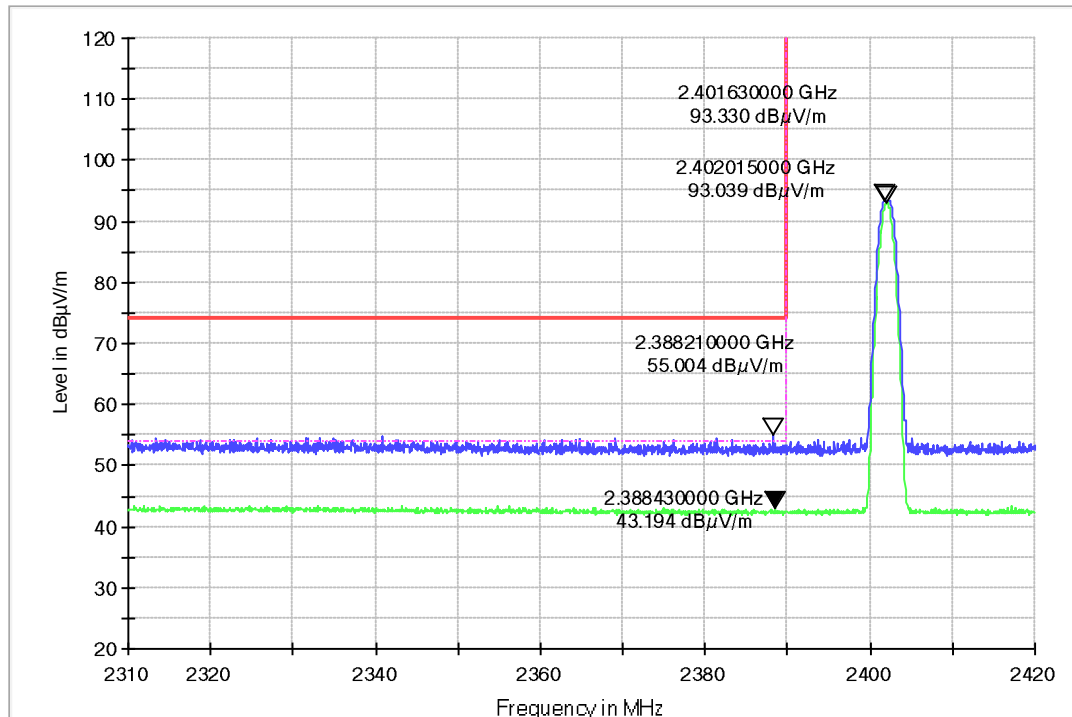
5.3.1 Radiated Band-Edge

RESULT:**Pass**

Date of testing	:	2025-04-26
Ambient temperature	:	23.9°C
Relative humidity	:	59.2%
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: 2013
Test voltage	:	DC 3.3V
Test modes applied	:	A

Figure 6: Radiated Band-Edge, 1Mbps, 2402MHz, H

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


Figure 7: Radiated Band-Edge, 1Mbps, 2402MHz, V

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

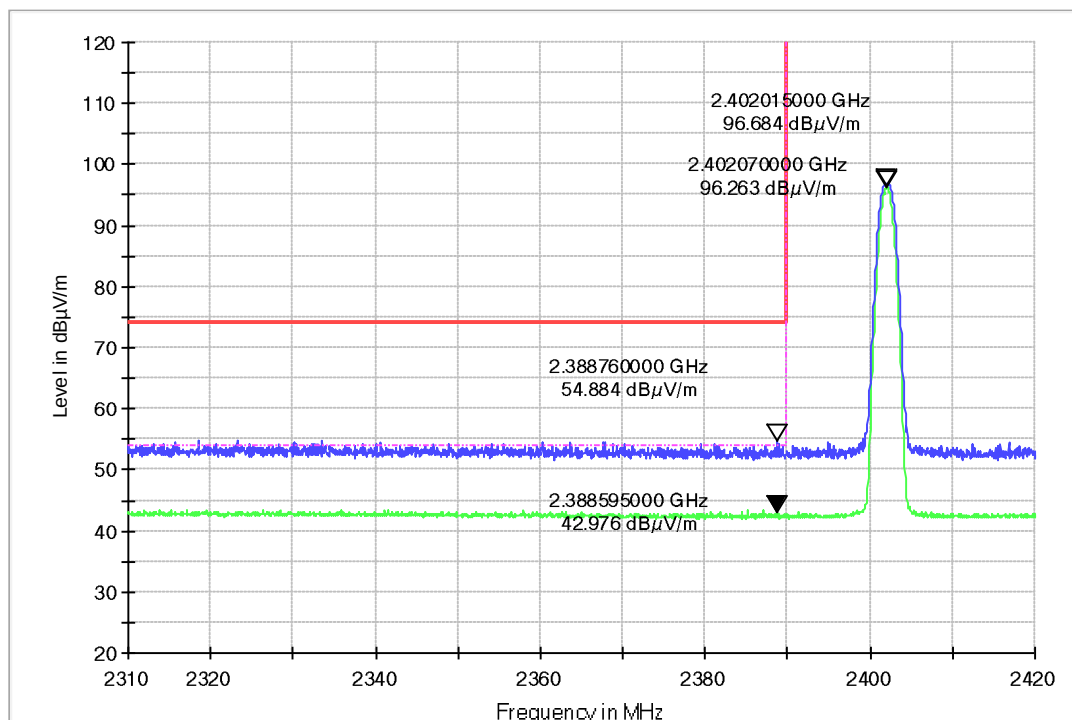
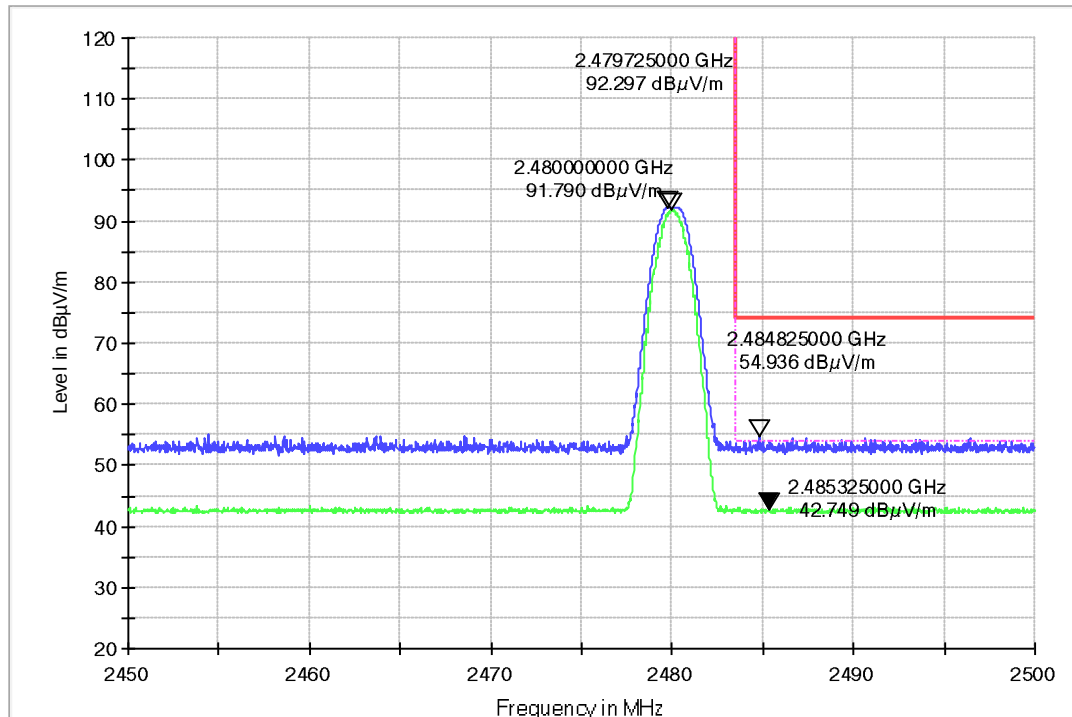


Figure 8: Radiated Band-Edge, 1Mbps, 2480MHz, H

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


Figure 9: Radiated Band-Edge, 1Mbps, 2480MHz, V

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

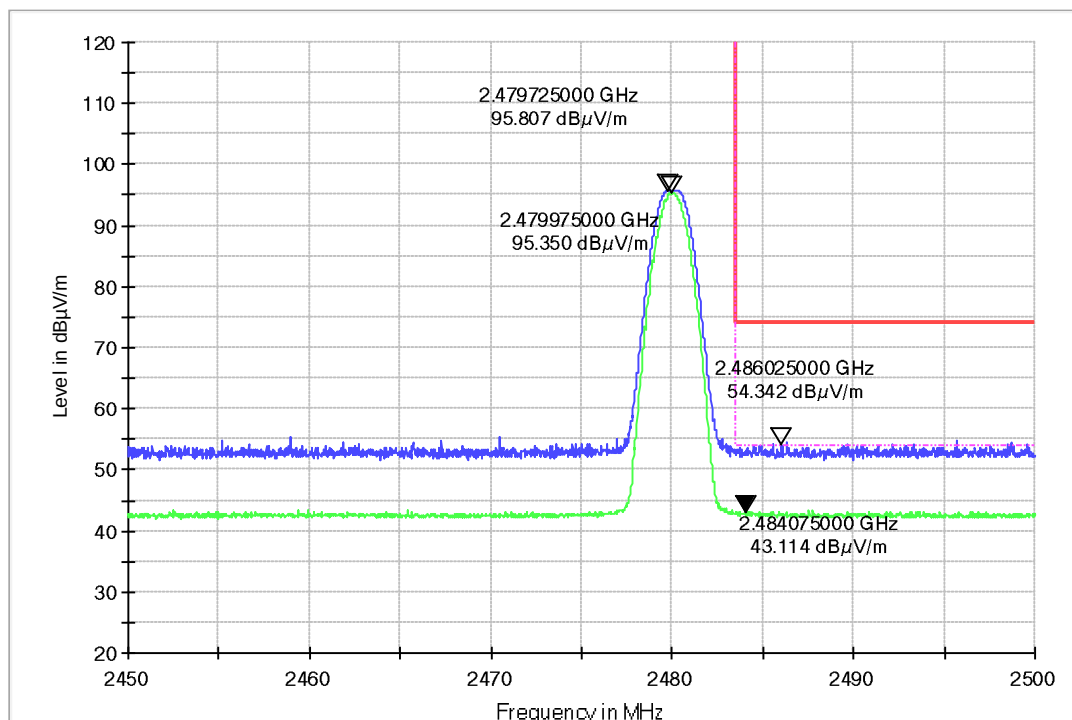
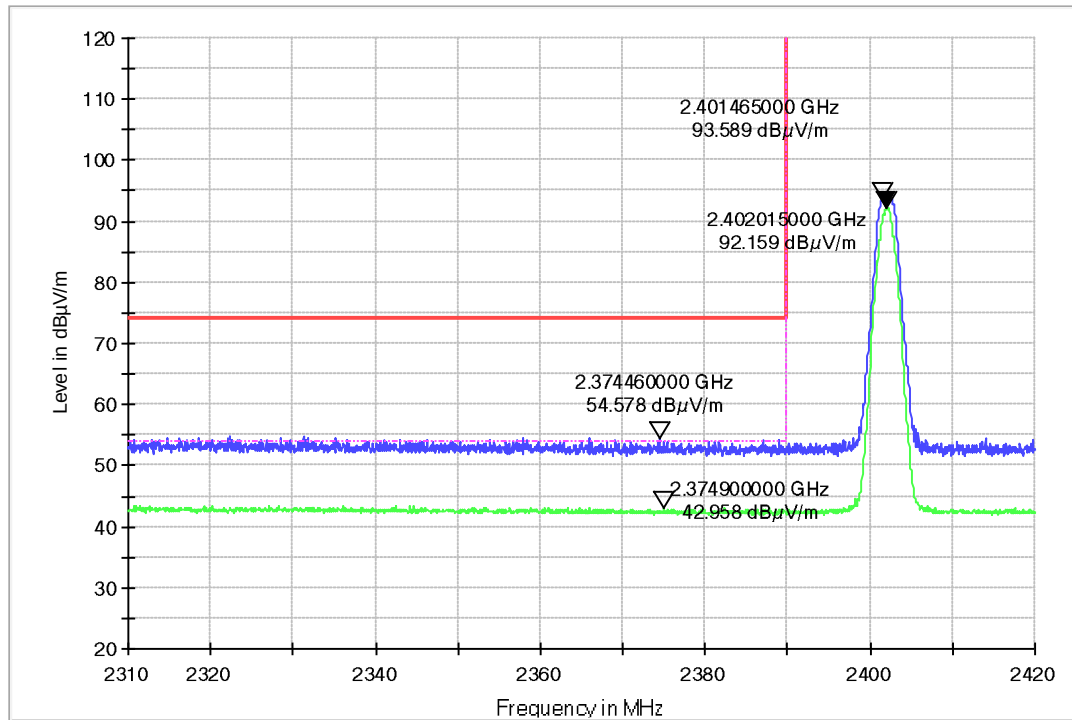


Figure 10: Radiated Band-Edge, 2Mbps, 2402MHz, H

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


Figure 11: Radiated Band-Edge, 2Mbps, 2402MHz, V

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

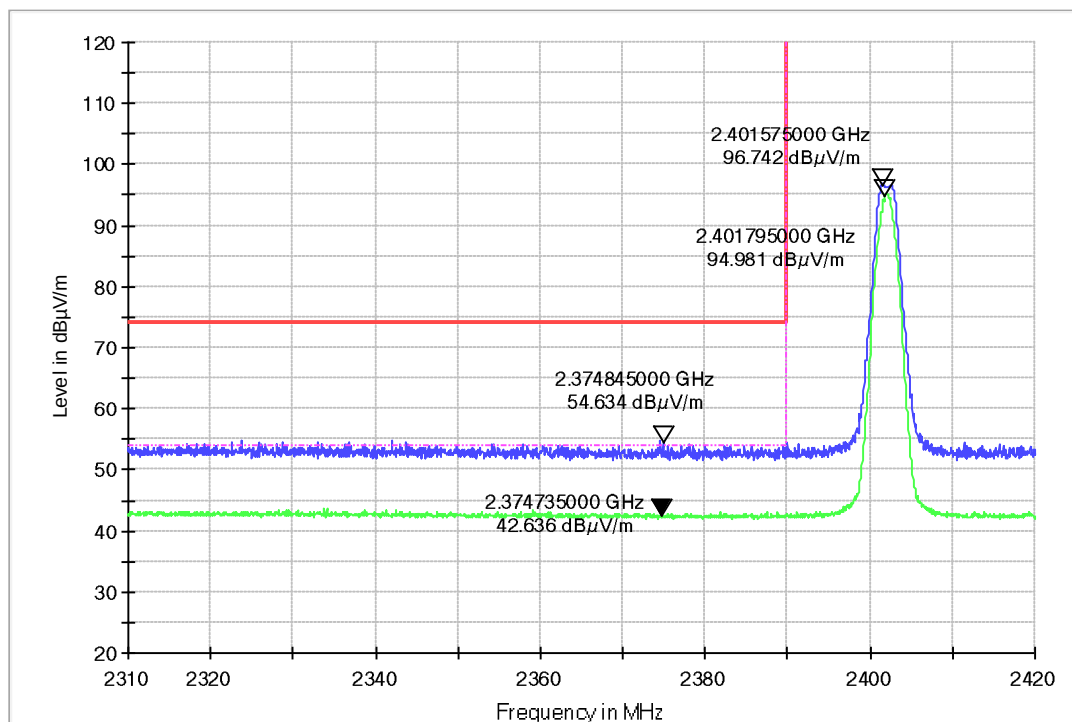
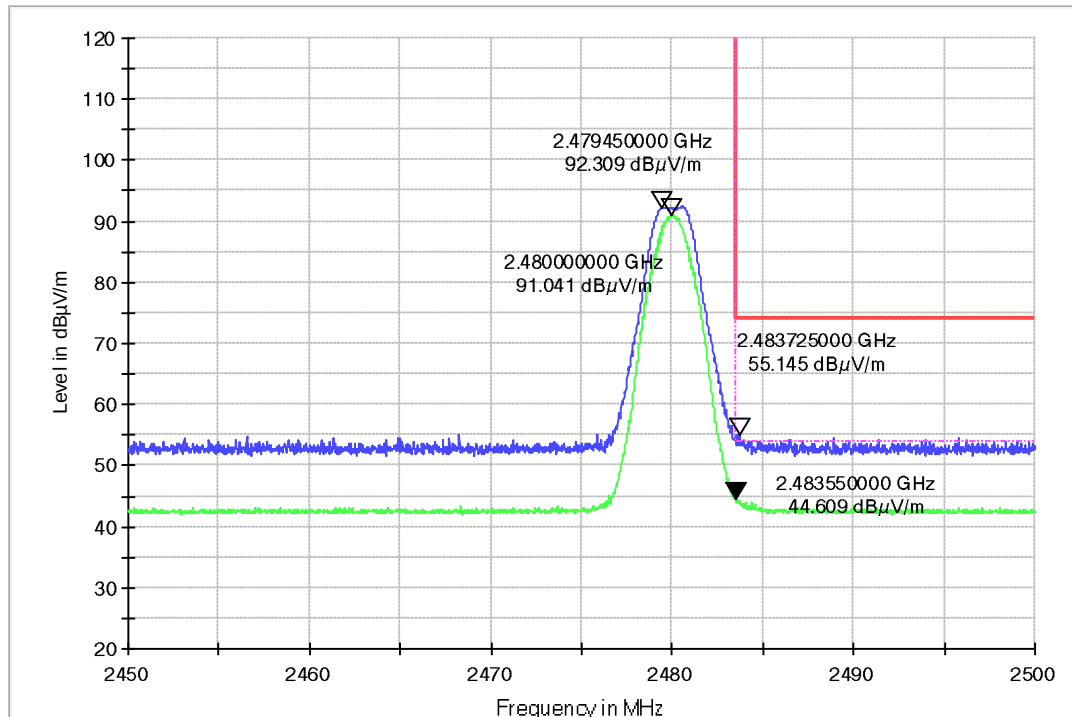
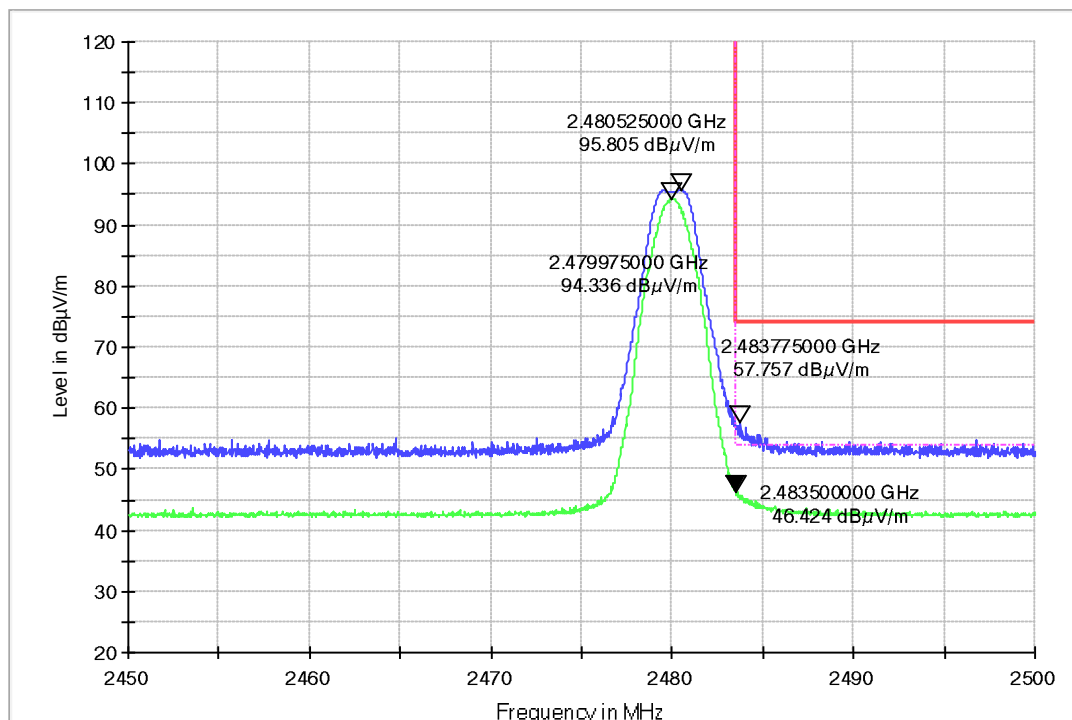


Figure 12: Radiated Band-Edge, 2Mbps, 2480MHz, H

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


Figure 13: Radiated Band-Edge, 2Mbps, 2480MHz, V

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



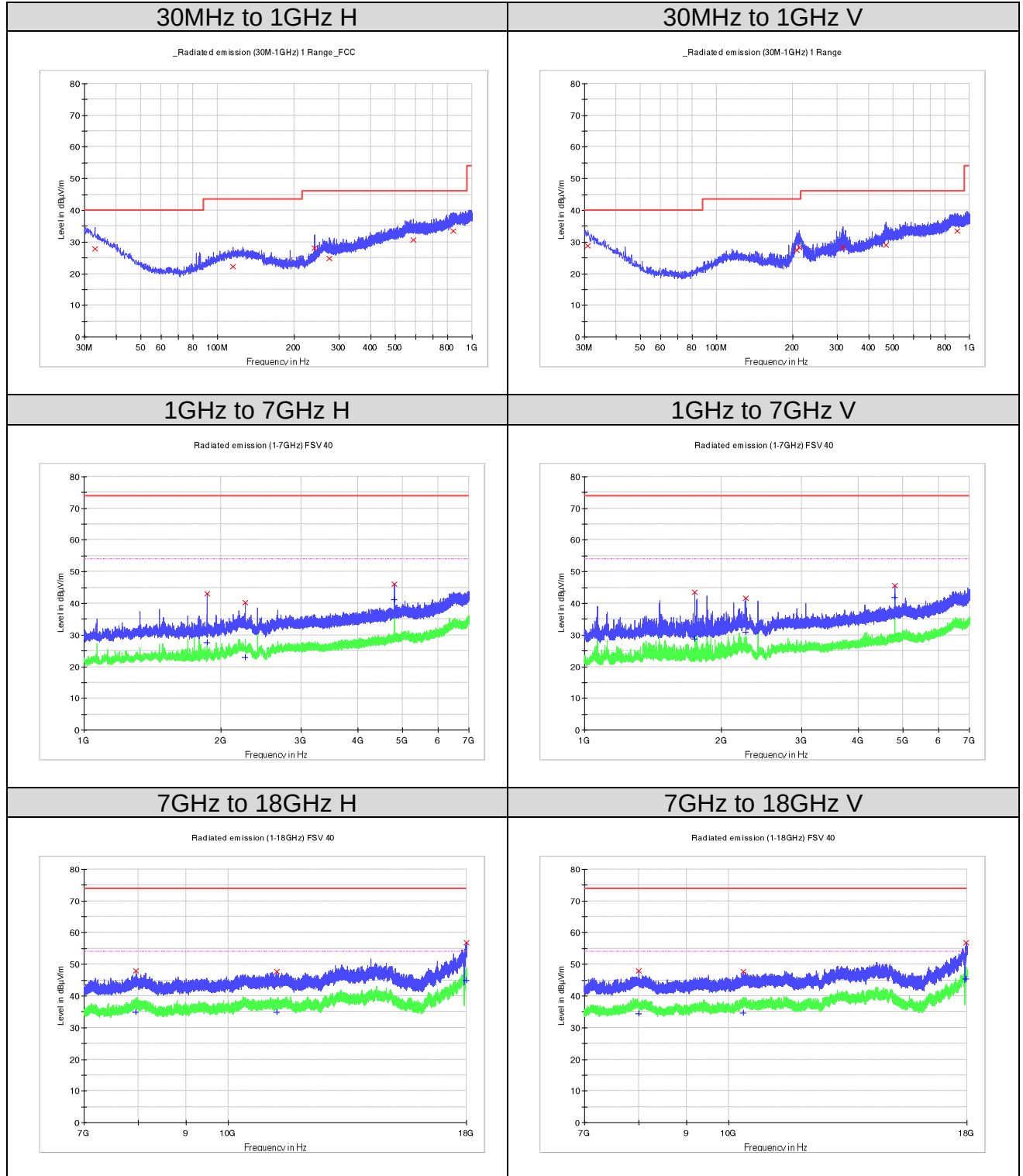
5.3.2 Radiated Spurious Emission

RESULT:**Pass**

Date of testing	:	2025-05-11
Ambient temperature	:	22.5°C
Relative humidity	:	59.2%
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: 2013
Test voltage	:	DC 3.3V
Test modes applied	:	A

Note:

1. Only the worst case is shown on the report.
2. For the frequency range from 18GHz to 25GHz, no emission was found.

Figure 14: Radiated Spurious Emission, 1Mbps, 2402MHz


Limit and Margin
QP

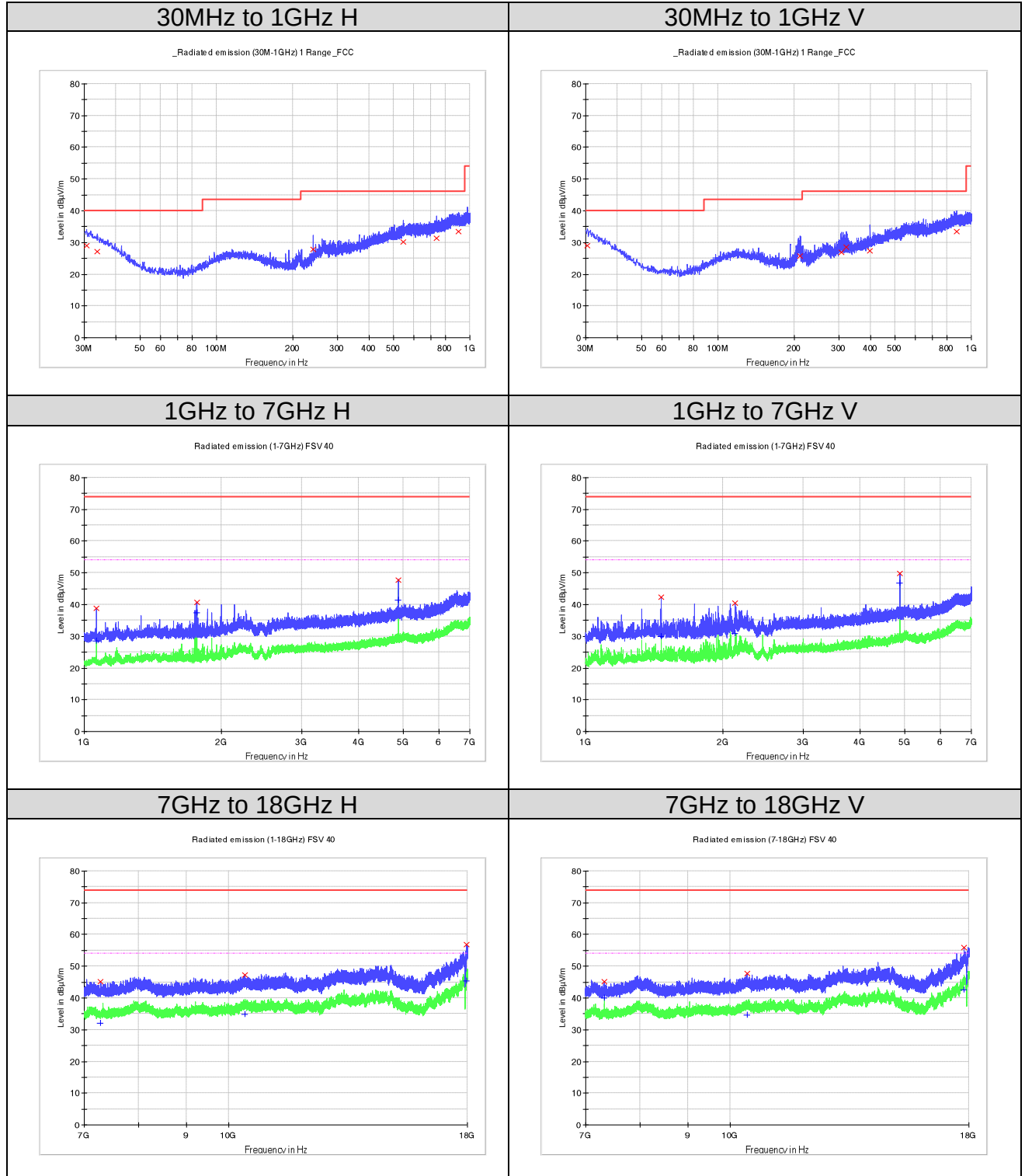
Frequency (MHz)	QuasiPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
32.910000	28.0	H	24.0	12.1	40.0
114.875000	22.1	H	18.9	21.4	43.5
240.975000	28.0	H	18.5	18.0	46.0
274.561250	24.8	H	20.0	21.2	46.0
587.265000	30.6	H	26.6	15.4	46.0
844.921250	33.5	H	28.9	12.5	46.0
30.970000	28.7	V	25.2	11.3	40.0
207.873750	27.3	V	16.3	16.2	43.5
211.875000	28.2	V	16.1	15.3	43.5
316.028750	28.2	V	20.7	17.8	46.0
467.833750	29.1	V	24.7	16.9	46.0
891.966250	33.4	V	28.5	12.6	46.0

PK

Frequency (MHz)	MaxPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1863.727273	43.2	H	-18.4	30.8	74.0
2260.545455	40.3	H	-15.6	33.7	74.0
4803.454546	46.0	H	-11.4	28.0	74.0
7951.156250	47.9	H	-3.7	26.1	74.0
11264.906250	47.8	H	-2.6	26.2	74.0
17996.906250	56.8	H	12.3	17.2	74.0
1746.181818	43.5	V	-18.8	30.5	74.0
2263.818182	41.7	V	-15.7	32.3	74.0
4804.272727	45.6	V	-11.4	28.4	74.0
8007.531250	47.9	V	-3.5	26.1	74.0
10365.312500	47.8	V	-2.7	26.2	74.0
17964.593750	56.9	V	11.8	17.1	74.0

AV

Frequency (MHz)	Average (dBµV/m)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1863.727273	27.7	H	-18.4	26.3	54.0
2260.545455	22.8	H	-15.6	31.2	54.0
4803.454546	41.3	H	-11.4	12.7	54.0
7951.156250	34.8	H	-3.7	19.2	54.0
11264.906250	34.9	H	-2.6	19.1	54.0
17996.906250	44.9	H	12.3	9.1	54.0
1746.181818	28.8	V	-18.8	25.2	54.0
2263.818182	30.9	V	-15.7	23.1	54.0
4804.272727	41.9	V	-11.4	12.1	54.0
8007.531250	34.3	V	-3.5	19.7	54.0
10365.312500	34.7	V	-2.7	19.3	54.0
17964.593750	45.4	V	11.8	8.7	54.0

Figure 15: Radiated Spurious Emission, 1Mbps, 2442MHz


Limit and Margin
QP

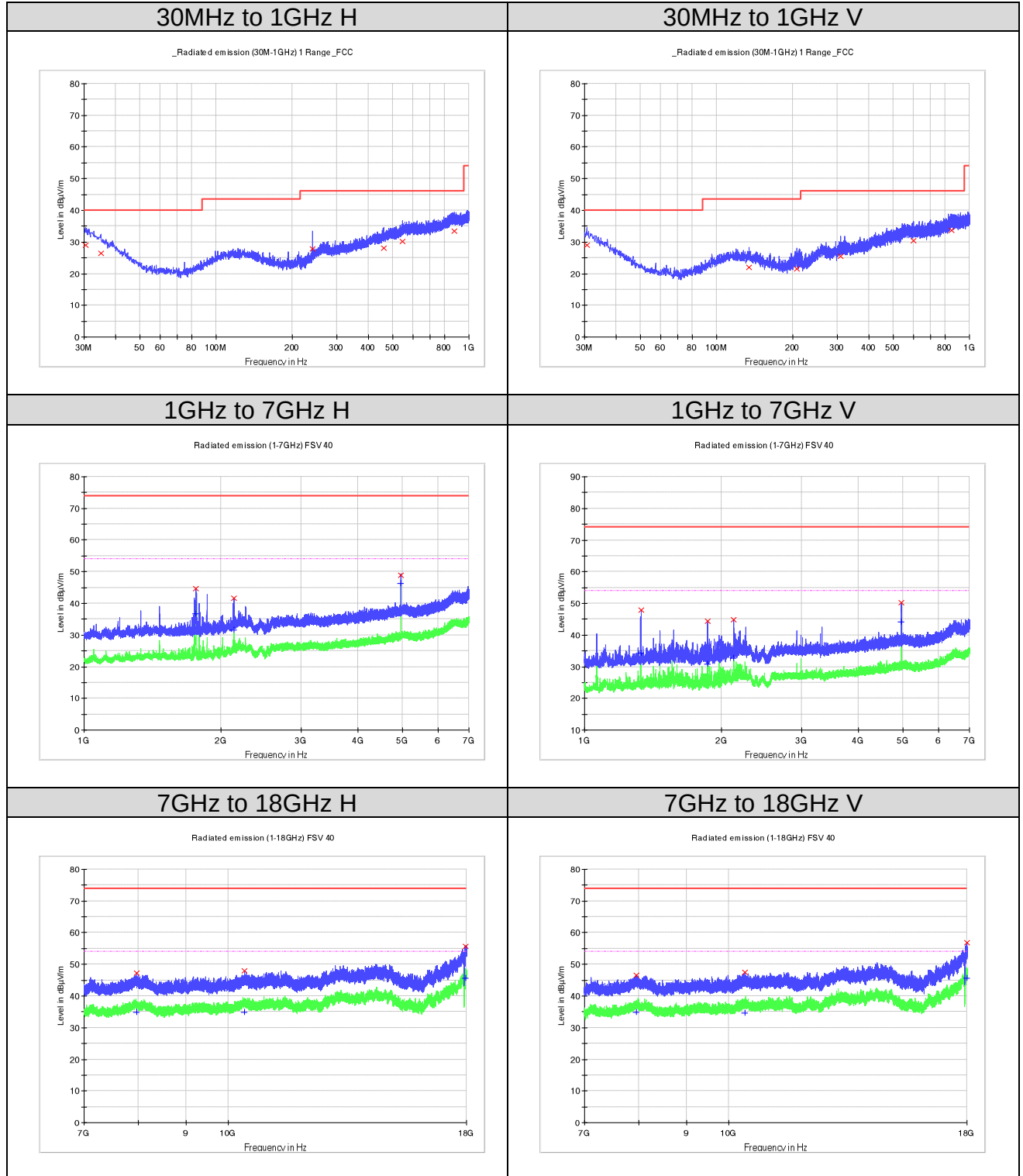
Frequency (MHz)	QuasiPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.606250	29.0	H	25.3	11.0	40.0
33.880000	27.1	H	23.5	12.9	40.0
240.853750	27.8	H	18.4	18.2	46.0
545.433750	30.2	H	26.4	15.8	46.0
737.857500	31.4	H	27.6	14.6	46.0
903.848750	33.4	H	28.6	12.6	46.0
30.485000	28.9	V	25.4	11.1	40.0
210.905000	25.7	V	16.2	17.8	43.5
306.692500	27.0	V	20.5	19.0	46.0
320.515000	28.5	V	20.9	17.5	46.0
398.842500	27.3	V	22.9	18.7	46.0
878.022500	33.5	V	28.5	12.5	46.0

PK

Frequency (MHz)	MaxPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1063.000000	38.7	H	-20.1	35.3	74.0
1763.909091	40.8	H	-18.8	33.2	74.0
4883.636364	47.8	H	-11.3	26.2	74.0
7292.531250	45.1	H	-6.5	28.9	74.0
10404.500000	47.2	H	-2.6	26.8	74.0
17960.468750	56.9	H	11.7	17.1	74.0
1461.454546	42.3	V	-18.7	31.7	74.0
2126.363636	40.4	V	-16.6	33.6	74.0
4884.454546	49.7	V	-11.3	24.3	74.0
7325.187500	45.1	V	-6.5	28.9	74.0
10420.656250	47.7	V	-2.6	26.3	74.0
17785.156250	55.9	V	8.6	18.1	74.0

AV

Frequency (MHz)	Average (dBµV/m)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1063.000000	28.5	H	-20.1	25.5	54.0
1763.909091	37.5	H	-18.8	16.5	54.0
4883.636364	41.4	H	-11.3	12.6	54.0
7292.531250	32.0	H	-6.5	22.0	54.0
10404.500000	34.8	H	-2.6	19.2	54.0
17960.468750	45.4	H	11.7	8.6	54.0
1461.454546	30.0	V	-18.7	24.0	54.0
2126.363636	30.9	V	-16.6	23.1	54.0
4884.454546	46.9	V	-11.3	7.1	54.0
7325.187500	39.9	V	-6.5	14.1	54.0
10420.656250	34.6	V	-2.6	19.4	54.0
17785.156250	42.7	V	8.6	11.3	54.0

Figure 16: Radiated Spurious Emission, 1Mbps, 2480MHz


Limit and Margin
QP

Frequency (MHz)	QuasiPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.363750	29.1	H	25.5	10.9	40.0
34.971250	26.4	H	22.9	13.6	40.0
240.853750	27.9	H	18.4	18.1	46.0
459.103750	28.0	H	24.4	18.0	46.0
544.827500	30.2	H	26.4	15.8	46.0
874.506250	33.6	H	28.5	12.4	46.0
30.606250	29.0	V	25.3	11.0	40.0
134.153750	21.9	V	18.5	21.6	43.5
207.873750	21.5	V	16.3	22.0	43.5
309.238750	25.4	V	20.5	20.6	46.0
600.723750	30.4	V	26.7	15.6	46.0
852.438750	33.7	V	29.0	12.3	46.0

PK

Frequency (MHz)	MaxPeak (dBµV/m)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBµV/m)
1762.545455	44.6	H	-18.8	29.4	74.0
2132.090909	41.7	H	-16.5	32.3	74.0
4959.454546	49.0	H	-11.2	25.0	74.0
7968.343750	47.3	H	-3.6	26.7	74.0
10404.500000	48.0	H	-2.6	26.0	74.0
17970.437500	55.7	H	11.9	18.3	74.0
1864.000000	46.8	V	-18.4	27.2	74.0
2265.727273	44.8	V	-15.7	29.2	74.0
4959.500000	50.9	V	-11.2	23.1	74.0
7954.250000	46.7	V	-3.6	27.3	74.0
10412.062500	47.6	V	-2.6	26.4	74.0
17982.125000	56.7	V	12.1	17.3	74.0

AV

Frequency (MHz)	Average (dBµV/m)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
1762.545455	36.7	H	-18.8	17.4	54.0
2132.090909	31.6	H	-16.5	22.5	54.0
4959.454546	46.2	H	-11.2	7.8	54.0
7968.343750	34.9	H	-3.6	19.1	54.0
10404.500000	34.8	H	-2.6	19.2	54.0
17970.437500	45.6	H	11.9	8.4	54.0
1864.000000	30.6	V	-18.4	23.4	54.0
2265.727273	35.0	V	-15.7	19.0	54.0
4959.500000	47.6	V	-11.2	6.4	54.0
7954.250000	34.8	V	-3.6	19.3	54.0
10412.062500	34.7	V	-2.6	19.4	54.0
17982.125000	45.7	V	12.1	8.3	54.0

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