TEST REPORT

Test Report No. : UL-RPT-RP15585693-1916A

Customer*	:	Cisco Systems Norway AS
Model No. / HVIN*	:	TTC7-29
HMN*	:	Cisco Desk Pro G2
PMN*	:	07100725
Contains FCC ID*	:	LDKXV2EA2797
Contains IC*	:	2461N-XV2EA2797
Technology	:	WLAN (802.11 b/g/n/ax)
Test Standard(s)	:	FCC Parts 15.209(a) & 15.247(d) Innovation, Science and Economic Development Canada RSS-247 Issue 3 August 2023, Section 5.5 RSS-Gen Issue 5 February 2021, Section 6.13, 8.2 & 8.9
Test Laboratory	:	UL International (UK) Ltd, Basingstoke, Hampshire, RG24 8AH, United Kingdom

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2. The results in this report apply only to the sample(s) tested.
3. The sample tested is in compliance with the above standard(s).
4. The test results in this report are traceable to the national or international standards.
5. All information marked with (*) was provided by the Customer, Applicant or Authorised representative
6. Version 2.0 supersedes all previous versions.

Date of Issue: 08 September 2025

Checked by:

Ben Mercer
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Customer Information

Company Name*:	Cisco Systems Norway AS
Address*:	Philip Pedersens vei 1, 1366 Lysaker, Norway

Manufacturers Information

Manufacturers Name*:	Cisco Systems, Inc.
Address*:	170 West Tasman Drive, San Jose, CA 95134, United States of America

Report Revision History

Version Number	Issue Date	Revision Details	Revised By
1.0	16/06/2025	Initial Version	Ben Mercer
2.0	08/09/2025	TCB feedback addressed	Ben Mercer

Table of Contents

1 Attestation of Test Results

1.1 Description of EUT

The equipment under test (EUT) was a desktop collaboration unit.*

1.2 General Information

Specification Reference:	47CFR15.247
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunication): Part 15 Subpart C (Intentional Radiators) – Section 15.247
Specification Reference:	47CFR15.209
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunication): Part 15 Subpart C (Intentional Radiators) – Section 15.209
Specification Reference:	RSS-247 Issue 3 August 2023
Specification Title:	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
Specification Reference:	RSS-Gen Issue 5 February 2021
Specification Title:	General Requirements for Compliance of Radio Apparatus
Site Registration:	FCC: 685609, ISEDC: 20903
FCC Lab. Designation No.:	UK2011
ISEDC CABID:	UK0001
Location of Testing:	Units 3 & 4 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom
Test Dates:	27 March 2025 to 23 April 2025

1.3 Summary of Test Results

FCC Reference (47CFR)	ISED Canada Reference	Measurement	Result
Part 15.35(c)	RSS-Gen 8.2	Transmitter Duty Cycle	Note 1
Part 15.247(d) & 15.209(a)	RSS-247 5.5 / RSS-Gen 6.13	Transmitter Radiated Emissions	
Part 15.247(d) & 15.209(a)	RSS-247 5.5 / RSS-Gen 6.13	Transmitter Band Edge Radiated Emissions	
Key to Results  = Complied  = Did not comply			

Note(s):

1. The measurement was performed to assist in the calculation of emission levels. The EUT cannot transmit continuously and sweep triggering/signal gating cannot be implemented.

1.4 Deviations from the Test Specification

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specification identified above.

2 Summary of Testing

2.1 Facilities and Accreditation

The test site and measurement facilities used to collect data are located at Units 3 & 4 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom. The following table identifies which facilities were utilised for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

Site 1	X
Site 17	-
Site 32	-
Site 33	-

UL International (UK) Ltd is accredited by the United Kingdom Accreditation Service (UKAS). UKAS is one of the signatories to the International Laboratory Accreditation Co-operation (ILAC) Arrangement for the mutual recognition of test reports. The tests reported herein have been performed in accordance with its terms of accreditation.

2.2 Methods and Procedures

Reference:	ANSI C63.10-2013
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
Reference:	KDB 558074 D01 15.247 Meas Guidance v05r02, April 2, 2019
Title:	Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating Under Section 15.247 of the FCC Rules

2.3 Calibration and Uncertainty

Measuring Instrument Calibration

In accordance with UKAS requirements all the measurement equipment is on a calibration schedule. All equipment was within the calibration period on the date of testing.

Measurement Uncertainty & Decision Rule

Overview

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

Decision Rule

Measurement system instrumentation shall be used with an accuracy specification meeting the accuracy specification limits according to IEC/IECEE OD-5014.

As applicable, unless specified otherwise in this quotation, the compliance “Decision Rule” is based on Simple Acceptance. If the measured value is on the limit, the result is defined as a pass. In this case the risk of a false positive is 50%. For further information regarding risk assessment refer to ILAC G8:09/2019.

Measurement Uncertainty

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document “approximately” is interpreted as meaning “effectively” or “for most practical purposes”.

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
Duty Cycle	2.4 GHz to 2.4835 GHz	95%	±1.14 %
Radiated Spurious Emissions	9 kHz to 30 MHz	95%	±5.44 dB
Radiated Spurious Emissions	30 MHz to 1 GHz	95%	±2.98 dB
Radiated Spurious Emissions	1 GHz to 25 GHz	95%	±3.64 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty the published guidance of the appropriate accreditation body is followed.

2.4 Test and Measurement Equipment

Test Equipment Used for Transmitter Radiated Emissions Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
K0001	3m RSE Chamber	MVG Industries	N/A	N/A	11 Sep 2025	12
M2040	Thermohygrometer	Testo	608-H1	45124934	23 Dec 2025	12
M236226	Test Receiver	Rohde & Schwarz	ESW26	103134	06 May 2025	12
M1874	Test Receiver	Rohde & Schwarz	ESU26	100553	06 May 2025	12
A3139	Antenna	Schwarzbeck	HWRD750	00027	06 Sep 2025	12
A3165	Antenna	ETS-Lindgren	6502	00224383	25 Mar 2026	12
A3179	Pre Amplifier	Agilent	8449B	3008A00934	30 Aug 2025	12
A222867	Pre Amplifier	Atlantic Microwave	A-LNAKX-380116-S5S5	220705003	30 Aug 2025	12
A3154	Pre Amplifier	Com-Power	PAM-103	18020012	28 Aug 2025	12
A3138	Antenna	Schwarzbeck	BBHA 9120 B	00702	06 Sep 2025	12
A553	Antenna	Chase EMC Ltd	CBL6111A	1593	27 Aug 2025	12
A3083	Low Pass Filter	AtlanTecRF	AFL-01000	18010900076	16 Sep 2025	12
A227131	High Pass Filter	Micro-Tronics	HPS20723	005	16 Sep 2025	12
A3093	High Pass Filter	AtlanTecRF	AFH-03000	18051800077	16 Sep 2025	12
A221643	Attenuator	Atlantic Microwave	ATT06KXP-483034-N4N5	221643	16 Sep 2025	12

Test Equipment Used for Transmitter Duty Cycle & Band Edge Radiated Emissions Tests

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
K0001	3m RSE Chamber	MVG Industries	N/A	N/A	11 Sep 2025	12
M2040	Thermohygrometer	Testo	608-H1	45124934	23 Dec 2025	12
M236226	Test Receiver	Rohde & Schwarz	ESW26	103134	06 May 2025	12
A3179	Pre Amplifier	Agilent	8449B	3008A00934	30 Aug 2025	12
A3138	Antenna	Schwarzbeck	BBHA 9120 B	00702	06 Sep 2025	12
A221643	Attenuator	Atlantic Microwave	ATT06KXP-483034-N4N5	221643	16 Sep 2025	12

3 Equipment Under Test (EUT)

3.1 Identification of Equipment Under Test (EUT)

Brand Name*:	Cisco
Model Name or Number / HVIN*:	TTC7-29
HMN*:	Cisco Desk Pro G2
PMN*:	07100725
Test Sample Serial Number*:	FOC2845HUBH *(Radiated sample #1)*
Hardware Version*:	DVb modified with rev. D main board and camera base board.
Software Version*:	s01874-1.2.0.dev
Firmware Version / FVIN*:	Type-2EA rev2.4.3 NVRAM updated
Contains FCC ID*:	LDKXV2EA2797
Contains IC*:	2461N-XV2EA2797
Date of Receipt:	10 January 2025 (enclosure) 20 March 2025 (mainboard and top camera module)

3.2 Modifications Incorporated in the EUT

No modifications were applied to the EUT during testing.

3.3 Additional Information Related to Testing

Technology Tested:	WLAN (IEEE 802.11b,g,n,ax) / Digital Transmission System	
Type of Unit:	Transceiver	
Modulation Type:	DBPSK, DQPSK, BPSK, QPSK, 16QAM, 64QAM, 256QAM & 1024QAM	
Data Rates*:	802.11b	1, 2, 5.5 & 11 Mbps (SISO)
	802.11g	6, 9, 12, 18, 24, 36, 48 & 54 Mbps (SISO, MIMO with CDD) 6, 9, 12, 18, 24, 36, 48 & 54 Mbps (SISO, MIMO with CDD/STBC)
	802.11n HT20	MCS0 to MCS7 (1 spatial stream with either SISO or 2-chain MIMO CDD/STBC operation) MCS8 to MCS15 (2 spatial streams on 2 transmit chains)
	802.11ax HE20	MCS0 to MCS11 (1 or 2 spatial streams) (SISO, or MIMO with CDD/STBC) SU 242, RU 26/52/106/242
Power Supply Requirement(s)*:	20 VDC via 120 VAC 60 Hz AC/DC supply	
Channel Spacing:	20 MHz	
Transmit Frequency Range:	2412 MHz to 2462 MHz	

Transmit Channels Tested:	**Channel Number**	**Channel Frequency (MHz)**
	1	2412
	3	2422
	6	2437
	9	2452
	11	2462

3.4 Description of Available Antennas

The radio utilizes an integrated antenna, with the following maximum gain:

Frequency Range (MHz)	**Antenna Gain (dBi)***
2400-2480	4.2

3.5 Power Settings Per Antenna Port

Data Rate	Channel	Power Setting	
		SISO	MIMO
802.11b (1 Mbps)	1	15	-
	3	18	-
	6	18	-
	9	18	-
	11	15	-
802.11g (6 Mbps)	1	13	-
	3	14	-
	9	14	-
	11	13	-
802.11n HT20 (MCS0)	1	13	-
	3	14	-
	9	14	-
	11	12	-
802.11n HT20 (MCS8)	1	-	10
	3	-	13
	9	-	13
	11	-	9
802.11ax HE20 (MCS0x1)	1	11	8
	3	14	11
	9	14	11
	11	11	8

3.6 Description of Test Setup

Support Equipment

The following support equipment was used to exercise the EUT during testing:

Customer Supplied*:

Description	Brand Name	Model Name or Number	Serial Number
Switching Power Adaptor	FSP	FSP230-A20C14	FST2841MBJQ

Laboratory Supplied:

Description	Brand Name	Model Name or Number	Serial Number
Laptop	Lenovo	Thinkpad	PF1EHZQQ
USB to Micro USB Cable	Not marked or stated	Not marked or stated	Not marked or stated
ThinkPad USB-C Dock Gen 2	Lenovo	LDC-G2	Not marked or stated
ThinkPad USB-C Dock Gen 2	Lenovo	LDC-G2	Not marked or stated
Ethernet Cable. Quantity 2.	Not marked or stated	Not marked or stated	Not marked or stated
HDMI Cable. Quantity 2.	Not marked or stated	Not marked or stated	Not marked or stated
USB-A Cable. Quantity 3.	Not marked or stated	Not marked or stated	Not marked or stated
Micro USB Cable. Quantity 3.	Not marked or stated	Not marked or stated	Not marked or stated

Operating Modes

The EUT was tested in the following operating mode(s):

- Continuously transmitting with a modulated carrier at maximum power, configured with the power settings as stated in section 3.5, on the relevant channels as required using the supported data rates/modulation types.

Configuration and Peripherals

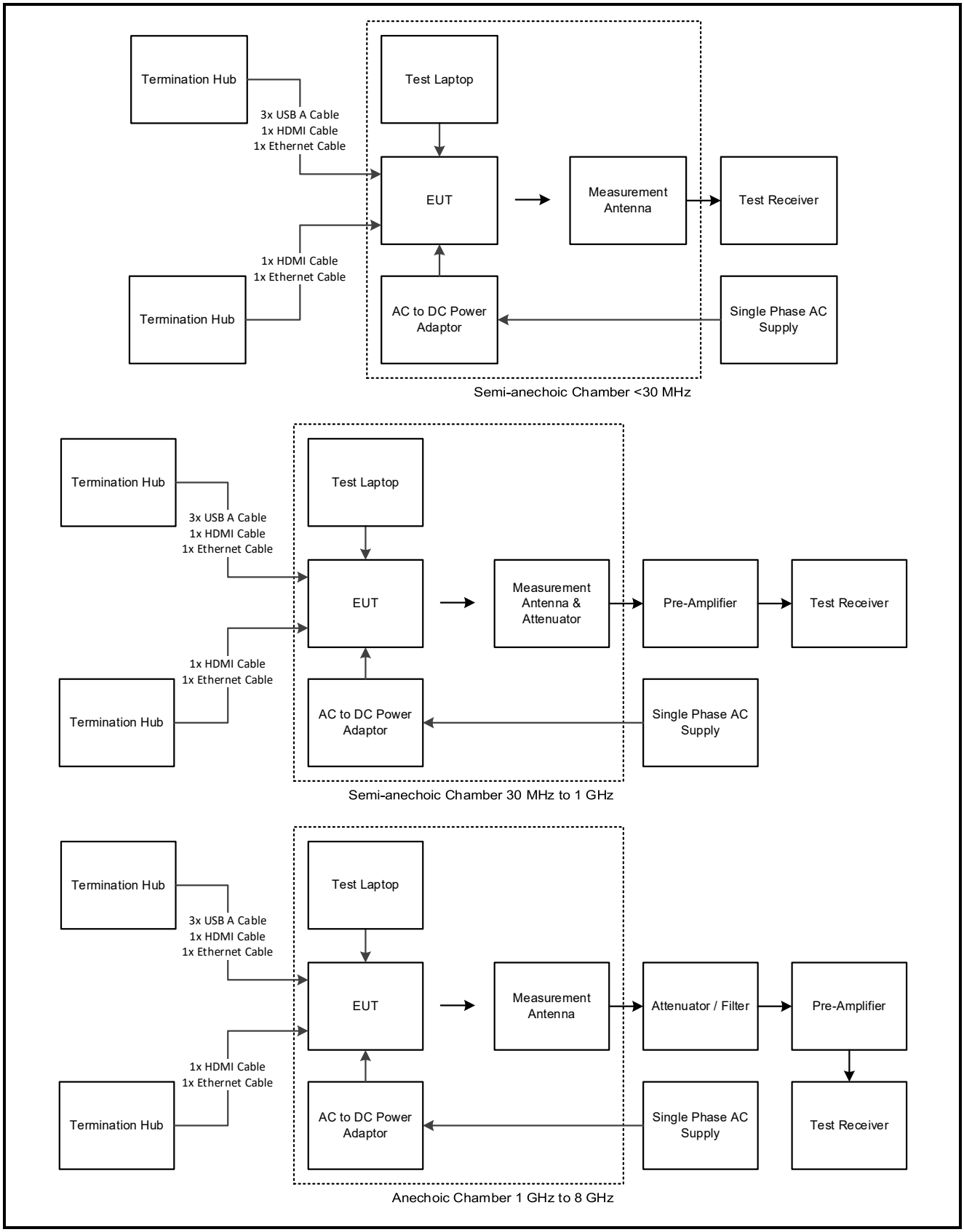
The EUT was tested in the following configuration(s):

- Controlled using a terminal application on the test laptop connected to the EUT via the USB cable. The application was used to enable continuous transmission and to select the test channels as required.
- The EUT was powered from an AC to DC Power Supply. The input was connected to a 120 VAC 60 Hz single phase mains supply.
- Transmitter spurious emissions were performed with the EUT transmitting with a data rate of 802.11b / 1 Mbps.
- Tests were performed with the EUT in its normal orientation.
- All active ports were terminated using appropriate terminations.

Test Setup Diagrams

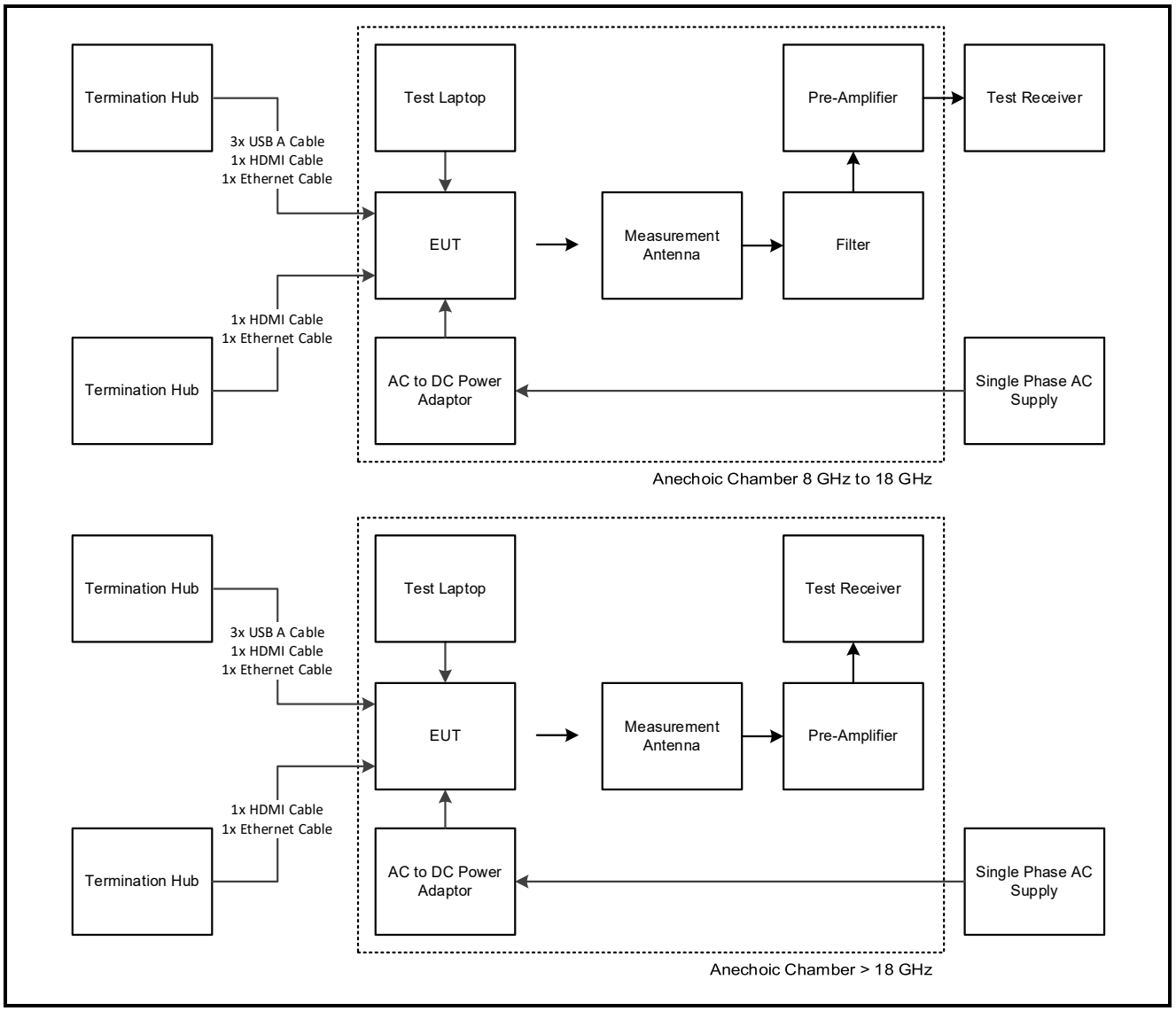
Radiated Tests:

Test Setup for Transmitter Radiated Emissions



Test Setup Diagrams (continued)

Test Setup for Transmitter Radiated Emissions (continued)



4 Radiated Test Results

4.1 Transmitter Duty Cycle

Test Summary:

Test Engineer:	Nick Steele	**Test Date:**	10 April 2025
Test Sample Serial Number:	FOC2845HUBH		

FCC Reference:	Part 15.35(c)
ISED Canada Reference:	RSS-Gen 8.2
Test Method Used:	FCC KDB 558074 Section 6 referencing ANSI C63.10 Section 11.6

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	34

Note(s):

1. In order to assist with the determination of the average level of fundamental and spurious emissions field strength, measurements were made of duty cycle to determine the transmission duration and the silent period time of the transmitter. The transmitter duty cycle was measured using a spectrum analyser in the time domain and calculated by using the following calculation:

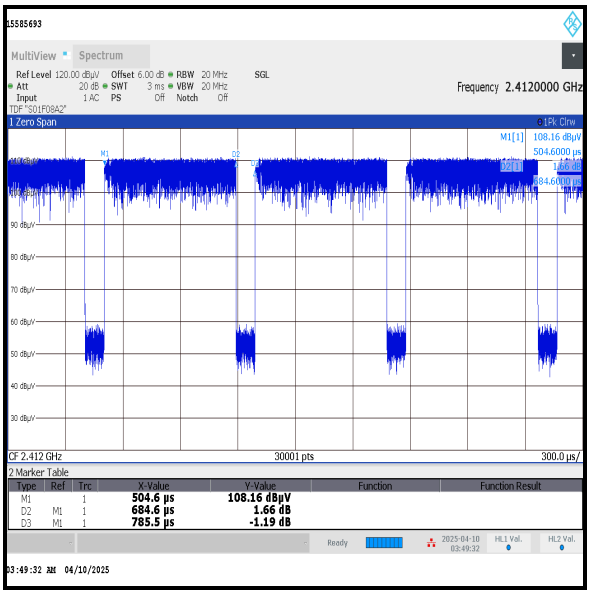
   10 log (1 / (On Time / [Period or 100 ms whichever is the lesser])).

2. For all modes where a duty cycle was measured and found to be greater than 98%, plots are archived on the company server and available for inspection upon request.

Transmitter Duty Cycle (continued)

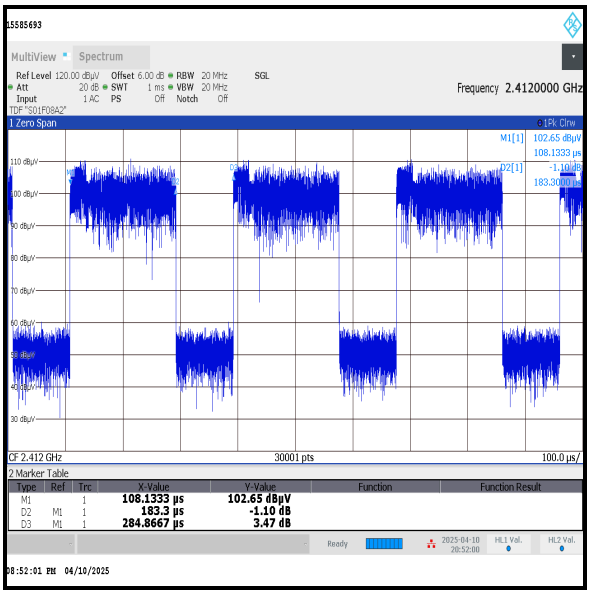
Results: 802.11n / HT20 / SISO / MCS0 / Ant 1

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
0.685	0.786	0.6



Results: 802.11n / HT20 / MIMO / MCS8 / Ant 0 + Ant 1

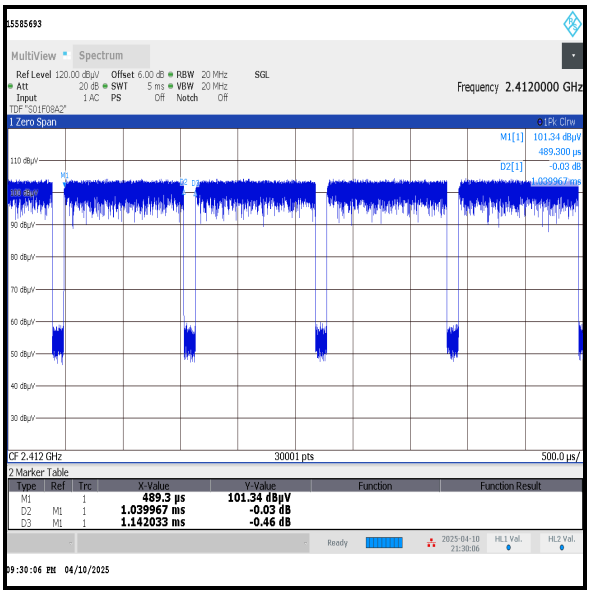
Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
0.183	0.285	1.9



Transmitter Duty Cycle (continued)

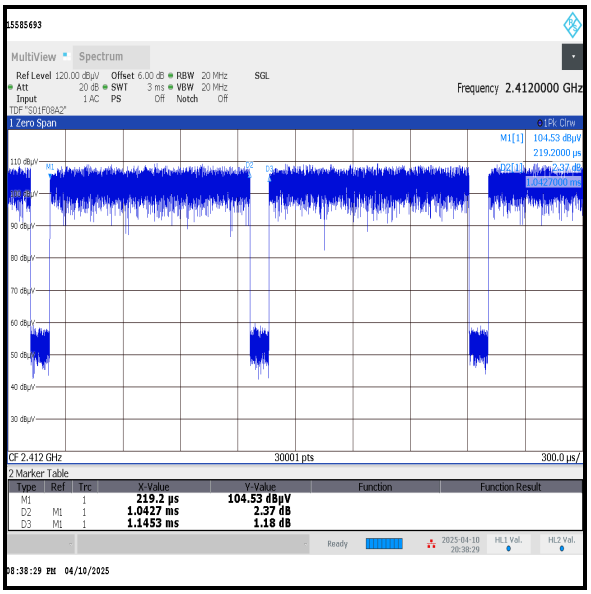
Results: 802.11ax / HE20 / SU / SISO / MCS0x1 / Ant 1

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
1.040	1.142	0.4



Results: 802.11ax / HE20 / SU / MIMO / MCS0x1 / Ant 0 + Ant 1

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
1.043	1.145	0.4



4.2 Transmitter Radiated Emissions <1 GHz

Test Summary:

Test Engineers:	John Ferdinand & Nick Steele	**Test Dates:**	22 April 2025 & 23 April 2025
Test Sample Serial Number:	FOC2845HUBH		

FCC Reference:	Parts 15.247(d) & 15.209(a)
ISED Canada Reference:	RSS-247 5.5 / RSS-Gen 6.13 & 8.9
Test Method Used:	ANSI C63.10 Sections 6.3, 6.4 and 6.5
Frequency Range	9 kHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	20
Relative Humidity (%):	38 to 39

Transmitter Radiated Emissions (continued)

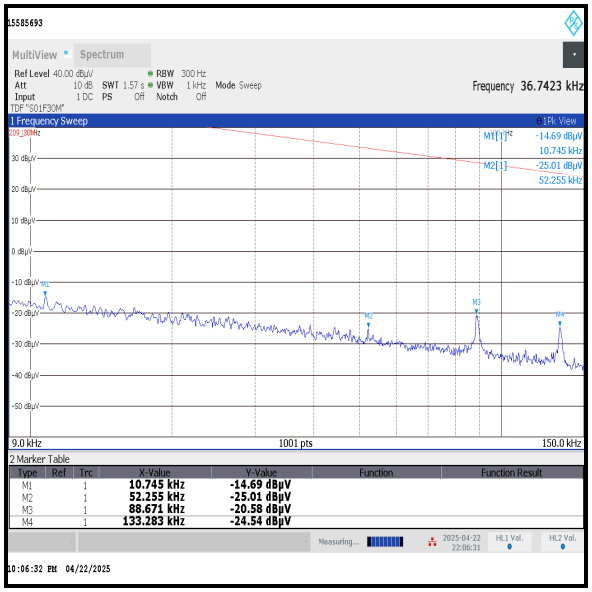
Note(s):

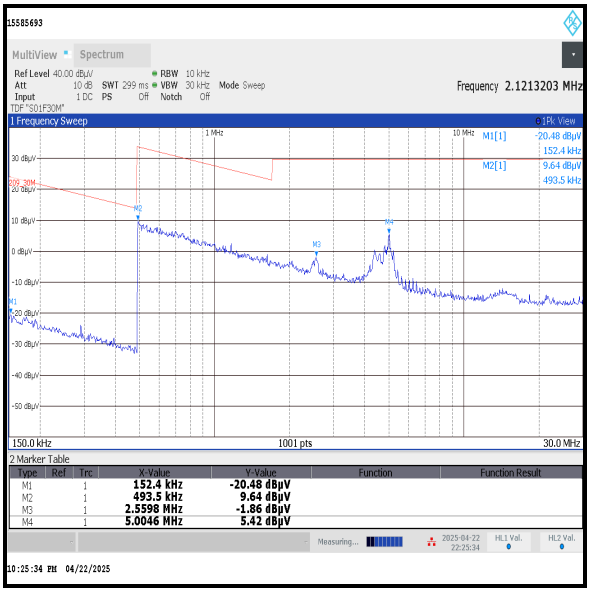
1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. Filters and/or attenuators were used as appropriate. The insertion loss was added to the test receiver as a reference level offset.
3. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation and each radio technology. Therefore final radiated emissions measurements were performed with the EUT set to 2.4 GHz WLAN middle channel only.
4. All other emissions were > 20 dB below the appropriate limit or below the noise floor of the measurement system.
5. Measurements below 30 MHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. As allowed by ANSI C63.10 clause 5.2; an alternative test site that can demonstrate equivalence to an open area test site may be used for measurements below 30 MHz. Therefore, measurements were performed in a semi-anechoic chamber. The correlation data between semi-anechoic chamber and an open field test site is available upon request.
6. The measured values at 3 metres were extrapolated to the required measurement distances of 300 metres and 30 metres and compared to the specified limits at those distances:
   - 9 kHz to 490 kHz: measured value extrapolated from 3 metres to 300 metres by subtracting 80 dB at 40 dB / decade
   - 490 kHz to 30 MHz: measured value extrapolated from 3 metres to 30 metres by subtracting 40 dB at 40 dB / decade
7. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω. For example, the measurement frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to Y - 51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to the 15.209(a) limit.
8. Measurements from 30 MHz to 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
9. Pre-scans were performed and markers placed on the highest measured levels. The test receiver was configured as follows: For 9 kHz to 150 kHz, the resolution bandwidth was set to 300 Hz and video bandwidth 1 kHz. A peak detector was used and trace mode was Max Hold. For 150 kHz to 30 MHz, the resolution bandwidth was set to 10 kHz and video bandwidth 30 kHz, trace mode was Max Hold. For 30 MHz to 1 GHz, the resolution bandwidth was set to 120 kHz and video bandwidth 500 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold.
10. Final measurements were performed on the marker frequencies and the results entered into the table below. The test receiver resolution bandwidth was set to 120 kHz, using a CISPR quasi-peak detector and measurement time set to 15 seconds.

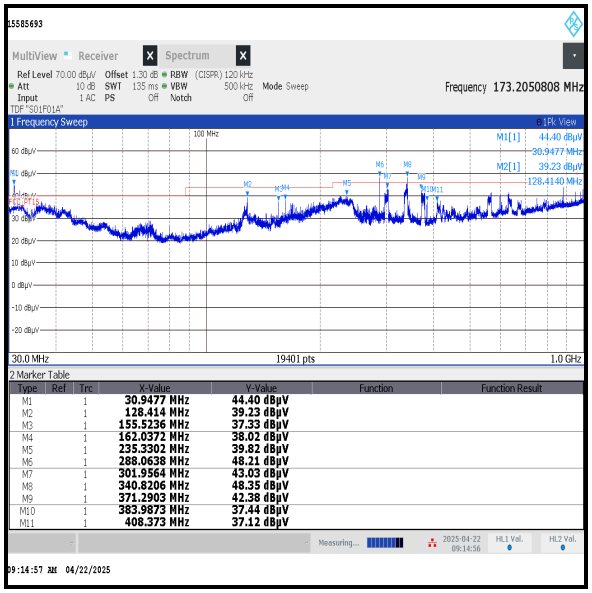
Transmitter Radiated Emissions (continued)

Results: Quasi-Peak / Middle Channel / 802.11b / 1 Mbps

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
37.522	Vertical	39.0	40.0	1.0	Complied
127.57	Horizontal	35.7	43.5	7.8	Complied
162.032	Horizontal	42.7	43.5	0.8	Complied
168.808	Horizontal	37.3	43.5	6.2	Complied
240.875	Horizontal	38.2	46.0	7.8	Complied
270.004	Horizontal	34.8	46.0	11.2	Complied







Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying table.

4.3 Transmitter Radiated Emissions >1 GHz

Test Summary:

Test Engineer:	Nick Steele	**Test Dates:**	27 March 2025 to 09 April 2025
Test Sample Serial Number:	FOC2845HUBH		

FCC Reference:	Parts 15.247(d) & 15.209(a)
ISED Canada Reference:	RSS-247 5.5 / RSS-Gen 6.13 & 8.9
Test Method Used:	FCC KDB 558074 Sections 8.1 c)3), 8.5 & 8.6 referencing ANSI C63.10 Sections 6.3, 6.6, 11.11 & 11.12
Frequency Range	1 GHz to 25 GHz

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	35 to 40

Note(s):

1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. Filters and/or attenuators were used as appropriate. The insertion loss was added to the test receiver as a reference level offset.
3. All other emissions shown on the pre-scans were investigated and found to be ambient, or > 20 dB below the appropriate limit or below the noise floor of the measurement system.
4. The emission shown on the 1 GHz to 3 GHz plot is the EUT fundamental.
5. In accordance with ANSI C63.10 Section 6.6.4.3, Note 1, if the peak measured value complies with the average limit, it is unnecessary to perform an average measurement.
6. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 metres above the test chamber floor, in line with the EUT.
7. Final measurements above 1 GHz were performed in a semi-anechoic chamber (Asset Number K0001) at a distance of 3 metres. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 metre to 4 metres.
8. Pre-scans were performed and a marker placed on the highest measured level of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto. Peak and average measurements were performed with their respective detectors during the pre-scan measurements.

Transmitter Radiated Emissions (continued)

Results: Bottom Channel

Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
1023.030	Horizontal	53.4	54.0	0.6	Complied
4007.350	Horizontal	49.4	54.0	4.6	Complied
4823.820	Horizontal	50.3	54.0	3.7	Complied

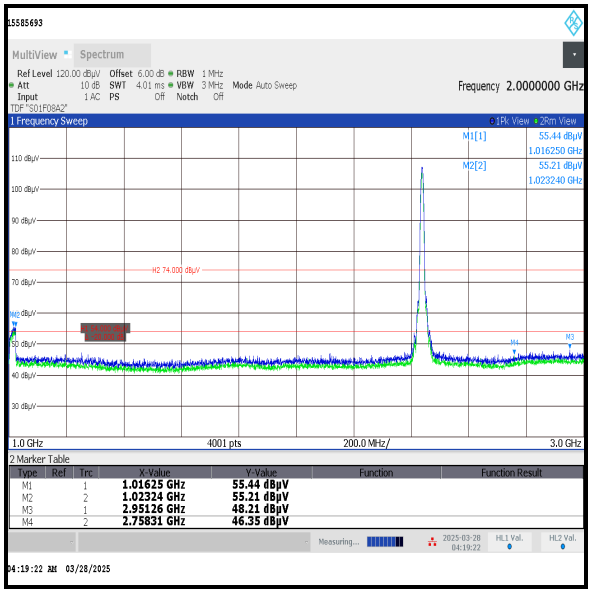
Results: Middle Channel

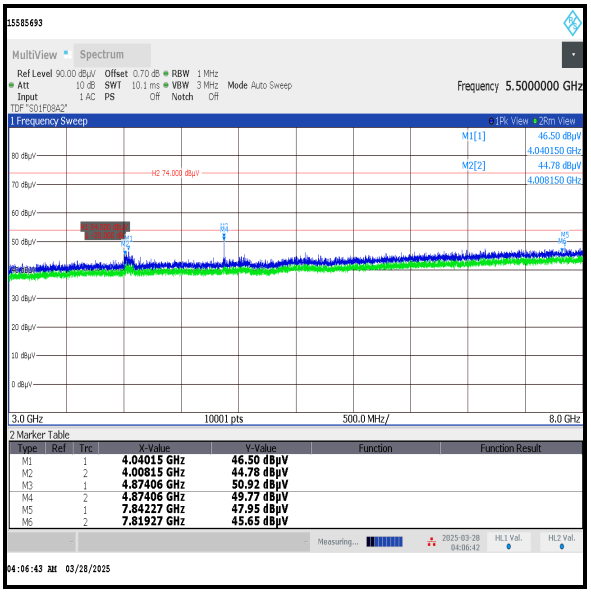
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
1023.030	Horizontal	53.4	54.0	0.6	Complied
4007.350	Horizontal	49.4	54.0	4.6	Complied
4873.960	Horizontal	52.0	54.0	2.0	Complied

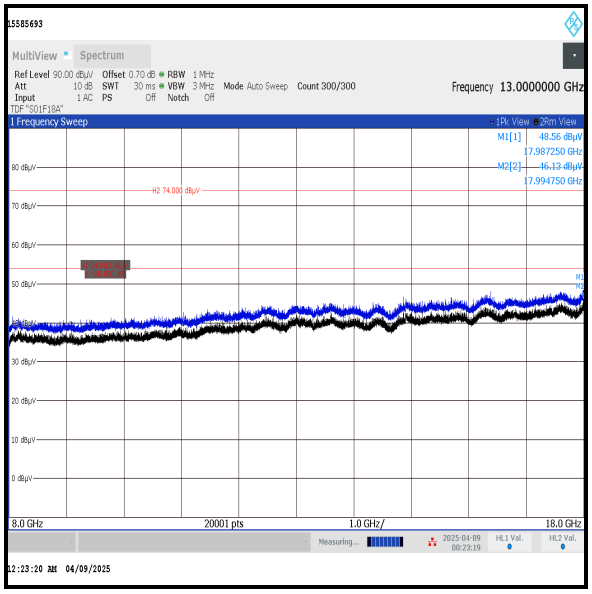
Results: Top Channel

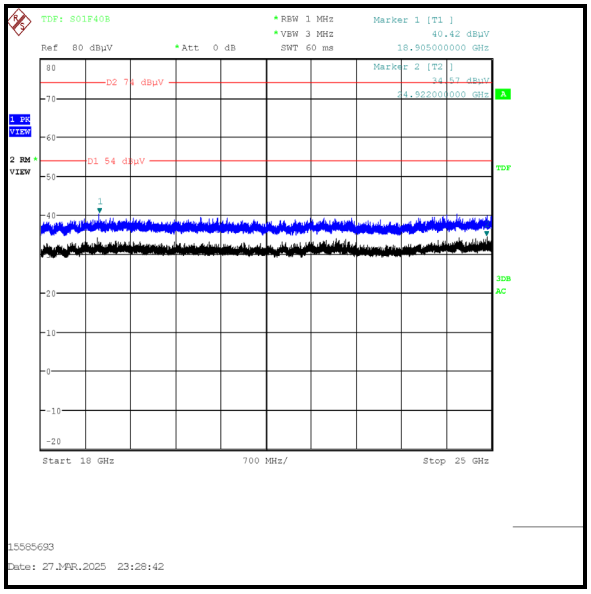
Frequency (MHz)	Antenna Polarity	Peak Level (dBµV/m)	Average Limit (dBµV/m)	Margin (dB)	Result
1023.030	Horizontal	53.4	54.0	0.6	Complied
4007.350	Horizontal	49.4	54.0	4.6	Complied
4923.940	Horizontal	50.1	54.0	3.9	Complied

Transmitter Radiated Emissions (continued)









Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

4.4 Transmitter Band Edge Radiated Emissions

Test Summary:

Test Engineer:	Nick Steele	**Test Dates:**	10 April 2025 & 11 April 2025
Test Sample Serial Number:	FOC2845HUBH		

FCC Reference:	Parts 15.247(d) & 15.209(a)
ISED Canada Reference:	RSS-247 5.5 / RSS-Gen 6.13
Test Method Used:	KDB 558074 Section 8.7 referencing ANSI C63.10 Sections 6.10, 11.11, 11.12 & 11.13

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	34

Note(s):

1. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
2. Filters and/or attenuators were used as appropriate. The insertion loss was added to the test receiver as a reference level offset.
3. Lower band edge measurements have been omitted since the measurement was performed in a conducted environment during the module certification. The change in antenna will not impact this measurement.
4. The upper band edge is adjacent to a restricted band. Both peak and average measurements were recorded by placing a marker at the edge of the band. For peak measurements the test receiver resolution bandwidth was set to 1 MHz and the video bandwidth 3 MHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold. For average measurements the test receiver resolution bandwidth was set to 1 MHz and the video bandwidth 3 MHz. An RMS detector was used, sweep time was set to auto and trace mode was trace averaging over 300 sweeps. A marker was placed on the band edge spot frequencies and a second marker placed on the highest emission level in the adjacent restricted band of operation (where a higher level emission was present). Marker frequencies and levels were recorded.
5. There is a restricted band 10 MHz below the lower band edge. The test receiver was set up as follows: the RBW set to 1 MHz, the VBW set to 3 MHz, with the sweep time set to auto couple. Peak and average measurements were performed with peak and RMS detectors respectively. Markers were placed on the highest point on each trace.
6. As the EUT had a duty cycle < 98% the duty cycle correction factor calculated in section 4.1 has been applied to the relevant results below.

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11b / 20 MHz / SISO / 1 Mbps / Ant 1

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2386.683	Horizontal	50.9	74.0	23.1	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2387.403	Horizontal	41.4	54.0	12.6	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.960	Horizontal	49.6	74.0	24.4	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.960	Horizontal	39.8	54.0	14.2	Complied

Results: Upper Band Edge / Peak / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	53.2	74.0	20.8	Complied
2483.950	Horizontal	54.1	74.0	19.9	Complied

Results: Upper Band Edge / Average / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	43.7	54.0	10.3	Complied
2484.039	Horizontal	44.9	54.0	9.1	Complied

Results: Upper Band Edge / Peak / Channel 11

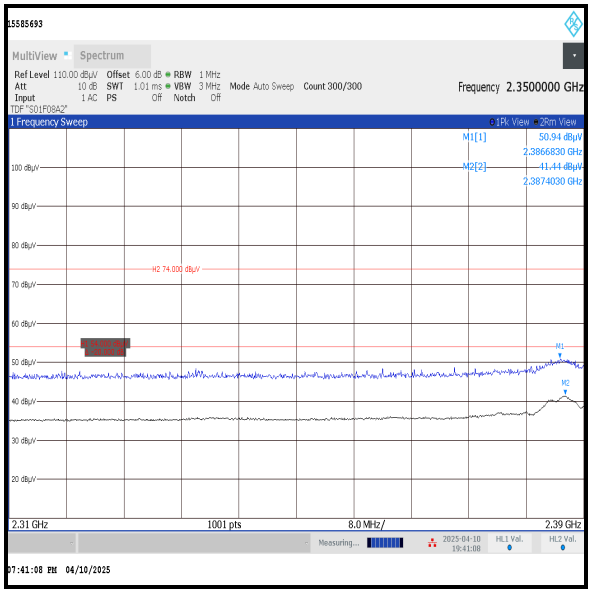
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	52.4	74.0	21.6	Complied
2486.227	Horizontal	53.3	74.0	20.7	Complied

Results: Upper Band Edge / Average / Channel 11

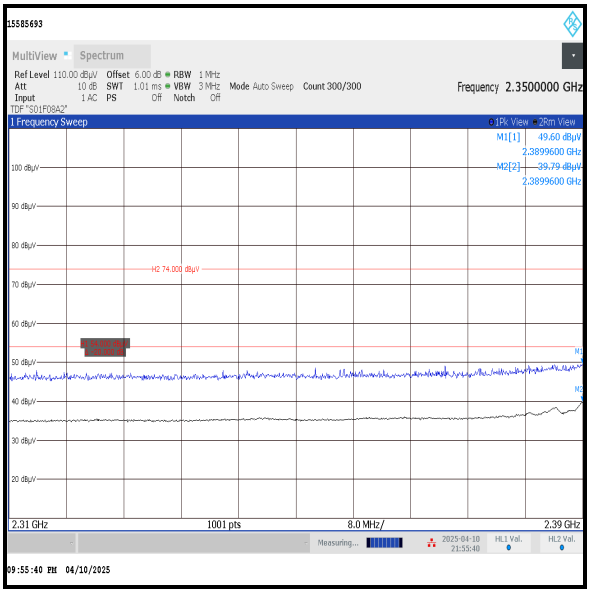
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	43.4	54.0	10.6	Complied

Transmitter Band Edge Radiated Emissions (continued)

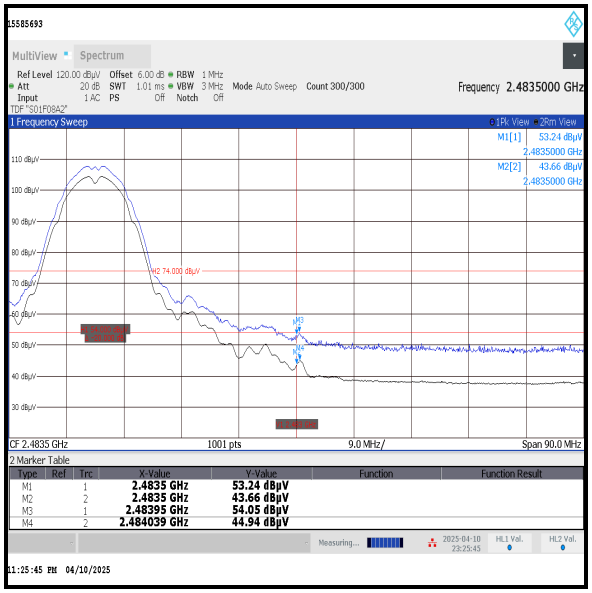
Results: 802.11b / 20 MHz / SISO / 1 Mbps / Ant 1



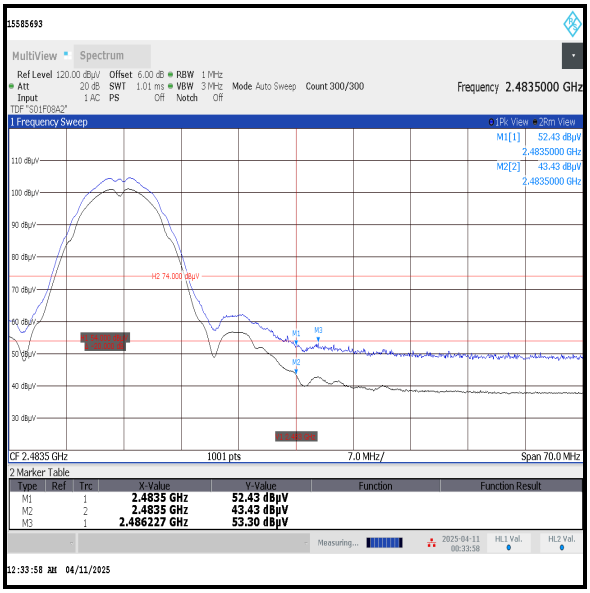
2310 MHz to 2390 MHz Restricted Band
Channel 1



2310 MHz to 2390 MHz Restricted Band
Channel 3



Upper Band Edge
Channel 9



Upper Band Edge
Channel 11

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11g / 20 MHz / SISO / 6 Mbps / Ant 1

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2387.323	Horizontal	49.8	74.0	24.2	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.880	Horizontal	36.8	54.0	17.2	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2385.405	Horizontal	49.7	74.0	24.3	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2384.446	Horizontal	36.5	54.0	17.5	Complied

Results: Upper Band Edge / Peak / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	49.1	74.0	24.9	Complied
2485.208	Horizontal	49.9	74.0	24.1	Complied

Results: Upper Band Edge / Average / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	38.2	54.0	15.8	Complied
2485.028	Horizontal	38.3	54.0	15.7	Complied

Results: Upper Band Edge / Peak / Channel 11

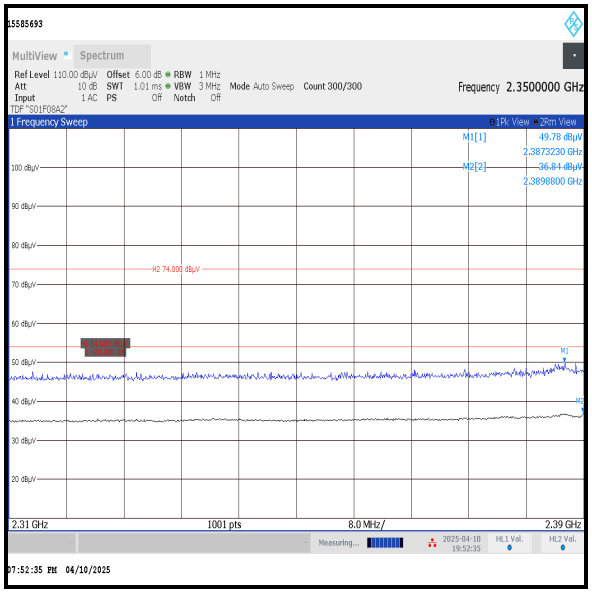
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	51.1	74.0	22.9	Complied

Results: Upper Band Edge / Average / Channel 11

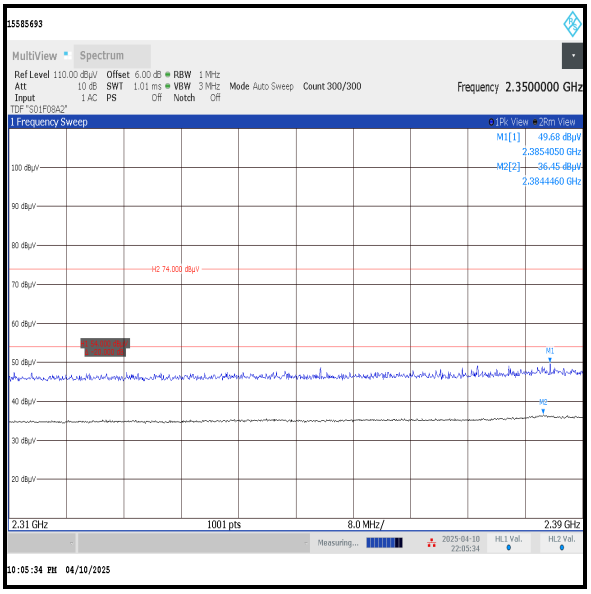
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	39.9	54.0	14.1	Complied

Transmitter Band Edge Radiated Emissions (continued)

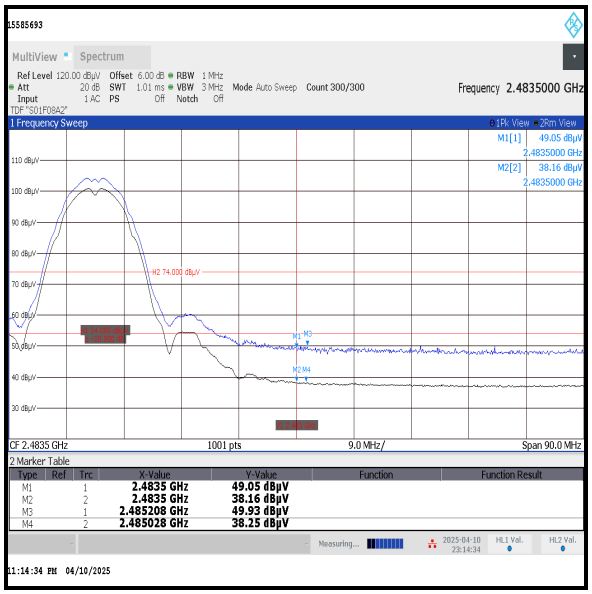
Results: 802.11g / 20 MHz / SISO / 6 Mbps / Ant 1



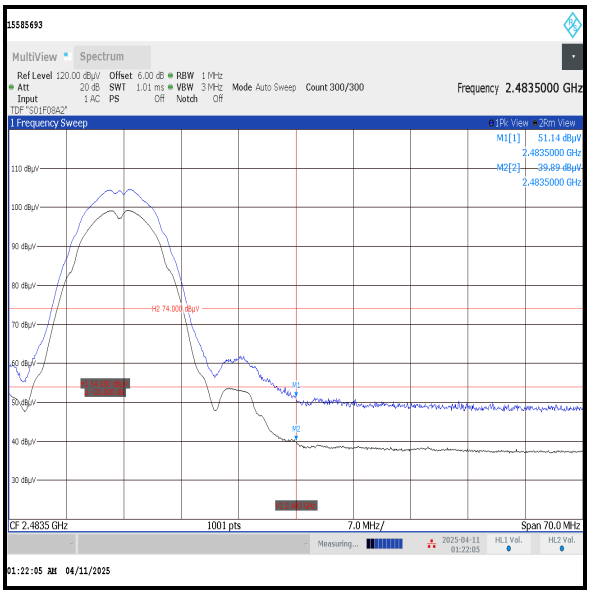
2310 MHz to 2390 MHz Restricted Band
Channel 1



2310 MHz to 2390 MHz Restricted Band
Channel 3



Upper Band Edge
Channel 9



Upper Band Edge
Channel 11

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11n HT20 / SISO / MCS0 / Ant 1

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.560	Horizontal	51.3	74.0	22.7	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.880	Horizontal	38.7	0.6	54.0	39.3	14.7	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2386.284	Horizontal	50.0	74.0	24.0	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.720	Horizontal	38.1	0.6	38.7	54.0	15.3	Complied

Results: Upper Band Edge / Peak / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	52.0	74.0	22.0	Complied
2484.399	Horizontal	52.3	74.0	21.7	Complied

Results: Upper Band Edge / Average / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	40.4	0.6	54.0	41.0	13.0	Complied
2483.590	Horizontal	40.6	0.6	54.0	41.2	12.8	Complied

Transmitter Band Edge Radiated Emissions (continued)

Results: Upper Band Edge / Peak / Channel 11

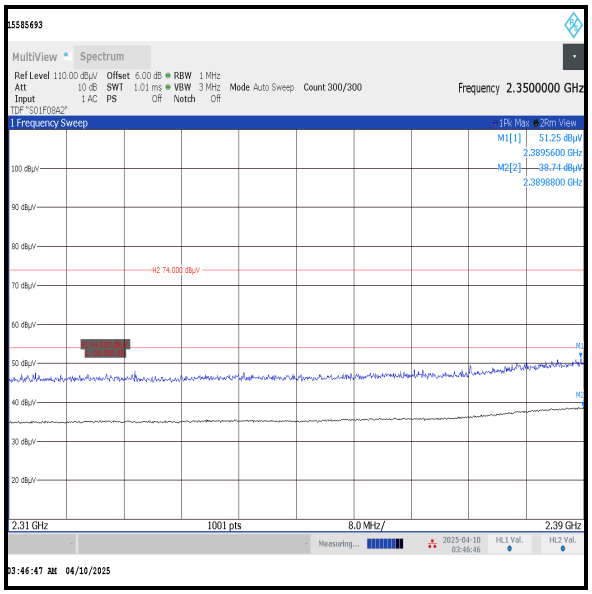
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	55.0	74.0	19.0	Complied
2484.059	Horizontal	59.1	74.0	15.9	Complied

Results: Upper Band Edge / Average / Channel 11

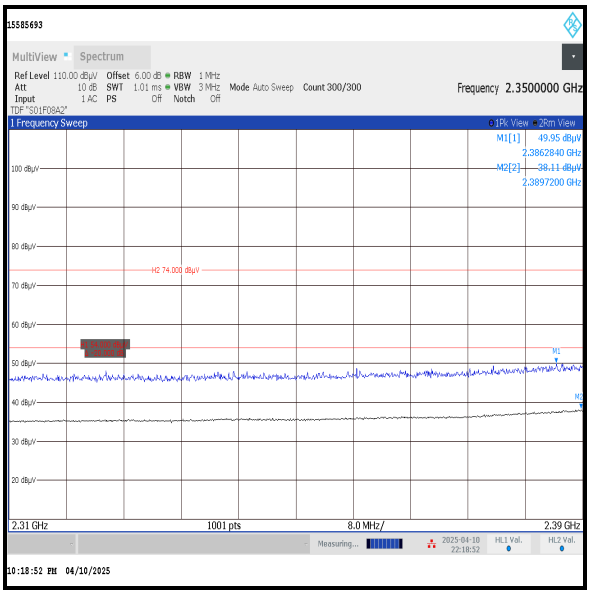
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	40.1	0.6	54.0	40.7	13.3	Complied

Transmitter Band Edge Radiated Emissions (continued)

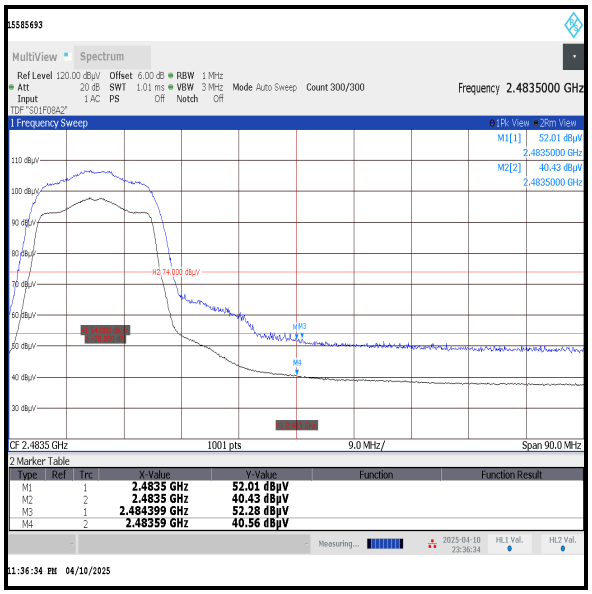
Results: 802.11n HT20 / SISO / MCS0 / Ant 1



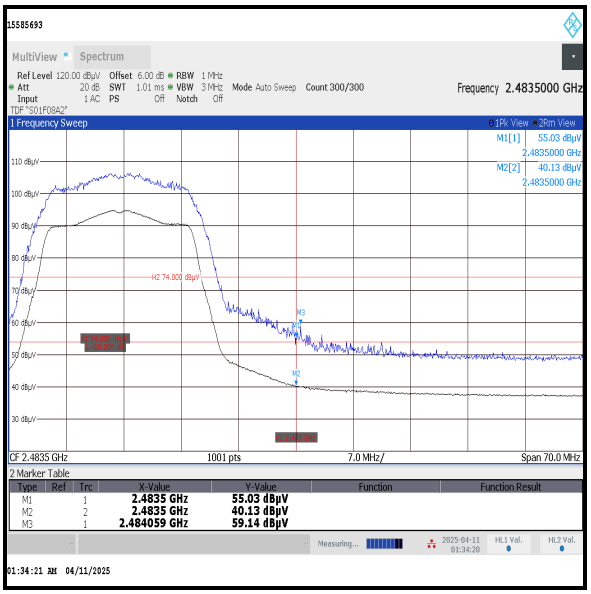
2310 MHz to 2390 MHz Restricted Band
Channel 1



2310 MHz to 2390 MHz Restricted Band
Channel 3



Upper Band Edge
Channel 9



Upper Band Edge
Channel 11

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11n HT20 / MIMO / MCS8 / Ant 0 + Ant 1

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2388.921	Horizontal	65.3	74.0	8.7	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.900	Horizontal	36.8	1.9	38.7	54.0	15.3	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.900	Horizontal	52.1	74.0	21.9	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.481	Horizontal	39.4	1.9	54.0	41.3	12.7	Complied

Results: Upper Band Edge / Peak / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	52.3	74.0	21.7	Complied
2486.827	Horizontal	53.7	74.0	20.3	Complied

Results: Upper Band Edge / Average / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	40.4	1.9	42.3	54.0	11.7	Complied

Transmitter Band Edge Radiated Emissions (continued)

Results: Upper Band Edge / Peak / Channel 11

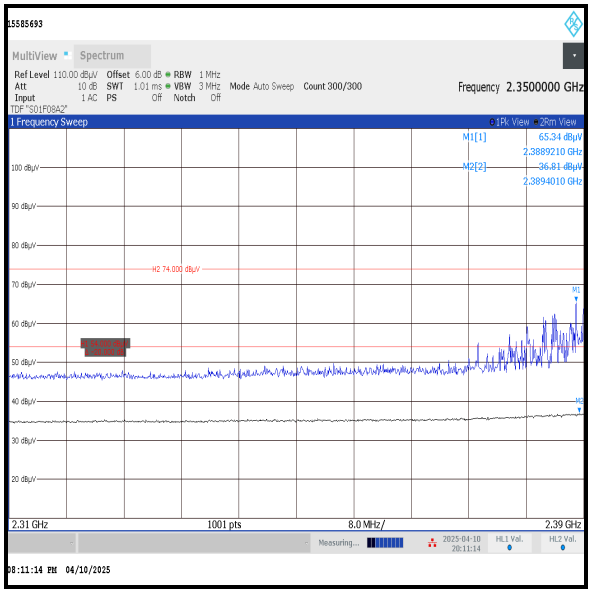
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	54.5	74.0	19.5	Complied
2487.066	Horizontal	61.1	74.0	12.9	Complied

Results: Upper Band Edge / Average / Channel 11

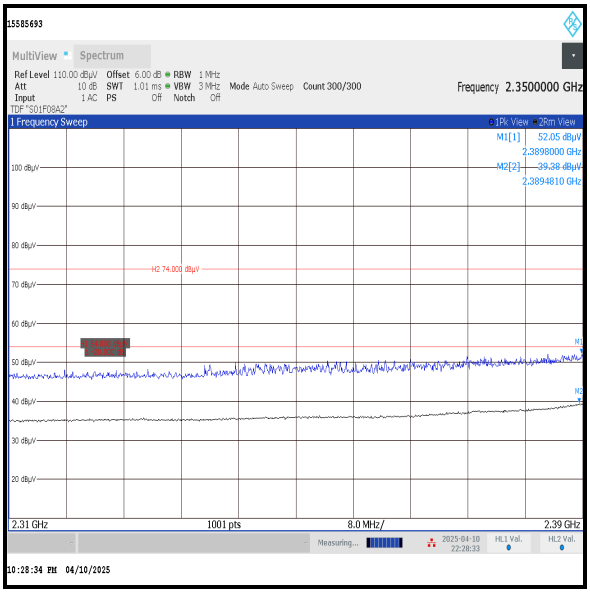
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	38.4	1.9	40.3	54.0	13.7	Complied
2487.206	Horizontal	38.7	1.9	40.6	54.0	13.4	Complied

Transmitter Band Edge Radiated Emissions (continued)

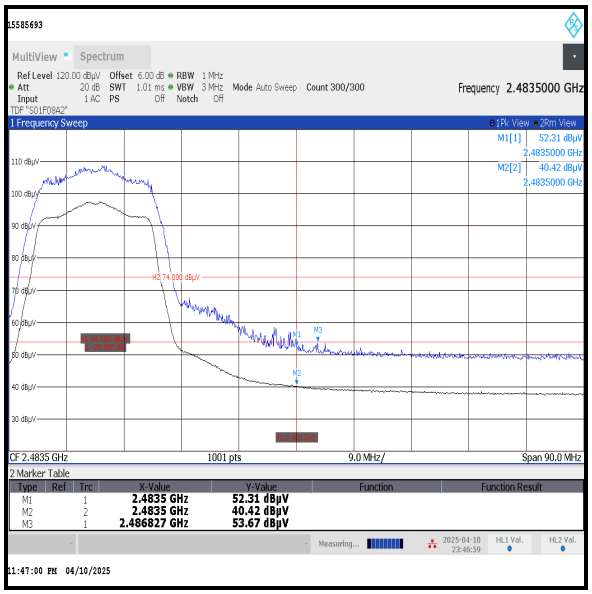
Results: 802.11n HT20 / MIMO / MCS8 / Ant 0 + Ant 1



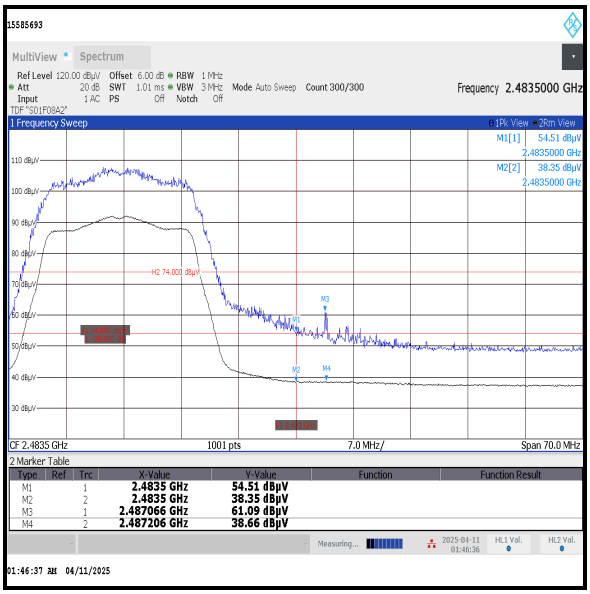
2310 MHz to 2390 MHz Restricted Band
Channel 1



2310 MHz to 2390 MHz Restricted Band
Channel 3



Upper Band Edge
Channel 9



Upper Band Edge
Channel 11

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11ax HE20 / SISO / MCS0x1 / Ant 1

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2381.169	Horizontal	52.5	74.0	21.5	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2388.202	Horizontal	36.1	0.4	36.5	54.0	17.5	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2387.483	Horizontal	51.5	74.0	22.5	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.560	Horizontal	38.9	0.4	39.3	54.0	14.7	Complied

Results: Upper Band Edge / Peak / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	57.1	74.0	16.9	Complied
2487.186	Horizontal	58.7	74.0	15.3	Complied

Results: Upper Band Edge / Average / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	42.4	0.4	42.8	54.0	11.2	Complied

Transmitter Band Edge Radiated Emissions (continued)

Results: Upper Band Edge / Peak / Channel 11

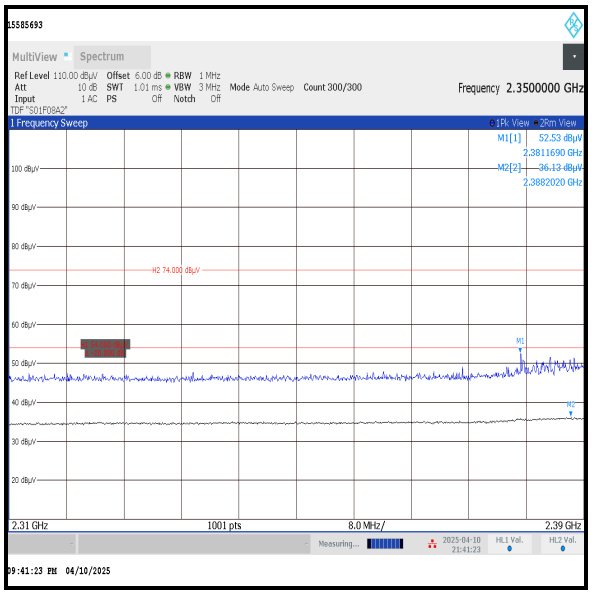
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	59.2	74.0	14.8	Complied
2484.829	Horizontal	60.0	74.0	14.0	Complied

Results: Upper Band Edge / Average / Channel 11

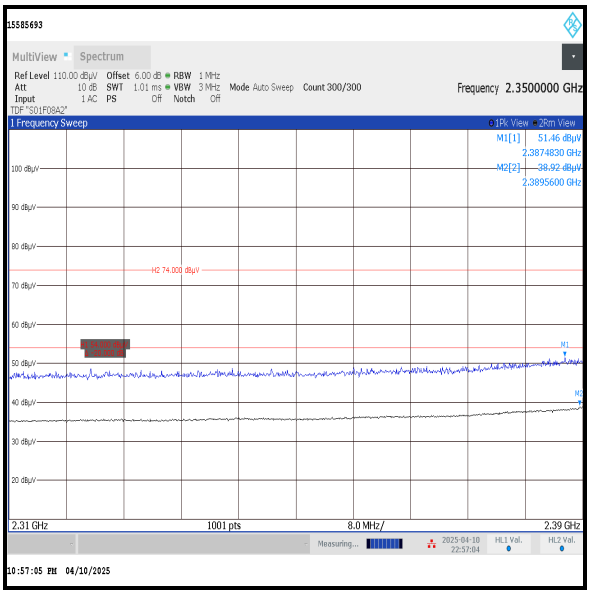
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	40.2	0.4	40.6	54.0	13.4	Complied
2483.780	Horizontal	40.5	0.4	40.9	54.0	13.1	Complied

Transmitter Band Edge Radiated Emissions (continued)

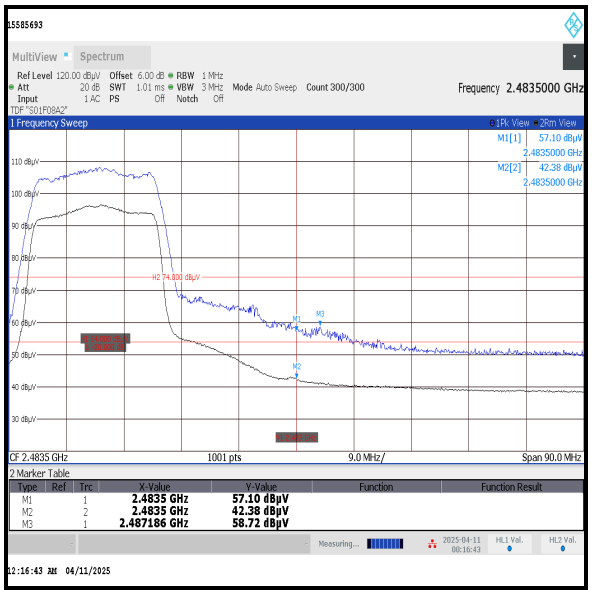
Results: 802.11ax HE20 / SISO / MCS0x1 / Ant 1



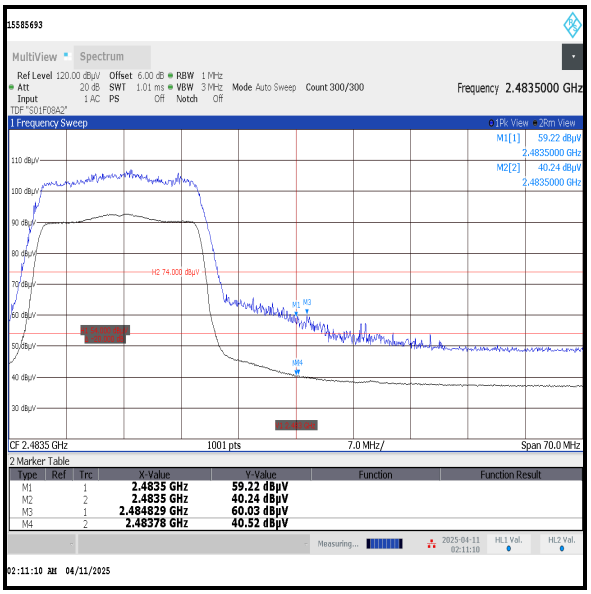
2310 MHz to 2390 MHz Restricted Band
Channel 1



2310 MHz to 2390 MHz Restricted Band
Channel 3



Upper Band Edge
Channel 9



Upper Band Edge
Channel 11

Transmitter Band Edge Radiated Emissions (continued)

Results: 802.11ax HE20 / MIMO / MCS0x1 / Ant 0 + Ant 1

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.401	Horizontal	63.0	74.0	11.0	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 1

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.880	Horizontal	37.5	0.4	37.9	54.0	16.1	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Peak / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2387.802	Horizontal	51.9	74.0	22.1	Complied

Results: 2310 MHz to 2390 MHz Restricted Band / Average / Channel 3

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2389.481	Horizontal	38.1	0.4	38.5	54.0	15.5	Complied

Results: Upper Band Edge / Peak / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	57.3	74.0	16.7	Complied
2485.838	Horizontal	58.1	74.0	15.9	Complied

Results: Upper Band Edge / Average / Channel 9

Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	40.2	0.4	40.6	54.0	13.4	Complied

Transmitter Band Edge Radiated Emissions (continued)

Results: Upper Band Edge / Peak / Channel 11

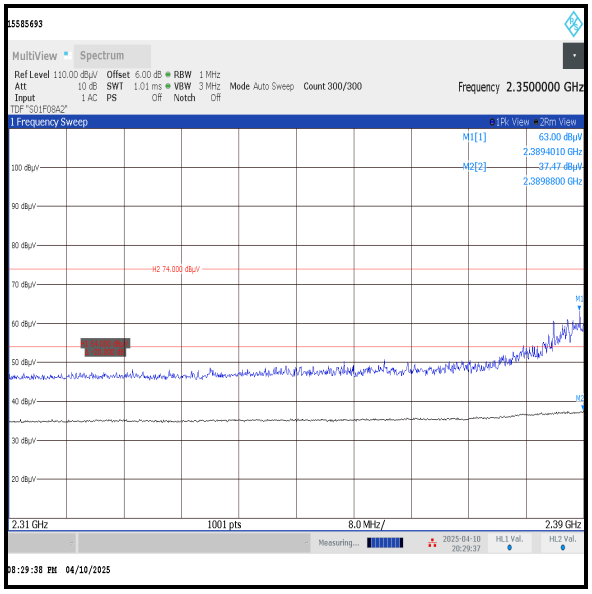
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	61.5	74.0	12.5	Complied
2484.199	Horizontal	65.0	74.0	9.0	Complied

Results: Upper Band Edge / Average / Channel 11

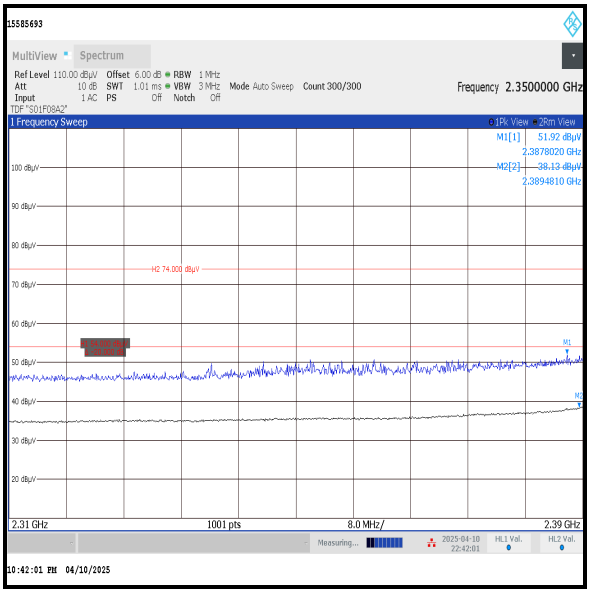
Frequency (MHz)	Antenna Polarity	Level (dBµV/m)	Duty Cycle correction (dB)	Corrected Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
2483.5	Horizontal	40.0	0.4	40.4	54.0	13.6	Complied
2483.850	Horizontal	40.2	0.4	40.6	54.0	13.4	Complied

Transmitter Band Edge Radiated Emissions (continued)

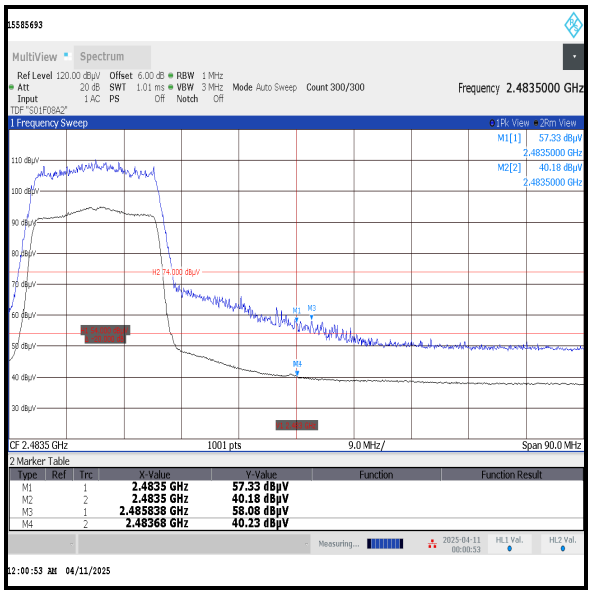
Results: 802.11ax HE20 / MIMO / MCS0x1 / Ant 0 + Ant 1



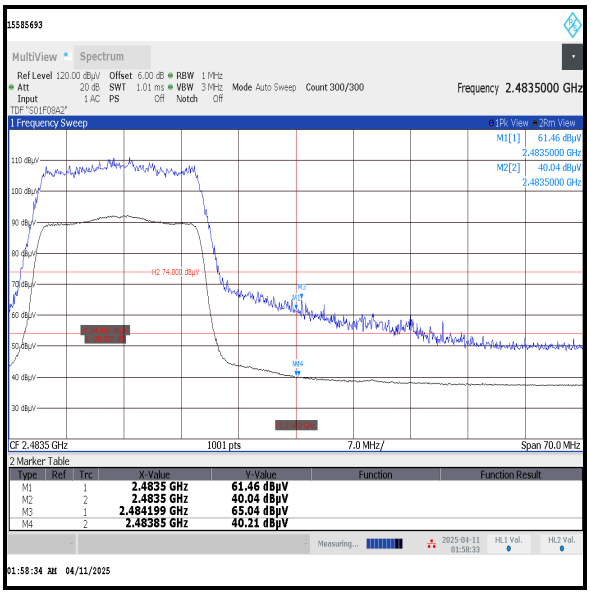
2310 MHz to 2390 MHz Restricted Band
Channel 1



2310 MHz to 2390 MHz Restricted Band
Channel 3



Upper Band Edge
Channel 9



Upper Band Edge
Channel 11

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