

TEST REPORT

Test Report No. : UL-RPT-RP15928867-516A

Applicant* : Covidien LLC
Model No.* : M2-JODY-W377
FCC ID* : P7G-173269
Technology* : WLAN (a/n/ac/ax)
Test Standard(s) : FCC Parts 15.209(a) & 15.407(b)

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 4.0 supersedes all previous versions.

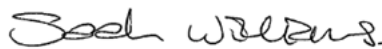
Date of Issue: 05 February 2026

Checked by:



Ben Mercer
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Company Signatory:



Sarah Williams
Staff Engineer, Radio Laboratory



5772

Applicant / Manufacturer Information

Company Name*:	Covidien LLC
Address*:	15 Hampshire Street Mansfield Massachusetts 02048 USA

Report Revision History

Version Number	Issue Date	Revision Details	Revised By
1.0	28/10/2025	Initial Version	Ben Mercer
2.0	06/11/2025	Applicant / manufacturer updated	Ben Mercer
3.0	04/02/2026	Implemented TCB feedback	Ben Mercer
4.0	05/02/2026	Antenna model number updated	Ben Mercer

Table of Contents

Applicant / Manufacturer Information	2
Report Revision History	2
1 Attestation of Test Results	4
1.1 Description of EUT	4
1.2 General Information	4
1.3 Summary of Test Results	4
1.4 Deviations from the Test Specification	4
2 Summary of Testing	5
2.1 Facilities and Accreditation	5
2.2 Methods and Procedures	5
2.3 Calibration and Uncertainty	6
2.4 Test and Measurement Equipment	7
3 Equipment Under Test (EUT)	9
3.1 Identification of Equipment Under Test (EUT)	9
3.2 Modifications Incorporated in the EUT	9
3.3 Additional Information Related to Testing	10
3.4 Description of Available Antennas	13
3.5 Description of Test Setup	13
4 Radiated Test Results	18
4.1 Transmitter Duty Cycle	18
4.2 Transmitter Out of Band Radiated Emissions <1 GHz	23
4.3 Transmitter Out of Band Radiated Emissions >1 GHz	26
4.3.1 5.15-5.25 GHz band	26
4.3.2 5.25-5.35 GHz band	28
4.3.3 5.47-5.725 GHz band	32
4.3.4 5.725-5.85 GHz band	34
4.4 Transmitter Band Edge Radiated Emissions	36
4.4.1 5.15-5.25 GHz band	36
4.4.2 5.25-5.35 GHz band	58
4.4.3 5.47-5.725 GHz band	81
4.4.4 5.725-5.85 GHz band	104

1 Attestation of Test Results

1.1 Description of EUT

The equipment under test was a module with 2.4 GHz and 5 GHz WLAN transceivers.*

1.2 General Information

Specification Reference:	47CFR15.407
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart E (Unlicensed National Information Infrastructure Devices) – Section 15.407
Specification Reference:	47CFR15.209
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.209
Site Registration:	621311
Location of Testing:	Units 3 & 4 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom
Test Dates:	08 October 2025 to 15 October 2025

1.3 Summary of Test Results

FCC Reference (47CFR)	Measurement	Result
Part 15.35(c)	Transmitter Duty Cycle	Note 1
Part 15.407(b) / 15.209(a)	Transmitter Out of Band Radiated Emissions	
Part 15.407(b) / 15.209(a)	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 the level of average emissions, as the EUT employs pulsed operation.

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 specifications identified above.

2 Summary of Testing

2.1 Facilities and Accreditation

The test site and measurement facilities used to collect data are located at Unit 3 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	-
Site 17	-
Site 32	-
Site 33	X

UL International (UK) Ltd is accredited by UKAS. The tests reported herein have been performed in accordance with its terms of accreditation.

2.2 Methods and Procedures

Reference:	ANSI C63.10-2020 + Cor.1-2023
Title:	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
Reference:	KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 December 14, 2017
Title:	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices (Part 15, Subpart E)
Reference:	KDB662911 D01 Multiple Transmitter Output v02r01 October 31, 2013
Title:	Emissions Testing of Transmitter with Multiple Outputs in the Same Band

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. 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	5.15 GHz to 5.850 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 40 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 Duty Cycle

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
K226203	3m RSE Chamber	Albatross Projects	N/A	N/A	29 Apr 2026	12
M226556	Thermohygrometer	Testo	608-H1	83800306	20 Dec 2025	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	19 Mar 2026	12
A3142	Pre-Amplifier	Schwarzbeck	BBV 9718 B	00020	25 Apr 2026	12
A230451	Attenuator	Atlantic Microwave	ATT10KXP-483034-N4N5	-	06 May 2026	12
A231044	Horn Antenna	Schwarzbeck	BBHA 9120 B	00835	28 Apr 2026	12

Test Equipment Used for Transmitter Radiated Emissions

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
M226556	Thermohygrometer	Testo	608-H1	83800306	20 Dec 2025	12
K226203	3m RSE Chamber	Albatross Projects	N/A	N/A	29 Apr 2026	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	19 Mar 2026	12
A231567	Pre-Amplifier	RF Bay Inc.	LNA-1070	2	28 Apr 2026	12
A3142	Pre-Amplifier	Schwarzbeck	BBV 9718 B	00020	25 Apr 2026	12
A230567	Pre-Amplifier	Atlantic Microwave	A-HPAKX-380143-K5K5	VJ3601001	14 Apr 2026	12
A3165	Mag Loop Antenna	ETS-Lindgren	6502	00224383	25 Mar 2026	12
A225134	Antenna	Teseq, Inc	CBL6111D	62222	13 Mar 2026	12
A231044	Antenna	Schwarzbeck	BBHA 9120 B	00835	28 Apr 2026	12
A231045	Antenna	Schwarzbeck	HWRD 750	00064	28 Apr 2026	12
A231050	Antenna	Schwarzbeck	BBHA 9170	01280	14 Apr 2026	12
A3115	Attenuator	AtlanTecRF	AN18-06	219706#5	13 Mar 2026	12
A230451	Attenuator	Atlantic Microwave	ATT10KXP-483034-N4N5	Not stated	06 May 2026	12
A227126	High Pass Filter	Micro-Tronics	HPS20723	006	19 May 2026	12

Test and Measurement Equipment (continued)**Test Equipment Used for Transmitter Band Edge Radiated Emissions**

Asset No.	Instrument	Manufacturer	Type No.	Serial No.	Date Calibration Due	Cal. Interval (Months)
K226203	3m RSE Chamber	Albatross Projects	N/A	N/A	29 Apr 2026	12
M226556	Thermohygrometer	Testo	608-H1	83800306	20 Dec 2025	12
M1995	Test Receiver	Rohde & Schwarz	ESU40	100428	19 Mar 2026	12
A3142	Pre-Amplifier	Schwarzbeck	BBV 9718 B	00020	25 Apr 2026	12
A230451	Attenuator	Atlantic Microwave	ATT10KXP-483034-N4N5	-	06 May 2026	12
A231044	Horn Antenna	Schwarzbeck	BBHA 9120 B	00835	28 Apr 2026	12

3 Equipment Under Test (EUT)

3.1 Identification of Equipment Under Test (EUT)

Applicant / Manufacturer*:	Covidien LLC
Model Name or Number*:	M2-JODY-W377
Test Sample Serial Number*:	Not marked or stated (UL ID 8817497) (<i>Radiated sample #1</i>)
Hardware Version*:	0.5
Software Version*:	2.0.0.86-17.80.200.p207 & 17.68.1.p88-17.26.1.p88-MXM5X17287_V0V1
FCC ID*:	P7G-173269
Date of Receipt:	15 August 2025

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 802.11a,n,ac,ax) / U-NII	
Type of Unit:	Transceiver	
Modulation:	BPSK	
Data Rates:	802.11a	6 Mbps (SISO)
	802.11n HT20	MCS0 (SISO), MCS8 (MIMO)
	802.11n HT40	MCS0 (SISO), MCS8 (MIMO)
	802.11ac VHT80	MCS0 (SISO or MIMO)
	802.11ax HE20	MCS0 (SISO or MIMO), SU 242
	802.11ax HE40	MCS0 (SISO or MIMO), SU 484
	802.11ax HE80	MCS0 (SISO or MIMO), SU 996
Power Supply Requirement(s)*:	Nominal	12.0 VDC

Additional Information Related to Testing (continued)

Channel Spacing:	20 MHz		
Transmit Frequency Band:	5150 MHz to 5250 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	36	5180
	Middle	40	5200
	Top	48	5240
Transmit Frequency Band:	5250 MHz to 5350 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	52	5260
	Middle	60	5300
	Top	64	5320
Transmit Frequency Band:	5470 MHz to 5725 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	100	5500
	-	104	5520
	Middle	116	5580
	-	136	5680
	Top	140	5700
Transmit Frequency Band:	5725 MHz to 5850 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	149	5745
	Middle	157	5785
	Top	165	5825

Additional Information Related to Testing (continued)

Channel Spacing:	40 MHz		
Transmit Frequency Band:	5150 MHz to 5250 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	38	5190
	Top	46	5230
Transmit Frequency Band:	5250 MHz to 5350 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	54	5270
	Top	62	5310
Transmit Frequency Band:	5470 MHz to 5725 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	102	5510
	Middle	110	5550
	Top	134	5670
Transmit Frequency Band:	5725 MHz to 5850 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	151	5755
	Top	159	5795

Additional Information Related to Testing (continued)

Channel Spacing:	80 MHz		
Transmit Frequency Band:	5150 MHz to 5250 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Single	42	5210
Transmit Frequency Band:	5250 MHz to 5350 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Single	58	5290
Transmit Frequency Band:	5470 MHz to 5725 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Bottom	106	5530
Transmit Frequency Band:	5725 MHz to 5850 MHz		
Transmit Channels Tested:	Channel ID	Channel Number	Channel Frequency (MHz)
	Single	155	5775

3.4 Description of Available Antennas

The radio utilizes 2 identical antennas, with the following maximum gains:

Manufacturer	Model	Type	Frequency Range (MHz)	Antenna Gain (dBi)
TE Connectivity	2118909-2	PCB	5150 to 5875	4.3

3.5 Description of Test Setup**Support Equipment****Customer Supplied*:**

Description	Brand Name	Model Name or Number	Serial Number
Test Laptop	Lenovo	V15 G4 1RU	PF5L41HE
Carrier Board	Covidien LLC	Not marked or stated	Not marked or stated
Linear Power Supply	TTI	CPX200DP	489228
Ethernet Cable	Not marked or stated	Not marked or stated	Not marked or stated
Power Cable	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 on the bottom, middle and top channels as required using the supported data rates/modulation types.

Configuration and Peripherals

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

- The EUT was connected to a carrier board and controlled in test mode using a software application on the laptop PC supplied by the customer. The application was used to enable a continuous transmission and to select the test channels as required. The customer supplied a document containing the setup instructions 'Aide Compliance - Instructions for WiFi Test Script (using RF test mode).pdf'. The laptop was connected to the carrier board via an ethernet cable.
- Transmitter spurious emissions were performed with the EUT transmitting in an 802.11n / HT20 / MCS8 / MIMO configuration. As this mode emits the highest transmit output power and power spectral density, it was deemed to be the worst case.
- The carrier board was powered from a 120 VAC single phase mains supply via the customer supplied TTI AC/DC power supply. There were no ports on the EUT to terminate. Unused ports on the carrier board were not terminated.

Power Settings**20 MHz**

802.11 Mode	Channel									
	36	40	60	64	100	104	136	140	149	165
a	16	17	18	16	<i>14.5</i>	<i>17</i>	<i>17.5</i>	15	18	18
HT20 SISO	14	17	17	14	<i>14.5</i>	17	17	15	17	17
HT20 MIMO	14	15	17	14	14	17	17	14	17	17
HE20 SISO	14	15	15	14	14	15	-	15	15	15
HE20 MIMO	14	-	15	14	14	15	15	14	15	15

40 MHz

802.11 Mode	Channel								
	38	46	54	62	102	110	134	151	159
HT40 SISO	13	16	16	9.5	11	16	14	16	16
HT40 MIMO	12	15	16	10.5	11	16	15	16	16
HE40 SISO	11.5	15	15	9	9.5	15	14	15	15
HE40 MIMO	12	14	15	9.5	11	15	14.5	15	15

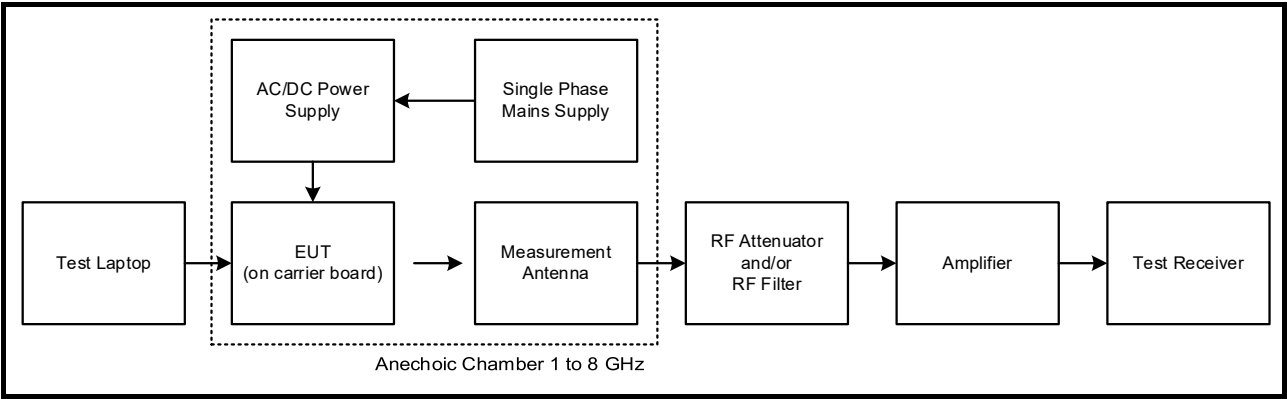
80 MHz

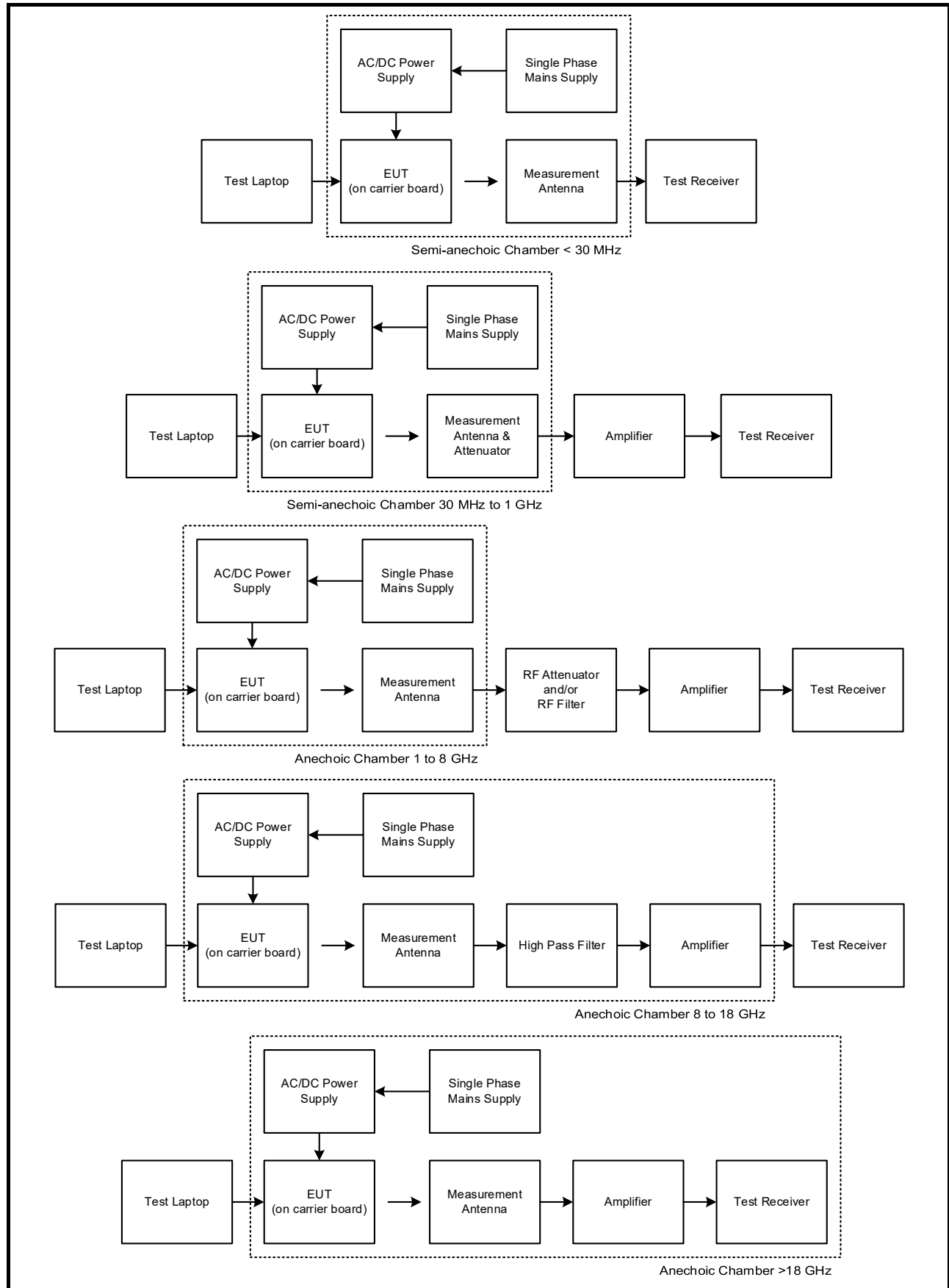
802.11 Mode	Channel			
	42	58	106	155
VHT80 SISO	<i>11</i>	9	<i>10</i>	16
VHT80 MIMO	11	9	9	16
HE80 SISO	<i>10.5</i>	9	<i>9.5</i>	15
HE80 MIMO	11	9	<i>10</i>	15

Note: *Italic* values indicate a reduced value from the original module certification. '-' indicates that this combination of channel and mode was not tested.

Test Setup Diagrams

Test Setup for Transmitter Duty Cycle



Test Setup Diagrams (continued)**Test Setup for Transmitter Radiated Emissions**

4 Radiated Test Results

4.1 Transmitter Duty Cycle

Test Summary:

Test Engineers:	John Ferdinand & Nick Steele	Test Dates:	09 October 2025 to 14 October 2025
Test Sample Serial Number:	UL ID 8817497		

FCC Reference:	Part 15.35(c)
Test Method Used:	KDB 789033 D02 Section II.B.2.b)

Environmental Conditions:

Temperature (°C):	21 to 23
Relative Humidity (%):	48 to 50

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:

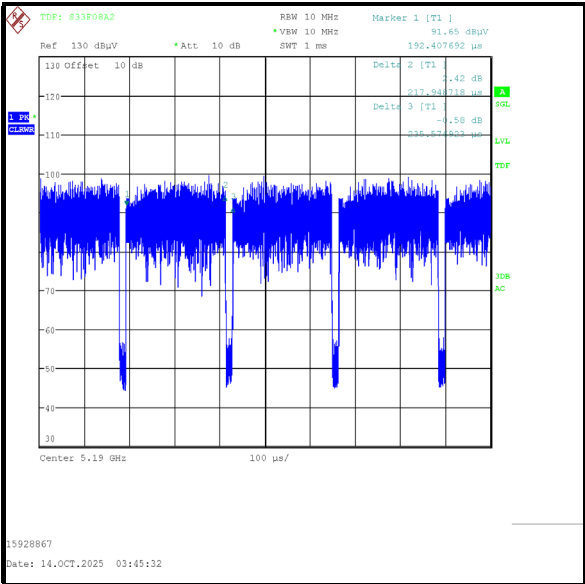
$$10 \log 1 / (\text{On Time} / [\text{Period or } 100\text{ms whichever is the lesser}]).$$

2. Measurements were performed on both EUT antennas and were found to be identical. Therefore only results for Ant 0 are presented in the section of the test report.
3. Plots below are for data rates with a duty cycle less than 98%. Results for all other modes having a duty cycle >98% are archived on the company server and available for inspection if required.

Transmitter Duty Cycle (continued)

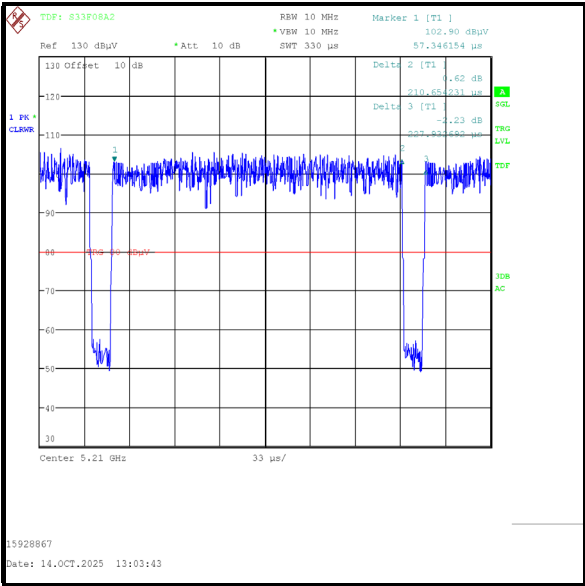
Results: 802.11n / 40 MHz / SISO / MCS0

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
0.217949	0.235577	0.3



Results: 802.11ac / 80 MHz / SISO / MCS0

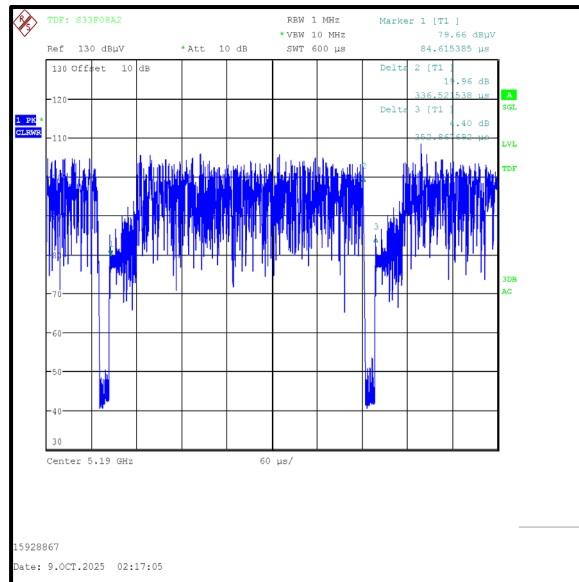
Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
0.210654	0.227933	0.3



Transmitter Duty Cycle (continued)

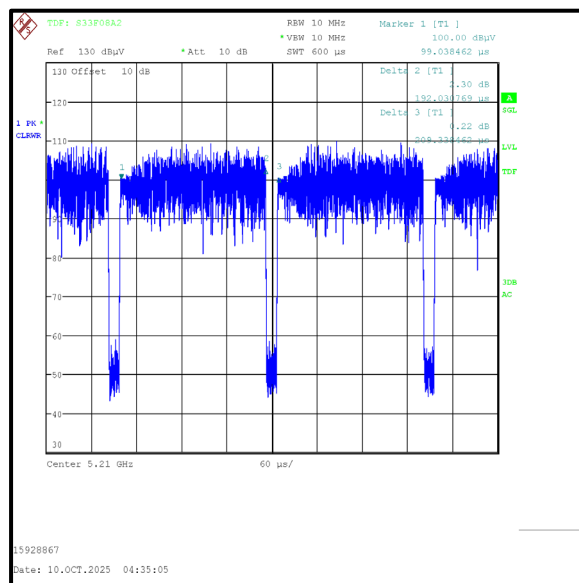
Results: 802.11ax / 40 MHz / SISO / MCS0

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
0.336522	0.352868	0.2



Results: 802.11ax / 80 MHz / SISO / MCS0

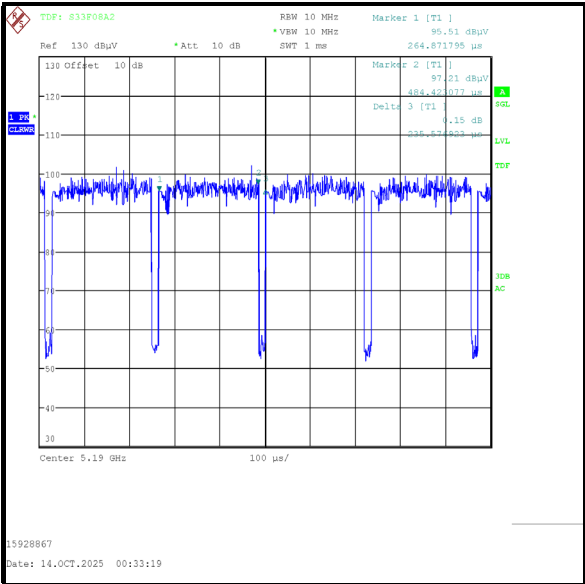
Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
0.192031	0.209338	0.4



Transmitter Duty Cycle (continued)

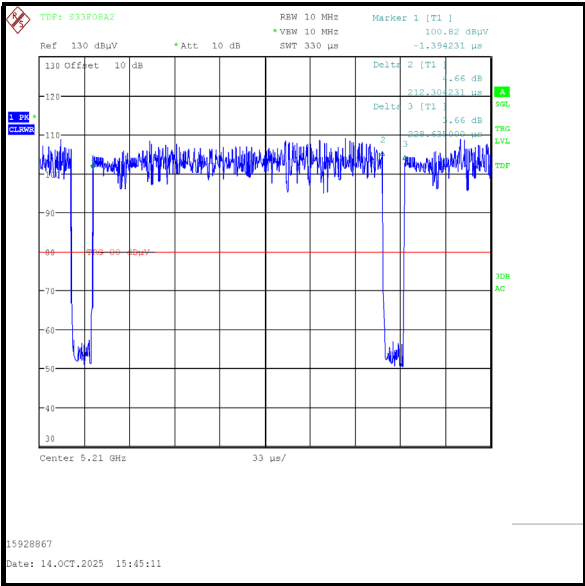
Results: 802.11n / 40 MHz / MIMO / MCS8

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
0.219551	0.235577	0.3



Results: 802.11ac / 80 MHz / MIMO / MCS0

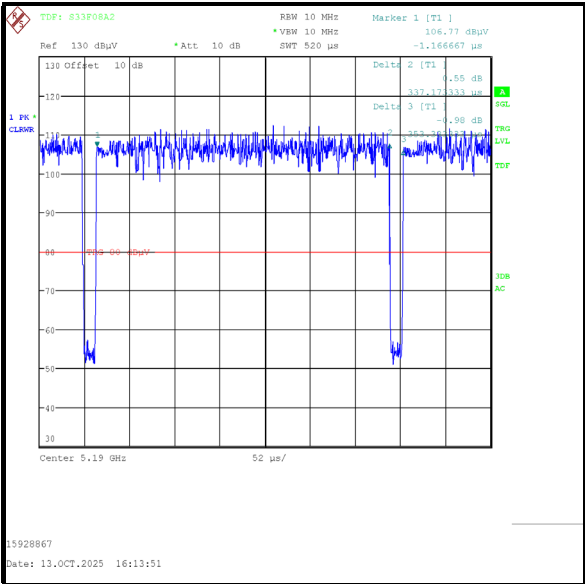
Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
0.212304	0.228635	0.3



Transmitter Duty Cycle (continued)

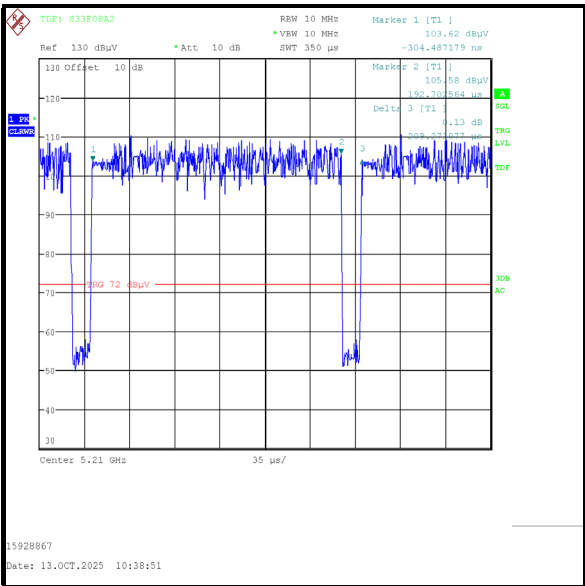
Results: 802.11ax / 40 MHz / MIMO / MCS0

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
0.337173	0.35333	0.2



Results: 802.11ax / 80 MHz / MIMO / MCS0

Pulse Duration (ms)	Period (ms)	Duty Cycle (dB)
0.192703	0.209273	0.4



4.2 Transmitter Out of Band Radiated Emissions <1 GHz

Test Summary:

Test Engineers:	John Ferdinand & Nick Steele	Test Date:	15 October 2025
Test Sample Serial Number:	UL ID 8817497		

FCC Reference:	Parts 15.407(b)(2),(9),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3, 6.4 and 6.5
Frequency Range:	9 kHz to 1000 MHz

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	48

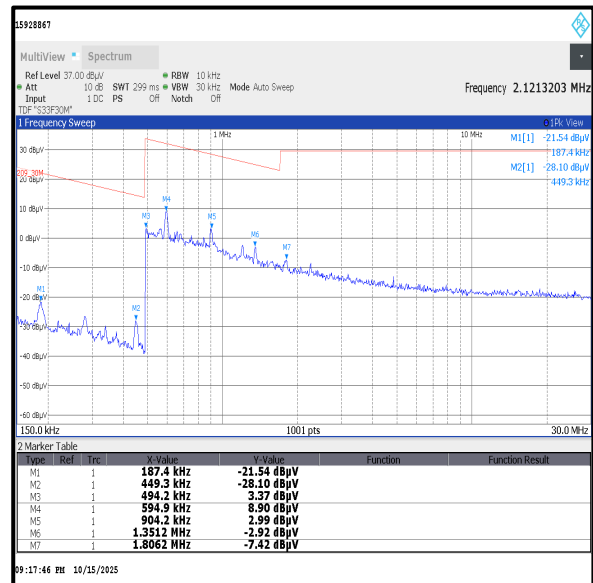
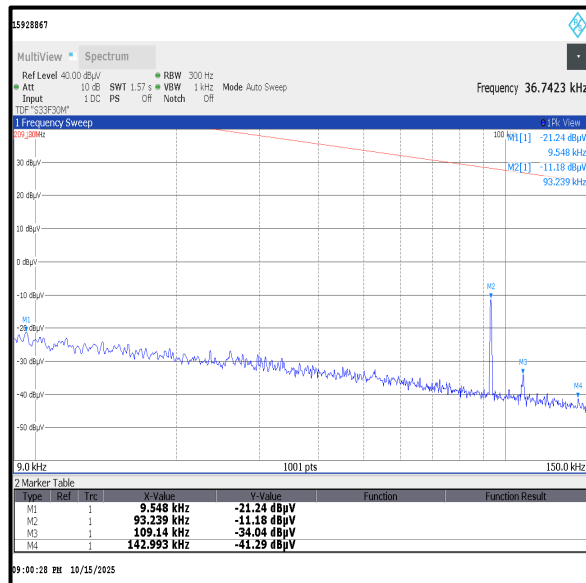
Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Note(s):**

1. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
2. Pre-scans were performed with the EUT transmitting in the band 5.25 to 5.35 GHz band with a configuration of 802.11n / HT20 / MCS8 / MIMO on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest power spectral density and all final measurements should be performed on any emissions seen in each band.
3. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the middle channel only.
4. All other emissions shown on the pre-scan were investigated and found to be ambient, or >20 dB below the applicable limit or below the measurement system noise floor.
5. Measurements below 30 MHz were performed in a semi-anechoic chamber (Asset Number K226203) at 3 metres. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. The limit was extrapolated to 3 metres in accordance with ANSI C63.10 clause 6.4.3 using the method described in clause 6.4.4.2. ANSI C63.10 clause 5.2 states 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:
 - a. 9 kHz to 490 kHz: measured value extrapolated from 3 metres to 300 metres by subtracting 80 dB at 40 dB / decade
 - b. 490 kHz to 30 MHz: measured value extrapolated from 3 metres to 30 metres by subtracting 40 dB at 40 dB / decade
7. Measurements between 30 MHz and 1 GHz were performed in a semi-anechoic chamber (Asset Number K226203) 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.
8. Pre-scans were performed, and markers placed on the highest measured levels. The test receiver was configured as follows: During 9 kHz to 150 kHz measurements, 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. During 30 MHz to 1 GHz measurements, 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. Final measurements were performed using a CISPR Quasi-Peak detector and measurement time set to 15 seconds.

Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation) (continued)

Results: Quasi-Peak / Peak / Middle Channel / 802.11n / MIMO / MCS8

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
124.997	Horizontal	40.1	44.0	3.9	Complied
273.388	Horizontal	43.0	46.0	3.0	Complied
408.154	Vertical	36.9	46.0	9.1	Complied



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

4.3 Transmitter Out of Band Radiated Emissions >1 GHz

4.3.1 5.15-5.25 GHz band

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation)

Test Summary:

Test Engineers:	John Ferdinand & Nick Steele	Test Dates:	14 October 2025 & 15 October 2025
Test Sample Serial Number:	UL ID 8817497		

FCC Reference:	Part 15.407(b)(1),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	48 to 50

Note(s):

1. FCC Part 15.407(b)(1) states for transmitters operating in the band 5.15 to 5.25 GHz: all emissions outside of the 5.15 to 5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. Part(b)(10) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. In accordance with ANSI C63.10-2020 Section 6.5.4, emissions more than 20 dB below the limit do not need to be reported.
3. Pre-scans were performed with the EUT transmitting in the band 5.25 to 5.35 GHz band with a data rate of 802.11n / HT20 / MCS8 / MIMO on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest power spectral density and all final measurements should be performed on any emissions seen in each band.
4. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
5. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
6. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K226203) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres 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.
7. In accordance with KDB 789033 Section II.G.1.c) if the peak measurement is below the average limit, it is not necessary to perform a separate average measurement.
8. All other emissions shown on the pre-scan plots were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.

Transmitter Out of Band Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: Bottom Channel / EIRP**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
15532.500	Vertical	-46.3	-27.0	19.3	Complied

Results: Bottom Channel / Field Strength

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
10359.850	Vertical	48.5	54.0	5.5	Complied

Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
10400.641	Vertical	-41.3	-27.0	14.3	Complied

Results: Middle Channel / Field Strength

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
15587.660	Vertical	47.1	54.0	6.9	Complied

Results: Top Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
10480.801	Vertical	-39.8	-27.0	12.8	Complied

Results: Top Channel / Field Strength

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
15720.000	Vertical	47.3	54.0	6.7	Complied

4.3.2 5.25-5.35 GHz band**Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation)****Test Summary:**

Test Engineers:	John Ferdinand & Nick Steele	Test Dates:	14 October 2025 & 15 October 2025
Test Sample Serial Number:	UL ID 8817497		

FCC Reference:	Part 15.407(b)(2),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	48 to 50

Note(s):

1. FCC Part 15.407(b)(2) states for transmitters operating in the band 5.25 to 5.35 GHz: all emissions outside of the 5.15 to 5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. Part(b)(10) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. In accordance with ANSI C63.10-2020 Section 6.5.4, emissions more than 20 dB below the limit do not need to be reported.
3. Pre-scans were performed with the EUT transmitting on the middle channel with a data rate of 802.11n / HT20 / MCS8 / MIMO in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest power spectral density and all final measurements should be performed on any emissions seen in each band.
4. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
5. The emission shown on the 1 GHz to 6 GHz plot is the EUT fundamental.
6. In accordance with KDB 789033 Section II.G.1.c) if the peak measurement is below the average limit, it is not necessary to perform a separate average measurement.
7. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.
8. Measurements were performed across the two restricted bands closest to the bands of operation with the EUT transmitting on the top channel in the 5.25 to 5.35 GHz band. Plots are included in this section of the test report. Peak and average measurements were made.
9. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K226203) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres 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.

Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: Bottom Channel / EIRP**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
10520.481	Vertical	-38.5	-27.0	11.5	Complied

Results: Bottom Channel / Field Strength

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
15792.397	Vertical	49.0	54.0	5.0	Complied

Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
10600.400	Vertical	-42.4	-27.0	15.4	Complied

Results: Middle Channel / Field Strength

Frequency (MHz)	Antenna Polarity	Peak Level (dB μ V/m)	Average Limit (dB μ V/m)	Margin (dB)	Result
15896.900	Vertical	48.1	54.0	5.9	Complied

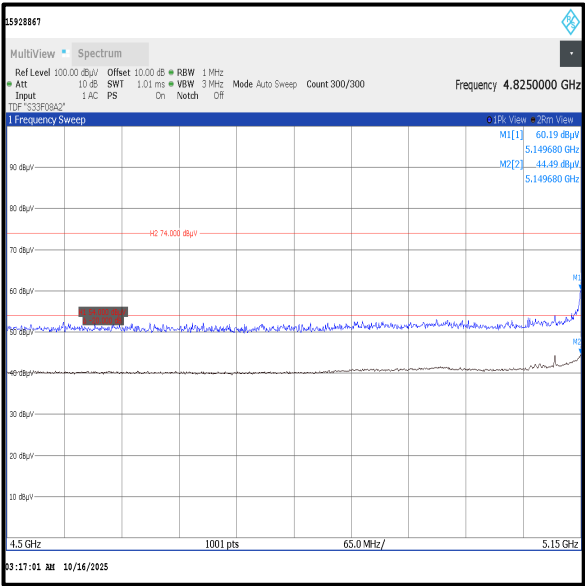
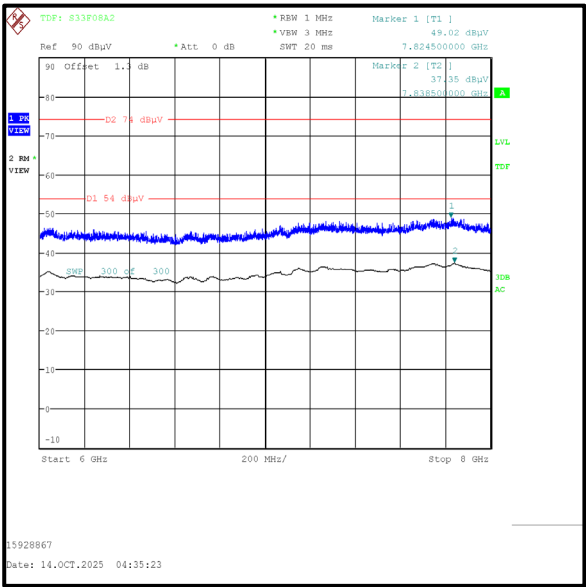
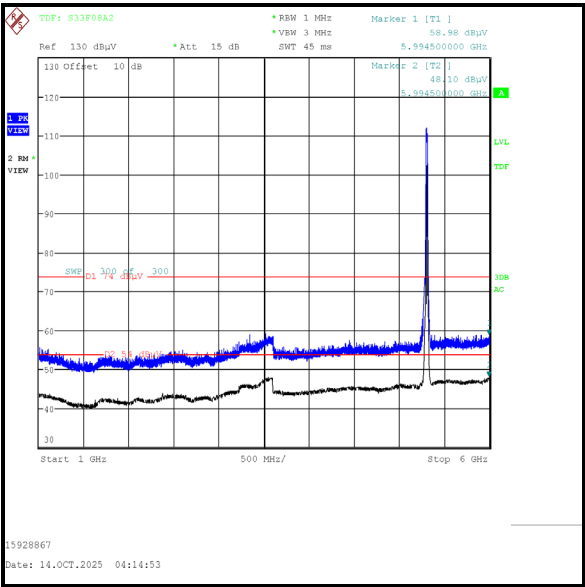
Results: Top Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
10640.641	Vertical	54.6	74.0	19.4	Complied
15959.359	Vertical	48.5	74.0	25.5	Complied

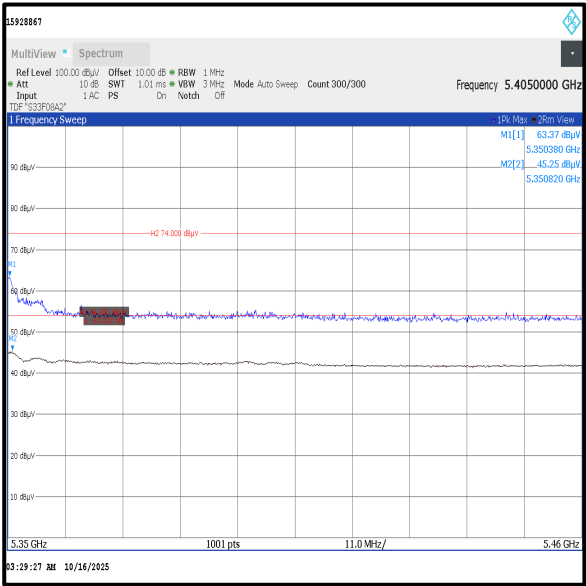
Results: Top Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
10641.122	Vertical	41.2	54.0	12.8	Complied
15959.359	Vertical	33.9	54.0	20.1	Complied

Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation) (continued)

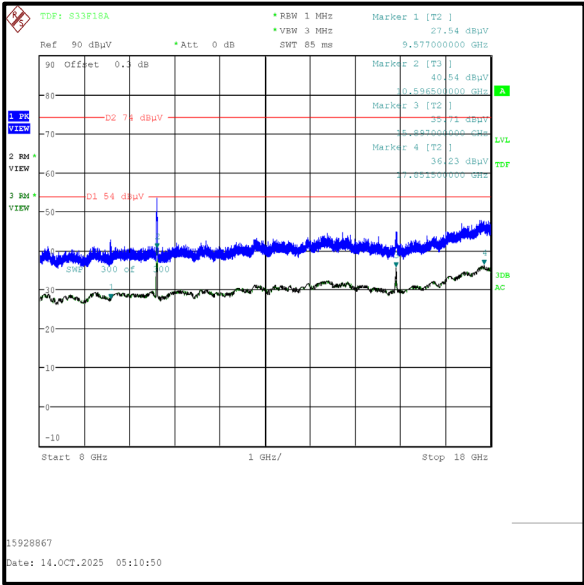
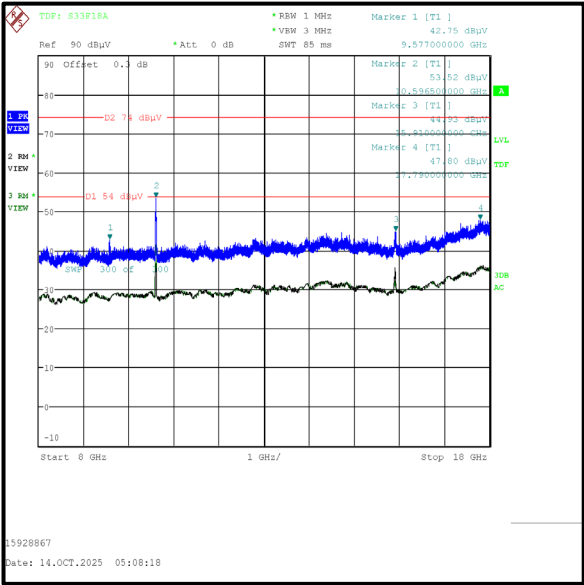


Restricted Band 4.5 GHz to 5.15 GHz



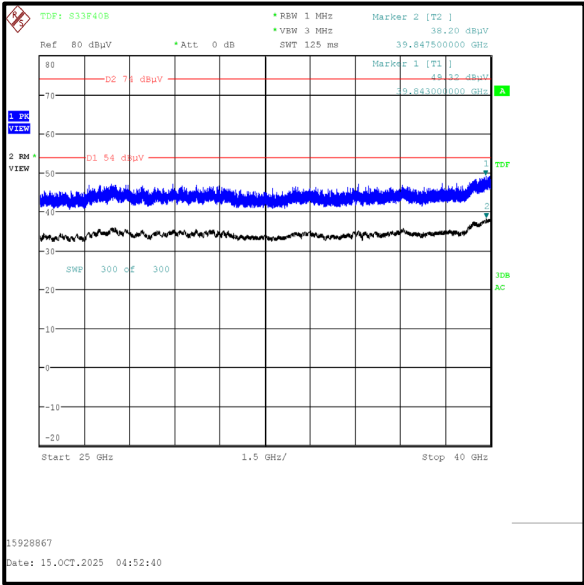
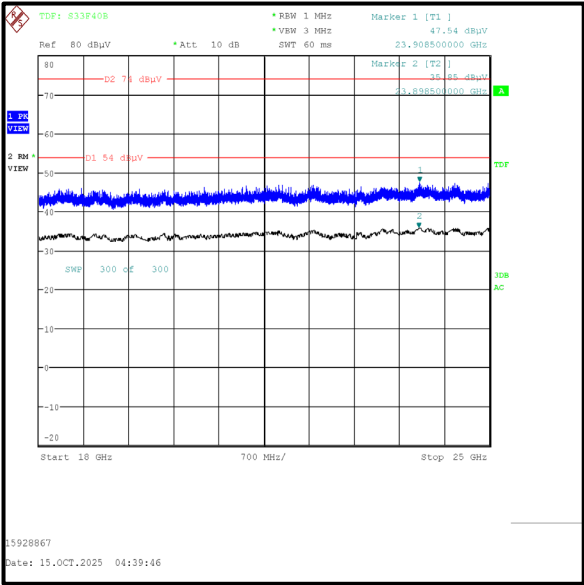
Restricted Band 5.35 GHz to 5.46 GHz

Transmitter Out of Band Radiated Emissions (5.25-5.35 GHz band operation) (continued)



Peak Detector Markers

Average Detector Markers



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

4.3.3 5.47-5.725 GHz band**Transmitter Out of Band Radiated Emissions (5.47-5.725 GHz band operation)****Test Summary:**

Test Engineers:	John Ferdinand & Nick Steele	Test Dates:	14 October 2025 & 15 October 2025
Test Sample Serial Number:	UL ID 8817497		

FCC Reference:	Part 15.407(b)(3),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	48 to 50

Note(s):

1. FCC Part 15.407(b)(3) states for transmitters operating in the band 5.47 to 5.725 GHz: all emissions outside of the 5.47 to 5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz. Part(b)(10) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. In accordance with ANSI C63.10-2020 Section 6.5.4, emissions more than 20 dB below the limit do not need to be reported.
3. Pre-scans were performed with the EUT transmitting in the band 5.25 to 5.35 GHz band with a data rate of 802.11n / HT20 / MCS8 / MIMO on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest power spectral density and all final measurements should be performed on any emissions seen in each band.
4. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
5. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
6. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.
7. Measurements above 1 GHz were performed in a fully anechoic chamber (Asset Number K226203) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres 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.

Transmitter Out of Band Radiated Emissions (5.47-5.725 GHz band operation) (continued)**Results: Bottom Channel / EIRP**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
16504.300	Vertical	-42.7	-27.0	15.7	Complied

Results: Bottom Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
11000.660	Vertical	54.9	74.0	19.1	Complied

Results: Bottom Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
11000.300	Vertical	41.2	54.0	12.8	Complied

Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
16736.200	Vertical	-39.4	-27.0	12.4	Complied

Results: Middle Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
11160.300	Vertical	59.5	74.0	14.5	Complied

Results: Middle Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
11161500	Vertical	46.9	54.0	7.1	Complied

Results: Top Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
17096.300	Vertical	-46.3	-27.0	19.3	Complied

Results: Top Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
11400.600	Vertical	56.1	74.0	17.9	Complied

Results: Top Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
11400.500	Vertical	42.0	54.0	12.0	Complied

4.3.4 5.725-5.85 GHz band**Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation)****Test Summary:**

Test Engineers:	John Ferdinand & Nick Steele	Test Dates:	14 October 2025 & 15 October 2025
Test Sample Serial Number:	UL ID 8817497		

FCC Reference:	Part 15.407(b)(4)(i),(10) & 15.209(a)
Test Method Used:	KDB 789033 II.G. & ANSI C63.10 Sections 6.3 and 6.6
Frequency Range:	1 GHz to 40 GHz

Environmental Conditions:

Temperature (°C):	22
Relative Humidity (%):	48 to 50

Note(s):

1. FCC Part 15.407(b)(4)(i) states for transmitters operating in the band 5.725 to 5.85 GHz: all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. Part(b)(10) states the provisions of 15.205 apply e.g. restricted bands of operation.
2. In accordance with ANSI C63.10-2020 Section 6.5.4, emissions more than 20 dB below the limit do not need to be reported.
3. Pre-scans were performed with the EUT transmitting in the band 5.25 to 5.35 GHz band with a data rate of 802.11n / HT20 / MCS8 / MIMO on middle channel in this band as it produced the highest power spectral density and was therefore deemed worst case. An inquiry was made to the FCC and the response was pre-scans could be performed in the band with the highest spectral power density and all final measurements should be performed on any emissions seen in each band.
4. The final measured value, for the given emission in the field strength result tables, incorporates the calibrated antenna factor and cable loss.
5. Appropriate RF filters and attenuators were used during pre-scans and final measurements. Insertion losses were entered on the spectrum analyser as RF levels offsets.
6. All other emissions shown on the pre-scan plot were investigated and found to be ambient or >20 dB below the applicable limit or below the measurement system noise floor.
7. Pre-scans above 1 GHz were performed in a fully anechoic chamber (Asset Number K226203) at a distance of 3 metres. The EUT was placed at a height of 1.5 metres 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.

Transmitter Out of Band Radiated Emissions (5.725-5.85 GHz band operation) (continued)**Results: Bottom Channel / EIRP**

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
17247.100	Vertical	-43.5	-27.0	16.5	Complied

Results: Bottom Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
11490.600	Vertical	57.4	74.0	16.6	Complied

Results: Bottom Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
11491.400	Vertical	44.4	54.0	9.6	Complied

Results: Middle Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
17342.500	Vertical	-43.4	-27.0	16.4	Complied

Results: Middle Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
11570.900	Vertical	56.6	74.0	17.4	Complied

Results: Middle Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
11571.600	Vertical	43.8	54.0	10.2	Complied

Results: Top Channel / EIRP

Frequency (MHz)	Antenna Polarity	Level (dBm)	Limit (dBm)	Margin (dB)	Result
17478.700	Vertical	-40.0	-27.0	13.0	Complied

Results: Top Channel / Field Strength / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
11651.100	Vertical	58.3	74.0	15.7	Complied

Results: Top Channel / Field Strength / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
11651.600	Vertical	45.9	54.0	8.1	Complied

4.4 Transmitter Band Edge Radiated Emissions

4.4.1 5.15-5.25 GHz band

Test Summary:

Test Engineers:	John Ferdinand & Nick Steele	Test Dates:	08 October 2025 & 14 October 2025
Test Sample Serial Number:	UL ID 8817497		

FCC Reference:	Parts 15.407(b)(1),(10), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	21 to 23
Relative Humidity (%):	48 to 50

Note(s):

1. Lower band edge measurements were performed with the EUT transmitting on the bottom channel.
2. For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. However, there are restricted bands of operation below the lower band edge at 4.5-5.15 GHz and also above the upper band edge at 5.35-5.46 GHz therefore the provisions of FCC Part 15.205 apply. Tests were performed in these restricted bands of operation, the results are included in the transmitter 5.25-5.35 GHz band radiated spurious emission section of this test report.
3. Field strength measurements using peak and average detectors were performed in the restricted bands below 5.15 GHz and above 5.35 GHz. Field strength and EIRP results were found to be compliant with the restricted band limits and Part 15.407 out-of-band limits.
4. In accordance with KDB 789033 Section II.G.1.c) if the peak measurement is below the average limit, it is not necessary to perform a separate average measurement.
5. For all average measurements if this section, 300 sweeps were used. This satisfies the requirement for the minimum number of sweep points, as stated in KDB 789033 Section II.G.6.c) Method AD (vi).
6. In accordance with KDB 789033 Section II.G.6.c) Method AD (vii), for average measurements, data rates where the EUT was transmitting <98% duty cycle, the duty cycle correction factor calculated in section 4.1 was added to the measured result.

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

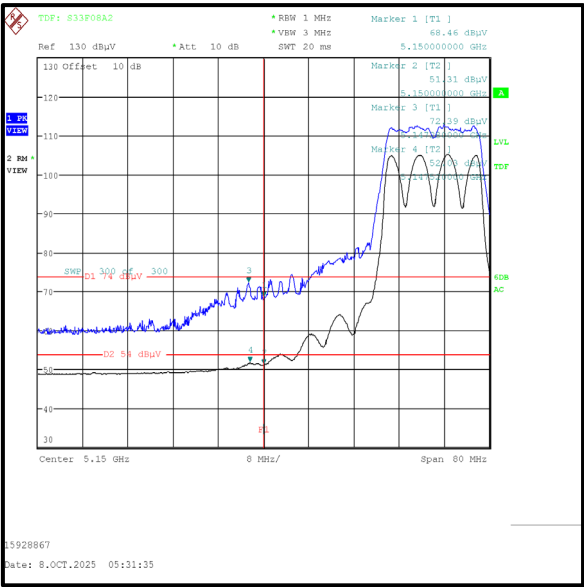
Results: 802.11a / 20 MHz / SISO / 6 Mbps / Channel 36

Results: Lower Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5147.280	Vertical	72.4	74.0	1.6	Complied
5150	Vertical	68.5	74.0	5.5	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5147.520	Vertical	52.0	54.0	2.0	Complied
5150	Vertical	51.3	54.0	2.7	Complied



Lower Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

Results: 802.11a / 20 MHz / SISO / 6 Mbps / Channel 40

Results: Lower Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5149.640	Vertical	66.4	74.0	7.6	Complied
5150	Vertical	66.2	74.0	7.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5149.880	Vertical	48.5	54.0	5.5	Complied
5150	Vertical	48.4	54.0	5.6	Complied



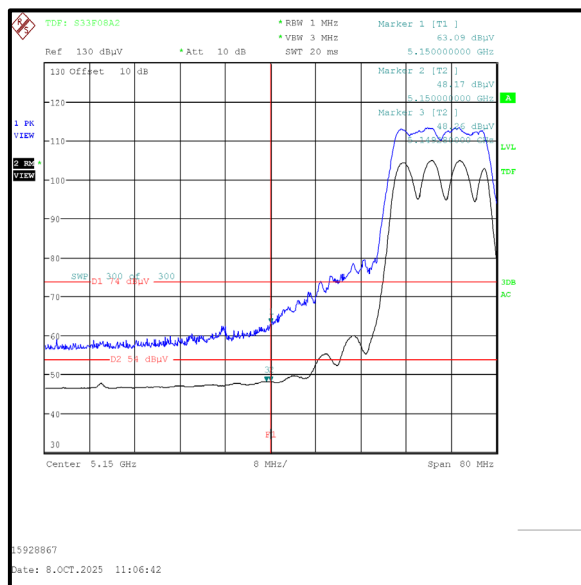
Lower Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / MCS0 / Channel 36****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	Vertical	63.1	74.0	10.9	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.280	Vertical	48.3	54.0	5.7	Complied
5150	Vertical	48.2	54.0	5.8	Complied

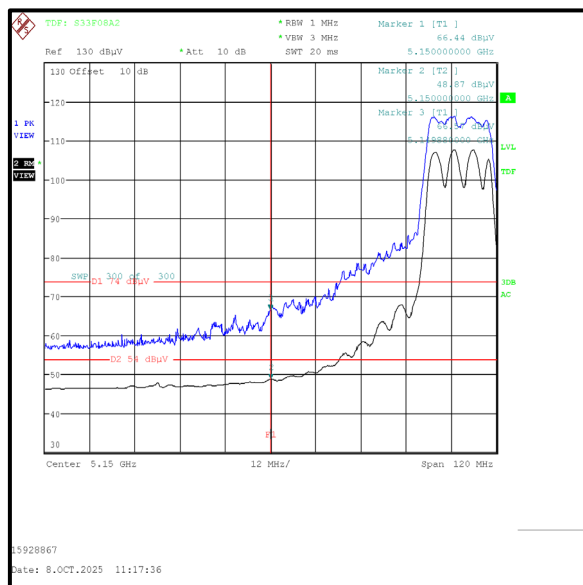
**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / MCS0 / Channel 40****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.988	Vertical	66.6	74.0	7.4	Complied
5150	Vertical	66.4	74.0	7.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	Vertical	48.9	54.0	5.1	Complied

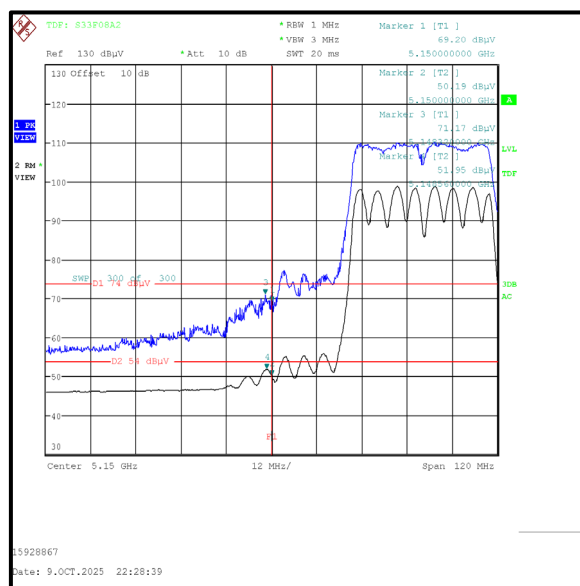
**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / SISO / MCS0 / Channel 38****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.320	Vertical	71.2	74.0	2.8	Complied
5150	Vertical	69.2	74.0	4.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.560	Vertical	52.0	0.3	52.3	54.0	1.7	Complied
5150	Vertical	50.2	0.3	50.5	54.0	3.5	Complied

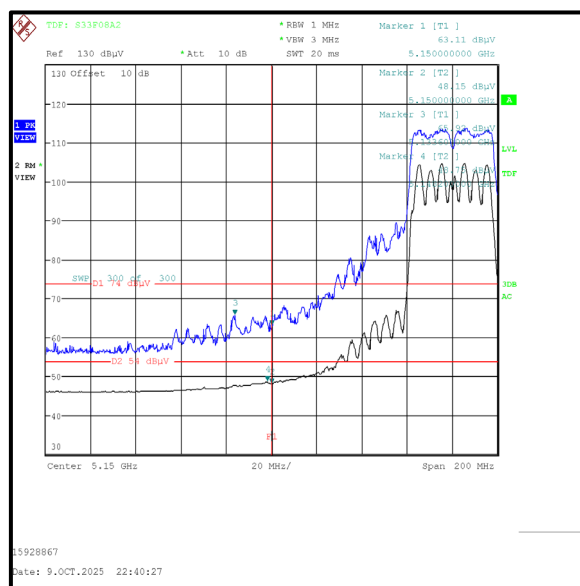
**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 40 MHz / SISO / MCS0 / Channel 46****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5133.600	Vertical	65.9	74.0	8.1	Complied
5150	Vertical	63.1	74.0	10.9	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.200	Vertical	48.8	0.3	49.1	54.0	4.9	Complied
5150	Vertical	48.2	0.3	48.5	54.0	5.5	Complied

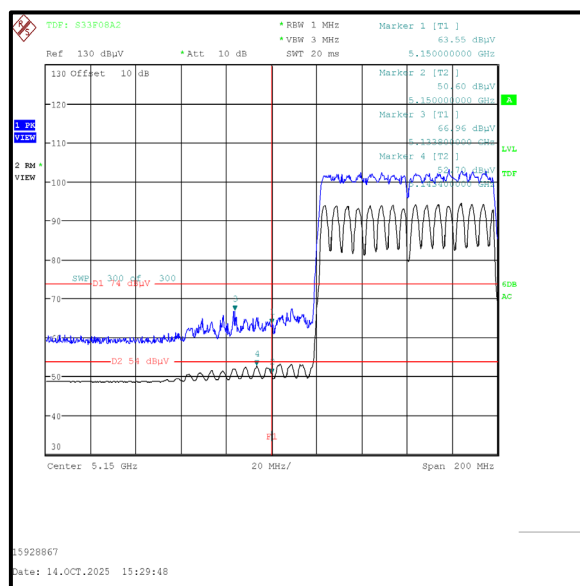
**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ac / 80 MHz / SISO / MCS0 / Channel 42****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5133.800	Vertical	67.0	74.0	7.0	Complied
5150	Vertical	63.6	74.0	10.4	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5143.4000	Vertical	52.7	0.3	53.0	54.0	1.0	Complied
5150	Vertical	50.6	0.3	50.9	54.0	3.1	Complied

**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

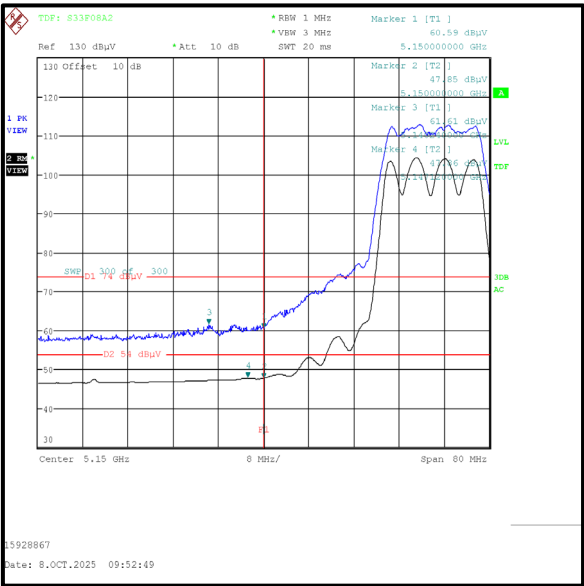
Results: 802.11ax / 20 MHz / SISO / MCS0 / Channel 36

Results: Lower Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5140.210	Vertical	61.6	74.0	12.4	Complied
5150	Vertical	60.6	74.0	13.4	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5150	Vertical	47.9	54.0	6.1	Complied



Lower Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

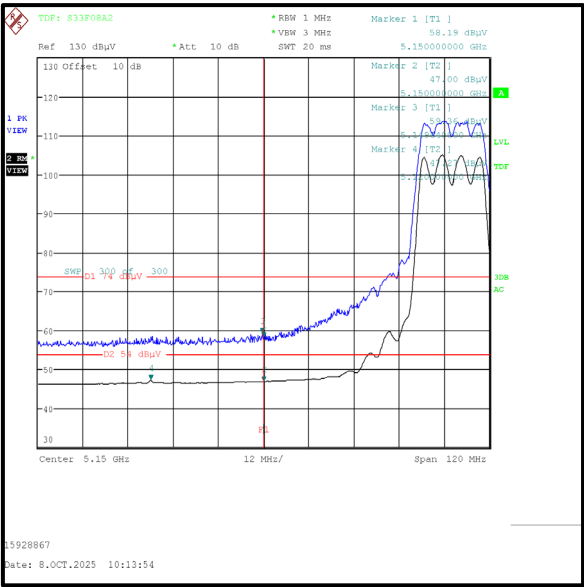
Results: 802.11ax / 20 MHz / SISO / MCS0 / Channel 40

Results: Lower Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5149.640	Vertical	59.4	74.0	14.6	Complied
5150	Vertical	58.2	74.0	15.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5120.000	Vertical	47.3	54.0	6.7	Complied
5150	Vertical	47.0	54.0	7.0	Complied



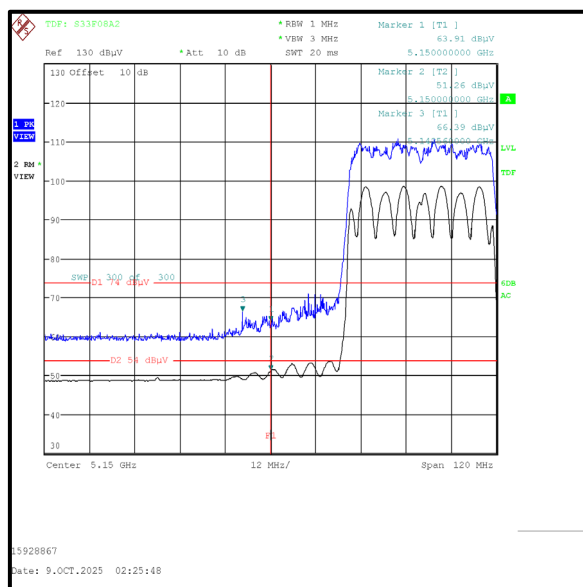
Lower Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ax / 40 MHz / SISO / MCS0 / Channel 38****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5142.560	Vertical	66.4	74.0	7.6	Complied
5150	Vertical	63.9	74.0	10.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	Vertical	51.3	0.2	51.5	54.0	2.5	Complied

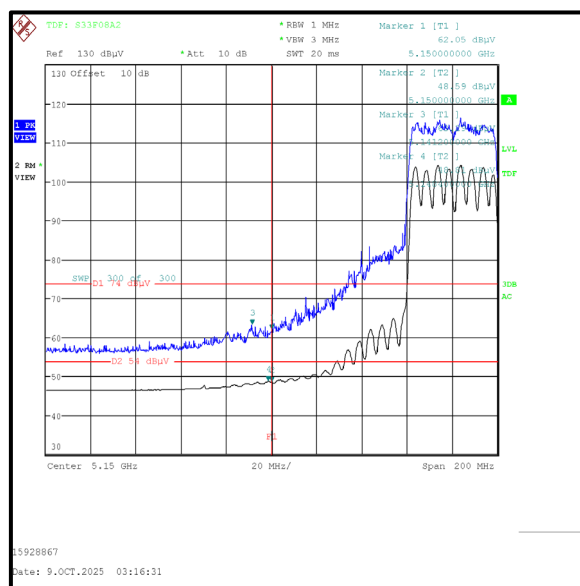
**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ax / 40 MHz / SISO / MCS0 / Channel 46****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5141.200	Vertical	63.3	74.0	10.7	Complied
5150	Vertical	62.1	74.0	11.9	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.400	Vertical	48.8	0.2	49.0	54.0	5.0	Complied
5150	Vertical	48.6	0.2	48.8	54.0	5.2	Complied

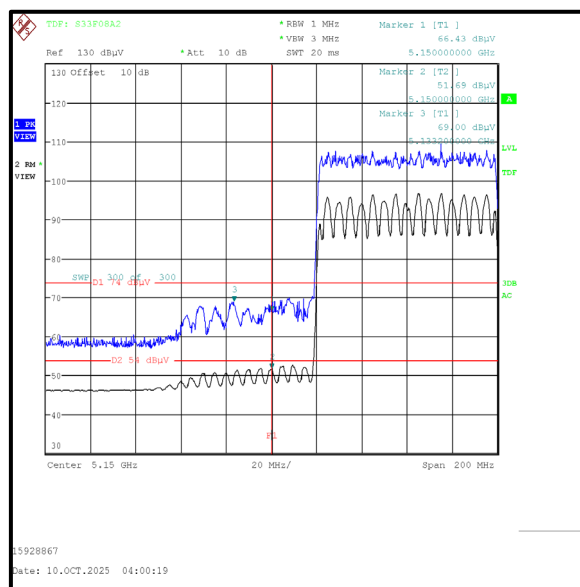
**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ax / 80 MHz / SISO / MCS0 / Channel 42****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5133.200	Vertical	69.0	74.0	5.0	Complied
5150	Vertical	66.4	74.0	7.6	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	Vertical	51.7	0.4	52.1	54.0	1.9	Complied

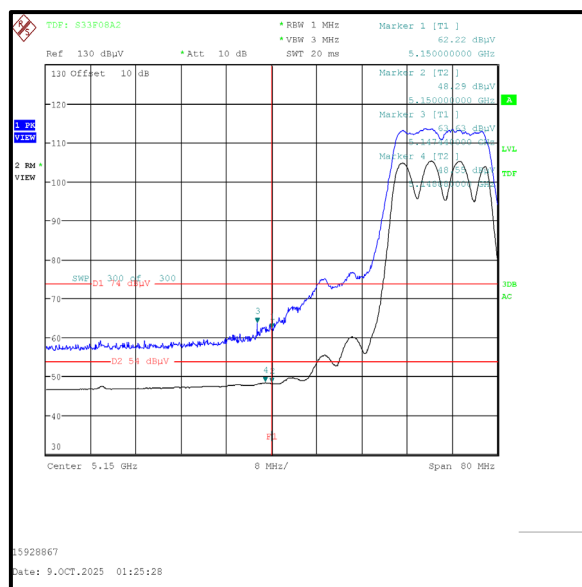
**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11n / 20 MHz / MIMO / MCS8 / Channel 36****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5147.440	Vertical	63.6	74.0	10.4	Complied
5150	Vertical	62.2	74.0	11.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.880	Vertical	48.6	54.0	5.4	Complied
5150	Vertical	48.3	54.0	5.7	Complied

**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

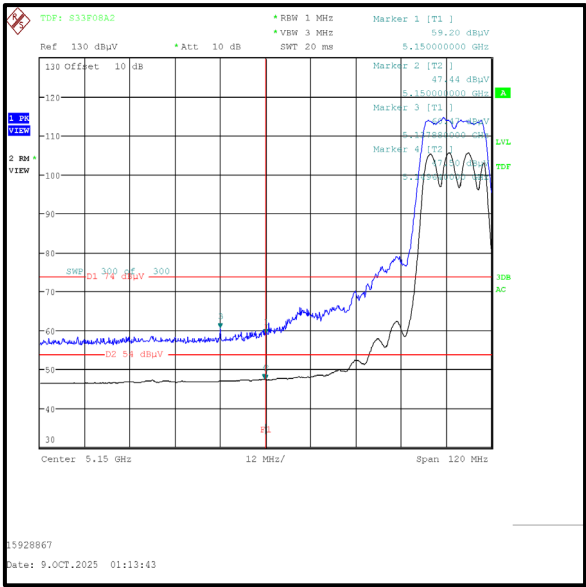
Results: 802.11n / 20 MHz / MIMO / MCS8 / Channel 40

Results: Lower Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5137.880	Vertical	60.5	74.0	13.5	Complied
5150	Vertical	59.2	74.0	14.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5149.640	Vertical	47.5	54.0	6.5	Complied
5150	Vertical	47.4	54.0	6.6	Complied



Lower Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

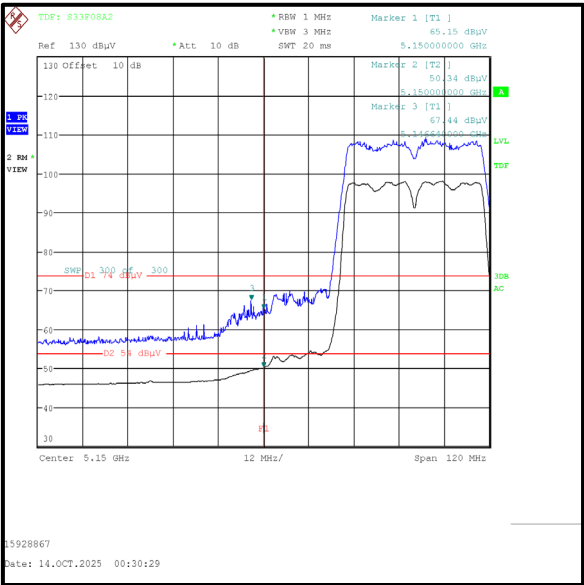
Results: 802.11n / 40 MHz / MIMO / MCS8 / Channel 38

Results: Lower Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5146.640	Vertical	67.4	74.0	6.6	Complied
5150	Vertical	65.2	74.0	8.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Duty Cycle correction (dB)	Corrected Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5150	Vertical	50.3	0.3	50.6	54.0	3.4	Complied



Lower Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

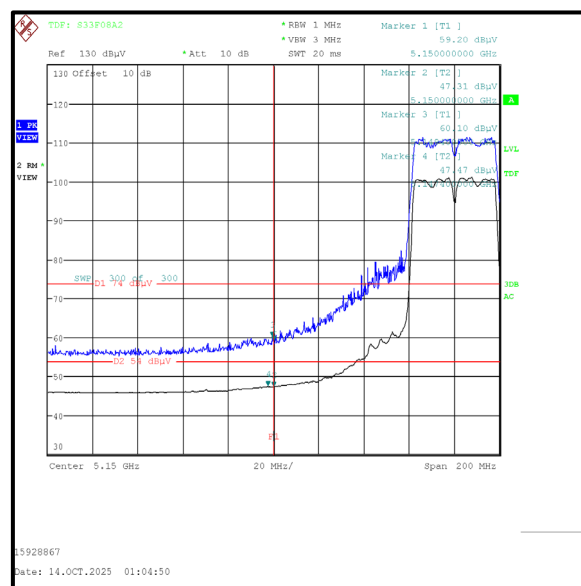
Results: 802.11n / 40 MHz / MIMO / MCS8 / Channel 46

Results: Lower Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5149.401	Vertical	60.1	74.0	13.9	Complied
5150	Vertical	59.2	74.0	14.8	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Duty Cycle correction (dB)	Corrected Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5147.400	Vertical	47.5	0.3	47.8	54.0	6.2	Complied
5150	Vertical	47.3	0.3	47.6	54.0	6.4	Complied



Lower Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

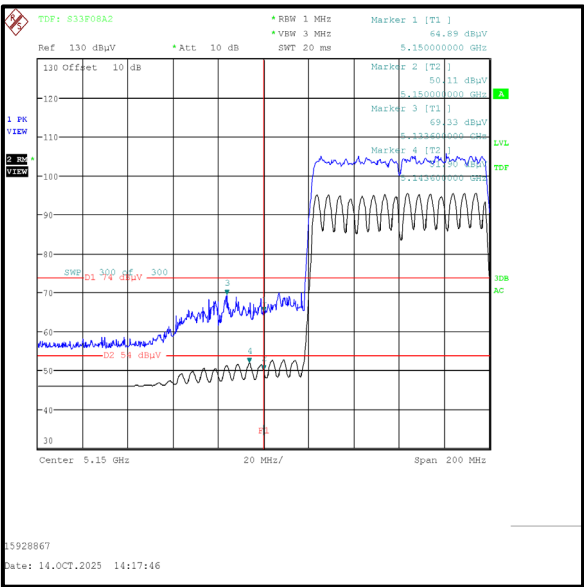
Results: 802.11ac / 80 MHz / MIMO / MCS0 / Channel 42

Results: Lower Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5133.600	Vertical	69.3	74.0	4.7	Complied
5150	Vertical	64.9	74.0	9.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Duty Cycle correction (dB)	Corrected Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5143.600	Vertical	51.9	0.3	52.2	54.0	1.8	Complied
5150	Vertical	50.1	0.3	50.4	54.0	3.6	Complied



Lower Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

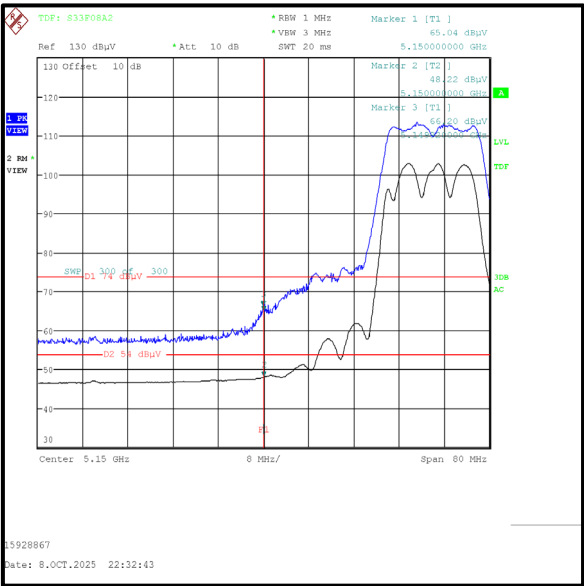
Results: 802.11ax / 20 MHz / MIMO / MCS0 / Channel 36

Results: Lower Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5149.920	Vertical	66.2	74.0	7.8	Complied
5150	Vertical	65.0	74.0	9.0	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5150	Vertical	48.2	54.0	5.8	Complied



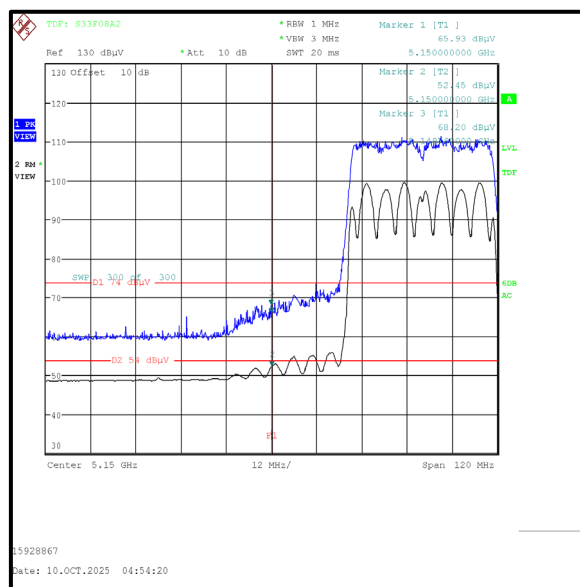
Lower Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ax / 40 MHz / MIMO / MCS0 / Channel 38****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.760	Vertical	68.2	74.0	5.8	Complied
5150	Vertical	65.9	74.0	8.1	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5150	Vertical	52.5	0.2	52.7	54.0	1.3	Complied

**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)

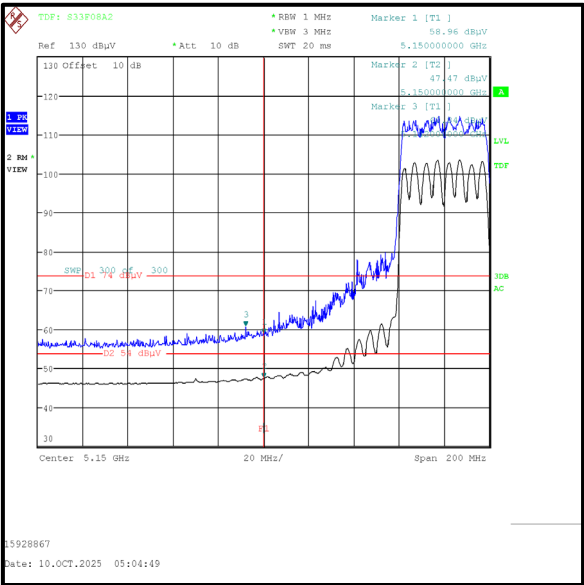
Results: 802.11ax / 40 MHz / MIMO / MCS0 / Channel 46

Results: Lower Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5142.000	Vertical	60.8	74.0	13.2	Complied
5150	Vertical	59.0	74.0	15.0	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Duty Cycle correction (dB)	Corrected Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5150	Vertical	47.5	0.2	47.7	54.0	6.3	Complied



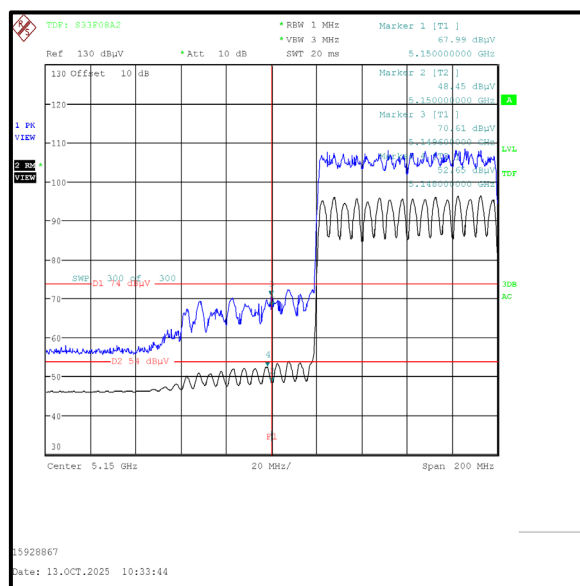
Lower Band Edge

Transmitter Band Edge Radiated Emissions (5.15-5.25 GHz band operation) (continued)**Results: 802.11ax / 80 MHz / MIMO / MCS0 / Channel 42****Results: Lower Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5149.600	Vertical	70.6	74.0	3.4	Complied
5150	Vertical	68.0	74.0	6.0	Complied

Results: Lower Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Duty Cycle correction (dB)	Corrected Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5148.000	Vertical	52.7	0.3	53.0	54.0	1.0	Complied
5150	Vertical	48.5	0.3	48.8	54.0	5.2	Complied

**Lower Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band)**4.4.2 5.25-5.35 GHz band****Test Summary:**

Test Engineers:	John Ferdinand & Nick Steele	Test Dates:	08 October 2025 & 14 October 2025
Test Sample Serial Number:	UL ID 8817497		

FCC Reference:	Parts 15.407(b)(2),(10), 15.205 & 15.209(a)
Test Method Used:	ANSI C63.10 Section 6.10 & KDB 789033 II.G.

Environmental Conditions:

Temperature (°C):	21 to 23
Relative Humidity (%):	48 to 50

Note(s):

1. Upper band edge measurements were performed with the EUT transmitting on the top channel.
2. For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. However, there are restricted bands of operation below the lower band edge at 4.5-5.15 GHz and also above the upper band edge at 5.35-5.46 GHz therefore the provisions of FCC Part 15.205 apply. Tests were performed in these restricted bands of operation with the EUT transmitting on the bottom and top channels within 5.25-5.35 GHz band, the results are included in the transmitter 5.25-5.35 GHz band radiated spurious emissions section of this test report.
3. Field strength measurements using peak and average detectors were performed in the restricted bands below 5.15 GHz and above 5.35 GHz. Field strength and EIRP results were found to be compliant with the restricted band limits and Part 15.407 out-of-band limits.
4. In accordance with KDB 789033 Section II.G.1.c) if the peak measurement is below the average limit, it is not necessary to perform a separate average measurement.
5. For all average measurements in this section, 300 sweeps were used. This satisfies the requirement for the minimum number of sweep points, as stated in KDB 789033 Section II.G.6.c) Method AD (vi).
6. In accordance with KDB 789033 Section II.G.6.c) Method AD (vii), for average measurements, data rates where the EUT was transmitting <98% duty cycle, the duty cycle correction factor calculated in section 4.1 was added to the measured result.

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)

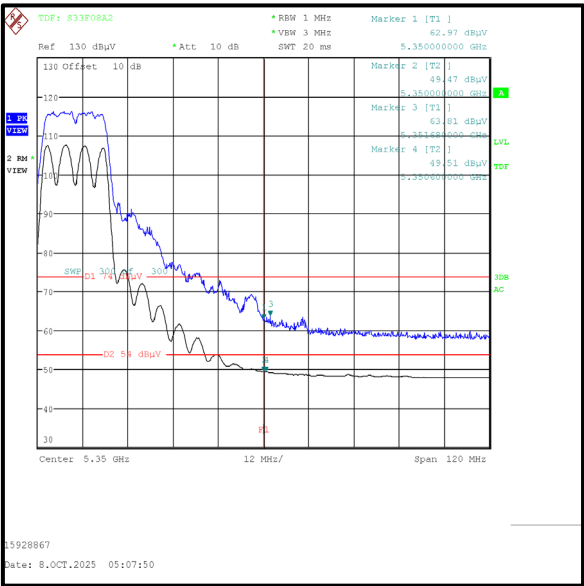
Results: 802.11a / 20 MHz / 6 Mbps / Channel 60

Results: Upper Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5350	Vertical	63.0	74.0	11.0	Complied
5351.680	Vertical	63.8	74.0	10.2	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5350	Vertical	49.5	54.0	4.5	Complied



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)

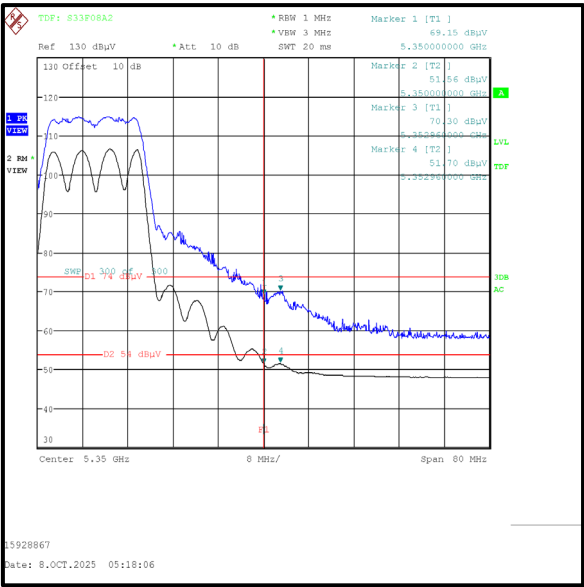
Results: 802.11a / 20 MHz / 6 Mbps / Channel 64

Results: Upper Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5350	Vertical	69.2	74.0	4.8	Complied
5352.960	Vertical	70.3	74.0	3.7	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5350	Vertical	51.6	54.0	2.4	Complied
5352.960	Vertical	51.7	54.0	2.3	Complied



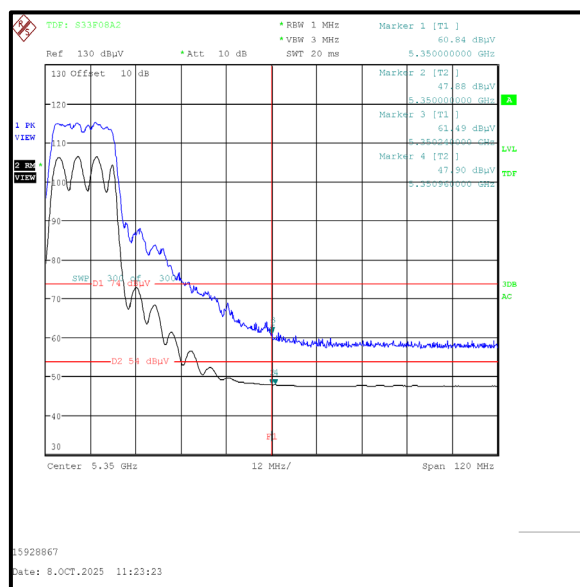
Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)**Results: 802.11n / 20 MHz / SISO / MCS0 / Channel 60****Results: Upper Band Edge / Peak**

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	Vertical	60.8	74.0	13.2	Complied
5350.240	Vertical	61.5	74.0	12.5	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Result
5350	Vertical	47.9	54.0	6.1	Complied

**Upper Band Edge**

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)

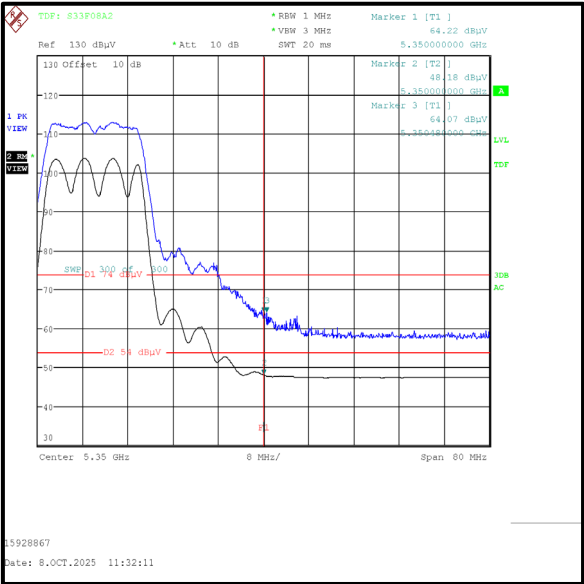
Results: 802.11n / 20 MHz / SISO / MCS0 / Channel 64

Results: Upper Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5350	Vertical	64.2	74.0	9.8	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5350	Vertical	48.2	54.0	5.8	Complied



Upper Band Edge

Transmitter Band Edge Radiated Emissions (5.25-5.35 GHz band operation) (continued)

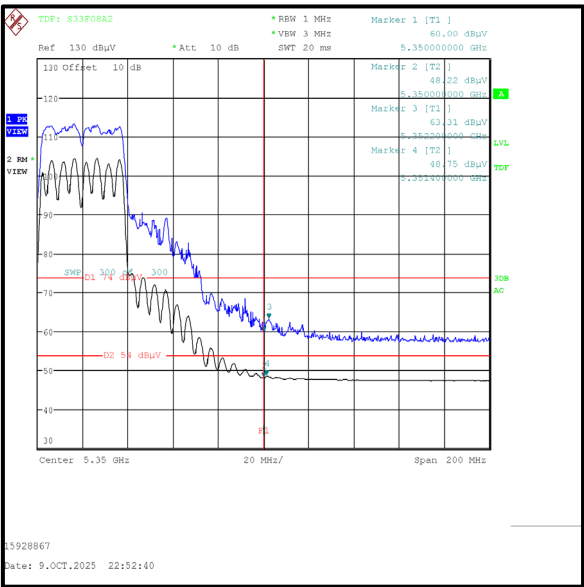
Results: 802.11n / 40 MHz / SISO / MCS0 / Channel 54

Results: Upper Band Edge / Peak

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5350	Vertical	60.0	74.0	14.0	Complied
5352.200	Vertical	63.3	74.0	10.7	Complied

Results: Upper Band Edge / Average

Frequency (MHz)	Antenna Polarity	Level (dBμV/m)	Duty Cycle correction (dB)	Corrected Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
5350	Vertical	48.2	0.3	48.5	54.0	5.5	Complied
5351.400	Vertical	48.8	0.3	49.1	54.0	4.9	Complied



Upper Band Edge