TEST REPORT

Report Number: R15628768-E1

Applicant	:	Garmin International Inc. 1200 East 151st Street Olathe, KS 66062-3426, USA
Model	:	A05201
FCC ID	:	IPH-05201
IC	:	1792A-05201
EUT Description	:	Extremity Worn Digital Transceiver
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART C: 2025 ISED RSS-247 ISSUE 3: 2023 ISED RSS-GEN ISSUE 5 + A1 + A2: 2021

Date Of Issue:
2025-08-15

Prepared by:
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CERT #0751.06

REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2025-08-15	Initial Issue	Charles Moody

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Garmin International Inc.
1200 East 151St Street
Olathe, KS 66062-3426, USA

EUT DESCRIPTION: Extremity Worn Digital Transceiver

MODEL: A05201

SERIAL NUMBER: 603037845, 604021419, 604021429, 604021450, 604021458

SAMPLE RECEIPT DATE: 2025-05-14 TO 2025-07-08

DATE TESTED: 2025-05-28 TO 2025-08-15

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	Refer to Section 2
ISED RSS-247 Issue 3	Refer to Section 2
ISED RSS-GEN Issue 5 + A1 + A2	Refer to Section 2

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document.

Approved & Released For
UL LLC By:

Michael Antola
Senior Staff Engineer
Consumer, Medical and IT Segment
UL LLC

Prepared By:

Charles Moody
Lead Project Engineer
Consumer, Medical and IT Segment
UL LLC

2. TEST RESULTS SUMMARY

This report contains info provided by the customer which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer.
Below is a list of the data/info provided by the customer:

1) Antenna gain and type (see section 6.3)
2) Worst-case data rates (see section 6.5)

FCC Clause	ISED Clause	Requirement	Result	Comment
See Comment		Duty Cycle	Reporting purposes only	ANSI C63.10 Section 11.6.
-	RSS-GEN 6.7	99% OBW	Reporting purposes only	ANSI C63.10 Section 6.9.3.
15.247 (a) (2)	RSS-247 5.2 (a)	6dB BW	Compliant	None
15.247 (b) (3)	RSS-247 5.4 (d)	Output Power		
See Comment		Average power	Reporting purposes only	Per ANSI C63.10, Section 11.9.2.3.2.
15.247 (e)	RSS-247 5.2 (b)	PSD	Compliant	None
15.247 (d)	RSS-247 5.5	Conducted Spurious Emissions		
15.209, 15.205	RSS-GEN 8.9, 8.10	Radiated Emissions		
15.207	RSS-Gen 8.8	AC Mains Conducted Emissions		

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC 47 CFR Part 2, FCC 47 CFR Part 15, ANSI C63.10-2020, KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, RSS-GEN Issue 5 + A1 + A2, and RSS-247 Issue 3.

4. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification # 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☐	Building: 12 Laboratory Dr Durham, NC 27713, USA	US0067	2180C	825374
☒	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A		27265	

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

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

5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Radio Frequency (Spectrum Analyzer)	141.2 Hz
Occupied Channel Bandwidth	1.22%
RF output power, conducted	1.3 dB (PK) 0.45 dB (AV)
Power Spectral Density, conducted	2.47 dB
Unwanted Emissions, conducted	1.94 dB
All emissions, radiated	6.01 dB
Conducted Emissions (0.150-30MHz) - LISN	3.40 dB
Temperature	0.57°C
Humidity	3.39%
DC Supply voltages	1.70%
Time	3.39%

Uncertainty figures are valid to a confidence level of 95%.

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:
Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:
Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.
36.5 dBuV + 0 dB +10.1 dB+ 0 dB = 46.6 dBuV

6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The EUT is an extremity worn digital transceiver with BT, BLE, ANT/ANT+, 802.11b/g/n 2.4GHz WLAN, NFC, and Global Navigation Satellite System (GNSS) receiver. This report covers full testing on the ANT/ANT+, BLE, and 2.4GHz WLAN radios.

6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2412 - 2472	802.11b	19.16	82.41
2412 - 2472	802.11g	21.94	156.31
2412 - 2472	802.11n HT20	22.20	165.96
2402 - 2480	ANT/ANT+	4.59	2.88
2402 - 2480	BLE 1Mbps	4.56	2.86
2402 - 2480	BLE 2Mbps	4.56	2.86

6.3. DESCRIPTION OF AVAILABLE ANTENNAS

The antenna(s) gain and type, as provided by the manufacturer' are as follows:
The radio utilizes an antenna with the following type and maximum gain:

Type	Frequency Range (MHz)	Maximum Gain (dBi)
Slot	2402-2480	-3.35

6.4. SOFTWARE AND FIRMWARE

EUT FW Version: 16.29

6.5. WORST-CASE CONFIGURATION AND MODE

Radiated emissions below 1GHz, above 18GHz, and power line conducted emissions were performed with the EUT set to transmit at the channel with highest PSD as worst-case scenario.

For 2.4 WLAN all radiated spurious emissions between 1GHz and 18 GHz were tested at mid channel power. Band edge scans were performed on all inner/outer channels up to mid channel power. For 11b and 11g conducted testing, all testing was performed on the lowest, middle, and highest channel with the EUT set to transmit at mid channel power. Power for all modes was taken at the corresponding tuned setting.

For BLE and ANT/ANT+ power is not distributed equally among all channels and therefore radiated spurious emissions between 1GHz and 18GHz were performed on mid channel and the highest power low and high channels. Band edge scans and all conducted emissions testing were performed on all inner/outer channels up to mid channel power. Power for all modes was taken at the corresponding tuned setting.

The fundamental of the EUT was investigated in three orthogonal orientations X,Y,Z, it was determined that Z orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in Z orientation.

As declared by the manufacturer, the EUT does not support channels 2402 MHz and 2480 MHz for BLE 2 Mbps.

For conducted data, one plot per radio data rate / modulation was included as a representative plot of all collected data for that mode. Full tabular data was included.

6.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Power Supply	Phihong	AQ27A-59CFA	n/a	n/a
Laptop	Lenovo	T14 Gen3	PF4FKVY8	n/a

I/O CABLES

I/O Cable List						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	Proprietary	1	USB-C	Shielded	<3m	Program/Charge EUT

TEST SETUP

EUT was configured using its own built-in push buttons prior to testing and using the support laptop to manipulate power settings. For final emissions testing, the EUT was connected to AC mains.

SETUP DIAGRAMS

Please refer to R15628768-EP1 for setup diagrams

7. MEASUREMENT METHOD

On Time and Duty Cycle: ANSI C63.10-2020 Section 11.6

6 dB BW: ANSI C63.10-2020 Subclause -11.8.2

Occupied BW (99%): ANSI C63.10-2020 Section 6.9.3

Output Power: ANSI C63.10-2020 Subclause -11.9.1.2 Method PKPM1 Peak-reading power meter
ANSI C63.10-2020 Subclause -11.9.2.3.2 Method AVGPM-G (Measurement using a gated RF average-reading power meter)

PSD: ANSI C63.10-2020 Subclause -11.10.2 Method PKPSD (peak PSD)

Conducted emissions non-restricted frequency bands: ANSI C63.10-2020 Subclause -11.11 and 6.10.4

Radiated emissions restricted frequency bands: ANSI C63.10-2020 Subclause -11.12.1 and 6.10.5

General radiated emissions: ANSI C63.10 Subclause - 6.3-6.6

AC Power-line conducted emissions: ANSI C63.10-2020, Section 6.2.

8. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
Conducted Room 1					
90416	Spectrum Analyzer	Keysight Technologies	N9030A	2024-09-23	2025-09-23
179892	Environmental Meter	Fisher Scientific	15-077-963	2024-08-12	2025-08-12
Pad II	SMA Coaxial 10dB Attenuator 25MHz-18GHz	CentricRF	C18S2-10	2025-05-25	2026-05-25
**Pad IV	SMA Coaxial 10dB Attenuator 25MHz-18GHz	CentricRF	C18S2-10	2024-06-06	2025-06-06
SOFTEMI	Antenna Port Software	UL	Version 2022.8.16	NA	NA
211057	Real-Time Peak Power Sensor 50MHz to 8GHz	Boonton	RTP5000	2024-08-01	2025-08-01
Power Software	Boonton Power Analyzer	Boonton	Version 3.0.13.0	NA	NA

**NOTE: Testing with this equipment was performed while still in calibration.

Test Equipment Used - Line-Conducted Emissions – Voltage (Morrisville – Conducted 1)

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
CBL087	Coax cable, RG223, N-male to BNC-male, 20-ft.	Pasternack	PE3W06143-240	2025-04-17	2026-04-17
179892	Environmental Meter	Fisher Scientific	15-077-963	2024-08-12	2025-08-12
**80391	LISN, 50-ohm/50-uH, 250uH 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50/250-25-2-01	2024-08-01	2025-08-01
**75141	EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESCI 7	2024-08-01	2025-08-01
52859	Transient Limiter, 0.009-100MHz	Electro-Metrics	EM-7600	2025-04-17	2026-04-17
236852	AC Power Source	California instruments	NA	NA	NA
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		

**NOTE: Testing with this equipment was performed while still in calibration.

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 2)

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	1-18 GHz				
**86408	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2023-06-19	2025-06-19
88761	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2023-10-05	2025-10-05
	Gain-Loss Chains				
91977	Gain-loss string: 1-18GHz	Various	Various	2025-05-31	2026-05-31
	Receiver & Software				
197955	Spectrum Analyzer	Rohde & Schwarz	ESW44	2025-05-12	2026-05-12
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
**200540	Environmental Meter	Fisher Scientific	15-077-963	2023-07-19	2025-07-19

**NOTE: At the time of testing, all equipment was in calibration.

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 4)

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	0.009-30MHz				
135144	Active Loop Antenna	ETS-Lindgren	6502	2024-10-02	2025-10-02
	30-1000 MHz				
90628	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2024-01-02	2026-01-02
	1-18 GHz				
206211	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2024-04-09	2026-04-09
	18-40 GHz				
91186	Horn Antenna, 18-26.5GHz	ARA	MWH-1826/B	2024-05-16	2026-05-16
	Gain-Loss Chains				
*207638	Gain-loss string: 0.009-30MHz	Various	Various	2024-05-22	2025-06-06
207638	Gain-loss string: 0.009-30MHz	Various	Various	2025-06-13	2026-06-13
*207639	Gain-loss string: 25-1000MHz	Various	Various	2024-05-22	2025-06-06
207639	Gain-loss string: 25-1000MHz	Various	Various	2025-06-13	2026-06-13
*207640	Gain-loss string: 1-18GHz	Various	Various	2024-05-22	2025-06-06
207640	Gain-loss string: 1-18GHz	Various	Various	2025-06-13	2026-06-13
225795	Gain-loss string: 18-40GHz	Various	Various	2025-06-13	2026-06-13
	Receiver & Software				
197954	Spectrum Analyzer	Rohde & Schwarz	ESW44	2025-04-21	2026-04-21
**81018	Spectrum Analyzer	Agilent	E4446A	2024-07-31	2025-07-31
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
241204	Environmental Meter	Fisher Scientific	15-077-963	2023-09-05	2025-09-05

*NOTE: A continuous chain of unbroken calibrations was performed on this equipment during the duration of testing.

**NOTE: At the time of testing, all equipment was in calibration.

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

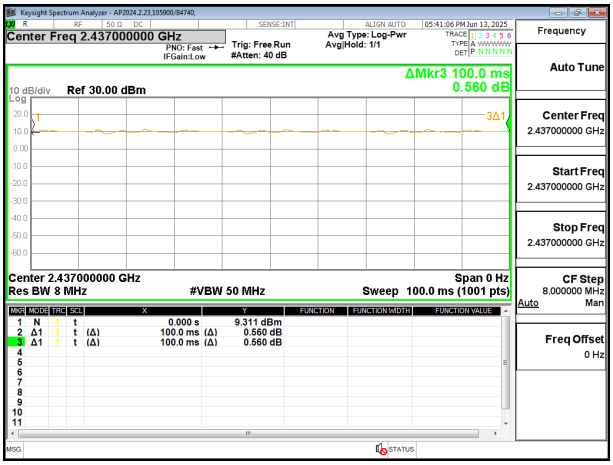
KDB 558074 Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

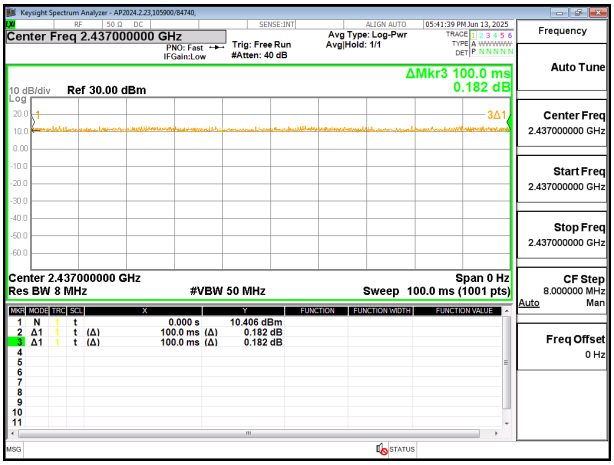
Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
2.4GHz Band						
802.11b	100.000	100.00	1.000	100.00	0.00	0.010
802.11g	100.000	100.00	1.000	100.00	0.00	0.010
802.11n HT20	100.000	100.00	1.000	100.00	0.00	0.010
ANT/ANT+	100.000	100.00	1.000	100.00	0.00	0.010
BLE 1Mbps	100.000	100.00	1.000	100.00	0.00	0.010
BLE 2Mbps	100.000	100.00	1.000	100.00	0.00	0.010

Tester ID: 105900/84740, 104463/85501
Date: 2025-06-13, 2025-08-05

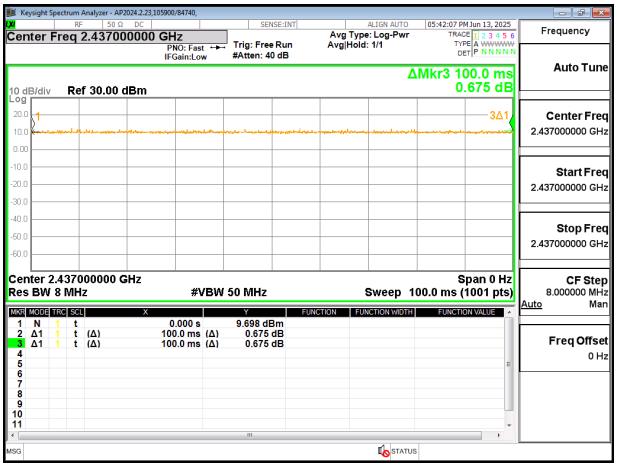
DUTY CYCLE PLOTS



DUTY CYCLE 802.11b MODE

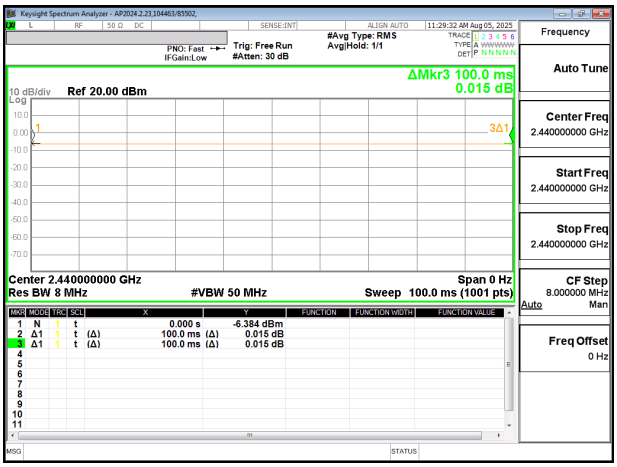


DUTY CYCLE 802.11g MODE

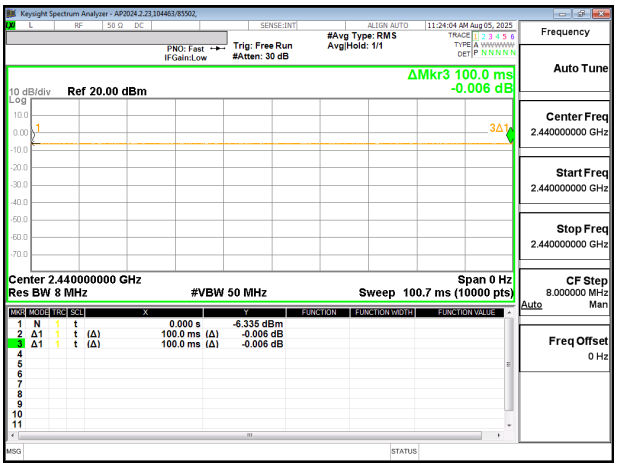


DUTY CYCLE 802.11n HT20 MODE

DUTY CYCLE ANT/ANT+ MODE



DUTY CYCLE BLE 1Mbps



DUTY CYCLE BLE 2Mbps

9.2. 99% BANDWIDTH

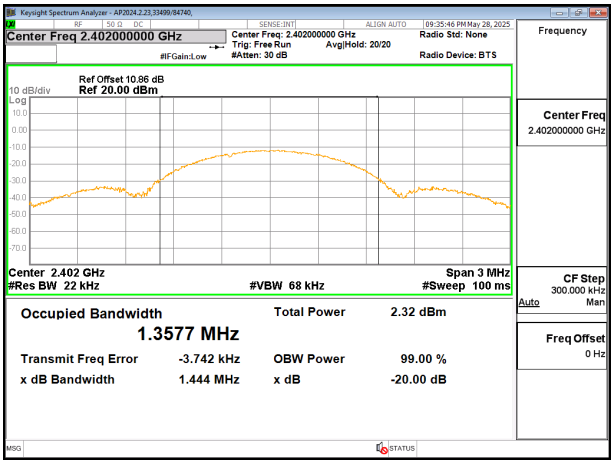
LIMITS

None; for reporting purposes only.

RESULTS

9.2.1. BLE (1Mbps)

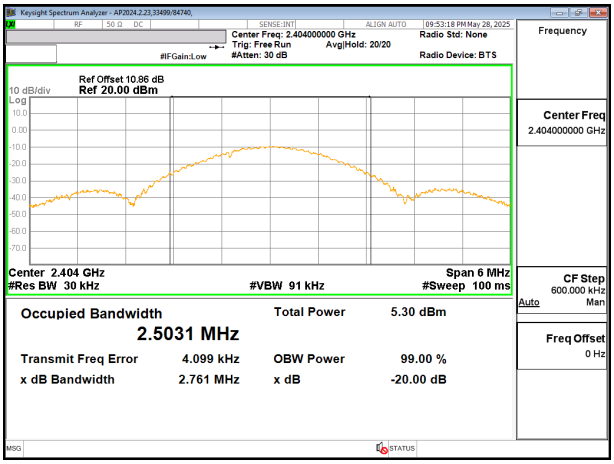
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	1.3577
Low	2404	1.2795
Middle	2440	1.3591
High	2476	1.4683
High	2480	1.3484



LOW CHANNEL

9.2.2. BLE (2Mbps)

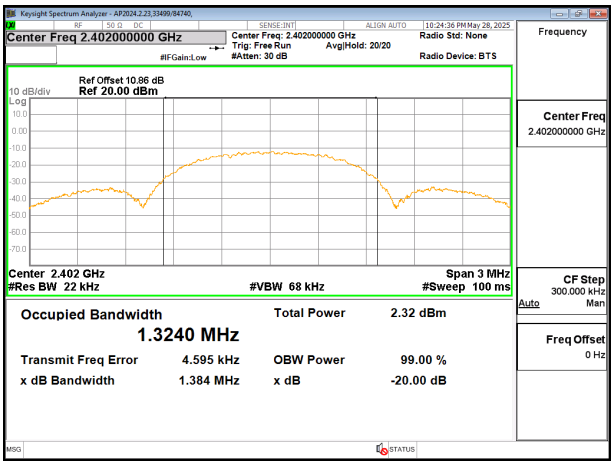
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2404	2.5031
Middle	2440	2.5958
High	2476	2.6072
High	2478	2.5718



LOW CHANNEL

9.2.3. ANT/ANT+

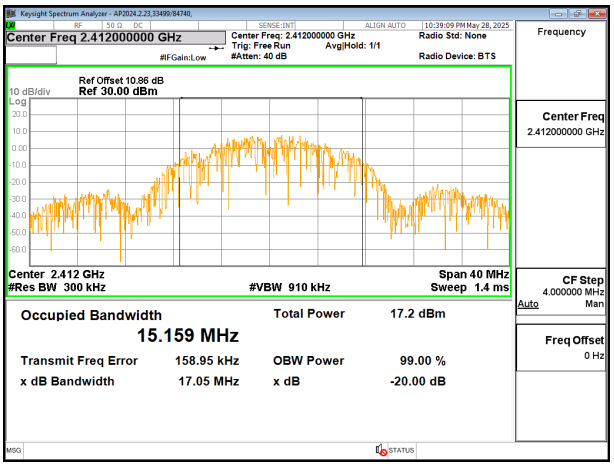
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	1.3240
Low	2404	1.3095
Middle	2440	1.2770
High	2478	1.3041
High	2480	1.3924



LOW CHANNEL

9.2.4. 2.4 WLAN (11b)

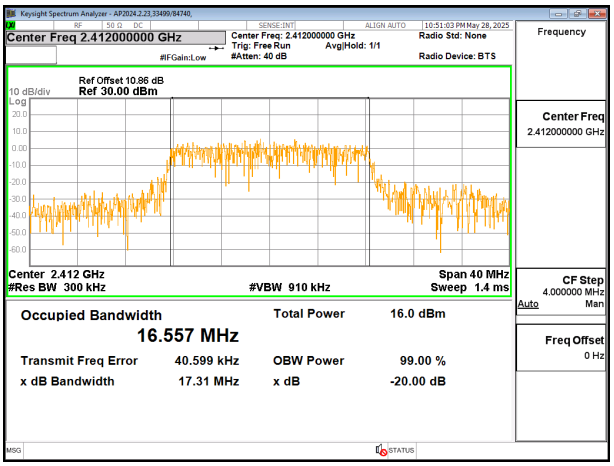
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	15.1590
Middle	2437	15.2400
High	2472	15.3690



LOW CHANNEL

9.2.5. 2.4 WLAN (11g)

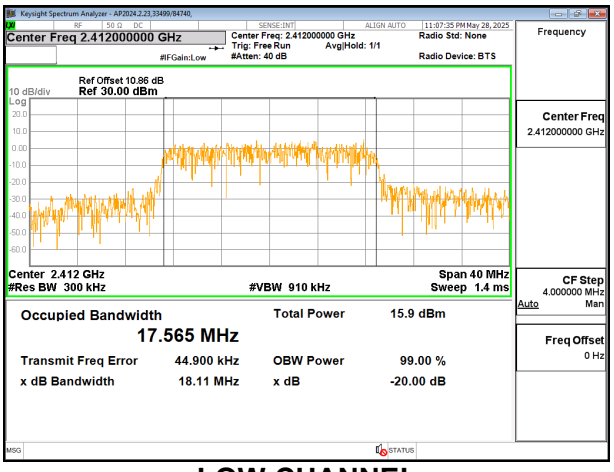
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	16.5570
Middle	2437	16.3490
High	2472	16.7420



LOW CHANNEL

9.2.6. 2.4 WLAN (11n HT20)

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	17.5650
Middle	2437	17.5350
High	2457	17.4970
High	2462	17.3950
High	2472	17.5770



LOW CHANNEL

9.3. 6 dB BANDWIDTH

LIMITS

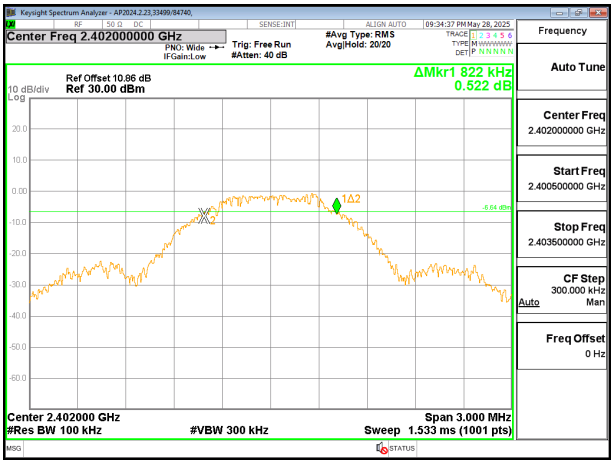
FCC §15.247 (a) (2)
RSS-247 5.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

9.3.1. BLE (1Mbps)

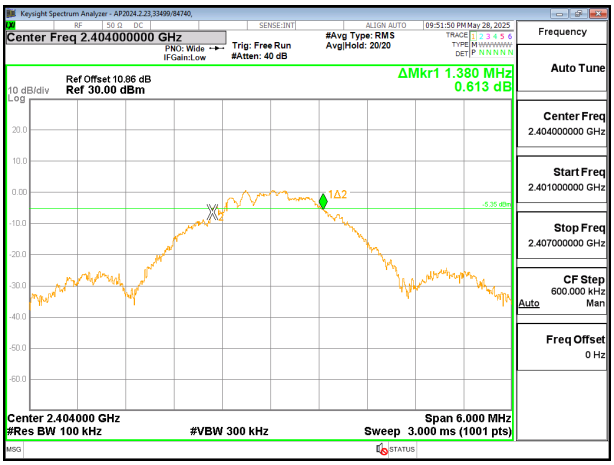
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2402	0.822	0.5
Low	2404	0.693	0.5
Middle	2440	0.801	0.5
High	2476	0.897	0.5
High	2480	0.885	0.5



LOW CHANNEL

9.3.2. BLE (2Mbps)

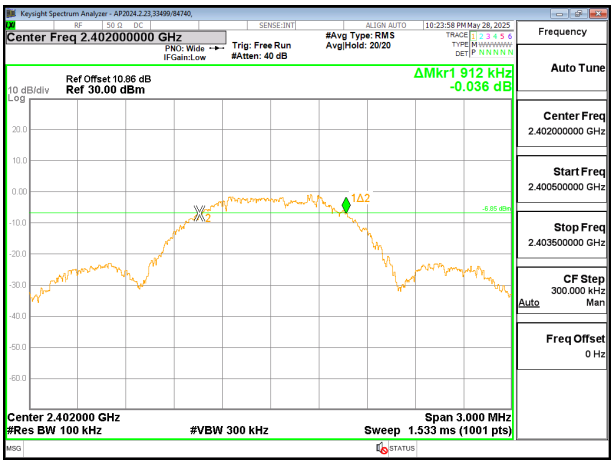
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2404	1.380	0.5
Middle	2440	1.620	0.5
High	2476	1.584	0.5
High	2478	1.452	0.5



LOW CHANNEL

9.3.3. ANT/ANT+

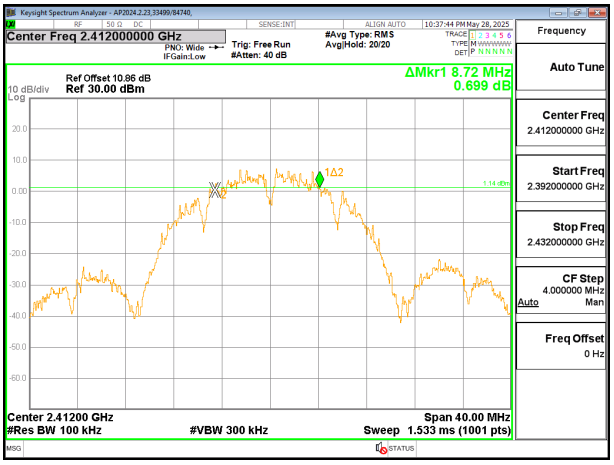
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2402	0.912	0.5
Low	2404	0.900	0.5
Middle	2440	0.804	0.5
High	2478	0.813	0.5
High	2480	0.909	0.5



LOW CHANNEL

9.3.4. 2.4 WLAN (11b)

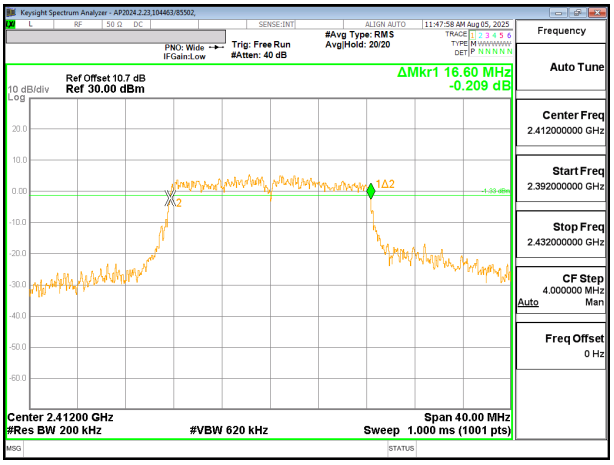
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	8.72	0.5
Middle	2437	8.24	0.5
High	2472	9.16	0.5



LOW CHANNEL

9.3.5. 2.4 WLAN (11g)

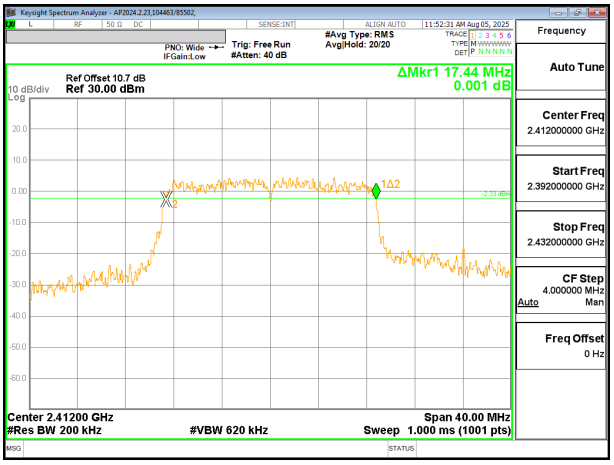
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	16.60	0.5
Middle	2437	16.56	0.5
High	2472	16.52	0.5



LOW CHANNEL

9.3.6. 2.4 WLAN (11n HT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	17.44	0.5
Middle	2437	17.12	0.5
High	2457	17.68	0.5
High	2462	17.68	0.5
High	2472	17.16	0.5



LOW CHANNEL

9.4. OUTPUT POWER

LIMITS

FCC §15.247 (b) (3)
RSS-247 5.4 (d)

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

TEST PROCEDURE
The transmitter output is connected to a power meter.

The cable assembly insertion loss of 12.37 dB (0.7dB EUT cable, 1.67 dB test cable and 10.00 dB attenuation pad) was entered as an offset in the power meter.

The power output was measured on the EUT antenna port using SMA cable connected to a power meter via wideband power sensor. Peak output power was read directly from power meter.

RESULTS

9.4.1. BLE (1Mbps)

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2402	1.619	30	-28.381
Low	2404	4.317	30	-25.683
Middle	2440	4.556	30	-25.444
High	2476	4.069	30	-25.931
High	2480	0.841	30	-29.159

9.4.2. BLE (2Mbps)

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2404	4.343	30	-25.657
Middle	2440	4.561	30	-25.439
High	2476	3.900	30	-26.100
High	2478	0.539	30	-29.461

9.4.3. ANT/ANT+

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2402	1.650	30	-28.350
Low	2404	4.408	30	-25.592
Middle	2440	4.594	30	-25.406
High	2478	3.967	30	-26.033
High	2480	0.896	30	-29.104

9.4.4. 2.4 WLAN (11b)

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30, 2025-08-07

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2412	18.388	30	-11.612
Middle	2437	18.320	30	-11.680
High	2457	19.066	30	-10.934
High	2462	19.157	30	-10.843
High	2467	15.276	30	-14.724
High	2472	13.665	30	-16.335

9.4.5. 2.4 WLAN (11g)

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30, 2025-08-07

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2412	21.935	30	-8.065
Middle	2437	21.847	30	-8.153
High	2452	21.623	30	-8.377
High	2457	21.293	30	-8.707
High	2462	20.318	30	-9.682
High	2472	18.618	30	-11.382

9.4.6. 2.4 WLAN (11n HT20)

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30, 2025-08-07

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2412	22.196	30	-7.804
Middle	2437	21.566	30	-8.434
High	2457	21.315	30	-8.685
High	2462	19.828	30	-10.172
High	2472	19.294	30	-10.706

9.5. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 12.37 dB (0.7dB EUT cable, 1.67 dB test cable and 10.00 dB attenuation pad) was entered as an offset in the power meter.

The power output was measured on the EUT antenna port using SMA cable connected to a power meter via wideband power sensor. Peak output power was read directly from power meter.

RESULTS

9.5.1. BLE (1Mbps)

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30

Channel	Frequency (MHz)	AV power (dBm)
Low	2402	1.231
Low	2404	4.107
Middle	2440	4.207
High	2476	3.862
High	2480	0.430

9.5.2. BLE (2Mbps)

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30

Channel	Frequency (MHz)	AV power (dBm)
Low	2404	4.102
Middle	2440	4.206
High	2476	3.675
High	2478	0.310

9.5.3. ANT/ANT+

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30

Channel	Frequency (MHz)	AV power (dBm)
Low	2402	1.257
Low	2404	4.114
Middle	2440	4.234
High	2478	3.677
High	2480	0.461

9.5.4. 2.4 WLAN (11b)

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30, 2025-08-07

Channel	Frequency (MHz)	AV power (dBm)
Low	2412	16.067
Middle	2437	16.049
High	2457	16.907
High	2462	16.935
High	2467	12.953
High	2472	11.224

9.5.5. 2.4 WLAN (11g)

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30, 2025-08-07

Channel	Frequency (MHz)	AV power (dBm)
Low	2412	16.731
Middle	2437	16.851
High	2452	16.793
High	2457	15.968
High	2462	13.939
High	2472	12.050

9.5.6. 2.4 WLAN (11n HT20)

Tested By:	104463/85501, 105900/84740
Date:	2025-06-30, 2025-08-07

Channel	Frequency (MHz)	AV power (dBm)
Low	2412	16.031
Middle	2437	15.921
High	2457	15.636
High	2462	12.762
High	2472	12.071

9.6. POWER SPECTRAL DENSITY

LIMITS

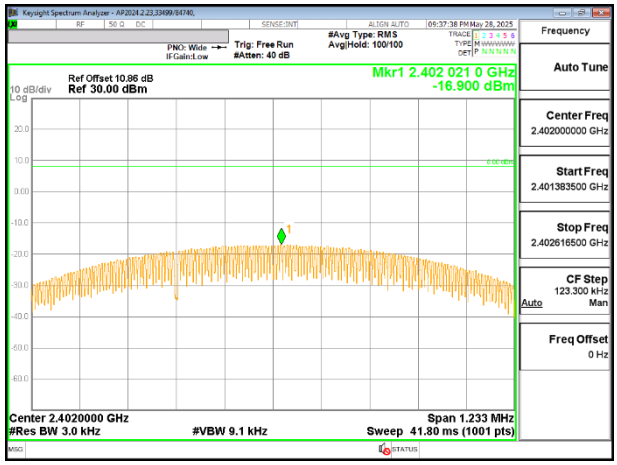
FCC §15.247 (e)
RSS-247 (5.2) (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

RESULTS

9.6.1. BLE (1Mbps)

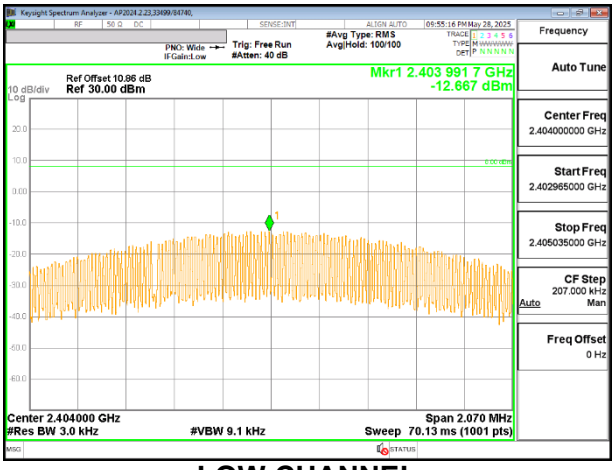
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2402	-16.900	8	-24.90
Low	2404	-12.634	8	-20.63
Middle	2440	-13.829	8	-21.83
High	2476	-14.273	8	-22.27
High	2480	-17.413	8	-25.41



LOW CHANNEL

9.6.2. BLE (2Mbps)

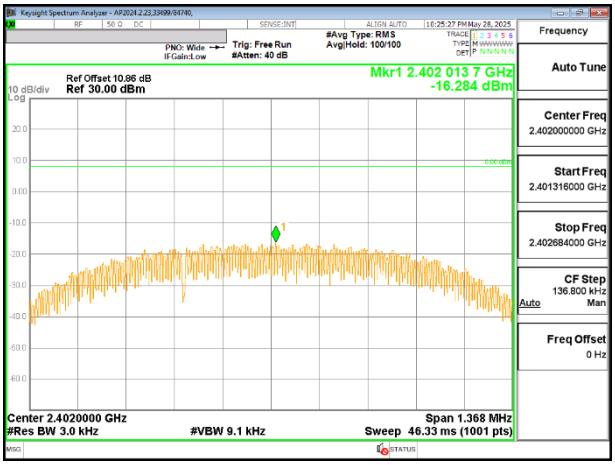
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2404	-12.667	8	-20.67
Middle	2440	-14.024	8	-22.02
High	2476	-14.316	8	-22.32
High	2478	-18.173	8	-26.17



LOW CHANNEL

9.6.3. ANT/ANT+

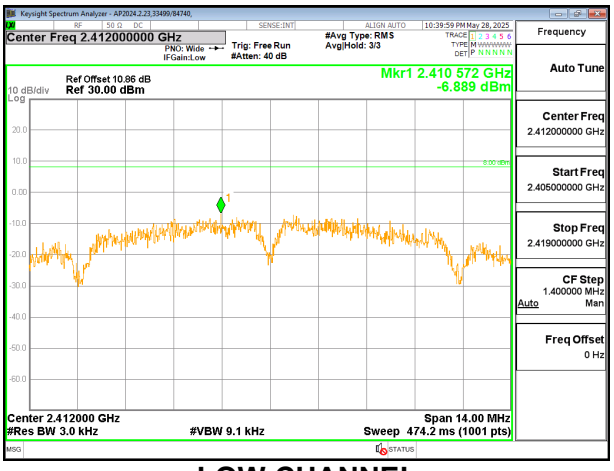
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2402	-16.284	8	-24.28
Low	2404	-11.615	8	-19.62
Middle	2440	-12.434	8	-20.43
High	2478	-12.672	8	-20.67
High	2480	-16.847	8	-24.85



LOW CHANNEL

9.6.4. 2.4 WLAN (11b)

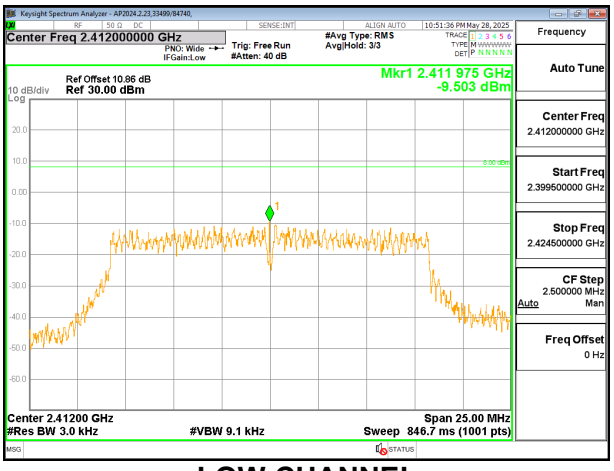
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2412	-6.889	8	-14.89
Middle	2437	-4.193	8	-12.19
High	2472	-3.042	8	-11.04



LOW CHANNEL

9.6.5. 2.4 WLAN (11g)

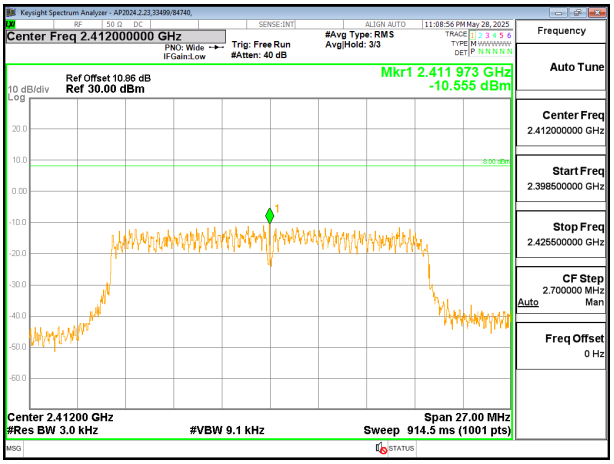
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2412	-9.503	8	-17.50
Middle	2437	-10.027	8	-18.03
High	2472	-8.767	8	-16.77



LOW CHANNEL

9.6.6. 2.4 WLAN (11n HT20)

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2412	-10.555	8	-18.56
Middle	2437	-8.969	8	-16.97
High	2457	-8.509	8	-16.51
High	2462	-12.482	8	-20.48
High	2472	-12.411	8	-20.41



LOW CHANNEL

9.7. CONDUCTED SPURIOUS EMISSIONS

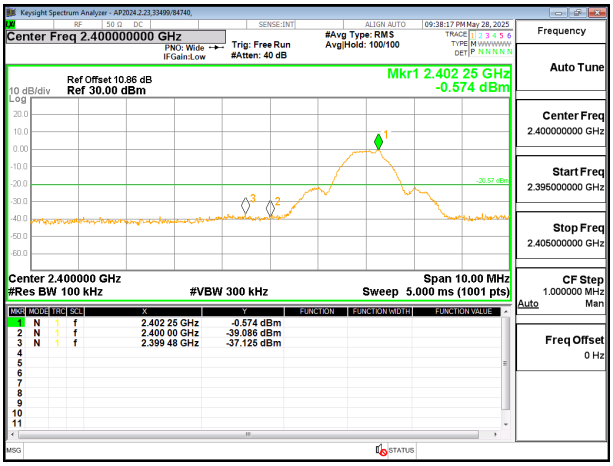
LIMITS

FCC §15.247 (d)
RSS-247 5.5

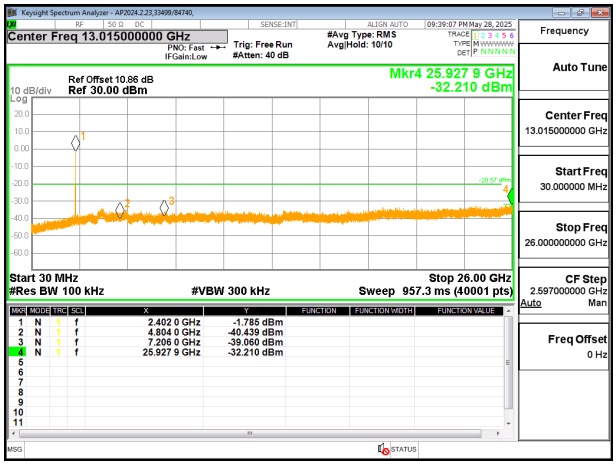
Output power was measured based on the use of a peak measurement; therefore the required attenuation is -20 dBc.

RESULTS

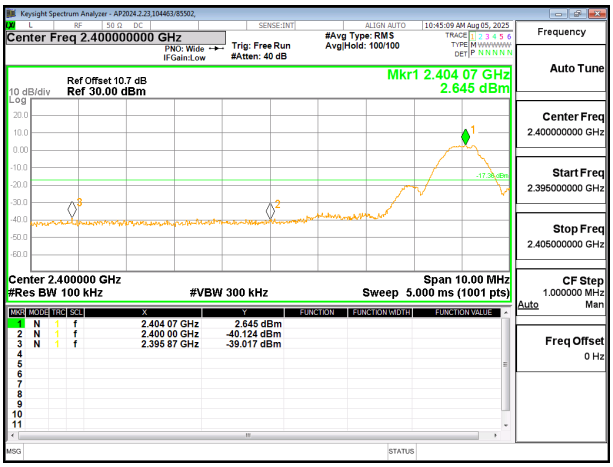
9.7.1. BLE (1Mbps)



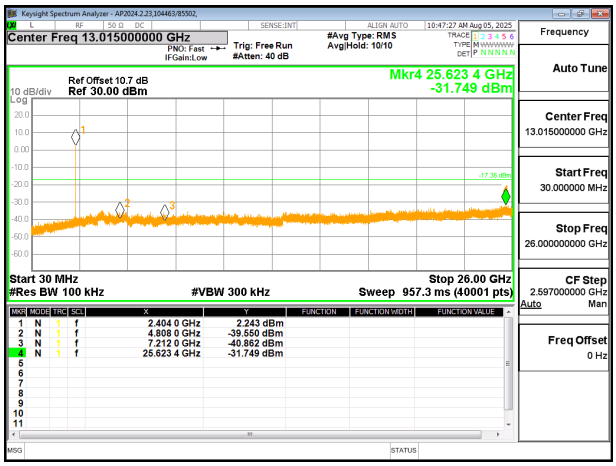
LOW CHANNEL (2402) BANDEDGE



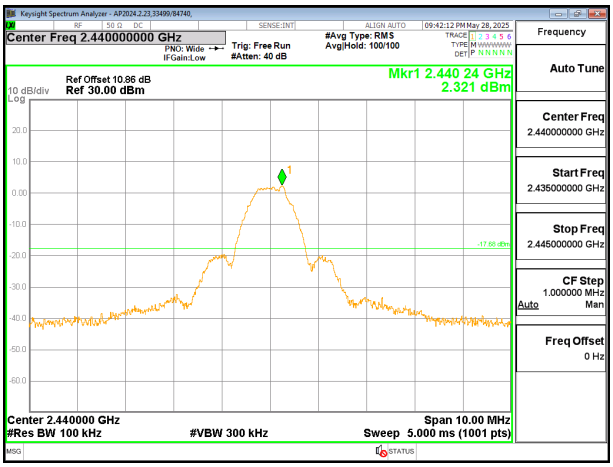
OUT-OF-BAND LOW CHANNEL (2402)



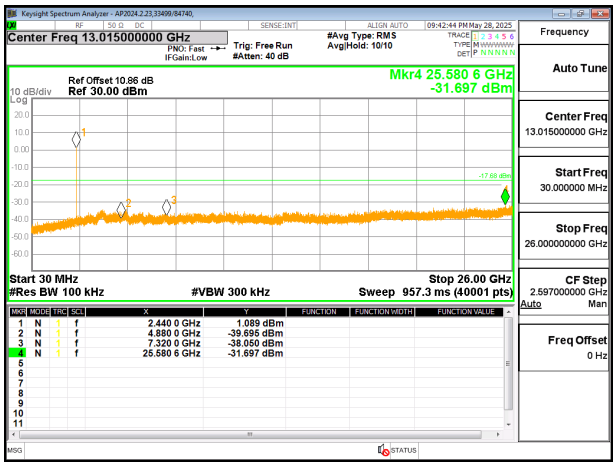
LOW CHANNEL (2404) BANDEDGE



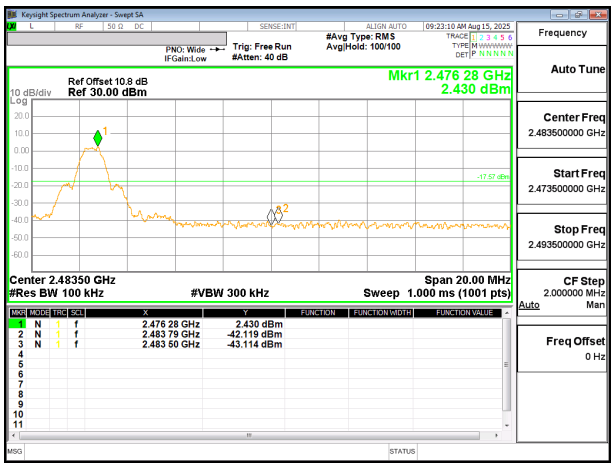
OUT-OF-BAND LOW CHANNEL (2404)



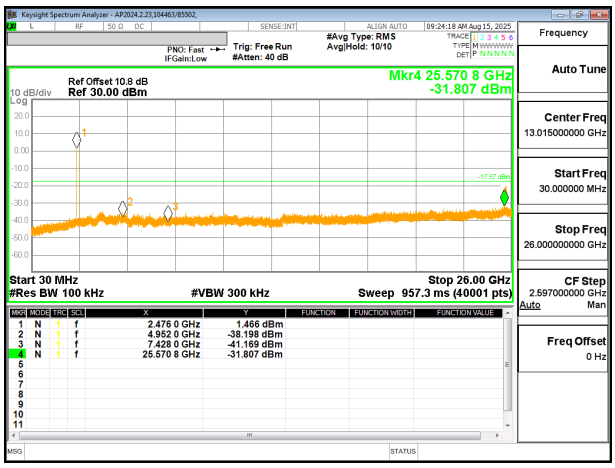
IN-BAND REFERENCE LEVEL



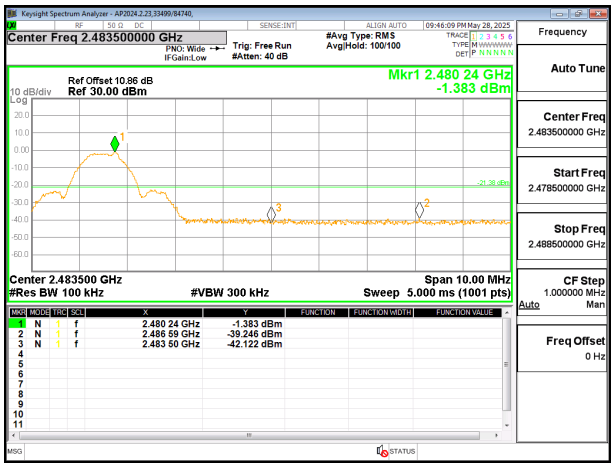
OUT-OF-BAND MID CHANNEL



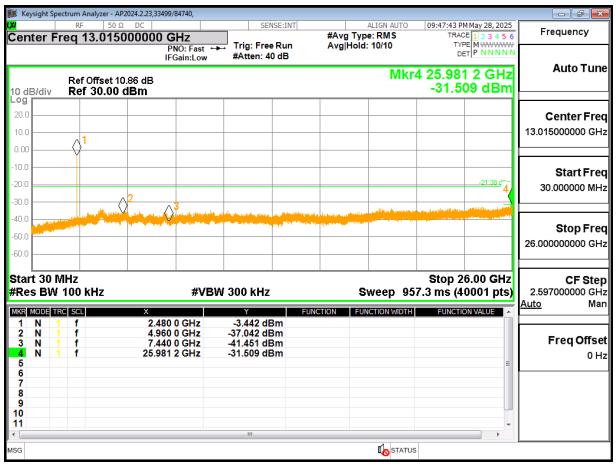
HIGH CHANNEL (2476) BANDEDGE



OUT-OF-BAND HIGH CHANNEL (2476)

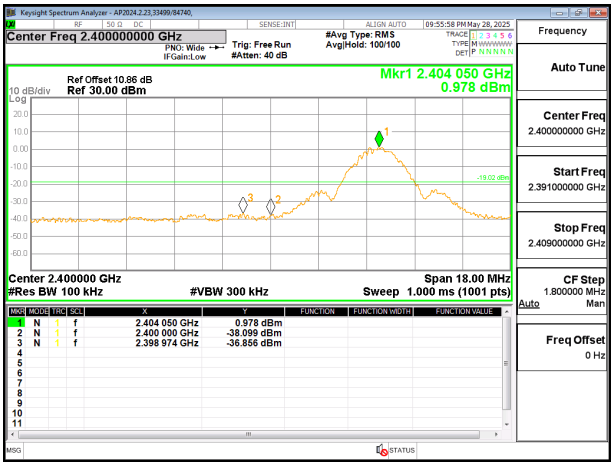


HIGH CHANNEL (2480) BANDEDGE

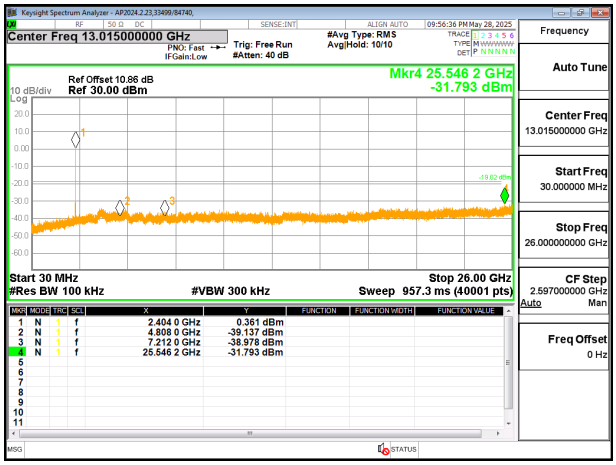


OUT-OF-BAND HIGH CHANNEL (2480)

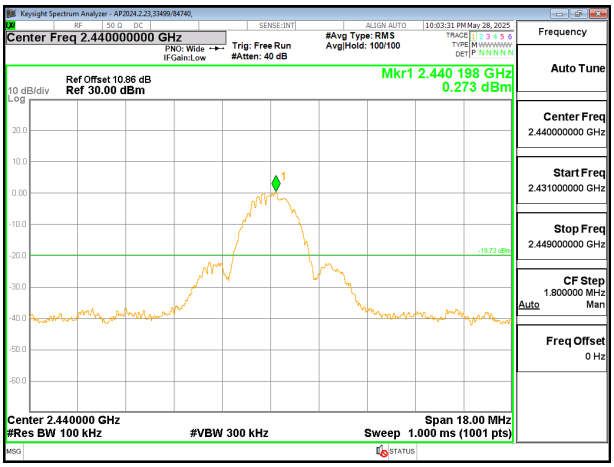
9.7.2. BLE (2Mbps)



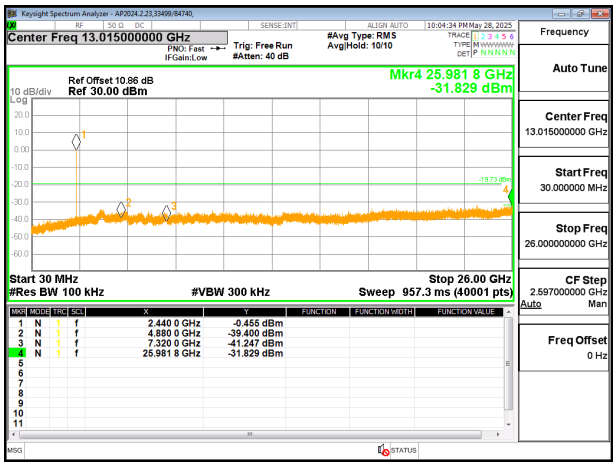
LOW CHANNEL (2404) BANDEDGE



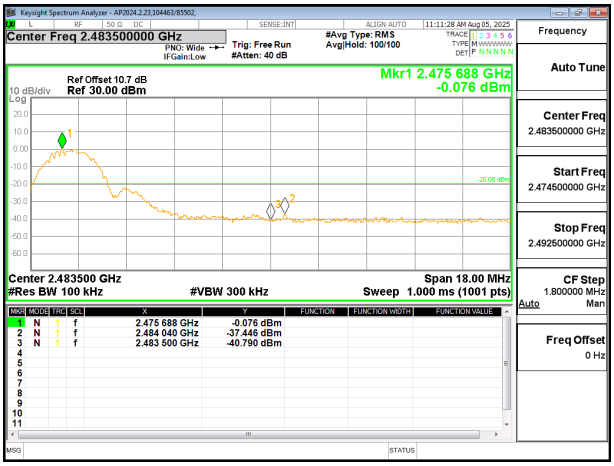
OUT-OF-BAND LOW CHANNEL (2404)



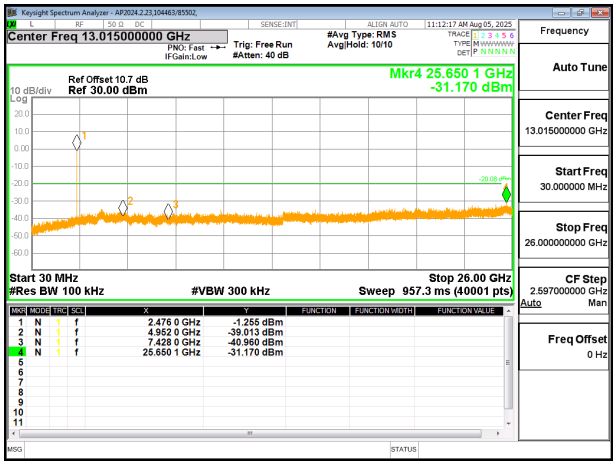
IN-BAND REFERENCE LEVEL



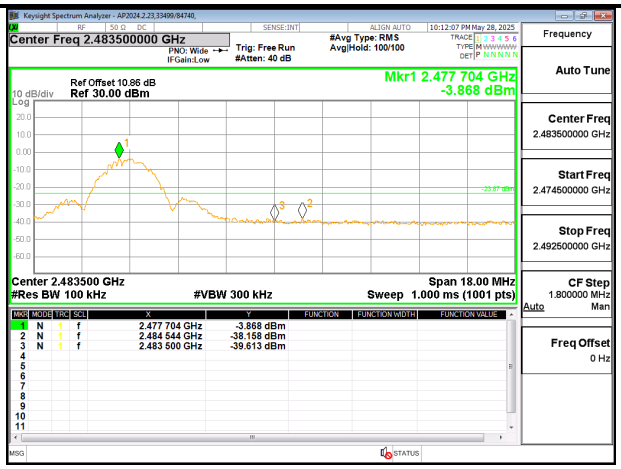
OUT-OF-BAND MID CHANNEL



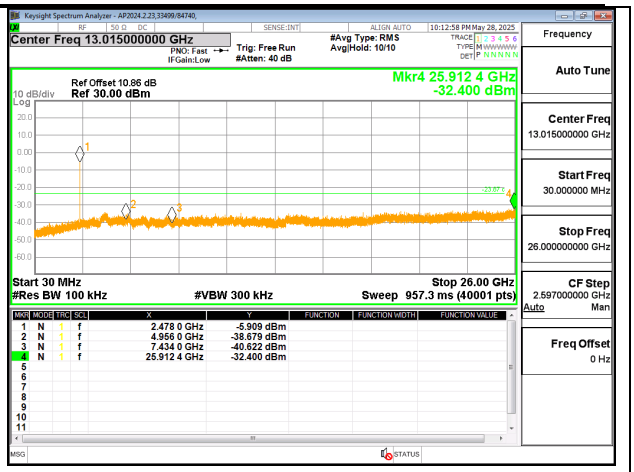
HIGH CHANNEL (2476) BANDEDGE



OUT-OF-BAND HIGH CHANNEL (2476)

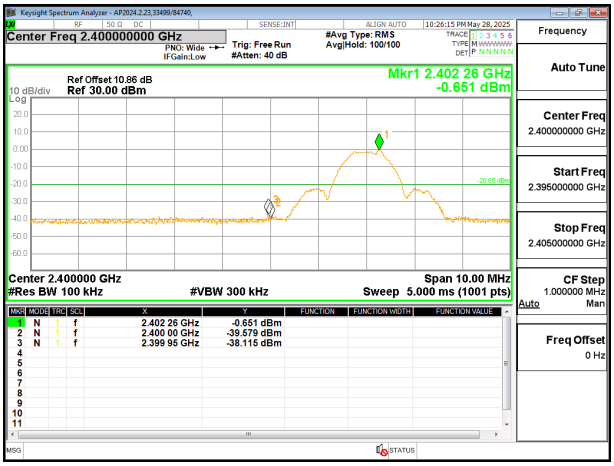


HIGH CHANNEL (2478) BANDEDGE

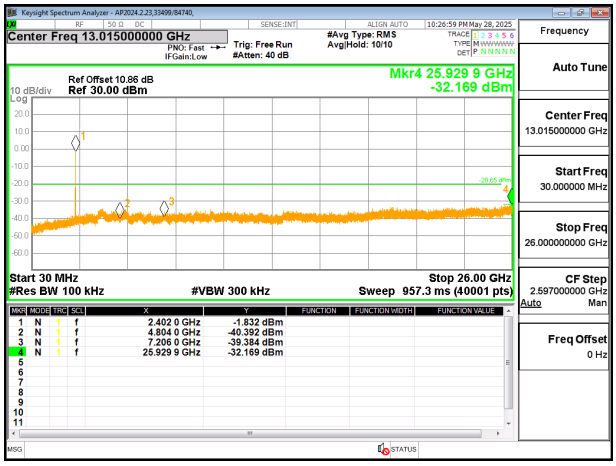


OUT-OF-BAND HIGH CHANNEL (2478)

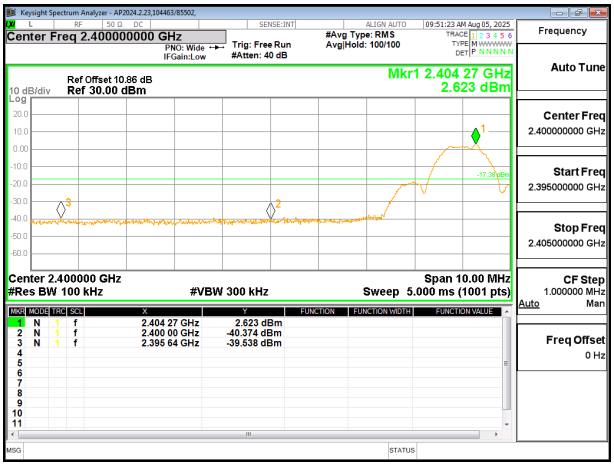
9.7.3. ANT/ANT+



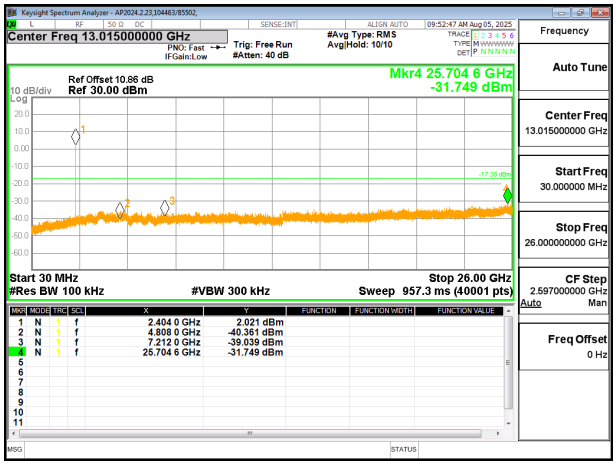
LOW CHANNEL (2402) BANDEDGE



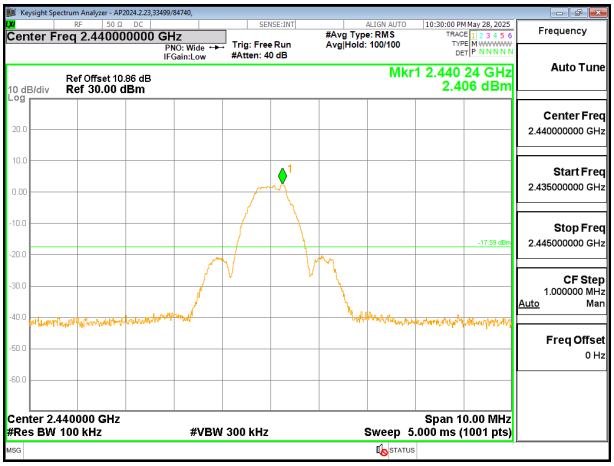
OUT-OF-BAND LOW CHANNEL (2402)



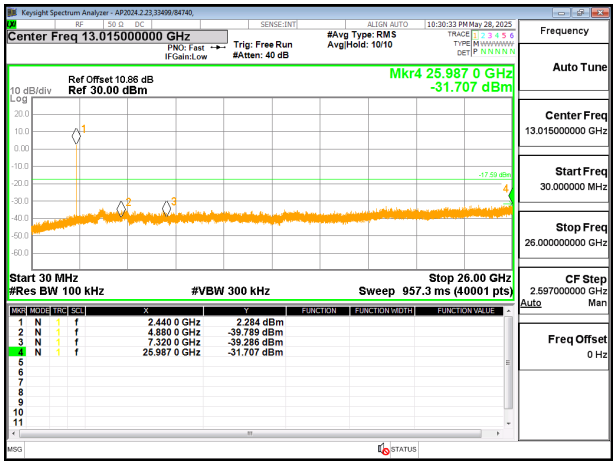
LOW CHANNEL (2404) BANDEDGE



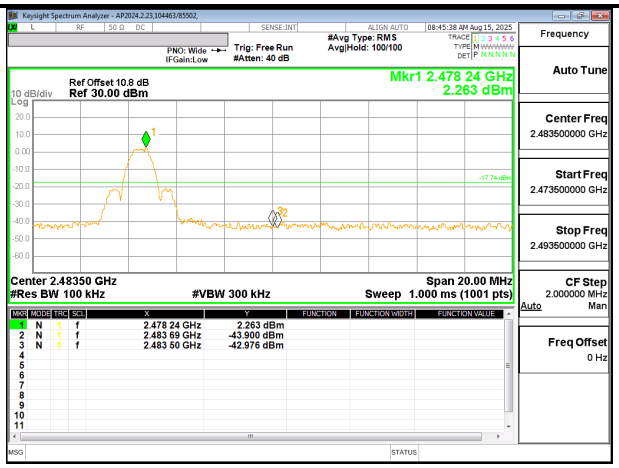
OUT-OF-BAND LOW CHANNEL (2404)



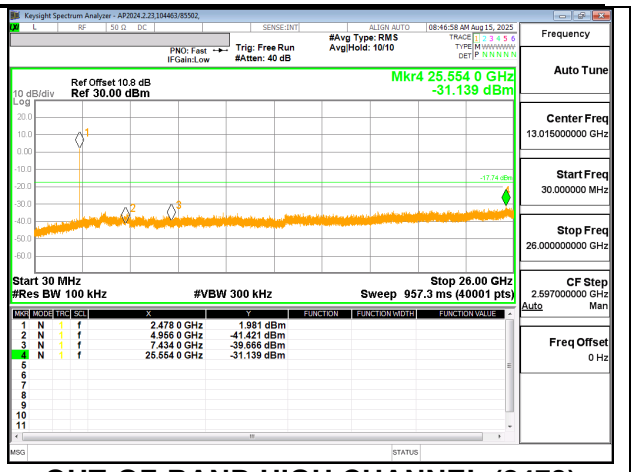
IN-BAND REFERENCE LEVEL



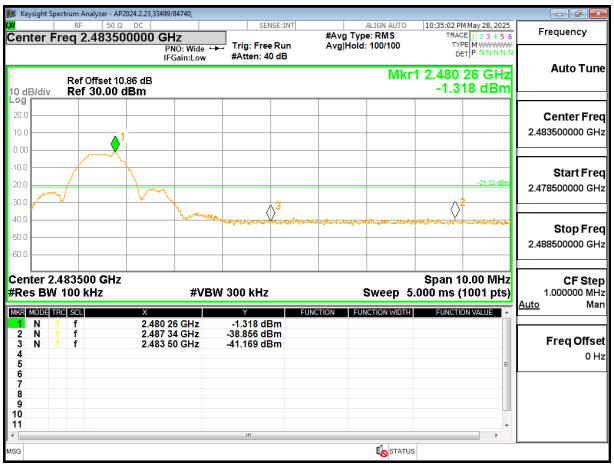
OUT-OF-BAND MID CHANNEL



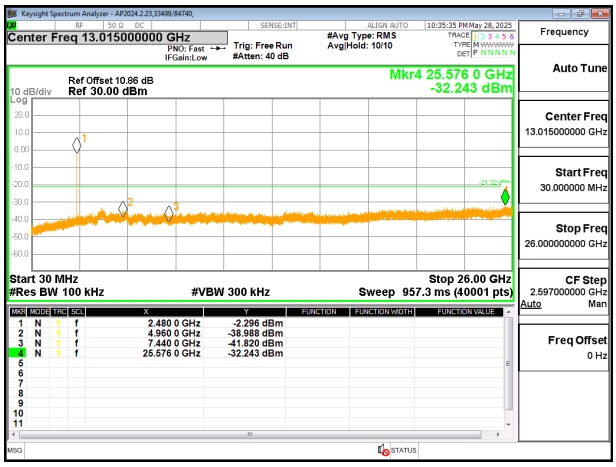
HIGH CHANNEL (2478) BANDEDGE



OUT-OF-BAND HIGH CHANNEL (2478)

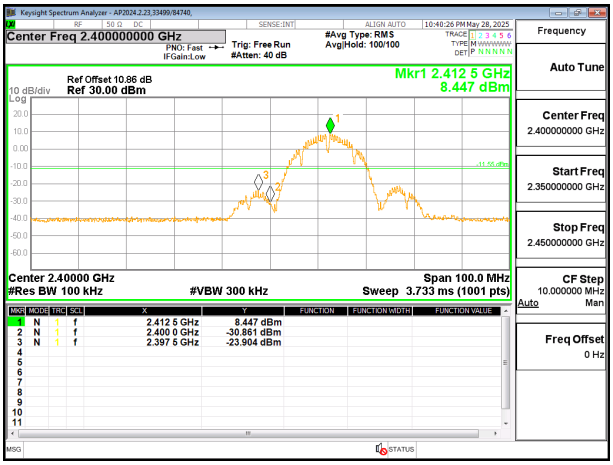


HIGH CHANNEL (2480) BANDEDGE

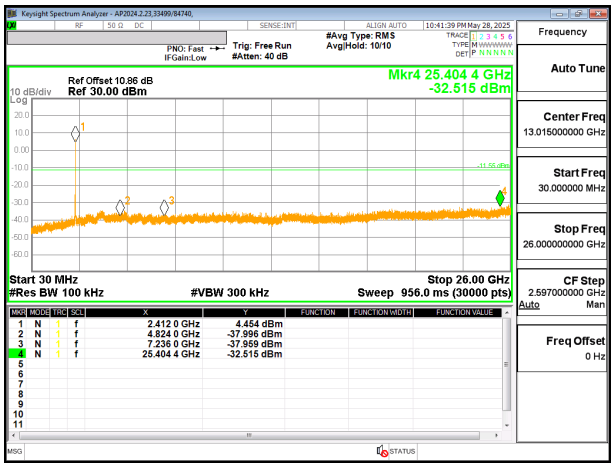


OUT-OF-BAND HIGH CHANNEL (2480)

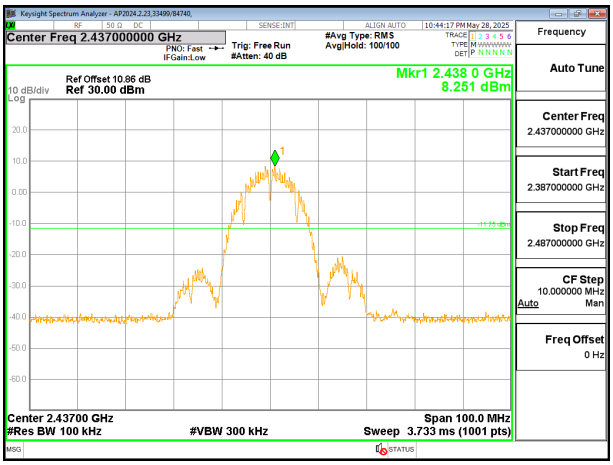
9.7.4. 2.4 WLAN (11b)



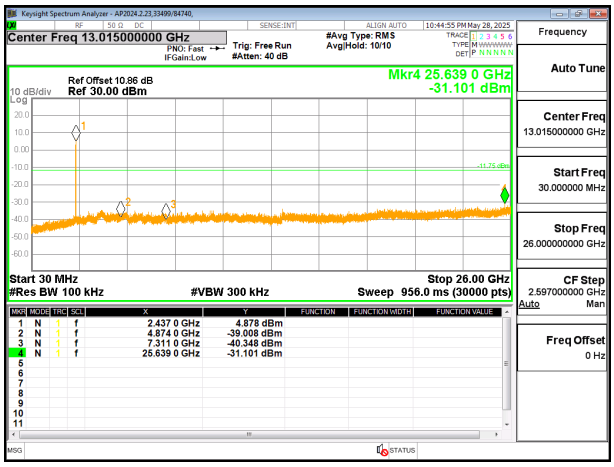
LOW CHANNEL BANDEDGE



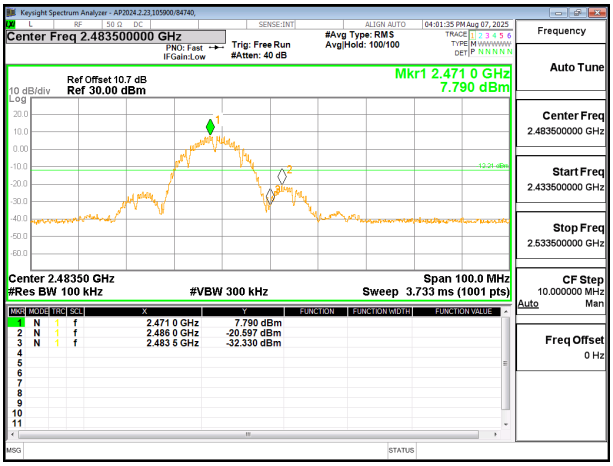
OUT-OF-BAND LOW CHANNEL



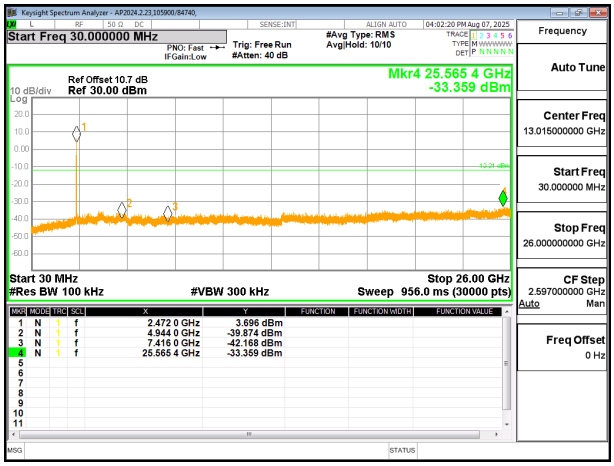
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL

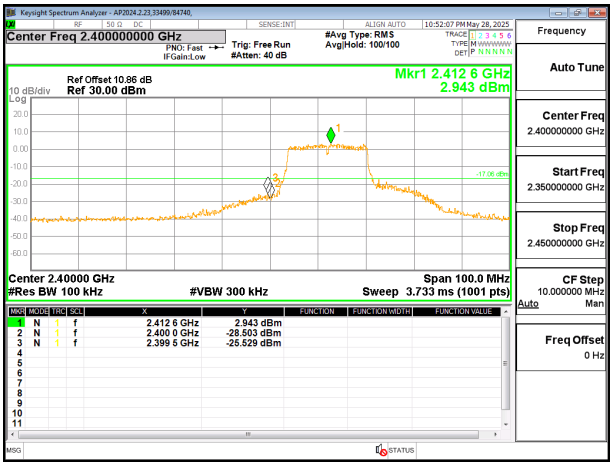


HIGH CHANNEL BANDEDGE

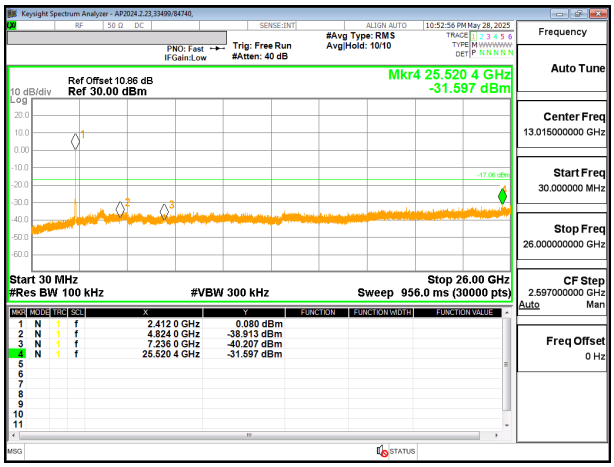


OUT-OF-BAND HIGH CHANNEL

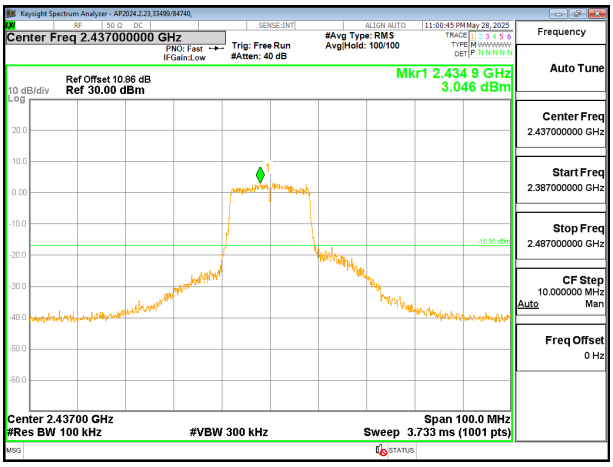
9.7.5. 2.4 WLAN (11g)



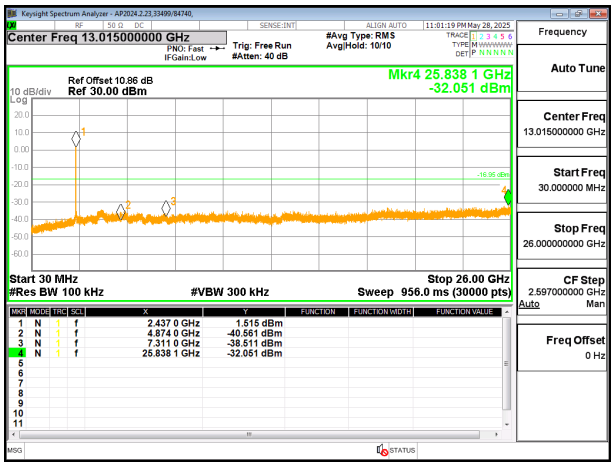
LOW CHANNEL BANDEDGE



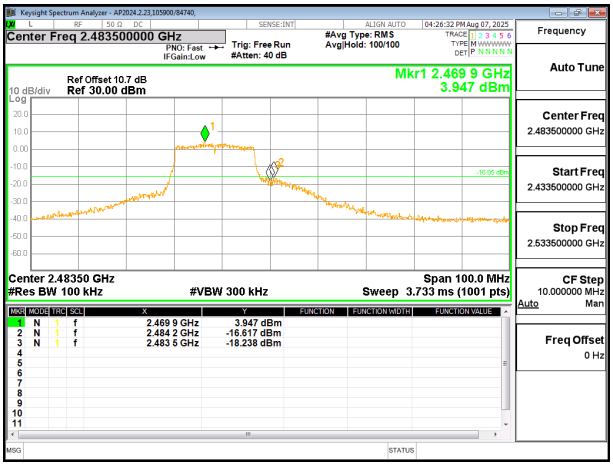
OUT-OF-BAND LOW CHANNEL



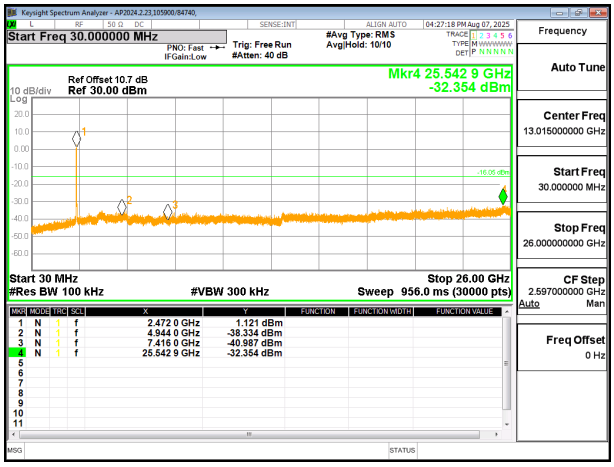
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL

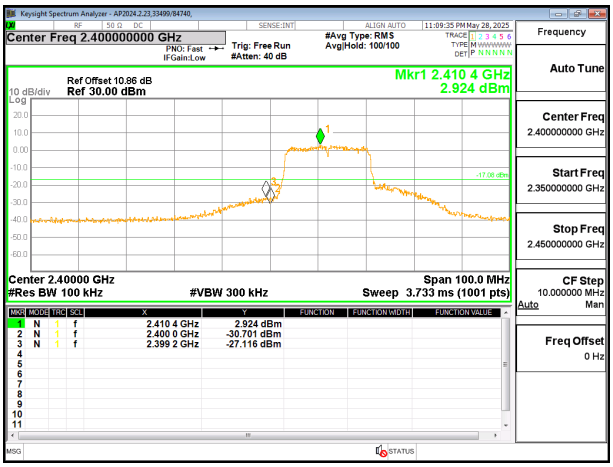


HIGH CHANNEL BANDEDGE

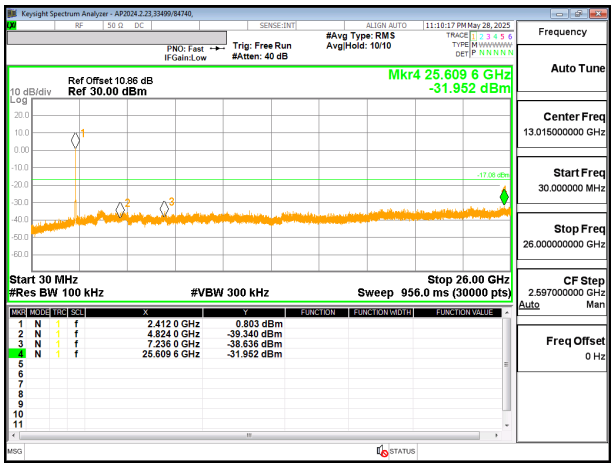


OUT-OF-BAND HIGH CHANNEL

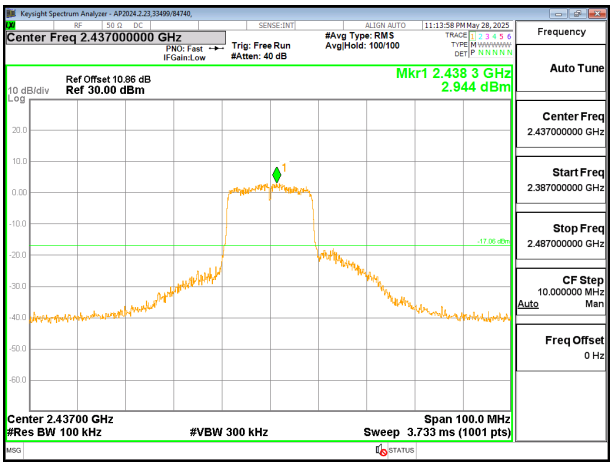
9.7.6. 2.4 WLAN (11n HT20)



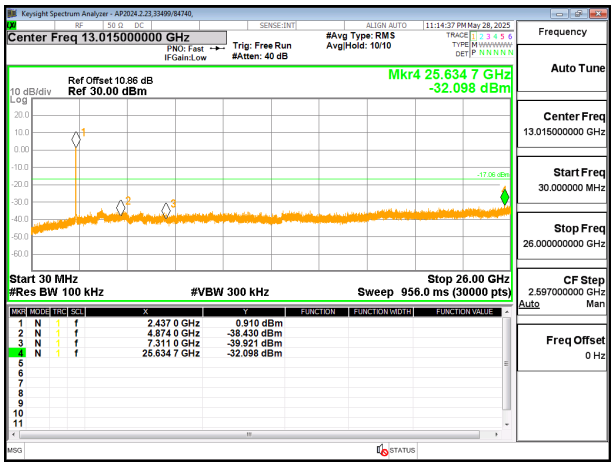
LOW CHANNEL BANDEDGE



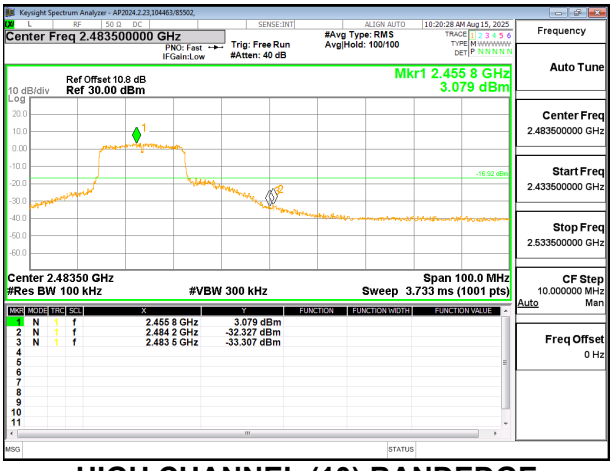
OUT-OF-BAND LOW CHANNEL



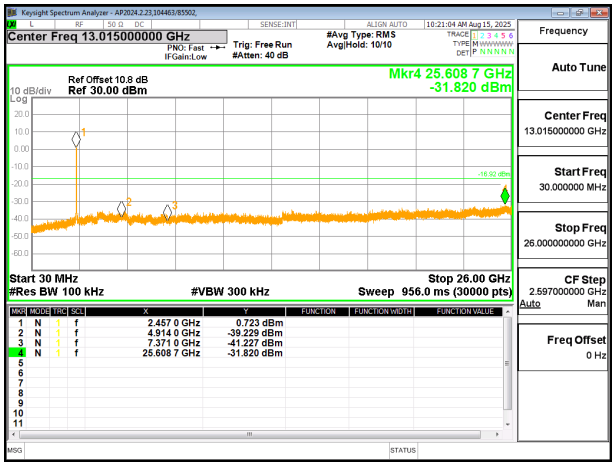
IN-BAND REFERENCE LEVEL



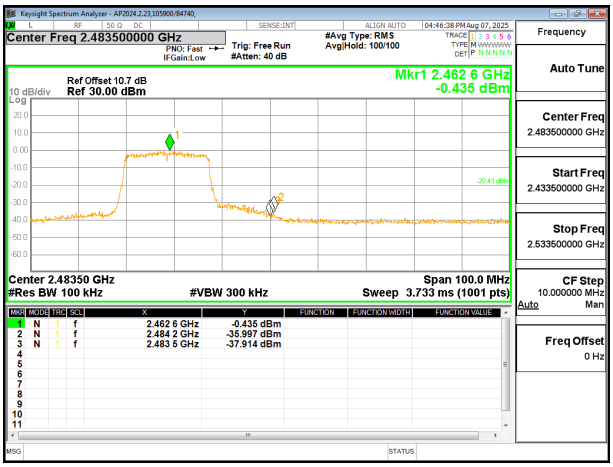
OUT-OF-BAND MID CHANNEL



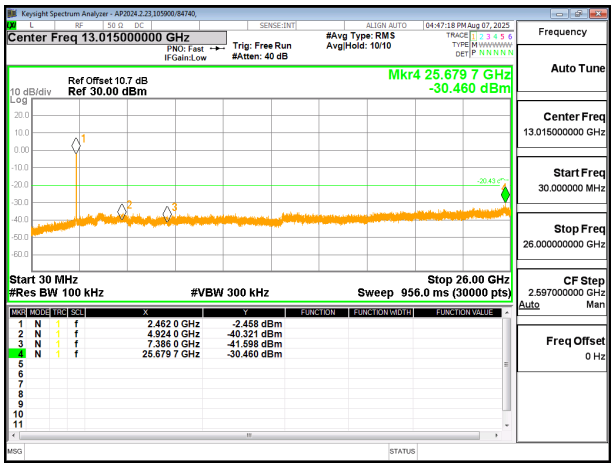
HIGH CHANNEL (10) BANDEDGE



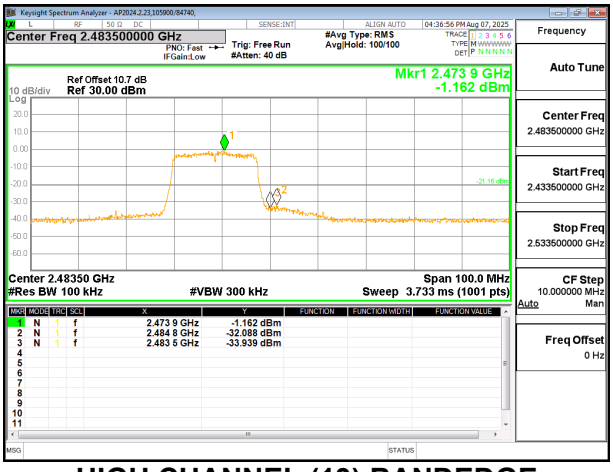
OUT-OF-BAND HIGH (10) CHANNEL



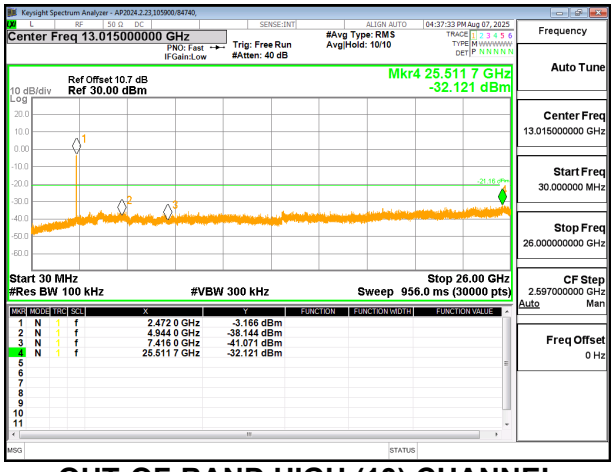
HIGH CHANNEL (11) BANDEDGE



OUT-OF-BAND HIGH (11) CHANNEL



HIGH CHANNEL (13) BANDEDGE



OUT-OF-BAND HIGH (13) CHANNEL

10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

IC RSS-GEN Clause 8.9 and 8.10

Frequency Range (kHz)	Field Strength Limit (uA/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	6.37/F(kHz) @ 300 m	-
0.490-1.705	63.7/F(kHz) @ 30 m	-
1.705 - 30	0.08 @ 30m	-
Frequency Range (MHz)	**Field Strength Limit (uV/m) at 3 m**	**Field Strength Limit (dBuV/m) at 3 m**
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for linear voltage average measurements.

The spectrum from 1 GHz to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz and above 18GHz emissions, the channel with the highest power spectral density was tested.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

3D antenna use - For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel).

Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

KDB 414788 Open Field Site(OFS) and Chamber Correlation Justification

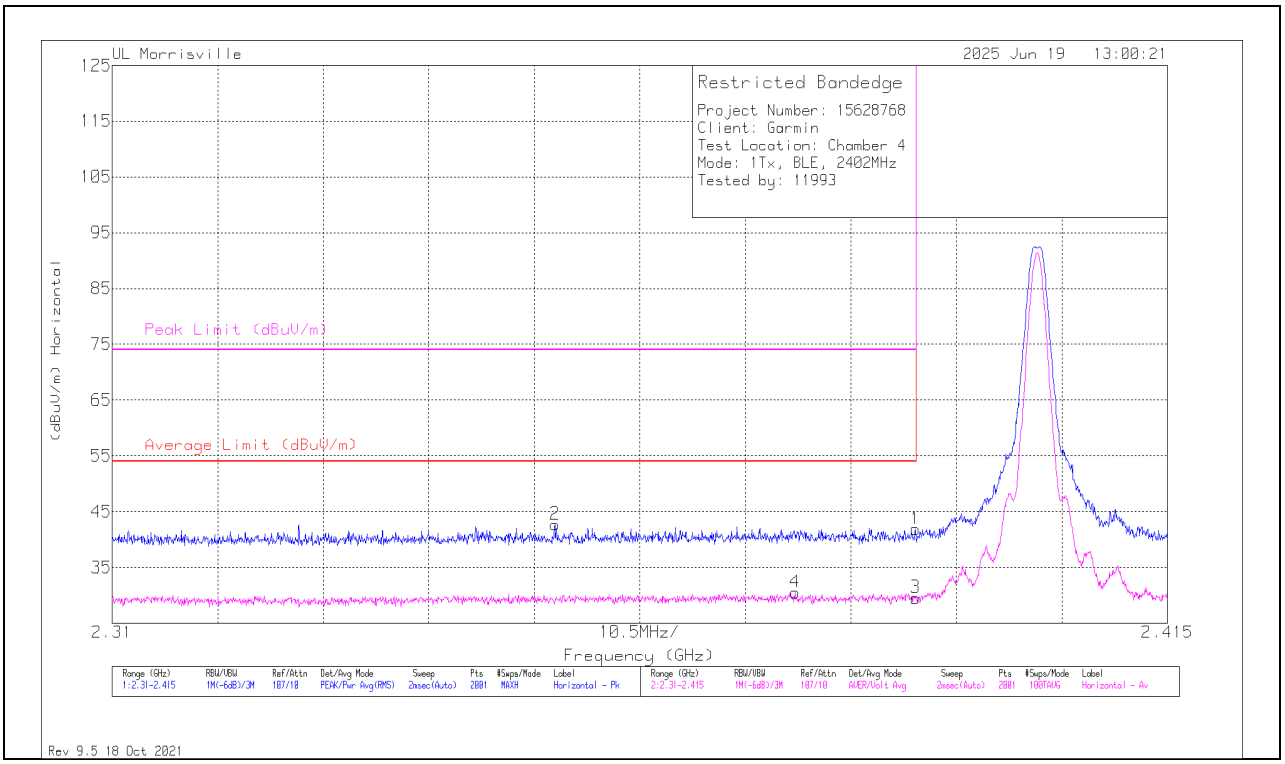
OFS and chamber correlation testing had been performed and chamber measured test result is the worst-case test result.

10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. BLE (1Mbps)

BANDEDGE (LOW CHANNEL, 2402 MHz)

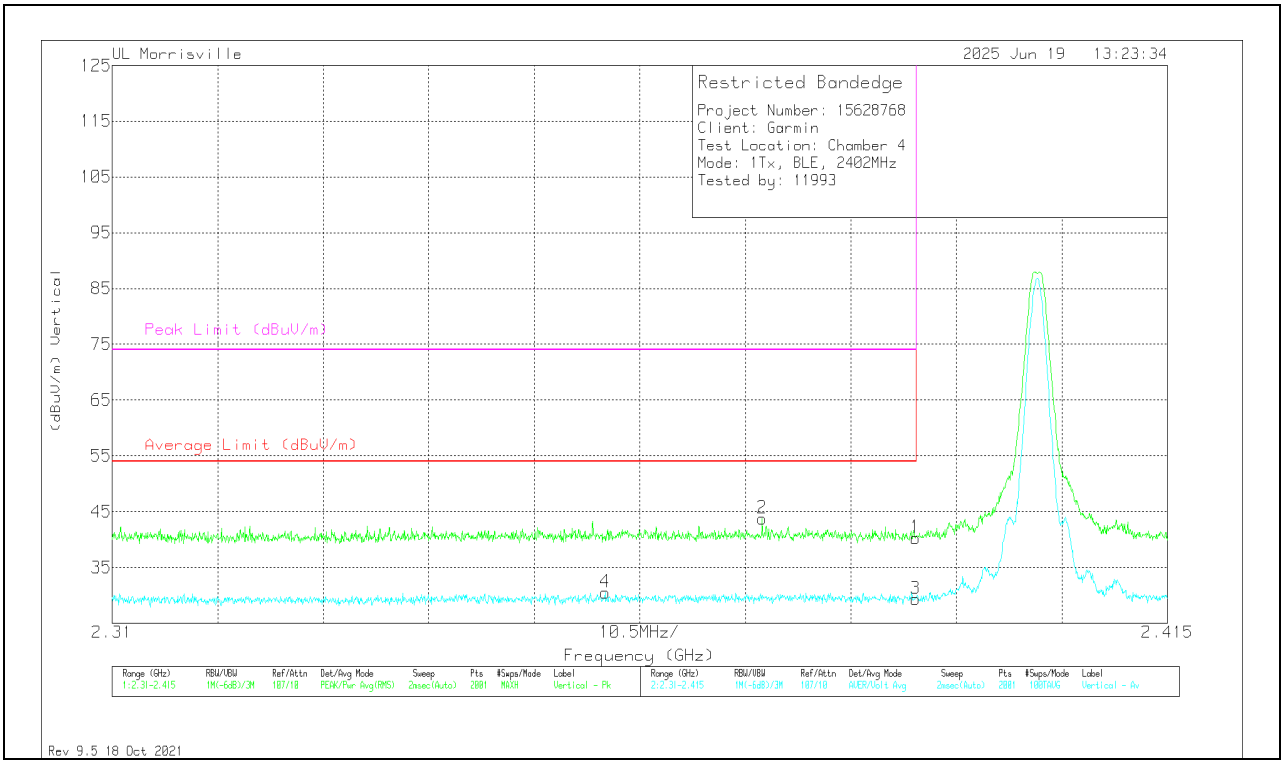
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.38996	33.03	Pk	32	-23.2	41.83	-	-	74	-32.17	256	102	H
2	* ** 2.35405	33.9	Pk	31.8	-23	42.7	-	-	74	-31.3	256	102	H
3	* ** 2.38996	20.65	ADV	32	-23.2	29.45	54	-24.55	-	-	256	102	H
4	* ** 2.37794	21.45	ADV	32	-23	30.45	54	-23.55	-	-	256	102	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

VERTICAL RESULT

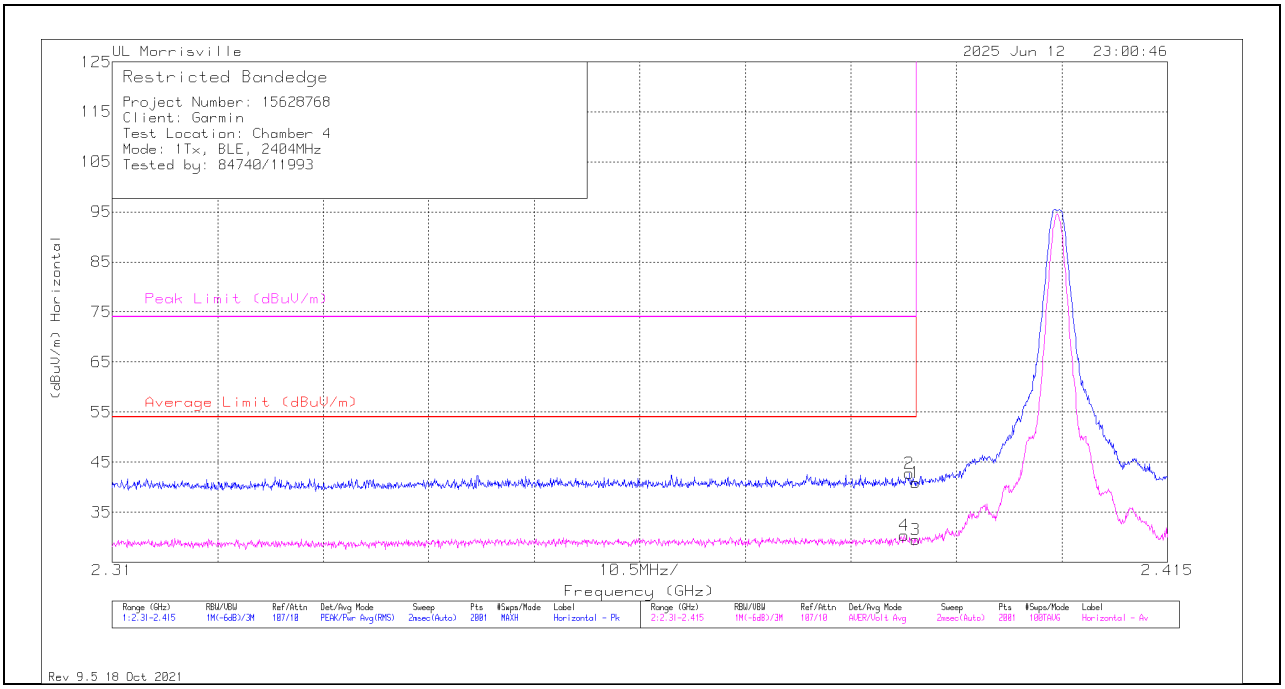


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.38996	31.43	Pk	32	-23.2	40.23	-	-	74	-33.77	28	103	V
2	* ** 2.37468	34.8	Pk	31.9	-22.9	43.8	-	-	74	-30.2	28	103	V
3	* ** 2.38996	20.52	ADV	32	-23.2	29.32	54	-24.68	-	-	28	103	V
4	* ** 2.35904	21.57	ADV	31.9	-23	30.47	54	-23.53	-	-	28	103	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

BANDEDGE (LOW CHANNEL, 2404 MHz)

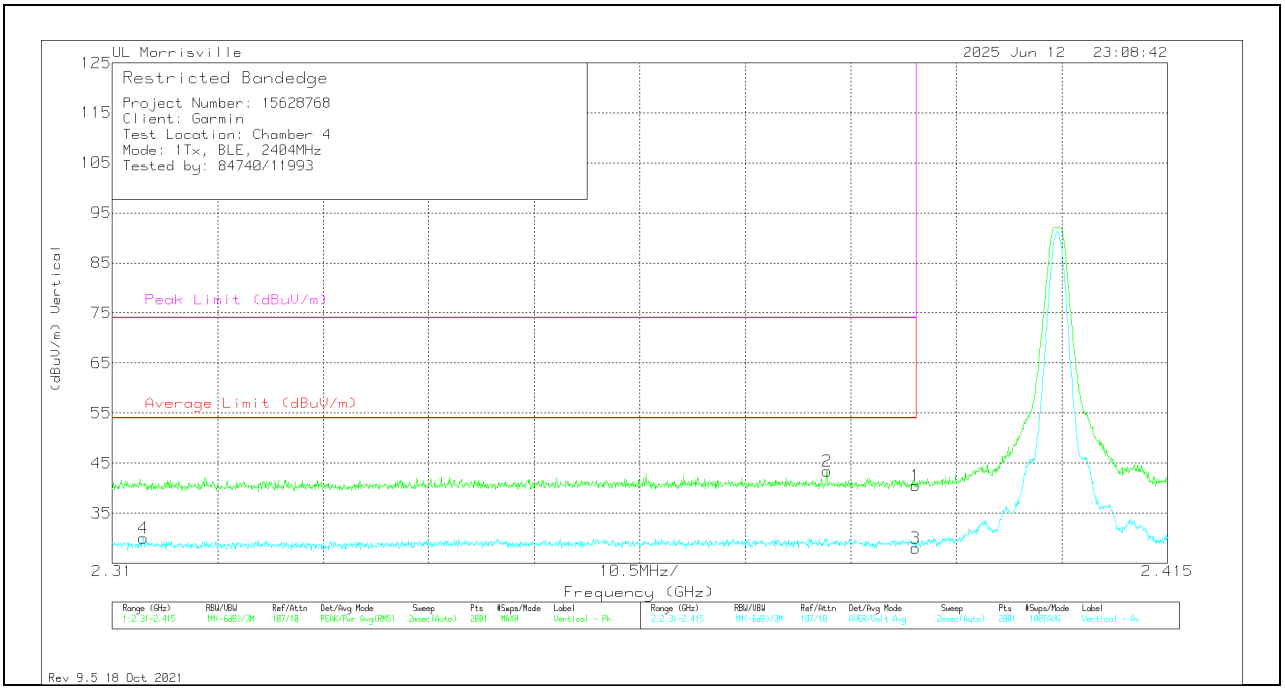
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.38996	32.14	Pk	32	-23.2	40.94	-	-	74	-33.06	200	128	H
2	* ** 2.38933	33.98	Pk	32	-23.2	42.78	-	-	74	-31.22	200	128	H
3	* ** 2.38996	20.73	ADV	32	-23.2	29.53	54	-24.47	-	-	200	128	H
4	* ** 2.3888	21.58	ADV	32	-23.2	30.38	54	-23.62	-	-	200	128	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

VERTICAL RESULT

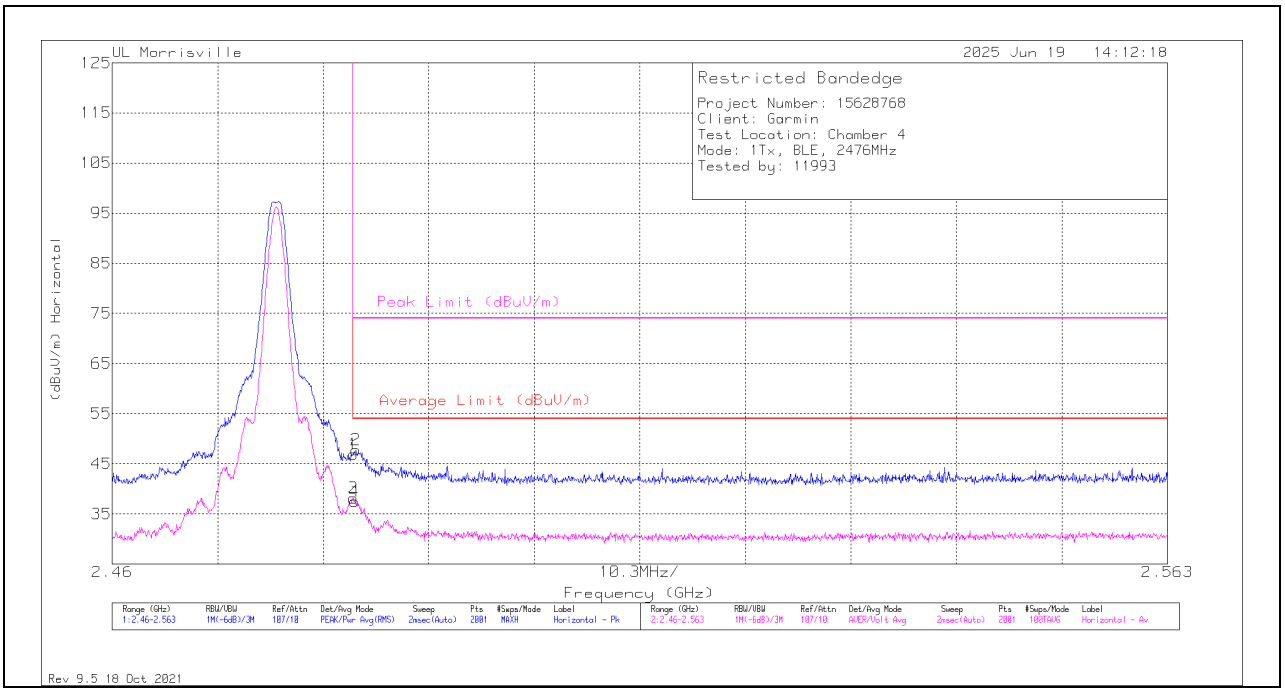


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.38996	31.75	Pk	32	-23.2	40.55	-	-	74	-33.45	181	124	V
2	* ** 2.38114	34.51	Pk	32	-23.1	43.41	-	-	74	-30.59	181	124	V
3	* ** 2.38996	19.23	ADV	32	-23.2	28.03	54	-25.97	-	-	181	124	V
4	* ** 2.3131	21.22	ADV	31.9	-23.1	30.02	54	-23.98	-	-	181	124	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

BANDEDGE (HIGH CHANNEL, 2476 MHz)

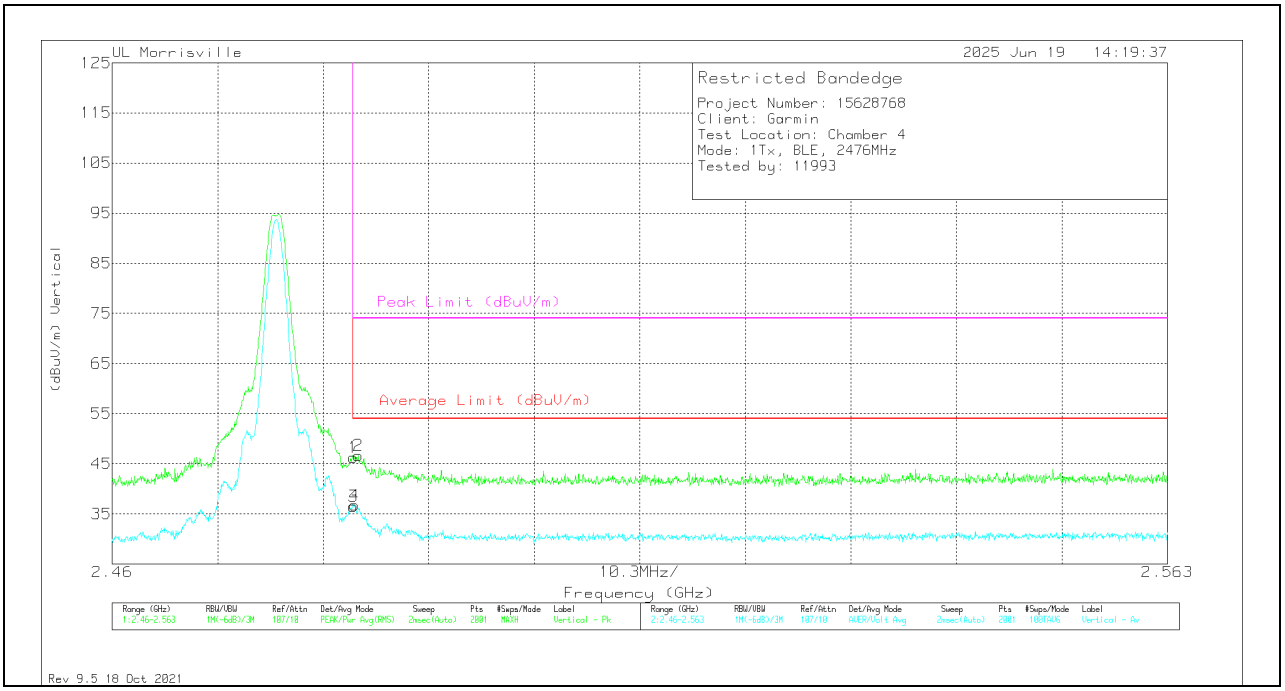
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	37.38	Pk	32.3	-22.8	46.88	-	-	74	-27.12	257	116	H
2	* ** 2.48379	38.29	Pk	32.3	-22.8	47.79	-	-	74	-26.21	257	116	H
3	* ** 2.48354	28.63	ADV	32.3	-22.8	38.13	54	-15.87	-	-	257	116	H
4	* ** 2.48364	28.06	ADV	32.3	-22.8	37.56	54	-16.44	-	-	257	116	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

VERTICAL RESULT

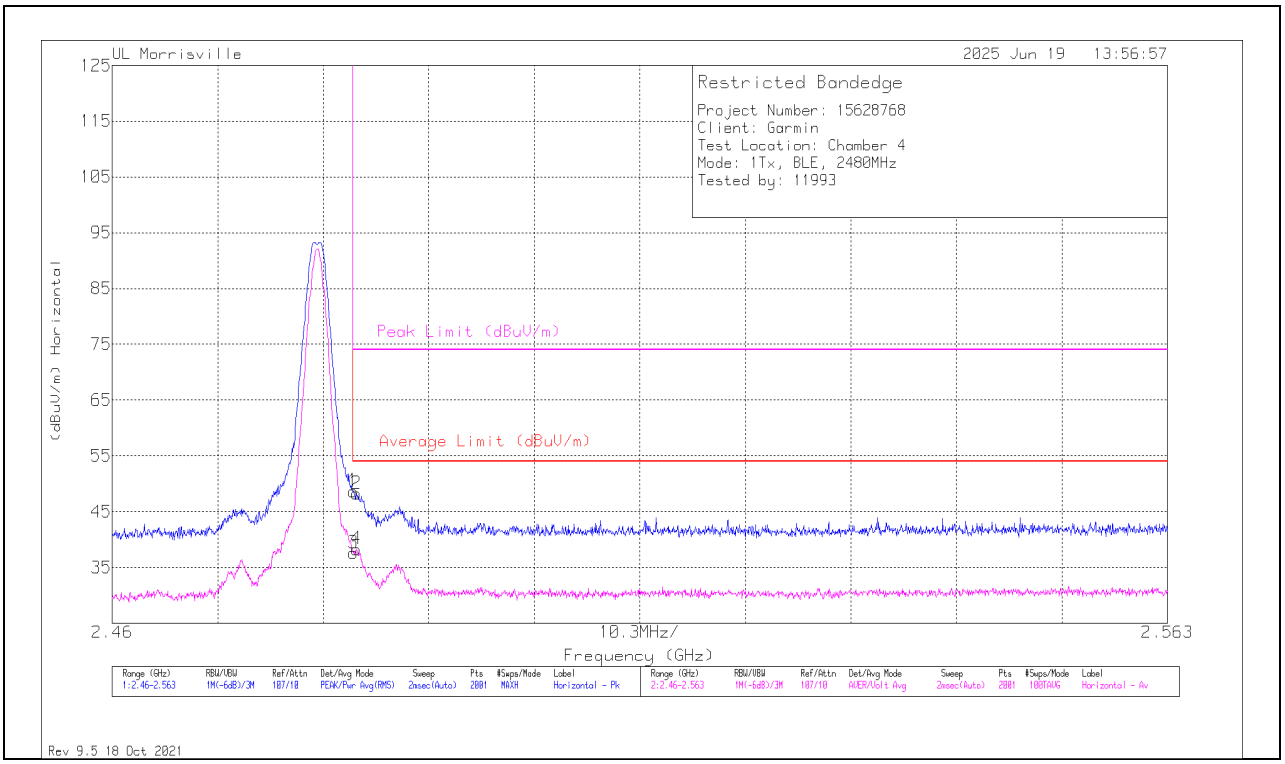


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	36.8	Pk	32.3	-22.8	46.3	-	-	74	-27.7	28	101	V
2	* ** 2.484	37.14	Pk	32.3	-22.8	46.64	-	-	74	-27.36	28	101	V
3	* ** 2.48354	26.99	ADV	32.3	-22.8	36.49	54	-17.51	-	-	28	100	V
4	* ** 2.48364	27.2	ADV	32.3	-22.8	36.7	54	-17.3	-	-	28	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

BANDEDGE (HIGH CHANNEL, 2480 MHz)

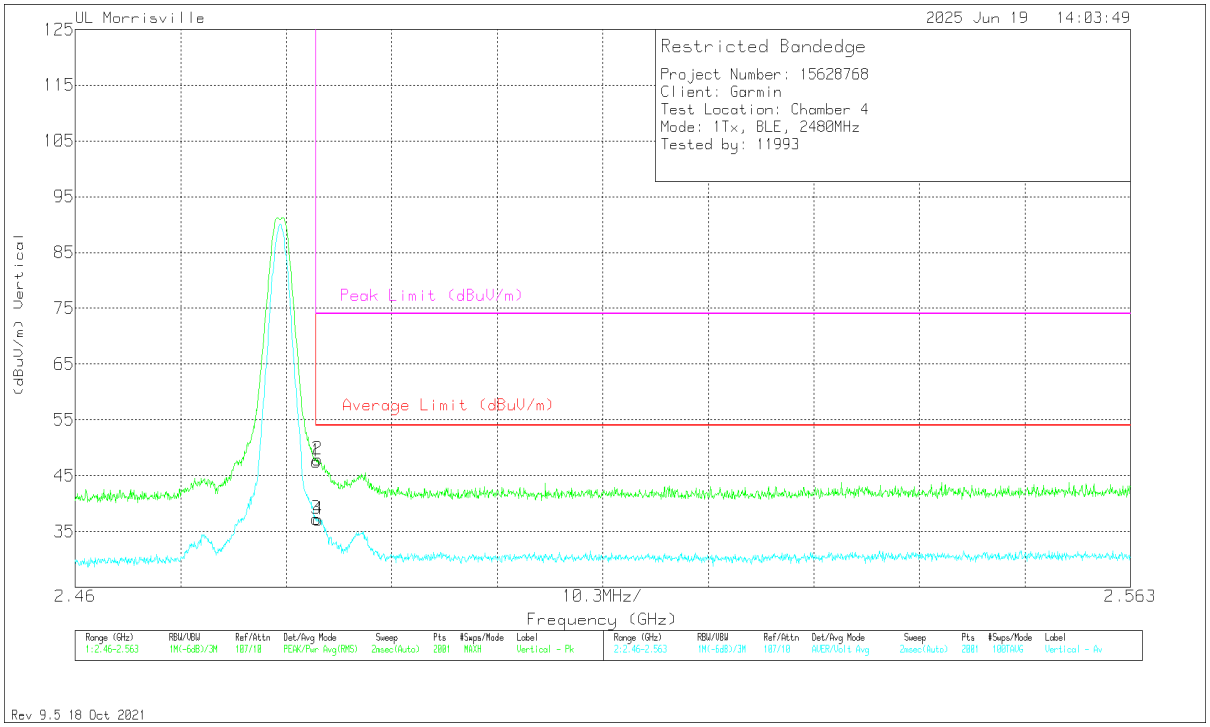
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	39.14	Pk	32.3	-22.8	48.64	-	-	74	-25.36	263	117	H
2	* ** 2.48384	38.71	Pk	32.3	-22.8	48.21	-	-	74	-25.79	263	117	H
3	* ** 2.48354	28.07	ADV	32.3	-22.8	37.57	54	-16.43	-	-	263	117	H
4	* ** 2.48384	28.75	ADV	32.3	-22.8	38.25	54	-15.75	-	-	263	117	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

VERTICAL RESULT

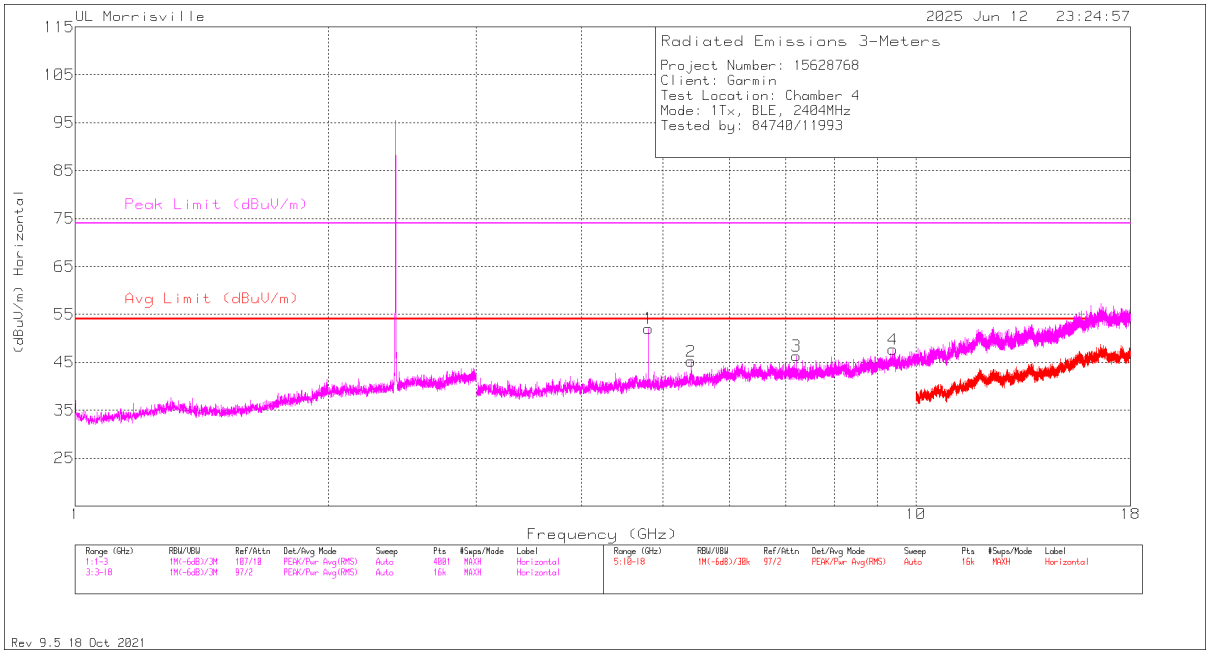


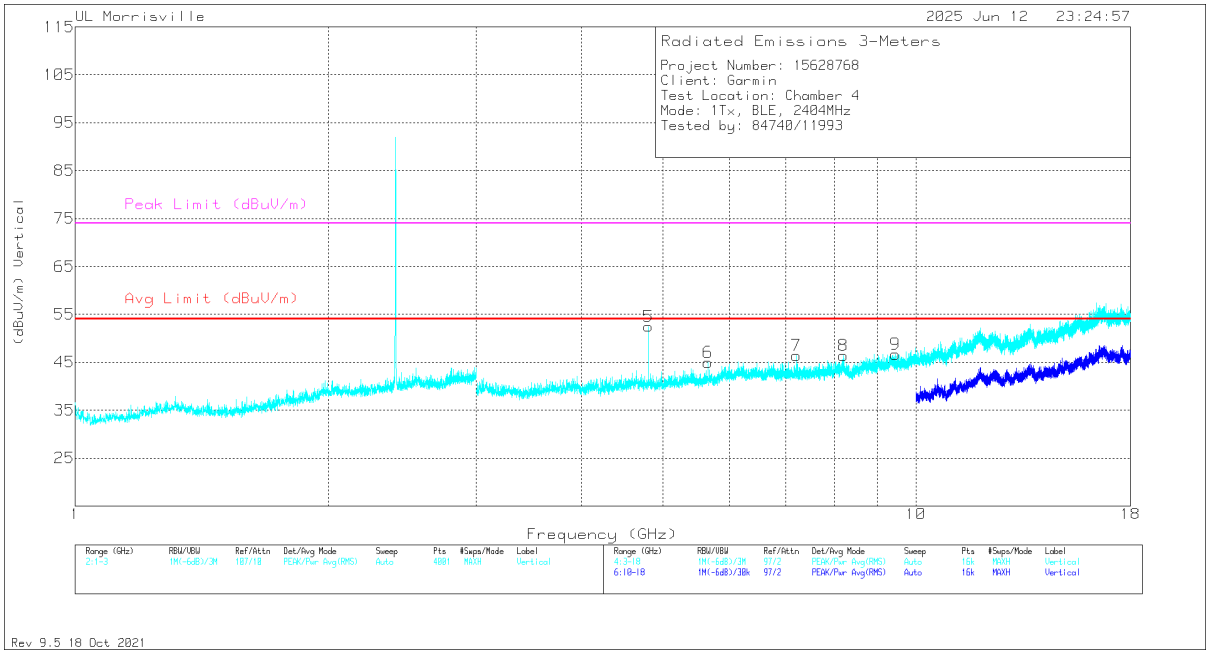
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	38	Pk	32.3	-22.8	47.5	-	-	74	-26.5	28	101	V
2	* ** 2.48364	38.35	Pk	32.3	-22.8	47.85	-	-	74	-26.15	28	101	V
3	* ** 2.48354	27.81	ADV	32.3	-22.8	37.31	54	-16.69	-	-	28	100	V
4	* ** 2.48374	27.61	ADV	32.3	-22.8	37.11	54	-16.89	-	-	28	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, 2404 MHz, RESULTS

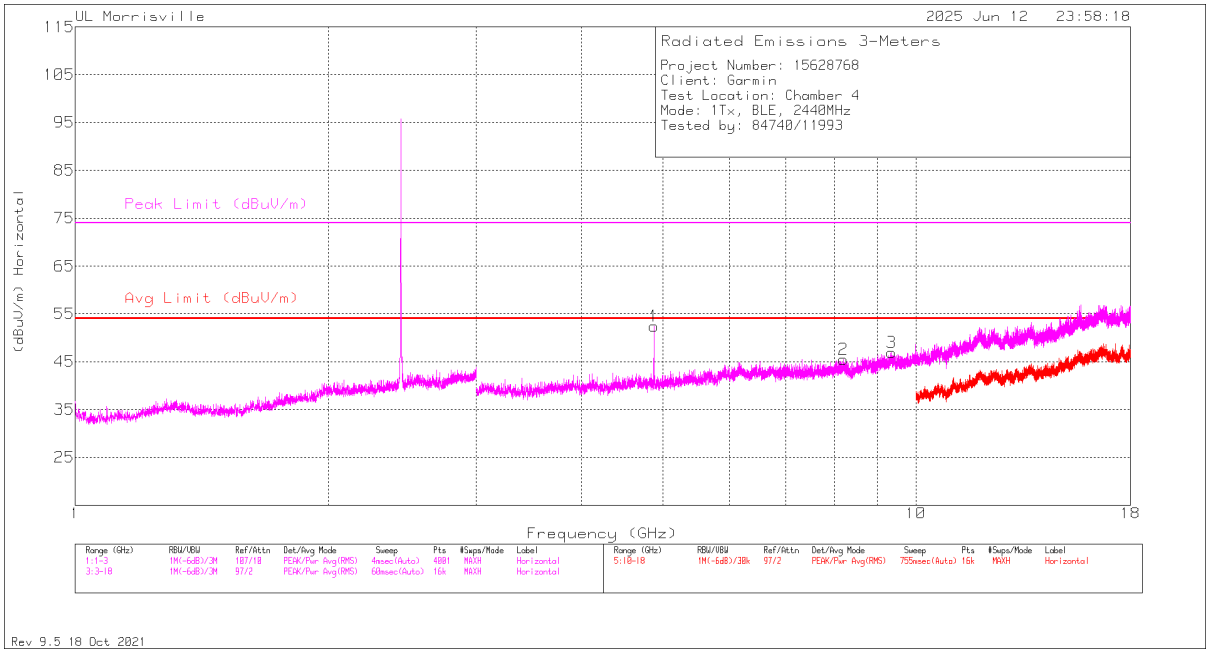


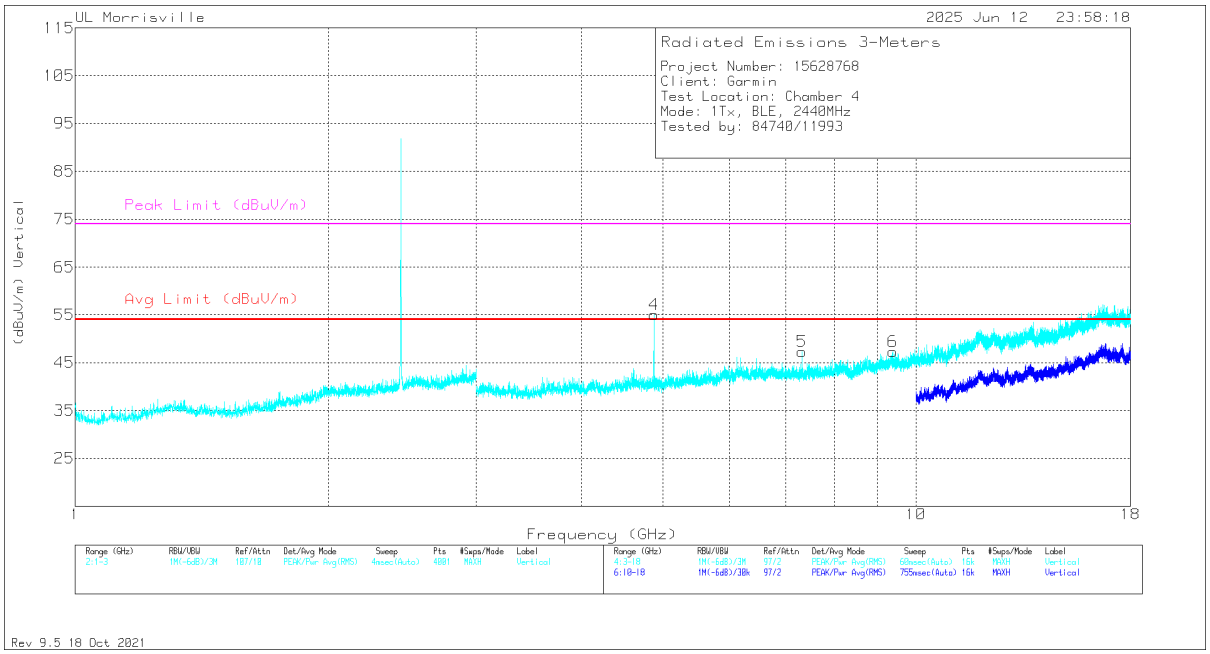


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 4.80858	52.29	PK2	33.9	-31.3	54.89	-	-	74	-19.11	114	106	H
	* ** 4.80844	39.84	ADV	33.9	-31.3	42.44	54	-11.56	-	-	114	106	H
2	* ** 5.40094	40.27	Pk	34.4	-29.5	45.17	54	-8.83	74	-28.83	0-360	100	H
4	* ** 9.39281	35.96	Pk	36.5	-24.8	47.66	54	-6.34	74	-26.34	0-360	100	H
5	* ** 4.80861	48.96	PK2	33.9	-31.3	51.56	-	-	74	-22.44	241	209	V
	* ** 4.8082	36.75	ADV	33.9	-31.3	39.35	54	-14.65	-	-	241	209	V
8	* ** 8.20594	37.1	Pk	35.7	-26.4	46.4	54	-7.6	74	-27.6	0-360	200	V
9	* ** 9.45375	35.45	Pk	36.5	-25.3	46.65	54	-7.35	74	-27.35	0-360	200	V
6	5.65781	39.52	Pk	34.4	-28.9	45.02	54	-8.98	74	-28.98	0-360	200	V
3	7.21219	38.74	Pk	35.5	-27.9	46.34	54	-7.66	74	-27.66	0-360	100	H
7	7.21219	38.76	Pk	35.5	-27.9	46.36	54	-7.64	74	-27.64	0-360	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
PK2 - Maximum Peak
ADV - Linear Voltage Average

MID CHANNEL, 2440 MHz, RESULTS

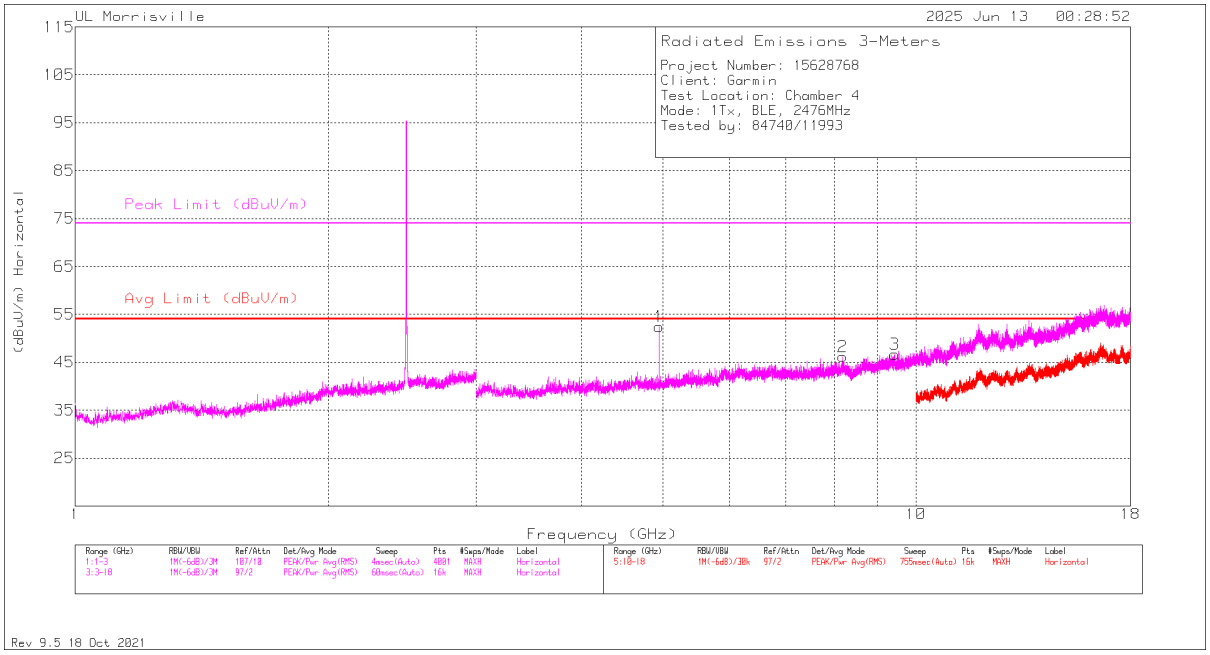


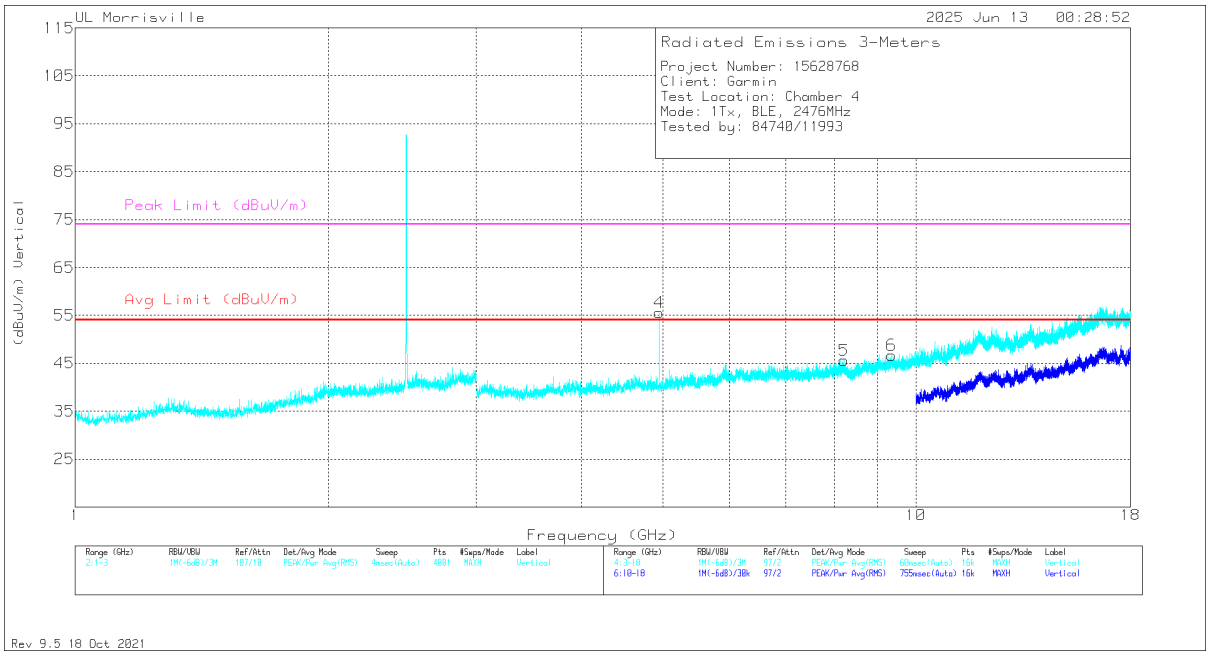


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 4.88038	53.74	PK2	33.9	-31	56.64	-	-	74	-17.36	79	125	H
	* ** 4.88031	41.44	ADV	33.9	-31	44.34	54	-9.66	-	-	79	125	H
2	* ** 8.19375	36.06	Pk	35.7	-26.3	45.46	54	-8.54	74	-28.54	0-360	100	H
3	* ** 9.35906	35.03	Pk	36.4	-24.5	46.93	54	-7.07	74	-27.07	0-360	100	H
4	* ** 4.88057	49.47	PK2	33.9	-31	52.37	-	-	74	-21.63	221	191	V
	* ** 4.87981	36.64	ADV	33.9	-31	39.54	54	-14.46	-	-	221	191	V
5	* ** 7.32094	39.51	Pk	35.5	-27.7	47.31	54	-6.69	74	-26.69	0-360	200	V
6	* ** 9.39469	35.53	Pk	36.5	-24.7	47.33	54	-6.67	74	-26.67	0-360	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
PK2 - Maximum Peak
ADV - Linear Voltage Average

HIGH CHANNEL, 2476 MHz, RESULTS





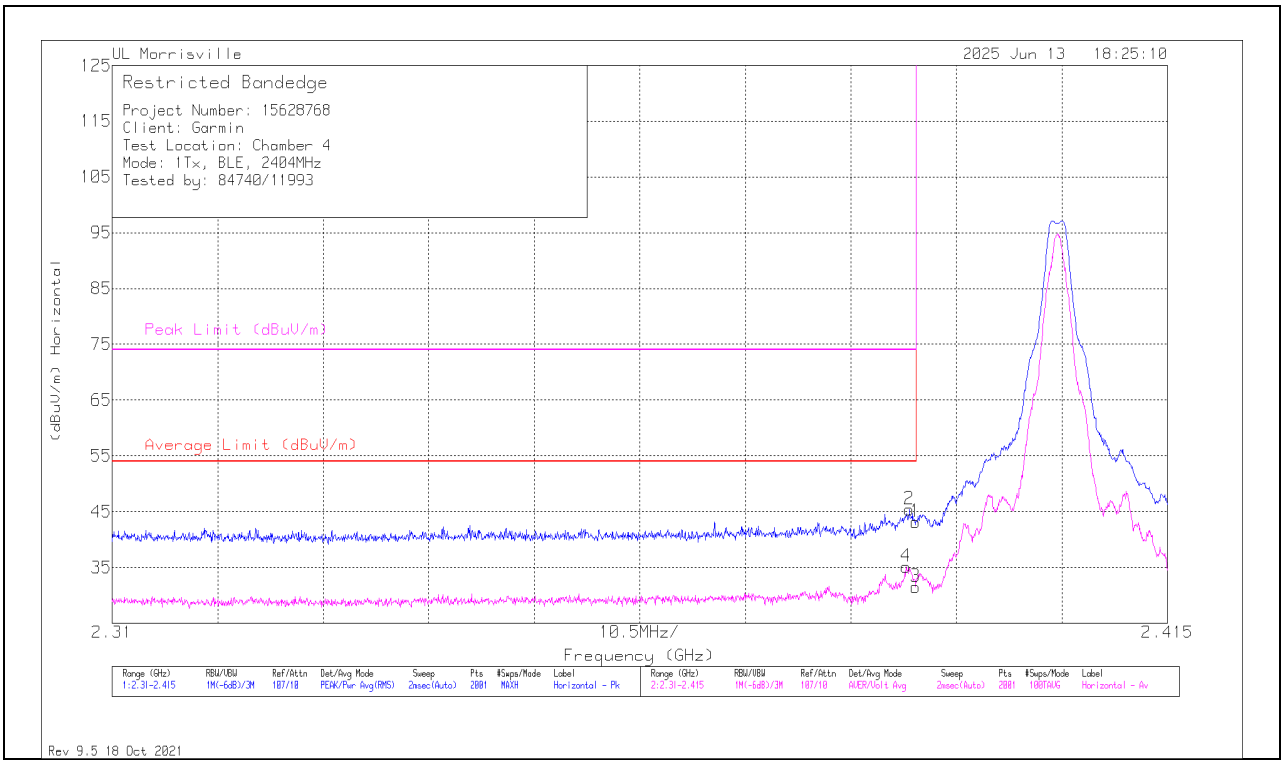
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 4.95148	52.39	PK2	33.8	-31	55.19	-	-	74	-18.81	114	121	H
	* ** 4.9522	40.93	ADV	33.8	-31	43.73	54	-10.27	-	-	114	121	H
2	* ** 8.18063	36.81	Pk	35.7	-26.3	46.21	54	-7.79	74	-27.79	0-360	100	H
3	* ** 9.44063	35.26	Pk	36.5	-25.1	46.66	54	-7.34	74	-27.34	0-360	100	H
4	* ** 4.95163	53.25	PK2	33.8	-31	56.05	-	-	74	-17.95	275	113	V
	* ** 4.9522	41.44	ADV	33.8	-31	44.24	54	-9.76	-	-	275	113	V
5	* ** 8.21813	36.17	Pk	35.7	-26.3	45.57	54	-8.43	74	-28.43	0-360	200	V
6	* ** 9.36469	34.85	Pk	36.4	-24.6	46.65	54	-7.35	74	-27.35	0-360	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
PK2 - Maximum Peak
ADV - Linear Voltage Average

10.2.2. BLE (2Mbps)

BANDEDGE (LOW CHANNEL, 2404 MHz)

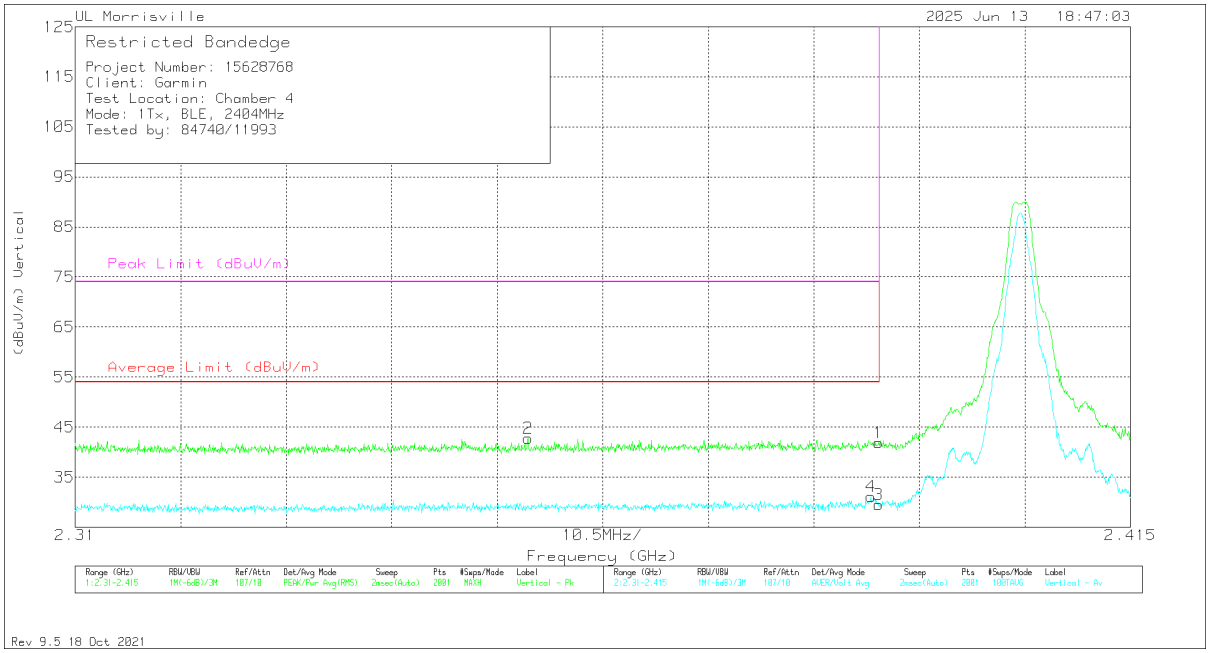
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.38996	34.33	Pk	32	-23.2	43.13	-	-	74	-30.87	173	119	H
2	* ** 2.38933	36.59	Pk	32	-23.2	45.39	-	-	74	-28.61	173	119	H
3	* ** 2.38996	22.71	ADV	32	-23.2	31.51	54	-22.49	-	-	173	119	H
4	* ** 2.38901	26.34	ADV	32	-23.2	35.14	54	-18.86	-	-	173	119	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

VERTICAL RESULT

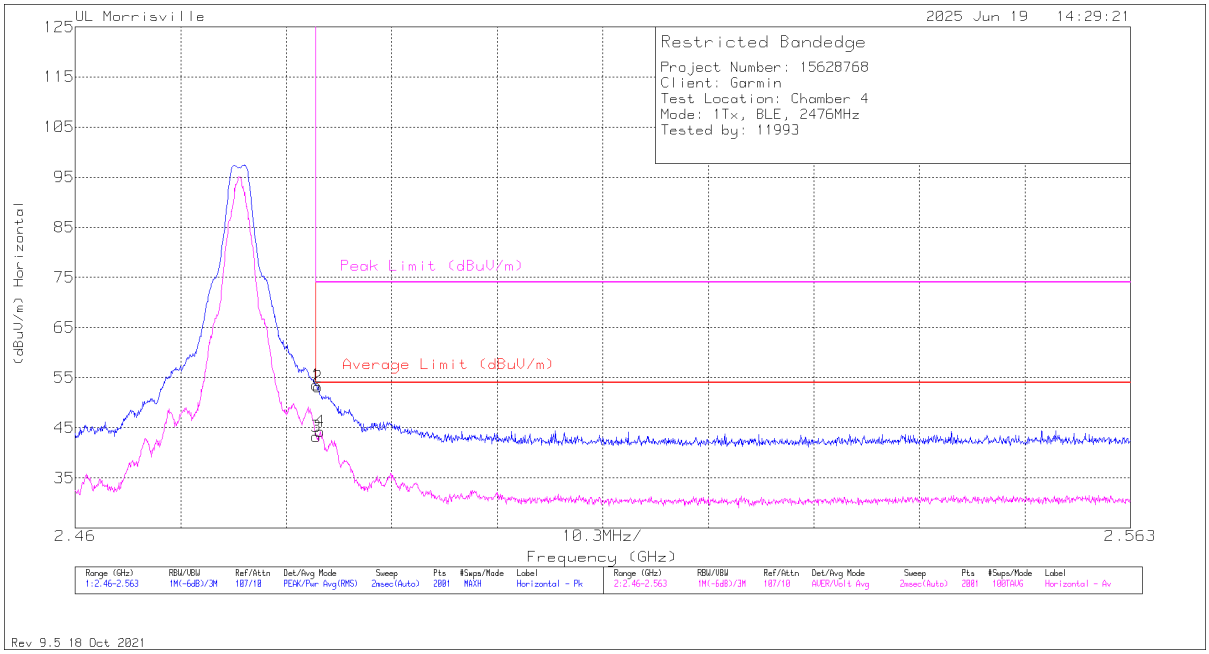


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.38996	33.05	Pk	32	-23.2	41.85	-	-	74	-32.15	29	217	V
2	* ** 2.35505	33.85	Pk	31.9	-23	42.75	-	-	74	-31.25	29	217	V
3	* ** 2.38996	20.69	ADV	32	-23.2	29.49	54	-24.51	-	-	29	217	V
4	* ** 2.38917	22.36	ADV	32	-23.2	31.16	54	-22.84	-	-	29	217	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

BANDEDGE (HIGH CHANNEL, 2476 MHz)

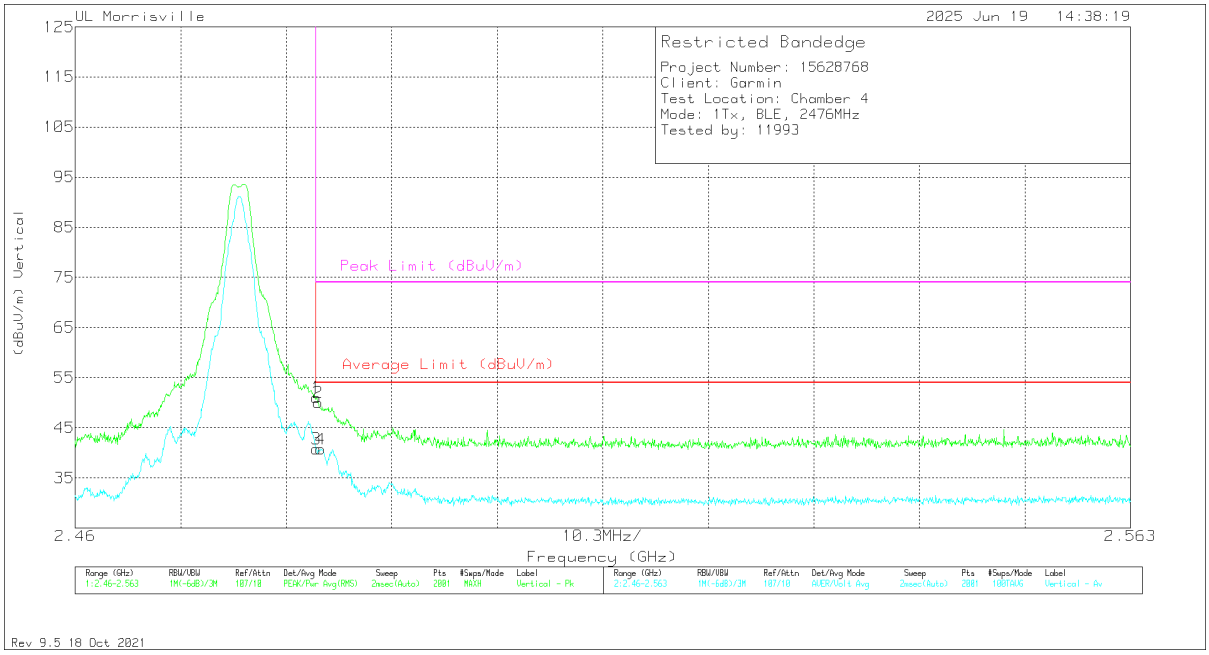
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	44.01	Pk	32.3	-22.8	53.51	-	-	74	-20.49	258	116	H
2	* ** 2.48369	43.61	Pk	32.3	-22.8	53.11	-	-	74	-20.89	258	116	H
3	* ** 2.48354	33.77	ADV	32.3	-22.8	43.27	54	-10.73	-	-	258	116	H
4	* ** 2.4839	34.73	ADV	32.3	-22.8	44.23	54	-9.77	-	-	258	116	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

VERTICAL RESULT

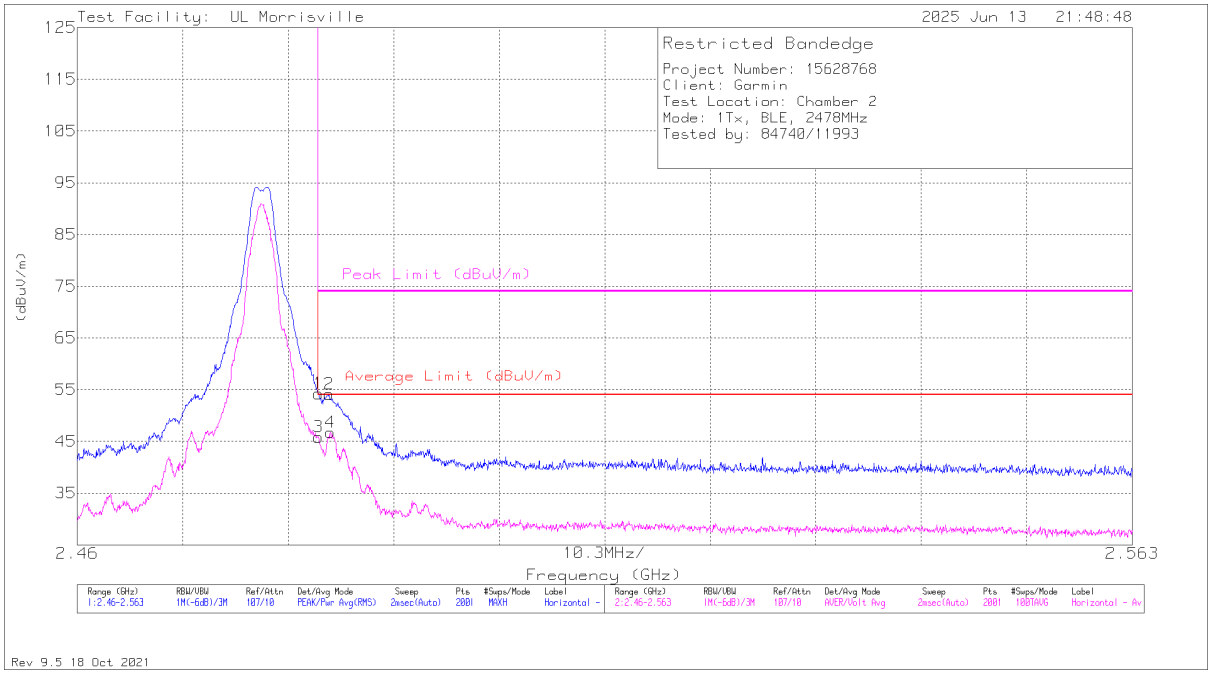


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	41.54	Pk	32.3	-22.8	51.04	-	-	74	-22.96	28	101	V
2	* ** 2.48374	40.51	Pk	32.3	-22.8	50.01	-	-	74	-23.99	28	101	V
3	* ** 2.48354	31.29	ADV	32.3	-22.8	40.79	54	-13.21	-	-	28	100	V
4	* ** 2.48395	31.21	ADV	32.3	-22.8	40.71	54	-13.29	-	-	28	100	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

BANDEDGE (HIGH CHANNEL, 2478 MHz)

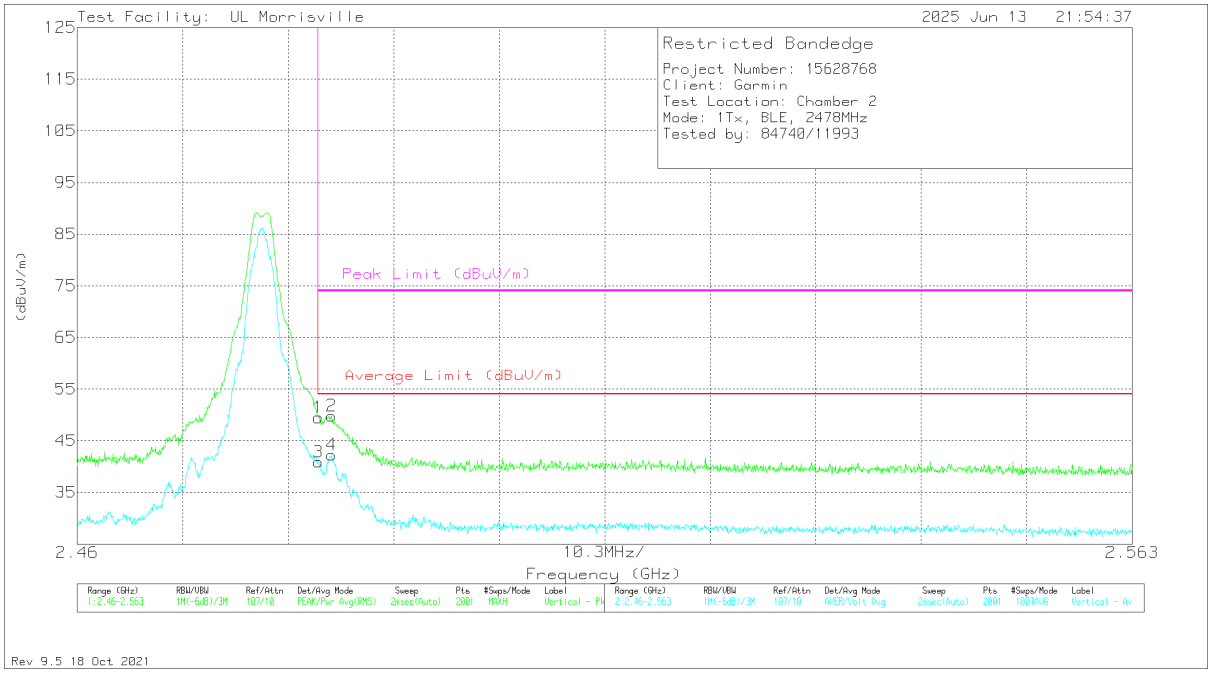
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	86408 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	47.24	Pk	32.5	-25.5	54.24	-	-	74	-19.76	203	144	H
2	* ** 2.48457	47.23	Pk	32.5	-25.6	54.13	-	-	74	-19.87	203	144	H
3	* ** 2.48354	38.85	ADV	32.5	-25.5	45.85	54	-8.15	-	-	203	144	H
4	* ** 2.48472	39.84	ADV	32.5	-25.6	46.74	54	-7.26	-	-	203	144	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

VERTICAL RESULT

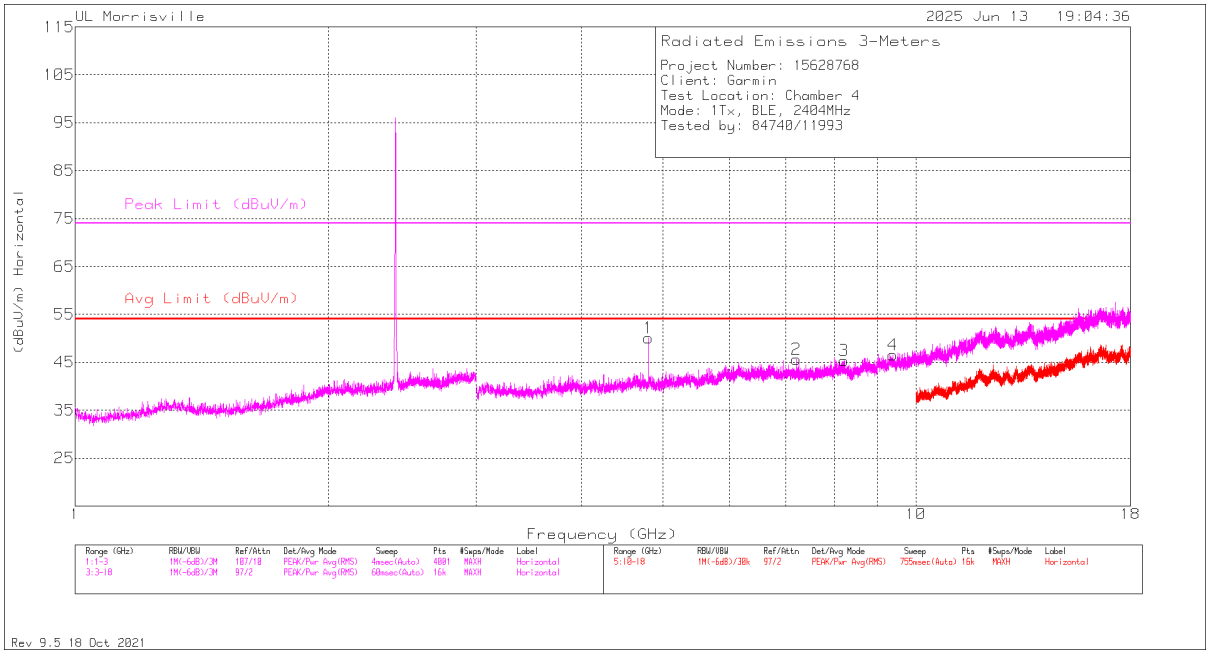


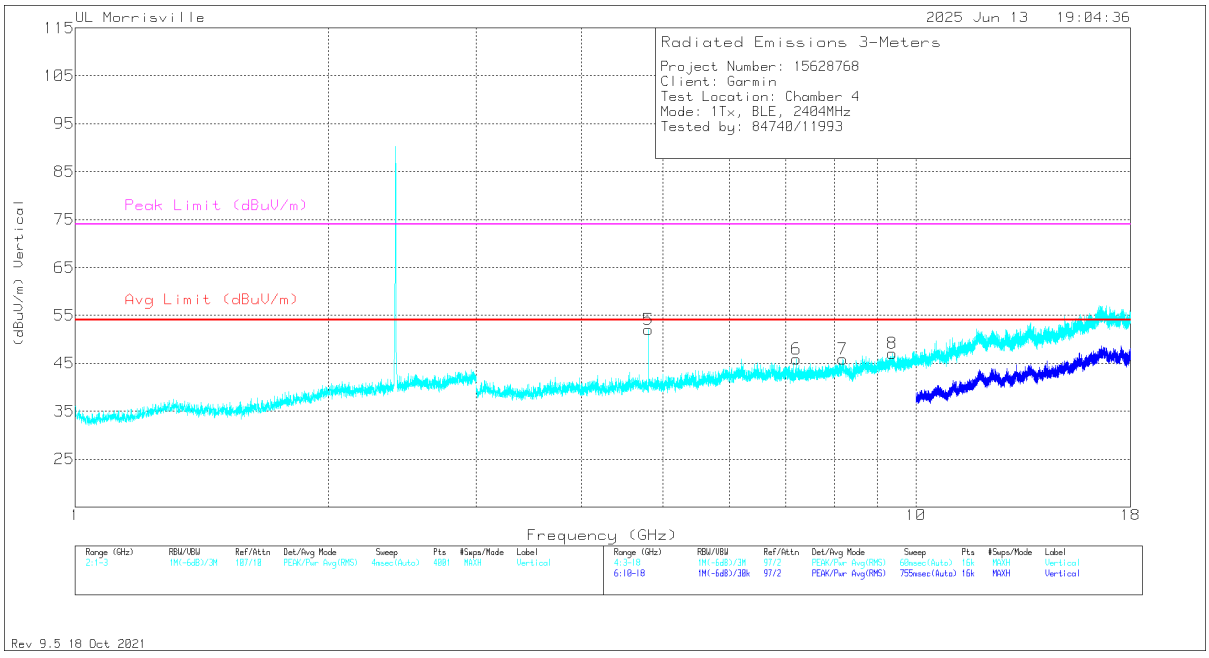
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	86408 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	42.5	Pk	32.5	-25.5	49.5	-	-	74	-24.5	82	386	V
2	* ** 2.48482	42.9	Pk	32.5	-25.6	49.8	-	-	74	-24.2	82	386	V
3	* ** 2.48354	33.9	ADV	32.5	-25.5	40.9	54	-13.1	-	-	82	386	V
4	* ** 2.48482	35.37	ADV	32.5	-25.6	42.27	54	-11.73	-	-	82	386	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, 2404 MHz, RESULTS





Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 4.80886	50.44	PK2	33.9	-31.3	53.04	-	-	74	-20.96	108	102	H
	* ** 4.80903	36.65	ADV	33.9	-31.3	39.25	54	-14.75	-	-	108	102	H
3	* ** 8.20781	36.11	Pk	35.7	-26.4	45.41	54	-8.59	74	-28.59	0-360	100	H
4	* ** 9.38438	35.06	Pk	36.5	-25	46.56	54	-7.44	74	-27.44	0-360	100	H
5	* ** 4.80883	48.84	PK2	33.9	-31.3	51.44	-	-	74	-22.56	217	254	V
	* ** 4.80887	35.29	ADV	33.9	-31.3	37.89	54	-16.11	-	-	217	254	V
7	* ** 8.18625	36.4	Pk	35.7	-26.2	45.9	54	-8.1	74	-28.1	0-360	200	V
8	* ** 9.36938	35.4	Pk	36.4	-24.7	47.1	54	-6.9	74	-26.9	0-360	200	V
6	7.21031	38.33	Pk	35.5	-27.9	45.93	54	-8.07	74	-28.07	0-360	200	V
2	7.21125	38	Pk	35.5	-27.9	45.6	54	-8.4	74	-28.4	0-360	100	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
** - indicates frequency in Taiwan NCC LP0002 Restricted Band
Pk - Peak detector
PK2 - Maximum Peak
ADV - Linear Voltage Average