

TEST REPORT

Report Number: R15952388-E3

Applicant : Garmin International Inc.
1200 East 151st Street
Olathe, KS 66062-3426, USA

Model : A04986

FCC ID : IPH-04986

IC : 1792A-04986

EUT Description : Portable Transceiver

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C
ISED RSS-247 ISSUE 4
ISED RSS-GEN ISSUE 5 + A1 + A2

Date Of Issue:
2025-10-03

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REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2025-10-03	Initial Issue	Chandler Stanely

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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: Portable Transceiver

MODEL: A04986

SERIAL NUMBER: 3611415493 / 3611415476

SAMPLE RECEIPT DATE: 2025-08-13 And 2025-08-14

DATE TESTED: 2025-08-21 To 2025-09-05

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Complies
ISED RSS-247 Issue 4	Complies
ISED RSS-GEN Issue 5 + A1 + A2	Complies

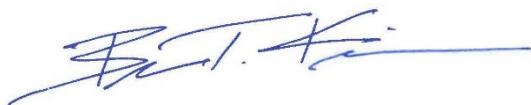
UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the sample tested, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to ensure 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:

Prepared By:



Brian Kiewra
Project Engineer
Consumer, Medical and IT Segment
UL LLC



Chandler Stanley
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 6.3.1 (a)	6dB BW	Compliant	None.
15.247 (b) (3)	RSS-247 6.3.2	Output Power		
See Comment		Average power	Reporting purposes only	Per ANSI C63.10, Section 11.9.2.3.2.
15.247 (e)	RSS-247 6.3.1 (b)	PSD	Compliant	None.
15.247 (d)	RSS-247 6.6	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 CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024, 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 4.

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, U.S.A	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)
 $36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$

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.
 $36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$

6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The EUT is a portable transceiver that utilizes BLE and ANT radios as well as a 57 GHz radar. This report covers full testing of the BLE radio.

6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2402 - 2480	BLE - 1 Mbps	8.04	6.37
2402 - 2480	BLE - 2 Mbps	8.01	6.32

6.3. DESCRIPTION OF AVAILABLE ANTENNAS

The antenna's gain and type, as provided by the manufacturer are as follows:

Frequency Band (GHz)	Antenna Gain (dBi)	Antenna Type
2402-2480	1.90	PCB Inverted L

6.4. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was v4.06.

The test utility software used during testing was RF State Setter v1.100.

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 and mode with the highest PSD as the worst-case scenario.

Band edge and radiated emissions between 1GHz and 18GHz were performed with the EUT set to transmit at the highest power on low, middle and high channels.

The EUT was investigated in three orthogonal orientations: X, Y, and Z. The worst-case orientation was determined to be the Y-orientation. Therefore, all testing was performed with the EUT in the Y-orientation.

The EUT supports both 1 and 2 Mbps.

6.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Power Supply	Garmin	AQ27A-59CFA	NA	NA
Power Supply	Bose	S008AHU0500160	072381Z60770055AE	NA

I/O CABLES

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

TEST SETUP

A laptop is used to program the device to transmit at the desired channels/modes. The laptop is removed from the chamber for radiated scans.

SETUP DIAGRAMS

Please refer to R15952388-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 C63.10-2020 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 were 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 MY54490254	Keysight Technologies	N9030A	2025-07-31	2026-07-31
211058	Real-Time Peak Power Sensor 50MHz to 8GHz 11997	Boonton	RTP5000	2025-07-30	2026-07-30
179892	Environmental Meter 161024885	Fisher Scientific	15-077-963	2025-08-05	2026-08-05
SOFTEMI	Antenna Port Software	UL	Version 2024.2.23	-	-
Power Software	Boonton Power Analyzer	Boonton	Version 3.0.13.0	-	-
Pad III	SMA Coaxial 10dB Attenuator	CENTRICRF	C18S2-10	2025-08-18	2026-08-18

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 1)

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
0.009-30MHz					
65682	Active Loop Antenna	ETS-Lindgren	6502	2023-10-03	2025-10-03
30-1000 MHz					
90629	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2024-01-30	2026-01-30
1-18 GHz					
135143	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2024-02-07	2026-02-07
Gain-Loss Chains					
91974	Gain-loss string: 0.009-30MHz	Various	Various	2025-05-31	2026-05-31
91976	Gain-loss string: 25-1000MHz	Various	Various	2025-05-31	2026-05-31
91979	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					
241205	Environmental Meter	Fisher Scientific	15-077-963	2025-08-05	2027-08-05

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

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
1-18 GHz					
206211	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2024-04-09	2026-04-09
18-26.5 GHz					
91186	Horn Antenna, 18-26.5GHz	ARA	MWH-1826/B	2024-05-16	2026-05-16
Gain-Loss Chains					
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
90411	Spectrum Analyzer	Keysight	N9030A	2025-07-30	2026-07-30
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
Additional Equipment used					
241204	Environmental Meter	Fisher Scientific	15-077-963	2025-08-05	2027-08-05

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	2025-08-5	2026-08-06
80389	LISN, 50-ohm/50-uH, 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50—50-2-02-550V	2025-07-30	2026-07-30
75141	EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESCI 7	2025-7-30	2026-07-30
52859	Transient Limiter, 0.009-100MHz	Electro-Metrics	EM-7600	2025-7-30	2026-07-30
236852	AC Power Source	California Instruments	AST3001	NA	NA
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
Miscellaneous (if needed)					
84681	ANSI C63.4 1m extension cable.	UL	Per Annex B of ANSI C63.4	2025-04-17	2026-04-17

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

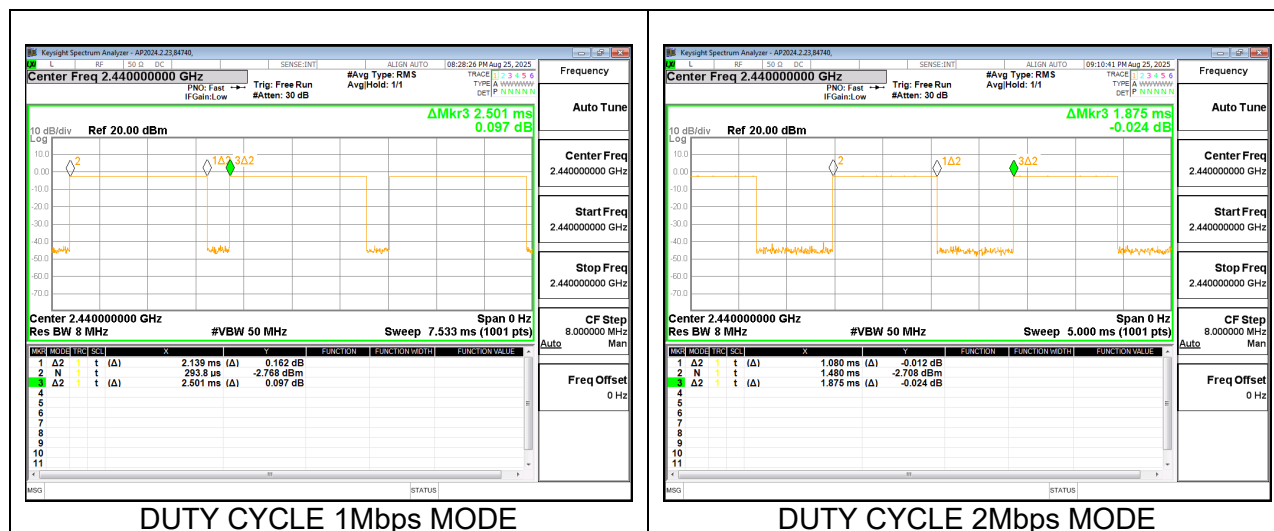
PROCEDURE

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						
BLE 1Mbps	2.139	2.501	0.855	85.53	1.36	0.468
BLE 2Mbps	1.080	1.875	0.576	57.60	4.79	0.926

DUTY CYCLE PLOTS



9.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

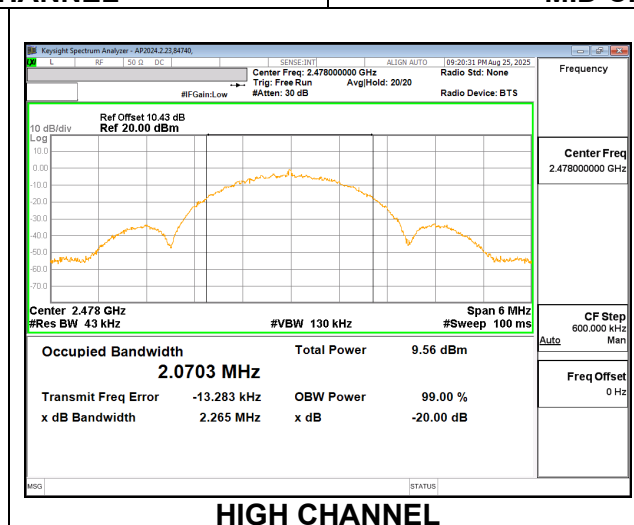
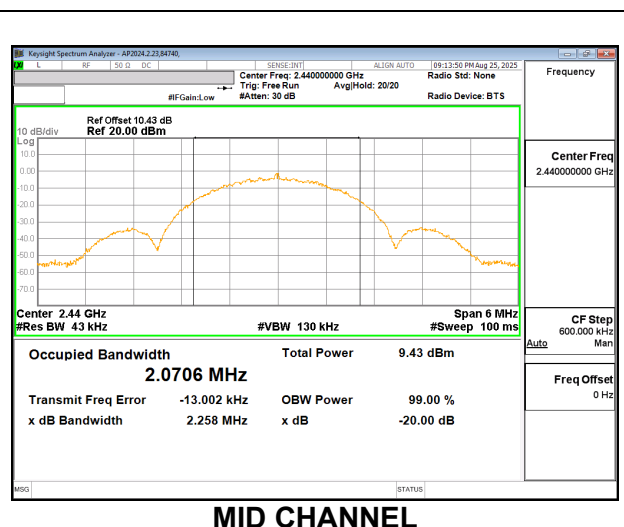
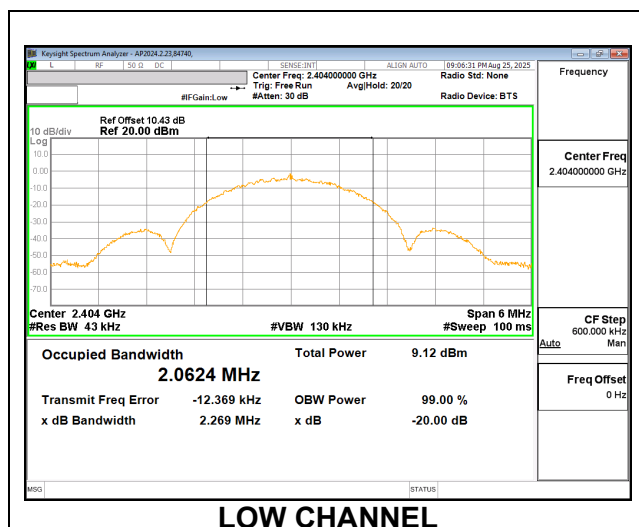
9.2.1. BLE (1Mbps)

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	1.0577
Middle	2440	1.0608
High	2480	1.0585



9.2.2. BLE (2Mbps)

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2404	2.0624
Middle	2440	2.0706
High	2478	2.0703



9.3. 6 dB BANDWIDTH

LIMITS

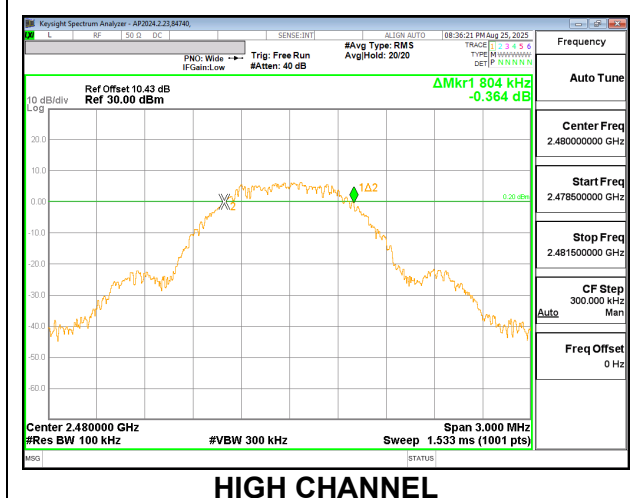
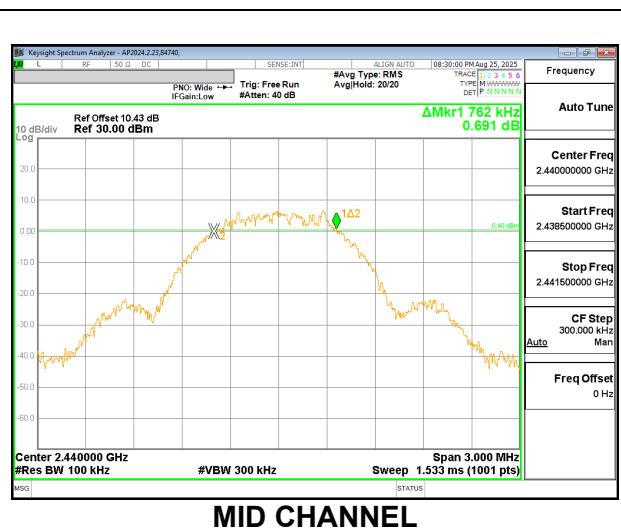
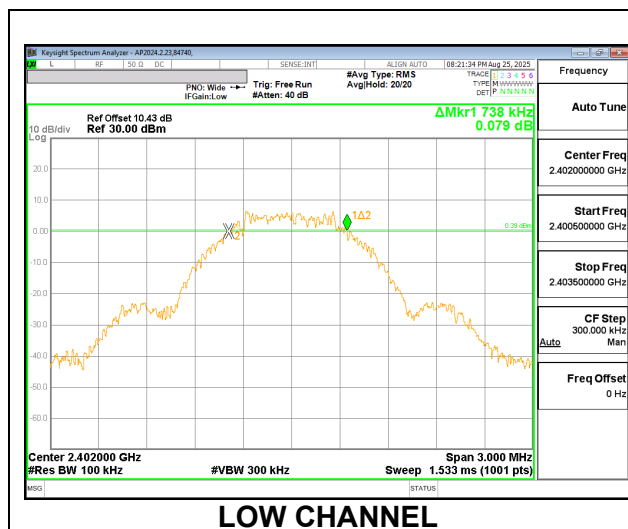
FCC §15.247 (a) (2)
RSS-247 5.2 (a)

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

RESULTS

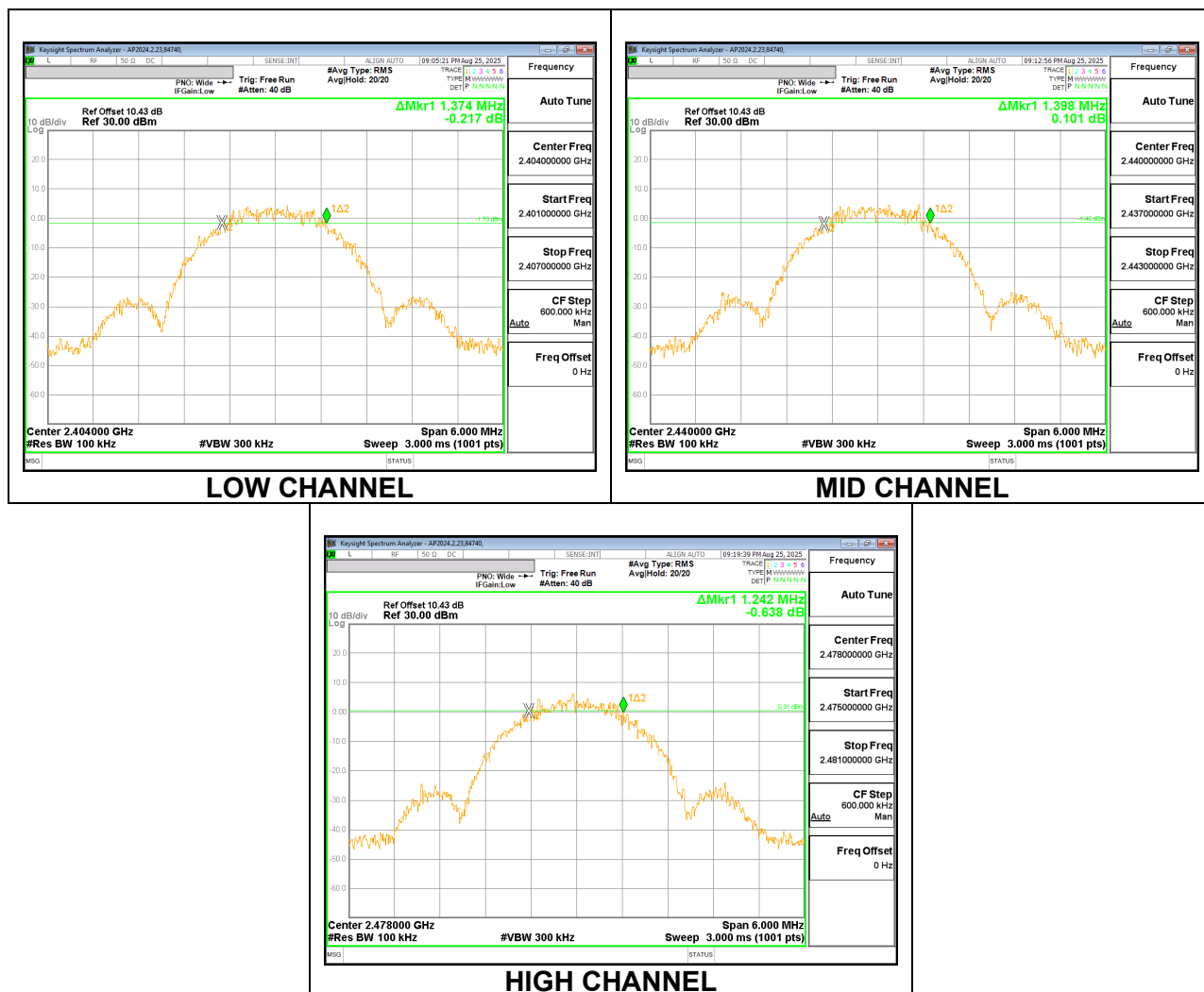
9.3.1. BLE (1Mbps)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2402	0.7380	0.5
Middle	2440	0.7620	0.5
High	2480	0.8040	0.5



9.3.2. BLE (2Mbps)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2404	1.3740	0.5
Middle	2440	1.3980	0.5
High	2478	1.2420	0.5



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 wideband power meter.

The cable assembly insertion loss of 10.43 dB (including 9.73 dB pad and 0.7 dB cable) was entered as an offset in the power meter.

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

RESULTS

9.4.1. BLE (1Mbps)

Tested By:	104463/85502
Date:	2025-08-25

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2402	7.590	30	-22.410
Middle	2440	7.810	30	-22.190
High	2480	8.040	30	-21.960

9.4.2. BLE (2Mbps)

Tested By:	104463/85502
Date:	2025-08-25

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2404	7.560	30	-22.440
Middle	2440	7.810	30	-22.190
High	2478	8.010	30	-21.990

9.5. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements were performed using a wideband power meter.

The cable assembly insertion loss of 10.43 dB (including 9.73 dB pad and 0.7 dB cable) was entered as an offset in the power meter.

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

RESULTS

9.5.1. BLE (1Mbps)

Tested By:	104463/85502
Date:	2025-08-25

Channel	Frequency (MHz)	AV power (dBm)
Low	2402	7.335
Middle	2440	7.585
High	2480	7.819

9.5.2. BLE (2Mbps)

Tested By:	104463/85502
Date:	2025-08-25

Channel	Frequency (MHz)	AV power (dBm)
Low	2404	7.345
Middle	2440	7.582
High	2478	7.801

9.6. POWER SPECTRAL DENSITY

LIMITS

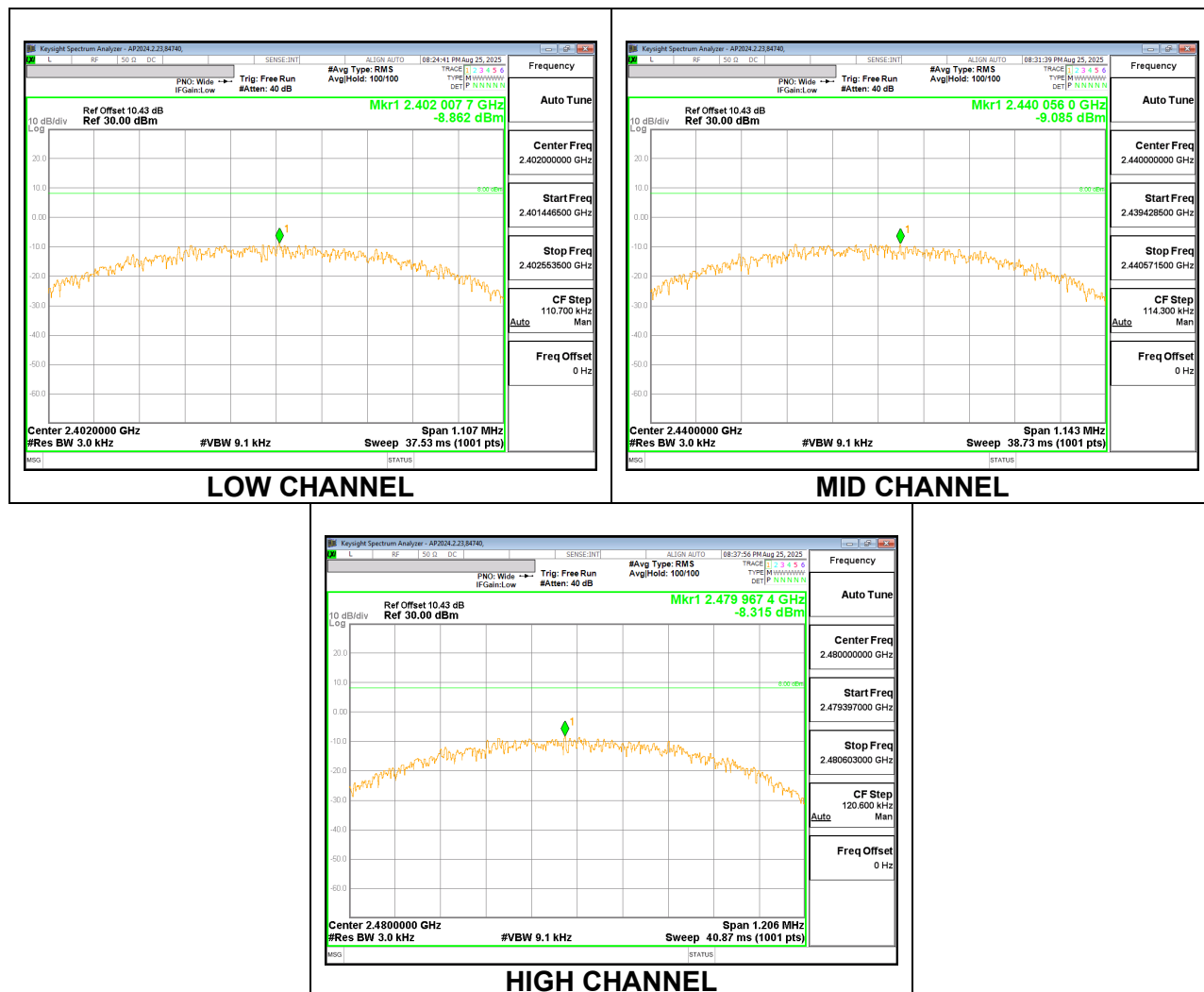
FCC §15.247 (e)
RSS-247 (5.2) (b)

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

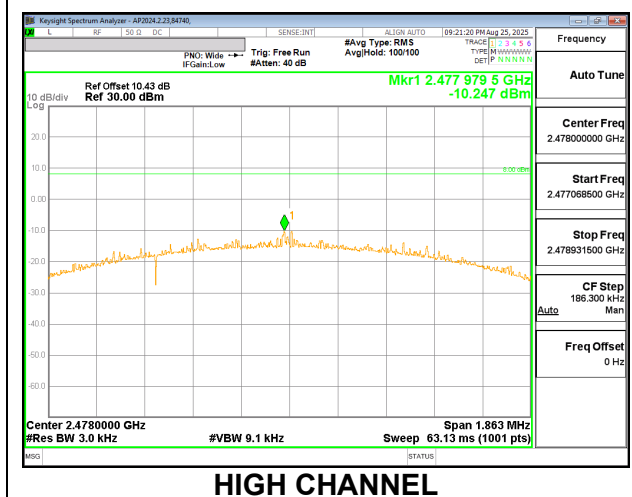
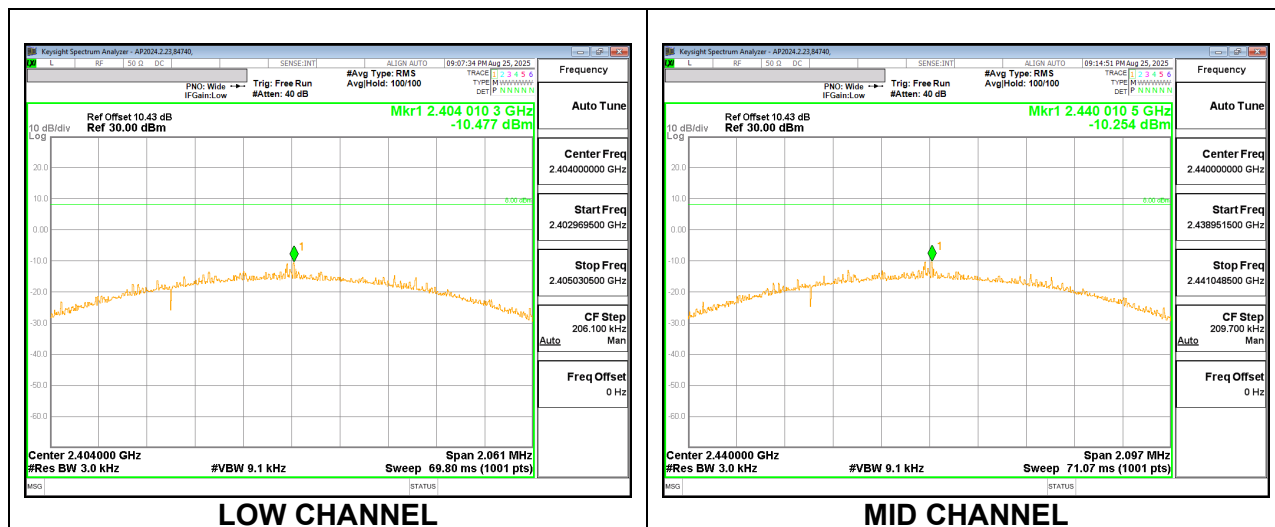
9.6.1. BLE (1Mbps)

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2402	-8.862	8	-16.862
Middle	2440	-9.085	8	-17.085
High	2480	-8.315	8	-16.315



9.6.2. BLE (2Mbps)

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2404	-10.477	8	-18.477
Middle	2440	-10.254	8	-18.254
High	2478	-10.247	8	-18.247



9.7. CONDUCTED SPURIOUS EMISSIONS

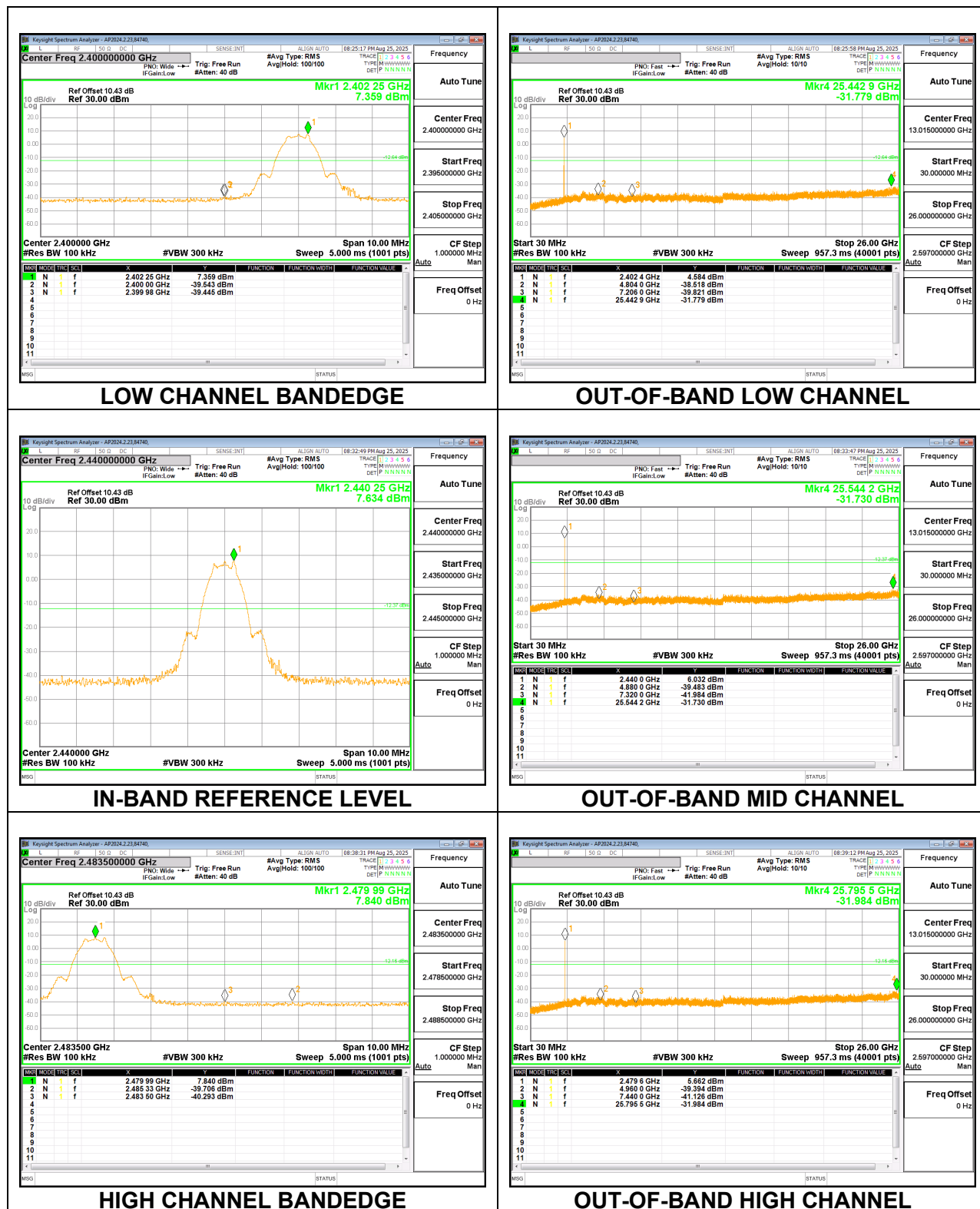
LIMITS

FCC §15.247 (d)
RSS-247 5.5

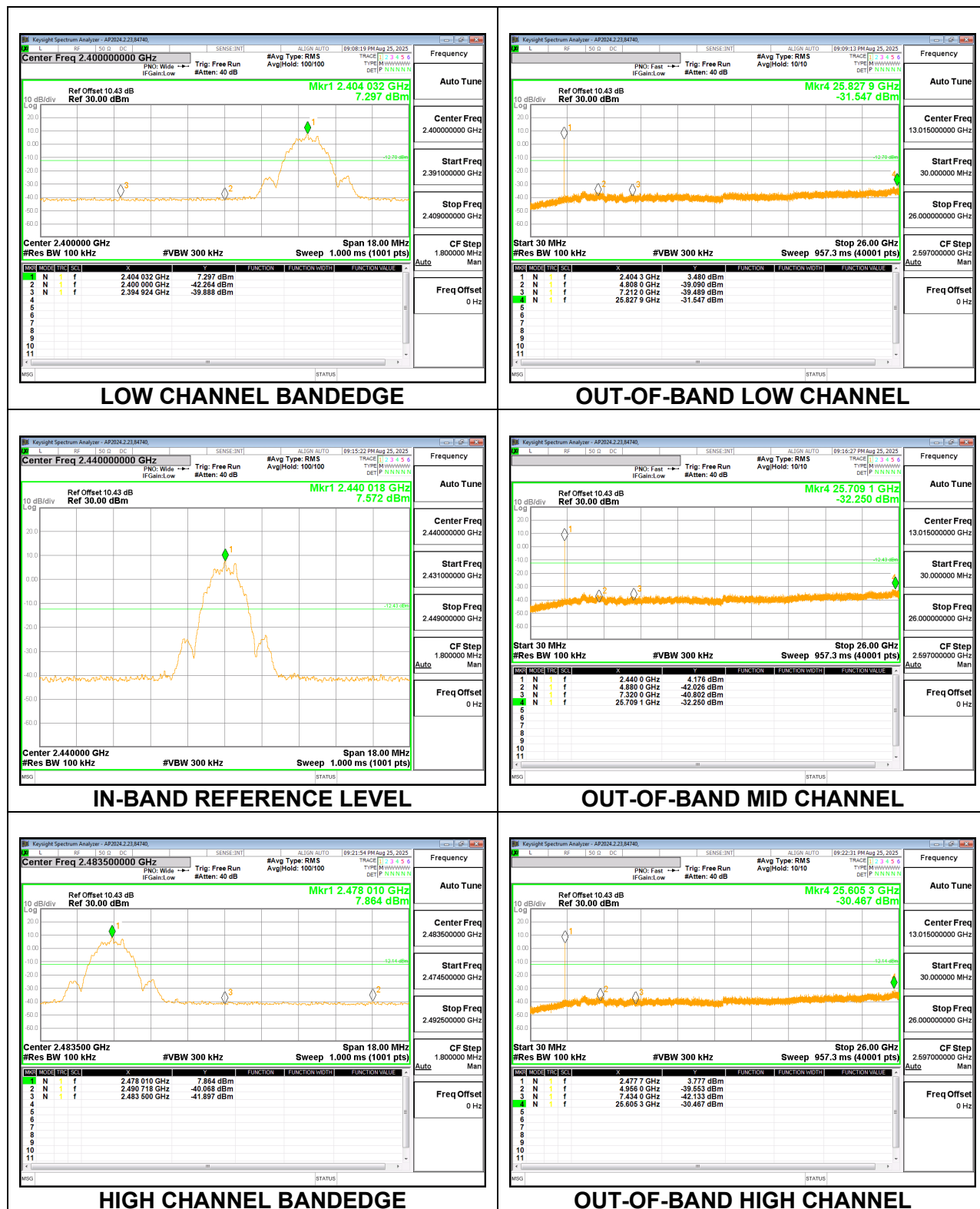
Output power was measured based on the use of a peak measurement; therefore, the required attenuation is -20 dBc.

RESULTS

9.7.1. BLE (1Mbps)



9.7.2. BLE (2Mbps)



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

RSS-GEN Section 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 30 KHz 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 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 output power 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.

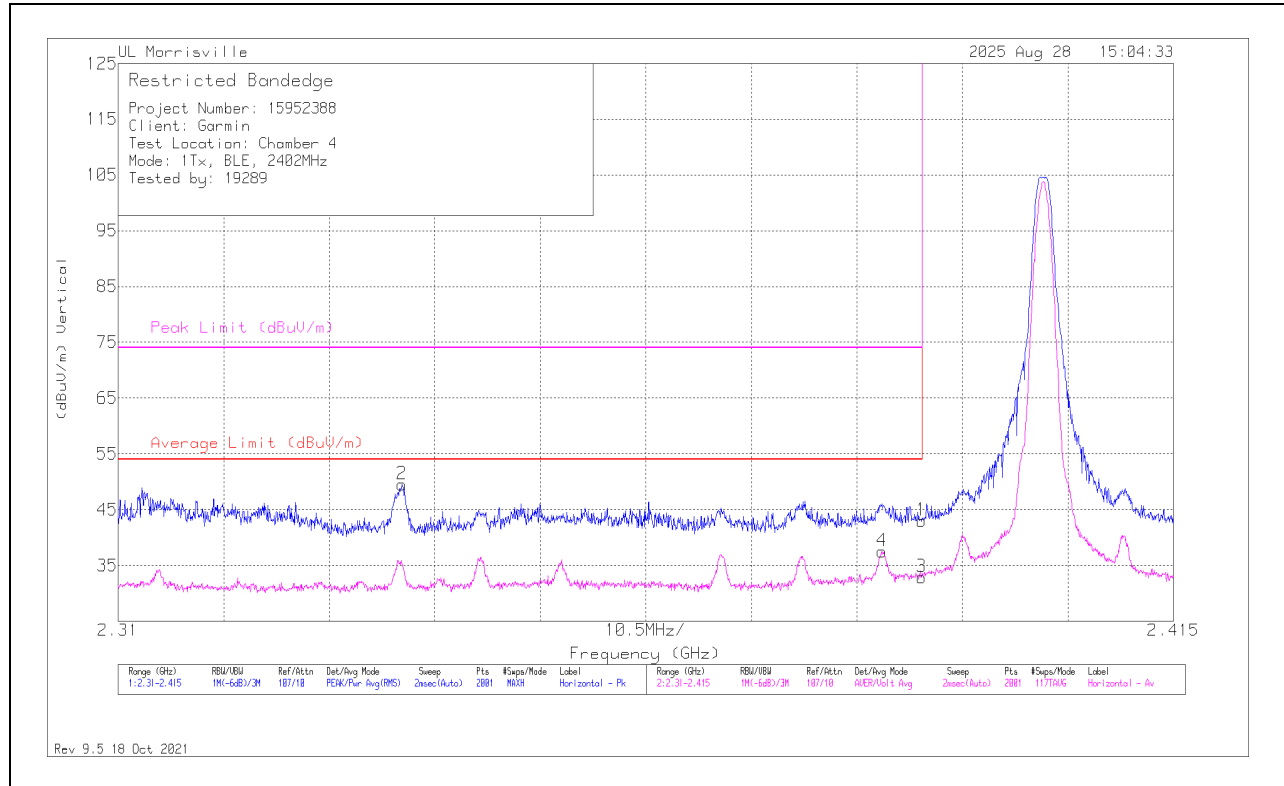
NOTE: The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table), using the free space impedance of 377 Ohms. For example the measurement at frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to $Y - 51.5 = Z$ dBuA/m, which has the same margin, W dB, to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.

10.2. TRANSMITTER ABOVE 1 GHz

10.2.1. BLE (1Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	DC Corr (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	33.97	Pk	32	-23	0	42.97	-	-	74	-31.03	3	101	H
2	* ** 2.33825	41.19	Pk	31.9	-23.6	0	49.49	-	-	74	-24.51	3	101	H
3	* ** 2.38996	22.56	ADV	32	-23	1.36	32.92	54	-21.08	-	-	3	100	H
4	* ** 2.38602	26.91	ADV	32	-22.8	1.36	37.47	54	-16.53	-	-	3	100	H

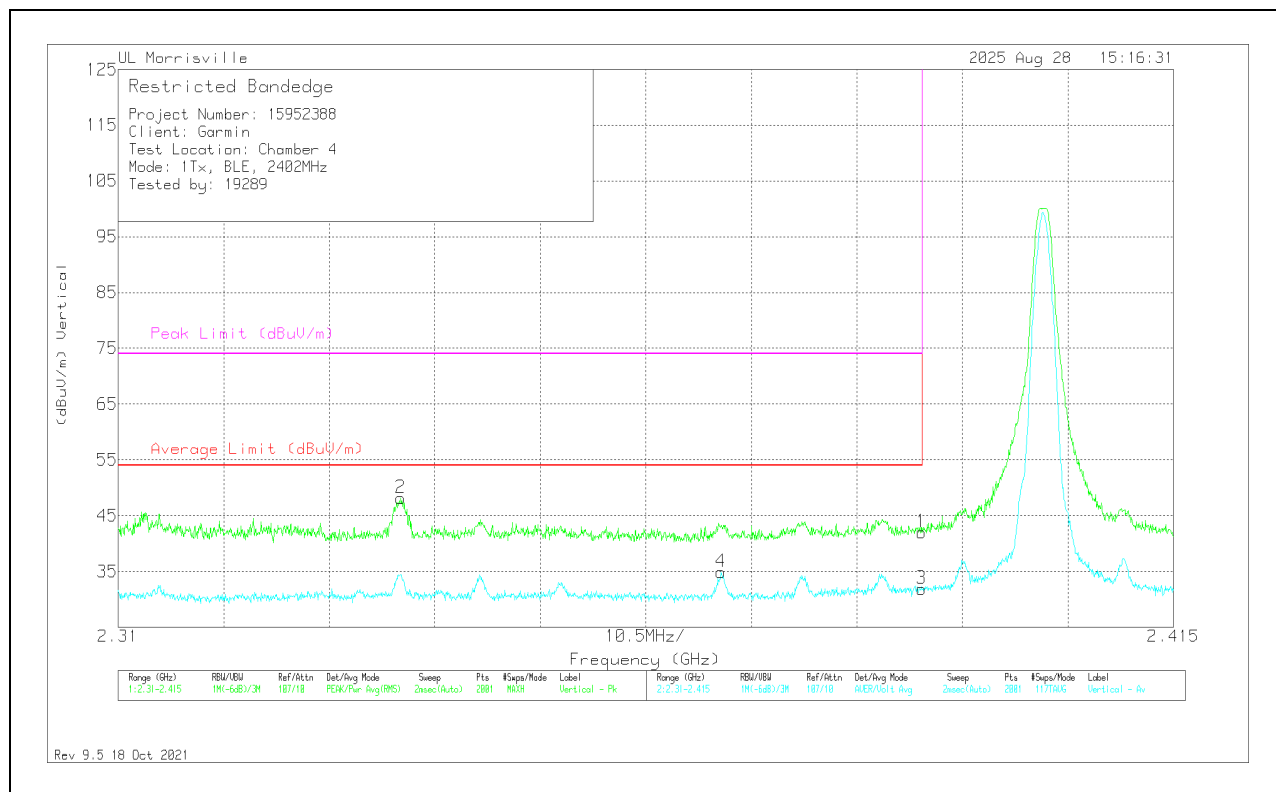
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - 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)	DC Corr (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	33.06	Pk	32	-23	0	42.06	-	-	74	-31.94	70	152	V
2	*** 2.33809	39.84	Pk	31.9	-23.6	0	48.14	-	-	74	-25.86	70	152	V
3	*** 2.38996	21.55	ADV	32	-23	1.36	31.91	54	-22.09	-	-	70	152	V
4	*** 2.36996	25.38	ADV	31.9	-23.8	1.36	34.84	54	-19.16	-	-	70	152	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

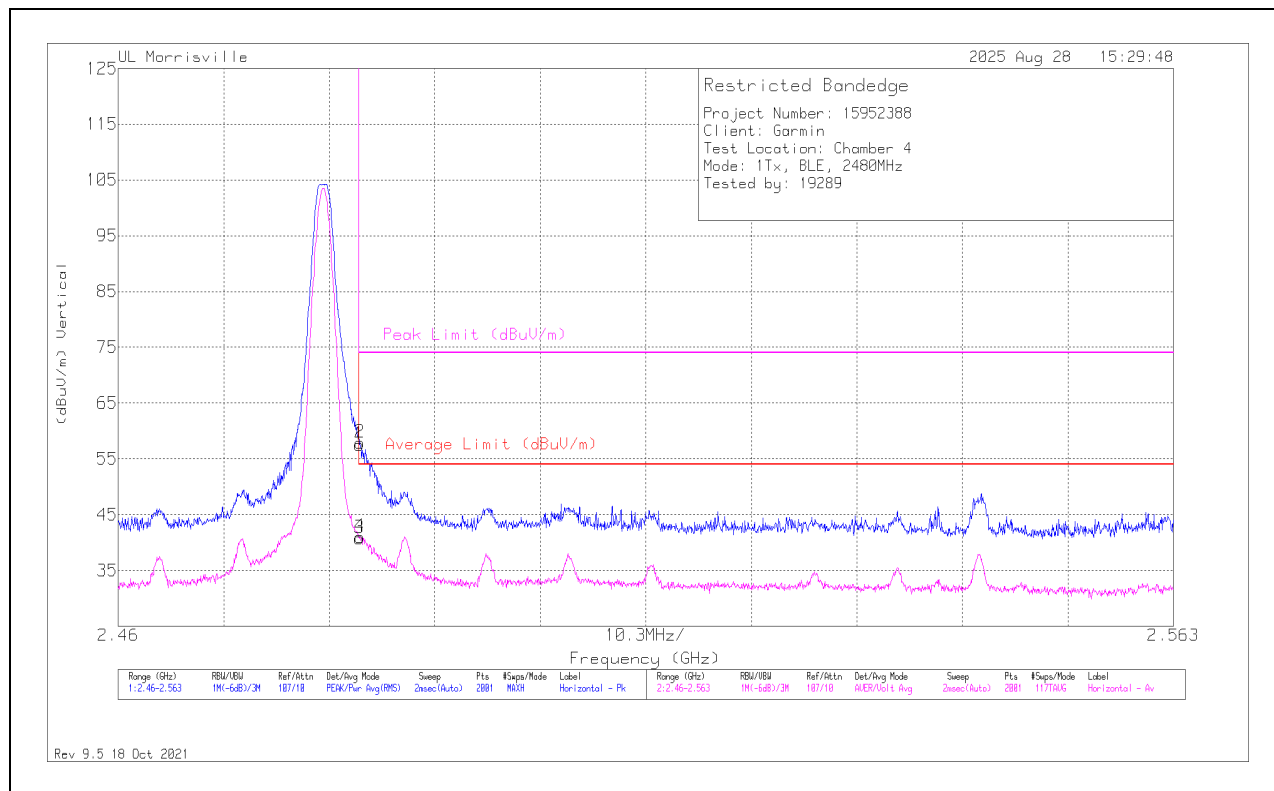
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	DC Corr (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	48.48	Pk	32.3	-23.2	0	57.58	-	-	74	-16.42	5	120	H
2	*** 2.48359	48.85	Pk	32.3	-23.2	0	57.95	-	-	74	-16.05	5	120	H
3	*** 2.48354	30.33	ADV	32.3	-23.2	1.36	40.79	54	-13.21	-	-	5	120	H
4	*** 2.48359	30.58	ADV	32.3	-23.2	1.36	41.04	54	-12.96	-	-	5	120	H

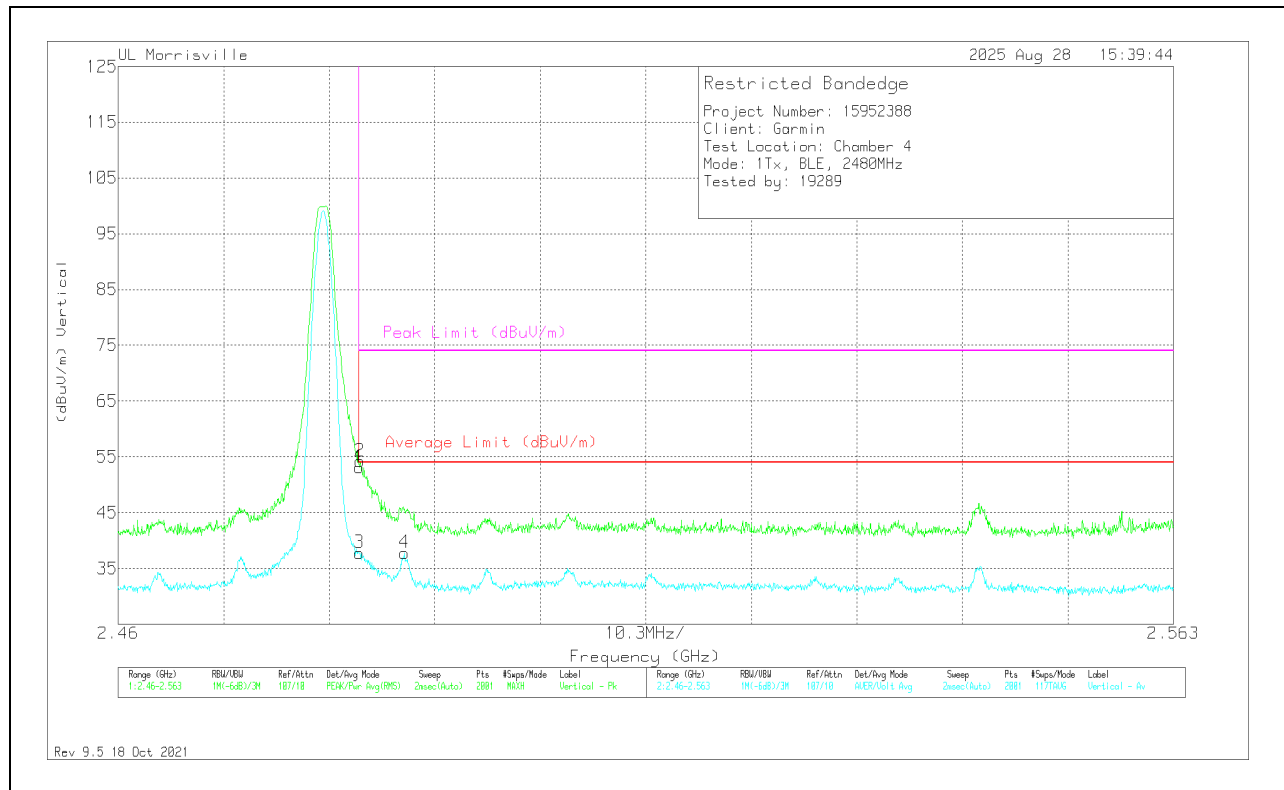
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - 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)	DC Corr (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	43.99	Pk	32.3	-23.2	0	53.09	-	-	74	-20.91	68	142	V
2	* ** 2.48359	45.12	Pk	32.3	-23.2	0	54.22	-	-	74	-19.78	68	142	V
3	* ** 2.48354	27.34	ADV	32.3	-23.2	1.36	37.8	54	-16.2	-	-	68	142	V
4	* ** 2.48796	27.45	ADV	32.4	-23.5	1.36	37.71	54	-16.29	-	-	68	142	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

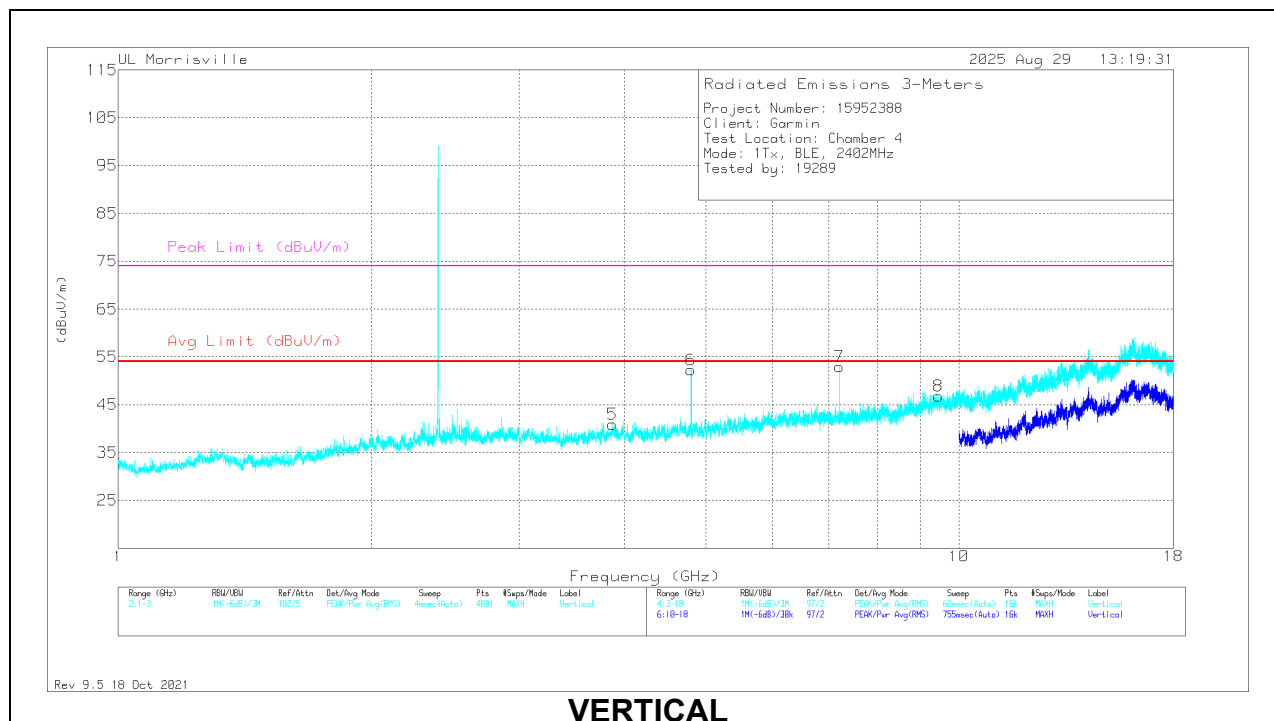
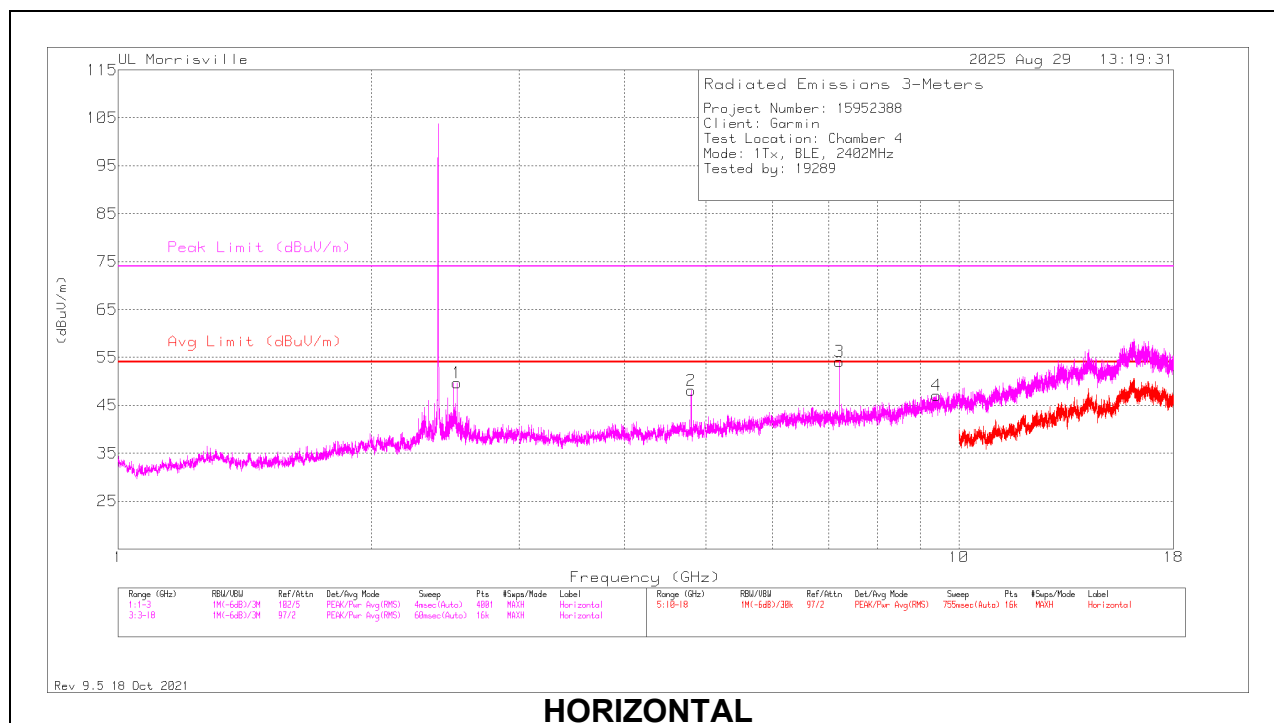
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	** 2.5302	42.25	PK2	32.4	-23.1	0	51.55	-	-	74	-22.45	17	113	H
	** 2.52999	27.16	ADV	32.4	-23.1	1.36	37.82	54	-16.18	-	-	17	113	H
2	*** 4.80344	49.08	PK2	33.9	-32.5	0	50.48	-	-	74	-23.52	28	101	H
	*** 4.804	41.63	ADV	33.9	-32.5	1.36	44.39	54	-9.61	-	-	28	101	H
4	*** 9.40406	34.68	Pk	36.5	-24.1	0	47.08	54	-6.92	74	-26.92	0-360	100	H
5	*** 3.87469	40.48	Pk	33.5	-33.1	0	40.88	54	-13.12	74	-33.12	0-360	200	V
6	*** 4.80446	52.43	PK2	33.9	-32.5	0	53.83	-	-	74	-20.17	250	143	V
	*** 4.80417	46.22	ADV	33.9	-32.5	1.36	48.98	54	-5.02	-	-	250	143	V
8	*** 9.4575	35.07	Pk	36.5	-24.8	0	46.77	54	-7.23	74	-27.23	0-360	200	V
3	7.20563	47.06	Pk	35.5	-28.4	0	54.16	-	-	-	-	0-360	100	H
7	7.20656	45.89	Pk	35.5	-28.4	0	52.99	-	-	-	-	0-360	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

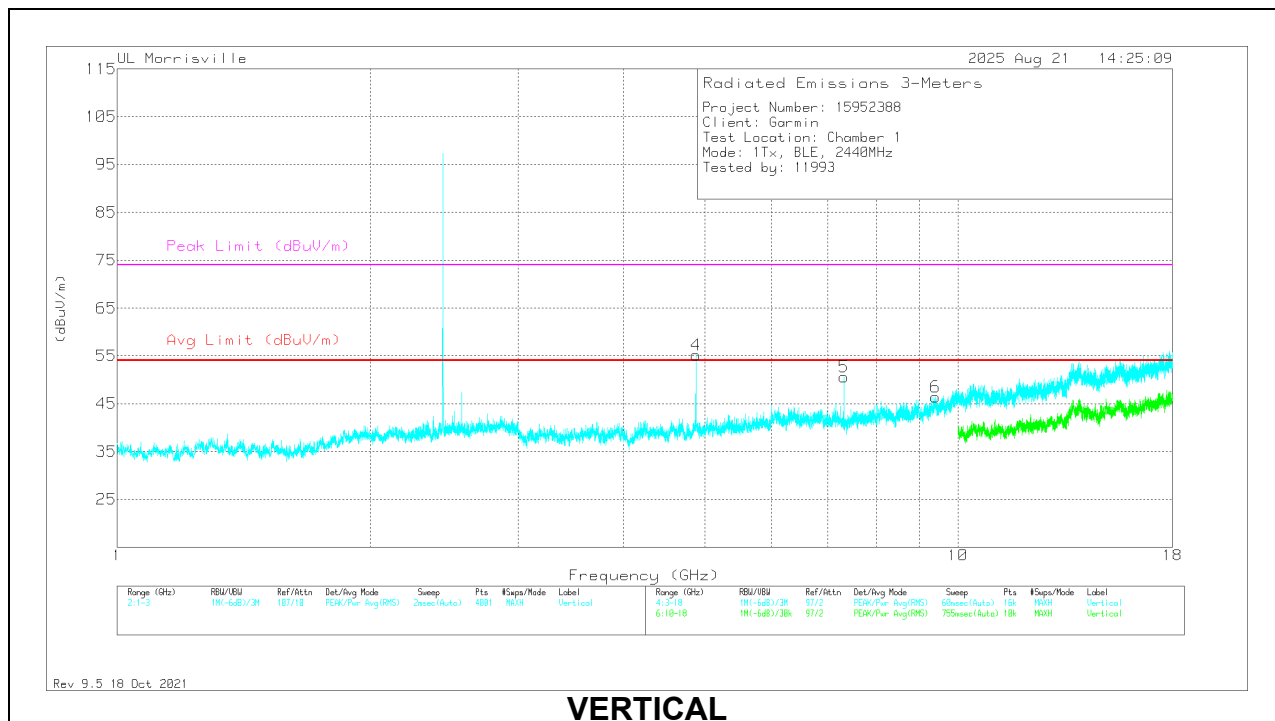
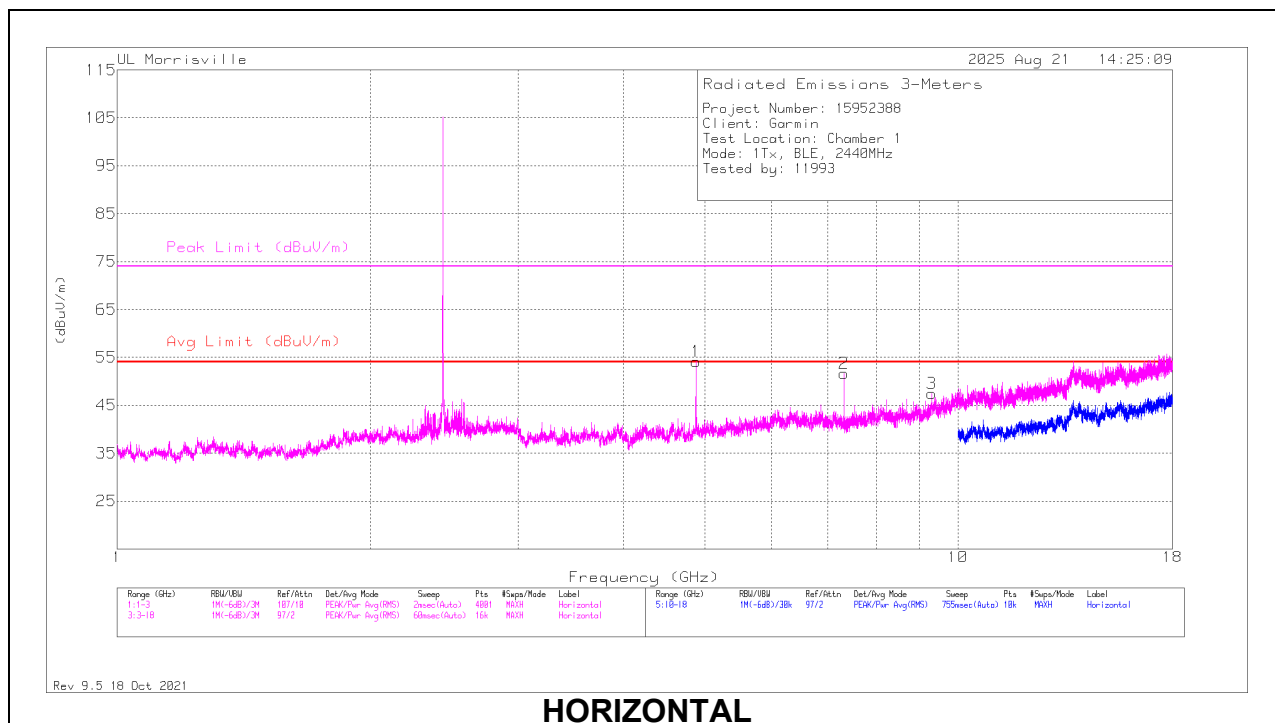
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

PK2 - Maximum Peak

ADV - Linear Voltage Average

MID CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	135143 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 4.87941	66.94	PK2	34	-45.4	0	55.54	-	-	74	-18.46	279	104	H
	*** 4.88005	60.86	ADV	34	-45.4	1.36	50.82	54	-3.18	-	-	279	104	H
2	*** 7.32073	61.6	PK2	35.4	-43.3	0	53.7	-	-	74	-20.3	127	188	H
	*** 7.31946	54.02	ADV	35.4	-43.2	1.36	47.58	54	-6.42	-	-	127	188	H
3	*** 9.31031	51.43	Pk	36.1	-40.1	0	47.43	54	-6.57	74	-26.57	0-360	200	H
4	*** 4.88046	67.64	PK2	34	-45.4	0	56.24	-	-	74	-17.76	184	197	V
	*** 4.88023	61.61	ADV	34	-45.4	1.36	51.57	54	-2.43	-	-	184	197	V
5	*** 7.31929	60.71	PK2	35.4	-43.2	0	52.91	-	-	74	-21.09	309	200	V
	*** 7.31919	52.32	ADV	35.4	-43.2	1.36	45.88	54	-8.12	-	-	309	200	V
6	*** 9.41156	50.82	Pk	36.3	-40.7	0	46.42	54	-7.58	74	-27.58	0-360	101	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

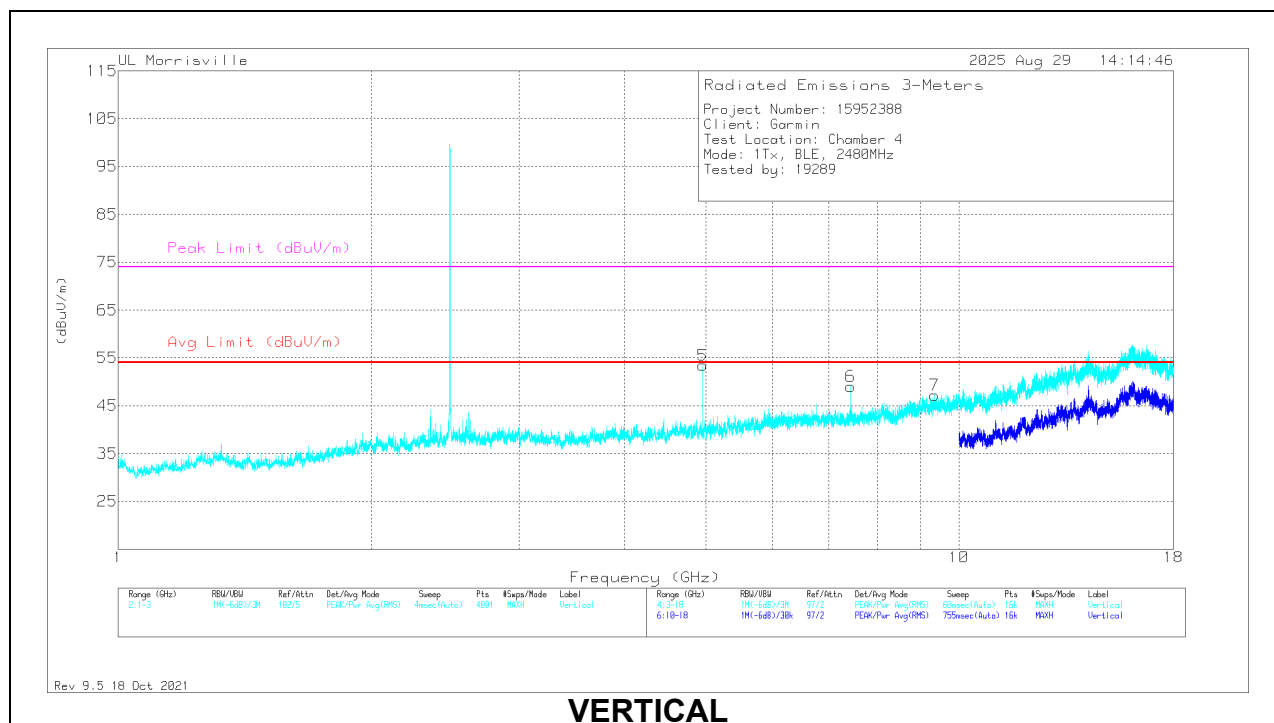
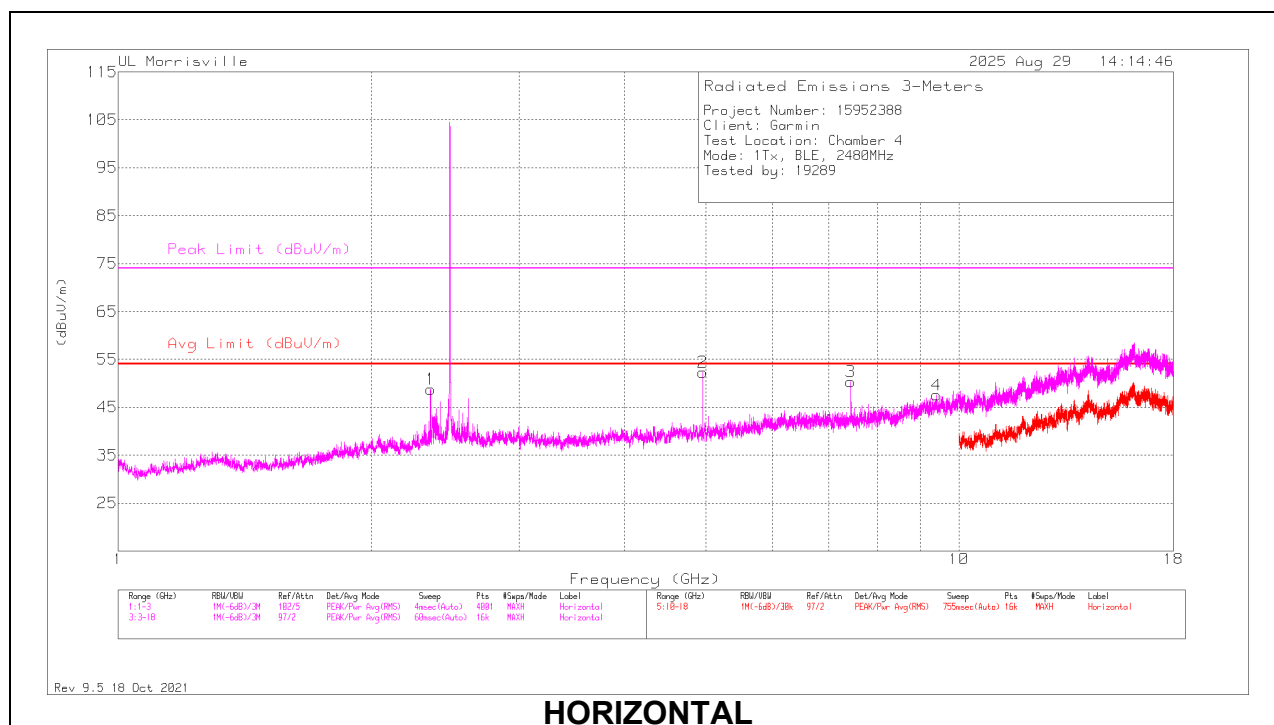
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

PK2 - Maximum Peak

ADV - Linear Voltage Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.35213	43.26	PK2	31.8	-23.4	0	51.66	-	-	74	-22.34	3	103	H
	*** 2.35195	27.15	ADV	31.8	-23.4	1.36	36.91	54	-17.09	-	-	3	103	H
2	*** 4.95953	52.39	PK2	33.8	-31.8	0	54.39	-	-	74	-19.61	336	120	H
	*** 4.95983	45.84	ADV	33.8	-31.8	1.36	49.2	54	-4.8	-	-	336	120	H
3	*** 7.4391	44.86	PK2	35.6	-28.1	0	52.36	-	-	74	-21.64	193	120	H
	*** 7.43931	36.23	ADV	35.6	-28.1	1.36	45.09	54	-8.91	-	-	193	120	H
4	*** 9.39938	35.03	Pk	36.5	-24	0	47.53	54	-6.48	74	-26.47	0-360	100	H
5	*** 4.95962	53.18	PK2	33.8	-31.8	0	55.18	-	-	74	-18.82	252	113	V
	*** 4.96033	46.95	ADV	33.8	-31.7	1.36	50.41	54	-3.59	-	-	252	113	V
6	*** 7.43924	44.04	PK2	35.6	-28.1	0	51.54	-	-	74	-22.46	224	190	V
	*** 7.44061	35.39	ADV	35.6	-28.2	1.36	44.15	54	-9.85	-	-	224	190	V
7	*** 9.35156	35.31	Pk	36.4	-24.5	0	47.21	54	-6.79	74	-26.79	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

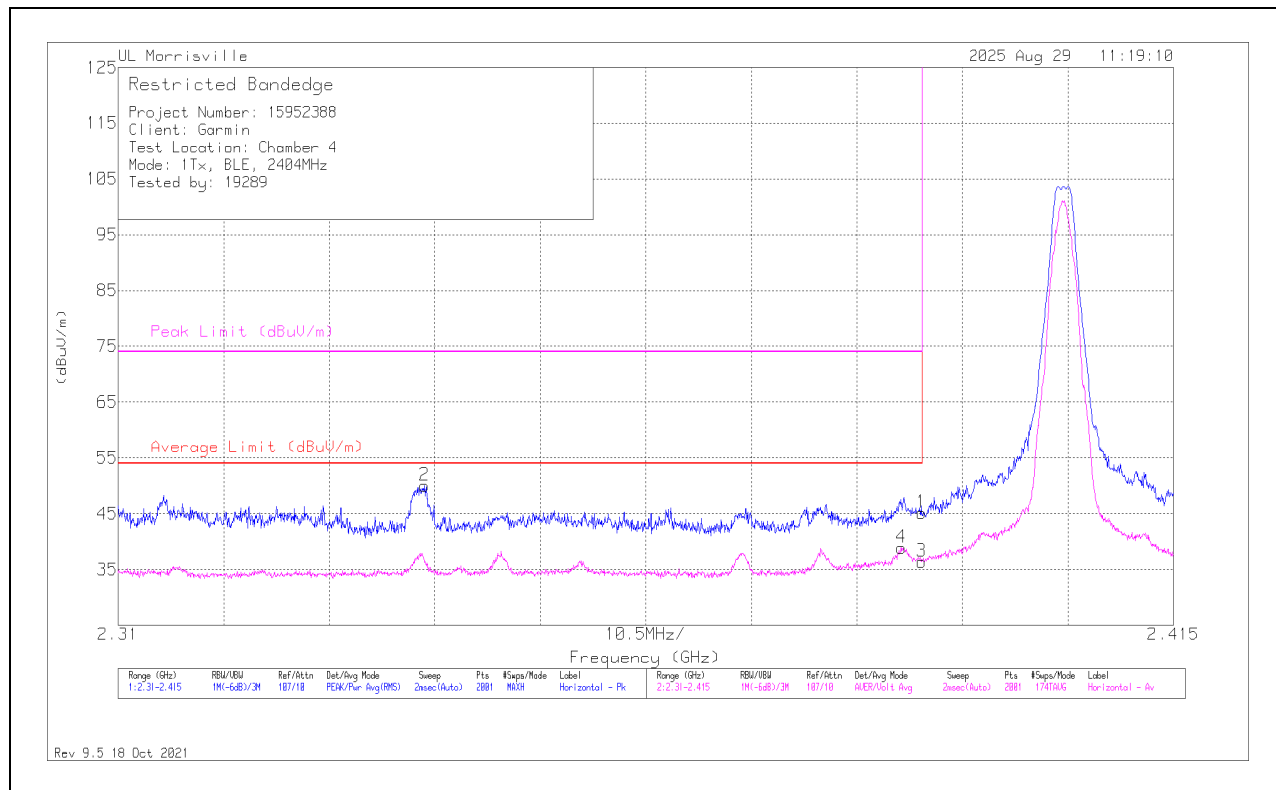
PK2 - Maximum Peak

ADV - Linear Voltage Average

10.2.2. BLE (2Mbps)

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	DC Corr (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	36.15	Pk	32	-23	0	45.15	-	-	74	-28.85	4	123	H
2	* ** 2.3405	41.6	Pk	31.9	-23.5	0	50	-	-	74	-24	4	123	H
3	* ** 2.38996	22.6	ADV	32	-23	4.79	36.39	54	-17.61	-	-	4	123	H
4	* ** 2.38791	25	ADV	32	-22.9	4.79	38.89	54	-15.11	-	-	4	123	H

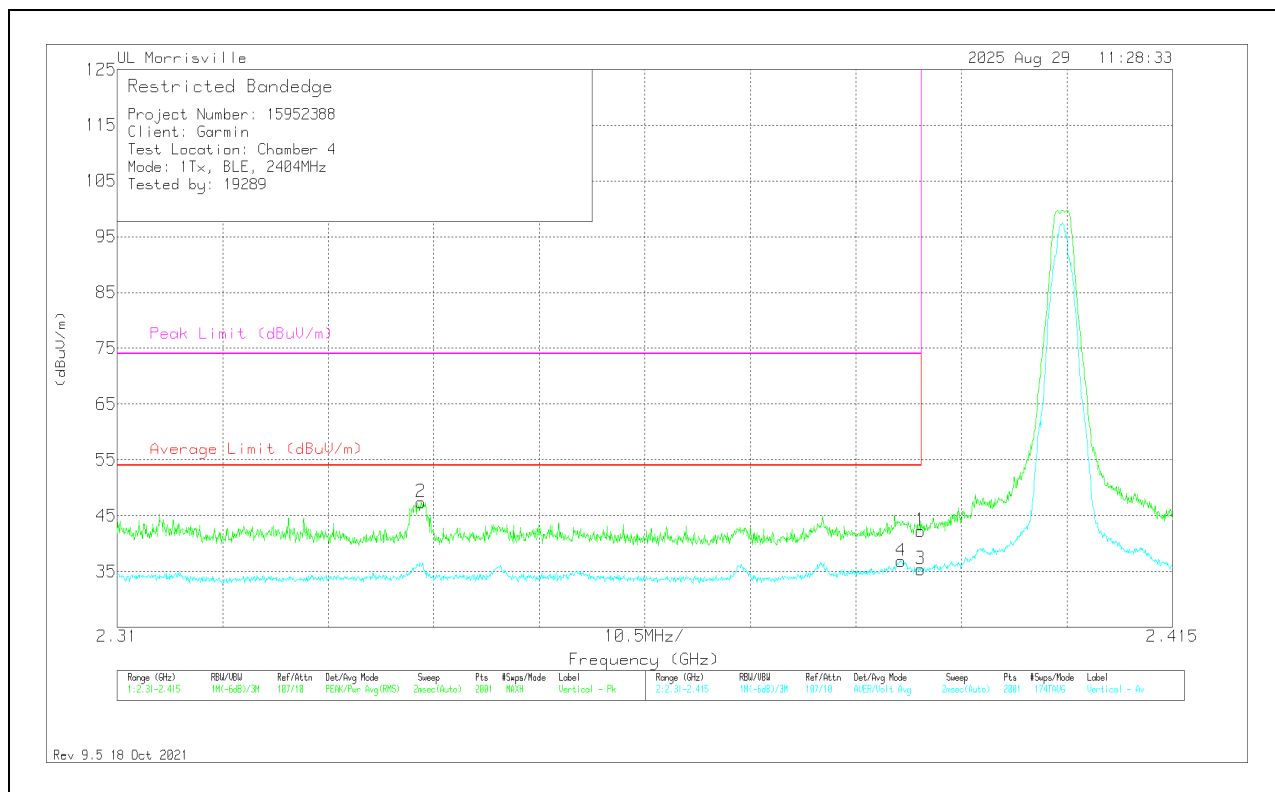
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - 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)	DC Corr (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	33.26	Pk	32	-23	0	42.26	-	-	74	-31.74	68	152	V
2	*** 2.34024	39.03	Pk	31.9	-23.5	0	47.43	-	-	74	-26.57	68	152	V
3	*** 2.38996	21.54	ADV	32	-23	4.79	35.33	54	-18.67	-	-	68	152	V
4	*** 2.38802	22.91	ADV	32	-22.9	4.79	36.8	54	-17.2	-	-	68	152	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

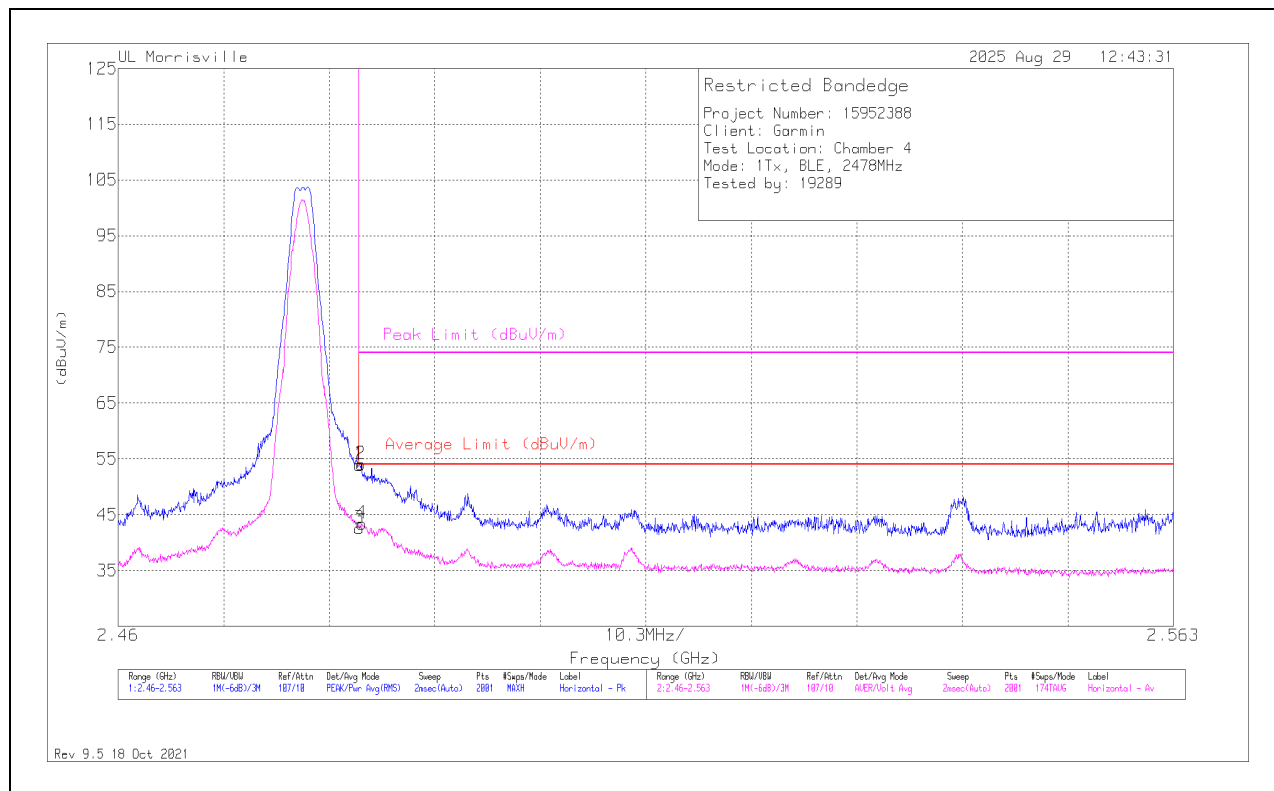
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

BANDEDGE (HIGH CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	DC Corr (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	44.84	Pk	32.3	-23.2	0	53.94	-	-	74	-20.06	6	100	H
2	*** 2.48369	44.94	Pk	32.3	-23.2	0	54.04	-	-	74	-19.96	6	100	H
3	*** 2.48354	28.65	ADV	32.3	-23.2	4.79	42.54	54	-11.46	-	-	6	100	H
4	*** 2.48379	29.46	ADV	32.3	-23.2	4.79	43.35	54	-10.65	-	-	6	100	H

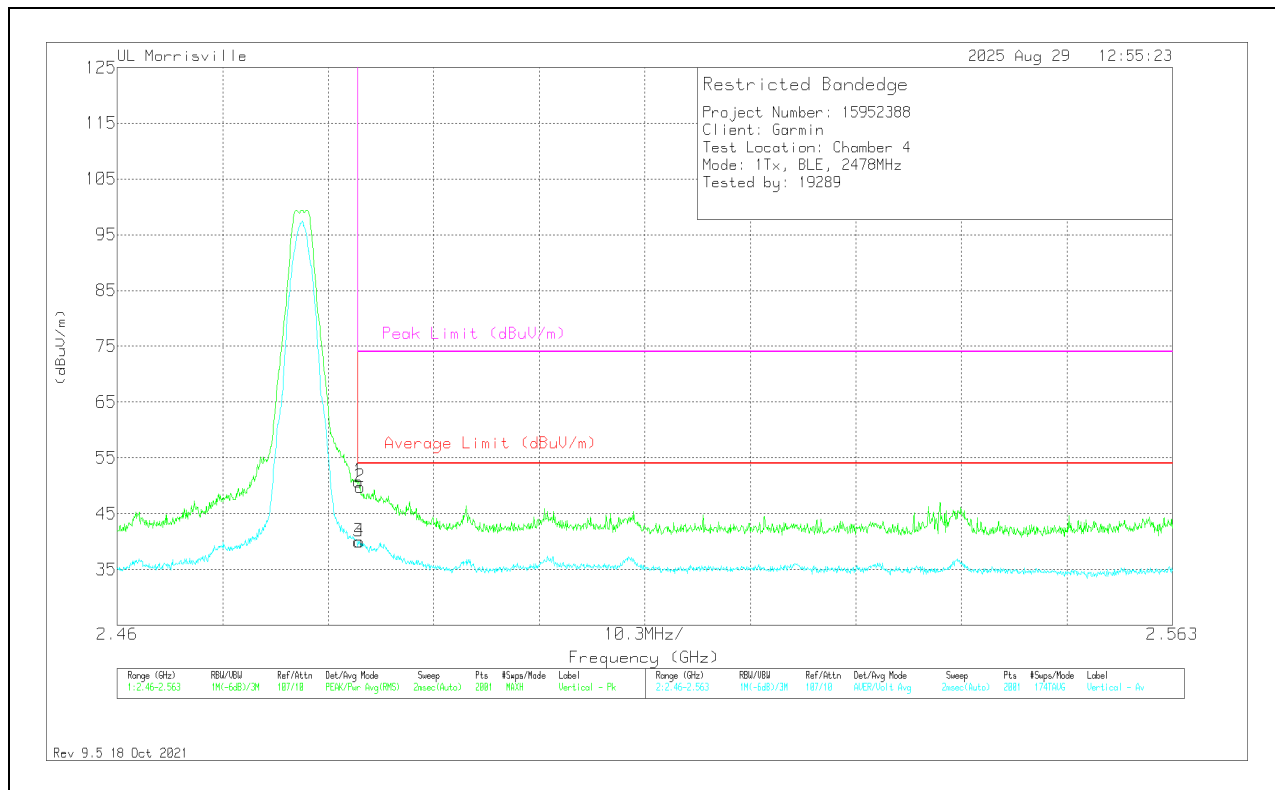
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - 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)	DC Corr (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	41.67	Pk	32.3	-23.2	0	50.77	-	-	74	-23.23	68	120	V
2	*** 2.48374	40.66	Pk	32.3	-23.2	0	49.76	-	-	74	-24.24	68	120	V
3	*** 2.48354	26.05	ADV	32.3	-23.2	4.79	39.94	54	-14.06	-	-	68	120	V
4	*** 2.48364	26.14	ADV	32.3	-23.2	4.79	40.03	54	-13.97	-	-	68	120	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

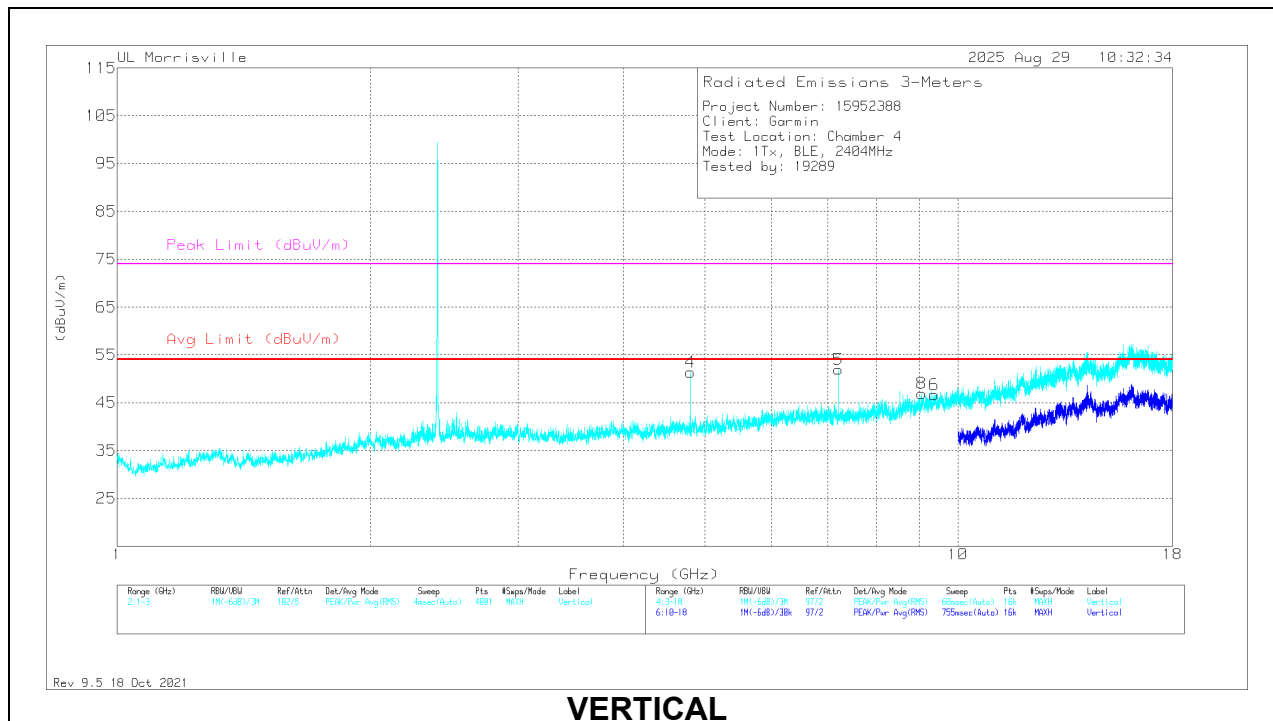
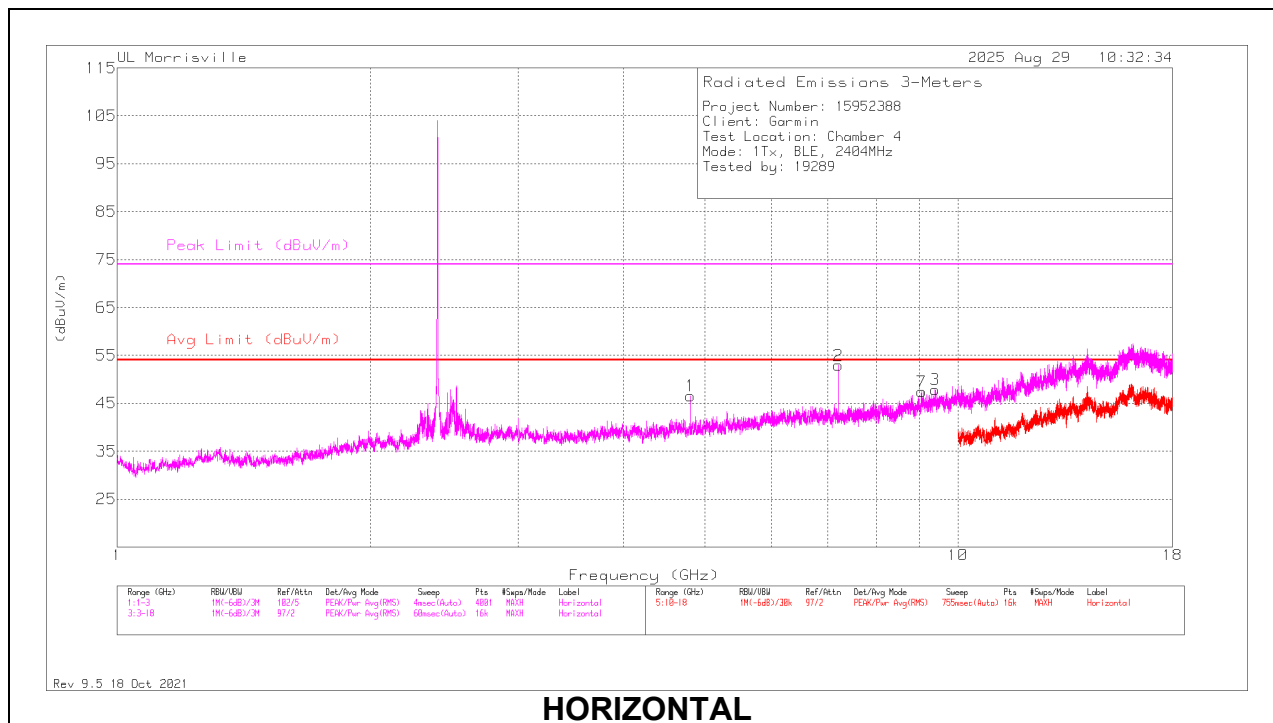
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 4.8075	45.39	Pk	33.9	-32.7	0	46.59	54	-7.41	74	-27.41	0-360	100	H
3	* ** 9.39844	35.34	Pk	36.5	-24	0	47.84	54	-6.16	74	-26.16	0-360	100	H
7	* ** 9.0525	35	Pk	36	-23.6	0	47.4	54	-6.6	74	-26.6	0-360	100	H
4	* ** 4.80905	53.38	PK2	33.9	-32.8	0	54.48	-	-	74	-19.52	250	133	V
	* ** 4.80885	40.6	ADV	33.9	-32.8	4.79	46.49	54	-7.51	-	-	250	133	V
6	* ** 9.37313	34.71	Pk	36.4	-24.4	0	46.71	54	-7.29	74	-27.29	0-360	200	V
8	* ** 9.05063	34.76	Pk	36	-23.8	0	46.96	54	-7.04	74	-27.04	0-360	200	V
5	7.21031	44.97	Pk	35.5	-28.5	0	51.97	-	-	-	-	0-360	200	V
2	7.21313	45.99	Pk	35.5	-28.6	0	52.89	-	-	-	-	0-360	100	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

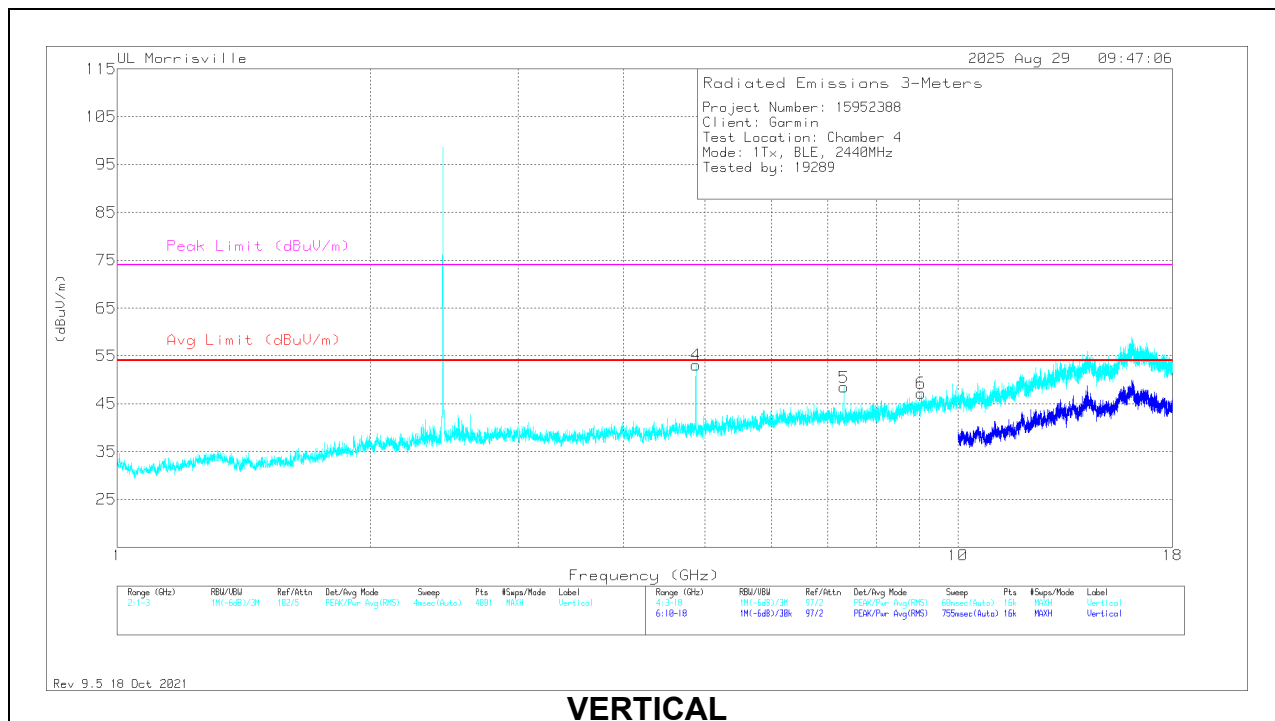
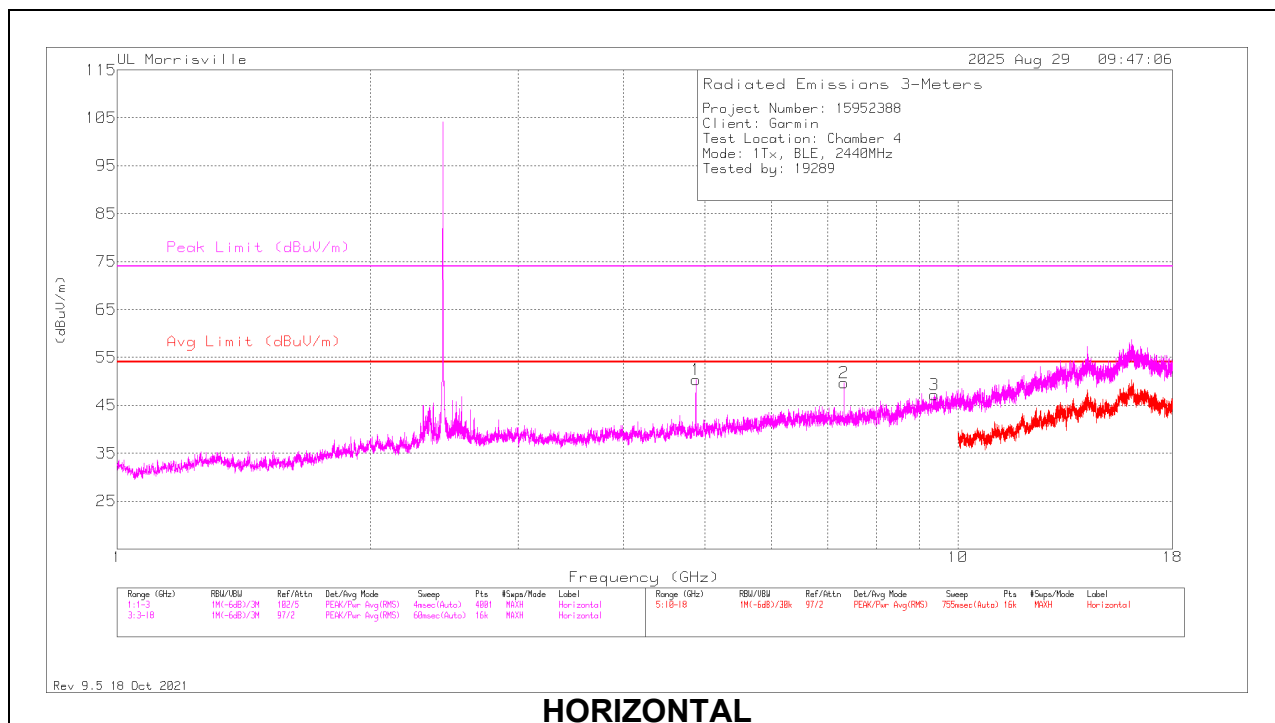
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

PK2 - Maximum Peak

ADV - Linear Voltage Average

MID CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 4.88094	50.67	PK2	33.9	-31.6	0	52.97	-	-	74	-21.03	336	106	H
	*** 4.88076	40.38	ADV	33.9	-31.6	4.79	47.47	54	-6.53	-	-	336	106	H
2	*** 7.31849	46.45	PK2	35.5	-28.4	0	53.55	-	-	74	-20.45	185	152	H
	*** 7.31869	35.52	ADV	35.5	-28.4	4.79	47.43	54	-6.59	-	-	185	152	H
3	*** 9.375	35	Pk	36.5	-24.3	0	47.2	54	-6.8	74	-26.8	0-360	100	H
4	*** 4.88101	53.55	PK2	33.9	-31.6	0	55.85	-	-	74	-18.15	250	143	V
	*** 4.87898	43.23	ADV	33.9	-31.4	4.79	50.52	54	-3.48	-	-	250	143	V
5	*** 7.32142	46.26	PK2	35.5	-28.5	0	53.26	-	-	74	-20.74	227	240	V
	*** 7.31879	36.19	ADV	35.5	-28.4	4.79	48.08	54	-5.92	-	-	227	240	V
6	*** 9.04781	35.27	Pk	36	-24.1	0	47.17	54	-6.83	74	-26.83	0-360	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

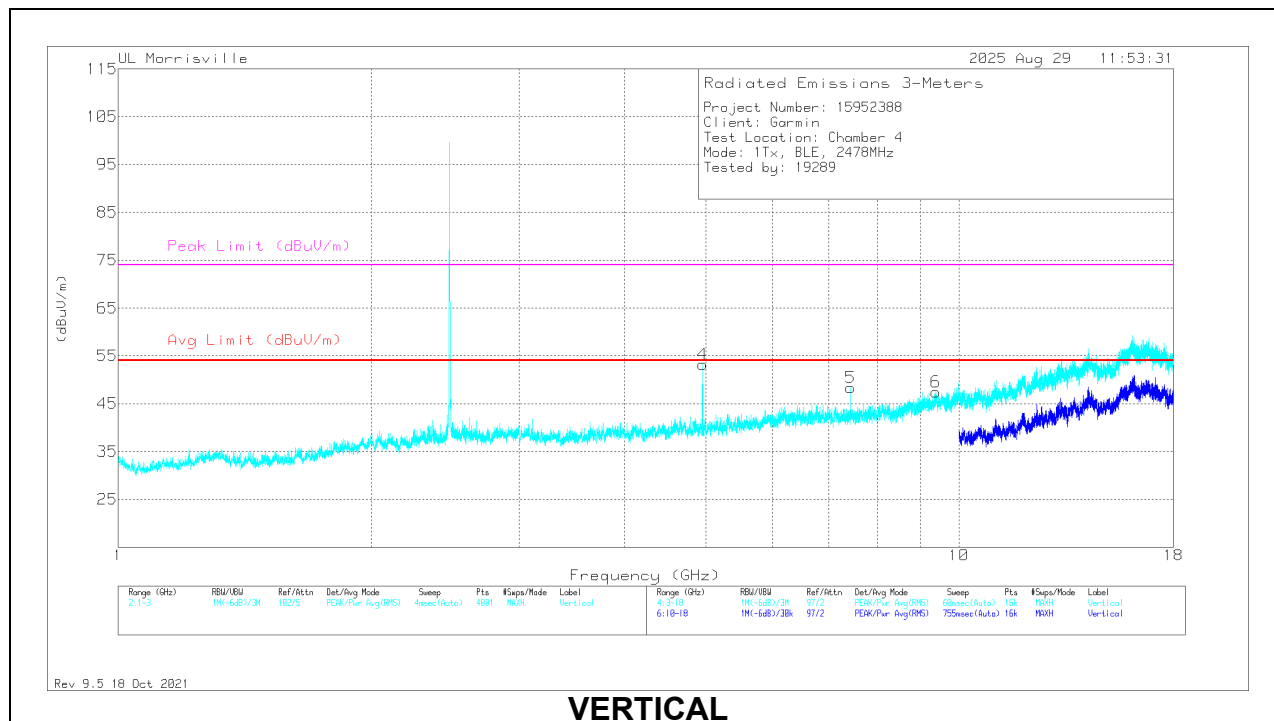
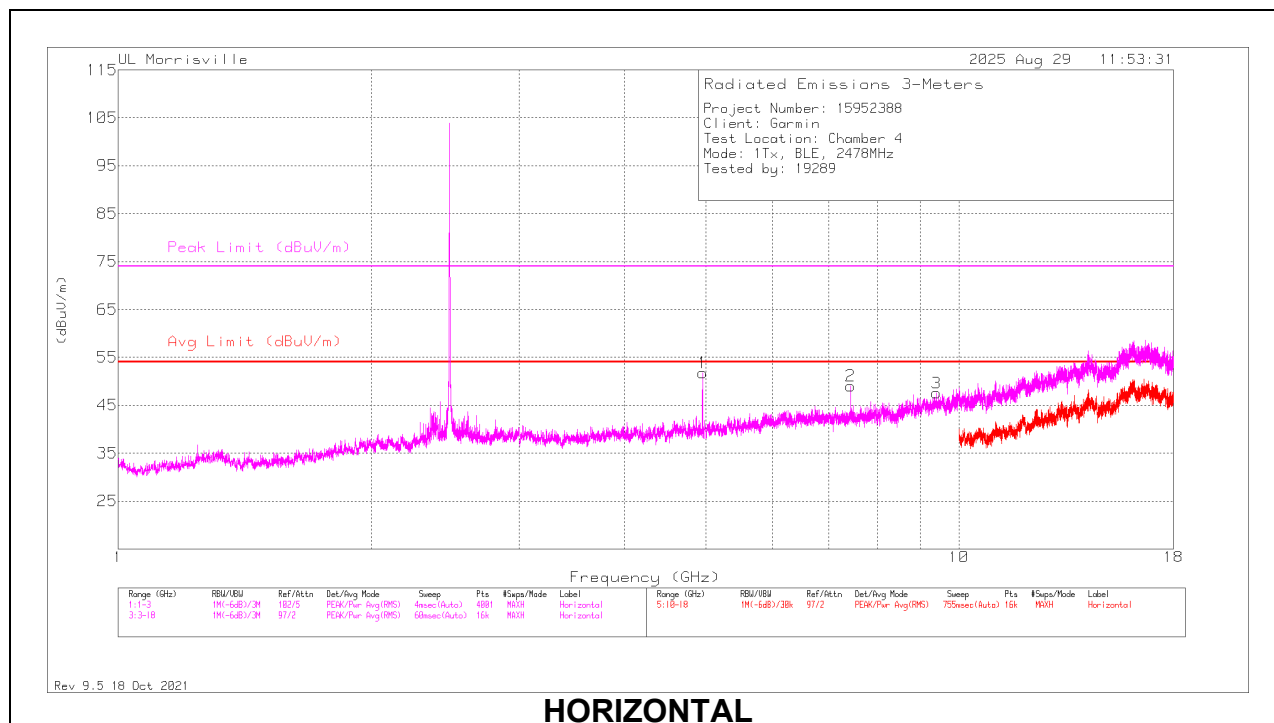
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

PK2 - Maximum Peak

ADV - Linear Voltage Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 4.95691	52.26	PK2	33.8	-31.9	0	54.16	-	-	74	-19.84	338	116	H
	* ** 4.95498	42.25	ADV	33.8	-32	4.79	48.84	54	-5.16	-	-	338	116	H
2	* ** 7.43259	45.18	PK2	35.6	-27.7	0	53.08	-	-	74	-20.92	103	209	H
	* ** 7.4353	32.69	ADV	35.6	-27.8	4.79	45.28	54	-8.72	-	-	103	209	H
3	* ** 9.40688	35.13	Pk	36.5	-24.1	0	47.53	54	-6.47	74	-26.47	0-360	100	H
4	* ** 4.955	52.78	PK2	33.8	-32	0	54.58	-	-	74	-19.42	244	133	V
	* ** 4.95517	43.16	ADV	33.8	-32	4.79	49.75	54	-4.25	-	-	244	133	V
5	* ** 7.43255	43.47	PK2	35.6	-27.7	0	51.37	-	-	74	-22.63	204	251	V
	* ** 7.43528	32.55	ADV	35.6	-27.8	4.79	45.14	54	-8.86	-	-	204	251	V
6	* ** 9.39656	35.01	Pk	36.5	-24	0	47.51	54	-6.49	74	-26.49	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

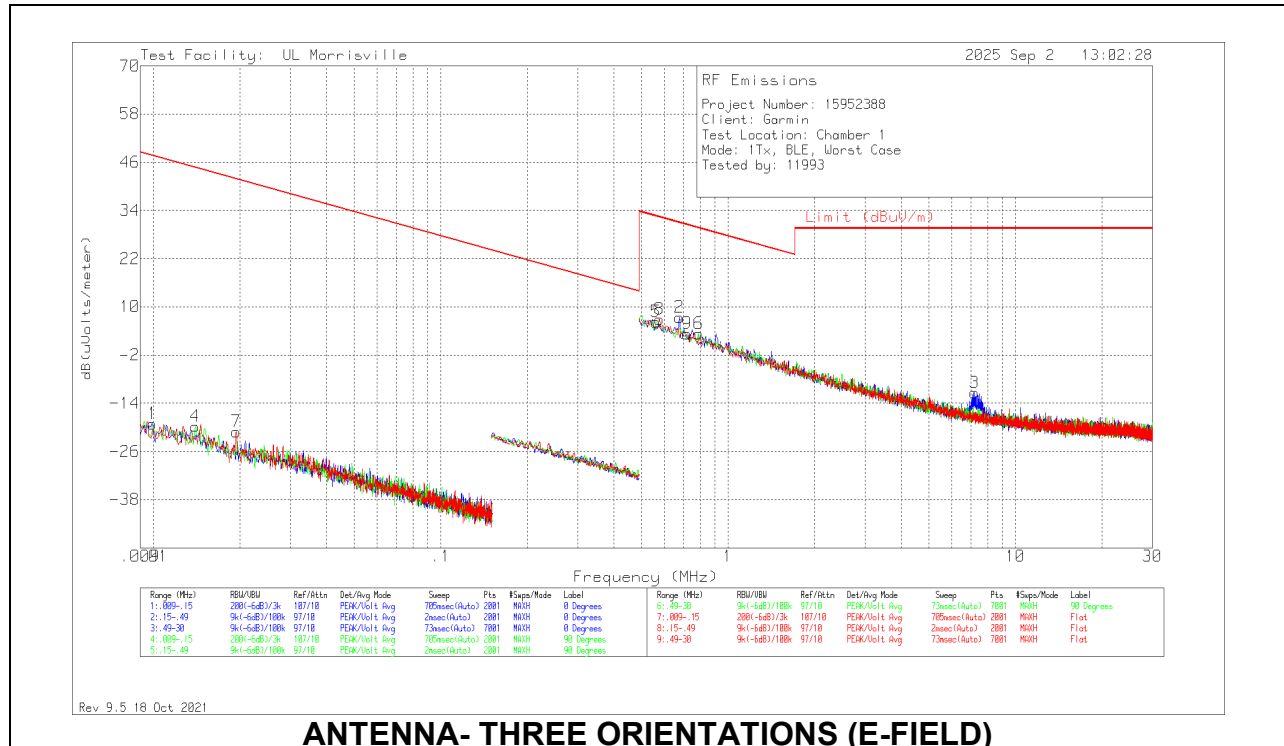
PK2 - Maximum Peak

ADV - Linear Voltage Average

10.3. WORST CASE BELOW 30MHZ

Note: All measurements were made at a test distance of 3 m. The measured data was extrapolated from the test distance (3m) to the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz – 30 MHz) to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were 40*Log (test distance / specification distance).

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)



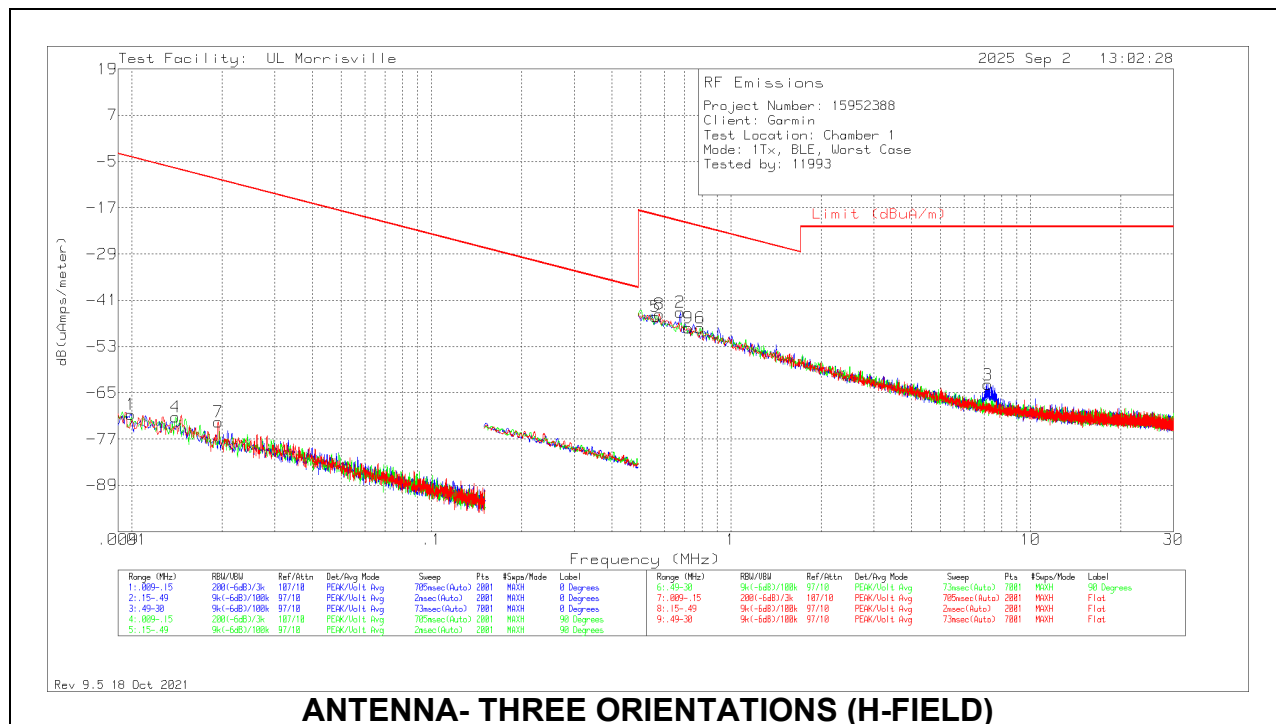
ANTENNA- THREE ORIENTATIONS (E-FIELD)

Below 30MHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	ANT (dB/m)	Gain/Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uVolts/meter)	QP/AV Limit (dBuV/m)	PK Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Loop Angle
1	.00992	41.78	Pk	19	.1	-80	-19.12	47.67	67.67	-66.79	0-360	0 degs
4	.01397	43.18	Pk	17	.1	-80	-19.72	44.7	64.7	-64.42	0-360	90 degs
7	.01944	44.63	Pk	14.2	.1	-80	-21.07	41.83	61.83	-62.9	0-360	Flat
5	.56167	35.13	Pk	11	.1	-40	6.23	32.61	-	-26.38	0-360	90 degs
8	.57854	35.81	Pk	11	.1	-40	6.91	32.36	-	-25.45	0-360	Flat
2	.6755	36.29	Pk	11	.1	-40	7.39	31.01	-	-23.62	0-360	0 degs
9	.72188	32.17	Pk	11	.1	-40	3.27	30.43	-	-27.16	0-360	Flat
6	.78934	32.25	Pk	11	.1	-40	3.35	29.66	-	-26.31	0-360	90 degs
3	7.21452	17.5	Pk	10.7	.4	-40	-11.4	29.54	-	-40.94	0-360	0 degs

Pk - Peak detector

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)



ANTENNA- THREE ORIENTATIONS (H-FIELD)

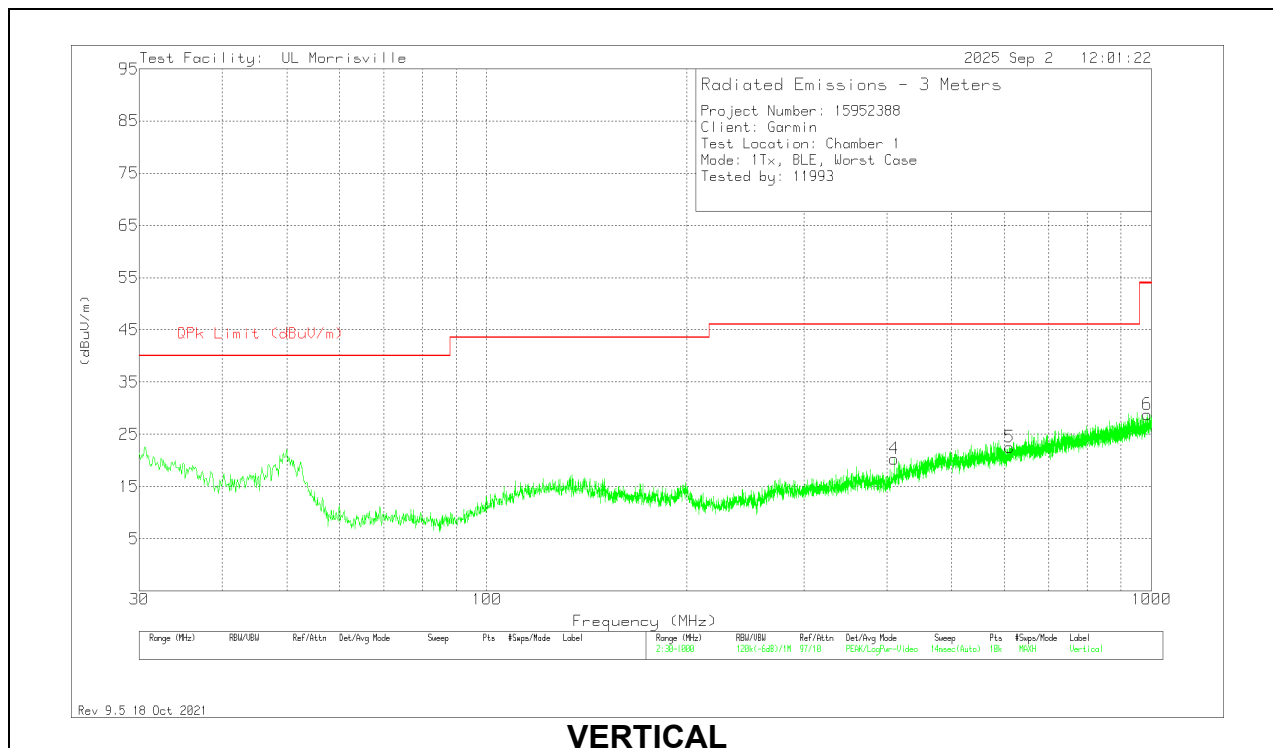
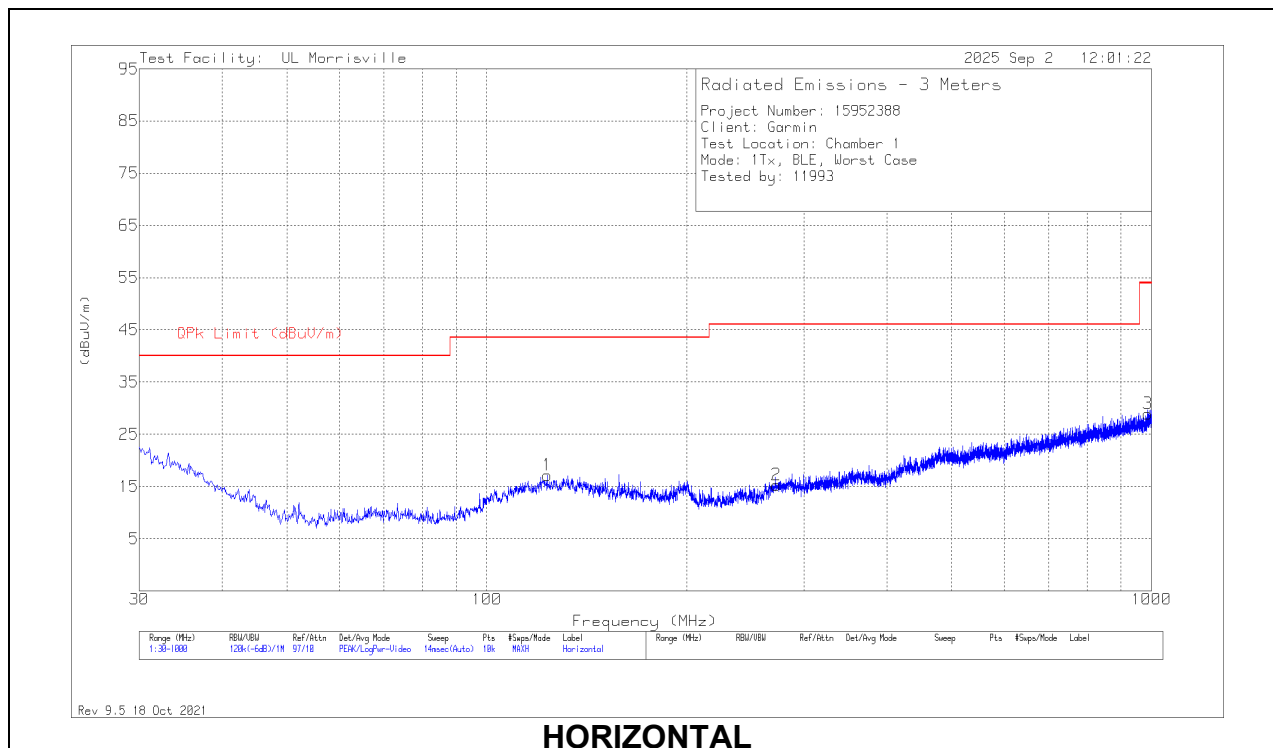
Below 30MHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	ANT (dB/m)	Gain/Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uAmps/meter)	QP/AV Limit (dBuA/m)	PK Limit (dBuA/m)	Margin (dB)	Azimuth (Degs)	Loop Angle
1	.00992	41.78	Pk	-32.5	.1	-80	-70.62	-3.83	16.17	-66.79	0-360	0 degs
4	.01397	43.18	Pk	-34.5	.1	-80	-71.22	-6.8	13.2	-64.42	0-360	90 degs
7	.01944	44.63	Pk	-37.3	.1	-80	-72.57	-9.67	10.33	-62.9	0-360	Flat
5	.56167	35.13	Pk	-40.5	.1	-40	-45.27	-18.89	-	-26.38	0-360	90 degs
8	.57854	35.81	Pk	-40.5	.1	-40	-44.59	-19.14	-	-25.45	0-360	Flat
2	.6755	36.29	Pk	-40.5	.1	-40	-44.11	-20.49	-	-23.62	0-360	0 degs
9	.72188	32.17	Pk	-40.5	.1	-40	-48.23	-21.07	-	-27.16	0-360	Flat
6	.78934	32.25	Pk	-40.5	.1	-40	-48.15	-21.84	-	-26.31	0-360	90 degs
3	7.21452	17.5	Pk	-40.8	.4	-40	-62.9	-21.96	-	-40.94	0-360	0 degs

Pk - Peak detector

10.4. WORST CASE BELOW 1 GHZ

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)



Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	90629 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 123.314	27.9	Pk	20.1	-30.9	17.1	43.52	-26.42	0-360	399	H
2	* ** 272.694	25.47	Pk	19.4	-29.6	15.27	46.02	-30.75	0-360	99	H
3	* ** 986.711	25.04	Pk	29.4	-25.5	28.94	53.97	-25.03	0-360	200	H
4	* ** 409.852	26.94	Pk	21.8	-28.5	20.24	46.02	-25.78	0-360	100	V
5	* ** 611.806	25.91	Pk	25.1	-28.5	22.51	46.02	-23.51	0-360	100	V
6	* ** 985.062	25.05	Pk	29.3	-25.6	28.75	53.97	-25.22	0-360	100	V

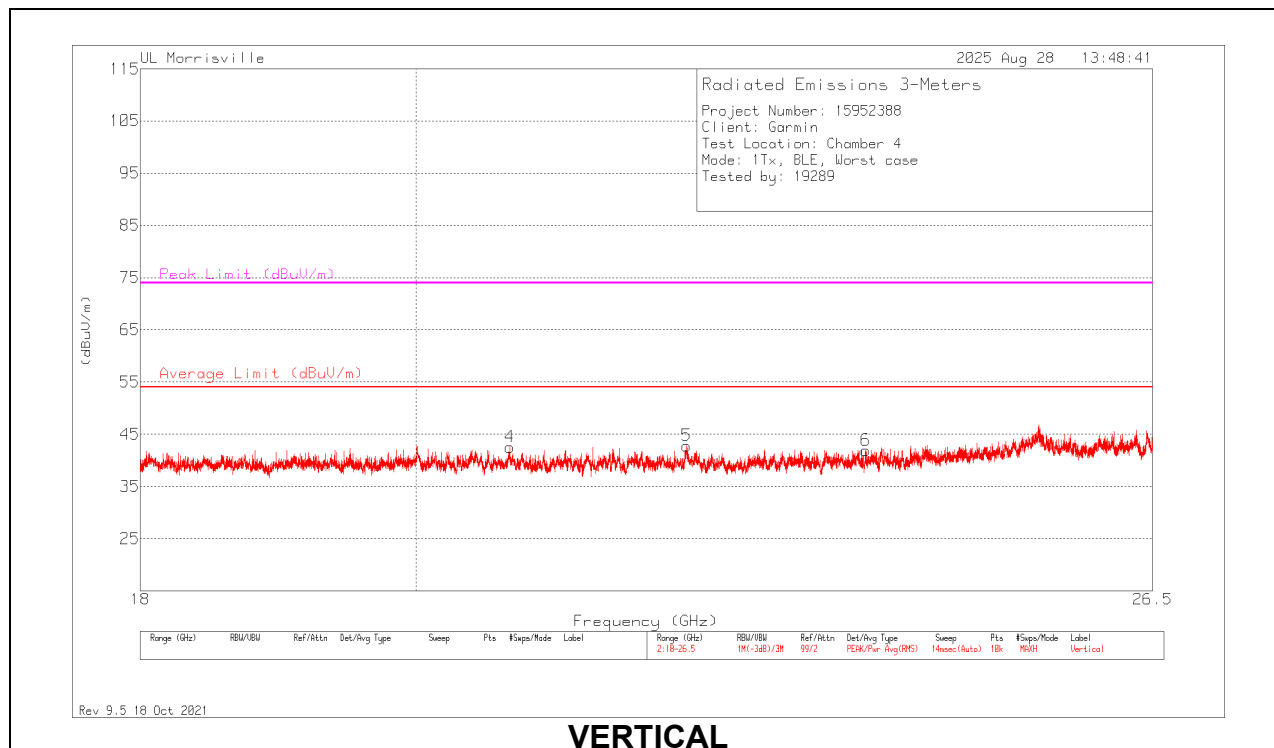
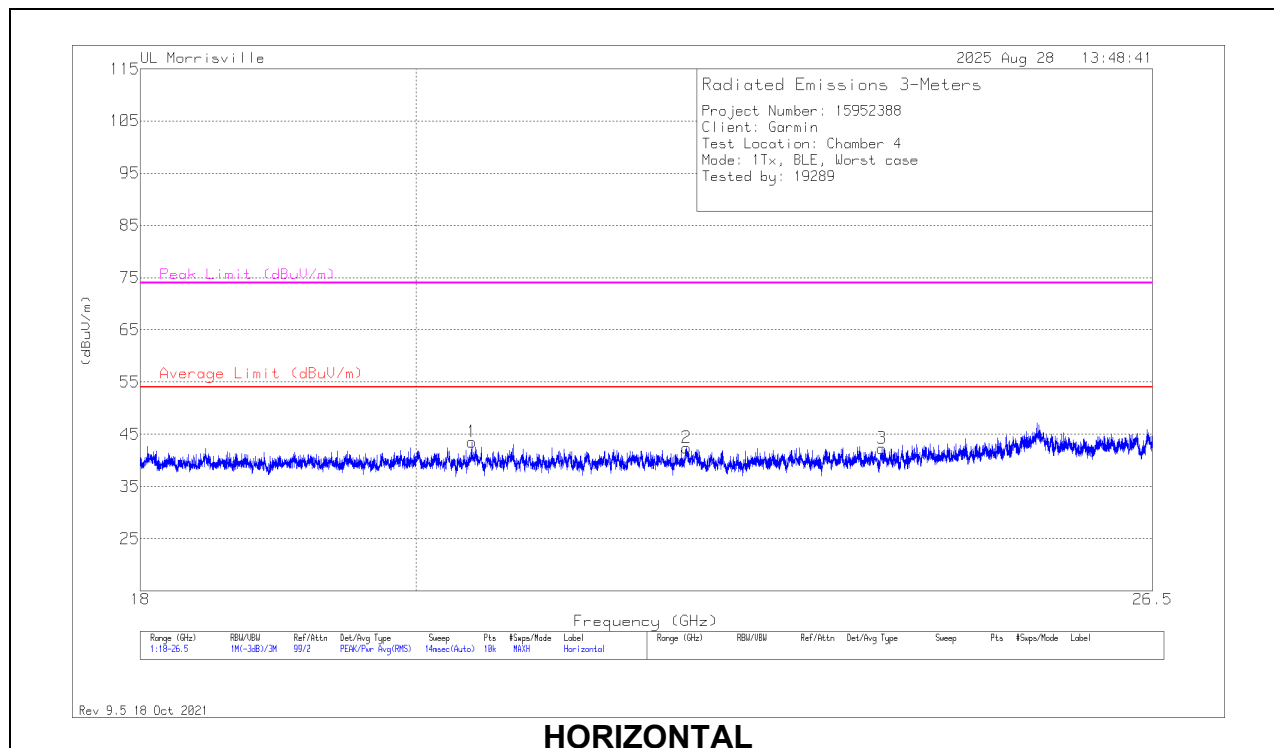
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

10.5. WORST CASE 18-26 GHZ

SPURIOUS EMISSIONS 18-26 GHz (WORST-CASE CONFIGURATION)



18 – 26GHz Data

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	91186 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 20.43039	49.62	Pk	32.8	-38.9	0	43.52	54	-10.48	74	-30.48	0-360	150	H
2	* ** 22.17732	46.89	Pk	33.4	-37.9	0	42.39	54	-11.61	74	-31.61	0-360	250	H
3	* ** 23.89874	45.9	Pk	33.7	-37.3	0	42.3	54	-11.7	74	-31.7	0-360	200	H
4	* ** 20.72792	48.71	Pk	32.7	-38.9	0	42.51	54	-11.49	74	-31.49	0-360	250	V
5	* ** 22.17902	47.08	Pk	33.4	-37.7	0	42.78	54	-11.22	74	-31.22	0-360	250	V
6	* ** 23.74742	45.9	Pk	33.9	-37.9	0	41.9	54	-12.1	74	-32.1	0-360	300	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)
RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 [*]	56 to 46 [*]
0.5-5	56	46
5-30	60	50

^{*} Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

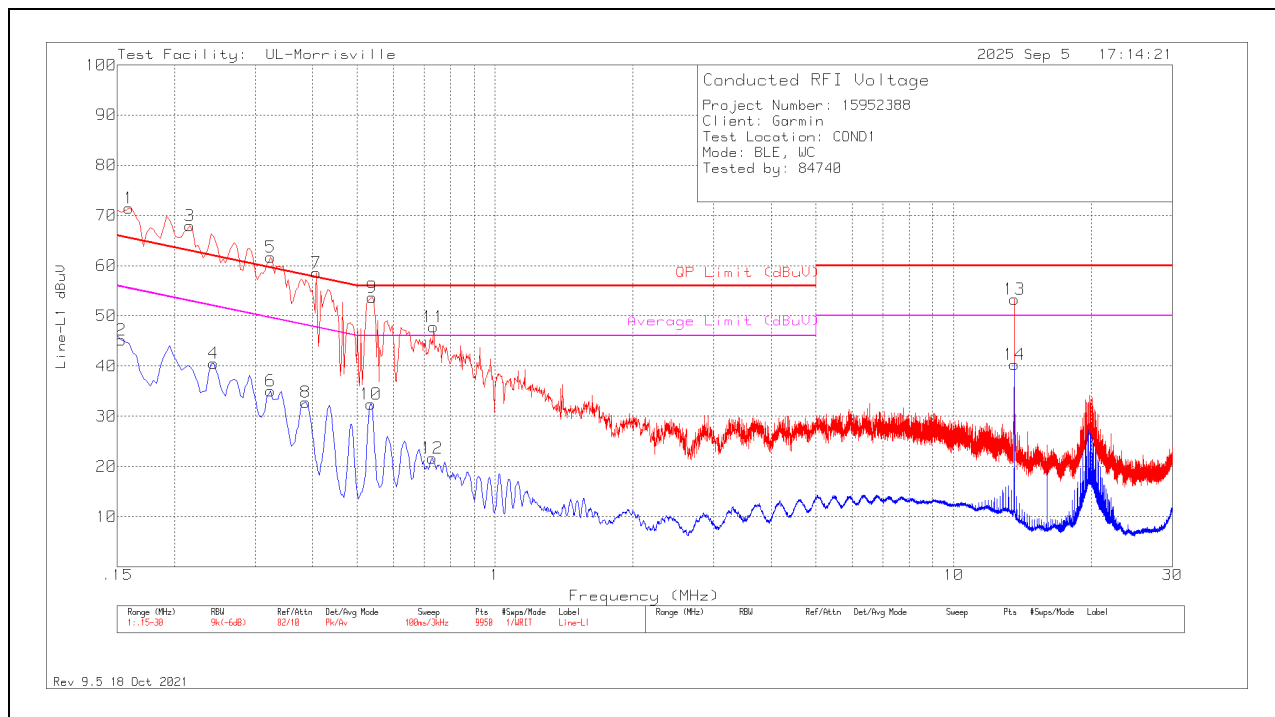
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

11.1.1. AC Power Line Norm

LINE 1 RESULTS



Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80389 (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
1	.15513	42.38	Qp	.2	9.7	52.28	65.72	-13.44	-	-
2	.153	35.25	Av	.2	9.7	45.15	-	-	55.84	-10.69
3	.21568	45.2	Qp	.1	9.7	55	62.98	-7.98	-	-
4	.243	30.71	Av	.1	9.7	40.51	-	-	51.99	-11.48
5	.31028	39.72	Qp	.1	9.7	49.52	59.96	-10.44	-	-
6	.324	25.22	Av	.1	9.7	35.02	-	-	49.6	-14.58
7	.39025	37.73	Qp	0	9.7	47.43	58.06	-10.63	-	-
8	.387	23.04	Av	0	9.7	32.74	-	-	48.13	-15.39
9	.52996	32.18	Qp	0	9.7	41.88	56	-14.12	-	-
10	.5355	22.74	Av	0	9.7	32.44	-	-	46	-13.56
11	.735	38.07	Pk	0	9.7	47.77	56	-8.23	-	-
12	.729	12	Av	0	9.7	21.7	-	-	46	-24.3
13	13.563	43.44	Pk	.1	9.8	53.34	60	-6.66	-	-
14	13.56	30.39	Av	.1	9.8	40.29	-	-	50	-9.71

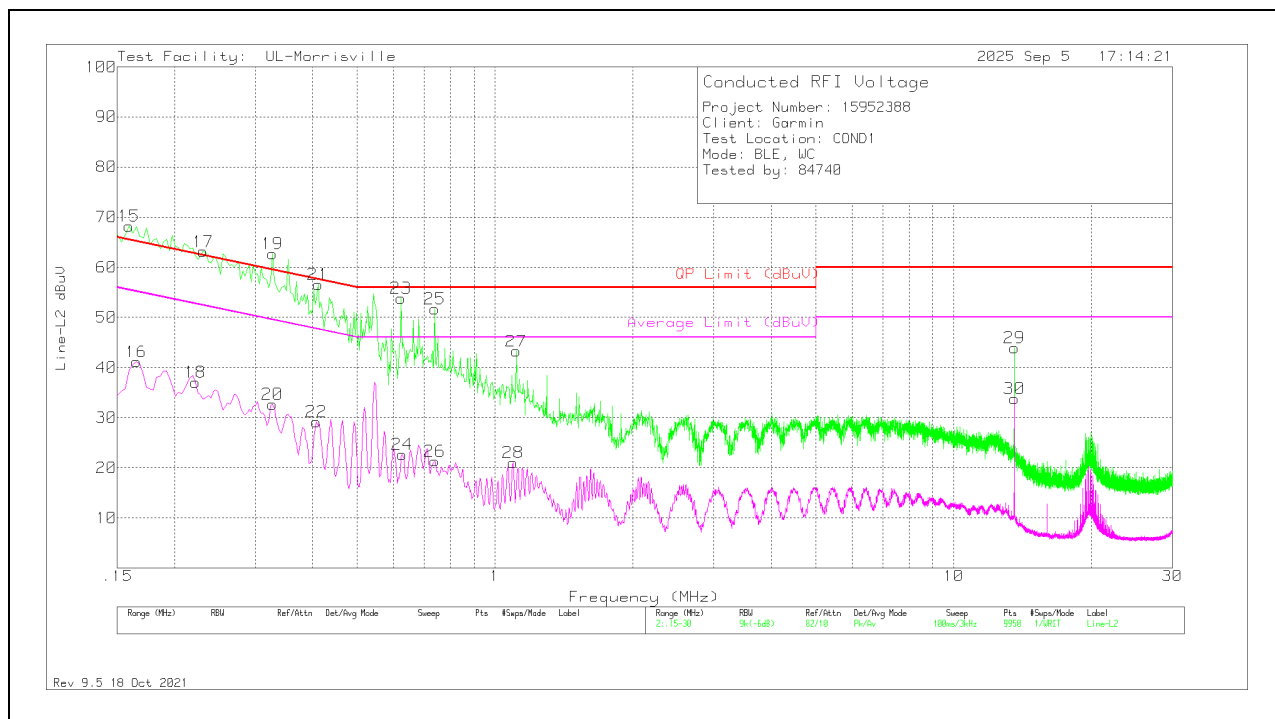
Pk - Peak detector

Av - Average detection

Qp - Quasi-Peak detector

Note – Markers 13 and 14 are from badge readers in the lab.

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	80389 (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
15	.15041	48.82	Qp	.2	9.7	58.72	65.98	-7.26	-	-
16	.165	31.22	Av	.2	9.7	41.12	-	-	55.21	-14.09
17	.24335	45.22	Qp	.1	9.7	55.02	61.98	-6.96	-	-
18	.222	27.22	Av	.1	9.7	37.02	-	-	52.74	-15.72
19	.34025	40.35	Qp	0	9.7	50.05	59.2	-9.15	-	-
20	.327	22.85	Av	.1	9.7	32.65	-	-	49.53	-16.88
21	.39826	37.82	Qp	0	9.7	47.52	57.89	-10.37	-	-
22	.408	19.43	Av	0	9.7	29.13	-	-	47.69	-18.56
23	.63246	27.14	Qp	0	9.7	36.84	56	-19.16	-	-
24	.627	12.93	Av	0	9.7	22.63	-	-	46	-23.37
25	.72911	23.47	Qp	0	9.7	33.17	56	-22.83	-	-
26	.738	11.63	Av	0	9.7	21.33	-	-	46	-24.67
27	1.113	33.55	Pk	0	9.7	43.25	56	-12.75	-	-
28	1.095	11.34	Av	0	9.7	21.04	-	-	46	-24.96
29	13.563	33.99	Pk	.1	9.8	43.89	60	-16.11	-	-
30	13.563	23.89	Av	.1	9.8	33.79	-	-	50	-16.21

Pk - Peak detector

Av - Average detection

Qp - Quasi-Peak detector

Note – Markers 29 and 30 are from badge readers in the lab.

12. SETUP PHOTOS

Please refer to R15952388-EP1 for setup photos

END OF TEST REPORT