TEST REPORT

Report Number: R15500557-E1

Applicant	:	Sonos 301 Coromar Dr Goleta, CA 93117 USA
Model	:	S51
Brand	:	Sonos
FCC ID	:	SBVRM051
IC	:	5373A-RM051
EUT Description	:	Wireless Amplifier
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:
2025-11-10

Prepared by:
UL LLC
12 Laboratory Dr.
Durham, NC 27713, USA
TEL: (919) 549-1400

CERT #0751.06

REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2025-11-10	Initial Issue	B. Kiewra

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	Sonos 301 Coromar Dr Goleta, CA 93117 USA
EUT DESCRIPTION:	Wireless Amplifier
MODEL:	S51
BRAND:	Sonos
SERIAL NUMBER:	00E5813A1A36, 00E585a5CA27
SAMPLE RECEIPT DATE:	2025-09-22
DATE TESTED:	2025-09-22 to 2025-10-01

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C ISED RSS-247 Issue 4 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 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:

Jeff Moser
Operations Manager
Consumer, Medical and IT Segment
UL LLC

Prepared By:

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

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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)

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 47 CFR Part 2, FCC 47 CFR 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	

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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

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6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The EUT is a Wireless Amplifier that transmits BLE, 2.4GHz WLAN, and 5GHz WLAN. This report covers testing on BLE.

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 - 1Mbps	8.22	6.64
2402 - 2480	BLE - 2Mbps	8.26	6.70

6.3. DESCRIPTION OF AVAILABLE ANTENNAS

The antenna gain and type, as provided by the manufacturer are as follows:
The radio utilizes a stamped monopole antenna, with a maximum gain of 4.5 dBi.

6.4. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was 91.0-45210-diag-pallas-rel-202505220206.

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 output power as worst-case scenario.

Band edge and radiated spurious emissions between 1GHz and 18GHz were performed with the EUT set to transmit at the highest power on low, middle (spurious emissions only) and high channels. Radiated spurious emissions performed on the modes with the highest power and PSD.

The EUT is intended to operate in one orientation. Therefore, all testing was performed with the EUT is this intended orientation of operation.

EUT supports both 1Mbps and 2Mbps data rates.

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6.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Laptop	Lenovo	T14s	PC2E1WMJ	NA
Laptop	Lenovo	T450s	PC06YXZG	NA
Speakers	Scosche	HD4004SD	PEA12112	NA

I/O CABLES

I/O Cable List						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	Mains	1	Hardwired	Non-shielded	<3m	Mains
2	Ethernet	1	Ethernet	Non-Shielded	>3m	Connected to ENET switch
3	USB C	1	USB C	Non-Shielded	<3m	Connected to laptop
4	RCA	3	RCA-3.5mm	Non-Shielded	<3m	Connected to laptop
5	Speaker	8	Proprietary	Non-Shielded	<3m	Connected to speaker

TEST SETUP

The EUT is connected to a test laptop during the tests.

SETUP DIAGRAMS

Please refer to R15500557-EP1 for setup diagrams

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7. TEST AND MEASUREMENT EQUIPMENT

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

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

Equipment 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	2025-06-13	2026-06-13
207639	Gain-loss string: 25-1000MHz	Various	Various	2025-06-13	2026-06-13
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

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Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
90410	Spectrum Analyzer **MY54410168**	Keysight Technologies	N9030A	2025-07-10	2026-07-10
211055	Real-Time Peak Power Sensor 50MHz to 8GHz **12002**	Boonton	RTP5000	2025-07-30	2026-07-30
211056	Real-Time Peak Power Sensor 50MHz to 8GHz **12001**	Boonton	RTP5000	2025-07-30	2026-07-30
248881	Environmental Meter **240303668**	Control Company	06-662-4	2024-04-10	2026-04-10
226566	2.92mm Coaxial 10dB Attenuator 40GHz	Fairview Microwave	SA4014-10	2025-08-30	2026-08-30
SOFTEMI	Antenna Port Software	UL	Version 2024.2.23		
Power Software	Boonton Power Analyzer	Boonton	Version 3.0.13.0		

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	2025-08-05	2026-08-05
91432	LISN, 50-ohm/50-uH, 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50-25-2-01-550V	2025-07-30	2026-07-30
75141	EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESCI 7	2025-07-30	2026-07-30
52859	Transient Limiter, 0.009-100MHz	Electro-Metrics	EM-7600	2025-07-30	2026-07-30
694826	AC Power Source	Elgar	CW2501M	NA	NA
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		

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8. MEASUREMENT METHOD

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

6 dB BW: ANSI C63.10-2020 Subclause -11.8.1

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, 6.3 to 6.6.

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

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9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

ANSI C63.10-2020 Section 11.6

Mode	ON Time B (ms)	Period (ms)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor Voltage (dB)	Duty Cycle Correction Factor RMS (dB)	1/T Minimum VBW (kHz)
1Mbps	2.125	2.500	0.850	85.00	1.41	0.71	0.471
2Mbps	1.069	1.875	0.570	57.01	4.88	2.44	0.935

Tester ID: 19289
Test Location: Chamber 4

1Mbps DUTY CYCLE

2Mbps DUTY CYCLE

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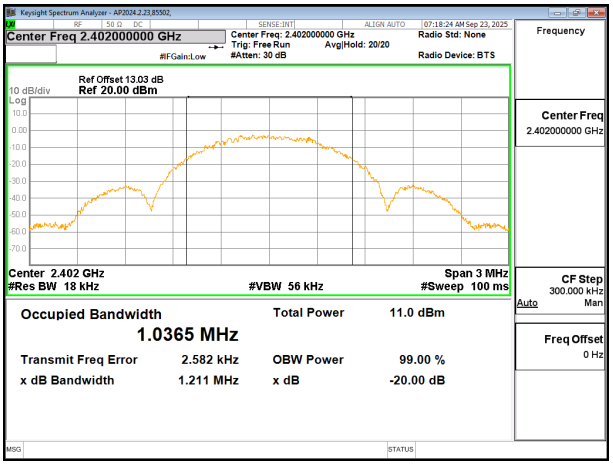
9.2. 99% BANDWIDTH

LIMITS

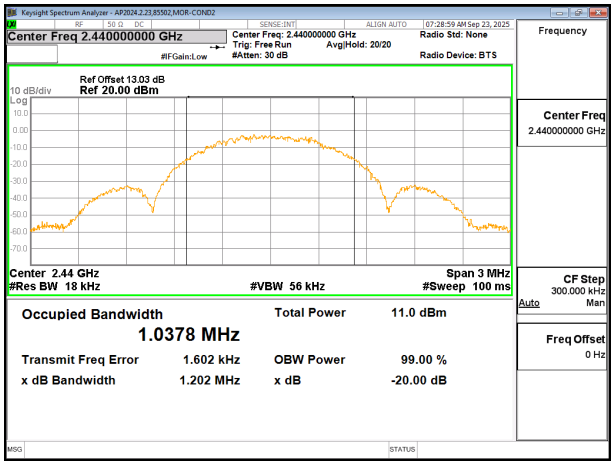
None; for reporting purposes only.

9.2.1. BLE (1Mbps)

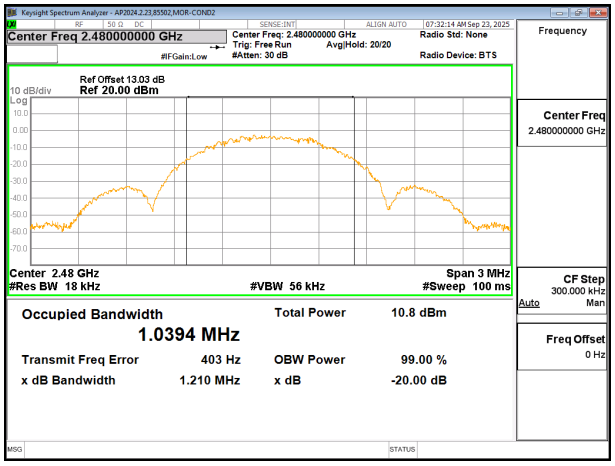
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	1.0365
Middle	2440	1.0378
High	2480	1.0394



LOW CHANNEL



MID CHANNEL



HIGH CHANNEL

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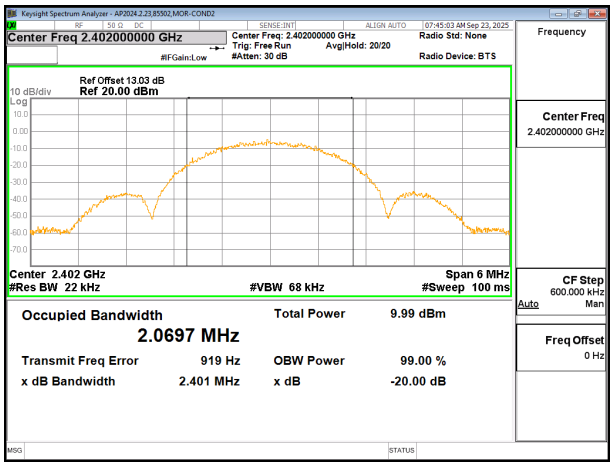
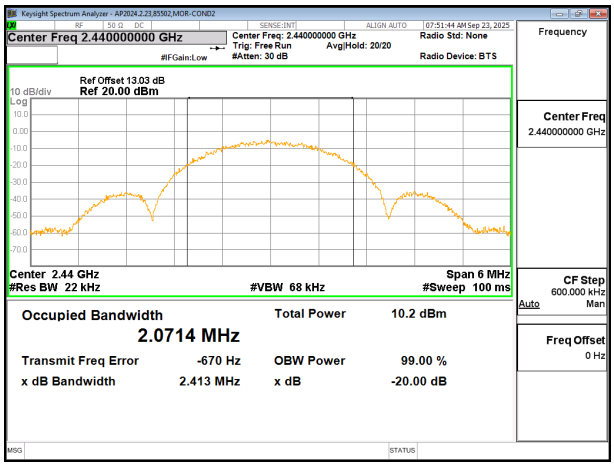
9.2.2. BLE (2Mbps)

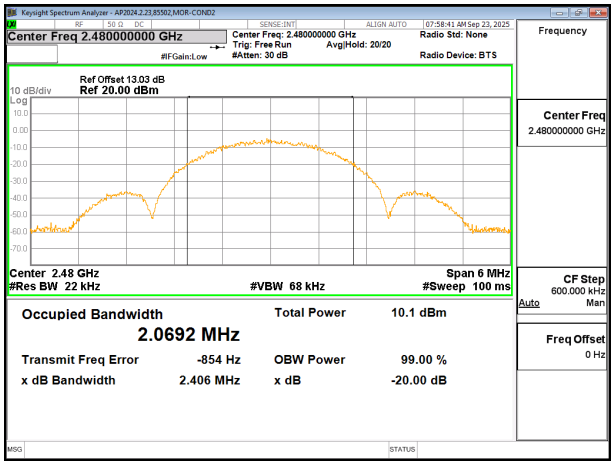
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	2.0697
Middle	2440	2.0714
High	2480	2.0692



LOW CHANNEL



MID CHANNEL



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9.3. 6 dB BANDWIDTH

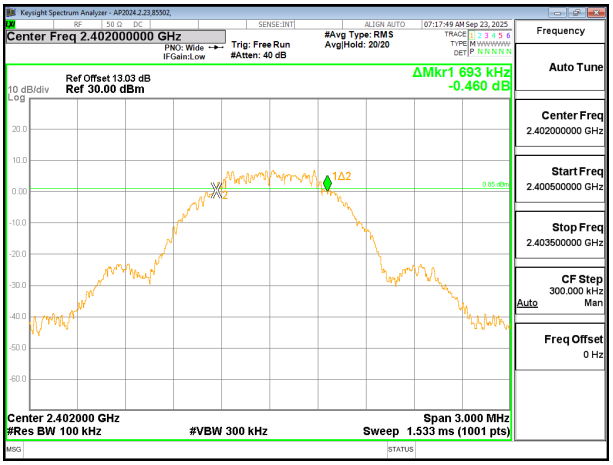
LIMITS

FCC §15.247 (a) (2)
RSS-247 6.3.1 (a)

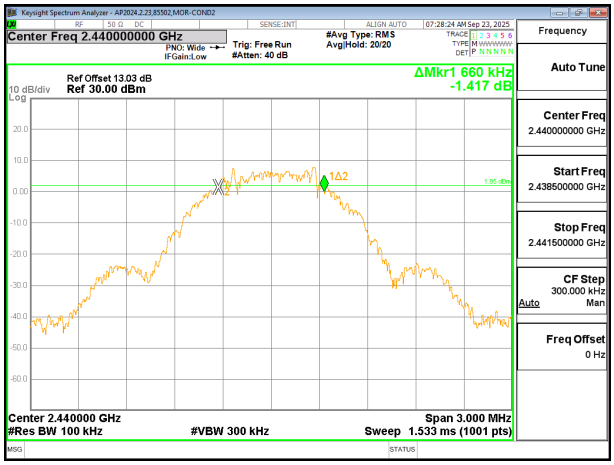
The minimum 6 dB bandwidth shall be at least 500 kHz.

9.3.1. BLE (1Mbps)

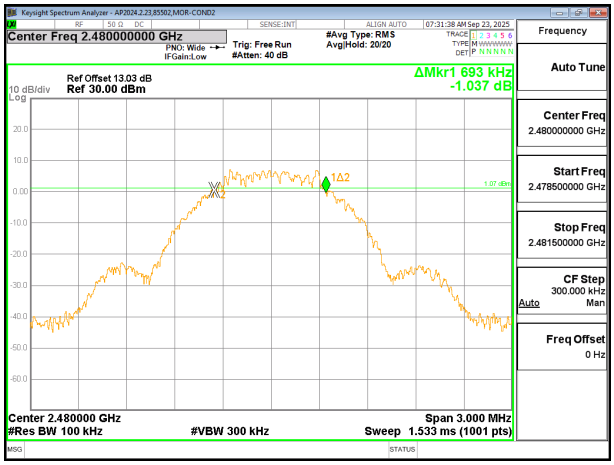
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2402	.693	0.5
Middle	2440	.660	0.5
High	2480	.693	0.5



LOW CHANNEL



MID CHANNEL



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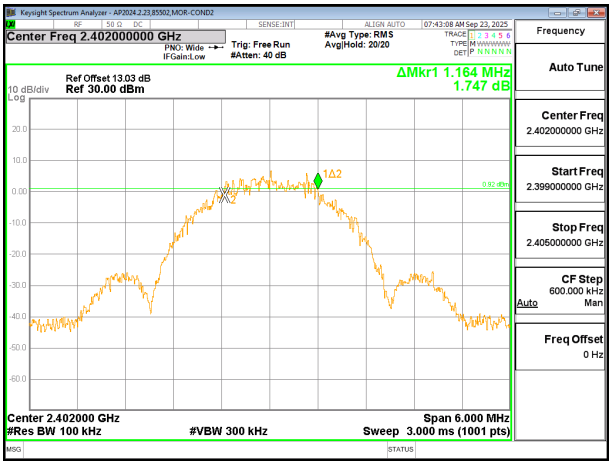
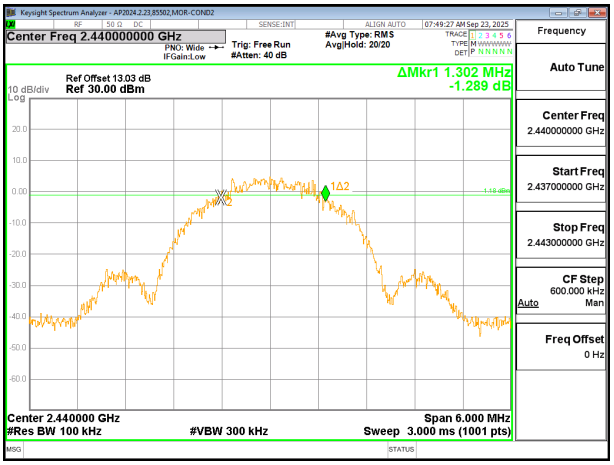
9.3.2. BLE (2Mbps)

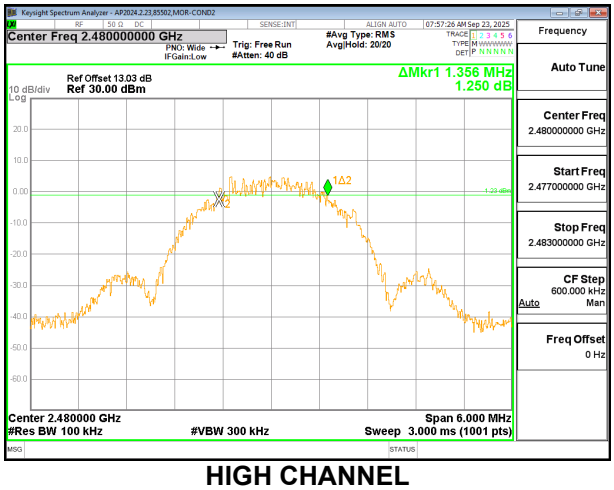
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2402	1.164	0.5
Middle	2440	1.302	0.5
High	2480	1.356	0.5



LOW CHANNEL



MID CHANNEL



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9.4. OUTPUT POWER

LIMITS

FCC §15.247 (b) (3)
RSS-247 6.3.2

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 12.60 dB (including 9.93 dB pad and 2.67 dB cable) was entered as an offset in the power meter.

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Peak output power was read directly from power meter.

9.4.1. BLE (1Mbps)

Tested By:	85502
Date:	9/22/2025

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	8.22	30	-21.78
Middle	2440	8.07	30	-21.93
High	2480	8.11	30	-21.89

9.4.2. BLE (2Mbps)

Tested By:	85502
Date:	9/22/2025

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	8.26	30	-21.74
Middle	2440	8.17	30	-21.83
High	2480	8.13	30	-21.87

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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 12.60 dB (including 9.93 dB pad and 2.67 dB cable) was entered as an offset in the power meter.

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

9.5.1. BLE (1Mbps)

Tested By:	85502
Date:	9/22/2025

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	7.96
Middle	2440	7.80
High	2480	7.83

9.5.2. BLE (2Mbps)

Tested By:	85502
Date:	9/22/2025

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	7.95
Middle	2440	7.90
High	2480	7.88

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9.6. POWER SPECTRAL DENSITY

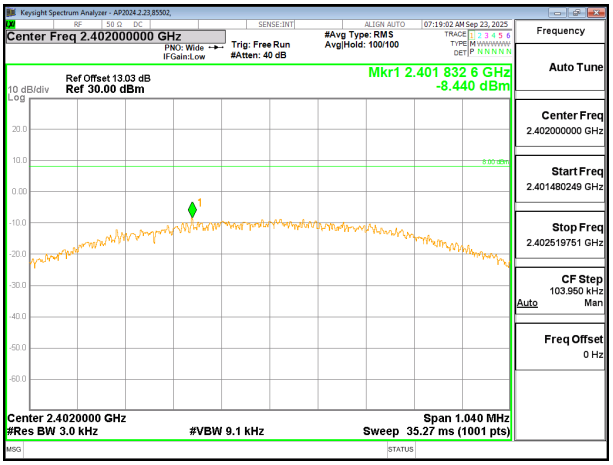
LIMITS
FCC §15.247 (e)
RSS-247 6.3.1 (b)

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.

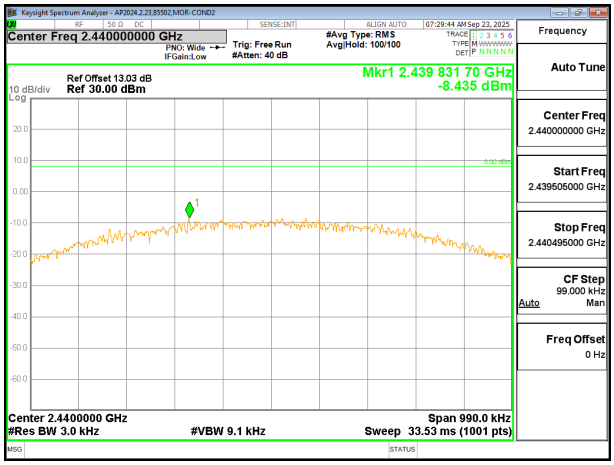
9.6.1. BLE (1Mbps)

PSD Results

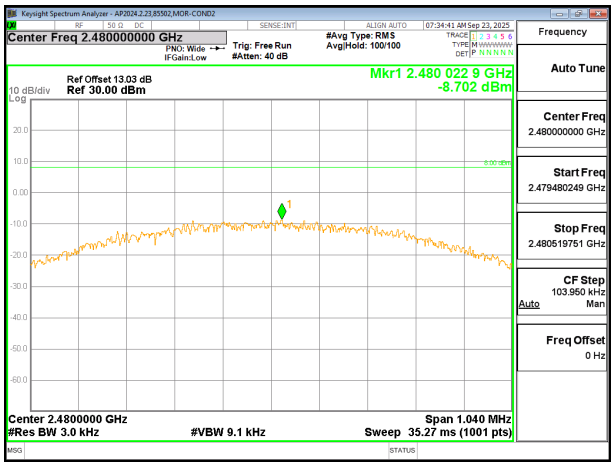
Channel	Frequency (MHz)	Measured PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low	2402	-8.44	8.0	-16.4
Mid	2440	-8.44	8.0	-16.4
High	2480	-8.70	8.0	-16.7



LOW CHANNEL



MID CHANNEL



HIGH CHANNEL

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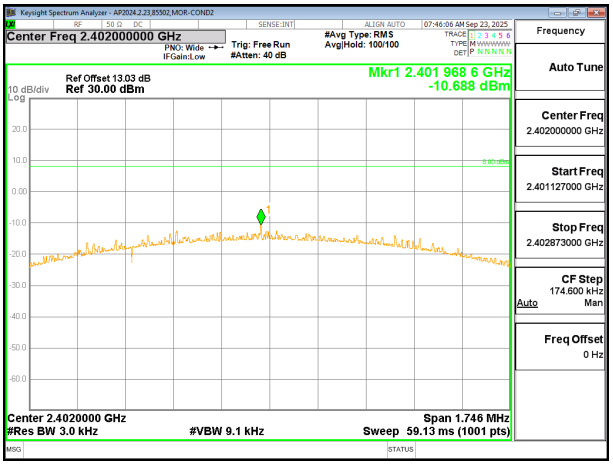
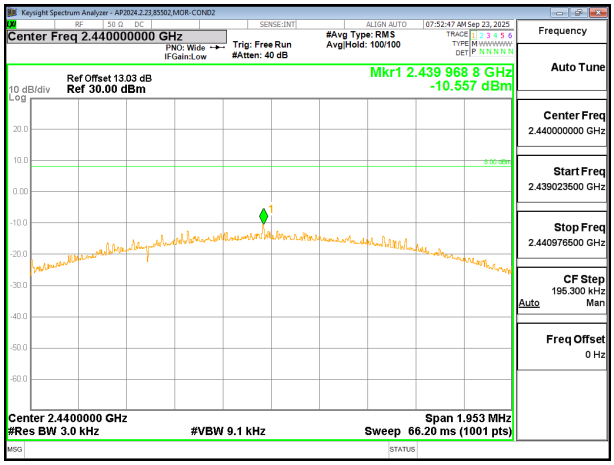
9.6.2. BLE (2Mbps)

PSD Results

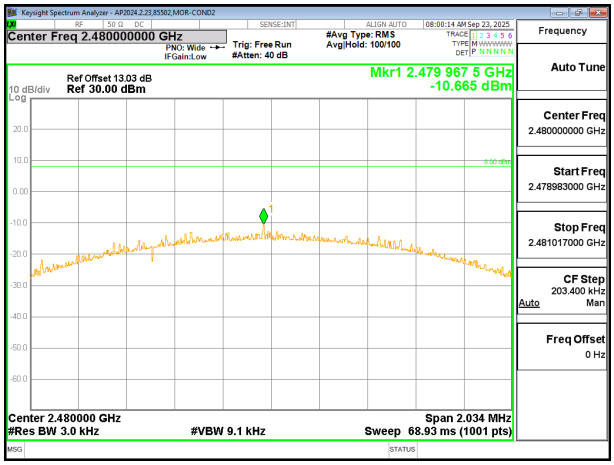
Channel	Frequency (MHz)	Measured PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low	2402	-10.69	8.0	-18.7
Mid	2440	-10.56	8.0	-18.6
High	2480	-10.67	8.0	-18.7



LOW CHANNEL



MID CHANNEL



HIGH CHANNEL

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9.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)
RSS-247 6.6

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

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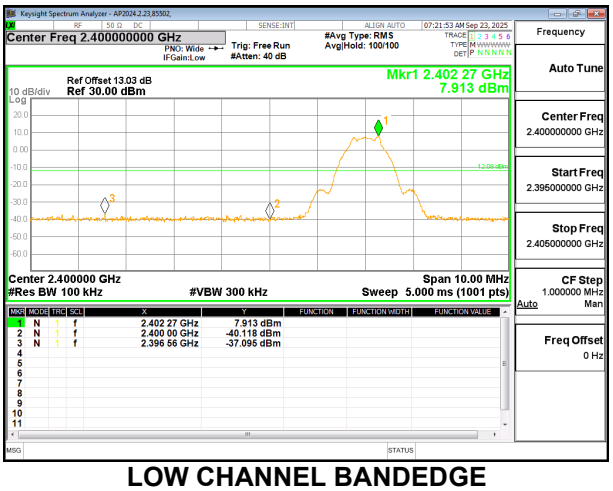
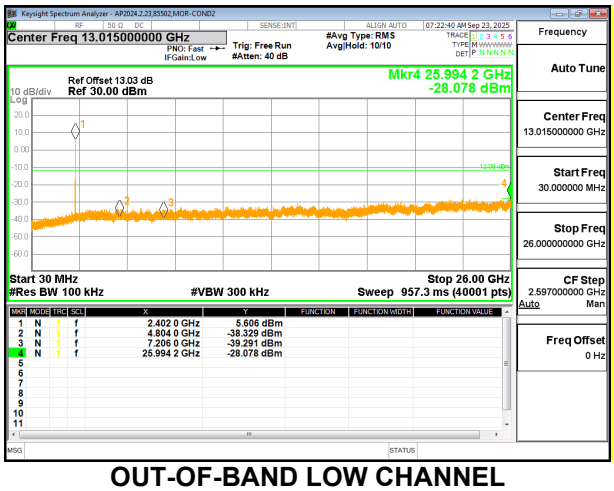
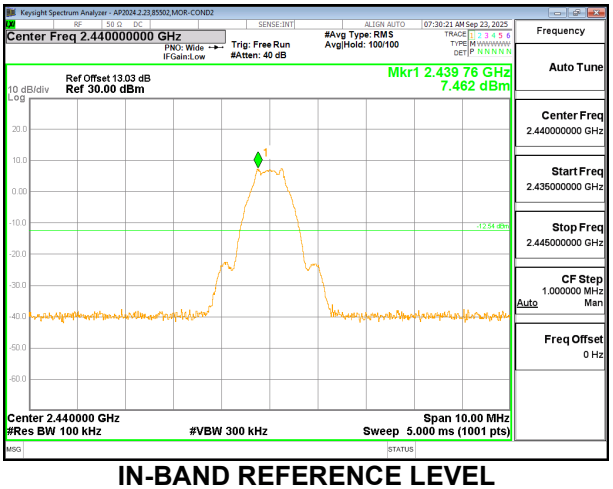
9.7.1. BLE (1Mbps)



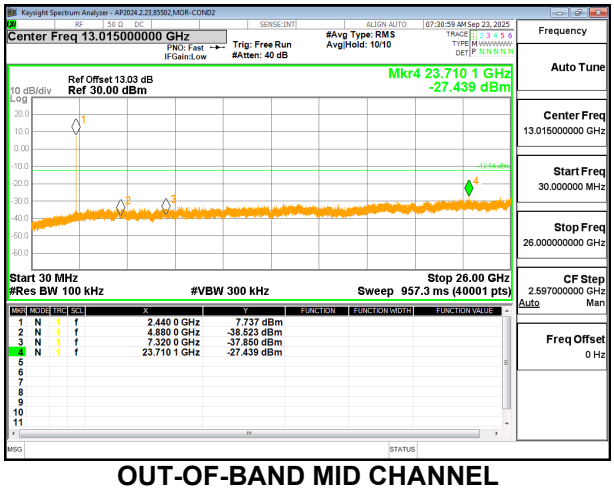
LOW CHANNEL BANDEDGE



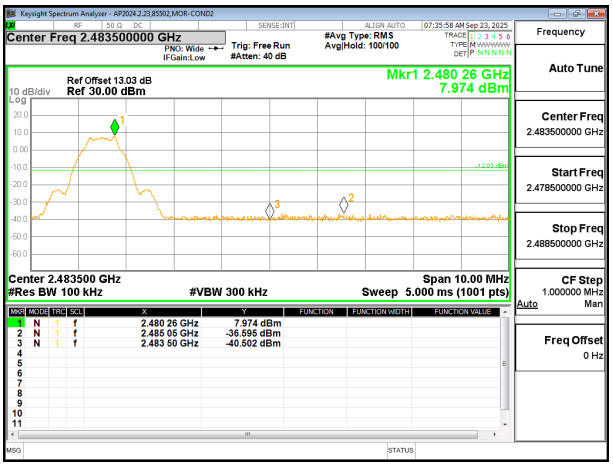
OUT-OF-BAND LOW CHANNEL



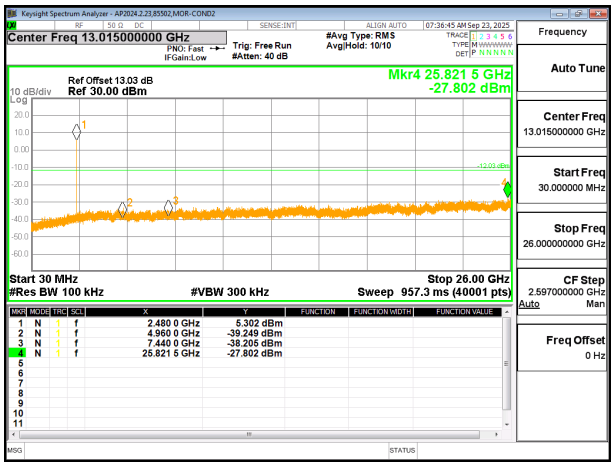
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



OUT-OF-BAND HIGH CHANNEL

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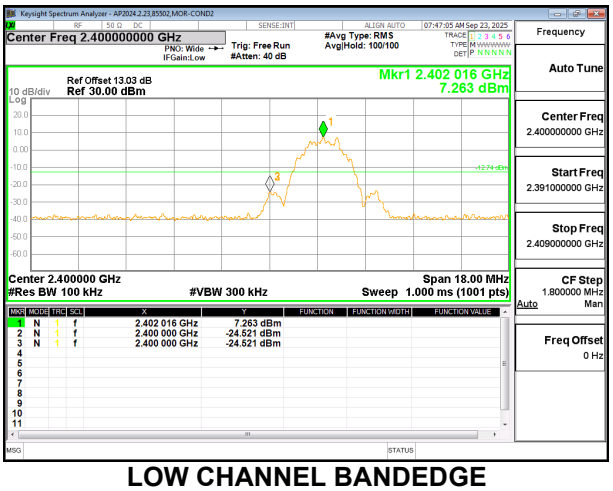
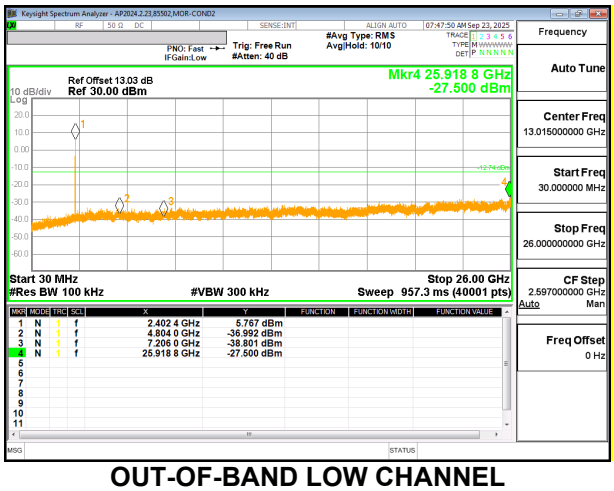
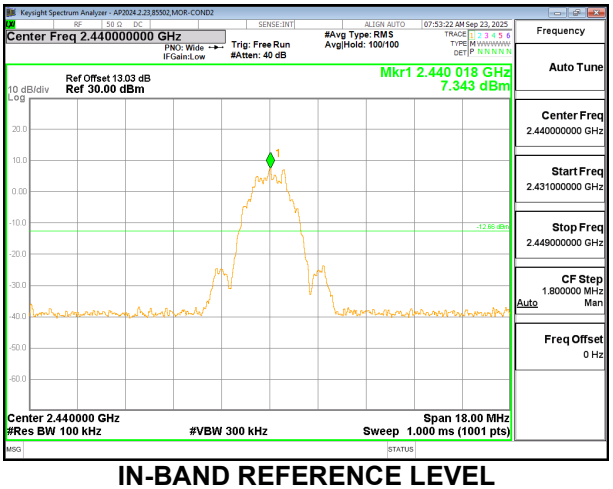
9.7.2. BLE (2Mbps)



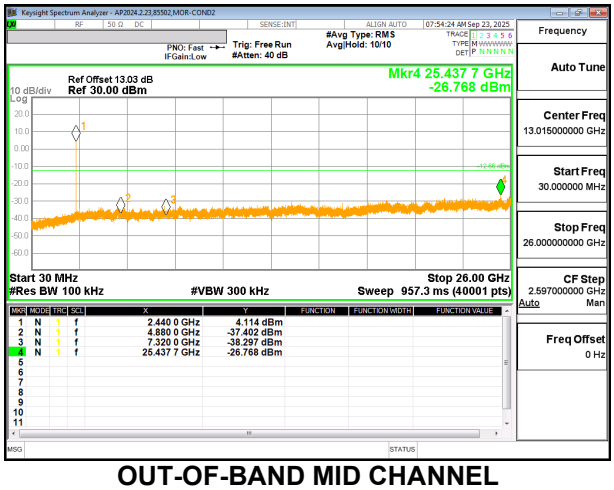
LOW CHANNEL BANDEDGE



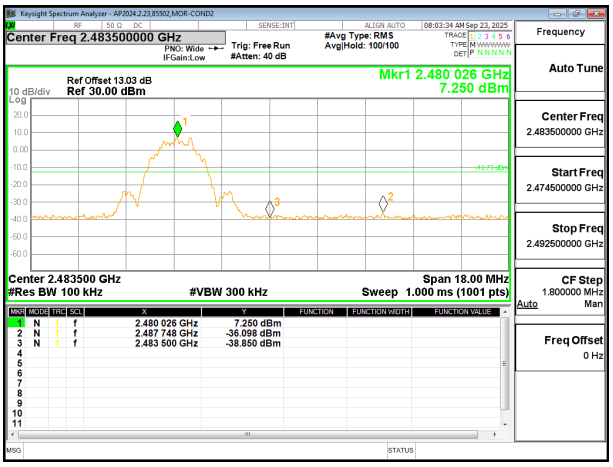
OUT-OF-BAND LOW CHANNEL



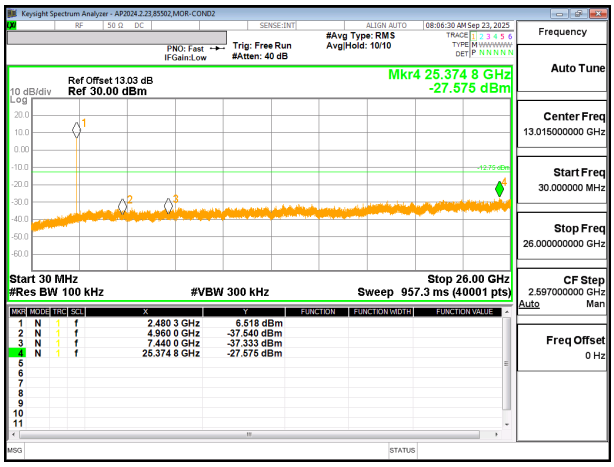
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



OUT-OF-BAND HIGH CHANNEL

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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 3MHz 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 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 output power was tested.

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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).

Base 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.

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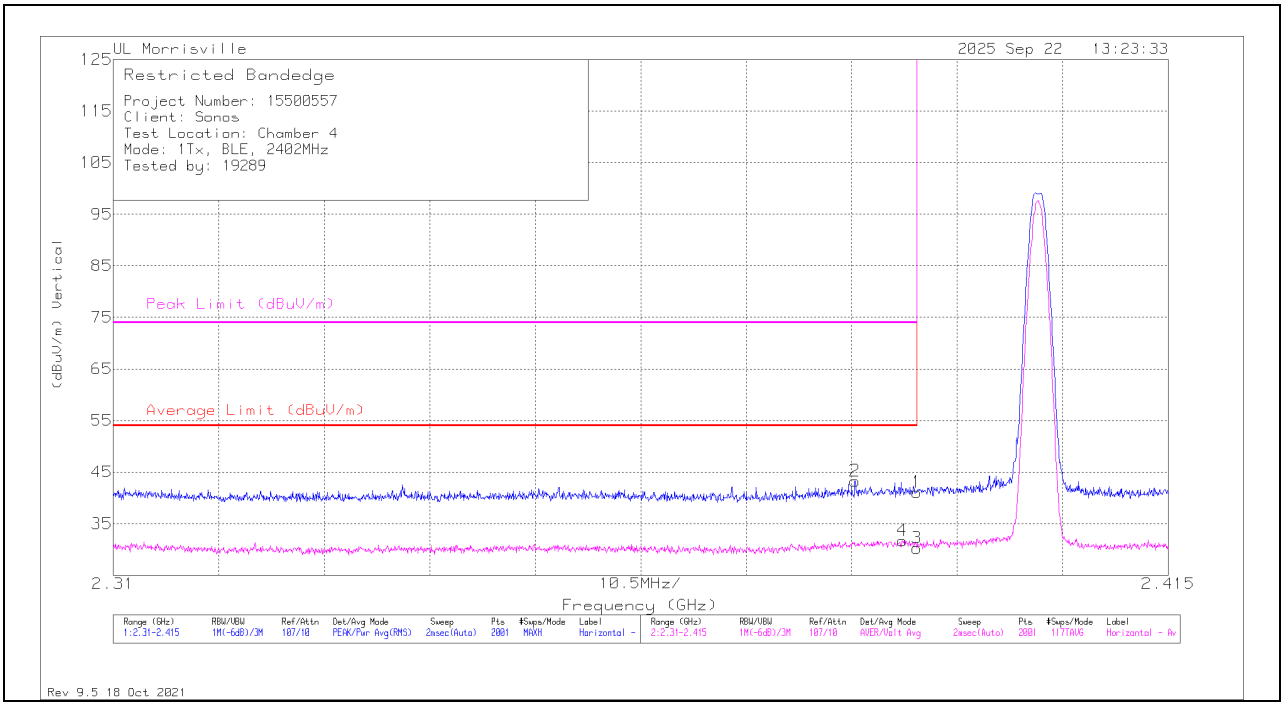
10.2. TRANSMITTER ABOVE 1 GHz

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	32.08	Pk	32	-23	0	41.08	-	-	74	-32.92	265	255	H
2	* ** 2.38382	34.27	Pk	32	-23	0	43.27	-	-	74	-30.73	265	255	H
3	* ** 2.38996	19.88	ADV	32	-23	1.41	30.29	54	-23.71	-	-	265	255	H
4	* ** 2.38854	21.31	ADV	32	-23	1.41	31.72	54	-22.28	-	-	265	255	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

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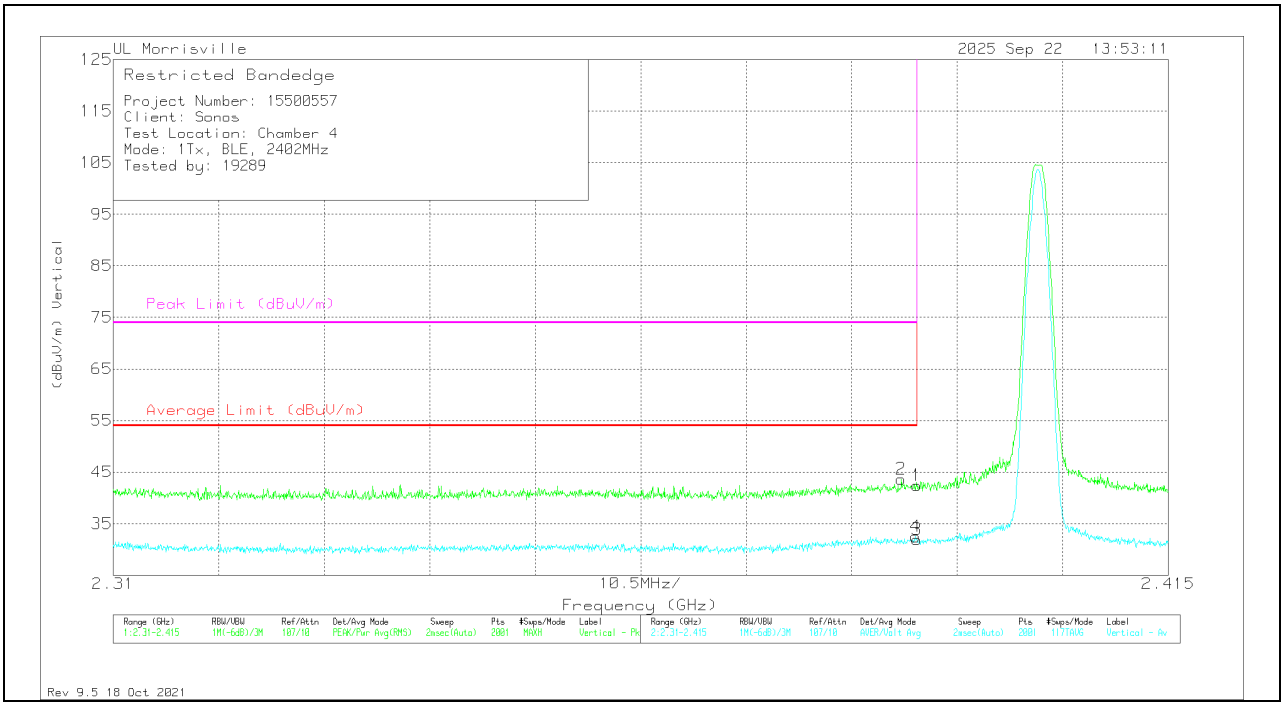
VERTICAL RESULT



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	33.41	Pk	32	-23	0	42.41	-	-	74	-31.59	260	194	V
2	* ** 2.38844	34.64	Pk	32	-23	0	43.64	-	-	74	-30.36	260	194	V
3	* ** 2.38996	21.53	ADV	32	-23	1.41	31.94	54	-22.06	-	-	260	194	V
4	* ** 2.38985	22.09	ADV	32	-23	1.41	32.5	54	-21.5	-	-	260	194	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

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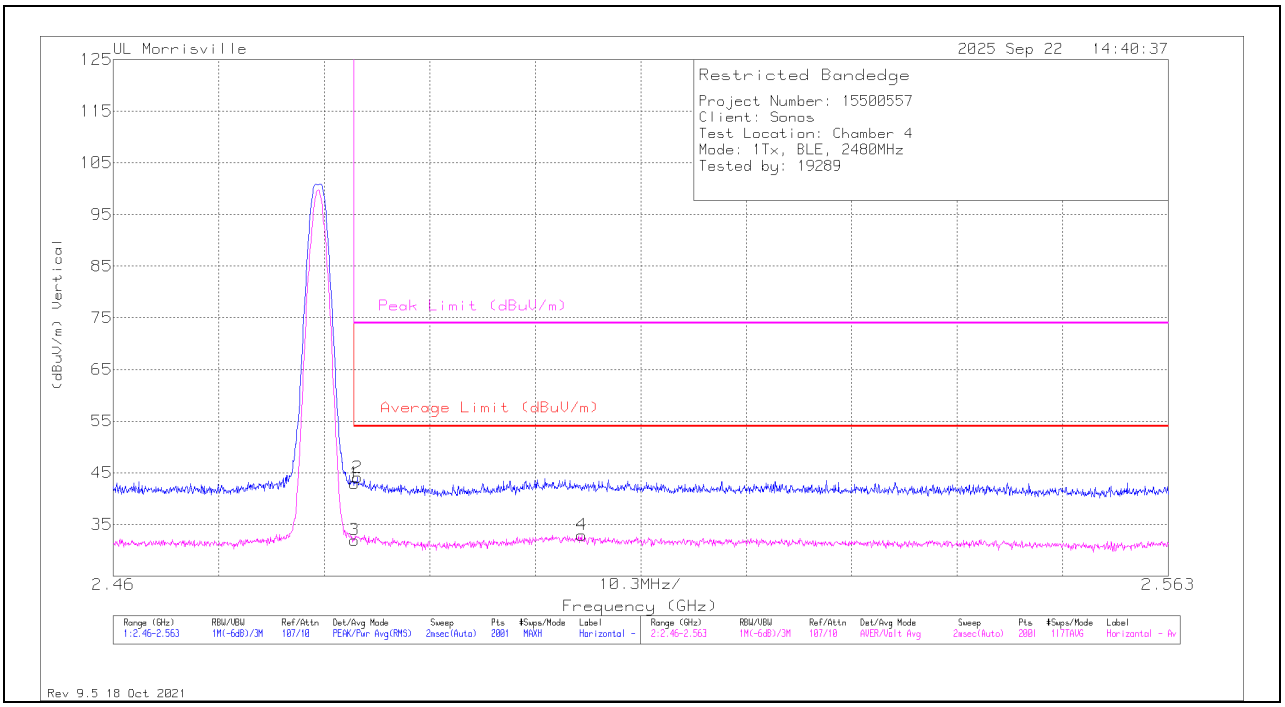
BANDEDGE (HIGH CHANNEL)

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	33.87	Pk	32.3	-23.2	0	42.97	-	-	74	-31.03	273	358	H
2	* ** 2.48384	34.99	Pk	32.3	-23.2	0	44.09	-	-	74	-29.91	273	358	H
3	* ** 2.48354	21.48	ADV	32.3	-23.2	1.41	31.99	54	-22.01	-	-	273	358	H
4	** 2.50573	21.44	ADV	32.4	-22.3	1.41	32.95	54	-21.05	-	-	273	358	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

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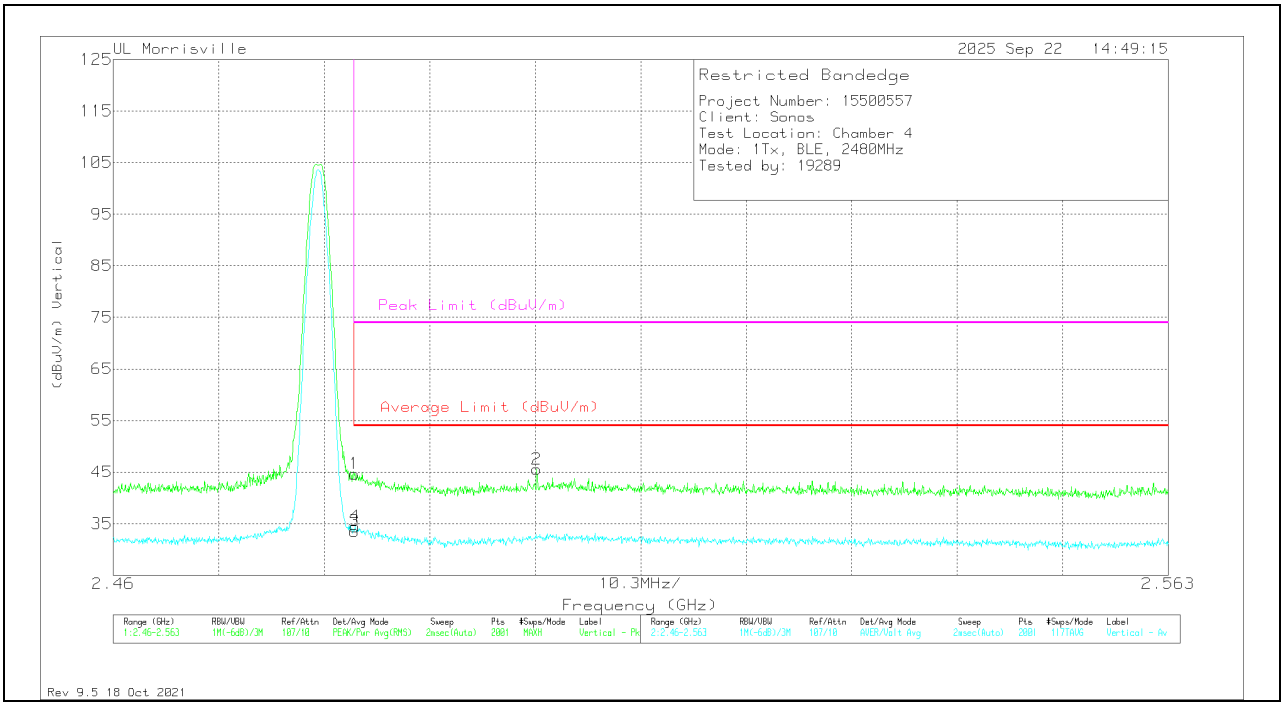
VERTICAL RESULT



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	35.58	Pk	32.3	-23.2	0	44.68	-	-	74	-29.32	194	386	V
2	** 2.50135	35.57	Pk	32.4	-22.4	0	45.57	-	-	74	-28.43	194	386	V
3	* ** 2.48354	23.08	ADV	32.3	-23.2	1.41	33.59	54	-20.41	-	-	194	386	V
4	* ** 2.48359	23.93	ADV	32.3	-23.2	1.41	34.44	54	-19.56	-	-	194	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

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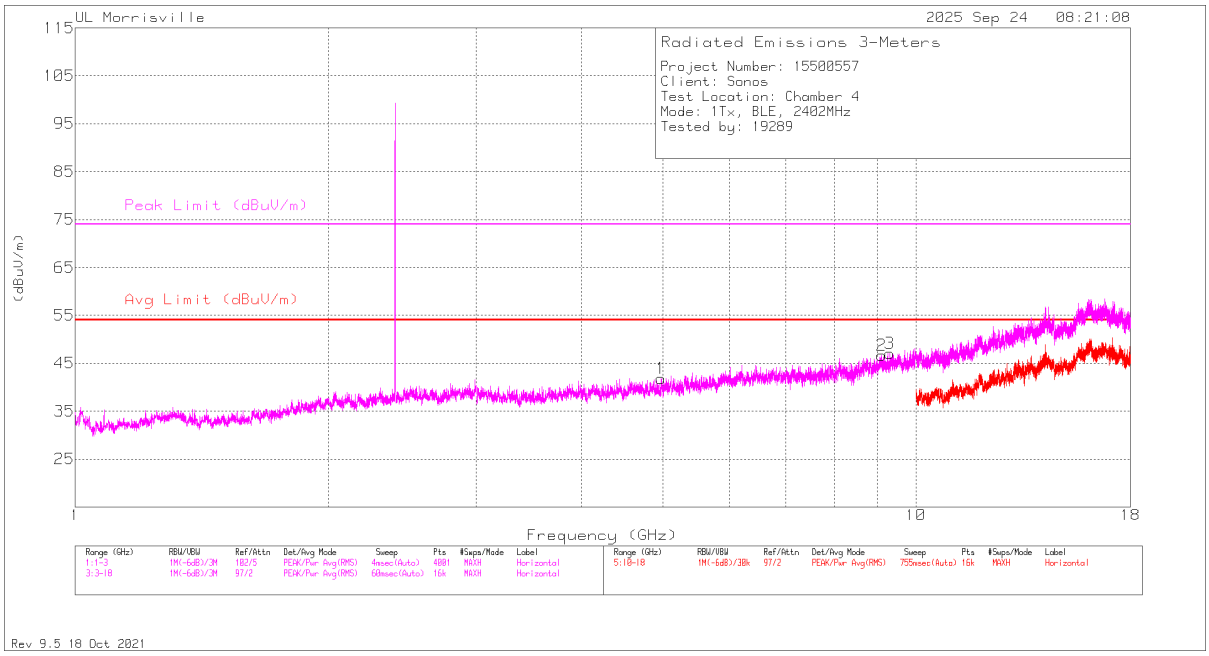
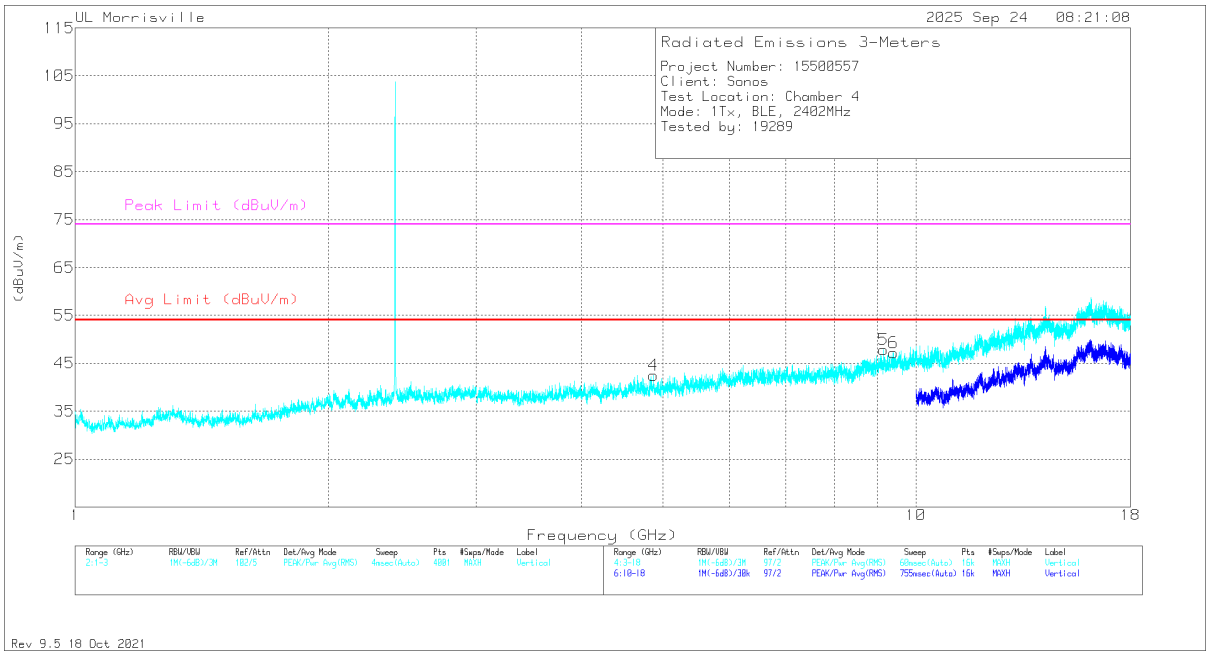
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

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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	* ** 4.97719	39.62	Pk	33.9	-31.7	0	41.82	54	-12.18	74	-32.18	0-360	100	H
2	* ** 9.10688	34.52	Pk	36	-23.8	0	46.72	54	-7.28	74	-27.28	0-360	100	H
3	* ** 9.30563	35.09	Pk	36.3	-24.3	0	47.09	54	-6.91	74	-26.91	0-360	100	H
4	* ** 4.87406	39.67	Pk	33.9	-31.1	0	42.47	54	-11.53	74	-31.53	0-360	200	V
5	* ** 9.15	35.9	Pk	36.2	-24.3	0	47.8	54	-6.2	74	-26.2	0-360	200	V
6	* ** 9.39938	34.73	Pk	36.5	-24	0	47.23	54	-6.77	74	-26.77	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

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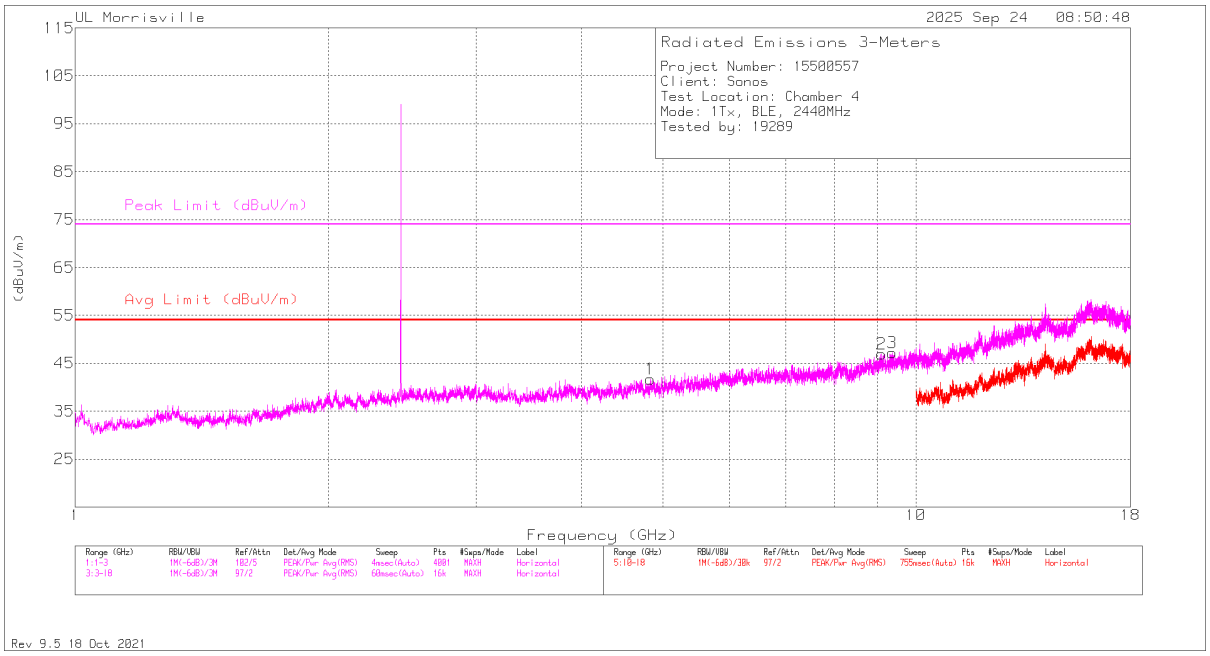
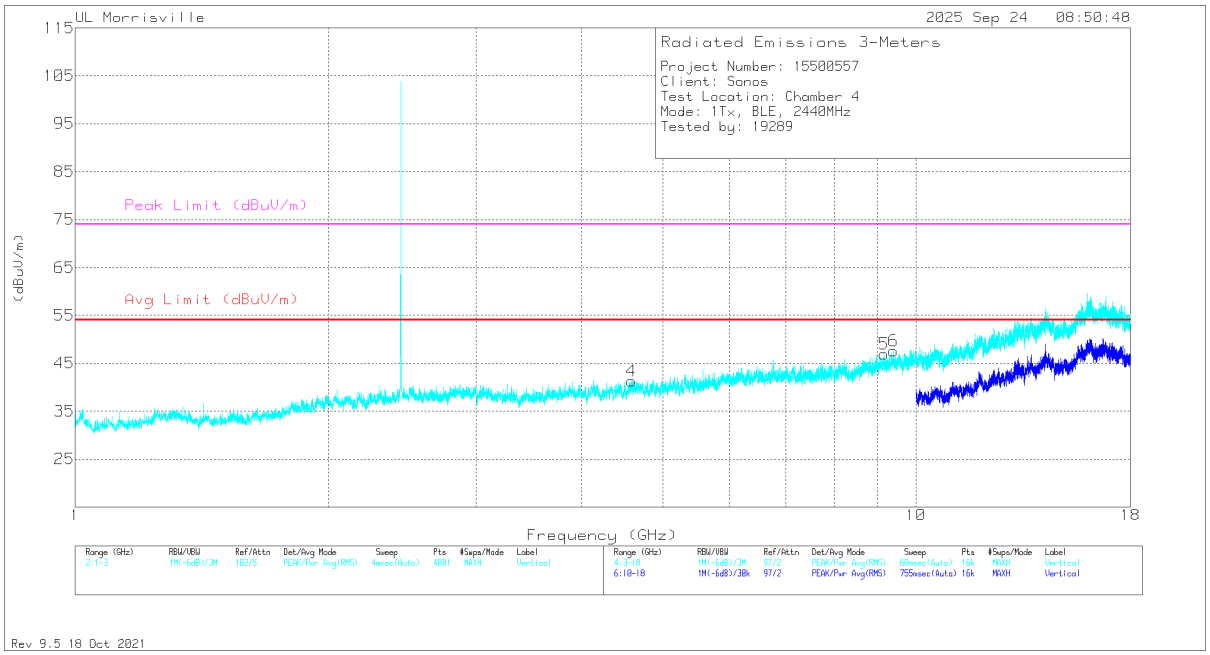
MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

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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	* ** 4.83094	39.36	Pk	34	-31.7	0	41.66	54	-12.34	74	-32.34	0-360	100	H
2	* ** 9.10406	34.99	Pk	36	-24	0	46.99	54	-7.01	74	-27.01	0-360	100	H
3	* ** 9.36938	35.28	Pk	36.4	-24.5	0	47.18	54	-6.82	74	-26.82	0-360	100	H
4	* ** 4.58906	39.05	Pk	34.2	-31.9	0	41.35	54	-12.65	74	-32.65	0-360	200	V
5	* ** 9.16969	35.89	Pk	36.2	-25.2	0	46.89	54	-7.11	74	-27.11	0-360	200	V
6	* ** 9.405	35.2	Pk	36.5	-24.1	0	47.6	54	-6.4	74	-26.4	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

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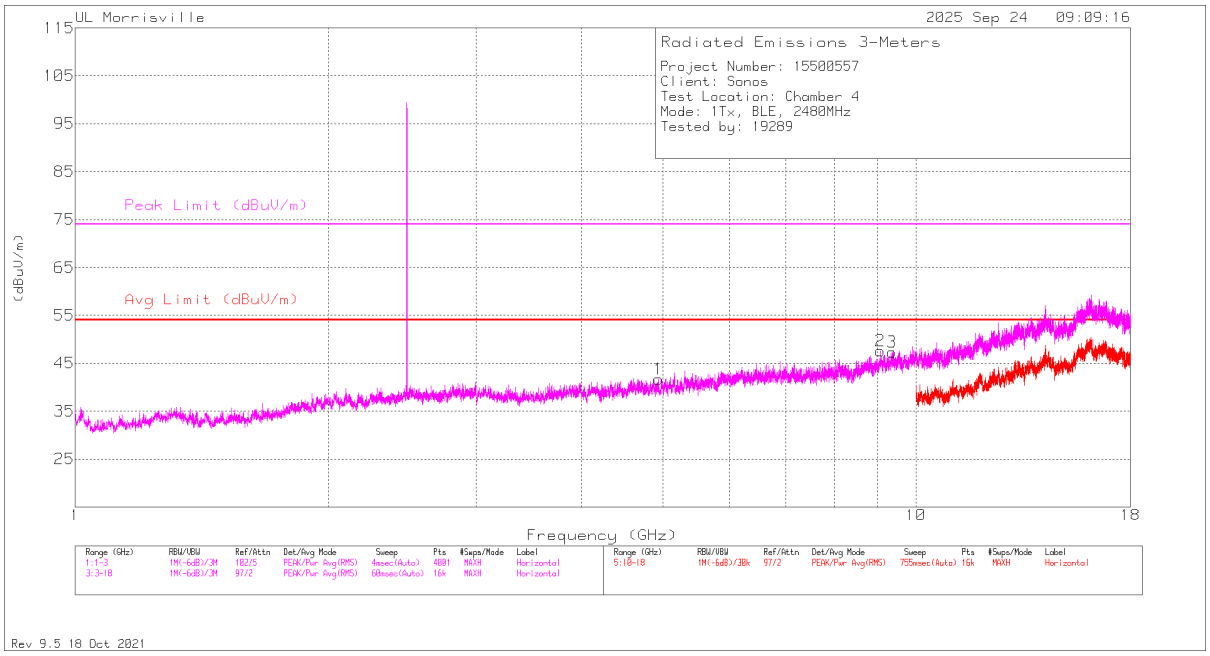
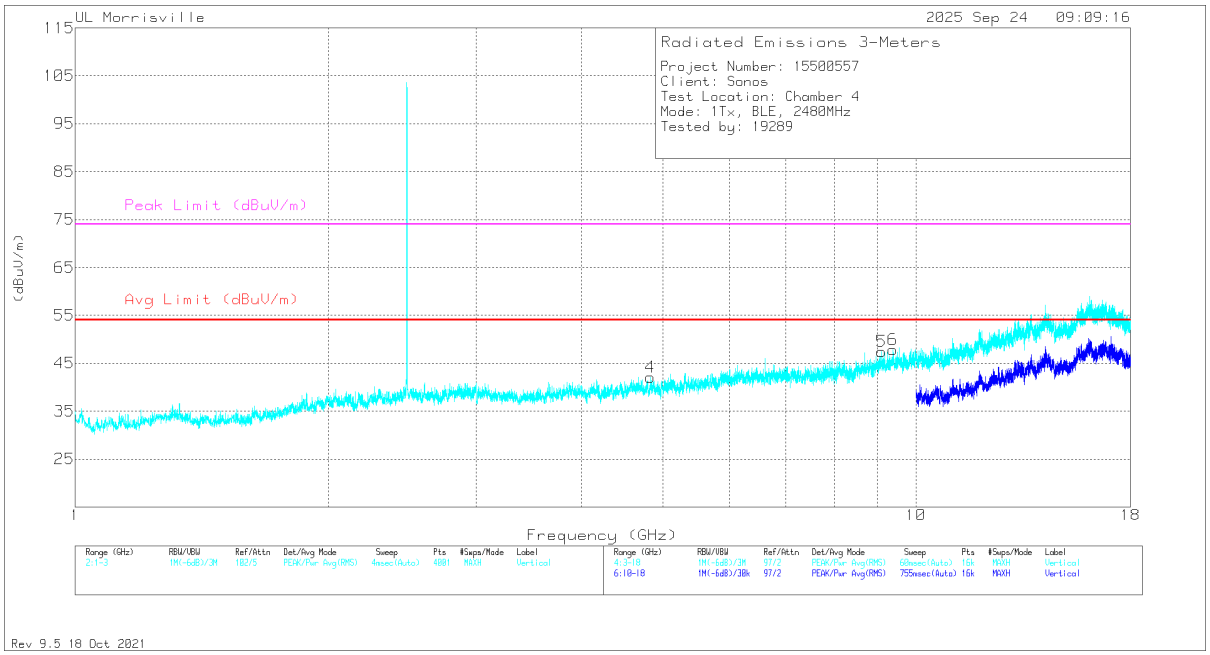
HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

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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	* ** 4.94063	39.7	Pk	33.8	-31.8	0	41.7	54	-12.3	74	-32.3	0-360	100	H
2	* ** 9.07688	35.68	Pk	36	-24.1	0	47.58	54	-6.42	74	-26.42	0-360	100	H
3	* ** 9.36656	35.45	Pk	36.4	-24.5	0	47.35	54	-6.65	74	-26.65	0-360	100	H
4	* ** 4.83375	39.45	Pk	34	-31.4	0	42.05	54	-11.95	74	-31.95	0-360	200	V
5	* ** 9.10688	35.24	Pk	36	-23.8	0	47.44	54	-6.56	74	-26.56	0-360	200	V
6	* ** 9.39469	35.6	Pk	36.5	-24.2	0	47.9	54	-6.1	74	-26.1	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

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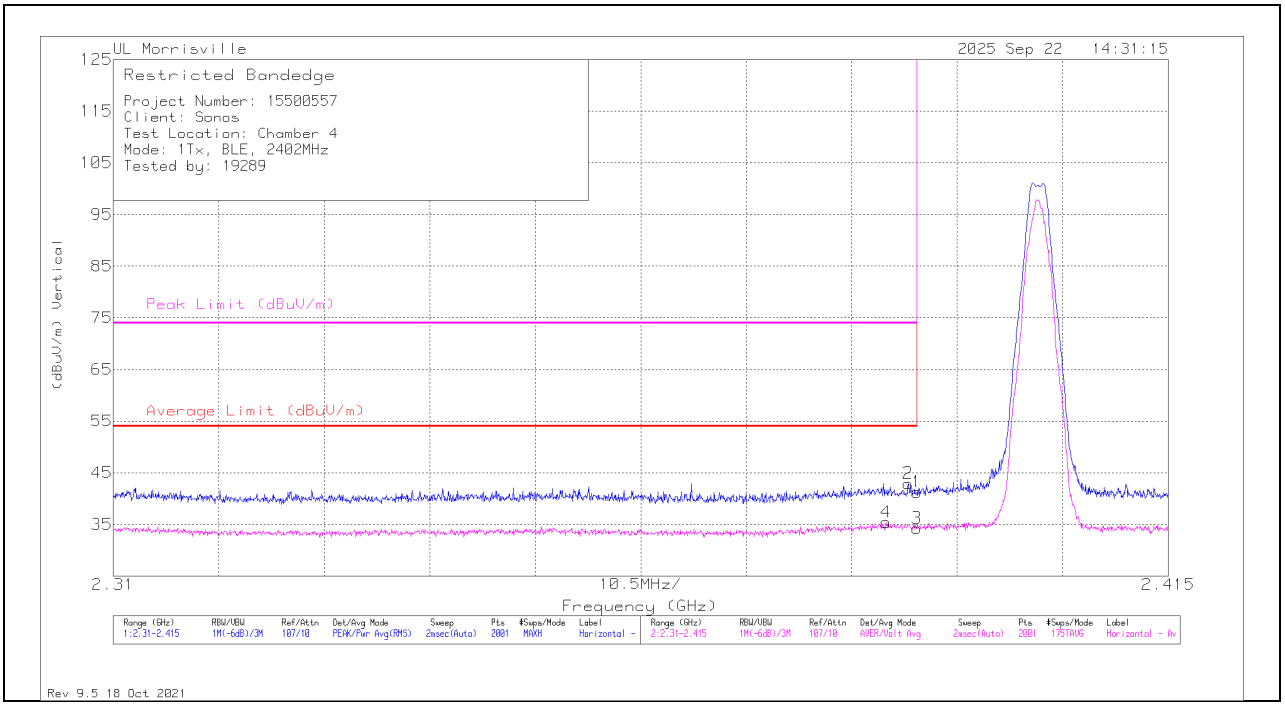
10.2.2. BLE (2Mbps)

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	32.25	Pk	32	-23	0	41.25	-	-	74	-32.75	271	288	H
2	* ** 2.38912	33.91	Pk	32	-23	0	42.91	-	-	74	-31.09	271	288	H
3	* ** 2.38996	20.37	ADV	32	-23	4.88	34.25	54	-19.75	-	-	271	288	H
4	* ** 2.38691	21.44	ADV	32	-22.9	4.88	35.42	54	-18.58	-	-	271	288	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

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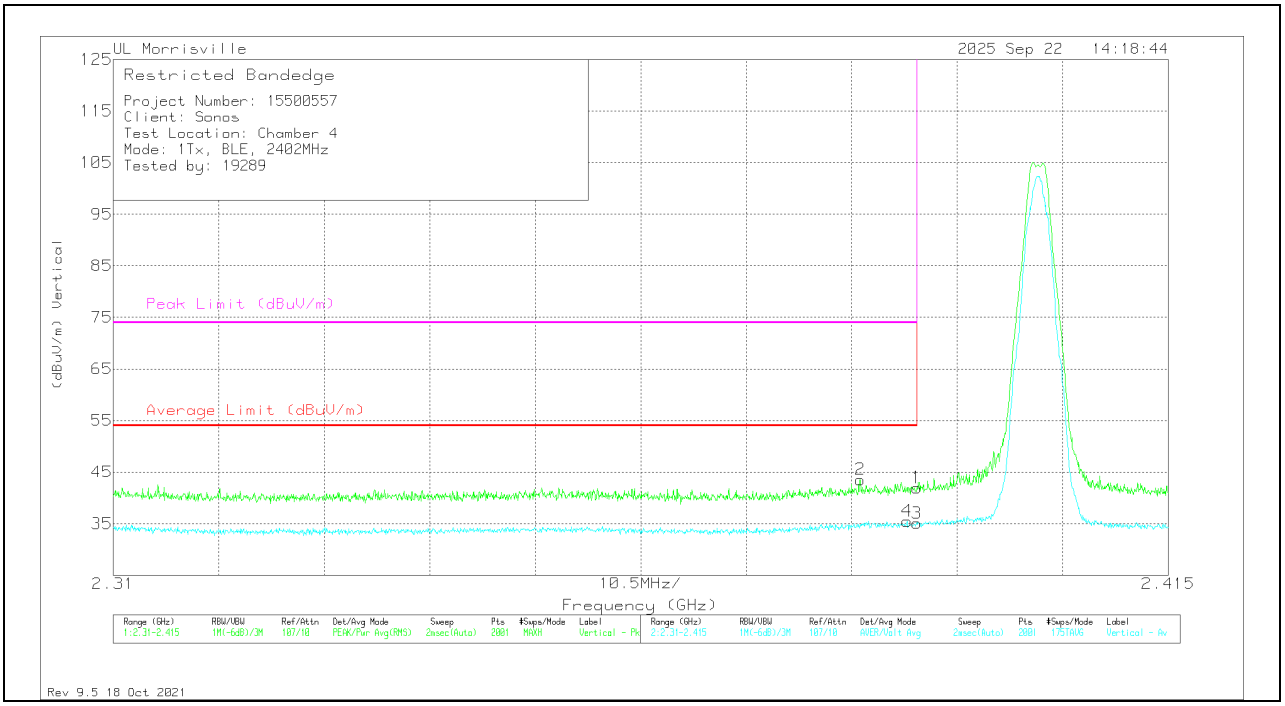
VERTICAL RESULT



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	32.95	Pk	32	-23	0	41.95	-	-	74	-32.05	262	190	V
2	* ** 2.38434	34.55	Pk	32	-23	0	43.55	-	-	74	-30.45	262	190	V
3	* ** 2.38996	21.19	ADV	32	-23	4.88	35.07	54	-18.93	-	-	262	190	V
4	* ** 2.38901	21.62	ADV	32	-23	4.88	35.5	54	-18.5	-	-	262	190	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

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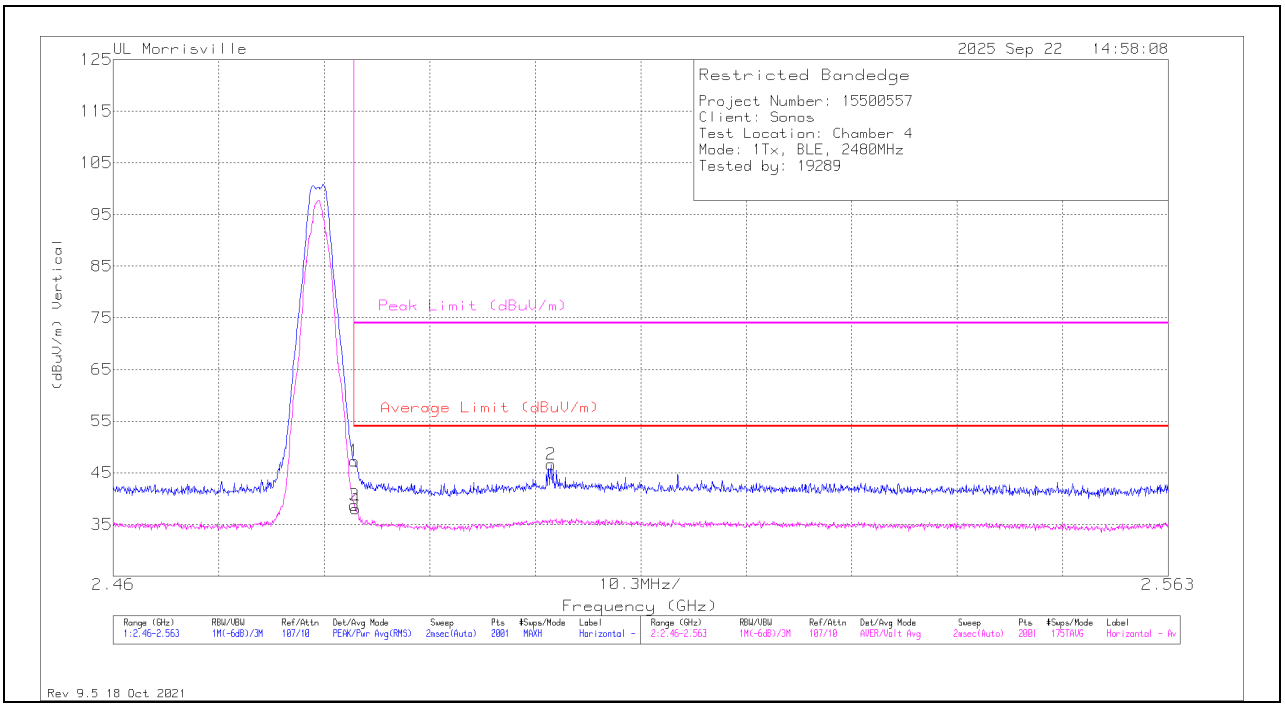
BANDEDGE (HIGH CHANNEL)

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	38.22	Pk	32.3	-23.2	0	47.32	-	-	74	-26.68	101	365	H
2	** 2.50275	36.41	Pk	32.4	-22.2	0	46.61	-	-	74	-27.39	101	365	H
3	* ** 2.48354	24.72	ADV	32.3	-23.2	4.88	38.7	54	-15.3	-	-	101	365	H
4	* ** 2.48369	24.01	ADV	32.3	-23.2	4.88	37.99	54	-16.01	-	-	101	365	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

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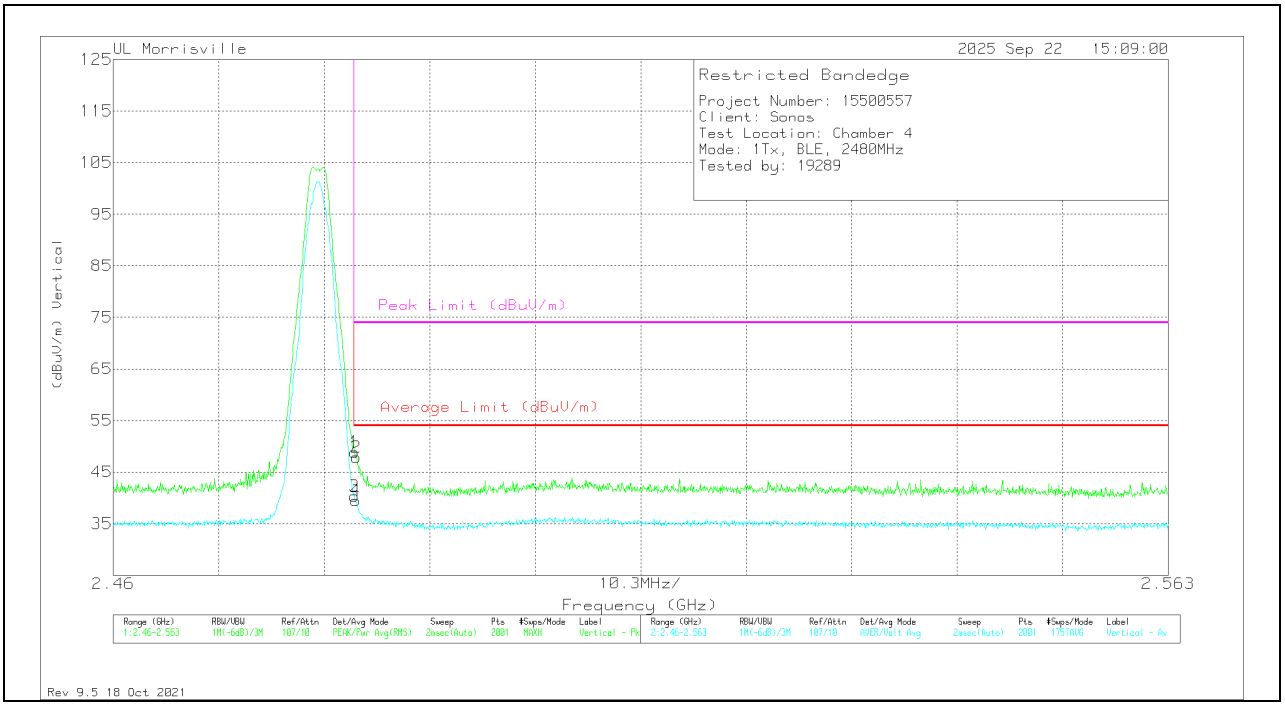
VERTICAL RESULT



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	39.77	Pk	32.3	-23.2	0	48.87	-	-	74	-25.13	181	379	V
2	* ** 2.48374	38.76	Pk	32.3	-23.2	0	47.86	-	-	74	-26.14	181	379	V
3	* ** 2.48354	26.35	ADV	32.3	-23.2	4.88	40.33	54	-13.67	-	-	181	379	V
4	* ** 2.48369	25.49	ADV	32.3	-23.2	4.88	39.47	54	-14.53	-	-	181	379	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

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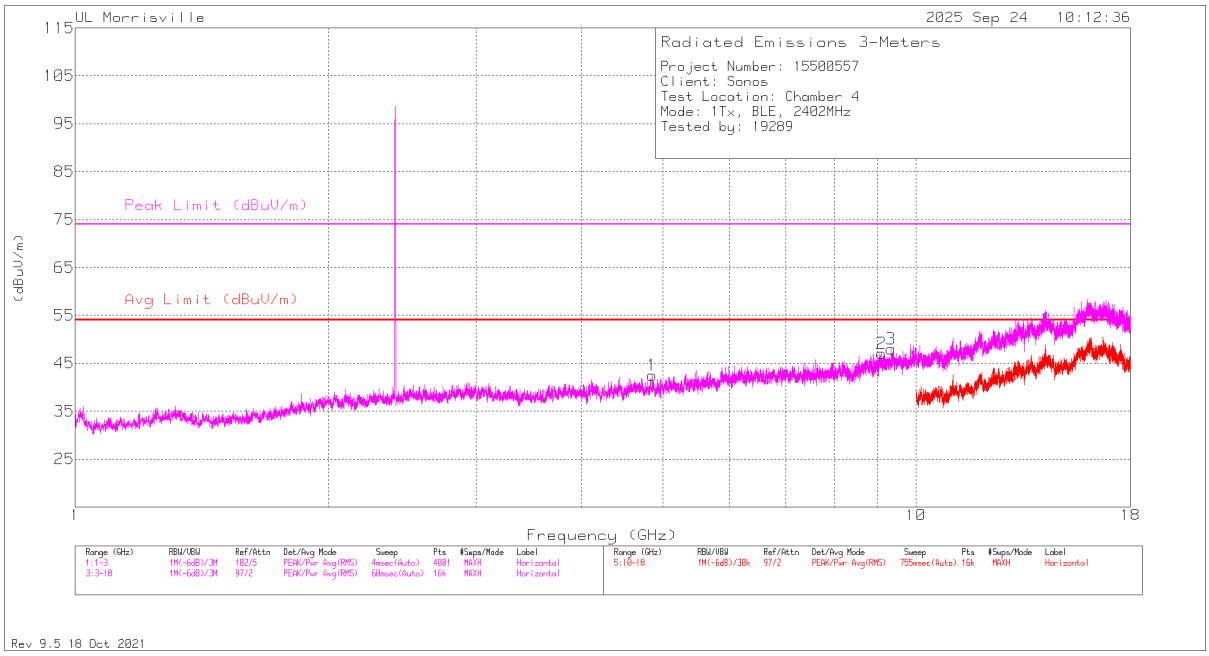
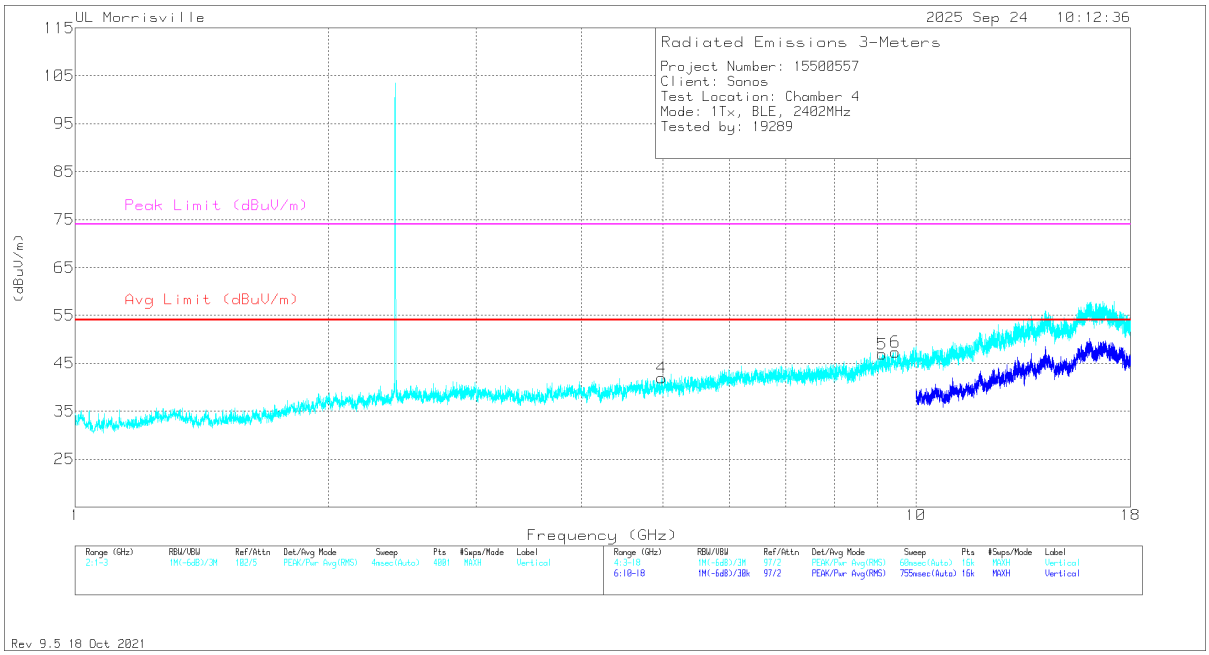
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



HORIZONTAL



VERTICAL

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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	* ** 4.86094	40.31	Pk	34	-31.8	0	42.51	54	-11.49	74	-31.49	0-360	100	H
2	* ** 9.10875	35.02	Pk	36	-23.9	0	47.12	54	-6.88	74	-26.88	0-360	100	H
3	* ** 9.34594	35.79	Pk	36.4	-24.2	0	47.99	54	-6.01	74	-26.01	0-360	100	H
4	* ** 4.98094	39.2	Pk	33.9	-31.1	0	42	54	-12	74	-32	0-360	200	V
5	* ** 9.12469	35.98	Pk	36.1	-25.2	0	46.88	54	-7.12	74	-27.12	0-360	200	V
6	* ** 9.46219	35.68	Pk	36.5	-24.8	0	47.38	54	-6.62	74	-26.62	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

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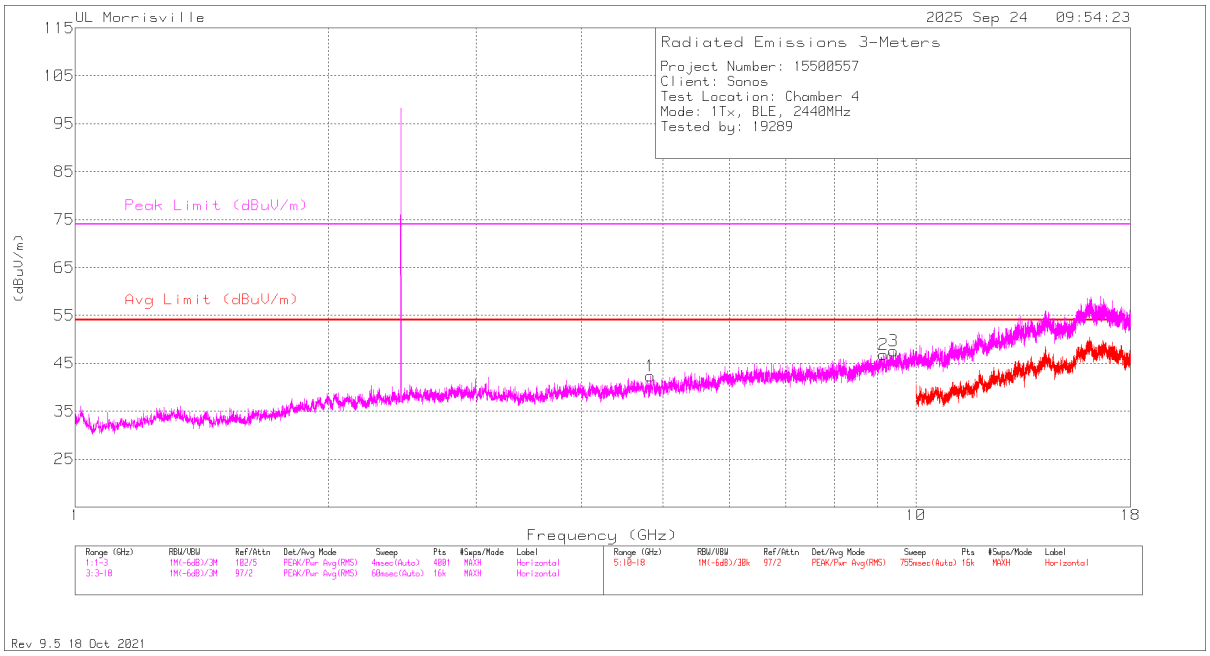
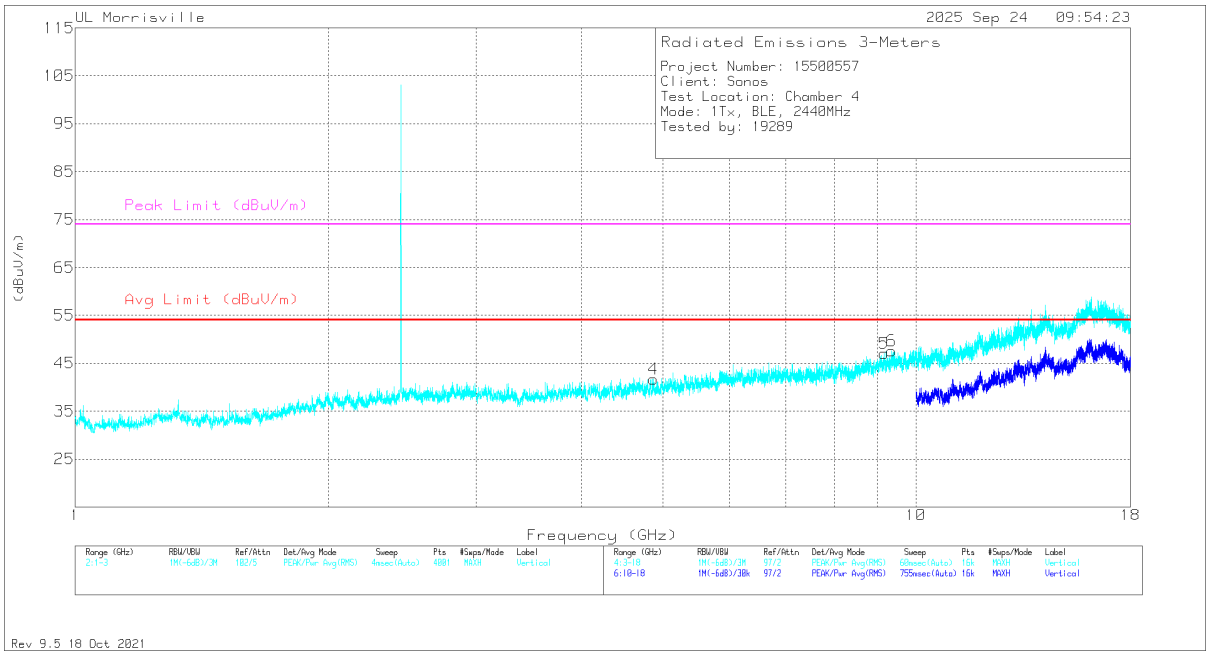
MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

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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	* ** 4.83281	39.75	Pk	34	-31.4	0	42.35	54	-11.65	74	-31.65	0-360	100	H
2	* ** 9.14906	35.05	Pk	36.2	-24.4	0	46.85	54	-7.15	74	-27.15	0-360	100	H
3	* ** 9.40406	35.15	Pk	36.5	-24.1	0	47.55	54	-6.45	74	-26.45	0-360	100	H
4	* ** 4.875	38.9	Pk	33.9	-31.1	0	41.7	54	-12.3	74	-32.3	0-360	200	V
5	* ** 9.17156	36.01	Pk	36.2	-25.2	0	47.01	54	-6.99	74	-26.99	0-360	200	V
6	* ** 9.35906	35.75	Pk	36.4	-24.6	0	47.55	54	-6.45	74	-26.45	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

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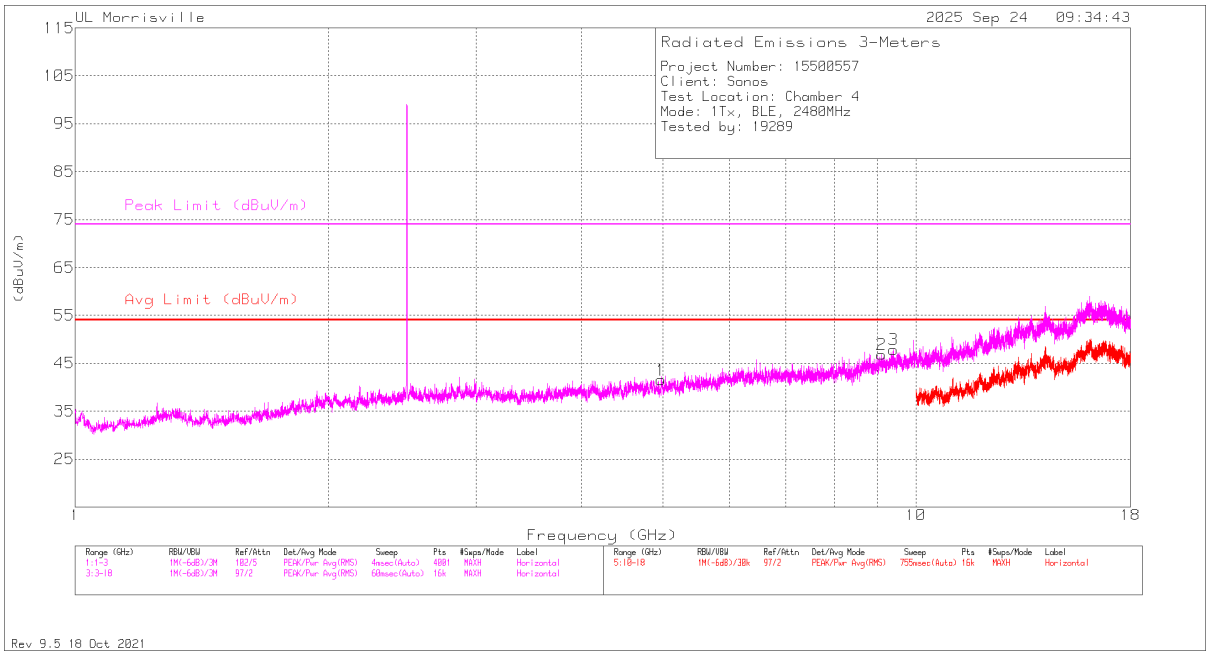
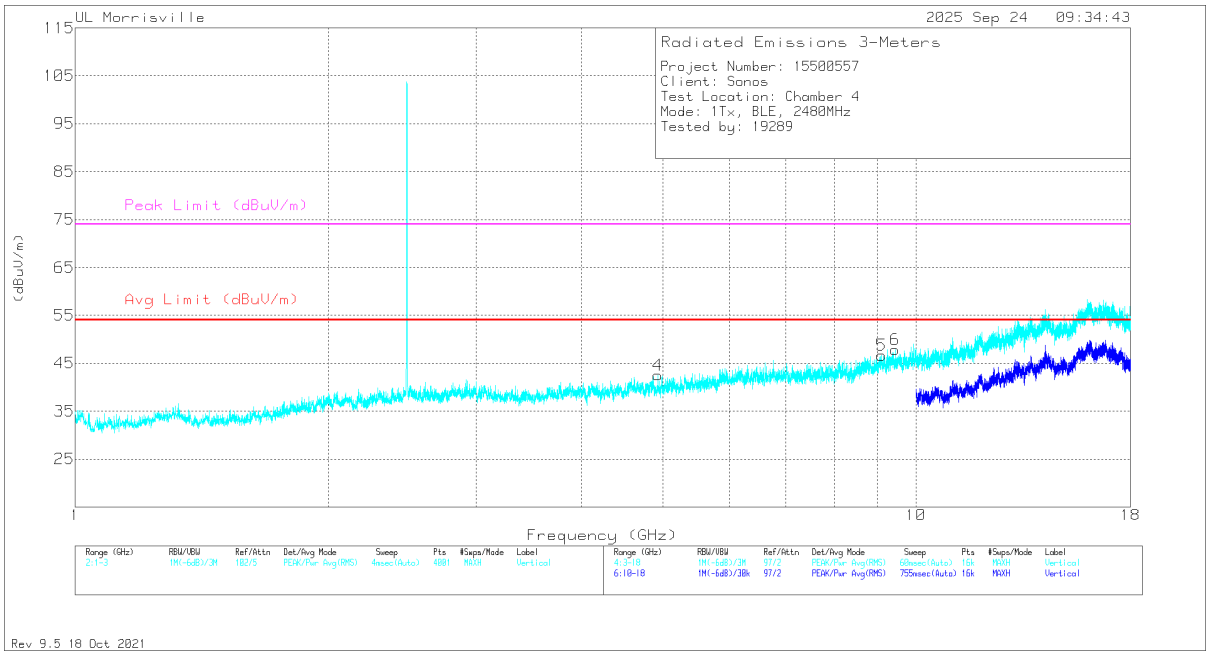
HIGH CHANNEL RESULTS



HORIZONTAL



VERTICAL

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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	* ** 4.97531	39.6	Pk	33.9	-32	0	41.5	54	-12.5	74	-32.5	0-360	100	H
2	* ** 9.11063	34.96	Pk	36	-24.1	0	46.86	54	-7.14	74	-27.14	0-360	100	H
3	* ** 9.40688	35.48	Pk	36.5	-24.1	0	47.88	54	-6.12	74	-26.12	0-360	100	H
4	* ** 4.93125	40.64	Pk	33.8	-31.9	0	42.54	54	-11.46	74	-31.46	0-360	200	V
5	* ** 9.10875	34.56	Pk	36	-23.9	0	46.66	54	-7.34	74	-27.34	0-360	200	V
6	* ** 9.44719	36.47	Pk	36.5	-25.1	0	47.87	54	-6.13	74	-26.13	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

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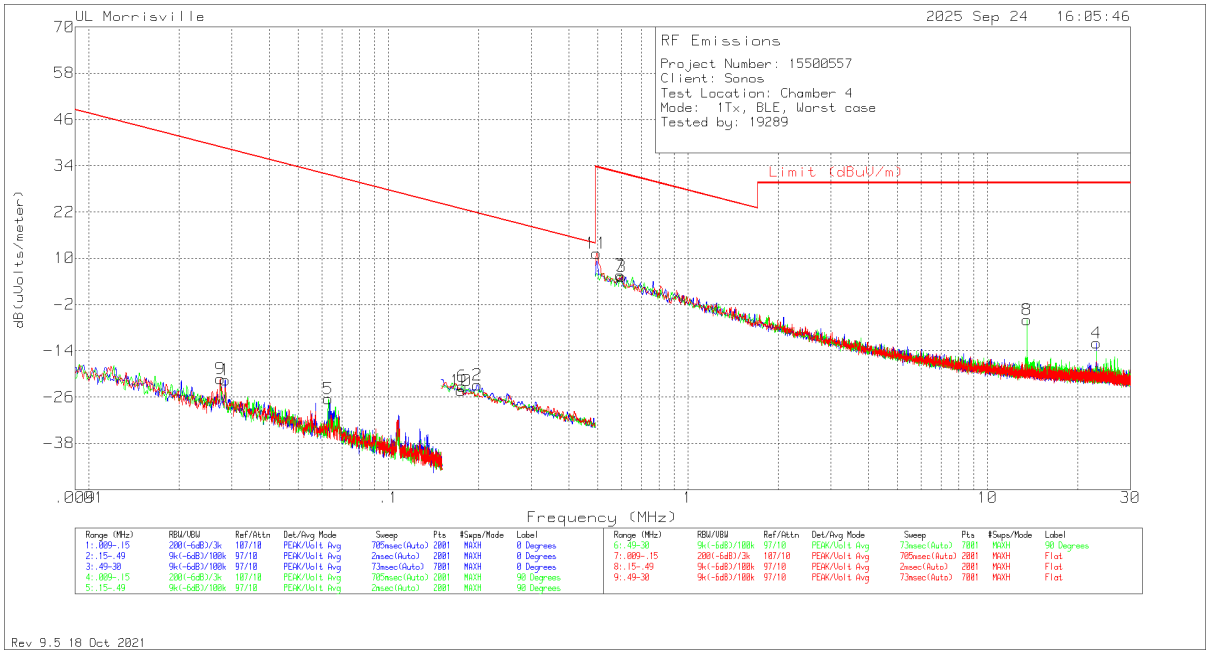
10.3. WORST CASE SPURIOUS BELOW 30MHz

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).



ANTENNA- THREE ORIENTATIONS (E-FIELD)

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
9	.02746	45.43	Pk	13.3	0	-80	-21.27	38.83	58.83	-60.1	0-360	Flat
1	.02853	45.14	Pk	13.3	0	-80	-21.56	38.5	58.5	-60.06	0-360	0 degs
5	.06296	42.27	Pk	11.3	0	-80	-26.43	31.62	51.62	-58.05	0-360	90 degs
10	.17482	44.61	Pk	11	0	-80	-24.39	22.75	42.75	-47.14	0-360	Flat
6	.1761	45.85	Pk	11	0	-80	-23.15	22.69	42.69	-45.84	0-360	90 degs
2	.19811	46.07	Pk	11	.1	-80	-22.83	21.67	41.67	-44.5	0-360	0 degs
11	.49422	40.18	Pk	11	.1	-40	11.28	33.73	-	-22.45	0-360	Flat
7	.59329	34.47	Pk	11	.1	-40	5.57	32.14	-	-26.57	0-360	90 degs
3	.59962	34.11	Pk	11	.1	-40	5.21	32.05	-	-26.84	0-360	0 degs
8	13.5596	22.99	Pk	10.6	.4	-40	-6.01	29.54	-	-35.55	0-360	90 degs
4	23.12992	17.81	Pk	9.6	.6	-40	-11.99	29.54	-	-41.53	0-360	0 degs

Pk - Peak detector

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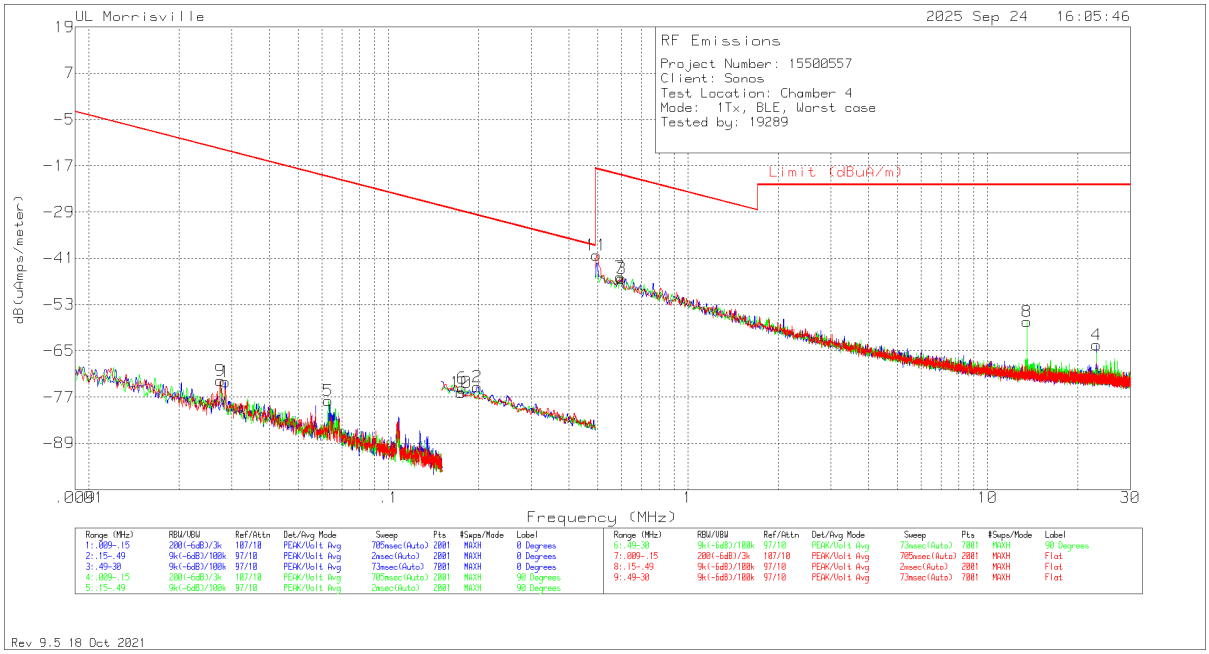

ANTENNA- THREE ORIENTATIONS (H-FIELD)

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
9	.02746	45.43	Pk	-38.2	0	-80	-72.77	-12.67	7.33	-60.1	0-360	Flat
1	.02853	45.14	Pk	-38.2	0	-80	-73.06	-13	7.00	-60.06	0-360	0 degs
5	.06296	42.27	Pk	-40.2	0	-80	-77.93	-19.88	0.12	-58.05	0-360	90 degs
10	.17482	44.61	Pk	-40.5	0	-80	-75.89	-28.75	-8.75	-47.14	0-360	Flat
6	.1761	45.85	Pk	-40.5	0	-80	-74.65	-28.81	-8.81	-45.84	0-360	90 degs
2	.19811	46.07	Pk	-40.5	.1	-80	-74.33	-29.83	-9.83	-44.5	0-360	0 degs
11	.49422	40.18	Pk	-40.5	.1	-40	-40.22	-17.77	-	-22.45	0-360	Flat
7	.59329	34.47	Pk	-40.5	.1	-40	-45.93	-19.36	-	-26.57	0-360	90 degs
3	.59962	34.11	Pk	-40.5	.1	-40	-46.29	-19.45	-	-26.84	0-360	0 degs
8	13.5596	22.99	Pk	-40.9	.4	-40	-57.51	-21.96	-	-35.55	0-360	90 degs
4	23.12992	17.81	Pk	-41.9	.6	-40	-63.49	-21.96	-	-41.53	0-360	0 degs

Pk - Peak detector

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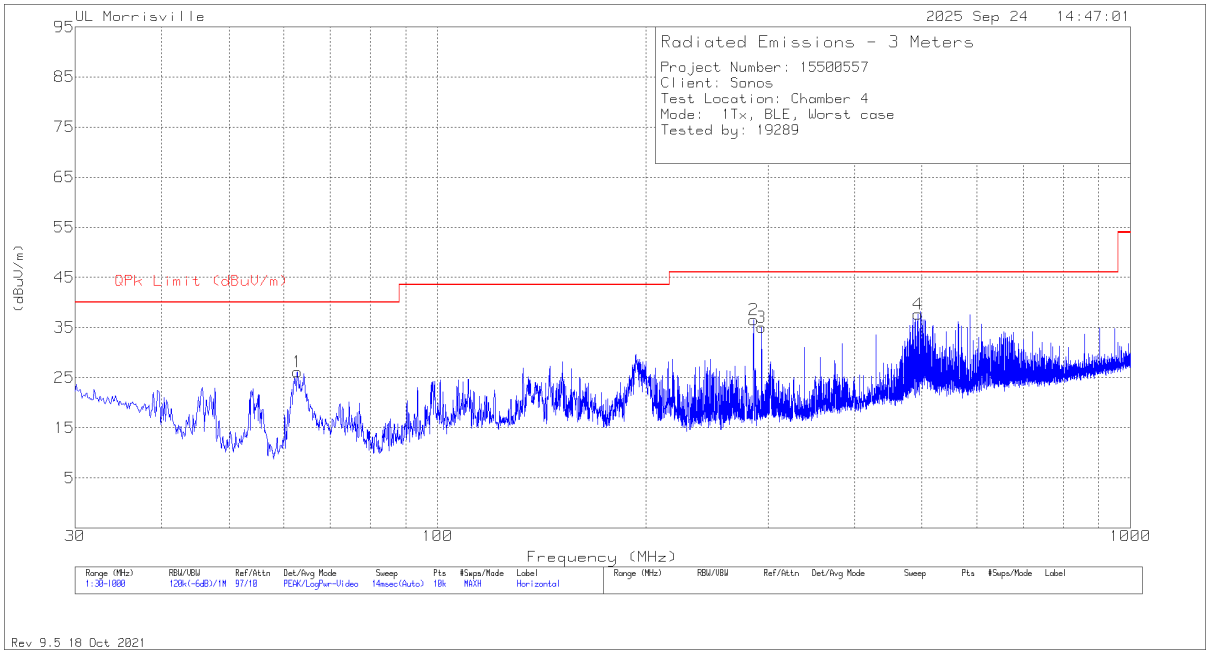
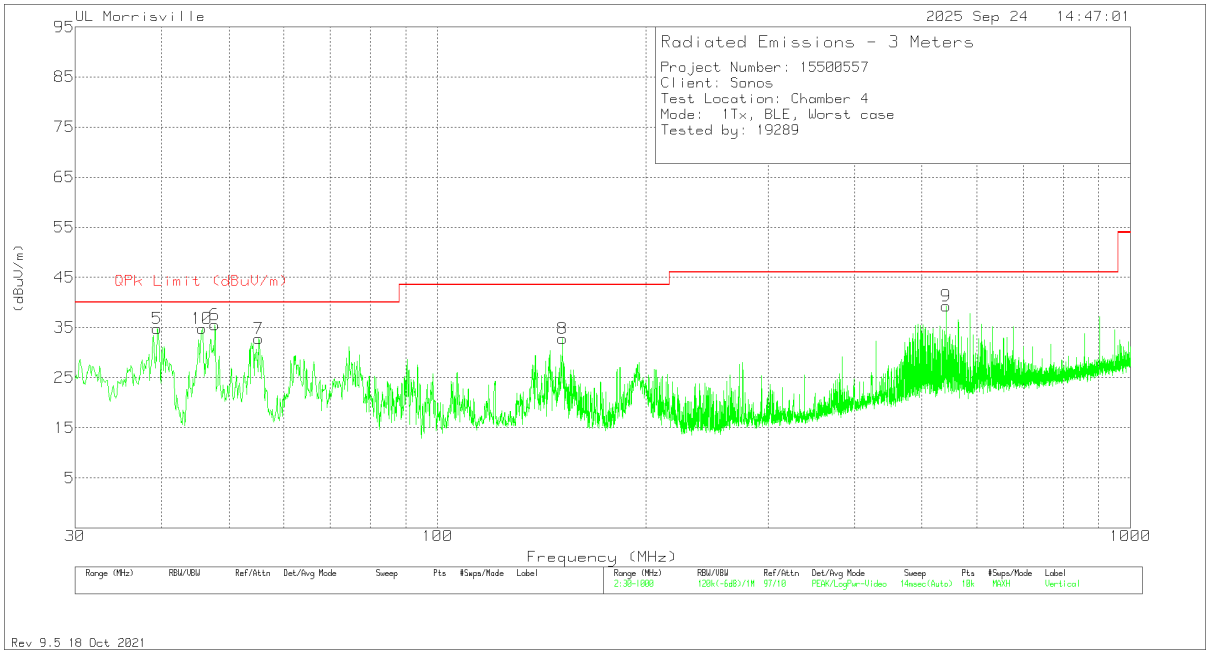
10.4. WORST CASE SPURIOUS 30-1000MHz



HORIZONTAL



VERTICAL

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Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	90628 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	39.4669	43.69	Qp	20.4	-31.9	32.19	40	-7.81	287	110	V
10	45.73109	46.45	Qp	16.1	-31.4	31.15	40	-8.85	332	101	V
6	47.793	51.67	Qp	15	-31.9	34.77	40	-5.23	254	107	V
7	55.22	50.6	Pk	13.5	-31.3	32.8	40	-7.2	0-360	100	V
1	62.786	43.49	Pk	14	-31.3	26.19	40	-13.81	0-360	300	H
8	151.541	44.27	Pk	18.6	-30.1	32.77	43.52	-10.75	0-360	100	V
2	285.983	46.41	Pk	19.4	-29.3	36.51	46.02	-9.51	0-360	100	H
3	293.549	44.72	Pk	19.5	-29.2	35.02	46.02	-11	0-360	100	H
4	493.563	42.28	Pk	23.7	-28.3	37.68	46.02	-8.34	0-360	100	H
9	541.966	43.42	Pk	24.2	-28.3	39.32	46.02	-6.7	0-360	100	V

Pk - Peak detector
Qp - Quasi-Peak detector

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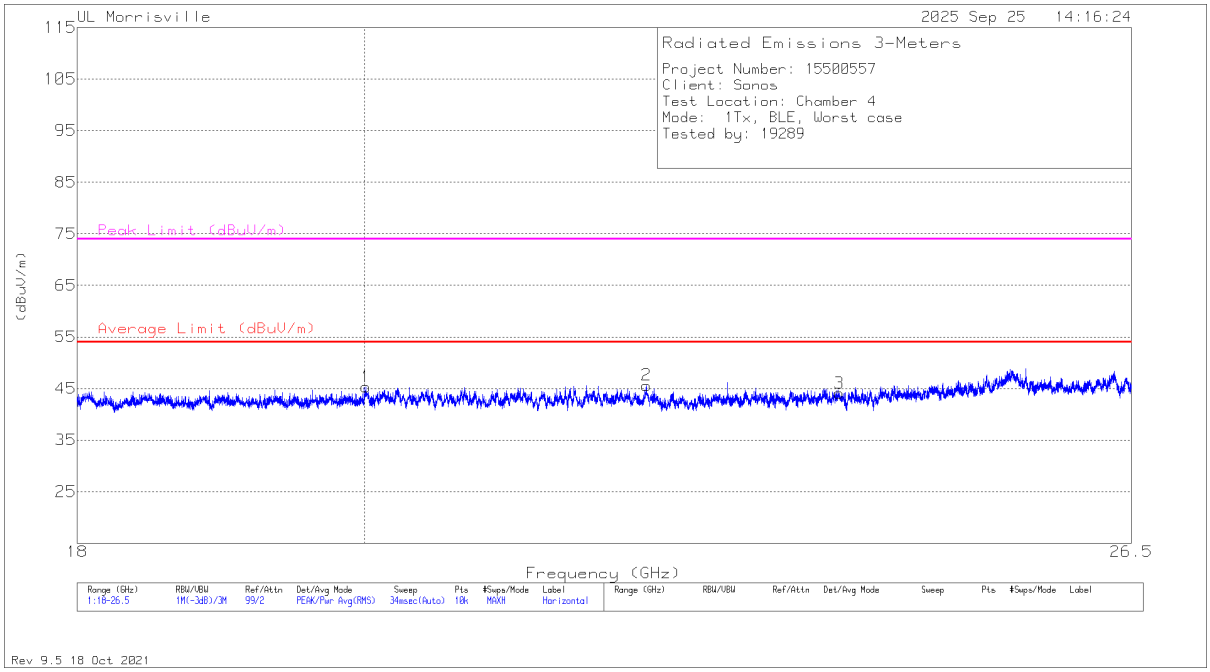
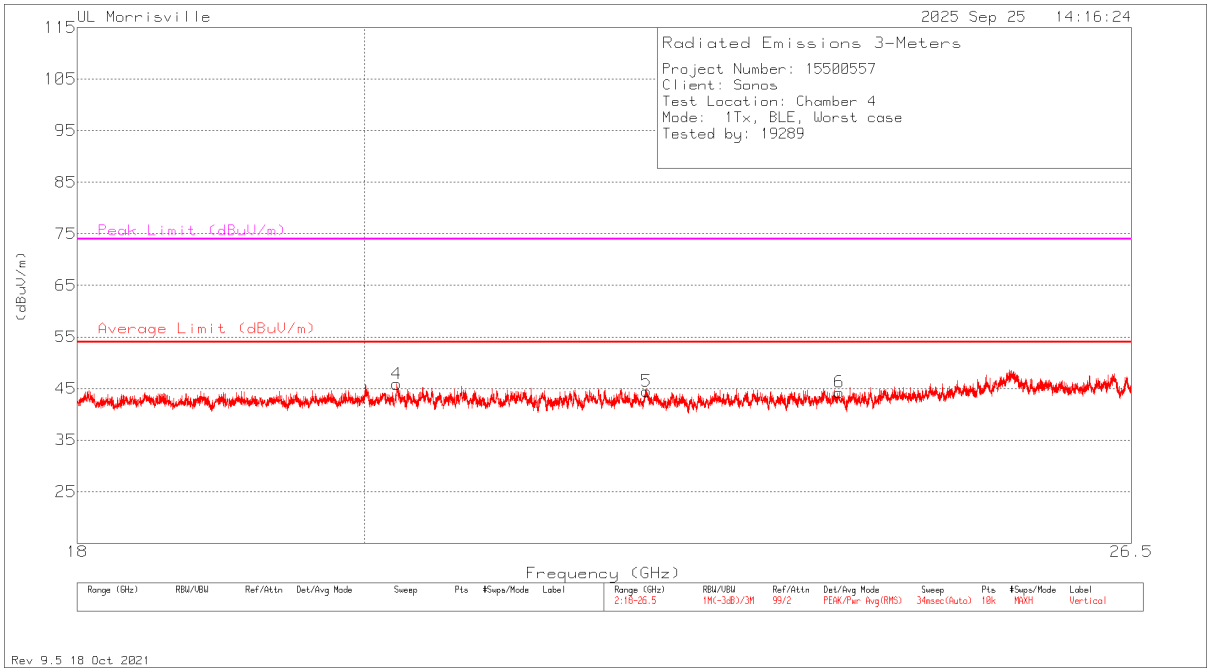
10.5. WORST CASE SPURIOUS >18GHz



HORIZONTAL



VERTICAL

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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	* ** 20.0113	51	Pk	32.6	-38.3	0	45.3	54	-8.7	74	-28.7	0-360	150	H
2	* ** 22.18072	49.91	Pk	33.4	-37.7	0	45.61	54	-8.39	74	-28.39	0-360	250	H
3	* ** 23.80693	47.97	Pk	34	-37.9	0	44.07	54	-9.93	74	-29.93	0-360	200	H
4	* ** 20.23997	51.59	Pk	32.6	-38.3	0	45.89	54	-8.11	74	-28.11	0-360	150	V
5	* ** 22.18157	48.87	Pk	33.4	-37.8	0	44.47	54	-9.53	74	-29.53	0-360	200	V
6	* ** 23.80778	48.18	Pk	34	-37.9	0	44.28	54	-9.72	74	-29.72	0-360	250	V

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

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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 lines.

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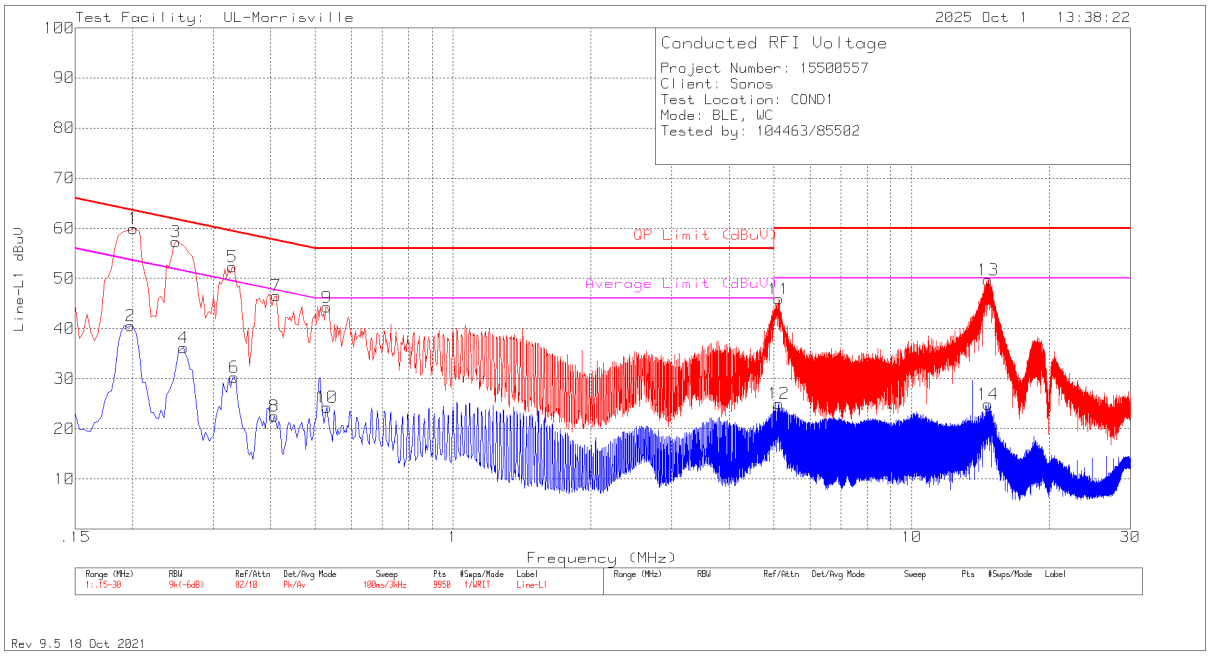
11.1. AC POWER LINE

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)
2	.198	30.8	Av	.1	9.7	40.6	-	-	53.69	-13.09
1	.20561	45.51	Qp	.1	9.7	55.31	63.38	-8.07	-	-
3	.24616	41.69	Qp	.1	9.7	51.49	61.89	-10.4	-	-
4	.258	26.33	Av	.1	9.7	36.13	-	-	51.5	-15.37
5	.33	42.56	Pk	.1	9.7	52.36	59.45	-7.09	-	-
6	.333	20.55	Av	0	9.7	30.25	-	-	49.38	-19.13
8	.408	12.78	Av	0	9.7	22.48	-	-	47.69	-25.21
7	.411	36.83	Pk	0	9.7	46.53	57.63	-11.1	-	-
9	.531	34.54	Pk	0	9.7	44.24	56	-11.76	-	-
10	.531	14.54	Av	0	9.7	24.24	-	-	46	-21.76
11	5.127	36.17	Pk	0	9.7	45.87	60	-14.13	-	-
12	5.127	15.34	Av	0	9.7	25.04	-	-	50	-24.96
13	14.691	39.79	Pk	.1	9.8	49.69	60	-10.31	-	-
14	14.697	15.01	Av	.1	9.8	24.91	-	-	50	-25.09

Pk - Peak detector
Av - Average detection
Qp - Quasi-Peak detector

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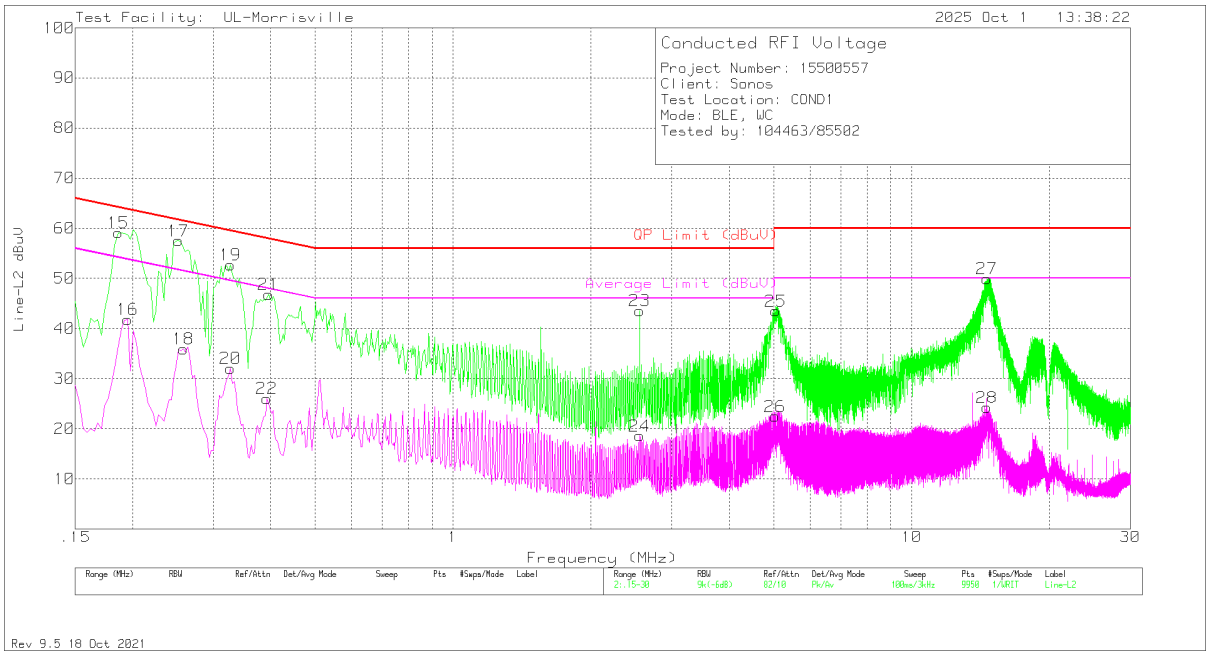
LINE 2 RESULTS



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	.186	45.22	Qp	.1	9.7	55.02	64.21	-9.19	-	-
16	.195	31.96	Av	.1	9.7	41.76	-	-	53.82	-12.06
17	.24779	42.41	Qp	.1	9.7	52.21	61.83	-9.62	-	-
18	.258	26.08	Av	.1	9.7	35.88	-	-	51.5	-15.62
19	.327	42.85	Pk	.1	9.7	52.65	59.53	-6.88	-	-
20	.327	22.22	Av	.1	9.7	32.02	-	-	49.53	-17.51
22	.393	16.3	Av	0	9.7	26	-	-	48	-22
21	.396	37.08	Pk	0	9.7	46.78	57.94	-11.16	-	-
23	2.553	33.87	Pk	0	9.7	43.57	56	-12.43	-	-
24	2.556	8.88	Av	0	9.7	18.58	-	-	46	-27.42
26	5.034	12.76	Av	0	9.7	22.46	-	-	50	-27.54
25	5.052	33.79	Pk	0	9.7	43.49	60	-16.51	-	-
27	14.598	40.01	Pk	.1	9.8	49.91	60	-10.09	-	-
28	14.604	14.32	Av	.1	9.8	24.22	-	-	50	-25.78

Pk - Peak detector
Av - Average detection
Qp - Quasi-Peak detector

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12. SETUP PHOTOS

Please refer to R15500557-EP1 for setup photos

END OF TEST REPORT

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