

TEST REPORT

Report Number: 15496282-E5V3

Applicant : APPLE, INC.
1 APPLE PARK WAY
CUPERTINO, CA 95014, U.S.A

Model : A3260 (Parent)
A3516, A3517, A3518 (Variants)

Brand : APPLE

FCC ID : BCG-E8948A(Parent)
BCG-E8954A, BCG-E8955A, BCG-E8956A (Variants)

IC : 579C-E8948A (Parent)
579C-E8954A, 579C-E8955A, 579C-E8956A (Variants)

EUT Description : SMARTPHONE

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C
ISED RSS-247 ISSUE 3
ISED RSS-GEN ISSUE 5 + A1 + A2

Date Of Issue:
2025/07/28

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REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2025/06/19	Initial Issue	Francisco Guarnero
V2	2025/07/08	Addressed TCB Feedback sections 3, 6, 9, 11 & 12	Glenn Escano
V3	2025/07/28	Updated data in section 10.1.3	Francisco Guarnero

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: APPLE INC.
1 APPLE PARK WAY
CUPERTINO, CA 95014, U.S.A

EUT DESCRIPTION: SMARTPHONE

MODEL: A3260 (Parent)
A3516, A3517, A3518 (Variants)

BRAND: APPLE

SERIAL NUMBER: JJ9TWWRN60 (RADIATED)
C07HCB0003S0000Y (CONDUCTED)

SAMPLE RECEIPT DATE: 2025/02/28

DATE TESTED: FEBRUARY 19 – JULY 26, 2025

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Complies
ISED RSS-247 Issue 3	Complies
ISED RSS-GEN Issue 5 + A1 + A2	Complies

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

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

This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, any agency of the Federal Government, or any agency of the U.S. government.

Approved & Released For
UL Verification Services Inc. By:



Frank Ibrahim
Staff Engineer
Consumer Technology Division
UL Verification Services Inc.

Prepared By:



Francisco Guarnero
Senior Test Engineer
Consumer Technology Division
UL Verification Services Inc.

2. TEST SUMMARY

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

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with:

- FCC 47 CFR Part 2
- FCC 47 CFR Part 15C
- ANSI C63.10-2020+Cor. 1-2023+C63. 10a-2024
- KDB 558074 D01 15.247 Meas Guidance
- KDB 414788 D01 Radiated Test Site
- KDB 662911 D01 Multiple Transmitter Output
- KDB 484596 D01 Referencing Test Data
- RSS-GEN Issue 5 + A1 + A2
- RSS-247 Issue 3

4. FACILITIES AND ACCREDITATION

UL Verification Services Inc.is accredited by A2LA, certification #0751.05, 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 1: 47173 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	550739
☒	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA			
☐	Building 3: 843 Auburn Court, Fremont, CA 94538 USA			
☒	Building 4: 47658 Kato Rd, Fremont, CA 94538 USA			
☒	Building 5: 47670 Kato Rd, Fremont, CA 94538 USA			

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	U _{LAB}
Conducted Antenna Port Emission Measurement	1.94
Power Spectral Density	2.466
Time Domain Measurements Using SA	3.39
RF Power Measurement Direct Method Using Power Meter	1.3 (Peak), 0.45 (Ave)
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.2%
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.78 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.87 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB

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 Apple iPhone is a smartphone with cellular GSM, GPRS, EGPRS, WCDMA, LTE, 5G NR1, IEEE 802.11a/b/g/n/ac/ax/be, Bluetooth (BT), Ultra-Wideband (UWB), Global Positioning System (GPS), Near-Field Communication (NFC), Narrow-Band (NB) UNII, 802.15.4, 802.15.4ab-Narrow Band (NB), Wireless Power Transfer (WPT) and Mobile Satellite Service (MSS) technologies. The rechargeable battery is not user accessible.

6.2. MAXIMUM OUTPUT POWER

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

Antenna	Configuration	Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
ANT 2	High Power	2405 - 2475	802.15.4	20.34	108.14
	Low Power			8.75	7.50
ANT 1	High Power			20.33	107.89
	Low Power			9.88	9.73

6.3. DESCRIPTION OF AVAILABLE ANTENNAS

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

Frequency Band (GHz)	Antenna Type	Antenna Peak Gain ANT 2 (dBi)	Antenna Peak Gain ANT 1 (dBi)	Cable Loss ANT 2 (dB)	Cables Loss ANT 1 (dB)
2.4	IFA	-1.5	-2.5	1.45	1.46

The cables were used for RF antenna port tests that had been offset to the test equipment during testing.

6.4. SOFTWARE AND FIRMWARE

The EUT firmware version installed during testing was Luck23A256.

6.5. WORST-CASE CONFIGURATION AND MODE

The EUT was investigated in three orthogonal orientations X, Y and Z on ANT 2, and ANT 1. It was determined that X (Flatbed) was the worst-case orientation for ANT 2 and Y (Landscape) was the worst-case orientation for ANT 1.

Radiated band edge, harmonic, and spurious emissions from 1GHz to 18GHz were performed with the EUT was set to transmit at highest power on Low/Middle/High channels.

Radiated emissions below 1GHz, 18-26GHz and power line conducted emissions were performed with the EUT transmits at the channel with the highest output power as worst-case scenario. There were no emissions found below 30MHz within 20dB of the limit.

For below 1GHz, tests were performed with EUT connected to AC power adapter as the worst case; and for above 1GHz, the worst-case configuration reported was tested with EUT only. For AC line conducted emission, test was investigated with AC power adapter and with laptop.

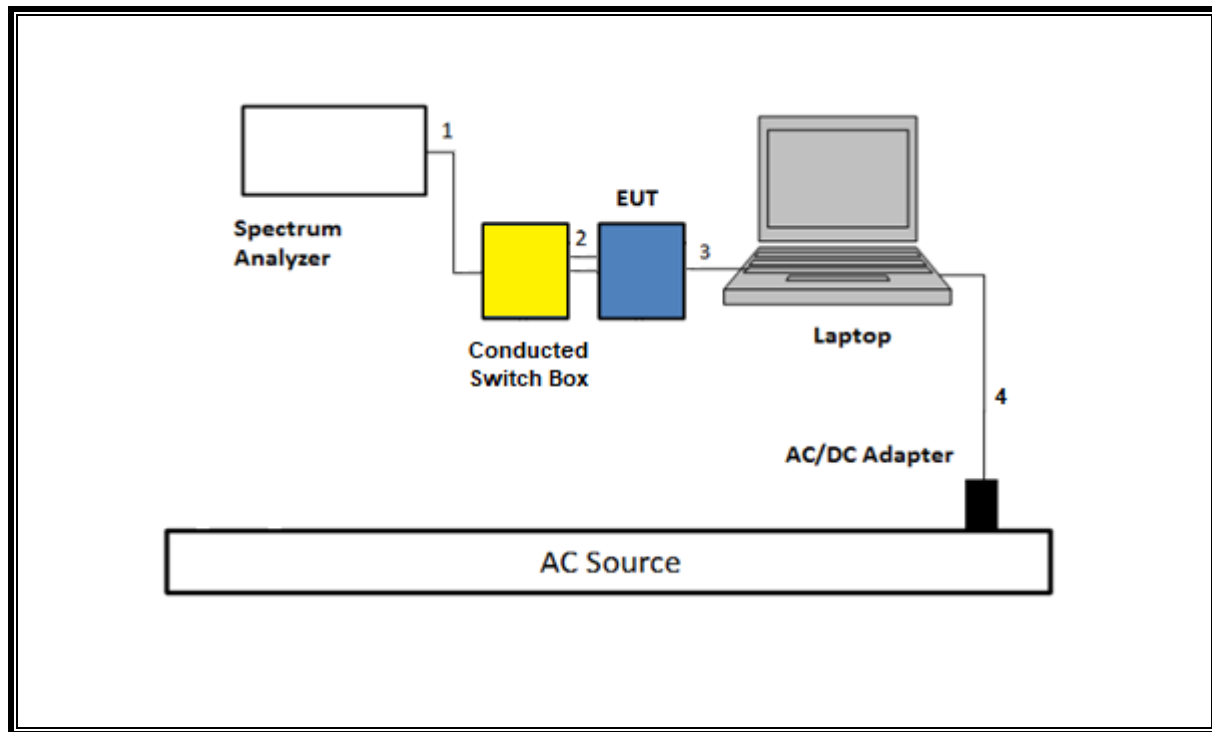
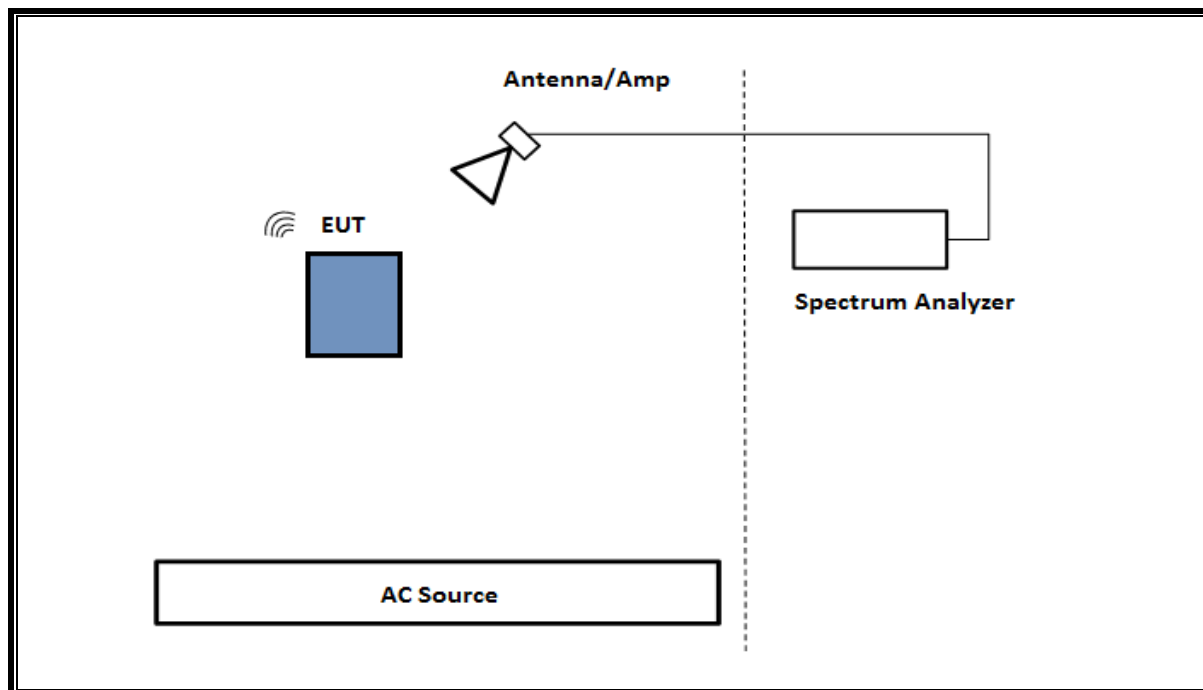
For simultaneous transmission of multiple channels in the 2.4GHz and 5GHz bands. No noticeable emission was found.

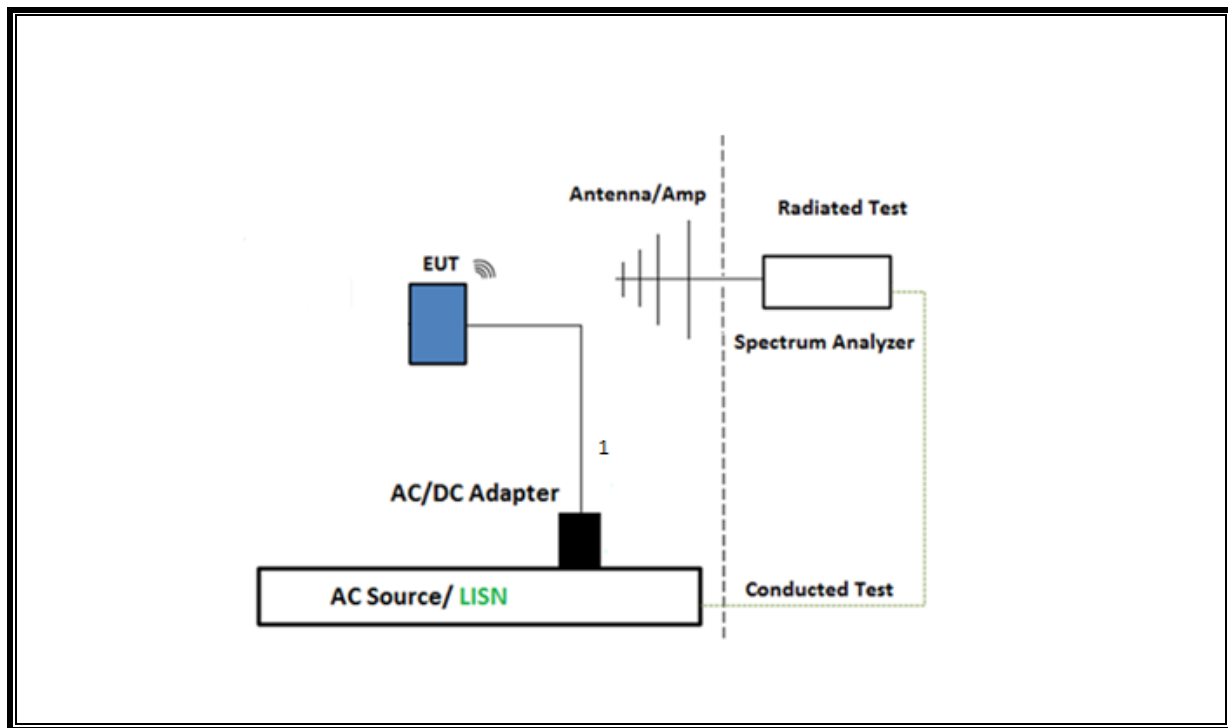
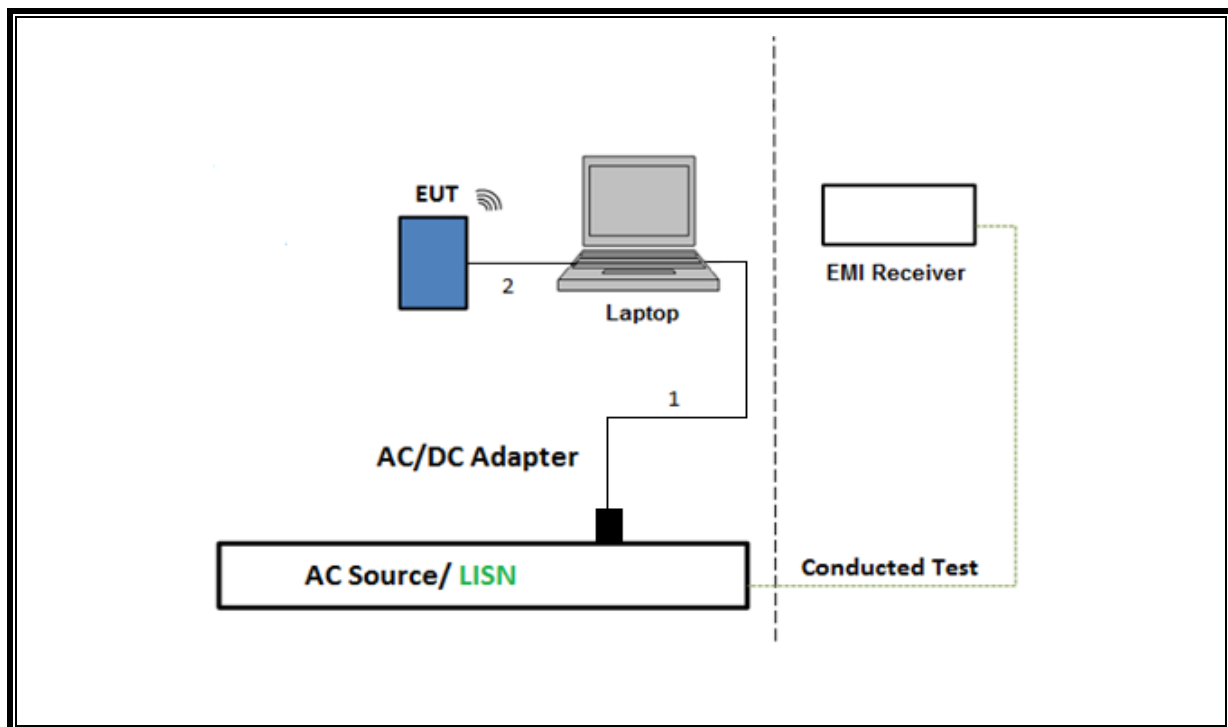
6.6. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT						
Description		Manufacturer	Model	Serial Number	FCC ID/ DoC	
Laptop		Apple	Macbook Pro	C02VD7SAHV22	BCGA1708	
Laptop AC/DC adapter		Liteon Technology	A1424	NSW25679	DoC	
EUT AC/DC adapter		Apple	A1720	C3D8417A7R93KVPA8	DoC	
Conducted Switch Box		UL	n/a	208281	N/A	
I/O CABLES (RF CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	SMA	1	SMA	Shielded	0.75	To spectrum Analyzer
2	Antenna	2	SMA	Un-shielded	0.2	To Conducted Switch Box
3	USB-C	1	USB-C	Shielded	1.0	N/A
4	AC	1	AC	Un-shielded	2	N/A
I/O CABLES (RF RADIATED AND AC LINE CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	1	AC	Un-shielded	2	N/A
2	USB	1	USB	Shielded	1	N/A

TEST SETUP

The EUT setup is shown as below. Test software exercised the radio card.

SETUP DIAGRAM FOR CONDUCTED TESTS**SETUP DIAGRAM FOR RADIATED TESTS Above 1 GHz**

SETUP DIAGRAM FOR Below 1GHz and AC LINE CONDUCTED TEST**TEST SETUP- AC LINE CONDUCTED: LAPTOP CONFIGURATION**

7. MEASUREMENT METHOD

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

6 dB BW: ANSI C63.10 Section 11.8.1 RBW $\geq$ DTS BW

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

Output Power: ANSI C63.10 Section 11.9.1.2 Method PKPM1 Peak-reading power meter

Output Power: ANSI C63.10 Section 11.9.2.3.2 Measurement using gated average power meter

PSD: ANSI C63.10 Section 11.10.2 Method PKPSD (peak PSD)

Radiated emissions restricted frequency bands: ANSI C63.10 Section 11.12.1 and 13

Conducted emissions in restricted frequency bands: ANSI C63.10 Section 11.12.2

Band-edge: ANSI C63.10 Section 11.12.2.4 and 13: Peak Measurement

Band-edge: ANSI C63.10 Section 11.12.2.5 and 13: Average Measurement

AC Power Line Conducted Emissions: ANSI C63.10 Section 6.2

Radiated emissions non-restricted frequency bands ANSI C63.10 Section 11.11 and 13

Radiated Spurious Emissions Below 30MHz: ANSI C63.10 Section 6.4 and 13

8. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	ID Num	Cal Due
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	80707	2026/6/30
RF Filter Box, 1-18GHz, 12 Port	UL-FR1	N/A	171875	2026/3/31
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	245268	2026/2/28
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	222741	2026/9/30
RF Filter Box, 1-18GHz, 12 Port	UL-FR1	Frankenstein	217521	2025/8/31
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	223461	2026/2/28
Antenna, Broadband Hybrid, 30MHz to 3GHz	Sunol Sciences Corp.	JB3	202301	2026/8/31
Amplifier, 9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	79584	2026/1/31
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	235266	2026/2/28
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	84796	2026/4/30
RF Filter Box, 1-18GHz, 12 Port	UL-FR1	Frankenstein	230878	2026/1/31
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	201497	2026/2/28
Antenna, Broadband Hybrid, 30MHz to 3GHz	SunAR rf motion	JB3	82258	2026/10/31
Amplifier, 9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	170648	2026/03/30
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	222740	2026/9/30
RF Filter Box, 1-18GHz, 12 Port	UL-FR1	Frankenstein	171389	2026/03/30
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	169936	2026/2/28
Antenna, Horn 18-26.5GHz	A.R.A	MWH-1826/B	81105	2025/08/31
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	226671	2027/7/31
RF Filter Box, 1-18GHz, 17 Ports	UL-FR1	RAT 2	236726	2025/10/31
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	223460	2026/2/28
Link File, RF Amplifier Assembly, 18-26.5GHz, 60dB Gain	Amplical	AMP18G26.5-60	220194	2026/04/29
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	201502	2026/2/27
Antenna, Passive Loop, 30Hz - 1MHz	Electro-Metrics	EM-6871	170014	2025/08/31
Antenna, Passive Loop, 100kHz to 30MHz	Electro-Metrics	EM-6872	170016	2025/08/31
Spectrum Analyzer, PXA, 3Hz to 44GHz	N9030A	Keysight Technologies Inc	80397	2026/01/31
Spectrum Analyzer, PXA, 3Hz to 44GHz	N9030A	Keysight Technologies Inc	125179	2026/02/28
Conducted Switch Box	UL-FR1	CSB	245782	2025/07/31
Conducted Switch Box	UL-FR1	CSB	208281	*2025/05/31
Power Meter, P-series single channel	Keysight Technologies Inc	N1911A	90715	2026/01/31
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1921A	81319	2026/01/31
Power Meter, P-series single channel	Keysight Technologies Inc	N1911A	90718	2026/01/31
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1921A	90419	2026/01/31

AC Line Conducted				
Description	Manufacturer	Model	ID Num	Cal Due
EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESR	171646	2026/02/28
LISN for Conducted Emissions CISPR-16	FISCHER CUSTOM COMMUNICATIONS	FCC-LISN-50/250-25-2-01-480V	175765	2026/01/31
Transient Limiter	TE	TBFL1	207996	2025/09/30
UL AUTOMATION SOFTWARE				
Radiated Software	UL	UL EMC	Ver 9.5, May 1, 2023	
Conducted Software	UL	UL EMC	2020.8.16	
AC Line Conducted Software	UL	UL EMC	Ver 9.5, Mar 3, 2023	

*Testing is completed before equipment expiration date.

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

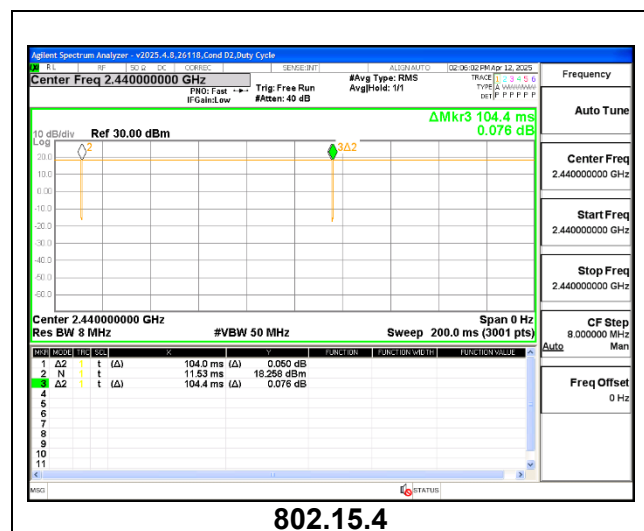
PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
2.4GHz Band						
802.15.4, 2440MHz	104.00	104.40	0.996	99.62%	0.00	0.010

DUTY CYCLE PLOTS



9.2. 99% BANDWIDTH**LIMITS**

None; for reporting purposes only.

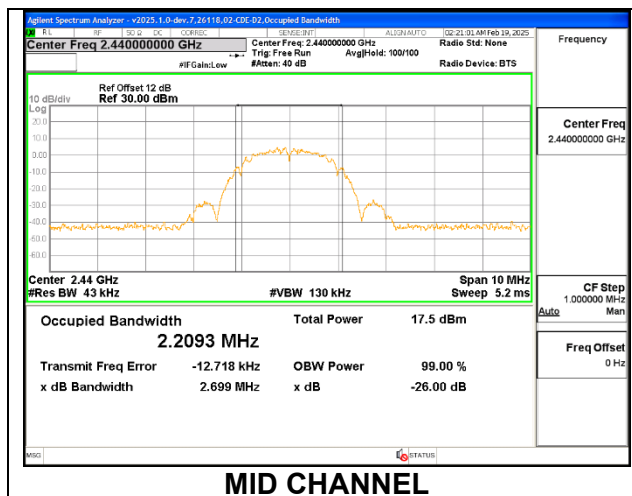
RESULTS

Only High-Power modes result is reported, it covers all Low Power modes. Only Mid channel plot is reported to show the analyzer's settings.

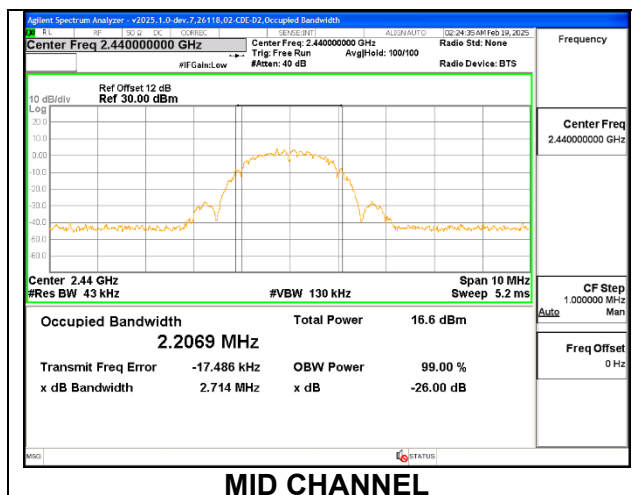
9.2.1. HIGH POWER

ANT 2

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2405	2.2007
Middle	2440	2.2093
High	2475	2.2102

ANT 1

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2405	2.2142
Middle	2440	2.2069
High	2475	2.2188



9.3. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

RSS-247 5.2 (a)

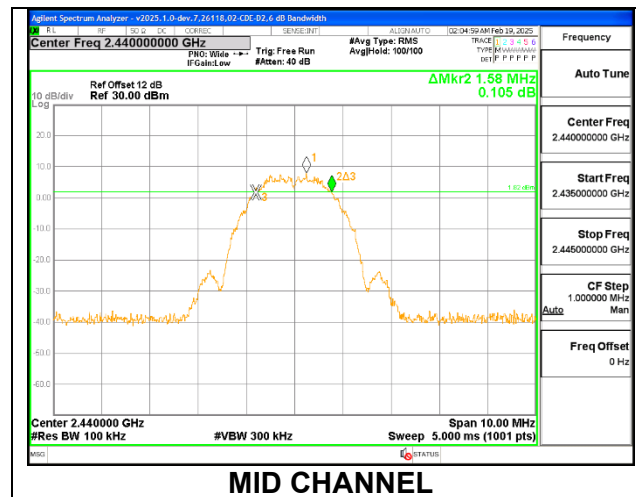
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

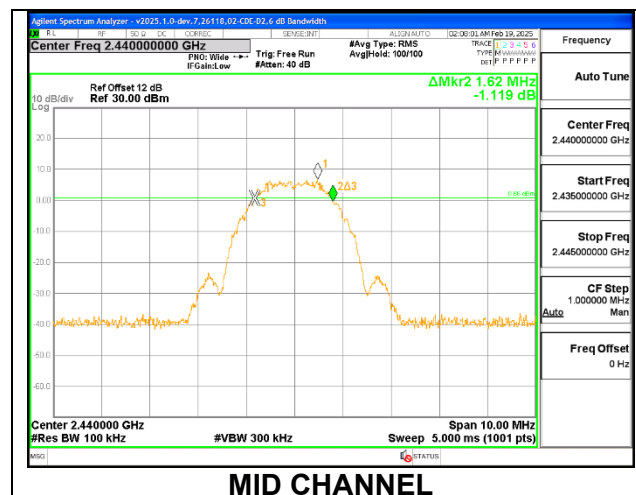
Only High-Power modes result is reported, it covers all Low Power modes. Only Mid channel plot is reported to show the analyzer's settings.

ANT 2

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2405	1.600	0.5
Middle	2440	1.580	0.5
High	2475	1.600	0.5



Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2405	1.590	0.5
Middle	2440	1.620	0.5
High	2475	1.650	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

Measurements were performed using a wideband RF 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 peak power sensor. Peak output power was read directly from the power meter.

DIRECTIONAL ANTENNA GAIN

For 1 TX:

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

9.4.1. **HIGH POWER****ANT 2**

Tested By:	26118
Date:	2/19/2025

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2405	20.17	30	-9.83
Middle	2440	20.34	30	-9.66
High	2475	20.17	30	-9.83

ANT 1

Tested By:	32181
Date:	6/17/2025

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2405	20.33	30	-9.67
Middle	2440	20.16	30	-9.84
High	2475	20.15	30	-9.85

9.4.2. **LOW POWER****ANT 2**

Tested By:	32181
Date:	2/17/2025

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2405	8.72	30	-21.28
Middle	2440	8.75	30	-21.25
High	2475	8.75	30	-21.25

ANT 1

Tested By:	26118
Date:	2/19/2025

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2405	9.85	30	-20.15
Middle	2440	9.88	30	-20.12
High	2475	9.44	30	-20.56

9.5. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband RF 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 average power sensor. Gated average output power was read directly from power meter.

RESULTS

9.5.1. HIGH POWER**ANT 2**

Tested By:	26118
Date:	2/19/2025

Channel	Frequency (MHz)	AV power (dBm)
Low	2405	19.79
Middle	2440	19.99
High	2475	19.86

ANT 1

Tested By:	32181
Date:	6/17/2025

Channel	Frequency (MHz)	AV power (dBm)
Low	2405	19.99
Middle	2440	19.85
High	2475	19.85

9.5.2. LOW POWER**ANT 2**

Tested By:	32181
Date:	6/17/2025

Channel	Frequency (MHz)	AV power (dBm)
Low	2405	8.17
Middle	2440	8.19
High	2475	8.19

ANT 1

Tested By:	26118
Date:	2/19/2025

Channel	Frequency (MHz)	AV power (dBm)
Low	2405	9.27
Middle	2440	9.49
High	2475	9.19

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

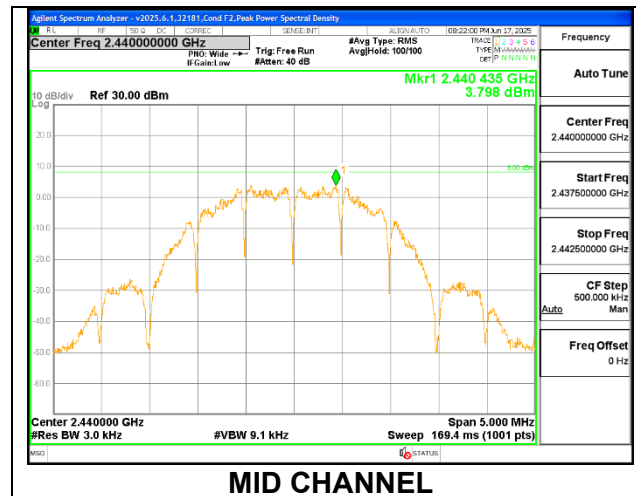
Only Mid channel plot is reported to show the analyzer's settings.

Only High-Power modes result is reported, it covers all Low Power modes.

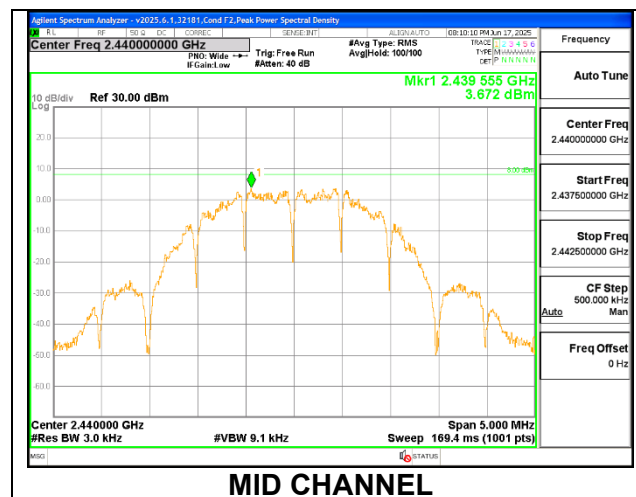
9.6.1. HIGH POWER

ANT 2

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2405	3.788	8	-4.21
Middle	2440	3.798	8	-4.20
High	2475	3.936	8	-4.06

**ANT 1**

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low	2405	3.980	8	-4.02
Middle	2440	3.672	8	-4.33
High	2475	4.027	8	-3.97



9.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

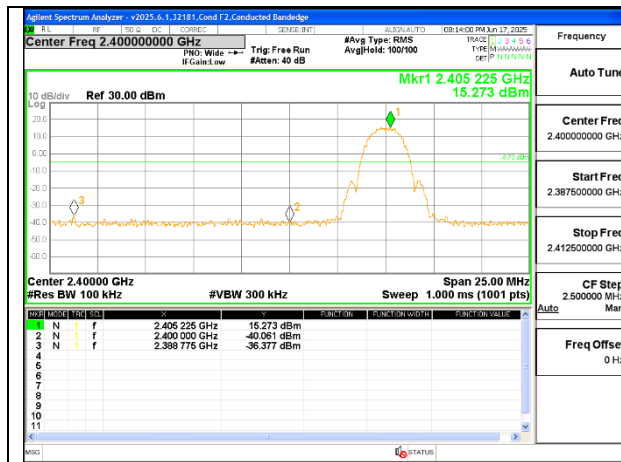
RSS-247 5.5

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

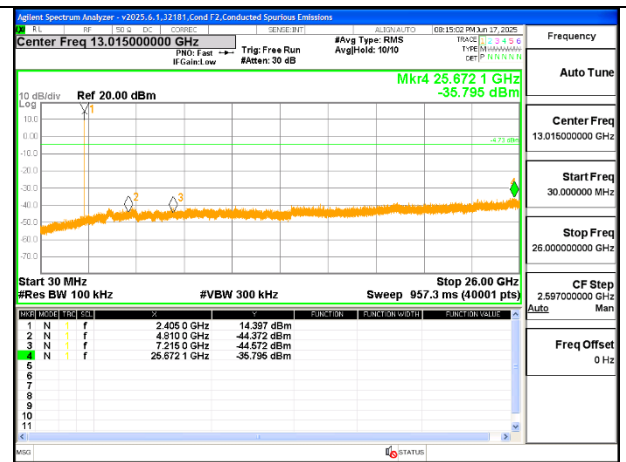
RESULTS

9.7.1. HIGH POWER

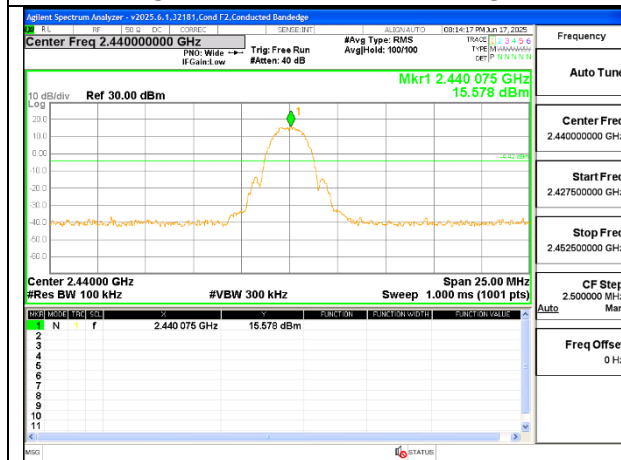
ANT 2



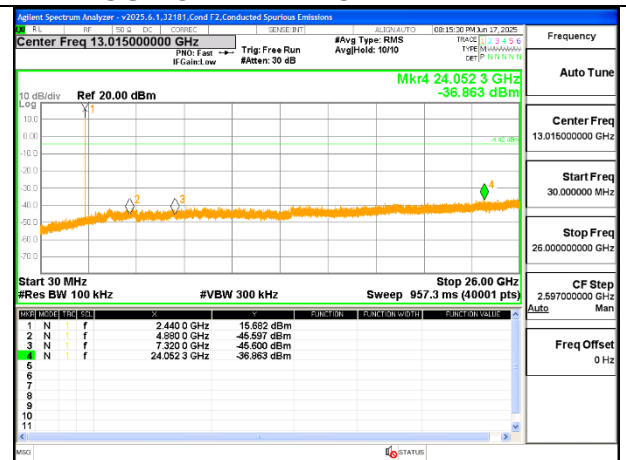
LOW CHANNEL BANDEDGE



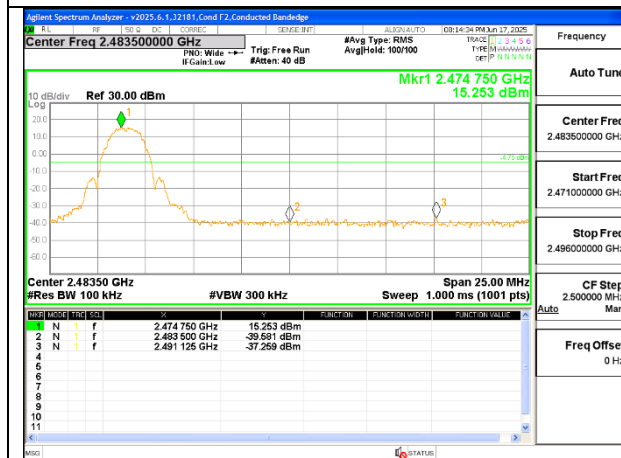
OUT-OF-BAND LOW CHANNEL



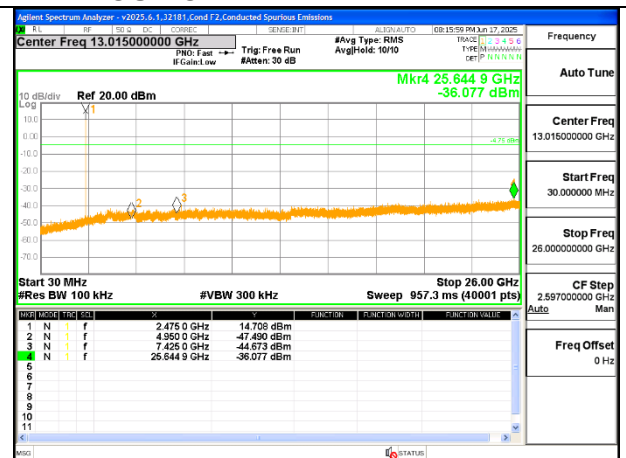
IN-BAND REFERENCE LEVEL



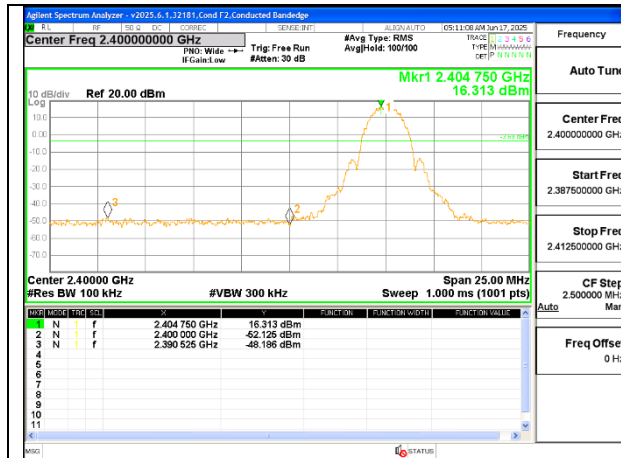
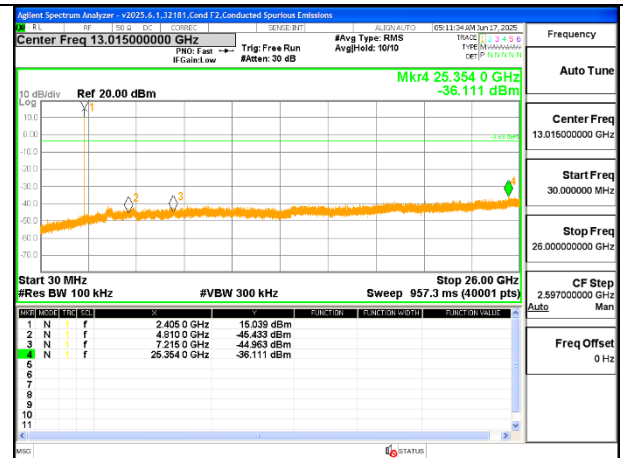
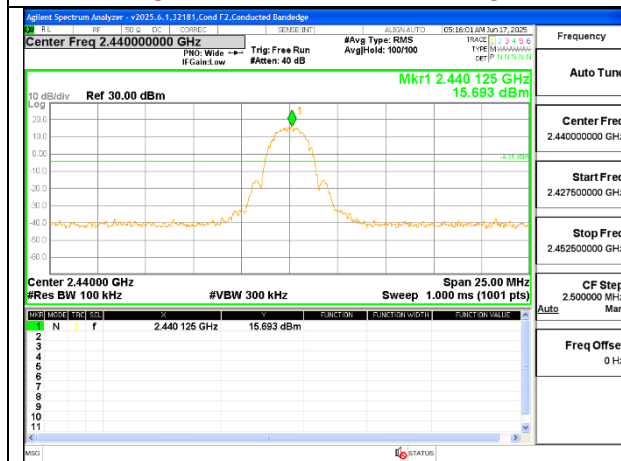
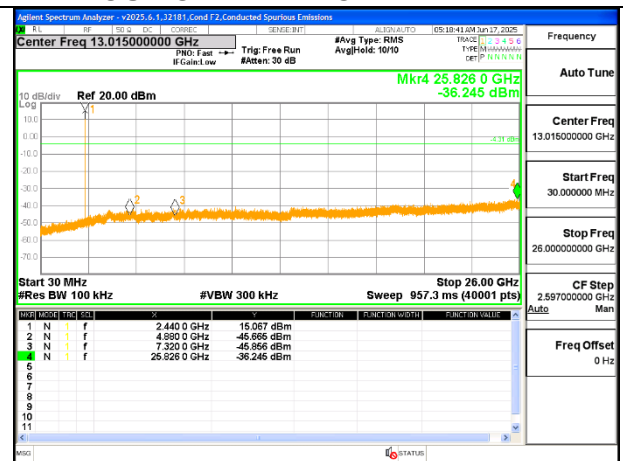
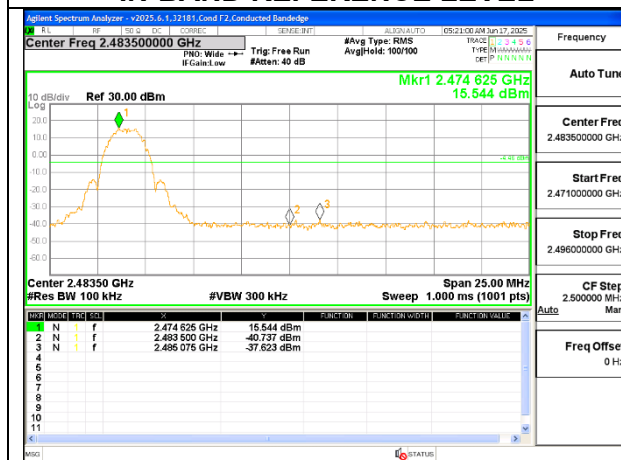
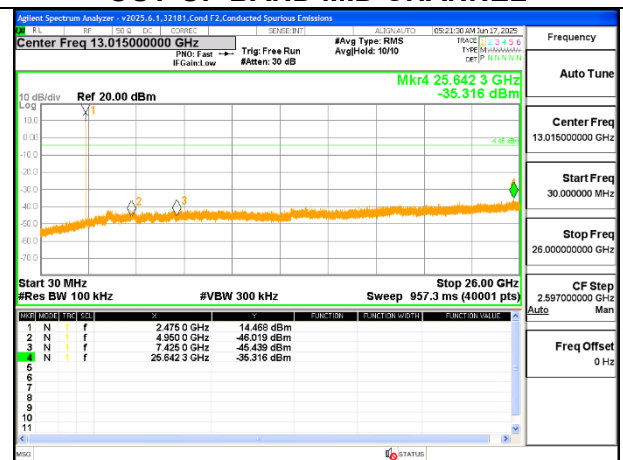
OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE

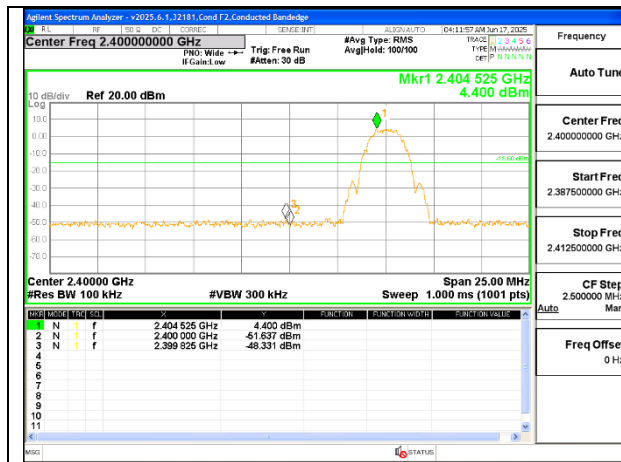


OUT-OF-BAND HIGH CHANNEL

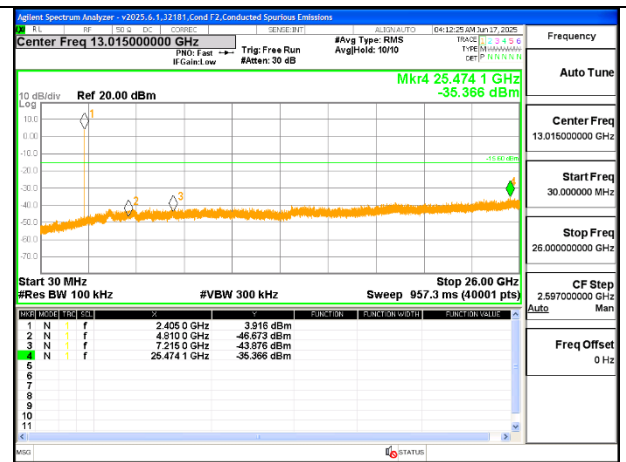
ANT 1**LOW CHANNEL BANDEDGE****OUT-OF-BAND LOW CHANNEL****IN-BAND REFERENCE LEVEL****OUT-OF-BAND MID CHANNEL****HIGH CHANNEL BANDEDGE****OUT-OF-BAND HIGH CHANNEL**

9.7.2. LOW POWER

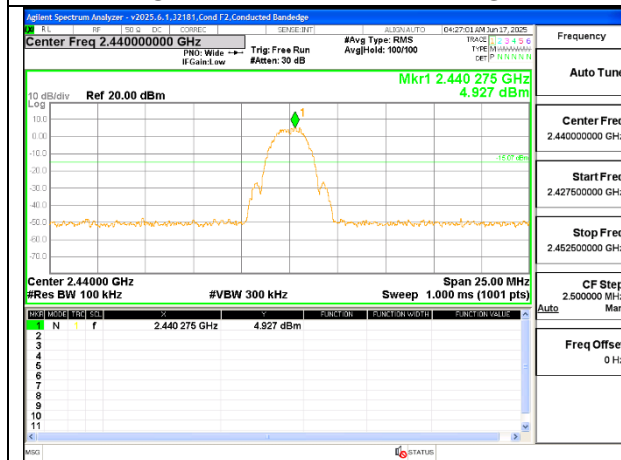
ANT 2



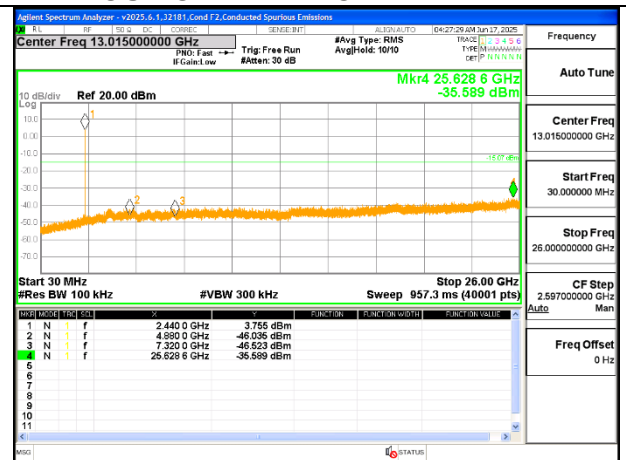
LOW CHANNEL BANDEDGE



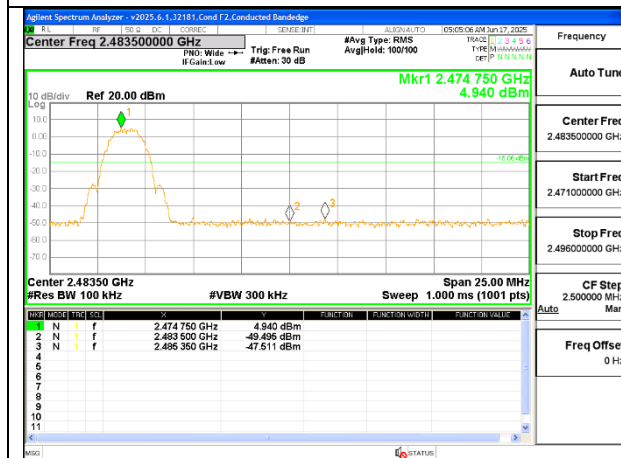
OUT-OF-BAND LOW CHANNEL



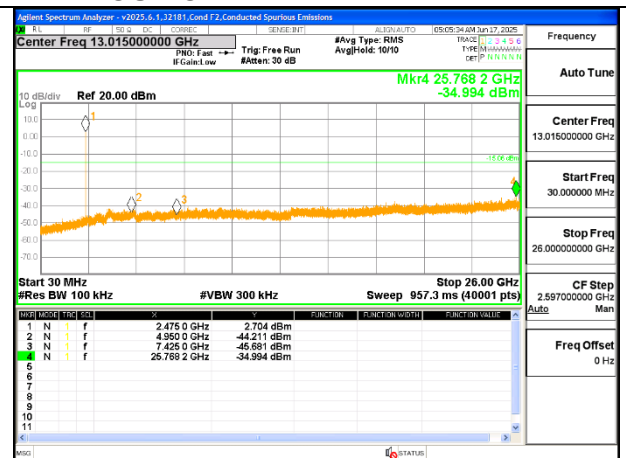
IN-BAND REFERENCE LEVEL



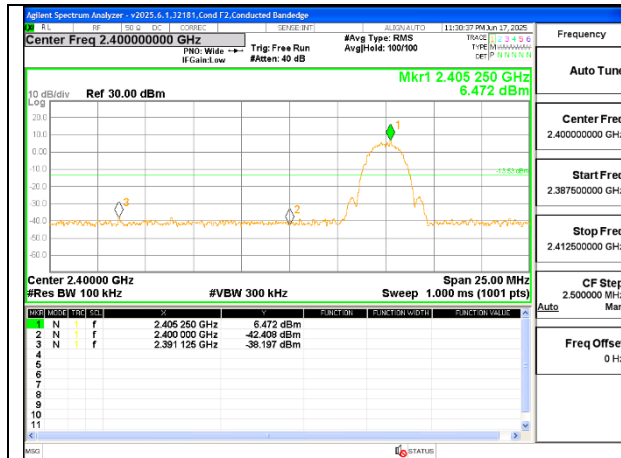
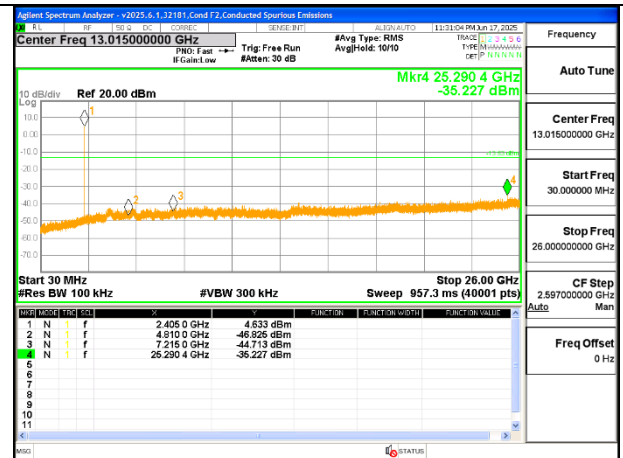
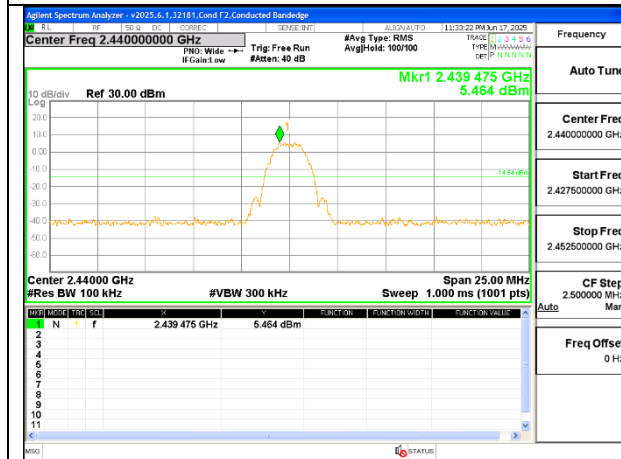
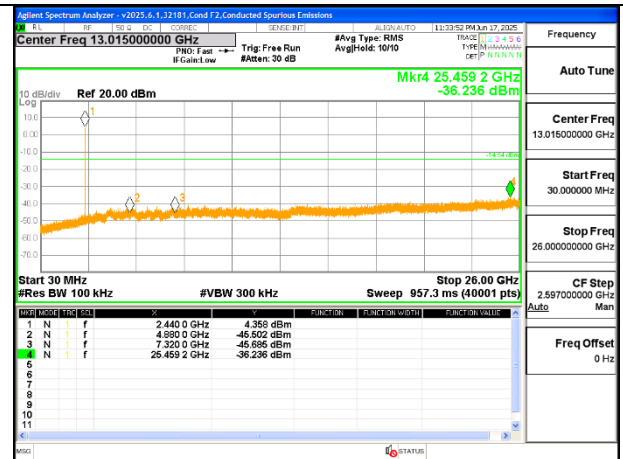
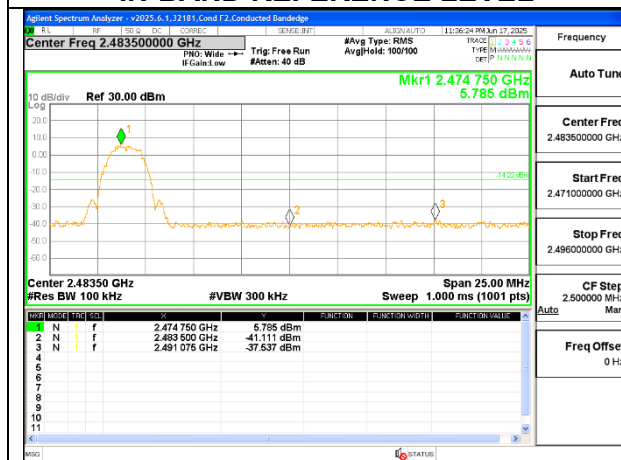
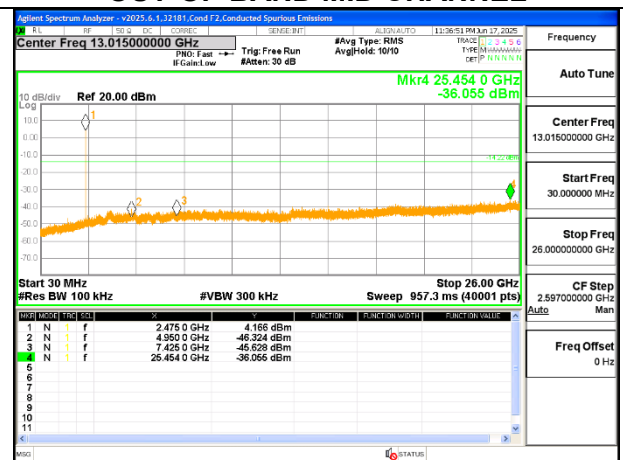
OUT-OF-BAND MID CHANNEL



HIGH CHANNEL BANDEDGE



OUT-OF-BAND HIGH CHANNEL

ANT 1**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**

10. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209

RSS-GEN, Section 8.9 and 8.10.

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	

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. Peak detection is used unless otherwise noted as quasi-peak.

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 on above 1 GHz restricted bandedge, 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. And for Harmonic Spurious final scans above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T (10 Hz) video bandwidth with peak detector 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.

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 report in the table) using 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.

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

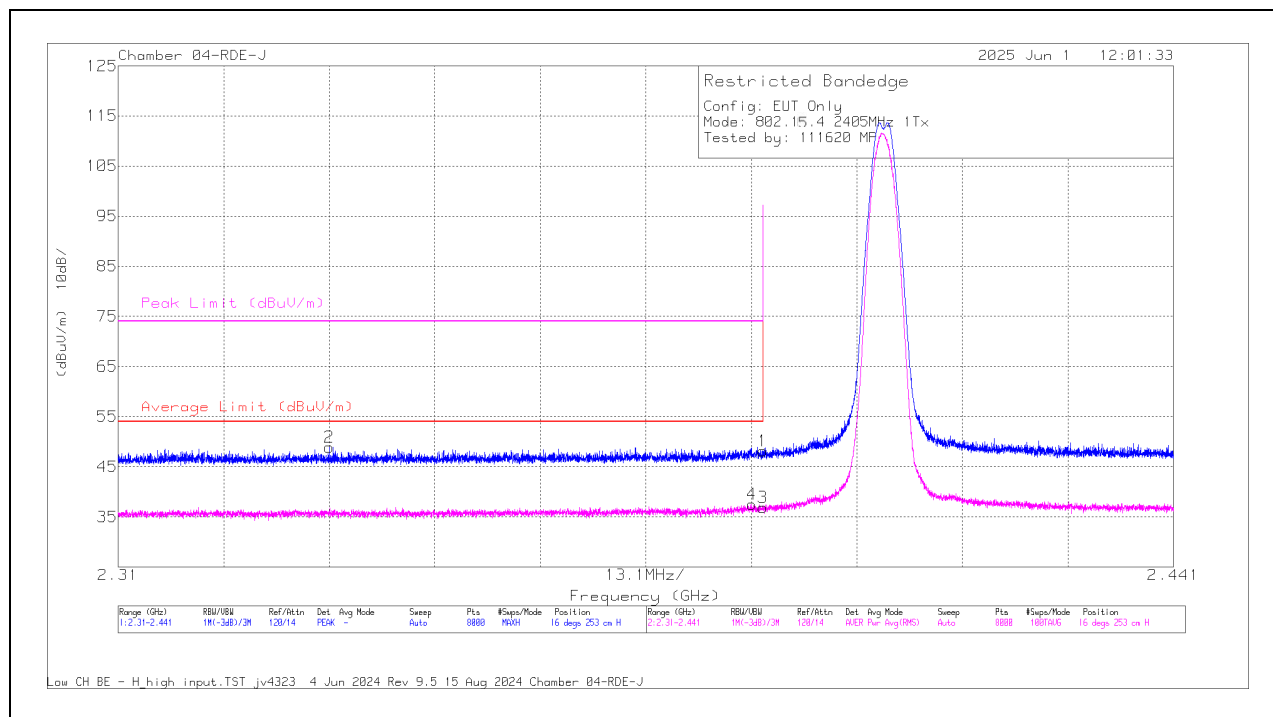
OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

10.1. TRANSMITTER ABOVE 1 GHz

10.1.1. ANT 2, 802.15.4 HIGH POWER BANDEDGE

LOW CHANNEL

HORIZONTAL RESULT



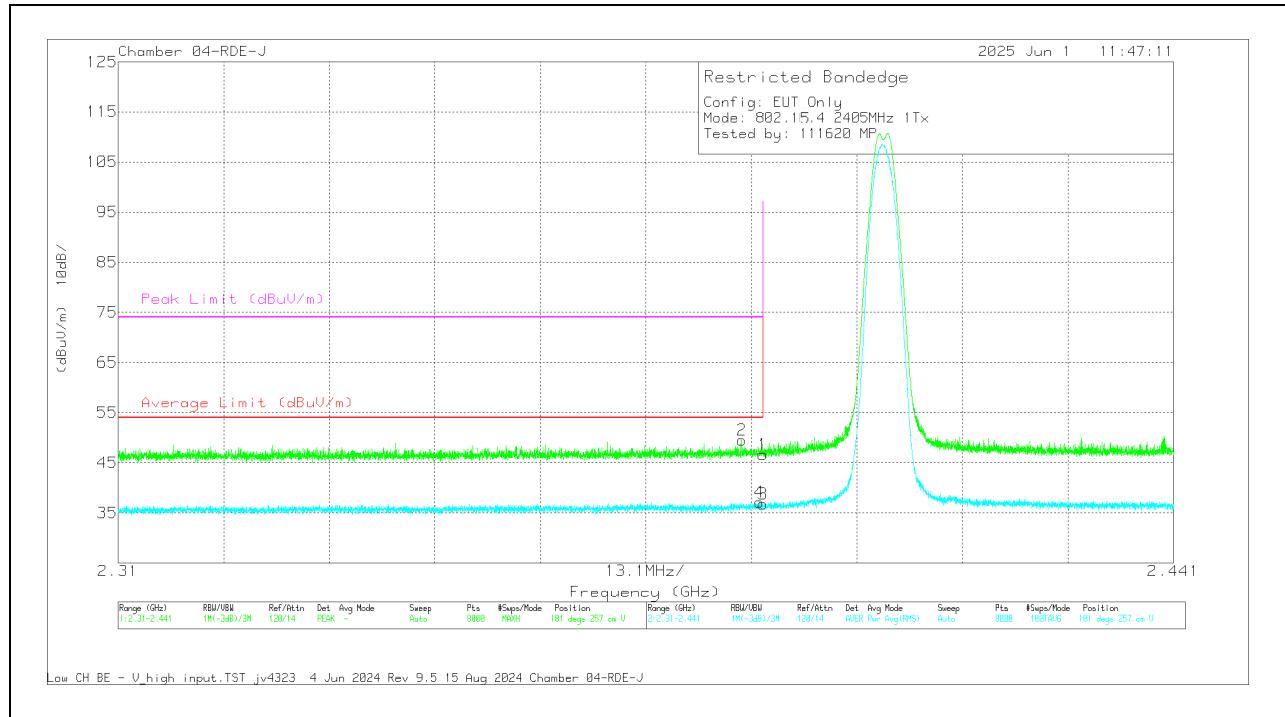
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	44.15	Pk	32.2	-28.2	0	48.15	-	-	74	-25.85	16	253	H
2	* 2.33622	45.43	Pk	32	-28.5	0	48.93	-	-	74	-25.07	16	253	H
3	* 2.39	32.89	RMS	32.2	-28.2	0	36.89	54	-17.11	-	-	16	253	H
4	* 2.388675	33.51	RMS	32.2	-28.2	0	37.51	54	-16.49	-	-	16	253	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

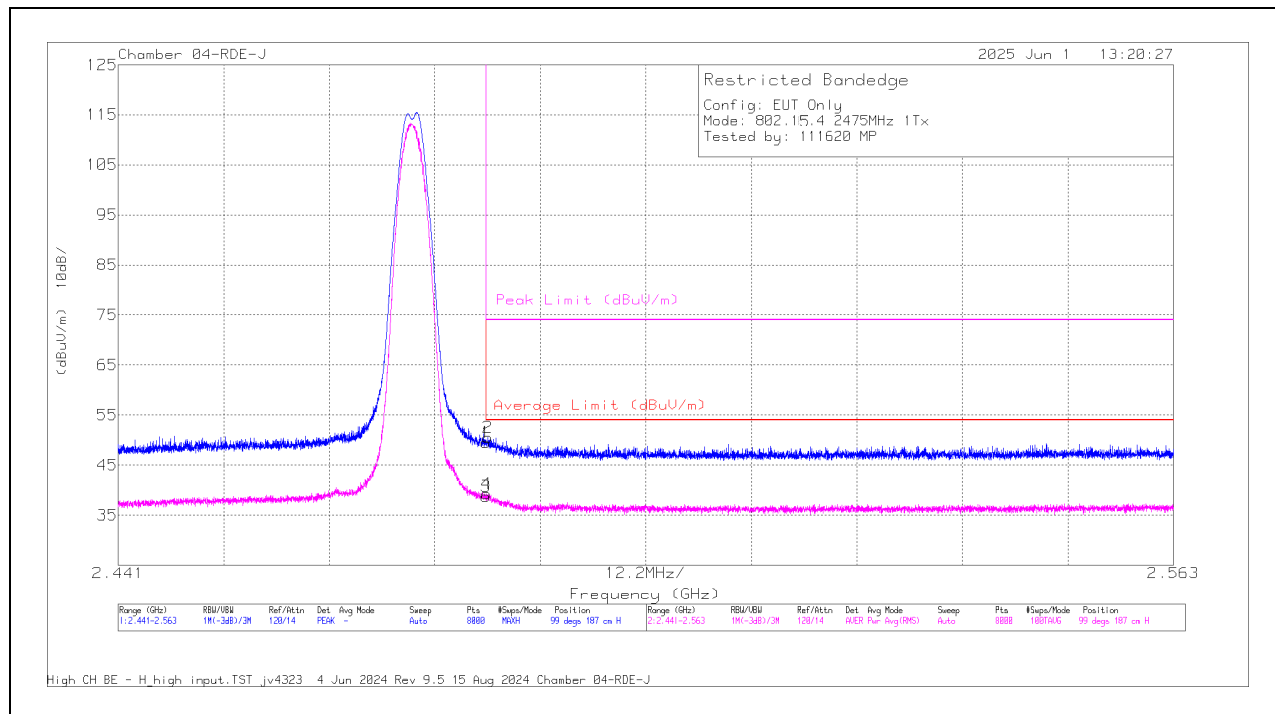


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.63	Pk	32.2	-28.2	0	46.63	-	-	74	-27.37	181	257	V
2	* 2.38743	45.53	Pk	32.2	-28.2	0	49.53	-	-	74	-24.47	181	257	V
3	* 2.39	32.75	RMS	32.2	-28.2	0	36.75	54	-17.25	-	-	181	257	V
4	* 2.389609	33.12	RMS	32.2	-28.2	0	37.12	54	-16.88	-	-	181	257	V

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

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL**HORIZONTAL RESULT**

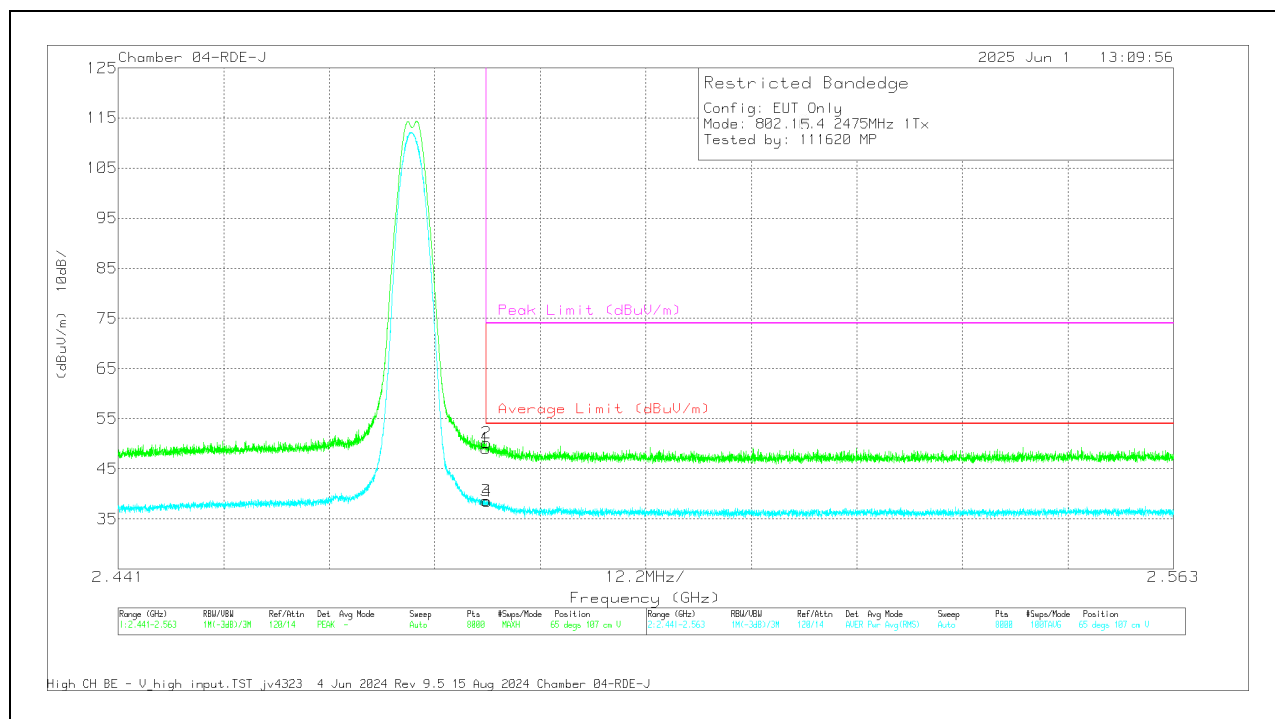
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	45.21	Pk	32.4	-28.1	0	49.51	-	-	74	-24.49	99	187	H
2	* 2.483736	46.23	Pk	32.4	-28.1	0	50.53	-	-	74	-23.47	99	187	H
3	* 2.4835	34.48	RMS	32.4	-28.1	0	38.78	54	-15.22	-	-	99	187	H
4	* 2.483553	34.99	RMS	32.4	-28.1	0	39.29	54	-14.71	-	-	99	187	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	44.7	Pk	32.4	-28.1	0	49	-	-	74	-25	65	107	V
2	* 2.483599	45.84	Pk	32.4	-28.1	0	50.14	-	-	74	-23.86	65	107	V
3	* 2.4835	34.29	RMS	32.4	-28.1	0	38.59	54	-15.41	-	-	65	107	V
4	* 2.48366	34.26	RMS	32.4	-28.1	0	38.56	54	-15.44	-	-	65	107	V

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

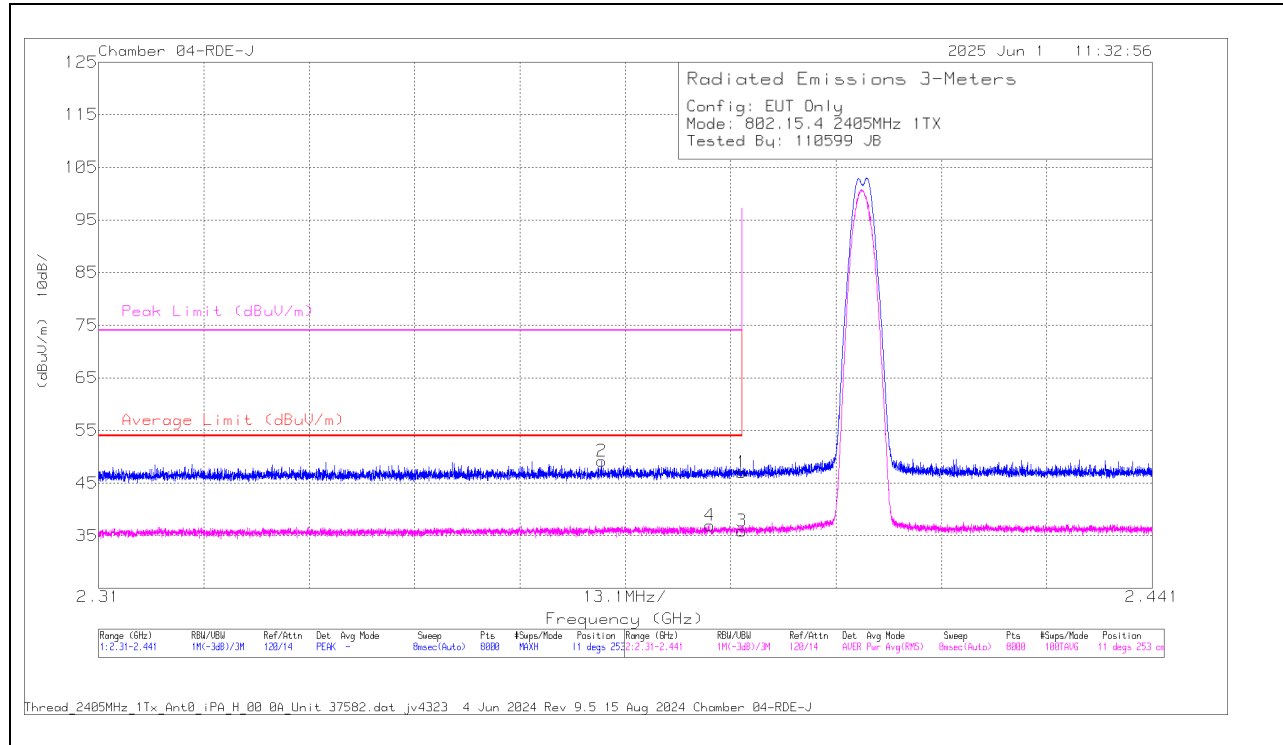
Pk - Peak detector

RMS - RMS detection

10.1.2. ANT 2, 802.15.4 LOW POWER BANDEGE

LOW CHANNEL

HORIZONTAL RESULT



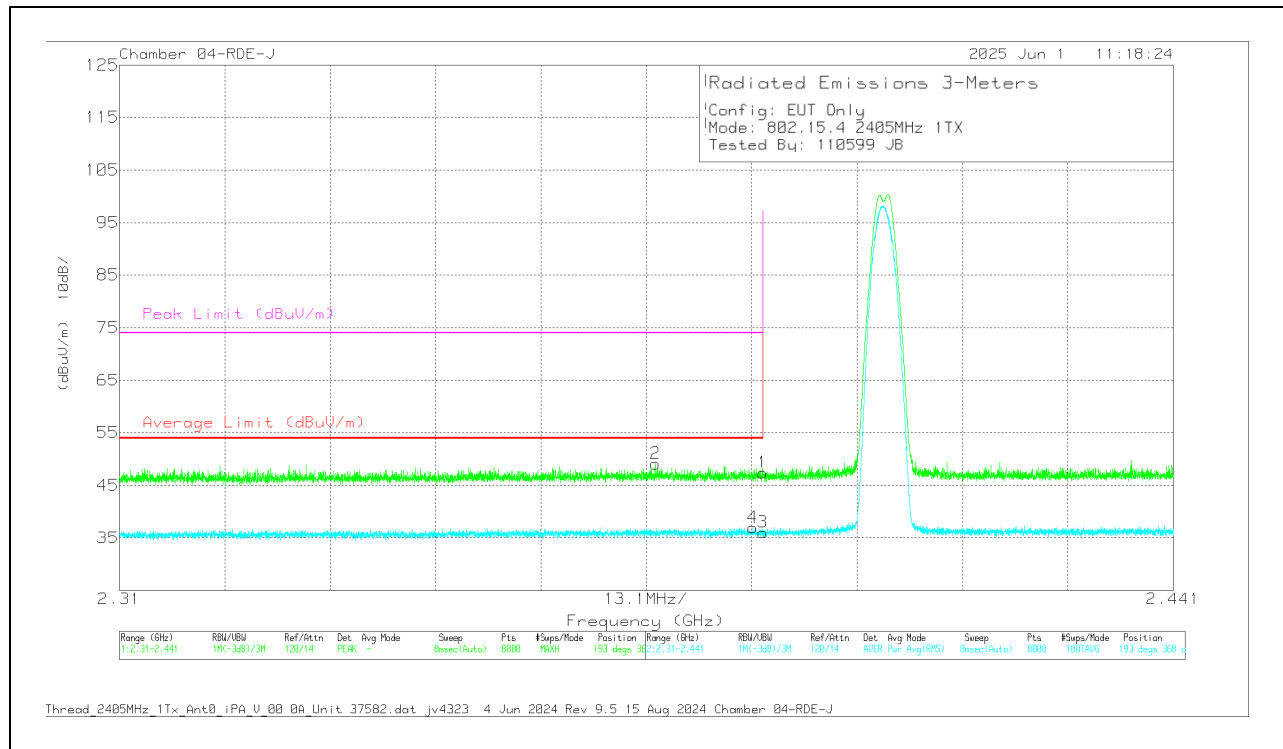
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1	* 2.39	43.01	Pk	32.2	-28.2	0	47.01	-	-	74	-26.99	11	253	H
2	* 2.372577	45.28	Pk	32.2	-28.3	0	49.18	-	-	74	-24.82	11	253	H
3	* 2.39	31.88	RMS	32.2	-28.2	0	35.88	54	-18.12	-	-	11	253	H
4	* 2.386006	32.94	RMS	32.2	-28.2	0	36.94	54	-17.06	-	-	11	253	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

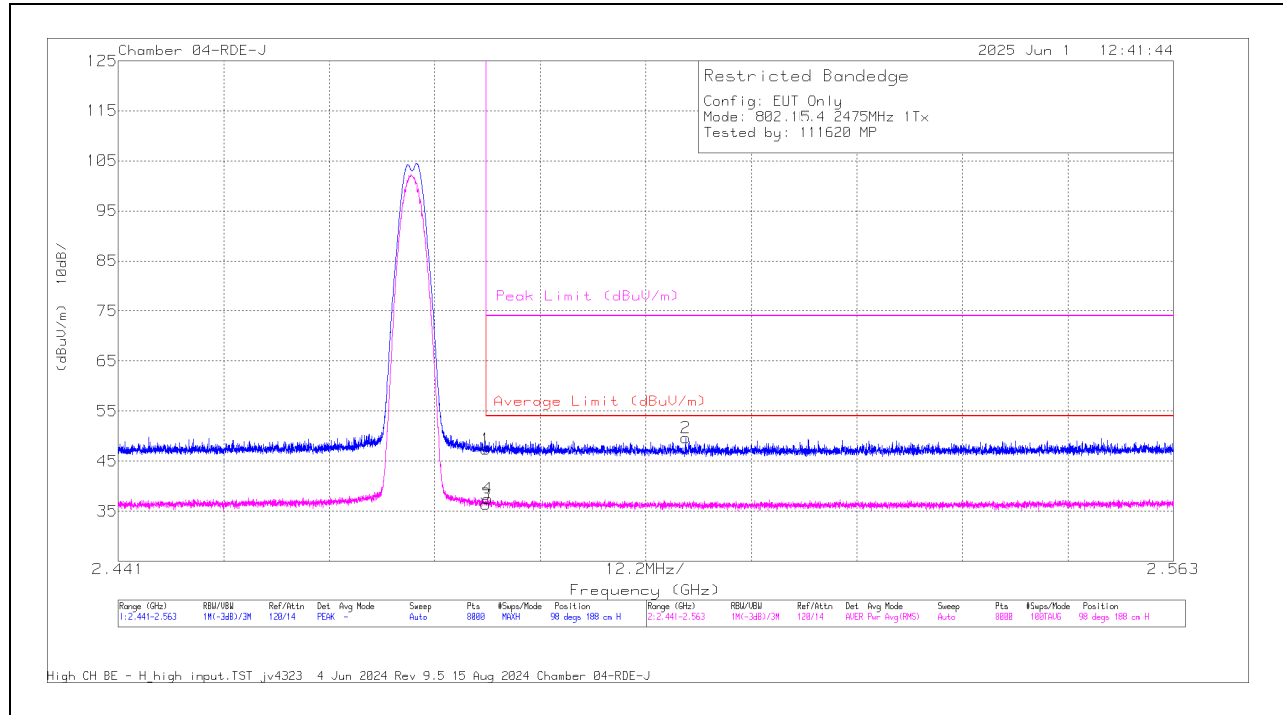


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	43.42	PK	32.2	-28.2	0	47.42	-	-	74	-26.58	193	368	V
2	* 2.376638	45.11	PK	32.2	-28.2	0	49.11	-	-	74	-24.89	193	368	V
3	* 2.39	32.04	RMS	32.2	-28.2	0	36.04	54	-17.96	-	-	193	368	V
4	* 2.388724	32.95	RMS	32.2	-28.2	0	36.95	54	-17.05	-	-	193	368	V

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

PK - Peak detector

RMS - RMS detection

HIGH CHANNEL**HORIZONTAL RESULT**

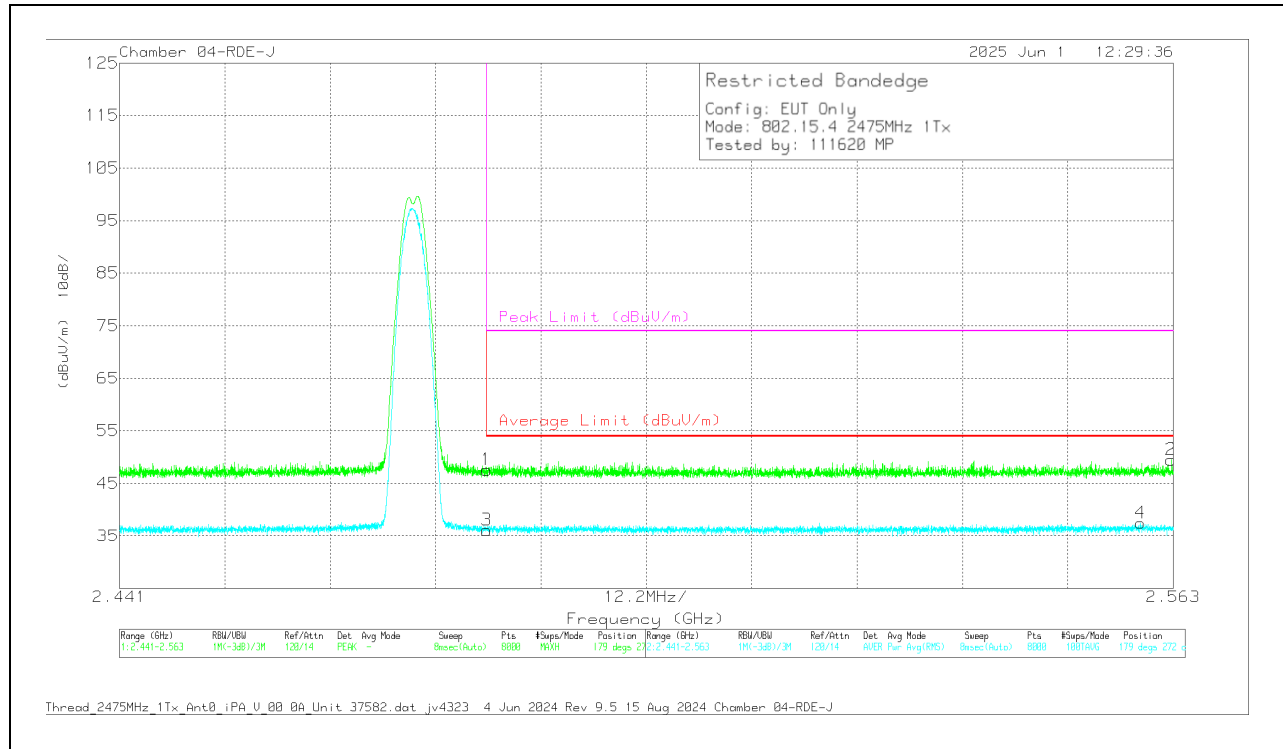
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1	* 2.4835	43.06	Pk	32.4	-28.1	0	47.36	-	-	74	-26.64	98	188	H
2	2.506599	45.28	Pk	32.5	-28.1	0	49.68	-	-	74	-24.32	98	188	H
3	* 2.4835	32.12	RMS	32.4	-28.1	0	36.42	54	-17.58	-	-	98	188	H
4	* 2.483736	33.23	RMS	32.4	-28.1	0	37.53	54	-16.47	-	-	98	188	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	43.27	Pk	32.4	-28.1	0	47.57	-	-	74	-26.43	179	272	V
2	2.562757	44.99	Pk	32.6	-28.1	0	49.49	-	-	74	-24.51	179	272	V
3	* 2.4835	31.79	RMS	32.4	-28.1	0	36.09	54	-17.91	-	-	179	272	V
4	2.559234	32.96	RMS	32.6	-28.1	0	37.46	54	-16.54	-	-	179	272	V

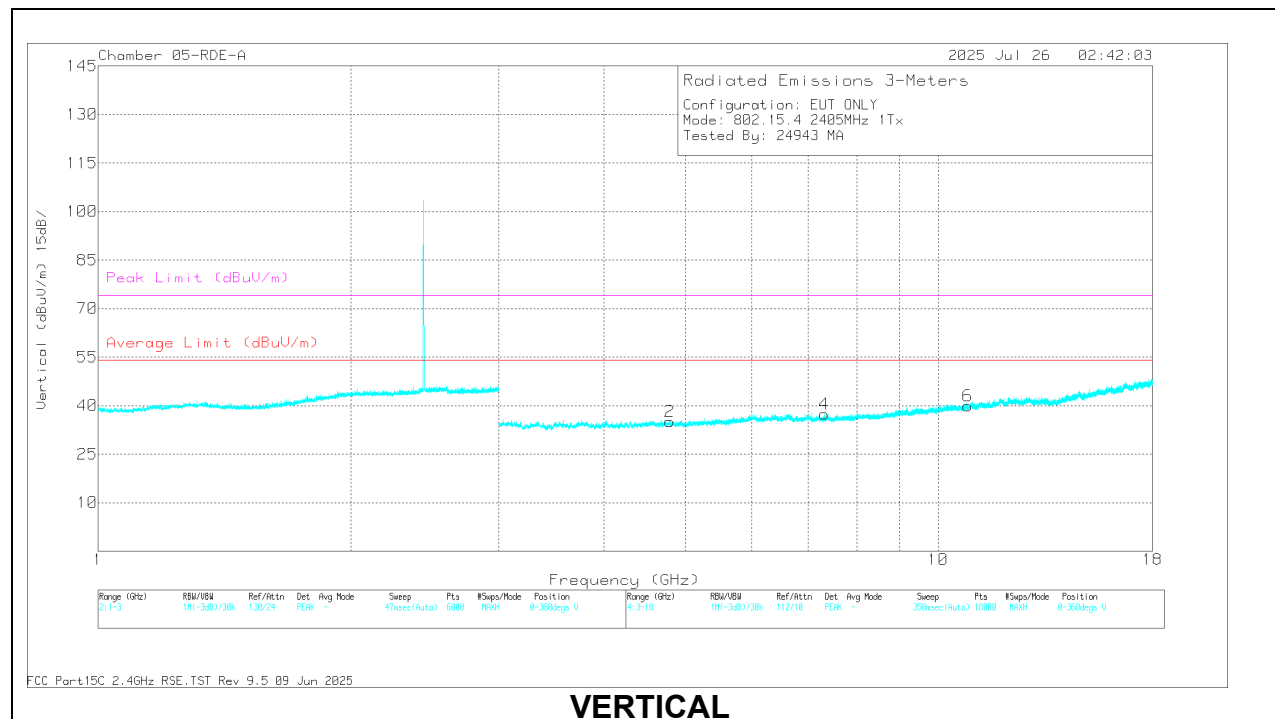
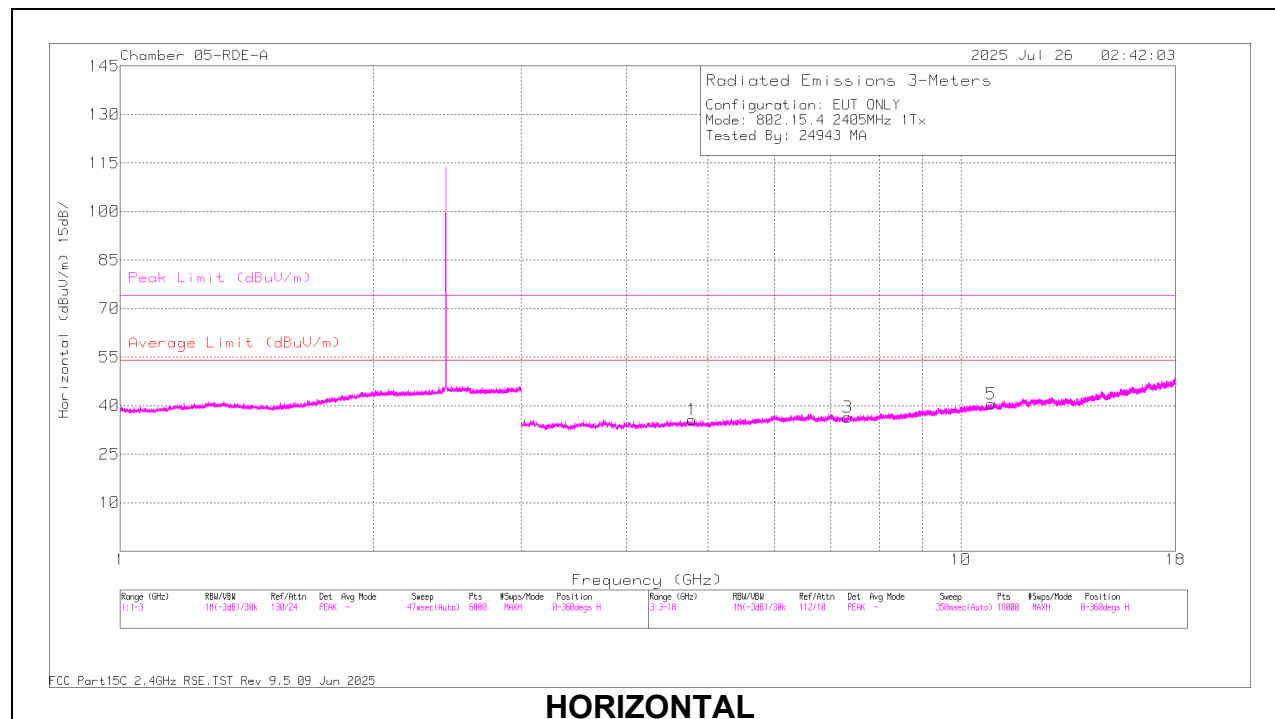
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

10.1.3. ANT 2, 802.15.4 HIGH POWER, HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

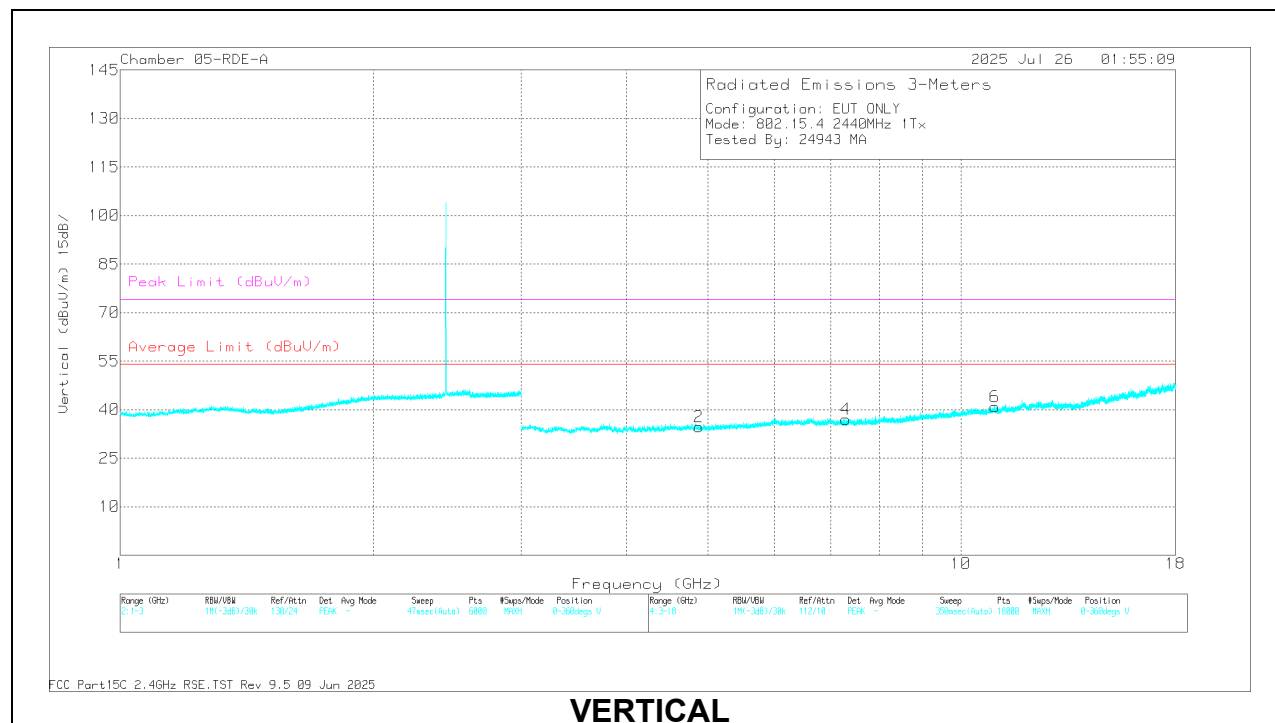
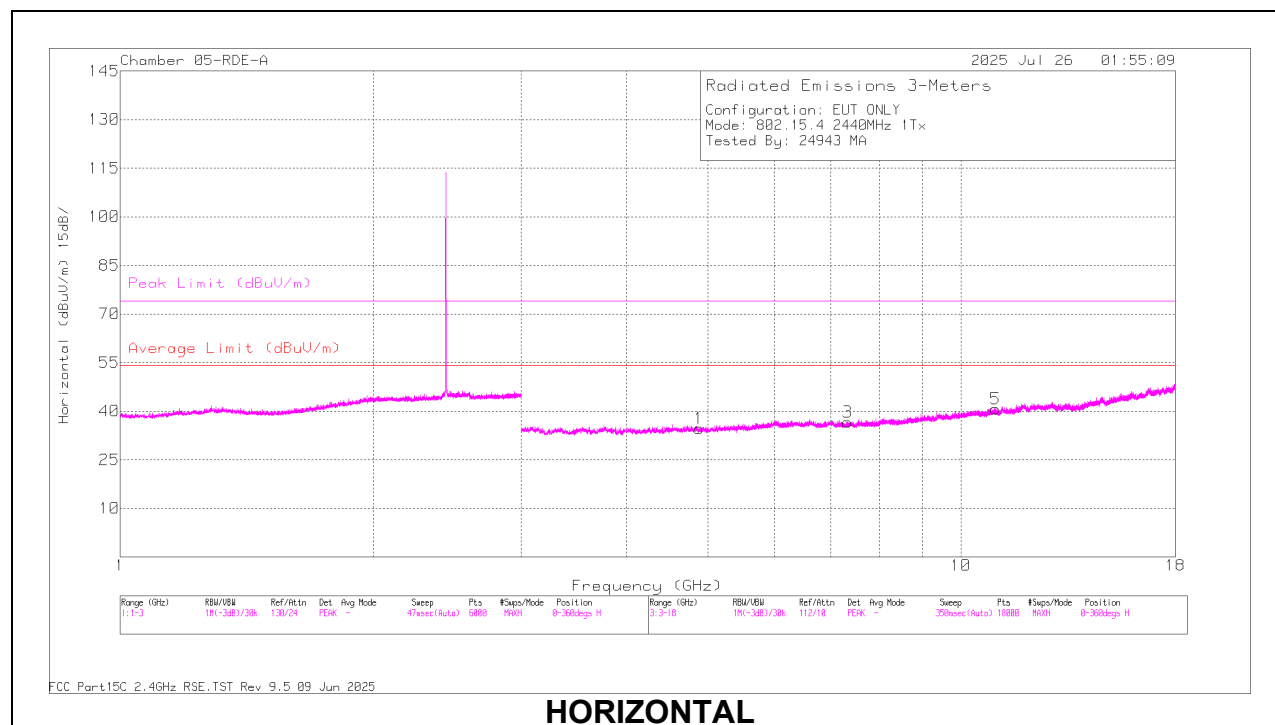
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226671 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.773898	58.24	PK2	34.4	-47.51	45.13	-	-	74	-28.87	360	101	H
	* 4.77824	46.59	MAv1	34.4	-47.45	33.54	54	-20.46	-	-	360	101	H
2	* 4.786118	58.38	PK2	34.4	-47.59	45.19	-	-	74	-28.81	360	101	V
	* 4.780887	46.54	MAv1	34.4	-47.5	33.44	54	-20.56	-	-	360	101	V
3	* 7.324738	55.88	PK2	35.8	-45	46.68	-	-	74	-27.32	360	101	H
	* 7.338116	44.12	MAv1	35.8	-45	34.92	54	-19.08	-	-	360	101	H
4	* 7.301388	55.6	PK2	35.8	-44.96	46.44	-	-	74	-27.56	360	101	V
	* 7.318731	43.92	MAv1	35.8	-45.1	34.62	54	-19.38	-	-	360	101	V
5	* 10.87388	54.95	PK2	38.3	-42.4	50.85	-	-	74	-23.15	360	199	H
	* 10.865263	42.59	MAv1	38.3	-42.4	38.49	54	-15.51	-	-	360	199	H
6	* 10.845412	54.81	PK2	38.3	-42.4	50.71	-	-	74	-23.29	360	200	V
	* 10.825119	42.88	MAv1	38.3	-42.41	38.77	54	-15.23	-	-	360	200	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS



RADIATED EMISSIONS

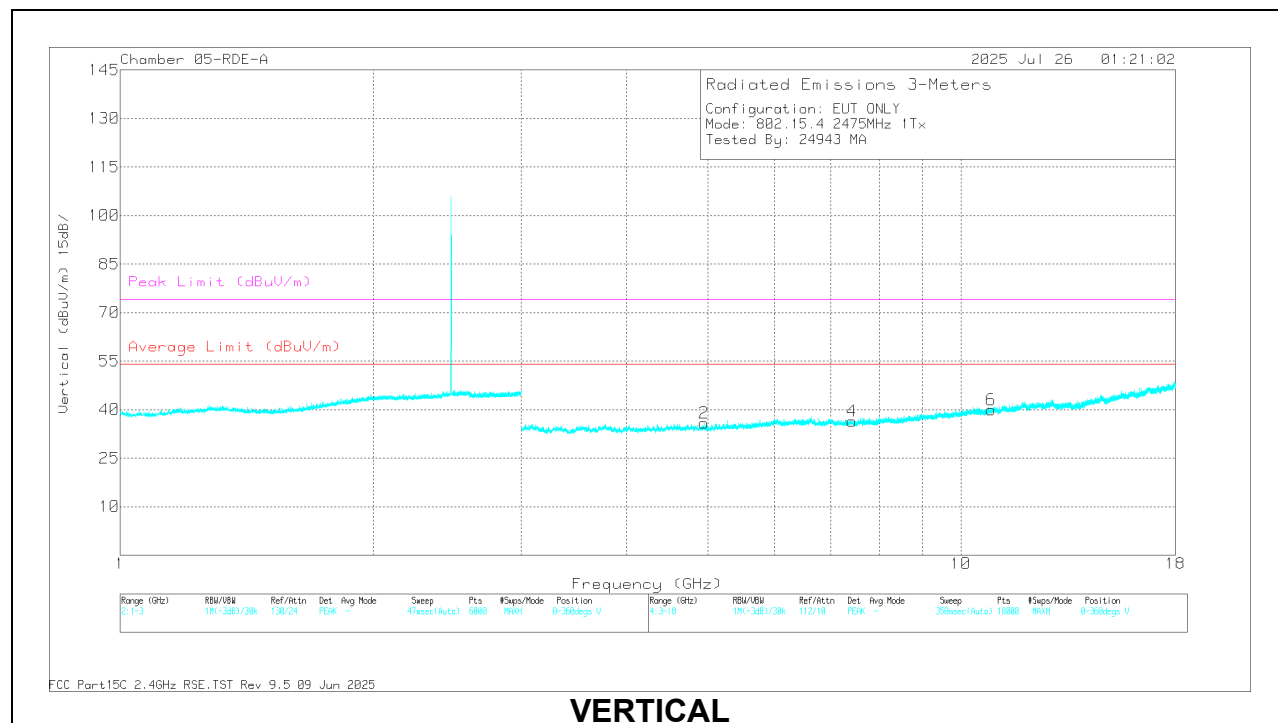
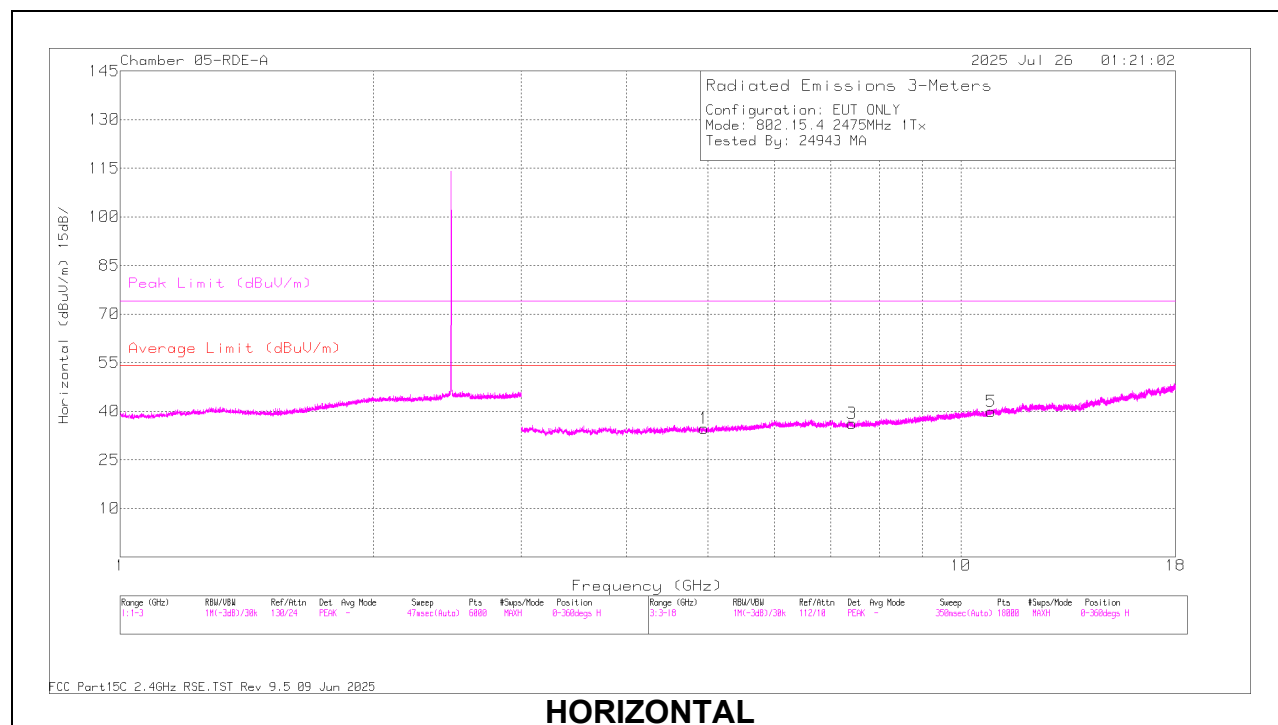
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226671 ACF (dBm)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.885601	57.89	PK2	34.4	-47.5	44.79	-	-	74	-29.21	276	161	H
	* 4.890788	46.39	MAv1	34.4	-47.48	33.31	54	-20.69	-	-	276	161	H
2	* 4.888912	57.99	PK2	34.4	-47.49	44.9	-	-	74	-29.1	18	101	V
	* 4.896147	46.26	MAv1	34.4	-47.41	33.25	54	-20.75	-	-	18	101	V
3	* 7.322083	56.11	PK2	35.8	-45	46.91	-	-	74	-27.09	18	230	H
	* 7.318434	44.79	MAv1	35.8	-45.1	35.49	54	-18.51	-	-	18	230	H
4	* 7.284895	55.71	PK2	35.8	-45.1	46.41	-	-	74	-27.59	242	154	V
	* 7.319402	43.95	MAv1	35.8	-45.1	34.65	54	-19.35	-	-	242	154	V
5	* 10.977663	53.71	PK2	38.4	-41.7	50.41	-	-	74	-23.59	18	200	H
	* 10.97817	42.14	MAv1	38.4	-41.7	38.84	54	-15.16	-	-	18	200	H
6	* 10.967787	54.12	PK2	38.4	-41.78	50.74	-	-	74	-23.26	242	200	V
	* 10.964147	42.37	MAv1	38.4	-41.79	38.98	54	-15.02	-	-	242	200	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	226671 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.948571	58.07	PK2	34.4	-47.2	45.27	-	-	74	-28.73	2	101	H
	* 4.938953	46.35	MAv1	34.4	-47.4	33.35	54	-20.65	-	-	2	101	H
2	* 4.949357	58.22	PK2	34.4	-47.24	45.38	-	-	74	-28.62	26	101	V
	* 4.945989	46.24	MAv1	34.4	-47.3	33.34	54	-20.66	-	-	26	101	V
3	* 7.442029	55.49	PK2	35.8	-45.2	46.09	-	-	74	-27.91	190	185	H
	* 7.441967	44.03	MAv1	35.8	-45.2	34.63	54	-19.37	-	-	190	185	H
4	* 7.42843	55.84	PK2	35.8	-44.9	46.74	-	-	74	-27.26	307	141	V
	* 7.435483	43.96	MAv1	35.8	-45.1	34.66	54	-19.34	-	-	307	141	V
5	* 10.853083	53.98	PK2	38.3	-42.5	49.78	-	-	74	-24.22	190	101	H
	* 10.858176	42.4	MAv1	38.3	-42.42	38.28	54	-15.72	-	-	190	101	H
6	* 10.873794	54.69	PK2	38.3	-42.4	50.59	-	-	74	-23.41	307	200	V
	* 10.855683	42.63	MAv1	38.3	-42.5	38.43	54	-15.57	-	-	307	200	V

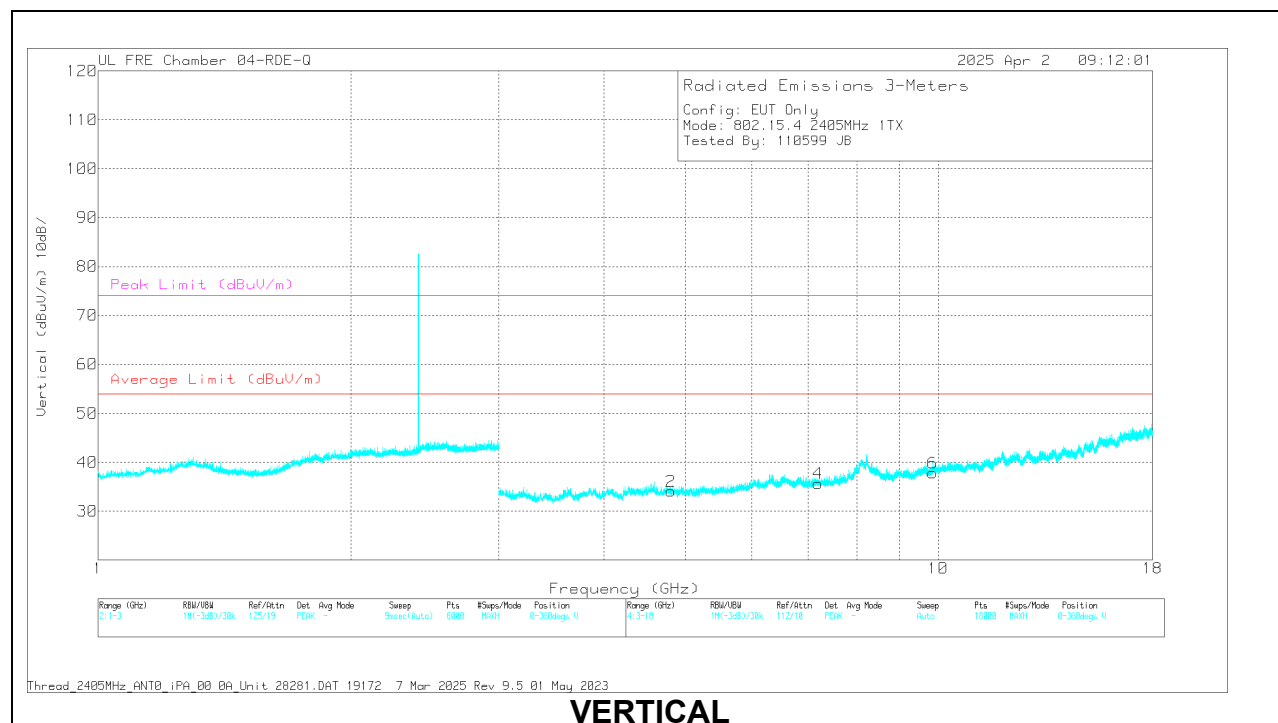
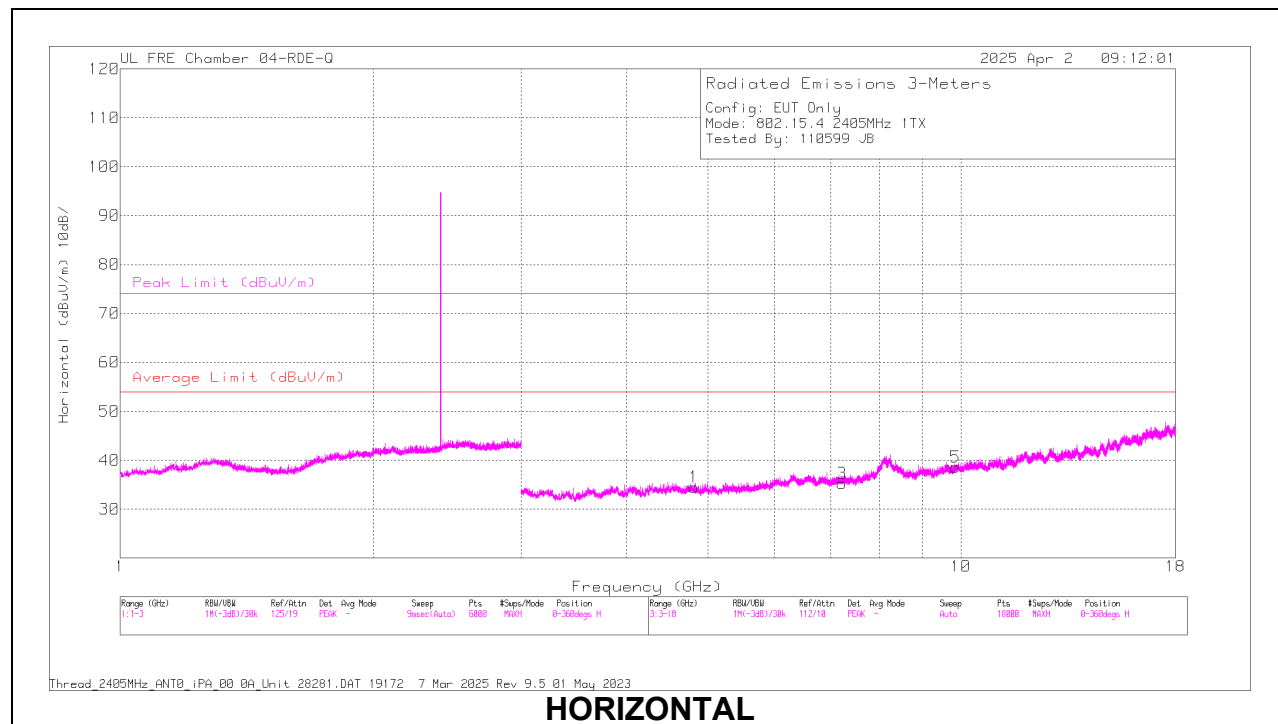
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.1.4. ANT 2, 802.15.4 LOW POWER, HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS

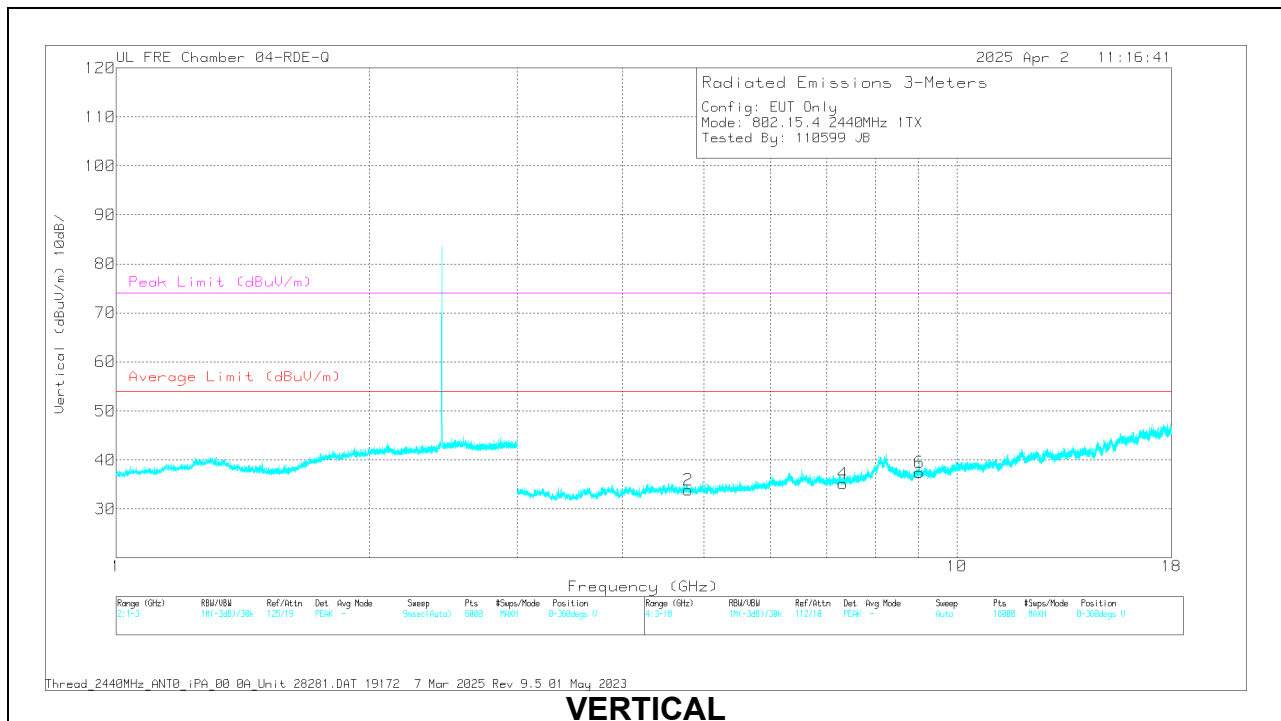
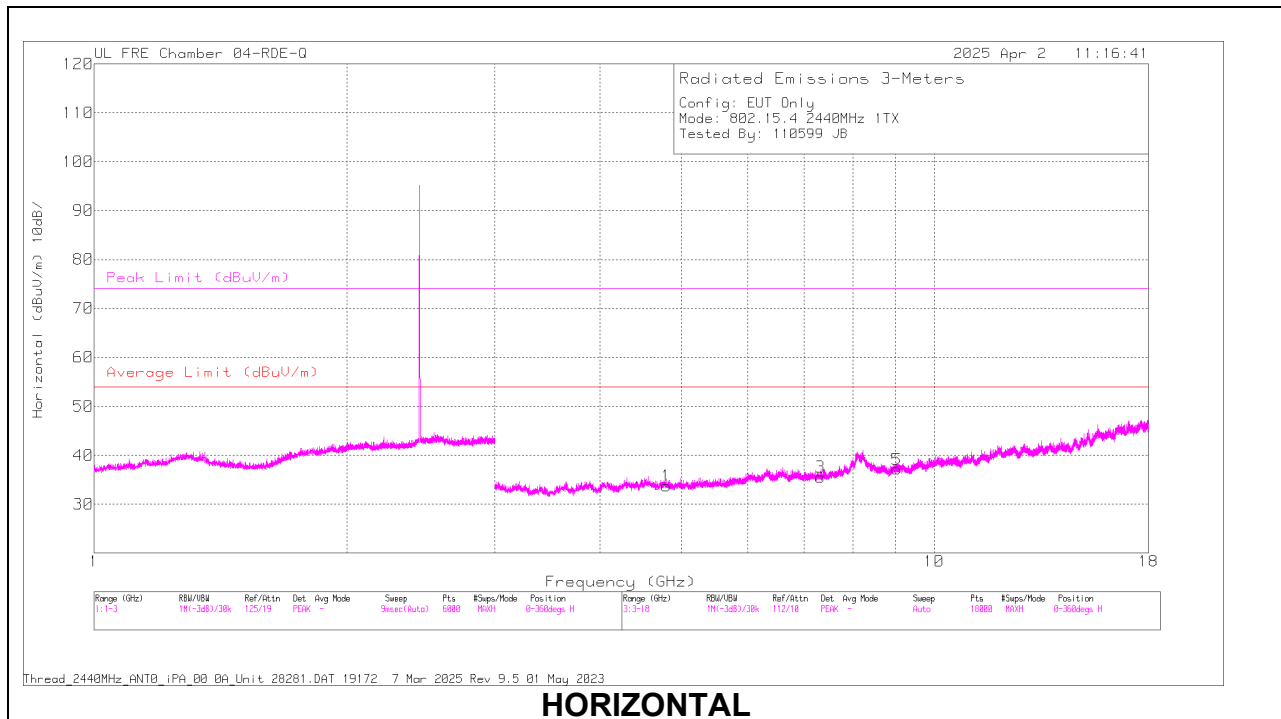


RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	22741 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	4.817619	57.54	PK2	34.3	-46.52	45.32	-	-	74	-28.68	349	394	H
	4.818676	45.27	MAv1	34.3	-46.49	33.08	54	-20.92	-	-	349	394	H
2	4.812266	57.65	PK2	34.3	-46.35	45.6	-	-	74	-28.4	236	264	V
	4.812192	45.11	MAv1	34.3	-46.35	33.06	54	-20.94	-	-	236	264	V
3	7.203008	55.54	PK2	35.6	-44.68	46.46	-	-	74	-27.54	275	317	V
	7.199458	43.91	MAv1	35.6	-44.69	34.82	54	-19.18	-	-	275	317	V
4	7.224303	55.23	PK2	35.6	-44.54	46.29	-	-	74	-27.71	155	371	H
	7.223949	43.91	MAv1	35.6	-44.55	34.96	54	-19.04	-	-	155	371	H
5	9.849782	55.72	PK2	37.1	-44.02	48.8	-	-	74	-25.2	26	321	V
	9.852566	43.85	MAv1	37.1	-44.03	36.92	54	-17.08	-	-	26	321	V
6	9.848041	55.75	PK2	37.1	-43.99	48.86	-	-	74	-25.14	297	121	H
	9.846487	43.81	MAv1	37.1	-43.97	36.94	54	-17.06	-	-	297	121	H

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS

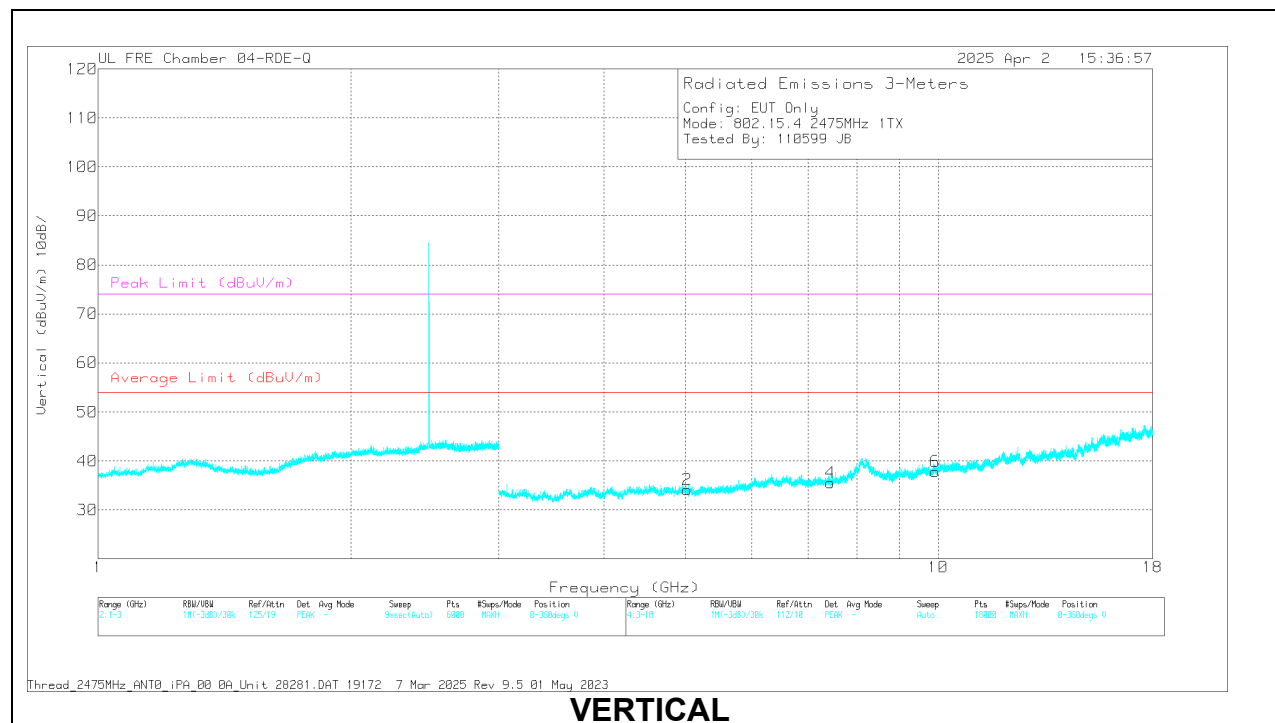
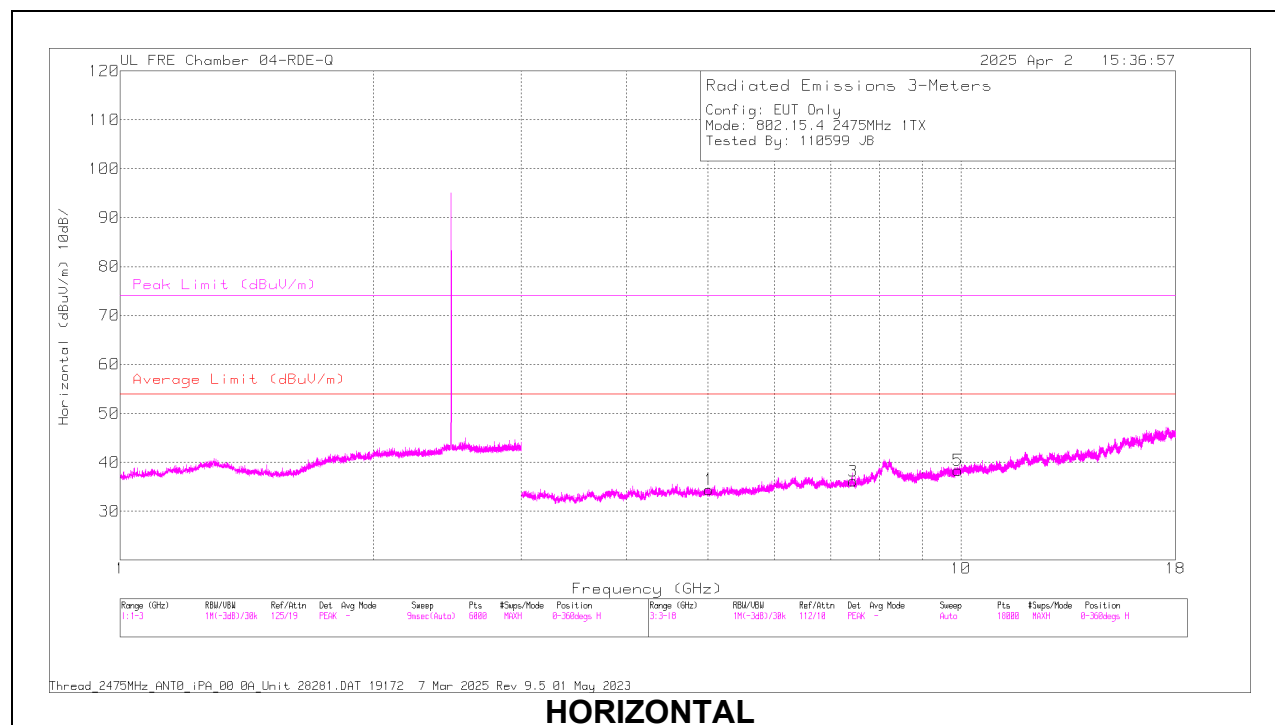
RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	4.797695	56.88	PK2	34.2	-46.32	44.76	-	-	74	-29.24	280	232	H
	4.797145	45.17	MAv1	34.2	-46.33	33.04	54	-20.96	-	-	280	232	H
2	4.795862	56.68	PK2	34.2	-46.38	44.5	-	-	74	-29.5	180	263	V
	4.796351	45.25	MAv1	34.2	-46.36	33.09	54	-20.91	-	-	180	263	V
3	7.321378	55.25	PK2	35.6	-44.59	46.26	-	-	74	-27.74	9	348	H
	7.322729	43.9	MAv1	35.6	-44.57	34.93	54	-19.07	-	-	9	348	H
4	7.321709	55.33	PK2	35.6	-44.58	46.35	-	-	74	-27.65	353	197	V
	7.320362	43.65	MAv1	35.6	-44.57	34.68	54	-19.32	-	-	353	197	V
5	9.032365	54.62	PK2	36.2	-43.47	47.35	-	-	74	-26.65	315	394	H
	9.031307	43.4	MAv1	36.2	-43.47	36.13	54	-17.87	-	-	315	394	H
6	9.033226	54.94	PK2	36.2	-43.47	47.67	-	-	74	-26.33	253	200	V
	9.032993	43.14	MAv1	36.2	-43.47	35.87	54	-18.13	-	-	253	200	V

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.015409	56.83	PK2	34.1	-46.5	44.43	-	-	74	-29.57	77	336	H
	5.015735	45.27	MAv1	34.1	-46.5	32.87	54	-21.13	-	-	77	336	H
2	5.025696	57	PK2	34.2	-46.44	44.76	-	-	74	-29.24	224	390	V
	5.024994	45.31	MAv1	34.2	-46.47	33.04	54	-20.96	-	-	224	390	V
3	7.437263	55.16	PK2	35.6	-44.48	46.28	-	-	74	-27.72	339	183	H
	7.439921	43.65	MAv1	35.6	-44.56	34.69	54	-19.31	-	-	339	183	H
4	7.44233	55.7	PK2	35.6	-44.6	46.7	-	-	74	-27.3	292	390	V
	7.443766	43.92	MAv1	35.6	-44.58	34.94	54	-19.06	-	-	292	390	V
5	9.917092	55.41	PK2	37.2	-43.88	48.73	-	-	74	-25.27	283	326	H
	9.916891	43.7	MAv1	37.2	-43.88	37.02	54	-16.98	-	-	283	326	H
6	9.917797	55.53	PK2	37.2	-43.9	48.83	-	-	74	-25.17	215	381	V
	9.91798	44.08	MAv1	37.2	-43.91	37.37	54	-16.63	-	-	215	381	V

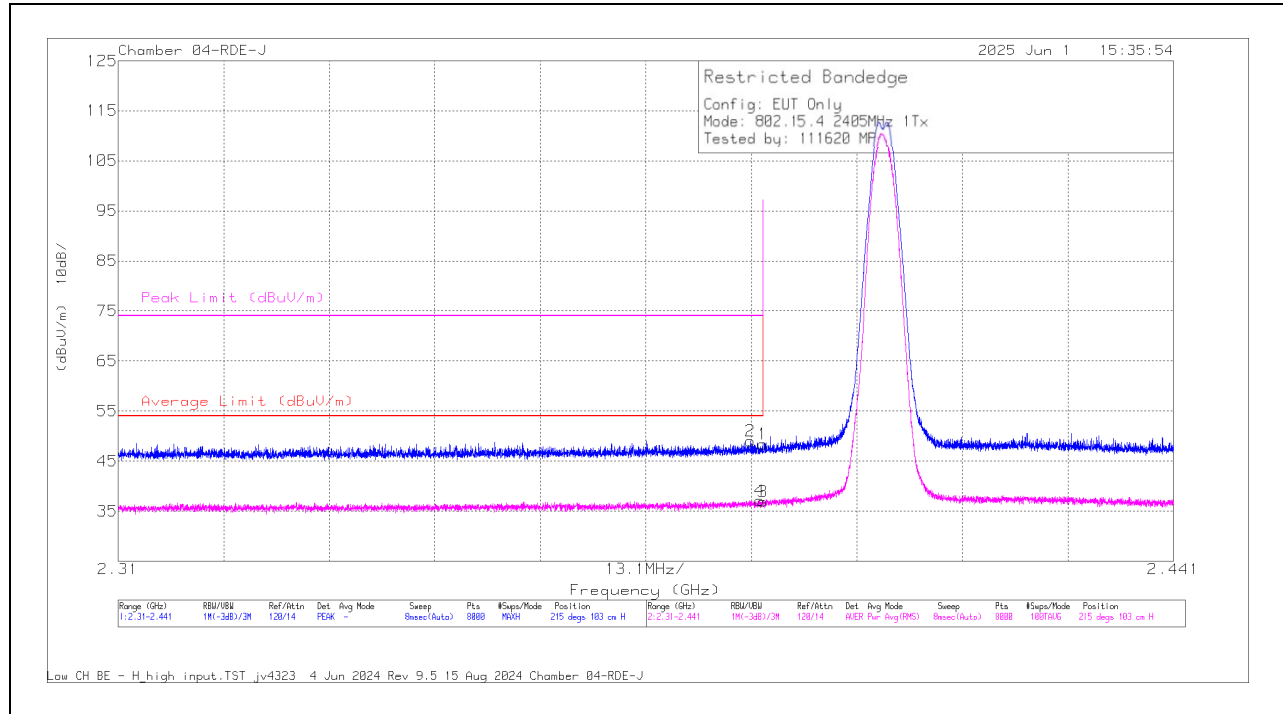
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.1.5. ANT 1, 802.15.4 HIGH POWER BANDEdge

LOW CHANNEL

HORIZONTAL RESULT



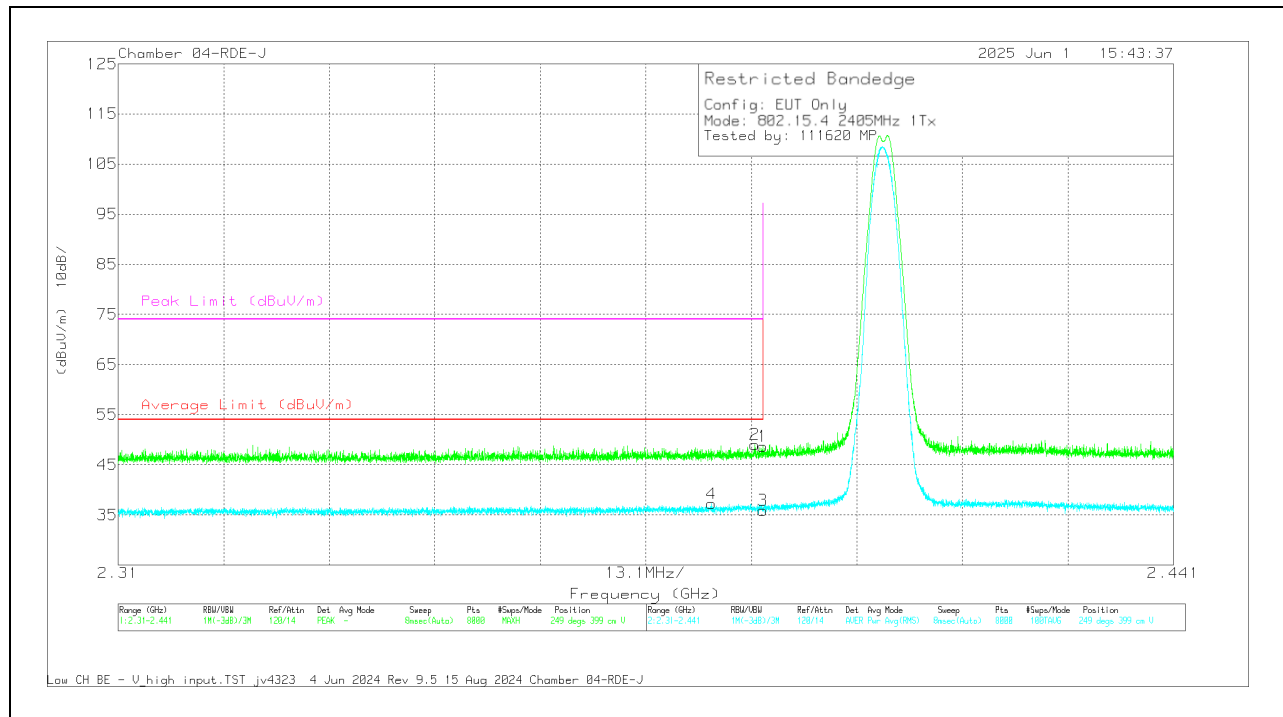
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	44.43	Pk	32.2	-28.2	0	48.43	-	-	74	-25.57	215	103	H
2	* 2.388511	45.07	Pk	32.2	-28.2	0	49.07	-	-	74	-24.93	215	103	H
3	* 2.39	32.94	RMS	32.2	-28.2	0	36.94	54	-17.06	-	-	215	103	H
4	* 2.389641	33.08	RMS	32.2	-28.2	0	37.08	54	-16.92	-	-	215	103	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL RESULT

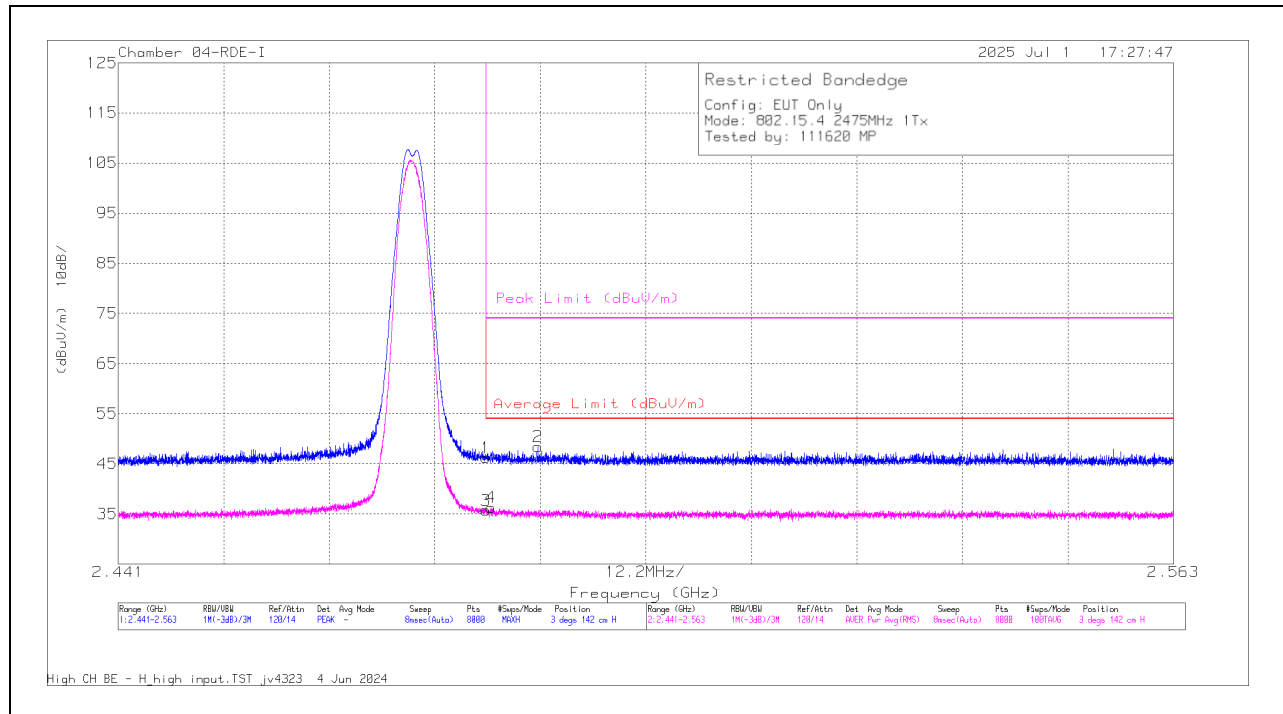


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	44.66	Pk	32.2	-28.2	0	48.66	-	-	74	-25.34	249	399	V
2	* 2.389003	44.98	Pk	32.2	-28.2	0	48.98	-	-	74	-25.02	249	399	V
3	* 2.39	31.83	RMS	32.2	-28.2	0	35.83	54	-18.17	-	-	249	399	V
4	* 2.383631	33.3	RMS	32.2	-28.3	0	37.2	54	-16.8	-	-	249	399	V

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

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL**HORIZONTAL RESULT**

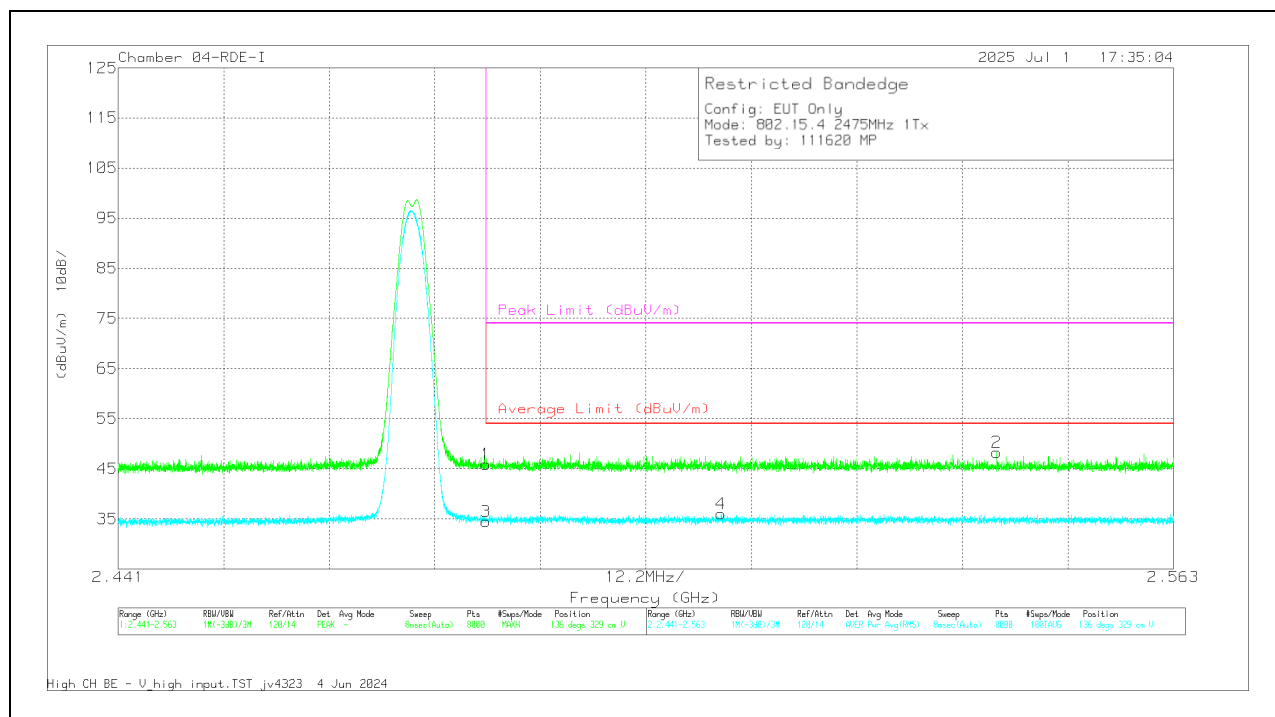
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	43.4	Pk	32.3	-29.5	0	46.2	-	-	74	-27.8	3	142	H
2	* 2.489532	45.62	Pk	32.3	-29.5	0	48.42	-	-	74	-25.58	3	142	H
3	* 2.4835	32.9	RMS	32.3	-29.5	0	35.7	54	-18.3	-	-	3	142	H
4	* 2.484072	33.46	RMS	32.3	-29.5	0	36.26	54	-17.74	-	-	3	142	H

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

PK - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	43.07	Pk	32.3	-29.5	0	45.87	-	-	74	-28.13	136	329	V
3	* 2.4835	31.65	RMS	32.3	-29.5	0	34.45	54	-19.55	-	-	136	329	V
4	2.510702	33.16	RMS	32.4	-29.6	0	35.96	54	-18.04	-	-	136	329	V
2	2.542594	45.46	Pk	32.4	-29.6	0	48.26	-	-	74	-25.74	136	329	V

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

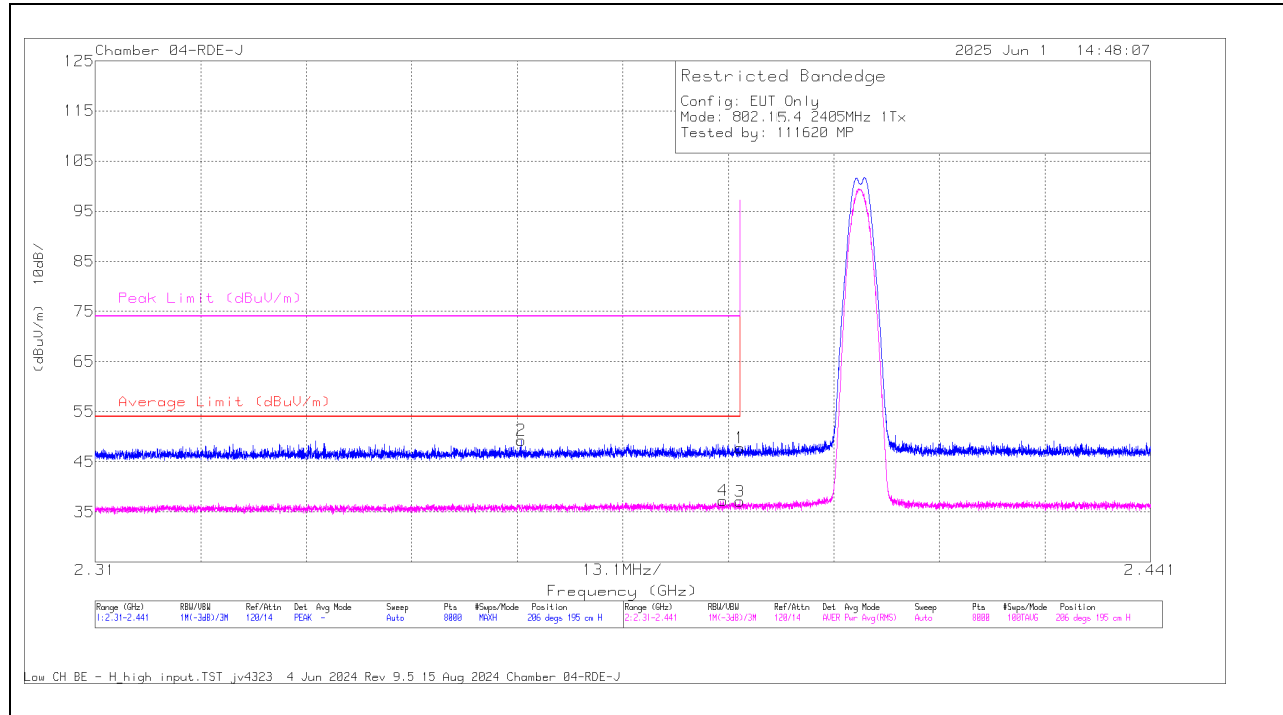
Pk - Peak detector

RMS - RMS detection

10.1.6. ANT 1, 802.15.4 LOW POWER BANDEGE

LOW CHANNEL

HORIZONTAL RESULT



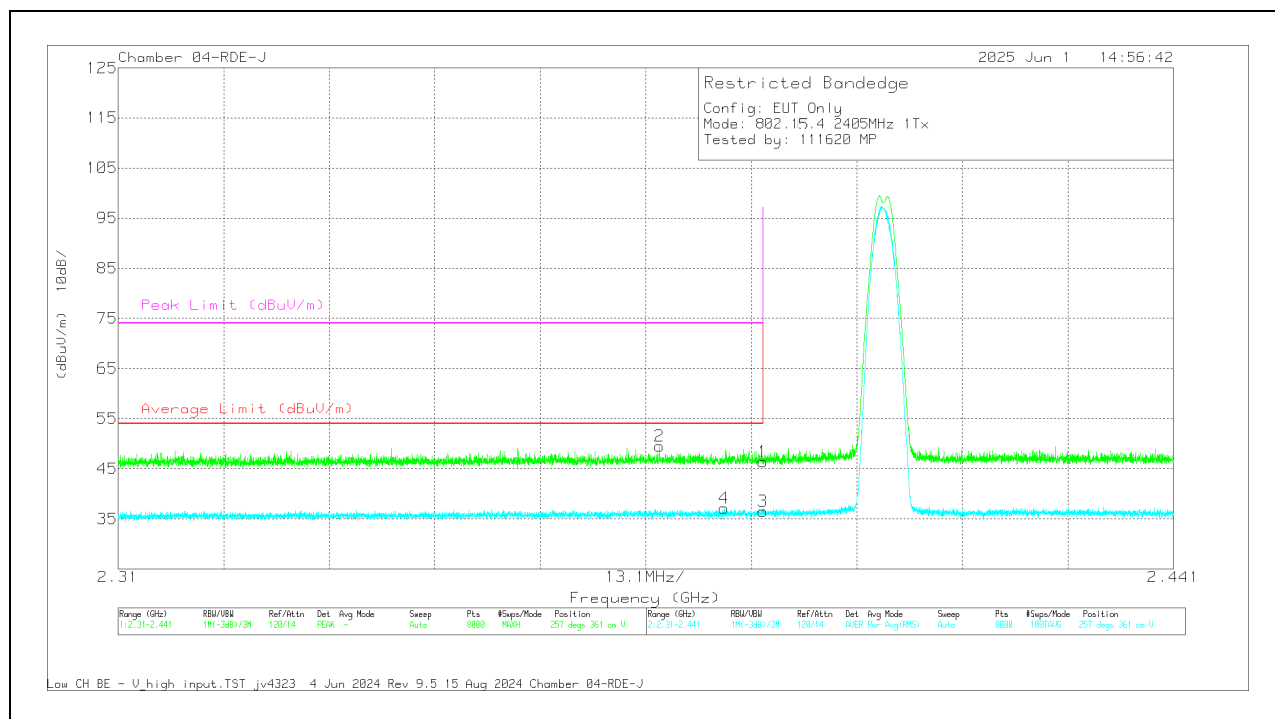
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	43.74	Pk	32.2	-28.2	0	47.74	-	-	74	-26.26	206	195	H
2	* 2.362898	45.46	Pk	32.1	-28.3	0	49.26	-	-	74	-24.74	206	195	H
3	* 2.39	33.08	RMS	32.2	-28.2	0	37.08	54	-16.92	-	-	206	195	H
4	* 2.387955	33.22	RMS	32.2	-28.2	0	37.22	54	-16.78	-	-	206	195	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

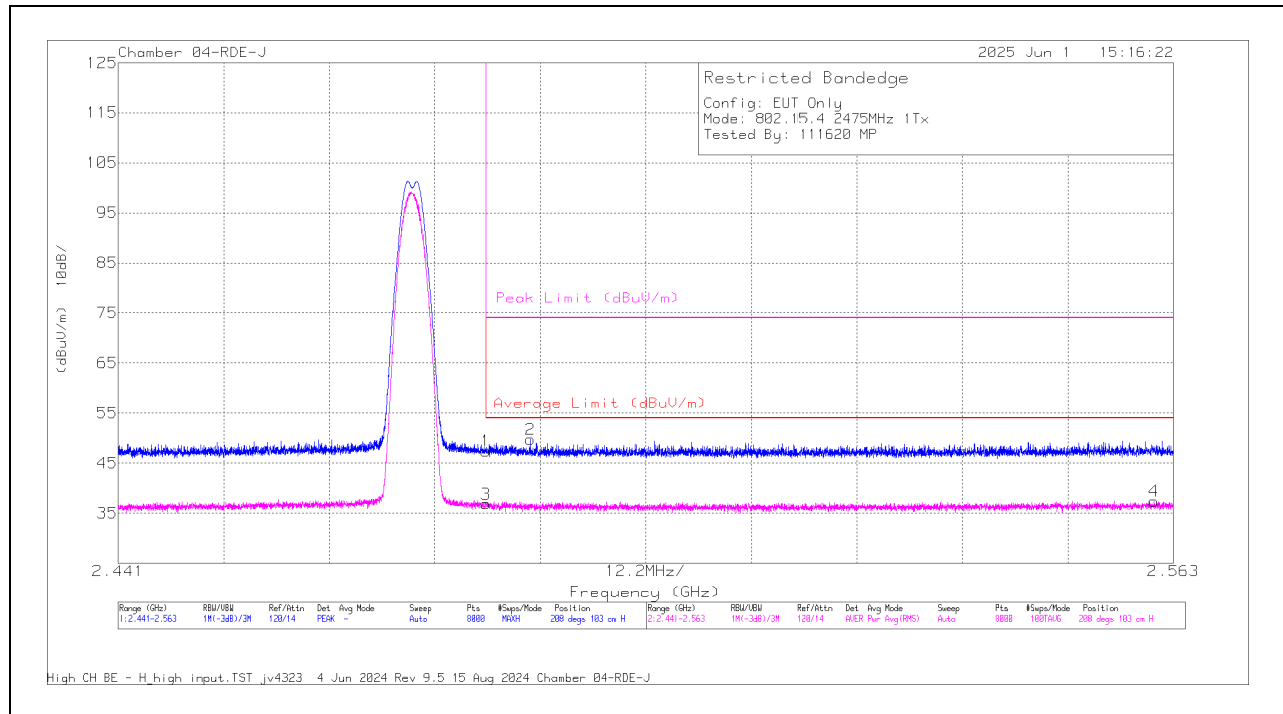


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.37	Pk	32.2	-28.2	0	46.37	-	-	74	-27.63	257	361	V
2	* 2.377195	45.52	Pk	32.2	-28.2	0	49.52	-	-	74	-24.48	257	361	V
3	* 2.39	32.52	RMS	32.2	-28.2	0	36.52	54	-17.48	-	-	257	361	V
4	* 2.385203	33.24	RMS	32.2	-28.3	0	37.14	54	-16.86	-	-	257	361	V

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

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL**HORIZONTAL RESULT**

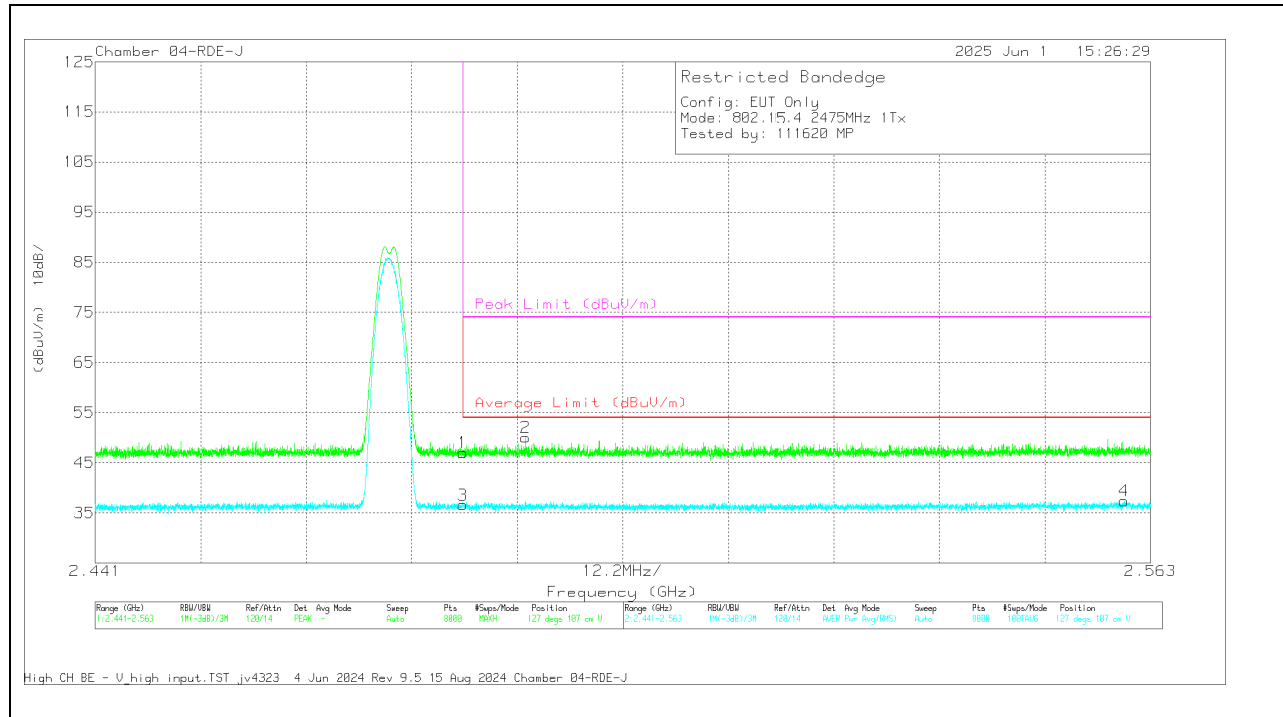
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Ampl/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	43.1	Pk	32.4	-28.1	0	47.4	-	-	74	-26.6	208	103	H
2	* 2.488647	45.32	Pk	32.5	-28.1	0	49.72	-	-	74	-24.28	208	103	H
3	* 2.4835	32.52	RMS	32.4	-28.1	0	36.82	54	-17.18	-	-	208	103	H
4	2.560743	32.81	RMS	32.6	-28	0	37.41	54	-16.59	-	-	208	103	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80707 ACF (dB/m)	Amp/Cbl (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.4835	42.71	Pk	32.4	-28.1	0	47.01	-	-	74	-26.99	127	107	V
2	* 2.490752	45.68	Pk	32.5	-28.1	0	50.08	-	-	74	-23.92	127	107	V
3	* 2.4835	32.27	RMS	32.4	-28.1	0	36.57	54	-17.43	-	-	127	107	V
4	2.55992	32.86	RMS	32.6	-28.1	0	37.36	54	-16.64	-	-	127	107	V

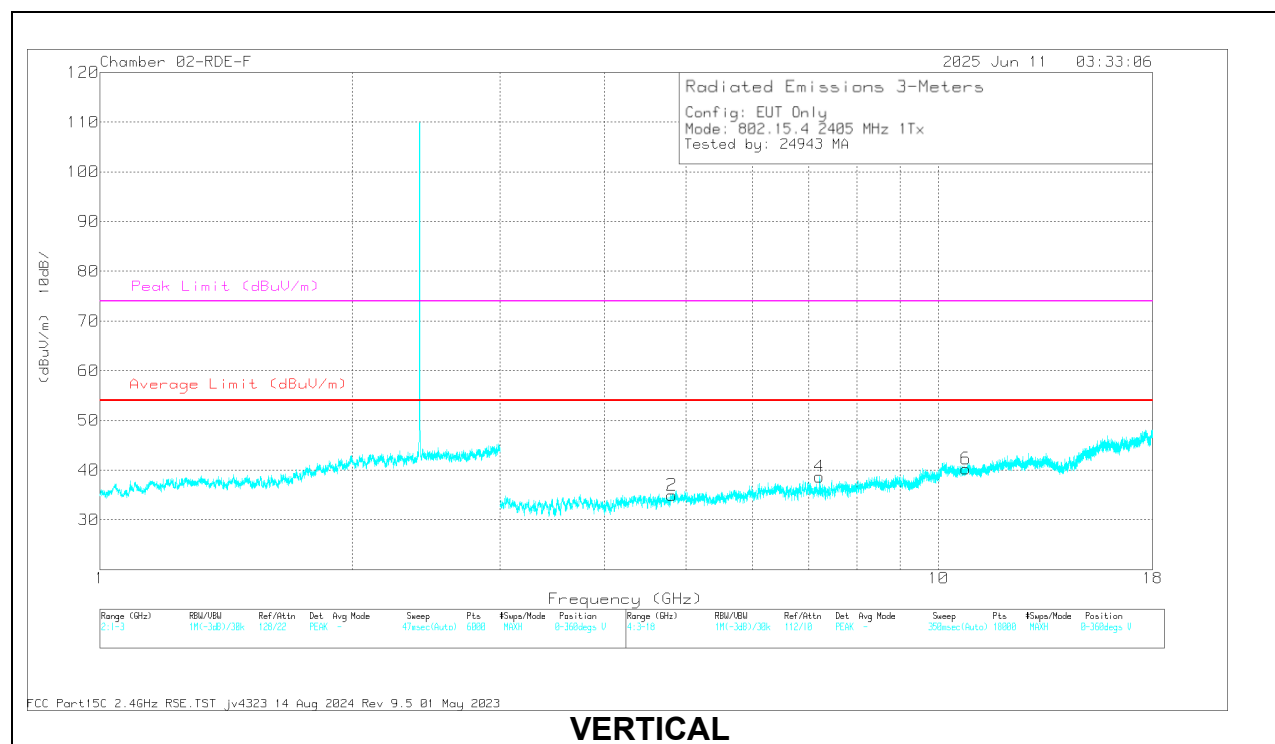
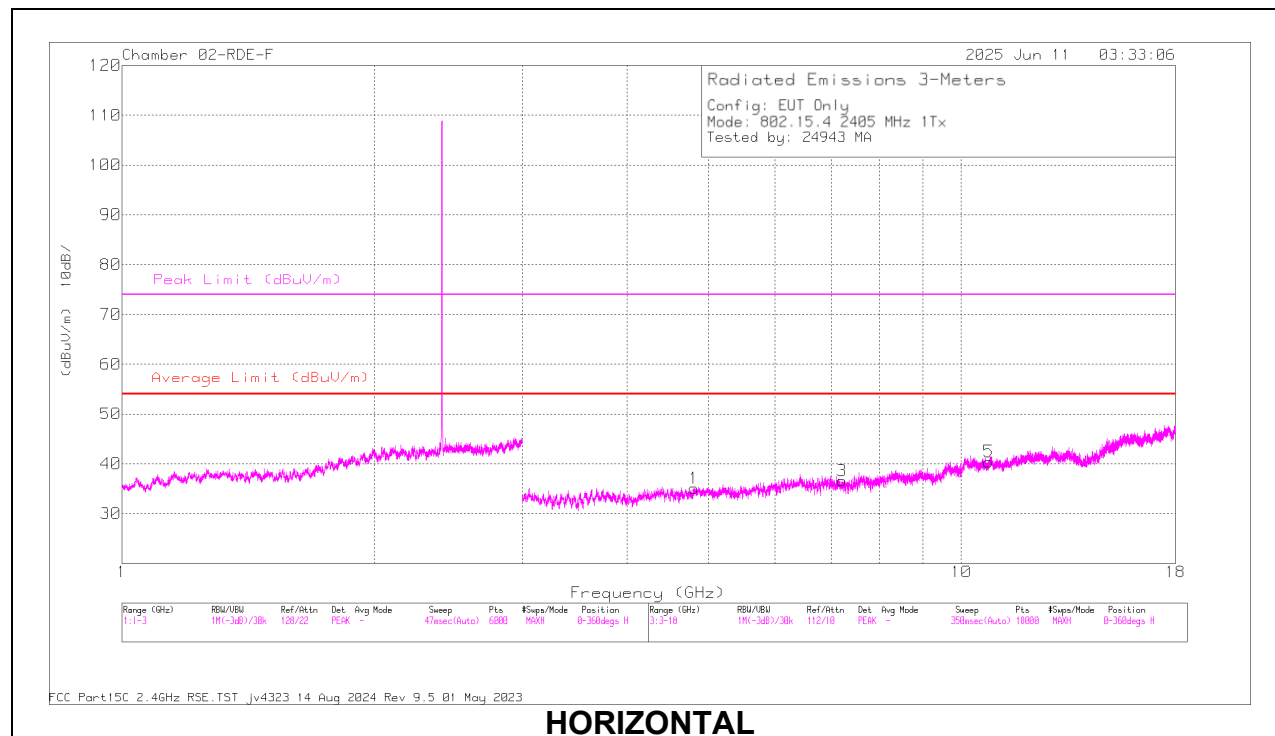
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

10.1.7. ANT 1, 802.15.4 HIGH POWER, HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



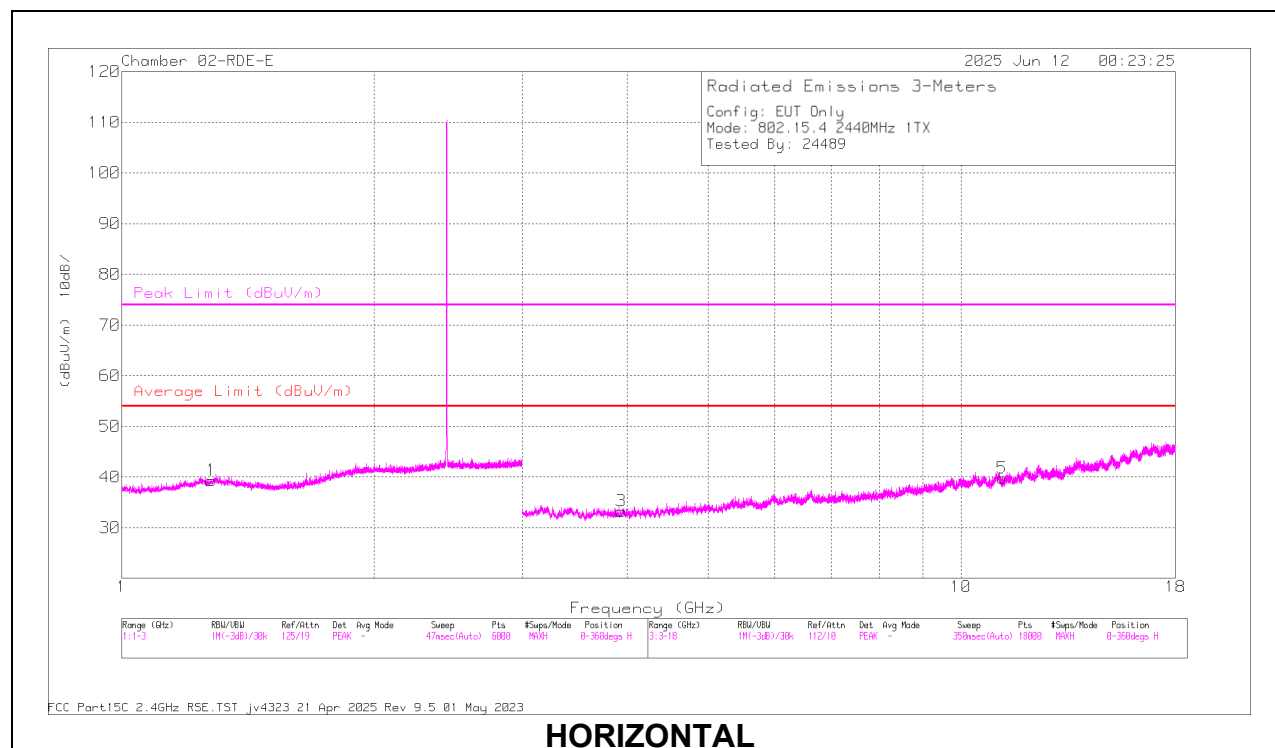
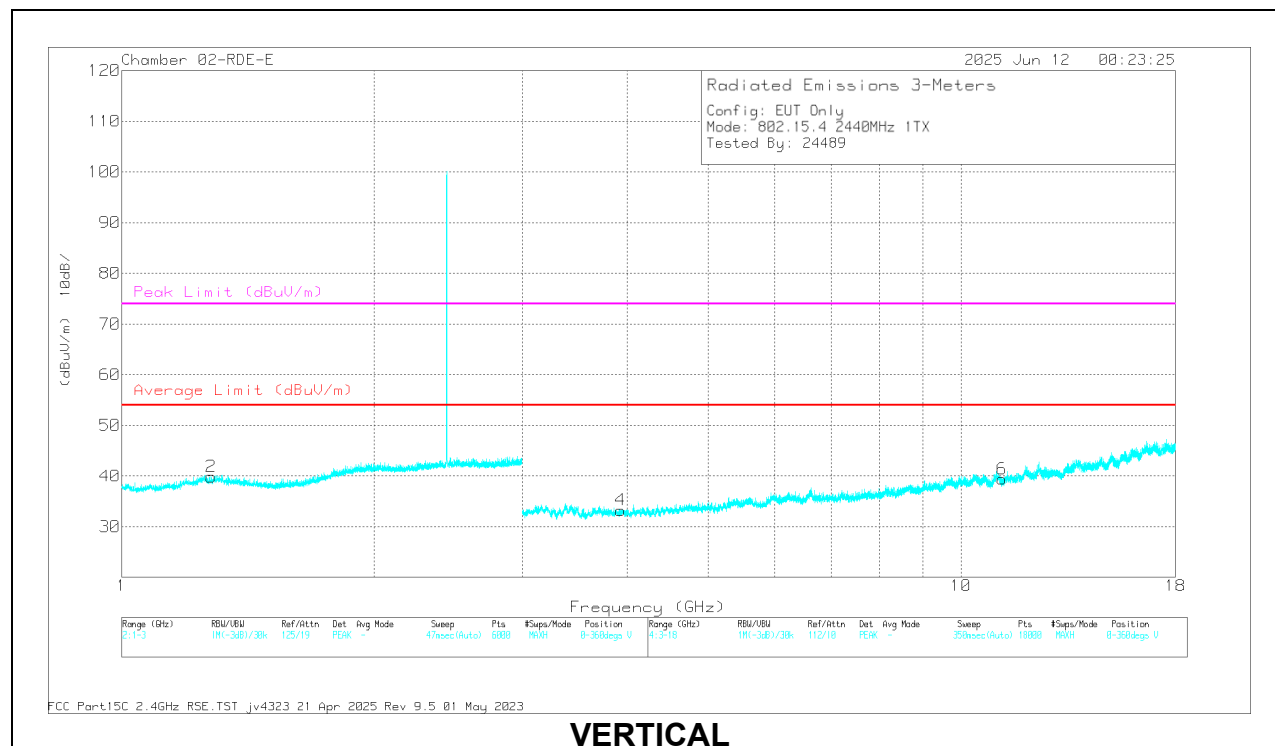
Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206806 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.807392	57.15	PK2	34.1	0	-45.88	45.37	-	-	74	-28.63	0	101	H
	* 4.805104	45.6	MAv1	34.1	0	-46.01	33.69	54	-20.31	-	-	0	101	H
2	* 4.810486	56.94	PK2	34.1	0	-45.96	45.08	-	-	74	-28.92	40	200	V
	* 4.807785	45.53	MAv1	34.1	0	-45.96	33.67	54	-20.33	-	-	40	200	V
3	7.21344	56.26	PK2	35.6	0	-43.94	47.92	-	-	-	-	40	128	H
4	7.213438	58.09	PK2	35.6	0	-43.94	49.75	-	-	-	-	347	104	V
5	* 10.778067	55.75	PK2	37.9	0	-42.73	50.92	-	-	74	-23.08	40	101	H
	* 10.77716	43.93	MAv1	37.9	0	-42.87	38.96	54	-15.04	-	-	40	101	H
6	* 10.781816	55.27	PK2	37.9	0	-42.86	50.31	-	-	74	-23.69	347	101	V
	* 10.780754	43.75	MAv1	37.9	0	-42.8	38.85	54	-15.15	-	-	347	101	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS**HORIZONTAL****VERTICAL**

RADIATED EMISSIONS

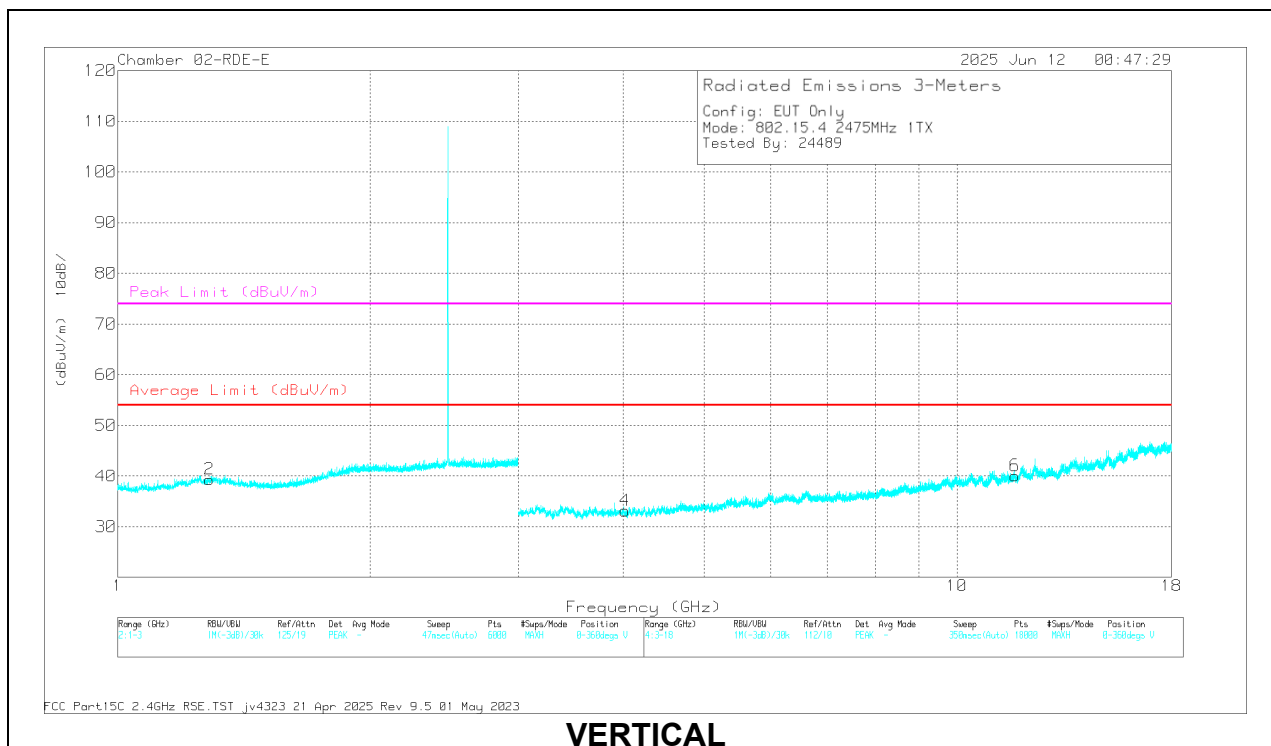
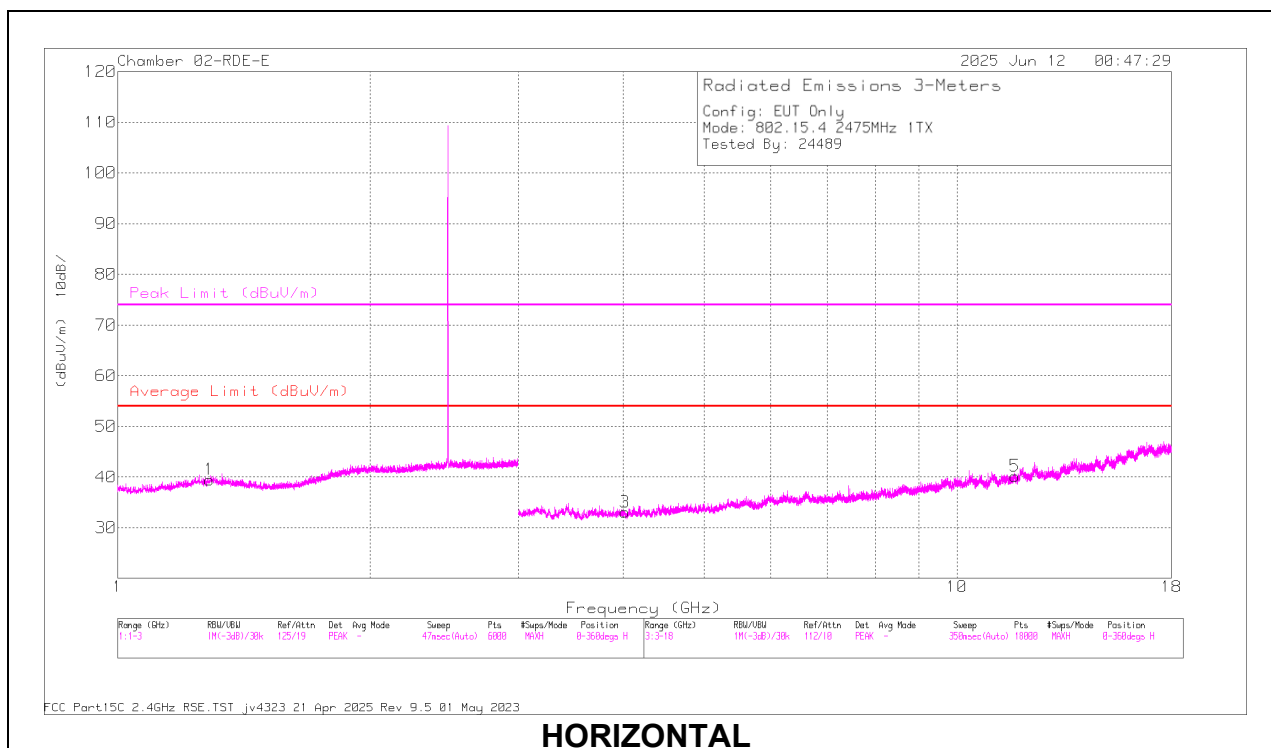
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.279626	60.5	PK2	29.1	0	-39.81	49.79	-	-	74	-24.21	360	101	H
	* 1.279911	48.52	MAv1	29.1	0	-39.82	37.8	54	-16.2	-	-	360	101	H
2	* 1.277843	60.24	PK2	29.1	0	-39.82	49.52	-	-	74	-24.48	360	198	V
	* 1.277103	48.69	MAv1	29.1	0	-39.81	37.98	54	-16.02	-	-	360	198	V
3	* 3.938297	56.38	PK2	33.5	0	-46.2	43.68	-	-	74	-30.32	360	198	H
	* 3.936645	44.47	MAv1	33.5	0	-46.21	31.76	54	-22.24	-	-	360	198	H
4	* 3.929837	55.98	PK2	33.5	0	-46.39	43.09	-	-	74	-30.91	360	101	V
	* 3.929804	44.45	MAv1	33.5	0	-46.39	31.56	54	-22.44	-	-	360	101	V
5	* 11.183029	54.65	PK2	37.7	0	-42.79	49.56	-	-	74	-24.44	360	198	H
	* 11.185334	42.91	MAv1	37.8	0	-42.81	37.9	54	-16.1	-	-	360	198	H
6	* 11.187725	54.43	PK2	37.8	0	-42.82	49.41	-	-	74	-24.59	360	101	V
	* 11.188888	42.9	MAv1	37.8	0	-42.79	37.91	54	-16.09	-	-	360	101	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.286603	60.85	PK2	29.1	0	-39.78	50.17	-	-	74	-23.83	360	101	H
	* 1.289014	48.98	MAv1	29.1	0	-39.79	38.29	54	-15.71	-	-	360	101	H
2	* 1.286727	60.49	PK2	29.1	0	-39.78	49.81	-	-	74	-24.19	360	101	V
	* 1.285346	48.94	MAv1	29.1	0	-39.79	38.25	54	-15.75	-	-	360	101	V
3	* 4.022419	56.42	PK2	33.4	0	-46.35	43.47	-	-	74	-30.53	360	199	H
	* 4.021022	44.64	MAv1	33.4	0	-46.36	31.68	54	-22.32	-	-	360	199	H
4	* 4.025215	56.44	PK2	33.4	0	-46.33	43.51	-	-	74	-30.49	360	199	V
	* 4.024507	44.72	MAv1	33.4	0	-46.33	31.79	54	-22.21	-	-	360	199	V
5	* 11.717429	55.38	PK2	38.4	0	-42.84	50.94	-	-	74	-23.06	360	199	H
	* 11.719118	43.57	MAv1	38.4	0	-42.92	39.05	54	-14.95	-	-	360	199	H
6	* 11.718822	55.19	PK2	38.4	0	-42.9	50.69	-	-	74	-23.31	360	199	V
	* 11.718816	43.67	MAv1	38.4	0	-42.9	39.17	54	-14.83	-	-	360	199	V

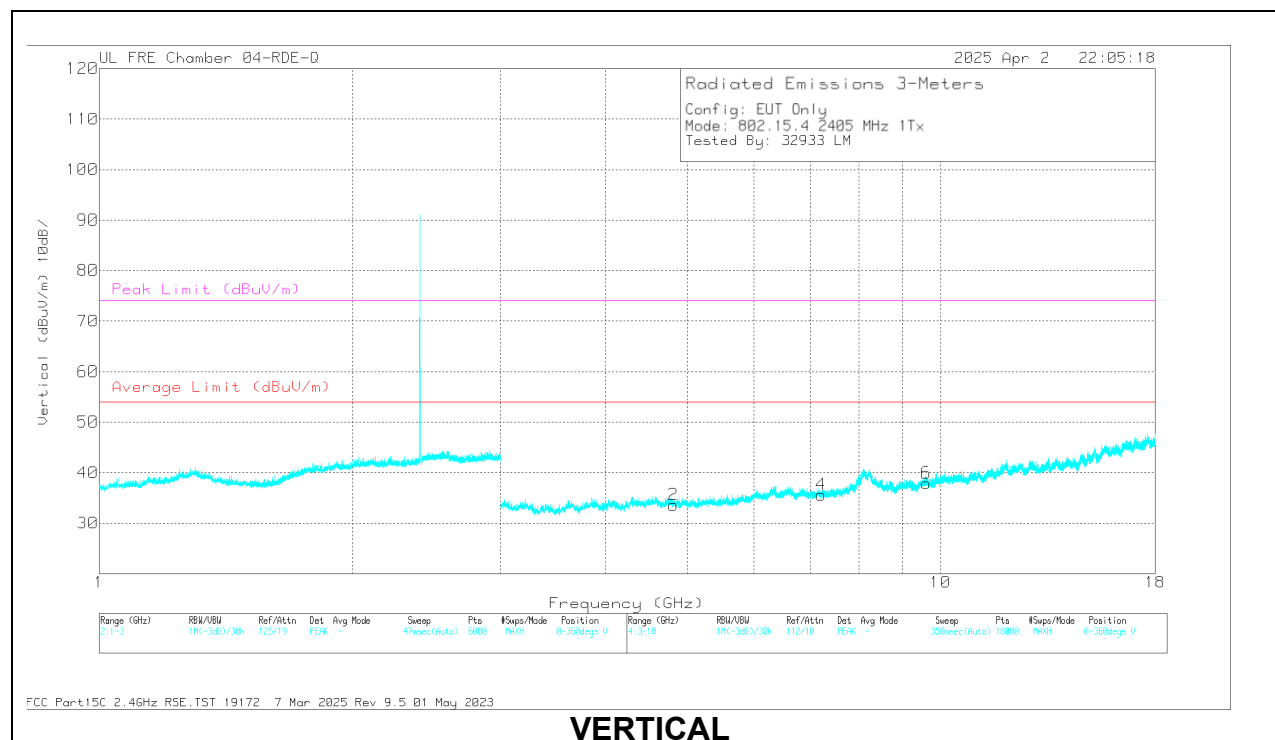
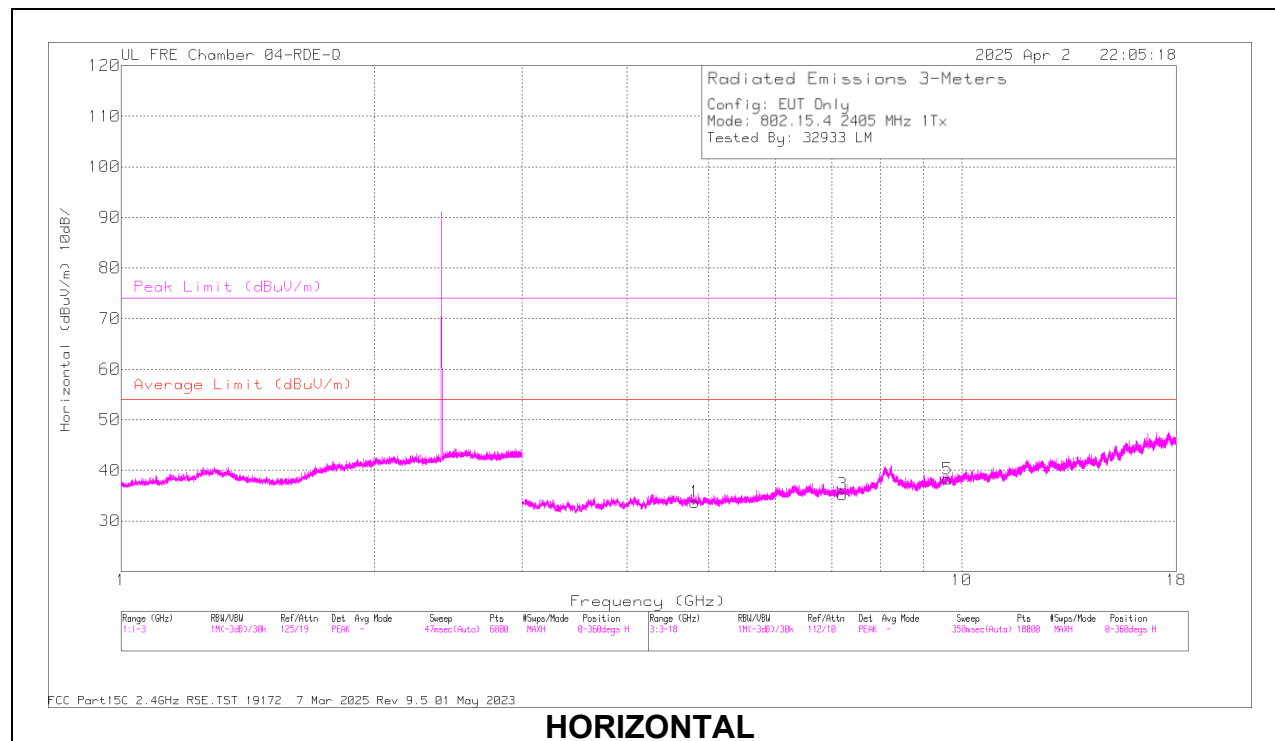
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.1.8. ANT 1, 802.15.4 LOW POWER, HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



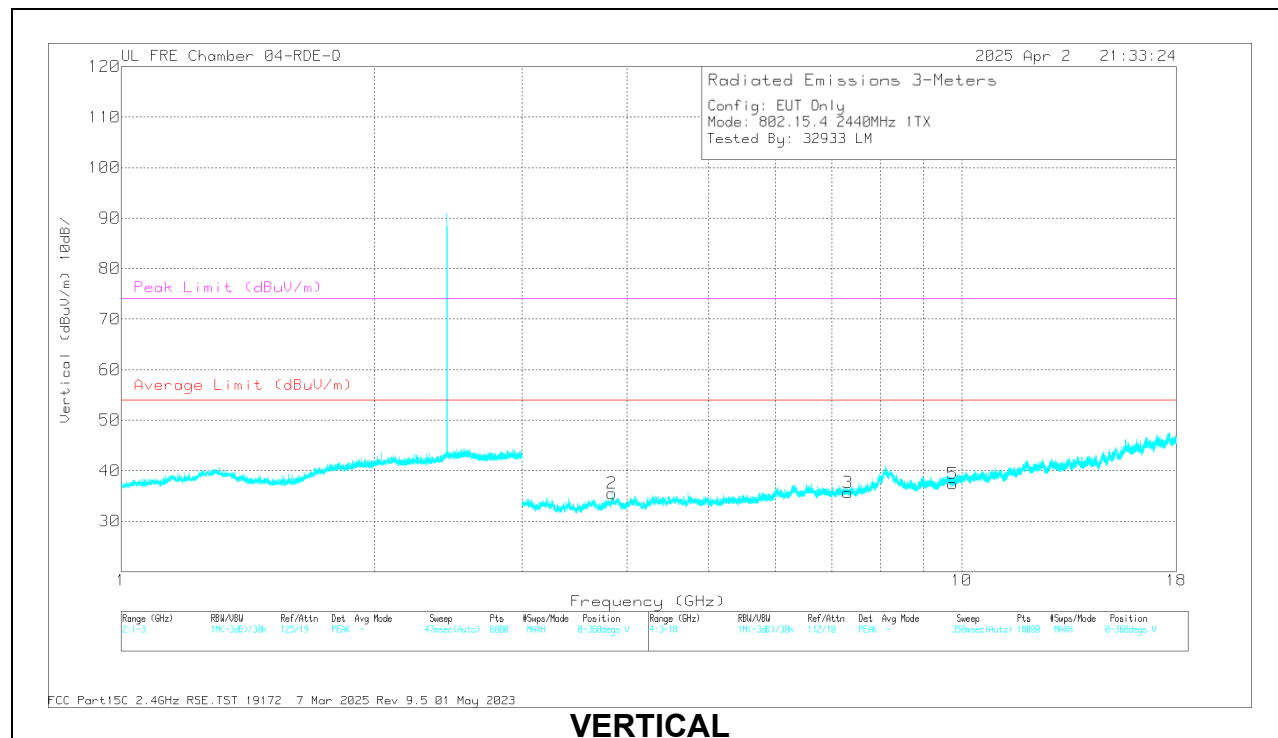
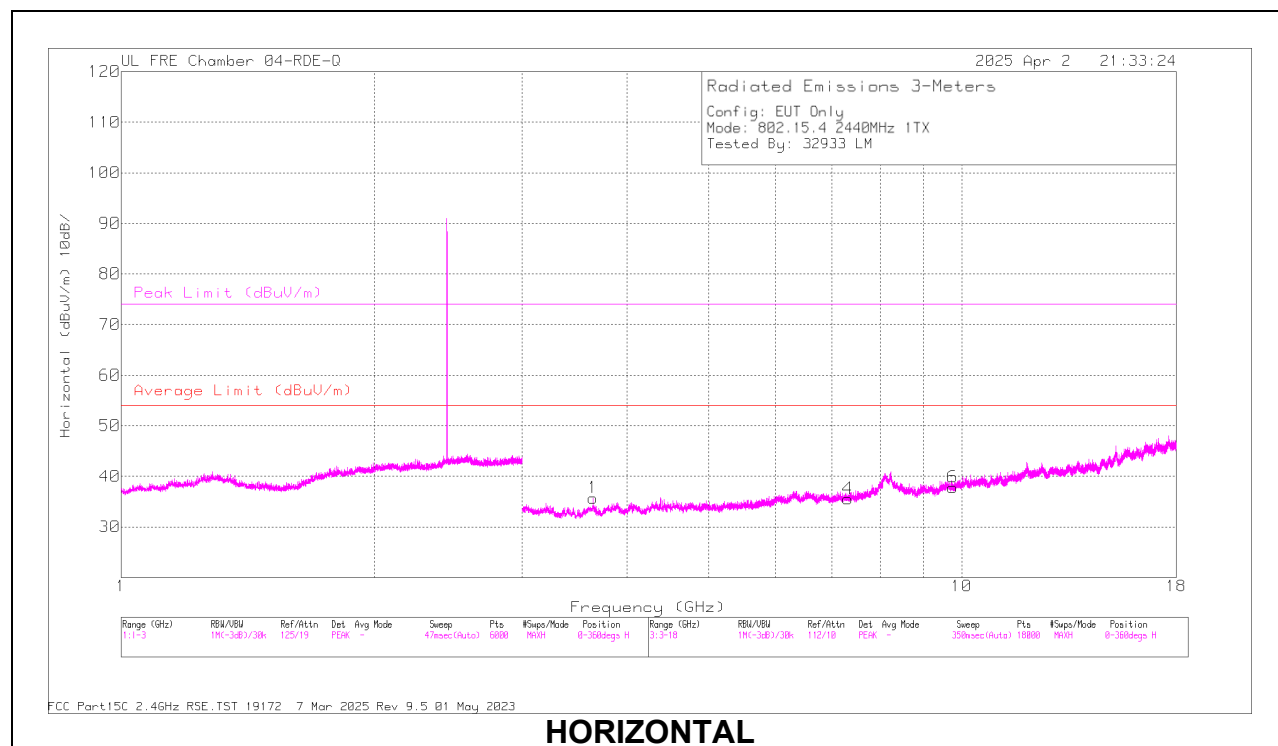
RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.808171	56.6	PK2	34.3	-46.48	44.42	-	-	74	-29.58	2	232	H
	* 4.810748	45.08	MAv1	34.3	-46.42	32.96	54	-21.04	-	-	2	232	H
2	* 4.810371	56.65	PK2	34.3	-46.43	44.52	-	-	74	-29.48	119	102	V
	* 4.80861	44.97	MAv1	34.3	-46.47	32.8	54	-21.2	-	-	119	102	V
3	7.216238	56.09	PK2	35.6	-44.6	47.09	-	-	-	-	309	166	H
4	7.215026	55.56	PK2	35.6	-44.6	46.56	-	-	-	-	317	132	V
5	9.615723	55.95	PK2	36.8	-43.63	49.12	-	-	-	-	112	396	H
6	9.62013	55.89	PK2	36.8	-43.62	49.07	-	-	-	-	117	330	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL RESULTS

RADIATED EMISSIONS

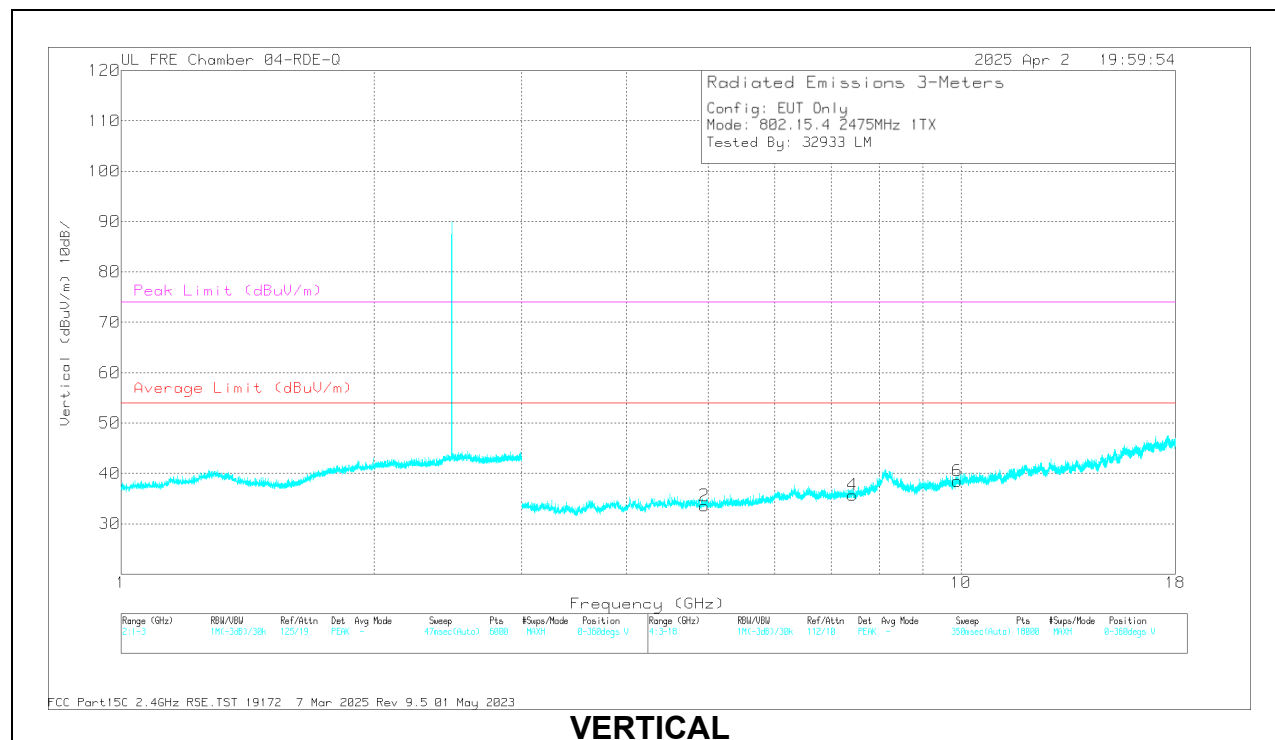
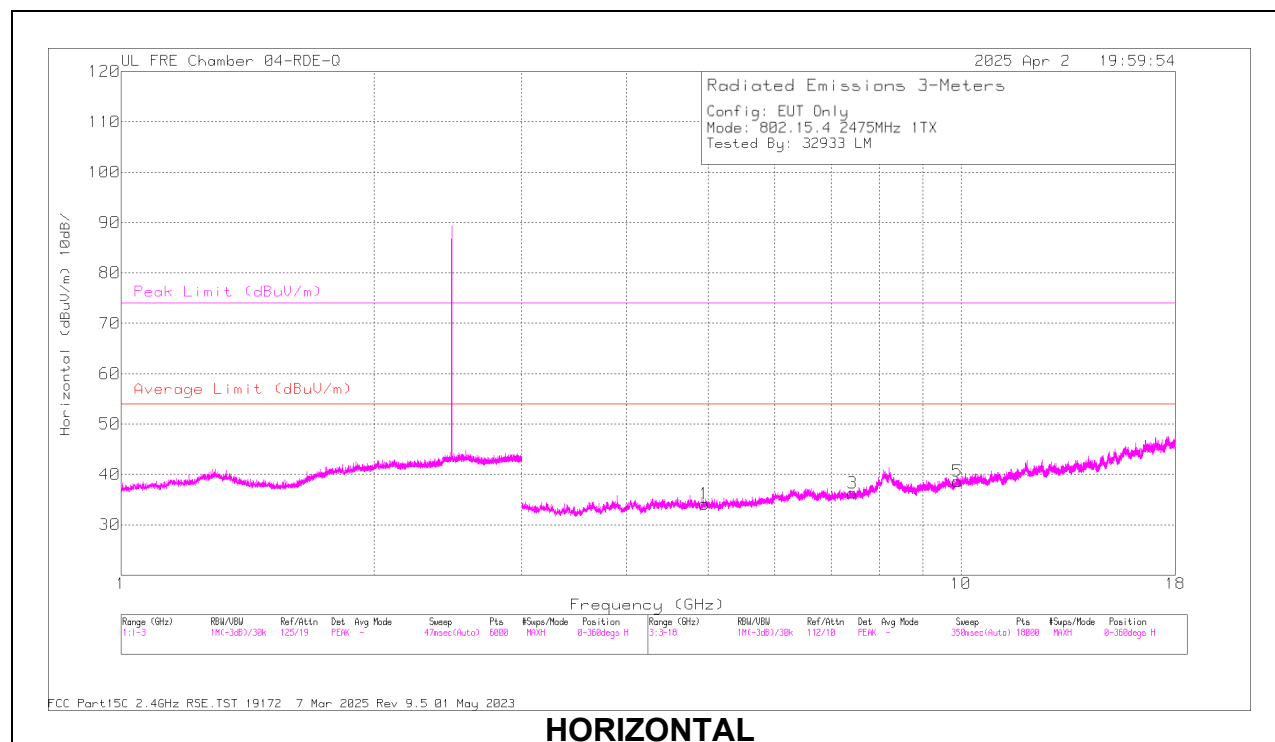
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	22741 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.641402	56.91	PK2	33.2	-45.85	44.26	-	-	74	-29.74	349	100	H
	* 3.643573	45.39	MAv1	33.2	-45.74	32.85	54	-21.15	-	-	349	100	H
2	* 3.839248	57.44	PK2	33.3	-46.11	44.63	-	-	74	-29.37	257	196	V
	* 3.838733	45.63	MAv1	33.3	-46.11	32.82	54	-21.18	-	-	257	196	V
3	* 7.321241	55.48	PK2	35.6	-44.59	46.49	-	-	74	-27.51	115	297	V
	* 7.321871	43.89	MAv1	35.6	-44.58	34.91	54	-19.09	-	-	115	297	V
4	* 7.320979	55.45	PK2	35.6	-44.59	46.46	-	-	74	-27.54	242	384	H
	* 7.319235	43.85	MAv1	35.6	-44.57	34.88	54	-19.12	-	-	242	384	H
5	9.762182	55.67	PK2	37	-43.88	48.79	-	-	-	-	107	280	H
6	9.759074	55.35	PK2	37	-43.86	48.49	-	-	-	-	346	149	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	222741 ACF (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.951629	56.77	PK2	34.4	-46.23	44.94	-	-	74	-29.06	28	138	H
	* 4.950671	44.83	MAv1	34.4	-46.25	32.98	54	-21.02	-	-	28	138	H
2	* 4.950831	56.21	PK2	34.4	-46.25	44.36	-	-	74	-29.64	345	179	V
	* 4.950096	44.73	MAv1	34.4	-46.26	32.87	54	-21.13	-	-	345	179	V
3	* 7.423837	55.69	PK2	35.6	-44.4	46.89	-	-	74	-27.11	289	141	H
	* 7.426572	44.12	MAv1	35.6	-44.41	35.31	54	-18.69	-	-	289	141	H
4	* 7.424681	55.76	PK2	35.6	-44.4	46.96	-	-	74	-27.04	107	333	V
	* 7.424767	44.07	MAv1	35.6	-44.4	35.27	54	-18.73	-	-	107	333	V
5	9.901807	55.65	PK2	37.2	-43.98	48.87	-	-	-	-	153	253	H
6	9.900536	55.13	PK2	37.2	-44	48.33	-	-	-	-	250	141	V

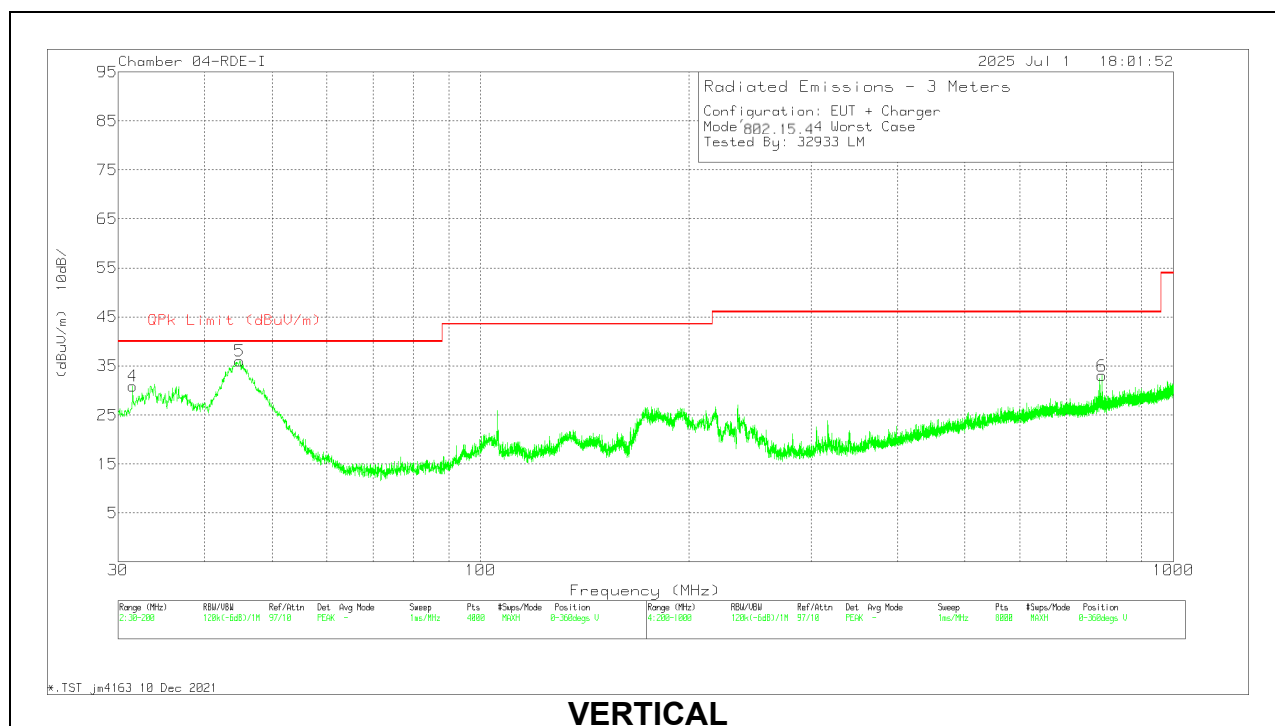
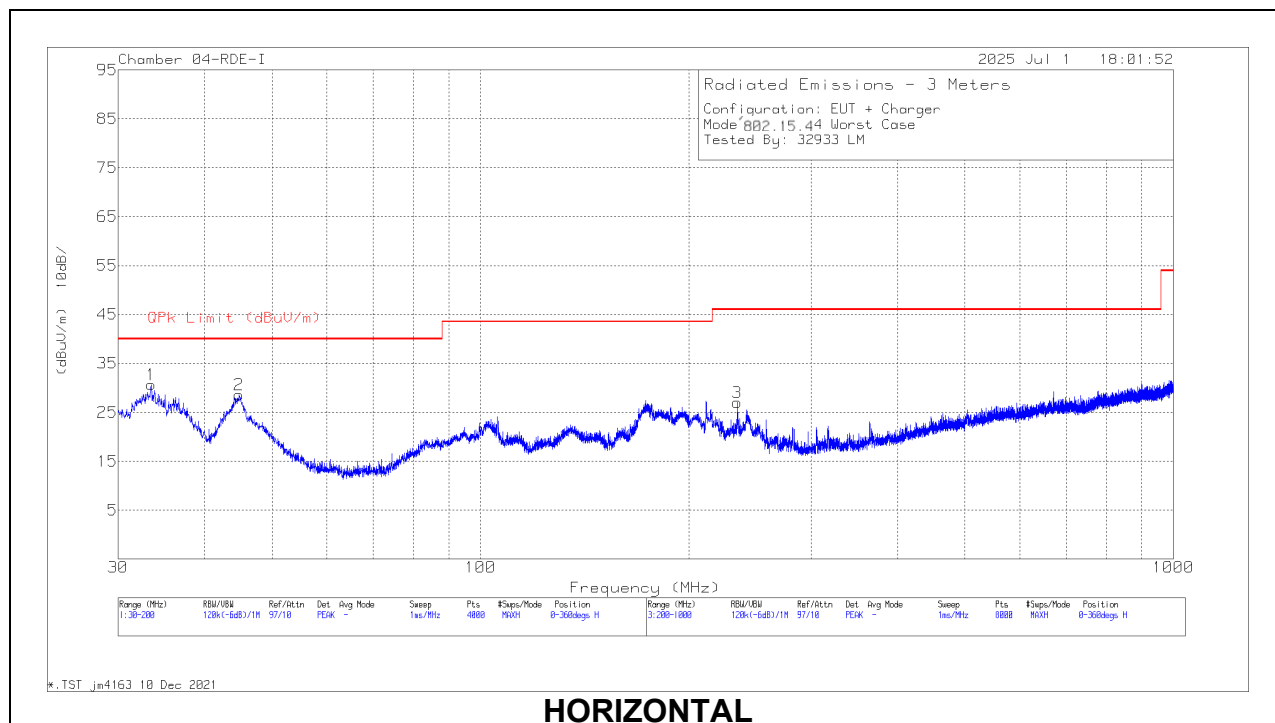
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.2. WORST CASE BELOW 1 GHZ

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



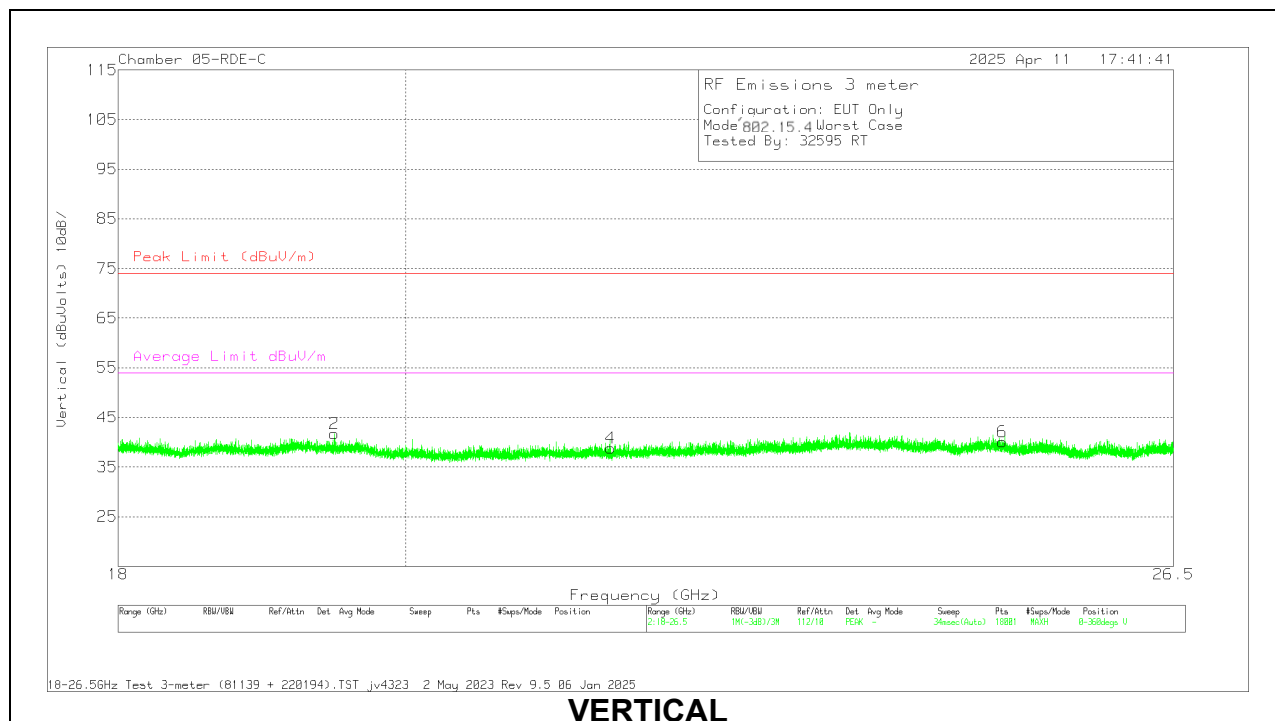
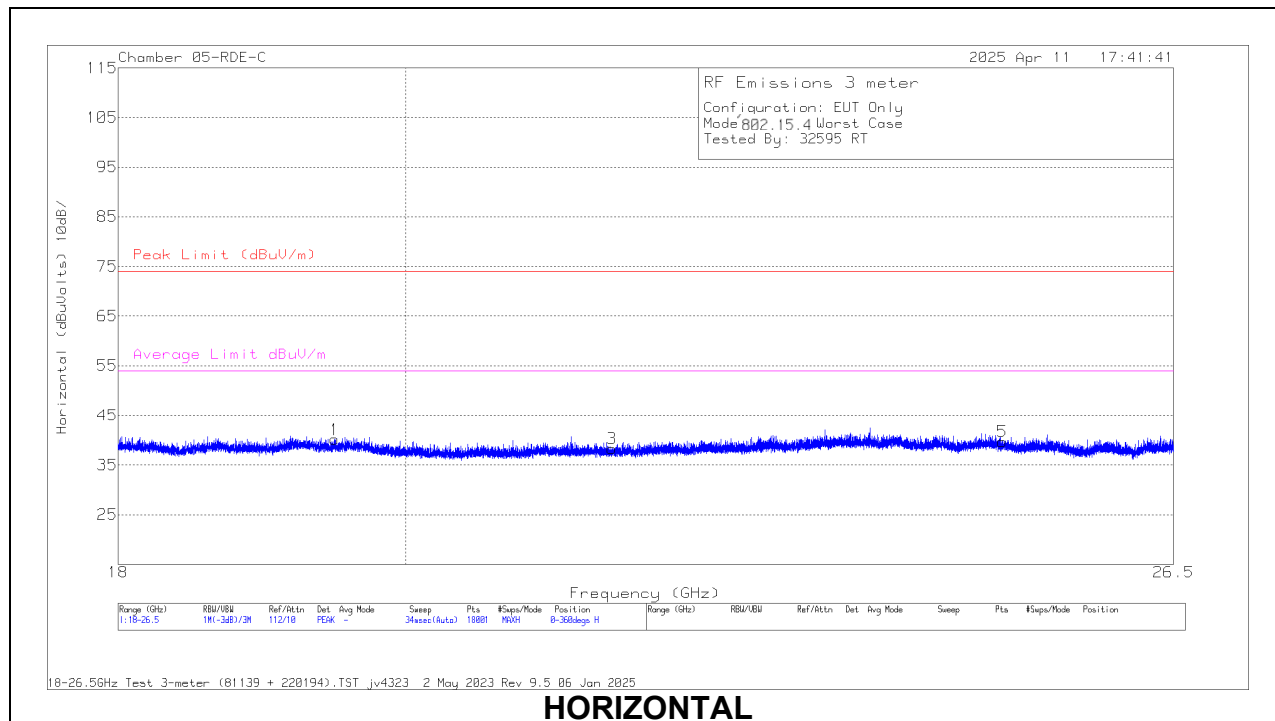
Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	82258 ACF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	33.5239	20.99	Qp	24	-31.2	13.79	40	-26.21	42	398	H
2	45.6235	38.28	Qp	15.5	-31.1	22.68	40	-17.32	211	315	H
3	235.343	36.35	Qp	17.2	-30	23.55	46.02	-22.47	65	134	H
4	31.451	39.8	Qp	25.9	-31.2	34.5	40	-5.5	300	318	V
5	44.8663	46.57	Qp	15.9	-31.1	31.37	40	-8.63	145	145	V
6	789.031	20.17	Qp	27.1	-28.3	18.97	46.02	-27.05	99	365	V

Qp - Quasi-Peak detector

10.3. WORST CASE 18-26 GHZ

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



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	81139 ACF (dB/m)	CBL/AMP	Cables (dB)	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	19.483292	57.08	PK	33.1	-62.4	13.4	41.18	74	-32.82	54	-12.82	0	199	V
1	19.487135	56.83	PK	33.1	-62.4	13.4	40.93	74	-33.07	54	-13.07	0	101	H
4	21.560079	55.89	PK	33.4	-62.4	14.1	40.99	74	-33.01	54	-13.01	0	101	V
3	21.567865	55.87	PK	33.4	-62.4	14.1	40.97	74	-33.03	54	-13.03	0	200	H
6	24.887073	55.19	PK	34.2	-62.8	15	41.59	74	-32.41	54	-12.41	0	101	V
5	24.891305	55.25	PK	34.2	-62.8	15	41.65	74	-32.35	54	-12.35	0	101	H

Pk - Peak detector

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	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.

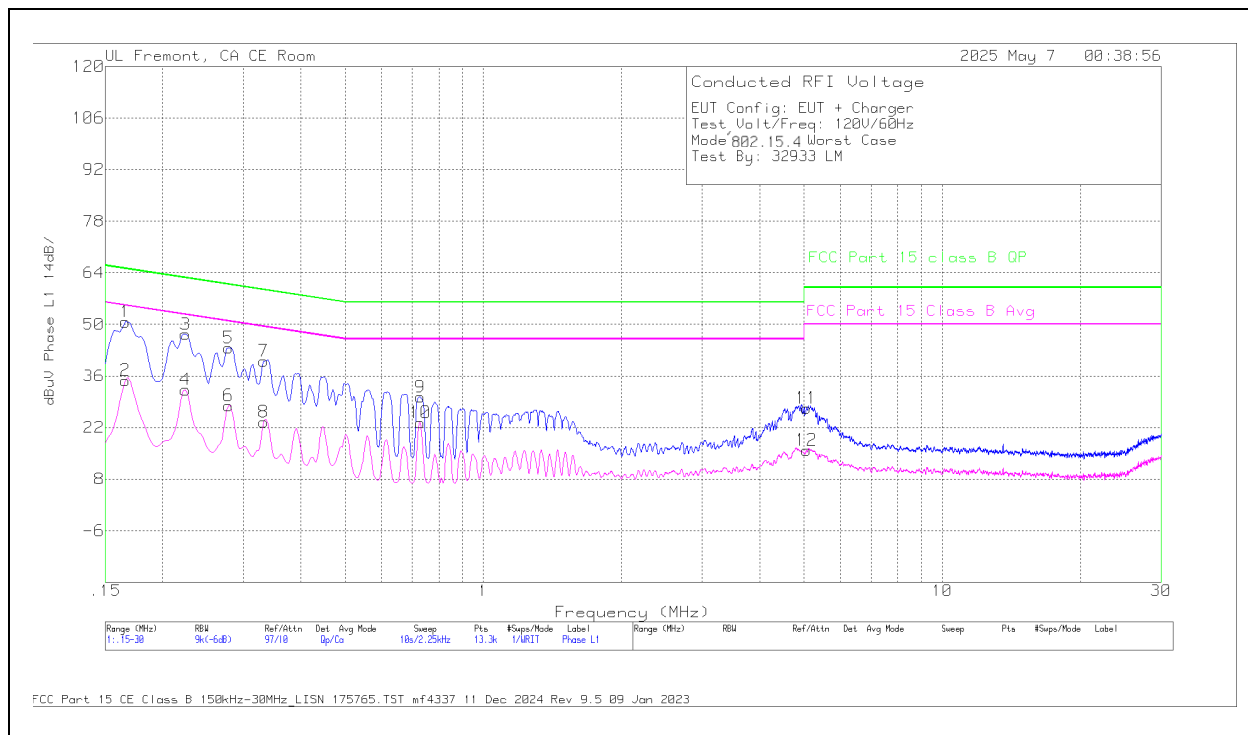
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

11.1. AC Power Line With AC/DC Adapter

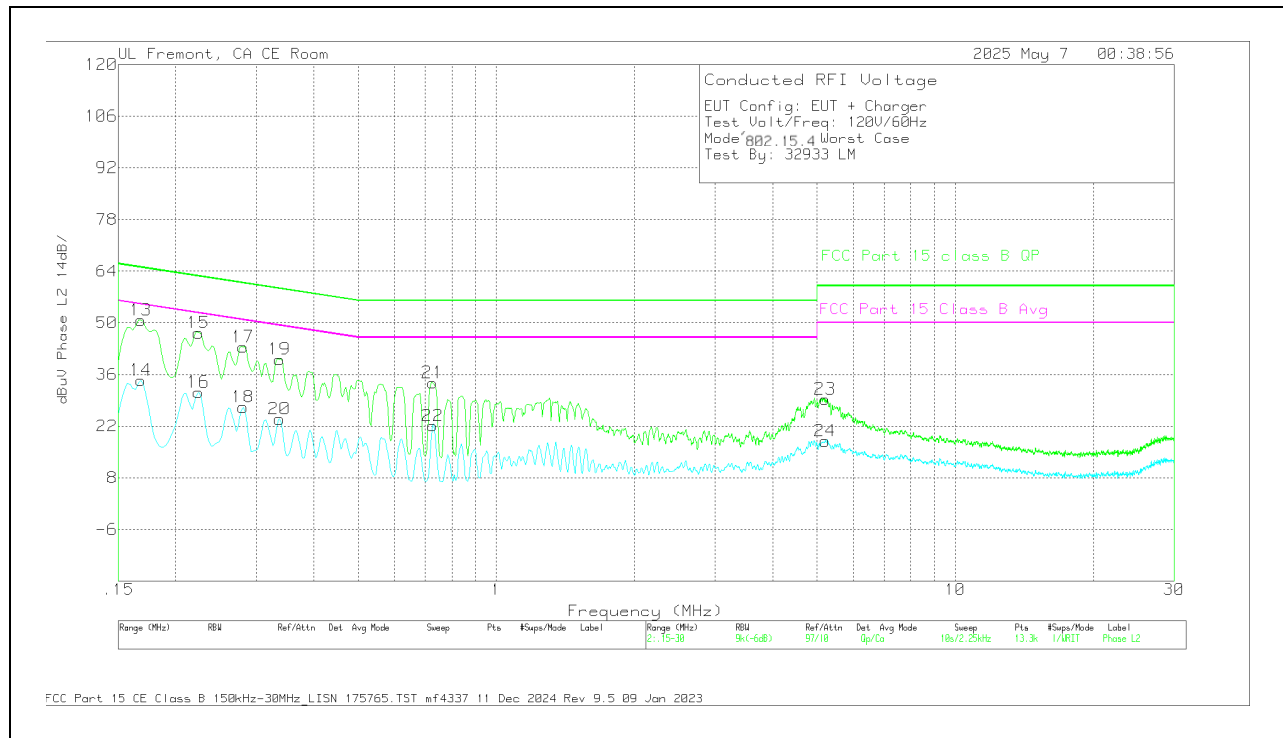
LINE 1 RESULTS



Range 1: Phase L1 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	CBL(dB)	LISN (dB)	CBL(dB)	10dB Atten (dB)	Corrected Reading (dBuV)	FCC Part 15 Class B Avg (dBuV)	Margin (dB)	FCC Part 15 class B QP (dBuV)	Margin (dB)
2	.1658	15.78	Ca	.4	.1	8.5	10	34.78	55.17	-20.39	-	-
4	.2243	13.95	Ca	0	0	8.3	10	32.25	52.66	-20.41	-	-
6	.2783	9.83	Ca	0	0	8.1	10	27.93	50.87	-22.94	-	-
8	.3323	5.48	Ca	-.3	0	8.3	10	23.48	49.39	-25.91	-	-
10	.7283	4.8	Ca	.1	0	8.4	10	23.3	46	-22.7	-	-
12	5.0573	-2.69	Ca	.2	0	8.3	10	15.81	50	-34.19	-	-
1	.1658	31.68	Qp	.4	.1	8.5	10	50.68	-	-	65.17	-14.49
3	.2243	29.02	Qp	0	0	8.3	10	47.32	-	-	62.66	-15.34
5	.2783	25.5	Qp	0	0	8.1	10	43.6	-	-	60.87	-17.27
7	.3323	22.04	Qp	-.3	0	8.3	10	40.04	-	-	59.39	-19.35
9	.7283	11.77	Qp	.1	0	8.4	10	30.27	-	-	56	-25.73
11	5.0573	8.74	Qp	.2	0	8.3	10	27.24	-	-	60	-32.76

Qp - Quasi-Peak detector
Ca - CISPR average detection

LINE 2 RESULTS

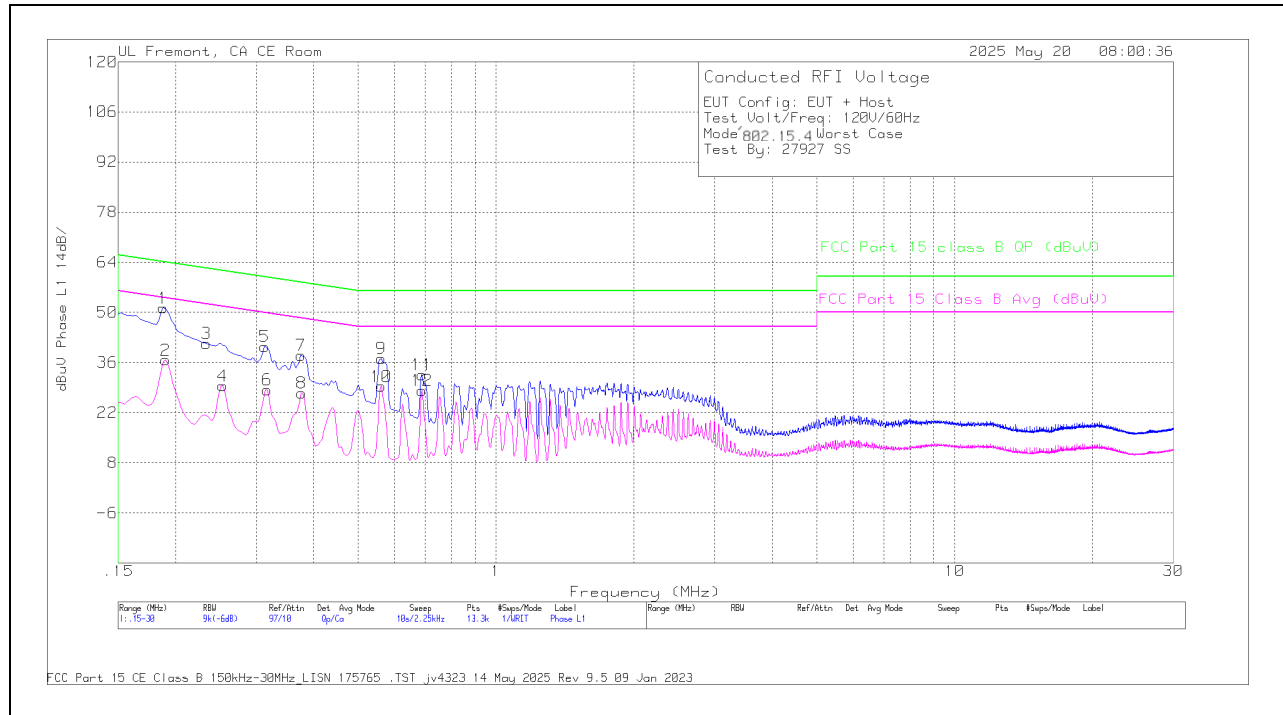


Range 2: Phase L2 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	CBL(dB)	LISN (dB)	CBL(dB)	10dB Atten (dB)	Corrected Reading (dBuV)	FCC Part 15 Class B Avg (dBuV)	Margin (dB)	FCC Part 15 class B QP (dBuV)	Margin (dB)
14	.168	15.4	Ca	.4	.1	8.5	10	34.4	55.06	-20.66	-	-
16	.2243	12.89	Ca	0	0	8.3	10	31.19	52.66	-21.47	-	-
18	.2805	9.04	Ca	0	0	8.1	10	27.14	50.8	-23.66	-	-
20	.3368	5.91	Ca	-.3	0	8.3	10	23.91	49.28	-25.37	-	-
22	.726	3.6	Ca	.1	0	8.4	10	22.1	46	-23.9	-	-
24	5.2035	-.25	Ca	0	0	8.2	10	17.95	50	-32.05	-	-
13	.168	31.69	Qp	.4	.1	8.5	10	50.69	-	-	65.06	-14.37
15	.2243	28.98	Qp	0	0	8.3	10	47.28	-	-	62.66	-15.38
17	.2805	25.32	Qp	0	0	8.1	10	43.42	-	-	60.8	-17.38
19	.3368	22.09	Qp	-.3	0	8.3	10	40.09	-	-	59.28	-19.19
21	.726	15.25	Qp	.1	0	8.4	10	33.75	-	-	56	-22.25
23	5.2035	11.1	Qp	0	0	8.2	10	29.3	-	-	60	-30.7

Qp - Quasi-Peak detector
Ca - CISPR average detection

11.2. AC Power Line with Laptop

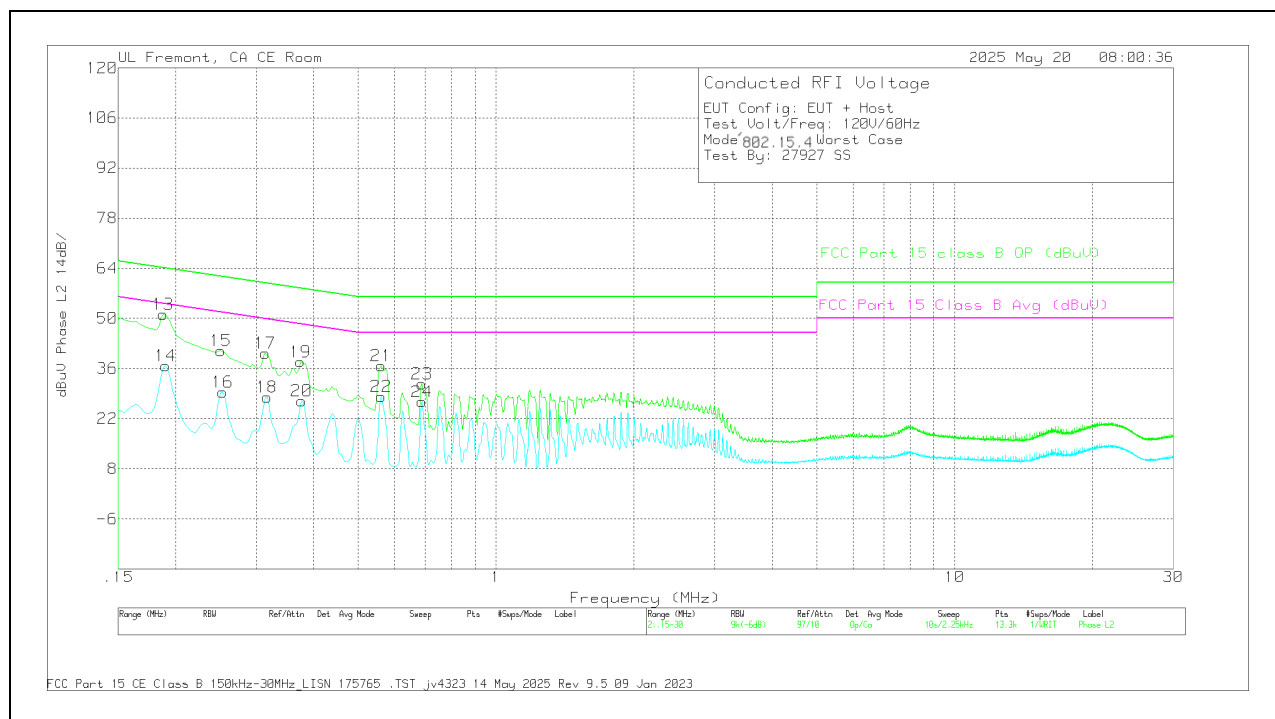
LINE 1 RESULTS



Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



Range 2: Phase L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 C3_C2_Limit er no Pad_UL (dB)	LISN (dB)	10dB Atten (dB)	Corrected Reading dBuV	FCC Part 15 Class B Avg (dBuV)	Margin (dB)	FCC Part 15 class B QP (dBuV)	Margin (dB)
14	.1905	17.31	Ca	9.4	0	10	36.71	54.01	-17.3	-	-
16	.2535	10.08	Ca	9.4	0	10	29.48	51.64	-22.16	-	-
18	.3165	8.64	Ca	9.3	0	10	27.94	49.8	-21.86	-	-
20	.3773	7.64	Ca	9.3	0	10	26.94	48.34	-21.4	-	-
22	.5618	8.94	Ca	9.3	0	10	28.24	46	-17.76	-	-
24	.69	7.4	Ca	9.3	0	10	26.7	46	-19.3	-	-
13	.1883	31.72	Qp	9.4	0	10	51.12	-	-	64.11	-12.99
15	.2513	21.58	Qp	9.4	0	10	40.98	-	-	61.72	-20.74
17	.3143	21.03	Qp	9.3	0	10	40.33	-	-	59.86	-19.53
19	.375	18.6	Qp	9.3	0	10	37.9	-	-	58.39	-20.49
21	.5618	17.42	Qp	9.3	0	10	36.72	-	-	56	-19.28
23	.69	12.44	Qp	9.3	0	10	31.74	-	-	56	-24.26

Qp - Quasi-Peak detector

Ca - CISPR average detection

12. SETUP PHOTOS

Please refer to 15496282-EP1 for setup photos

APPENDIX A – SPOT CHECK EVALUATION

1. SPOT CHECK EVALUATION

1.1. MODEL DIFFERENCES

The manufacturer hereby declares the following for models A3260, A3516, A3517 and A3518.

These models have the same PCB layout, design, common components, antennas, antenna locations and housing cases, except for the cellular bands that are enabled/disabled by software as shown below.

Model	FCC ID	IC ID	Feature Difference	Sim Support	Reference Model
A3260	BCG-E8948A	579C-E8948A	_No B11/21	eSIM	-
A3516	BCG-E8954A	579C-E8954A	_Added B11/21 _No B14/29/71		A3260
A3517	BCG-E8955A	579C-E8955A	_No B11/21/14/29/71		
A3518	BCG-E8956A	579C-E8956A	_No B11/21/14/29/71/53 _No MSS		

The spot check plan, approved by the FCC inquiry, allows for data reuse from the reference model where the variant model data meets the limits and has not changed by more than the criteria from KDB 484596 D01 v03 equation (4).

$$d_{dBmax}(M_{dB}) = \begin{cases} (3 + M_{dB}/20) \text{ dB} & , \text{ for } 0 \leq M_{dB} \leq 60 \text{ dB} \\ 6 \text{ dB} & , \text{ for } M_{dB} > 60 \text{ dB} \end{cases} \quad (4)$$

Where: d_{dB} deviation from Reference data, V_{dB} variant spot check level, and R_{dB} measurement level



1.2. SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3516

A3516 SPOT CHECK RESULTS											
Equipment Class	Frequency (GHz)	Mode	Data Rate	Test Item	Channel	Measured Frequency (GHz)	Original Model: A3260	Sub Model: A3516	Delta (dB)	Margin	Remarks
							FCC ID : BCG-E8948A IC : 579C-E8948A	FCC ID : BCG-E8954A IC : 579C-E8954A			
802.15.4 (Thread)	2.4	802.15.4 HP ANT2	250 kbps	Output Power (dBm)	Mid	Fundamental	20.34	20.21	-0.13	-9.66	Note 1
		802.15.4 HP ANT2	250 kbps	Radiated Bandedge (dBuV/m)	High	Horizontal High Bandedge	39.29	38.21	-1.08	-14.71	Note 1
		802.15.4 HP ANT1	250 kbps	RSE (dBuV/m)	High	1 to 18 (11.718816 GHz)	39.17	38.63	-0.54	-14.83	Note 1

Note 1: Deviation from reference to variant within the value allowed by equation (4) in KDB 484596. Additional tests not required.

Note 2: Deviation from reference to variant exceeds the value allowed by equation (4) in KDB 484596. Additional tests performed on second channel.

1.3. SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3517

A3517 SPOT CHECK RESULTS											
Equipment Class	Frequency (GHz)	Mode	Data Rate	Test Item	Channel	Measured Frequency (GHz)	Original Model: A3260	Sub Model: A3517	Delta (dB)	Margin	Remarks
							FCC ID : BCG-E8948A IC : 579C-E8948A	FCC ID : BCG-E8955A IC : 579C-E8955A			
802.15.4 (Thread)	2.4	802.15.4 HP ANT2	250 kbps	Output Power (dBm)	Mid	Fundamental	20.34	20.40	0.06	-9.66	Note 1
		802.15.4 HP ANT2	250 kbps	Radiated Bandedge (dBuV/m)	High	Horizontal High Bandedge	39.29	38.11	-1.18	-14.71	Note 1
		802.15.4 HP ANT1	250 kbps	RSE (dBuV/m)	High	1 to 18 (11.718816 GHz)	39.17	38.97	-0.20	-14.83	Note 1

Note 1: Deviation from reference to variant within the value allowed by equation (4) in KDB 484596. Additional tests not required.

Note 2: Deviation from reference to variant exceeds the value allowed by equation (4) in KDB 484596. Additional tests performed on second channel.

1.4. SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3518

A3518 SPOT CHECK RESULTS											
Equipment Class	Frequency (GHz)	Mode	Data Rate	Test Item	Channel	Measured Frequency (GHz)	Original Model: A3260	Sub Model: A3518	Delta (dB)	Margin	Remarks
							FCC ID : BCG-E8948A IC : 579C-E8948A	FCC ID : BCG-E8956A IC : 579C-E8956A			
802.15.4 (Thread)	2.4	802.15.4 HP ANT2	250 kbps	Output Power (dBm)	Mid	Fundamental	20.34	20.29	-0.05	-9.66	Note 1
		802.15.4 HP ANT2	250 kbps	Radiated Bandedge (dBuV/m)	High	Horizontal High Bandedge	39.29	38.82	-0.47	-14.71	Note 1
		802.15.4 HP ANT1	250 kbps	RSE (dBuV/m)	High	1 to 18 (11.718816 GHz)	39.17	38.63	-0.54	-14.83	Note 1

Note 1: Deviation from reference to variant within the value allowed by equation (4) in KDB 484596. Additional tests not required.

Note 2: Deviation from reference to variant exceeds the value allowed by equation (4) in KDB 484596. Additional tests performed on second channel.

END OF REPORT