

TEST REPORT

Report Number: 16064952-E5V2

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

Model : A3447 (Parent)
A3719, A3720, A3721 (Variants)

Brand : APPLE

FCC ID : BCG-E9188A (Parent)
BCG-E9198A, BCG-E9203A, BCG-E9204A (Variants)

IC : 579C-E9188A (Parent)
579C-E9198A, 579C-E9203A, 579C-E9204A (Variants)

EUT Description : SMARTPHONE

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:
2026-07-11

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REPORT REVISION HISTORY

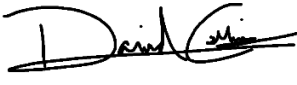
Rev.	Issue Date	Revisions	Revised By
V1	2026-07-08	Initial Issue	--
V2	2026-07-11	Addressed TCB Comments: Document Formatting; Sections 3, 6, 12	Benjamin Dobbins

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1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	APPLE INC. 1 APPLE PARK WAY CUPERTINO, CA 95014, U.S.A.		
Model	A3447 (Parent) A3719, A3720, A3721 (Variants)		
Brand	APPLE		
FCC ID	BCG-E9188A (Parent) BCG-E9198A, BCG-E9203A, BCG-E9204A (Variants)		
IC	579C-E9188A (Parent) 579C-E9198A, 579C-E9203A, 579C-E9204A (Variants)		
EUT Description	SMARTPHONE		
Serial Number	C07HPF000800000ZYA, C07HTH000DS0001B59 (Conducted)		
Sample Receipt Date	2026-02-17		
Date Tested	2026-02-19 to 2026-06-14		
Applicable Standards	FCC 47 CFR Part 15 Subpart C ISED RSS-247 Issue 4 ISED RSS-GEN Issue 5 + A1 + A2		
Test Results	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 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 Verification Services Inc., and all revisions are duly 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.			
Approved & Released By:		Prepared & Reviewed By:	
			
Frank Ibrahim Staff Engineer UL Verification Services Inc.		David Collins Lab Supervisor UL Verification Services Inc.	

2. TEST RESULTS SUMMARY

This report contains data provided by the customer, which can impact the validity of the results. UL Verification Services Inc. is only responsible for correctly integrating customer-provided data with measurements performed by UL Verification Services Inc.

Below is a list of the data provided by the customer:

1. Antenna gain and type (see section 6.3)
2. Cable loss (see section 6.3)

Requirement Description	Requirement Clause Number (FCC)	Requirement Clause Number (ISED)	Result
Duty Cycle	-	-	Reporting purposes only
99% OBW	-	RSS-GEN 6.7	Complies
6dB BW	15.247 (a) (2)	RSS-247 6.3.1 (a)	Complies
Output Power	15.247 (b) (3)	RSS-247 6.3.2	Complies
PSD	15.247 (e)	RSS-247 6.3.1 (b)	Complies
Conducted Spurious Emissions	15.247 (d)	RSS-247 6.6	Complies
Radiated Emissions	15.209, 15.205	RSS-GEN 8.9, 8.10	Complies
AC Mains Conducted Emissions	15.207	RSS-Gen 8.8	Complies

3. TEST METHODOLOGY

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

- ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024
- FCC 47 CFR Part 2
- FCC 47 CFR Part 15C
- 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 4

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 regularly, with a maximum time between calibrations of one year or the manufacturer's 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 dB
Power Spectral Density	2.466 dB
Time Domain Measurements Using SA	3.39 %
RF Power Measurement Direct Method Using a Power Meter	0.45 dB (Ave), 1.30 dB Peak)
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.22 %
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 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.

36.5 dBuV + 0 dB + 10.1 dB + 0 dB = 46.6 dBuV

6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The 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.

The EUT is considered a “Foldable Smartphone” and can be operated in two unique operating states – phone “fully closed” (State A) and phone “fully open” (State B). The test results of both operating states are reported.

6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Antenna	Configuration	Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
ANT 4	High Power	2405 - 2475	802.15.4	21.53	142.23
	Low Power			9.33	8.57
ANT 3	High Power			21.04	127.06
	Low Power			8.97	7.89

6.3. DESCRIPTION OF AVAILABLE ANTENNAS AND CABLE LOSS

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

Frequency Range (GHz)	Antenna Type	Configuration	Antenna Peak Gain		Cable Loss	
			ANT 4 (dBi)	ANT 3 (dBi)	ANT 4 (dB)	ANT 3 (dB)
2.4	IFA	STATE A	-4.4	-4.3	-1.72	-1.70
		STATE B	-3.4	-3.6		

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 and software installed during testing were 24A343.

6.5. WORST-CASE CONFIGURATION AND MODE

The EUT was evaluated in two configurations: State A (fully closed) and State B (fully open), and in three orthogonal orientations: X (Flatbed), Y (Landscape), and Z (Portrait). The table below identifies the worst-case orientation for each configuration, and full testing was conducted in those orientations.

Band	State	ANT 4	ANT 3
2.4 GHz	A	X (Flatbed)	Y (Landscape)
	B	X (Flatbed)	Y (Landscape)

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

Radiated emissions below 30MHz, below 1 GHz, 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 1 GHz tests, EUT was connected to AC power adapter as the worst case; and for above 1 GHz, 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.

All simultaneous transmission combinations have been investigated, and no signal emissions were observed.

The output power between State A and State B is identical; therefore, only a single set of conducted test results is presented. Where applicable, the higher antenna gain of the two States has been used to assess compliance.

For radiated tests, full testing was performed on both State A and State B due to differences in antenna gain between the two states.

For AC line conducted emissions, radiated emissions below 1 GHz, and radiated emissions above 18 GHz, only the worst-case test results are included in this report.

If the Keysight PXA supports both AC and DC coupling, a warning message stating "DC coupled" will appear on the status line.

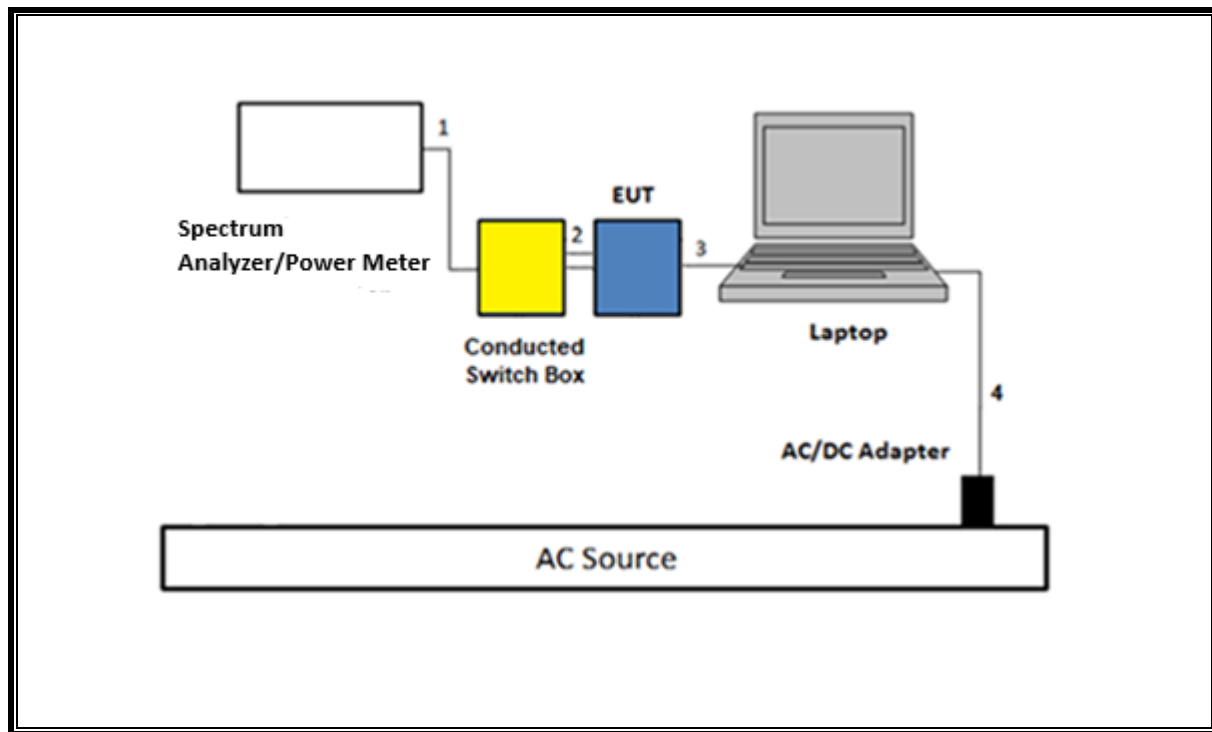
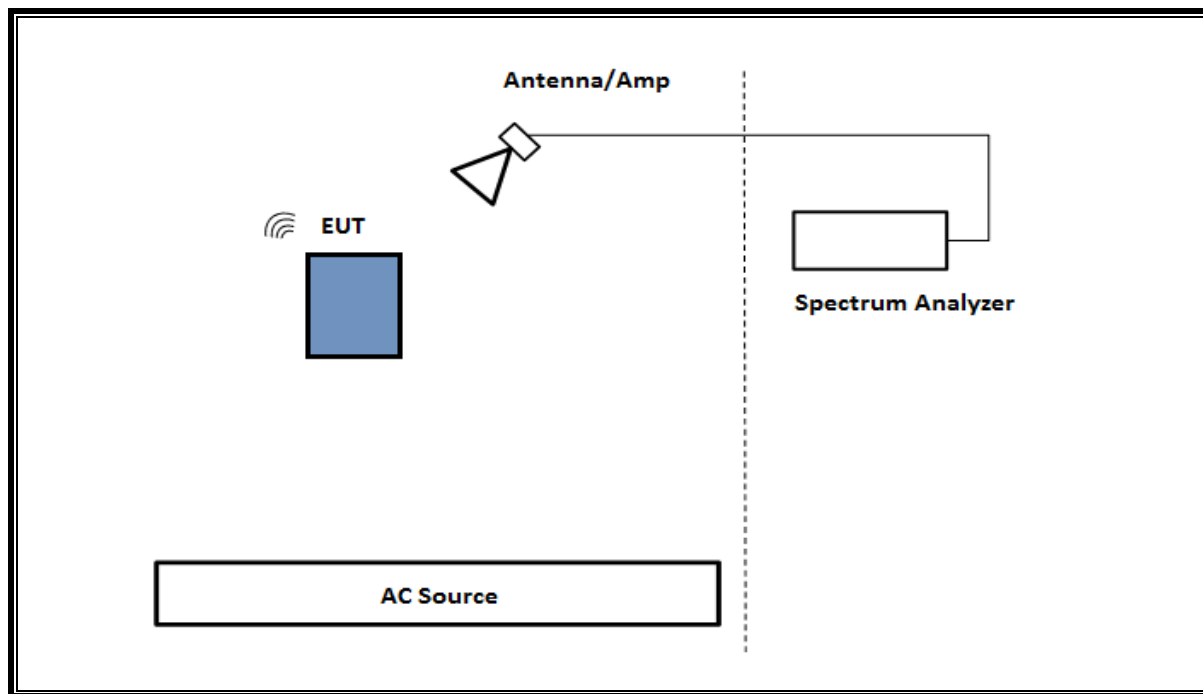
Plots included in the report are representative of the method and settings parameters used for the test.

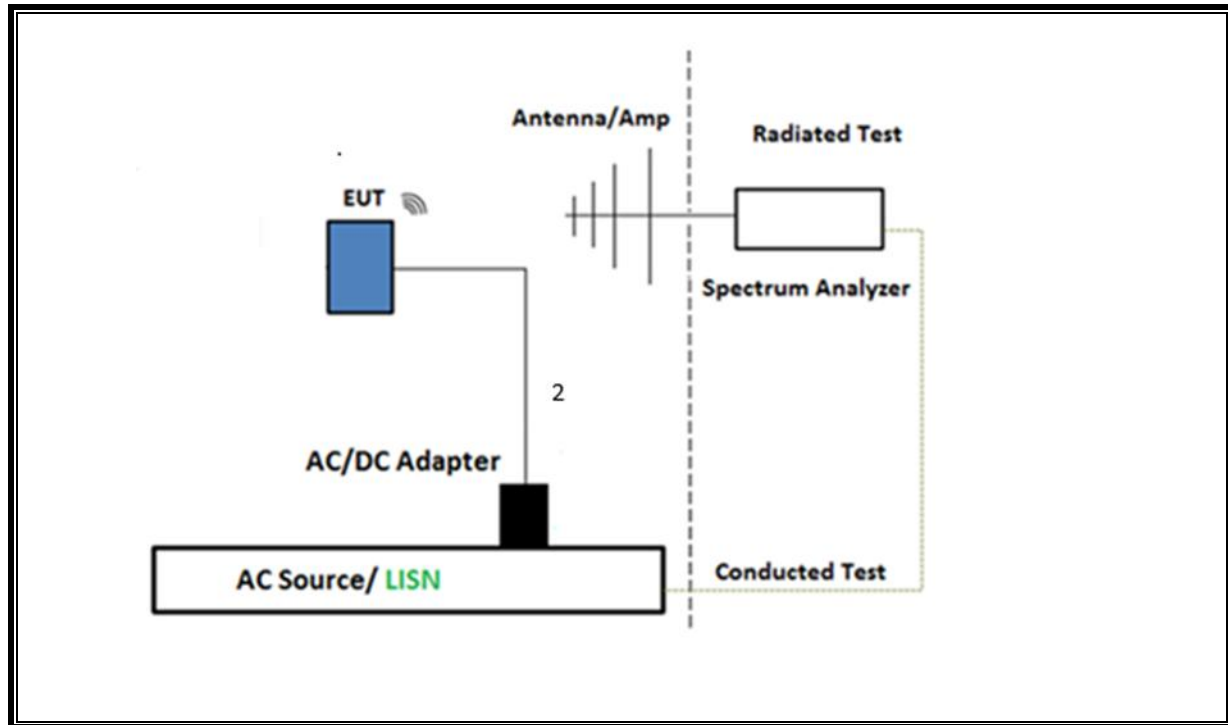
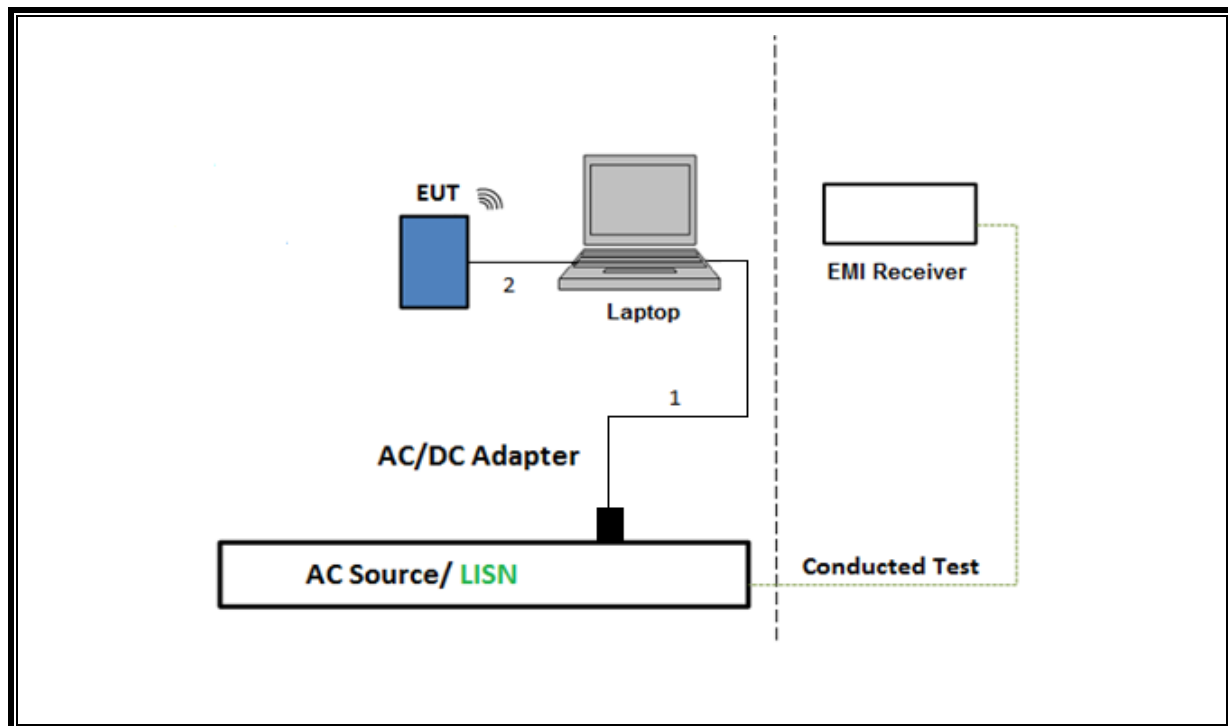
6.6. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT						
Description		Manufacturer	Model	Serial Number		FCC ID/ DoC
Laptop		Apple	Macbook Pro	JT2J32695Y		BCGA1708
Laptop AC/DC adapter		Liteon Technology	A2452	C4H206702PRQ41CAH		DoC
EUT AC/DC adapter		Apple	A1720	F16334402P626MKAK		DoC
RF Device, Switch (Conducted Switch Box)		UL	n/a	245783		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 the spectrum Analyzer
2	Antenna	2	SMA	Un-shielded	0.2	To Conducted Switch Box
3	USB-C	1	USB-C	Shield	1.0	N/A
4	DC	1	DC	Un-shielded	2.0	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 below. Test software exercised the radio card.

SETUP DIAGRAM FOR CONDUCTED TESTS**SETUP DIAGRAM FOR RADIATED TESTS Above 1 GHz (1 to 26GHz)**

SETUP DIAGRAM FOR 30-1000MHz and AC LINE CONDUCTED TEST**TEST SETUP- AC LINE CONDUCTED: LAPTOP CONFIGURATION**

7. 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	200785	2026-12-31
RF Filter Box, 1-18GHz	UL-FR1	Frankenstein, 2 Amp, 12 Port	235088	2027-05-31
EMI Test Receiver	Rohde & Schwarz	ESW44	201500	2027-02-28
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	84796	2026-10-31
RF Filter Box, 1-18GHz	UL-FR1	Frankenstein, 1 Amp, 12 Port	231876	2026-05-31
EMI Test Receiver	Rohde & Schwarz	ESW44	201497	2027-02-28
Antenna, Broadband Hybrid, 30MHz to 3GHz	Sunol Sciences Corp.	JB3	204045	2027-05-31
Amplifier, 9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	224489	2026-08-30
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	223460	2027-02-28
Antenna, Horn 18 to 26.5GHz	A.R.A.	MWH-1826/B	172354	2027-05-31
Amplifier Assembly, 18-26.5GHz, 60dB Gain	AMPLICAL	AMP18G26.5-60	221832	*2026-05-31
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	201499	2027-02-28
Antenna, Horn 18 to 26.5GHz	A.R.A.	MWH-1826/B	81139	2027-10-31
Amplifier Assembly, 18-26.5GHz, 60dB Gain	AMPLICAL	AMP18G26.5-60	220194	*2026-04-30
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	226079	2027-02-28
Antenna, Passive Loop 30Hz - 1MHz	ELECTRO-METRICS	EM-6871	170013	2026-09-30
Antenna, Passive Loop 100KHz - 30MHz	ELECTRO-METRICS	EM-6872	170015	2026-09-30
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	85214	2027-01-31
Power Meter, P-series single channel	Keysight Technologies Inc	N1911A	82174	2027-01-31
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1912A	259286	2027-01-31
RF Device, Switch (Conducted Switch Box)	UL	CSB	245783	2027-01-31

AC Line Conducted				
Description	Manufacturer	Model	ID Num	Cal Due
EMI Test Receiver 9kHz-3.6GHz	Rohde & Schwarz	ESR	82297	2027-02-28
LISN for Conducted Emissions CISPR-16	Fischer Custom Communications	FCC-LISN-50/250- 25-2-01-480V	175765	2027-01-31
Transient Limiter	TE	TBFL1	207996	2026-12-30
UL AUTOMATION SOFTWARE				
Radiated Software	UL	UL EMC	Ver 9.5, Aug 25, 2025	
Conducted Software	UL	UL EMC	2026.4.1	
AC Line Conducted Software	UL	UL EMC	Ver 9.5, Aug 25, 2025	

*Testing is completed before equipment calibration date.

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

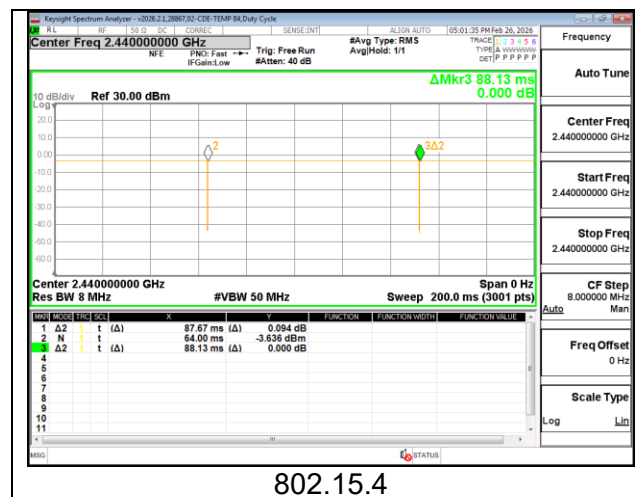
PROCEDURE

ANSI C63.10, Subclause 11.6.

ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time T (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
2.4GHz Band						
802.15.4, 2440MHz	87.67	88.13	0.995	99.48	0.00	0.010

DUTY CYCLE PLOT



8.2. 99% BANDWIDTH LIMITS

None; for reporting purposes only.

TEST PROCEDURE

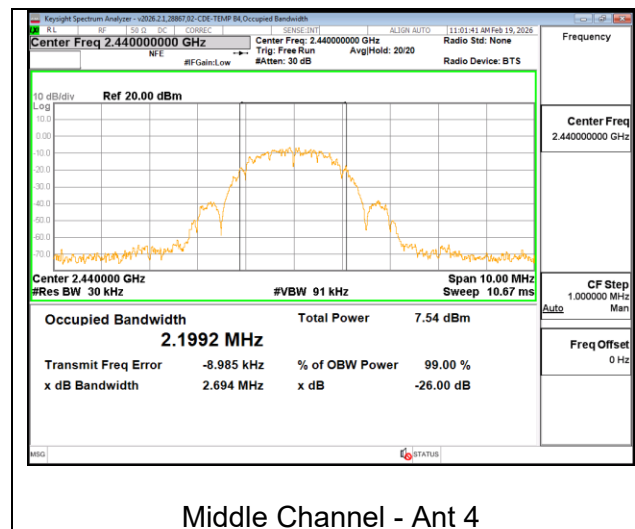
ANSI C63.10, Subclause - 6.9.3.

RESULTS

Only High-Power modes results are reported, it covers all Low Power modes.

802.15.4	Frequency (MHz)	Channel Number	99% Bandwidth (MHz)	
			Ant 4	Ant 3
High Power	2405	Low	2.1986	2.1762
	2440	Mid	2.1992	2.1916
	2475	High	2.1884	2.1887

WORST MAXIMUM PLOTS



8.3. 6dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

RSS-247 6.3.1 (a)

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

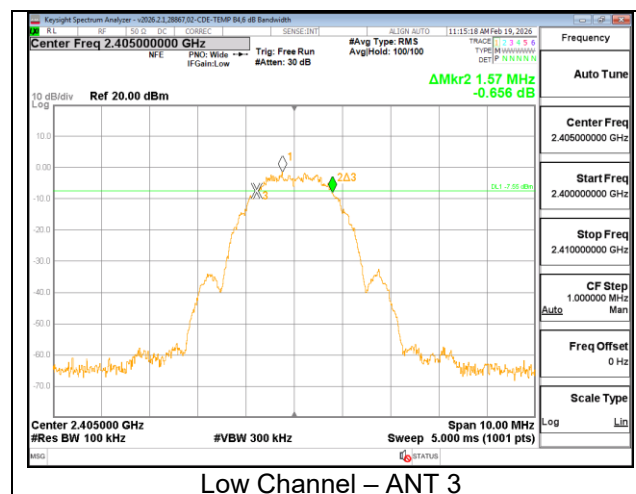
TEST PROCEDURE

ANSI C63.10 Subclause - 11.8.1 Option 1

RESULTS

802.15.4	Frequency (MHz)	Channel Number	6dB Bandwidth (MHz)	
			Ant 4	Ant 3
High Power	2405	Low	1.59	1.57
	2440	Mid	1.61	1.61
	2475	High	1.60	1.60

WORST MINIMUM PLOT



8.4. OUTPUT POWER AND POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (b) (3) & (e)

RSS-247 6.3.2 & 6.3.1 (b)

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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.

TEST PROCEDURE

Conducted Output Power: ANSI C63.10 Subclause - 11.9.1.2 Method PKPM1 (Peak-reading power meter)

Power Spectral Density: ANSI C63.10 Subclause - 11.10.2 Method PKPSD (peak PSD)

DIRECTIONAL ANTENNA GAIN

For 1 TX:

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

RESULTS

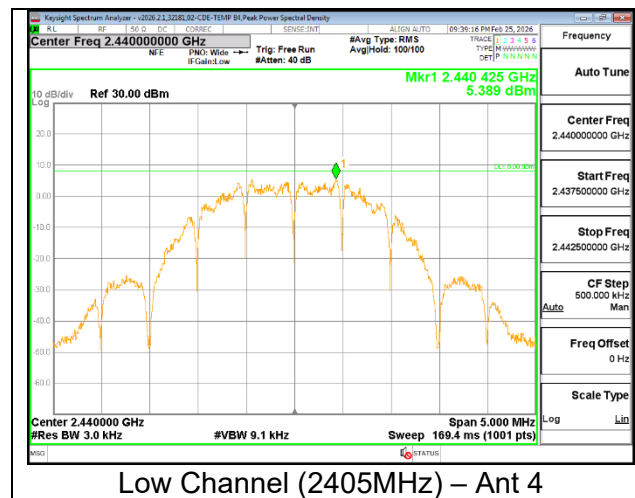
Only the worst-case margin plot is reported to show the analyzer's settings.

Note: RBW setting is 3kHz or higher on PSD measurement

2.4G Thread	
Ant 4 (dBi)	-3.4
Ant 3 (dBi)	-3.6

2.4G	Power Config.	Freq (MHz)	Ch. #	Power Limit (dBm)		Output Power (dBm)		PSD Limit (dBm/3kHz)		PSD (dBm/kHz)	
				Ant4	Ant3	Ant4	Ant3	Ant4	Ant3	Ant4	Ant3
Thread	High	2405	Low	30	30	21.50	20.96	8	8	5.360	4.198
		2440	Mid			21.53	21.04			5.389	4.637
		2475	High			21.49	20.95			5.315	4.164
	Low	2405	Low			9.33	8.92			-7.177	-7.879
		2440	Mid			9.26	8.97			-7.376	-7.620
		2475	High			9.24	8.94			-7.292	-7.768

Worst-Case Plot:



8.5. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

ANSI C63.10 Subclause - 11.9.2.3.2 Method AVGPM G (Measurement using an RF average-reading power meter)

RESULTS

2.4G	Power Config.	Freq (MHz)	Ch. #	Average Power (Gated) (dBm)	
				Ant 4	Ant 3
Thread	High	2405	Low	20.98	20.32
		2440	Mid	20.98	20.34
		2475	High	20.88	20.49
	Low	2405	Low	8.75	8.40
		2440	Mid	8.71	8.49
		2475	High	8.73	8.47

8.6. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

RSS-247 6.6

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

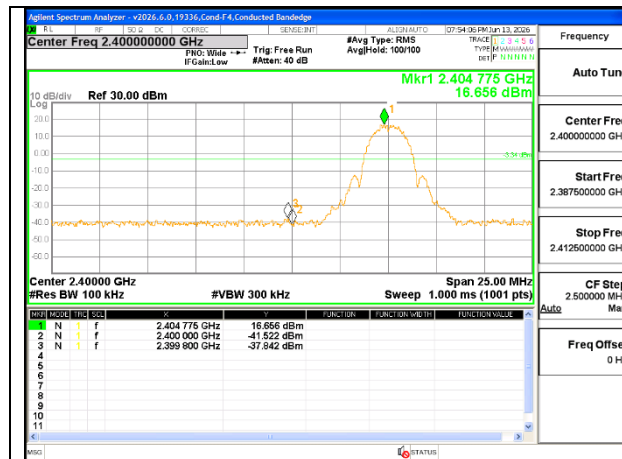
TEST PROCEDURE

ANSI C63.10 Subclause - 11.12.2

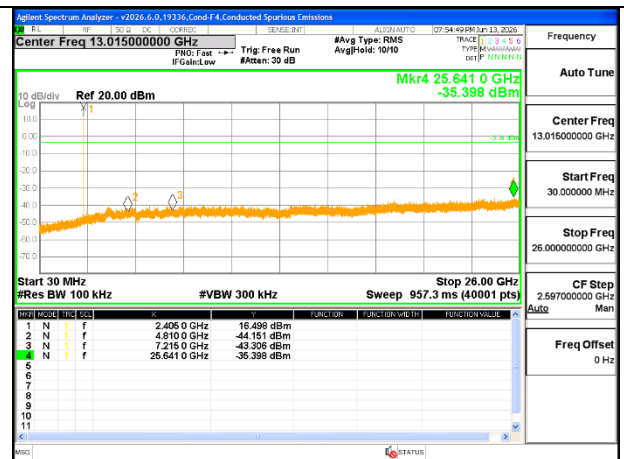
RESULTS

8.6.1. HIGH POWER

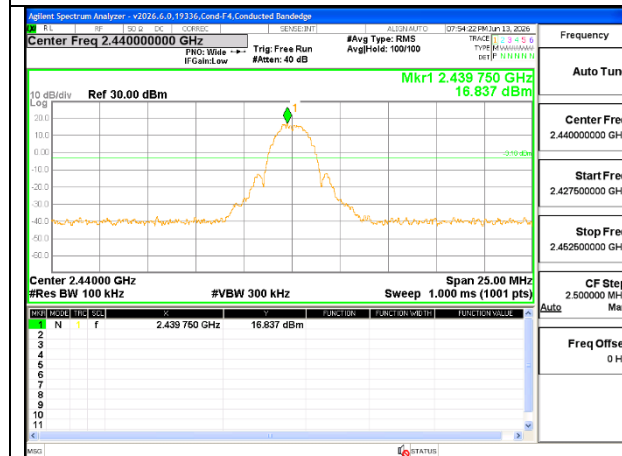
ANT 4



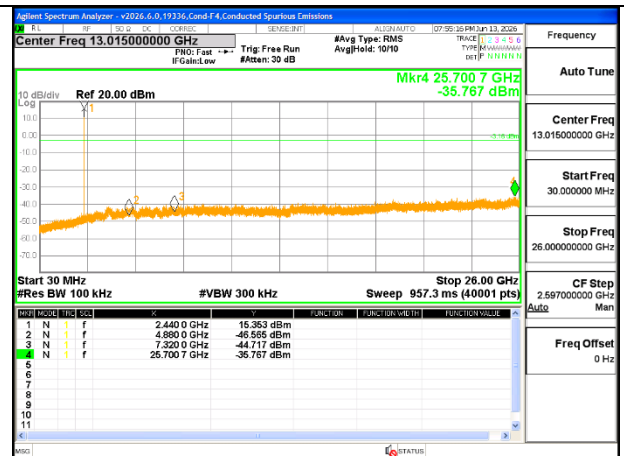
LOW CHANNEL BANDEDGE



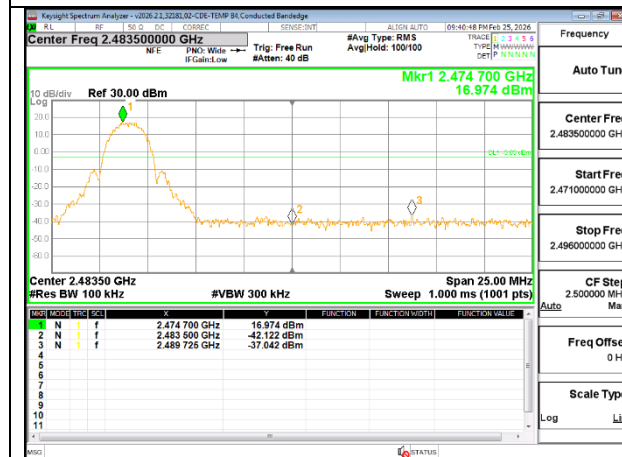
OUT-OF-BAND LOW CHANNEL



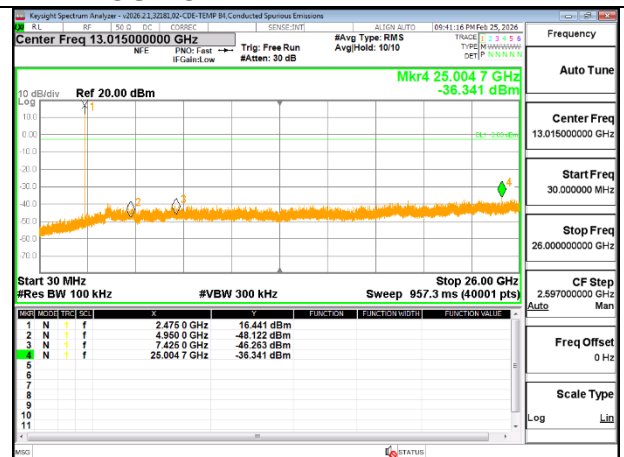
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL

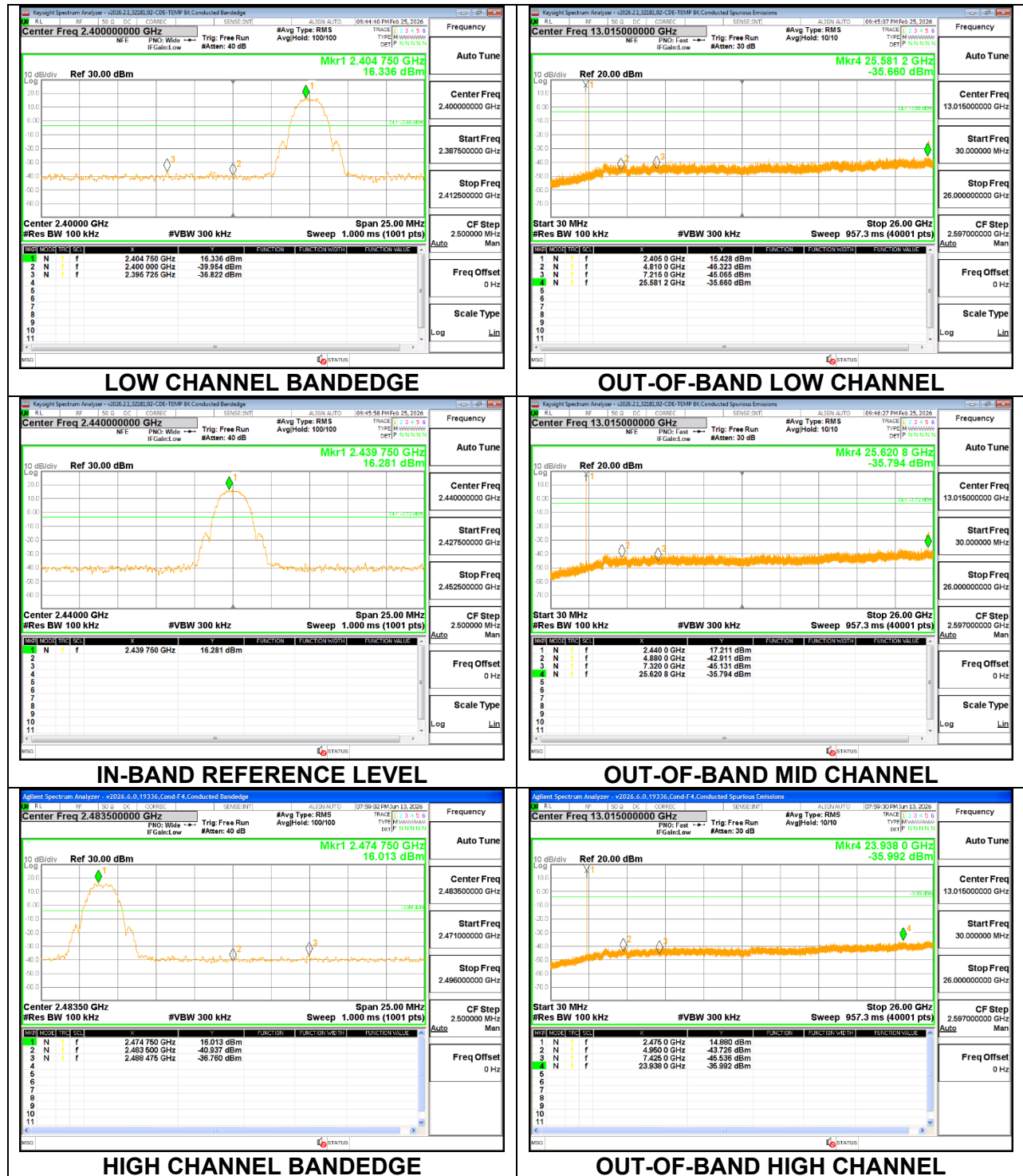


HIGH CHANNEL BANDEDGE



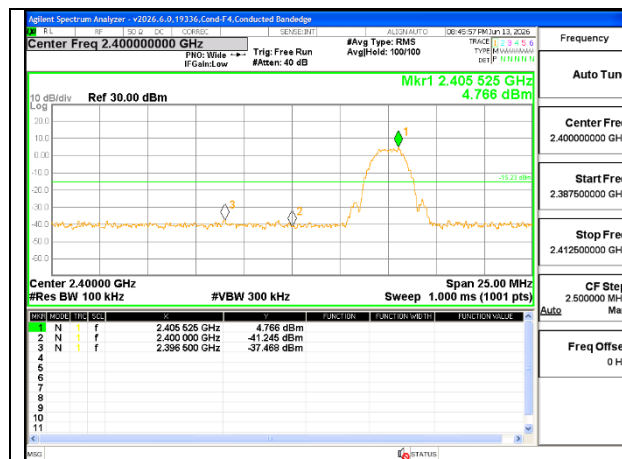
OUT-OF-BAND HIGH CHANNEL

ANT 3

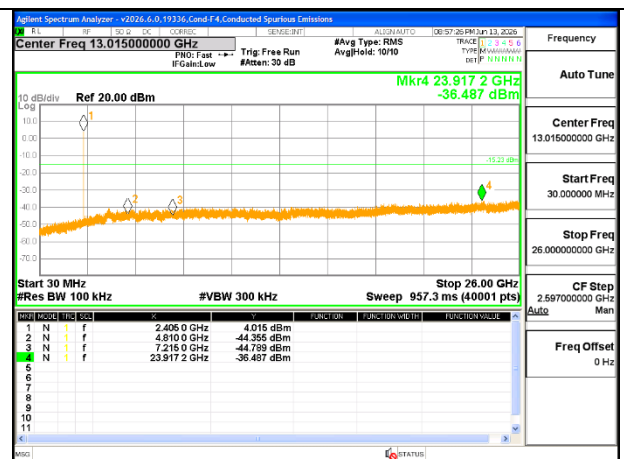


8.6.2. LOW POWER

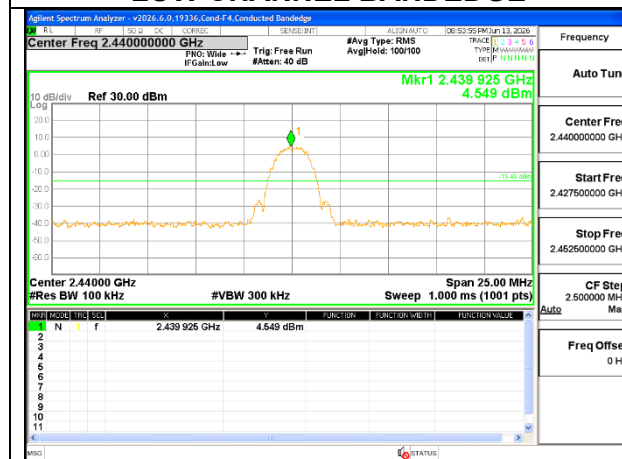
ANT 4



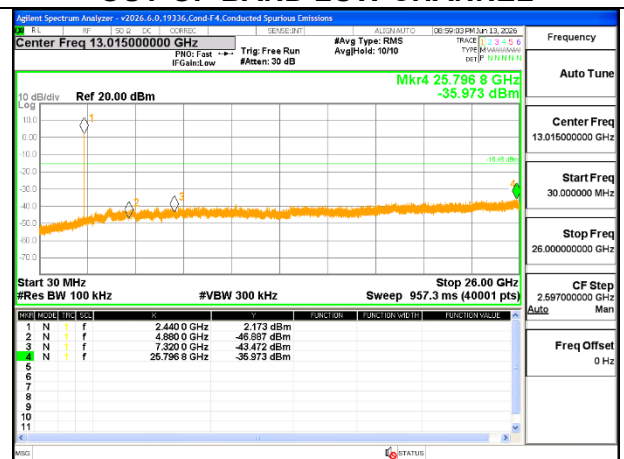
LOW CHANNEL BANDEDGE



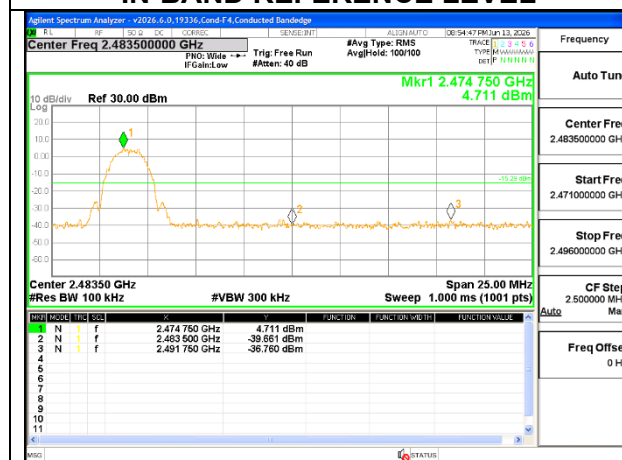
OUT-OF-BAND LOW CHANNEL



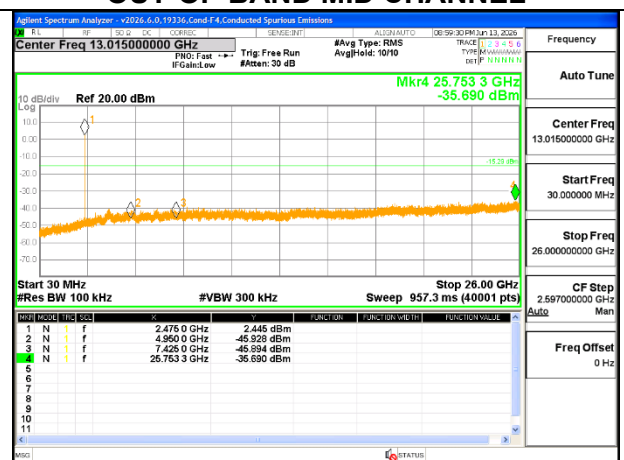
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL

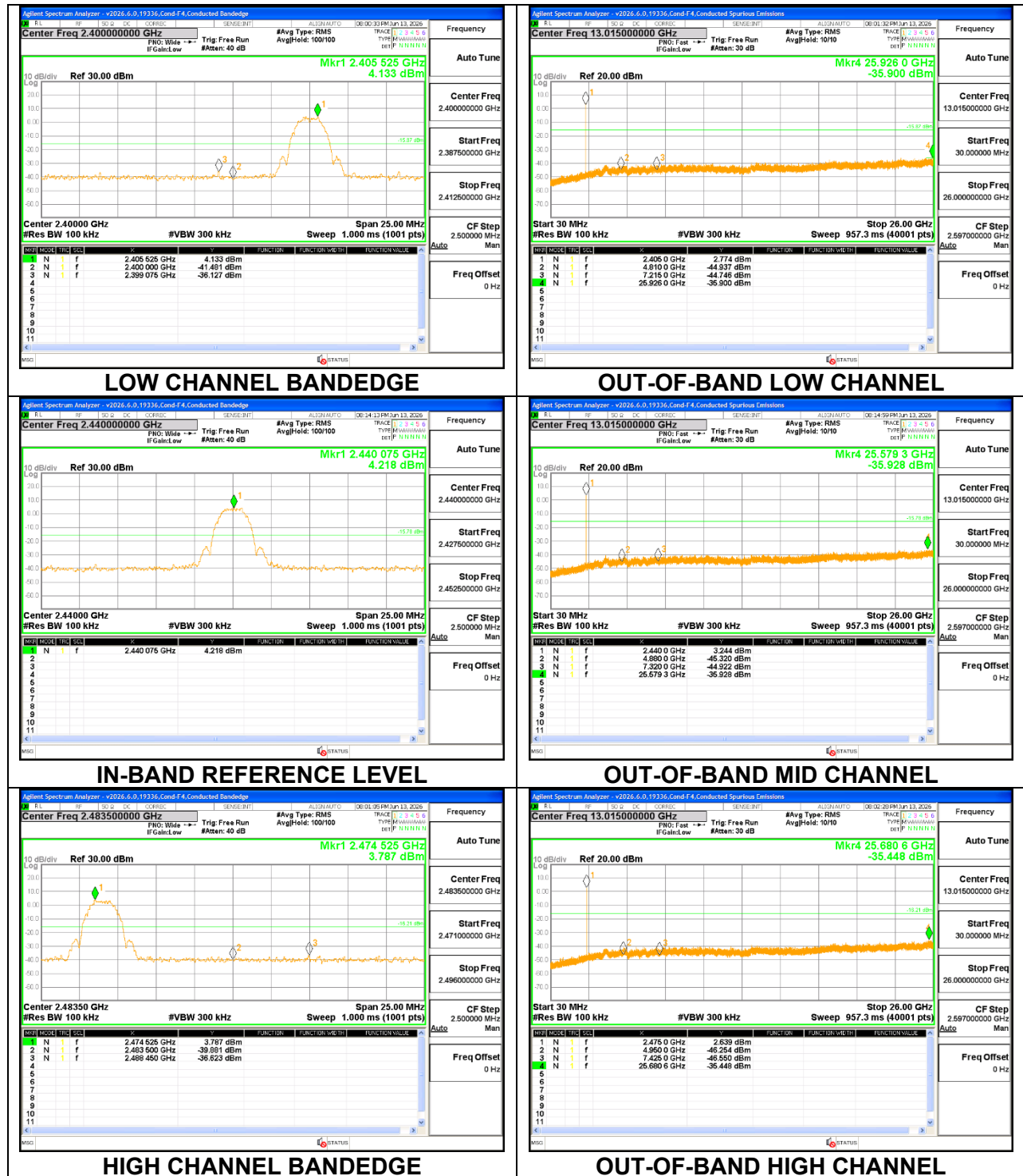


HIGH CHANNEL BANDEDGE



OUT-OF-BAND HIGH CHANNEL

ANT 3



9. 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

Radiated emissions non-restricted frequency bands	ANSI C63.10 Subclause -11.11 and 13
Radiated emissions restricted frequency bands	ANSI C63.10 Subclause -11.12.1 and 13
Band-edge	ANSI C63.10 Subclause -11.12.2.4 and 13: Peak Measurement
Band-edge	ANSI C63.10 Subclause -11.12.2.5 and 13: Average Measurement
Radiated Spurious Emissions Below 30MHz	ANSI C63.10 Subclause 6.4 and 13

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

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

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

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 must 15.209(a) limit.

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

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.

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

RESULTS

The plots in these sections are for reference settings only for different bandwidth and different antenna.

9.1. TRANSMITTER ABOVE 1 GHz

9.1.1. LOW BANDEDGE / STATE A

2.4GHz (Thread)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DCCF (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
High Power	2405	4	*2.389126	51.62	RMS	32.2	-40.32	0	43.5	54	-10.5			287	152	H
			*2.39	50.98	RMS	32.2	-40.31	0	42.87	54	-11.13			287	152	H
			*2.327831	64.05	Pk	31.9	-40.44	0	55.51			74	-18.49	287	152	H
			*2.39	61.61	Pk	32.2	-40.31	0	53.5			74	-20.5	287	152	H
			*2.384439	51.56	RMS	32.2	-40.33	0	43.43	54	-10.57			107	358	V
			*2.39	50.56	RMS	32.2	-40.31	0	42.45	54	-11.55			107	358	V
			*2.365764	63.96	Pk	32.1	-40.34	0	55.72			74	-18.28	107	358	V
			*2.39	61.51	Pk	32.2	-40.31	0	53.4			74	-20.6	107	358	V
		3	*2.387627	51.9	RMS	32.2	-40.32	0	43.78	54	-10.22			305	151	H
			*2.39	50.95	RMS	32.2	-40.31	0	42.84	54	-11.16			305	151	H
			*2.382838	63.68	Pk	32.2	-40.32	0	55.56			74	-18.44	305	151	H
			*2.39	61.53	Pk	32.2	-40.31	0	53.42			74	-20.58	305	151	H
			*2.388952	51.45	RMS	32.2	-40.32	0	43.33	54	-10.67			218	276	V
			*2.39	50.74	RMS	32.2	-40.31	0	42.63	54	-11.37			218	276	V
			*2.345619	63.61	Pk	32	-40.41	0	55.2			74	-18.8	218	276	V
			*2.39	61.87	Pk	32.2	-40.31	0	53.76			74	-20.24	218	276	V
Low Power	2405	4	*2.387147	51.48	RMS	32.2	-40.33	0	43.35	54	-10.65			107	225	H
			*2.39	50.07	RMS	32.2	-40.31	0	41.96	54	-12.04			107	225	H
			*2.38917	63.59	Pk	32.2	-40.32	0	55.47			74	-18.53	107	225	H
			*2.39	61.31	Pk	32.2	-40.31	0	53.2			74	-20.8	107	225	H
			*2.385458	51.73	RMS	32.2	-40.32	0	43.61	54	-10.39			149	218	V
			*2.39	50.12	RMS	32.2	-40.31	0	42.01	54	-11.99			149	218	V
			*2.326667	63.92	Pk	31.9	-40.43	0	55.39			74	-18.61	149	218	V
			*2.39	62.22	Pk	32.2	-40.31	0	54.11			74	-19.89	149	218	V
		3	*2.389898	51.66	RMS	32.2	-40.31	0	43.55	54	-10.45			323	151	H
			*2.39	50.09	RMS	32.2	-40.31	0	41.98	54	-12.02			323	151	H
			*2.359927	63.38	Pk	32.1	-40.36	0	55.12			74	-18.88	323	151	H
			*2.39	61.11	Pk	32.2	-40.31	0	53			74	-21	323	151	H
			*2.389126	52.03	RMS	32.2	-40.32	0	43.91	54	-10.09			246	272	V
			*2.39	50.47	RMS	32.2	-40.31	0	42.36	54	-11.64			246	272	V
			*2.388952	64.37	Pk	32.2	-40.32	0	56.25			74	-17.75	246	272	V
			*2.39	61.12	Pk	32.2	-40.31	0	53.01			74	-20.99	246	272	V

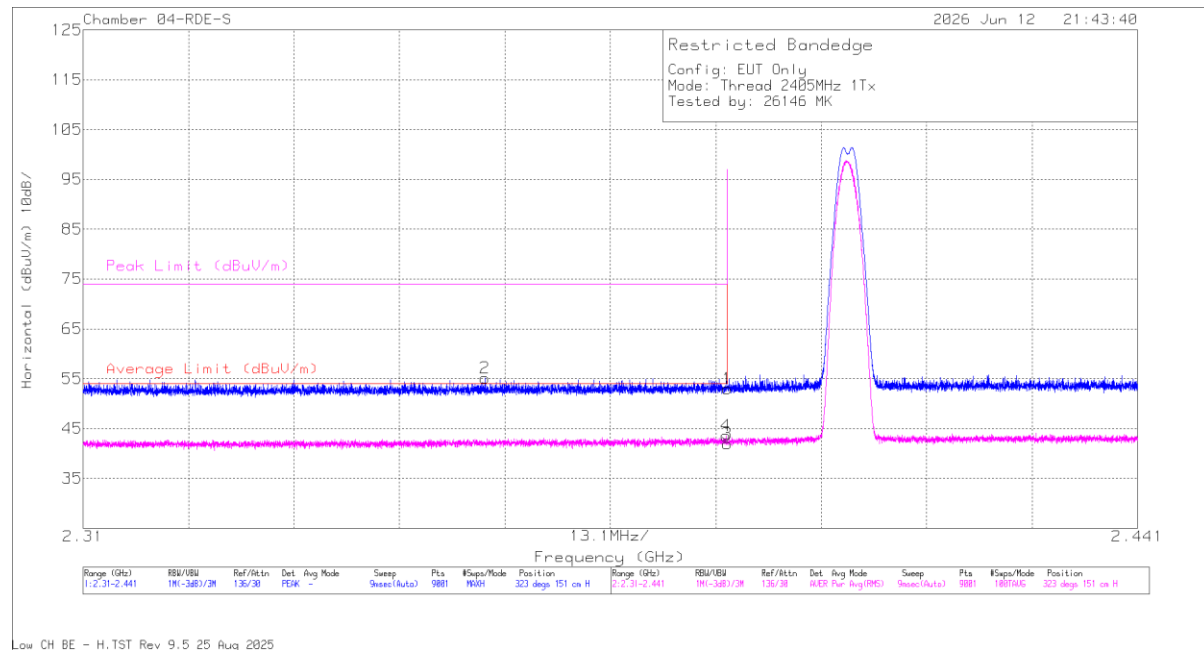
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

WORST-CASE LOW BANDEDGE LOW POWER / ANT 3 / STATE A:

Horizontal/Vertical Result



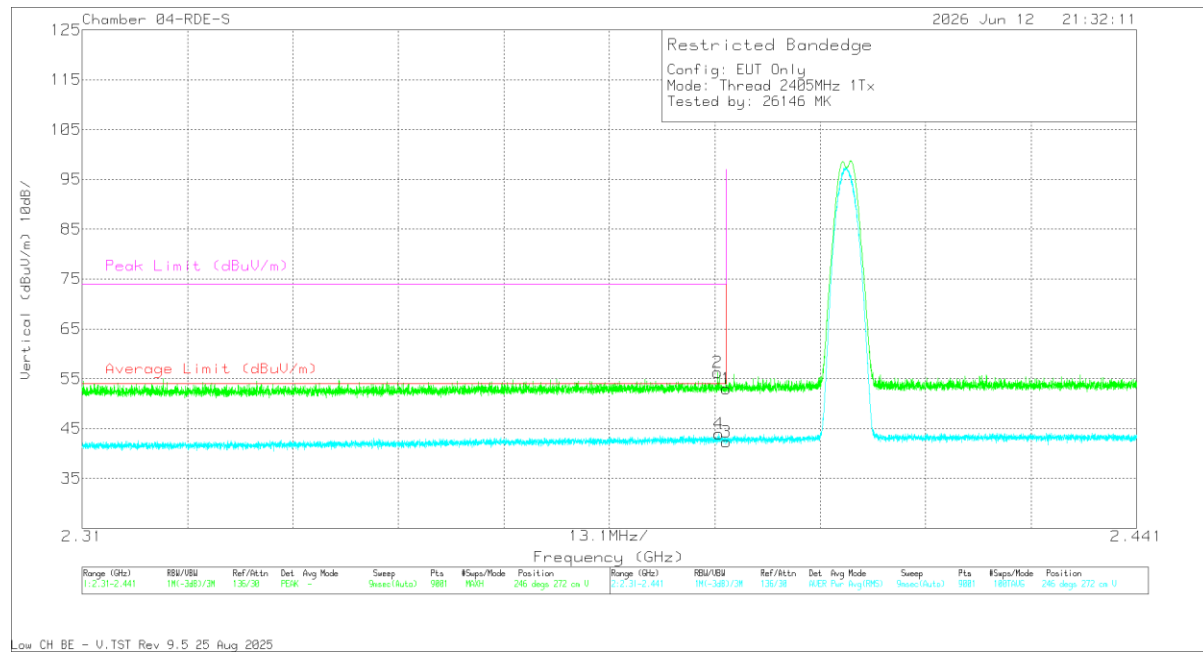
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200785 ACF (dBm)	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	*2.39	61.11	Pk	32.2	0	-40.31	53	-	-	74	-21	323	151	H
2	*2.359927	63.38	Pk	32.1	0	-40.36	55.12	-	-	74	-18.88	323	151	H
3	*2.39	50.09	RMS	32.2	0	-40.31	41.98	54	-12.02	-	-	323	151	H
4	*2.389898	51.66	RMS	32.2	0	-40.31	43.55	54	-10.45	-	-	323	151	H

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

Pk - Peak detector

RMS - RMS detection



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200785 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	*2.39	61.12	Pk	32.2	0	-40.31	53.01	-	-	74	-20.99	246	272	V
2	*2.388952	64.37	Pk	32.2	0	-40.32	56.25	-	-	74	-17.75	246	272	V
3	*2.39	50.47	RMS	32.2	0	-40.31	42.36	54	-11.64	-	-	246	272	V
4	*2.389126	52.03	RMS	32.2	0	-40.32	43.91	54	-10.09	-	-	246	272	V

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

Pk - Peak detector

RMS - RMS detection

9.1.2. LOW BANDEGE / STATE B

2.4GHz (Thread)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DCCF (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
High Power	2405	4	*2.384643	51.41	RMS	32.2	-40.33	0	43.28	54	-10.72			10	196	H
			*2.39	50.89	RMS	32.2	-40.31	0	42.78	54	-11.22			10	196	H
			*2.340175	63.53	Pk	32	-40.42	0	55.11			74	-18.89	10	196	H
			*2.39	60.84	Pk	32.2	-40.31	0	52.73			74	-21.27	10	196	H
			*2.388311	51.5	RMS	32.2	-40.32	0	43.38	54	-10.62			260	363	V
			*2.39	51.19	RMS	32.2	-40.31	0	43.08	54	-10.92			260	363	V
			*2.38853	64.12	Pk	32.2	-40.32	0	56			74	-18	260	363	V
			*2.39	61.28	Pk	32.2	-40.31	0	53.17			74	-20.83	260	363	V
		3	*2.380975	51.49	RMS	32.2	-40.32	0	43.37	54	-10.63			355	323	H
			*2.39	50.69	RMS	32.2	-40.31	0	42.58	54	-11.42			355	323	H
			*2.3808	63.67	Pk	32.2	-40.32	0	55.55			74	-18.45	355	323	H
			*2.39	61.77	Pk	32.2	-40.31	0	53.66			74	-20.34	355	323	H
			*2.386434	51.53	RMS	32.2	-40.33	0	43.4	54	-10.6			231	269	V
			*2.39	50.83	RMS	32.2	-40.31	0	42.72	54	-11.28			231	269	V
			*2.346375	63.96	Pk	32	-40.41	0	55.55			74	-18.45	231	269	V
			*2.39	61.21	Pk	32.2	-40.31	0	53.1			74	-20.9	231	269	V
Low Power	2405	4	*2.367409	51.69	RMS	32.1	-40.35	0	43.44	54	-10.56			197	100	H
			*2.39	50.84	RMS	32.2	-40.31	0	42.73	54	-11.27			197	100	H
			*2.386783	63.69	Pk	32.2	-40.33	0	55.56			74	-18.44	197	100	H
			*2.39	60.84	Pk	32.2	-40.31	0	52.73			74	-21.27	197	100	H
			*2.389534	51.45	RMS	32.2	-40.31	0	43.34	54	-10.66			20	358	V
			*2.39	51.28	RMS	32.2	-40.31	0	43.17	54	-10.83			20	358	V
			*2.375138	63.81	Pk	32.1	-40.35	0	55.56			74	-18.44	20	358	V
			*2.39	62.24	Pk	32.2	-40.31	0	54.13			74	-19.87	20	358	V
		3	*2.385094	51.78	RMS	32.2	-40.32	0	43.66	54	-10.34			129	263	H
			*2.39	51.35	RMS	32.2	-40.31	0	43.24	54	-10.76			129	263	H
			*2.384614	63.4	Pk	32.2	-40.33	0	55.27			74	-18.73	129	263	H
			*2.39	61.93	Pk	32.2	-40.31	0	53.82			74	-20.18	129	263	H
			*2.382722	51.48	RMS	32.2	-40.32	0	43.36	54	-10.64			232	267	V
			*2.39	50.42	RMS	32.2	-40.31	0	42.31	54	-11.69			232	267	V
			*2.370917	63.71	Pk	32.1	-40.34	0	55.47			74	-18.53	232	267	V
			*2.39	61.18	Pk	32.2	-40.31	0	53.07			74	-20.93	232	267	V

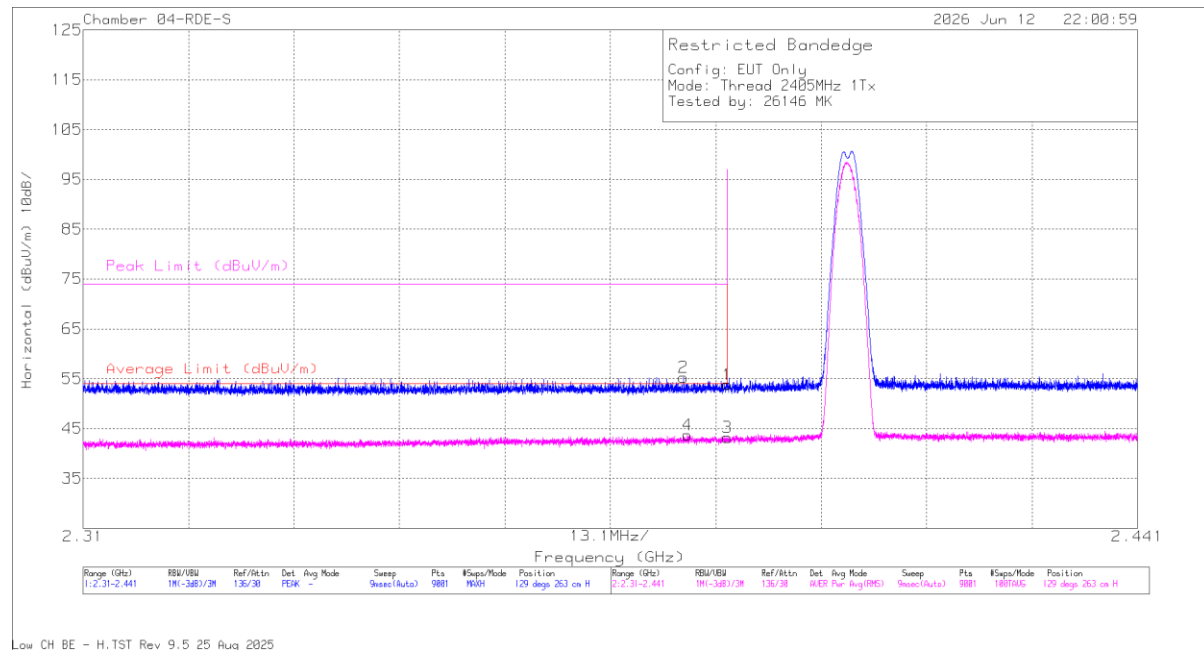
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

WORST-CASE LOW BANDEDGE LOW POWER / ANT 3 / STATE B:

HORIZONTAL / VERTICAL RESULT



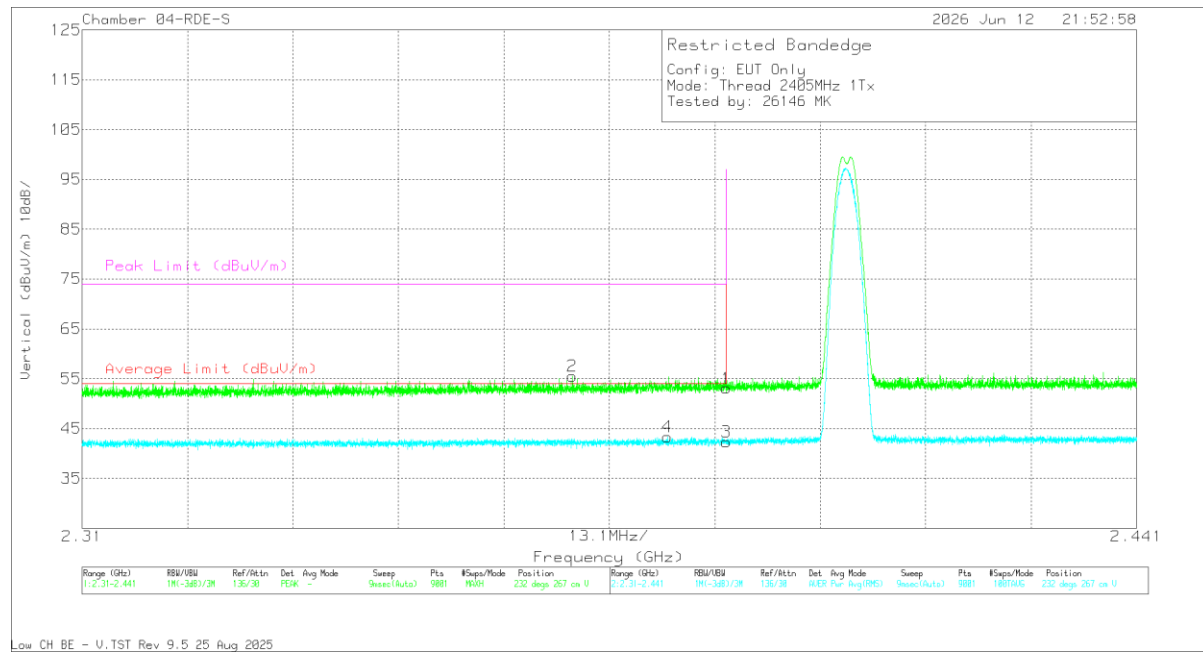
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200785 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	*2.39	61.93	Pk	32.2	0	-40.31	53.82	-	-	74	-20.18	129	263	H
2	*2.384614	63.4	Pk	32.2	0	-40.33	55.27	-	-	74	-18.73	129	263	H
3	*2.39	51.35	RMS	32.2	0	-40.31	43.24	54	-10.76	-	-	129	263	H
4	*2.385094	51.78	RMS	32.2	0	-40.32	43.66	54	-10.34	-	-	129	263	H

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

Pk - Peak detector

RMS - RMS detection



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200785 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	*2.39	61.18	Pk	32.2	0	-40.31	53.07	-	-	74	-20.93	232	267	V
2	*2.370917	63.71	Pk	32.1	0	-40.34	55.47	-	-	74	-18.53	232	267	V
3	*2.39	50.42	RMS	32.2	0	-40.31	42.31	54	-11.69	-	-	232	267	V
4	*2.382722	51.48	RMS	32.2	0	-40.32	43.36	54	-10.64	-	-	232	267	V

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

Pk - Peak detector

RMS - RMS detection

9.1.3. HIGH BANDEDGE / STATE A

2.4GHz (Thread)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DCCF (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
High Power	2475	4	*2.551766	51.53	RMS	32.6	-39.96	0	44.17	54	-9.83			109	115	H
			*2.4835	50.67	RMS	32.5	-40.12	0	43.05	54	-10.95			109	115	H
			*2.484867	63.88	Pk	32.5	-40.09	0	56.29			74	-17.71	109	115	H
			*2.4835	61.41	Pk	32.5	-40.12	0	53.79			74	-20.21	109	115	H
			*2.556362	51.6	RMS	32.6	-39.93	0	44.27	54	-9.73			155	180	V
			*2.4835	50.07	RMS	32.5	-40.12	0	42.45	54	-11.55			155	180	V
			*2.518554	63.59	Pk	32.5	-40.04	0	56.05			74	-17.95	155	180	V
			*2.4835	62.12	Pk	32.5	-40.12	0	54.5			74	-19.5	155	180	V
		3	*2.488405	52.03	RMS	32.5	-40.09	0	44.44	54	-9.56			302	166	H
			*2.4835	50.69	RMS	32.5	-40.12	0	43.07	54	-10.93			302	166	H
			*2.561662	63.72	Pk	32.6	-39.93	0	56.39			74	-17.61	302	166	H
			*2.4835	60.94	Pk	32.5	-40.12	0	53.32			74	-20.68	302	166	H
			*2.542019	51.47	RMS	32.6	-40.02	0	44.05	54	-9.95			215	294	V
			*2.4835	50.1	RMS	32.5	-40.12	0	42.48	54	-11.52			215	294	V
			*2.551549	64.18	Pk	32.6	-39.96	0	56.82			74	-17.18	215	294	V
			*2.4835	60.93	Pk	32.5	-40.12	0	53.31			74	-20.69	215	294	V
Low Power	2475	4	*2.544907	51.7	RMS	32.6	-40	0	44.3	54	-9.7			292	186	H
			*2.4835	50.56	RMS	32.5	-40.12	0	42.94	54	-11.06			292	186	H
			*2.536434	63.64	Pk	32.6	-40.02	0	56.22			74	-17.78	292	186	H
			*2.4835	60.83	Pk	32.5	-40.12	0	53.21			74	-20.79	292	186	H
			*2.49353	51.73	RMS	32.5	-40.07	0	44.16	54	-9.84			123	104	V
			*2.4835	50.69	RMS	32.5	-40.12	0	43.07	54	-10.93			123	104	V
			*2.544622	63.68	Pk	32.6	-40	0	56.28			74	-17.72	123	104	V
			*2.4835	60.34	Pk	32.5	-40.12	0	52.72			74	-21.28	123	104	V
		3	*2.517049	51.75	RMS	32.5	-40.04	0	44.21	54	-9.79			301	168	H
			*2.4835	50.27	RMS	32.5	-40.12	0	42.65	54	-11.35			301	168	H
			*2.562435	63.42	Pk	32.6	-39.93	0	56.09			74	-17.91	301	168	H
			*2.4835	61.35	Pk	32.5	-40.12	0	53.73			74	-20.27	301	168	H
			*2.511491	51.45	RMS	32.5	-40.04	0	43.91	54	-10.09			238	294	V
			*2.4835	50.34	RMS	32.5	-40.12	0	42.72	54	-11.28			238	294	V
			*2.555643	63.38	Pk	32.6	-39.94	0	56.04			74	-17.96	238	294	V
			*2.4835	61.33	Pk	32.5	-40.12	0	53.71			74	-20.29	238	294	V

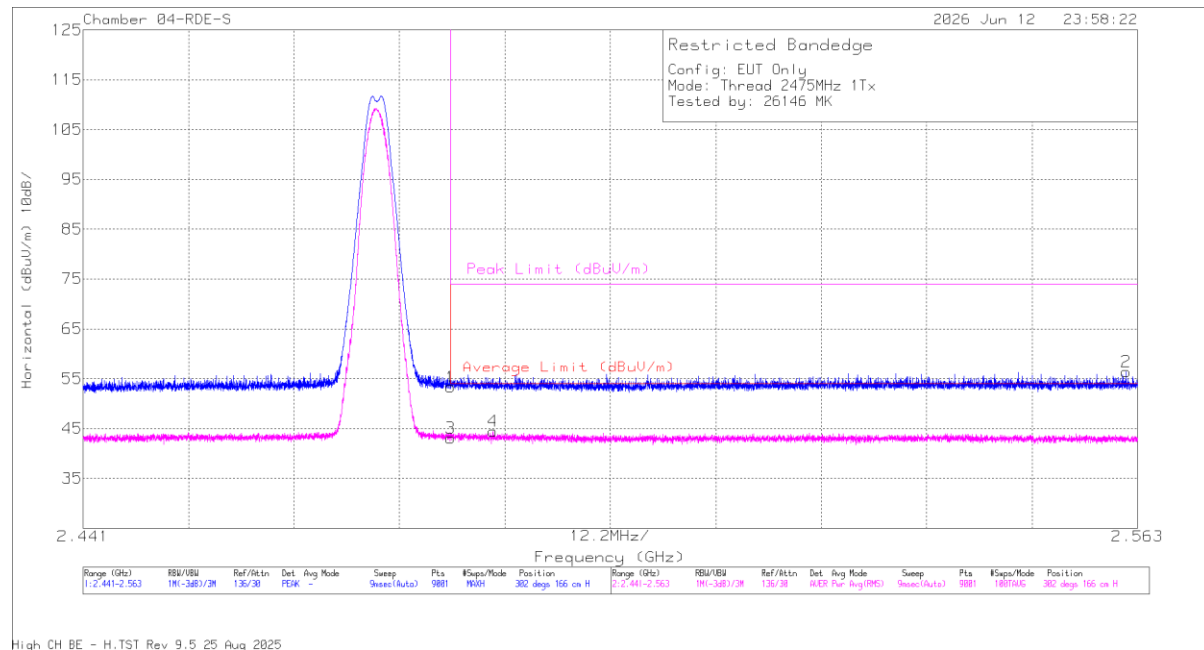
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

WORST-CASE HIGH BANDEDGE HIGH POWER / ANT 3 / STATE A:

HORIZONTAL / VERTICAL RESULT



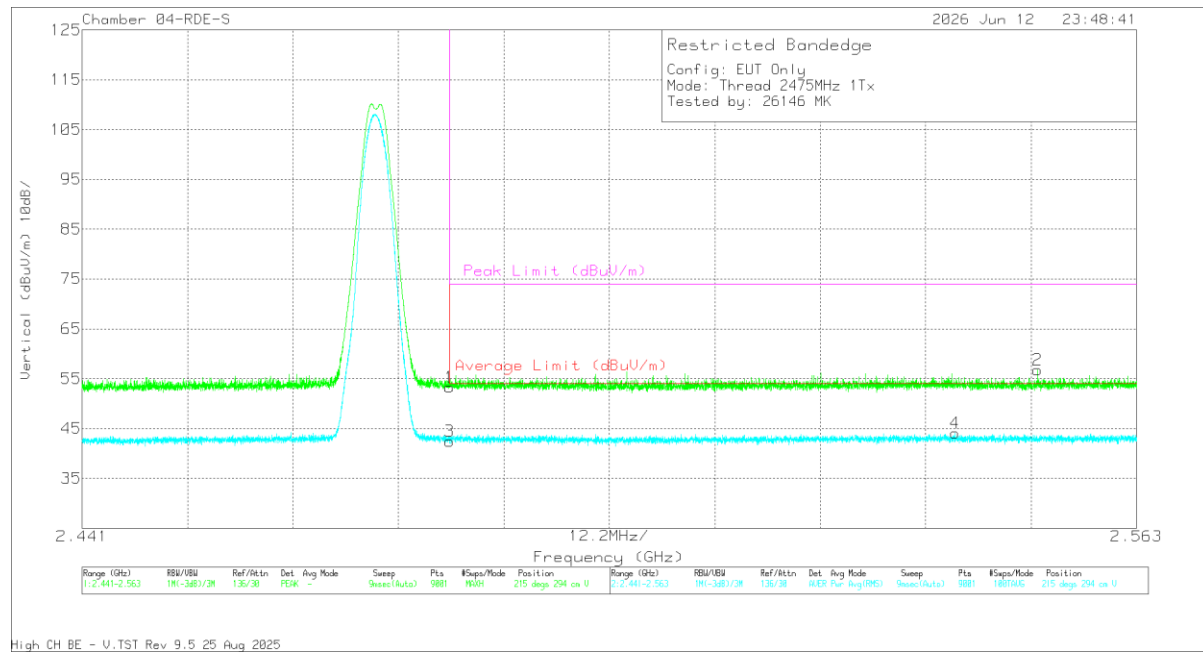
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200785 ACF (dBm)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Acimuth (Degs)	Height (cm)	Polarity
1	*2.4835	60.94	Pk	32.5	0	-40.12	53.32	-	-	74	-20.68	302	166	H
2	*2.561662	63.72	Pk	32.6	0	-39.93	56.39	-	-	74	-17.61	302	166	H
3	*2.4835	50.69	RMS	32.5	0	-40.12	43.07	54	-10.93	-	-	302	166	H
4	*2.488405	52.03	RMS	32.5	0	-40.09	44.44	54	-9.56	-	-	302	166	H

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

Pk - Peak detector

RMS - RMS detection



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200785 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	*2.4835	60.93	Pk	32.5	0	-40.12	53.31	-	-	74	-20.69	215	294	V
2	*2.551549	64.18	Pk	32.6	0	-39.96	56.82	-	-	74	-17.18	215	294	V
3	*2.4835	50.1	RMS	32.5	0	-40.12	42.48	54	-11.52	-	-	215	294	V
4	*2.542019	51.47	RMS	32.6	0	-40.02	44.05	54	-9.95	-	-	215	294	V

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

Pk - Peak detector

RMS - RMS detect

9.1.4. HIGH BANDEDGE / STATE B

2.4GHz (Thread)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DCCF (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
High Power	2475	4	*2.557812	51.57	RMS	32.6	-39.93	0	44.24	54	-9.76			191	143	H
			*2.4835	50.96	RMS	32.5	-40.12	0	43.34	54	-10.66			191	143	H
			*2.523895	64.3	Pk	32.5	-40.05	0	56.75			74	-17.25	191	143	H
			*2.4835	61.64	Pk	32.5	-40.12	0	54.02			74	-19.98	191	143	H
			*2.483959	51.98	RMS	32.5	-40.11	0	44.37	54	-9.63			67	339	V
			*2.4835	51.59	RMS	32.5	-40.12	0	43.97	54	-10.03			67	339	V
			*2.557717	64.32	Pk	32.6	-39.93	0	56.99			74	-17.01	67	339	V
			*2.4835	61.14	Pk	32.5	-40.12	0	53.52			74	-20.48	67	339	V
		3	*2.484027	51.73	RMS	32.5	-40.11	0	44.12	54	-9.88			358	271	H
			*2.4835	51.33	RMS	32.5	-40.12	0	43.71	54	-10.29			358	271	H
			*2.560198	63.39	Pk	32.6	-39.93	0	56.06			74	-17.94	358	271	H
			*2.4835	61.29	Pk	32.5	-40.12	0	53.67			74	-20.33	358	271	H
			*2.496105	51.84	RMS	32.4	-40.06	0	44.18	54	-9.82			228	320	V
			*2.4835	50.87	RMS	32.5	-40.12	0	43.25	54	-10.75			228	320	V
			*2.487836	63.46	Pk	32.5	-40.09	0	55.87			74	-18.13	228	320	V
			*2.4835	61.61	Pk	32.5	-40.12	0	53.99			74	-20.01	228	320	V
Low Power	2475	4	*2.485559	51.73	RMS	32.5	-40.08	0	44.15	54	-9.85			276	220	H
			*2.4835	50.33	RMS	32.5	-40.12	0	42.71	54	-11.29			276	220	H
			*2.523244	63.78	Pk	32.5	-40.07	0	56.21			74	-17.79	276	220	H
			*2.4835	61.15	Pk	32.5	-40.12	0	53.53			74	-20.47	276	220	H
			*2.549882	51.71	RMS	32.6	-39.97	0	44.34	54	-9.66			222	384	V
			*2.4835	50.63	RMS	32.5	-40.12	0	43.01	54	-10.99			222	384	V
			*2.540623	64.42	Pk	32.6	-40.01	0	57.01			74	-16.99	222	384	V
			*2.4835	60.92	Pk	32.5	-40.12	0	53.3			74	-20.7	222	384	V
		3	*2.490398	51.79	RMS	32.5	-40.08	0	44.21	54	-9.79			181	277	H
			*2.4835	50.42	RMS	32.5	-40.12	0	42.8	54	-11.2			181	277	H
			*2.513864	64.27	Pk	32.5	-40.04	0	56.73			74	-17.27	181	277	H
			*2.4835	60.67	Pk	32.5	-40.12	0	53.05			74	-20.95	181	277	H
			*2.525088	51.85	RMS	32.5	-40.03	0	44.32	54	-9.68			50	315	V
			*2.4835	50.8	RMS	32.5	-40.12	0	43.18	54	-10.82			50	315	V
			*2.538183	64.14	Pk	32.6	-40.02	0	56.72			74	-17.28	50	315	V
			*2.4835	60.62	Pk	32.5	-40.12	0	53			74	-17.28	50	315	V

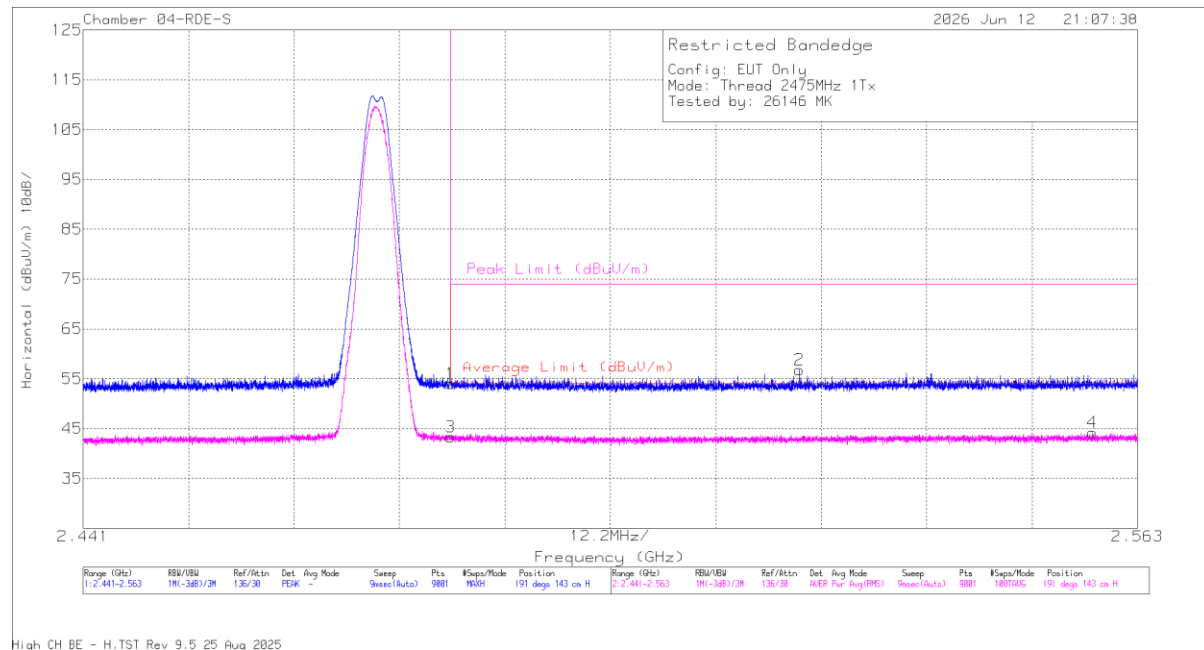
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

WORST-CASE HIGH BANDEDGE HIGH POWER / ANT 4 / STATE B :

HORIZONTAL / VERTICAL RESULT



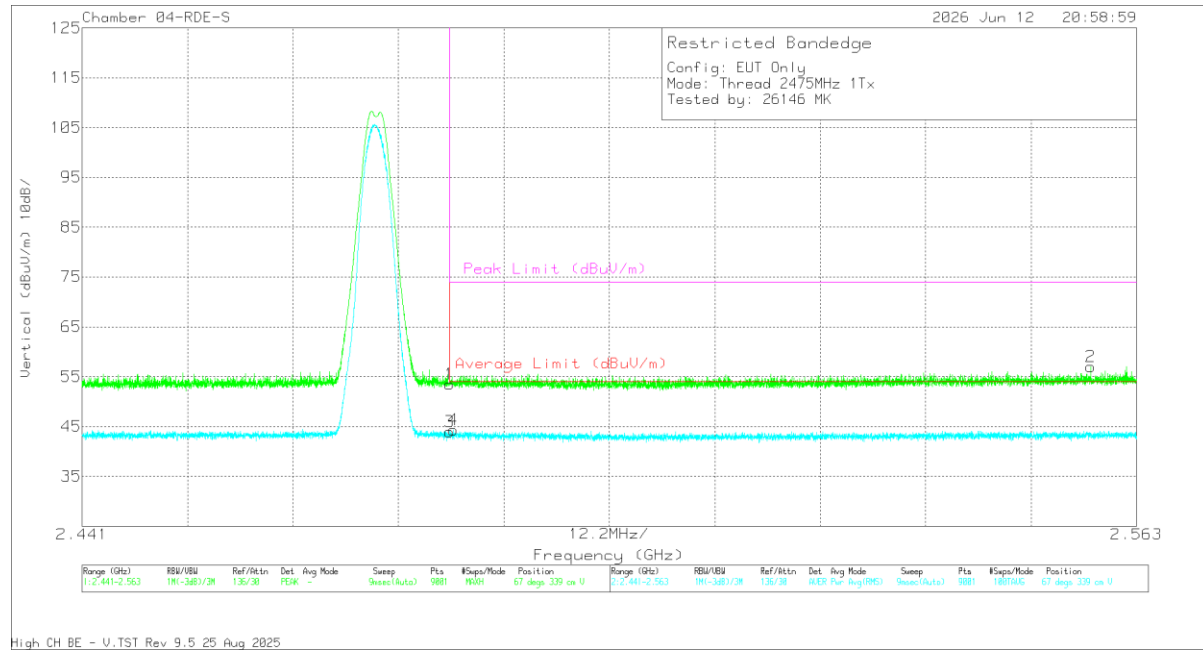
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200785 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	*2.4835	61.64	Pk	32.5	0	-40.12	54.02	-	-	74	-19.98	191	143	H
2	*2.523895	64.3	Pk	32.5	0	-40.05	56.75	-	-	74	-17.25	191	143	H
3	*2.4835	50.96	RMS	32.5	0	-40.12	43.34	54	-10.66	-	-	191	143	H
4	*2.557812	51.57	RMS	32.6	0	-39.93	44.24	54	-9.76	-	-	191	143	H

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

Pk - Peak detector

RMS - RMS dete



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	200785 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	*2.4835	61.14	Pk	32.5	0	-40.12	53.52	-	-	74	-20.48	67	339	V
2	*2.557717	64.32	Pk	32.6	0	-39.93	56.99	-	-	74	-17.01	67	339	V
3	*2.4835	51.59	RMS	32.5	0	-40.12	43.97	54	-10.03	-	-	67	339	V
4	*2.483959	51.98	RMS	32.5	0	-40.11	44.37	54	-9.63	-	-	67	339	V

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

Pk - Peak detector

RMS - RMS detection

9.1.5. SPURIOUS EMISSIONS STATE A

2.4 GHz (Thread)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	DCCF (dB)	Amp/Cbl /Filtr/Pad (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
High Power	2405	4	* 4.811486	46.28	MAv1	34.4	0	-48.03	32.65	54	-21.35	-	-	360	200	H
			* 4.82957	58.15	PK2	34.4	0	-47.85	44.7	-	-	74	-29.3	360	200	H
			* 4.814915	46.44	MAv1	34.4	0	-47.96	32.88	54	-21.12	-	-	360	101	V
			* 4.838391	58.29	PK2	34.4	0	-47.96	44.73	-	-	74	-29.27	360	101	V
			7.237415	44.04	MAv1	35.7	0	-45.76	33.98	-	-	-	-	360	101	H
			7.228895	56.4	PK2	35.7	0	-45.8	46.3	-	-	-	-	360	101	H
			7.234319	44.01	MAv1	35.7	0	-45.81	33.9	-	-	-	-	360	101	V
			7.245546	55.82	PK2	35.7	0	-45.73	45.79	-	-	-	-	360	101	V
			9.602099	43.41	MAv1	36.8	0	-44.44	35.77	-	-	-	-	360	101	H
			9.60829	55.65	PK2	36.8	0	-44.37	48.08	-	-	-	-	360	101	H
		9.60825	42.97	MAv1	36.8	0	-44.37	35.4	-	-	-	-	360	199	V	
		9.60689	55.49	PK2	36.8	0	-44.41	47.88	-	-	-	-	360	199	V	
		3	* 4.773949	46.46	MAv1	34.4	0	-48.08	32.78	54	-21.22	-	-	360	200	H
			* 4.778638	58.87	PK2	34.4	0	-48.23	45.04	-	-	74	-28.96	360	200	H
			* 4.792584	46.34	MAv1	34.4	0	-47.88	32.86	54	-21.14	-	-	360	101	V
			* 4.79277	58.19	PK2	34.4	0	-47.87	44.72	-	-	74	-29.28	360	101	V
			7.213383	44.01	MAv1	35.7	0	-45.5	34.21	-	-	-	-	360	101	H
			7.213747	55.54	PK2	35.7	0	-45.49	45.75	-	-	-	-	360	101	H
			7.209219	43.74	MAv1	35.7	0	-45.63	33.81	-	-	-	-	360	199	V
			7.206503	55.76	PK2	35.7	0	-45.68	45.78	-	-	-	-	360	199	V
	9.603475		43.3	MAv1	36.8	0	-44.46	35.64	-	-	-	-	360	101	H	
	9.622043		55.17	PK2	36.8	0	-44.33	47.64	-	-	-	-	360	101	H	
	9.640091	43.08	MAv1	36.9	0	-44.16	35.82	-	-	-	-	360	101	V		
	9.635122	54.63	PK2	36.8	0	-44.29	47.14	-	-	-	-	360	101	V		
	2440	4	* 4.838421	46.04	MAv1	34.4	0	-47.96	32.48	54	-21.52	-	-	360	101	H
			* 4.839101	57.92	PK2	34.4	0	-47.98	44.34	-	-	74	-29.66	360	101	H
			* 4.842737	46.05	MAv1	34.4	0	-47.99	32.46	54	-21.54	-	-	360	101	V
			* 4.837675	58.15	PK2	34.4	0	-47.94	44.61	-	-	74	-29.39	360	101	V
			* 7.391009	44.04	MAv1	35.7	0	-45.57	34.17	54	-19.83	-	-	360	101	H
			* 7.385432	55.42	PK2	35.7	0	-45.56	45.56	-	-	74	-28.44	360	101	H
			* 7.391465	43.85	MAv1	35.7	0	-45.57	33.98	54	-20.02	-	-	360	101	V
			* 7.371198	55.63	PK2	35.7	0	-45.67	45.66	-	-	74	-28.34	360	101	V
			9.7864	43.3	MAv1	37	0	-44.24	36.06	-	-	-	-	360	101	H
			9.779009	55.17	PK2	37	0	-44.56	47.61	-	-	-	-	360	101	H
		9.782998	42.99	MAv1	37	0	-44.37	35.62	-	-	-	-	360	200	V	
		9.791838	55.19	PK2	37	0	-44.51	47.68	-	-	-	-	360	200	V	
		3	* 4.882855	45.94	MAv1	34.4	0	-47.86	32.48	54	-21.52	-	-	360	101	H
			* 4.859269	57.52	PK2	34.4	0	-48	43.92	-	-	74	-30.08	360	101	H
			* 4.862242	45.98	MAv1	34.4	0	-47.97	32.41	54	-21.59	-	-	360	101	V
			* 4.853749	57.64	PK2	34.4	0	-47.97	44.07	-	-	74	-29.93	360	101	V
			* 7.404428	44.13	MAv1	35.7	0	-45.64	34.19	54	-19.81	-	-	360	101	H
			* 7.404428	56.34	PK2	35.7	0	-45.64	46.4	-	-	74	-27.6	360	101	H
			* 7.399394	44	MAv1	35.7	0	-45.6	34.1	54	-19.9	-	-	360	101	V
			* 7.389932	56.02	PK2	35.7	0	-45.6	46.12	-	-	74	-27.88	360	101	V
			9.763051	42.69	MAv1	37	0	-44.49	35.2	-	-	-	-	360	200	H
			9.742069	54.24	PK2	37	0	-44.62	46.62	-	-	-	-	360	200	H
			9.751125	42.59	MAv1	37	0	-44.55	35.04	-	-	-	-	360	200	V
			9.749934	54.56	PK2	37	0	-44.58	46.98	-	-	-	-	360	200	V

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

Pk - Peak detector

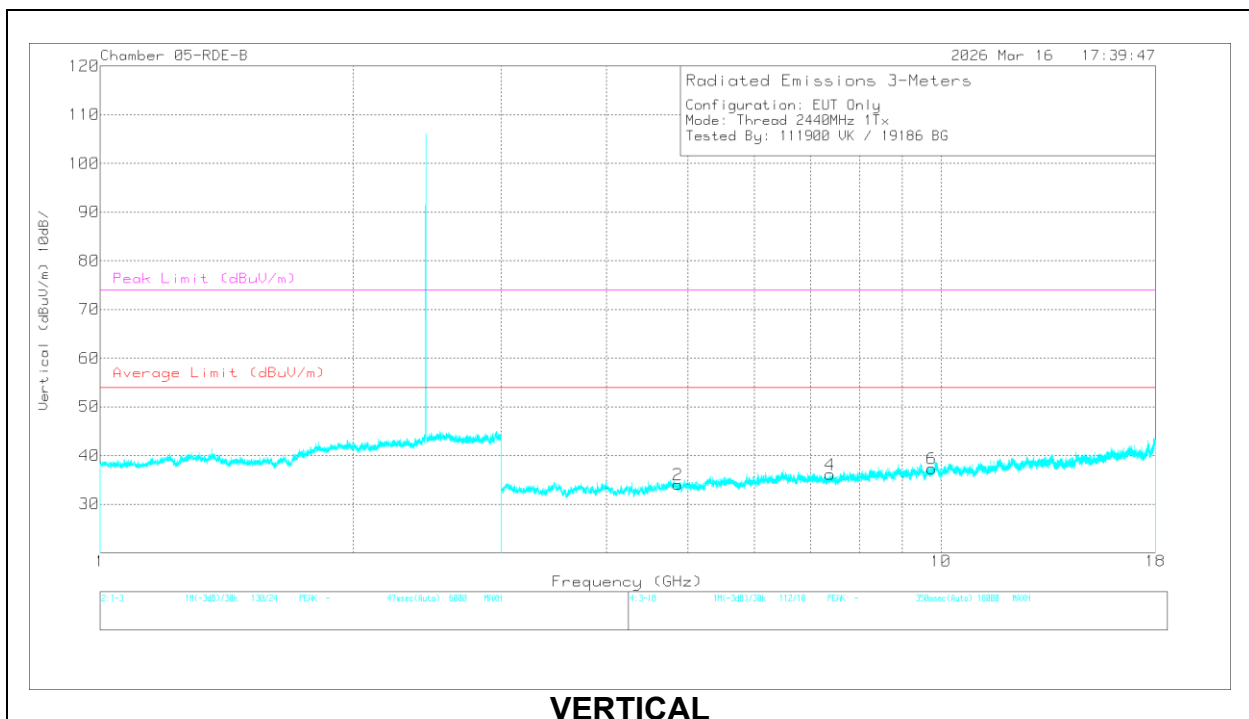
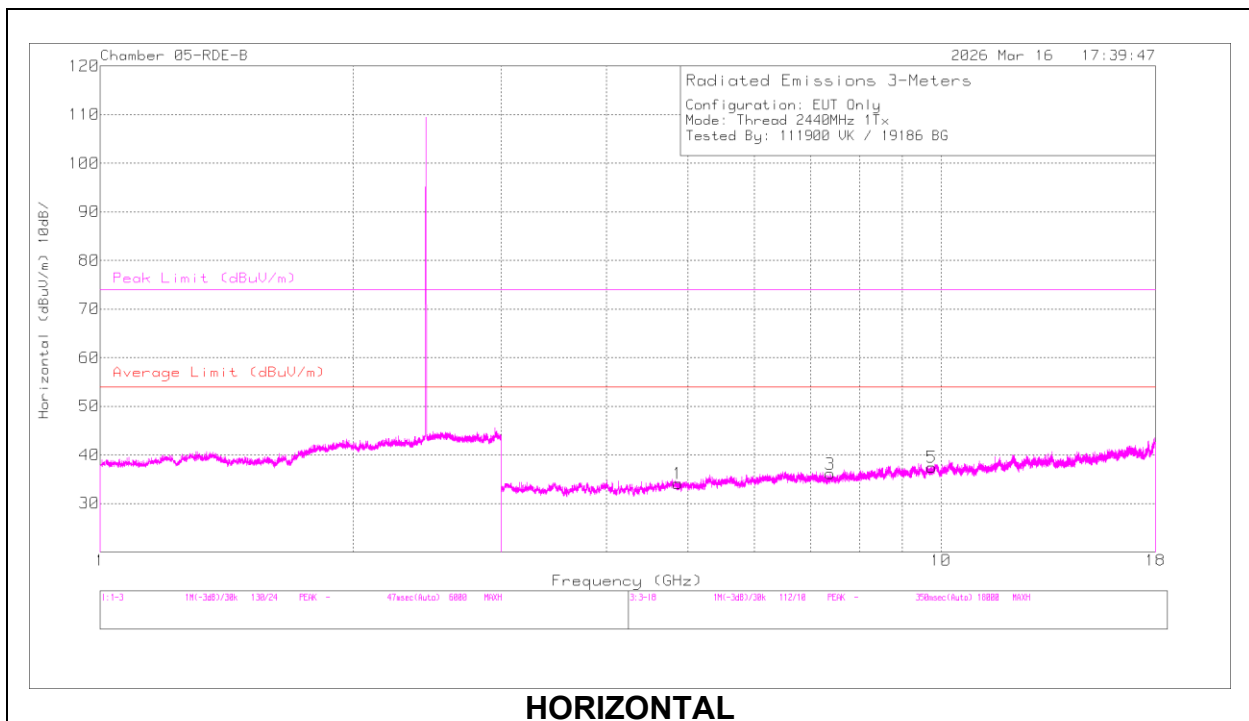
RMS - RMS detection

2.4 GHz (Thread)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	DCCF (dB)	Amp/Cbl /Filtr/Pad (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
High Power	2475	4	* 4.893459	46.07	MAV1	34.4	0	-47.93	32.54	54	-21.46	-	-	360	100	H
			* 4.896362	57.85	PK2	34.4	0	-47.93	44.32	-	-	74	-29.68	360	100	H
			* 4.894973	45.82	MAV1	34.4	0	-47.91	32.31	54	-21.69	-	-	360	101	V
			* 4.884262	57.41	PK2	34.4	0	-47.89	43.92	-	-	74	-30.08	360	101	V
			7.238577	43.7	MAV1	35.7	0	-45.73	33.67	-	-	-	-	360	200	H
			7.229031	55.38	PK2	35.7	0	-45.81	45.27	-	-	-	-	360	200	H
			7.244826	43.84	MAV1	35.7	0	-45.73	33.81	-	-	-	-	360	101	V
			* 7.251457	55.99	PK2	35.6	0	-45.78	45.81	-	-	74	-28.19	360	101	V
			9.720324	42.65	MAV1	37	0	-44.43	35.22	-	-	-	-	360	200	H
			9.708453	54.3	PK2	36.9	0	-44.3	46.9	-	-	-	-	360	200	H
		3	* 9.689715	42.43	MAV1	36.9	0	-44.36	34.97	-	-	-	-	360	200	V
			9.6886	55.34	PK2	36.9	0	-44.33	47.91	-	-	-	-	360	200	V
			* 4.978881	46.4	MAV1	34.4	0	-48.14	32.66	54	-21.34	-	-	360	101	H
			* 4.95397	58.41	PK2	34.4	0	-47.98	44.83	-	-	74	-29.17	360	101	H
			* 4.982797	46.12	MAV1	34.3	0	-48.09	32.33	54	-21.67	-	-	360	200	V
			* 4.983068	58.1	PK2	34.3	0	-48.08	44.32	-	-	74	-29.68	360	200	V
			* 7.435672	43.73	MAV1	35.7	0	-45.68	33.75	54	-20.25	-	-	360	200	H
			* 7.427881	55.45	PK2	35.7	0	-45.64	45.51	-	-	74	-28.49	360	200	H
			* 7.404557	43.64	MAV1	35.7	0	-45.64	33.7	54	-20.3	-	-	360	200	V
			* 7.440468	55.84	PK2	35.7	0	-45.65	45.89	-	-	74	-28.11	360	200	V
			9.883611	43.94	MAV1	37.1	0	-44.8	36.24	-	-	-	-	360	101	H
			9.899593	55.61	PK2	37.1	0	-44.39	48.32	-	-	-	-	360	101	H
			9.888964	43.74	MAV1	37.1	0	-44.85	35.99	-	-	-	-	360	101	V
			9.905284	55.57	PK2	37.1	0	-44.42	48.25	-	-	-	-	360	101	V

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

Pk - Peak detector

RMS - RMS detection

WORST-CASE HARMONICS AND SPURIOUS EMISSIONS
HIGH POWER / ANT 3/ STATE A:

Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degree)	Height (cm)	Polarity
2	* 4.853749	57.64	PK2	34.4	0	-47.97	44.07	-	-	74	-29.93	360	101	V
1	* 4.859269	57.52	PK2	34.4	0	-48	43.92	-	-	74	-30.08	360	101	H
2	* 4.862242	45.98	MAV1	34.4	0	-47.97	32.41	54	-21.59	-	-	360	101	V
1	* 4.882855	45.94	MAV1	34.4	0	-47.86	32.48	54	-21.52	-	-	360	101	H
4	* 7.389932	56.02	PK2	35.7	0	-45.6	46.12	-	-	74	-27.88	360	101	V
4	* 7.399394	44	MAV1	35.7	0	-45.6	34.1	54	-19.9	-	-	360	101	V
3	* 7.404428	56.34	PK2	35.7	0	-45.64	46.4	-	-	74	-27.6	360	101	H
3	* 7.404428	44.13	MAV1	35.7	0	-45.64	34.19	54	-19.81	-	-	360	101	H
5	9.742069	54.24	PK2	37	0	-44.62	46.62	-	-	-	-	360	200	H
6	9.749934	54.56	PK2	37	0	-44.58	46.98	-	-	-	-	360	200	V
6	9.751125	42.59	MAV1	37	0	-44.55	35.04	-	-	-	-	360	200	V
5	9.763051	42.69	MAV1	37	0	-44.49	35.2	-	-	-	-	360	200	H

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

PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

9.1.6. SPURIOUS EMISSIONS STATE B

2.4 GHz (Thread)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	DCCF (dB)	Amp/Cbl /Ftr/Pad (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
High Power	2405	4	* 4.827054	45.9	MAV1	34.4	0	-47.83	32.47	54	-21.53	-	-	360	200	H
			* 4.835779	57.66	PK2	34.4	0	-47.91	44.15	-	-	74	-29.85	360	200	H
			* 4.81887	46.08	MAV1	34.4	0	-47.82	32.66	54	-21.34	-	-	360	200	V
			* 4.829341	58.49	PK2	34.4	0	-47.85	45.04	-	-	74	-28.96	360	200	V
			7.183011	43.59	MAV1	35.7	0	-45.44	33.85	-	-	-	-	360	200	H
			7.159136	55.31	PK2	35.8	0	-45.33	45.78	-	-	-	-	360	200	H
			7.179643	43.64	MAV1	35.7	0	-45.46	33.88	-	-	-	-	360	200	V
			7.166576	55.78	PK2	35.8	0	-45.48	46.1	-	-	-	-	360	200	V
			9.613765	42.99	MAV1	36.8	0	-44.34	35.45	-	-	-	-	360	101	H
			9.640556	54.96	PK2	36.9	0	-44.13	47.73	-	-	-	-	360	101	H
		3	9.654234	42.95	MAV1	36.9	0	-44.06	35.79	-	-	-	-	360	101	V
			9.628727	54.92	PK2	36.8	0	-44.34	47.38	-	-	-	-	360	101	V
			* 4.813733	46.31	MAV1	34.4	0	-47.99	32.72	54	-21.28	-	-	360	101	H
			* 4.843778	58.19	PK2	34.4	0	-47.97	44.62	-	-	74	-29.38	360	101	H
			* 4.814022	46.23	MAV1	34.4	0	-47.98	32.65	54	-21.35	-	-	360	200	V
			* 4.81	57.76	PK2	34.4	0	-48.04	44.12	-	-	74	-29.88	360	200	V
			7.216593	43.84	MAV1	35.7	0	-45.5	34.04	-	-	-	-	360	199	H
			7.215224	55.58	PK2	35.7	0	-45.49	45.79	-	-	-	-	360	199	H
			7.214596	43.99	MAV1	35.7	0	-45.49	34.2	-	-	-	-	360	101	V
			7.230036	55.71	PK2	35.7	0	-45.79	45.62	-	-	-	-	360	101	V
			9.624387	43.11	MAV1	36.8	0	-44.33	35.58	-	-	-	-	360	101	H
			9.621307	54.37	PK2	36.8	0	-44.34	46.83	-	-	-	-	360	101	H
			9.598436	42.9	MAV1	36.8	0	-44.42	35.28	-	-	-	-	360	200	V
			9.610419	54.56	PK2	36.8	0	-44.36	47	-	-	-	-	360	200	V
	2440	4	* 4.785557	46.28	MAV1	34.4	0	-48.21	32.47	54	-21.53	-	-	360	200	H
			* 4.803677	58.28	PK2	34.4	0	-47.99	44.69	-	-	74	-29.31	360	200	H
			* 4.78493	46.32	MAV1	34.4	0	-48.22	32.5	54	-21.5	-	-	360	101	V
			* 4.82213	59.04	PK2	34.4	0	-47.77	45.67	-	-	74	-28.33	360	101	V
			* 7.394338	43.71	MAV1	35.7	0	-45.58	33.83	54	-20.17	-	-	360	200	H
			* 7.410729	55.63	PK2	35.7	0	-45.58	45.75	-	-	74	-28.25	360	200	H
			* 7.401017	43.87	MAV1	35.7	0	-45.63	33.94	54	-20.06	-	-	360	101	V
			* 7.395946	55.83	PK2	35.7	0	-45.55	45.98	-	-	74	-28.02	360	101	V
			9.74905	42.62	MAV1	37	0	-44.57	35.05	-	-	-	-	360	200	H
			9.724633	54.46	PK2	37	0	-44.29	47.17	-	-	-	-	360	200	H
		3	9.748479	42.9	MAV1	37	0	-44.59	35.31	-	-	-	-	360	101	V
			9.73723	54.66	PK2	37	0	-44.56	47.1	-	-	-	-	360	101	V
			* 4.893282	46.02	MAV1	34.4	0	-47.93	32.49	54	-21.51	-	-	360	101	H
			* 4.897011	58.18	PK2	34.4	0	-47.92	44.66	-	-	74	-29.34	360	101	H
			* 4.89081	46.07	MAV1	34.4	0	-47.9	32.57	54	-21.43	-	-	360	101	V
			* 4.884566	57.32	PK2	34.4	0	-47.9	43.82	-	-	74	-30.18	360	101	V
			* 7.400452	43.89	MAV1	35.7	0	-45.61	33.98	54	-20.02	-	-	360	101	H
			* 7.403186	55.56	PK2	35.7	0	-45.66	45.6	-	-	74	-28.4	360	101	H
			* 7.388477	43.77	MAV1	35.7	0	-45.56	33.91	54	-20.09	-	-	360	199	V
			* 7.396437	55.43	PK2	35.7	0	-45.55	45.58	-	-	74	-28.42	360	199	V
			9.725507	42.59	MAV1	37	0	-44.26	35.33	-	-	-	-	360	101	H
			9.729712	54.02	PK2	37	0	-44.23	46.79	-	-	-	-	360	101	H
			9.720876	42.91	MAV1	37	0	-44.4	35.51	-	-	-	-	360	199	V
			9.719712	53.97	PK2	37	0	-44.43	46.54	-	-	-	-	360	199	V

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

Pk - Peak detector

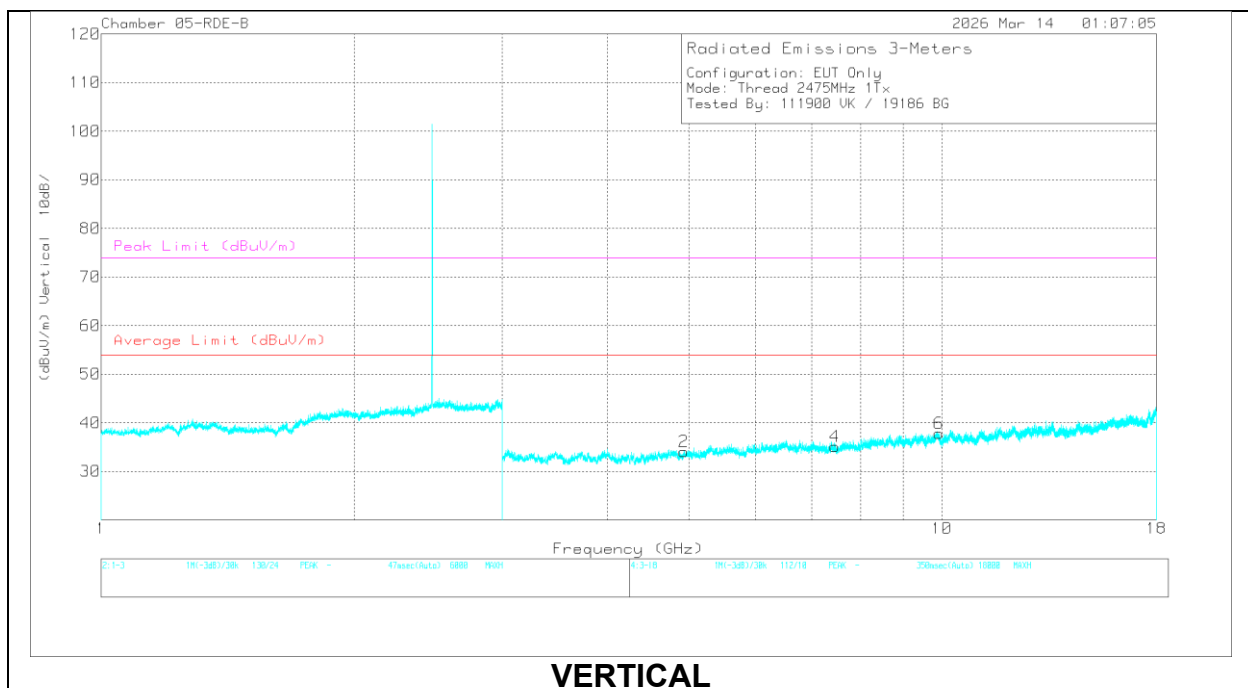
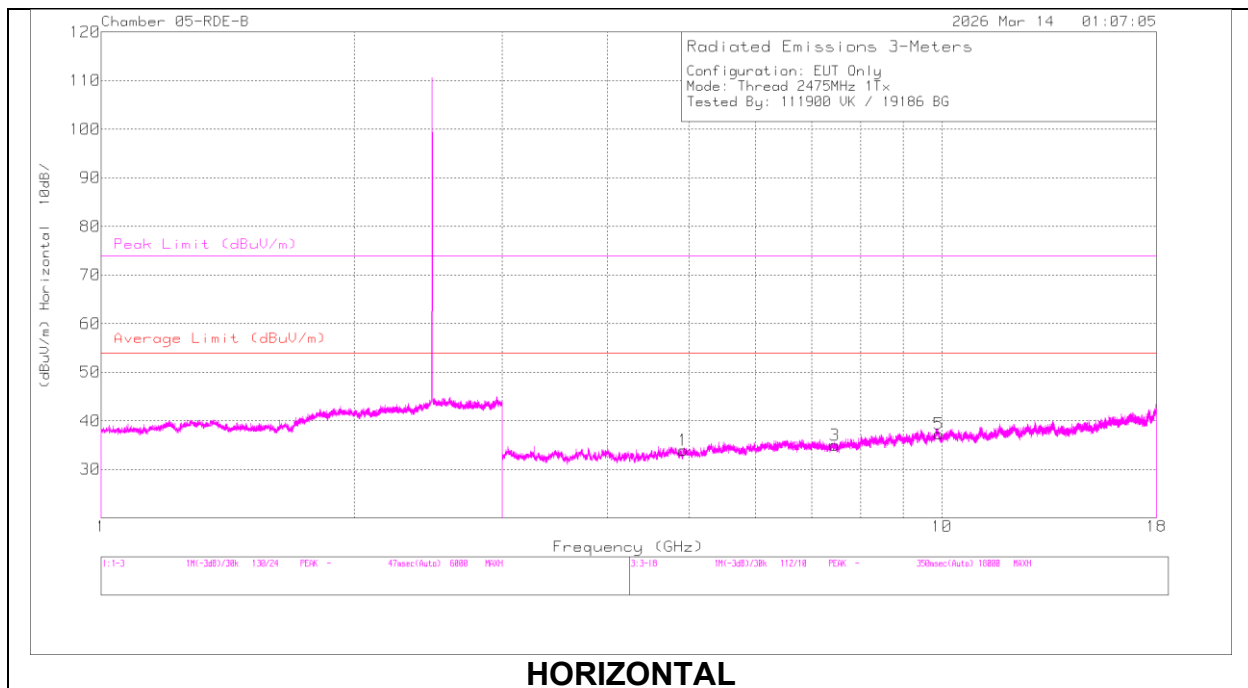
RMS - RMS detection

2.4 GHz (Thread)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	DCCF (dB)	Amp/Cbl /Ftr/Pad (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
High Power	2475	4	* 4.92865	46.4	MAV1	34.4	0	-47.99	32.81	54	-21.19	-	-	360	101	H
			* 4.938708	58.46	PK2	34.4	0	-48.03	44.83	-	-	74	-29.17	360	101	H
			* 4.933375	46.29	MAV1	34.4	0	-47.88	32.81	54	-21.19	-	-	360	101	V
			* 4.948975	58.01	PK2	34.4	0	-48.05	44.36	-	-	74	-29.64	360	101	V
			* 7.456097	43.88	MAV1	35.8	0	-45.59	34.09	54	-19.91	-	-	360	101	H
			* 7.462377	55.67	PK2	35.8	0	-45.7	45.77	-	-	74	-28.23	360	101	H
			* 7.452457	43.8	MAV1	35.8	0	-45.57	34.03	54	-19.97	-	-	360	101	V
			* 7.454679	55.66	PK2	35.8	0	-45.58	45.88	-	-	74	-28.12	360	101	V
			9.918721	43.39	MAV1	37.1	0	-44.6	35.89	-	-	-	-	360	199	H
			9.90841	55.18	PK2	37.1	0	-44.55	47.73	-	-	-	-	360	199	H
			9.916567	43.59	MAV1	37.1	0	-44.62	36.07	-	-	-	-	360	199	V
			9.912536	55.34	PK2	37.1	0	-44.63	47.81	-	-	-	-	360	199	V
		3	* 4.936581	46.24	MAV1	34.4	0	-47.94	32.7	54	-21.3	-	-	360	101	H
			* 4.931168	58.2	PK2	34.4	0	-47.9	44.7	-	-	74	-29.3	360	101	H
			* 4.937883	46.21	MAV1	34.4	0	-47.99	32.62	54	-21.38	-	-	360	101	V
			* 4.930519	57.8	PK2	34.4	0	-47.92	44.28	-	-	74	-29.72	360	101	V
			* 7.448758	43.64	MAV1	35.8	0	-45.57	33.87	54	-20.13	-	-	360	199	H
			* 7.447105	56.08	PK2	35.8	0	-45.62	46.26	-	-	74	-27.74	360	199	H
			* 7.456794	43.83	MAV1	35.8	0	-45.57	34.06	54	-19.94	-	-	360	101	V
			* 7.432358	55.61	PK2	35.7	0	-45.68	45.63	-	-	74	-28.37	360	101	V
			9.940656	42.98	MAV1	37.1	0	-44.66	35.42	-	-	-	-	360	101	H
			9.935127	54.6	PK2	37.1	0	-44.46	47.24	-	-	-	-	360	101	H
			9.942291	42.87	MAV1	37.1	0	-44.65	35.32	-	-	-	-	360	199	V
			9.935643	54.46	PK2	37.1	0	-44.48	47.08	-	-	-	-	360	199	V

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

Pk - Peak detector

RMS - RMS detection

**WORST-CASE HARMONICS AND SPURIOUS EMISSIONS
HIGH POWER / ANT 4 / STATE B:**

Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	54796 ACF (dB)	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	* 4.92865	46.4	MAv1	34.4	0	-47.99	32.81	54	-21.19	-	-	360	101	H
1	* 4.938708	58.46	PK2	34.4	0	-48.03	44.83	-	-	74	-29.17	360	101	H
2	* 4.933375	46.29	MAv1	34.4	0	-47.88	32.81	54	-21.19	-	-	360	101	V
2	* 4.948975	58.01	PK2	34.4	0	-48.05	44.36	-	-	74	-29.64	360	101	V
3	* 7.456097	43.88	MAv1	35.8	0	-45.59	34.09	54	-19.91	-	-	360	101	H
3	* 7.462377	55.67	PK2	35.8	0	-45.7	45.77	-	-	74	-28.23	360	101	H
4	* 7.452457	43.8	MAv1	35.8	0	-45.57	34.03	54	-19.97	-	-	360	101	V
4	* 7.454679	55.66	PK2	35.8	0	-45.58	45.88	-	-	74	-28.12	360	101	V
5	9.918721	43.39	MAv1	37.1	0	-44.6	35.89	-	-	-	-	360	199	H
5	9.90841	55.18	PK2	37.1	0	-44.55	47.73	-	-	-	-	360	199	H
6	9.916567	43.59	MAv1	37.1	0	-44.62	36.07	-	-	-	-	360	199	V
6	9.912536	55.34	PK2	37.1	0	-44.63	47.81	-	-	-	-	360	199	V

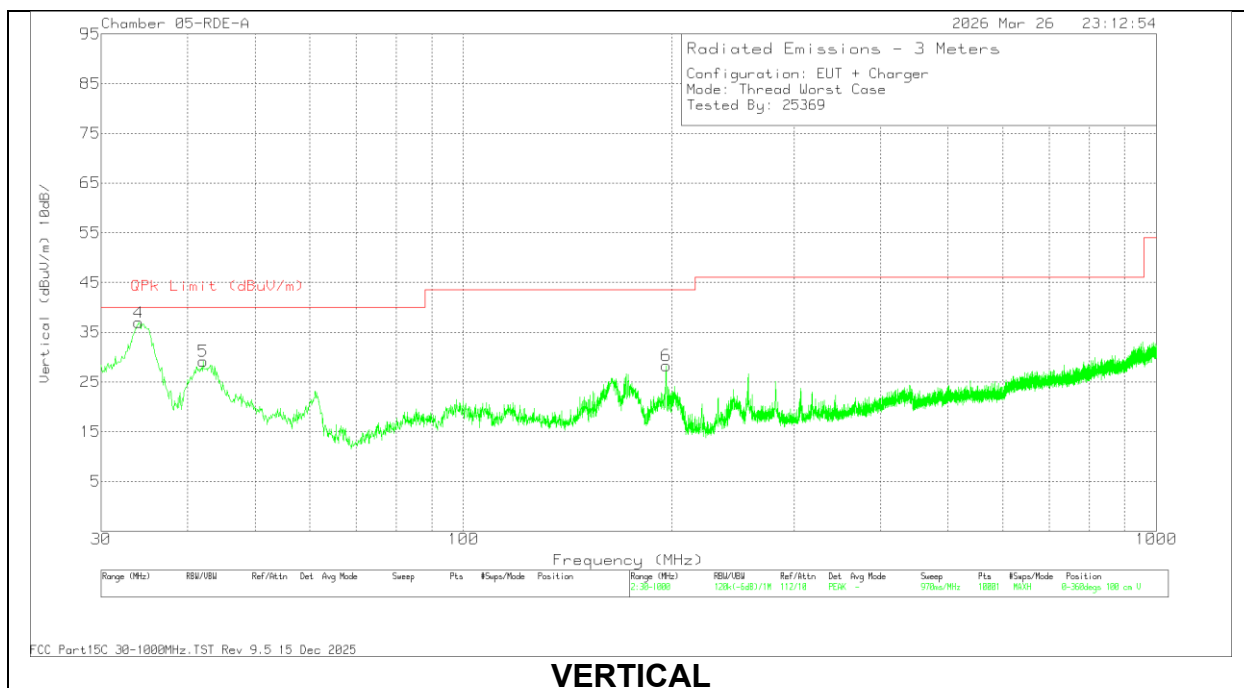
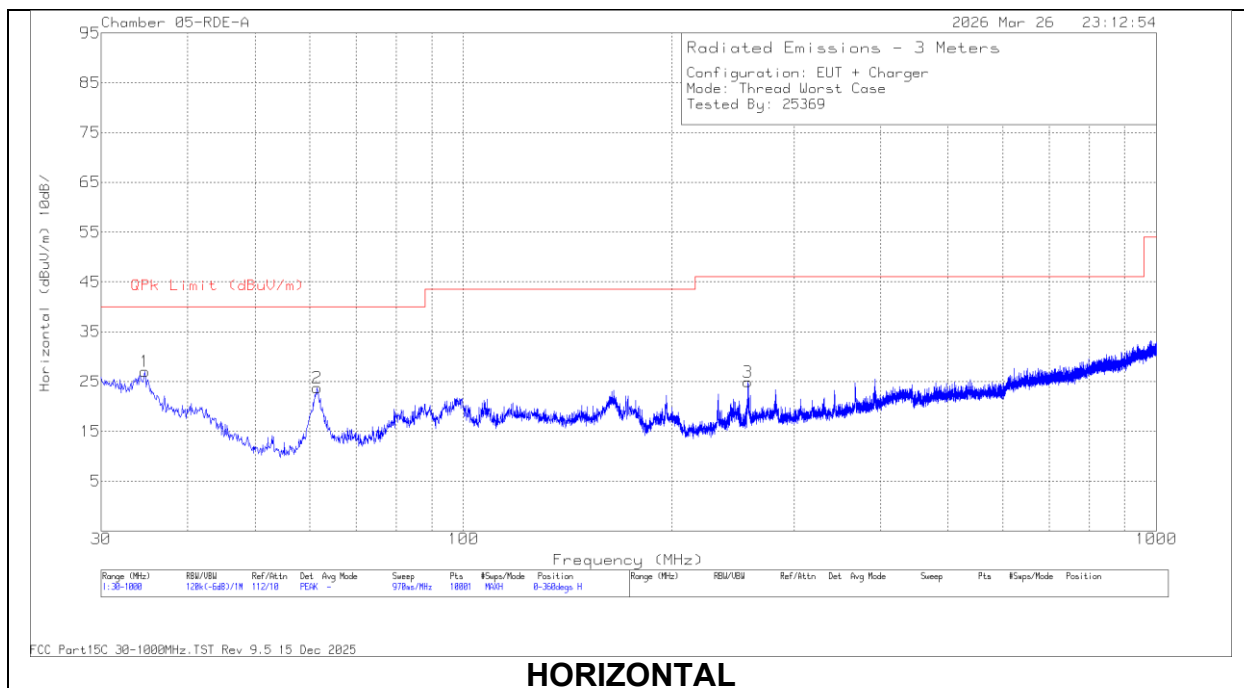
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2. WORST CASE BELOW 1 GHz

9.2.1. SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION) STATE A



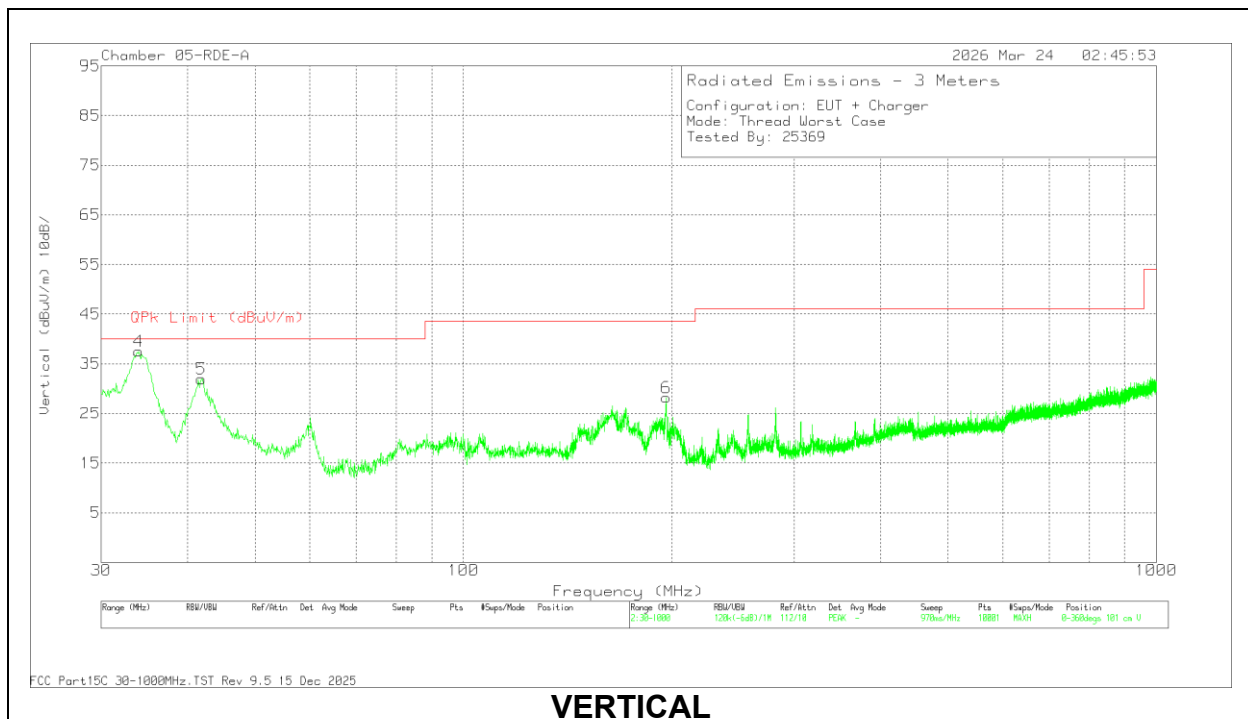
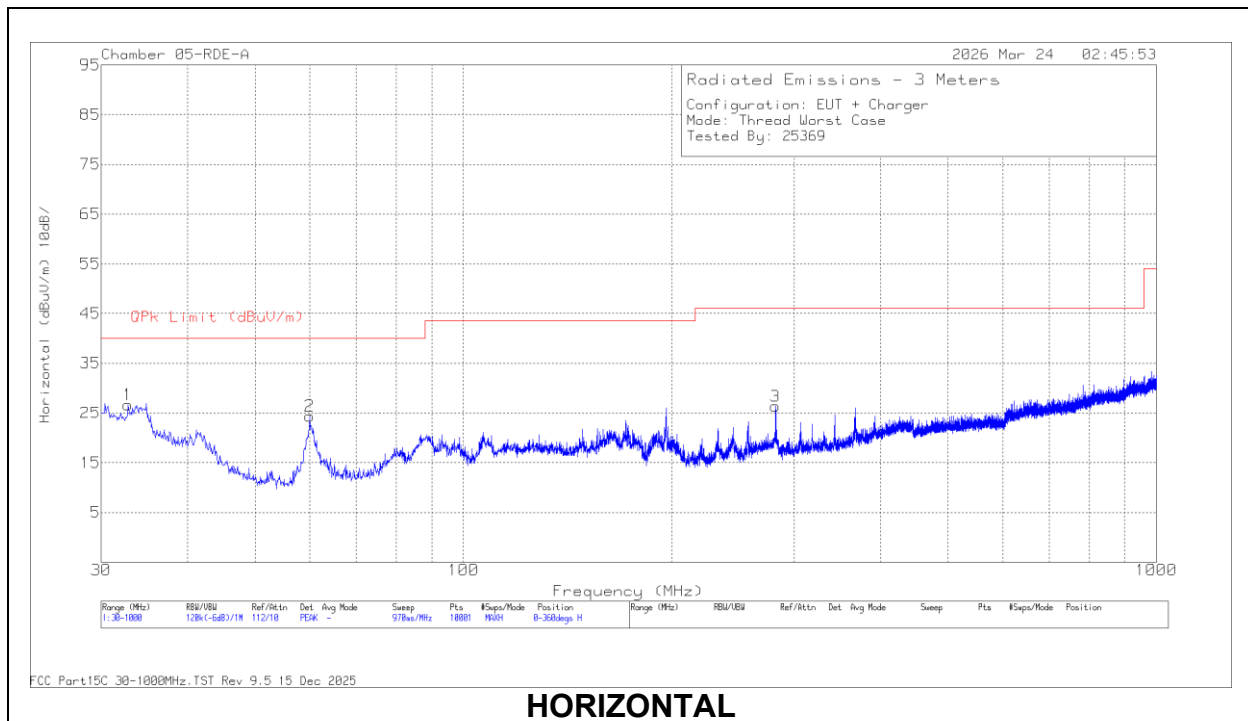
Below 1GHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	204045 ACF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 257.174	38.23	Pk	17.6	-30.9	24.93	46.02	-21.09	0-360	99	H
4	34.1908	42.02	Qp	24	-32.3	33.72	40	-6.28	163	100	V
1	34.656	35.7	Pk	23.6	-32.3	27	40	-13	0-360	199	H
5	42.125	43.14	Pk	18.1	-32.1	29.14	40	-10.86	0-360	100	V
2	61.525	42.09	Pk	13.7	-32	23.79	40	-16.21	0-360	400	H
6	196.258	41.14	Pk	18.3	-31.2	28.24	43.52	-15.28	0-360	100	V

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

Pk - Peak detector

9.2.2. SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION) STATE B



Below 1GHz Data

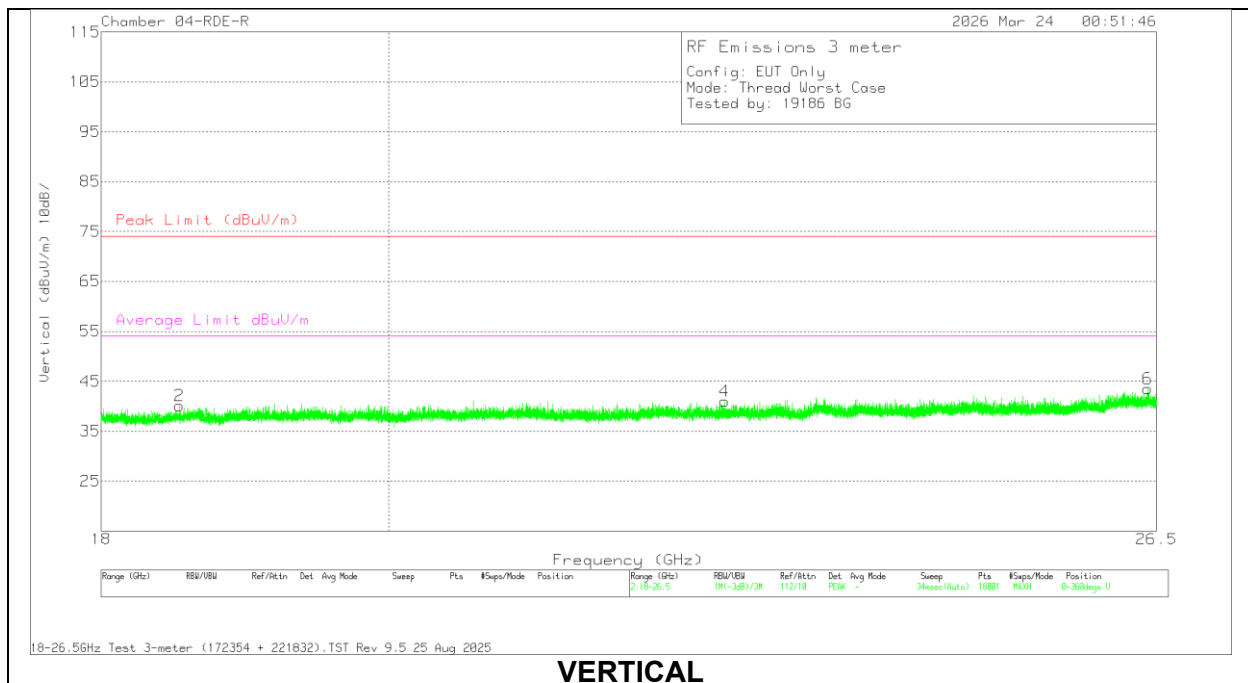
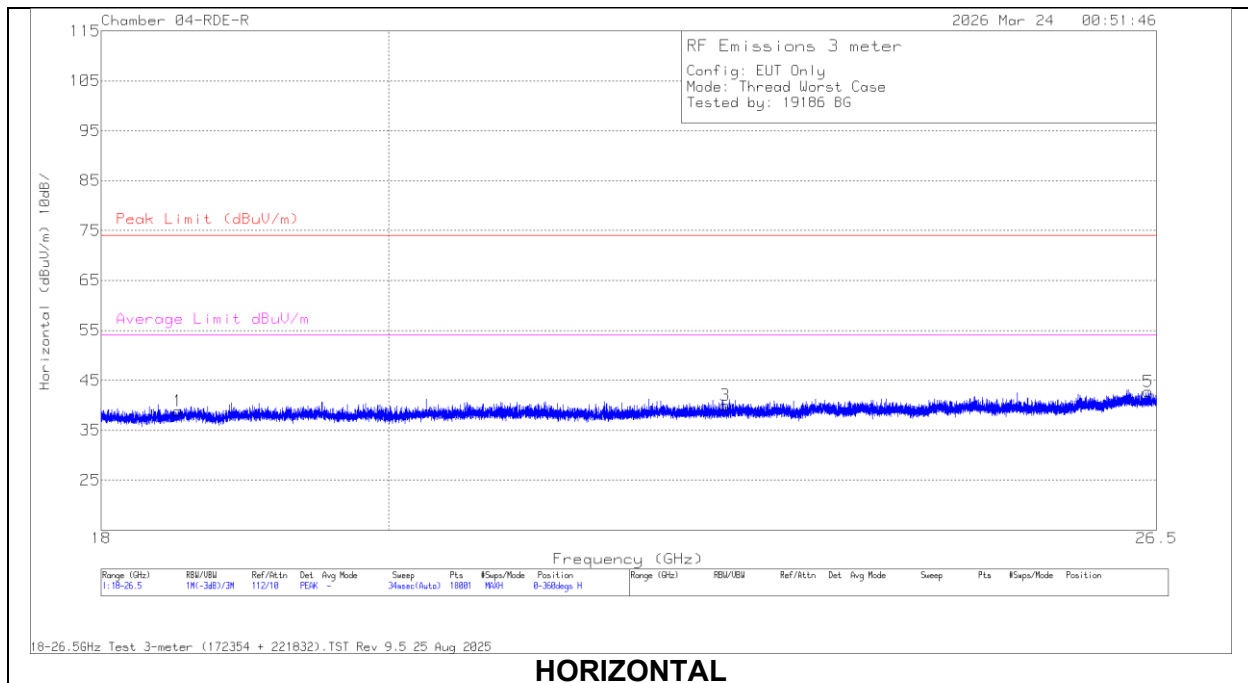
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	204045 ACF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 282.103	37.73	Pk	19.2	-30.6	26.33	46.02	-19.69	0-360	101	H
1	32.813	34.07	Pk	24.9	-32.3	26.67	40	-13.33	0-360	200	H
4	34.0687	42.37	Qp	24.1	-32.3	34.17	40	-5.83	222	100	V
5	41.834	45.77	Pk	18.3	-32.1	31.97	40	-8.03	0-360	101	V
2	59.973	42.9	Pk	13.5	-32	24.4	40	-15.6	0-360	399	H
6	196.258	41.11	Pk	18.3	-31.2	28.21	43.52	-15.31	0-360	101	V

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

Pk - Peak detector

9.3. WORST CASE 18-26 GHz

9.3.1. SPURIOUS EMISSIONS 18-26 GHz (WORST-CASE CONFIGURATION) STATE A



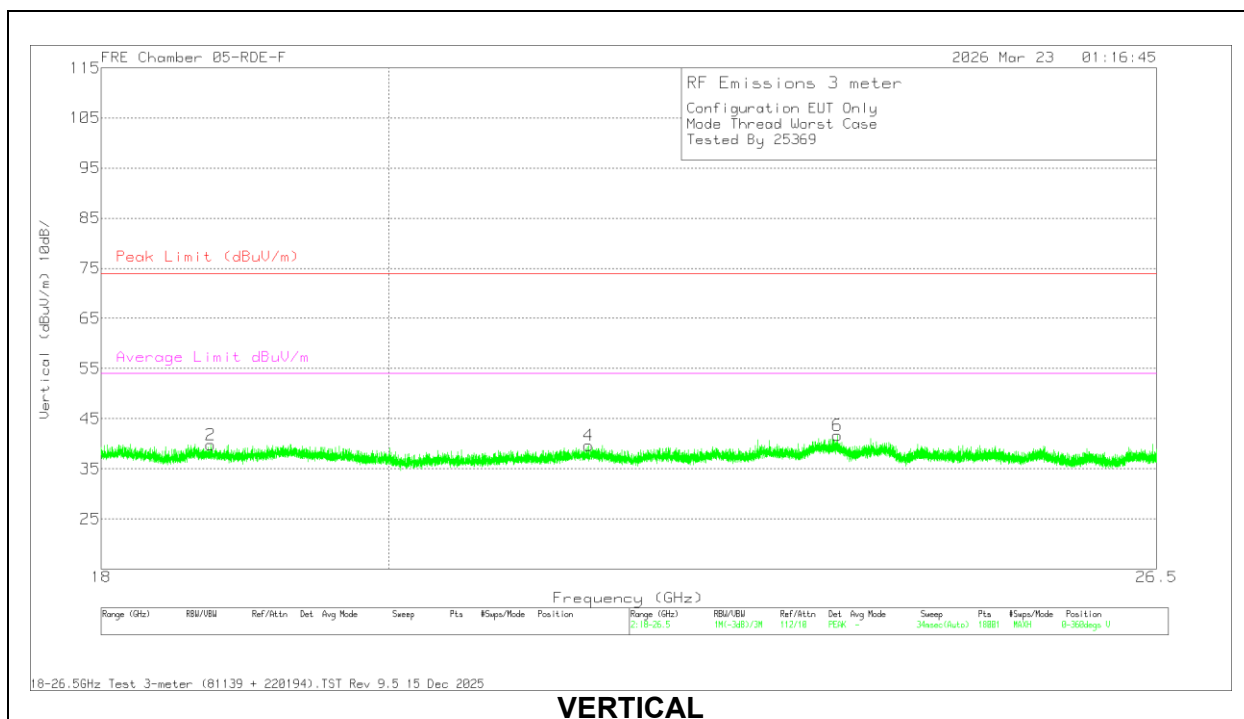
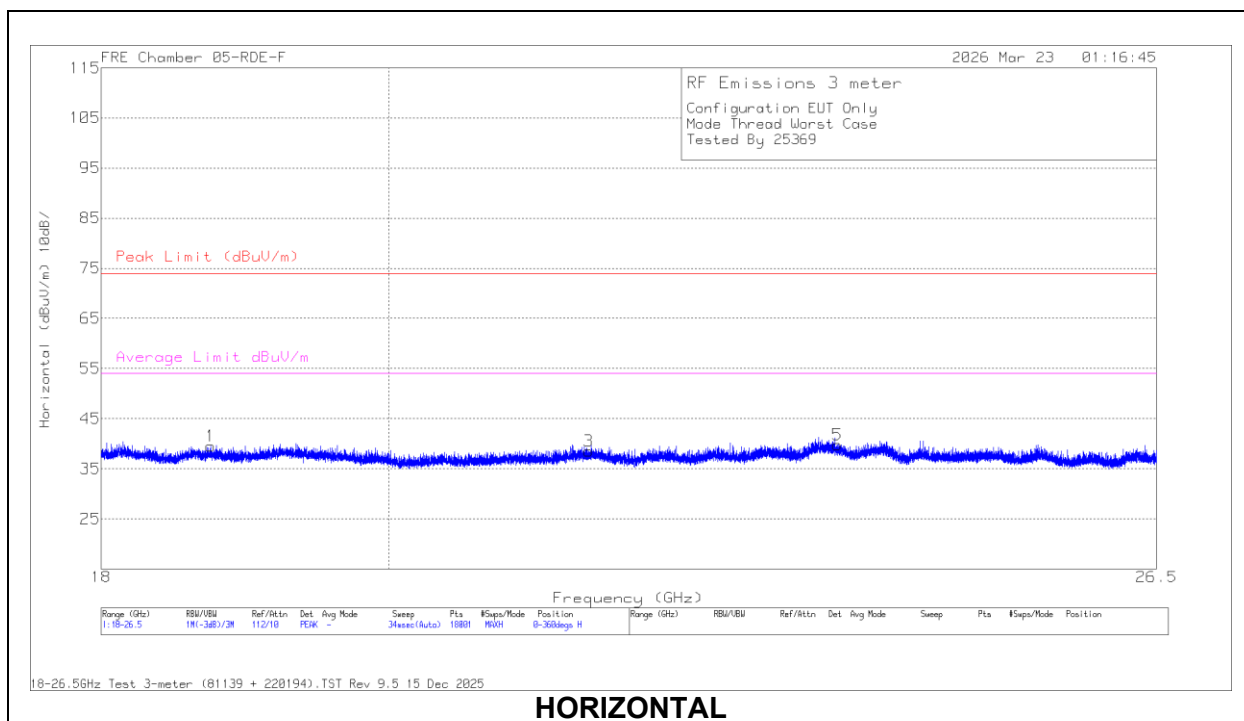
18 – 26GHz Data

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	172354 3m AF (dB/m)	18-26GHz Amp	Cables (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit dBuV/m	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 18.516139	54.2	Pk	32.2	-63.3	15.8	38.9	74	-35.1	54	-15.1	0-360	99	H
2	* 18.52275	55.41	Pk	32.2	-63.3	15.8	40.11	74	-33.89	54	-13.89	0-360	99	V
3	* 22.626831	51.55	Pk	33.1	-62.2	17.5	39.95	74	-34.05	54	-14.05	0-360	99	H
4	* 22.620692	52.58	Pk	33.1	-62.2	17.5	40.98	74	-33.02	54	-13.02	0-360	99	V
5	26.419246	50.3	Pk	34.2	-60.8	19.1	42.8	-	-	-	-	0-360	99	H
6	26.417357	50.98	Pk	34.2	-60.8	19.1	43.48	-	-	-	-	0-360	99	V

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

Pk - Peak detector

9.3.2. SPURIOUS EMISSIONS 18-26 GHz (WORST-CASE CONFIGURATION) STATE B



18 – 26GHz Data

Range 1: Horizontal 18 - 26.5GHz													
Marker	Frequency (GHz)	Marker Reading (dBm)	Det	E1139 ACF (dBm)	CELAMP (dB)	CSL (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Average Limit (dBuV/m)	Margin (dB)	Azimuth (Degree)	Height (cm)
1	* 18.736194	56.29	Pk	32.3	-62.3	13.2	39.49	74	-34.51	54	-14.51	0-360	101
3	21.523012	53.67	Pk	33.3	-62.5	14.1	38.67	74	-35.43	54	-15.43	0-360	101
5	23.575053	54.07	Pk	33.6	-62.7	14.8	39.77	74	-34.23	54	-14.23	0-360	200
2	* 18.735722	56.61	Pk	32.3	-62.3	13.2	39.81	74	-34.19	54	-14.19	0-360	200
4	21.520415	54.73	Pk	33.3	-62.5	14.1	39.63	-	-	-	-	0-360	200
6	23.577414	55.92	Pk	33.6	-62.7	14.8	41.62	-	-	-	-	0-360	101

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

Pk - Peak detector

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	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

ANSI C63.10, Subclause - 6.2

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.

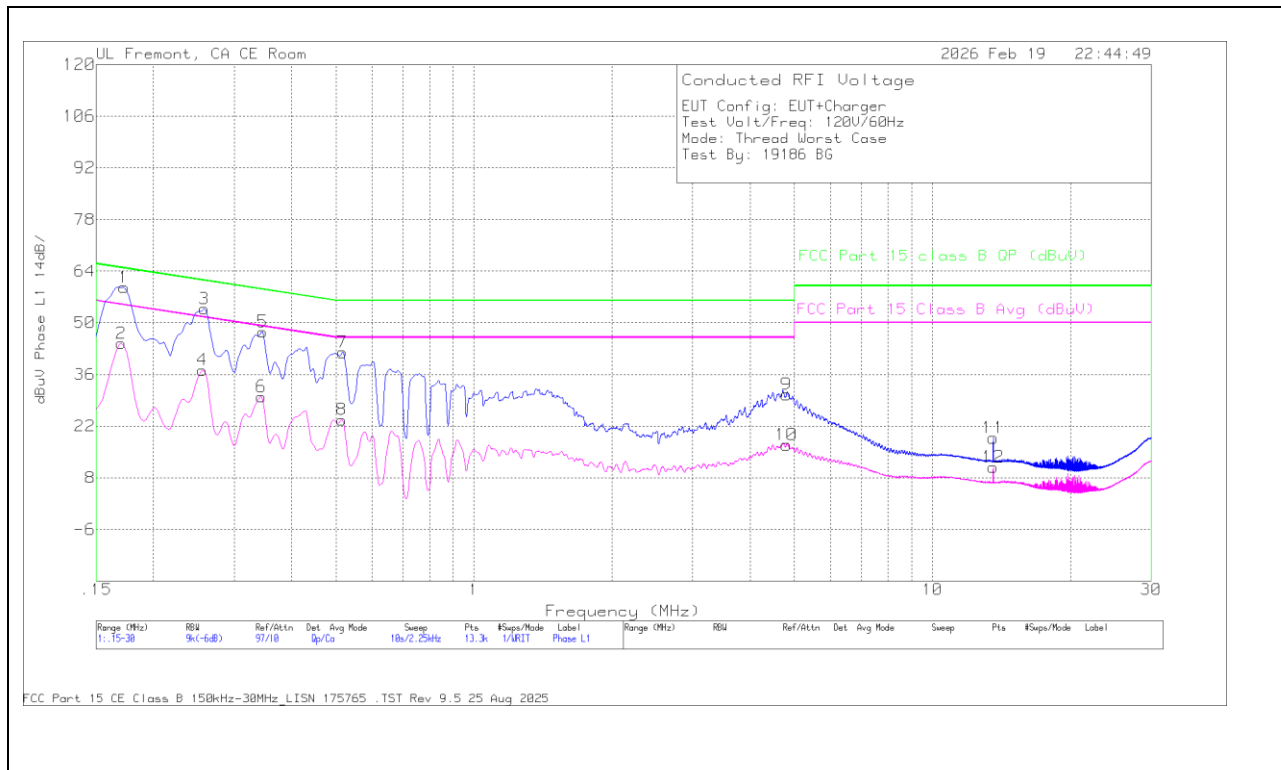
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

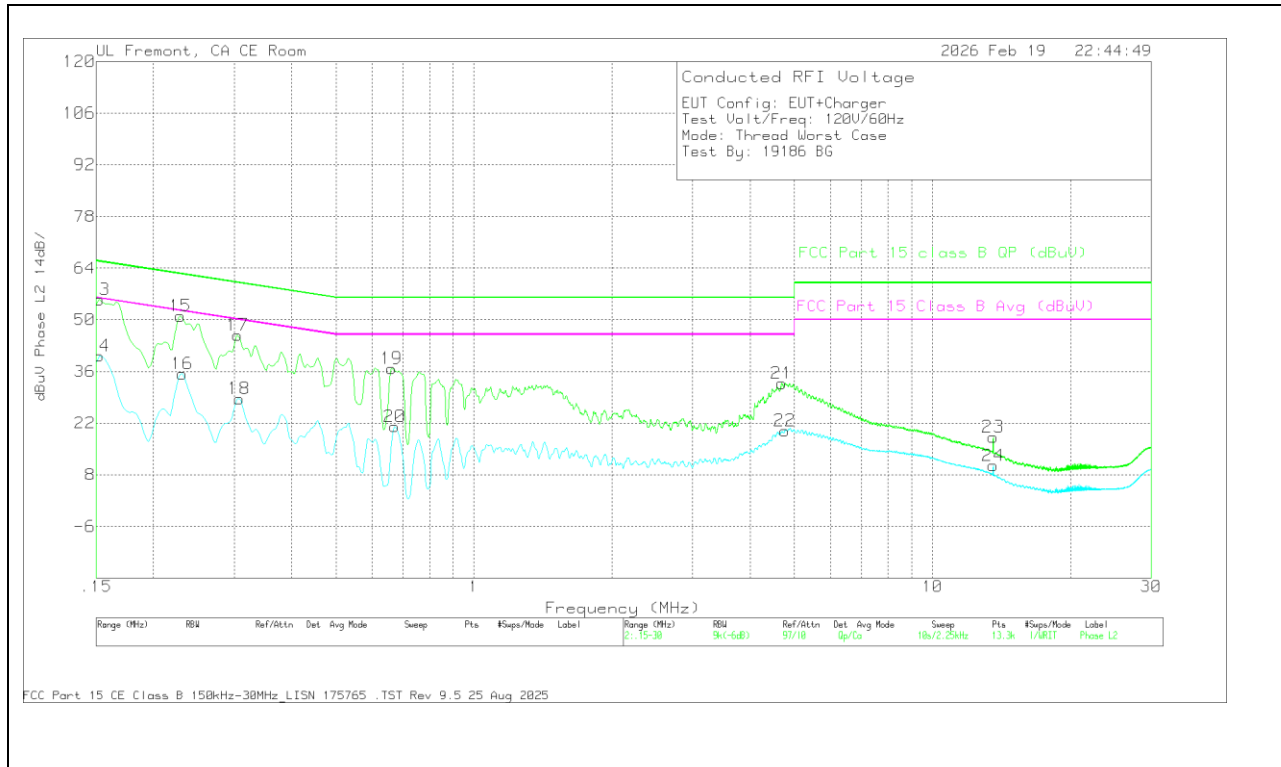
10.1. AC POWER LINE WITH AC/DC ADAPTER

LINE 1 RESULTS



Range 1: Phase L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (dB)	LISN (dB)	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	.1703	34.34	Ca	0	.1	10	44.44	54.95	-10.51	-	-
4	.2558	27.18	Ca	0	0	10	37.18	51.57	-14.39	-	-
6	.3435	19.95	Ca	0	0	10	29.95	49.12	-19.17	-	-
8	.5145	13.72	Ca	0	0	10	23.72	46	-22.28	-	-
10	4.8008	6.81	Ca	.1	0	10	16.91	46	-29.09	-	-
12	13.56	.56	Ca	.2	.1	10	10.86	50	-39.14	-	-
1	.1725	49.48	Qp	0	.1	10	59.58	-	-	64.84	-5.26
3	.258	43.8	Qp	0	0	10	53.8	-	-	61.5	-7.7
5	.3458	37.52	Qp	0	0	10	47.52	-	-	59.06	-11.54
7	.5168	32	Qp	0	0	10	42	-	-	56	-14
9	4.8008	20.46	Qp	.1	0	10	30.56	-	-	56	-25.44
11	13.56	8.49	Qp	.2	.1	10	18.79	-	-	60	-41.21

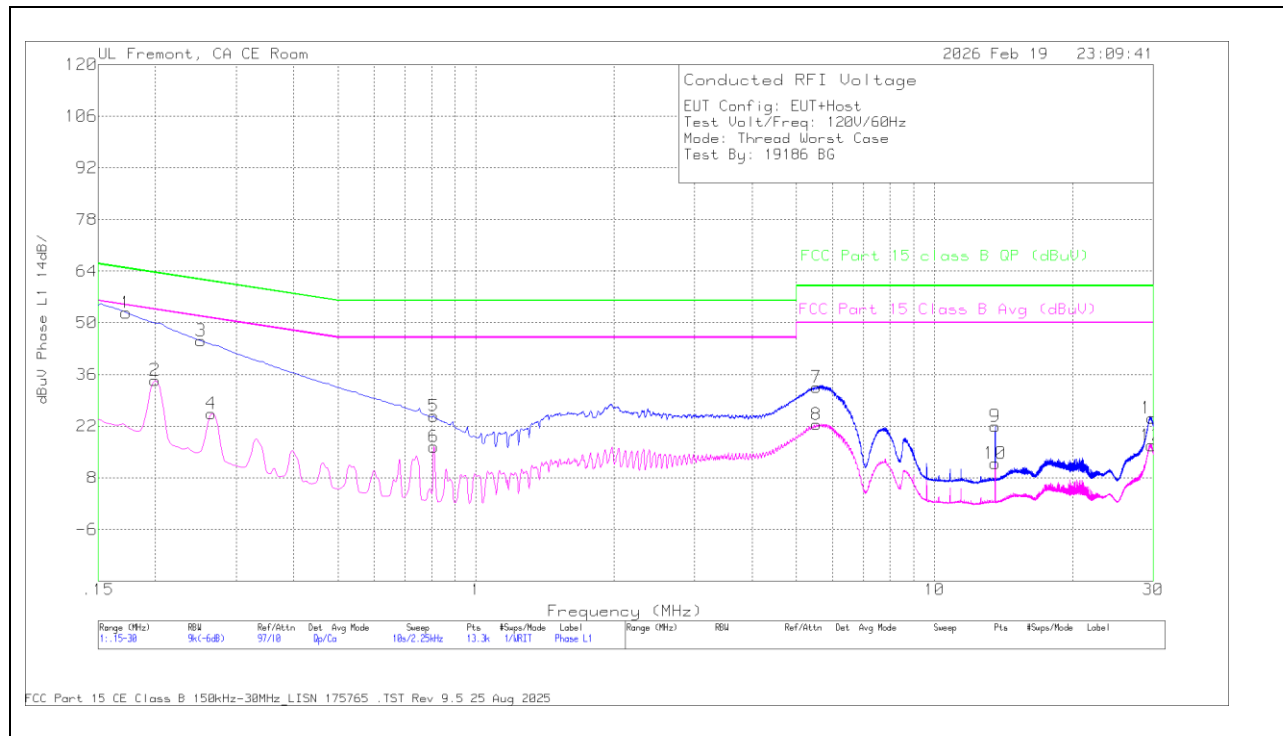
LINE 2 RESULTS



Range 2: Phase L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (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	.1523	30.11	Ca	0	.1	10	40.21	55.88	-15.67	-	-
16	.231	25.33	Ca	0	0	10	35.33	52.41	-17.08	-	-
18	.3075	18.6	Ca	0	0	10	28.6	50.04	-21.44	-	-
20	.672	10.93	Ca	.1	0	10	21.03	46	-24.97	-	-
22	4.7648	9.84	Ca	.1	0	10	19.94	46	-26.06	-	-
24	13.56	.18	Ca	.2	.1	10	10.48	50	-39.52	-	-
13	.1523	45.36	Qp	0	.1	10	55.46	-	-	65.88	-10.42
15	.2288	41.02	Qp	0	0	10	51.02	-	-	62.49	-11.47
17	.3053	35.81	Qp	0	0	10	45.81	-	-	60.1	-14.29
19	.6608	26.67	Qp	.1	0	10	36.77	-	-	56	-19.23
21	4.6928	22.57	Qp	.2	0	10	32.77	-	-	56	-23.23
23	13.56	7.92	Qp	.2	.1	10	18.22	-	-	60	-41.78

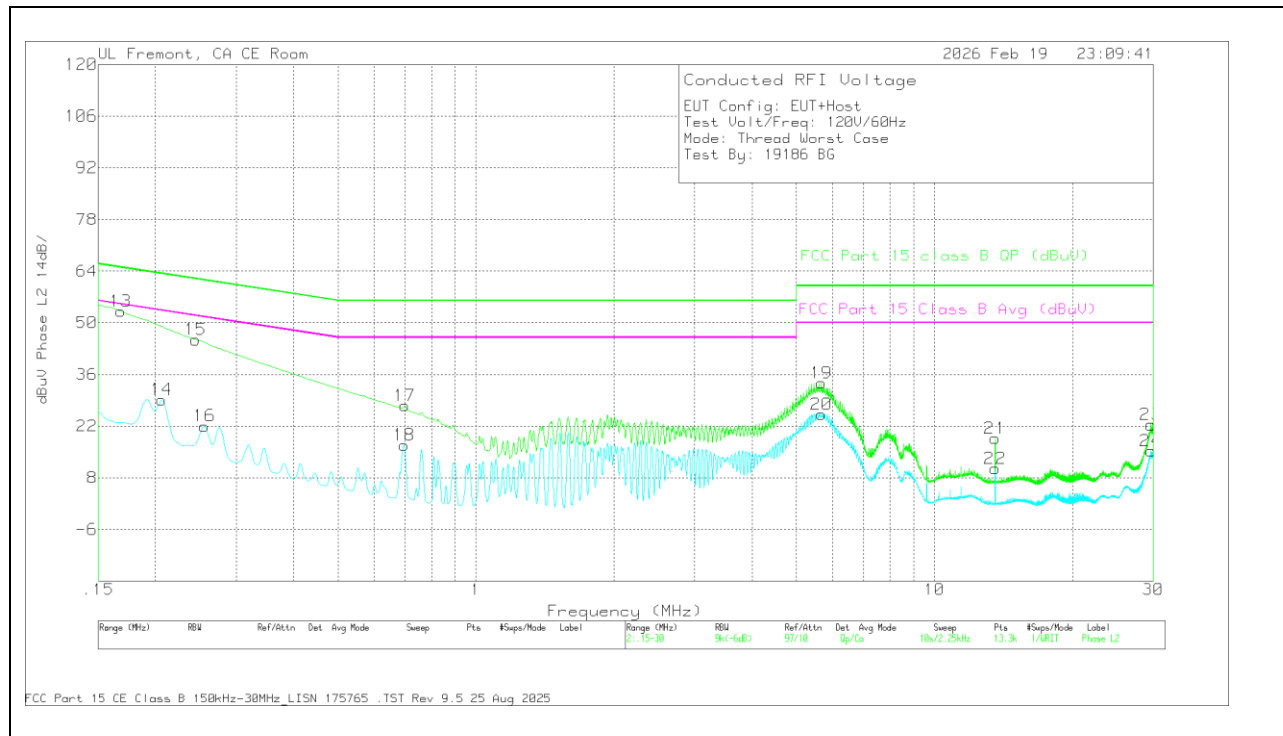
10.2. AC POWER LINE WITH LAPTOP

LINE 1 RESULTS



Range 1: Phase L1 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (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)
2	.1995	24.32	Ca	0	.1	10	34.42	53.63	-19.21	-	-
4	.2648	15.4	Ca	0	0	10	25.4	51.28	-25.88	-	-
6	.8093	6.3	Ca	.1	0	10	16.4	46	-29.6	-	-
8	5.5275	12.25	Ca	.2	0	10	22.45	50	-27.55	-	-
10	13.56	1.63	Ca	.2	.1	10	11.93	50	-38.07	-	-
12	29.7555	6.05	Ca	.4	.3	10	16.75	50	-33.25	-	-
1	.1725	42.62	Qp	0	.1	10	52.72	-	-	64.84	-12.12
3	.2513	35.13	Qp	0	0	10	45.13	-	-	61.72	-16.59
5	.8093	14.66	Qp	.1	0	10	24.76	-	-	56	-31.24
7	5.523	22.35	Qp	.2	0	10	32.55	-	-	60	-27.45
9	13.56	11.65	Qp	.2	.1	10	21.95	-	-	60	-38.05
11	29.7803	13.51	Qp	.4	.3	10	24.21	-	-	60	-35.79

LINE 2 RESULTS



Range 2: Phase L2 .15 - 30MHz											
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Cbl (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	.2063	19.14	Ca	0	0	10	29.14	53.35	-24.21	-	-
16	.2558	12	Ca	0	0	10	22	51.57	-29.57	-	-
18	.6968	6.73	Ca	.1	0	10	16.83	46	-29.17	-	-
20	5.6693	14.94	Ca	.2	0	10	25.14	50	-24.86	-	-
22	13.56	.2	Ca	.2	.1	10	10.5	50	-39.5	-	-
24	29.6565	4.64	Ca	.4	.2	10	15.24	50	-34.76	-	-
13	.168	43.01	Qp	0	.1	10	53.11	-	-	65.06	-11.95
15	.2445	35.41	Qp	0	0	10	45.41	-	-	61.94	-16.53
17	.699	17.41	Qp	.1	0	10	27.51	-	-	56	-28.49
19	5.667	23.46	Qp	.2	0	10	33.66	-	-	60	-26.34
21	13.56	8.39	Qp	.2	.1	10	18.69	-	-	60	-41.31
23	29.6565	11.76	Qp	.4	.2	10	22.36	-	-	60	-37.64

11. SETUP PHOTOS

Please refer to 16064952-EP1V1 for setup photos.

12. APPENDIX A – SPOT CHECK EVALUATION

12.1. MODEL DIFFERENCES

The manufacturer hereby declares the following for models A3447, A3719, A3720 and A3721. These models are very similar, with only the following differences.

Model	IC ID	FCC ID	Feature Difference	Sim Support	Reference Model
A3447	579C-E9188A	BCG-E9188A	-With FR2 -No LTE B11, B21	eSIM	-
A3719	579C-E9198A	BCG-E9198A	-Without FR2 -Added LTE B11, B21	eSIM	A3472
A3720	579C-E9203A	BCG-E9203A	-Without FR2 -No LTE/5GNR B14, B29, B71 -No LTE B11, B21	eSIM	
A3721	579C-E9204A	BCG-E9204A	-Without FR2 -No LTE/5GNR B14, B29, B71, B53 -No LTE B11, B21, MSS	eSIM	

Note:

- All Models use the same System, Cellular and Connectivity radio electrical schematics.
- Removal of LTE/ 5GNR bands on models either done by software or de-population of related components Please refer to data reuse test plan for details.
- All Models use the same Applications Processor and PMU.
- All Models use the same UICC hardware/software interface.
- All Models run the same Baseband firmware and iOS software.

The spot check plan 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

12.2. SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3719

A3719 SPOT CHECK RESULTS										
Equipment Class / Technology	Frequency (GHz)	Mode	Test Item	Channel	Measured Frequency (GHz)	Original Model: A3447	Sub Model: A3719	Delta (dB)	Margin	Remarks
						FCC ID : BCG-E9188A IC : 579C-E9188A	FCC ID : BCG-E9198A IC : 579C-E9198A			
DTS/Thread	2.4	2.4GHz Thread (ANT 4)	Output Power (dBm)	Mid	2.440	21.53	21.49	-0.04	-8.47	Note 1
		2.4GHz Thread (ANT 3) High Power State A	Radiated Bandedge (dBuV/m)	High	Horizontal High Bandedge AVG	44.44	43.98	-0.46	-9.56	Note 1
		Worst Case State B	RSE (dBuV/m)	Mid	30-1000MHz Vertical QP	34.17	31.73	-2.44	-5.83	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.

12.3. SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3720

A3720 SPOT CHECK RESULTS										
Equipment Class / Technology	Frequency (GHz)	Mode	Test Item	Channel	Measured Frequency (GHz)	Original Model: A3447	Sub Model: A3720	Delta (dB)	Margin	Remarks
						FCC ID : BCG-E9188A IC : 579C-E9188A	FCC ID : BCG-E9203A IC : 579C-E9203A			
DTS/Thread	2.4	2.4GHz Thread (ANT 4)	Output Power (dBm)	Mid	2.440	21.53	21.48	-0.05	0.53	Note 1
		2.4GHz Thread (ANT 3) High Power State A	Radiated Bandedge (dBuV/m)	High	Horizontal High Bandedge AVG	44.44	44.26	-0.18	-9.56	Note 1
		Worst Case State B	RSE (dBuV/m)	Mid	30-1000MHz Vertical QP	34.17	30.96	-3.21	-5.83	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.

12.4. SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3721

A3721 SPOT CHECK RESULTS										
Equipment Class / Technology	Frequency (GHz)	Mode	Test Item	Channel	Measured Frequency (GHz)	Original Model: A3447	Sub Model: A3721	Delta (dB)	Margin	Remarks
						FCC ID : BCG-E9188A IC : 579C-E9188A	FCC ID : BCG-E9204A IC : 579C-E9204A			
DTS/Thread	2.4	2.4GHz Thread (ANT 4)	Output Power (dBm)	Mid	2.440	21.53	21.51	-0.02	0.53	Note 1
		2.4GHz Thread (ANT 3) High Power State A	Radiated Bandedge (dBuV/m)	High	Horizontal High Bandedge AVG	44.44	44.27	-0.17	-9.56	Note 1
		Worst Case State B	RSE (dBuV/m)	Mid	30-1000MHz Vertical QP	34.17	34.30	0.13	-5.83	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.