

TEST REPORT

Report Number: R14641114-E3

Applicant : Axon Enterprise Inc.
17800 N. 85th Street
Scottsdale, AX 85255, USA

Model : AX1037

FCC ID : X4GS01506

IC : 8803A-S01506

EUT Description : Body Worn Camera

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C: 2023
ISED RSS-247 ISSUE 2: 2017
ISED RSS-GEN ISSUE 5 + A2: 2021

Date Of Issue:
2023-06-19

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REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2023-03-28	Initial Issue	Charles Moody
V2	2023-05-12	Updated Hardware/Firmware Information	Charles Moody
V3	2023-06-19	Updated Section 6.5 to Reflect Worst Case Testing Configuration	Charles Moody

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Axon Enterprise Inc.
17800 N. 85th Street
Scottsdale, AZ 85255, USA

EUT DESCRIPTION: Body Worn Camera

MODEL: AX1037

SERIAL NUMBER: D01A01381, D01A02481, D01A01401

SAMPLE RECEIPT DATE: 2023-03-06

DATE TESTED: 2023-03-06 TO 2023-03-24

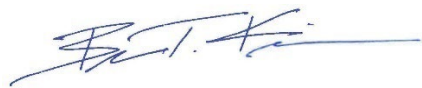
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Refer to Section 2
ISED RSS-247 Issue 2	Refer to Section 2
ISED RSS-GEN Issue 5 + A2	Refer to Section 2

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

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

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

Approved & Released For
UL LLC By:



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

Prepared By:



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

2. TEST RESULTS SUMMARY

This report contains data provided by the applicant which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer.

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

- 1) Antenna gain and type (see section 6.3)
- 2) Cable loss (see section 9.4 and 9.5)

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

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013, KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, RSS-GEN Issue 5 + A2, and RSS-247 Issue 2.

4. FACILITIES AND ACCREDITATION

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

	Address	ISED CABID	ISED Company Number	FCC Registration
<input checked="" type="checkbox"/>	Building 2800 Suite Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A	US0067	27265	825374
<input type="checkbox"/>	Building 12 Laboratory Dr RTP, NC 27709, U.S.A.		2180C	

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

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

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

$$\text{Field Strength (dBuV/m)} = \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Preamp Gain (dB)}$$

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

$$\text{Final Voltage (dBuV)} = \text{Measured Voltage (dBuV)} + \text{Cable Loss (dB)} + \text{Limiter Factor (dB)} + \text{LISN Insertion Loss}$$

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

6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The EUT is a body worn video camera that uses a rechargeable battery back. The EUT contains a BLE, BT, 2.4 WLAN, 5 WLAN, NFC, GNSS, and WWAN radio. This report covers the full testing of the 2.4 WLAN radio.

6.2. MAXIMUM OUTPUT POWER

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

2.4GHz BAND

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
1Tx			
2412 - 2462	802.11b	20.73	118.30
2412 - 2462	802.11g	25.41	347.54
2412 - 2462	802.11n HT20	22.72	187.07
2422 - 2452	802.11n HT40	22.65	184.08

6.3. DESCRIPTION OF AVAILABLE ANTENNAS

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

The radio utilizes a combination loop + IFA antenna, with a maximum gain of 1.55 dBi.

6.4. SOFTWARE AND FIRMWARE

The EUT hardware installed during testing was HW v.DVT2

The firmware version used during testing was FW v.01.01.NA.01.08

6.5. WORST-CASE CONFIGURATION AND MODE

Radiated emissions below 1GHz, above 18GHz, and power line conducted emission were performed with the EUT set to transmit at the channel with highest average output power as worst-case scenario. This was found to be 11b 1Mbps, high channel.

Radiated emissions between 1GHz and 18GHz were performed with the EUT set to transmit at the highest power on low, mid, and high channels for the worst case CCK and OFDM modulation scheme as determine by PSD. This was found to be 11b and 11g. Band edge was performed with the EUT set to transmit at the highest power on low, high, and any power stepped channels for all modulation schemes.

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

The EUT was tested in four configurations: dock charging, ac adapter charging, connected to POV camera, and battery powered, to find the worst-case emissions configuration. Through pretesting, it was determined that charging with the AC adapter was the worst-case radiated emissions and AC line configuration. Therefore, all radiated emissions, and AC line testing was performed with the EUT charging when connected to the AC adapter.

Worst-case data rates as determined by pre-testing were found to be:

802.11b mode: 1 Mbps
 802.11g mode: 54 Mbps
 802.11n HT20mode: MCS3
 802.11n HT40mode: MCS0

6.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop	Lenovo	L470	PF0ZV66P	PD98260NG
AC Adapter	Protégé	PG60-100015434-01	NA	NA

I/O CABLES

I/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	1	1	USB-C	Unshielded	<3m	Connects to AC Adapter

TEST SETUP

The EUT is connected to a support laptop and configured prior to testing. For final testing, the EUT is disconnected from the support laptop and left connected to the AC Adapter.

SETUP DIAGRAM

Please refer to R14641114-EP1 for setup diagrams

7. MEASUREMENT METHOD

On Time and Duty Cycle: ANSI C63.10, Section 11.6 : Zero-Span Spectrum Analyzer Method.

6 dB BW: ANSI C63.10 Subclause -11.8.1

Occupied BW (99%): ANSI C63.10-2013 Section 6.9.3

Output Power: ANSI C63.10 Subclause -11.9.2.3.1 Method PKPM1 Peak-reading power meter
ANSI C63.10 Subclause -11.9.2.3.2 Method AVGPM-G (Measurement using a gated RF average-reading power meter)

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

Emissions non-restricted frequency bands: ANSI C63.10 Subclause -11.11 and 6.10.4

Emissions restricted frequency bands: ANSI C63.10 Subclause -11.12.1 and 6.10.5

General Radiated Spurious Emissions: ANSI C63.10-2013 Section 6.3 to 6.6

AC Power-line conducted emissions: ANSI C63.10-2013, Section 6.2

8. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
Common Equipment					
Conducted Room 2					
HI0090	Environmental Meter	Fisher Scientific	15-077-963	2022-07-20	2023-07-20
PWM002 (PRE0137344)	RF Power Meter	Keysight Technologies	N1911A	2022-07-07	2023-07-07
PWS002	Peak and Avg Power Sensor, 50MHz to 18GHz	Keysight Technologies	N1921A	2022-09-27	2023-09-27
SA0025	Spectrum Analyzer	Keysight Technologies	N9030A	2022-05-02	2023-05-02
SOFTEMI	Antenna Port Software	UL	Version 2022.8.16	NA	NA
Additional Equipment used					
226565	SMA Coaxial 10dB Attenuator 25MHz-18GHz	CENTRICRF	C18S2-10	2023-02-16	2024-02-16
CBL101	Micro-Coax UTIFLEX Cable Assembly, Low Loss,40Ghz, 39.3", Connectors 2	Carlisle Interconnect Technologies	UFA147A-0-0180- 200200	2023-01-24	2024-01-24

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

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
CBL087	Coax cable, RG223, N-male to BNC-male, 20-ft.	Pasternack	PE3W06143-240	2022-04-05	2023-04-05
HI0091	Environmental Meter	Fisher Scientific	15-077-963	2022-07-20	2023-07-20
LISN003	LISN, 50-ohm/50-uH, 250uH 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50/250-25- 2-01	2022-08-01	2023-08-01
75141	EMI Test Receiver 9kHz- 7GHz	Rohde & Schwarz	ESCI 7	2022-08-03	2023-08-03
ATA222	Transient Limiter, 0.009- 100MHz	Electro-Metrics	EM-7600	2022-04-05	2023-04-05
PS214	AC Power Source	Elgar	CW2501M (s/n 1523A02396)	NA	NA
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
Miscellaneous (if needed)					
CDECABLE001	ANSI C63.4 1m extension cable.	UL	Per Annex B of ANSI C63.4	2022-09-12	2023-09-12

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

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	0.009-30MHz				
135144	Active Loop Antenna	ETS-Lindgren	6502	2023-01-17	2024-01-17
	30-1000 MHz				
AT0074	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2022-09-07	2023-09-07
	1-18 GHz				
206211	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2022-03-21	2023-03-21
	18-40 GHz				
204704	Horn Antenna, 18-26.5GHz	Com-Power	AH-626	2022-07-11	2023-07-11
	Gain-Loss Chains				
91975	Gain-loss string: 0.009-30MHz	Various	Various	2022-05-10	2023-05-10
91978	Gain-loss string: 25-1000MHz	Various	Various	2022-05-10	2023-05-10
91977	Gain-loss string: 1-18GHz	Various	Various	2022-05-10	2023-05-10
136042	Gain-loss string: 18-40GHz	Various	Various	2022-05-10	2023-05-10
	Receiver & Software				
197955	Spectrum Analyzer	Rohde & Schwarz	ESW44	2022-03-08	2023-03-31
SA0026	Spectrum Analyzer	Keysight	N9030A	2022-08-02	2023-08-02
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
200540	Environmental Meter	Fisher Scientific	15-077-963 s/n 181474409	2022-10-05	2023-10-05
207639	10dB, DC-18GHz, 5W	Mini-Circuits	BW-N10W5+	2022-08-11	2023-08-11

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

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	1-18 GHz				
86408	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2022-05-24	2023-05-24
	Gain-Loss Chains				
207640	Gain-loss string: 1-18GHz	Various	Various	2022-05-20	2023-05-20
	Receiver & Software				
197954	Spectrum Analyzer	Rohde & Schwarz	ESW44	2023-02-02	2024-02-02
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
21642	Environmental Meter	Fisher Scientific	15-077-963 (s/n 210701692)	2021-08-16	2023-08-16

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

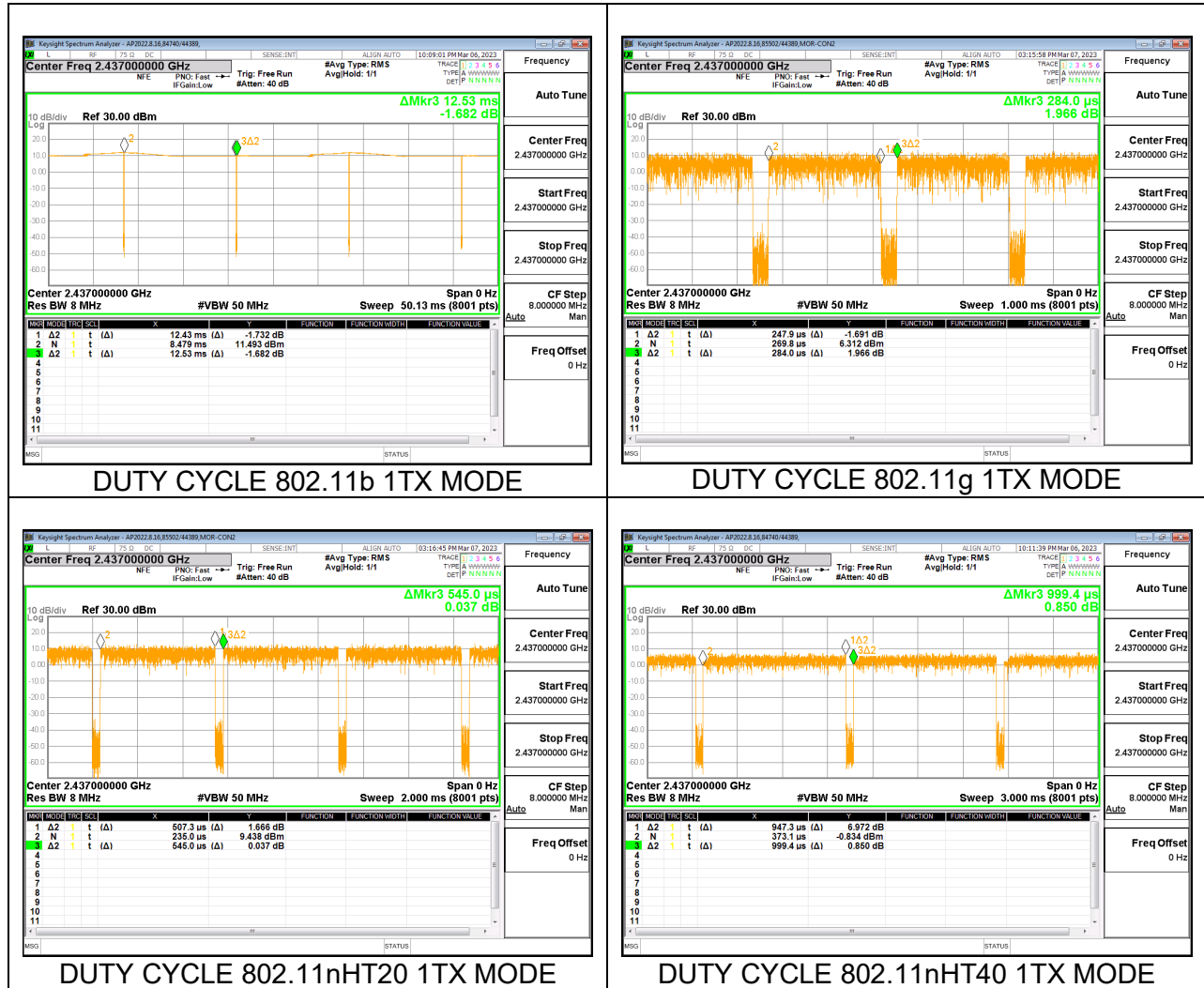
PROCEDURE

ANSI C63.10 Section 11.6

KDB 558074 Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
2.4GHz Band						
802.11b 1TX	12.430	12.530	0.992	99.20	0.00	0.010
802.11g 1TX	0.2479	0.2840	0.873	87.29	1.18	4.034
802.11n HT20 1TX	0.5073	0.5450	0.931	93.08	0.62	1.971
802.11n HT40 1TX	0.9473	0.9994	0.948	94.79	0.47	1.056



9.2. 99% BANDWIDTH

LIMITS

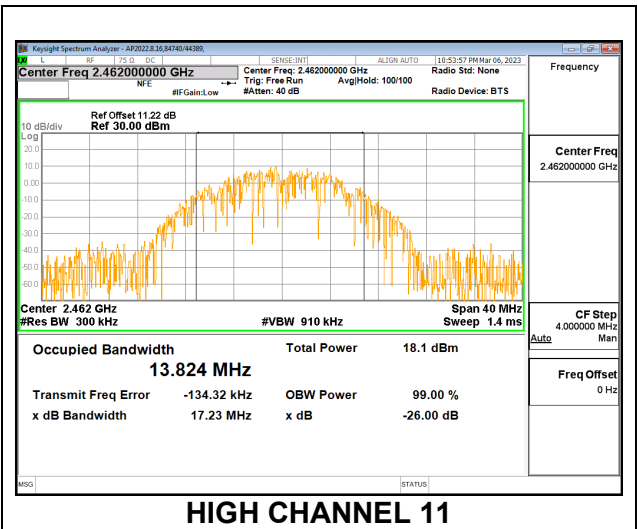
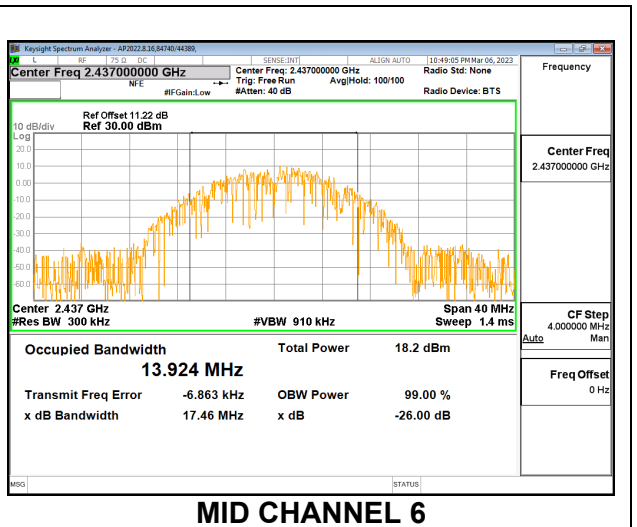
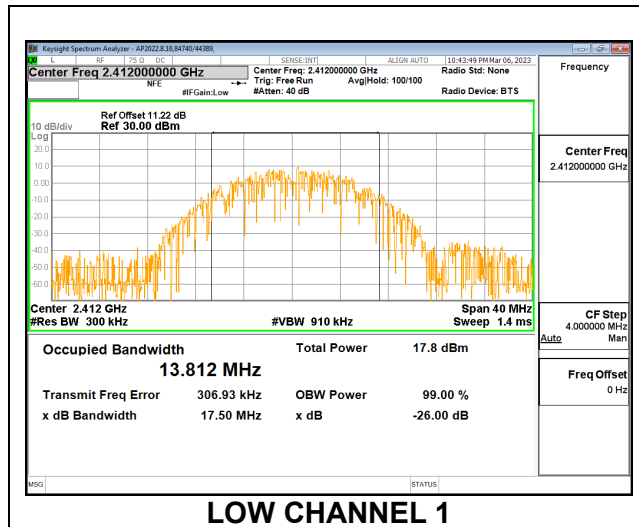
None; for reporting purposes only.

RESULTS

9.2.1. 802.11b MODE

1TX Antenna 1 MODE

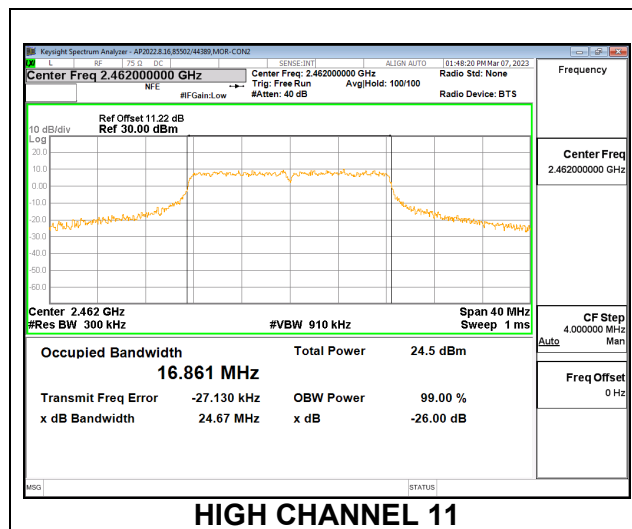
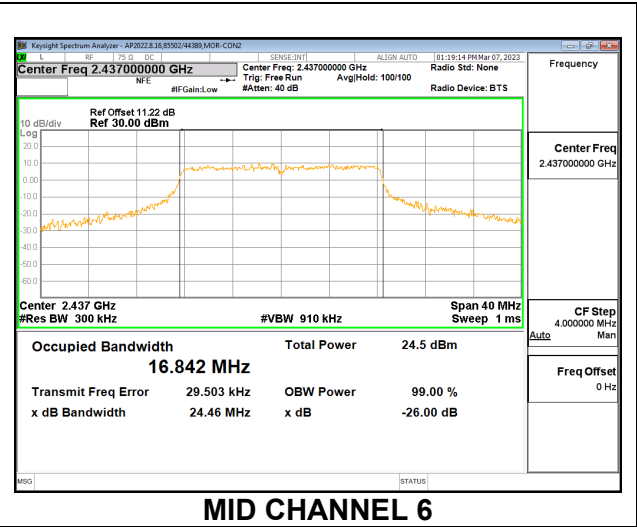
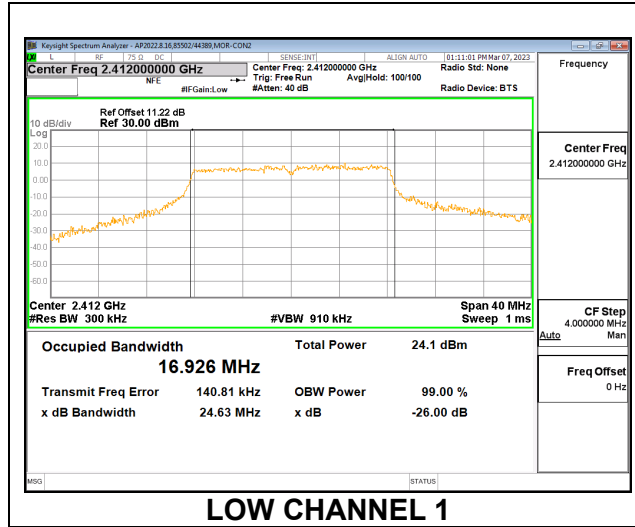
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low 1	2412	13.812
Mid 6	2437	13.924
High 11	2462	13.824



9.2.2. 802.11g MODE

1TX Antenna 1 MODE

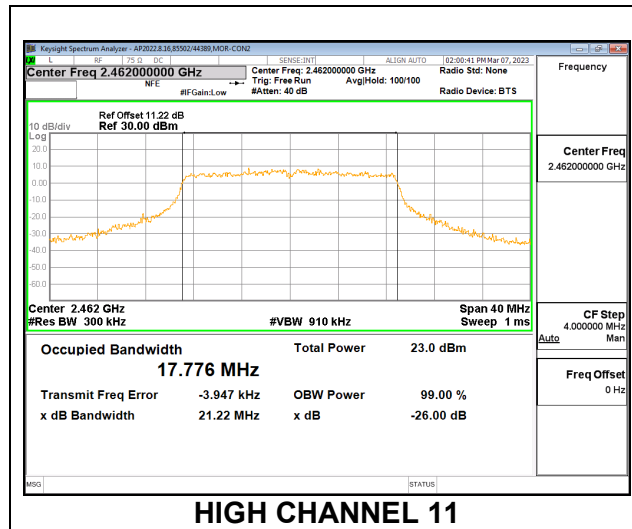
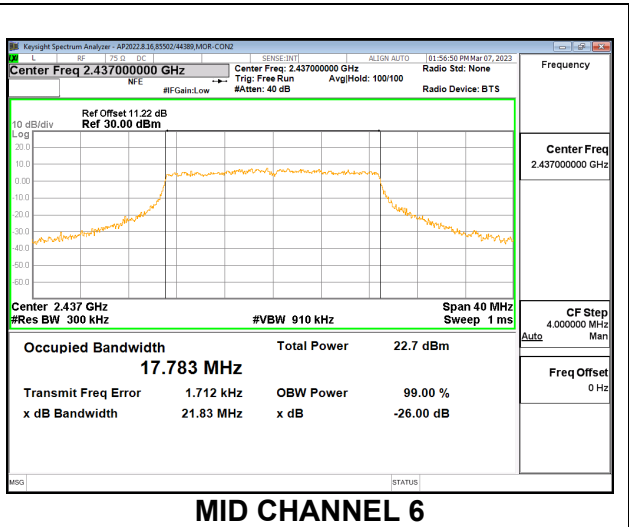
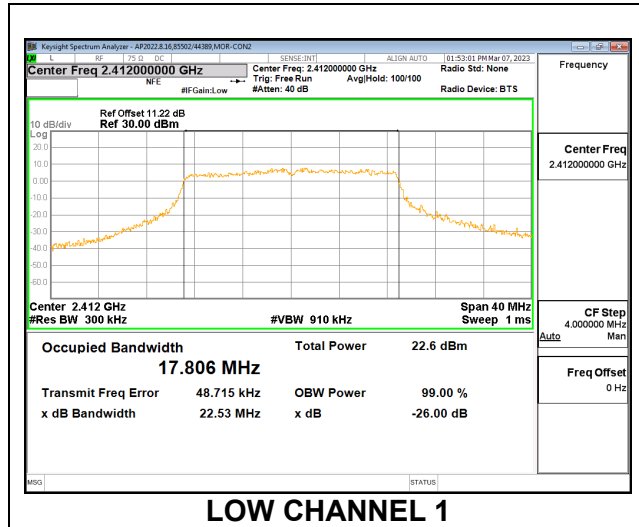
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low 1	2412	16.926
Mid 6	2437	16.842
High 11	2462	16.861



9.2.3. 802.11n HT20 MODE

1TX Antenna 1 MODE

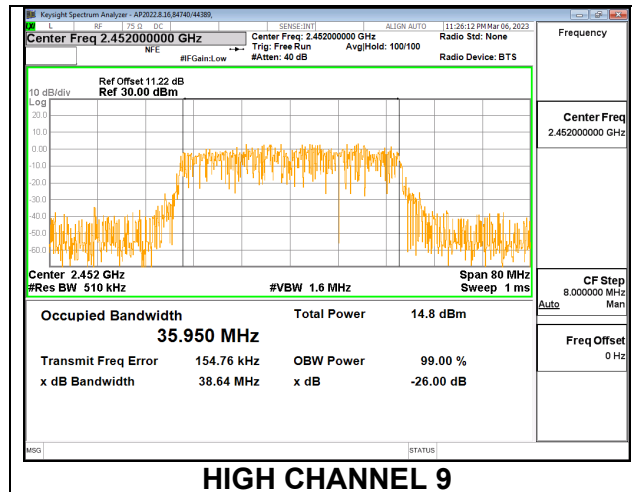
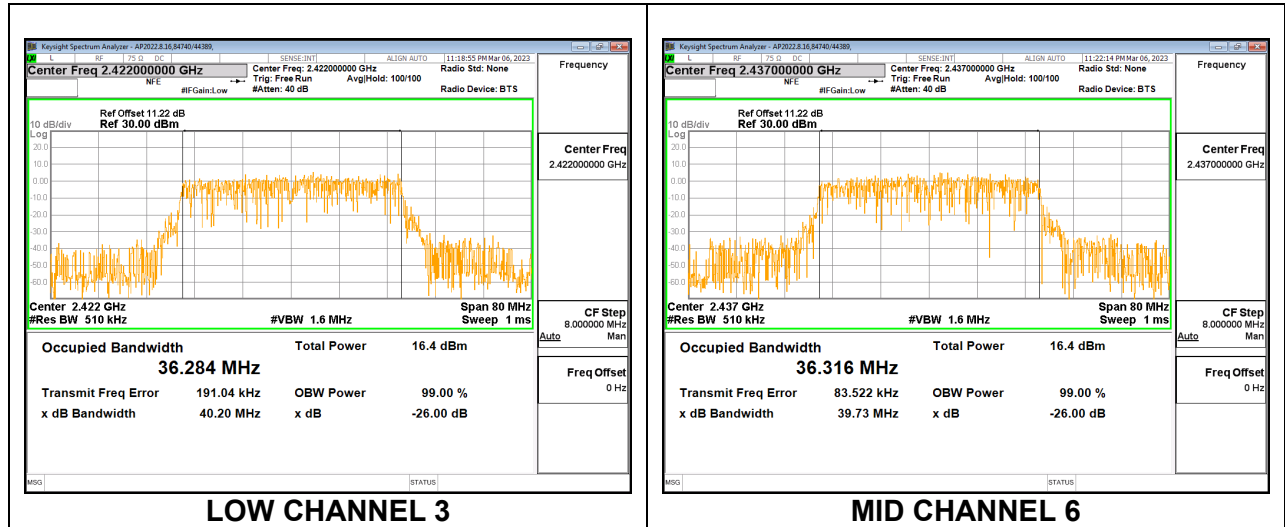
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low 1	2412	17.806
Mid 6	2437	17.783
High 11	2462	17.776



9.2.4. 802.11n HT40 MODE

1TX Antenna 1 MODE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low 3	2422	36.284
Mid 6	2437	36.316
High 9	2452	35.950



9.3. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)
RSS-247 5.2 (a)

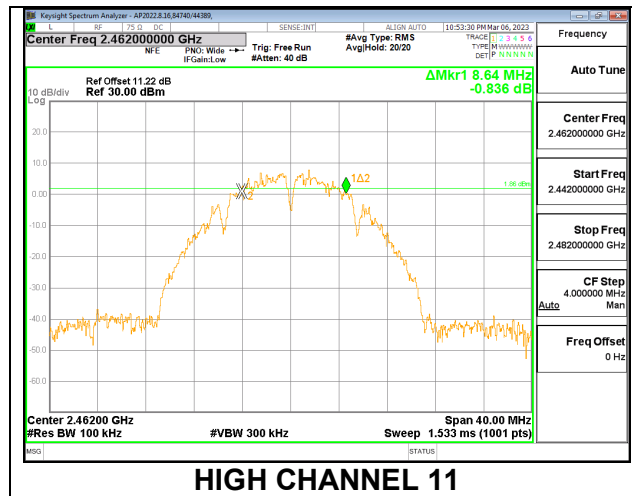
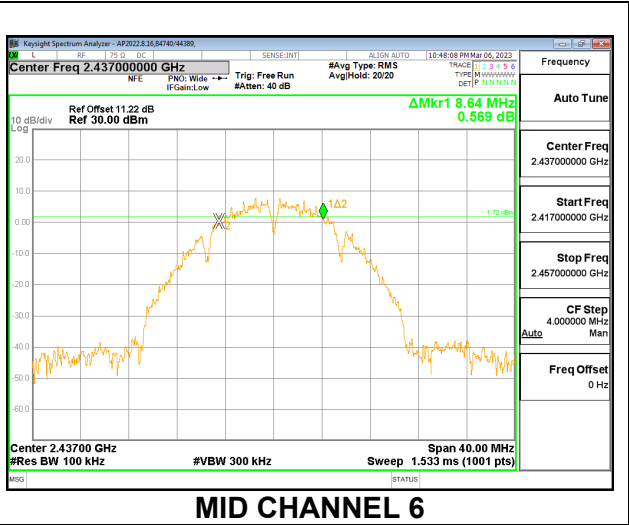
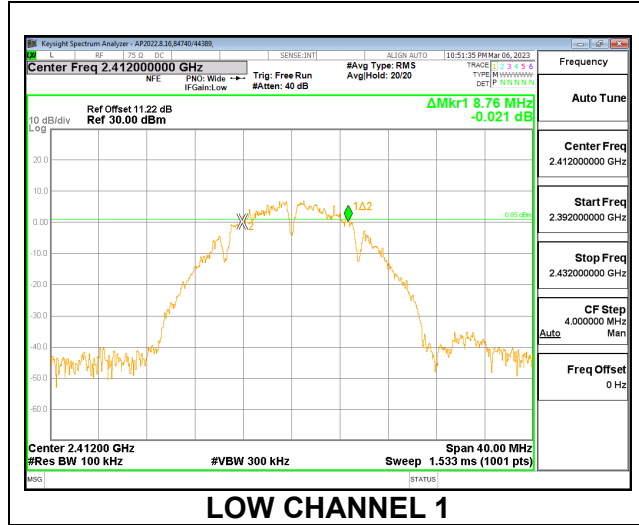
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

9.3.1. 802.11b MODE

1TX Antenna 1 MODE

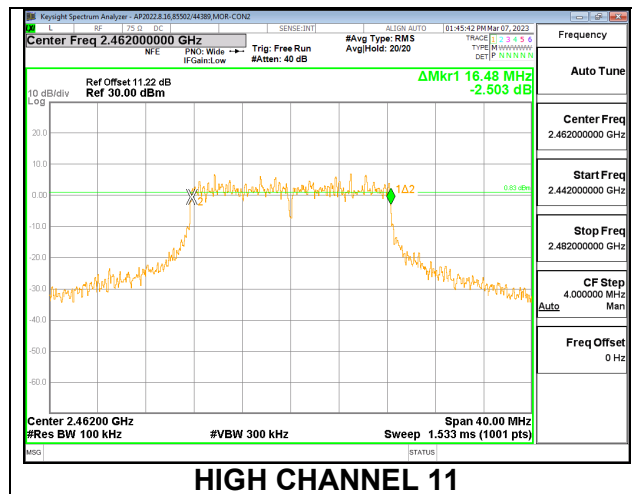
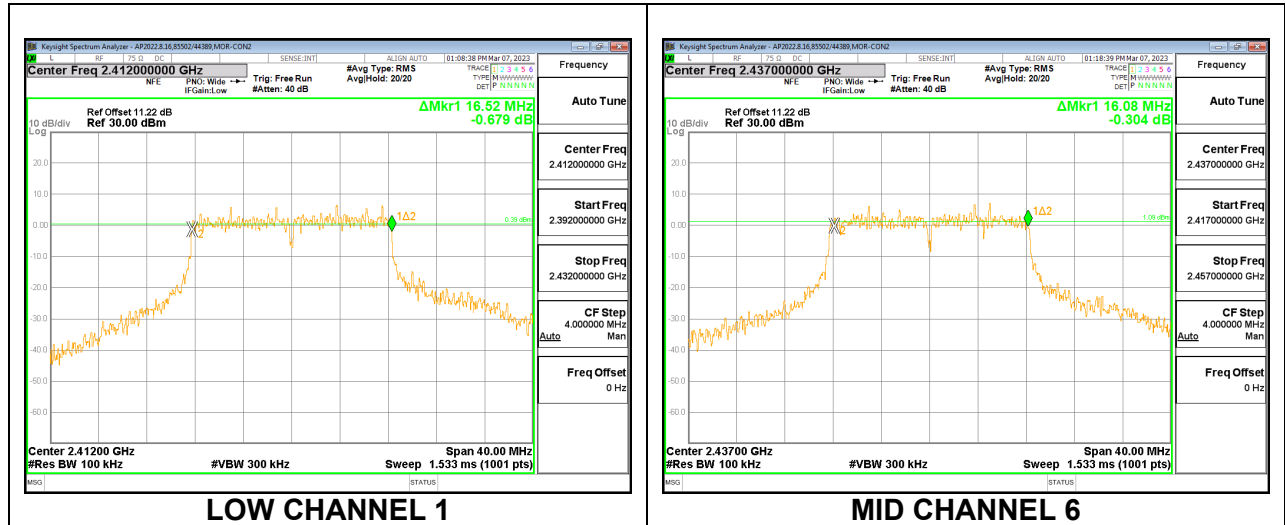
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low 1	2412	8.76	0.5
Mid 6	2437	8.64	0.5
High 11	2462	8.64	0.5



9.3.2. 802.11g MODE

1TX Antenna 1 MODE

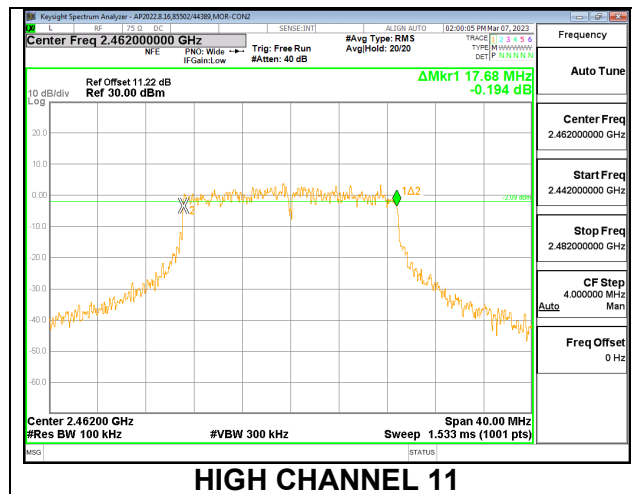
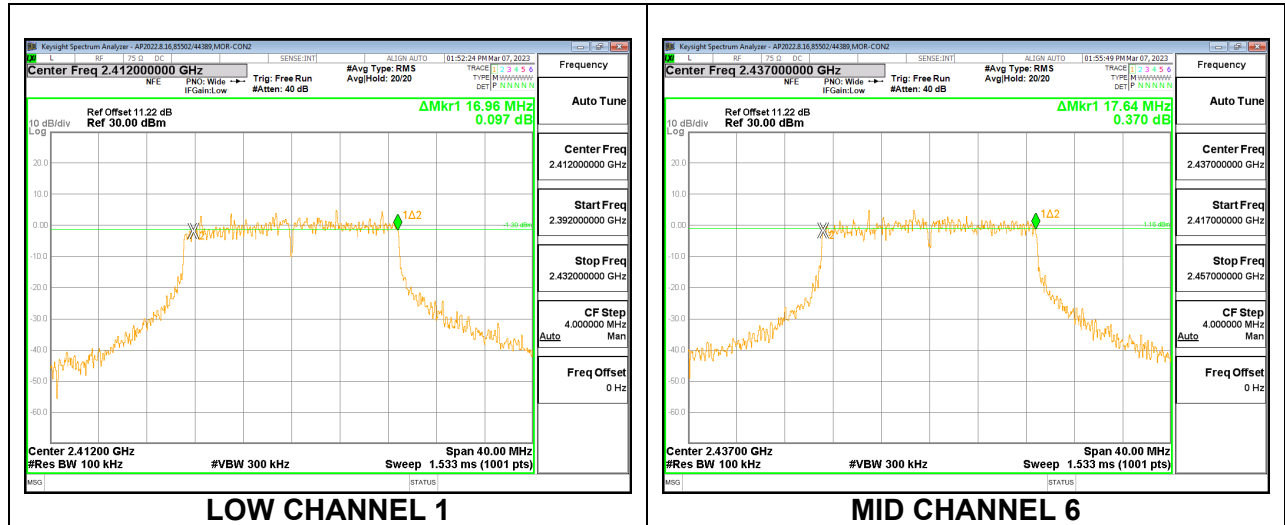
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low 1	2412	16.52	0.5
Mid 6	2437	16.08	0.5
High 11	2462	16.48	0.5



9.3.3. 802.11n HT20 MODE

1TX Antenna 1 MODE

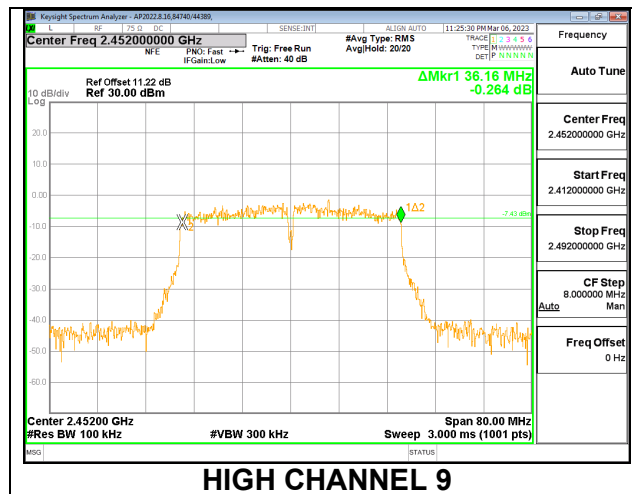
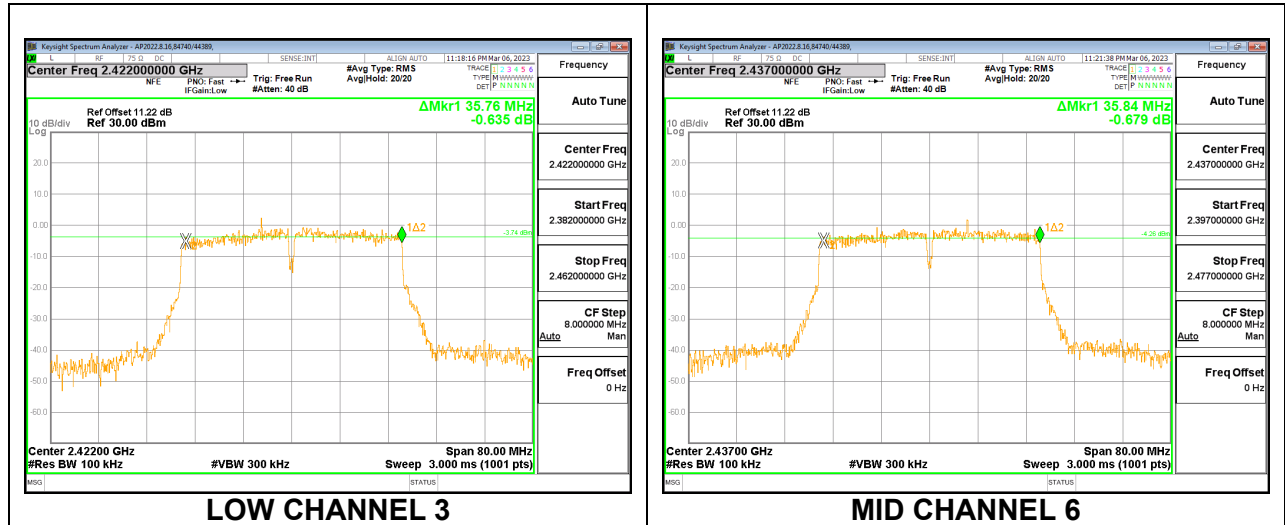
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low 1	2412	16.96	0.5
Mid 6	2437	17.64	0.5
High 11	2462	17.68	0.5



9.3.4. 802.11n HT40 MODE

1TX Antenna 1 MODE

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low 3	2422	35.76	0.5
Mid 6	2437	35.84	0.5
High 9	2452	36.16	0.5



9.4. OUTPUT POWER

LIMITS

FCC §15.247 (b) (3)
RSS-247 5.4 (d)

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.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11.22 dB (including 9.68 dB pad, a 1 dB EUT cable, and a 0.54 dB test cable) was entered as an offset in the power meter.

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

RESULTS

9.4.1. 802.11b MODE

1TX Antenna 1 MODE

Tested By:	84740/44389
Date:	2023-03-06

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low 1	2412	20.30	30	-9.700
Middle 6	2437	20.36	30	-9.640
High 11	2462	20.73	30	-9.270

9.4.2. 802.11g MODE

1TX Antenna 1 MODE

Tested By:	84740/44389
Date:	2023-03-06

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low 1	2412	24.91	30	-5.090
Middle 6	2437	25.41	30	-4.590
High 10	2457	25.06	30	-4.940
High 11	2462	24.85	30	-5.150

9.4.3. 802.11n HT20 MODE

1TX Antenna 1 MODE

Tested By:	84740/44389
Date:	2023-03-06

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low 1	2412	22.33	30	-7.670
Middle 6	2437	22.52	30	-7.480
High 11	2462	22.72	30	-7.280

9.4.4. 802.11n HT40 MODE

1TX Antenna 1 MODE

Tested By:	84740/44389
Date:	2023-03-06

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low 3	2422	22.31	30	-7.690
Middle 6	2437	22.26	30	-7.740
High 8	2447	22.65	30	-7.350
High 9	2452	20.69	30	-9.310

9.5. AVERAGE POWER

LIMITS

None; for reporting purposes only

TEST PROCEDURE

The cable assembly insertion loss of 11.22 dB (including 9.68 dB pad, a 1 dB EUT cable, and a 0.54 dB test cable) was entered as an offset in the power meter.

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

RESULTS

9.5.1. 802.11b MODE

1TX Antenna 1 MODE

Tested By:	84740/44389
Date:	2023-03-06

Channel	Frequency (MHz)	AV power (dBm)
Low 1	2412	18.00
Middle 6	2437	18.02
High 11	2462	18.30

9.5.2. 802.11g MODE

1TX Antenna 1 MODE

Tested By:	84740/44389
Date:	2023-03-06

Channel	Frequency (MHz)	AV power (dBm)
Low 1	2412	17.84
Middle 6	2437	17.97
High 10	2457	17.45
High 11	2462	16.12

9.5.3. 802.11n HT20 MODE

1TX Antenna 1 MODE

Tested By:	84740/44389
Date:	2023-03-06

Channel	Frequency (MHz)	AV power (dBm)
Low 1	2412	16.25
Middle 6	2437	16.40
High 11	2462	16.74

9.5.4. 802.11n HT40 MODE

1TX Antenna 1 MODE

Tested By:	84740/44389
Date:	2023-03-06

Channel	Frequency (MHz)	AV power (dBm)
Low 3	2412	16.28
Middle 6	2437	16.33
High 8	2447	16.40
High 9	2452	14.44

9.6. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (e)
RSS-247 (5.2) (b)

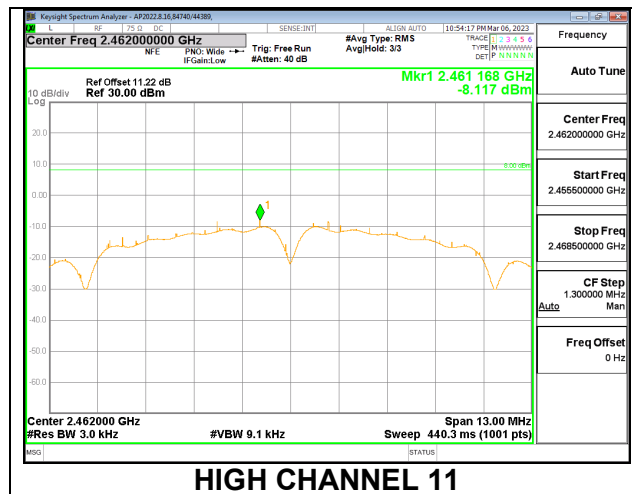
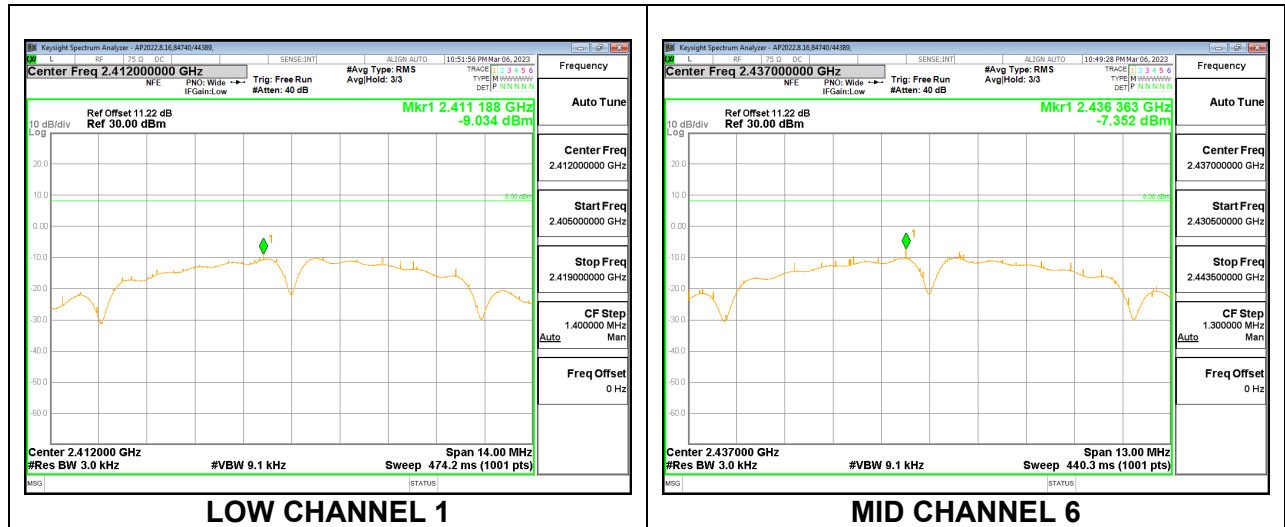
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

RESULTS

9.6.1. 802.11b MODE

1TX Antenna 1 MODE

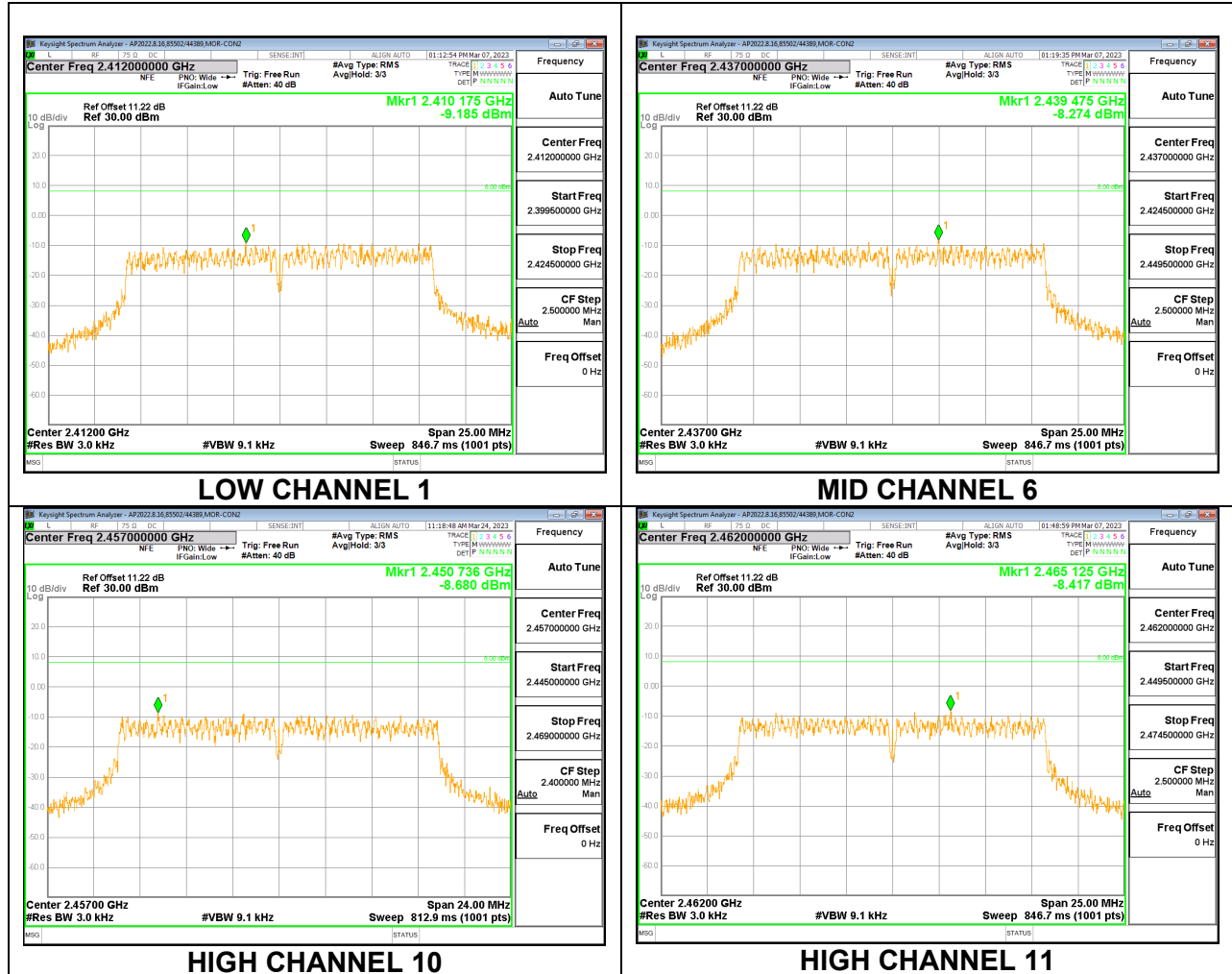
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low 1	2412	-9.034	8	-17.03
Middle 6	2437	-7.352	8	-15.35
High 11	2462	-8.117	8	-16.12



9.6.2. 802.11g MODE

1TX Antenna 1 MODE

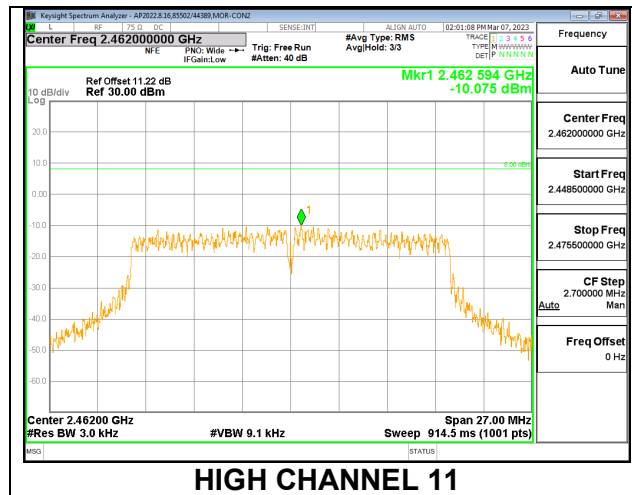
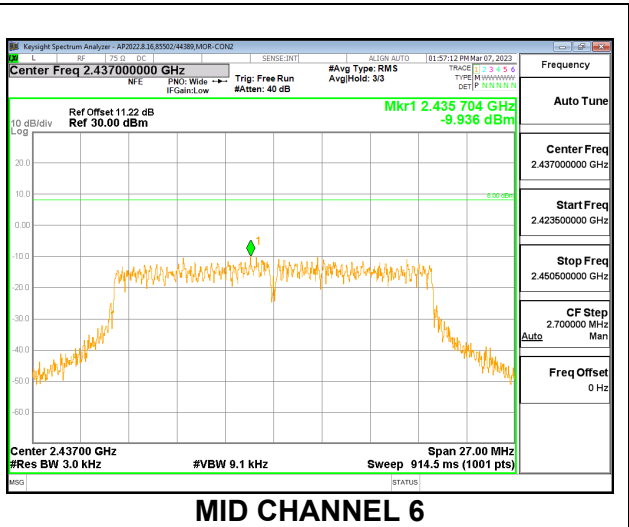
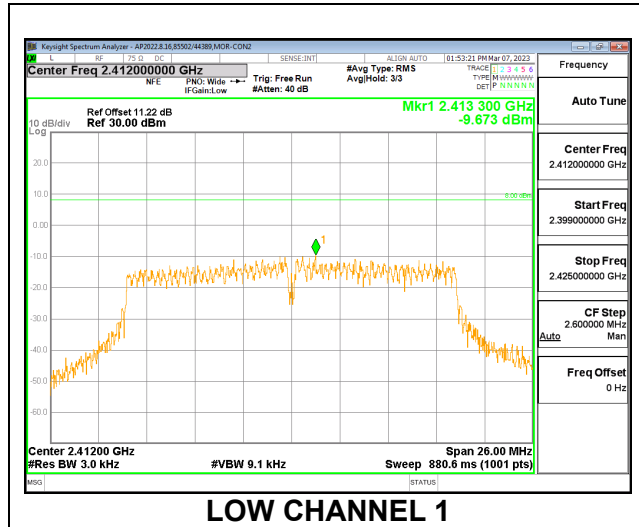
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low 1	2412	-9.185	8	-17.19
Middle 6	2437	-8.274	8	-16.27
High 10	2457	-8.680	8	-16.68
High 11	2462	-8.417	8	-16.42



9.6.3. 802.11n HT20 MODE

1TX Antenna 1 MODE

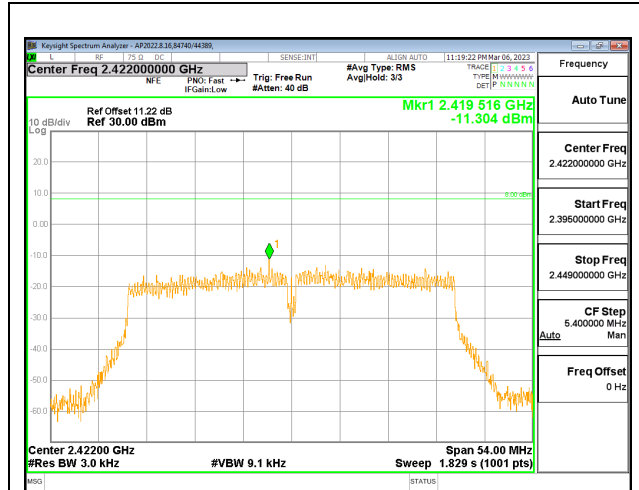
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low 1	2412	-9.673	8	-17.67
Middle 6	2437	-9.936	8	-17.94
High 11	2462	-10.075	8	-18.08



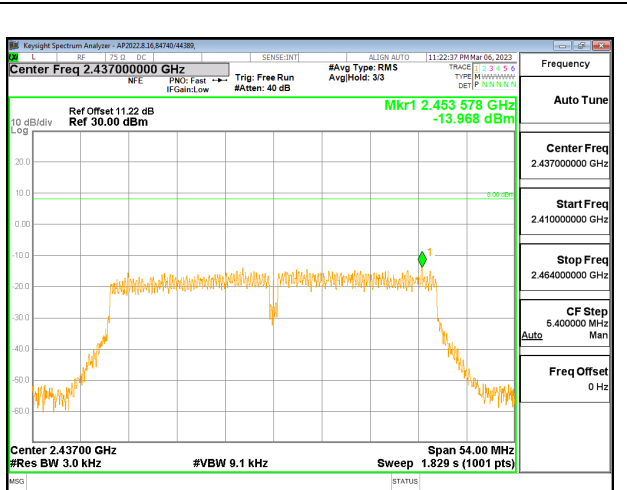
9.6.4. 802.11n HT40 MODE

1TX Antenna 1 MODE

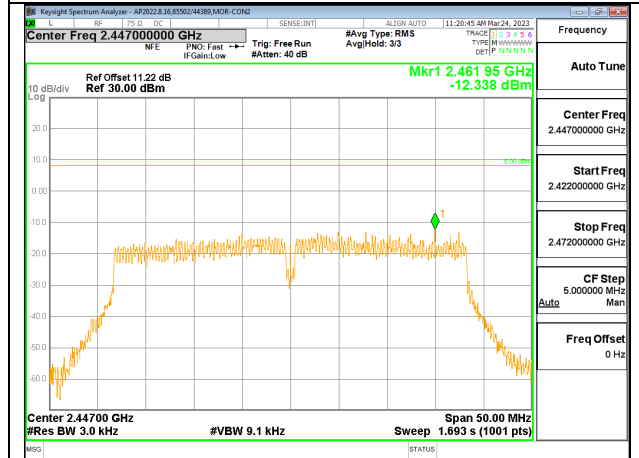
Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Margin (dB)
Low 3	2422	-11.304	8	-19.30
Middle 6	2437	-13.968	8	-21.97
High 8	2447	-12.338	8	-20.34
High 9	2452	-14.797	8	-22.80



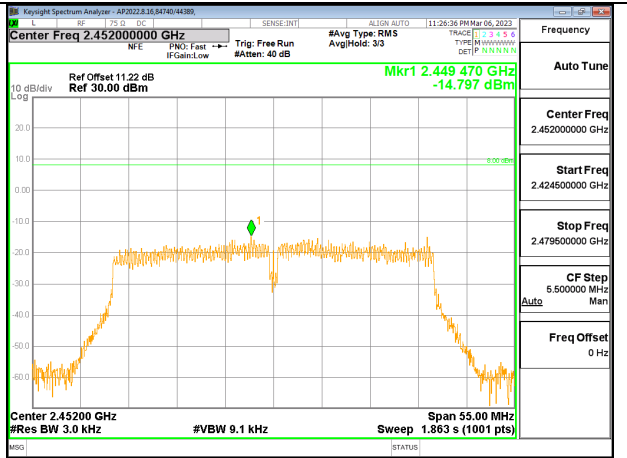
LOW CHANNEL 3



MID CHANNEL 6



HIGH CHANNEL 8



HIGH CHANNEL 9

9.7. CONDUCTED SPURIOUS EMISSIONS

LIMITS

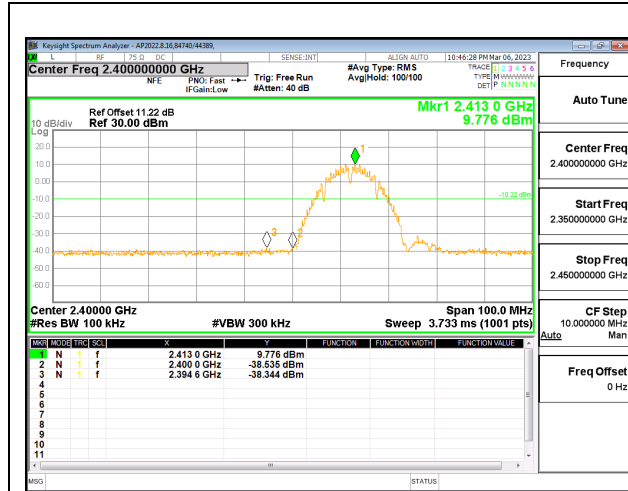
FCC §15.247 (d)
RSS-247 5.5

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

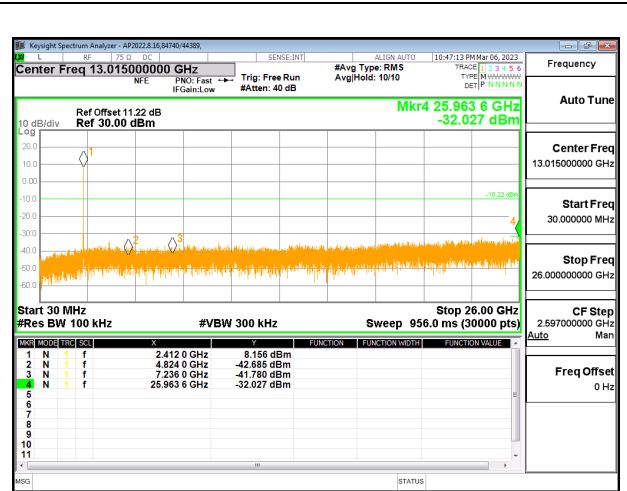
RESULTS

9.7.1. 802.11b MODE

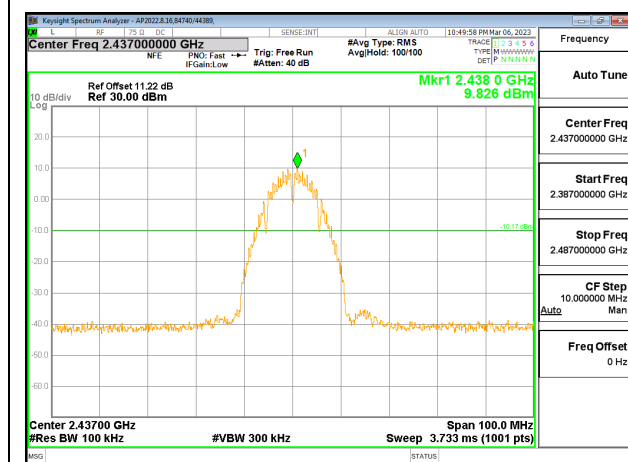
1TX Antenna 1 MODE



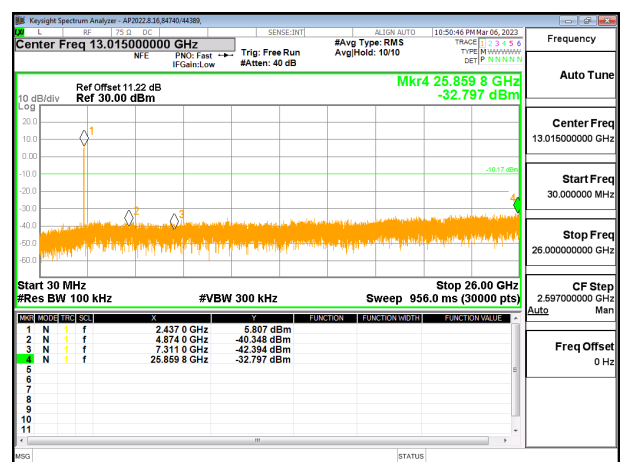
LOW CHANNEL 1 BANDEDGE



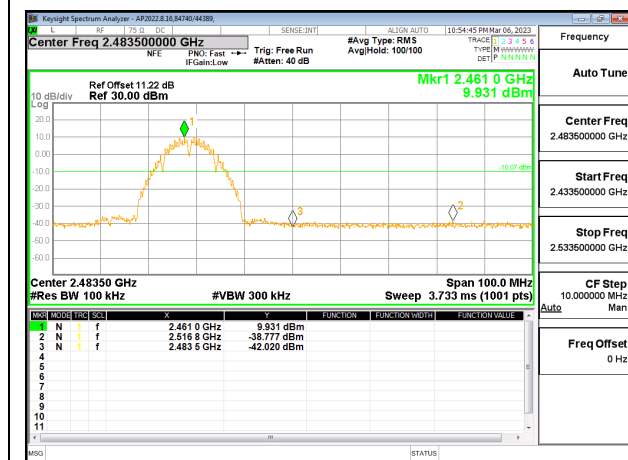
OUT-OF-BAND LOW CHANNEL 1



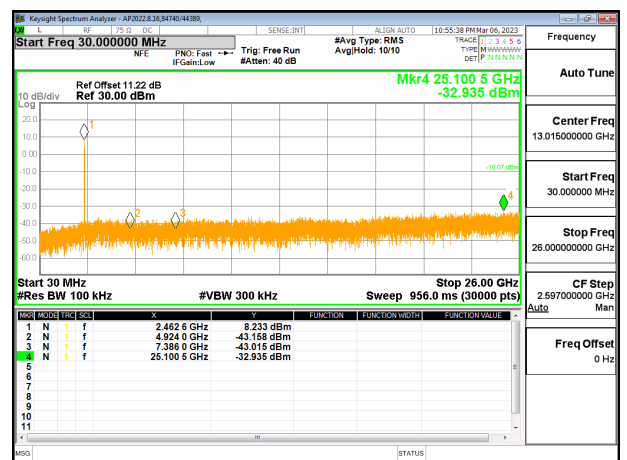
IN-BAND REFERENCE LEVEL



OUT-OF-BAND MID CHANNEL



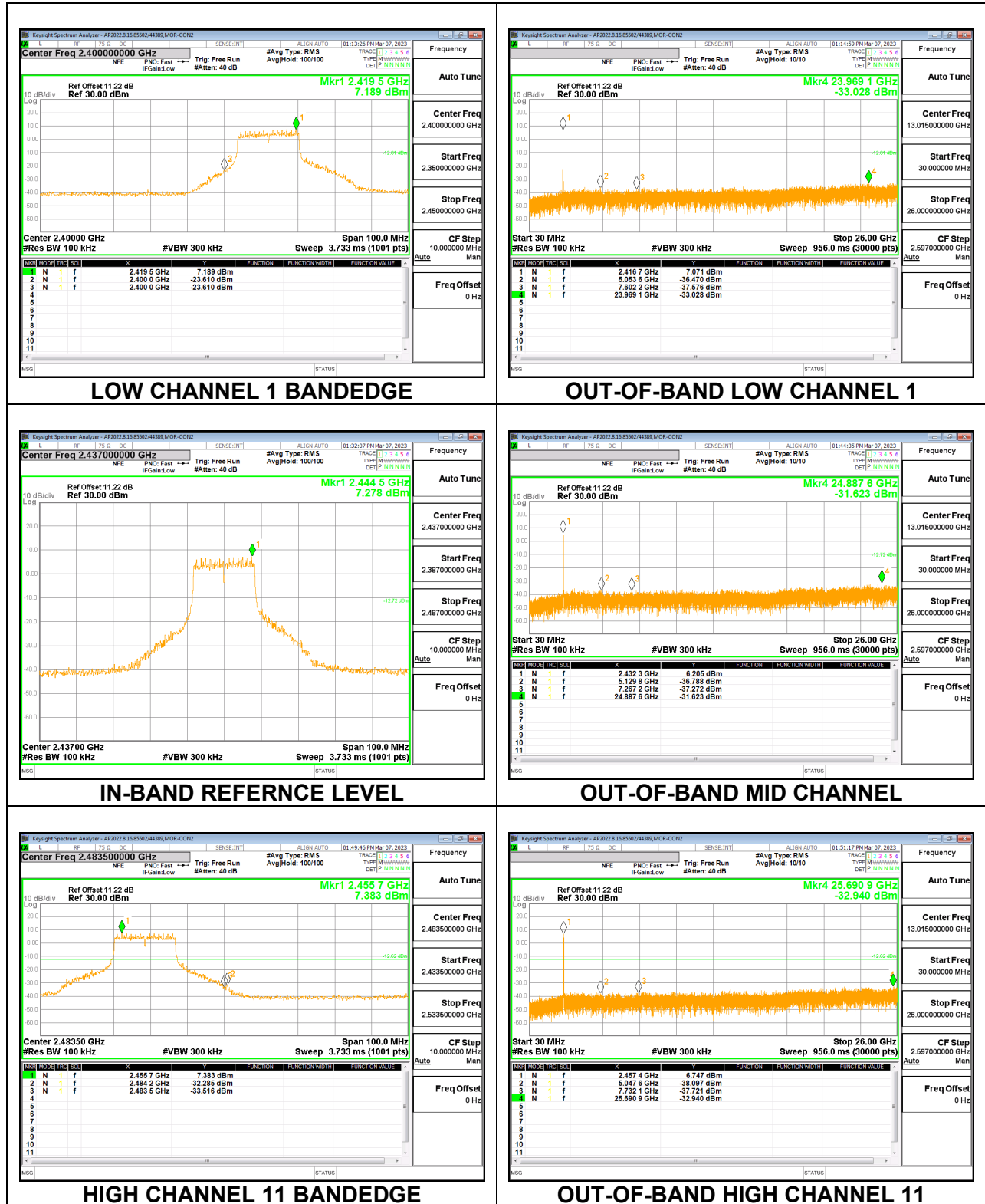
HIGH CHANNEL 11 BANDEDGE



OUT-OF-BAND HIGH CHANNEL 11

9.7.2. 802.11g MODE

1TX Antenna 1 MODE



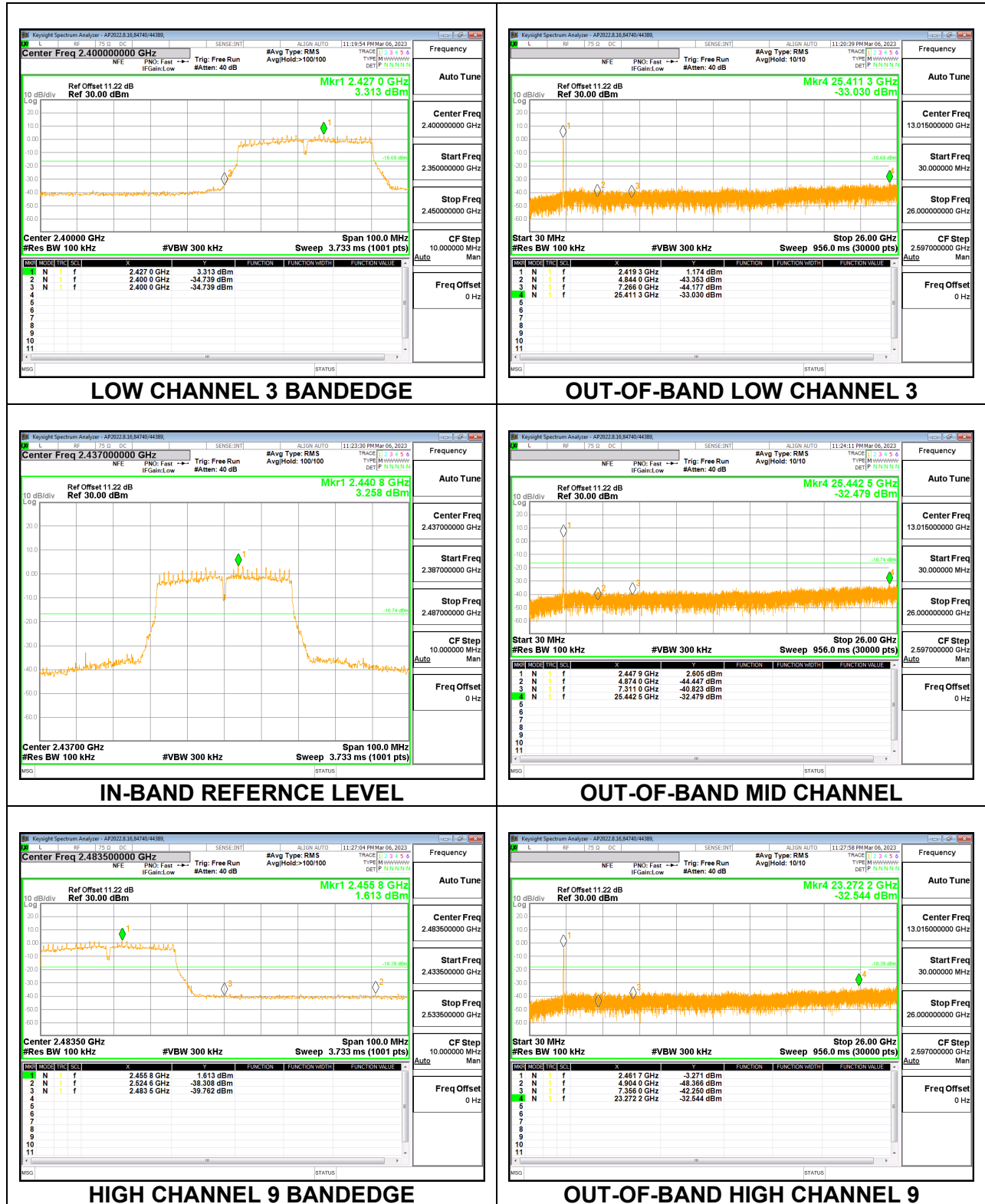
9.7.3. 802.11n HT20 MODE

1TX Antenna 1 MODE



9.7.4. 802.11n HT40 MODE

1TX Antenna 1 MODE



10. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209

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

RSS-GEN, Section 8.9 and 8.10

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

TEST PROCEDURE

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

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

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

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

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

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

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.

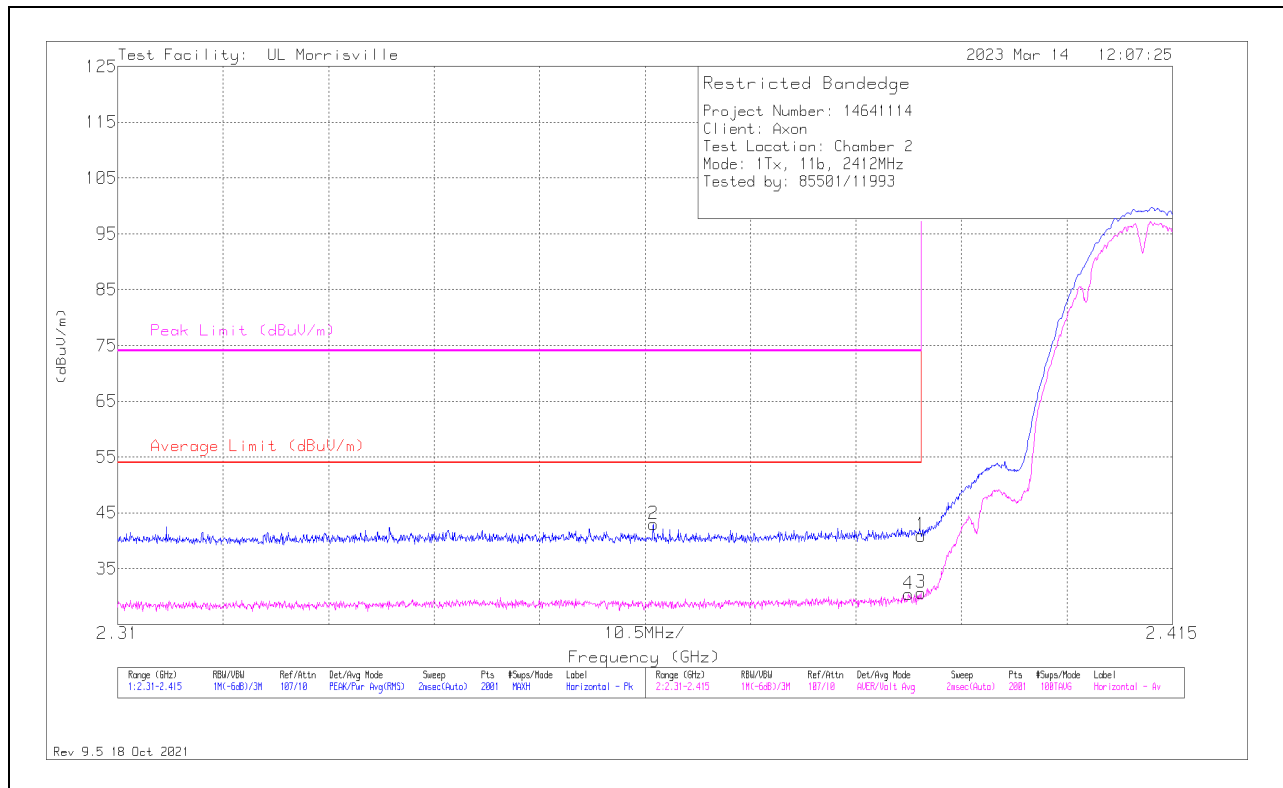
10.1. TRANSMITTER ABOVE 1 GHz

10.1.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND

1TX Antenna 1 MODE

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.38996	32.72	Pk	32	-23.8	0	40.92	-	-	74	-33.08	199	113	H
2	* ** 2.36334	35.06	Pk	32	-24.1	0	42.96	-	-	74	-31.04	199	113	H
3	* ** 2.38996	22.46	ADV	32	-23.8	0	30.66	54	-23.34	-	-	199	113	H
4	* ** 2.38875	22.26	ADV	32	-23.8	0	30.46	54	-23.54	-	-	199	113	H

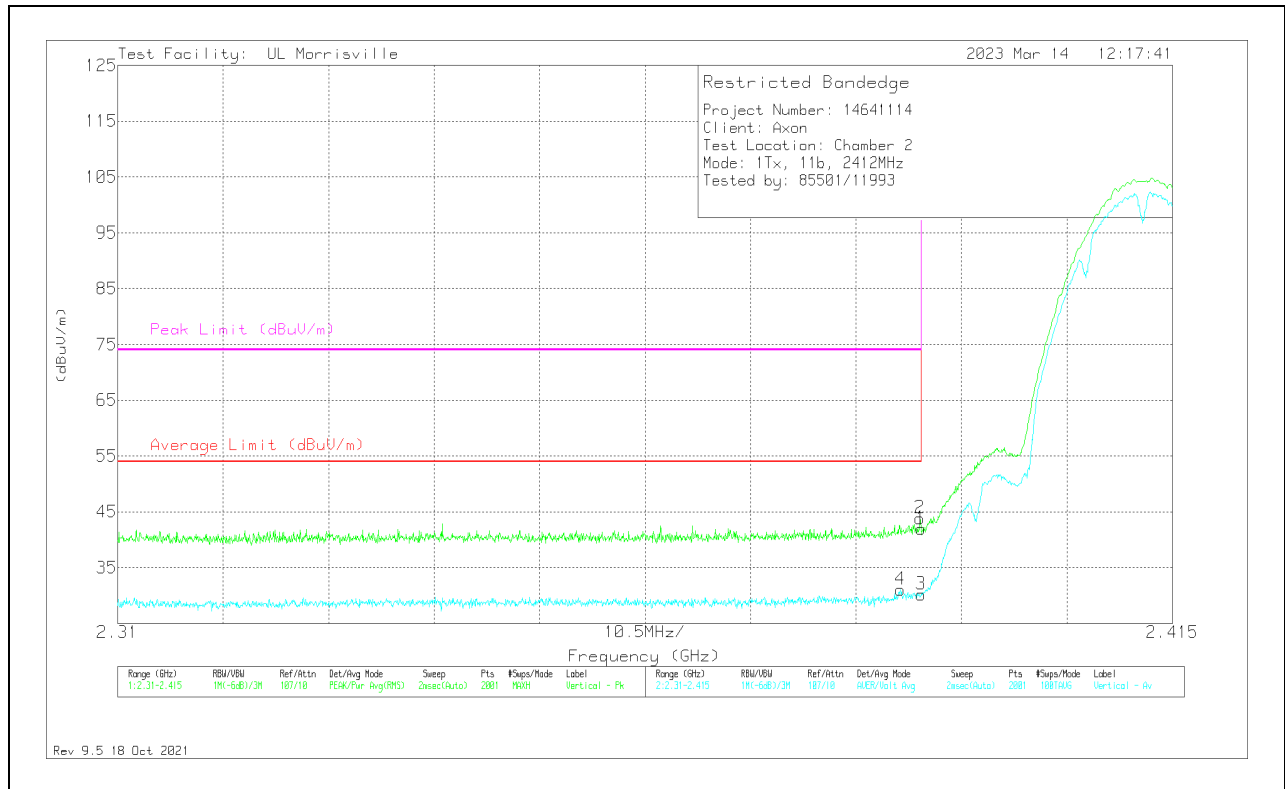
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

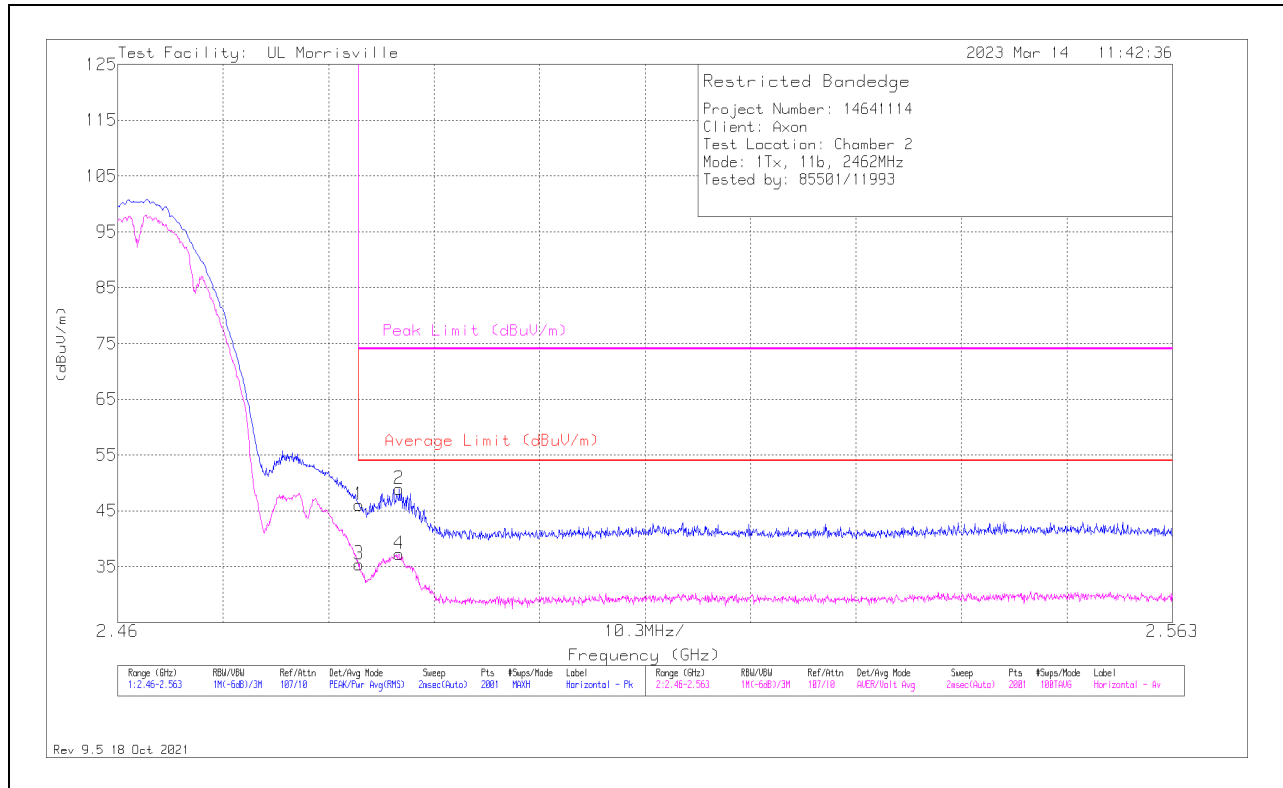


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.38996	33.8	Pk	32	-23.8	0	42	-	-	74	-32	320	150	V
2	* ** 2.38985	35.62	Pk	32	-23.8	0	43.82	-	-	74	-30.18	320	150	V
3	* ** 2.38996	21.98	ADV	32	-23.8	0	30.18	54	-23.82	-	-	320	149	V
4	* ** 2.38791	22.9	ADV	32	-23.8	0	31.1	54	-22.9	-	-	320	149	V

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

BANDEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	37.84	Pk	32.5	-24.3	0	46.04	-	-	74	-27.96	163	247	H
2	* ** 2.4875	41.08	Pk	32.4	-24.6	0	48.88	-	-	74	-25.12	163	247	H
3	* ** 2.48354	27.25	ADV	32.5	-24.3	0	35.45	54	-18.55	-	-	163	247	H
4	* ** 2.48745	29.48	ADV	32.4	-24.6	0	37.28	54	-16.72	-	-	163	247	H

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

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

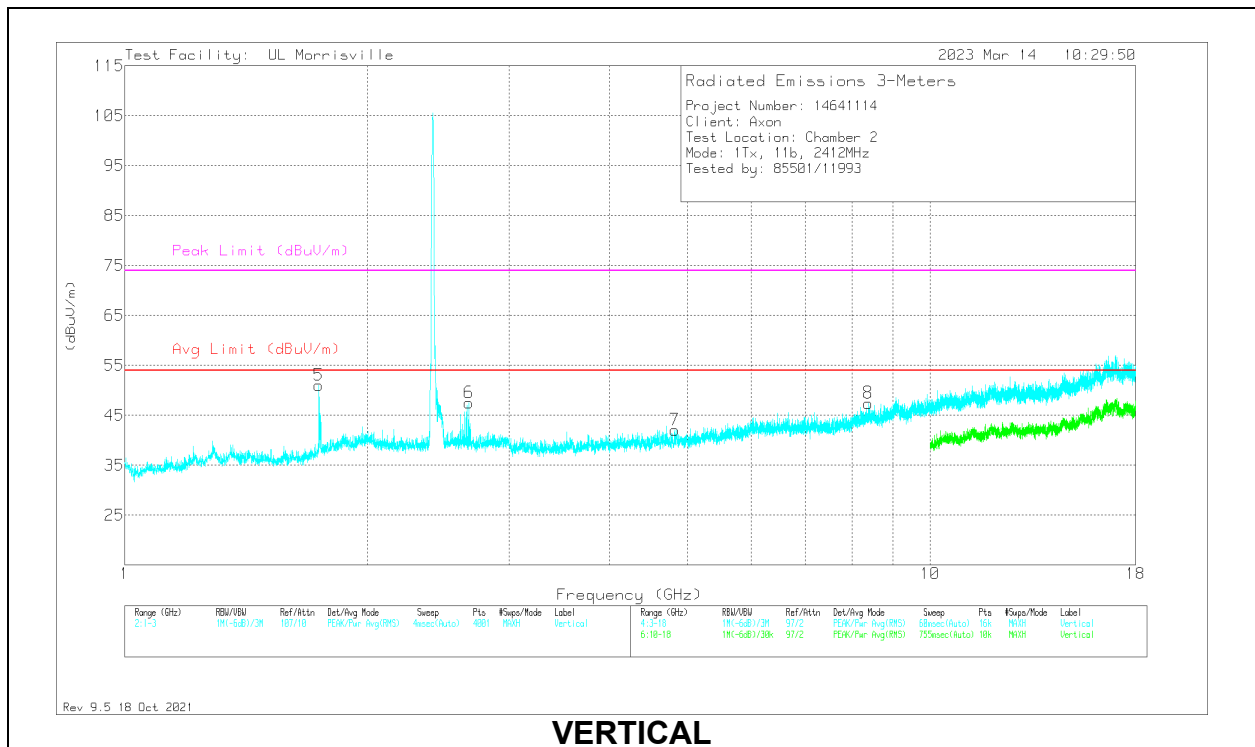
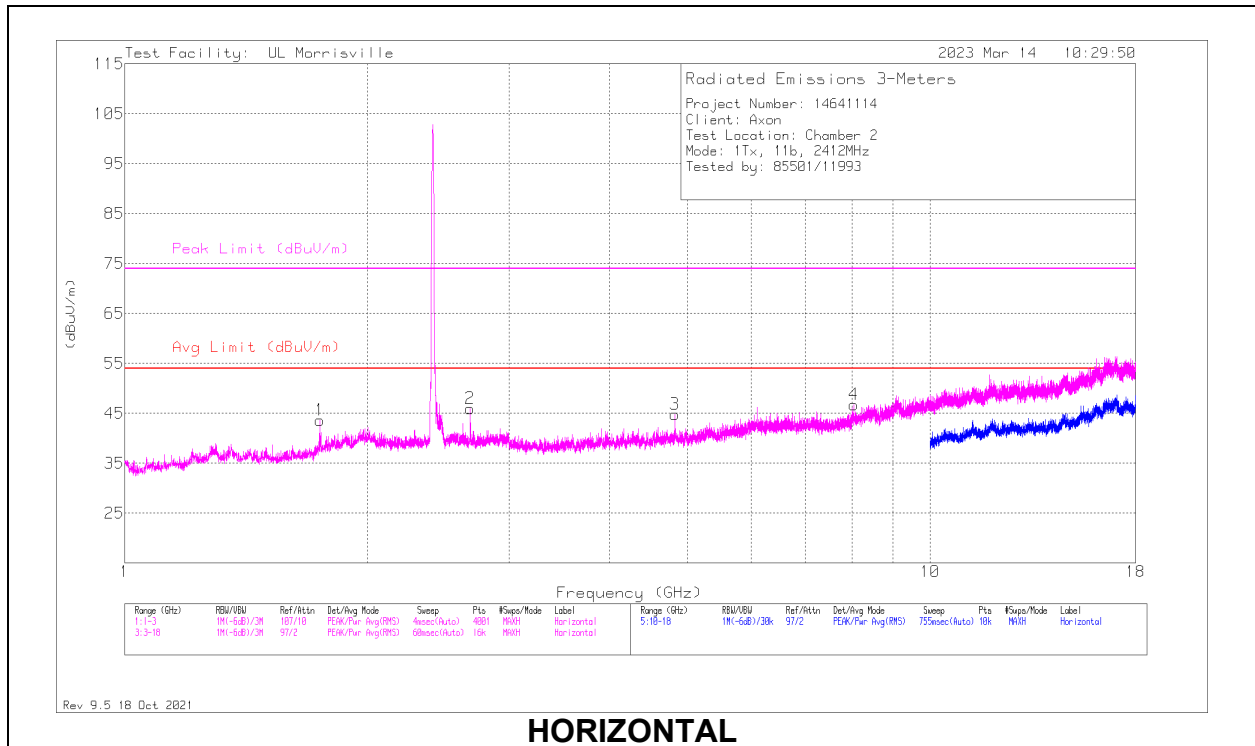


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.48354	41.29	Pk	32.5	-24.3	0	49.49	-	-	74	-24.51	329	259	V
2	*** 2.48704	44.8	Pk	32.4	-24.5	0	52.7	-	-	74	-21.3	329	259	V
3	*** 2.48354	31.04	ADV	32.5	-24.3	0	39.24	54	-14.76	-	-	329	259	V
4	*** 2.48683	34.1	ADV	32.4	-24.5	0	42	54	-12	-	-	329	259	V

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

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, CH 1 RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	** 1.748	35.88	Pk	29.8	-22.1	0	43.58	54	-10.42	74	-30.42	0-360	101	H
2	*** 2.683	39	Pk	32.5	-25.5	0	46	54	-8	74	-28	0-360	101	H
5	** 1.74357	33.82	PK2	29.8	-22.3	0	41.32	-	-	74	-32.68	277	336	V
	** 1.74448	21.34	ADV	29.8	-22.3	0	28.84	54	-25.16	-	-	277	336	V
6	*** 2.674	40.62	Pk	32.5	-25.6	0	47.52	54	-6.48	74	-26.48	0-360	199	V
3	*** 4.82344	40.97	Pk	34.1	-30.3	0	44.77	54	-9.23	74	-29.23	0-360	199	H
4	* ** 8.03719	37.68	Pk	35.8	-26.7	0	46.78	54	-7.22	74	-27.22	0-360	199	H
7	* ** 4.82438	38.26	Pk	34.1	-30.3	0	42.06	54	-11.94	74	-31.94	0-360	101	V
8	*** 8.38781	38.35	Pk	35.8	-26.7	0	47.45	54	-6.55	74	-26.55	0-360	199	V

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

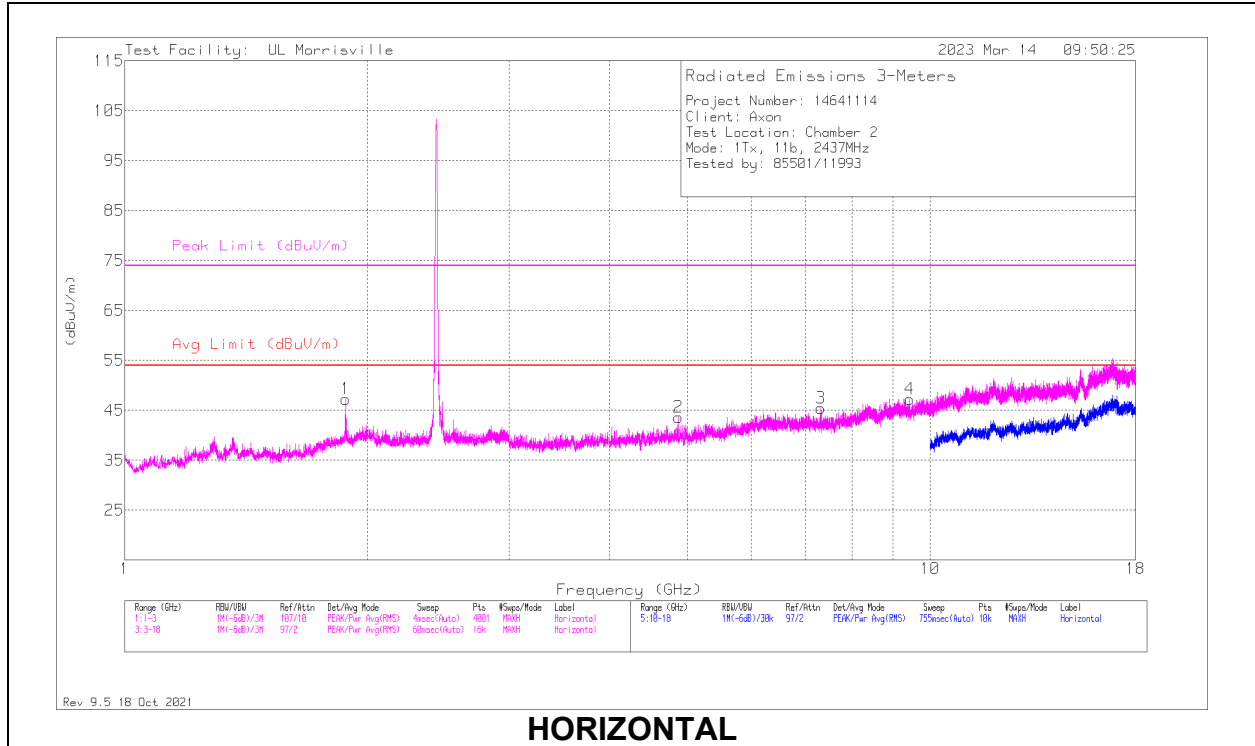
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

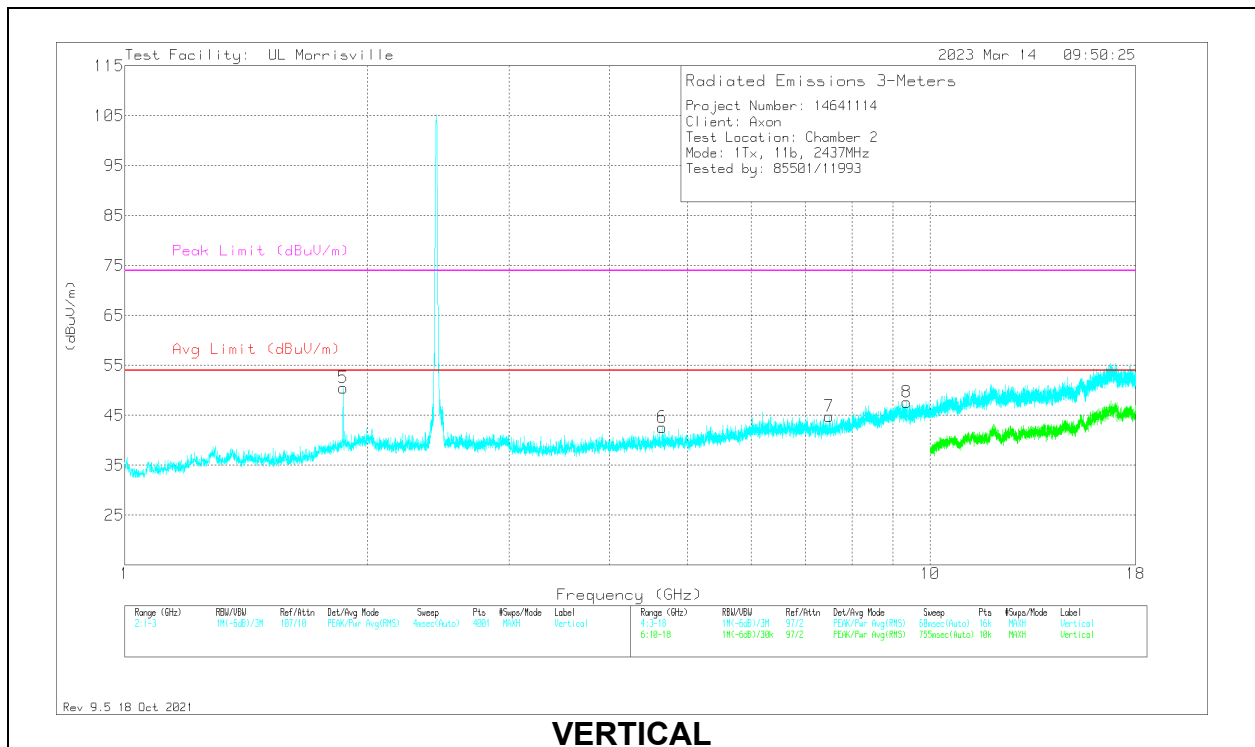
PK2 - Maximum Peak

ADV - Linear Voltage Average

MID CHANNEL, CH 6 RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	** 1.86669	50.56	PK2	31.3	-22.4	0	59.46	-	-	74	-14.54	151	155	V
	** 1.86702	22.48	ADV	31.3	-22.4	0	31.38	54	-22.62	-	-	151	155	V
2	*** 4.87406	40.42	Pk	34	-30.8	0	43.62	54	-10.38	74	-30.38	0-360	200	H
3	*** 7.31906	36.56	Pk	35.6	-26.7	0	45.46	54	-8.54	74	-28.54	0-360	101	H
4	*** 9.42938	36.68	Pk	36.6	-26	0	47.28	54	-6.72	74	-26.72	0-360	200	H
6	*** 4.65375	39.83	Pk	34.1	-31.4	0	42.53	54	-11.47	74	-31.47	0-360	200	V
7	*** 7.49156	37.06	Pk	35.6	-27.9	0	44.76	54	-9.24	74	-29.24	0-360	101	V
8	*** 9.36281	36.42	Pk	36.6	-25.4	0	47.62	54	-6.38	74	-26.38	0-360	101	V
1	1.8825	38.32	Pk	31.4	-22.5	0	47.22	54	-6.78	74	-26.78	0-360	101	H

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

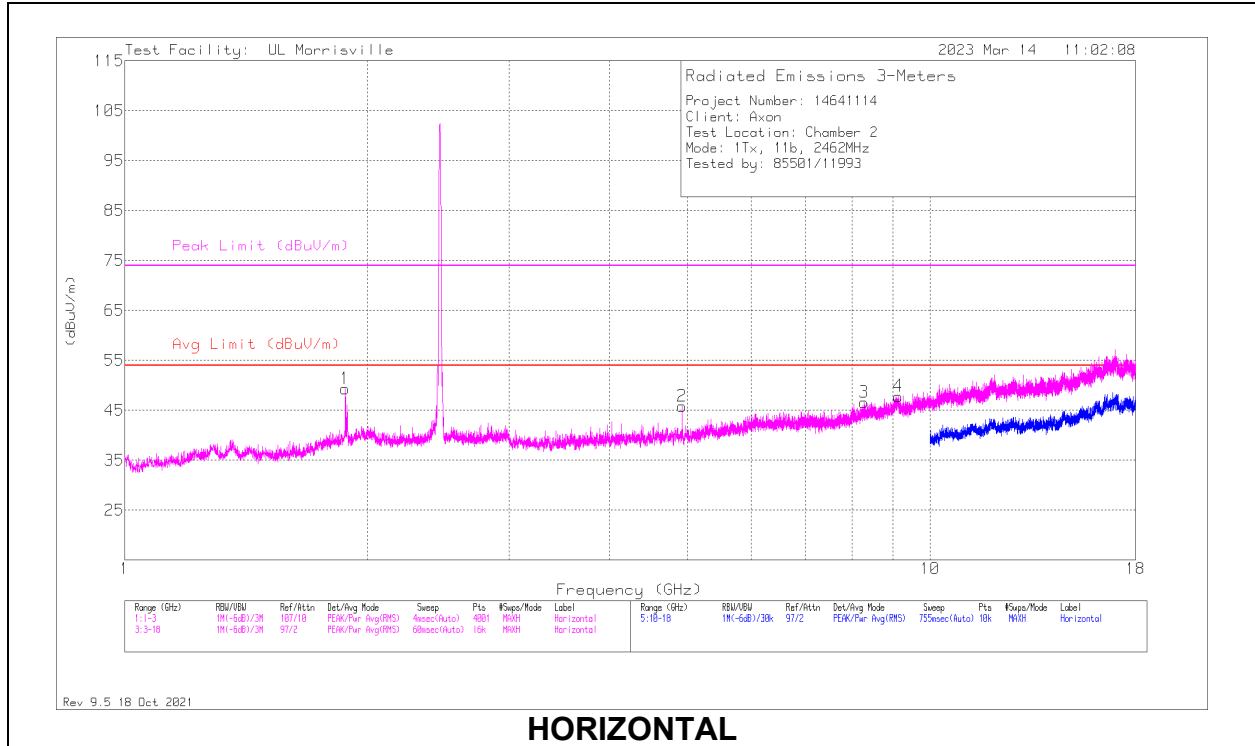
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

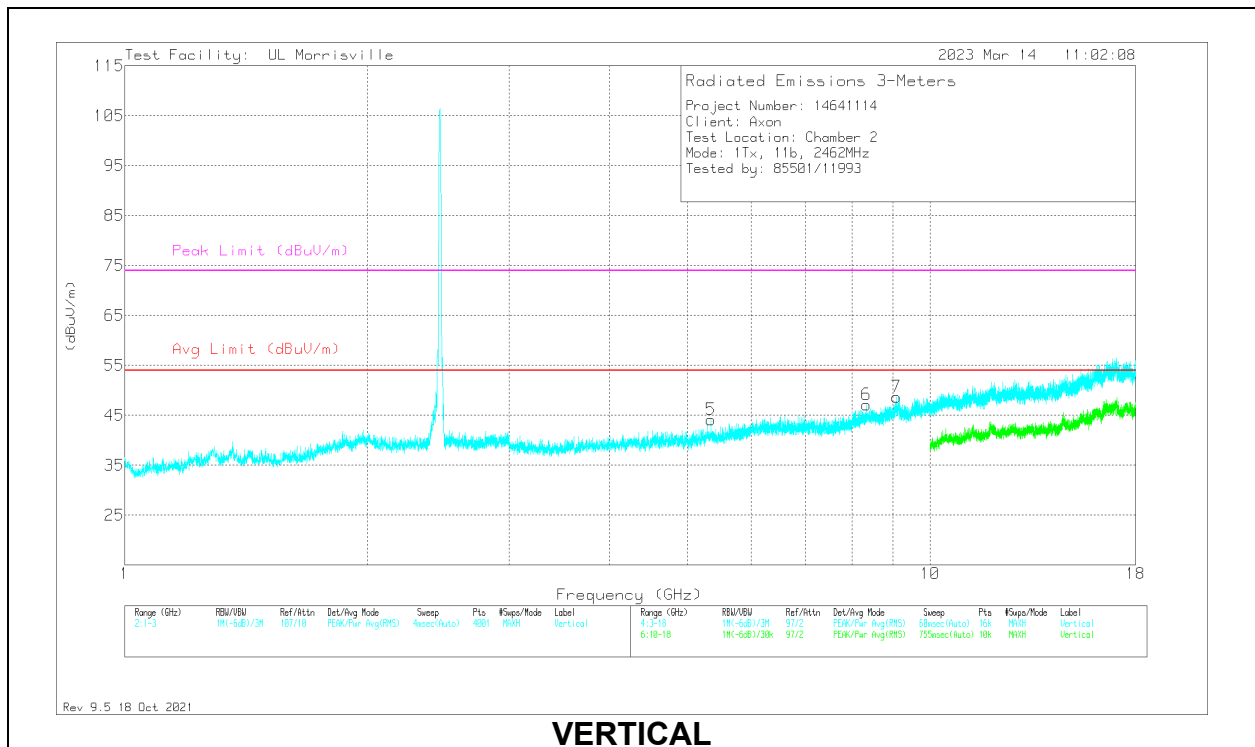
PK2 - Maximum Peak

ADV - Linear Voltage Average

HIGH CHANNEL, CH 11 RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	** 1.87861	33.68	PK2	31.4	-22.4	0	42.68	-	-	74	-31.32	11	374	H
	** 1.87945	21.43	ADV	31.4	-22.4	0	30.43	54	-23.57	-	-	11	374	H
2	*** 4.92375	42.51	Pk	34	-30.7	0	45.81	54	-8.19	74	-28.19	0-360	101	H
3	*** 8.27719	37.85	Pk	35.8	-27	0	46.65	54	-7.35	74	-27.35	0-360	101	H
4	*** 9.12563	36.74	Pk	36.3	-25.2	0	47.84	54	-6.16	74	-26.16	0-360	200	H
6	*** 8.34094	37.78	Pk	35.8	-26.4	0	47.18	54	-6.82	74	-26.82	0-360	200	V
7	*** 9.09205	38.29	PK2	36.3	-25.3	0	49.29	-	-	74	-24.71	287	227	V
	*** 9.09112	25.81	ADV	36.3	-25.3	0	36.81	54	-17.19	-	-	287	227	V
5	5.34375	38.41	Pk	34.4	-28.7	0	44.11	54	-9.89	74	-29.89	0-360	200	V

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

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

PK2 - Maximum Peak

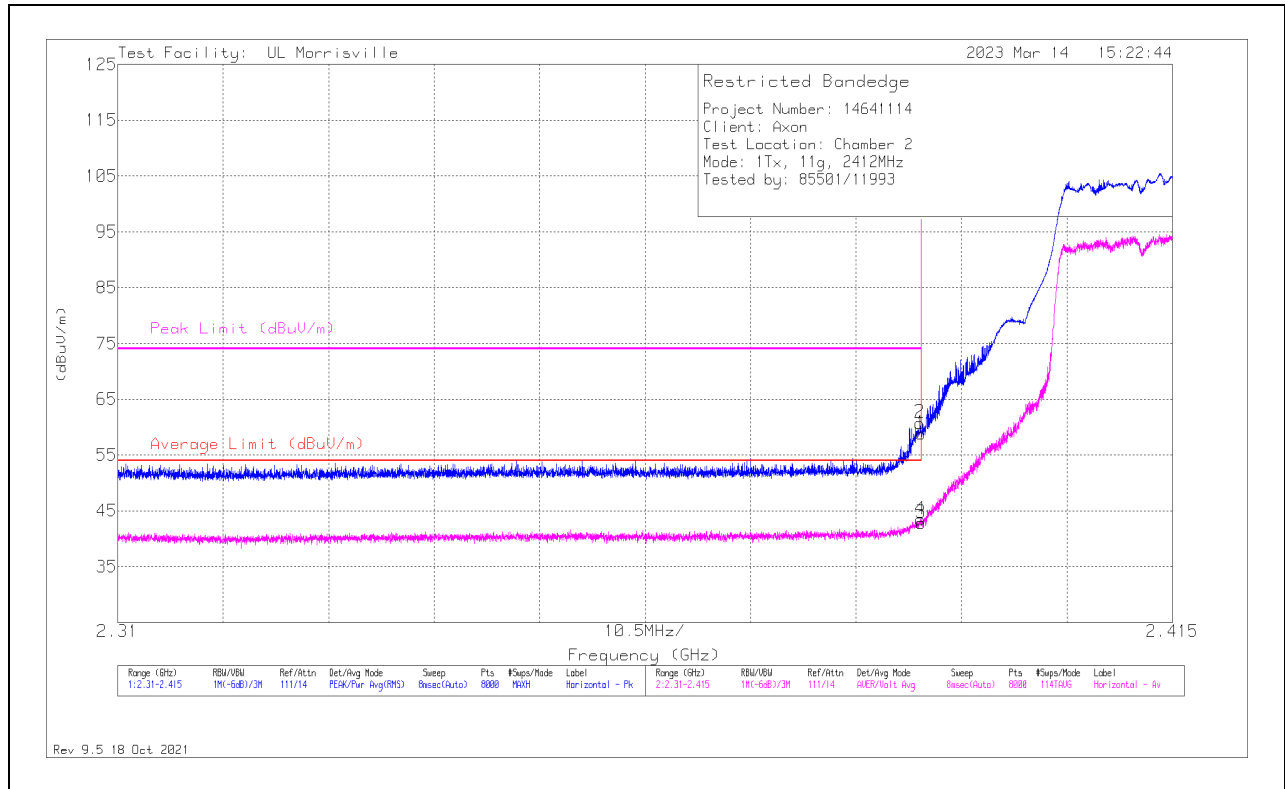
ADV - Linear Voltage Average

10.1.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

1TX Antenna 1 MODE

BANDEDGE (LOW CHANNEL, CH 1)

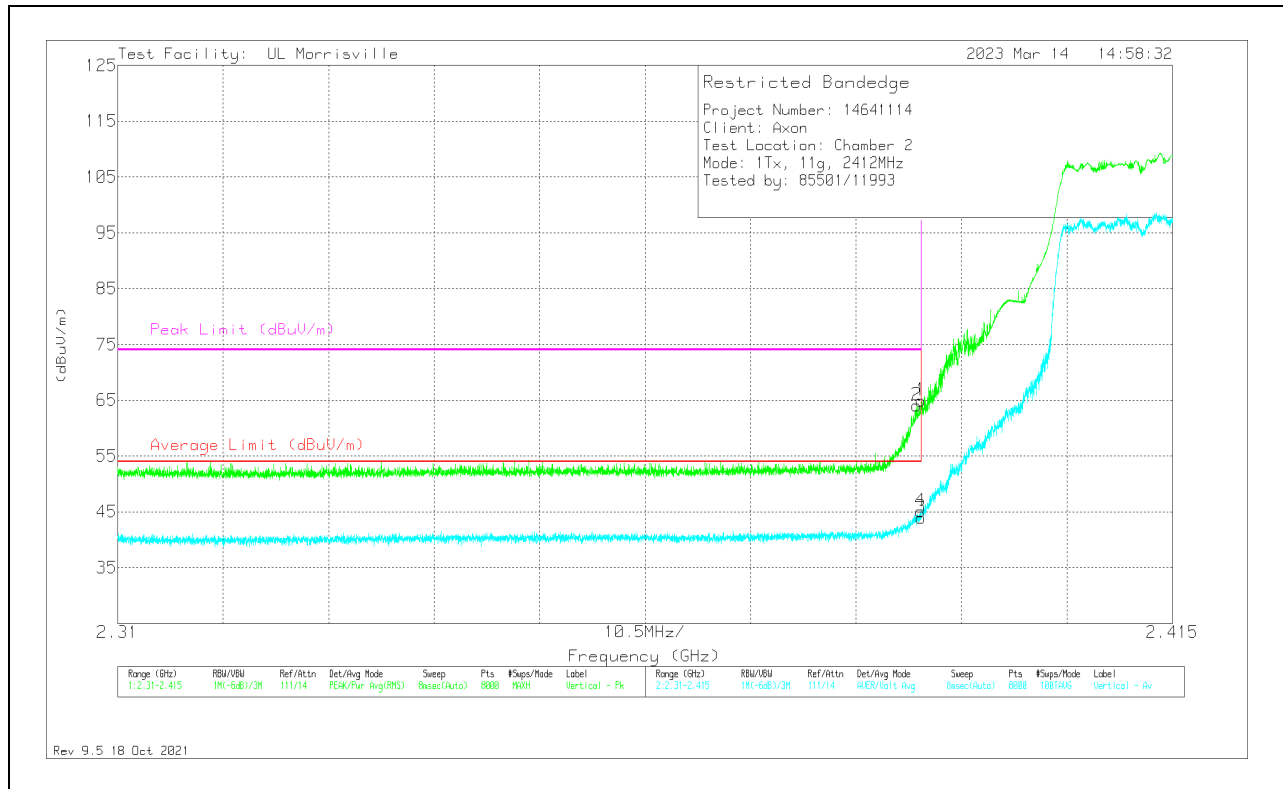
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	40.62	Pk	32	-23.8	10	0	58.82	-	-	74	-15.18	265	170	H
2	* ** 2.38984	42.58	Pk	32	-23.8	10	0	60.78	-	-	74	-13.22	265	170	H
3	* ** 2.39	23.49	ADV	32	-23.8	10	1.18	42.87	54	-11.13	-	-	265	170	H
4	* ** 2.38994	24.08	ADV	32	-23.8	10	1.18	43.46	54	-10.54	-	-	265	170	H

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

VERTICAL RESULT

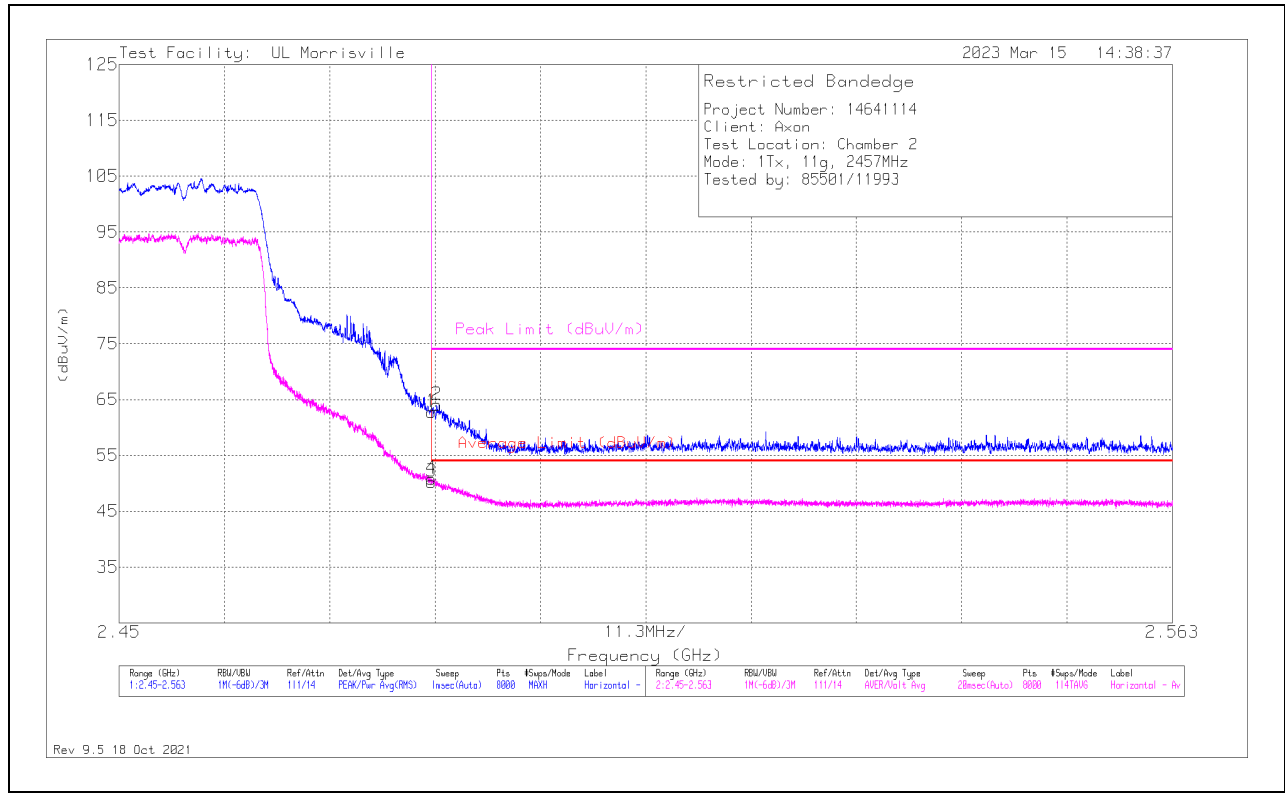


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	46.72	Pk	32	-23.8	10	0	64.92	-	-	74	-9.08	297	151	V
2	* ** 2.38952	45.85	Pk	32	-23.8	10	0	64.05	-	-	74	-9.95	297	151	V
3	* ** 2.39	24.62	ADV	32	-23.8	10	1.18	44	54	-10	-	-	297	151	V
4	* ** 2.38992	25.72	ADV	32	-23.8	10	1.18	45.1	54	-8.9	-	-	297	151	V

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

BANDEDGE (HIGH CHANNEL, CH 10)

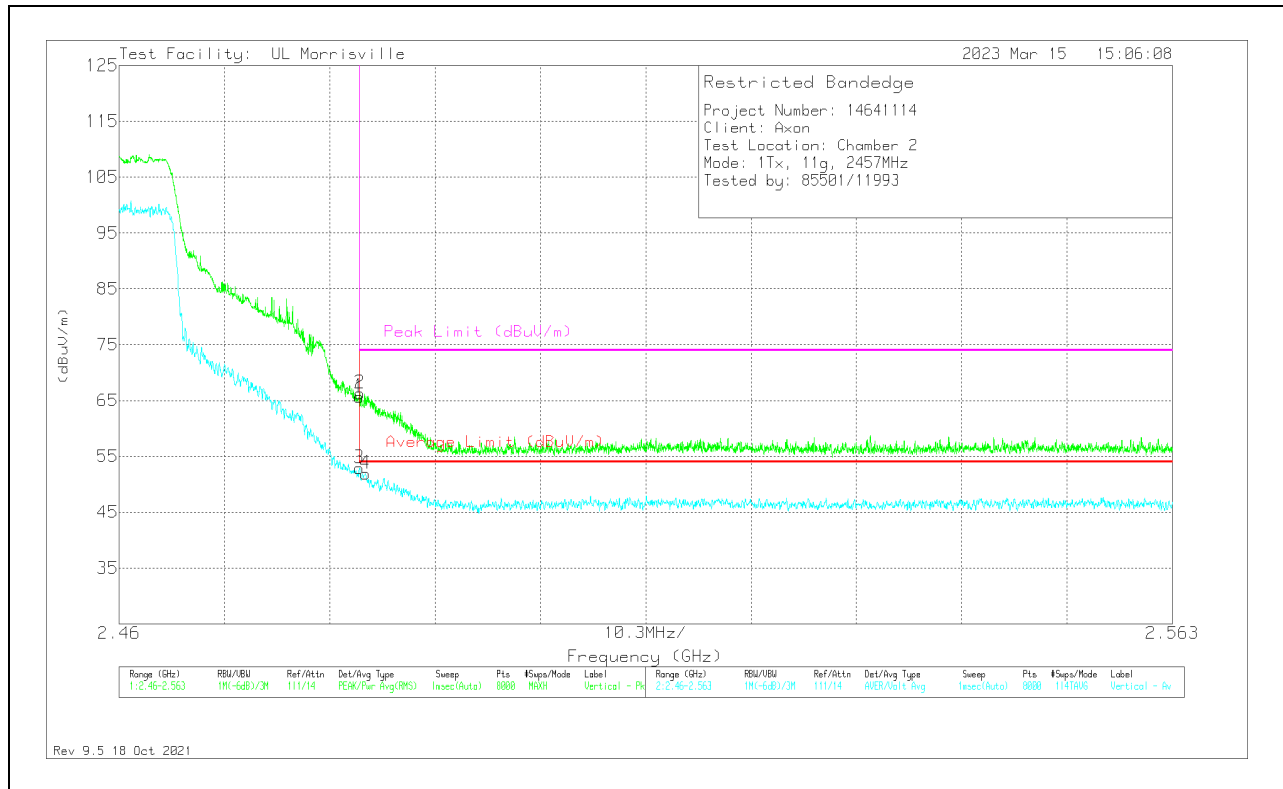
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.48351	44.59	Pk	32.5	-24.3	10	0	62.79	-	-	74	-11.21	38	215	H
2	*** 2.48407	45.93	Pk	32.5	-24.4	10	0	64.03	-	-	74	-9.97	38	215	H
3	*** 2.48351	30.87	ADV	32.5	-24.3	10	1.18	50.25	54	-3.75	-	-	38	215	H
4	*** 2.48352	31.43	ADV	32.5	-24.3	10	1.18	50.81	54	-3.19	-	-	38	215	H

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

VERTICAL RESULT

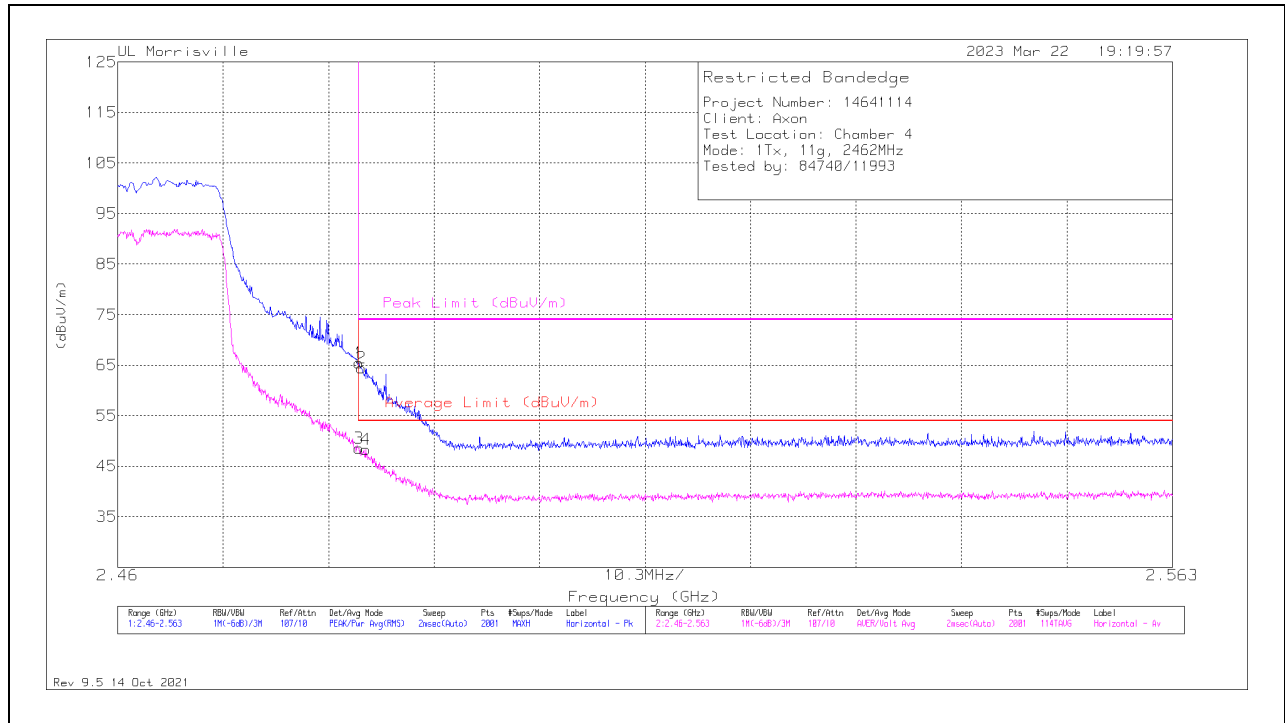


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.4835	47.49	Pk	32.5	-24.3	10	0	65.69	-	-	74	-8.31	238	174	V
2	** 2.48353	48.11	Pk	32.5	-24.3	10	0	66.31	-	-	74	-7.69	238	174	V
3	*** 2.4835	33.52	ADV	32.5	-24.3	10	1.18	52.9	54	-1.1	-	-	238	174	V
4	** 2.48411	32.64	ADV	32.5	-24.4	10	1.18	51.92	54	-2.08	-	-	238	174	V

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

BANDEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	46.54	Pk	32.6	-13.7	0	65.44	-	-	74	-8.56	162	197	H
2	* ** 2.48379	45.57	Pk	32.6	-13.7	0	64.47	-	-	74	-9.53	162	197	H
3	* ** 2.48354	28.5	ADV	32.6	-13.7	1.18	48.58	54	-5.42	-	-	162	197	H
4	* ** 2.48421	28.24	ADV	32.6	-13.7	1.18	48.32	54	-5.68	-	-	162	197	H

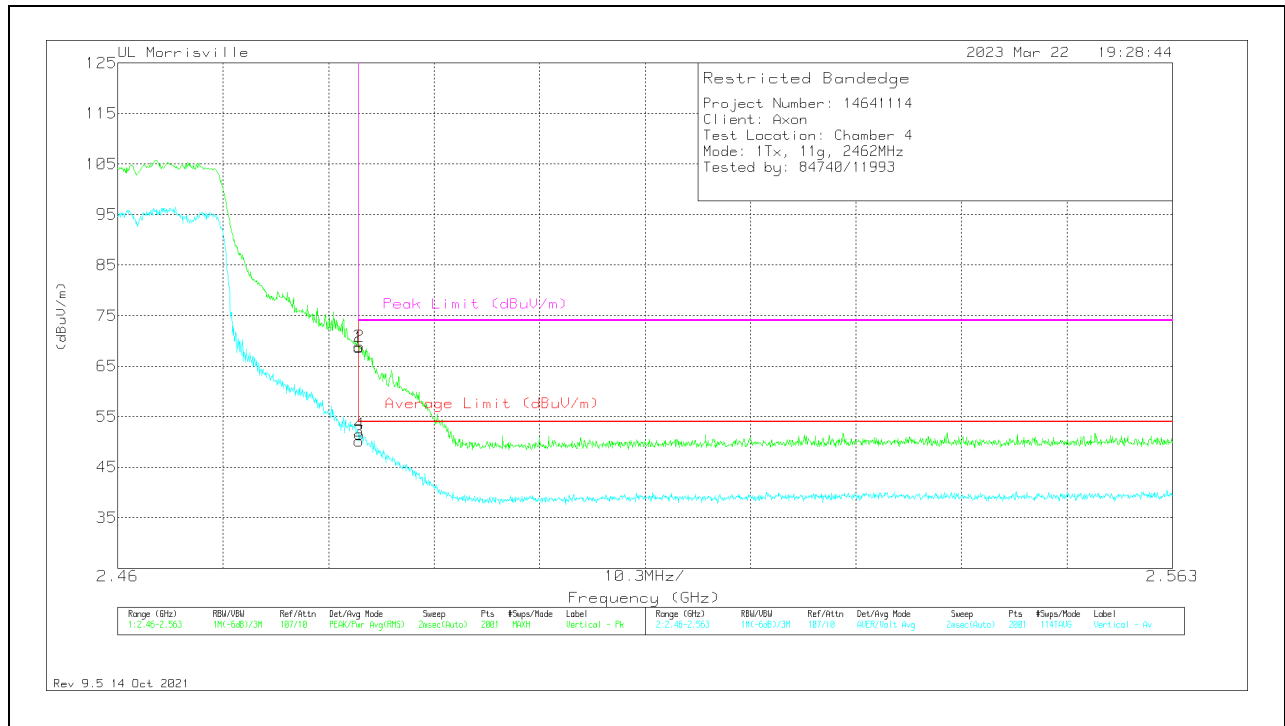
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

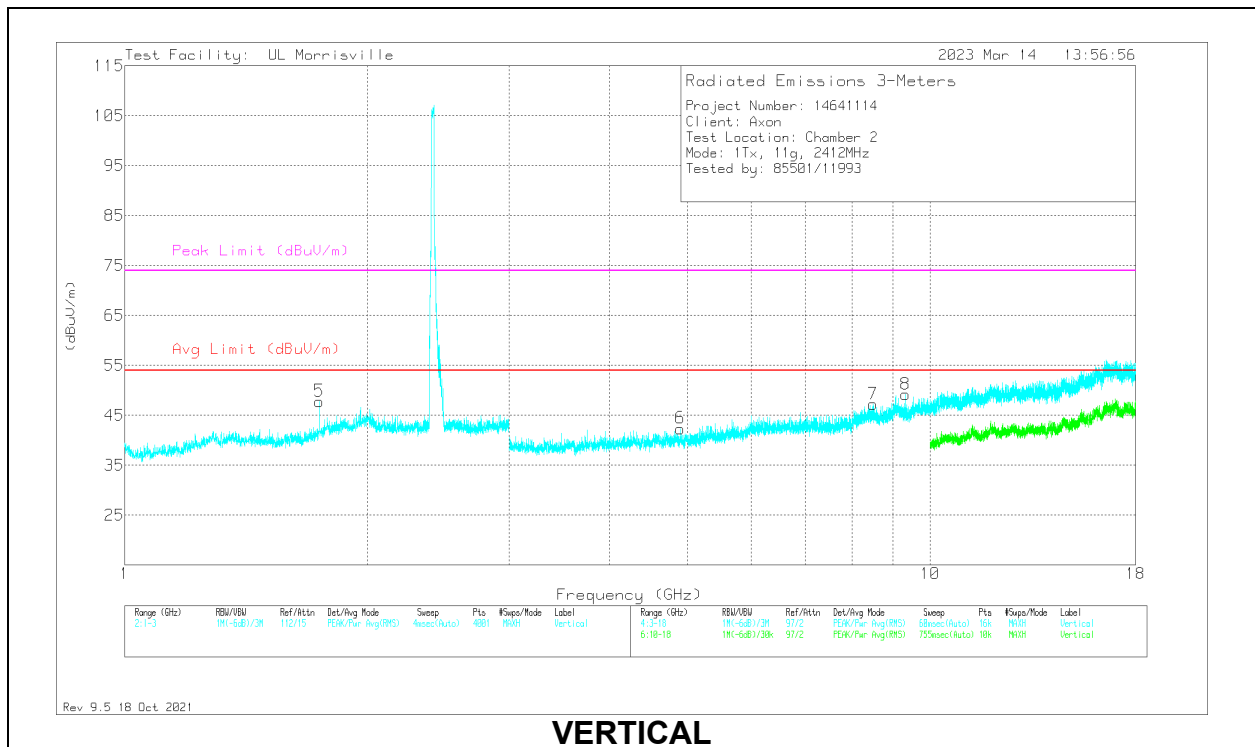
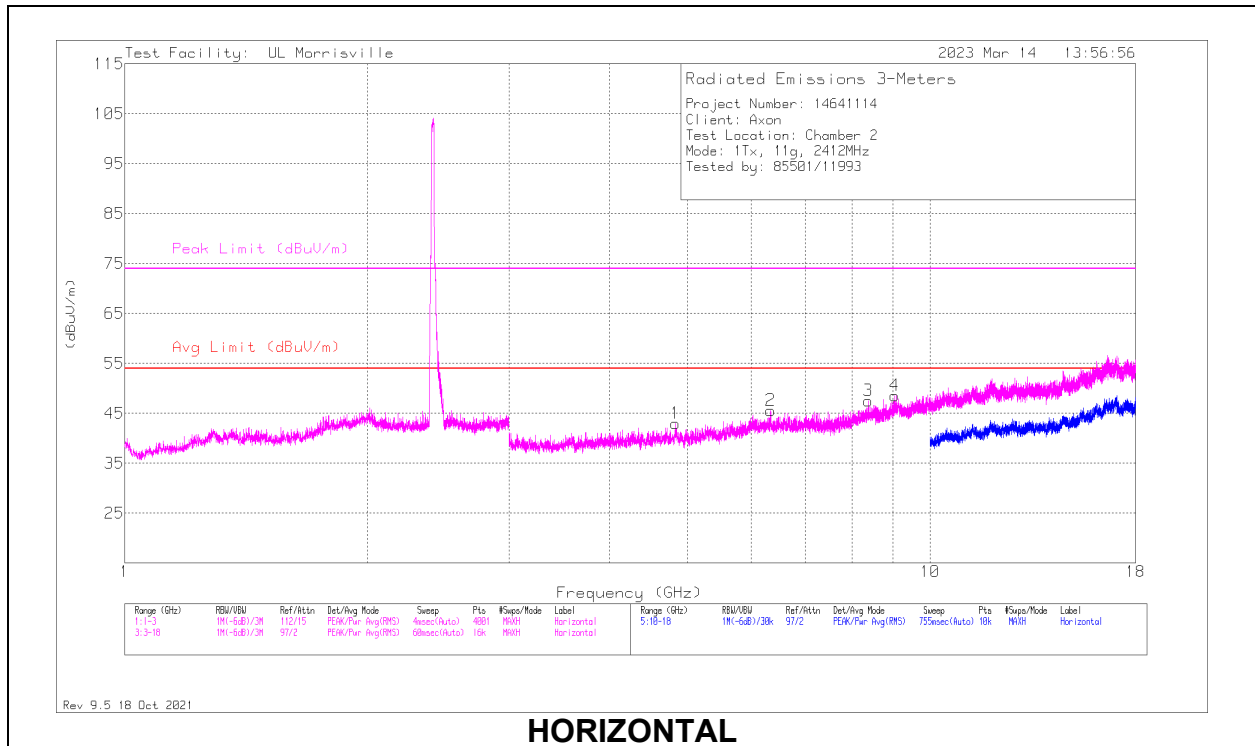


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.48354	49.72	Pk	32.6	-13.7	0	68.62	-	-	74	-5.38	271	196	V
2	* ** 2.48359	50.05	Pk	32.6	-13.7	0	68.95	-	-	74	-5.05	271	196	V
3	* ** 2.48354	30.09	ADV	32.6	-13.7	1.18	50.17	54	-3.83	-	-	271	196	V
4	* ** 2.48364	31.46	ADV	32.6	-13.7	1.18	51.54	54	-2.46	-	-	271	196	V

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

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, CH 1 RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	** 1.7435	40.34	Pk	29.8	-22.3	0	47.84	54	-6.16	74	-26.16	0-360	101	V
1	*** 4.83	39.29	Pk	34.1	-30.4	0	42.99	54	-11.01	74	-31.01	0-360	101	H
3	*** 8.38781	38.42	Pk	35.8	-26.7	0	47.52	54	-6.48	74	-26.48	0-360	200	H
4	*** 9.04657	38.67	PK2	36.2	-25.6	0	49.27	-	-	74	-24.73	128	217	H
	*** 9.04695	25.95	ADV	36.2	-25.6	1.18	37.73	54	-16.27	-	-	128	217	H
6	*** 4.89469	38.89	Pk	34	-30.5	0	42.39	54	-11.61	74	-31.61	0-360	101	V
8	*** 9.31794	37.51	PK2	36.5	-25.6	0	48.41	-	-	74	-25.59	150	111	V
	*** 9.3162	24.83	ADV	36.5	-25.7	1.18	36.81	54	-17.19	-	-	150	111	V
2	6.34031	37.4	Pk	35.5	-27.3	0	45.6	54	-8.4	74	-28.4	0-360	200	H
7	8.50406	37.71	Pk	35.9	-26.4	0	47.21	54	-6.79	74	-26.79	0-360	200	V

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

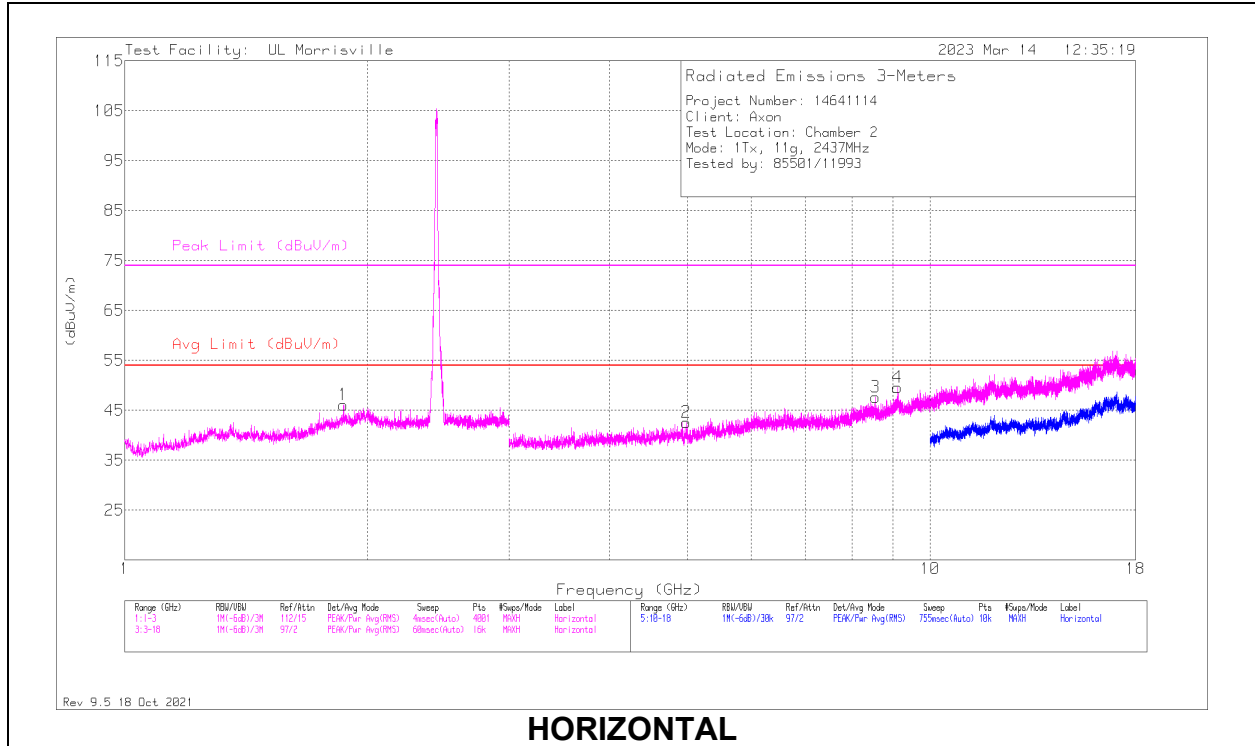
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

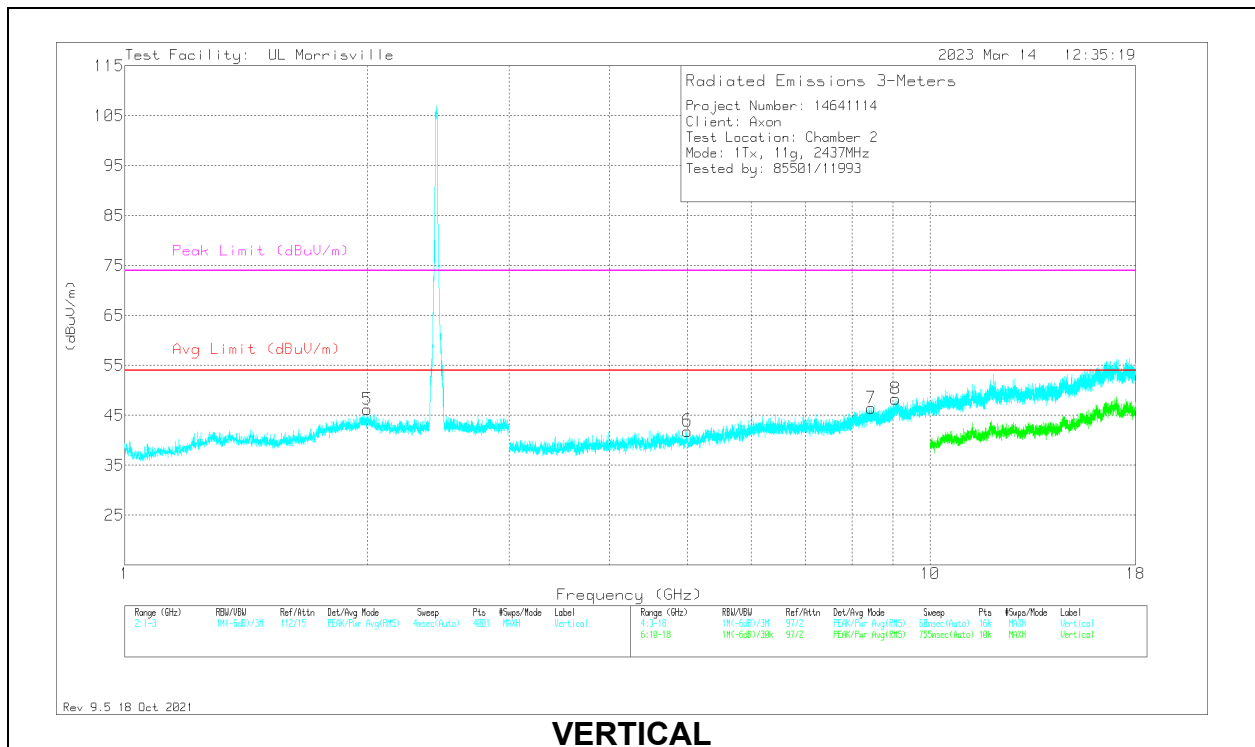
PK2 - Maximum Peak

ADV - Linear Voltage Average

MID CHANNEL, CH 6 RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	** 1.8695	37.1	Pk	31.4	-22.4	0	46.1	54	-7.9	74	-27.9	0-360	101	H
2	*** 4.97906	38.95	Pk	34.1	-30.5	0	42.55	54	-11.45	74	-31.45	0-360	101	H
4	*** 9.10882	38.11	PK2	36.3	-25.5	0	48.91	-	-	74	-25.09	62	306	H
	*** 9.11119	25.75	ADV	36.3	-25.5	1.18	37.73	54	-16.27	-	-	62	306	H
6	*** 5.00156	38.67	Pk	34.1	-30.9	0	41.87	54	-12.13	74	-32.13	0-360	101	V
7	*** 8.45344	37.52	Pk	35.8	-26.8	0	46.52	54	-7.48	74	-27.48	0-360	101	V
8	*** 9.06317	39.53	PK2	36.2	-25.2	0	50.53	-	-	74	-23.47	110	157	V
	*** 9.06174	25.84	ADV	36.2	-25.3	1.18	37.92	54	-16.08	-	-	110	157	V
5	2.0025	36.45	Pk	32	-22.2	0	46.25	54	-7.75	74	-27.75	0-360	101	V
3	8.56313	38.22	Pk	35.8	-26.4	0	47.62	54	-6.38	74	-26.38	0-360	199	H

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

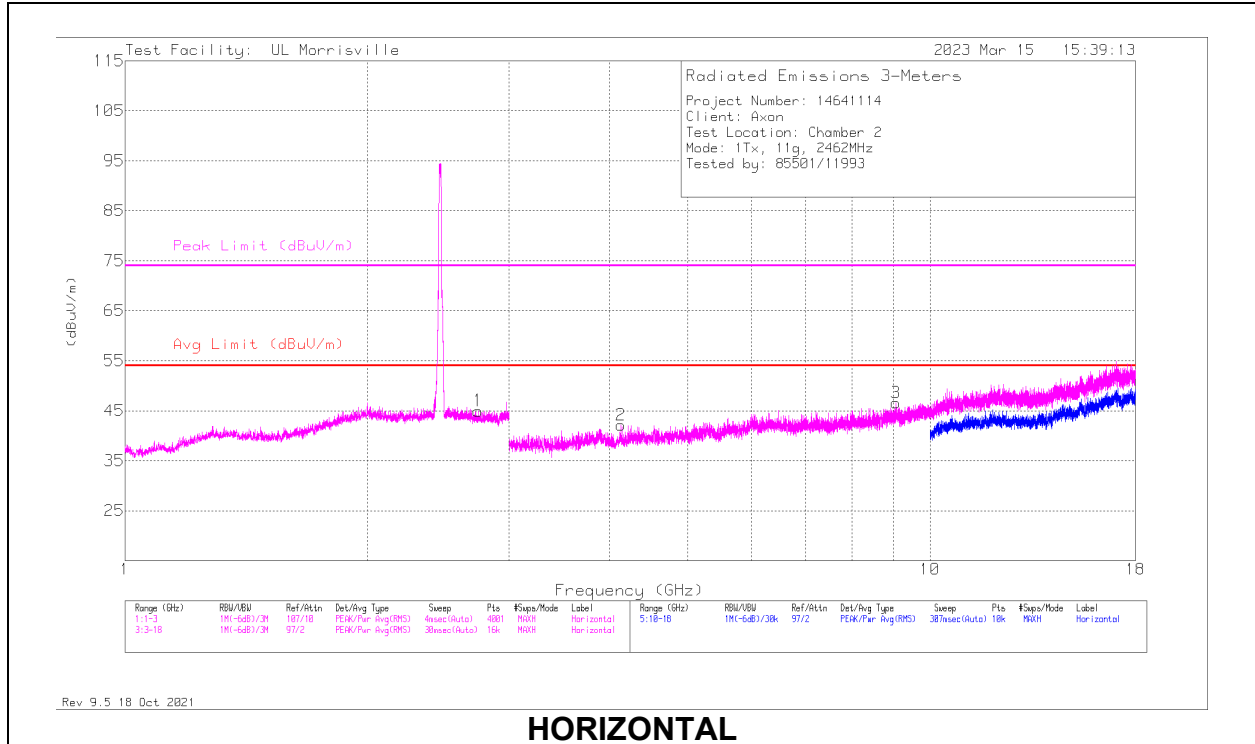
** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

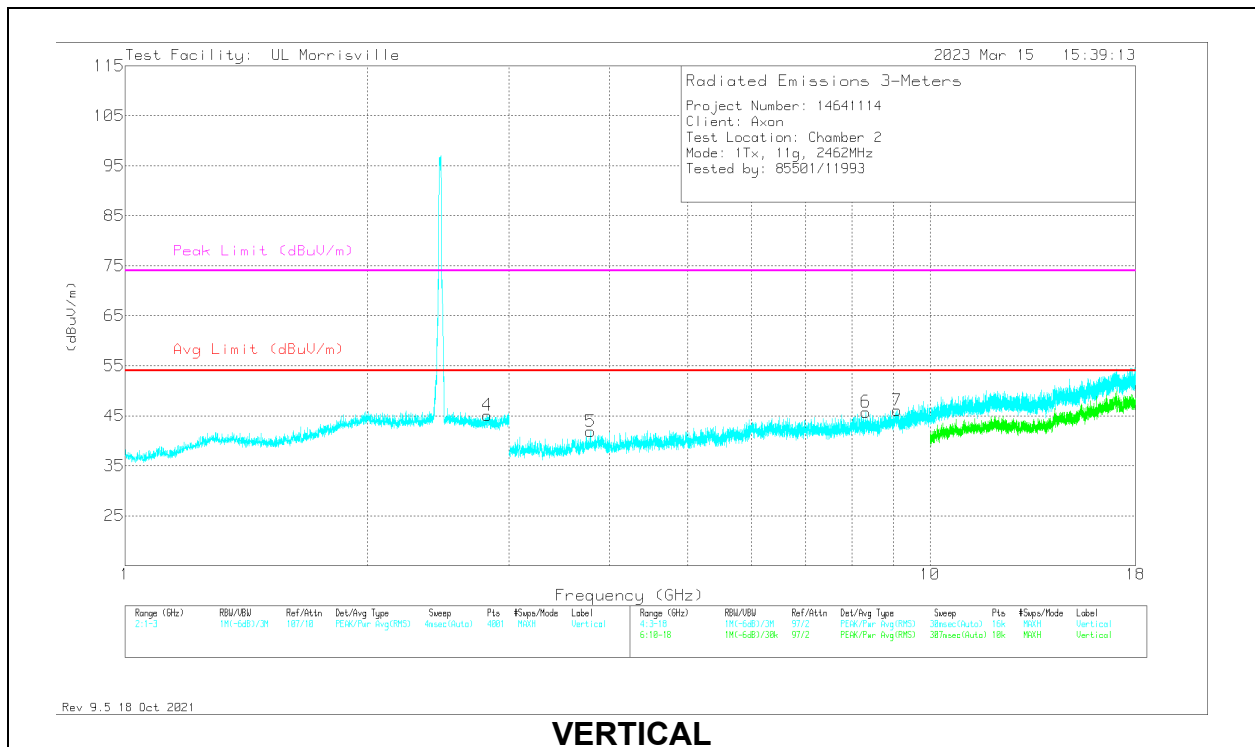
PK2 - Maximum Peak

ADV - Linear Voltage Average

HIGH CHANNEL, CH 11 RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.7445	38.15	Pk	32.5	-25.7	0	44.95	54	-9.05	74	-29.05	0-360	101	H
4	*** 2.818	38.29	Pk	32.6	-25.8	0	45.09	54	-8.91	74	-28.91	0-360	101	V
2	*** 4.13063	39.91	Pk	33.4	-31.2	0	42.11	54	-11.89	74	-31.89	0-360	200	H
3	*** 9.07219	36.07	Pk	36.2	-25.7	0	46.57	54	-7.43	74	-27.43	0-360	200	H
5	*** 3.78656	40.76	Pk	33.4	-32.3	0	41.86	54	-12.14	74	-32.14	0-360	200	V
6	*** 8.32031	36.44	Pk	35.8	-26.5	0	45.74	54	-8.26	74	-28.26	0-360	200	V
7	*** 9.09656	35.07	Pk	36.3	-25.3	0	46.07	54	-7.93	74	-27.93	0-360	200	V

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

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

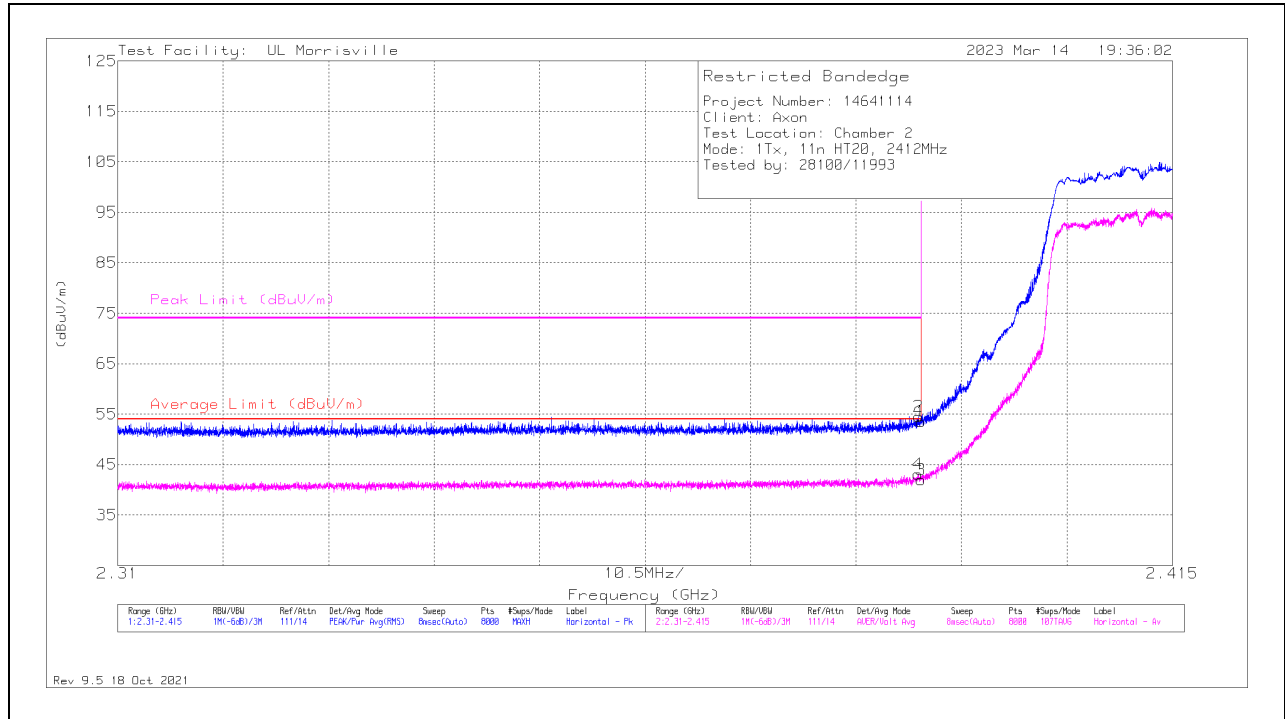
Pk - Peak detector

10.1.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

1TX Antenna 1 MODE

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	35.37	Pk	32	-23.8	10	0	53.57	-	-	74	-20.43	356	294	H
2	* ** 2.38972	36.36	Pk	32	-23.8	10	0	54.56	-	-	74	-19.44	356	294	H
3	* ** 2.39	23.19	ADV	32	-23.8	10	.62	42.01	54	-11.99	-	-	356	294	H
4	* ** 2.38967	24.32	ADV	32	-23.8	10	.62	43.14	54	-10.86	-	-	356	294	H

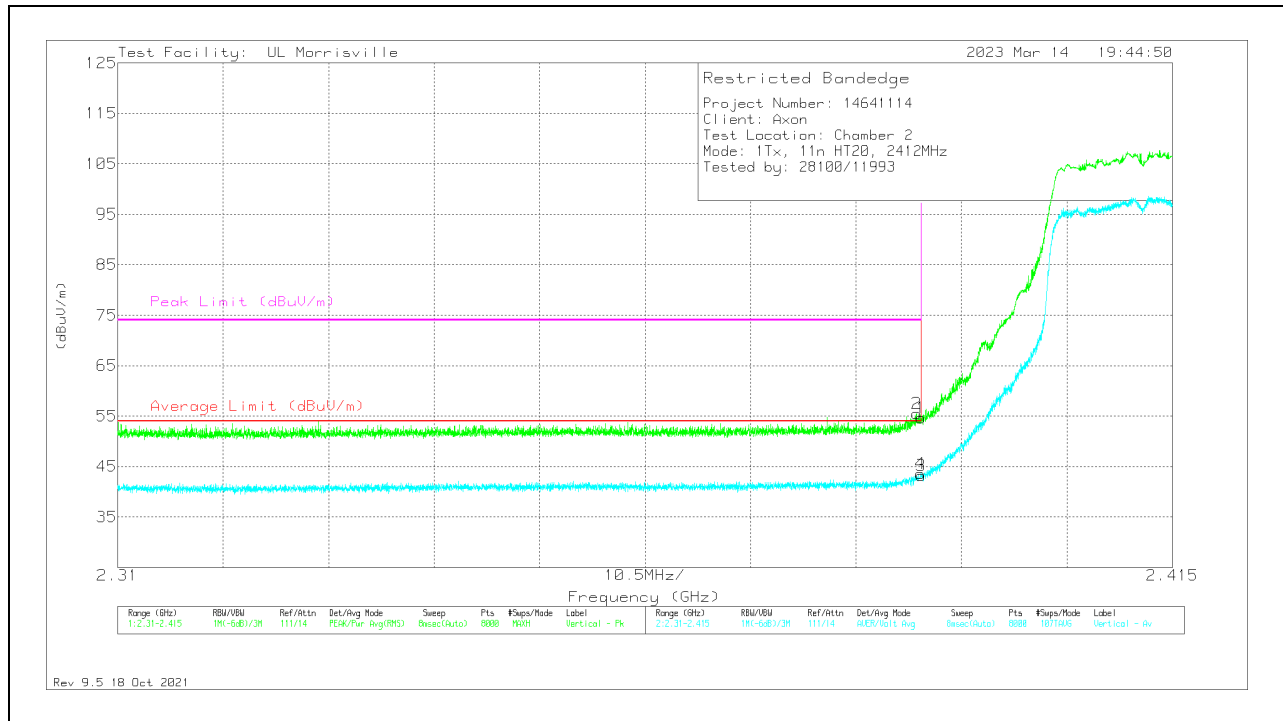
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

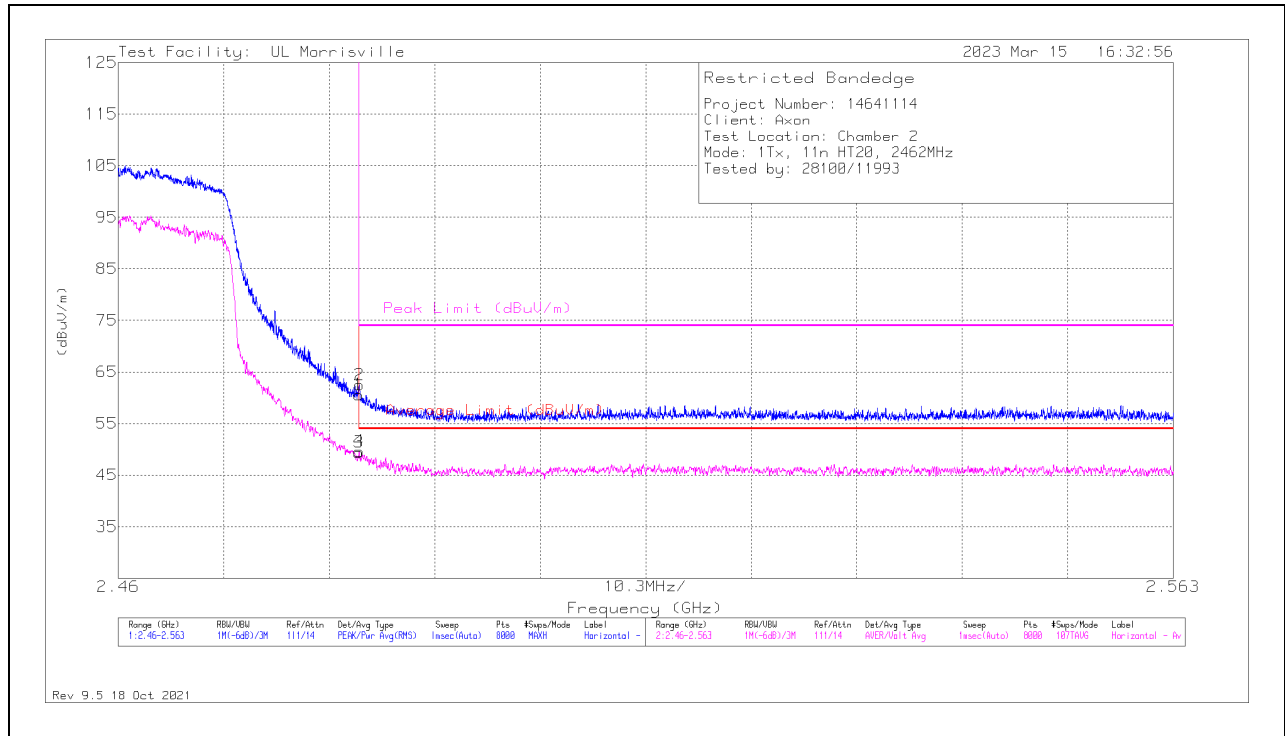


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	36.4	Pk	32	-23.8	10	0	54.6	-	-	74	-19.4	100	250	V
2	* ** 2.38954	37.32	Pk	32	-23.8	10	0	55.52	-	-	74	-18.48	100	250	V
3	* ** 2.39	24.45	ADV	32	-23.8	10	.62	43.27	54	-10.73	-	-	100	250	V
4	* ** 2.38992	24.81	ADV	32	-23.8	10	.62	43.63	54	-10.37	-	-	100	250	V

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

BANDEDGE (HIGH CHANNEL, CH 11)

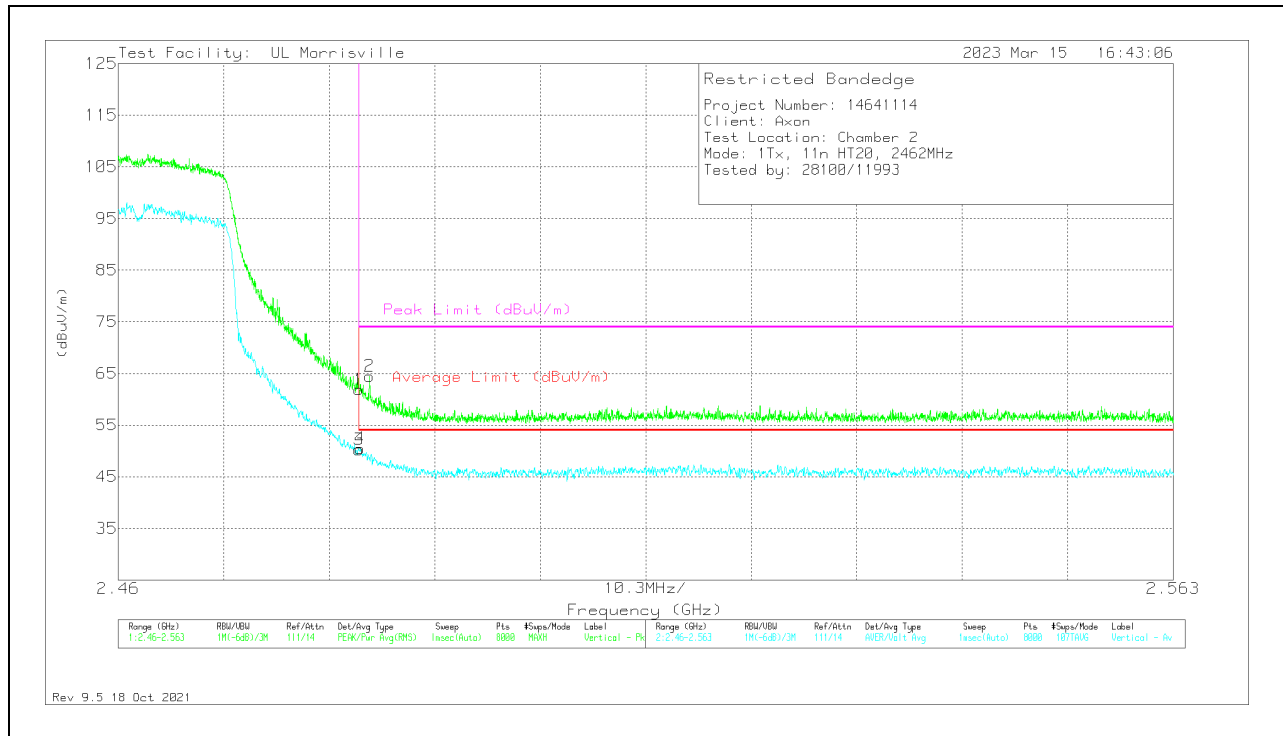
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.4835	42.39	Pk	32.5	-24.3	10	0	60.59	-	-	74	-13.41	187	176	H
2	*** 2.48354	44.28	Pk	32.5	-24.3	10	0	62.48	-	-	74	-11.52	187	176	H
3	*** 2.4835	30.58	ADV	32.5	-24.3	10	.62	49.4	54	-4.6	-	-	187	176	H
4	*** 2.48351	30.83	ADV	32.5	-24.3	10	.62	49.65	54	-4.35	-	-	187	176	H

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

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.4835	43.68	Pk	32.5	-24.3	10	0	61.88	-	-	74	-12.12	285	123	V
2	*** 2.48453	46.39	Pk	32.5	-24.4	10	0	64.49	-	-	74	-9.51	285	123	V
3	*** 2.4835	31.45	ADV	32.5	-24.3	10	.62	50.27	54	-3.73	-	-	285	123	V
4	*** 2.48363	31.65	ADV	32.5	-24.3	10	.62	50.47	54	-3.53	-	-	285	123	V

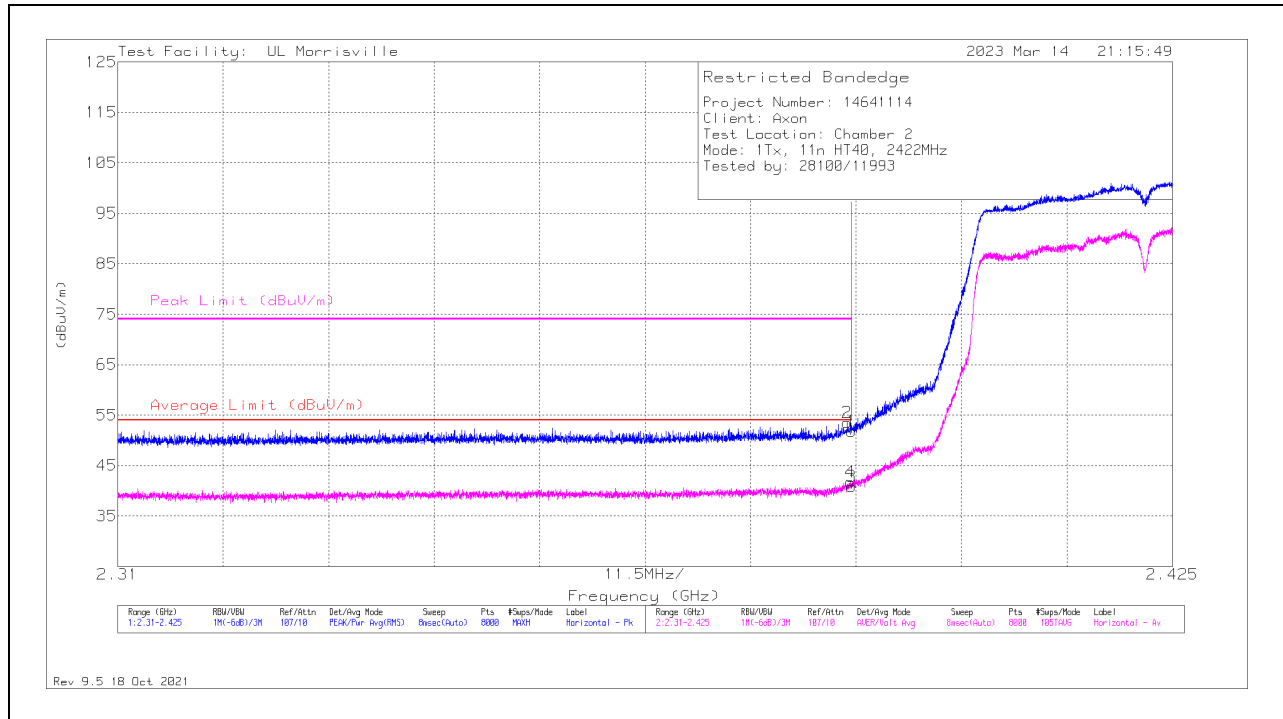
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 ** - indicates frequency in Taiwan NCC LP0002 Restricted Band
 Pk - Peak detector
 ADV - Linear Voltage Average

10.1.1. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 2.4 GHz BAND

1TX Antenna 1 MODE

BANDEDGE (LOW CHANNEL, CH 3)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.38999	33.58	Pk	32	-23.8	10	0	51.78	-	-	74	-22.22	10	156	H
2	* ** 2.38953	35.37	Pk	32	-23.8	10	0	53.57	-	-	74	-20.43	10	156	H
3	* ** 2.38999	22.14	ADV	32	-23.8	10	.47	40.81	54	-13.19	-	-	10	156	H
4	* ** 2.38985	23.02	ADV	32	-23.8	10	.47	41.69	54	-12.31	-	-	10	156	H

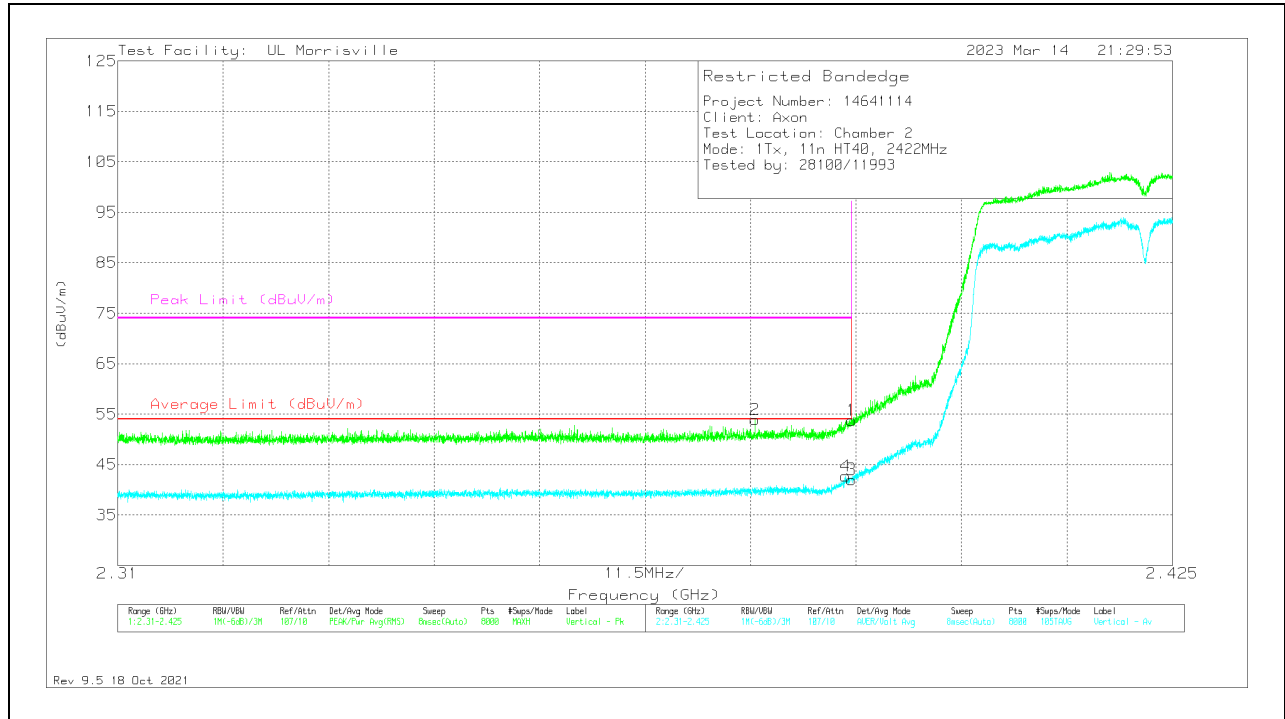
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

ADV - Linear Voltage Average

VERTICAL RESULT

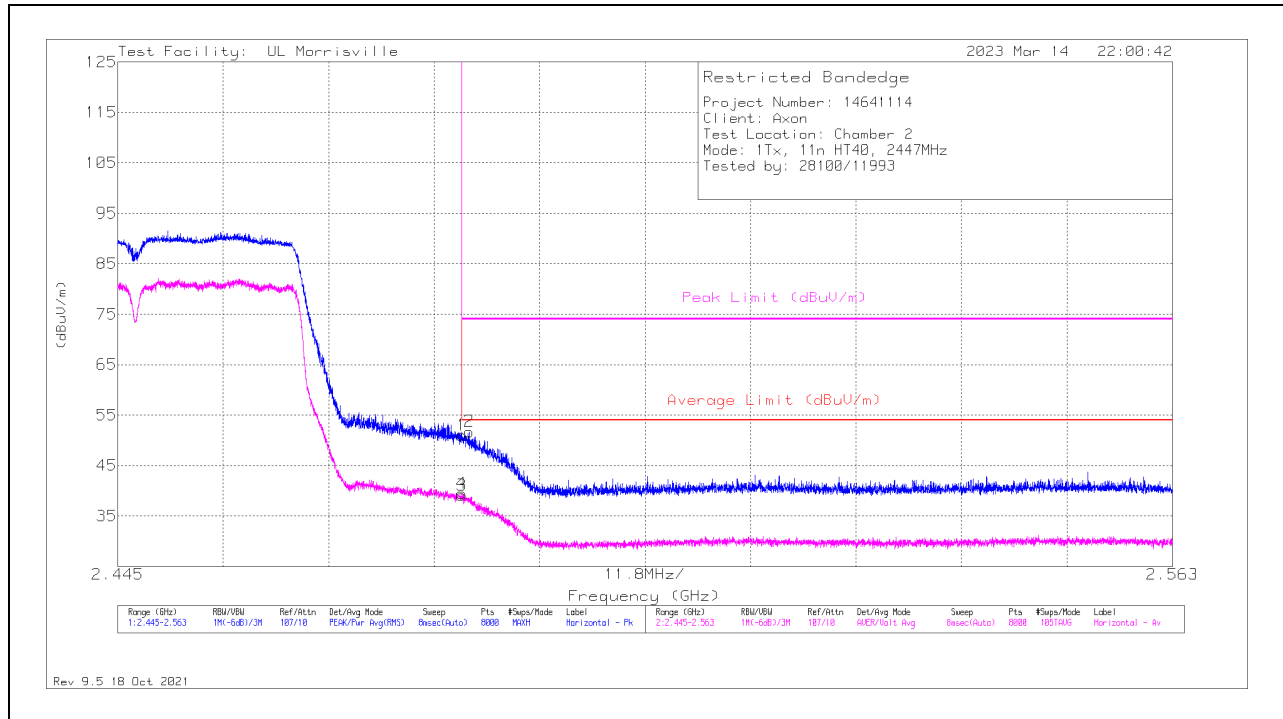


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.38999	35.55	Pk	32	-23.8	10	0	53.75	-	-	74	-20.25	76	136	V
2	* ** 2.37948	35.84	Pk	32	-23.9	10	0	53.94	-	-	74	-20.06	76	136	V
3	* ** 2.38999	23.36	ADV	32	-23.8	10	.47	42.03	54	-11.97	-	-	76	136	V
4	* ** 2.38936	24.01	ADV	32	-23.8	10	.47	42.68	54	-11.32	-	-	76	136	V

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

BANDEDGE (HIGH CHANNEL, CH 8)

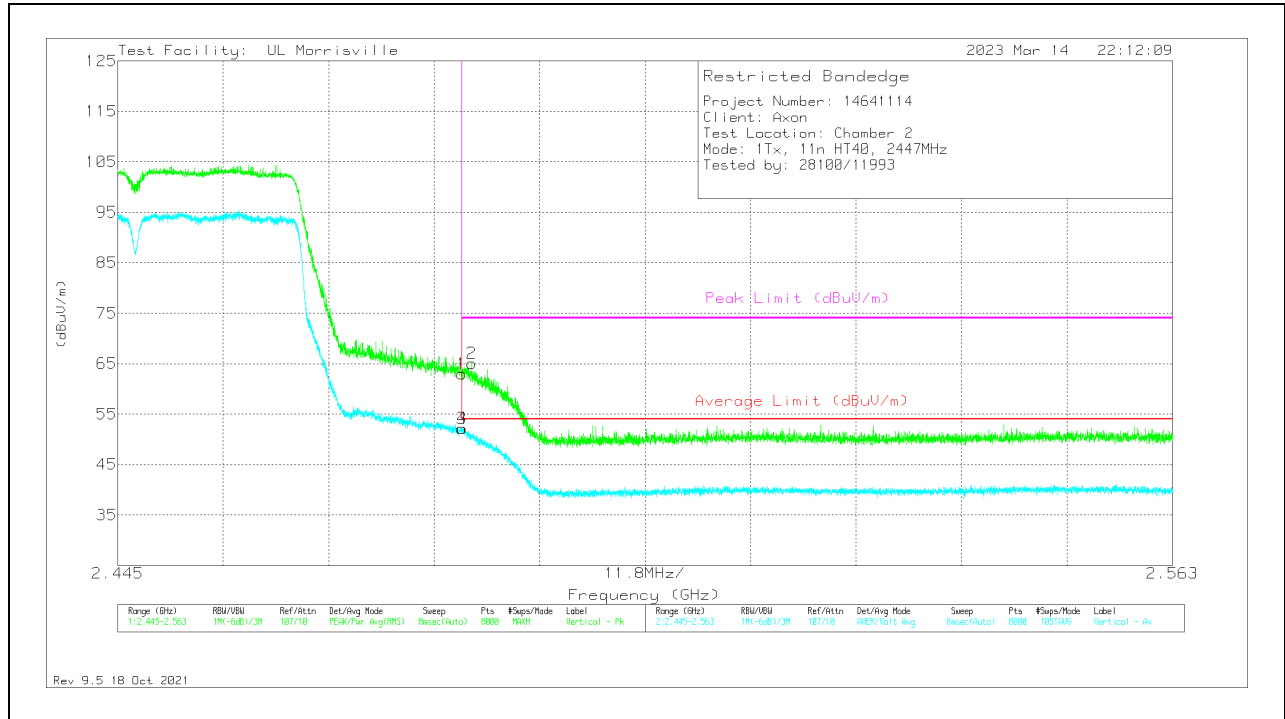
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.4835	42.8	Pk	32.5	-24.3	0	51	-	-	74	-23	168	173	H
2	*** 2.48434	43.62	Pk	32.5	-24.4	0	51.72	-	-	74	-22.28	168	173	H
3	*** 2.4835	30.47	ADV	32.5	-24.3	.47	39.14	54	-14.86	-	-	168	173	H
4	*** 2.48352	30.82	ADV	32.5	-24.3	.47	39.49	54	-14.51	-	-	168	173	H

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

VERTICAL RESULT

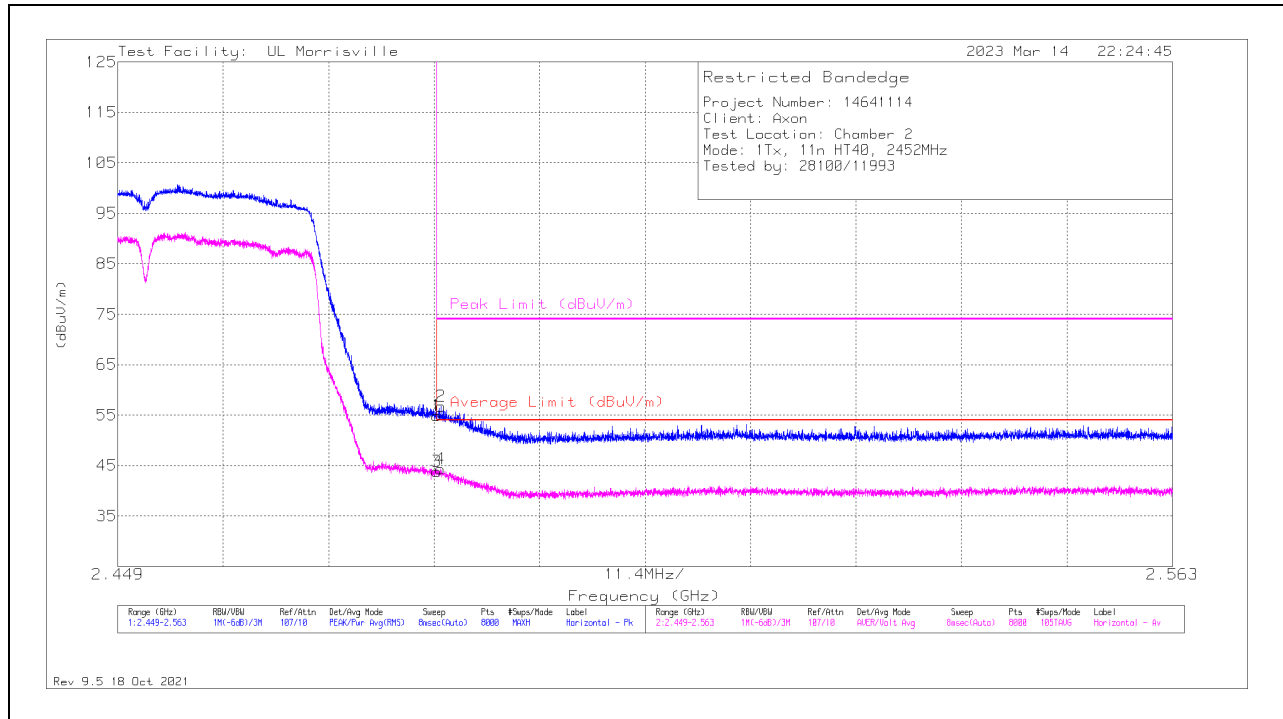


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.4835	44.72	Pk	32.5	-24.3	10	0	62.92	-	-	74	-11.08	312	167	V
2	** 2.48459	46.95	Pk	32.5	-24.4	10	0	65.05	-	-	74	-8.95	312	167	V
3	*** 2.4835	33.49	ADV	32.5	-24.3	10	.47	52.16	54	-1.84	-	-	312	167	V
4	*** 2.48355	33.49	ADV	32.5	-24.3	10	.47	52.16	54	-1.84	-	-	312	167	V

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

BANDEDGE (HIGH CHANNEL, CH 9)

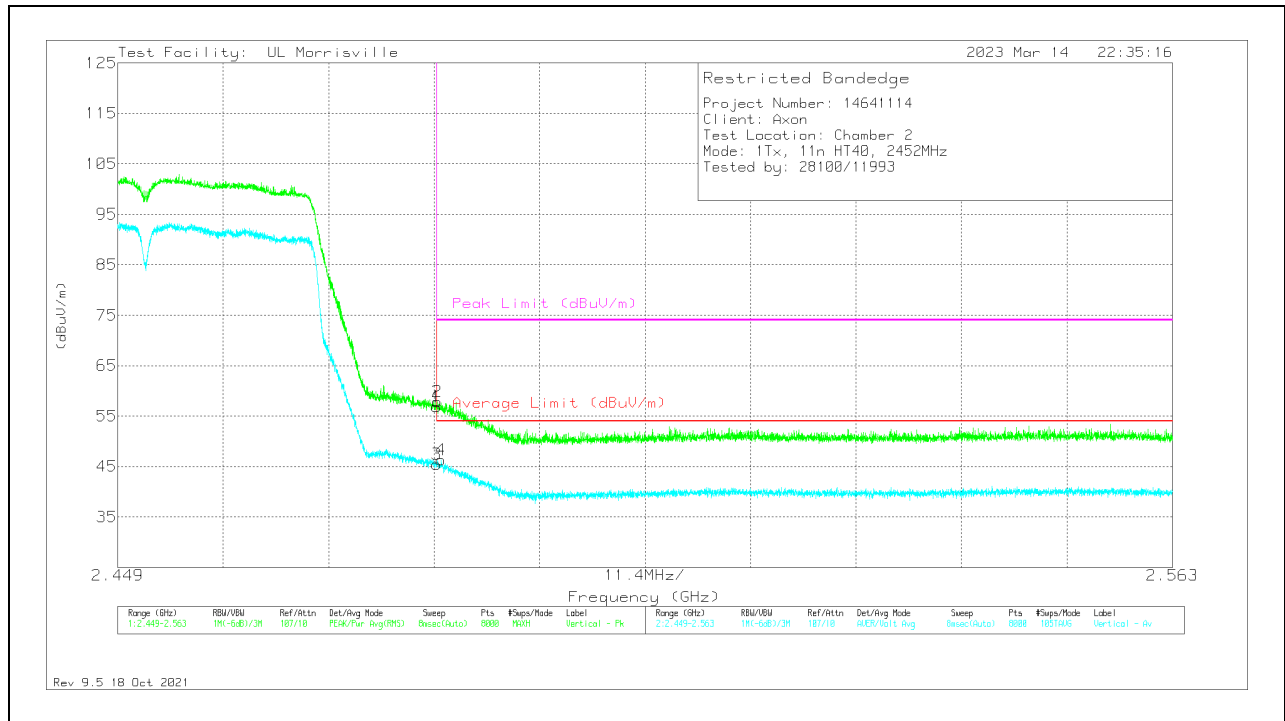
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.4835	36.7	Pk	32.5	-24.3	10	0	54.9	-	-	74	-19.1	188	352	H
2	*** 2.48395	38.62	Pk	32.5	-24.4	10	0	56.72	-	-	74	-17.28	188	352	H
3	*** 2.4835	25.21	ADV	32.5	-24.3	10	.47	43.88	54	-10.12	-	-	188	352	H
4	*** 2.48386	25.71	ADV	32.5	-24.4	10	.47	44.28	54	-9.72	-	-	188	352	H

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

VERTICAL RESULT



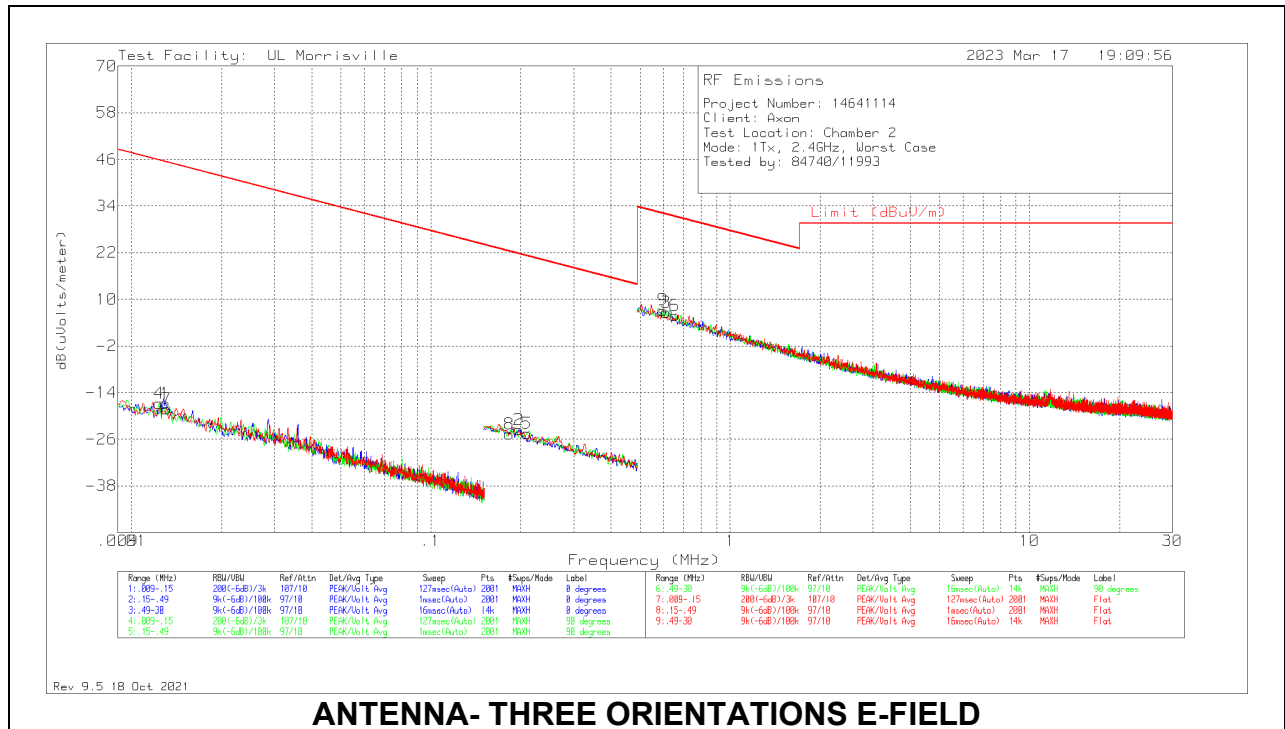
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Gain/Loss (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*** 2.4835	38.67	Pk	32.5	-24.3	10	0	56.87	-	-	74	-17.13	348	127	V
2	** 2.48356	39.66	Pk	32.5	-24.3	10	0	57.86	-	-	74	-16.14	348	127	V
3	*** 2.4835	26.77	ADV	32.5	-24.3	10	.47	45.44	54	-8.56	-	-	348	127	V
4	*** 2.48397	27.76	ADV	32.5	-24.4	10	.47	46.33	54	-7.67	-	-	348	127	V

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

10.2. WORST CASE BELOW 30MHZ

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)

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

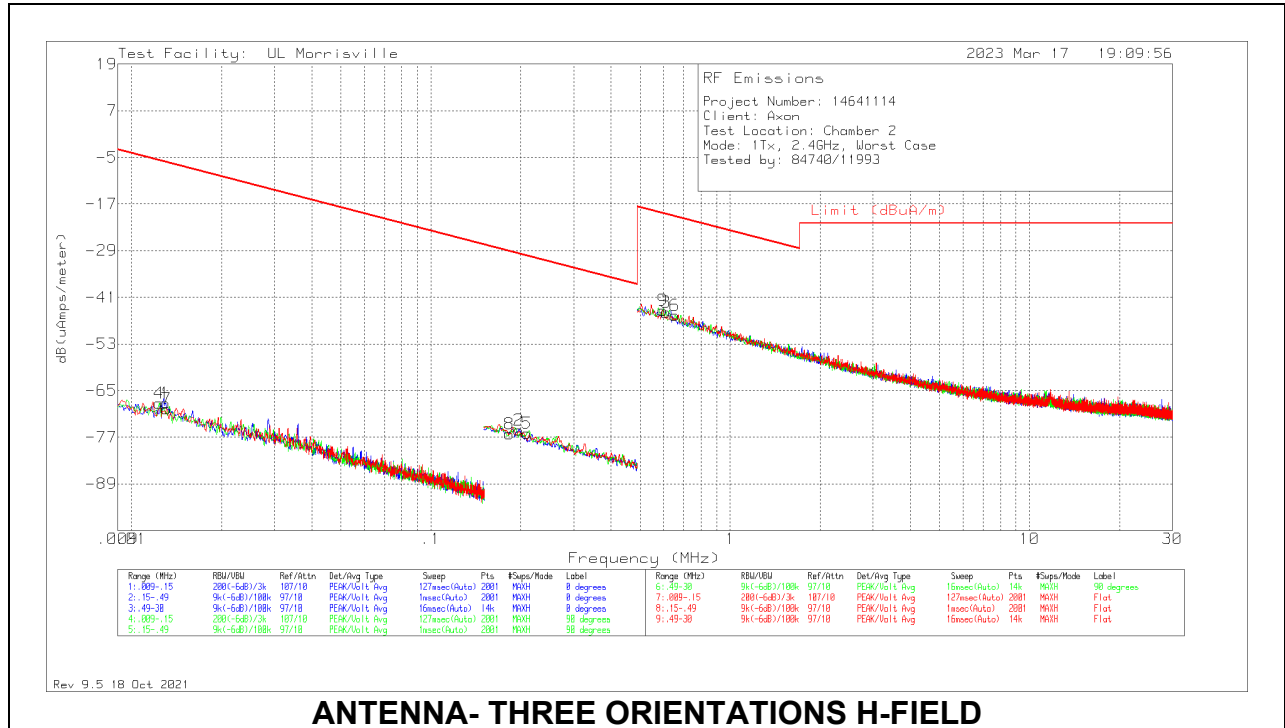


ANTENNA- THREE ORIENTATIONS E-FIELD

Below 30MHz Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	135144 (dB/m)	Gain/Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uVolts/meter)	QP/AV Limit (dBuV/m)	PK Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Loop Angle
4	.01234	44.81	Pk	18.3	.1	-80	-16.79	45.78	65.78	-62.57	0-360	90 deg
1	.01298	45.19	Pk	18	.1	-80	-16.71	45.34	65.34	-62.05	0-360	0 deg
7	.01312	43.77	Pk	17.9	.1	-80	-18.23	45.25	65.25	-63.48	0-360	Flat
8	.18298	43.1	Pk	12.2	.1	-80	-24.6	22.36	42.36	-46.96	0-360	Flat
2	.19658	44.09	Pk	12.2	.1	-80	-23.61	21.73	41.73	-45.34	0-360	0 deg
5	.20933	43.19	Pk	12.2	.1	-80	-24.51	21.19	41.19	-45.7	0-360	90 deg
9	.5954	34.8	Pk	12.2	.2	-40	7.2	32.11	-	-24.91	0-360	Flat
3	.61016	34.25	Pk	12.2	.2	-40	6.65	31.9	-	-25.25	0-360	0 deg
6	.65442	33.43	Pk	12.2	.2	-40	5.83	31.29	-	-25.46	0-360	90 deg

Pk - Peak detector



ANTENNA- THREE ORIENTATIONS H-FIELD

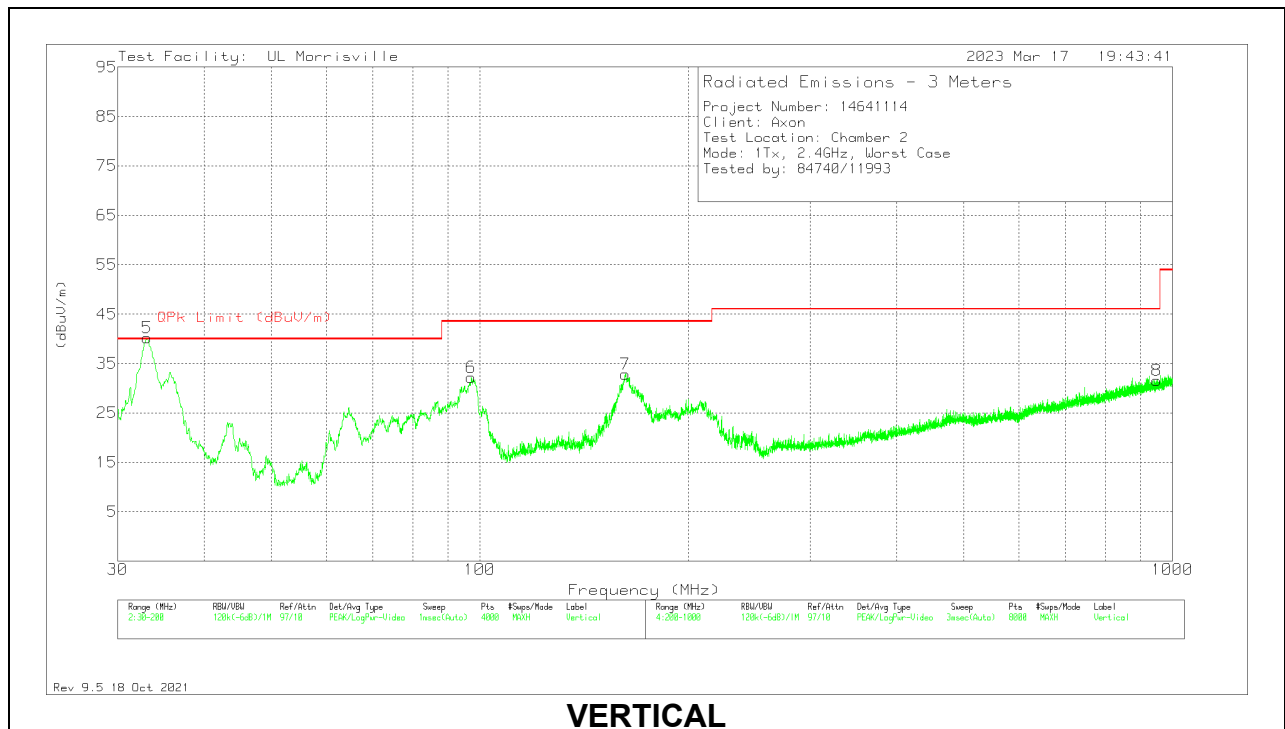
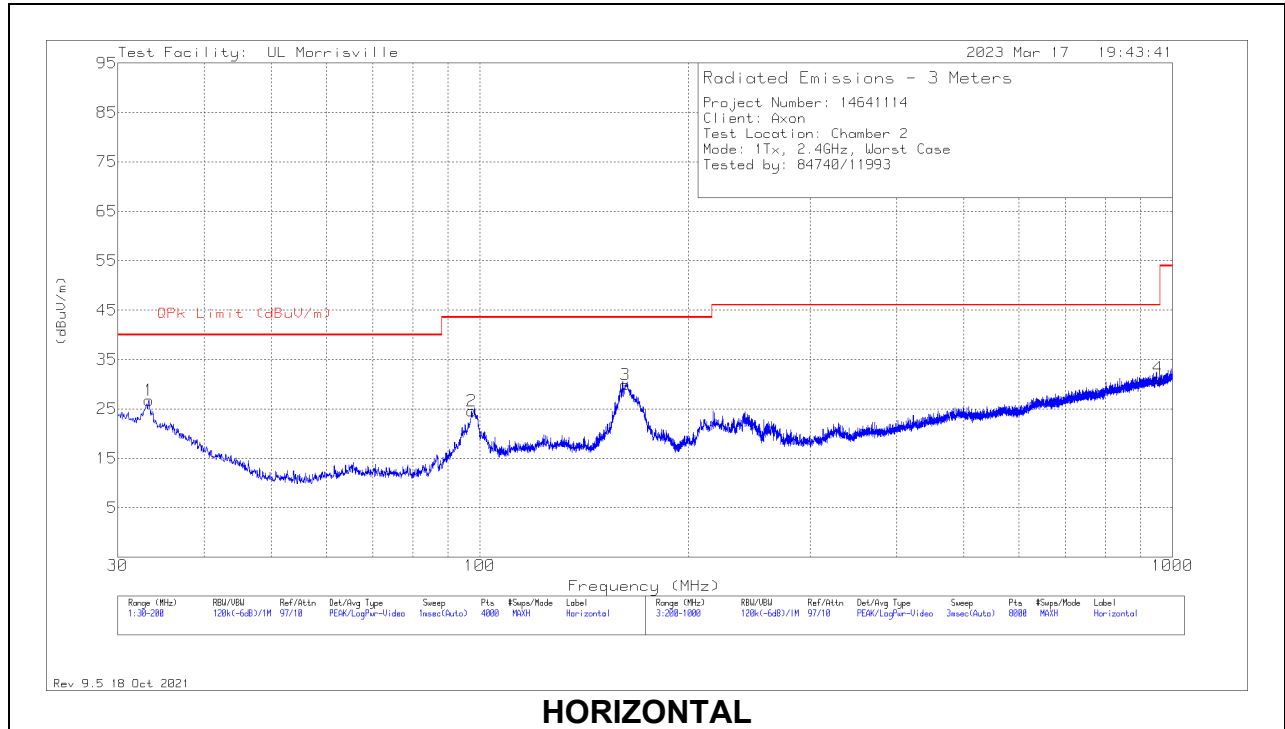
Below 30MHz Data

Marker	Frequency (MHz)	Meter Reading (dBuA)	Det	135144 (dB/m)	Gain/Loss (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uAmps/meter)	QP/AV Limit (dBuA/m)	PK Limit (dBuA/m)	Margin (dB)	Azimuth (Degs)	Loop Angle
4	.01234	44.81	Pk	-33.2	.1	-80	-68.29	-5.72	14.28	-62.57	0-360	90 deg
1	.01298	45.19	Pk	-33.5	.1	-80	-68.21	-6.16	13.84	-62.05	0-360	0 deg
7	.01312	43.77	Pk	-33.6	.1	-80	-69.73	-6.25	13.75	-63.48	0-360	Flat
8	.18298	43.1	Pk	-39.3	.1	-80	-76.1	-29.14	-9.14	-46.96	0-360	Flat
2	.19658	44.09	Pk	-39.3	.1	-80	-75.11	-29.77	-9.77	-45.34	0-360	0 deg
5	.20933	43.19	Pk	-39.3	.1	-80	-76.01	-30.31	-10.31	-45.7	0-360	90 deg
9	.5954	34.8	Pk	-39.3	.2	-40	-44.3	-19.39	-	-24.91	0-360	Flat
3	.61016	34.25	Pk	-39.3	.2	-40	-44.85	-19.6	-	-25.25	0-360	0 deg
6	.65442	33.43	Pk	-39.3	.2	-40	-45.67	-20.21	-	-25.46	0-360	90 deg

Pk - Peak detector

10.3. WORST CASE BELOW 1 GHZ

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



Below 1GHz Data

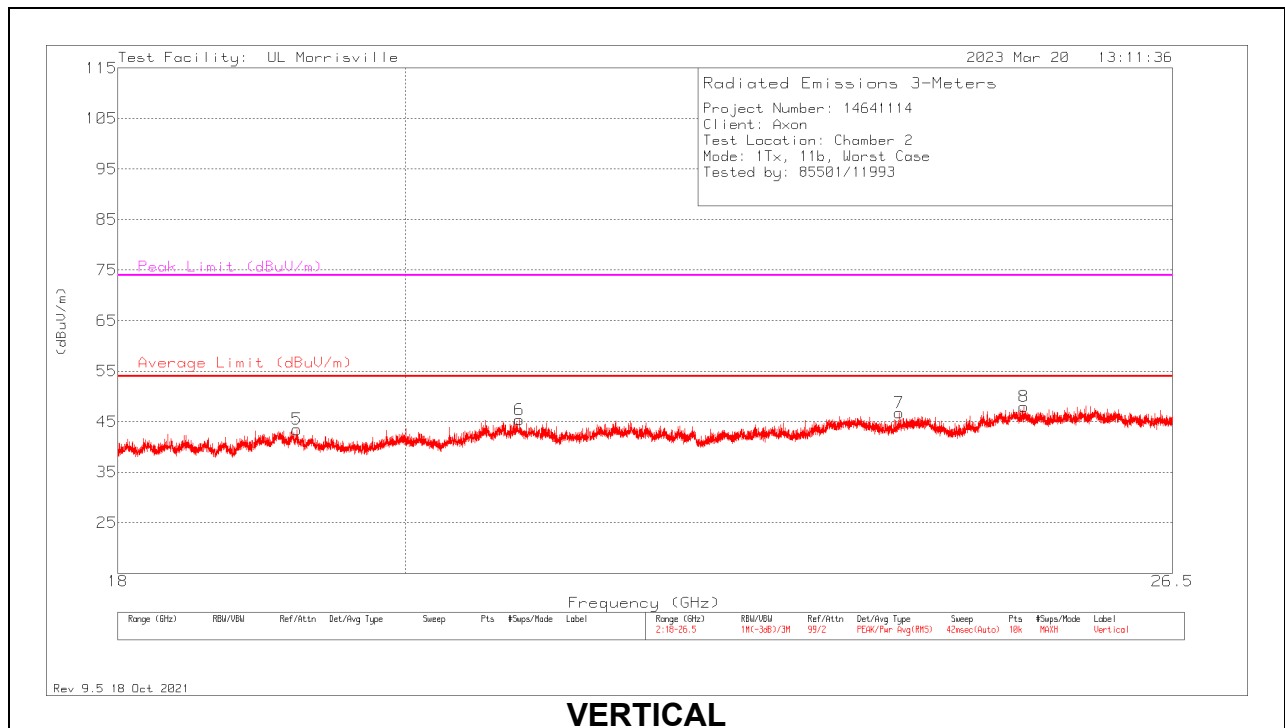
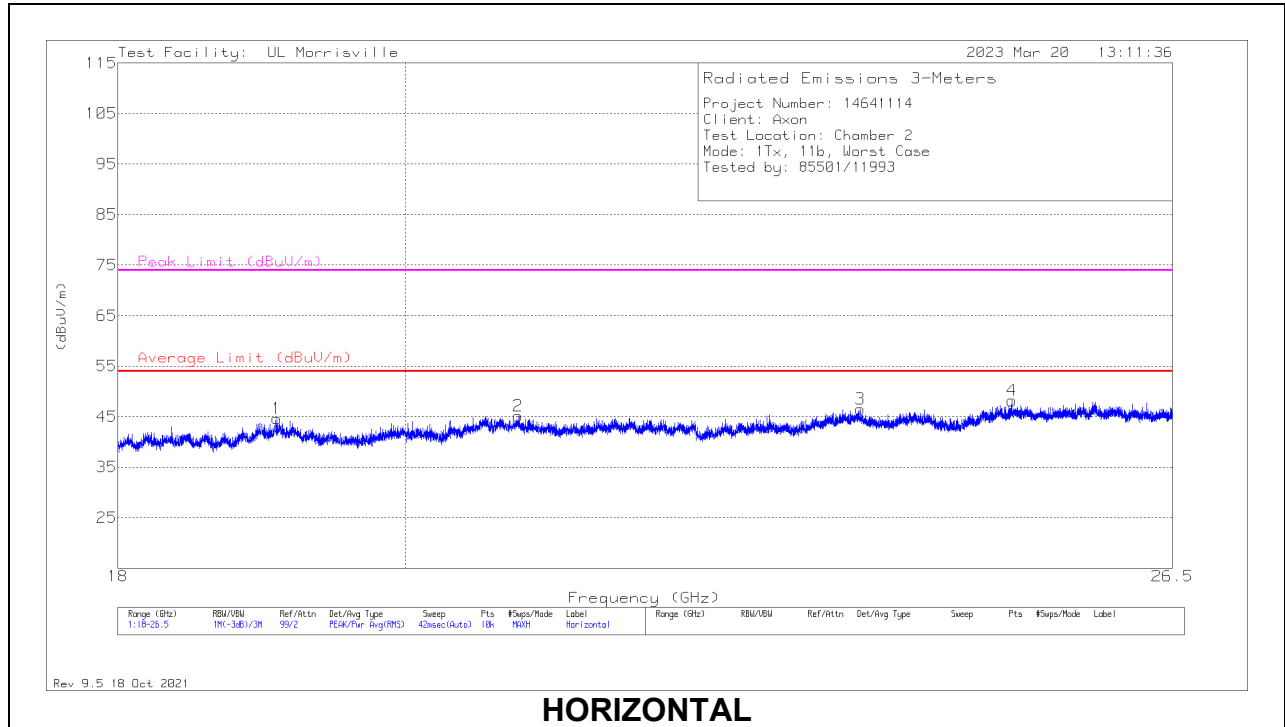
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	33.2733	33.39	Pk	25	-31.6	26.79	40	-13.21	0-360	101	H
2	97.2949	39.31	Pk	15.7	-30.4	24.61	43.52	-18.91	0-360	299	H
3	162.2942	41.37	Pk	18.4	-29.9	29.87	43.52	-13.65	0-360	198	H
4	952.9979	27.95	Pk	28.3	-25	31.25	46.02	-14.77	0-360	101	H
5	33.1347	42.9	Qp	25.1	-31.5	36.5	40	-3.5	333	100	V
6	97.1674	46.96	Pk	15.7	-30.5	32.16	43.52	-11.36	0-360	101	V
7	162.0817	44.19	Pk	18.4	-29.8	32.79	43.52	-10.73	0-360	101	V
8	948.9974	27.95	Pk	28.4	-24.8	31.55	46.02	-14.47	0-360	199	V

Pk - Peak detector

Qp - Quasi-Peak detector

10.4. WORST CASE 18-26 GHZ

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



18 – 26GHz Data

Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	204704 (dB/m)	Gain/Loss (dB)	DC Corr (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 19.08024	49.27	Pk	33.8	-38.4	0	44.67	54	-9.33	74	-29.33	0-360	149	H
2	* ** 20.84552	49.67	Pk	34	-38.5	0	45.17	54	-8.83	74	-28.83	0-360	249	H
3	* ** 23.63324	48.98	Pk	35.2	-37.7	0	46.48	54	-7.52	74	-27.52	0-360	149	H
5	* ** 19.22388	48.16	Pk	33.7	-38.4	0	43.46	54	-10.54	74	-30.54	0-360	300	V
6	* ** 20.85571	49.89	Pk	34	-38.5	0	45.39	54	-8.61	74	-28.61	0-360	200	V
7	* ** 23.97235	49.2	Pk	35.1	-37.5	0	46.8	54	-7.2	74	-27.2	0-360	101	V
4	24.98303	50.36	PK2	35.6	-37	0	48.96	-	-	74	-25.04	46	362	H
	24.98117	36.73	ADV	35.6	-37	1.18	36.51	54	-17.49	-	-	46	362	H
8	25.09749	49.75	PK2	35.7	-36.8	0	48.65	-	-	74	-25.35	153	243	V
	25.09611	36.39	ADV	35.7	-36.8	1.18	36.47	54	-17.53	-	-	153	243	V

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

** - indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

PK2 - Maximum Peak

ADV - Linear Voltage Average

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)
RSS-Gen 8.8

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

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

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

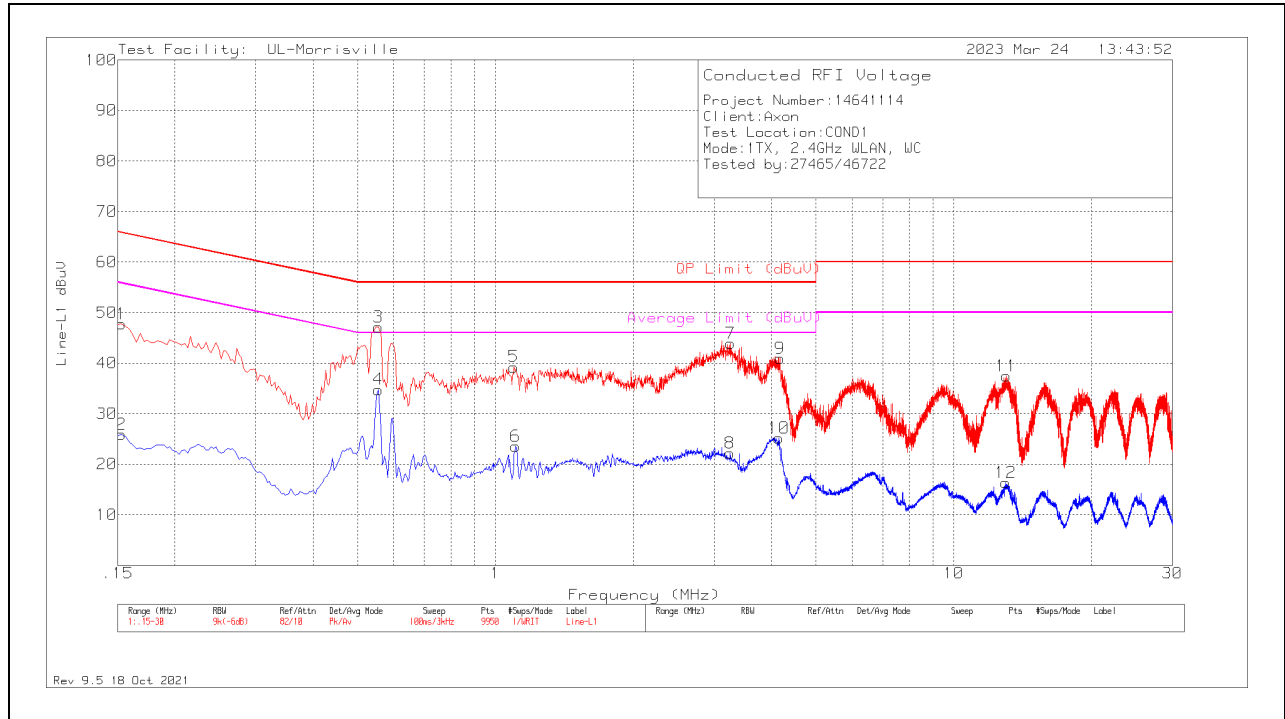
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

11.1.1. AC Power Line Norm

LINE 1 RESULTS

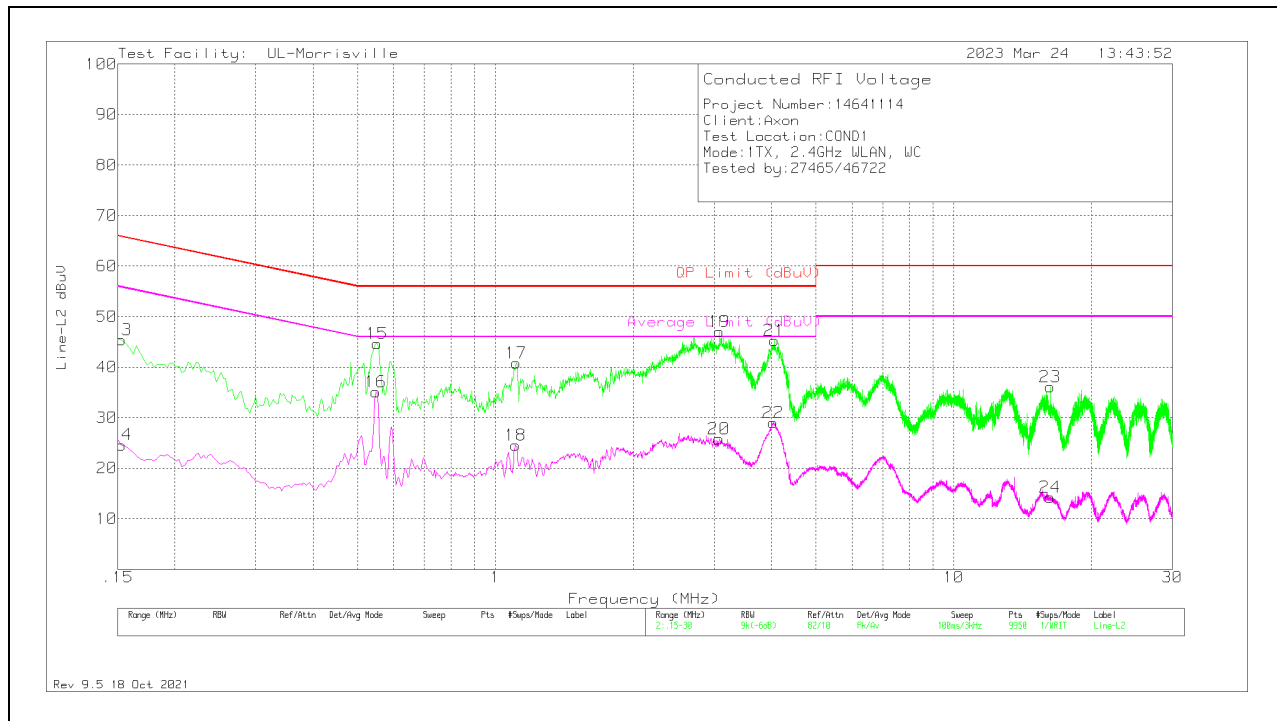


Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
1	.153	37.81	Pk	.2	9.8	47.81	65.84	-18.03	-	-
2	.153	15.86	Av	.2	9.8	25.86	-	-	55.84	-29.98
3	.555	37.34	Pk	0	9.8	47.14	56	-8.86	-	-
4	.555	24.99	Av	0	9.8	34.79	-	-	46	-11.21
5	1.098	29.46	Pk	0	9.8	39.26	56	-16.74	-	-
6	1.107	13.78	Av	0	9.8	23.58	-	-	46	-22.42
7	3.255	33.99	Pk	0	9.9	43.89	56	-12.11	-	-
8	3.252	12.25	Av	0	9.9	22.15	-	-	46	-23.85
9	4.179	31.09	Pk	0	9.9	40.99	56	-15.01	-	-
10	4.158	15.22	Av	0	9.9	25.12	-	-	46	-20.88
11	13.026	27.41	Pk	.1	10	37.51	60	-22.49	-	-
12	12.999	6.22	Av	.1	10	16.32	-	-	50	-33.68

Pk - Peak detector
 Av - Average detection

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
13	.153	35.44	Pk	.2	9.8	45.44	65.84	-20.4	-	-
14	.153	14.61	Av	.2	9.8	24.61	-	-	55.84	-31.23
15	.552	34.88	Pk	0	9.8	44.68	56	-11.32	-	-
16	.549	25.33	Av	0	9.8	35.13	-	-	46	-10.87
17	1.11	30.97	Pk	0	9.8	40.77	56	-15.23	-	-
18	1.107	14.69	Av	0	9.8	24.49	-	-	46	-21.51
19	3.078	37.23	Pk	0	9.8	47.03	56	-8.97	-	-
20	3.075	16.02	Av	0	9.8	25.82	-	-	46	-20.18
21	4.068	35.4	Pk	0	9.9	45.3	56	-10.7	-	-
22	4.038	19.12	Av	0	9.9	29.02	-	-	46	-16.98
23	16.215	25.85	Pk	.1	10.1	36.05	60	-23.95	-	-
24	16.245	4.04	Av	.1	10.1	14.24	-	-	50	-35.76

Pk - Peak detector
 Av - Average detection

12. SETUP PHOTOS

Please refer to R14641114-EP1 for setup photos

END OF TEST REPORT