



TEST REPORT

Report Number. : 13214419-E3V3

Applicant : Microsoft Corporation
One Microsoft Way
Redmond, WA 98052-6399
USA

Model : 1873

FCC ID : C3K1873

IC : 3048A-1873

EUT Description : Portable Computing Device

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

Date Of Issue:

April 21, 2020

Prepared by:

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REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	4/13/2020	Initial Issue	---
V2	4/16/2020	Section 6.3 Statement updated Section 10.2 updated	Henry Lau
V3	4/21/2020	Section 6.2 Statement updated	Henry Lau

REPORT REVISION HISTORY	2
1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	6
3. REFERENCE DOCUMENTS	6
4. FACILITIES AND ACCREDITATION	6
5. CALIBRATION AND UNCERTAINTY	7
5.1. MEASURING INSTRUMENT CALIBRATION	7
5.2. SAMPLE CALCULATION	7
5.3. MEASUREMENT UNCERTAINTY	7
6. EQUIPMENT UNDER TEST	8
6.1. EUT DESCRIPTION	8
6.2. PERMISSIVE CHANGE SCOPE	8
6.3. MAXIMUM OUTPUT POWER.....	8
6.4. DESCRIPTION OF AVAILABLE ANTENNAS	9
6.5. SOFTWARE AND FIRMWARE.....	9
6.6. WORST-CASE CONFIGURATION AND MODE.....	9
6.7. DESCRIPTION OF TEST SETUP.....	10
7. MEASUREMENT METHOD.....	13
8. TEST AND MEASUREMENT EQUIPMENT	13
9. ANTENNA PORT TEST RESULTS	14
9.1. OUTPUT POWER.....	14
9.1.1. 802.11g MODE	15
9.1.2. 802.11n HT20 MODE	16
9.1.3. 802.11n HT40 MODE	17
10. RADIATED TEST RESULTS.....	18
10.1. TRANSMITTER ABOVE 1 GHz.....	20
10.1.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND	20
10.1.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND	36
10.1.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND.....	52
10.1.4. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 2.4 GHz BAND.....	68
10.2. WORST CASE BELOW 30MHz	82
10.3. WORST CASE BELOW 1 GHz	83
10.4. WORST CASE 18-26 GHZ.....	85
11. SETUP PHOTOS.....	87

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Microsoft Corporation
One Microsoft Way
Redmond, WA 98052-6399
USA

EUT DESCRIPTION: Portable Computing Device

MODEL: 1873

SERIAL NUMBER: 030239493757

DATE TESTED: January 22, 2020 – February 4, 2020

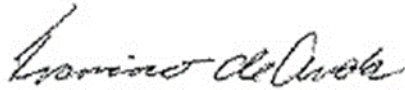
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Complies
ISED RSS-247 Issue 2	Complies
ISED RSS-GEN Issue 5	Complies

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

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

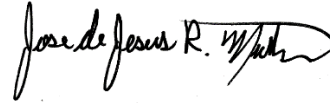
This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This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

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2. 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, KDB 662911 D01, RSS-GEN Issue 5, and RSS-247 Issue 2.

3. REFERENCE DOCUMENTS

Measurements of original parameters as referenced in this report are documented in UL Verification Services report number 12857633-E3.

4. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, and 47658 Kato Road, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street	47658 Kato Rd
☐ Chamber A	☐ Chamber D	☐ Chamber I
☐ Chamber B	☐ Chamber E	☒ Chamber J
☐ Chamber C	☐ Chamber F	☒ Chamber K
	☐ Chamber G	☐ Chamber L
	☐ Chamber H	☐ Chamber M

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. Chambers above are covered under Industry Canada company address and respective code: 2324A.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0

5. CALIBRATION AND UNCERTAINTY

5.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

5.2. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
 $36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.
 $36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$

5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.39 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.07 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.52 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	4.88 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.24 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.37 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.17 dB

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

6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The EUT is a portable computing device.

6.2. PERMISSIVE CHANGE SCOPE

Purpose for C2PC permissive change is to introduce a version of the product that has a new fabric keyboard. There are no changes to mother board nor RF circuitry, nor changes to the antennas but at a system level, the peak antenna gains changed.

Radiated Spurious Emissions, Radiated Bandedge & Conducted Output power tests were performed due to changes of antenna gains.

Results for all other tests, Duty Cycle, PSD, Bandwidth, conducted emissions, and AC Line conducted emissions from the original report (12857633-E3) remain representative as worst case due to having higher maximum power levels.

6.3. MAXIMUM OUTPUT POWER

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

2.4GHz BAND

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2Tx			
2412 - 2472	802.11b	21.27	133.97
2412 - 2472	802.11g	21.32	135.52
2412 - 2472	802.11n HT20 CDD	21.26	133.66
2422 - 2462	802.11n HT40 CDD	21.3	134.90

Above are maximum output power levels. They remain same as the original filing.

The following Channels and modes had a reduction in power due to changes in antenna gain;
802.11g Channel 13
802.11n HT20 Channel 13
802.11n HT40 Channel 11

6.4. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes two PIFA antennas, with a maximum gain of:

Frequency Band (MHz)	Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)
2412-2472	-0.7	2.6

NOTE:

Antenna 1 = Chain 0

Antenna 2 = Chain 1

6.5. SOFTWARE AND FIRMWARE

The operating system installed on the EUT is Windows 10 Home build 18362.418.

The Driver installed on the EUT is version 12.0.0.916.

The test utility software used during testing was QRCT v4.0.00123.

6.6. WORST-CASE CONFIGURATION AND MODE

Radiated emissions below 1GHz & above 18GHz was performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

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

For all modes, tests were performed with the EUT set at the 2Tx CDD mode with power setting equal to SISO modes as the worst case scenario thus MIMO is representative of SISO.

The EUT has one intended orientations, X; therefore, all final radiated testing was performed with the EUT in X orientation.

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps

802.11g mode: 6 Mbps

802.11n HT20mode: MCS0

802.11n HT40mode: MCS0

6.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC DC Adapter	Microsoft	1706	0D130POEUBG9A	DoC
AC DC Adapter	Lenovo	ADLX45NCC2A	8SSA10E75794C15G8 5N27C8	DoC
Laptop	Lenovo	Yoga 11e	R9-0R7JR3	PD99260NG
Mouse	Microsoft	1113	X821908-017	DoC
USB 3.0 Gigabit Ethernet Adapter	Linksys	USB3GIGV1	15710S08406234	DoC
USB Type C to Audio Jack	SONY	1310-9798	N/A	DoC
Earphone	SONY	AG-0501	N/A	DoC
Earphone	SONY	AG-1100	N/A	DoC

I/O CABLES (CONDUCTED TEST)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	1	AC	Un-Shielded	1	to AC/DC Adaptor
2	DC	1	DC	Shielded	1.2	to Laptop, to EUT
3	Antenna	1	SMA	Un-Shielded	0.2	to Analyzer
4	USB	1	TYPE A	Shielded	0.2	USB-A to RJ45 converter
5	Ethernet	1	RJ45	Un-Shielded	0.5	Support Laptop to Ethernet Adapter
6	AC	1	AC	Un-Shielded	1	to AC/DC Adaptor
7	DC	1	DC	Shielded	1.2	to Support Equipment

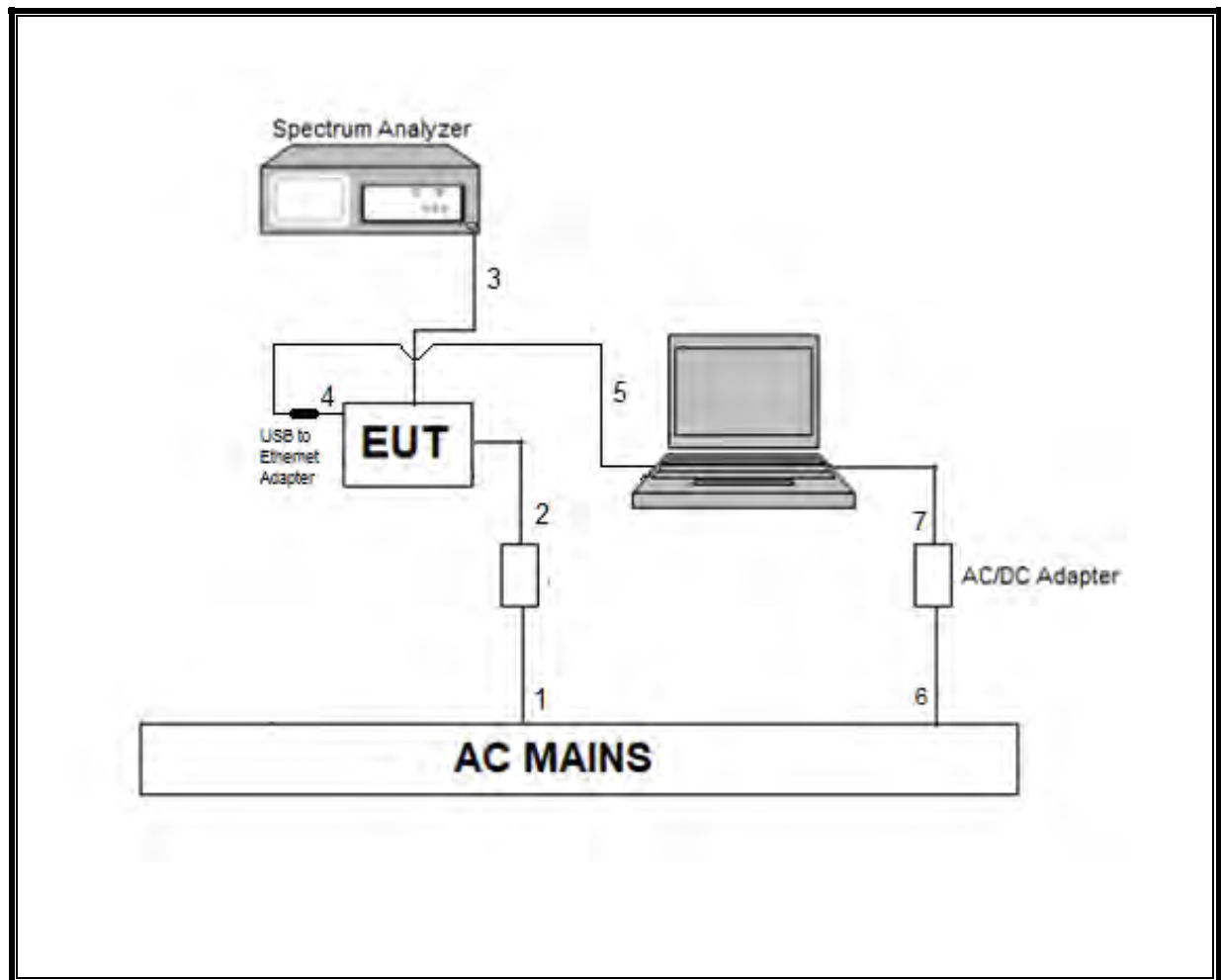
I/O CABLES (RADIATED AND CONDUCTED EMISSIONS)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	1	AC	Un-shielded	1	to AC/DC Adapter
2	DC	1	DC	Shielded	1.2	to EUT
3	USB	1	TYPE A	Shielded	1.5	EUT to Mouse
4	USB	1	Type C	Shielded	0.1	USB-C to Audio Jack converter
5	Earphone	2	3.5mm	Un-shielded	1	EUT to earphone

TEST SETUP

The EUT is connected to a test laptop during the tests. Test software exercised the radio card.

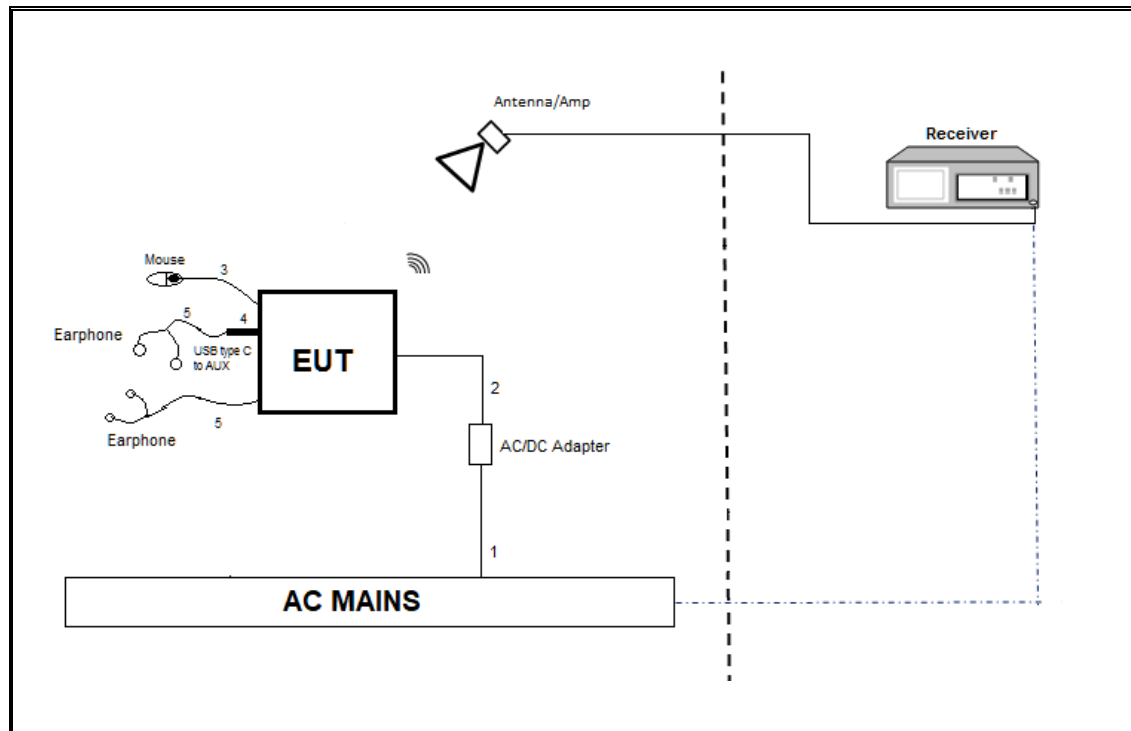
CONDUCTED TEST SETUP DIAGRAM



TEST SETUP

For conducted tests, the EUT was connected to a laptop. The test software exercises the radio.

RADIATED AND AC LINE CONDUCTED EMISSIONS SETUP DIAGRAM



TEST SETUP

For radiated tests and AC line conducted tests: EUT is connected to all support equipment. The test software exercises the radio. Support laptop was removed after EUT was configured.

7. MEASUREMENT METHOD

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

Radiated emissions non-restricted frequency bands: ANSI C63.10 Subclause -11.11

Radiated emissions restricted frequency bands: ANSI C63.10 Subclause -11.12.1

Radiated Spurious Emissions Below 30MHz: ANSI C63.10-2013 Section 6.4

8. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST					
Description	Manufacturer	Model	ID Num	Cal Due	Last Cal
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	PRE0179367	05/16/2020	05/16/2019
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences Corp.	JB3	T899	08/23/2020	08/23/2019
Amplifier, 9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	PRE0180174	06/01/2020	06/01/2019
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	T344	05/07/2020	05/07/2019
Amplifier, 1 to 18GHz, 35dB	AMPLICAL	AMP1G18-35	T1571	05/28/2020	05/28/2019
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	PRE0179372	02/16/2020	02/16/2019
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	EMC4294	06/14/2020	06/14/2019
Amplifier, 1 to 18GHz, 35dB	AMPLICAL	AMP1G18-35	T1569	05/04/2020	06/04/2019
Antenna, Passive Loop 30Hz - 1MHz	ELECTRO METRICS	EM-6871	PRE0179465	05/31/2020	05/31/2019
Antenna, Passive Loop 100KHz - 30MHz	ELECTRO METRICS	EM-6872	PRE0179467	05/31/2020	05/31/2019
Antenna, Horn 18 to 26.5GHz	ARA	MWH-1826/B	T447	08/13/2020	08/13/2019
Rf Amplifier, 18-26.5GHz, 60dB gain	AMPLICAL	AMP18G26.5-60	171590	05/01/2020	05/01/2019
Power Meter, P-series single channel	Agilent (Keysight) Technologies	N1911A	T229	01/31/2020	01/31/2019
Power Sensor, P-series, 50MHz to 18GHz, Wideband	Agilent (Keysight) Technologies	N1921A	T413	02/22/2020	02/22/2019
TEST SOFTWARE LIST					
Description	Manufacturer	Model	Version		
Radiated Software	UL	UL EMC	Ver 9.5, Oct 19, 2019		
Radiated Software	UL	UL EMC	Ver 9.5, Sep 24, 2019		
Radiated Software	UL	UL EMC	Ver 9.5, Oct 21, 2019		

NOTES:

- Equipment listed above that calibrated during the testing period was set for test after the calibration.
- Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

9. ANTENNA PORT TEST RESULTS

9.1. 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 was entered as an offset in the power meter to allow for a gated average reading of power

DIRECTIONAL ANTENNA GAIN

For 2 TX:

Tx chains are uncorrelated for power and correlated for PSD due to the device supporting CDD in all MIMO modes. The directional gains are as follows:

Band (GHz)	Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)	Correlated Chains Directional Gain (dBi)
2.40	-0.70	2.60	1.26	4.12

RESULTS

9.1.1. 802.11g MODE

2TX Chain 0 + Chain 1 CDD MODE

Test Engineer:	16080 ZS
Test Date:	1/27/2019

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
High 13	2472	1.26	30.00	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
High 13	2472	10.13	9.74	12.95	30.00	-17.05

9.1.2. 802.11n HT20 MODE

2TX Antenna 1 + Antenna 2 CDD MODE

Test Engineer:	16080 ZS
Test Date:	1/27/2019

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
High 13	2472	1.26	30.00	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
High 13	2472	7.53	7.21	10.38	30.00	-19.62

9.1.3. 802.11n HT40 MODE

2TX Antenna 1 + Antenna 2 CDD MODE

Test Engineer:	16080 ZS
Test Date:	1/29/2019

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
High 10	2457	1.26	30.00	36	30.00
High 11	2462	1.26	30.00	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
High 10	2457	17.33	17.38	20.37	30.00	-9.63
High 11	2462	9.01	8.65	11.84	30.00	-18.16

10. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209

RSS-GEN, Section 8.9 and 8.10

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

TEST PROCEDURE

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

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements 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 30MHz, 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.

2D antenna use - For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only.

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

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.

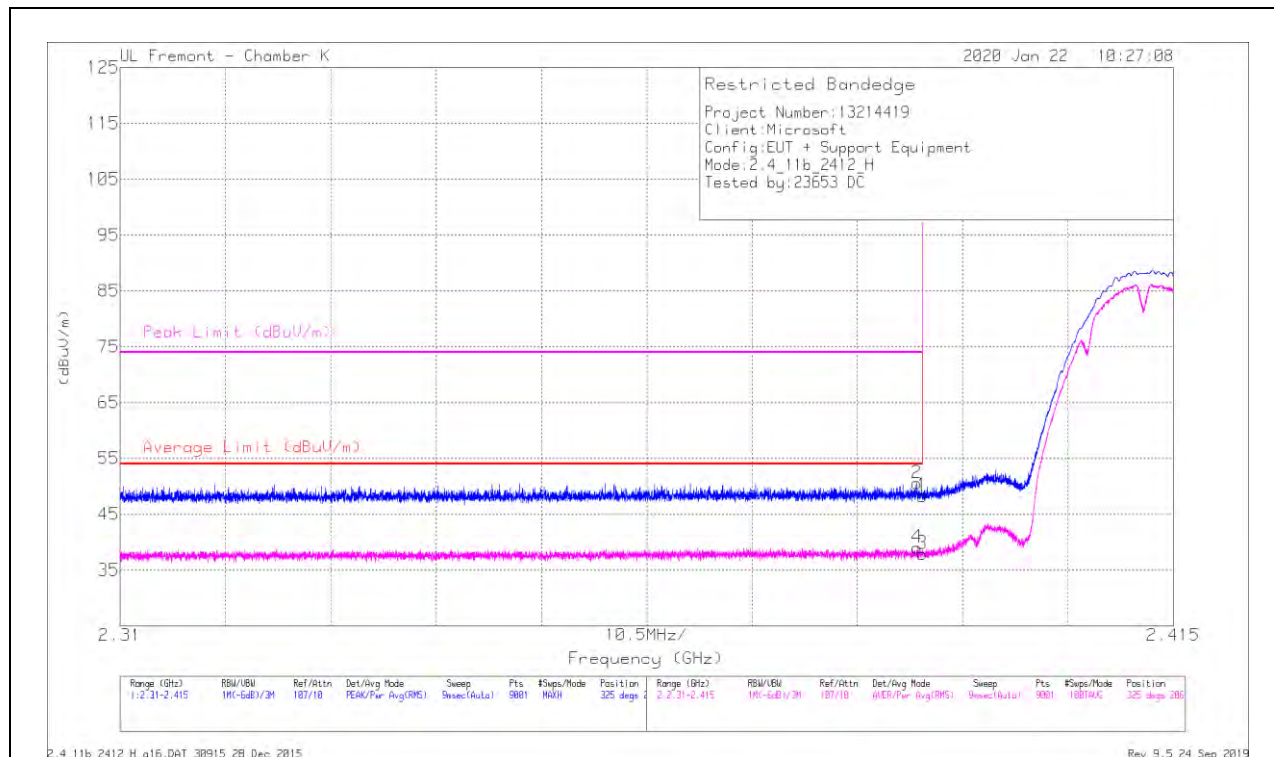
10.1. TRANSMITTER ABOVE 1 GHz

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

2TX Antenna 1 + Antenna 2 CDD MODE

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT



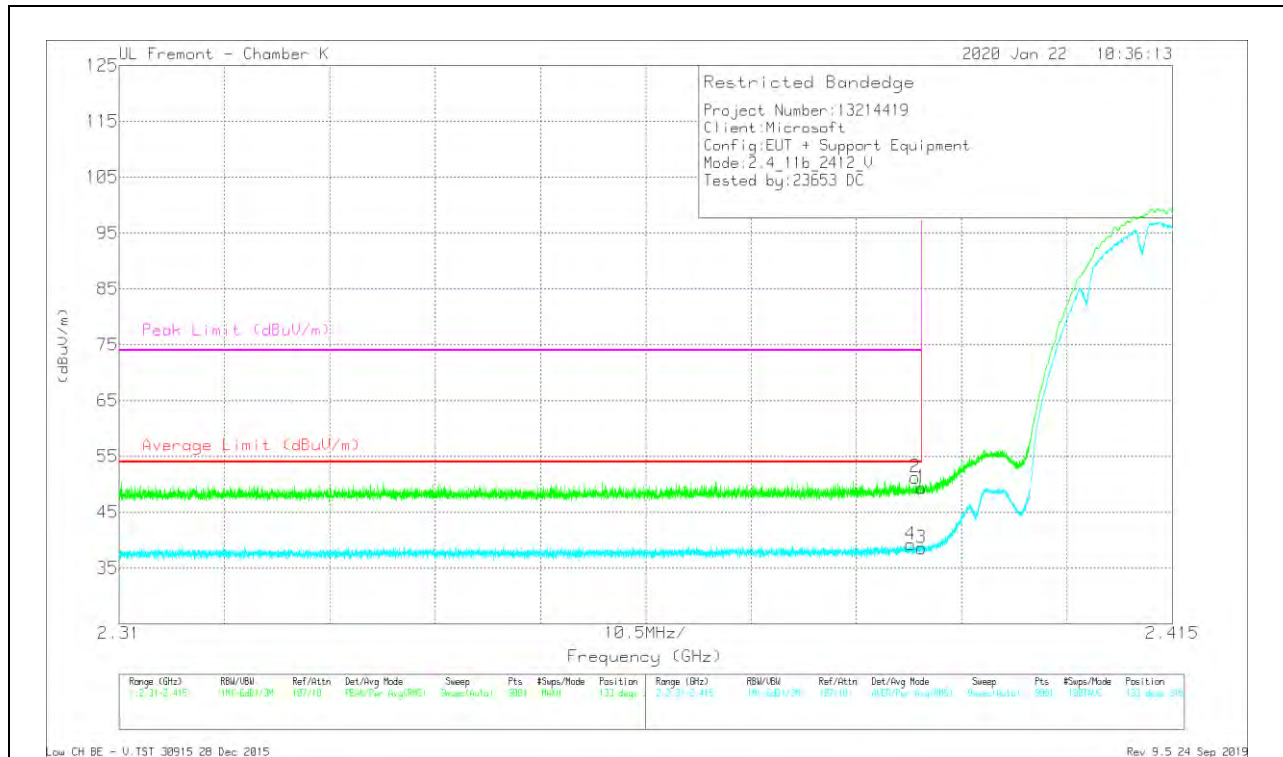
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Ftr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	41.12	Pk	31.9	-24.7	48.32	-	-	74	-25.68	325	206	H
2	* 2.38939	43.36	Pk	31.9	-24.7	50.56	-	-	74	-23.44	325	206	H
3	* 2.38999	30.71	RMS	31.9	-24.7	37.91	54	-16.09	-	-	325	206	H
4	* 2.38945	31.81	RMS	31.9	-24.7	39.01	54	-14.99	-	-	325	206	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Filtr/Pad (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	42.15	Pk	31.9	-24.7	49.35	-	-	74	-24.65	133	310	V
2	* 2.38935	44.04	Pk	31.9	-24.7	51.24	-	-	74	-22.76	133	310	V
3	* 2.38999	31.39	RMS	31.9	-24.7	38.59	54	-15.41	-	-	133	310	V
4	* 2.38892	32.03	RMS	31.9	-24.7	39.23	54	-14.77	-	-	133	310	V

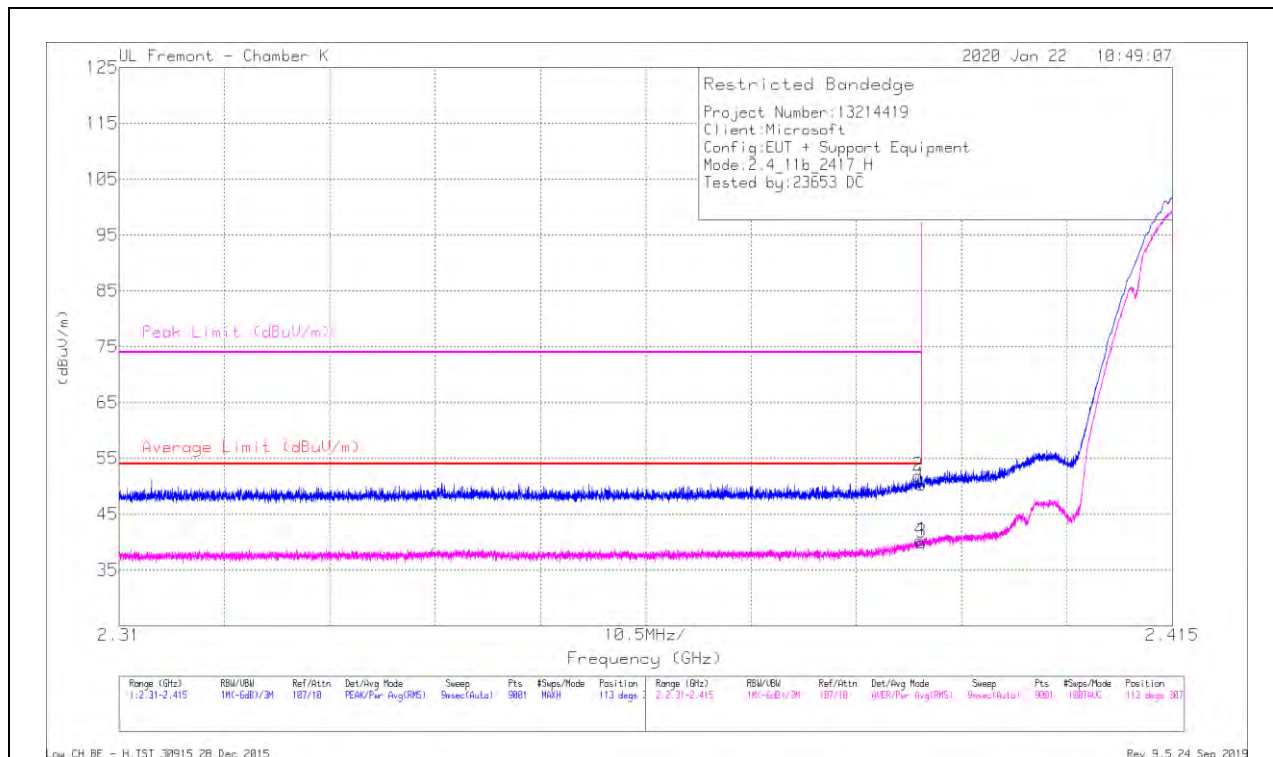
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (LOW CHANNEL, CH 2)

HORIZONTAL RESULT



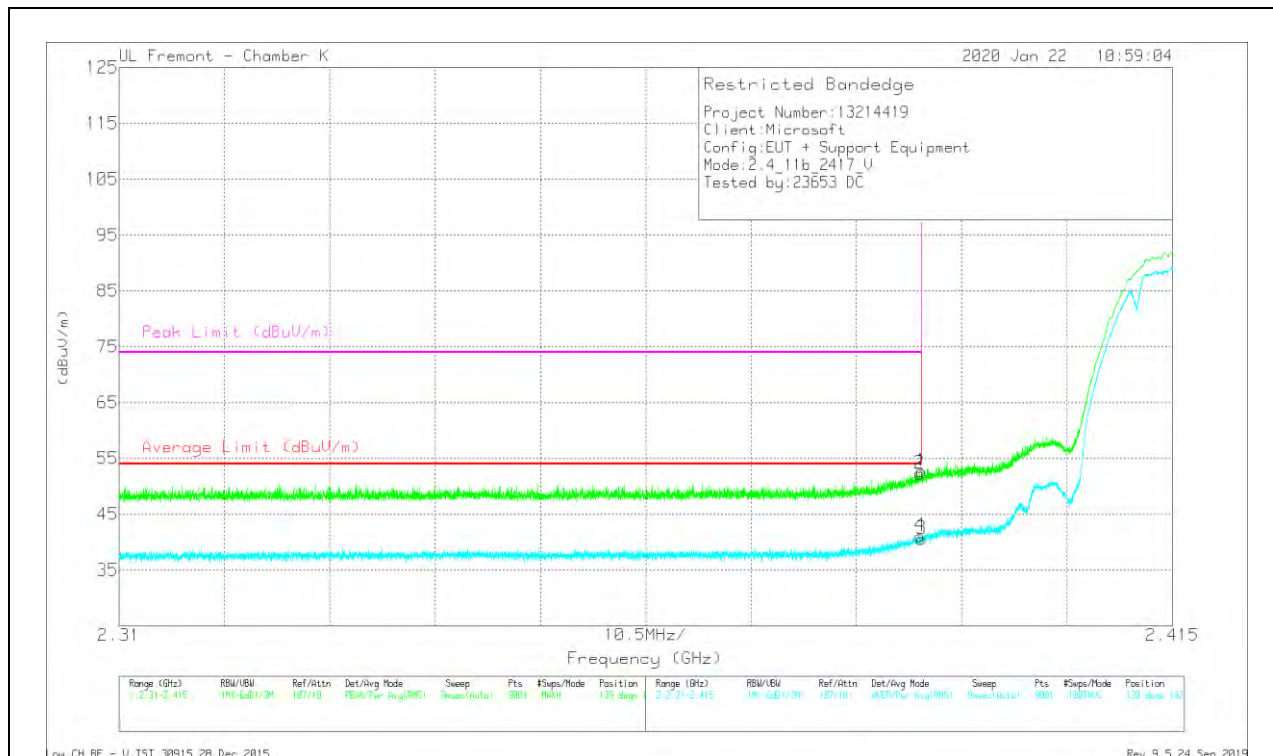
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dBm)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	43.1	Pk	31.9	-24.7	50.3	-	-	74	-23.7	113	307	H
2	* 2.38965	44.72	Pk	31.9	-24.7	51.92	-	-	74	-22.08	113	307	H
3	* 2.38999	32.8	RMS	31.9	-24.7	40	54	-14	-	-	113	307	H
4	* 2.38986	33.14	RMS	31.9	-24.7	40.34	54	-13.66	-	-	113	307	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dBm)	Amp/Cbl/Filt/Pad (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	45.53	Pk	31.9	-24.7	52.73	-	-	74	-21.27	139	142	V
2	* 2.3898	45.09	Pk	31.9	-24.7	52.29	-	-	74	-21.71	139	142	V
3	* 2.38999	33.41	RMS	31.9	-24.7	40.61	54	-13.39	-	-	139	142	V
4	* 2.38986	33.9	RMS	31.9	-24.7	41.1	54	-12.9	-	-	139	142	V

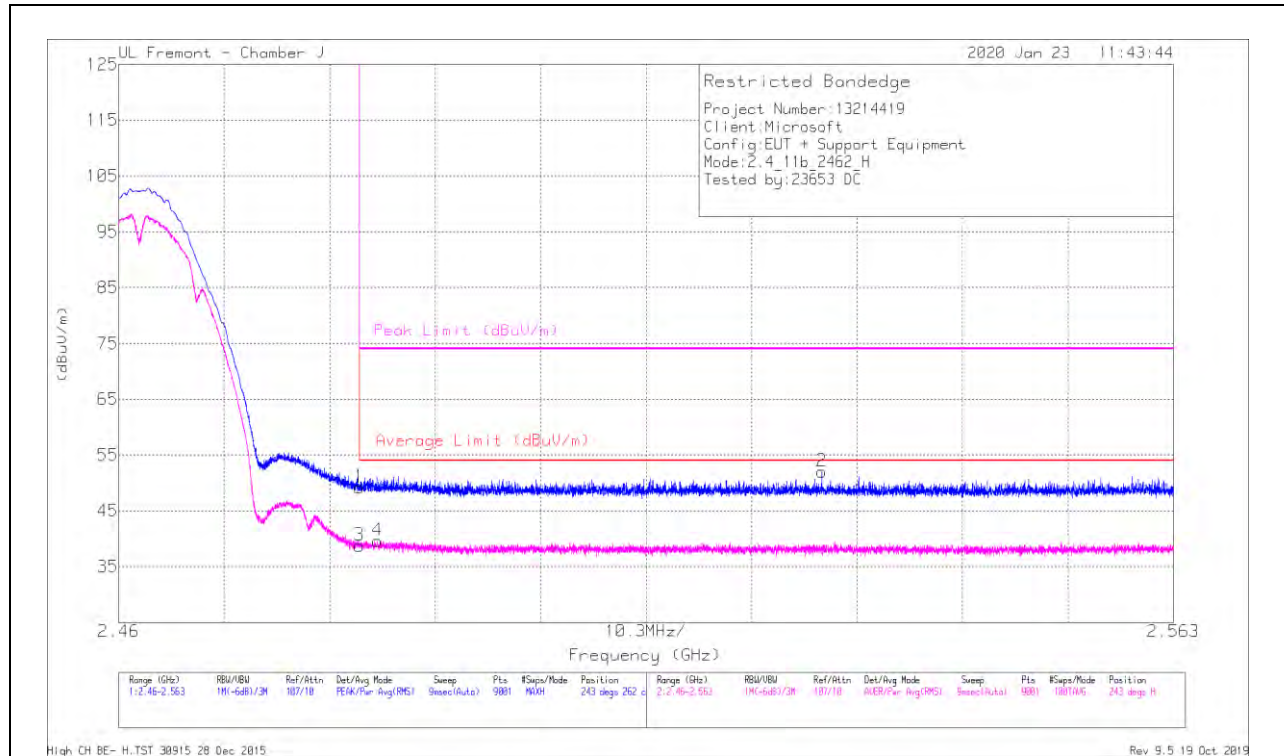
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT



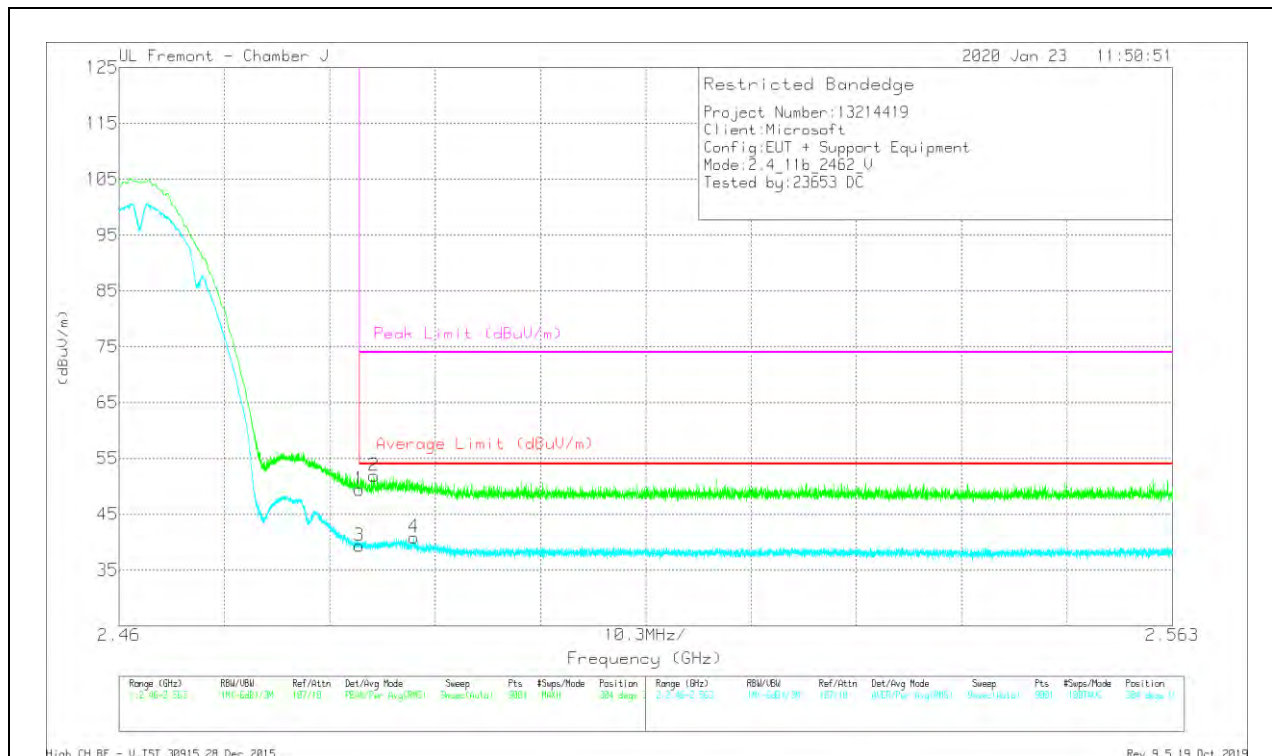
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	42.35	Pk	32.3	-25.5	49.15	-	-	74	-24.85	243	262	H
2	2.52865	45.01	Pk	32.4	-25.4	52.01	-	-	74	-21.99	243	262	H
3	* 2.48351	31.96	RMS	32.3	-25.5	38.76	54	-15.24	-	-	243	262	H
4	* 2.48528	32.85	RMS	32.3	-25.5	39.65	54	-14.35	-	-	243	262	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (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	42.63	Pk	32.3	-25.5	49.43	-	-	74	-24.57	304	328	V
2	* 2.48493	45.08	Pk	32.3	-25.5	51.88	-	-	74	-22.12	304	328	V
3	* 2.48351	32.55	RMS	32.3	-25.5	39.35	54	-14.65	-	-	304	328	V
4	* 2.4888	34.04	RMS	32.3	-25.5	40.84	54	-13.16	-	-	304	328	V

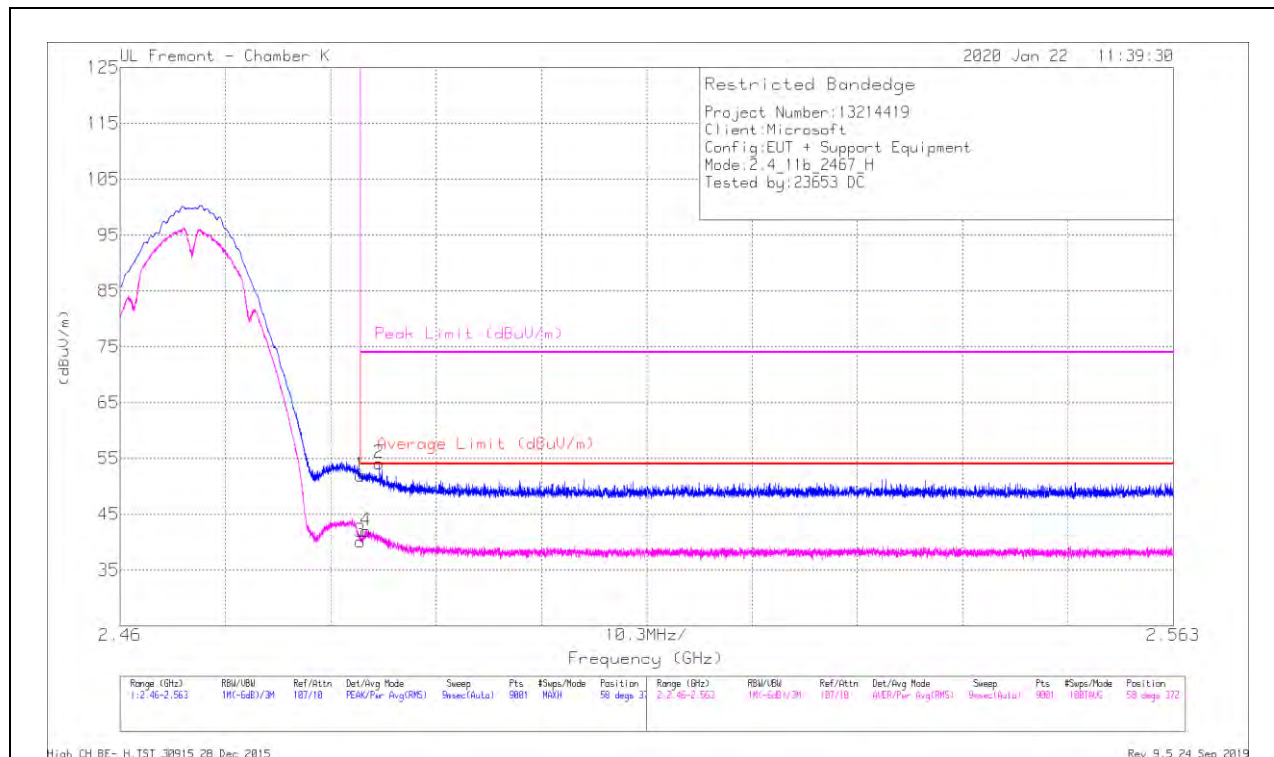
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 12)

HORIZONTAL RESULT



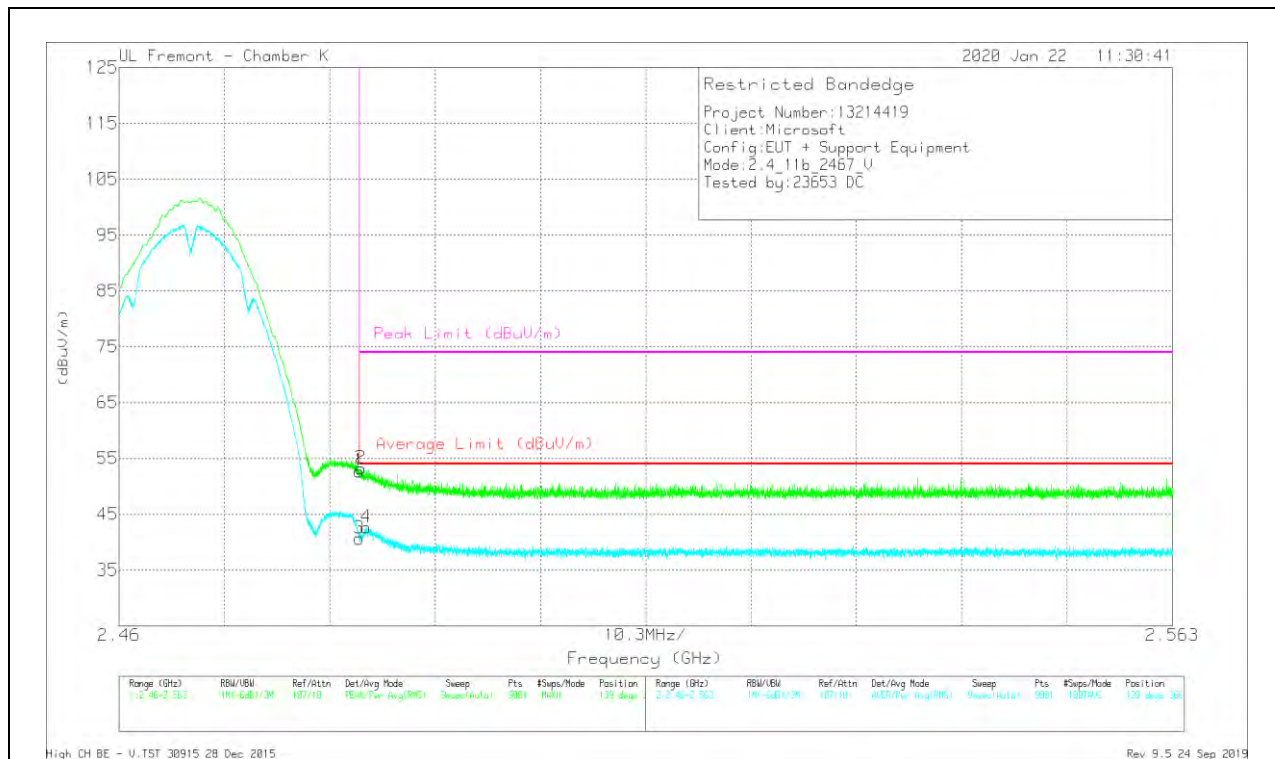
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	44.28	Pk	32.5	-24.8	51.98	-	-	74	-22.02	58	372	H
2	* 2.48534	46.45	Pk	32.5	-24.8	54.15	-	-	74	-19.85	58	372	H
3	* 2.48351	32.42	RMS	32.5	-24.8	40.12	54	-13.88	-	-	58	372	H
4	* 2.48406	34.35	RMS	32.5	-24.8	42.05	54	-11.95	-	-	58	372	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Fitr/Pad (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	44.99	Pk	32.5	-24.8	52.69	-	-	74	-21.31	139	366	V
2	* 2.48363	45.53	Pk	32.5	-24.8	53.23	-	-	74	-20.77	139	366	V
3	* 2.48351	32.96	RMS	32.5	-24.8	40.66	54	-13.34	-	-	139	366	V
4	* 2.48417	34.94	RMS	32.5	-24.8	42.64	54	-11.36	-	-	139	366	V

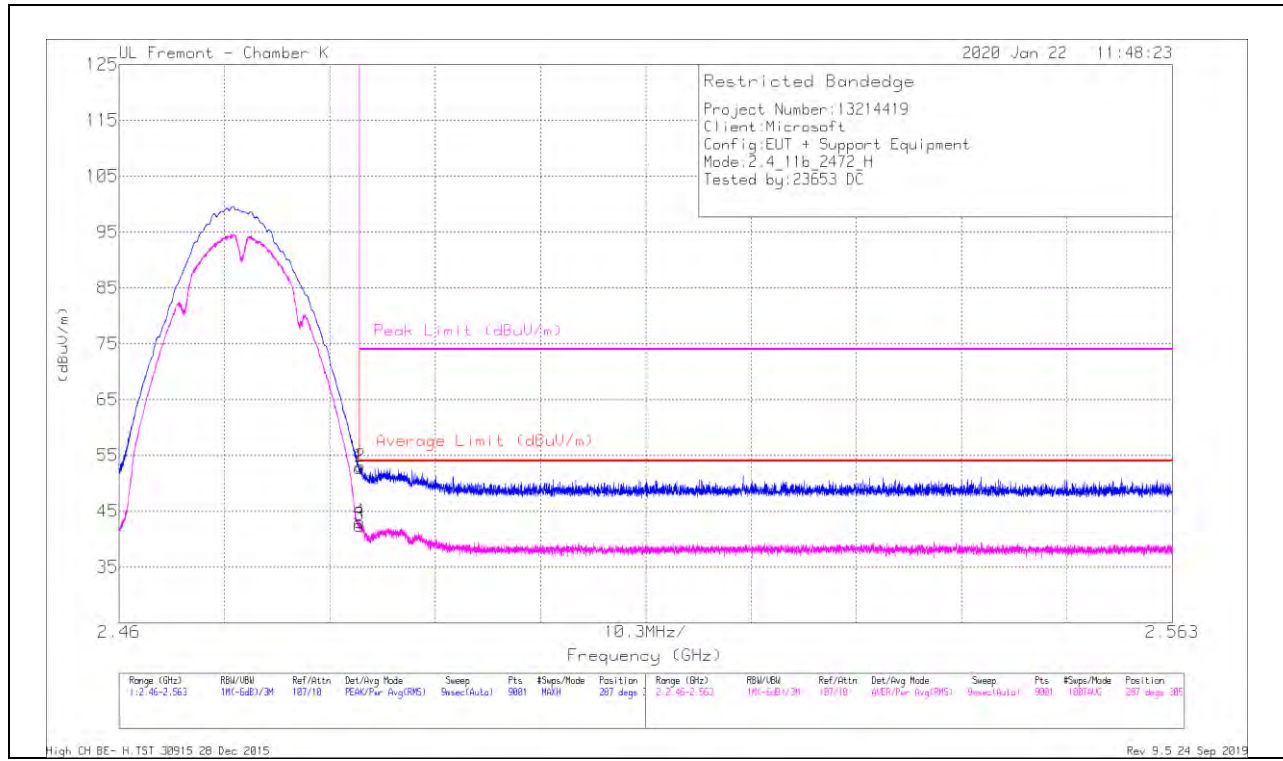
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT



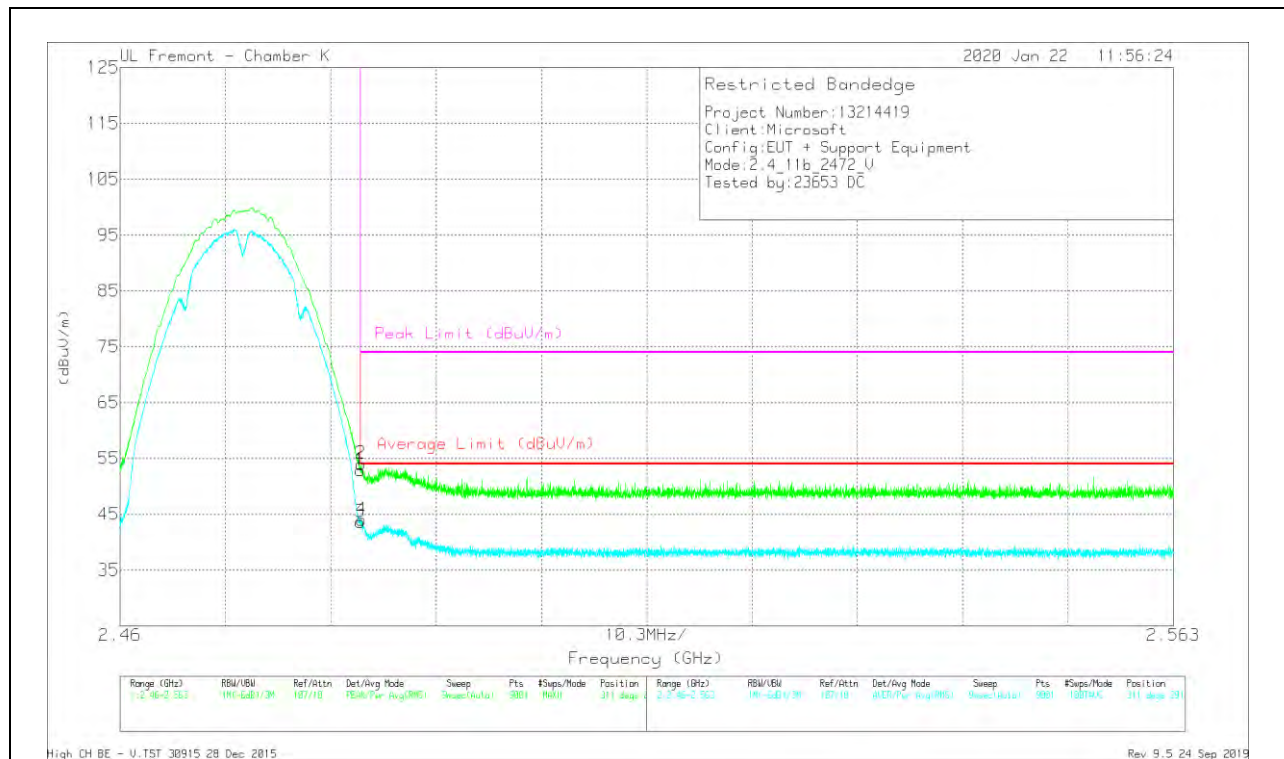
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dBm)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	45.09	Pk	32.5	-24.8	52.79	-	-	74	-21.21	287	305	H
2	* 2.4836	45.27	Pk	32.5	-24.8	52.97	-	-	74	-21.03	287	305	H
3	* 2.48351	34.77	RMS	32.5	-24.8	42.47	54	-11.53	-	-	287	305	H
4	* 2.48352	35.37	RMS	32.5	-24.8	43.07	54	-10.93	-	-	287	305	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Fitr/Pad (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	45.15	Pk	32.5	-24.8	52.85	-	-	74	-21.15	311	291	V
2	* 2.48353	46.33	Pk	32.5	-24.8	54.03	-	-	74	-19.97	311	291	V
3	* 2.48351	35.9	RMS	32.5	-24.8	43.6	54	-10.4	-	-	311	291	V
4	* 2.48362	36.27	RMS	32.5	-24.8	43.97	54	-10.03	-	-	311	291	V

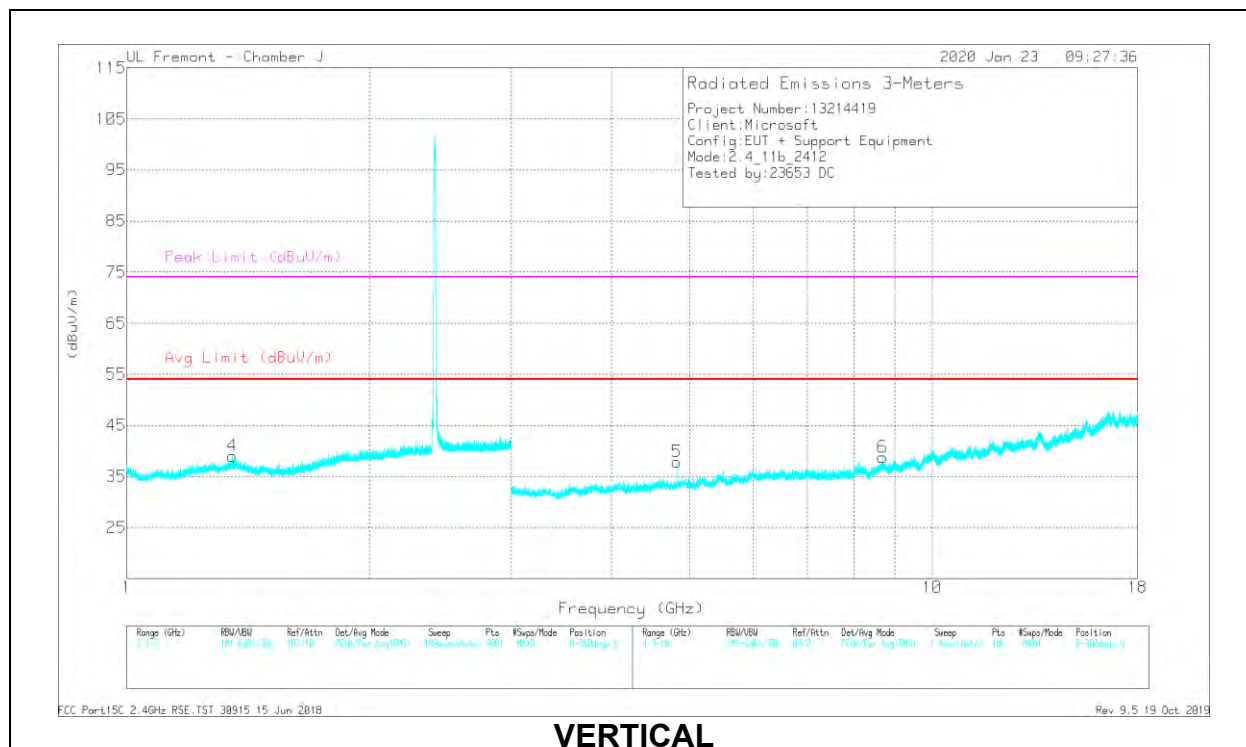
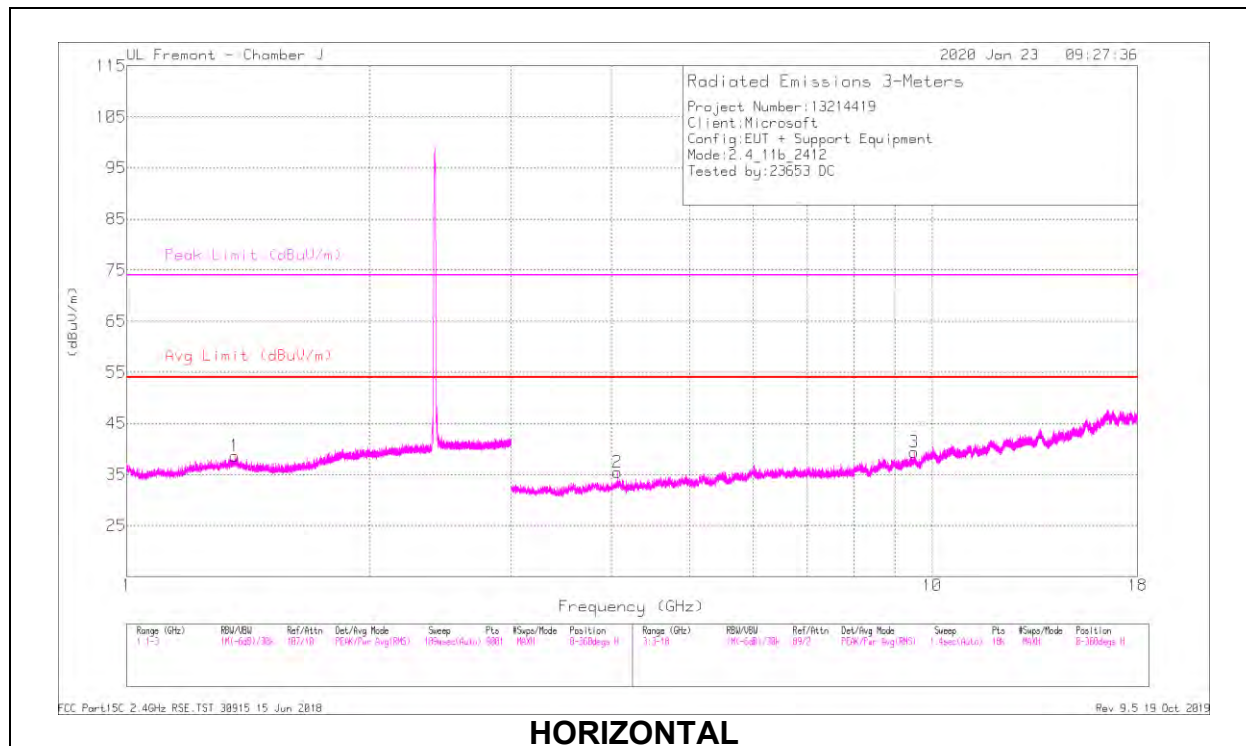
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, CH 1 RESULTS



RADIATED EMISSIONS

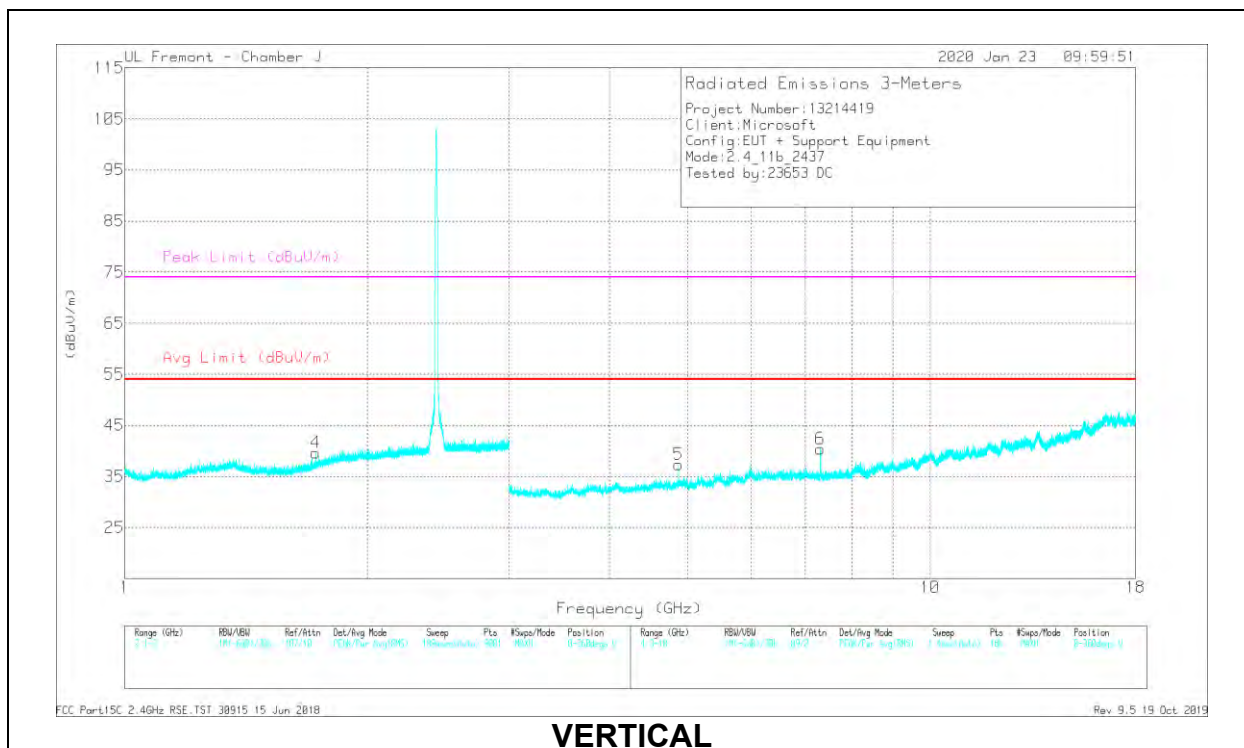
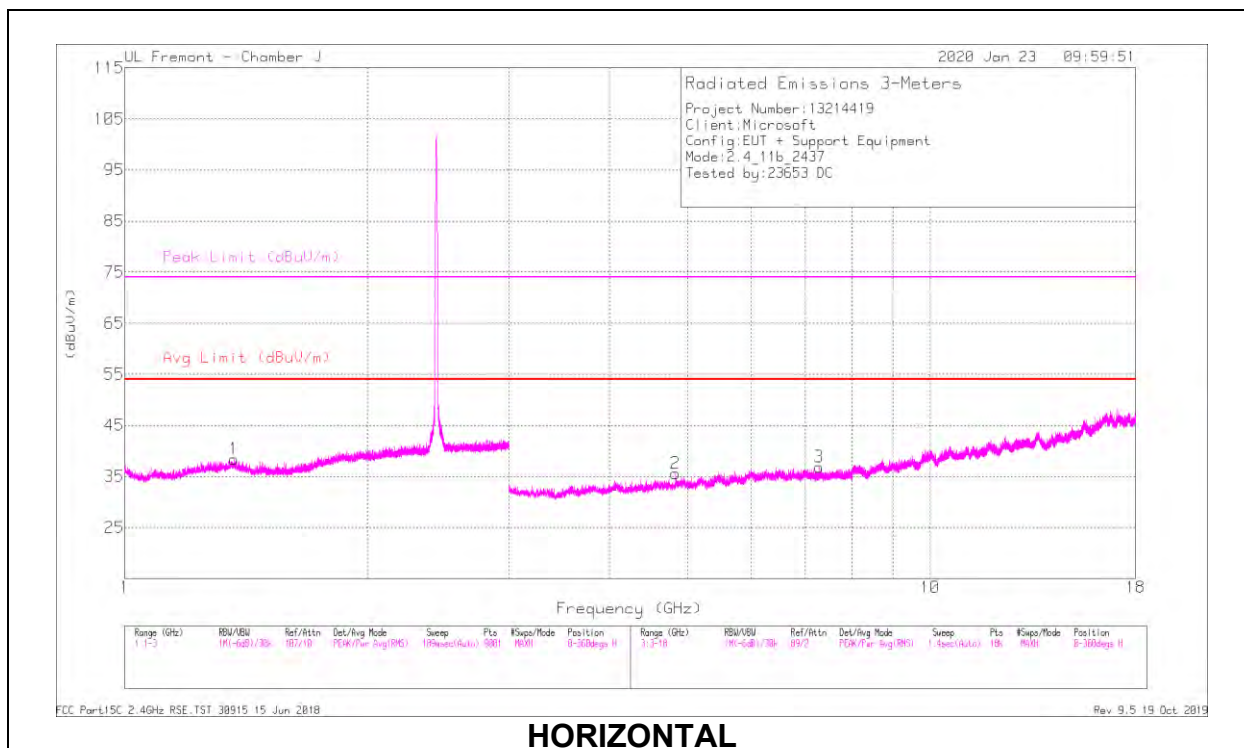
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.36152	42.56	PK2	29.3	-25.9	45.96	-	-	74	-28.04	163	172	H
	* 1.36289	32.47	MAv1	29.3	-25.9	35.87	54	-18.13	-	-	163	172	H
4	* 1.35222	42.17	PK2	29.3	-25.8	45.67	-	-	74	-28.33	245	156	V
	* 1.35467	32.23	MAv1	29.3	-25.8	35.73	54	-18.27	-	-	245	156	V
3	9.50533	32.45	PK2	36.7	-22.9	46.25	-	-	-	-	184	271	H
2	* 4.06533	38.96	PK2	33.6	-31.5	41.06	-	-	74	-32.94	124	220	H
	* 4.06716	28.79	MAv1	33.6	-31.5	30.89	54	-23.11	-	-	124	220	H
6	8.68005	34.11	PK2	36	-25.1	45.01	-	-	-	-	227	141	V
5	* 4.82401	40.86	PK2	34.2	-31.1	43.96	-	-	74	-30.04	345	253	V
	* 4.82398	33.46	MAv1	34.2	-31.1	36.56	54	-17.44	-	-	345	253	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL, CH 6 RESULTS



RADIATED EMISSIONS

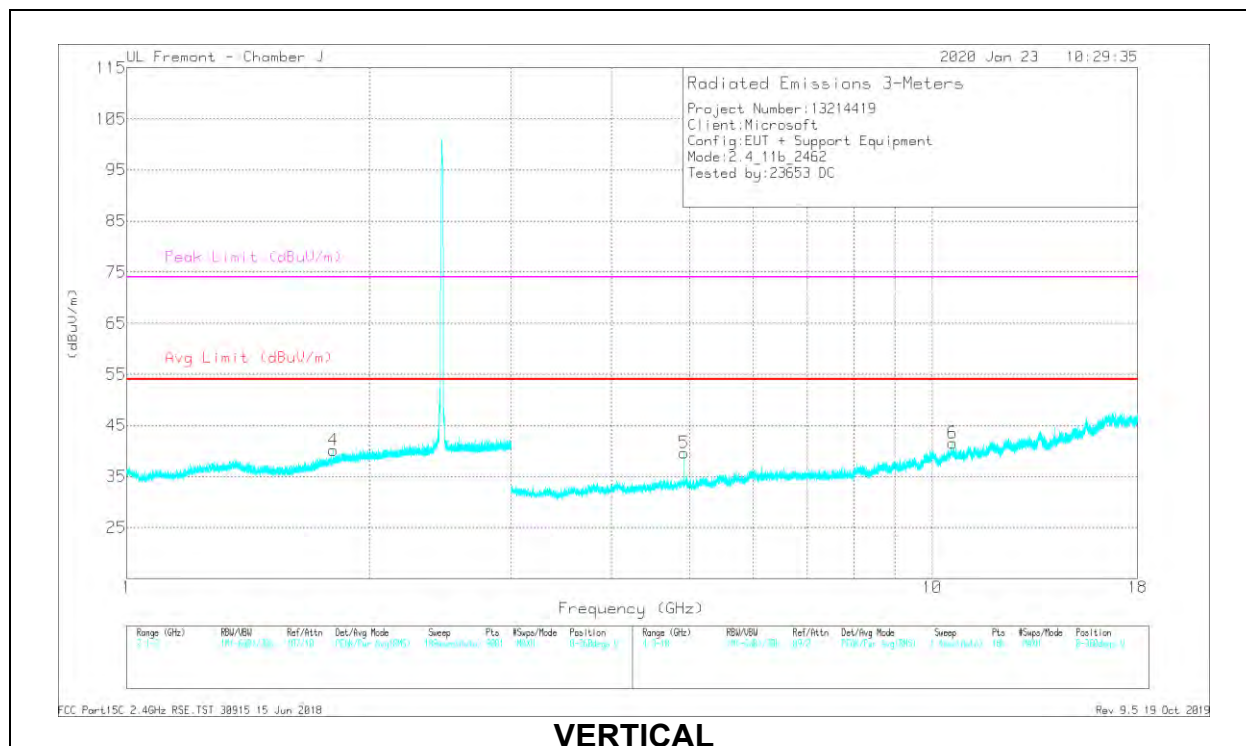
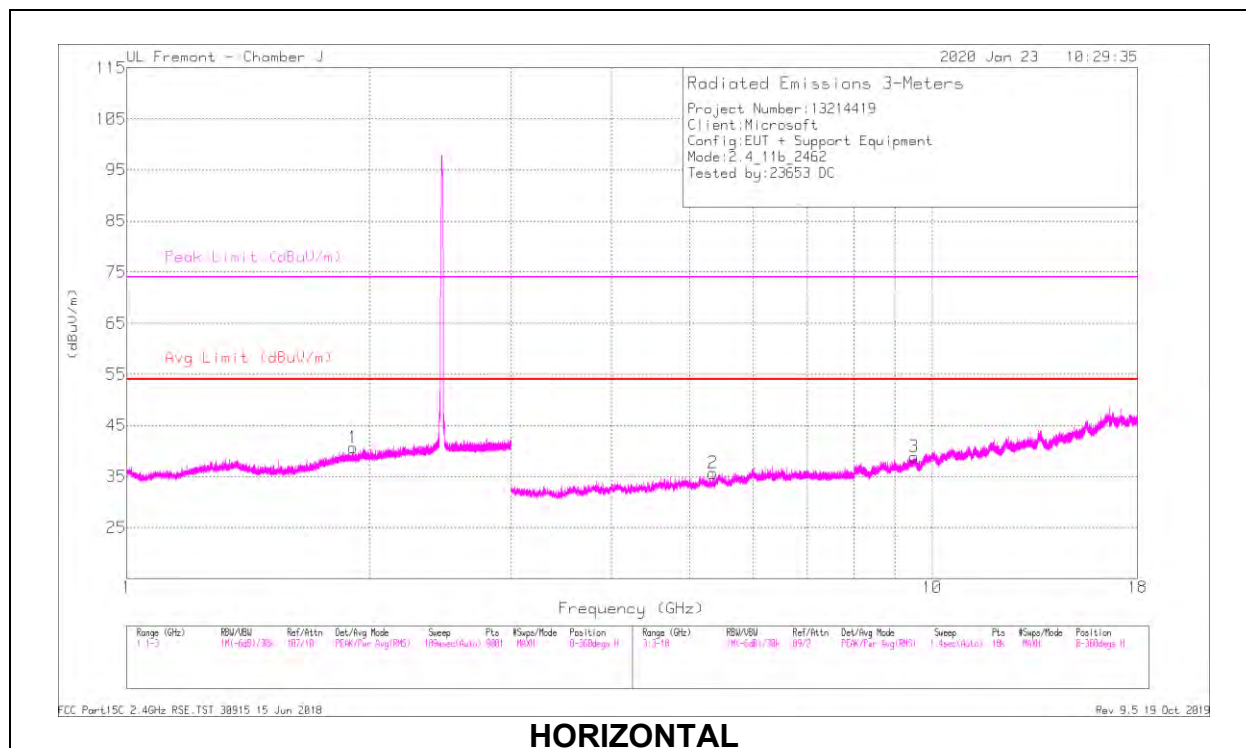
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.36628	41.18	PK2	29.4	-25.8	44.78	-	-	74	-29.22	166	209	H
	* 1.36884	31.77	MAv1	29.4	-25.9	35.27	54	-18.73	-	-	166	209	H
4	1.72933	41.92	PK2	29.3	-25.8	45.42	-	-	-	-	257	150	V
2	* 4.83263	38.75	PK2	34.3	-31.2	41.85	-	-	74	-32.15	116	198	H
	* 4.83314	28.69	MAv1	34.3	-31.2	31.79	54	-22.21	-	-	116	198	H
3	* 7.28594	33.98	PK2	35.6	-26.9	42.68	-	-	74	-31.32	201	223	H
	* 7.28441	24.76	MAv1	35.6	-27	33.36	54	-20.64	-	-	201	223	H
5	* 4.87404	41.44	PK2	34.1	-31.1	44.44	-	-	74	-29.56	324	246	V
	* 4.874	35.07	MAv1	34.1	-31.1	38.07	54	-15.93	-	-	324	246	V
6	* 7.31094	38.4	PK2	35.6	-27	47	-	-	74	-27	53	180	V
	* 7.31027	30.75	MAv1	35.6	-27	39.35	54	-14.65	-	-	53	180	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL, CH 11 RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.90892	42.64	PK2	30.6	-25.8	47.44	-	-	-	-	203	191	H
4	1.80461	42	PK2	30	-25.8	46.2	-	-	-	-	280	218	V
2	5.34948	38.53	PK2	34.5	-30.7	42.33	-	-	-	-	172	157	H
3	9.50321	33.21	PK2	36.6	-22.9	46.91	-	-	-	-	208	172	H
5	* 4.92406	40.75	PK2	34.1	-30.5	44.35	-	-	74	-29.65	324	254	V
	* 4.92399	33.5	MAv1	34.1	-30.5	37.1	54	-16.9	-	-	324	254	V
6	* 10.60583	33.89	PK2	37.9	-23.3	48.49	-	-	74	-25.51	245	223	V
	* 10.60815	23.6	MAv1	37.9	-23.4	38.1	54	-15.9	-	-	245	223	V

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

PK2 - KDB558074 Method: Maximum Peak

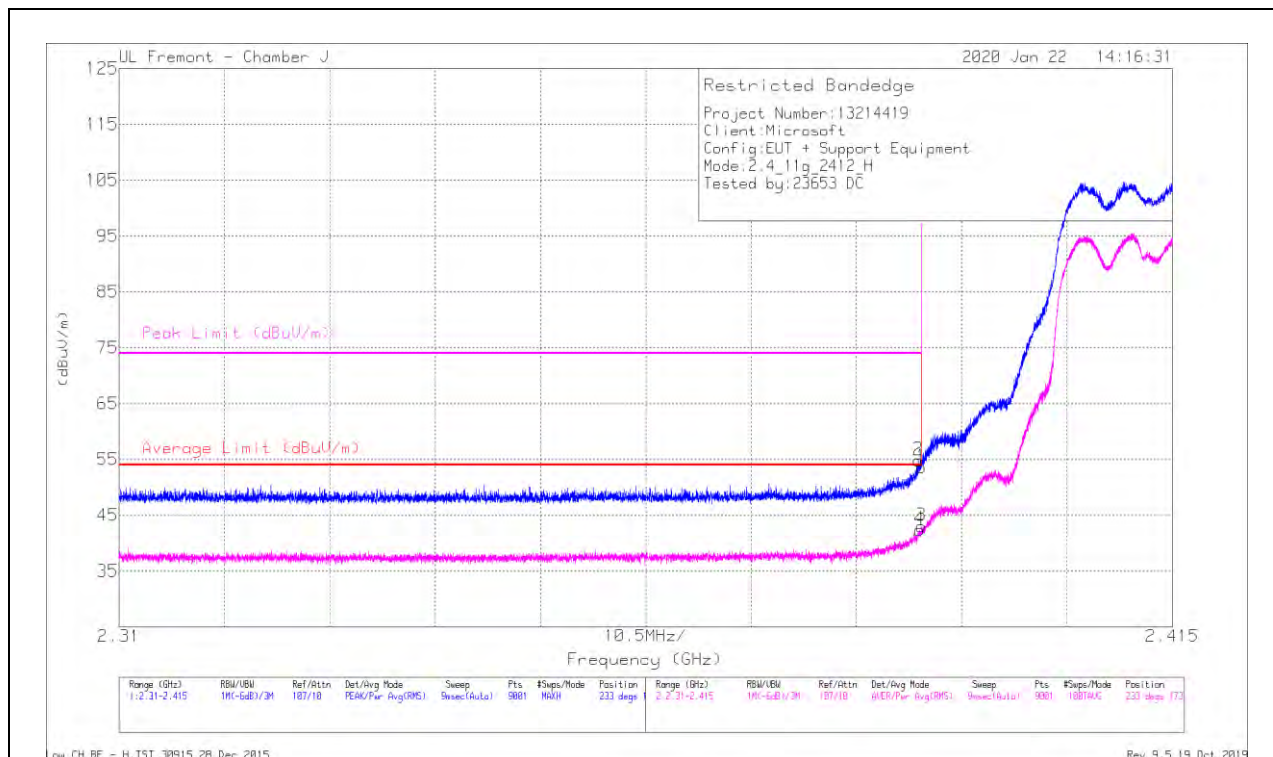
MAv1 - KDB558074 Option 1 Maximum RMS Average

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

2TX Antenna 1 + Antenna 2 CDD MODE

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT



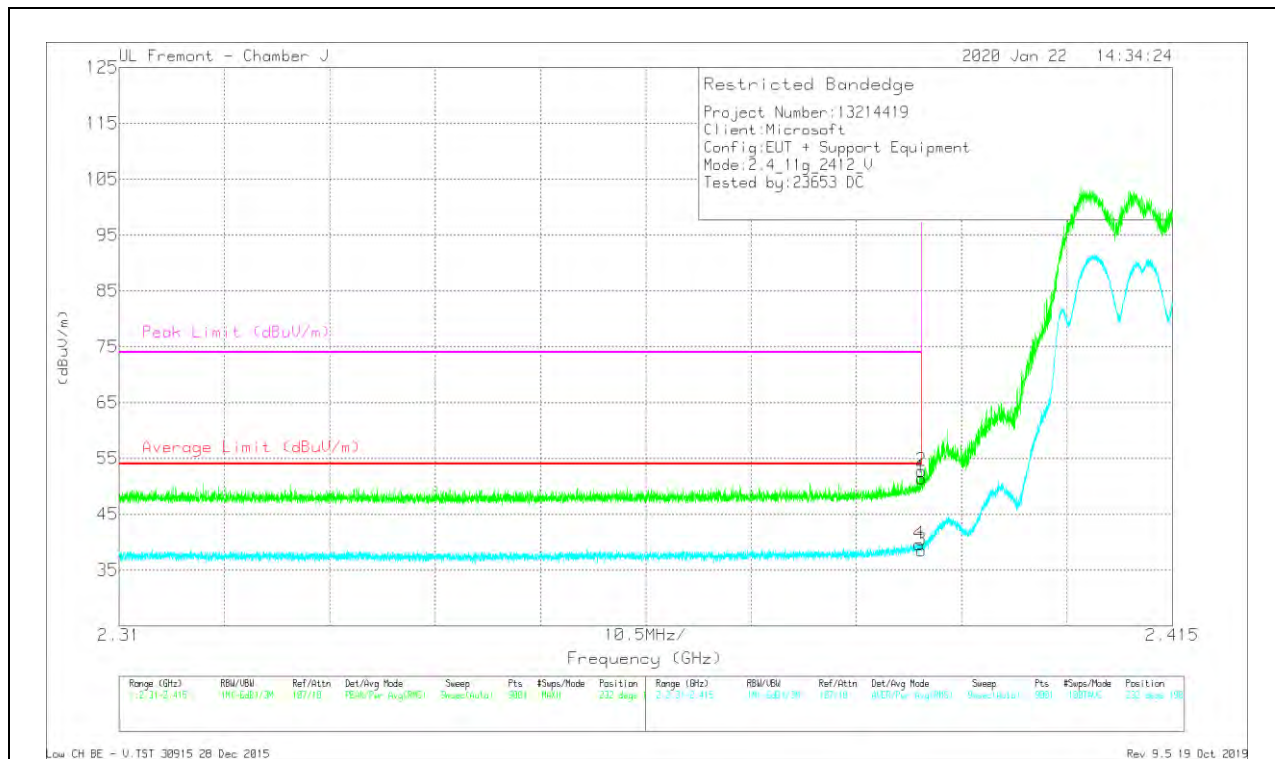
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Chl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.38999	47.23	Pk	31.9	-25.5	0	53.63	-	-	74	-20.37	233	173	H
2	* 2.38965	48.47	Pk	31.9	-25.5	0	54.87	-	-	74	-19.13	233	173	H
3	* 2.38999	36.45	RMS	31.9	-25.5	.22	43.07	54	-10.93	-	-	233	173	H
4	* 2.38981	35.83	RMS	31.9	-25.5	.22	42.45	54	-11.55	-	-	233	173	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	AmpCntrFiltzPad (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	45.07	Pk	31.9	-25.5	0	51.47	-	-	74	-22.53	232	198	V
2	* 2.38997	46.36	Pk	31.9	-25.5	0	52.76	-	-	74	-21.24	232	198	V
3	* 2.38999	31.93	RMS	31.9	-25.5	22	38.55	54	-15.45	-	-	232	198	V
4	* 2.38976	33.04	RMS	31.9	-25.5	22	39.66	54	-14.34	-	-	232	198	V

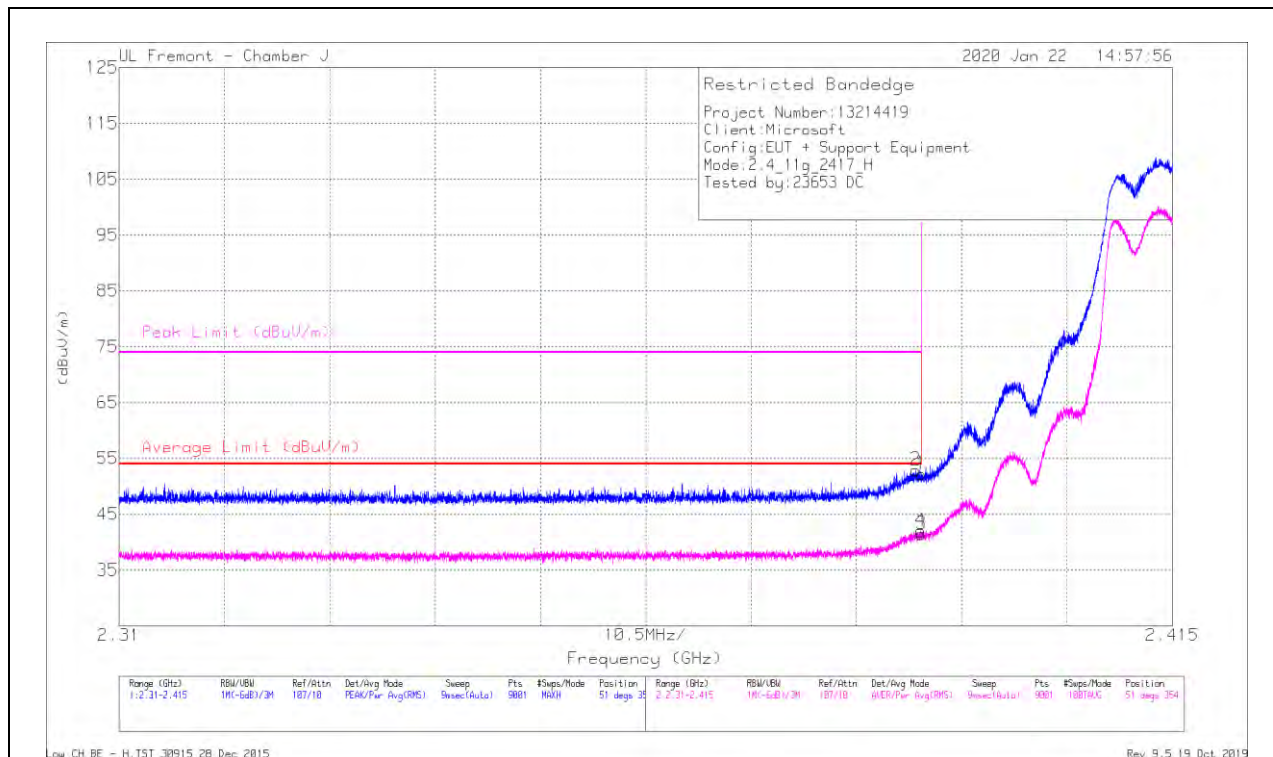
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (LOW CHANNEL, CH 2)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Cbl/Ftr/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	45.79	Pk	31.9	-25.5	0	52.19	-	-	74	-21.81	51	354	H
2	* 2.38941	46.5	Pk	31.9	-25.5	0	52.9	-	-	74	-21.1	51	354	H
3	* 2.38999	34.85	RMS	31.9	-25.5	.22	41.47	54	-12.53	-	-	51	354	H
4	* 2.3899	35.38	RMS	31.9	-25.5	.22	42	54	-12	-	-	51	354	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

2020 Jan 22 14:46:53

Restricted Bandedge

Project Number:13214419
 Client:Microsoft
 Config:EUT + Support Equipment
 Mode:2.411g,2417 U
 Tested by:23653 DC

10.5MHz/
 Frequency (GHz)

2.415

Pts	#Samps/Mode	Position	Range (GHz)	RBW/ENB	Ref/Retn	Det/Avg Mode	Sweep	Pts	#Samps/Mode	Position
3001	Full	252 deg	2.373-2.415	100 kHz/30	REF:10	WATERFALL	100kHz	3001	Full	252 deg

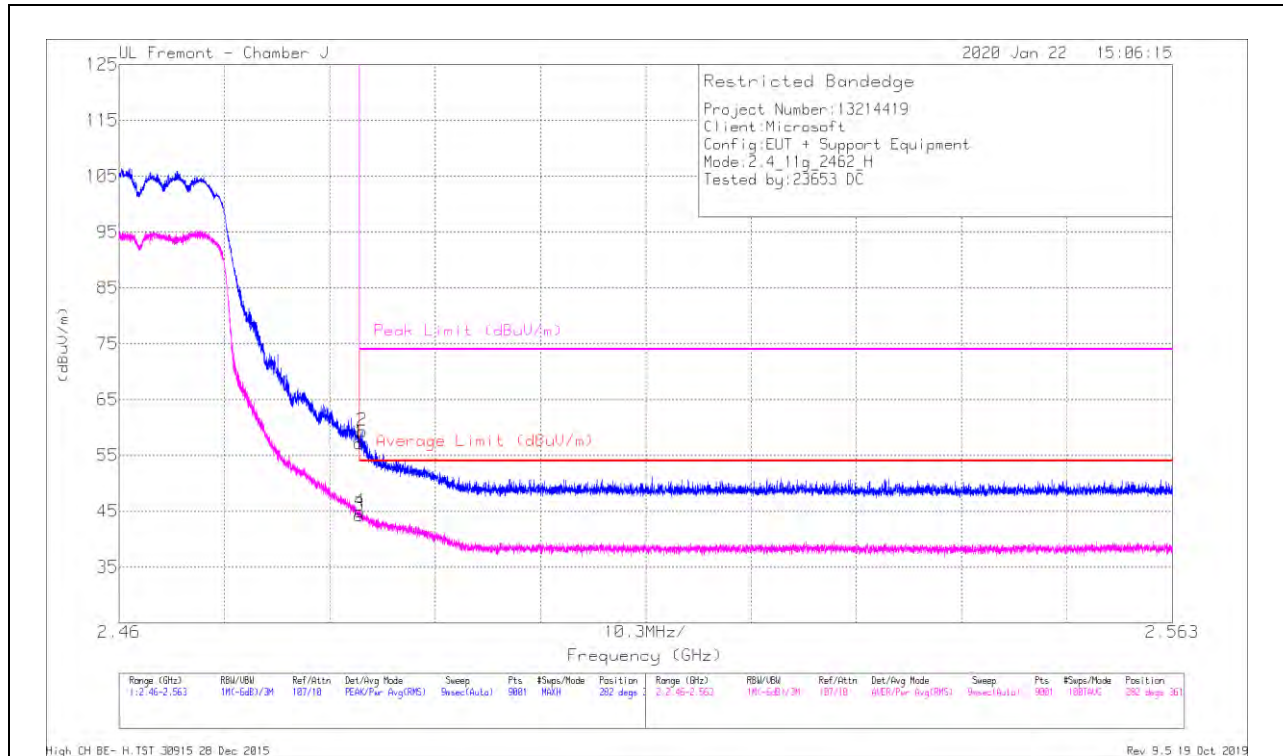
Rev 9.5 19 Oct 2019

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Cbl/Filt/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	43.15	Pk	31.9	-25.5	0	49.55	-	-	74	-24.45	352	260	V
2	* 2.3793	44.17	Pk	31.8	-25.5	0	50.47	-	-	74	-23.53	352	260	V
3	* 2.38999	31.65	RMS	31.9	-25.5	22	38.27	54	-15.73	-	-	352	260	V
4	* 2.37187	32.48	RMS	31.8	-25.5	22	39	54	-15	-	-	352	260	V

Pk - Peak detector
RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 11)

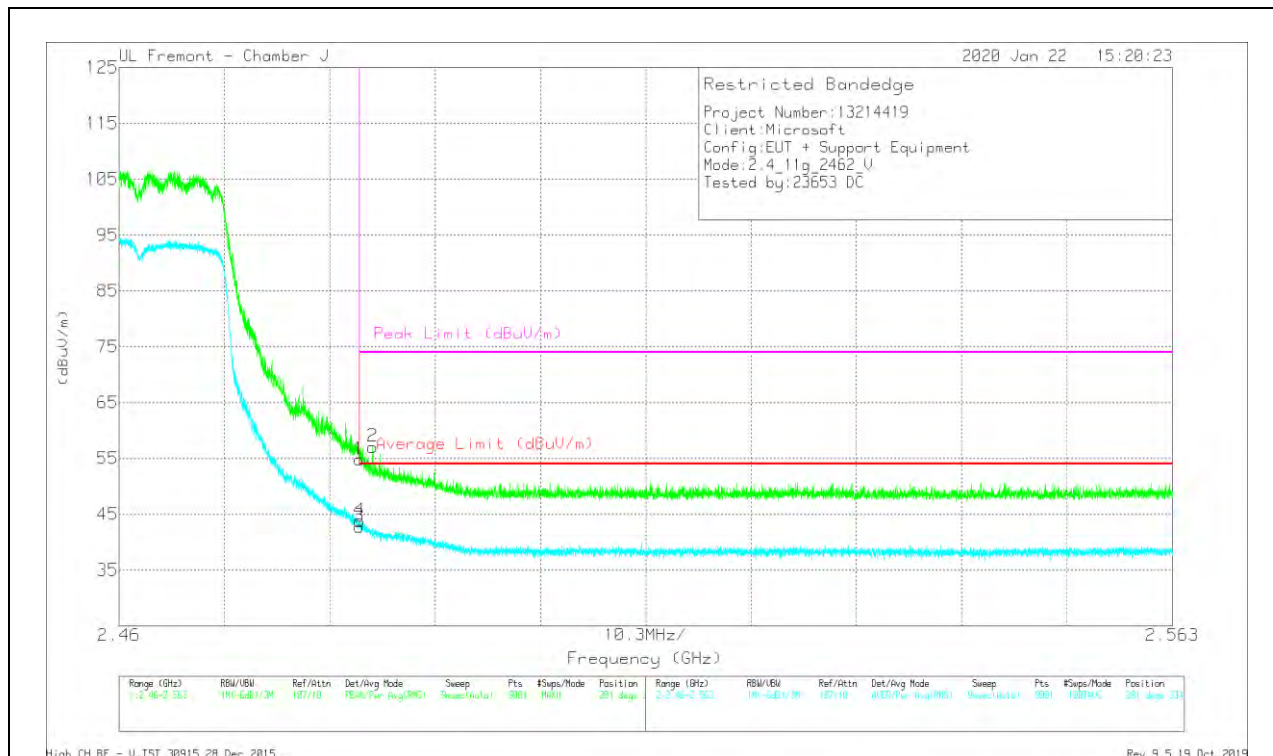
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Ctrl/Filt/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	50.37	Pk	32.3	-25.5	0	57.17	-	-	74	-16.83	282	361	H
2	* 2.48377	52.59	Pk	32.3	-25.5	0	59.39	-	-	74	-14.61	282	361	H
3	* 2.48351	37.25	RMS	32.3	-25.5	.22	44.27	54	-9.73	-	-	282	361	H
4	* 2.48353	37.92	RMS	32.3	-25.5	.22	44.94	54	-9.06	-	-	282	361	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Chn/Filter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	48.02	Pk	32.3	-25.5	0	54.82	-	-	74	-19.18	281	334	V
2	* 2.4848	50.28	Pk	32.3	-25.5	0	57.08	-	-	74	-16.92	281	334	V
3	* 2.48351	35.79	RMS	32.3	-25.5	22	42.81	54	-11.19	-	-	281	334	V
4	* 2.48352	36.79	RMS	32.3	-25.5	22	43.81	54	-10.19	-	-	281	334	V

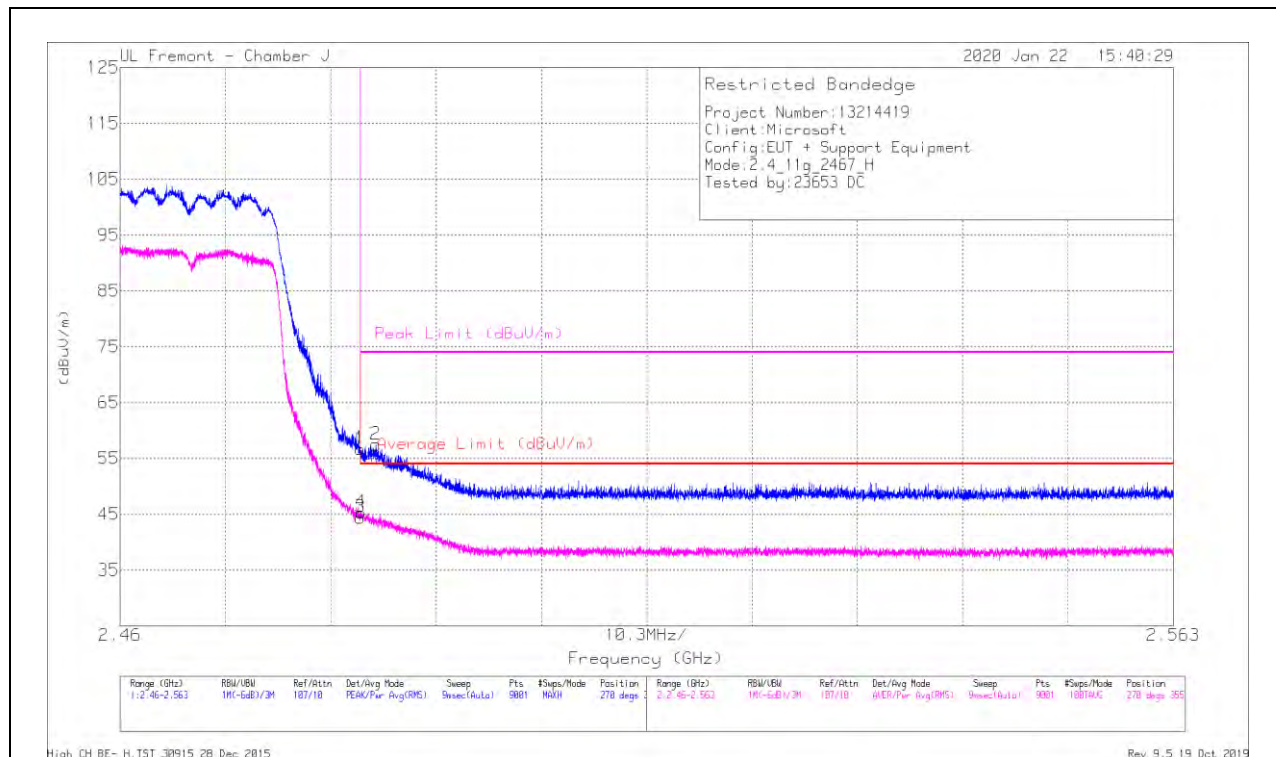
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 12)

HORIZONTAL RESULT



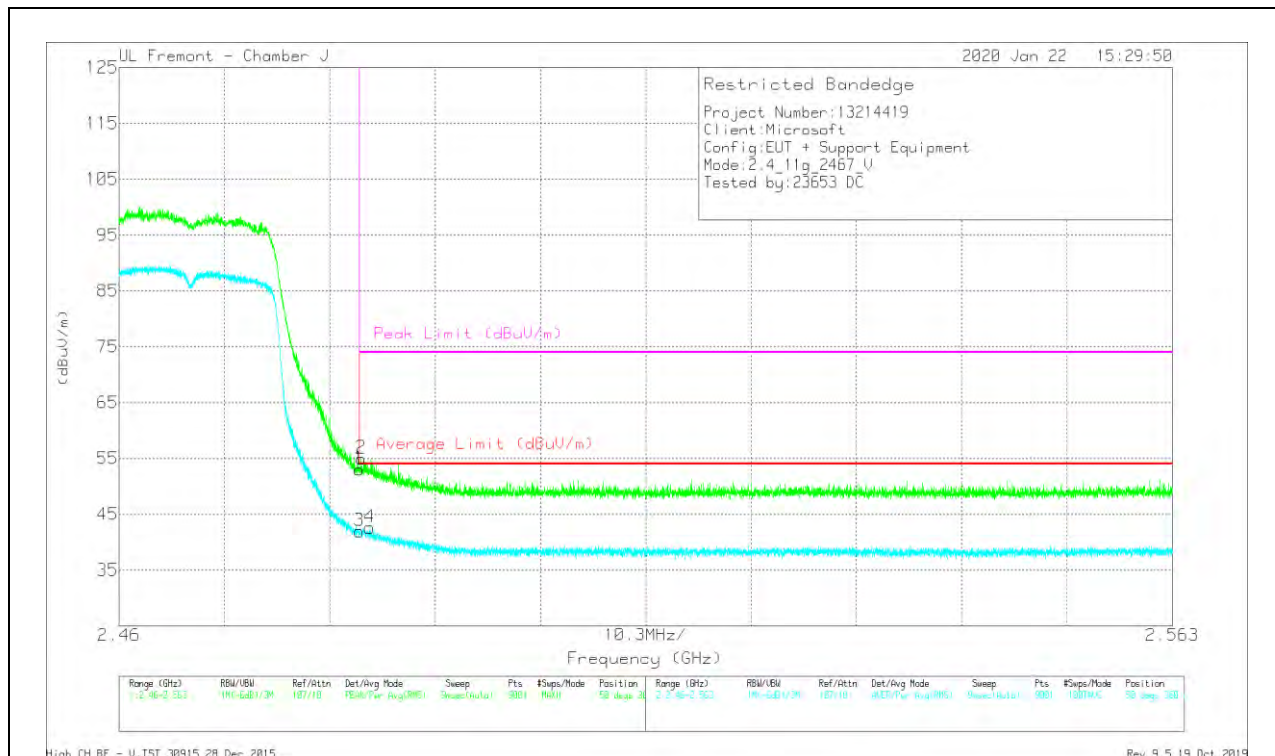
Marker	Frequency (GHz)	Motor Reading (dBuV)	Det	AF T344 (dBm)	Amp/Ch/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	49.9	Pk	32.3	-25.5	0	56.7	-	-	74	-17.3	270	355	H
2	* 2.48499	50.65	Pk	32.3	-25.5	0	57.45	-	-	74	-16.55	270	355	H
3	* 2.48351	37.39	RMS	32.3	-25.5	.22	44.41	54	-9.59	-	-	270	355	H
4	* 2.48356	38.29	RMS	32.3	-25.5	.22	45.31	54	-8.69	-	-	270	355	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Chl/Pltr/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	46.24	Pk	32.3	-25.5	0	53.04	-	-	74	-20.96	50	360	V
2	* 2.48367	48.19	Pk	32.3	-25.5	0	54.99	-	-	74	-19.01	50	360	V
3	* 2.48351	34.96	RMS	32.3	-25.5	22	41.98	54	-12.02	-	-	50	360	V
4	* 2.4845	35.59	RMS	32.3	-25.5	22	42.61	54	-11.39	-	-	50	360	V

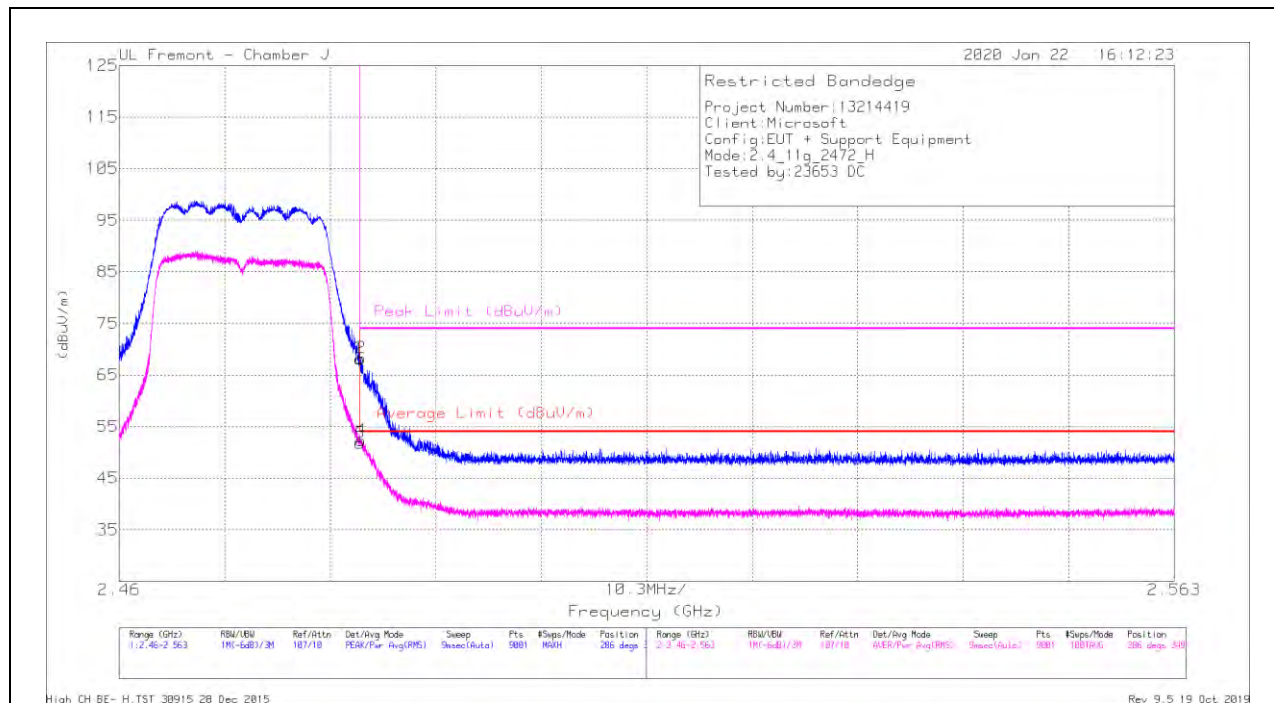
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT



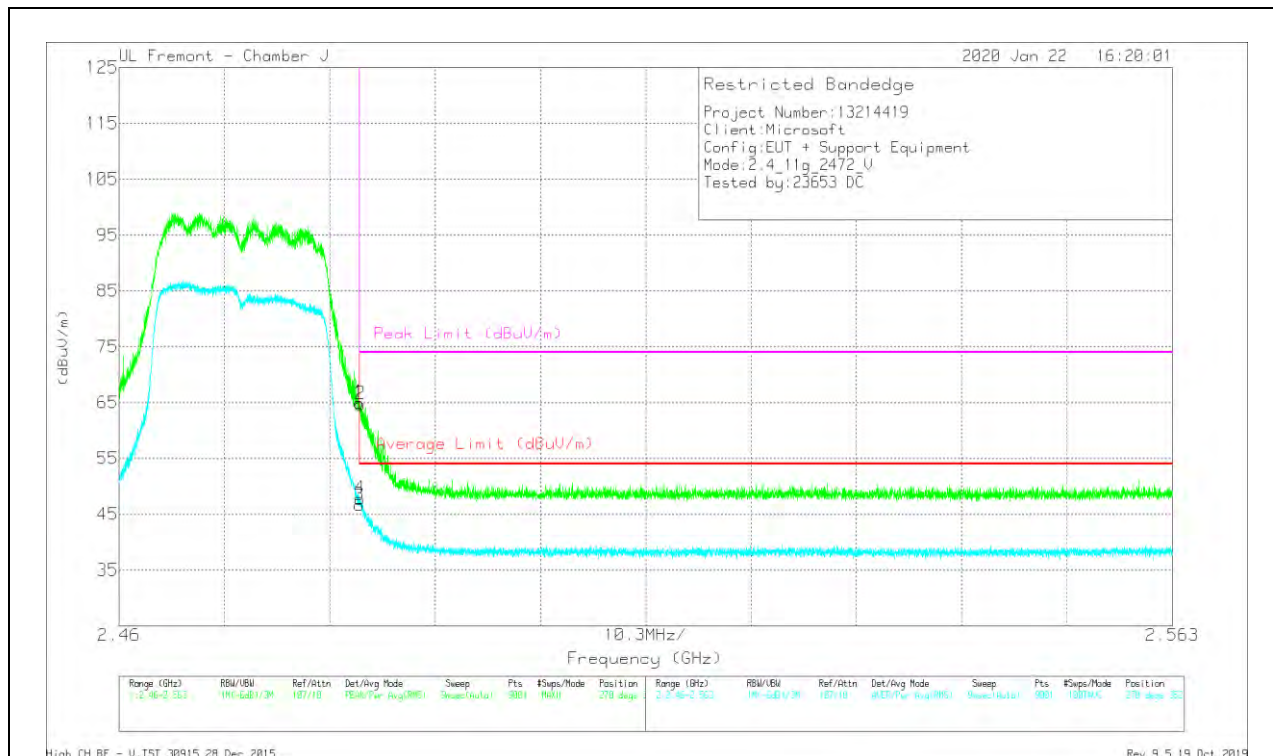
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Chl/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	61.28	Pk	32.3	-25.5	0	68.08	-	-	74	-5.92	286	349	H
2	* 2.48359	61.48	Pk	32.3	-25.5	0	68.28	-	-	74	-5.72	286	349	H
3	* 2.48351	44.82	RMS	32.3	-25.5	.22	51.84	54	-2.16	-	-	286	349	H
4	* 2.48359	45.3	RMS	32.3	-25.5	.22	52.32	54	-1.68	-	-	286	349	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT

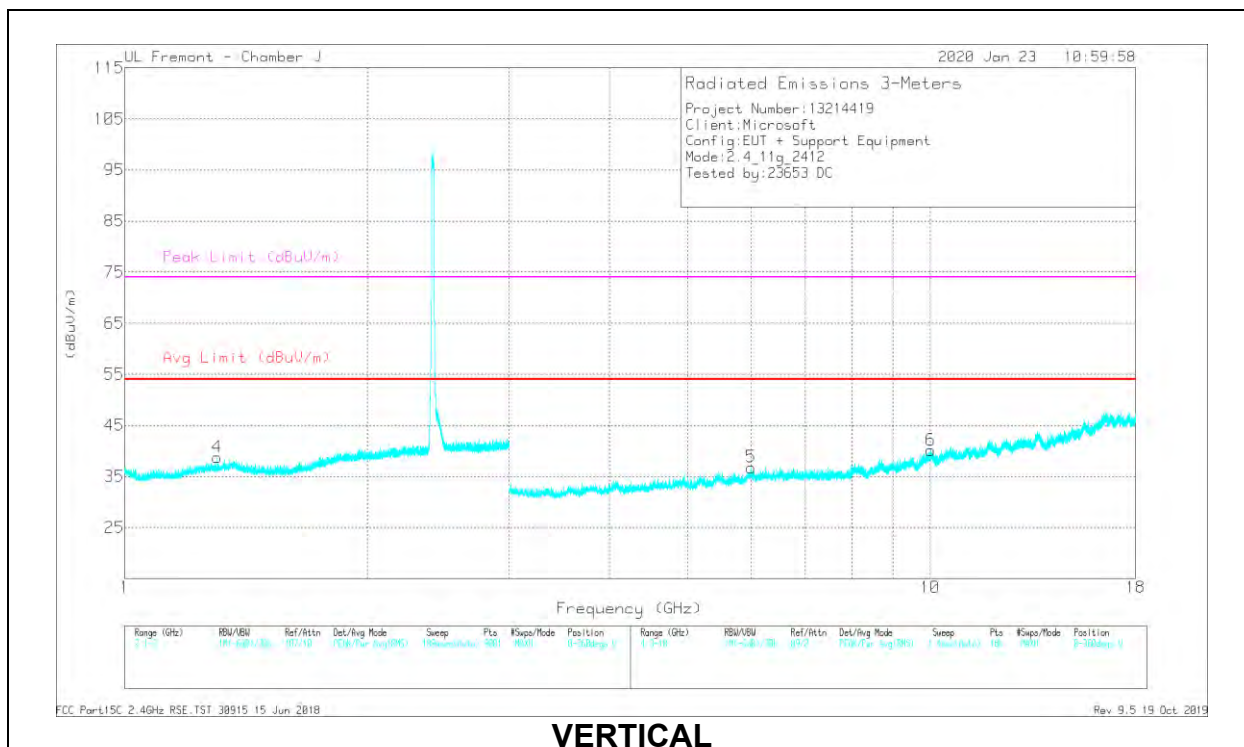
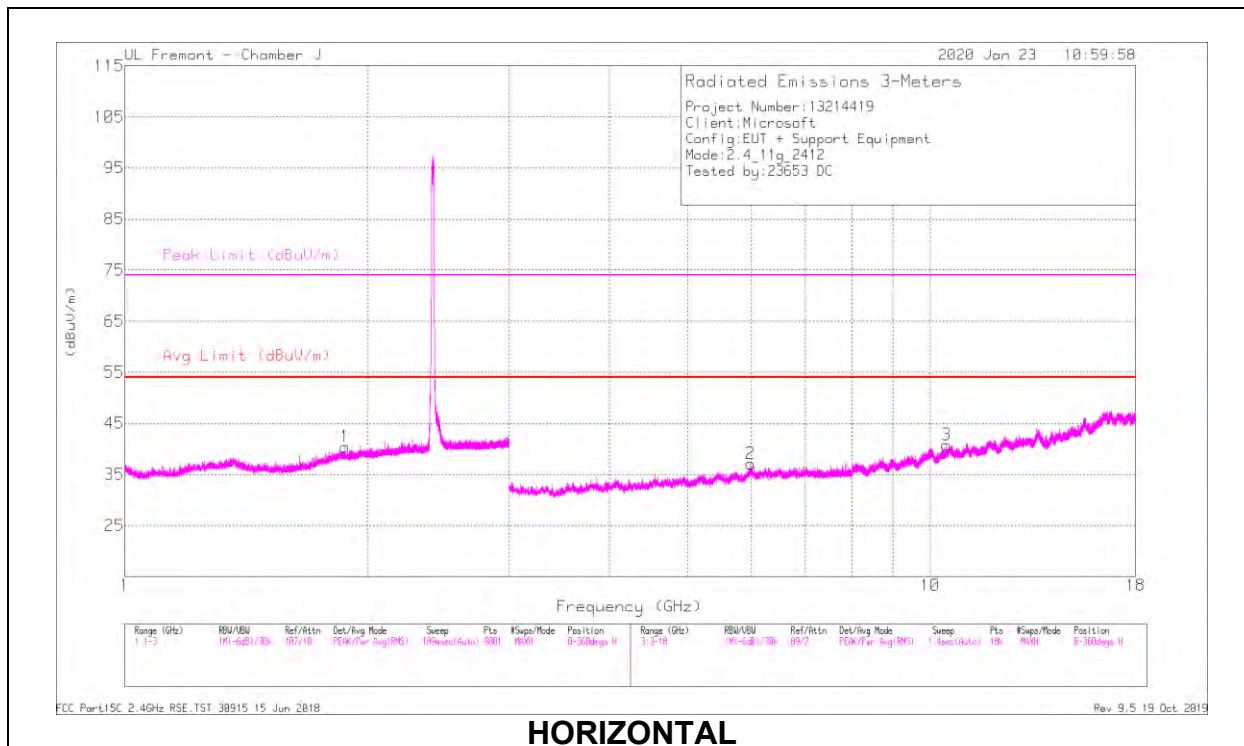


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amplifier/Filter (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	58.19	Pk	32.3	-25.5	0	64.99	-	-	74	-9.01	270	352	V
2	* 2.48361	57.9	Pk	32.3	-25.5	0	64.7	-	-	74	-9.3	270	352	V
3	* 2.48351	39.62	RMS	32.3	-25.5	.22	46.64	54	-7.36	-	-	270	352	V
4	* 2.48354	40.77	RMS	32.3	-25.5	.22	47.79	54	-6.21	-	-	270	352	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, CH 1 RESULTS



RADIATED EMISSIONS

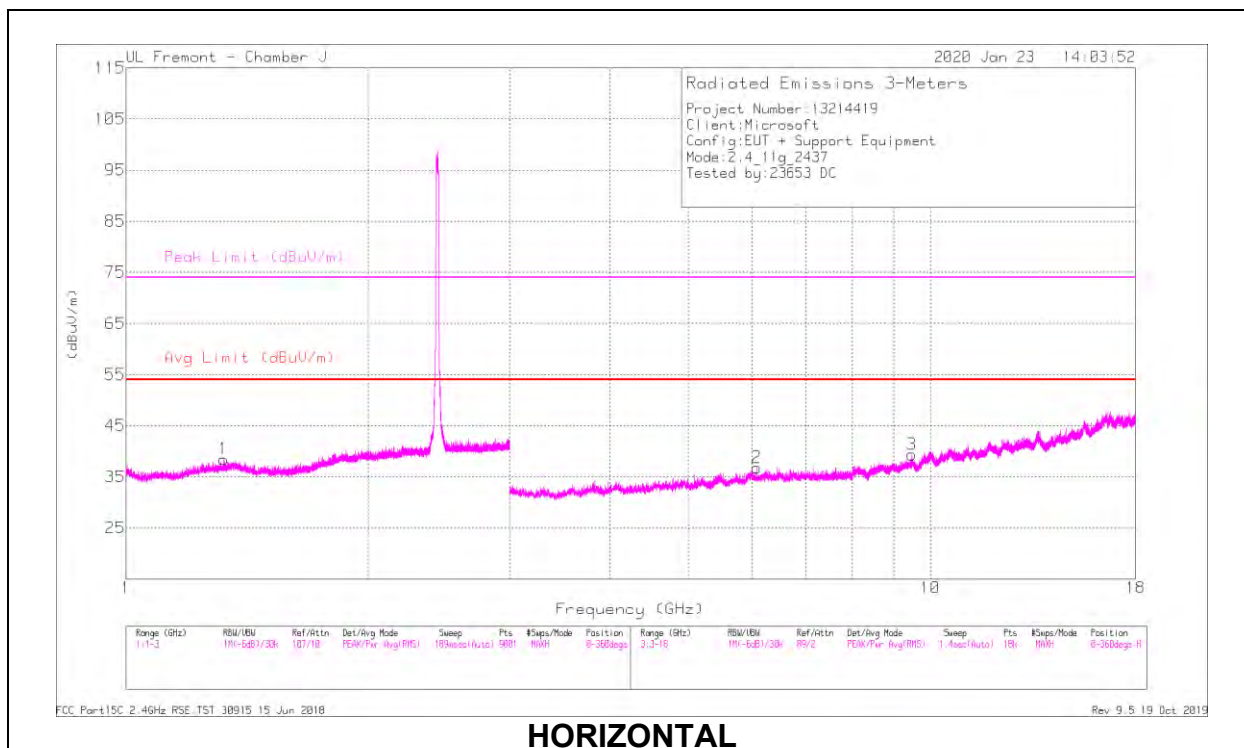
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.87715	41.84	PK2	30.7	-25.8	0	46.74	-	-	-	-	299	212	H
4	* 1.30245	42.02	PK2	28.6	-25.9	0	44.72	-	-	74	-29.28	303	177	V
	* 1.30067	32.36	MAv1	28.6	-25.9	.22	35.28	54	-18.72	-	-	303	177	V
2	5.98628	36.08	PK2	35.2	-27.9	0	43.38	-	-	-	-	222	180	H
3	10.47452	33.87	PK2	37.7	-24.1	0	47.47	-	-	-	-	199	229	H
5	5.99616	36.15	PK2	35.3	-27.8	0	43.65	-	-	-	-	94	166	V
6	10.0224	32.6	PK2	37.1	-22.9	0	46.8	-	-	-	-	238	247	V

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

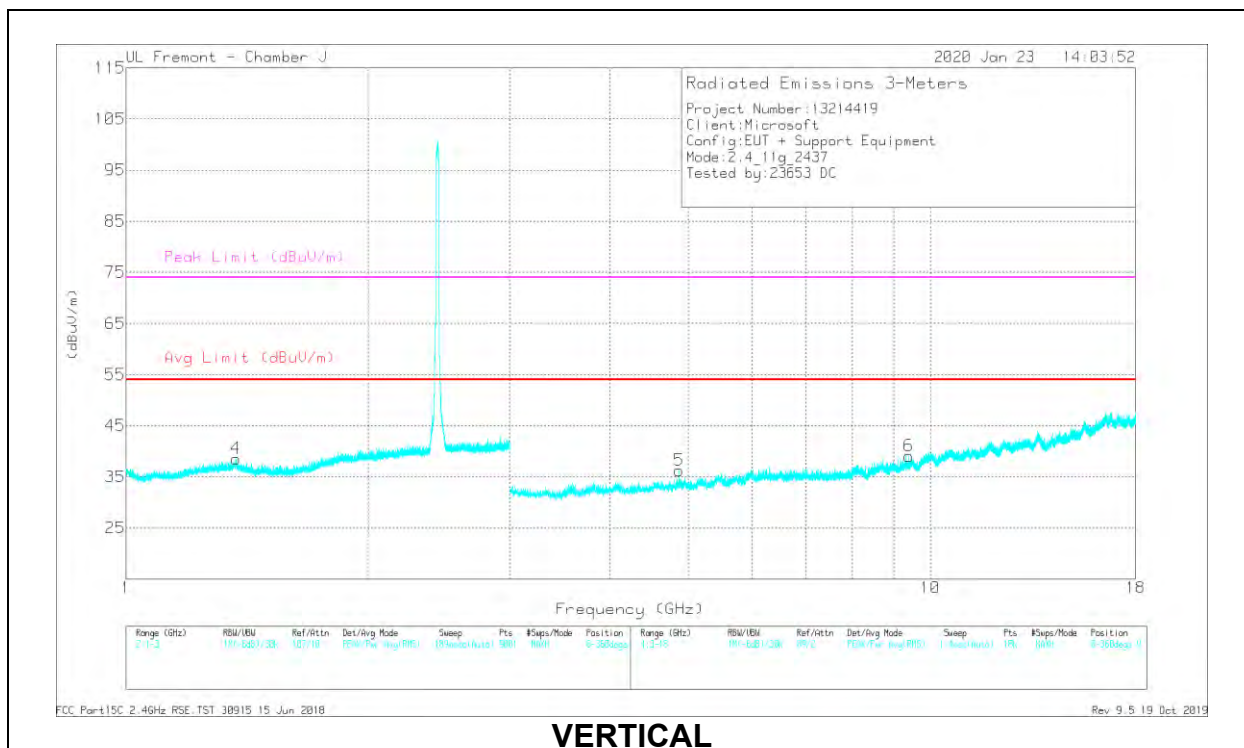
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL, CH 6 RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

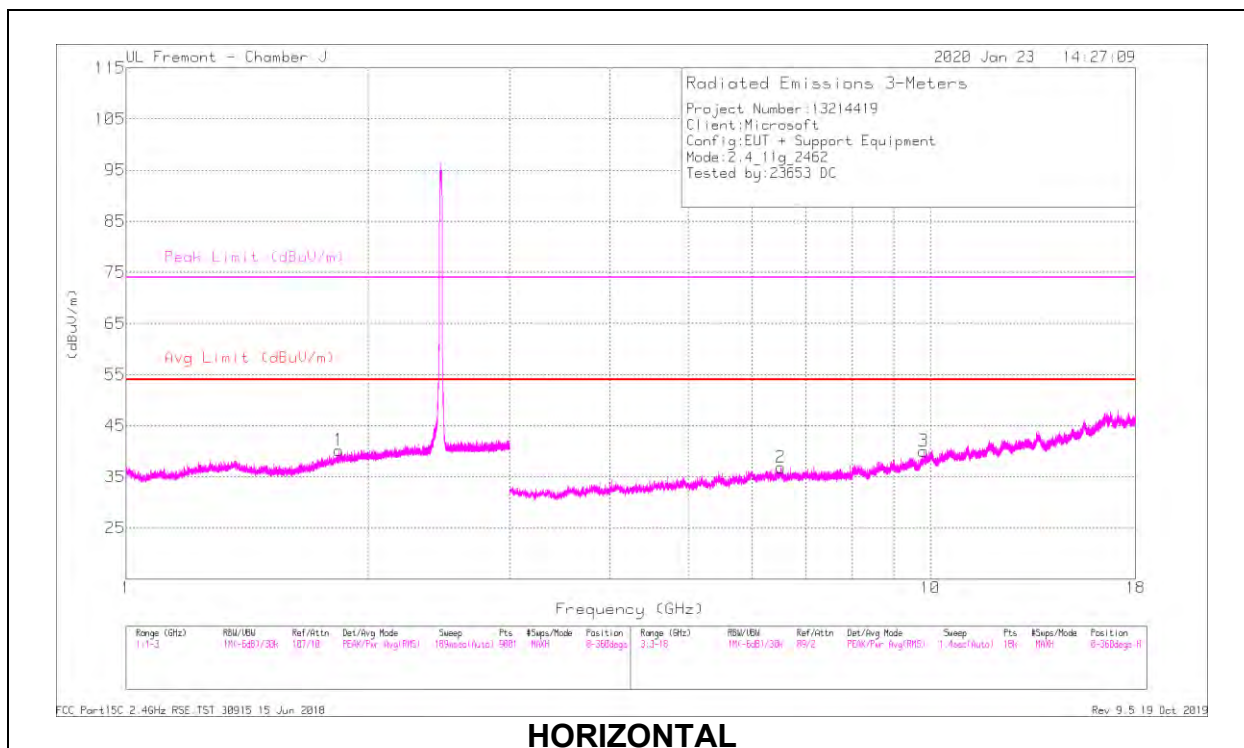
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.32336	41.55	PK2	28.8	-25.8	0	44.55	-	-	74	-29.45	233	177	H
	* 1.32172	32.14	MAv1	28.8	-25.8	.22	35.36	54	-18.64	-	-	233	177	H
4	* 1.37016	42.15	PK2	29.4	-25.9	0	45.65	-	-	74	-28.35	129	234	V
	* 1.37069	31.73	MAv1	29.4	-25.9	.22	35.45	54	-18.55	-	-	129	234	V
2	6.08269	35.78	PK2	35.5	-28.7	0	42.58	-	-	-	-	299	207	H
3	* 9.49067	33.68	PK2	36.6	-23.1	0	47.18	-	-	74	-26.82	54	154	H
	* 9.48893	22.47	MAv1	36.6	-23.1	.22	36.19	54	-17.81	-	-	54	154	H
5	* 4.87393	40.49	PK2	34.1	-31.1	0	43.49	-	-	74	-30.51	315	274	V
	* 4.87402	31.58	MAv1	34.1	-31.1	.22	34.8	54	-19.2	-	-	315	274	V
6	* 9.41087	32.59	PK2	36.5	-24.4	0	44.69	-	-	74	-29.31	117	254	V
	* 9.41131	23.88	MAv1	36.5	-24.4	.22	36.2	54	-17.8	-	-	117	254	V

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

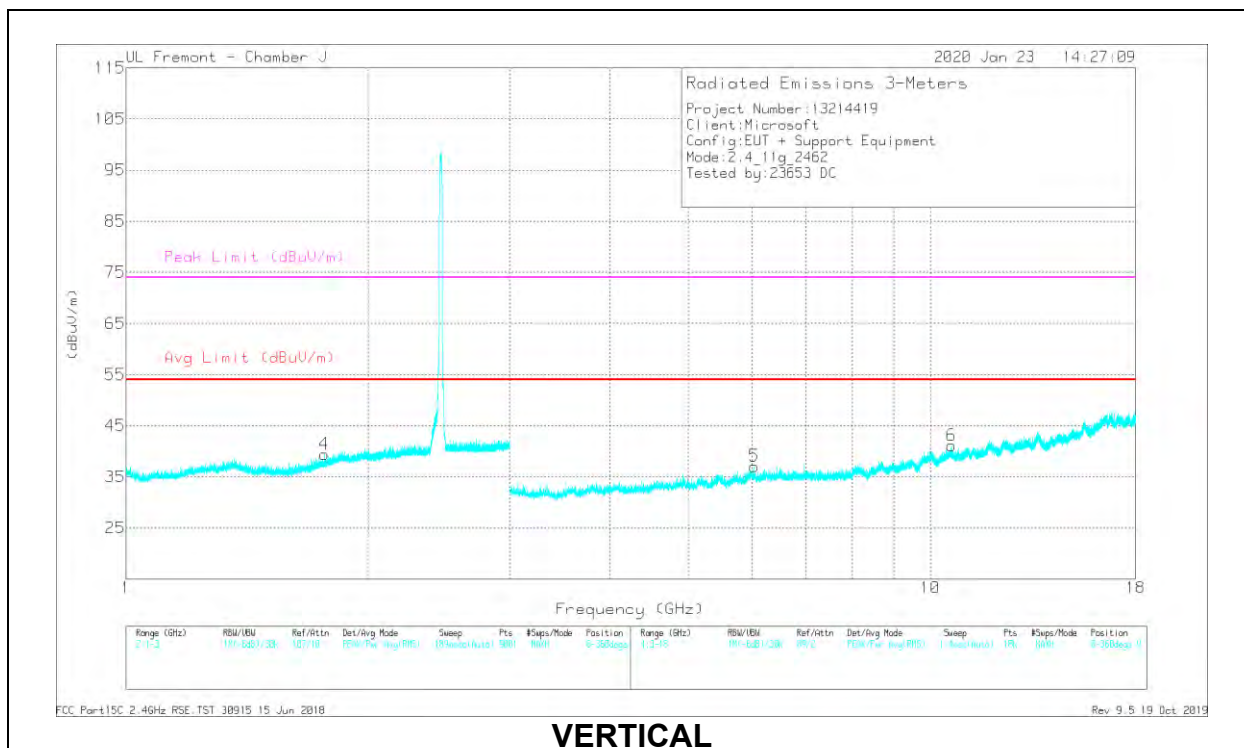
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL, CH 11 RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/ Pad (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	1.83713	42.27	PK2	30.5	-25.8	0	46.97	-	-	-	-	72	225	H
4	1.76539	41.84	PK2	29.7	-25.8	0	45.74	-	-	-	-	141	190	V
2	6.51792	35.45	PK2	35.5	-27.2	0	43.75	-	-	-	-	184	139	H
3	9.81061	33.53	PK2	37	-23.6	0	46.93	-	-	-	-	328	172	H
5	6.0412	35.11	PK2	35.4	-28.1	0	42.41	-	-	-	-	279	242	V
6	* 10.62214	33.3	PK2	37.9	-23.7	0	47.5	-	-	74	-26.5	55	232	V
	* 10.62524	23.78	MAv1	37.9	-23.7	22	38.2	54	-15.8	-	-	55	232	V

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

PK2 - KDB558074 Method: Maximum Peak

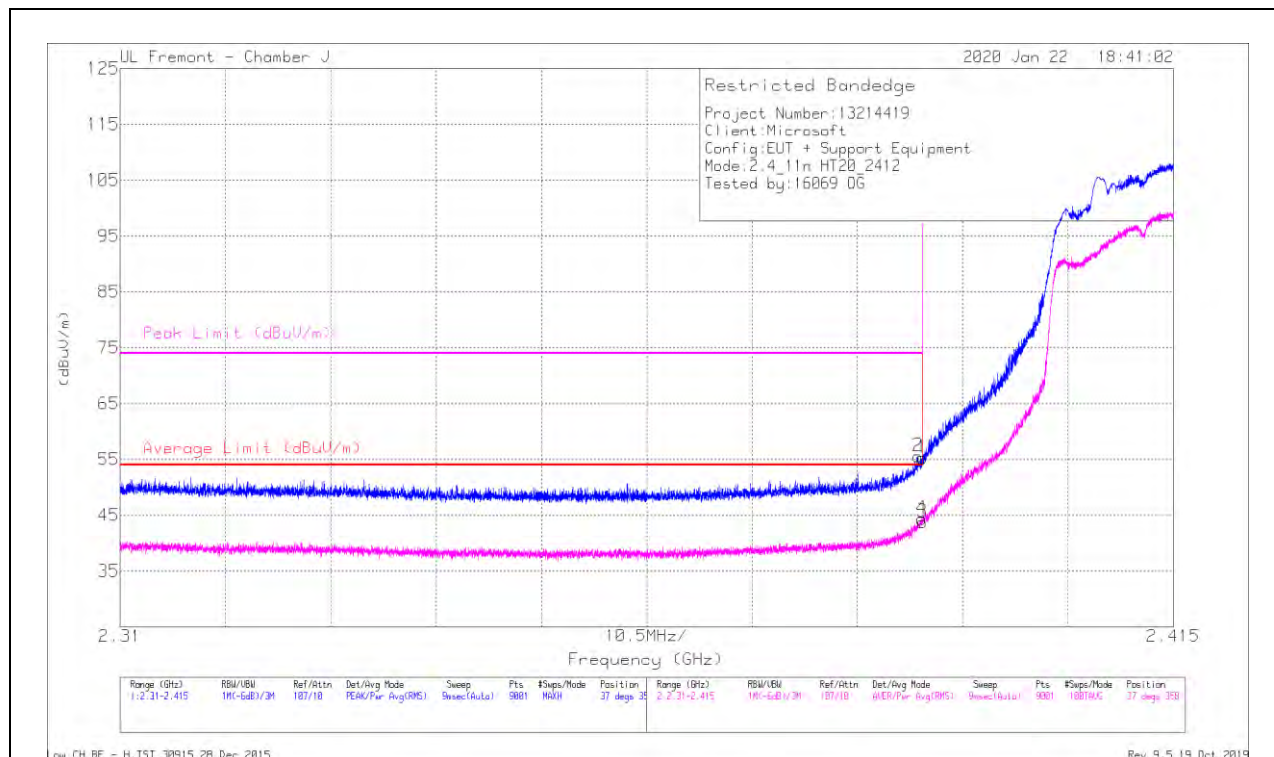
MAv1 - KDB558074 Option 1 Maximum RMS Average

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

2TX Antenna 1 + Antenna 2 CDD MODE

BANDEDGE (LOW CHANNEL, CH 1)

HORIZONTAL RESULT



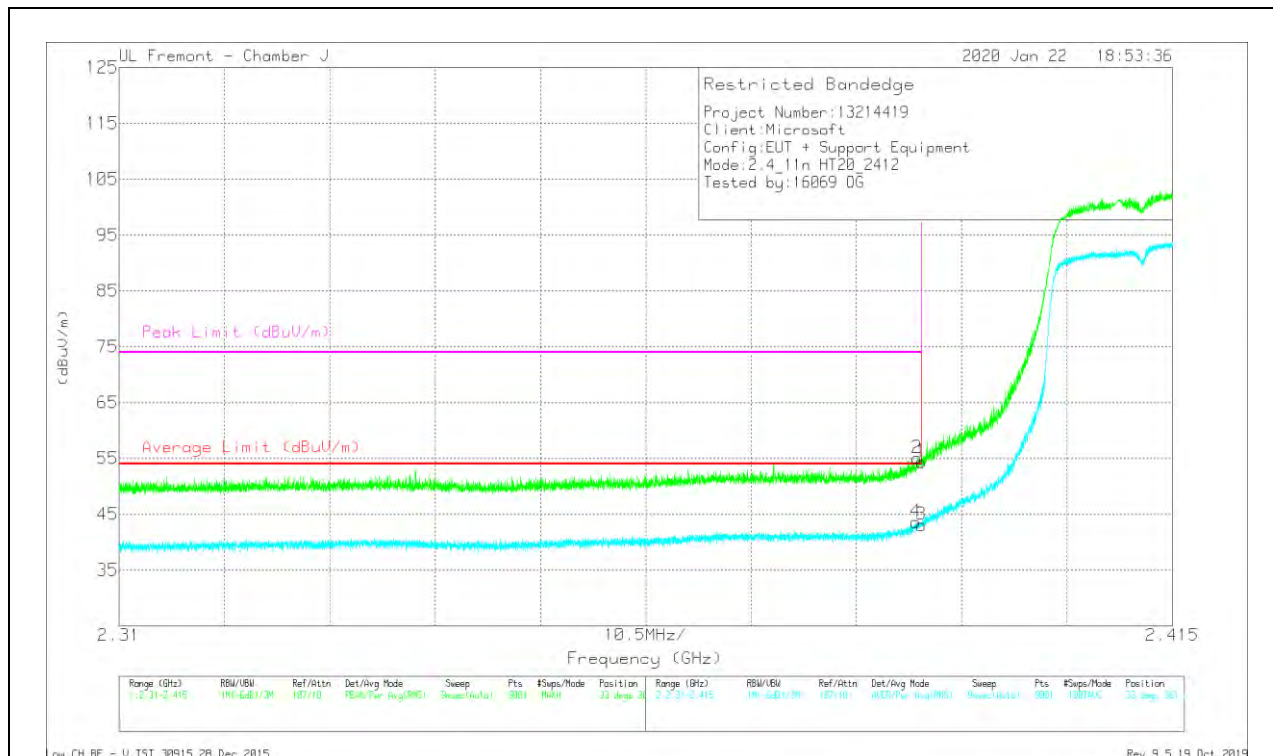
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Cou/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	48.88	Pk	31.9	-25.5	0	55.28	-	-	74	-18.72	37	358	H
2	* 2.38955	49.18	Pk	31.9	-25.5	0	55.58	-	-	74	-18.42	37	358	H
3	* 2.38999	37.14	RMS	31.9	-25.5	.24	43.78	54	-10.22	-	-	37	358	H
4	* 2.3899	37.72	RMS	31.9	-25.5	.24	44.36	54	-9.64	-	-	37	358	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 1344 (dBm)	Amp/Cat/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.38999	47.96	Pk	31.9	-25.5	0	54.36	-	-	74	-19.64	33	361	V
2	* 2.38953	48.65	Pk	31.9	-25.5	0	55.05	-	-	74	-18.95	33	361	V
3	* 2.38999	36.44	RMS	31.9	-25.5	.24	43.08	54	-10.92	-	-	33	361	V
4	* 2.38942	36.97	RMS	31.9	-25.5	.24	43.61	54	-10.39	-	-	33	361	V

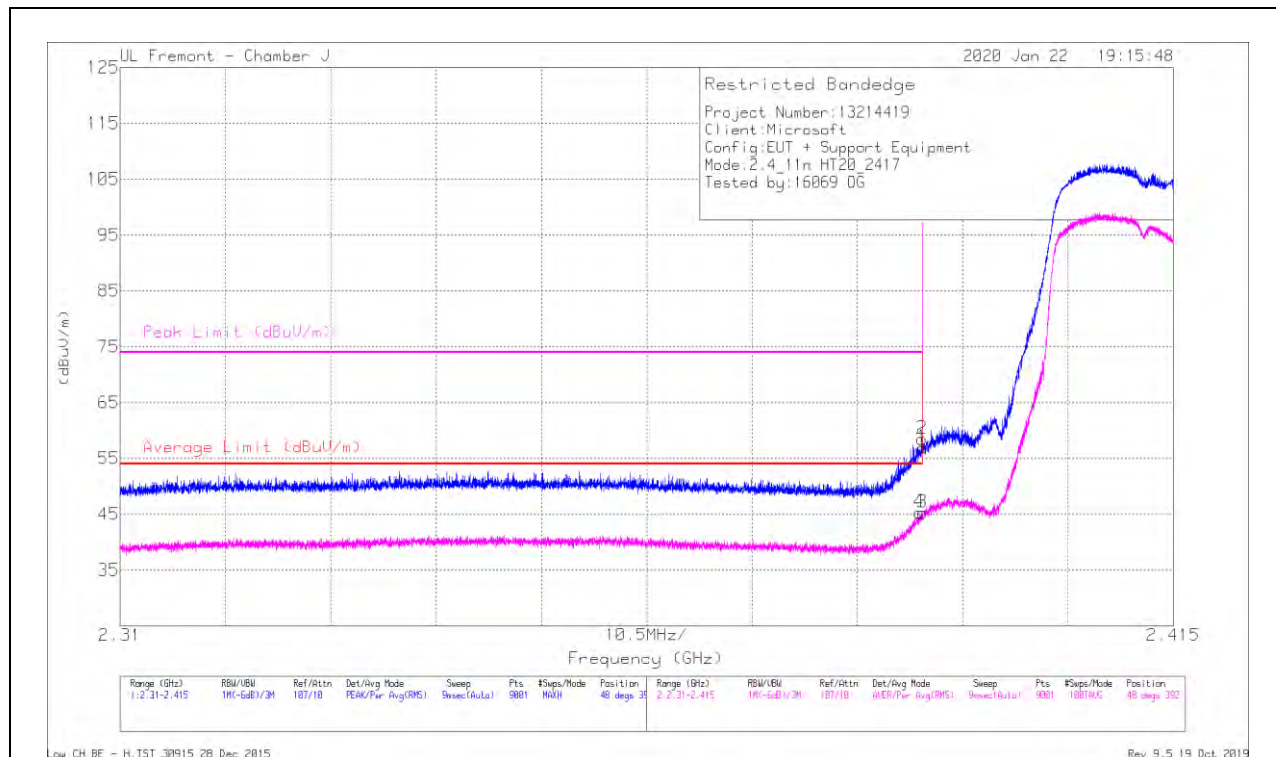
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (LOW CHANNEL, CH 2)

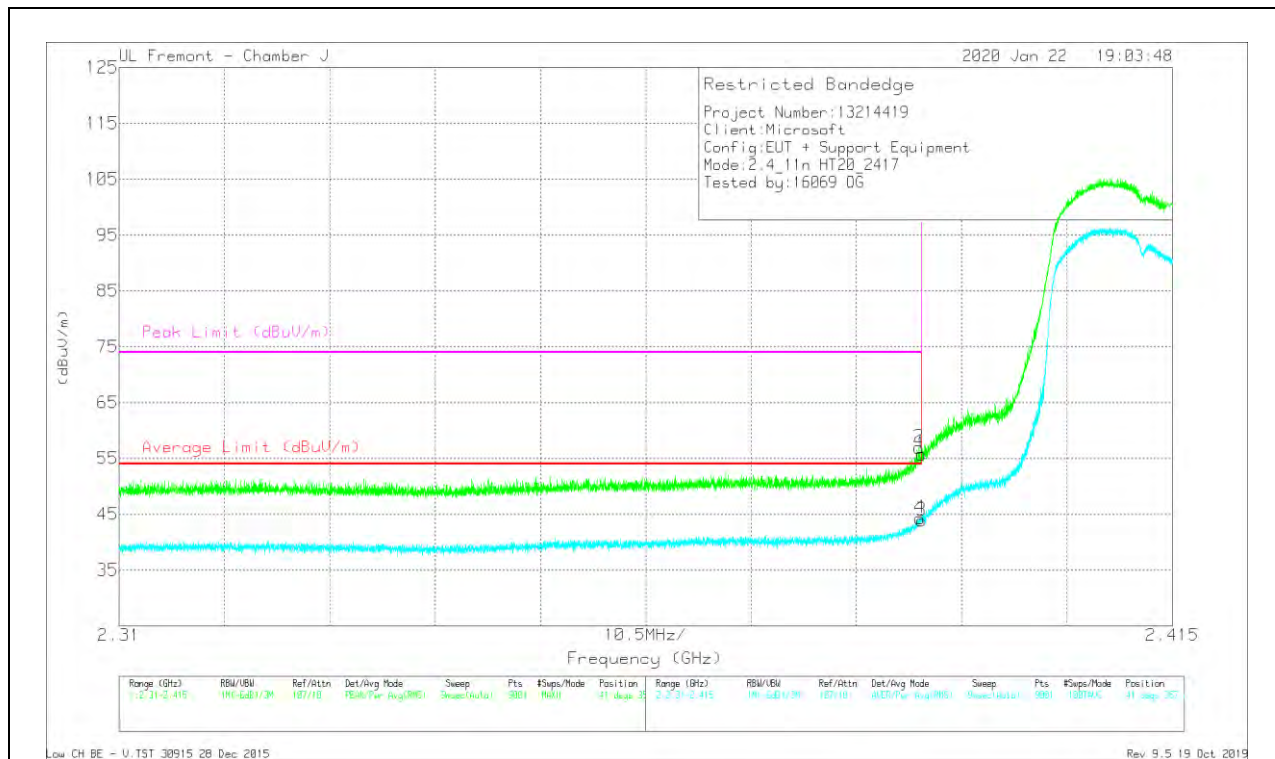
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.38999	50.56	Pk	31.9	-25.5	0	56.96	-	-	74	-17.04	48	392	H
2	* 2.38994	52.1	Pk	31.9	-25.5	0	58.5	-	-	74	-15.5	48	392	H
3	* 2.38999	38.63	RMS	31.9	-25.5	.24	45.27	54	-8.73	-	-	48	392	H
4	* 2.38967	38.7	RMS	31.9	-25.5	.24	45.34	54	-8.66	-	-	48	392	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 1344 (dBm)	Amp/Chl/Filt/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	49.35	Pk	31.9	-25.5	0	55.75	-	-	74	-18.25	41	357	V
2	* 2.38974	50.57	Pk	31.9	-25.5	0	56.97	-	-	74	-17.03	41	357	V
3	* 2.38999	37.24	RMS	31.9	-25.5	.24	43.88	54	-10.12	-	-	41	357	V
4	* 2.38983	37.65	RMS	31.9	-25.5	.24	44.29	54	-9.71	-	-	41	357	V

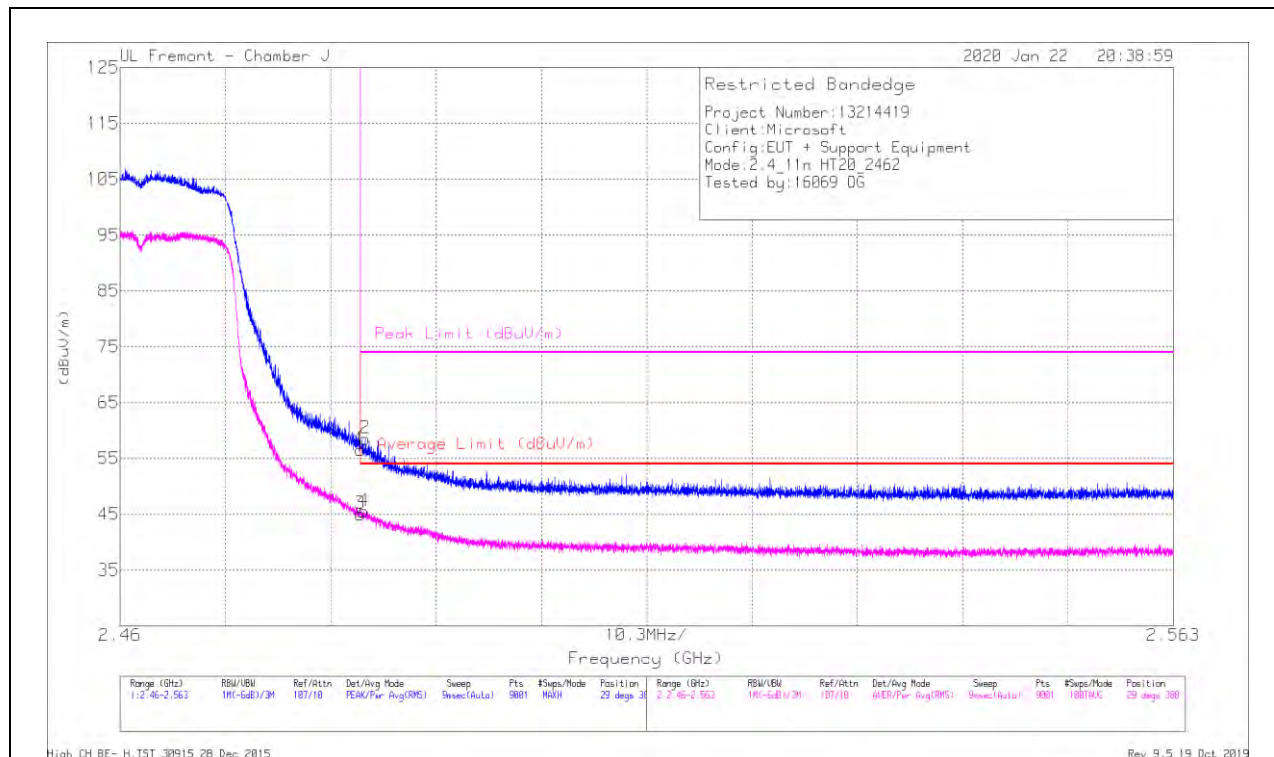
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 11)

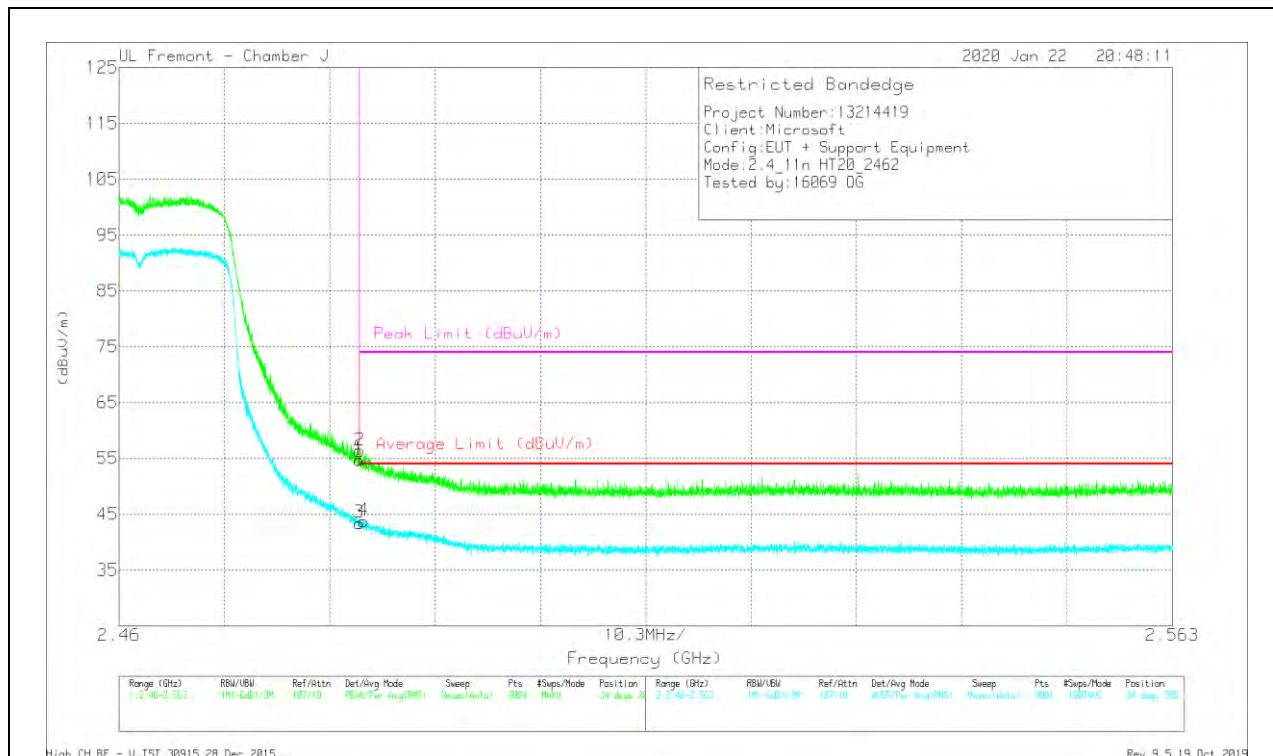
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Ctrl/Filt/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	49.74	Pk	32.3	-25.5	0	56.54	-	-	74	-17.46	29	388	H
2	* 2.48396	51.73	Pk	32.3	-25.5	0	58.53	-	-	74	-15.47	29	388	H
3	* 2.48351	38	RMS	32.3	-25.5	.24	45.04	54	-8.96	-	-	29	388	H
4	* 2.48383	38.49	RMS	32.3	-25.5	.24	45.53	54	-8.47	-	-	29	388	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	47.95	Pk	32.3	-25.5	0	54.75	-	-	74	-19.25	34	385	V
2	* 2.48352	49.57	Pk	32.3	-25.5	0	56.37	-	-	74	-17.63	34	385	V
3	* 2.48351	36.39	RMS	32.3	-25.5	.24	43.43	54	-10.57	-	-	34	385	V
4	* 2.48392	36.76	RMS	32.3	-25.5	.24	43.8	54	-10.2	-	-	34	385	V

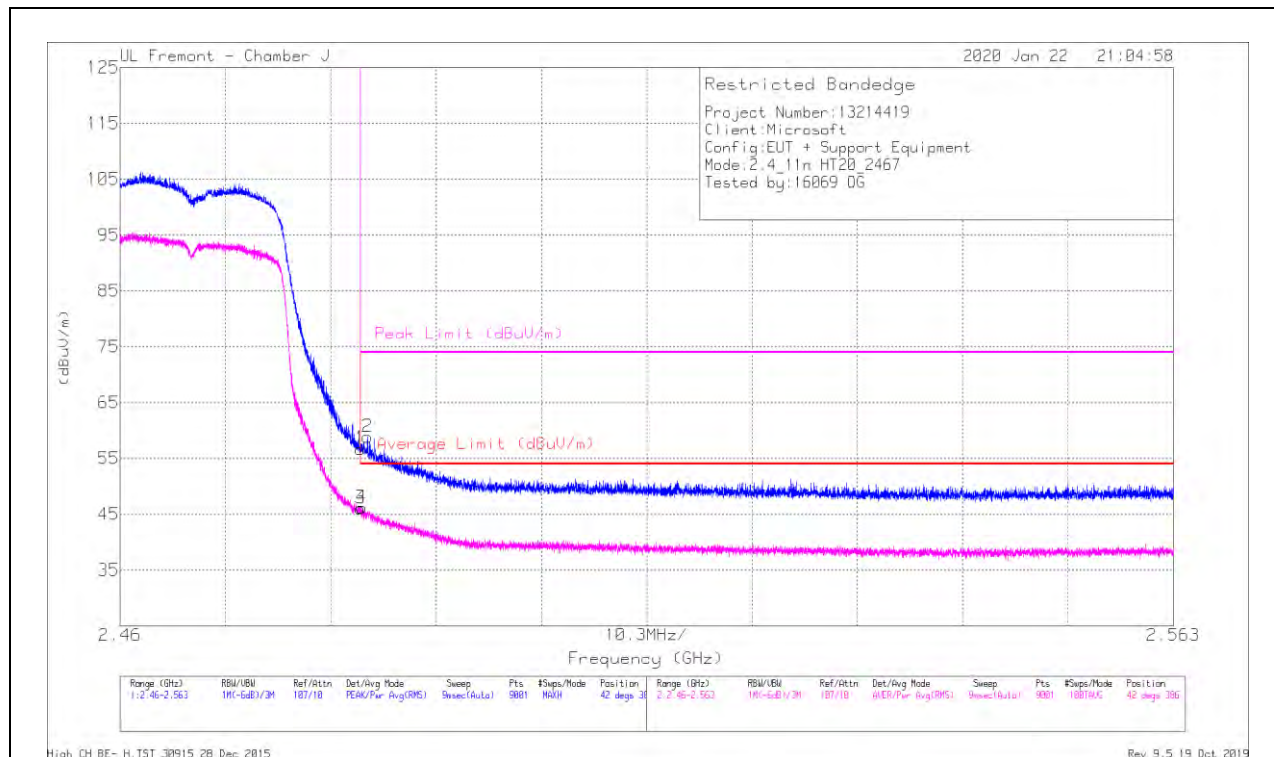
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 12)

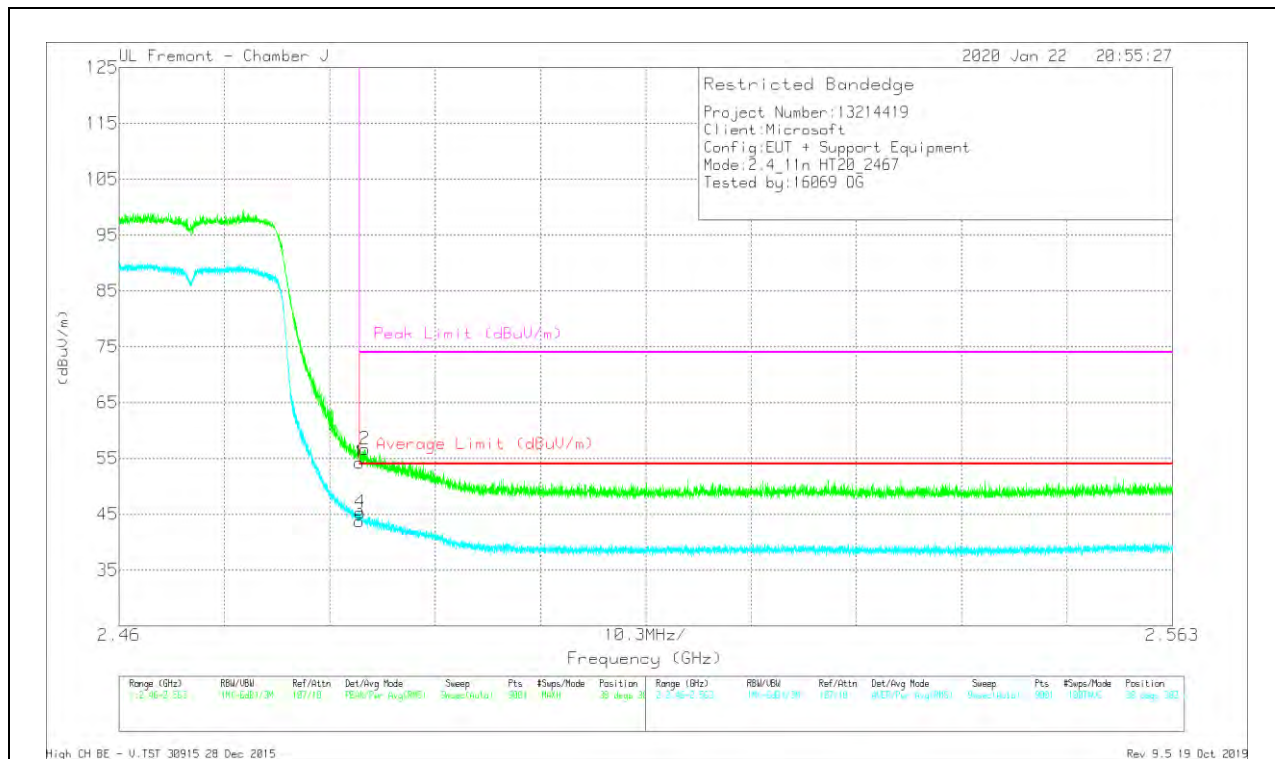
HORIZONTAL RESULT



Marker	Frequency (GHz)	Marker Reading (dBuV)	Det	AF T344 (dBm)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	49.89	Pk	32.3	-25.5	0	56.69	-	-	74	-17.31	42	386	H
2	* 2.48419	52.04	Pk	32.3	-25.5	0	58.84	-	-	74	-15.16	42	386	H
3	* 2.48351	39.02	RMS	32.3	-25.5	.24	46.06	54	-7.94	-	-	42	386	H
4	* 2.48363	39.13	RMS	32.3	-25.5	.24	46.17	54	-7.83	-	-	42	386	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 1344 (dBm)	Amplifier/Filter (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	47.4	Pk	32.3	-25.5	0	54.2	-	-	74	-19.8	38	382	V
2	* 2.48402	49.83	Pk	32.3	-25.5	0	56.63	-	-	74	-17.37	38	382	V
3	* 2.48351	36.76	RMS	32.3	-25.5	.24	43.8	54	-10.2	-	-	38	382	V
4	* 2.48357	38.27	RMS	32.3	-25.5	.24	45.31	54	-8.69	-	-	38	382	V

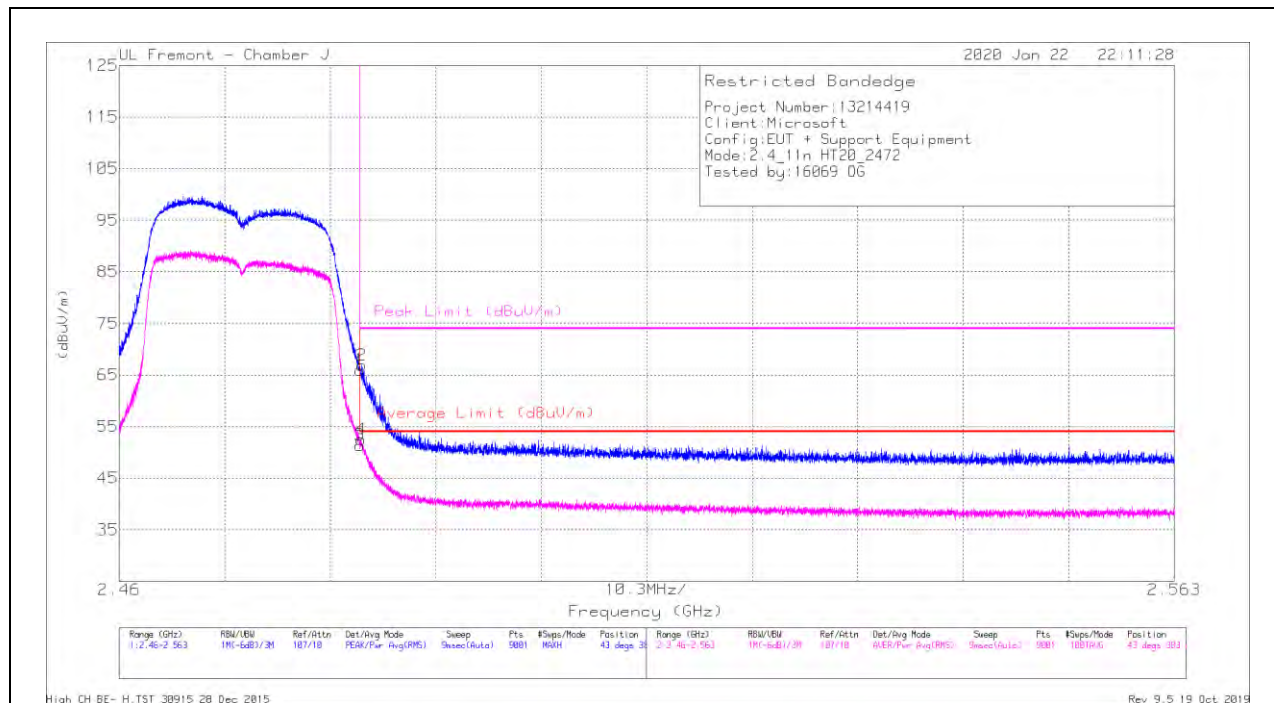
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 13)

HORIZONTAL RESULT



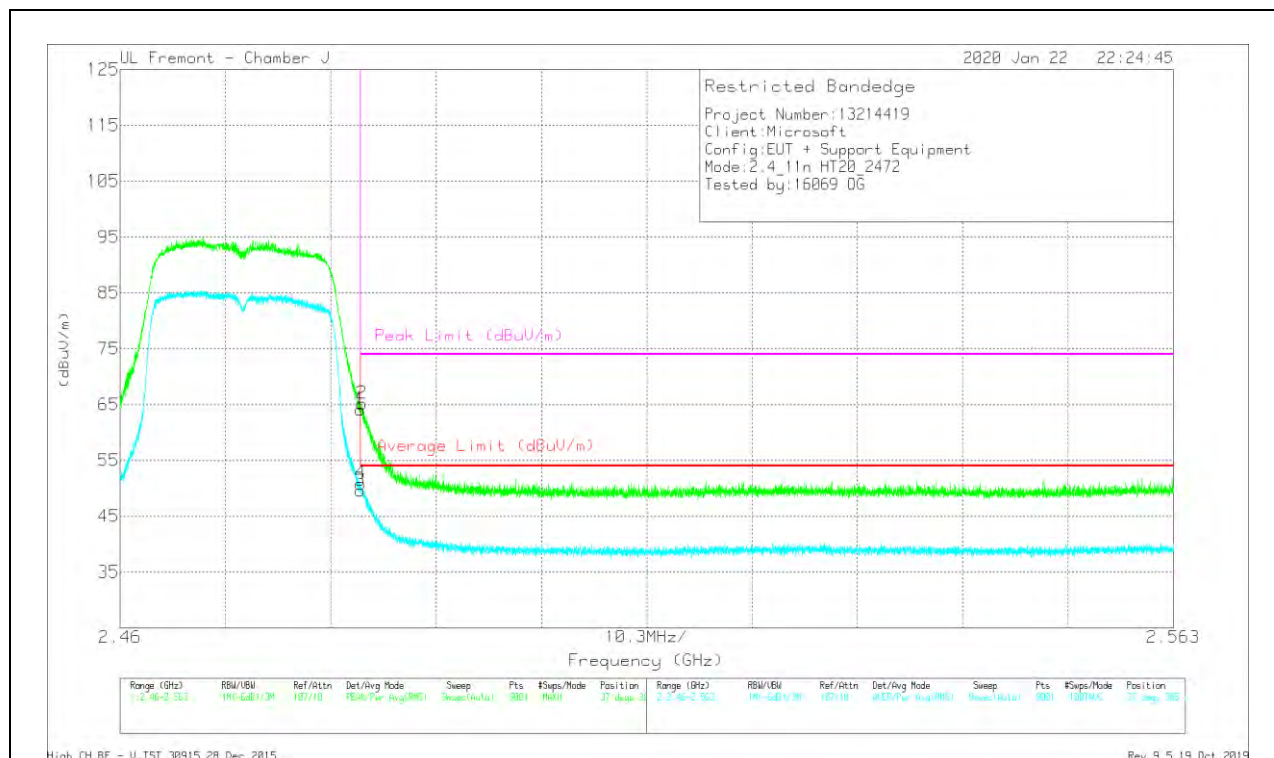
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Chl/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	59.13	Pk	32.3	-25.5	0	65.93	-	-	74	-8.07	43	383	H
2	* 2.48369	60.07	Pk	32.3	-25.5	0	66.87	-	-	74	-7.13	43	383	H
3	* 2.48351	44.31	RMS	32.3	-25.5	.24	51.35	54	-2.65	-	-	43	383	H
4	* 2.48361	45.44	RMS	32.3	-25.5	.24	52.48	54	-1.52	-	-	43	383	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Cali/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	57.29	Pk	32.3	-25.5	0	64.09	-	-	74	-9.91	37	385	V
2	* 2.48364	58.38	Pk	32.3	-25.5	0	65.18	-	-	74	-8.82	37	385	V
3	* 2.48351	42.56	RMS	32.3	-25.5	.24	49.6	54	-4.4	-	-	37	385	V
4	* 2.48352	43.78	RMS	32.3	-25.5	.24	50.82	54	-3.18	-	-	37	385	V

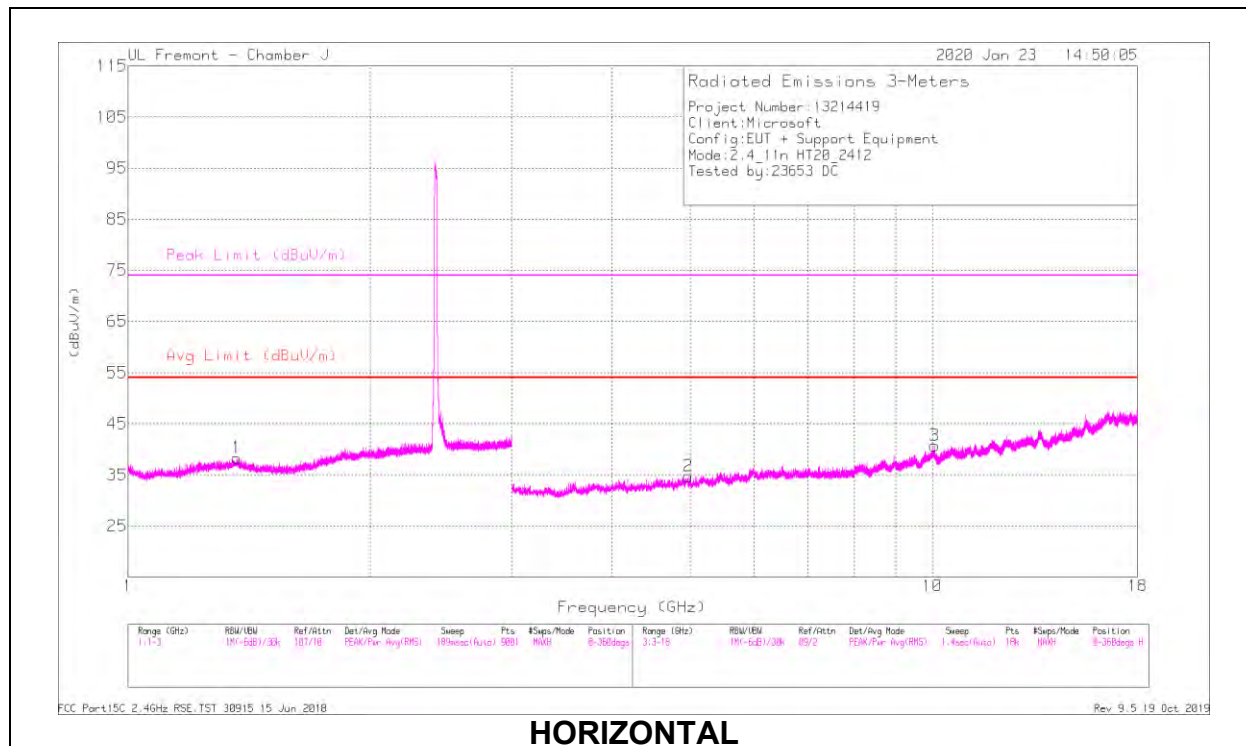
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

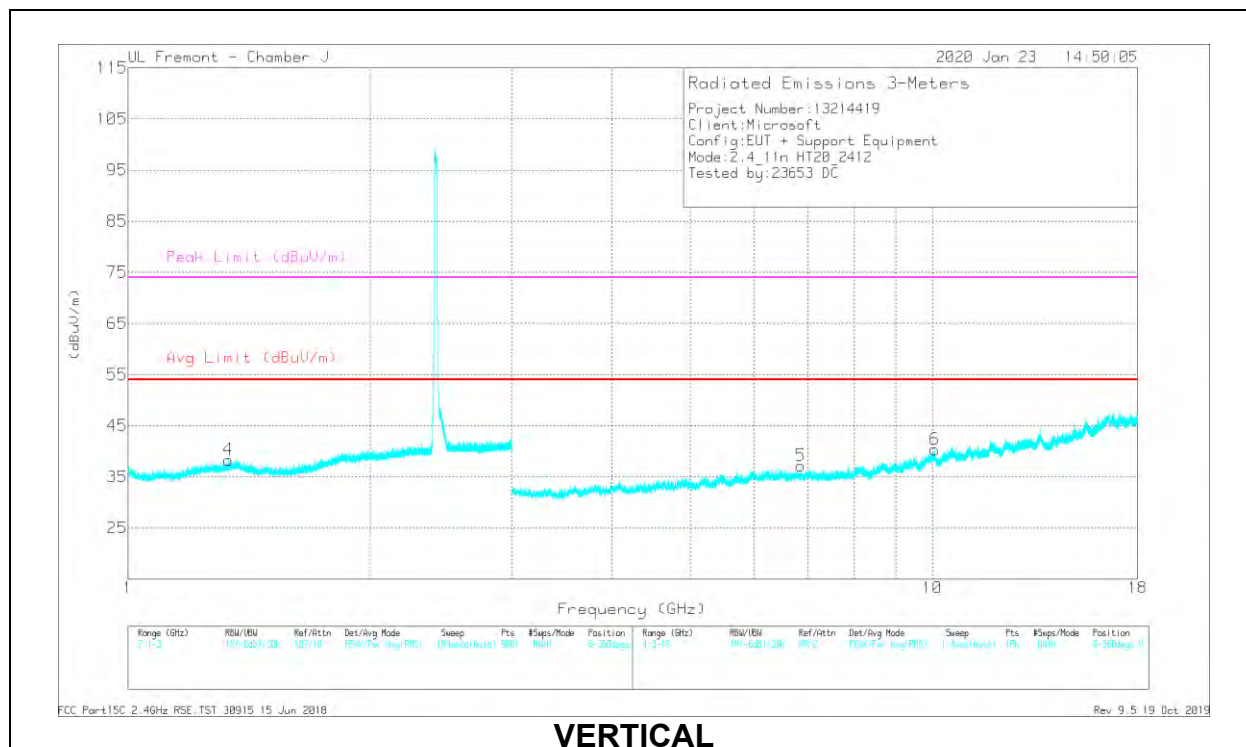
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, CH 1 RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

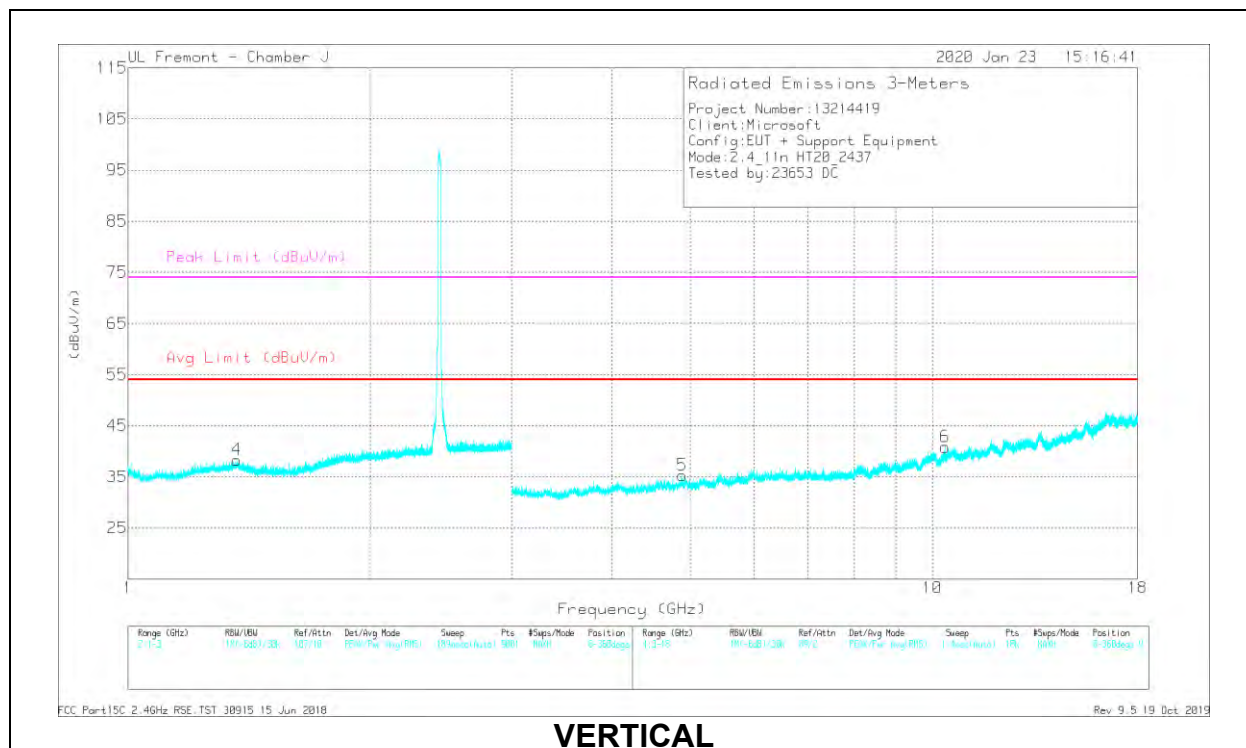
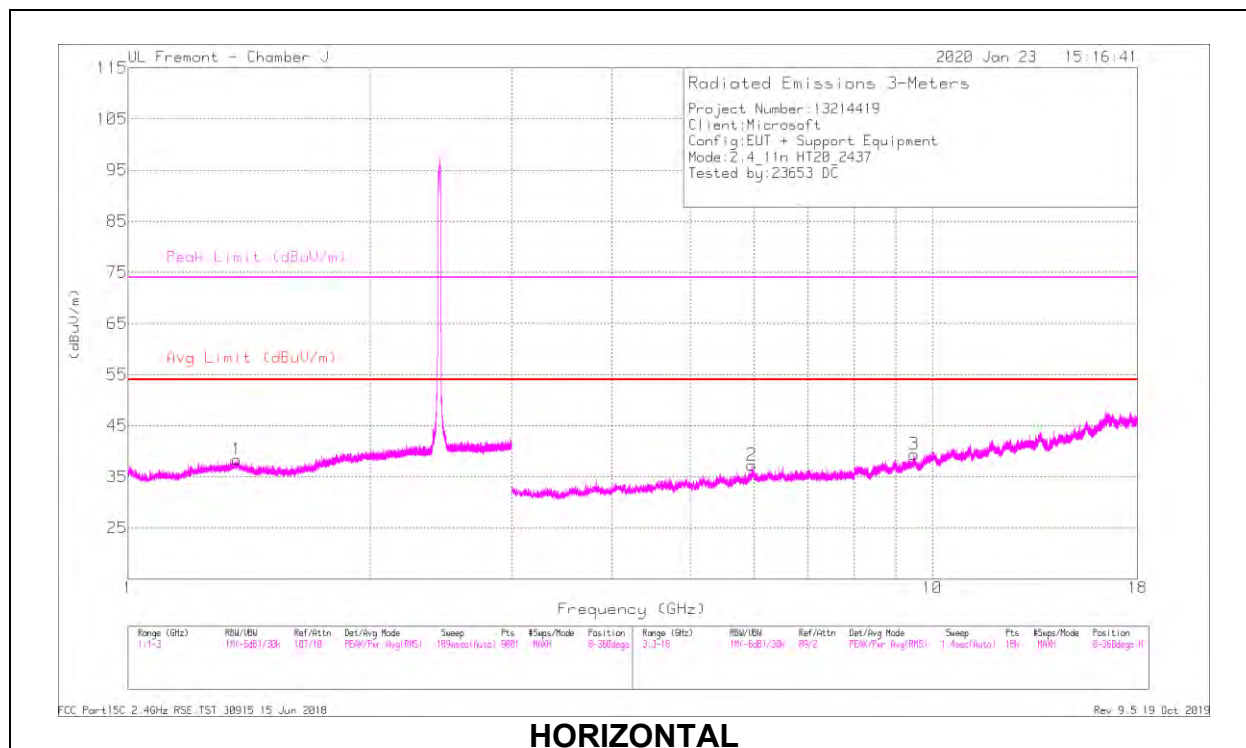
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.36401	41.88	PK2	29.4	-25.8	0	45.48	-	-	74	-28.52	4	184	H
	* 1.36689	32.05	MAv1	29.4	-25.8	.24	35.89	54	-18.11	-	-	4	184	H
4	* 1.3313	41.81	PK2	28.7	-25.9	0	44.61	-	-	74	-29.39	62	142	V
	* 1.33089	31.85	MAv1	28.7	-25.9	.24	34.89	54	-19.11	-	-	62	142	V
3	10.06583	32.74	PK2	37.2	-23.2	0	46.74	-	-	-	-	342	175	H
2	* 4.97506	38.73	PK2	34.1	-30.2	0	42.63	-	-	74	-31.37	330	164	H
	* 4.97709	27.78	MAv1	34.1	-30.2	.24	31.92	54	-22.08	-	-	330	164	H
5	6.8587	35.12	PK2	35.7	-27.5	0	43.32	-	-	-	-	278	225	V
6	10.07346	32.65	PK2	37.1	-23.2	0	46.55	-	-	-	-	55	232	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL, CH 6 RESULTS



RADIATED EMISSIONS

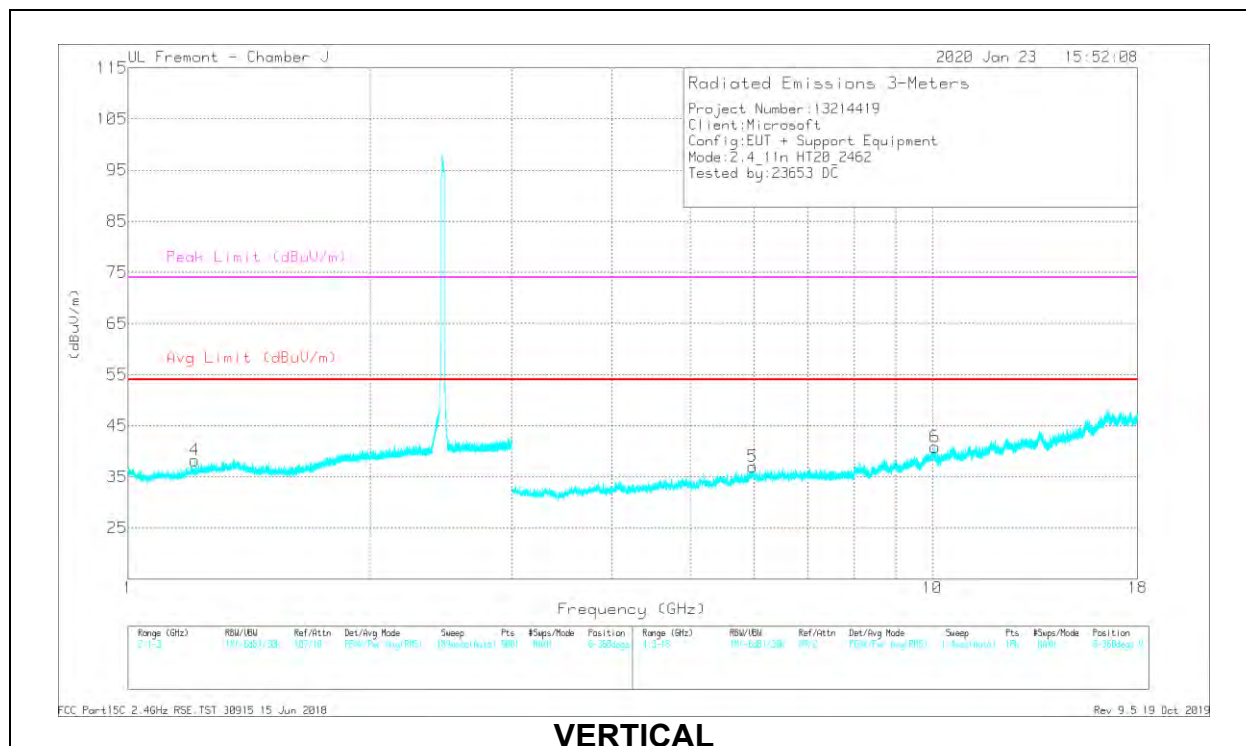
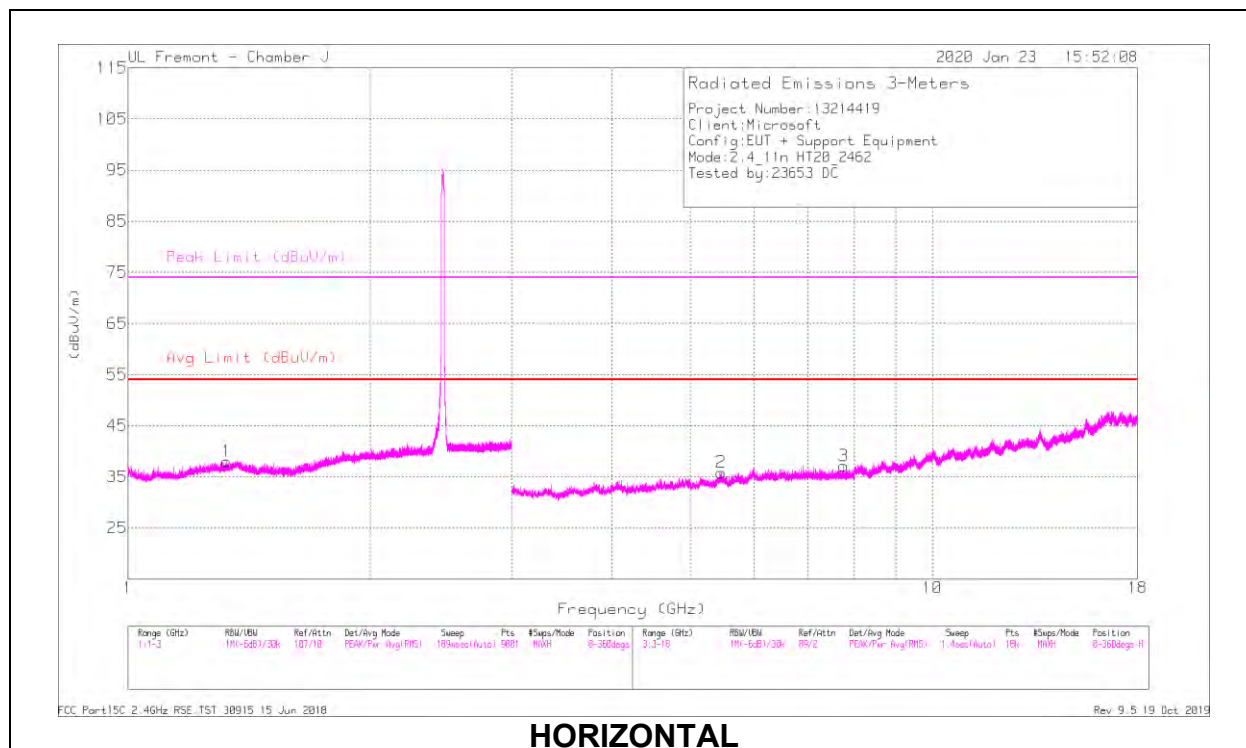
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.36395	41.71	PK2	29.4	-25.8	0	45.31	-	-	74	-28.69	183	212	H
	* 1.36374	31.68	MAv1	29.4	-25.8	.24	35.52	54	-18.48	-	-	183	212	H
4	* 1.36498	41.43	PK2	29.4	-25.8	0	45.03	-	-	74	-28.97	101	187	V
	* 1.3644	31.98	MAv1	29.4	-25.8	.24	35.82	54	-18.18	-	-	101	187	V
2	5.96362	36.5	PK2	35.3	-28.6	0	43.2	-	-	-	-	360	175	H
3	* 9.49122	32.39	PK2	36.6	-23	0	45.99	-	-	74	-28.01	318	234	H
	* 9.49383	22.65	MAv1	36.6	-23	.24	36.49	54	-17.51	-	-	318	234	H
6	10.37093	33.19	PK2	37.5	-24	0	46.69	-	-	-	-	279	180	V
5	* 4.88793	38.93	PK2	34.1	-30.9	0	42.13	-	-	74	-31.87	294	319	V
	* 4.88653	28.79	MAv1	34.1	-30.9	.24	32.23	54	-21.77	-	-	294	319	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL, CH 11 RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/ Pad (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	* 1.32488	42.83	PK2	28.8	-25.7	0	45.93	-	-	74	-28.07	149	147	H
	* 1.32523	32.26	MAv1	28.8	-25.7	.24	35.6	54	-18.4	-	-	149	147	H
4	* 1.208	41.83	PK2	28.2	-25.8	0	44.23	-	-	74	-29.77	53	174	V
	* 1.2108	31.81	MAv1	28.2	-25.8	.24	34.45	54	-19.55	-	-	53	174	V
2	5.46445	36.95	PK2	34.5	-28.7	0	42.75	-	-	-	-	310	224	H
3	7.76001	34.36	PK2	35.7	-27	0	43.06	-	-	-	-	273	300	H
5	5.98035	36.42	PK2	35.3	-28.1	0	43.62	-	-	-	-	304	256	V
6	10.08096	33.59	PK2	37.2	-23.3	0	47.49	-	-	-	-	267	277	V

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

PK2 - KDB558074 Method: Maximum Peak

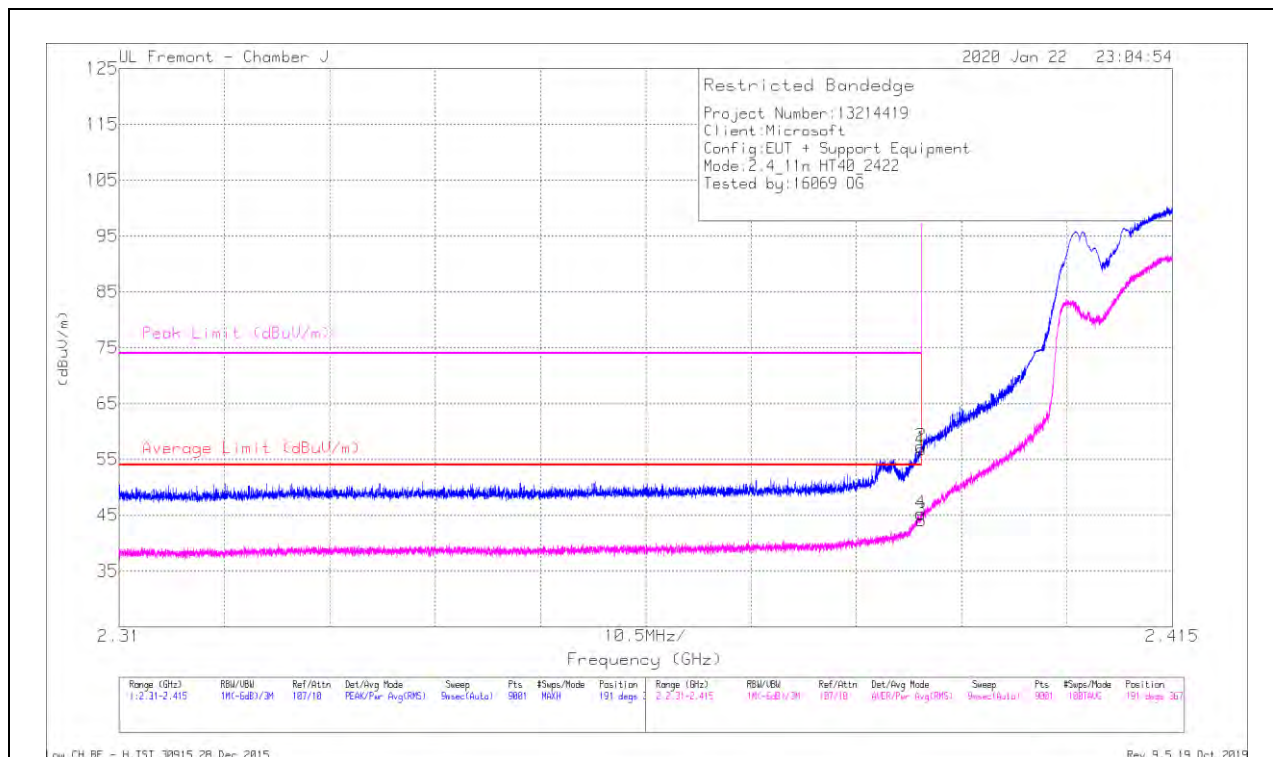
MAv1 - KDB558074 Option 1 Maximum RMS Average

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

2TX Antenna 1 + Antenna 2 CDD MODE

BANDEDGE (LOW CHANNEL, CH 3)

HORIZONTAL RESULT



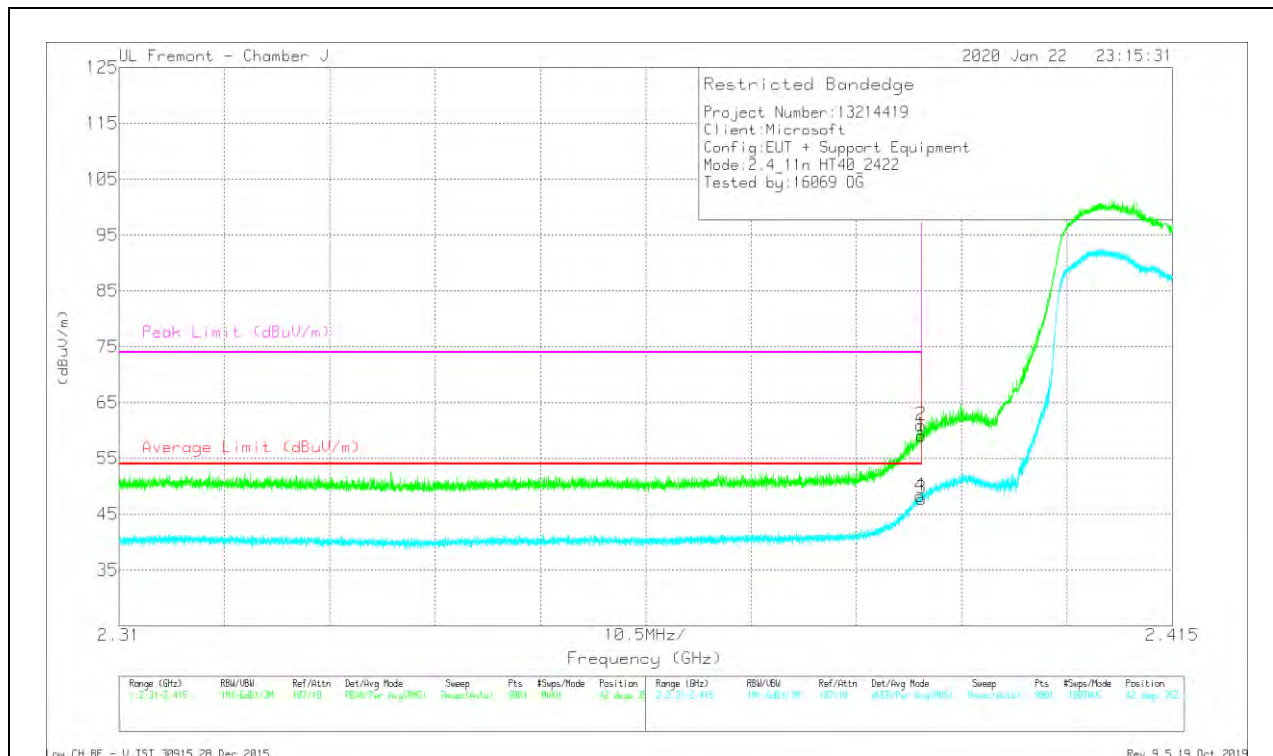
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/CD/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.38999	50.43	Pk	31.9	-25.5	0	56.83	-	-	74	-17.17	191	367	H
2	* 2.38994	50.94	Pk	31.9	-25.5	0	57.34	-	-	74	-16.66	191	367	H
3	* 2.38999	37.27	RMS	31.9	-25.5	47	44.14	54	-9.86	-	-	191	367	H
4	* 2.38991	38.41	RMS	31.9	-25.5	47	45.28	54	-8.72	-	-	191	367	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 1344 (dBm)	Amp/Coupling/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.38999	52.72	Pk	31.9	-25.5	0	59.12	-	-	74	-14.88	42	352	V
2	* 2.38994	54.56	Pk	31.9	-25.5	0	60.96	-	-	74	-13.04	42	352	V
3	* 2.38999	40.95	RMS	31.9	-25.5	47	47.82	54	-6.18	-	-	42	352	V
4	* 2.38984	41.4	RMS	31.9	-25.5	47	48.27	54	-5.73	-	-	42	352	V

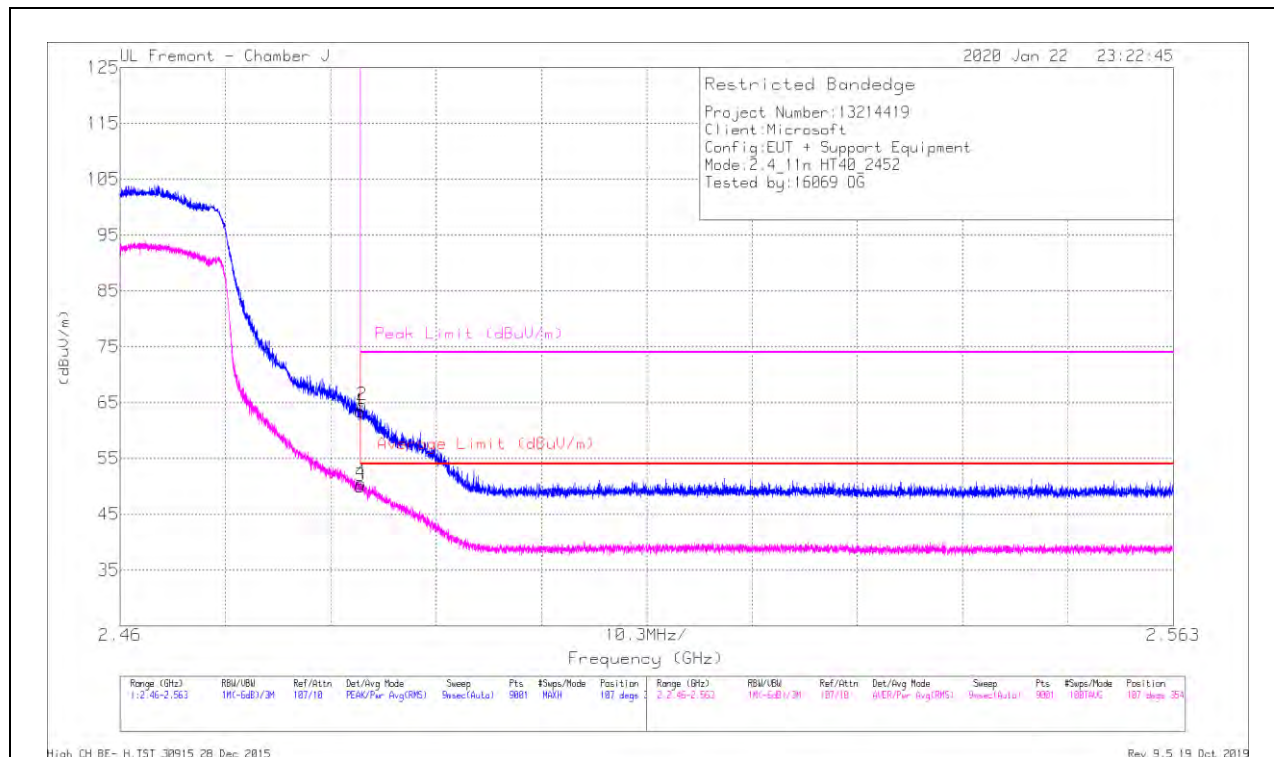
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 9)

HORIZONTAL RESULT



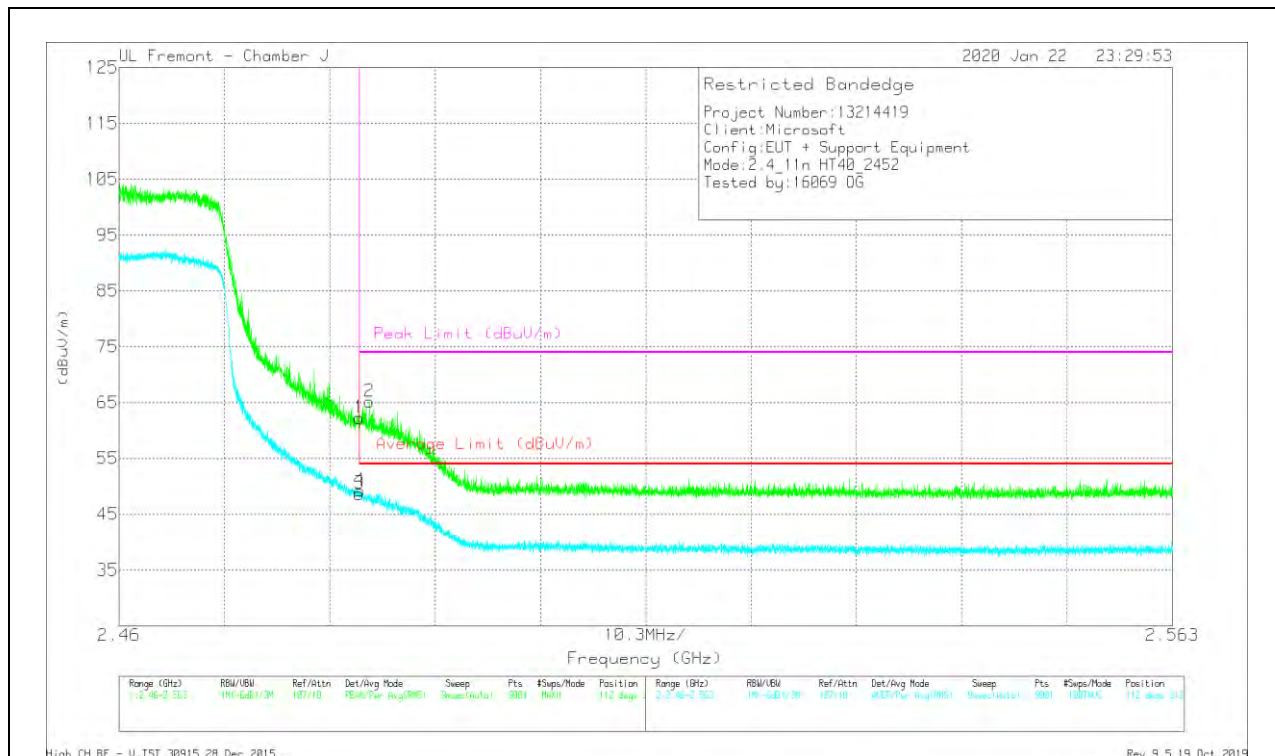
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Ctrl/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	56.63	Pk	32.3	-25.5	0	63.43	-	-	74	-10.57	107	354	H
2	* 2.48369	57.72	Pk	32.3	-25.5	0	64.52	-	-	74	-9.48	107	354	H
3	* 2.48351	42.75	RMS	32.3	-25.5	.47	50.02	54	-3.98	-	-	107	354	H
4	* 2.48354	43.3	RMS	32.3	-25.5	.47	50.57	54	-3.43	-	-	107	354	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Cali/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	56.41	Pk	32.3	-25.5	0	62.21	-	-	74	-11.79	112	313	V
2	* 2.48448	58.35	Pk	32.3	-25.5	0	65.15	-	-	74	-8.85	112	313	V
3	* 2.48351	41.41	RMS	32.3	-25.5	.47	48.68	54	-5.32	-	-	112	313	V
4	* 2.48352	41.94	RMS	32.3	-25.5	.47	49.21	54	-4.79	-	-	112	313	V

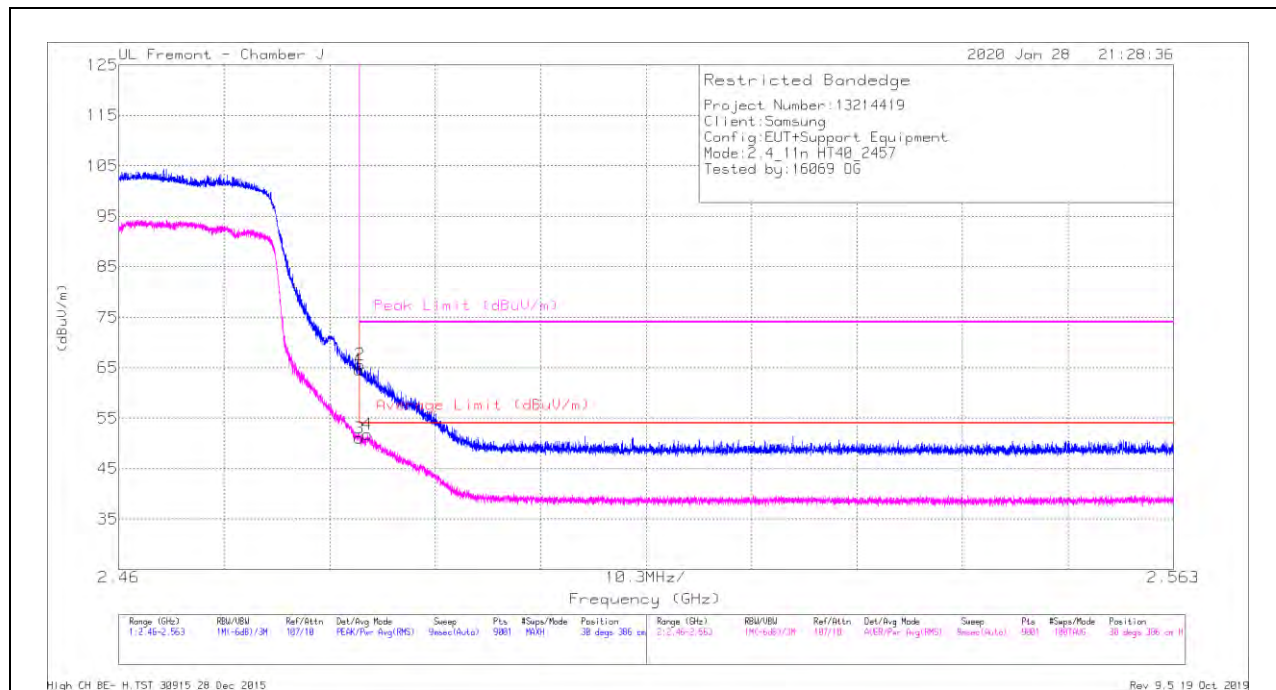
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 10)

HORIZONTAL RESULT



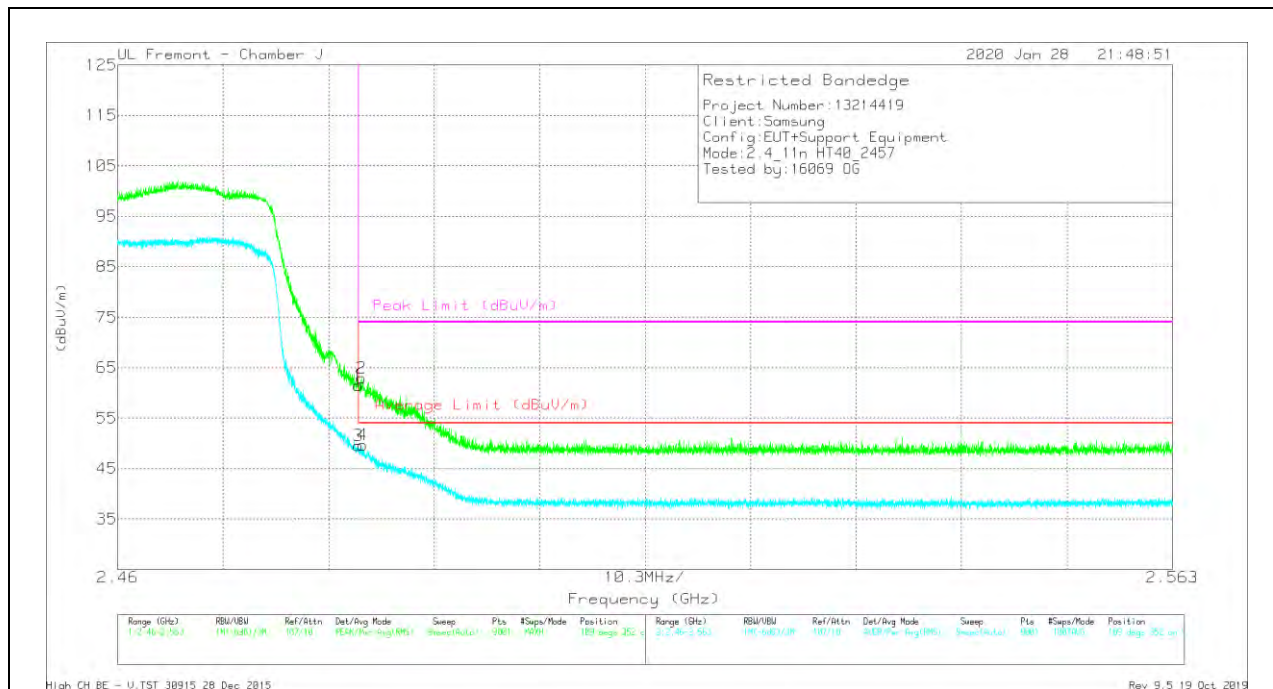
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 1344 (dBm)	Amp/Cat/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	57.82	Pk	32.3	-25.5	0	64.62	-	-	74	-9.38	30	386	H
2	* 2.48355	58.82	Pk	32.3	-25.5	0	65.62	-	-	74	-8.38	30	386	H
3	* 2.48351	43.72	RMS	32.3	-25.5	.47	50.99	54	-3.01	-	-	30	386	H
4	* 2.48431	44.56	RMS	32.3	-25.5	.47	51.83	54	-2.17	-	-	30	386	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/CbI/Fr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	54.69	Pk	32.3	-25.5	0	61.49	-	-	74	-12.51	109	352	V
2	* 2.4838	56.13	Pk	32.3	-25.5	0	62.93	-	-	74	-11.07	109	352	V
3	* 2.48351	42.28	RMS	32.3	-25.5	.47	49.55	54	-4.45	-	-	109	352	V
4	* 2.48391	42.45	RMS	32.3	-25.5	.47	49.72	54	-4.28	-	-	109	352	V

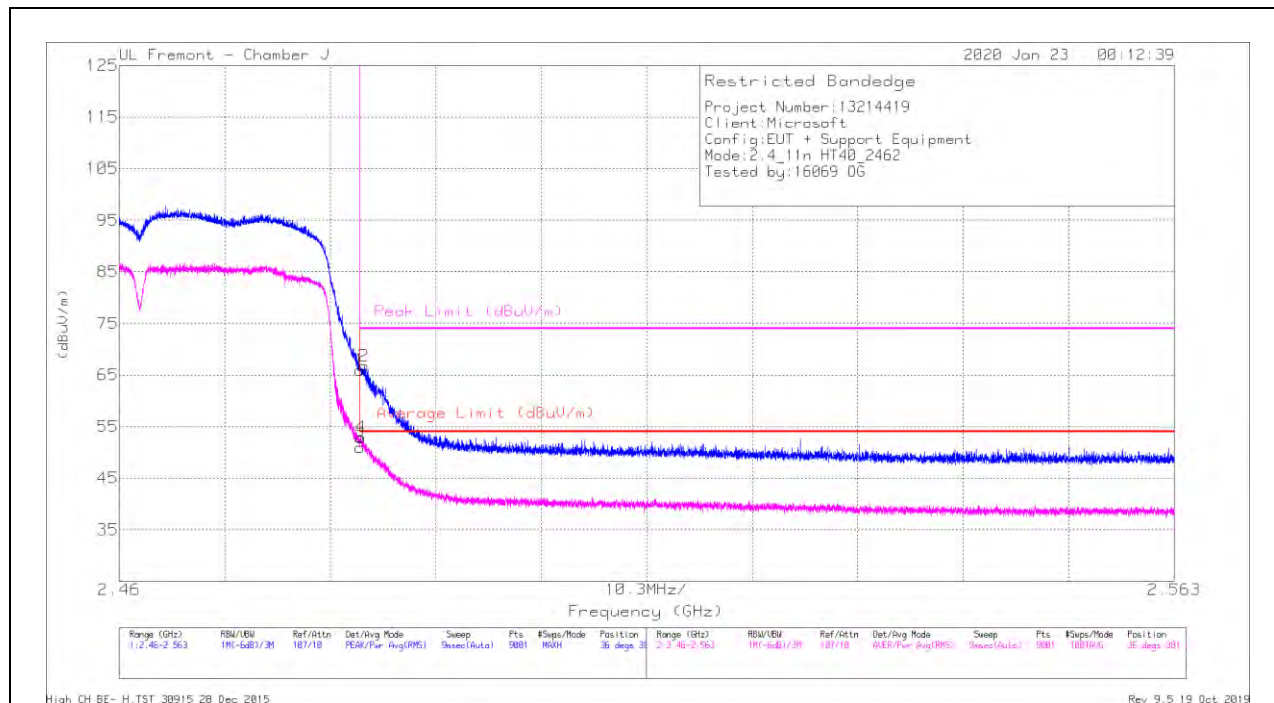
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

BANDEDGE (HIGH CHANNEL, CH 11)

HORIZONTAL RESULT



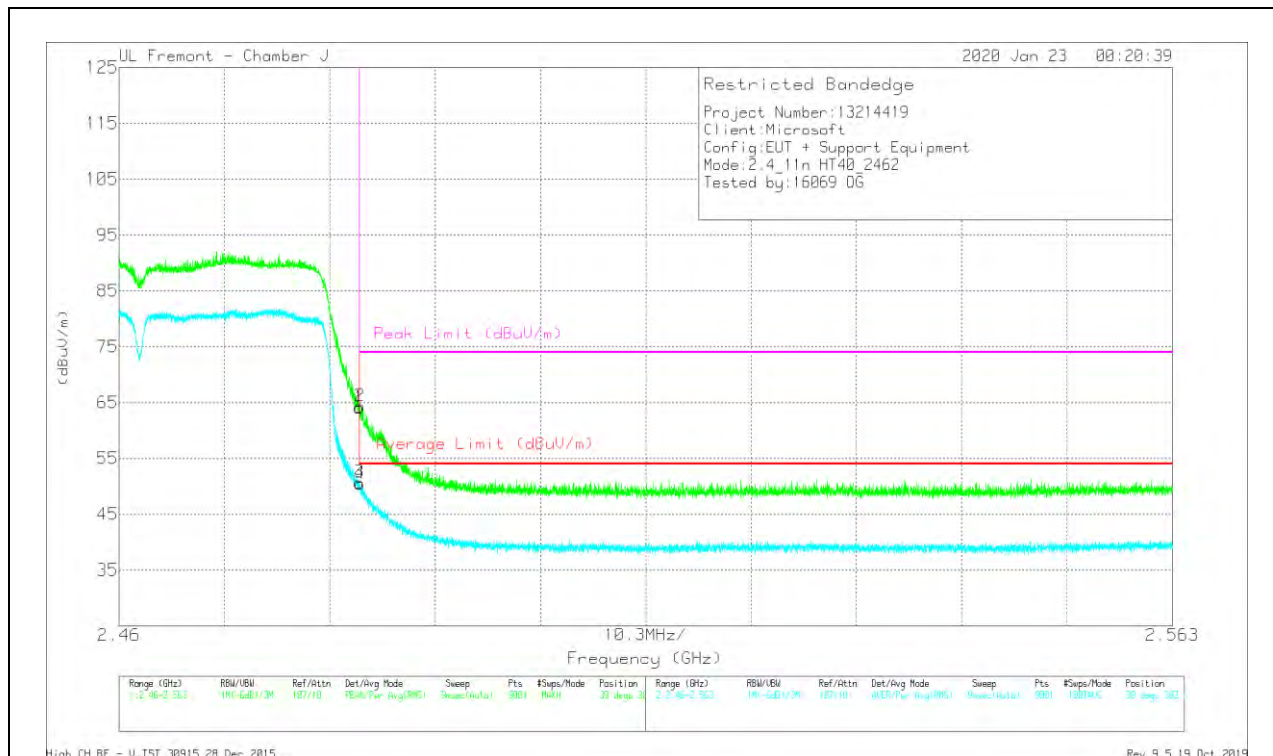
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Cbl/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Asimuth (Degs)	Height (cm)	Polarity
1	* 2.48351	59.15	Pk	32.3	-25.5	0	65.95	-	-	74	-8.05	36	381	H
2	* 2.48388	59.95	Pk	32.3	-25.5	0	66.75	-	-	74	-7.25	36	381	H
3	* 2.48351	43.72	RMS	32.3	-25.5	.47	50.99	54	-3.01	-	-	36	381	H
4	* 2.48362	45.65	RMS	32.3	-25.5	.47	52.92	54	-1.08	-	-	36	381	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dBm)	Amp/Cal/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Altitude (Degs)	Height (cm)	Polarity
1	* 2.48351	57.28	Pk	32.3	-25.5	0	64.08	-	-	74	-9.92	39	382	V
2	* 2.48355	57.49	Pk	32.3	-25.5	0	64.29	-	-	74	-9.71	39	382	V
3	* 2.48351	43.41	RMS	32.3	-25.5	.47	50.68	54	-3.32	-	-	39	382	V
4	* 2.48354	43.17	RMS	32.3	-25.5	.47	50.44	54	-3.56	-	-	39	382	V

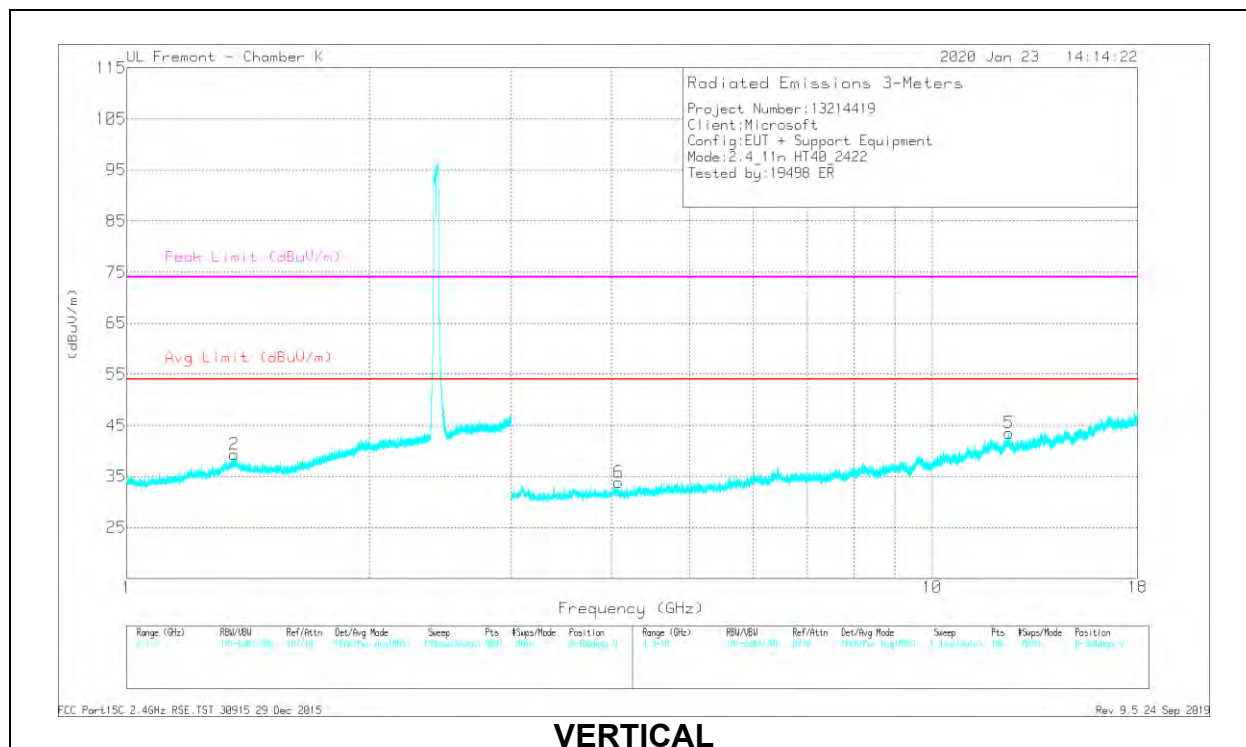
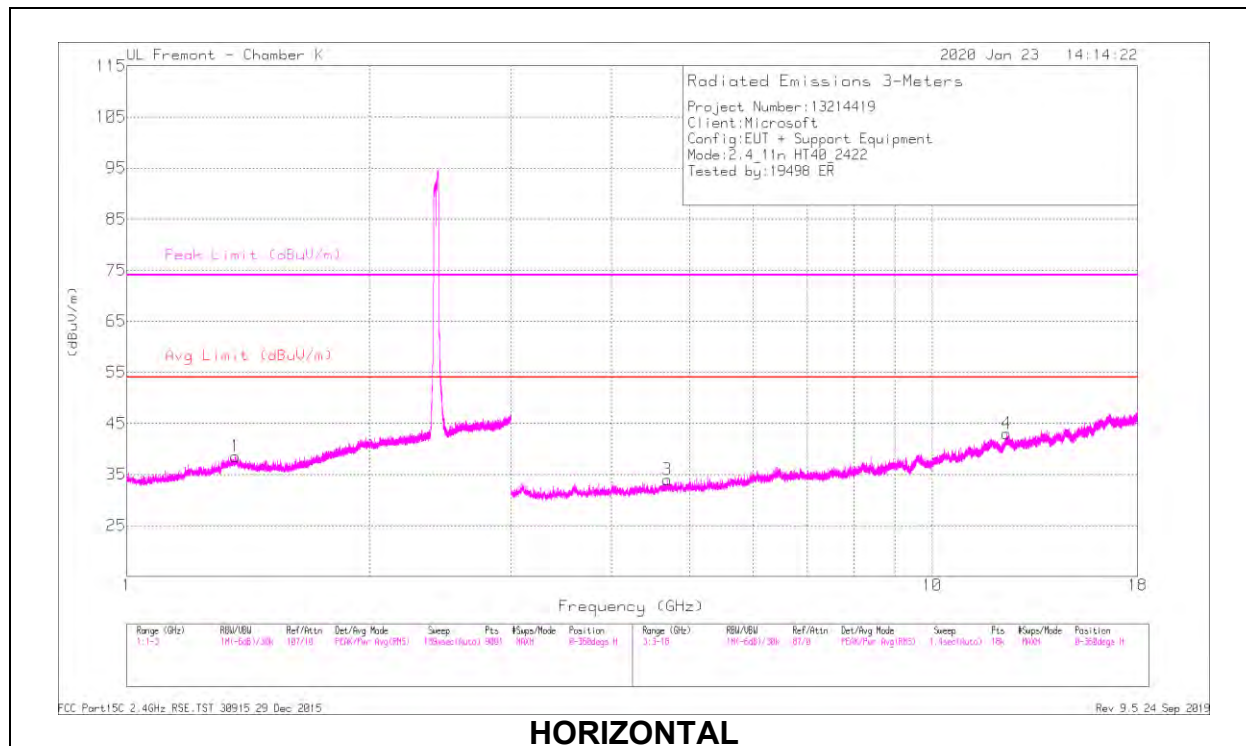
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL, CH 3 RESULTS



RADIATED EMISSIONS

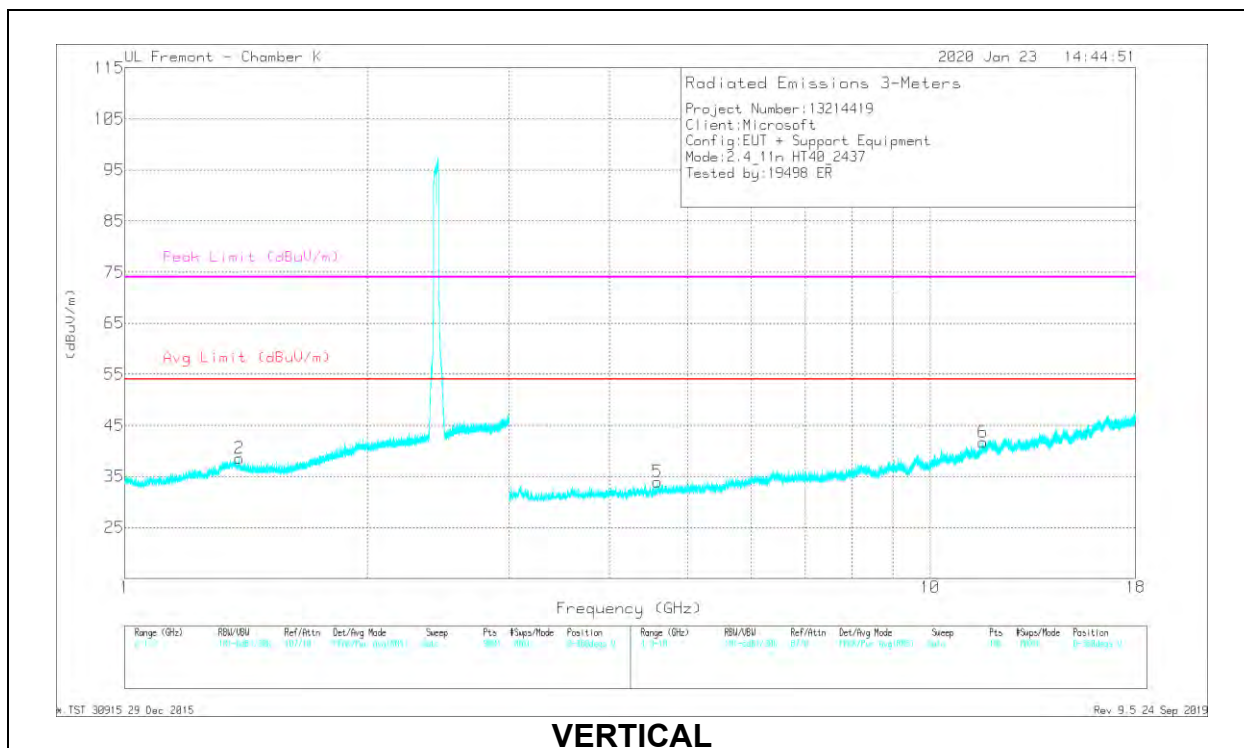
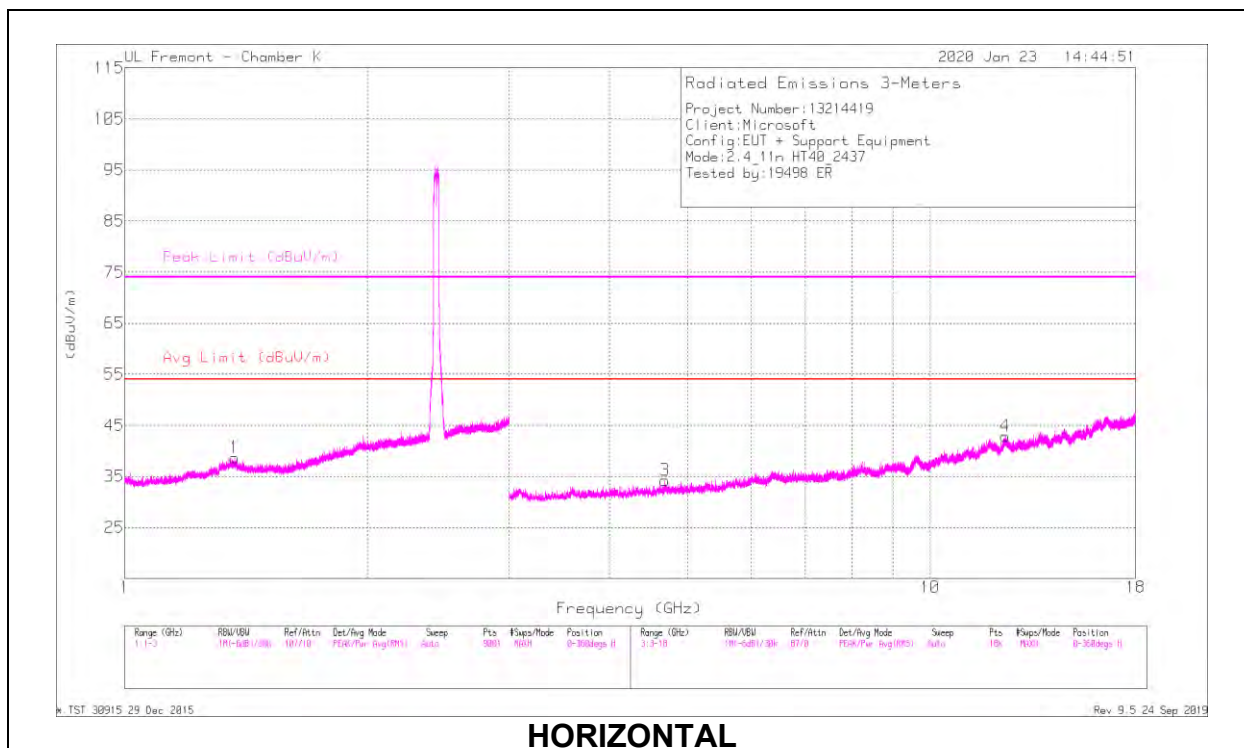
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.36347	32.63	PK2	29.6	-16.8	0	45.43	-	-	74	-28.57	68	182	H
	* 1.362	22.41	MAv1	29.6	-16.8	.47	35.68	54	-18.32	-	-	68	182	H
2	* 1.36007	32.49	PK2	29.5	-16.9	0	45.09	-	-	74	-28.91	149	142	V
	* 1.35862	22.54	MAv1	29.6	-16.9	.47	35.71	54	-18.29	-	-	149	142	V
3	* 4.68984	37.93	PK2	34	-30.6	0	41.33	-	-	74	-32.67	247	231	H
	* 4.69209	27.19	MAv1	34	-30.5	.47	31.16	54	-22.84	-	-	247	231	H
4	* 12.38252	31.01	PK2	39	-20.1	0	49.91	-	-	74	-24.09	230	114	H
	* 12.38186	20.62	MAv1	39	-20.1	.47	39.99	54	-14.01	-	-	230	114	H
5	* 12.45744	31.19	PK2	39	-20.1	0	50.09	-	-	74	-23.91	316	150	V
	* 12.45655	20.88	MAv1	39	-20.1	.47	40.25	54	-13.75	-	-	316	150	V
6	* 4.081	37.33	PK2	33.4	-30.7	0	40.03	-	-	74	-33.97	133	215	V
	* 4.0798	27.85	MAv1	33.4	-30.7	.47	31.02	54	-22.98	-	-	133	215	V

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

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL, CH 6 RESULTS



RADIATED EMISSIONS

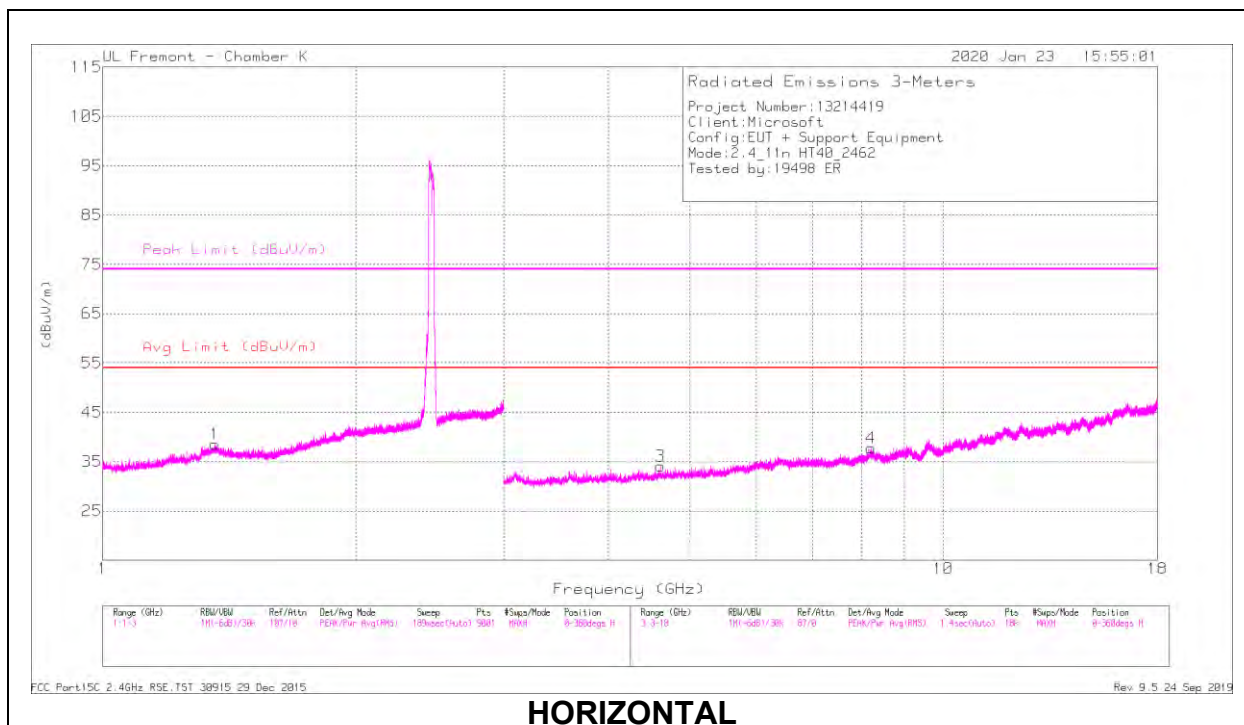
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.37005	33.26	PK2	29.6	-16.9	0	45.96	-	-	74	-28.04	224	386	H
	* 1.37145	22.74	MAV1	29.5	-16.8	.47	35.91	54	-18.09	-	-	224	386	H
2	* 1.38747	32.11	PK2	29.1	-16.8	0	44.41	-	-	74	-29.59	146	265	V
	* 1.38774	22.85	MAV1	29.1	-16.8	.47	35.62	54	-18.38	-	-	146	265	V
3	* 4.6881	36.55	PK2	33.9	-30.6	0	39.85	-	-	74	-34.15	39	230	H
	* 4.68537	26.99	MAV1	33.9	-30.6	.47	30.76	54	-23.24	-	-	39	230	H
4	* 12.40029	32.34	PK2	39	-20.1	0	51.24	-	-	74	-22.76	84	322	H
	* 12.40168	20.89	MAV1	39	-20.1	.47	40.26	54	-13.74	-	-	84	322	H
5	* 4.58436	37.94	PK2	33.9	-30.9	0	40.94	-	-	74	-33.06	39	289	V
	* 4.58434	27.66	MAV1	33.9	-30.9	.47	31.13	54	-22.87	-	-	39	289	V
6	* 11.6357	30.43	PK2	38.5	-20.3	0	48.63	-	-	74	-25.37	217	180	V
	* 11.63831	20.63	MAV1	38.5	-20.3	.47	39.3	54	-14.7	-	-	217	180	V

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

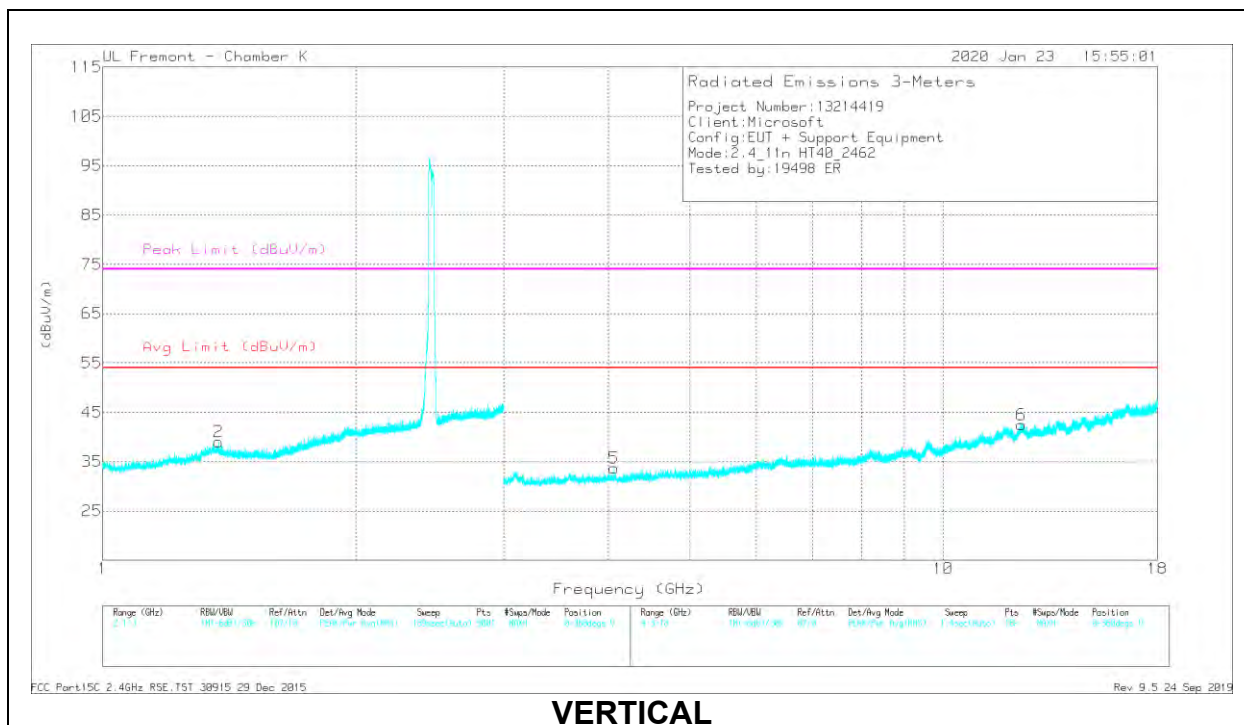
PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

HIGH CHANNEL, CH 11 RESULTS



HORIZONTAL



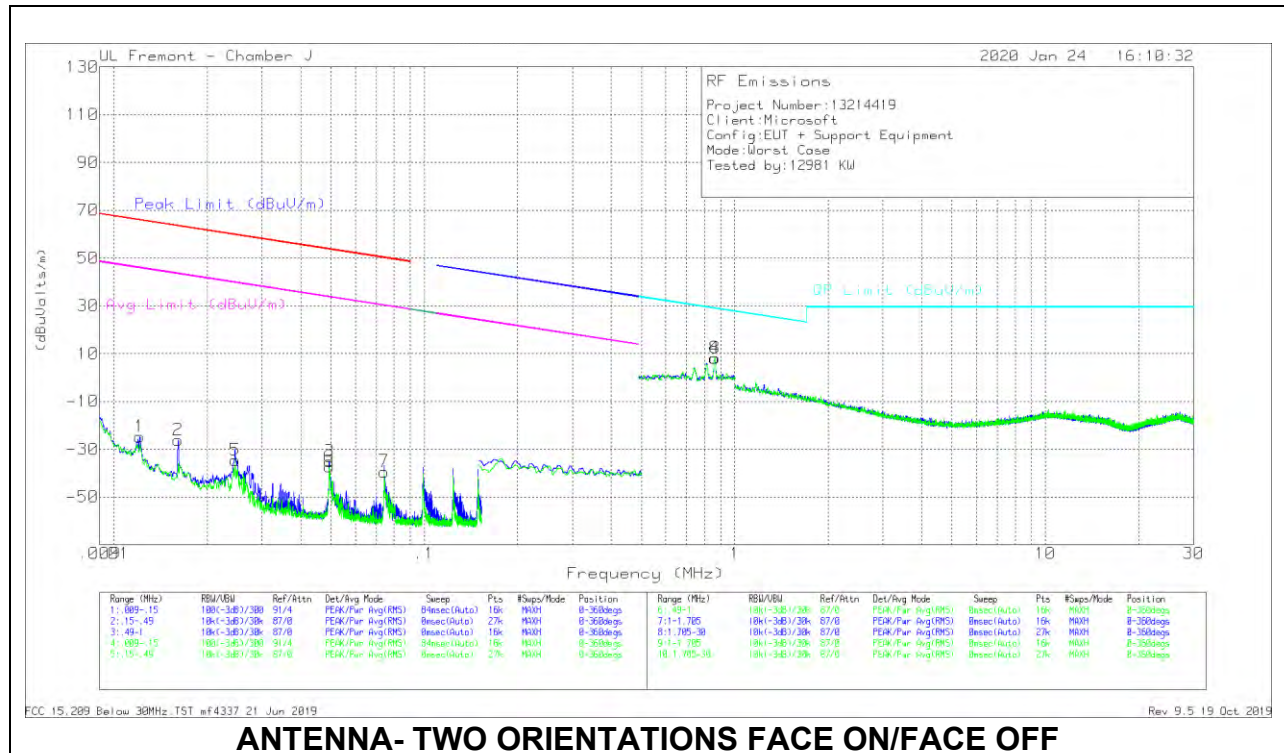
VERTICAL

RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF EMC4294 (dB/m)	Amp/Cbl/Filtr/ Pad (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	* 1.36013	32.37	PK2	29.5	-16.9	0	44.97	-	-	74	-29.03	80	188	H
	* 1.3597	22.66	MAv1	29.5	-16.9	.47	35.73	54	-18.27	-	-	80	188	H
2	* 1.37452	33.29	PK2	29.4	-16.8	0	45.69	-	-	74	-28.11	20	205	V
	* 1.37481	22.64	MAv1	29.4	-16.9	.47	35.61	54	-18.39	-	-	20	205	V
3	* 4.60764	37.3	PK2	34	-31	0	40.3	-	-	74	-33.7	174	215	H
	* 4.6087	27.79	MAv1	33.9	-31	.47	31.16	54	-22.84	-	-	174	215	H
4	* 8.2188	34.14	PK2	35.9	-24.9	0	45.14	-	-	74	-28.86	10	133	H
	* 8.21815	23.67	MAv1	35.9	-24.9	.47	35.14	54	-18.86	-	-	10	133	H
5	* 4.05847	36.81	PK2	33.4	-30.9	0	39.31	-	-	74	-34.69	67	185	V
	* 4.05902	27.69	MAv1	33.4	-30.9	.47	30.66	54	-23.34	-	-	67	185	V
6	* 12.40801	30.93	PK2	39.1	-20.1	0	49.93	-	-	74	-24.07	105	218	V
	* 12.40436	20.97	MAv1	39	-20.1	.47	40.34	54	-13.66	-	-	105	218	V

10.2. WORST CASE BELOW 30MHz

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)



ANTENNA- TWO ORIENTATIONS FACE ON/FACE OFF

Below 30MHz Data

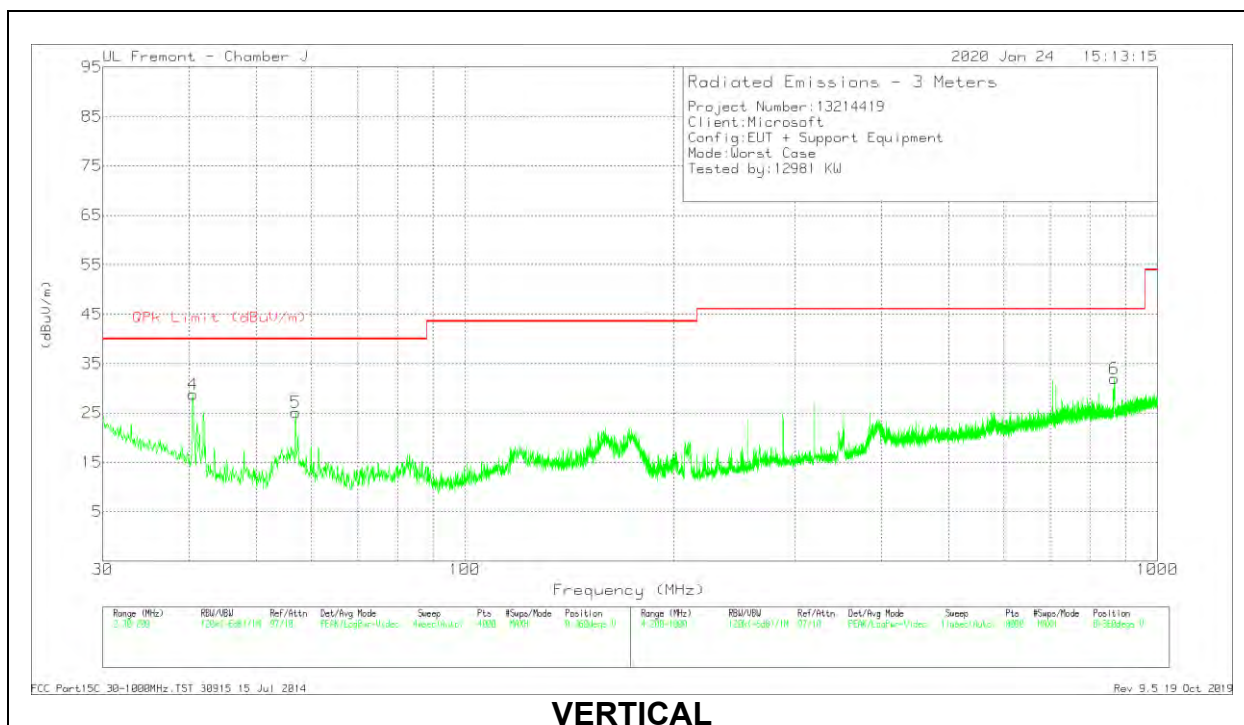
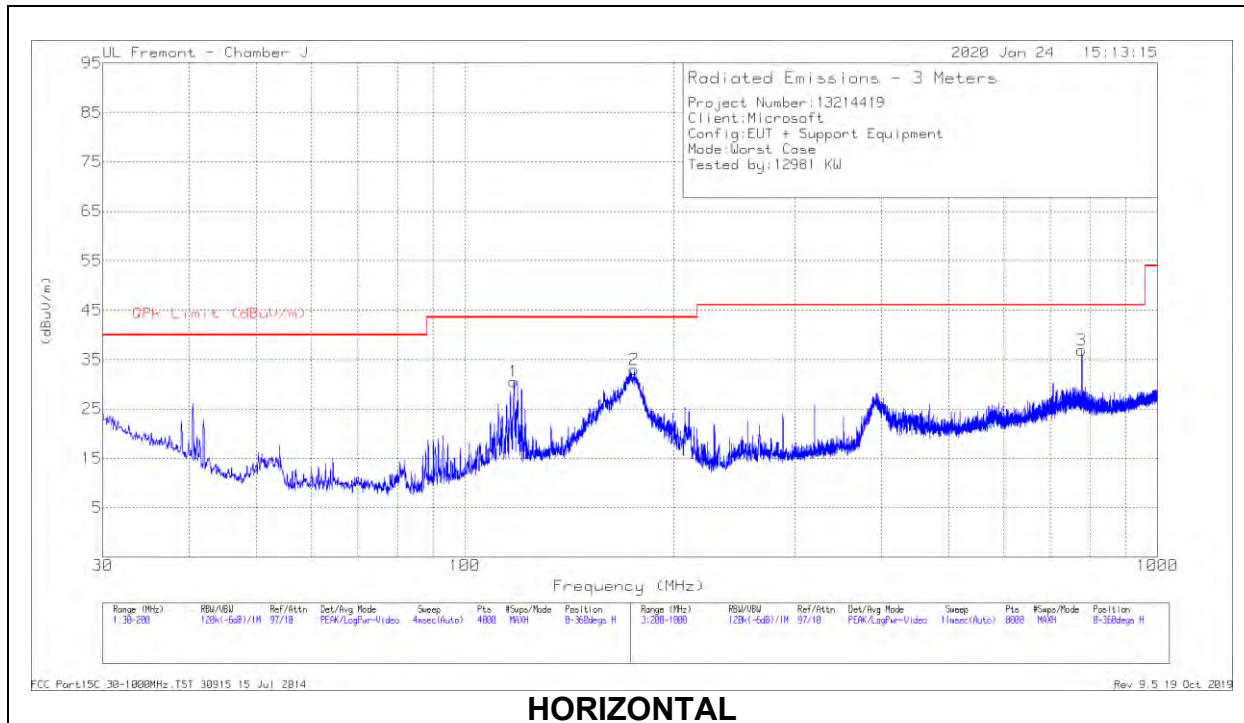
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (ACF)	Amp/Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.01214	23.79	Pk	59.9	-28.5	-80	-24.81	65.9	-90.71	45.9	-70.71	0-360
2	.01614	23.04	Pk	59.3	-28.5	-80	-26.16	63.43	-89.59	43.43	-69.59	0-360
3	.04949	16.49	Pk	56.9	-28.5	-80	-35.11	53.69	-88.8	33.69	-68.8	0-360
5	.02463	15.65	Pk	58.3	-28.5	-80	-34.55	59.75	-94.3	39.75	-74.3	0-360
6	.04946	14.3	Pk	56.9	-28.5	-80	-37.3	53.7	-91	33.7	-71	0-360
7	.07428	13.56	Pk	55.7	-28.6	-80	-39.34	50.17	-89.51	30.17	-69.51	0-360

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (ACF)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuVolts/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
4	.86058	20.41	Pk	56.1	-28.4	-40	8.11	28.92	-20.81	0-360
8	.8633	20.35	Pk	56.1	-28.4	-40	8.05	28.89	-20.84	0-360

Pk - Peak detector

10.3. WORST CASE BELOW 1 GHz



Below 1GHz DATA

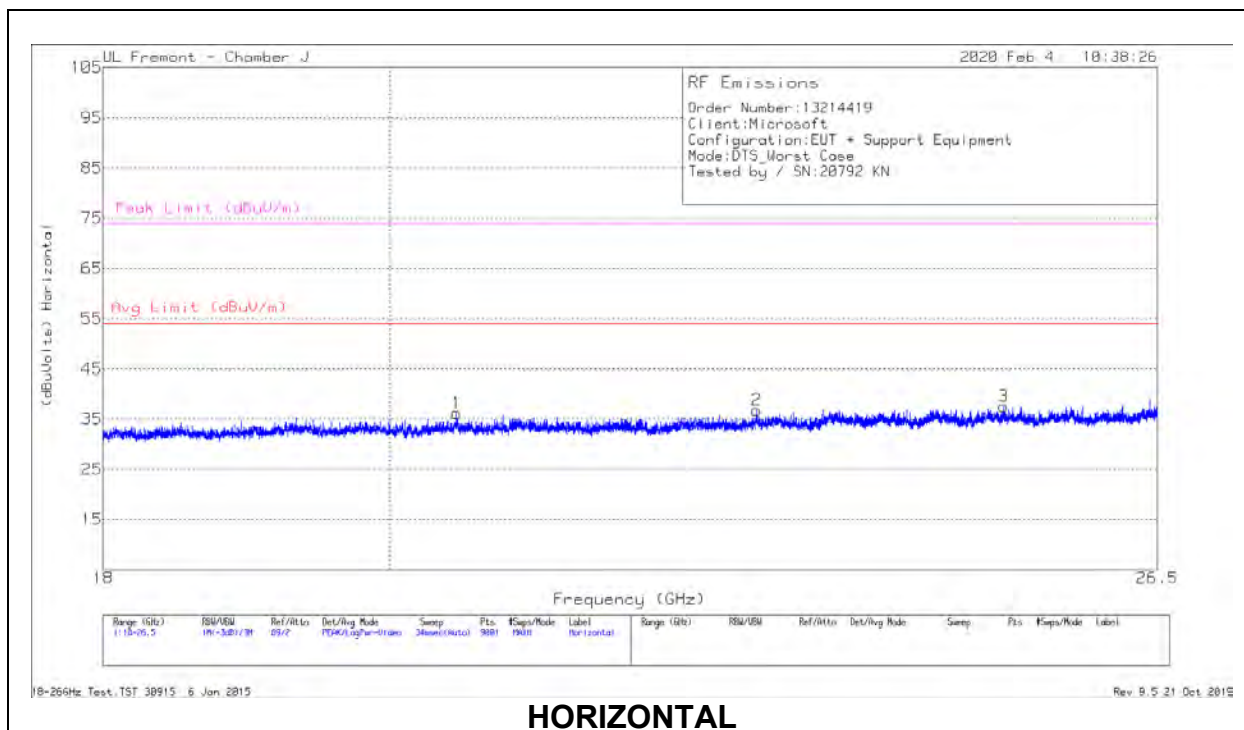
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T899 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 117.6152	42.1	Pk	19.4	-30.9	30.6	43.52	-12.92	0-360	299	H
2	175.6427	46.12	Pk	17.4	-30.5	33.02	43.52	-10.5	0-360	198	H
4	40.4577	40.37	Pk	19.9	-31.5	28.77	40	-11.23	0-360	101	V
5	56.952	43.22	Pk	13.3	-31.4	25.12	40	-14.88	0-360	101	V
3	777.9947	32.86	Pk	26.9	-28.4	31.36	46.02	-14.66	16	116	H
	777.9947	26.09	Qp	26.9	-28.4	24.59	46.02	-21.43	16	116	H
6	866.2366	31.94	Pk	27.7	-27.7	31.94	46.02	-14.08	0-360	101	V

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

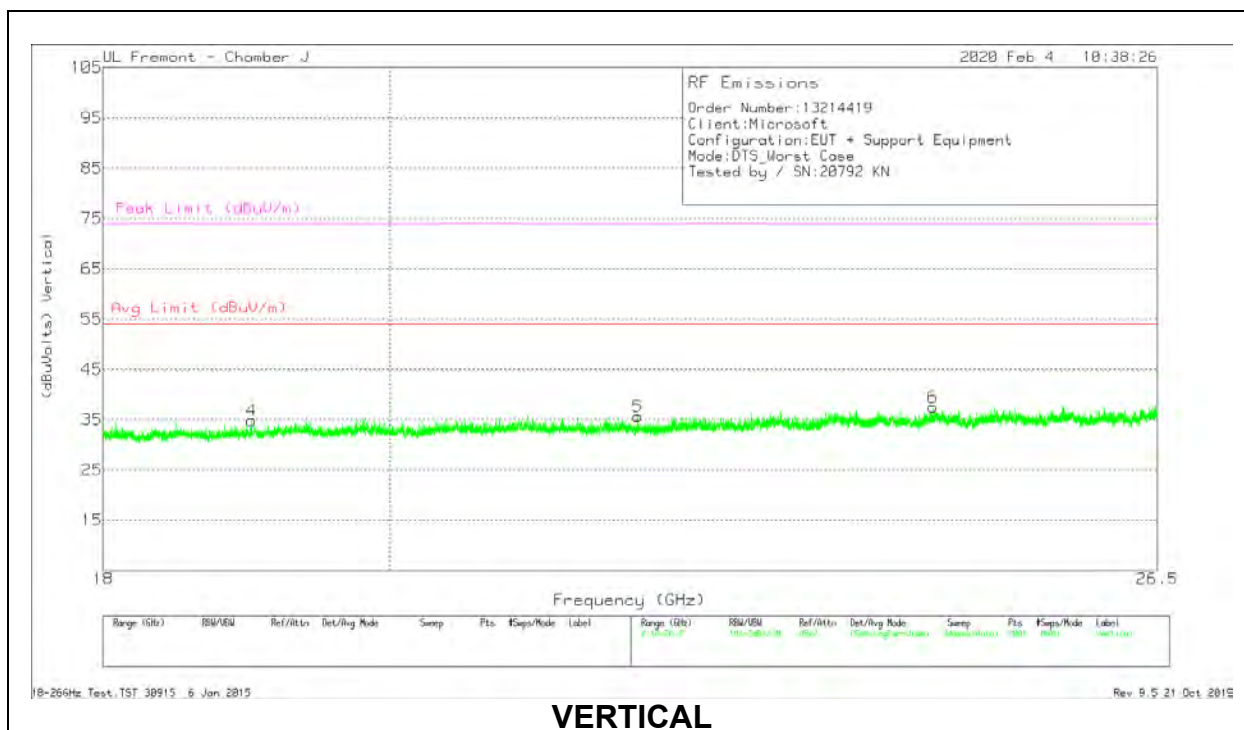
Pk - Peak detector

Qp - Quasi-Peak detector

10.4. WORST CASE 18-26 GHZ



HORIZONTAL



VERTICAL

18 – 26GHz DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T447 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	20.49239	69.29	Pk	33.1	-56.7	-9.5	36.19	54	-17.81	74	-37.81
2	22.87711	69.99	Pk	33.7	-57.4	-9.5	36.79	54	-17.21	74	-37.21
3	25.04555	67.55	Pk	34.6	-55.1	-9.5	37.55	54	-16.45	74	-36.45
4	19.00772	69.3	Pk	32.5	-57.5	-9.5	34.8	54	-19.2	74	-39.2
5	21.9015	69.07	Pk	33.4	-57.3	-9.5	35.67	54	-18.33	74	-38.33
6	24.40522	69.26	Pk	34.3	-56.6	-9.5	37.46	54	-16.54	74	-36.54

Pk - Peak detector