CERTIFICATION TEST REPORT

Report Number. : 11981280-E26V1

Applicant	:	FITBIT INC. 199 FREMONT ST, 14TH FLOOR SAN FRANCISCO, CA 94105, U.S.A
Model	:	FB504
FCC ID	:	XRAFB504
IC	:	8542A-FB504
EUT Description	:	SMART WATCH
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART C INDUSTRY CANADA RSS - 247 ISSUE 2 INDUSTRY CANADA RSS-GEN ISSUE 4

Date Of Issue:
February 02, 2018

Prepared by:
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2/2/2018	Initial Issue	--

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: FITBIT INC.
199 FREMONT ST, 14TH FLOOR
SAN FRANCISCO,
CA 94105, U.S.A

EUT DESCRIPTION: SMART WATCH

MODEL: FB504

SERIAL NUMBER: B2-H3-03 (RADIATED)

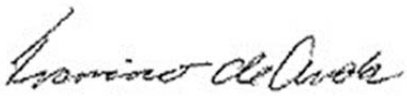
DATE TESTED: JANUARY 5, 2018 – JANUARY 31, 2018

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	Complies
INDUSTRY CANADA RSS-247 Issue 2	Complies
INDUSTRY CANADA RSS-GEN Issue 4	Complies

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. 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 U.S. government.

Approved & Released For
UL Verification Services Inc. By:



FRANCISCO DE ANDA
OPERATIONS LEAD
UL Verification Services Inc.

Prepared By:

ERIC YU
TEST ENGINEER
UL Verification Services Inc.

Reviewed By:

TINA CHU
SENIOR PROJECT ENGINEER
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, KDB 558074 D01 v04, ANSI C63.10-2013, RSS-GEN Issue 4, and RSS-247 Issue 2.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, 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
☒ Chamber A (IC:2324B-1)	☐ Chamber D (IC:22541-1)
☒ Chamber B (IC:2324B-2)	☐ Chamber E (IC:22541-2)
☐ Chamber C (IC:2324B-3)	☐ Chamber F (IC:22541-3)
	☐ Chamber G (IC:22541-4)
	☐ Chamber H (IC:22541-5)

The above test sites and facilities are covered under FCC Test Firm Registration # 208313.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://ts.nist.gov/standards/scopes/2000650.htm.

4. CALIBRATION AND UNCERTAINTY

4.1. 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.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

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

Parameter	Uncertainty
Conducted Disturbance, 9KHz to 0.15 MHz	3.84 dB
Conducted Disturbance, 0.15 to 30 MHz	3.65 dB
Radiated Disturbance, 9KHz to 30 MHz	3.15 dB
Radiated Disturbance, 30 to 1000 MHz	5.36 dB
Radiated Disturbance,1000 to 18000 MHz	4.32 dB
Radiated Disturbance,18000 to 26000 MHz	4.45 dB
Radiated Disturbance,26000 to 40000 MHz	5.24 dB
Occupied Channel Bandwidth	±0.39 %

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The equipment under test is a Smart Watch.

5.1. MODELS DIFFERENCES DESCRIPTION

FCC ID: XRAFB504 / IC: 8542A-FB504 (model: FB504) has the same board design and mechanical design as FCC ID: XRAFB505 / IC: 8542A-FB505 (model: FB505). The difference is that the Model: FB504 does not have the NFC controller and antenna is depopulated. Conducted tests are leveraged from model FB505. Radiated tests were performed on this model(FB504).

5.2. MAXIMUM OUTPUT POWER

Please refer to FCC ID: XRAFB505 / IC: 8542A-FB505 for the maximum output power information.

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

Frequency Band (GHz)	Antenna Peak Gain (dBi)
2.4	-11.30

5.4. SOFTWARE AND FIRMWARE

The test utility software used during testing was Tera Term Ver 4.93.
The firmware installed in the EUT during testing was Version 32.3.125.8.

5.5. WORST-CASE CONFIGURATION AND MODE

EUT has 1 type of plastic wristband and 3 types of metallic bands: Mesh, Link and Tri-Link. The worst-case configuration was investigated with wristbands with and without a charger and it was determined that EUT with plastic wristband and with a charger was the worst-case; therefore, all final radiated testing was performed with this configuration.

Radiated bandedge were performed with EUT set to transmit at the channels output power.

Radiated harmonics and spurious emissions from 1 GHz to 18GHz were performed with EUT set to transmit at the Low/Middle/High channel with highest output power.

Radiated emission below 1GHz, above 18GHz, and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

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

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

802.11b mode: 1 Mbps
802.11g mode: 6 Mbps
802.11n HT20 mode: MCS0

BT and Wifi bands do not transmit simultaneously.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC/DC Adapter	Homespot	S005AYU0500100	N/A	NA

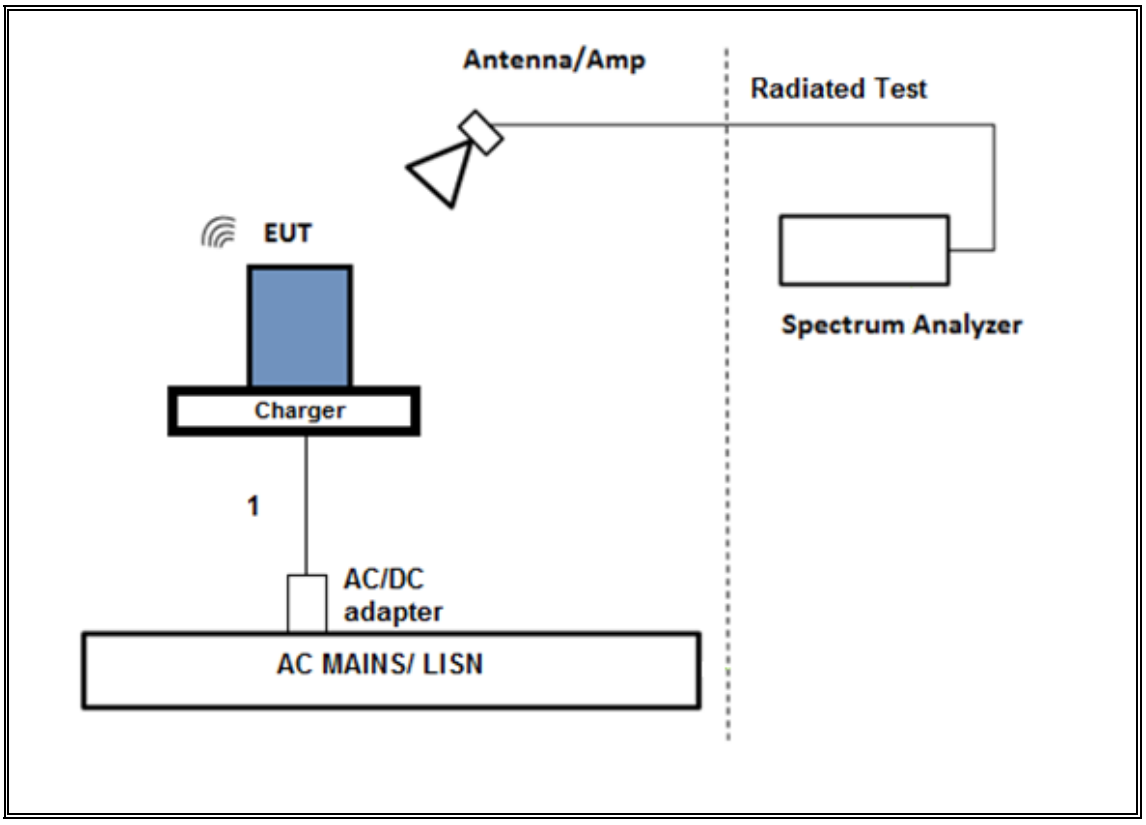
I/O CABLES (RADIATED TEST)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB	1	USB	Unshielded	1	Charger to AC/DC adapter

TEST SETUP- RADIATED TEST

The EUT was placed in charger and powered by an AC/DC adapter. Test software exercised the EUT.

SETUP DIAGRAM



6. 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**	**Asset**	**Cal Due**
Antenna, Active Loop 9KHz to 30MHz	EMCO	6502	T35	03/09/2018
Amplifier, 10KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310N	T300	12/11/2018
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences Corp.	JB1	T130	10/16/2018
Amplifier, 100KHz to 1GHz, 32dB	Keysight	8447D	T15	08/14/2018
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	T862	06/09/2018
Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-S-42	T1165	11/25/2018
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T1466	04/11/2018
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T863	06/09//2018
Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-S-42	T493	12/16/2018
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T907	01/23/2018
Antenna Horn, 18 to 26GHz	ARA	MWH-1826	T449	06/12/2018
Amplifier, 1 to 26.5GHz 23.5dB gain Minimum	Keysight	8449B	T404	07/23/2018
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A-544	T1113	12/21/2018
UL AUTOMATION SOFTWARE				
Radiated Software	UL	UL EMC	Ver 9.5, Dec 01, 2016	

NOTES:

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

7. MEASUREMENT METHODS

Out-of-band emissions in non-restricted bands: KDB 558074 D01 v04, Section 11.0.

Out-of-band emissions in restricted bands: KDB 558074 D01 v04, Section 12.1.

Band-edge: KDB 558074 D01 v04, Section 12.1.

8. ANTENNA PORT TEST RESULTS

Please refer to FCC ID: XRAFB505 / IC: 8542A-FB505 for the antenna port test results.

9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC 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) @ 300m	2400/F(kHz) @ 300m
0.490-1.705	24000/F(kHz) @ 30m	24000/F(kHz) @ 30m
1.705-30.0	30 @ 30m	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 1GHz and above 18GHz emissions, the channel with the highest output power was tested.

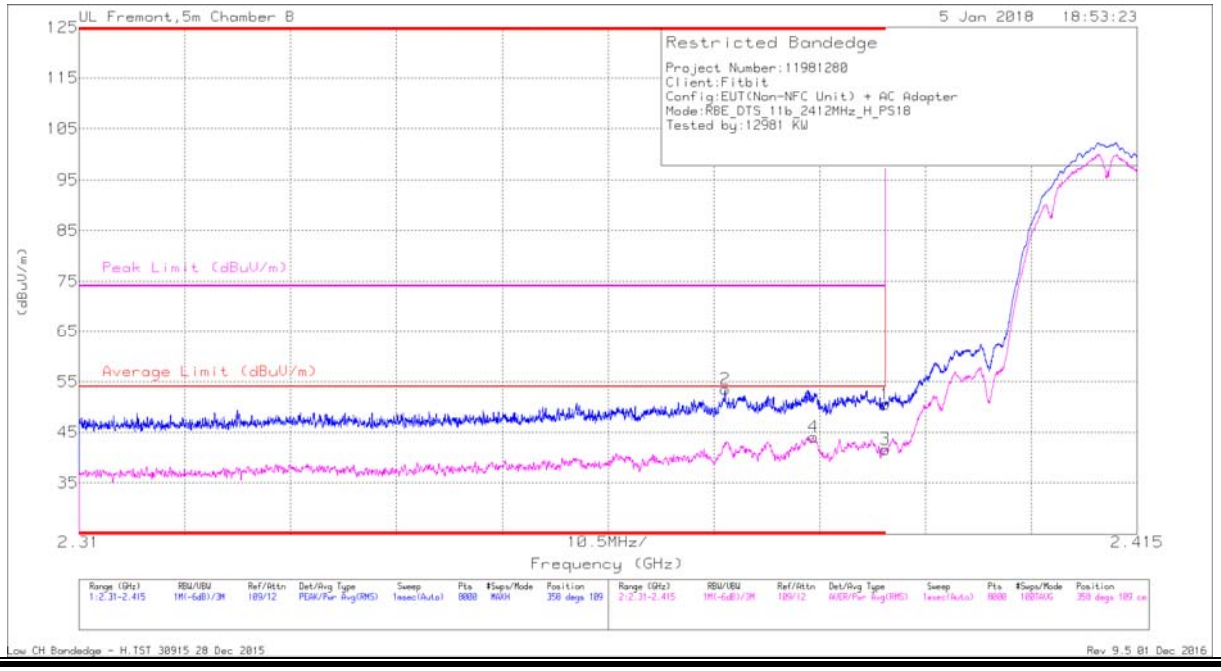
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

9.2. TRANSMITTER ABOVE 1 GHz

9.2.1. 802.11b MODE IN THE 2.4 GHz BAND

AUTHORIZED BANDEDGE (LOW CHANNEL, CH 1)

LOW CHANNEL HORIZONTAL

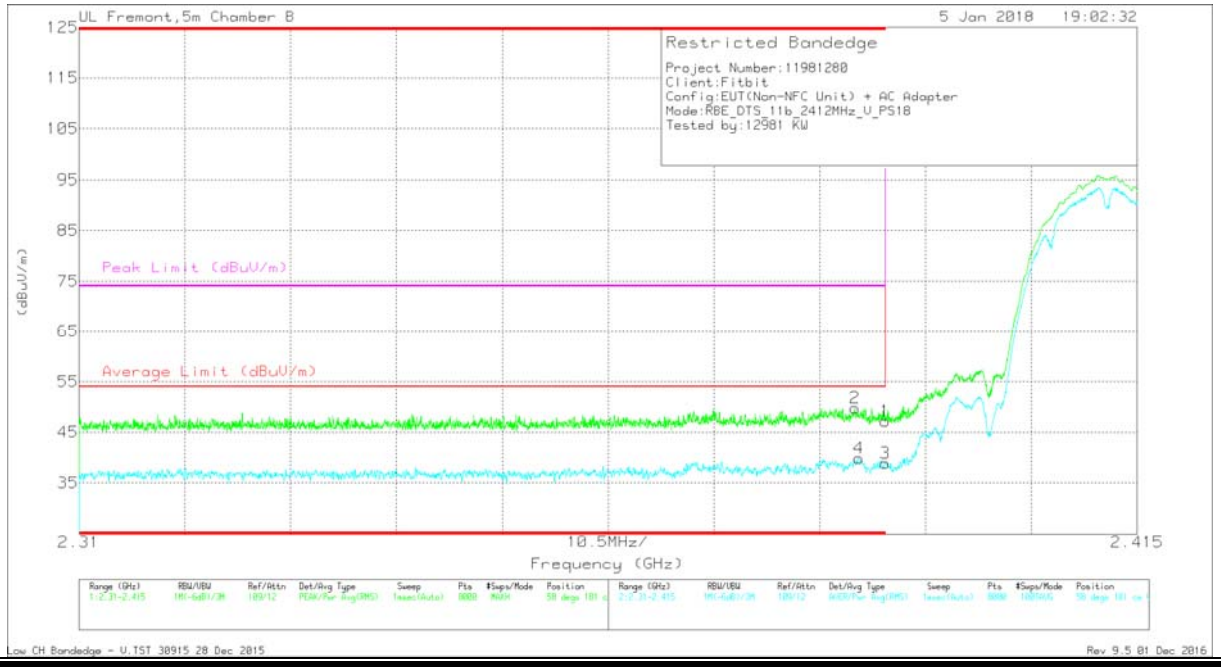


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	39.79	Pk	32	-21.3	0	50.49	-	-	74	-23.51	358	109	H
2	* 2.374	42.95	Pk	31.9	-21.3	0	53.55	-	-	74	-20.45	358	109	H
3	* 2.39	30.96	RMS	32	-21.3	0	41.66	54	-12.34	-	-	358	109	H
4	* 2.383	33.31	RMS	32	-21.2	0	44.11	54	-9.89	-	-	358	109	H

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

LOW CHANNEL VERTICAL



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Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	36.49	Pk	32	-21.3	0	47.19	-	-	74	-26.81	58	181	V
2	* 2.387	39.12	Pk	32	-21.3	0	49.82	-	-	74	-24.18	58	181	V
3	* 2.39	28.2	RMS	32	-21.3	0	38.9	54	-15.1	-	-	58	181	V
4	* 2.387	29.11	RMS	32	-21.3	0	39.81	54	-14.19	-	-	58	181	V

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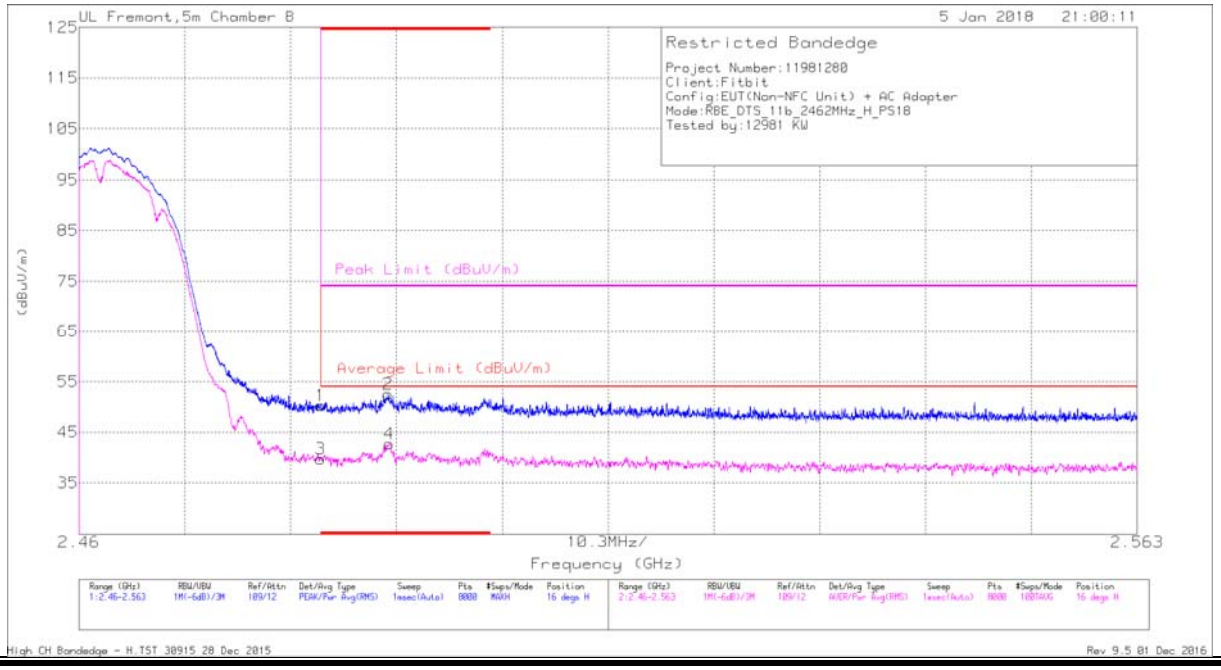
Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 11)

HIGH CHANNEL HORIZONTAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	39.08	Pk	32.5	-21.3	0	50.28	-	-	74	-23.72	16	106	H
2	* 2.49	41.28	Pk	32.5	-21.3	0	52.48	-	-	74	-21.52	16	106	H
3	* 2.484	28.49	RMS	32.5	-21.3	0	39.69	54	-14.31	-	-	16	106	H
4	* 2.49	31.5	RMS	32.5	-21.3	0	42.7	54	-11.3	-	-	16	106	H

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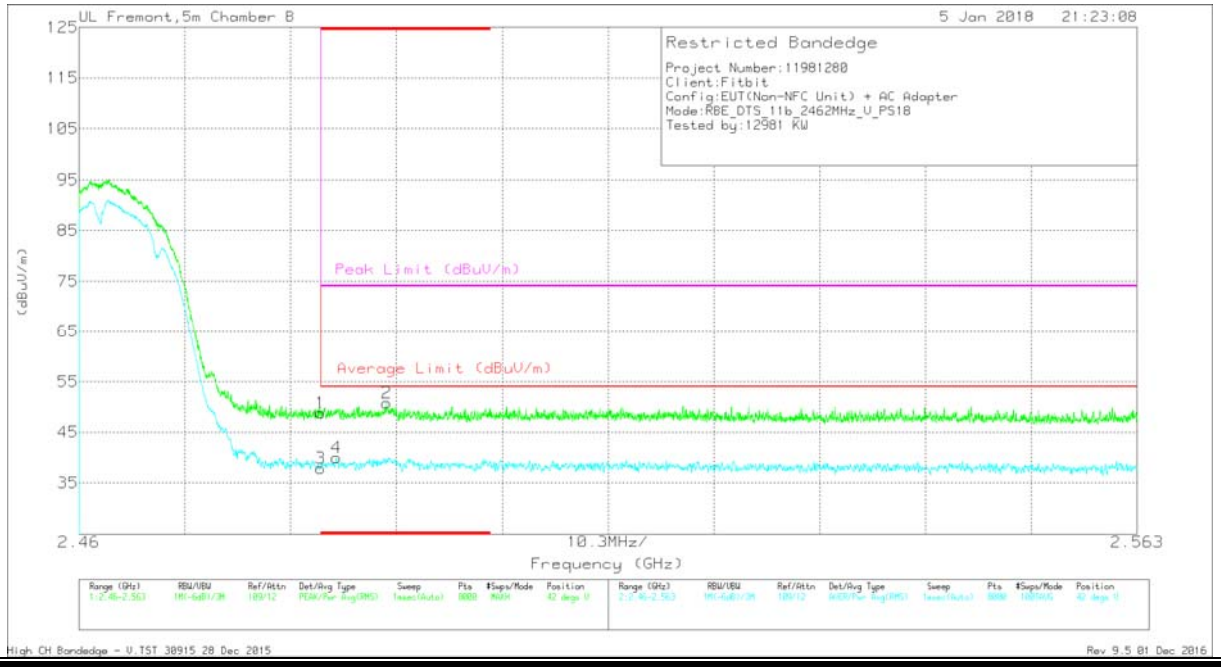
Pk - Peak detector
RMS - RMS detection

HIGH CHANNEL VERTICAL



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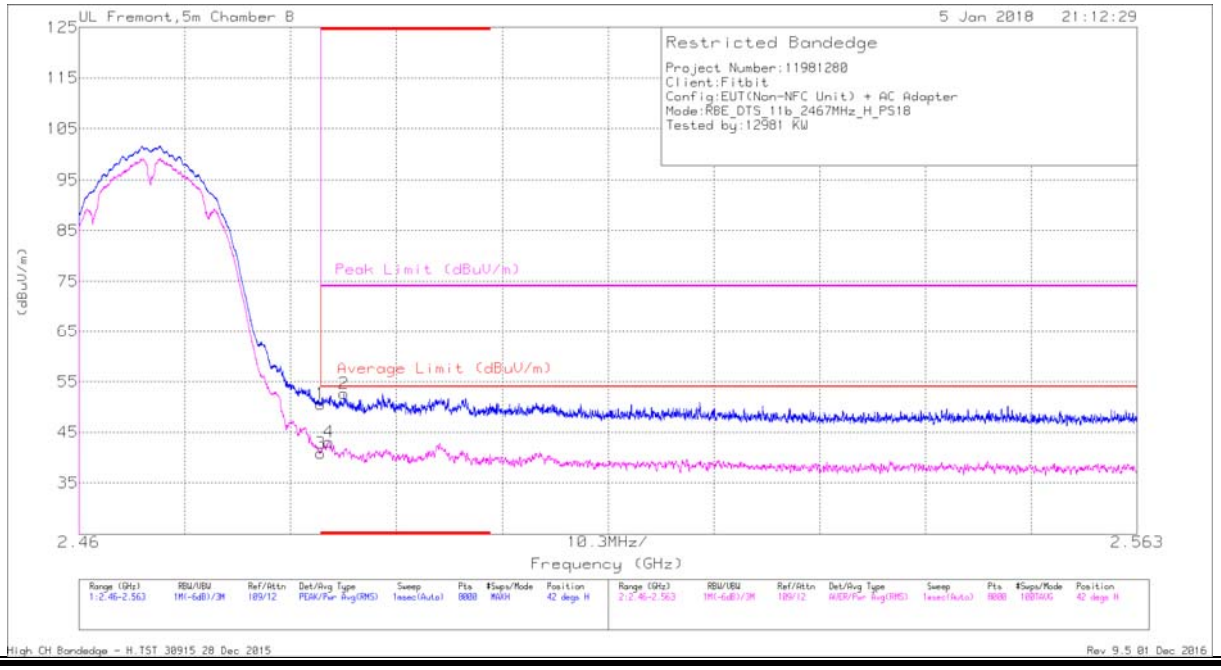
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	37.63	Pk	32.5	-21.3	0	48.83	-	-	74	-25.17	45	104	V
2	* 2.49	39.58	Pk	32.5	-21.3	0	50.78	-	-	74	-23.22	45	104	V
3	* 2.484	26.7	RMS	32.5	-21.3	0	37.9	54	-16.1	-	-	45	104	V
4	* 2.485	28.73	RMS	32.5	-21.3	0	39.93	54	-14.07	-	-	45	104	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 12)

HIGH CHANNEL HORIZONTAL



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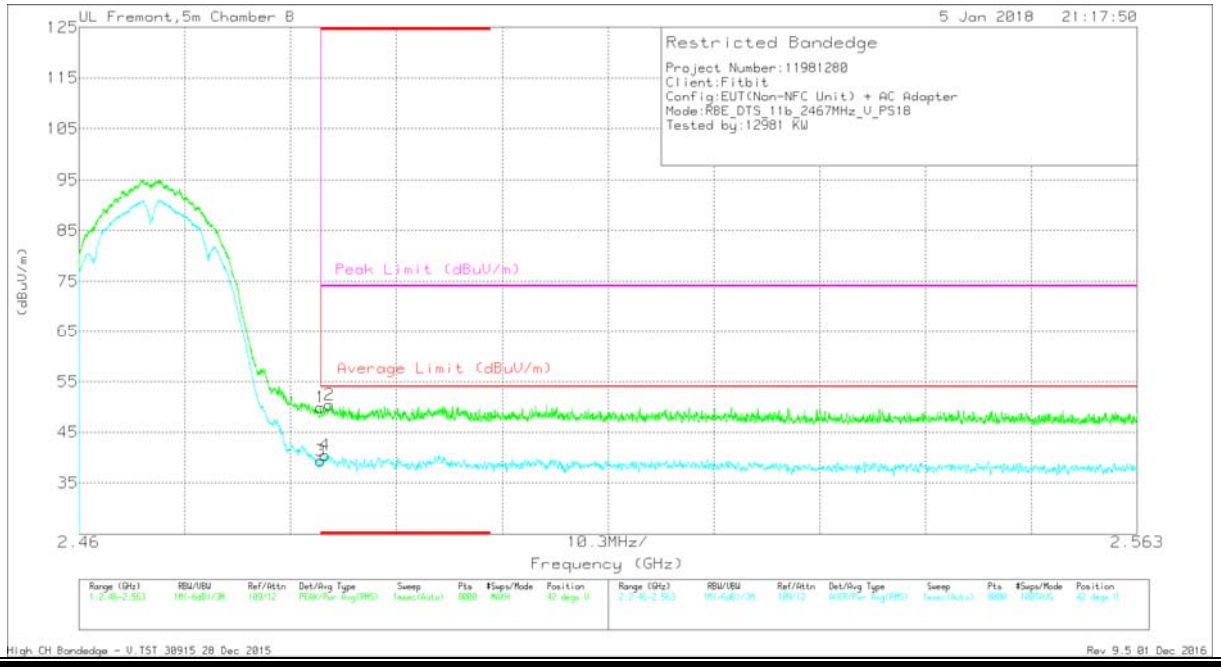
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.4	Pk	32.5	-21.3	0	50.6	-	-	74	-23.4	42	106	H
2	* 2.486	41.46	Pk	32.5	-21.3	0	52.66	-	-	74	-21.34	42	106	H
3	* 2.484	29.67	RMS	32.5	-21.3	0	40.87	54	-13.13	-	-	42	106	H
4	* 2.484	31.94	RMS	32.5	-21.3	0	43.14	54	-10.86	-	-	42	106	H

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

HIGH CHANNEL VERTICAL



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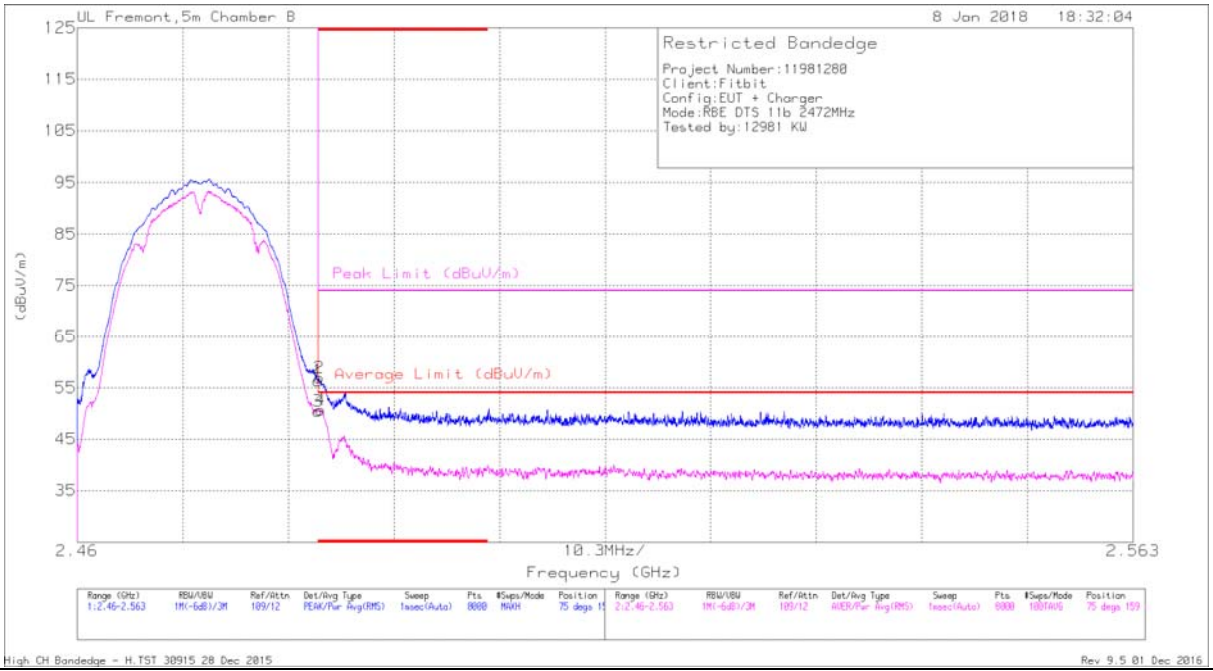
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.74	Pk	32.5	-21.3	0	49.94	-	-	74	-24.06	48	116	V
2	* 2.484	39.24	Pk	32.5	-21.3	0	50.44	-	-	74	-23.56	48	116	V
3	* 2.484	28.2	RMS	32.5	-21.3	0	39.4	54	-14.6	-	-	48	116	V
4	* 2.484	29.23	RMS	32.5	-21.3	0	40.43	54	-13.57	-	-	48	116	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 13)

HIGH CHANNEL HORIZONTAL



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Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	45.15	Pk	32.5	-21.3	0	56.35	-	-	74	-17.65	75	159	H
2	* 2.484	45.73	Pk	32.5	-21.3	0	56.93	-	-	74	-17.07	75	159	H
3	* 2.484	39.26	RMS	32.5	-21.3	0	50.46	54	-3.54	-	-	75	159	H
4	* 2.484	39.47	RMS	32.5	-21.3	0	50.67	54	-3.33	-	-	75	159	H

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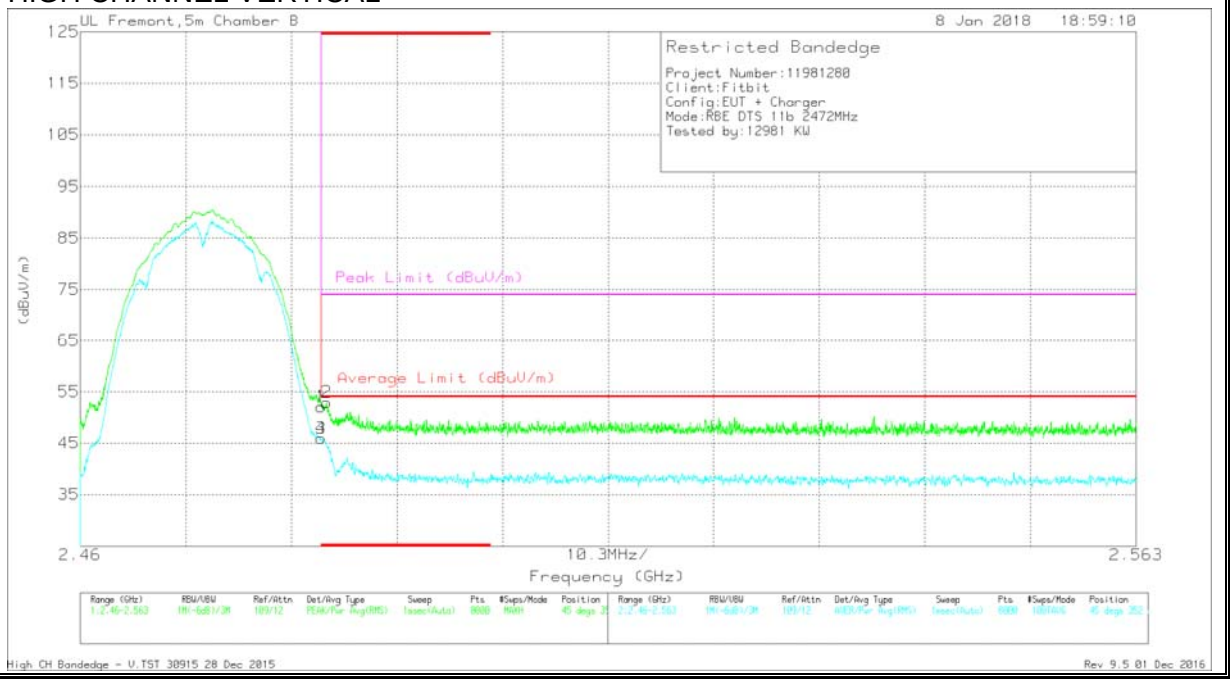
Pk - Peak detector
RMS - RMS detection

HIGH CHANNEL VERTICAL



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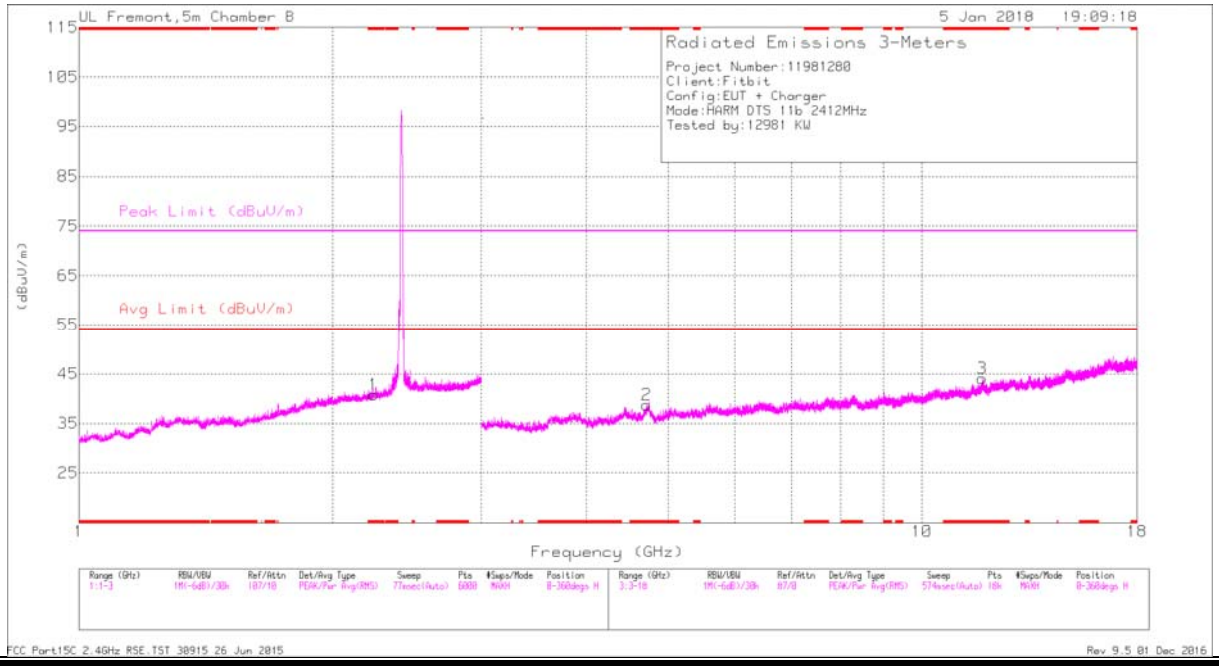
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.89	Pk	32.5	-21.3	0	52.09	-	-	74	-21.91	45	352	V
2	* 2.484	41.71	Pk	32.5	-21.3	0	52.91	-	-	74	-21.09	45	352	V
3	* 2.484	34.72	RMS	32.5	-21.3	0	45.92	54	-8.08	-	-	45	352	V
4	* 2.484	34.72	RMS	32.5	-21.3	0	45.92	54	-8.08	-	-	45	352	V

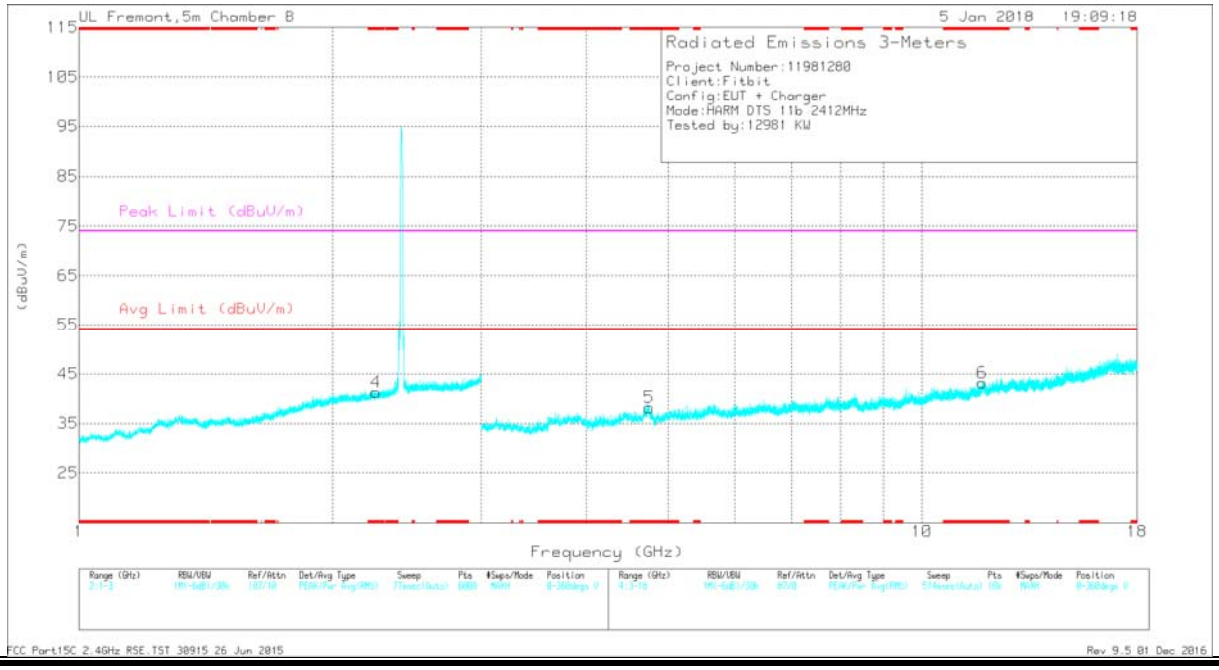
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL, CH 1)

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



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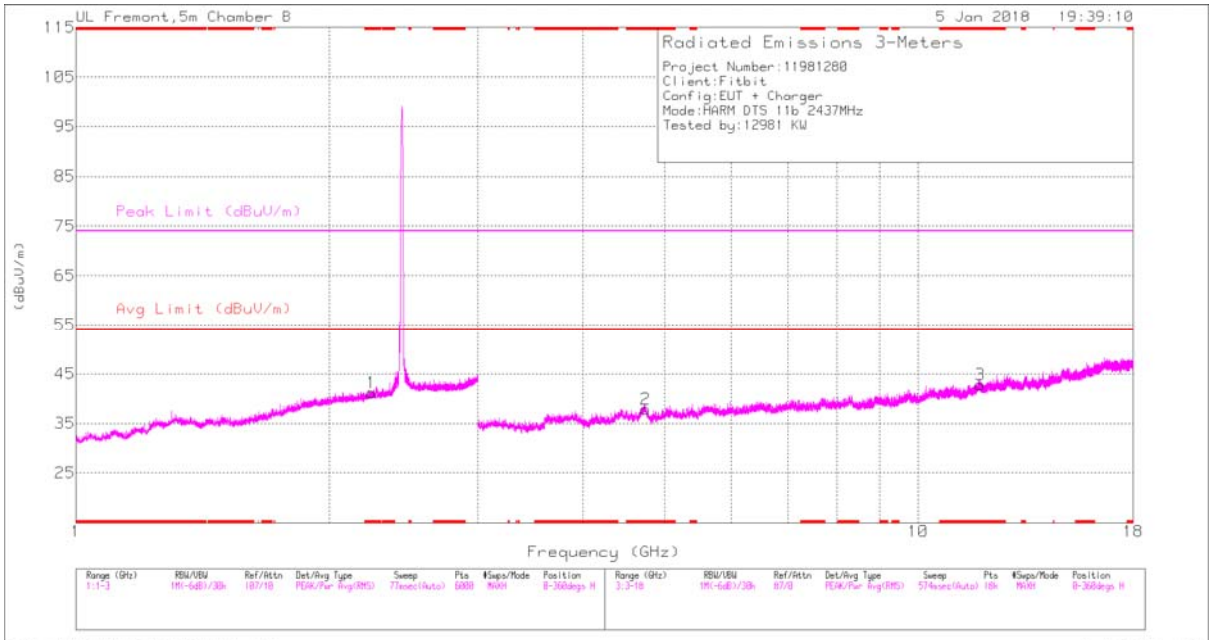
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.238	36.99	PK2	31.9	-21.3	0	47.59	-	-	74	-26.41	80	120	H
	* 2.237	24.88	MAv1	31.9	-21.3	0	35.48	54	-18.52	-	-	80	120	H
4	* 2.252	36.06	PK2	32	-21.3	0	46.76	-	-	74	-27.24	15	151	V
	* 2.251	24.95	MAv1	32	-21.3	0	35.65	54	-18.35	-	-	15	151	V
2	* 4.717	40.51	PK2	34.2	-29.9	0	44.81	-	-	74	-29.19	215	111	H
	* 4.717	29.33	MAv1	34.2	-29.9	0	33.63	54	-20.37	-	-	215	111	H
3	* 11.792	34.19	PK2	38.6	-23.4	0	49.39	-	-	74	-24.61	118	152	H
	* 11.789	23.76	MAv1	38.6	-23.6	0	38.76	54	-15.24	-	-	118	152	H
5	* 4.749	40.41	PK2	34.2	-29.3	0	45.31	-	-	74	-28.69	255	137	V
	* 4.745	29.6	MAv1	34.2	-29.3	0	34.5	54	-19.5	-	-	255	137	V
6	* 11.789	34.99	PK2	38.6	-23.6	0	49.99	-	-	74	-24.01	78	210	V
	* 11.79	23.61	MAv1	38.6	-23.6	0	38.61	54	-15.39	-	-	78	210	V

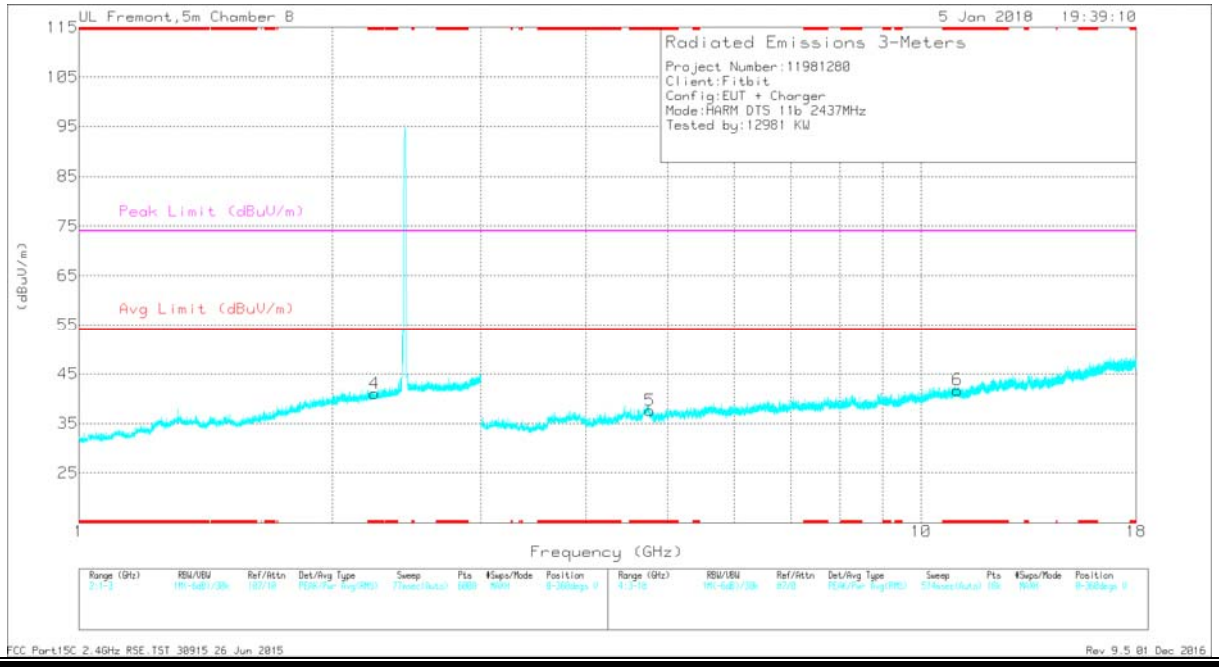
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL, CH 6)

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



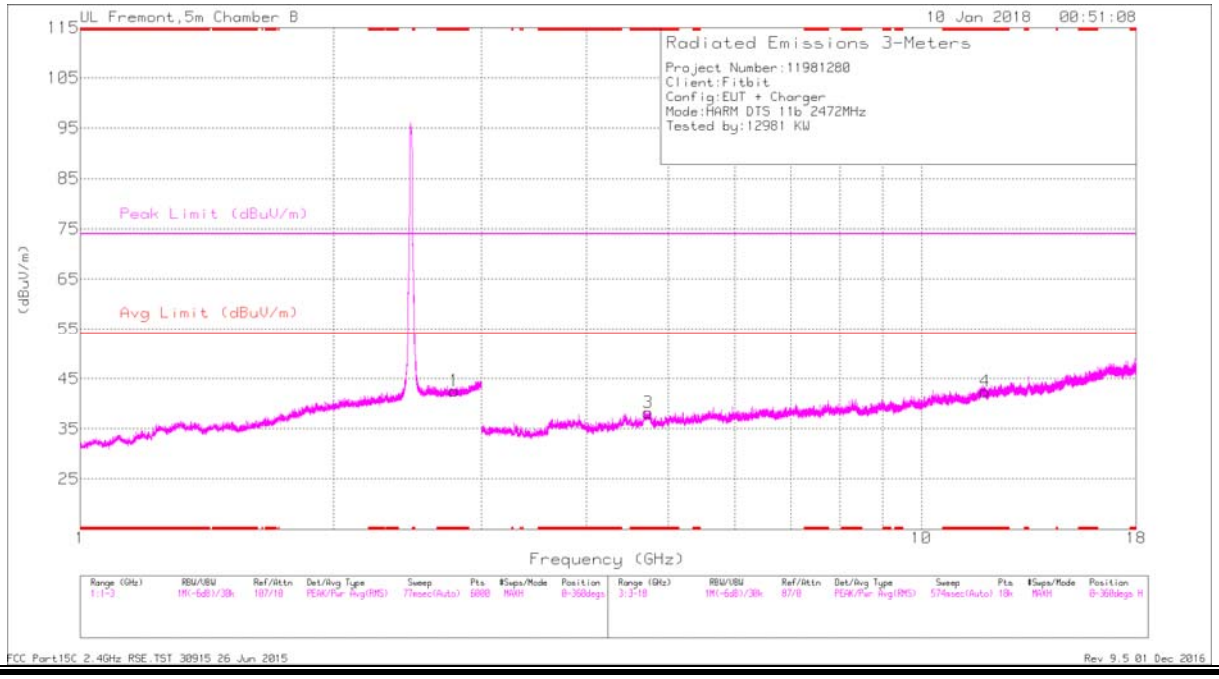
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/ 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	* 2.244	36.67	PK2	31.9	-21.4	0	47.17	-	-	74	-26.83	113	141	H
	* 2.243	24.83	MAv1	31.9	-21.4	0	35.33	54	-18.58	-	-	113	141	H
4	* 2.244	36.81	PK2	31.9	-21.4	0	47.31	-	-	74	-26.69	48	130	V
	* 2.244	24.87	MAv1	31.9	-21.4	0	35.37	54	-18.54	-	-	48	130	V
2	* 4.744	40.32	PK2	34.2	-29.4	0	45.12	-	-	74	-28.88	250	155	H
	* 4.745	29.64	MAv1	34.2	-29.3	0	34.54	54	-19.37	-	-	250	155	H
3	* 11.848	33.76	PK2	38.6	-23.7	0	48.66	-	-	74	-25.34	199	184	H
	* 11.848	23.54	MAv1	38.6	-23.7	0	38.44	54	-15.47	-	-	199	184	H
5	* 4.767	39.11	PK2	34.3	-29.5	0	43.91	-	-	74	-30.09	59	207	V
	* 4.768	28.59	MAv1	34.3	-29.5	0	33.39	54	-20.52	-	-	59	207	V
6	* 11.041	34.7	PK2	37.8	-24.6	0	47.9	-	-	74	-26.1	188	210	V
	* 11.044	23.97	MAv1	37.8	-24.6	0	37.17	54	-16.74	-	-	188	210	V

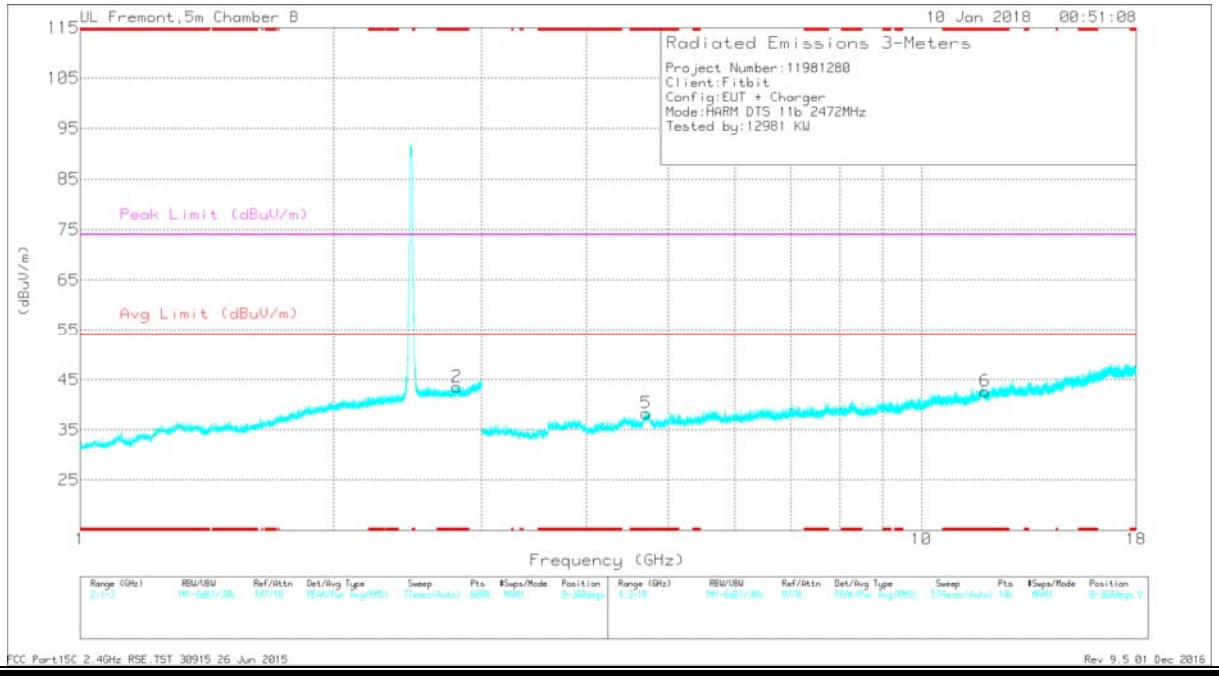
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, CH 13)

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

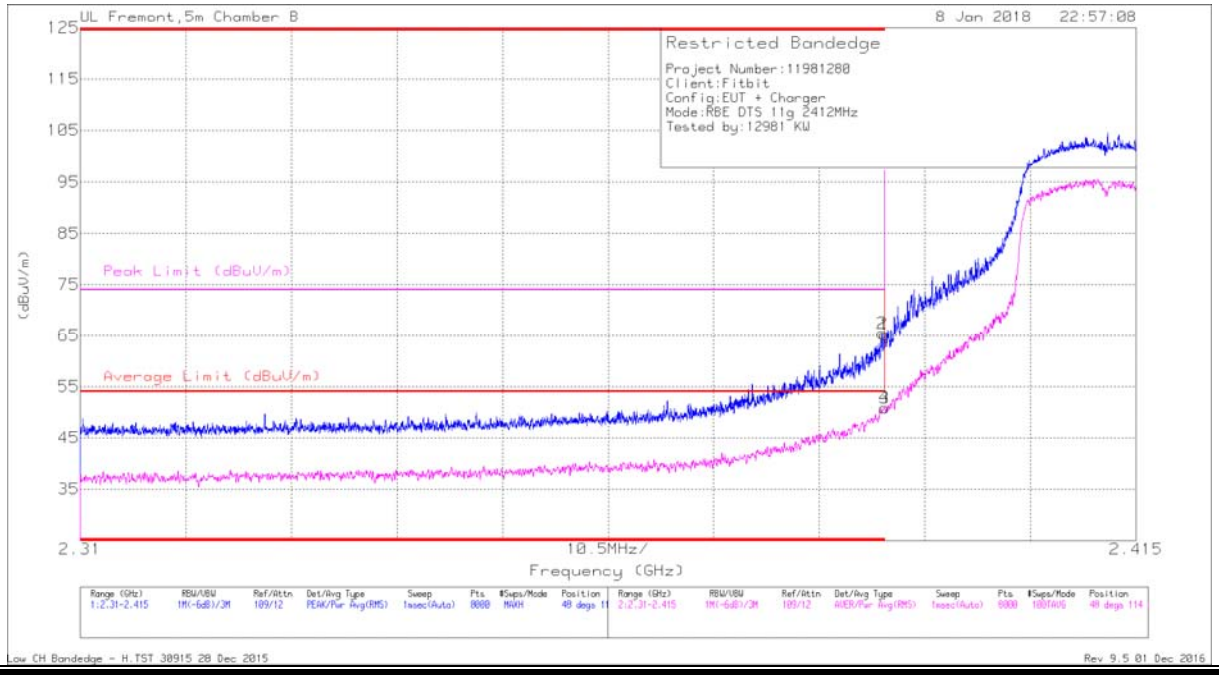
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.787	36.81	PK2	32.4	-20.6	0	48.61	-	-	74	-25.39	78	113	H
	* 2.788	25.34	MAv1	32.4	-20.6	0	37.14	54	-16.86	-	-	78	113	H
2	* 2.804	36.5	PK2	32.4	-20.6	0	48.3	-	-	74	-25.7	110	135	V
	* 2.803	25.55	MAv1	32.4	-20.5	0	37.45	54	-16.55	-	-	110	135	V
3	* 4.732	40.69	PK2	34.2	-29.7	0	45.19	-	-	74	-28.81	253	225	H
	* 4.735	29.75	MAv1	34.2	-29.5	0	34.45	54	-19.55	-	-	253	225	H
4	* 11.909	34.29	PK2	38.7	-24.4	0	48.59	-	-	74	-25.41	287	332	H
	* 11.908	23.64	MAv1	38.7	-24.3	0	38.04	54	-15.96	-	-	287	332	H
5	* 4.711	40.26	PK2	34.2	-30	0	44.46	-	-	74	-29.54	118	105	V
	* 4.711	29.4	MAv1	34.2	-30	0	33.6	54	-20.4	-	-	118	105	V
6	* 11.903	35.64	PK2	38.7	-24.3	0	50.04	-	-	74	-23.96	79	199	V
	* 11.905	23.71	MAv1	38.7	-24.3	0	38.11	54	-15.89	-	-	79	199	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2.2. 802.11g MODE IN THE 2.4 GHz BAND

AUTHORIZED BANDEDGE (LOW CHANNEL, CH 1)

LOW CHANNEL HORIZONTAL

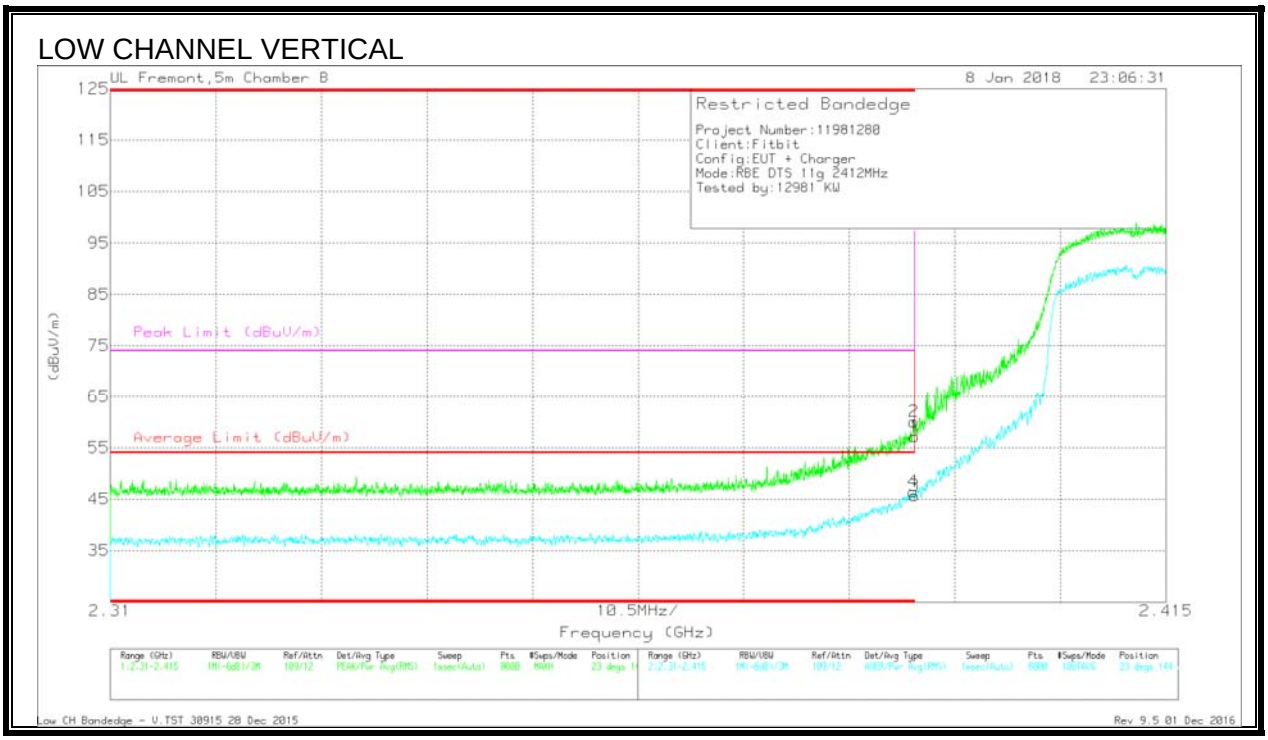


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	54.47	Pk	32	-21.3	0	65.17	-	-	74	-8.83	48	114	H
2	* 2.39	54.76	Pk	32	-21.3	0	65.46	-	-	74	-8.54	48	114	H
3	* 2.39	39.82	RMS	32	-21.3	0	50.52	54	-3.48	-	-	48	114	H
4	* 2.39	39.88	RMS	32	-21.3	0	50.58	54	-3.42	-	-	48	114	H

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

LOW CHANNEL VERTICAL



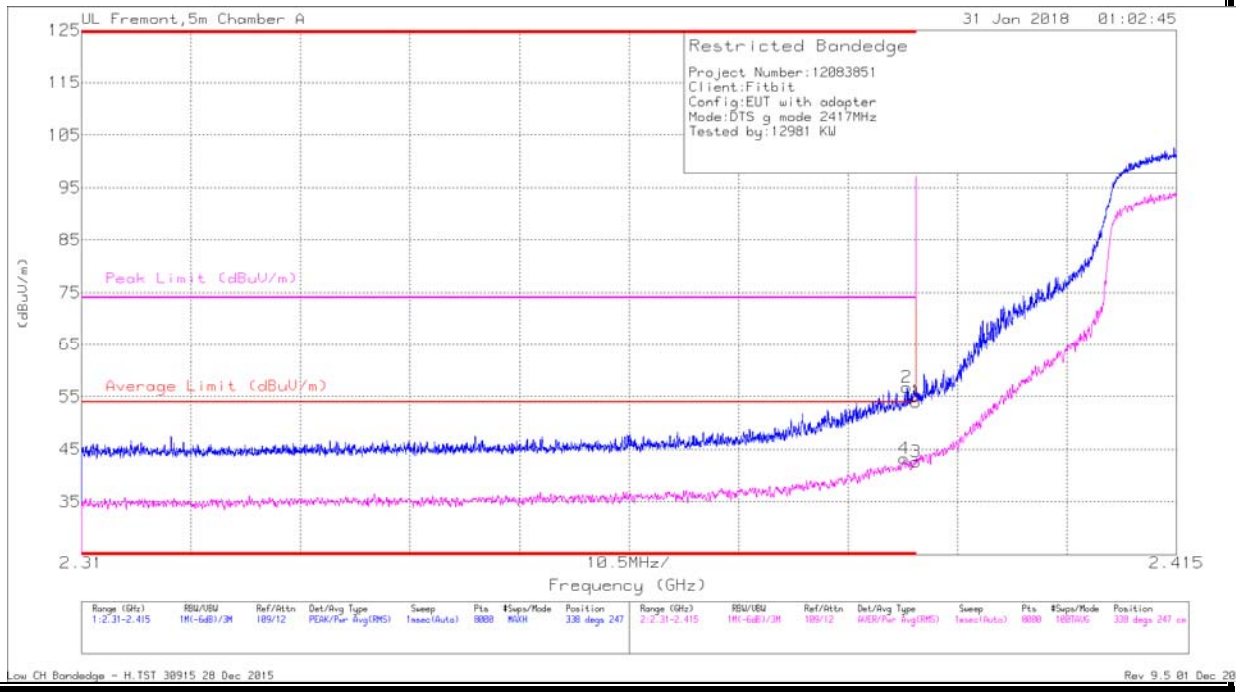
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	46.46	Pk	32	-21.3	0	57.16	-	-	74	-16.84	23	144	V
2	* 2.39	49.36	Pk	32	-21.3	0	60.06	-	-	74	-13.94	23	144	V
3	* 2.39	34.65	RMS	32	-21.3	0	45.35	54	-8.65	-	-	23	144	V
4	* 2.39	35.45	RMS	32	-21.3	0	46.15	54	-7.85	-	-	23	144	V

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

AUTHORIZED BANDEDGE (LOW CHANNEL, CH 2)

LOW CHANNEL HORIZONTAL

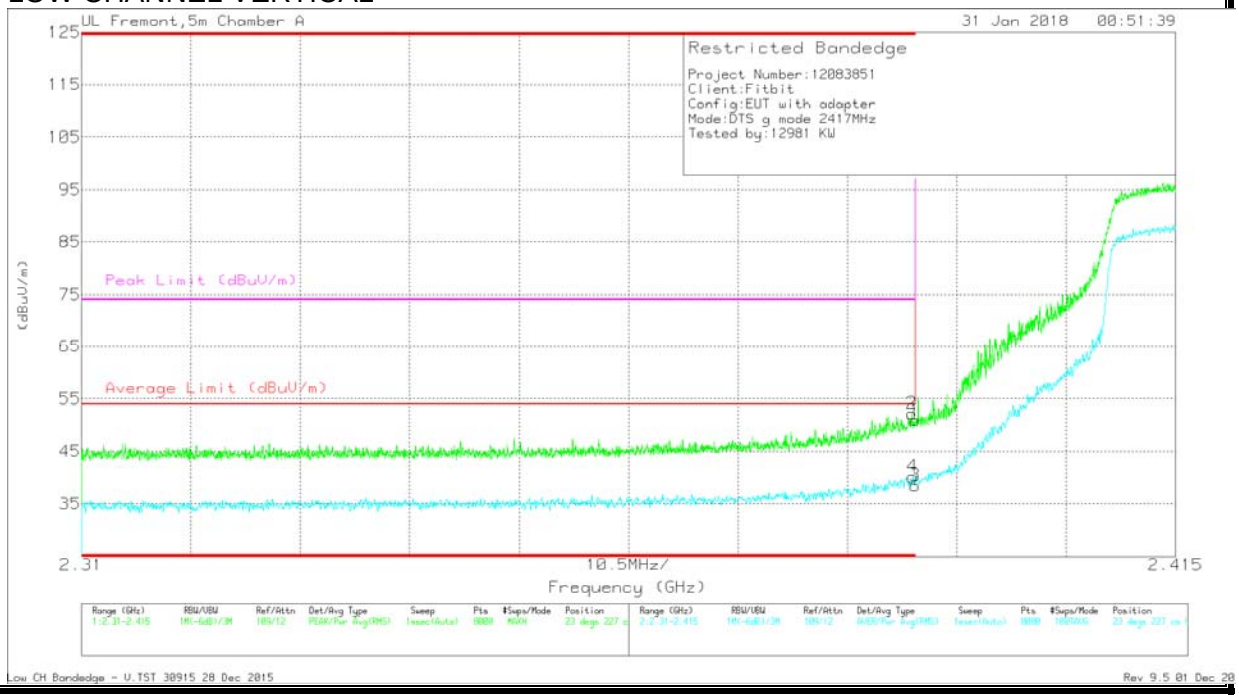


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.389	48.28	Pk	31.8	-23.3	56.78	-	-	74	-17.22	338	247	H
4	* 2.389	34.7	RMS	31.8	-23.3	43.2	54	-10.8	-	-	338	247	H
1	* 2.39	45.53	Pk	31.8	-23.3	54.03	-	-	74	-19.97	338	247	H
3	* 2.39	34.04	RMS	31.8	-23.3	42.54	54	-11.46	-	-	338	247	H

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

LOW CHANNEL VERTICAL



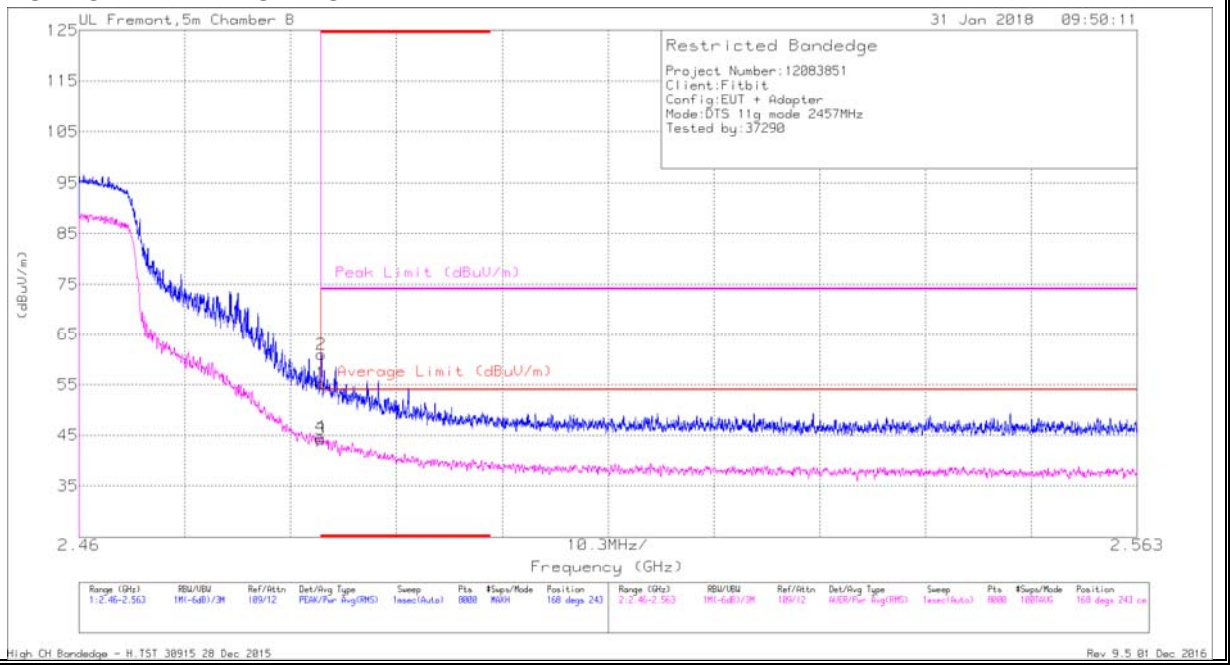
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/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	* 2.39	42.43	Pk	31.8	-23.3	50.93	-	-	74	-23.07	28	225	V
2	* 2.39	43.6	Pk	31.8	-23.3	52.1	-	-	74	-21.9	28	225	V
3	* 2.39	29.97	RMS	31.8	-23.3	38.47	54	-15.53	-	-	28	225	V
4	* 2.39	31.67	RMS	31.8	-23.3	40.17	54	-13.83	-	-	28	225	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 10)

LOW CHANNEL HORIZONTAL

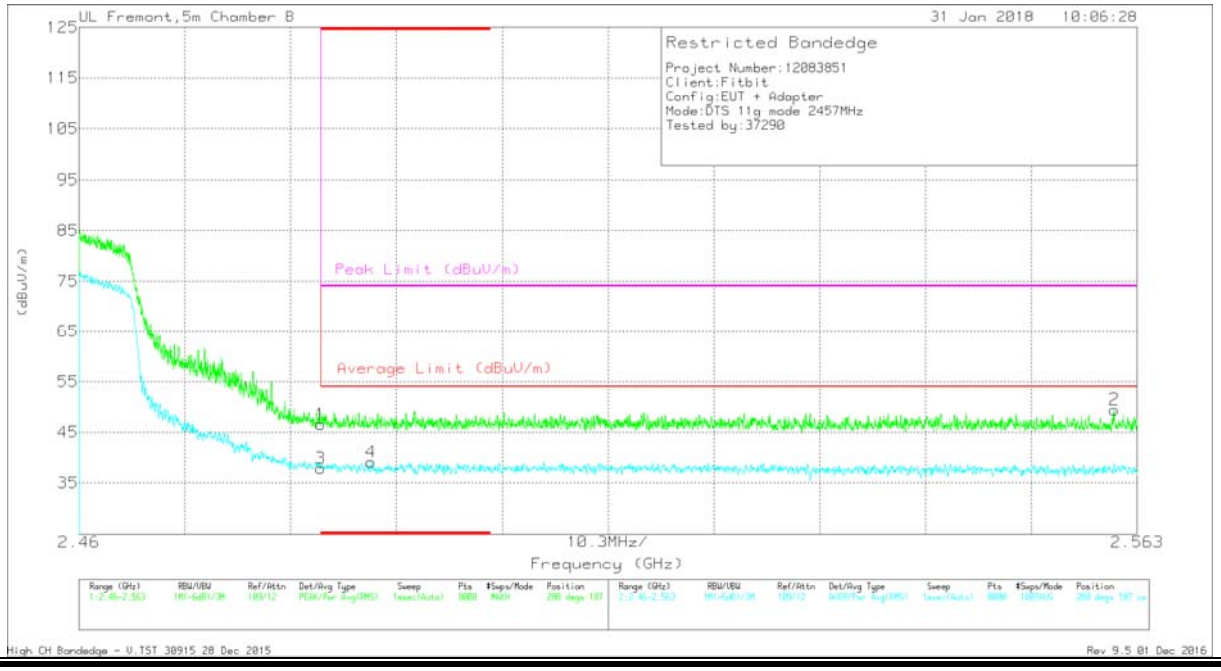


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	44.04	Pk	32.5	-21.3	55.24	-	-	74	-18.76	168	243	H
2	* 2.484	49.78	Pk	32.5	-21.3	60.98	-	-	74	-13.02	168	243	H
3	* 2.484	33.05	RMS	32.5	-21.3	44.25	54	-9.75	-	-	168	243	H
4	* 2.484	33.52	RMS	32.5	-21.3	44.72	54	-9.28	-	-	168	243	H

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

LOW CHANNEL VERTICAL



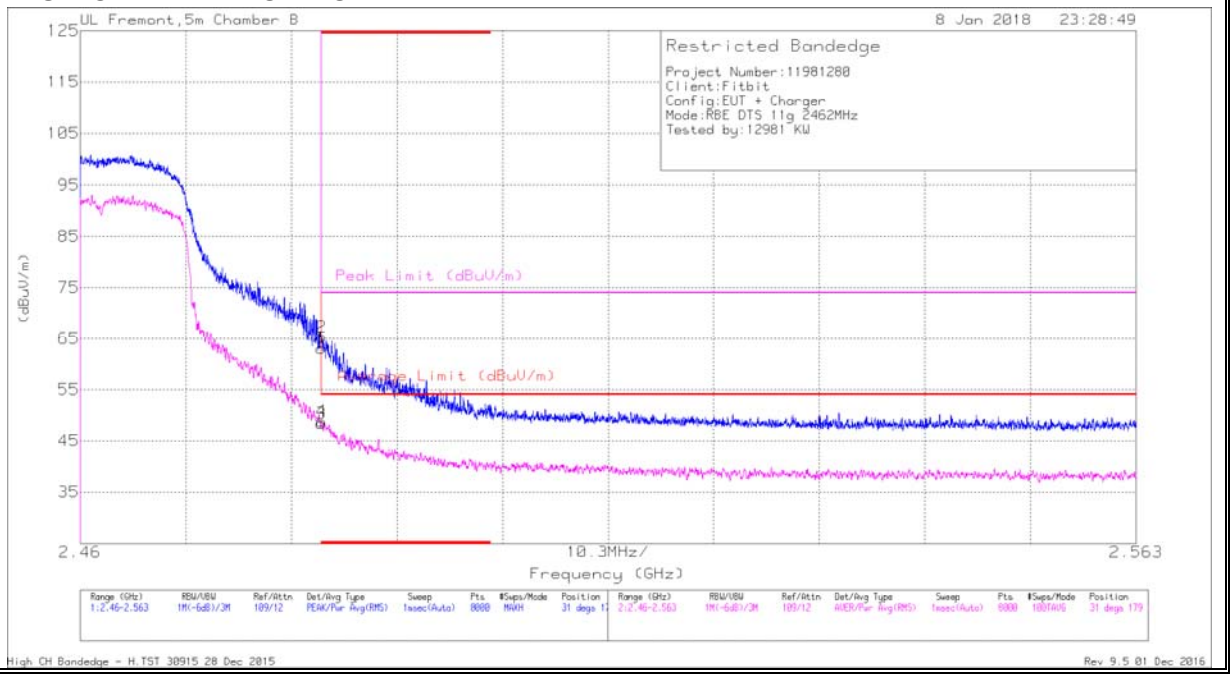
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	35.37	Pk	32.5	-21.3	46.57	-	-	74	-27.43	288	187	V
3	* 2.484	26.68	RMS	32.5	-21.3	37.88	54	-16.12	-	-	288	187	V
4	* 2.488	27.92	RMS	32.5	-21.3	39.12	54	-14.88	-	-	288	187	V
2	2.561	38.08	Pk	32.5	-21.1	49.48	-	-	74	-24.52	288	187	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 11)

HIGH CHANNEL HORIZONTAL

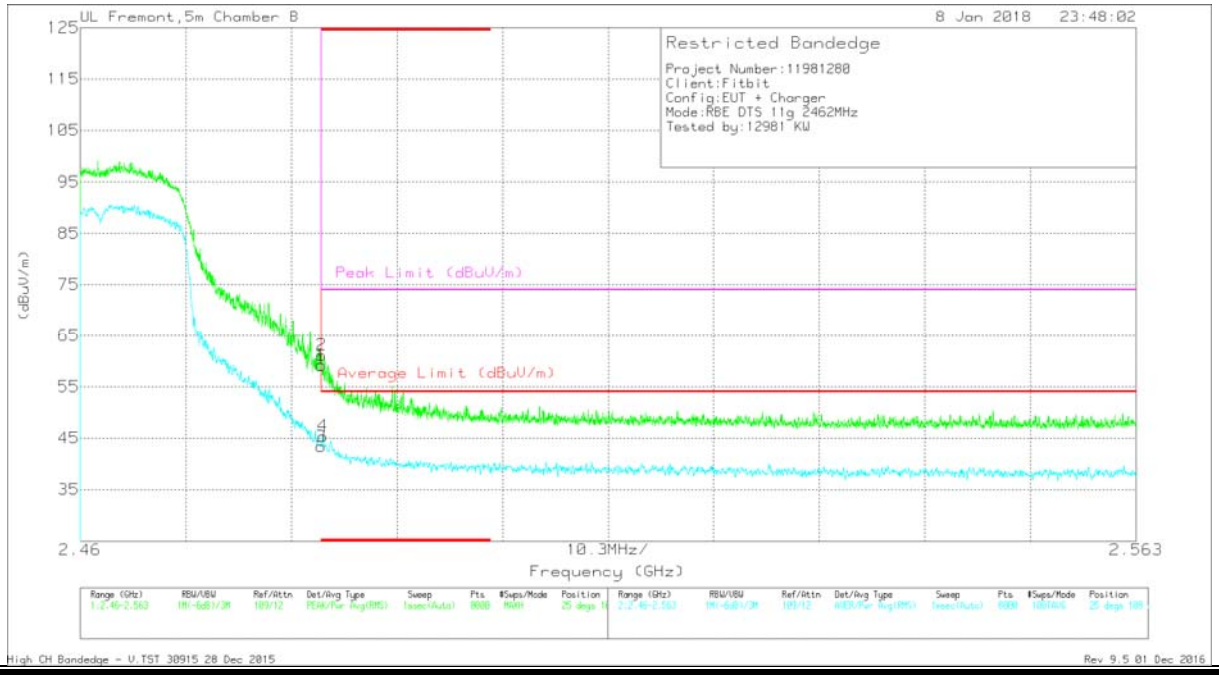


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	51.87	Pk	32.5	-21.3	0	63.07	-	-	74	-10.93	31	179	H
2	* 2.484	54.11	Pk	32.5	-21.3	0	65.31	-	-	74	-8.69	31	179	H
3	* 2.484	36.86	RMS	32.5	-21.3	0	48.06	54	-5.94	-	-	31	179	H
4	* 2.484	37.27	RMS	32.5	-21.3	0	48.47	54	-5.53	-	-	31	179	H

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

HIGH CHANNEL VERTICAL



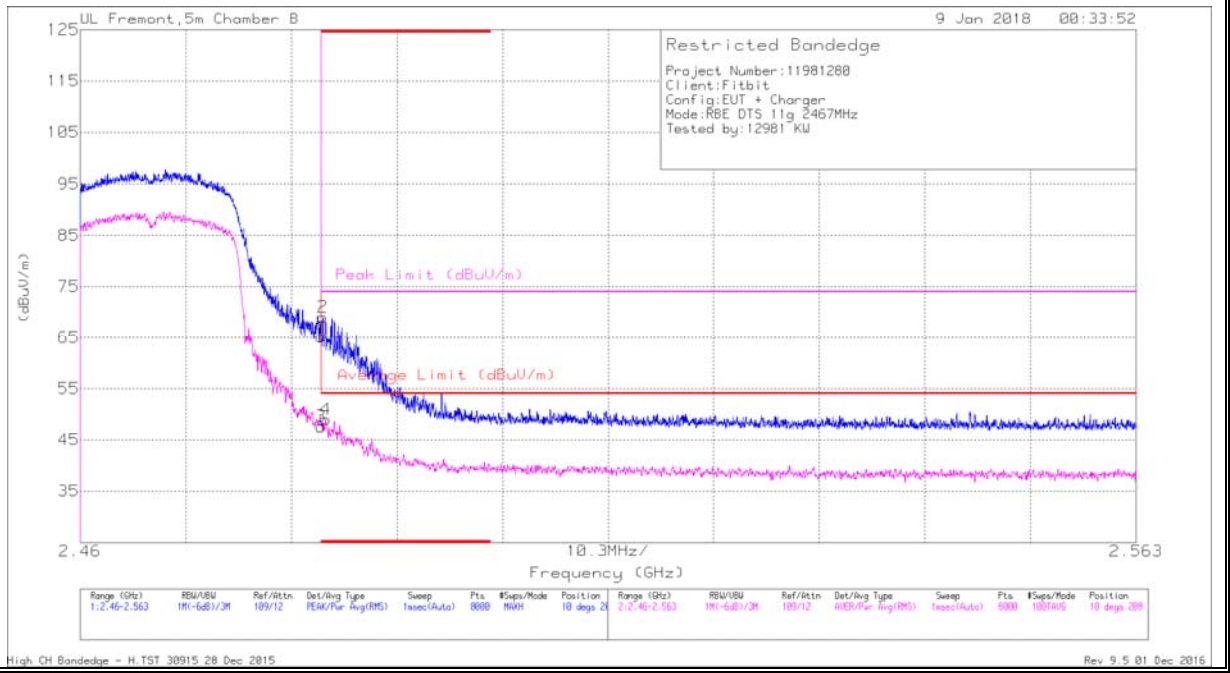
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	47.99	Pk	32.5	-21.3	0	59.19	-	-	74	-14.81	25	108	V
2	* 2.484	49.94	Pk	32.5	-21.3	0	61.14	-	-	74	-12.86	25	108	V
3	* 2.484	31.83	RMS	32.5	-21.3	0	43.03	54	-10.97	-	-	25	108	V
4	* 2.484	33.86	RMS	32.5	-21.3	0	45.06	54	-8.94	-	-	25	108	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 12)

HIGH CHANNEL HORIZONTAL

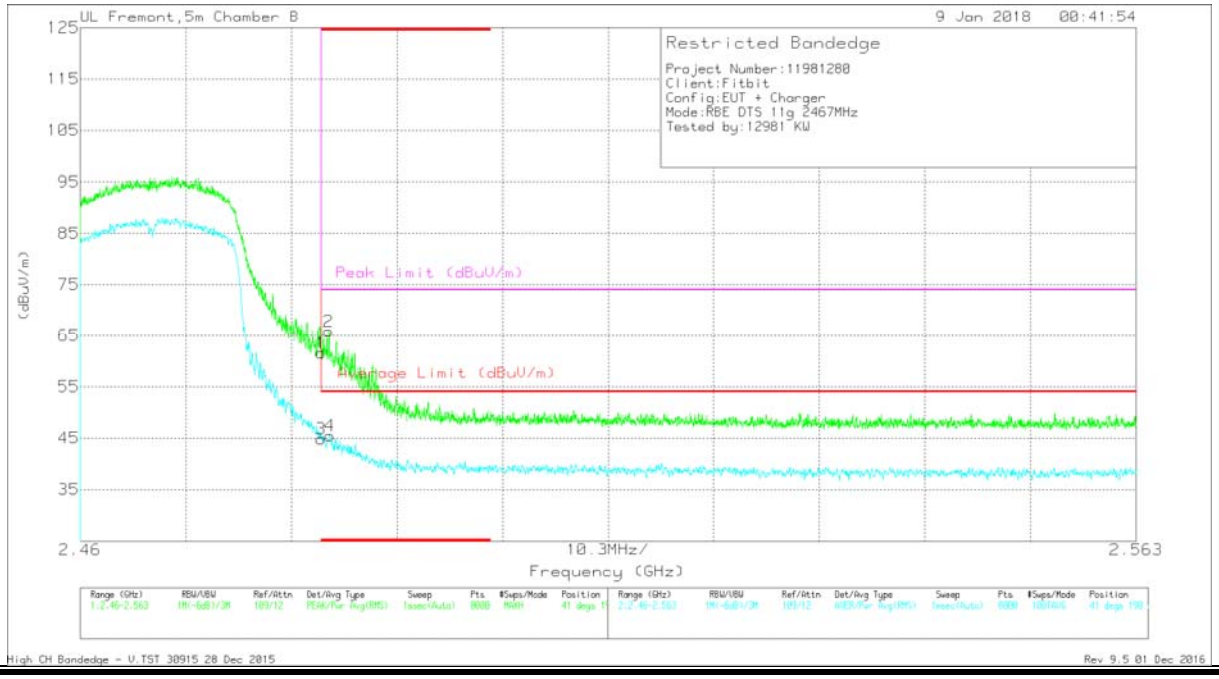


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	53.88	Pk	32.5	-21.3	0	65.08	-	-	74	-8.92	10	208	H
2	* 2.484	57.86	Pk	32.5	-21.3	0	69.06	-	-	74	-4.94	10	208	H
3	* 2.484	36.1	RMS	32.5	-21.3	0	47.3	54	-6.7	-	-	10	208	H
4	* 2.484	37.47	RMS	32.5	-21.3	0	48.67	54	-5.33	-	-	10	208	H

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

HIGH CHANNEL VERTICAL



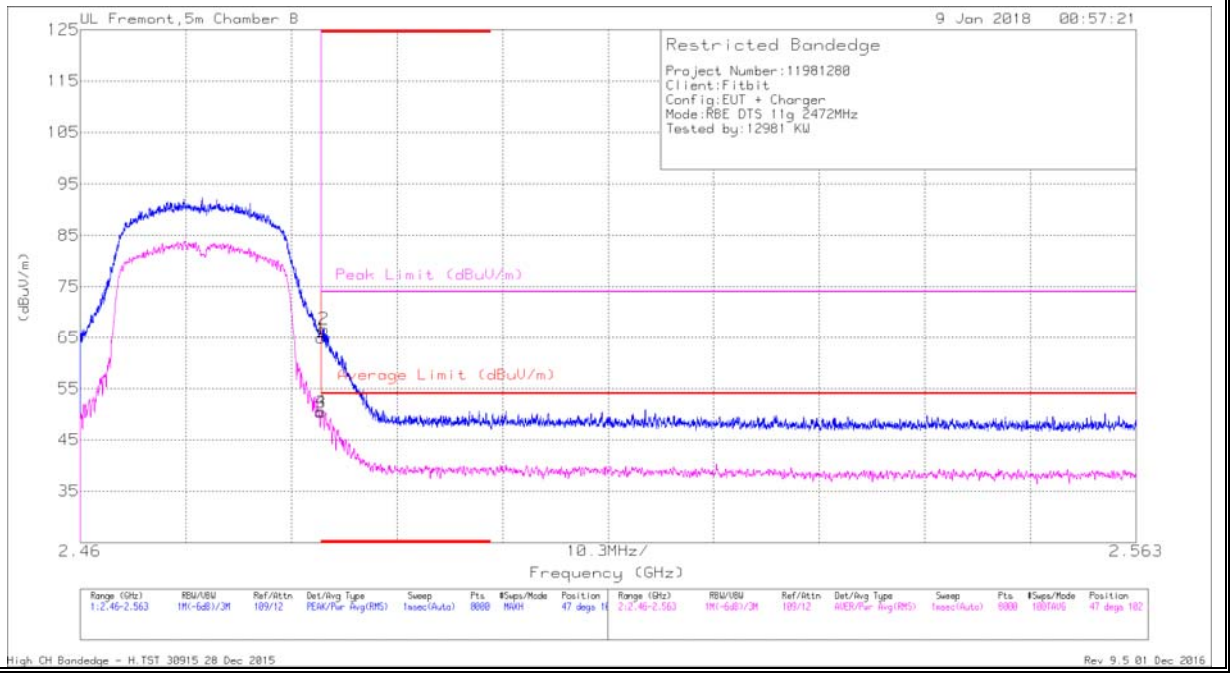
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	50.34	Pk	32.5	-21.3	0	61.54	-	-	74	-12.46	41	190	V
2	* 2.484	54.62	Pk	32.5	-21.3	0	65.82	-	-	74	-8.18	41	190	V
3	* 2.484	33.64	RMS	32.5	-21.3	0	44.84	54	-9.16	-	-	41	190	V
4	* 2.484	34.24	RMS	32.5	-21.3	0	45.44	54	-8.56	-	-	41	190	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 13)

HIGH CHANNEL HORIZONTAL

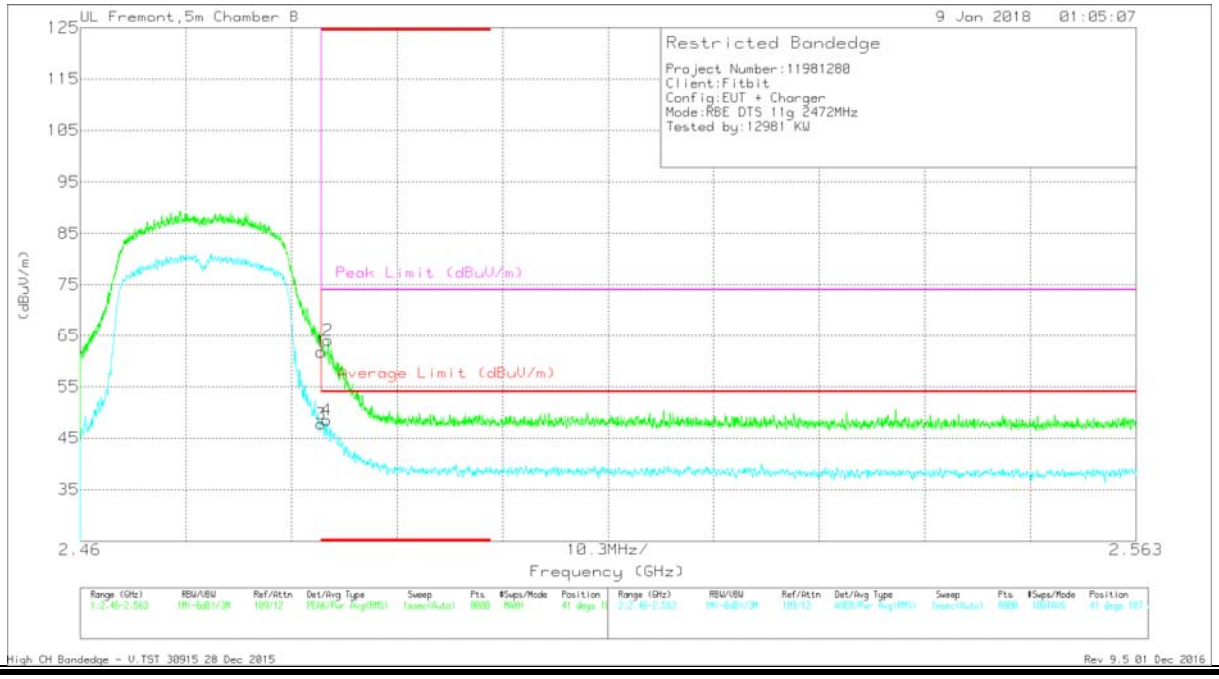


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	53.67	Pk	32.5	-21.3	0	64.87	-	-	74	-9.13	47	102	H
2	* 2.484	55.53	Pk	32.5	-21.3	0	66.73	-	-	74	-7.27	47	102	H
3	* 2.484	38.81	RMS	32.5	-21.3	0	50.01	54	-3.99	-	-	47	102	H
4	* 2.484	39.05	RMS	32.5	-21.3	0	50.25	54	-3.75	-	-	47	102	H

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

HIGH CHANNEL VERTICAL



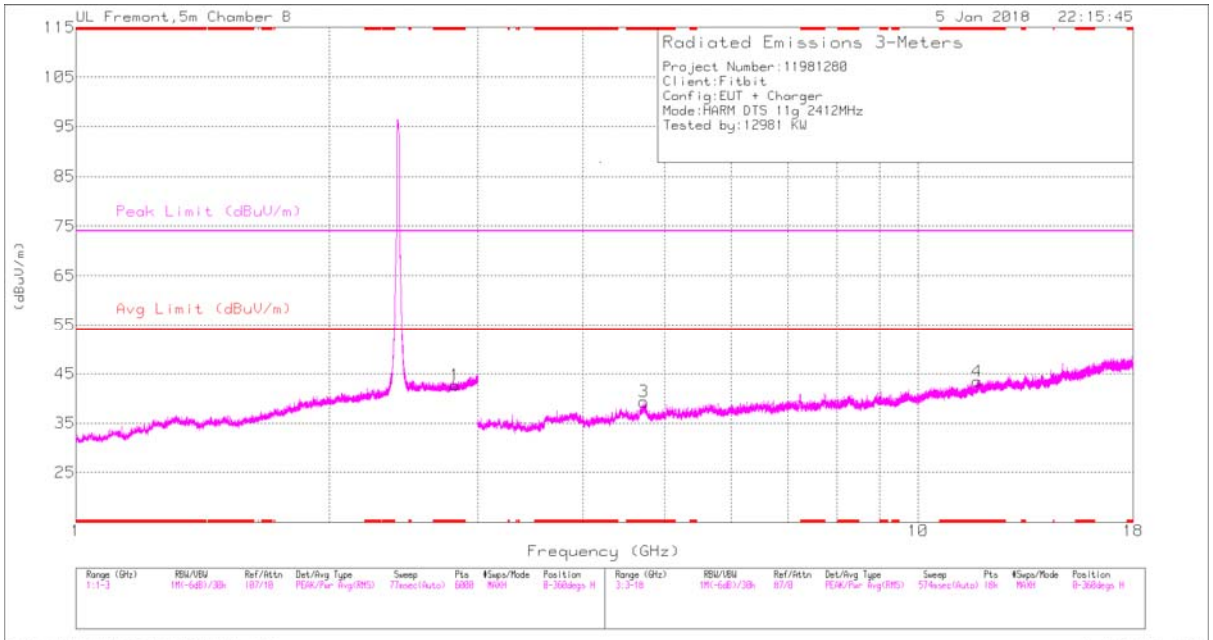
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	50.57	Pk	32.5	-21.3	0	61.77	-	-	74	-12.23	41	187	V
2	* 2.484	52.83	Pk	32.5	-21.3	0	64.03	-	-	74	-9.97	41	187	V
3	* 2.484	36.24	RMS	32.5	-21.3	0	47.44	54	-6.56	-	-	41	187	V
4	* 2.484	36.98	RMS	32.5	-21.3	0	48.18	54	-5.82	-	-	41	187	V

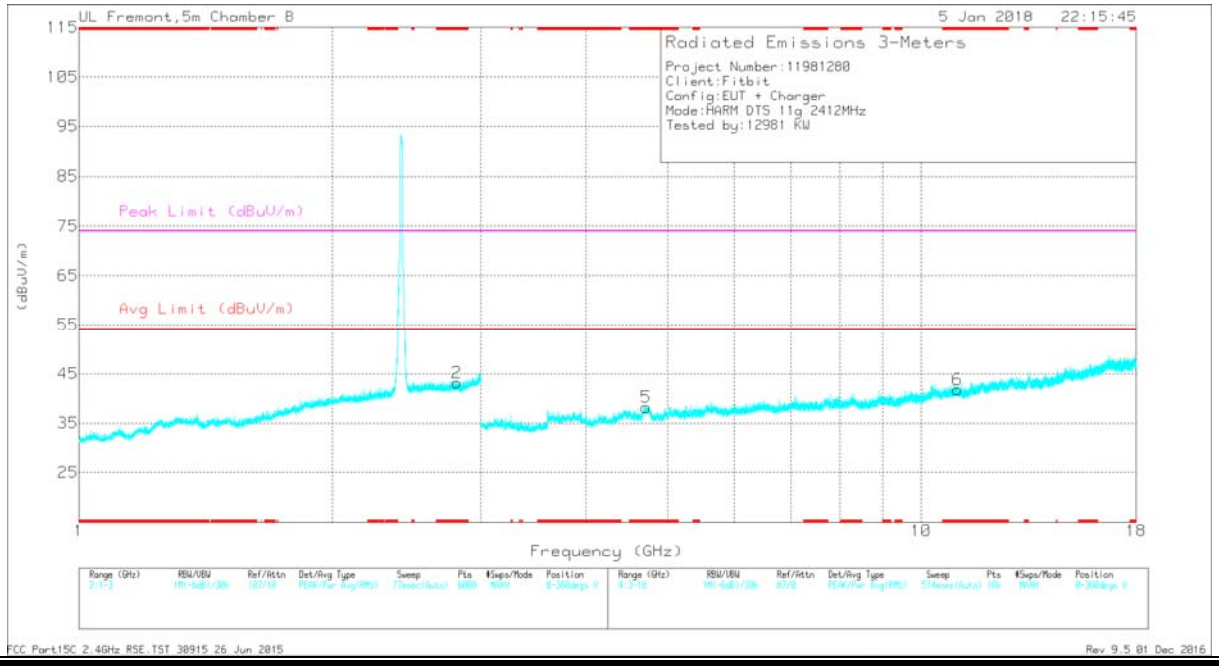
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL, CH 1)

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



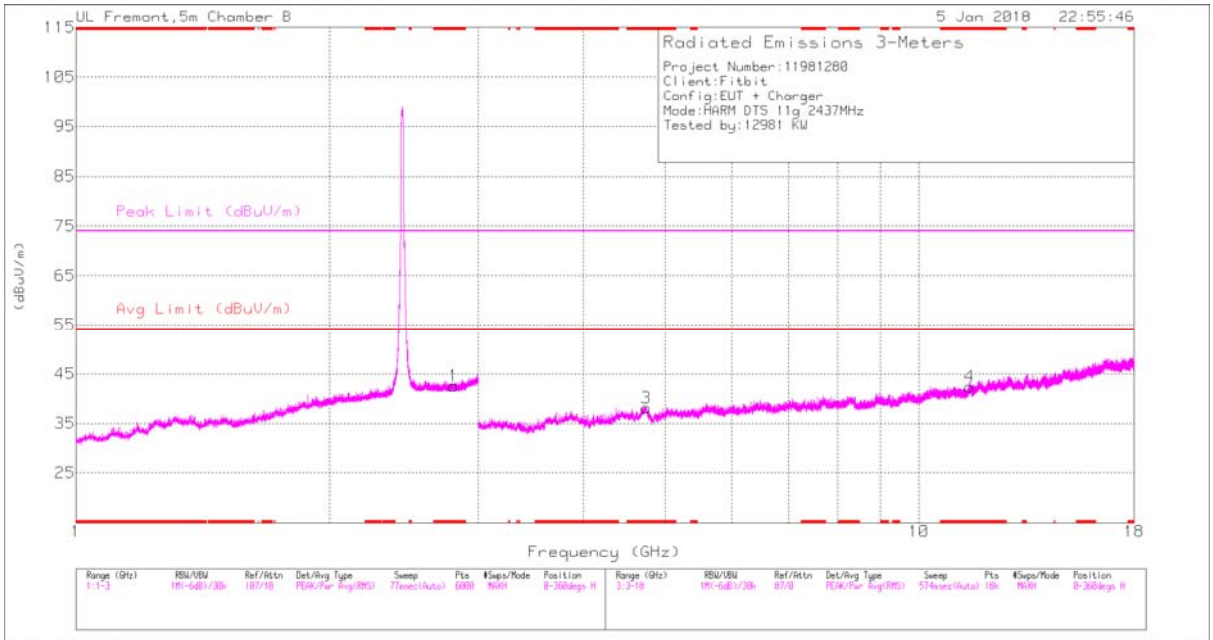
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/ 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	* 2.82	37.03	PK2	32.4	-20.6	0	48.83	-	-	74	-25.17	58	199	H
	* 2.819	25.38	MAv1	32.4	-20.6	0	37.18	54	-16.82	-	-	58	199	H
2	* 2.81	36.76	PK2	32.4	-20.6	0	48.56	-	-	74	-25.44	110	171	V
	* 2.81	25.29	MAv1	32.4	-20.6	0	37.09	54	-16.91	-	-	110	171	V
3	* 4.726	41.19	PK2	34.2	-29.8	0	45.59	-	-	74	-28.41	205	181	H
	* 4.725	29.61	MAv1	34.2	-29.7	0	34.11	54	-19.89	-	-	205	181	H
4	* 11.751	34.68	PK2	38.5	-23.9	0	49.28	-	-	74	-24.72	135	124	H
	* 11.754	23.62	MAv1	38.5	-23.9	0	38.22	54	-15.78	-	-	135	124	H
5	* 4.712	40.28	PK2	34.2	-30	0	44.48	-	-	74	-29.52	310	207	V
	* 4.715	29.25	MAv1	34.2	-29.9	0	33.55	54	-20.45	-	-	310	207	V
6	* 11.047	35.79	PK2	37.8	-24.6	0	48.99	-	-	74	-25.01	305	103	V
	* 11.045	24.09	MAv1	37.8	-24.6	0	37.29	54	-16.71	-	-	305	103	V

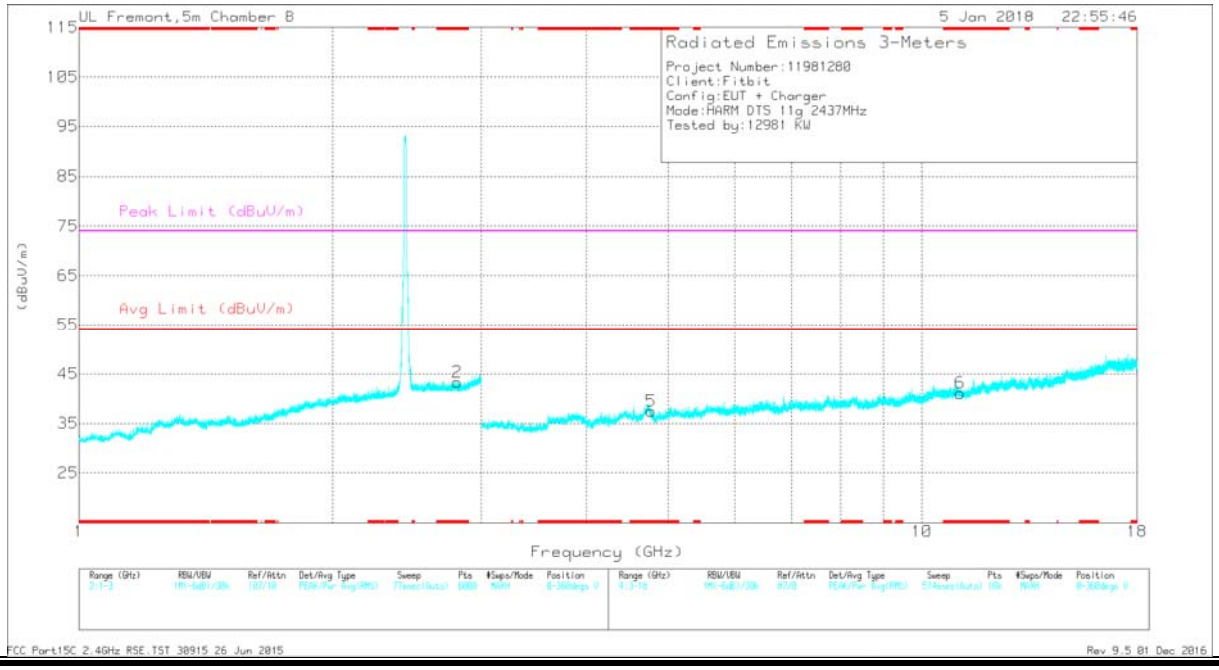
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL, CH 6)

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



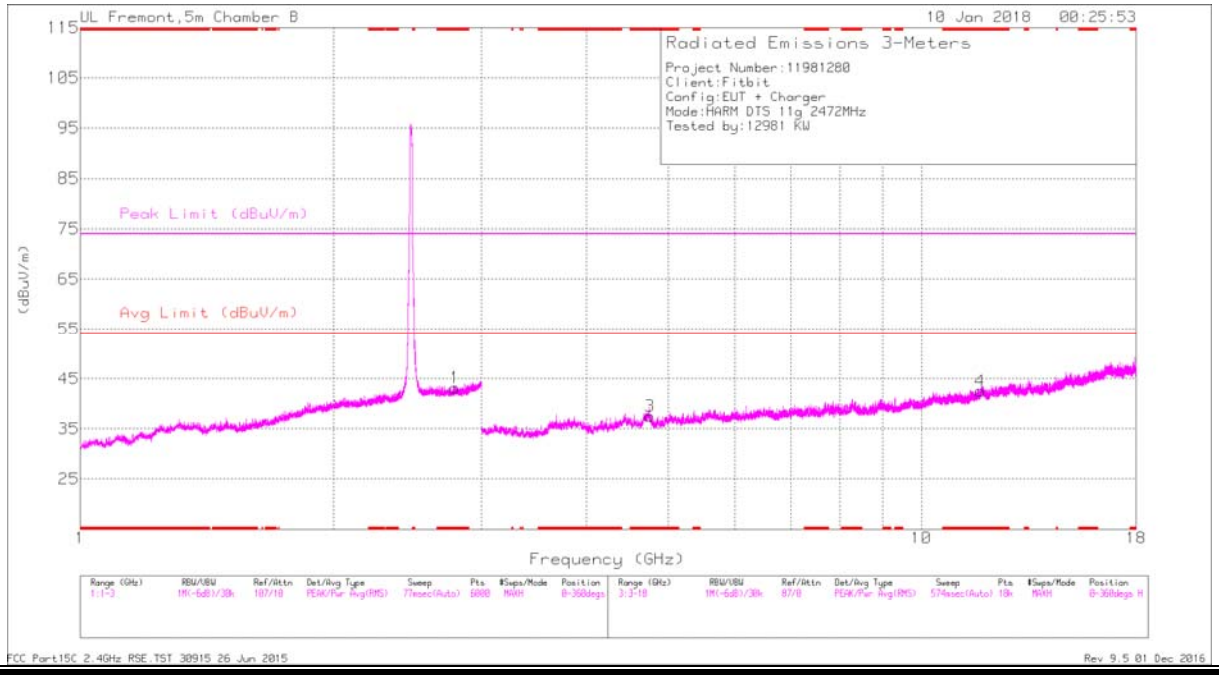
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/ 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	* 2.808	36.82	PK2	32.4	-20.6	0	48.62	-	-	74	-25.38	100	112	H
	* 2.805	25.33	MAv1	32.4	-20.6	0	37.13	54	-16.87	-	-	100	112	H
2	* 2.812	36.92	PK2	32.4	-20.6	0	48.72	-	-	74	-25.28	92	113	V
	* 2.812	25.39	MAv1	32.4	-20.6	0	37.19	54	-16.81	-	-	92	113	V
3	* 4.745	40.32	PK2	34.2	-29.3	0	45.22	-	-	74	-28.78	250	154	H
	* 4.744	29.61	MAv1	34.2	-29.4	0	34.41	54	-19.59	-	-	250	154	H
4	* 11.485	34.28	PK2	38.1	-23.8	0	48.58	-	-	74	-25.42	78	139	H
	* 11.484	23.5	MAv1	38.1	-23.8	0	37.8	54	-16.2	-	-	78	139	H
5	* 4.773	39.9	PK2	34.3	-29.5	0	44.7	-	-	74	-29.3	321	208	V
	* 4.773	28.77	MAv1	34.3	-29.5	0	33.57	54	-20.43	-	-	321	208	V
6	* 11.097	35.06	PK2	37.7	-24.6	0	48.16	-	-	74	-25.84	106	210	V
	* 11.1	24.11	MAv1	37.7	-24.6	0	37.21	54	-16.79	-	-	106	210	V

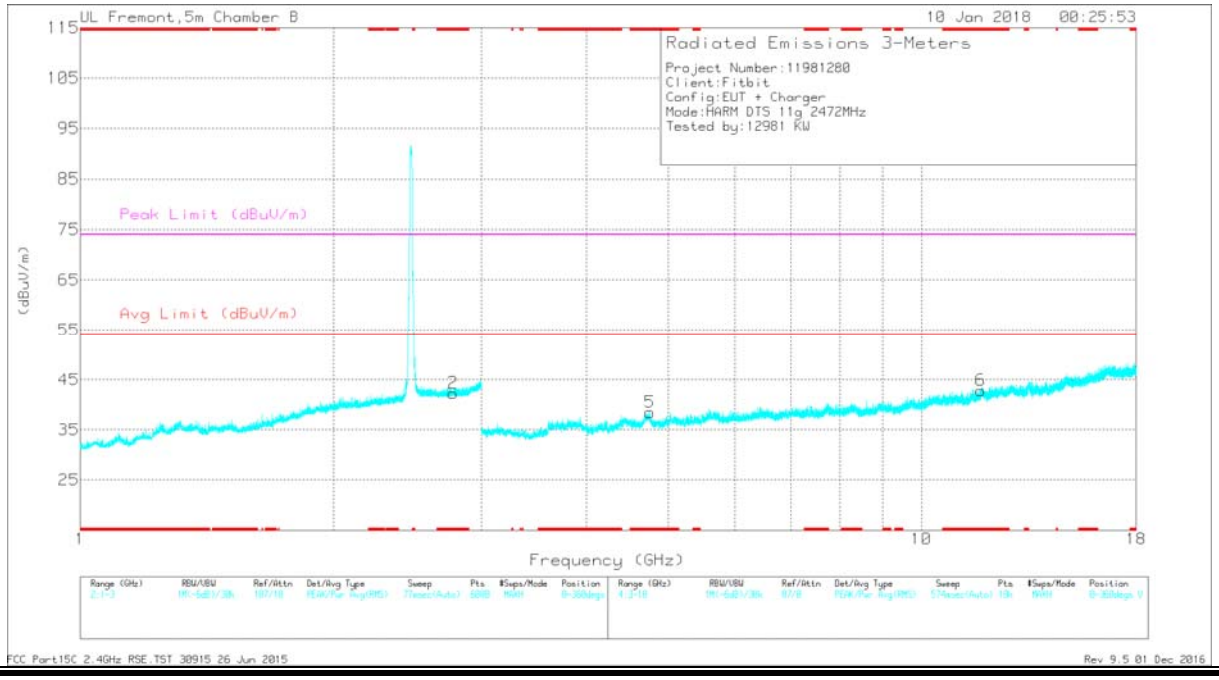
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, CH 13)

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

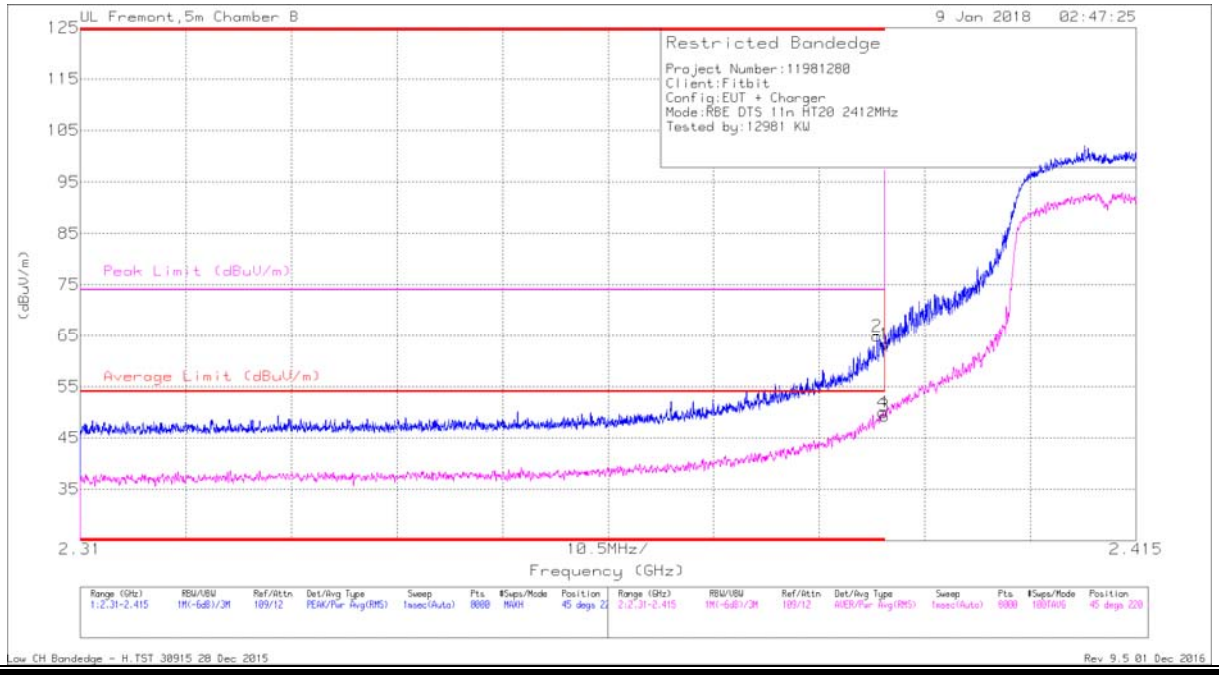
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.79	37.53	PK2	32.4	-20.6	0	49.33	-	-	74	-24.67	54	178	H
	* 2.792	25.37	MAv1	32.4	-20.6	0	37.17	54	-16.83	-	-	54	178	H
2	* 2.775	36.71	PK2	32.3	-20.7	0	48.31	-	-	74	-25.69	10	171	V
	* 2.776	25.5	MAv1	32.3	-20.7	0	37.1	54	-16.9	-	-	10	171	V
3	* 4.756	39.87	PK2	34.3	-29.4	0	44.77	-	-	74	-29.23	108	182	H
	* 4.754	29.08	MAv1	34.3	-29.4	0	33.98	54	-20.02	-	-	108	182	H
4	* 11.744	33.72	PK2	38.5	-24	0	48.22	-	-	74	-25.78	255	144	H
	* 11.742	23.72	MAv1	38.5	-24	0	38.22	54	-15.78	-	-	255	144	H
5	* 4.756	40.36	PK2	34.3	-29.4	0	45.26	-	-	74	-28.74	237	104	V
	* 4.753	29.02	MAv1	34.2	-29.3	0	33.92	54	-20.08	-	-	237	104	V
6	* 11.767	35.32	PK2	38.5	-23.8	0	50.02	-	-	74	-23.98	87	198	V
	* 11.767	23.5	MAv1	38.5	-23.8	0	38.2	54	-15.8	-	-	87	198	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

9.2.3. 802.11n HT20 MODE IN THE 2.4 GHz BAND

AUTHORIZED BANDEDGE (LOW CHANNEL, CH 1)

LOW CHANNEL HORIZONTAL

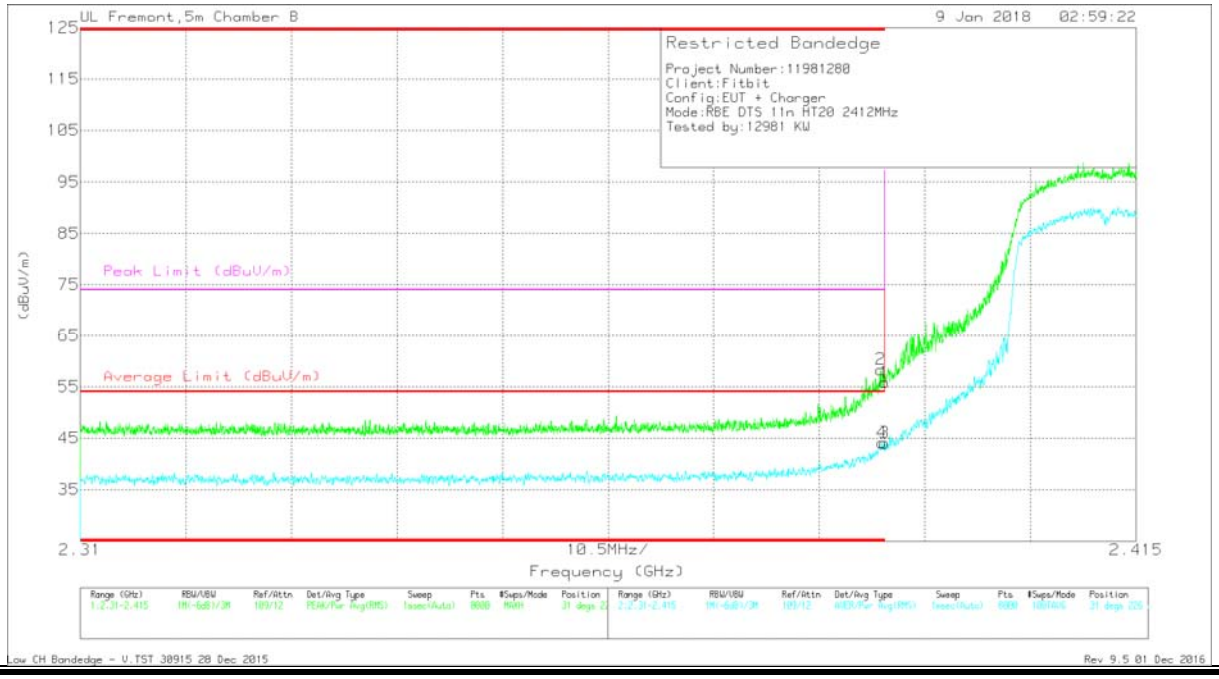


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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
2	* 2.389	54.2	Pk	32	-21.3	0	64.9	-	-	74	-9.1	45	220	H
1	* 2.39	52.62	Pk	32	-21.3	0	63.32	-	-	74	-10.68	45	220	H
3	* 2.39	38.25	RMS	32	-21.3	0	48.95	54	-5.05	-	-	45	220	H
4	* 2.39	38.93	RMS	32	-21.3	0	49.63	54	-4.37	-	-	45	220	H

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

LOW CHANNEL VERTICAL



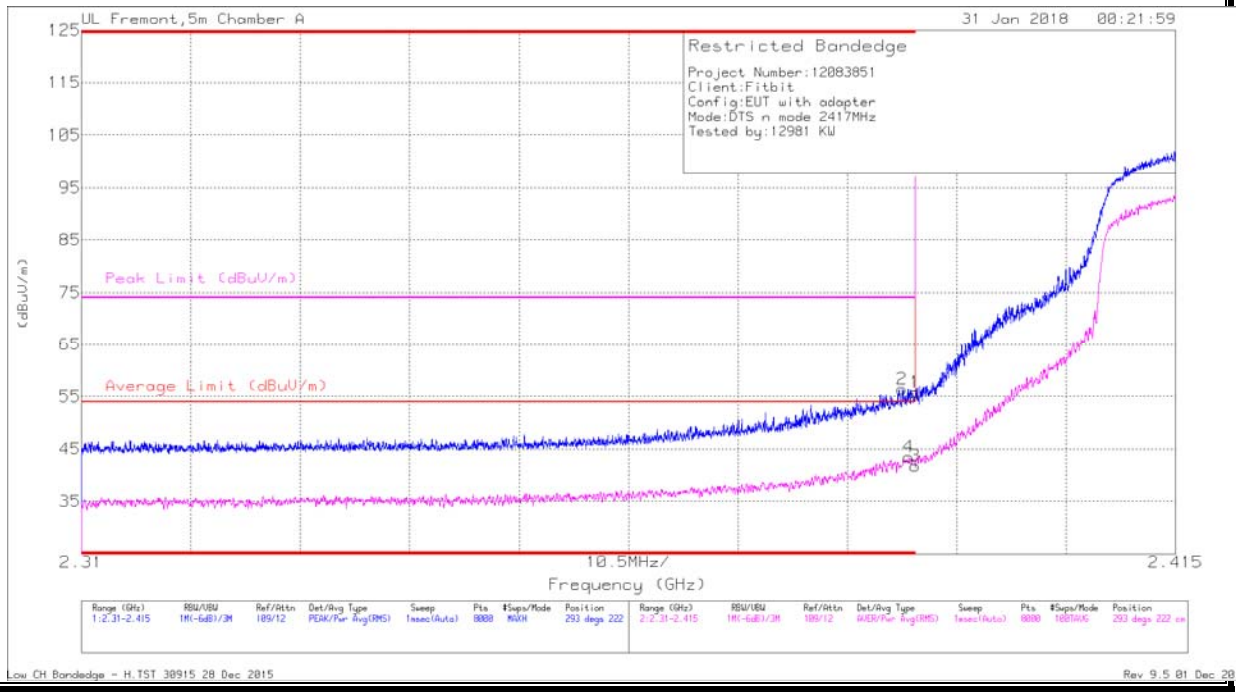
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	45.1	Pk	32	-21.3	0	55.8	-	-	74	-18.2	31	226	V
2	* 2.39	47.63	Pk	32	-21.3	0	58.33	-	-	74	-15.67	31	226	V
3	* 2.39	33.01	RMS	32	-21.3	0	43.71	54	-10.29	-	-	31	226	V
4	* 2.39	33.06	RMS	32	-21.3	0	43.76	54	-10.24	-	-	31	226	V

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

AUTHORIZED BANDEDGE (LOW CHANNEL, CH 2)

LOW CHANNEL HORIZONTAL

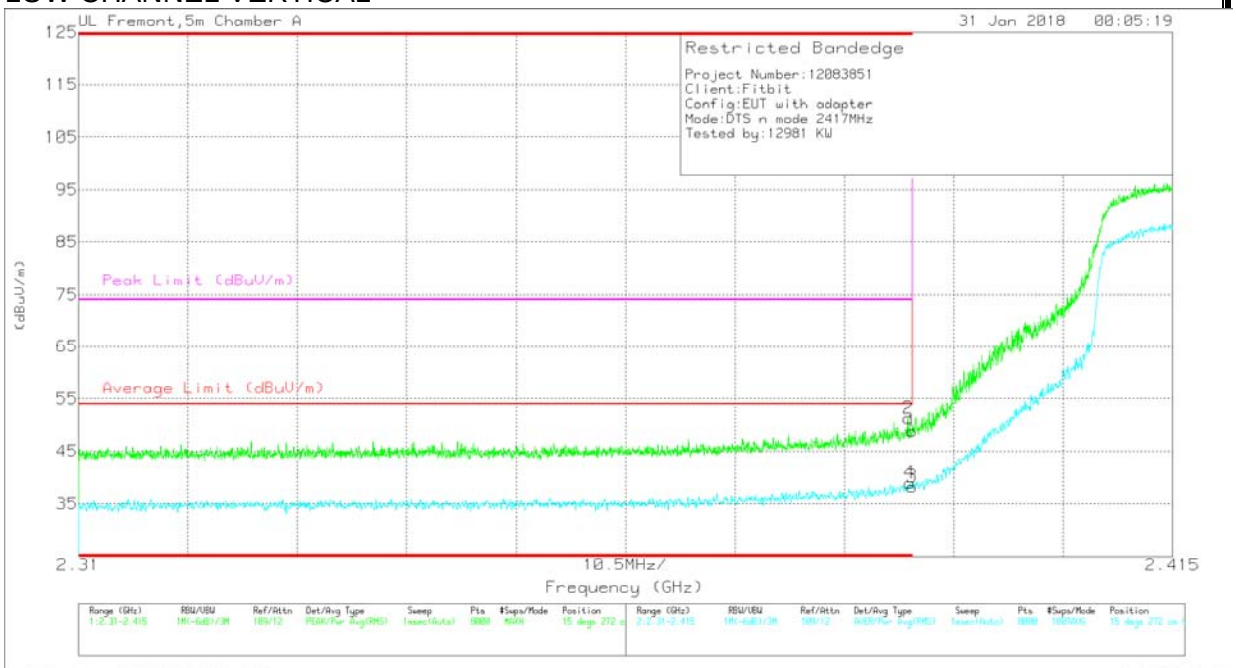


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.389	47.84	Pk	31.8	-23.3	56.34	-	-	74	-17.66	293	222	H
4	* 2.389	34.92	RMS	31.8	-23.3	43.42	54	-10.58	-	-	293	222	H
1	* 2.39	47.3	Pk	31.8	-23.3	55.8	-	-	74	-18.2	293	222	H
3	* 2.39	33.19	RMS	31.8	-23.3	41.69	54	-12.31	-	-	293	222	H

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

LOW CHANNEL VERTICAL



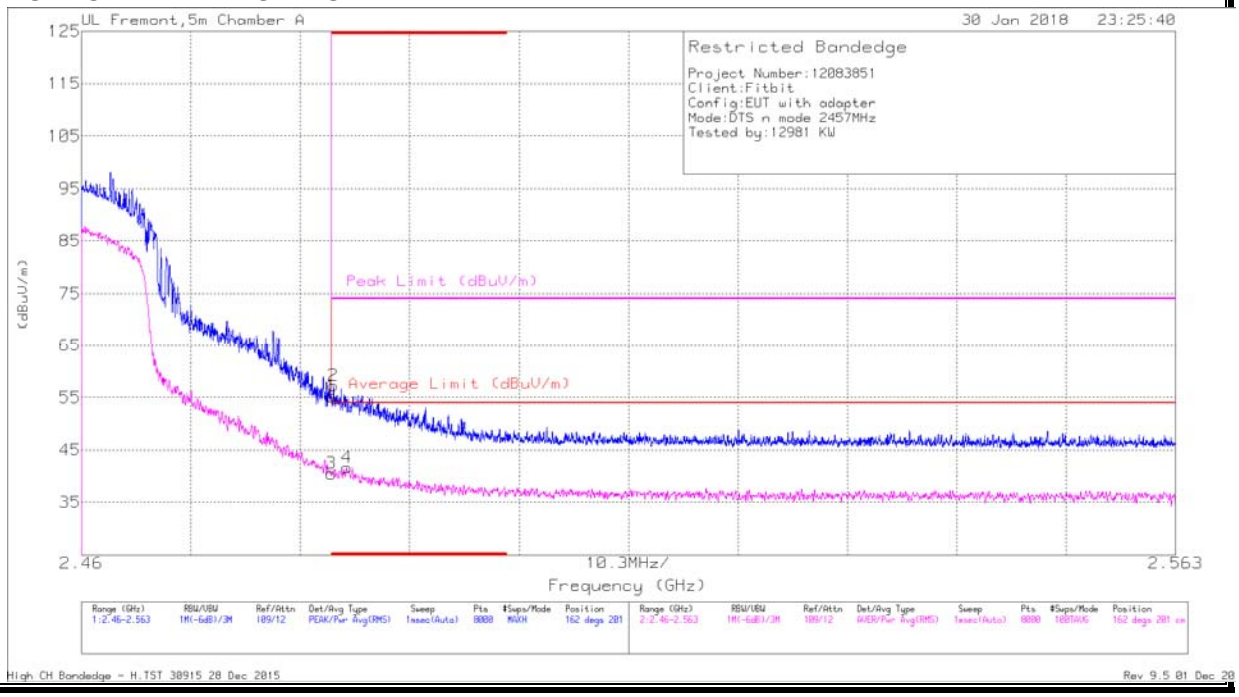
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/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	* 2.39	40.25	Pk	31.8	-23.3	48.75	-	-	74	-25.25	18	270	V
2	* 2.39	42.82	Pk	31.8	-23.3	51.32	-	-	74	-22.68	18	270	V
3	* 2.39	29.81	RMS	31.8	-23.3	38.31	54	-15.69	-	-	18	270	V
4	* 2.39	30.44	RMS	31.8	-23.3	38.94	54	-15.06	-	-	18	270	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 10)

LOW CHANNEL HORIZONTAL

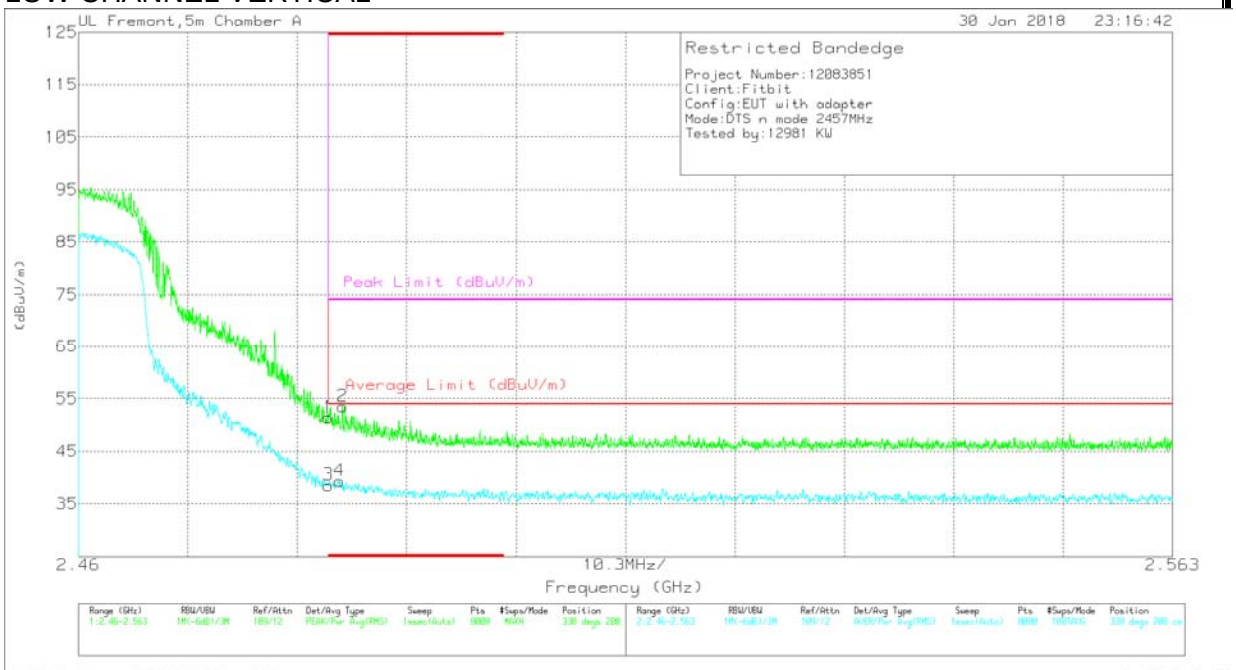


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	46.13	Pk	32.3	-23.2	55.23	-	-	74	-18.77	162	201	H
2	* 2.484	48.11	Pk	32.3	-23.2	57.21	-	-	74	-16.79	162	201	H
3	* 2.484	31.34	RMS	32.3	-23.2	40.44	54	-13.56	-	-	162	201	H
4	* 2.485	32.46	RMS	32.3	-23.2	41.56	54	-12.44	-	-	162	201	H

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

LOW CHANNEL VERTICAL



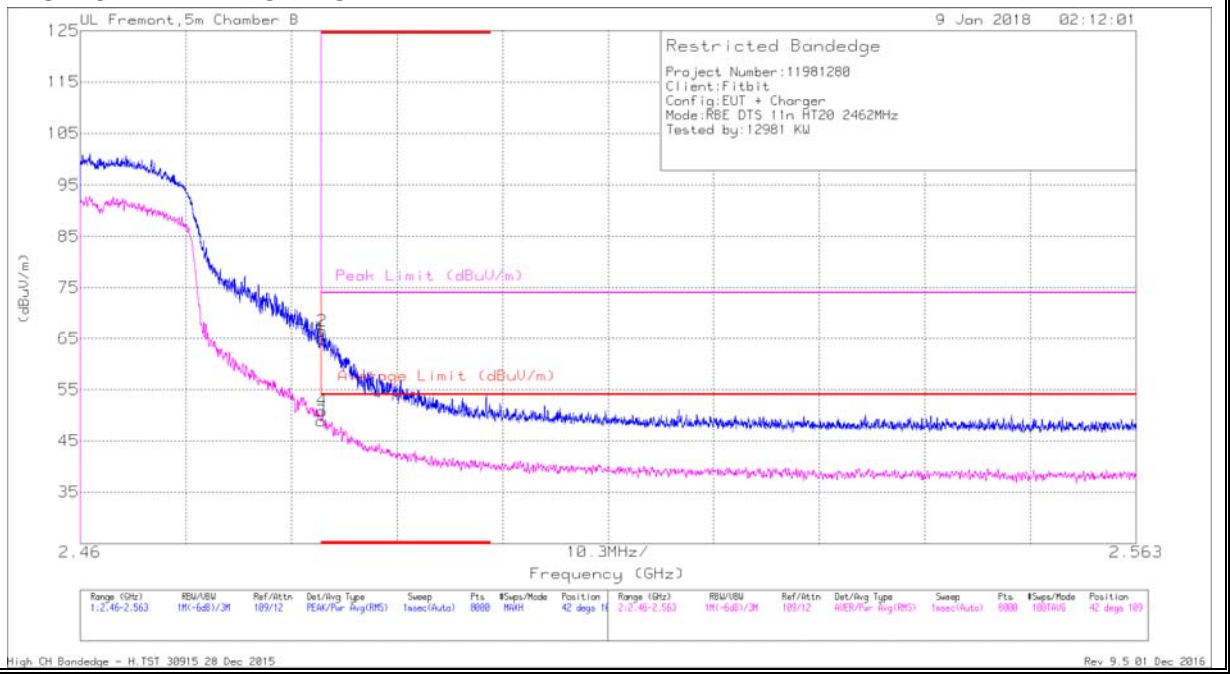
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	42.34	Pk	32.3	-23.2	51.44	-	-	74	-22.56	330	205	V
3	* 2.484	29.46	RMS	32.3	-23.2	38.56	54	-15.44	-	-	330	205	V
2	* 2.485	44.39	Pk	32.3	-23.2	53.49	-	-	74	-20.51	330	205	V
4	* 2.485	30.23	RMS	32.3	-23.2	39.33	54	-14.67	-	-	330	205	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 11)

HIGH CHANNEL HORIZONTAL

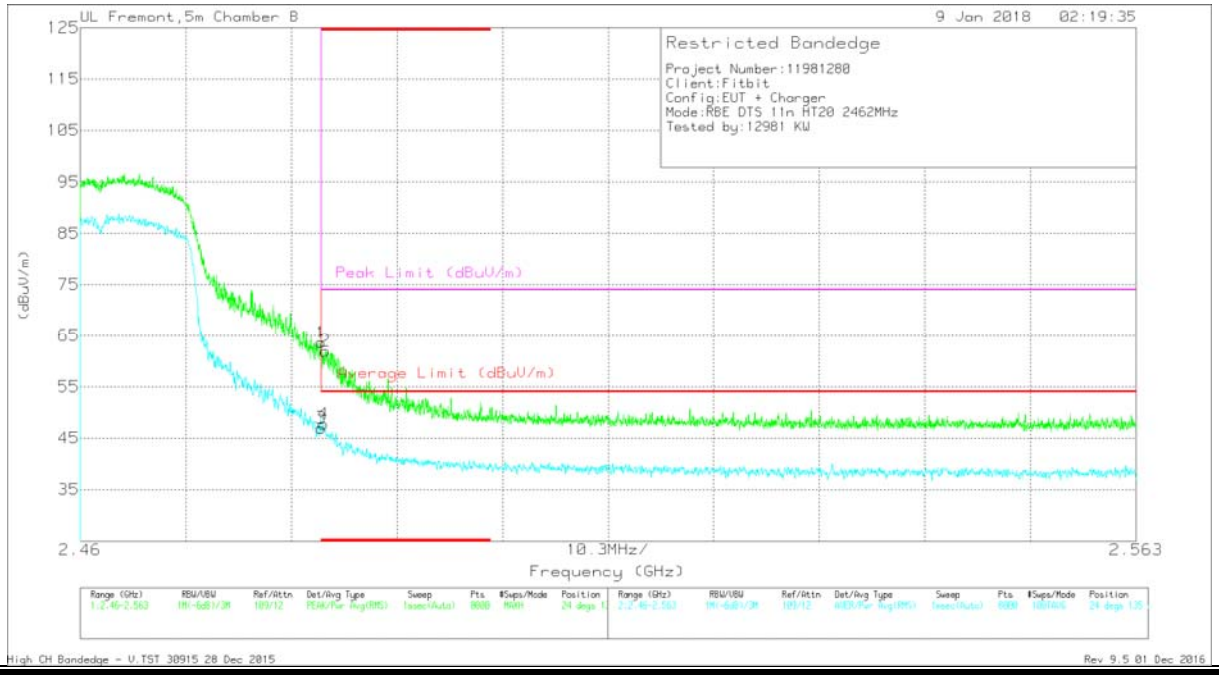


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	53.75	Pk	32.5	-21.3	0	64.95	-	-	74	-9.05	42	109	H
2	* 2.484	55.32	Pk	32.5	-21.3	0	66.52	-	-	74	-7.48	42	109	H
3	* 2.484	37.31	RMS	32.5	-21.3	0	48.51	54	-5.49	-	-	42	109	H
4	* 2.484	39.32	RMS	32.5	-21.3	0	50.52	54	-3.48	-	-	42	109	H

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

HIGH CHANNEL VERTICAL



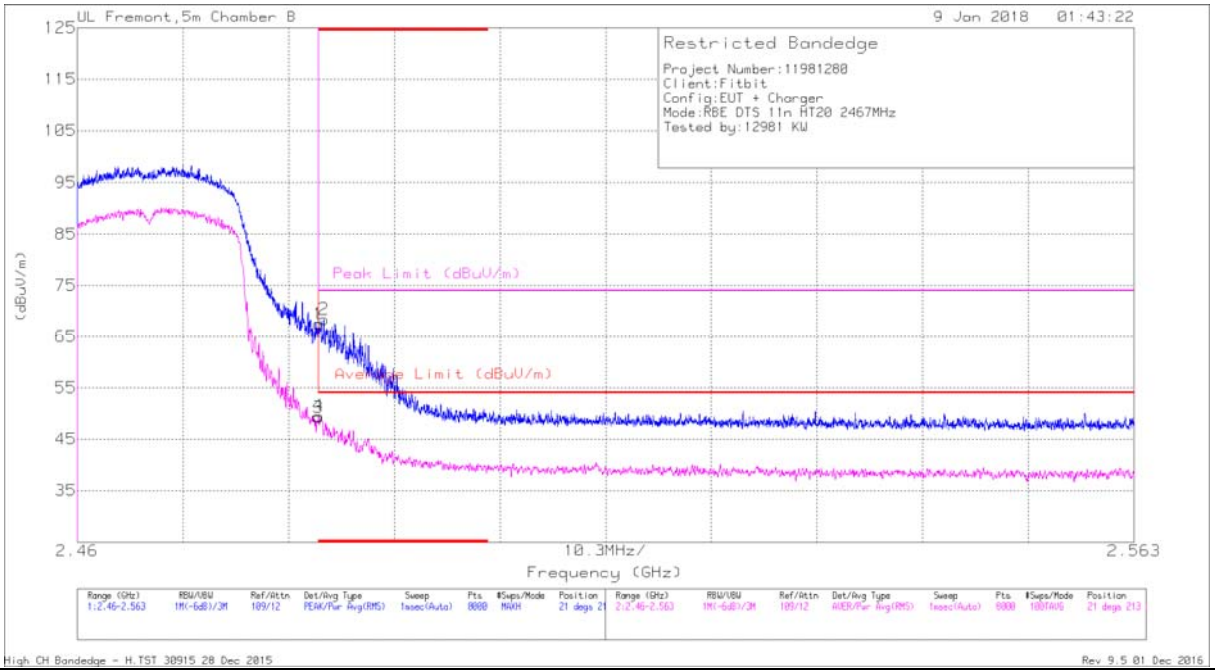
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	52.42	Pk	32.5	-21.3	0	63.62	-	-	74	-10.38	24	135	V
2	* 2.484	50.77	Pk	32.5	-21.3	0	61.97	-	-	74	-12.03	24	135	V
3	* 2.484	35.39	RMS	32.5	-21.3	0	46.59	54	-7.41	-	-	24	135	V
4	* 2.484	36.23	RMS	32.5	-21.3	0	47.43	54	-6.57	-	-	24	135	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 12)

HIGH CHANNEL HORIZONTAL

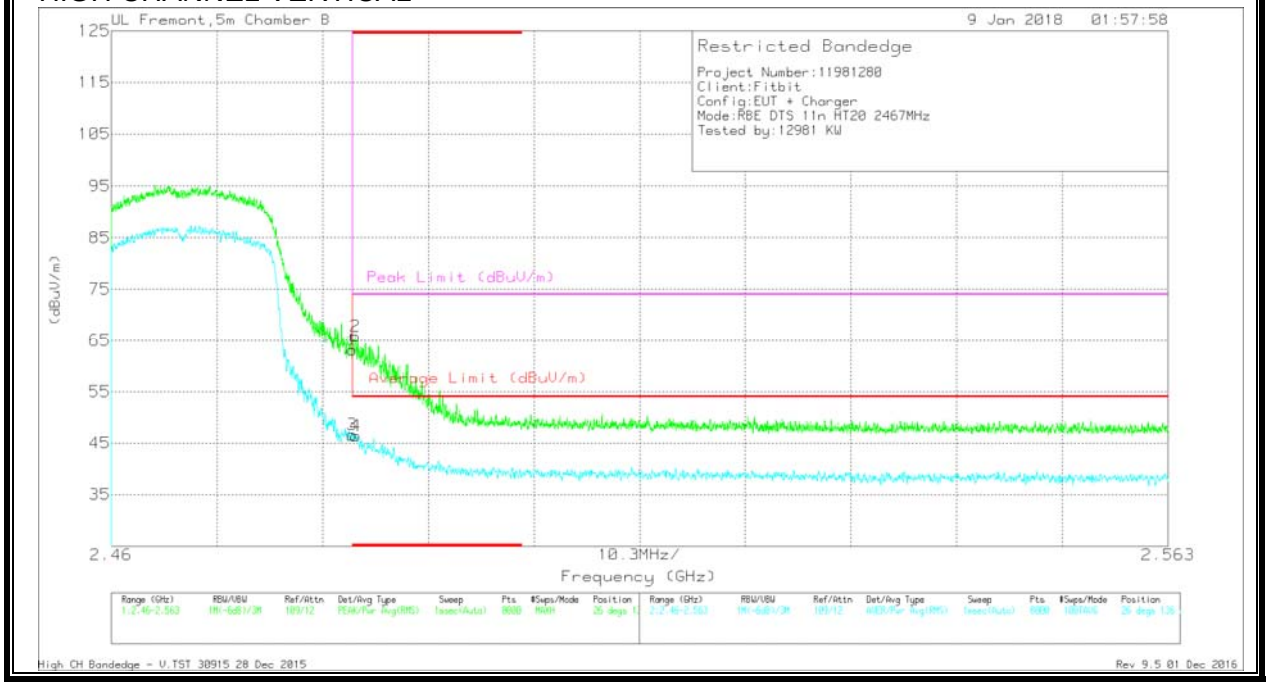


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	56.35	Pk	32.5	-21.3	0	67.55	-	-	74	-6.45	21	213	H
2	* 2.484	57.23	Pk	32.5	-21.3	0	68.43	-	-	74	-5.57	21	213	H
3	* 2.484	37.68	RMS	32.5	-21.3	0	48.88	54	-5.12	-	-	21	213	H
4	* 2.484	37.99	RMS	32.5	-21.3	0	49.19	54	-4.81	-	-	21	213	H

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

HIGH CHANNEL VERTICAL



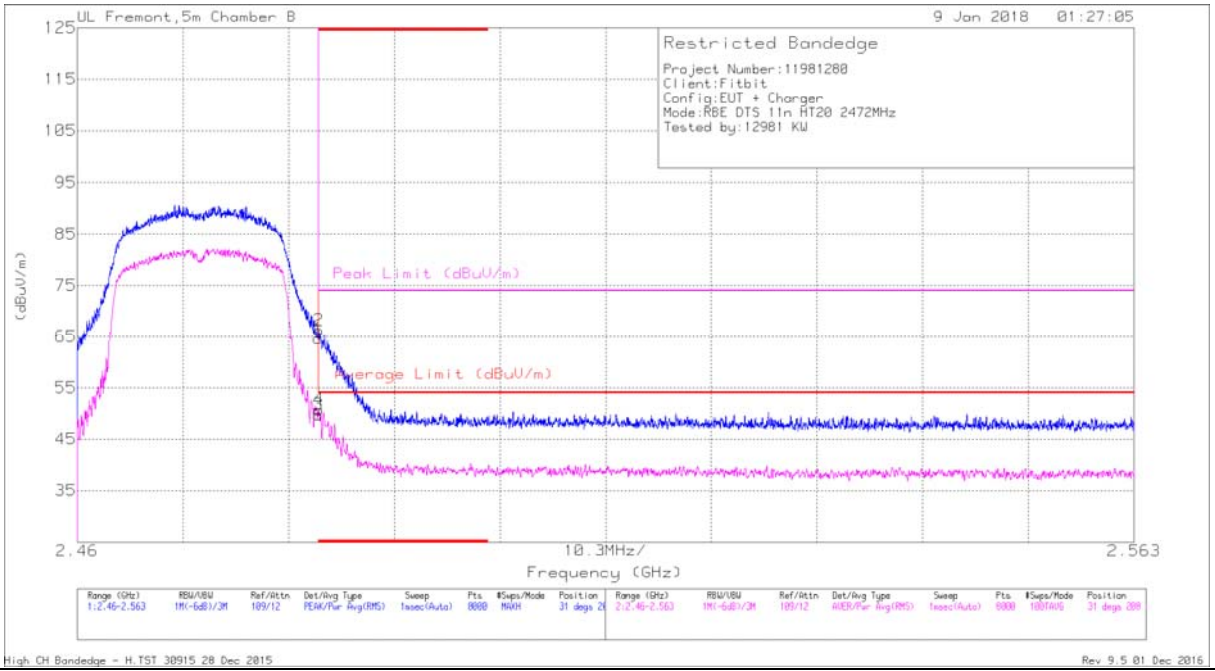
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	51.97	Pk	32.5	-21.3	0	63.17	-	-	74	-10.83	26	136	V
2	* 2.484	54.61	Pk	32.5	-21.3	0	65.81	-	-	74	-8.19	26	136	V
3	* 2.484	35.08	RMS	32.5	-21.3	0	46.28	54	-7.72	-	-	26	136	V
4	* 2.484	34.89	RMS	32.5	-21.3	0	46.09	54	-7.91	-	-	26	136	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 13)

HIGH CHANNEL HORIZONTAL

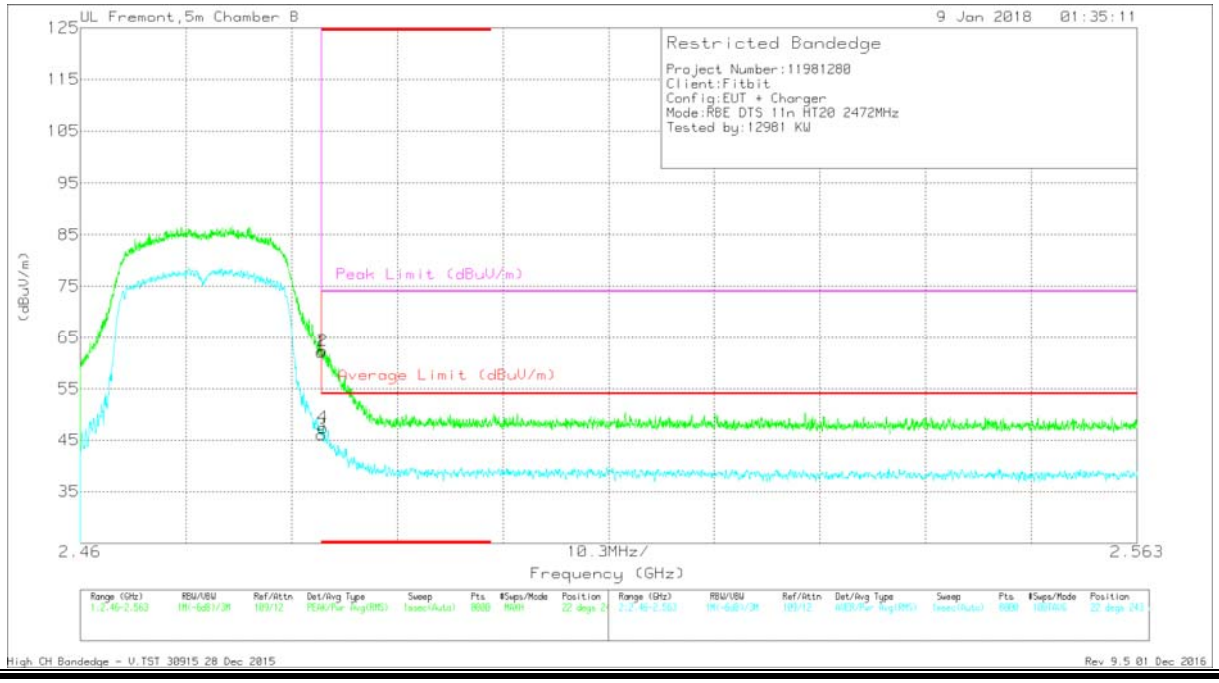


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	53.4	Pk	32.5	-21.3	0	64.6	-	-	74	-9.4	31	208	H
2	* 2.484	55.05	Pk	32.5	-21.3	0	66.25	-	-	74	-7.75	31	208	H
3	* 2.484	38.22	RMS	32.5	-21.3	0	49.32	54	-4.58	-	-	31	208	H
4	* 2.484	39.18	RMS	32.5	-21.3	0	50.38	54	-3.62	-	-	31	208	H

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

HIGH CHANNEL VERTICAL



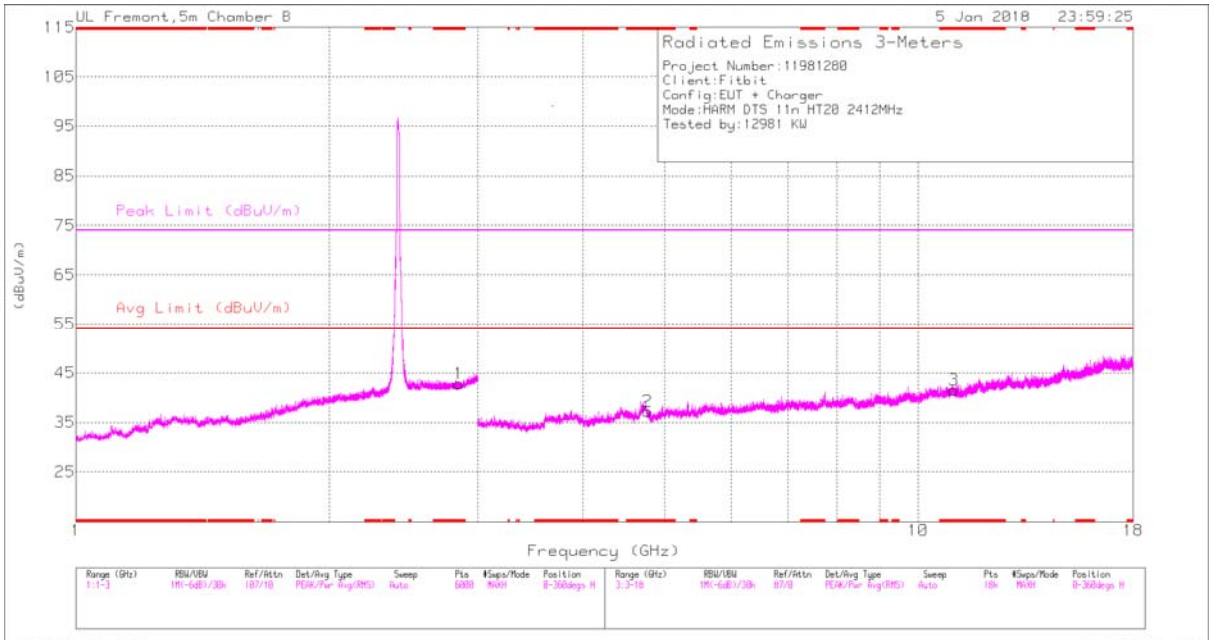
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.484	50.94	Pk	32.5	-21.3	0	62.14	-	-	74	-11.86	22	243	V
2	* 2.484	51.2	Pk	32.5	-21.3	0	62.4	-	-	74	-11.6	22	243	V
3	* 2.484	34.48	RMS	32.5	-21.3	0	45.68	54	-8.32	-	-	22	243	V
4	* 2.484	35.9	RMS	32.5	-21.3	0	47.1	54	-6.9	-	-	22	243	V

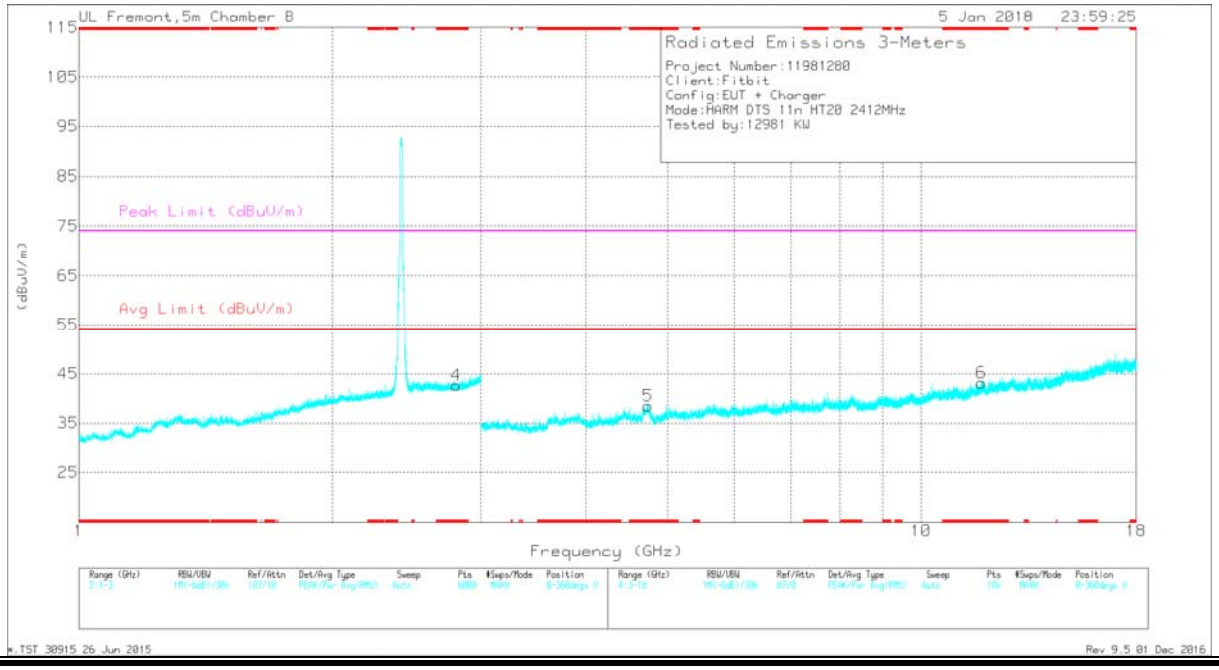
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL, CH 1)

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



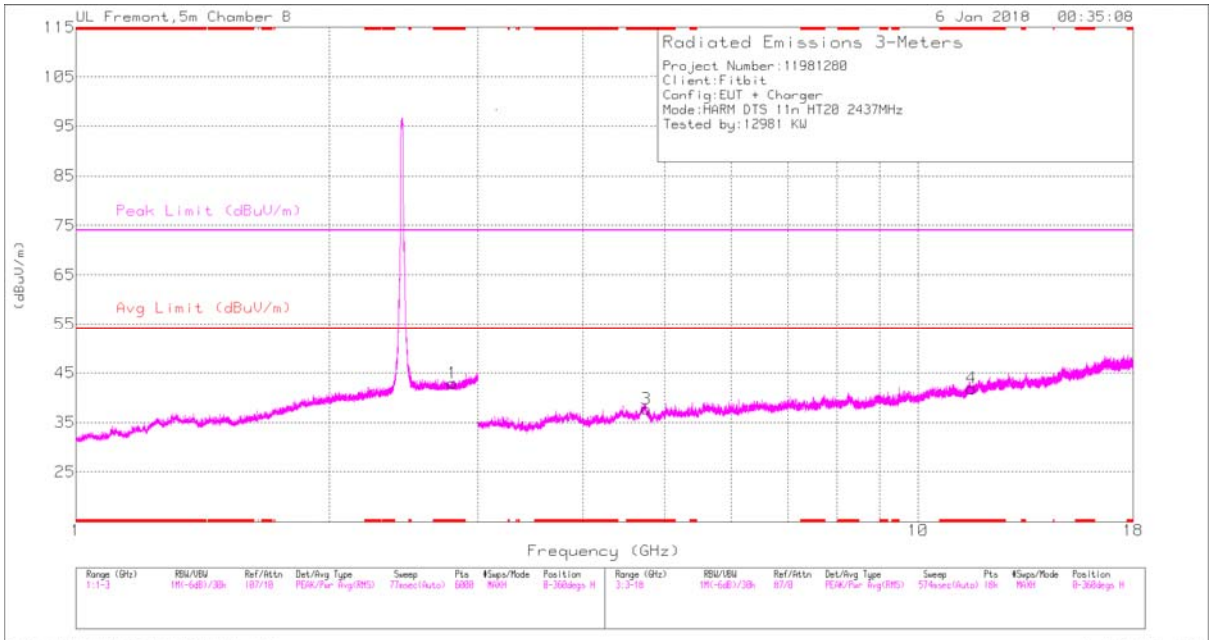
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.848	36.8	PK2	32.4	-20.4	0	48.8	-	-	74	-25.2	160	199	H
	* 2.848	25.18	MAv1	32.4	-20.4	0	37.18	54	-16.82	-	-	160	199	H
4	* 2.807	36.86	PK2	32.4	-20.6	0	48.66	-	-	74	-25.34	168	182	V
	* 2.807	25.42	MAv1	32.4	-20.6	0	37.22	54	-16.78	-	-	168	182	V
2	* 4.772	39.55	PK2	34.3	-29.4	0	44.45	-	-	74	-29.55	79	171	H
	* 4.771	28.88	MAv1	34.3	-29.4	0	33.78	54	-20.22	-	-	79	171	H
3	* 11.02	35.01	PK2	37.7	-24.3	0	48.41	-	-	74	-25.59	158	104	H
	* 11.019	24.13	MAv1	37.7	-24.3	0	37.53	54	-16.47	-	-	158	104	H
5	* 4.74	41.12	PK2	34.2	-29.5	0	45.82	-	-	74	-28.18	261	230	V
	* 4.742	29.82	MAv1	34.2	-29.5	0	34.52	54	-19.48	-	-	261	230	V
6	* 11.79	34.31	PK2	38.6	-23.6	0	49.31	-	-	74	-24.69	333	212	V
	* 11.79	23.57	MAv1	38.6	-23.6	0	38.57	54	-15.43	-	-	333	212	V

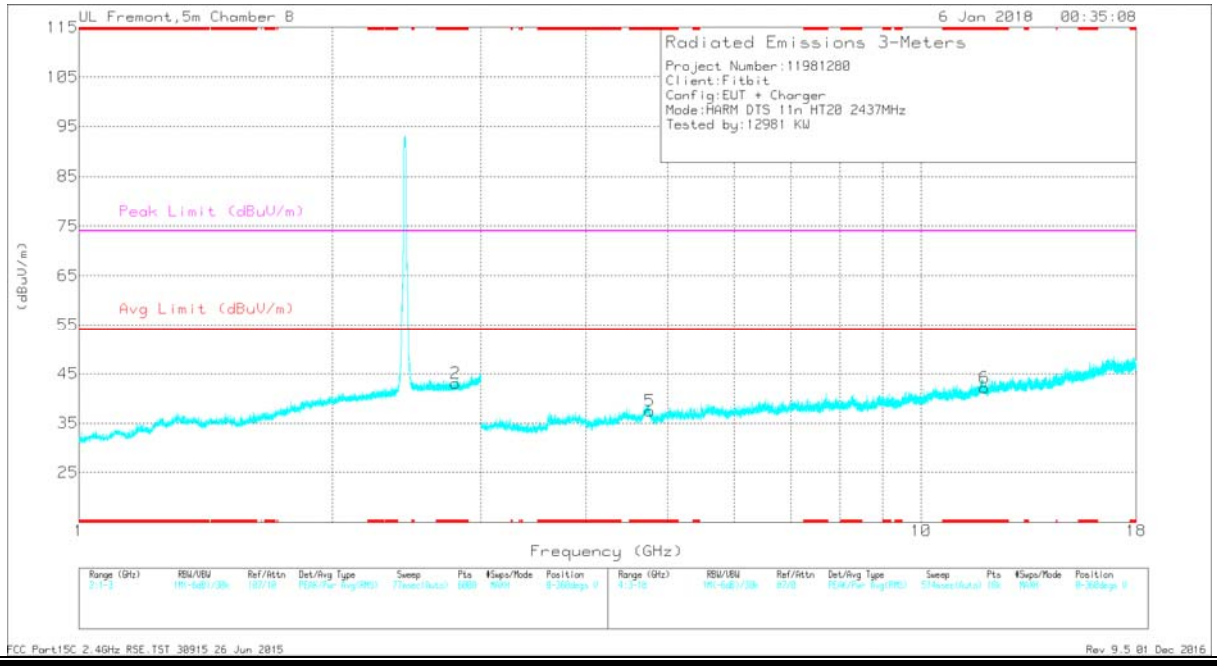
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL, CH 6)

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



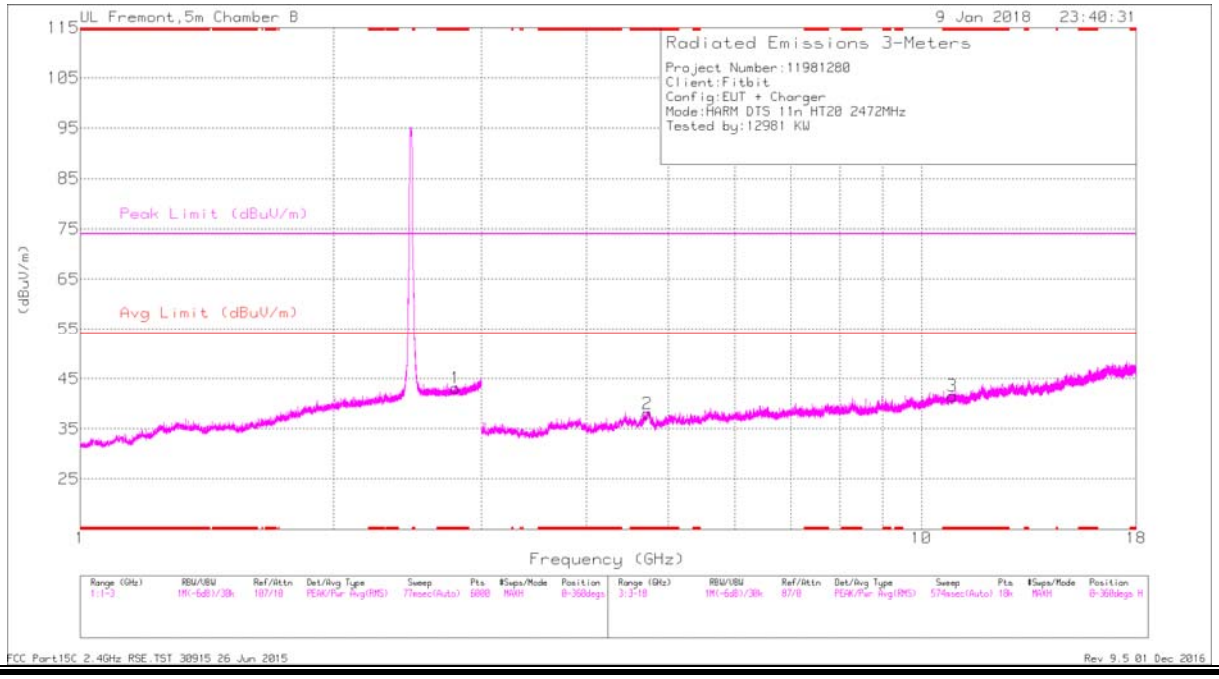
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/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	* 2.799	36.61	PK2	32.4	-20.6	0	48.41	-	-	74	-25.59	162	179	H
	* 2.8	25.39	MAv1	32.4	-20.6	0	37.19	54	-16.81	-	-	162	179	H
2	* 2.799	36.63	PK2	32.4	-20.6	0	48.43	-	-	74	-25.57	58	219	V
	* 2.799	25.37	MAv1	32.4	-20.6	0	37.17	54	-16.83	-	-	58	219	V
3	* 4.755	40.57	PK2	34.3	-29.4	0	45.47	-	-	74	-28.53	268	119	H
	* 4.753	29.34	MAv1	34.3	-29.3	0	34.34	54	-19.66	-	-	268	119	H
4	* 11.57	34.46	PK2	38.2	-24.4	0	48.26	-	-	74	-25.74	167	154	H
	* 11.57	23.64	MAv1	38.2	-24.4	0	37.44	54	-16.56	-	-	167	154	H
5	* 4.76	39.87	PK2	34.3	-29.3	0	44.87	-	-	74	-29.13	99	256	V
	* 4.761	28.93	MAv1	34.3	-29.2	0	34.03	54	-19.97	-	-	99	256	V
6	* 11.891	34.5	PK2	38.7	-24.2	0	49	-	-	74	-25	324	272	V
	* 11.891	23.71	MAv1	38.7	-24.2	0	38.21	54	-15.79	-	-	324	272	V

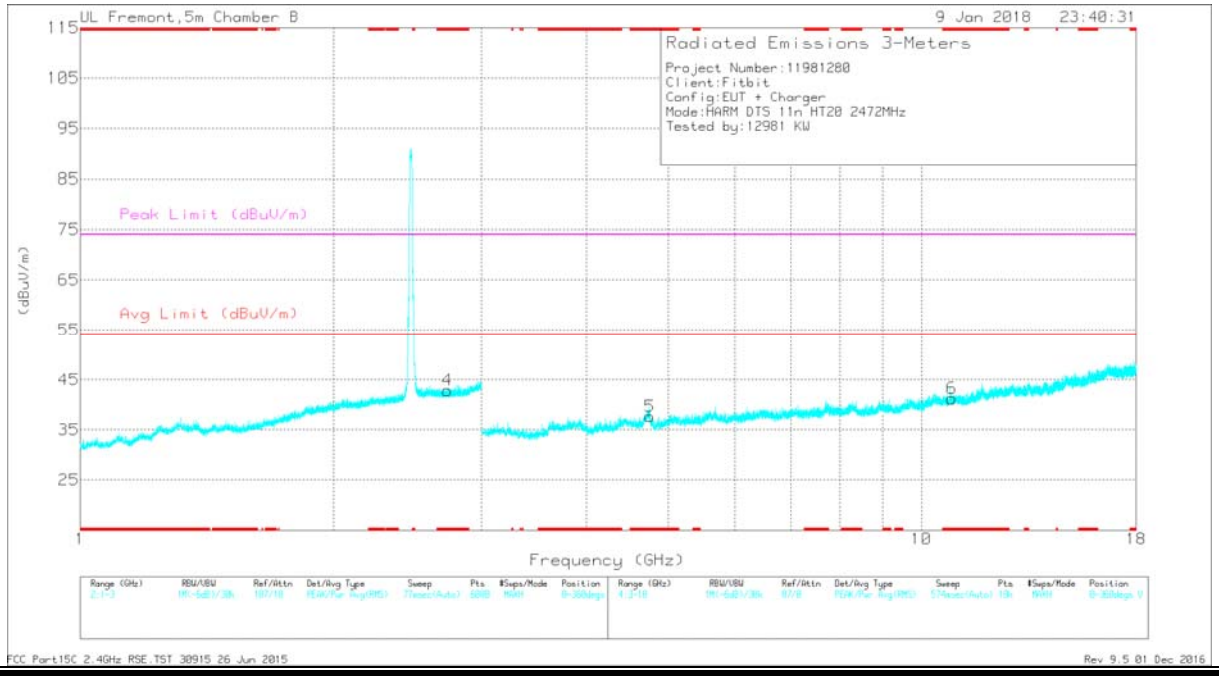
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, CH 13)

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

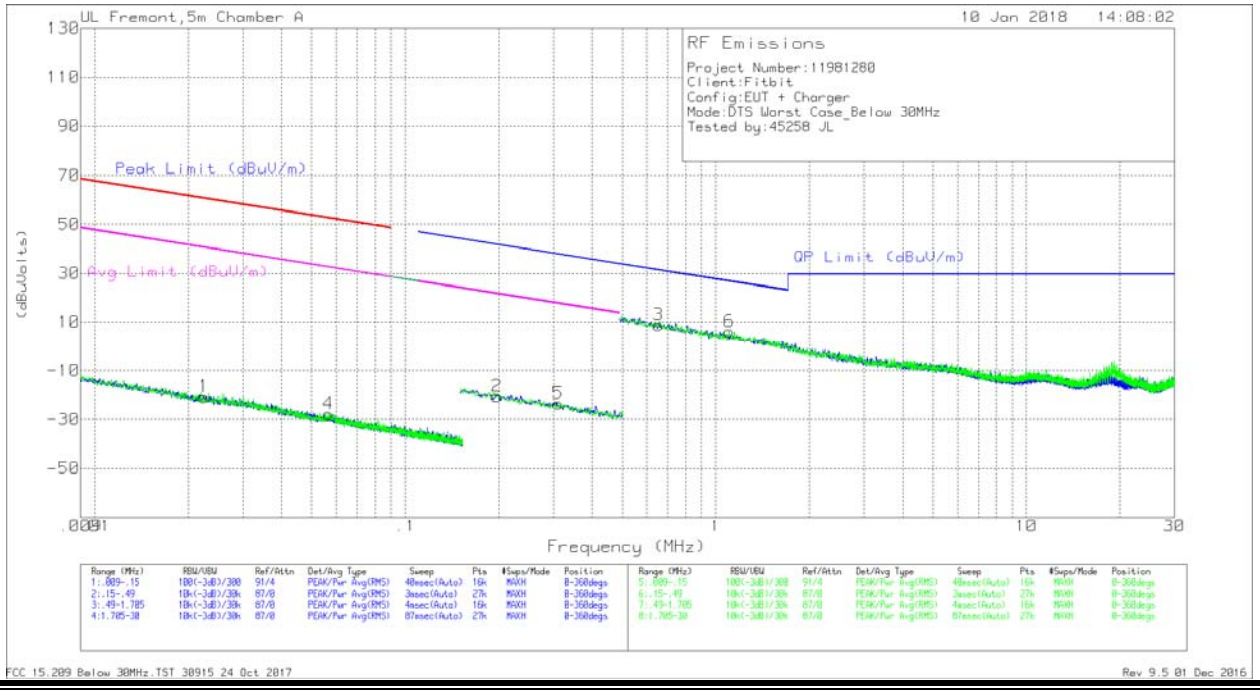
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.796	36.56	PK2	32.4	-20.6	0	48.36	-	-	74	-25.64	92	179	H
	* 2.794	25.27	MAv1	32.4	-20.6	0	37.07	54	-16.93	-	-	92	179	H
4	* 2.735	37.47	PK2	32.3	-20.8	0	48.97	-	-	74	-25.03	110	192	V
	* 2.737	25.28	MAv1	32.3	-20.8	0	36.78	54	-17.22	-	-	110	192	V
2	* 4.726	40.11	PK2	34.2	-29.8	0	44.51	-	-	74	-29.49	254	134	H
	* 4.726	29.29	MAv1	34.2	-29.7	0	33.79	54	-20.21	-	-	254	134	H
3	* 10.887	35.26	PK2	37.7	-24.7	0	48.26	-	-	74	-25.74	91	149	H
	* 10.886	23.78	MAv1	37.7	-24.7	0	36.78	54	-17.22	-	-	91	149	H
5	* 4.757	39.99	PK2	34.3	-29.4	0	44.89	-	-	74	-29.11	312	174	V
	* 4.757	28.8	MAv1	34.3	-29.4	0	33.7	54	-20.3	-	-	312	174	V
6	* 10.865	34.25	PK2	37.7	-24.5	0	47.45	-	-	74	-26.55	150	114	V
	* 10.865	23.9	MAv1	37.7	-24.5	0	37.1	54	-16.9	-	-	150	114	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

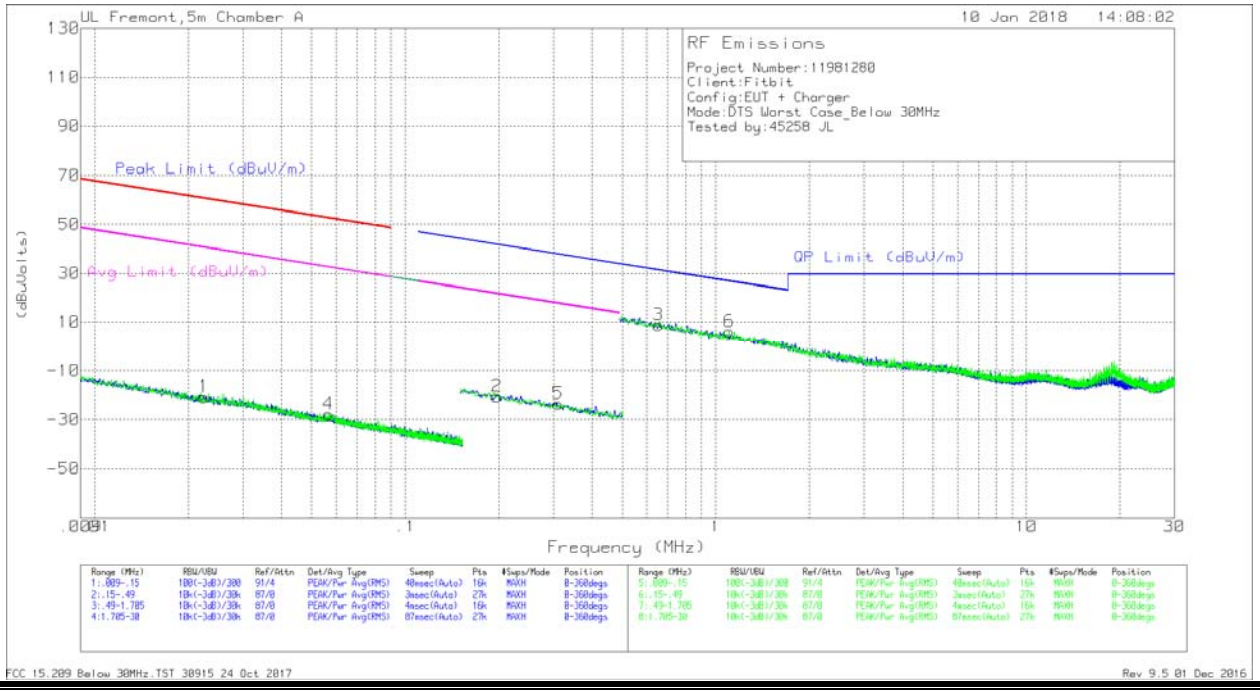
9.3. WORST-CASE BELOW 30MHz

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.02248	44.25	Pk	14.9	.1	-80	-20.75	60.55	-81.3	40.55	-61.3	-	-	-	-	0-360
4	.05651	37.81	Pk	14.4	.1	-80	-27.69	52.54	-80.23	32.54	-60.23	-	-	-	-	0-360
2	.19742	45.34	Pk	13.9	.1	-80	-20.66	-	-	-	-	41.71	-62.37	21.71	-42.37	0-360
5	.31066	42.65	Pk	13.8	.1	-80	-23.45	-	-	-	-	37.77	-61.22	17.77	-41.22	0-360

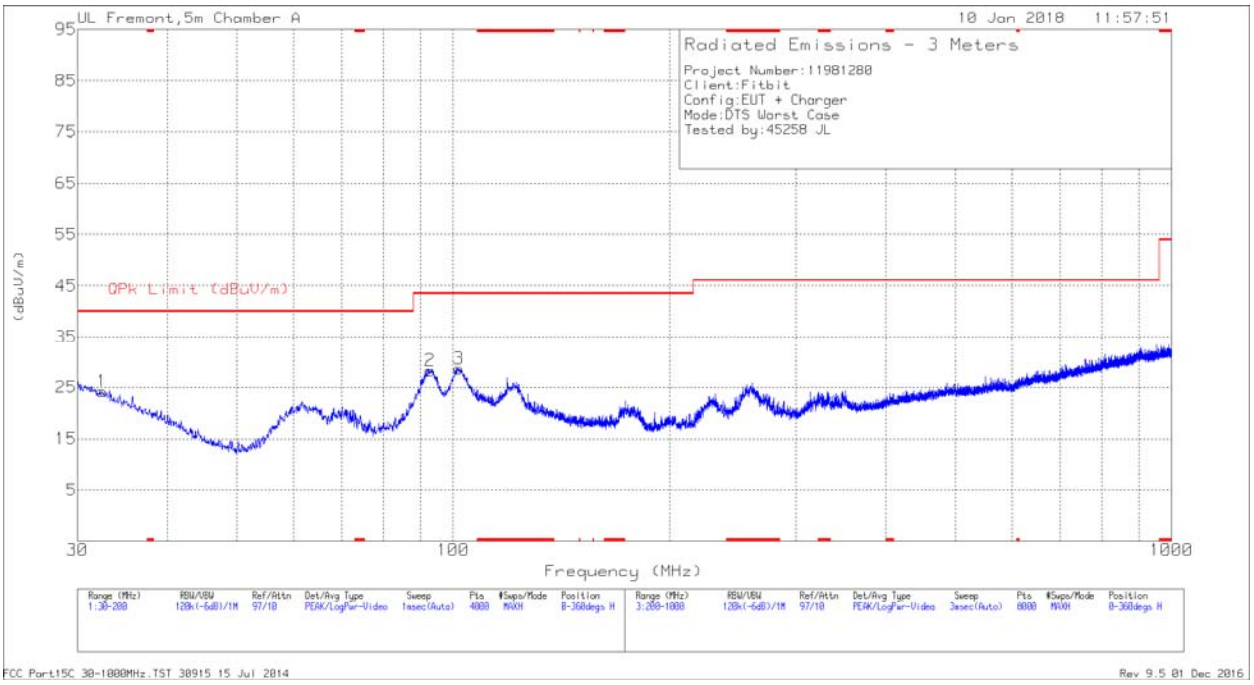
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
3	.65348	34.85	Pk	14	.1	-40	8.95	31.31	-22.36	0-360
6	1.10469	31.76	Pk	14.3	.2	-40	6.26	26.76	-20.5	0-360

Pk - Peak detector

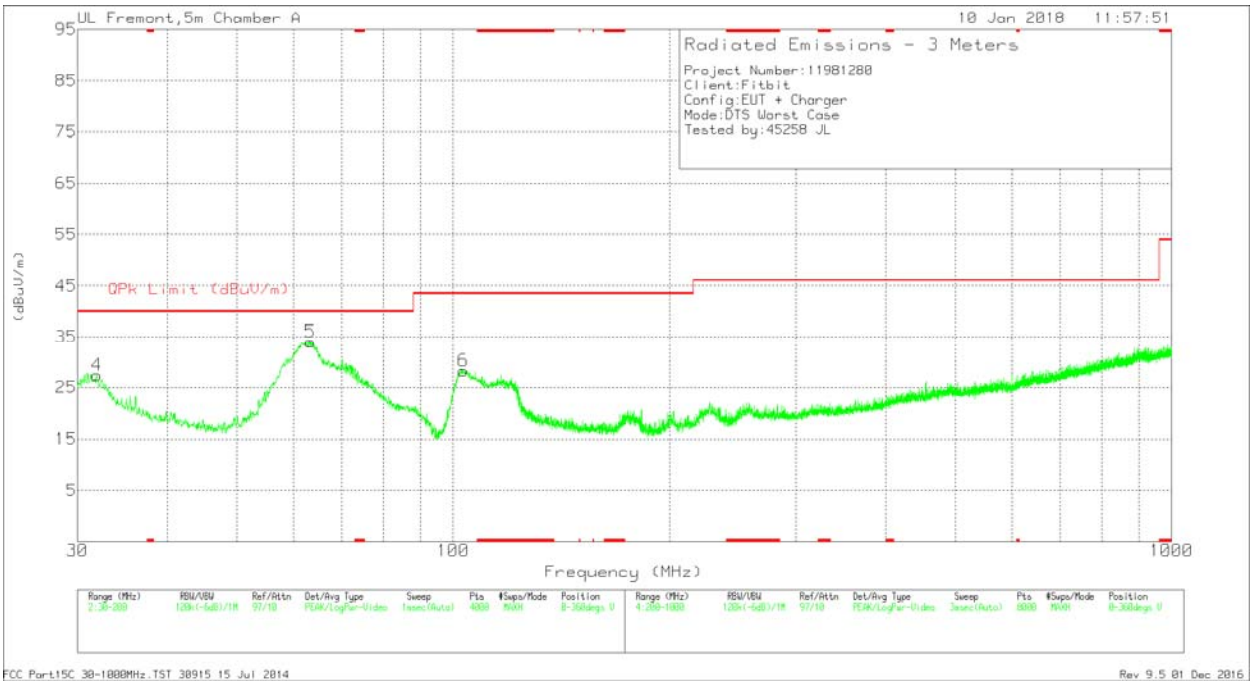
9.4. WORST-CASE 30MHz TO 1GHz

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

HORIZONTAL PLOT



VERTICAL PLOT



DATA

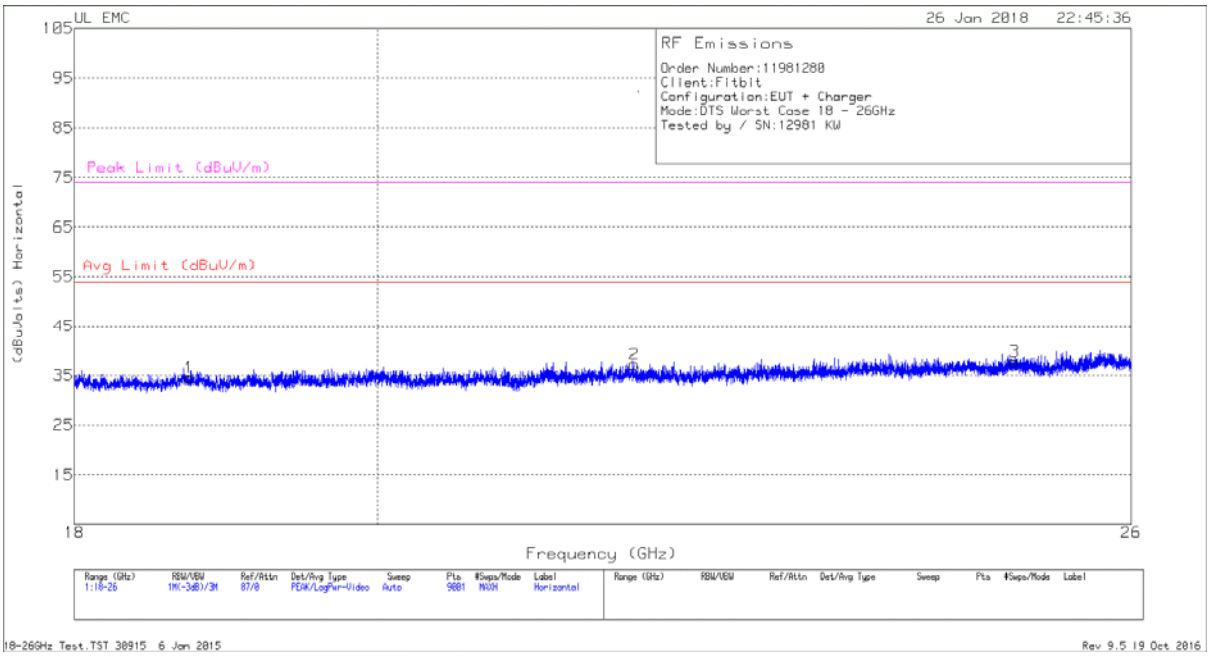
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	31.913	30.91	Pk	23.8	-27.3	27.41	40	-12.59	0-360	100	V
1	32.4656	28.13	Pk	23.4	-27.3	24.23	40	-15.77	0-360	400	H
5	63.2436	48.94	Pk	11.9	-26.8	34.04	40	-5.96	0-360	100	V
	63.3488	39.27	Qp	11.9	-26.8	24.37	40	-15.63	158	112	V
2	92.8738	42.43	Pk	12.3	-26.5	28.23	43.52	-15.29	0-360	200	H
3	101.8861	40.3	Pk	14.8	-26.4	28.7	43.52	-14.82	0-360	300	H
6	103.3315	39.49	Pk	15.2	-26.4	28.29	43.52	-15.23	0-360	100	V

Qp - Quasi-Peak detector
Pk - Peak detector

9.5. WORST-CASE ABOVE 18GHz

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

HORIZONTAL PLOT



VERTICAL PLOT

DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T449 (dB/m)	Amp/Cbl (dB/m)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	18.734	36.13	Pk	32.6	-24.7	-9.5	34.53	54	-19.47	74	-39.47
2	21.87	38.12	Pk	33.3	-24.7	-9.5	37.22	54	-16.78	74	-36.78
3	24.964	37.5	Pk	34.1	-24.3	-9.5	37.8	54	-16.2	74	-36.2
4	18.674	38.14	Pk	32.5	-24.7	-9.5	36.44	54	-17.56	74	-37.56
5	20.851	38.07	Pk	32.6	-25.4	-9.5	35.77	54	-18.23	74	-38.23
6	24.295	38.57	Pk	33.6	-24.2	-9.5	38.47	54	-15.53	74	-35.53

Pk - Peak detector