FCC CFR47 PART 15 SUBPART C
CERTIFICATION TEST REPORT

FOR

TABLET WITH CELLULAR GSM/GPRS/EGPRS/WCDMA/HSPA+/DC-HSDPA/LTE IEEE 802.11A/B/G/N (MIMO 2X2) AND BLUETOOTH RADIO

Model: A1476

FCC ID: BCGA1476

REPORT NUMBER: 13U16584-5, Revision A

ISSUE DATE: FEBRUARY 21, 2014

Prepared for
APPLE, INC.
1 INFINITE LOOP
CUPERTINO, CA 95014, U.S.A.

Prepared by
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
---	02/15/14	Initial Issue	T. Chan
---	02/21/14	Addressed TCB's Questions	T. Chan

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: APPLE, INC.
1 INFINITE LOOP
CUPERTINO, CA 95014, U.S.A.

EUT DESCRIPTION: TABLET WITH CELLULAR GSM/GPRS/EGPRS/WCDMA/HSPA+/DC-HSDPA/LTE IEEE 802.11A/B/G/N (MIMO 2X2) AND BLUETOOTH RADIO

MODEL: A1476

SERIAL NUMBER: DLXLP024FVJ0

DATE TESTED: AUGUST 20 – AUGUST 28, 2013 AND FEBRUARY 14, 2014

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	Pass

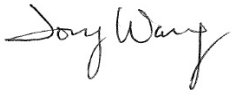
UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services based on interpretations and/or observations of test results. Measurement Uncertainties 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 and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services 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 any government.

Approved & Released For
UL Verification Services Inc. By:

Thu Chan
WiSE Operations Manager
UL Verification Services Inc.

Tested By:



TONY WANG
WiSE Lab Technician
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2009, FCC CFR 47 Part 2, FCC CFR 47 Part 15.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

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	☐ Chamber D
☐ Chamber B	☒ Chamber E
☐ Chamber C	☒ Chamber F

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

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, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

Tablet with cellular GSM/GPRS/EGPRS/WCDMA/HSPA+/DC-HSDPA, LTE/IEEE 802.11a/b/g/n (MIMO 2x2) and Bluetooth radio

5.2. MAXIMUM OUTPUT POWER

Please refer to project number 13U15555-10, Section 5.2:

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PiFA antenna, with a maximum gain as below table.

Frequency (MHz)	Antenna Gain (dBi)
2402 -2480	0.5

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was Broadcom Bluetool 1.5.6.2.

5.5. WORST-CASE CONFIGURATION AND MODE

There are two vendors of the WiFi/Bluetooth radio modules: BOM #1, vender1 and BOM #2, vender 2, and they have the same mechanical outline, same on board antenna, matching circuit, antenna structure and same specification and baseline was performed on both venders to determine the worst case.

The EUT is a portable device that has three orientations; therefore, X (Lay down), Y (Landscape) and Z orientations (Standup) have been investigated, and the worst case was found to be at X (Lay down) position without AC Adapter and Headset.

Worst-case data rates from the base line scans of output powers were:
GFSK: 1Mbps
8PSK: 3Mbps

The worst-case mode and channel used for 30-1000 MHz radiated and power line conducted emissions was including headset, AC charger and the mode and channel with the highest output power.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC/DC adapter	Apple	A1401	60812	NA
Earphone	Apple	NA	NA	NA

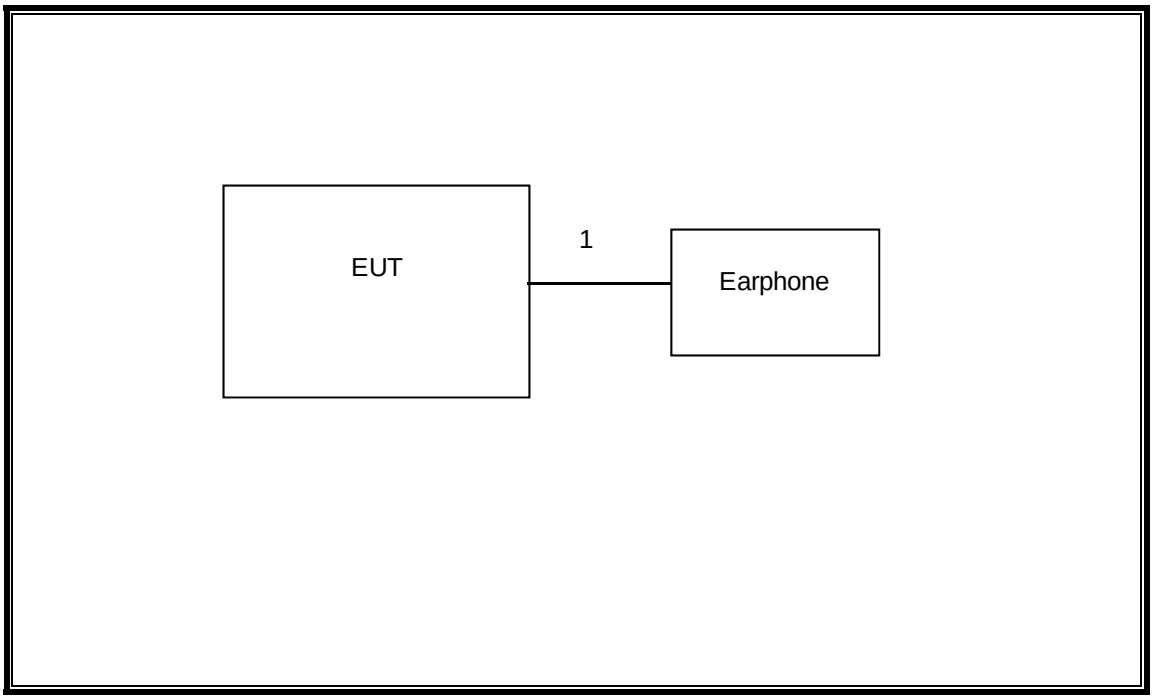
I/O CABLES (RADIATED TEST)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	Audio	1	Jack	Un-Shielded	0.5m	NA

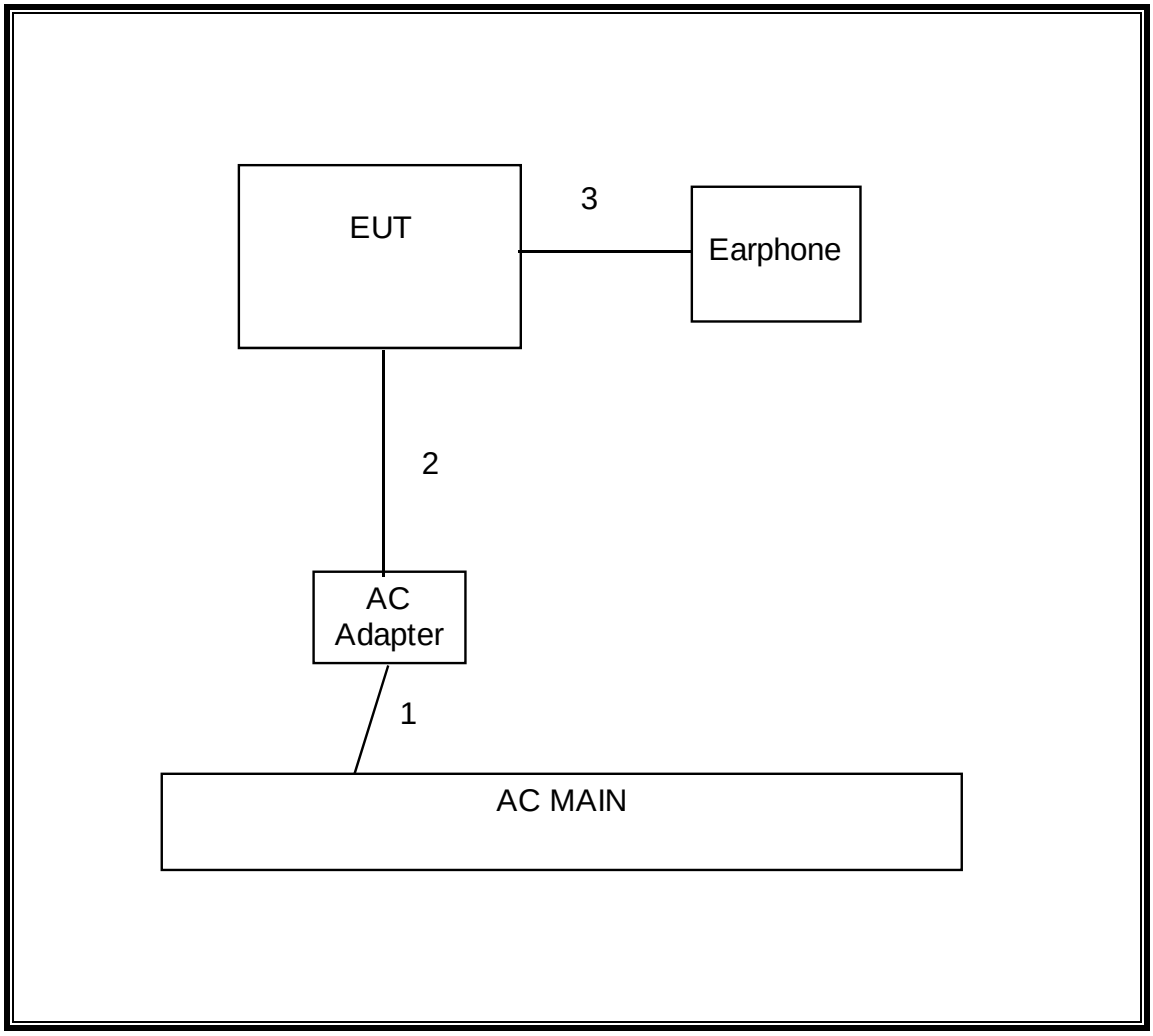
I/O CABLES (RADITED BELOW 1GHz TEST)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	1	US115	Un-Shielded	2m	NA
2	DC	1	USB	Un-Shielded	2m	NA
3	Audio	1	Jack	Un-Shielded	0.5m	NA

ETUP DIAGRAM FOR RADIATED TESTS



SETUP DIAGRAM FOR BELOW 1GHz TEST



6. TEST AND MEASUREMENT EQUIPMENT

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

Description	Manufacturer	Model	Asset	Cal Due
Horn Antenna 1-18GHz	ETS Lindgren	3117	F00131	02/18/15
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00580	06/26/14
Antenna, Horn, 26.5 GHz	ARA	SWH-28	C01015	05/06/14
Antenna, Biconolog, 30MHz-1 GHz	Sunol Sciences	JB3	F00027	03/07/14
LISN, 30 MHz	FCC	LISN-50/250-25-2	N02625	01/17/15
Peak / Average Power Sensor	Agilent / HP	E9323A	F00026	04/03/14
P-Series single channel Power Meter	Agilent / HP	N1911A	F00153	04/05/14
Spectrum Analyzer, 44GHz	Agilent	E4446A	C01159	04/10/14
Spectrum Analyzer, 44GHz	Agilent	N9030A	F00129	02/22/14
PreApmplifier, 1-26.5GHz	Agilent	8449B	C01052	06/26/14
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/09/14

7. ANTENNA PORT TEST RESULTS

Note that for all antenna port data refer to the FCC BLUETOOTH report with the FCC ID BCGA1475 and project number 13U15555-10 from Section 7.1. to 7.7.

8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
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. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. 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 measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

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.

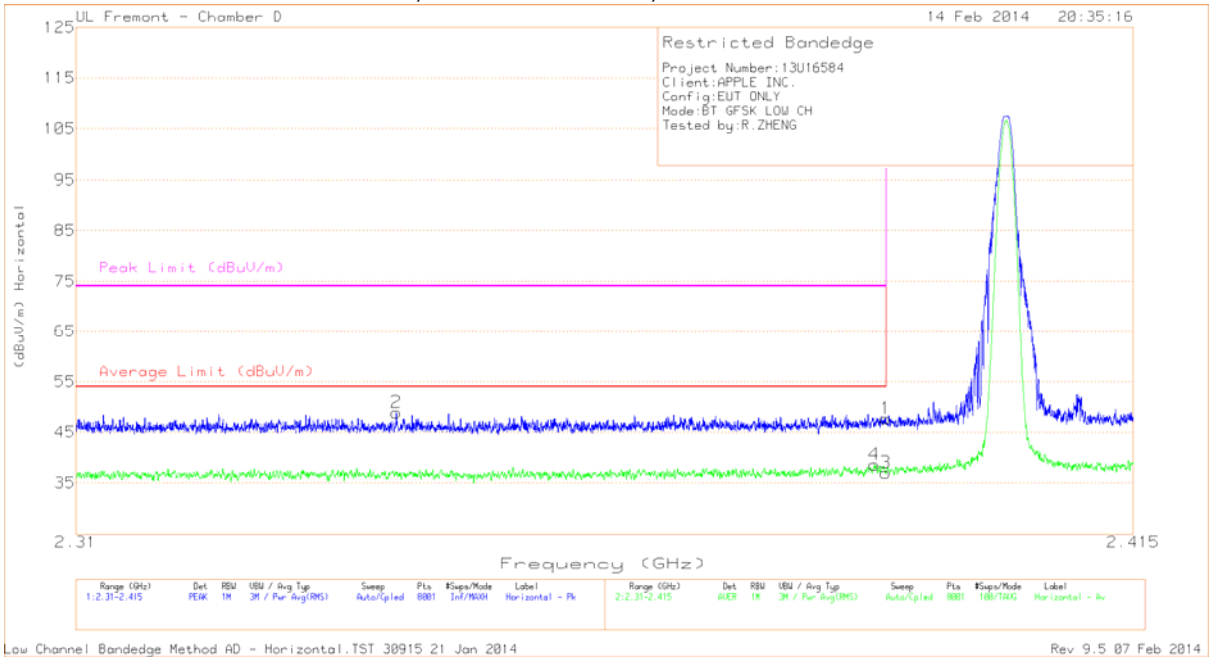
RESULTS

8.2. TRANSMITTER ABOVE 1 GHz

8.2.1. BASIC DATA RATE GFSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK AND AVG, HORIZ

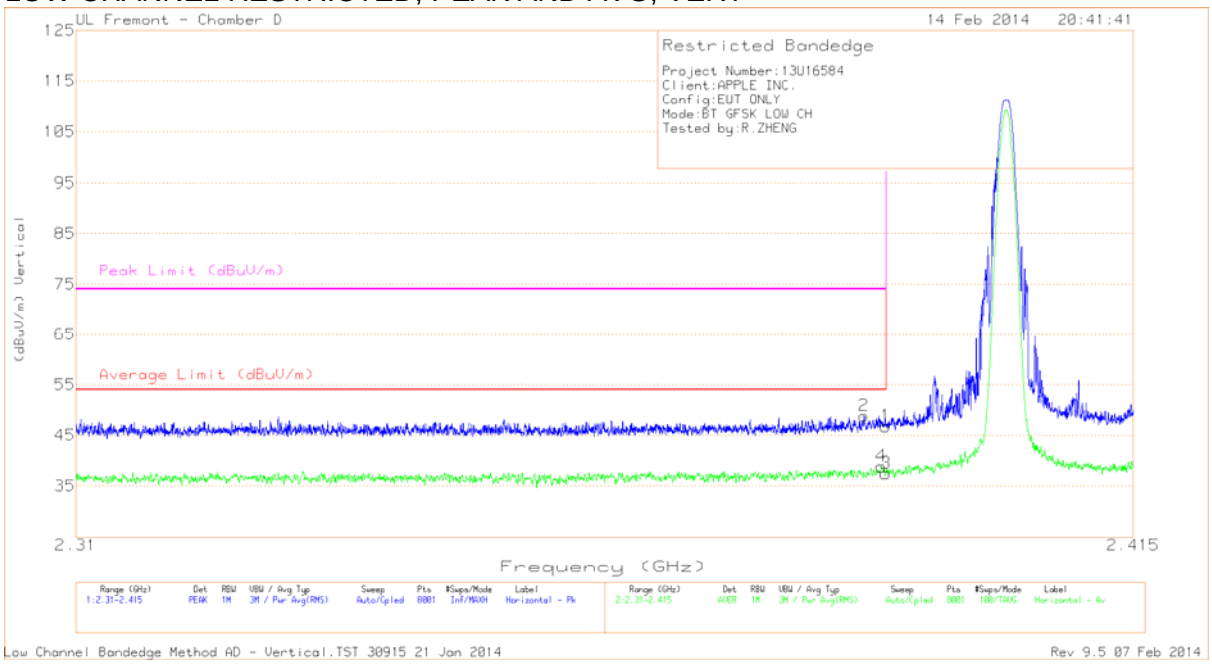


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	PK Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.390	36.80	PK	31.5	-20.6	47.70	-	-	74	-26.30	77	175	H
2	2.341	38.50	PK	31.2	-20.8	48.90	-	-	74	-25.10	77	175	H
3	2.390	26.08	RMS	31.5	-20.6	36.98	54	-17.02	-	-	77	175	H
4	2.389	27.67	RMS	31.5	-20.6	38.57	54	-15.43	-	-	77	175	H

PK - Peak detector
RMS - RMS detection

LOW CHANNEL RESTRICTED, PEAK AND AVG, VERT

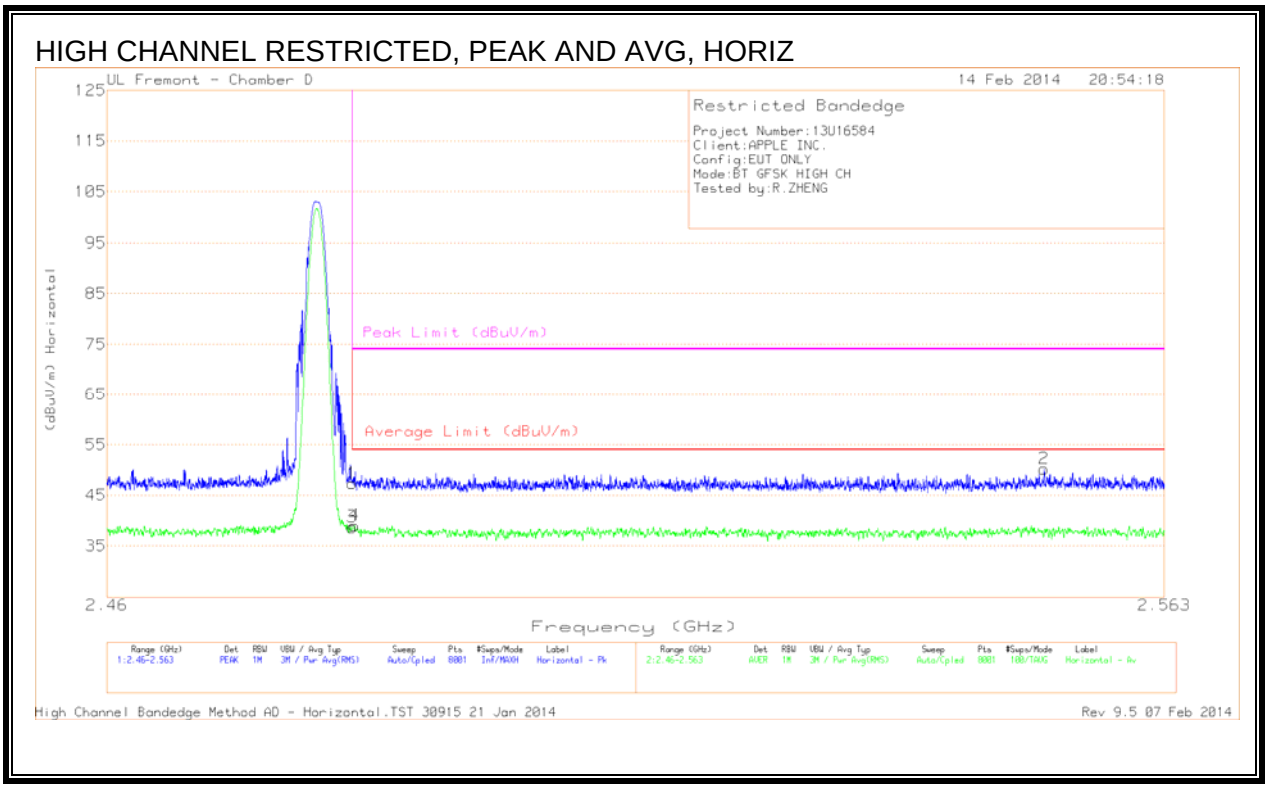


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (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	2.390	35.89	PK	31.5	-20.6	46.79	-	-	74	-27.21	39	282	V
2	2.388	37.95	PK	31.5	-20.6	48.85	-	-	74	-25.15	39	282	V
3	2.390	26.56	RMS	31.5	-20.6	37.46	54	-16.54	-	-	39	282	V
4	2.390	27.92	RMS	31.5	-20.6	38.82	54	-15.18	-	-	39	282	V

PK - Peak detector
RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL)

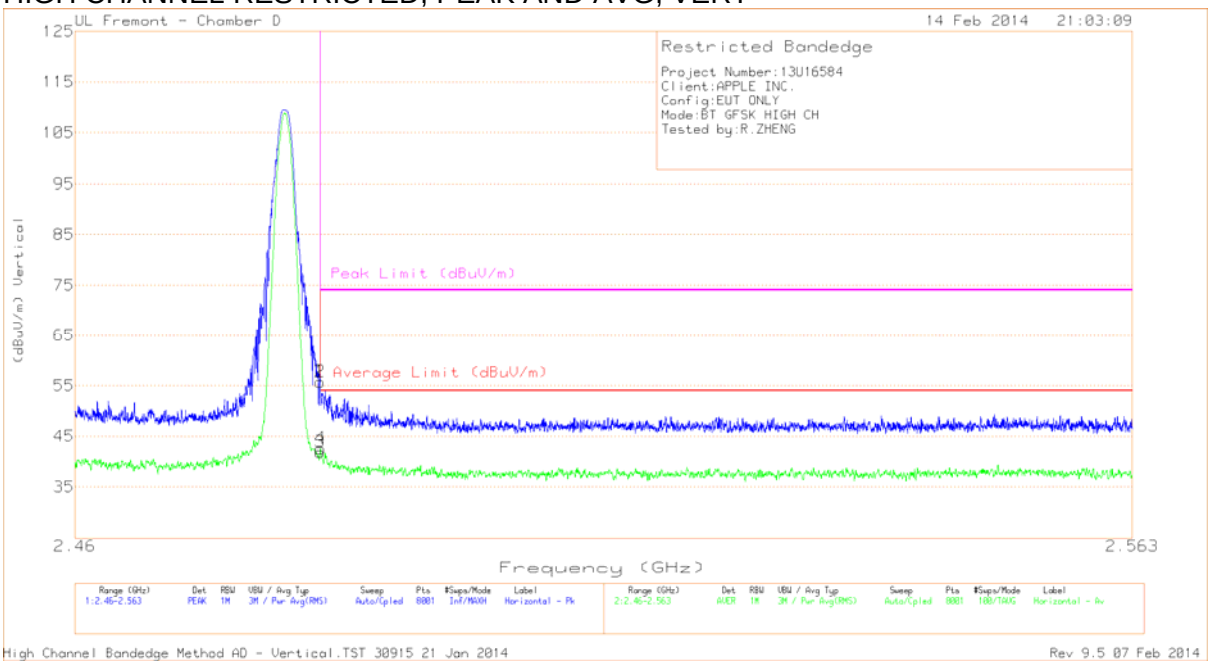


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (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	35.80	PK	32.1	-20.6	47.30	-	-	74	-26.70	274	314	H
2	2.551	38.33	PK	32.1	-20.2	50.23	-	-	74	-23.77	274	314	H
3	2.484	27.20	RMS	32.1	-20.6	38.70	54	-15.30	-	-	274	314	H
4	2.484	27.53	RMS	32.1	-20.6	39.03	54	-14.97	-	-	274	314	H

PK - Peak detector
RMS - RMS detection

HIGH CHANNEL RESTRICTED, PEAK AND AVG, VERT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (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	44.22	PK	32.1	-20.6	55.72	-	-	74	-18.28	31	209	V
2	2.484	44.22	PK	32.1	-20.6	55.72	-	-	74	-18.28	31	209	V
3	2.484	30.38	RMS	32.1	-20.6	41.88	54	-12.12	-	-	31	209	V
4	2.484	31.06	RMS	32.1	-20.6	42.56	54	-11.44	-	-	31	209	V

PK - Peak detector
RMS - RMS detection

8.2.2. ENHANCED DATA RATE 8PSK MODULATION

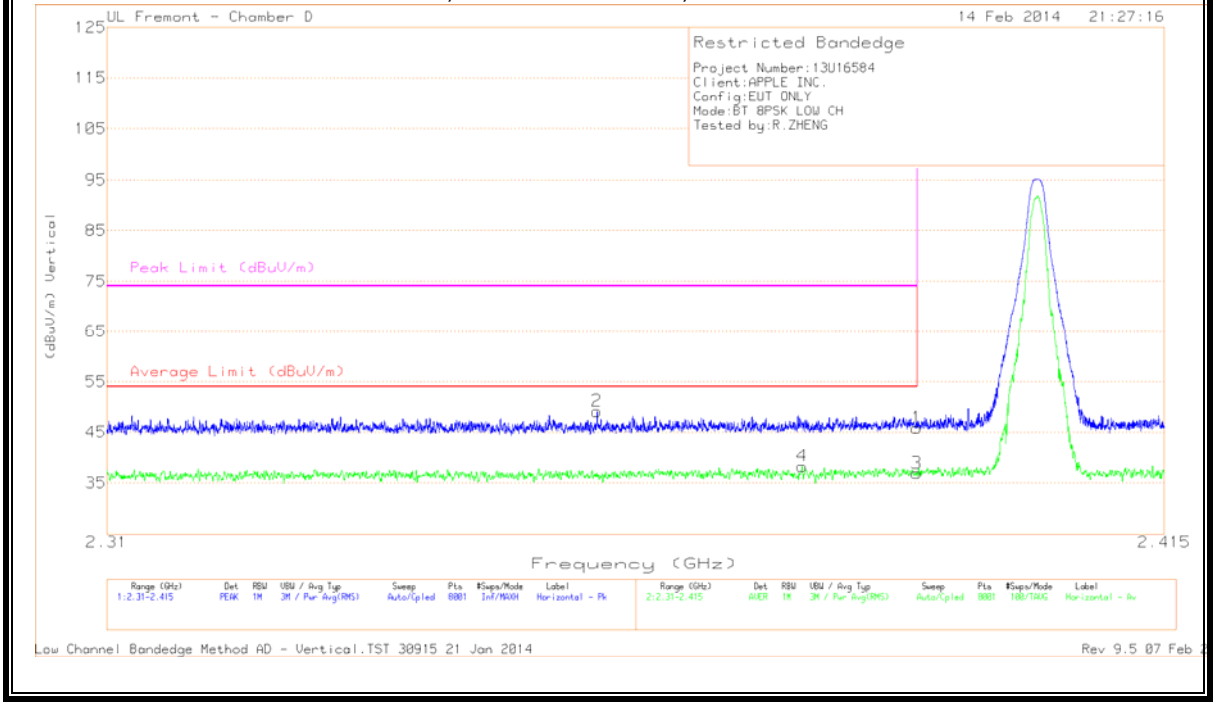
LOW CHANNEL RESTRICTED, PEAK AND AVG, HORIZ

DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (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	2.390	35.11	PK	31.5	-20.6	46.01	-	-	74	-27.99	287	154	H
2	2.388	37.85	PK	31.5	-20.6	48.75	-	-	74	-25.25	287	154	H
3	2.390	25.91	RMS	31.5	-20.6	36.81	54	-17.19	-	-	287	154	H
4	2.388	27.64	RMS	31.5	-20.6	38.54	54	-15.46	-	-	287	154	H

PK - Peak detector
RMS - RMS detection

LOW CHANNEL RESTRICTED, PEAK AND AVG, VERK



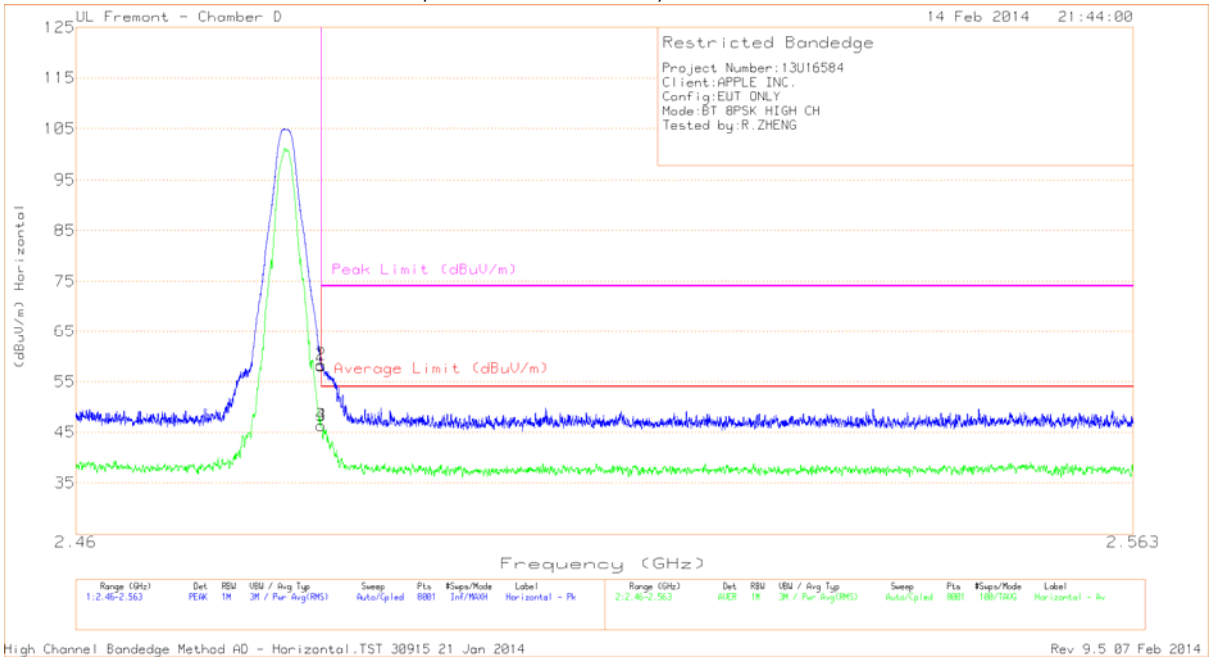
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (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	2.390	34.95	PK	31.5	-20.6	45.85	-	-	74	-28.15	307	271	V
2	2.358	38.63	PK	31.3	-20.8	49.13	-	-	74	-24.87	307	271	V
3	2.390	25.96	RMS	31.5	-20.6	36.86	54	-17.14	-	-	307	271	V
4	2.379	27.58	RMS	31.4	-20.7	38.28	54	-15.72	-	-	307	271	V

PK - Peak detector
RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL RESTRICTED, PEAK AND AVG, HORIZ

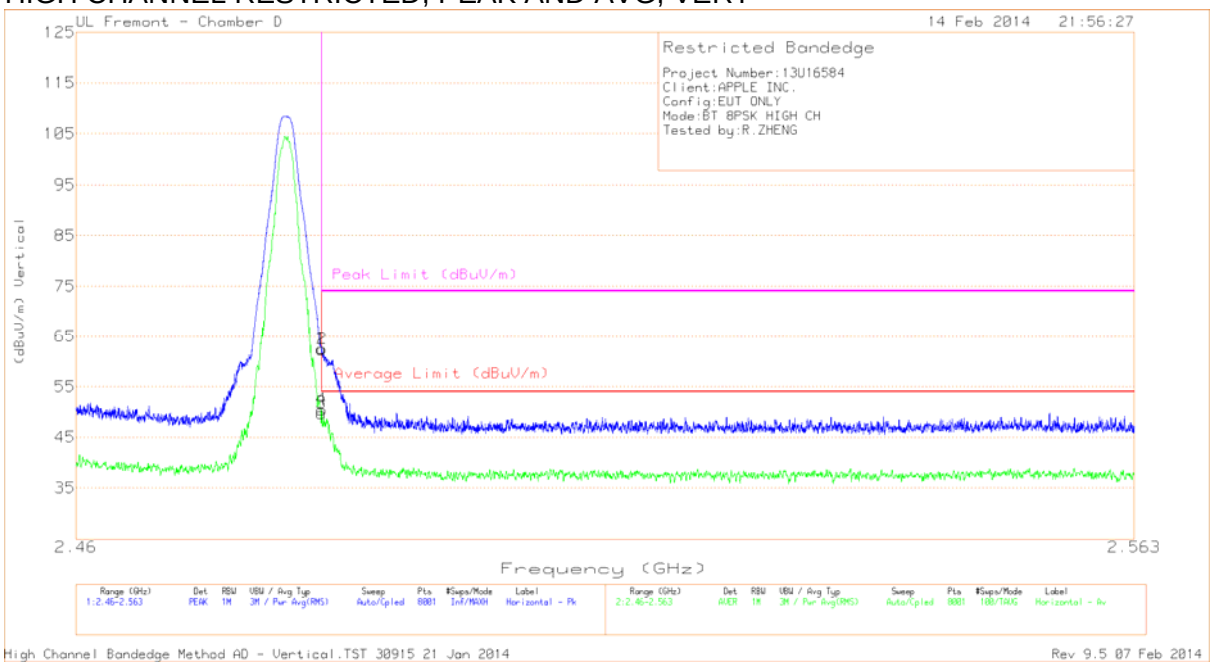


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (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	46.63	PK	32.1	-20.6	58.13	-	-	74	-15.87	75	215	H
2	2.484	46.81	PK	32.1	-20.6	58.31	-	-	74	-15.69	75	215	H
3	2.484	34.83	RMS	32.1	-20.6	46.33	54	-7.67	-	-	75	215	H
4	2.484	34.83	RMS	32.1	-20.6	46.33	54	-7.67	-	-	75	215	H

PK - Peak detector
RMS - RMS detection

HIGH CHANNEL RESTRICTED, PEAK AND AVG, VERT



DATA

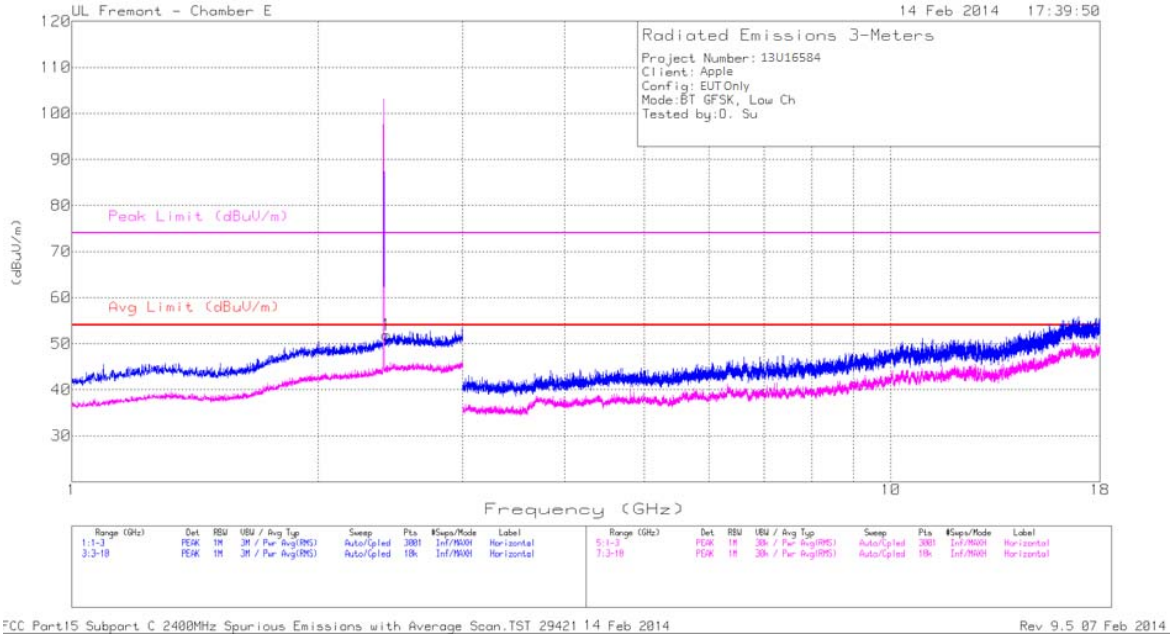
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T712 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.484	50.93	PK	32.1	-20.6	62.43	-	-	74	-11.57	32	260	V
2	2.484	51.00	PK	32.1	-20.6	62.50	-	-	74	-11.50	32	260	V
3	2.484	38.26	RMS	32.1	-20.6	49.76	54	-4.24	-	-	32	260	V
4	2.484	38.93	RMS	32.1	-20.6	50.43	54	-3.57	-	-	32	260	V

PK - Peak detector
RMS - RMS detection

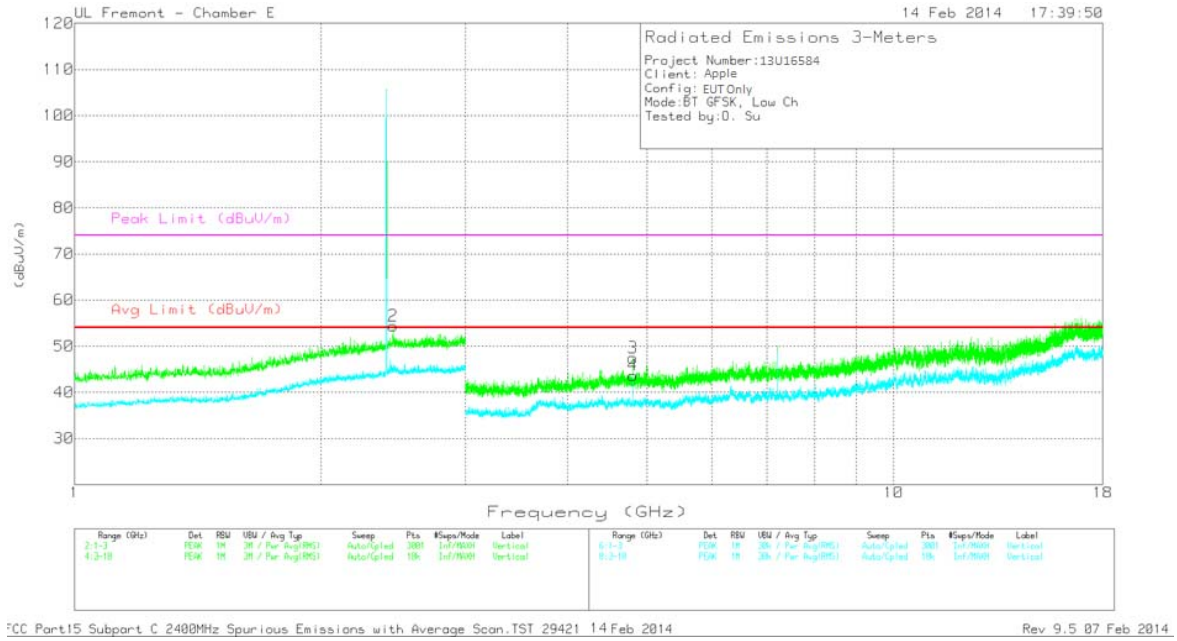
GFSK HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/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	2.425	44.18	PK	32.6	-24.9	51.88	-	-	-	-	0-360	199	H
2	2.448	46.47	PK	32.7	-24.8	54.37	-	-	-	-	0-360	200	V
3	* 4.805	43.84	PK	34.5	-30.9	47.44	54	-6.56	74	-26.56	0-360	200	V
4	* 4.804	40.07	Avg	34.5	-30.9	43.67	54	-10.33	-	-	0-360	200	V

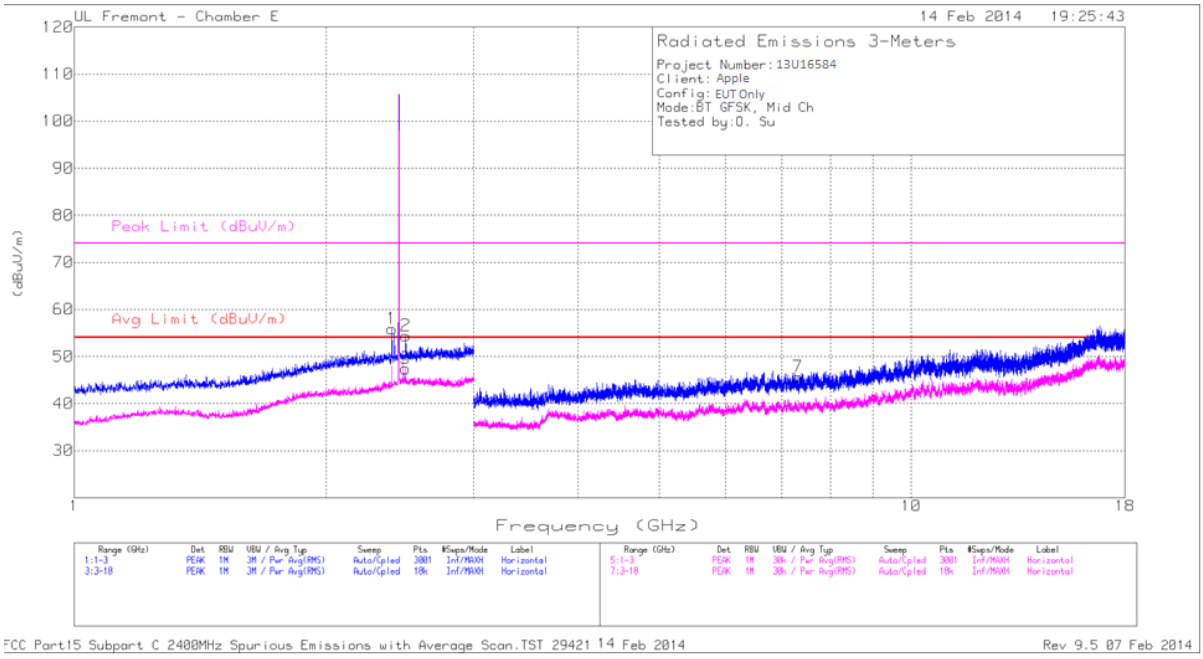
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

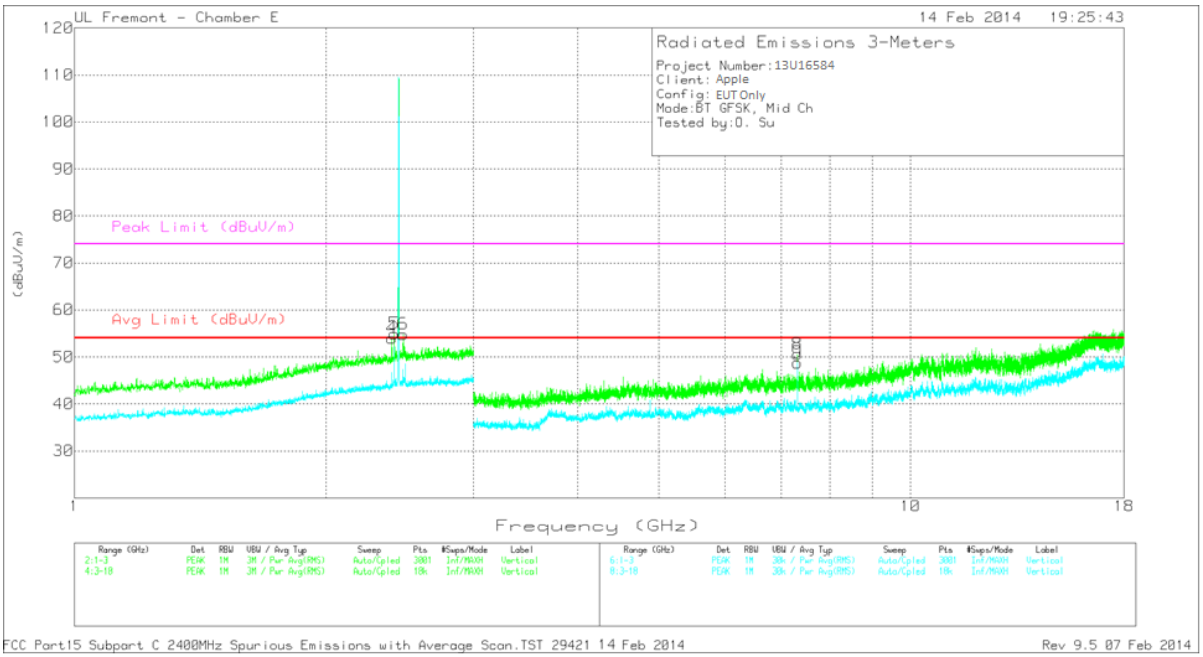
Avg - Video bandwidth < Resolution bandwidth

MID CHANNEL

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/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	2.397	48.19	PK	32.6	-24.9	55.89	-	-	-	-	0-360	101	H
2	* 2.489	46.19	PK	32.7	-24.5	54.39	-	-	74	-19.61	0-360	199	H
3	* 2.487	39.25	Avg	32.7	-24.5	47.45	54	-6.55	-	-	0-360	101	H
4	2.397	46.28	PK	32.6	-24.9	53.98	-	-	-	-	0-360	200	V
5	2.413	47.01	PK	32.6	-24.7	54.91	-	-	-	-	0-360	200	V
6	2.473	46.53	PK	32.7	-24.4	54.83	-	-	-	-	0-360	200	V
7	* 7.324	37.37	PK	35.9	-27.6	45.67	54	-8.33	74	-28.33	0-360	101	H
8	* 7.323	43.81	PK3	35.9	-27.6	52.11	-	-	74	-21.89	13	185	V
9	* 7.323	36.46	VB10	35.9	-27.6	44.76	54	-9.24	-	-	13	185	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

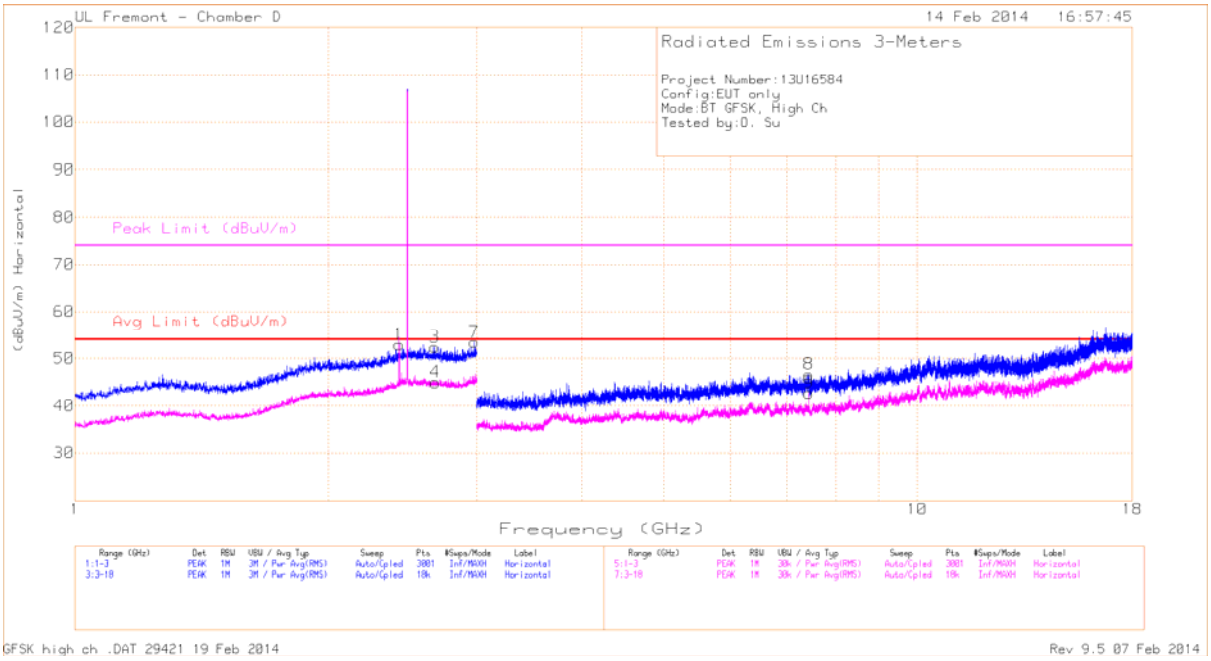
Avg - Video bandwidth < Resolution bandwidth

PK3 - FHSS Method: Maximum Peak

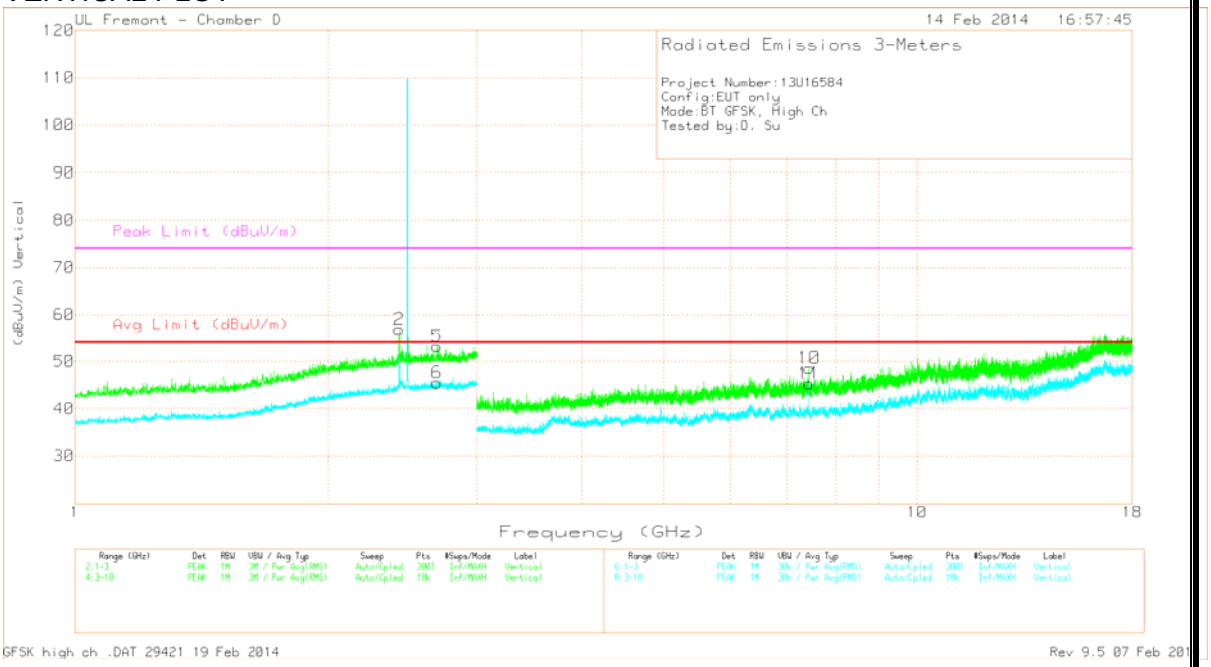
VB10Hz - FHSS Method: 10Hz Video Bandwidth

HIGH CHANNEL

HORIZONTAL PLOT



VERTICAL PLOT



DATA

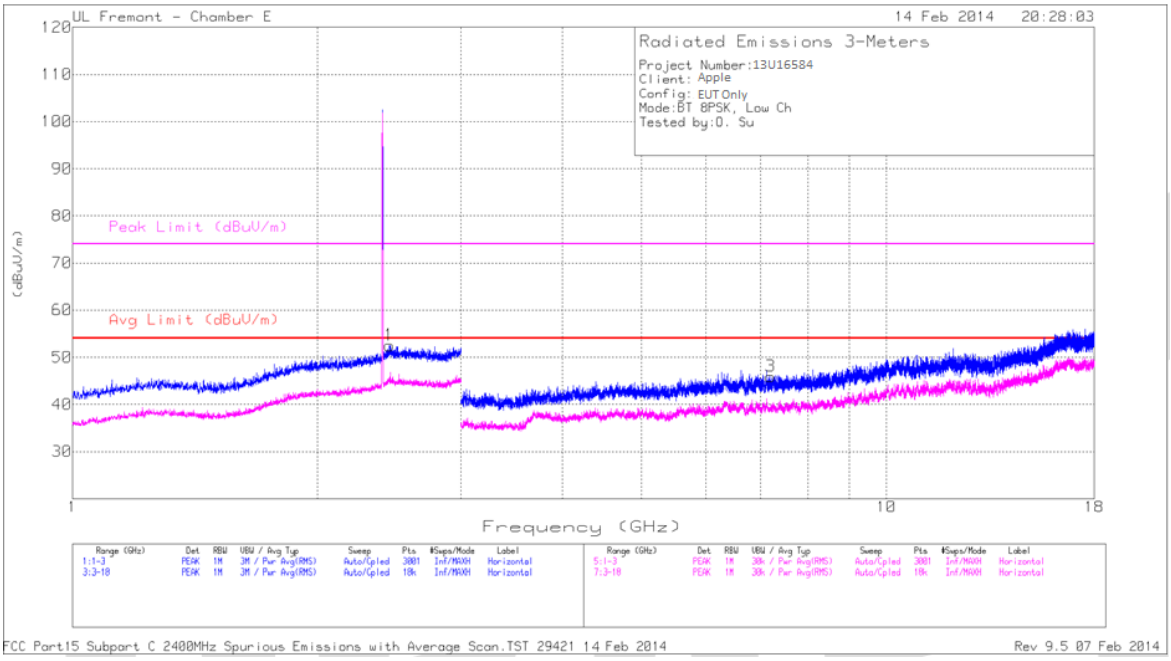
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.426	45.22	PK	32.6	-24.9	52.92	-	-	-	-	0-360	101	H
2	2.427	49.16	PK	32.6	-24.9	56.86	-	-	-	-	0-360	101	V
3	* 2.674	43.9	PK	32.8	-24.3	52.4	-	-	74	-21.6	0-360	101	H
4	* 2.674	36.42	Avg	32.8	-24.3	44.92	54	-9.08	-	-	0-360	199	H
5	* 2.691	44.51	PK	32.8	-24.1	53.21	-	-	74	-20.79	0-360	101	V
6	* 2.691	36.75	Avg	32.8	-24.1	45.45	54	-8.55	-	-	0-360	200	V
7	2.98	44.47	PK	33	-24	53.47	-	-	-	-	0-360	200	H
8	* 7.44	39.39	PK	35.8	-28.6	46.59	54	-7.41	74	-27.41	0-360	200	H
9	* 7.44	35.46	Avg	35.8	-28.6	42.66	54	-11.34	-	-	0-360	199	H
10	* 7.44	39.72	PK2	35.8	-28.6	46.92	54	-7.08	74	-27.08	10	175	V
11	* 7.44	32.23	MAv 1	35.8	-28.6	39.43	54	-14.57	-	-	10	175	V

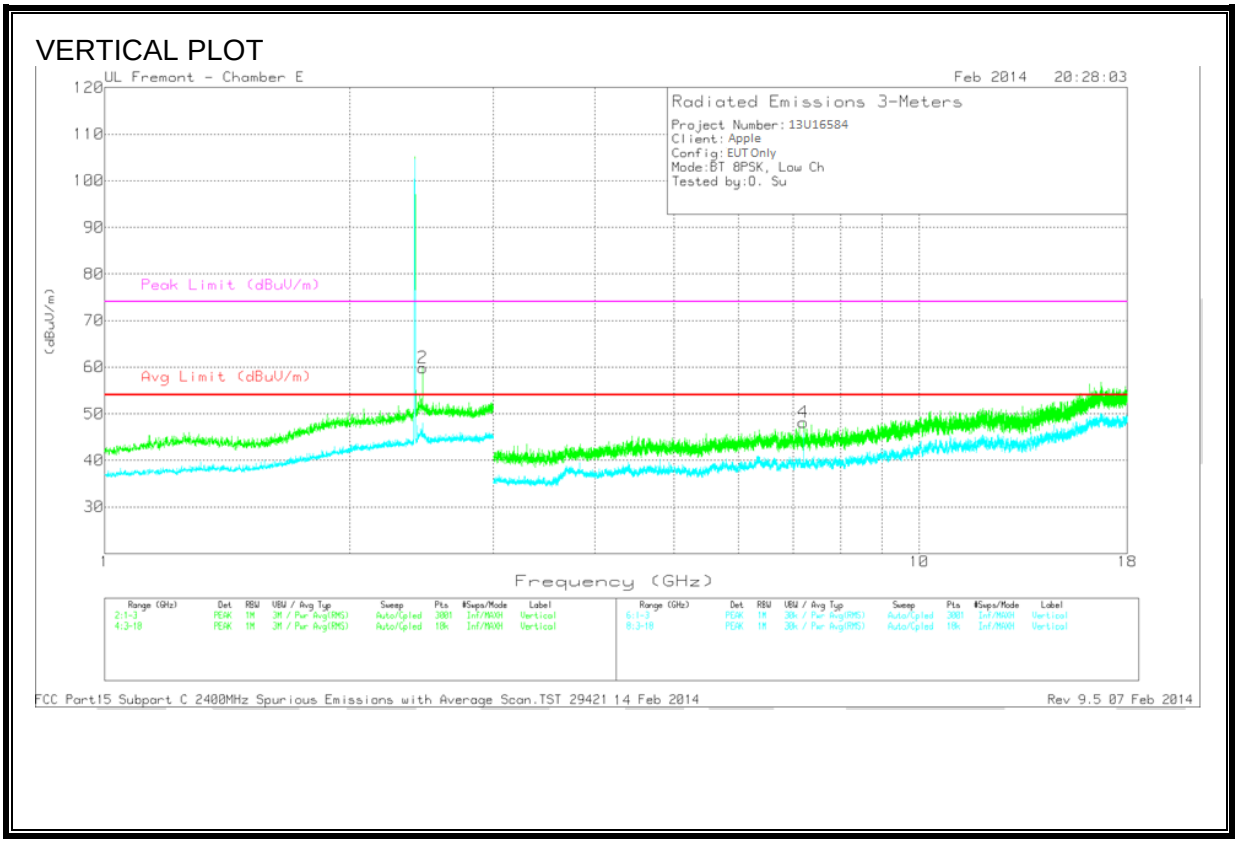
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector
Avg - Video bandwidth < Resolution bandwidth
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

8PSK HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL

HORIZONTAL PLOT





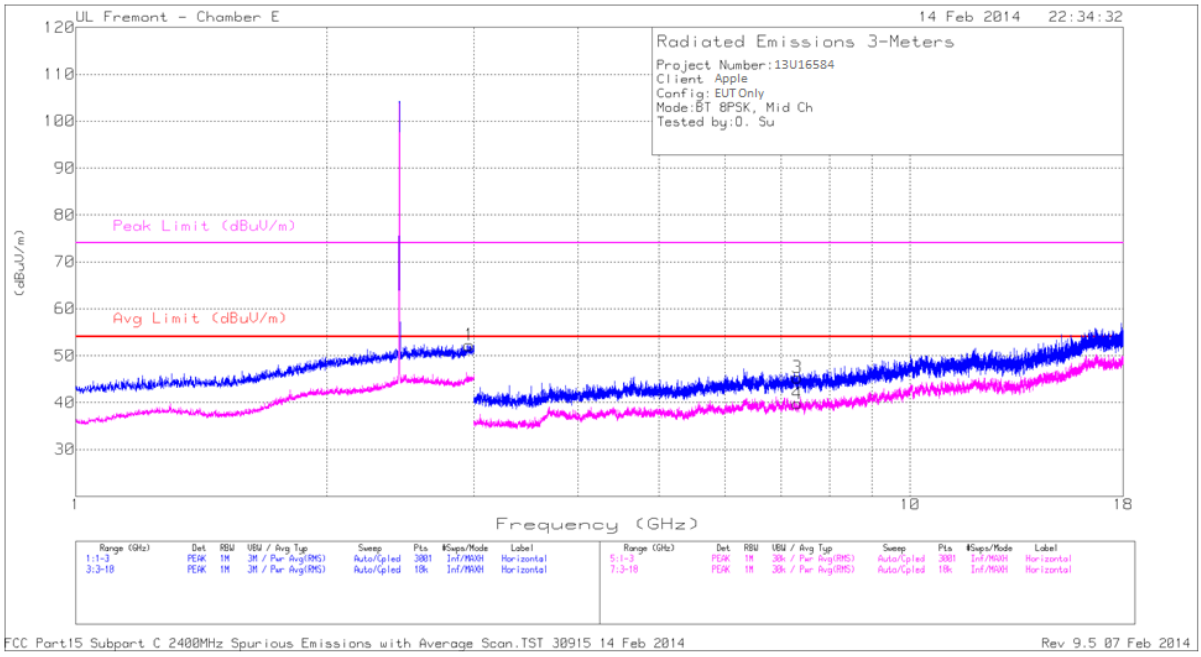
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/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	2.451	44.5	PK	32.7	-24.7	52.50	-	-	-	-	0-360	199	H
2	2.458	51.74	PK	32.7	-24.6	59.84	-	-	-	-	0-360	200	V
3	7.203	38.72	PK	35.9	-28.7	45.92	-	-	-	-	0-360	101	H
4	7.206	40.95	PK	35.9	-28.7	48.15	-	-	-	-	0-360	200	V

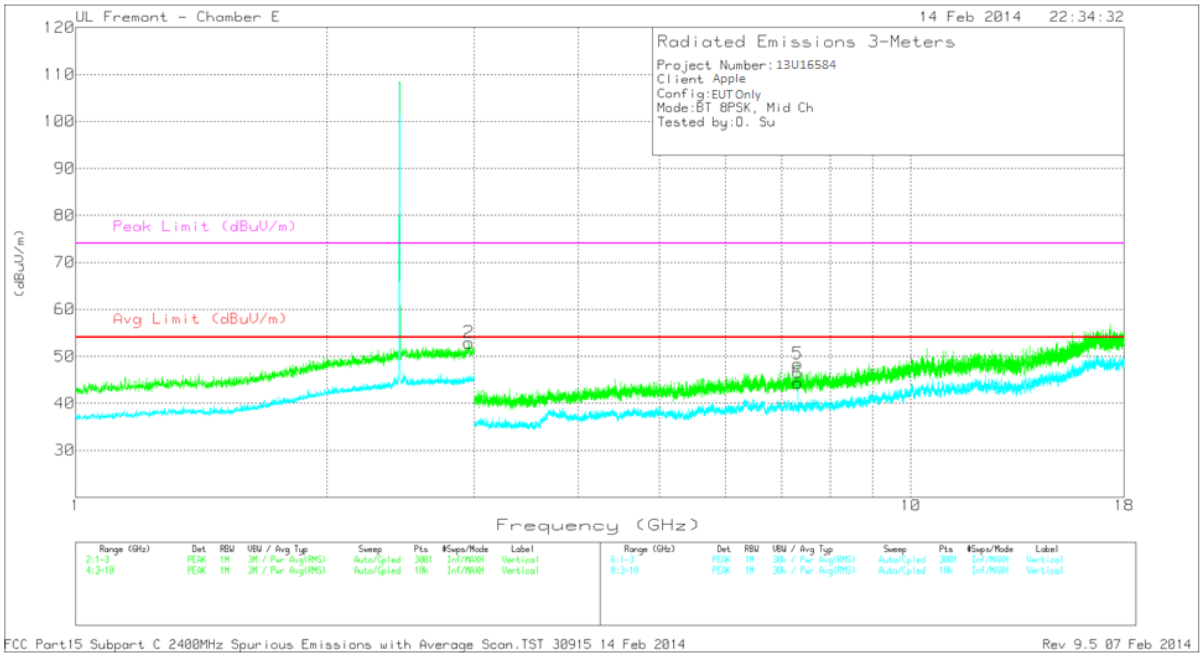
PK - Peak detector

MID CHANNEL

HORIZONTAL PLOT



VERTICAL PLOT



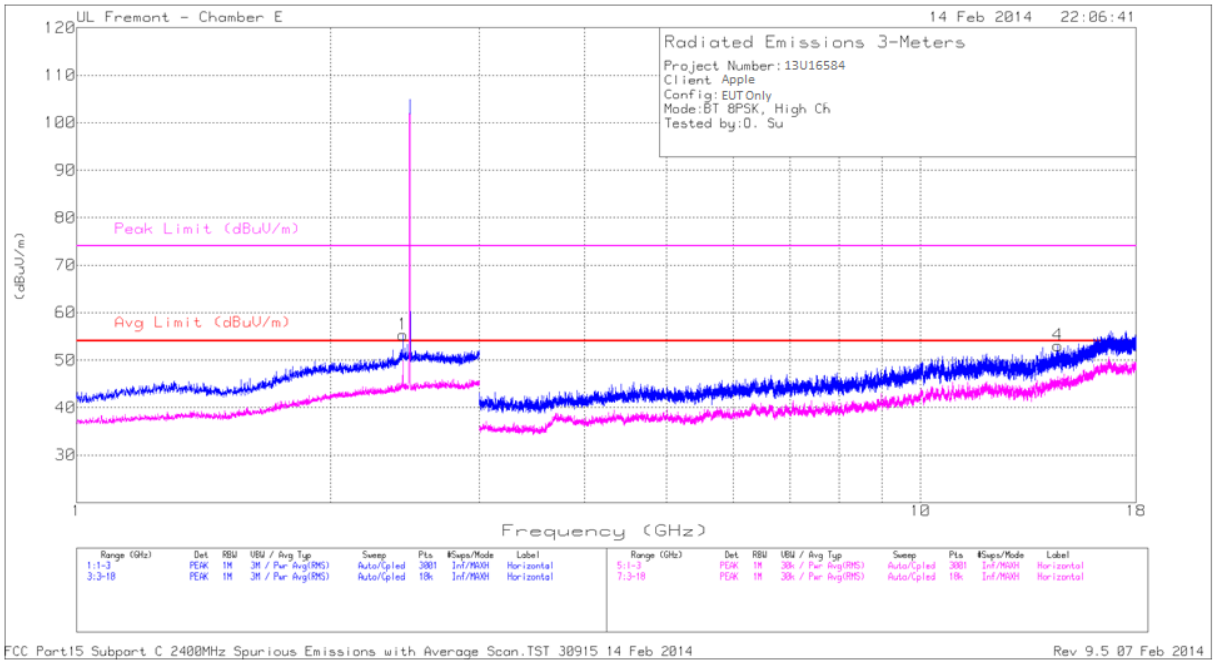
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Flt r/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	2.962	43.03	PK	33.0	-23.8	52.23	-	-	-	-	0-360	101	H
2	2.957	43.80	PK	33.0	-23.9	52.9	-	-	-	-	0-360	101	V
3	* 7.322	37.02	PK	35.9	-27.6	45.32	-	-	74	-28.68	0-360	101	H
4	* 7.322	31.47	Avg	35.9	-27.6	39.77	54	-14.23	-	-	0-360	101	H
5	* 7.323	40.10	PK	35.9	-27.6	48.40	-	-	74	-25.60	0-360	200	V
6	* 7.323	36.10	Avg	35.9	-27.6	44.40	54	-9.60	-	-	0-360	200	V

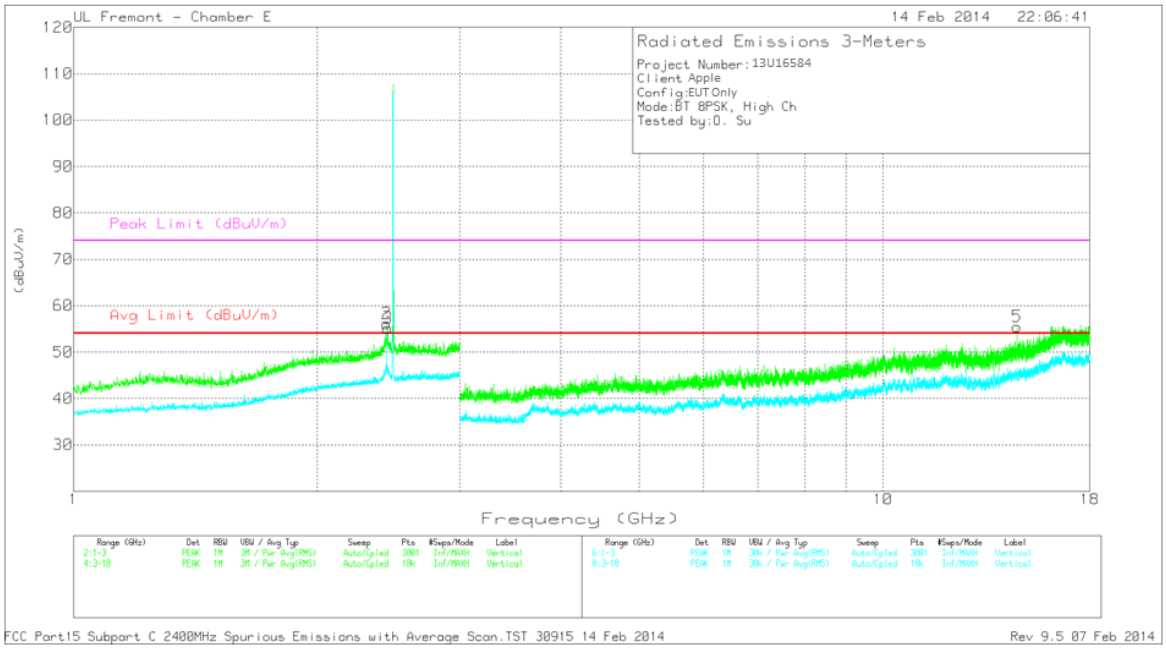
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector
Avg - Video bandwidth < Resolution bandwidth

HIGH CHANNEL

HORIZONTAL PLOT



VERTICAL PLOT



DATA

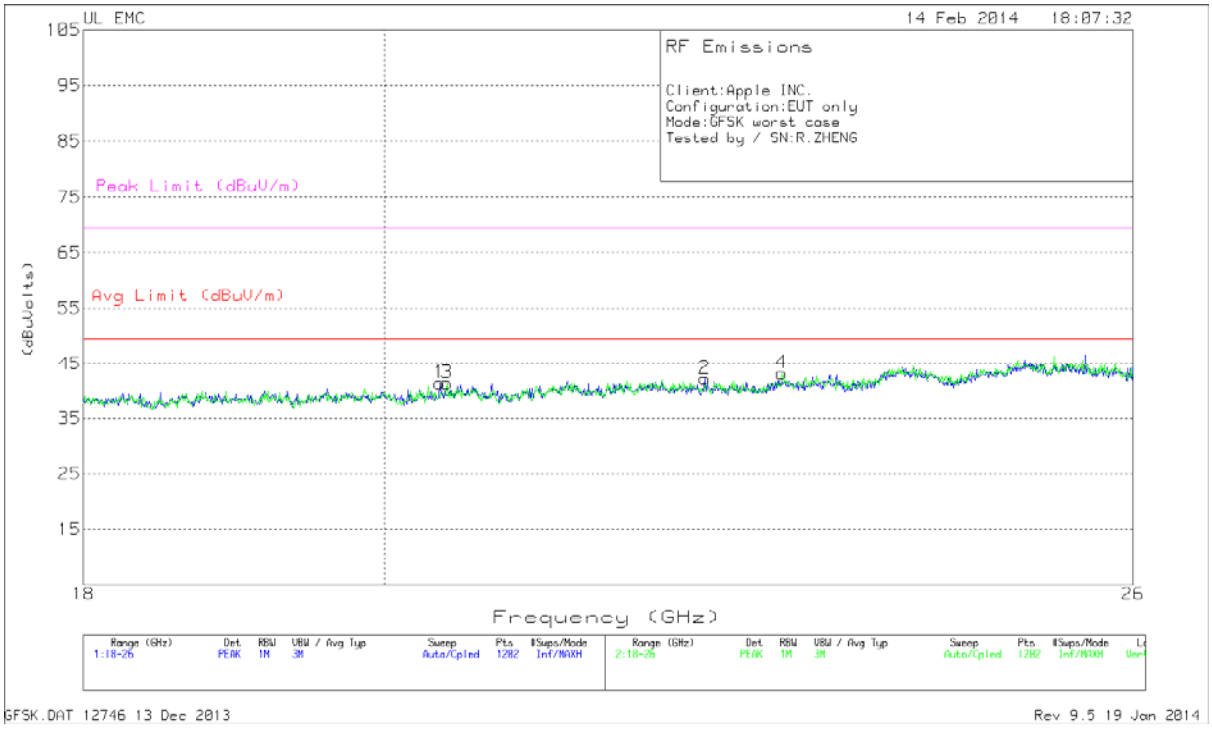
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.436	47.67	PK	32.6	-24.9	55.37	-	-	-	-	0-360	101	H
2	2.437	48.43	PK	32.6	-24.9	56.13	-	-	-	-	0-360	101	V
3	2.443	47.27	PK	32.7	-24.8	55.17	-	-	-	-	0-360	200	V
4	14.538	38.01	PK	40.1	-25.0	53.11	-	-	-	-	0-360	101	H
5	14.644	40.47	PK	40.1	-25.1	55.47	-	-	-	-	0-360	101	V

PK - Peak detector

8.3. WORST-CASE ABOVE 18 GHz

SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE)

HORIZONTAL & VERTICAL PLOT



DATA

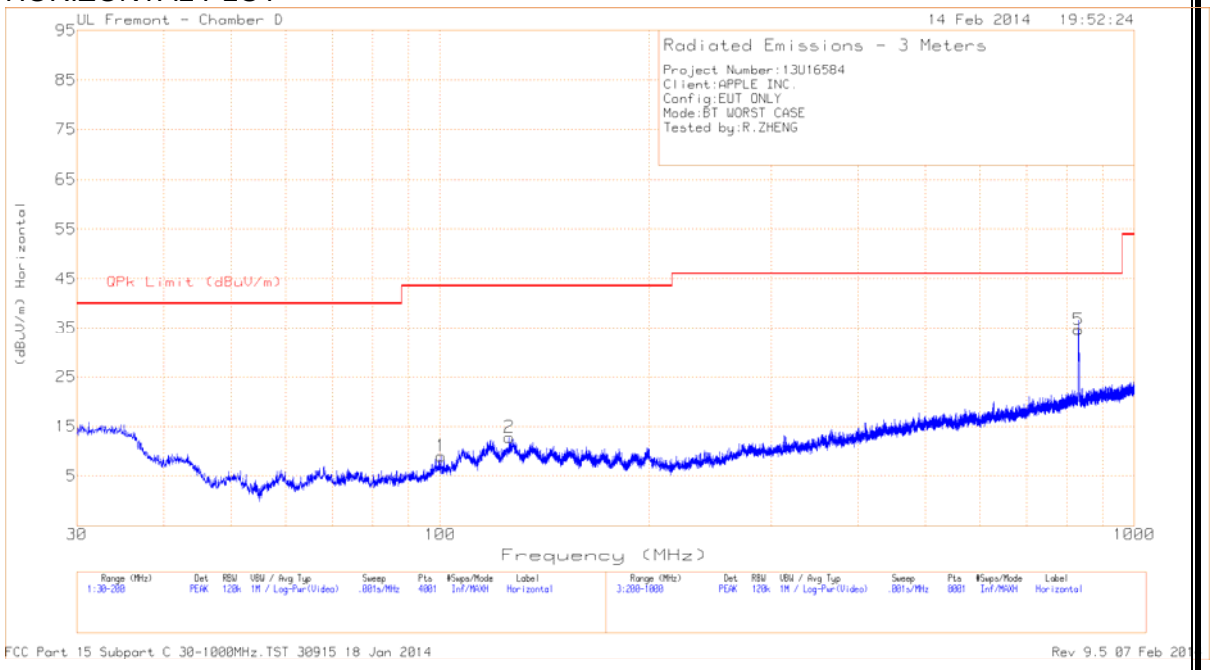
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T89 (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	20.391	41.93	PK	32.7	-23.8	-9.5	41.33	49.5	-8.17	69.5	-28.18
2	22.376	41.57	PK	33.3	-23.2	-9.5	42.17	49.5	-7.34	69.5	-27.34
3	20.445	42.23	PK	32.8	-24.2	-9.5	41.34	49.5	-8.17	69.5	-28.17
4	22.989	42.27	PK	33.6	-23.2	-9.5	43.17	49.5	-6.34	69.5	-26.34

PK - Peak detector

8.4. WORST-CASE BELOW 1 GHz

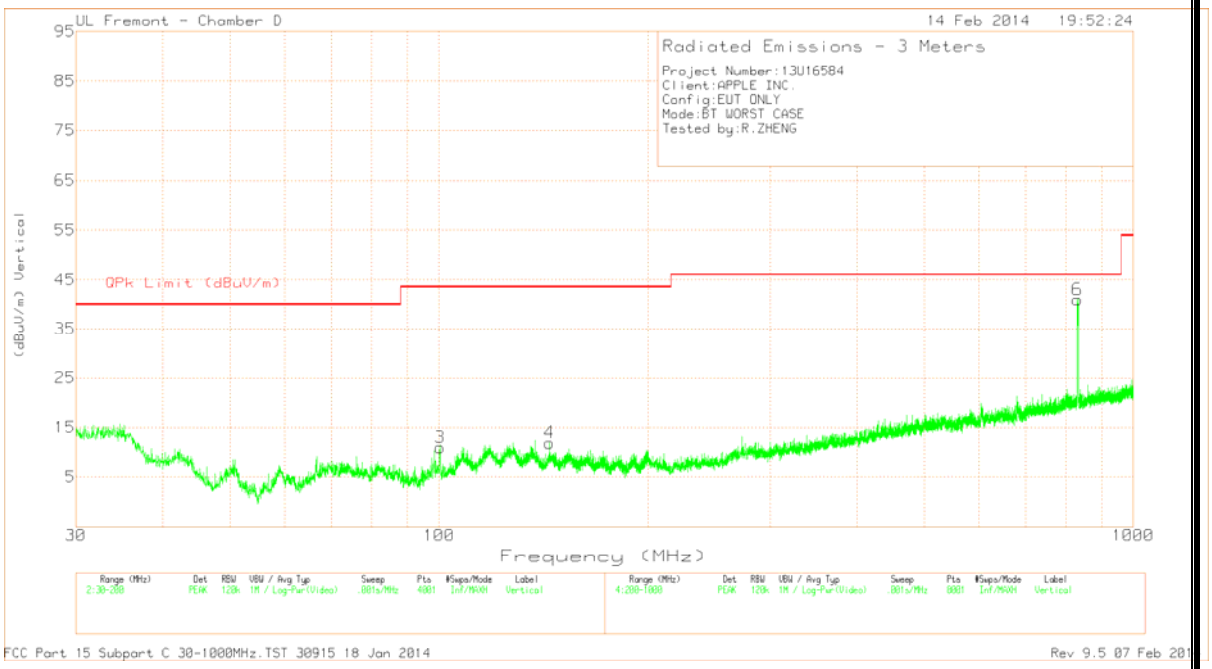
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T407 dB/m	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	100.338	30.48	PK	10.2	-31.7	8.98	43.52	-34.54	0-360	301	H
2	* 125.838	30.4	PK	13.9	-31.5	12.80	43.52	-30.72	0-360	301	H
3	100.338	32.44	PK	10.2	-31.7	10.94	43.52	-32.58	0-360	100	V
4	144.325	30.26	PK	12.6	-31.0	11.86	43.52	-31.66	0-360	100	V
5	831.000	42.05	PK	21.6	-29.0	34.65	46.02	-11.37	0-360	400	H
6	831.100	48.34	PK	21.6	-29.0	40.94	46.02	-5.08	0-360	100	V
	824.421	23.82	QP	21.5	-29.1	16.22	46.02	-29.80	6	100	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector
QP - Quasi-Peak detector