



**RADIATED SPURIOUS EMISSIONS PORTIONS OF  
FCC CFR47 PART 15 SUBPART C  
INDUSTRY CANADA RSS-210 ISSUE 8**

**CERTIFICATION TEST REPORT**

**FOR**

**CDMA MOBILE PHONE with BLUETOOTH**

**FCC MODEL NUMBER: S2151**

**FCC ID: V65S2151**

**REPORT NUMBER: 13U14815-2, REVISION A**

**ISSUE DATE: February 19, 2013**

*Prepared for*

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**NVLAP LAB CODE 100414-0**

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# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** KYOCERA COMMUNICATIONS, INC  
8611 BALBOA AVENUE  
SAN DIEGO, CA 92123, U.S.A

**EUT DESCRIPTION:** CDMA TRI-BAND MOBILE PHONE WITH BLUETOOTH

**MODEL:** S2151

**SERIAL NUMBER:** 0000061

**DATE TESTED:** January 28, 2013 – February 4, 2013

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C – Radiated Spurious Only	Pass

UL LLC 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 LLC 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 LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. 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 LLC By:



Michael Ferrer  
EMC ENGINEER  
UL LLC

Tested By:



Bart Mucha  
EMC ENGINEER  
UL LLC

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2003 FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 3, and RSS-210 Issue 8.

## 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 333 Pfingsten Road, Northbrook, IL, USA.

UL LLC is accredited by NVLAP, Laboratory Code 100414-0. The full scope of accreditation can be viewed at <http://ts.nist.gov/Standards/scopes/1004140.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:

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

### 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	0.9 dB k=2
Radiated Disturbance, 30 to 1000 MHz	3.1 dB k=2

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

## **5. EQUIPMENT UNDER TEST**

### **5.1. DESCRIPTION OF EUT**

The EUT is a Bluetooth transceiver and CDMA Phone that is manufactured by Kyocera Communications, Inc.

### **5.2. DESCRIPTION OF AVAILABLE ANTENNAS**

The radio utilizes an PIFA antenna, with a maximum gain of -1.0 dBi.

### **5.3. SOFTWARE AND FIRMWARE**

The software version installed on EUT: 0.800VM

Hardware Version: 0202

The test utility software used during testing was BT Test.

## 5.4. WORST-CASE CONFIGURATION AND MODE

The worst position is where the middle channel has the highest radiated power. To determine the worst case axis (X, Y, Z) and position (folded and unfolded) of the EUT was investigated. Once the worst axis and position was determined headset was added and radiated power was re-measured and battery charger was added and power was re-measured again. It was determined that worst case axis and position was Z-Axis, Opened, with headset and power supply. Refer to test setup photos for test setup information.

## 5.5. DESCRIPTION OF TEST SETUP

### TEST SETUP

### SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
Charging Adapter	Kyocera	SCP-36ADT	-	-
Headset	Generic	-	-	-

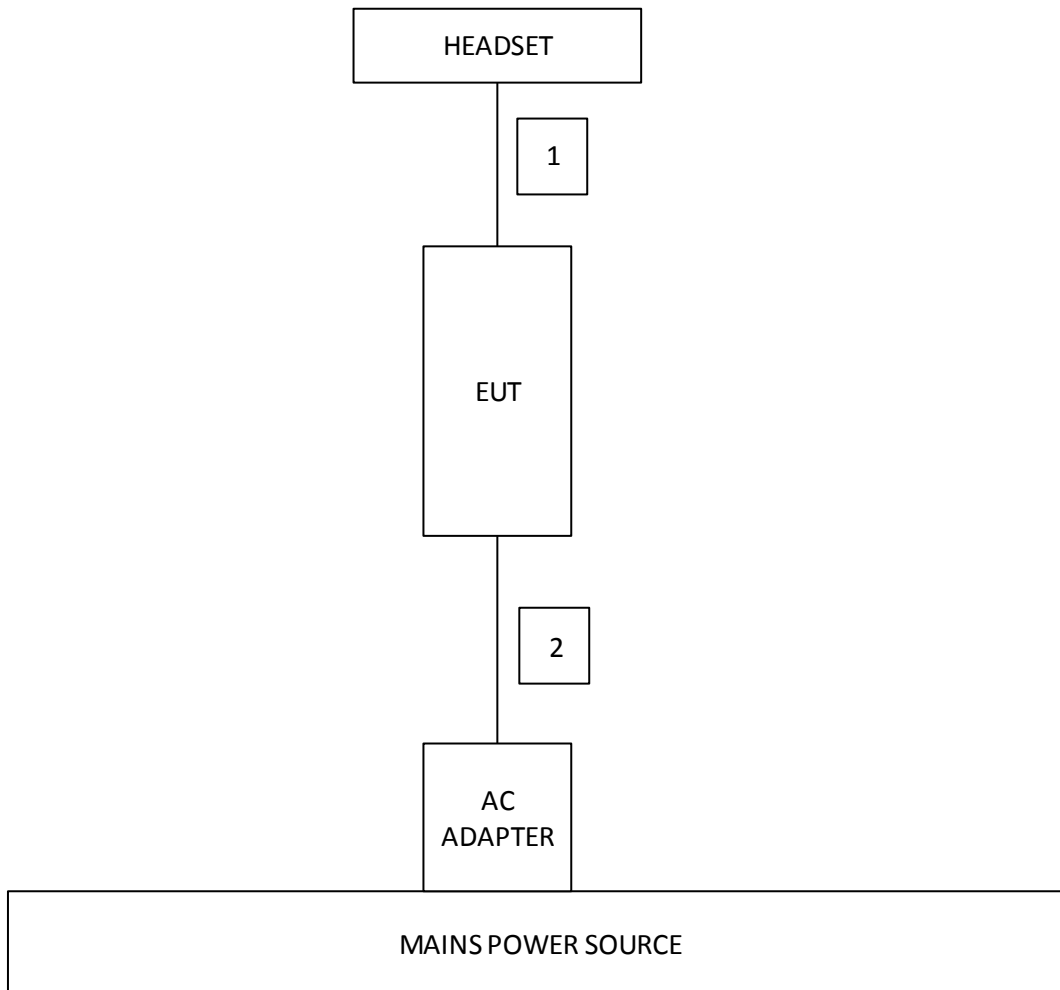
### I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	DC	1	USB micro B	Shielded	1.5m	N/A
2	Headphone / Mic	1	3.5mm	Shielded	1m	N/A

The EUT is a CDMA phone with bluetooth and-is tested as a standalone configuration.



**SETUP DIAGRAM FOR TESTS**



## 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 Date	Cal Due
EMI Test Receiver	Rohde & Schwarz	ESU	EMC4323	20121227	20131231
Bicon Antenna	Chase	VBA6106A	EMC4078	20120117	20130131
Bicon Antenna	Electro-Metrics	EM6912A	EMC4070	20120806	20130830
Log-P Antenna	Chase	UPA6109	EMC4313	20120807	20130831
Spectrum Analyzer	Rhode & Schwarz	FSEK	EMC4182	20121226	20131231
Antenna Array	UL	BOMS	EMC4276	20111227	20131231
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC4328	30-Dec-12	30-Dec-13
Transient Limiter	Electro-Metrics	EM7600-2	EMC4224	N/A	N/A
HighPass Filter	Solar Electronics	2803-150	885551	N/A	N/A
Attenuator	HP	8494B	2831A00838	N/A	N/A
LISN - L1	Solar	8602-50-TS-50-N	EMC4052	15-Jan-13	16-Jan-14
LISN - L2	Solar	8602-50-TS-50-N	EMC4064	15-Jan-13	16-Jan-14

## 7. RADIATED TEST RESULTS

### 7.1. 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	Field Strength Limit (dBuV/m) at 10 m
30 - 88	100	40	29.54
88 - 216	150	43.5	33.06
216 - 960	200	46	35.56
Above 960	500	54	43.52

#### 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 C63.4:2003. 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.

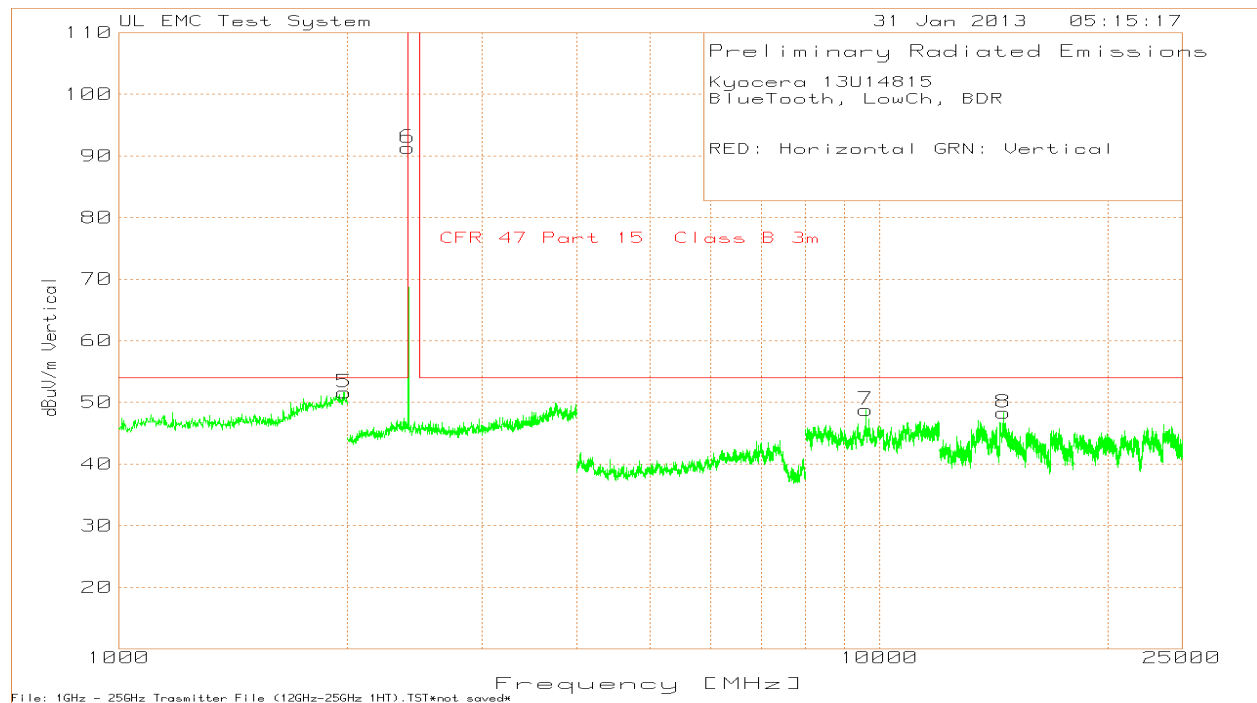
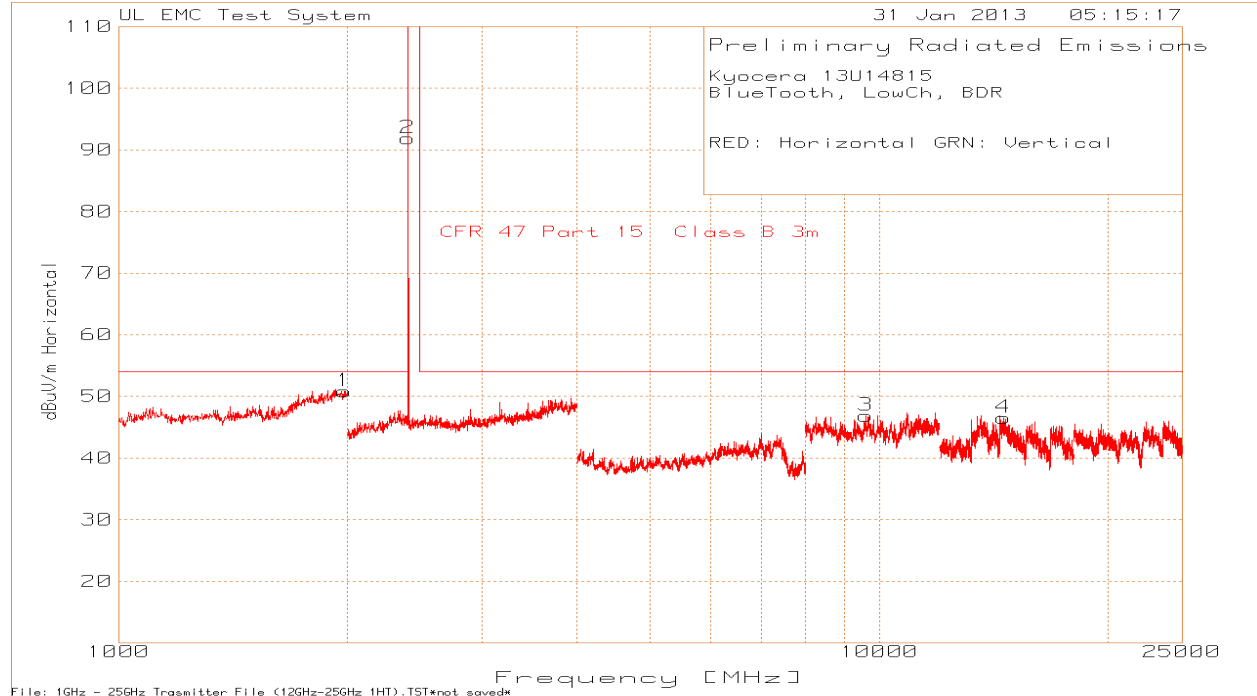
The spectrum from 30 MHz to 25 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

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.

## 7.2. TRANSMITTER ABOVE 1 GHz

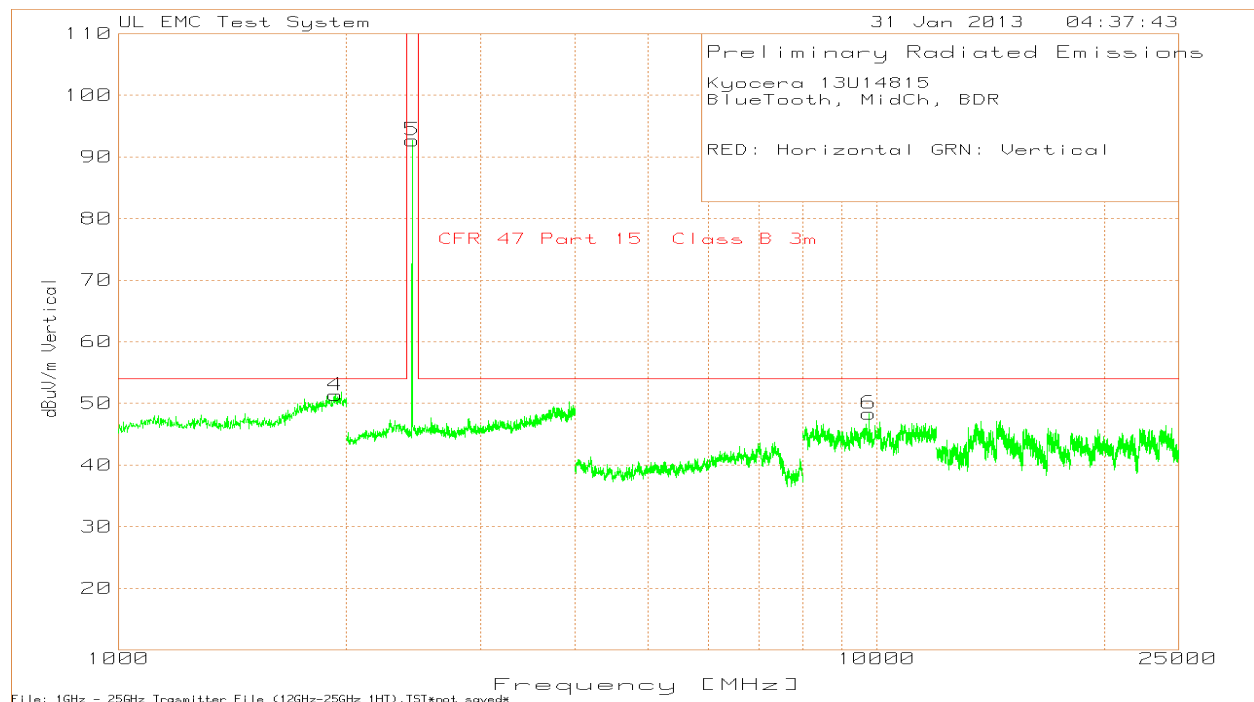
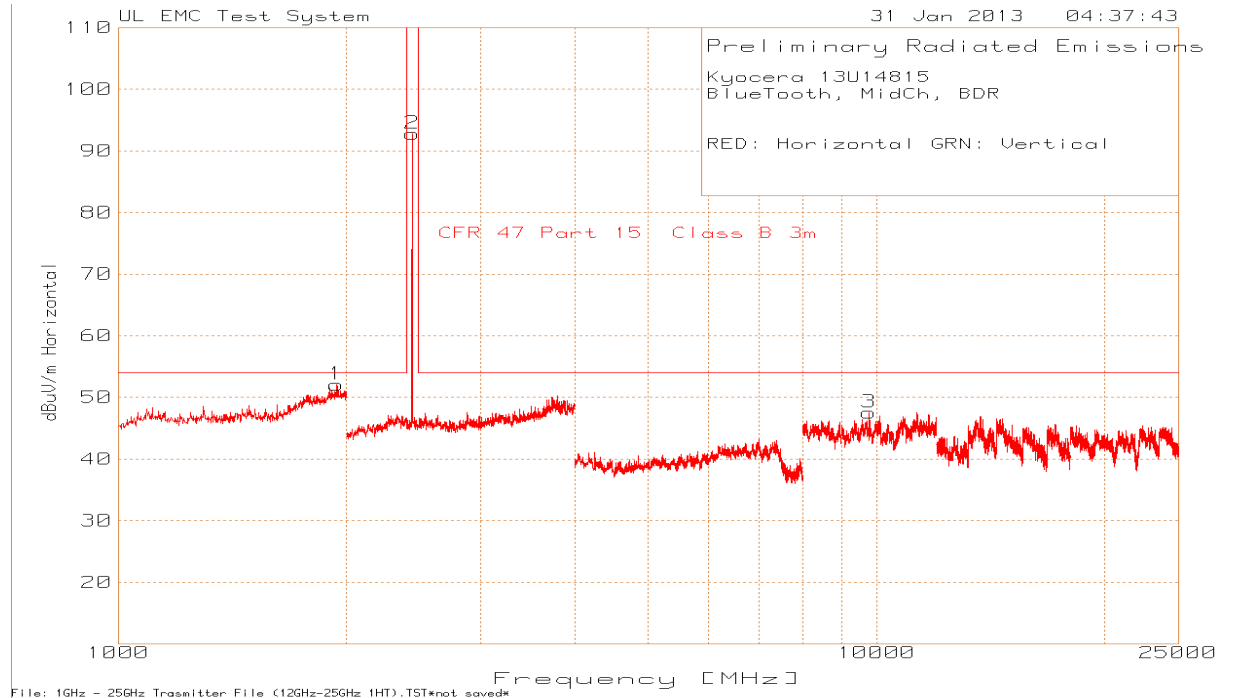
### 7.2.1. BDR Data 1GHz – 25GHz

#### Low Channel



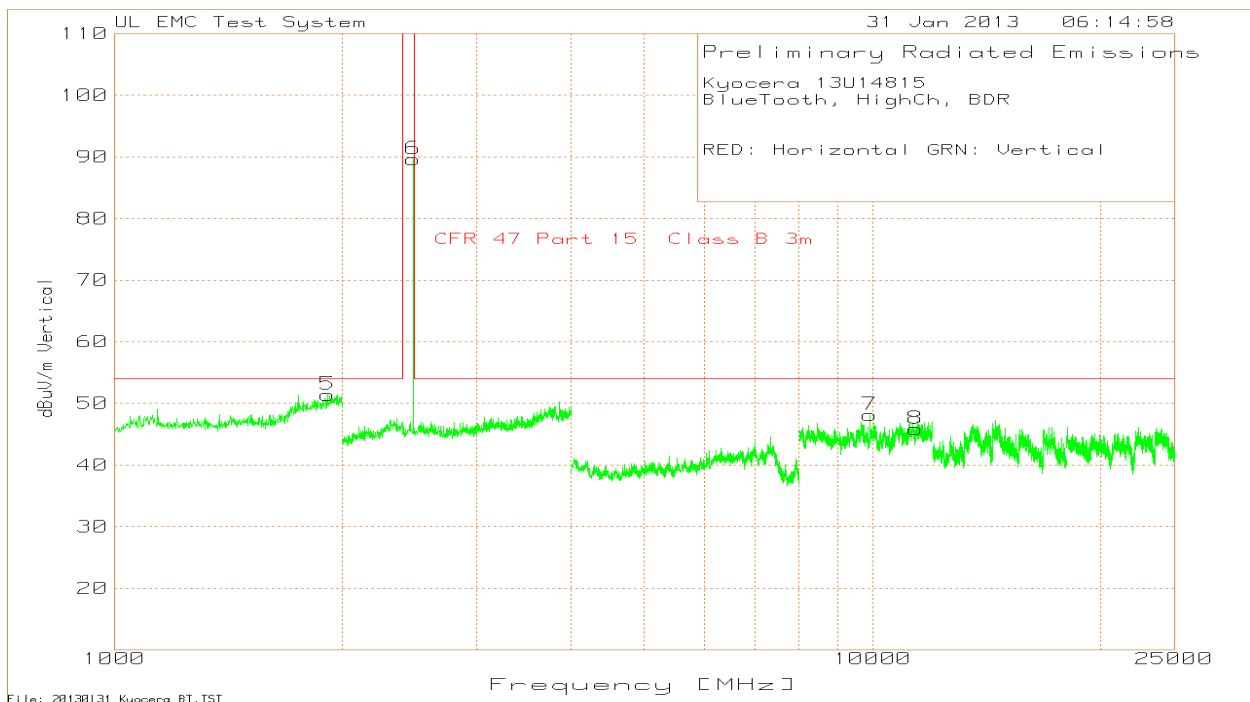
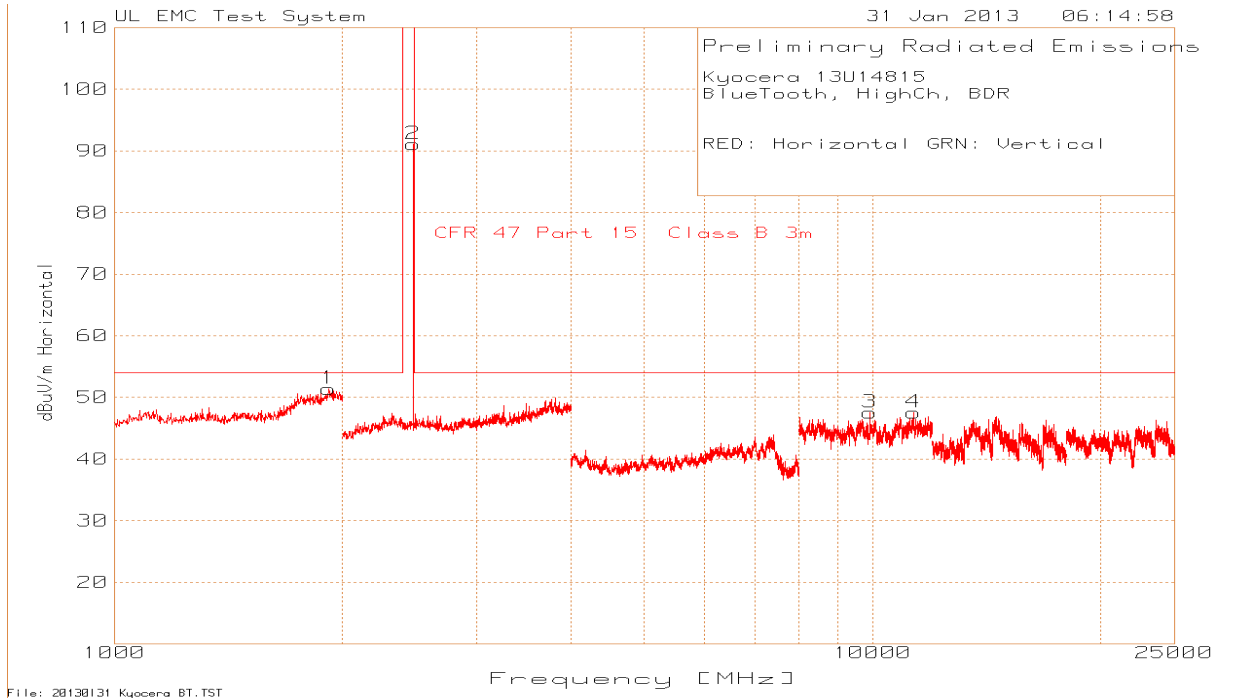
Kyocera 13U14815 BlueTooth, LowCh, BDR RED: Horizontal GRN: Vertical										
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	CFR 47 Part 15 Class B 3m dBuV/m	Margin dB	Height [cm]	Polarity
1	1979.96	19.63	PK	27.3	3.95	50.88	54	-3.12	100	Horz
2	2402.402	65.83	PK	21.8	4.25	91.88	-	-	100	Horz
3	9609.073	60.37	PK	36.4	-49.87	46.9	54	-7.1	100	Horz
4	14583.433	45.91	PK	39.8	-39.18	46.53	54	-7.47	100	Horz
5	1977.956	20.47	PK	27.3	3.91	51.68	54	-2.32	100	Vert
6	2402.402	65.32	PK	21.8	4.25	91.37	-	-	100	Vert
7	9609.073	62.23	PK	36.4	-49.87	48.76	54	-5.24	100	Vert
8	14554.622	47.35	PK	39.8	-38.79	48.36	54	-5.64	100	Vert
PK - Peak detector										

### Middle Channel



Kyocera 13U14815 BlueTooth, MidCh, BDR RED: Horizontal GRN: Vertical										
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	CFR 47 Part 15 Class B 3m dBuV/m	Margin dB	Height [cm]	Polarity
1	1941.884	20.89	PK	27.3	3.92	52.11	54	-1.89	112	Horz
2	2440.44	66.63	PK	21.9	4.25	92.78	-	-	100	Horz
3	9763.843	61.73	PK	36.4	-50.62	47.51	54	-6.49	150	Horz
4	1931.864	20.09	PK	27.3	3.96	51.35	54	-2.65	100	Vert
5	2440.44	66.49	PK	21.9	4.25	92.64	-	-	150	Vert
6	9763.843	62.61	PK	36.4	-50.62	48.39	54	-5.61	150	Vert
PK - Peak detector										

### High Channel

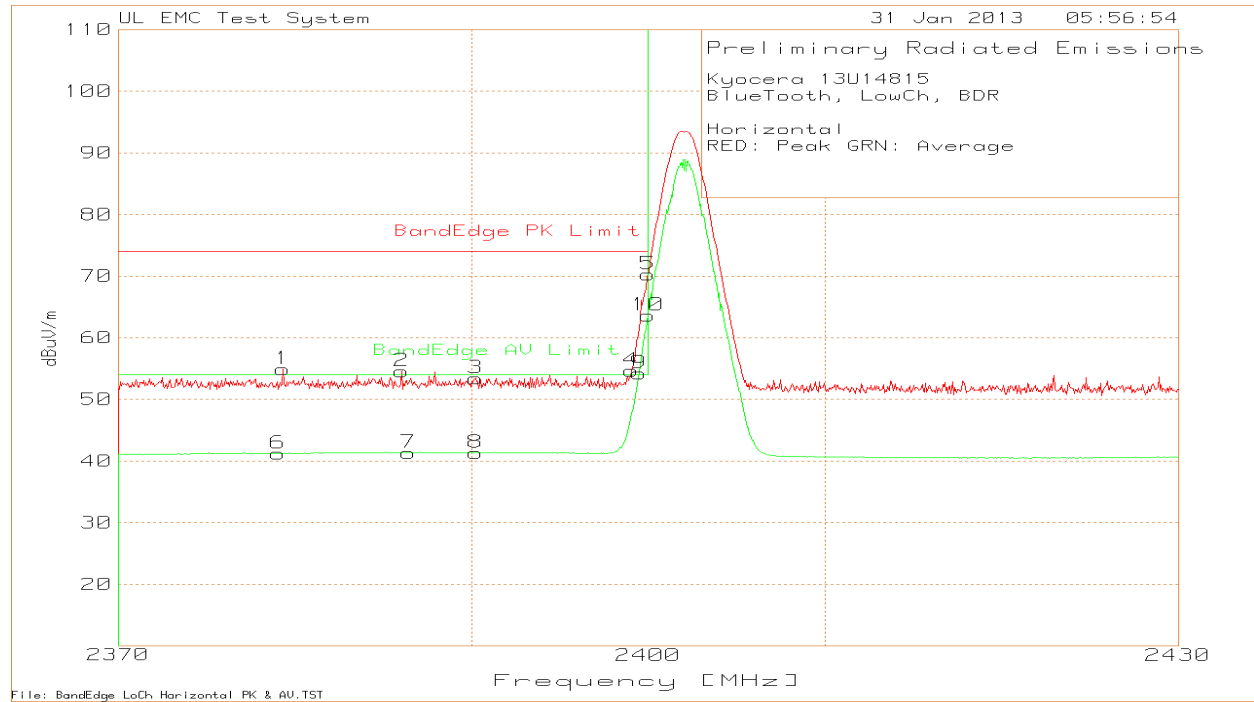




Kyocera 13U14815 BlueTooth, HighCh, BDR RED: Horizontal GRN: Vertical										
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	CFR 47 Part 15 Class B 3m dBuV/m	Margin dB	Height [cm]	Polarity
1	1915.832	20.32	PK	27.3	3.78	51.4	54	-2.6	100	Horz
2	2480.48	65.31	PK	22	3.77	91.08	-	-	100	Horz
3	9921.281	61.6	PK	36.4	-50.41	47.59	54	-6.41	99	Horz
4	11322.215	58.31	PK	36.9	-47.62	47.59	54	-6.41	150	Horz
5	1911.824	20.33	PK	27.3	3.74	51.37	54	-2.63	100	Vert
6	2480.48	63.89	PK	22	3.77	89.66	-	-	100	Vert
7	9921.281	62.13	PK	36.4	-50.41	48.12	54	-5.88	150	Vert
8	11383.589	57.52	PK	37	-48.68	45.84	54	-8.16	100	Vert
PK - Peak detector										

### 7.2.2. BDR Data Band Edge

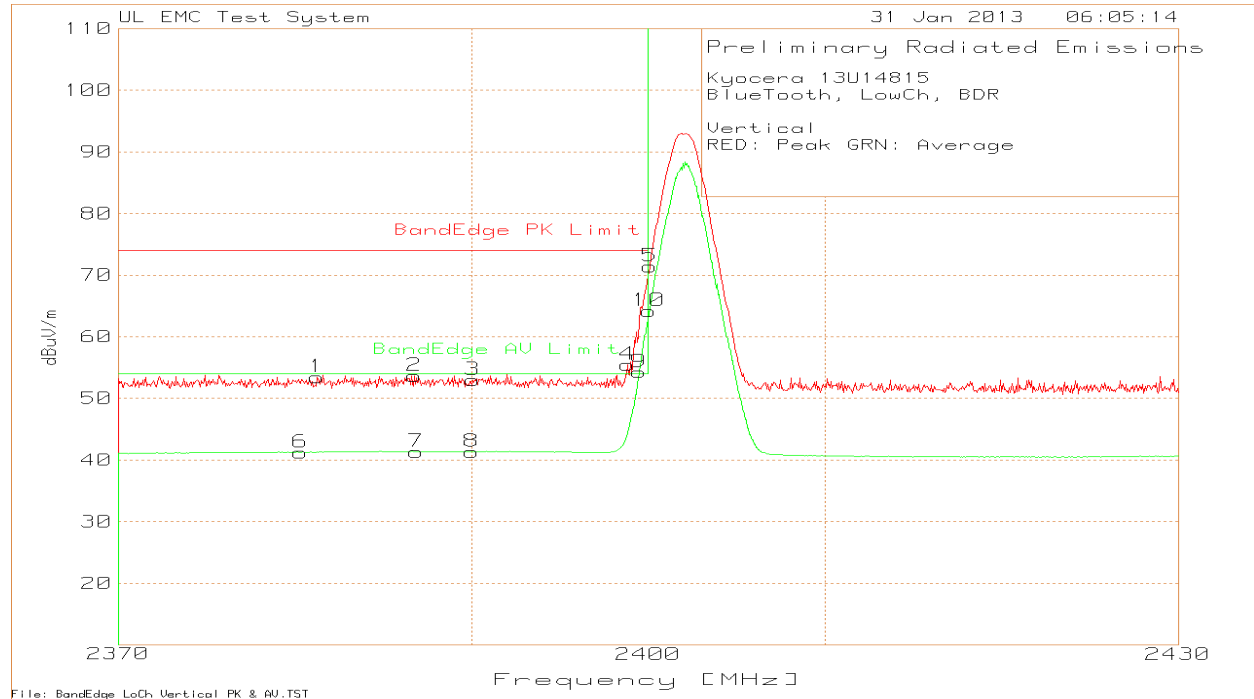
#### Low Channel - Horizontal



Kyocera 13U14815 BlueTooth, LowCh, BDR Horizontal RED: Peak GRN: Average												
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
1	2379.309	28.84	PK	21.8	4.27	54.91	74	-19.09	-	-	100	Horz
2	2386.036	28.4	PK	21.8	4.41	54.61	74	-19.39	-	-	100	Horz
3	2390	27.11	PK	21.8	4.48	53.39	74	-20.61	-	-	150	Horz
4	2399.069	28.6	PK	21.8	4.33	54.73	-	-	-	-	100	Horz
5	2399.97	44.21	PK	21.8	4.31	70.32	-	-	-	-	100	Horz
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
6	2379.039	15.19	AV	21.8	4.26	41.25	-	-	54	-12.75	150	Horz
7	2386.426	15.14	AV	21.8	4.42	41.36	-	-	54	-12.64	100	Horz
8	2390	15.06	AV	21.8	4.48	41.34	-	-	54	-12.66	150	Horz
9	2399.489	28.15	AV	21.8	4.32	54.27	-	-	-	-	100	Horz
10	2399.97	37.55	AV	21.8	4.31	63.66	-	-	-	-	100	Horz

PK - Peak detector  
 Av - Average detector

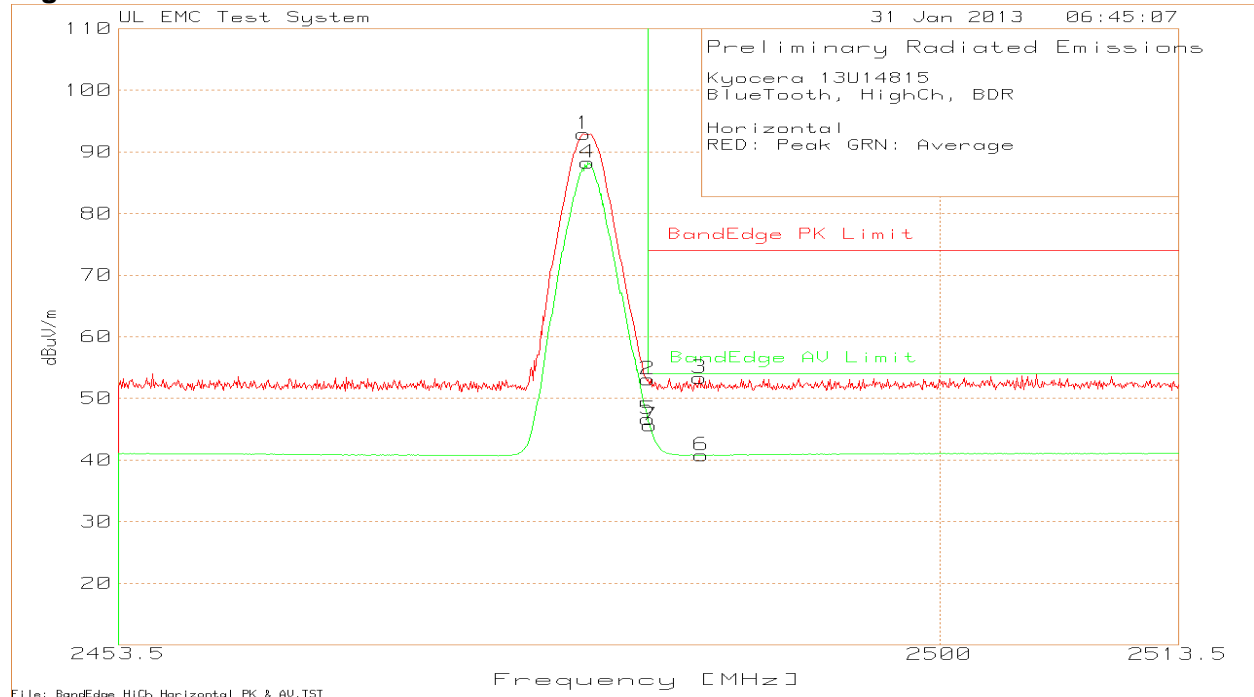
**Low Channel – Vertical**



Kyocera 13U14815 Bluetooth, LowCh, BDR Vertical RED: Peak GRN: Average												
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
1	2381.231	27.33	PK	21.8	4.33	53.46	74	-20.54	-	-	150	Vert
2	2386.757	27.47	PK	21.8	4.42	53.69	74	-20.31	-	-	100	Vert
3	2390.06	26.69	PK	21.8	4.48	52.97	74	-21.03	-	-	150	Vert
4	2398.829	29.37	PK	21.8	4.34	55.51	-	-	-	-	100	Vert
5	2400.09	45.34	PK	21.8	4.31	71.45	-	-	-	-	100	Vert
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
6	2380.33	15.18	PK	21.8	4.3	41.28	-	-	54	-12.72	150	Vert
7	2386.847	15.15	PK	21.8	4.43	41.38	-	-	54	-12.62	100	Vert
8	2390	15.08	PK	21.8	4.48	41.36	-	-	54	-12.64	100	Vert
9	2399.489	28.17	PK	21.8	4.32	54.29	-	-	-	-	100	Vert
10	2400.03	38.12	PK	21.8	4.31	64.23	-	-	-	-	100	Vert

PK - Peak detector  
 Av - Average detector

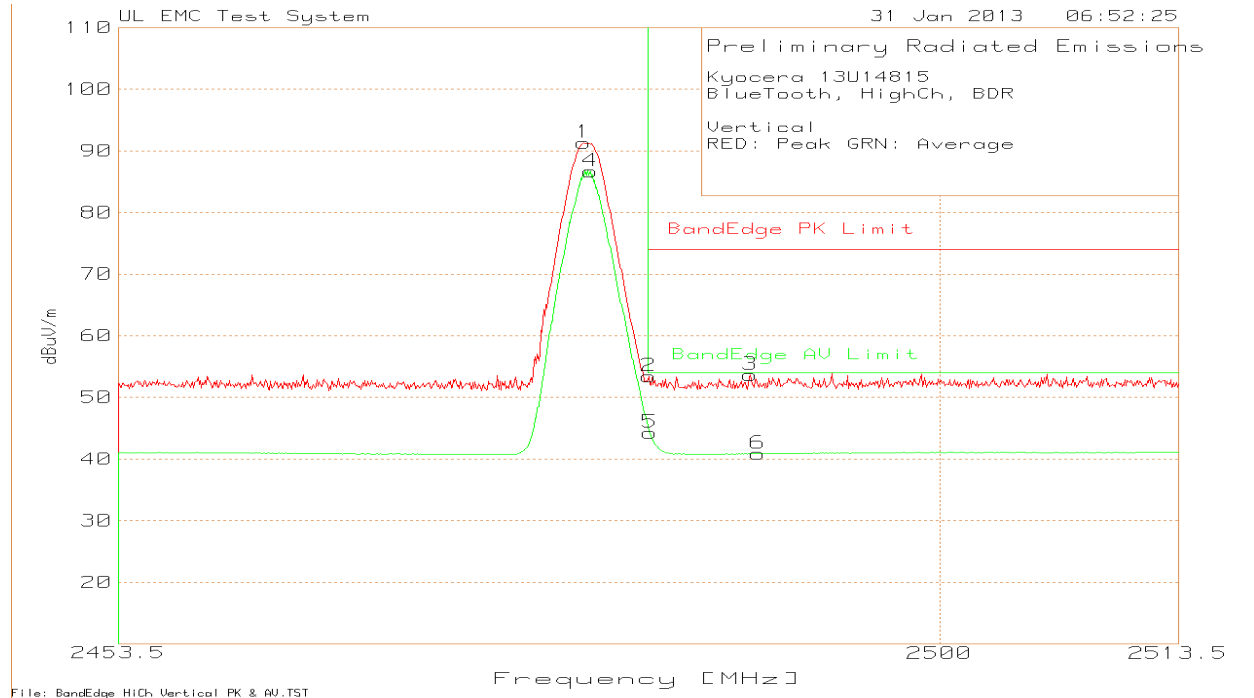
**High Channel – Horizontal**



Kyocera 13U14815 BlueTooth, HighCh, BDR Horizontal RED: Peak GRN: Average												
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
1	2479.866	67.14	PK	22	3.77	92.91	-	-	-	-	100	Horz
2	2483.5	27.24	PK	22.1	3.77	53.11	74	-20.89	-	-	100	Horz
3	2486.413	27.45	PK	22.1	3.77	53.32	74	-20.68	-	-	100	Horz
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
4	2480.047	62.55	AV	22	3.77	88.32	-	-	-	-	100	Horz
5	2483.5	20.76	AV	22.1	3.77	46.63	-	-	54	-7.37	100	Horz
6	2486.533	14.94	AV	22.1	3.77	40.81	-	-	54	-13.19	150	Horz
7	2483.59	19.73	AV	22.1	3.77	45.6	-	-	54	-8.4	100	Horz

PK - Peak detector  
 Av - Average detector

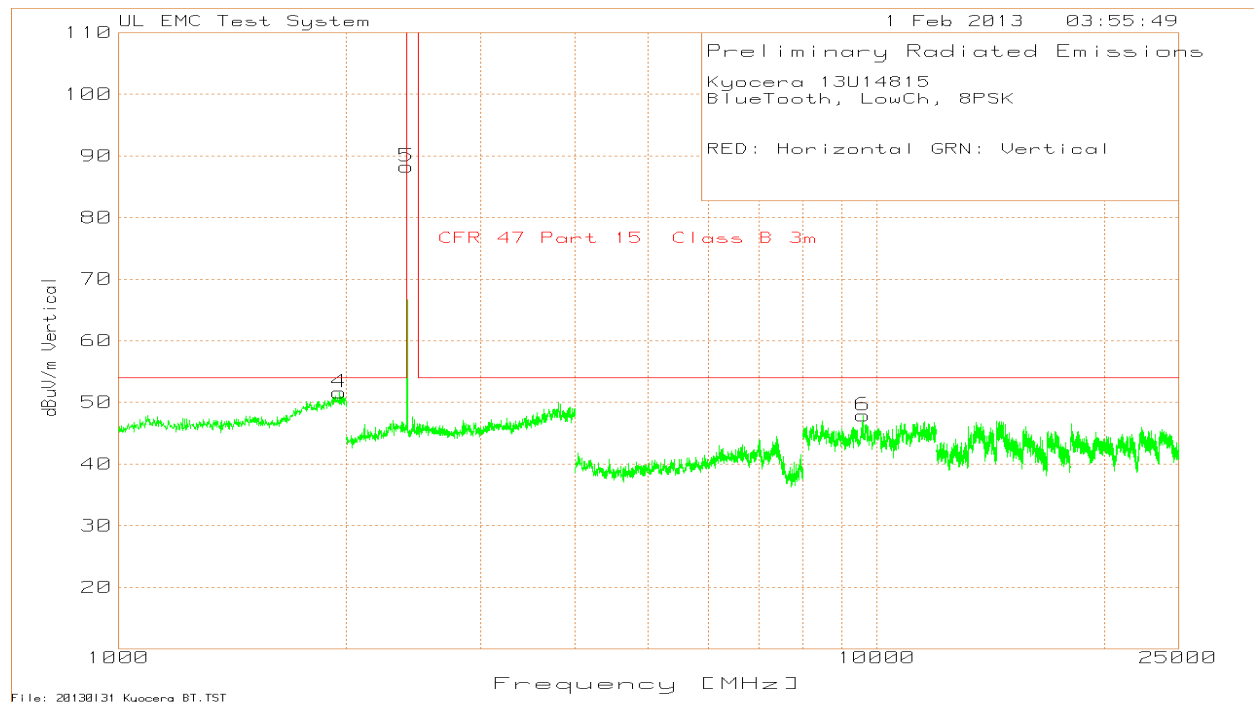
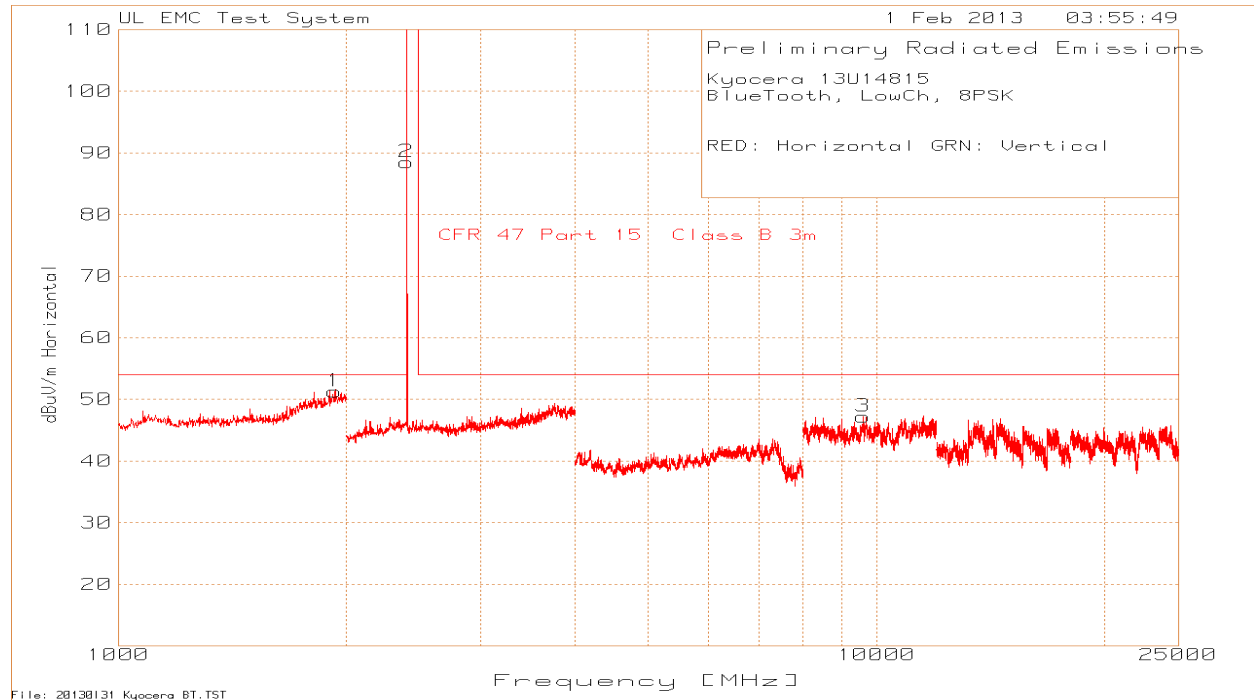
**High Channel – Vertical**



Kyocera 13U14815 BlueTooth, HighCh, BDR Vertical RED: Peak GRN: Average												
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
1	2479.866	65.59	PK	22	3.77	91.36	-	-	-	-	150	Vert
2	2483.5	27.53	PK	22.1	3.77	53.4	74	-20.6	-	-	100	Vert
3	2489.296	27.78	PK	22.1	3.8	53.68	74	-20.32	-	-	100	Vert
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
4	2480.227	60.9	AV	22	3.77	86.67	-	-	-	-	150	Vert
5	2483.5	18.41	AV	22.1	3.77	44.28	-	-	54	-9.72	150	Vert
6	2489.716	15.01	AV	22.1	3.8	40.91	-	-	54	-13.09	150	Vert
PK - Peak detector Av - Average detector												

### 7.2.3. 8PSK Data 1GHz – 25GHz

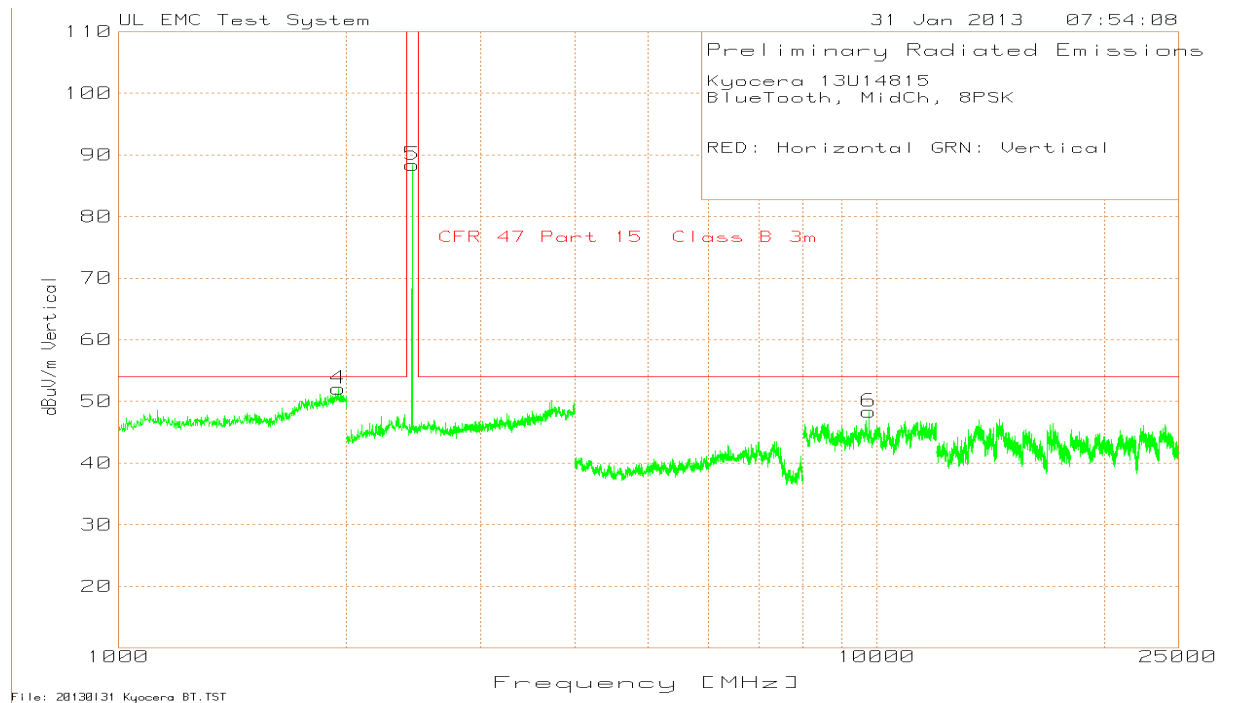
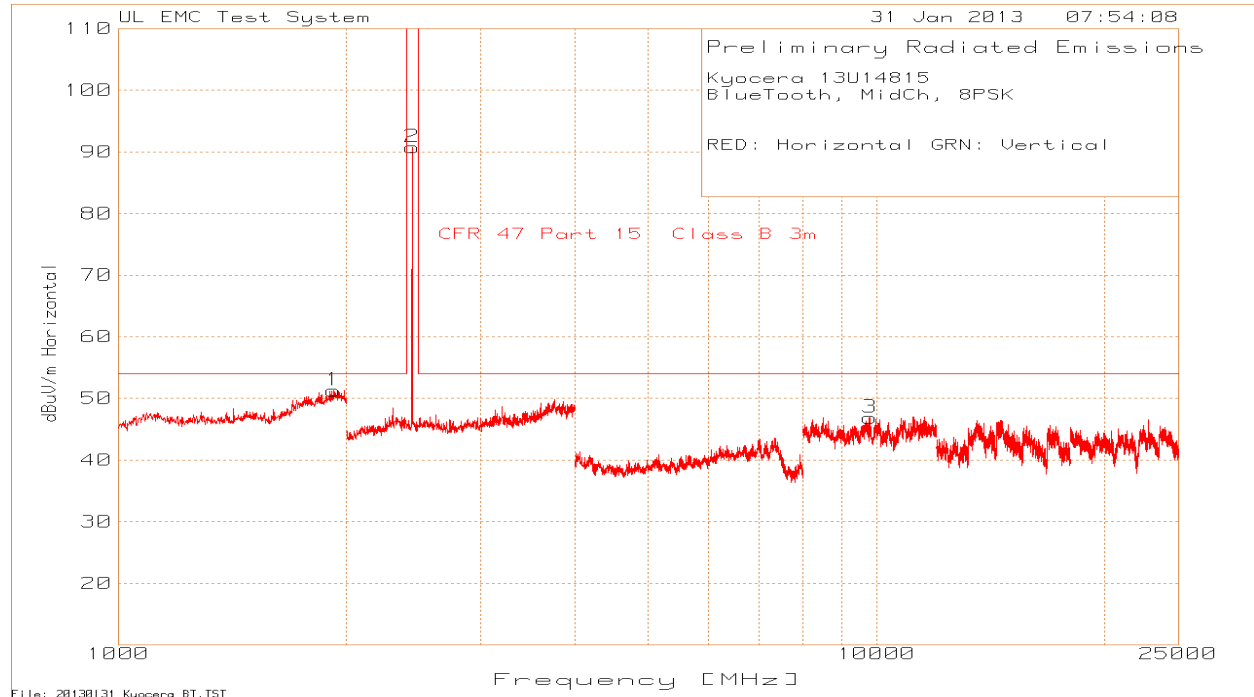
#### Low Channel



Kyocera 13U14815 BlueTooth, LowCh, 8PSK RED: Horizontal GRN: Vertical										
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	CFR 47 Part 15 Class B 3m dBuV/m	Margin dB	Height [cm]	Polarity
1	1929.86	20.05	PK	27.3	3.94	51.29	54	-2.71	150	Horz
2	2402.402	62.46	PK	21.8	4.25	88.51	n/a	n/a	100	Horz
3	9603.736	60.65	PK	36.4	-49.83	47.22	54	-6.78	100	Horz
4	1957.916	20.57	PK	27.3	3.75	51.62	54	-2.38	100	Vert
5	2400.4	62.21	PK	21.8	4.3	88.31	n/a	n/a	150	Vert
6	9609.073	61.37	PK	36.4	-49.87	47.9	54	-6.1	150	Vert

PK - Peak detector

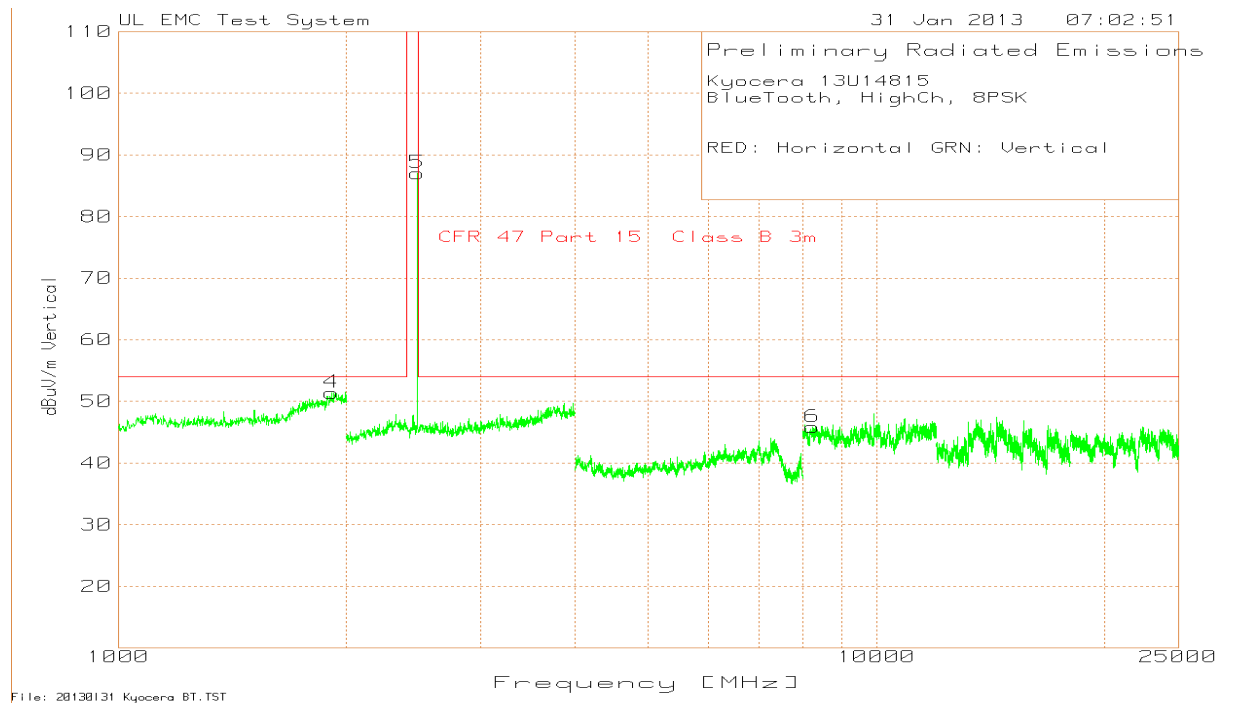
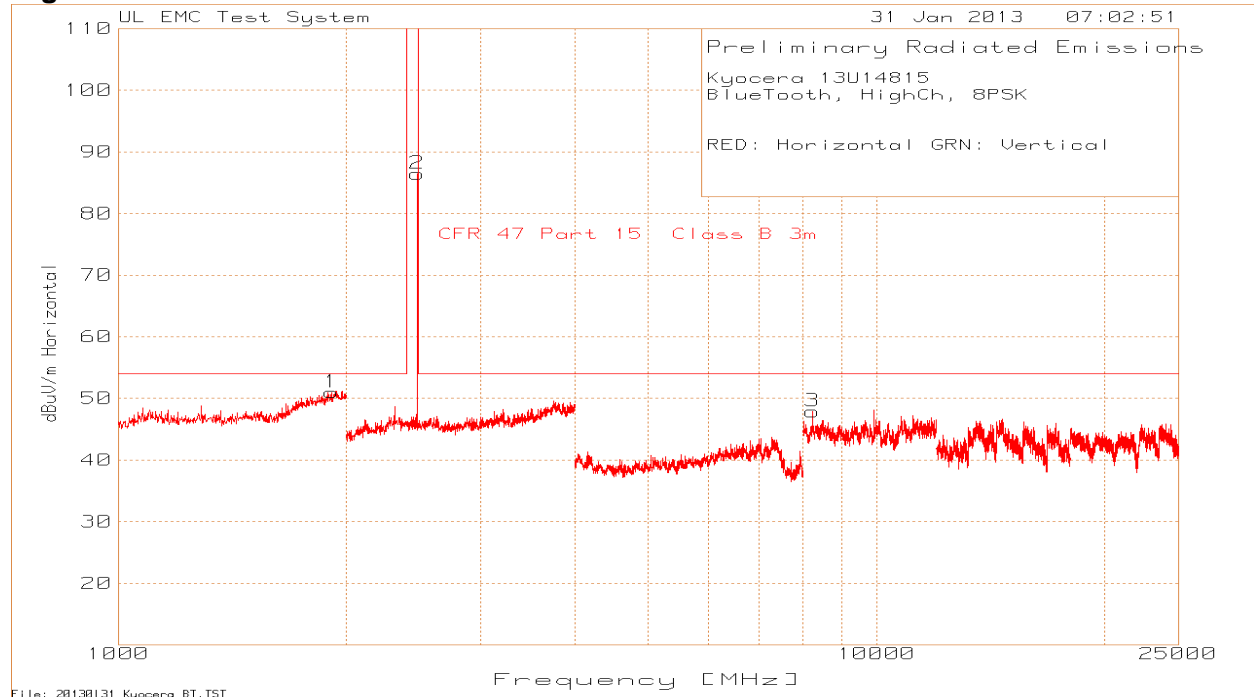
### Middle Channel





Kyocera 13U14815 BlueTooth, MidCh, 8PSK RED: Horizontal GRN: Vertical										
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	CFR 47 Part 15 Class B 3m dBuV/m	Margin dB	Height [cm]	Polarity
1	1919.84	20.21	PK	27.3	3.83	51.34	54	-2.66	100	Horz
2	2440.44	64.63	PK	21.9	4.25	90.78	-	-	100	Horz
3	9809.206	60.47	PK	36.4	-49.94	46.93	54	-7.07	150	Horz
4	1949.9	20.95	PK	27.3	3.83	52.08	54	-1.92	100	Vert
5	2440.44	62.24	PK	21.9	4.25	88.39	-	-	150	Vert
6	9763.843	62.54	PK	36.4	-50.62	48.32	54	-5.68	150	Vert
PK - Peak detector										

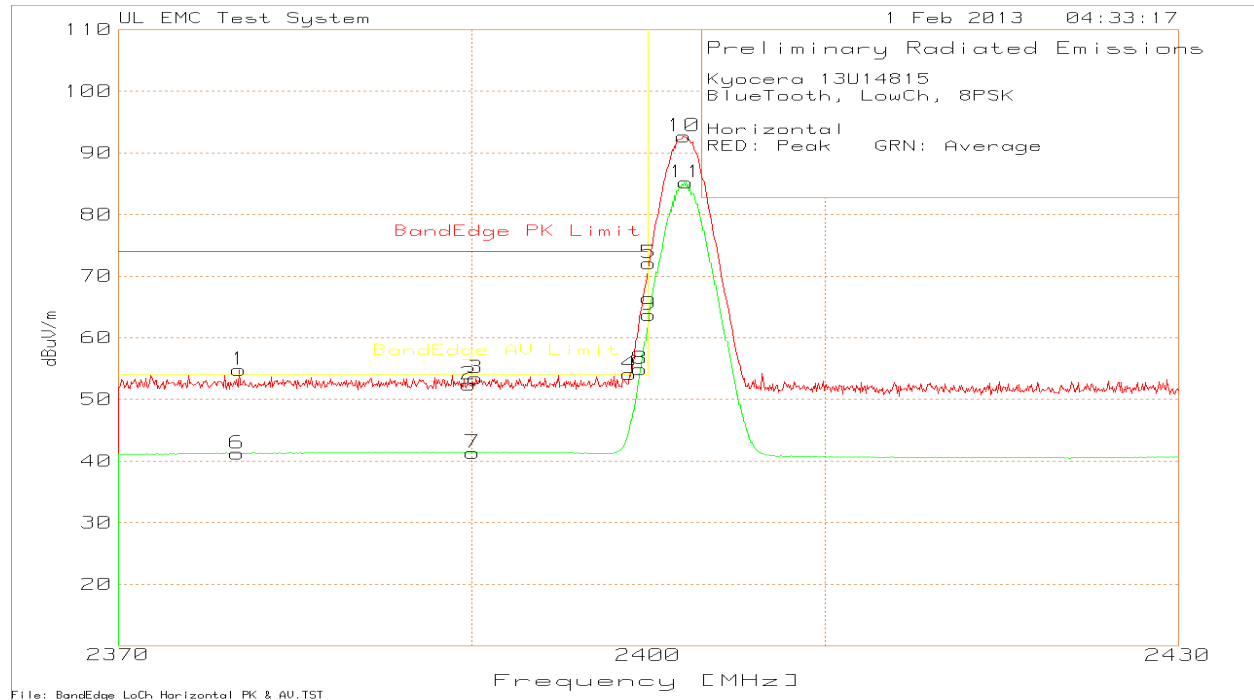
### High Channel



Kyocera 13U14815 BlueTooth, HighCh, 8PSK RED: Horizontal GRN: Vertical										
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	CFR 47 Part 15 Class B 3m dBuV/m	Margin dB	Height [cm]	Polarity
1	1909.82	19.98	PK	27.3	3.73	51.01	54	-2.99	100	Horz
2	2478.478	60.75	PK	22	3.77	86.52	-	-	100	Horz
3	8232.155	59.77	PK	36.4	-48.32	47.85	54	-6.15	150	Horz
4	1911.824	20.41	PK	27.3	3.74	51.45	54	-2.55	100	Vert
5	2480.48	61.25	PK	22	3.77	87.02	-	-	100	Vert
6	8242.829	57.86	PK	36.4	-48.45	45.81	54	-8.19	100	Vert
PK - Peak detector										

### 7.2.4. 8PSK Data Band Edge

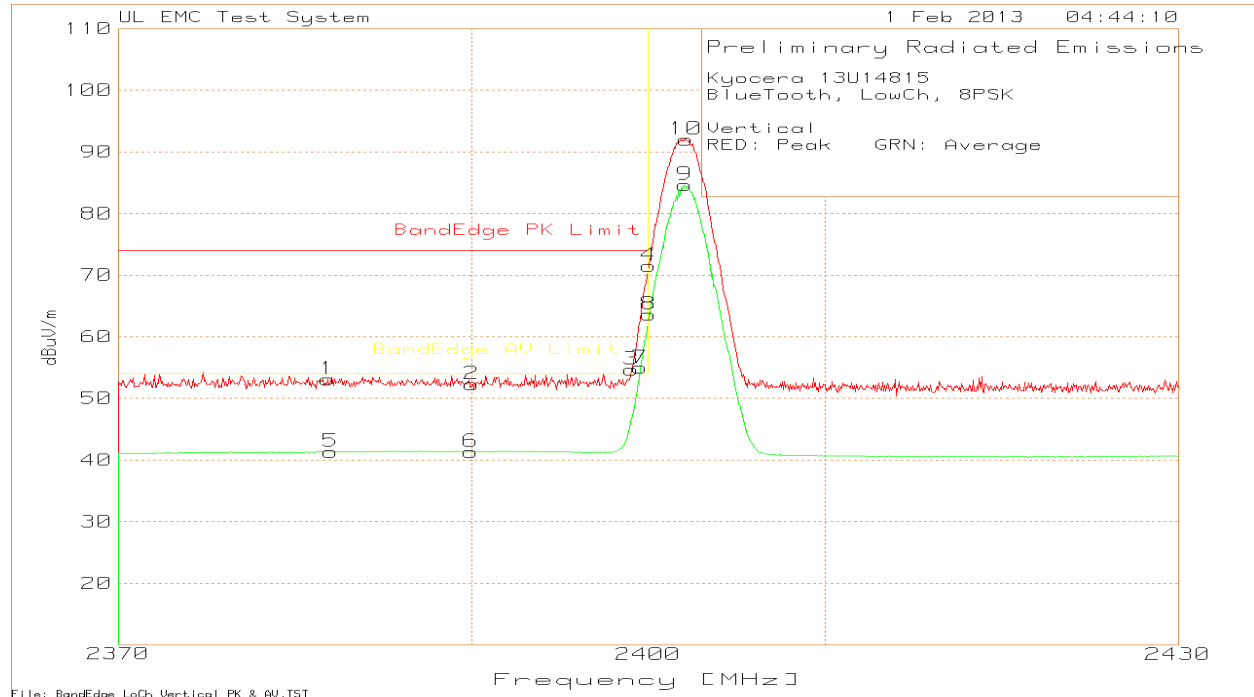
#### Low Channel – Horizontal



Kyocera 13U14815 BlueTooth, LowCh, 8PSK Horizontal RED: Peak GRN: Average												
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
1	2376.847	28.82	PK	21.8	4.19	54.81	74	-19.19	-	-	100	Horz
2	2389.82	26.1	PK	21.8	4.48	52.38	74	-21.62	-	-	150	Horz
3	2390	27.16	PK	21.8	4.48	53.44	74	-20.56	-	-	100	Horz
4	2398.949	27.95	PK	21.8	4.34	54.09	74	-19.91	-	-	100	Horz
5	2400.03	45.99	PK	21.8	4.31	72.1	-	-	-	-	100	Horz
10	2402.012	66.62	PK	21.8	4.26	92.68	-	-	-	-	100	Horz
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
6	2376.727	15.29	PK	21.8	4.18	41.27	-	-	54	-12.73	100	Horz
7	2390	15.11	PK	21.8	4.48	41.39	-	-	54	-12.61	150	Horz
8	2399.55	28.78	PK	21.8	4.32	54.9	-	-	54	0.9	100	Horz
9	2400.03	37.66	PK	21.8	4.31	63.77	-	-	-	-	100	Horz
11	2402.132	59.11	PK	21.8	4.26	85.17	-	-	-	-	100	Horz

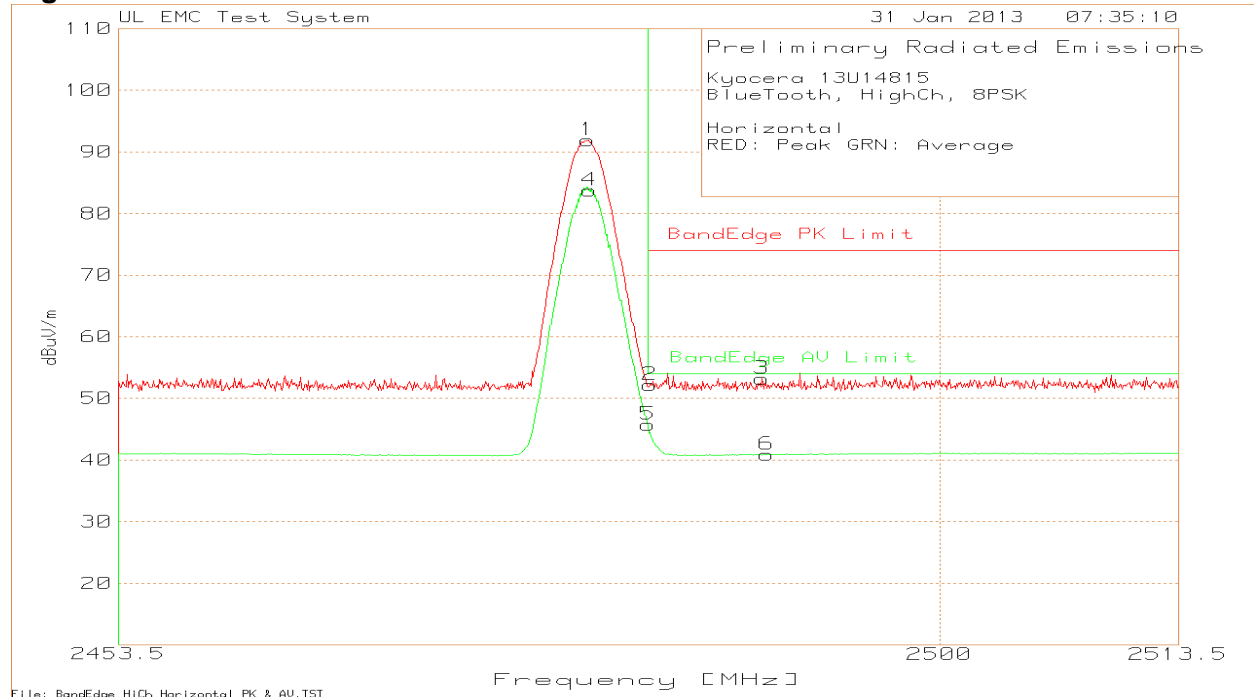
PK - Peak detector  
 Av - Average detector

**Low Channel – Vertical**



Kyocera 13U14815 Bluetooth, LowCh, 8PSK Vertical RED: Peak GRN: Average												
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
1	2381.832	26.97	PK	21.8	4.34	53.11	74	-20.89	-	-	150	Vert
2	2390	26.06	PK	21.8	4.48	52.34	74	-21.66	-	-	150	Vert
3	2399.069	28.51	PK	21.8	4.33	54.64	-	-	-	-	150	Vert
4	2400.03	45.48	PK	21.8	4.31	71.59	-	-	-	-	100	Vert
10	2402.132	65.92	PK	21.8	4.26	91.98	-	-	-	-	100	Vert
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
5	2382.012	15.19	PK	21.8	4.34	41.33	-	-	54	-12.67	100	Vert
6	2390	15.11	PK	21.8	4.48	41.39	-	-	54	-12.61	150	Vert
7	2399.55	28.85	PK	21.8	4.32	54.97	-	-	-	-	100	Vert
8	2400.03	37.54	PK	21.8	4.31	63.65	-	-	-	-	100	Vert
9	2402.072	58.55	PK	21.8	4.26	84.61	-	-	-	-	150	Vert
PK - Peak detector Av - Average detector												

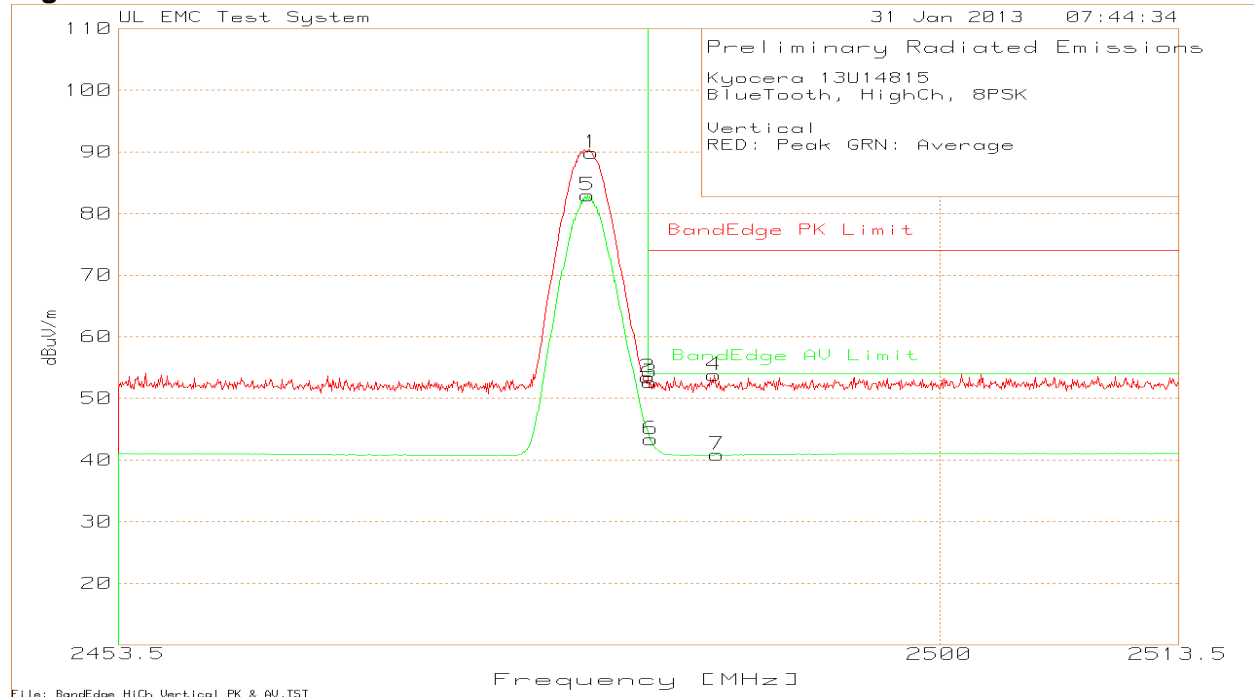
**High Channel – Horizontal**



Kyocera 13U14815 Bluetooth, HighCh, 8PSK Horizontal RED: Peak GRN: Average												
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
1	2480.047	66.18	PK	22	3.77	91.95	-	-	-	-	100	Horz
2	2483.5	26.33	PK	22.1	3.77	52.2	74	-21.8	-	-	150	Horz
3	2489.956	27.34	PK	22.1	3.81	53.25	74	-20.75	-	-	100	Horz
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
4	2480.167	58.01	PK	22	3.77	83.78	-	-	-	-	100	Horz
5	2483.5	19.89	PK	22.1	3.77	45.76	-	-	54	-8.24	100	Horz
6	2490.227	14.96	PK	22.1	3.81	40.87	-	-	54	-13.13	150	Horz

PK - Peak detector  
 Av - Average detector

**High Channel – Vertical**

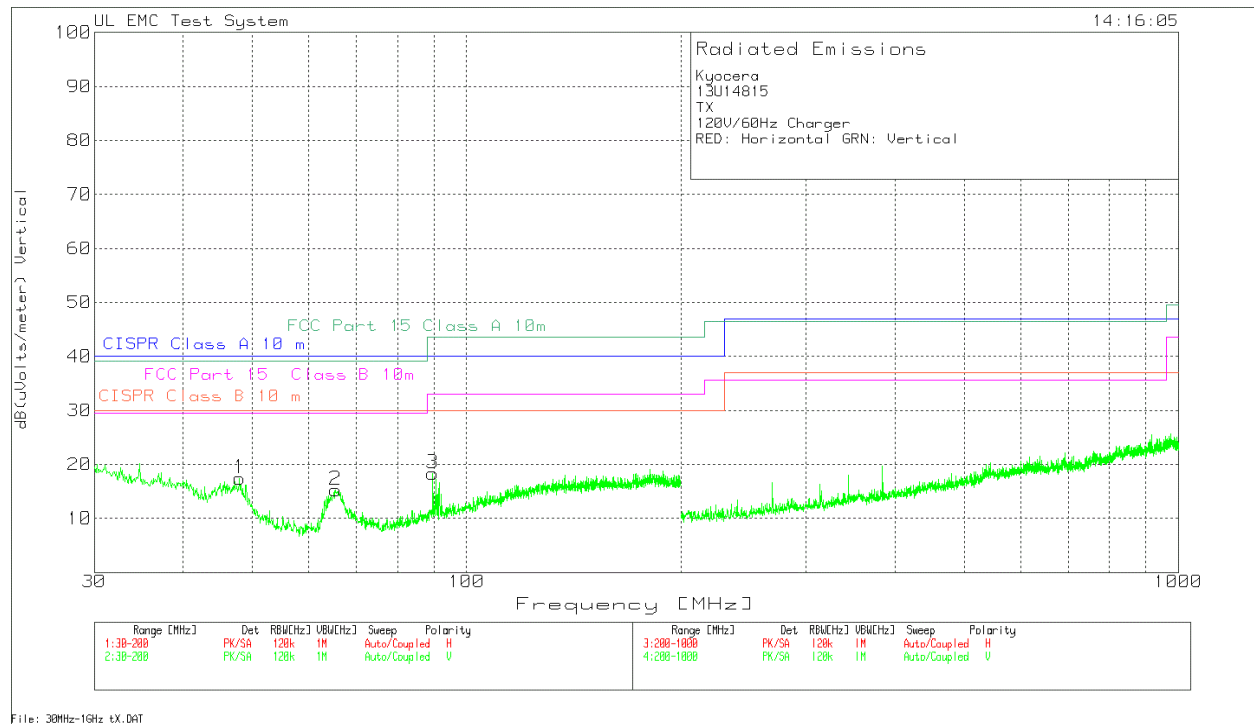
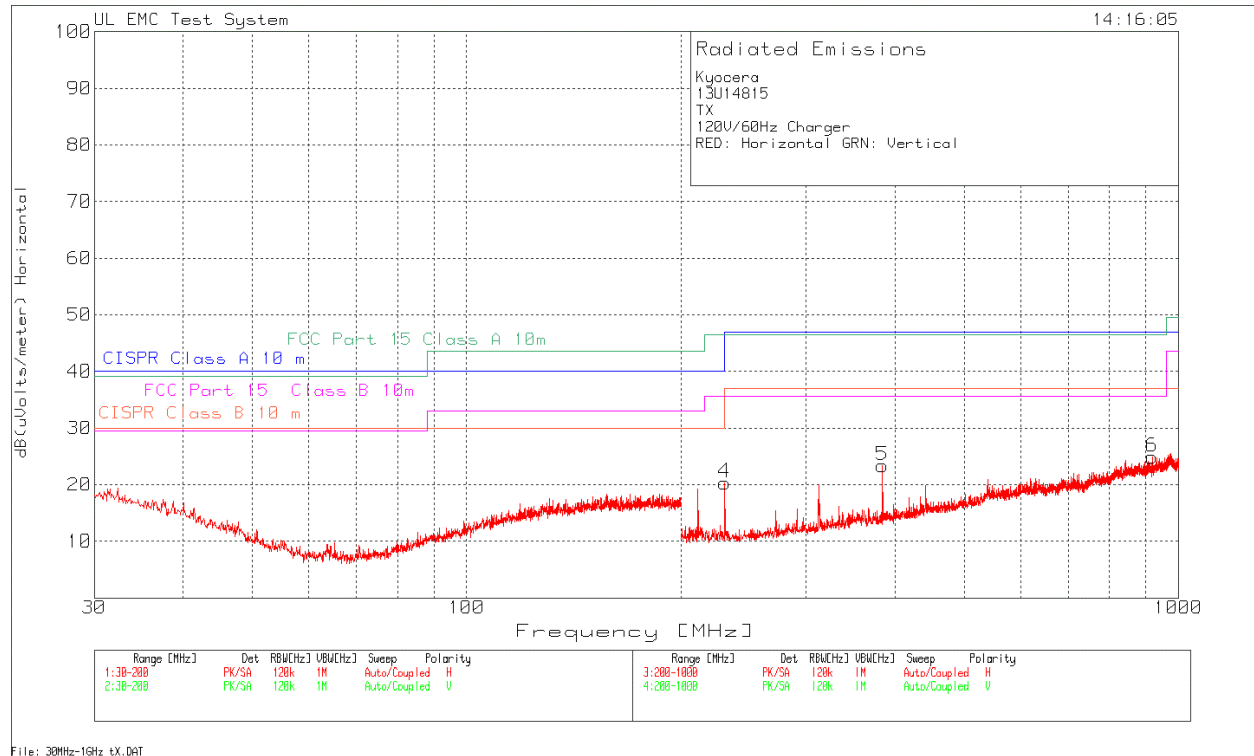


Kyocera 13U14815 Bluetooth, HighCh, 8PSK Vertical RED: Peak GRN: Average												
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
1	2480.287	64.08	PK	22	3.77	89.85	-	-	-	-	150	Vert
2	2483.5	27.62	PK	22.1	3.77	53.49	74	-20.51	-	-	100	Vert
3	2483.59	26.81	PK	22.1	3.77	52.68	74	-21.32	-	-	100	Vert
4	2487.254	27.93	PK	22.1	3.77	53.8	74	-20.2	-	-	100	Vert
Marker No.	Test Frequency MHz	Meter Reading dBuV	Detector	AF dB	BOMS Factor (dB)	Level dBuV/m	BandEdge PK Limit dBuV/m	Margin dB	BandEdge AV Limit dBuV/m	Margin dB	Height [cm]	Polarity
5	2480.047	57.19	PK	22	3.77	82.96	-	-	-	-	100	Vert
6	2483.5	17.46	PK	22.1	3.77	43.33	-	-	54	-10.67	150	Vert
7	2487.404	14.97	PK	22.1	3.77	40.84	-	-	54	-13.16	150	Vert

PK - Peak detector  
 Av - Average detector

### 7.3. WORST-CASE BELOW 1 GHz

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





Kyocera  
 13U14815  
 TX  
 120V/60Hz Charger  
 RED: Horizontal GRN: Vertical

Test No.	Frequency [MHz]	Meter Reading (dBUV)	Transducer Factor [dB]	Gain/Loss Factor [dB]	Level dB(uVolts/meter)	Limit:1	2	3	4	5	6
1	48.011	36.46 PK Height:99 Vert	10.4	-29.4 Margin [dB]	17.46	40	30	39.1	-	-	-
2	65.5122	38.46 PK Height:250 Vert	6.2	-29.4 Margin [dB]	15.26	40	30	39.1	-	-	-
3	89.6402	38.01 PK Height:99 Vert	9.8	-29.5 Margin [dB]	18.31	40	30	43.5	-	-	-
4	230.3797	41.22 PK Height:299 Horz	10.9	-31.8 Margin [dB]	20.32	47	37	46.4	-	-	-
5	383.8774	39.25 PK Height:199 Horz	15.2	-31.1 Margin [dB]	23.35	47	37	46.4	-	-	-
6	918.1879	31.98 PK Height:199 Horz	22.9	-30 Margin [dB]	24.88	47	37	46.4	-	-	-

LIMIT 1: CISPR Class A 10 m  
 LIMIT 2: CISPR Class B 10 m  
 LIMIT 3: FCC Part 15 Class A 10m  
 LIMIT 4: FCC Part 15 Class B 10m

PK - Peak detector  
 QP - Quasi-Peak detector