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Project Number:	12U4325
FCC ID	V65C5170
Date:	March 26, 2012
Model:	C5170

Electromagnetic Compatibility Test Report

For

KYOCERA Communications, Inc.

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FCC ID: V65C5170
Model Number: C5170
Client Name: Kyocera Communications

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Test Report Details

Tests Performed By: Underwriters Laboratories Inc.
333 Pfingsten Rd.
Northbrook, IL 60062

Tests Performed For: KYOCERA Communications, Inc.
8611 Balboa Ave
San Diego, CA 92123

Applicant Contact: Thuy To
Title: Senior Regulatory Engineer
Phone: 858-882-2137
E-mail: thuy.to@kyocera.com

Test Report Date: March 26, 2012

Product Type: CDMA Mobile Phone with Bluetooth

Product standards: FCC Part 15, Subpart C 15.247 – (15.207 and 15.209 tests),
RSS-210, RSS-GEN

Model Number: C5170
FCC ID: V65C5170

EUT Category: Transceiver

Testing Start Date: March 1, 2012

Date Testing Complete: March 15, 2012

Overall Results: Compliant

UL LLC reports apply only to the specific samples tested under stated test conditions. All samples tested were in good operating condition throughout the entire test program. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. UL LLC shall have no liability for any deductions, inferences or generalizations drawn by the client or others from UL LLC issued reports. 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.

This report may contain test results that are not covered by the NVLAP or A2LA accreditation. The scope of accreditation is limited to the specific tests that are listed on the NVLAP and/or A2LA websites referenced at the end of this report.

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Report Revision History

Revision Date	Description	Revised By	Revision Reviewed By
None			

1 GENERAL - Product Description

1.1 Equipment Description

FCC V65C5170 Cell phone with BT and Wifi capabilities. Only Radiated Spurious Emissions, Bandedge, and Conducted Emissions AC mains were performed.

1.2 Equipment Marking Plate

N/A

1.3 Device Configuration During Test

1.3.1 Equipment Used During Test:

Use	Product Type	Manufacturer	Model	Comments
EUT	CDMA Mobile Phone	KYOCERA Communications, Inc.	C5170	None
EUT	Power Supply	KYOCERA Communications, Inc.	SCP-31ADT	Input:100-240Vac 50/60Hz 0.2A Output: 5Vdc 800mA
AE	Ear Phones	-	-	None

Note: **EUT** - Equipment Under Test, **AE** - Auxiliary/Associated Equipment, or **SIM** - Simulator (Not Subjected to Test)

1.3.2 Input/Output Ports:

Port #	Name	Type*	Cable Max. >3m (Y/N)	Cable Shielded (Y/N)	Comments
0	Enclosure	N/E	—	—	None
1	Mains	AC	N	N	None
2	Mains	Batt	-	-	3.7V Rechargeable battery
3	Headphone	I/O	N	N	None

Note:
 AC = AC Power Port DC = DC Power Port N/E = Non-Electrical
 I/O = Signal Input or Output Port (Not Involved in Process Control)
 TP = Telecommunication Ports

1.3.3 EUT Internal Operating Frequencies:

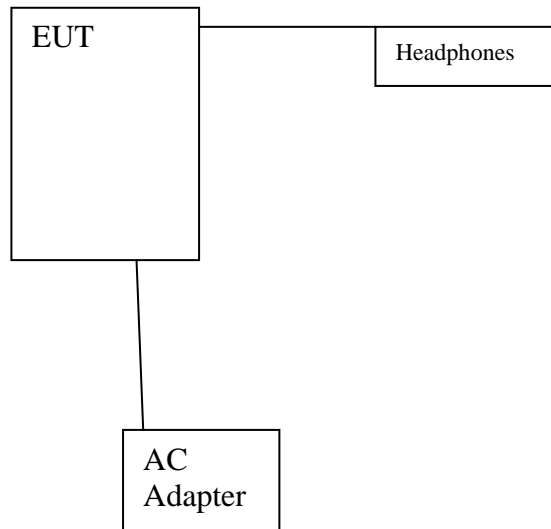
Frequency (MHz)	Description
2400	Wifi

1.3.4 Power Interface:

Mode # /Rated	Voltage (V)	Current (A)	Power (W)	Frequency (DC/AC-Hz)	Phases (#)	Comments
1	Battery Operated	-	-	DC	-	None
2	120Vac	-	-	60Hz	Single	None

1.4 Block Diagram:

The diagram below illustrates the configuration of the equipment above.



1.5 EUT Configurations

Mode #	Description
1	EUT was configured with headphones connected and either in Battery or AC mode as indicated in the caption of each plot

1.6 EUT Operation Modes

Mode #	Description
1	EUT was programmed to various operating modes indicated by the caption in each plot

1.7 Rational for EUT Configuration

Mode #	Description
1	The selected EUT configuration was chosen to maximize emissions

2 Summary

The tests listed in the Summary of Testing section of this report have been performed and the results recorded by UL LLC in accordance with the procedures stated in each test requirement and specification. The applicant determined the list of tests performed were applicable to the Equipment Under Test. As a result, the subject product has been verified to comply or not comply as noted in the Summary of Testing with each test specification. The test results relate only to the items tested.

2.1 Deviations from standard test methods

None

2.2 Device Modifications Necessary for Compliance

None

2.3 Reference Standards

Standard Number	Standard Name	Standard Date
FCC Part 15, Subpart C	Code of Federal Regulations, Part 15, Radio Frequency Devices	2011

2.4 Results Summary

This product is considered Class B

Requirement – Test	Result (Compliant / Non-Compliant)*
Conducted Emissions	Compliant
Radiated Emissions including Bandedge	Compliant

Test Engineer:



Michael Ferrer (Ext.41312)
Senior Project Engineer
International EMC Services
Conformity Assessment Services

Reviewer:



Mike Antola (Ext. 23053)
Senior Project Engineer
International EMC Services
Conformity Assessment Services

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

3 Calibration of Equipment Used for Measurement

All test equipment and test accessories are calibrated on a regular basis. The maximum time between calibrations is one year or the manufacturers' recommendation, whichever is less.

All test equipment calibrations are traceable to the National Institute of Standards and Technology (NIST); therefore, all test data recorded in this report is traceable to NIST.

4 EMISSIONS TEST RESULTS

The emissions tests were performed according to following regulations:

----- United States -----

Code of Federal Regulations Title 47	Part 15, Subpart C, Radio Frequency Devices
--------------------------------------	---

Unless specified otherwise in the individual Methods, the tests shall be conducted under the following ambient conditions. Confirmation of these conditions shall be verified at the time the test is conducted.

Ambient Temperature, °C	22.5 ± 2.5	Relative Humidity, %	45 ± 15	Barometric Pressure, mBar	950 ± 150
-------------------------	------------	----------------------	---------	---------------------------	-----------

Measurement Uncertainty

Test	Uncertainty
Conducted Emissions	+/- 0.6dB (k=2)
Radiated Emissions	+/- 3.1dB (k=2)

Sample Calculations

Radiated Field Strength and Conducted Emissions data contained within this report is calculated on the following basis:

Field Strength (dBuV/m) = Meter Reading (dBuV) + AF (dB/m) - Gain (dB) + Cable Loss (dB)

Conducted Voltage (dBuV) = Meter Reading (dBuV) + Cable Loss (dB) + LISN IL (dB)

Conducted Current (dBA) = Meter Reading (dBuV) + Cable Loss (dB) - Transducer Factor (dBohms)

4.1

Test Conditions and Results – MAINS TERMINAL – CONDUCTED EMISSIONS

Test Description	Measurements were made on a ground plane. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN.	
Basic Standard	FCC Part 15.207	
UL LPG	80-EM-S0026	
	Frequency range on each side of line	Measurement Point
Fully configured sample scanned over the following frequency range	150kHz to 30MHz	Mains
Limits - Class B		
Frequency (MHz)	Limit (dB μ V)	
	Quasi-Peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50
Supplementary information: None		

Table 1 Conducted Emissions EUT Configuration Settings

Power Interface Mode #	EUT Configurations Mode #	EUT Operation Mode #
1	1	1
Supplementary information: None		

Table 2 Conducted Emissions Test Equipment

Description	Manufacturer	Model	Identifier	Cal Date	Cal Due
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC4328	12/28/11	12/28/12
Transient Limiter	Electro-Metrics	EM7600-2	EMC4224	N/A	N/A
HighPass Filter	Solar Electronics	2803-150	EMC4327	N/A	N/A
Attenuator	HP	8494B	2831A00838	N/A	N/A
LISN - L1	Solar	8602-50-TS-50-N	EMC4052	1/6/12	1/7/13
LISN - L2	Solar	8602-50-TS-50-N	EMC4064	1/6/12	1/7/13

Figure 1 Test Setup for Conducted Emissions

See Photos exhibit

Figure 2 Conducted Emissions Graph

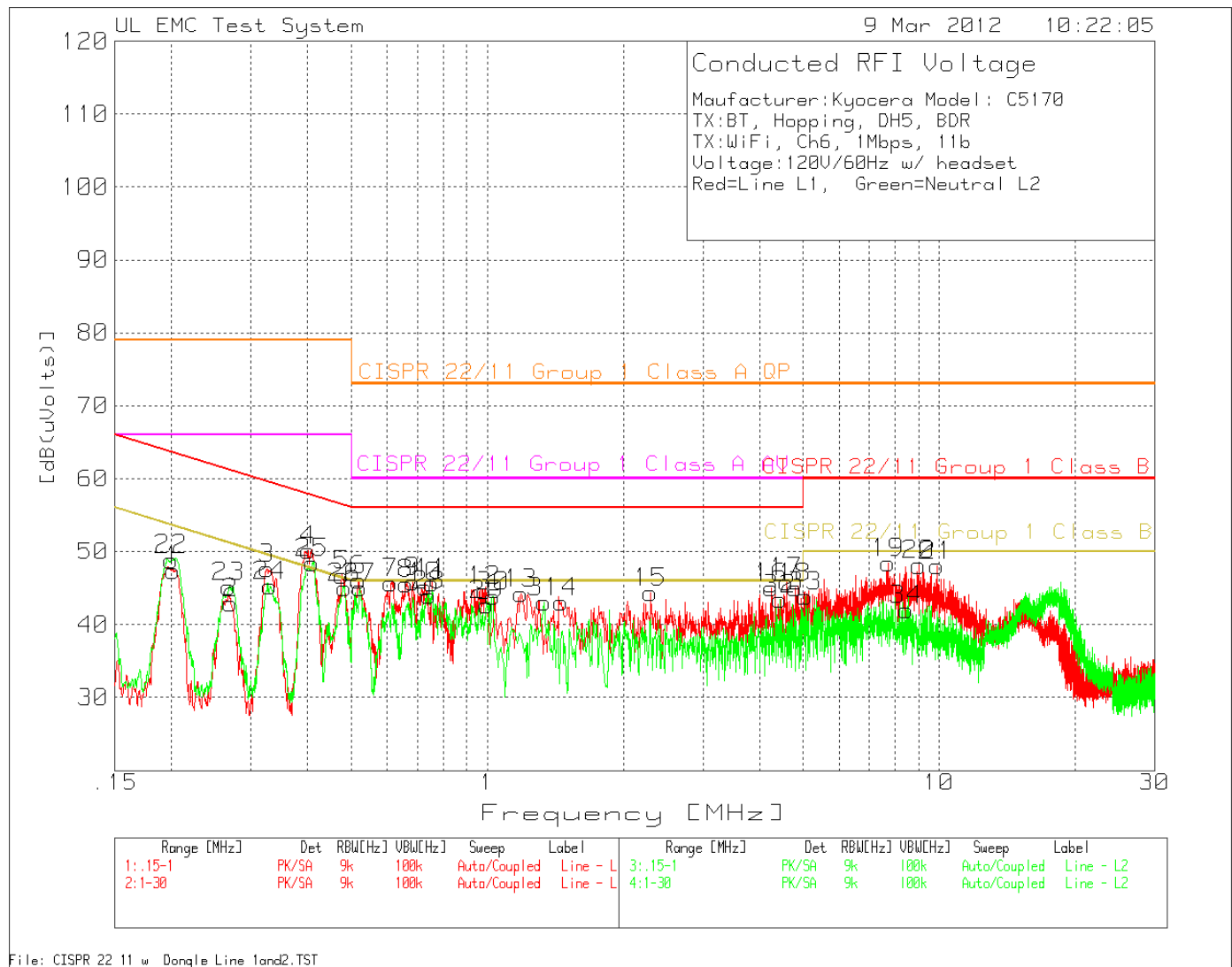


Table 3 Conducted Emissions Data Points

Manufacturer:Kyocera Model: C5170

TX:BT, Hopping, DH5, BDR

TX:WiFi, Ch6, 1Mbps, 11b

Voltage:120V/60Hz w/ headset

Red=Line L1, Green=Neutral L2

Test	Meter	Transducer	Gain/Loss	Level	Limit:1	2	3	4	5	6
No. Frequency	Reading	Factor	Factor	[dB(uVolts)]						
[MHz]	[dB(uV)]	[dB]	[dB]							
=====										
Line - L1 .15 - 1MHz -----										
1 .20182	35.81 PK	.1	11.5	47.41	79	66	63.5	53.5	-	-
			Margin [dB]		-31.59	-18.59	-16.09	-6.09	-	-
2 .2709	31.69 PK	.1	11.1	42.89	79	66	61.1	51.1	-	-
			Margin [dB]		-36.11	-23.11	-18.21	-8.21	-	-
3 .32527	36.74 PK	.1	10.8	47.64	79	66	59.6	49.6	-	-
			Margin [dB]		-31.36	-18.36	-11.96	-1.96	-	-
4 .40172	39.2 PK	.1	10.8	50.1	79	66	57.8	47.8	-	-
			Margin [dB]		-28.9	-15.9	-7.7	2.3	-	-
5 .4759	35.9 PK	.1	10.7	46.7	79	66	56.4	46.4	-	-
			Margin [dB]		-32.3	-19.3	-9.7	.3	-	-
6 .51894	35.34 PK	.1	10.6	46.04	73	60	56	46	-	-
			Margin [dB]		-26.96	-13.96	-9.96	.04	-	-
7 .61167	34.94 PK	.1	10.6	45.64	73	60	56	46	-	-
			Margin [dB]		-27.36	-14.36	-10.36	-.36	-	-
8 .66178	34.88 PK	.1	10.6	45.58	73	60	56	46	-	-
			Margin [dB]		-27.42	-14.42	-10.42	-.42	-	-
9 .6826	35.15 PK	.1	10.6	45.85	73	60	56	46	-	-
			Margin [dB]		-27.15	-14.15	-10.15	-.15	-	-
10 .72846	34.47 PK	.1	10.6	45.17	73	60	56	46	-	-
			Margin [dB]		-27.83	-14.83	-10.83	-.83	-	-
11 .75366	35.02 PK	.1	10.6	45.72	73	60	56	46	-	-
			Margin [dB]		-27.28	-14.28	-10.28	-.28	-	-
12 .98471	33.92 PK	.1	10.6	44.62	73	60	56	46	-	-
			Margin [dB]		-28.38	-15.38	-11.38	-1.38	-	-
Line - L1 1 - 30MHz -----										
13 1.18545	33.58 PK	.1	10.6	44.28	73	60	56	46	-	-
			Margin [dB]		-28.72	-15.72	-11.72	-1.72	-	-
14 1.45783	32.31 PK	.1	10.6	43.01	73	60	56	46	-	-
			Margin [dB]		-29.99	-16.99	-12.99	-2.99	-	-
15 2.29816	33.63 PK	.1	10.6	44.33	73	60	56	46	-	-
			Margin [dB]		-28.67	-15.67	-11.67	-1.67	-	-
16 4.2512	34.17 PK	.2	10.7	45.07	73	60	56	46	-	-
			Margin [dB]		-27.93	-14.93	-10.93	-.93	-	-
17 4.60472	34.94 PK	.2	10.7	45.84	73	60	56	46	-	-
			Margin [dB]		-27.16	-14.16	-10.16	-.16	-	-
18 4.81335	34.07 PK	.2	10.7	44.97	73	60	56	46	-	-
			Margin [dB]		-28.03	-15.03	-11.03	-1.03	-	-
19 7.69944	37.24 PK	.3	10.9	48.44	73	60	60	50	-	-
			Margin [dB]		-24.56	-11.56	-11.56	-1.56	-	-
20 9.01789	36.61 PK	.6	10.9	48.11	73	60	60	50	-	-
			Margin [dB]		-24.89	-11.89	-11.89	-1.89	-	-
21 9.8785	36.52 PK	.5	11	48.02	73	60	60	50	-	-
			Margin [dB]		-24.98	-11.98	-11.98	-1.98	-	-

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Line - L2 .15 - 1MHz -----										
22	.19955	37.29 PK	.1	11.5	48.89	79	66	63.6	53.6	-
				Margin [dB]		-30.11	-17.11	-14.71	-4.71	-
23	.26807	33.9 PK	.1	11.1	45.1	79	66	61.2	51.2	-
				Margin [dB]		-33.9	-20.9	-16.1	-6.1	-
24	.33036	34.37 PK	.1	10.8	45.27	79	66	59.4	49.4	-
				Margin [dB]		-33.73	-20.73	-14.13	-4.13	-
25	.40979	37.55 PK	.1	10.8	48.45	79	66	57.7	47.7	-
				Margin [dB]		-30.55	-17.55	-9.25	.75	-
26	.48326	34.22 PK	.1	10.7	45.02	79	66	56.3	46.3	-
				Margin [dB]		-33.98	-20.98	-11.28	-1.28	-
27	.52262	34.26 PK	.1	10.7	45.06	73	60	56	46	-
				Margin [dB]		-27.94	-14.94	-10.94	-.94	-
28	.74291	33.3 PK	.1	10.6	44	73	60	56	46	-
				Margin [dB]		-29	-16	-12	-2	-
29	.99858	31.92 PK	.1	10.6	42.62	73	60	56	46	-
				Margin [dB]		-30.38	-17.38	-13.38	-3.38	-

Line - L2 1 - 30MHz -----										
30	1.02898	33.09 PK	.1	10.6	43.79	73	60	56	46	-
				Margin [dB]		-29.21	-16.21	-12.21	-2.21	-
31	1.33613	32.32 PK	.1	10.6	43.02	73	60	56	46	-
				Margin [dB]		-29.98	-16.98	-12.98	-2.98	-
32	4.44245	32.56 PK	.2	10.7	43.46	73	60	56	46	-
				Margin [dB]		-29.54	-16.54	-12.54	-2.54	-
33	5.05676	32.84 PK	.2	10.8	43.84	73	60	60	50	-
				Margin [dB]		-29.16	-16.16	-16.16	-6.16	-
34	8.45284	30.44 PK	.6	11	42.04	73	60	60	50	-
				Margin [dB]		-30.96	-17.96	-17.96	-7.96	-

LIMIT 1: CISPR 22/11 Group 1 Class A QP
 LIMIT 2: CISPR 22/11 Group 1 Class A AV
 LIMIT 3: CISPR 22/11 Group 1 Class B QP
 LIMIT 4: CISPR 22/11 Group 1 Class B AV
 LIMIT 5: NONE
 LIMIT 6: NONE

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Manufacturer:Kyocera Model: C5170

TX:BT, Hopping, DH5, BDR

TX:WiFi, Ch6, 1Mbps, 11b

Voltage:120V/60Hz w/ headset

Red=Line L1, Green=Neutral L2

Test	Meter	Transducer	Gain/Loss	Level	Limit:1	2	3	4	5	6
Frequency	Reading	Factor	Factor	[dB(uVolts)]						
[MHz]	[dB(uV)]	[dB]	[dB]							
=====										
Line - L1 .15 - 1MHz										
.20087	33.36 QP	.1	11.5	44.96	79	66	63.57	53.57	-	-
			Margin [dB]:		-34.04	-21.04	-18.61	-8.61	-	-
.26895	29.69 QP	.1	11.1	40.89	79	66	61.15	51.15	-	-
			Margin [dB]:		-38.11	-25.11	-20.26	-10.26	-	-
.32749	33.41 QP	.1	10.8	44.31	79	66	59.51	49.51	-	-
			Margin [dB]:		-34.69	-21.69	-15.2	-5.2	-	-
.39962	37.51 QP	.1	10.8	48.41	79	66	57.86	47.86	-	-
			Margin [dB]:		-30.59	-17.59	-9.45	.55	-	-
.47752	29.9 QP	.1	10.7	40.7	79	66	56.38	46.38	-	-
			Margin [dB]:		-38.3	-25.3	-15.68	-5.68	-	-
.52079	31.45 QP	.1	10.6	42.15	73	60	56	46	-	-
			Margin [dB]:		-30.85	-17.85	-13.85	-3.85	-	-
.61279	29.17 QP	.1	10.6	39.87	73	60	56	46	-	-
			Margin [dB]:		-33.13	-20.13	-16.13	-6.13	-	-
.66275	31.88 QP	.1	10.6	42.58	73	60	56	46	-	-
			Margin [dB]:		-30.42	-17.42	-13.42	-3.42	-	-
.68378	29.85 QP	.1	10.6	40.55	73	60	56	46	-	-
			Margin [dB]:		-32.45	-19.45	-15.45	-5.45	-	-
.72902	31.02 QP	.1	10.6	41.72	73	60	56	46	-	-
			Margin [dB]:		-31.28	-18.28	-14.28	-4.28	-	-
.75537	28 QP	.1	10.6	38.7	73	60	56	46	-	-
			Margin [dB]:		-34.3	-21.3	-17.3	-7.3	-	-
.98651	29.38 QP	.1	10.6	40.08	73	60	56	46	-	-
			Margin [dB]:		-32.92	-19.92	-15.92	-5.92	-	-
Line - L1 1 - 30MHz										
1.19507	29.88 QP	.1	10.6	40.58	73	60	56	46	-	-
			Margin [dB]:		-32.42	-19.42	-15.42	-5.42	-	-
1.46031	28.71 QP	.1	10.6	39.41	73	60	56	46	-	-
			Margin [dB]:		-33.59	-20.59	-16.59	-6.59	-	-
2.29341	26.8 QP	.1	10.6	37.5	73	60	56	46	-	-
			Margin [dB]:		-35.5	-22.5	-18.5	-8.5	-	-
4.25573	24.39 QP	.2	10.7	35.29	73	60	56	46	-	-
			Margin [dB]:		-37.71	-24.71	-20.71	-10.71	-	-
4.60988	25.76 QP	.2	10.7	36.66	73	60	56	46	-	-
			Margin [dB]:		-36.34	-23.34	-19.34	-9.34	-	-
4.83169	28.36 QP	.2	10.7	39.26	73	60	56	46	-	-
			Margin [dB]:		-33.74	-20.74	-16.74	-6.74	-	-
7.71494	27.67 QP	.3	10.9	38.87	73	60	60	50	-	-
			Margin [dB]:		-34.13	-21.13	-21.13	-11.13	-	-
9.03079	28.01 QP	.6	10.9	39.51	73	60	60	50	-	-
			Margin [dB]:		-33.49	-20.49	-20.49	-10.49	-	-
9.86506	27.11 QP	.5	11	38.61	73	60	60	50	-	-
			Margin [dB]:		-34.39	-21.39	-21.39	-11.39	-	-

Line - L2 .15 - 1MHz										
.20154	35.26	QP	.1	11.5	46.86	79	66	63.55	53.55	-
				Margin [dB]:		-32.14	-19.14	-16.69	-6.69	-
.2697	30.98	QP	.1	11.1	42.18	79	66	61.13	51.13	-
				Margin [dB]:		-36.82	-23.82	-18.95	-8.95	-
.33245	30.21	QP	.1	10.8	41.11	79	66	59.39	49.39	-
				Margin [dB]:		-37.89	-24.89	-18.28	-8.28	-
.40774	32.82	QP	.1	10.8	43.72	79	66	57.69	47.69	-
				Margin [dB]:		-35.28	-22.28	-13.97	-3.97	-
.48134	31.51	QP	.1	10.7	42.31	79	66	56.32	46.32	-
				Margin [dB]:		-36.69	-23.69	-14.01	-4.01	-
.52461	29.88	QP	.1	10.7	40.68	73	60	56	46	-
				Margin [dB]:		-32.32	-19.32	-15.32	-5.32	-
.74113	29.45	QP	.1	10.6	40.15	73	60	56	46	-
				Margin [dB]:		-32.85	-19.85	-15.85	-5.85	-
.99911	25.91	QP	.1	10.6	36.61	73	60	56	46	-
				Margin [dB]:		-36.39	-23.39	-19.39	-9.39	-
Line - L2 1 - 30MHz										
1.01139	27.04	QP	.1	10.6	37.74	73	60	56	46	-
				Margin [dB]:		-35.26	-22.26	-18.26	-8.26	-
1.35153	26.89	QP	.1	10.6	37.59	73	60	56	46	-
				Margin [dB]:		-35.41	-22.41	-18.41	-8.41	-
4.4269	24.22	QP	.2	10.7	35.12	73	60	56	46	-
				Margin [dB]:		-37.88	-24.88	-20.88	-10.88	-
5.07221	27.46	QP	.2	10.8	38.46	73	60	50	50	-
				Margin [dB]:		-34.54	-21.54	-21.54	-11.54	-
8.44773	24.24	QP	.6	11	35.84	73	60	60	50	-
				Margin [dB]:		-37.16	-24.16	-24.16	-14.16	-

NOTE: "+" - Indicates an emission level in excess of the applicable limit (s).

PK - Peak detector
QP - Quasi-Peak detector
LnAv - Linear average detector
LgAv - average log detection
Av - average detection
CAV - CISPR average detection
RMS - RMS detection
CRMS - CISPR RMS detection

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV
LIMIT 5: NONE
LIMIT 6: NONE

FCC ID: V65C5170
 Model Number: C5170
 Client Name: Kyocera Communications

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Manufacturer:Kyocera Model: C5170

TX:BT, Hopping, DH5, BDR

TX:WiFi, Ch6, 1Mbps, 11b

Voltage:120V/60Hz w/ headset

Red=Line L1, Green=Neutral L2

Test	Meter	Transducer	Gain/Loss	Level	Limit:1	2	3	4	5	6
Frequency	Reading	Factor	Factor	[dB(uVolts)]						
[MHz]	[dB(uV)]	[dB]	[dB]							

=====										
Line - L1 .15 - 1MHz										
.20087	25.7 Av	.1	11.5	37.3	79	66	63.57	53.57	-	-
			Margin [dB]:		-41.7	-28.7	-26.27	-16.27	-	-
.26895	19.71 Av	.1	11.1	30.91	79	66	61.15	51.15	-	-
			Margin [dB]:		-48.09	-35.09	-30.24	-20.24	-	-
.32749	21.15 Av	.1	10.8	32.05	79	66	59.51	49.51	-	-
			Margin [dB]:		-46.95	-33.95	-27.46	-17.46	-	-
.39962	27.37 Av	.1	10.8	38.27	79	66	57.86	47.86	-	-
			Margin [dB]:		-40.73	-27.73	-19.59	-9.59	-	-
.47752	17.96 Av	.1	10.7	28.76	79	66	56.38	46.38	-	-
			Margin [dB]:		-50.24	-37.24	-27.62	-17.62	-	-
.52079	16.6 Av	.1	10.6	27.3	73	60	56	46	-	-
			Margin [dB]:		-45.7	-32.7	-28.7	-18.7	-	-
.61279	14.45 Av	.1	10.6	25.15	73	60	56	46	-	-
			Margin [dB]:		-47.85	-34.85	-30.85	-20.85	-	-
.66275	18.64 Av	.1	10.6	29.34	73	60	56	46	-	-
			Margin [dB]:		-43.66	-30.66	-26.66	-16.66	-	-
.68378	16.17 Av	.1	10.6	26.87	73	60	56	46	-	-
			Margin [dB]:		-46.13	-33.13	-29.13	-19.13	-	-
.72902	19.73 Av	.1	10.6	30.43	73	60	56	46	-	-
			Margin [dB]:		-42.57	-29.57	-25.57	-15.57	-	-
.75537	15.7 Av	.1	10.6	26.4	73	60	56	46	-	-
			Margin [dB]:		-46.6	-33.6	-29.6	-19.6	-	-
.98651	17.42 Av	.1	10.6	28.12	73	60	56	46	-	-
			Margin [dB]:		-44.88	-31.88	-27.88	-17.88	-	-
Line - L1 1 - 30MHz										
1.19507	16.43 Av	.1	10.6	27.13	73	60	56	46	-	-
			Margin [dB]:		-45.87	-32.87	-28.87	-18.87	-	-
1.46031	16.88 Av	.1	10.6	27.58	73	60	56	46	-	-
			Margin [dB]:		-45.42	-32.42	-28.42	-18.42	-	-
2.29341	16.73 Av	.1	10.6	27.43	73	60	56	46	-	-
			Margin [dB]:		-45.57	-32.57	-28.57	-18.57	-	-
4.25573	15.32 Av	.2	10.7	26.22	73	60	56	46	-	-
			Margin [dB]:		-46.78	-33.78	-29.78	-19.78	-	-
4.60988	17.29 Av	.2	10.7	28.19	73	60	56	46	-	-
			Margin [dB]:		-44.81	-31.81	-27.81	-17.81	-	-
4.83169	17.64 Av	.2	10.7	28.54	73	60	56	46	-	-
			Margin [dB]:		-44.46	-31.46	-27.46	-17.46	-	-
7.71494	18.03 Av	.3	10.9	29.23	73	60	60	50	-	-
			Margin [dB]:		-43.77	-30.77	-30.77	-20.77	-	-
9.03079	17.86 Av	.6	10.9	29.36	73	60	60	50	-	-
			Margin [dB]:		-43.64	-30.64	-30.64	-20.64	-	-
9.86506	16.76 Av	.5	11	28.26	73	60	60	50	-	-
			Margin [dB]:		-44.74	-31.74	-31.74	-21.74	-	-

Line - L2 .15 - 1MHz										
.20154	24.19 Av	.1	11.5	35.79	79	66	63.55	53.55	-	-
			Margin [dB]:		-43.21	-30.21	-27.76	-17.76	-	-
.2697	18.96 Av	.1	11.1	30.16	79	66	61.13	51.13	-	-
			Margin [dB]:		-48.84	-35.84	-30.97	-20.97	-	-
.33245	19.34 Av	.1	10.8	30.24	79	66	59.39	49.39	-	-
			Margin [dB]:		-48.76	-35.76	-29.15	-19.15	-	-
.40774	21.68 Av	.1	10.8	32.58	79	66	57.69	47.69	-	-
			Margin [dB]:		-46.42	-33.42	-25.11	-15.11	-	-
.48134	16.09 Av	.1	10.7	26.89	79	66	56.32	46.32	-	-
			Margin [dB]:		-52.11	-39.11	-29.43	-19.43	-	-
.52461	14.5 Av	.1	10.7	25.3	73	60	56	46	-	-
			Margin [dB]:		-47.7	-34.7	-30.7	-20.7	-	-
.74113	17.94 Av	.1	10.6	28.64	73	60	56	46	-	-
			Margin [dB]:		-44.36	-31.36	-27.36	-17.36	-	-
.99911	14.98 Av	.1	10.6	25.68	73	60	56	46	-	-
			Margin [dB]:		-47.32	-34.32	-30.32	-20.32	-	-
Line - L2 1 - 30MHz										
1.01139	16.35 Av	.1	10.6	27.05	73	60	56	46	-	-
			Margin [dB]:		-45.95	-32.95	-28.95	-18.95	-	-
1.35153	14.73 Av	.1	10.6	25.43	73	60	56	46	-	-
			Margin [dB]:		-47.57	-34.57	-30.57	-20.57	-	-
4.4269	14.34 Av	.2	10.7	25.24	73	60	56	46	-	-
			Margin [dB]:		-47.76	-34.76	-30.76	-20.76	-	-
5.07221	15.43 Av	.2	10.8	26.43	73	60	60	50	-	-
			Margin [dB]:		-46.57	-33.57	-33.57	-23.57	-	-
8.44773	15.03 Av	.6	11	26.63	73	60	60	50	-	-
			Margin [dB]:		-46.37	-33.37	-33.37	-23.37	-	-

NOTE: "+" - Indicates an emission level in excess of the applicable limit (s).

PK - Peak detector
QP - Quasi-Peak detector
LnAv - Linear average detector
LgAv - average log detection
Av - average detection
CAV - CISPR average detection
RMS - RMS detection
CRMS - CISPR RMS detection

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV
LIMIT 5: NONE
LIMIT 6: NONE

4.2 Test Conditions and Results – RADIATED EMISSIONS

Test Description	Measurements were made in a 10-meter semi-anechoic chamber that complies to CISPR 16/ANSI C63.4. Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 10-meter. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in both horizontal and vertical polarities. Final measurements (quasi-peak or average as noted) were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4-meters. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable.	
Basic Standard	FCC Part 15	
UL LPG	80-EM-S0029	
	Frequency range	Measurement Point
Fully configured sample scanned over the following frequency range	30MHz – 1GHz	(10 meter measurement distance)
Fully configured sample scanned over the following frequency range	1GHz – 25GHz	(3 meter measurement distance)
Limits - Class B		
Frequency (MHz)	Limit (dBμV/m)	
	Quasi-Peak	Average
30-88	29.6	NA
88-216	33.1	NA
216-960	35.6	NA
960-1000	43.5	NA
960-25000 (3m)	74 (Peak)	54
<p>Supplementary information: If Emissions detected were at least 6dB below the limit no additional measurements were taken after prescan. The EUT was scanned in three orthogonal axis from 1GHz-25GHz set to 802.11b, 1Mbps, low, middle and high channels. In addition the EUT was set to 802.11g, 6Mbps and 802.11n, MCS0 to determine if any additional spurious emissions are generated by switching to different modulation. Band-edge scans were conducted at axis determined as worst case from initial 1GHz-25GHz scans in multiple modulation modes and data rates. Below 1GHz the EUT was scanned only in one axis, one modulation. No emissions related the transmitter were noted.</p> <p>Emissions found near 1.9GHz is noise floor.</p>		

Table 4 Radiated Emissions EUT Configuration Settings

Power Interface Mode #	EUT Configurations Mode #	EUT Operation Mode #
1	1	1
Supplementary information: None		

Table 5 Radiated Emissions Test Equipment

Description	Manufacturer	Model	Identifier	Cal Date	Cal Due
EMI Test Receiver	Rohde & Schwarz	ESU	EMC4323	12/27/11	12/27/12
Bicon Antenna	Chase	VBA6106A	EMC4078	1/17/12	1/31/13
Log-P Antenna	Chase	UPA6109	EMC4313	6/29/11	6/29/12
Spectrum Analyzer	Rhode & Schwarz	FSEK	EMC4182	12/27/11	12/31/12
Antenna Array	UL	BOMS	EMC4276	1/2/2012	1/2/2013

Figure 3 Test setup for Radiated Emissions

See Photo Exhibit

4.2.1.1 Spurious, 802.11b, 1Mbps, Middle Channel, Battery Mode, 30MHz – 1GHz

Figure 4 Radiated Emissions Graph X-Axis

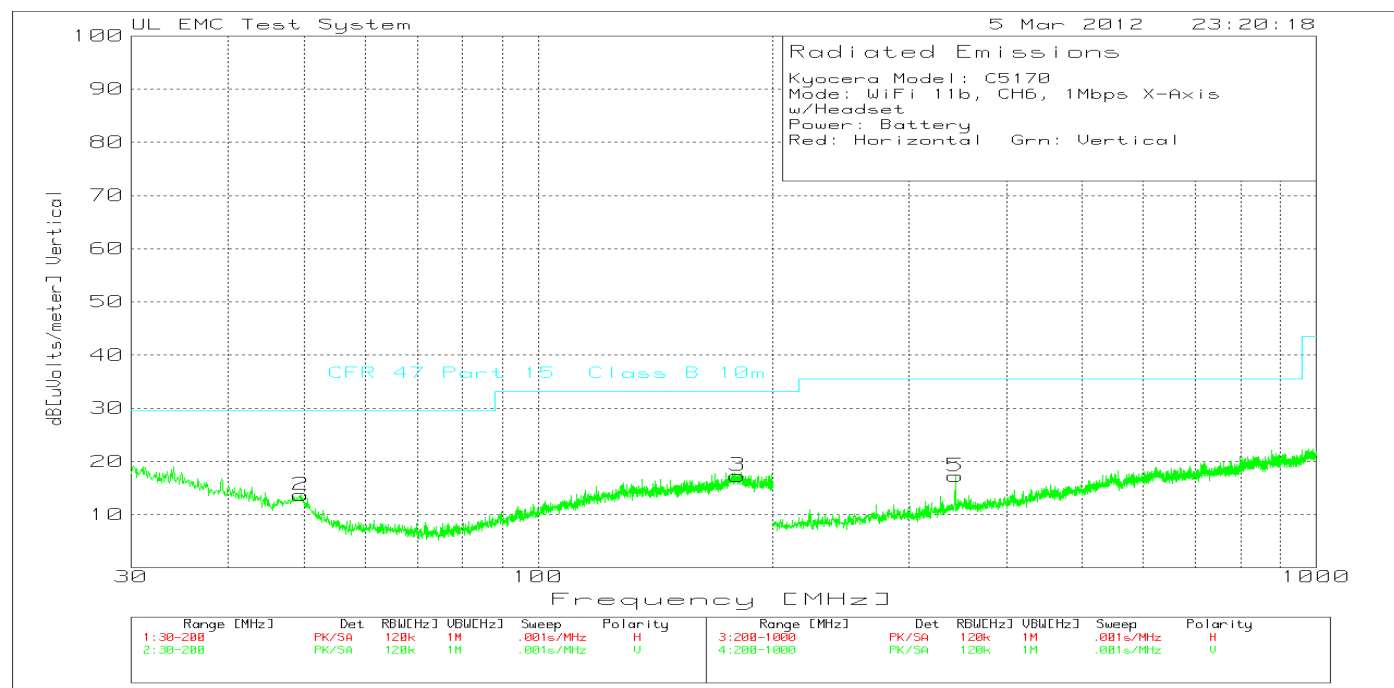
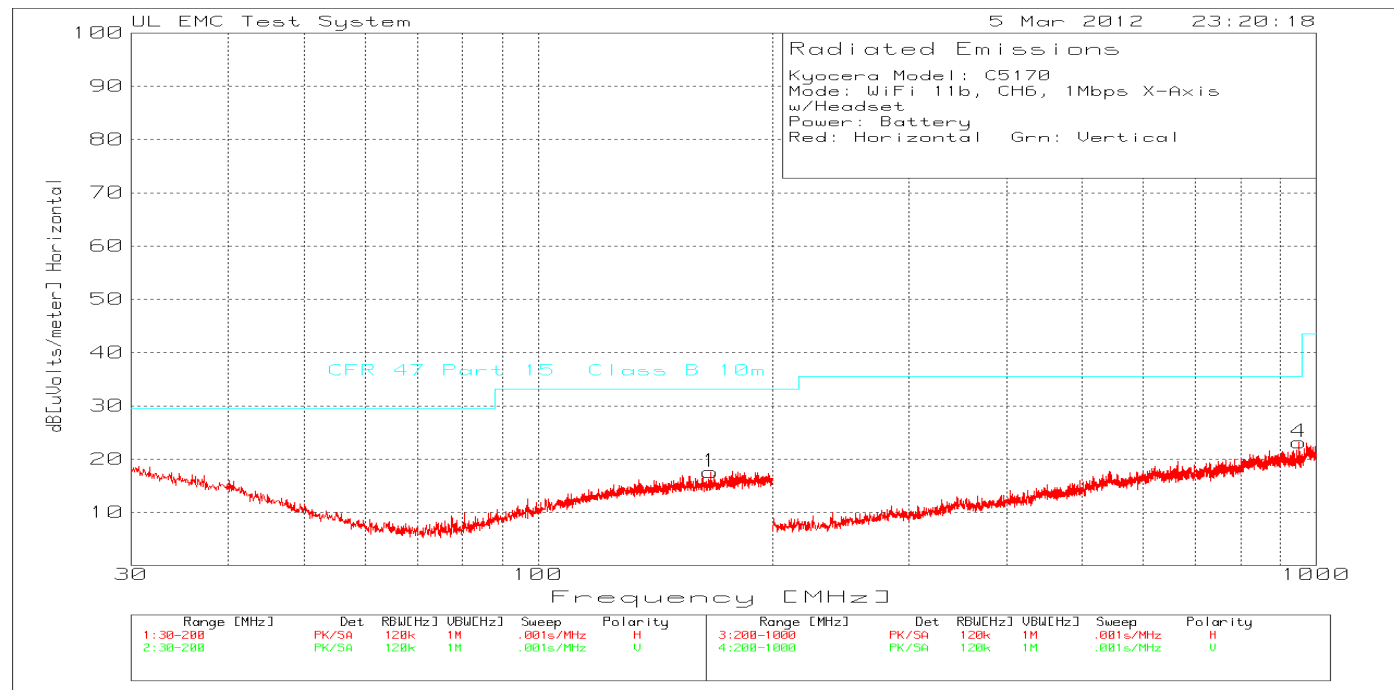


Table 6 Radiated Emissions Data Points X-Axis

Kyocera Model: C5170
 Mode: WiFi 11b, CH6, 1Mbps X-Axis
 w/Headset
 Power: Battery
 Red: Horizontal Grn: Vertical

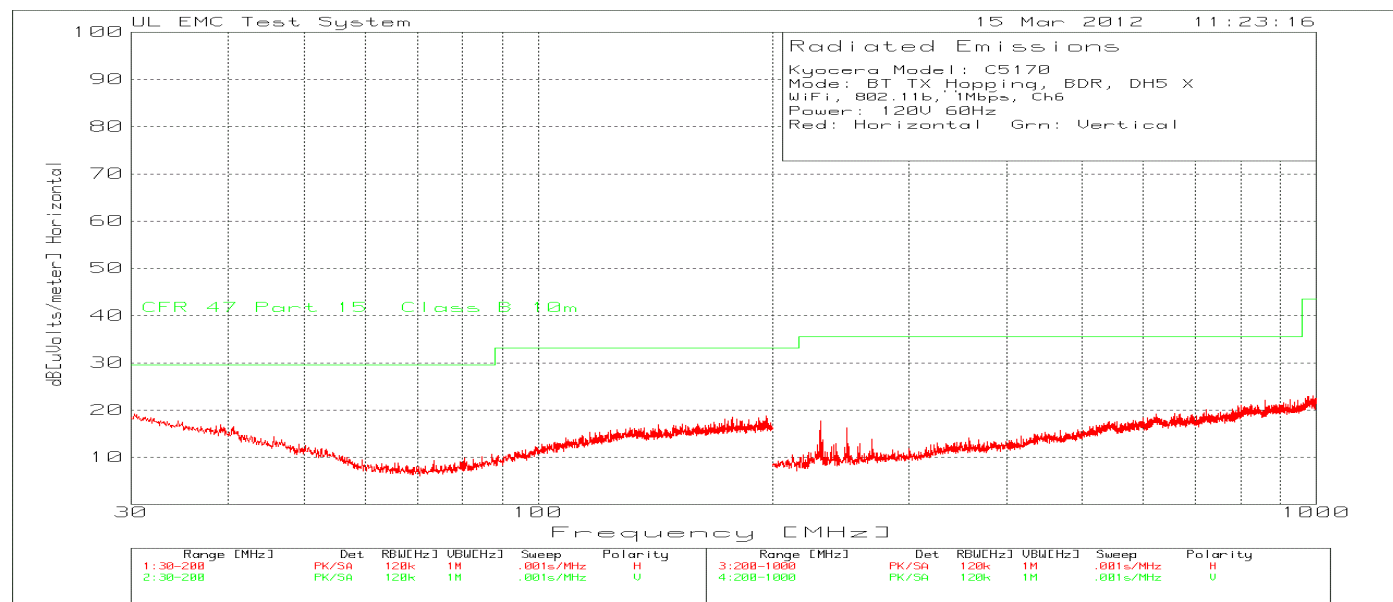
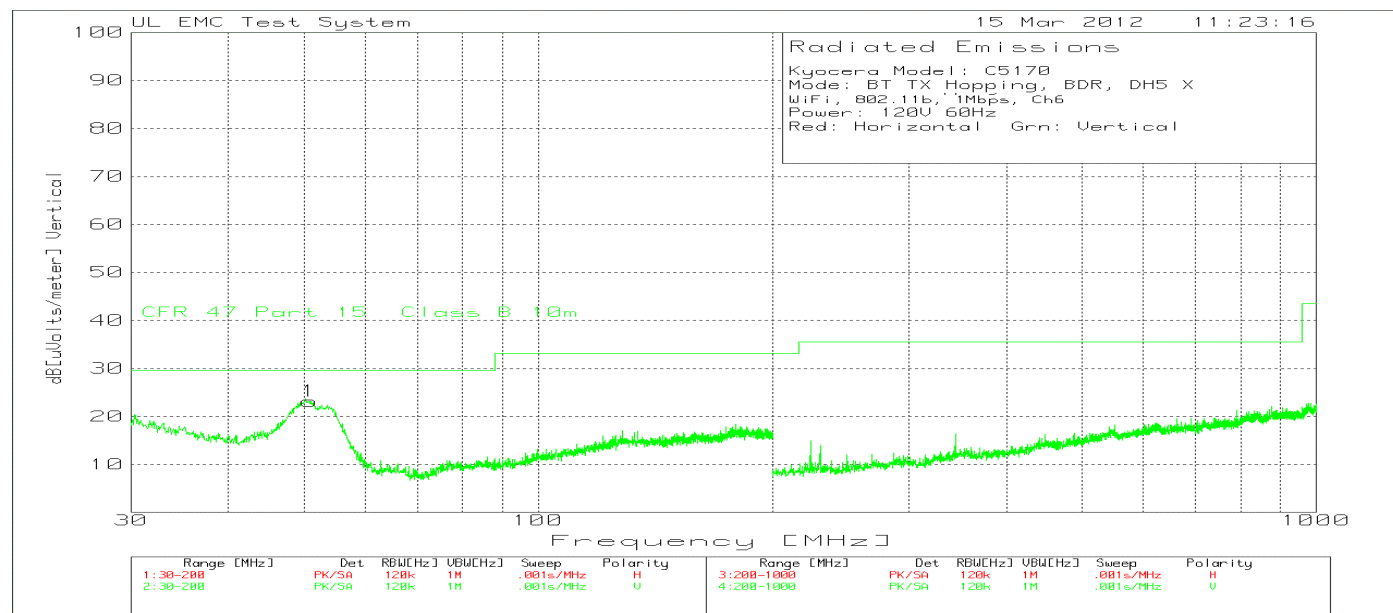
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	dB[uV/m]	CFR 47 Part 15 Class B 10m	Margin	Height [cm]	Polarity
166.5267	31.71	PK	15.2	-29.3	17.61	33.1	-15.49	101	Horz
49.5402	32.98	PK	10.1	-29.4	13.68	29.6	-15.92	101	Vert
180.7996	30.62	PK	15.8	-29.1	17.32	33.1	-15.78	101	Vert
951.7655	31.86	PK	22.8	-31.5	23.16	35.6	-12.44	100	Horz
343.6376	35.35	PK	14.5	-32.6	17.25	35.6	-18.35	99	Vert

There are no emissions recorded, noise floor only.

PK - Peak detector
 QP - Quasi-Peak detector

4.2.1.2 Spurious, 802.11b, 1Mbps, Middle Channel, Charging Mode, 30MHz – 1GHz

Figure 5 Radiated Emissions Graph X-Axis



FCC ID: V65C5170
Model Number: C5170
Client Name: Kyocera Communications

Table 7 Radiated Emissions Data Points X-Axis

Kyocera Model: C5170

Mode: BT TX Hopping, BDR, DH5 X

Power: 120V 60Hz

Red: Horizontal Grn: Vertical

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 10m	Margin	Height [cm]	Polarity
50.8146	42.76	PK	9.7	-29.3	23.16	29.6	-6.44	99	Vert

PK - Peak detector

QP - Quasi-Peak detector

4.2.1.3 Spurious, 802.11b, 1Mbps, Low Channel, 1GHz – 25GHz

Figure 6 Radiated Emissions Graph X-Axis

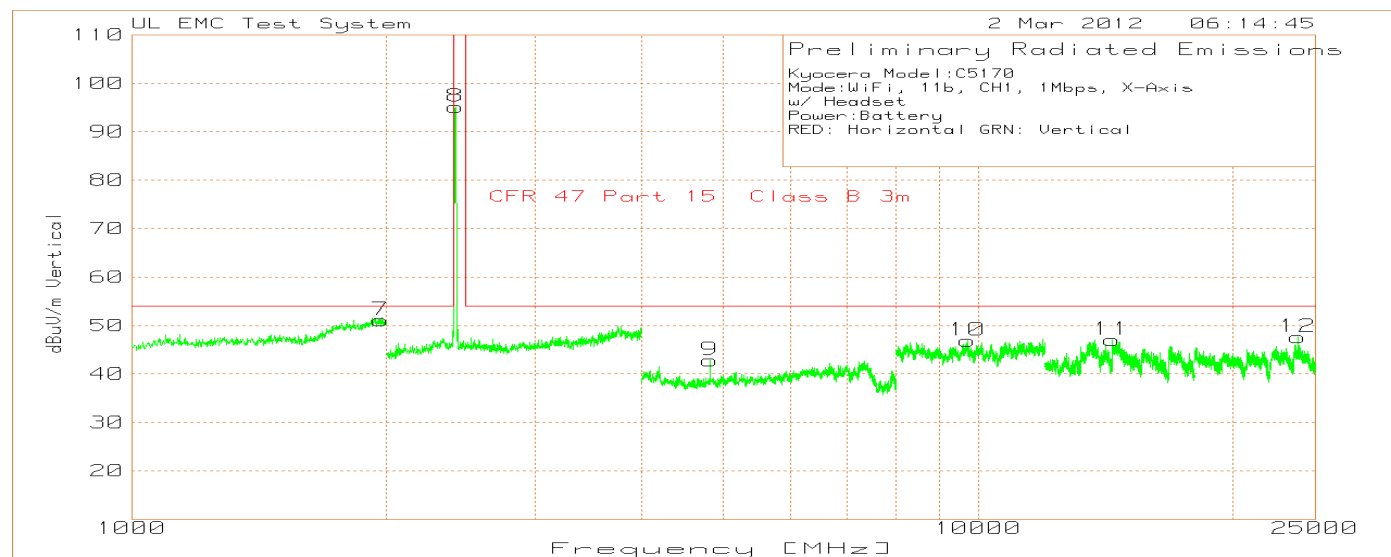
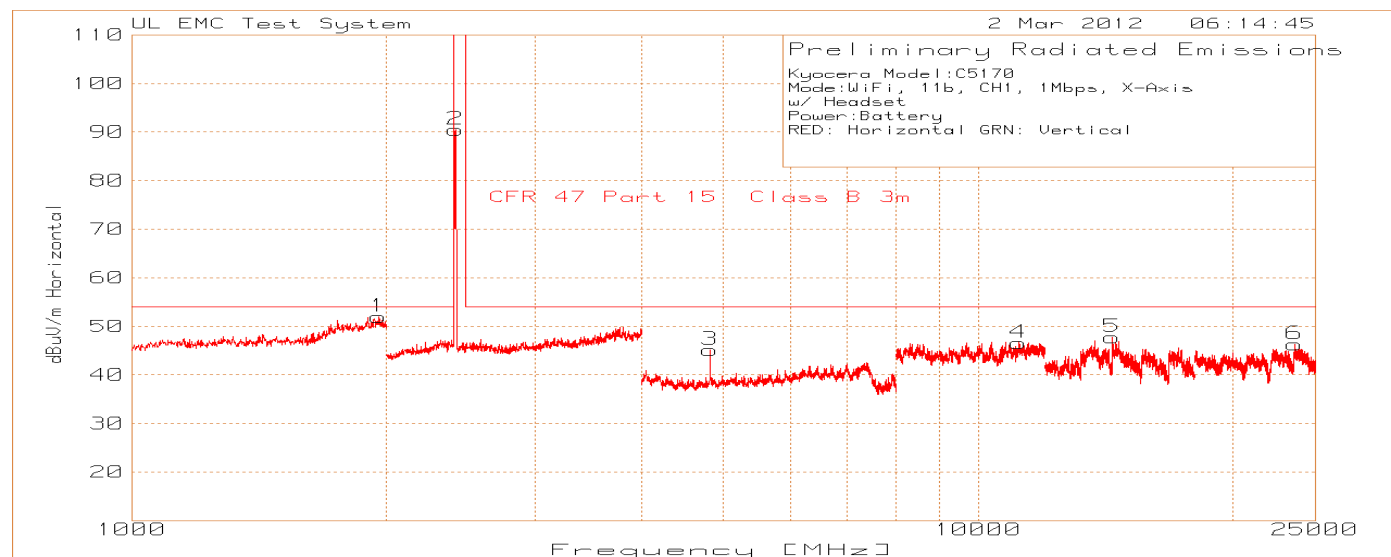


Table 8 Radiated Emissions Data Points X-Axis

Kyocera Model:C5170 Mode:WiFi, 11b, CH1, 1Mbps, X-Axis w/ Headset Power:Battery RED: Horizontal GRN: Vertical									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1955.912	20.81	PK	27.4	3.76	51.97	54	-2.03	99	Horz
2412.412	64.85	PK	21.8	3.87	90.52	-	-	99	Horz
4824.55	68.54	PK	27.7	-51.02	45.22	54	-8.78	99	Horz
11170.113	57.01	PK	36.6	-46.94	46.67	54	-7.33	150	Horz
14403.361	47.26	PK	39.8	-39.23	47.83	54	-6.17	100	Horz
23661.064	58.58	PK	40.3	-52.61	46.27	54	-7.73	100	Horz
1971.944	19.78	PK	27.5	3.81	51.09	54	-2.91	100	Vert
2412.412	69.43	PK	21.8	3.87	95.1	-	-	150	Vert
4824.55	66.12	PK	27.7	-51.02	42.8	54	-11.2	101	Vert
9726.484	60.28	PK	36.4	-49.78	46.9	54	-7.1	108	Vert
14400.96	46.47	PK	39.8	-39.21	47.06	54	-6.94	101	Vert
23854.342	61.29	PK	40.3	-53.95	47.64	54	-6.36	101	Vert
PK - Peak detector									

Figure 7 Radiated Emissions Graph Y-Axis

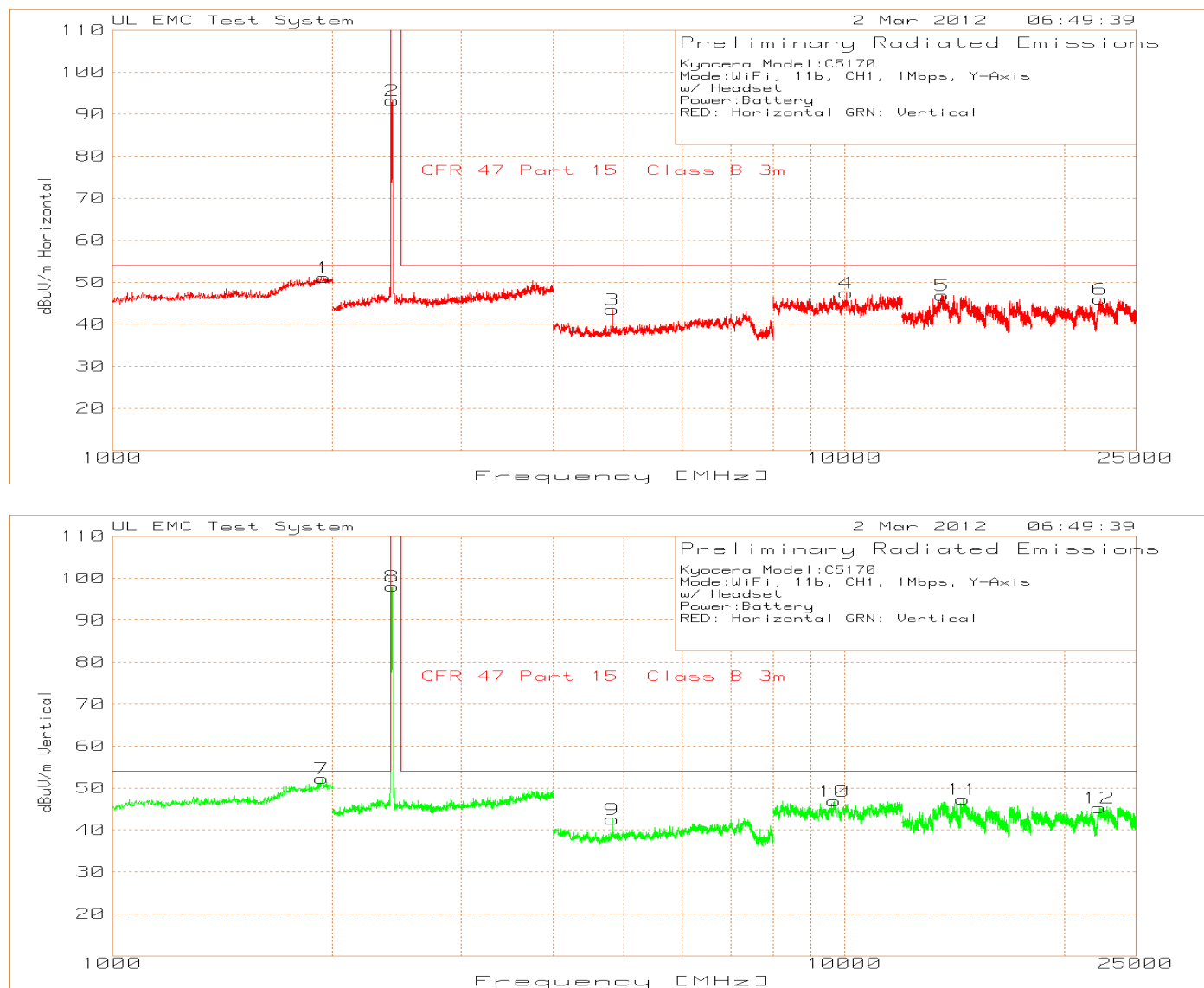


Table 9 Radiated Emissions Data Points Y-Axis

Kyocera Model:C5170 Mode:WiFi, 11b, CH1, 1Mbps, Y-Axis w/ Headset Power:Battery RED: Horizontal GRN: Vertical									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1943.888	19.78	PK	27.4	3.9	51.08	54	-2.92	101	Horz
2412.412	67.63	PK	21.8	3.87	93.3	-	-	100	Horz
4824.55	66.94	PK	27.7	-51.02	43.62	54	-10.38	99	Horz
10068.045	59.98	PK	36.3	-48.81	47.47	54	-6.53	150	Horz
13618.247	48.39	PK	39.8	-41.28	46.91	54	-7.09	99	Horz
22344.538	58.11	PK	40.5	-52.62	45.99	54	-8.01	99	Horz
1935.872	20.87	PK	27.4	3.97	52.24	54	-1.76	101	Vert
2412.412	72.4	PK	21.8	3.87	98.07	-	-	150	Vert
4821.881	65.93	PK	27.7	-51.11	42.52	54	-11.48	102	Vert
9683.789	59.11	PK	36.4	-48.55	46.96	54	-7.04	150	Vert
14528.211	46.44	PK	39.8	-38.94	47.3	54	-6.7	100	Vert
22268.908	57.39	PK	40.5	-52.64	45.25	54	-8.75	100	Vert
PK - Peak detector									

Figure 8 Radiated Emissions Graph Z-Axis

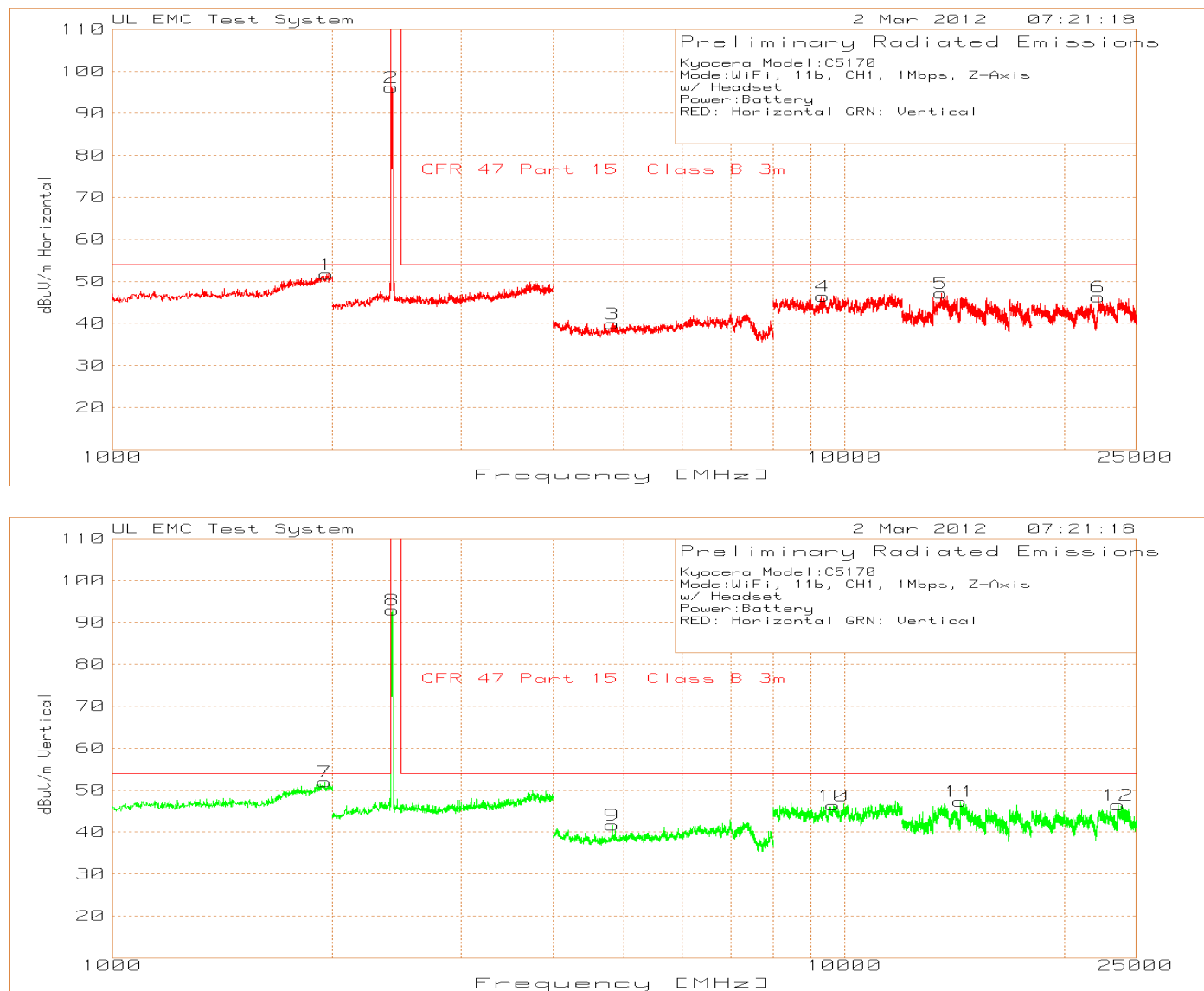


Table 10 Radiated Emissions Data Points Z-Axis

Kyocera Model:C5170 Mode:WiFi, 11b, CH1, 1Mbps, Z-Axis w/ Headset Power:Battery RED: Horizontal GRN: Vertical									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1961.924	20.49	PK	27.5	3.74	51.73	54	-2.27	100	Horz
2410.41	70.48	PK	21.8	3.95	96.23	-	-	100	Horz
4823.215	63.25	PK	27.7	-51.07	39.88	54	-14.12	99	Horz
9344.897	59.95	PK	36.4	-49.83	46.52	54	-7.48	150	Horz
13551.02	48.59	PK	39.8	-41.14	47.25	54	-6.75	99	Horz
22254.902	58.58	PK	40.5	-52.79	46.29	54	-7.71	99	Horz
1951.904	20.79	PK	27.4	3.81	52	54	-2	150	Vert
2412.412	67.26	PK	21.8	3.87	92.93	-	-	102	Vert
4824.55	64.99	PK	27.7	-51.02	41.67	54	-12.33	100	Vert
9670.447	58.74	PK	36.4	-48.75	46.39	54	-7.61	102	Vert
14400.96	46.7	PK	39.8	-39.21	47.29	54	-6.71	102	Vert
23666.667	58.82	PK	40.3	-52.64	46.48	54	-7.52	100	Vert
PK - Peak detector									

4.2.2 Spurious, 802.11b, 1Mbps, Middle Channel, 1GHz – 25GHz

Figure 9 Radiated Emissions Graph X-Axis

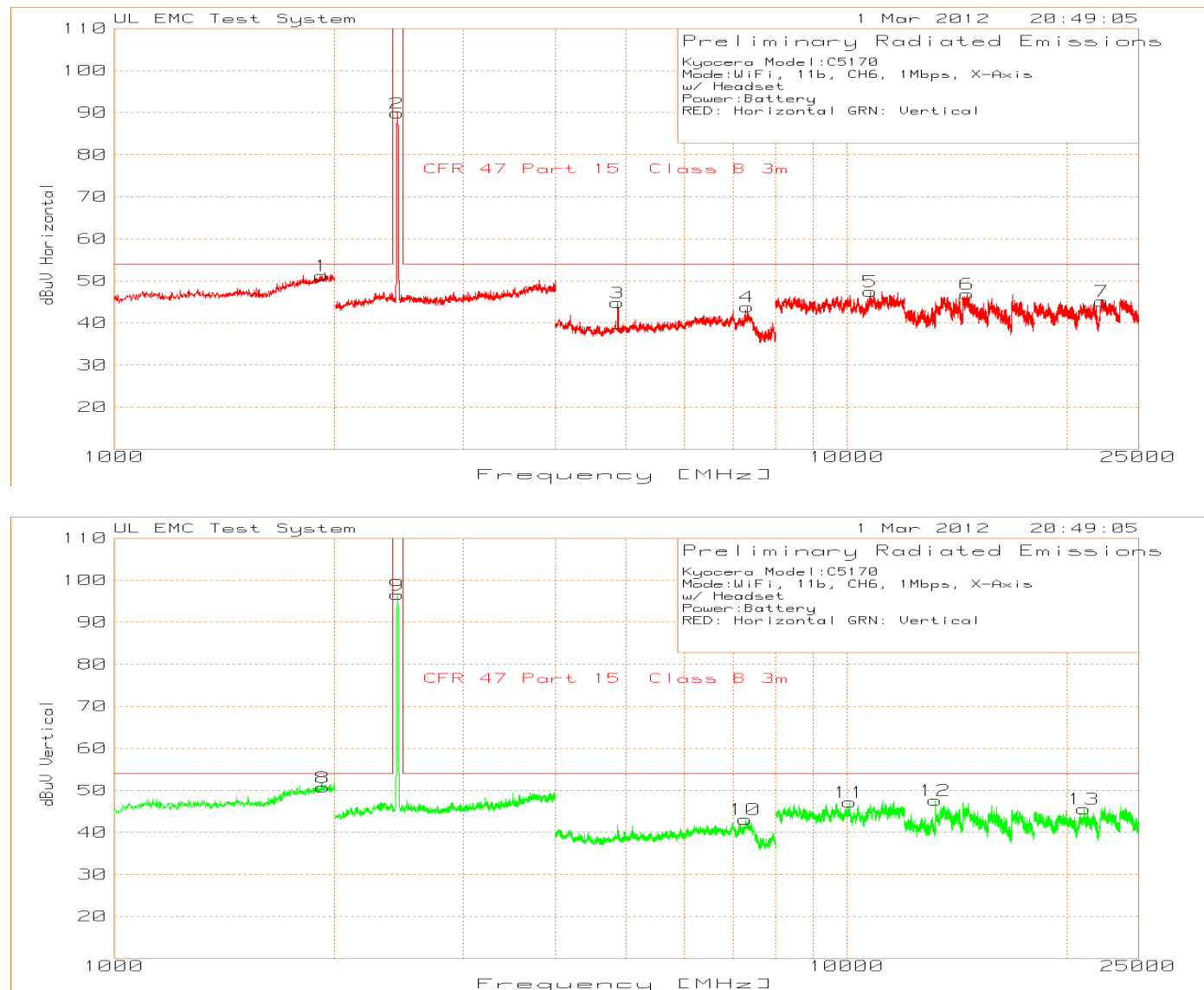


Table 11 Radiated Emissions Data Points X-Axis

Kyocera Model:C5170 Mode:WiFi, 11b, CH6, 1Mbps, X-Axis w/ Headset Power:Battery RED: Horizontal GRN: Vertical									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1923.848	19.97	PK	27.4	3.89	51.26	54	-2.74	100	Horz
2436.436	63.86	PK	21.9	4.1	89.86	-	-	100	Horz
4872.582	68.28	PK	27.7	-51.18	44.8	54	-9.2	100	Horz
7311.541	59.73	PK	30.5	-46.35	43.88	54	-10.12	100	Horz
10767.178	59.25	PK	36.4	-48.15	47.5	54	-6.5	100	Horz
14609.844	46.19	PK	39.8	-39.03	46.96	54	-7.04	100	Horz
22266.106	57.29	PK	40.5	-52.67	45.12	54	-8.88	100	Horz
1929.86	19.41	PK	27.4	3.94	50.75	54	-3.25	100	Vert
2436.436	70.54	PK	21.9	4.1	96.54	-	-	150	Vert
7268.846	59.34	PK	30.2	-46.45	43.09	54	-10.91	150	Vert
10105.404	59.87	PK	36.3	-48.95	47.22	54	-6.78	100	Vert
13210.084	50.94	PK	39.8	-43.1	47.64	54	-6.36	101	Vert
21058.824	60.87	PK	40.1	-55.33	45.64	54	-8.36	101	Vert
PK - Peak detector									

4.2.3 Spurious, 802.11g, 6Mbps, Middle Channel, 1GHz – 25GHz

Figure 10 Radiated Emissions Graph X-Axis

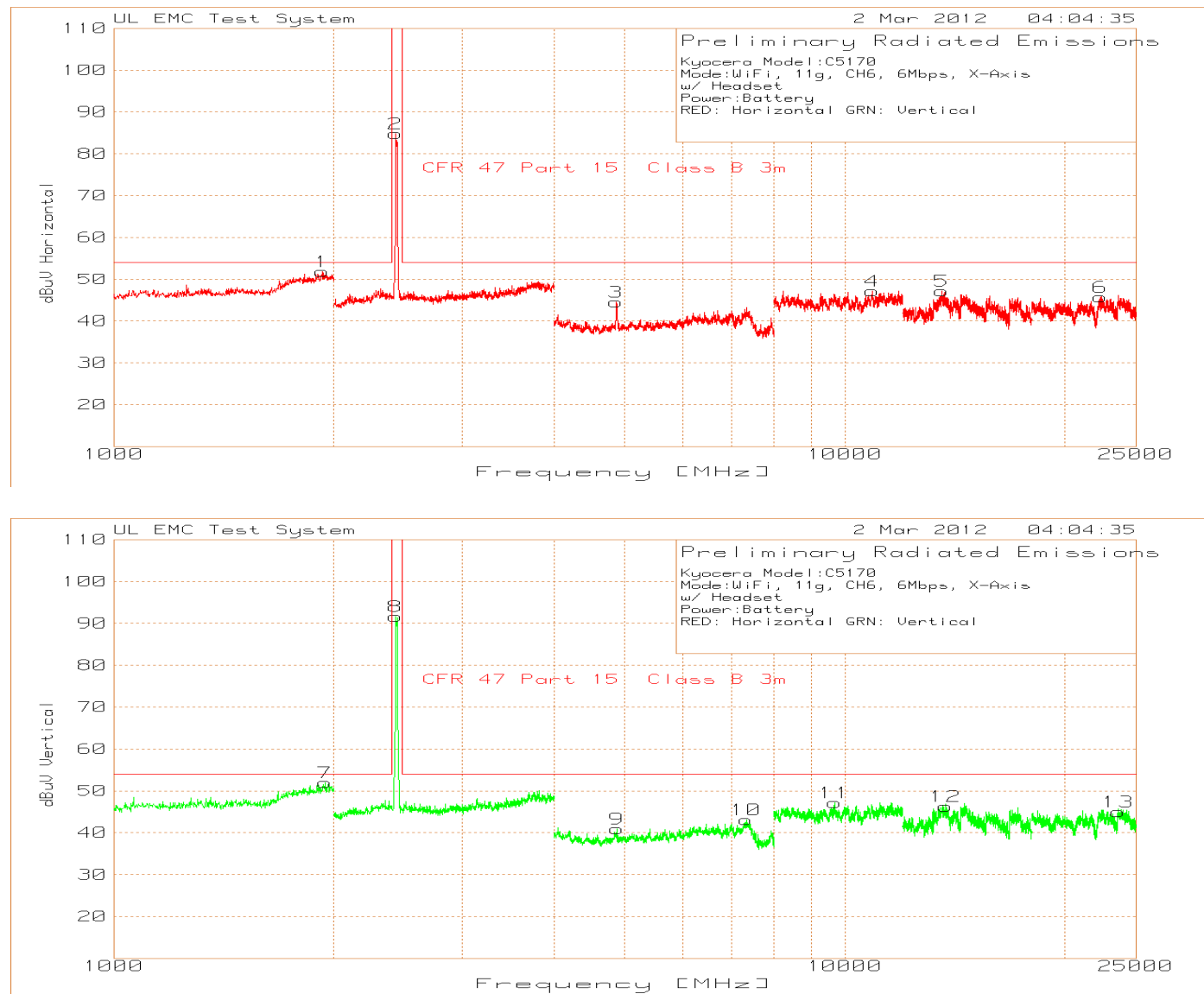


Table 12 Radiated Emissions Data Points X-Axis

Kyocera Model:C5170 Mode:WiFi, 11g, CH6, 6Mbps, X-Axis w/ Headset Power:Battery RED: Horizontal GRN: Vertical									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1931.864	20.52	PK	27.4	3.96	51.88	54	-2.12	100	Horz
2432.432	58.99	PK	21.9	3.99	84.88	-	-	100	Horz
4872.582	68.12	PK	27.7	-51.18	44.64	54	-9.36	100	Horz
10900.6	58.24	PK	36.3	-47.34	47.2	54	-6.8	99	Horz
13560.62	48.14	PK	39.8	-40.75	47.19	54	-6.81	100	Horz
22344.54	57.85	PK	40.5	-52.62	45.73	54	-8.27	100	Horz
1947.896	20.74	PK	27.4	3.86	52	54	-2	150	Vert
2432.432	65.84	PK	21.9	3.99	91.73	-	-	150	Vert
4877.919	64.36	PK	27.7	-51.16	40.9	54	-13.1	101	Vert
7327.552	58.69	PK	30.7	-46.26	43.13	54	-10.87	101	Vert
9675.784	59.36	PK	36.4	-48.58	47.18	54	-6.82	150	Vert
13735.89	46.66	PK	39.8	-40.13	46.33	54	-7.67	100	Vert
23672.27	57.41	PK	40.3	-52.65	45.06	54	-8.94	100	Vert
PK - Peak detector									

4.2.4 Spurious, 802.11n, MCS0, Middle Channel, 1GHz – 25GHz

Figure 11 Radiated Emissions Graph X-Axis

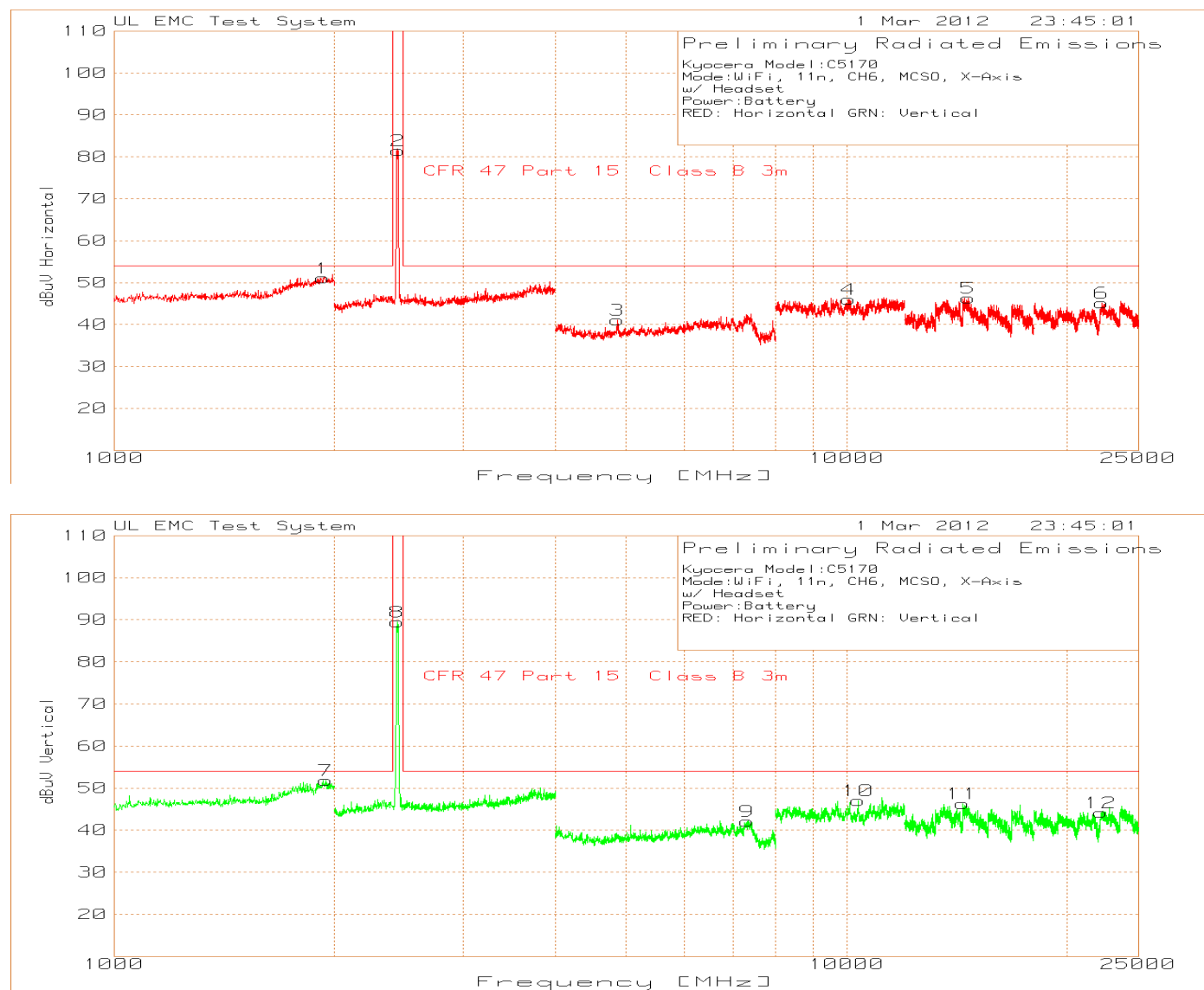


Table 13 Radiated Emissions Data Points X-Axis

Kyocera Model:C5170 Mode:WiFi, 11n, CH6, MCS0, X-Axis w/ Headset Power:Battery RED: Horizontal GRN: Vertical									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1931.864	19.69	PK	27.4	3.96	51.05	54	-2.95	101	Horz
2440.44	55.33	PK	21.9	4.25	81.48	-	-	99	Horz
4867.245	64.6	PK	27.7	-51.2	41.1	54	-12.9	99	Horz
10054.7	58.58	PK	36.4	-48.89	46.09	54	-7.91	150	Horz
14660.26	44.95	PK	39.8	-38.43	46.32	54	-7.68	100	Horz
22299.72	57.41	PK	40.5	-52.74	45.17	54	-8.83	100	Horz
1945.892	20.57	PK	27.4	3.88	51.85	54	-2.15	100	Vert
2438.438	63.47	PK	21.9	4.18	89.55	-	-	150	Vert
7322.215	57.69	PK	30.6	-46.22	42.07	54	-11.93	102	Vert
10369.58	58.76	PK	36.2	-47.94	47.02	54	-6.98	150	Vert
14403.36	45.76	PK	39.8	-39.23	46.33	54	-7.67	100	Vert
22246.5	56.61	PK	40.5	-52.9	44.21	54	-9.79	100	Vert
PK - Peak detector									

Figure 12 Radiated Emissions Graph Y-Axis

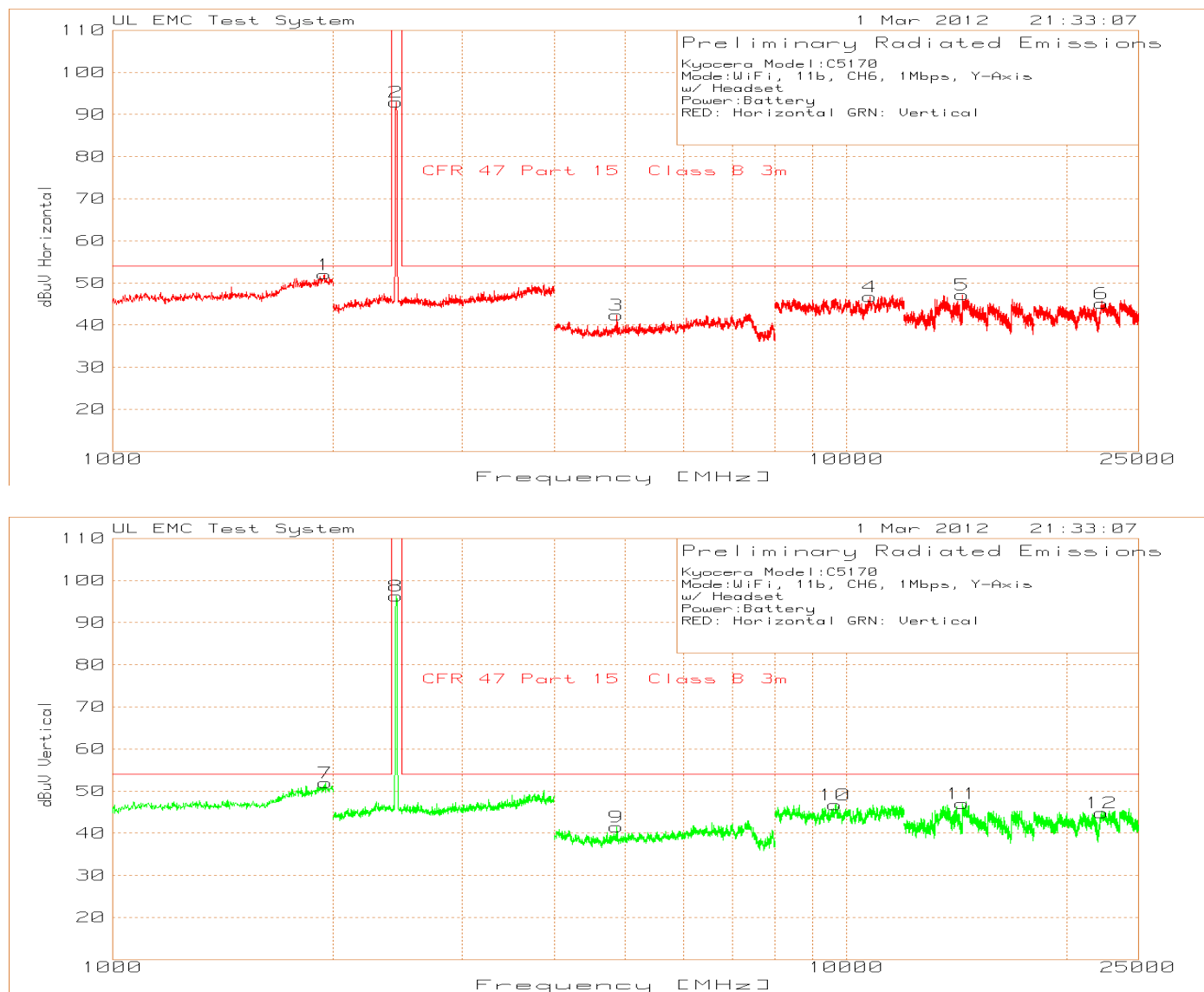
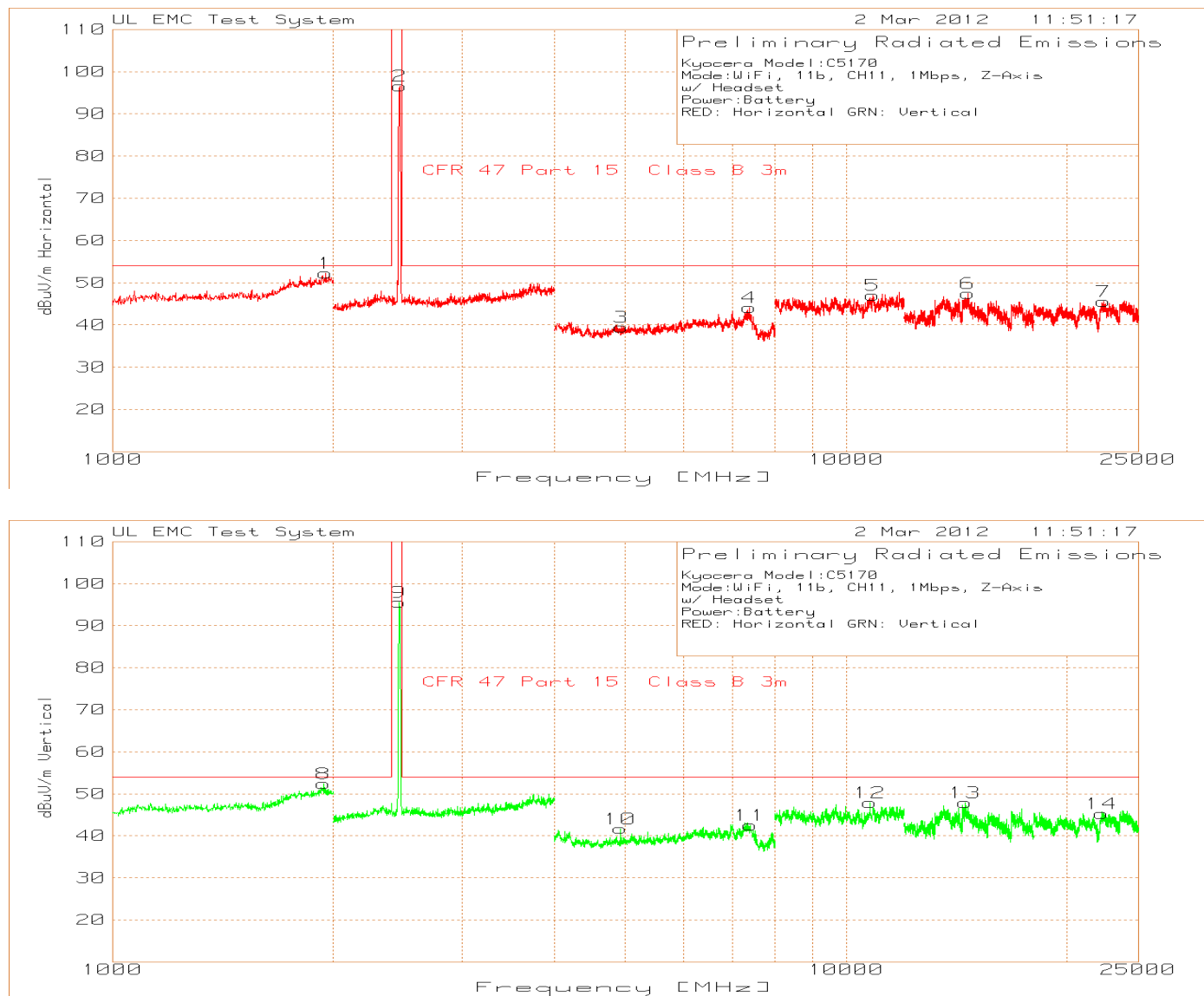


Table 14 Radiated Emissions Data Points Y-Axis

Kyocera Model:C5170 Mode:WiFi, 11b, CH6, 1Mbps, Y-Axis w/ Headset Power:Battery RED: Horizontal GRN: Vertical									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1945.892	20.78	PK	27.4	3.88	52.06	54	-1.94	101	Horz
2438.438	66.94	PK	21.9	4.18	93.02	-	-	100	Horz
4872.582	65.89	PK	27.7	-51.18	42.41	54	-11.59	99	Horz
10767.18	58.49	PK	36.4	-48.15	46.74	54	-7.26	100	Horz
14403.36	46.63	PK	39.8	-39.23	47.2	54	-6.8	100	Horz
22305.32	57.33	PK	40.5	-52.67	45.16	54	-8.84	100	Horz
1949.9	20.78	PK	27.4	3.83	52.01	54	-1.99	150	Vert
2438.438	70.27	PK	21.9	4.18	96.35	-	-	100	Vert
4872.582	65.03	PK	27.7	-51.18	41.55	54	-12.45	100	Vert
9670.447	59.14	PK	36.4	-48.75	46.79	54	-7.21	102	Vert
14400.96	46.4	PK	39.8	-39.21	46.99	54	-7.01	100	Vert
22282.91	56.97	PK	40.5	-52.57	44.9	54	-9.1	100	Vert
PK - Peak detector									

Figure 13 Radiated Emissions Graph Z-Axis



FCC ID: V65C5170
 Model Number: C5170
 Client Name: Kyocera Communications

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Table 15 Radiated Emissions Data Points Z-Axis

Kyocera Model:C5170 Mode:WiFi, 11b, CH6, 1Mbps, Z-Axis w/ Headset Power:Battery RED: Horizontal GRN: Vertical									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1931.864	20.56	PK	27.4	3.96	51.92	54	-2.08	100	Horz
2434.434	68.7	PK	21.9	4.02	94.62	-	-	99	Horz
6999.333	58.25	PK	29.3	-45.19	42.36	54	-11.64	150	Horz
11858.57	55.54	PK	37.7	-46.35	46.89	54	-7.11	150	Horz
13579.83	47.83	PK	39.8	-40.72	46.91	54	-7.09	99	Horz
19980.39	65.03	PK	40.2	-59.6	45.63	54	-8.37	99	Horz
1947.896	20.37	PK	27.4	3.86	51.63	54	-2.37	101	Vert
2434.434	66.34	PK	21.9	4.02	92.26	-	-	101	Vert
7279.52	57.84	PK	30.3	-45.77	42.37	54	-11.63	150	Vert
11695.8	56.89	PK	37.6	-47.78	46.71	54	-7.29	150	Vert
13575.03	47.12	PK	39.8	-40.65	46.27	54	-7.73	100	Vert
22305.32	59.1	PK	40.5	-52.67	46.93	54	-7.07	100	Vert
PK - Peak detector									

4.2.5 Spurious, 802.11b, 1Mbps, High Channel, 1GHz – 25GHz

Figure 14 Radiated Emissions Graph X-Axis

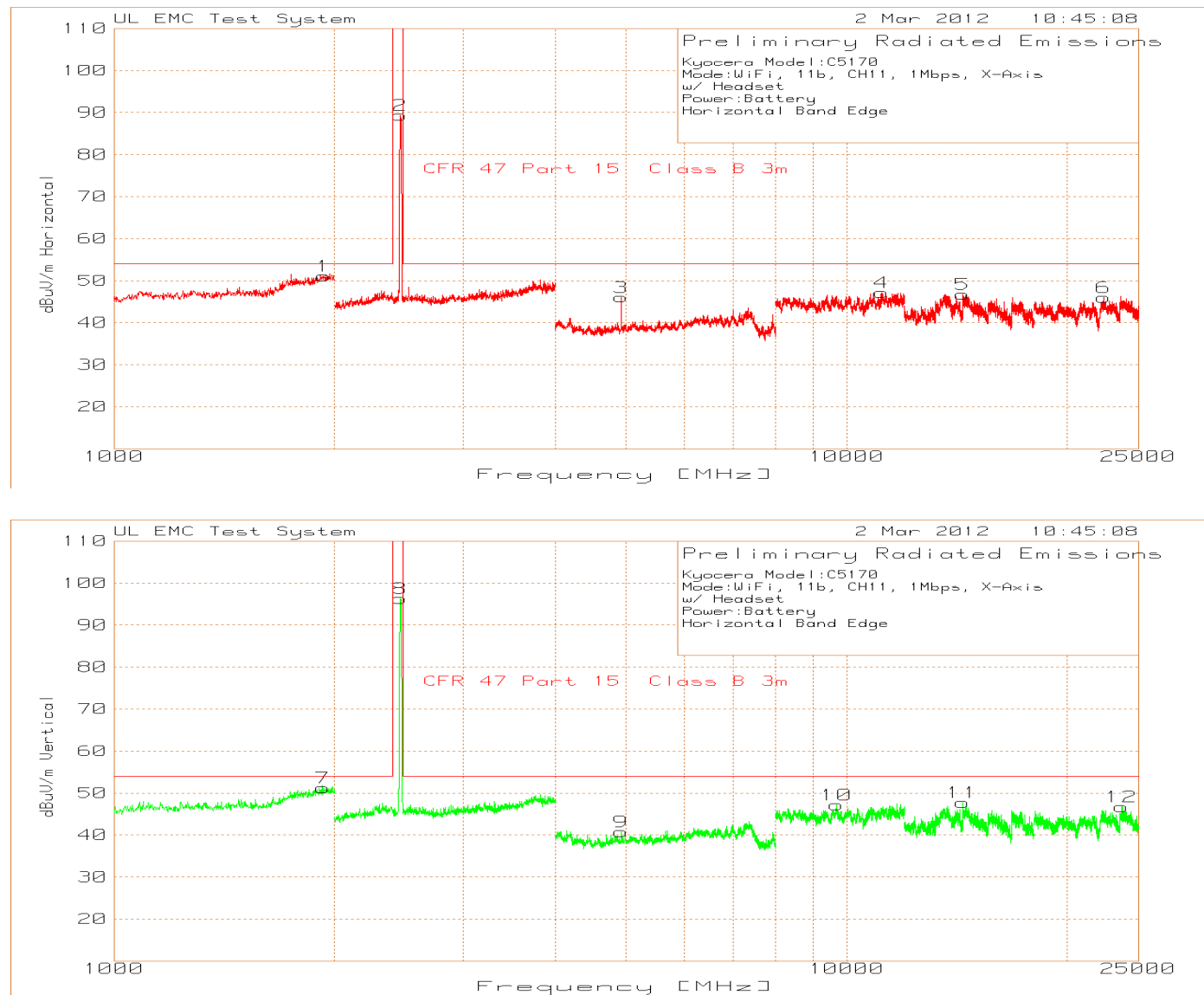


Table 16 Radiated Emissions Data Points X-Axis

Kyocera Model:C5170 Mode:WiFi, 11b, CH11, 1Mbps, X-Axis w/ Headset Power:Battery Horizontal Band Edge									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1933.868	19.76	PK	27.4	3.97	51.13	54	-2.87	99	Horz
2460.46	63.18	PK	22	4.14	89.32	-	-	99	Horz
4923.282	70.15	PK	27.8	-51.85	46.1	54	-7.9	99	Horz
11175.45	57.32	PK	36.7	-46.81	47.21	54	-6.79	150	Horz
14405.76	46.27	PK	39.8	-39.25	46.82	54	-7.18	99	Horz
22434.17	57.54	PK	40.5	-51.98	46.06	54	-7.94	99	Horz
1927.856	19.94	PK	27.4	3.92	51.26	54	-2.74	150	Vert
2460.46	70.22	PK	22	4.14	96.36	-	-	100	Vert
4923.282	64.89	PK	27.8	-51.85	40.84	54	-13.16	100	Vert
9675.784	59.36	PK	36.4	-48.58	47.18	54	-6.82	102	Vert
14405.76	47.27	PK	39.8	-39.25	47.82	54	-6.18	100	Vert
23753.5	60.48	PK	40.3	-53.99	46.79	54	-7.21	100	Vert
PK - Peak detector									

Figure 15 Radiated Emissions Graph Y-Axis

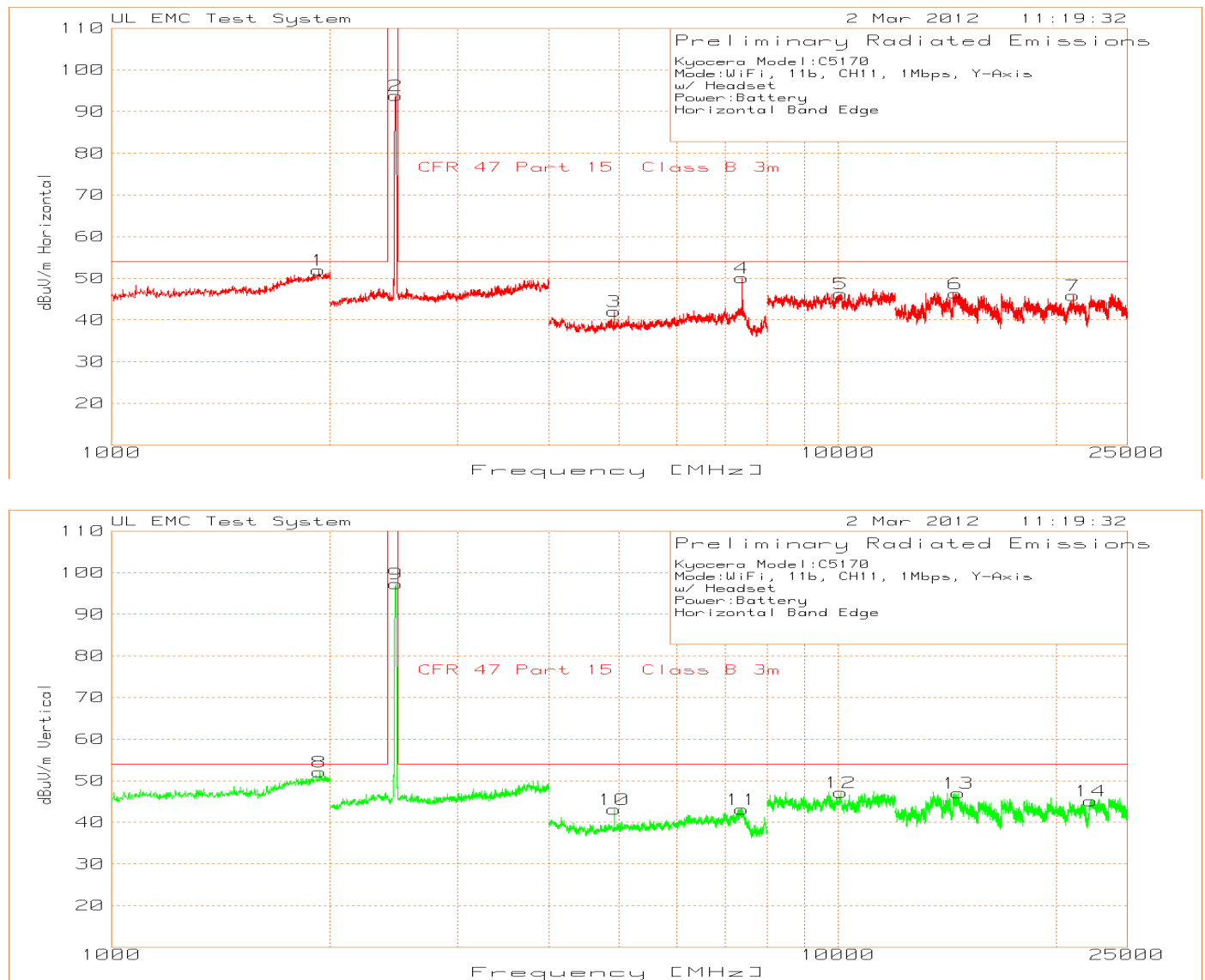


Table 17 Radiated Emissions Data Points Y-Axis

Kyocera Model:C5170 Mode:WiFi, 11b, CH11, 1Mbps, Y-Axis w/ Headset Power:Battery Horizontal Band Edge									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1931.864	20.59	PK	27.4	3.96	51.95	54	-2.05	100	Horz
2462.462	67.79	PK	22	4.09	93.88	-	-	100	Horz
4923.282	66.17	PK	27.8	-51.85	42.12	54	-11.88	99	Horz
7388.926	65.7	PK	31.1	-46.64	50.16	54	-3.84	99	Horz
10105.4	59	PK	36.3	-48.95	46.35	54	-7.65	100	Horz
14537.82	45.84	PK	39.8	-39.25	46.39	54	-7.61	100	Horz
21072.83	60.89	PK	40.1	-55.16	45.83	54	-8.17	100	Horz
1935.872	20.71	PK	27.4	3.97	52.08	54	-1.92	100	Vert
2464.464	71.27	PK	22	4.04	97.31	-	-	150	Vert
4923.282	67.18	PK	27.8	-51.85	43.13	54	-10.87	101	Vert
7386.258	58.48	PK	31.1	-46.46	43.12	54	-10.88	150	Vert
10094.73	60.04	PK	36.3	-49.14	47.2	54	-6.8	150	Vert
14660.26	45.67	PK	39.8	-38.43	47.04	54	-6.96	100	Vert
22288.52	57.21	PK	40.5	-52.57	45.14	54	-8.86	100	Vert
PK - Peak detector									

Figure 16 Radiated Emissions Graph Z-Axis

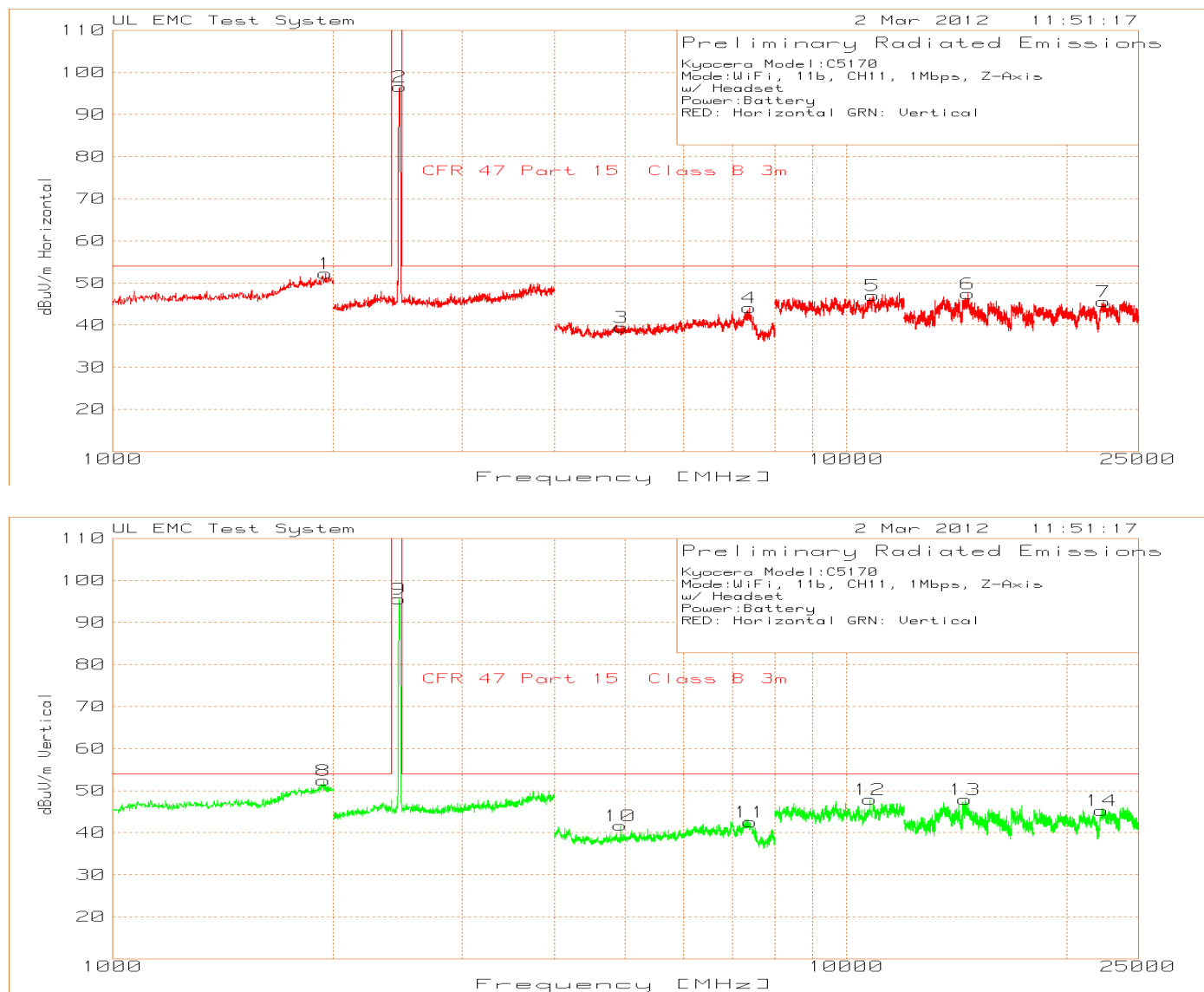


Table 18 Radiated Emissions Data Points Z-Axis

Kyocera Model:C5170 Mode:WiFi, 11b, CH11, 1Mbps, Z-Axis w/ Headset Power:Battery RED: Horizontal GRN: Vertical									
Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	Level dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1951.904	21.08	PK	27.4	3.81	52.29	54	-1.71	100	Horz
2462.462	70.5	PK	22	4.09	96.59	-	-	99	Horz
4933.956	63.29	PK	27.8	-51.61	39.48	54	-14.52	99	Horz
7383.589	59.45	PK	31.1	-46.41	44.14	54	-9.86	150	Horz
10857.91	58.64	PK	36.4	-47.97	47.07	54	-6.93	150	Horz
14648.26	46.35	PK	39.8	-38.67	47.48	54	-6.52	100	Horz
22450.98	57.21	PK	40.5	-52.08	45.63	54	-8.37	100	Horz
1939.88	21.12	PK	27.4	3.94	52.46	54	-1.54	150	Vert
2460.46	69.47	PK	22	4.14	95.61	-	-	100	Vert
4923.282	65.79	PK	27.8	-51.85	41.74	54	-12.26	101	Vert
7394.263	58.32	PK	31.2	-46.99	42.53	54	-11.47	101	Vert
10775.18	59.5	PK	36.4	-48.02	47.88	54	-6.12	102	Vert
14506.6	47.28	PK	39.8	-39.18	47.9	54	-6.1	102	Vert
22322.13	57.55	PK	40.5	-52.69	45.36	54	-8.64	100	Vert
PK - Peak detector									

4.2.6 Band-edge, 802.11b, 1Mbps, Low Channel

Figure 17 Band-edge Graph Y-Axis, Horizontal

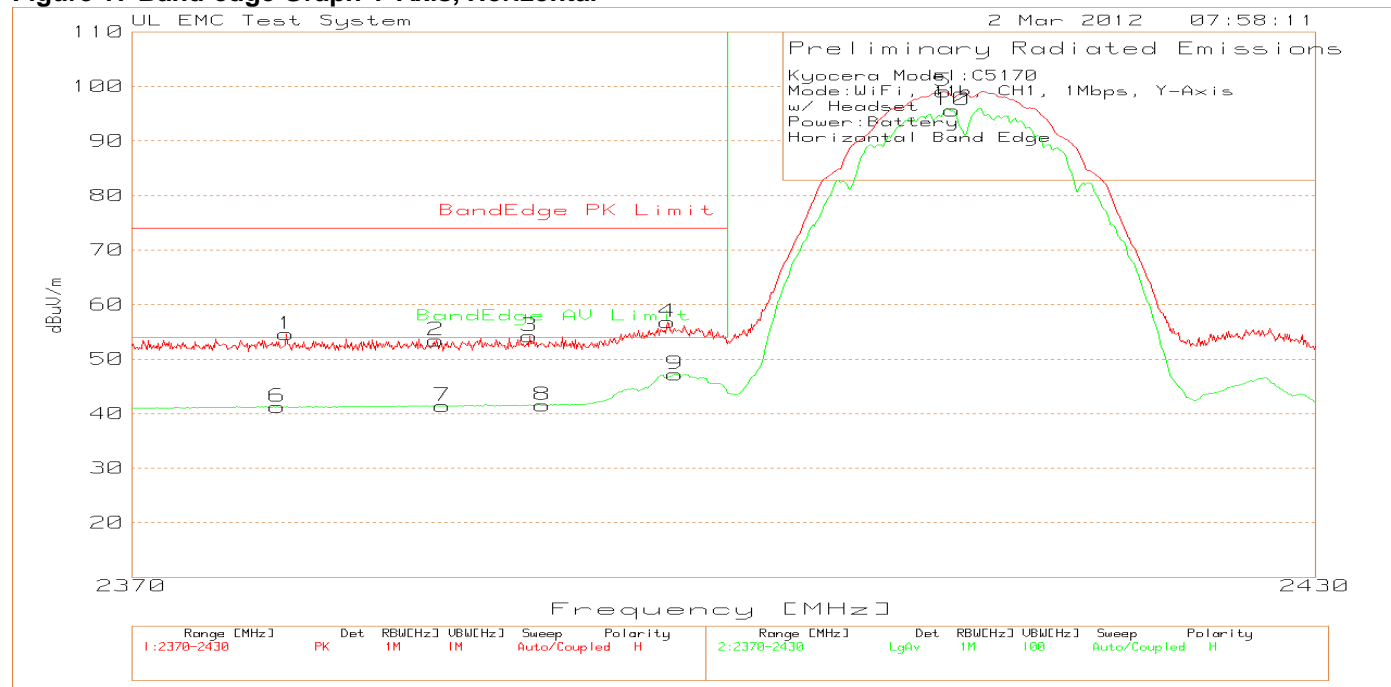


Table 19 Band-edge Data Y-Axis, Horizontal

Kyocera Model:C5170
Mode:WiFi, 11b, CH1, 1Mbps, Y-Axis
w/ Headset
Power:Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2377.748	28.52	PK	21.8	4.22	54.54	74	-19.46	150	Horz
2385.315	27.22	PK	21.8	4.4	53.42	74	-20.58	100	Horz
2390	27.97	PK	21.8	4.48	54.25	74	-19.75	150	Horz
2396.967	30.6	PK	21.8	4.39	56.79	-	-	100	Horz
2411.021	73.36	PK	21.8	3.93	99.09	-	-	100	Horz
2377.327	15.22	AV	21.8	4.2	41.22	54	-12.78	99	Horz
2385.616	15.24	AV	21.8	4.4	41.44	54	-12.56	99	Horz
2390.691	15.24	AV	21.8	4.49	41.53	54	-12.47	99	Horz
2397.387	21	AV	21.8	4.38	47.18	-	-	99	Horz
2411.441	69.86	AV	21.8	3.91	95.57	-	-	99	Horz

PK - Peak detector
Av - Average detector

Figure 18 Band-edge Graph Y-Axis, Vertical

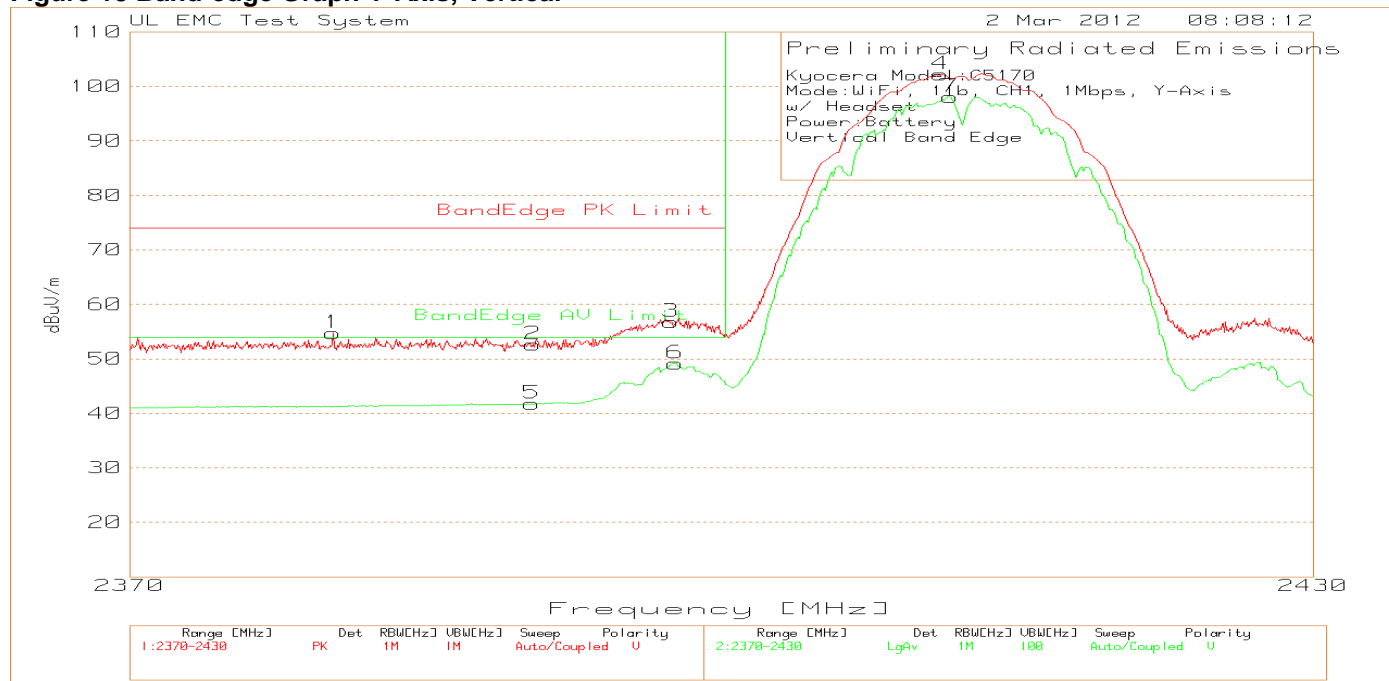


Table 20 Band-edge Data Y-Axis, Vertical

Kyocera Model: C5170
Mode: WiFi, 11b, CH1, 1Mbps, Y-Axis
w/ Headset
Power: Battery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2380.21	28.67	PK	21.8	4.3	54.77	74	-19.23	100	Vert
2390.3	26.39	PK	21.8	4.49	52.68	74	-21.32	100	Vert
2397.267	30.58	PK	21.8	4.38	56.76	-	-	150	Vert
2410.961	76.49	PK	21.8	3.93	102.22	-	-	150	Vert
2390.24	15.47	Av	21.8	4.48	41.75	54	-12.25	100	Vert
2397.477	22.98	Av	21.8	4.37	49.15	-	-	150	Vert
2411.441	72.37	Av	21.8	3.91	98.08	-	-	150	Vert

PK - Peak detector
Av - Average detector

4.2.7 Band-edge, 802.11b, 11Mbps, Low Channel

Figure 19 Band-edge Graph Y-Axis, Horizontal

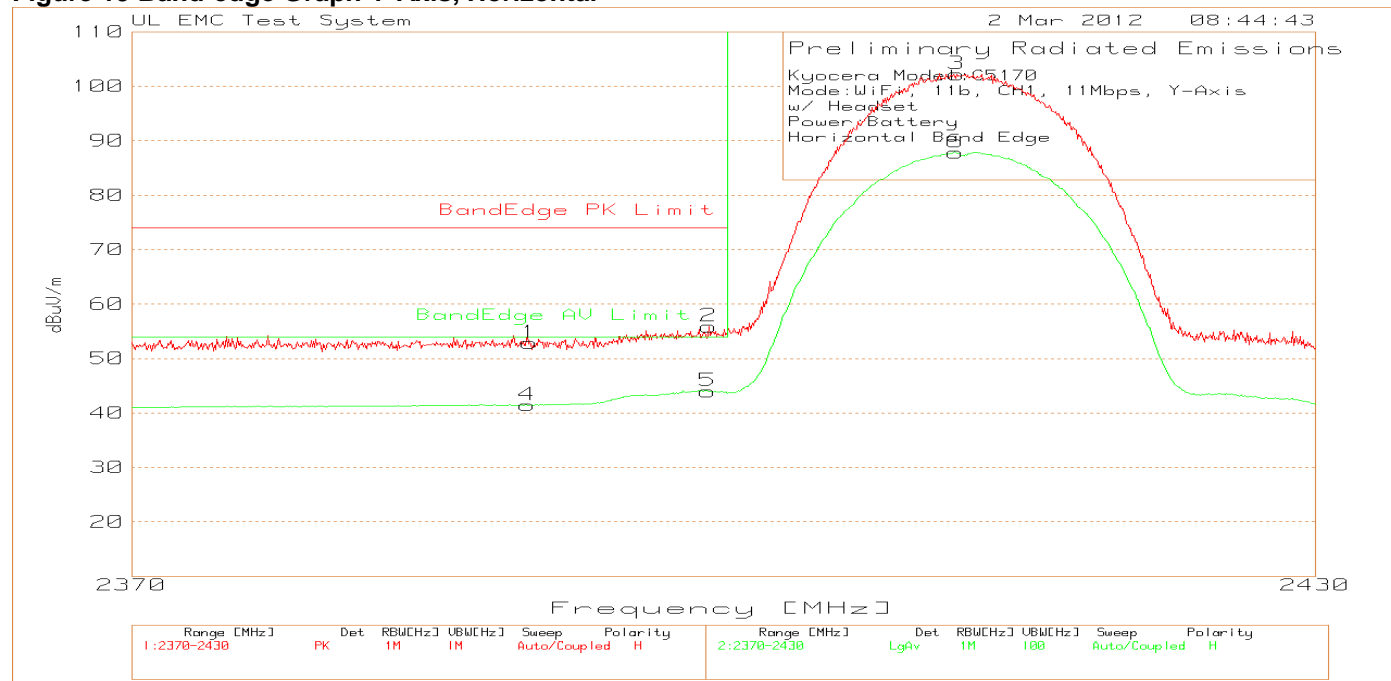


Table 21 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11b, CH1, 11Mbps, Y-Axis
w/ Headset
Power: Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2390	26.58	PK	21.8	4.48	52.86	74	-21.14	99	Horz
2399.069	29.72	PK	21.8	4.33	55.85	-	-	99	Horz
2411.682	76.53	PK	21.8	3.9	102.23	-	-	99	Horz
2389.88	15.18	Av	21.8	4.48	41.46	54	-12.54	99	Horz
2399.039	17.89	Av	21.8	4.33	44.02	-	-	99	Horz
2411.622	62.19	Av	21.8	3.9	87.89	-	-	99	Horz

PK - Peak detector
Av - Average detector

Figure 20 Band-edge Graph Y-Axis, Vertical

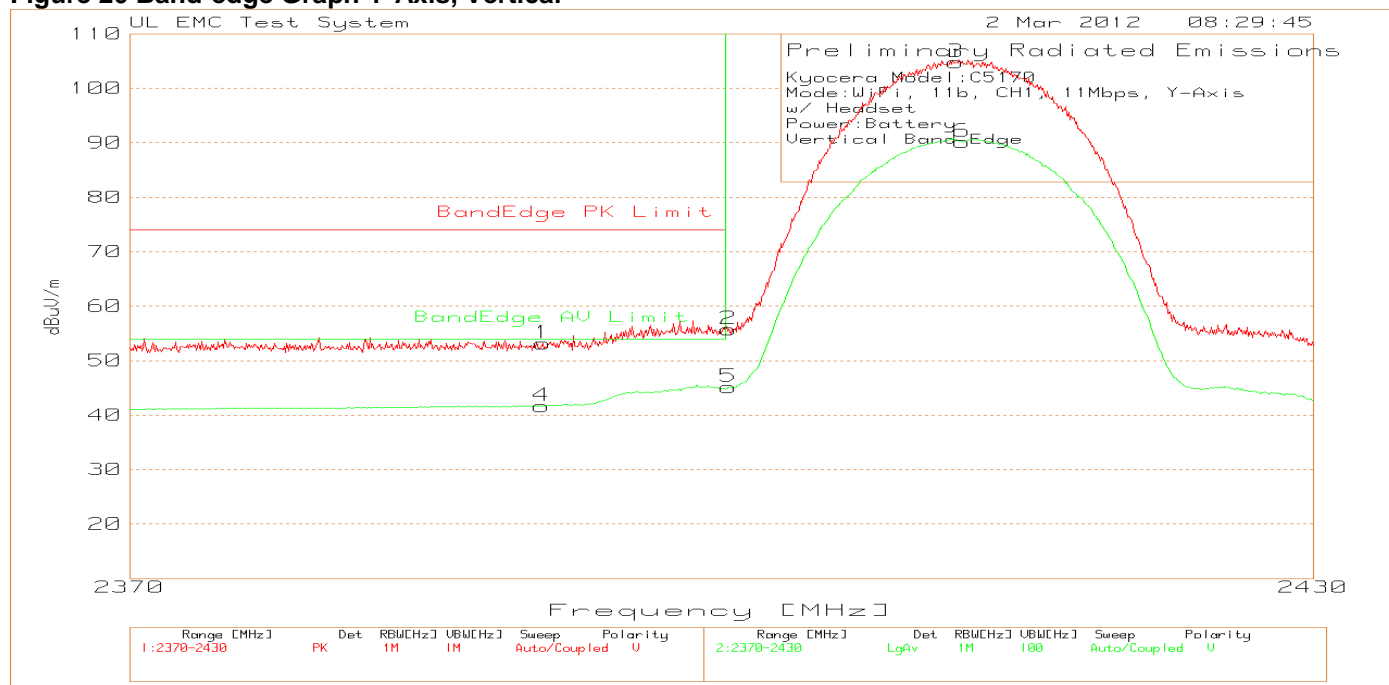


Table 22 Band-edge Data Y-Axis, Vertical

Kyocera Model: C5170
Mode: WiFi, 11b, CH1, 11Mbps, Y-Axis
w/ Headset
Power: Battery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2390.781	26.85	PK	21.8	4.49	53.14	74	-20.86	101	Vert
2400.21	29.7	PK	21.8	4.31	55.81	-	-	150	Vert
2411.742	79.1	PK	21.8	3.9	104.8	-	-	150	Vert
2390.721	15.36	Av	21.8	4.49	41.65	54	-12.35	150	Vert
2400.21	19.05	Av	21.8	4.31	45.16	-	-	150	Vert
2412.042	64.54	Av	21.8	3.89	90.23	-	-	150	Vert

PK - Peak detector
Av - Average detector

4.2.8 Band-edge, 802.11g, 6Mbps, Low Channel

Figure 21 Band-edge Graph Y-Axis, Horizontal

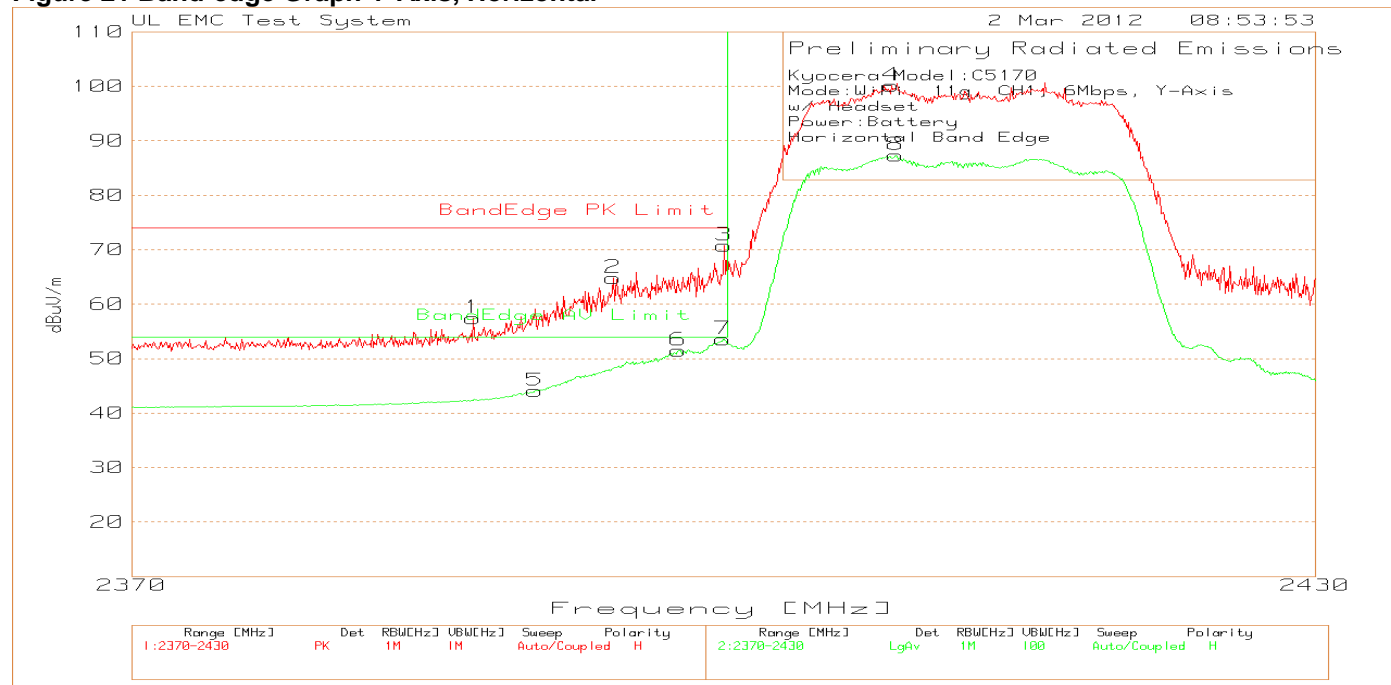


Table 23 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11g, CH1, 6Mbps, Y-Axis
w/ Headset
Power: Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2387.177	31.24	PK	21.8	4.43	57.47	74	-16.53	99	Horz
2394.264	38.6	PK	21.8	4.45	64.85	-	-	99	Horz
2399.85	44.61	PK	21.8	4.31	70.72	-	-	99	Horz
2408.378	74.27	PK	21.8	4.03	100.1	-	-	99	Horz
2390.3	17.77	Av	21.8	4.49	44.06	54	-9.94	99	Horz
2397.568	25.32	Av	21.8	4.37	51.49	-	-	99	Horz
2399.79	27.4	Av	21.8	4.32	53.52	-	-	99	Horz
2408.559	61.47	Av	21.8	4.02	87.29	-	-	99	Horz

PK - Peak detector
Av - Average detector

Figure 22 Band-edge Graph Y-Axis, Vertical

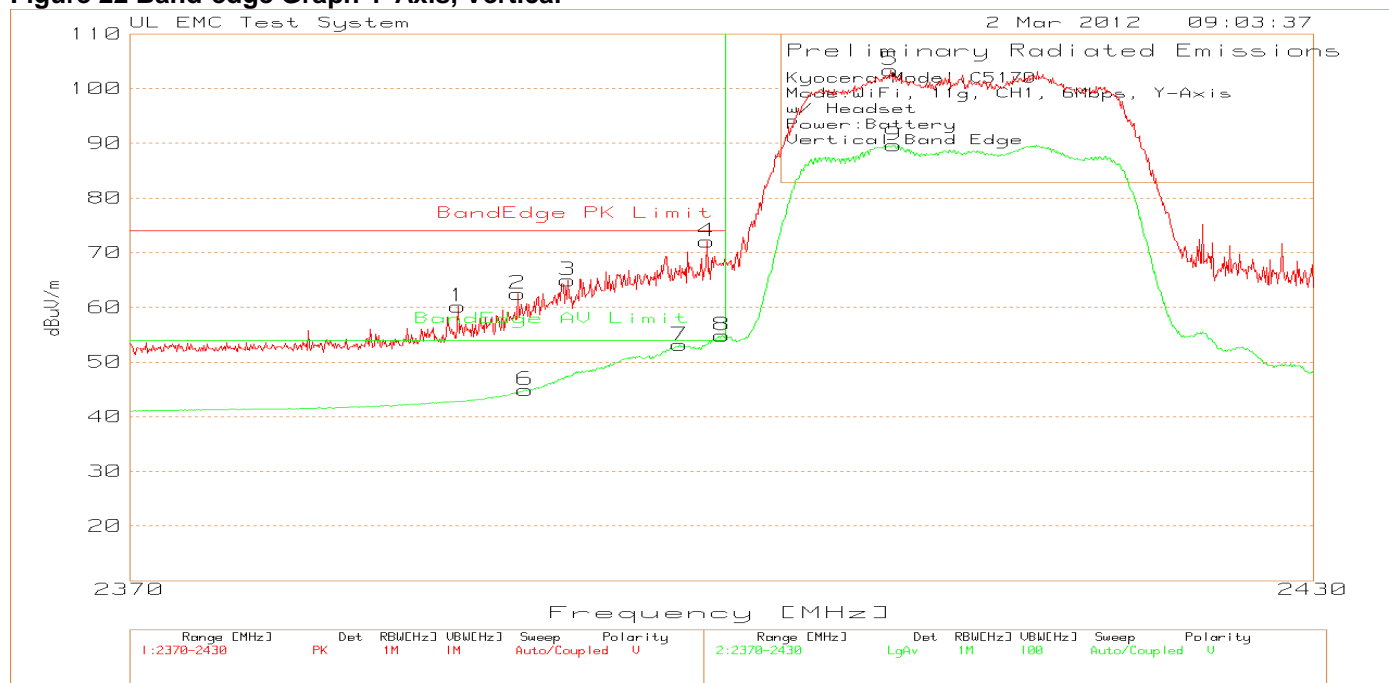


Table 24 Band-edge Data Y-Axis, Vertical

Kyocera Model: C5170
Mode: WiFi, 11g, CH1, 6Mbps, Y-Axis
w/ Headset
Power: Battery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2386.517	33.96	PK	21.8	4.42	60.18	74	-13.82	101	Vert
2389.52	36.18	PK	21.8	4.47	62.45	74	-11.55	150	Vert
2392.042	38.69	PK	21.8	4.51	65	-	-	150	Vert
2399.069	45.9	PK	21.8	4.33	72.03	-	-	150	Vert
2408.438	77.6	PK	21.8	4.02	103.42	-	-	150	Vert
2389.88	18.62	Av	21.8	4.48	44.9	54	-9.1	150	Vert
2397.688	26.94	Av	21.8	4.37	53.11	-	-	150	Vert
2399.85	28.7	Av	21.8	4.31	54.81	-	-	150	Vert
2408.559	63.82	Av	21.8	4.02	89.64	-	-	150	Vert

PK - Peak detector
Av - Average detector

4.2.9 Band-edge, 802.11g, 54Mbps, Low Channel

Figure 23 Band-edge Graph Y-Axis, Horizontal

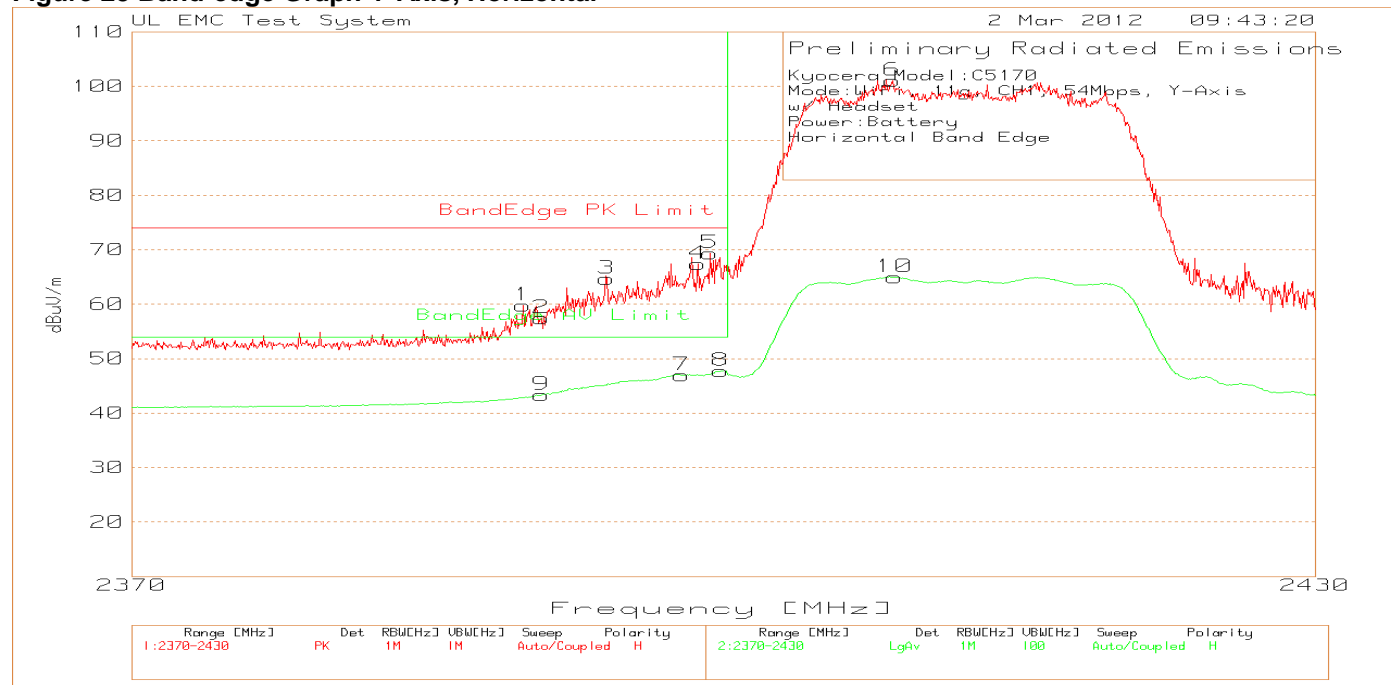


Table 25 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11g, CH1, 54Mbps, Y-Axis
w/ Headset
Power: Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2389.7	33.55	PK	21.8	4.48	59.83	74	-14.17	99	Horz
2390.601	31.17	PK	21.8	4.49	57.46	74	-16.54	99	Horz
2393.904	38.43	PK	21.8	4.46	64.69	-	-	99	Horz
2398.529	41.31	PK	21.8	4.35	67.46	-	-	99	Horz
2399.129	43.17	PK	21.8	4.33	69.3	-	-	99	Horz
2408.438	75.24	PK	21.8	4.02	101.06	-	-	99	Horz
2397.718	20.81	Av	21.8	4.37	46.98	54	-7.02	99	Horz
2399.67	21.57	Av	21.8	4.32	47.69	-	-	99	Horz
2390.601	17.08	Av	21.8	4.49	43.37	54	-10.63	99	Horz
2408.529	39.19	Av	21.8	4.02	65.01	-	-	99	Horz

PK - Peak detector
Av - Average detector

Figure 24 Band-edge Graph Y-Axis, Vertical

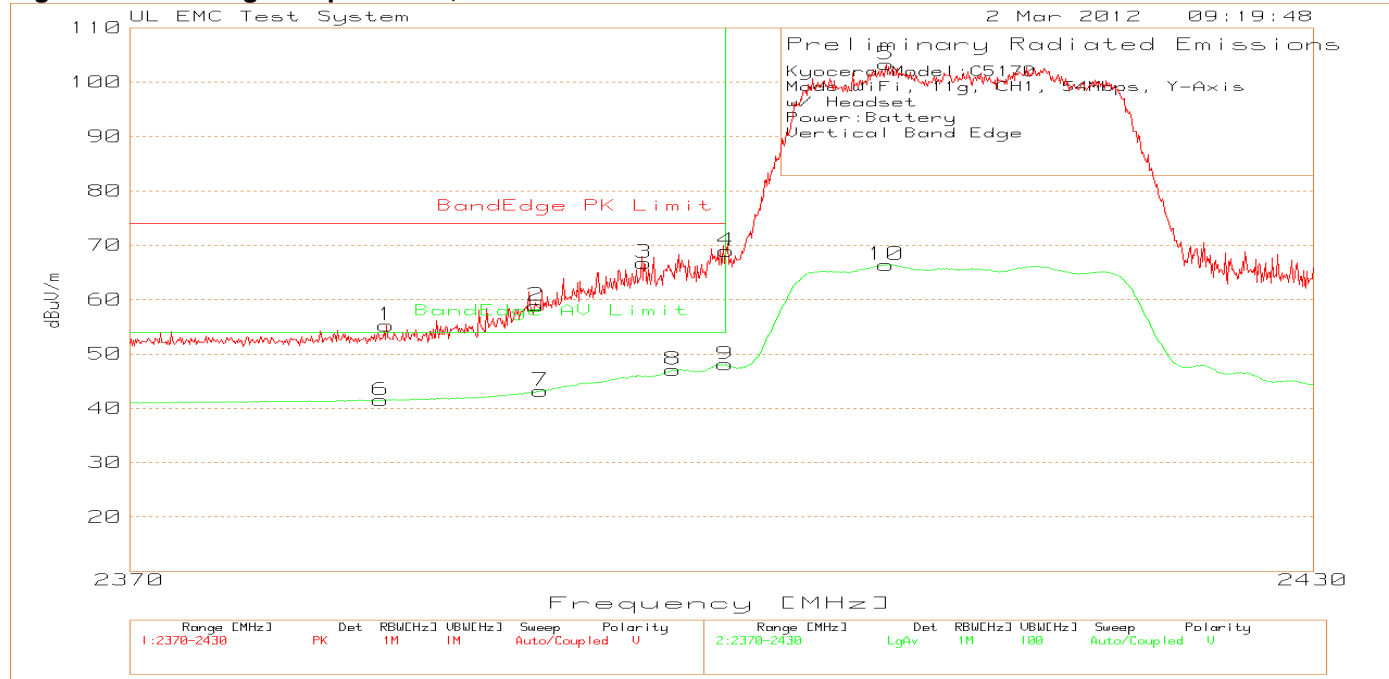


Table 26 Band-edge Data Y-Axis, Vertical

Mode:WiFi, 11g, CH1, 54Mbps, Y-Axis
w/ Headset
Power:Battery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2382.913	29.06	PK	21.8	4.36	55.22	74	-18.78	150	Vert
2390.48	32.64	PK	21.8	4.49	58.93	74	-15.07	150	Vert
2395.886	40.61	PK	21.8	4.41	66.82	-	-	150	Vert
2400.09	42.81	PK	21.8	4.31	68.92	-	-	150	Vert
2408.198	77.49	PK	21.8	4.03	103.32	-	-	150	Vert
2382.613	15.32	Av	21.8	4.35	41.47	54	-12.53	101	Vert
2390.661	16.91	Av	21.8	4.49	43.2	54	-10.8	150	Vert
2397.387	20.86	Av	21.8	4.38	47.04	-	-	150	Vert
2400.03	21.96	Av	21.8	4.31	48.07	-	-	150	Vert
2408.198	40.57	Av	21.8	4.03	66.4	-	-	150	Vert

PK - Peak detector
Av - Average detector

4.2.10 Band-edge, 802.11n, MCS0, Low Channel

Figure 25 Band-edge Graph Y-Axis, Horizontal

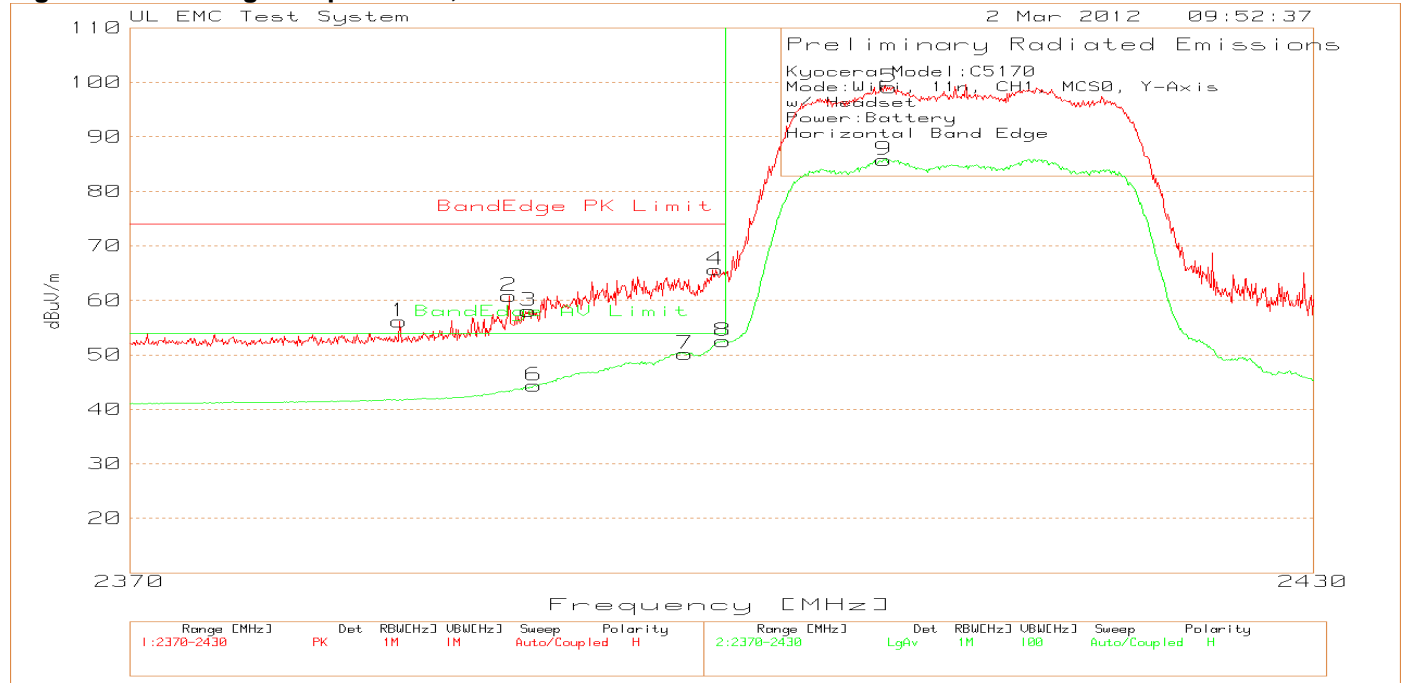


Table 27 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11n, CH1, MCS0, Y-Axis
w/ Headset
Power: Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2383.574	30.01	PK	21.8	4.37	56.18	74	-17.82	99	Horz
2389.099	34.54	PK	21.8	4.46	60.8	74	-13.2	99	Horz
2390.06	31.76	PK	21.8	4.48	58.04	74	-15.96	99	Horz
2399.55	39.54	PK	21.8	4.32	65.66	-	-	99	Horz
2408.378	73.28	PK	21.8	4.03	99.11	-	-	99	Horz
2390.36	18.14	AV	21.8	4.49	44.43	54	-9.57	100	Horz
2397.988	24.06	Av	21.8	4.36	50.22	-	-	100	Horz
2399.91	26.4	Av	21.8	4.31	52.51	-	-	100	Horz
2408.078	59.96	Av	21.8	4.04	85.8	-	-	100	Horz

PK - Peak detector
Av - Average detector

Figure 26 Band-edge Graph Y-Axis, Vertical

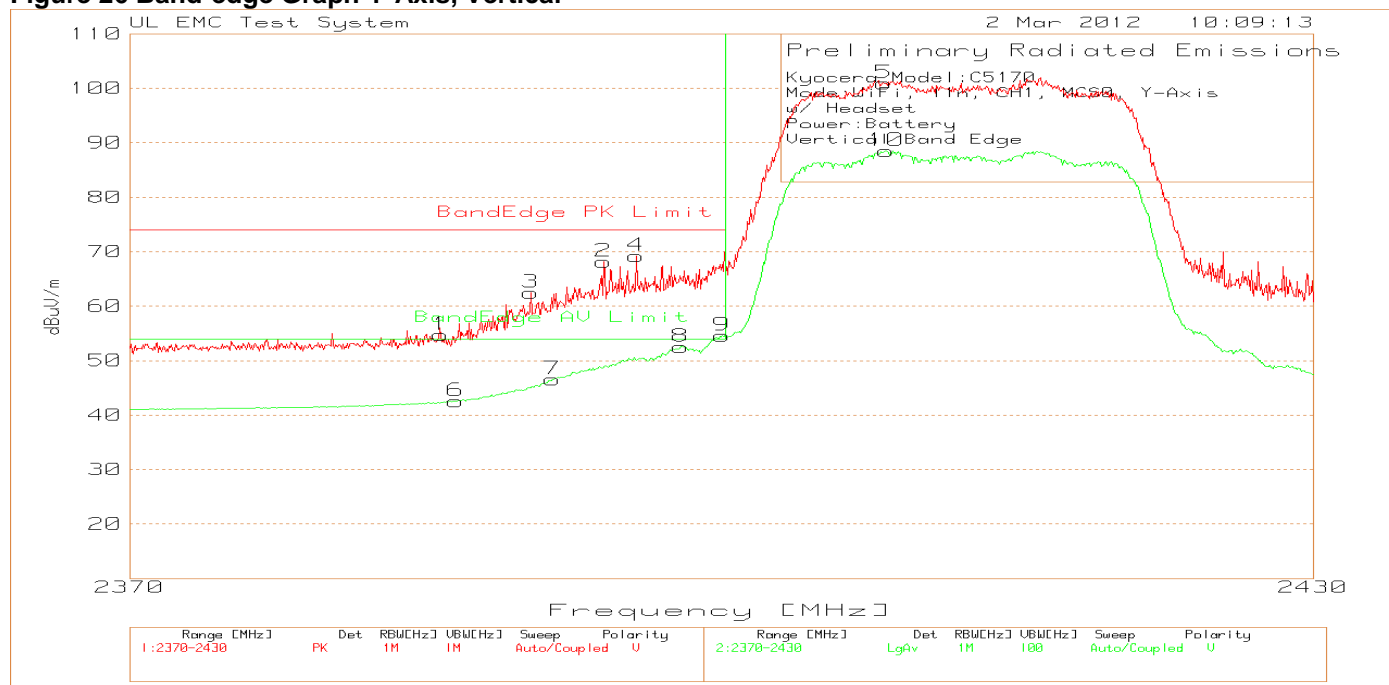


Table 28 Band-edge Data Y-Axis, Vertical

Kyocera Model: C5170
Mode: WiFi, 11n, CH1, MCS0, Y-Axis
w/ Headset
Power: Battery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2385.616	28.5	PK	21.8	4.4	54.7	74	-19.3	150	Vert
2393.844	41.89	PK	21.8	4.46	68.15	-	-	150	Vert
2390.18	36.26	PK	21.8	4.48	62.54	74	-11.46	150	Vert
2395.526	43	PK	21.8	4.42	69.22	-	-	150	Vert
2408.078	75.1	PK	21.8	4.04	100.94	-	-	150	Vert
2386.396	16.36	Av	21.8	4.42	42.58	54	-11.42	150	Vert
2391.261	20.29	Av	21.8	4.5	46.59	54	-7.41	150	Vert
2397.748	26.33	Av	21.8	4.37	52.5	-	-	150	Vert
2399.85	28.54	Av	21.8	4.31	54.65	-	-	150	Vert
2408.198	62.63	Av	21.8	4.03	88.46	-	-	150	Vert

PK - Peak detector
Av - Average detector

4.2.11 Band-edge, 802.11n, MCS7, Low Channel

Figure 27 Band-edge Graph Y-Axis, Horizontal

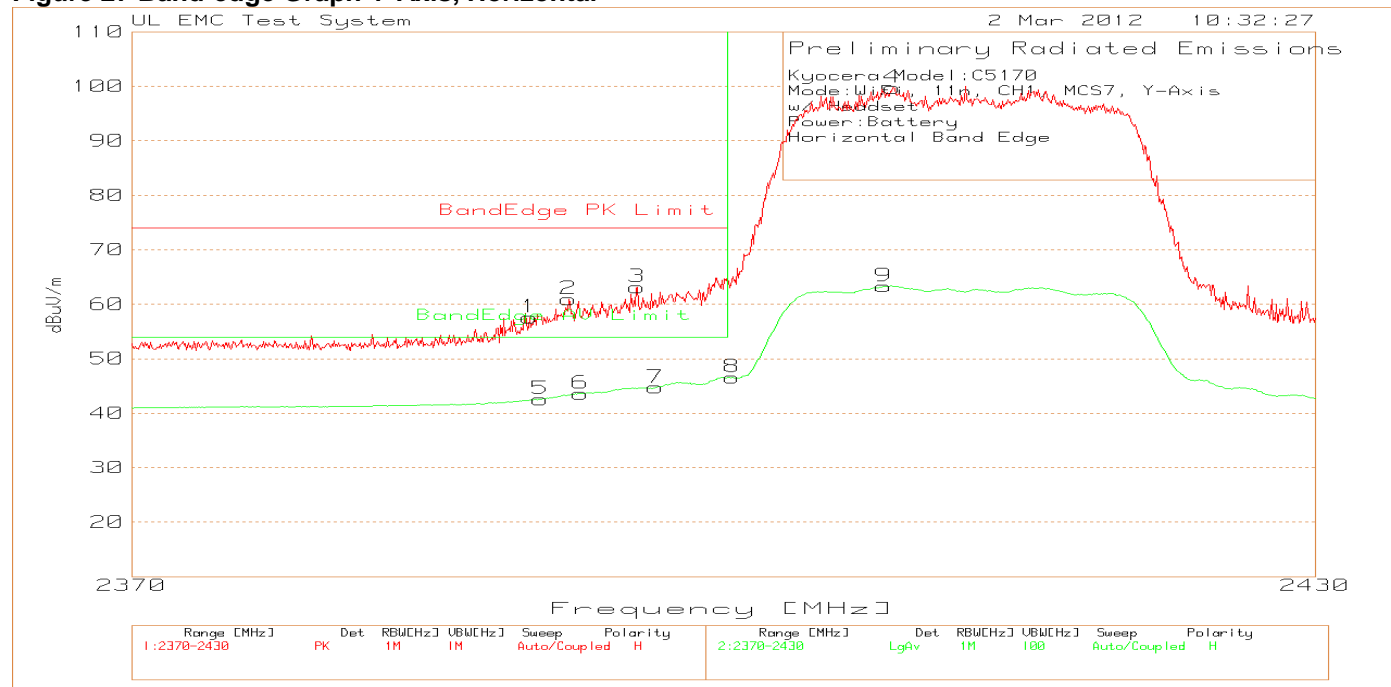


Table 29 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11n, CH1, MCS7, Y-Axis
w/ Headset
Power: Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2390	31.25	PK	21.8	4.48	57.53	74	-16.47	99	Horz
2391.982	34.64	PK	21.8	4.51	60.95	74	-13.05	99	Horz
2395.465	36.91	PK	21.8	4.42	63.13	-	-	150	Horz
2408.438	73.97	PK	21.8	4.02	99.79	-	-	99	Horz
2390.541	16.26	Av	21.8	4.49	42.55	54	-11.45	99	Horz
2392.583	17.29	Av	21.8	4.5	43.59	-	-	99	Horz
2396.366	18.5	Av	21.8	4.4	44.7	-	-	99	Horz
2400.27	20.43	Av	21.8	4.3	46.53	-	-	99	Horz
2407.958	37.49	Av	21.8	4.04	63.33	-	-	99	Horz

PK - Peak detector
Av - Average detector

Figure 28 Band-edge Graph Y-Axis, Vertical

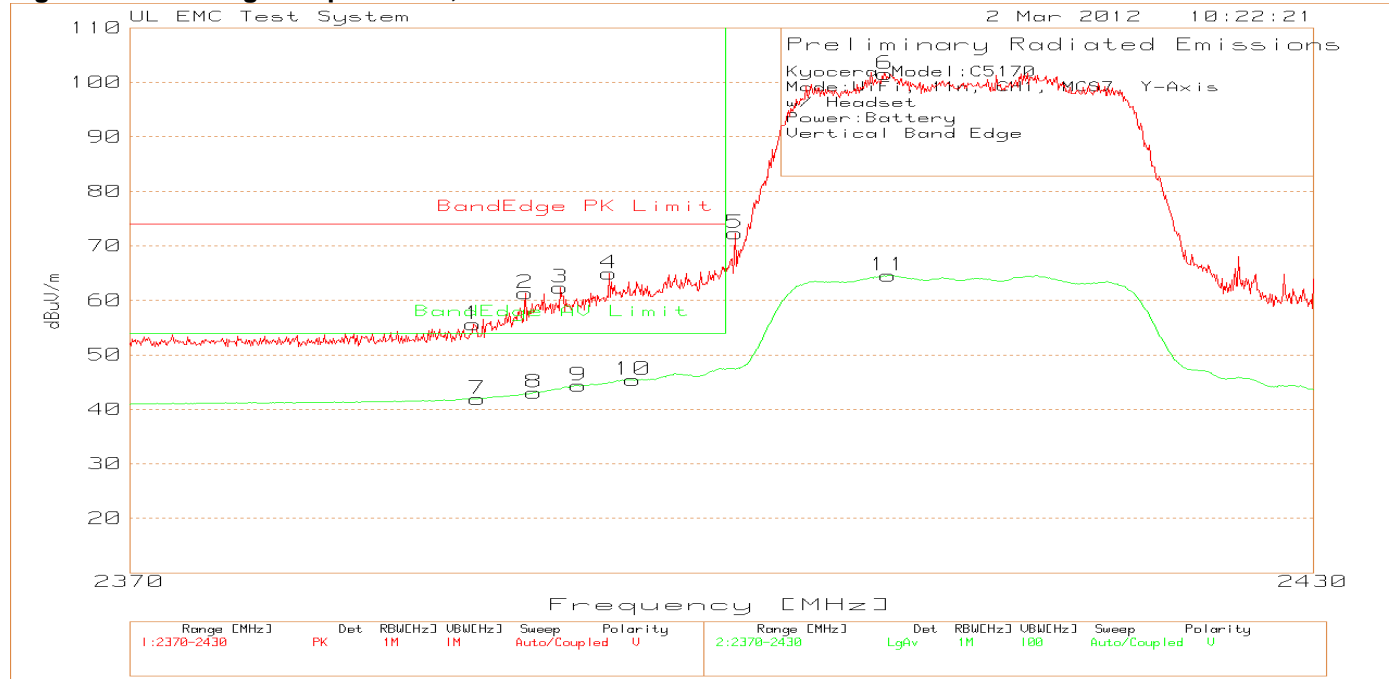


Table 30 Band-edge Data Y-Axis, Vertical

Kyocera Model:C5170
Mode:WiFi, 11n, CH1, MCS7, Y-Axis
w/ Headset
Power:Battery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2387.297	29.45	PK	21.8	4.43	55.68	74	-18.32	150	Vert
2389.88	35.04	PK	21.8	4.48	61.32	74	-12.68	150	Vert
2391.682	36.1	PK	21.8	4.51	62.41	-	-	150	Vert
2394.144	38.68	PK	21.8	4.46	64.94	-	-	150	Vert
2400.511	46.25	PK	21.8	4.3	72.35	-	-	150	Vert
2408.138	75.74	PK	21.8	4.04	101.58	-	-	150	Vert
2387.477	15.72	PK	21.8	4.44	41.96	54	-12.04	150	Vert
2390.36	16.79	PK	21.8	4.49	43.08	54	-10.92	150	Vert
2392.583	18.09	PK	21.8	4.5	44.39	-	-	150	Vert
2395.345	19.14	PK	21.8	4.43	45.37	-	-	150	Vert
2408.318	38.76	PK	21.8	4.03	64.59	-	-	150	Vert

PK - Peak detector
Av - Average detector

4.2.12 Band-edge, 802.11b, 1Mbps, High Channel

Figure 29 Band-edge Graph Y-Axis, Horizontal

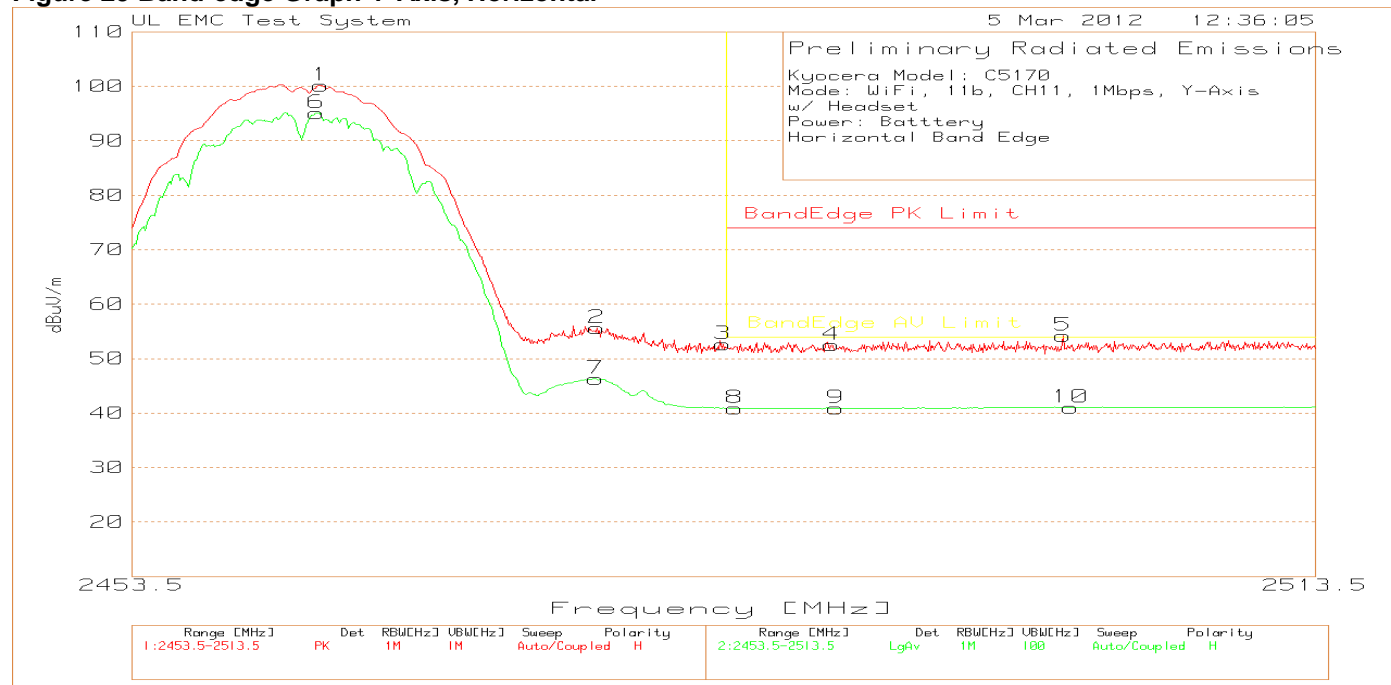


Table 31 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11b, CH11, 1Mbps, Y-Axis
w/ Headset
Power: Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2463.02	74.11	PK	22	4.08	100.19	-	-	100	Horz
2476.923	29.91	PK	22	3.77	55.68	-	-	100	Horz
2483.29	26.94	PK	22	3.77	52.71	-	-	150	Horz
2488.815	26.65	PK	22.1	3.79	52.54	74	-21.46	150	Horz
2500.587	28.18	PK	22.1	3.93	54.21	74	-19.79	150	Horz
2462.809	69.07	Av	22	4.08	95.15	-	-	100	Horz
2476.863	20.49	Av	22	3.78	46.27	-	-	100	Horz
2483.89	15.02	Av	22.1	3.77	40.89	54	-13.11	100	Horz
2489.056	15.02	Av	22.1	3.79	40.91	54	-13.09	100	Horz
2500.977	15.03	Av	22.1	3.92	41.05	54	-12.95	100	Horz

PK - Peak detector
Av - Average detector

Figure 30 Band-edge Graph Y-Axis, Vertical

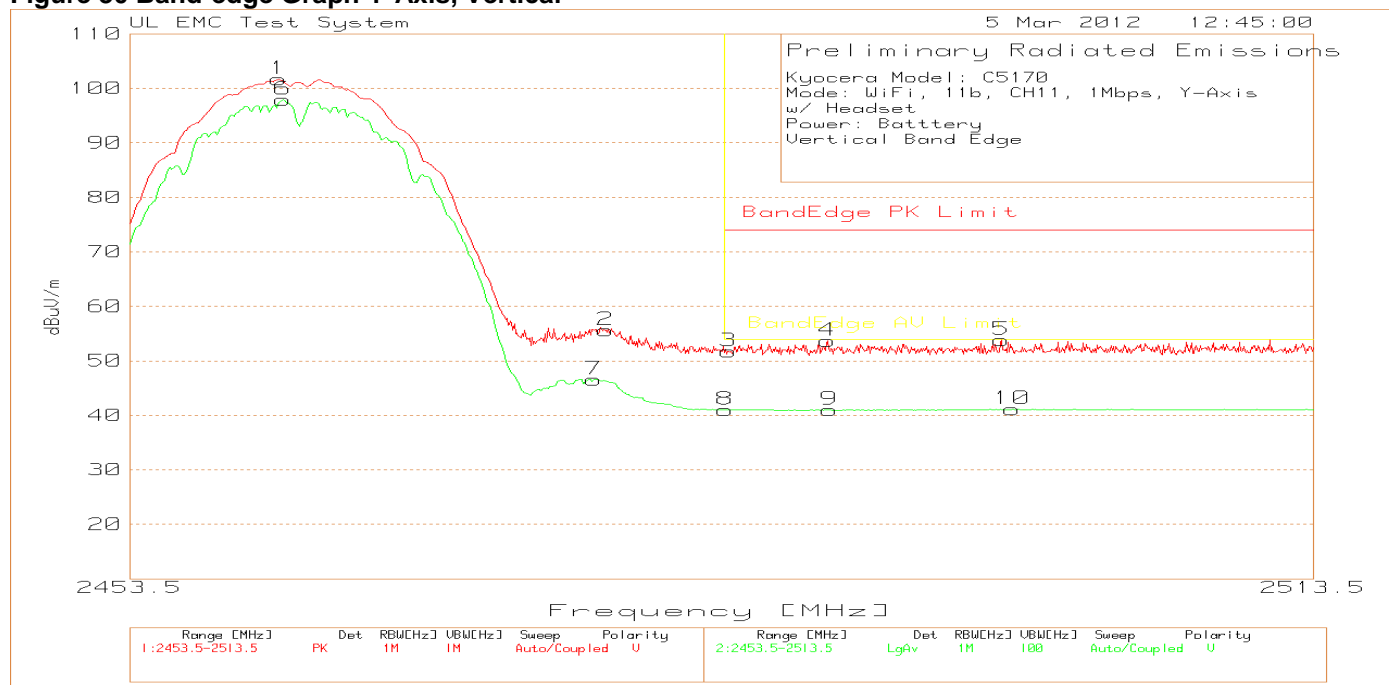


Table 32 Band-edge Data Y-Axis, Vertical

Kyocera Model: C5170
Mode: WiFi, 11b, CH11, 1Mbps, Y-Axis
w/ Headset
Power: Batttery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2461.008	75.57	PK	22	4.12	101.69	-	-	150	Vert
2477.464	29.92	PK	22	3.77	55.69	-	-	150	Vert
2483.71	25.89	PK	22.1	3.77	51.76	74	-22.24	150	Vert
2488.695	27.86	PK	22.1	3.79	53.75	74	-20.25	100	Vert
2497.584	27.76	PK	22.1	3.93	53.79	74	-20.21	150	Vert
2461.188	71.86	Av	22	4.12	97.98	-	-	150	Vert
2476.863	20.79	Av	22	3.78	46.57	-	-	150	Vert
2483.53	15.16	Av	22.1	3.77	41.03	54	-12.97	100	Vert
2488.845	15.09	Av	22.1	3.79	40.98	54	-13.02	150	Vert
2498.125	15.1	Av	22.1	3.93	41.13	54	-12.87	150	Vert

PK - Peak detector
Av - Average detector

4.2.13 Band-edge, 802.11b, 11Mbps, High Channel

Figure 31 Band-edge Graph Y-Axis, Horizontal

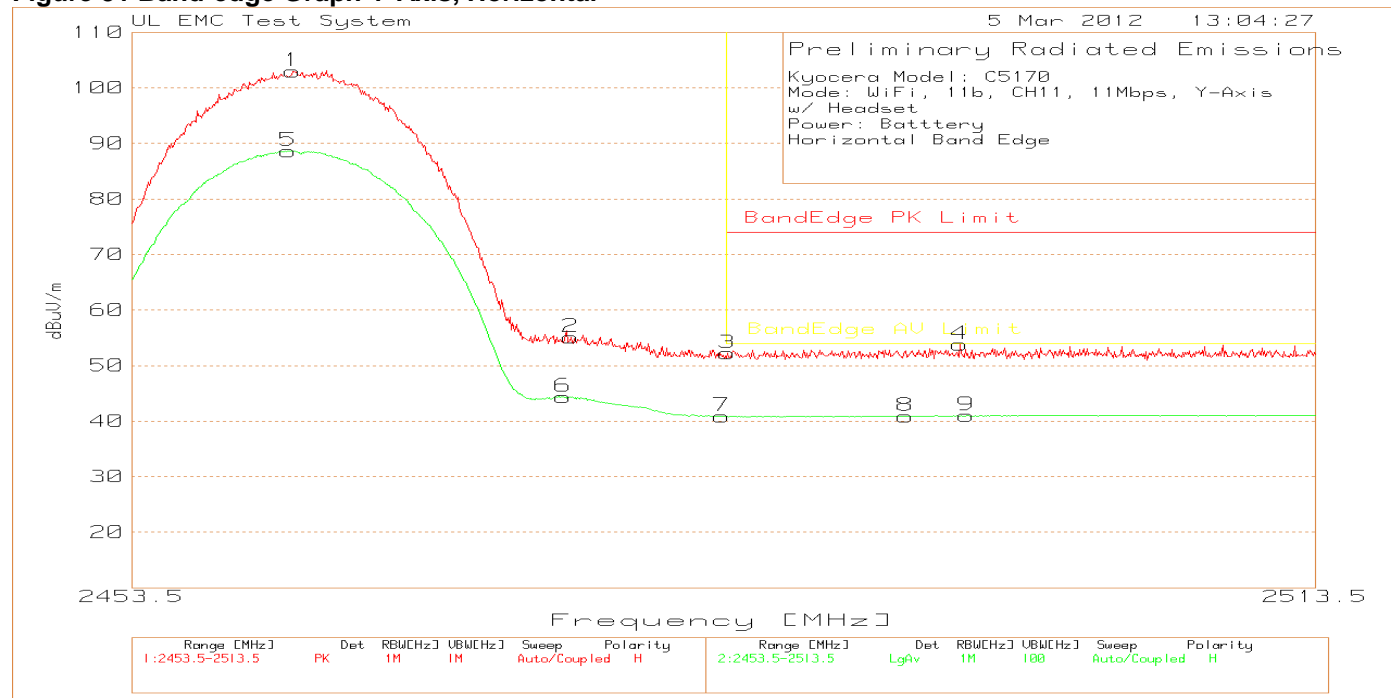


Table 33 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11b, CH11, 11Mbps, Y-Axis
w/ Headset
Power: Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2461.608	76.88	PK	22	4.11	102.99	-	-	100	Horz
2475.602	29.3	PK	22	3.8	55.1	-	-	100	Horz
2483.53	26.34	PK	22.1	3.77	52.21	74	-21.79	150	Horz
2495.362	27.86	PK	22.1	3.89	53.85	74	-20.15	150	Horz
2461.368	62.49	Av	22	4.12	88.61	-	-	99	Horz
2475.242	18.54	Av	22	3.81	44.35	-	-	99	Horz
2483.23	15.13	Av	22	3.77	40.9	-	-	99	Horz
2492.599	14.93	Av	22.1	3.85	40.88	54	-13.12	99	Horz
2495.662	14.97	Av	22.1	3.9	40.97	54	-13.03	99	Horz

PK - Peak detector
Av - Average detector

Figure 32 Band-edge Graph Y-Axis, Vertical

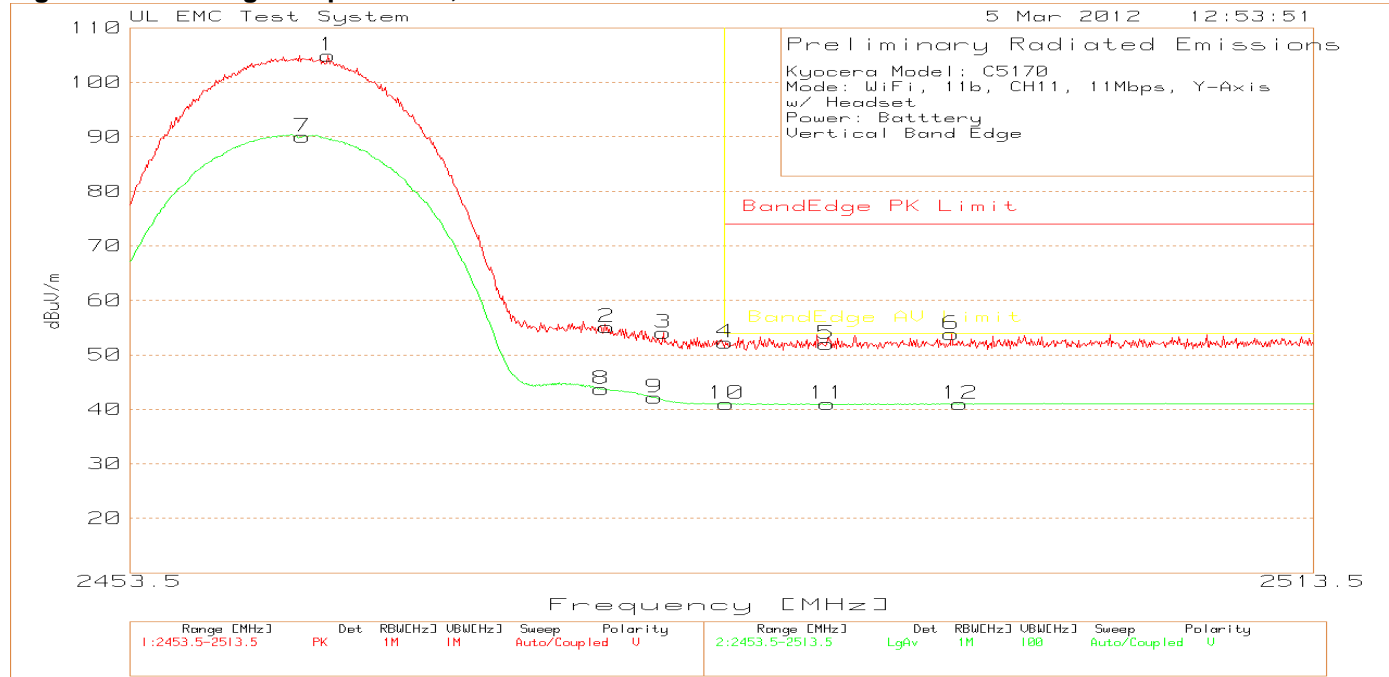


Table 34 Band-edge Data Y-Axis, Vertical

Kyocera Model: C5170
Mode: WiFi, 11b, CH11, 11Mbps, Y-Axis
w/ Headset
Power: Battery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2463.47	78.9	PK	22	4.07	104.97	-	-	150	Vert
2477.524	29.3	PK	22	3.77	55.07	-	-	150	Vert
2480.407	28.28	PK	22	3.77	54.05	-	-	150	Vert
2483.53	26.44	PK	22.1	3.77	52.31	74	-21.69	150	Vert
2488.635	26.14	PK	22.1	3.79	52.03	74	-21.97	100	Vert
2495.002	27.8	PK	22.1	3.89	53.79	74	-20.21	150	Vert
2462.209	63.96	Av	22	4.1	90.06	-	-	150	Vert
2477.254	17.97	Av	22	3.77	43.74	-	-	150	Vert
2479.926	16.38	Av	22	3.77	42.15	-	-	150	Vert
2483.56	15.11	Av	22.1	3.77	40.98	54	-13.02	150	Vert
2488.695	15.08	Av	22.1	3.79	40.97	54	-13.03	150	Vert
2495.482	14.98	Av	22.1	3.89	40.97	54	-13.03	150	Vert

PK - Peak detector
Av - Average detector

4.2.14 Band-edge, 802.11g, 6Mbps, High Channel

Figure 33 Band-edge Graph Y-Axis, Horizontal

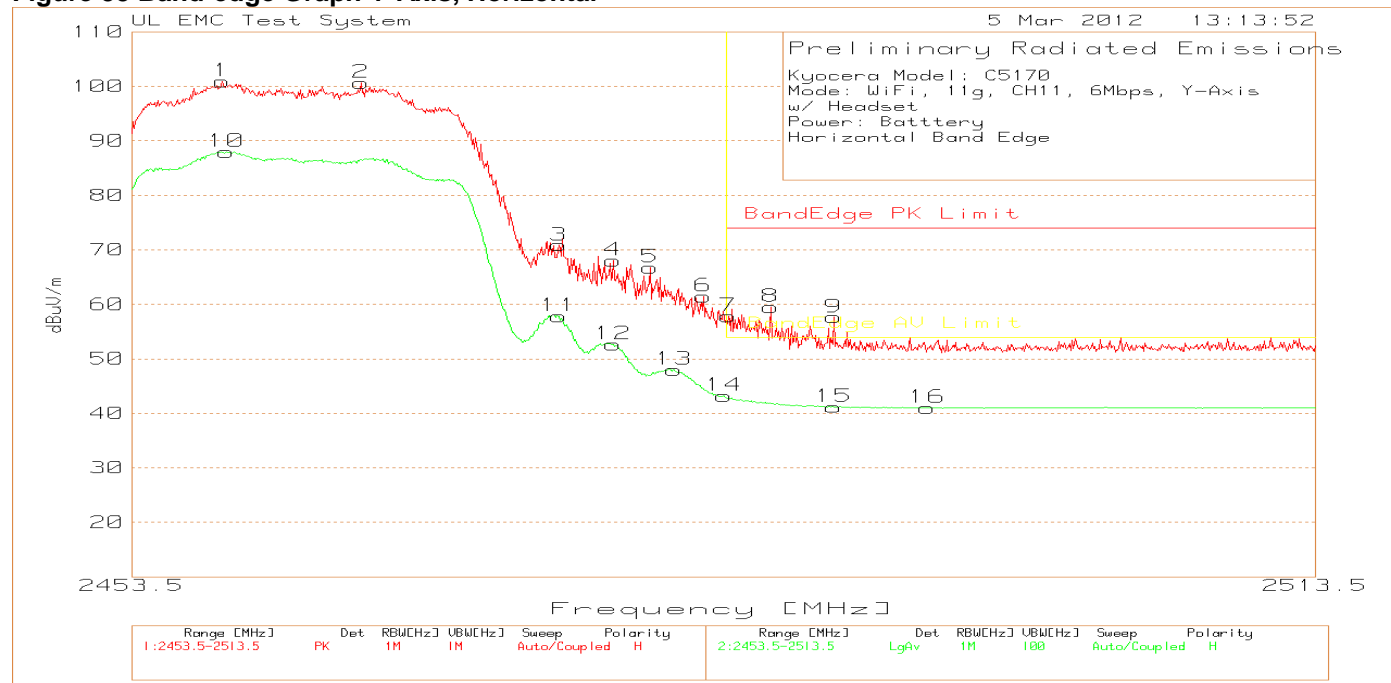


Table 35 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11g, CH11, 6Mbps, Y-Axis
w/ Headset
Power: Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2458.065	74.73	PK	22	4.19	100.92	-	-	100	Horz
2465.032	74.6	PK	22	4.03	100.63	-	-	100	Horz
2475.002	45.03	PK	22	3.81	70.84	-	-	100	Horz
2477.764	42.25	PK	22	3.77	68.02	-	-	100	Horz
2479.626	41.04	PK	22	3.77	66.81	-	-	100	Horz
2482.329	35.72	PK	22	3.77	61.49	-	-	100	Horz
2483.59	31.97	PK	22.1	3.77	57.84	74	-16.16	150	Horz
2485.752	33.66	PK	22.1	3.77	59.53	74	-14.47	100	Horz
2488.935	31.75	PK	22.1	3.79	57.64	74	-16.36	100	Horz
2458.245	61.82	Av	22	4.19	88.01	-	-	100	Horz
2475.002	32.06	Av	22	3.81	57.87	-	-	100	Horz
2477.764	26.92	Av	22	3.77	52.69	-	-	100	Horz
2480.827	22.22	Av	22	3.77	47.99	-	-	100	Horz
2483.35	17.37	Av	22.1	3.77	43.24	-	-	100	Horz
2488.935	15.31	Av	22.1	3.79	41.2	54	-12.8	100	Horz
2493.68	15.03	Av	22.1	3.86	40.99	54	-13.01	100	Horz

PK - Peak detector
Av - Average detector

Figure 34 Band-edge Graph Y-Axis, Vertical

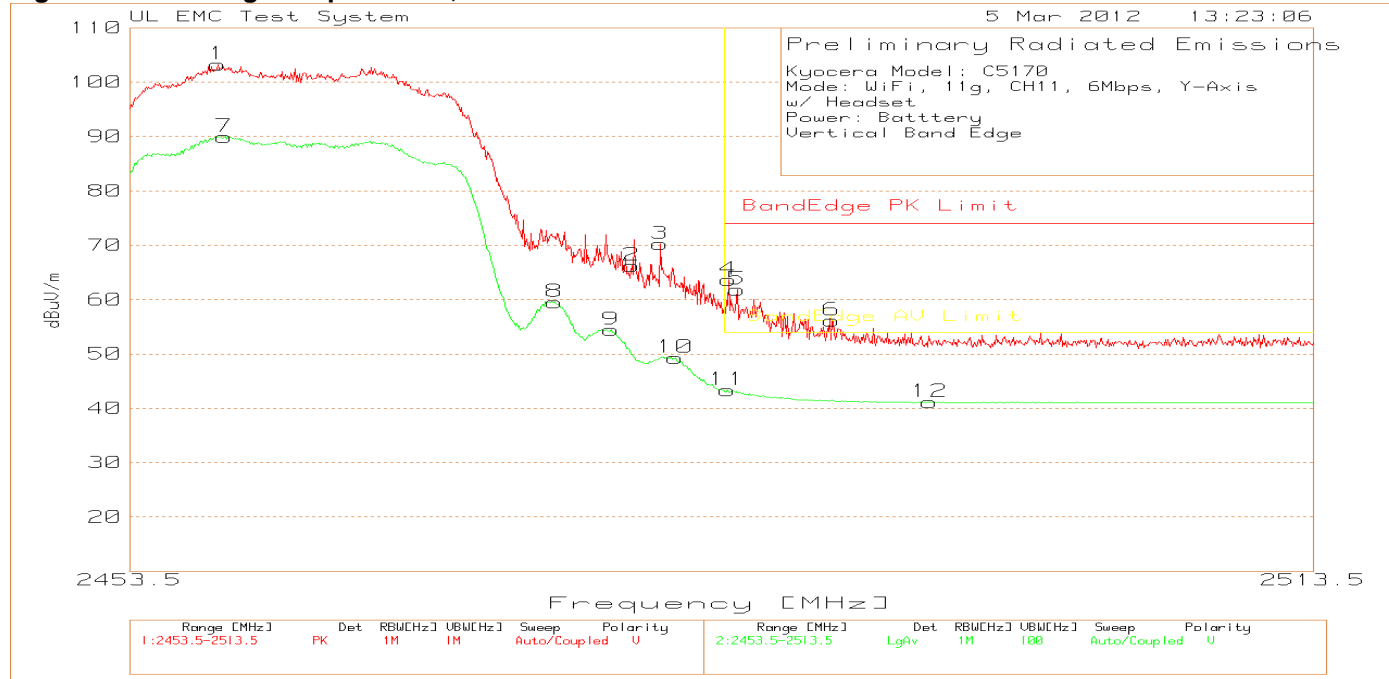


Table 36 Band-edge Data Y-Axis, Vertical

Kyocera Model: C5170
Mode: WiFi, 11g, CH11, 6Mbps, Y-Axis
w/ Headset
Power: Battery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2457.944	77.07	PK	22	4.2	103.27	-	-	150	Vert
2478.785	40.49	PK	22	3.77	66.26	-	-	100	Vert
2480.227	44.43	PK	22	3.77	70.2	-	-	100	Vert
2483.71	37.77	PK	22.1	3.77	63.64	74	-10.36	150	Vert
2484.131	36.02	PK	22.1	3.77	61.89	74	-12.11	150	Vert
2488.935	30.31	PK	22.1	3.79	56.2	74	-17.8	150	Vert
2458.245	63.7	Av	22	4.19	89.89	-	-	150	Vert
2474.881	33.68	Av	22	3.82	59.5	-	-	150	Vert
2477.764	28.64	Av	22	3.77	54.41	-	-	150	Vert
2481.008	23.5	Av	22	3.77	49.27	-	-	150	Vert
2483.65	17.43	Av	22.1	3.77	43.3	54	-10.7	150	Vert
2493.89	15.13	Av	22.1	3.87	41.1	54	-12.9	150	Vert

PK - Peak detector
Av - Average detector

4.2.15 Band-edge, 802.11g, 54Mbps, High Channel

Figure 35 Band-edge Graph Y-Axis, Horizontal

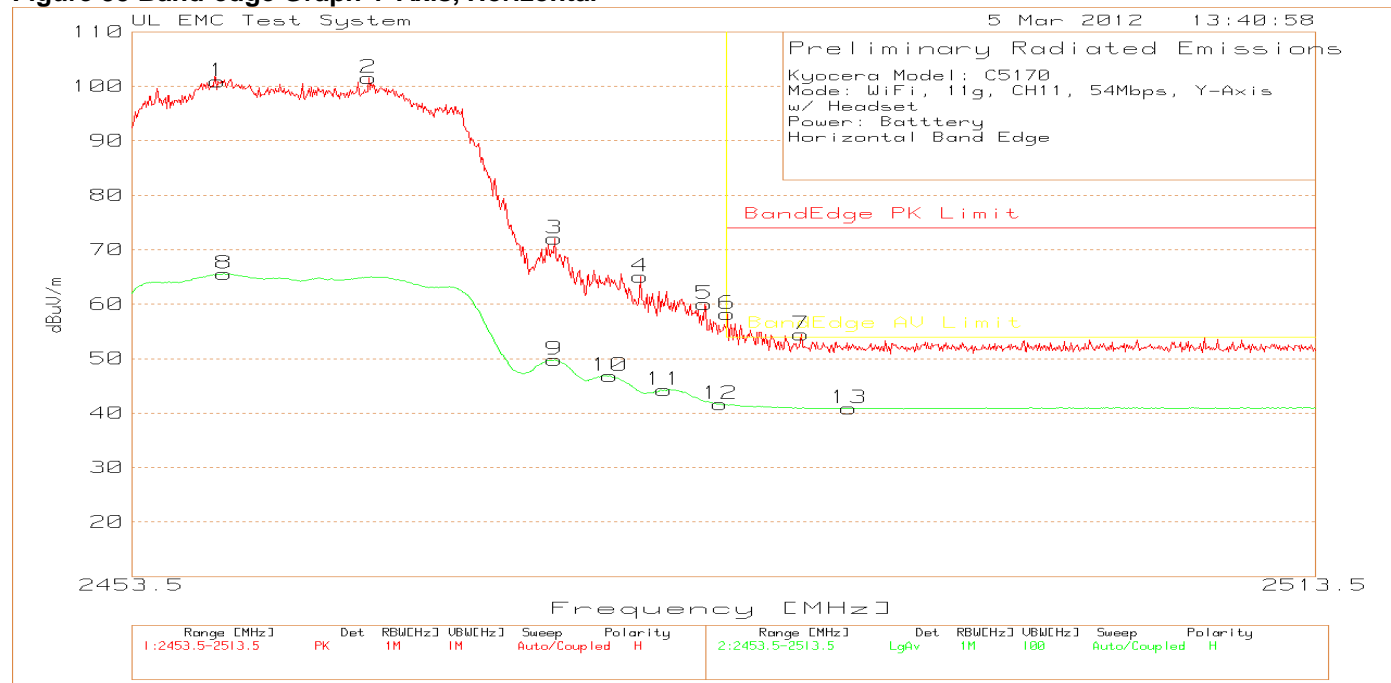


Table 37 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11g, CH11, 54Mbps, Y-Axis
w/ Headset
Power: Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2457.824	74.71	PK	22	4.2	100.91	-	-	100	Horz
2465.392	75.51	PK	22	4.02	101.53	-	-	100	Horz
2474.761	46.21	PK	22	3.82	72.03	-	-	100	Horz
2479.146	39.32	PK	22	3.77	65.09	-	-	100	Horz
2482.389	34.25	PK	22	3.77	60.02	-	-	100	Horz
2483.53	32.35	PK	22.1	3.77	58.22	74	-15.78	100	Horz
2487.254	28.63	PK	22.1	3.77	54.5	74	-19.5	100	Horz
2458.125	39.36	Av	22	4.19	65.55	-	-	100	Horz
2474.761	24	Av	22	3.82	49.82	-	-	100	Horz
2477.584	21.05	Av	22	3.77	46.82	-	-	100	Horz
2480.347	18.42	Av	22	3.77	44.19	-	-	100	Horz
2483.17	15.86	Av	22	3.77	41.63	-	-	100	Horz
2489.716	14.99	Av	22.1	3.8	40.89	54	-13.11	100	Horz

PK - Peak detector
Av - Average detector

Figure 36 Band-edge Graph Y-Axis, Vertical

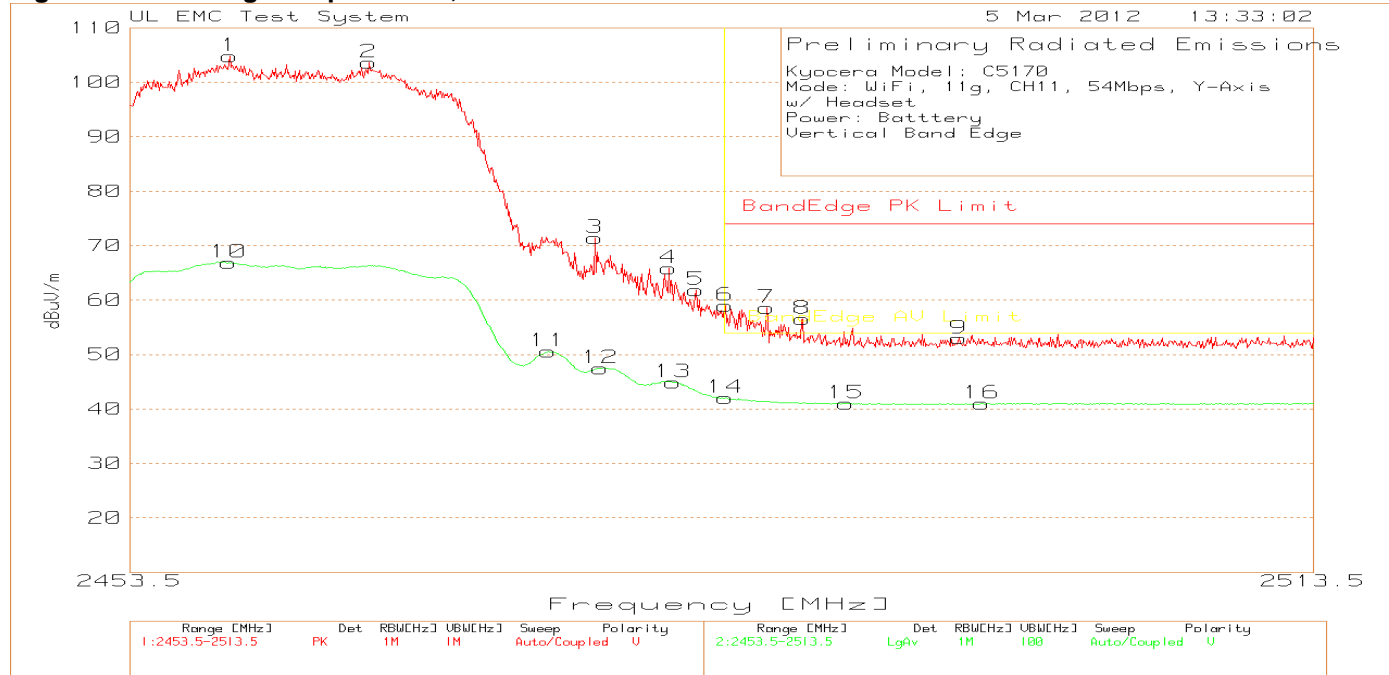


Table 38 Band-edge Data Y-Axis, Vertical

Kyocera Model: C5170
Mode: WiFi, 11g, CH11, 54Mbps, Y-Axis
w/ Headset
Power: Battery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2458.545	78.65	PK	22	4.18	104.83	-	-	150	Vert
2465.512	77.6	PK	22	4.02	103.62	-	-	150	Vert
2476.923	45.62	PK	22	3.77	71.39	-	-	150	Vert
2480.647	40.1	PK	22	3.77	65.87	-	-	150	Vert
2482.029	36.06	PK	22	3.77	61.83	-	-	150	Vert
2483.53	33.18	PK	22.1	3.77	59.05	74	-14.95	100	Vert
2485.632	32.69	PK	22.1	3.77	58.56	74	-15.44	150	Vert
2487.434	30.69	PK	22.1	3.77	56.56	74	-17.44	150	Vert
2495.422	26.99	PK	22.1	3.89	52.98	74	-21.02	100	Vert
2458.485	40.66	Av	22	4.18	66.84	-	-	150	Vert
2474.581	24.72	Av	22	3.82	50.54	-	-	150	Vert
2477.224	21.74	Av	22	3.77	47.51	-	-	100	Vert
2480.887	19.14	Av	22	3.77	44.91	-	-	100	Vert
2483.53	16.17	Av	22.1	3.77	42.04	54	-11.96	150	Vert
2489.656	15.13	Av	22.1	3.8	41.03	54	-12.97	150	Vert
2496.563	14.96	Av	22.1	3.91	40.97	54	-13.03	150	Vert

PK - Peak detector
Av - Average detector

4.2.16 Band-edge, 802.11n, MCS0, High Channel

Figure 37 Band-edge Graph Y-Axis, Horizontal

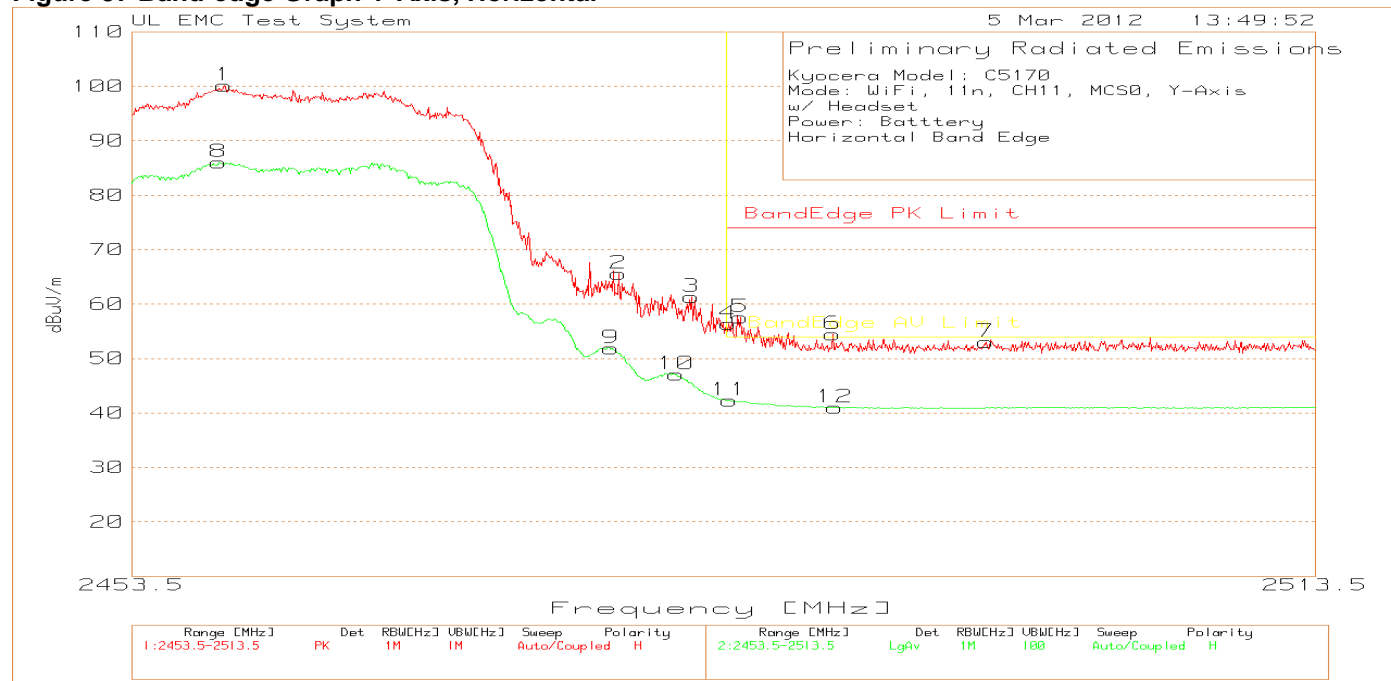


Table 39 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11n, CH11, MCS0, Y-Axis
w/ Headset
Power: Batttery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2458.125	73.97	PK	22	4.19	100.16	-	-	100	Horz
2478.005	39.83	PK	22	3.77	65.6	-	-	100	Horz
2481.728	35.54	PK	22	3.77	61.31	-	-	100	Horz
2483.59	30.5	PK	22.1	3.77	56.37	74	-17.63	100	Horz
2484.191	31.72	PK	22.1	3.77	57.59	74	-16.41	100	Horz
2488.875	28.59	PK	22.1	3.79	54.48	74	-19.52	100	Horz
2496.683	26.99	PK	22.1	3.91	53	74	-21	150	Horz
2457.884	59.84	Av	22	4.2	86.04	-	-	100	Horz
2477.644	26.14	Av	22	3.77	51.91	-	-	100	Horz
2480.947	21.32	Av	22	3.77	47.09	-	-	100	Horz
2483.62	16.43	Av	22.1	3.77	42.3	54	-11.7	100	Horz
2488.965	15.1	Av	22.1	3.79	40.99	54	-13.01	100	Horz

PK - Peak detector
Av - Average detector

Figure 38 Band-edge Graph Y-Axis, Vertical

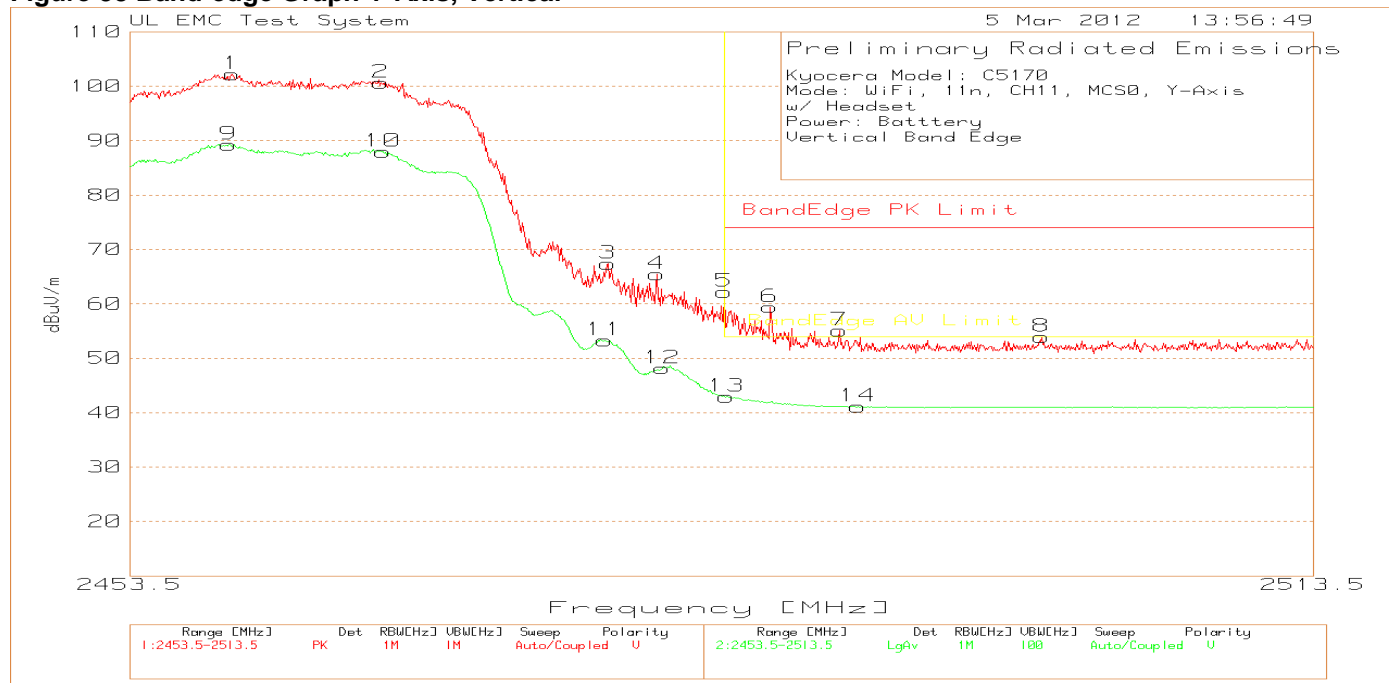


Table 40 Band-edge Data Y-Axis, Vertical

Kyocera Model: C5170
Mode: WiFi, 11n, CH11, MCS0, Y-Axis
w/ Headset
Power: Battery
Vertical Band Edge

Peak 2453.5 - 2513.5MHz

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2458.665	76.06	PK	22	4.18	102.24	-	-	150	Vert
2466.113	74.63	PK	22	4	100.63	-	-	150	Vert
2477.584	41.65	PK	22	3.77	67.42	-	-	150	Vert
2480.047	39.66	PK	22	3.77	65.43	-	-	100	Vert
2483.47	36.34	PK	22.1	3.77	62.21	-	-	150	Vert
2485.812	33.58	PK	22.1	3.77	59.45	74	-14.55	150	Vert
2489.296	29.2	PK	22.1	3.8	55.1	74	-18.9	100	Vert
2499.626	27.91	PK	22.1	3.93	53.94	74	-20.06	150	Vert
2458.485	63.13	Av	22	4.18	89.31	-	-	150	Vert
2466.233	61.96	Av	22	4	87.96	-	-	150	Vert
2477.404	27.54	Av	22	3.77	53.31	-	-	150	Vert
2480.347	22.42	Av	22	3.77	48.19	-	-	150	Vert
2483.59	17.14	Av	22.1	3.77	43.01	54	-10.99	150	Vert
2490.257	15.18	Av	22.1	3.81	41.09	54	-12.91	150	Vert

PK - Peak detector
Av - Average detector

4.2.17 Band-edge, 802.11n, MCS7, High Channel

Figure 39 Band-edge Graph Y-Axis, Horizontal

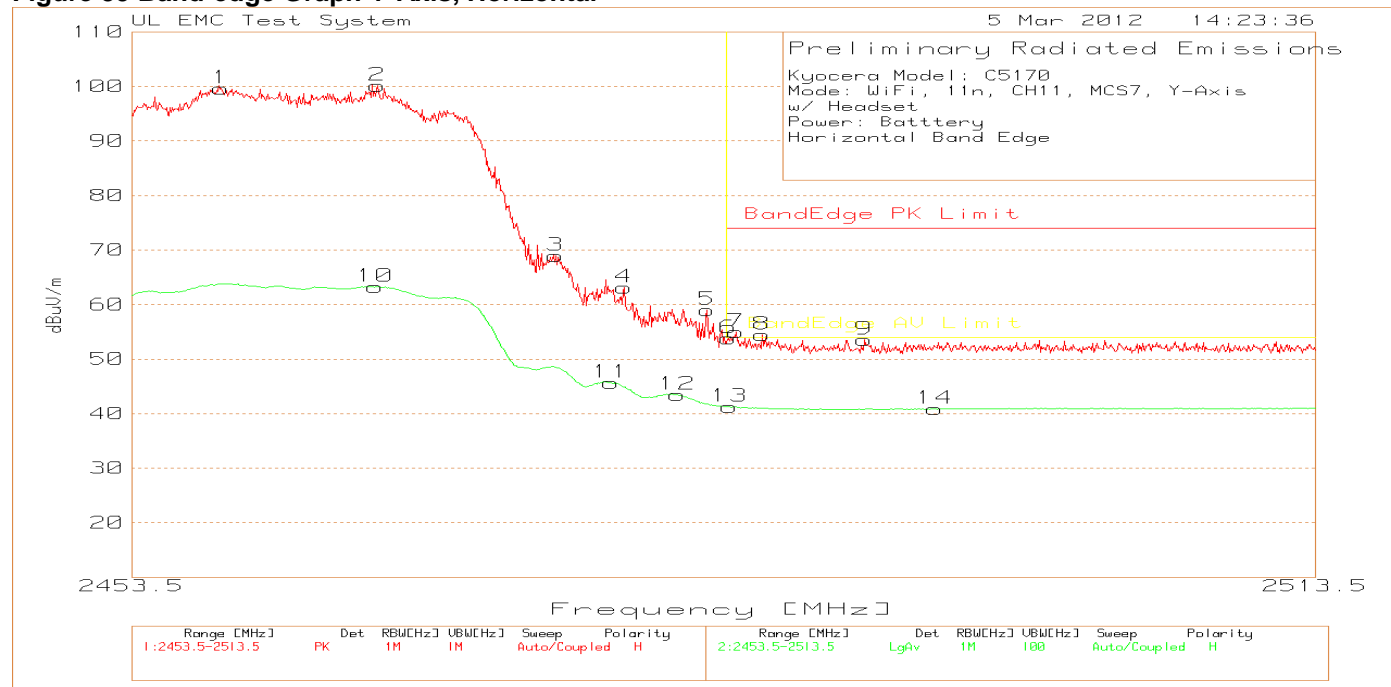


Table 41 Band-edge Data Y-Axis, Horizontal

Kyocera Model: C5170
Mode: WiFi, 11n, CH11, MCS7, Y-Axis
w/ Headset
Power: Battery
Horizontal Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2458.005	73.38	PK	22	4.2	99.58	-	-	100	Horz
2465.872	74.18	PK	22	4.01	100.19	-	-	100	Horz
2474.821	43.1	PK	22	3.82	68.92	-	-	100	Horz
2478.305	37.36	PK	22	3.77	63.13	-	-	100	Horz
2482.509	33.24	PK	22	3.77	59.01	-	-	100	Horz
2483.59	27.97	PK	22.1	3.77	53.84	74	-20.16	100	Horz
2483.95	29.09	PK	22.1	3.77	54.96	74	-19.04	100	Horz
2485.272	28.64	PK	22.1	3.77	54.51	74	-19.49	100	Horz
2490.497	27.67	PK	22.1	3.82	53.59	74	-20.41	150	Horz
2465.752	37.26	Av	22	4.01	63.27	-	-	100	Horz
2477.644	19.92	Av	22	3.77	45.69	-	-	100	Horz
2480.977	17.66	Av	22	3.77	43.43	-	-	100	Horz
2483.65	15.38	Av	22.1	3.77	41.25	54	-12.75	100	Horz
2494.071	14.86	Av	22.1	3.87	40.83	54	-13.17	150	Horz

PK - Peak detector
Av - Average detector

Figure 40 Band-edge Graph Y-Axis, Vertical

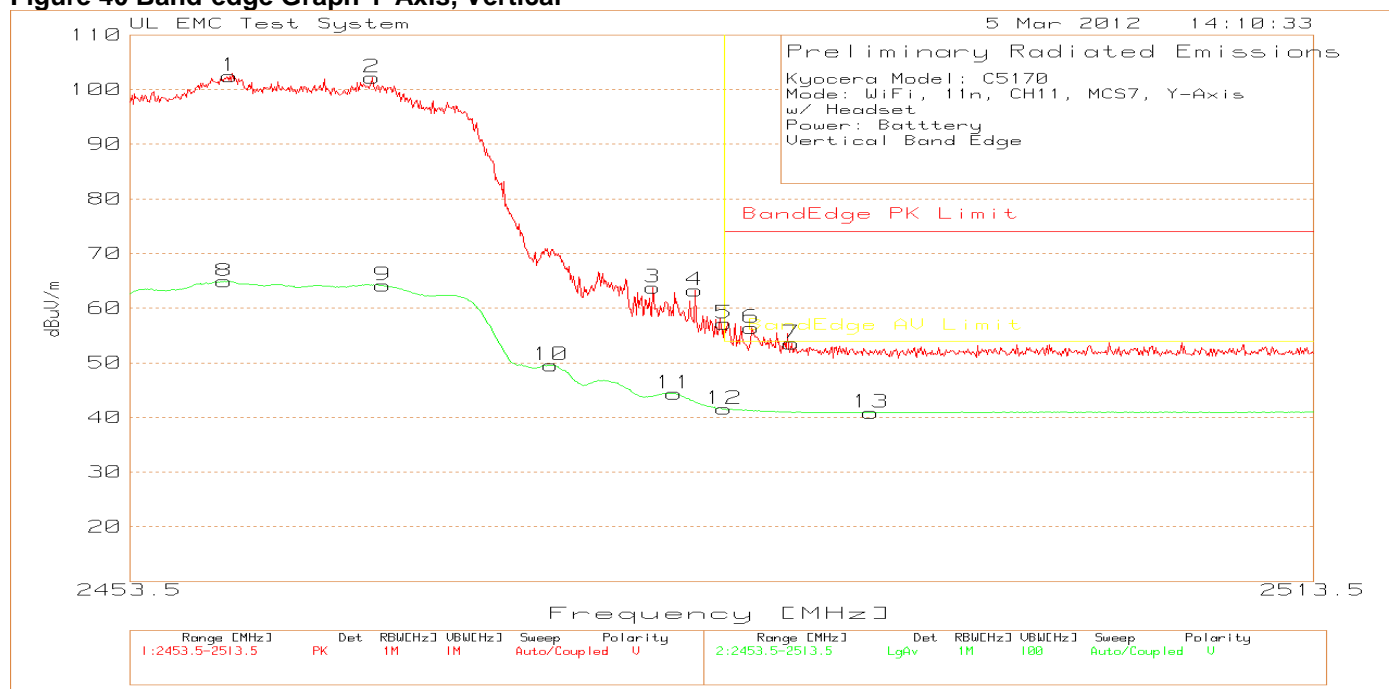


Table 42 Band-edge Data Y-Axis, Vertical

Kyocera Model: C5170
Mode: WiFi, 11n, CH11, MCS7, Y-Axis
w/ Headset
Power: Battery
Vertical Band Edge

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain Factor dB	dBuV/m	BandEdge Limit	Margin	Height [cm]	Polarity
2458.545	76.28	PK	22	4.18	102.46	-	-	150	Vert
2465.692	76.17	PK	22	4.01	102.18	-	-	150	Vert
2479.866	37.97	PK	22	3.77	63.74	-	-	150	Vert
2481.968	37.47	PK	22	3.77	63.24	-	-	100	Vert
2483.47	31.36	PK	22.1	3.77	57.23	-	-	150	Vert
2484.851	30.54	PK	22.1	3.77	56.41	74	-17.59	150	Vert
2486.893	27.66	PK	22.1	3.77	53.53	74	-20.47	150	Vert
2458.245	38.7	Av	22	4.19	64.89	-	-	150	Vert
2466.233	38.15	Av	22	4	64.15	-	-	150	Vert
2474.701	23.77	Av	22	3.82	49.59	-	-	150	Vert
2480.947	18.57	Av	22	3.77	44.34	-	-	150	Vert
2483.47	15.72	Av	22.1	3.77	41.59	-	-	150	Vert
2490.917	14.96	Av	22.1	3.82	40.88	54	-13.12	150	Vert

PK - Peak detector
Av - Average detector

4.2.18 Receiver and Digital Radiated Emissions, Battery Mode, 30MHz – 1GHz

Figure 41 Radiated Emissions Graph

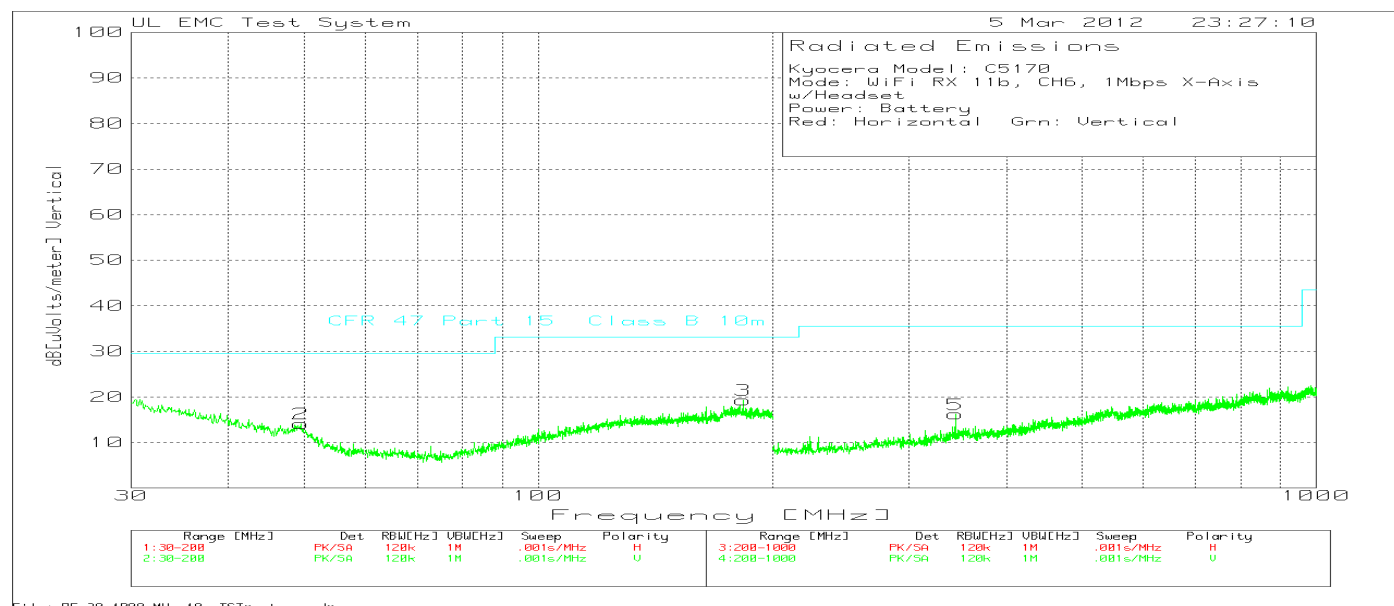
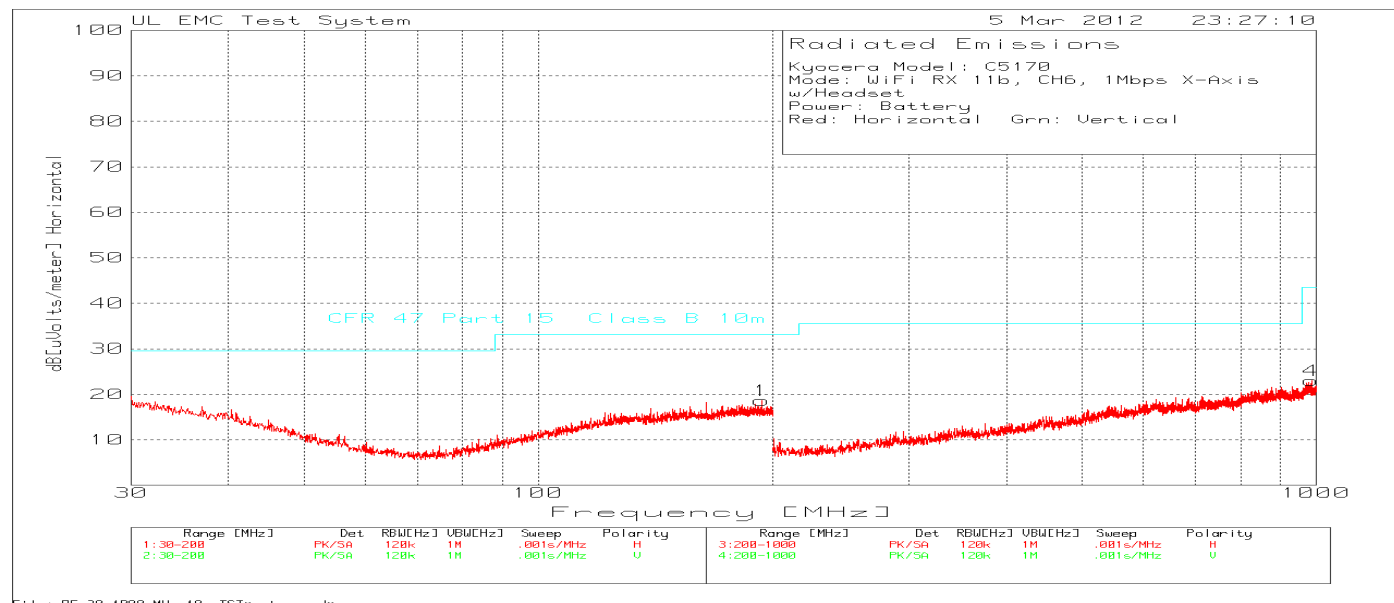


Table 43 Radiated Emissions Data Points

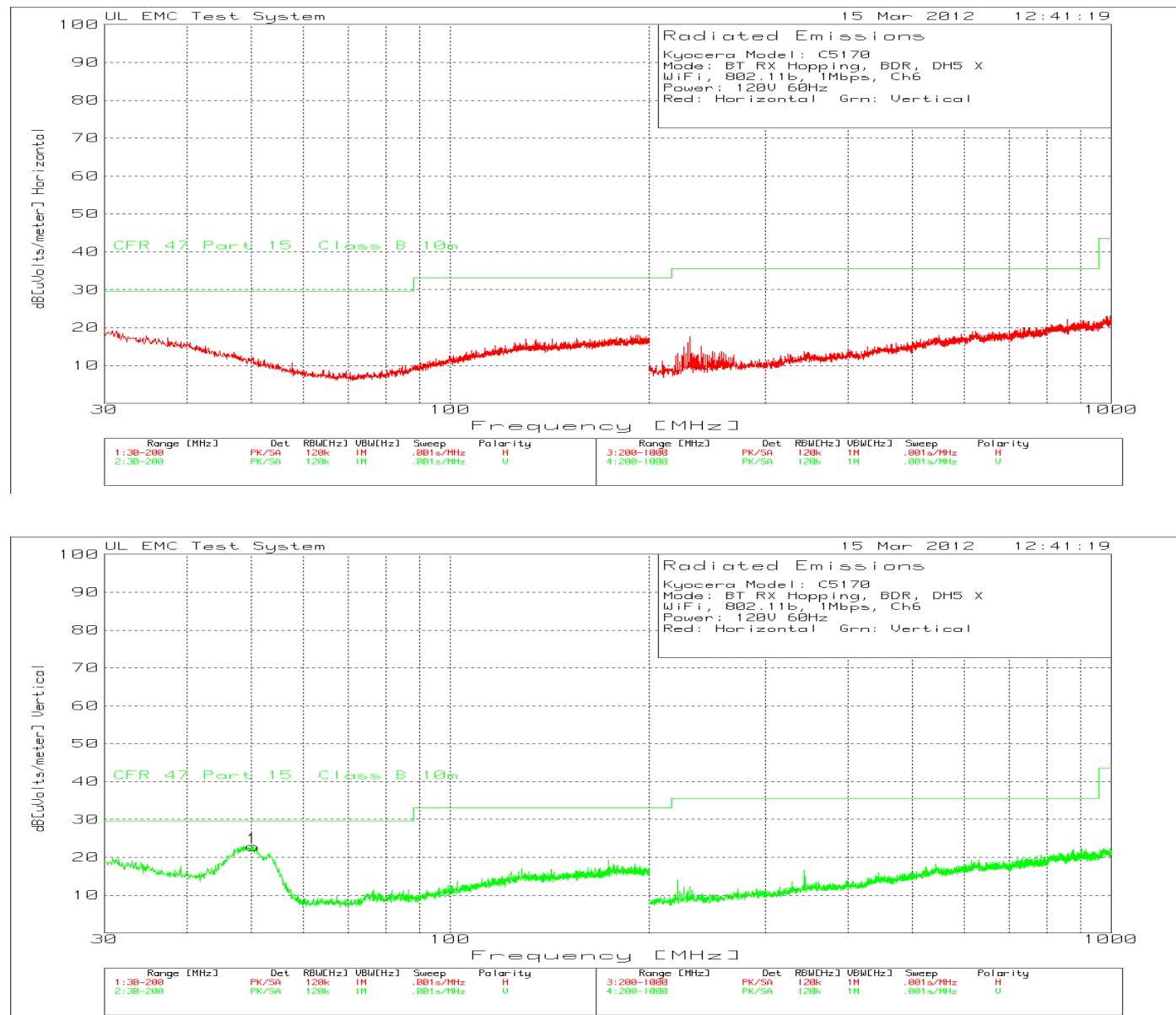
Kyocera Model: C5170
 Mode: WiFi RX 11b, CH6, 1Mbps X-Axis
 w/Headset
 Power: Battery
 Red: Horizontal Grn: Vertical

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	dB[uV/m]	CFR 47 Part 15 Class B 10m	Margin	Height [cm]	Polarity
193.7981	31.45	PK	16	-28.8	18.65	33.1	-14.45	101	Horz
49.5402	33.41	PK	10.1	-29.4	14.11	29.6	-15.49	99	Vert
183.6882	32.27	PK	16	-29	19.27	33.1	-13.83	99	Vert
986.1426	29.91	PK	23.8	-30.7	23.01	43.5	-20.49	99	Horz
343.6376	34.29	PK	14.5	-32.6	16.19	35.6	-19.41	102	Vert

PK - Peak detector
 QP - Quasi-Peak detector

4.2.19 Receiver and Digital Radiated Emissions, Charging Mode, 30MHz – 1GHz

Figure 42 Radiated Emissions Graph



FCC ID: V65C5170
Model Number: C5170
Client Name: Kyocera Communications

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Table 44 Radiated Emissions Data Points

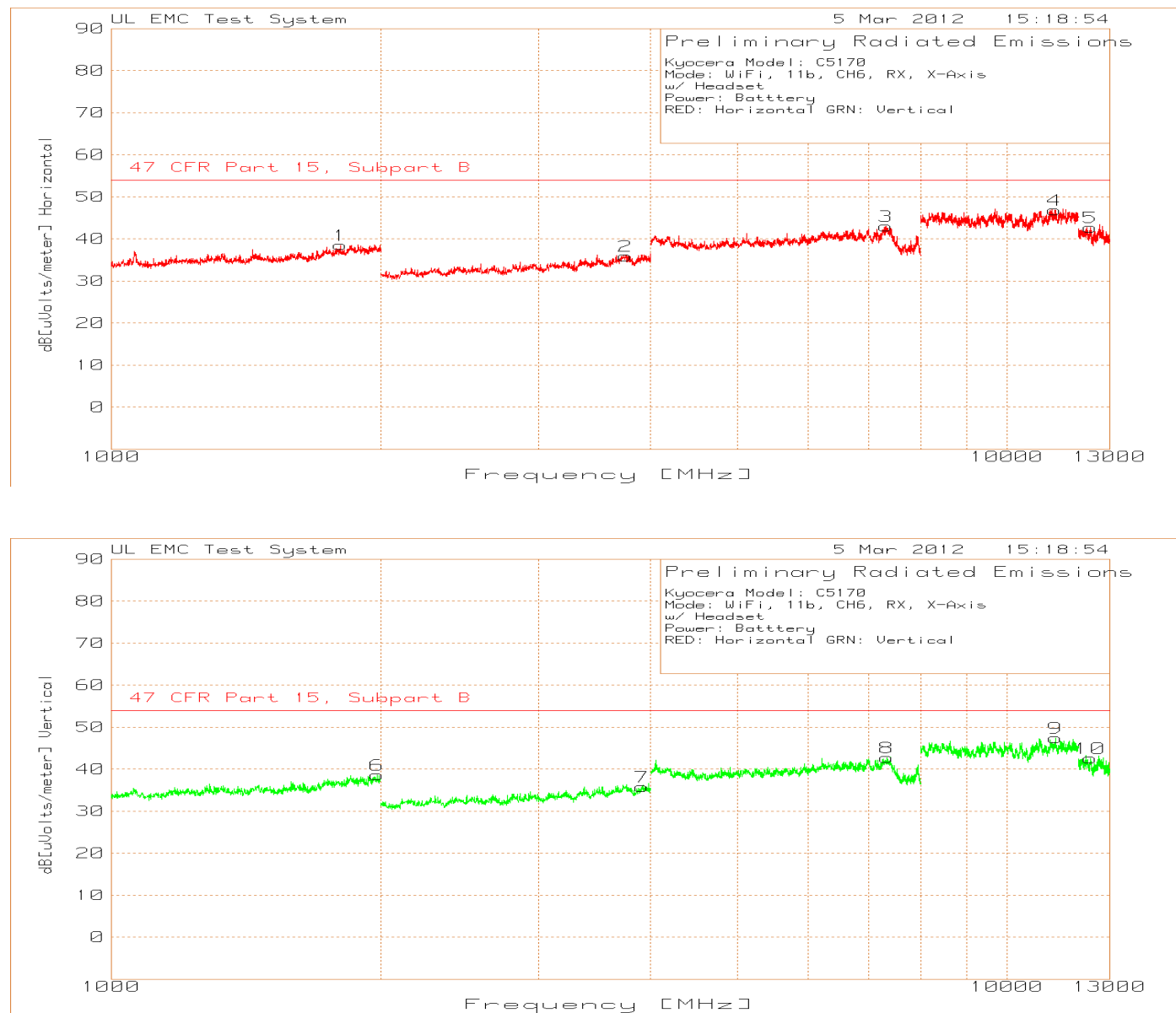
Kyocera Model: C5170
Mode: BT RX Hopping, BDR, DH5 X
WiFi, 802.11b, 1Mbps, Ch6
Power: 120V 60Hz
Red: Horizontal Grn: Vertical

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	dB[uV/m]	CFR 47 Part 15 Class B 10m	Margin	Height [cm]	Polarity
50.3048	42.44	PK	9.8	-29.4	22.84	29.6	-6.76	99	Vert

PK - Peak detector
QP - Quasi-Peak detector

4.2.20 Receiver and Digital Radiated Emissions, Battery Mode, 1GHz – 13GHz

Figure 43 Radiated Emissions Graph



FCC ID: V65C5170
 Model Number: C5170
 Client Name: Kyocera Communications

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Table 45 Radiated Emissions Data Points

Kyocera Model: C5170
 Mode: WiFi, 11b, CH6, RX, X-Axis
 w/ Headset
 Power: Batttery
 RED: Horizontal GRN: Vertical

Test Frequency	Meter Reading	Detector	Antenna Factor dB	Path Loss/Gain dB	dB[uV/m]	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
1801.802	66.71	PK	27	-55.15	38.56	54	-15.44	150	Horz
3747.748	63.28	PK	23.8	-51.1	35.98	54	-18.02	99	Horz
7327.552	58.57	PK	30.7	-46.26	43.01	54	-10.99	150	Horz
11295.53	57.54	PK	36.9	-47.62	46.82	54	-7.18	100	Horz
12382.766	48.7	PK	39.4	-45.32	42.78	54	-11.22	100	Horz
1982.983	64.91	PK	27.5	-53.79	38.62	54	-15.38	150	Vert
3911.912	63.51	PK	23.9	-51.59	35.82	54	-18.18	150	Vert
7335.557	58.49	PK	30.7	-46.4	42.79	54	-11.21	100	Vert
11311.541	57.97	PK	36.9	-47.38	47.49	54	-6.51	100	Vert
12394.79	48.72	PK	39.4	-45.52	42.6	54	-11.4	150	Vert

PK - Peak detector
 Av - Average detector

FCC ID: V65C5170
Model Number: C5170
Client Name: Kyocera Communications

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5 IMMUNITY TEST RESULTS

Immunity tests are not required per the standard

Appendix A

Accreditations and Authorizations



NVLAP Lab code: 100414-0

NVLAP: The National Institute of Standards and Technology (NIST) administers the National Voluntary Laboratory Accreditation Program (NVLAP). NVLAP is comprised of laboratory accreditation programs (LAPs) which are established on the basis of requests and demonstrated need. Each LAP includes specific calibration and/or test standards and related methods and protocols assembled to satisfy the unique needs for accreditation in a field of testing or calibration. NVLAP accredits public and private laboratories based on evaluation of their technical qualifications and competence to carry out specific calibrations or tests. Accreditation criteria are established in accordance with the U.S. Code of Federal Regulations (CFR, Title 15, Part 285), NVLAP Procedures and General Requirements, and encompass the requirements of ISO/IEC 17025. For a full scope listing see <http://ts.nist.gov/standards/scopes/1004140.htm>



FCC: Details of the measurement facilities used for these tests have been filed with the Federal Communications Commission's Laboratory in Columbia, Maryland (Ref. No. 91044).



Industry Canada Industrie Canada

Industry of Canada: Accredited by Industry Canada for performance of radiated measurements. Our test site complies with RSP 100, Issue 7, Section 3.3. File #: IC 2180



VCCI: Accepted as an Associate Member to the VCCI. The measurement facilities detailed in this test report have been registered in accordance with Regulations for Voluntary Control Measures, Article 8. Registration Nos.: Radiated Emissions R-621, Conducted Emissions C-642.



ICASA: ICASA (Independent Communications Authority of South Africa) has appointed UL as a Designated Test Laboratory to test Telecommunications equipment for type approval in compliance with CISPR 22 to assist in fulfilling its mandate under section 54(1) of the Telecommunications Act, 1996 (Act 103 of 1996).



NIST/CAB: Validated by the European Commission as a U.S. Conformity Assessment Body (CAB) of the U.S.-EU Mutual Recognition Agreement (MRA) for the Electromagnetic Compatibility - Council Directive 2004/108/EC, Annex III (2-3). Also validated for the Telecommunication Equipment-Council Directive 99/5/EC, Annex III and IV, Identification Number: 0983.

NIST/CAB: Provisioned to act as a U.S. Conformity Assessment Body (CAB) under Appendix B, Phase I Procedures, of the Asia Pacific Economic Cooperation (APEC) MRA between the American Institute in Taiwan (AIT) and the United States. Our laboratory is considered qualified to test equipment subject to the applicable EMC regulations of the Chinese Taipei Bureau of Standards, Metrology and Inspection (BSMI) which require testing to CNS 13438 (CISPR 22).

NIST/CAB: Recognized by the Infocomm Development Authority of Singapore (IDA) under the Asia Pacific Economic Cooperation Mutual Recognition Agreement (APEC MRA). Our laboratory is provisionally designated to act as a Conformity Assessment Body (CAB) under Appendix B, Phase I Procedures, of the APEC MRA. Our scope of designation includes IDA TS EMC (CISPR 22), IEC 61000-4-2, -4-3, -4-4, -4-5, and -4-6

