

FCC CFR47 PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

TRI-BAND PHONE WITH BT +2.1 & WIFI (2.4GHZ) RADIOS

MODEL NUMBER: C5171

FCC ID: V65C5171

REPORT NUMBER: 12U14556

ISSUE DATE: 2012-08-30

Prepared for KYROCERA WIRELESS 8611 BALBOA AVENUE SAN DIEGO CA, 92123, USA

Prepared by UL LLC 1285 WALT WHITMAN RD. MELVILLE, NY 11747, U.S.A. TEL: (631) 271-6200 FAX: (877) 854-3577

R

NVLAP LAB CODE 100255-0

Revision History

Rev.	Issue Date	Revisions	Revised By
	08/30/12	Initial Issue	M. Antola

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	KYROCERA WIRELESS 8611 BALBOA AVENUE SAN DIEGO CA, 92123, USA
EUT DESCRIPTION:	TRI-BAND PHONE WITH BT +2.1 & WIFI (2.4GHZ) RADIOS
MODEL:	C5171
SERIAL NUMBER:	268435457816727686
DATE TESTED:	2012-08-02 to 2012-08-06
	APPLICABLE STANDARDS
ST	ANDARD TEST RESULTS
CFR 47 P	art 15 Subpart C Pass

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards, using test results reported in the test report documents referenced below and/or documentation furnished by the applicant. All indications of Pass/Fail in this report are opinions expressed by UL LLC based on interpretations of these calculations. The results show that the equipment 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 by the referenced documents. 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 CCS By:

Tested By:

Bob Deat

Michael Conto

Bob DeLisi WiSE Principal Engineer UL LLC

Mike Antola WiSE Project Lead UL LLC

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003, FCC CFR 47 Part 2 and FCC CFR 47 Part 15.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 1285 Walt Whitman Rd. Melville, NY 11747, USA.

UL Melville is accredited by NVLAP, Laboratory Code 100255-0. The full scope of accreditation can be viewed at <u>http://ts.nist.gov/standards/scopes/1002550.htm</u>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	± 3.3 dB
Radiated Disturbance, 30 to 1000 MHz	± 4.00 dB

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

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is an 802.11b/g/n transceiver Model: C5171.

The radio module is manufactured by Qualcomm.

5.2. MAXIMUM OUTPUT POWER

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

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2412 - 2462	802.11b	16.00	39.81
2412 - 2462	802.11g	16.00	39.81
2412 - 2462	802.11n HT20	16.00	39.81

Note: Maximum output power values were provided by the customer. Only radiated testing was performed as part of this investigation per request.

5.3. SOFTWARE AND FIRMWARE

The Kernel version was 3.0.8-perf, release@release #1 and utilized Android version 4.0.4.

The EUT Build number was C5171-eng 4.0.4 IMM76D, release.20120711.192024 release-keys.

The test utility software used during testing was FCC Test Application.

5.4. WORST-CASE CONFIGURATION AND MODE

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

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

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5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST					
Description	Manufacturer	Model	Serial Number	FCC ID	
Travel Adapter	Kyocera	SCP-23ADT	N/A	N/A	
Headphones	Kyocera	N/A	N/A	N/A	

I/O CABLES

			I/O (CABLE LIST		
Cable No.	Port	# of Identica Ports	Connector Type	Cable Type	Cable Length	Remarks
1	USB	1	USB	Shielded	<3M	
2	Headphone	1	Audio	Unshielded	<3M	

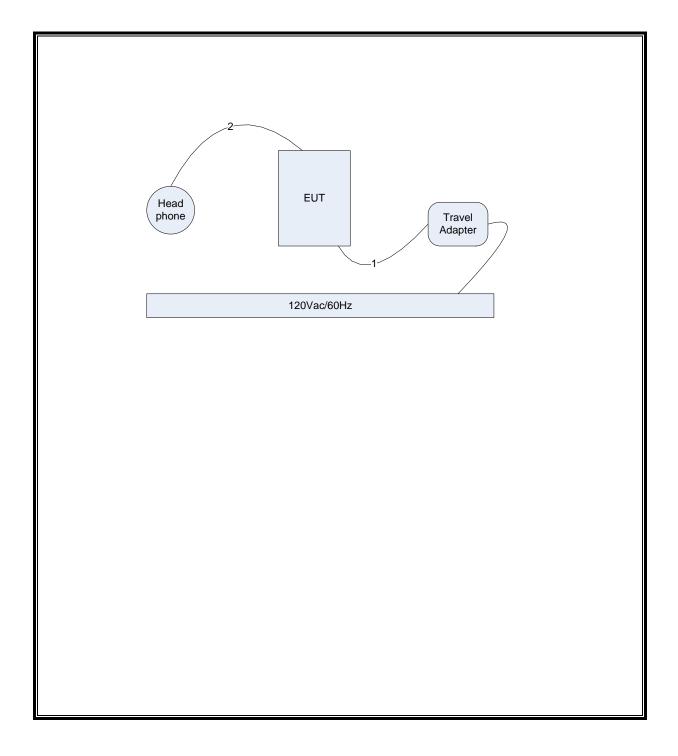
TEST SETUP

The EUT is a stand-alone device.

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SETUP DIAGRAM FOR TESTS



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6. TEST AND MEASUREMENT EQUIPMENT

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

	Radiate	d Emissions			
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
30-1000MHz			-		
EMI Receiver	Rohde & Schwarz	ESIB26	ME5B-081	2012-01-30	2013-01-30
Bicon Antenna	Schaffner	VBA6106A	54	2012-04-10	2013-04-10
Log-P Antenna	Schaffner	UPA6109	44067	2012-05-16	2013-05-16
Switch Driver	HP	11713A	ME7A-627	N/A	N/A
System Controller	Sunol Sciences	SC99V	44396	N/A	N/A
Camera Controller	Panasonic	WV-CU254	44395	N/A	N/A
RF Switch Box	UL	1	44398	N/A	N/A
Measurement Software	UL	Version 9.5	44740	N/A	N/A
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2010-12-07	2012-12-07
Multimeter	Fluke	83111	ME5B-305	2012-02-01	2013-02-28
Above 1GHz (Band Optimized Sy	/stem)				
EMI Receiver	Rohde & Schwarz	ESIB40	34968	2012-03-06	2013-03-06
Horn Antenna (1-2 GHz)	ETS	3161-01	51442		See * below
Horn Antenna (2-4 GHz)	ETS	3161-02	48107	2007-09-27	See * below
Horn Antenna (4-8 GHz)	ETS	3161-03	48106	2007-09-27	See * below
Horn Antenna (8-12 GHz)	ETS	3160-07	8933	2008-11-24	See * below
Horn Antenna (12-18 GHz)	ETS	3160-08	8932	2007-09-27	See * below
Horn Antenna (18-26.5 GHz)	ETS	3160-09	8947	2007-09-26	See * below
Signal Path Controller	HP	11713A	50250	N/A	N/A
Gain Controller	HP	11713A	50251	N/A	N/A
RF Switch / Preamp Fixture	UL	BOMS1	50249	N/A	N/A
System Controller	UL	BOMS2	50252	N/A	N/A
Measurement Software	UL	Version 9.5	44740	N/A	N/A
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2010-12-07	2012-12-07
Multimeter	Fluke	83111	ME5B-305	2012-02-01	

* - Note: As allowed by the calibration standard ANSI C63.4 Section 4.4.2, standard gain horns need only a one-time calibration. Only if physical damage occurs will the horn antenna require re-calibration. * Gain standard horn antennas (sometimes called standard gain horn antennas) need not be calibrated beyond that which is provided by the manufacturer unless they are damaged or deterioration is suspected, or they are used at a distance closer than $2D^2/\lambda$. Gain standard horn antennas have gains that are fixed by their dimensions and dimensional tolerances.

	Conducted	d Emissions - Mains			
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
Conducted Emissions – GP 1	•	·	•		
	Rohde &				
EMI Receiver	Schwarz	ESCI7	75141	2012-01-05	2013-01-05
LISN	Solar	9252-50-R-24-BNC	ME5A-636	2012-02-03	2013-02-28
Switch Driver	HP	11713A	44397	N/A	N/A
RF Switch Box	UL	4	44404	N/A	N/A
Measurement Software	UL	Version 9.5	44736	N/A	N/A
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	43734	2012-03-13	2014-03-13
Multimeter	Fluke	83III	ME5B-305	2012-02-01	2013-02-28

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7. RADIATED TEST RESULTS

7.1. LIMITS AND PROCEDURE

<u>LIMITS</u>

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

IC RSS-GEN Clause 6 (Receiver)

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

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

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

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

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable 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.

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7.2. TRANSMITTER ABOVE 1 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

	Restricted Bandedge Manufacturer:Kyocera Wireless
	Device:81+2.1 & WiFi (2.4(GHz) Phone Model:6-39 WiFi 802.11b 11 Mbps Jobi:12014556 La Chan
	Tested by:GB
Restricted Band - Peak	
0	
Restricted Band - Avg	how we have the part of the pa
0	
0	
0	
2310	Frequency [MHz]
Ronge DMtz] Det RBNCHz] UBNCHz] Sweep 1:2318-2415 PK/SA IM IM .05s/sgmt	Label Reverse CML Det Mild (Hz) Wall (Hz) Severse Label Norizontal-Rk 2.2016-2115 PV/3k Ht 18 .852/ngwk Borizontal-Av
L	

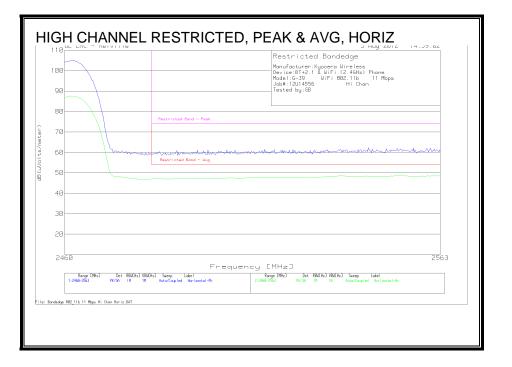
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RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

0 UL EMC - Melville	Restrict	3 Aug 2012 14:41:29 ed Bandedge
30	Monufacturer	r:Kyacera Wireless .1 & WiFi (2.4GHz) Phone WiFi 802.11b II Mbps
90	Tested by:GE	
10		
Restricted Band - Peak		//
70		//
Restricted Bond - Avg	malle have have have have have have have hav	momment
50		
40		
30		
20		
2310	Frequency [MHz]	241
	BulkErz] Sweep Lobel Range DHtz] Det 1M .665/sgnnt Vertical-Fk 2:2318-2415 PK/56	: RBUEH2J UBUEH2J Sweep Label 1M 18 .055/squat Ventical-Av

Page 13 of 41

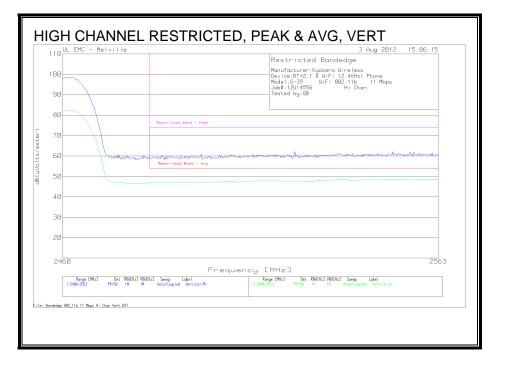
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



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RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



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HARMONICS AND SPURIOUS EMISSIONS

Manufacturer:K	yocera Wireless	i										
	k WiFi (2.4GHz) Pł											
Model:G-39 80	2.11b Mode											
Job#:12U14556												
Tested by:RM												
Low Channel - 24	412MHz											
Test Frequency	Meter Reading	Detector	AF-48106 [dB]	BOMS Factor [dB]	dB(uVolts/meter)	FCC Part 15 Subpart C 15,209	Margin	FCC Part 15 Subpart C Peak	Margin	Azimuth [Degs]	Height [cm]	Polarity
4824.02	69.5			-52.4			-		-29.84			Horz
4824.02	53.21			-52.4			-26.13		-46.13			Horz
4824.02			27.1						-27.82			Vert
4824.02	56.19		27.1				-23.15		-43.15			Vert
Mid Channel - 24	437MHz											
			AF-48106			FCC Part 15 Subpart C		FCC Part 15 Subpart C		Azimuth	-	
	Meter Reading			[dB]	dB(uVolts/meter)		Margin		Margin		[cm]	Polarit
4874.005	67.03			-52.6			-12.38		-32.38			Horz
4874.005	51.61			-52.6								Horz
4874.005 4874.005	69.63 54.57			-52.6			-9.78 -24.84		-29.78 -44.84			Vert Vert
48/4.005	54.57	Av	21.2	-52.6	25.10	24	-24.04	/4	-44.04	117	240	Vert
High Channel - 2	462MHz											
There exercises					-							
			AF-48106			FCC Part 15 Subpart C		FCC Part 15 Subpart C		Azimuth	-	
	Meter Reading			[dB]	dB(uVolts/meter)		Margin		Margin		[cm]	Polarit
4924.014				-52.5			-13.56		-33.56			Horz
4924.014				-52.5			-28.44		-48.44			Horz
4924.014				-52.5					-29.23			Vert
4924.014	54.97	Av	27.2	-52.5	29.64	54	-24.36	74	-44.36	100	315	Vert
PK - Peak detect	or											
Av - Average det	ector											

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

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

	ØUL EMC - Melville	Restricted Bandedge
0	10	Manufacturer:Kyacera Wireless Device:BT+2.1 & WiFi (2.46Hz) Phone Model:G-39 WiFi 802.11g 9 Mbps
9		
8		
7	Restricted Band - Peak	
	۲ ۲	a www.malusta
6	Restricted Bord - Ava	
5	io	
4	88	
З	10	
2		
2	2310	241 equency [MHz]
	Range DMHz3 Det RBNCHz3 UBNCHz3 Sweep Label 1:2318-2415 PK/56 IM 1M .G5x/sgent Borizontal-Fk	Range [MHz] Det RBW[Hz] Sweep Label 2:2310-2415 PK/SA 1M 10 d5a/samt Borizontal-fiv
	, 	

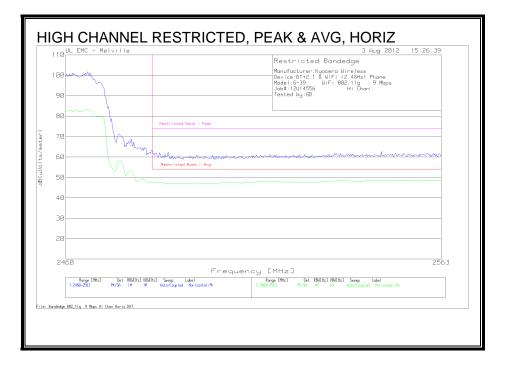
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RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

	Restricted Bandedge
00	Manufacturar:Kyocence Wineless Device:BT+2.1 & WiFi (2.4GHz) Phone Model:G-39 WiFi 682.11q 9 Mpps ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
90	Job≭:12U14556 Lo Čhon ' \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/
80	
Restricted Band - Peak	
50 Manhana Marina Marina	
Restricted Bond - Avg	
50	
40	
30	
20	
2310	2415 Frequency [MHz]
Range DMHz] Det RBWCHz] VBWCHz] Sweep 1:2318-2415 FK/SA IM 1M .055/sgan	Label Range DMHz] Det RBW[Hz] VBW[Hz] Sweep Label
adge 882 11g 9 Mops Lo Chan Vert.DAT	

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RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



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RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

0 <mark>UL EMC - Melville</mark>	3 Aug 2012 15:13:49
	Restricted Bandedge Manufacturer:Kyppera Wireless
0	Device:BT+2.1 & WiFi (2.46Hz) Phone
mmy	Madel:G-39 WiFi 802.11g 9 Mbps Job‡:12U14555 Hi Chan
0	Tested by:GB
ø	
	Restricted Band - Peak
e human	water the source of the stand and the source of the source
	Restricted Bond - Avg
0	
я	
a	
460	25
-08	Frequency [MHz]
Ronge [MHz] Det RBMCHz] UBMCHz 1:2468-2563 PK/SA IM IM	Sweep Label Range DMHz3 Det RR/LH23 Sweep Label Auto/Coupled Vertical-Rk 2:2468-2553 PK/S9 HM 18 Auto/Coupled Vertical-Rk
ae 882 Ila 9 Mbas Hi Chan Vert.DAT	
a contract of the second second	

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HARMONICS AND SPURIOUS EMISSIONS

Manufacturer.	yocera Wireless	5										
Device:BT+2.1 8	WiFi (2.4GHz) P	hone										
Model:G-39 80												
Job#:12U14556	-											
Tested by:RM												
Low Channel - 2	412MHz											
				BOMS		FCC Part 15		FCC Part 15				
			AF-48106	Factor		Subpart C		Subpart C		Azimuth	Height	
Test Frequency	Meter Reading	Detector		[dB]	dB(uVolts/meter)		Margin		Margin		[cm]	Polarity
4825.2224	64.22		27.1	• •	38.98		-15.02		-35.02	194		Horz
4825.2224			27.1		24.38		-29.62		-49.62	194		Horz
4825.2224			27.1		44.43				-29.57	136		Vert
4825.2224				-52.3	27.46		-26.54		-46.54			Vert
1020.222	52.7			52.5	27.10		20.51		10.51	150	507	
Mid Channel - 2	437MHz											
				BOMS		FCC Part 15		FCC Part 15				
			AF-48106			Subpart C		Subpart C		Azimuth	Height	
Test Frequency	Meter Reading	Detector		[dB]	dB(uVolts/meter)		Margin		Margin		[cm]	Polarity
4874.6814	62.67		27.2	• •			-16.77		-36.77	271		Horz
4874.6814	48.09		27.2				-31.35		-51.35	271		Horz
4874.6814				-52.6			-11.75		-31.75			Vert
4874.6814				-52.6	26.25		-27.75		-47.75			Vert
4074.0014	51.05	~		-52.0	20.25		-21.12		-11.12		210	vert
High Channel - 2	462MHz											
ingit channel 1												
				BOMS		FCC Part 15		FCC Part 15				
			AF-48106			Subpart C		Subpart C		Azimuth	Haight	
Test Frequency	Meter Reading	Detector		[dB]	dB(uVolts/meter)		Margin		Margin		[cm]	Polarity
4924	41.07		27.2	• •	15.74		-38.26		-58.26	117		Horz
4924	25.79			-52.5	0.46		-53.54		-73.54			Horz
4924	40.37			-52.5	15.04		-38.96		-58.96			Vert
4924	25.78		27.2		0.45		-53.55		-73.55			Vert
.524	25.76		27.2		0.45			/1		-112		
PK - Peak detec	tor											
Av - Average de												

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

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)

0 UL EMC - Melville		Restricted Bande	3 Aug 201	2 16:04:30
10		Manufacturer:Kyocera k Device:BT+2.1 & WiFi (lineless	mm
0		Job‡:12U14556 Tested by:GB	La Chan	ſ l
Restricted Band - Peak			- /	
0			adm	
Restricted Bood - Ava	aharman har and the second	nghuman na han na ha Na han na han n	www.aww	
0				/
0				
ø				
0				
:310		ency [MHz]		2415
Range [MHz] Det RBWCHz]	UBNCHz] Sweep Lobel		Sweep Label	
1:2318-2415 PK/SA IM	111 .85a/signnt Honi zonta I-Pk	2:2318-2415 PK/SA 1M 18	.85a/sgent Horizontal-	
ae 882 11n MCS7 Lo Chan Hariz.DAT				

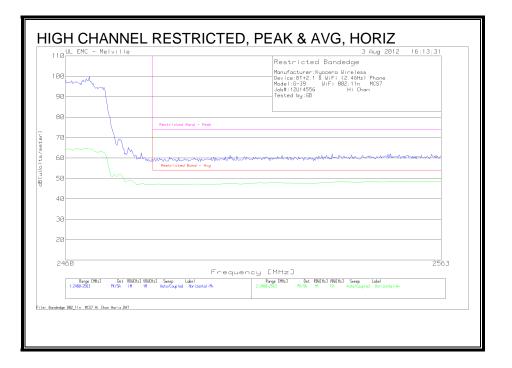
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RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)

90	Restricted Bandedge Manufacture::Kupperg Wirgless Device:(BTu2): & WiFi (2:40Hz) Shone Model:(5-39. WiFi (2:40Hz) MCS7 ////////////////////////////////////
90	Jobel (8-39 Jobel: 1211/8356 UFF Dec. III) mc3/ Tested by 68
80 Restricted Band - Peak	
70	
60 Asstructure Ang	white me and the second white here and the second
50	
40	
за	
20	
2310	2415 Frequency [MHz]
	aren Lobel Ronge (MHz) Det HB&(Hz) VB&(Hz) Svereg Lobel Avlagent Berticol-Pk 2-2314-2415 FU-SA IM 18 (Balagent Berticol-Hv
edge 882_11n MCS7 Lo Chan Vert.DAT	

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RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



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RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)

	Restricted Bandedge
10	Manufacturer:Kyocera Wireless Device:BT+2.1 & WiFi (2.4GHz) Phone
man	Madel:G-39 WIFi 802.11n MCS7 Jab‡:12U14556 Hi Chan
0	Tested by:GB
10	
	Restricted Band - Peak
·0	
V/M	
il mine	Restricted Bord - Avg
0	
10	
·n	
2460	2563
	Frequency [MHz]
Ronge [MHz] Det RBNCHz] UBNC 1:2468-2563 PK/SA IM 1M	2] Sweep Label Range DMHz] Det RBulltz] UBULHz] Sweep Label AutorCoupled Ventical-Pix 2:2458-2563 PK/SA IM 18 AutorCoupled Ventical-Av
dae 882 11n MCS7 Hi Chan Vent.DAT	

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HARMONICS AND SPURIOUS EMISSIONS

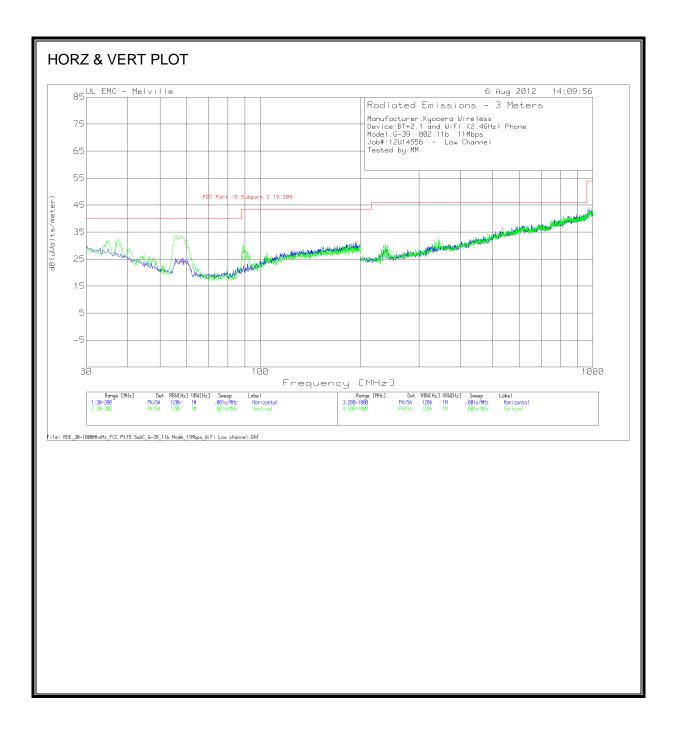
Manulacturer.N	vocera Wireless	5										
Device:BT+2.18	WiFi (2.4GHz) P	hone										
Model:G-39 80												
Job#:12U14556												
Tested by:RM												
Low Channel - 2	412MHz											
				BOMS		FCC Part 15		FCC Part 15				
			AF-48106	Factor		Subpart C		Subpart C		Azimuth	Height	
Test Frequency	Meter Reading	Detector	[dB]	[dB]	dB(uVolts/meter)	15.209	Margin	Peak	Margin	[Degs]	[cm]	Polarity
4824.0401	64.39	PK	27.1	-52.4	39.05	54	-14.95	74	-34.95	306	391	Horz
4824.0401	49.8	Av	27.1	-52.4	24.46	54	-29.54	74	-49.54	306	391	Horz
4824.0401	70.55	PK	27.1	-52.4	45.21	54	-8.79	74	-28.79	86	317	Vert
4824.0401	51.55	Av	27.1	-52.4	26.21	54	-27.79	74	-47.79	86	317	Vert
Mid Channel - 2	437MHz											
				BOMS		FCC Part 15		FCC Part 15				
			AF-48106	Factor		Subpart C		Subpart C		Azimuth	Height	
Test Frequency	Meter Reading	Detector	[dB]	[dB]	dB(uVolts/meter)	15.209	Margin	Peak	Margin	[Degs]	[cm]	Polarit
4874.8818	69.8	PK	27.2	-52.7	44.35	54	-9.65	74	-29.65	85	391	Vert
4874.8818	51.57	Av	27.2	-52.7	26.12	54	-27.88	74	-47.88	85	391	Vert
4874.8818	64.29	PK	27.2	-52.7	38.84	54	-15.16	74	-35.16	11	156	Horz
4874.8818	49.62	Av	27.2	-52.7	24.17	54	-29.83	74	-49.83	11	156	Horz
High Channel - 2	462MHz											
				BOMS		FCC Part 15		FCC Part 15				
			AF-48106	Factor		Subpart C		Subpart C		Azimuth	Height	
Test Frequency	Meter Reading	Detector	[dB]	[dB]	dB(uVolts/meter)	15.209	Margin	Peak	Margin	[Degs]	[cm]	Polarity
4923.5992	66.68			-52.5	41.37	54	-12.63	74	-32.63	100	308	Vert
4923.5992	50.17	Av	27.2	-52.5	24.86	54	-29.14	74	-49.14	100	308	Vert
4923.5992	65.16	PK	27.2	-52.5	39.85	54	-14.15	74	-34.15	260	228	Horz
4923.5992	49.67	Av	27.2	-52.5	24.36	54	-29.64	74	-49.64	260	228	Horz
	tor											
PK - Peak detect	tector											

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7.3. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORZ & VERT)



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	rer:Kyocera Wire	less									
	2.1 and WiFi (2.4										
/lodel:G-39	9 802.11b 11Mb	ps									
	4556 - Low Chan	nel									
ested by:N	им										
action 120	- 200MHz										
	Test Frequency	Meter Reading	Detector		GL-3M (dB)	dB(uVolts/meter)	FCC Part 15 Subpart C 15.209	Margin	Azimuth [Degs]	-	Polarit
1		-		15.8				-			Vert
2		15.72	PK	14.5	0.6	30.82	40	-9.18		100	Vert
3	56.036	25.46	PK	7.6	0.7	33.76	40	-6.24	153	100	Vert
4	89.049	20.63	PK	8.6	1	30.23	43.5	-13.27	178	100	Vert
5	104.8749	14.48	PK	11.4	1.1	26.98	43.5	-16.52	153	100	Vert
ertical 20	0 - 1000MHz										
larker No.	Test Frequency	Meter Reading	Detector		GL-3M (dB)	dB(uVolts/meter)	FCC Part 15 Subpart C 15.209	Margin	Azimuth [Degs]	-	Polarit
6	241.2206	17.35	РК	11.3	1.6	30.25	46	-15.75			Vert
K - Peak de	etector										

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8. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

Frequency of Emission (MHz)	Conducted I	.imit (dBuV)
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 "
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

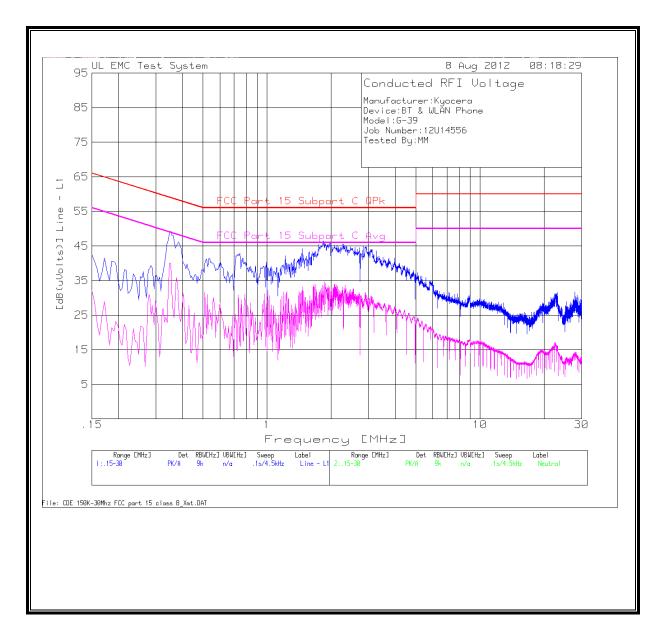
<u>RESULTS</u>

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6 WORST EMISSIONS

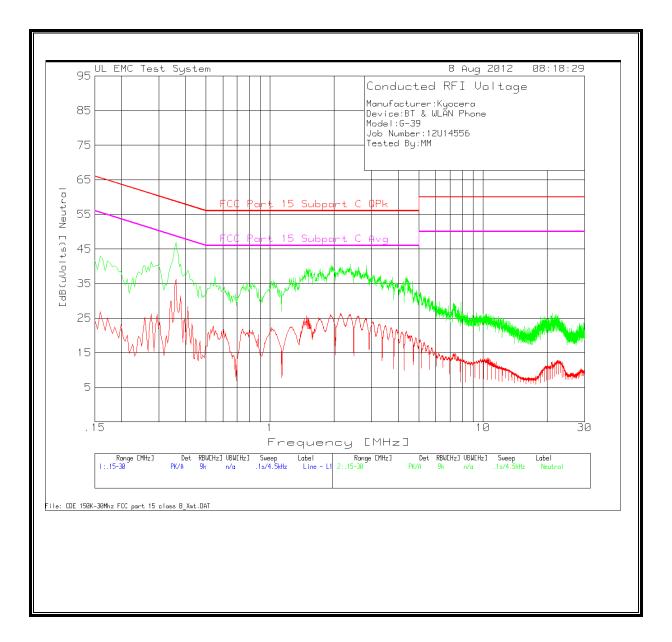
LINE 1 RESULTS



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LINE 2 RESULTS



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NUMERICAL RESULTS

Manufacturer:K	yocera							
Device:BT & WL	AN Phone							
Model:G-39								
Job Number:12	J14556							
Tested By:MM								
Line - L1 .15 - 30	MHz							
Fest Frequency	Meter Reading	Detector	LISN 5A636 L1 [dB]	[dB(uVolts)]	FCC Part 15 Subpart C QPk	Margin	FCC Part 15 Subpart C Avg	Margin
0.3525	39.16	PK	10	49.16	58.9	-9.74		
0.3525	29.97	Av	10	39.97	58.9	-18.93	48.9	-8.93
0.537	31.27	PK	10.1	41.37	56	-14.63	46	-4.63
0.537	16.58	Av	10.1	26.68	56	-29.32	46	-19.32
0.744	32.79	PK	10.1	42.89	56	-13.11	46	-3.11
0.744	6.29	Av	10.1	16.39	56	-39.61	46	-29.61
1.8375	36.36	PK	10.1	46.46	56	-9.54	46	0.46
1.8375	20.69	Av	10.1	30.79	56	-25.21	46	-15.21
2.283	35.41	PK	10.1	45.51	56	-10.49	46	-0.49
2.283	19.07	Av	10.1	29.17	56	-26.83	46	-16.83
2.9175	34.61	PK	10.2	44.81	56	-11.19	46	-1.19
2.9175	18.39	Av	10.2	28.59	56	-27.41	46	-17.41
Neutral .15 - 30	MHz							
	Meter Reading	Detector	LISN 5A636 L2 [dB]	[dB(uVolts)]	FCC Part 15 Subpart C QPk	Margin	FCC Part 15 Subpart C Avg	Margin
0.3615	_		10	47.01		-11.69	_	-1.69
0.3615	26.32	Av	10	36.32	58.7	-22.38	48.7	-12.38
0.5505	27.04	PK	10.1	37.14	56	-18.86	46	-8.86
0.5505	10.84	Av	10.1	20.94	56	-35.06	46	-25.06
1.032	25.72	PK	10.1	35.82	56	-20.18	46	-10.18
1.032	11.57	Av	10.1	21.67		-34.33	46	-24.33
1.4775	29.33	PK	10.1	39.43	56	-16.57	46	-6.57
1.4775			10.1	22.78		-33.22		-23.22
1.9455			10.1	40.18		-15.82	46	
1.9455			10.1	25.54		-30.46		-20.46
2.832			10.1	40.39		-15.61		
	14.71	Av	10.1	24.81	56	-31.19	46	-21.19
2.832								
2.832 PK - Peak detect	or							