



FCC CFR47 PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

TRI BAND CDMA MOBILE PHONE WITH BLUETOOTH

FCC MODEL NUMBER: S2150

FCC ID: V65S2150

REPORT NUMBER: 12U14613-3

ISSUE DATE: SEPTEMBER 19, 2012

Prepared for

**KYOCERA COMMUNICATIONS, INC
9520 TOWNE CENTER DRIVE
SAN DIEGO, CA 92121, USA**

Prepared by

**UL CCS
47173 BENICIA STREET
FREMONT, CA 94538, U.S.A.
TEL: (510) 771-1000
FAX: (510) 661-0888**



NVLAP LAB CODE 200065-0

Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
--	09/19/12	Initial Issue	T. LEE

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1. ATTESTATION OF TEST RESULTS

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

EUT DESCRIPTION: TRI BAND CDMA MOBILE PHONE WITH BLUETOOTH

MODEL: S2150

SERIAL NUMBER: 268435457816728097

DATE TESTED: AUGUST 30 - SEPTEMBER 14, 2012

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

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

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL CCS 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:



TIM LEE
STAFF ENGINEER
UL CCS

VIEN TRAN
EMC ENGINEER
UL CCS

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2009, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 3, and RSS-210 Issue 8.

3. FACILITIES AND ACCREDITATION

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

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

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is Bluetooth featured Tri Band CDMA Phone that is manufactured by Kyocera Communications, Inc.

5.2. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a dipole (internal) antenna, with a maximum gain of -1.0 dBi.

5.3. SOFTWARE AND FIRMWARE

The EUT driver software installed in the phone during testing was 0.110CR.

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.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC/DC Adapter	Kyocera	SCP-31ADT	2001	N/A
Headset	N/A	N/A	N/A	N/A

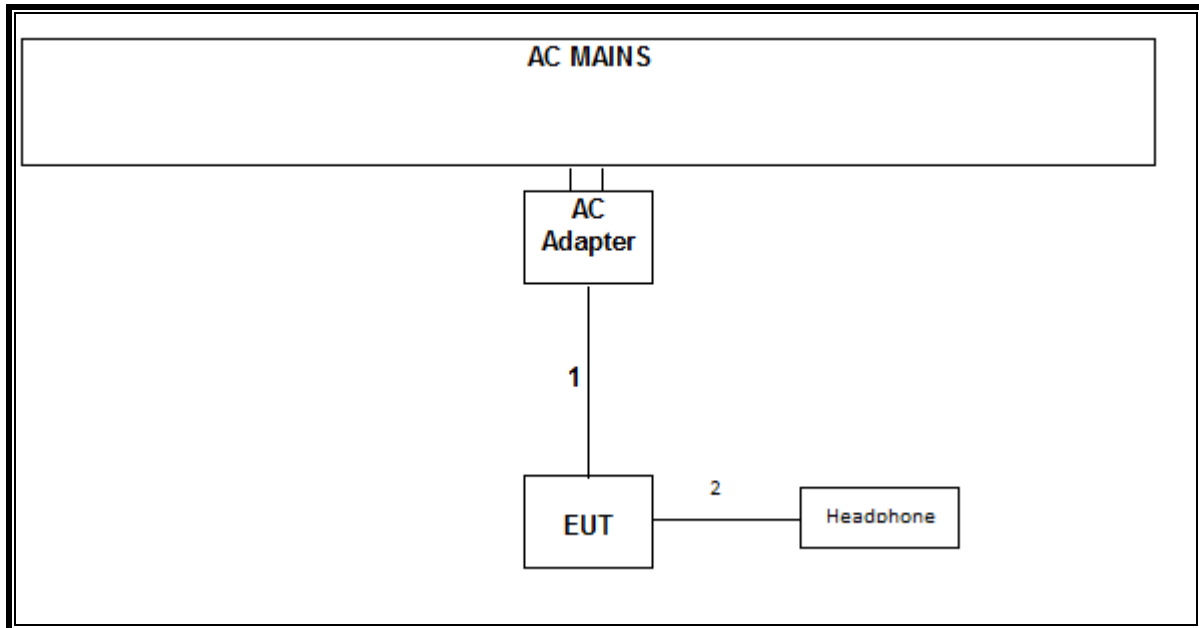
I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
2	DC	1	USB	Shielded	1.5m	N/A
3	Mic	1	Earphone	Un-shielded	1.5m	N/A

TEST SETUP

The EUT is setup to transmit continuously.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Asset	Cal Due
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01179	2/16/2013
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01011	3/23/2013
Antenna, Horn, 18 GHz	EMCO	3115	C00945	10/6/2012
Preamplifier, 26.5 GHz	Preamplifier, 26.5 GHz	Agilent / HP	8449B	11/11/2012
Preamplifier, 1300 MHz	Preamplifier, 1300 MHz	Agilent / HP	8447D	11/11/2012
Reject Filter, 2.4-2.5 GHz	Micro-Tronics	BRM50702	N02683	CNR
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	T31	06/08/2013
LISN, 30 MHz	FCC	LISN-50/250-25-2	C00626	12/13/2012

7. RADIATED TEST RESULTS

7.1. LIMITS AND PROCEDURE

LIMITS

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.

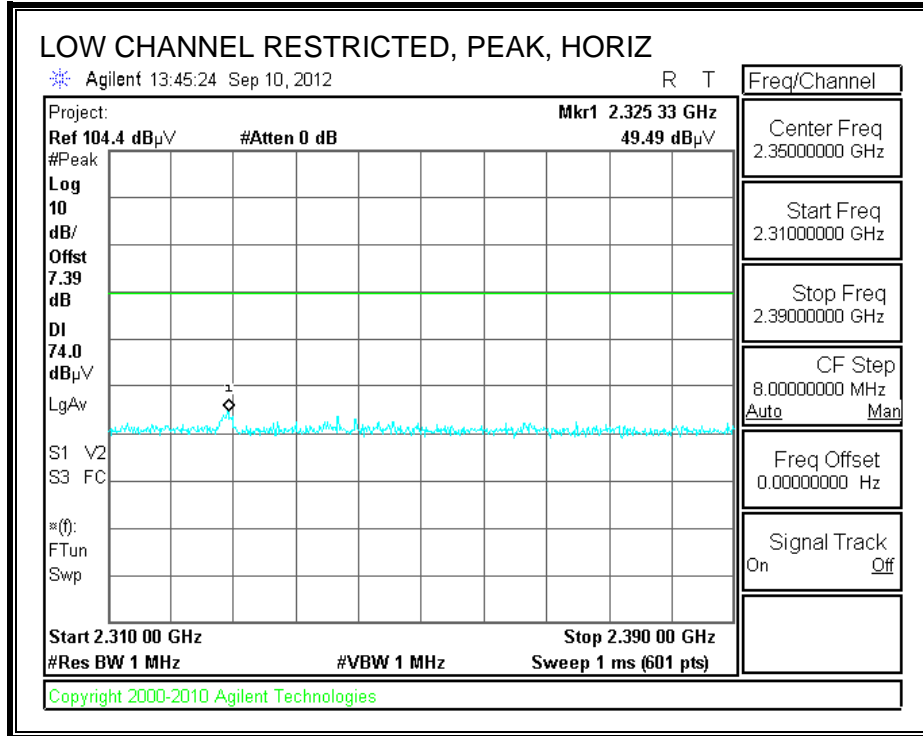
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

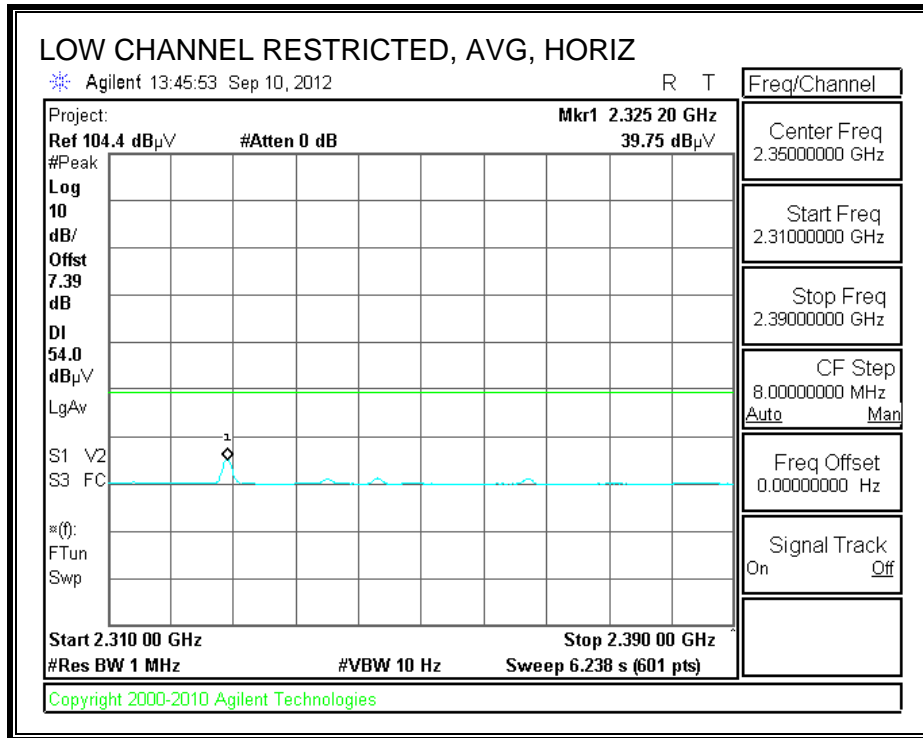
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

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

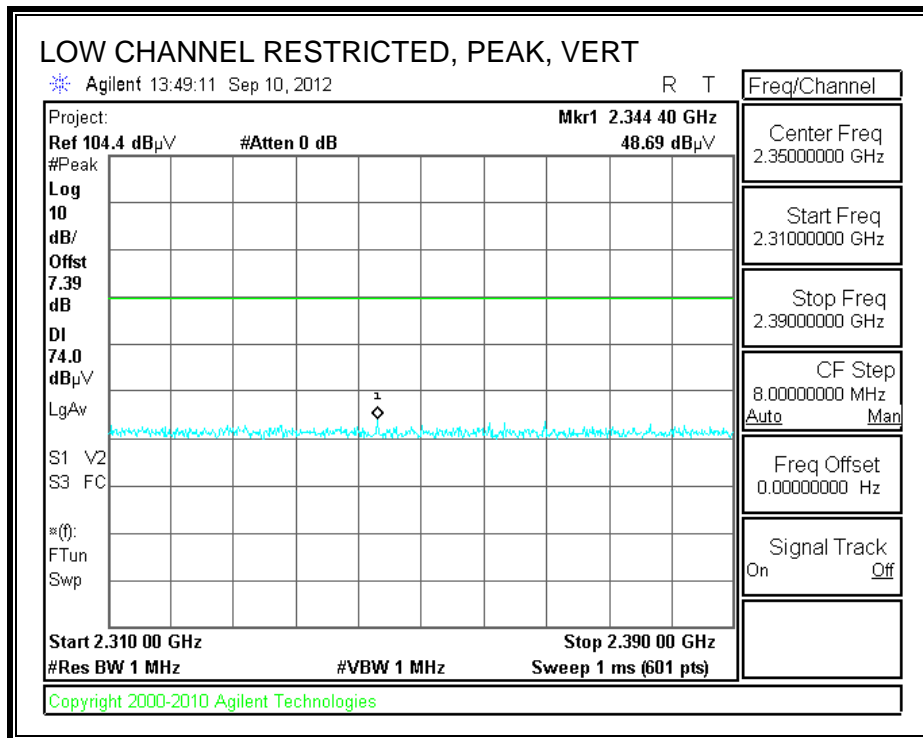
7.1.1. BASIC DATA RATE GFSK MODULATION

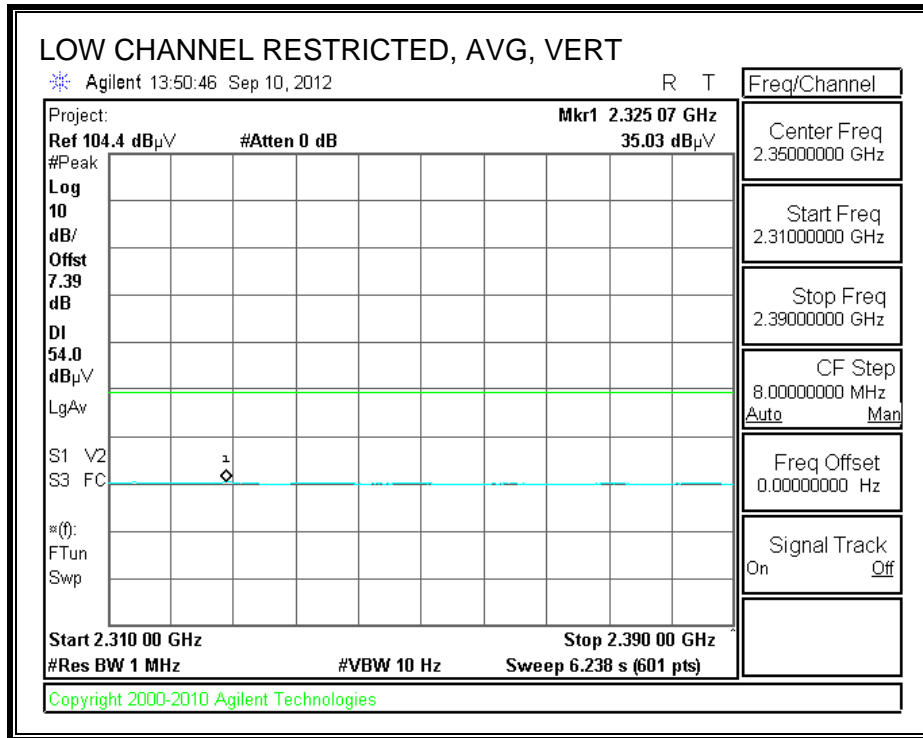
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



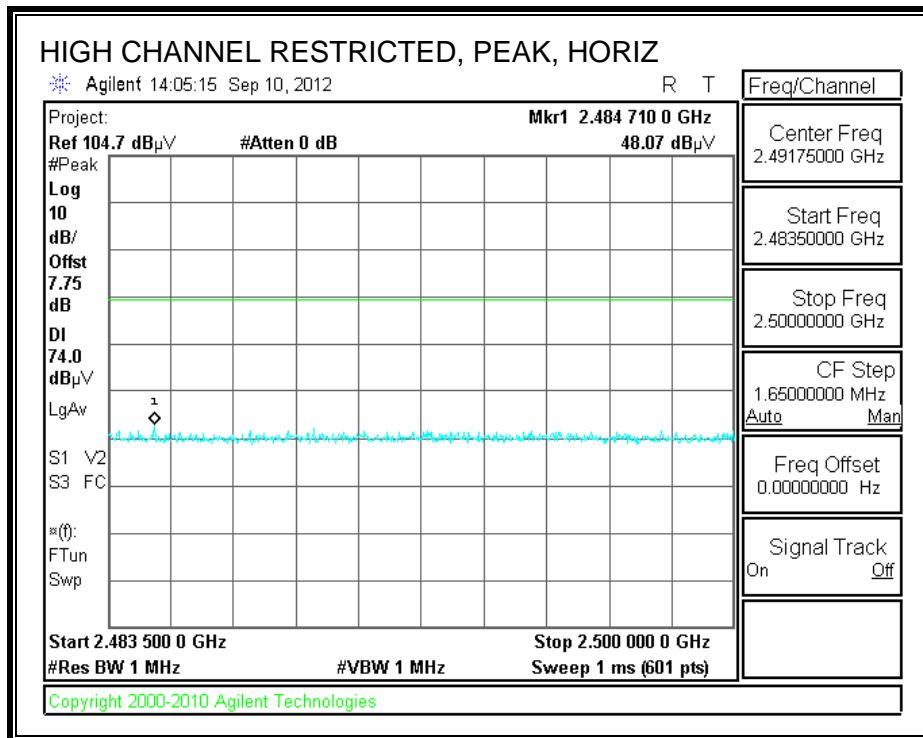


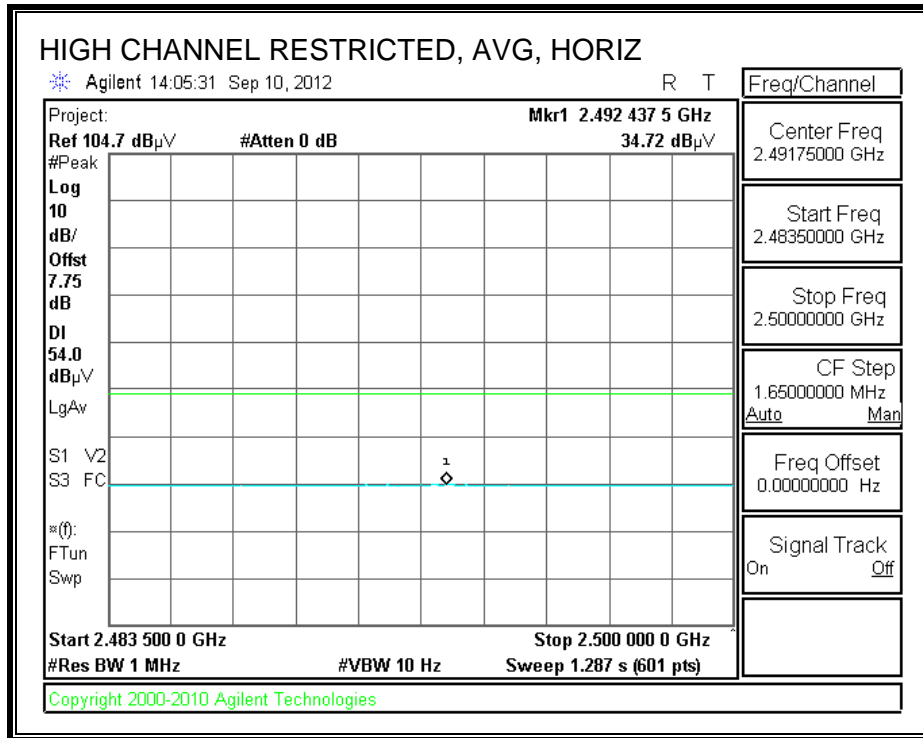
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



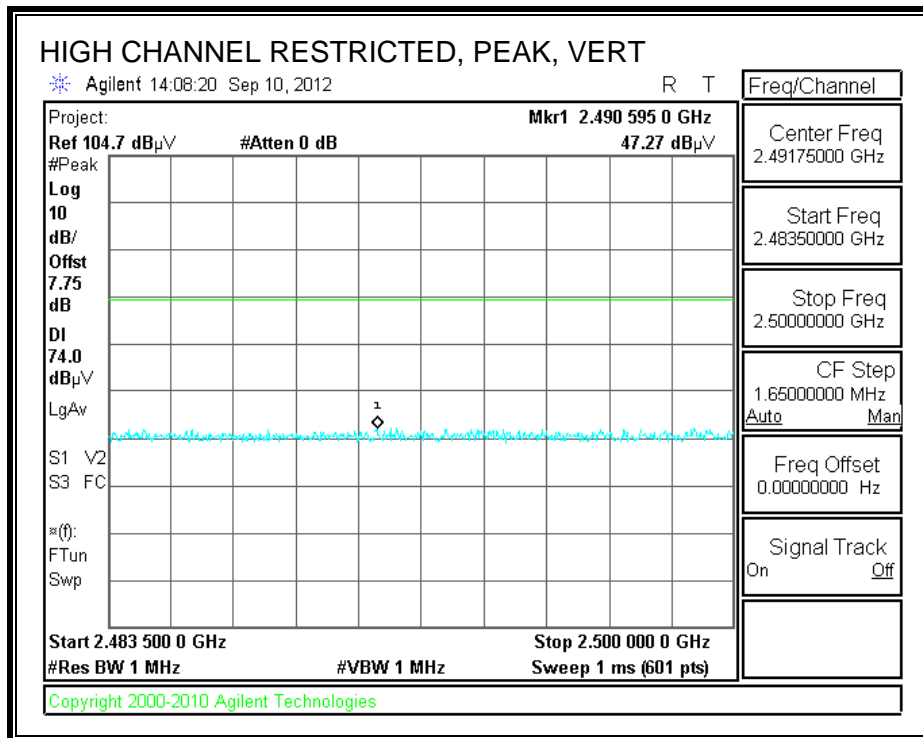


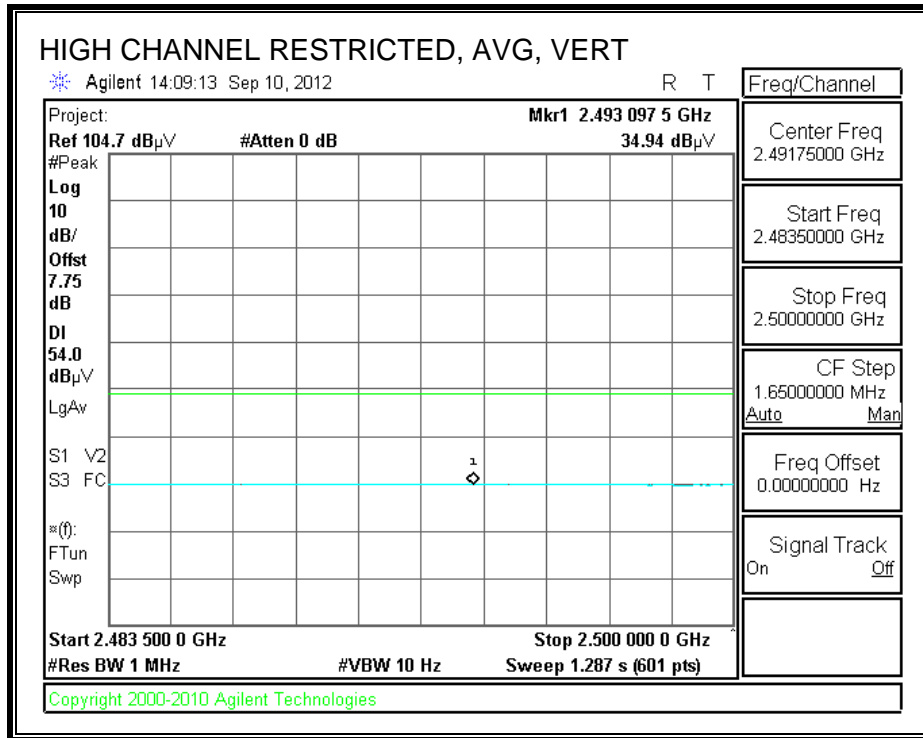
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



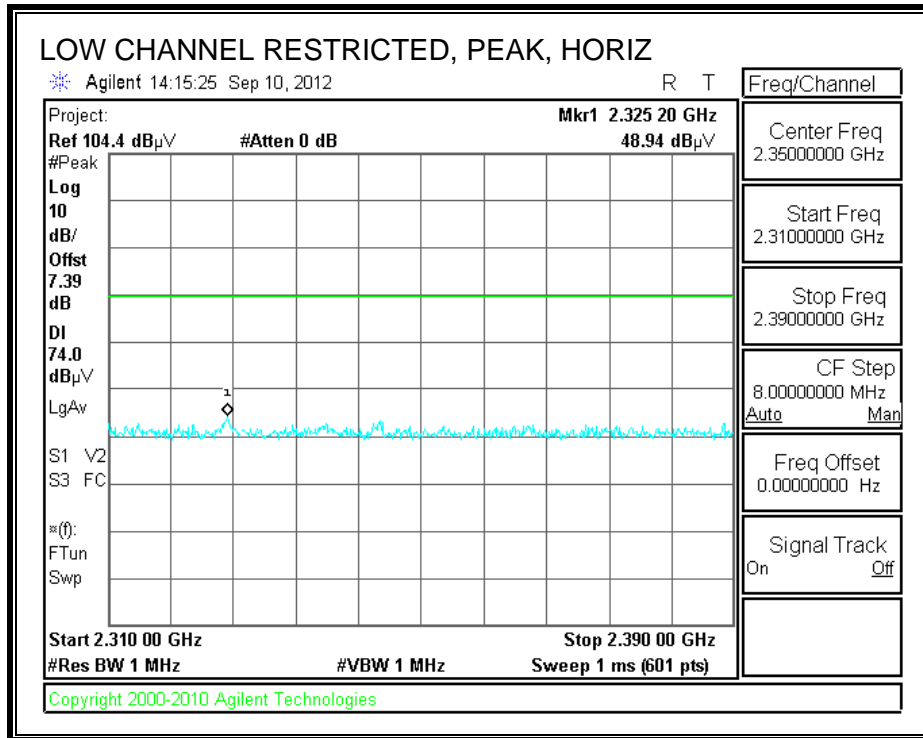


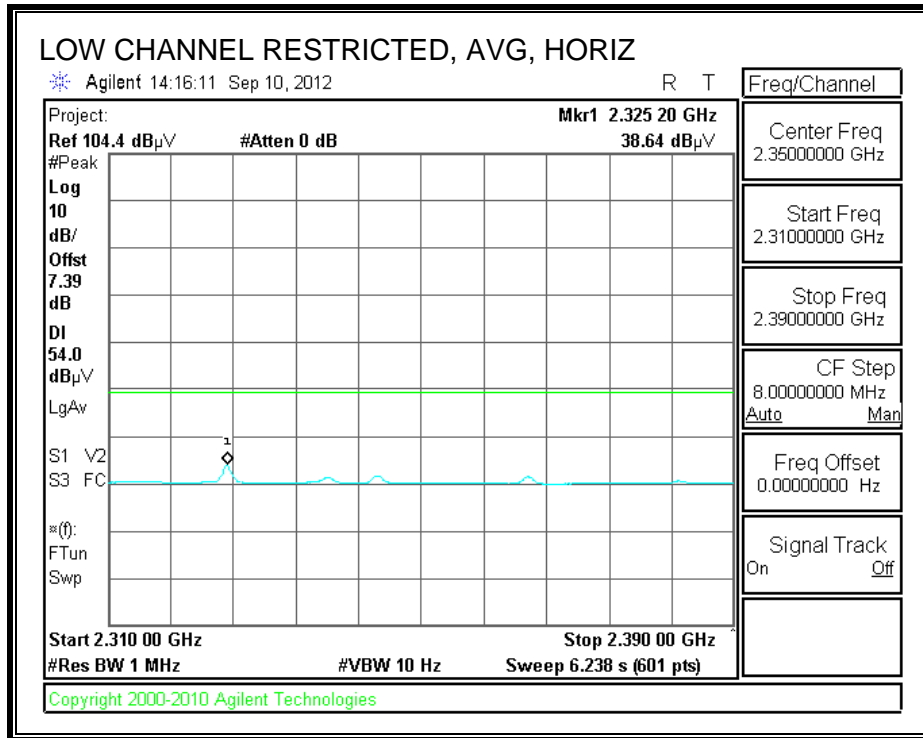
HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement															
Compliance Certification Services, Fremont 5m Chamber															
Test Engr:		Tony													
Date:		09/10/12													
Project #:		12U14613													
Company:		Kyocera													
Test Target:		15.247													
Mode Oper:		BT GFSK Tx Continuously													
f	Measurement Frequency	Amp	Preamp Gain	Average Field Strength Limit											
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Peak Field Strength Limit											
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Margin vs. Average Limit											
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Margin vs. Peak Limit											
CL	Cable Loss	HPF	High Pass Filter												
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Ant.High cm	Table Angle Degree	Notes
Low Channel, 2402MHz															
4.804	3.0	42.5	33.1	6.8	-34.1	0.0	0.0	48.3	74.0	-25.7	H	P	103.0	321.0	
4.804	3.0	32.6	33.1	6.8	-34.1	0.0	0.0	38.4	54.0	-15.6	H	A	103.0	321.0	
12.010	3.0	33.9	39.4	11.9	-32.5	0.0	0.0	52.6	74.0	-21.4	H	P	98.0	359.0	
12.010	3.0	21.2	39.4	11.9	-32.5	0.0	0.0	40.0	54.0	-14.0	H	A	98.0	359.0	
4.804	3.0	41.3	33.1	6.8	-34.1	0.0	0.0	47.1	74.0	-26.9	V	P	98.0	193.0	
4.804	3.0	31.2	33.1	6.8	-34.1	0.0	0.0	37.0	54.0	-17.0	V	A	98.0	193.0	
12.010	3.0	33.5	39.4	11.9	-32.5	0.0	0.0	52.3	74.0	-21.7	V	P	187.0	72.0	
12.010	3.0	21.2	39.4	11.9	-32.5	0.0	0.0	40.0	54.0	-14.0	V	A	187.0	72.0	
Mid Channel, 2441MHz															
4.882	3.0	39.0	33.2	6.8	-34.0	0.0	0.0	45.0	74.0	-29.0	H	P	100.0	325.0	
4.882	3.0	28.3	33.2	6.8	-34.0	0.0	0.0	34.3	54.0	-19.7	H	A	100.0	325.0	
7.323	3.0	34.4	36.3	9.1	-33.1	0.0	0.0	46.7	74.0	-27.3	H	P	149.0	350.0	
7.323	3.0	22.1	36.3	9.1	-33.1	0.0	0.0	34.4	54.0	-19.6	H	A	149.0	350.0	
12.205	3.0	32.8	39.4	12.0	-32.5	0.0	0.0	51.7	74.0	-22.3	H	P	153.0	36.0	
12.205	3.0	20.8	39.4	12.0	-32.5	0.0	0.0	39.7	54.0	-14.3	H	A	153.0	36.0	
4.882	3.0	39.3	33.2	6.8	-34.0	0.0	0.0	45.2	74.0	-28.8	V	P	98.0	43.0	
4.882	3.0	29.2	33.2	6.8	-34.0	0.0	0.0	35.2	54.0	-18.8	V	A	98.0	43.0	
7.323	3.0	35.1	36.3	9.1	-33.1	0.0	0.0	47.4	74.0	-26.6	V	P	98.0	122.0	
7.323	3.0	22.3	36.3	9.1	-33.1	0.0	0.0	34.6	54.0	-19.4	V	A	98.0	122.0	
12.205	3.0	32.7	39.4	12.0	-32.5	0.0	0.0	51.6	74.0	-22.4	V	P	154.0	278.0	
12.205	3.0	20.6	39.4	12.0	-32.5	0.0	0.0	39.5	54.0	-14.5	V	A	154.0	278.0	
High Channel, 2480MHz															
4.960	3.0	38.1	33.2	6.9	-34.0	0.0	0.0	44.2	74.0	-29.8	H	P	98.0	330.0	
4.960	3.0	27.8	33.2	6.9	-34.0	0.0	0.0	33.9	54.0	-20.1	H	A	98.0	330.0	
7.440	3.0	35.1	36.5	9.1	-33.0	0.0	0.0	47.7	74.0	-26.3	H	P	161.0	178.0	
7.440	3.0	22.3	36.5	9.1	-33.0	0.0	0.0	34.8	54.0	-19.2	H	A	161.0	178.0	
12.400	3.0	33.3	39.4	12.0	-32.5	0.0	0.0	52.3	74.0	-21.7	H	P	192.0	214.0	
12.400	3.0	20.8	39.4	12.0	-32.5	0.0	0.0	39.8	54.0	-14.2	H	A	192.0	214.0	
4.960	3.0	38.0	33.2	6.9	-34.0	0.0	0.0	44.0	74.0	-30.0	V	P	98.0	316.0	
4.960	3.0	27.7	33.2	6.9	-34.0	0.0	0.0	33.7	54.0	-20.3	V	A	98.0	316.0	
7.440	3.0	34.4	36.5	9.1	-33.0	0.0	0.0	46.9	74.0	-27.1	V	P	152.0	180.0	
7.440	3.0	21.9	36.5	9.1	-33.0	0.0	0.0	34.5	54.0	-19.5	V	A	152.0	180.0	
12.400	3.0	32.6	39.4	12.0	-32.5	0.0	0.0	51.6	74.0	-22.4	V	P	183.0	155.0	
12.400	3.0	20.6	39.4	12.0	-32.5	0.0	0.0	39.6	54.0	-14.4	V	A	183.0	155.0	
Rev. 4.1.2.7															
Note: No other emissions were detected above the system noise floor.															

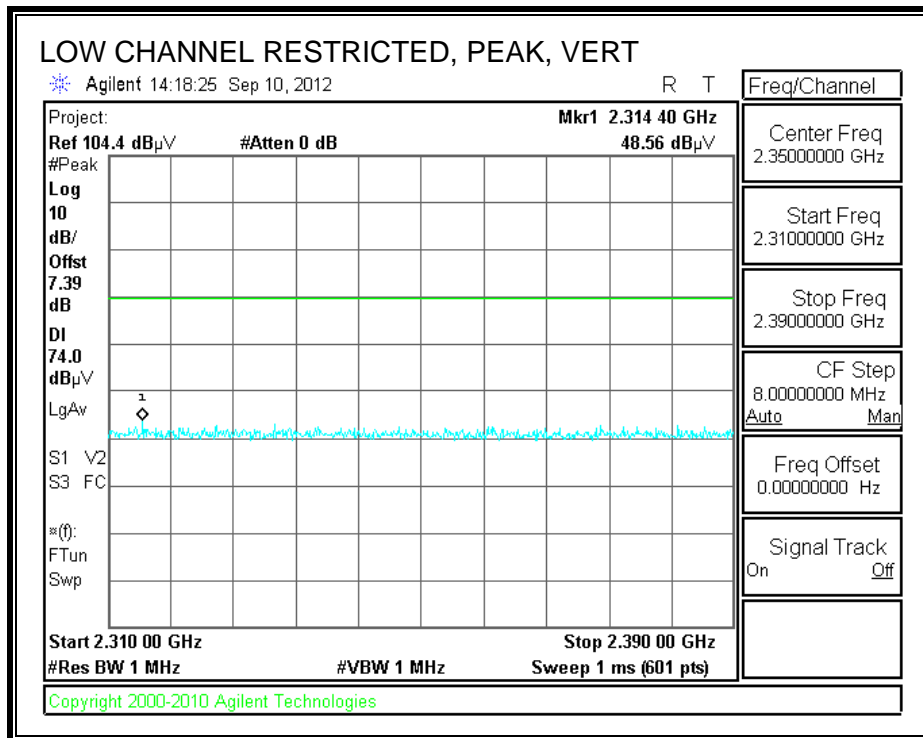
7.1.1. ENHANCED DATA RATE QPSK MODULATION

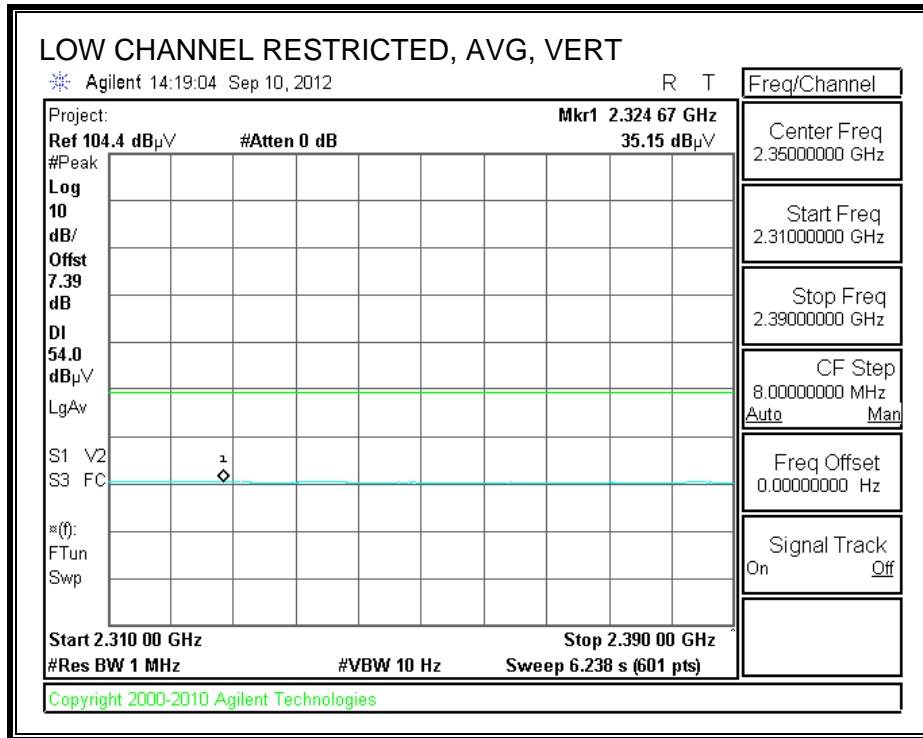
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



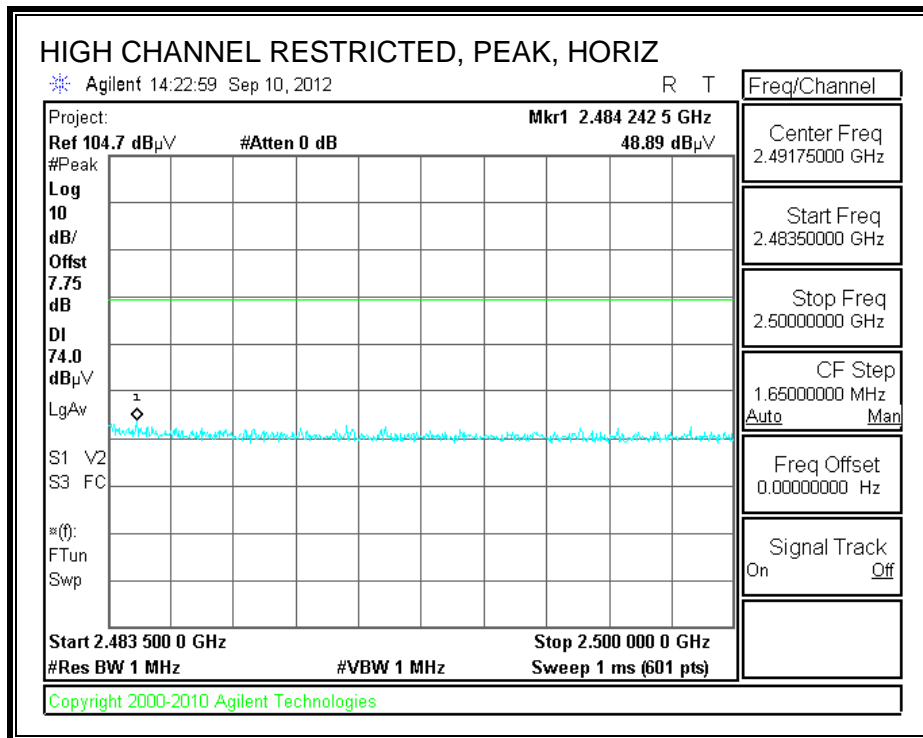


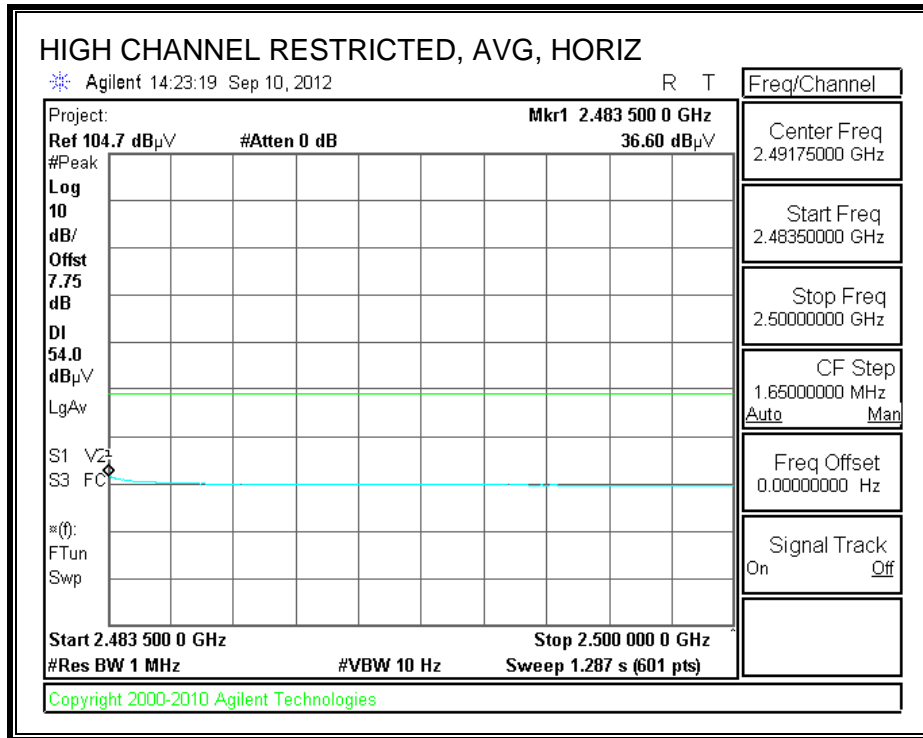
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



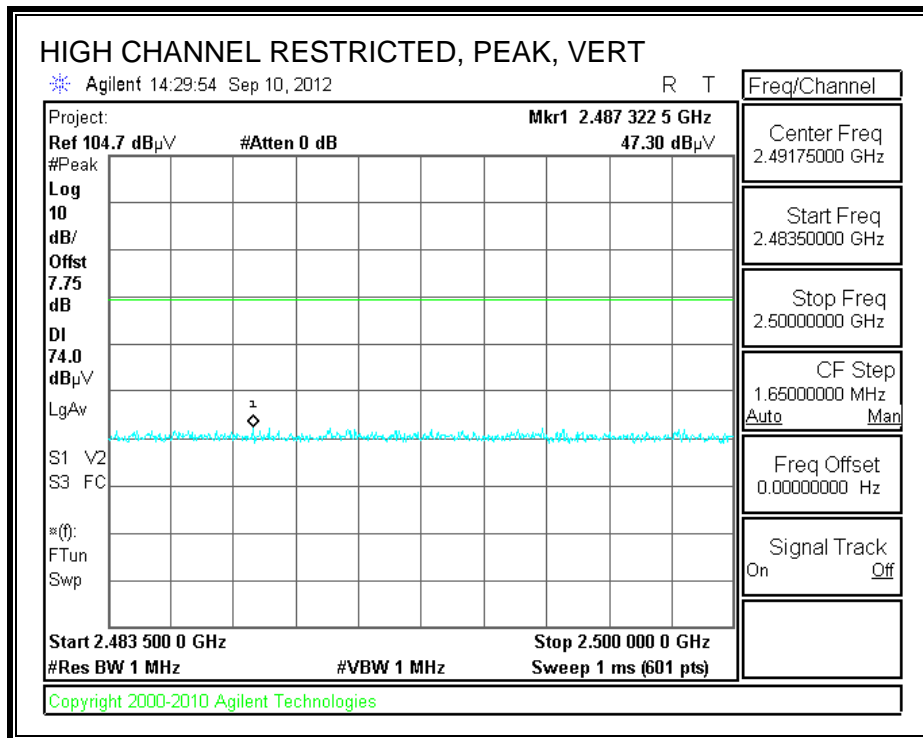


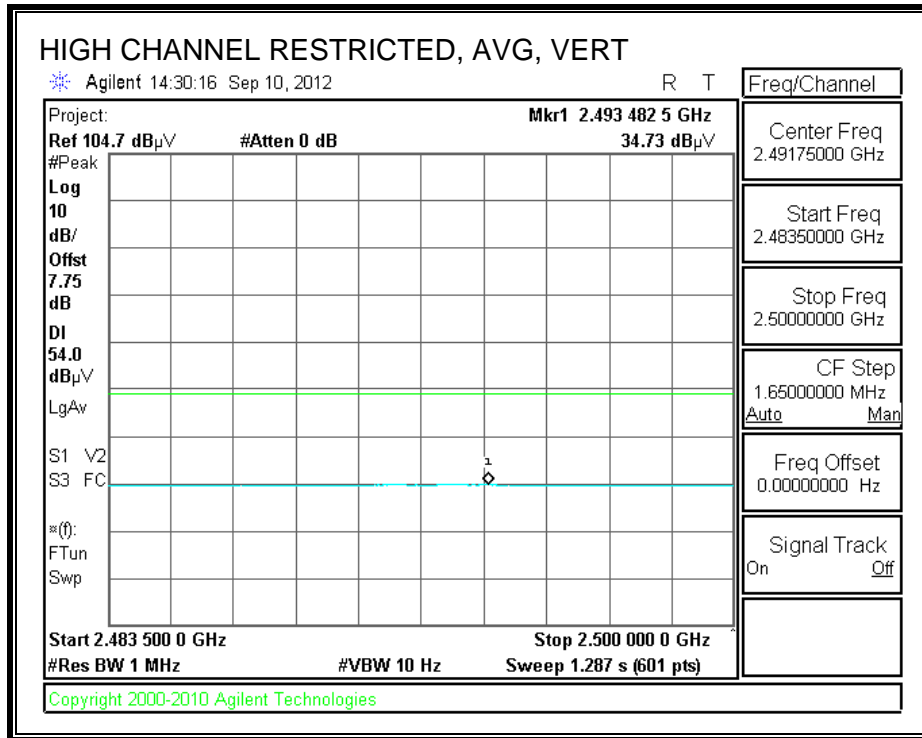
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



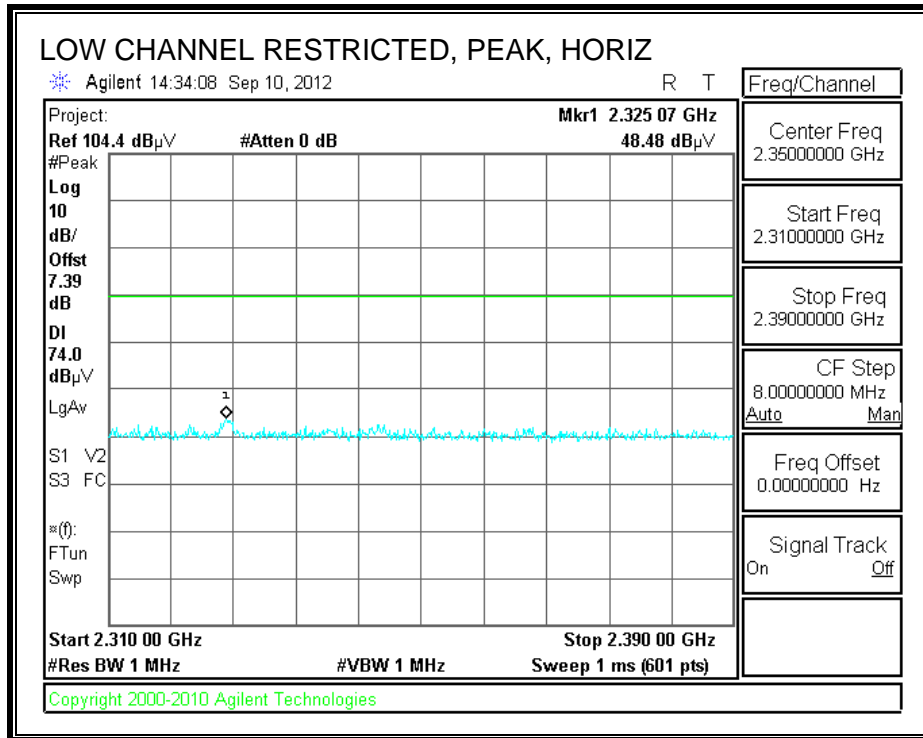


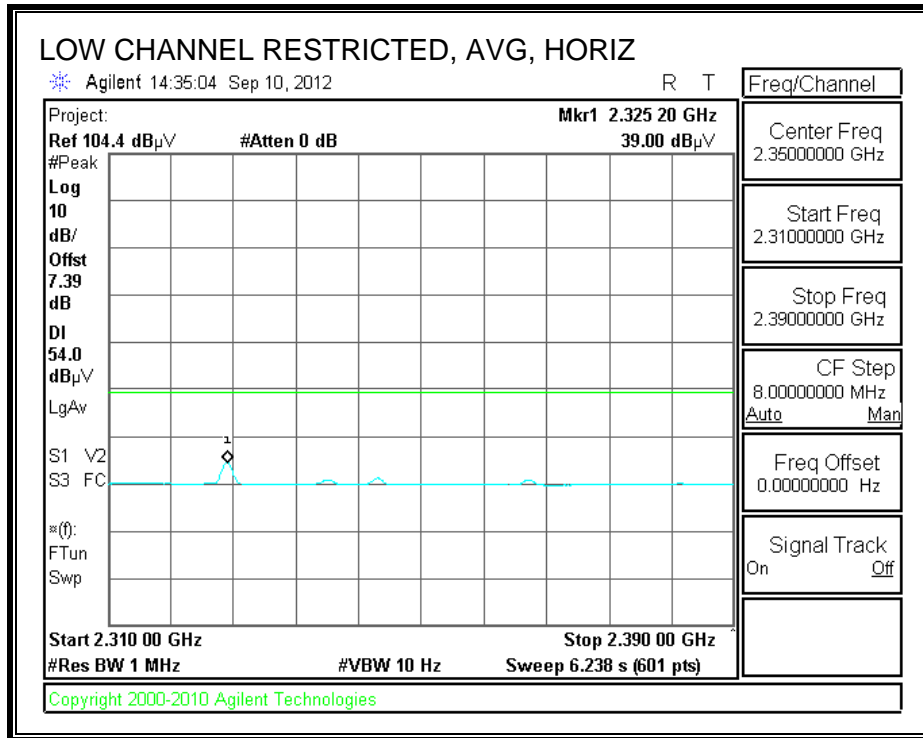
HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement															
Compliance Certification Services, Fremont 5m Chamber															
Test Engr:		Tony & Kris													
Date:		09/11/12													
Project #:		12u14613													
Company:		Kycocera													
Test Target:		15.247													
Mode Oper:		BT DQPSK Tx Continuously													
f	Measurement Frequency			Amp Preamp Gain			Average Field Strength Limit								
Dist	Distance to Antenna			D Corr Distance Correct to 3 meters			Peak Field Strength Limit								
Read	Analyzer Reading			Avg Average Field Strength @ 3 m			Margin vs. Average Limit								
AF	Antenna Factor			Peak Calculated Peak Field Strength			Margin vs. Peak Limit								
CL	Cable Loss			HPF High Pass Filter											
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dB	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Ant.High cm	Table Angle Degree	Notes
Low Channel, 2402MHz															
4.804	3.0	39.8	33.1	6.8	-34.1	0.0	0.0	45.6	74.0	-28.4	H	P	98.0	341.0	
4.804	3.0	28.6	33.1	6.8	-34.1	0.0	0.0	34.4	54.0	-19.6	H	A	98.0	341.0	
12.010	3.0	34.0	39.4	11.9	-32.5	0.0	0.0	52.8	74.0	-21.2	H	P	193.0	133.0	
12.010	3.0	21.3	39.4	11.9	-32.5	0.0	0.0	40.0	54.0	-14.0	H	A	193.0	133.0	
4.804	3.0	42.7	33.1	6.8	-34.1	0.0	0.0	48.5	74.0	-25.5	V	P	129.0	41.0	
4.804	3.0	33.9	33.1	6.8	-34.1	0.0	0.0	39.7	54.0	-14.3	V	A	129.0	41.0	
12.010	3.0	33.8	39.4	11.9	-32.5	0.0	0.0	52.6	74.0	-21.4	V	P	178.0	184.0	
12.010	3.0	21.5	39.4	11.9	-32.5	0.0	0.0	40.3	54.0	-13.7	V	A	178.0	184.0	
Mid Channel, 2441MHz															
4.882	3.0	38.7	33.2	6.8	-34.0	0.0	0.0	44.6	74.0	-29.4	H	P	101.0	318.0	
4.882	3.0	28.0	33.2	6.8	-34.0	0.0	0.0	33.9	54.0	-20.1	H	A	101.0	318.0	
7.323	3.0	34.2	36.3	9.1	-33.1	0.0	0.0	46.5	74.0	-27.5	H	P	135.0	98.0	
7.323	3.0	22.1	36.3	9.1	-33.1	0.0	0.0	34.4	54.0	-19.6	H	A	135.0	98.0	
12.205	3.0	32.7	39.4	12.0	-32.5	0.0	0.0	51.6	74.0	-22.4	H	P	150.0	357.0	
12.205	3.0	20.7	39.4	12.0	-32.5	0.0	0.0	39.6	54.0	-14.4	H	A	150.0	357.0	
4.882	3.0	39.7	33.2	6.8	-34.0	0.0	0.0	45.6	74.0	-28.4	V	P	99.0	40.0	
4.882	3.0	30.8	33.2	6.8	-34.0	0.0	0.0	36.7	54.0	-17.3	V	A	99.0	40.0	
7.323	3.0	34.8	36.3	9.1	-33.1	0.0	0.0	47.1	74.0	-26.9	V	P	102.0	147.0	
7.323	3.0	22.2	36.3	9.1	-33.1	0.0	0.0	34.5	54.0	-19.5	V	A	102.0	147.0	
12.205	3.0	33.1	39.4	12.0	-32.5	0.0	0.0	52.0	74.0	-22.0	V	P	126.0	0.0	
12.205	3.0	20.7	39.4	12.0	-32.5	0.0	0.0	39.6	54.0	-14.4	V	A	126.0	0.0	
High Channel, 2480MHz															
4.960	3.0	36.7	33.2	6.9	-34.0	0.0	0.0	42.8	74.0	-31.2	H	P	184.0	355.0	
4.960	3.0	26.3	33.2	6.9	-34.0	0.0	0.0	32.4	54.0	-21.6	H	A	184.0	355.0	
7.440	3.0	35.0	36.5	9.1	-33.0	0.0	0.0	47.5	74.0	-26.5	H	P	100.0	126.0	
7.440	3.0	22.4	36.5	9.1	-33.0	0.0	0.0	34.9	54.0	-19.1	H	A	100.0	126.0	
12.400	3.0	33.7	39.4	12.0	-32.5	0.0	0.0	52.7	74.0	-21.3	H	P	175.0	99.0	
12.400	3.0	20.7	39.4	12.0	-32.5	0.0	0.0	39.7	54.0	-14.3	H	A	175.0	99.0	
4.960	3.0	39.0	33.2	6.9	-34.0	0.0	0.0	45.1	74.0	-28.9	V	P	98.0	314.0	
4.960	3.0	29.8	33.2	6.9	-34.0	0.0	0.0	35.9	54.0	-18.1	V	A	98.0	314.0	
7.440	3.0	34.5	36.5	9.1	-33.0	0.0	0.0	47.0	74.0	-27.0	V	P	139.0	26.0	
7.440	3.0	22.3	36.5	9.1	-33.0	0.0	0.0	34.8	54.0	-19.2	V	A	139.0	26.0	
12.400	3.0	32.2	39.4	12.0	-32.5	0.0	0.0	51.2	74.0	-22.8	V	P	179.0	35.0	
12.400	3.0	20.5	39.4	12.0	-32.5	0.0	0.0	39.5	54.0	-14.5	V	A	179.0	35.0	
Rev. 4.1.2.7															
Note: No other emissions were detected above the system noise floor.															

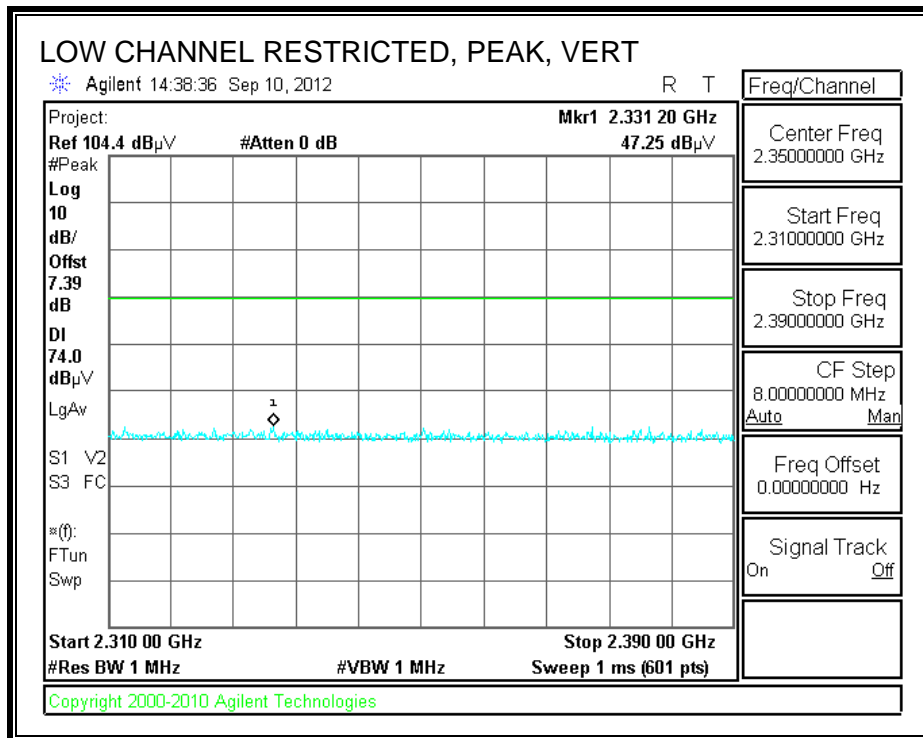
7.1.1. ENHANCED DATA RATE 8PSK MODULATION

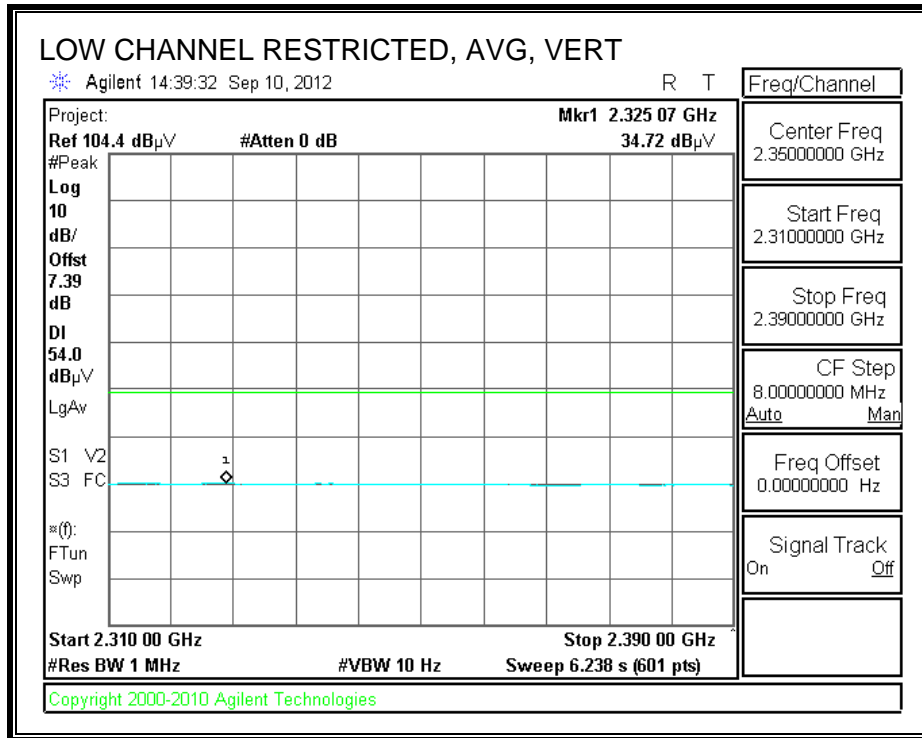
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



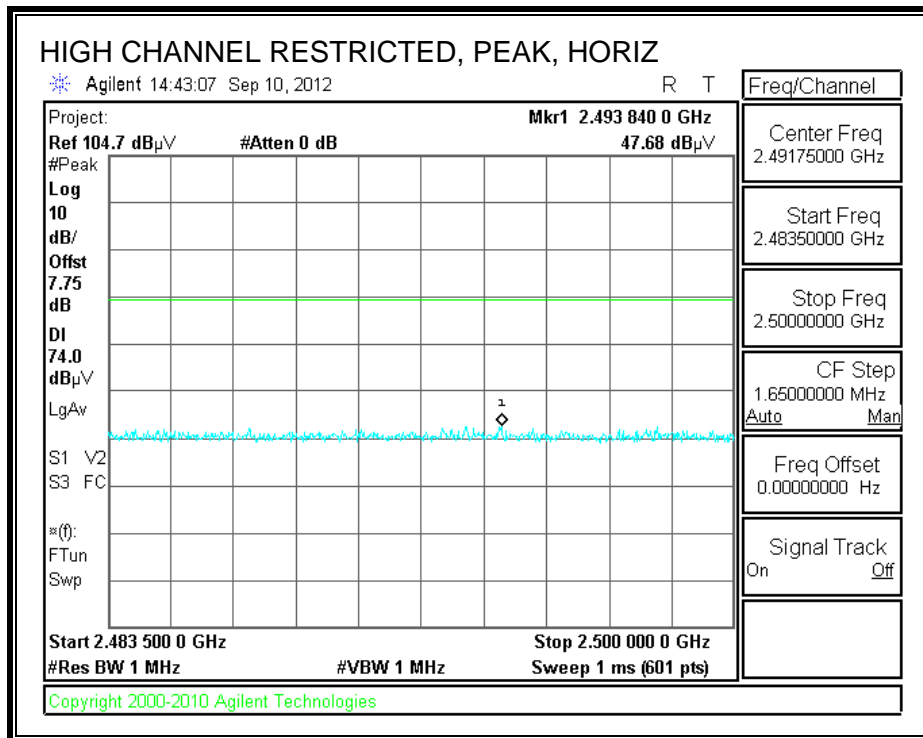


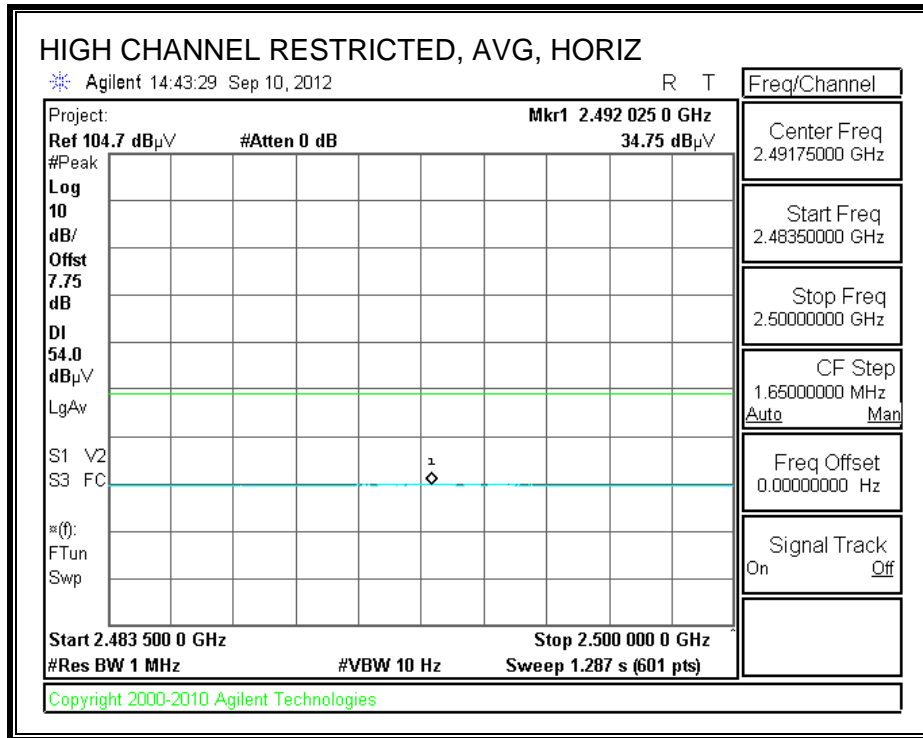
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



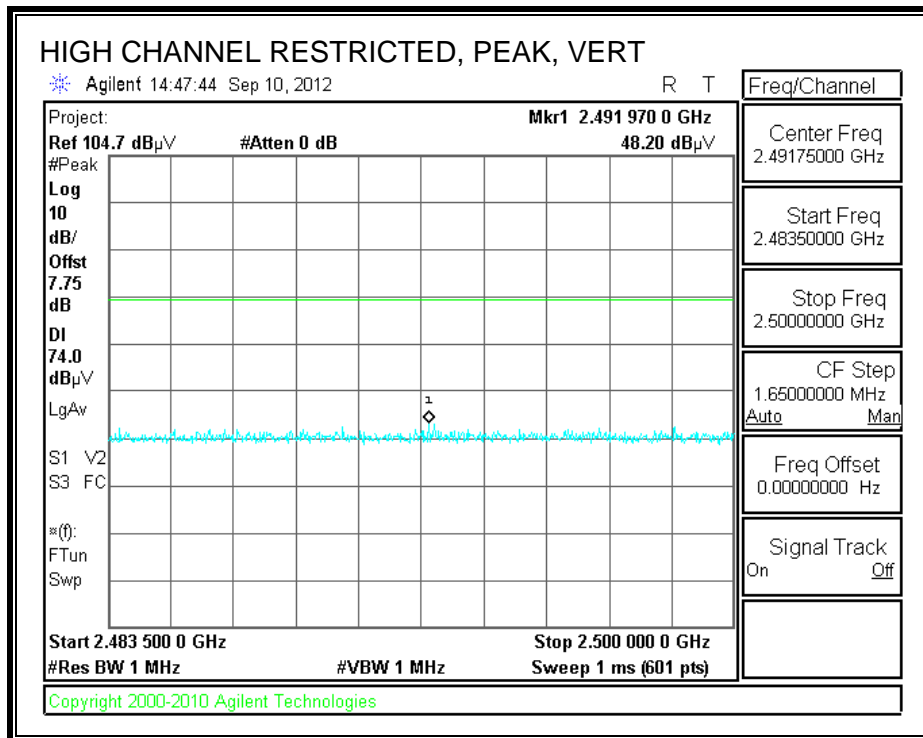


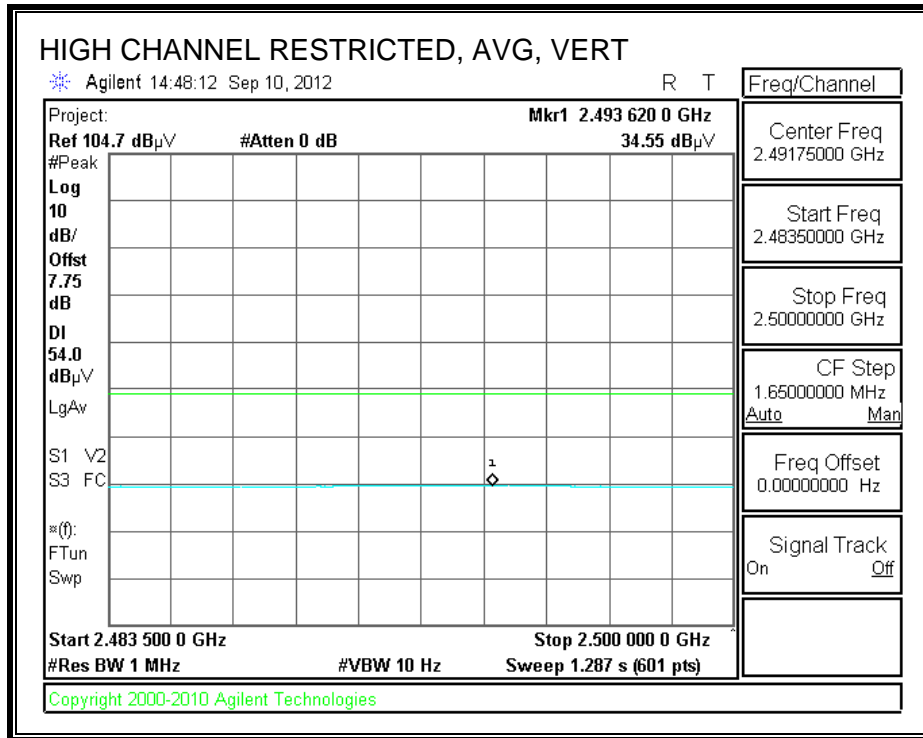
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



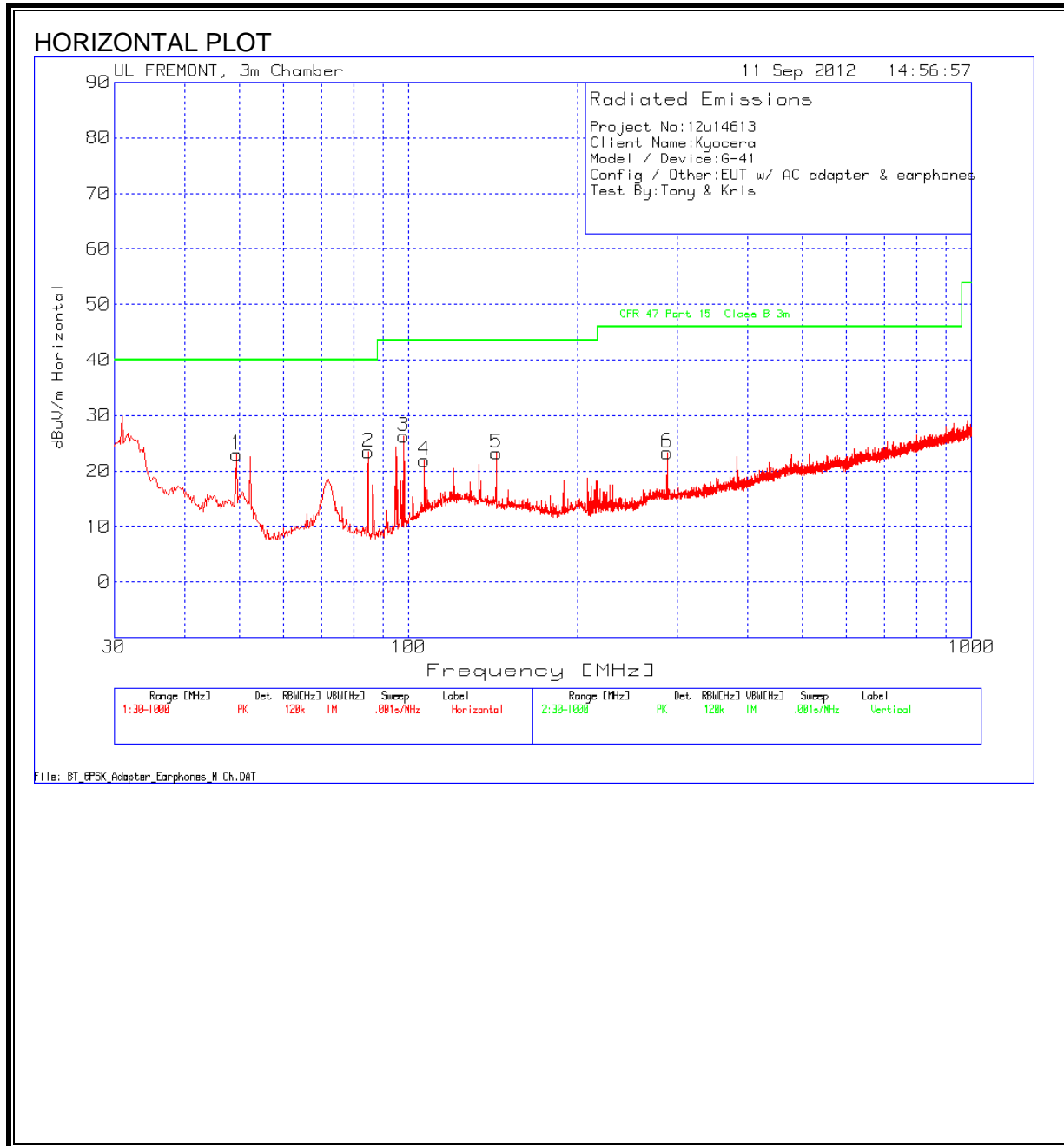


HARMONICS AND SPURIOUS EMISSIONS

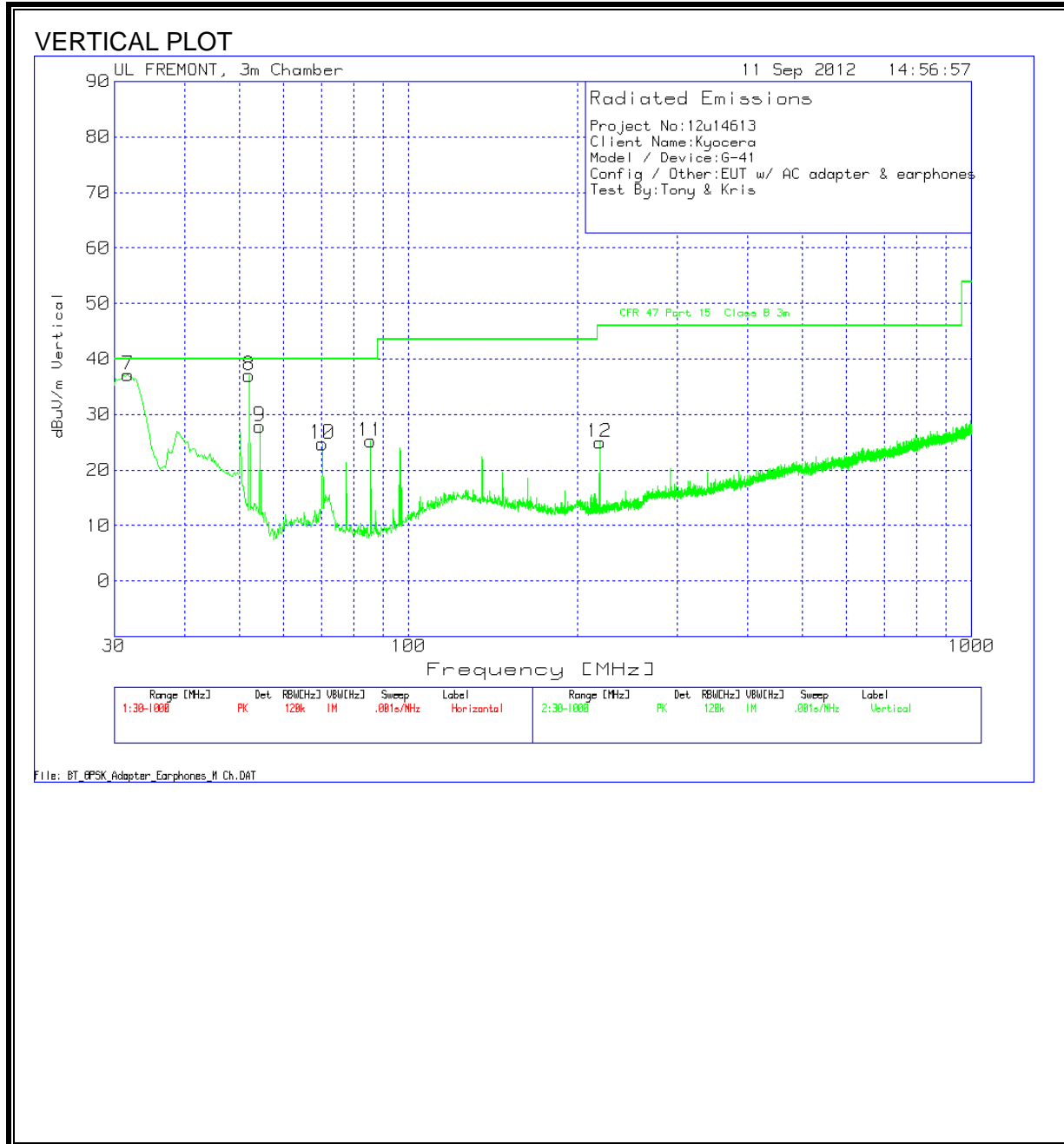
High Frequency Measurement															
Compliance Certification Services, Fremont 5m Chamber															
Test Engr:		Tony & Kris													
Date:		09/11/12													
Project #:		12u14613													
Company:		Kyocera													
Test Target:		15.247													
Mode Oper:		BT 8PSK Tx Continuously													
f	Measurement Frequency		Amp	Preamp Gain		Average Field Strength Limit									
Dist	Distance to Antenna		D Corr	Distance Correct to 3 meters		Peak Field Strength Limit									
Read	Analyzer Reading		Avg	Average Field Strength @ 3 m		Margin vs. Average Limit									
AF	Antenna Factor		Peak	Calculated Peak Field Strength		Margin vs. Peak Limit									
CL	Cable Loss		HPF	High Pass Filter											
f	Dist	Read	AF	CL	Amp	D Corr	Ftr	Corr.	Limit	Margin	Ant. Pol.	Det.	Ant. High	Table Angle	Notes
GHz	(m)	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	dBuV/m	dB	V/H	P/A/QP	cm	Degree	
Low Channel, 2402MHz															
4.804	3.0	41.0	33.1	6.8	-34.1	0.0	0.0	46.8	74.0	-27.2	H	P	101.0	321.0	
4.804	3.0	31.8	33.1	6.8	-34.1	0.0	0.0	37.7	54.0	-16.3	H	A	101.0	321.0	
12.010	3.0	33.1	39.4	11.9	-32.5	0.0	0.0	51.9	74.0	-22.1	H	P	100.0	262.0	
12.010	3.0	21.2	39.4	11.9	-32.5	0.0	0.0	40.0	54.0	-14.0	H	A	100.0	262.0	
4.804	3.0	40.2	33.1	6.8	-34.1	0.0	0.0	46.0	74.0	-28.0	V	P	99.0	40.0	
4.804	3.0	31.5	33.1	6.8	-34.1	0.0	0.0	37.3	54.0	-16.7	V	A	99.0	40.0	
12.010	3.0	33.2	39.4	11.9	-32.5	0.0	0.0	52.0	74.0	-22.0	V	P	142.0	205.0	
12.010	3.0	21.3	39.4	11.9	-32.5	0.0	0.0	40.1	54.0	-13.9	V	A	142.0	205.0	
Mid Channel, 2441MHz															
4.882	3.0	38.6	33.2	6.8	-34.0	0.0	0.0	44.5	74.0	-29.5	H	P	98.0	318.0	
4.882	3.0	27.7	33.2	6.8	-34.0	0.0	0.0	33.6	54.0	-20.4	H	A	98.0	318.0	
7.323	3.0	35.6	36.3	9.1	-33.1	0.0	0.0	47.9	74.0	-26.1	H	P	122.0	360.0	
7.323	3.0	22.1	36.3	9.1	-33.1	0.0	0.0	34.4	54.0	-19.6	H	A	122.0	360.0	
12.205	3.0	32.8	39.4	12.0	-32.5	0.0	0.0	51.7	74.0	-22.3	H	P	127.0	313.0	
12.205	3.0	20.6	39.4	12.0	-32.5	0.0	0.0	39.5	54.0	-14.5	H	A	127.0	313.0	
4.882	3.0	39.1	33.2	6.8	-34.0	0.0	0.0	45.0	74.0	-29.0	V	P	98.0	38.0	
4.882	3.0	30.0	33.2	6.8	-34.0	0.0	0.0	36.0	54.0	-18.0	V	A	98.0	38.0	
7.323	3.0	34.8	36.3	9.1	-33.1	0.0	0.0	47.1	74.0	-26.9	V	P	107.0	128.0	
7.323	3.0	22.3	36.3	9.1	-33.1	0.0	0.0	34.6	54.0	-19.4	V	A	107.0	128.0	
12.205	3.0	32.9	39.4	12.0	-32.5	0.0	0.0	51.7	74.0	-22.3	V	P	121.0	209.0	
12.205	3.0	20.7	39.4	12.0	-32.5	0.0	0.0	39.6	54.0	-14.4	V	A	121.0	209.0	
High Channel, 2480MHz															
4.960	3.0	37.9	33.2	6.9	-34.0	0.0	0.0	43.9	74.0	-30.1	H	P	101.0	10.0	
4.960	3.0	28.4	33.2	6.9	-34.0	0.0	0.0	34.5	54.0	-19.5	H	A	101.0	10.0	
7.440	3.0	35.0	36.5	9.1	-33.0	0.0	0.0	47.6	74.0	-26.4	H	P	99.0	131.0	
7.440	3.0	22.3	36.5	9.1	-33.0	0.0	0.0	34.8	54.0	-19.2	H	A	99.0	131.0	
12.400	3.0	33.5	39.4	12.0	-32.5	0.0	0.0	52.5	74.0	-21.5	H	P	119.0	228.0	
12.400	3.0	20.7	39.4	12.0	-32.5	0.0	0.0	39.7	54.0	-14.3	H	A	119.0	228.0	
4.960	3.0	38.6	33.2	6.9	-34.0	0.0	0.0	44.7	74.0	-29.3	V	P	98.0	323.0	
4.960	3.0	29.1	33.2	6.9	-34.0	0.0	0.0	35.2	54.0	-18.8	V	A	98.0	323.0	
7.440	3.0	34.7	36.5	9.1	-33.0	0.0	0.0	47.3	74.0	-26.7	V	P	185.0	261.0	
7.440	3.0	22.3	36.5	9.1	-33.0	0.0	0.0	34.8	54.0	-19.2	V	A	185.0	261.0	
12.400	3.0	33.0	39.4	12.0	-32.5	0.0	0.0	52.0	74.0	-22.0	V	P	180.0	131.0	
12.400	3.0	20.9	39.4	12.0	-32.5	0.0	0.0	39.9	54.0	-14.1	V	A	180.0	131.0	
Rev. 4.1.2.7															
Note: No other emissions were detected above the system noise floor.															

7.1. WORST-CASE BELOW 1 GHz

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



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



DATA

Project No:12u14613									
Client Name:Kyocera									
Model / Device:G-41									
Config / Other:EUT w/ AC adapter & earphones									
Test By:Tony & Kris									
Horizontal 30 - 1000MHz									
Test Frequency	Meter Reading	Detector	25MHz-1GHz Cham	Antenna T185 (dB)	dBuV/m	CFR 47 Part 15 Class B 3r	Margin	Height [cm]	Polarity
49.5783	42.19	PK	-27.3	8.1	22.99	40	-17.01	200	Horz
84.8581	43.06	PK	-27	7.4	23.46	40	-16.54	300	Horz
98.0396	43.9	PK	-26.9	9.3	26.3	43.5	-17.2	101	Horz
106.7626	36.84	PK	-26.7	11.8	21.94	43.5	-21.56	300	Horz
143.3993	36.82	PK	-26.4	12.8	23.22	43.5	-20.28	200	Horz
288.0076	35.22	PK	-25.2	13.3	23.32	46	-22.68	101	Horz
Vertical 30 - 1000MHz									
Test Frequency	Meter Reading	Detector	25MHz-1GHz Cham	Antenna T185 (dB)	dBuV/m	CFR 47 Part 15 Class B 3r	Margin	Height [cm]	Polarity
31.7446	44.67	PK	-27.5	20	37.17	40	-2.83	100	Vert
52.0983	57.06	PK	-27.3	7.3	37.06	40	-2.94	100	Vert
54.4245	48.09	PK	-27.2	7	27.89	40	-12.11	201	Vert
70.3197	43.65	PK	-27.1	8.2	24.75	40	-15.25	300	Vert
85.6335	44.92	PK	-27	7.3	25.22	40	-14.78	100	Vert
218.6111	40.06	PK	-25.7	10.6	24.96	46	-21.04	201	Vert
Project No:12u14613									
Client Name:Kyocera									
Model / Device:G-41									
Config / Other:EUT w/ AC adapter & earphones									
Test By:Tony & Kris									

8. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

Frequency of Emission (MHz)	Conducted Limit (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.

RESULTS

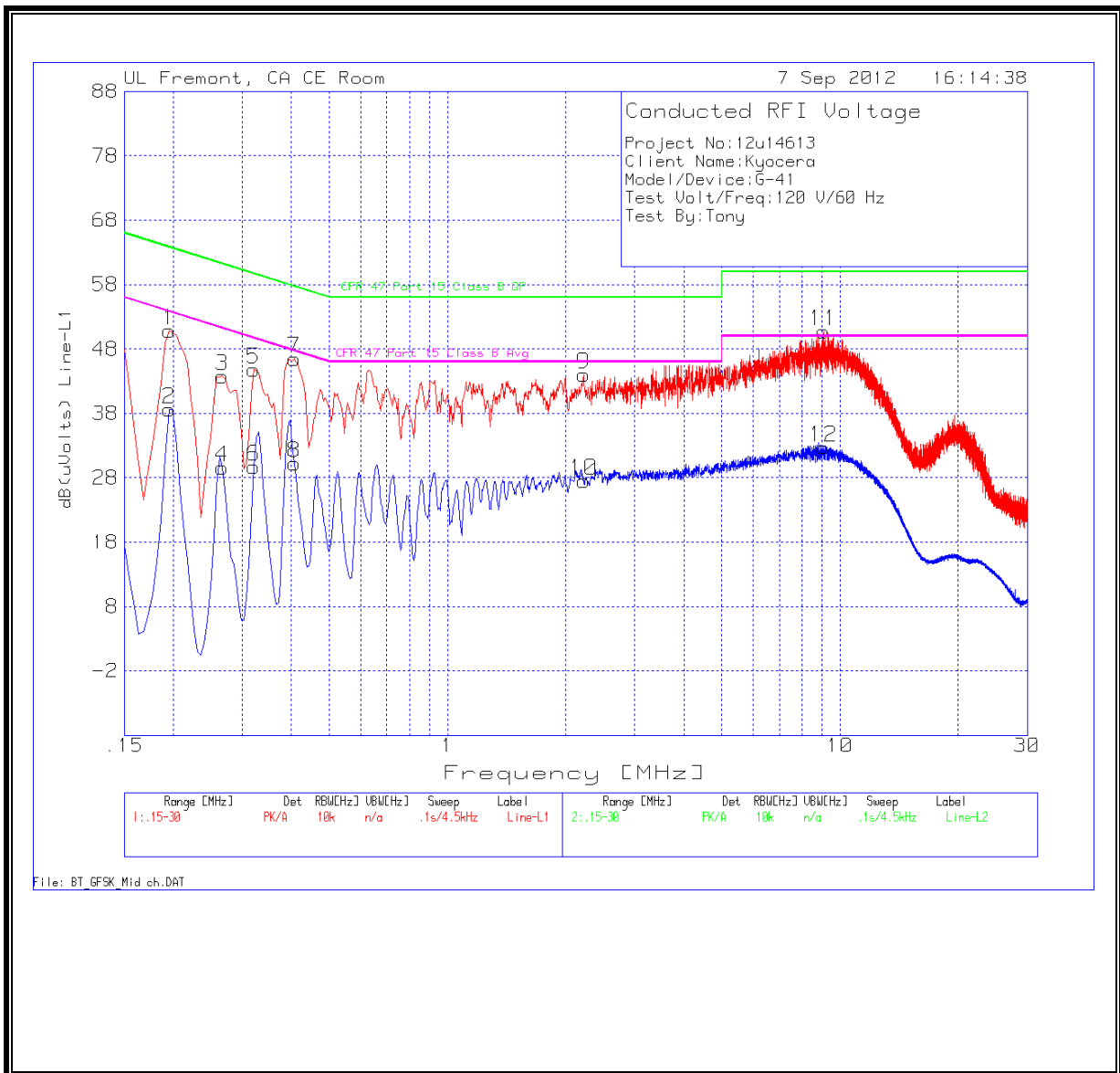
6 WORST EMISSIONS

Project No: 12u14613									
Client Name: Kyocera									
Model/Device: G-41									
Test Volt/Freq: 120 V/60 Hz									
Test By: Tony									

Line-L1 .15 - 30MHz									
Test Frequency	Meter Reading	Detector	T24 IL L1.TXT (dB)	LC Cables 1&3.TXT (dB)	dB(uVolts)	CFR 47 Part 15 Class B QP	Margin	CFR 47 Part 15 Class B Avg	Margin
0.195	50.71	PK	0.1	0	50.81	63.8	-12.99	-	-
0.195	38.53	Av	0.1	0	38.63	-	-	53.8	-15.17
0.267	43.68	PK	0.1	0	43.78	61.2	-17.42	-	-
0.267	29.46	Av	0.1	0	29.56	-	-	51.2	-21.64
0.321	44.71	PK	0.1	0	44.81	59.7	-14.89	-	-
0.321	29.58	Av	0.1	0	29.68	-	-	49.7	-20.02
0.4065	46.37	PK	0.1	0	46.47	57.7	-11.23	-	-
0.4065	30.16	Av	0.1	0	30.26	-	-	47.7	-17.44
2.22	43.84	PK	0.1	0.1	44.04	56	-11.96	-	-
2.22	27.39	Av	0.1	0.1	27.59	-	-	46	-18.41
9.078	50.52	PK	0.1	0.1	50.72	60	-9.28	-	-
9.078	32.55	Av	0.1	0.1	32.75	-	-	50	-17.25

Line-L2 .15 - 30MHz									
Test Freq	Meter Rea	Detector	T24 IL L2.T	LC Cables	dB(uVolts)	CFR 47 Par	Margin	CFR 47 Par	Margin
0.1995	49.13	PK	0.1	0	49.23	63.6	-14.37	-	-
0.1995	35.71	Av	0.1	0	35.81	-	-	53.6	-17.79
0.2895	42.74	PK	0.1	0	42.84	60.5	-17.66	-	-
0.2895	11.17	Av	0.1	0	11.27	-	-	50.5	-39.23
0.33	46.32	PK	0.1	0	46.42	59.5	-13.08	-	-
0.33	32.2	Av	0.1	0	32.3	-	-	49.5	-17.2
0.411	48.23	PK	0.1	0	48.33	57.6	-9.27	-	-
0.411	27.93	Av	0.1	0	28.03	-	-	47.6	-19.57
0.7395	43.74	PK	0.1	0	43.84	56	-12.16	-	-
0.7395	26.33	Av	0.1	0	26.43	-	-	46	-19.57
21.255	41.76	PK	0.3	0.2	42.26	60	-17.74	-	-
21.255	15.93	Av	0.3	0.2	16.43	-	-	50	-33.57

LINE 1 RESULTS



LINE 2 RESULTS

