RADIATED SPURIOUS EMISSIONS PORTIONS OF

FCC CFR47 PART 22 SUBPART H
FCC CFR47 PART 24 SUBPART E
INDUSTRY CANADA RSS-132 ISSUE 2
INDUSTRY CANADA RSS-133 ISSUE 5

CERTIFICATION TEST REPORT

FOR

CDMA1x/850MHz/1900MHz MPERs PENDANT WORN AROUND NECK

MODEL: LC140

FCC ID: ZQR-LC140

REPORT NUMBER: 11U14008-1, Revision A

ISSUE DATE: OCTOBER 18, 2011

Prepared for

LIFECOMM, LLC
2002 SUMMIT BLVD SUITE 1800
ATLANTA, GEORGIA 30319, USA

Prepared by

COMPLIANCE CERTIFICATION SERVICES (UL CCS)
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
---	10/12/12	Initial Issue	T. Chan
A	10/18/12	Updated ERP and EIRP Test Results Based On Average Reading	Chin Pang

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Lifecomm, LLC
2002 Summit Blvd Suite 1800
Atlanta, Georgia 30319, USA

EUT DESCRIPTION: CDMA1x 850MHz/1900MHz MPERs PENDANT WORN AROUND NECK

MODEL: LC140

SERIAL NUMBER: module 4

DATE TESTED: OCTOBER 03 – 07, 2011

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 22H & 24E	PASS (Radiated Portion)
IC RSS-132 ISSUE 2 & RSS-133 ISSUE 5	PASS (Radiated Portion)

Compliance Certification Services, Inc. (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. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For UL CCS By:

THU CHAN
ENGINEERING MANAGER
UL CCS

Tested By:

CHIN PANG
EMC ENGINEER
UL CCS

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with TIA-603-C, FCC CFR 47 Part 2, FCC CFR 47 Part 22, FCC CFR Part 24, RSS-132 Issue 2, and RSS-133 Issue 5.

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:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

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

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

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

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a CDMA1 850MHz/1900MHz MPERs pendant worn around neck.

5.2. MAXIMUM OUTPUT POWER

The transmitter has maximum average ERP and EIRP output powers as follow:

1xRTT CDMA MODE

824 to 849 MHz Authorized Band

Frequency Range (MHz)	Modulation	ERP Output Power (dBm)	ERP Output Power (mW)
Low CH - 824.70	1xRTT CDMA2000	23.50	223.9
Mid CH - 836.52		23.40	218.8
High CH - 848.31		23.05	201.8

1850 to 1910 MHz Authorized Band

Frequency Range (MHz)	Modulation	EIRP Output Power (dBm)	EIRP Output Power (mW)
Low CH - 1851.25	1xRTT CDMA2000	19.66	92.5
Mid CH - 1880.00		20.58	114.3
High CH - 1908.75		20.13	103.0

5.3. SOFTWARE AND FIRMWARE

The EUT is linked with Agilent Communication Test Set.

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5.4. WORST-CASE CONFIGURATION AND MODE

For radiated tests, X, Y, and Z orientations were investigated and Y position turned out to be the worst case for Cell and PCS bands.

PROCEDURE USED TO ESTABLISH TEST SIGNAL

3G-CDMA2000 1xRTT

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

Application	Rev, License
CDMA2000 Mobil Test	B.10.11, L

1xRTT

- Call Setup > Shift & Preset
- Protocol Rev > 6 (IS-2000-0)
- Radio Config (RC) > RC2 (Fwd2, Rvs2)
- FCH Service Option (SO) Setup > 55
- Traffic Data Rate > Full
- TDSO SCH Info > F-SCH Parameters > F-SCH Data Rate > 153.6 kbps
  > R-SCH Parameters > R-SCH Data Rate > 153.6 kbps
- Cell Info > Cell Parameters > System ID (SID) > 331
  > Network ID (NID) > 1

Once “Active Cell” show “Connected ” then change “Rvs Power Ctrl” from “Active bits” to “**All Up bits**” to get the maximum power.

Worst-case Measurement Result @ Low, Middle and High Channel

Worst-case Measurement Result for Low, Middle and High Channel under Radio Configuration RC2 and Service Option 55.

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5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Laptop	HP	nc6400	CND71753T	DoC
AC Adapter	HP	PA-1900-18H2	597950DLLVADK1	DoC
Charger	Foxlink	WS-227-40	W1051557189	DoC
Charging base fixture	Qualcomm	NA	NA	NA

I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	1	US 115V	Un-shielded	2m	NA
2	DC	1	DC	Un-shielded	2m	NA
3	USB	1	USB	Un-shielded	1m	connect EUT to Laptop

TEST SETUP

The EUT is stand-alone unit. The laptop is for setup purpose.

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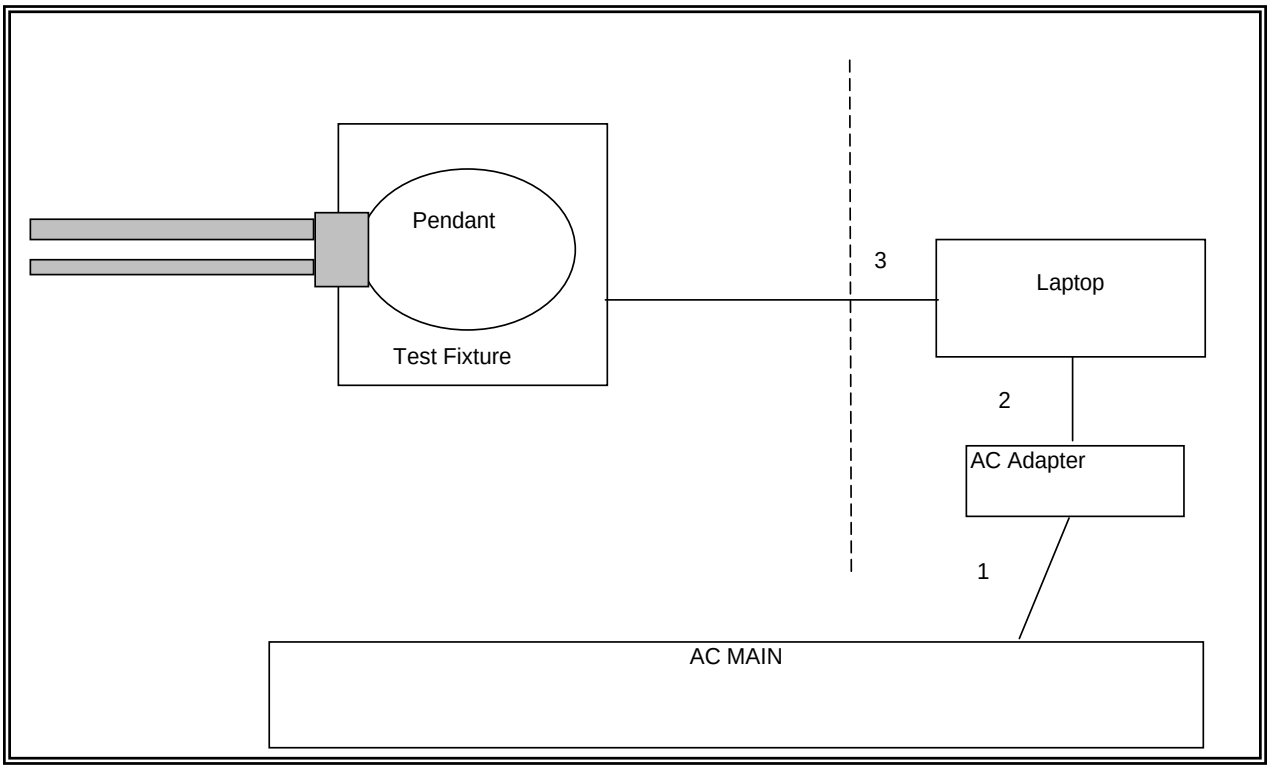
SETUP DIAGRAM FOR TESTS



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6. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset**	**Cal Due**
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01178	08/15/12
Communications Test Set	Agilent / HP	E5515C	C01086	06/17/12
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00580	01/27/12
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01063	07/12/12
Dipole	Speag	D900V2	N/A	11/16/11
Highpass Filter, 1.5 GHz	Micro-Tronics	HPM13193	N02689	CNR
Highpass Filter, 2.7 GHz	Micro-Tronics	HPM13194	N02687	CNR
Vector signal generator, 6 GHz	Agilent / HP	E4438C	N/A	06/09/12
Antenna, Horn, 18 GHz	EMCO	3115	C00943	CNR
Antenna, Horn, 18 GHz	EMCO	3115	C00783	06/29/12
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01016	07/16/12

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7. LIMITS AND RESULTS

7.1. RADIATED OUTPUT POWER

LIMITS

22.913(a) The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

24.232(b) & RSS133 § 6.4 Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

RSS-132 § 4.4 The maximum ERP shall be 6.3 Watts for mobile stations.

TEST PROCEDURE

ANSI / TIA / EIA 603 Clause 2.2.17, RSS-132 & RSS-133

This section reports the maximum instantaneous peak ERP of the intentional transmitter using a peak detector per Part 22 measurement detector settings, and the maximum average EIRP of the intentional transmitter using an average detector per Part 24 measurement detector settings. The maximum instantaneous peak ERP can be expected to be different from the maximum average conducted power plus the antenna gain in dBd.

RESULTS

Mode	Channel	f (MHz)	ERP /EIRP	
			dBm	mW
1xRTT Cell	1013	824.70	23.50	223.87
	384	836.52	23.40	218.78
	777	848.31	23.05	201.84
1xRTT PCS	25	1851.25	19.66	92.47
	600	1880.00	20.58	114.29
	1175	1908.75	20.13	103.04

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1xRTT CDMA

CELL OUTPUT POWER (ERP)

High Frequency Substitution Measurement
Compliance Certification Services Chamber B

Company: Qualcomm
Project #: 11U14008
Date: 10/07/11
Test Engineer: Chin Pang
Configuration: EUT ALONE
Mode: TX, CELL BAND CDMA2000, 1xRTT MODE
EUT:

Test Equipment:
Receiving: Sunol T130, and 3m Chamber N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 00022117, 6ft SMA Cable (SN # 208947003) Warehouse.

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.70	17.67	V	0.5	0.0	17.17	38.5	-21.3	
824.70	24.00	H	0.5	0.0	23.50	38.5	-14.9	
836.52	17.37	V	0.5	0.0	16.87	38.5	-21.6	
836.52	23.90	H	0.5	0.0	23.40	38.5	-15.0	
848.31	15.62	V	0.5	0.0	15.12	38.5	-23.3	
848.31	23.55	H	0.5	0.0	23.05	38.5	-15.4	

Rev. 3.17.11

PCS OUTPUT POWER (EIRP)

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: Qualcomm
Project #: 11I14008
Date: 10/07/11
Test Engineer: Chin Pang
Configuration: EUTALONE
Mode: TX, PCS BAND CDMA2000, 1xRTT MODE
Pendang worn around neck

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T60 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.851	12.0	V	0.85	8.01	19.16	33.0	-13.8	
1.851	12.5	H	0.85	8.01	19.66	33.0	-13.3	
1.880	12.3	V	0.85	8.13	19.58	33.0	-13.4	
1.880	13.3	H	0.85	8.13	20.58	33.0	-12.4	
1.909	11.7	V	0.85	8.13	18.98	33.0	-14.0	
1.909	12.9	H	0.85	8.13	20.13	33.0	-12.9	

Rev. 3.17.11

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7.2. FIELD STRENGTH OF SPURIOUS RADIATION

LIMIT

§22.917 (e) and §24.238 (a), RSS-132 § 4.5.1, & RSS-133 § 6.5.1 (a) (i) & (b): Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

TEST PROCEDURE

ANSI / TIA / EIA 603 Clause 3.2.12 & FCC 22.917 (b) & FCC 24.238 (b), (g)(1)(2)(3), RSS-132 & RSS-133

RESULTS

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1xRTT CDMA

CELL SPURIOUS & HARMONIC (ERP)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: Qualcomm
Project #: 11I14008
Date: 10/07/11
Test Engineer: Chin Pang
Configuration: EUT only
Mode: TX, CELL BAND CDMA2000, 1xRTT MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T144 8449B	Filter 1	Part 22

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (824.7MHz)									
1.649	-6.9	V	3.0	38.2	1.0	-44.1	-13.0	-31.1	
2.474	-15.7	V	3.0	37.5	1.0	-52.2	-13.0	-39.2	
1.649	-9.3	H	3.0	38.2	1.0	-46.4	-13.0	-33.4	
2.474	-18.4	H	3.0	37.5	1.0	-54.8	-13.0	-41.8	
Mid Ch, (836.52MHz)									
1.673	-11.2	V	3.0	38.1	1.0	-48.3	-13.0	-35.3	
2.510	-16.0	V	3.0	37.5	1.0	-52.4	-13.0	-39.4	
1.673	-12.7	H	3.0	38.1	1.0	-49.9	-13.0	-36.9	
2.510	-17.6	H	3.0	37.5	1.0	-54.1	-13.0	-41.1	
High Ch, (848.31MHz)									
1.697	-15.0	V	3.0	38.1	1.0	-52.1	-13.0	-39.1	
2.545	-16.1	V	3.0	37.5	1.0	-52.6	-13.0	-39.6	
1.697	-16.5	H	3.0	38.1	1.0	-53.6	-13.0	-40.6	
2.545	-17.2	H	3.0	37.5	1.0	-53.6	-13.0	-40.6	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

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PCS Spurious & Harmonic (EIRP)

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: Qualcomm
Project #: 11I14008
Date: 10/07/11
Test Engineer: Chin Pang
Configuration: EUT onlyne
Mode: TX, PCS BAND CDMA2000, 1xRTT MODE
Pendant Worn Around neck

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 8449B	Filter 1	Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch, (1850.2MHz)									
3.703	-3.2	V	3.0	35.4	1.0	-37.5	-13.0	-24.5	
5.554	-12.8	V	3.0	35.4	1.0	-47.2	-13.0	-34.2	
3.703	-6.0	H	3.0	35.4	1.0	-40.3	-13.0	-27.3	
5.554	-10.2	H	3.0	35.4	1.0	-44.6	-13.0	-31.6	
		H							
Mid Ch, (1880.0MHz)									
3.760	-4.0	V	3.0	35.3	1.0	-38.4	-13.0	-25.4	
5.640	-12.8	V	3.0	35.4	1.0	-47.2	-13.0	-34.2	
3.760	-5.7	H	3.0	35.3	1.0	-40.0	-13.0	-27.0	
5.640	-13.6	H	3.0	35.4	1.0	-48.1	-13.0	-35.1	
High Ch, (1909.8MHz)									
3.818	-2.4	V	3.0	35.3	1.0	-36.7	-13.0	-23.7	
5.726	-8.4	V	3.0	35.4	1.0	-42.9	-13.0	-29.9	
3.818	-6.3	H	3.0	35.3	1.0	-40.6	-13.0	-27.6	
5.726	-11.2	H	3.0	35.4	1.0	-45.6	-13.0	-32.6	

Rev. 03.03.09
Note: No other emissions were detected above the system noise floor.

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7.3. RECEIVER SPURIOUS EMISSIONS

LIMIT

RSS-Gen 7.2.2

Spurious Emission Limits for Receivers:

Spurious Frequency (MHz)	Field Strength (microvolts/m at 3 metres)
30-88	100
88-216	150
216-960	200
Above 960	500

TEST PROCEDURE

The search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (local oscillator frequency, intermediate frequency or carrier frequency),

or 30 MHz, whichever is the higher, to at least 3 times the highest tunable and local oscillator frequencies.

RESULTS

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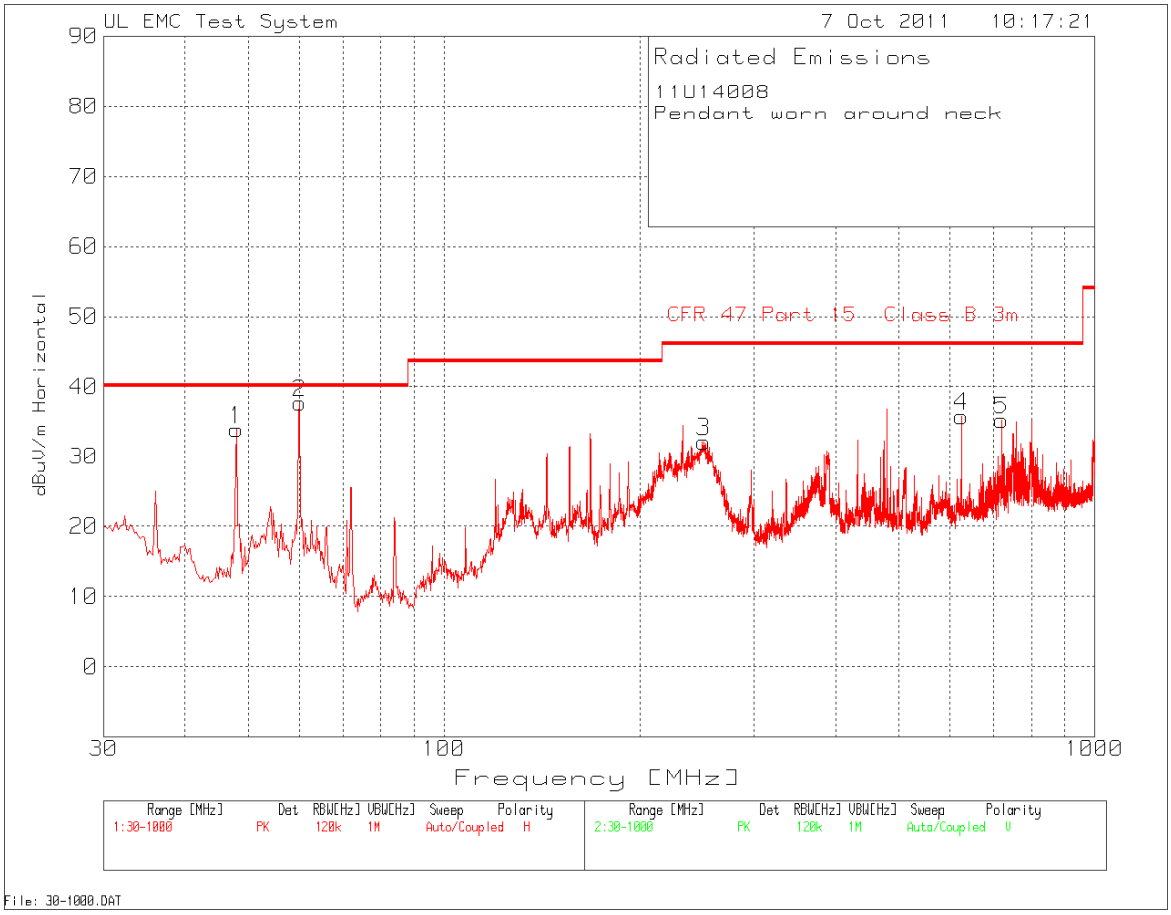
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)

HORIZONTAL PLOT



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VERTICAL PLOT

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HORIZONTAL AND VERTICAL DATA

11U14008									
Pendant worn around neck									
Range 1 30 - 1000MHz									
Frequency	Reading	Detector	Cable.TX [dB]	PreAmp [dB]	Bilog Factor	dBuV/m	Part 15B 3m	Margin	Polarity
48.0276	53.09	PK	1	-29.4	9.2	33.89	40	-6.11	Horz
60.046	57.97	PK	1.2	-29.4	7.9	37.67	40	-2.33	Horz
60.046	49.65	QP	1.2	-29.4	7.9	29.35	40	-10.65	Horz
250.9832	46.86	PK	2.2	-28.7	11.8	32.16	46	-13.84	Horz
624.1347	43.12	PK	3.5	-29.3	18.5	35.82	46	-10.18	Horz
720.0879	41.01	PK	3.8	-29.2	19.6	35.21	46	-10.79	Horz
Range 2 30 - 1000MHz									
Frequency	Reading	Detector	Cable.TX [dB]	PreAmp [dB]	Bilog Factor	dBuV/m	Part 15B 3m	Margin	Polarity
36.0092	51.02	PK	0.9	-29.5	17.2	39.62	40	-0.38	Vert
36.000	41.6	QP	0.9	-29.5	17.2	30.2	40	-9.8	Vert
48.0276	57.73	PK	1	-29.4	9.2	38.53	40	-1.47	Vert
48.000	48.8	QP	1	-29.4	9.2	29.6	40	-10.4	Vert
60.046	53.73	PK	1.2	-29.4	7.9	33.43	40	-6.57	Vert
155.8054	49.75	PK	1.7	-29.1	11.6	33.95	43.5	-9.55	Vert
167.8237	50.69	PK	1.8	-29.1	10.3	33.69	43.5	-9.81	Vert
250.9832	52.65	PK	2.2	-28.7	11.8	37.95	46	-8.05	Vert
480.1079	49.4	PK	3	-29.3	16.4	39.5	46	-6.5	Vert

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SPURIOUS EMISSIONS ABOVE 1000 MHz (WORST-CASE CONFIGURATION)

Note: No emissions were detected above the system noise floor.

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7.4. POWER LINE CONDUCTED EMISSION

LIMIT

RSS-Gen 7.2.2

Except when the requirements applicable to a given device state otherwise, for any licence-exempt radio communication device equipped to operate from the public utility AC power supply, either directly or indirectly, the radio frequency voltage that is conducted back onto the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in Table 2. The tighter limit applies at the frequency range boundaries.

Table 2 – AC Power Lines Conducted Emission Limits

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.

RESULTS

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6 WORST EMISSIONS

AC ADAPTER

QUALCOMM INC							
11U14008							
120 AC / 60HZ							
AC/DC ADAPTER CHARGING							
PENDANT							
Line-L1 .15 - 30MHz							
Test Frequer	Meter Readin	Detector	dB[uVolts]	Class B QP	Margin	Class B Avg I	Margin
0.1635	49.01	PK	49.01	65.3	-16.29	55.3	-6.29
0.1635	32.61	Av	32.61	65.3	-32.69	55.3	-22.69
0.5325	43.19	PK	43.19	56	-12.81	46	-2.81
0.5325	29.28	Av	29.28	56	-26.72	46	-16.72
3.5835	37.65	PK	37.65	56	-18.35	46	-8.35
3.5835	20.41	Av	20.41	56	-35.59	46	-25.59
8.511	26.91	PK	26.91	60	-33.09	50	-23.09
8.511	9.36	Av	9.36	60	-50.64	50	-40.64
12.8085	33.45	PK	33.45	60	-26.55	50	-16.55
12.8085	26.34	Av	26.34	60	-33.66	50	-23.66
24.432	20.37	PK	20.37	60	-39.63	50	-29.63
24.432	6.06	Av	6.06	60	-53.94	50	-43.94
Line-L2 .15 - 30MHz							
Test Frequer	Meter Readin	Detector	dB[uVolts]	Class B QP	Margin	Class B Avg I	Margin
0.159	48.71	PK	48.71	65.5	-16.79	55.5	-6.79
0.159	31.82	Av	31.82	65.5	-33.68	55.5	-23.68
0.537	40.95	PK	40.95	56	-15.05	46	-5.05
0.537	30.08	Av	30.08	56	-25.92	46	-15.92
1.383	32.37	PK	32.37	56	-23.63	46	-13.63
1.383	19.03	Av	19.03	56	-36.97	46	-26.97
4.956	30.99	PK	30.99	56	-25.01	46	-15.01
4.956	15.01	Av	15.01	56	-40.99	46	-30.99
13.4205	30.44	PK	30.44	60	-29.56	50	-19.56
13.4205	25.25	Av	25.25	60	-34.75	50	-24.75
17.6955	29.62	PK	29.62	60	-30.38	50	-20.38
17.6955	26.5	Av	26.5	60	-33.5	50	-23.5

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SUPPORT LAPTOP

QUALCOMM INC							
11U14008							
120 AC / 60HZ							
USB CABLE TO LAPTOP							
Line-L1 .15 - 30MHz							
Test Freque	Meter Readir	Detector	dB[uVolts]	Class B QP	Margin	Class B Avg	Margin
0.1545	55.44	PK	55.44	65.8	-10.36	55.8	-0.36
0.1545	19.63	Av	19.63	65.8	-46.17	55.8	-36.17
0.258	47.43	PK	47.43	61.5	-14.07	51.5	-4.07
0.258	32.16	Av	32.16	61.5	-29.34	51.5	-19.34
2.0535	40.87	PK	40.87	56	-15.13	46	-5.13
2.0535	27.45	Av	27.45	56	-28.55	46	-18.55
3.6285	40.84	PK	40.84	56	-15.16	46	-5.16
3.6285	28.07	Av	28.07	56	-27.93	46	-17.93
14.3205	43.79	PK	43.79	60	-16.21	50	-6.21
14.3205	31.29	Av	31.29	60	-28.71	50	-18.71
24	44.35	PK	44.35	60	-15.65	50	-5.65
24	27.31	Av	27.31	60	-32.69	50	-22.69
Line-L2 .15 - 30MHz							
Test Freque	Meter Readir	Detector	dB[uVolts]	Class B QP	Margin	Class B Avg	Margin
0.195	48.93	PK	48.93	63.8	-14.87	53.8	-4.87
0.195	37.36	Av	37.36	63.8	-26.44	53.8	-16.44
0.384	40.39	PK	40.39	58.2	-17.81	48.2	-7.81
0.384	21.13	Av	21.13	58.2	-37.07	48.2	-27.07
0.708	36.98	PK	36.98	56	-19.02	46	-9.02
0.708	17.11	Av	17.11	56	-38.89	46	-28.89
3.84	34.22	PK	34.22	56	-21.78	46	-11.78
3.84	22.09	Av	22.09	56	-33.91	46	-23.91
13.686	42.79	PK	42.79	60	-17.21	50	-7.21
13.686	28.19	Av	28.19	60	-31.81	50	-21.81
24.0045	40.04	PK	40.04	60	-19.96	50	-9.96
24.0045	24.9	Av	24.9	60	-35.1	50	-25.1

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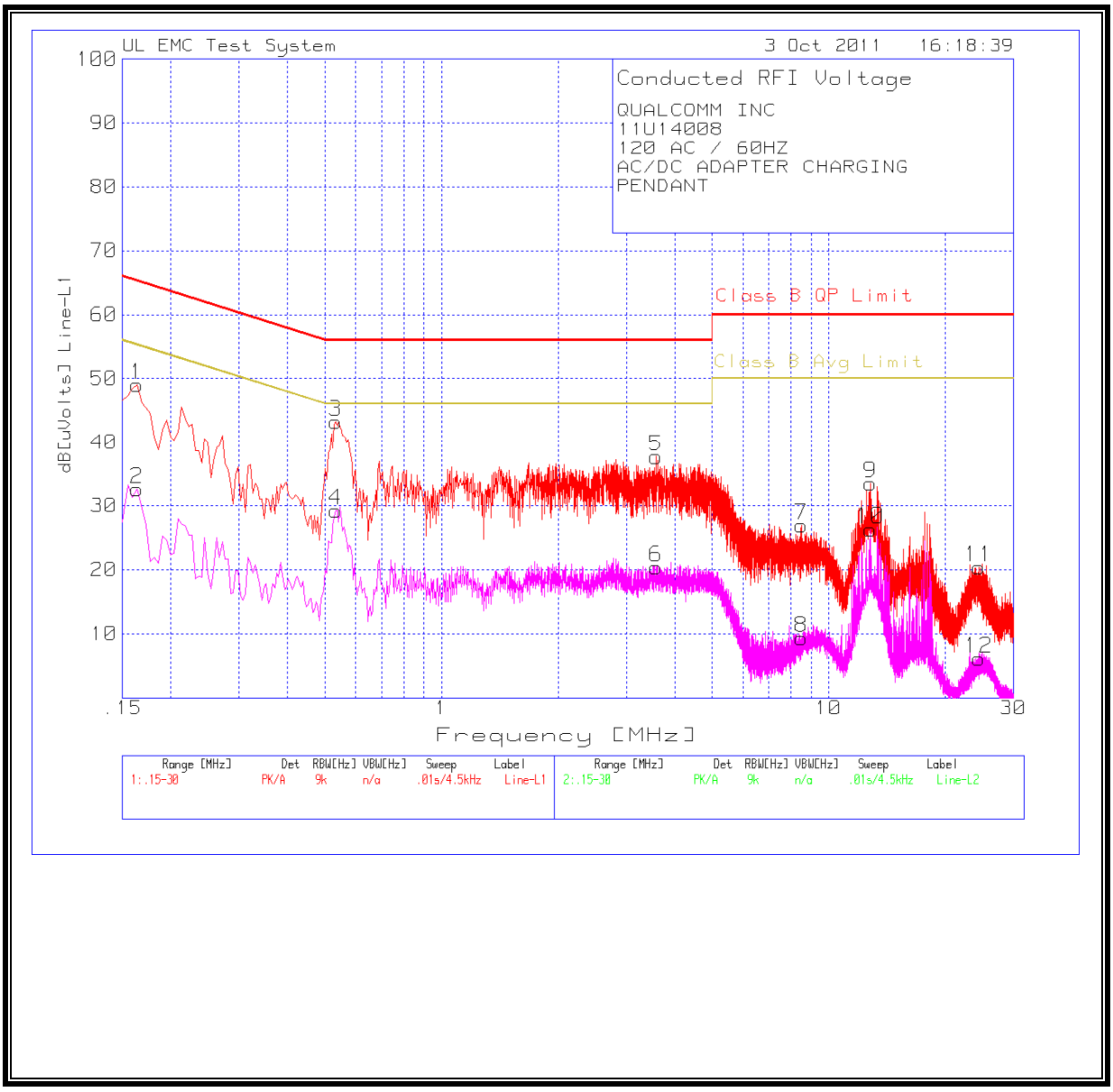
AC ADAPTER

LINE 1 RESULTS



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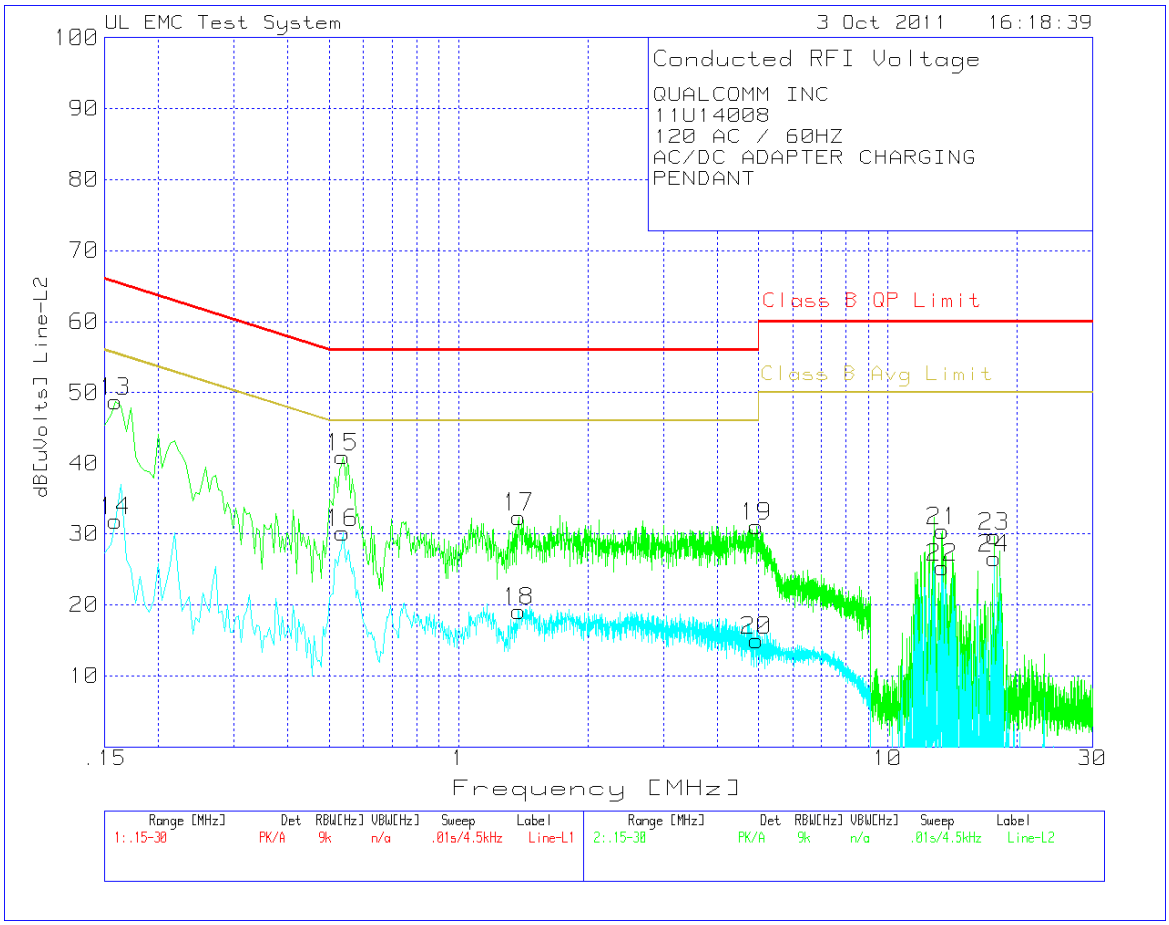
LINE 2 RESULTS



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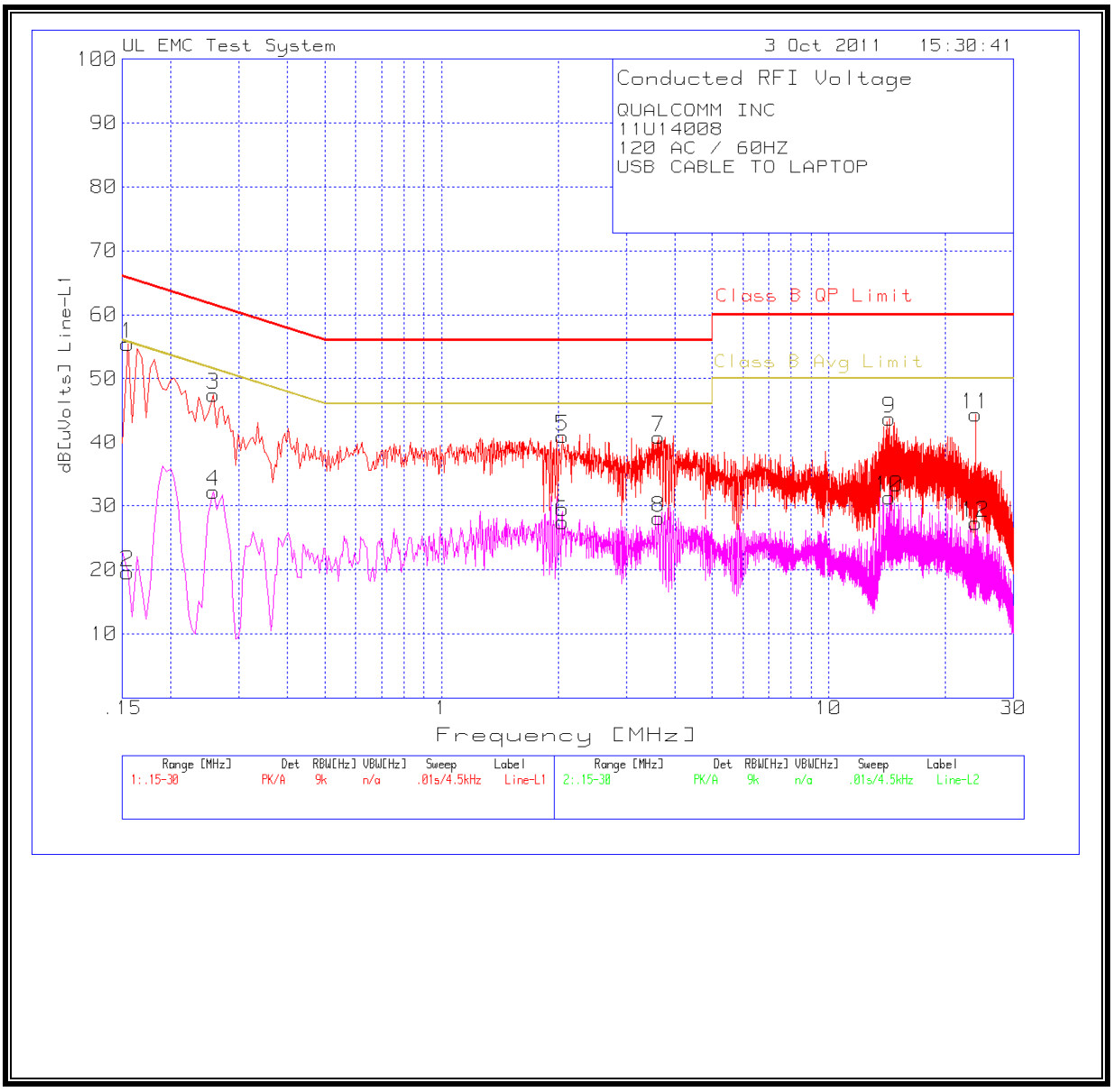
EUT WITH LAPTOP

LINE 1 RESULTS



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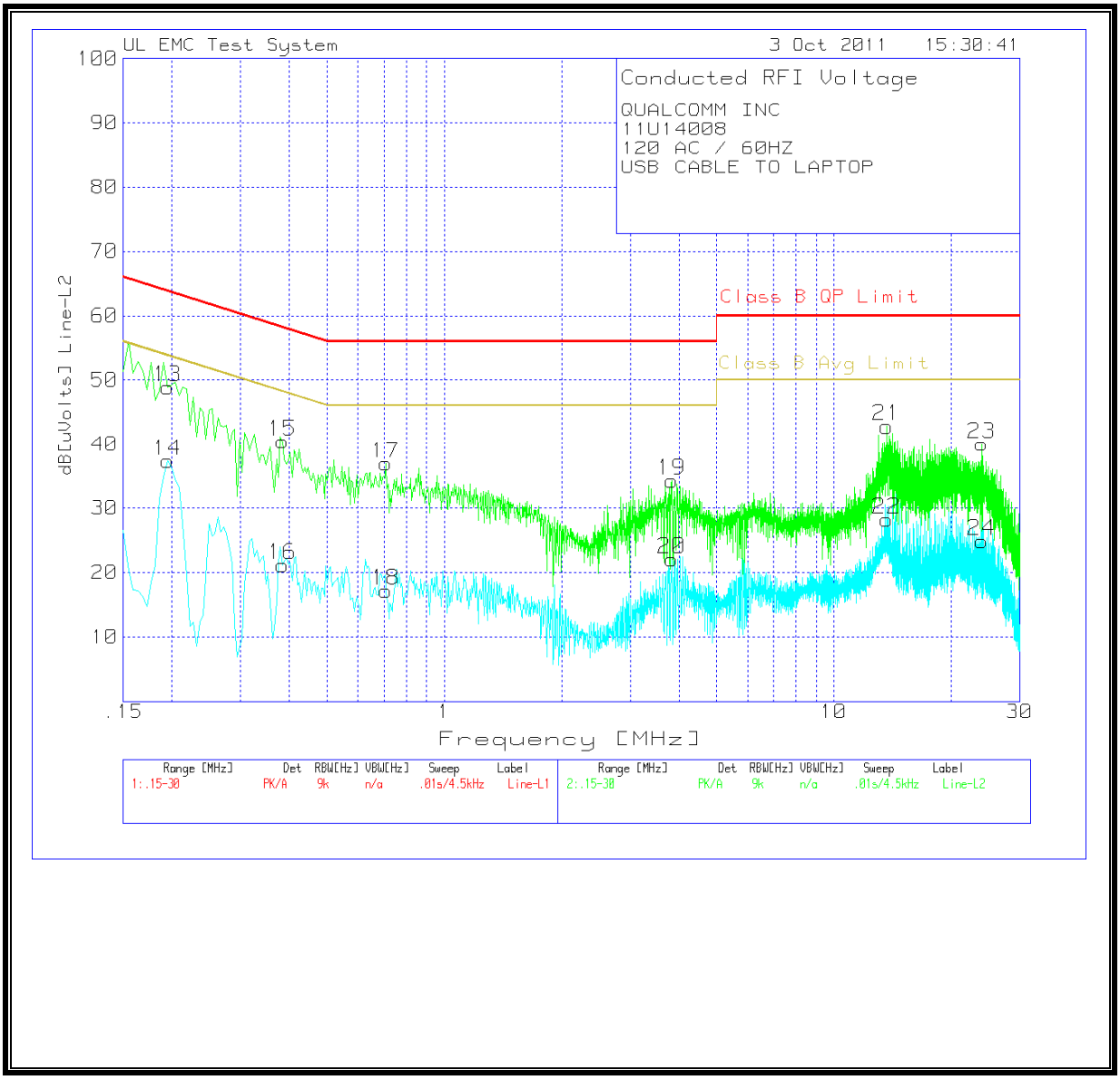
LINE 2 RESULTS



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