



TEST REPORT- EMC

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Project Number: G100613810

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Product Designation: Model: TrueCPR

Standards: EMC Directive 2004/108/EC
Medical Device Directive 93/42/EEC
IEC 60601-1-2, Edition 3: 2007
IEC/ CISPR 11: 2009+A1:2010
FCC 47CFR 15C
IC RSS-210 Issue 7: 2007
ICES-003: 2004

Tested by:

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1 Introduction and Conclusion

The tests indicated in section 2.0 were performed on the product constructed as described in section 3.0. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test Method, a list of the actual Test Equipment Used, documentation Photos, Results and raw Data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded **the product tested is compliant with the requirements of the standard(s) indicated.** The results obtained in this test report pertain only to the item(s) tested.

2 Test Summary

Section	Test full name	Test date	Result
6	Electrostatic Discharge Immunity-ESD (IEC 61000-4-2:2008)	01/27/2012	Pass
7	Radiated, Radio-Frequency, Electromagnetic Field Immunity Test (IEC 61000-4-3: 2006, A1:2007, A2:2010)	01/19-24/2012 02/06/2012 02/14/2012 02/24/2012	Pass Note (3)
8	Electrical Fast Transient (Electrical Fast Transient/Burst Immunity Test (IEC 61000-4-4: 2004, A1:2010)	N/A	Note (4) Note (5)
9	Immunity to Voltage Surge (IEC 61000-4-5:2005)	N/A	Note (4)
10	Conducted, Radio-Frequency, Electromagnetic Field Immunity (IEC 61000-4-6 :2008)	01/26/2012	Pass
11	Power Frequency Magnetic Field Immunity Test (IEC 61000-4-8:2009)	01/27/2012	Pass
12	Voltage Dips / Interruptions Immunity Tests (IEC 61000-4-11 :2004)	N/A	Note (4)
13	Tx Spurious Radiated Electromagnetic Emissions – Compression Mode (FCC Part 15.209, IC RSS-210:2007) (CISPR 11 Group 1, Class B:2009+A1:2010)	01/17/2012	Pass
14	Rx Radiated Electromagnetic Emissions - Receive/ Idle Mode (FCC Part 15.209, IC RSS-210:2007) (CISPR 11 Group 1, Class B:2009+A1:2010)	01/16/2012	Pass
15	Unintentional Radiated Electromagnetic Emissions -Data Mode (CISPR 11:2009+A1:2010, FCC Part 15.109) (ICES-003:2004)	01/18/2012	Pass
16	AC Conducted Emissions (CISPR 11:2009+A1:2010)	N/A	Note (4)
17	Telecom Port Conducted Emissions (CISPR 22:2009)	N/A	Note (5)
18	Current Harmonic Emissions (IEC 61000-3-2:2005, A1:2008, A2:2009)	N/A	Note (4)
19	Voltage Fluctuations and Flicker (IEC 61000-3-3: 2008)	N/A	Note (4)
20	Tx Radio Testing - _Fundamental & Harmonics of Fundamental (FCC 47CFR Part 15.209/ IC RSS-210:2007)	01/28/2012	Pass
21	Magnetic Field Emissions – Fundamental & harmonics (Plexus SYSRS130 & SYSRS131)	01/28/2012	Pass
22	Tx Frequency Stability (Plexus SYSRS331)	01/18/2012	Pass

Notes:

- 1) Client specifically requested compliance to IEC 60601-1-2, 3rd Edition.
- 2) IEC 60601-2-x Medical "Particular" standards do not apply to the product tested.
- 3) Product modification(s) were required to pass Radiated Immunity - Refer to Section 24 for details.
- 4) Product is internal battery-powered – test not applicable.
- 5) Product has no telecom ports or associated cables – test is not applicable.

2.1 Test Facility

Intertek Denver's testing facilities are located at 1795 Dogwood St. Suite 200 Louisville, CO 80027. The testing facility is ISO17025:2005 accredited by A2LA, our lab code is 2506.02, our VCCI registration numbers are: R-1643, C-1752 and T-1558, our FCC designation no. US1121 and our IC lab no. 2042N.

Testing contained in this test report may not be covered under the laboratories scope of accreditation. A note will be placed in the specific test section for testing not covered under the laboratories scope.

3 Description of Equipment Under Test

Equipment Under Test			
Description	Manufacturer	Model Number	Serial Number
CPR Coaching Device	Plexus	TrueCPR	ALPHA2 0012
CPR Coaching Device	Plexus	TrueCPR	ALPHA2 0030
CPR Coaching Device	Plexus	TrueCPR	ALPHA2 0036
CPR Coaching Device	Plexus	TrueCPR	ALPHA2 0041
CPR Coaching Device	Plexus	TrueCPR	ALPHA2 0043

Receive Date:	01/19/2012
Received Condition:	Good
Type:	Production Samples

Description of Equipment Under Test (provided by client)

Model: TrueCPR Coaching Device

The product provides rescuers with instantaneous feedback on chest compressions during cardiopulmonary resuscitation (CPR) in accordance with current CPR guidelines. The device is intended for use on patients in cardiac arrest (unconscious, pulse-less, not breathing normally).

Internal Battery-Powered: 6VDC (2 x Type DL123), 300mA – non-rechargeable batteries

Product Features:

- Compression depth and release (recoil) gauge
- Compression rate meter
- Metronome
- Elapsed time meter
- Inactivity Timer
- Event review statistics
- Data download with DT EXPRESS data transfer software

Modes of Operation:

- Compression – Transmitting mode (a.k.a. Session mode) – Tx enabled
- Idle/Standby – DSP is active and waiting for user action – Tx disabled
- Hibernate – Low-Power state after power button pressed – limited electronics powered
- Data – Product connected to laptop/host via USB uploading/downloading data – Tx disabled

Radio: Transmit/Receive at 12kHz fixed, 3-internal inductive loop antennas, pulsed CW

Clock Frequencies: 32kHz, 80MHz & 100MHz

Intended Use: Dry, Damp, Wet and Hazardous locations, including home, office, hospital, commercial and ambulatory.

Marketed: US, Canada and EU

Equipment Under Test Power Configuration			
Rated Voltage	Rated Current	Rated Frequency	Number of Phases
Battery 6VDC (2 x Type DL123)	300mA	-----	-----

Operating modes of the EUT:

No.	Descriptions of EUT Exercising
1	EMC Radiated Emissions – Tested in Compression Mode, Idle Mode and Data Mode per Plexus document D25303-681, Revision A - pages 13-14 of this report.
2	EMC Immunity Tests – Product configured and running in the modes of operation per Plexus document D25303-681, Revision A – pages 13-14 of this report.

3.1 Operating modes of the EUT: IEC 60601-2-x - Medical “Particular Standard” Requirements

Medical “Particular Standards” do not apply to the product tested.

3.2 Photo – Product Tested:

Model: TrueCPR

Top View



Bottom View



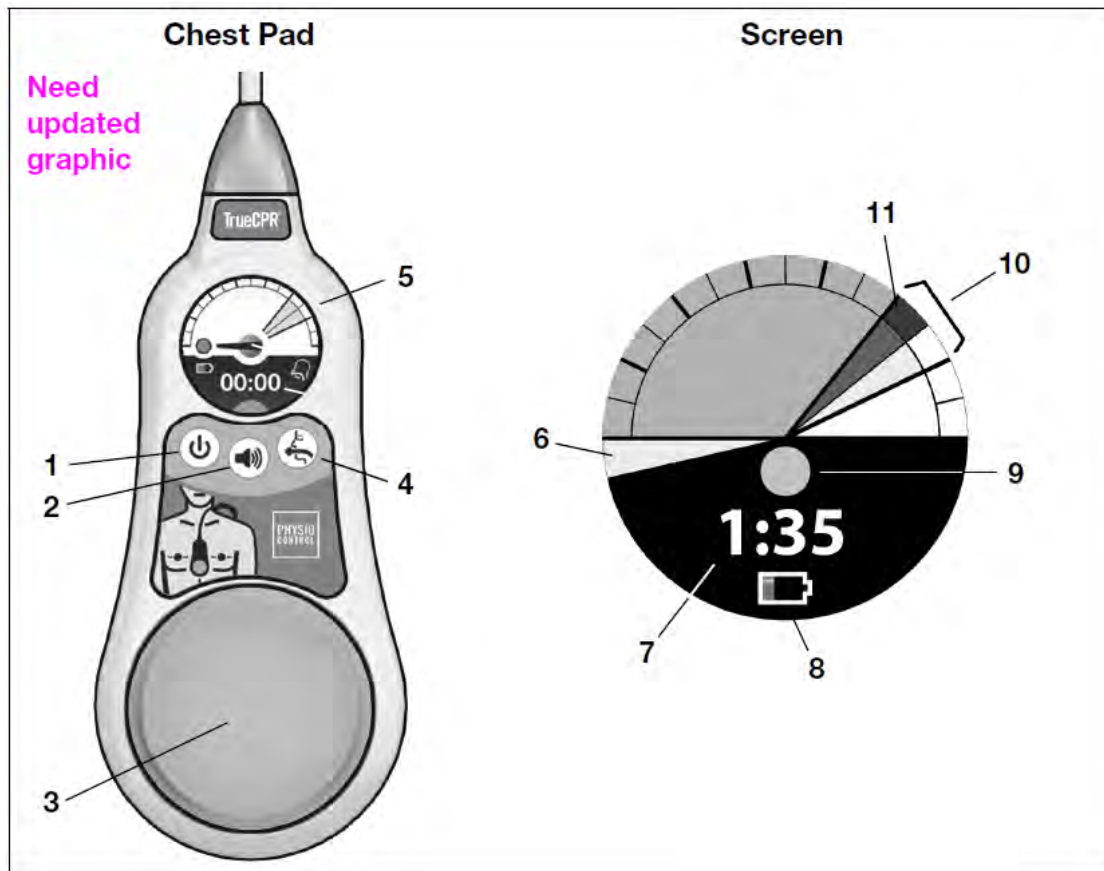
3.3 Product Features – Controls, Indicators and Connectors

Chest Pad



Back Pad



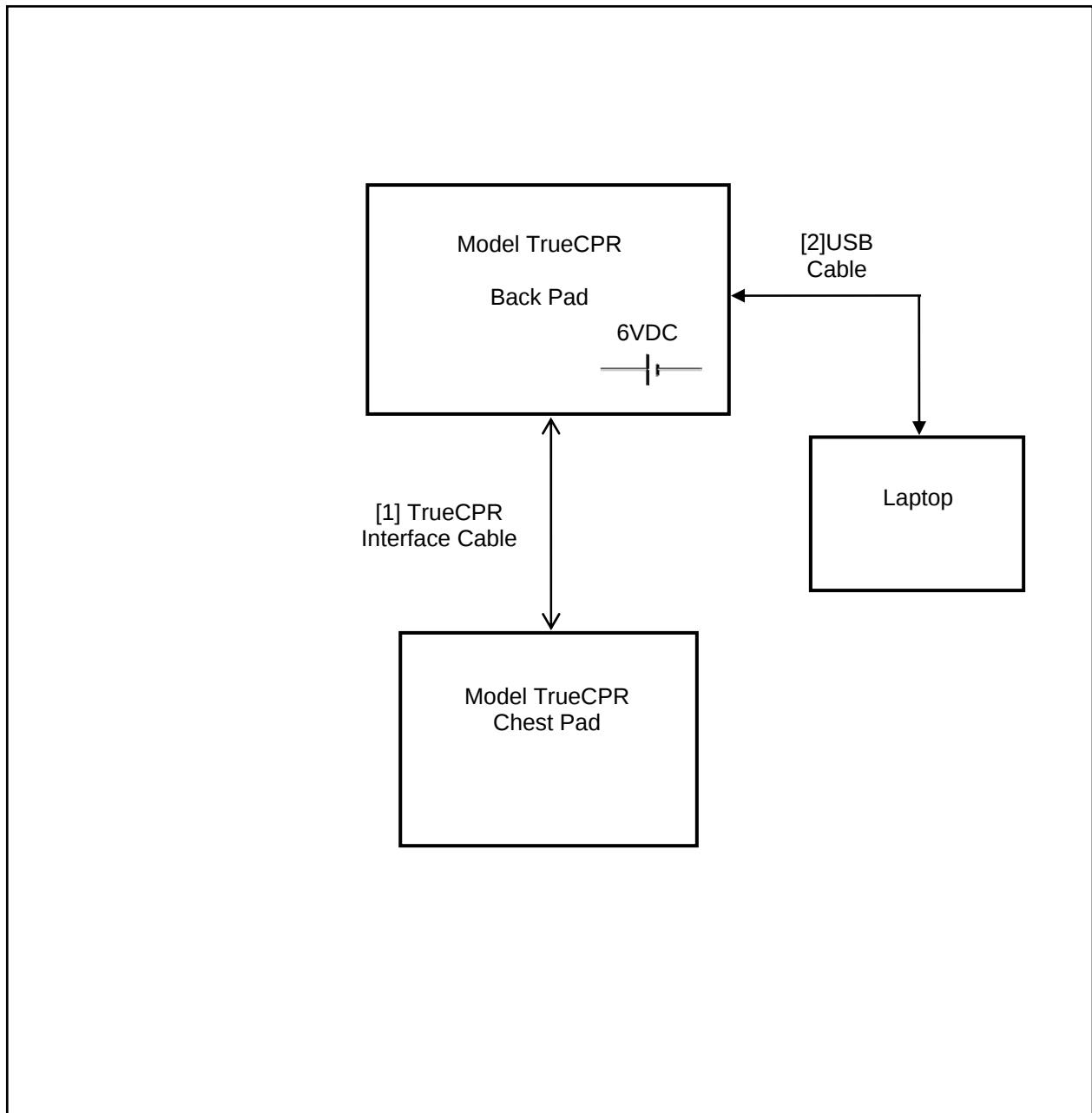


Item	Description
1	Power Button: Press green button to turn device on. Press and hold for 2 seconds to turn device off.
2	Mute Button: Press to turn metronome audio on or off. In Post-Event Review mode, press to switch between screens.
3	Palm Pad: Hand placement area.
4	Airway Button: Press to switch between metronome Airway (continuous compressions) mode and No Airway mode.
5	Screen: Main user interface for compression feedback and other indicators.
6	Recoil Target Zone: Changes from light green to dark green when compression is completely released.
7	Inactivity Timer: Appears when 5 seconds pass without compressions. Device turns off automatically after 10 minutes with no activity.
8	Low Battery Indicator: Appears when remaining battery capacity is less than 30 minutes of operation.
9	Visual Metronome: Flashes in time with audio metronome.
10	Compression Target Zone: Changes from light green to dark green when compression reaches target depth of 5–6 cm.
11	Compression Depth History: Dark green segment in outer circle shows depth of previous compression.

4 System setup including cable interconnection details, support equipment and simplified block diagram

4.1 Method: Record the details of EUT cabling, document the support equipment, and show the interconnections in a block diagram.

4.2 EUT Block Diagram:



Note: If applicable, items in dashed-line are support equipment - not directly tested.

4.3 Data:

ID	Description	Length	Shielding	Ferrites
1	TrueCPR Interface Cable	~ 0.8 meter	none	none
2	USB Cable – Garmin 325	1.2 meters	Yes - braid	yes

Support Equipment			
Description	Manufacturer	Model Number	Serial Number
Laptop Computer	HP	----	----
TrueCPR Test Fixture	Plexus	N/A	N/A

Notes:

- 1) Support equipment – A laptop computer was required as support equipment in order to download key operation parameters (depth, force, recoil and errors) from the product after each specific EMC test sequence. The data was then plotted and verified to be acceptable and within all manufacturer control limits.
- 2) A Test Fixture was utilized to apply constant force and to precisely separate (position) the chest and back pads during all testing.

5 Performance Criterion of the Equipment when tested against the immunity requirements for the European CE Mark

5.1 Method:

The equipment under test (EUT) is to be installed in accordance with the manufacturer's instructions. The installation process includes, product assembly, connecting any support equipment, connecting power and configuration of the equipment under test. All unused ports should be terminated as instructed by the test standard. The EUT should indicate normal operation in accordance with the Operation Manual.

If, as a result of the application of the tests defined in this standard, the apparatus becomes dangerous or unsafe, the apparatus shall be deemed to have failed the test.

A functional description and a definition of performance criteria, during or as a consequence of the EMC testing, shall be provided by the manufacturer.

Performance criterion A: The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.

Performance criterion B: The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed. No change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.

Performance criterion C: Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

Performance criterion D: EUT is physically damaged.

Product Specific Performance Criterion:

No.	Description
1	Specific Medical Equipment Performance Criterion per IEC 60601-1-2 described below.
2	Radiated Immunity, Conducted Immunity, AC Magnetic Field Immunity – Criterion A
3	ESD, Electrical Fast Transients (EFT), Surge & Voltage Dips – Criterion A
4	Voltage Interruptions – Criterion C (if product has no battery backup)

5.2 Plexus Performance Criterion per Document D25303-681, Revision A

1. This document applies to the design testing of the Discovery (TrueCPR) product level requirements identified in Requirements Tested above.
2. Complete Training Records Box indicating that training requirements called out in this procedure have been met.
3. Reference Design Verification Plans D21066 and D21447.
4. There is no essential performance for Discovery TrueCPR. Reference the risk analysis document D20740.
5. All EMC Testing will be conducted according to IEC 60601-1-2.
6. The unit is allowed to self reset during testing.
7. The unit must maintain the following during testing for acceptance criteria:
 - a. Accurate depth compression feedback
 - b. Accurate recoil feedback
8. All testing is completed on five samples.
9. Normal operation cannot be completed during testing so normal use must be simulated. The unit will be run in static mode. Special software is required.
 - a. The timer must be disabled.
 - b. The recoil required check must be disabled.
10. A fixture is used to apply constant force and separation of the chest pad and back pad.
11. For the unit to simulated compressions/recoil:
 - a. The unit must be in the fixture. Positioning will be described in each individual test.
 - b. The unit must be turned on and allowed to auto-zero before a force is applied to it.
 - c. Activate the force sensor by applying a constant force to the chest pad greater than 5.5 lbs of force should be applied.
 - d. Once a constant force is applied to the chest pad, move the fixture so that the chest pad so that 5 cm compression distance is simulated.
 - e. Mute and un-mute the unit. This action will trigger a user event log so that it will roughly be known what time the test was begun.
 - f. The visual metronome and depth compression needle shall move on the screen. The screen must be recorded during testing.
12. Download all data and evaluate log information for compression depth, force/recoil, and errors. The held force will be recorded in the log file and be used to calculate the accuracy of the recoil. Plexus to analyze compression and force data with a Matlab script.

5.3 Overview of allowable or unallowable medical product performance criteria during immunity testing per IEC 60601-1-2:

The medical product under test shall be able to provide basic safety and essential performance. The following product degradations, if associated with basic safety and essential performance, shall not be allowed:

- component failures
- changes in programmable parameters
- reset to factory defaults (manufacturer's presets)
- change of operating mode
- false alarms
- cessation or interruption of any intended operation, even if accompanied by an alarm
- initiation of any unintended operation, including unintended or uncontrolled motion, even if accompanied by an alarm
- error of a displayed numerical value sufficiently large to affect diagnosis or treatment
- noise on a waveform in which the noise would interfere with diagnosis, treatment or monitoring
- artifact or distortion in an image in which the artifact would interfere with diagnosis, treatment or monitoring
- failure of automatic diagnosis or treatment to diagnose or treat, even if accompanied by an alarm

Note that the medical product may exhibit limited degradation of performance (e.g. deviation from manufacturer's specifications) that does not affect basic safety or essential performance.

5.4 Performance Criterion: IEC 60601-2-x - Medical "Particular Standard" Requirements

Medical "Particular Standards" do not apply to the product tested.

Description of how performance was observed during testing:

No.	Description
1	The visual metronome and depth compression needle movement was monitored during testing.
2	The metronome audio was verified during testing.
3	The Chest Pad LCD was monitored for normal operation and accurate display information.
4	After each specific test sequence, all data from the device was downloaded via USB. All log information was verified for compression depth, force/recoil, and errors. The held force was recorded in the log file and used to calculate the accuracy of the recoil. Plexus analyzed all compression and force data with a Matlab script. Intertek witnessed the process.
5	Product error messaging was verified to be accurate, when applicable.

6 Electrostatic Discharge Immunity Test – (SYSRS242.1) (SYSRS242.2)**6.1 Method**

Unless otherwise stated no deviations from IEC/EN 61000-4-2:2008 were made.

This testing was performed at Intertek Denver, located on 1795 Dogwood Street, Suite 200, Louisville, CO 80027.

6.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
DEN-034	ESD Simulator	NOISEKEN	ESS-2002	ESS0838103	05/20/2011	05/20/2012

6.3 Results:

The sample tested was found to Comply.

6.4 Test Setup Photographs:

ESD – Test Setup

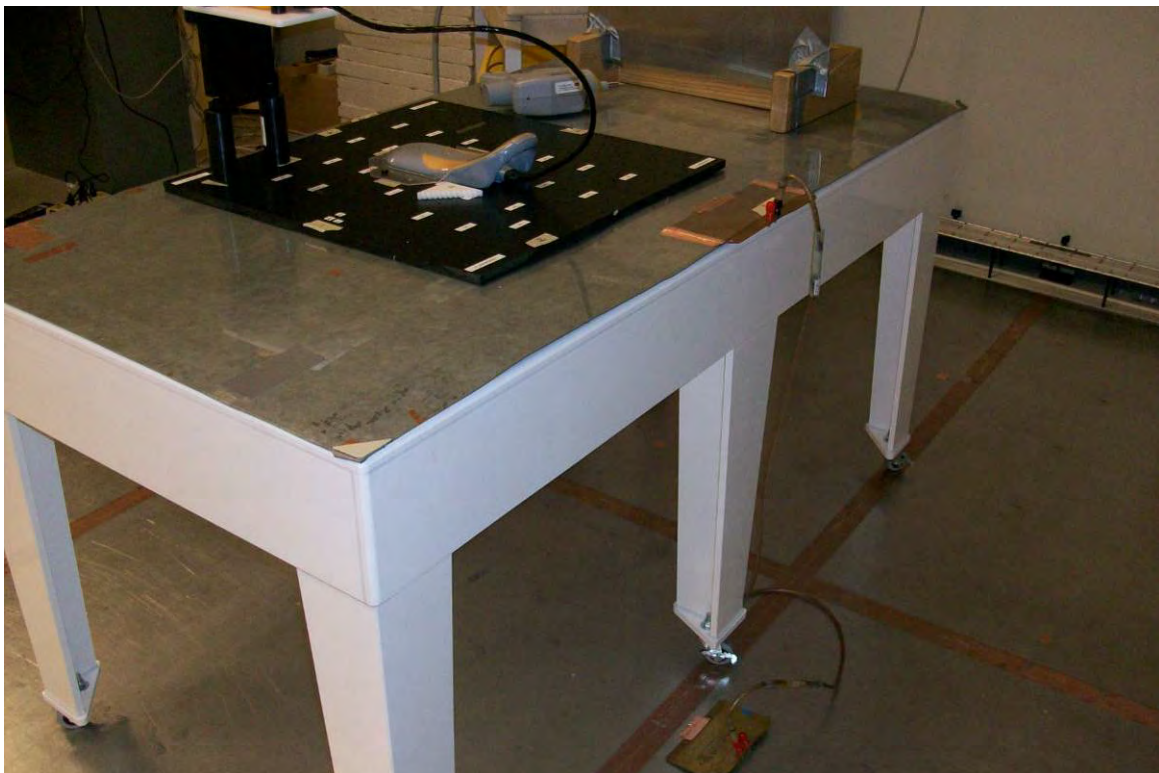
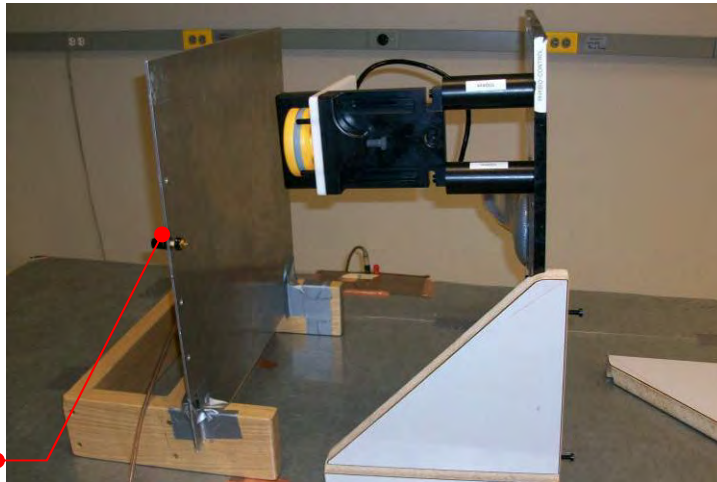
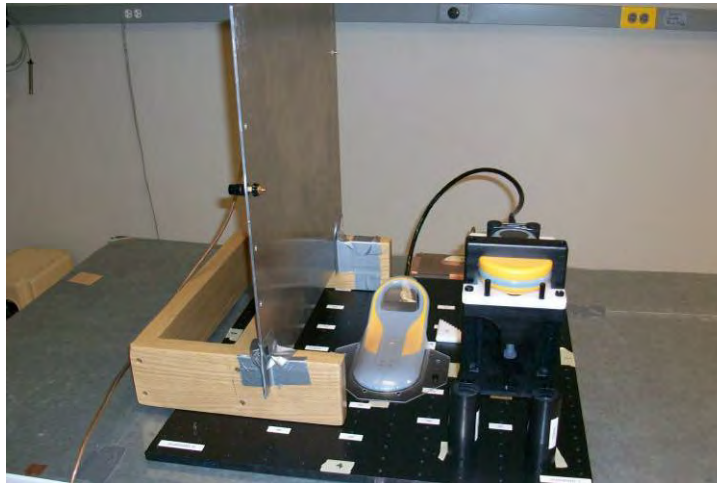


Photo:

ESD Test Setup – Vertical Coupling Plane



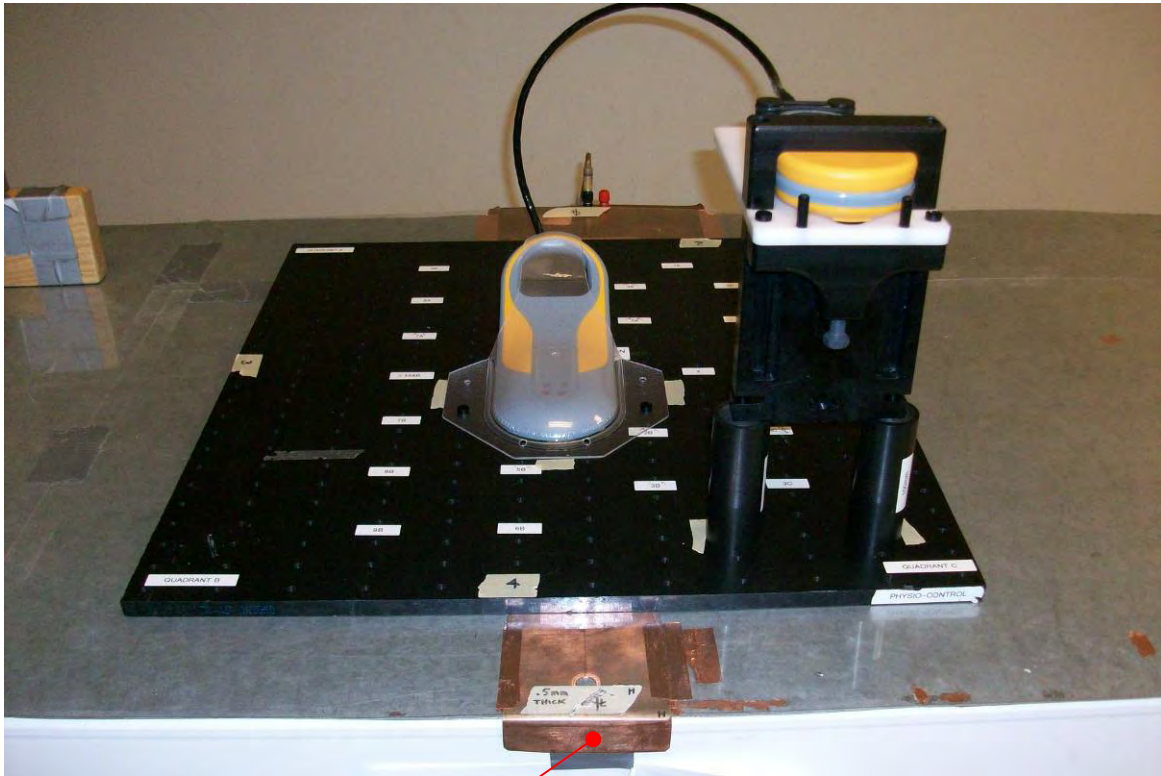
ESD Discharge
point – VCP 10 cm
from product



4-sides tested each device – sample sides shown

Photo:

ESD Test Setup – Horizontal Coupling Plane

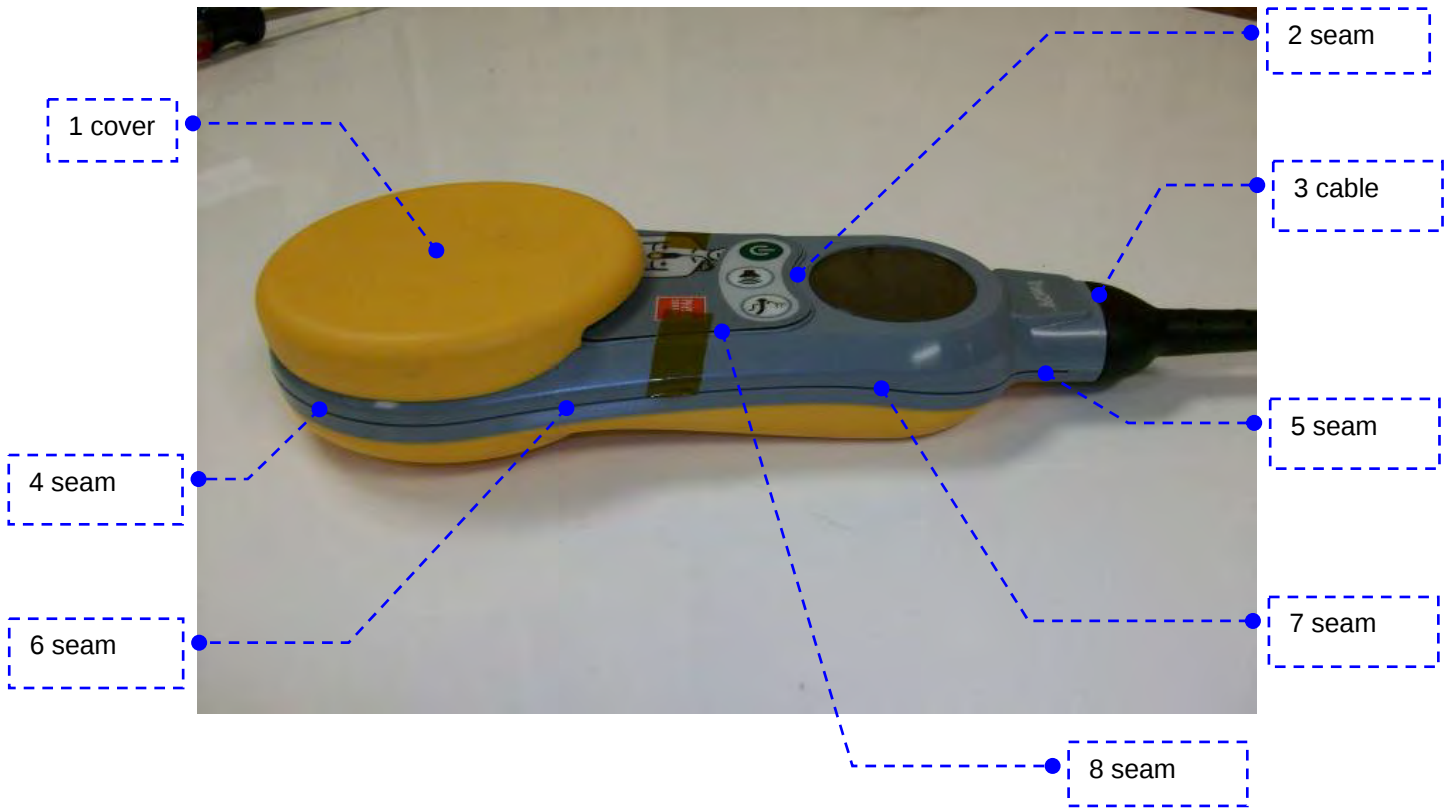


ESD Discharge point
10 cm from edge of
product- (4) sides tested

ESD Test Point Photo:

ESD Map #1

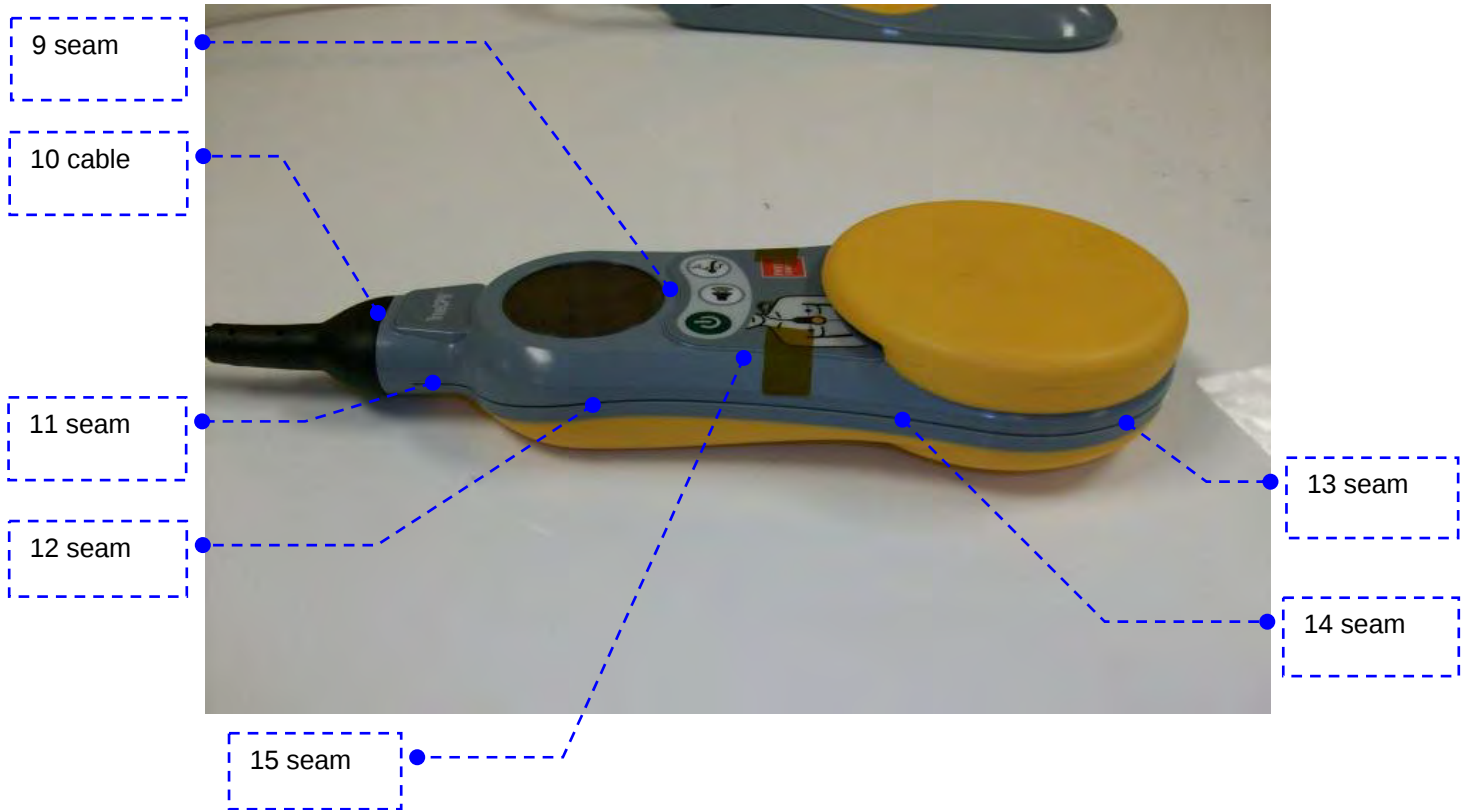
Note: Red denotes direct contact discharge – Blue dashed denotes air discharge



ESD Test Point Photo:

ESD Map #2

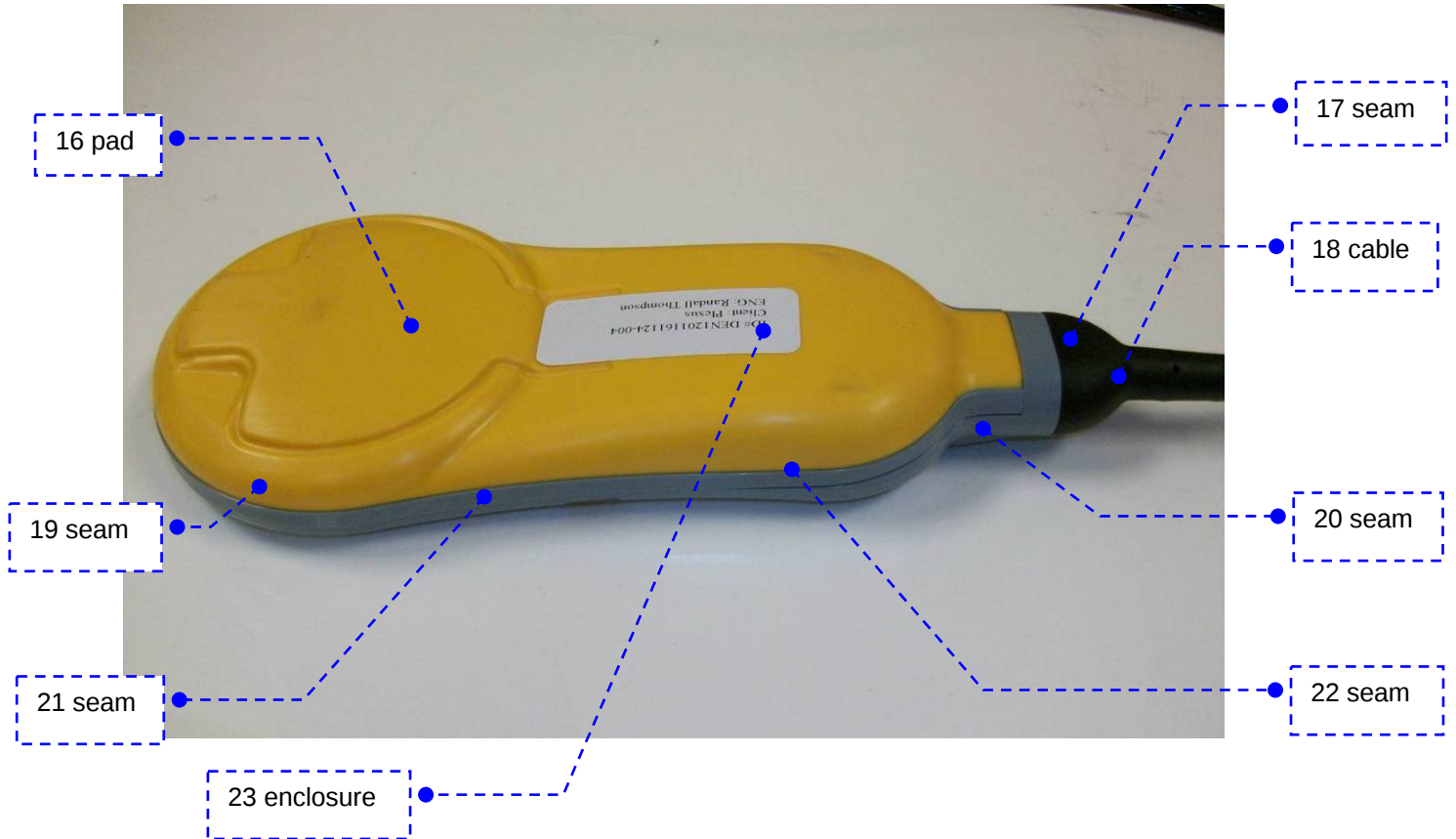
Note: Red denotes direct contact discharge – Blue dashed denotes air discharge



ESD Test Point Photo:

ESD Map #3

Note: Red denotes direct contact discharge – Blue dashed denotes air discharge



ESD Test Point Photo:**ESD Map #4**

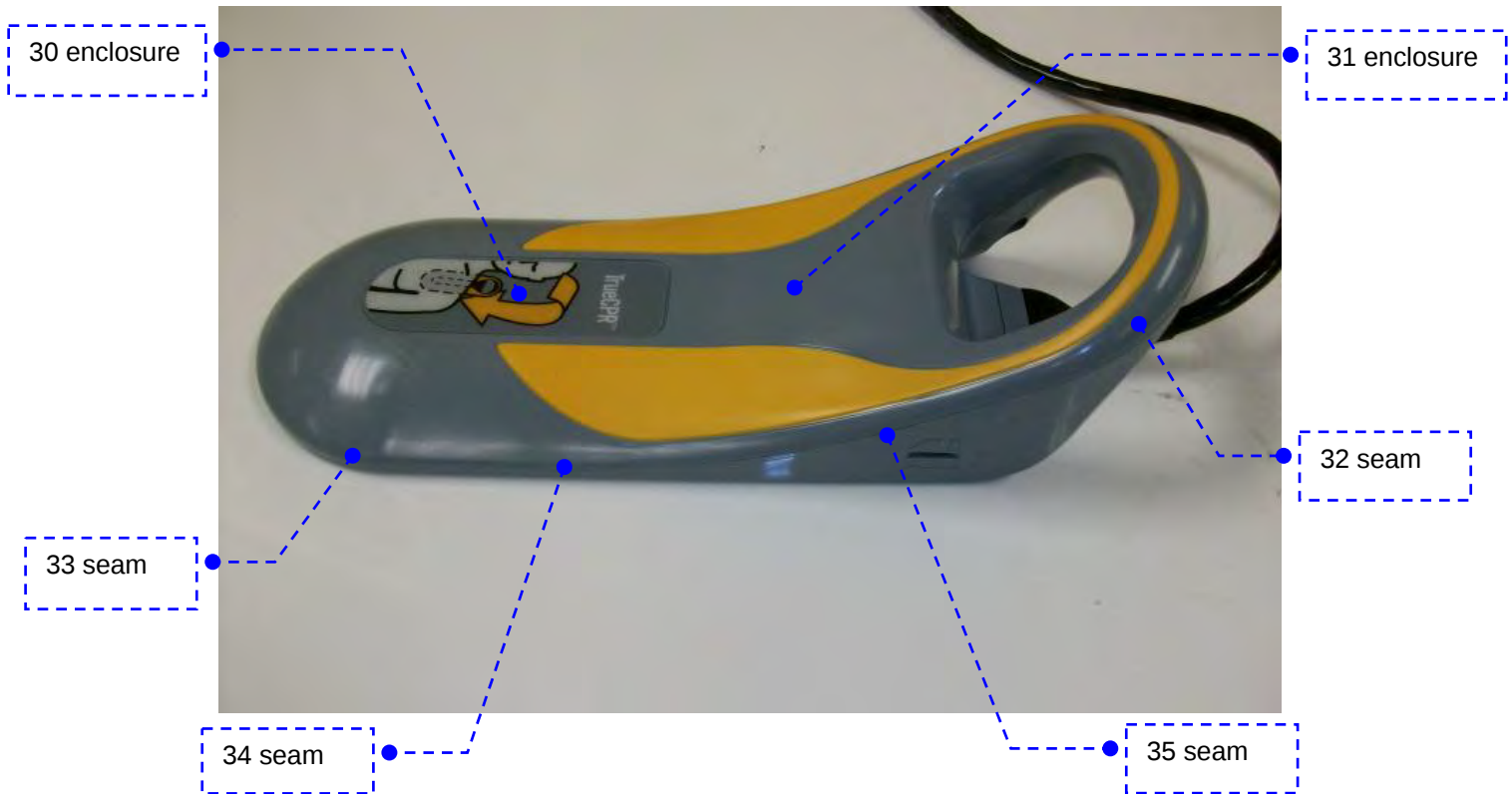
Note: Red denotes direct contact discharge – Blue dashed denotes air discharge



ESD Test Point Photo:

ESD Map #5

Note: Red denotes direct contact discharge – Blue dashed denotes air discharge



ESD Test Point Photo:

ESD Map #6

Note: Red denotes direct contact discharge – Blue dashed denotes air discharge



ESD Test Point Photo:

ESD Map #7

Note: Red denotes direct contact discharge – Blue dashed denotes air discharge



ESD Test Point Photo:

ESD Map #8

Note: Red denotes direct contact discharge – Blue dashed denotes air discharge



ESD Test Point Photo:

ESD Map #9

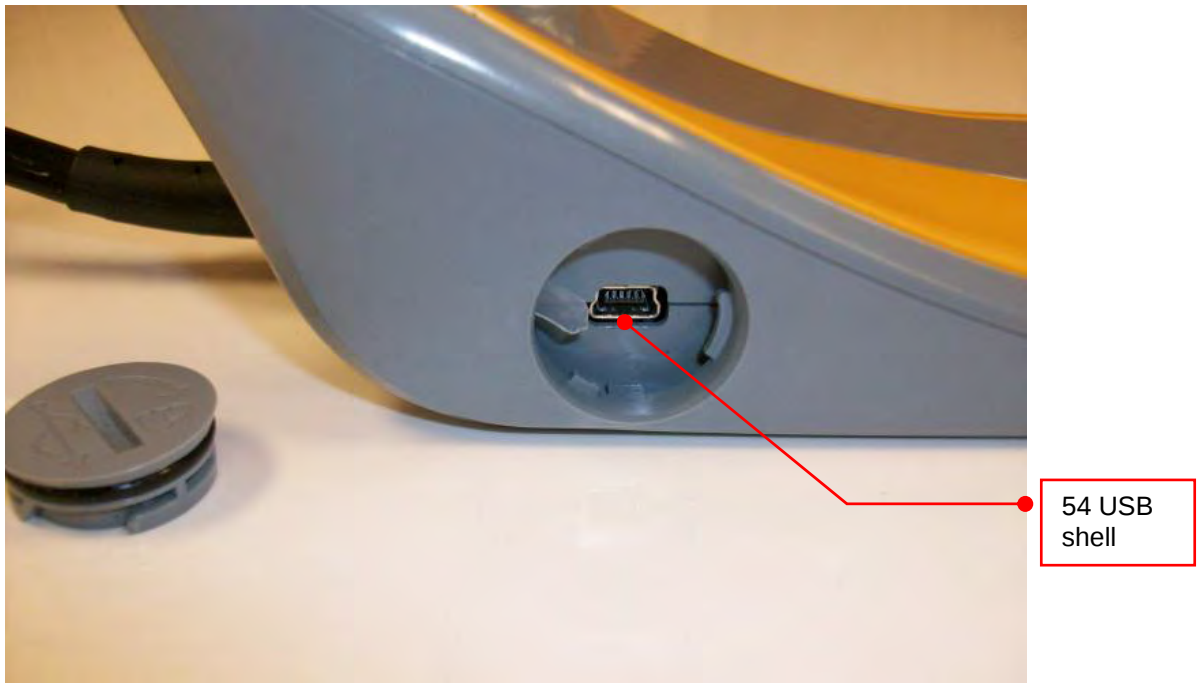
Note: Red denotes direct contact discharge – Blue dashed denotes air discharge



ESD Test Point Photo:

ESD Map #10

Note: Red denotes direct contact discharge – Blue dashed denotes air discharge



Not Shown Test Point 55– Tested +VDC Battery Terminal +/- 6kV Direct Contact

6.5 Test Data:

Test Point	Discharge Voltage Type	Test Voltages, Polarities and Result Classification												
		2 kV		4 kV		6 kV		8 kV			15 kV		kV	
		Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg		Pos	Neg	Pos	Neg
HCP	Contact	A(1)	A(1)	A(1)	A(1)	A(1)	A(1)	---	---	Air Discharges only above 8 kV				
VCP	Contact	A(2)	A(2)	A(2)	A(2)	A(2)	A(2)	---	---					
1	Air	ND	ND	ND	ND	---	---	ND	ND					
2	Air	ND	ND	ND	ND	---	---	ND	ND					
3	Air	ND	ND	ND	ND	---	---	ND	ND					
4	Air	ND	ND	ND	ND	---	---	ND	ND					
5	Air	ND	ND	ND	ND	---	---	ND	ND					
6	Air	ND	ND	ND	ND	---	---	ND	ND					
7	Air	ND	ND	ND	ND	---	---	ND	ND					
8	Air	ND	ND	ND	ND	---	---	ND	ND					
9	Air	ND	ND	ND	ND	---	---	ND	ND					
10	Air	ND	ND	ND	ND	---	---	ND	ND					
11	Air	ND	ND	ND	ND	---	---	ND	ND					
12	Air	ND	ND	ND	ND	---	---	ND	ND					
13	Air	ND	ND	ND	ND	---	---	ND	ND					
14	Air	ND	ND	ND	ND	---	---	ND	ND					
15	Air	ND	ND	ND	ND	---	---	ND	ND					
16	Air	ND	ND	ND	ND	---	---	ND	ND					
17	Air	ND	ND	ND	ND	---	---	ND	ND					
18	Air	ND	ND	ND	ND	---	---	ND	ND					
19	Air	ND	ND	ND	ND	---	---	ND	ND					
20	Air	ND	ND	ND	ND	---	---	ND	ND					
21	Air	ND	ND	ND	ND	---	---	ND	ND					
22	Air	ND	ND	ND	ND	---	---	ND	ND					
23	Air	ND	ND	ND	ND	---	---	ND	ND					
24	Air	ND	ND	ND	ND	---	---	ND	ND					
25	Air	ND	ND	ND	ND	---	---	ND	ND					
26	Air	ND	ND	ND	ND	---	---	ND	ND					
27	Air	ND	ND	ND	ND	---	---	ND	ND					
28	Air	ND	ND	ND	ND	---	---	ND	ND					
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36	Air	ND	ND	ND	ND	---	---	ND	ND					
37	Air	ND	ND	ND	ND	---	---	ND	ND					
38	Air	ND	ND	ND	ND	---	---	ND	ND					
39	Air	ND	ND	ND	ND	---	---	ND	ND					
40	Air	ND	ND	ND	ND	---	---	ND	ND					
41	Air	ND	ND	ND	ND	---	---	ND	ND					
42	Air	ND	ND	ND	ND	---	---	ND	ND					
43	Air	ND	ND	ND	ND	---	---	ND	ND					
44	Air	ND	ND	ND	ND	---	---	ND	ND					

6.6 Test Data:

Test Point	Discharge Voltage Type	Test Voltages, Polarities and Result Classification												
		2 kV		4 kV		6 kV		8 kV		Air Discharges only above 8 kV	15 kV		kV	
		Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg		Pos	Neg	Pos	Neg
45	Air	ND	ND	ND	ND	---	---	ND	ND	kV				
46	Air	ND	ND	ND	ND	---	---	ND	ND					
47	Air	ND	ND	ND	ND	---	---	ND	ND					
48	Air	ND	ND	ND	ND	---	---	ND	ND					
49	Air	ND	ND	ND	ND	---	---	ND	ND					
50	Air	ND	ND	ND	ND	---	---	ND	ND					
51	Air	ND	ND	ND	ND	---	---	ND	ND					
52	Air	ND	ND	ND	ND	---	---	ND	ND					
53	Air	ND	ND	ND	ND	---	---	ND	ND					
54	Contact	A	A	A	A	A	A	---	---					
55	Contact	A	A	A	A	A	A	---	---					

Standard: EN 61000-4-2:2008

Test Levels: 8kV air / 6 kV contact

Input Voltage: 6VDC Battery

Number of Discharges/Point/Polarity: Contact: 10, Air: 10

ESD Observed on Oscilloscope: ----

Ambient Temperature: 23.8 °C

Relative Humidity: 39.8 %

Atmospheric Pressure: 83.7 kPa

Notes:

- (1) Discharged to Horizontal Coupling Plane, 4 locations around product
- (2) Discharged to Vertical Coupling Plane, 4 sides of product
- (3) "ND" refers to no air discharge to intended test point – ESD generator tip fully charged
- (4) No air discharge to intended test point - discharged to adjacent metal

Deviations, Additions, or Exclusions: None

7 Radiated, Radio-Frequency, Electromagnetic Field Immunity Test – (SYSRS242.3)**7.1 Method**

Unless otherwise stated no deviations from IEC/EN 61000-4-3:2010 were made.

This testing was performed at Intertek Denver, located on 1795 Dogwood Street, Suite 200, Louisville, CO 80027.

7.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
18781	Signal Generator	MARCONI INSTRUMENTS	2031	119537	01/24/2012	01/24/2013
18739	Power Meter (set 3)	Hewlett-Packard	436A	2446A21023	11/22/2011	11/22/2012
18740	Power Sensor (set 3)	Hewlett-Packard	8482A	2349A14570	11/22/2011	11/22/2012
18779	Broadband amplifier (80MHz - 1GHz)	Amplifier Research	200W1000M7A	16049	VBU	VBU
18764	Bilog Antenna	EMCO	3142	9706-1190	VBU	VBU
18777	40 dB Directional Coupler	WERLATONE	C3736	4153	05/04/2011	05/04/2012
18769	Directional Coupler (1.7-12.4 GHz)	Hewlett-Packard	779D	1144A05973	05/04/2011	05/04/2012
18796	High-gain Horn Antenna	Amplifier Research	AT4510	27653	VBU	VBU
DEN-003	High Freq Amplifier	Amplifier Research	10S1G4A	0327889	VBU	VBU
SW-7	Software application for Radiated and Conducted Immunity.	CKC	EMITest	V. 3.15.1	VBU	VBU
18706	Field Monitor	Amplifier Research	FM 5004	20595	01/18/2012	01/18/2013
18708	RF Electric Field Probe	Amplifier Research	FP 5080	20238	01/18/2012	01/18/2013

7.3 Results:

The sample tested was found to Comply.

7.4 Setup Photographs:

Radiated Immunity (Front View)



80MHz to 1000MHz

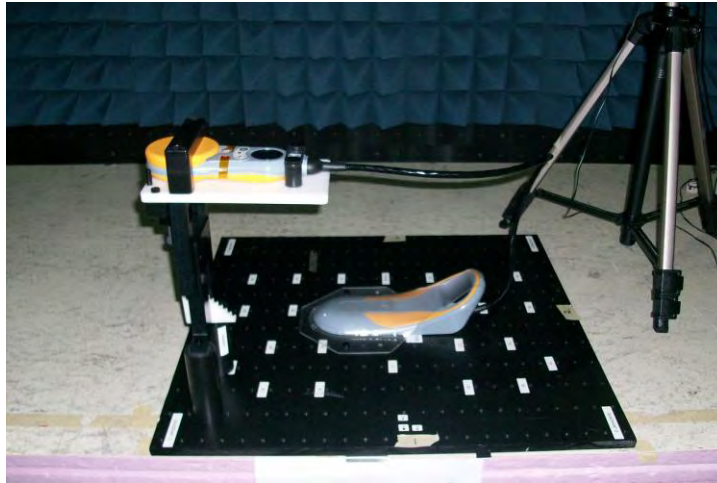


1GHz to 2.5 GHz

Photo:

Radiated Immunity (Axes Tested)

Product Flat on Table



Product Vertical



Product Vertical & Rotated 90 Degrees



7.5 Test Data:

Field Level (V/m)	Frequency Range MHz	Antenna Polarity, Azimuths and Result Classification							
		Vertical				Horizontal			
		0	90	180	270	0	90	180	270
3	80 - 2500	A	A	A	A	A	A	A	A

Standard: EN 61000-4-3:2010Actual Test Levels: 3 V/m, 80-2700 MHzInput Voltage: 6VDC BatteryObserved on field probe: AR Field Probe/MonitorAmbient Temperature: 23.4° CRelative Humidity: 28.1 %Atmospheric Pressure: 82.9 kPa

Notes:

- 1) Product tested in 3-Axes – refer to photos for details

Deviations, Additions, or Exclusions: Product tested up to 2700 MHz (2500 MHz required).

8 Electrical Fast Transient/Burst Immunity Test – (Test not Applicable)**8.1 Method**

Unless otherwise stated no deviations from IEC/EN 61000-4-4:2004 were made.

This testing was performed at Intertek Denver, located on 1795 Dogwood Street, Suite 200, Louisville, CO 80027.

8.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
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8.3 Results:

Product is battery-powered and has no I/O or Signals cables > 3-meters – test not required.

8.4 Setup Photographs:**8.5 Test Data:**

Test Point	Coupling Method	Test Voltages, Polarities, and Result Classification									
		0.25kV		0.5kV		1 kV		2 kV		4 kV	
		pos	neg	pos	neg	pos	neg	pos	neg	pos	neg
VAC/ Hz											
Power - L1	Direct			---	---	---	---	---	---		
Power - L2	Direct			---	---	---	---	---	---		
Power - PE	Direct			---	---	---	---	---	---		
All Lines (L1, L2, PE)	Direct			---	---	---	---	---	---		
VAC/ Hz											
Power - L1	Direct			---	---	---	---	---	---		
Power - L2	Direct			---	---	---	---	---	---		
Power - PE	Direct			---	---	---	---	---	---		
All Lines (L1, L2, PE)	Direct			---	---	---	---	---	---		
Cable 1	Clamp			---	---	---	---	---	---		

Standard: EN 61000-4-4:2004
Input Voltage: _____

Observed on _____
Oscilloscope: _____

Ground Strap Used ---

Spec Test Levels: +/- 2kV Power
+/- 1kV Cable

Ambient Temperature: ° C

Relative Humidity: %

Atmospheric Pressure: kPa

Deviations, Additions, or Exclusions:

9 Immunity to Voltage Surge - (Test not Applicable)

9.1 Method

Unless otherwise stated no deviations from IEC/EN 61000-4-5:2005 were made.

This testing was performed at Intertek Denver, located on 1795 Dogwood Street, Suite 200, Louisville, CO 80027.

9.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
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9.3 Results:

Product is battery-powered and has no I/O or Signal cables > 30-meters – test not required.

9.4 Setup Photographs:

9.5 Test Data:

Test	Test Voltages, Polarities, and Result Classification							
	0.5kV		1kV		2kV		4kV	
	pos	neg	pos	neg	pos	neg	pos	neg
Power – VAC/Hz Common Mode Tests								
L1-PE, at 0 deg	---	----	---	---	---	---		
L1-PE, at 90 deg	---	----	---	---	---	---		
L1-PE, at 180 deg	---	----	---	---	---	---		
L1-PE, at 270 deg	---	----	---	---	---	---		
N-PE, at 0 deg	---	----	---	---	---	---		
N-PE, at 90 deg	---	----	---	---	---	---		
N-PE, at 180 deg	---	----	---	---	---	---		
N-PE, at 270 deg	---	----	---	---	---	---		
Power – VAC/Hz Differential Mode Tests								
L1-N, at 0 deg	---	----	---	---				
L1-N, at 90 deg	---	----	---	---				
L1-N, at 180 deg	---	----	---	---				
L1-N, at 270 deg	---	----	---	---				
Telecom/Network - Cable Tests								
Cable (1)	---	---	---	---				

Standard: <u>EN 61000-4-5:2005</u> Input Voltage: _____ Observed on SA <u>Current Probe/SA</u>	Spec Test Levels: <u>+/- 1kV Differential Mode</u> <u>+/- 2kV Common Mode</u> Ambient Temperature: <u>° C</u> Relative Humidity: <u>%</u> Atmospheric Pressure: <u>kPa</u>
--	--

Test Matrix	Line to Physical Earth (ground)	Line to Line (or Neutral)
AC:	+/- 2 kV Common Mode	+/- 1kV Differential Mode
DC:	Not Applicable	Not Applicable
Indoor Signal:	Not Applicable	Not Applicable
Outdoor Signal:	Not Applicable	Not Applicable

Deviations, Additions, or Exclusions:

10 Conducted, Radio-Frequency, Electromagnetic Field Immunity - (SYSRS242.4)**10.1 Method**

Unless otherwise stated no deviations from IEC/EN 61000-4-6:2008 were made.

This testing was performed at Intertek Denver, located on 1795 Dogwood Street, Suite 200, Louisville, CO 80027.

10.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
18781	Signal Generator	MARCONI INSTRUMENTS	2031	119537	01/24/2012	01/24/2013
18739	Power Meter (set 3)	Hewlett-Packard	436A	2446A21023	11/22/2011	11/22/2012
18740	Power Sensor (set 3)	Hewlett-Packard	8482A	2349A14570	11/22/2011	11/22/2012
18724	6 db Attenuator	JFW	50FH-006-100	00332	VBU	VBU
18763	30 DB Directional Coupler	WERLATONE	C5091	5768	05/04/2011	05/04/2012
DEN-030	100W Amplifier – 10kHz to 250MHz	Amplifier Research	100A250A	-----	VBU	VBU
18691	Bulk Clamp Injection Probe	Fisher Scientific	F-120-2	60	04/18/2011	04/18/2012
SW-7	Software application for Radiated and Conducted Immunity.	CKC	EMITest	V. 3.15.1	VBU	VBU
18673	RF Current Probe 10kHz – 250MHz	Fisher Custom Comm.	F-33-1	356	04/18/2011	04/18/2012
18788	Spectrum Analyzer	Hewlett-Packard	8566B-Mil-Std	2430A00759	07/27/2011	07/27/2012

10.3 Results:

The sample tested was found to Comply.

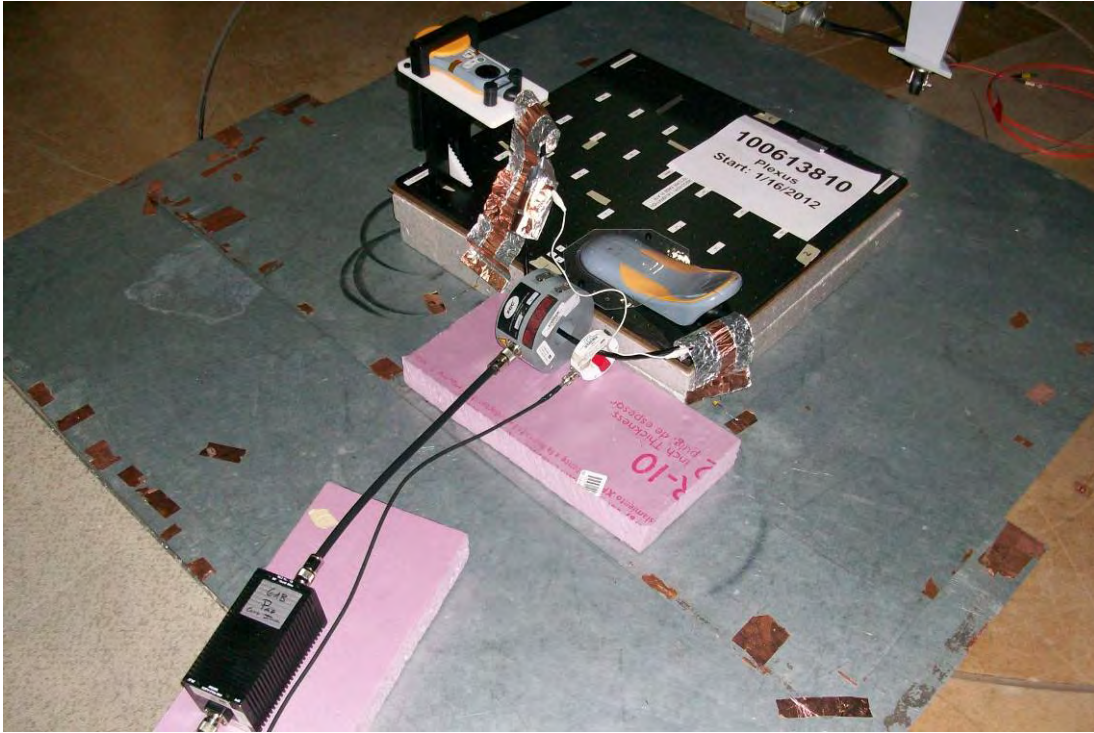
10.4 Setup Photographs:**Conducted Immunity (Cable Port)**

Photo:

Conducted Immunity (Cable Port)

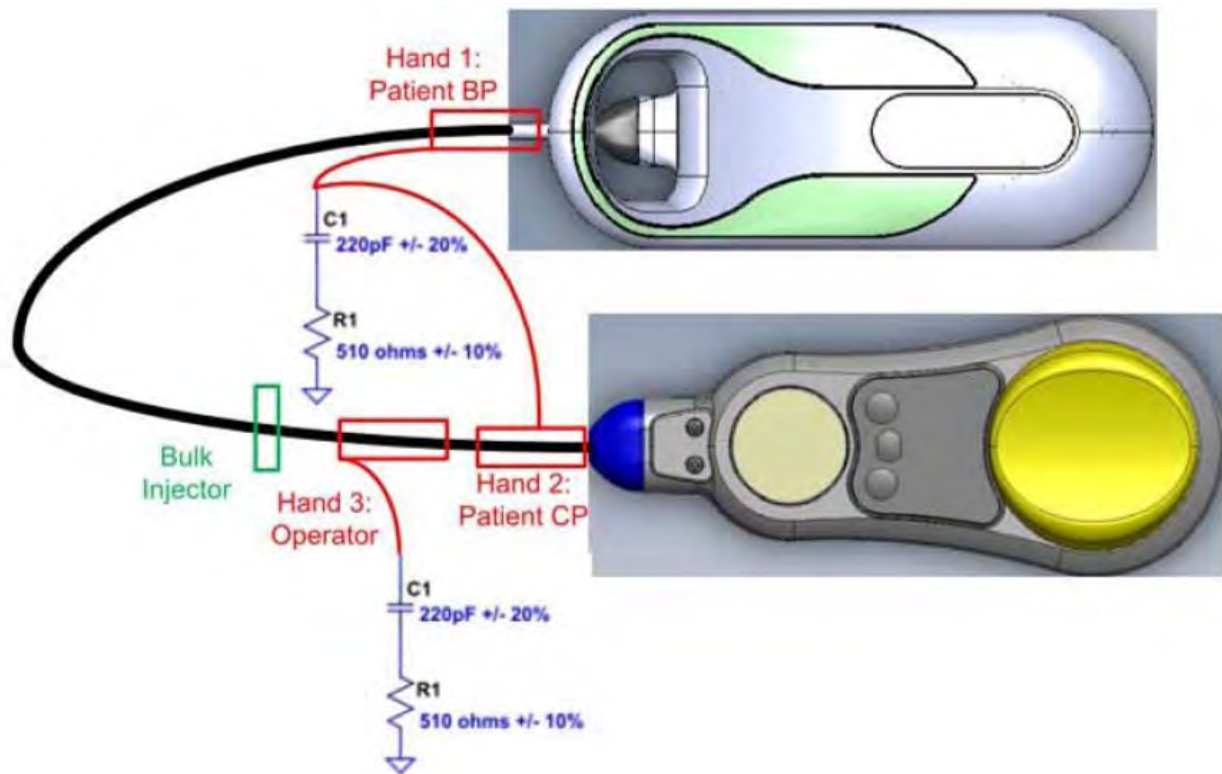
Artificial Hands – Chest Pad Cable Port



Artificial Hand – Back Pad Cable Port



Details of Artificial Hand – Conducted Immunity



10.5 Test Data:

Injection Device Type	Port Description	Test Level (Vrms)	Result Classification
Power Tests – 100VAC/50Hz			
CDN	AC Power Input	---	---
Power Tests – 100VAC/50Hz			
CDN	AC Power Input	---	---
I/O Cable & Signal Tests			
Bulk Injection Clamp	Chest Pad Cable Port	3	A
Bulk Injection Clamp	Back Pad Cable Port	3	A

Standard: EN 61000-4-6: 2008
Input Voltage: 6VDC Battery

Spec Test Levels: 3 Vrms Power Port
3 Vrms Cable Port

Ambient Temperature: 23.4° C
Relative Humidity: 28.1 %

Injected Disturbance RF Current probe & spectrum
Verified analyzer

Atmospheric Pressure: 82.7 kPa

Notes:

- 1) Product is internal battery-powered – AC power port test not applicable.
- 2) Artificial hands were attached to the cable during testing – refer to detailed drawing.

Deviations, Additions, or Exclusions: None

11 Power Frequency Magnetic Field Immunity Test – (SYSRS242.5)**11.1 Method**

Unless otherwise stated no deviations from IEC/EN 61000-4-8:2009 were made.

This testing was performed at Intertek Denver, located on 1795 Dogwood Street, Suite 200, Louisville, CO 80027.

11.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
18705	Auto Transformer	POWERSTAT	3PN226	124202	VBU	VBU
18719	Digital Multimeter	Hewlett-Packard	34401A	3146A73916	06/01/2011	06/01/2012
18784	Loop sensor	SOLAR	7334-1	927606	10/29/2011	10/29/2012

11.3 Results:

The sample tested was found to Comply.

11.4 Setup Photographs:

AC Magnetic Immunity – AC Magnetic Field Calibration



Photo:

AC Magnetic Immunity – Axis 1

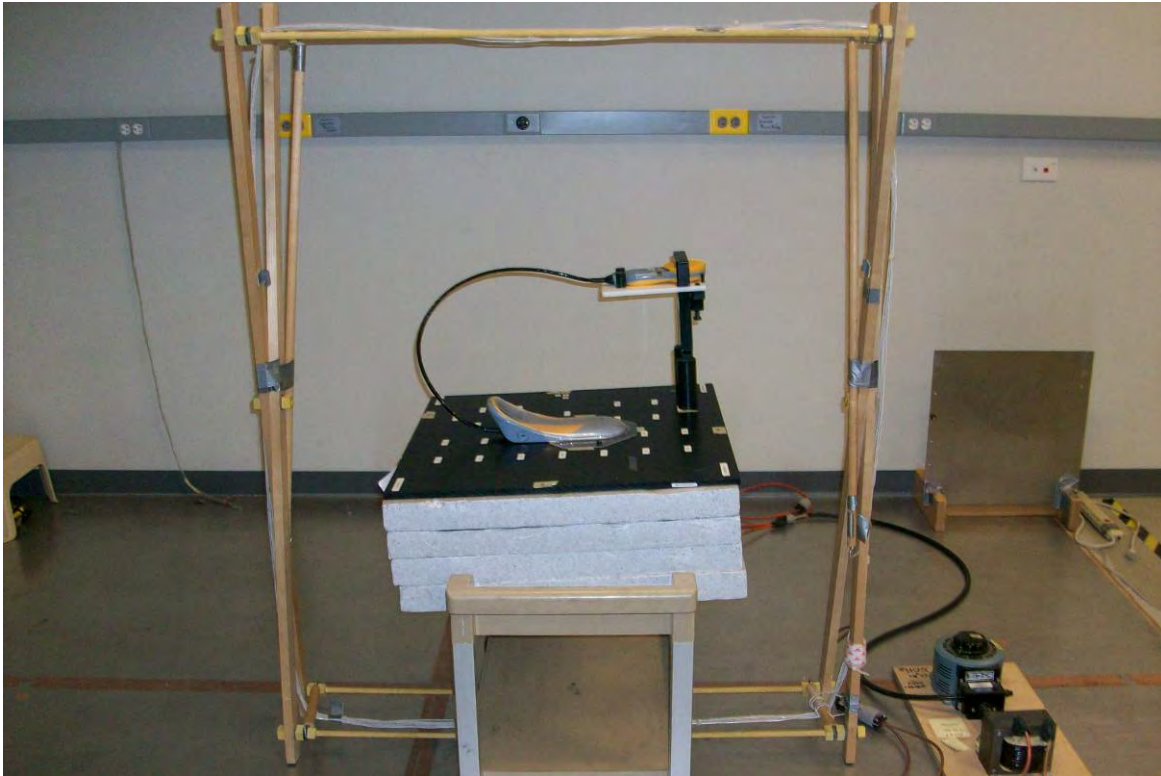


Photo:

AC Magnetic Immunity – Axis 2

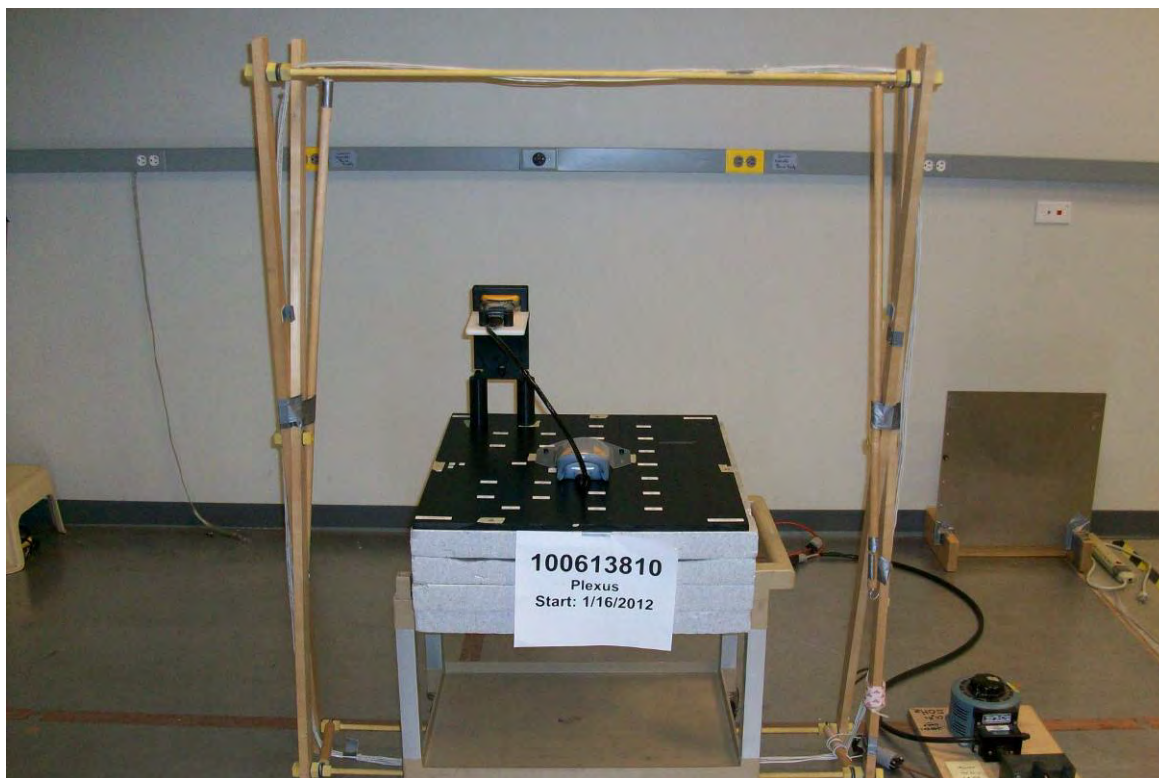
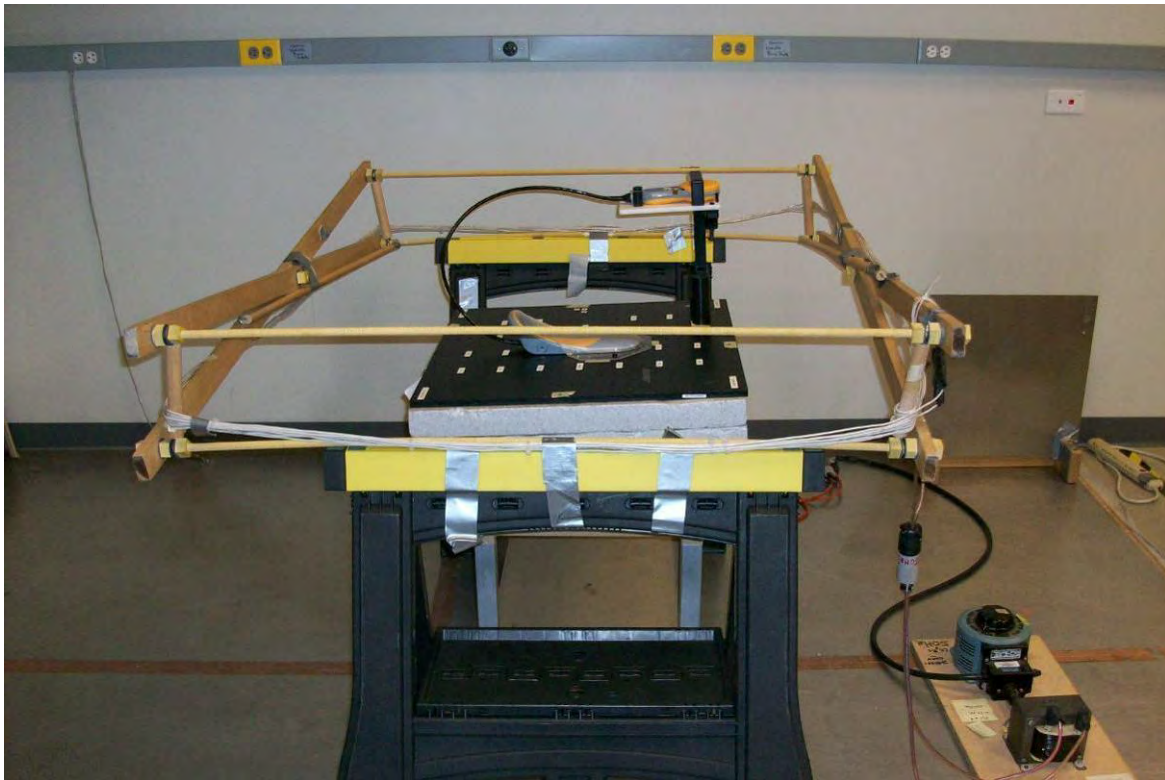


Photo:

AC Magnetic Immunity – Axis 3



11.5 Test Data:

Test Location/ Mode/ EUT AC Input	Test Level (A/m)	Frequency (Hz)	Result Classification		
			X - Axis	Y - Axis	Z - Axis
230VAC/ 50Hz					
Enclosure/Operating	3	50	A	A	A
230VAC/ 60Hz					
Enclosure/Operating	3	60	A	A	A

Standard: EN 61000-4-8:2009
Input Voltage: 6VDC Battery

Spec Test Levels: 3 A/m
Ambient Temperature: 23.3 °C
Relative Humidity: 41.4 %
Atmospheric Pressure: 83.2 kPa

Notes:

- 1) None

Deviations, Additions, or Exclusions: Product was tested and passed 30A/m – 3 A/m required.

12 Voltage Dips / Interruptions Immunity Tests – (Test not Applicable)**12.1 Method**

Unless otherwise stated no deviations from IEC/EN 61000-4-11:2004 were made.

This testing was performed at Intertek Denver, located on 1795 Dogwood Street, Suite 200, Louisville, CO 80027.

12.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
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12.3 Results:

Product is battery-powered – test not required.

12.4 Setup Photographs:**12.5 Test Data:**

Specification	Rated Voltage (Vac)	Frequency (Hz)	Voltage Test Level (% Nom)	Voltage Dip (%)	Test Voltage (Vac)	Duration (Cycles)	Result Classification	
							Test Spec	Test Result

Voltage Dips VAC/ Hz								
Test Specification #1	---	---	< 5	> 95	---	0.5	A	---
Test Specification #2	---	---	40	60	---	5	A	---
Test Specification #3	---	---	70	30	---	25	A	---
Voltage Interruption VAC/ Hz								
Test Specification #1	---	---	< 5	> 95	---	---	C	---

Standard: EN 61000-4-11:2004
Input Voltage: _____

Test Levels: See Matrix Above

Ambient Temperature: °C
Relative Humidity: %
Atmospheric Pressure: kPa

Deviations, Additions, or Exclusions:

13 Tx Spurious Radiated Electromagnetic Emissions – Product in Compression Mode – (SYSRS11) (SYSRS315) (SYSRS242.6)

13.1 Method

The test methods used comply with ANSI C63.4 and CISPR 16. Unless otherwise stated no deviations were made from CISPR 11 Group 1, Class B:2009+A1:2010, FCC Part 15.209 and IC RSS-210:2007, Clause 2.6, Table 2 & Table 3.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

13.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
18913	Spectrum Analyzer	Hewlett-Packard	E7405A	My44211889	06/28/2011	06/28/2012
18912	9 kHz- 1.3GHz Pre Amp	Hewlett-Packard	8447F	3113A05545	06/03/2011	06/03/2012
19936	Bilog Antenna 30MHz – 6GHz	Sunol Sciences	JB6	A050707-1	11/15/2011	11/15/2012
18897	Active Loop Antenna (9kHz to 30MHz)	EMCO	6502	9205-2738	11/22/2011	11/22/2012
SW-6	Software application for Radiated and Conducted Emissions	Intertek	OATS_CVI	V.1.0	VBU	VBU

13.3 Results:

The sample tested was found to Comply.

13.4 Setup Photographs: Product in Compression Mode

Radiated Emissions – Product 3-Axes

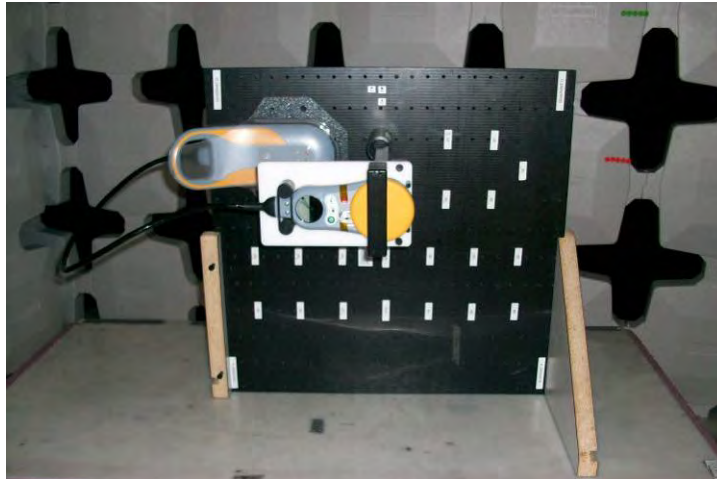
Axis 1 – Product Flat on Table (worst-case axis)**Axis 2 – Product Vertical****Axis 3 – Product Vertical & Rotated 90 Degrees**

Photo: Product in Compression Mode

Radiated Emissions (Front View)



Photo: Product in Compression Mode

Radiated Emissions (Rear View)

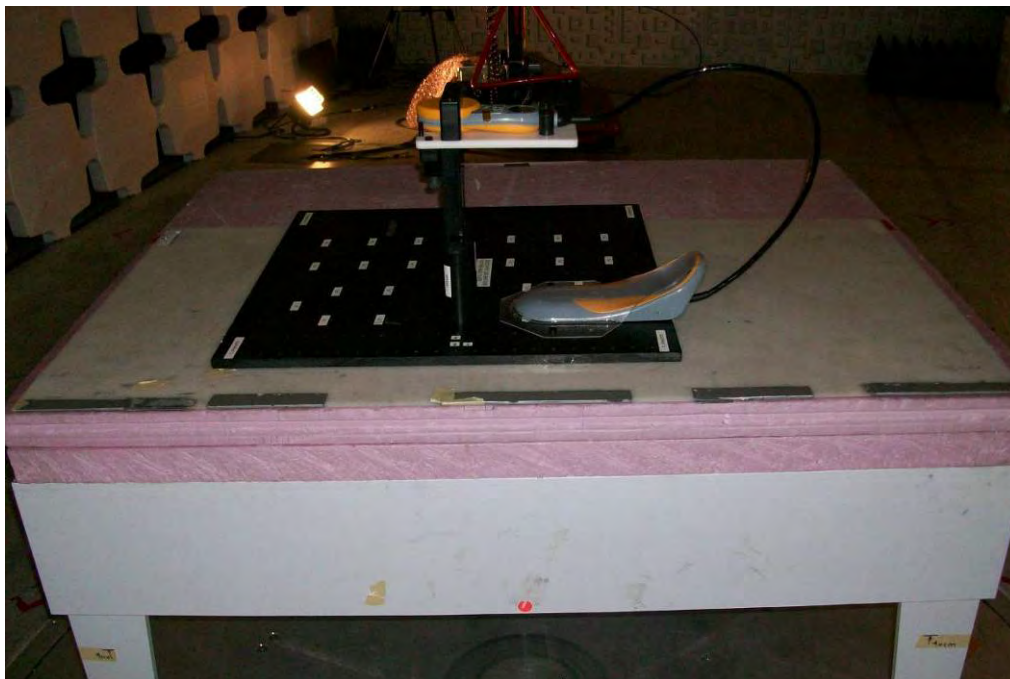
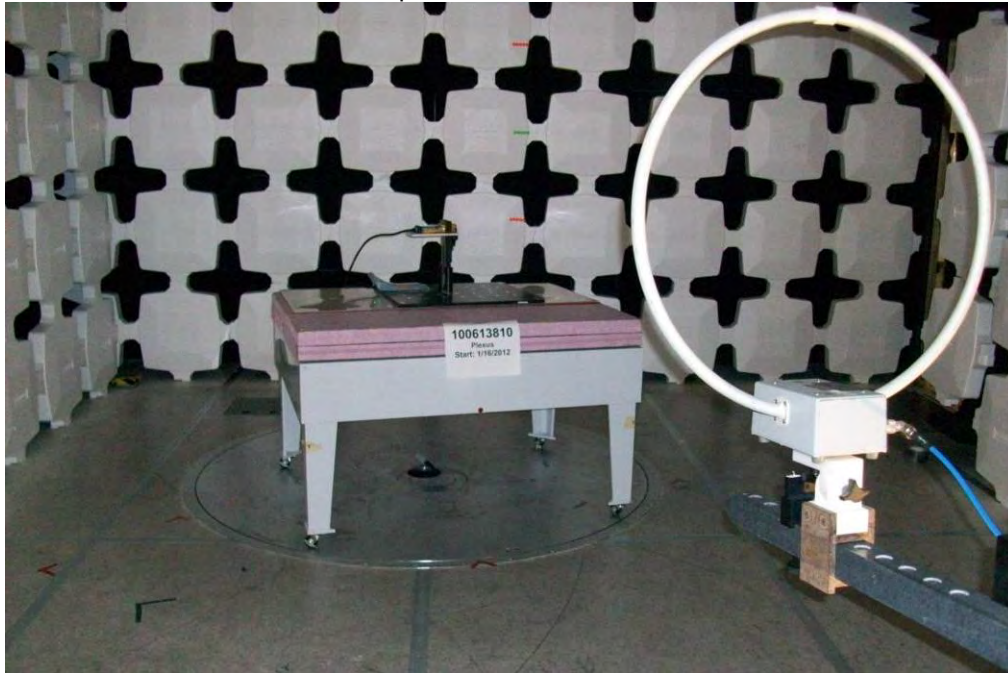


Photo: Product in Compression Mode

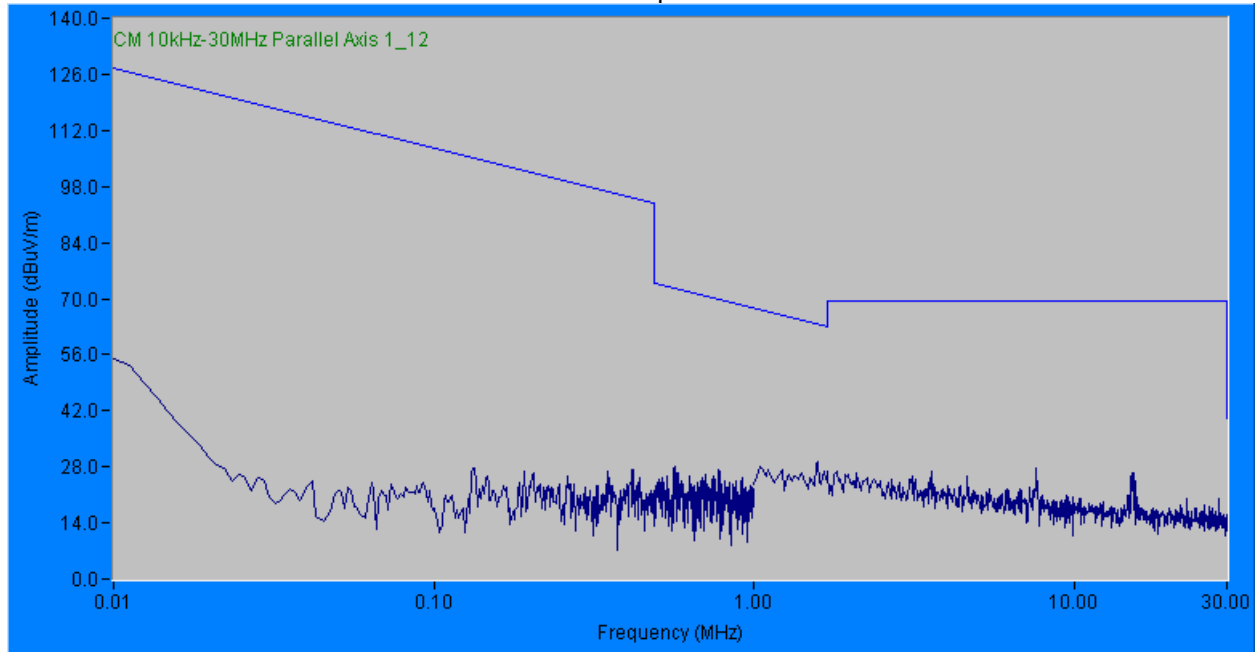
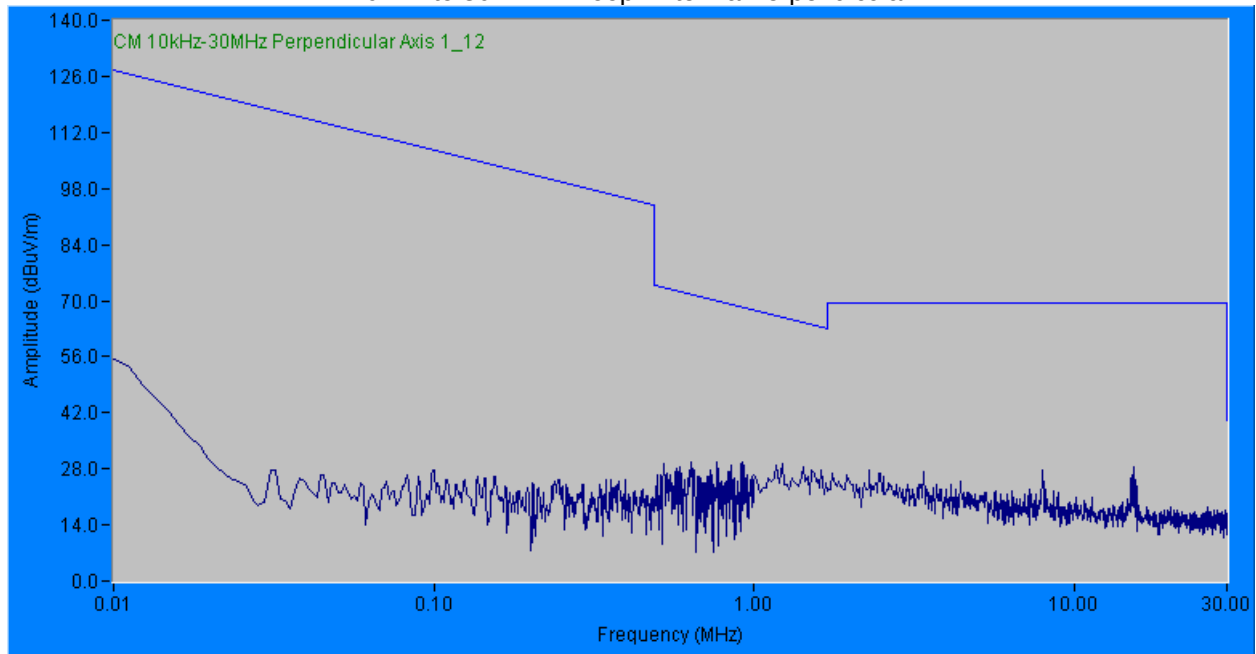
Radiated Emissions (Antenna)

Active Loop Antenna – 10kHz to 30MHz



BiLog Antenna – 30MHz to 1000MHz

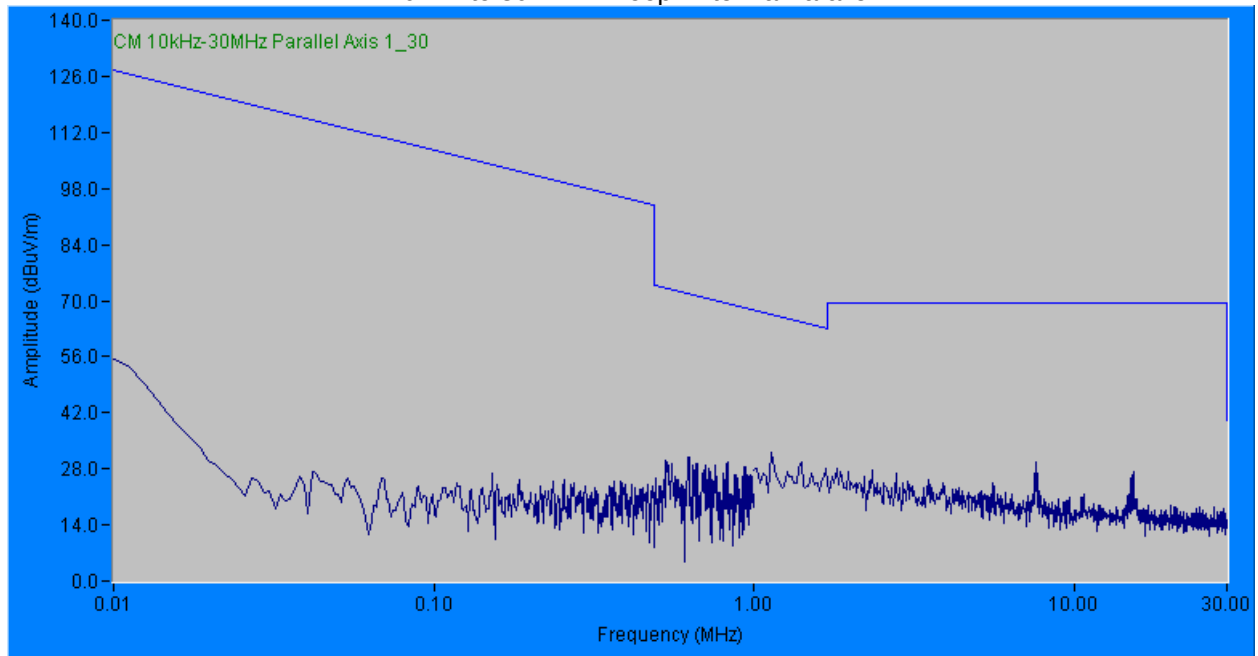


13.5 Pre-scan plots for reference only – not final data: Compression Mode**Unit 0012****10kHz to 30MHz – Loop Antenna Parallel****10kHz to 30MHz – Loop Antenna Perpendicular**

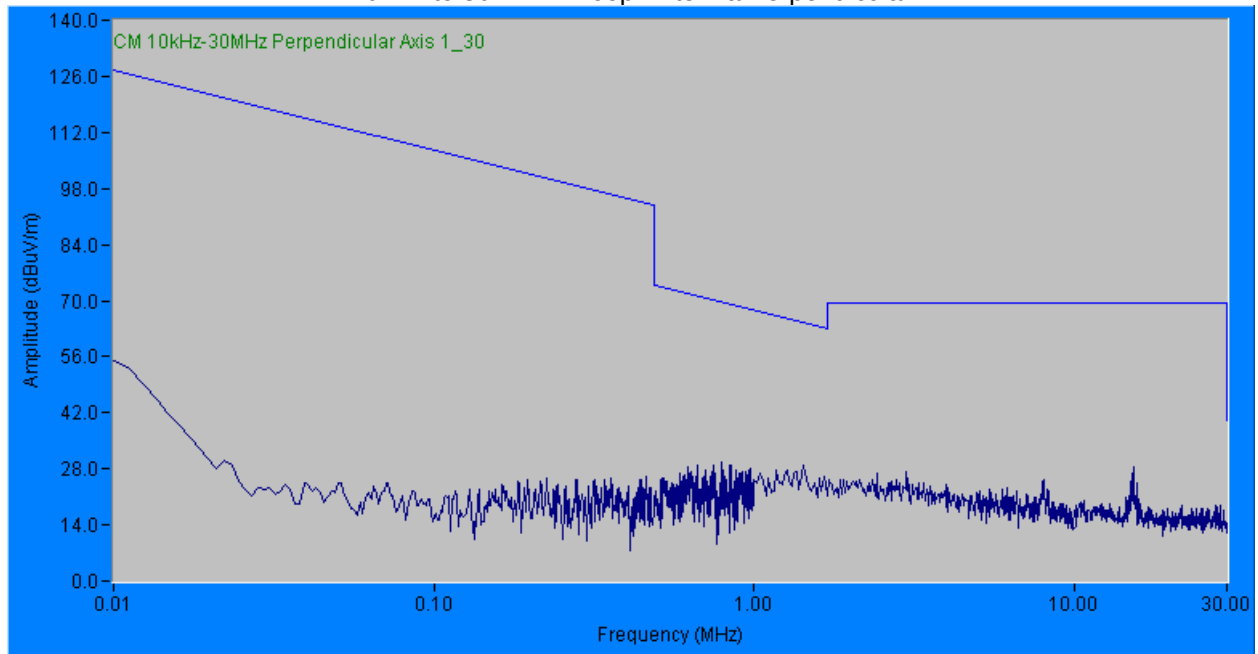
Note: Above plots represent peak measurements referenced to FCC 15.209/RSS-210 quasi-peak limit

Unit 0030

10kHz to 30MHz – Loop Antenna Parallel



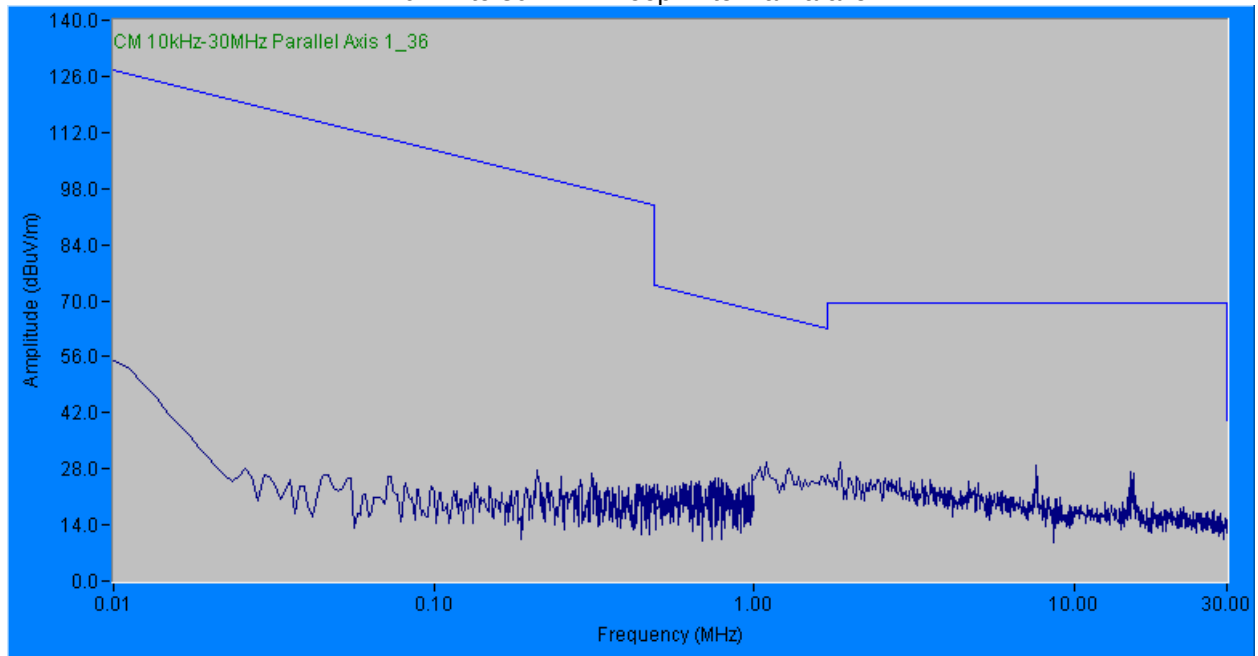
10kHz to 30MHz – Loop Antenna Perpendicular



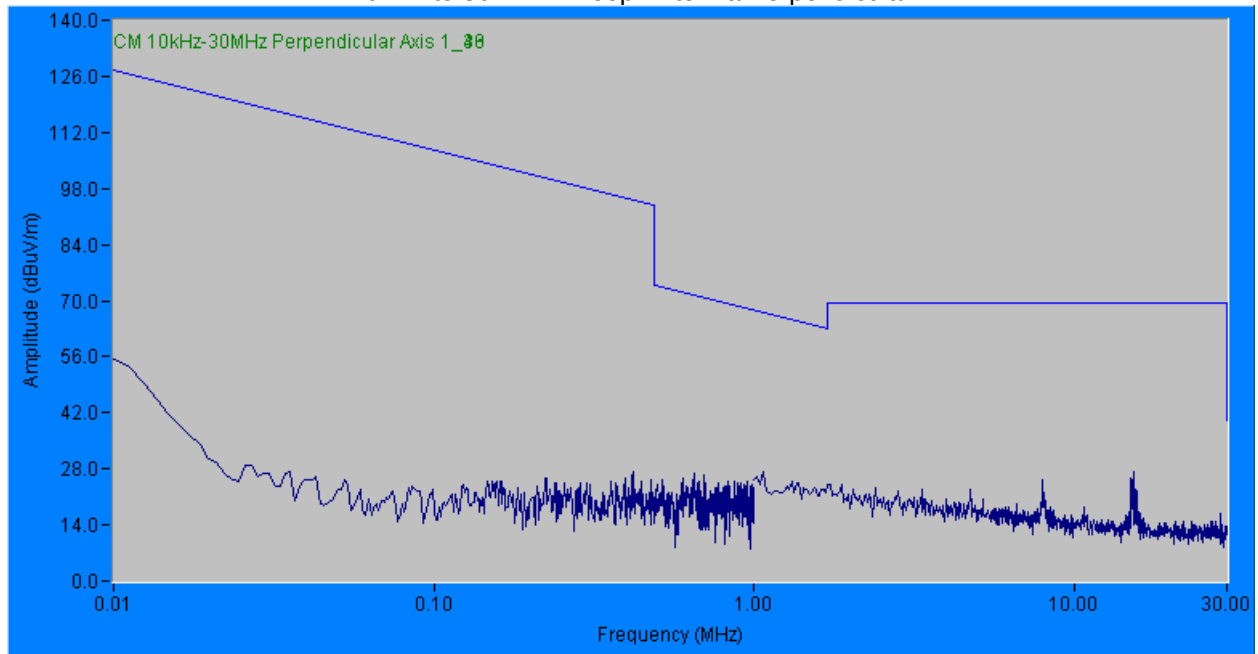
Note: Above plots represent peak measurements referenced to FCC 15.209/RSS-210 quasi-peak limit

Unit 0036

10kHz to 30MHz – Loop Antenna Parallel



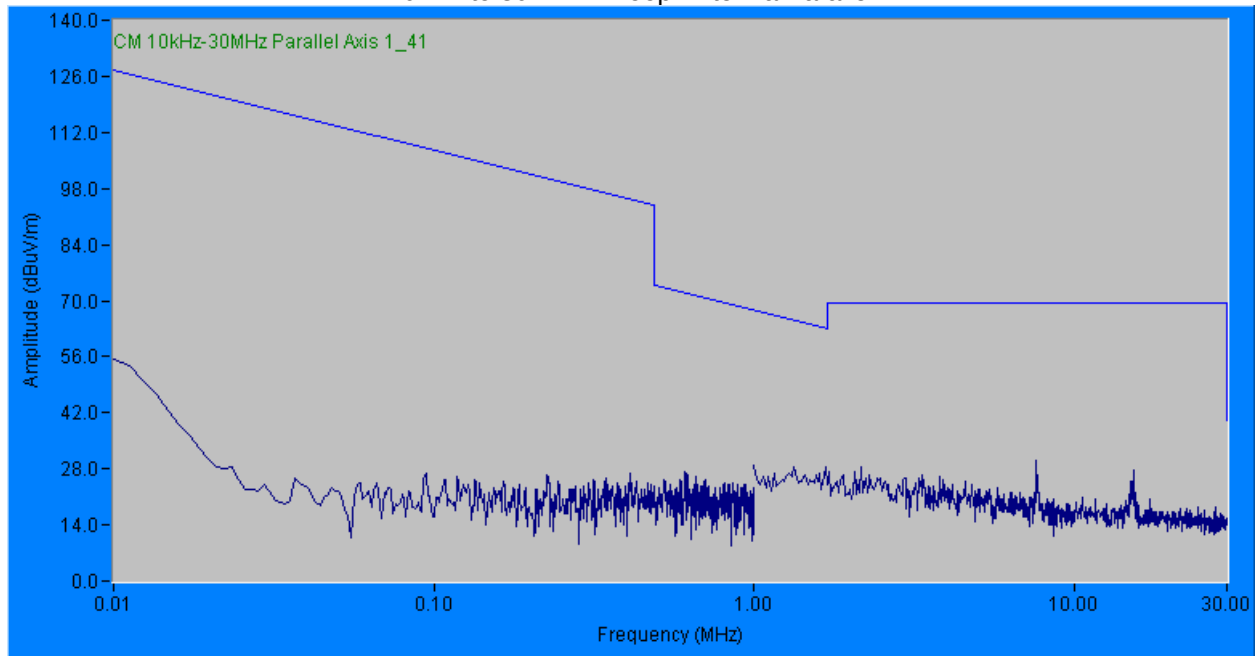
10kHz to 30MHz – Loop Antenna Perpendicular



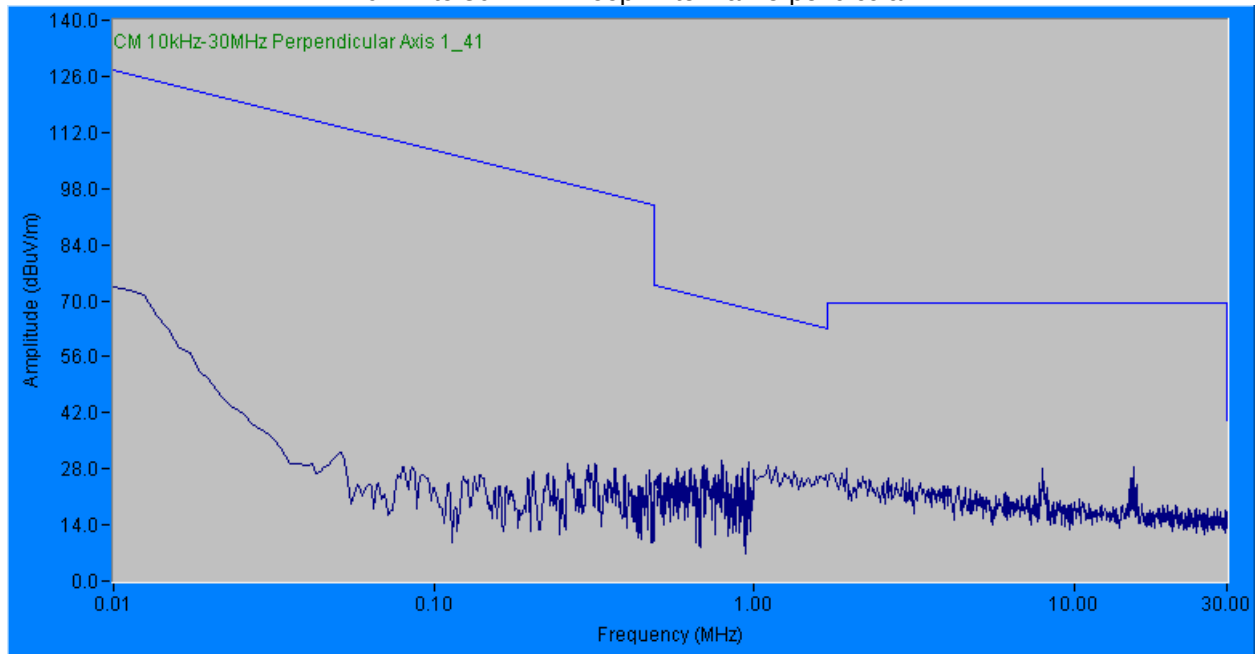
Note: Above plots represent peak measurements referenced to FCC 15.209/RSS-210 quasi-peak limit

Unit 0041

10kHz to 30MHz – Loop Antenna Parallel



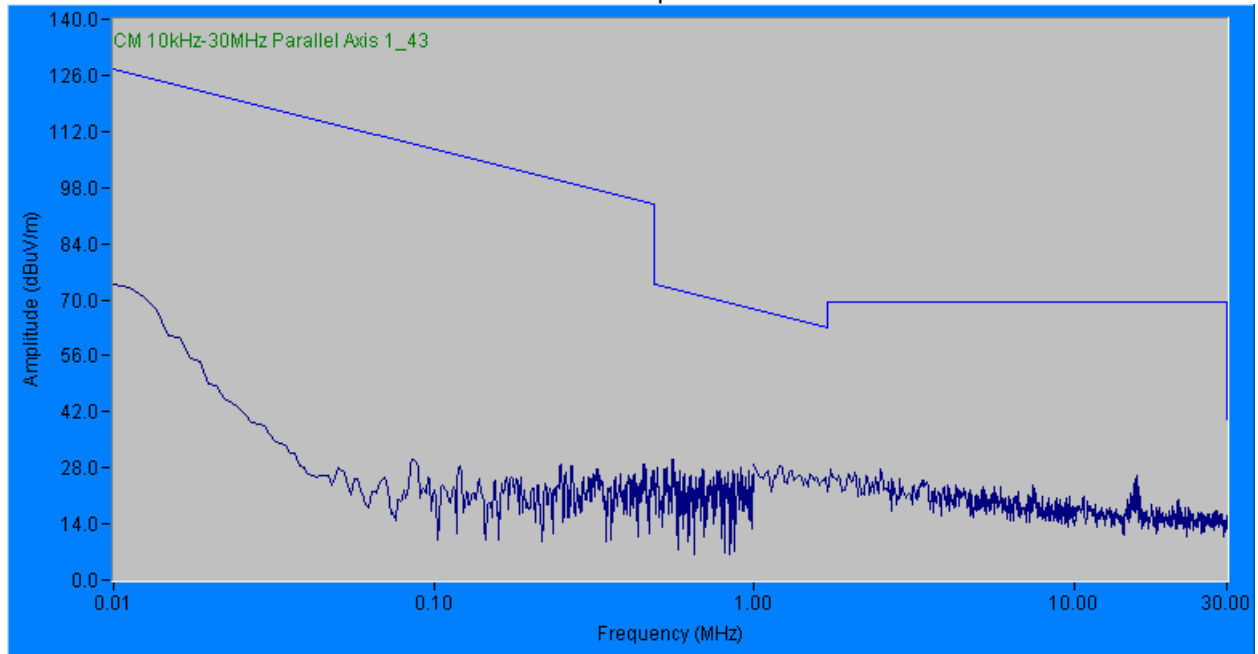
10kHz to 30MHz – Loop Antenna Perpendicular



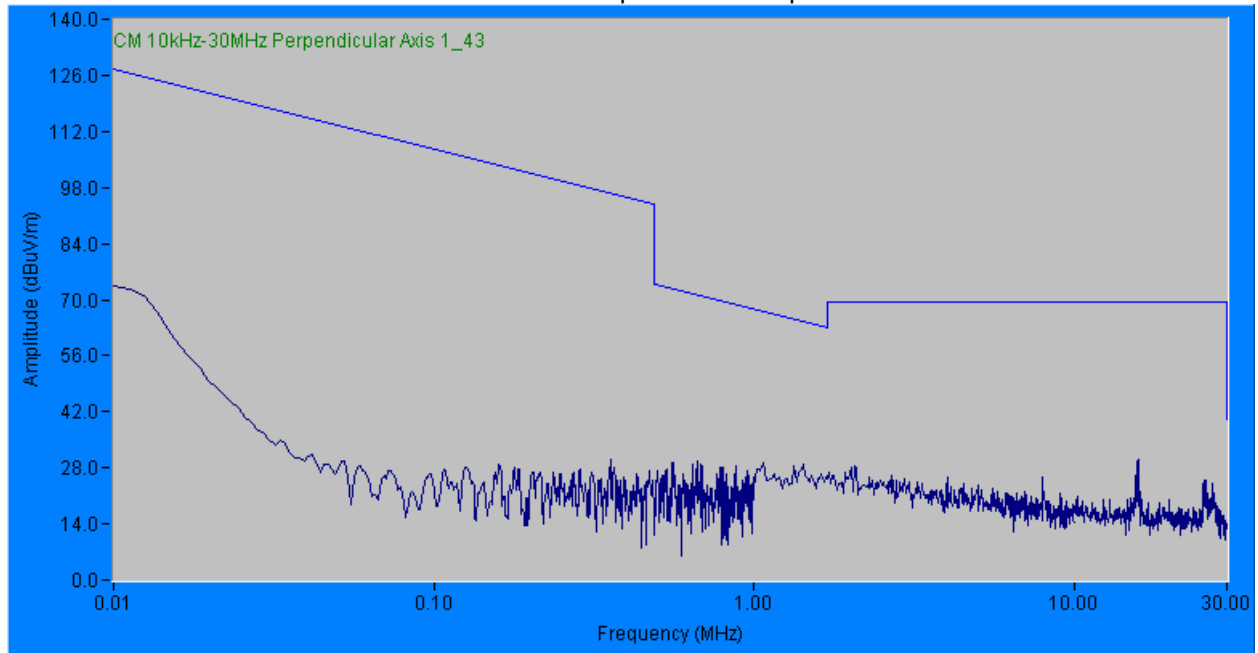
Note: Above plots represent peak measurements referenced to FCC 15.209/RSS-210 quasi-peak limit

Unit 0043

10kHz to 30MHz – Loop Antenna Parallel



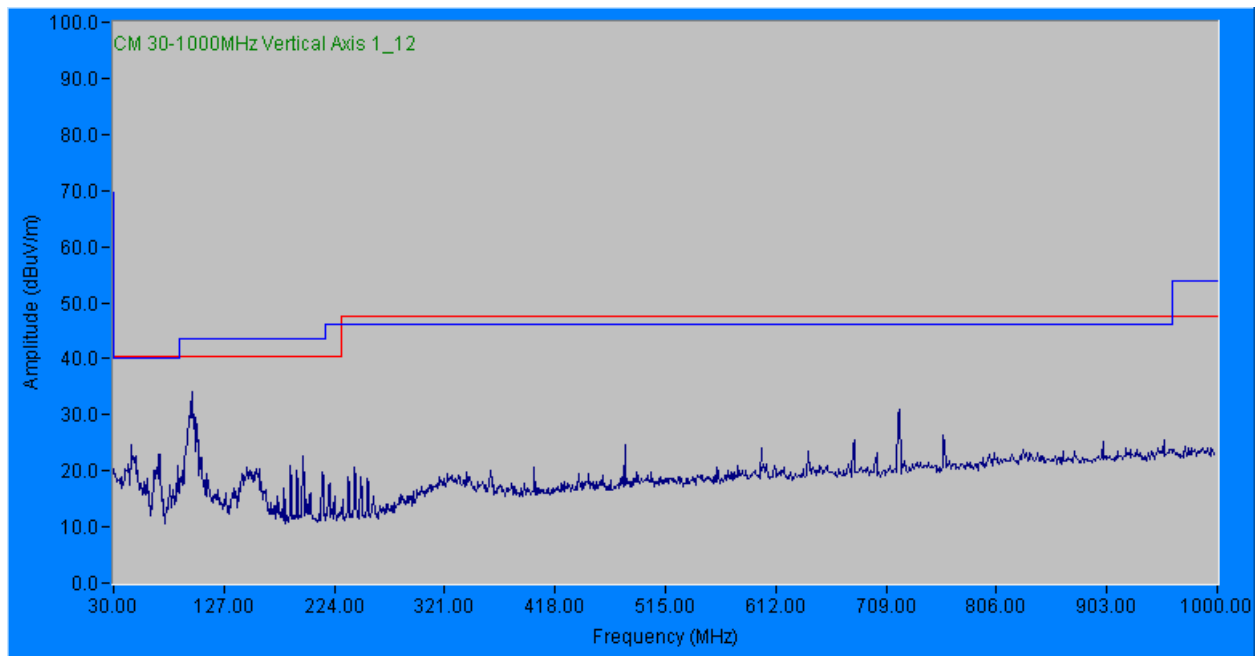
10kHz to 30MHz – Loop Antenna Perpendicular



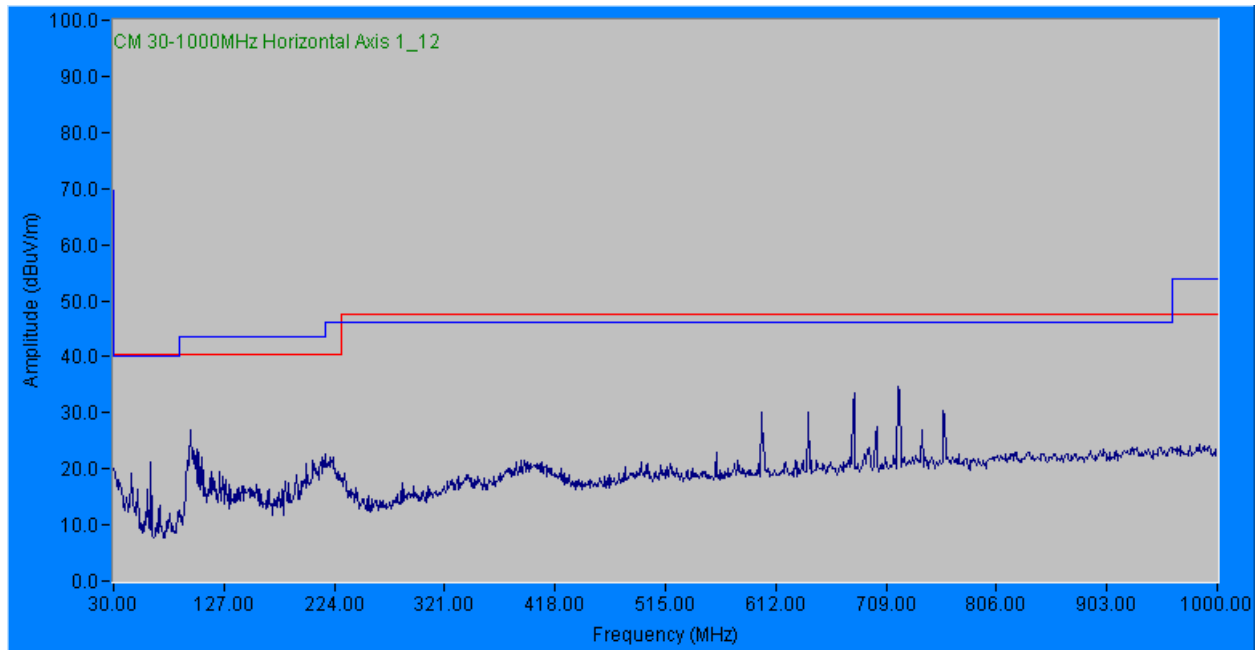
Note: Above plots represent peak measurements referenced to FCC 15.209/RSS-210 quasi-peak limit

13.6 Pre-scan plots for reference only – not final data: Compression Mode**Unit 0012**

30MHz to 1000MHz – Vertical



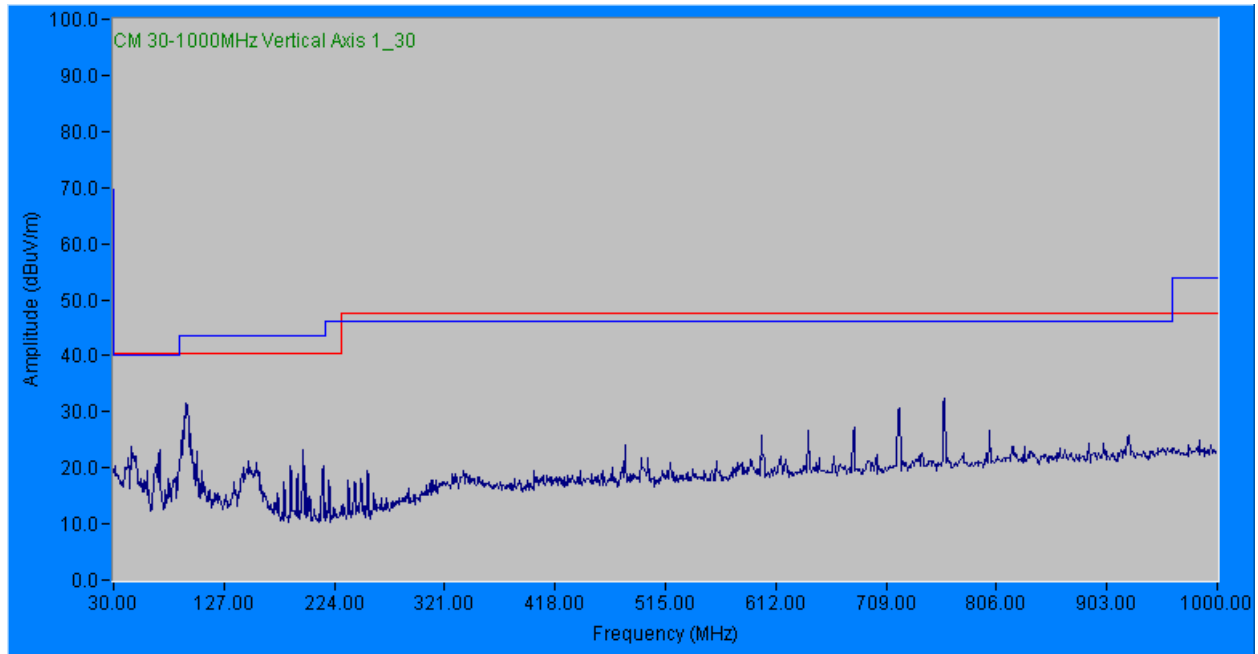
30MHz to 1000MHz – Horizontal



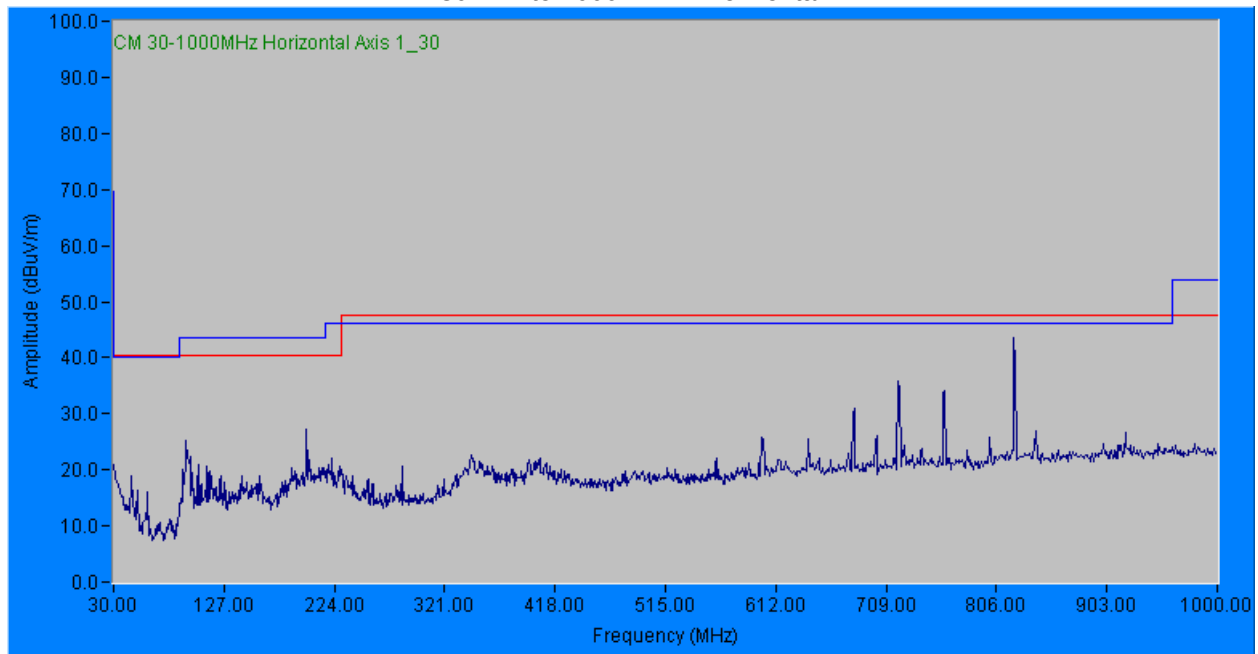
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.209/RSS-210 (blue)
quasi-peak limits

Unit 0030

30MHz to 1000MHz – Vertical



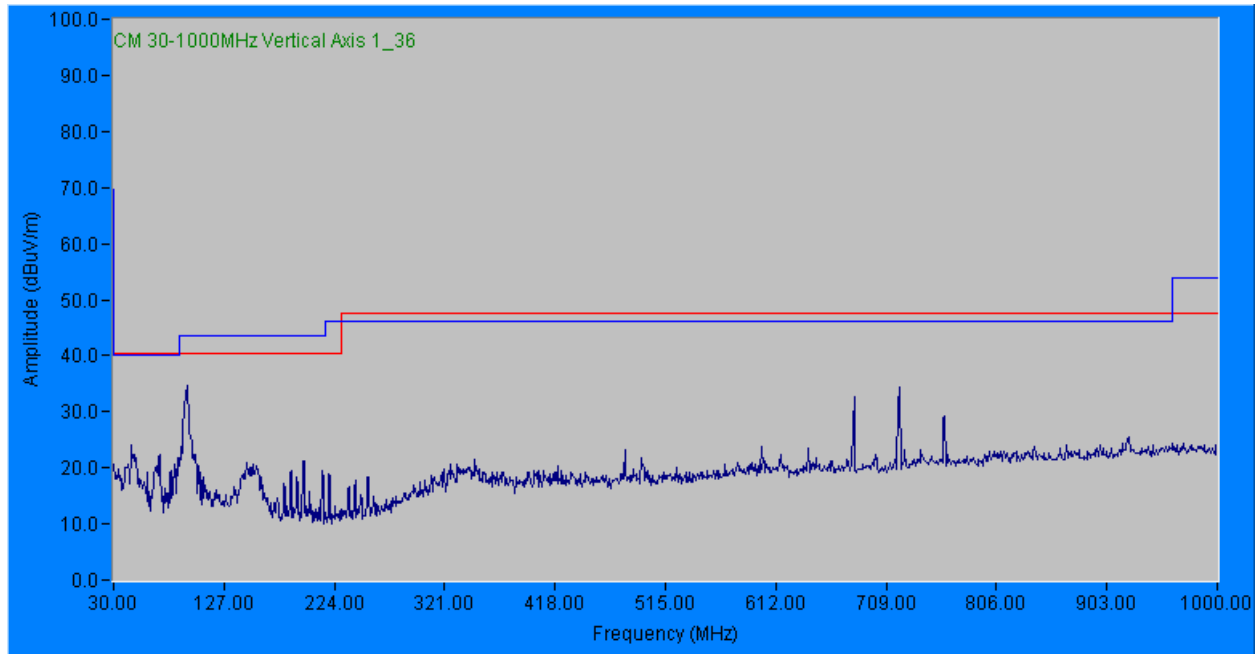
30MHz to 1000MHz – Horizontal



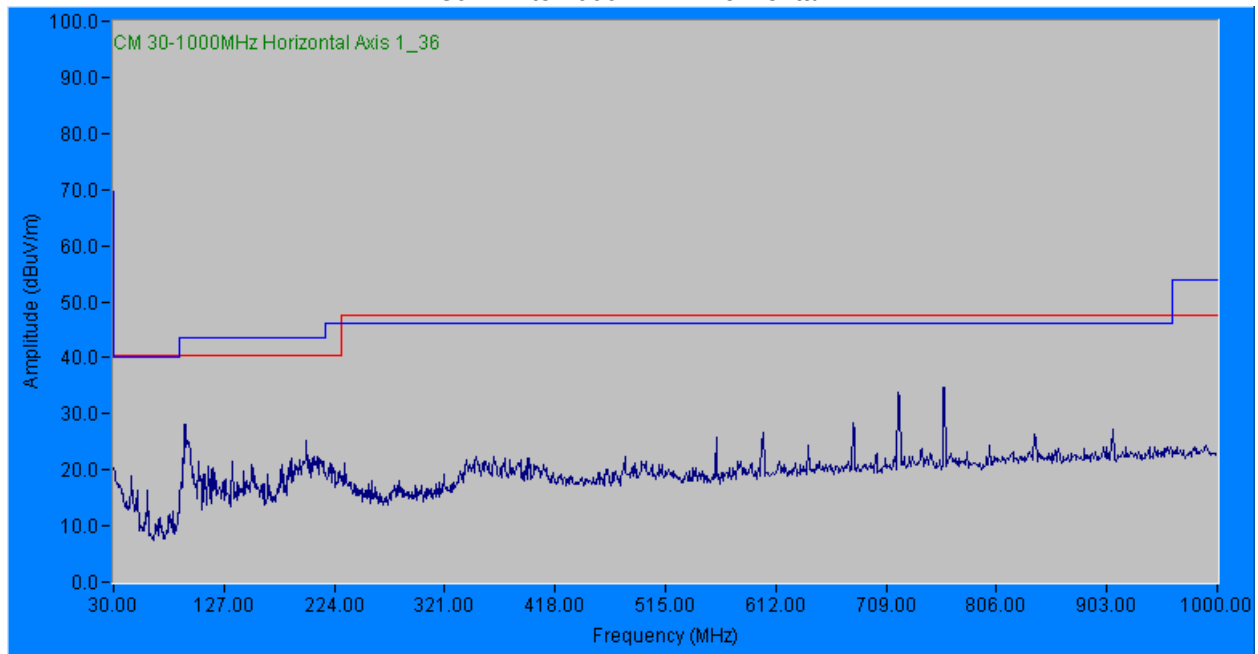
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.209/RSS-210 (blue)
quasi-peak limits

Unit 0036

30MHz to 1000MHz – Vertical



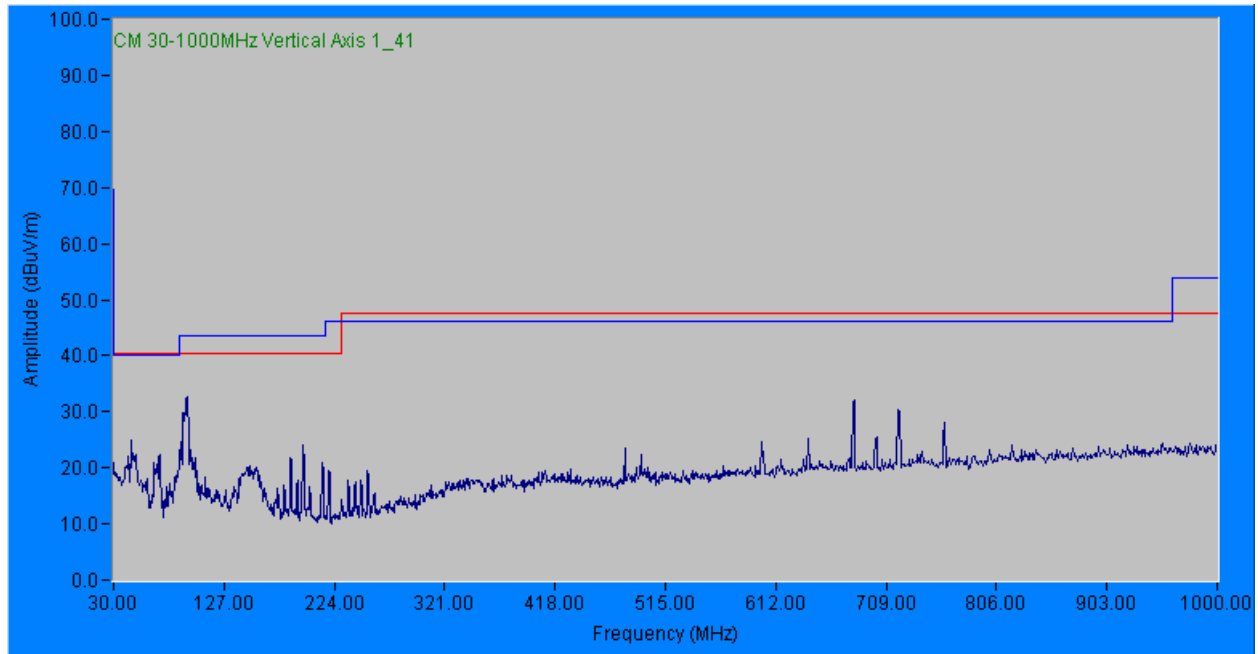
30MHz to 1000MHz – Horizontal



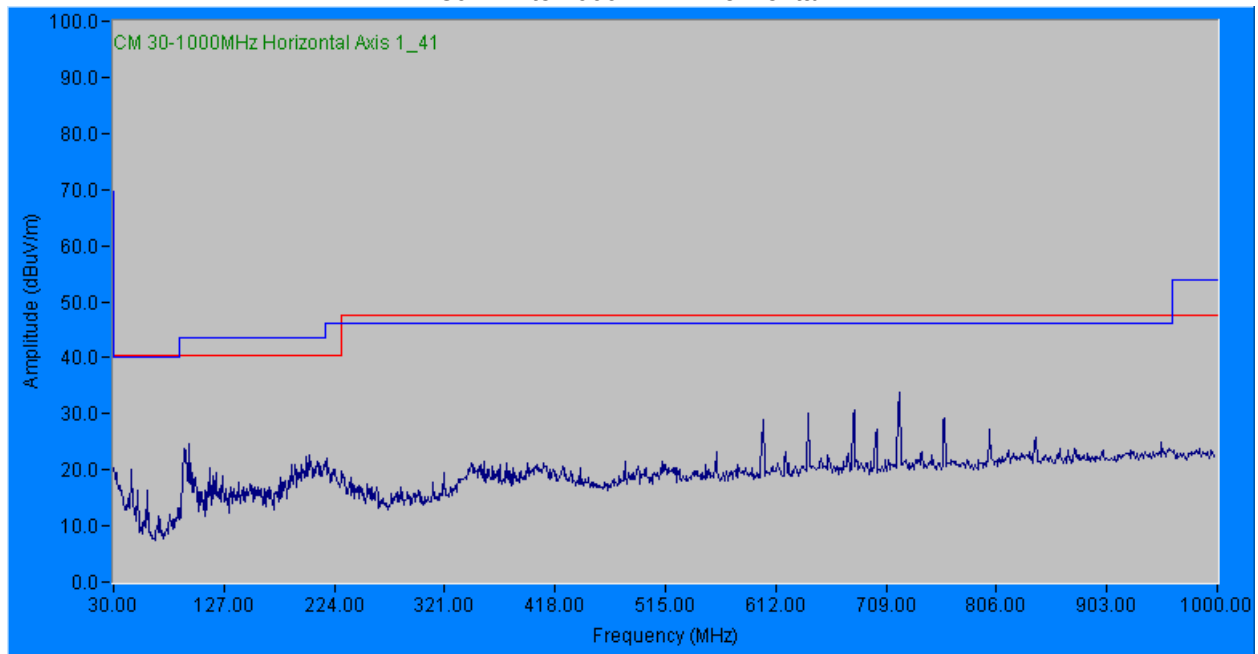
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.209/RSS-210 (blue)
quasi-peak limits

Unit 0041

30MHz to 1000MHz – Vertical



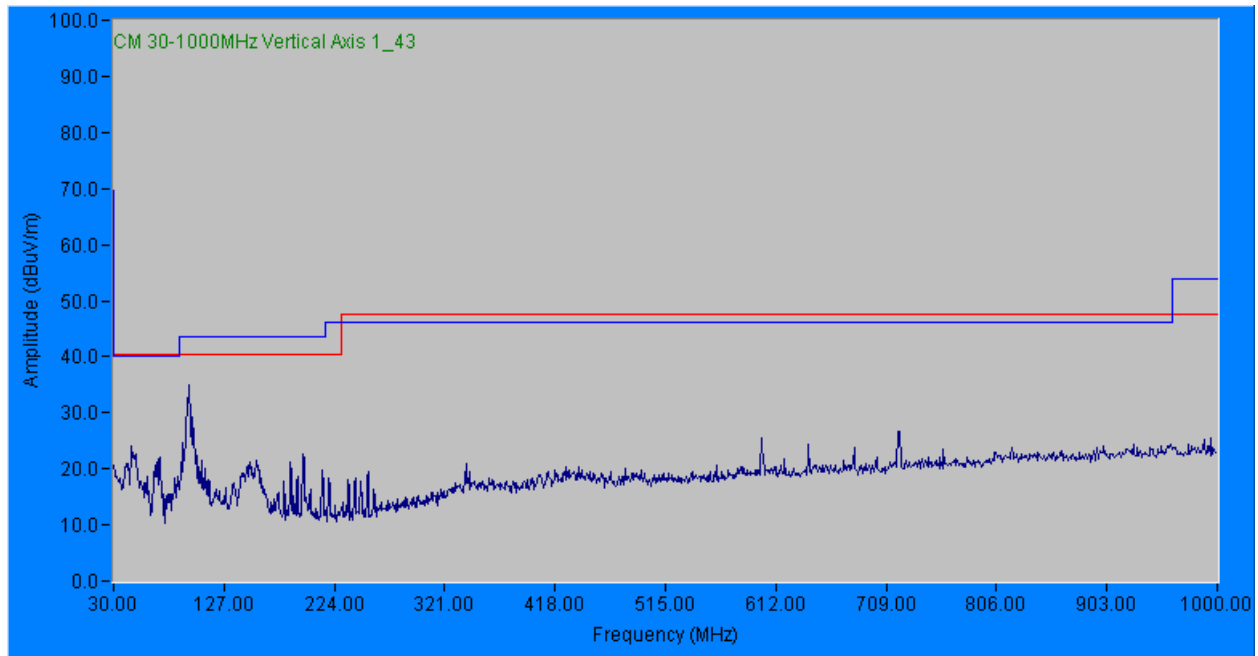
30MHz to 1000MHz – Horizontal



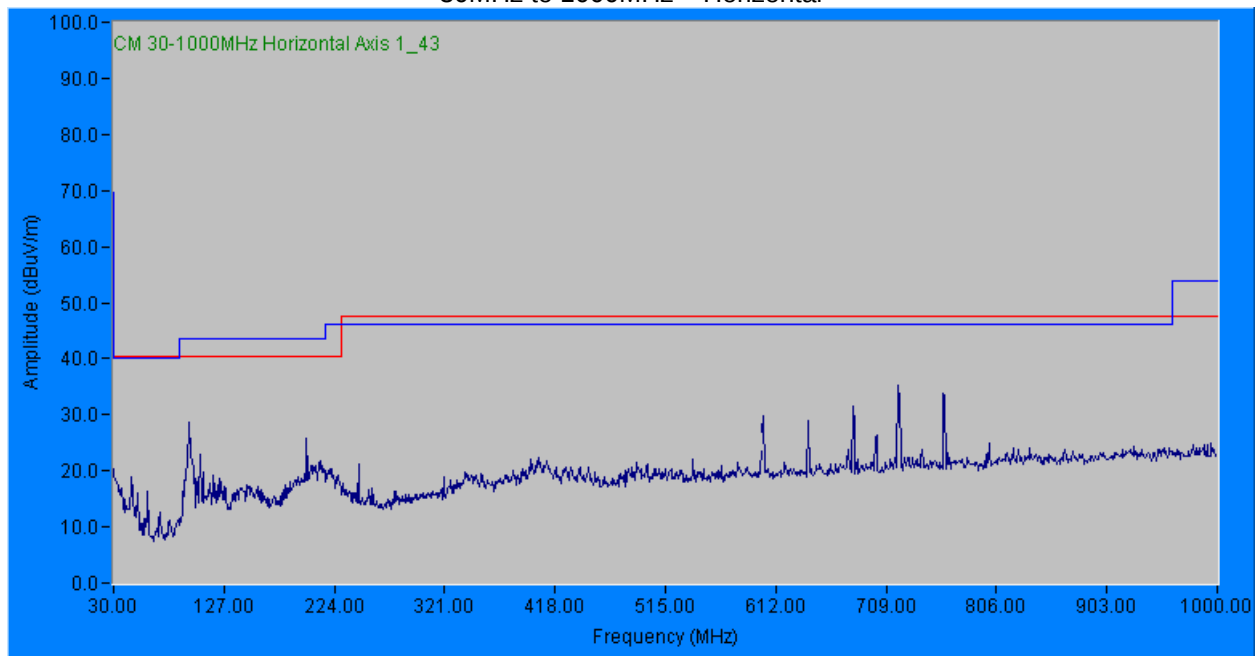
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.209/RSS-210 (blue)
quasi-peak limits

Unit 0043

30MHz to 1000MHz – Vertical



30MHz to 1000MHz – Horizontal

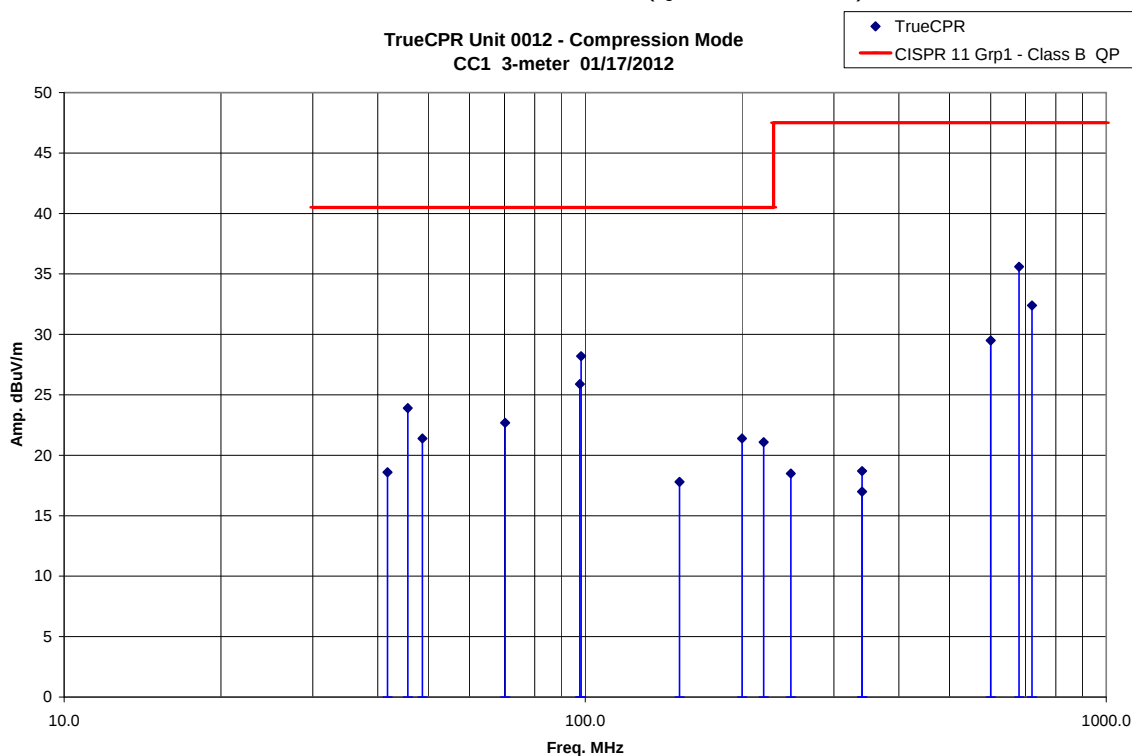


Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.209/RSS-210 (blue)
quasi-peak limits

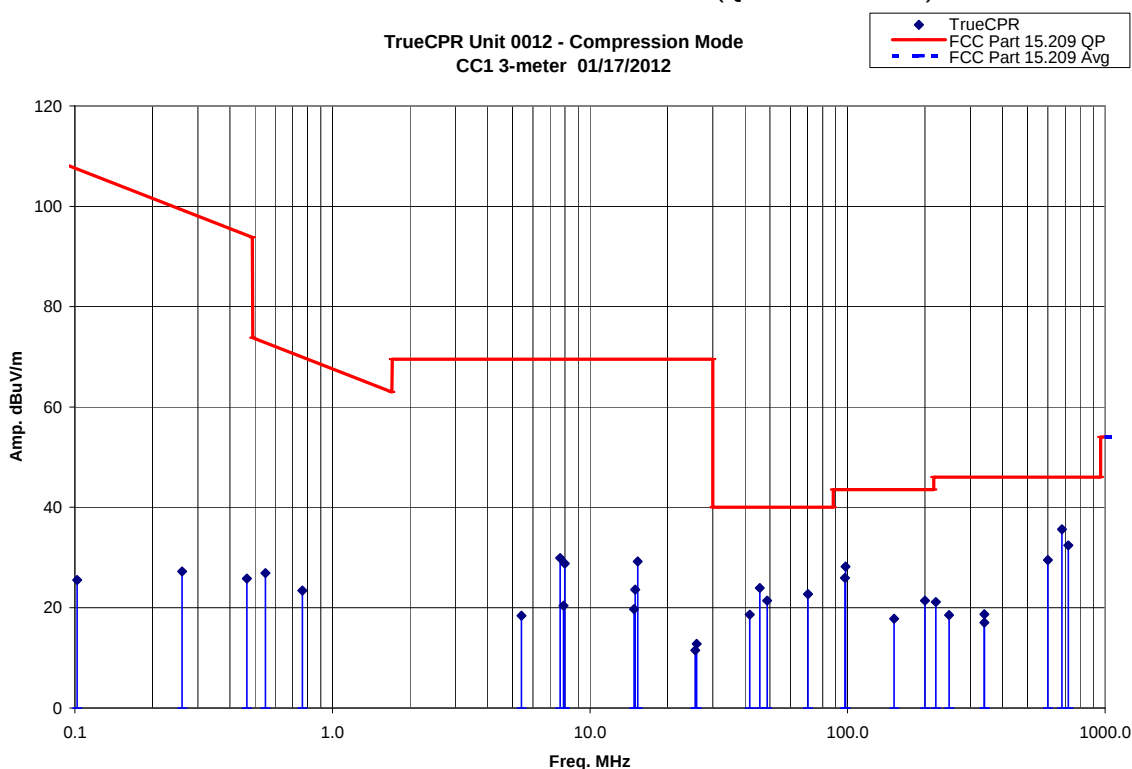
13.7 Final Plots: Compression Mode – CISPR 11 Group 1, Class B & FCC 15.209/RSS-210

Unit 0012

CISPR 11 - 30MHz to 1000MHz (Quasi-Peak Data)

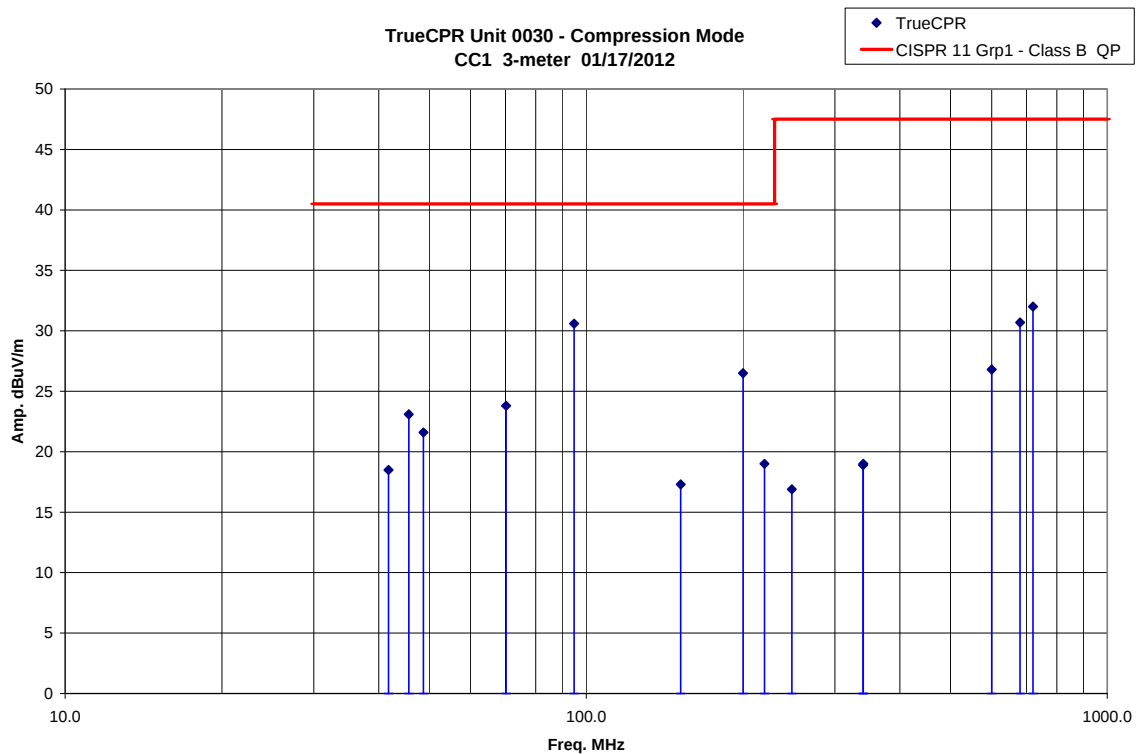


FCC 15.209/ RSS-210 - 10kHz to 1000MHz (Quasi-Peak Data)

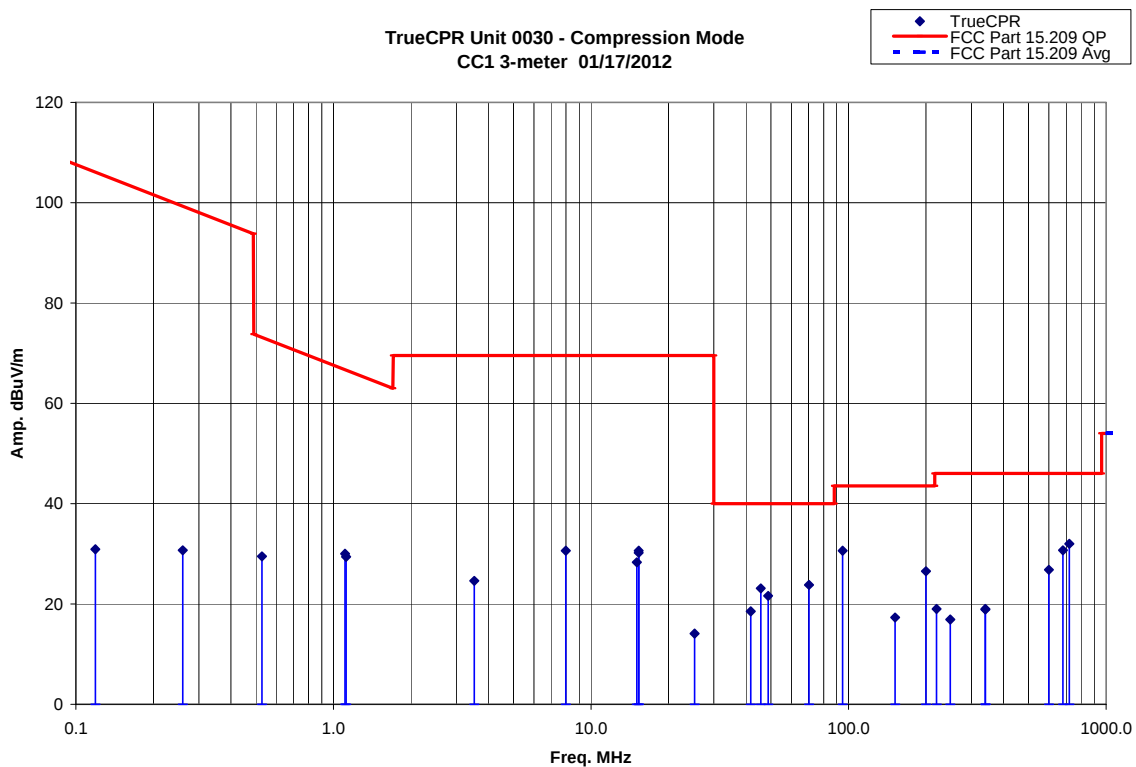


Unit 0030

CISPR 11 - 30MHz to 1000MHz (Quasi-Peak Data)

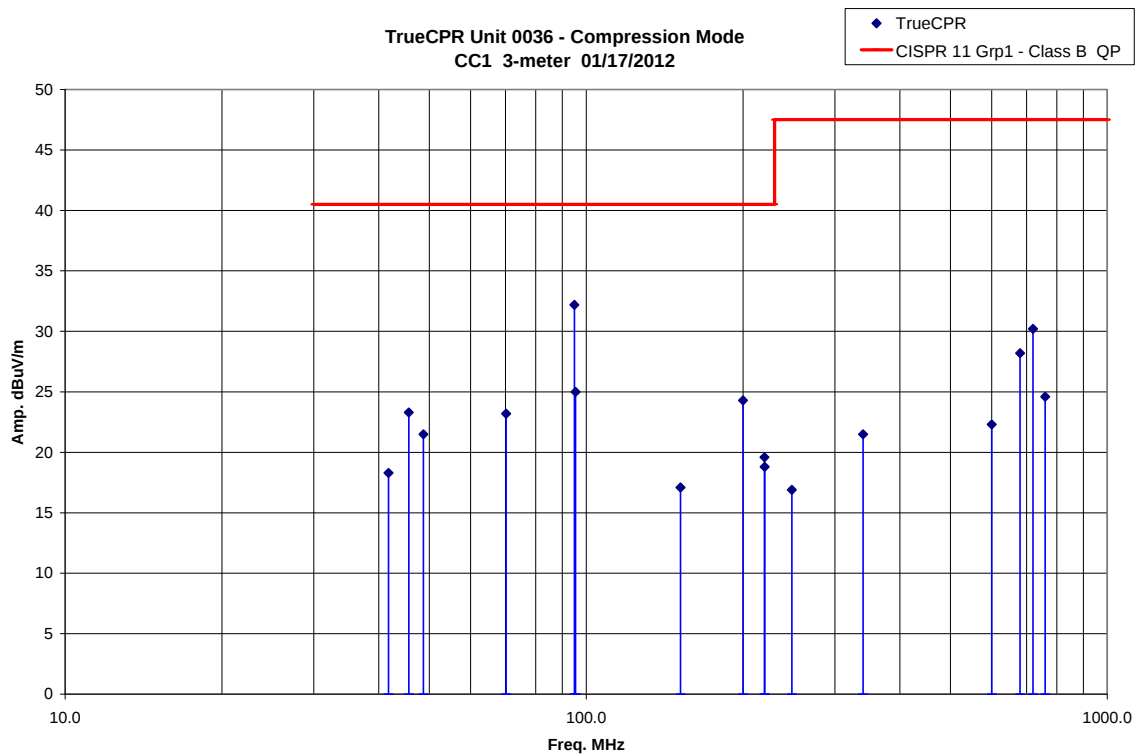


FCC 15.209/ RSS-210 - 10kHz to 1000MHz (Quasi-Peak Data)

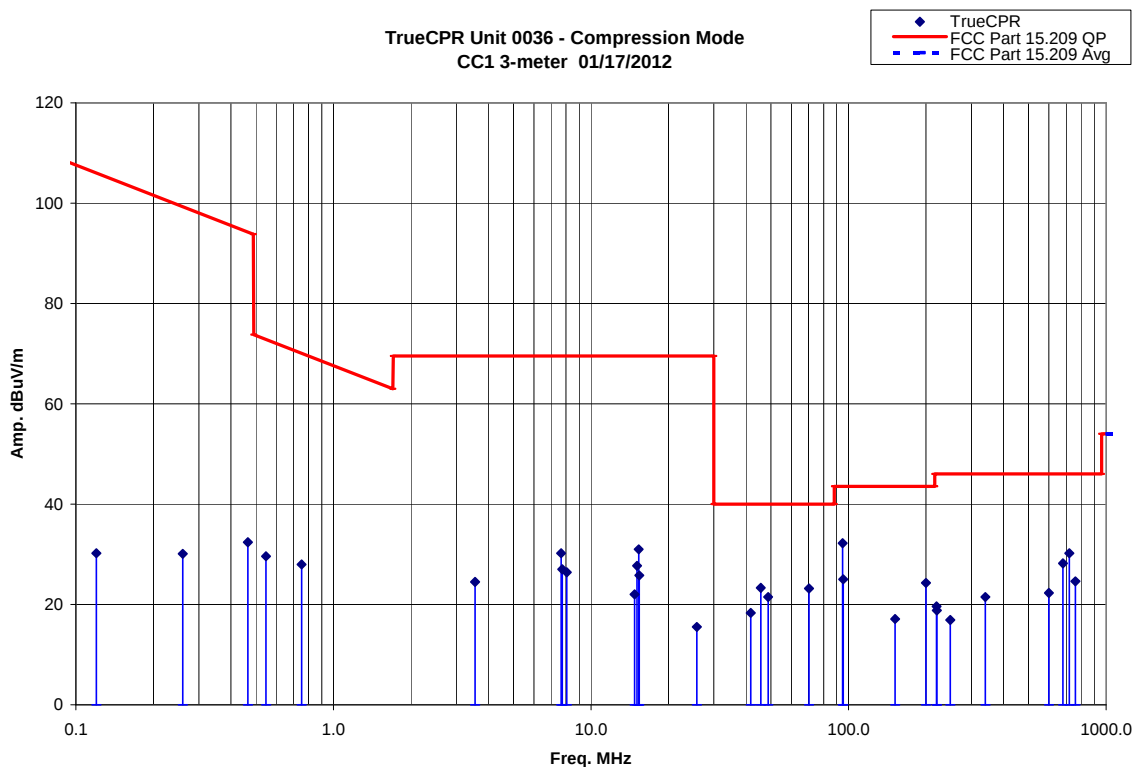


Unit 0036

CISPR 11 - 30MHz to 1000MHz (Quasi-Peak Data)

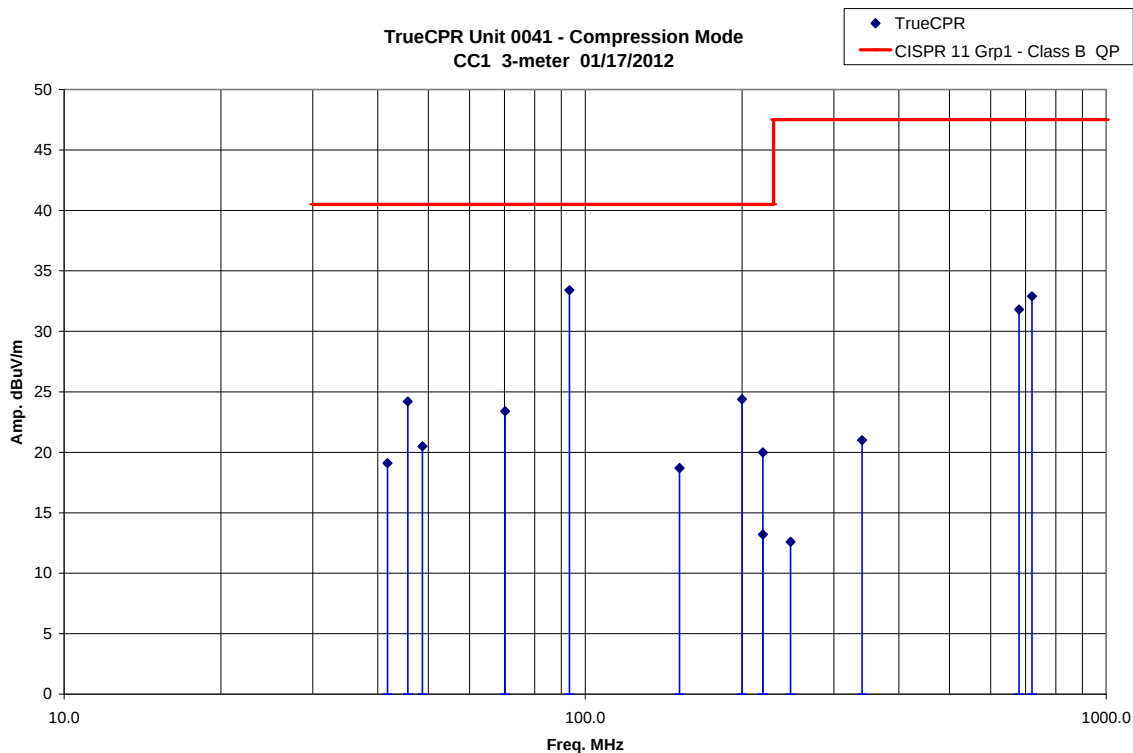


FCC 15.209/ RSS-210 - 10kHz to 1000MHz (Quasi-Peak Data)

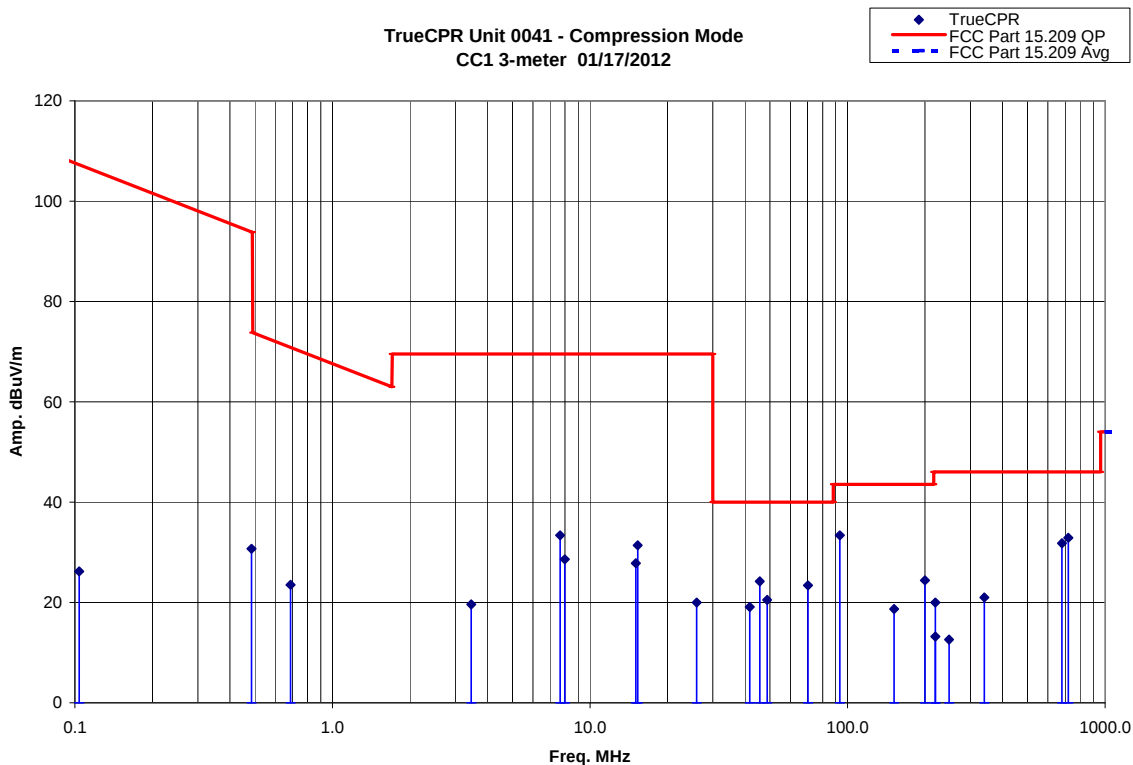


Unit 0041

CISPR 11 - 30MHz to 1000MHz (Quasi-Peak Data)

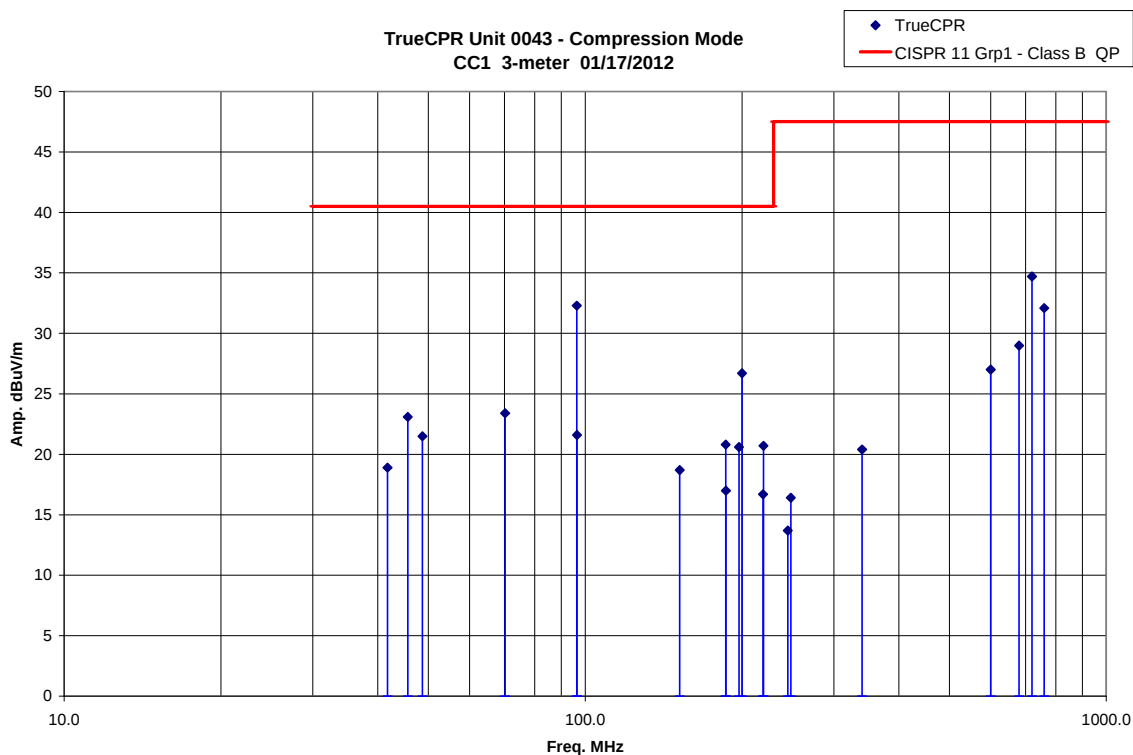


FCC 15.209/ RSS-210 - 10kHz to 1000MHz (Quasi-Peak Data)

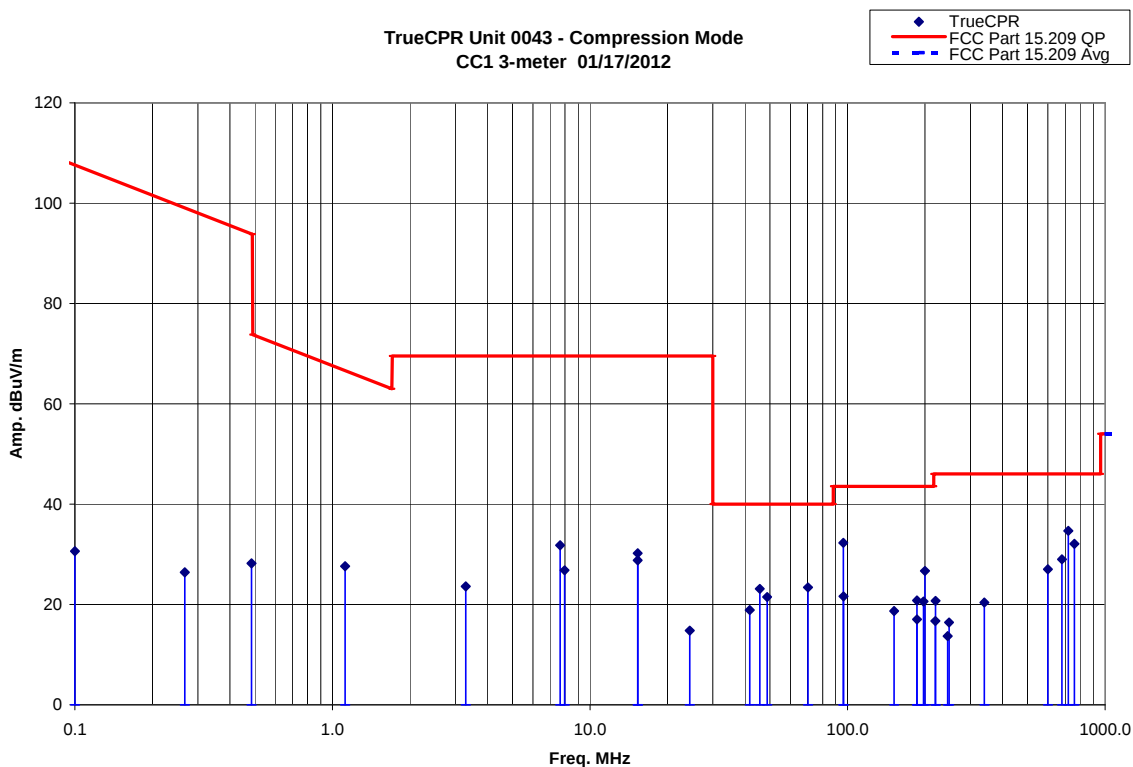


Unit 0043

CISPR 11 - 30MHz to 1000MHz (Quasi-Peak Data)



FCC 15.209/ RSS-210 - 10kHz to 1000MHz (Quasi-Peak Data)



Test Data: Compression Mode – CISPR 11 Group 1, Class B & FCC 15.209/RSS-210

Radiated Electromagnetic Emissions – Unit 0012

Test Report #:	100613810 Run 3	Test Area:	CC1 Radiated
Test Method:	EN55022	Test Date:	17-Jan-2012
EUT Model #:	TrueCPR	EUT Power:	Battery
EUT Serial #:	ALPHA2 0012		
Manufacturer:	Plexus		
EUT Description:	CPR Coaching Device		
Notes:	Product in Compression mode		

Temperature:	23.1	°C
Relative Humidity:	22.7	%
Air Pressure:	83.7	kPa

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

Tx Spurious Measurements

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.209 RSS-210
***** Measurement Summary *****						
679.99	42.9 Qp	1.8 / 19.1 / 28.3	35.6	H / 1.7 / 312.0	-11.9	-10.4
98.18	45.5 Qp	0.8 / 9.9 / 28.0	28.2	V / 1.6 / 310.0	-12.3	-15.3
720.00	38.6 Qp	1.9 / 20.1 / 28.2	32.4	H / 1.7 / 312.0	-15.1	-13.6
97.70	43.3 Qp	0.8 / 9.7 / 28.0	25.9	V / 1.6 / 310.0	-14.6	-17.6
45.64	40.9 Qp	0.8 / 10.4 / 28.2	23.9	V / 1.0 / 335.0	-16.6	-16.1
600.00	37.6 Qp	1.7 / 18.6 / 28.4	29.5	V / 1.7 / 76.0	-18.0	-16.5
70.21	41.8 Qp	0.8 / 8.3 / 28.1	22.7	V / 1.7 / 240.0	-17.8	-17.3
48.71	39.9 Qp	0.8 / 8.9 / 28.2	21.4	V / 1.0 / 335.0	-19.1	-18.6
200.02	35.9 Qp	0.9 / 12.1 / 27.5	21.4	H / 1.4 / 38.0	-19.1	-22.1
220.00	36.8 Qp	1.0 / 10.7 / 27.4	21.1	H / 1.4 / 216.0	-19.4	-24.9
41.75	33.4 Qp	0.8 / 12.7 / 28.2	18.6	V / 1.0 / 42.0	-21.9	-21.4
151.72	32.2 Qp	0.8 / 12.5 / 27.7	17.8	V / 1.2 / 330.0	-22.7	-25.7
340.00	30.7 Qp	1.3 / 14.0 / 27.3	18.7	V / 1.5 / 224.0	-28.8	-27.3
248.11	33.3 Qp	1.1 / 11.4 / 27.3	18.5	V / 1.6 / 188.0	-29.0	-27.5
339.80	29.1 Qp	1.3 / 14.0 / 27.3	17.0	H / 1.7 / 10.0	-30.5	-29.0
7.66	19.0 Qp	0.2 / 10.6 / 0.0	29.9	H / 1.7 / 220.0	N/A	-39.6
15.31	18.9 Qp	0.3 / 10.0 / 0.0	29.2	V / 1.7 / 220.0	N/A	-40.3
7.98	17.9 Qp	0.2 / 10.6 / 0.0	28.8	V / 1.7 / 124.0	N/A	-40.7
0.549	16.3 Qp	0.1 / 10.5 / 0.0	26.9	V / 1.7 / 232.0	N/A	-45.9
14.99	13.3 Qp	0.3 / 10.0 / 0.0	23.6	H / 1.7 / 216.0	N/A	-45.9
0.764	12.9 Qp	0.1 / 10.4 / 0.0	23.4	V / 1.7 / 232.0	N/A	-46.5
7.89	9.6 Qp	0.2 / 10.6 / 0.0	20.4	V / 1.7 / 232.0	N/A	-49.1
14.83	9.3 Qp	0.3 / 10.0 / 0.0	19.7	V / 1.7 / 212.0	N/A	-49.8
5.42	7.6 Qp	0.2 / 10.6 / 0.0	18.4	V / 1.7 / 232.0	N/A	-51.1
25.95	3.0 Qp	0.4 / 9.4 / 0.0	12.8	V / 1.7 / 220.0	N/A	-56.7
25.62	1.7 Qp	0.4 / 9.4 / 0.0	11.5	H / 1.7 / 216.0	N/A	-58.0

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.209 RSS-210
0.465	15.4 Qp	0.1 / 10.4 / 0.0	25.8	V / 1.7 / 232.0	N/A	-68.5
0.261	16.9 Qp	0.0 / 10.3 / 0.0	27.2	V / 1.7 / 232.0	N/A	-72.1
0.102	15.2 Qp	0.0 / 10.3 / 0.0	25.5	V / 1.7 / 148.0	N/A	-81.9

Radiated Electromagnetic Emissions – Unit 0030

Test Report #:	100613810 Run 4	Test Area:	CC1 Radiated	Temperature:	23.1	°C
Test Method:	EN55022	Test Date:	17-Jan-2012	Relative Humidity:	22.7	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.7	kPa
EUT Serial #:	ALPHA2 0030					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Compression mode					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

Tx Spurious Measurements

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB/m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.209 RSS-210
***** Measurement Summary *****						
94.84	48.7 Qp	0.8 / 9.2 / 28.0	30.6	V / 1.6 / 310.0	-9.9	-12.9
200.02	41.0 Qp	0.9 / 12.1 / 27.5	26.5	H / 1.3 / 32.0	-14.0	-17.0
720.00	38.2 Qp	1.9 / 20.1 / 28.2	32.0	H / 1.6 / 177.0	-15.5	-14.0
679.99	38.0 Qp	1.8 / 19.1 / 28.3	30.7	H / 1.5 / 164.0	-16.8	-15.3
70.21	42.8 Qp	0.8 / 8.3 / 28.1	23.8	V / 1.7 / 245.0	-16.7	-16.2
45.64	40.1 Qp	0.8 / 10.4 / 28.2	23.1	V / 1.0 / 36.0	-17.4	-16.9
48.71	40.1 Qp	0.8 / 8.9 / 28.2	21.6	V / 1.0 / 330.0	-18.9	-18.4
600.00	34.9 Qp	1.7 / 18.6 / 28.4	26.8	H / 1.6 / 312.0	-20.7	-19.2
41.75	33.3 Qp	0.8 / 12.7 / 28.2	18.5	V / 1.0 / 36.0	-22.0	-21.5
219.91	34.7 Qp	1.0 / 10.7 / 27.4	19.0	V / 1.7 / 268.0	-21.5	-27.0
151.82	31.7 Qp	0.8 / 12.5 / 27.7	17.3	V / 1.2 / 332.0	-23.2	-26.2
340.07	31.0 Qp	1.3 / 14.0 / 27.3	19.0	V / 1.6 / 228.0	-28.5	-27.0
340.01	30.9 Qp	1.3 / 14.0 / 27.3	18.9	H / 1.7 / 32.0	-28.6	-27.1
248.13	31.7 Qp	1.1 / 11.4 / 27.3	16.9	V / 1.7 / 268.0	-30.6	-29.1
1.11	19.3 Qp	0.1 / 10.6 / 0.0	30.0	H / 1.6 / 242.0	N/A	-36.7
1.12	18.7 Qp	0.1 / 10.6 / 0.0	29.4	V / 1.6 / 212.0	N/A	-37.2
7.98	19.8 Qp	0.2 / 10.6 / 0.0	30.6	V / 1.6 / 218.0	N/A	-38.9
15.31	20.3 Qp	0.3 / 10.0 / 0.0	30.6	H / 1.6 / 208.0	N/A	-38.9
15.31	19.8 Qp	0.3 / 10.0 / 0.0	30.2	V / 1.6 / 242.0	N/A	-39.3
15.07	18.0 Qp	0.3 / 10.0 / 0.0	28.3	V / 1.6 / 265.0	N/A	-41.2
0.528	18.9 Qp	0.1 / 10.5 / 0.0	29.5	V / 1.6 / 212.0	N/A	-43.6
3.52	14.1 Qp	0.1 / 10.4 / 0.0	24.6	V / 1.6 / 198.0	N/A	-44.9
25.26	4.2 Qp	0.4 / 9.5 / 0.0	14.1	V / 1.6 / 242.0	N/A	-55.4
0.260	20.3 Qp	0.0 / 10.3 / 0.0	30.7	V / 1.6 / 212.0	N/A	-68.6
0.0200	37.9 Qp	0.0 / 14.5 / 0.0	52.4	V / 1.6 / 224.0	N/A	-69.2
0.119	20.5 Qp	0.0 / 10.3 / 0.0	30.9	V / 1.6 / 172.0	N/A	-75.1
0.0890	16.9 Qp	0.0 / 11.0 / 0.0	27.9	V / 1.6 / 224.0	N/A	-80.7

Radiated Electromagnetic Emissions – Unit 0036

Test Report #: **100613810 Run 5** Test Area: CC1 Radiated Temperature: 23.1 °C
 Test Method: EN55022 Test Date: 17-Jan-2012 Relative Humidity: 22.7 %
 EUT Model #: TrueCPR EUT Power: Battery Air Pressure: 83.7 kPa
 EUT Serial #: **ALPHA2 0036**
 Manufacturer: Plexus
 EUT Description: CPR Coaching Device
 Notes: **Product in Compression mode**

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

Tx Spurious Measurements

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB/m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.209 RSS-210
***** Measurement Summary *****						
94.92	50.2 Qp	0.8 / 9.2 / 28.0	32.2	V / 1.5 / 312.0	-8.3	-11.3
95.39	42.9 Qp	0.8 / 9.3 / 28.0	25.0	H / 1.8 / 223.0	-15.5	-18.5
720.00	36.5 Qp	1.9 / 20.1 / 28.2	30.2	H / 1.7 / 166.0	-17.3	-15.8
200.00	38.7 Qp	0.9 / 12.1 / 27.5	24.3	H / 1.3 / 44.0	-16.2	-19.2
45.64	40.4 Qp	0.8 / 10.4 / 28.2	23.3	V / 1.0 / 30.0	-17.2	-16.7
70.21	42.3 Qp	0.8 / 8.3 / 28.1	23.2	V / 1.7 / 258.0	-17.3	-16.8
679.99	35.6 Qp	1.8 / 19.1 / 28.3	28.2	V / 1.7 / 76.0	-19.3	-17.8
48.71	40.0 Qp	0.8 / 8.9 / 28.2	21.5	V / 1.0 / 335.0	-19.0	-18.5
219.91	35.3 Qp	1.0 / 10.7 / 27.4	19.6	H / 1.3 / 44.0	-20.9	-26.4
760.00	30.4 Qp	1.9 / 20.4 / 28.1	24.6	H / 1.7 / 166.0	-22.9	-21.4
41.75	33.0 Qp	0.8 / 12.7 / 28.2	18.3	V / 1.0 / 30.0	-22.2	-21.7
219.97	34.5 Qp	1.0 / 10.7 / 27.4	18.8	V / 1.7 / 280.0	-21.7	-27.2
151.72	31.6 Qp	0.8 / 12.5 / 27.7	17.1	V / 1.2 / 336.0	-23.4	-26.4
600.00	30.4 Qp	1.7 / 18.6 / 28.4	22.3	H / 1.4 / 44.0	-25.2	-23.7
339.99	33.6 Qp	1.3 / 14.0 / 27.3	21.5	V / 1.5 / 182.0	-26.0	-24.5
248.13	31.6 Qp	1.1 / 11.4 / 27.3	16.9	V / 1.6 / 257.0	-30.6	-29.1
15.31	20.6 Qp	0.3 / 10.0 / 0.0	31.0	H / 1.0 / 216.0	N/A	-38.5
7.66	19.3 Qp	0.2 / 10.6 / 0.0	30.2	V / 1.0 / 316.0	N/A	-39.3
15.08	17.4 Qp	0.3 / 10.0 / 0.0	27.7	V / 1.0 / 260.0	N/A	-41.8
0.752	17.5 Qp	0.1 / 10.4 / 0.0	28.0	V / 1.0 / 164.0	N/A	-42.0
7.74	16.2 Qp	0.2 / 10.6 / 0.0	27.0	V / 1.0 / 316.0	N/A	-42.5
8.05	15.6 Qp	0.2 / 10.6 / 0.0	26.4	H / 1.0 / 216.0	N/A	-43.1
0.547	19.0 Qp	0.1 / 10.5 / 0.0	29.6	V / 1.0 / 188.0	N/A	-43.2
15.40	15.5 Qp	0.3 / 10.0 / 0.0	25.8	V / 1.0 / 260.0	N/A	-43.7
3.55	14.0 Qp	0.1 / 10.4 / 0.0	24.5	V / 1.0 / 164.0	N/A	-45.0
14.76	11.7 Qp	0.3 / 10.0 / 0.0	22.0	V / 1.0 / 260.0	N/A	-47.5
25.79	5.7 Qp	0.4 / 9.4 / 0.0	15.5	V / 1.0 / 260.0	N/A	-54.0
0.465	21.9 Qp	0.1 / 10.4 / 0.0	32.4	V / 1.0 / 188.0	N/A	-61.9

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.209 RSS-210
0.0199	38.2 Qp	0.0 / 14.5 / 0.0	52.8	V / 1.0 / 0.0	N/A	-68.8
0.260	19.7 Qp	0.0 / 10.3 / 0.0	30.1	V / 1.0 / 48.0	N/A	-69.2
0.120	19.9 Qp	0.0 / 10.3 / 0.0	30.2	V / 1.0 / 12.0	N/A	-75.8

Radiated Electromagnetic Emissions – Unit 0041

Test Report #:	100613810 Run 2	Test Area:	CC1 Radiated	Temperature:	23.1	°C
Test Method:	EN55022	Test Date:	17-Jan-2012	Relative Humidity:	22.7	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.7	kPa
EUT Serial #:	ALPHA2 0041					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Compression mode					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

Tx Spurious Measurements

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.209 RSS-210
***** Measurement Summary *****						
93.26	51.8 Qp	0.8 / 8.9 / 28.0	33.4	V / 1.3 / 302.0	-7.1	-10.1
720.00	39.1 Qp	1.9 / 20.1 / 28.2	32.9	H / 1.7 / 186.0	-14.6	-13.1
679.99	39.2 Qp	1.8 / 19.1 / 28.3	31.8	H / 1.8 / 24.0	-15.7	-14.2
45.64	41.3 Qp	0.8 / 10.4 / 28.2	24.2	V / 1.0 / 356.0	-16.3	-15.8
200.01	38.9 Qp	0.9 / 12.1 / 27.5	24.4	H / 1.8 / 12.0	-16.1	-19.1
70.21	42.4 Qp	0.8 / 8.3 / 28.1	23.4	V / 1.7 / 248.0	-17.1	-16.6
48.71	39.0 Qp	0.8 / 8.9 / 28.2	20.5	V / 1.0 / 356.0	-20.0	-19.5
219.22	35.7 Qp	1.0 / 10.7 / 27.4	20.0	H / 1.6 / 12.0	-20.5	-26.0
41.75	33.8 Qp	0.8 / 12.7 / 28.2	19.1	V / 1.0 / 36.0	-21.4	-20.9
151.72	33.1 Qp	0.8 / 12.5 / 27.7	18.7	V / 1.3 / 332.0	-21.8	-24.8
340.03	33.1 Qp	1.3 / 14.0 / 27.3	21.0	V / 1.5 / 224.0	-26.5	-25.0
219.29	28.9 Qp	1.0 / 10.7 / 27.4	13.2	V / 1.6 / 64.0	-27.3	-32.8
247.79	27.4 Qp	1.1 / 11.4 / 27.3	12.6	V / 1.6 / 46.0	-34.9	-33.4
7.66	22.5 Qp	0.2 / 10.6 / 0.0	33.4	H / 1.7 / 212.0	N/A	-36.1
15.31	21.1 Qp	0.3 / 10.0 / 0.0	31.4	V / 1.7 / 222.0	N/A	-38.1
7.98	17.8 Qp	0.2 / 10.6 / 0.0	28.6	V / 1.7 / 316.0	N/A	-40.9
15.07	17.5 Qp	0.3 / 10.0 / 0.0	27.8	V / 1.7 / 222.0	N/A	-41.7
0.687	13.0 Qp	0.1 / 10.3 / 0.0	23.5	V / 1.7 / 278.0	N/A	-47.3
25.95	10.3 Qp	0.4 / 9.4 / 0.0	20.0	V / 1.7 / 240.0	N/A	-49.5
3.46	9.1 Qp	0.1 / 10.4 / 0.0	19.6	V / 1.7 / 216.0	N/A	-49.9
0.485	20.2 Qp	0.1 / 10.4 / 0.0	30.7	H / 1.7 / 240.0	N/A	-63.2
0.0899	16.5 Qp	0.0 / 11.0 / 0.0	27.5	V / 1.7 / 264.0	N/A	-81.0
0.104	15.8 Qp	0.0 / 10.3 / 0.0	26.2	V / 1.7 / 278.0	N/A	-81.1
0.0200	17.4 Qp	0.0 / 14.5 / 0.0	31.9	V / 1.7 / 186.0	N/A	-89.7

Radiated Electromagnetic Emissions – Unit 0043

Test Report #:	100613810 Run 1	Test Area:	CC1 Radiated	Temperature:	23.1	°C
Test Method:	EN55022	Test Date:	16-Jan-2012	Relative Humidity:	28.7	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.7	kPa
EUT Serial #:	ALPHA2 0043					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Compression mode					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

Tx Spurious Measurements

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.209 RSS-210
***** Measurement Summary *****						
96.37	50.0 Qp	0.8 / 9.5 / 28.0	32.3	V / 1.5 / 312.0	-8.2	-11.2
720.00	40.9 Qp	1.9 / 20.1 / 28.2	34.7	H / 1.6 / 158.0	-12.8	-11.3
200.01	41.1 Qp	0.9 / 12.1 / 27.5	26.7	H / 1.3 / 35.0	-13.8	-16.8
760.00	37.9 Qp	1.9 / 20.4 / 28.1	32.1	H / 1.6 / 158.0	-15.4	-13.9
70.21	42.5 Qp	0.8 / 8.3 / 28.1	23.4	V / 1.7 / 248.0	-17.1	-16.6
45.66	40.1 Qp	0.8 / 10.4 / 28.2	23.1	V / 1.0 / 336.0	-17.4	-16.9
679.97	36.3 Qp	1.8 / 19.1 / 28.3	29.0	H / 1.4 / 160.0	-18.5	-17.0
48.71	40.0 Qp	0.8 / 8.9 / 28.2	21.5	V / 1.0 / 336.0	-19.0	-18.5
96.44	39.3 Qp	0.8 / 9.5 / 28.0	21.6	H / 1.7 / 216.0	-18.9	-21.9
600.00	35.0 Qp	1.7 / 18.6 / 28.4	27.0	V / 1.7 / 78.0	-20.5	-19.0
186.03	36.7 Qp	0.9 / 10.8 / 27.5	20.8	V / 1.5 / 212.0	-19.7	-22.7
219.79	36.4 Qp	1.0 / 10.7 / 27.4	20.7	H / 1.3 / 192.0	-19.8	-25.3
197.33	35.4 Qp	0.9 / 11.7 / 27.5	20.6	V / 1.6 / 196.0	-19.9	-22.9
41.75	33.7 Qp	0.8 / 12.7 / 28.2	18.9	V / 1.0 / 38.0	-21.6	-21.1
151.82	33.1 Qp	0.8 / 12.5 / 27.7	18.7	V / 1.1 / 330.0	-21.8	-24.8
186.17	32.8 Qp	0.9 / 10.8 / 27.5	17.0	H / 1.7 / 216.0	-23.5	-26.5
219.38	32.4 Qp	1.0 / 10.7 / 27.4	16.7	V / 1.7 / 260.0	-23.8	-29.3
340.03	32.5 Qp	1.3 / 14.0 / 27.3	20.4	V / 1.5 / 228.0	-27.1	-25.6
248.11	31.1 Qp	1.1 / 11.4 / 27.3	16.4	V / 1.6 / 196.0	-31.1	-29.6
244.82	28.5 Qp	1.1 / 11.4 / 27.3	13.7	H / 1.4 / 188.0	-33.8	-32.3
7.66	20.9 Qp	0.2 / 10.6 / 0.0	31.8	V / 1.6 / 167.0	N/A	-37.7
1.12	16.9 Qp	0.1 / 10.6 / 0.0	27.6	V / 1.6 / 176.0	N/A	-39.0
15.31	19.9 Qp	0.3 / 10.0 / 0.0	30.2	H / 1.6 / 225.0	N/A	-39.3
15.31	18.5 Qp	0.3 / 10.0 / 0.0	28.8	V / 1.6 / 225.0	N/A	-40.7
7.97	15.9 Qp	0.2 / 10.6 / 0.0	26.8	H / 1.6 / 225.0	N/A	-42.7

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.209 RSS-210
3.29	13.1 Qp	0.1 / 10.4 / 0.0	23.6	V / 1.6 / 176.0	N/A	-45.9
24.41	4.7 Qp	0.4 / 9.7 / 0.0	14.8	V / 1.6 / 225.0	N/A	-54.7
0.485	17.7 Qp	0.1 / 10.4 / 0.0	28.2	V / 1.6 / 118.0	N/A	-65.7
0.267	16.0 Qp	0.0 / 10.3 / 0.0	26.4	V / 1.6 / 232.0	N/A	-72.7
0.100	20.3 Qp	0.0 / 10.3 / 0.0	30.6	V / 1.6 / 232.0	N/A	-77.0
0.0200	16.4 Qp	0.0 / 14.5 / 0.0	30.9	V / 1.6 / 158.0	N/A	-90.7

Example calculation:

Measured Level	+	Transducer, Cable Loss & Amplifier corrections	=	Corrected Reading	Specification Limit	-	Corrected Reading	=	Delta Specification
(dBμV)		(dB)		(dBμV/m)	(dBμV/m)		(dBμV/m)		
14.0		14.9		28.9	40.0		28.9		-11.1

Notes:

- 1) As determined from pre-scans, product tested in worst-case axis – axis 1 (product flat on table).
- 2) Product configured in normal operation compression mode – radio transmitter active.
- 3) Product has no clocks > 108MHz – testing above 1GHz not required.
- 4) Covers ICES-003:2004 - Digital Apparatus Interference-Causing Equipment.

Deviations, Additions, or Exclusions: None

14 Radiated Electromagnetic Emissions – Product in Receive/Idle Mode – (SYSRS11) (SYSRS315) (SYSRS242.6)

14.1 Method

The test methods used comply with ANSI C63.4 and CISPR 16. Unless otherwise stated no deviations were made from CISPR 11 Group 1, Class B:2009+A1:2010, FCC Part 15.209 and IC RSS-210:2007, Section 2.6, Table 2 & Table 3.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

14.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
18913	Spectrum Analyzer	Hewlett-Packard	E7405A	My44211889	06/28/2011	06/28/2012
18912	9 kHz- 1.3GHz Pre Amp	Hewlett-Packard	8447F	3113A05545	06/03/2011	06/03/2012
19936	Bilog Antenna 30MHz – 6GHz	Sunol Sciences	JB6	A050707-1	11/15/2011	11/15/2012
18897	Active Loop Antenna (9kHz to 30MHz)	EMCO	6502	9205-2738	11/22/2011	11/22/2012
SW-6	Software application for Radiated and Conducted Emissions	Intertek	OATS_CVI	V.1.0	VBU	VBU

14.3 Results:

The sample tested was found to Comply.

14.4 Setup Photographs: Product in Idle Mode

Radiated Emissions – Product 3-Axes

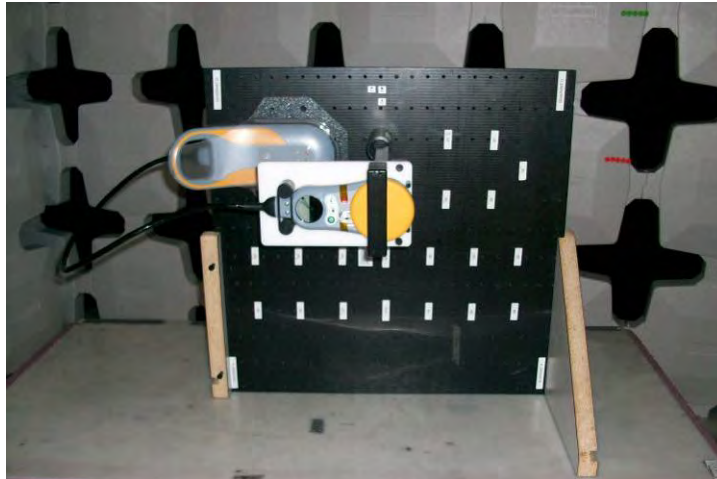
Axis 1 – Product Flat on Table (worst-case axis)**Axis 2 – Product Vertical****Axis 3 – Product Vertical & Rotated 90 Degrees**

Photo: Product in Idle Mode

Radiated Emissions (Front View)



Photo: Product in Idle Mode

Radiated Emissions (Rear View)

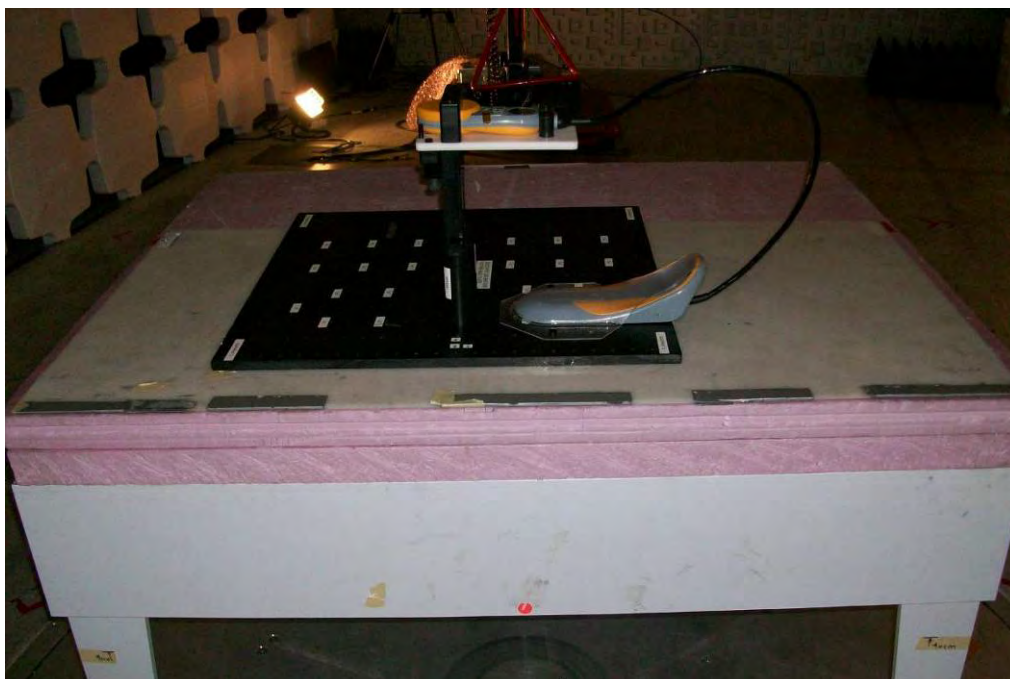
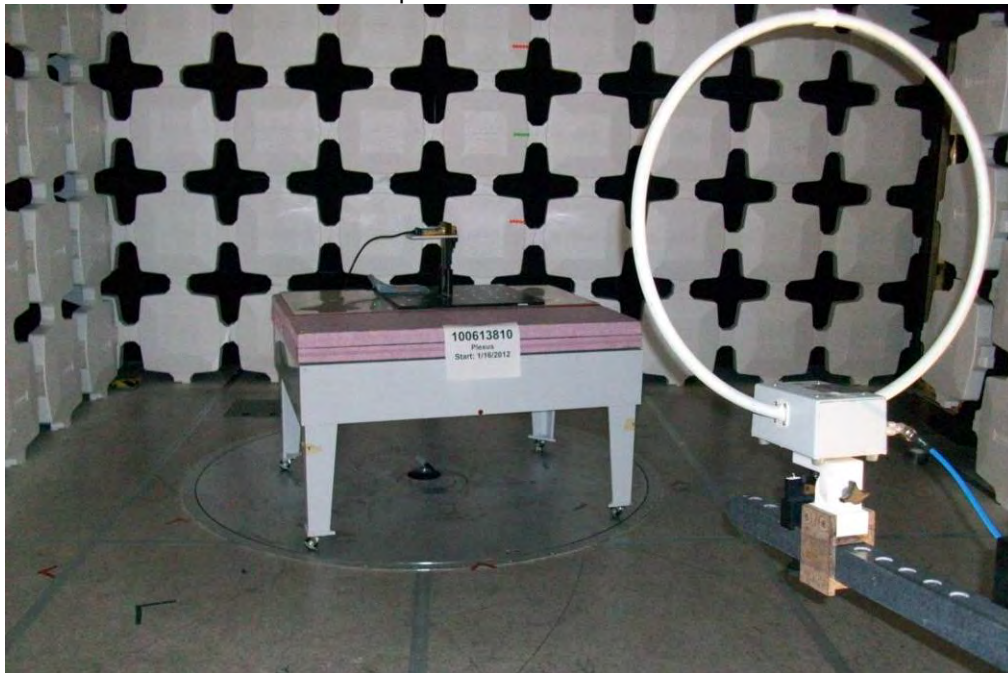


Photo: Product in Receive/ Idle Mode

Radiated Emissions (Antenna)

Active Loop Antenna – 10kHz to 30MHz

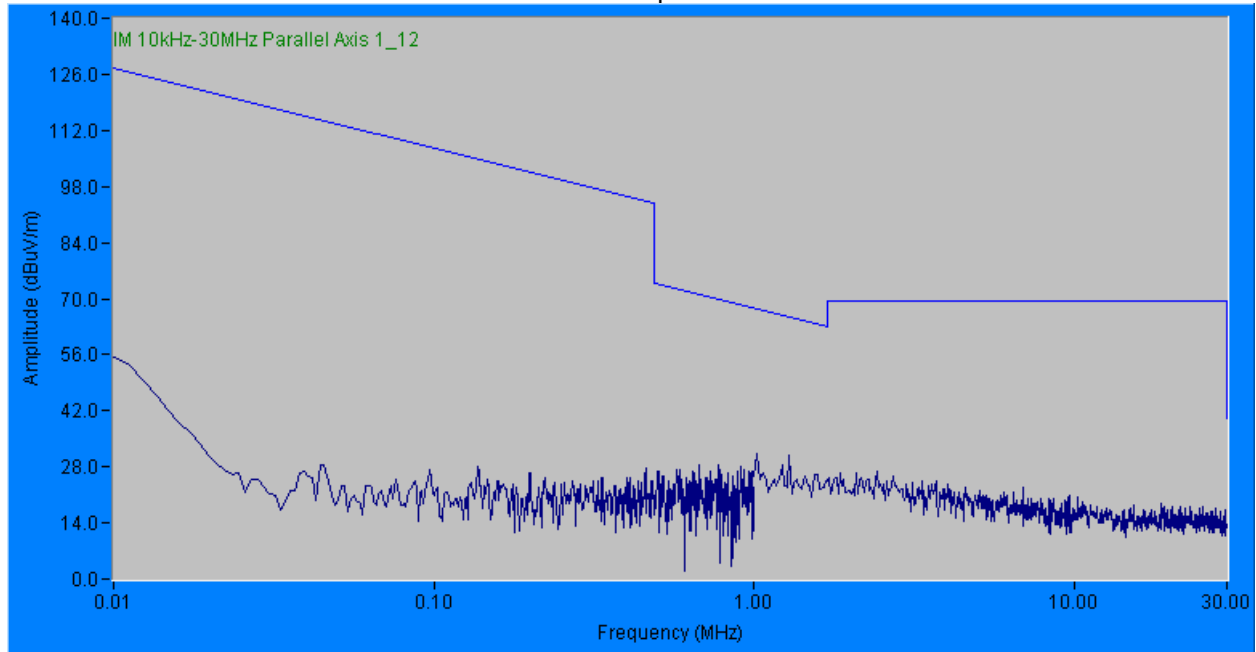


BiLog Antenna – 30MHz to 1000MHz

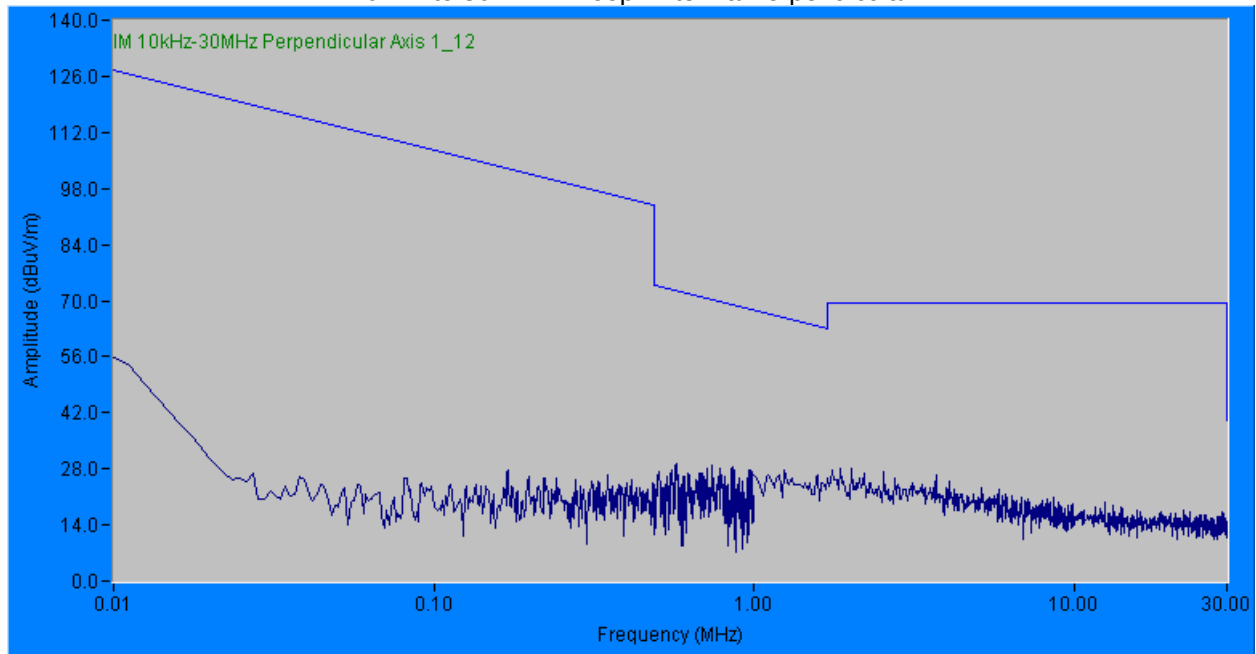


14.5 Pre-scan plots for reference only – not final data: Receive/ Idle Mode**Unit 0012**

10kHz to 30MHz – Loop Antenna Parallel



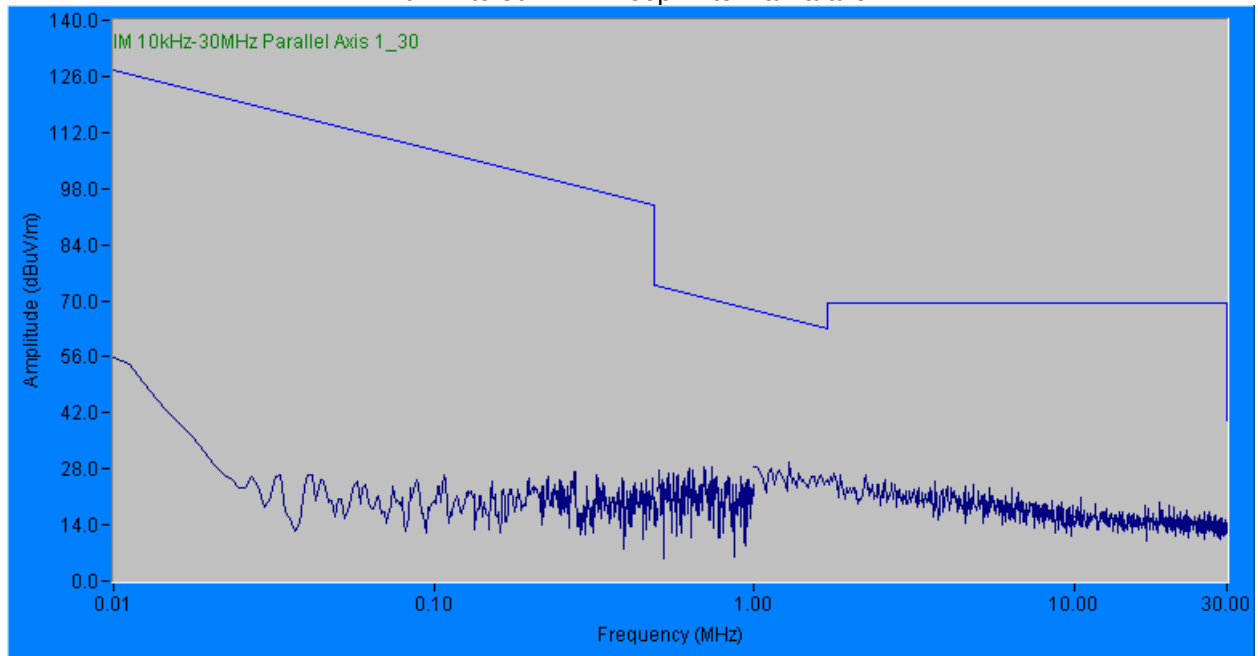
10kHz to 30MHz – Loop Antenna Perpendicular



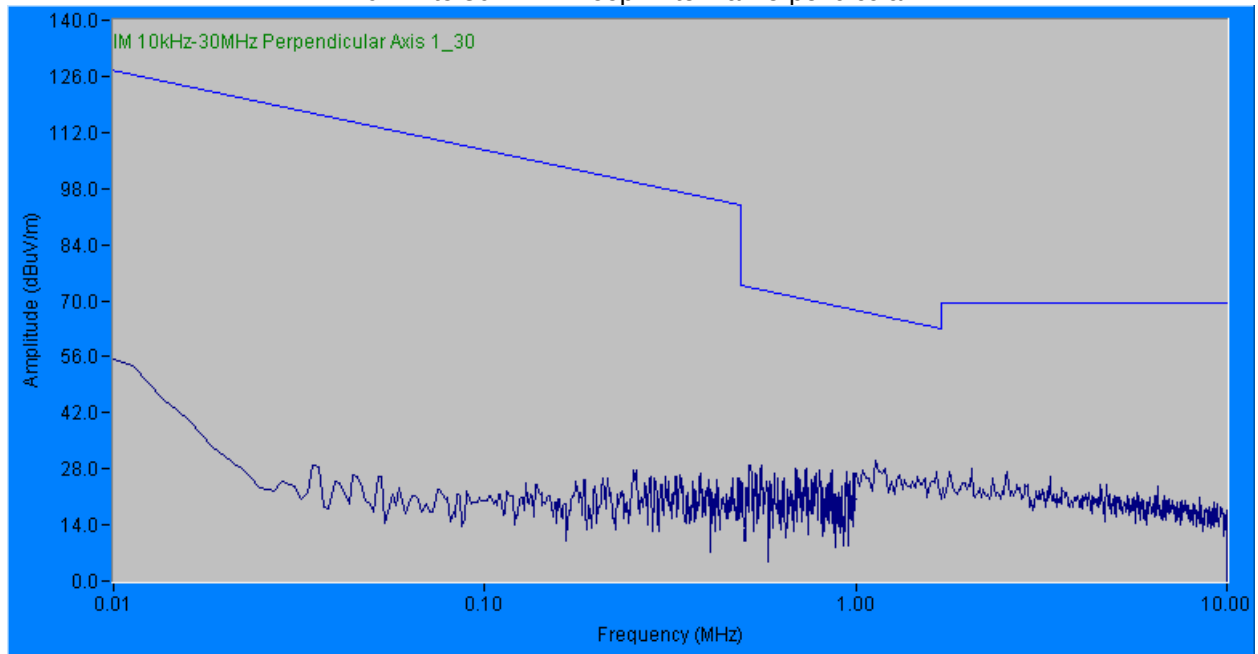
Note: Above plots represent peak measurements referenced to FCC 15.209/RSS-210 quasi-peak limit

Unit 0030

10kHz to 30MHz – Loop Antenna Parallel



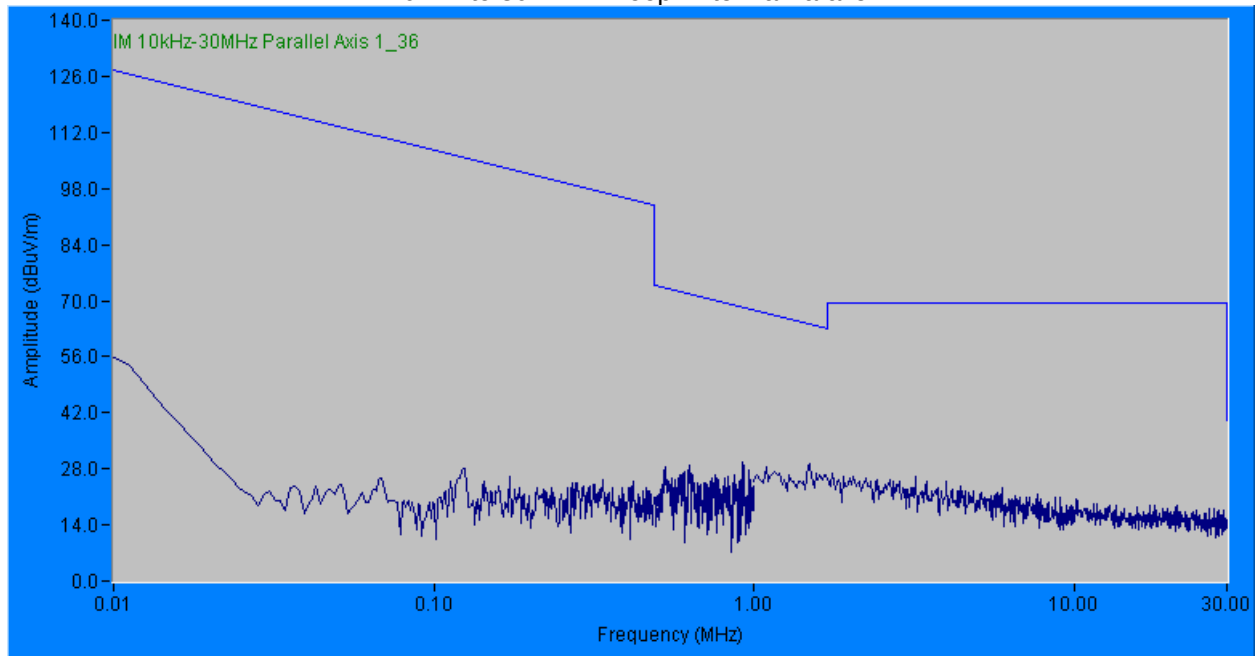
10kHz to 30MHz – Loop Antenna Perpendicular



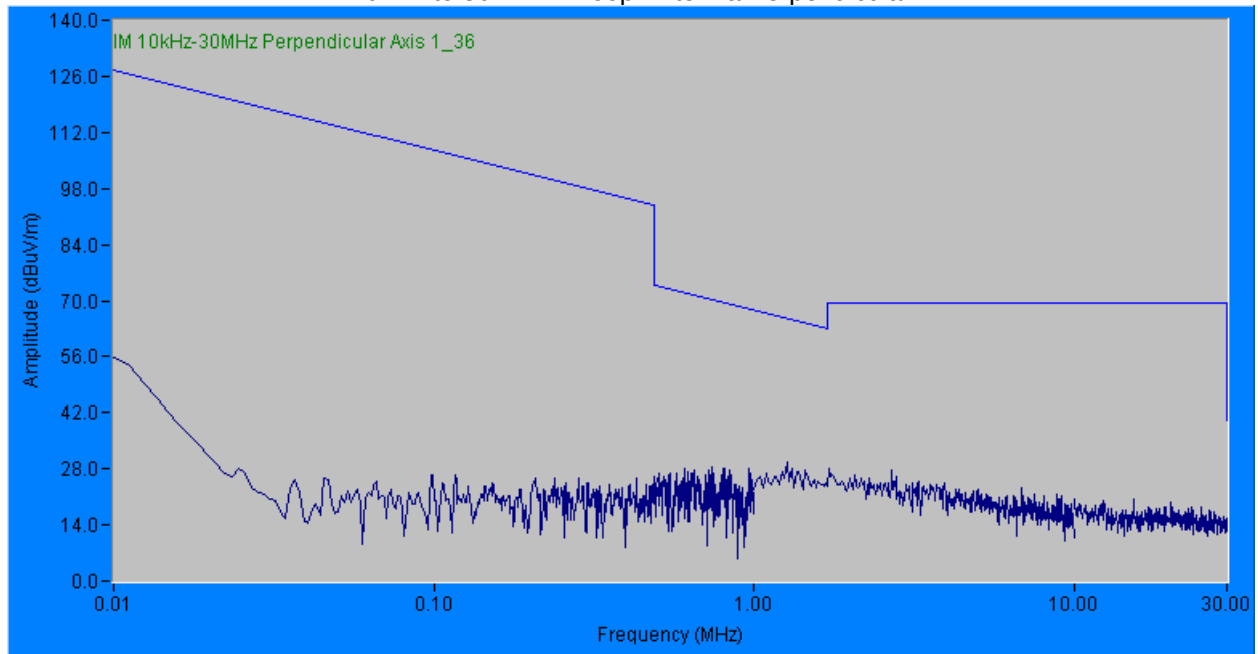
Note: Above plots represent peak measurements referenced to FCC 15.209/RSS-210 quasi-peak limit

Unit 0036

10kHz to 30MHz – Loop Antenna Parallel



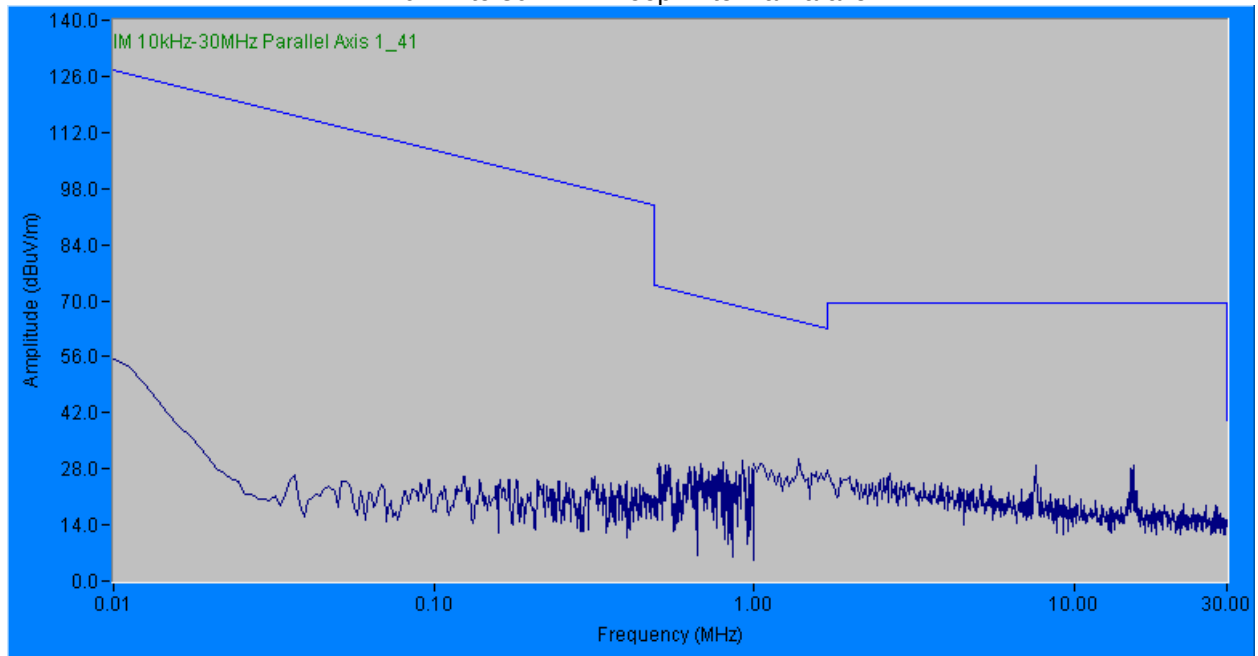
10kHz to 30MHz – Loop Antenna Perpendicular



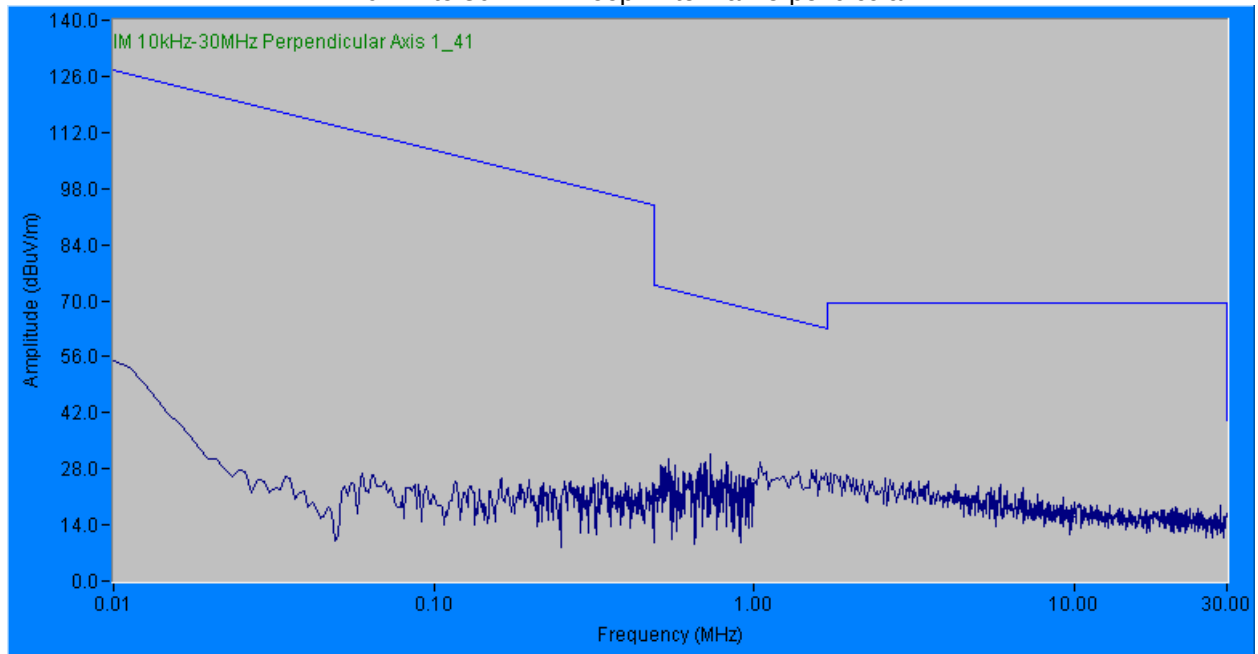
Note: Above plots represent peak measurements referenced to FCC 15.209/RSS-210 quasi-peak limit

Unit 0041

10kHz to 30MHz – Loop Antenna Parallel



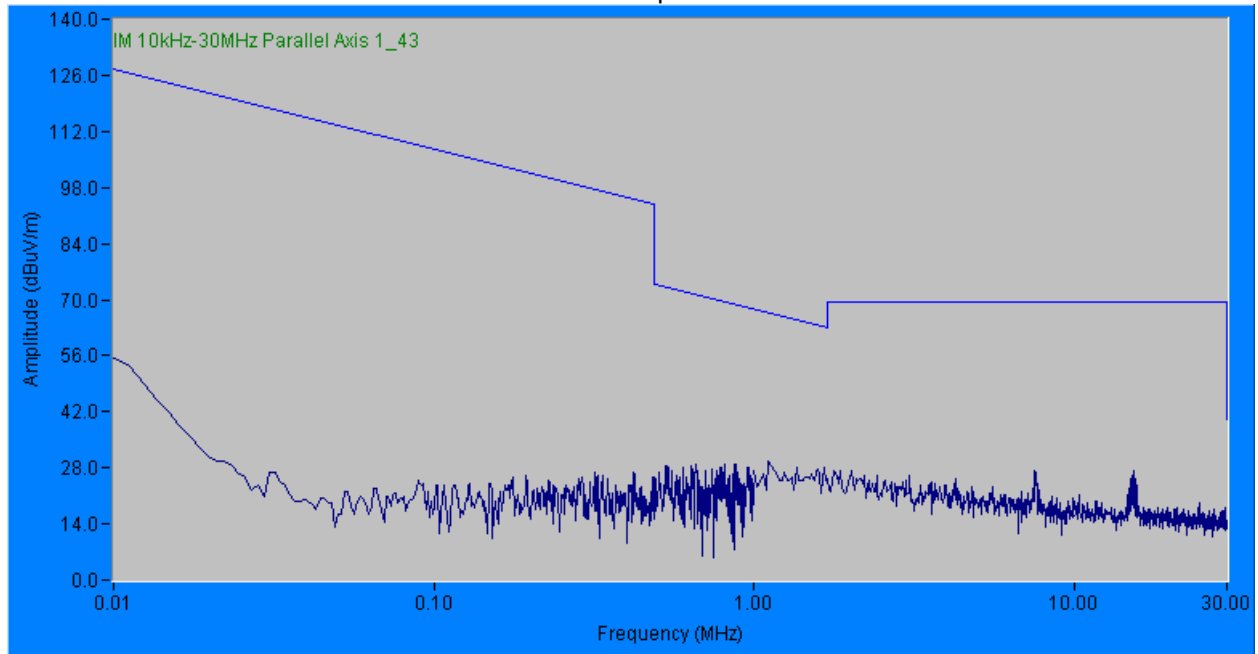
10kHz to 30MHz – Loop Antenna Perpendicular



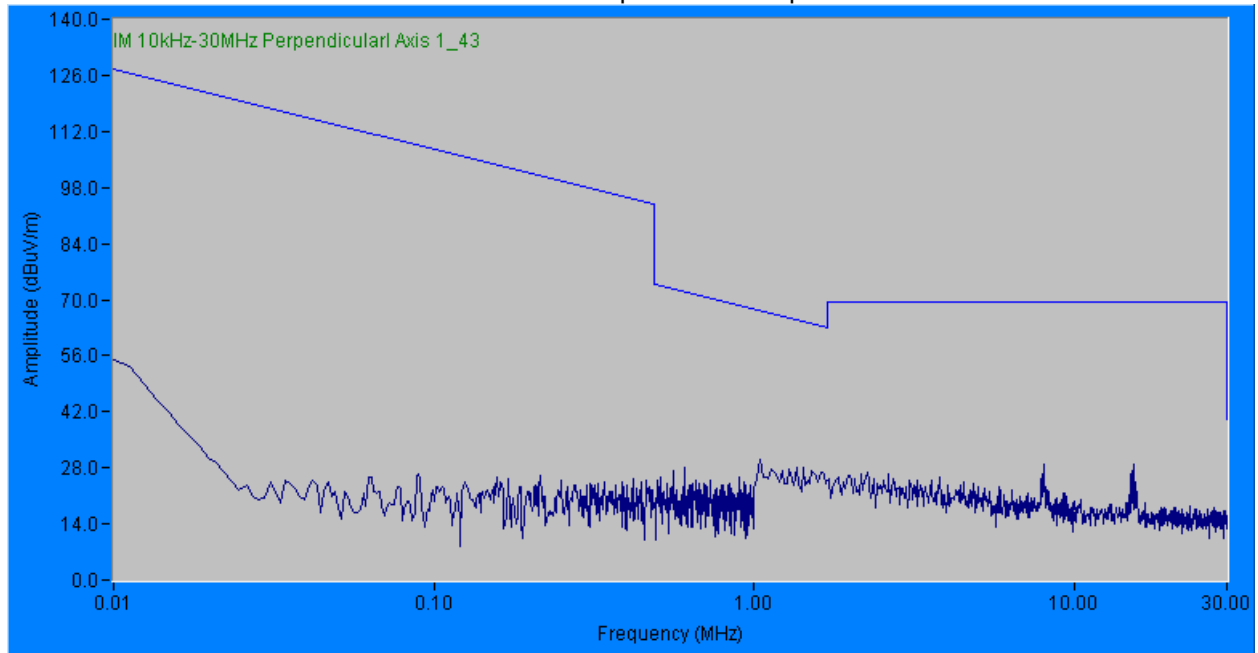
Note: Above plots represent peak measurements referenced to FCC 15.209/RSS-210 quasi-peak limit

Unit 0043

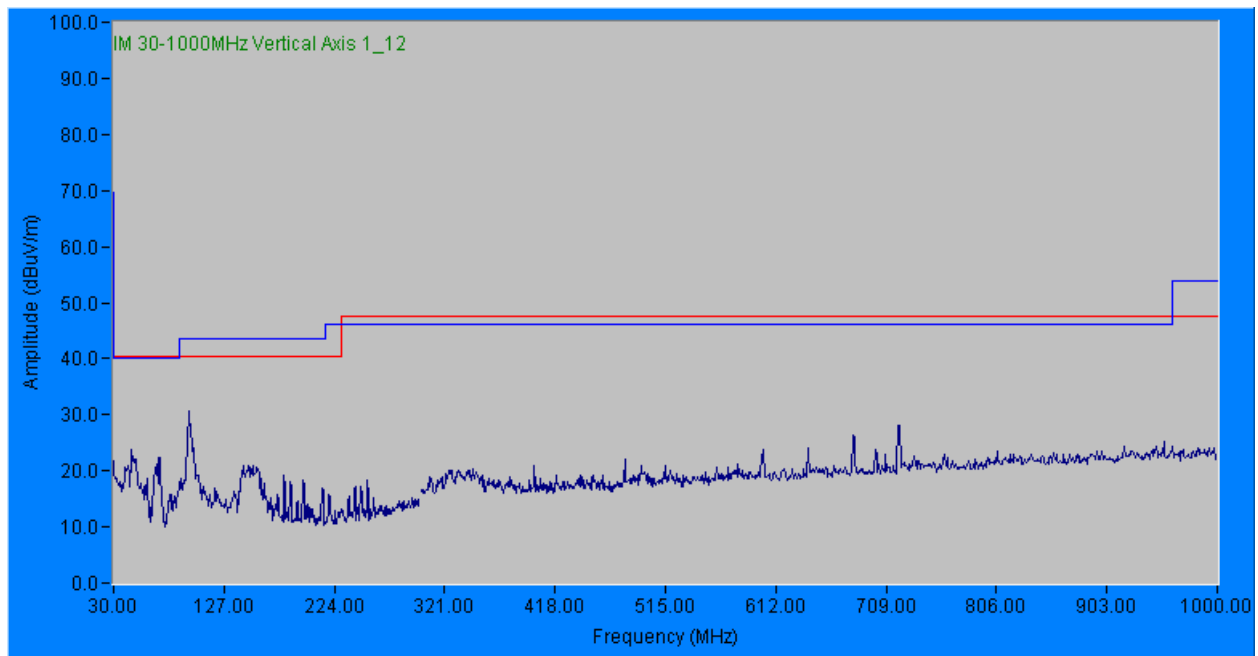
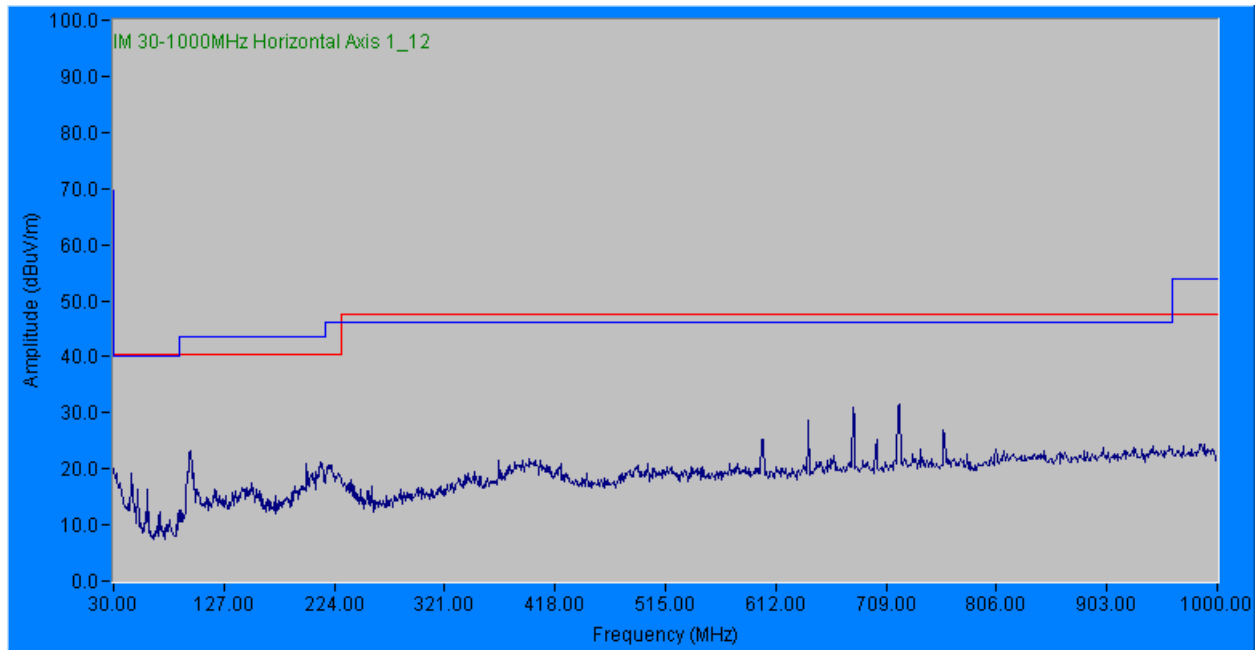
10kHz to 30MHz – Loop Antenna Parallel



10kHz to 30MHz – Loop Antenna Perpendicular



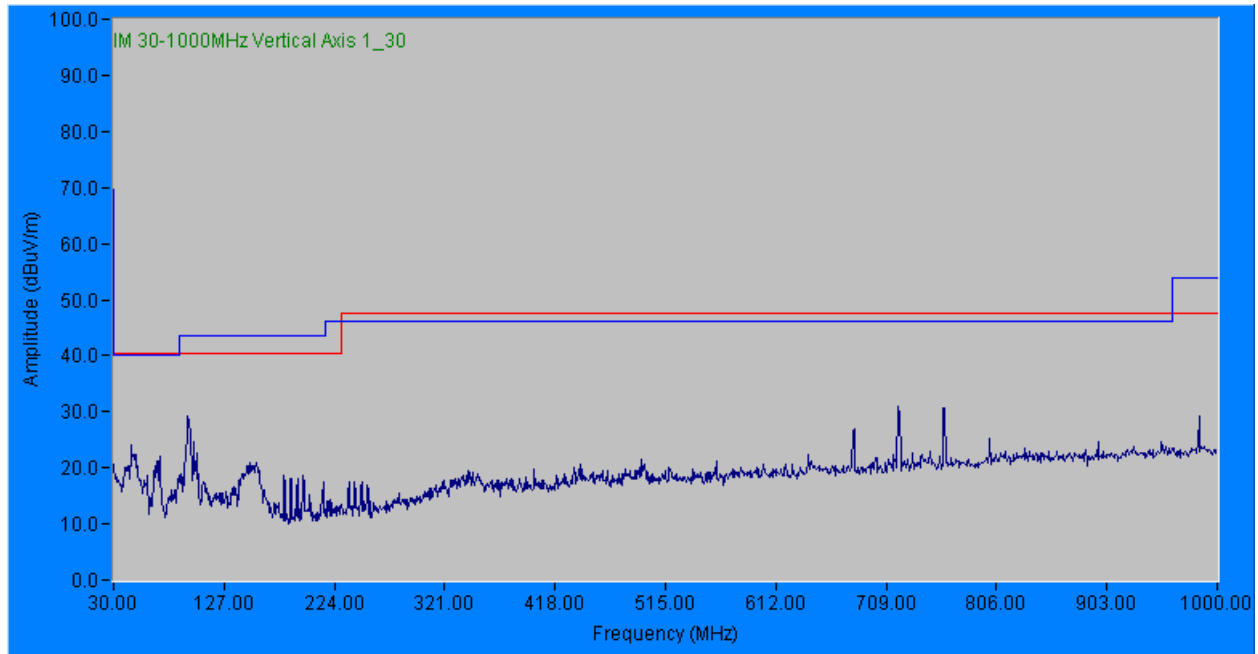
Note: Above plots represent peak measurements referenced to FCC 15.209/RSS-210 quasi-peak limit

14.6 Pre-scan plots for reference only – not final data: Idle Mode**Unit 0012****30MHz to 1000MHz – Vertical****30MHz to 1000MHz – Horizontal**

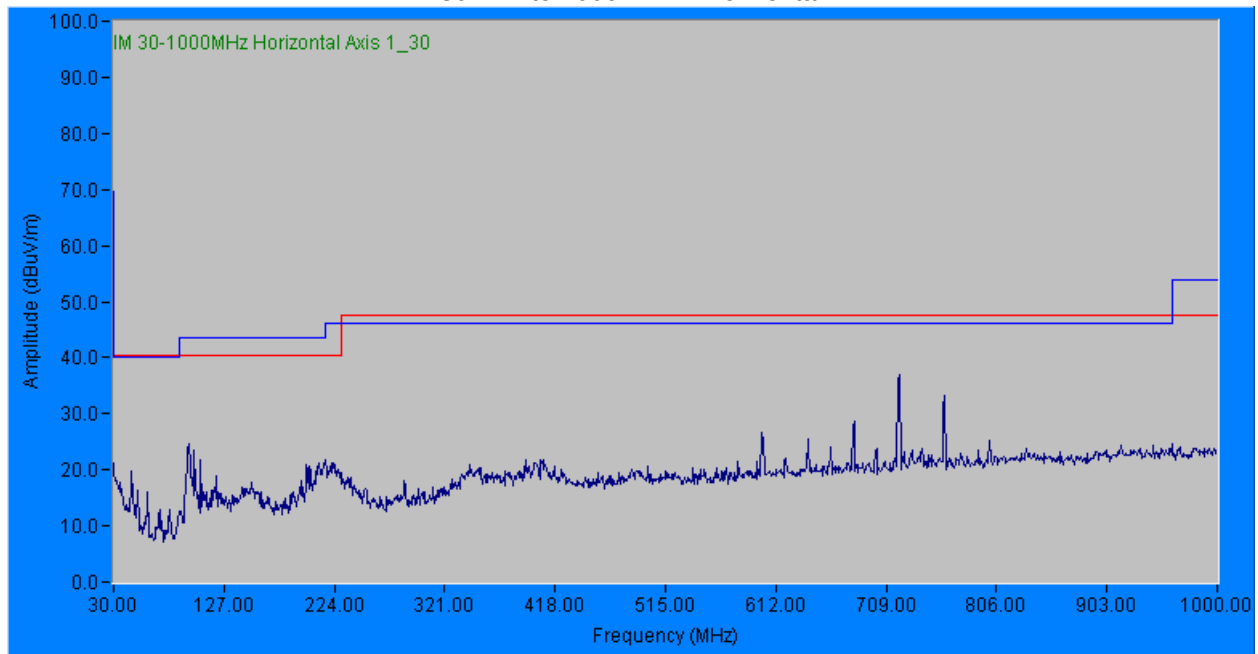
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.209/RSS-210 (blue)
quasi-peak limits

Unit 0030

30MHz to 1000MHz – Vertical



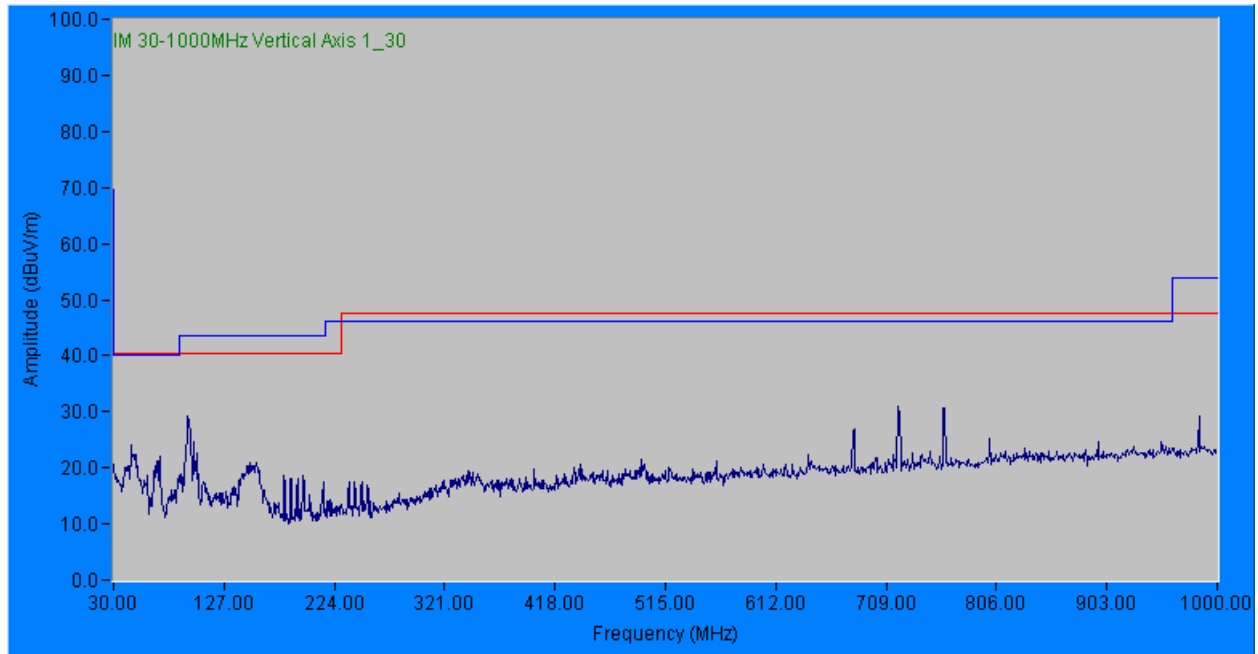
30MHz to 1000MHz – Horizontal



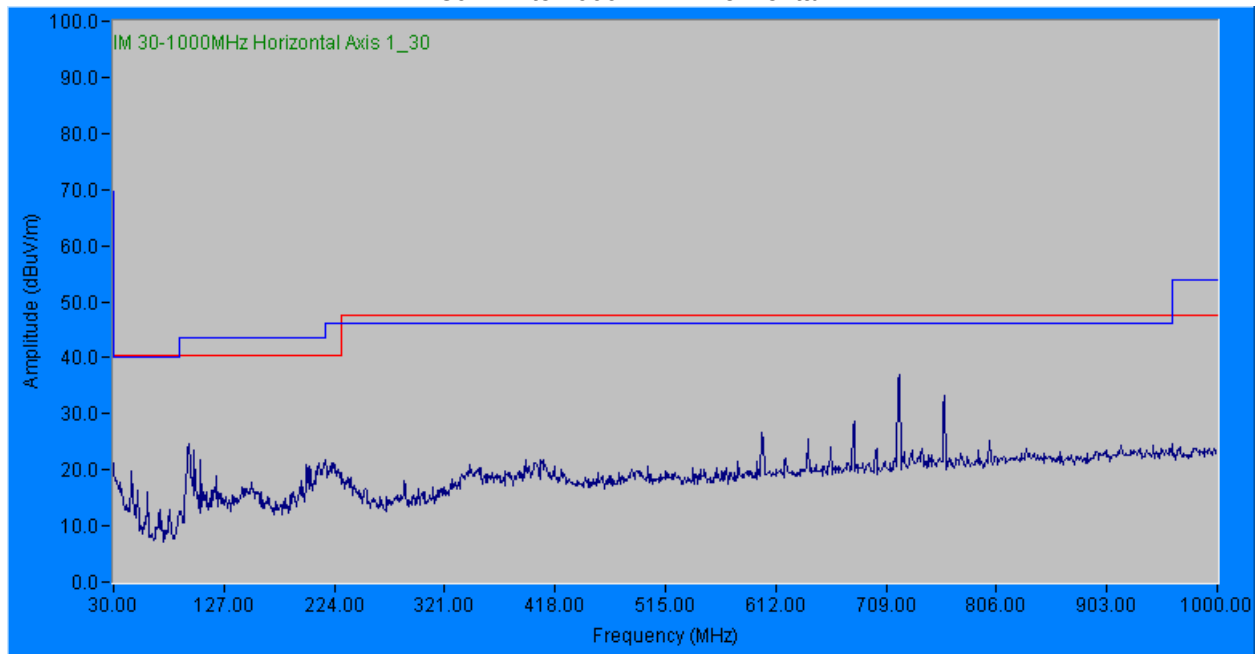
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.209/RSS-210 (blue)
quasi-peak limits

Unit 0036

30MHz to 1000MHz – Vertical



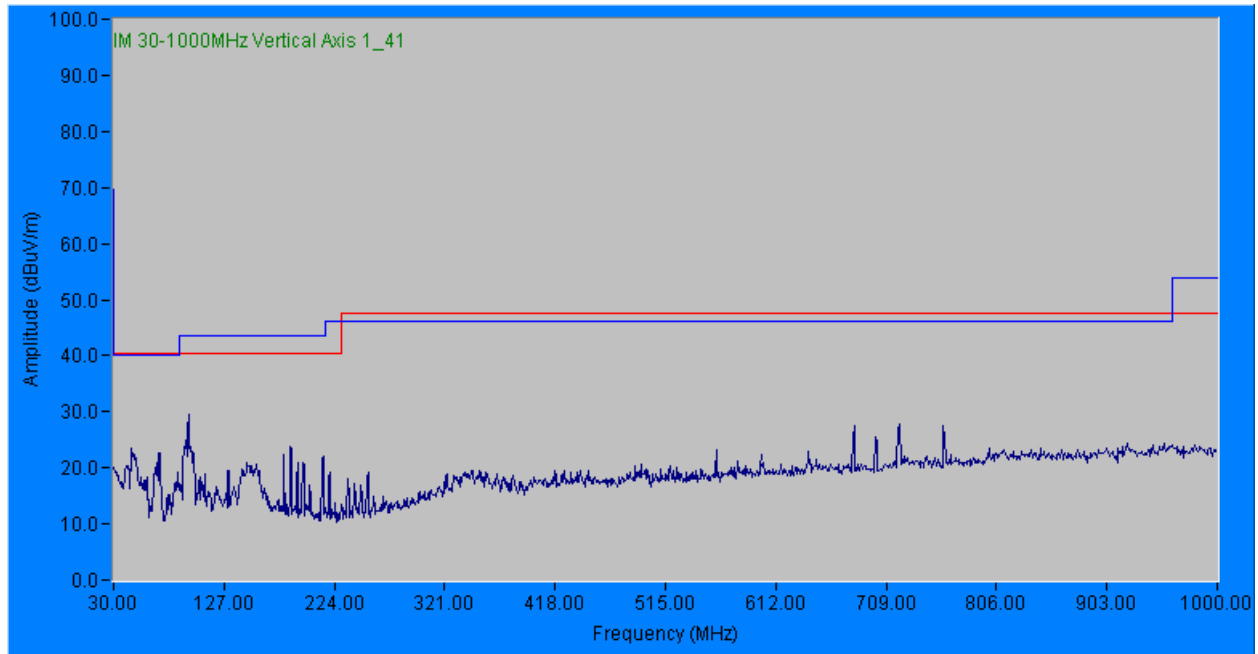
30MHz to 1000MHz – Horizontal



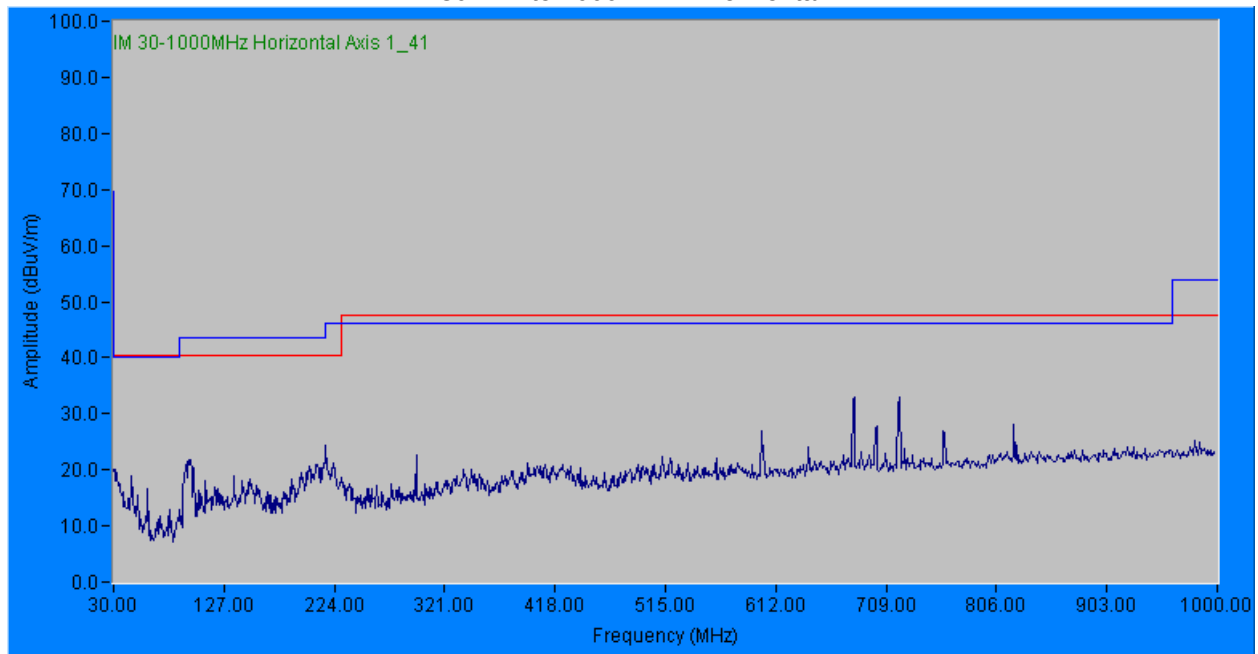
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.209/RSS_210 (blue)
quasi-peak limits

Unit 0041

30MHz to 1000MHz – Vertical



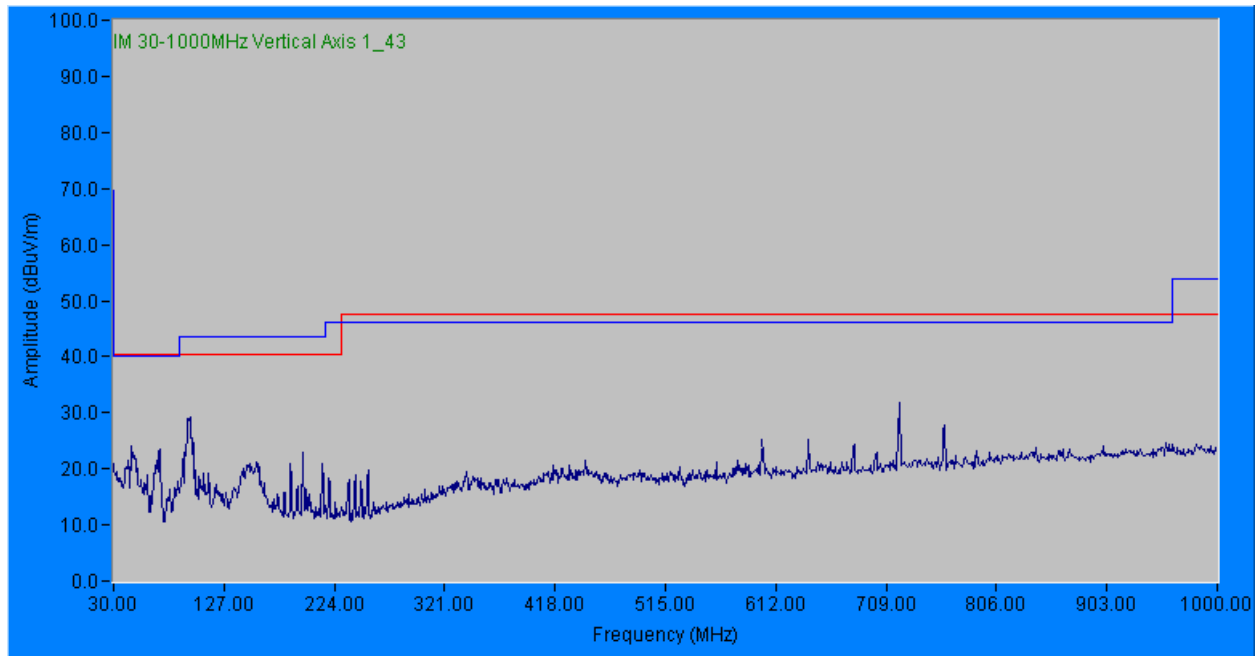
30MHz to 1000MHz – Horizontal



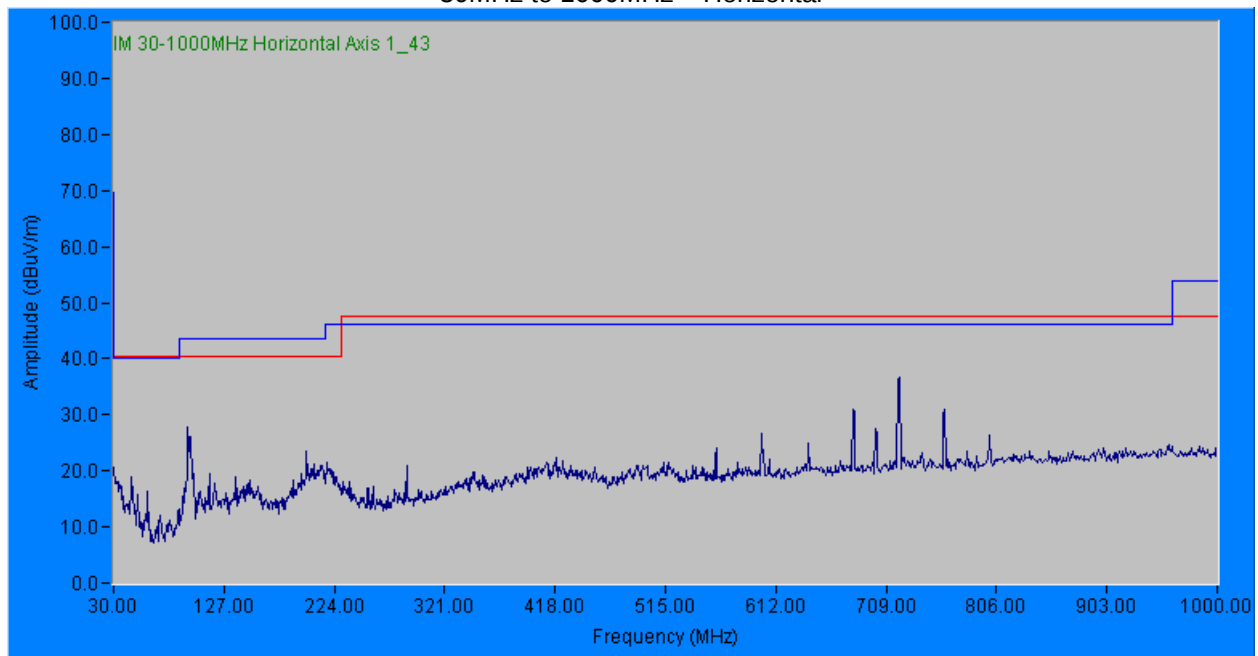
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.209/RSS-210 (blue)
quasi-peak limits

Unit 0043

30MHz to 1000MHz – Vertical



30MHz to 1000MHz – Horizontal

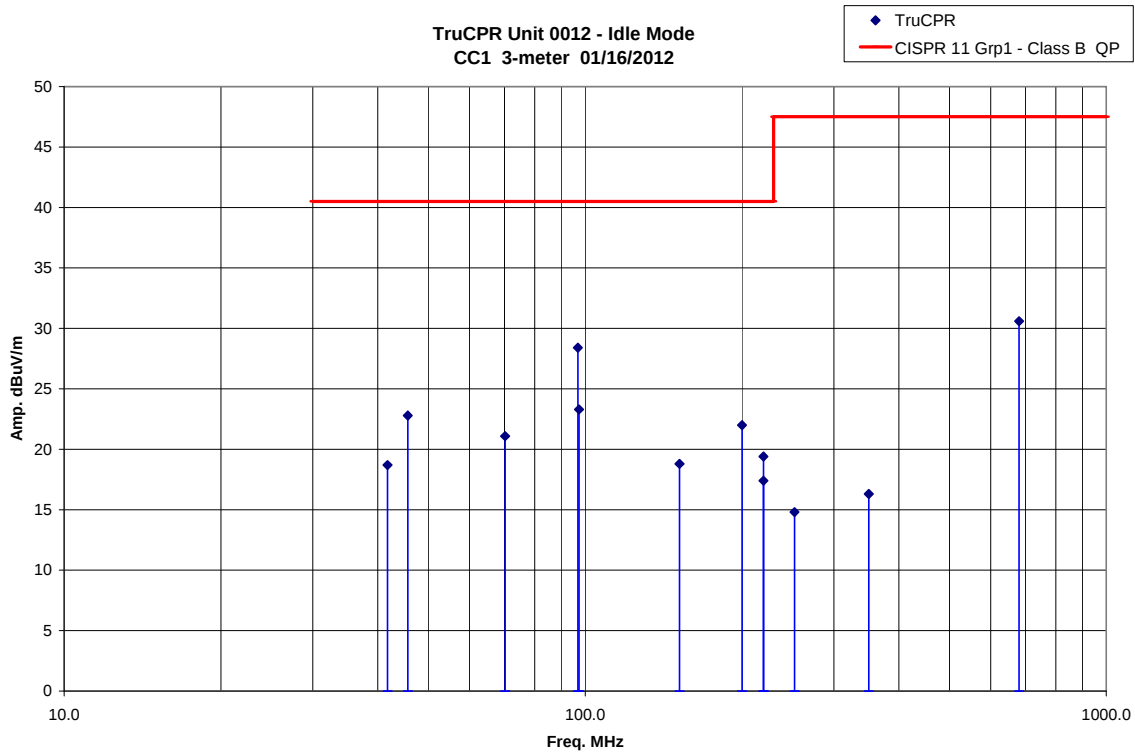


Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.209/RSS-210 (blue)
quasi-peak limits

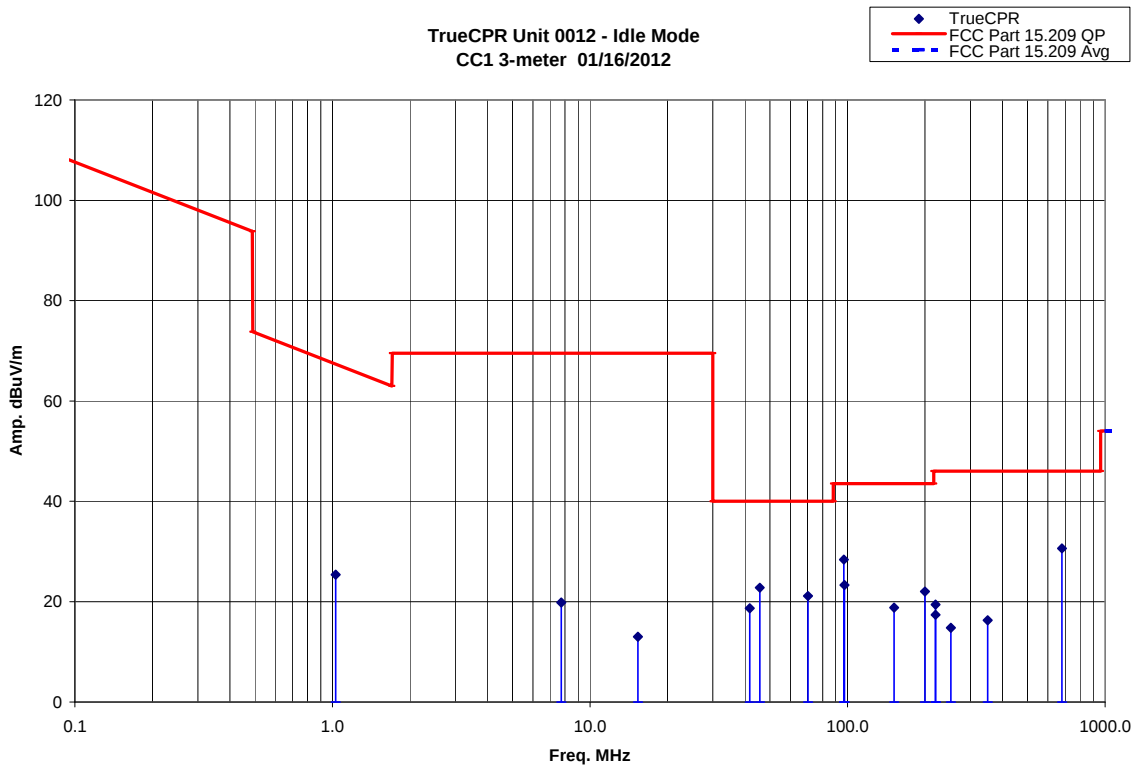
14.7 Final Plots: Receive/ Idle Mode – CISPR 11 Group 1, Class & FCC 5.209/ RSS-210

Unit 0012

CISPR 11 Group 1, Class B - 30MHz to 1000MHz (Quasi-Peak Data)

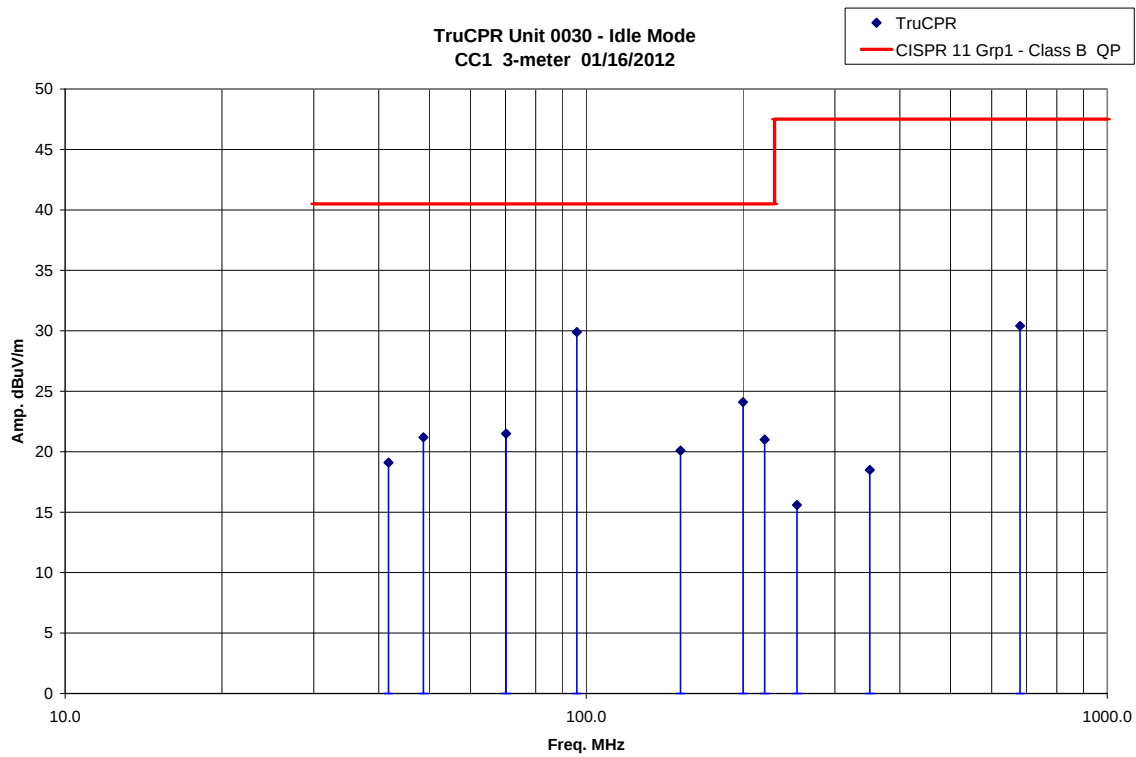


FCC 15.209/RSS-210 -10kHz to 1000MHz (Quasi-Peak Data)

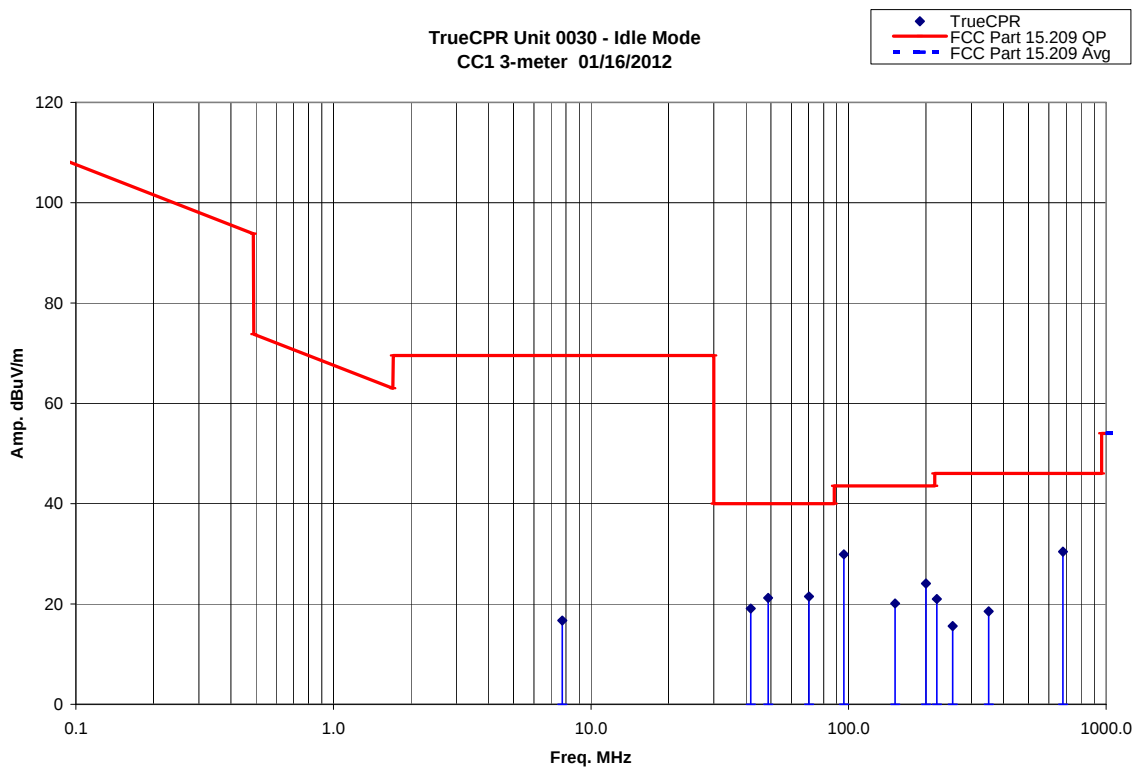


Unit 0030

CISPR 11 Group 1, Class B - 30MHz to 1000MHz (Quasi-Peak Data)

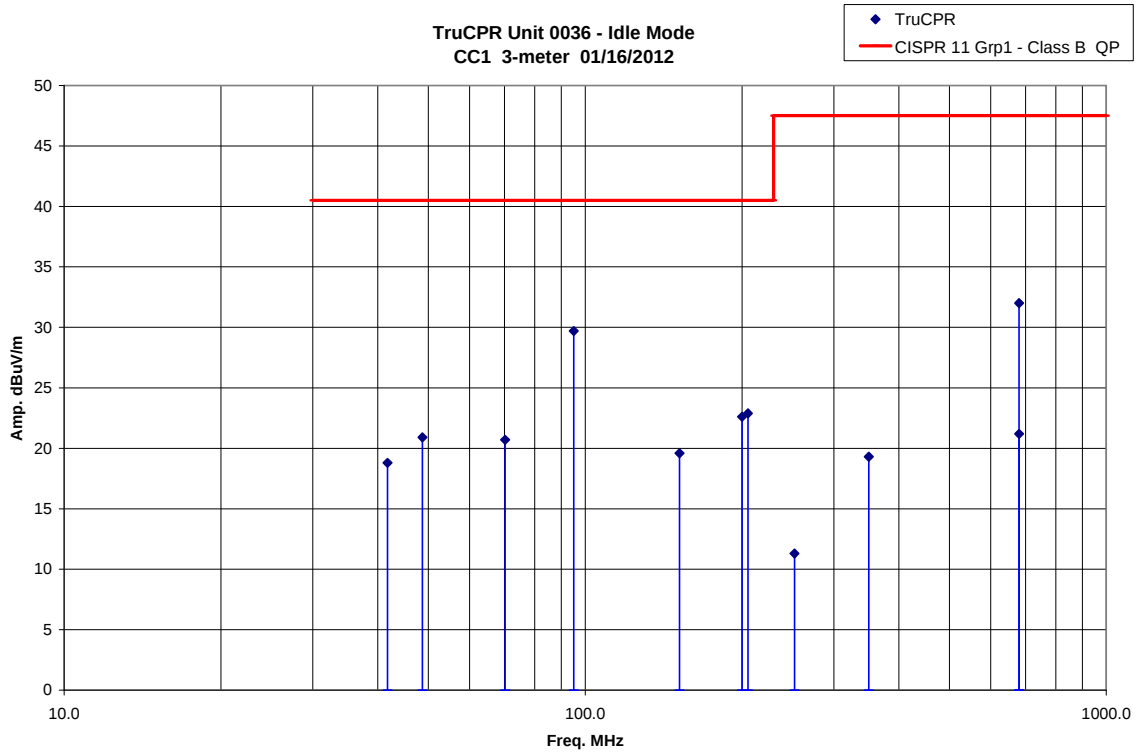


FCC 15.209/RSS-210 - 10kHz to 1000MHz (Quasi-Peak Data)

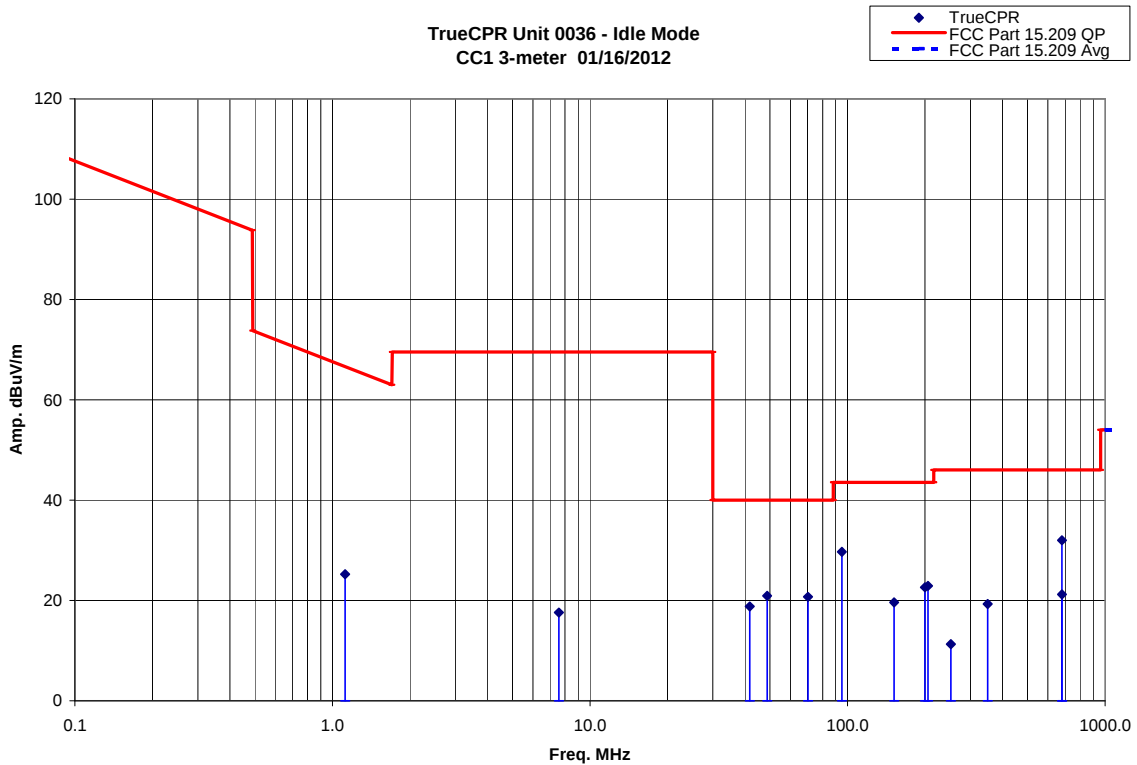


Unit 0036

CISPR 11 Group 1, Class B - 30MHz to 1000MHz (Quasi-Peak Data)

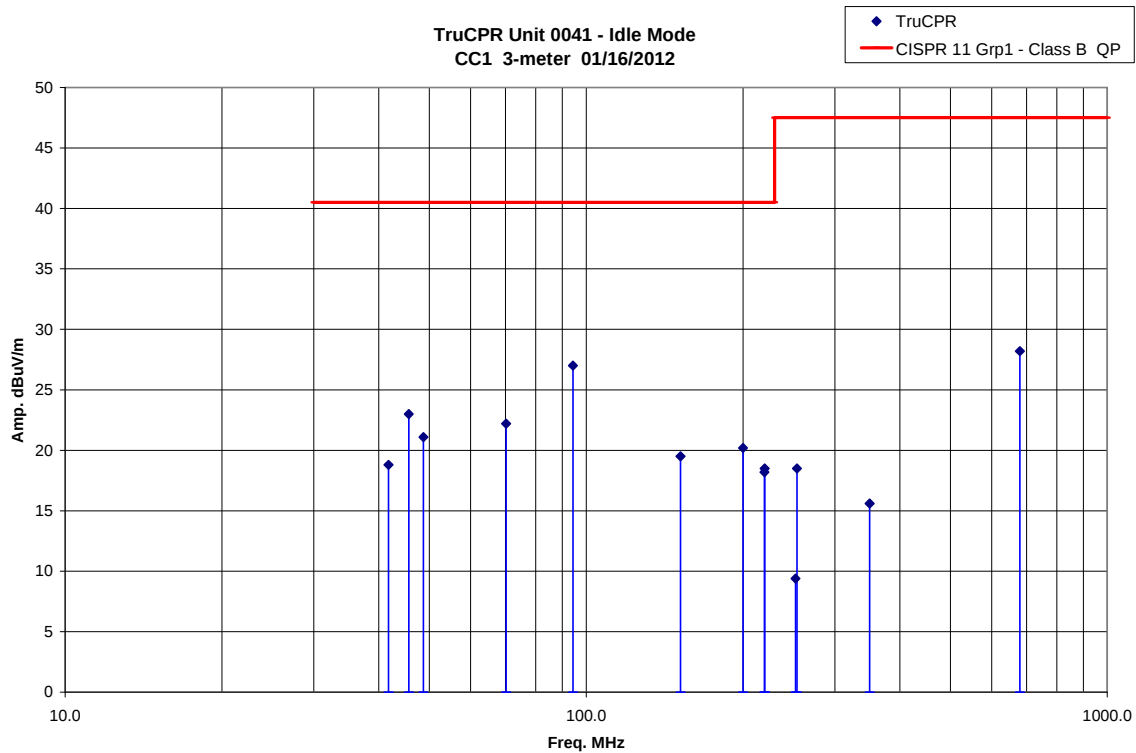


FCC 15.209/RSS-210 -10kHz to 1000MHz (Quasi-Peak Data)

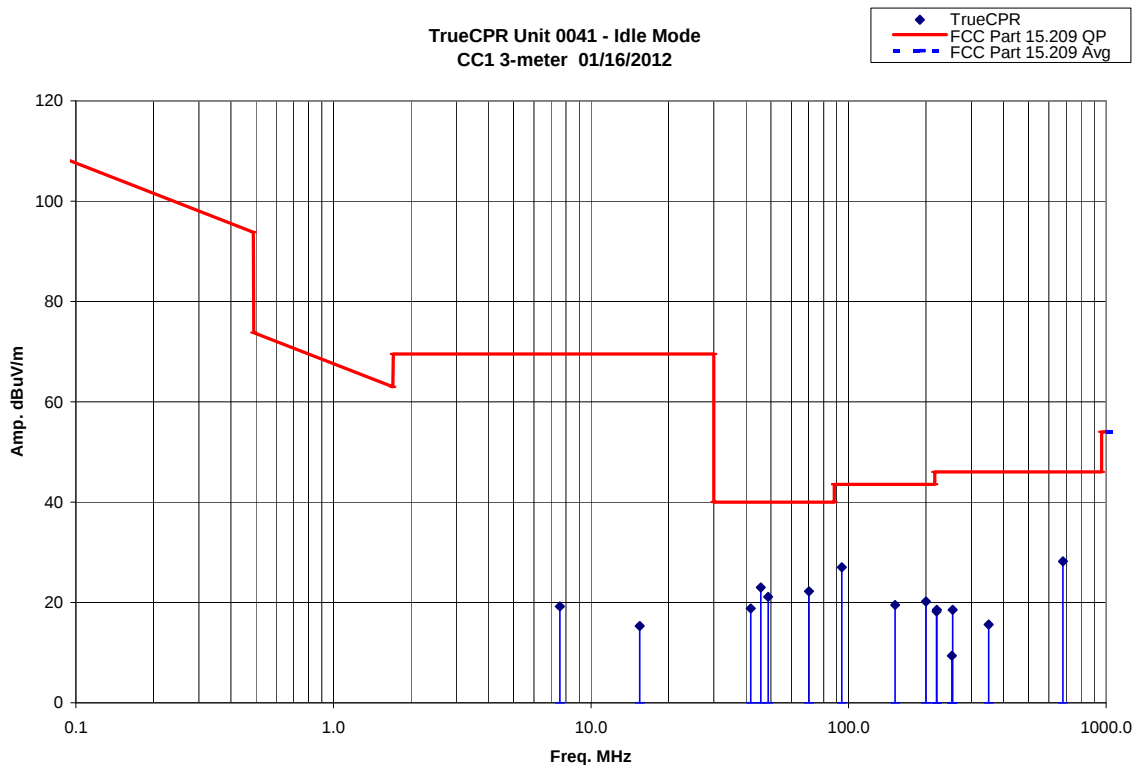


Unit 0041

CISPR 11 Group 1, Class B - 30MHz to 1000MHz (Quasi-Peak Data)

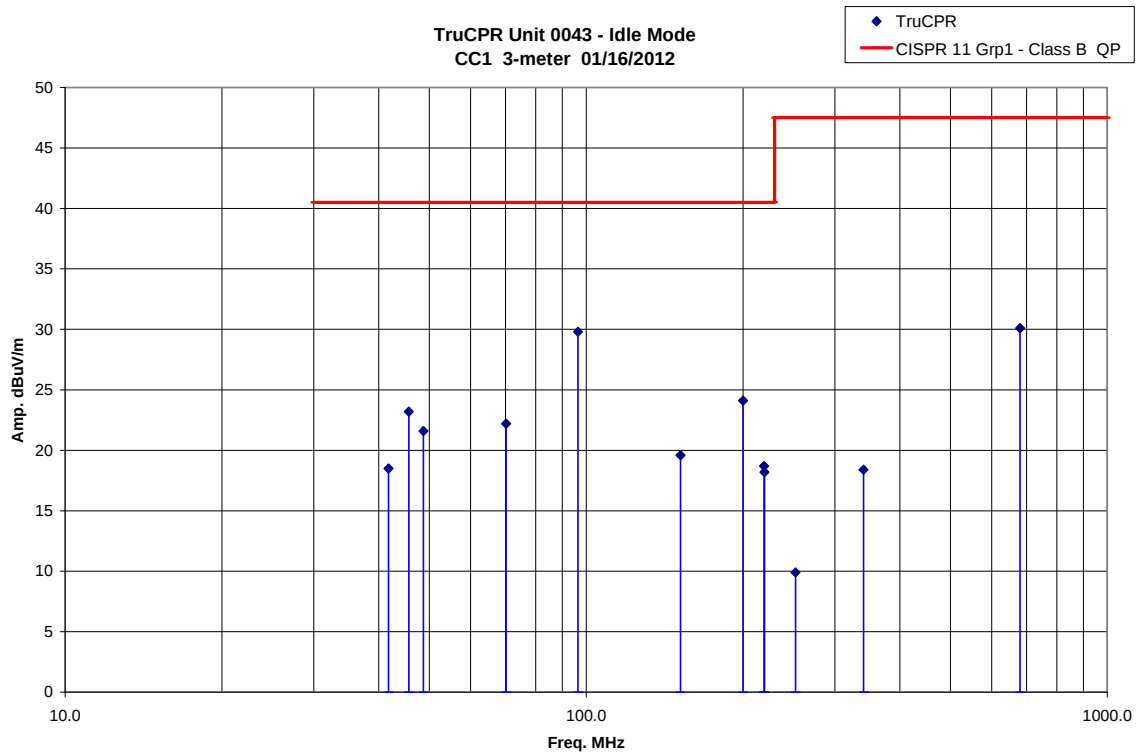


FCC 15.209/RSS-210 - 0kHz to 1000MHz (Quasi-Peak Data)

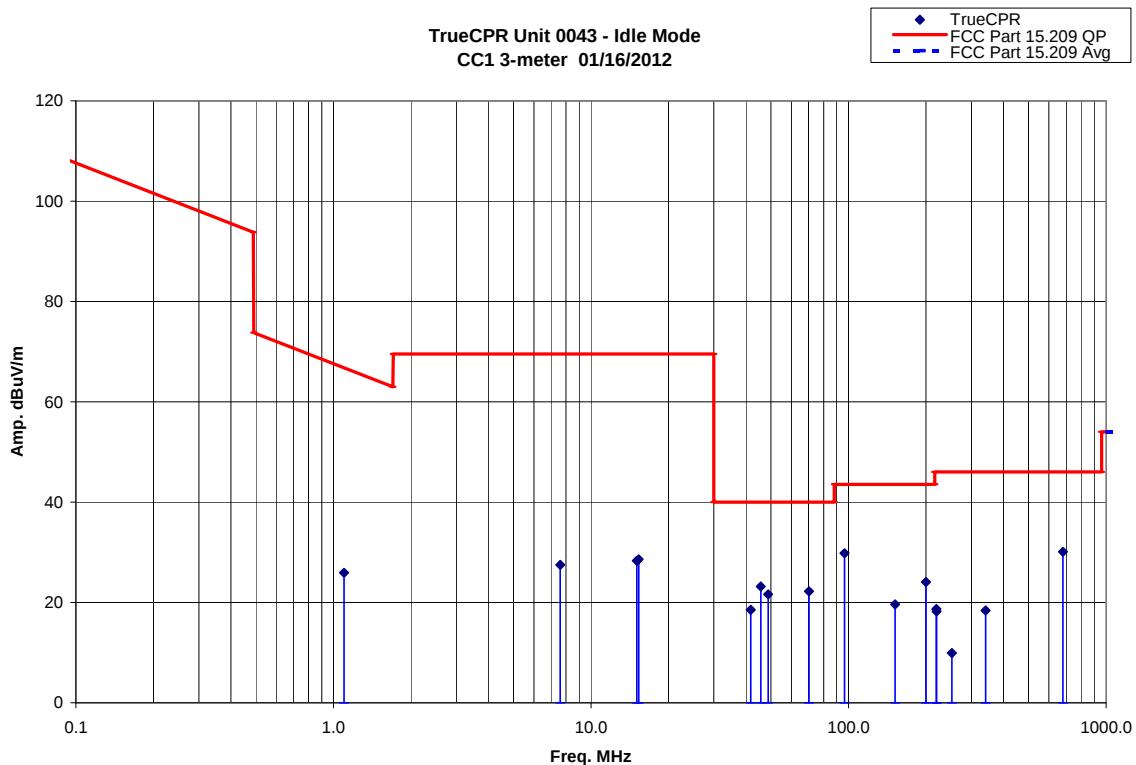


Unit 0043

CISPR 11 Group 1, Class B - 30MHz to 1000MHz (Quasi-Peak Data)



FCC 15.209/RSS-210 -10kHz to 1000MHz (Quasi-Peak Data)



Test Data: Receive/ Idle Mode

Radiated Electromagnetic Emissions – Unit 0012

Test Report #:	100613810 Run 3	Test Area:	CC1 Radiated	Temperature:	22.3	°C
Test Method:	EN55022	Test Date:	16-Jan-2012	Relative Humidity:	21.7	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	82.5	kPa
EUT Serial #:	ALPHA2 0012					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Idle mode					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	EN55022 B	15.209 <1GHz
***** Measurement Summary *****						
96.81	46.0 Qp	0.8 / 9.6 / 28.0	28.4	V / 1.1 / 94.0	-12.1	-15.1
679.97	38.0 Qp	1.8 / 19.1 / 28.3	30.6	H / 1.6 / 146.0	-16.9	-15.4
45.66	39.9 Qp	0.8 / 10.4 / 28.2	22.8	V / 1.0 / 349.0	-17.7	-17.2
97.32	40.8 Qp	0.8 / 9.7 / 28.0	23.3	H / 2.0 / 10.0	-17.2	-20.2
200.01	36.4 Qp	0.9 / 12.1 / 27.5	22.0	H / 1.5 / 24.0	-18.5	-21.5
70.21	40.1 Qp	0.8 / 8.3 / 28.1	21.1	V / 1.0 / 264.0	-19.4	-18.9
219.81	35.1 Qp	1.0 / 10.7 / 27.4	19.4	H / 1.5 / 24.0	-21.1	-26.6
41.75	33.5 Qp	0.8 / 12.7 / 28.2	18.7	V / 1.0 / 38.0	-21.8	-21.3
151.72	33.3 Qp	0.8 / 12.5 / 27.7	18.8	V / 1.1 / 338.0	-21.7	-24.7
219.91	33.1 Qp	1.0 / 10.7 / 27.4	17.4	V / 1.9 / 208.0	-23.1	-28.6
350.06	27.9 Qp	1.3 / 14.5 / 27.4	16.3	V / 1.4 / 235.0	-31.2	-29.7
252.19	29.5 Qp	1.1 / 11.4 / 27.2	14.8	V / 1.5 / 48.0	-32.7	-31.2
1.03	14.7 Qp	0.1 / 10.6 / 0.0	25.4	V / 1.6 / 146.0	N/A	-41.9
7.74	9.0 Qp	0.2 / 10.6 / 0.0	19.8	V / 1.6 / 212.0	N/A	-49.7
15.34	2.6 Qp	0.3 / 10.0 / 0.0	13.0	V / 1.6 / 188.0	N/A	-56.5

Radiated Electromagnetic Emissions – Unit 0030

Test Report #:	100613810 Run 2	Test Area:	CC1 Radiated	Temperature:	22.3	°C
Test Method:	EN55022	Test Date:	16-Jan-2012	Relative Humidity:	21.7	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	82.5	kPa
EUT Serial #:	ALPHA2 0030					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Idle Mode					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	EN55022 B	15.209 <1GHz
***** Measurement Summary *****						
95.92	47.8 Qp	0.8 / 9.4 / 28.0	29.9	V / 1.0 / 86.0	-10.6	-13.6
679.97	37.8 Qp	1.8 / 19.1 / 28.3	30.4	H / 1.4 / 158.0	-17.1	-15.6
200.00	38.5 Qp	0.9 / 12.1 / 27.5	24.1	H / 1.5 / 20.0	-16.4	-19.4
70.21	40.5 Qp	0.8 / 8.3 / 28.1	21.5	V / 1.0 / 264.0	-19.0	-18.5
48.71	39.7 Qp	0.8 / 8.9 / 28.2	21.2	V / 1.0 / 270.0	-19.3	-18.8
220.02	36.7 Qp	1.0 / 10.7 / 27.4	21.0	V / 1.8 / 216.0	-19.5	-25.0
151.72	34.5 Qp	0.8 / 12.5 / 27.7	20.1	V / 1.0 / 336.0	-20.4	-23.4
41.75	33.9 Qp	0.8 / 12.7 / 28.2	19.1	V / 1.0 / 348.0	-21.4	-20.9
350.06	30.1 Qp	1.3 / 14.5 / 27.4	18.5	V / 1.4 / 224.0	-29.0	-27.5
253.80	30.3 Qp	1.1 / 11.5 / 27.2	15.6	V / 1.5 / 216.0	-31.9	-30.4
7.74	5.9 Qp	0.2 / 10.6 / 0.0	16.7	V / 1.4 / 158.0	N/A	-52.8

Radiated Electromagnetic Emissions – Unit 0036

Test Report #:	100613810 Run 1	Test Area:	CC1 Radiated	Temperature:	22.3	°C
Test Method:	EN55022	Test Date:	16-Jan-2012	Relative Humidity:	21.7	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	82.5	kPa
EUT Serial #:	ALPHA2 0036					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Idle Mode					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	EN55022 B	15.209 <1GHz
***** Measurement Summary *****						
95.07	47.7 Qp	0.8 / 9.2 / 28.0	29.7	V / 1.0 / 86.0	-10.8	-13.8
679.97	39.4 Qp	1.8 / 19.1 / 28.3	32.0	H / 1.6 / 154.0	-15.5	-14.0
205.21	38.8 Qp	1.0 / 10.6 / 27.5	22.9	H / 1.4 / 18.0	-17.6	-20.6
200.00	37.1 Qp	0.9 / 12.1 / 27.5	22.6	H / 1.5 / 18.0	-17.9	-20.9
48.71	39.4 Qp	0.8 / 8.9 / 28.2	20.9	V / 1.0 / 354.0	-19.6	-19.1
70.21	39.8 Qp	0.8 / 8.3 / 28.1	20.7	V / 1.0 / 268.0	-19.8	-19.3
151.72	34.0 Qp	0.8 / 12.5 / 27.7	19.6	V / 1.0 / 332.0	-20.9	-23.9
41.75	33.5 Qp	0.8 / 12.7 / 28.2	18.8	V / 1.0 / 32.0	-21.7	-21.2
680.22	28.6 Qp	1.8 / 19.1 / 28.3	21.2	V / 1.7 / 12.0	-26.3	-24.8
350.06	30.9 Qp	1.3 / 14.5 / 27.4	19.3	V / 1.4 / 236.0	-28.2	-26.7
252.22	26.0 Qp	1.1 / 11.4 / 27.2	11.3	V / 1.4 / 46.0	-36.2	-34.7
1.12	14.5 Qp	0.1 / 10.6 / 0.0	25.2	V / 1.0 / 202.0	N/A	-41.4
7.57	6.8 Qp	0.2 / 10.6 / 0.0	17.6	V / 1.0 / 154.0	N/A	-51.9

Radiated Electromagnetic Emissions – Unit 0041

Test Report #:	100613810 Run 4	Test Area:	CC1 Radiated	Temperature:	22.3	°C
Test Method:	EN55022	Test Date:	16-Jan-2012	Relative Humidity:	21.7	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	82.5	kPa
EUT Serial #:	0041					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Idle mode					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	EN55022 B	15.209 <1GHz
***** Measurement Summary *****						
94.27	45.2 Qp	0.8 / 9.1 / 28.0	27.0	V / 1.0 / 98.0	-13.5	-16.5
45.66	40.1 Qp	0.8 / 10.4 / 28.2	23.0	V / 1.0 / 347.0	-17.5	-17.0
70.21	41.2 Qp	0.8 / 8.3 / 28.1	22.2	V / 1.1 / 274.0	-18.3	-17.8
679.96	35.5 Qp	1.8 / 19.1 / 28.3	28.2	H / 1.7 / 158.0	-19.3	-17.8
48.71	39.6 Qp	0.8 / 8.9 / 28.2	21.1	V / 1.0 / 347.0	-19.4	-18.9
200.01	34.7 Qp	0.9 / 12.1 / 27.5	20.2	H / 1.5 / 22.0	-20.3	-23.3
151.72	33.9 Qp	0.8 / 12.5 / 27.7	19.5	V / 1.0 / 334.0	-21.0	-24.0
41.75	33.6 Qp	0.8 / 12.7 / 28.2	18.8	V / 1.0 / 36.0	-21.7	-21.2
220.00	34.2 Qp	1.0 / 10.7 / 27.4	18.5	H / 1.5 / 22.0	-22.0	-27.5
219.91	33.9 Qp	1.0 / 10.7 / 27.4	18.2	V / 1.6 / 222.0	-22.3	-27.8
253.74	33.2 Qp	1.1 / 11.5 / 27.2	18.5	H / 1.6 / 48.0	-29.0	-27.5
349.90	27.2 Qp	1.3 / 14.5 / 27.4	15.6	V / 1.4 / 233.0	-31.9	-30.4
252.19	24.1 Qp	1.1 / 11.4 / 27.2	9.4	V / 1.4 / 54.0	-38.1	-36.6
7.57	8.4 Qp	0.2 / 10.6 / 0.0	19.2	V / 1.7 / 168.0	N/A	-50.3
15.46	4.9 Qp	0.3 / 10.1 / 0.0	15.3	V / 1.7 / 221.0	N/A	-54.2

Radiated Electromagnetic Emissions – Unit 0043

Test Report #: 100613810 Run 5	Test Area: CC1 Radiated	Temperature: 22.9 °C
Test Method: EN55022	Test Date: 16-Jan-2012	Relative Humidity: 24.3 %
EUT Model #: TrueCPR	EUT Power: Battery	Air Pressure: 82.4 kPa
EUT Serial #: ALPHA2 0043		

Manufacturer: Plexus

EUT Description: CPR Coaching Device

Notes: **Product in Idle mode**

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	EN55022 B	15.209 <1GHz
***** Measurement Summary *****						
96.44	47.5 Qp	0.8 / 9.5 / 28.0	29.8	V / 1.1 / 86.0	-10.7	-13.7
679.97	37.4 Qp	1.8 / 19.1 / 28.3	30.1	H / 1.7 / 162.0	-17.4	-15.9
200.01	38.5 Qp	0.9 / 12.1 / 27.5	24.1	H / 1.6 / 208.0	-16.4	-19.4
45.66	40.3 Qp	0.8 / 10.4 / 28.2	23.2	V / 1.0 / 352.0	-17.3	-16.8
70.21	41.2 Qp	0.8 / 8.3 / 28.1	22.2	V / 1.1 / 268.0	-18.3	-17.8
48.71	40.0 Qp	0.8 / 8.9 / 28.2	21.6	V / 1.0 / 32.0	-18.9	-18.4
151.72	34.0 Qp	0.8 / 12.5 / 27.7	19.6	V / 1.1 / 320.0	-20.9	-23.9
41.75	33.3 Qp	0.8 / 12.7 / 28.2	18.5	V / 1.0 / 352.0	-22.0	-21.5
219.38	34.4 Qp	1.0 / 10.7 / 27.4	18.7	H / 1.6 / 216.0	-21.8	-27.3
219.91	33.9 Qp	1.0 / 10.7 / 27.4	18.2	V / 1.6 / 216.0	-22.3	-27.8
340.40	30.4 Qp	1.3 / 14.0 / 27.3	18.4	V / 1.4 / 234.0	-29.1	-27.6
252.19	24.6 Qp	1.1 / 11.4 / 27.2	9.9	V / 1.5 / 46.0	-37.6	-36.1
1.10	15.2 Qp	0.1 / 10.6 / 0.0	25.9	V / 1.7 / 162.0	N/A	-40.8
15.31	18.3 Qp	0.3 / 10.0 / 0.0	28.6	V / 1.7 / 152.0	N/A	-40.9
15.07	18.0 Qp	0.3 / 10.0 / 0.0	28.3	V / 1.7 / 152.0	N/A	-41.2
7.60	16.7 Qp	0.2 / 10.6 / 0.0	27.5	V / 1.7 / 176.0	N/A	-42.0

Example calculation:

Measured Level		Transducer, Cable Loss & Amplifier corrections		Corrected Reading	Specification Limit		Corrected Reading		Delta Specification
(dBμV)	+	(dB)	=	(dBμV/m)	(dBμV/m)	-	(dBμV/m)	=	
14.0		14.9		28.9	40.0		28.9		-11.1

Notes:

- 1) As determined from pre-scans, product tested in worst-case axis – axis 1 (product flat on table).
- 2) Product configured in normal receive/standby/idle mode of operation.
- 3) Product has no clocks > 108MHz – testing above 1GHz not required.
- 4) Covers ICES-003:2004 - Digital Apparatus Interference-Causing Equipment.

Deviations, Additions, or Exclusions: None

15 Unintentional Radiated Electromagnetic Emissions – Product Data Mode – (SYSRS242.6)**15.1 Method**

The test methods used comply with ANSI C63.4 and CISPR 16. Unless otherwise stated no deviations were made from CISPR 11: 2009+A1:2010, FCC Part 15.109 and ICES-003:2004.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

15.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
18913	Spectrum Analyzer	Hewlett-Packard	E7405A	My44211889	06/28/2011	06/28/2012
18912	9 kHz- 1.3GHz Pre Amp	Hewlett-Packard	8447F	3113A05545	06/03/2011	06/03/2012
19936	Bilog Antenna 30MHz – 6GHz	Sunol Sciences	JB6	A050707-1	11/15/2011	11/15/2012
SW-6	Software application for Radiated and Conducted Emissions	Intertek	OATS_CVI	V.1.0	VBU	VBU

15.3 Results:

The sample tested was found to Comply.

15.4 Setup Photographs: Product in Data Mode

Radiated Emissions – Product 3-Axes

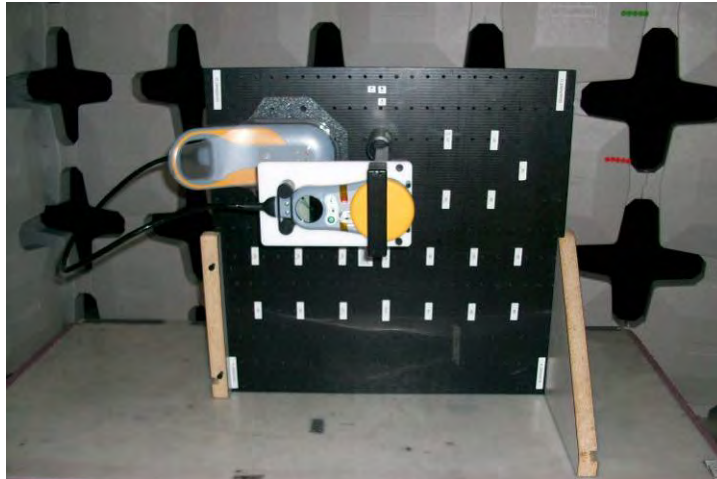
Axis 1 – Product Flat on Table (worst-case axis)**Axis 2 – Product Vertical****Axis 3 – Product Vertical & Rotated 90 Degrees**

Photo: Product in Data Mode

Radiated Emissions (Front View)



Photo: Product in Data Mode

Radiated Emissions (Rear View)

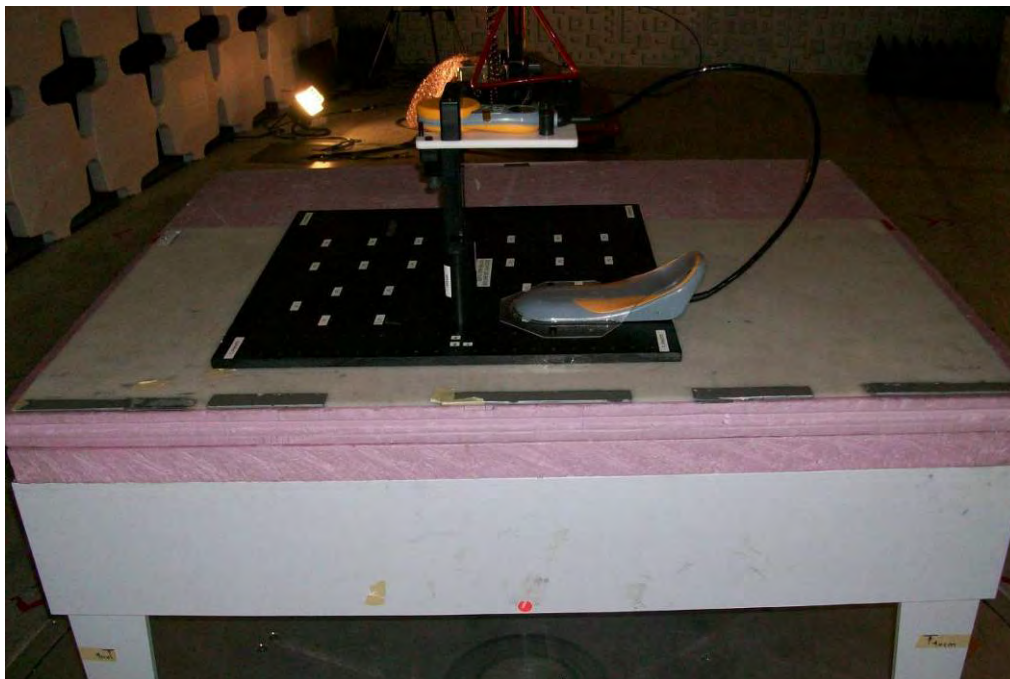


Photo: Product in Data Mode

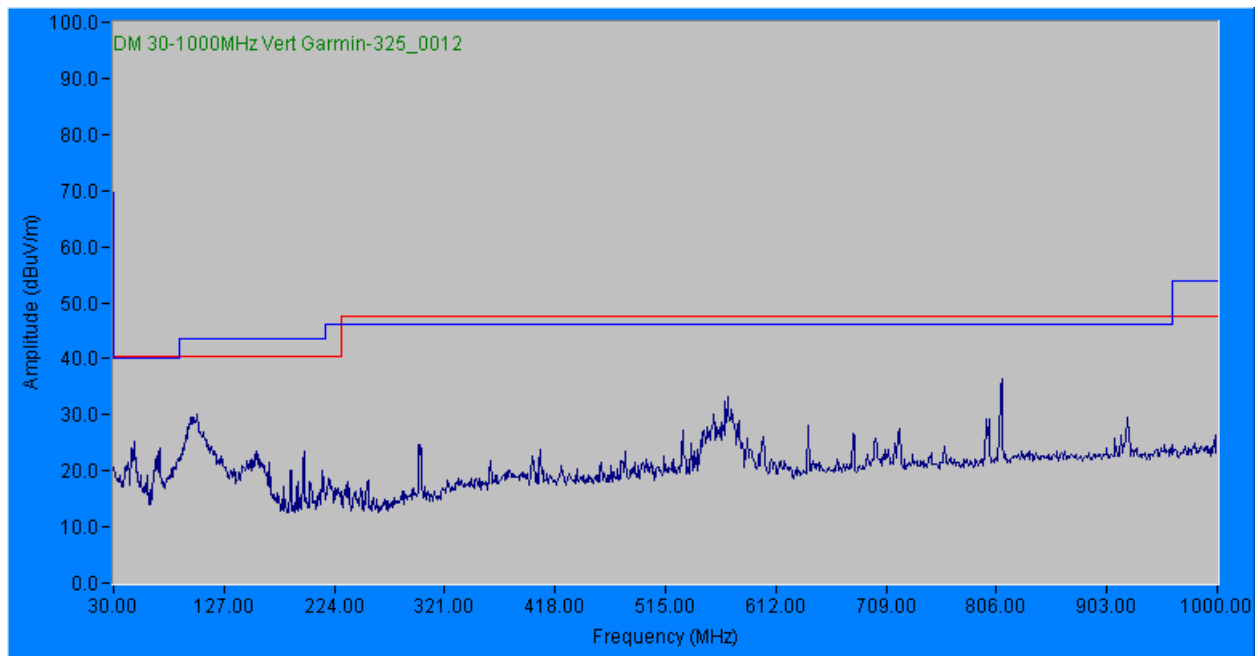
Radiated Emissions (Antenna)

BiLog Antenna – 30MHz to 1000MHz

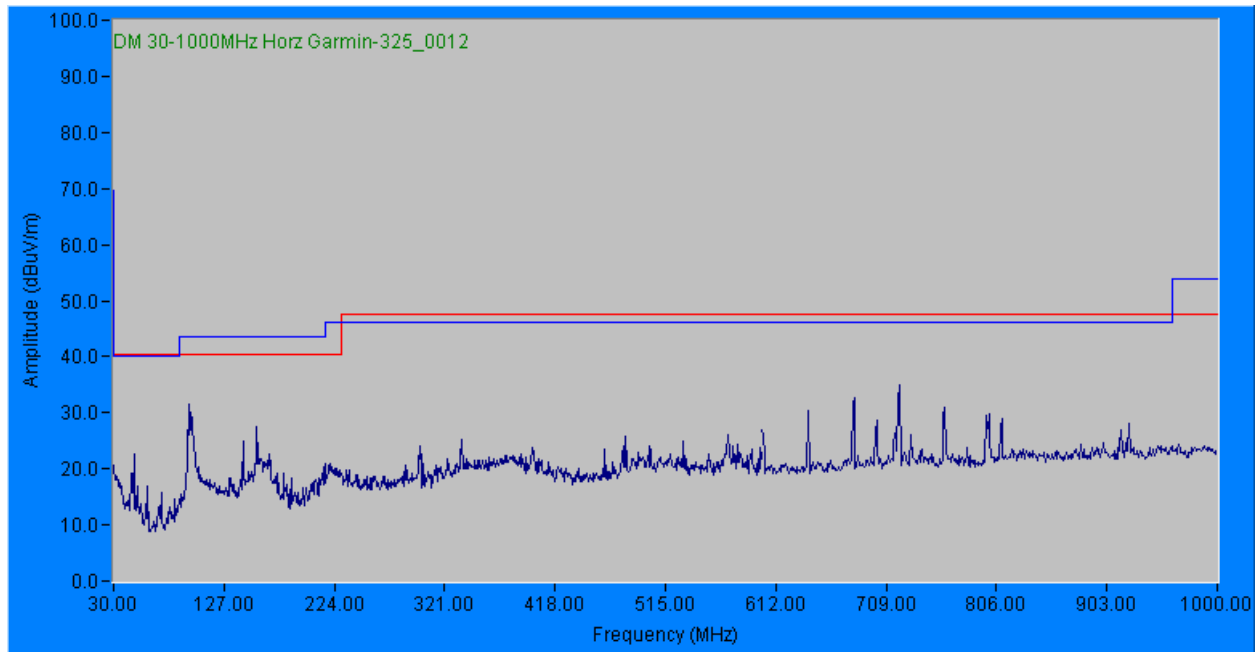


15.5 Pre-scan plots for reference only – not final data: Data Mode**Unit 0012**

30MHz to 1000MHz – Vertical



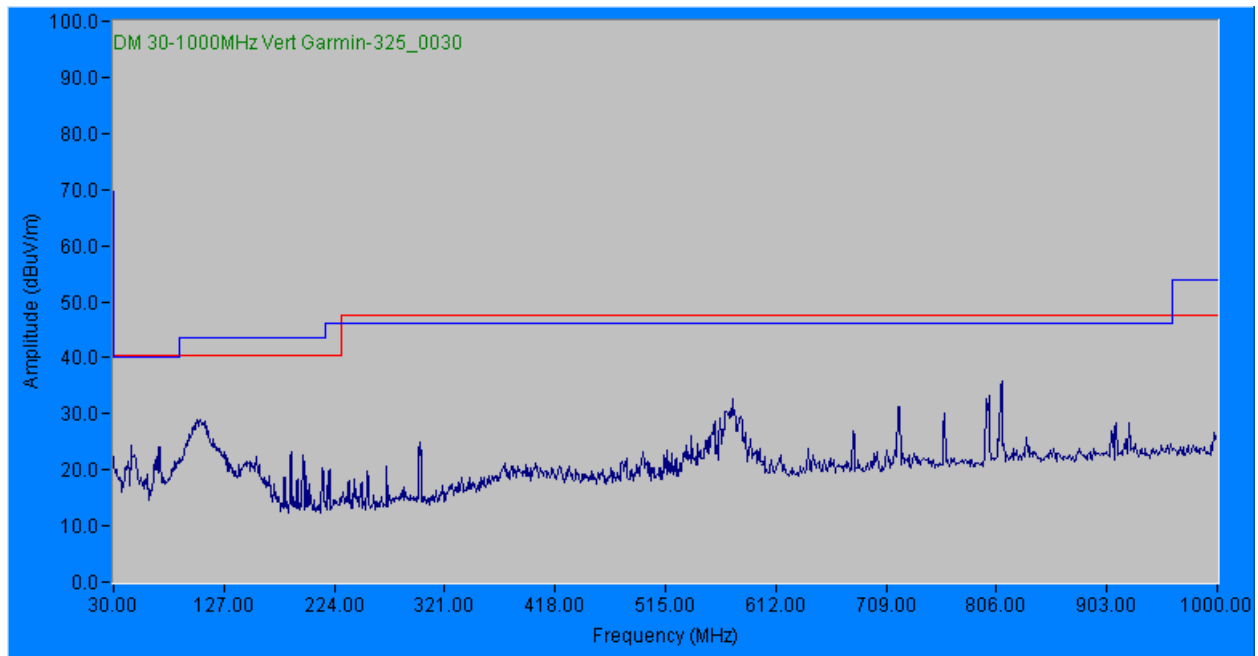
30MHz to 1000MHz – Horizontal



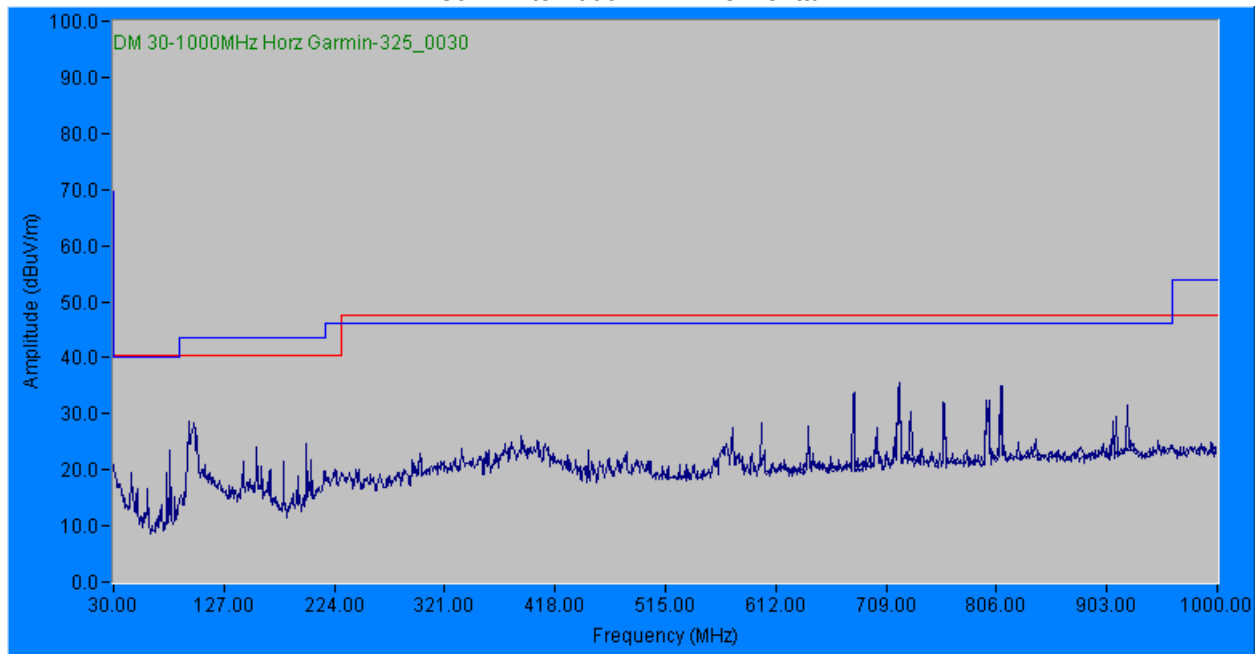
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.109 (blue) quasi-peak limits

Unit 0030

30MHz to 1000MHz – Vertical



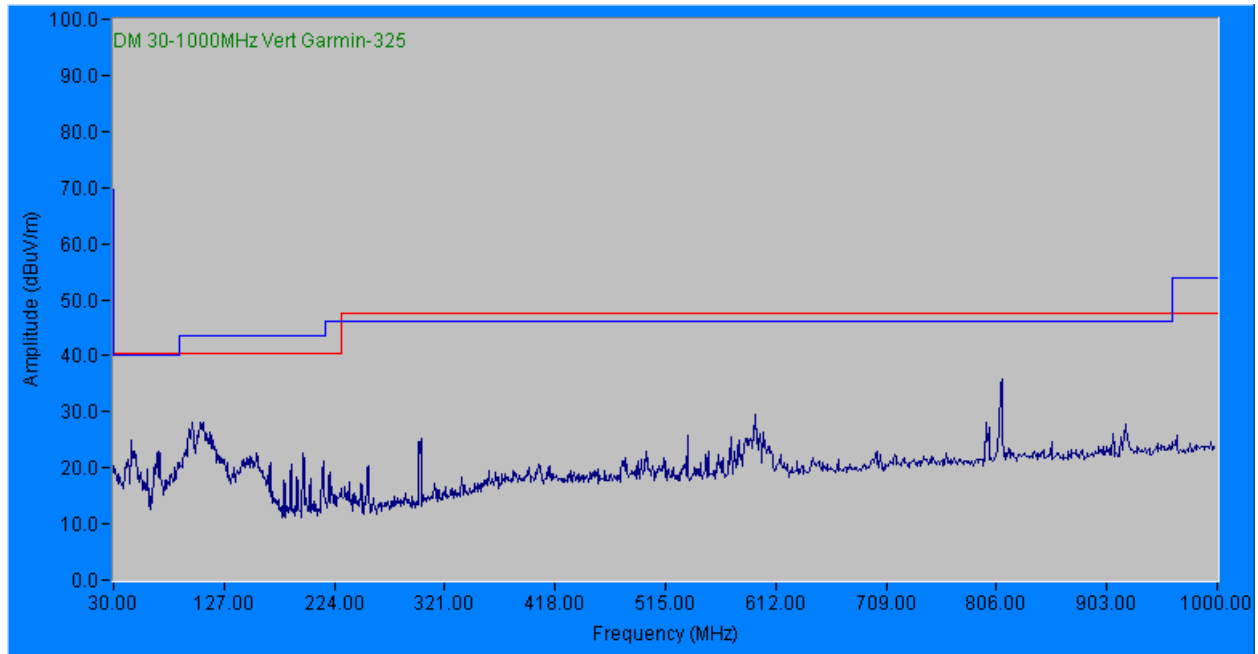
30MHz to 1000MHz – Horizontal



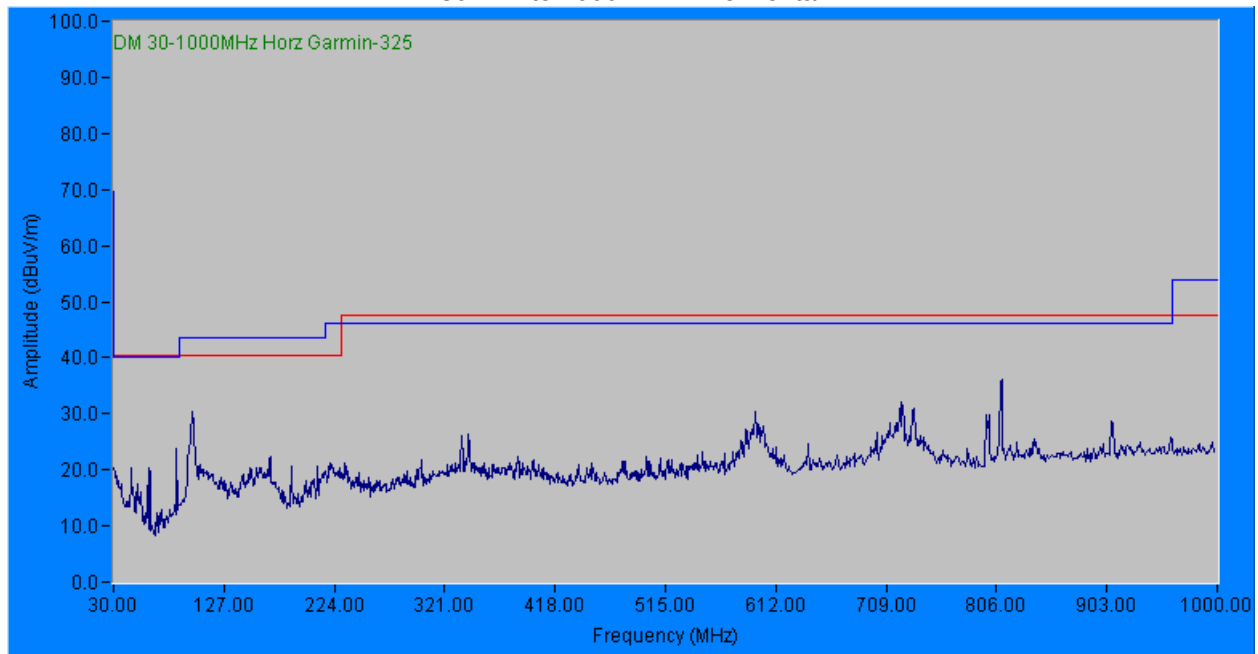
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.109 (blue) quasi-peak limits

Unit 0036

30MHz to 1000MHz – Vertical



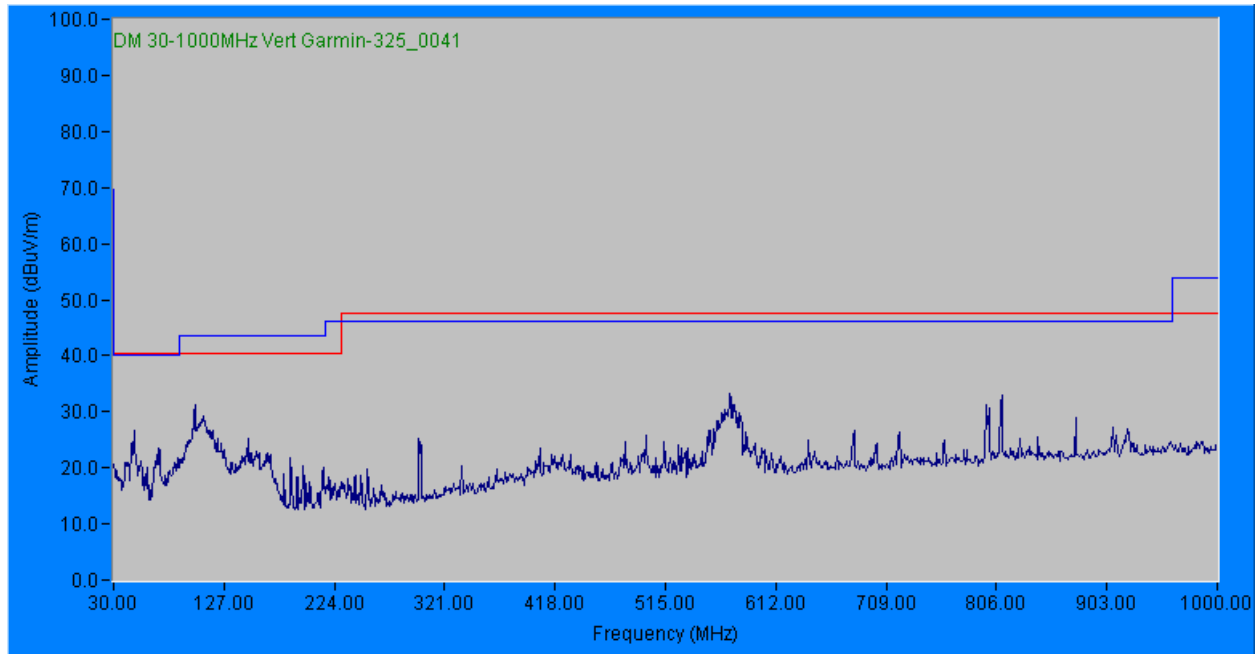
30MHz to 1000MHz – Horizontal



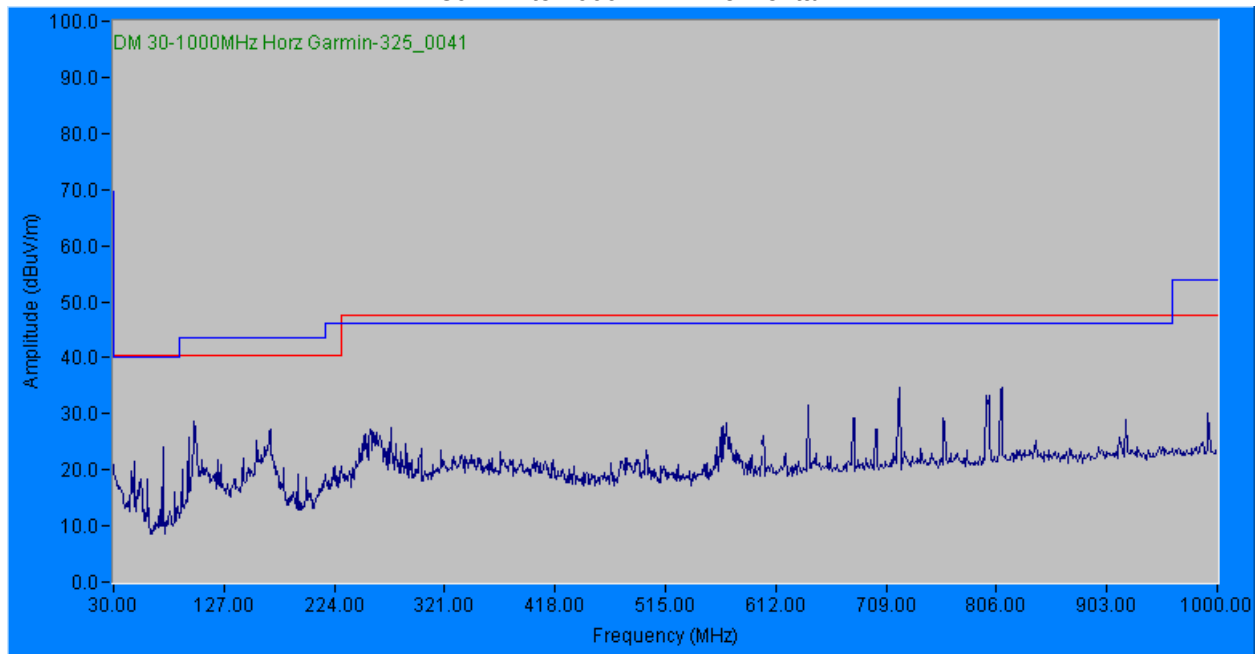
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.109 (blue) quasi-peak limits

Unit 0041

30MHz to 1000MHz – Vertical



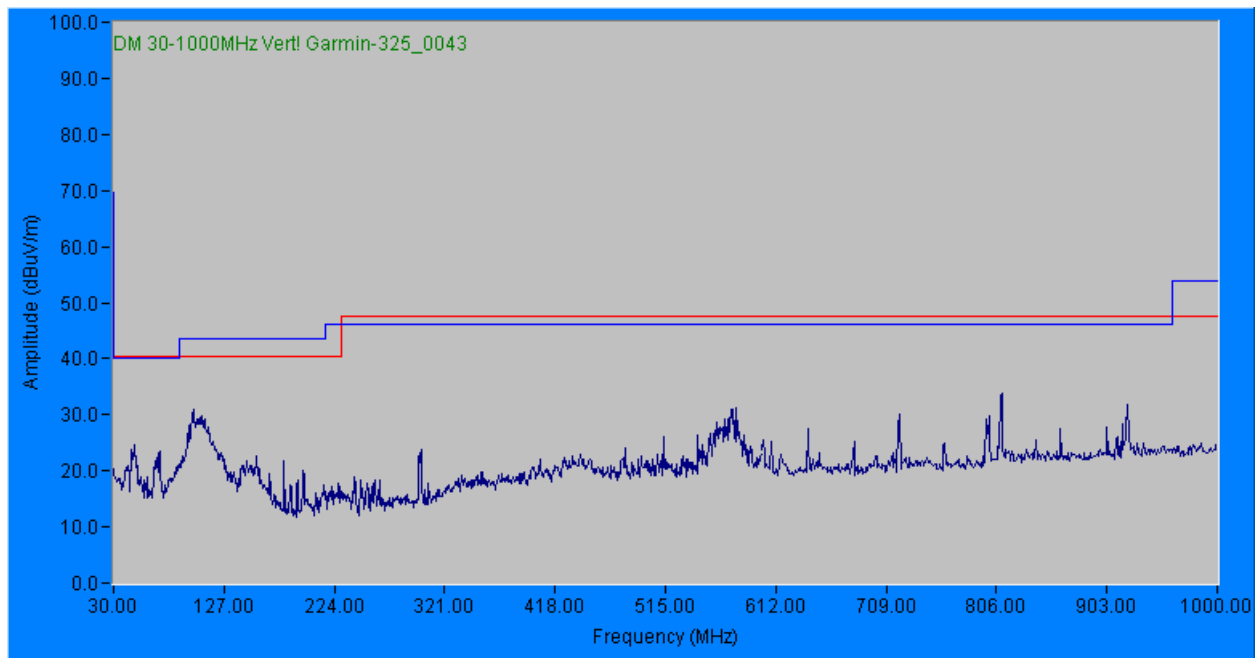
30MHz to 1000MHz – Horizontal



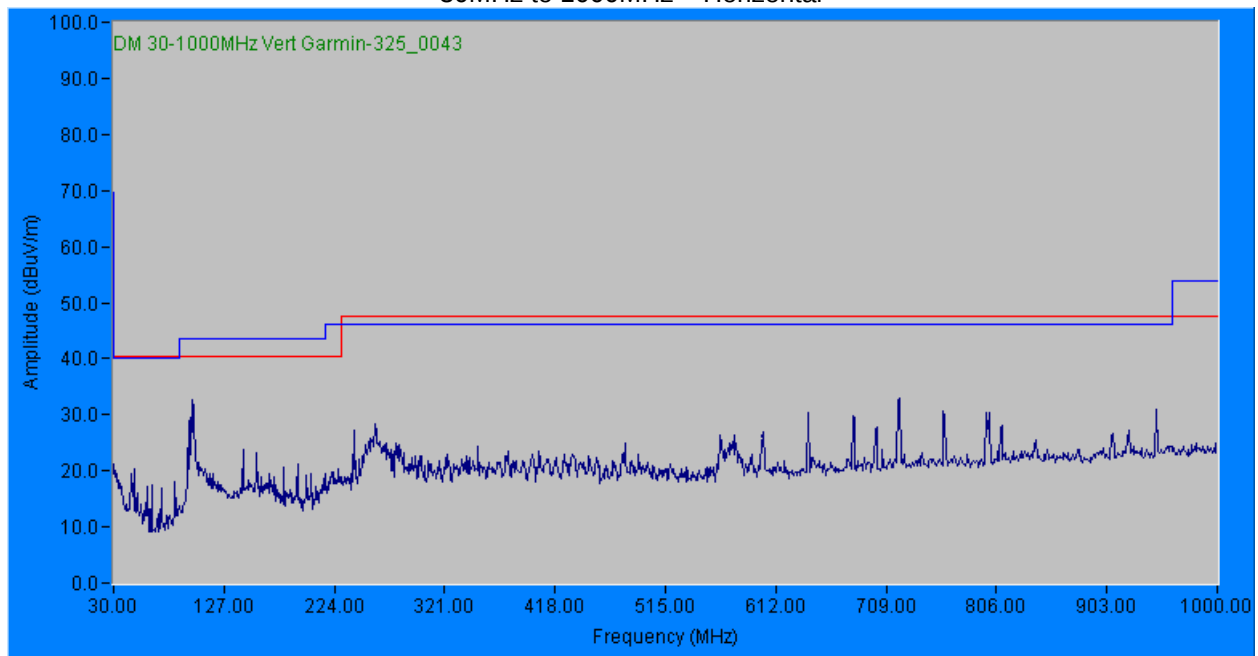
Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.109 (blue) quasi-peak limits

Unit 0043

30MHz to 1000MHz – Vertical



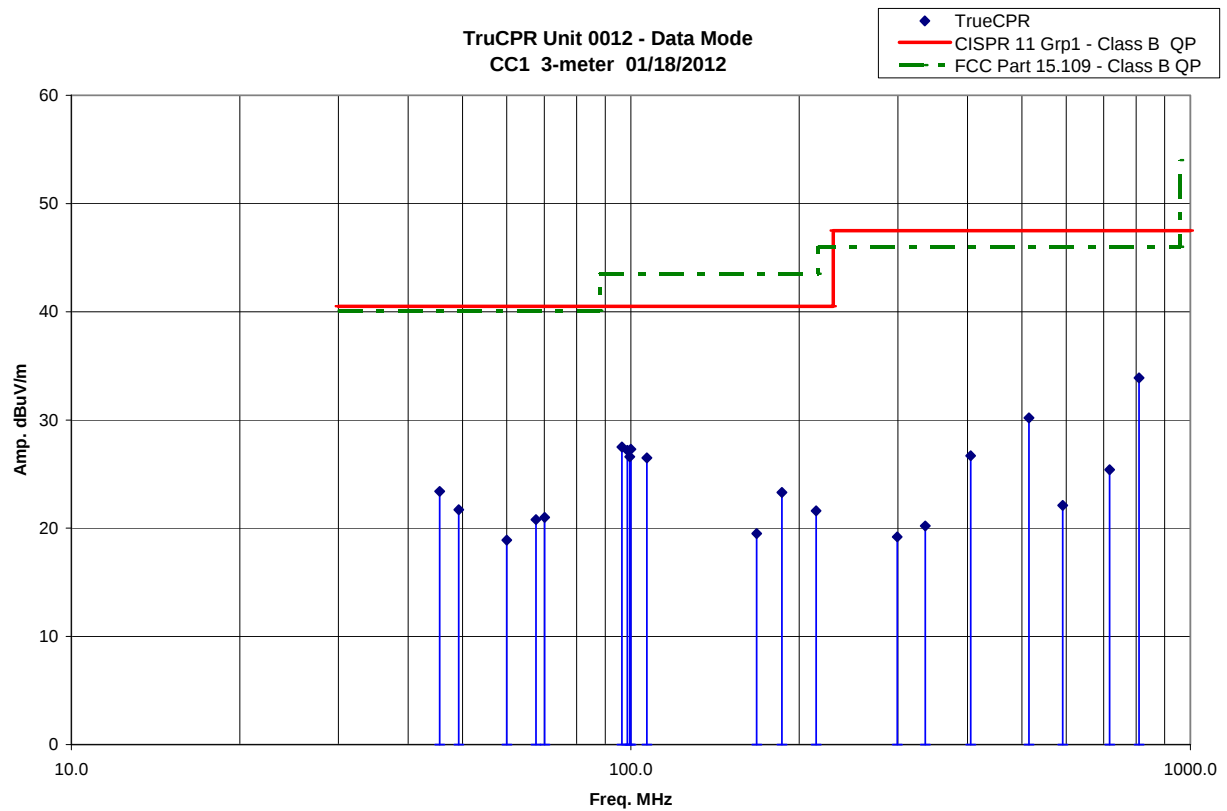
30MHz to 1000MHz – Horizontal



Above plots peak measurements referenced to CISPR 11 (red) & FCC 15.109 (blue) quasi-peak limits

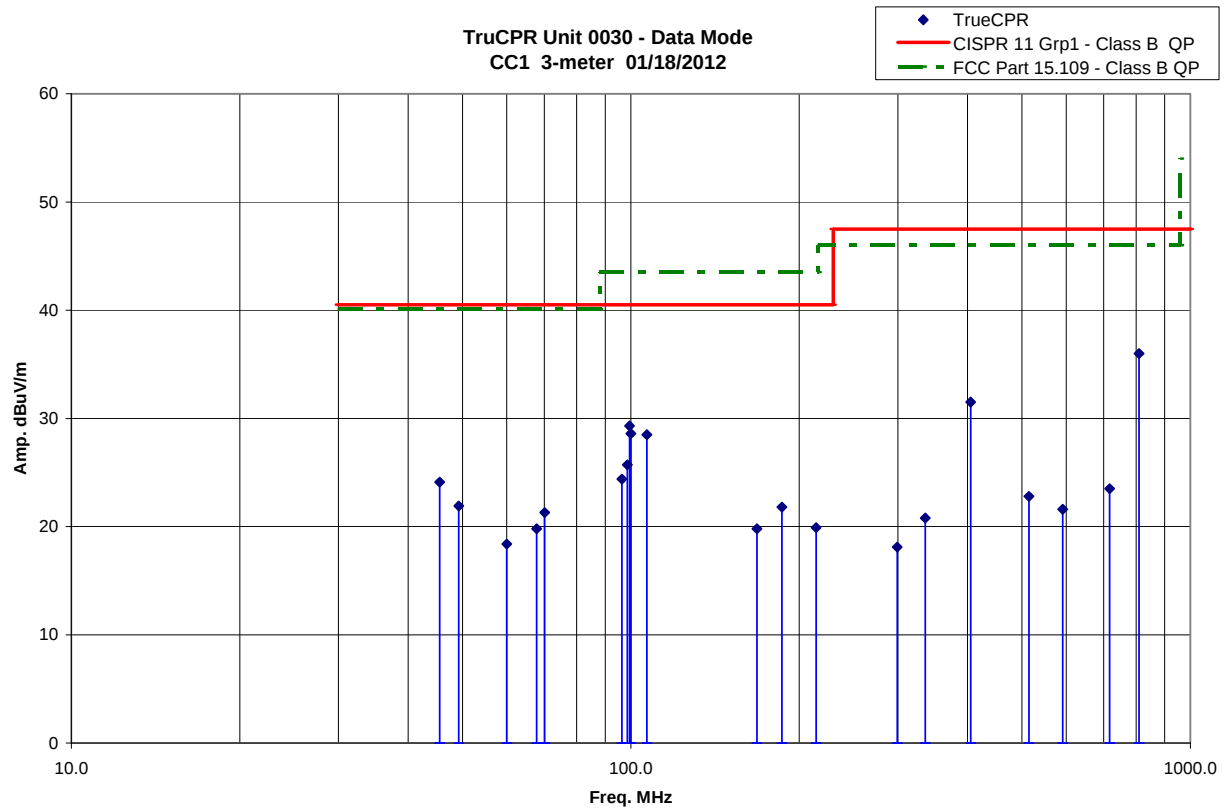
15.6 Final Plots: Data Mode – CISPR 11 Group 1, Class B & FCC 15.109, Class B**Unit 0012**

CISPR 11 Group 1, Class B/ FCC 15.109 - 30MHz to 1000MHz (Quasi-Peak Data)



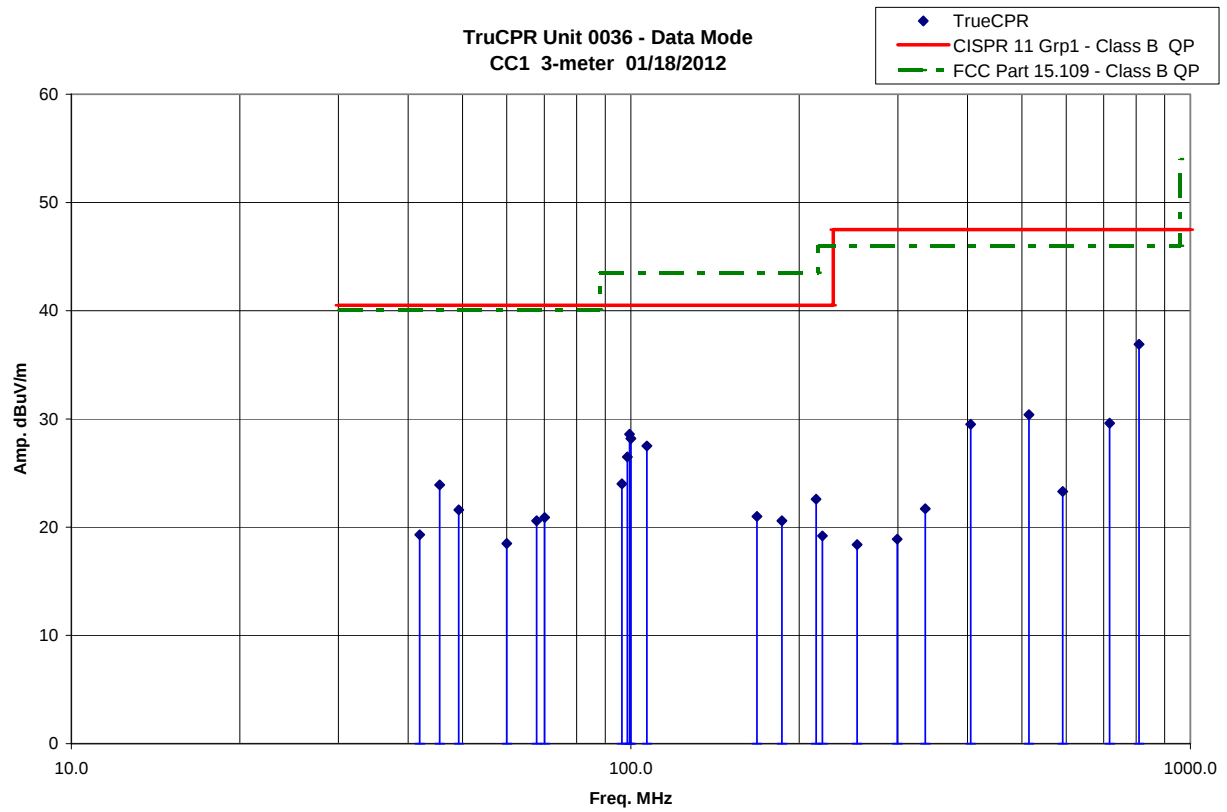
Unit 0030

CISPR 11 Group 1, Class B/ FCC 15.109 - 30MHz to 1000MHz (Quasi-Peak Data)



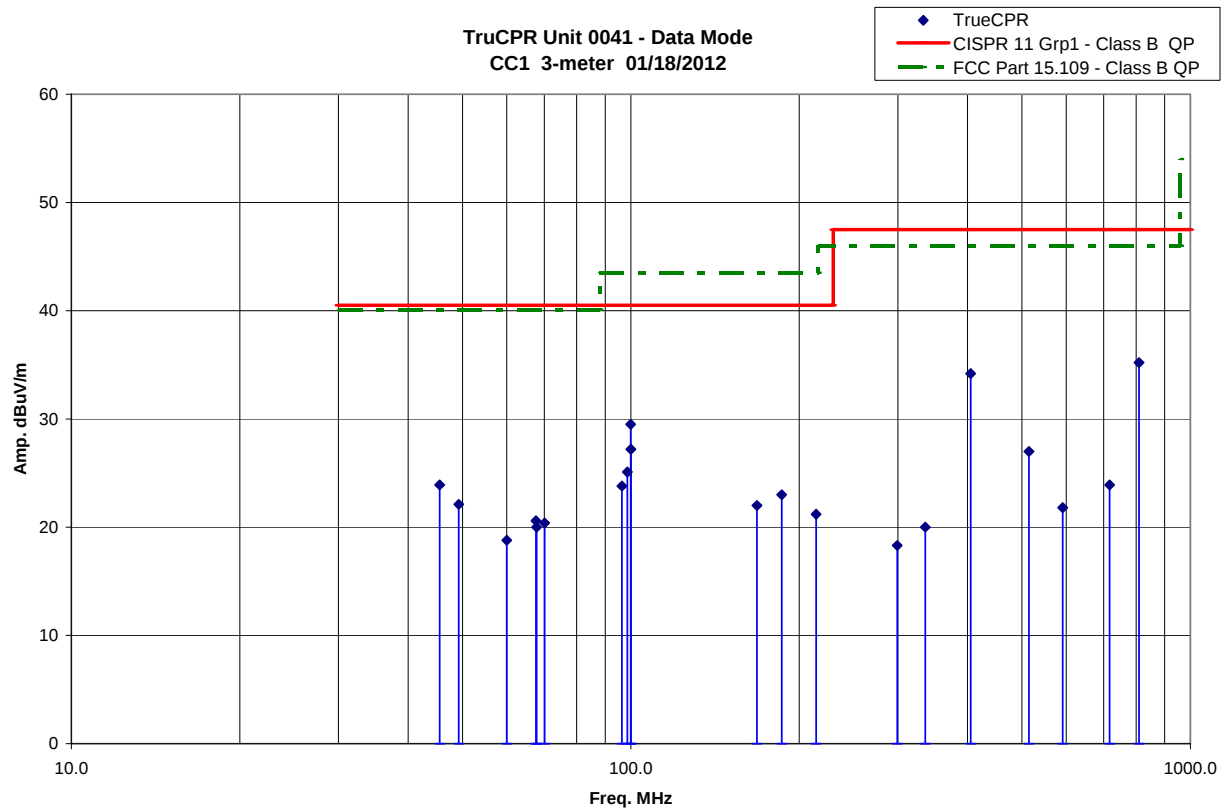
Unit 0036

CISPR 11 Group 1, Class B/ FCC 15.109 - 30MHz to 1000MHz (Quasi-Peak Data)



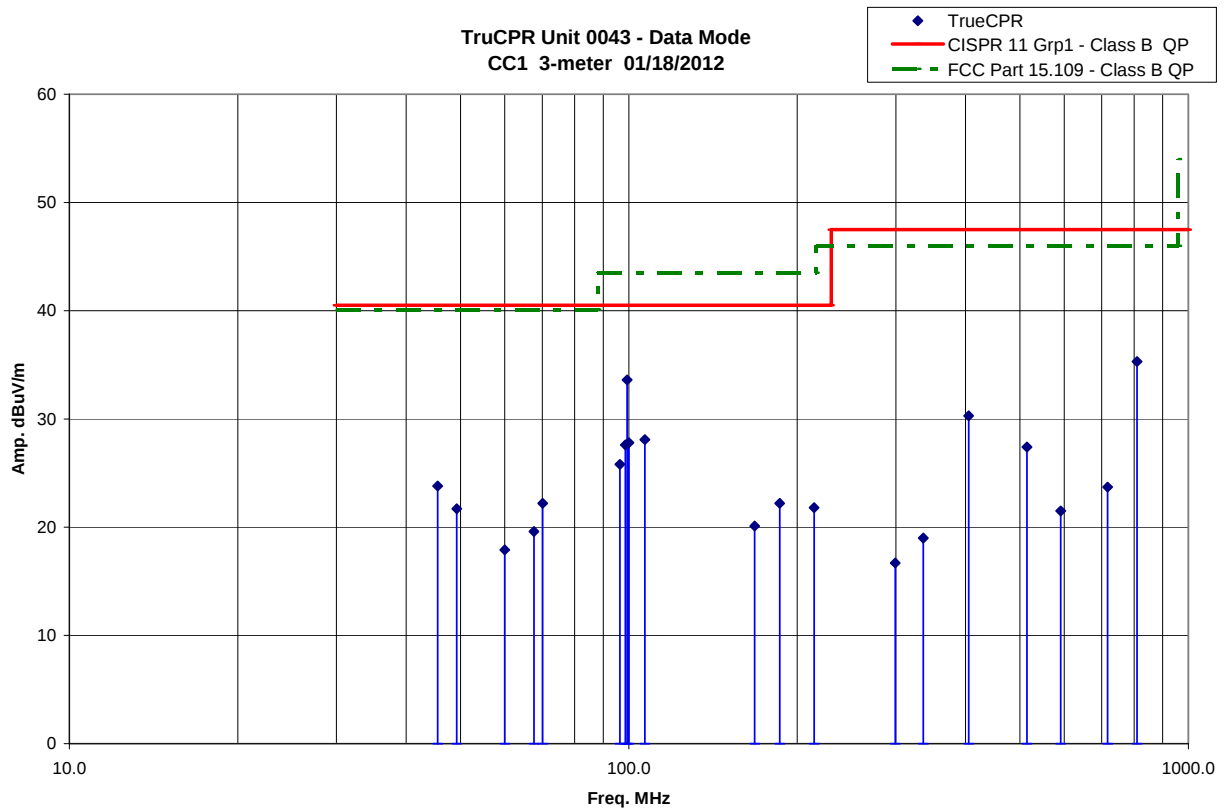
Unit 0041

CISPR 11 Group 1, Class B/ FCC 15.109 - 30MHz to 1000MHz (Quasi-Peak Data)



Unit 0043

CISPR 11 Group 1, Class B/ FCC 15.109 - 30MHz to 1000MHz (Quasi-Peak Data)



15.7 Test Data: Data Mode

Radiated Electromagnetic Emissions – Unit 0012

Test Report #:	100613810 Run 03	Test Area:	CC1 Radiated	Temperature:	22.1	°C
Test Method:	EN55022	Test Date:	18-Jan-2012	Relative Humidity:	20.8	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.9	kPa
EUT Serial #:	ALPHA2 0012					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Data Mode					
	USB Cable: Garmin-325					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.109 Class B
***** Measurement Summary *****						
810.01	38.7 Qp	2.0 / 21.1 / 27.9	33.9	V / 1.8 / 290.0	-13.6	-12.1
96.33	45.3 Qp	0.8 / 9.5 / 28.0	27.5	V / 1.0 / 170.0	-13.0	-16.0
100.03	44.1 Qp	0.8 / 10.4 / 28.0	27.3	H / 1.8 / 164.0	-13.2	-16.2
98.58	44.4 Qp	0.8 / 10.0 / 28.0	27.2	V / 1.0 / 170.0	-13.3	-16.3
99.51	43.6 Qp	0.8 / 10.3 / 28.0	26.6	H / 1.8 / 164.0	-13.9	-16.9
106.83	41.5 Qp	0.8 / 12.2 / 27.9	26.5	V / 1.0 / 168.0	-14.0	-17.0
514.75	39.2 Qp	1.6 / 17.8 / 28.4	30.2	V / 1.4 / 160.0	-17.3	-15.8
45.52	40.4 Qp	0.8 / 10.4 / 28.2	23.4	V / 1.0 / 332.0	-17.1	-16.6
186.12	39.1 Qp	0.9 / 10.8 / 27.5	23.3	V / 1.2 / 218.0	-17.2	-20.2
49.27	40.4 Qp	0.8 / 8.7 / 28.2	21.7	V / 1.0 / 332.0	-18.8	-18.3
214.25	37.4 Qp	1.0 / 10.7 / 27.4	21.6	V / 1.2 / 218.0	-18.9	-21.9
70.17	40.0 Qp	0.8 / 8.3 / 28.1	21.0	V / 1.0 / 210.0	-19.5	-19.0
67.68	39.9 Qp	0.8 / 8.2 / 28.1	20.8	V / 1.0 / 210.0	-19.7	-19.2
405.00	37.6 Qp	1.4 / 15.5 / 27.8	26.7	V / 1.4 / 182.0	-20.8	-19.3
717.15	31.9 Qp	1.9 / 19.9 / 28.2	25.4	V / 1.5 / 154.0	-22.1	-20.6
167.88	34.2 Qp	0.9 / 12.0 / 27.6	19.5	V / 1.0 / 166.0	-21.0	-24.0
60.02	38.6 Qp	0.8 / 7.7 / 28.2	18.9	V / 1.0 / 282.0	-21.6	-21.1
591.47	30.2 Qp	1.7 / 18.6 / 28.4	22.1	H / 1.9 / 208.0	-25.4	-23.9
336.01	32.4 Qp	1.3 / 13.9 / 27.3	20.2	H / 2.1 / 198.0	-27.3	-25.8
299.33	31.7 Qp	1.2 / 13.4 / 27.2	19.2	H / 1.8 / 284.0	-28.3	-26.8

Radiated Electromagnetic Emissions – Unit 0030

Test Report #:	100613810 Run 02	Test Area:	CC1 Radiated	Temperature:	22.1	°C
Test Method:	EN55022	Test Date:	18-Jan-2012	Relative Humidity:	20.8	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.9	kPa
EUT Serial #:	ALPHA2 0030					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Data Mode					
	USB Cable: Garmin-325					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.109 Class B
***** Measurement Summary *****						
810.01	40.8 Qp	2.0 / 21.1 / 27.9	36.0	V / 1.7 / 290.0	-11.5	-10.0
99.43	46.2 Qp	0.8 / 10.2 / 28.0	29.3	H / 1.8 / 157.0	-11.2	-14.2
99.98	45.4 Qp	0.8 / 10.4 / 28.0	28.6	H / 1.8 / 157.0	-11.9	-14.9
106.83	43.5 Qp	0.8 / 12.2 / 27.9	28.5	V / 1.0 / 172.0	-12.0	-15.0
405.00	42.4 Qp	1.4 / 15.5 / 27.8	31.5	V / 1.4 / 180.0	-16.0	-14.5
98.58	43.0 Qp	0.8 / 10.0 / 28.0	25.7	V / 1.0 / 168.0	-14.8	-17.8
45.52	41.1 Qp	0.8 / 10.4 / 28.2	24.1	V / 1.0 / 320.0	-16.4	-15.9
96.33	42.1 Qp	0.8 / 9.5 / 28.0	24.4	V / 1.0 / 168.0	-16.1	-19.1
49.27	40.6 Qp	0.8 / 8.7 / 28.2	21.9	V / 1.0 / 270.0	-18.6	-18.1
70.17	40.3 Qp	0.8 / 8.3 / 28.1	21.3	V / 1.0 / 216.0	-19.2	-18.7
186.12	37.6 Qp	0.9 / 10.8 / 27.5	21.8	V / 1.0 / 224.0	-18.7	-21.7
67.83	39.0 Qp	0.8 / 8.2 / 28.1	19.8	V / 1.0 / 216.0	-20.7	-20.2
214.31	35.7 Qp	1.0 / 10.7 / 27.4	19.9	V / 1.0 / 210.0	-20.6	-23.6
167.93	34.6 Qp	0.9 / 12.0 / 27.6	19.8	V / 1.0 / 202.0	-20.7	-23.7
60.02	38.1 Qp	0.8 / 7.7 / 28.2	18.4	V / 1.0 / 280.0	-22.1	-21.6
717.15	29.9 Qp	1.9 / 19.9 / 28.2	23.5	V / 1.5 / 155.0	-24.0	-22.5
514.75	31.9 Qp	1.6 / 17.8 / 28.4	22.8	V / 1.4 / 160.0	-24.7	-23.2
591.47	29.7 Qp	1.7 / 18.6 / 28.4	21.6	H / 1.9 / 204.0	-25.9	-24.4
336.01	33.0 Qp	1.3 / 13.9 / 27.3	20.8	H / 2.0 / 194.0	-26.7	-25.2
299.33	30.6 Qp	1.2 / 13.4 / 27.2	18.1	H / 1.8 / 280.0	-29.4	-27.9

Radiated Electromagnetic Emissions – Unit 0036

Test Report #:	100613810 Run 1	Test Area:	CC1 Radiated	Temperature:	22.1	°C
Test Method:	EN55022	Test Date:	17-Jan-2012	Relative Humidity:	20.8	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.9	kPa
EUT Serial #:	ALPHA2 0036					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Data Mode					
	USB Cable: Garmin-325					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.109 Class B
***** Measurement Summary *****						
810.01	41.7 Qp	2.0 / 21.1 / 27.9	36.9	V / 1.7 / 288.0	-10.6	-9.1
99.43	45.6 Qp	0.8 / 10.2 / 28.0	28.6	H / 2.1 / 166.0	-11.9	-14.9
99.98	45.0 Qp	0.8 / 10.4 / 28.0	28.2	H / 1.8 / 166.0	-12.3	-15.3
106.83	42.5 Qp	0.8 / 12.2 / 27.9	27.5	V / 1.0 / 168.0	-13.0	-16.0
98.58	43.7 Qp	0.8 / 10.0 / 28.0	26.5	V / 1.0 / 168.0	-14.0	-17.0
514.75	39.4 Qp	1.6 / 17.8 / 28.4	30.4	V / 1.3 / 164.0	-17.1	-15.6
45.52	40.9 Qp	0.8 / 10.4 / 28.2	23.9	V / 1.0 / 324.0	-16.6	-16.1
717.15	36.1 Qp	1.9 / 19.9 / 28.2	29.6	V / 1.5 / 154.0	-17.9	-16.4
96.33	41.7 Qp	0.8 / 9.5 / 28.0	24.0	V / 1.0 / 168.0	-16.5	-19.5
405.00	40.4 Qp	1.4 / 15.5 / 27.8	29.5	V / 1.3 / 182.0	-18.0	-16.5
214.32	38.4 Qp	1.0 / 10.7 / 27.4	22.6	V / 1.1 / 216.0	-17.9	-20.9
49.27	40.3 Qp	0.8 / 8.7 / 28.2	21.6	V / 1.0 / 268.0	-18.9	-18.4
70.17	40.0 Qp	0.8 / 8.3 / 28.1	20.9	V / 1.0 / 212.0	-19.6	-19.1
67.83	39.8 Qp	0.8 / 8.2 / 28.1	20.6	V / 1.0 / 212.0	-19.9	-19.4
168.01	35.7 Qp	0.9 / 12.0 / 27.6	21.0	V / 1.1 / 168.0	-19.5	-22.5
186.13	36.5 Qp	0.9 / 10.8 / 27.5	20.6	V / 1.1 / 220.0	-19.9	-22.9
41.95	34.2 Qp	0.8 / 12.5 / 28.2	19.3	V / 1.0 / 324.0	-21.2	-20.7
219.94	34.9 Qp	1.0 / 10.7 / 27.4	19.2	V / 1.1 / 218.0	-21.3	-26.8
60.02	38.2 Qp	0.8 / 7.7 / 28.2	18.5	V / 1.0 / 288.0	-22.0	-21.5
591.47	31.4 Qp	1.7 / 18.6 / 28.4	23.3	H / 1.9 / 196.0	-24.2	-22.7
336.01	33.8 Qp	1.3 / 13.9 / 27.3	21.7	H / 1.9 / 196.0	-25.8	-24.3
299.33	31.5 Qp	1.2 / 13.4 / 27.2	18.9	H / 1.9 / 270.0	-28.6	-27.1
253.75	33.1 Qp	1.1 / 11.5 / 27.2	18.4	V / 1.1 / 204.0	-29.1	-27.6

Radiated Electromagnetic Emissions – Unit 0041

Test Report #:	100613810 Run 04	Test Area:	CC1 Radiated	Temperature:	22.1	°C
Test Method:	EN55022	Test Date:	18-Jan-2012	Relative Humidity:	20.8	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.9	kPa
EUT Serial #:	ALPHA2 0041					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Data Mode					
	USB Cable: Garmin-325					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.109 Class B
***** Measurement Summary *****						
810.01	40.0 Qp	2.0 / 21.1 / 27.9	35.2	V / 1.7 / 276.0	-12.3	-10.8
99.89	46.3 Qp	0.8 / 10.4 / 28.0	29.5	H / 1.8 / 164.0	-11.0	-14.0
405.00	45.1 Qp	1.4 / 15.5 / 27.8	34.2	V / 1.5 / 182.0	-13.3	-11.8
100.03	44.0 Qp	0.8 / 10.4 / 28.0	27.2	V / 1.2 / 184.0	-13.3	-16.3
98.58	42.3 Qp	0.8 / 10.0 / 28.0	25.1	V / 1.0 / 184.0	-15.4	-18.4
45.52	40.9 Qp	0.8 / 10.4 / 28.2	23.9	V / 1.0 / 332.0	-16.6	-16.1
96.33	41.5 Qp	0.8 / 9.5 / 28.0	23.8	V / 1.0 / 184.0	-16.7	-19.7
186.10	38.8 Qp	0.9 / 10.8 / 27.5	23.0	V / 1.2 / 212.0	-17.5	-20.5
49.27	40.8 Qp	0.8 / 8.7 / 28.2	22.1	V / 1.0 / 277.0	-18.4	-17.9
167.99	36.8 Qp	0.9 / 12.0 / 27.6	22.0	V / 1.2 / 208.0	-18.5	-21.5
514.75	36.0 Qp	1.6 / 17.8 / 28.4	27.0	V / 1.5 / 182.0	-20.5	-19.0
214.28	37.0 Qp	1.0 / 10.7 / 27.4	21.2	V / 1.2 / 218.0	-19.3	-22.3
67.68	39.8 Qp	0.8 / 8.2 / 28.1	20.6	V / 1.0 / 220.0	-19.9	-19.4
70.17	39.5 Qp	0.8 / 8.3 / 28.1	20.4	V / 1.0 / 218.0	-20.1	-19.6
67.83	39.1 Qp	0.8 / 8.2 / 28.1	20.0	V / 1.0 / 220.0	-20.5	-20.0
60.02	38.5 Qp	0.8 / 7.7 / 28.2	18.8	V / 1.0 / 277.0	-21.7	-21.2
717.15	30.3 Qp	1.9 / 19.9 / 28.2	23.9	V / 1.5 / 182.0	-23.6	-22.1
591.47	29.9 Qp	1.7 / 18.6 / 28.4	21.8	H / 1.9 / 200.0	-25.7	-24.2
336.01	32.1 Qp	1.3 / 13.9 / 27.3	20.0	H / 2.2 / 232.0	-27.5	-26.0
299.33	30.9 Qp	1.2 / 13.4 / 27.2	18.3	H / 1.8 / 312.0	-29.2	-27.7

Radiated Electromagnetic Emissions – Unit 0043

Test Report #:	100613810 Run 05	Test Area:	CC1 Radiated	Temperature:	22.1	°C
Test Method:	EN55022	Test Date:	18-Jan-2012	Relative Humidity:	20.8	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.9	kPa
EUT Serial #:	ALPHA2 0043					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Product in Data Mode					
	USB Cable: Garmin-325					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av – Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB/m) (dB)	(dBuV/m)	(m) (DEG)	CISPR 11 Group 1 Class B	FCC 15.109 Class B
***** Measurement Summary *****						
99.28	50.6 Qp	0.8 / 10.2 / 28.0	33.6	H / 1.7 / 160.0	-6.9	-9.9
810.01	40.1 Qp	2.0 / 21.1 / 27.9	35.3	V / 1.7 / 283.0	-12.2	-10.7
106.83	43.1 Qp	0.8 / 12.2 / 27.9	28.1	V / 1.0 / 169.0	-12.4	-15.4
100.03	44.5 Qp	0.8 / 10.4 / 28.0	27.8	H / 1.7 / 160.0	-12.7	-15.7
98.58	44.9 Qp	0.8 / 10.0 / 28.0	27.6	V / 1.0 / 178.0	-12.9	-15.9
96.33	43.5 Qp	0.8 / 9.5 / 28.0	25.8	V / 1.0 / 178.0	-14.7	-17.7
405.00	41.2 Qp	1.4 / 15.5 / 27.8	30.3	V / 1.4 / 188.0	-17.2	-15.7
45.52	40.8 Qp	0.8 / 10.4 / 28.2	23.8	V / 1.0 / 334.0	-16.7	-16.2
70.17	41.3 Qp	0.8 / 8.3 / 28.1	22.2	V / 1.0 / 218.0	-18.3	-17.8
49.27	40.4 Qp	0.8 / 8.7 / 28.2	21.7	V / 1.0 / 312.0	-18.8	-18.3
186.07	38.0 Qp	0.9 / 10.8 / 27.5	22.2	V / 1.0 / 222.0	-18.3	-21.3
514.72	36.4 Qp	1.6 / 17.8 / 28.4	27.4	V / 1.4 / 168.0	-20.1	-18.6
214.27	37.5 Qp	1.0 / 10.7 / 27.4	21.8	V / 1.0 / 222.0	-18.7	-21.7
67.68	38.8 Qp	0.8 / 8.2 / 28.1	19.6	V / 1.0 / 220.0	-20.9	-20.4
167.88	34.9 Qp	0.9 / 12.0 / 27.6	20.1	V / 1.0 / 202.0	-20.4	-23.4
60.02	37.5 Qp	0.8 / 7.7 / 28.2	17.9	V / 1.0 / 282.0	-22.6	-22.1
717.15	30.2 Qp	1.9 / 19.9 / 28.2	23.7	V / 1.4 / 155.0	-23.8	-22.3
591.47	29.6 Qp	1.7 / 18.6 / 28.4	21.5	H / 1.9 / 204.0	-26.0	-24.5
336.01	31.1 Qp	1.3 / 13.9 / 27.3	19.0	H / 1.9 / 212.0	-28.5	-27.0
299.33	29.3 Qp	1.2 / 13.4 / 27.2	16.7	H / 1.8 / 284.0	-30.8	-29.3

Example calculation:

Measured Level	+	Transducer, Cable Loss & Amplifier corrections	=	Corrected Reading	Specification Limit	-	Corrected Reading	=	Delta Specification
(dBμV)		(dB)		(dBμV/m)	(dBμV/m)		(dBμV/m)		
14.0		14.9		28.9	40.0		28.9		-11.1

Notes:

- 1) As determined from pre-scans, product tested in worst-case axis – axis 1 (product flat on table).
- 2) Covers ICES-003:2004 - Digital Apparatus Interference-Causing Equipment.

Deviations, Additions, or Exclusions: None

16 AC Mains Conducted Emissions – (Test not Applicable)**16.1 Method**

The test methods used comply with ANSI C63.4 and CISPR 16. Unless otherwise stated no deviations were made from CISPR 11:2009+A1:2010.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

16.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
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16.3 Results:

The product is internal battery-powered – test not required.

16.4 Setup Photographs:**16.5 Pre-scan plots for reference only – not final data:****16.6 Final Plots:****16.7 Test Data:**

Example calculation:

Measured Level		Transducer, Cable Loss & Amplifier corrections		Corrected Reading	Specification Limit		Corrected Reading		Delta Specification
(dB μ V)	+	(dB)	=	(dB μ V/m)	(dB μ V/m)	-	(dB μ V/m)	=	
14.0		14.9		28.9	40.0		28.9		-11.1

Notes:

Deviations, Additions, or Exclusions:

17 Telecom Port Conducted Emissions – (Test not Applicable)**17.1 Method**

The test methods used comply with ANSI C63.4 and CISPR 16. Unless otherwise stated no deviations were made from CISPR 22: 2008.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

17.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
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17.3 Results:**17.4 Setup Photographs:****17.5 Pre-scan plots for reference only – not final data:****17.6 Final Plots – Ethernet Cable:****17.7 Test Data – Ethernet Cable:**

Example calculation:

Measured Level	+	Transducer, Cable Loss & Amplifier corrections	=	Corrected Reading	Specification Limit	-	Corrected Reading	=	Delta Specification
(dB μ V)		(dB)		(dB μ V/m)	(dB μ V/m)		(dB μ V/m)		
14.0		14.9		28.9	40.0		28.9		-11.1

Notes:

- 1) Product has no telecom port cables – test not required.

Deviations, Additions, or Exclusions:

18 Current Harmonic Emissions – (Test not Applicable)**18.1 Method**

Unless otherwise stated no deviations from IEC 61000-3-2:2005, A1:2008, A2:2009 were made.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

18.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
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18.3 Results:**18.4 Setup Photographs:****18.5 Test Data:**

Notes: The product is internal battery-powered – test not required.

Deviations, Additions, or Exclusions:

19 Voltage Fluctuations and Flicker – (Test not Applicable)**19.1 Method**

Unless otherwise stated no deviations from IEC 61000-3-3:2008 were made.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

19.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
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19.3 Results:**19.4 Setup Photographs:****19.5 Test Data:**

Notes: The product is internal battery-powered – test not required.

Deviations, Additions, or Exclusions:

20 Intentional Radiated Emissions – Fundamental & Harmonics of Fundamental (SYSRS11) (SYSRS315)**20.1 Method**

Unless otherwise stated no deviations from FCC Part 15.209 and IC RSS-210:2007, Section 2.6, Table 3.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

20.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
18913	Spectrum Analyzer	Hewlett-Packard	E7405A	My44211889	06/28/2011	06/28/2012
18897	Active Loop Antenna (9kHz to 30MHz)	EMCO	6502	9205-2738	11/22/2011	11/22/2012

20.3 Results:

The sample tested was found to comply.

20.4 Setup Photographs: Intentional Radiated Emissions – Fundamental & Harmonics

Axis 1 – EUT Flat on Table



Photo:

Axis 2 – EUT Vertical

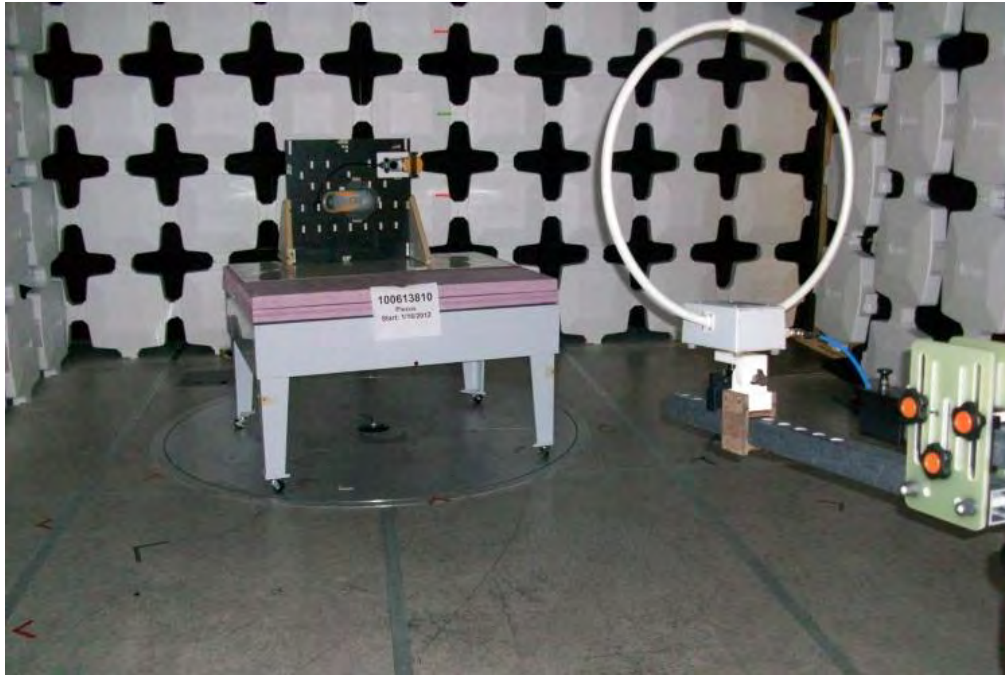
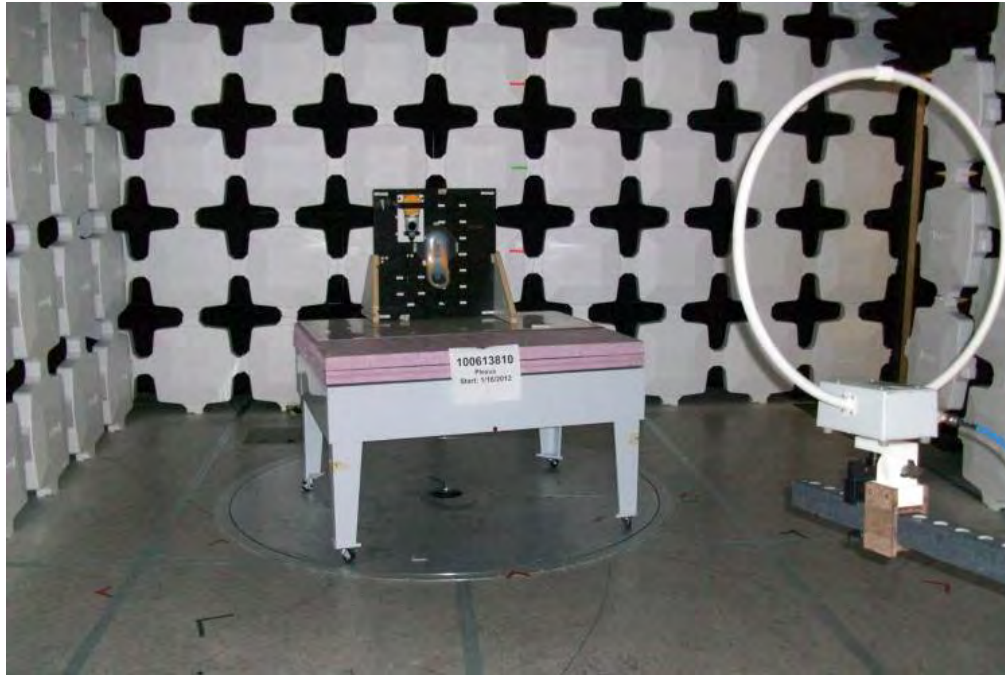


Photo:

Axis 3 – EUT Vertical & Rotated 90 degrees



20.5 Test Data: Intentional Radiated Emissions – Fundamental & Harmonics

Radiated Electromagnetic Emissions – Unit 0012

Test Report #:	100613810 Run 01	Test Area:	CC1 Radiated	Temperature:	22.4	°C
Test Method:	FCC Part 15.209	Test Date:	28-Jan-2012	Relative Humidity:	28.7	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.6	kPa
EUT Serial #:	0012					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Tx Compression Mode of operation					
	Product tested in 3-axes to determine worst-case axis for fundamental					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV)	(m) (DEG)	FCC 15.209 IC RSS-210	N/A
Loop Antenna Parallel						
Axis 1 - EUT Flat on Table						
0.0120	27.6 Pk	0.0 / 18.2 / 0.0	45.8	V / 1.0 / 334.0	-80.2	N/A
0.0240	2.7 Pk	0.0 / 14.2 / 0.0	16.9	V / 1.0 / 330.0	-103.1	N/A
0.0360	34.0 Pk	0.0 / 12.9 / 0.0	46.9	V / 1.0 / 330.0	-69.6	N/A
0.0480	1.9 Pk	0.0 / 11.5 / 0.0	13.5	V / 1.0 / 287.0	-100.5	N/A
0.0600	2.8 Pk	0.0 / 11.2 / 0.0	14.0	V / 1.0 / 248.0	-98.0	N/A
0.0720	2.6 Pk	0.0 / 11.0 / 0.0	13.6	V / 1.0 / 248.0	-96.8	N/A
0.0840	-0.7 Pk	0.0 / 10.9 / 0.0	10.3	V / 1.0 / 248.0	-98.8	N/A
0.0960	3.2 Pk	0.0 / 10.6 / 0.0	13.8	V / 1.0 / 212.0	-94.2	N/A
0.108	5.8 Pk	0.0 / 10.3 / 0.0	16.2	H / 1.0 / 217.0	-90.7	N/A
0.120	2.5 Pk	0.0 / 10.3 / 0.0	12.9	V / 1.0 / 312.0	-93.1	N/A
Loop Perpendicular						
0.0120	24.7 Pk	0.0 / 18.2 / 0.0	42.9	H / 1.0 / 88.0	-83.1	N/A
0.0240	1.4 Pk	0.0 / 14.2 / 0.0	15.6	H / 1.0 / 88.0	-104.4	N/A
0.0360	-3.6 Pk	0.0 / 12.9 / 0.0	9.4	H / 1.0 / 112.0	-107.1	N/A
0.0480	-0.6 Pk	0.0 / 11.5 / 0.0	11.0	H / 1.0 / 112.0	-103.0	N/A
0.0600	1.1 Pk	0.0 / 11.2 / 0.0	12.3	H / 1.0 / 120.0	-99.7	N/A
0.0720	1.5 Pk	0.0 / 11.0 / 0.0	12.5	H / 1.0 / 120.0	-97.9	N/A
0.0840	-0.1 Pk	0.0 / 10.9 / 0.0	10.8	H / 1.0 / 122.0	-98.3	N/A
0.0960	4.1 Pk	0.0 / 10.6 / 0.0	14.7	H / 1.0 / 118.0	-93.3	N/A
0.108	1.2 Pk	0.0 / 10.3 / 0.0	11.6	H / 1.0 / 123.0	-95.3	N/A
0.120	1.6 Pk	0.0 / 10.3 / 0.0	11.9	H / 1.0 / 210.0	-94.1	N/A

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV)	(m) (DEG)	FCC 15.209 IC RSS-210	N/A

Axis 2 – EUT Vertical						
Loop Parallel						
0.0120	33.2 Pk	0.0 / 18.2 / 0.0	51.4	V / 1.0 / 194.0	-74.6	N/A
0.0240	12.0 Pk	0.0 / 14.2 / 0.0	26.2	V / 1.0 / 204.0	-93.8	N/A
0.0360	2.1 Pk	0.0 / 12.9 / 0.0	15.0	V / 1.0 / 204.0	-101.5	N/A
0.0480	36.0 Pk	0.0 / 11.5 / 0.0	47.5	V / 1.0 / 176.0	-66.5	N/A
0.0600	3.9 Pk	0.0 / 11.2 / 0.0	15.2	V / 1.0 / 176.0	-96.8	N/A
0.0720	1.2 Pk	0.0 / 11.0 / 0.0	12.2	V / 1.0 / 172.0	-98.2	N/A
0.0840	-3.3 Pk	0.0 / 10.9 / 0.0	7.7	V / 1.0 / 172.0	-101.4	N/A
0.0960	32.0 Pk	0.0 / 10.6 / 0.0	42.6	V / 1.0 / 224.0	-65.4	N/A
0.108	1.4 Pk	0.0 / 10.3 / 0.0	11.7	V / 1.0 / 224.0	-95.2	N/A
0.120	1.2 Pk	0.0 / 10.3 / 0.0	11.6	V / 1.0 / 186.0	-94.4	N/A
Loop Perpendicular						
0.0120	28.4 Pk	0.0 / 18.2 / 0.0	46.6	H / 1.0 / 138.0	-79.4	N/A
0.0240	-0.3 Pk	0.0 / 14.2 / 0.0	13.9	H / 1.0 / 138.0	-106.1	N/A
0.0360	3.0 Pk	0.0 / 12.9 / 0.0	16.0	H / 1.0 / 172.0	-100.5	N/A
0.0480	1.4 Pk	0.0 / 11.5 / 0.0	12.9	H / 1.0 / 172.0	-101.1	N/A
0.0600	1.7 Pk	0.0 / 11.2 / 0.0	12.9	H / 1.0 / 176.0	-99.1	N/A
0.0720	21.0 Pk	0.0 / 11.0 / 0.0	32.0	H / 1.0 / 176.0	-78.4	N/A
0.0840	-1.2 Pk	0.0 / 10.9 / 0.0	9.8	H / 1.0 / 224.0	-99.3	N/A
0.0960	-0.4 Pk	0.0 / 10.6 / 0.0	10.2	H / 1.0 / 224.0	-97.8	N/A
0.108	-0.3 Pk	0.0 / 10.3 / 0.0	10.1	H / 1.0 / 224.0	-96.8	N/A
0.120	3.8 Pk	0.0 / 10.3 / 0.0	14.1	H / 1.0 / 163.0	-91.9	N/A
Axis 3 - Vertical & Rotated 90 degrees						
Loop Parallel						
0.0120	30.9 Pk	0.0 / 18.2 / 0.0	49.1	V / 1.0 / 216.0	-76.9	N/A
0.0240	3.4 Pk	0.0 / 14.2 / 0.0	17.6	V / 1.0 / 216.0	-102.4	N/A
0.0360	2.2 Pk	0.0 / 12.9 / 0.0	15.2	V / 1.0 / 200.0	-101.3	N/A
0.0480	-0.5 Pk	0.0 / 11.5 / 0.0	11.0	V / 1.0 / 200.0	-103.0	N/A
0.0600	1.7 Pk	0.0 / 11.2 / 0.0	12.9	V / 1.0 / 204.0	-99.1	N/A
0.0720	-1.4 Pk	0.0 / 11.0 / 0.0	9.6	V / 1.0 / 204.0	-100.8	N/A
0.0840	-0.4 Pk	0.0 / 10.9 / 0.0	10.6	V / 1.0 / 210.0	-98.5	N/A
0.0960	12.0 Pk	0.0 / 10.6 / 0.0	22.6	V / 1.0 / 210.0	-85.4	N/A
0.108	-0.5 Pk	0.0 / 10.3 / 0.0	9.9	V / 1.0 / 223.0	-97.0	N/A
0.120	2.7 Pk	0.0 / 10.3 / 0.0	13.1	V / 1.0 / 223.0	-92.9	N/A
Loop Perpendicular						
0.0120	27.9 Pk	0.0 / 18.2 / 0.0	46.1	H / 1.0 / 188.0	-79.9	N/A
0.0240	4.4 Pk	0.0 / 14.2 / 0.0	18.6	H / 1.0 / 212.0	-101.4	N/A

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0.0360	2.4 Pk	0.0 / 12.9 / 0.0	15.3	H / 1.0 / 228.0	-101.2	N/A
0.0480	1.6 Pk	0.0 / 11.5 / 0.0	13.2	H / 1.0 / 200.0	-100.8	N/A
0.0600	-0.6 Pk	0.0 / 11.2 / 0.0	10.6	H / 1.0 / 204.0	-101.4	N/A
0.0720	-1.2 Pk	0.0 / 11.0 / 0.0	9.8	H / 1.0 / 204.0	-100.6	N/A
0.0840	-0.3 Pk	0.0 / 10.9 / 0.0	10.7	H / 1.0 / 204.0	-98.4	N/A
0.0960	-2.9 Pk	0.0 / 10.6 / 0.0	7.7	H / 1.0 / 204.0	-100.3	N/A
0.108	-1.4 Pk	0.0 / 10.3 / 0.0	8.9	H / 1.0 / 204.0	-98.0	N/A
0.120	-0.1 Pk	0.0 / 10.3 / 0.0	10.2	H / 1.0 / 204.0	-95.8	N/A

Radiated Electromagnetic Emissions – Unit 0030

Test Report #: 100613810 Run 05

Test Area: CC1 Radiated

Temperature: 22.4 °C

Test Method: FCC Part 15.209

Test Date: 28-Jan-2012

Relative Humidity: 28.7 %

EUT Model #: TrueCPR

EUT Power: Battery

Air Pressure: 83.6 kPa

EUT Serial #: 0030

Manufacturer: Plexus

EUT Description: CPR Coaching Device

Notes: Tx Compression Mode of operation

Level Key

Pk – Peak Nb – Narrow Band

Qp – QuasiPeak Bb – Broad Band

Av - Average

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB/m) (dB)	(dBuV)	(m) (DEG)	FCC 15.209 IC RSS-210	N/A
Loop Parallel						
0.0120	33.6 Pk	0.0 / 18.2 / 0.0	51.8	V / 1.0 / 182.0	-74.2	N/A
0.0240	3.9 Pk	0.0 / 14.2 / 0.0	18.1	V / 1.0 / 239.0	-101.9	N/A
0.0360	-0.3 Pk	0.0 / 12.9 / 0.0	12.7	V / 1.0 / 239.0	-103.8	N/A
0.0480	1.1 Pk	0.0 / 11.5 / 0.0	12.7	V / 1.0 / 198.0	-101.3	N/A
0.0600	2.8 Pk	0.0 / 11.2 / 0.0	14.0	V / 1.0 / 220.0	-98.0	N/A
0.0720	2.1 Pk	0.0 / 11.0 / 0.0	13.1	V / 1.0 / 203.0	-97.3	N/A
0.0840	5.1 Pk	0.0 / 10.9 / 0.0	16.0	V / 1.0 / 211.0	-93.1	N/A
0.0960	3.5 Pk	0.0 / 10.6 / 0.0	14.1	V / 1.0 / 211.0	-93.9	N/A
0.108	15.0 Pk	0.0 / 10.3 / 0.0	25.3	V / 1.0 / 236.0	-81.6	N/A
0.120	-0.3 Pk	0.0 / 10.3 / 0.0	10.0	V / 1.0 / 218.0	-96.0	N/A
Loop Perpendicular						
0.0120	26.6 Pk	0.0 / 18.2 / 0.0	44.8	H / 1.0 / 276.0	-81.2	N/A
0.0240	2.5 Pk	0.0 / 14.2 / 0.0	16.7	H / 1.0 / 243.0	-103.3	N/A
0.0360	1.3 Pk	0.0 / 12.9 / 0.0	14.3	H / 1.0 / 234.0	-102.2	N/A
0.0480	3.2 Pk	0.0 / 11.5 / 0.0	14.7	H / 1.0 / 242.0	-99.3	N/A
0.0600	-1.1 Pk	0.0 / 11.2 / 0.0	10.2	H / 1.0 / 242.0	-101.8	N/A
0.0720	-0.3 Pk	0.0 / 11.0 / 0.0	10.7	H / 1.0 / 225.0	-99.7	N/A
0.0840	3.3 Pk	0.0 / 10.9 / 0.0	14.3	H / 1.0 / 237.0	-94.8	N/A
0.0960	2.0 Pk	0.0 / 10.6 / 0.0	12.6	H / 1.0 / 207.0	-95.4	N/A
0.108	4.0 Pk	0.0 / 10.3 / 0.0	14.3	H / 1.0 / 207.0	-92.6	N/A
0.120	3.1 Pk	0.0 / 10.3 / 0.0	13.5	H / 1.0 / 207.0	-92.5	N/A

Radiated Electromagnetic Emissions – Unit 0036

Test Report #: **100613810 Run 04**

Test Area: CC1 Radiated

Temperature: 22.4 °C

Test Method: FCC Part 15.209

Test Date: 28-Jan-2012

Relative Humidity: 28.7 %

EUT Model #: TrueCPR

EUT Power: Battery

Air Pressure: 83.6 kPa

EUT Serial #: 0036

Manufacturer: Plexus

EUT Description: CPR Coaching Device

Notes: **Tx Compression Mode of operation**

Level Key

Pk – Peak Nb – Narrow Band

Qp – QuasiPeak Bb – Broad Band

Av - Average

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV)	(m) (DEG)	FCC 15.209 IC RSS-210	N/A
Loop Parallel						
0.0120	33.1 Pk	0.0 / 18.2 / 0.0	51.3	V / 1.0 / 187.0	-74.7	N/A
0.0240	2.4 Pk	0.0 / 14.2 / 0.0	16.6	V / 1.0 / 187.0	-103.4	N/A
0.0360	-0.1 Pk	0.0 / 12.9 / 0.0	12.9	V / 1.0 / 212.0	-103.6	N/A
0.0480	1.4 Pk	0.0 / 11.5 / 0.0	12.9	V / 1.0 / 216.0	-101.1	N/A
0.0600	3.4 Pk	0.0 / 11.2 / 0.0	14.6	V / 1.0 / 232.0	-97.4	N/A
0.0720	2.2 Pk	0.0 / 11.0 / 0.0	13.2	V / 1.0 / 218.0	-97.2	N/A
0.0840	2.0 Pk	0.0 / 10.9 / 0.0	13.0	V / 1.0 / 218.0	-96.1	N/A
0.0960	4.2 Pk	0.0 / 10.6 / 0.0	14.8	V / 1.0 / 218.0	-93.2	N/A
0.108	1.8 Pk	0.0 / 10.3 / 0.0	12.1	V / 1.0 / 218.0	-94.8	N/A
0.120	4.2 Pk	0.0 / 10.3 / 0.0	14.5	V / 1.0 / 199.0	-91.5	N/A
Loop Perpendicular						
0.0120	28.1 Pk	0.0 / 18.2 / 0.0	46.3	H / 1.0 / 254.0	-79.7	N/A
0.0240	3.0 Pk	0.0 / 14.2 / 0.0	17.2	H / 1.0 / 246.0	-102.8	N/A
0.0360	-0.2 Pk	0.0 / 12.9 / 0.0	12.8	H / 1.0 / 208.0	-103.7	N/A
0.0480	-0.1 Pk	0.0 / 11.5 / 0.0	11.4	H / 1.0 / 228.0	-102.6	N/A
0.0600	-1.2 Pk	0.0 / 11.2 / 0.0	10.0	H / 1.0 / 228.0	-102.0	N/A
0.0720	1.4 Pk	0.0 / 11.0 / 0.0	12.5	H / 1.0 / 220.0	-97.9	N/A
0.0840	1.2 Pk	0.0 / 10.9 / 0.0	12.1	H / 1.0 / 208.0	-97.0	N/A
0.0960	1.2 Pk	0.0 / 10.6 / 0.0	11.8	H / 1.0 / 208.0	-96.2	N/A
0.108	-0.2 Pk	0.0 / 10.3 / 0.0	10.1	H / 1.0 / 212.0	-96.8	N/A
0.120	2.8 Pk	0.0 / 10.3 / 0.0	13.2	H / 1.0 / 204.0	-92.8	N/A

Radiated Electromagnetic Emissions – Unit 0041

Test Report #: **100613810 Run 03**

Test Area: CC1 Radiated

Temperature: 22.4 °C

Test Method: FCC Part 15.209

Test Date: 28-Jan-2012

Relative Humidity: 28.7 %

EUT Model #: True CPR

EUT Power: Battery

Air Pressure: 83.6 kPa

EUT Serial #: 0041

Manufacturer: Plexus

EUT Description: CPR Coaching Device

Notes: **Tx Compression Mode of operation**

Level Key

Pk – Peak Nb – Narrow Band

Qp – QuasiPeak Bb – Broad Band

Av - Average

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV)	(m) (DEG)	FCC 15.209 IC RSS-210	N/A
Loop Parallel						
0.0120	33.4 Pk	0.0 / 18.2 / 0.0	51.6	V / 1.0 / 182.0	-74.4	N/A
0.0240	1.8 Pk	0.0 / 14.2 / 0.0	16.0	V / 1.0 / 212.0	-104.0	N/A
0.0360	2.0 Pk	0.0 / 12.9 / 0.0	15.0	V / 1.0 / 212.0	-101.5	N/A
0.0480	-0.1 Pk	0.0 / 11.5 / 0.0	11.4	V / 1.0 / 198.0	-102.6	N/A
0.0600	1.3 Pk	0.0 / 11.2 / 0.0	12.5	V / 1.0 / 198.0	-99.5	N/A
0.0720	16.0 Pk	0.0 / 11.0 / 0.0	27.0	V / 1.0 / 198.0	-83.4	N/A
0.0840	2.0 Pk	0.0 / 10.9 / 0.0	13.0	V / 1.0 / 243.0	-96.1	N/A
0.0960	3.2 Pk	0.0 / 10.6 / 0.0	13.8	V / 1.0 / 243.0	-94.2	N/A
0.108	1.5 Pk	0.0 / 10.3 / 0.0	11.8	V / 1.0 / 248.0	-95.1	N/A
0.120	1.4 Pk	0.0 / 10.3 / 0.0	11.7	V / 1.0 / 212.0	-94.3	N/A
Loop Perpendicular						
0.0120	28.5 Pk	0.0 / 18.2 / 0.0	46.7	H / 1.0 / 244.0	-79.3	N/A
0.0240	1.3 Pk	0.0 / 14.2 / 0.0	15.5	H / 1.0 / 216.0	-104.5	N/A
0.0360	1.7 Pk	0.0 / 12.9 / 0.0	14.6	H / 1.0 / 187.0	-101.9	N/A
0.0481	1.6 Pk	0.0 / 11.5 / 0.0	13.1	H / 1.0 / 222.0	-100.8	N/A
0.0600	4.6 Pk	0.0 / 11.2 / 0.0	15.9	H / 1.0 / 222.0	-96.1	N/A
0.0720	19.0 Pk	0.0 / 11.0 / 0.0	30.0	H / 1.0 / 222.0	-80.4	N/A
0.0840	1.5 Pk	0.0 / 10.9 / 0.0	12.4	H / 1.0 / 243.0	-96.7	N/A
0.0960	2.6 Pk	0.0 / 10.6 / 0.0	13.2	H / 1.0 / 240.0	-94.8	N/A
0.108	1.7 Pk	0.0 / 10.3 / 0.0	12.1	H / 1.0 / 240.0	-94.8	N/A
0.120	4.5 Pk	0.0 / 10.3 / 0.0	14.8	H / 1.0 / 240.0	-91.2	N/A

Radiated Electromagnetic Emissions – Unit 0043

Test Report #:	100613810 Run 02	Test Area:	CC1 Radiated	Temperature:	22.4	°C
Test Method:	FCC Part 15.209	Test Date:	28-Jan-2012	Relative Humidity:	28.7	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.6	kPa
EUT Serial #:	0043					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					
Notes:	Tx Compression Mode of operation					

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV)	(m) (DEG)	FCC 15.209 IC RSS-210	N/A
Loop Parallel						
0.0120	31.0 Pk	0.0 / 18.2 / 0.0	49.2	V / 1.0 / 198.0	-76.8	N/A
0.0240	1.7 Pk	0.0 / 14.2 / 0.0	15.9	V / 1.0 / 177.0	-104.1	N/A
0.0360	1.4 Pk	0.0 / 12.9 / 0.0	14.3	V / 1.0 / 177.0	-102.2	N/A
0.0480	1.9 Pk	0.0 / 11.5 / 0.0	13.4	V / 1.0 / 212.0	-100.6	N/A
0.0600	1.3 Pk	0.0 / 11.2 / 0.0	12.5	V / 1.0 / 212.0	-99.5	N/A
0.0720	4.7 Pk	0.0 / 11.0 / 0.0	15.7	V / 1.0 / 212.0	-94.7	N/A
0.0840	1.7 Pk	0.0 / 10.9 / 0.0	12.6	V / 1.0 / 202.0	-96.5	N/A
0.0960	-1.4 Pk	0.0 / 10.6 / 0.0	9.2	V / 1.0 / 202.0	-98.8	N/A
0.108	4.0 Pk	0.0 / 10.3 / 0.0	14.4	V / 1.0 / 210.0	-92.5	N/A
0.120	0.0 Pk	0.0 / 10.3 / 0.0	10.4	V / 1.0 / 210.0	-95.6	N/A
Loop Perpendicular						
0.0120	28.7 Pk	0.0 / 18.2 / 0.0	46.9	H / 1.0 / 264.0	-79.1	N/A
0.0240	1.9 Pk	0.0 / 14.2 / 0.0	16.1	H / 1.0 / 246.0	-103.9	N/A
0.0360	2.4 Pk	0.0 / 12.9 / 0.0	15.3	H / 1.0 / 228.0	-101.2	N/A
0.0481	2.1 Pk	0.0 / 11.5 / 0.0	13.7	H / 1.0 / 229.0	-100.3	N/A
0.0600	1.4 Pk	0.0 / 11.2 / 0.0	12.6	H / 1.0 / 216.0	-99.4	N/A
0.0720	1.7 Pk	0.0 / 11.0 / 0.0	12.7	H / 1.0 / 226.0	-97.7	N/A
0.0840	2.2 Pk	0.0 / 10.9 / 0.0	13.2	H / 1.0 / 217.0	-95.9	N/A
0.0960	1.1 Pk	0.0 / 10.6 / 0.0	11.7	H / 1.0 / 217.0	-96.3	N/A
0.108	5.8 Pk	0.0 / 10.3 / 0.0	16.2	H / 1.0 / 217.0	-90.7	N/A
0.120	1.1 Pk	0.0 / 10.3 / 0.0	11.4	H / 1.0 / 217.0	-94.6	N/A

Notes:

1)

21 Magnetic Field Emissions – Fundamental & Harmonics – (SYSRS130) (SYSRS131)**21.1 Method**

Testing was performed per Plexus D25303-681 Design Test Procedures. The Radiated Magnetic Field of the Fundamental and Harmonics of the Fundamental shall be < 5Gauss and <1Gauss respectively.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

21.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
18913	Spectrum Analyzer	Hewlett-Packard	E7405A	My44211889	06/28/2011	06/28/2012
18784	Loop sensor	SOLAR	7334-1	927606	10/29/2011	10/29/2012

21.3 Results:

The sample tested was found to comply.

21.4 Setup Photographs: Tx Magnetic Field Radiated Emissions

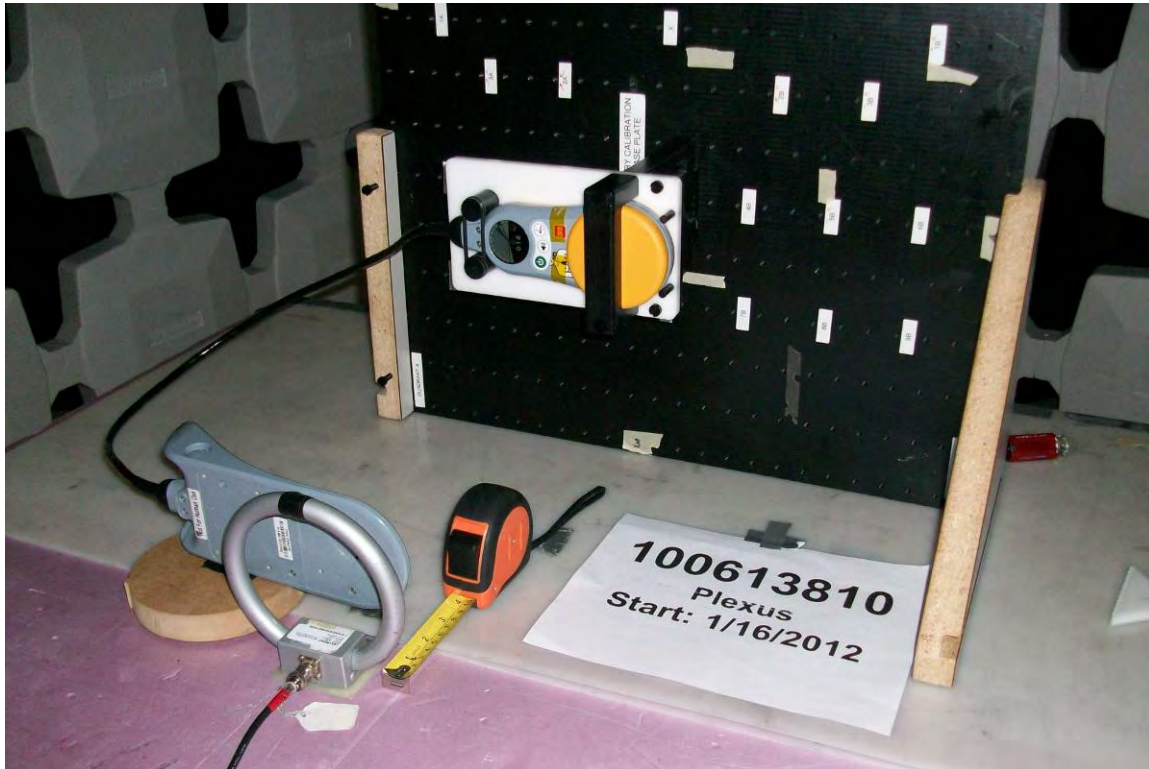


Photo: Back Pad

Loop Parallel to product



Photo: Back Pad

Loop Perpendicular to product



Photo: Chest Pad

Loop Parallel to product



Loop Parallel to product



Loop Perpendicular to product



21.5 Test Data: Tx Magnetic Field Radiated Emissions per (SYSRS 130 & 131)

Tx Magnetic Field Radiated Electromagnetic Emissions – Unit 0012

Test Report #:	100613810 Run 05	Test Area:	CC1 Conducted	Temperature:	23.1	°C
Test Method:	N/A	Test Date:	28-Jan-2012	Relative Humidity:	28.7	%
EUT Model #:	TrueCPR	EUT Power:	Battery	Air Pressure:	83.7	kPa
EUT Serial #:	0012					
Manufacturer:	Plexus					
EUT Description:	CPR Coaching Device					

Notes: **Tx Compression mode of operation**

Limit of Fundamental = 5 Gauss = 223.5 dBuV/m

Limit of Harmonics = 1 Gauss = 209.5 dBuV/m

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av – Average	

FREQ	LEVEL	CABLE / LISN / ATTEN	Final S/A	Loop Af	Final	Limit	Delta Limit
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
Loop Antenna Parallel to EUT							
Fundamental Frequency							
0.0120	108.0 Pk	0.1 / 0.0 / 0.0	108.1	82.0	190.1	223.5	-33.4
Harmonics of Fundamental							
0.0240	58.5 Pk	0.1 / 0.0 / 0.0	58.6	81.0	139.6	209.5	-69.9
0.0360	53.8 Pk	0.1 / 0.0 / 0.0	53.9	80.0	133.9	209.5	-75.6
0.0480	42.1 Pk	0.1 / 0.0 / 0.0	42.2	79.5	121.7	209.5	-87.8
0.0600	44.3 Pk	0.1 / 0.0 / 0.0	44.4	79.5	123.9	209.5	-85.6
0.0720	30.3 Pk	0.1 / 0.0 / 0.0	30.4	79.5	109.9	209.5	-99.6
0.0840	39.3 Pk	0.1 / 0.0 / 0.0	39.4	79.5	118.9	209.5	-90.6
0.0960	27.5 Pk	0.1 / 0.0 / 0.0	27.6	79.0	106.6	209.5	-102.9
0.108	34.7 Pk	0.1 / 0.0 / 0.0	34.8	79.0	113.8	209.5	-95.7
0.120	26.0 Pk	0.1 / 0.0 / 0.0	26.1	79.0	105.1	209.5	-104.4
Loop Antenna Perpendicular to EUT							
Fundamental Frequency							
0.0120	99.6 Pk	0.1 / 0.0 / 0.0	99.7	82.0	181.7	223.5	-41.8
Harmonics of Fundamental							
0.0240	49.4 Pk	0.1 / 0.0 / 0.0	49.5	81.0	130.5	209.5	-79.0
0.0360	44.9 Pk	0.1 / 0.0 / 0.0	45.0	80.0	125.0	209.5	-84.5
0.0480	34.5 Pk	0.1 / 0.0 / 0.0	34.6	79.5	114.1	209.5	-95.4
0.0600	37.4 Pk	0.1 / 0.0 / 0.0	37.5	79.5	117.0	209.5	-92.5
0.0720	20.7 Pk	0.1 / 0.0 / 0.0	20.8	79.5	100.3	209.5	-109.2
0.0840	30.0 Pk	0.1 / 0.0 / 0.0	30.1	79.5	109.6	209.5	-99.9
0.0960	22.2 Pk	0.1 / 0.0 / 0.0	22.3	79.0	101.3	209.5	-108.2
0.108	25.8 Pk	0.1 / 0.0 / 0.0	25.9	79.0	104.9	209.5	-104.6
0.120	19.7 Pk	0.1 / 0.0 / 0.0	19.8	79.0	98.8	209.5	-110.7

Tx Magnetic Field Radiated Electromagnetic Emissions – Unit 0030

Test Report #: **100613810 Run 05** Test Area: CC1 Conducted Temperature: 23.1 °C
 Test Method: N/A Test Date: 28-Jan-2012 Relative Humidity: 28.7 %
 EUT Model #: TrueCPR EUT Power: Battery Air Pressure: 83.7 kPa
 EUT Serial #: 0030

Manufacturer: Plexus

EUT Description: CPR Coaching Device

Notes: Tx Compression mode of operation

Limit of Fundamental = 5 Gauss = 223.5 dBuV/m

Limit of Harmonics = 1 Gauss = 209.5 dBuV/m

Level Key

Pk – Peak Nb – Narrow Band
 Qp – QuasiPeak Bb – Broad Band
 Av - Average

FREQ	LEVEL	CABLE / LISN / ATTEN	Final S/A	Loop Af	Final	Limit	Delta Limit
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
Loop Antenna Parallel to EUT							
Fundamental Frequency							
0.012	105.0 Pk	0.1 / 0.0 / 0.0	105.1	82.0	187.1	223.5	-36.4
Harmonics of Fundamental							
0.024	40.9 Pk	0.1 / 0.0 / 0.0	41.0	81.0	122.0	209.5	-87.5
0.036	54.4 Pk	0.1 / 0.0 / 0.0	54.5	80.0	134.5	209.5	-75.0
0.048	35.9 Pk	0.1 / 0.0 / 0.0	36.0	79.5	115.5	209.5	-94.0
0.06	43.0 Pk	0.1 / 0.0 / 0.0	43.1	79.5	122.6	209.5	-86.9
0.072	29.5 Pk	0.1 / 0.0 / 0.0	29.6	79.5	109.1	209.5	-100.4
0.084	38.2 Pk	0.1 / 0.0 / 0.0	38.3	79.5	117.8	209.5	-91.7
0.096	27.8 Pk	0.1 / 0.0 / 0.0	27.9	79.0	106.9	209.5	-102.6
0.108	33.1 Pk	0.1 / 0.0 / 0.0	33.2	79.0	112.2	209.5	-97.3
0.12	21.9 Pk	0.1 / 0.0 / 0.0	22.0	79.0	101.0	209.5	-108.5
Loop Antenna Perpendicular to EUT							
Fundamental Frequency							
0.012	86.3 Pk	0.1 / 0.0 / 0.0	86.4	82.0	168.4	223.5	-55.1
Harmonics of Fundamental							
0.024	35.1 Pk	0.1 / 0.0 / 0.0	35.2	81.0	116.2	209.5	-93.3
0.036	31.8 Pk	0.1 / 0.0 / 0.0	31.9	80.0	111.9	209.5	-97.6
0.048	20.9 Pk	0.1 / 0.0 / 0.0	21.0	79.5	100.5	209.5	-109.0
0.06	23.5 Pk	0.1 / 0.0 / 0.0	23.6	79.5	103.1	209.5	-106.4
0.072	12.9 Pk	0.1 / 0.0 / 0.0	13.0	79.5	92.5	209.5	-117.0
0.084	16.0 Pk	0.1 / 0.0 / 0.0	16.1	79.5	95.6	209.5	-113.9
0.096	9.2 Pk	0.1 / 0.0 / 0.0	9.2	79.0	88.2	209.5	-121.3
0.108	23.1 Pk	0.1 / 0.0 / 0.0	23.2	79.0	102.2	209.5	-107.3
0.12	4.6 Pk	0.1 / 0.0 / 0.0	4.7	79.0	83.7	209.5	-125.8

Tx Magnetic Field Radiated Electromagnetic Emissions – Unit 0036

Test Report #: 100613810 Run 05	Test Area: CC1 Conducted	Temperature: 23.1 °C
Test Method: N/A	Test Date: 28-Jan-2012	Relative Humidity: 28.7 %
EUT Model #: TrueCPR	EUT Power: Battery	Air Pressure: 83.7 kPa

EUT Serial #: 0036

Manufacturer: Plexus

EUT Description: CPR Coaching Device

Notes: **Tx Compression mode of operation**

Limit of Fundamental = 5 Gauss = 223.5 dBuV/m

Limit of Harmonics = 1 Gauss = 209.5 dBuV/m

Level Key

Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / LISN / ATTEN	Final S/A	Loop Af	Final	Limit	Delta Limit
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
Loop Antenna Parallel to EUT							
Fundamental Frequency							
0.012	107.0 Pk	0.1 / 0.0 / 0.0	107.1	82.0	189.1	223.5	-34.4
Harmonics of Fundamental							
0.024	55.9 Pk	0.1 / 0.0 / 0.0	56.0	81.0	137.0	209.5	-72.5
0.036	51.2 Pk	0.1 / 0.0 / 0.0	51.3	80.0	131.3	209.5	-78.2
0.048	38.6 Pk	0.1 / 0.0 / 0.0	38.7	79.5	118.2	209.5	-91.3
0.06	44.4 Pk	0.1 / 0.0 / 0.0	44.5	79.5	124.0	209.5	-85.5
0.072	33.7 Pk	0.1 / 0.0 / 0.0	33.8	79.5	113.3	209.5	-96.2
0.084	37.1 Pk	0.1 / 0.0 / 0.0	37.2	79.5	116.7	209.5	-92.8
0.096	29.2 Pk	0.1 / 0.0 / 0.0	29.3	79.0	108.3	209.5	-101.2
0.108	34.7 Pk	0.1 / 0.0 / 0.0	34.8	79.0	113.8	209.5	-95.7
0.12	25.3 Pk	0.1 / 0.0 / 0.0	25.4	79.0	104.4	209.5	-105.1
Loop Antenna Perpendicular to EUT							
Fundamental Frequency							
0.012	100.0 Pk	0.1 / 0.0 / 0.0	100.1	82.0	182.1	223.5	-41.4
Harmonics of Fundamental							
0.024	49.9 Pk	0.1 / 0.0 / 0.0	50.0	81.0	131.0	209.5	-78.5
0.036	45.8 Pk	0.1 / 0.0 / 0.0	45.9	80.0	125.9	209.5	-83.6
0.048	34.0 Pk	0.1 / 0.0 / 0.0	34.1	79.5	113.6	209.5	-95.9
0.06	35.5 Pk	0.1 / 0.0 / 0.0	35.6	79.5	115.1	209.5	-94.4
0.072	21.8 Pk	0.1 / 0.0 / 0.0	21.9	79.5	101.4	209.5	-108.1
0.084	32.7 Pk	0.1 / 0.0 / 0.0	32.8	79.5	112.3	209.5	-97.2
0.096	22.1 Pk	0.1 / 0.0 / 0.0	22.2	79.0	101.2	209.5	-108.3
0.108	27.9 Pk	0.1 / 0.0 / 0.0	28.0	79.0	107.0	209.5	-102.5
0.12	18.2 Pk	0.1 / 0.0 / 0.0	18.3	79.0	97.3	209.5	-112.2

Tx Magnetic Field Radiated Electromagnetic Emissions – Unit 0041

Test Report #: 100613810 Run 05	Test Area: CC1 Conducted	Temperature: 23.1 °C
Test Method: N/A	Test Date: 28-Jan-2012	Relative Humidity: 28.7 %
EUT Model #: TrueCPR	EUT Power: Battery	Air Pressure: 83.7 kPa

EUT Serial #: 0041

Manufacturer: Plexus

EUT Description: CPR Coaching Device

Notes: **Tx Compression mode of operation**

Limit of Fundamental = 5 Gauss = 223.5 dBuV/m

Limit of Harmonics = 1 Gauss = 209.5 dBuV/m

Level Key

Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / LISN / ATTEN	Final S/A	Loop Af	Final	Limit	Delta Limit
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
Loop Antenna Parallel to EUT							
Fundamental Frequency							
0.012	106.0 Pk	0.1 / 0.0 / 0.0	106.1	82.0	188.1	223.5	-35.4
Harmonics of Fundamental							
0.024	56.2 Qp	0.1 / 0.0 / 0.0	56.3	81.0	137.3	209.5	-72.2
0.036	51.9 Pk	0.1 / 0.0 / 0.0	52.0	80.0	132.0	209.5	-77.5
0.048	37.2 Pk	0.1 / 0.0 / 0.0	37.3	79.5	116.8	209.5	-92.7
0.06	43.8 Pk	0.1 / 0.0 / 0.0	43.9	79.5	123.4	209.5	-86.1
0.072	33.4 Pk	0.1 / 0.0 / 0.0	33.5	79.5	113.0	209.5	-96.5
0.084	38.6 Pk	0.1 / 0.0 / 0.0	38.7	79.5	118.2	209.5	-91.3
0.096	28.3 Pk	0.1 / 0.0 / 0.0	28.4	79.0	107.4	209.5	-102.1
0.108	32.5 Pk	0.1 / 0.0 / 0.0	32.6	79.0	111.6	209.5	-97.9
0.12	25.3 Pk	0.1 / 0.0 / 0.0	25.4	79.0	104.4	209.5	-105.1
Loop Antenna Perpendicular to EUT							
Fundamental Frequency							
0.012	99.7 Pk	0.1 / 0.0 / 0.0	99.8	82.0	181.8	223.5	-41.7
Harmonics of Fundamental							
0.024	50.5 Pk	0.1 / 0.0 / 0.0	50.6	81.0	131.6	209.5	-77.9
0.036	44.4 Pk	0.1 / 0.0 / 0.0	44.5	80.0	124.5	209.5	-85.0
0.048	33.4 Pk	0.1 / 0.0 / 0.0	33.5	79.5	113.0	209.5	-96.5
0.06	37.7 Pk	0.1 / 0.0 / 0.0	37.8	79.5	117.3	209.5	-92.2
0.072	26.3 Pk	0.1 / 0.0 / 0.0	26.4	79.5	105.9	209.5	-103.6
0.084	29.6 Pk	0.1 / 0.0 / 0.0	29.7	79.5	109.2	209.5	-100.3
0.096	16.8 Pk	0.1 / 0.0 / 0.0	16.9	79.0	95.9	209.5	-113.6
0.108	27.9 Pk	0.1 / 0.0 / 0.0	28.0	79.0	107.0	209.5	-102.5
0.12	19.6 Pk	0.1 / 0.0 / 0.0	19.7	79.0	98.7	209.5	-110.8

Magnetic Field Radiated Electromagnetic Emissions – Unit 0043

Test Report #: 100613810 Run 05	Test Area: CC1 Conducted	Temperature: 23.1 °C
Test Method: N/A	Test Date: 28-Jan-2012	Relative Humidity: 28.7 %
EUT Model #: TrueCPR	EUT Power: Battery	Air Pressure: 83.7 kPa
EUT Serial #: 0043		

Manufacturer: Plexus

EUT Description: CPR Coaching Device

Notes: Tx Compression mode of operation

Limit of Fundamental = 5 Gauss = 223.5 dBuV/m

Limit of Harmonics = 1 Gauss = 209.5 dBuV/m

Level Key	
Pk – Peak	Nb – Narrow Band
Qp – QuasiPeak	Bb – Broad Band
Av - Average	

FREQ	LEVEL	CABLE / LISN / ATTEN	Final S/A	Loop Af	Final	Limit	Delta Limit
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)
Loop Antenna Parallel to EUT							
Fundamental Frequency							
0.012	107.0 Pk	0.1 / 0.0 / 0.0	107.1	82.0	189.1	223.5	-34.4
Harmonics of Fundamental							
0.024	56.5 Pk	0.1 / 0.0 / 0.0	56.6	81.0	137.6	209.5	-71.9
0.036	50.9 Pk	0.1 / 0.0 / 0.0	51.0	80.0	131.0	209.5	-78.5
0.048	40.8 Pk	0.1 / 0.0 / 0.0	40.9	79.5	120.4	209.5	-89.1
0.06	43.5 Pk	0.1 / 0.0 / 0.0	43.6	79.5	123.1	209.5	-86.4
0.072	34.4 Pk	0.1 / 0.0 / 0.0	34.5	79.5	114.0	209.5	-95.5
0.084	38.5 Pk	0.1 / 0.0 / 0.0	38.6	79.5	118.1	209.5	-91.4
0.096	26.9 Pk	0.1 / 0.0 / 0.0	27.0	79.0	106.0	209.5	-103.5
0.108	33.5 Pk	0.1 / 0.0 / 0.0	33.6	79.0	112.6	209.5	-96.9
0.12	21.9 Pk	0.1 / 0.0 / 0.0	22.0	79.0	101.0	209.5	-108.5
Loop Antenna Perpendicular to EUT							
Fundamental Frequency							
0.012	99.5 Pk	0.1 / 0.0 / 0.0	99.6	82.0	181.6	223.5	-41.9
Harmonics of Fundamental							
0.024	51.1 Pk	0.1 / 0.0 / 0.0	51.2	81.0	132.2	209.5	-77.3
0.036	44.9 Pk	0.1 / 0.0 / 0.0	45.0	80.0	125.0	209.5	-84.5
0.048	33.4 Pk	0.1 / 0.0 / 0.0	33.5	79.5	113.0	209.5	-96.5
0.06	37.7 Pk	0.1 / 0.0 / 0.0	37.8	79.5	117.3	209.5	-92.2
0.072	26.6 Pk	0.1 / 0.0 / 0.0	26.7	79.5	106.2	209.5	-103.3
0.084	29.6 Pk	0.1 / 0.0 / 0.0	29.7	79.5	109.2	209.5	-100.3
0.096	22.5 Pk	0.1 / 0.0 / 0.0	22.6	79.0	101.6	209.5	-107.9
0.108	25.0 Pk	0.1 / 0.0 / 0.0	25.1	79.0	104.1	209.5	-105.4
0.12	13.1 Pk	0.1 / 0.0 / 0.0	13.2	79.0	92.2	209.5	-117.3

Notes:

- 1) Limit Conversion: 5 Gauss = 223.5 dBuV , 1 Gauss = 209.5 dBuV
- 2) Testing per Plexus D25303-681 Design Test Procedures.
- 3) Testing not covered under the laboratories scope of accreditation.

22 Tx Frequency Accuracy - (SYSRS331)

22.1 Method

Testing was performed per Plexus D25303-681 Design Test Procedures. The product Tx of 12kHz shall not deviate from center frequency by greater than +/- 25Hz.

This testing was performed at Intertek Denver, located at 1795 Dogwood St. Suite 200, Louisville, CO 80027.

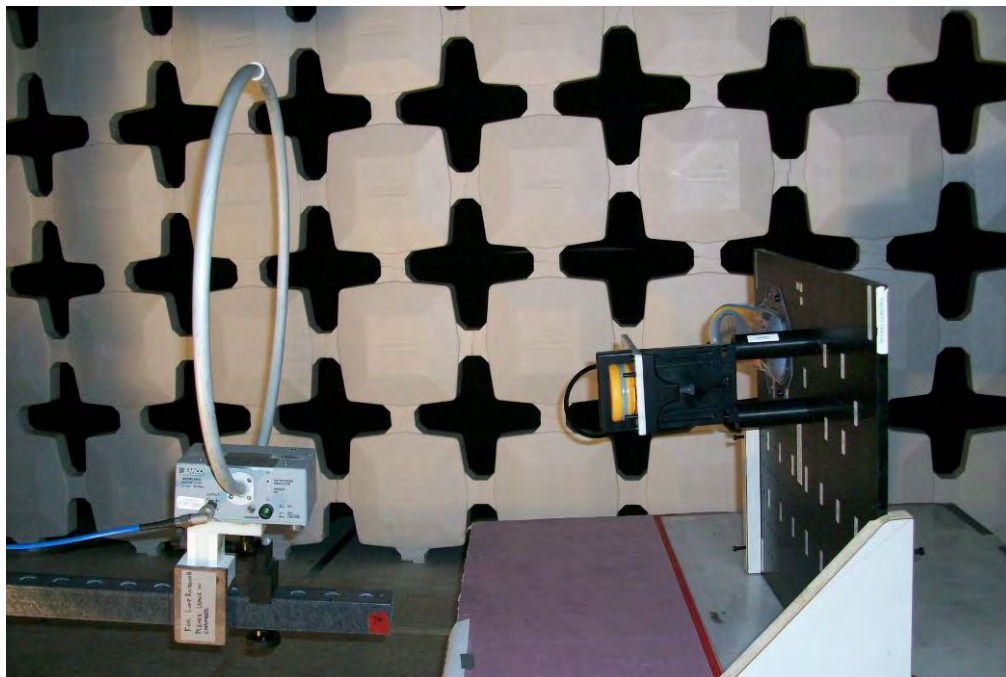
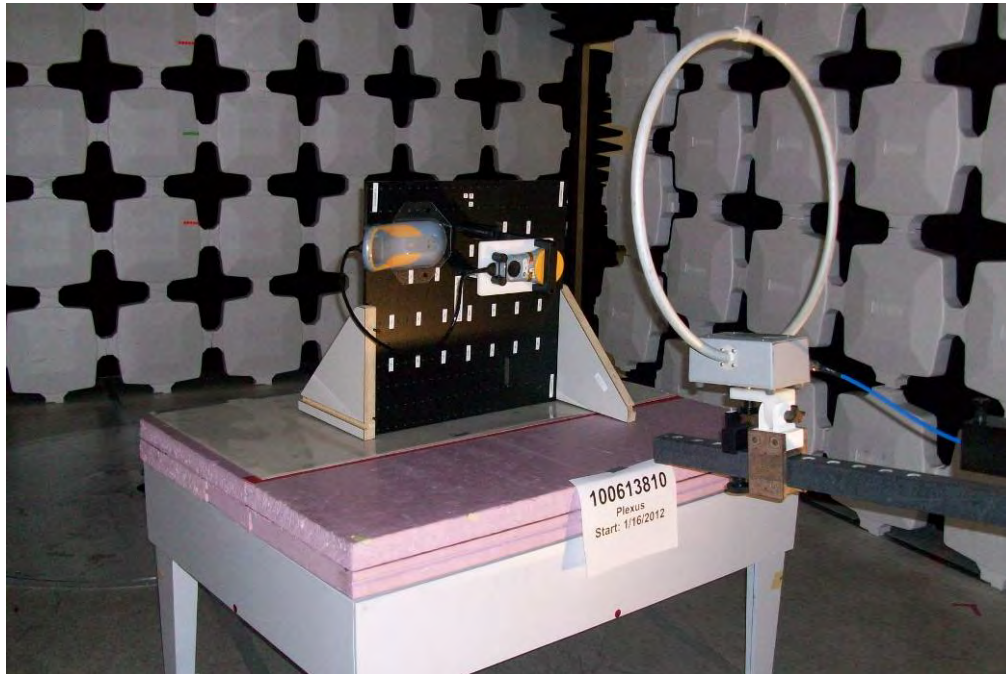
22.2 Test Equipment Used:

<u>Asset ID:</u>	<u>Description:</u>	<u>Manufacturer:</u>	<u>Model:</u>	<u>Serial:</u>	<u>Cal Date</u>	<u>Cal Due</u>
18913	Spectrum Analyzer	Hewlett-Packard	E7405A	My44211889	06/28/2011	06/28/2012
18897	Active Loop Antenna (9kHz to 30MHz)	EMCO	6502	9205-2738	11/22/2011	11/22/2012

22.3 Results:

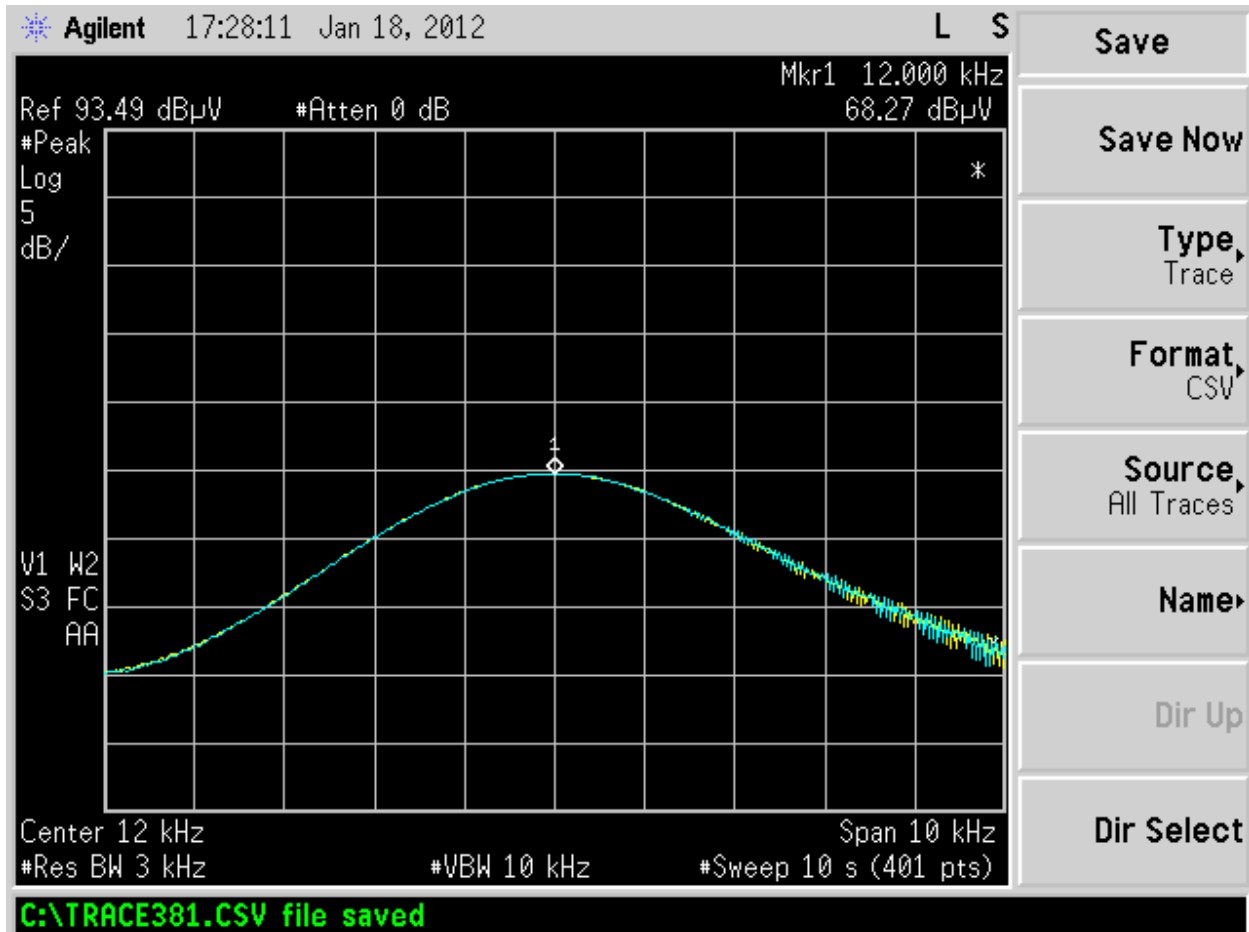
The sample tested was found to Comply.

22.4 Setup Photographs: Tx Frequency Accuracy



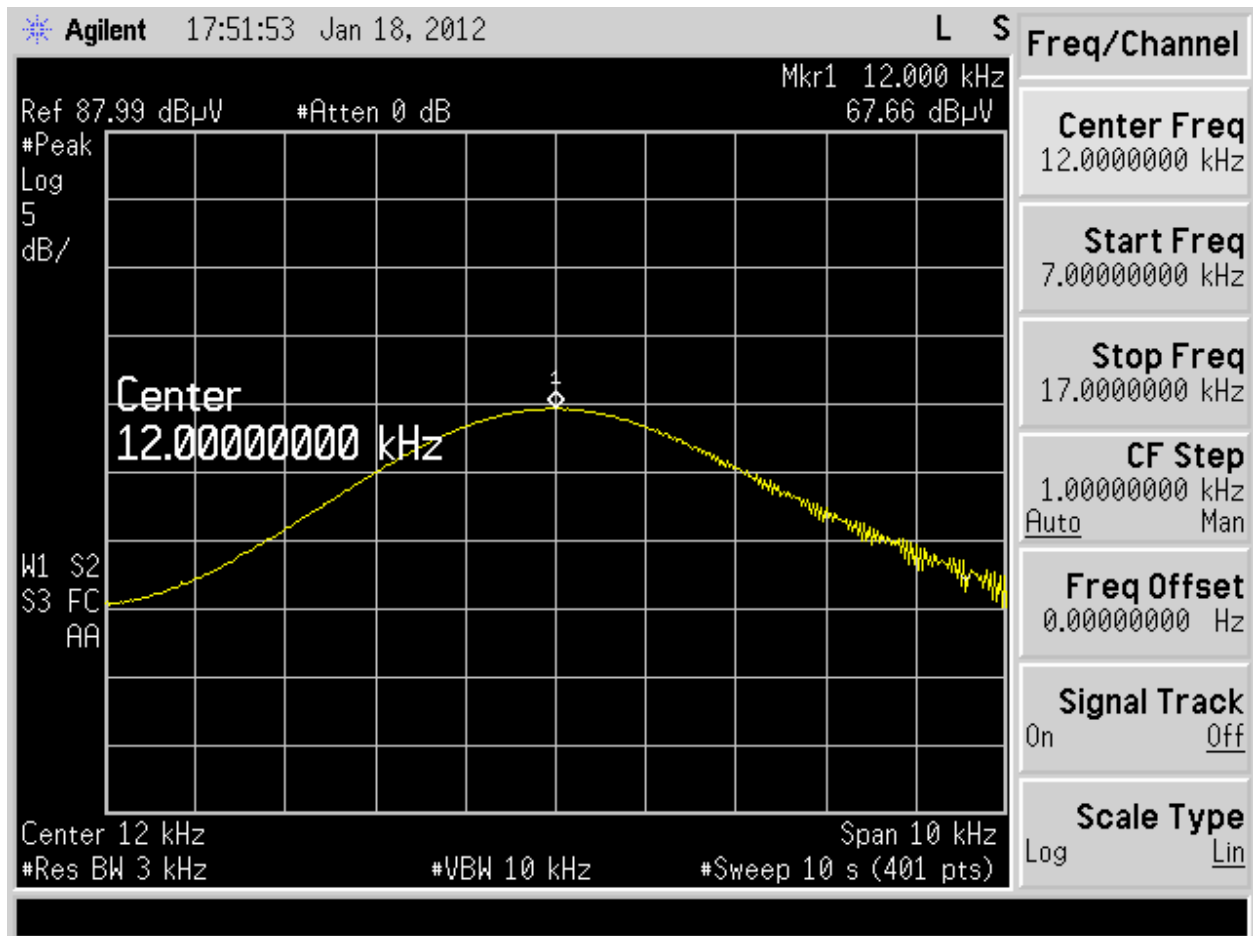
22.5 Test Data: Tx Frequency Accuracy

Unit 0012



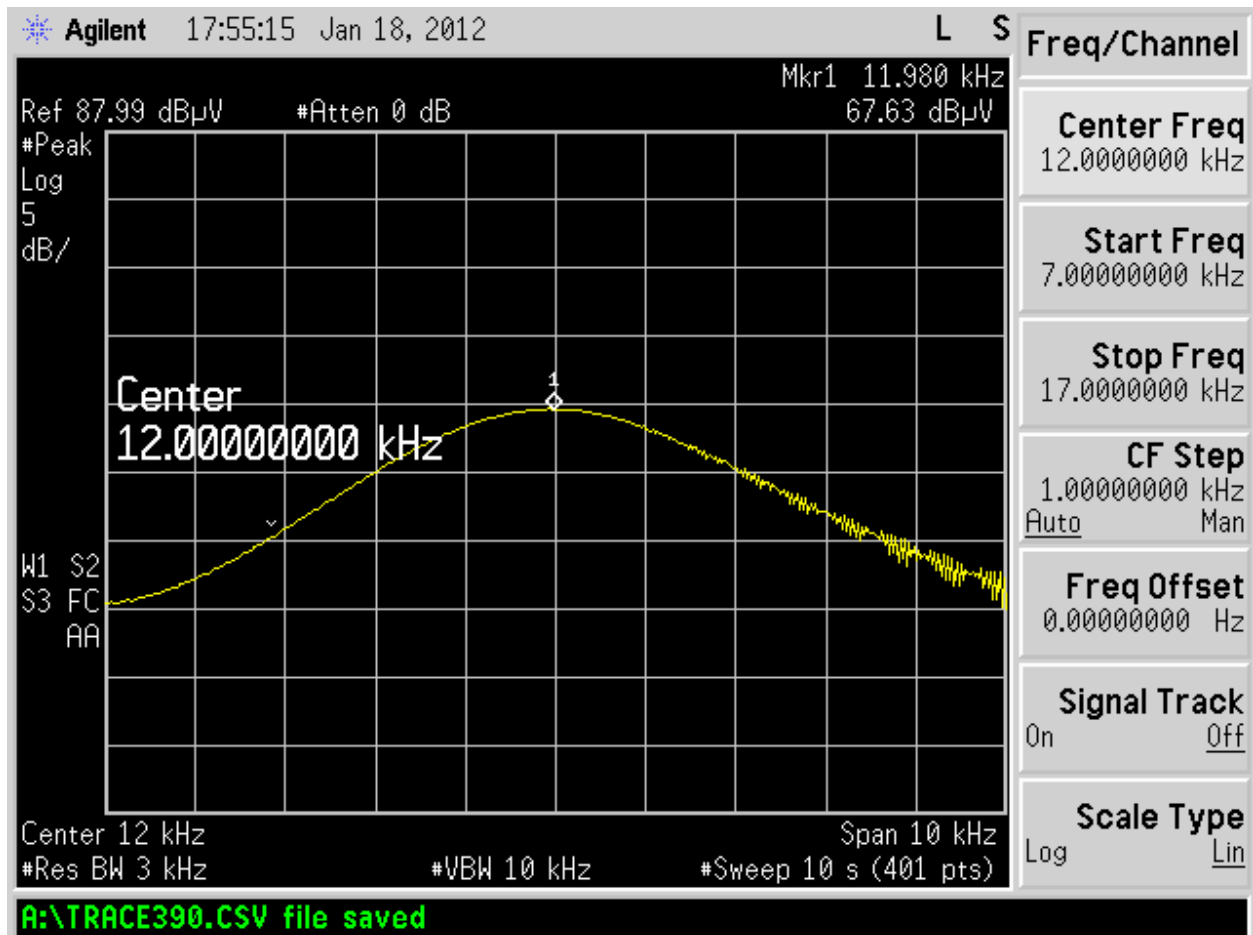
Tx Center Frequency = 12.000 kHz

Unit 0030



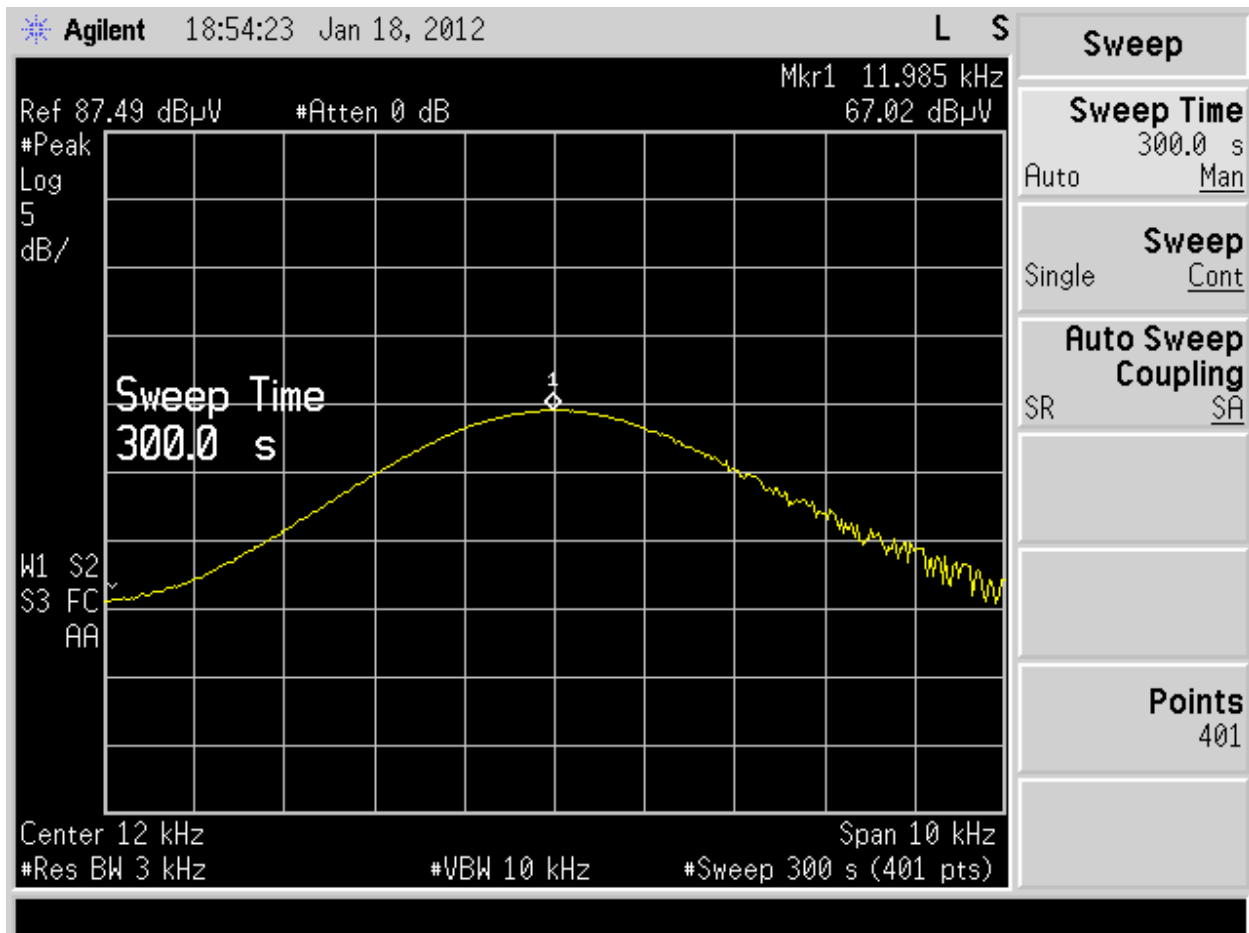
Tx Center Frequency = 12.000 kHz

Unit 0036



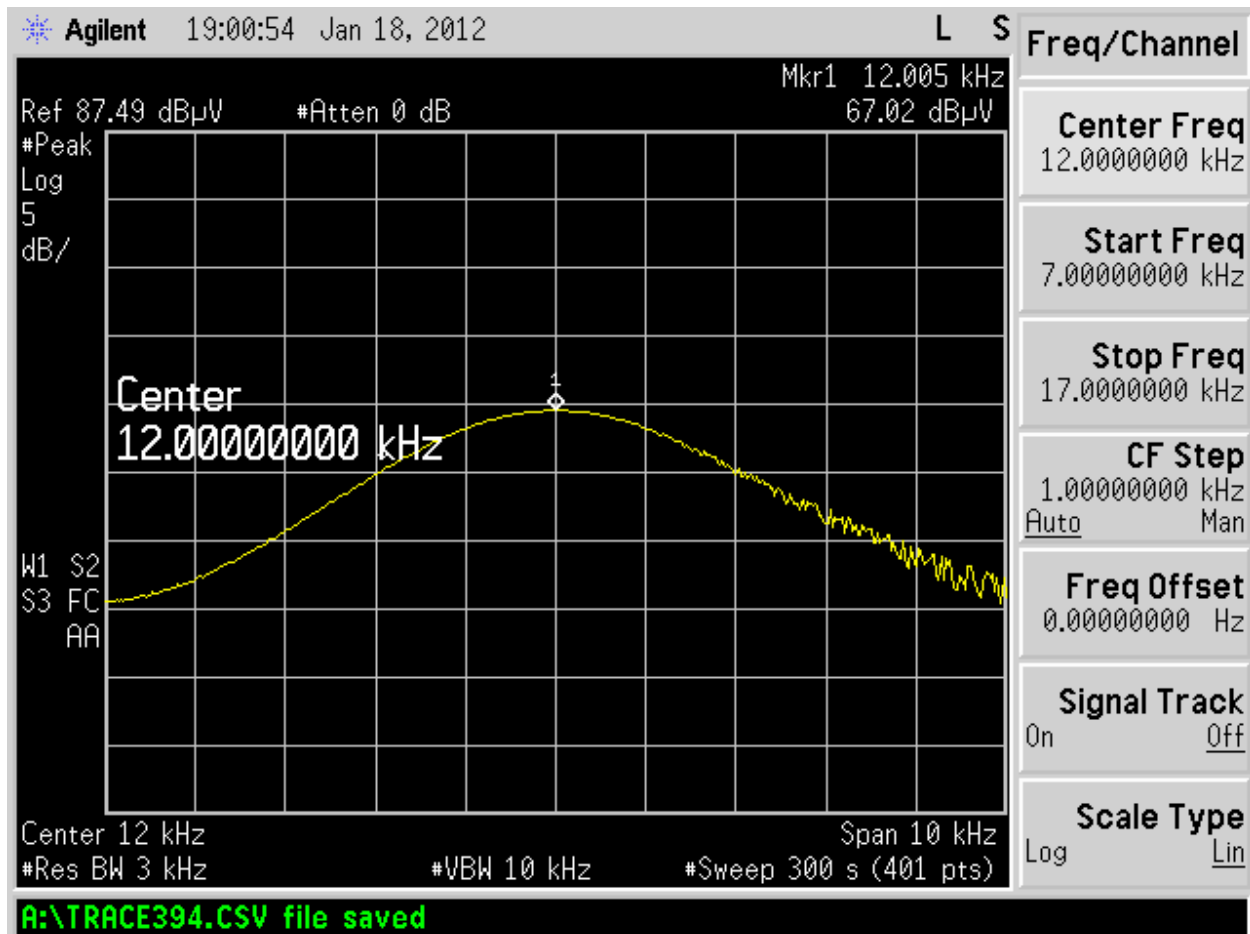
Tx Center Frequency = 11.980 kHz

Unit 0041



Tx Center Frequency = 11.985 kHz

Unit 0043



Tx Center Frequency = 12.005 kHz

Notes:

- 1) Worst-case deviation from 12.000 kHz = 20Hz.
- 2) Testing per Plexus D25303-681 Design Test Procedures.
- 3) Testing not covered under the laboratories scope of accreditation.

23 Measurement Uncertainty

The measured value related to the corresponding limit will be used to decide whether the equipment meets the requirements.

The measurement uncertainty figures were calculated and correspond to a coverage factor of $k = 2$, providing a confidence level of respectively 95.45 % in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian).

Measurement uncertainty Table

Parameter	Uncertainty $\pm$	Notes
Radiated emissions, 10kHz to 1000 MHz	4.4 dB	
Radiated emissions, 1 to 18 GHz	4.7 dB	
AC mains Conducted emissions, 150kHz to 30 MHz	3.14 dB	
Disturbance Power 30 to 1000 MHz	3.3 dB	
Telecom Port Conducted emissions, Voltage 150 kHz to 30 MHz	3.11 dB	
Harmonics	-	Meets the requirements specified by the standard.
Flicker	-	Meets the requirements specified by the standard.
ESD	4.4 %	
Radiated RF field immunity 80MHz to 2.7GHz	2.2 dB	
EFT	4.3 %	
Surge	4.3 %	
Conducted RF immunity	2.1 dB	
Power frequency magnetic field immunity	2.3 dB	
Voltage dips / interruptions immunity	0.3 mV	

24 Product Modifications Required to Pass – Radiated Immunity

The following product modifications were required to pass the specific testing listed below.

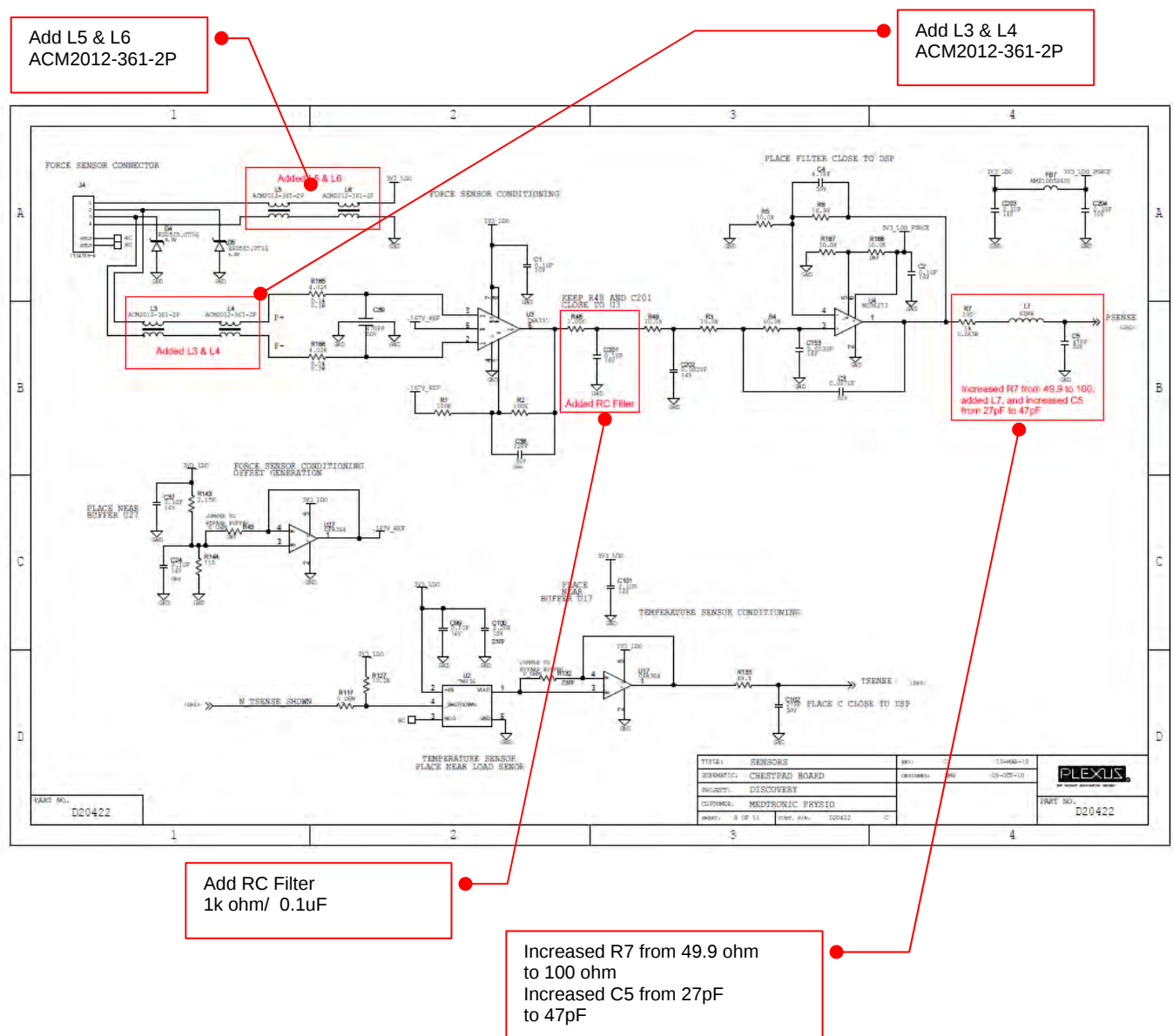
24.1 Radiated Immunity

The product originally failed Radiated Immunity testing in the general range of 1GHz to 2.5GHz. Specifically, the log information downloaded during testing (compression depth, force/recoil and errors) showed data outside the control limits in specific narrow-band frequency ranges.

The compression force could not vary more than ± 0.25 lbs and recoil distance could not vary more than ± 0.25 cm. Prior to product modifications, these parameters fell outside the control limits at approximately 1.5GHz.

24.2 Specific product modifications

Additional conditioning/ filtering was added to the Chest Pad board P/N D20422 to eliminate the above failures. Refer to the schematic below for details.



25 Identification, Marking and Documents – EN 60601-1-2, Edition 3.0 - Section 5

Product: Physio TrueCPR – Type B Medical Equipment

Product life-support: No

Product used in shielded room only: No

Product generates RF energy for its intended function (diagnosis/treatment): No

Product contains a radio transmitter or receiver: Yes

Product incorporates patient physiological signals: No

**User Manual: TrueCPR Coaching Device – Instructions for Use – P/N 3308456-001,
Publication Date 05/2012**

Section	Description	Compliance or N/A
5	IDENTIFICATION, MARKING AND DOCUMENTS	
5.1	Marking on the outside of ME Equipment or ME Parts	
5.1.1	RF equipment marked with symbol IEC 60417-5140 (RF transmitter or RF energy for diagnosis or treatment)	Compliance
5.1.2	Equipment for which the connector testing exemption is used marked with ESD symbol IEC 60417-5134	N/A
5.1.3	Equipment specified for use only in Shielded Location has appropriate marking	N/A

5.2	Accompanying documents	
5.2.1	Instructions for use	
5.2.1.1	All ME Equipment and ME Systems:	
a)	A statement that medical electrical equipment needs special precautions regarding EMC and needs to be installed according to EMC information	Compliance
b)	A statement that RF communications equipment can effect medical electrical equipment	Compliance

5.2.1.2	Equipment for which the connector testing exemption is used:	
a)	A reproduction of the ESD warning symbol (IEC 60417-5134)	N/A
b)	A warning that pins of connectors marked with the warning symbol shall not be touched and connections shall not be made without special precautions	N/A
c)	A specification of precautionary procedures	N/A
d)	A recommendation that all staff receive explanation and training in ESD procedures	N/A
e)	A specification of the minimum contents of ESD precautions procedure training	N/A

5.2.1.3	For equipment and systems without a manual sensitivity adjustment and for which the manufacturer specifies a minimum amplitude or value of Patient Physiological Signal:	N/A
a)	The minimum amplitude or value of signal	N/A
b)	A warning that operation of the equipment below that value may cause incorrect results	N/A

5.2.1.4	Special Requirements applicable to TYPE A Professional ME Equipment and ME Systems – Warning Label	N/A
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5.2.2	Technical description	
5.2.2.1	All ME Equipment and ME Systems:	
a)	List of electrical cables and accessories – not sold as replacement parts 1. A list of all cables and maximum lengths of cables (if applicable), and other accessories with which the manufacturer of the product(s) claims compliance with the requirements of EMC Emissions and Immunity. Accessories that do not affect compliance with the requirements need not be listed. Cables and accessories may be specified either generically (e.g. shielded serial cable, load impedance) or specifically (e.g. by manufacturer and model or part number). 2. A warning that the use of cables and accessories other than those specified, with the exception of transducers and cables sold by the manufacturer of the product(s) as replacement parts for internal components, may result in increased emissions or decreased immunity of the product(s).	Complies
b)	A warning that other electrical cables and accessories may affect EMC performance	N/A
c)	EMC Emissions (Table 1), modified as appropriate (see 5.2.2.1 c)	Complies
d)	A warning regarding stacking and location close to other equipment	Complies
e)	A justification for each immunity compliance level below 60601 test level	N/A
f)	EMC Immunity (Table 2), completed as appropriate (see 5.2.2.1 f)	Complies

5.2.2.2	Equipment <u>not</u> specified for use only in shielded location	
a)	1. RF/Conducted Immunity (Table 4) 2. Separation Distance between portable/mobile RF equipment and product (Table 6), selected and completed as appropriate (see 5.2.2.2)	Complies

5.2.2.3	Equipment specified for use only in shielded location	
a)	A warning that equipment should be used only in the specified type of shielded location	N/A
b)	Tables modified if disturbance allowance according to 36.201.1 a) 4) is used	N/A
c)	A specification of allowed emission of other equipment located within the shielded location	N/A

d)	Table 7 or Table 8 as appropriate	N/A
5.2.2.4	Equipment that intentionally apply RF energy for diagnosis or treatment: guidelines for avoiding or identifying and resolving adverse electromagnetic effects	N/A
5.2.2.5	Equipment that intentionally receive RF energy	Complies
5.2.2.6	Equipment that includes RF transmitters 5.2.2.6 Requirements applicable to ME EQUIPMENT and ME SYSTEMS that include RF transmitters For ME EQUIPMENT and ME SYSTEMS that include RF transmitters, the ACCOMPANYING DOCUMENTS shall include each frequency or frequency band of transmission, the type and frequency characteristics of the modulation and the EFFECTIVE RADIATED POWER.	Complies
5.2.2.7	Requirements of electrical cables and accessories that could affect compliance with the standard 1. a list of all products with which the cable or accessory may be used and that are claimed by the manufacturer to be in compliance with the requirements of EMC Emissions and Immunity when used with the cable or accessory. References shall be specific (e.g. by manufacturer and model or part number) 2. a warning that the use of the cable or accessory with product(s) other than those specified may result in increased emissions or decreased immunity of the product(s).	N/A
5.2.2.8	Requirements applicable to large permanently installed equipment and systems	N/A
5.2.2.9	Requirements applicable to equipment that has no essential performance	N/A
5.2.2.10	Requirements applicable to TYPE A Professional ME Equipment & ME Systems	N/A

26 Essential Performance – Supplied by Client

The following documents are available from Plexus with respect to “Essential Performance” and “Risk Analysis” for the TrueCPR device.

- **D25303-681 Design Test Procedures – “Magnetic Emissions, EMC and Use near Implants”**
- **D20740 – “Risk Analysis Document”**
- **TrueCPR Instructions for Use (IFU) – P/N 3308456-001, Publication date: 05/2012**

Intended Use

The product provides rescuers with instantaneous feedback on chest compressions during cardiopulmonary resuscitation (CPR) in accordance with current CPR guidelines. The device is intended for use on patients in cardiac arrest (unconscious, pulse-less, not breathing normally).

Essential Performance

In accordance with IEC 60601-1-2, Edition 3.0, the TrueCPR device maintains basic safety and essential performance feedback information when operated in the electromagnetic environment specified in the IFU EMC section, Table 2 – Table 4.

Specifically, the essential performance is accurate depth and recoil within +/- 0.25lbs and +/- 0.25cm from normal. In addition, correct messaging to the operator is required.

27 FDA EMC Requirements

- 27.1** Summary of EMC Testing: "Test Summary Table", Section 2
- 27.2** Requirements of standard that were met: General Sections 3-5, Specific tests Sections 6-22
- 27.3** Pass/Fail Criteria: Section 5
- 27.4** Key Product Functions considered to be Essential Performance: Section 5 & Section 26
- 27.5** Performance of product during testing: General Section 5 & 26, Refer to specific tests Sections for details. Pass criteria is called out in data tables.
- 27.6** Identification & Justification of standard's allowances: If applicable, Section 2 notes & Section 5 and noted under each specific test section.
- 27.7** Description & justification of deviations from requirements of standard: If applicable, Section 2 notes & Section 5. Also, refer to line item under each specific test section.
- 27.8** Identification, Marking & Documents Review: Section 25
- 27.9** Product modifications required to pass specific tests: If applicable, Section 24
- 27.10** Statement of Essential Performance of product during testing: Section 26

28 Revision History

Revision Level	Date	Report Number	Notes
0	04/24/2012	100613810DEN-001	Original Issue