



**FCC CFR47 PART 15 SUBPART C  
INDUSTRY CANADA RSS-210 ISSUE 8**

**CERTIFICATION TEST REPORT**

**FOR**

**WALL SWITCH**

**MODEL NUMBER: 5SDV**

**FCC ID: JPZ0100  
IC: 2851A-JPZ0100**

**REPORT NUMBER: 10109957**

**ISSUE DATE:2013-11-19**

*Prepared for*  
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**NVLAP LAB CODE 100255-0**

Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
--	2013-11-19	Initial Issue	B. DeLisi

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# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** Lutron Electronics Inc.  
7200 Suter Rd.  
Cooperburg PA, 18036, USA

**EUT DESCRIPTION:** Wall Switch

**MODEL:** 5SDV

**SERIAL NUMBER:** Non-serialized production unit

**DATE TESTED:** 2013-11-06 through 2013-11-13

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART C	Pass
INDUSTRY CANADA RSS-210 Issue 8, Annex 1	Pass
INDUSTRY CANADA RSS-GEN Issue 3	Pass

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

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation, as described by the referenced documents. This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For UL By:

Tested By:



Michael Antola  
WiSE Lead Engineer  
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WiSE Principal Engineer  
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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 3, and RSS-210 Issue 8.

## 3. FACILITIES AND ACCREDITATION

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

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

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

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

### 4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

### 4.3. MEASUREMENT UNCERTAINTY

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

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

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

## **5. EQUIPMENT UNDER TEST**

### **5.1. DESCRIPTION OF EUT**

The EUT is a wireless light switch intended for lighting applications.

The radio is manufactured by Lutron Electronics.

### **5.2. DESCRIPTION OF AVAILABLE ANTENNAS**

The radio utilizes a loop antenna.

### **5.3. SOFTWARE AND FIRMWARE**

The firmware installed in the EUT during testing was MmwSwitch\_0.32.sap.

The test utility software used during testing was Mmw\_switch\_UNSECURED\_0.50\_FCC.sap.

### **5.4. WORST-CASE CONFIGURATION AND MODE**

Testing was conducted on the lowest and highest channels

### **5.5. MODIFICATIONS**

No modifications were made during testing.

## 5.6. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

Not Applicable

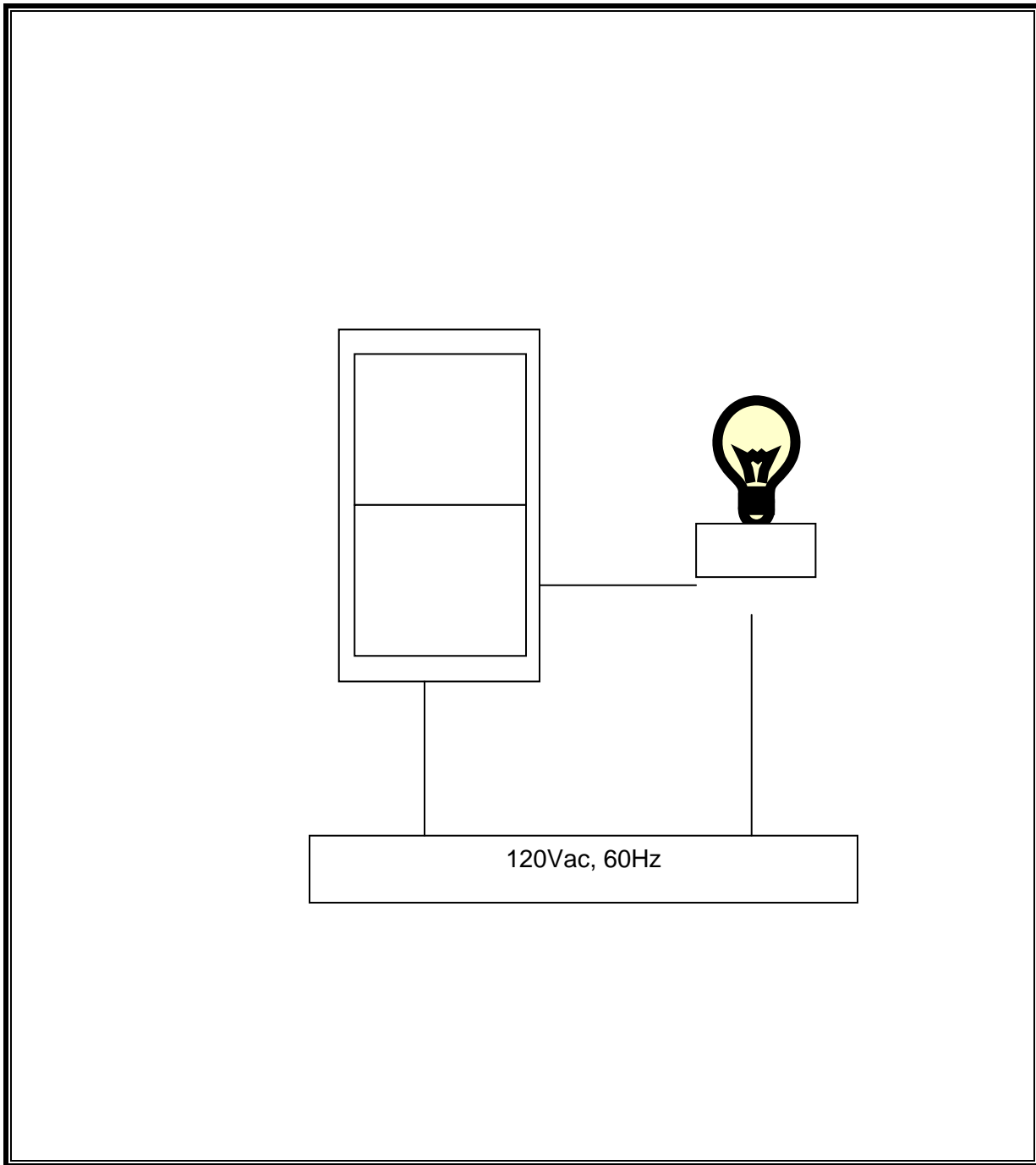
### I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	1	Hardwire	Unshielded	>3m	None

### TEST SETUP

The EUT was tested in a stand- alone configuration. The EUT is only intended to be installed in one position as indicated by the UP designation on the EUT.

**SETUP DIAGRAM FOR TESTS**





## 6. TEST AND MEASUREMENT EQUIPMENT

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

Radiated Emissions					
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
30-1000MHz					
EMI Receiver	Rohde & Schwarz	ESCI7	75141	2013-01-30	2014-01-30
Log-P Antenna	Schaffner	UPA6109	44068	2013-04-03	2014-04-03
Bicon Antenna	Schaffner	VBA6106A	54	2013-04-03	2014-04-03
Preamp	Miteq	AM-3A-000110-7687	44391	N/A	N/A
Preamp	Miteq	AM-3A-000110-7687	44394	N/A	N/A
Switch Driver	HP	11713A	ME7A-627	N/A	N/A
System Controller	Sunol Sciences	SC99V	44396	N/A	N/A
Camera Controller	Panasonic	WV-CU254	44395	N/A	N/A
RF Switch Box	UL	1	44398	N/A	N/A
Measurement Software	UL	Version 9.5	44740	N/A	N/A
Multimeter	Fluke	83III	ME5B-305	2013-01-29	2014-01-30
Above 1GHz (Band Optimized System)					
Spectrum Analyzer	Agilent	E4446A	72823	2013-01-29	2014-01-31
Horn Antenna (1-2 GHz)	ETS	3161-01 (26°)**	51442	2008-03-28	See * below
Horn Antenna (2-4 GHz)	ETS	3161-02 (22°)**	48107	2007-09-27	See * below
Horn Antenna (4-8 GHz)	ETS	3161-03 (22°)**	48106	2007-09-27	See * below
Signal Path Controller	HP	11713A	50250	N/A	N/A
Gain Controller	HP	11713A	50251	N/A	N/A
RF Switch / Preamp Fixture	UL	BOMS1	50249	N/A	N/A
System Controller	UL	BOMS2	50252	N/A	N/A
Measurement Software	UL	Version 9.5	44740	N/A	N/A
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2012-12-22	2014-12-22
Multimeter	Fluke	83III	ME5B-305	2013-01-29	2014-01-30
<p>* - Note: As allowed by the calibration standard ANSI C63.4 Section 4.4.2, standard gain horns need only a one-time calibration. Only if physical damage occurs will the horn antenna require re-calibration.</p> <p>Gain standard horn antennas (sometimes called standard gain horn antennas) need not be calibrated beyond that which is provided by the manufacturer unless they are damaged or deterioration is suspected, or they are used at a distance closer than <math>2D^2/\lambda</math>. Gain standard horn antennas have gains that are fixed by their dimensions and dimensional tolerances.</p> <p>** - Number in parentheses denotes antenna beam width.</p>					

Conducted Emissions					
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date

Conducted Emissions					
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
Conducted Emissions – GP 1					
EMI Receiver	Rohde & Schwarz	ESIB26	ME5B-081	2013-01-29	2014-01-31
LISN	Solar	9252-50-R-24-BNC	ME5A-636	2013-01-31	2014-01-31
Switch Driver	HP	11713A	44397	N/A	N/A
RF Switch Box	UL	4	44404	N/A	N/A
Measurement Software	UL	Version 9.5	44736	N/A	N/A
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	43734	2012-03-13	2014-03-13
Multimeter	Fluke	83III	ME5B-305	2013-01-30	2014-01-30

Bench Tests					
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
RF Room 1					
Spectrum Analyzer	Agilent	E4446A	72823	2013-01-30	2014-01-30
Dipole Antenna	EMCO	3121C	3359	2012-12-27	2013-12-27
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2012-12-22	2014-12-22
Multimeter	Fluke	83III	ME5B-305	2013-01-30	2014-01-30

## 7. ANTENNA PORT TEST RESULTS

### 7.1. 20 dB AND 99% BW

#### LIMITS

FCC §15.231 (c)

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

IC A1.1.3

For the purpose of Section A1.1, the 99% Bandwidth shall be no wider than 0.25% of the center frequency for devices operating between 70-900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency.

#### TEST PROCEDURE

ANSI C63.4

The transmitter output is connected to the spectrum analyzer.

20dB Bandwidth: The RBW is set to 10 KHz. The VBW is set to 30 KHz. The sweep time is coupled. Bandwidth is determined at the points 20 dB down from the modulated carrier.

99% Bandwidth: The RBW is set to 10 KHz. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

**RESULTS**

No non-compliance noted:

20dB Bandwidth Low Channel

Frequency (MHz)	20dB Bandwidth (kHz)	Limit (kHz)	Margin (kHz)
431	154	1077.5	-923.5

99% Bandwidth Low Channel

Frequency (MHz)	99% Bandwidth (kHz)	Limit (kHz)	Margin (kHz)
431	142.97	1077.5	-934.53

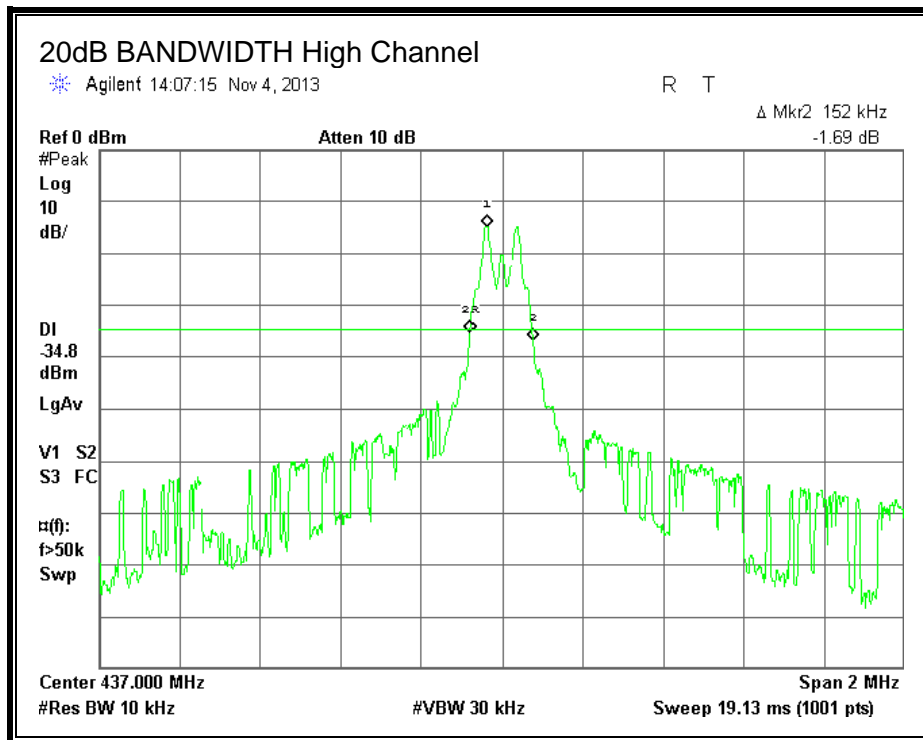
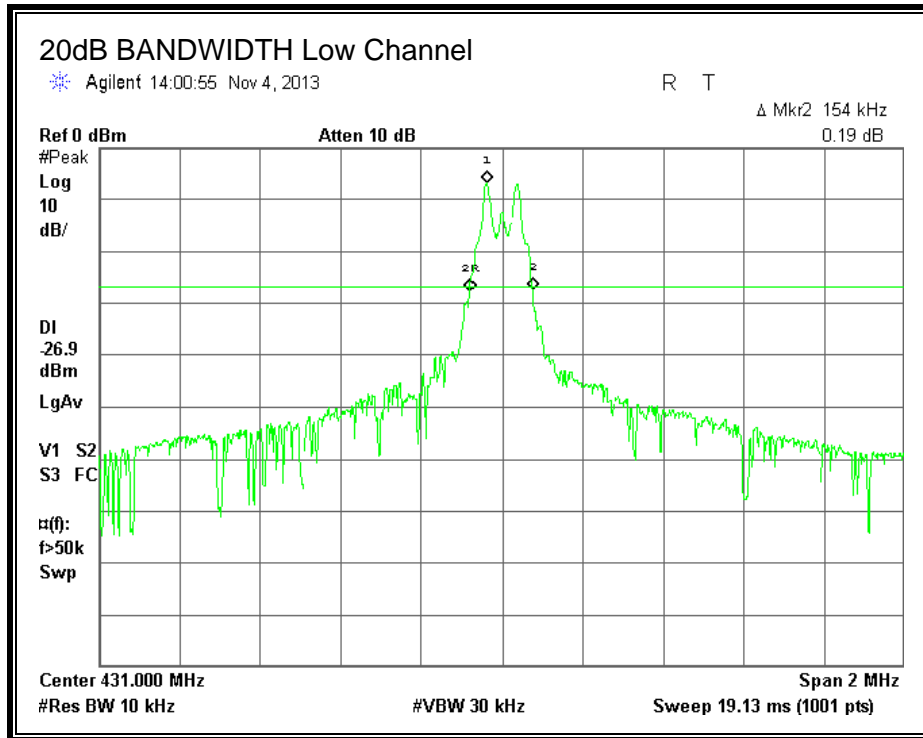
20dB Bandwidth High Channel

Frequency (MHz)	20dB Bandwidth (kHz)	Limit (kHz)	Margin (kHz)
437	152	1092.5	-940.5

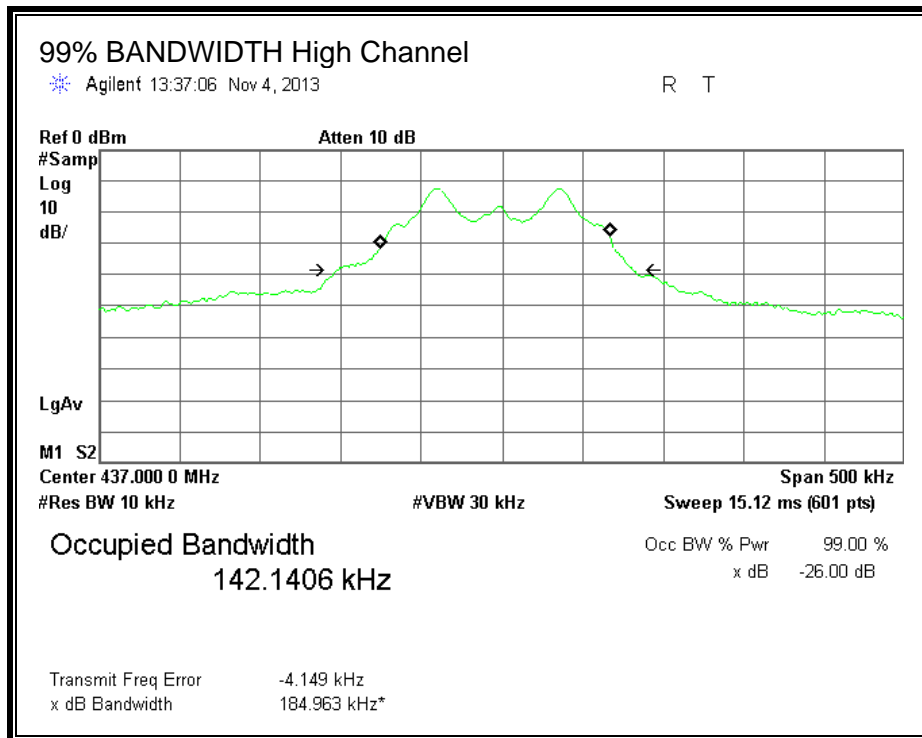
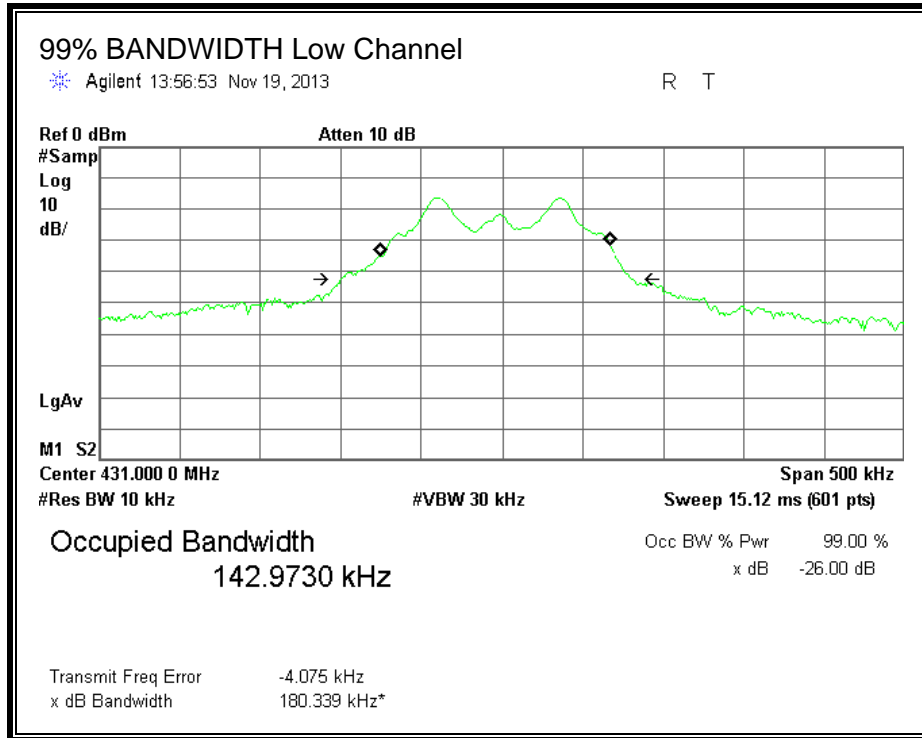
99% Bandwidth High Channel

Frequency (MHz)	99% Bandwidth (kHz)	Limit (kHz)	Margin (kHz)
437	142.14	1092.5	-950.36

20dB BANDWIDTH



99% BANDWIDTH



## 7.2. DUTY CYCLE

### LIMITS

FCC §15.35 (c)

The measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to notification or verification.

### TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer or radiated field strength. The RBW is set to 1 MHz and the VBW is set to 1 MHz. The sweep time is coupled and the span is set to 0 Hz. The number of pulses is measured and calculated in a 100 ms scan.

### CALCULATION

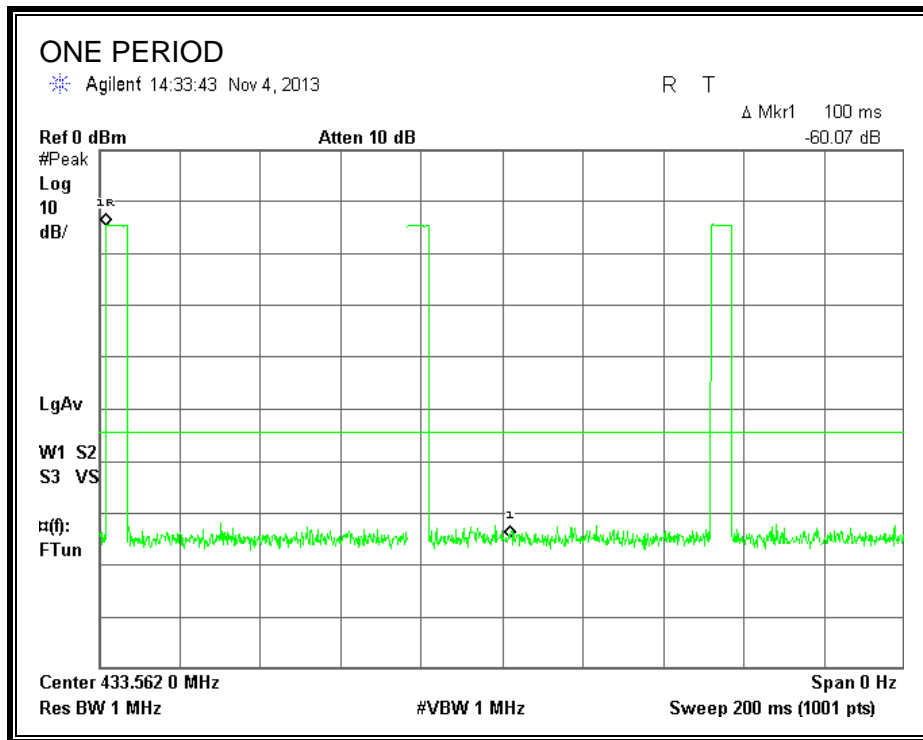
Average Reading = Peak Reading (dBuV/m) + 20log (Duty Cycle), Where Duty Cycle is (# of long pulses \* long pulse width) + (# of short pulses \* short pulse width) / 100 or T

### RESULTS

No non-compliance noted:

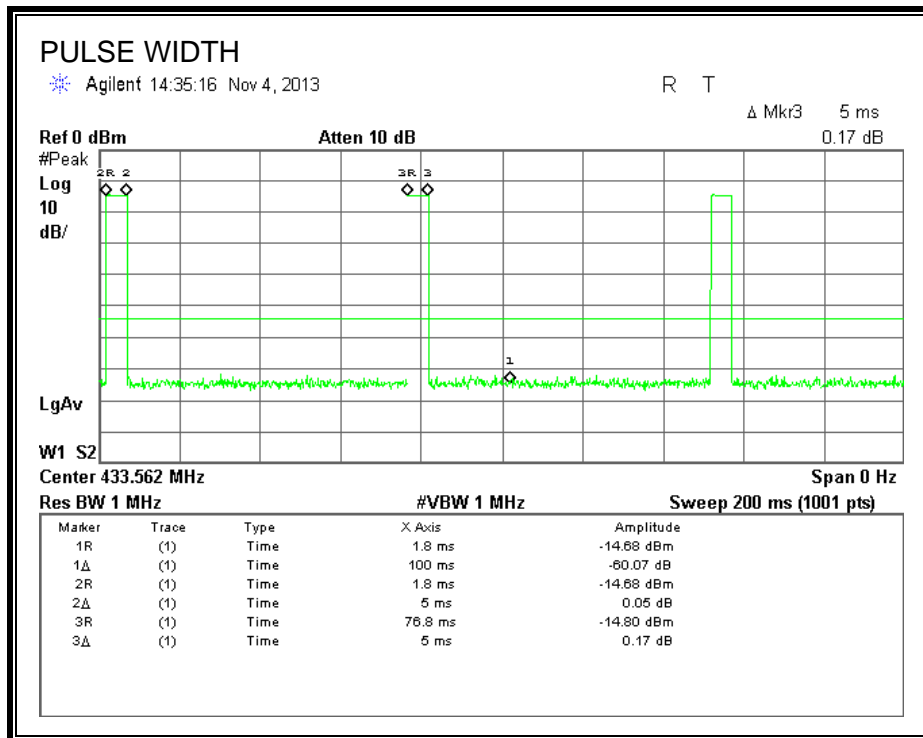
One Period (ms)	Long Pulse Width (ms)	# of Long Pulses	Short Width (ms)	# of Short Pulses	Duty Cycle	20*Log Duty Cycle (dB)
100	5	2	0.00	0	0.100	-20.00

**ONE PERIOD**





**PULSE WIDTH**



### 7.3. TRANSMISSION TIME

#### LIMITS

FCC §15.231 (a) (2)

IC A1.1.1 (b)

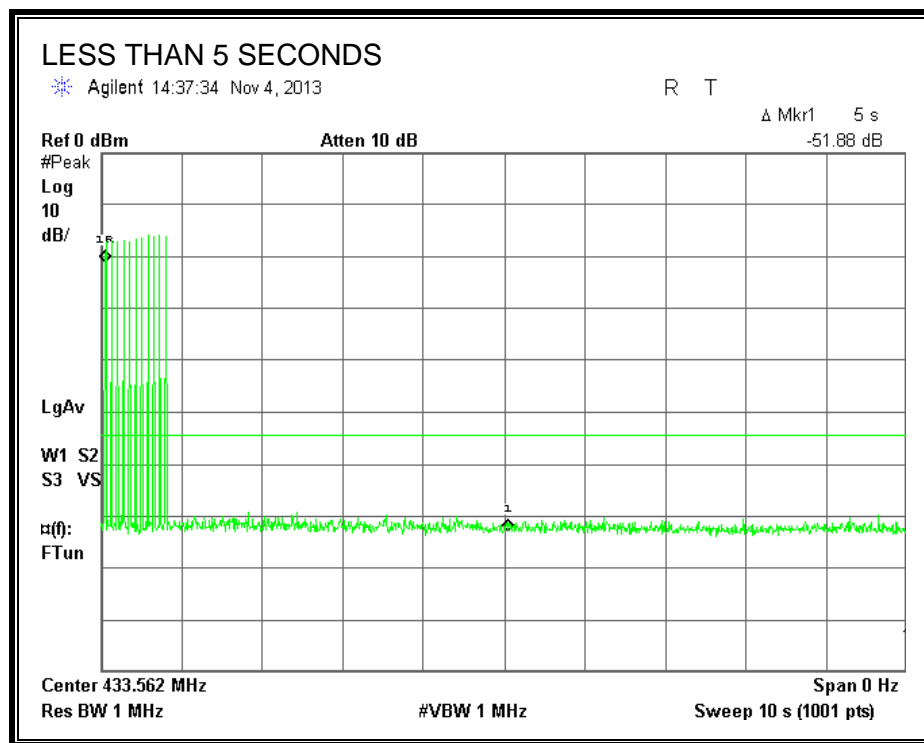
A transmitter activated automatically shall cease transmission within 5 seconds after activation.

#### TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer or radiated field strength. The RBW is set to 1 MHz and the VBW is set to 1 MHz. The sweep time is set to 10 seconds and the span is set to 0 Hz.

#### RESULTS

No non-compliance noted:



## 8. RADIATED EMISSION TEST RESULTS

### 8.1. TX RADIATED SPURIOUS EMISSION

#### LIMITS

FCC §15.231 (b)  
 IC A1.1.2

In addition to the provisions of § 15.205, the field strength of emissions from Intentional radiators operated under this section shall not exceed the following:

Fundamental Frequency (MHz)	Field Strength of Fundamental Frequency (microvolts/meter)	Field Strength of Spurious Emissions (microvolts/meter)
40.66 - 40.70	2,250	225
70 - 130	1,250	125
130 - 174	1,250 to 3,750 <sup>1</sup>	125 to 375 <sup>1</sup>
174 - 260	3,750	375
260 - 470	3,750 to 12,500 <sup>1</sup>	375 to 1,250 <sup>1</sup>
Above 470	12,500	1,250

<sup>1</sup> Linear interpolation

§15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	( <sup>2</sup> )
13.36 - 13.41	322 - 335.4		

1 Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.  
2 Above 38.6

§15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

§15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30 88	100 **	3
88 216	150 **	3
216 960	200 **	3
Above 960	500	3

\*\* Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

§15.209 (b) In the emission table above, the tighter limit applies at the band edges.

## **TEST PROCEDURE**

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

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

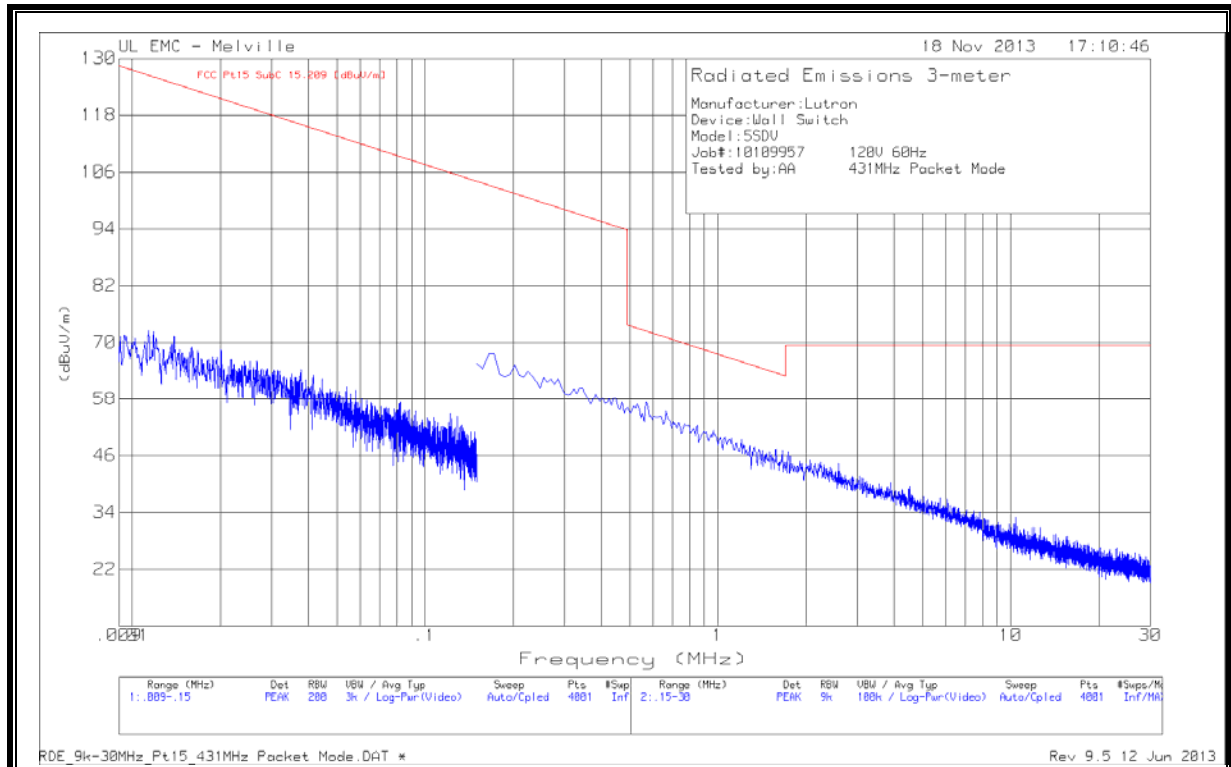
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

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

## **RESULTS**

No non-compliance noted:

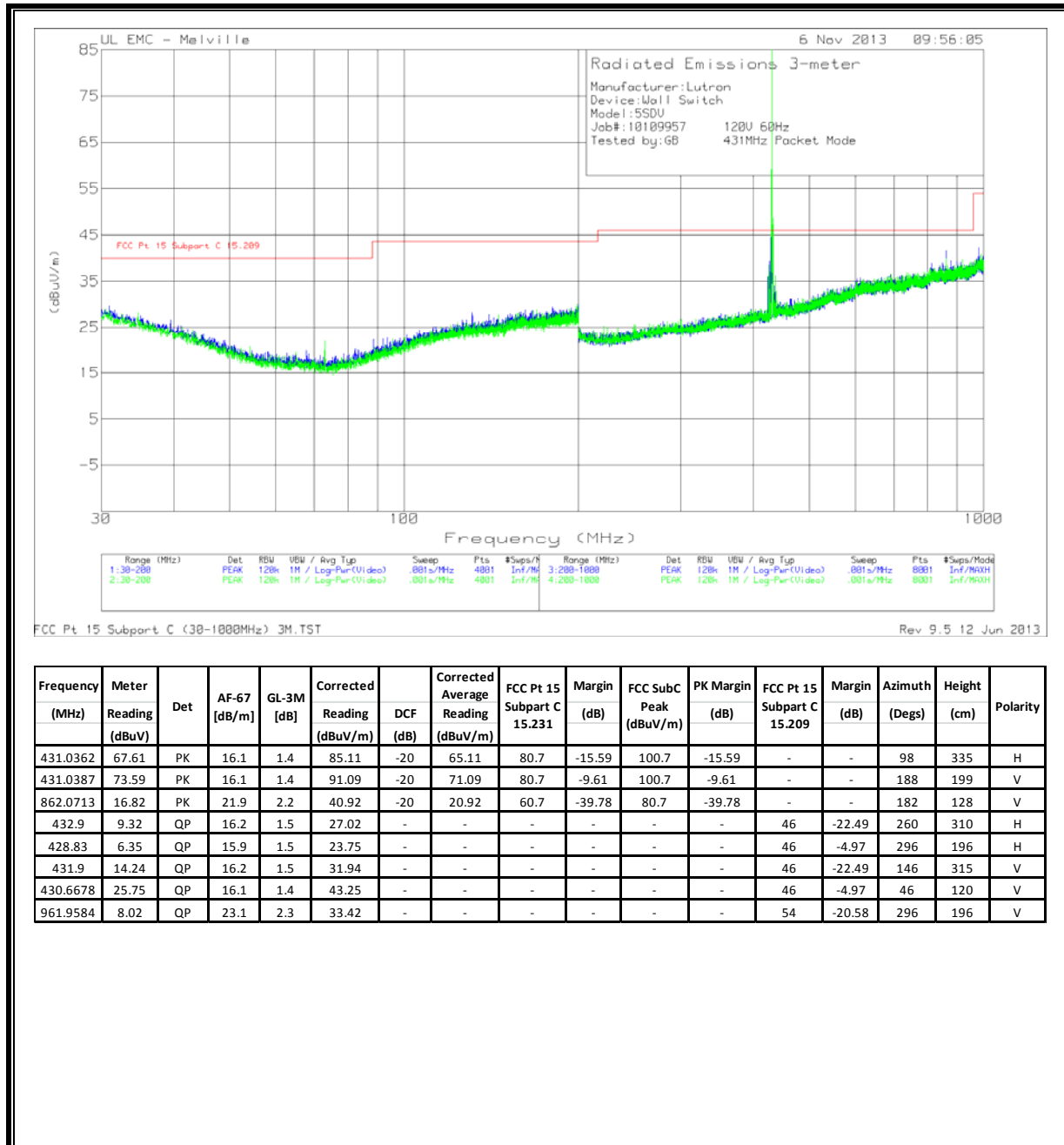
**SPURIOUS EMISSION (0.009 - 30 MHz) (Worst Case)**



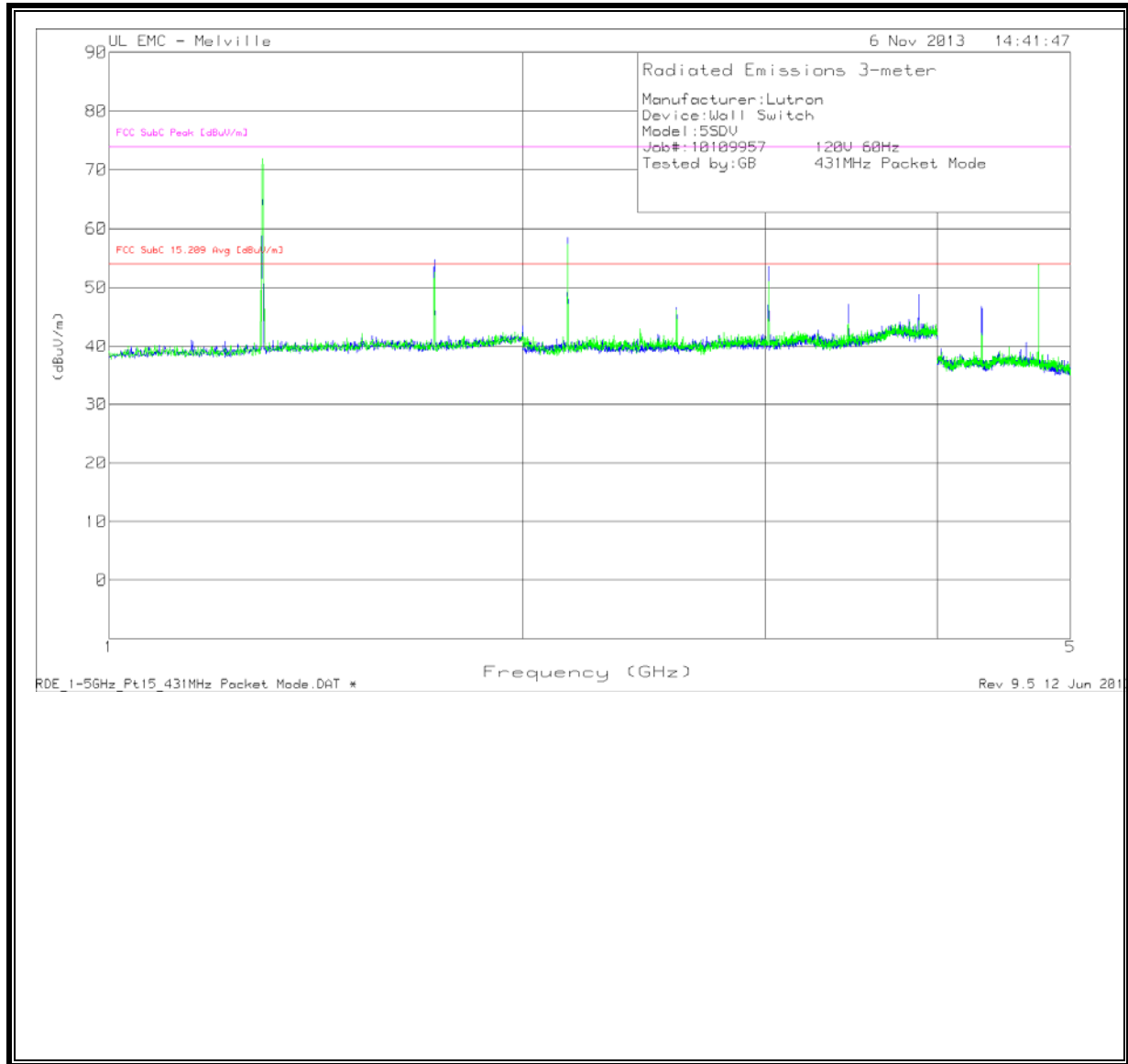
Frequency (MHz)	Meter Reading (dBuV)	Det	AF-5A288 [dB/m]	GL-3M [dB]	Corrected Reading (dBuV/m)	FCC Pt15 SubC 15.209 [dBuV/m]	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
.011397	43.31	PK	29	.2	72.51	126.45	-53.94	0-360	100	V
.038117	40.41	PK	20.9	.3	61.61	115.97	-54.36	0-360	100	V
.16493	51.06	PK	16.4	.3	67.76	103.25	-35.49	0-360	100	V
.5679	40.89	PK	16.2	.3	57.39	72.52	-15.13	0-360	100	V
1.66489	30.06	PK	16.5	.4	46.96	63.18	-16.22	0-360	100	V
4.51556	22.57	PK	16.3	.5	39.37	69.5	-30.13	0-360	100	V

PK - Peak detector

**FUNDAMENTAL, HARMONICS AND TX SPURIOUS EMISSION (30 – 1000 MHz) – Low Channel**



**HARMONICS AND TX SPURIOUS EMISSIONS ABOVE 1GHz – Low Channel**





Frequency (GHz)	Meter Reading (dBuV)	Det	AF-51442 [dB/m]	BOMS Factor (dB)	Corrected Reading (dBuV/m)	DCF (dB)	Corrected Average Reading (dBuV/m)	FCC SubC 15.209 Avg [dBuV/m]	Margin (dB)	FCC SubC Peak [dBuV/m]	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.293	88.82	PK	20.5	-44.15	65.17	-20	45.17	54	-8.83	74	-8.83	127	231	H
1.293	95.01	PK	20.5	-44.15	71.36	-20	51.36	54	-2.64	74	-2.64	150	108	V
1.724	74.37	PK	20.8	-43.58	51.59	-20	31.59	54	-22.41	74	-22.41	352	174	V
1.724	77.06	PK	20.8	-43.56	54.3	-20	34.3	54	-19.7	74	-22.41	198	262	H

PK - Peak detector

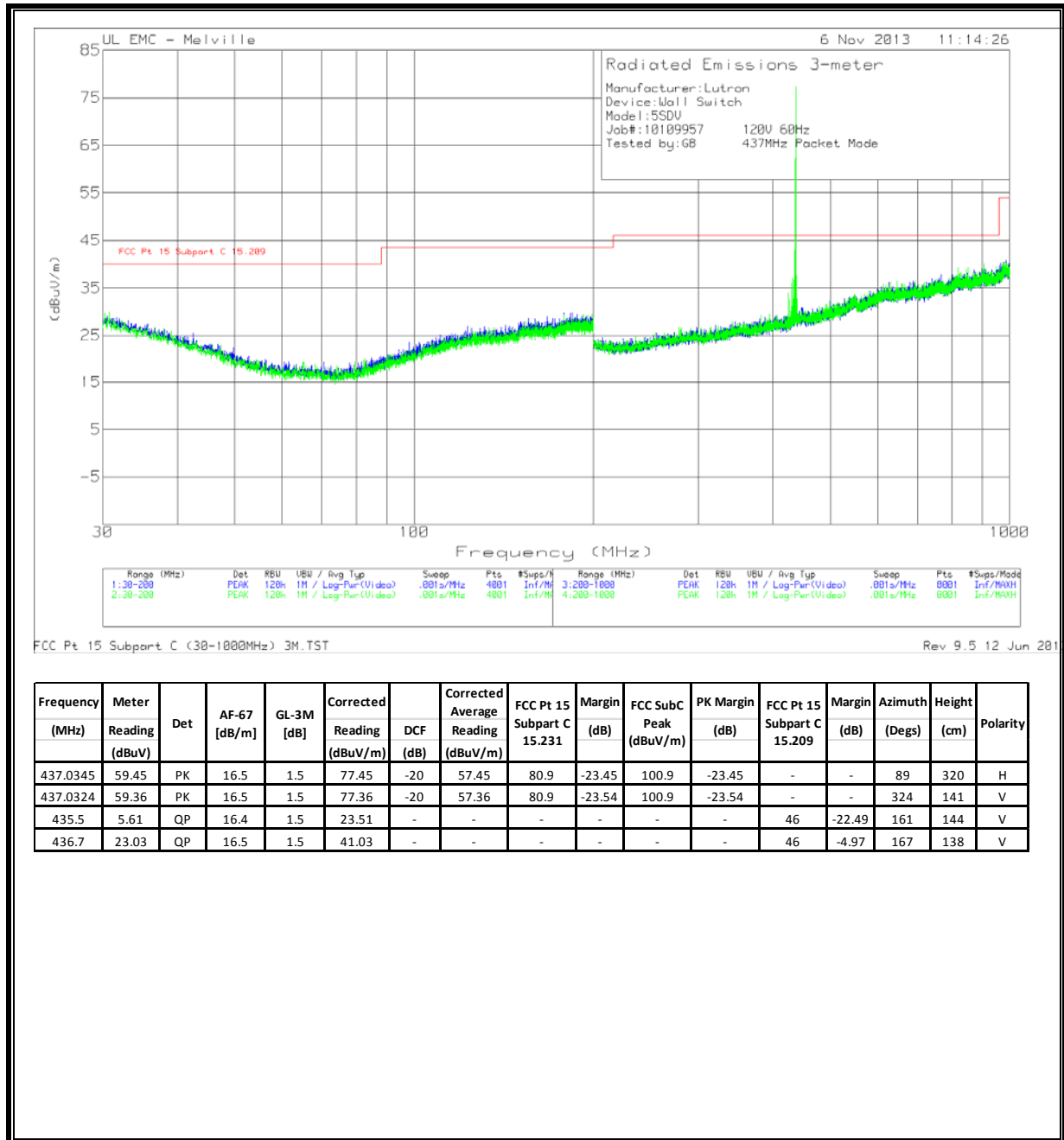
Frequency (GHz)	Meter Reading (dBuV)	Det	AF-48107 [dB/m]	BOMS Factor (dB)	Corrected Reading (dBuV/m)	DCF (dB)	Corrected Average Reading (dBuV/m)	FCC SubC 15.209 Avg [dBuV/m]	Margin (dB)	FCC SubC Peak [dBuV/m]	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.155	79.92	PK	21.4	-43.13	58.19	-20	38.19	54	-15.81	74	-15.81	309	213	H
2.155	78.54	PK	21.4	-43.13	56.81	-20	36.81	54	-17.19	74	-17.19	265	195	V
2.586	66.55	PK	21.3	-42.48	45.37	-20	25.37	54	-28.63	74	-28.63	242	128	V
2.586	68.97	PK	21.3	-42.48	47.79	-20	27.79	54	-26.21	74	-26.21	213	209	H
3.017	75.43	PK	21.5	-41.62	55.31	-20	35.31	54	-18.69	74	-18.69	169	275	H
3.017	70.55	PK	21.5	-41.62	50.43	-20	30.43	54	-23.57	74	-23.57	238	338	V
3.448	67.05	PK	22.1	-41.3	47.85	-20	27.85	54	-26.15	74	-26.15	203	158	H
3.448	59.74	PK	22.1	-41.31	40.53	-20	20.53	54	-33.47	74	-33.47	46	249	V
3.879	70.11	PK	22.6	-41.55	51.16	-20	31.16	54	-22.84	74	-22.84	189	346	H
3.879	69.97	PK	22.6	-41.55	51.02	-20	31.02	54	-22.98	74	-22.98	210	255	H

PK - Peak detector

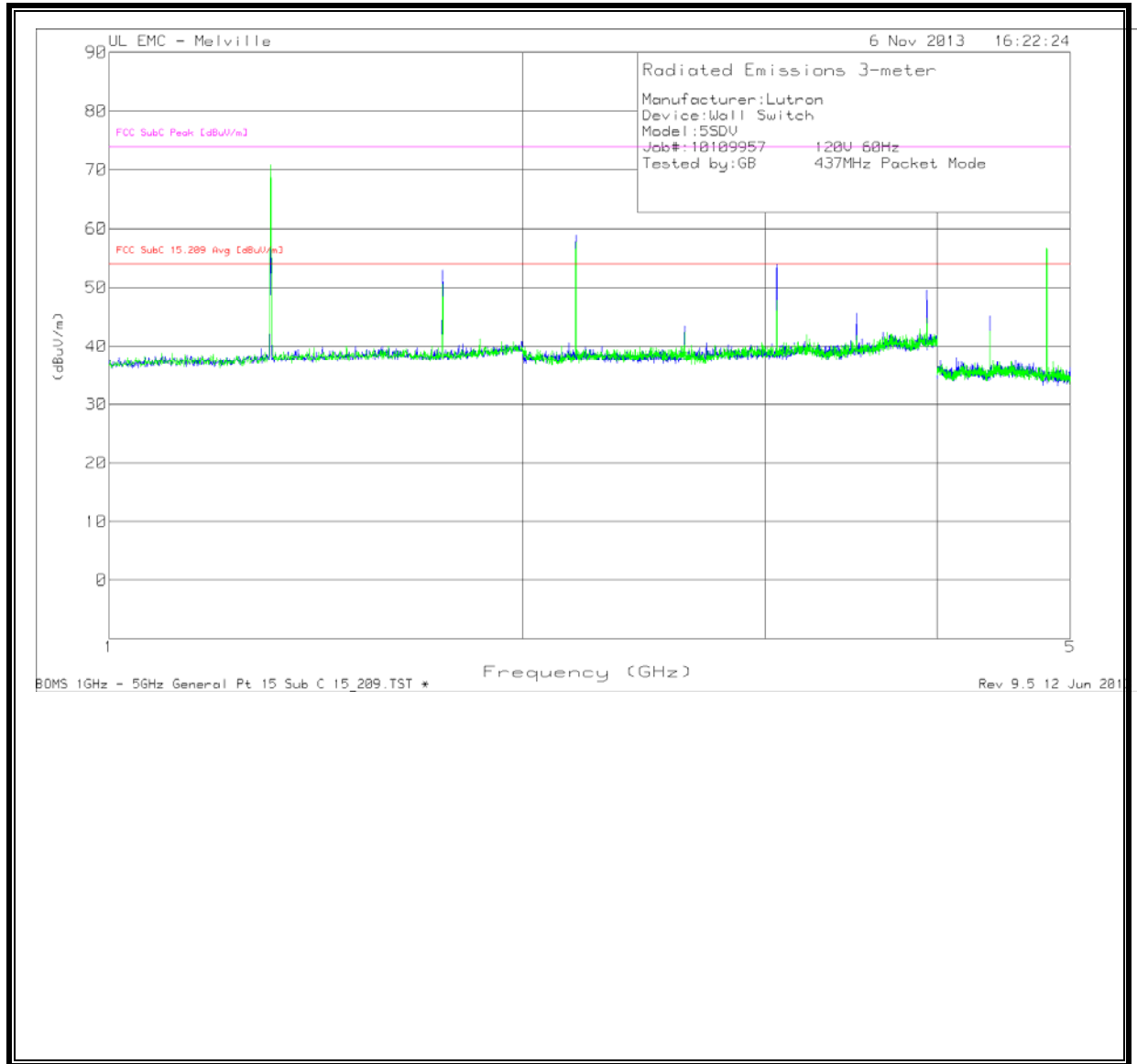
Frequency (GHz)	Meter Reading (dBuV)	Det	AF-48106 [dB/m]	BOMS Factor (dB)	Corrected Reading (dBuV/m)	DCF (dB)	Corrected Average Reading (dBuV/m)	FCC SubC 15.209 Avg [dBuV/m]	Margin (dB)	FCC SubC Peak [dBuV/m]	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4.31	68.31	PK	27.7	-51.27	44.74	-20	24.74	54	-29.26	74	-29.26	222	214	V
4.31	70.16	PK	27.7	-51.27	46.59	-20	26.59	54	-27.41	74	-27.41	216	120	H
4.74	75.87	PK	27.2	-51.81	51.26	-20	31.26	54	-22.74	74	-22.74	213	254	V
4.74	74.28	PK	27.2	-51.81	49.67	-20	29.67	54	-24.33	74	-24.33	175	354	H

PK - Peak detector

**FUNDAMENTAL, HARMONICS AND TX SPURIOUS EMISSION (30 – 1000 MHz) – High Channel**



**HARMONICS AND TX SPURIOUS EMISSIONS ABOVE 1GHz – High Channel**



Frequency (GHz)	Meter Reading (dBuV)	Det	AF-51442 [dB/m]	BOMS Factor (dB)	Corrected		Corrected Average Reading (dBuV/m)	FCC SubC 15.209 Avg [dBuV/m]	Margin (dB)	FCC SubC Peak [dBuV/m]	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
					Reading (dBuV/m)	DCF (dB)								
1.311	92.52	PK	20.5	-44.27	68.75	-20	48.75	54	-5.25	74	-5.25	207	325	V
1.311	86.12	PK	20.5	-44.27	62.35	-20	42.35	54	-11.65	74	-11.65	207	325	H
1.748	76.33	PK	20.8	-43.78	53.35	-20	33.35	54	-20.65	74	-20.65	356	111	H
1.748	74.63	PK	20.8	-43.78	51.65	-20	31.65	54	-22.35	74	-22.35	360	224	V

PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF-48107 [dB/m]	BOMS Factor (dB)	Corrected		Corrected Average Reading (dBuV/m)	FCC SubC 15.209 Avg [dBuV/m]	Margin (dB)	FCC SubC Peak [dBuV/m]	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
					Reading (dBuV/m)	DCF (dB)								
2.185	80.73	PK	21.5	-43.11	59.12	-20	39.12	54	-14.88	74	-14.88	232	177	V
2.185	81.65	PK	21.5	-43.11	60.04	-20	40.04	54	-13.96	74	-13.96	302	206	H
2.622	66.43	PK	21.4	-42.24	45.59	-20	25.59	54	-28.41	74	-28.41	309	277	H
2.622	65.53	PK	21.4	-42.24	44.69	-20	24.69	54	-29.31	74	-29.31	230	337	V
3.059	70.77	PK	21.6	-41.65	50.72	-20	30.72	54	-23.28	74	-23.28	226	392	V
3.059	75.5	PK	21.6	-41.65	55.45	-20	35.45	54	-18.55	74	-18.55	176	336	H
3.496	67.15	PK	22.2	-41.48	47.87	-20	27.87	54	-26.13	74	-26.13	218	234	H
3.496	63.21	PK	22.2	-41.48	43.93	-20	23.93	54	-30.07	74	-30.07	298	340	V
3.933	64.74	PK	22.7	-41.38	46.06	-20	26.06	54	-27.94	74	-27.94	331	388	V
3.933	70.83	PK	22.7	-41.38	52.15	-20	32.15	54	-21.85	74	-21.85	189	289	H

PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF-48106 [dB/m]	BOMS Factor (dB)	Corrected		Corrected Average Reading (dBuV/m)	FCC SubC 15.209 Avg [dBuV/m]	Margin (dB)	FCC SubC Peak [dBuV/m]	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
					Reading (dBuV/m)	DCF (dB)								
4.37	68.61	PK	27.6	-51.54	44.67	-20	24.67	54	-29.33	74	-29.33	268	334	V
4.37	70.77	PK	27.6	-51.54	46.83	-20	26.83	54	-27.17	74	-27.17	170	396	H
4.807	79.82	PK	27.1	-52.21	54.71	-20	34.71	54	-19.29	74	-19.29	169	303	H
4.807	82.01	PK	27.1	-52.21	56.9	-20	36.9	54	-17.1	74	-17.1	263	355	V

PK - Peak detector

## 8.2. RX RADIATED SPURIOUS EMISSION

### LIMITS

IC RSS-Gen Issue 2, section 7.2.3.2

All spurious emissions shall comply with the limits shown below:

Limits for radiated disturbance of Class B ITE at measuring distance of 3 m	
Frequency range (MHz)	Quasi-peak limits (dB $\mu$ V/m)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960 MHz	54

Note: The lower limit shall apply at the transition frequency.

### TEST PROCEDURE

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

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

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

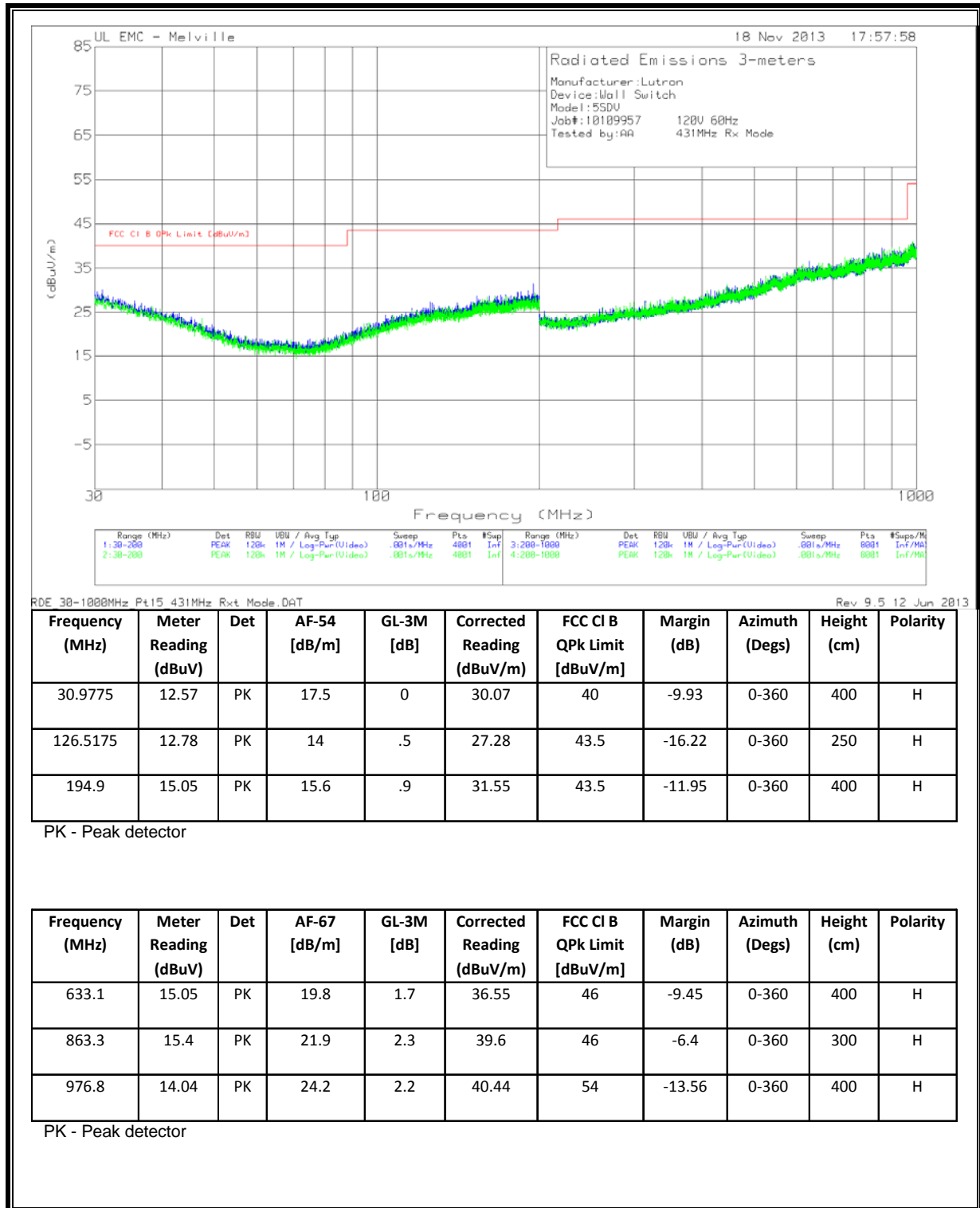
The spectrum from 30 MHz to 5th harmonic is investigated with the transmitter set to the middle channel.

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

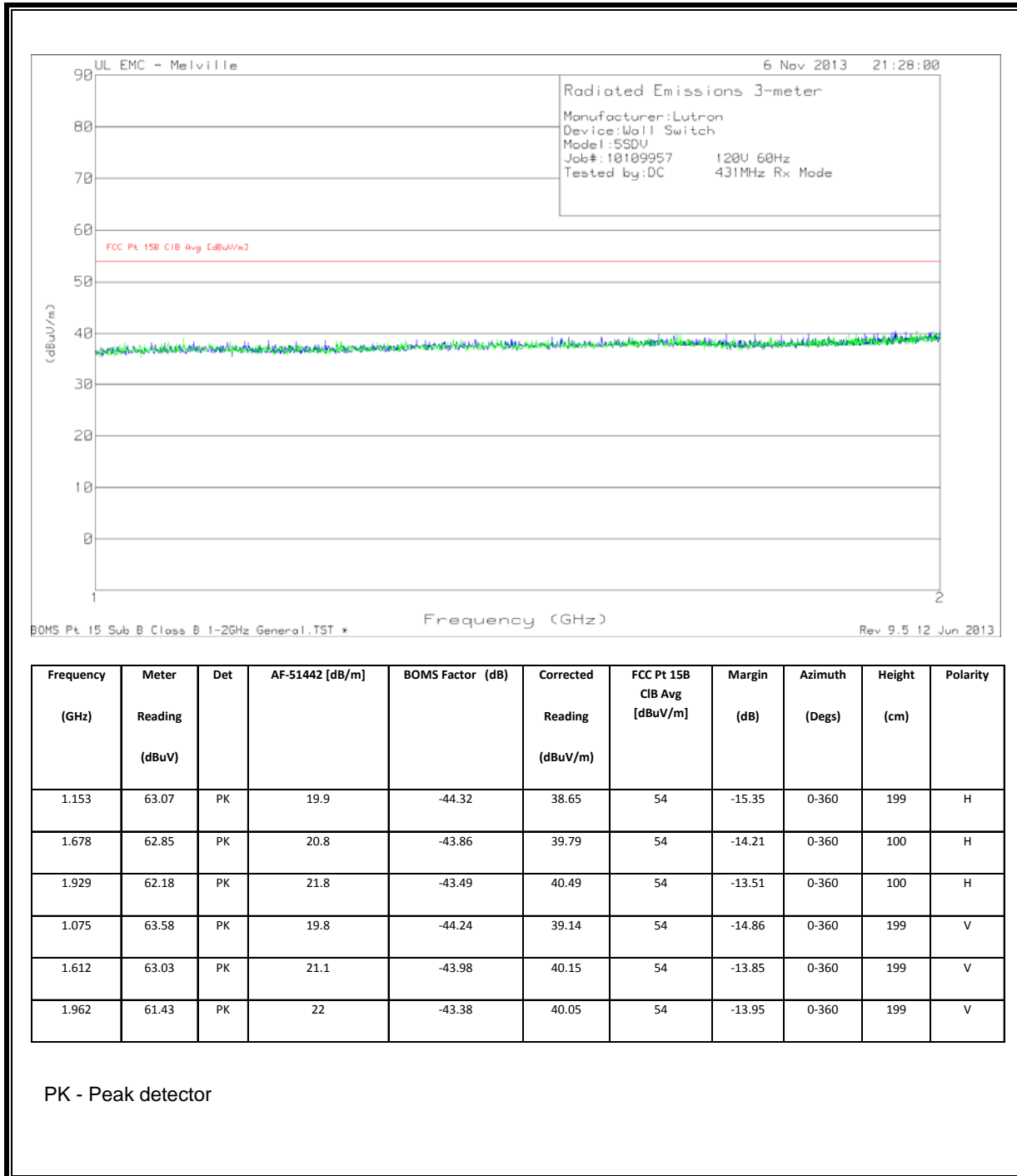
### RESULTS

No non-compliance noted:

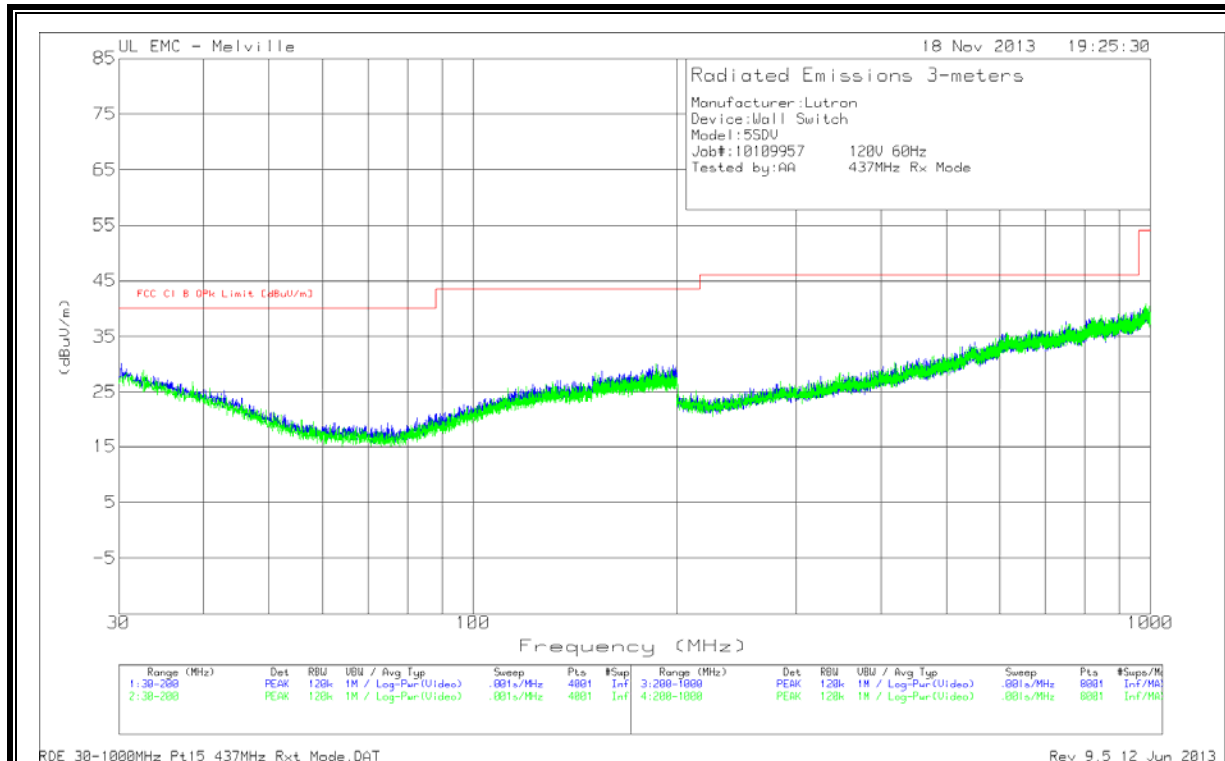
**RECEIVER SPURIOUS EMISSION (30MHz - 1GHz) – Low Channel**



**RECEIVER SPURIOUS EMISSION ABOVE 1GHz – Low Channel**



**RECEIVER SPURIOUS EMISSION (30MHz - 1GHz) – High Channel**



RDE\_30-1000MHz\_Pt15\_437MHz\_Rxt\_Mode.DAT

Rev 9.5 12 Jun 2013

Frequency (MHz)	Meter Reading (dBuV)	Det	AF-54 [dB/m]	GL-3M [dB]	Corrected Reading (dBuV/m)	FCC CI B QPk Limit [dBuV/m]	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
30.255	12.62	PK	17.6	0	30.22	40	-9.78	0-360	400	H
42.8775	12.25	PK	12.8	.2	25.25	40	-14.75	0-360	98	H
186.4	13.05	PK	15.7	.7	29.45	43.5	-14.05	0-360	250	H

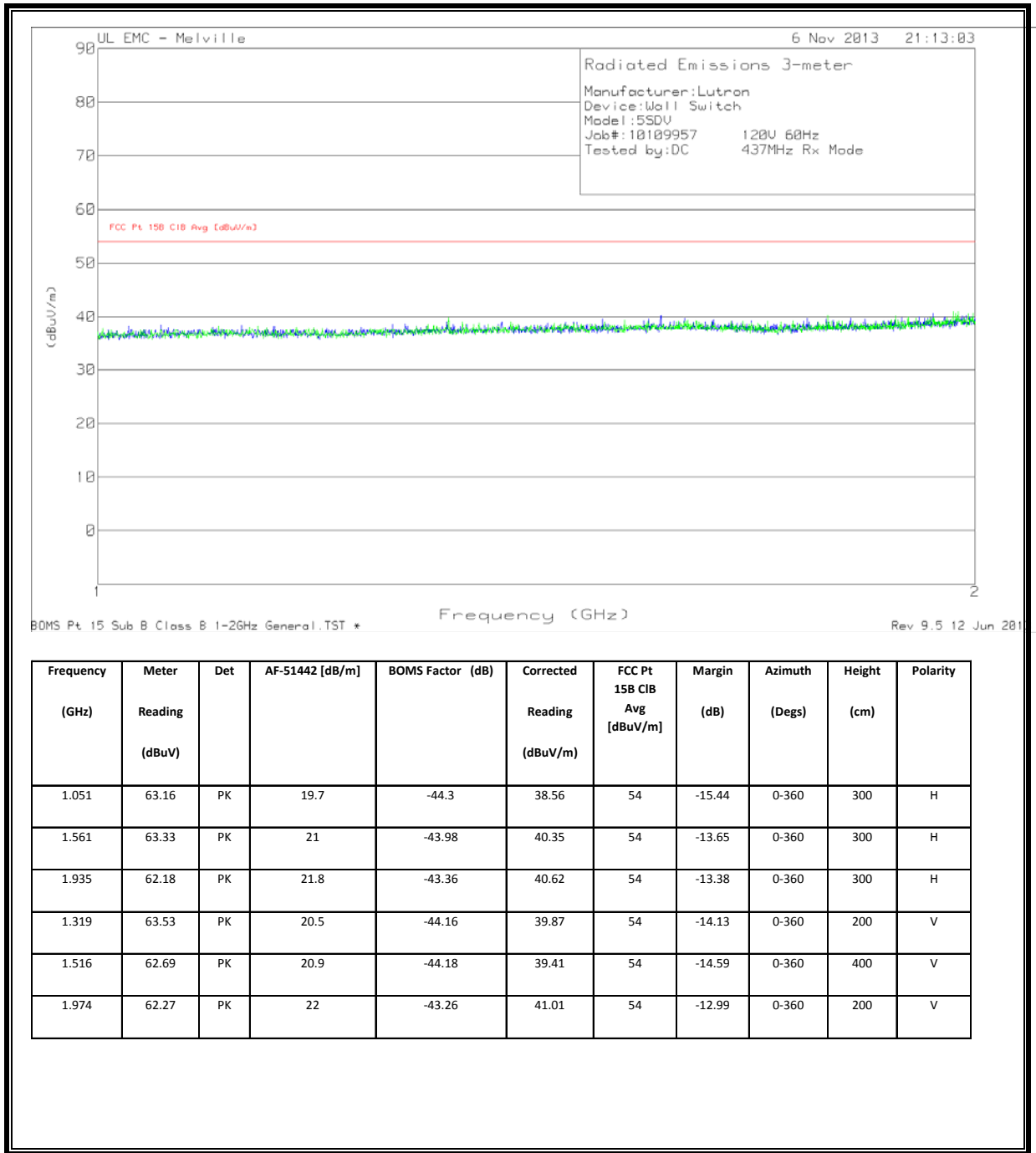
PK - Peak detector

Frequency (MHz)	Meter Reading (dBuV)	Det	AF-67 [dB/m]	GL-3M [dB]	Corrected Reading (dBuV/m)	FCC CI B QPk Limit [dBuV/m]	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
604.8	14.07	PK	19.6	1.7	35.37	46	-10.63	0-360	200	H
750.9	14.65	PK	21.1	1.9	37.65	46	-8.35	0-360	400	H
966.5	14.38	PK	23.4	2.3	40.08	54	-13.92	0-360	98	H

PK - Peak detector



**RECEIVER SPURIOUS EMISSION ABOVE 1GHz – High Channel**



Frequency (GHz)	Meter Reading (dBuV)	Det	AF-51442 [dB/m]	BOMS Factor (dB)	Corrected Reading (dBuV/m)	FCC Pt 15B C18 Avg [dBuV/m]	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.051	63.16	PK	19.7	-44.3	38.56	54	-15.44	0-360	300	H
1.561	63.33	PK	21	-43.98	40.35	54	-13.65	0-360	300	H
1.935	62.18	PK	21.8	-43.36	40.62	54	-13.38	0-360	300	H
1.319	63.53	PK	20.5	-44.16	39.87	54	-14.13	0-360	200	V
1.516	62.69	PK	20.9	-44.18	39.41	54	-14.59	0-360	400	V
1.974	62.27	PK	22	-43.26	41.01	54	-12.99	0-360	200	V

## 9. AC MAINS LINE CONDUCTED EMISSIONS

### LIMITS

§15.207 (a)  
IC RSS-GEN, Section 7.2.2

Frequency of emission (MHz)	Conducted Limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

\* Decreases with the logarithm of the frequency.

### TEST PROCEDURE

ANSI C63.4

### RESULTS

No non-compliance noted:

**6 WORST EMISSIONS – TX Low Channel**

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 1 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.184993	33.13	Av	10	43.13	-	-	54.26	-11.13
.18333	32.98	Av	10	42.98	-	-	54.33	-11.35
.213878	29.15	Av	10	39.15	-	-	53.05	-13.9
.30514	29.15	Av	10	39.15	-	-	50.1	-10.95
.338448	28.02	Av	10	38.02	-	-	49.24	-11.22
.399123	26.12	Av	10	36.12	-	-	47.87	-11.75
.440365	24.92	Av	10	34.92	-	-	47.05	-12.13
.463223	24.14	Av	10	34.14	-	-	46.63	-12.49
.569523	21.47	Av	10	31.47	-	-	46	-14.53

Av - average detection

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.18463	33.59	Av	10	43.59	-	-	54.27	-10.68
.184398	33.5	Av	10	43.5	-	-	54.29	-10.79
.236883	31.23	Av	10	41.23	-	-	52.2	-10.97
.303923	29.32	Av	10	39.32	-	-	50.13	-10.81
.321673	26.62	Av	10	36.62	-	-	49.66	-13.04
.370388	27.13	Av	10	37.13	-	-	48.49	-11.36
.44114	25.28	Av	10	35.28	-	-	47.04	-11.76
.533608	22.27	Av	10.1	32.37	-	-	46	-13.63
.611185	20.14	Av	10.1	30.24	-	-	46	-15.76

Av - average detection

**Quasi-Peak Emissions**

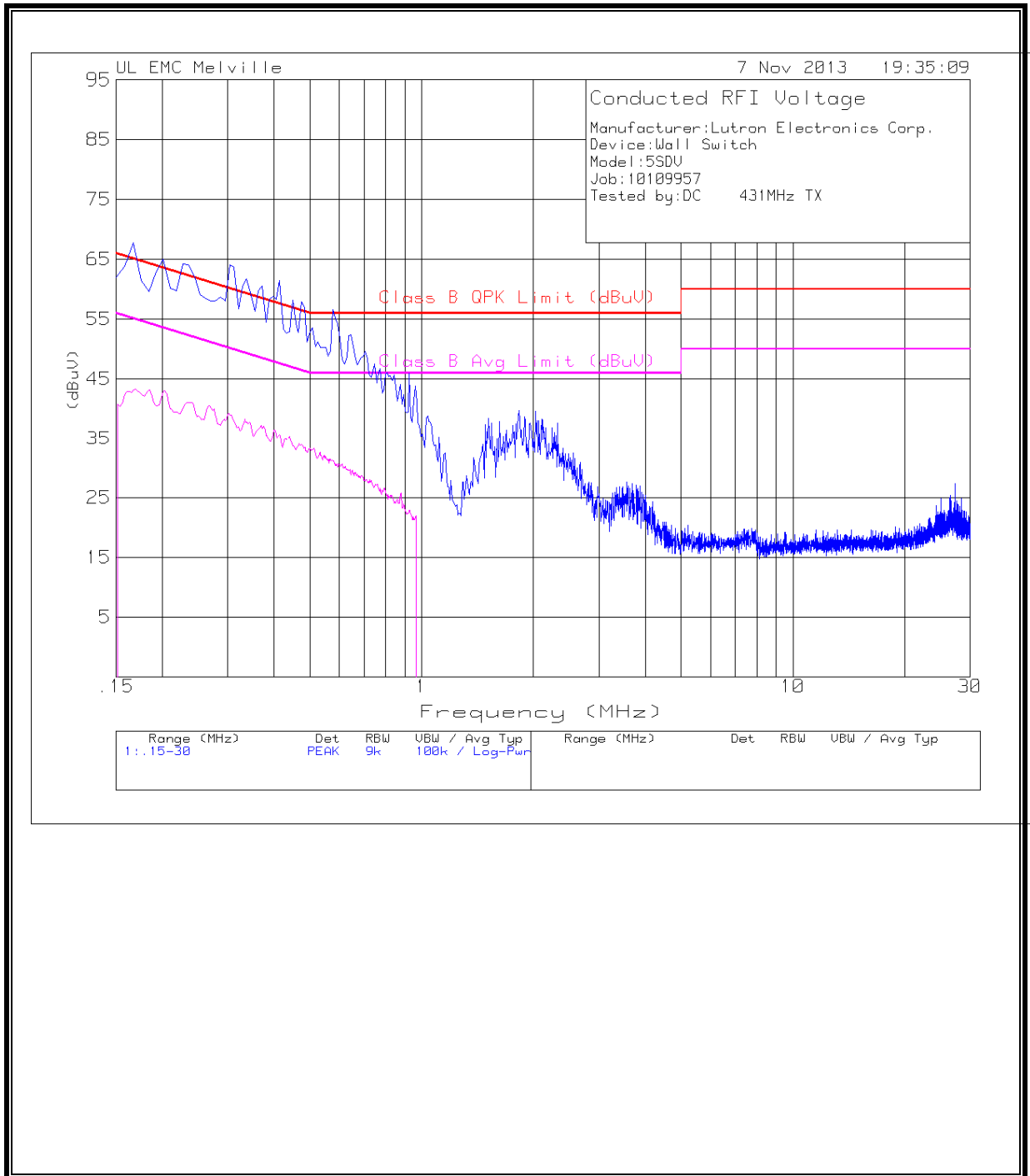
Frequency (MHz)	Meter Reading (dBuV)	Det	Line 1 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.184993	48.4	QP	10	58.4	64.26	-5.86	-	-
.18333	48.19	QP	10	58.19	64.33	-6.14	-	-
.213878	47.99	QP	10	57.99	63.05	-5.06	-	-
.30514	48.8	QP	10	58.8	60.1	-1.3	-	-
.338448	48.93	QP	10	58.93	59.24	-.31	-	-
.399123	45.64	QP	10	55.64	57.87	-2.23	-	-
.440365	43.69	QP	10	53.69	57.05	-3.36	-	-
.463223	42.64	QP	10	52.64	56.63	-3.99	-	-
.569523	39.58	QP	10	49.58	56	-6.42	-	-

QP - Quasi-Peak detector

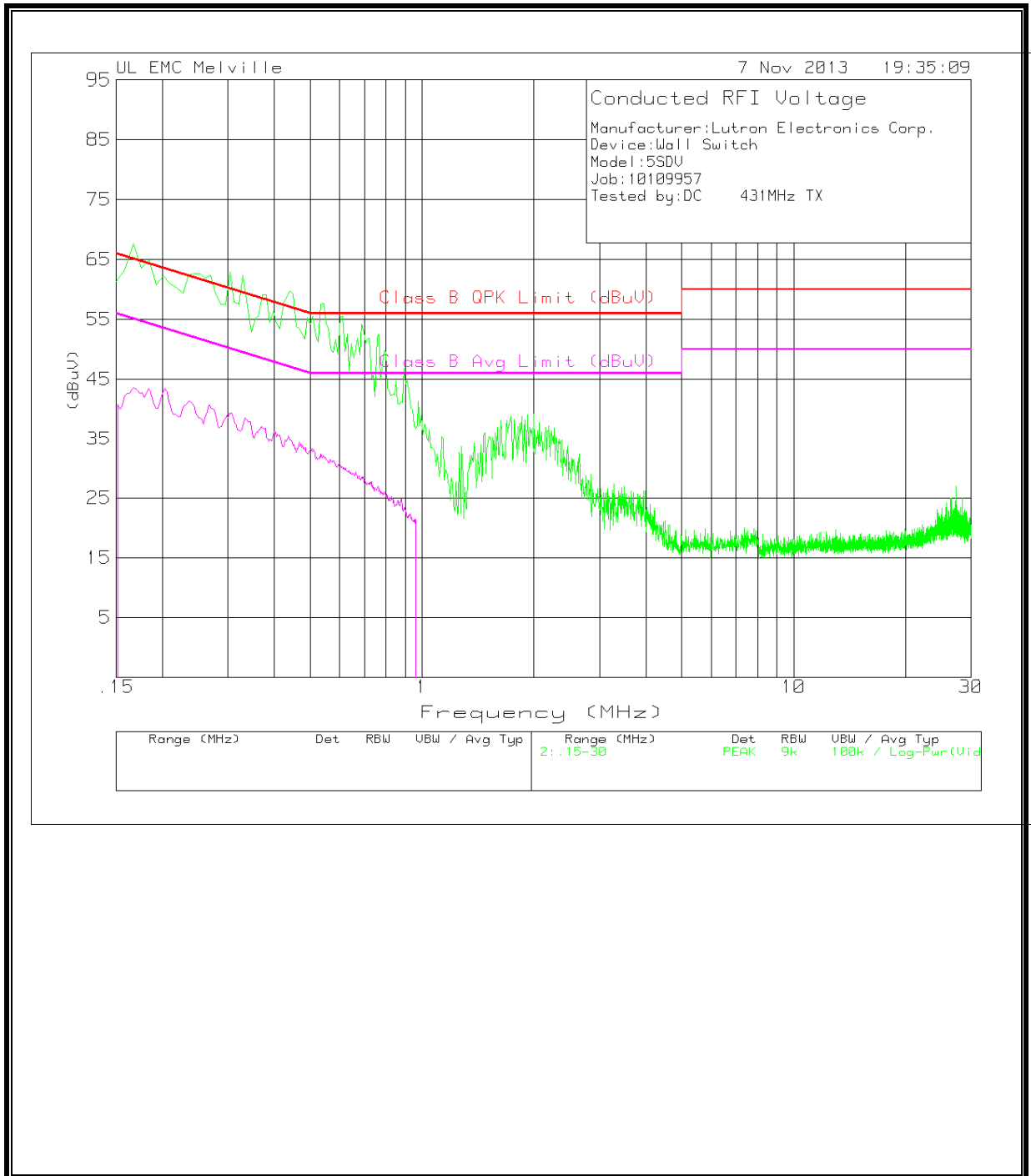
Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.18463	48.08	QP	10	58.08	64.27	-6.19	-	-
.184398	48.2	QP	10	58.2	64.29	-6.09	-	-
.236883	51.37	QP	10	61.37	62.2	-.83	-	-
.303923	49.06	QP	10	59.06	60.13	-1.07	-	-
.321673	44.71	QP	10	54.71	59.66	-4.95	-	-
.370388	46.14	QP	10	56.14	58.49	-2.35	-	-
.44114	43.67	QP	10	53.67	57.04	-3.37	-	-
.533608	41.32	QP	10.1	51.42	56	-4.58	-	-
.611185	39.07	QP	10.1	49.17	56	-6.83	-	-

QP - Quasi-Peak detector

**LINE 1 RESULTS – TX Low Channel**



**LINE 2 RESULTS – TX Low Channel**



**6 WORST EMISSIONS – TX High Channel**

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 1 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.195728	31.08	Av	10	41.08	-	-	53.79	-12.71
.233835	31.12	Av	10	41.12	-	-	52.31	-11.19
.269065	30.59	Av	10	40.59	-	-	51.15	-10.56
.33421	28.62	Av	10	38.62	-	-	49.35	-10.73
.43787	25.51	Av	10	35.51	-	-	47.1	-11.59
.466155	24.11	Av	10	34.11	-	-	46.58	-12.47
.569378	21.41	Av	10	31.41	-	-	46	-14.59
.670098	18.36	Av	10	28.36	-	-	46	-17.64
.82385	15.49	Av	10	25.49	-	-	46	-20.51
.925453	12.65	Av	10	22.65	-	-	46	-23.35

Av - average detection

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.183503	33.87	Av	10	43.87	-	-	54.33	-10.46
.228118	30.64	Av	10	40.64	-	-	52.52	-11.88
.30239	29.3	Av	10	39.3	-	-	50.18	-10.88
.334098	28.09	Av	10	38.09	-	-	49.35	-11.26
.369973	27.13	Av	10	37.13	-	-	48.5	-11.37
.440065	25.18	Av	10	35.18	-	-	47.06	-11.88
.46713	24.01	Av	10	34.01	-	-	46.56	-12.55
.578585	20.96	Av	10.1	31.06	-	-	46	-14.94
.678885	18.4	Av	10.1	28.5	-	-	46	-17.5
.704513	17.73	Av	10.1	27.83	-	-	46	-18.17
.789905	15.85	Av	10.1	25.95	-	-	46	-20.05
.82355	15.2	Av	10.1	25.3	-	-	46	-20.7
.894565	13.39	Av	10.1	23.49	-	-	46	-22.51

Av - average detection

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 1 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.195728	50.05	QP	10	60.05	63.79	-3.74	-	-
.233835	50.94	QP	10	60.94	62.31	-1.37	-	-
.269065	50.69	QP	10	60.69	61.15	-.46	-	-
.33421	48.22	QP	10	58.22	59.35	-1.13	-	-
.43787	43.82	QP	10	53.82	57.1	-3.28	-	-
.466155	43.5	QP	10	53.5	56.58	-3.08	-	-
.569378	39.23	QP	10	49.23	56	-6.77	-	-
.670098	36.3	QP	10	46.3	56	-9.7	-	-
.82385	32.32	QP	10	42.32	56	-13.68	-	-
.925453	28.68	QP	10	38.68	56	-17.32	-	-

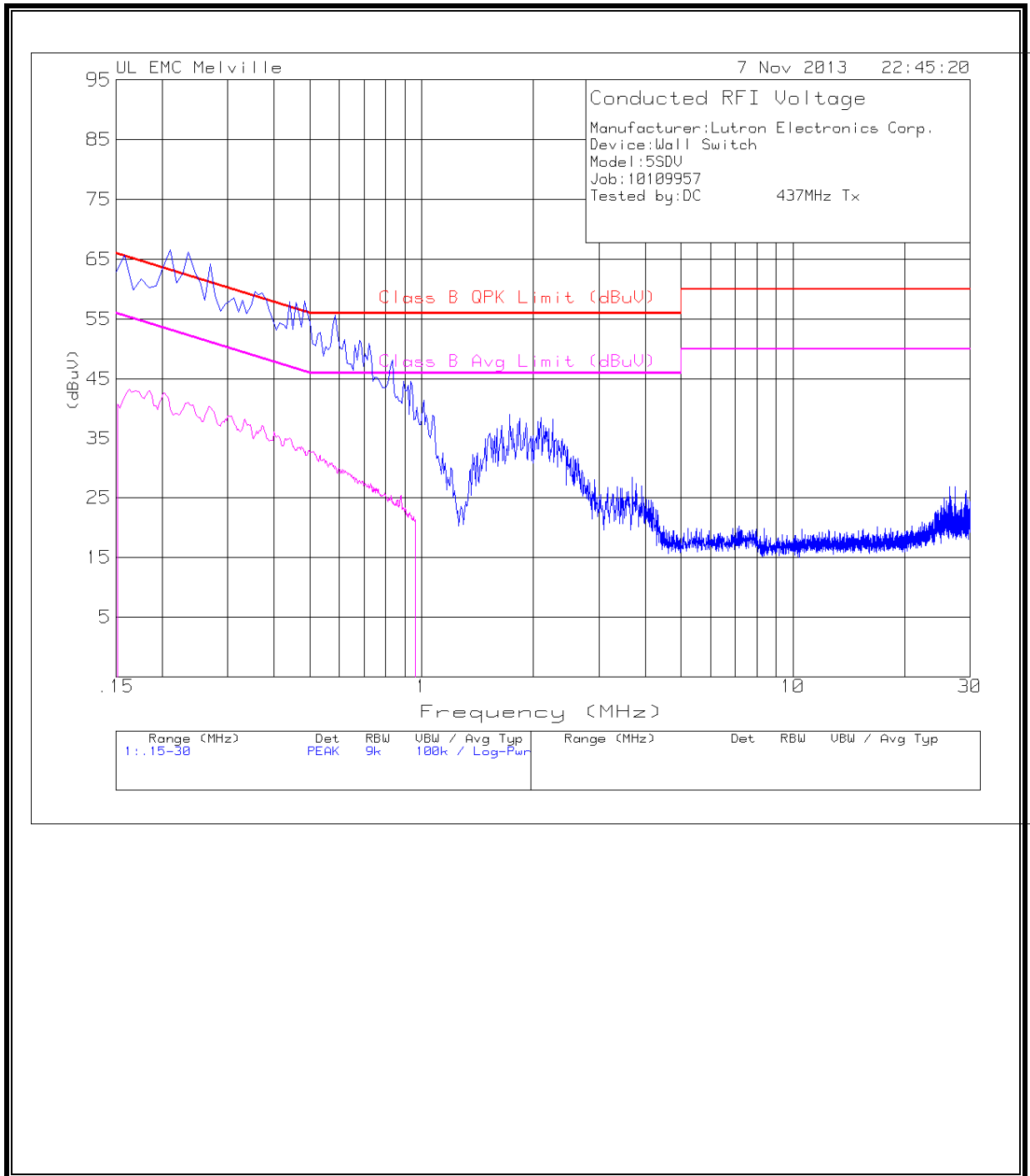
QP - Quasi-Peak detector

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.183503	48.93	QP	10	58.93	64.33	-5.4	-	-
.228118	49.45	QP	10	59.45	62.52	-3.07	-	-
.30239	48.76	QP	10	58.76	60.18	-1.42	-	-
.334098	47.78	QP	10	57.78	59.35	-1.57	-	-
.369973	46.08	QP	10	56.08	58.5	-2.42	-	-
.440065	43.8	QP	10	53.8	57.06	-3.26	-	-
.46713	43.11	QP	10	53.11	56.56	-3.45	-	-
.578585	39.15	QP	10.1	49.25	56	-6.75	-	-
.678885	36.34	QP	10.1	46.44	56	-9.56	-	-
.704513	35.17	QP	10.1	45.27	56	-10.73	-	-
.789905	33.35	QP	10.1	43.45	56	-12.55	-	-
.82355	32.19	QP	10.1	42.29	56	-13.71	-	-
.894565	29.88	QP	10.1	39.98	56	-16.02	-	-

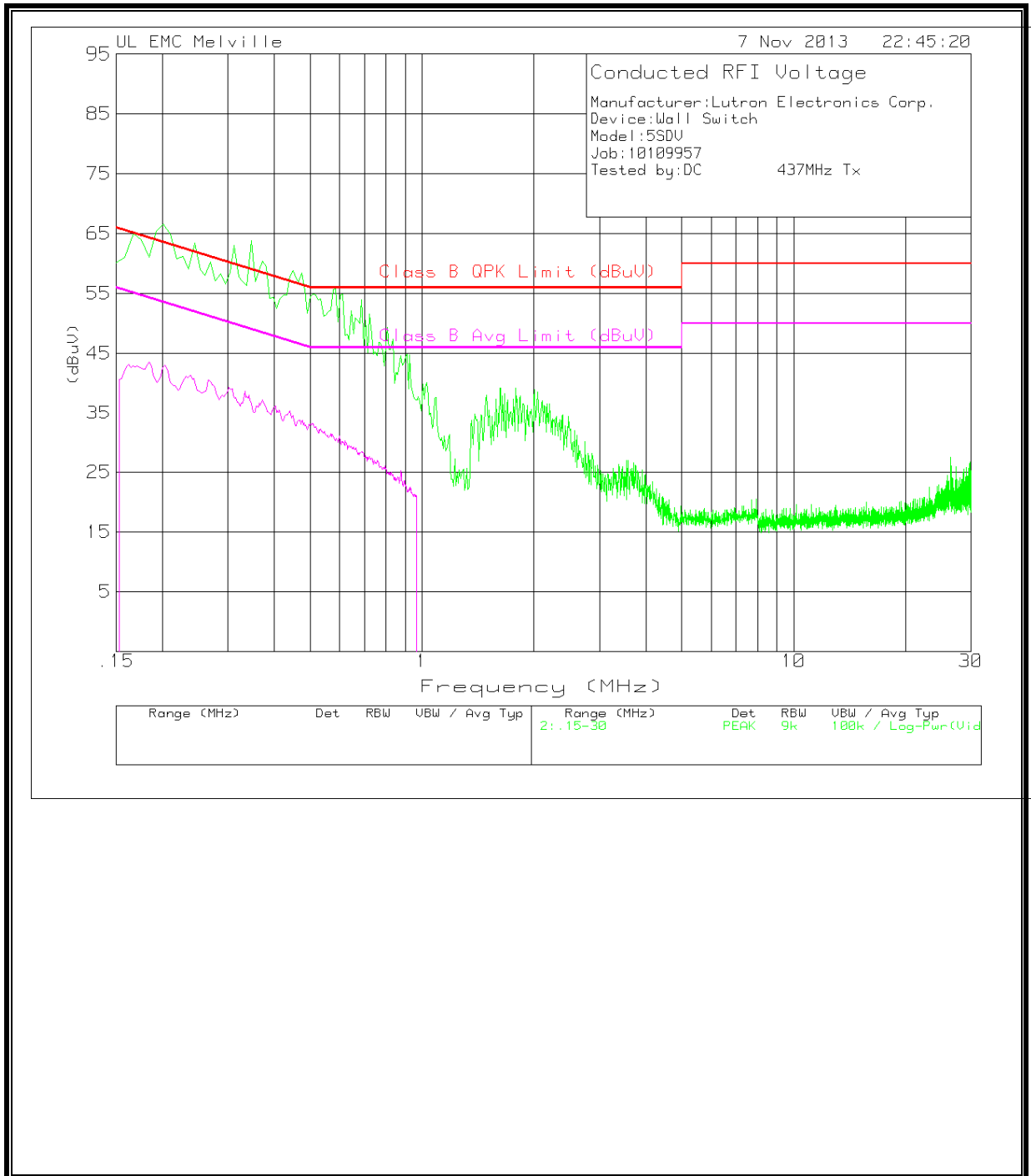
QP - Quasi-Peak detector



**LINE 1 RESULTS – TX High Channel**



**LINE 2 RESULTS – TX High Channel**



**6 WORST EMISSIONS – RX Low Channel**

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 1 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.183653	33.62	Av	10	43.62	-	-	54.32	-10.7
.20576	32.56	Av	10	42.56	-	-	53.37	-10.81
.301018	29.52	Av	10	39.52	-	-	50.21	-10.69
.34418	28.21	Av	10	38.21	-	-	49.1	-10.89
.40065	26.08	Av	10	36.08	-	-	47.84	-11.76
.437823	25.72	Av	10	35.72	-	-	47.1	-11.38
.501018	22.75	Av	10	32.75	-	-	46	-13.25
.620505	20.44	Av	10	30.44	-	-	46	-15.56
.676918	19.18	Av	10	29.18	-	-	46	-16.82
.749848	17.3	Av	10	27.3	-	-	46	-18.7
.866253	13.8	Av	10	23.8	-	-	46	-22.2

Av - average detection

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.183735	33.6	Av	10	43.6	-	-	54.32	-10.72
.237363	31.45	Av	10	41.45	-	-	52.19	-10.74
.26785	30.64	Av	10	40.64	-	-	51.18	-10.54
.275375	29.82	Av	10	39.82	-	-	50.95	-11.13
.33266	29.17	Av	10	39.17	-	-	49.38	-10.21
.371498	27.5	Av	10	37.5	-	-	48.47	-10.97
.439638	25.48	Av	10	35.48	-	-	47.07	-11.59
.458708	23.59	Av	10	33.59	-	-	46.72	-13.13
.50061	22.98	Av	10	32.98	-	-	46	-13.02
.533978	22.07	Av	10.1	32.17	-	-	46	-13.83
.59856	20.94	Av	10.1	31.04	-	-	46	-14.96
.676235	19.07	Av	10.1	29.17	-	-	46	-16.83
.724258	17.48	Av	10.1	27.58	-	-	46	-18.42
.78481	15.82	Av	10.1	25.92	-	-	46	-20.08
.831278	14.8	Av	10.1	24.9	-	-	46	-21.1

Av - average detection

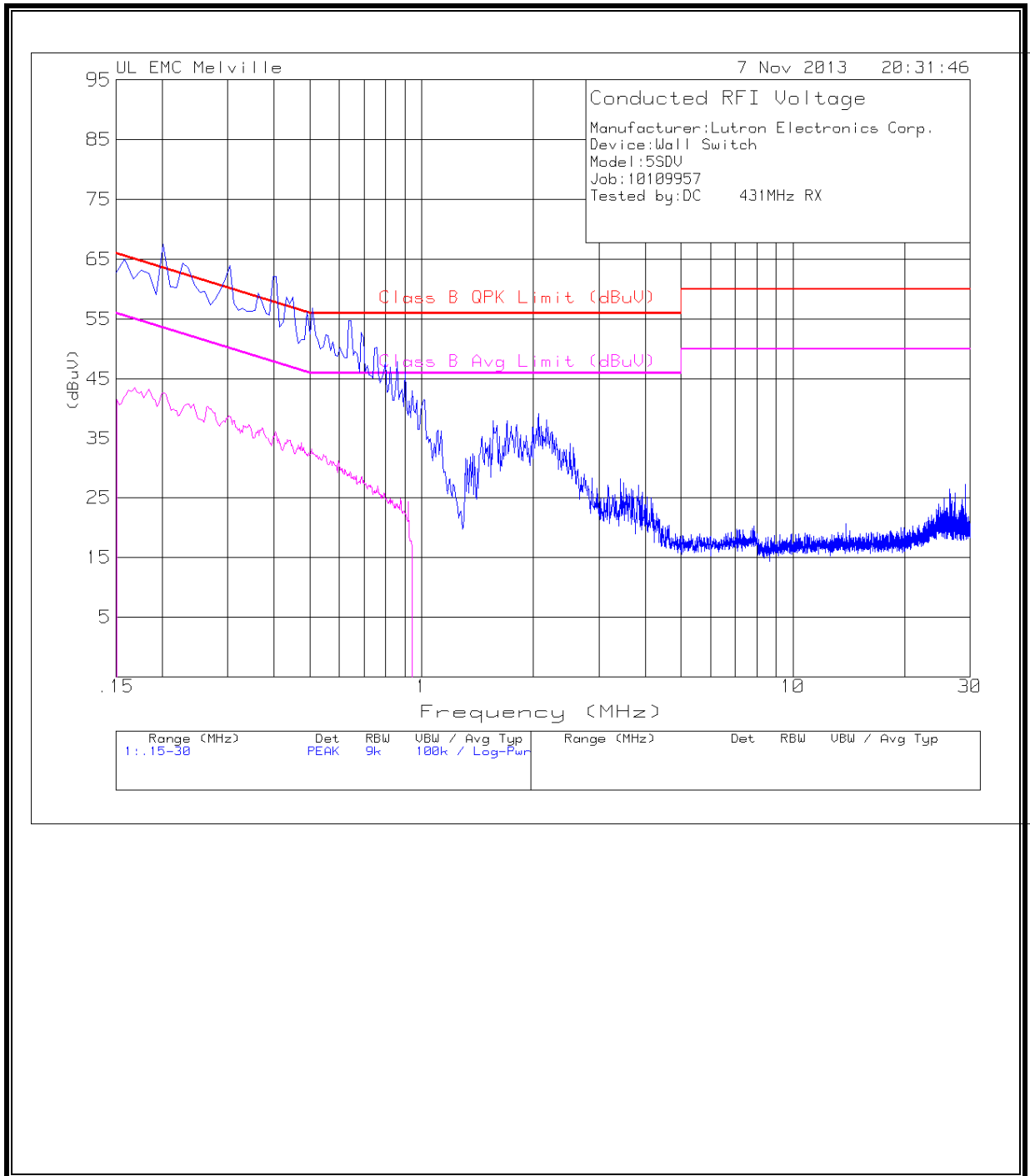
Frequency (MHz)	Meter Reading (dBuV)	Det	Line 1 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.183653	48.35	QP	10	58.35	64.32	-5.97	-	-
.20576	52.65	QP	10	62.65	63.37	-.72	-	-
.301018	48.42	QP	10	58.42	60.21	-1.79	-	-
.34418	47.65	QP	10	57.65	59.1	-1.45	-	-
.40065	46.67	QP	10	56.67	57.84	-1.17	-	-
.437823	44.37	QP	10	54.37	57.1	-2.73	-	-
.501018	40.88	QP	10	50.88	56	-5.12	-	-
.620505	38.43	QP	10	48.43	56	-7.57	-	-
.676918	36.08	QP	10	46.08	56	-9.92	-	-
.749848	34.09	QP	10	44.09	56	-11.91	-	-
.866253	30.75	QP	10	40.75	56	-15.25	-	-

QP - Quasi-Peak detector

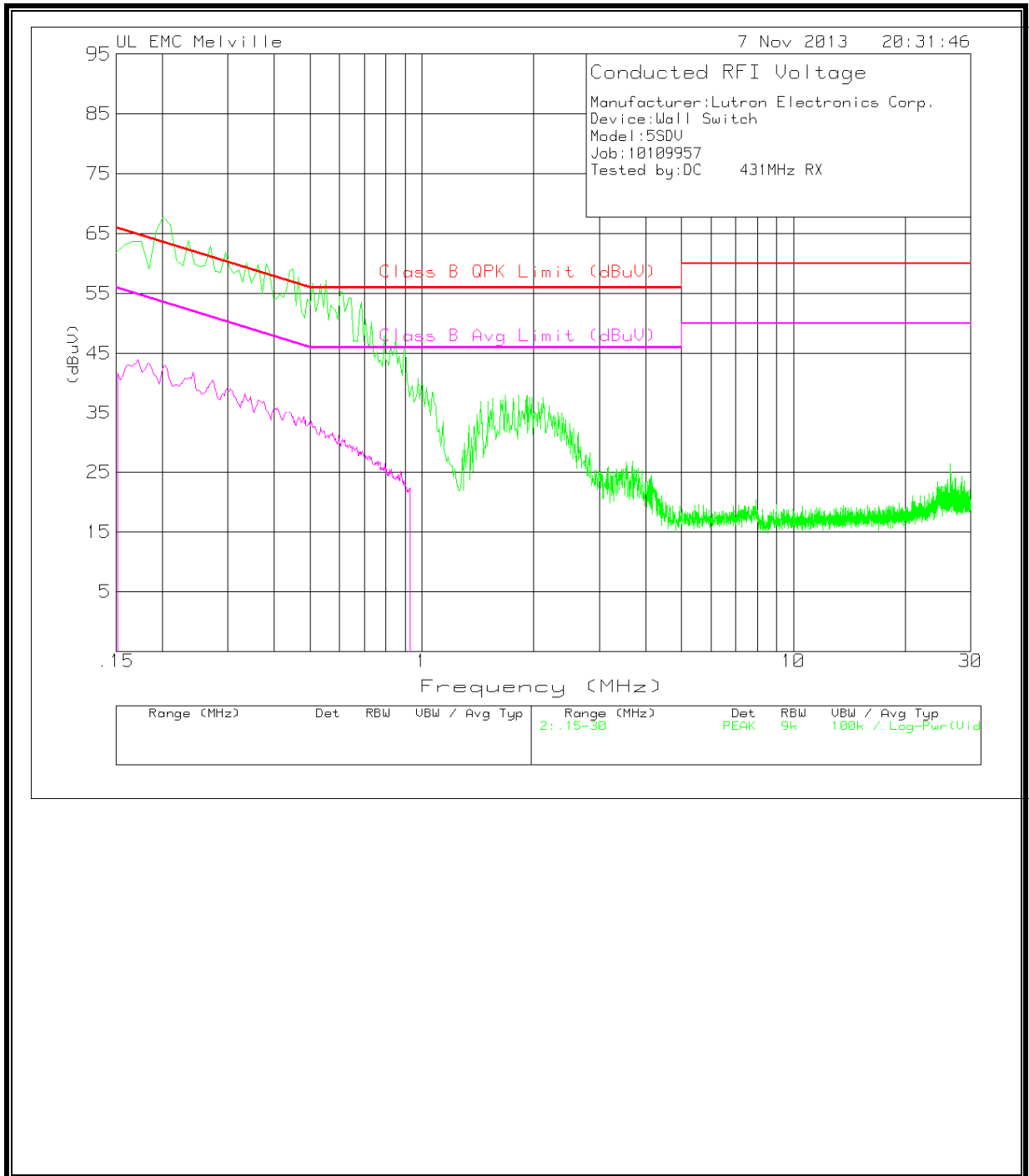
Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.183735	48.32	QP	10	58.32	64.32	-6	-	-
.237363	51.15	QP	10	61.15	62.19	-1.04	-	-
.26785	50.79	QP	10	60.79	61.18	-.39	-	-
.275375	49.62	QP	10	59.62	60.95	-1.33	-	-
.33266	48.11	QP	10	58.11	59.38	-1.27	-	-
.371498	46.32	QP	10	56.32	58.47	-2.15	-	-
.439638	43.83	QP	10	53.83	57.07	-3.24	-	-
.458708	41.8	QP	10	51.8	56.72	-4.92	-	-
.50061	41.8	QP	10	51.8	56	-4.2	-	-
.533978	41.97	QP	10.1	52.07	56	-3.93	-	-
.59856	38.75	QP	10.1	48.85	56	-7.15	-	-
.676235	35.94	QP	10.1	46.04	56	-9.96	-	-
.724258	35.52	QP	10.1	45.62	56	-10.38	-	-
.78481	32.75	QP	10.1	42.85	56	-13.15	-	-
.831278	31.52	QP	10.1	41.62	56	-14.38	-	-

QP - Quasi-Peak detector

**LINE 1 RESULTS – RX Low Channel**



**LINE 2 RESULTS – RX Low Channel**



**6 WORST EMISSIONS – RX High Channel**

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 1 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.18358	33.48	Av	10	43.48	-	-	54.32	-10.84
.237745	31.38	Av	10	41.38	-	-	52.17	-10.79
.24253	31.05	Av	10	41.05	-	-	52.01	-10.96
.320435	27.27	Av	10	37.27	-	-	49.7	-12.43
.364178	26.46	Av	10	36.46	-	-	48.63	-12.17
.399818	26.57	Av	10	36.57	-	-	47.86	-11.29
.465893	24.29	Av	10	34.29	-	-	46.59	-12.3
.507795	23.17	Av	10	33.17	-	-	46	-12.83
.571195	21.62	Av	10	31.62	-	-	46	-14.38
.641685	19.65	Av	10	29.65	-	-	46	-16.35
.717608	17.5	Av	10	27.5	-	-	46	-18.5
.74944	17.17	Av	10	27.17	-	-	46	-18.83
.853305	14.15	Av	10	24.15	-	-	46	-21.85

Av - average detection

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.183903	33.57	Av	10	43.57	-	-	54.31	-10.74
.183653	33.65	Av	10	43.65	-	-	54.32	-10.67
.206318	32.46	Av	10	42.46	-	-	53.35	-10.89
.274503	30.03	Av	10	40.03	-	-	50.98	-10.95
.308493	29.07	Av	10	39.07	-	-	50.01	-10.94
.357255	26.35	Av	10	36.35	-	-	48.79	-12.44
.4393	25.62	Av	10	35.62	-	-	47.07	-11.45
.506543	23.36	Av	10	33.36	-	-	46	-12.64
.505743	23.13	Av	10	33.13	-	-	46	-12.87
.570425	21.29	Av	10.1	31.39	-	-	46	-14.61
.63345	19.87	Av	10.1	29.97	-	-	46	-16.03
.663048	19.37	Av	10.1	29.47	-	-	46	-16.53
.718615	17.61	Av	10.1	27.71	-	-	46	-18.29
.746878	16.82	Av	10.1	26.92	-	-	46	-19.08
.793298	16.12	Av	10.1	26.22	-	-	46	-19.78
.845888	13.94	Av	10.1	24.04	-	-	46	-21.96
.889728	13.94	Av	10.1	24.04	-	-	46	-21.96

Av - average detection

Quasi-Peak Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 1 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.201723	53	QP	10	63	63.54	-.54	-	-
.237725	51.01	QP	10	61.01	62.18	-1.17	-	-
.303625	48.65	QP	10	58.65	60.14	-1.49	-	-
.308238	47.85	QP	10	57.85	60.02	-2.17	-	-
.36901	46.15	QP	10	56.15	58.52	-2.37	-	-
.50078	41.5	QP	10	51.5	56	-4.5	-	-
.46438	43.22	QP	10	53.22	56.61	-3.39	-	-

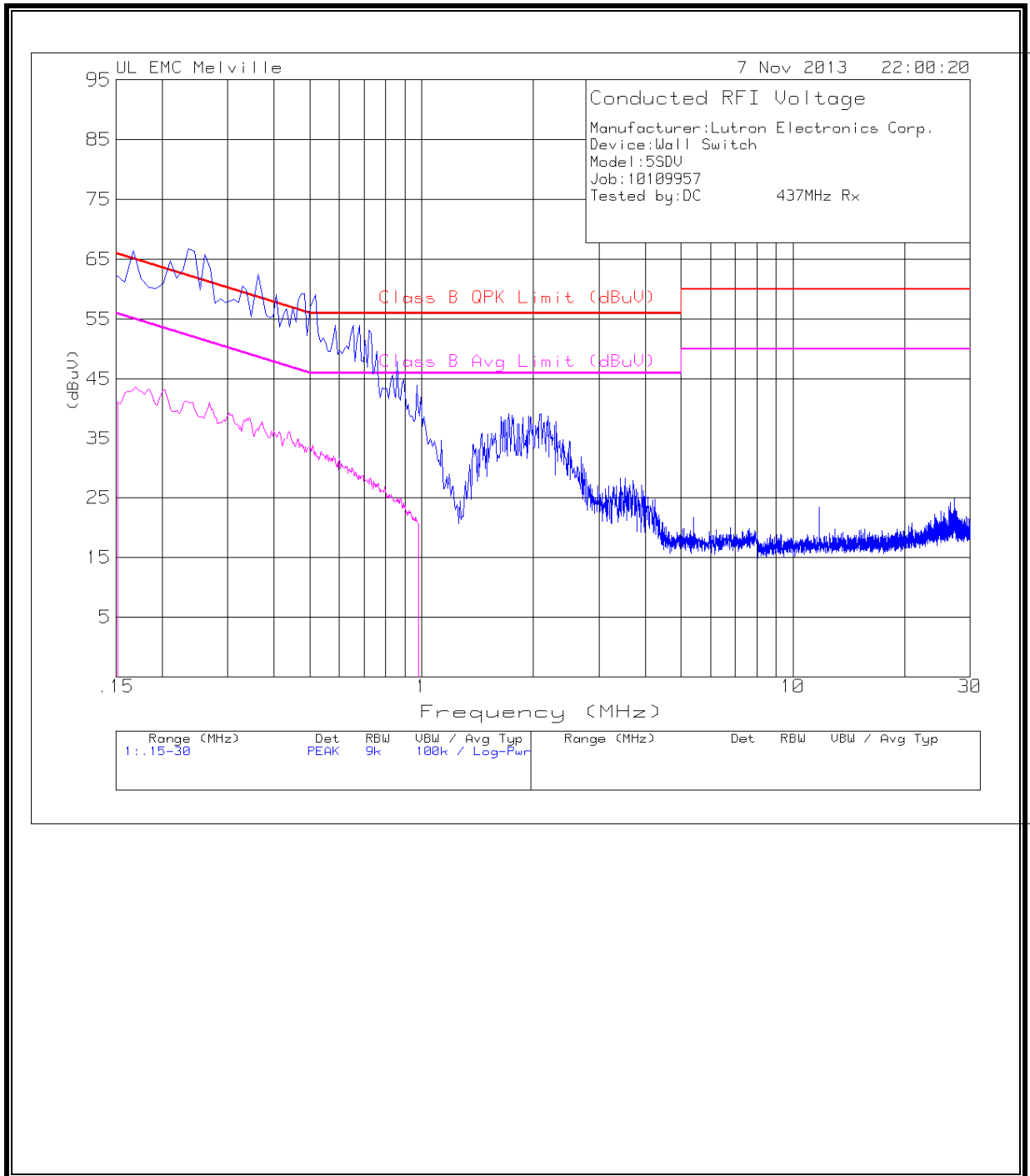
QP - Quasi-Peak detector

Frequency (MHz)	Meter Reading (dBuV)	Det	Line 2 G/L (dB)	Corrected Reading (dBuV)	Class B QPK Limit (dBuV)	Margin (dB)	Class B Avg Limit (dBuV)	Margin (dB)
.166365	52.97	QP	10	62.97	65.14	-2.17	-	-
.234713	50.72	QP	10	60.72	62.28	-1.56	-	-
.302448	48.71	QP	10	58.71	60.18	-1.47	-	-
.334395	47.77	QP	10	57.77	59.34	-1.57	-	-
.37019	46.2	QP	10	56.2	58.5	-2.3	-	-
.467003	43.58	QP	10	53.58	56.57	-2.99	-	-
.536875	41.11	QP	10.1	51.21	56	-4.79	-	-
.437993	43.7	QP	10.1	53.8	57.1	-3.3	-	-
.558173	39.11	QP	10.1	49.21	56	-6.79	-	-

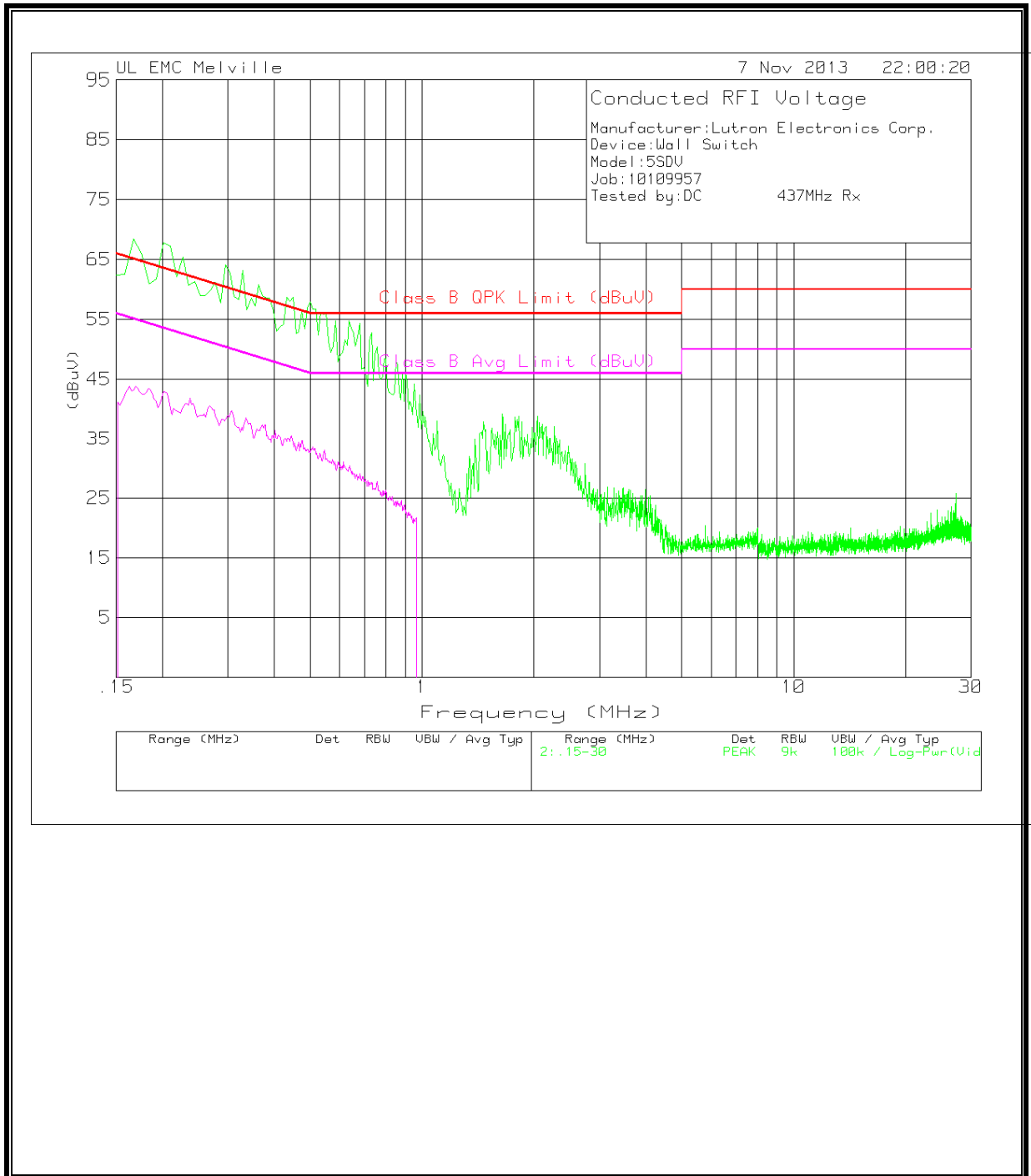
QP - Quasi-Peak detector



**LINE 1 RESULTS – RX High Channel**

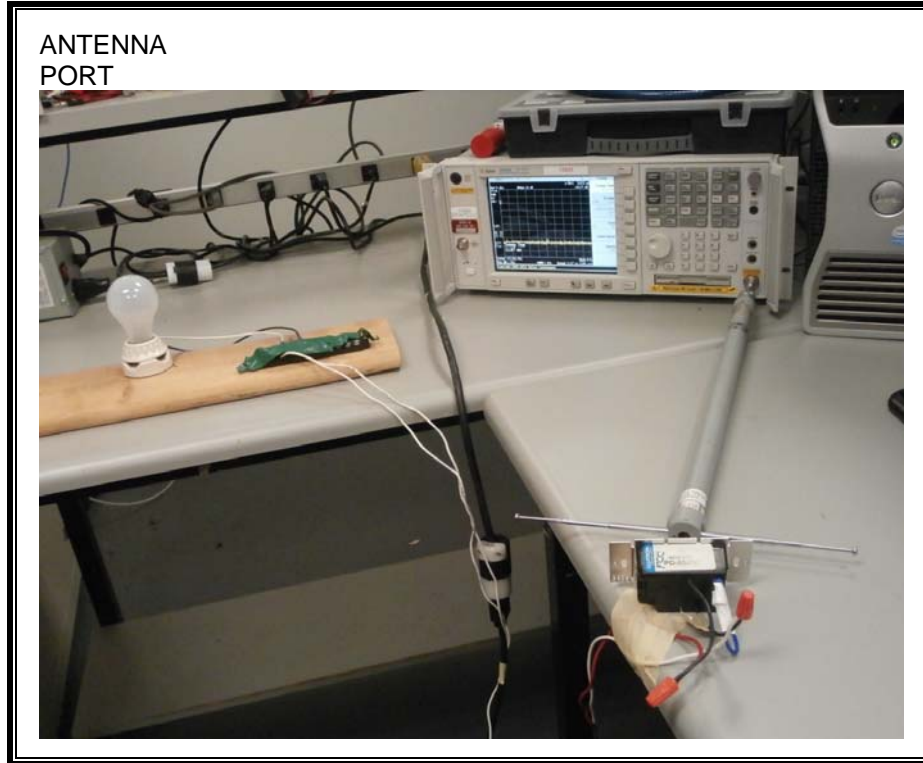


**LINE 2 RESULTS – RX High Channel**

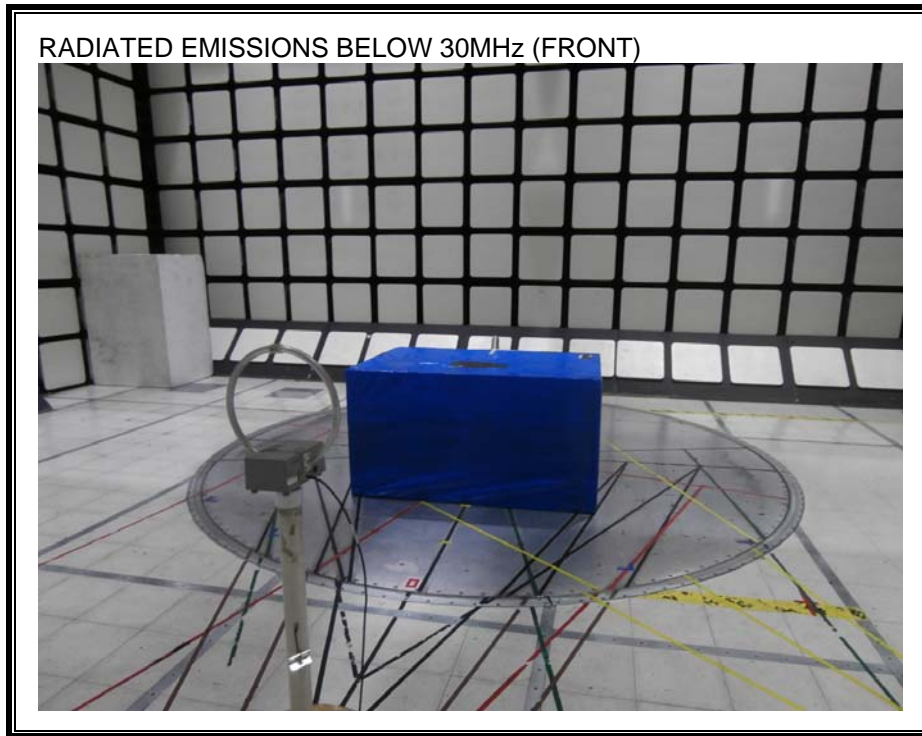


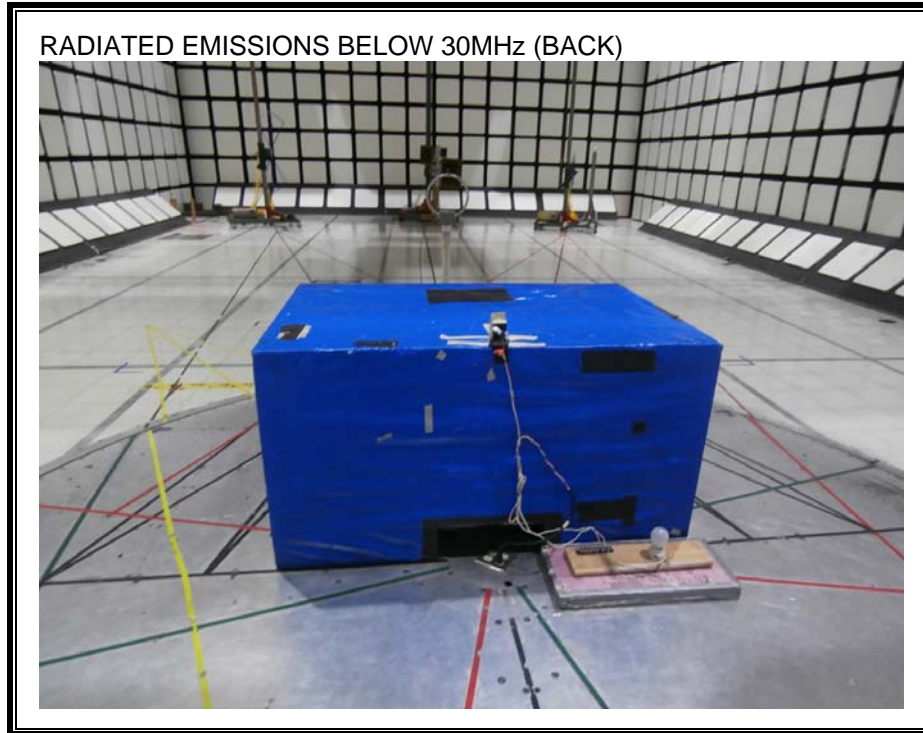
## 10. SETUP PHOTOS

### ANTENNA PORT

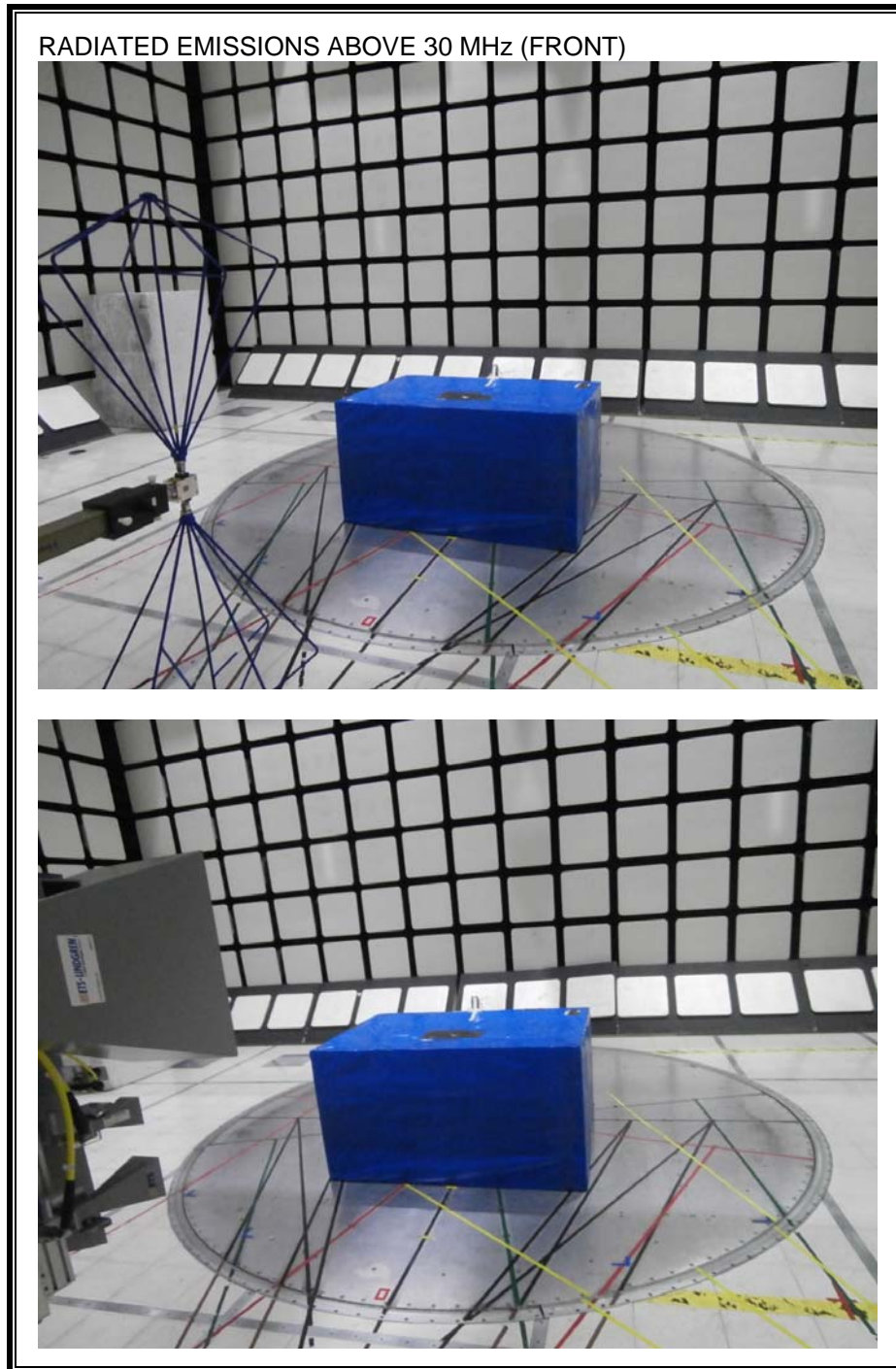


**RADIATED EMISSION BELOW 30 MHz**



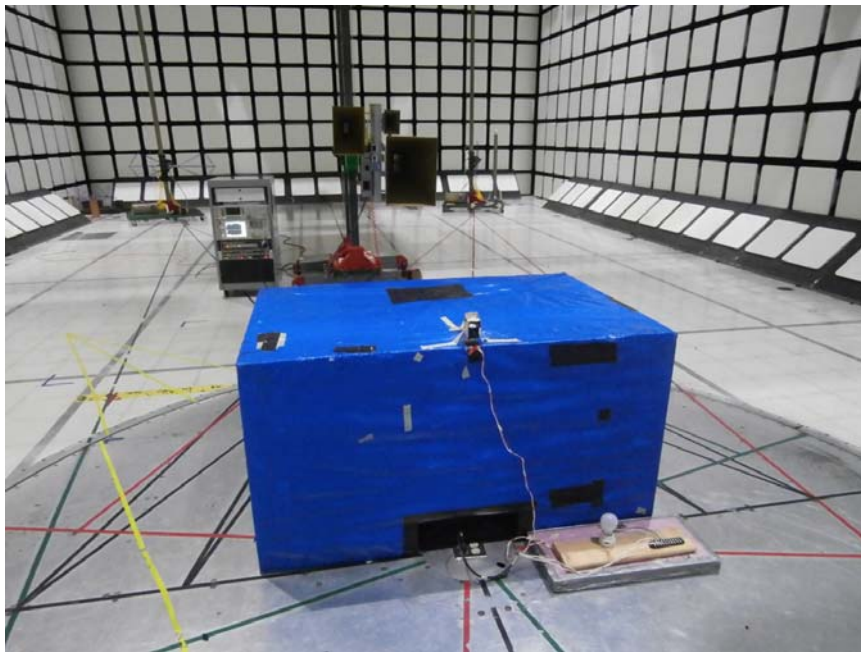
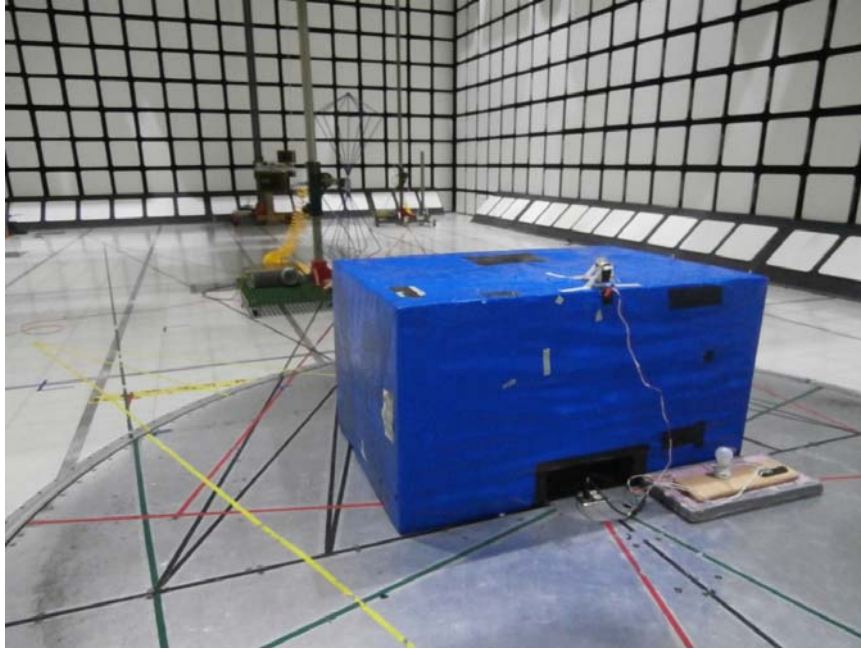


**RADIATED EMISSION ABOVE 30 MHz**





RADIATED EMISSIONS ABOVE 30 MHz (BACK)



**AC MAINS LINE CONDUCTED EMISSION**







**END OF REPORT**