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

CERTIFICATION TEST REPORT

FOR

SWITCH

MODEL NUMBER: RRD-6ANS-DV

FCC ID: JPZ0088
IC: 2851A-JPZ0088

REPORT NUMBER: 1001451341

ISSUE DATE: 2012-01-13
REVISION DATE: 2012-02-29

Prepared for
LUTRON ELECTRONICS INC
7200 SUTTER ROAD
COOPERBURG
PA 18036, USA

Prepared by
UL LLC
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NVLAP LAB CODE 100255-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	2012-01-13	Initial Issue	B. DeLisi
--	2012-02-29	Updated text for Occupied Bandwidth tests and updated duty cycle correction factor and all affected emissions results with new DCF.	B. DeLisi

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LUTRON ELECTRONICS INC
7200 SUTTER ROAD
COOPERBURG, PA 18036, USA

EUT DESCRIPTION: Switch

MODEL: RRD-6ANS-DV

SERIAL NUMBER: Non-serialized production unit

DATE TESTED: 2012-01-06 through 2012-02-29

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:

Joseph Danisi
Lead Engineering Assoicate
UL LLC

Tested By:

Bob DeLisi
Sr. Staff Engineer
UL LLC

2. TEST METHODOLOGY

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

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 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:

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

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

4.3. MEASUREMENT UNCERTAINTY

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

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

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a switch intended for wireless control of lighting devices.

The RRD-6ANS-DV is representative of the following models.

MRF2-6ANS-DV	HQRD-6ANS-DV	RRD-6ANS-DV	CCD-6ANS-DV

The differences between the models are for integration into different system lines. The device is electrically the same.

5.2. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an integral PCB antenna.

5.3. SOFTWARE AND FIRMWARE

The test utility software used during testing was Dmr_3.9_FCC_Working.

5.4. CONFIGURATION AND MODE

The EUT was configured as it would be installed. The junction box used for mounting was constructed of plastic. The EUT was operated at the lowest and highest channels for Radiated and Conducted Emissions. All other tests were conducted on a single channel.

5.5. MODIFICATIONS

No modifications were made during testing.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

None

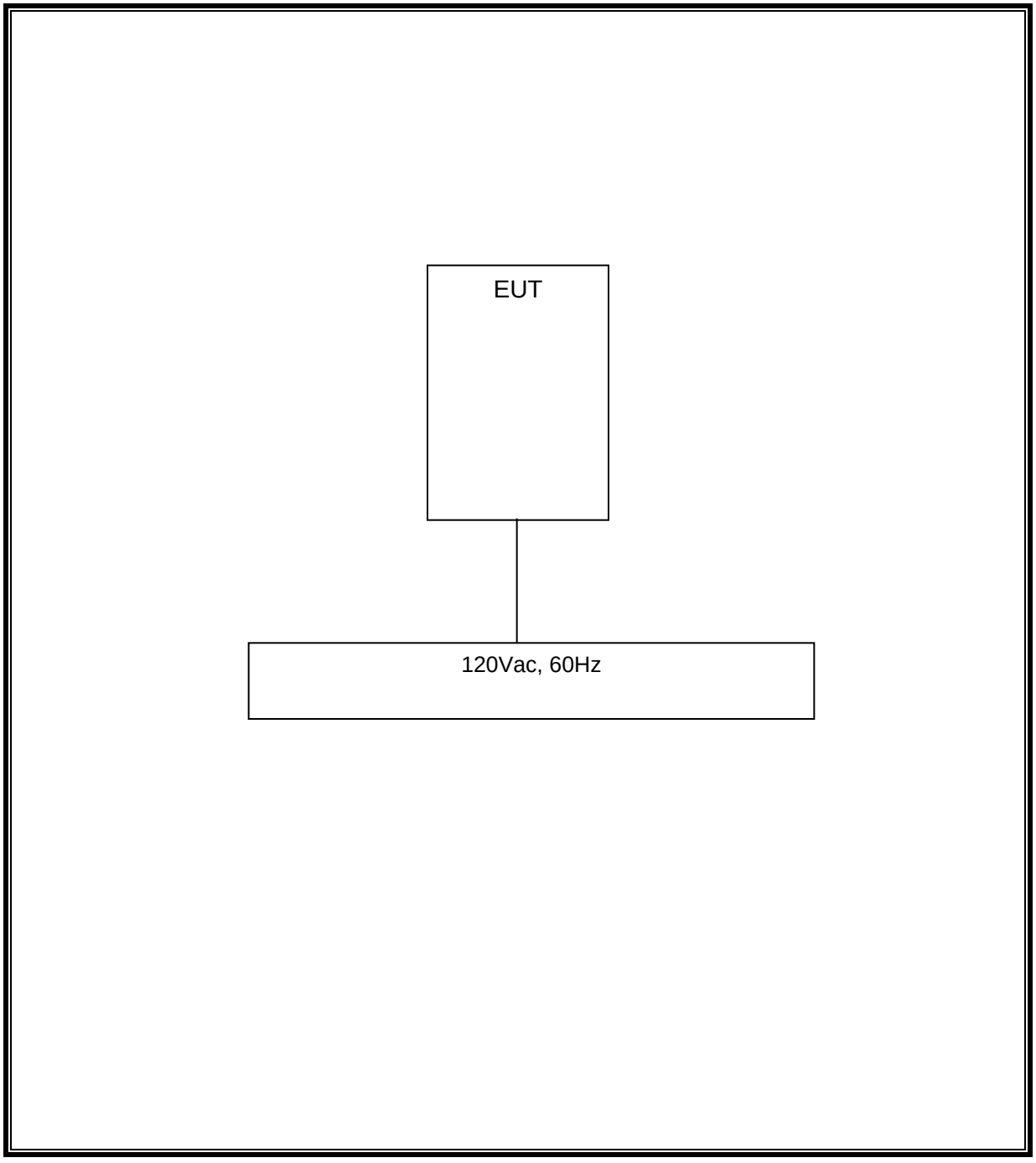
I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identica Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	1	AC Power	Unshielded	1.5m	None

TEST SETUP

The EUT was tested as a standalone device.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment Used					
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
30-1000MHz					
EMI Receiver	Rohde & Schwarz	ESIB40	34968	2011-03-01	2012-03-01
Bicon Antenna	Schaffner	VBA6106A	43441	2011-10-12	2012-10-12
Log-P Antenna	Schaffner	UPA6109	44067	2011-04-29	2012-04-29
Switch Driver	HP	11713A	ME7A-627	N/A	N/A
System Controller	Sunol Sciences	SC99V	44396	N/A	N/A
Camera Controller	Panasonic	WV-CU254	44395	N/A	N/A
RF Switch Box	UL	1	44398	N/A	N/A
Measurement Software	UL	Version 9.5	44740	N/A	N/A
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2010-12-07	2012-12-07
Multimeter	Fluke	83III	ME5B-305	2011-02-01	2012-02-29
Above 1GHz (Band Optimized System)					
Spectrum Analyzer	Agilent	E4446A	72823	2011-07-26	2012-07-26
Horn Antenna (1-2 GHz)	ETS	3161-01	51442	2008-03-28	See * below
Horn Antenna (2-4 GHz)	ETS	3161-02	48107	2007-09-27	See * below
Horn Antenna (4-8 GHz)	ETS	3161-03	48106	2007-09-27	See * below
Signal Path Controller	HP	11713A	50250	N/A	N/A
Gain Controller	HP	11713A	50251	N/A	N/A
RF Switch / Preamp Fixture	UL	BOMS1	50249	N/A	N/A
System Controller	UL	BOMS2	50252	N/A	N/A
Measurement Software	UL	Version 9.5	44740	N/A	N/A
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2010-12-07	2012-12-07
Multimeter	Fluke	83III	ME5B-305	2011-02-01	2012-02-29

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

Test Equipment Used – Conducted Emissions					
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
Conducted Emissions – GP 1					
EMI Receiver	Rohde & Schwarz	ESIB26	ME5B-081	2011-01-27	2012-01-31
LISN	Solar	9252-50-R-24-BNC	ME5A-636	2011-02-04	2012-02-28
Switch Driver	HP	11713A	44397	N/A	N/A
RF Switch Box	UL	4	44404	N/A	N/A
Measurement Software	UL	Version 9.3	44736	N/A	N/A
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	43734	2010-03-08	2012-03-08
Multimeter	Fluke	83III	ME5B-305	2011-02-01	2012-02-29

Test Equipment Used – Occupied Bandwidth/Cease Operation/Duty Cycle					
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
Spectrum Analyzer	Agilent	E4446A	72822	2011-02-07	2012-02-07
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2010-03-08	2012-03-08
Measurement Software	UL	Version 9.3	44740		
Multimeter	Fluke	83III	ME5B-305	2011-02-01	2012-02-29

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 C63.4:2003

The transmitter output is connected to the spectrum analyzer.

20dB Bandwidth and : The RBW is set to 10 KHz. The VBW is set to 300 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 300 KHz. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

RESULTS

No non-compliance noted:

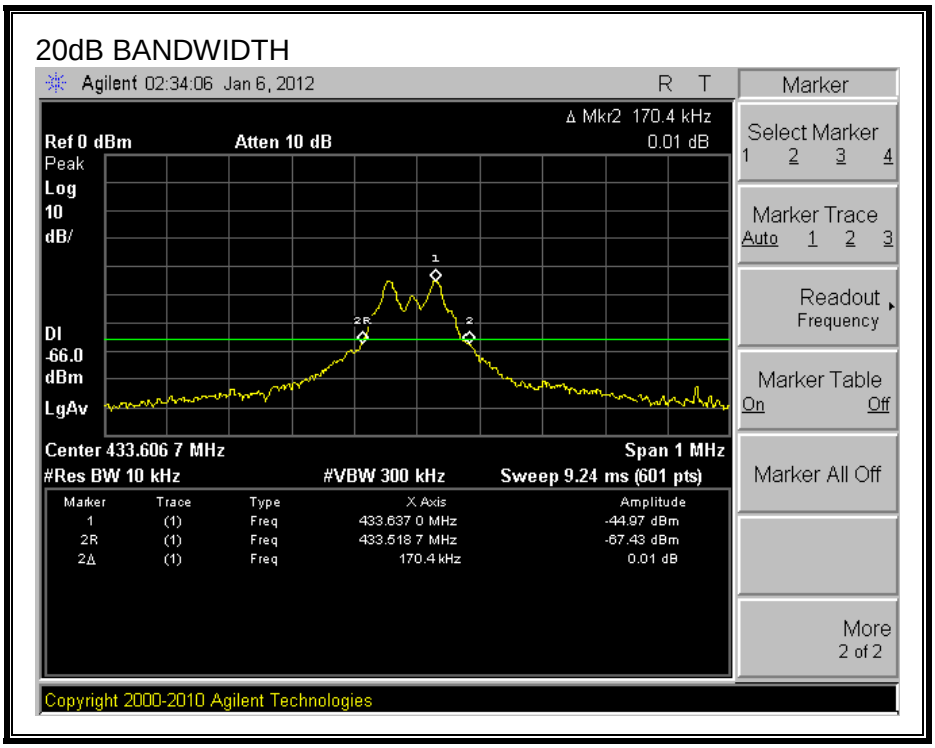
20dB Bandwidth

Frequency (MHz)	20dB Bandwidth (kHz)	Limit (kHz)	Margin (kHz)
433.6	170.4	1084	-913.6

99% Bandwidth

Frequency (MHz)	99% Bandwidth (kHz)	Limit (kHz)	Margin (kHz)
433.6	141.6	1084	-942.4

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

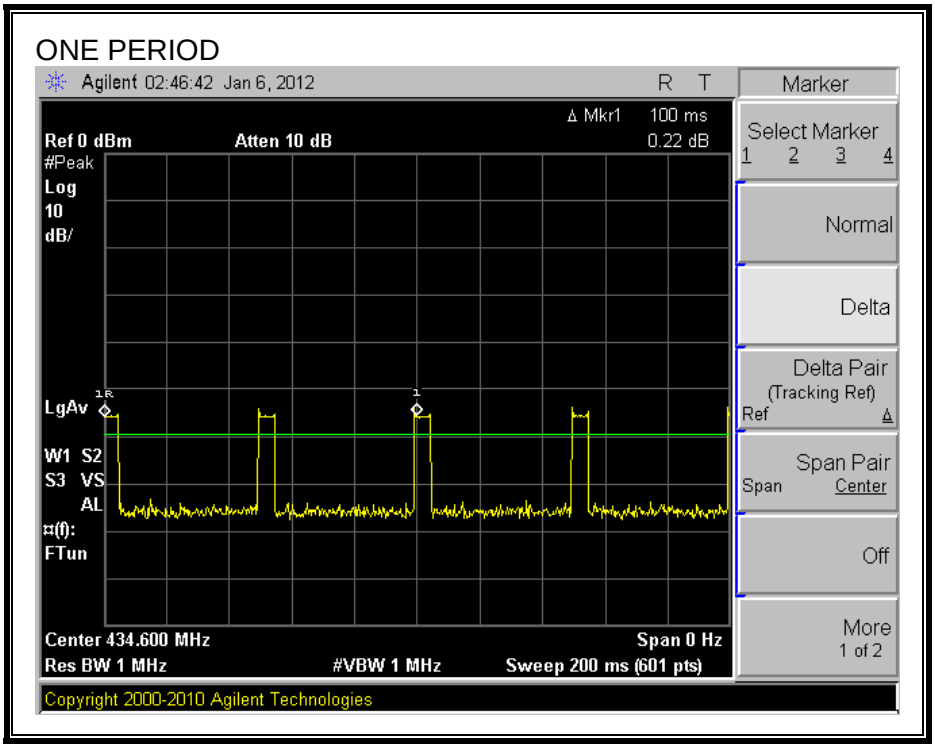
Average Reading = Peak Reading (dBuV/m) + 20log (Duty Cycle), Where Duty Cycle is
(# of long pulses * long pulse width) + (# of short pulses * short pulse width) / 100 or T

RESULTS

No non-compliance noted:

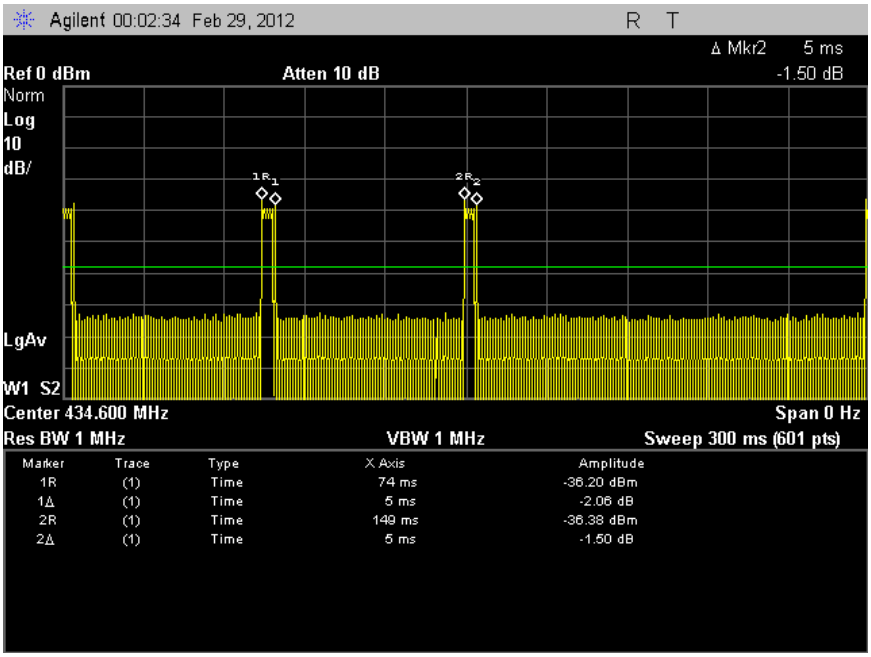
One Period (ms)	Long Pulse Width (ms)	# of Long Pulses	Short Width (ms)	# of Short Pulses	Duty Cycle	20*Log Duty Cycle (dB)
100	5	2	0.00	0	0.100	-20.00

ONE PERIOD



PULSE WIDTHS

LONG 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.

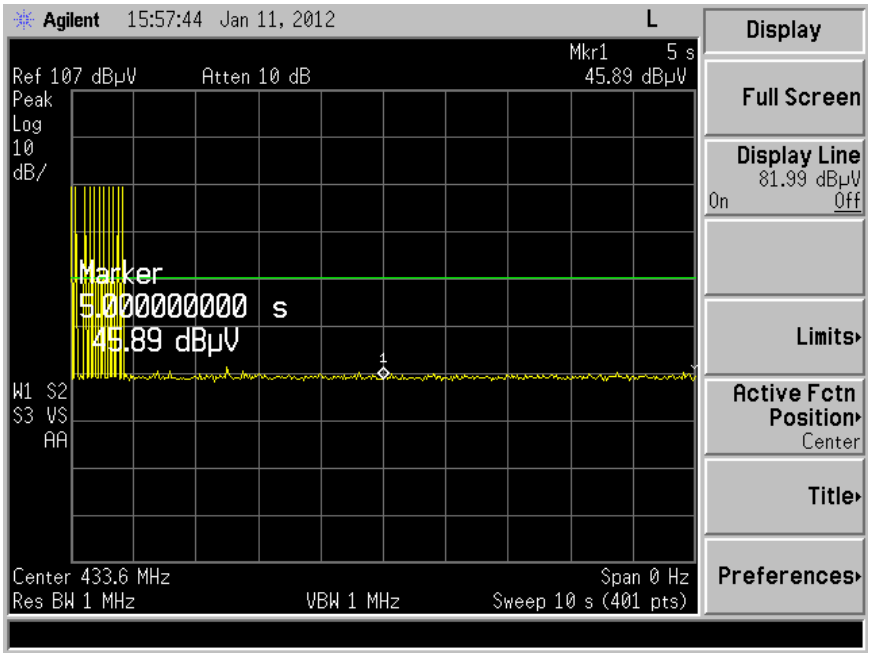
TEST PROCEDURE

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:

LESS THAN 5 SECONDS



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 3,7501	125 to 3751
174 - 260	3,750	375
260 - 470	3,750 to 12,5001	375 to 1,2501
Above 470	12,500	1,250

1 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
[1]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	([2])
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)
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 C63.4:2003. 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.

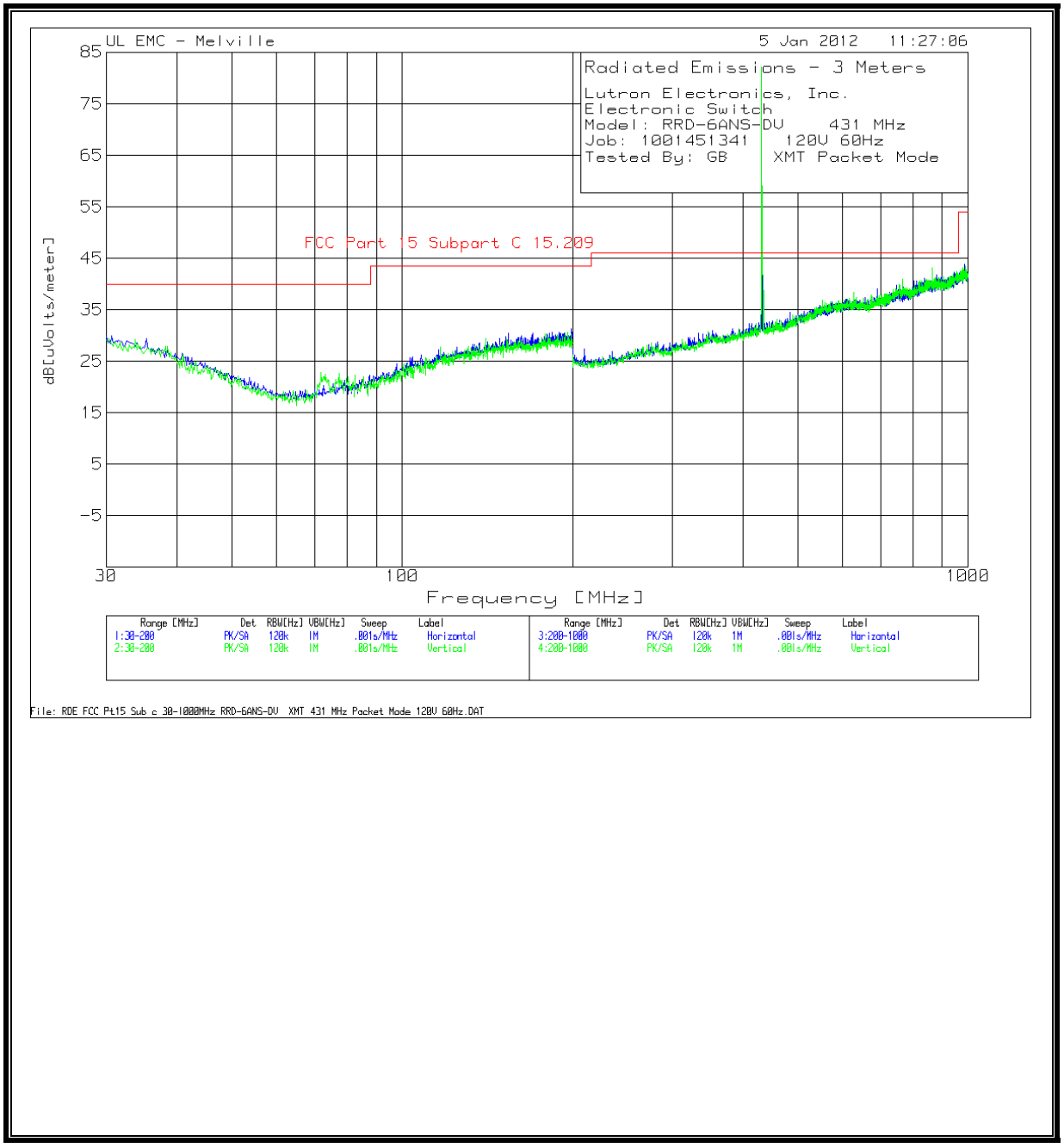
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

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:

FUNDAMENTAL, HARMONICS AND TX SPURIOUS EMISSION (30 – 1000 MHz) 431MHz

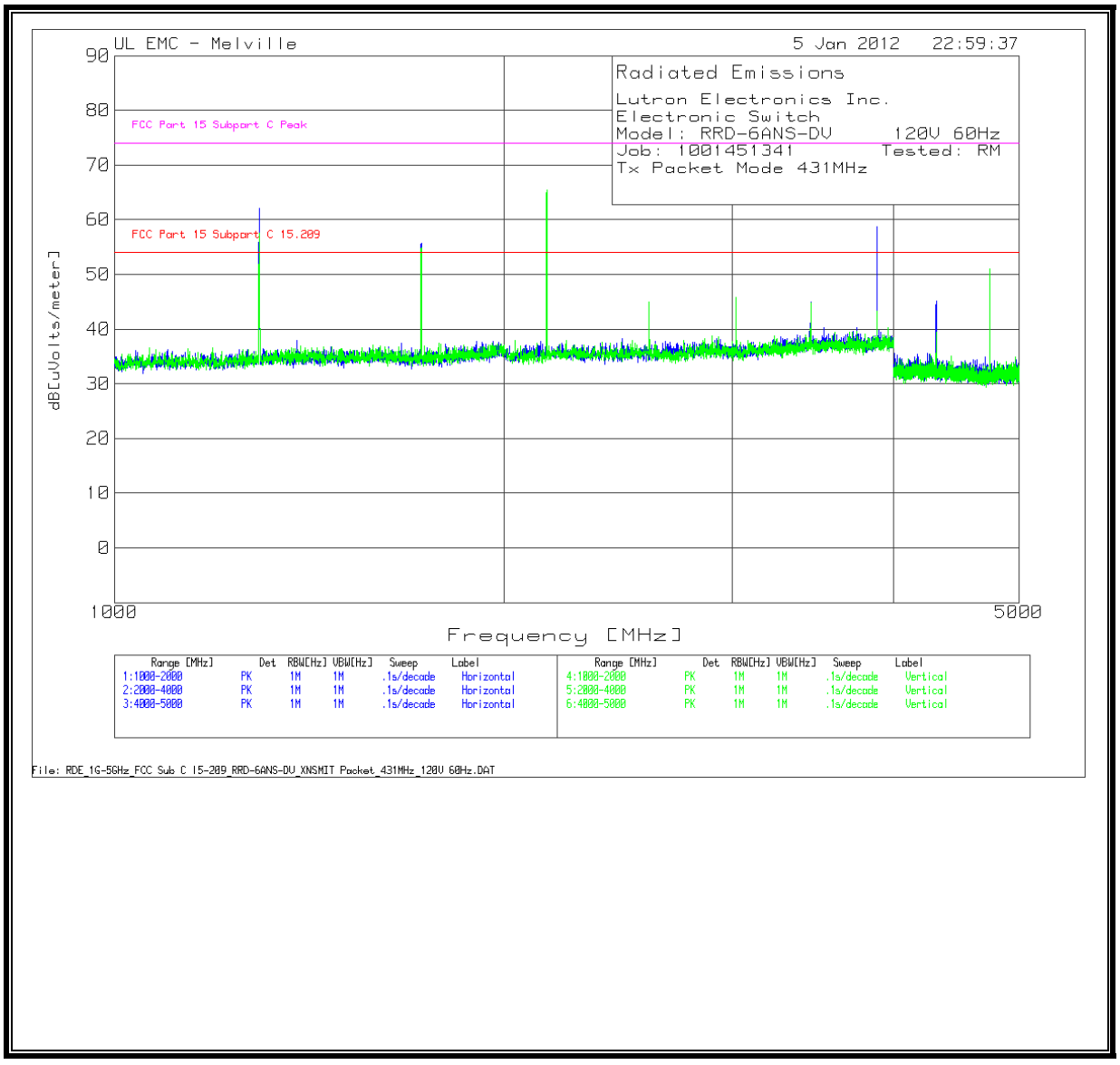


Lutron Electronics, Inc.
Electronic Switch
Model: RRD-6ANS-DV 431 MHz
Job: 1001451341 120V 60Hz
Tested By: GB XMT Packet Mode

Test Frequency	Meter Reading	Detector	AF-43441 [dB]	GL-3M [dB]	dB[uVolts/ meter]	DCF [dB]	Corrected Level dB[uVolts/ meter]	FCC Part 15 Subpart C 15.209	Margin	FCC Part 15 Subpart C 15.231	Margin	FCC Part 15 Subpart C Peak	Margin	Azimuth [Degs]	Height [cm]	Polarity
Horizontal 30 - 200MHz																
35.27	6.09	QP	16.1	0.6	22.79	-	-	40	-17.21	-	-	-	-	98	166	Horz
153.88	7.72	QP	15.1	1.3	24.12	-	-	43.5	-19.38	-	-	-	-	283	305	Horz
Horizontal 200 - 1000MHz																
431.5361	58.23	PK	17	2.3	77.53	-20	57.53	-	-	80.7	-23.17	100.7	-23.17	308	165	Horz
946.2475	9.74	QP	23.7	3.6	37.04	-	-	46	-8.96	-	-	-	-	313	126	Horz
879.5	8.84	QP	23.2	3.5	35.54	-	-	46	-10.46	-	-	-	-	189	206	Horz
Vertical 200 - 1000MHz																
431.5361	61.6	PK	16.5	2.3	80.4	-20	60.4	-	-	80.7	-20.3	100.7	-20.3	235	154	Vert
863.0649	15.42	PK	23.1	3.4	41.92	-20	21.92	-	-	60.7	-38.78	80.7	-38.78	74	310	Vert
432.5	10.58	QP	16.6	2.3	29.48	-	-	46	-16.52	-	-	-	-	158	240	Vert
939.16	8.94	QP	23.7	3.6	36.24	-	-	46	-9.76	-	-	-	-	157	206	Vert

PK - Peak detector (Maximized)
QP - Quasi-Peak detector
LnAv - Linear Average detector
LgAv - Log Average detector
Av - Average detector
CAV - CISPR Average detector
RMS - RMS detection
CRMS - CISPR RMS detection

HARMONICS AND TX SPURIOUS EMISSIONS ABOVE 1GHz 431MHz

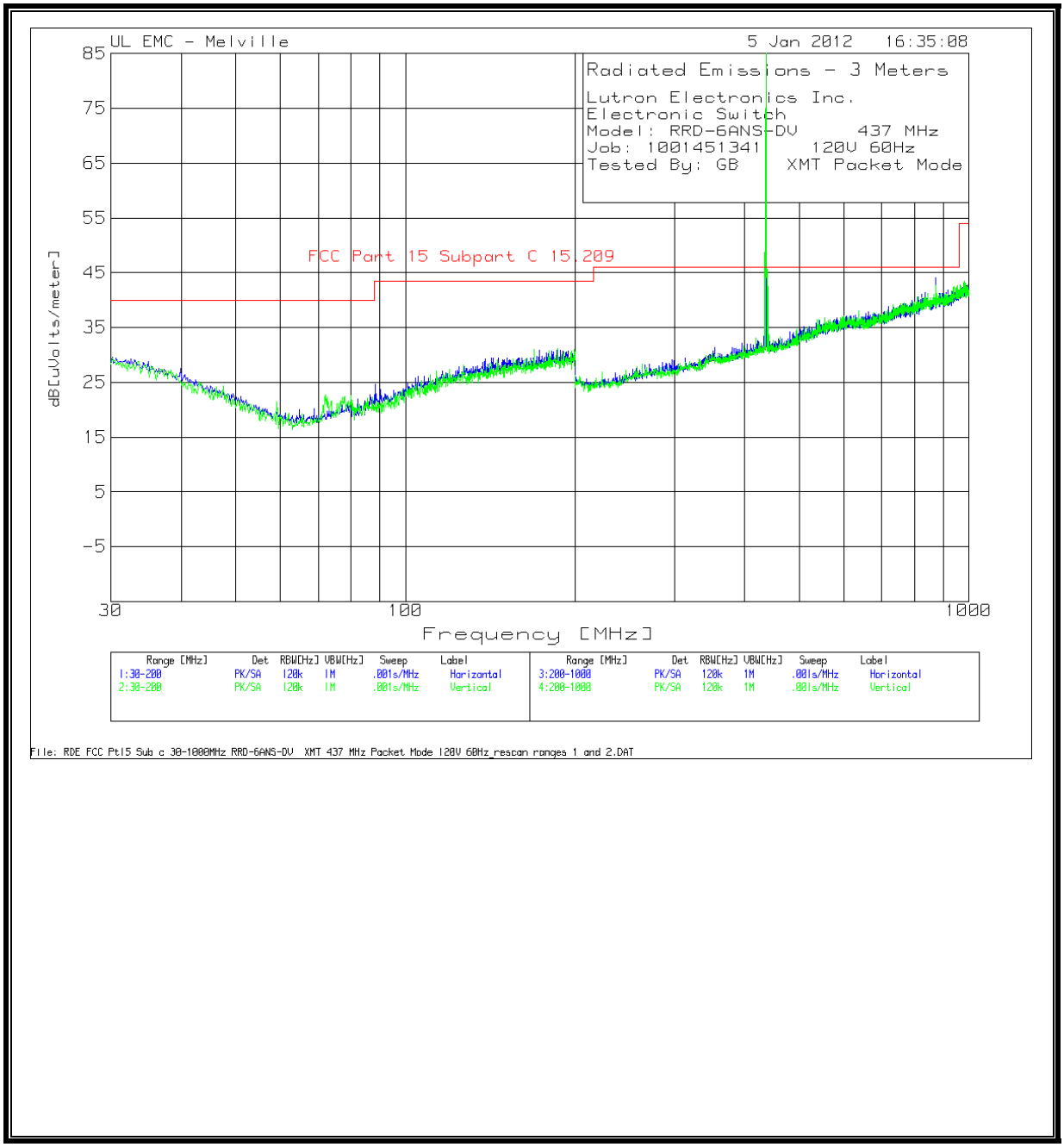


Lutron Electronics Inc.
Electronic Switch
Model: RRD-6ANS-DV 120V 60Hz
Job: 1001451341 Tested: RM
Tx Packet Mode 431MHz

Test Frequency	Meter Reading	Detector	AF-51442 [dB]	BOMS Factor [dB]	dB[uVolts /meter]	DCF [dB]	Corrected Level dB[uVolts/ meter]	FCC Part 15 Subpart C 15.209	Margin	FCC Part 15 Subpart C Peak	Margin	Azimuth [Degs]	Height [cm]	Polarity
Horizontal 1000 - 2000MHz														
1294.631	88.42	PK	20.5	-44.38	64.54	-20	44.54	54	-9.46	74	-9.46	107	258	Horz
1726.135	82.37	PK	20.8	-44.11	59.06	-20	39.06	54	-14.94	74	-14.94	210	370	Horz
Horizontal 2000 - 4000MHz														
2157.272	85.71	PK	21.4	-43.32	63.79	-20	43.79	54	-10.21	74	-10.21	306	334	Horz
2588.815	68.3	PK	21.3	-42.52	47.08	-20	27.08	54	-26.92	74	-26.92	360	306	Horz
3020.31	67.36	PK	21.5	-41.84	47.02	-20	27.02	54	-26.98	74	-26.98	166	160	Horz
3452.225	71.49	PK	22.2	-41.74	51.95	-20	31.95	54	-22.05	74	-22.05	139	339	Horz
3883.135	78.78	PK	22.6	-41.88	59.5	-20	39.5	54	-14.5	74	-14.5	302	276	Horz
Horizontal 4000 - 5000MHz														
4315.316	73.94	PK	27.7	-51.64	50	-20	30	54	-24	74	-24	294	279	Horz
4746.061	76.69	PK	27.2	-52.52	51.37	-20	31.37	54	-22.63	74	-22.63	286	188	Horz
Vertical 1000 - 2000MHz														
1294.619	82.93	PK	20.5	-44.38	59.05	-20	39.05	54	-14.95	74	-14.95	313	313	Vert
1725.873	83.81	PK	20.8	-44.11	60.5	-20	40.5	54	-13.5	74	-13.5	161	293	Vert
Vertical 2000 - 4000MHz														
2157.29	90.71	PK	21	-43.31	68.4	-20	48.4	54	-5.6	74	-5.6	355	285	Vert
2588.815	69.94	PK	21.5	-42.52	48.92	-20	28.92	54	-25.08	74	-25.08	148	198	Vert
3020.745	71.88	PK	21.7	-41.85	51.73	-20	31.73	54	-22.27	74	-22.27	34	245	Vert
3452.335	69.49	PK	22.2	-41.74	49.95	-20	29.95	54	-24.05	74	-24.05	98	350	Vert
3883.875	74.39	PK	22.6	-41.88	55.11	-20	35.11	54	-18.89	74	-18.89	212	367	Vert
Vertical 4000 - 5000MHz														
4314.65	75.58	PK	27.8	-51.65	51.73	-20	31.73	54	-22.27	74	-22.27	249	325	Vert
4746.875	81.02	PK	27.1	-52.51	55.61	-20	35.61	54	-18.39	74	-18.39	129	206	Vert

PK - Peak detector (Maximized)
QP - Quasi-Peak detector
LnAv - Linear Average detector
LgAv - Log Average detector
Av - Average detector
CAV - CISPR Average detector
RMS - RMS detection
CRMS - CISPR RMS detection

FUNDAMENTAL, HARMONICS AND TX SPURIOUS EMISSION (30 – 1000 MHz) 437MHz

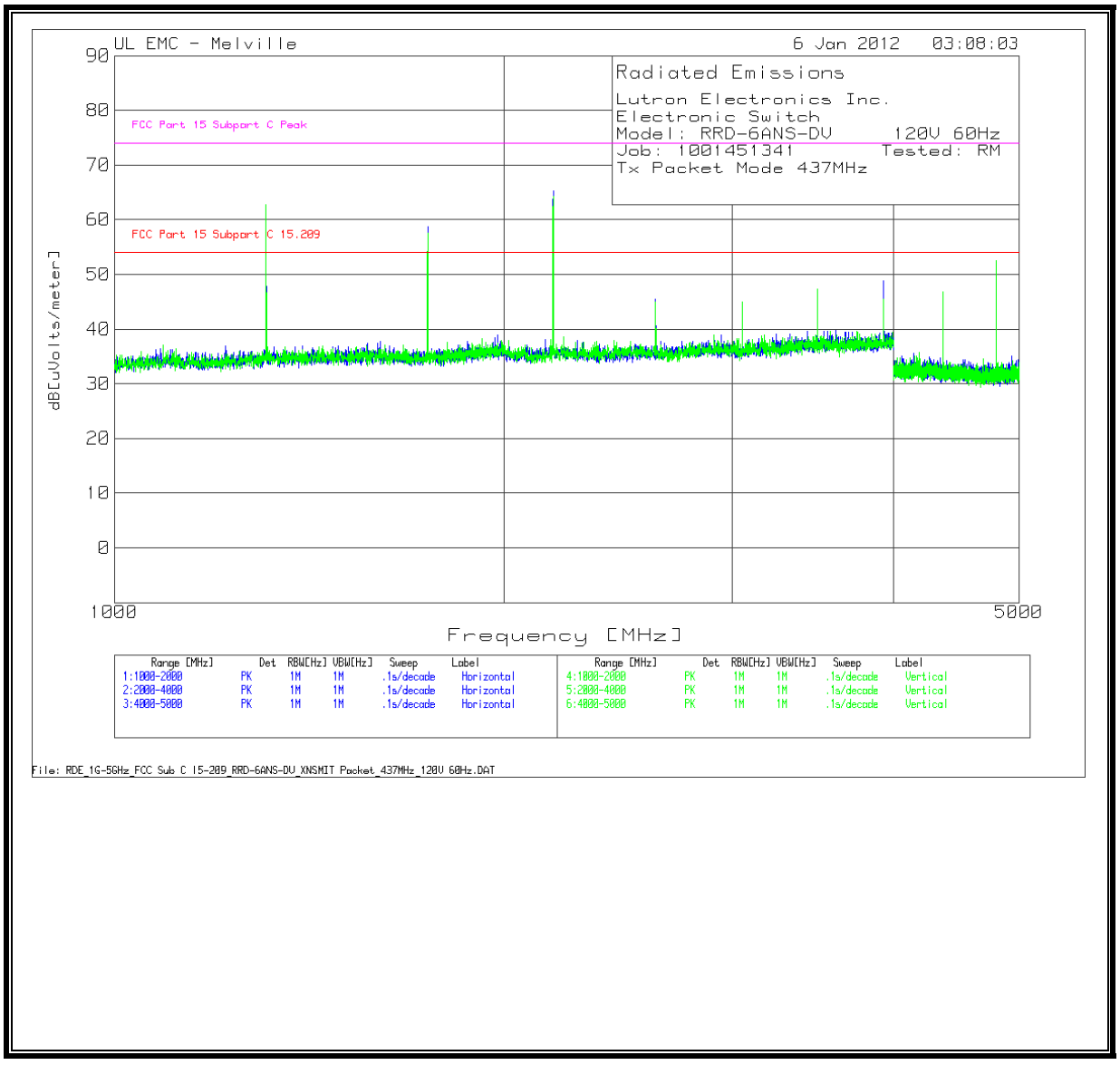


Lutron Electronics Inc.
Electronic Switch
Model: RRD-6ANS-DV 437 MHz
Job: 1001451341 120V 60Hz
Tested By: GB XMT Packet Mode

Test Frequency	Meter Reading	Detector	AF-44067 [dB]	GL-3M [dB]	dB[uVolts /meter]	DCF [dB]	Corrected Level dB[uV/meter]	FCC Part 15 Subpart C 15.209	Margin	FCC Part 15 Subpart C 15.231	Margin	FCC Part 15 Subpart C Peak	Margin	Azimuth [Degs]	Height [cm]	Polarity
Horizontal 200 - 1000MHz																
436.5649	65.66	PK	17.1	2.3	85.06	-20	65.06	-	-	80.9	-15.84	100.9	-15.84	110	163	Horz
435.7	13.41	QP	17.1	2.3	32.81	-	-	46	-13.19	-	-	-	-	100	167	Horz
438.5	8.24	QP	17.2	2.3	27.74	-	-	46	-18.26	-	-	-	-	98	150	Horz
434.5	8.73	QP	17.1	2.3	28.13	-	-	46	-17.87	-	-	-	-	105	165	Horz
873.5	14.87	PK	23.3	3.4	41.57	-	-	46	-4.43	-	-	-	-	24	144	Horz
916.35	8.99	QP	23.3	3.5	35.79	-	-	46	-10.21	-	-	-	-	0	231	Horz
Vertical 200 - 1000MHz																
436.5549	71.06	PK	16.6	2.3	89.96	-20	69.96	-	-	80.9	-10.94	100.9	-10.94	194	160	Vert
873.2345	21.97	PK	23.3	3.4	48.67	-20	28.67	-	-	60.9	-32.23	80.9	-32.23	20	165	Vert
437.3	21.65	QP	16.6	2.3	40.55	-	-	46	-5.45	-	-	-	-	189	186	Vert
439.3	8.52	QP	16.6	2.3	27.42	-	-	46	-18.58	-	-	-	-	194	177	Vert
434.9	13.32	QP	16.6	2.3	32.22	-	-	46	-13.78	-	-	-	-	196	184	Vert
438.1	12.83	QP	16.6	2.3	31.73	-	-	46	-14.27	-	-	-	-	168	185	Vert
438.1	12.6	QP	16.6	2.3	31.5	-	-	46	-14.5	-	-	-	-	168	185	Vert
903.15	8.99	QP	23.2	3.5	35.69	-	-	46	-10.31	-	-	-	-	100	199	Vert
939.16	8.99	QP	23.7	3.6	36.29	-	-	46	-9.71	-	-	-	-	82	107	Vert

PK - Peak detector (Maximized)
QP - Quasi-Peak detector
LnAv - Linear Average detector
LgAv - Log Average detector
Av - Average detector
CAV - CISPR Average detector
RMS - RMS detection
CRMS - CISPR RMS detection

HARMONICS AND TX SPURIOUS EMISSIONS ABOVE 1GHz 437MHz



Lutron Electronics Inc.
Electronic Switch
Model: RRD-6ANS-DV 120V 60Hz
Job: 1001451341 Tested: RM
Tx Packet Mode 437MHz

Test Frequency	Meter Reading	Detector	AF-51442 [dB]	BOMS Factor [dB]	dB[uVolts /meter]	DCF [dB]	Corrected Level dB[uVolts /meter]	FCC Part 15 Subpart C 15.209	Margin	FCC Part 15 Subpart C Peak	Margin	Azimuth [Degs]	Height [cm]	Polarity
Horizontal 1000 - 2000MHz														
1309.935	88.56	PK	20.5	-44.37	64.69	-20	44.69	54	-9.31	74	-9.31	75	253	Horz
1746.43	84.36	PK	20.8	-44.15	61.01	-20	41.01	54	-12.99	74	-12.99	98	275	Horz
Horizontal 2000 - 4000MHz														
2183.16	90.52	PK	21.4	-43.19	68.73	-20	48.73	54	-5.27	74	-5.27	79	305	Horz
2619.814	69.14	PK	21.4	-42.51	48.03	-20	28.03	54	-25.97	74	-25.97	243	262	Horz
3056.44	69.3	PK	21.6	-41.86	49.04	-20	29.04	54	-24.96	74	-24.96	169	336	Horz
3492.495	72.74	PK	22.2	-41.73	53.21	-20	33.21	54	-20.79	74	-20.79	156	319	Horz
3929.003	73.95	PK	22.7	-41.73	54.92	-20	34.92	54	-19.08	74	-19.08	297	275	Horz
Horizontal 4000 - 5000MHz														
4366.318	77.02	PK	27.6	-51.63	52.99	-20	32.99	54	-21.01	74	-21.01	283	388	Horz
4802.198	78.02	PK	27.1	-52.51	52.61	-20	32.61	54	-21.39	74	-21.39	174	383	Horz
Vertical 1000 - 2000MHz														
1309.871	88.77	PK	20.5	-44.37	64.9	-20	44.9	54	-9.1	74	-9.1	179	268	Vert
1746.216	83.55	PK	20.8	-44.15	60.2	-20	40.2	54	-13.8	74	-13.8	314	256	Vert
Vertical 2000 - 4000MHz														
2182.787	95.7	PK	21.2	-43.2	73.7	-20	53.7	54	-0.3	74	-0.3	0	380	Vert
2619.439	69.43	PK	21.4	-42.51	48.32	-20	28.32	54	-25.68	74	-25.68	234	380	Vert
3055.932	71.61	PK	21.8	-41.86	51.55	-20	31.55	54	-22.45	74	-22.45	34	193	Vert
3493.128	68.27	PK	22.4	-41.73	48.94	-20	28.94	54	-25.06	74	-25.06	87	237	Vert
3929.082	72.7	PK	22.7	-41.73	53.67	-20	33.67	54	-20.33	74	-20.33	166	302	Vert
Vertical 4000 - 5000MHz														
4365.616	76.57	PK	27.7	-51.63	52.64	-20	32.64	54	-21.36	74	-21.36	190	389	Vert
4802.208	81.96	PK	27.3	-52.51	56.75	-20	36.75	54	-17.25	74	-17.25	136	201	Vert

PK - Peak detector (Maximized)
QP - Quasi-Peak detector
LnAv - Linear Average detector
LgAv - Log Average detector
Av - Average detector
CAV - CISPR Average detector
RMS - RMS detection
CRMS - CISPR RMS detection

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 (dBµV/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 C63.4:2003. 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.

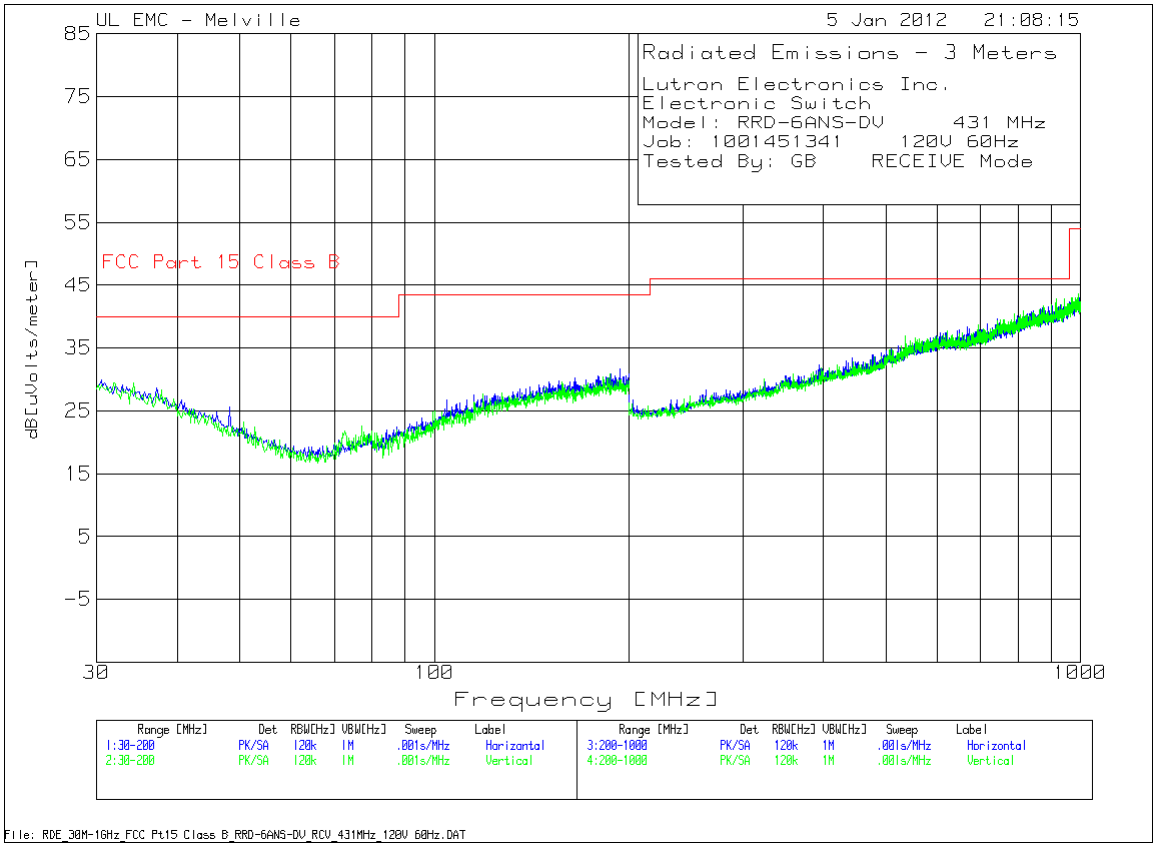
The spectrum from 30 MHz to 5th harmonic is investigated with the transmitter set to the middle channel.

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

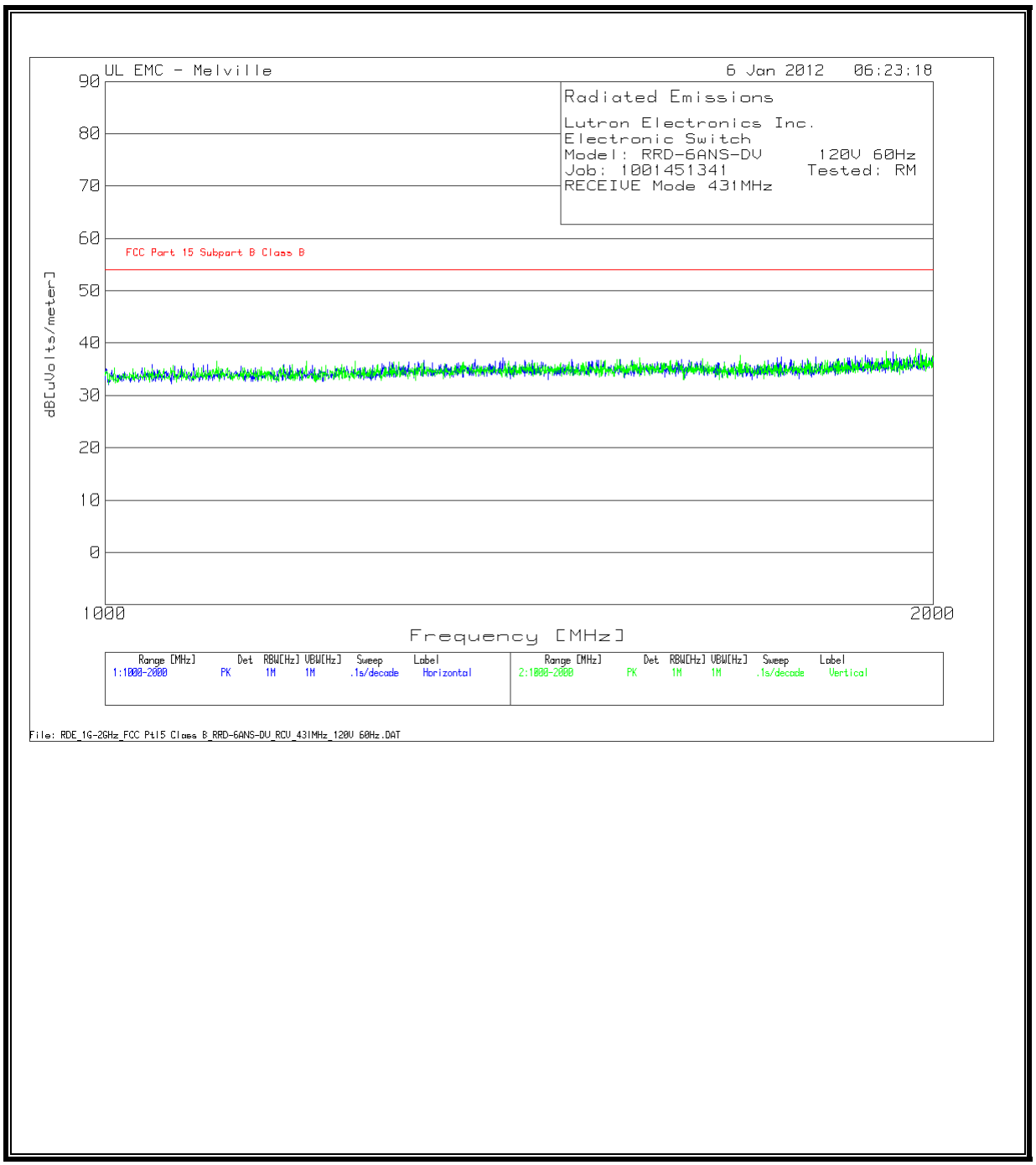
No non-compliance noted:

RECEIVER SPURIOUS EMISSION (30MHz - 1GHz) 431MHz



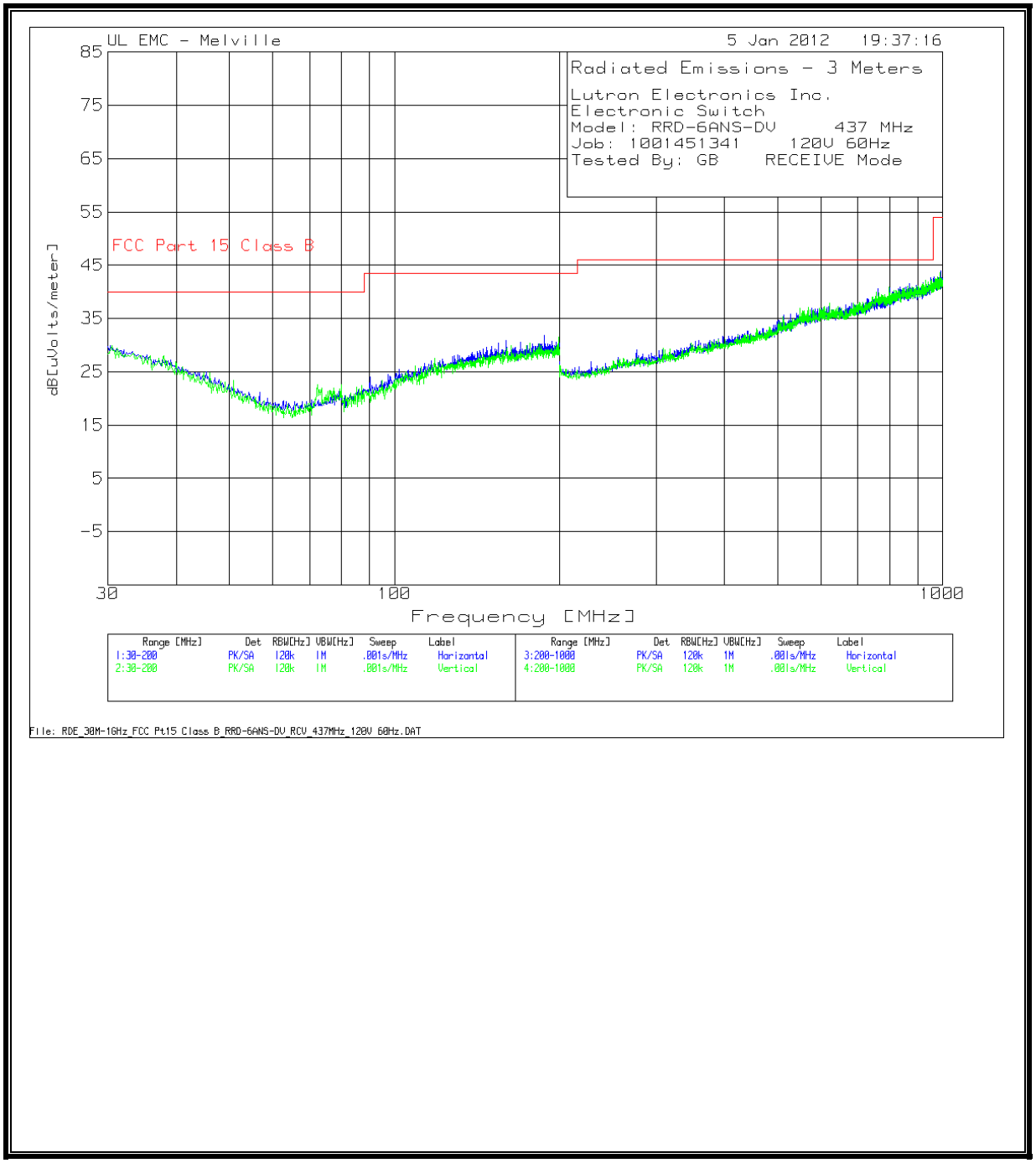
Lutron Electronics Inc.										
Electronic Switch										
Model: RRD-6ANS-DV 431 MHz										
Job: 1001451341 120V 60Hz										
Tested By: GB RECEIVE Mode										
Test Frequency	Meter Reading	Detector	AF-43441 [dB]	GL-3M [dB]	dB[uVolts/ meter]	FCC Part 15 Class B	Margin	Azimuth [Degs]	Height [cm]	Polarity
Horizontal 30 - 200MHz										
193.5335	14.42	PK	15.7	1.5	31.62	43.5	-11.88	182	100	Horz
Vertical 30 - 200MHz										
187.0671	13.62	PK	15.7	1.5	30.82	43.5	-12.68	88	100	Vert
Horizontal 200 - 1000MHz										
742.2711	14.86	PK	21.6	3.2	39.66	46	-6.34	342	300	Horz
912.7564	15.35	PK	23.3	3.5	42.15	46	-3.85	190	300	Horz
Vertical 200 - 1000MHz										
788.6943	15.21	PK	22.1	3.2	40.51	46	-5.49	171	300	Vert
945.5728	15.25	PK	24	3.6	42.85	46	-3.15	359	400	Vert
Horizontal 200 - 1000MHz										
742.27	8.57	QP	21.6	3.2	33.37	46	-12.63	122	134	Horz
912.76	8.94	QP	23.3	3.5	35.74	46	-10.26	126	177	Horz
Vertical 200 - 1000MHz										
788.69	8.57	QP	22.1	3.2	33.87	46	-12.13	155	230	Vert
945.57	8.99	QP	24	3.6	36.59	46	-9.41	19	107	Vert
PK - Peak detector										
QP - Quasi-Peak detector										
LnAv - Linear Average detector										
LgAv - Log Average detector										
Av - Average detector										
CAV - CISPR Average detector										
RMS - RMS detection										
CRMS - CISPR RMS detection										

RECEIVER SPURIOUS EMISSION ABOVE 1GHz 431MHz



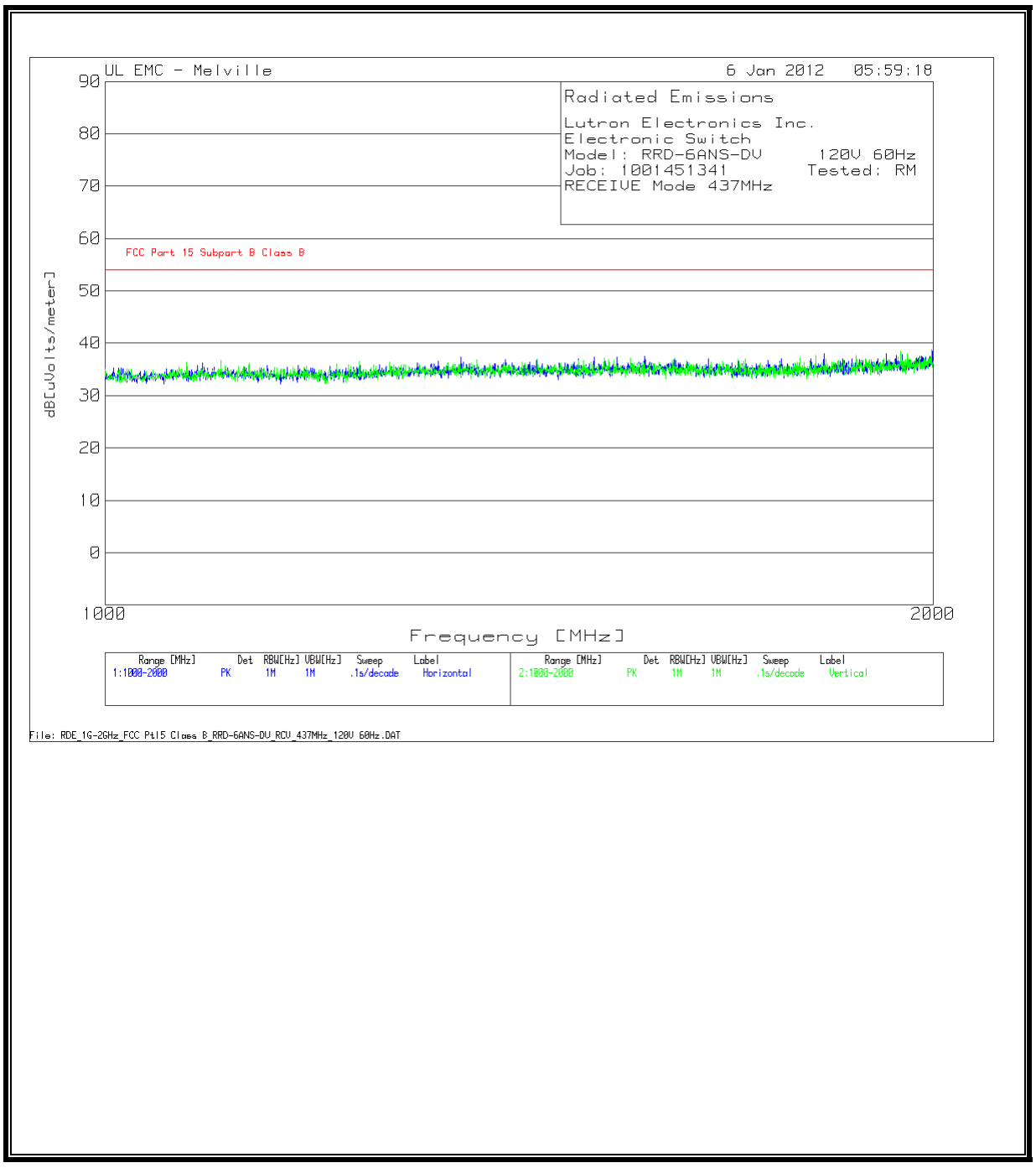
Lutron Electronics Inc.										
Electronic Switch										
Model: RRD-6ANS-DV 120V 60Hz										
Job: 1001451341 Tested: RM										
RECEIVE Mode 431MHz										
Test Frequency	Meter Reading	Detector	AF-51442 [dB]	BOMS Factor [dB]	dB[uVolts /meter]	FCC Part 15 Subpart B Class B	Margin	Azimuth [Degs]	Height [cm]	Polarity
Horizontal 1000 - 2000MHz										
1076.962	60.8	PK	19.8	-44.61	35.99	54	-18.01	154	249	Horz
1394.803	60.78	PK	20.7	-44.32	37.16	54	-16.84	284	249	Horz
1934.033	60.21	PK	21.8	-43.71	38.3	54	-15.7	103	249	Horz
Vertical 1000 - 2000MHz										
1183.408	61.14	PK	19.8	-44.38	36.56	54	-17.44	77	99	Vert
1702.149	61.19	PK	20.7	-44.2	37.69	54	-16.31	27	250	Vert
1970.515	60.61	PK	22	-43.61	39	54	-15	130	99	Vert
PK - Peak detector										
QP - Quasi-Peak detector										
LnAv - Linear Average detector										
LgAv - Log Average detector										
Av - Average detector										
CAV - CISPR Average detector										
RMS - RMS detection										
CRMS - CISPR RMS detection										

RECEIVER SPURIOUS EMISSION (30MHz - 1GHz) 437MHz



Lutron Electronics Inc.										
Electronic Switch										
Model: RRD-6ANS-DV 437 MHz										
Job: 1001451341 120V 60Hz										
Tested By: GB RECEIVE Mode										
Test Frequency	Meter Reading	Detector	AF-43441 [dB]	GL-3M [dB]	dB[uVolts /meter]	FCC Part 15 Class B	Margin	Azimuth [Degs]	Height [cm]	Polarity
Horizontal 30 - 200MHz										
187.9179	14.49	PK	15.8	1.5	31.79	43.5	-11.71	179	400	Horz
Vertical 30 - 200MHz										
176.5165	13.63	PK	15.4	1.4	30.43	43.5	-13.07	239	100	Vert
Horizontal 200 - 1000MHz										
762.2811	15.77	PK	21.7	3.1	40.57	46	-5.43	138	300	Horz
950.3752	15.17	PK	23.9	3.6	42.67	46	-3.33	19	300	Horz
Vertical 200 - 1000MHz										
799.4998	15.21	PK	22.4	3.3	40.91	46	-5.09	239	200	Vert
953.977	14.48	PK	24.2	3.6	42.28	46	-3.72	358	300	Vert
Horizontal 200 - 1000MHz										
762.28	8.84	QP	21.7	3.1	33.64	46	-12.36	135	113	Horz
950.38	8.89	QP	23.9	3.6	36.39	46	-9.61	52	101	Horz
Vertical 200 - 1000MHz										
799.49	8.57	QP	22.4	3.3	34.27	46	-11.73	125	192	Vert
953.98	8.89	QP	24.2	3.6	36.69	46	-9.31	11	100	Vert
PK - Peak detector										
QP - Quasi-Peak detector										
LnAv - Linear Average detector										
LgAv - Log Average detector										
Av - Average detector										
CAV - CISPR Average detector										
RMS - RMS detection										
CRMS - CISPR RMS detection										

RECEIVER SPURIOUS EMISSION ABOVE 1GHz 437MHz



Lutron Electronics Inc.										
Electronic Switch										
Model: RRD-6ANS-DV 120V 60Hz										
Job: 1001451341 Tested: RM										
RECEIVE Mode 437MHz										
Test Frequency	Meter Reading	Detector	AF-51442 [dB]	BOMS Factor [dB]	dB[uVolts /meter]	FCC Part 15 Subpart B Class B	Margin	Azimuth [Degs]	Height [cm]	Polarity
Horizontal 1000 - 2000MHz										
1347.326	61.09	PK	20.6	-44.3	37.39	54	-16.61	6	99	Horz
1535.232	60.83	PK	20.9	-44.33	37.4	54	-16.6	357	250	Horz
1825.087	60.79	PK	21.2	-44.05	37.94	54	-16.06	308	250	Horz
Vertical 1000 - 2000MHz										
1101.949	61.29	PK	20	-44.53	36.76	54	-17.24	181	250	Vert
1708.646	60.51	PK	20.7	-44.24	36.97	54	-17.03	231	250	Vert
1946.027	60.42	PK	21.9	-43.82	38.5	54	-15.5	156	99	Vert
PK - Peak detector										
QP - Quasi-Peak detector										
LnAv - Linear Average detector										
LgAv - Log Average detector										
Av - Average detector										
CAV - CISPR Average detector										
RMS - RMS detection										
CRMS - CISPR RMS detection										

9. AC MAINS LINE CONDUCTED EMISSIONS

LIMITS

§15.207 (a)
IC RSS-GEN, Section 7.2.2

Frequency of emission (MHz)	Conducted Limit (dBµV)	
	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 C63.4:2003

RESULTS

No non-compliance noted:

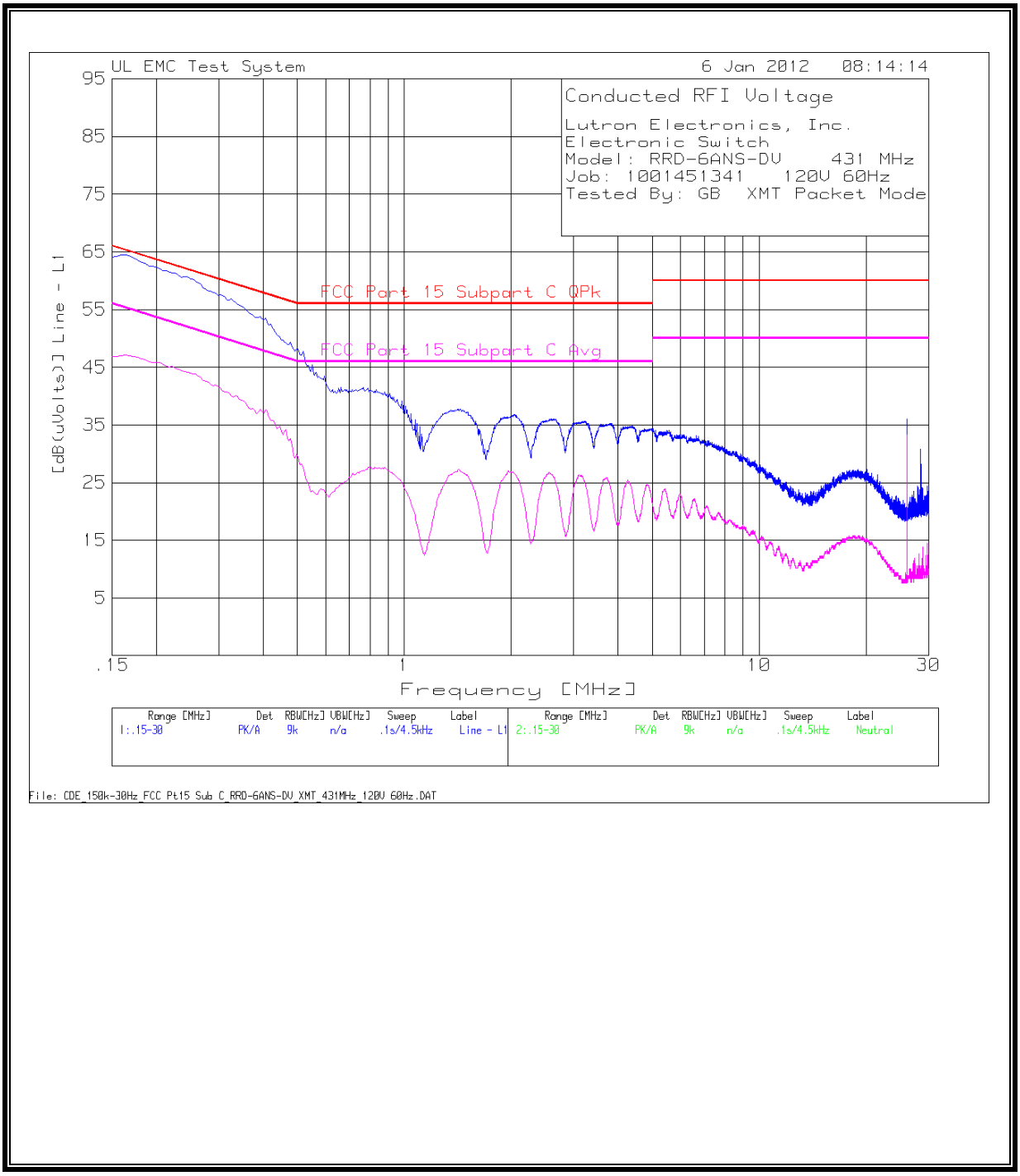
6 WORST EMISSIONS

Lutron Electronics, Inc.
Electronic Switch
Model: RRD-6ANS-DV 431 MHz
Job: 1001451341 120V 60Hz
Tested By: GB XMT Packet Mode

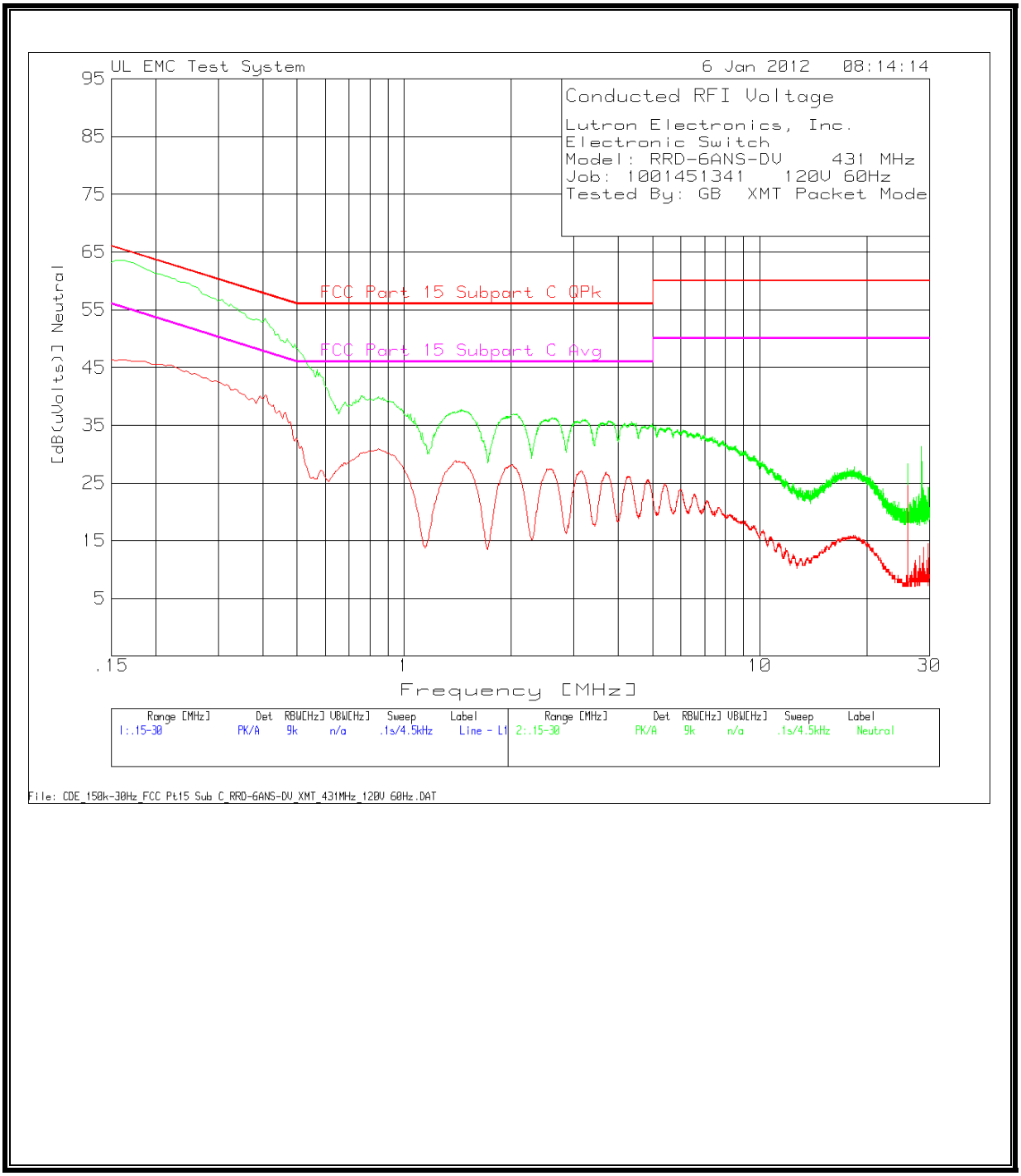
Test Frequency	Meter Reading	Detector	5A636 with Tl and Sw Line 1 [dB]	[dB(uVolts)]	FCC Part 15 Subpart C QPk	Margin	FCC Part 15 Subpart C Avg	Margin
Line - L1 .15 - 30MHz								
0.159	35.52	Av	11.5	47.02	65.5	-18.48	55.5	-8.48
0.168	35.63	Av	11.4	47.03	65.1	-18.07	55.1	-8.07
0.195	34.67	Av	11.2	45.87	63.8	-17.93	53.8	-7.93
0.2265	33.8	Av	11	44.8	62.6	-17.8	52.6	-7.8
0.2625	32.72	Av	10.8	43.52	61.4	-17.88	51.4	-7.88
0.3435	28.87	Av	10.6	39.47	59.1	-19.63	49.1	-9.63
Neutral .15 - 30MHz								
0.159	34.86	Av	11.5	46.36	65.5	-19.14	55.5	-9.14
0.159	34.86	Av	11.5	46.36	65.5	-19.14	55.5	-9.14
0.186	34.84	Av	11.2	46.04	64.2	-18.16	54.2	-8.16
0.222	34.36	Av	11	45.36	62.7	-17.34	52.7	-7.34
0.258	33.04	Av	10.9	43.94	61.5	-17.56	51.5	-7.56
0.339	30.41	Av	10.7	41.11	59.2	-18.09	49.2	-8.09
Line - L1 .15 - 30MHz								
0.1581	47.49	QP	11.5	58.99	65.56	-6.57	55.56	3.43
0.1725	46.73	QP	11.3	58.03	64.84	-6.81	54.84	3.19
0.195	45.94	QP	11.2	57.14	63.82	-6.68	53.82	3.32
0.2229	44.91	QP	11	55.91	62.71	-6.8	52.71	3.2
0.258	43.46	QP	10.8	54.26	61.5	-7.24	51.5	2.76
0.3093	40.96	QP	10.7	51.66	59.99	-8.33	49.99	1.67
0.3615	38.57	QP	10.6	49.17	58.69	-9.52	48.69	0.48
0.4038	36.76	QP	10.6	47.36	57.77	-10.41	47.77	-0.41
Neutral .15 - 30MHz								
0.1608	46.64	QP	11.5	58.14	65.42	-7.28	55.42	2.72
0.1689	46.58	QP	11.4	57.98	65.01	-7.03	55.01	2.97
0.2094	45.3	QP	11.1	56.4	63.23	-6.83	53.23	3.17
0.2355	43.69	QP	10.9	54.59	62.25	-7.66	52.25	2.34
0.267	42.09	QP	10.8	52.89	61.21	-8.32	51.21	1.68
0.3039	40.49	QP	10.7	51.19	60.14	-8.95	50.14	1.05
0.3435	38.78	QP	10.6	49.38	59.12	-9.74	49.12	0.26
0.4065	37.05	QP	10.6	47.65	57.72	-10.07	47.72	-0.07

PK - Peak detector
QP - Quasi-Peak detector
LnAv - Linear Average detector
LgAv - Log Average detector
Av - Average detector
CAV - CISPR Average detector
RMS - RMS detection
CRMS - CISPR RMS detection

LINE 1 RESULTS



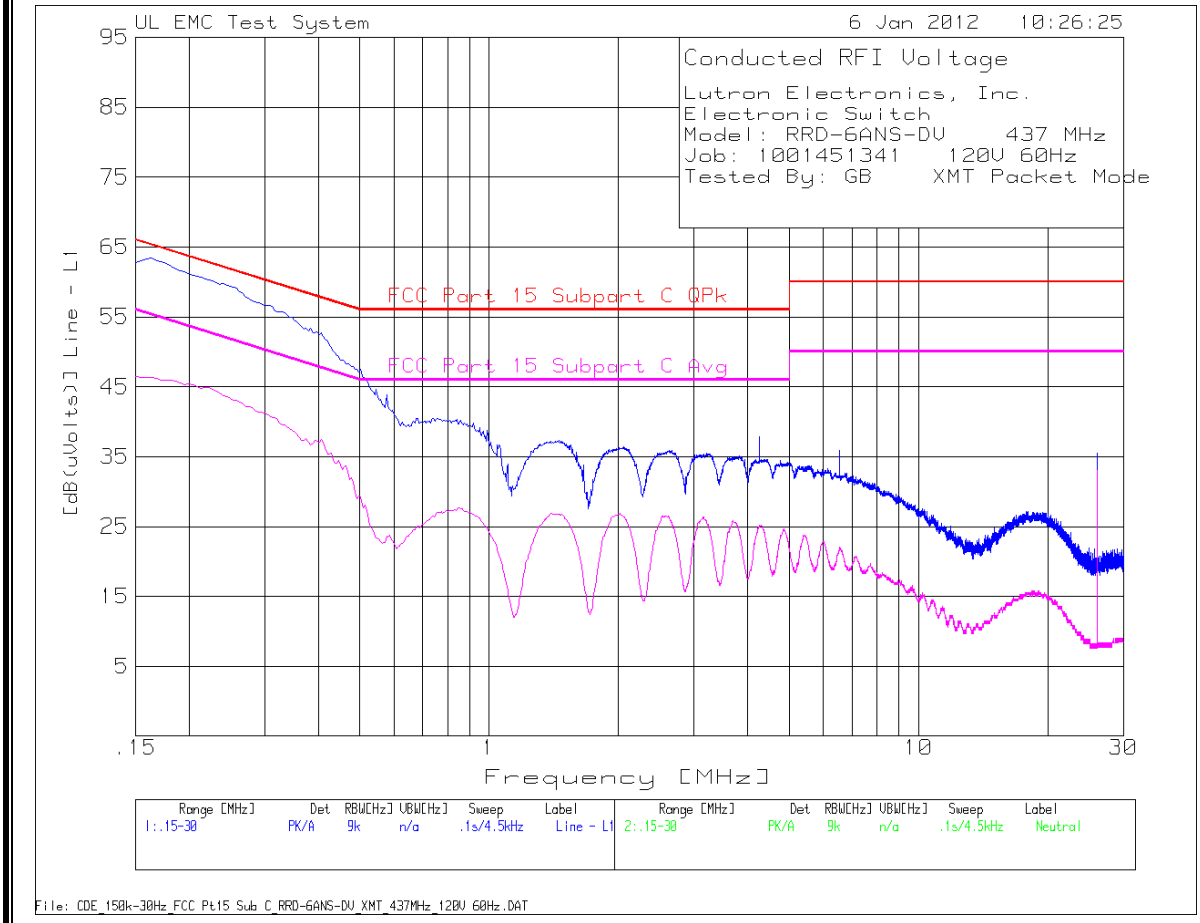
LINE 2 RESULTS



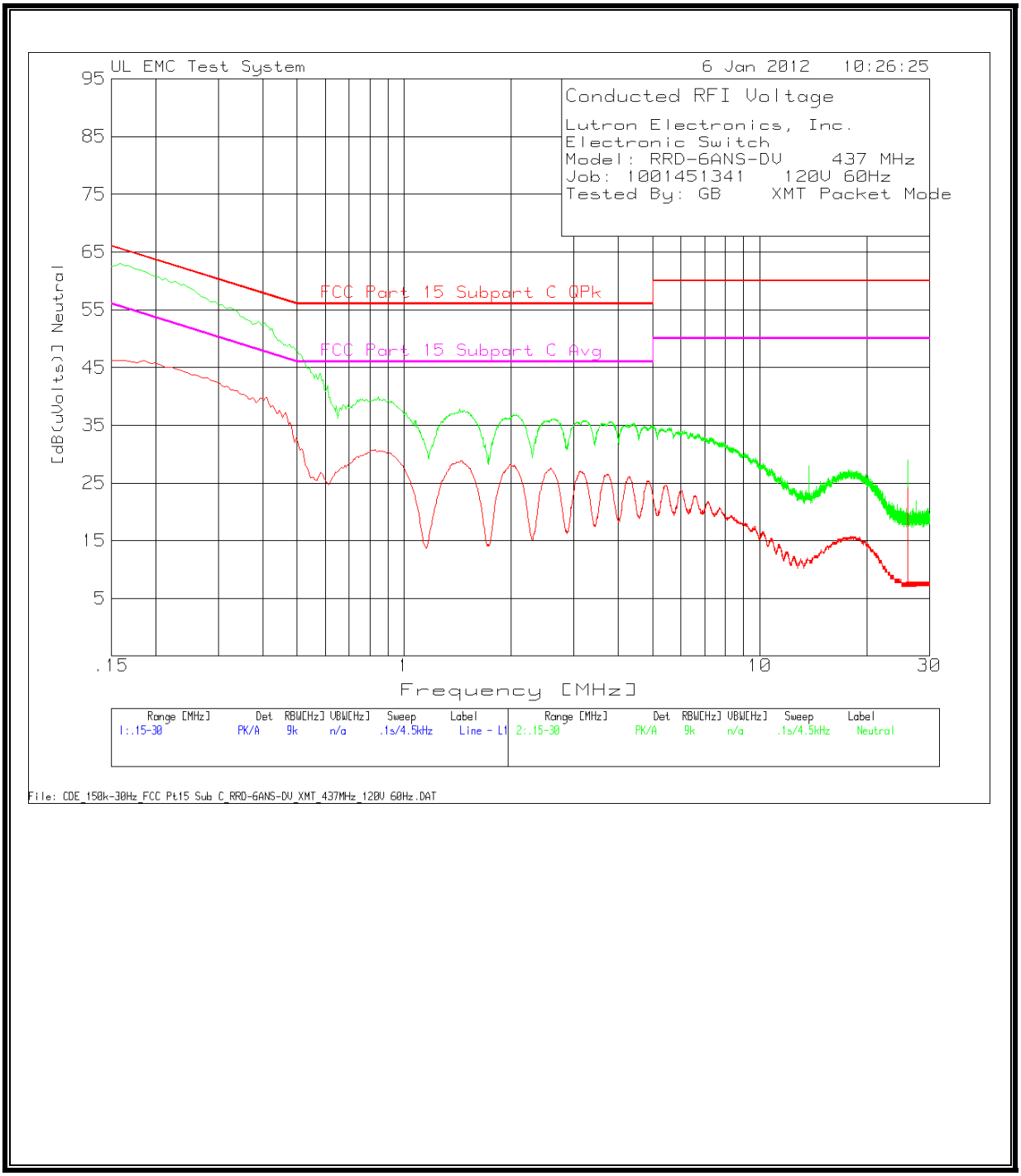
6 WORST EMISSIONS

Lutron Electronics, Inc.								
Electronic Switch								
Model: RRD-6ANS-DV 437 MHz								
Job: 1001451341 120V 60Hz								
Tested By: GB XMT Packet Mode								
Test Frequency	Meter Reading	Detector	5A636 with Tl and Sw Line 1 [dB]	[dB(uVolts)]	FCC Part 15 Subpart C QPk	Margin	FCC Part 15 Subpart C Avg	Margin
Line - L1 .15 - 30MHz								
0.1635	34.9	Av	11.4	46.3	65.3	-19	55.3	-9
0.177	34.62	Av	11.3	45.92	64.6	-18.68	54.6	-8.68
0.222	33.94	Av	11	44.94	62.7	-17.76	52.7	-7.76
0.2805	31.16	Av	10.8	41.96	60.8	-18.84	50.8	-8.84
0.3435	28.45	Av	10.6	39.05	59.1	-20.05	49.1	-10.05
0.3975	26.58	Av	10.6	37.18	57.9	-20.72	47.9	-10.72
Neutral .15 - 30MHz								
Test Freque	Meter Rea	Detector	5A636 with	[dB(uVolts)]	FCC Part 1	Margin	FCC Part 1	Margin
0.159	34.76	Av	11.5	46.26	65.5	-19.24	55.5	-9.24
0.1725	34.51	Av	11.4	45.91	64.8	-18.89	54.8	-8.89
0.213	33.98	Av	11	44.98	63.1	-18.12	53.1	-8.12
0.276	32.38	Av	10.8	43.18	60.9	-17.72	50.9	-7.72
0.3345	30.26	Av	10.7	40.96	59.3	-18.34	49.3	-8.34
0.3885	28.68	Av	10.6	39.28	58.1	-18.82	48.1	-8.82
Line - L1 .15 - 30MHz								
0.1617	46.91	QP	11.5	58.41	65.38	-6.97	55.38	3.03
0.1752	46.25	QP	11.3	57.55	64.71	-7.16	54.71	2.84
0.2175	44.36	QP	11	55.36	62.91	-7.55	52.91	2.45
0.249	43.22	QP	10.9	54.12	61.79	-7.67	51.79	2.33
0.267	42.4	QP	10.8	53.2	61.21	-8.01	51.21	1.99
0.30075	40.98	QP	10.7	51.68	60.22	-8.54	50.22	1.46
0.3705	37.81	QP	10.6	48.41	58.49	-10.08	48.49	-0.08
Neutral .15 - 30MHz								
0.159	46.41	QP	11.5	57.91	65.52	-7.61	55.52	2.39
0.1689	46.01	QP	11.4	57.41	65.01	-7.6	55.01	2.4
0.2085	44.41	QP	11.1	55.51	63.26	-7.75	53.26	2.25
0.258	42.33	QP	10.9	53.23	61.5	-8.27	51.5	1.73
0.3048	40.37	QP	10.7	51.07	60.11	-9.04	50.11	0.96
0.3354	38.77	QP	10.7	49.47	59.32	-9.85	49.32	0.15
0.3885	36.83	QP	10.6	47.43	58.1	-10.67	48.1	-0.67
PK - Peak detector								
QP - Quasi-Peak detector								
LnAv - Linear Average detector								
LgAv - Log Average detector								
Av - Average detector								
CAV - CISPR Average detector								
RMS - RMS detection								
CRMS - CISPR RMS detection								

LINE 1 RESULTS



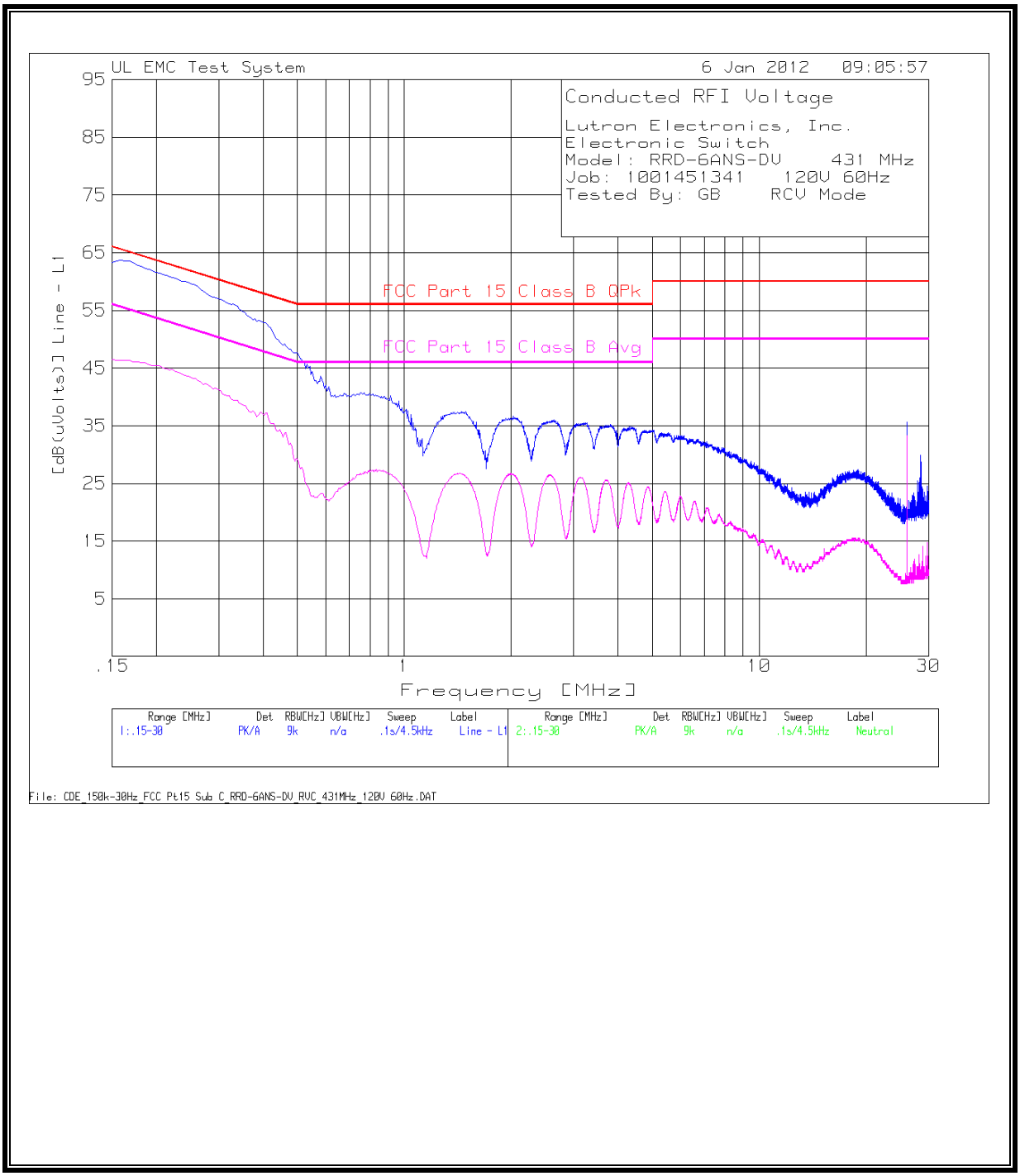
LINE 2 RESULTS



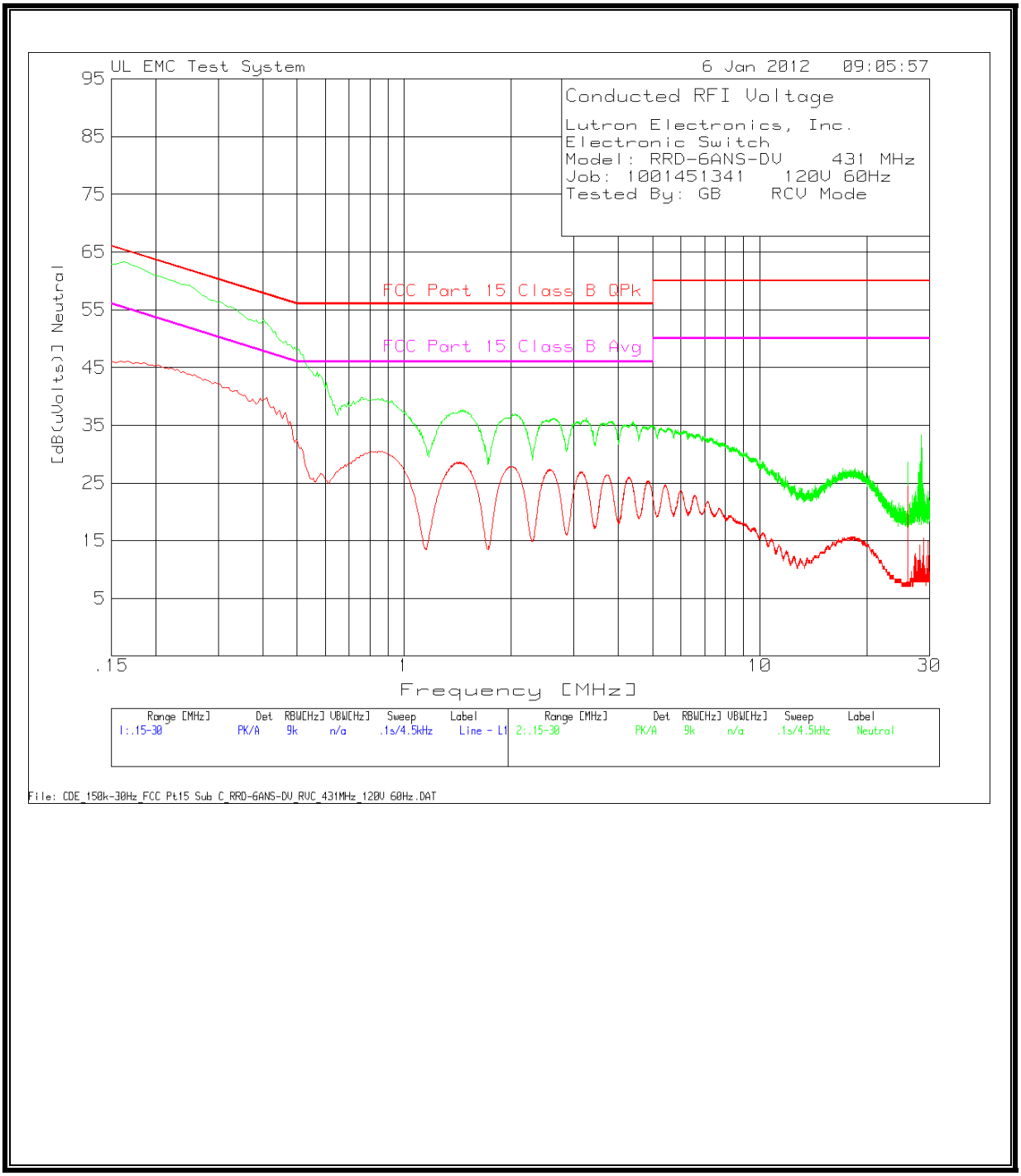
6 WORST EMISSIONS

Lutron Electronics, Inc.								
Electronic Switch								
Model: RRD-6ANS-DV 431 MHz								
Job: 1001451341 120V 60Hz								
Tested By: GB RCV Mode								
Test Frequency	Meter Reading	Detector	5A636 with Tl and Sw Line 1 [dB]	[dB(uVolts)]	FCC Part 15 Class B QPk	Margin	FCC Part 15 Class B Avg	Margin
Line - L1 .15 - 30MHz								
0.159	34.88	Av	11.5	46.38	65.5	-19.12	55.5	-9.12
0.1635	34.91	Av	11.4	46.31	65.3	-18.99	55.3	-8.99
0.195	34.18	Av	11.2	45.38	63.8	-18.42	53.8	-8.42
0.258	32.46	Av	10.8	43.26	61.5	-18.24	51.5	-8.24
0.321	29.49	Av	10.7	40.19	59.7	-19.51	49.7	-9.51
0.3795	26.57	Av	10.6	37.17	58.3	-21.13	48.3	-11.13
Neutral .15 - 30MHz								
0.1635	34.41	Av	11.5	45.91	65.3	-19.39	55.3	-9.39
0.1635	34.41	Av	11.5	45.91	65.3	-19.39	55.3	-9.39
0.1905	34.22	Av	11.2	45.42	64	-18.58	54	-8.58
0.231	33.67	Av	10.9	44.57	62.4	-17.83	52.4	-7.83
0.276	32.13	Av	10.8	42.93	60.9	-17.97	50.9	-7.97
0.402	28.77	Av	10.6	39.37	57.8	-18.43	47.8	-8.43
Line - L1 .15 - 30MHz								
0.1617	46.97	QP	11.5	58.47	65.38	-6.91	55.38	3.09
0.168	46.73	QP	11.4	58.13	65.06	-6.93	55.06	3.07
0.2175	45.01	QP	11	56.01	62.91	-6.9	52.91	3.1
0.258	43.33	QP	10.8	54.13	61.5	-7.37	51.5	2.63
0.312	40.74	QP	10.7	51.44	59.92	-8.48	49.92	1.52
0.366	38.24	QP	10.6	48.84	58.59	-9.75	48.59	0.25
Neutral .15 - 30MHz								
0.1599	46.48	QP	11.5	57.98	65.47	-7.49	55.47	2.51
0.168	46.58	QP	11.4	57.98	65.06	-7.08	55.06	2.92
0.2274	44.09	QP	11	55.09	62.54	-7.45	52.54	2.55
0.285	41.01	QP	10.8	51.81	60.67	-8.86	50.67	1.14
0.3255	39.35	QP	10.7	50.05	59.57	-9.52	49.57	0.48
0.3975	36.48	QP	10.6	47.08	57.91	-10.83	47.91	-0.83
PK - Peak detector								
QP - Quasi-Peak detector								
LnAv - Linear Average detector								
LgAv - Log Average detector								
Av - Average detector								
CAV - CISPR Average detector								
RMS - RMS detection								
CRMS - CISPR RMS detection								

LINE 1 RESULTS



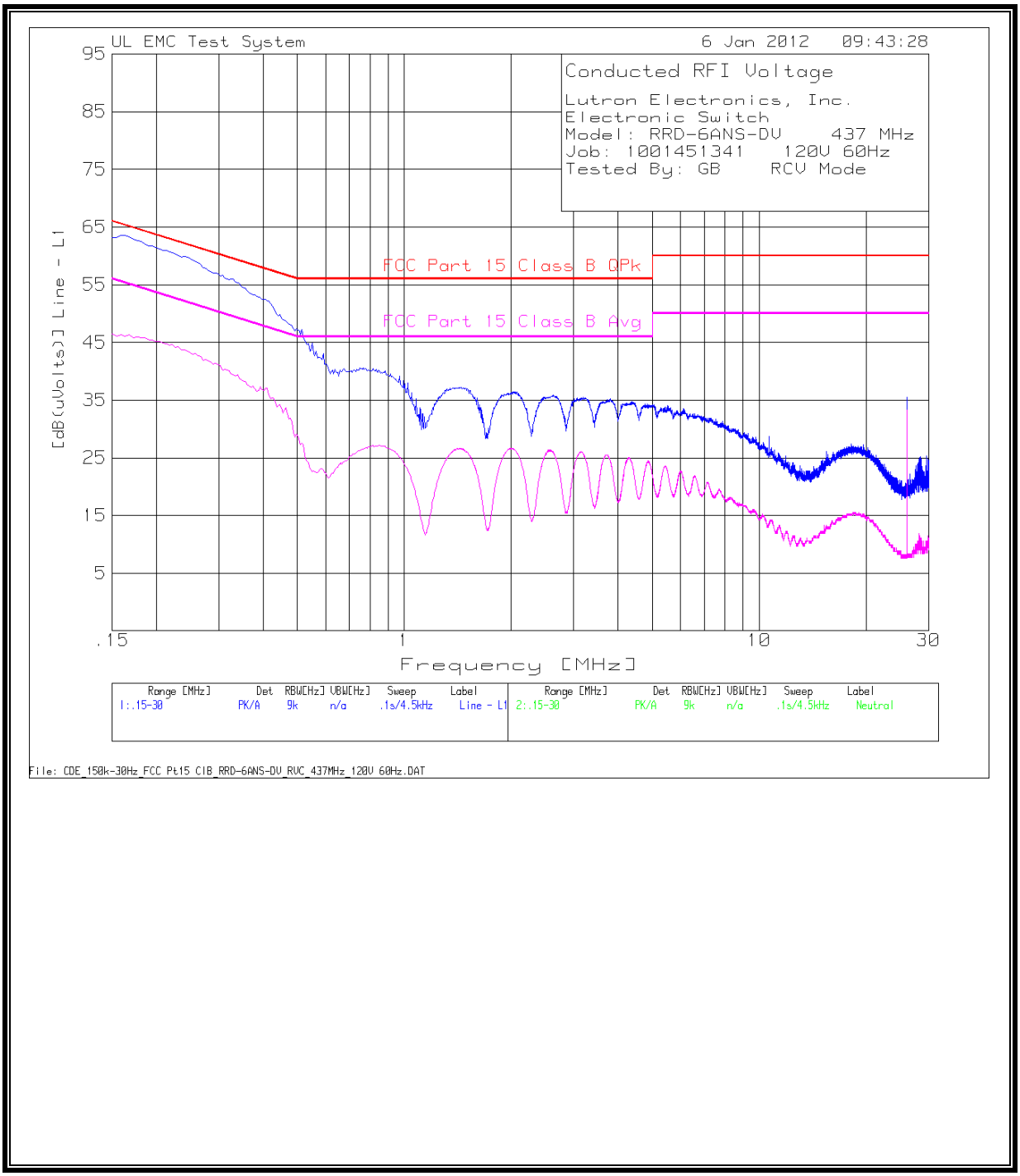
LINE 2 RESULTS



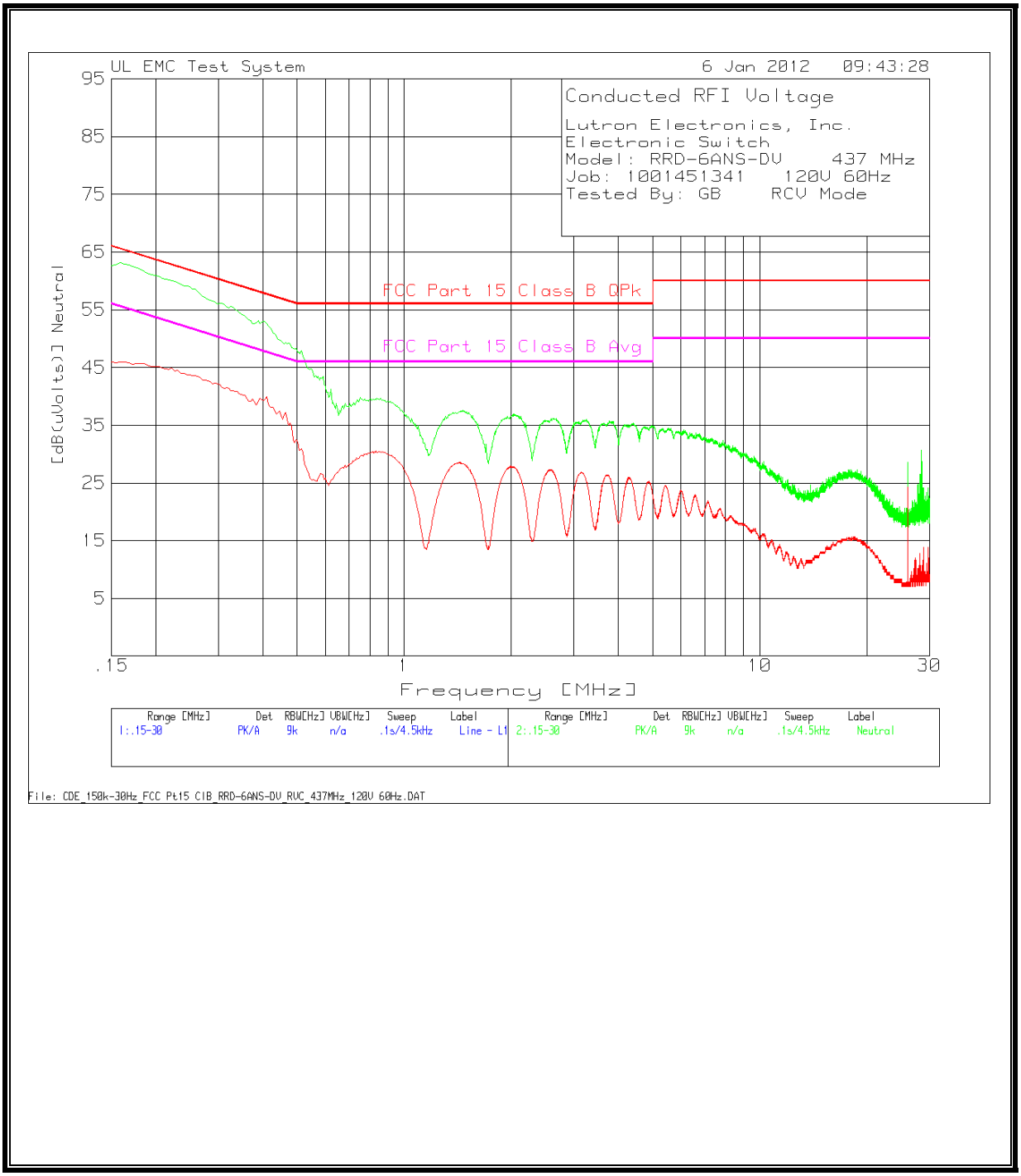
6 WORST EMISSIONS

Lutron Electronics, Inc.								
Electronic Switch								
Model: RRD-6ANS-DV 437 MHz								
Job: 1001451341 120V 60Hz								
Tested By: GB RCV Mode								
Test Frequency	Meter Reading	Detector	5A636 with Tl and Sw Line 1 [dB]	[dB(uVolts)]	FCC Part 15 Class B QPk	Margin	FCC Part 15 Class B Avg	Margin
Line - L1 .15 - 30MHz								
0.159	34.79	Av	11.5	46.29	65.5	-19.21	55.5	-9.21
0.1815	34.47	Av	11.3	45.77	64.4	-18.63	54.4	-8.63
0.213	33.75	Av	11	44.75	63.1	-18.35	53.1	-8.35
0.2625	31.83	Av	10.8	42.63	61.4	-18.77	51.4	-8.77
0.32775	28.74	Av	10.7	39.44	59.5	-20.06	49.5	-10.06
0.348	27.95	Av	10.6	38.55	59	-20.45	49	-10.45
Neutral .15 - 30MHz								
0.159	34.44	Av	11.5	45.94	65.5	-19.56	55.5	-9.56
0.1905	34.12	Av	11.2	45.32	64	-18.68	54	-8.68
0.204	34.11	Av	11.1	45.21	63.4	-18.19	53.4	-8.19
0.231	33.59	Av	10.9	44.49	62.4	-17.91	52.4	-7.91
0.294	31.59	Av	10.7	42.29	60.4	-18.11	50.4	-8.11
0.3525	29.55	Av	10.6	40.15	58.9	-18.75	48.9	-8.75
Line - L1 .15 - 30MHz								
0.1599	46.92	QP	11.5	58.42	65.47	-7.05	55.47	2.95
0.1635	46.83	QP	11.4	58.23	65.28	-7.05	55.28	2.95
0.213	44.75	QP	11	55.75	63.09	-7.34	53.09	2.66
0.249	43.04	QP	10.9	53.94	61.79	-7.85	51.79	2.15
0.2895	41.23	QP	10.7	51.93	60.54	-8.61	50.54	1.39
0.32505	39.67	QP	10.7	50.37	59.58	-9.21	49.58	0.79
Neutral .15 - 30MHz								
0.1581	46.15	QP	11.5	57.65	65.56	-7.91	55.56	2.09
0.1653	45.81	QP	11.4	57.21	65.19	-7.98	55.19	2.02
0.195	45.09	QP	11.2	56.29	63.82	-7.53	53.82	2.47
0.249	42.4	QP	10.9	53.3	61.79	-8.49	51.79	1.51
0.276	41.26	QP	10.8	52.06	60.94	-8.88	50.94	1.12
0.339	38.96	QP	10.7	49.66	59.23	-9.57	49.23	0.43
PK - Peak detector								
QP - Quasi-Peak detector								
LnAv - Linear Average detector								
LgAv - Log Average detector								
Av - Average detector								
CAV - CISPR Average detector								
RMS - RMS detection								
CRMS - CISPR RMS detection								

LINE 1 RESULTS



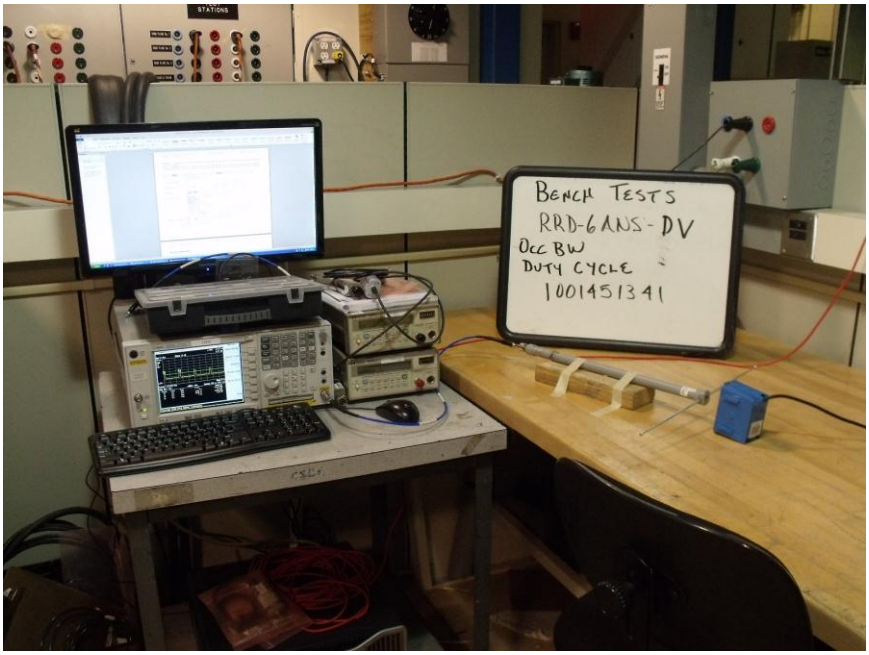
LINE 2 RESULTS



10. SETUP PHOTOS

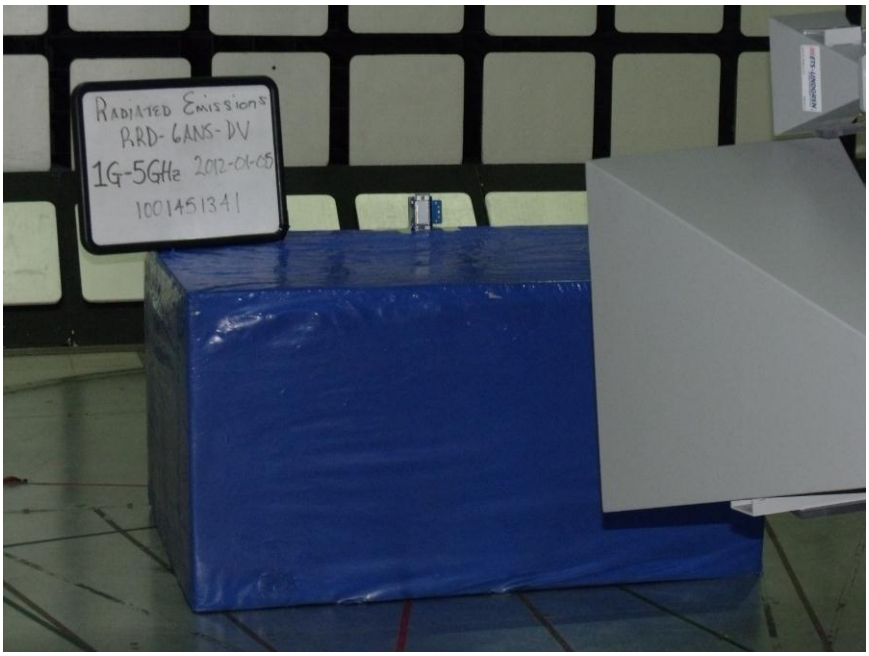
ANTENNA PORT

ANTENNA PORT



RADIATED EMISSION ABOVE 30 MHz

RADIATED EMISSIONS ABOVE 30 MHz (FRONT)



RADIATED EMISSIONS ABOVE 30 MHz (BACK)

AC MAINS LINE CONDUCTED EMISSION

LINE CONDUCTED EMISSION (FRONT)

LINE CONDUCTED EMISSION (BACK)

END OF REPORT