



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

CERTIFICATION TEST REPORT

FOR

Phase Selectable Dimmer

MODEL NUMBER: 5NE

**FCC ID: JPZ0115
IC: 2851A-JPZ0115**

REPORT NUMBER: 11232243

**ISSUE DATE: August 31, 2016
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Prepared for
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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
1	08/31/16	Initial Issue	M.Ferrer
2	09/04/16	Updated Radiated Emissions fundamental and harmonics values	M.Ferrer
3	09/07/16	Updated 2nd Harmonics limit and value	M.Ferrer
4	09/08/16	Updated 2nd Harmonics limit and value, Added note to non-harmonic frequencies.	M.Ferrer

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Lutron Electronics Inc
7200 Suter Rd
Coopersburg, PA 18036

EUT DESCRIPTION: Phase Selectable Dimmer

MODEL: 5NE

SERIAL NUMBER: Prototype


DATE TESTED: August 15, 2016 – August 31, 2016

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 4	Pass

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

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL 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 LLC By:



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Principle Engineer
UL LLC

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 4, and RSS-210 Issue 8.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 12 Laboratory Dr., Research Triangle Park, NC 27709, USA.

12 Laboratory Dr., RTP, NC 27709	
<input type="checkbox"/>	Chamber A
<input checked="" type="checkbox"/>	Chamber C

The onsite chambers (A & C) are covered under Industry Canada company address code 2180C with site numbers 2180C -1 through 2180C-2, respectively.

UL LLC (RTP) is accredited by NVLAP, Laboratory Code 200246-0.

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 Emissions	+/- 3.65 dB
Radiated Emissions	+/- 4.49 dB (10m) +/- 5.36 dB (3m)

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Phase Selectable Dimer

5.2. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PCB trace antenna

5.3. WORST-CASE CONFIGURATION AND MODE

The worst-case channel is determined as the channel with the highest field strength

5.4. MODIFICATIONS

No modifications were made during testing.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List			
Description	Manufacturer	Model	Serial Number
EUT	Lutron	5NE	-

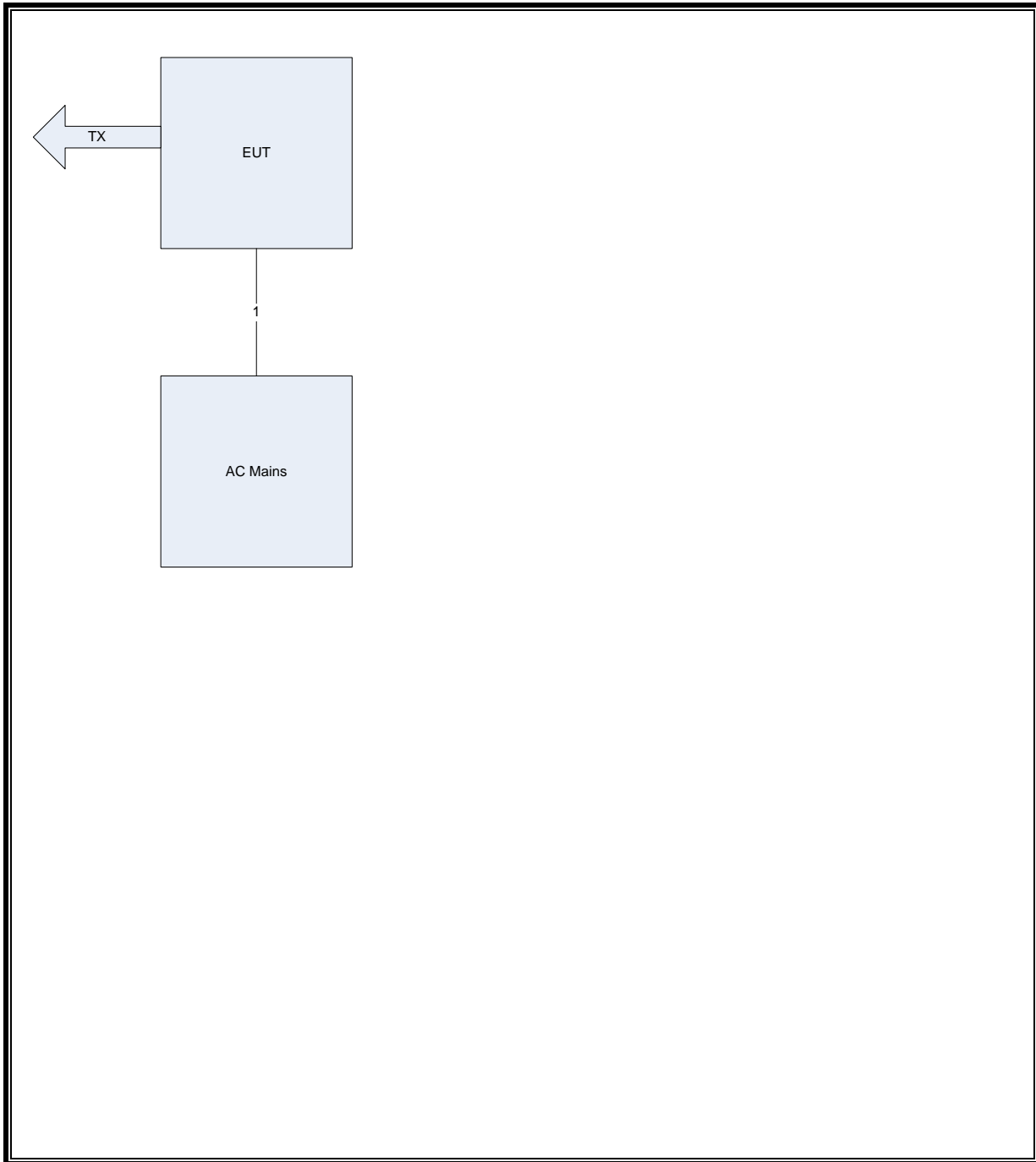
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	1	Wire	Wire	>3m	Input AC Mains

TEST SETUP

The EUT was setup to transmit continuous packets on Lo, Mi, and Hi Channels.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	30-1000 MHz Range				
AT0075	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2016-07-06	2017-07-31
	1-18 GHz				
AT0062	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2015-08-25	2016-08-31
	9k-30MHz				
AT0006	Loop Antenna	Electro-Metrics	EM6879	2015-12-03	2016-12-31
	Gain-Loss Chains				
C-SAC01	Gain-loss string: 0.009-1000MHz	Various	Various	2016-01-18	2017-01-31
C-SAC02	Gain-loss string: 1-18GHz	Various	Various	2016-01-28	2017-01-31
	Receiver & Software				
SA0016	Spectrum Analyzer	Agilent	PXA N903A	2015-08-26	2016-08-31
SA0013	Spectrum Analyzer	R&S	ESIB40	2016-08-26	2017-08-31
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
	Additional Equipment used				
HI0082	Temp/Humid/Pressure Meter	Cole-Parmer	99760-00	2016-04-26	2017-04-26

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	Equipment – Ground Plane E				
85496	EMI Test Receiver 9kHz-3.6GHz	Rohde & Schwarz	ESR3	2015-07-08	2016-08-31
ATA509	Coaxial cable, 20 ft., BNC -male to BNC-male	UL	RG-223	2015-08-03	2016-08-31
HI0081	Temp/Humid/Pressure Meter	SpringField	91905	2016-04-26	2017-04-26
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
	Transient Limiter				
ATA508	Transient Limiter, 0.009 to 100 MHz	Electro-Metrics	EM 7600	2015-08-03	2016-08-31
	LISN (FCC & CISPR testing)				
LISN002	LISN, 50-ohm/50-uH, 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50-25-2-01-550V	2015-08-24	2016-08-31

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 C63.10

The transmitter output is connected to the spectrum analyzer.

20dB Bandwidth: The RBW is set to 1% of the span. The VBW is set to 3x RBW. 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 1% to 3% of the 99 % bandwidth. 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:

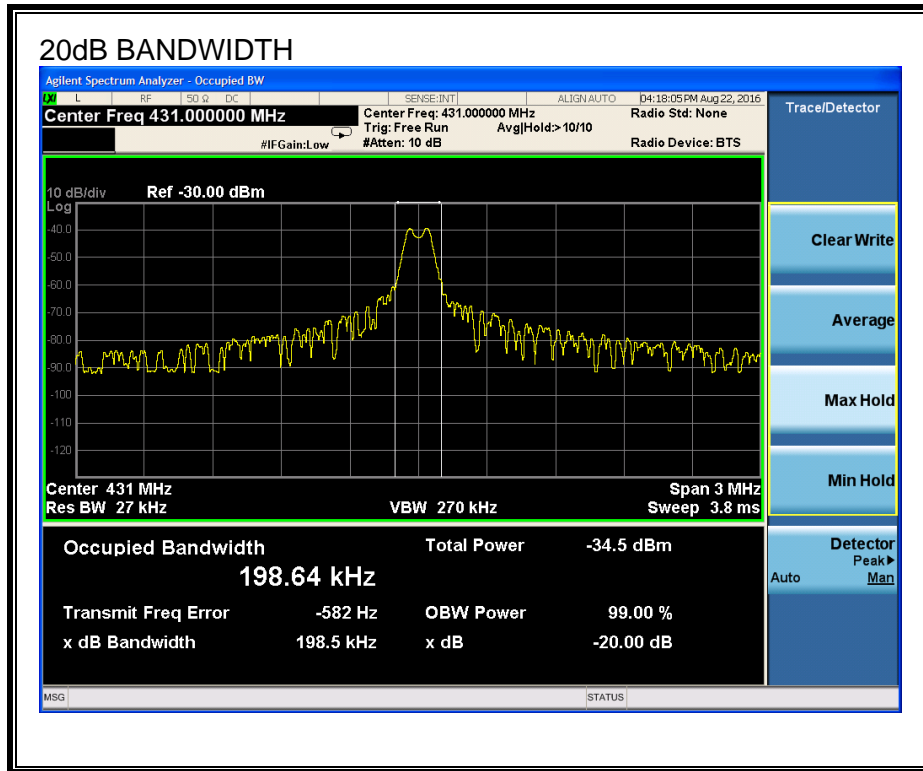
20dB Bandwidth

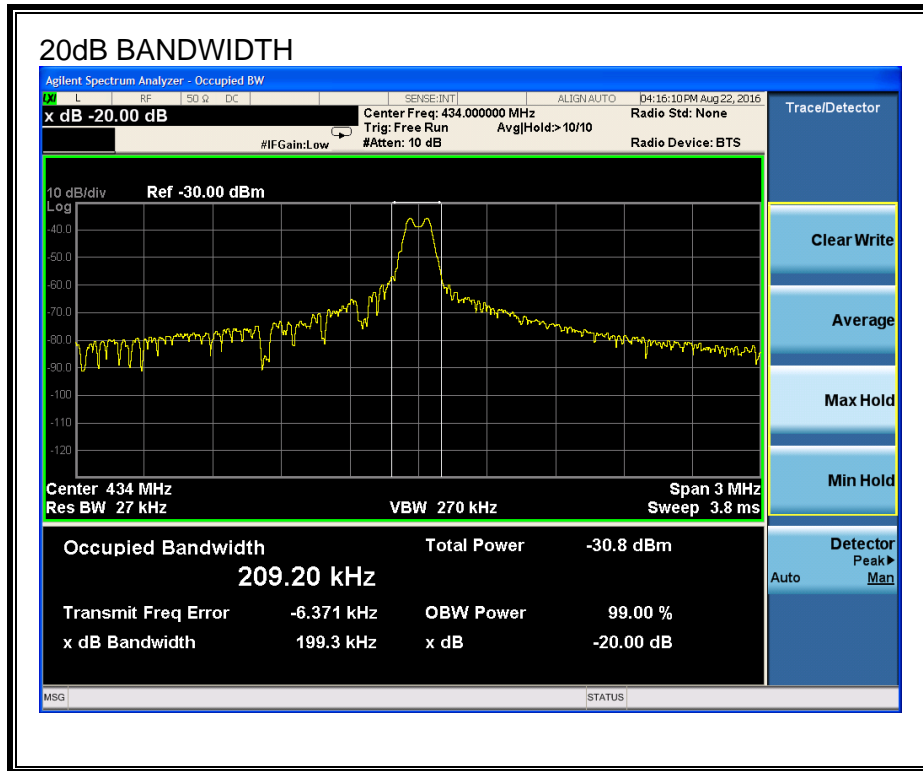
Frequency (MHz)	20dB Bandwidth (kHz)	Limit (kHz)	Margin (kHz)
431	198.5	1077.5	-879
434	199.3	1085	-885.7
437	193.6	1092.5	-898.9

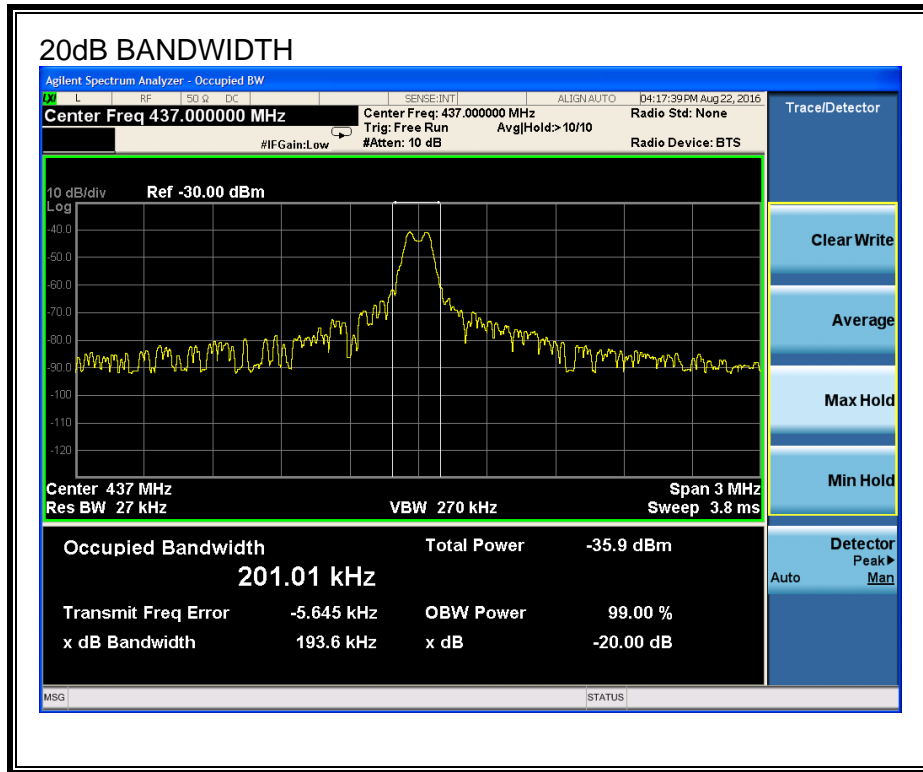
99% Bandwidth

Frequency (MHz)	99% Bandwidth (kHz)	Limit (kHz)	Margin (kHz)
431	173.2	1077.5	-904.3
434	178.21	1085	-906.79
437	172.03	1092.5	-920.47

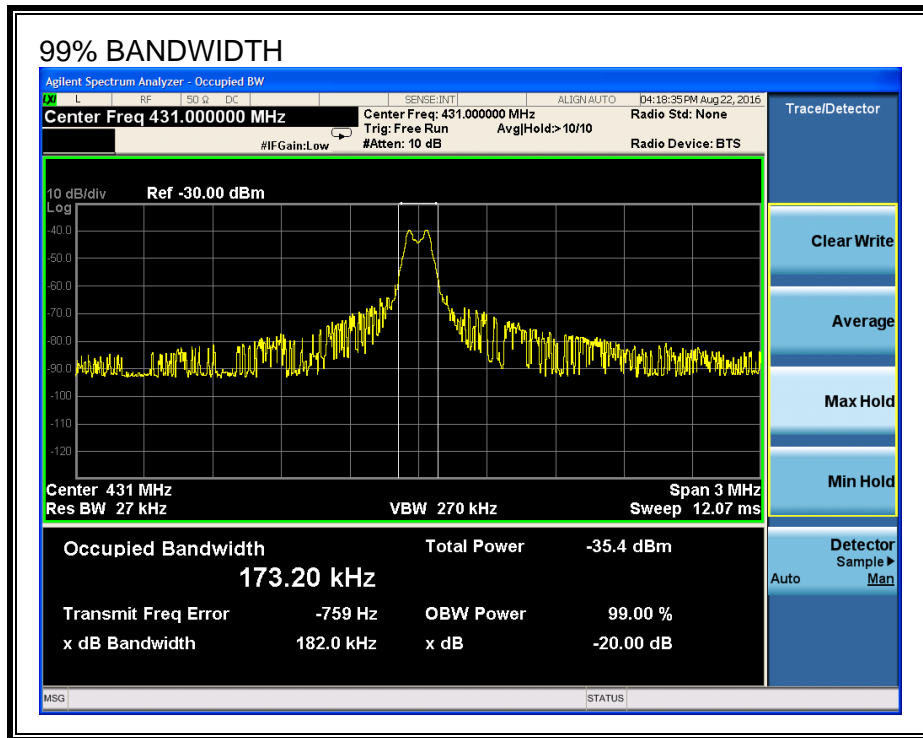
20dB BANDWIDTH

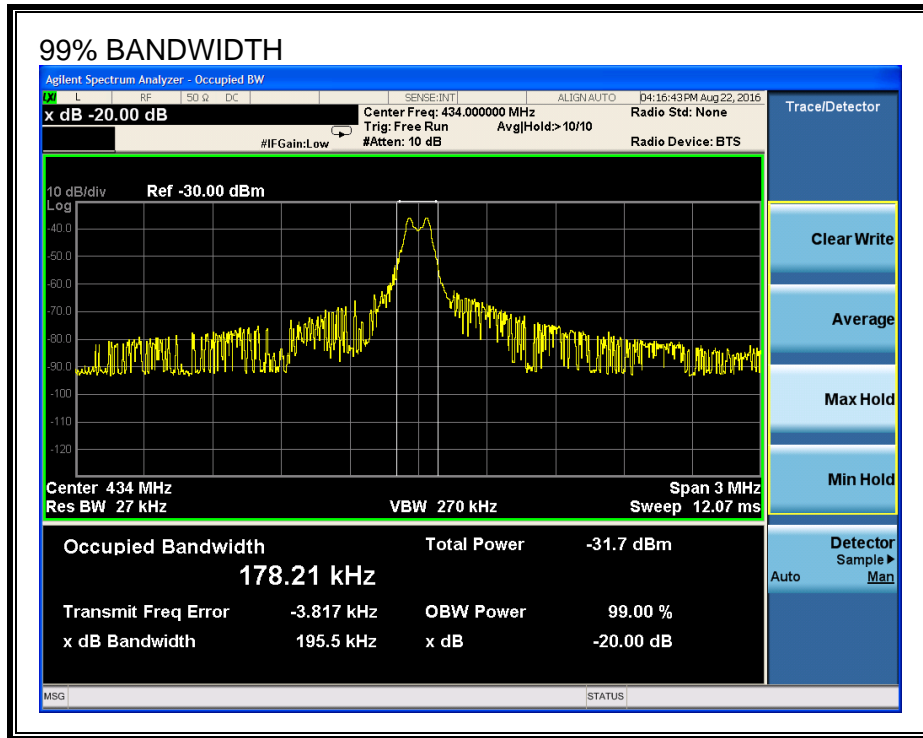


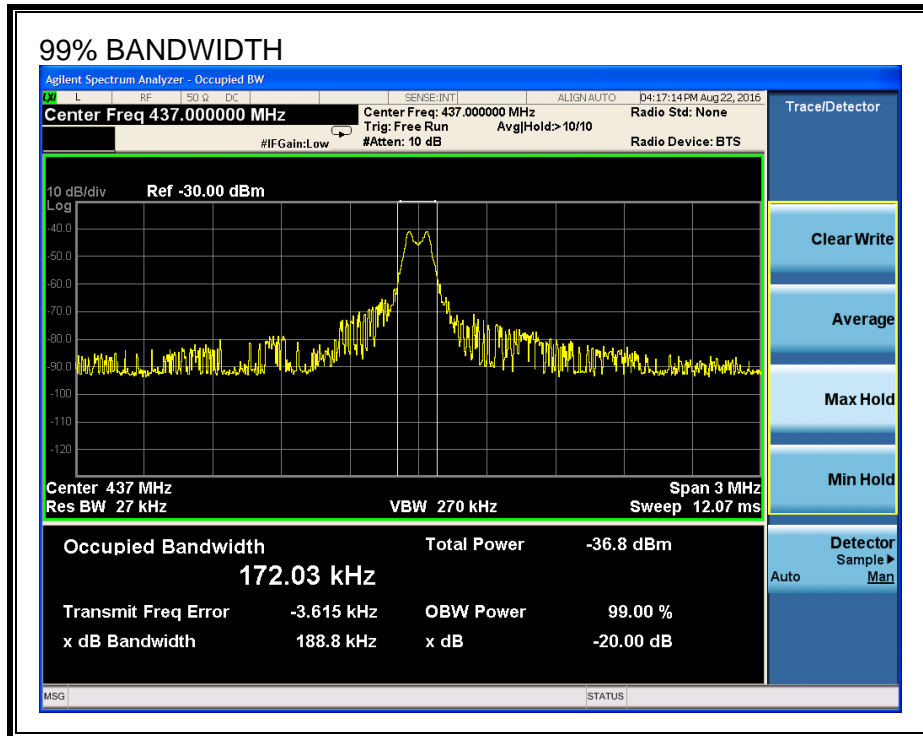




99% BANDWIDTH







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 100 kHz and the VBW is set to 100 kHz. 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

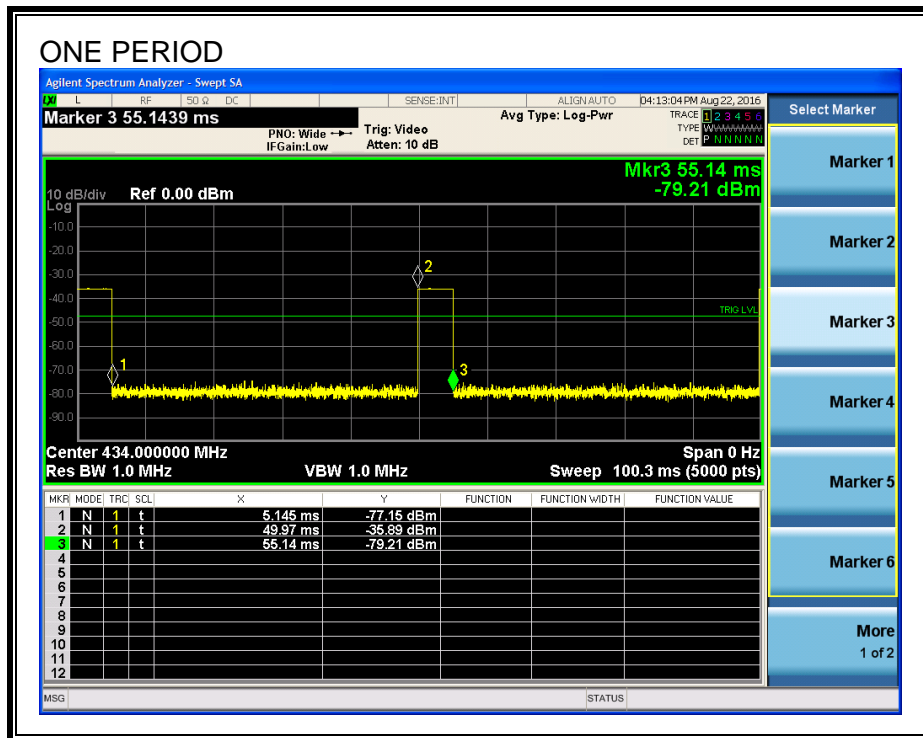
Average Reading = Peak Reading (dBuV/m) + 20log (Duty Cycle), Where Duty Cycle is (# of long pulses * long pulse width) + (# of short pulses * short pulse width) / 100 or T

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	5.17	1	5.15	1	0.103	-19.73

ONE PERIOD



7.3. TRANSMISSION TIME

LIMITS

FCC §15.231 (a) (2)

IC A1.1.1 (b)

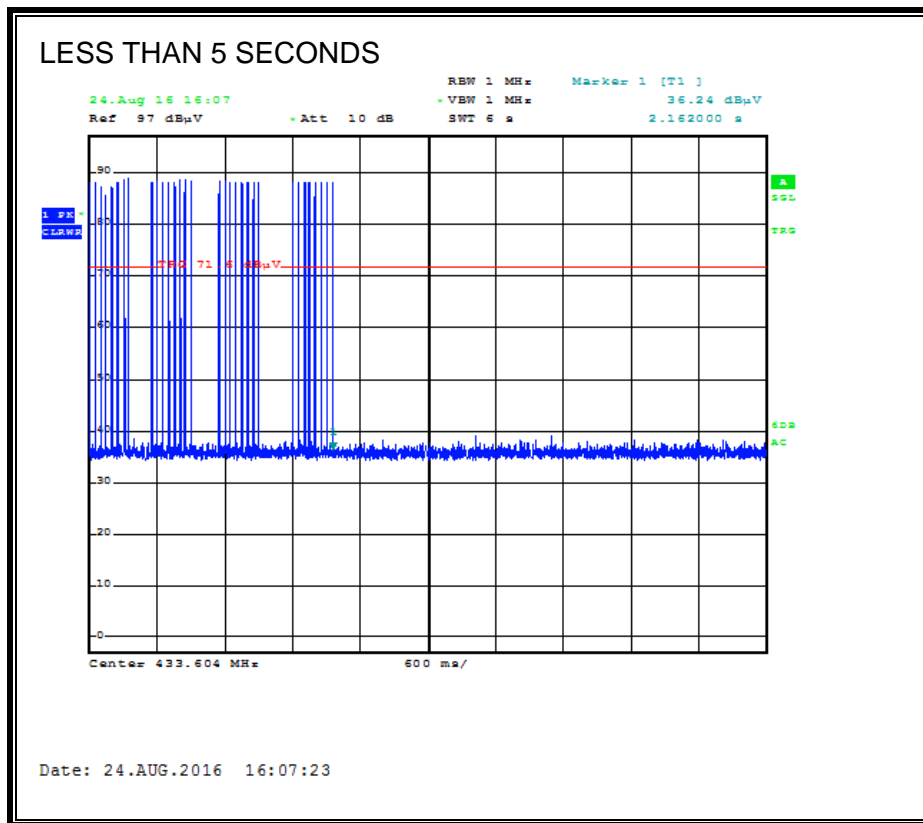
A transmitter activated automatically shall cease transmission within 5 seconds after activation.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer or radiated field strength. The RBW is set to 100 kHz and the VBW is set to 100 kHz. 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 3,7501	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:

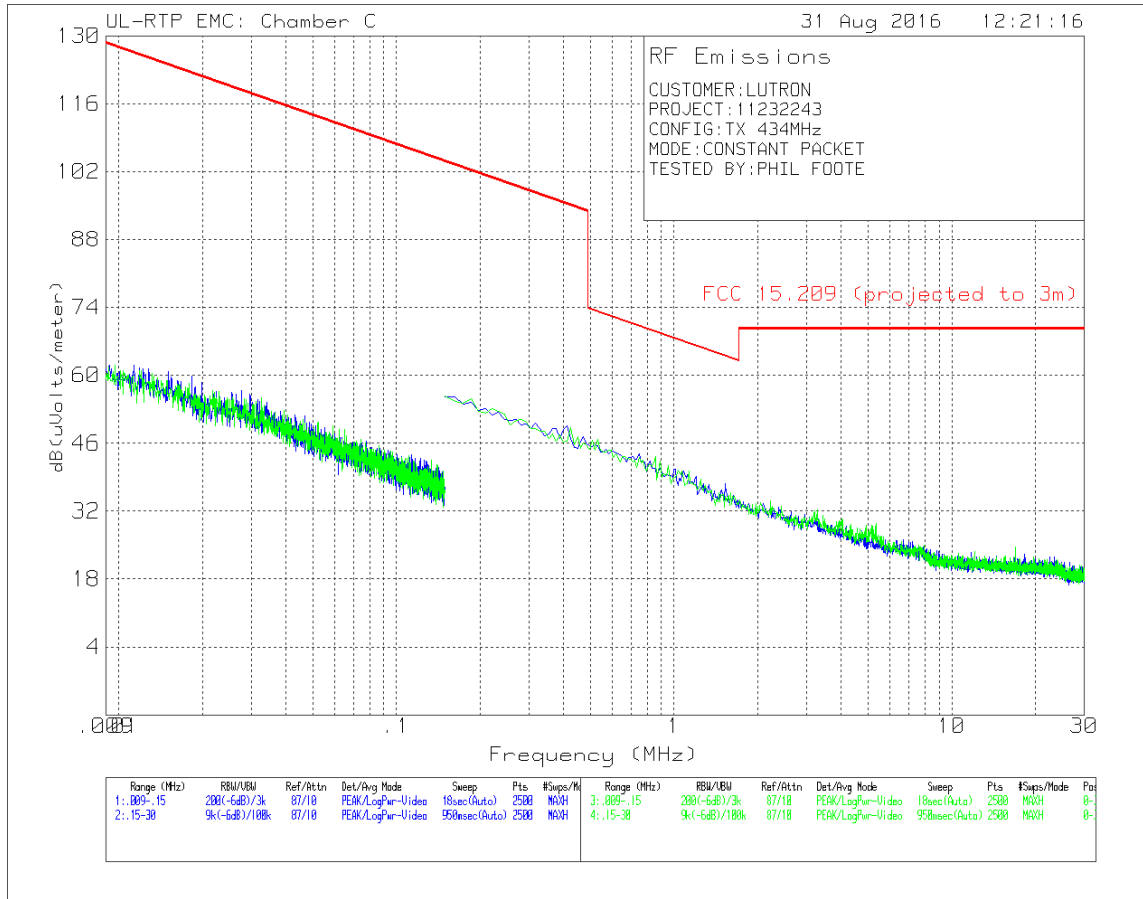
Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 88	100 **	3
88 216	150 **	3
216 960	200 **	3
Above 960	500	3

** 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.

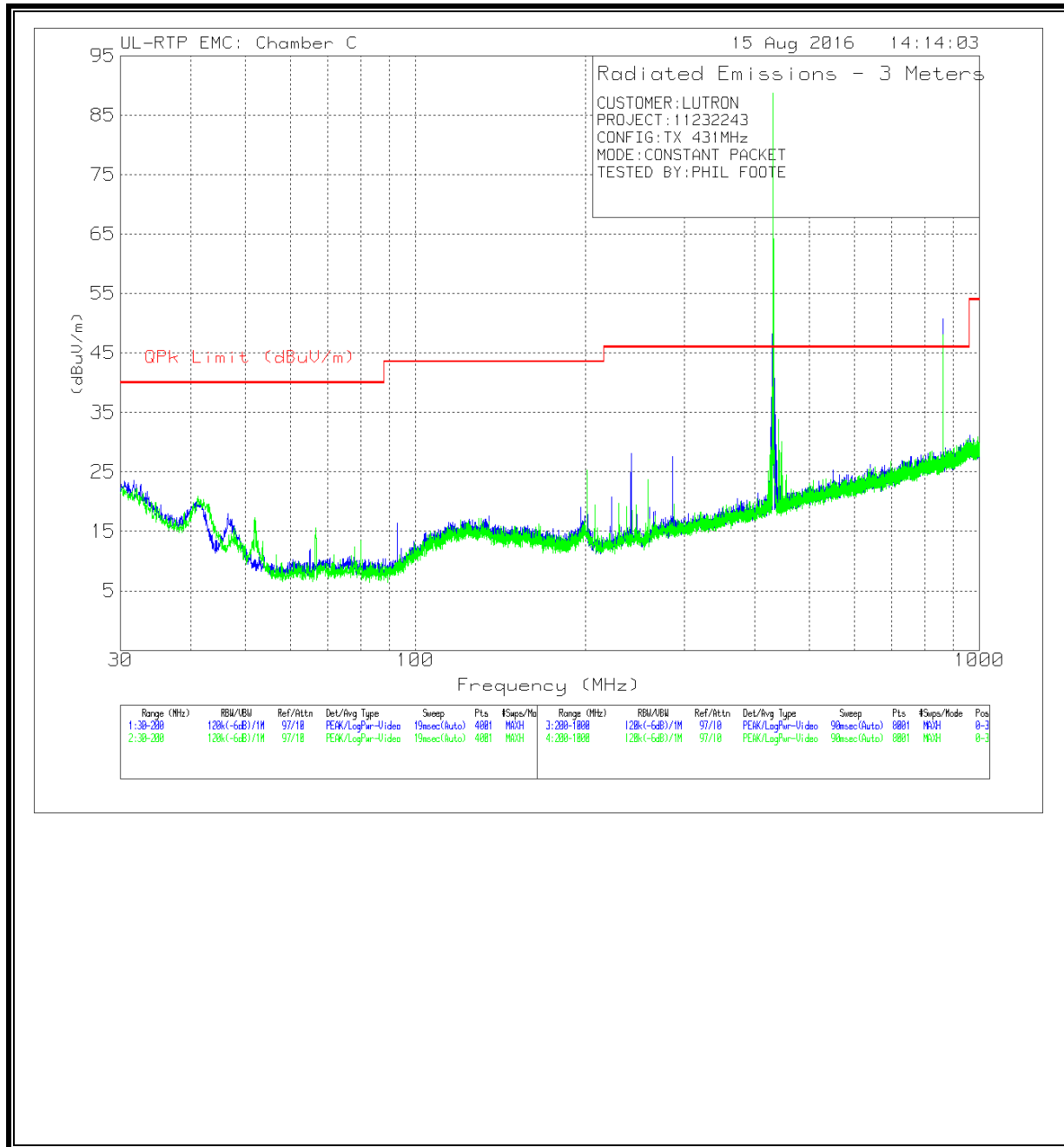
RESULTS

FUNDAMENTAL, HARMONICS AND TX SPURIOUS EMISSION (9k-30 MHz)



Frequency (MHz)	Meter Reading (dBuV)	Det	AT0059 AF (dB/m)	Amp/Cbl/Fitr /Pad	CBL (dB)	Corrected Reading dB(uVolts/meter)	FCC 15.209 (projected to 3m)	Margin (dB)	Azimuth (Degs)
.01135	43.3	Pk	18.7	0	0	62	126.5	-64.5	0-360
.0151	43.95	Pk	16.9	0	0	60.85	124.02	-63.17	0-360
.01992	44.02	Pk	14.5	0	0	58.52	121.62	-63.1	0-360
.02765	42.95	Pk	13.9	0	0	56.85	118.77	-61.92	0-360
.15	45.18	Pk	10.4	.1	0	55.68	104.08	-48.4	0-360
.42474	38.78	Pk	10.2	.1	.1	49.18	95.04	-45.86	0-360

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

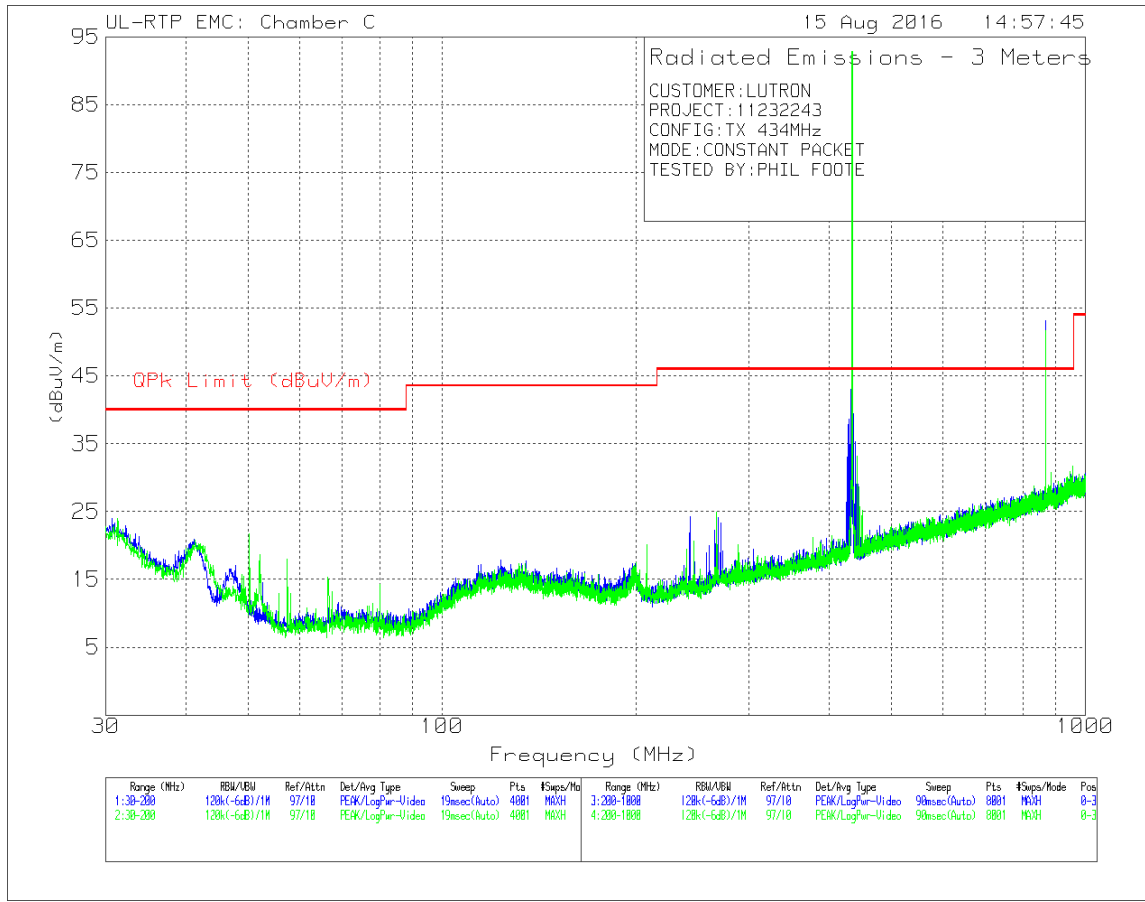


Frequency (MHz)	Meter Reading (dBuV)	Det	AT0075 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
241.8*	41.65	Pk	16.6	-30.1	28.15	46.02	-17.87	0-360	101	H
285.5*	39.58	Pk	17.8	-29.8	27.58	46.02	-18.44	0-360	101	H

*Emissions part of digital circuitry, here for reporting purposes only

Frequency (MHz)	Meter Reading (dBuV)	Det	AT0075 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	PK/AV Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
431.038	96.57	Pk	21	-29.2	88.37	100.72	-12.35	0	106	V
431.038	76.84	Pk*	21	-29.2	68.64	80.72	-12.08	0	106	V
431.04	83.71	Pk	21	-29.2	75.51	100.72	-25.21	1	100	H
431.04	63.98	Pk*	21	-29.2	55.78	80.72	-24.94	1	100	H
861.9136	51.45	Pk	26.3	-27.5	50.25	80.72	-30.47	235	103	H
861.9136	31.72	Pk*	26.3	-27.5	30.52	60.72	-30.2	235	103	H
862.0744	52.48	Pk	26.3	-27.5	51.28	80.72	-29.44	317	118	V
862.0744	32.75	Pk*	26.3	-27.5	31.55	60.72	-29.17	317	118	V

Pk*=PK-DCF

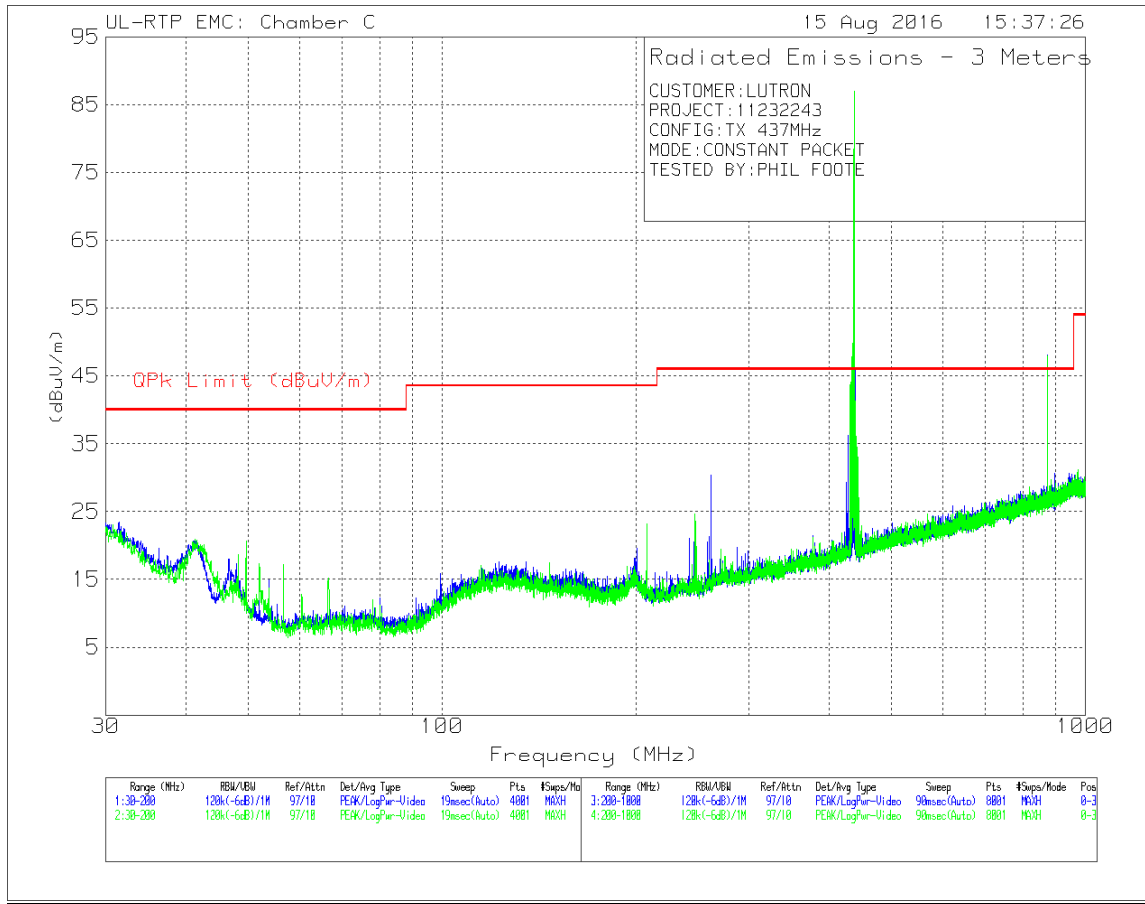


Frequency (MHz)	Meter Reading (dBuV)	Det	AT0075 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPK Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
242.8*	37.76	Pk	16.6	-30.1	24.26	46.02	-21.76	0-360	200	H
267.2*	37.33	Pk	17.5	-29.9	24.93	46.02	-21.09	0-360	101	V

*Emissions part of digital circuitry, here for reporting purposes only

Frequency (MHz)	Meter Reading (dBuV)	Det	AT0075 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	PK/AV Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
433.966	86.78	Pk	21	-29.3	78.48	100.85	-22.37	0	100	H
433.966	67.05	Pk*	21	-29.3	58.75	80.85	-22.1	0	100	H
434.04	101.46	Pk	21	-29.3	93.16	100.85	-7.69	347	104	V
434.04	81.73	Pk*	21	-29.3	73.43	80.85	-7.42	347	104	V
867.9076	52.05	Pk	26.5	-27.5	51.05	80.85	-29.8	0	104	V
867.9076	32.32	Pk*	26.5	-27.5	31.32	60.85	-29.53	0	104	V
867.9208	51.46	Pk	26.5	-27.5	50.46	80.85	-30.39	0	222	H
867.9208	31.73	Pk*	26.5	-27.5	30.73	60.85	-30.12	0	222	H

Pk*=PK-DCF



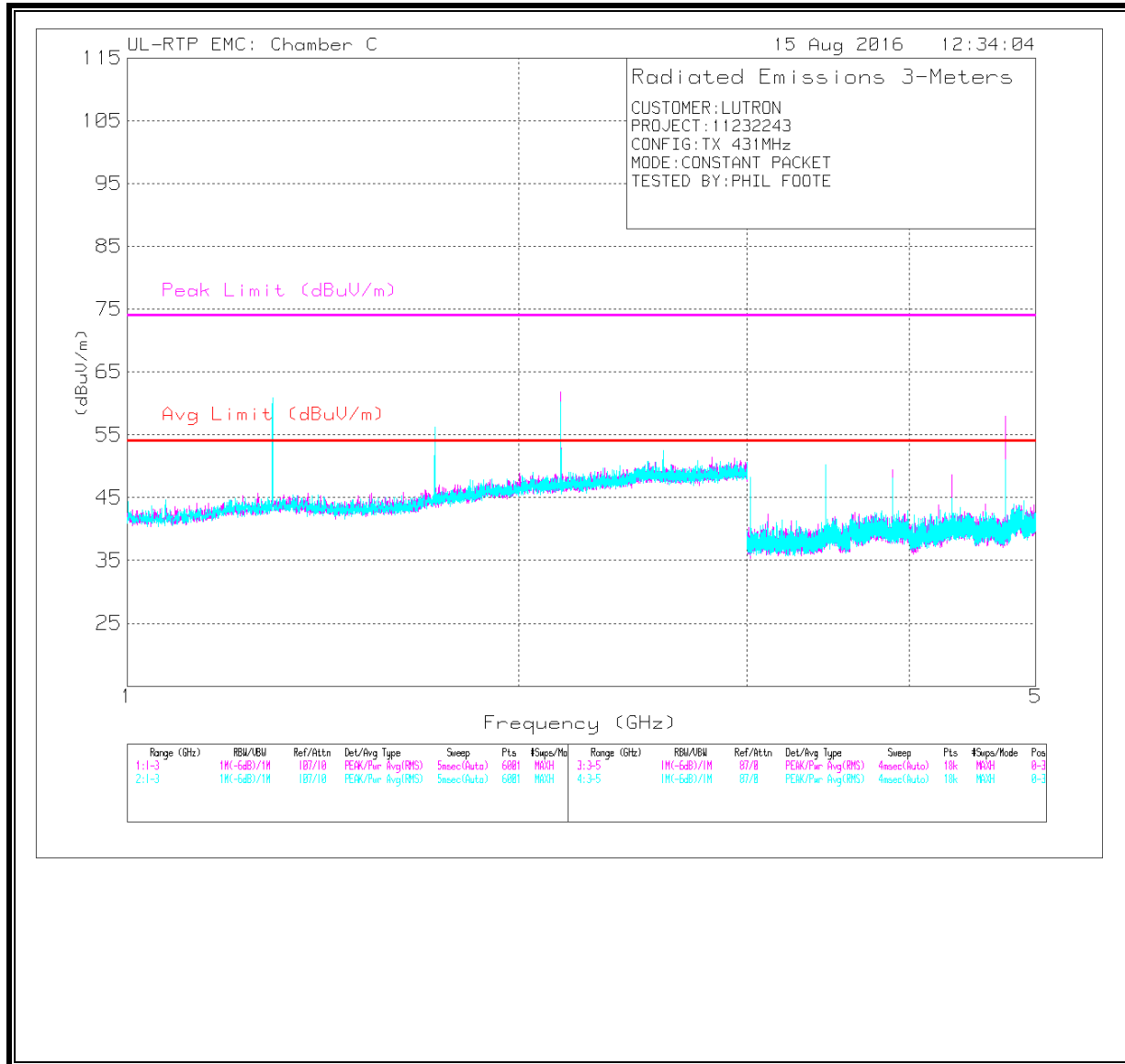
Frequency (MHz)	Meter Reading (dBuV)	Det	AT0075 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
247.4*	38.17	Pk	16.5	-30	24.67	46.02	-21.35	0-360	100	V
261.7*	43.38	Pk	17	-30	30.38	46.02	-15.64	0-360	100	H

*Emissions part of digital circuitry, here for reporting purposes only

Frequency (MHz)	Meter Reading (dBuV)	Det	AT0075 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	PK/AV Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
436.963	95.74	Pk	21	-29.3	87.44	100.92	-13.48	0	105	V
436.963	76.01	Pk*	21	-29.3	67.71	80.92	-13.21	0	105	V
436.964	92.04	Pk	21	-29.3	83.74	100.92	-17.18	104	269	H
436.964	72.31	Pk*	21	-29.3	64.01	80.92	-16.91	104	269	H
874.0629	45.85	Pk	26.7	-27.4	45.15	80.92	-35.77	254	225	H
874.0629	26.12	Pk*	26.7	-27.4	25.42	60.92	-35.5	254	225	H
874.0734	43.61	Pk	26.7	-27.4	42.91	80.92	-38.01	0	105	V
874.0734	23.88	Pk*	26.7	-27.4	23.18	60.92	-37.74	0	105	V

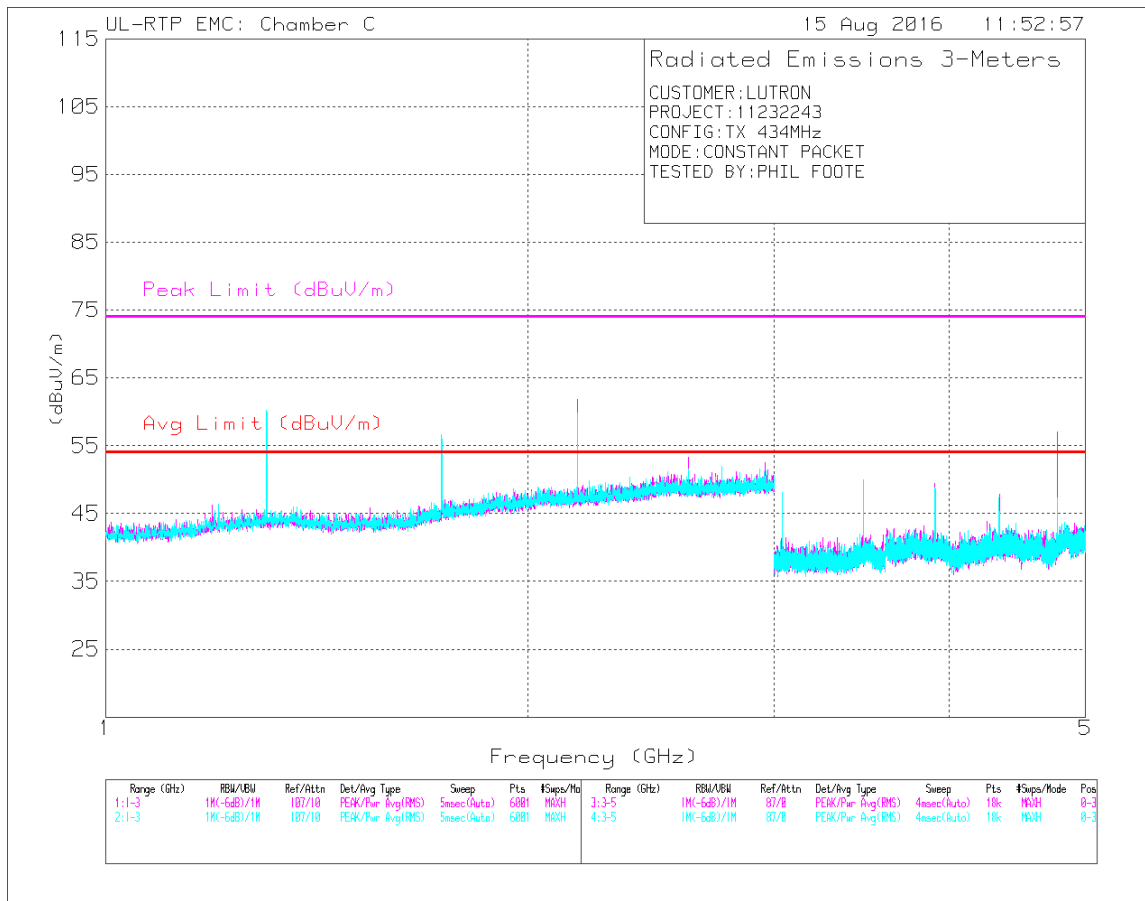
Pk*=PK-DCF

HARMONICS AND TX SPURIOUS EMISSIONS ABOVE 1GHz



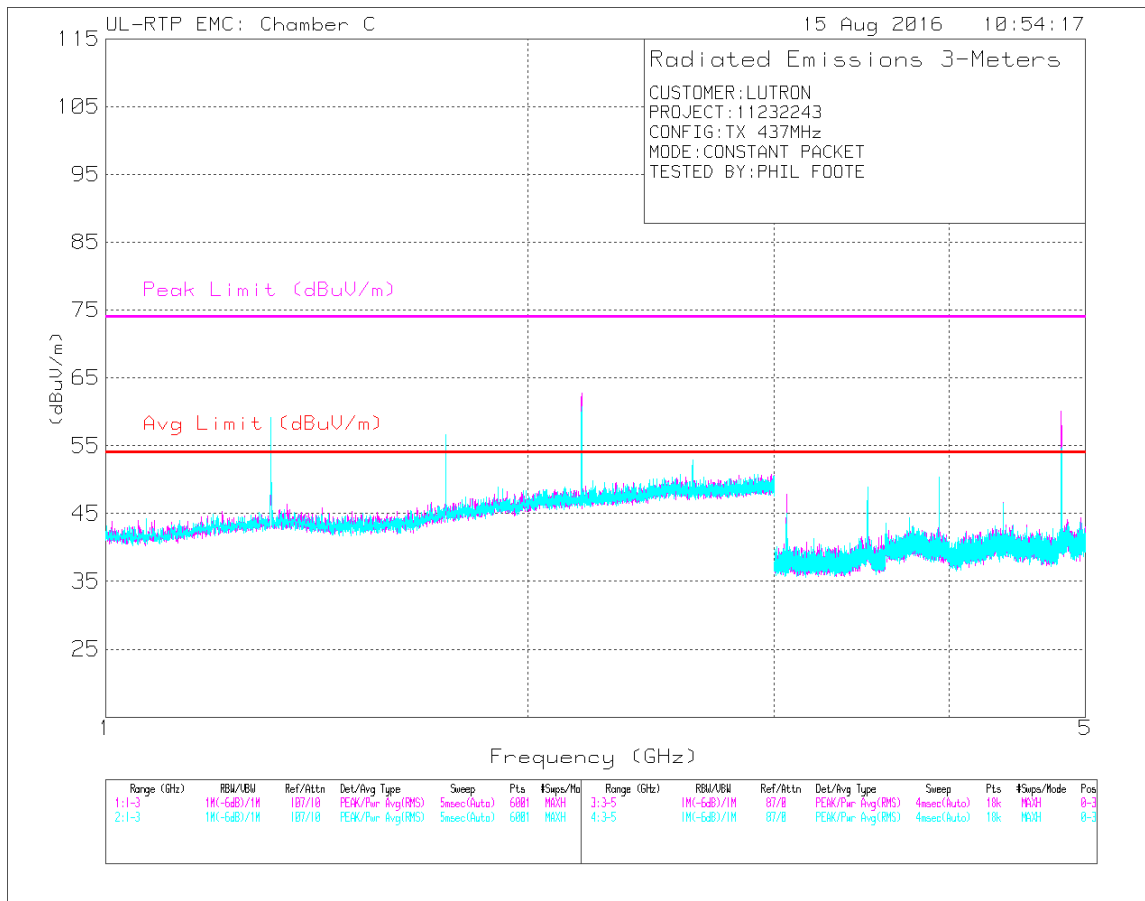
Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl/Filtr /Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.293	54.72	Pk	28.6	-29.5	53.82	-	-	74	-20.18	0	169	H
1.293	60.56	Pk	28.6	-29.5	59.66	-	-	74	-14.34	0	168	V
1.724	54.34	Pk	29.5	-28.4	55.44	-	-	74	-18.56	0	101	H
1.724	51.37	Pk	29.5	-28.4	52.47	-	-	74	-21.53	0	397	V
2.155	57.98	Pk	31.6	-27.4	62.18	-	-	74	-11.82	182	203	H
2.155	54.72	Pk	31.6	-27.4	58.92	-	-	74	-15.08	309	378	V
2.155	52.12	Pk	31.6	-27.4	56.32	-	-	74	-17.68	0	100	V
4.741	58.62	Pk	34.2	-33.8	59.02	-	-	74	-14.98	153	198	H
1.293	34.99	PK*	28.6	-29.5	34.09	54	-19.91	-	-	0	169	H
1.293	40.83	PK*	28.6	-29.5	39.93	54	-14.07	-	-	0	168	V
1.724	34.61	PK*	29.5	-28.4	35.71	54	-18.29	-	-	0	101	H
1.724	31.64	PK*	29.5	-28.4	32.74	54	-21.26	-	-	0	397	V
2.155	38.25	PK*	31.6	-27.4	42.45	54	-11.55	-	-	182	203	H
2.155	34.99	PK*	31.6	-27.4	39.19	54	-14.81	-	-	309	378	V
2.155	32.39	PK*	31.6	-27.4	36.59	54	-17.41	-	-	0	100	V
4.741	38.89	PK*	34.2	-33.8	39.29	54	-14.71	-	-	153	198	H

PK*=PK-DCF



Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl/Filtr /Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.302	52.64	Pk	28.6	-29.5	51.74	-	-	74	-22.26	0	225	H
1.302	61.42	Pk	28.6	-29.5	60.52	-	-	74	-13.48	215	161	V
1.736	53.9	Pk	29.6	-28.3	55.2	-	-	74	-18.8	228	113	H
1.736	50.54	Pk	29.6	-28.3	51.84	-	-	74	-22.16	0	385	V
2.17	54.48	Pk	31.6	-27.5	58.58	-	-	74	-15.42	0	192	H
2.17	53.52	Pk	31.6	-27.5	57.62	-	-	74	-16.38	0	101	V
4.774	48.27	Pk	34.3	-33.3	49.27	-	-	74	-24.73	0	172	H
1.302	32.91	Pk*	28.6	-29.5	32.01	54	-21.99	-	-	0	225	H
1.302	41.69	Pk*	28.6	-29.5	40.79	54	-13.21	-	-	215	161	V
1.736	34.17	Pk*	29.6	-28.3	35.47	54	-18.53	-	-	228	113	H
1.736	30.81	Pk*	29.6	-28.3	32.11	54	-21.89	-	-	0	385	V
2.17	34.75	Pk*	31.6	-27.5	38.85	54	-15.15	-	-	0	192	H
2.17	33.79	Pk*	31.6	-27.5	37.89	54	-16.11	-	-	0	101	V
4.774	28.54	Pk*	34.3	-33.3	29.54	54	-24.46	-	-	0	172	H

Pk*=PK-DCF



Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl/Filtr /Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.311	52.17	Pk	28.7	-29.5	51.37	-	-	74	-22.63	0	214	H
1.311	60.7	Pk	28.7	-29.5	59.9	-	-	74	-14.1	222	101	V
1.748	51.54	Pk	29.7	-28.3	52.94	-	-	74	-21.06	0	376	V
2.185	53.46	Pk	31.7	-27.4	57.76	-	-	74	-16.24	0	121	H
2.185	57.25	Pk	31.7	-27.4	61.55	-	-	74	-12.45	149	200	V
4.807	53.46	Pk	34.3	-33.2	54.56	-	-	74	-19.44	0	180	H
4.807	50.73	Pk	34.3	-33.2	51.83	-	-	74	-22.17	0	276	V
1.311	32.44	Pk*	28.7	-29.5	31.64	54	-22.36	-	-	0	214	H
1.311	40.97	Pk*	28.7	-29.5	40.17	54	-13.83	-	-	222	101	V
1.748	31.81	Pk*	29.7	-28.3	33.21	54	-20.79	-	-	0	376	V
2.185	33.73	Pk*	31.7	-27.4	38.03	54	-15.97	-	-	0	121	H
2.185	37.52	Pk*	31.7	-27.4	41.82	54	-12.18	-	-	149	200	V
4.807	33.73	Pk*	34.3	-33.2	34.83	54	-19.17	-	-	0	180	H
4.807	31	Pk*	34.3	-33.2	32.1	54	-21.9	-	-	0	276	V

Pk*=PK-DCF

9. AC MAINS LINE CONDUCTED EMISSIONS

LIMITS

§15.207 (a)
IC RSS-GEN, Section 7.2.2

Frequency of emission (MHz)	Conducted Limit (dB μ 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 C63.10

RESULTS

No non-compliance noted:

6 WORST EMISSIONS

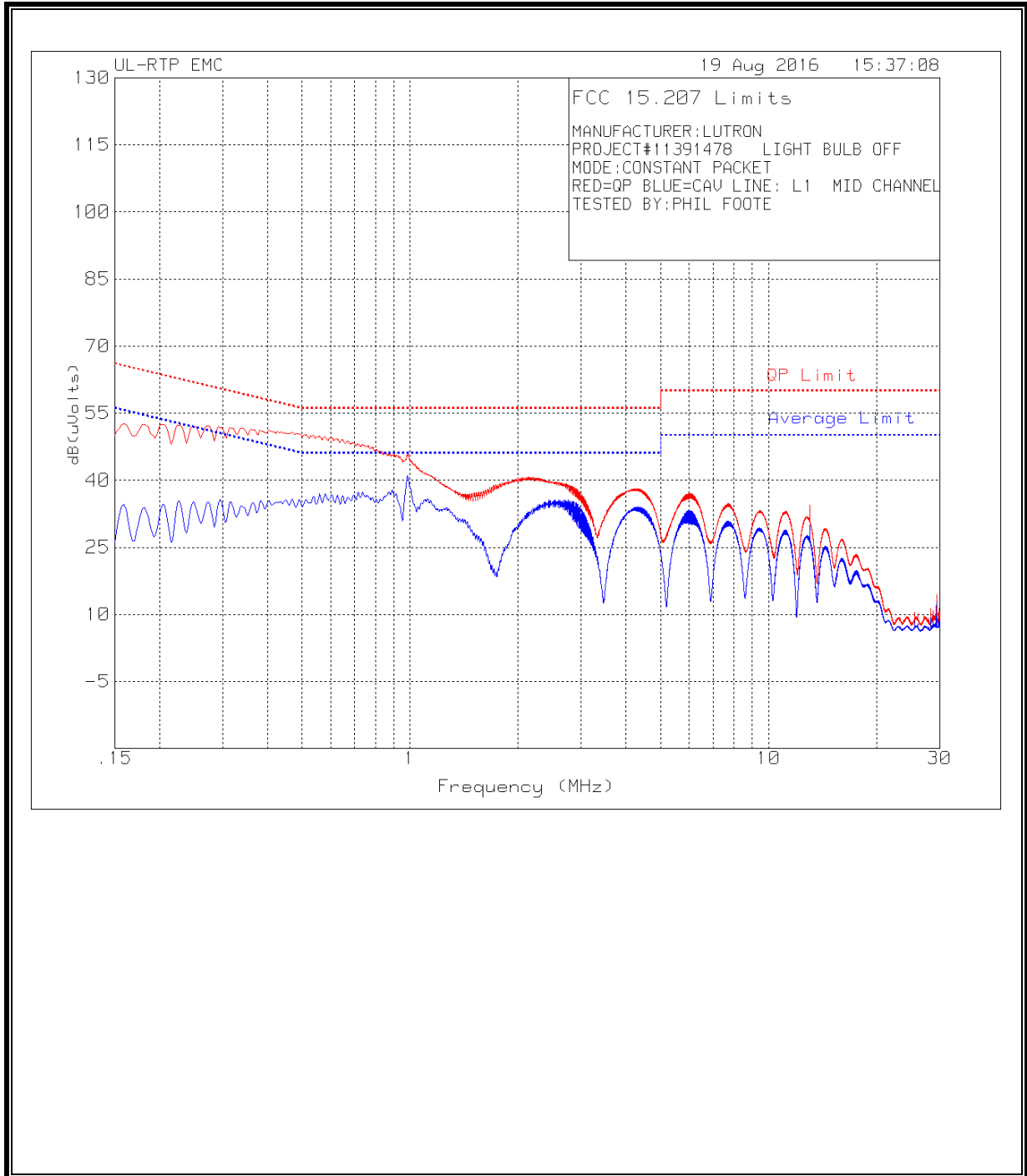
CDE L1

Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Limiter/Cbl (dB)	Corrected Reading dB(uVolts)	QP Limit	Margin (dB)	Average Limit	Margin (dB)
.159	25.09	Ca	.3	9.3	34.69	-	-	55.52	-20.83
.2715	25.48	Ca	.2	9.3	34.98	-	-	51.07	-16.09
.474	25.83	Ca	.1	9.3	35.23	-	-	46.44	-11.21
.98475	31.55	Ca	0	9.4	40.95	-	-	46	-5.05
2.55075	25.73	Ca	0	9.4	35.13	-	-	46	-10.87
4.299	23.71	Ca	.1	9.4	33.21	-	-	46	-12.79
.159	42.95	Qp	.3	9.3	52.55	65.52	-12.97	-	-
.2715	42.56	Qp	.2	9.3	52.06	61.07	-9.01	-	-
.474	41.06	Qp	.1	9.3	50.46	56.44	-5.98	-	-
.98475	36.3	Qp	0	9.4	45.7	56	-10.3	-	-
2.55075	29.94	Qp	0	9.4	39.34	56	-16.66	-	-
4.299	28.3	Qp	.1	9.4	37.8	56	-18.2	-	-

CDE L2

Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Limiter/Cbl (dB)	Corrected Reading dB(uVolts)	QP Limit	Margin (dB)	Average Limit	Margin (dB)
.159	23.84	Ca	.3	9.3	33.44	-	-	55.52	-22.08
.276	23.26	Ca	.1	9.3	32.66	-	-	50.94	-18.28
.51	22.97	Ca	.1	9.3	32.37	-	-	46	-13.63
.99825	24.69	Ca	0	9.4	34.09	-	-	46	-11.91
2.48775	20.77	Ca	0	9.4	30.17	-	-	46	-15.83
3.99525	18.68	Ca	.1	9.4	28.18	-	-	46	-17.82
.159	42.8	Qp	.3	9.3	52.4	65.52	-13.12	-	-
.276	42.41	Qp	.1	9.3	51.81	60.94	-9.13	-	-
.51	40.85	Qp	.1	9.3	50.25	56	-5.75	-	-
.99825	35.11	Qp	0	9.4	44.51	56	-11.49	-	-
2.48775	28.51	Qp	0	9.4	37.91	56	-18.09	-	-
3.99525	26.35	Qp	.1	9.4	35.85	56	-20.15	-	-

LINE 1 RESULTS



LINE 2 RESULTS

