

TEST REPORT

Report Number. : NBK16126681B.V1

Applicant : Lutron Electronics Co. Inc.
P.O. Box 900
Coopersburg, PA 18036 US

Model : CSMR-C

Brand : Lutron

FCC ID : JPZ0158

IC : 2851A-JPZ0158

EUT Description : RF Shade

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C
ISED RSS-247 ISSUE 4
ISED RSS-GEN ISSUE 5 + A1 + A2

Date Of Issue:
2026-06-29

Prepared by:
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REPORT REVISION HISTORY

Rev.	Issue Date	Revisions	Revised By
V1	2026-06-29	Initial Issue	BM

TABLE OF CONTENTS

REPORT REVISION HISTORY	2
TABLE OF CONTENTS	3
1. ATTESTATION OF TEST RESULTS	5
2. TEST RESULTS SUMMARY	6
3. TEST METHODOLOGY	7
4. FACILITIES AND ACCREDITATION	7
5. DECISION RULES AND MEASUREMENT UNCERTAINTY	8
5.1. METROLOGICAL TRACEABILITY	8
5.2. DECISION RULES	8
5.3. MEASUREMENT UNCERTAINTY	8
5.4. SAMPLE CALCULATION	8
6. EQUIPMENT UNDER TEST	9
6.1. EUT DESCRIPTION	9
6.2. MAXIMUM OUTPUT POWER	9
6.3. DESCRIPTION OF AVAILABLE ANTENNAS	9
6.4. SOFTWARE AND FIRMWARE	9
6.5. WORST-CASE CONFIGURATION AND MODE	10
6.6. DESCRIPTION OF TEST SETUP	11
7. MEASUREMENT METHOD	13
8. TEST AND MEASUREMENT EQUIPMENT	14
9. ANTENNA PORT TEST RESULTS	15
9.1. ON TIME AND DUTY CYCLE	15
9.2. OCCUPIED BANDWIDTH	16
9.2.1. 99% BW	16
9.3. 6 dB BANDWIDTH	17
9.3.1. 6dB BW	17
9.4. CONDUCTED OUTPUT POWER	18
9.4.1. Peak Power Measurements	18
9.5. PEAK POWER SPECTRAL DENSITY	19
9.5.1. PkPSD	19
9.6. SPURIOUS EMISSIONS & BANDEDGE	20
9.6.1. Bandedge Result	21
9.6.2. Antenna Port Conducted Emissions – low channel plot	22
9.6.3. Antenna Port Conducted Emissions – middle channel plot	22

9.6.4.	Antenna Port Conducted Emissions – high channel plot	23
9.6.5.	Antenna Port Conducted Emissions – tabular data	23
10.	RADIATED TEST RESULTS	24
10.1.	LIMITS AND PROCEDURE.....	24
10.2.	TRANSMITTER 9kHz-30MHz.....	25
10.2.1.	Battery Mode - Trickle-Charge Mode	25
	Radiated Emissions Middle Channel.....	25
10.3.	TRANSMITTER ABOVE 30MHz-1GHz.....	28
10.3.1.	Battery Mode - Trickle-Charge Mode	28
	Radiated Emissions Middle Channel.....	28
10.3.1.	Battery Mode - Trickle-Charge with Hambar Mode.....	30
	Radiated Emissions Middle Channel.....	30
10.4.	TRANSMITTER ABOVE 1 GHz.....	32
10.4.1.	Battery Mode	32
10.4.2.	Trickle-Charge Mode	42
10.4.3.	Trickle-Charge and Hembar Mode	58
11.	AC POWER LINE CONDUCTED EMISSIONS	74
12.	SETUP PHOTOS	79

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Lutron Electronics Co. Inc.

EUT DESCRIPTION: RF Shade

MODEL: CSMR-C

BRAND: Lutron

SAMPLE RECEIPT DATE: 2026-05-21

DATE TESTED: 2026-05-22 TO 2026-06-18

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Complies
ISED RSS-247 Issue 4	Complies
ISED RSS-GEN Issue 5 + A1 + A2	Complies

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

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.

Approved & Released For
UL LLC



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Consumer, Medical and IT Segment
UL LLC

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UL LLC

2. TEST RESULTS SUMMARY

This report contains data provided by the customer which can impact the validity of results. UL LLC is only responsible for correctly integrating customer-provided data with measurements performed by UL LLC. The data provided by customer is the hardware/protocol based duty cycle information.

FCC Clause	ISED Clause	Requirement	Result	Comment
-	-	Duty Cycle	Reporting purposes only	ANSI C63.10 Section 11.6.
-	RSS-GEN 6.7	99% OBW	Reporting purposes only	ANSI C63.10 Section 6.9.3.
15.247 (a) (2)	RSS-247 5.2 (a)	6dB BW	Met Limit	None.
15.247 (b) (3)	RSS-247 5.4 (d)	Output Power	Met Limit	None.
15.247 (e)	RSS-247 5.2 (b)	PSD	Met Limit	None.
15.247 (d)	RSS-247 5.5	Conducted Spurious Emissions	Met Limit	None.
15.209, 15.205	RSS-GEN 8.9, 8.10	Radiated Emissions	Met Limit	None.
15.207	RSS-Gen 8.8	AC Mains Conducted Emissions	Met Limit	None.

*unless otherwise stated all testing was conducted by BM06740.

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2020+Cor.1-2023+C63.10a-2024+Errata, KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, RSS-GEN Issue 5 + A1 + A2, and RSS-247 Issue 4.

4. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, Laboratory Code 0751.07, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☒	Test Location 1: 333 Pfingsten Road Northbrook, IL 60062	US0065	2180A	152210
☒	Test Location 2: 750 Anthony Trail Road Northbrook, IL 60062	US0065	2180A	152210

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	ULab
Occupied Bandwidth	1.22%
Power Spectral Density	2.47 dB
Unwanted Emissions, Conducted	1.94 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.87 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB

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

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

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)
 $36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.
 $36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$

6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

CSMR-C battery-operated RF shade is a roller style shade. The hembar, when docked in the upmost shade position, charges the motor drive's main battery for extending the battery charge. Radio is using 802.15.4 protocol.

The EUT is wireless 2.4GHz ZigBee protocol window roller controller.

6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

Antenna	Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
1	2405 - 2480	ZigBee	19.85	96.61

6.3. DESCRIPTION OF AVAILABLE ANTENNAS

The antenna(s) gain and type, as provided by the manufacturer' are as follows: The antenna(s) gain, as provided by the manufacturer' are as follows:

Frequency Band (GHz)	Antenna 1
	Antenna Gain
2405-2480	3.61dBd (5.76dBi)

6.4. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was 003.023.001r000

6.5. WORST-CASE CONFIGURATION AND MODE

Radiated emissions below 1GHz, and power line conducted emissions were performed with the EUT set to the middle channel. No emissions related to the radio were identified therefore low and high channel was not explored.

Radiated emissions above 18GHz were performed only in trickle charge and trickle charge plus hembar configuration.

Band edge and radiated emissions between 1GHz and 25GHz were performed with the EUT set to transmit at the highest power on low, middle and high channels.

The EUT can be mounted in single orientation only, however multiple configurations were possible. The possible configurations are:

- Battery mode (the part of the device with transceiver does not have trickle charge wires or hembar present nearby).
- Trickle charge mode where 35VDC source is attached to the transceiver part of the device to provide trickle charge to the roller battery.
- Trickle charge with hembar in front of the part of the EUT containing the transceiver.
- Antenna port measurements were conducted on special sample where 3.3VDC was directly applied to EUT part with the transceiver.

Testing was conducted at two lab locations. Test Location 1 was used for Line Conducted Emissions, Antenna Port conducted Emissions and all emissions above 1GHz. Test location 2 was used for radiated emissions testing below 1GHz.

Simultaneous transmission is not possible.

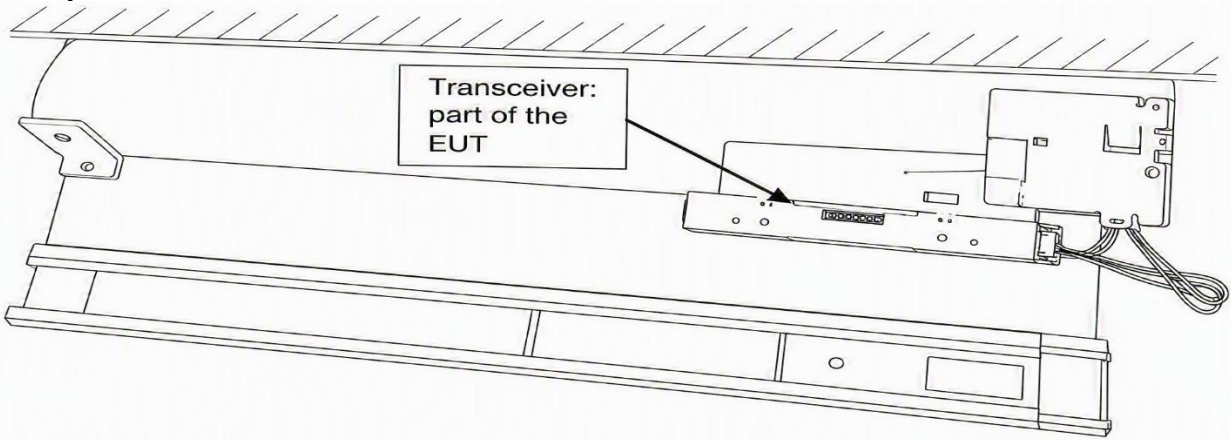
6.6. DESCRIPTION OF TEST SETUP

TEST SETUP

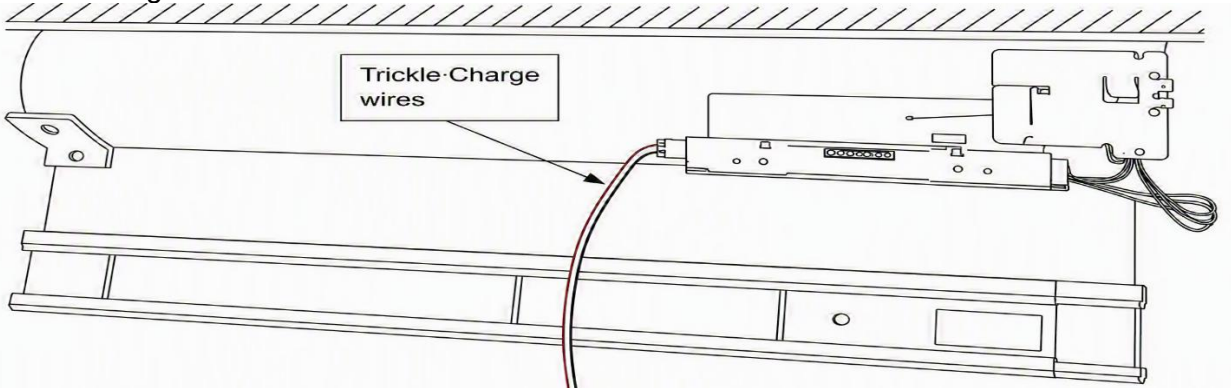
The EUT was programmed wirelessly via remote programmer.

SETUP DIAGRAMS

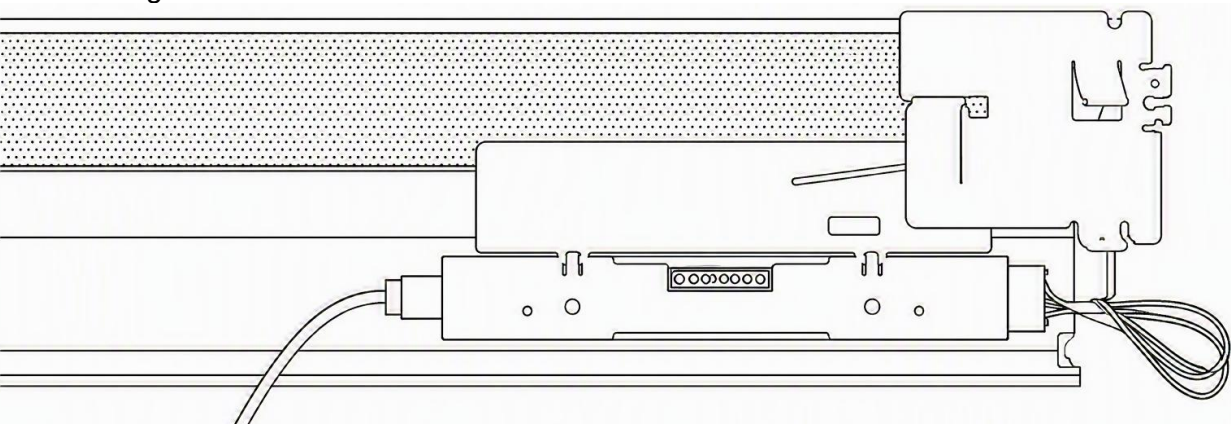
Battery Mode



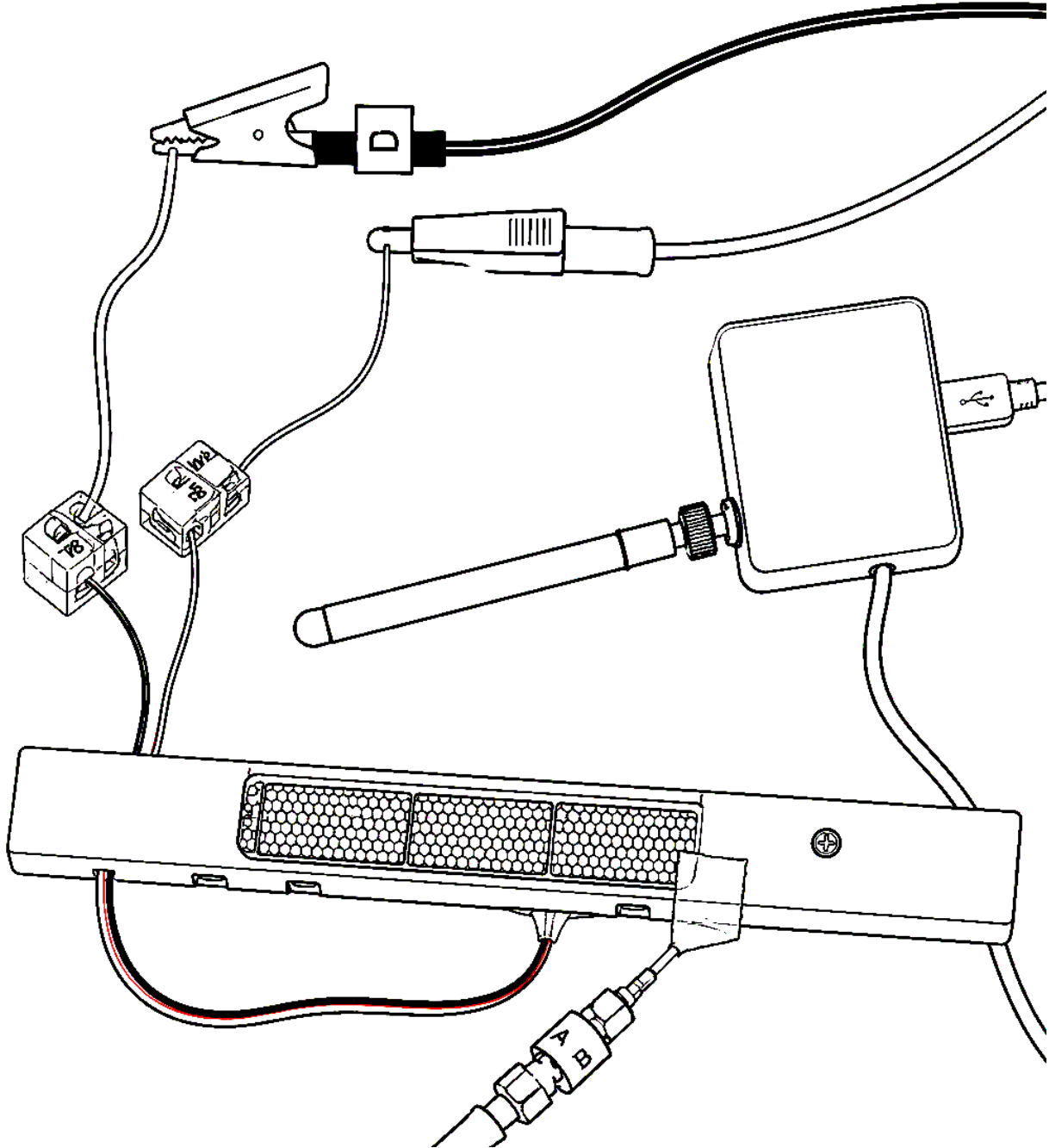
Trickle Charge Mode



Trickle Charge Mode with Hembar



Antenna Port Measurements



7. MEASUREMENT METHOD

On-Time and Duty Cycle: ANSI C63.10 Section 11.6.

Occupied BW (99%): ANSI C63.10-2020+Cor.1-2023+C63.10a-2024 Section 6.9.3

6 dB BW: ANSI C63.10 Subclause -11.8.2 $RBW \leq DTS \text{ BW}$

Occupied BW (99%): ANSI C63.10-2013 Section 6.9.3

Output Power: ANSI C63.10 Subclause -11.9.1.1 $RBW \geq DTS \text{ bandwidth}$

PSD: ANSI C63.10 Subclause -11.10.2 Method PKPSD (peak PSD)

Radiated emissions non-restricted frequency bands: ANSI C63.10 Subclause -11.11

Radiated emissions restricted frequency bands: ANSI C63.10 Subclause -11.12.1

Conducted emissions in restricted frequency bands: ANSI C63.10 Subclause -11.12.2

Band-edge: ANSI C63.10 Subclause -11.13.3.4 Integration method -Trace averaging across
ON and OFF times DC correction

AC Power Line Conducted Emissions: ANSI C63.10-2013, Section 6.2.

Radiated Spurious Emissions Below 30MHz: ANSI C63.10-2013 Section 6.4

8. TEST AND MEASUREMENT EQUIPMENT

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

Test Location 1 Equipment:

Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Antenna Array	UL	BOMS	36219	2025-08-26	2026-08-31
EMI Receiver	Rohde & Schwarz	ESU	52994	2026-01-30	2027-01-31
EMI Test Receiver	Rohde & Schwarz	ESR	86711	2026-01-20	2027-01-31
Transient Limiter	Electro-Metrics	EM-7600-2	19866	2026-02-27	2027-02-28
High-Pass Filter	Solar Electronics	2803-150	53775	2026-02-27	2027-02-28
LISN - L1	Solar Electronics	8602-50-TS-50-N	19808	2026-01-20	2027-01-31
LISN - L2	Solar Electronics	8602-50-TS-50-N	19806	2026-01-20	2027-01-31
Signal Analyzer	Aglient	N9030A PXA	77811	2026-01-21	2027-01-31

Test Location 2 Equipment

Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Receiver	Rohde & Schwarz	ESCI	54598	2026-01-24	2027-01-31
Hybrid Antenna	SunAR RF Motion	JB3	214023	2025-02-24	2027-02-28
Loop Antenna	EMCO	6502/1	19723	2026-01-29	2027-01-31

Software used for some data accusation:

UL-EMC Emissions and NSA program Version 9.5

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method, and ANSI C63.10, 11.6.

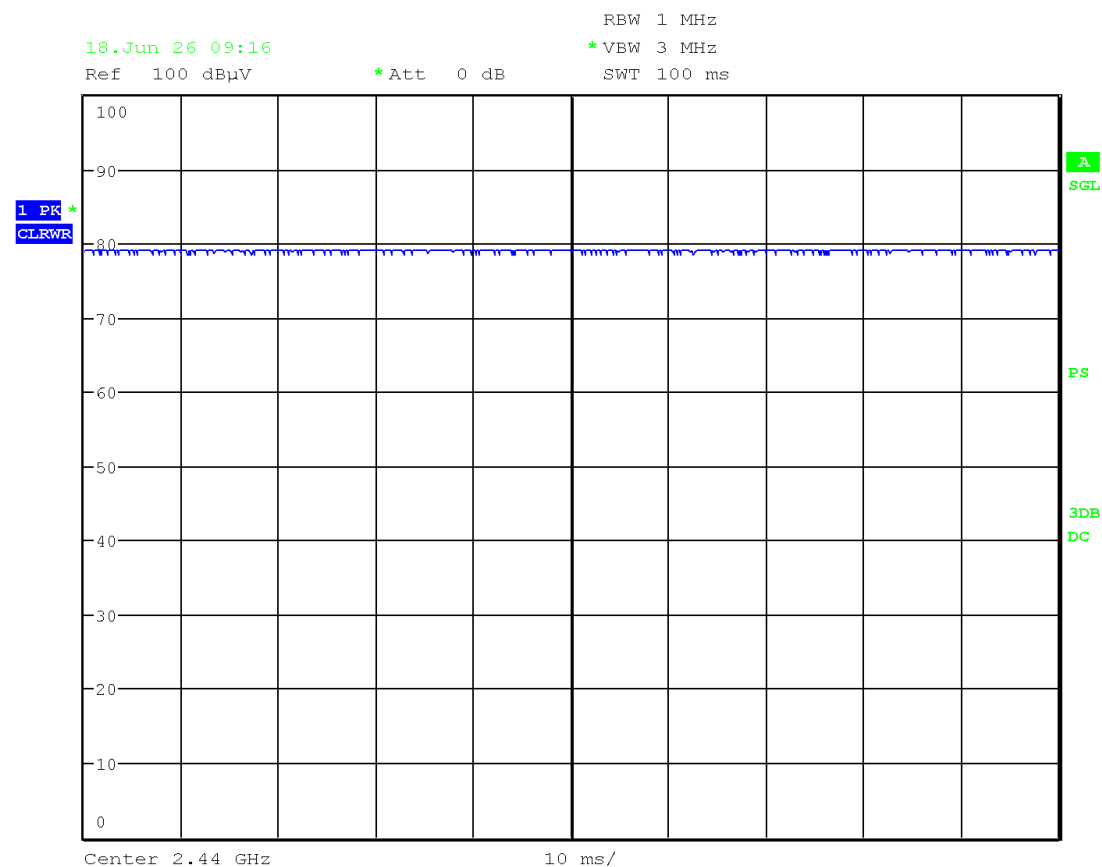
ON TIME AND DUTY CYCLE RESULTS

Per the manufacturer the maximum duty cycle in use will be 32% and it will be limited by the hardware protocol. Per FCC KDB 558074 D01 15.247 Meas Guidance v05r02 if the EUT is transmitting continuously with duty cycle greater then 98% during testing and average measurements are done. Where necessary those measurements were further adjusted by applying the protocol limited duty cycle. That duty cycle is calculated by using $10 \cdot \log((\text{protocol duty cycle \%})/100)$.

Hardware based duty cycle information is provided by the applicant in the operational description document.

The duty cycle used for testing was 100%. See plot below.

DUTY CYCLE PLOTS



9.2. OCCUPIED BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Bandwidth 99% - MHz
Low - 2405	2.2554
Middle - 2440	2.2556
High - 2480	2.2624

9.2.1. 99% BW



9.3. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

RSS-247 5.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Bandwidth 6dB - MHz
Low - 2405	1.638
Middle - 2440	1.641
High - 2480	1.642

9.3.1. 6dB BW



9.4. CONDUCTED OUTPUT POWER

LIMITS

FCC §15.247 (b) (3)

RSS-247 5.4 (d)

The maximum antenna gain is less than or equal to 6dBi, therefore the limit is 30dBm.

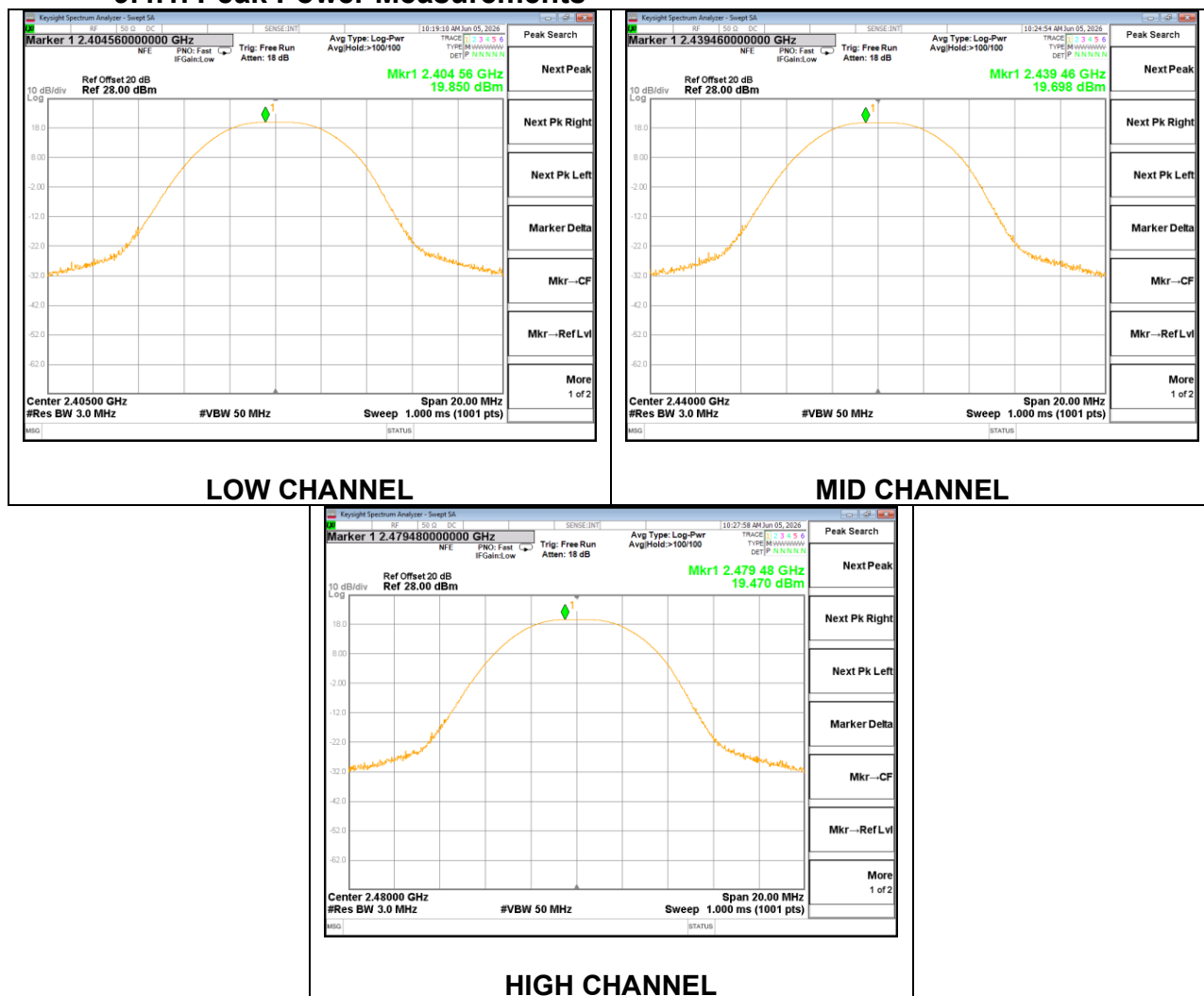
TEST PROCEDURE

The cable assembly with attenuator insertion loss of 20dB was entered as an offset in the spectrum analyzer.

RESULTS

Channel	Peak Power dBm
Low Channel – 2405MHz	19.850
Middle Channel – 2440MHz	19.698
High Channel – 2480MHz	19.470

9.4.1. Peak Power Measurements



9.5. PEAK POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (e)

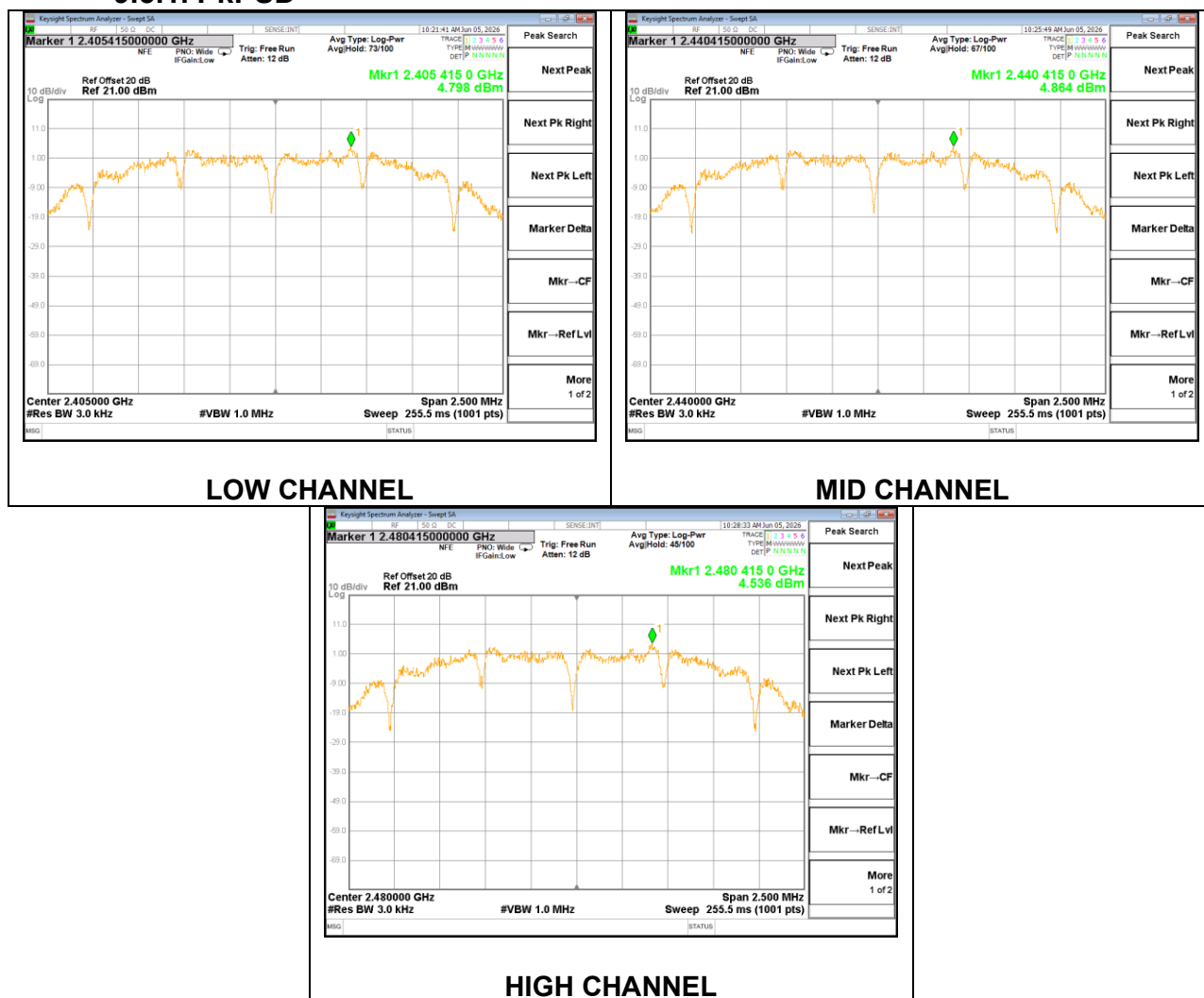
RSS-247 (5.2) (b)

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

RESULTS

Channel	Peak Power Spectral density dBm
Low Channel – 2405MHz	4.798
Middle Channel – 2440MHz	4.864
High Channel – 2480MHz	4.536

9.5.1. PkPSD



9.6. SPURIOUS EMISSIONS & BANDEDGE

LIMITS

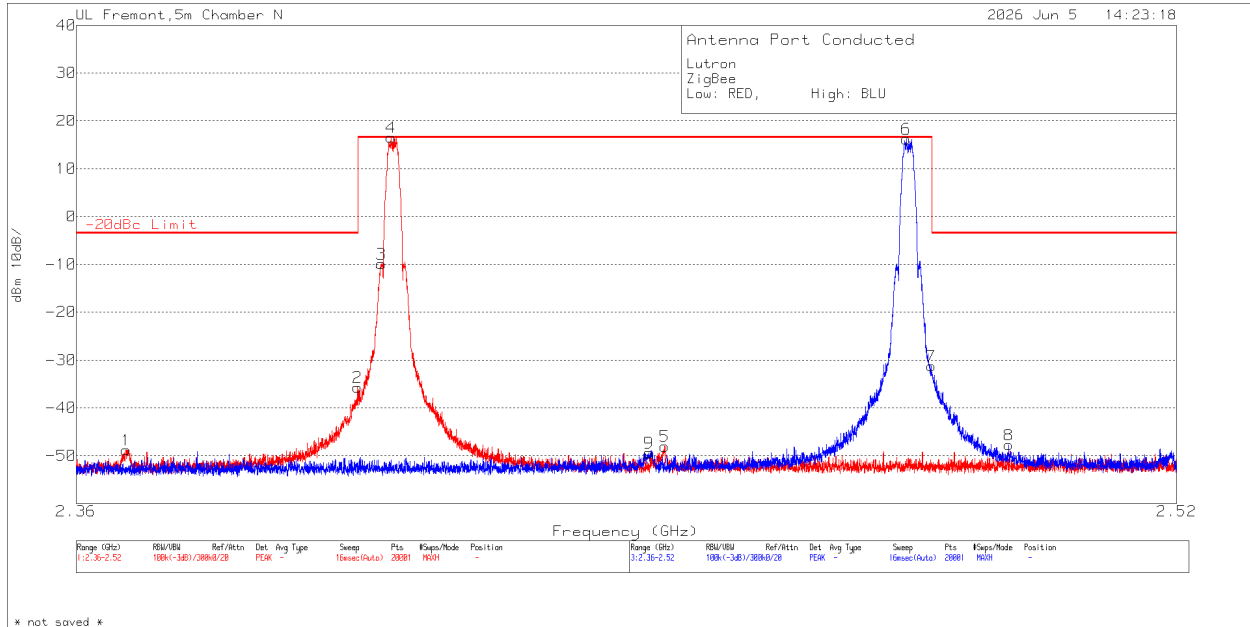
FCC §15.247 (d)

RSS-247 5.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is -20 dB.

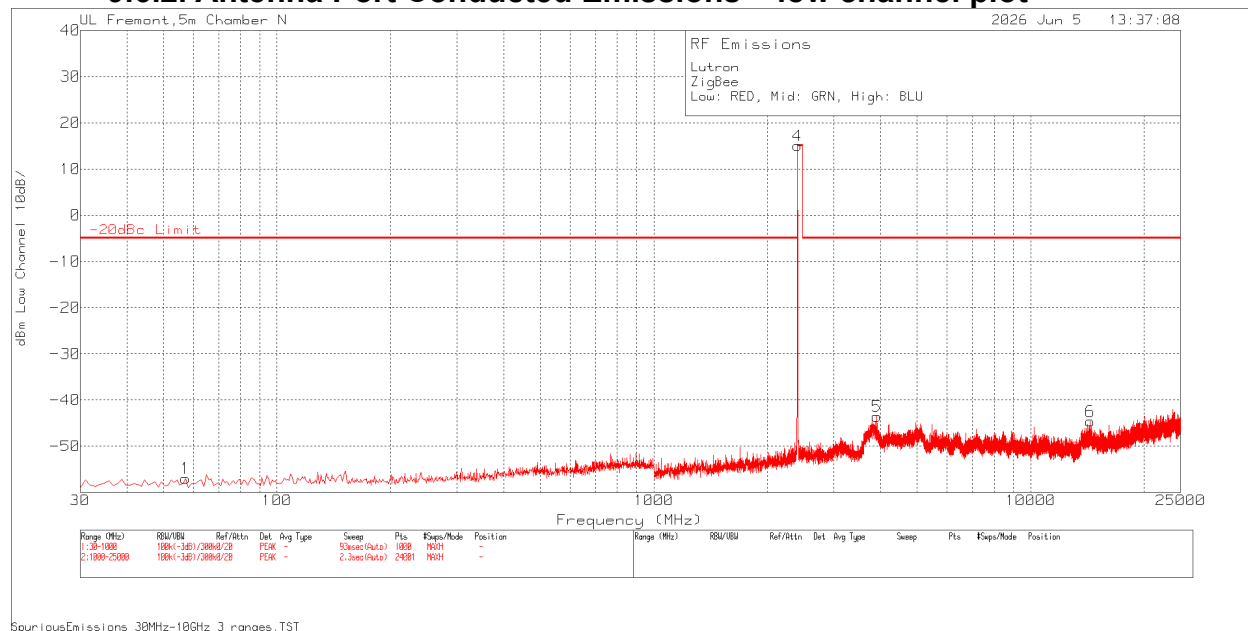
RESULTS

9.6.1. Bandedge Result

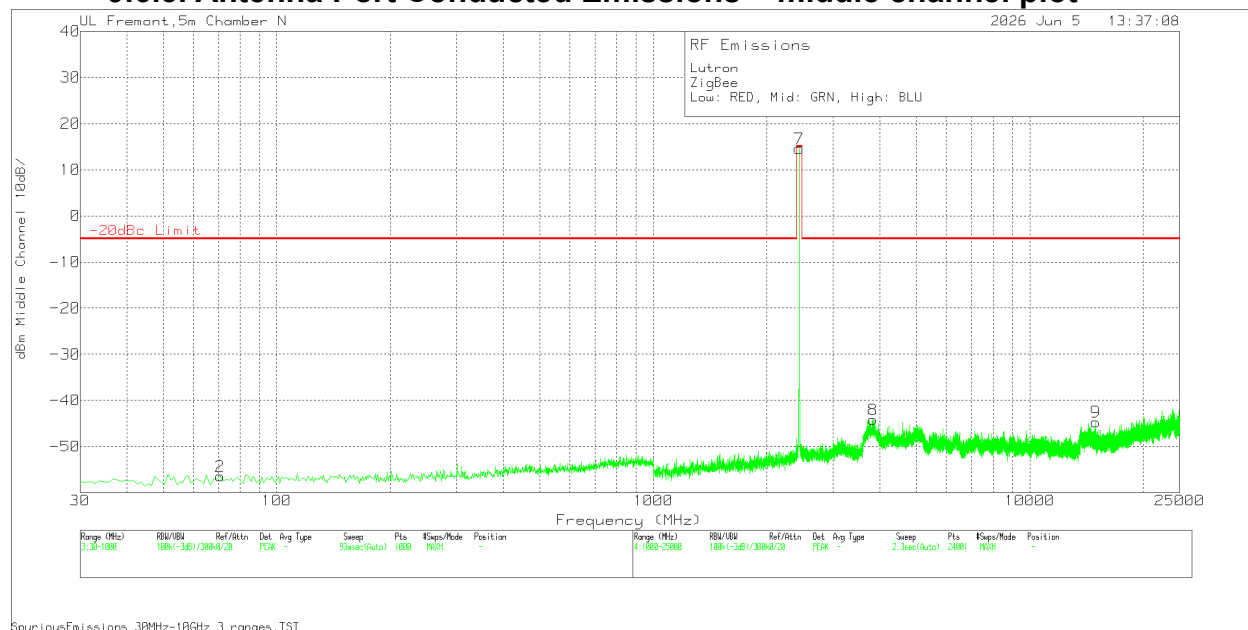


Lutron							
ZigBee							
Low: RE	High: BLU						
Trace Markers							
Marker No.	Test Frequency (GHz)	Meter Reading (dBm)	Detector	Path Factor dB	Corrected Reading dBm	-20dBc Limit	Margin (dB)
Low Channel							
1	2.367072	-68.7	Pk	19.9	-48.8	-3.43	-45.37
2	2.399912	-55.59	Pk	19.9	-35.69	-3.43	-32.26
3	2.403336	-29.8	Pk	19.9	-9.9	16.57	-26.47
4	2.404732	-3.33	Pk	19.9	16.57	16.57	0
5	2.44428	-67.95	Pk	19.9	-48.05	16.57	-64.62
High Channel							
6	2.479728	-3.67	Pk	19.9	16.23	16.57	-0.34
7	2.48342	-51.14	Pk	19.9	-31.24	16.57	-47.81
8	2.494912	-67.73	Pk	20	-47.73	-3.43	-44.3
9	2.44196	-69.31	Pk	19.9	-49.41	16.57	-65.98
Pk - Peak detector							

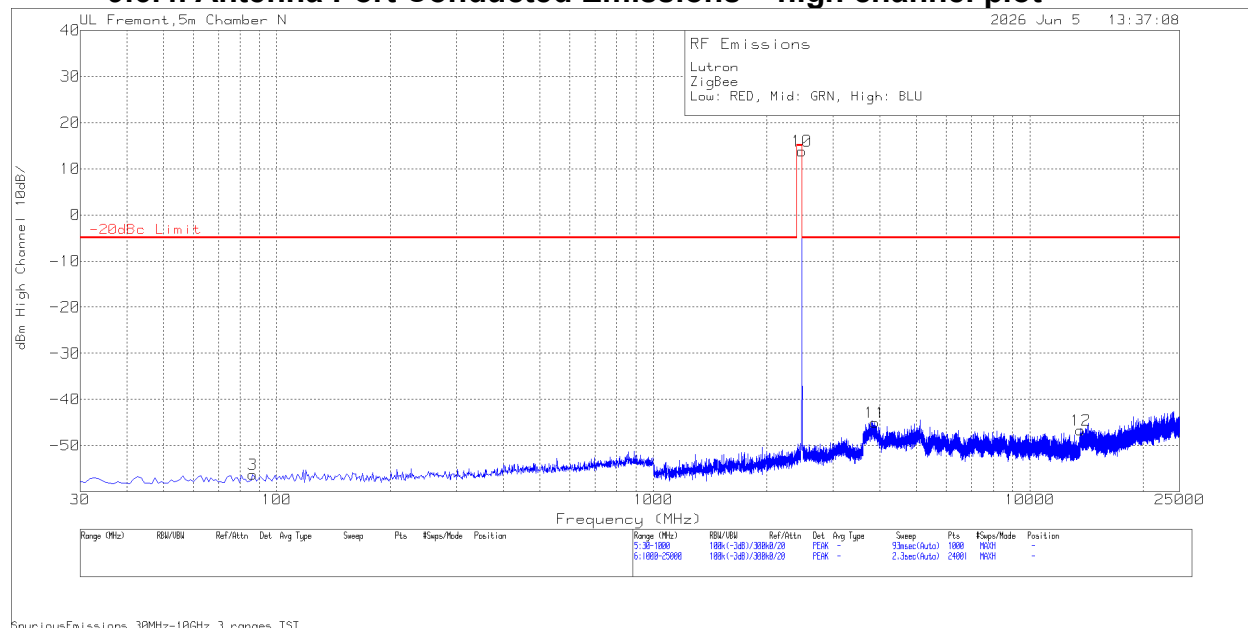
9.6.2. Antenna Port Conducted Emissions – low channel plot



9.6.3. Antenna Port Conducted Emissions – middle channel plot



9.6.4. Antenna Port Conducted Emissions – high channel plot



9.6.5. Antenna Port Conducted Emissions – tabular data

Lutron							
ZigBee							
Low: RE	Mid: GRN	High: BLU					
Trace Markers							
Marker No.	Test Frequency (MHz)	Meter Reading (dBm)	Detector	Path Factor dB	Corrected Reading dBm	-20dBc Limit	Margin (dB)
Low Channel							
1	57.18719	-74.93	Pk	18	-56.93	-4.97	-51.96
4	2405	-4.87	Pk	19.9	15.03	15.03	0
5	3904	-63.92	Pk	20.4	-43.52	-4.97	-38.55
6	14387	-65.18	Pk	20.6	-44.58	-4.97	-39.61
Middle Channel							
2	70.78078	-74.41	Pk	18	-56.41	-4.97	-51.44
7	2439.5	-5.35	Pk	19.9	14.55	15.03	-0.48
8	3833	-64.45	Pk	20.3	-44.15	-4.97	-39.18
9	14954	-65.27	Pk	20.6	-44.67	-4.97	-39.7
High Channel							
3	86.31632	-74.24	Pk	18	-56.24	-4.97	-51.27
10	2480	-6.1	Pk	19.9	13.8	15.03	-1.23
11	3873	-65.39	Pk	20.4	-44.99	-4.97	-40.02
12	13639	-67.05	Pk	20.4	-46.65	-4.97	-41.68
Pk - Peak detector							

10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

RSS-GEN, Section 8.9 and 8.10.

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. 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 in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3MHz for peak measurements. In addition between 12GHz and 25GHz Average Scan is conducted to determine if there is need to perform additional measurements where the peak noise floor is close to the limit. If there is no visible emissions close to the average limit when compared to average scan then no additional measurements are conducted.

For final measurements above 1 GHz, when needed, the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

The spectrum from 1 GHz to 25 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. Below 1GHz emissions, the EUT is set to middle channel. If there are not emissions identified related to the transmitter then no additional low channel and high channel scans are conducted.

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.

Hardware based duty cycle is only applied to average measurements when needed.

KDB 414788 Open Field Site(OFS) and Chamber Correlation Justification

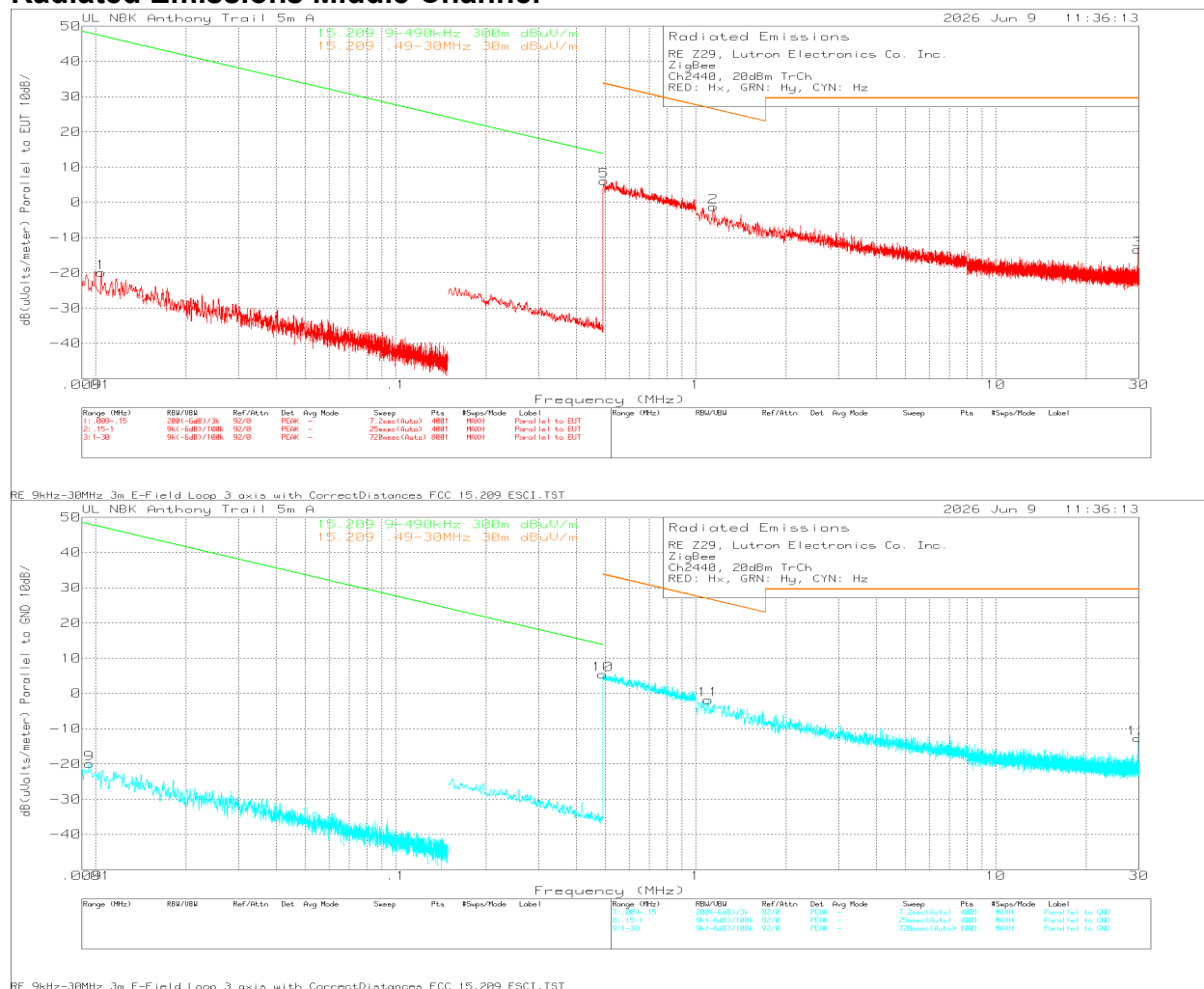
OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

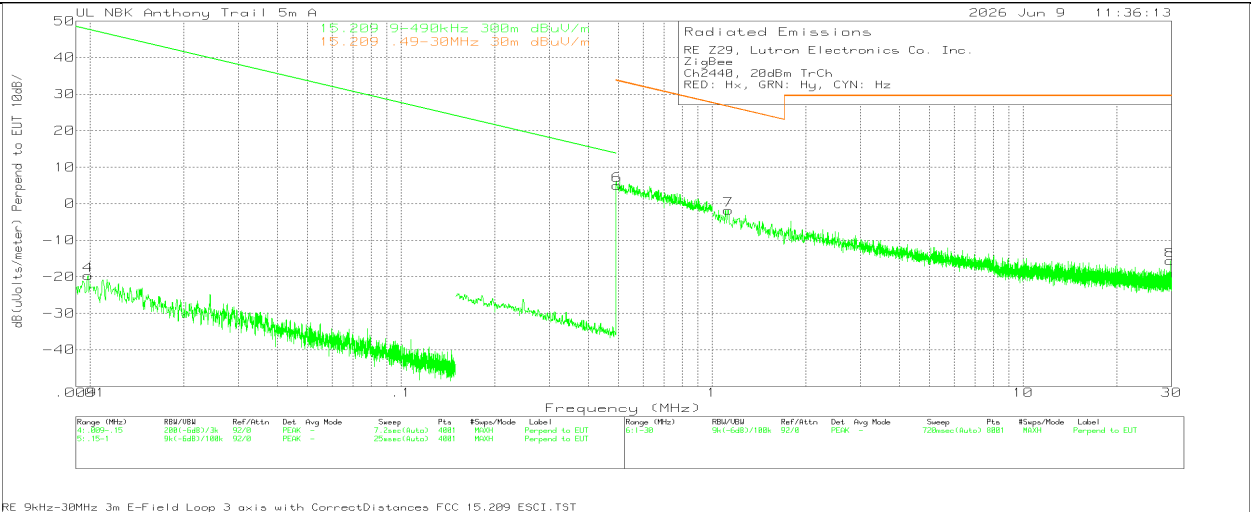
NOTE: The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table), using the free space impedance of 377 Ohms. For example the measurement at frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to $Y - 51.5 = Z$ dBuA/m, which has the same margin, W dB, to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.

10.2. TRANSMITTER 9kHz-30MHz

10.2.1. Battery Mode - Trickle-Charge Mode

Radiated Emissions Middle Channel





RE Z29,Lutron Electronics Co. Inc.
ZigBee
Ch2440, 20dBm TrCh
RED: Hx, GRN: Hy, CYN: Hz

Trace Markers

Test No.	Frequency (MHz)	Meter Reading	Transducer Factor (dB)	Gain/Loss Factor (dB)	Corrected Reading (uVolts/meter)	Limit:1	2
=====							
Parallel to EUT							
1	.0104	34.5dBuV Pk	25.5	-79.9	-19.9	47.23	-
		Azimuth:0-360			Margin (dB)	-67.13	-
5	.4949	34.44dBuV Pk	11.5	-39.9	6.04	-	33.71
		Azimuth:0-360			Margin (dB)	-	-27.67
2	1.145	26.82dBuV Pk	11.8	-39.9	-1.28	-	26.42
		Azimuth:0-360			Margin (dB)	-	-27.7
3	29.6593	17.24dBuV Pk	8.7	-39.4	-13.46	-	29.54
		Azimuth:0-360			Margin (dB)	-	-43
Perpendicular to EUT							
4	.0098	34.46dBuV Pk	25.8	-79.9	-19.64	47.74	-
		Azimuth:0-360			Margin (dB)	-67.38	-
6	.4949	33.37dBuV Pk	11.5	-39.9	4.97	-	33.71
		Azimuth:0-360			Margin (dB)	-	-28.74
7	1.1269	26.29dBuV Pk	11.8	-39.9	-1.81	-	26.56
		Azimuth:0-360			Margin (dB)	-	-28.37
8	29.6556	15.04dBuV Pk	8.7	-39.4	-15.66	-	29.54
		Azimuth:0-360			Margin (dB)	-	-45.2
Parallel to Ground							
9	.0095	33.92dBuV Pk	26	-79.9	-19.98	48.02	-
		Azimuth:0-360			Margin (dB)	-68	-
10	.4905	33.86dBuV Pk	11.5	-39.9	5.46	-	33.79
		Azimuth:0-360			Margin (dB)	-	-28.33
11	1.1015	26.31dBuV Pk	11.8	-39.9	-1.79	-	26.76
		Azimuth:0-360			Margin (dB)	-	-28.55
12	29.6556	18dBuV Pk	8.7	-39.4	-12.7	-	29.54
		Azimuth:0-360			Margin (dB)	-	-42.24

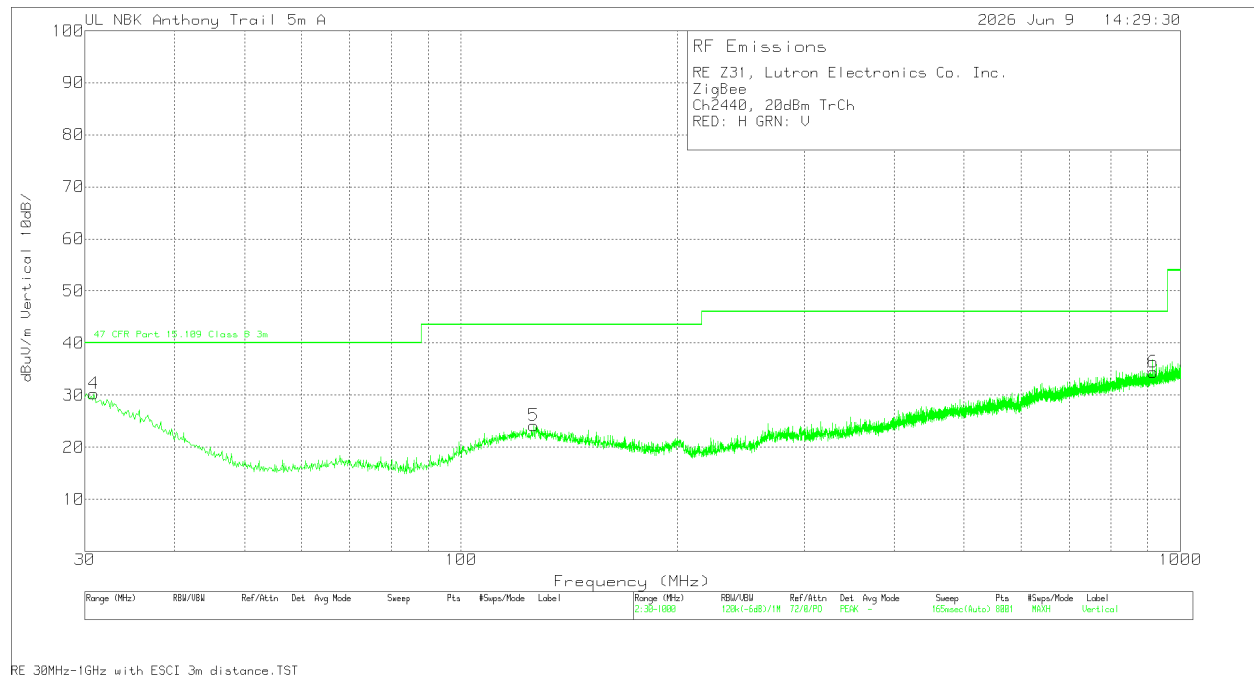
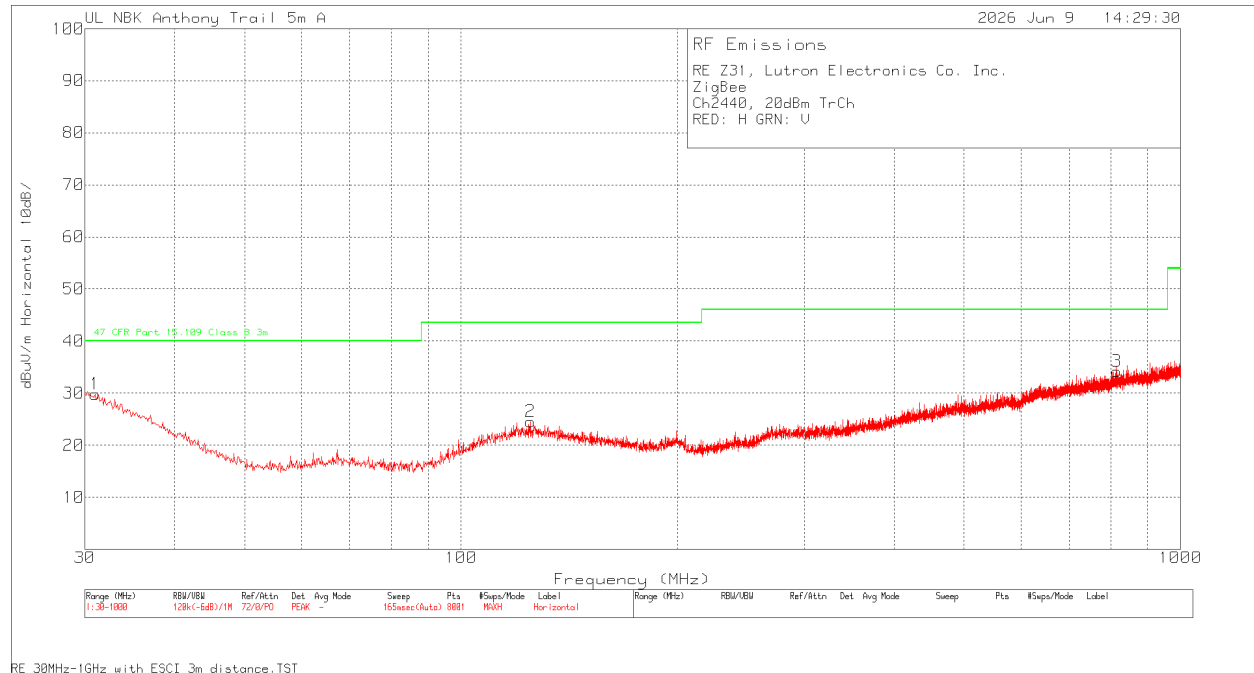
LIMIT 1: 15.209 9-490kHz 300m dBuV/m
LIMIT 2: 15.209 .49-30MHz 30m dBuV/m

Pk - Peak detector

10.3. TRANSMITTER ABOVE 30MHz-1GHz

10.3.1. Battery Mode - Trickle-Charge Mode

Radiated Emissions Middle Channel



*limit label is incorrect and should say FCC Part 15.209. Limit itself is correct.

RE Z31,Lutron Electronics Co. Inc.
ZigBee
Ch2440, 20dBm TrCh
RED: H GRN: V

Trace Markers

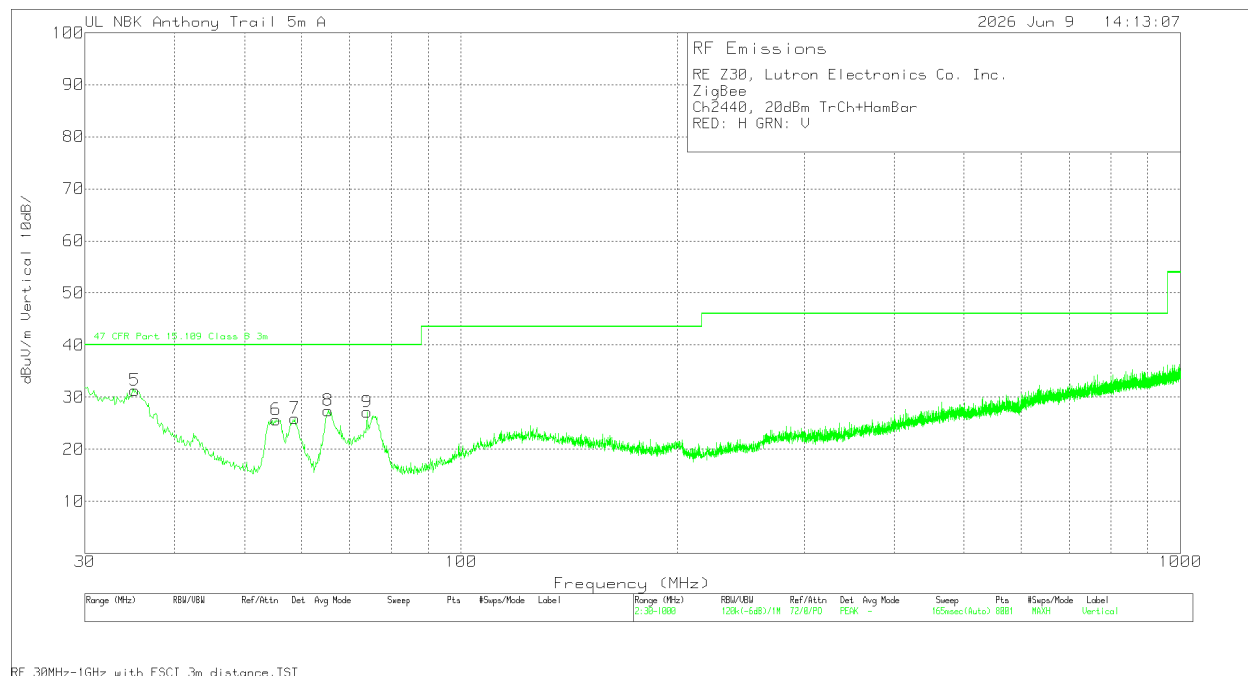
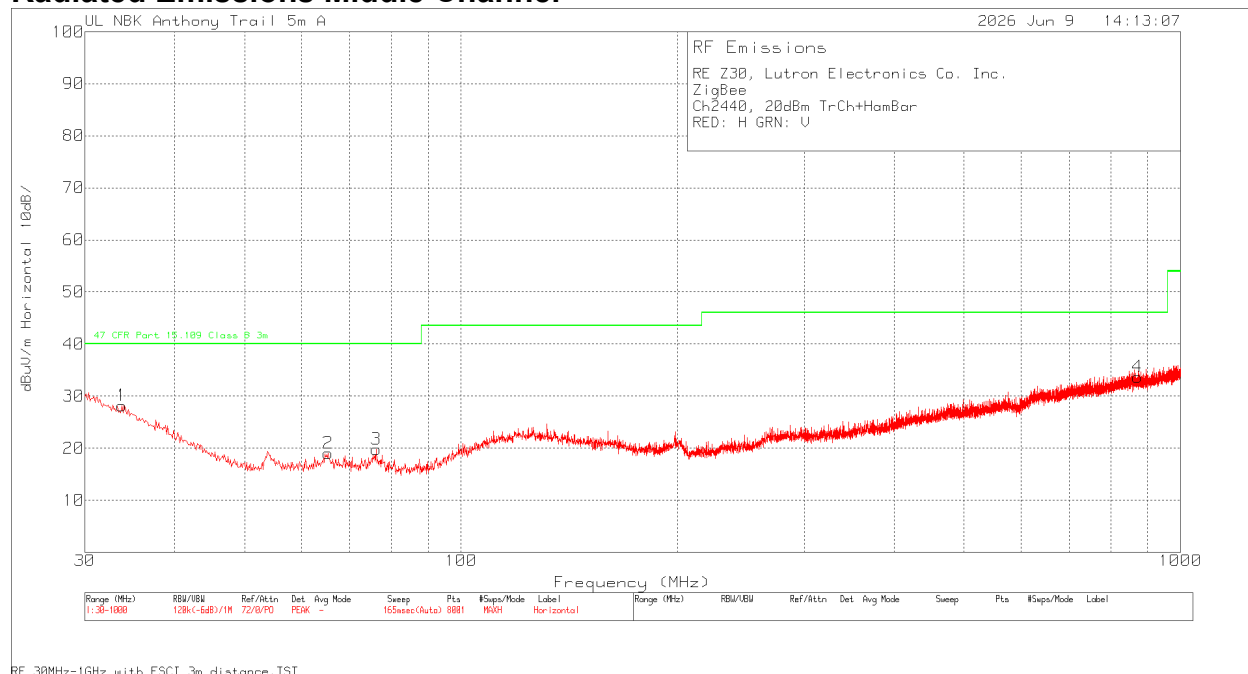
Test No.	Frequency (MHz)	Meter Reading	Transducer Factor (dB)	Gain/Loss Factor (dB)	Corrected Reading dBuV/m	Limit:1
1	30.97	4.97dBuV Pk	24.4	.4	29.77	40
		Azimuth:0-360	Height:300	Horz	Margin (dB)	-10.23
2	124.8175	5.61dBuV Pk	18	.9	24.51	43.52
		Azimuth:0-360	Height:401	Horz	Margin (dB)	-19.01
3	815.8213	5.88dBuV Pk	25.7	2.6	34.18	46.02
		Azimuth:0-360	Height:401	Horz	Margin (dB)	-11.84
4	30.8488	5.24dBuV Pk	24.6	.4	30.24	40
		Azimuth:0-360	Height:201	Vert	Margin (dB)	-9.76
5	126.1513	5.22dBuV Pk	18	.9	24.12	43.52
		Azimuth:0-360	Height:100	Vert	Margin (dB)	-19.4
6	915.4888	5.08dBuV Pk	26.5	2.8	34.38	46.02
		Azimuth:0-360	Height:100	Vert	Margin (dB)	-11.64

LIMIT 1: 47 CFR Part 15.109 Class B 3m
Pk - Peak detector

*limit label is incorrect and should say FCC Part 15.209. Limit itself is correct.

10.3.1. Battery Mode - Trickle-Charge with Hambar Mode

Radiated Emissions Middle Channel



*limit label is incorrect and should say FCC Part 15.209. Limit itself is correct.

RE Z30,Lutron Electronics Co. Inc.
ZigBee
Ch2440, 20dBm TrCh+HamBar
RED: H GRN: V

Trace Markers

Test No.	Frequency (MHz)	Meter Reading	Transducer Factor (dB)	Gain/Loss Factor (dB)	Corrected Reading	Limit:1 dBuV/m
1	33.7588	5.19dBuV Pk	22.6	.4	28.19	40
		Azimuth:0-360	Height:401	Horz	Margin (dB)	-11.81
2	65.2838	6.42dBuV Pk	12	.6	19.02	40
		Azimuth:0-360	Height:200	Horz	Margin (dB)	-20.98
3	76.1963	7.11dBuV Pk	12	.7	19.81	40
		Azimuth:0-360	Height:300	Horz	Margin (dB)	-20.19
4	871.8388	4.91dBuV Pk	26.1	2.7	33.71	46.02
		Azimuth:0-360	Height:401	Horz	Margin (dB)	-12.31
5	35.2138	9.3dBuV Pk	21.5	.5	31.3	40
		Azimuth:0-360	Height:100	Vert	Margin (dB)	-8.7
6	55.3413	13.9dBuV Pk	11.2	.6	25.7	40
		Azimuth:0-360	Height:100	Vert	Margin (dB)	-14.3
7	58.7363	13.86dBuV Pk	11.4	.6	25.86	40
		Azimuth:0-360	Height:100	Vert	Margin (dB)	-14.14
8	65.2838	14.85dBuV Pk	12	.6	27.45	40
		Azimuth:0-360	Height:100	Vert	Margin (dB)	-12.55
9	74.0138	14.3dBuV Pk	12.1	.7	27.1	40
		Azimuth:0-360	Height:100	Vert	Margin (dB)	-12.9

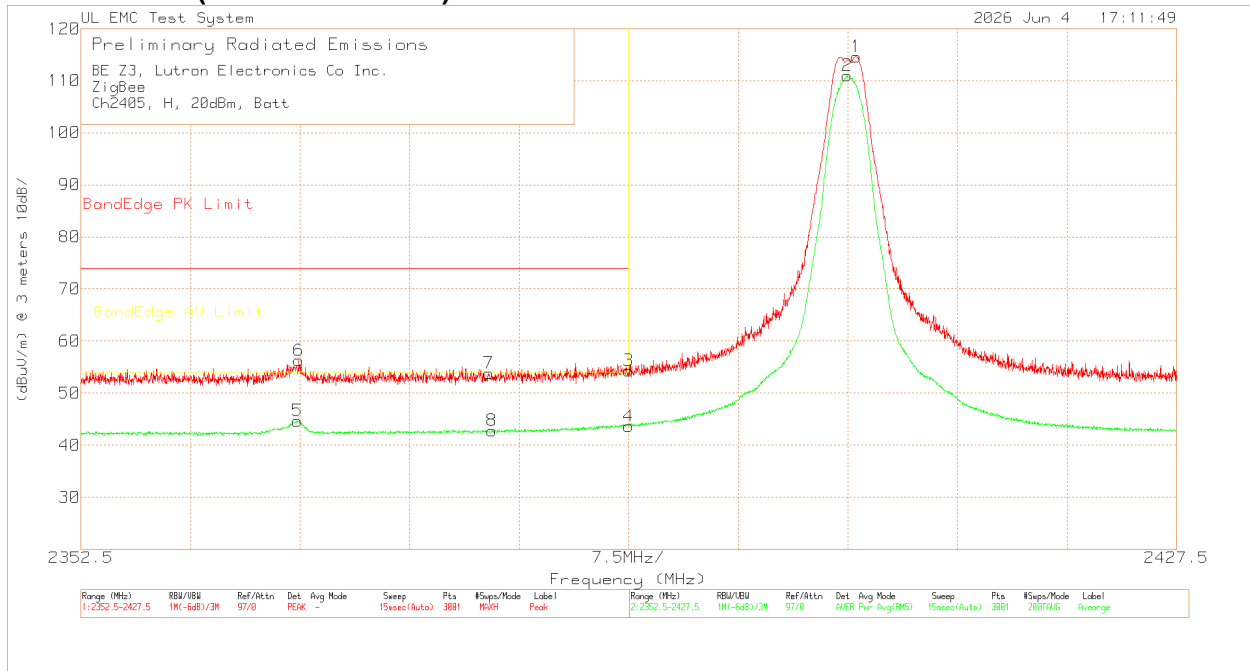
LIMIT 1: 47 CFR Part 15.109 Class B 3m
Pk - Peak detector

*limit label is incorrect and should say FCC Part 15.209. Limit itself is correct.

10.4. TRANSMITTER ABOVE 1 GHz

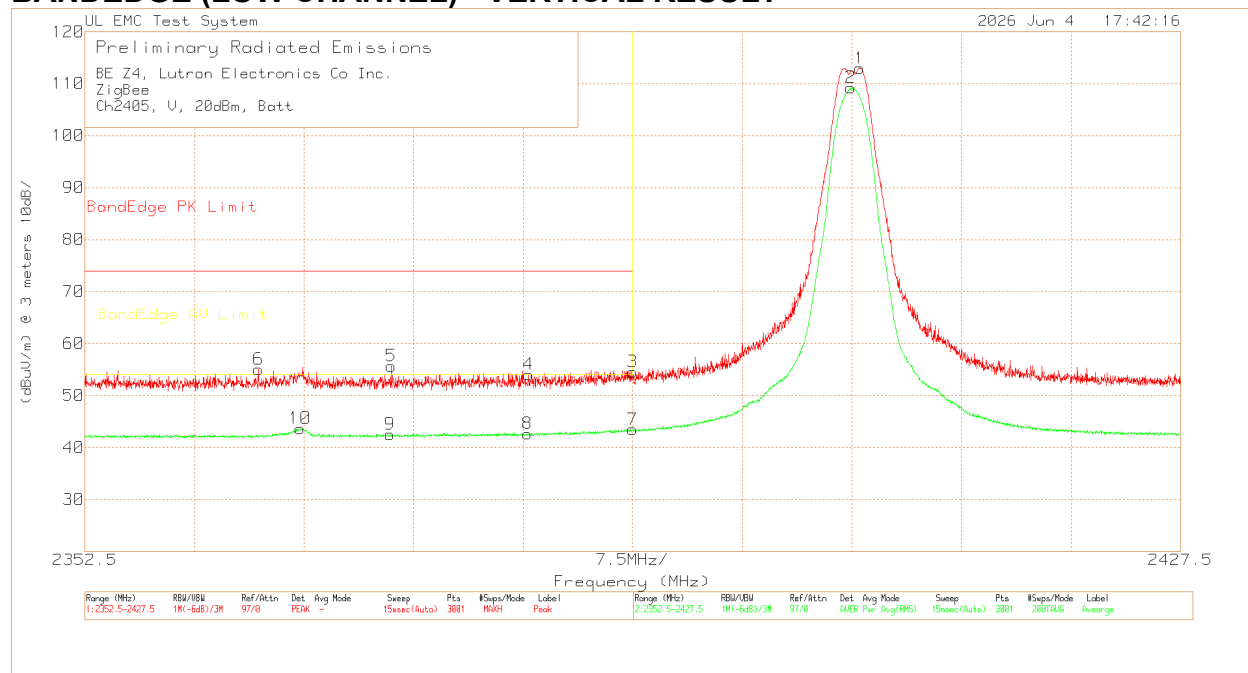
10.4.1. Battery Mode

BANDEDGE (LOW CHANNEL) - HORIZONTAL RESULT



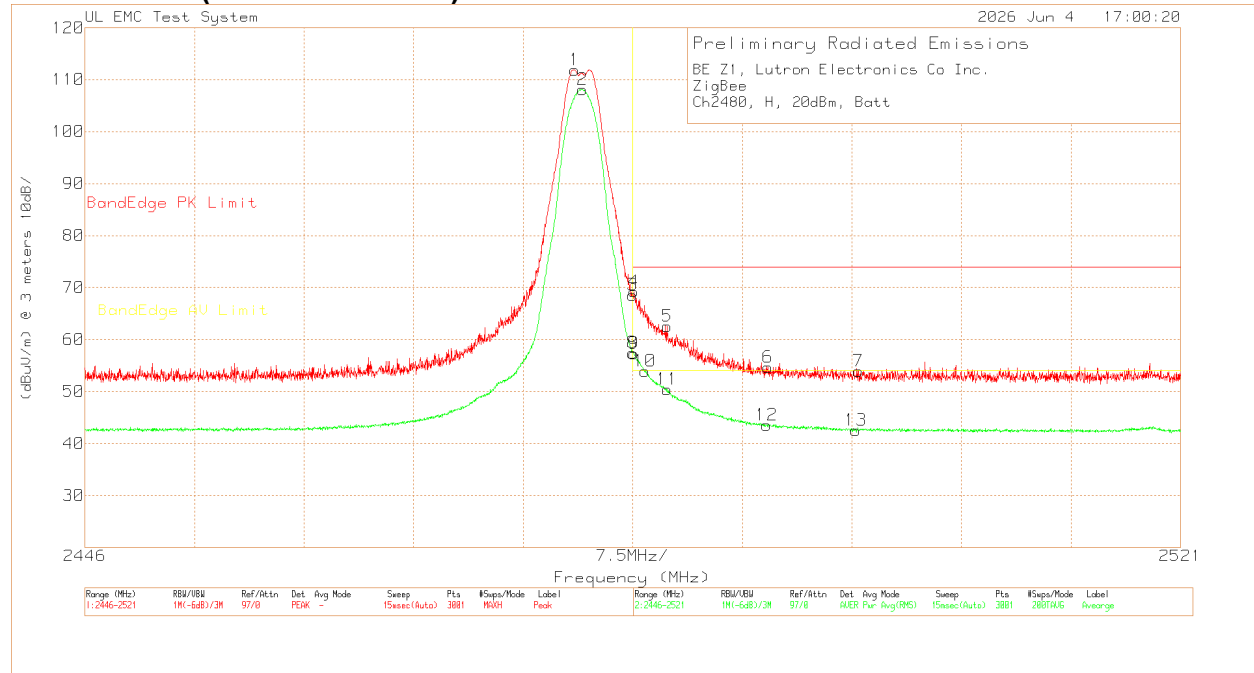
BE Z3,Lutron Electronics Co Inc.														
ZigBee														
Ch2405, H, 20dBm, Batt														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2405.5625	88.06	Pk	21.8	-	4.73	114.59	-	-	-	-	89	149	H
3	2390	27.75	Pk	21.8	-	4.77	54.32	74	-19.68	-	-	89	149	H
6	2367.425	29.81	Pk	21.8	-	4.63	56.24	74	-17.76	-	-	89	149	H
7	2380.4	27.24	Pk	21.8	-	4.71	53.75	74	-20.25	-	-	89	149	H
2	2404.95	84.43	RMS	21.8	-	4.72	110.95	-	-	-	-	89	149	H
4	2390	17.02	RMS	21.8	-	4.77	43.59	-	-	54	-10.41	89	149	H
5	2367.325	18.27	RMS	21.8	-	4.63	44.70	-	-	54	-9.30	89	149	H
8	2380.65	16.29	RMS	21.8	-	4.71	42.80	-	-	54	-11.20	89	149	H
Pk - Peak detector														
RMS - RMS detection														

BANDEDGE (LOW CHANNEL) - VERTICAL RESULT



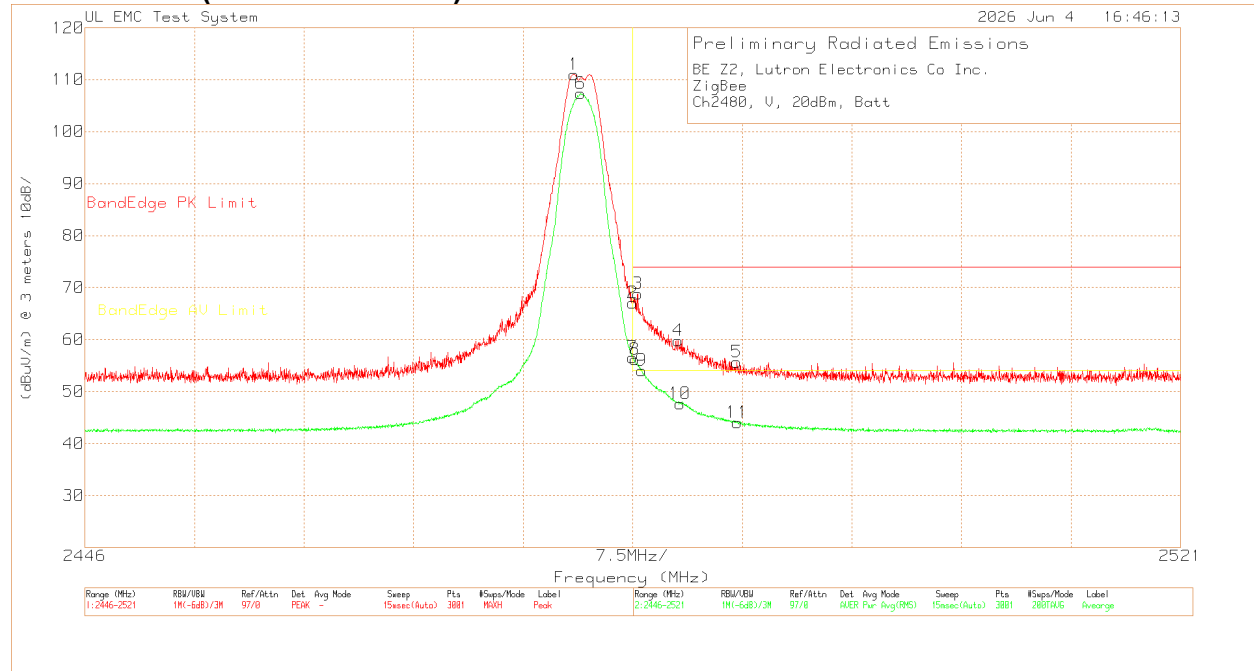
BE Z4,Lutron Electronics Co Inc.														
ZigBee														
Ch2405, V, 20dBm, Batt														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2405.5375	86.41	Pk	21.8	-	4.73	112.94	-	-	-	-	158	120	V
3	2390	27.99	Pk	21.8	-	4.77	54.56	74	-19.44	-	-	158	120	V
4	2382.85	27.5	Pk	21.8	-	4.71	54.01	74	-19.99	-	-	158	120	V
5	2373.45	29.13	Pk	21.8	-	4.69	55.62	74	-18.38	-	-	158	120	V
6	2364.375	28.6	Pk	21.8	-	4.64	55.04	74	-18.96	-	-	158	120	V
2	2404.925	82.74	RMS	21.8	-	4.72	109.26	-	-	-	-	158	120	V
7	2390	16.89	RMS	21.8	-	4.77	43.46	-	-	54	-10.54	158	120	V
8	2382.8	16.13	RMS	21.8	-	4.71	42.64	-	-	54	-11.36	158	120	V
9	2373.4	16.03	RMS	21.8	-	4.69	42.52	-	-	54	-11.48	158	120	V
10	2367.25	17.19	RMS	21.8	-	4.63	43.62	-	-	54	-10.38	158	120	V
Pk - Peak detector														
RMS - RMS detection														

BANDEDGE (HIGH CHANNEL) - HORIZONTAL RESULT



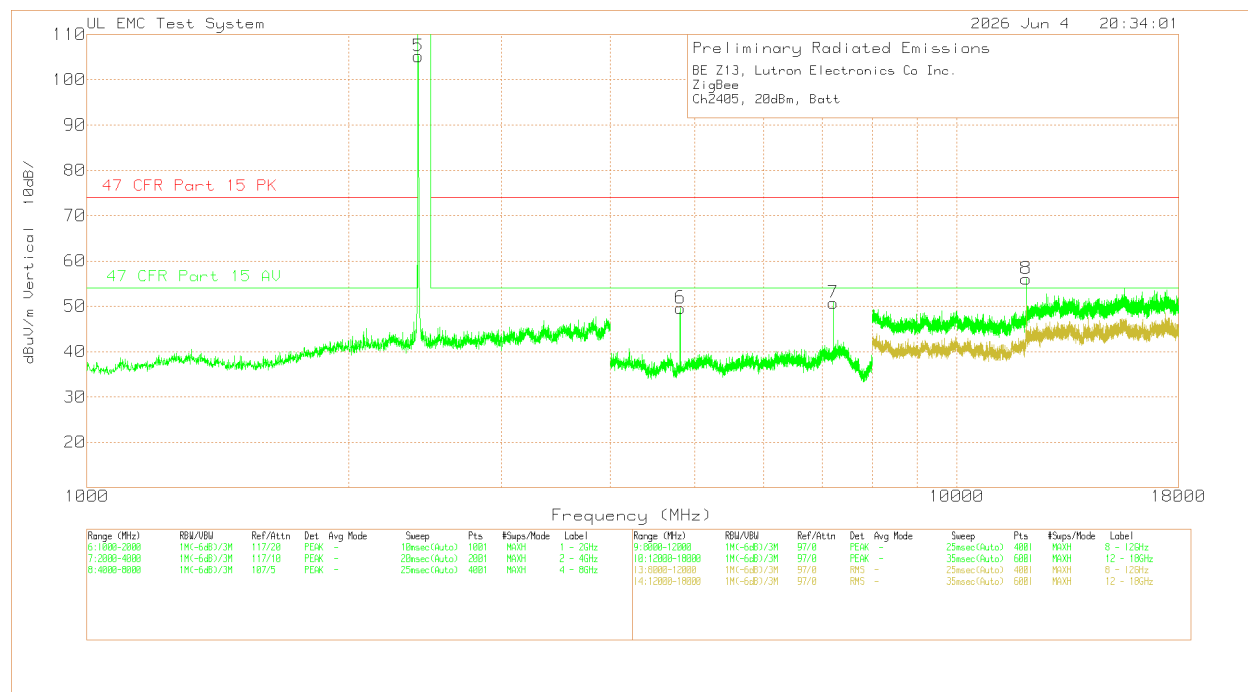
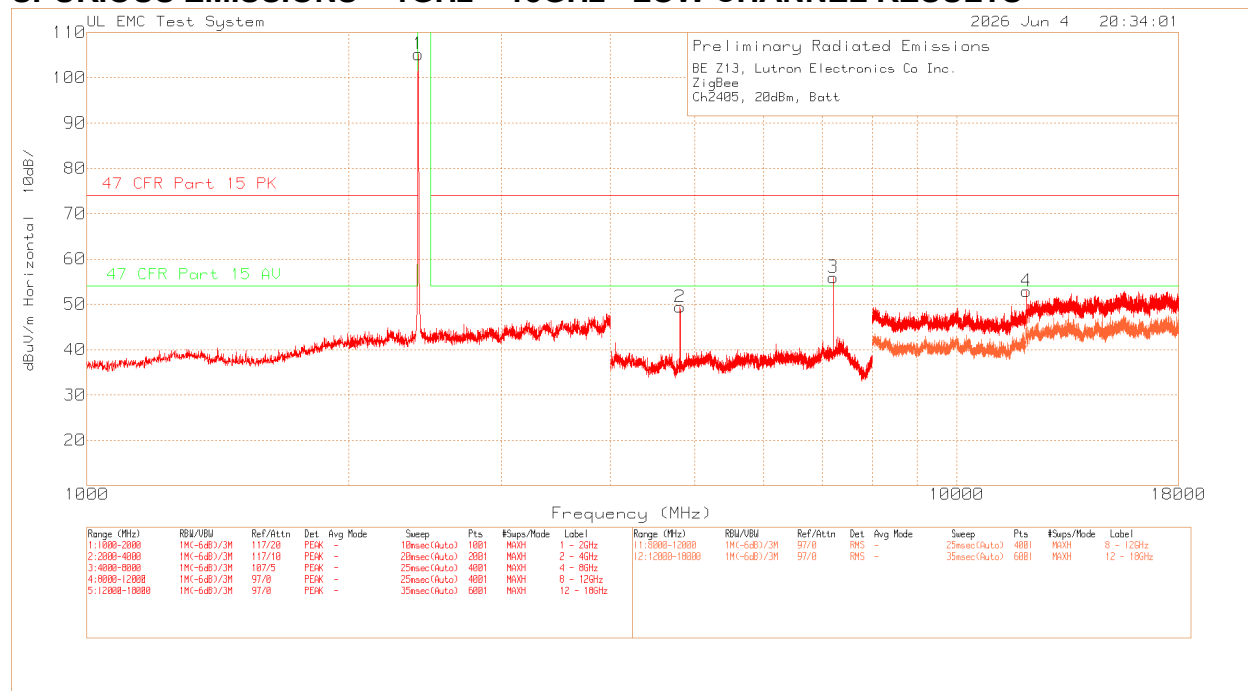
BE Z1,Lutron Electronics Co Inc.														
ZigBee														
Ch2480, H, 20dBm, Batt														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2479.525	85.39	Pk	22	-	4.48	111.87	-	-	-	-	87	143	H
3	2483.5	41.94	Pk	22.1	-	4.5	68.54	74	-5.46	-	-	87	143	H
4	2483.6	42.64	Pk	22.1	-	4.5	69.24	74	-4.76	-	-	87	143	H
5	2485.875	35.94	Pk	22.1	-	4.5	62.54	74	-11.46	-	-	87	143	H
6	2492.775	28.06	Pk	22.1	-	4.52	54.68	74	-19.32	-	-	87	143	H
7	2498.95	27.29	Pk	22.1	-	4.5	53.89	74	-20.11	-	-	87	143	H
2	2480.075	81.62	RMS	22	-	4.48	108.10	-	-	-	-	87	143	H
8	2483.5	30.87	RMS	22.1	-4.95	4.5	52.52	-	-	54	-1.48	87	143	H
9	2483.575	30.72	RMS	22.1	-4.95	4.5	52.37	-	-	54	-1.63	87	143	H
10	2484.35	27.3	RMS	22.1	-	4.5	53.90	-	-	54	-0.10	87	143	H
11	2485.875	23.84	RMS	22.1	-	4.5	50.44	-	-	54	-3.56	87	143	H
12	2492.65	16.89	RMS	22.1	-	4.52	43.51	-	-	54	-10.49	87	143	H
13	2498.775	15.97	RMS	22.1	-	4.5	42.57	-	-	54	-11.43	87	143	H
Pk - Peak detector														
RMS - RMS detection														

BANDEDGE (HIGH CHANNEL) - VERTICAL RESULT



BE Z2,Lutron Electronics Co Inc.														
ZigBee														
Ch2480, V, 20dBm, Batt														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2479.4875	84.53	Pk	22	-	4.48	111.01	-	-	-	-	87	152	V
2	2483.5	40.42	Pk	22.1	-	4.5	67.02	74	-6.98	-	-	87	152	V
3	2483.85	42.24	Pk	22.1	-	4.5	68.84	74	-5.16	-	-	87	152	V
4	2486.625	33.21	Pk	22.1	-	4.51	59.82	74	-14.18	-	-	87	152	V
5	2490.625	29.03	Pk	22.1	-	4.53	55.66	74	-18.34	-	-	87	152	V
6	2479.95	80.86	RMS	22	-	4.48	107.34	-	-	-	-	87	152	V
7	2483.5	29.98	RMS	22.1	-4.95	4.5	51.63	-	-	54	-2.37	87	152	V
8	2483.65	29.53	RMS	22.1	-4.95	4.5	51.18	-	-	54	-2.82	87	152	V
9	2484.125	27.47	RMS	22.1	-4.95	4.5	49.12	-	-	54	-4.88	87	152	V
10	2486.725	21.05	RMS	22.1	-	4.51	47.66	-	-	54	-6.34	87	152	V
11	2490.65	17.44	RMS	22.1	-	4.53	44.07	-	-	54	-9.93	87	152	V
Pk - Peak detector														
RMS - RMS detection														

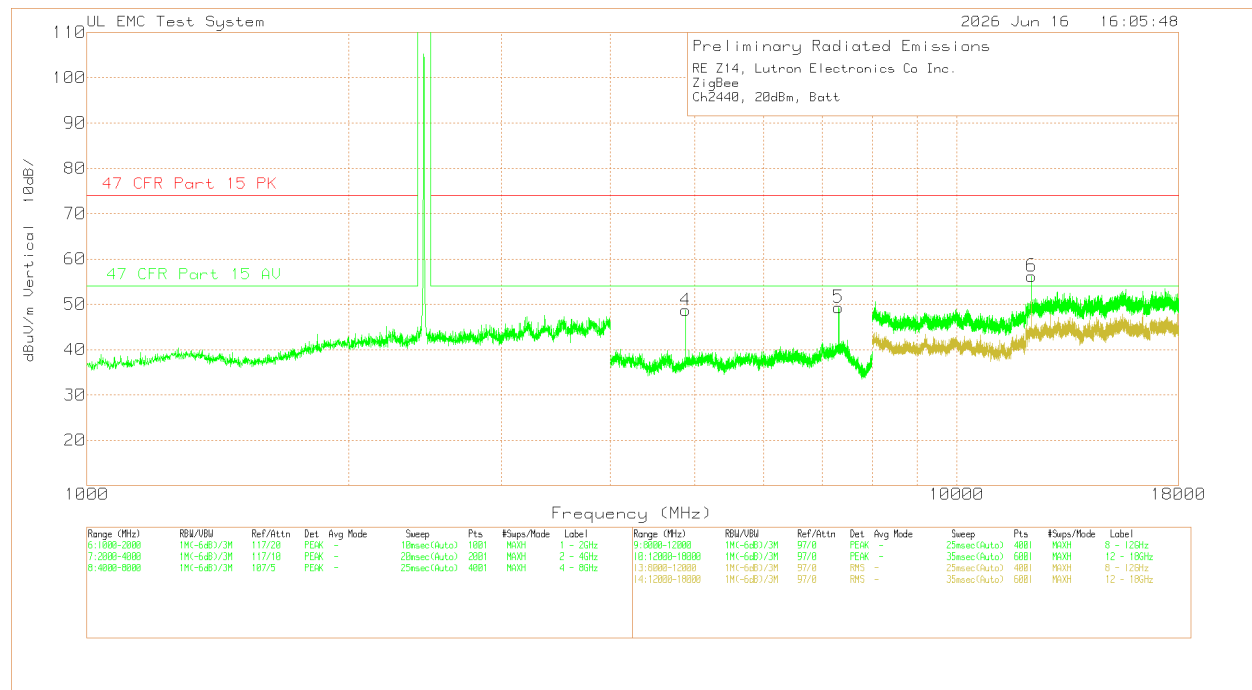
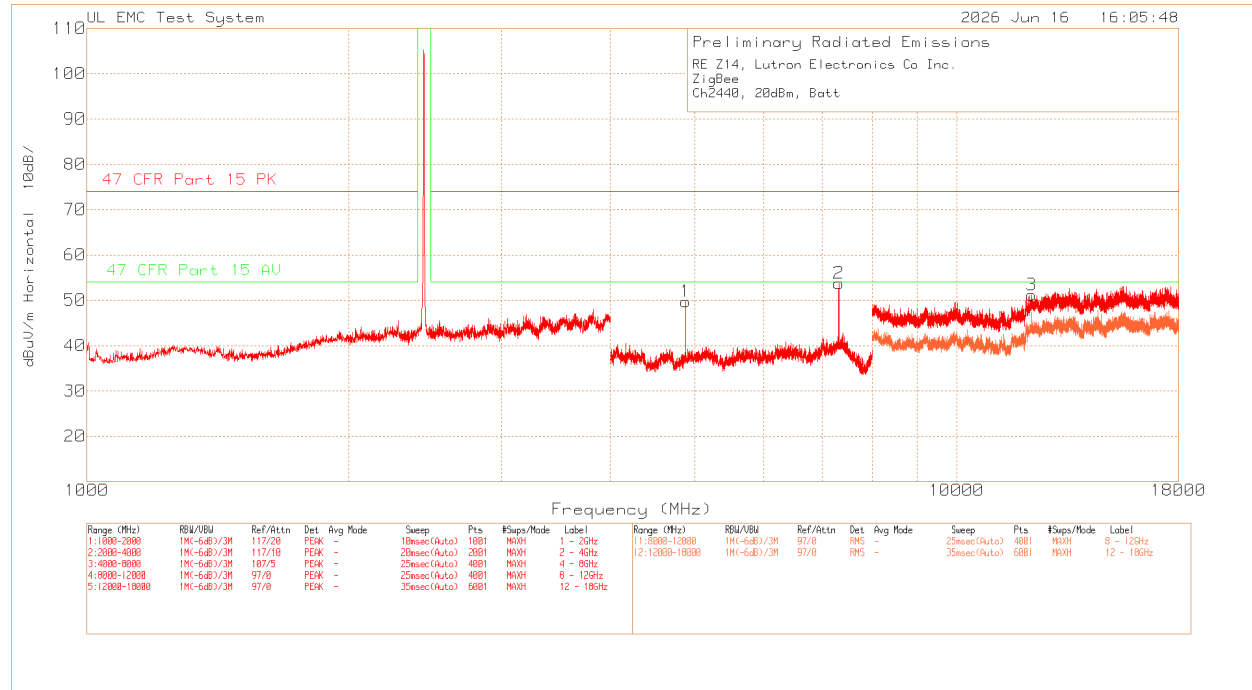
SPURIOUS EMISSIONS – 1GHz – 18GHz - LOW CHANNEL RESULTS



BE Z13, Lutron Electronics Co Inc.														
ZigBee														
Ch2405, 20dBm, Batt														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2405	121.91	Pk	21.8	-	-38.51	105.2	-	-	-	-	0-360	149	H
2	* 4809	72.07	Pk	27.7	-	-50.37	49.4	74	-24.6	-	-	0-360	149	H
3	7217	71.56	Pk	29.8	-	-45.41	55.95	74	-18.05	-	-	0-360	149	H
4	* 12027	59.62	Pk	39.4	-	-46.11	52.91	74	-21.09	-	-	0-360	149	H
5	2405	121.91	Pk	21.8	-	-38.51	105.2	-	-	-	-	0-360	149	V
6	* 4811	72.31	Pk	27.7	-	-50.39	49.62	74	-24.38	-	-	0-360	149	V
7	7217	66.4	Pk	29.8	-	-45.41	50.79	74	-23.21	-	-	0-360	149	V
8	* 12021	63.09	Pk	39.4	-	-46.4	56.09	74	-17.91	-	-	0-360	149	V
Radiated Emission Data														
	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
	* 4808.9850	75.89	Pk	27.7	-	-50.37	53.22	74	-20.78	-	-	264	115	H
	* 4810.2635	66.73	Av	27.7	-	-50.35	44.08	74	-29.92	54	-9.92	264	115	H
	7213.4475	73.63	Pk	29.8	-	-45.47	57.96	74	-16.04	-	-	119	140	H
	7215.84	63.55	Av	29.8	-	-45.55	47.8	74	-26.2	54	-6.2	119	140	H
	* 12022.191	65.71	Pk	39.4	-	-46.33	58.78	74	-15.22	-	-	143	189	H
	* 12026.591	52.47	Av	39.4	-	-46.21	45.66	74	-28.34	54	-8.34	143	189	H
	* 4808.8742	75.29	Pk	27.7	-	-50.36	52.63	74	-21.37	-	-	26	151	V
	* 4810.8382	66.78	Av	27.7	-	-50.38	44.1	74	-29.9	54	-9.9	26	151	V
	7216.7253	69.44	Pk	29.8	-	-45.45	53.79	74	-20.21	-	-	101	149	V
	7215.9607	59.3	Av	29.8	-	-45.57	43.53	74	-30.47	54	-10.47	101	149	V
	* 12022.343	67.11	Pk	39.4	-	-46.28	60.23	74	-13.77	-	-	360	132	V
	* 12027.039	54.81	Av	39.4	-	-46.11	48.1	74	-25.9	54	-5.9	360	132	V
Pk - Peak detector														
Av - Average detection														
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band														

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

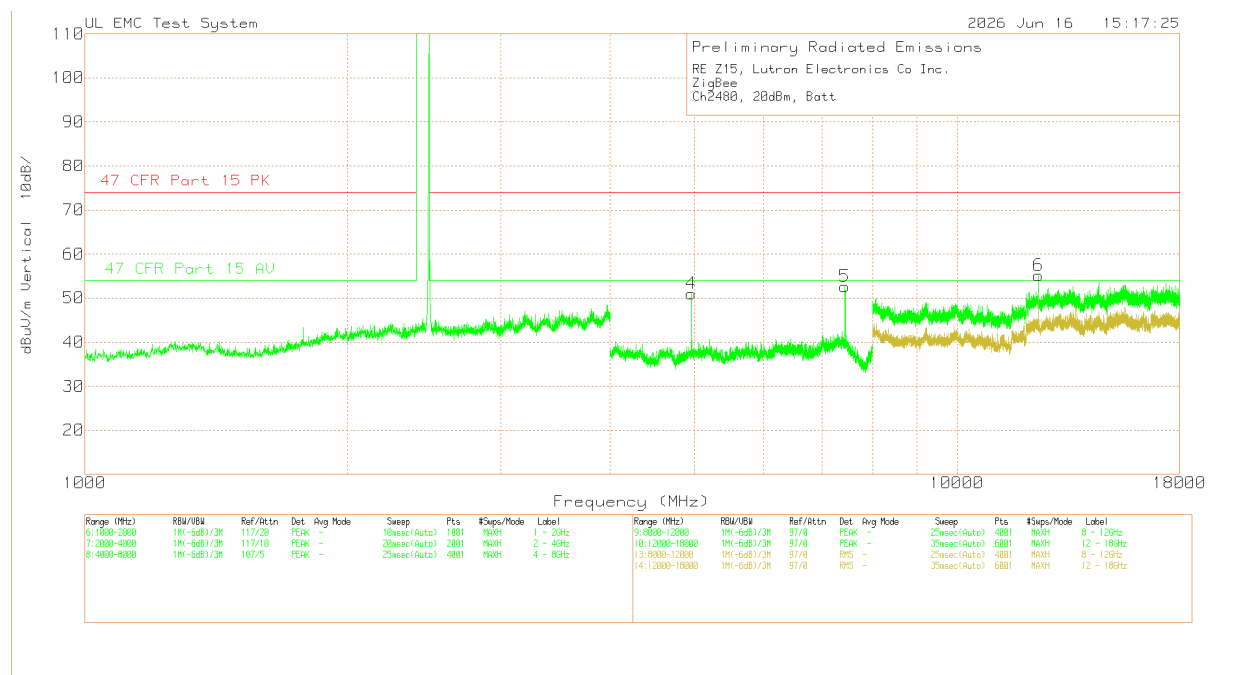
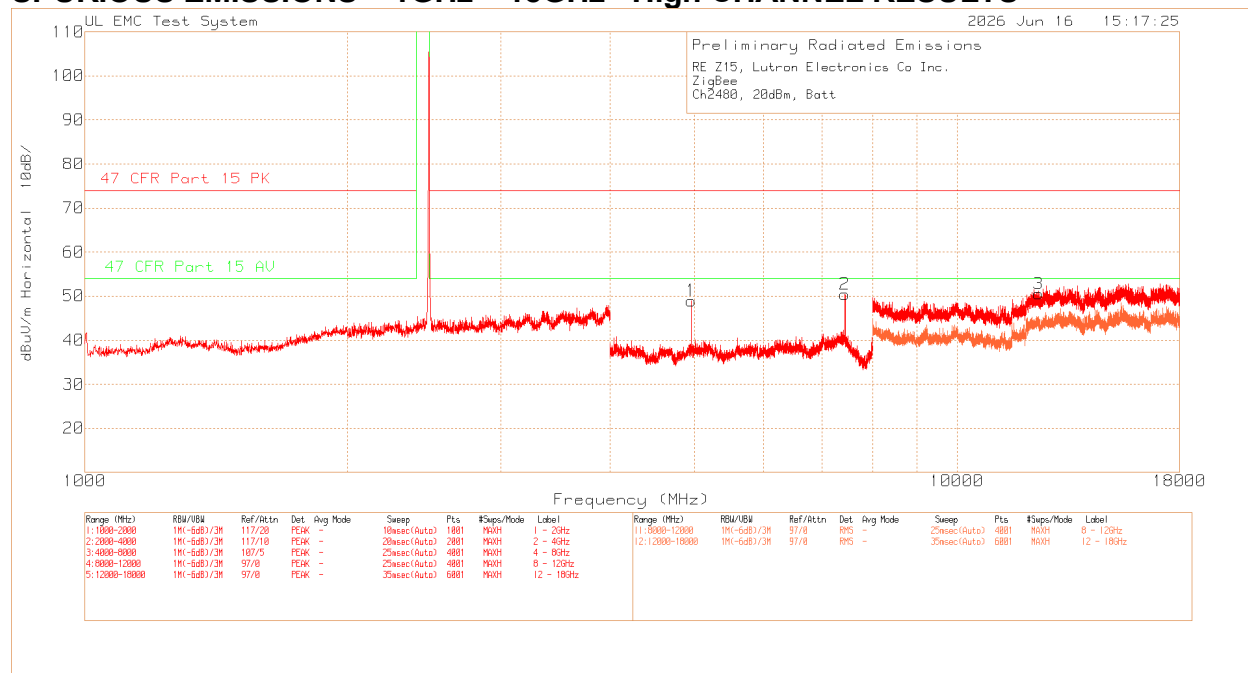
SPURIOUS EMISSIONS – 1GHz – 18GHz – Middle CHANNEL RESULTS



RE Z14,Lutron Electronics Co Inc.														
ZigBee														
Ch2440, 20dBm, Batt														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	* 4881	71.38	Pk	27.7	-	-49.38	49.7	74	-24.3	54	-4.3	0-360	156	H
2	* 7322	68.04	Pk	30.6	-	-44.89	53.75	74	-20.25	54	-0.25	0-360	156	H
3	* 12196	57.59	Pk	39.4	-	-45.84	51.15	74	-22.85	54	-2.85	0-360	156	H
4	* 4879	70.75	Pk	27.7	-	-49.75	48.7	74	-25.3	54	-5.3	0-360	156	V
5	* 7319	63.67	Pk	30.6	-	-44.94	49.33	74	-24.67	54	-4.67	0-360	156	V
6	* 12196	62.68	Pk	39.4	-	-45.84	56.24	74	-17.76	54	2.24	0-360	156	V
Radiated Emission Data														
	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
	* 4880.9025	73.87	Pk	27.7	-	-49.39	52.18	74	-21.82	-	-	341	121	H
	* 4880.95	66.87	Av	27.7	-	-49.38	45.19	-	-	54	-8.81	341	121	H
	* 7318.233462	70.92	Pk	30.6	-	-45.05	56.47	74	-17.53	-	-	124	151	H
	* 7318.388462	63.29	Av	30.6	-	-45.03	48.86	-	-	54	-5.14	124	151	H
	* 4878.7725	73.71	Pk	27.7	-	-49.69	51.72	74	-22.28	-	-	168	168	V
	* 4879.0075	66.32	Av	27.7	-	-49.75	44.27	-	-	54	-9.73	168	168	V
	* 7318.226987	67.75	Pk	30.6	-	-45.05	53.3	74	-20.7	-	-	72	151	V
	* 7321.506987	59.47	Av	30.6	-	-44.89	45.18	-	-	54	-8.82	72	151	V
	* 12202.42692	62.79	Pk	39.4	-	-46.06	56.13	74	-17.87	-	-	288	101	H
	* 12197.12192	52.72	Av	39.4	-	-46.05	46.07	-	-	54	-7.93	288	101	H
	* 12202.68692	66.6	Pk	39.4	-	-46.04	59.96	74	-14.04	-	-	352	139	V
	* 12202.66192	57.24	Av	39.4	-	-46.04	50.6	-	-	54	-3.4	352	139	V
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band														
Pk - Peak detector														
Av - Average detection														

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

SPURIOUS EMISSIONS – 1GHz – 18GHz - High CHANNEL RESULTS

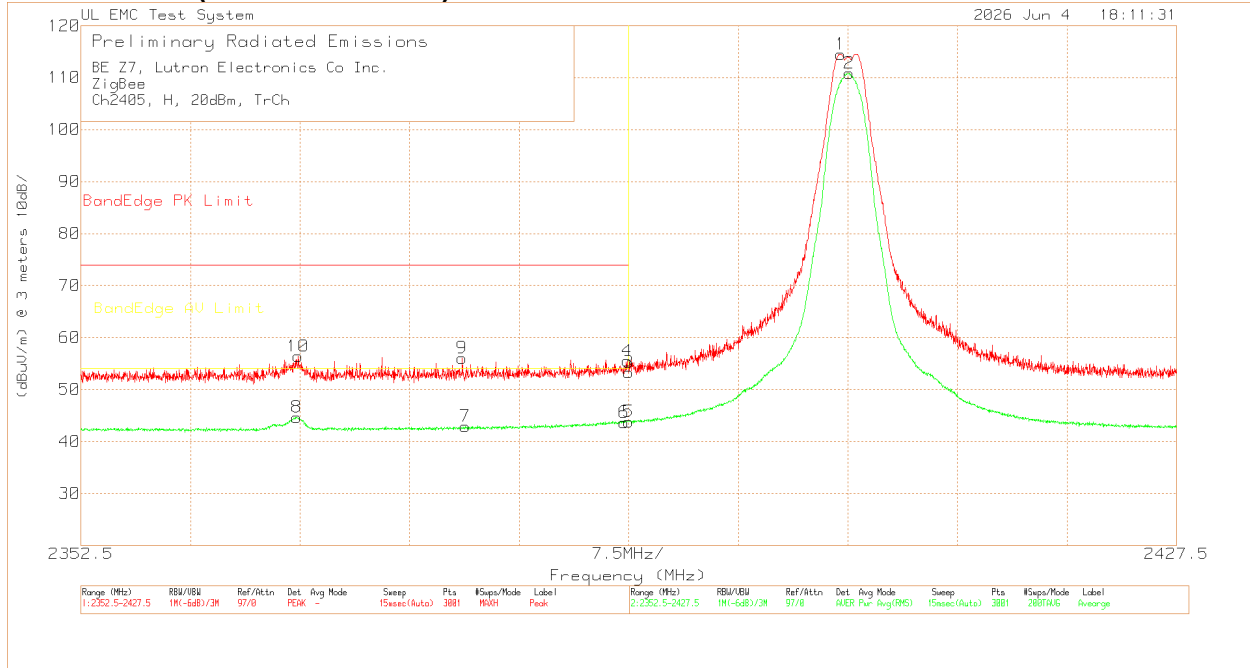


RE Z15,Lutron Electronics Co Inc.														
ZigBee														
Ch2480, 20dBm, Batt														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	PK Limit dBuV/m	PK Margin dB	AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	* 4961	70.07	Pk	27.8	-	-48.97	48.9	74	-25.1	54	-5.1	0-360	154	H
2	* 7439	66.17	Pk	30.6	-	-46.32	50.45	74	-23.55	54	-3.55	0-360	154	H
3	* 12402	56.47	Pk	39.4	-	-45.36	50.51	74	-23.49	54	-3.49	0-360	154	H
4	* 4959	72.14	Pk	27.8	-	-48.93	51.01	74	-22.99	54	-2.99	0-360	154	V
5	* 7438	68.26	Pk	30.6	-	-46.23	52.63	74	-21.37	54	-1.37	0-360	154	V
6	* 12396	61.14	Pk	39.4	-	-45.33	55.21	74	-18.79	54	1.21	0-360	154	V
Radiated Emission Data														
	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	PK Limit dBuV/m	PK Margin dB	AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
	* 4960.93435	71.59	Pk	27.8	-	-48.97	50.42	74	-23.58	-	-	120	149	H
	* 4960.87685	64.09	Av	27.8	-	-48.97	42.92	-	-	54	-11.08	120	149	H
	* 7441.62833	69.26	Pk	30.5	-	-46.3	53.46	74	-20.54	-	-	123	151	H
	* 7438.38833	61.22	Av	30.6	-	-46.26	45.56	-	-	54	-8.44	123	151	H
	* 12397.2263	61.41	Pk	39.4	-	-45.38	55.43	74	-18.57	-	-	232	150	H
	* 12402.6788	50.42	Av	39.4	-	-45.42	44.4	-	-	54	-9.6	232	150	H
	* 12397.3038	65.1	Pk	39.4	-	-45.36	59.14	74	-14.86	-	-	0	145	V
	* 12402.5738	55.43	Av	39.4	-	-45.41	49.42	-	-	54	-4.58	0	145	V
	* 4958.8375	73.59	Pk	27.8	-	-48.94	52.45	74	-21.55	-	-	28	149	V
	* 4958.865	66.57	Av	27.8	-	-48.94	45.43	-	-	54	-8.57	28	149	V
	* 7441.51307	69.07	Pk	30.5	-	-46.29	53.28	74	-20.72	-	-	75	156	V
	* 7441.50807	60.89	Av	30.5	-	-46.29	45.1	-	-	54	-8.9	75	156	V
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band														
Pk - Peak detector														
Av - Average detection														

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

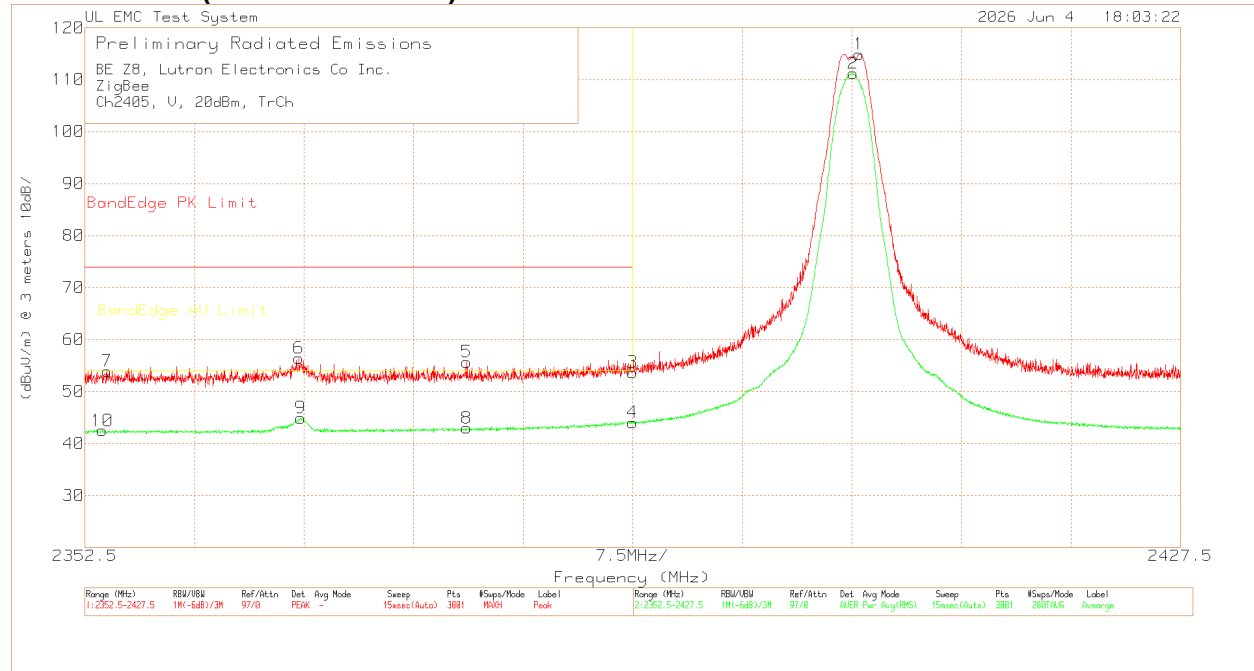
10.4.2. Trickle-Charge Mode

BANDEDGE (LOW CHANNEL) - HORIZONTAL RESULT



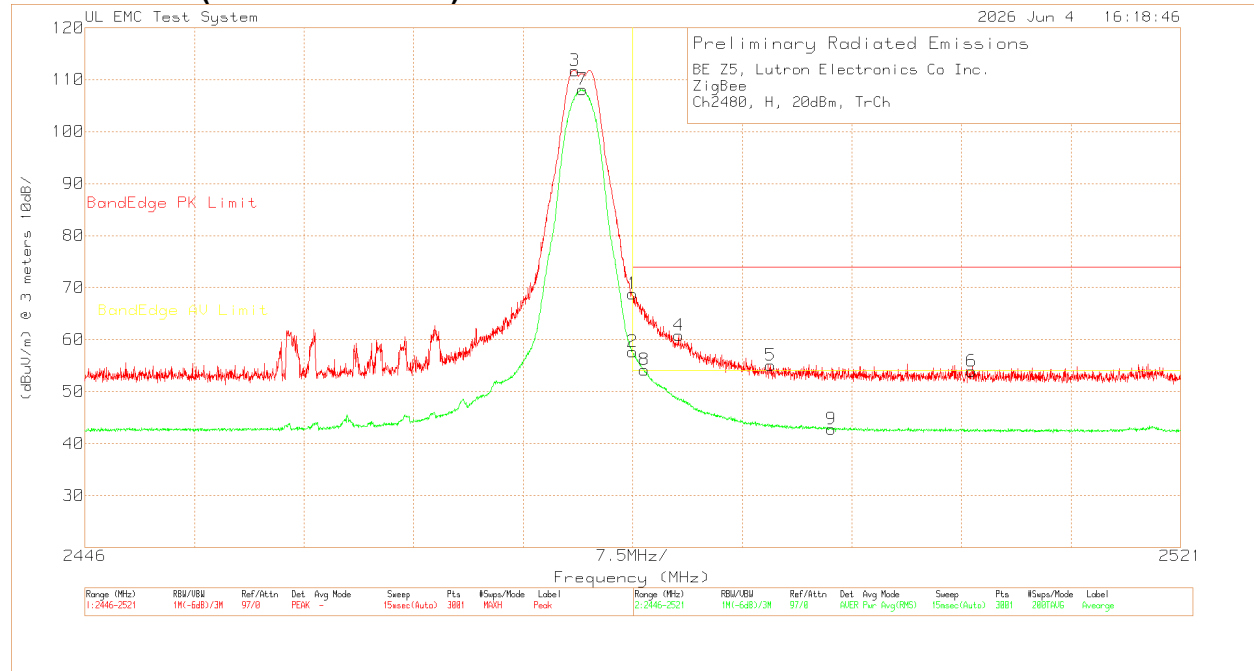
BE Z7,Lutron Electronics Co Inc.														
ZigBee														
Ch2405, H, 20dBm, TrCh														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2404.5125	87.99	Pk	21.8	-	4.72	114.51	-	-	-	-	89	143	H
3	2390	26.68	Pk	21.8	-	4.77	53.25	74	-20.75	-	-	89	143	H
4	2389.9	28.92	Pk	21.8	-	4.77	55.49	74	-18.51	-	-	89	143	H
9	2378.6	29.52	Pk	21.8	-	4.72	56.04	74	-17.96	-	-	89	143	H
10	2367.375	29.93	Pk	21.8	-	4.63	56.36	74	-17.64	-	-	89	143	H
2	2405.075	84.32	RMS	21.8	-	4.72	110.84	-	-	-	-	89	143	H
5	2390	17.16	RMS	21.8	-	4.77	43.73	-	-	54	-10.27	89	143	H
6	2389.675	17.06	RMS	21.8	-	4.77	43.63	-	-	54	-10.37	89	143	H
7	2378.8	16.34	RMS	21.8	-	4.72	42.86	-	-	54	-11.14	89	143	H
8	2367.275	18.23	RMS	21.8	-	4.63	44.66	-	-	54	-9.34	89	143	H
Pk - Peak detector														
RMS - RMS detection														

BANDEDGE (LOW CHANNEL) - VERTICAL RESULT



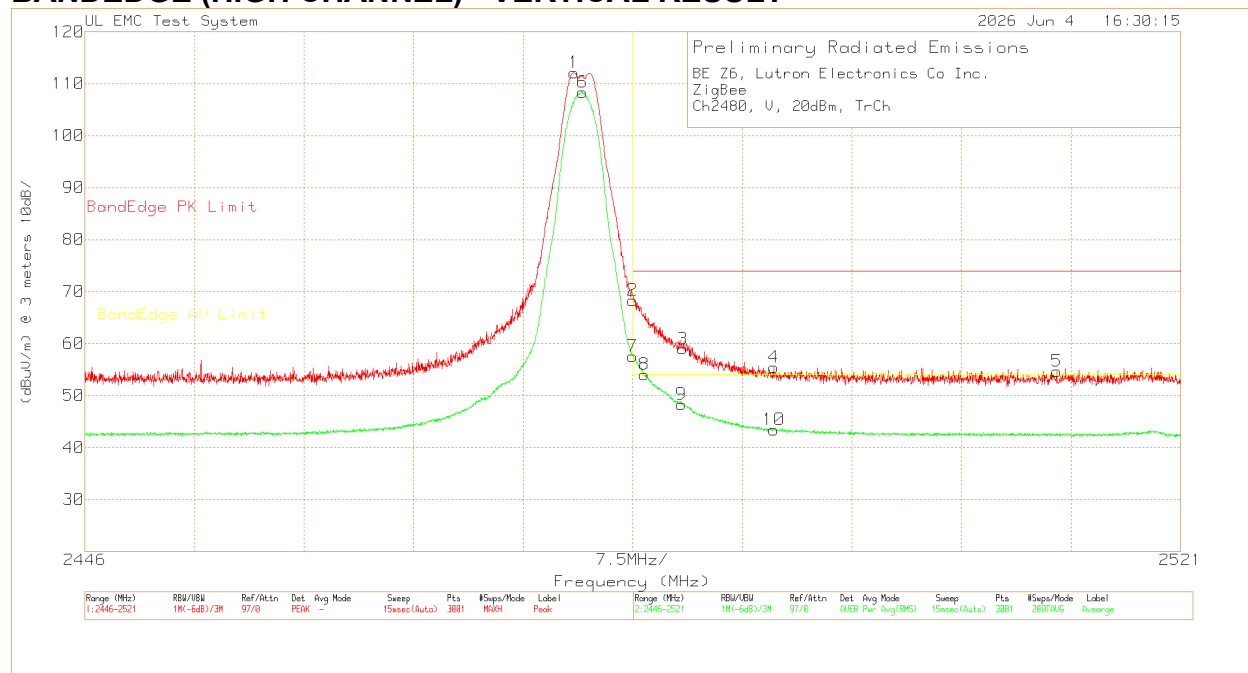
BE Z8,Lutron Electronics Co Inc.														
ZigBee														
Ch2405, V, 20dBm, TrCh														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2405.5125	88.36	Pk	21.8	-	4.73	114.89	-	-	-	-	41	101	V
3	2390	27.12	Pk	21.8	-	4.77	53.69	74	-20.31	-	-	41	101	V
5	2378.65	29.19	Pk	21.8	-	4.72	55.71	74	-18.29	-	-	41	101	V
6	2367.15	29.97	Pk	21.8	-	4.63	56.4	74	-17.6	-	-	41	101	V
7	2354.025	27.38	Pk	21.8	-	4.73	53.91	74	-20.09	-	-	41	101	V
2	2405.075	84.67	RMS	21.8	-	4.72	111.19	-	-	-	-	41	101	V
4	2390	17.47	RMS	21.8	-	4.77	44.04	-	-	54	-9.96	41	101	V
8	2378.625	16.44	RMS	21.8	-	4.72	42.96	-	-	54	-11.04	41	101	V
9	2367.275	18.46	RMS	21.8	-	4.63	44.89	-	-	54	-9.11	41	101	V
10	2353.675	15.93	RMS	21.8	-	4.73	42.46	-	-	54	-11.54	41	101	V
Pk - Peak detector														
RMS - RMS detection														

BANDEDGE (HIGH CHANNEL) - HORIZONTAL RESULT



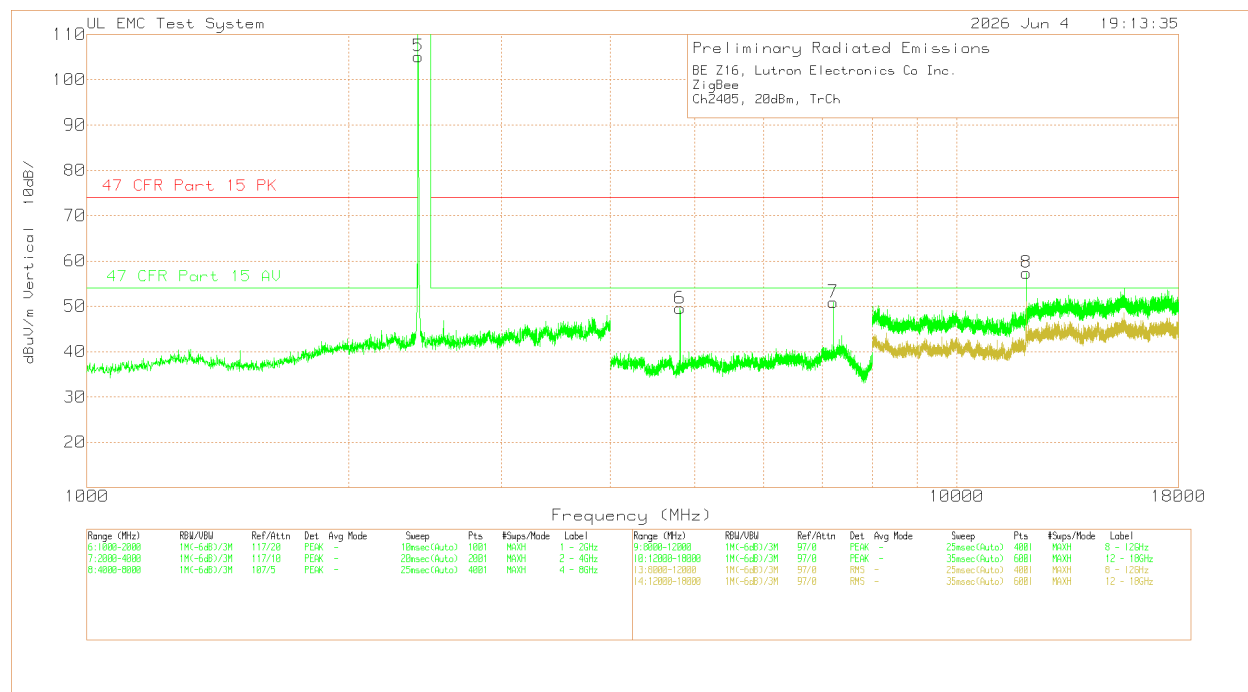
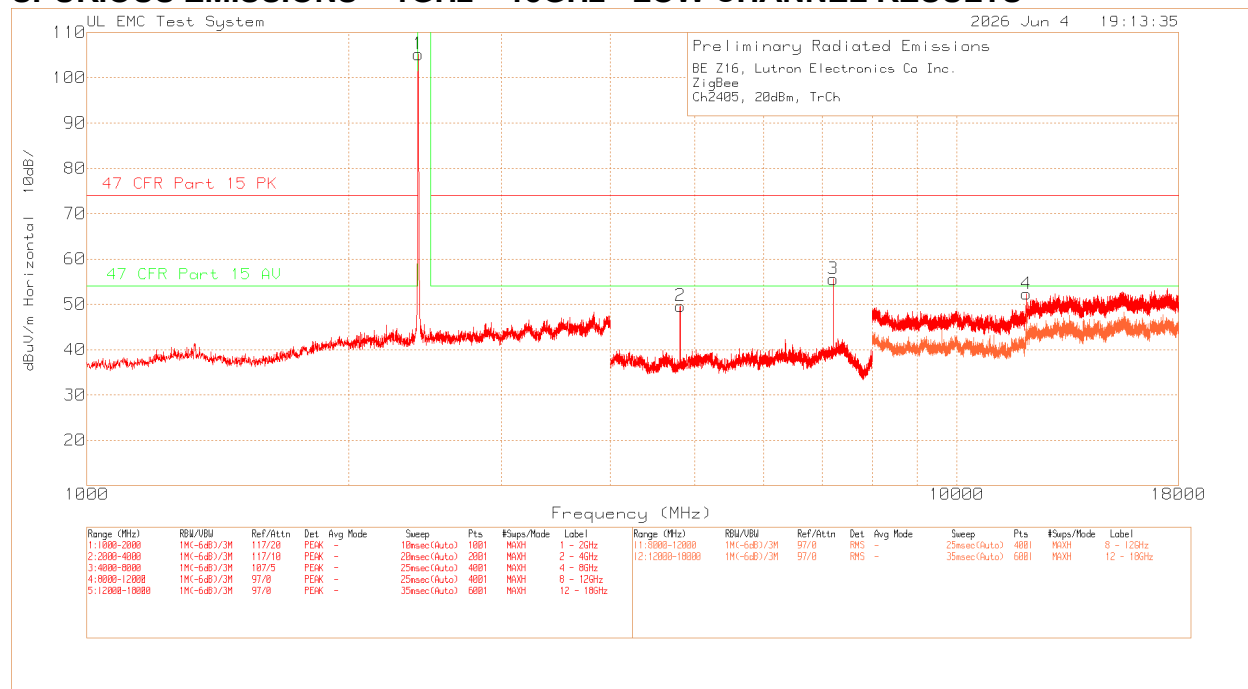
BE Z5,Lutron Electronics Co Inc.														
ZigBee														
Ch2480, H, 20dBm, TrCh														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2483.5	42.18	Pk	22.1	-	4.5	68.78	74	-5.22	54	14.78	87	142	H
3	2479.55	85.27	Pk	22	-	4.48	111.75	-	-	-	-	87	142	H
4	2486.65	34.15	Pk	22.1	-	4.51	60.76	74	-13.24	-	-	87	142	H
5	2492.925	28.39	Pk	22.1	-	4.52	55.01	74	-18.99	-	-	87	142	H
6	2506.7	27.31	Pk	22.1	-	4.52	53.93	74	-20.07	-	-	87	142	H
2	2483.5	31.06	RMS	22.1	-4.95	4.5	52.71	-	-	54	-1.29	87	142	H
7	2480.05	81.6	RMS	22	-	4.48	108.08	-	-	-	-	87	142	H
8	2484.275	27.52	RMS	22.1	-4.95	4.5	49.17	-	-	54	-4.83	87	142	H
9	2497.1	16.2	RMS	22.1	-	4.51	42.81	-	-	54	-11.19	87	142	H
Pk - Peak detector														
RMS - RMS detection														

BANDEDGE (HIGH CHANNEL) - VERTICAL RESULT



BE Z6,Lutron Electronics Co Inc.														
ZigBee														
Ch2480, V, 20dBm, TrCh														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2479.475	85.6	Pk	22	-	4.48	112.08	-	-	-	-	87	155	V
2	2483.5	41.7	Pk	22.1	-	4.5	68.3	74	-5.7	-	-	87	155	V
3	2486.925	32.37	Pk	22.1	-	4.51	58.98	74	-15.02	-	-	87	155	V
4	2493.15	28.75	Pk	22.1	-	4.52	55.37	74	-18.63	-	-	87	155	V
5	2512.525	28.08	Pk	22.1	-	4.51	54.69	74	-19.31	-	-	87	155	V
6	2480.05	81.85	RMS	22	-	4.48	108.33	-	-	-	-	87	155	V
7	2483.5	30.99	RMS	22.1	-4.95	4.5	52.64	-	-	54	-1.36	87	155	V
8	2484.3	27.43	RMS	22.1	-4.95	4.5	49.08	-	-	54	-4.92	87	155	V
9	2486.85	21.71	RMS	22.1	-	4.51	48.32	-	-	54	-5.68	87	155	V
10	2493.15	16.78	RMS	22.1	-	4.52	43.40	-	-	54	-10.60	87	155	V
Pk - Peak detector														
RMS - RMS detection														

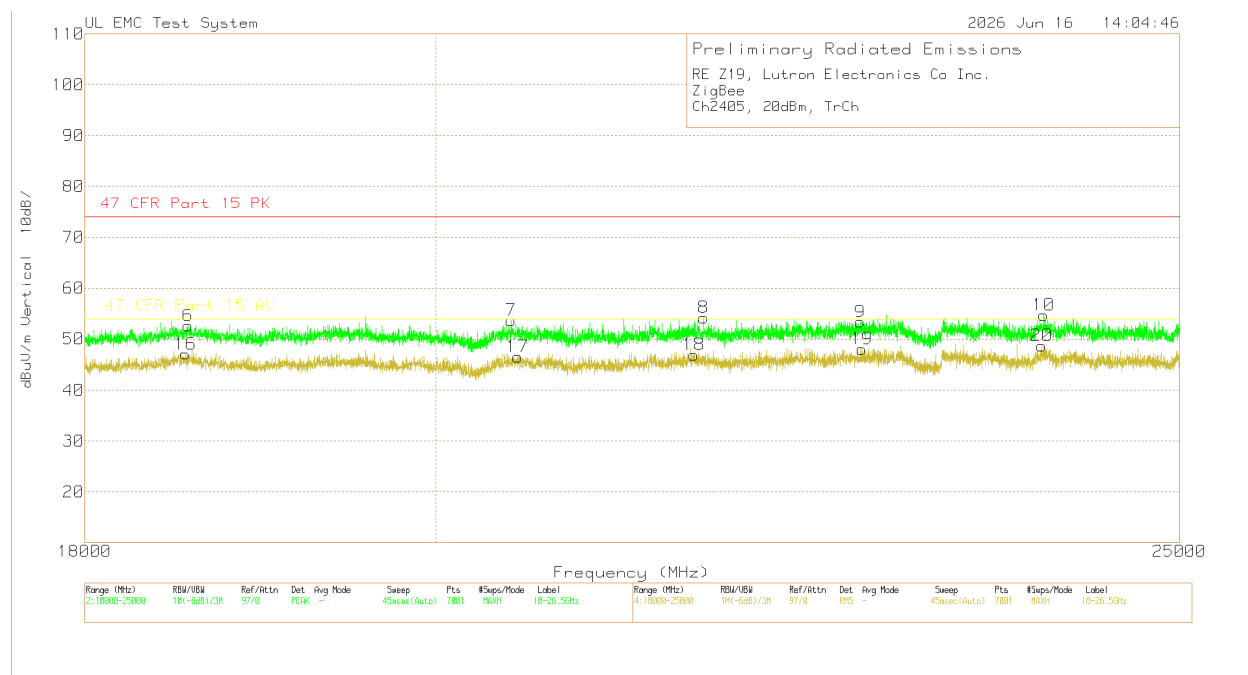
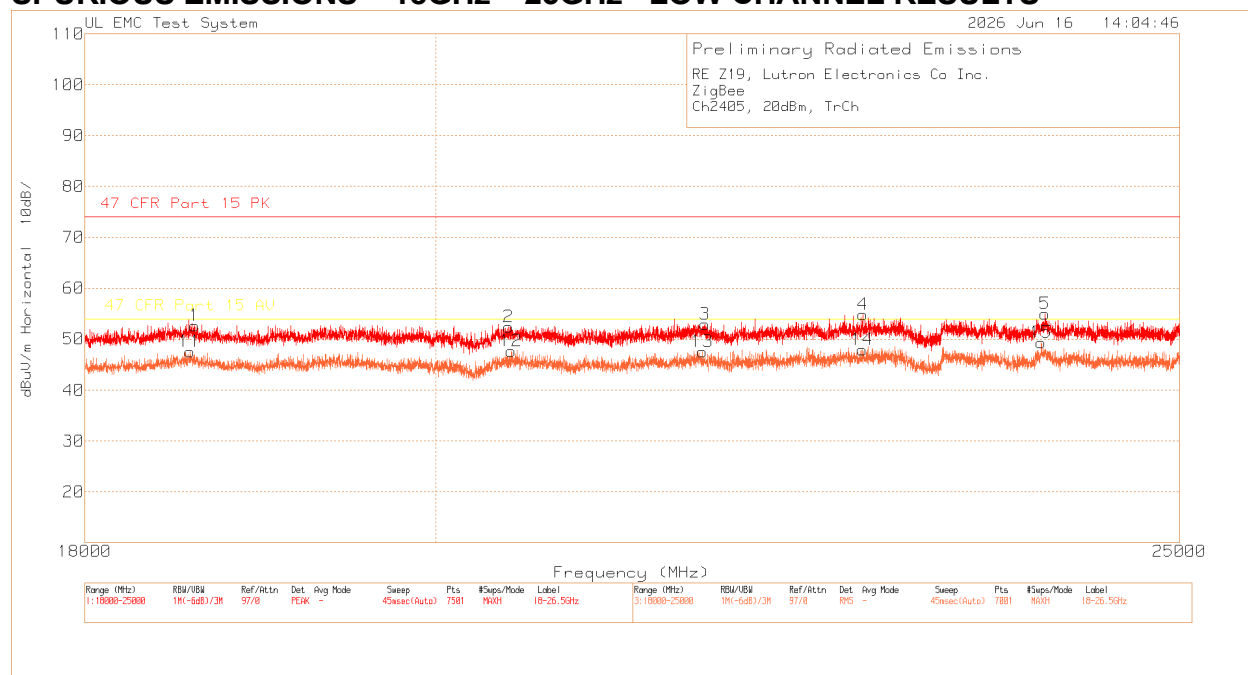
SPURIOUS EMISSIONS – 1GHz – 18GHz - LOW CHANNEL RESULTS



BE Z16, Lutron Electronics Co Inc.														
ZigBee														
Ch2405, 20dBm, TrCh														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2405	121.89	Pk	21.8	-	-38.51	105.18	-	-	-	-	0-360	150	H
2	* 4811	72.33	Pk	27.7	-	-50.39	49.64	74	-24.36	54	-4.36	0-360	150	H
3	7217	71.17	Pk	29.8	-	-45.41	55.56	74	-18.44	54	1.56	0-360	150	H
4	* 12027	59.02	Pk	39.4	-	-46.11	52.31	74	-21.69	54	-1.69	0-360	150	H
5	2405	121.87	Pk	21.8	-	-38.51	105.16	-	-	-	-	0-360	150	V
6	* 4809	72.23	Pk	27.7	-	-50.37	49.56	74	-24.44	54	-4.44	0-360	150	V
7	7214	66.59	Pk	29.8	-	-45.51	50.88	74	-23.12	54	-3.12	0-360	150	V
8	* 12027	64.13	Pk	39.4	-	-46.11	57.42	74	-16.58	54	3.42	0-360	150	V
Radiated Emission Data														
	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
	* 4808.97125	75.68	Pk	27.7	-	-50.37	53.01	74	-20.99	-	-	270	118	H
	* 4810.78875	67.07	Av	27.7	-	-50.38	44.39	-	-	54	-9.61	270	118	H
	7216.6975	73.27	Pk	29.8	-	-45.46	57.61	74	-16.39	-	-	120	141	H
	7215.905	63.29	Av	29.8	-	-45.56	47.53	-	-	54	-6.47	120	141	H
	* 12027.66	63.8	Pk	39.4	-	-46.15	57.05	74	-16.95	-	-	257	144	H
	* 12022.2666	53.42	Av	39.4	-	-46.31	46.51	-	-	54	-7.49	257	144	H
	* 4808.94357	75.02	Pk	27.7	-	-50.36	52.36	74	-21.64	-	-	25	165	V
	* 4810.5189	65.51	Av	27.7	-	-50.36	42.85	-	-	54	-11.15	25	165	V
	7216.4994	69.66	Pk	29.8	-	-45.49	53.97	74	-20.03	-	-	101	154	V
	7216.1263	59.41	Av	29.8	-	-45.55	43.66	-	-	54	-10.34	101	154	V
	* 12022.2393	66.86	Pk	39.4	-	-46.32	59.94	74	-14.06	-	-	360	134	V
	* 12027.0202	54.44	Av	39.4	-	-46.11	47.73	-	-	54	-6.27	360	134	V
Pk - Peak detector														
Av - Average detection														
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band														

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

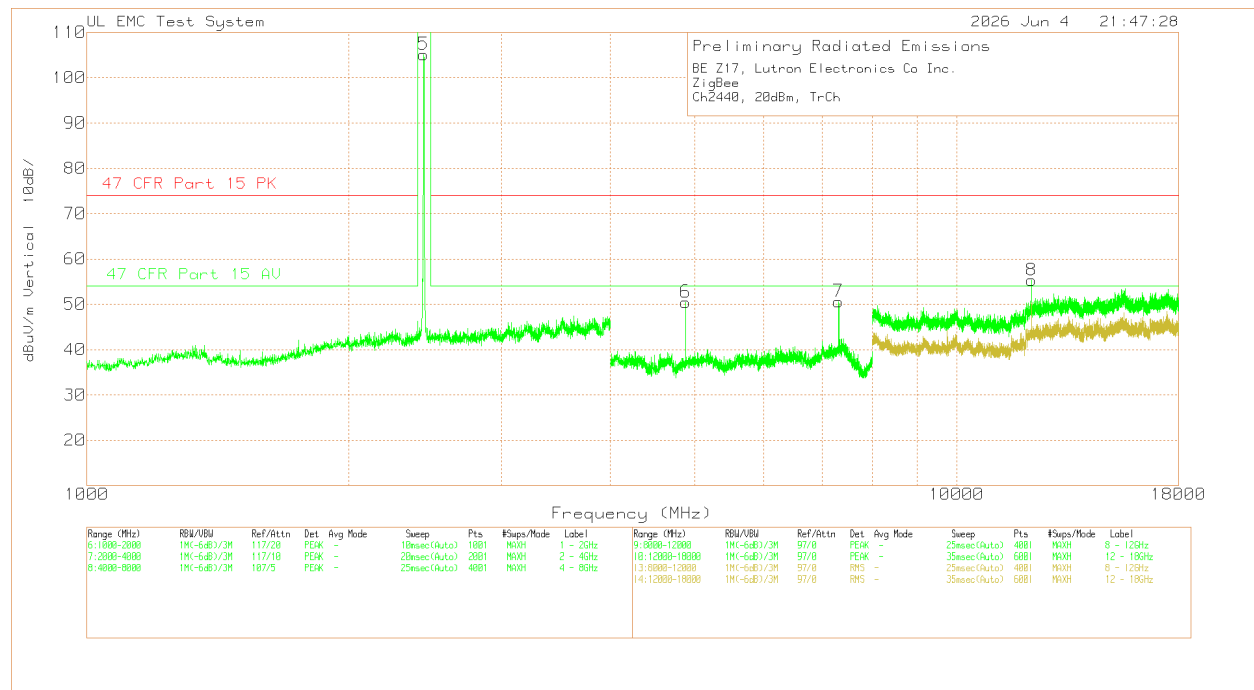
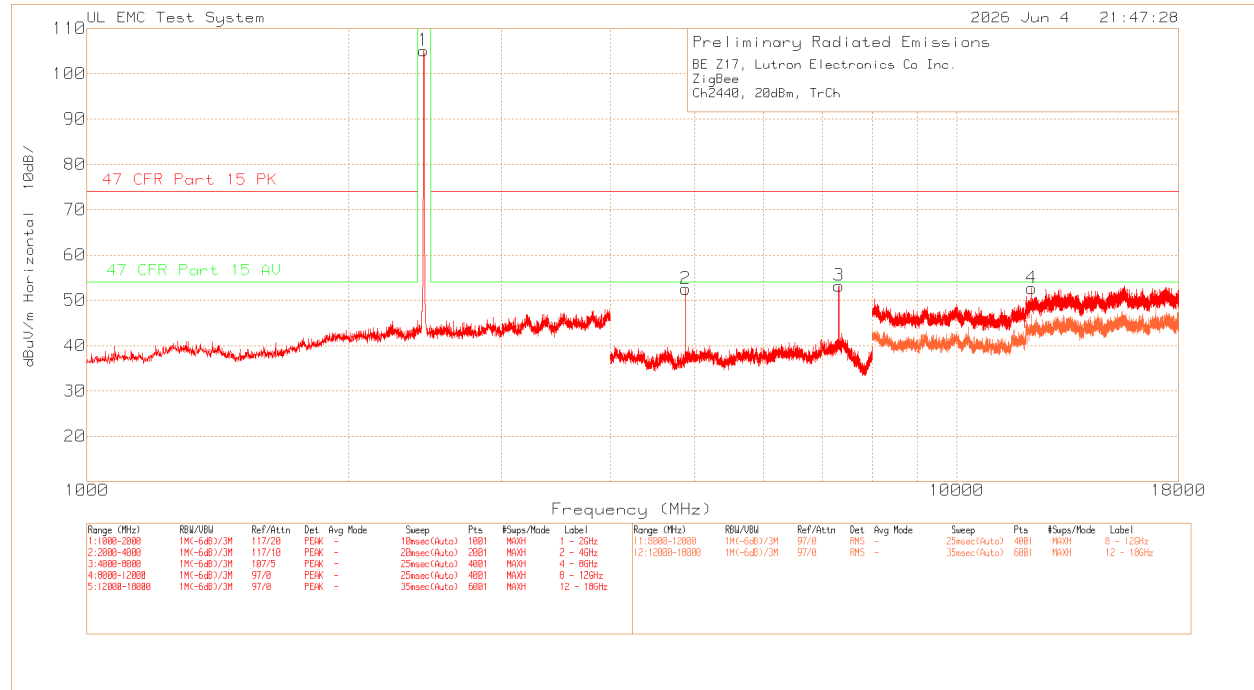
SPURIOUS EMISSIONS – 18GHz – 25GHz - LOW CHANNEL RESULTS



RE Z19,Lutron Electronics Co Inc.													
ZigBee													
Ch2405, 20dBm, TrCh													
Trace Markers													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	18603.866	63.71	Pk	40.1	-51.18	52.63	74	-21.37	54	-1.37	0-360	147	H
2	20439.732	60.48	Pk	40.3	-48.4	52.38	74	-21.62	54	-1.62	0-360	147	H
3	21681.065	58.83	Pk	40.4	-46.33	52.9	74	-21.1	54	-1.1	0-360	147	H
4	22731.998	59.64	Pk	40.4	-45.23	54.81	74	-19.19	54	0.81	0-360	147	H
5	24009.731	60.18	Pk	40.3	-45.48	55	74	-19	54	1	0-360	147	H
6	18566	63.33	Pk	40.1	-50.81	52.62	74	-21.38	54	-1.38	0-360	147	V
7	20458	61	Pk	40.3	-47.57	53.73	74	-20.27	54	-0.27	0-360	147	V
8	21672	60.16	Pk	40.4	-46.31	54.25	74	-19.75	54	0.25	0-360	147	V
9	22718	57.78	Pk	40.4	-44.8	53.38	74	-20.62	54	-0.62	0-360	147	V
10	24000	59.49	Pk	40.3	-45.12	54.67	74	-19.33	54	0.67	0-360	147	V
11	18578	58.6	RMS	40.1	-51.15	47.55	74	-26.45	54	-6.45	0-360	147	H
12	20458	54.93	RMS	40.3	-47.57	47.66	74	-26.34	54	-6.34	0-360	147	H
13	21665	53.69	RMS	40.4	-46.54	47.55	74	-26.45	54	-6.45	0-360	147	H
14	22730	51.86	RMS	40.4	-44.33	47.93	74	-26.07	54	-6.07	0-360	147	H
15	23983	53.56	RMS	40.3	-44.52	49.34	74	-24.66	54	-4.66	0-360	147	H
16	18553	58.01	RMS	40.1	-51.01	47.1	74	-26.9	54	-6.9	0-360	147	V
17	20497	54.7	RMS	40.3	-48.44	46.56	74	-27.44	54	-7.44	0-360	147	V
18	21608	52.76	RMS	40.3	-46.11	46.95	74	-27.05	54	-7.05	0-360	147	V
19	22727	52.19	RMS	40.4	-44.56	48.03	74	-25.97	54	-5.97	0-360	147	V
20	23985	53.44	RMS	40.3	-45.08	48.66	74	-25.34	54	-5.34	0-360	147	V
Pk - Peak detector													
RMS - RMS detection													

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

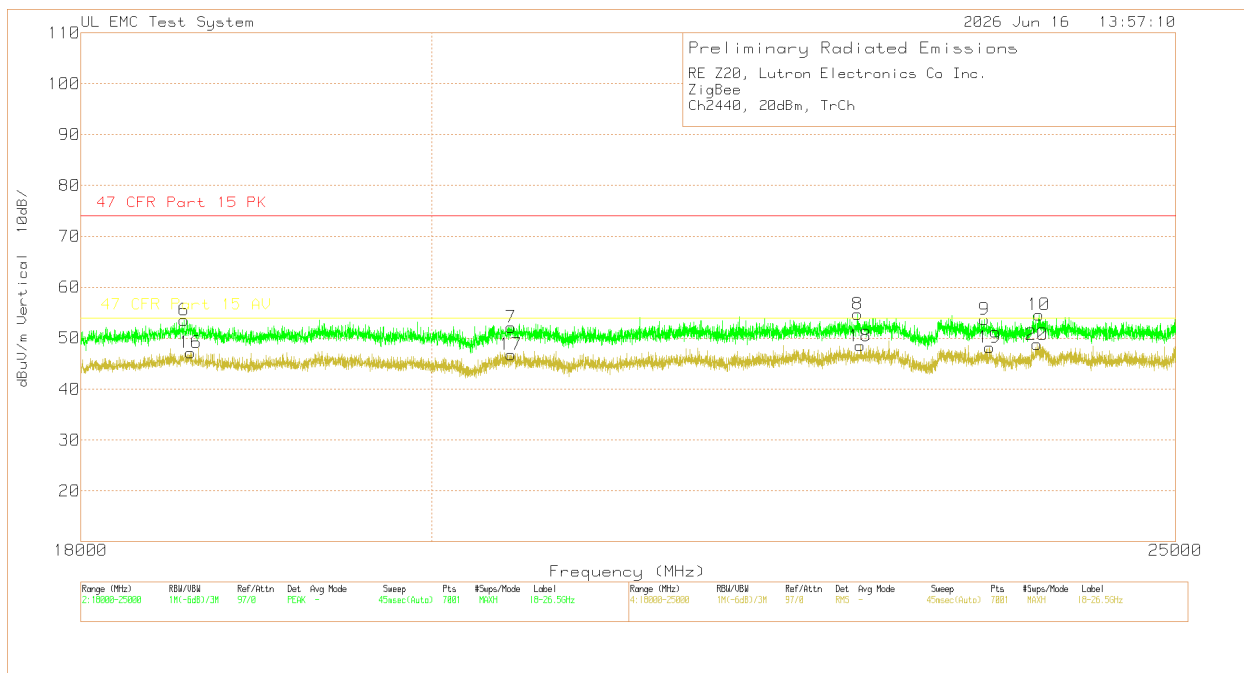
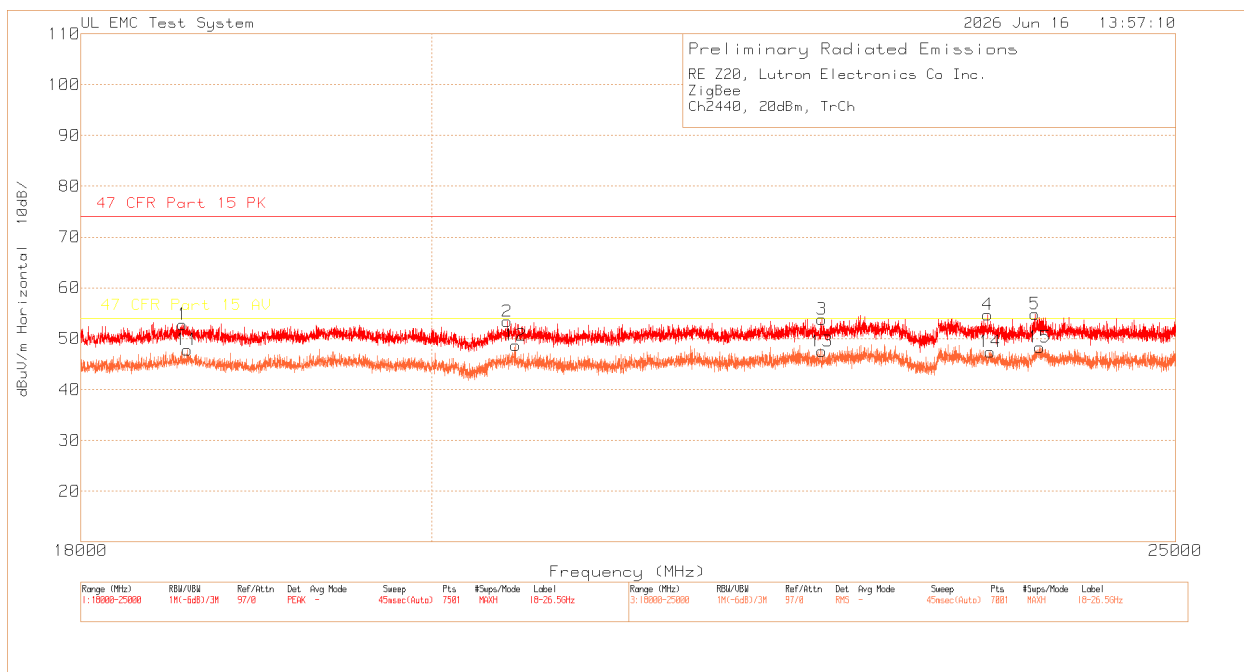
SPURIOUS EMISSIONS – 1GHz – 18GHz – Middle CHANNEL RESULTS



BE Z17, Lutron Electronics Co Inc.														
ZigBee														
Ch2440, 20dBm, TrCh														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2440	121.89	Pk	21.9	-	-38.65	105.14	-	-	-	-	0-360	149	H
2	* 4881	74.24	Pk	27.7	-	-49.38	52.56	74	-21.44	54	-1.44	0-360	149	H
3	* 7322	67.54	Pk	30.6	-	-44.89	53.25	74	-20.75	54	-0.75	0-360	149	H
4	* 12197	59.35	Pk	39.4	-	-46.06	52.69	74	-21.31	54	-1.31	0-360	149	H
5	2440	121.89	Pk	21.9	-	-38.65	105.14	-	-	-	-	0-360	149	V
6	* 4881	72.14	Pk	27.7	-	-49.38	50.46	74	-23.54	54	-3.54	0-360	149	V
7	* 7319	64.98	Pk	30.6	-	-44.94	50.64	74	-23.36	54	-3.36	0-360	149	V
8	* 12196	61.77	Pk	39.4	-	-45.84	55.33	74	-18.67	54	1.33	0-360	149	V
Radiated Emission Data														
	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
	* 4881.12	78.5	Pk	27.7	-	-49.4	56.8	74	-17.2	-	-	260	100	H
	* 4880	69.09	Av	27.7	-	-49.52	47.27	-	-	54	-6.73	260	100	H
	* 7321.5775	70.32	Pk	30.6	-	-44.89	56.03	74	-17.97	-	-	100	146	H
	* 7320.795	59.38	Av	30.6	-	-44.93	45.05	-	-	54	-8.95	100	146	H
	* 12196.9816	62.15	Pk	39.4	-	-46.05	55.5	74	-18.5	-	-	263	153	H
	* 12202.2683	49.39	Av	39.4	-	-46.07	42.72	-	-	54	-11.28	263	153	H
	* 4880.81109	76.86	Pk	27.7	-	-49.4	55.16	74	-18.84	-	-	352	150	V
	* 4880.34758	67.18	Av	27.7	-	-49.47	45.41	-	-	54	-8.59	352	150	V
	* 7318.47924	69.53	Pk	30.6	-	-45.02	55.11	74	-18.89	-	-	103	157	V
	* 7320.83416	58.98	Av	30.6	-	-44.92	44.66	-	-	54	-9.34	103	157	V
	* 12202.7383	64.8	Pk	39.4	-	-46.03	58.17	74	-15.83	-	-	2	128	V
	* 12202.275	52.07	Av	39.4	-	-46.07	45.4	-	-	54	-8.6	2	128	V
Pk - Peak detector														
Av - Average detection														
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band														

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

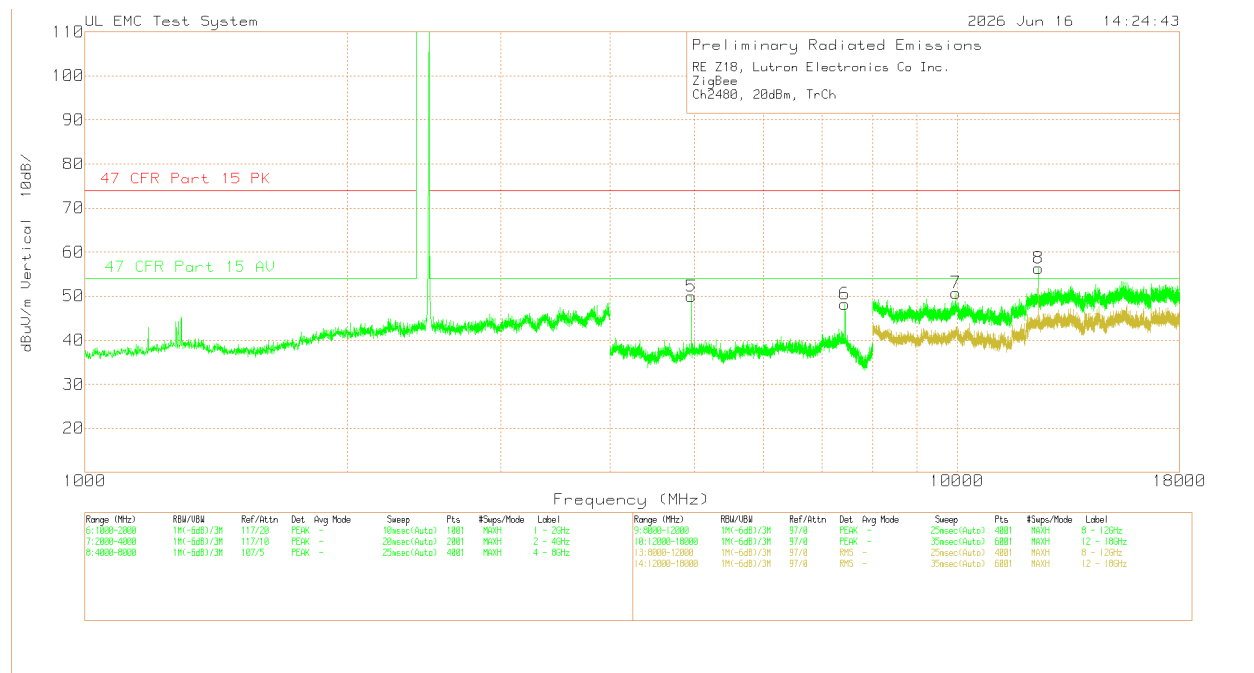
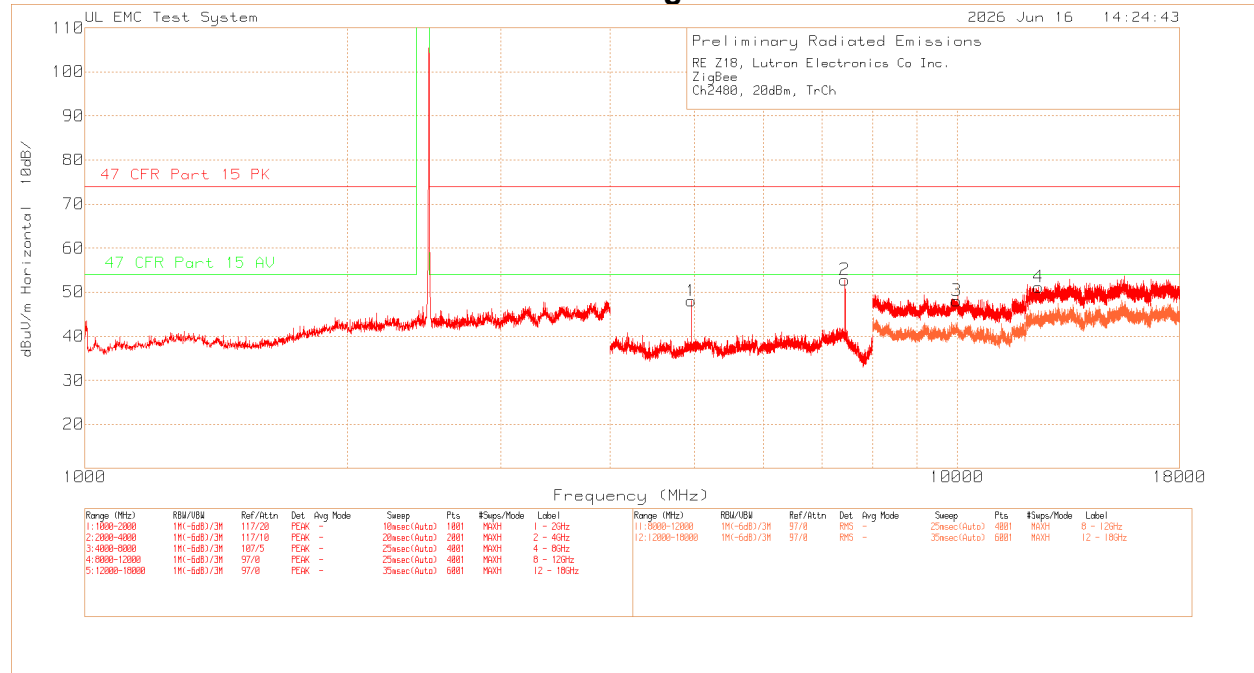
SPURIOUS EMISSIONS – 18GHz – 25GHz – Middle CHANNEL RESULTS



RE Z20,Lutron Electronics Co Inc.													
ZigBee													
Ch2440, 20dBm, TrCh													
Trace Markers													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	18557.2	63.79	Pk	40.1	-51.06	52.83	74	-21.17	54	-1.17	0-360	147	H
2	20457.466	61.21	Pk	40.3	-48.13	53.38	74	-20.62	54	-0.62	0-360	147	H
3	22480.932	59.42	Pk	40.5	-46.06	53.86	74	-20.14	54	-0.14	0-360	147	H
4	23628.931	59.81	Pk	40.3	-45.4	54.71	74	-19.29	54	0.71	0-360	147	H
5	23965.865	60.21	Pk	40.3	-45.71	54.8	74	-19.2	54	0.8	0-360	147	H
6	18566	64.24	Pk	40.1	-50.81	53.53	74	-20.47	54	-0.47	0-360	147	V
7	20480	60.16	Pk	40.3	-48.26	52.2	74	-21.8	54	-1.8	0-360	147	V
8	22724	59.16	Pk	40.4	-44.85	54.71	74	-19.29	54	0.71	0-360	147	V
9	23606	58.53	Pk	40.3	-45.17	53.66	74	-20.34	54	-0.34	0-360	147	V
10	23998	59.2	Pk	40.3	-44.88	54.62	74	-19.38	54	0.62	0-360	147	V
11	18585	58.67	RMS	40.1	-50.97	47.8	74	-26.2	54	-6.2	0-360	147	H
12	20507	56.12	RMS	40.3	-47.73	48.69	74	-25.31	54	-5.31	0-360	147	H
13	22484	52.76	RMS	40.5	-45.76	47.5	74	-26.5	54	-6.5	0-360	147	H
14	23647	52.11	RMS	40.3	-44.98	47.43	74	-26.57	54	-6.57	0-360	147	H
15	23999	52.89	RMS	40.3	-44.82	48.37	74	-25.63	54	-5.63	0-360	147	H
16	18603	58.37	RMS	40.1	-51.27	47.2	74	-26.8	54	-6.8	0-360	147	V
17	20479	54.9	RMS	40.3	-48.38	46.82	74	-27.18	54	-7.18	0-360	147	V
18	22743	53.09	RMS	40.4	-44.98	48.51	74	-25.49	54	-5.49	0-360	147	V
19	23642	52.99	RMS	40.3	-45.07	48.22	74	-25.78	54	-5.78	0-360	147	V
20	23983	52.99	RMS	40.3	-44.52	48.77	74	-25.23	54	-5.23	0-360	147	V
Pk - Peak detector													
RMS - RMS detection													

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

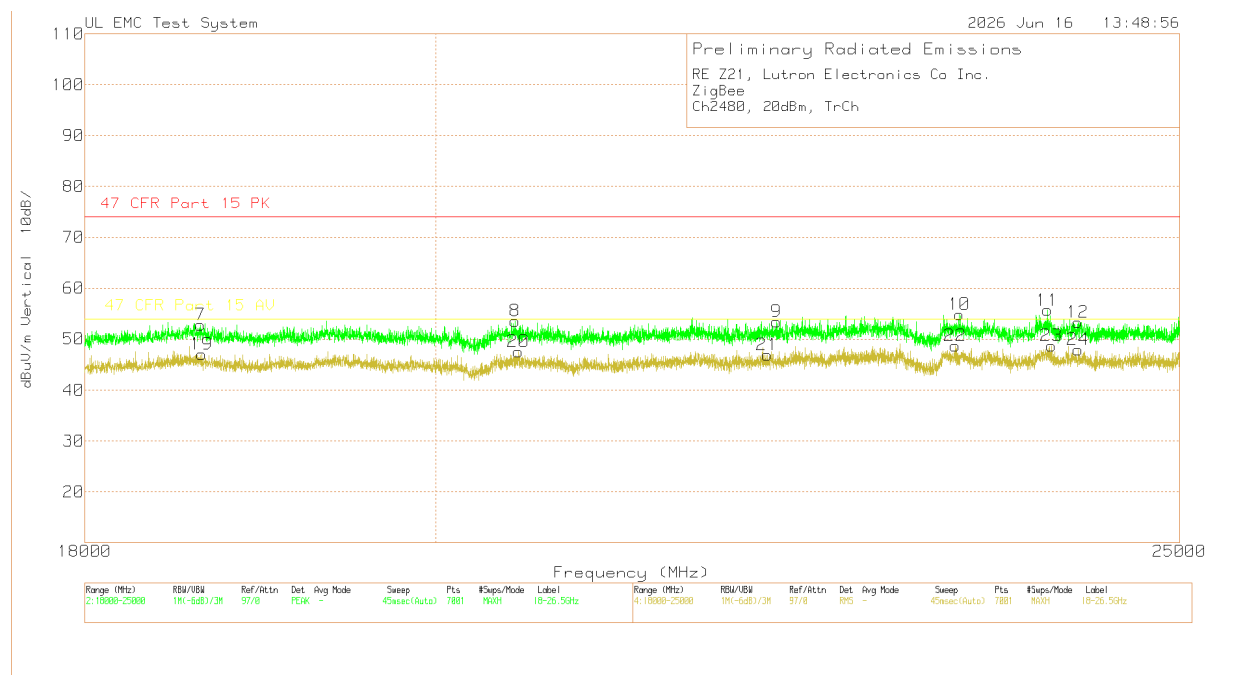
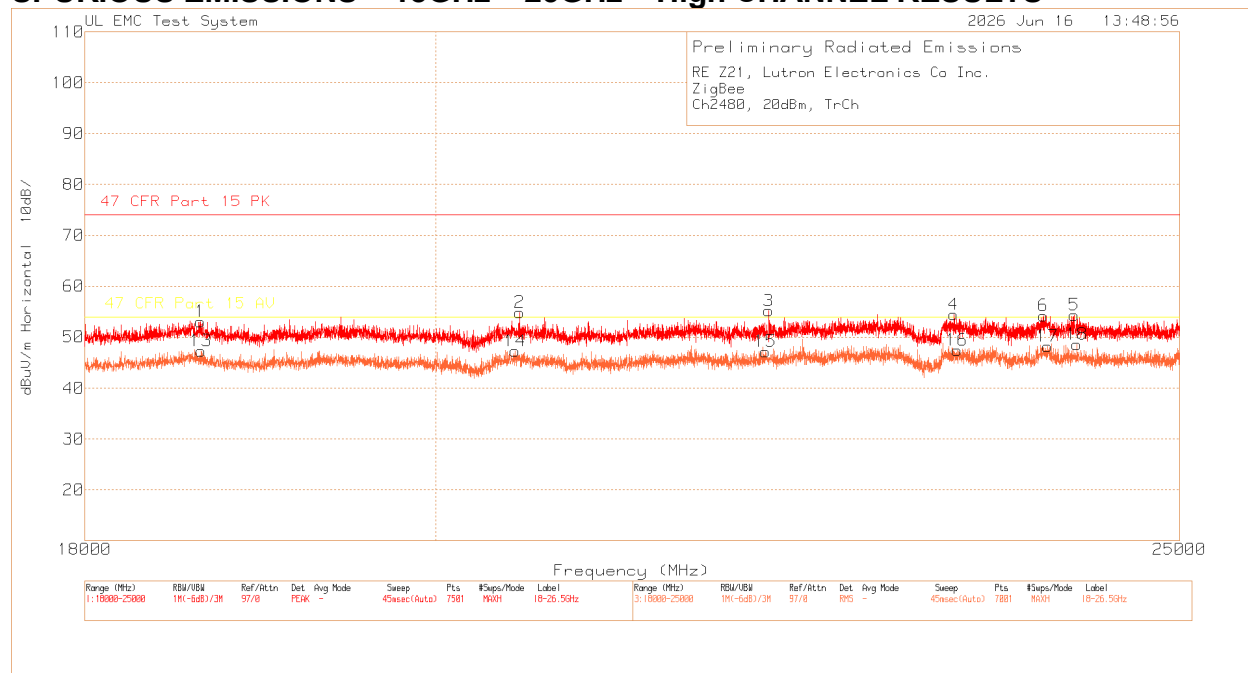
SPURIOUS EMISSIONS – 1GHz – 18GHz - High CHANNEL RESULTS



RE Z18,Lutron Electronics Co Inc.														
ZigBee														
Ch2480, 20dBm, TrCh														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	* 4961	69.17	Pk	27.8	-	-48.97	48	74	-26	54	-6	0-360	147	H
2	* 7439	68.53	Pk	30.6	-	-46.32	52.81	74	-21.19	54	-1.19	0-360	147	H
3	9989	59.34	Pk	36.4	-	-47.66	48.08	74	-25.92	54	-5.92	0-360	147	H
4	* 12396	57.15	Pk	39.4	-	-45.33	51.22	74	-22.78	54	-2.78	0-360	147	H
5	* 4961	71.09	Pk	27.8	-	-48.97	49.92	74	-24.08	54	-4.08	0-360	147	V
6	* 7439	63.95	Pk	30.6	-	-46.32	48.23	74	-25.77	54	-5.77	0-360	147	V
7	9978	61.78	Pk	36.4	-	-47.48	50.7	74	-23.3	54	-3.3	0-360	147	V
8	* 12396	62.33	Pk	39.4	-	-45.33	56.4	74	-17.6	54	2.4	0-360	147	V
Radiated Emission Data														
	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
	* 4958.9325	71.33	Pk	27.8	-	-48.94	50.19	74	-23.81	-	-	339	146	H
	* 4961.04	63.83	Av	27.8	-	-48.97	42.66	-	-	54	-11.34	339	146	H
	* 7438.27256	69.32	Pk	30.6	-	-46.25	53.67	74	-20.33	-	-	125	150	H
	* 7438.53006	61.35	Av	30.6	-	-46.27	45.68	-	-	54	-8.32	125	150	H
	* 12402.8030	61.05	Pk	39.4	-	-45.43	55.02	74	-18.98	-	-	235	160	H
	* 12402.6305	49.69	Av	39.4	-	-45.41	43.68	-	-	54	-10.32	235	160	H
	* 12402.5084	65.92	Pk	39.4	-	-45.4	59.92	74	-14.08	-	-	352	140	V
	* 12397.1959	57.11	Av	39.4	-	-45.39	51.12	-	-	54	-2.88	352	140	V
	* 4958.8925	74.32	Pk	27.8	-	-48.94	53.18	74	-20.82	-	-	30	138	V
	* 4958.91	67.47	Av	27.8	-	-48.94	46.33	-	-	54	-7.67	30	138	V
	* 7438.20596	68.81	Pk	30.6	-	-46.24	53.17	74	-20.83	-	-	73	154	V
	* 7441.48096	61.55	Av	30.5	-	-46.28	45.77	-	-	54	-8.23	73	154	V
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band														
Pk - Peak detector														
Av - Average detection														

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

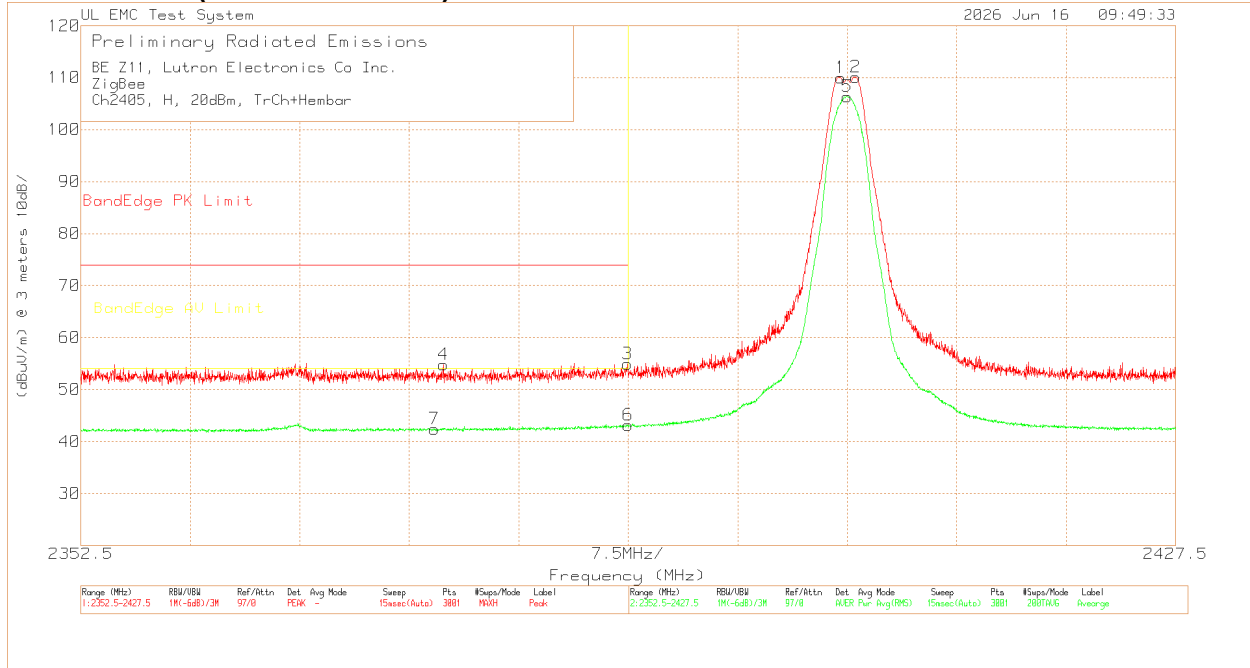
SPURIOUS EMISSIONS – 18GHz – 25GHz – High CHANNEL RESULTS



RE Z21,Lutron Electronics Co Inc.													
ZigBee													
Ch2480, 20dBm, TrCh													
Trace Markers													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	18636.533	64.15	Pk	40.1	-51.21	53.04	74	-20.96	54	-0.96	0-360	147	H
2	20506.932	62.35	Pk	40.3	-47.78	54.87	74	-19.13	54	0.87	0-360	147	H
3	22101.065	60.88	Pk	40.4	-46.11	55.17	74	-18.83	54	1.17	0-360	147	H
4	23361.065	58.92	Pk	40.3	-44.81	54.41	74	-19.59	54	0.41	0-360	147	H
5	24223.464	59.97	Pk	40.3	-45.95	54.32	74	-19.68	54	0.32	0-360	147	H
6	23998.531	58.8	Pk	40.3	-44.85	54.25	74	-19.75	54	0.25	0-360	147	H
7	18634	63.81	Pk	40.1	-51.12	52.79	74	-21.21	54	-1.21	0-360	147	V
8	20480	61.54	Pk	40.3	-48.26	53.58	74	-20.42	54	-0.42	0-360	147	V
9	22150	58.91	Pk	40.5	-45.93	53.48	74	-20.52	54	-0.52	0-360	147	V
10	23402	59.72	Pk	40.3	-45.12	54.9	74	-19.1	54	0.9	0-360	147	V
11	24027	60.94	Pk	40.3	-45.56	55.68	74	-18.32	54	1.68	0-360	147	V
12	24248	58.84	Pk	40.3	-45.81	53.33	74	-20.67	54	-0.67	0-360	147	V
13	18640	58.28	RMS	40.1	-51.13	47.25	74	-26.75	54	-6.75	0-360	147	H
14	20479	55.32	RMS	40.3	-48.38	47.24	74	-26.76	54	-6.76	0-360	147	H
15	22077	52.92	RMS	40.4	-46.11	47.21	74	-26.79	54	-6.79	0-360	147	H
16	23384	51.53	RMS	40.3	-44.44	47.39	74	-26.61	54	-6.61	0-360	147	H
17	24031	53.33	RMS	40.3	-45.47	48.16	74	-25.84	54	-5.84	0-360	147	H
18	24243	54.32	RMS	40.3	-46.01	48.61	74	-25.39	54	-5.39	0-360	147	H
19	18644	57.87	RMS	40.1	-50.92	47.05	74	-26.95	54	-6.95	0-360	147	V
20	20502	55.55	RMS	40.3	-48.27	47.58	74	-26.42	54	-6.42	0-360	147	V
21	22091	52.48	RMS	40.4	-45.93	46.95	74	-27.05	54	-7.05	0-360	147	V
22	23371	52.63	RMS	40.3	-44.22	48.71	74	-25.29	54	-5.29	0-360	147	V
23	24056	54	RMS	40.3	-45.55	48.75	74	-25.25	54	-5.25	0-360	147	V
24	24252	52.85	RMS	40.3	-45.22	47.93	74	-26.07	54	-6.07	0-360	147	V
Pk - Peak detector													
RMS - RMS detection													

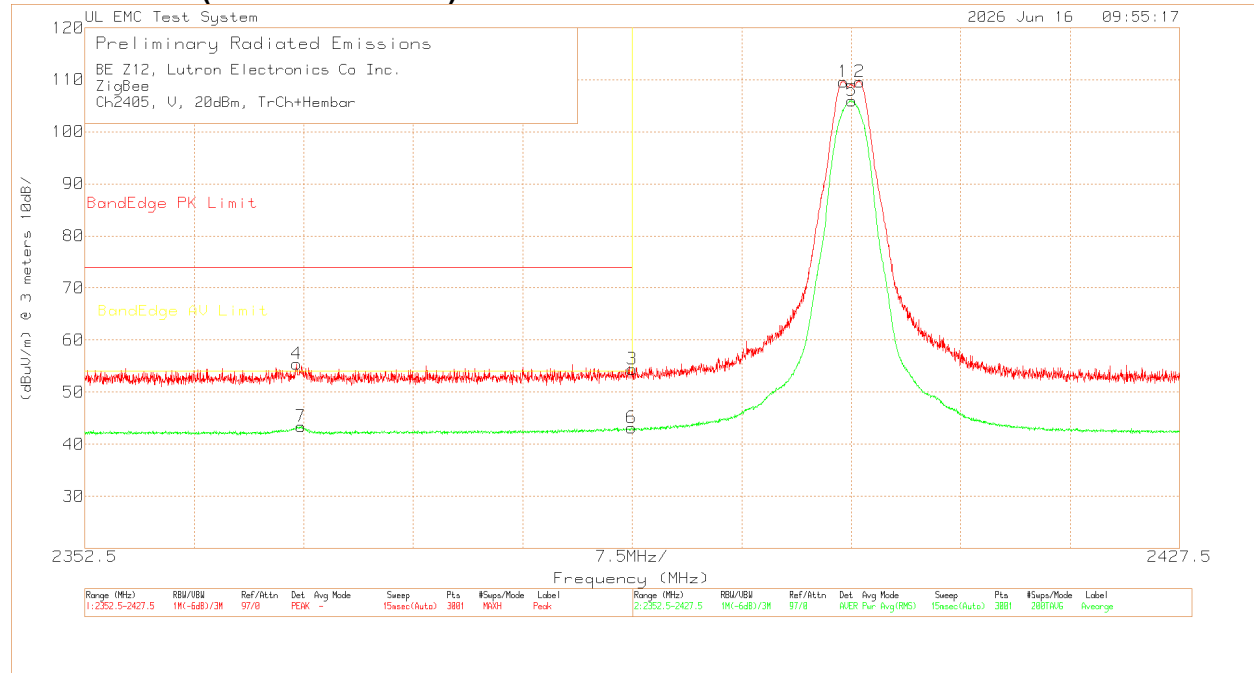
*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

10.4.3. Trickle-Charge and Hembar Mode BANDEDGE (LOW CHANNEL) - HORIZONTAL RESULT



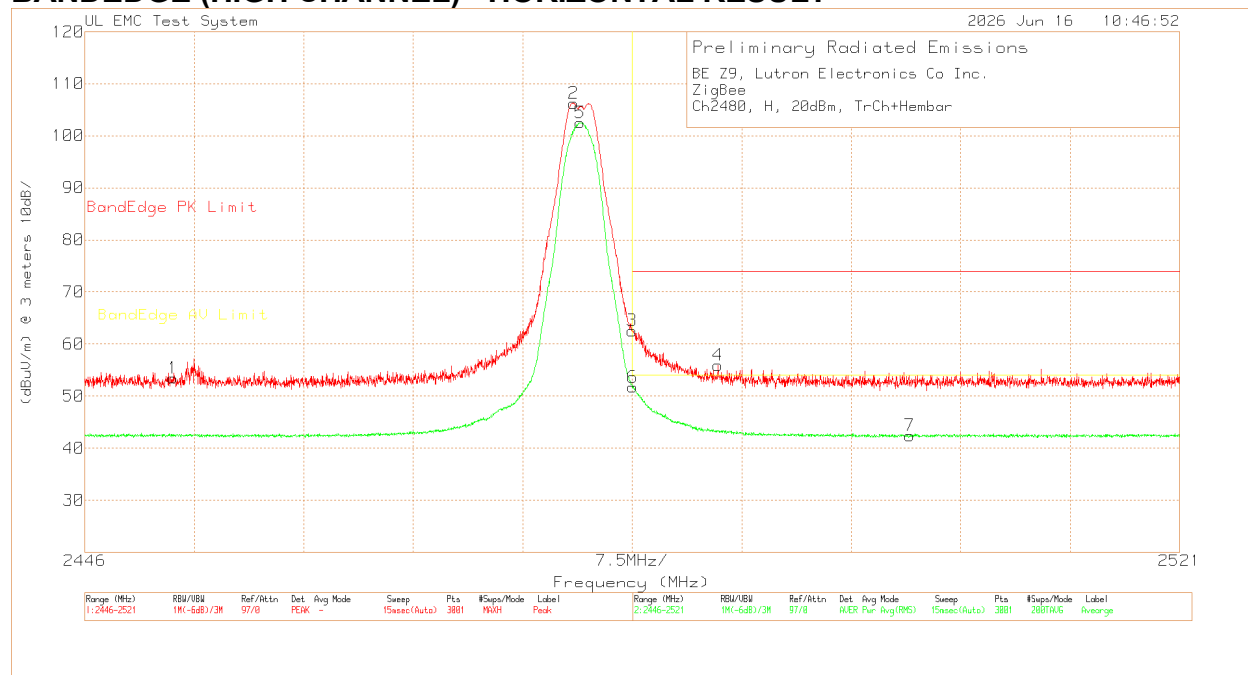
BE Z11, Lutron Electronics Co Inc.														
ZigBee														
Ch2405, H, 20dBm, TrCh+Hembar														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2404.575	83.43	Pk	21.8	-	4.72	109.95	-	-	-	-	82	148	H
2	2405.6	83.57	Pk	21.8	-	4.73	110.1	-	-	-	-	82	148	H
3	2390	28.37	Pk	21.8	-	4.77	54.94	74	-19.06	-	-	82	148	H
4	2377.325	28.26	Pk	21.8	-	4.71	54.77	74	-19.23	-	-	82	148	H
5	2405	79.89	RMS	21.8	-	4.72	106.41	-	-	-	-	82	148	H
6	2390	16.61	RMS	21.8	-	4.77	43.18	-	-	54	-10.82	82	148	H
7	2376.725	15.89	RMS	21.8	-	4.71	42.4	-	-	54	-11.6	82	148	H
Pk - Peak detector														
RMS - RMS detection														

BANDEDGE (LOW CHANNEL) - VERTICAL RESULT



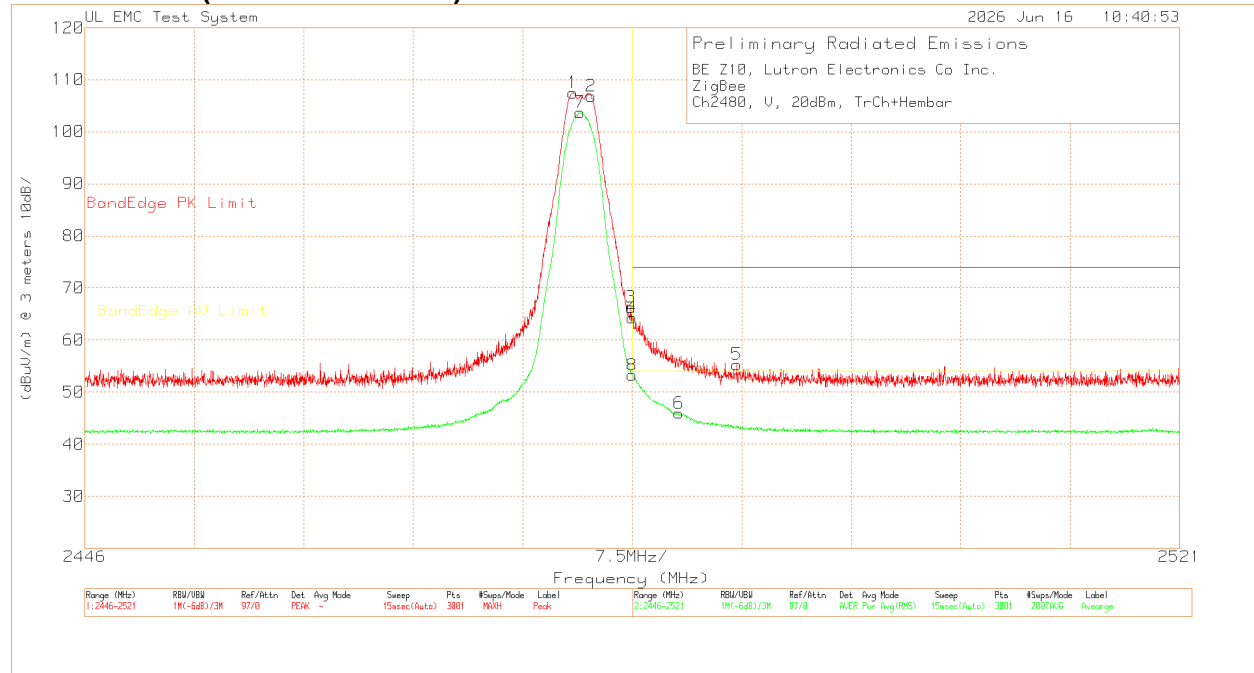
BE Z12,Lutron Electronics Co Inc.														
ZigBee														
Ch2405, V, 20dBm, TrCh+Hembar														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2404.4875	83.14	Pk	21.8	-	4.72	109.66	-	-	-	-	134	100	V
2	2405.6	83.1	Pk	21.8	-	4.73	109.63	-	-	-	-	134	100	V
3	2389.975	27.86	Pk	21.8	-	4.77	54.43	74	-19.57	-	-	134	100	V
4	2367	29	Pk	21.8	-	4.63	55.43	74	-18.57	-	-	134	100	V
5	2405.05	79.45	RMS	21.8	-	4.72	105.97	-	-	-	-	134	100	V
6	2389.95	16.61	RMS	21.8	-	4.77	43.18	-	-	54	-10.82	134	100	V
7	2367.3	16.96	RMS	21.8	-	4.63	43.39	-	-	54	-10.61	134	100	V
Pk - Peak detector														
RMS - RMS detection														

BANDEDGE (HIGH CHANNEL) - HORIZONTAL RESULT



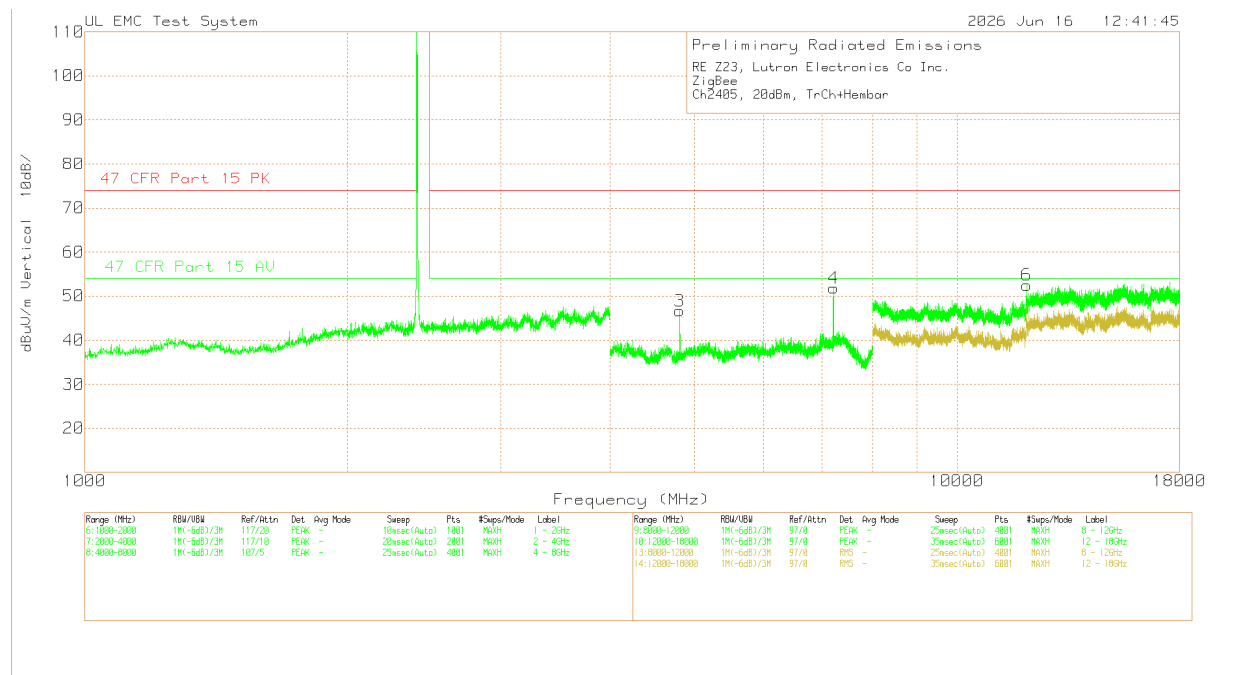
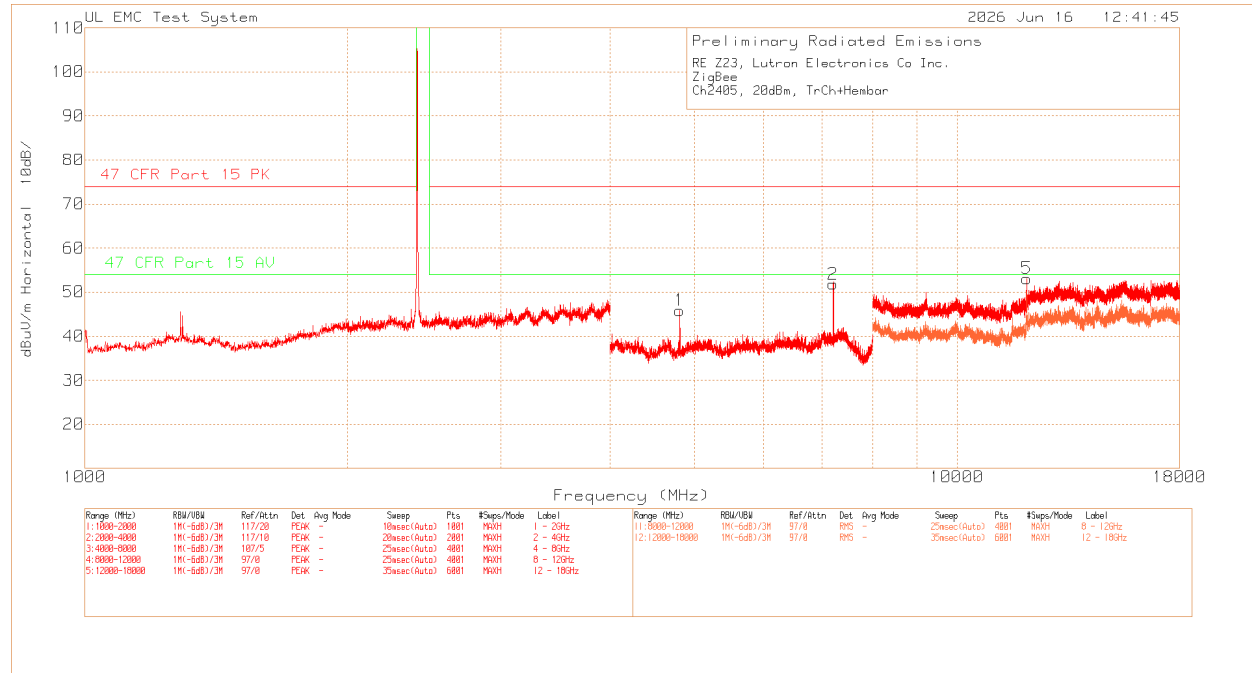
BE Z9,Lutron Electronics Co Inc.														
ZigBee														
Ch2480, H, 20dBm, TrCh+Hembar														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2452.05	26.78	Pk	22	-	4.69	53.47	-	-	-	-	86	134	H
2	2479.5	79.79	Pk	22	-	4.48	106.27	-	-	-	-	86	134	H
3	2483.5	35.97	Pk	22.1	-	4.5	62.57	74	-11.43	-	-	86	134	H
4	2489.375	29.26	Pk	22.1	-	4.53	55.89	74	-18.11	-	-	86	134	H
5	2479.95	76.06	RMS	22	-	4.48	102.54	-	-	-	-	86	134	H
6	2483.55	25.12	RMS	22.1	-	4.5	51.72	-	-	54	-2.28	86	134	H
7	2502.525	15.82	RMS	22.1	-	4.51	42.43	-	-	54	-11.57	86	134	H
Pk - Peak detector														
RMS - RMS detection														

BANDEDGE (HIGH CHANNEL) - VERTICAL RESULT



BE Z10,Lutron Electronics Co Inc.														
ZigBee														
Ch2480, V, 20dBm, TrCh+Hembar														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	2479.4375	80.96	Pk	22	-	4.48	107.44	-	-	-	-	131	202	V
2	2480.7	80.42	Pk	22	-	4.48	106.9	-	-	-	-	131	202	V
3	2483.425	39.71	Pk	22.1	-	4.5	66.31	-	-	-	-	131	202	V
4	2483.5	37.66	Pk	22.1	-	4.5	64.26	74	-9.74	-	-	131	202	V
5	2490.65	28.69	Pk	22.1	-	4.53	55.32	74	-18.68	-	-	131	202	V
6	2486.7	19.35	RMS	22.1	-	4.51	45.96	-	-	54	-8.04	131	202	V
7	2479.95	77.24	RMS	22	-	4.48	103.72	-	-	-	-	131	202	V
8	2483.5	26.63	RMS	22.1	-	4.5	53.23	-	-	54	-0.77	131	202	V
Pk - Peak detector														
RMS - RMS detection														

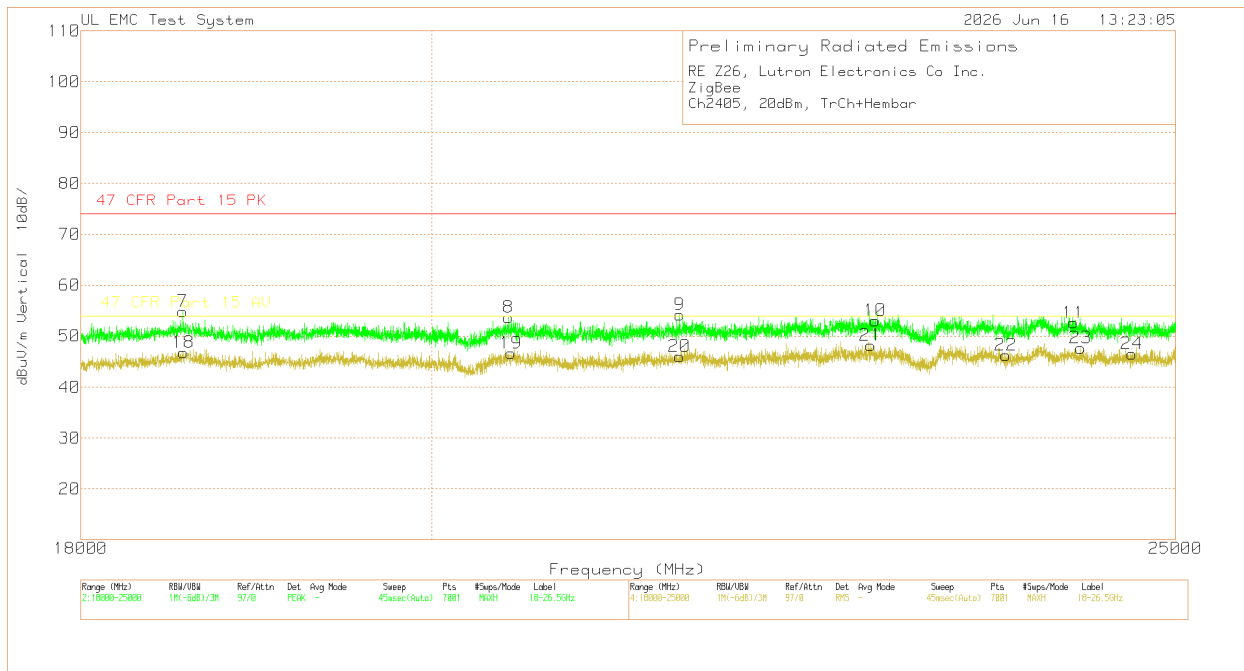
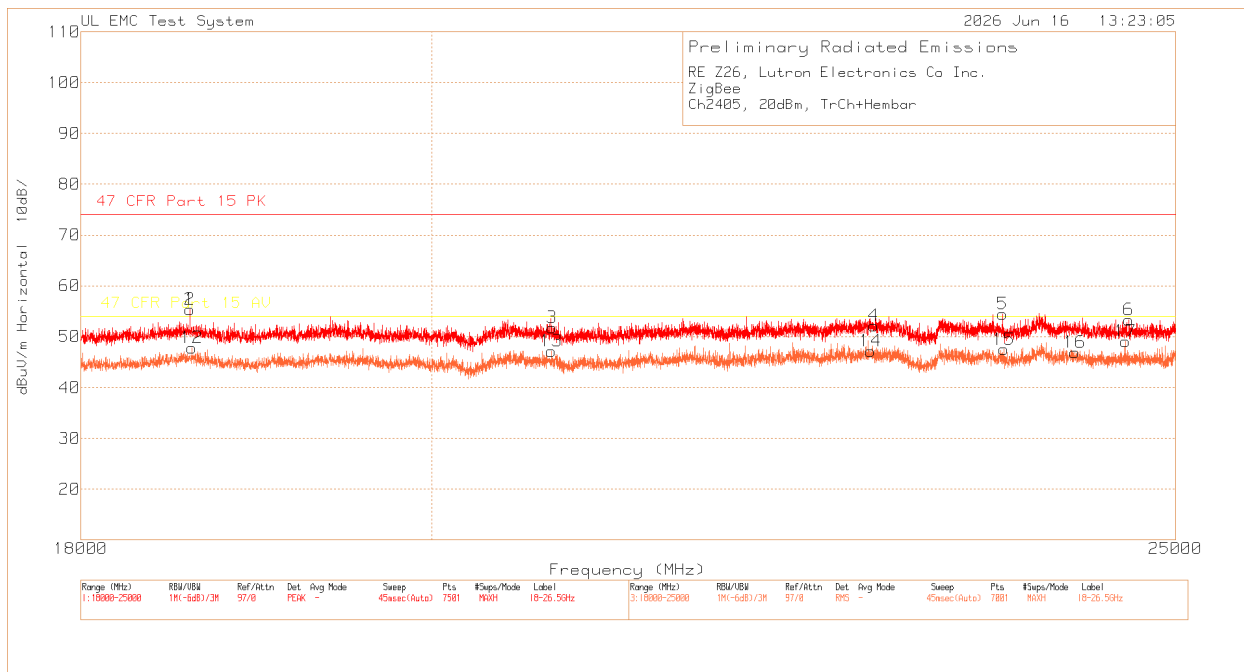
SPURIOUS EMISSIONS – 1GHz – 18GHz - LOW CHANNEL RESULTS



RE Z23,Lutron Electronics Co Inc.														
ZigBee														
Ch2405, 20dBm, TrCh+Hembar														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	* 4811	68.58	Pk	27.7		-50.39	45.89	74	-28.11	54	-8.11	0-360	151	H
2	7213	67.47	Pk	29.8		-45.44	51.83	74	-22.17	54	-2.17	0-360	151	H
5	* 12027	59.84	Pk	39.4		-46.11	53.13	74	-20.87	54	-0.87	0-360	151	H
3	* 4811	69.35	Pk	27.7		-50.39	46.66	74	-27.34	54	-7.34	0-360	151	V
4	7217	67.44	Pk	29.8		-45.41	51.83	74	-22.17	54	-2.17	0-360	151	V
6	* 12027	59.21	Pk	39.4		-46.11	52.5	74	-21.5	54	-1.5	0-360	151	V
Radiated Emission Data														
	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
	* 4808.9875	71.96	Pk	27.7	-	-50.37	49.29	74	-24.71	-	-	130	151	H
	* 4808.8475	64.39	Av	27.7	-	-50.36	41.73	-	-	54	-12.27	130	151	H
	7213.3231	70.09	Pk	29.8	-	-45.46	54.43	74	-19.57	-	-	150	155	H
	7213.3281	62.07	Av	29.8	-	-45.46	46.41	-	-	54	-7.59	150	155	H
	* 12022.2709	64.03	Pk	39.4	-	-46.31	57.12	74	-16.88	-	-	224	109	H
	* 12022.3509	54.92	Av	39.4	-	-46.28	48.04	-	-	54	-5.96	224	109	H
	* 12027.6567	63.1	Pk	39.4	-	-46.15	56.35	74	-17.65	-	-	0	131	V
	* 12022.1692	53.43	Av	39.4	-	-46.34	46.49	-	-	54	-7.51	0	131	V
	* 4808.82737	73.67	Pk	27.7	-	-50.35	51.02	74	-22.98	-	-	244	147	V
	* 4808.98487	66.22	Av	27.7	-	-50.37	43.55	-	-	54	-10.45	244	147	V
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band														
Pk - Peak detector														
Av - Average detection														

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

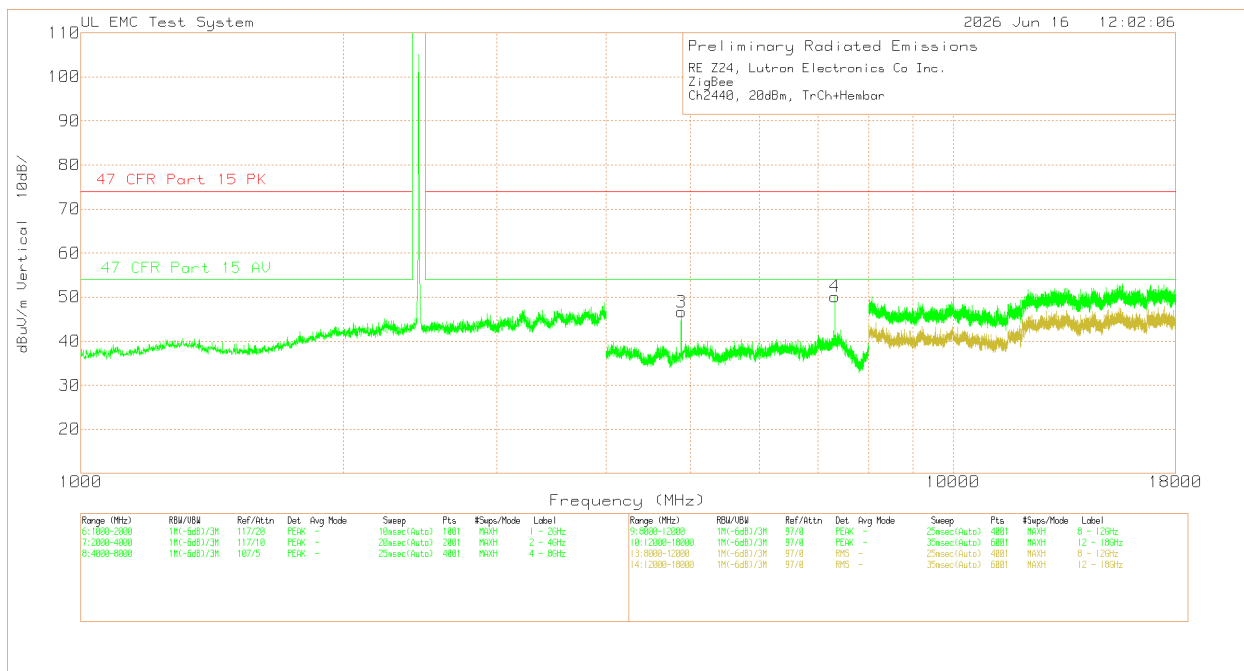
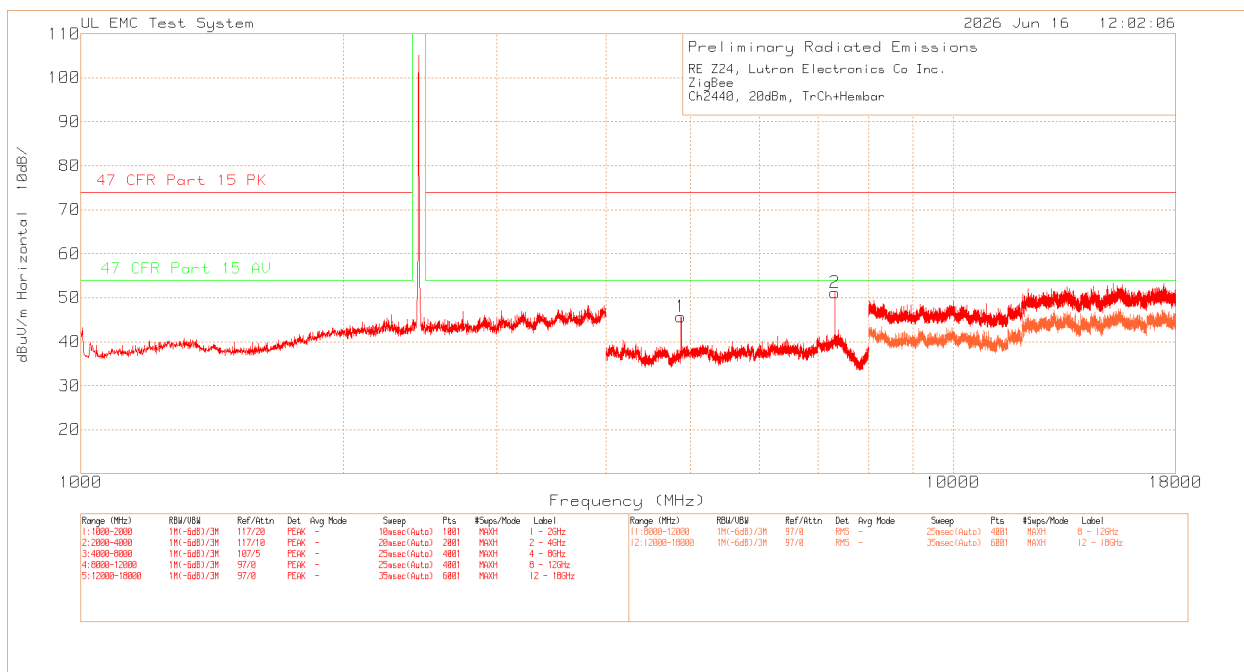
SPURIOUS EMISSIONS – 18GHz – 25GHz - LOW CHANNEL RESULTS



RE Z26,Lutron Electronics Co Inc.													
ZigBee													
Ch2405, 20dBm, TrCh+Hembar													
Trace Markers													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	18598.266	66.3	Pk	40.1	-51.04	55.36	74	-18.64	54	1.36	0-360	147	H
2	18598.266	66.3	Pk	40.1	-51.04	55.36	74	-18.64	54	1.36	0-360	147	H
3	20734.666	59.34	Pk	40.2	-47.77	51.77	74	-22.23	54	-2.23	0-360	147	H
4	22836.532	56.57	Pk	40.4	-44.8	52.17	74	-21.83	54	-1.83	0-360	147	H
5	23733.465	59.71	Pk	40.3	-45.54	54.47	74	-19.53	54	0.47	0-360	147	H
6	24652.798	58.47	Pk	40.3	-45.48	53.29	74	-20.71	54	-0.71	0-360	147	H
7	18560	65.75	Pk	40.1	-51.03	54.82	74	-19.18	54	0.82	0-360	147	V
8	20465	61.85	Pk	40.3	-48.44	53.71	74	-20.29	54	-0.29	0-360	147	V
9	21544	60.32	Pk	40.3	-46.41	54.21	74	-19.79	54	0.21	0-360	147	V
10	22846	57.1	Pk	40.4	-44.45	53.05	74	-20.95	54	-0.95	0-360	147	V
11	24246	57.98	Pk	40.3	-45.66	52.62	74	-21.38	54	-1.38	0-360	147	V
12	18610	58.97	RMS	40.1	-51.22	47.85	74	-26.15	54	-6.15	0-360	147	H
13	20731	54.61	RMS	40.2	-47.69	47.12	74	-26.88	54	-6.88	0-360	147	H
14	22813	51.18	RMS	40.4	-44.44	47.14	74	-26.86	54	-6.86	0-360	147	H
15	23745	52.84	RMS	40.3	-45.65	47.49	74	-26.51	54	-6.51	0-360	147	H
16	24254	51.85	RMS	40.3	-45.28	46.87	74	-27.13	54	-7.13	0-360	147	H
17	24627	54.53	RMS	40.3	-45.73	49.1	74	-24.9	54	-4.9	0-360	147	H
18	18563	57.81	RMS	40.1	-51.12	46.79	74	-27.21	54	-7.21	0-360	147	V
19	20479	54.73	RMS	40.3	-48.38	46.65	74	-27.35	54	-7.35	0-360	147	V
20	21541	52.36	RMS	40.3	-46.6	46.06	74	-27.94	54	-7.94	0-360	147	V
21	22812	52.48	RMS	40.4	-44.69	48.19	74	-25.81	54	-5.81	0-360	147	V
22	23758	51.46	RMS	40.3	-45.47	46.29	74	-27.71	54	-7.71	0-360	147	V
23	24298	52.87	RMS	40.3	-45.51	47.66	74	-26.34	54	-6.34	0-360	147	V
24	24675	52.1	RMS	40.3	-45.9	46.5	74	-27.5	54	-7.5	0-360	147	V
Pk - Peak detector													
RMS - RMS detection													

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noisefloor in peak mode.

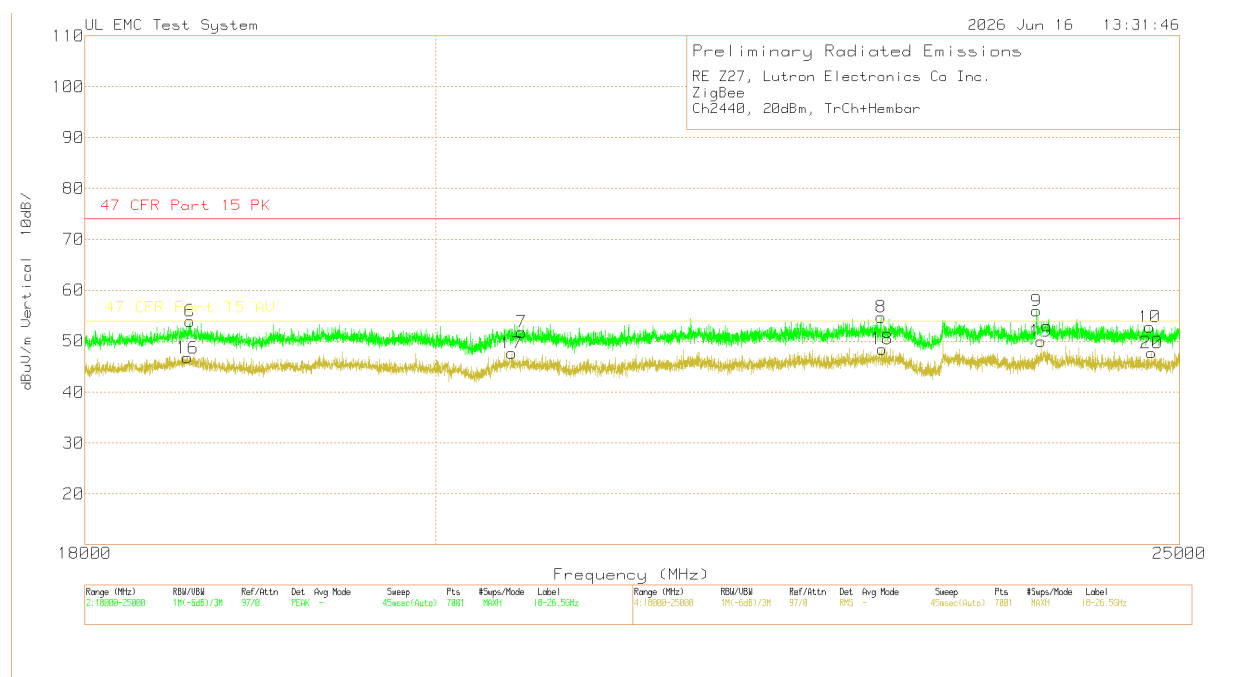
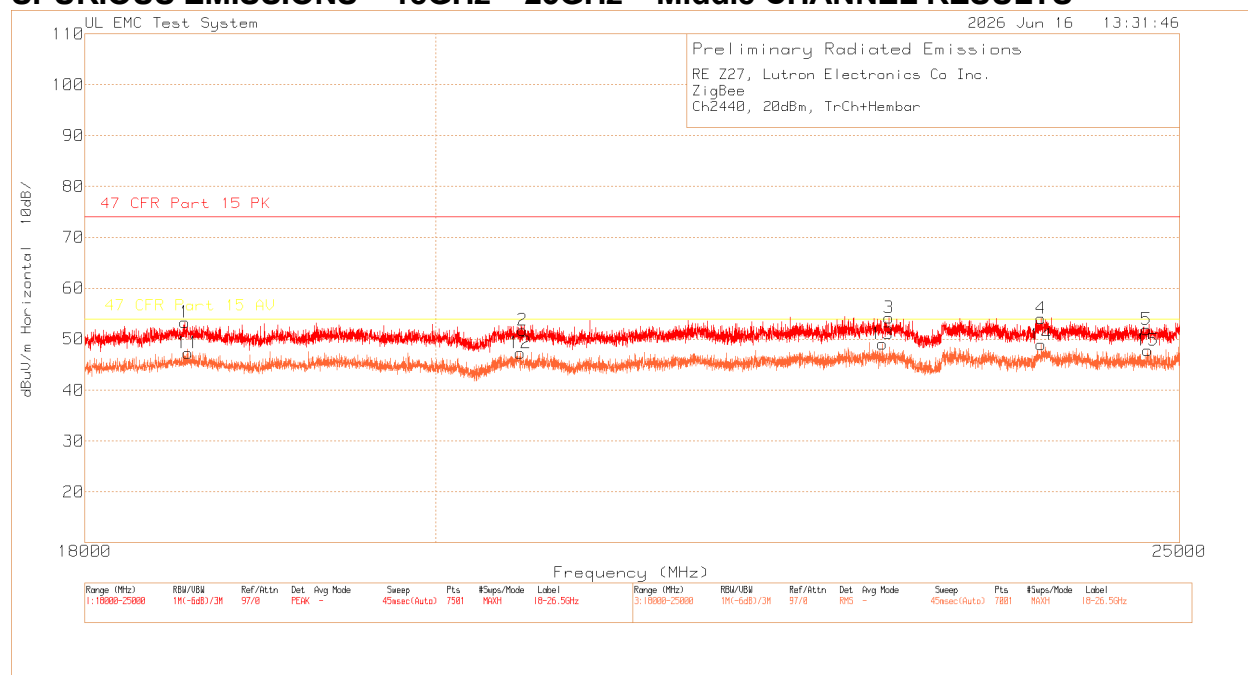
SPURIOUS EMISSIONS – 1GHz – 18GHz – Middle CHANNEL RESULTS



RE Z24,Lutron Electronics Co Inc.														
ZigBee														
Ch2440, 20dBm, TrCh+Hembar														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	* 4878	67.44	Pk	27.7		-49.49	45.65	74	-28.35	54	-8.35	0-360	151	H
2	* 7319	65.52	Pk	30.6		-44.94	51.18	74	-22.82	54	-2.82	0-360	151	H
3	* 4881	68.34	Pk	27.7		-49.38	46.66	74	-27.34	54	-7.34	0-360	151	V
4	* 7319	64.52	Pk	30.6		-44.94	50.18	74	-23.82	54	-3.82	0-360	151	V
Radiated Emission Data														
	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
	* 4878.81	71.05	Pk	27.7		-49.7	49.05	74	-24.95	-	-	130	147	H
	* 4878.915	63.1	Av	27.7		-49.73	41.07	-	-	54	-12.93	130	147	H
	* 7321.5925	69.6	Pk	30.6		-44.89	55.31	74	-18.69	-	-	239	109	H
	* 7321.63	61.42	Av	30.6		-44.89	47.13	-	-	54	-6.87	239	109	H
	* 7321.4525	69.79	Pk	30.6		-44.89	55.5	74	-18.5	-	-	150	177	V
	* 7318.5275	61.95	Av	30.6		-45.01	47.54	-	-	54	-6.46	150	177	V
	* 4878.7775	70.79	Pk	27.7		-49.69	48.8	74	-25.2	-	-	57	151	V
	* 4880.895	63.82	Av	27.7		-49.39	42.13	-	-	54	-11.87	57	151	V
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band														
Pk - Peak detector														
Av - Average detection														

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noisefloor in peak mode.

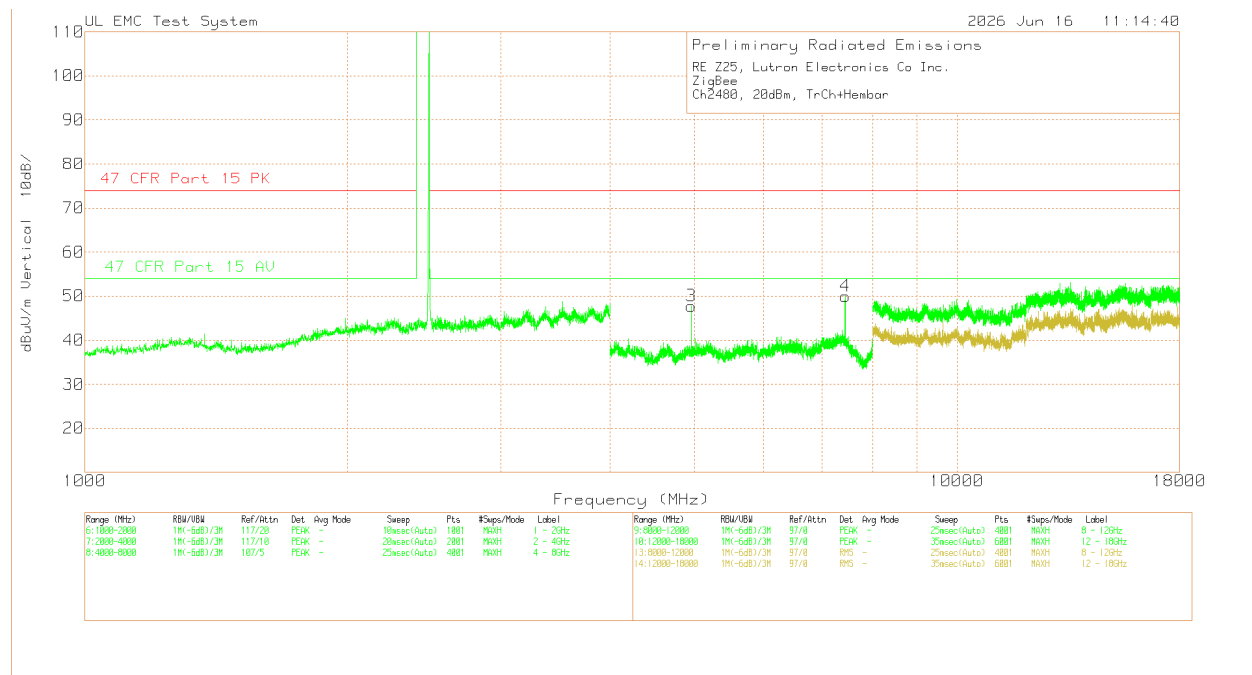
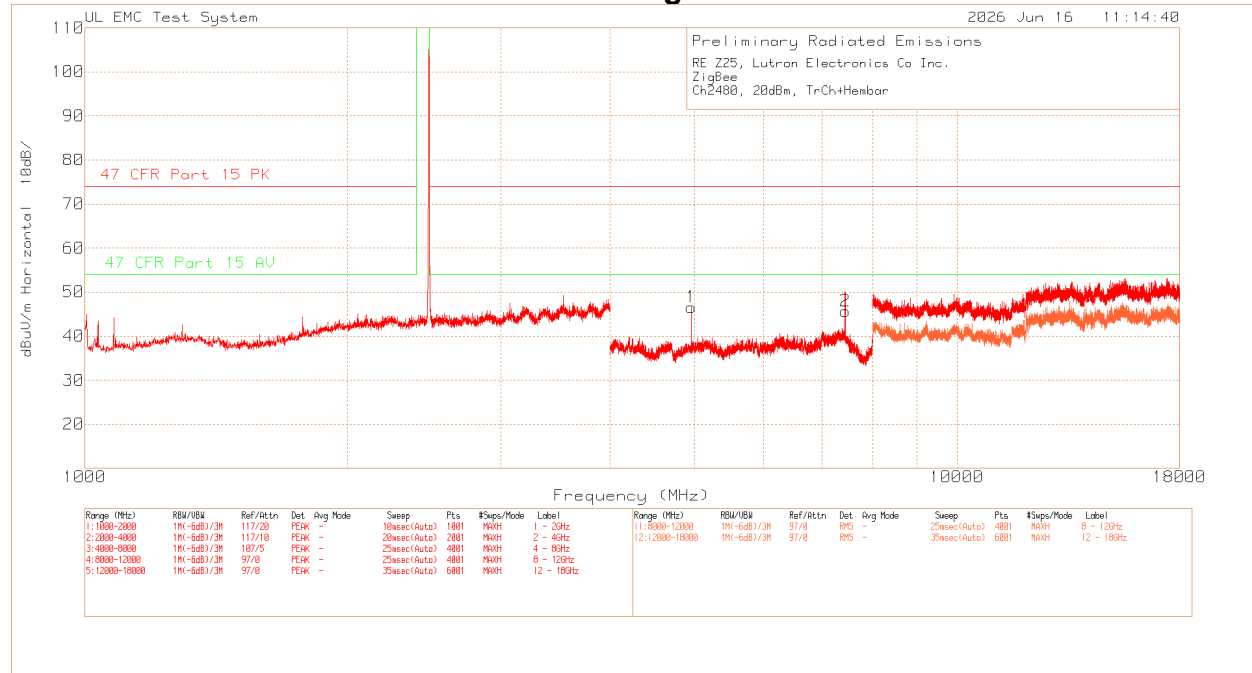
SPURIOUS EMISSIONS – 18GHz – 25GHz – Middle CHANNEL RESULTS



RE Z27,Lutron Electronics Co Inc.													
ZigBee													
Ch2440, 20dBm, TrCh+Hembar													
Trace Markers													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	18546.933	63.84	Pk	40.1	-50.64	53.3	74	-20.7	54	-0.7	0-360	147	H
2	20526.532	59.97	Pk	40.3	-48.49	51.78	74	-22.22	54	-2.22	0-360	147	H
3	22913.065	58.37	Pk	40.3	-44.43	54.24	74	-19.76	54	0.24	0-360	147	H
4	23979.865	59.09	Pk	40.3	-45.35	54.04	74	-19.96	54	0.04	0-360	147	H
5	24750.798	57.5	Pk	40.3	-45.88	51.92	74	-22.08	54	-2.08	0-360	147	H
6	18578	65.04	Pk	40.1	-51.15	53.99	74	-20.01	54	-0.01	0-360	147	V
7	20520	59.53	Pk	40.3	-48.08	51.75	74	-22.25	54	-2.25	0-360	147	V
8	22857	59.19	Pk	40.4	-44.91	54.68	74	-19.32	54	0.68	0-360	147	V
9	23948	61.23	Pk	40.3	-45.59	55.94	74	-18.06	54	1.94	0-360	147	V
10	24778	58.39	Pk	40.3	-45.94	52.75	74	-21.25	54	-1.25	0-360	147	V
11	18565	58.31	RMS	40.1	-51.16	47.25	74	-26.75	54	-6.75	0-360	147	H
12	20512	55.62	RMS	40.3	-48.66	47.26	74	-26.74	54	-6.74	0-360	147	H
13	22868	53.4	RMS	40.4	-44.7	49.1	74	-24.9	54	-4.9	0-360	147	H
14	23983	53.13	RMS	40.3	-44.52	48.91	74	-25.09	54	-5.09	0-360	147	H
15	24760	52.82	RMS	40.3	-45.28	47.84	74	-26.16	54	-6.16	0-360	147	H
16	18563	57.74	RMS	40.1	-51.12	46.72	74	-27.28	54	-7.28	0-360	147	V
17	20461	55.26	RMS	40.3	-47.94	47.62	74	-26.38	54	-6.38	0-360	147	V
18	22865	53.24	RMS	40.4	-45.22	48.42	74	-25.58	54	-5.58	0-360	147	V
19	23983	54.19	RMS	40.3	-44.52	49.97	74	-24.03	54	-4.03	0-360	147	V
20	24789	53.4	RMS	40.3	-45.96	47.74	74	-26.26	54	-6.26	0-360	147	V
Pk - Peak detector													
RMS - RMS detection													

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

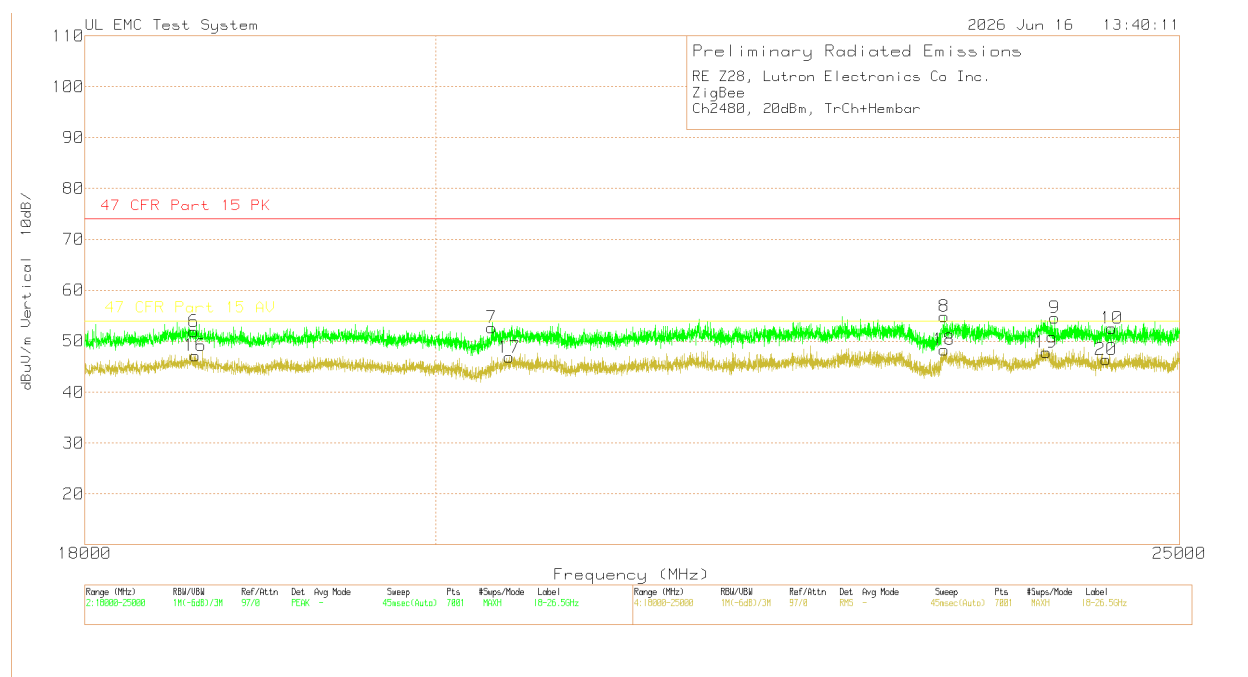
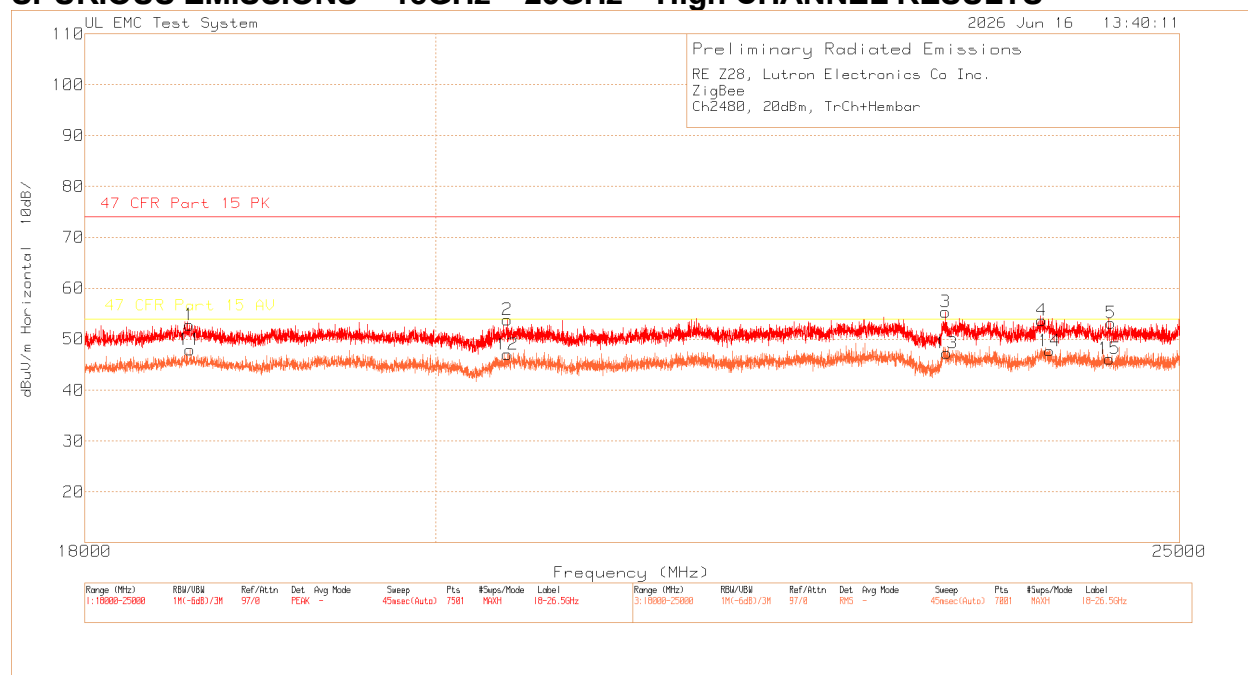
SPURIOUS EMISSIONS – 1GHz – 18GHz - High CHANNEL RESULTS



RE Z25,Lutron Electronics Co Inc.														
ZigBee														
Ch2480, 20dBm, TrCh+Hembar														
Trace Markers														
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	* 4959	67.72	Pk	27.8	-	-48.93	46.59	74	-27.41	54	-7.41	0-360	149	H
2	* 7443	61.49	Pk	30.5	-	-46.24	45.75	74	-28.25	54	-8.25	0-360	149	H
3	* 4961	68.89	Pk	27.8	-	-48.97	47.72	74	-26.28	54	-6.28	0-360	149	V
4	* 7442	65.88	Pk	30.5	-	-46.34	50.04	74	-23.96	54	-3.96	0-360	149	V
Radiated Emission Data														
	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Hardware DC Correction dB	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
	* 4961.02	71.4	Pk	27.8	-	-48.97	50.23	74	-23.77	-	-	121	205	H
	* 4958.8875	63.89	Av	27.8	-	-48.94	42.75	-	-	54	-11.25	121	205	H
	* 7441.52	68.81	Pk	30.5	-	-46.29	53.02	74	-20.98	-	-	237	126	H
	* 7441.4	61.03	Av	30.5	-	-46.27	45.26	-	-	54	-8.74	237	126	H
	* 4961.155	70.72	Pk	27.8	-	-48.96	49.56	74	-24.44	-	-	57	150	V
	* 4958.905	63.92	Av	27.8	-	-48.94	42.78	-	-	54	-11.22	57	150	V
	* 7441.555	69.18	Pk	30.5	-	-46.29	53.39	74	-20.61	-	-	148	210	V
	* 7438.31	61.92	Av	30.6	-	-46.25	46.27	-	-	54	-7.73	148	210	V
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band														
Pk - Peak detector														
Av - Average detection														

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

SPURIOUS EMISSIONS – 18GHz – 25GHz – High CHANNEL RESULTS



RE Z28,Lutron Electronics Co Inc.													
ZigBee													
Ch2480, 20dBm, TrCh+Hembar													
Trace Markers													
Marker No.	Test Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor dB/m	Path Factor dB	Corrected Reading @ 3 meters dBuV/m	Band Edge PK Limit dBuV/m	PK Margin dB	Band Edge AV Limit dBuV/m	Margin dB	Azimuth [Degs]	Height [cm]	Polarity
1	18574.933	64.06	Pk	40.1	-51.32	52.84	74	-21.16	54	-1.16	0-360	147	H
2	20433.199	61.96	Pk	40.3	-48.41	53.85	74	-20.15	54	-0.15	0-360	147	H
3	23305.998	59.47	Pk	40.3	-44.39	55.38	74	-18.62	54	1.38	0-360	147	H
4	23988.265	58.7	Pk	40.3	-45.27	53.73	74	-20.27	54	-0.27	0-360	147	H
5	24490.398	59.45	Pk	40.3	-46.57	53.18	74	-20.82	54	-0.82	0-360	147	H
6	18598	62.8	Pk	40.1	-51	51.9	74	-22.1	54	-2.1	0-360	147	V
7	20336	60.73	Pk	40.2	-48.29	52.64	74	-21.36	54	-1.36	0-360	147	V
8	23294	58.94	Pk	40.3	-44.44	54.8	74	-19.2	54	0.8	0-360	147	V
9	24079	59.84	Pk	40.3	-45.58	54.56	74	-19.44	54	0.56	0-360	147	V
10	24497	58.67	Pk	40.3	-46.39	52.58	74	-21.42	54	-1.42	0-360	147	V
11	18578	59	RMS	40.1	-51.15	47.95	74	-26.05	54	-6.05	0-360	147	H
12	20433	55.02	RMS	40.3	-48.33	46.99	74	-27.01	54	-7.01	0-360	147	H
13	23315	51.88	RMS	40.3	-44.94	47.24	74	-26.76	54	-6.76	0-360	147	H
14	24043	52.9	RMS	40.3	-45.46	47.74	74	-26.26	54	-6.26	0-360	147	H
15	24479	51.4	RMS	40.3	-45.6	46.1	74	-27.9	54	-7.9	0-360	147	H
16	18606	58.45	RMS	40.1	-51.35	47.2	74	-26.8	54	-6.8	0-360	147	V
17	20446	54.85	RMS	40.3	-48.3	46.85	74	-27.15	54	-7.15	0-360	147	V
18	23293	52.05	RMS	40.3	-44.05	48.3	74	-25.7	54	-5.7	0-360	147	V
19	24018	52.27	RMS	40.3	-44.77	47.8	74	-26.2	54	-6.2	0-360	147	V
20	24454	51.91	RMS	40.3	-45.83	46.38	74	-27.62	54	-7.62	0-360	147	V
Pk - Peak detector													
RMS - RMS detection													

*some markers were not measured based on the prescan data in average mode. Average scan was made to determine if there are any harmonics covered by the noise floor in peak mode.

11. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

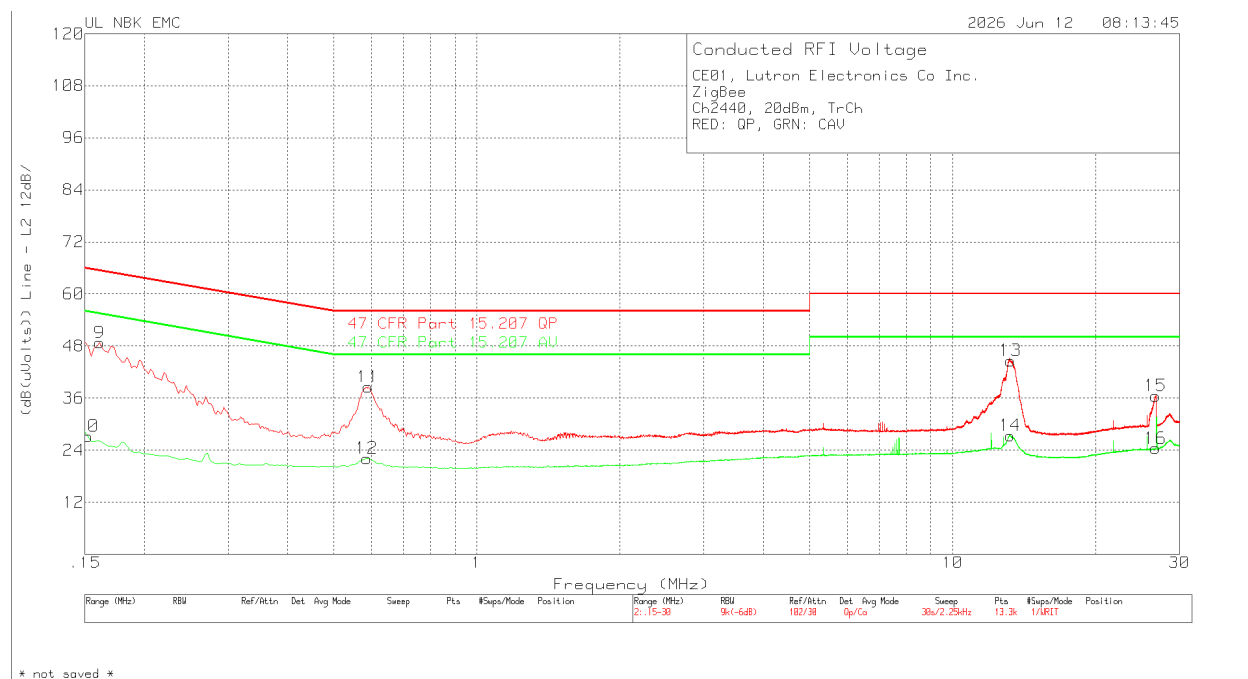
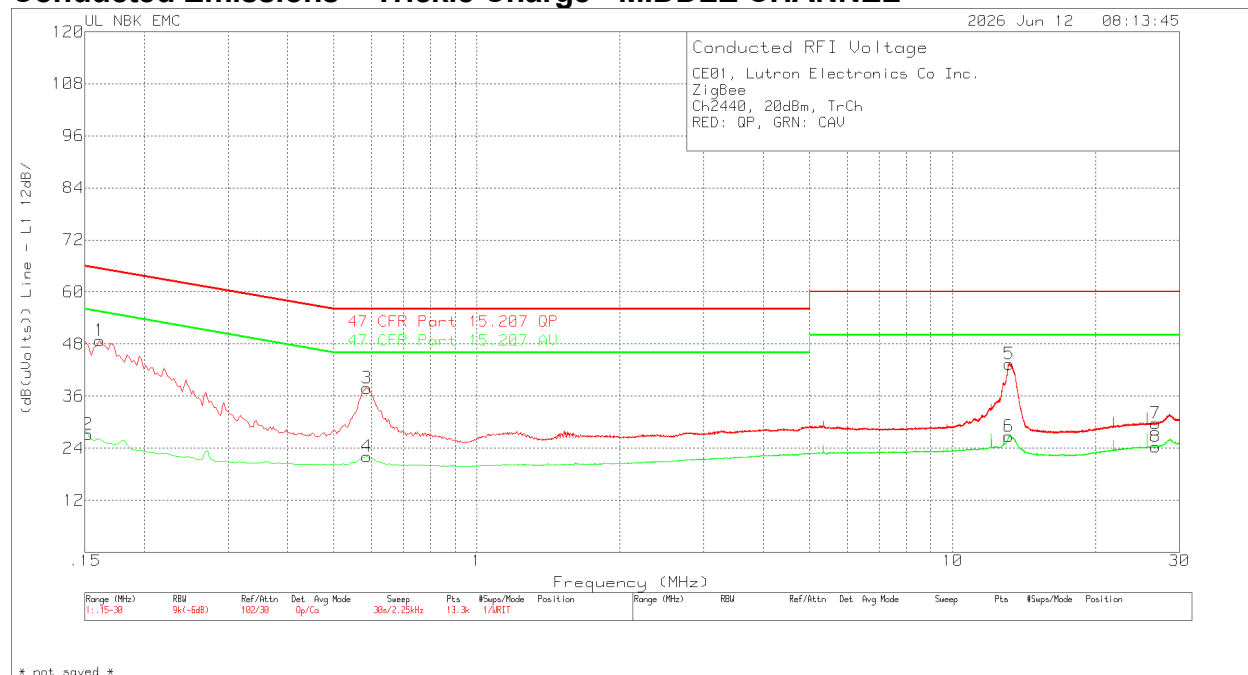
The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

Conducted Emissions – Trickle Charge - MIDDLE CHANNEL



CE01,Lutron Electronics Co Inc.
ZigBee
Ch2440, 20dBm, TrCh
RED: QP, GRN: CAV

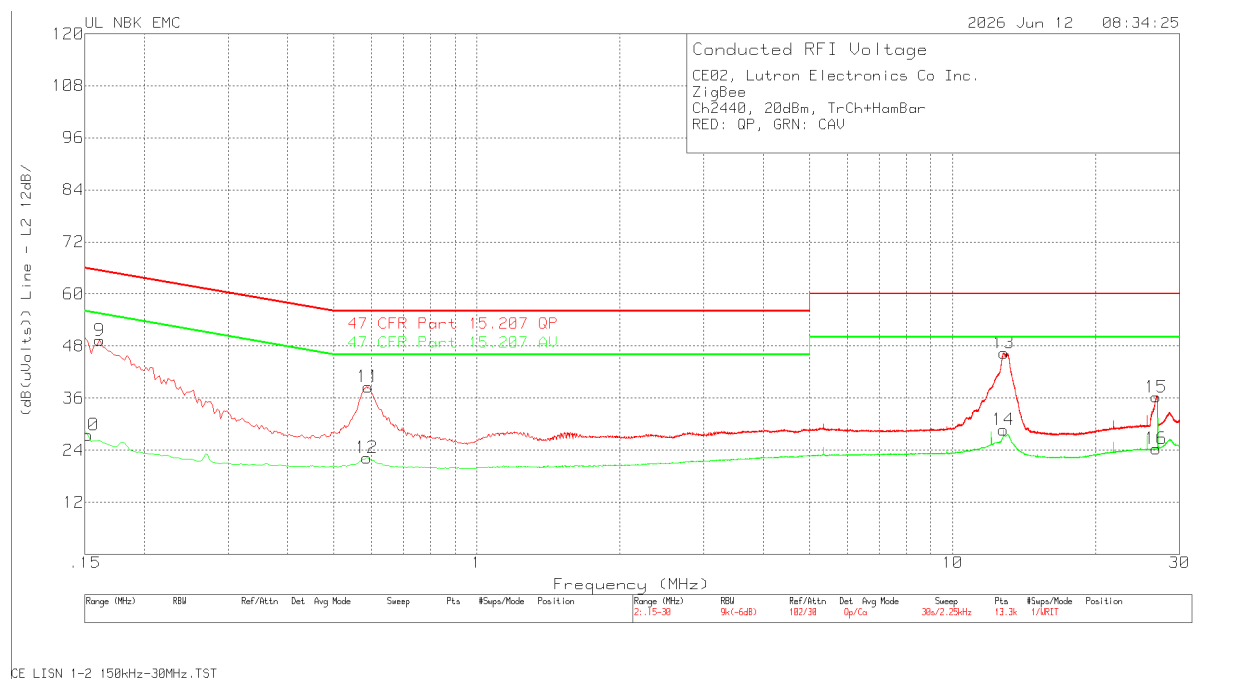
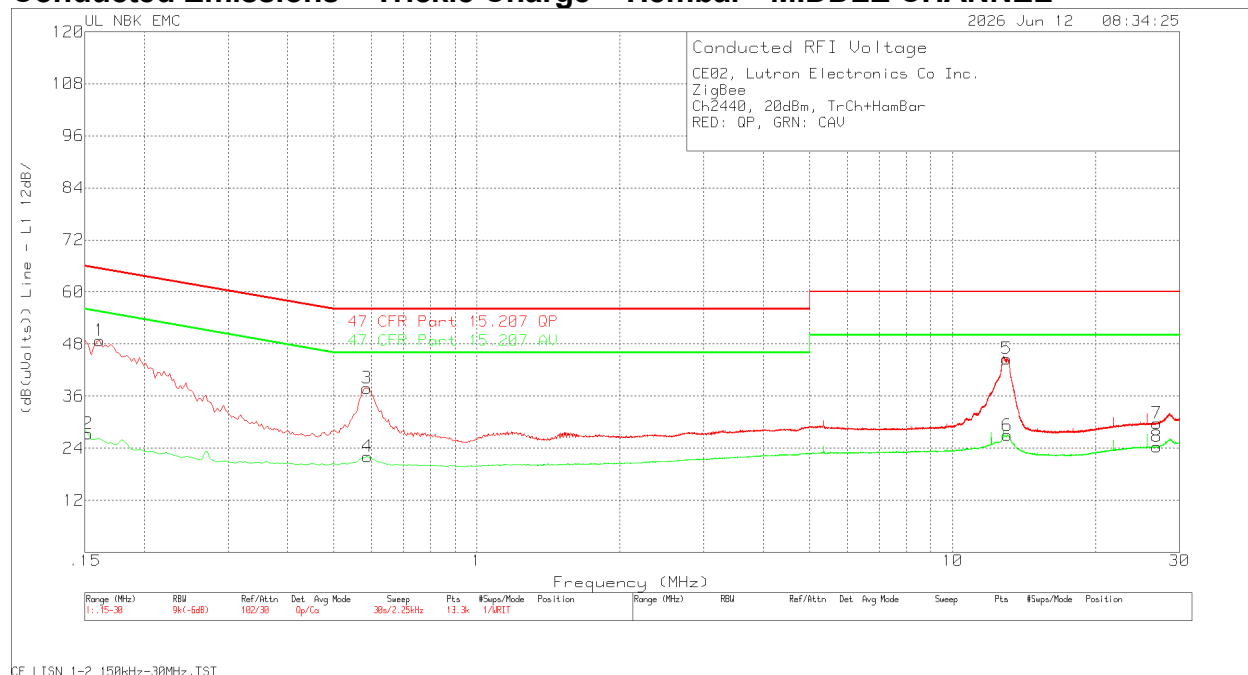
Trace Markers

Test No.	Frequency (MHz)	Meter Reading	Transducer Factor (dB)	Gain/Loss Factor (dB)	Corrected Reading (dB(uVolts))	Limit: 1	2
=====							
Line							
1	.1613	36.03dBuV Qp	0	12.8	48.83	65.4	-
					Margin (dB)	-16.57	-
2	.1523	13.24dBuV Ca	0	14	27.24	-	55.88
					Margin (dB)	-	-28.64
3	.5865	27.14dBuV Qp	0	10.7	37.84	56	-
					Margin (dB)	-18.16	-
4	.5865	11.32dBuV Ca	0	10.7	22.02	-	46
					Margin (dB)	-	-23.98
5	13.1348	32.03dBuV Qp	0	11.4	43.43	60	-
					Margin (dB)	-16.57	-
6	13.1303	15.27dBuV Ca	0	11.4	26.67	-	50
					Margin (dB)	-	-23.33
7	26.6798	17.92dBuV Qp	0	11.8	29.72	60	-
					Margin (dB)	-30.28	-
8	26.6888	12.46dBuV Ca	0	11.8	24.26	-	50
					Margin (dB)	-	-25.74
Neutral							
9	.1613	35.94dBuV Qp	0	12.8	48.74	65.4	-
					Margin (dB)	-16.66	-
10	.1523	13.19dBuV Ca	0	14	27.19	-	55.88
					Margin (dB)	-	-28.69
11	.591	27.83dBuV Qp	0	10.7	38.53	56	-
					Margin (dB)	-17.47	-
12	.5865	11.41dBuV Ca	0	10.7	22.11	-	46
					Margin (dB)	-	-23.89
13	13.2225	33.3dBuV Qp	0	11.3	44.6	60	-
					Margin (dB)	-15.4	-
14	13.2135	16.09dBuV Ca	0	11.3	27.39	-	50
					Margin (dB)	-	-22.61
15	26.691	24.68dBuV Qp	0	11.8	36.48	60	-
					Margin (dB)	-23.52	-
16	26.6888	12.6dBuV Ca	0	11.8	24.4	-	50
					Margin (dB)	-	-25.6

LIMIT 1: 47 CFR Part 15.207 QP
LIMIT 2: 47 CFR Part 15.207 AV

Qp - Quasi-Peak detector
Ca - CISPR Average detection

Conducted Emissions – Trickle Charge + Hembar - MIDDLE CHANNEL



CE02,Lutron Electronics Co Inc.
ZigBee
Ch2440, 20dBm, TrCh+HamBar
RED: QP, GRN: CAV

Trace Markers

Test No.	Frequency (MHz)	Meter Reading	Transducer Factor (dB)	Gain/Loss Factor (dB)	Corrected Reading (dB(uVolts))	Limit: 1	2
=====							
Line							
1	.1613	36.05dBuV Qp	0	12.8	48.85	65.4	-
					Margin (dB)	-16.55	-
2	.1523	13.29dBuV Ca	0	14	27.29	-	55.88
					Margin (dB)	-	-28.59
3	.5865	27.19dBuV Qp	0	10.7	37.89	56	-
					Margin (dB)	-18.11	-
4	.5888	11.33dBuV Ca	0	10.7	22.03	-	46
					Margin (dB)	-	-23.97
5	12.9953	33.15dBuV Qp	0	11.4	44.55	60	-
					Margin (dB)	-15.45	-
6	13.011	15.55dBuV Ca	0	11.4	26.95	-	50
					Margin (dB)	-	-23.05
7	26.8665	17.95dBuV Qp	0	11.8	29.75	60	-
					Margin (dB)	-30.25	-
8	26.88	12.49dBuV Ca	0	11.8	24.29	-	50
					Margin (dB)	-	-25.71
Neutral							
9	.1613	36.53dBuV Qp	0	12.8	49.33	65.4	-
					Margin (dB)	-16.07	-
10	.1523	13.45dBuV Ca	0	14	27.45	-	55.88
					Margin (dB)	-	-28.43
11	.591	27.92dBuV Qp	0	10.7	38.62	56	-
					Margin (dB)	-17.38	-
12	.5876	11.47dBuV Ca	0	10.7	22.17	-	46
					Margin (dB)	-	-23.83
13	12.8063	35.22dBuV Qp	0	11.2	46.42	60	-
					Margin (dB)	-13.58	-
14	12.7995	17.43dBuV Ca	0	11.2	28.63	-	50
					Margin (dB)	-	-21.37
15	26.7923	24.46dBuV Qp	0	11.8	36.26	60	-
					Margin (dB)	-23.74	-
16	26.781	12.57dBuV Ca	0	11.8	24.37	-	50
					Margin (dB)	-	-25.63

LIMIT 3: 47 CFR Part 15.207 QP
LIMIT 4: 47 CFR Part 15.207 AV

Qp - Quasi-Peak detector
Ca - CISPR Average detection