Underwriters Laboratories Inc.
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Melville, NY 11747

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Job Number:	07ME03926
File Number:	MC15211
Date:	20 July 2007
Revision Date:	11 Sept. 2007
Model:	RZC0P
FCC ID:	QGH-RZC0P

Electromagnetic Compatibility Test Report

For

LEVITON MFG CO INC

Test Report Details

Tests Performed By:	**Underwriters Laboratories Inc. 1285 Walt Whitman Rd. Melville, NY 11747**
Tests Performed For:	**LEVITON MFG CO INC 59-25 LITTLE NECK PKY LITTLE NECK, NY 11362**
Applicant Contact:	**Mr. P Patel**
Title:	**Not Provided**
Phone:	**(718) 281- 6574**
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E-mail:	**PPATEL@LEVITON.COM**
Test Report Date:	**20 July 2007**
Revision Date:	**11 Sept. 2007**
Product Type:	**Serial Interface Module**
Product standards	**FCC Part 15, Subpart C, 15.249**
Model Number:	**RZC0P**
Sample Serial Number:	**Prototype**
EUT Category:	**Transceiver**
Testing Start Date:	**01 Mar 2007**
Date Testing Complete:	**24 July 2007**
Overall Results:	**Compliant**

Underwriters Laboratories Inc. reports apply only to the specific samples tested under stated test conditions. All samples tested were in good operating condition throughout the entire test program. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. Underwriters Laboratories Inc. shall have no liability for any deductions, inferences or generalizations drawn by the client or others from Underwriters Laboratories Inc. issued reports. This report shall not be used to claim, constitute or imply product certification, approval, or endorsement by NVLAP, A2LA, or any agency of the US government.

This report may contain test results that are not covered by the NVLAP or A2LA accreditation. The scope of accreditation is limited to the specific tests that are listed on the NVLAP and/or A2LA websites referenced at the end of this report.

Report Directory

Report Revision History

Revision Date	Description	Revised By	Revision Reviewed By
11 Sept. 2007	Typographical standard Issues correction, clarify limit tables, Correction of test distance and max emissions result.	Joseph Danisi	--

1.0 G E N E R A L - Product Description

1.1 Equipment Description

The EUT is a RF programmer/timer remote controller for installation and control of a Z-wave system, which acts as a programmer, zone or scene controller remote for setting up and operating a RF network. It may also be utilized as a wireless controller for controlling your lighting system.

Per FCC Part 2.1093 (C) this device is not required to undergo testing for radio-frequency radiation exposure

1.2 Equipment Marking Plate

1.3 Device Configuration During Test

The device under test was tested in normal orientation, which is positioned in a Z-axis position that represents the worst-case orientation.

The Transmit antenna is permanently attached to the RZCPG Transmitter. The transmit antenna type is a PCB trace antenna.

1.3.1 Equipment Used During Test:

Use*	Product Type	Manufacturer	Model	Comments
EUT	Serial Interface Module	Leviton	RZC0P	None
ACC	Load	Leviton	-	Incandescent Light bulb

* Use = EUT - Equipment Under Test, ACC - Accessory (Not Subjected to Test), or SIM - Simulator (Not Subjected to Test)

1.3.2 Input/Output Ports:

Port #	Name	Type*	Cable Max. >3m (Y/N)	Cable Shielded (Y/N)	Comments
0	Enclosure	N/E	—	—	None
1	Mains	AC	NO	NO	None
2	Serial RS232	I/O	YES	NO	This is a momentary communication port only active when a timer event goes off (similar to contact relay's) or user intervention when required. This was confirmed that it had no impact on test results during the 30-1000MHz sweep by tuning to worst case frequency then measure with and without cable attached and concluded that it had no significant impact on results.

*AC = AC Power Port DC = DC Power Port N/E = Non-Electrical
I/O = Signal Input or Output Port (Not Involved in Process Control)
PMC = Process Measurement and Control Port

1.3.3 EUT Internal Operating Frequencies:

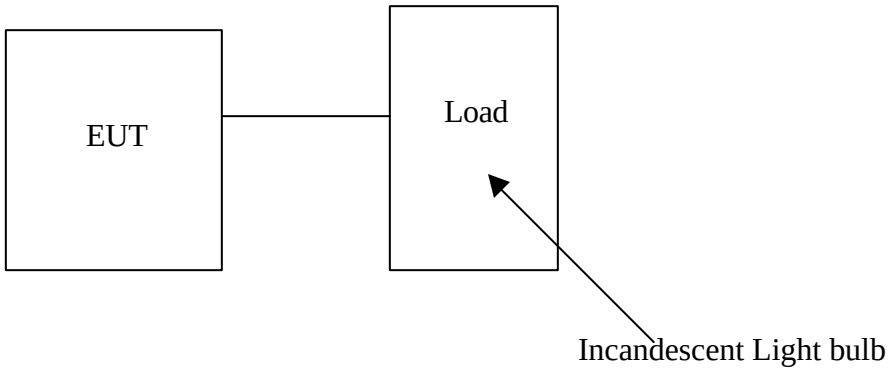
Frequency (MHz)	Description	Frequency (MHz)	Description
908.395	Fundamental	--	--
7.376	Oscillator	100	Clock

1.3.4 Power Interface:

Mode # /Rated	Voltage (V)	Current (A)	Power (W)	Frequency (DC/AC-Hz)	Phases (#)	Comments
Rated	120	-	-	AC-60	1	None
1	120	-	-	60 Hz	1	None

1.4 Block Diagram:

The diagram below illustrates the configuration of the equipment above.



1.5 EUT Operation Modes

Mode #	Description
1	The EUT was set to transmit at it's maximum allowable power rating at the fundamental frequency of 908.395MHz

1.6 EUT Configurations

Mode #	Description
1	Transmitter AC power

2.0 Results Summary

The tests listed in the Summary of Testing section of this report have been performed and the results recorded by Underwriters Laboratories Inc. in accordance with the procedures stated in each test requirement and specification. The applicant determined the list of tests performed were applicable to the Equipment Under Test. As a result, the subject product has been verified to comply or not comply as noted in the Summary of Testing with each test specification. The test results relate only to the items tested.

2.1 Reference Standards

Standard Number	Standard Name	Standard Date
CFR 47	FCC Part 15, Subpart C, 15.207, 15.209, and 15.249	2006
CFR 47	FCC Part 15, Subpart B, Class B	2006
RSS- 210, Issue 7	Low-power License-exempt Radio communications Devices (All Frequency Bands): Category I Equipment sets out certification requirements for low-power license- exempt radio communication devices that are Category I equipment.	2007
ICES-003, Issue 4	Spectrum Management and Telecommunications Policy Interference-Causing Equipment Standard: Digital Apparatus	2003
RSS-GEN, Issue 2	General Requirements and Information for the Certification of Radio communication Equipment.	2007

2.2 Results Summary

Summary of EMC Emission Tests	Test Name	Result
	Conducted Emissions	C
	Radiated Emissions	C
	Radiated Spurious Emissions	C
	Occupied Bandwidth	C
	Tx Versus Output Voltage	C
	Frequency Stability	C
	Fundamental Field Strength	C

Remarks:

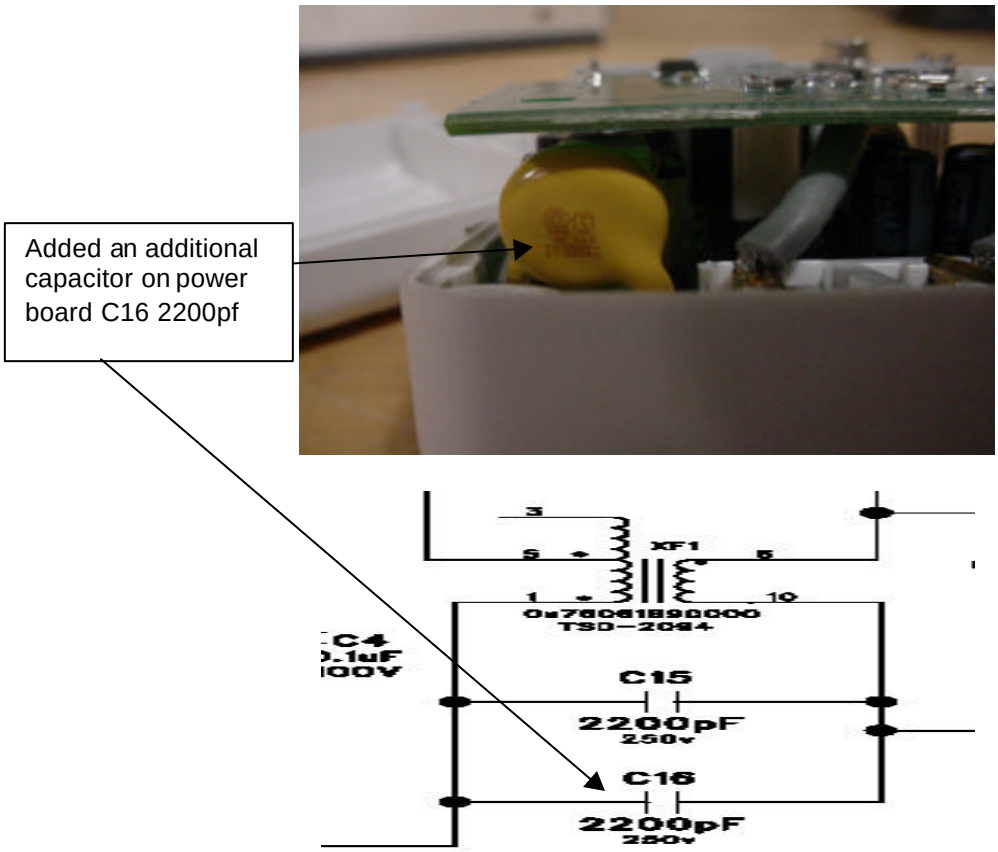
Note: C-Compliant, NC-Non-Compliant

2.3 Deviations from standard test methods

None

2.4 Device Modifications Necessary for Compliance

Yes, Conducted Emissions changed filter Capacitor Value



Joe Danisi (Ext.23055)
Lead Engineering Associate
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Conformity Assessment Services-

Bob DeLisi (Ext.22452)
Senior Staff Engineer
International EMC Services
Conformity Assessment Services

Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.

3.0 Calibration of Equipment Used for Measurement

All test equipment and test accessories are calibrated on a regular basis. The maximum time between calibrations is one year or the manufacturers' recommendation whichever is less.

All test equipment calibrations are traceable to the National Institute of Standards and Technology (NIST); therefore, all test data recorded in this report is traceable to NIST.

4.0 EMISSIONS TEST RESULTS

The emissions tests were performed according to following regulations:

FCC Part 15, Subpart C, 15.207, 15.209, and 15.249	Code of Federal Regulations, Part 15, Subpart C, Radio Frequency Devices: 2006
Radio Standards Specification 210, Issue 7	Low-power License-exempt Radio communications Devices (All Frequency Bands): Category I Equipment sets out certification requirements for low-power license- exempt radio communication devices that are Category I equipment. 2007
RSS-GEN, Issue 2	General Requirements and Information for the Certification of Radio communication Equipment.

Unless specified otherwise in the individual Methods, the tests shall be conducted under the following ambient conditions. Confirmation of these conditions shall be verified at the time the test is conducted.

Ambient Temperature, °C	22.5 ± 2.5	Relative Humidity, %	45 ± 15	Barometric Pressure, mBar	950 ± 150

4.1 Test Conditions and Results– MAINS TERMINAL – CONDUCTED EMISSIONS

Test Description	Measurements were made on a ground plane. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN.	
Basic Standard	FCC Part 15 Subpart C and RSS-210	
UL LPG	80-EM-S0026	
	Frequency range on each side of line	Measurement Point
Fully configured sample scanned over the following frequency range	150kHz to 30MHz	Mains

Limits - Class B Section 15.207

Frequency (MHz)	Limit (dBµV)	
	Quasi-Peak	Average
0.15-.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

Supplementary information: None

Table 1 Conducted Emissions EUT Configuration Settings

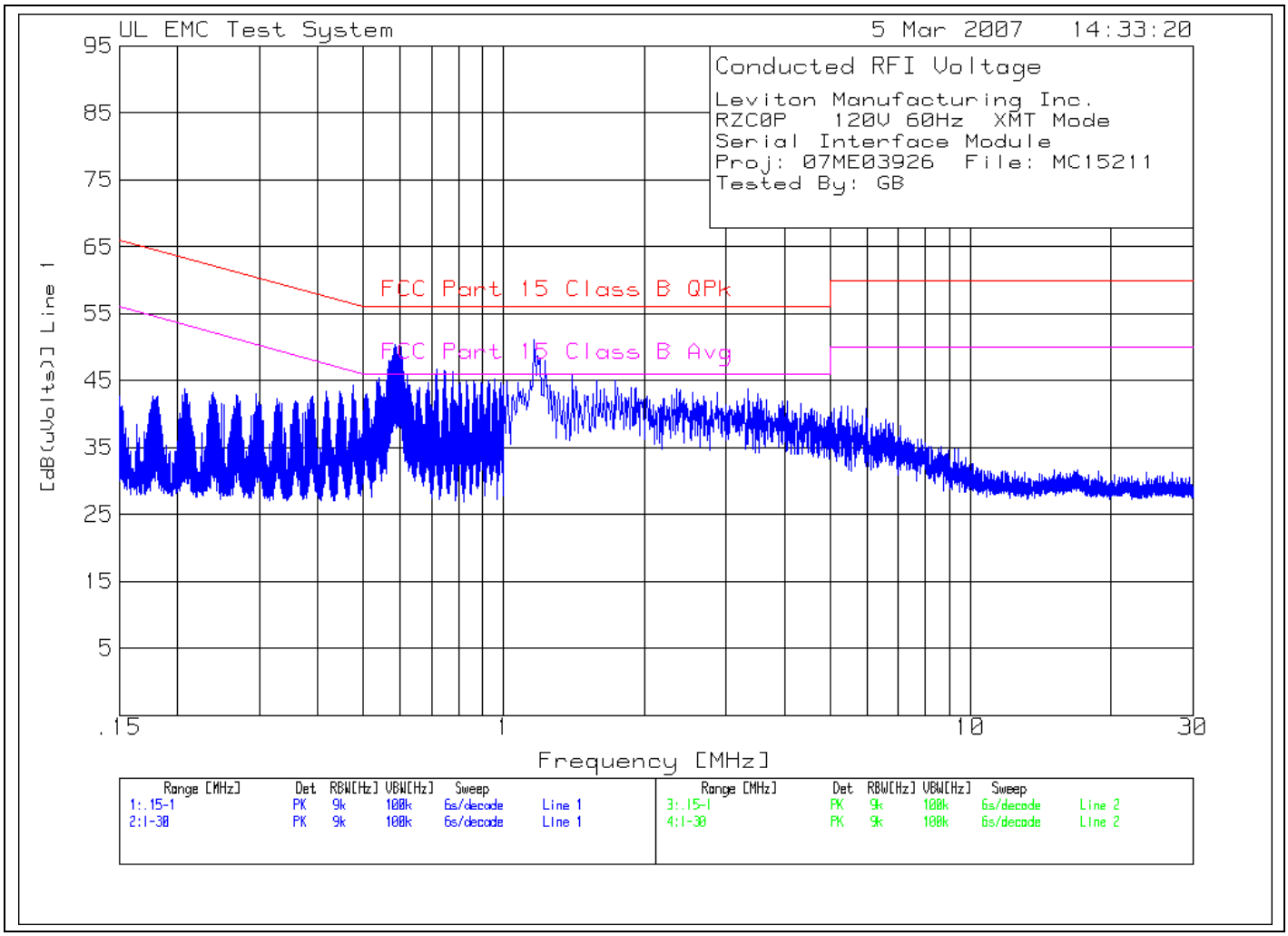
Power Interface Mode # (See Section 1.3.4)	EUT Configurations Mode # (See Section 1.6)	EUT Operation Mode # (See 1.5)
1	1	1
Supplementary information: None		

Table 2 Conducted Emissions Test Equipment

Test Equipment Used			
Description	Manufacturer	Model	Identifier
Conducted Emissions – Shield Room			
Spectrum Analyzer	Agilent	E7405A	19695
LISN	Solar	9252-50-R-24-BN	ME5A-636
LISN	EMCO	3825/2R	ME5-629
Temp/Humidity/ Pressure Meter	Cole Parmer	99760-00	43736

Figure 1 Test Setup for Conducted Emissions

Figure 2 Conducted Emissions Graph



Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

No.	Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
Line 1 .15 - 1MHz									
1	.35906	31.19 pk	10.7	0	41.89	58.8	48.8	-	-
				Margin [dB]		-16.91	-6.91	-	-
2	.38874	32.02 pk	10.6	0	42.62	58.1	48.1	-	-
				Margin [dB]		-15.48	-5.48	-	-
3	.41673	32.7 pk	10.6	0	43.3	57.5	47.5	-	-
				Margin [dB]		-14.2	-4.2	-	-
4	.44556	32.81 pk	10.5	0	43.31	57	47	-	-
				Margin [dB]		-13.69	-3.69	-	-
5	.47715	33.74 pk	10.5	0	44.24	56.4	46.4	-	-
				Margin [dB]		-12.16	-2.16	-	-
6	.5079	32.45 pk	10.5	0	42.95	56	46	-	-
				Margin [dB]		-13.05	-3.05	-	-
7	.53567	34.32 pk	10.5	0	44.82	56	46	-	-
				Margin [dB]		-11.18	-1.18	-	-
8	.62345	35.49 pk	10.4	0	45.89	56	46	-	-
				Margin [dB]		-10.11	-.11	-	-
9	.65907	33.46 pk	10.4	0	43.86	56	46	-	-
				Margin [dB]		-12.14	-2.14	-	-
10	.68833	33.88 pk	10.4	0	44.28	56	46	-	-
				Margin [dB]		-11.72	-1.72	-	-
11	.71674	35.63 pk	10.4	0	46.03	56	46	-	-
				Margin [dB]		-9.97	.03	-	-
12	.74706	36.01 pk	10.4	0	46.41	56	46	-	-
				Margin [dB]		-9.59	.41	-	-
13	.7761	35.84 pk	10.4	0	46.24	56	46	-	-
				Margin [dB]		-9.76	.24	-	-
14	.80642	34.26 pk	10.4	0	44.66	56	46	-	-
				Margin [dB]		-11.34	-1.34	-	-
15	.8378	33.92 pk	10.4	0	44.32	56	46	-	-
				Margin [dB]		-11.68	-1.68	-	-
16	.86494	34.39 pk	10.4	0	44.79	56	46	-	-
				Margin [dB]		-11.21	-1.21	-	-

pk - Peak detector
qp - Quasi-Peak detector
av - Average detector
avlg - denotes average log detection
ave - denotes average detection

LIMIT 1: FCC Part 15 Class B QPk
LIMIT 2: FCC Part 15 Class B Avg

Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

No.	Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
17	.8959	34.19 pk	10.4	0	44.59	56	46	-	-
				Margin [dB]		-11.41	-1.41	-	-
18	.92516	34.62 pk	10.4	0	45.02	56	46	-	-
				Margin [dB]		-10.98	-.98	-	-
19	.9542	34.84 pk	10.4	0	45.24	56	46	-	-
				Margin [dB]		-10.76	-.76	-	-
20	.98516	34.27 pk	10.4	0	44.67	56	46	-	-
				Margin [dB]		-11.33	-1.33	-	-
Line 1 1 - 30MHz ----------									
1	1.07234	34.25 pk	10.4	0	44.65	56	46	-	-
				Margin [dB]		-11.35	-1.35	-	-
2	1.15914	40.62 pk	10.4	0	51.02	56	46	-	-
				Margin [dB]		-4.98	5.02	-	-
3	1.19531	37.96 pk	10.4	0	48.36	56	46	-	-
				Margin [dB]		-7.64	2.36	-	-
4	1.22425	37.64 pk	10.4	0	48.04	56	46	-	-
				Margin [dB]		-7.96	2.04	-	-
5	1.40509	35.37 pk	10.4	0	45.77	56	46	-	-
				Margin [dB]		-10.23	-.23	-	-
6	1.73061	34.63 pk	10.4	0	45.03	56	46	-	-
				Margin [dB]		-10.97	-.97	-	-
7	2.02719	32.34 pk	10.4	0	42.74	56	46	-	-
				Margin [dB]		-13.26	-3.26	-	-
8	2.38888	33.09 pk	10.4	0	43.49	56	46	-	-
				Margin [dB]		-12.51	-2.51	-	-
9	2.85907	32.88 pk	10.4	0	43.28	56	46	-	-
				Margin [dB]		-12.72	-2.72	-	-
10	3.33649	33.39 pk	10.4	0	43.79	56	46	-	-
				Margin [dB]		-12.21	-2.21	-	-
11	3.89349	30.92 pk	10.4	0	41.32	56	46	-	-
				Margin [dB]		-14.68	-4.68	-	-
12	4.55899	30.32 pk	10.5	0	40.82	56	46	-	-
				Margin [dB]		-15.18	-5.18	-	-

pk - Peak detector
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av - Average detector
avlg - denotes average log detection
ave - denotes average detection

LIMIT 1: FCC Part 15 Class B QPk
LIMIT 2: FCC Part 15 Class B Avg

Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
Line 1 .15 - 1MHz								
.35906	17.35 ave	10.7	0	28.05	58.8	48.8	-	-
			Margin [dB]:		-30.75	-20.75	-	-
.38874	18.08 ave	10.6	0	28.68	58.1	48.1	-	-
			Margin [dB]:		-29.42	-19.42	-	-
.41673	18.82 ave	10.6	0	29.42	57.5	47.5	-	-
			Margin [dB]:		-28.08	-18.08	-	-
.44556	18.87 ave	10.5	0	29.37	57	47	-	-
			Margin [dB]:		-27.63	-17.63	-	-
.44577	32.15 ave	10.5	0	42.65	57	47	-	-
			Margin [dB]:		-14.35	-4.35	-	-
.47482	31.19 ave	10.5	0	41.69	56.4	46.4	-	-
			Margin [dB]:		-14.71	-4.71	-	-
.47715	18.97 ave	10.5	0	29.47	56.4	46.4	-	-
			Margin [dB]:		-26.93	-16.93	-	-
.5079	19.25 ave	10.5	0	29.75	56	46	-	-
			Margin [dB]:		-26.25	-16.25	-	-
.50578	31.69 ave	10.5	0	42.19	56	46	-	-
			Margin [dB]:		-13.81	-3.81	-	-
.53609	31.7 ave	10.5	0	42.2	56	46	-	-
			Margin [dB]:		-13.8	-3.8	-	-
.53567	19.58 ave	10.5	0	30.08	56	46	-	-
			Margin [dB]:		-25.92	-15.92	-	-
.62345	18.24 ave	10.4	0	28.64	56	46	-	-
			Margin [dB]:		-27.36	-17.36	-	-
.65907	17.66 ave	10.4	0	28.06	56	46	-	-
			Margin [dB]:		-27.94	-17.94	-	-
.68833	18.26 ave	10.4	0	28.66	56	46	-	-
			Margin [dB]:		-27.34	-17.34	-	-
.63384	28.39 ave	10.4	0	38.79	56	46	-	-
			Margin [dB]:		-17.21	-7.21	-	-

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LIMIT 2: FCC Part 15 Class B Avg

Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
.6544	27.67 ave	10.4	0	38.07	56	46	-	-
			Margin [dB]:		-17.93	-7.93	-	-
.68472	28.78 ave	10.4	0	39.18	56	46	-	-
			Margin [dB]:		-16.82	-6.82	-	-
.71716	29.25 ave	10.4	0	39.65	56	46	-	-
			Margin [dB]:		-16.35	-6.35	-	-
.74388	28.9 ave	10.4	0	39.3	56	46	-	-
			Margin [dB]:		-16.7	-6.7	-	-
.77441	28.86 ave	10.4	0	39.26	56	46	-	-
			Margin [dB]:		-16.74	-6.74	-	-
.80452	29.05 ave	10.4	0	39.45	56	46	-	-
			Margin [dB]:		-16.55	-6.55	-	-
.83526	29.3 ave	10.4	0	39.7	56	46	-	-
			Margin [dB]:		-16.3	-6.3	-	-
.86558	29.65 ave	10.4	0	40.05	56	46	-	-
			Margin [dB]:		-15.95	-5.95	-	-
.89441	30.06 ave	10.4	0	40.46	56	46	-	-
			Margin [dB]:		-15.54	-5.54	-	-
.92473	30.14 ave	10.4	0	40.54	56	46	-	-
			Margin [dB]:		-15.46	-5.46	-	-
.95717	30.23 ave	10.4	0	40.63	56	46	-	-
			Margin [dB]:		-15.37	-5.37	-	-
.98389	30.19 ave	10.4	0	40.59	56	46	-	-
			Margin [dB]:		-15.41	-5.41	-	-
.80642	18.68 ave	10.4	0	29.08	56	46	-	-
			Margin [dB]:		-26.92	-16.92	-	-
.8378	18.96 ave	10.4	0	29.36	56	46	-	-
			Margin [dB]:		-26.64	-16.64	-	-
.86494	19.23 ave	10.4	0	29.63	56	46	-	-
			Margin [dB]:		-26.37	-16.37	-	-

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LIMIT 1: FCC Part 15 Class B QPk
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Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
.8959	19.62 ave	10.4	0	30.02	56	46	-	-
			Margin [dB]:		-25.98	-15.98	-	-
.92516	19.9 ave	10.4	0	30.3	56	46	-	-
			Margin [dB]:		-25.7	-15.7	-	-
.9542	19.89 ave	10.4	0	30.29	56	46	-	-
			Margin [dB]:		-25.71	-15.71	-	-
.98516	20.07 ave	10.4	0	30.47	56	46	-	-
			Margin [dB]:		-25.53	-15.53	-	-
Line 1 1 - 30MHz								
1.07234	20.57 ave	10.4	0	30.97	56	46	-	-
			Margin [dB]:		-25.03	-15.03	-	-
1.15914	20.86 ave	10.4	0	31.26	56	46	-	-
			Margin [dB]:		-24.74	-14.74	-	-
1.19531	20.37 ave	10.4	0	30.77	56	46	-	-
			Margin [dB]:		-25.23	-15.23	-	-
1.22425	20.86 ave	10.4	0	31.26	56	46	-	-
			Margin [dB]:		-24.74	-14.74	-	-
1.40509	18.95 ave	10.4	0	29.35	56	46	-	-
			Margin [dB]:		-26.65	-16.65	-	-
1.73061	6.99 ave	10.4	0	17.39	56	46	-	-
			Margin [dB]:		-38.61	-28.61	-	-
2.02719	18.32 ave	10.4	0	28.72	56	46	-	-
			Margin [dB]:		-27.28	-17.28	-	-
2.38888	19.82 ave	10.4	0	30.22	56	46	-	-
			Margin [dB]:		-25.78	-15.78	-	-
2.85907	20.03 ave	10.4	0	30.43	56	46	-	-
			Margin [dB]:		-25.57	-15.57	-	-
3.33649	19.77 ave	10.4	0	30.17	56	46	-	-
			Margin [dB]:		-25.83	-15.83	-	-
3.89349	19.05 ave	10.4	0	29.45	56	46	-	-
			Margin [dB]:		-26.55	-16.55	-	-
4.55899	19.84 ave	10.5	0	30.34	56	46	-	-
			Margin [dB]:		-25.66	-15.66	-	-

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LIMIT 1: FCC Part 15 Class B QPk
LIMIT 2: FCC Part 15 Class B Avg

Figure 3 Conducted Emissions Graph

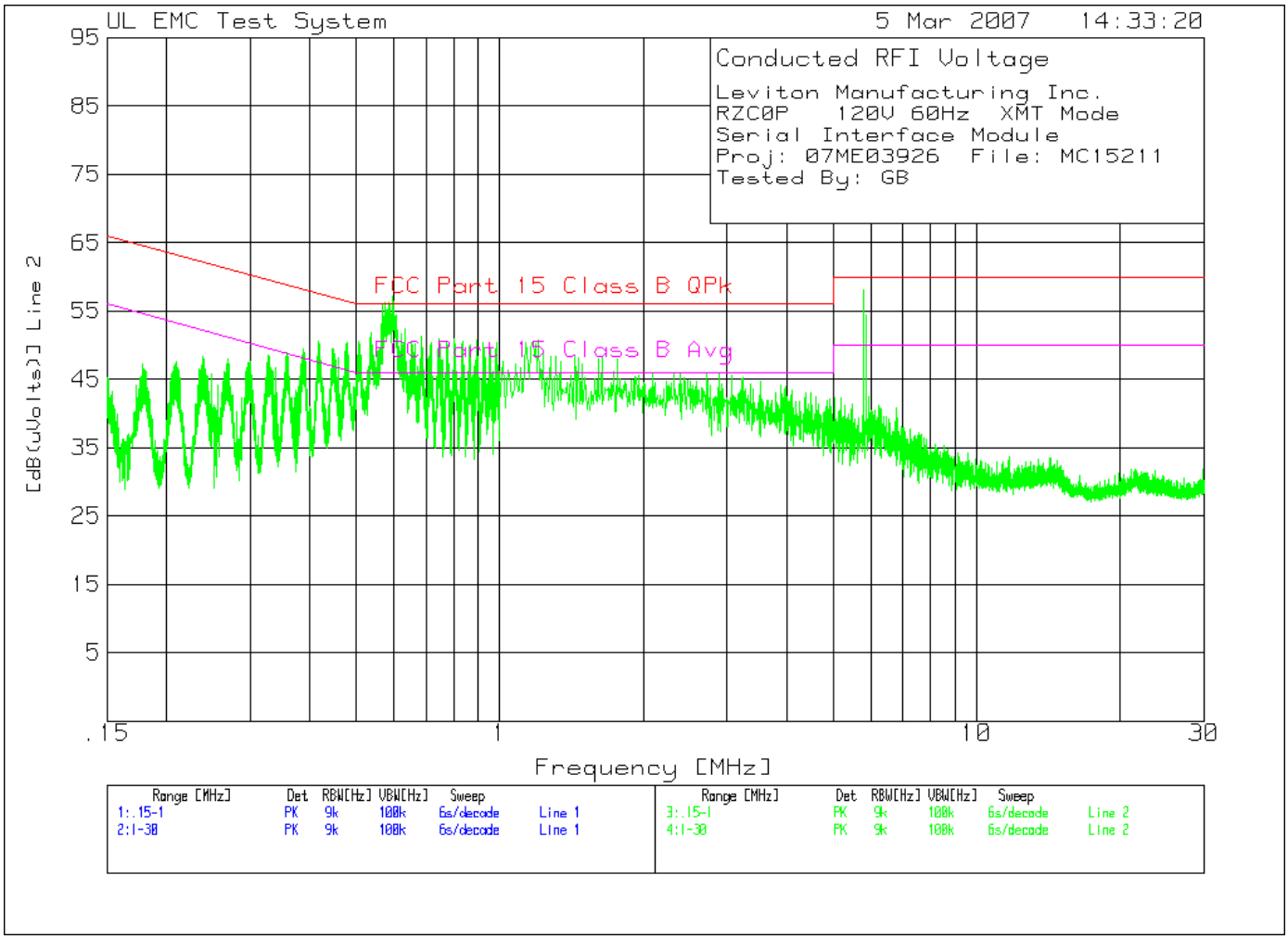


Table 3 Conducted Emissions Data Points

```
 Leviton Manufacturing Inc.
 RZC0P   120V 60Hz  XMT Mode
 Serial Interface Module
 Proj: 07ME03926  File: MC15211
 Tested By: GB
```

Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
Line 2 .15 - 1MHz								
21 .23905	37.16 pk	11.1	0	48.26	62.1	52.1	-	-
			Margin [dB]		-13.84	-3.84	-	-
22 .26937	37.16 pk	10.9	0	48.06	61.1	51.1	-	-
			Margin [dB]		-13.04	-3.04	-	-
23 .29948	36.86 pk	10.8	0	47.66	60.3	50.3	-	-
			Margin [dB]		-12.64	-2.64	-	-
24 .32619	37.72 pk	10.8	0	48.52	59.5	49.5	-	-
			Margin [dB]		-10.98	-.98	-	-
25 .35884	38.15 pk	10.7	0	48.85	58.8	48.8	-	-
			Margin [dB]		-9.95	.05	-	-
26 .38768	38.91 pk	10.6	0	49.51	58.1	48.1	-	-
			Margin [dB]		-8.59	1.41	-	-
27 .41673	39.95 pk	10.6	0	50.55	57.5	47.5	-	-
			Margin [dB]		-6.95	3.05	-	-
28 .44577	38.95 pk	10.5	0	49.45	57	47	-	-
			Margin [dB]		-7.55	2.45	-	-
29 .47482	39.68 pk	10.5	0	50.18	56.4	46.4	-	-
			Margin [dB]		-6.22	3.78	-	-
30 .50578	39.97 pk	10.5	0	50.47	56	46	-	-
			Margin [dB]		-5.53	4.47	-	-
31 .53609	41.27 pk	10.5	0	51.77	56	46	-	-
			Margin [dB]		-4.23	5.77	-	-
32 .63384	41.92 pk	10.4	0	52.32	56	46	-	-
			Margin [dB]		-3.68	6.32	-	-

```
LIMIT 1: FCC Part 15 Class B QPk
LIMIT 2: FCC Part 15 Class B Avg

pk - Peak detector
qp - Quasi-Peak detector
av - Average detector
avlg - denotes average log detection
```

Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

	Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
33	.6544	39.9 pk	10.4	0	50.3	56	46	-	-
				Margin [dB]		-5.7	4.3	-	-
34	.68472	40.88 pk	10.4	0	51.28	56	46	-	-
				Margin [dB]		-4.72	5.28	-	-
35	.71716	39.99 pk	10.4	0	50.39	56	46	-	-
				Margin [dB]		-5.61	4.39	-	-
36	.74388	40.43 pk	10.4	0	50.83	56	46	-	-
				Margin [dB]		-5.17	4.83	-	-
37	.77441	40.24 pk	10.4	0	50.64	56	46	-	-
				Margin [dB]		-5.36	4.64	-	-
38	.80452	40.49 pk	10.4	0	50.89	56	46	-	-
				Margin [dB]		-5.11	4.89	-	-
39	.83526	39.82 pk	10.4	0	50.22	56	46	-	-
				Margin [dB]		-5.78	4.22	-	-
40	.86558	39.64 pk	10.4	0	50.04	56	46	-	-
				Margin [dB]		-5.96	4.04	-	-
41	.89441	40.32 pk	10.4	0	50.72	56	46	-	-
				Margin [dB]		-5.28	4.72	-	-
42	.92473	39.29 pk	10.4	0	49.69	56	46	-	-
				Margin [dB]		-6.31	3.69	-	-
43	.95717	38.54 pk	10.4	0	48.94	56	46	-	-
				Margin [dB]		-7.06	2.94	-	-
44	.98389	39.96 pk	10.4	0	50.36	56	46	-	-
				Margin [dB]		-5.64	4.36	-	-

LIMIT 1: FCC Part 15 Class B QPk
LIMIT 2: FCC Part 15 Class B Avg

pk - Peak detector
qp - Quasi-Peak detector
av - Average detector
avlg - denotes average log detection

Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
Line 2 .15 - 1MHz								
.53575	36.89 qp	10.5	0	47.39	56	46	-	-
			Margin [dB]:		-8.61	1.39	-	-
.56903	39.48 qp	10.5	0	49.98	56	46	-	-
			Margin [dB]:		-6.02	3.98	-	-
.58395	41.4 qp	10.5	0	51.9	56	46	-	-
			Margin [dB]:		-4.1	5.9	-	-
.60032	40.99 qp	10.5	0	51.49	56	46	-	-
			Margin [dB]:		-4.51	5.49	-	-
.62411	35.82 qp	10.4	0	46.22	56	46	-	-
			Margin [dB]:		-9.78	.22	-	-
.63231	35.06 qp	10.4	0	45.46	56	46	-	-
			Margin [dB]:		-10.54	-.54	-	-
.65275	34.87 qp	10.4	0	45.27	56	46	-	-
			Margin [dB]:		-10.73	-.73	-	-
.6855	35.74 qp	10.4	0	46.14	56	46	-	-
			Margin [dB]:		-9.86	.14	-	-
.71664	35.34 qp	10.4	0	45.74	56	46	-	-
			Margin [dB]:		-10.26	-.26	-	-
.74463	34.97 qp	10.4	0	45.37	56	46	-	-
			Margin [dB]:		-10.63	-.63	-	-
.77606	35.07 qp	10.4	0	45.47	56	46	-	-
			Margin [dB]:		-10.53	-.53	-	-

NOTE: "+" - Indicates an emission level in excess of the applicable limit (s).

pk - Peak detector
qp - Quasi-Peak detector
av - Average detector
avlg - denotes average log detection
ave - denotes average detection

LIMIT 1: FCC Part 15 Class B QPk
LIMIT 2: FCC Part 15 Class B Avg

Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
.80501	34.89 qp	10.4	0	45.29	56	46	-	-
			Margin [dB]:		-10.71	-.71	-	-
.83522	34.83 qp	10.4	0	45.23	56	46	-	-
			Margin [dB]:		-10.77	-.77	-	-
.86528	34.8 qp	10.4	0	45.2	56	46	-	-
			Margin [dB]:		-10.8	-.8	-	-
.895	34.72 qp	10.4	0	45.12	56	46	-	-
			Margin [dB]:		-10.88	-.88	-	-
.92595	34.32 qp	10.4	0	44.72	56	46	-	-
			Margin [dB]:		-11.28	-1.28	-	-
.9545	34.7 qp	10.4	0	45.1	56	46	-	-
			Margin [dB]:		-10.9	-.9	-	-
.98446	34.52 qp	10.4	0	44.92	56	46	-	-
			Margin [dB]:		-11.08	-1.08	-	-

NOTE: "+" - Indicates an emission level in excess of the applicable limit (s).

pk - Peak detector
qp - Quasi-Peak detector
av - Average detector
avlg - denotes average log detection
ave - denotes average detection

LIMIT 1: FCC Part 15 Class B QPk
LIMIT 2: FCC Part 15 Class B Avg

Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
Line 2 .15 - 1MHz								
.23905	27.13 ave	11.1	0	38.23	62.1	52.1	-	-
			Margin [dB]:		-23.87	-13.87	-	-
.26937	27.92 ave	10.9	0	38.82	61.1	51.1	-	-
			Margin [dB]:		-22.28	-12.28	-	-
.29948	28.89 ave	10.8	0	39.69	60.3	50.3	-	-
			Margin [dB]:		-20.61	-10.61	-	-
.32619	29.39 ave	10.8	0	40.19	59.5	49.5	-	-
			Margin [dB]:		-19.31	-9.31	-	-
.35884	30.35 ave	10.7	0	41.05	58.8	48.8	-	-
			Margin [dB]:		-17.75	-7.75	-	-
.38768	31.28 ave	10.6	0	41.88	58.1	48.1	-	-
			Margin [dB]:		-16.22	-6.22	-	-
.41673	32.06 ave	10.6	0	42.66	57.5	47.5	-	-
			Margin [dB]:		-14.84	-4.84	-	-
.44577	32.15 ave	10.5	0	42.65	57	47	-	-
			Margin [dB]:		-14.35	-4.35	-	-
.47482	31.19 ave	10.5	0	41.69	56.4	46.4	-	-
			Margin [dB]:		-14.71	-4.71	-	-
.50578	31.69 ave	10.5	0	42.19	56	46	-	-
			Margin [dB]:		-13.81	-3.81	-	-
.53609	31.7 ave	10.5	0	42.2	56	46	-	-
			Margin [dB]:		-13.8	-3.8	-	-
.63384	28.39 ave	10.4	0	38.79	56	46	-	-
			Margin [dB]:		-17.21	-7.21	-	-
.6544	27.67 ave	10.4	0	38.07	56	46	-	-
			Margin [dB]:		-17.93	-7.93	-	-

NOTE: "+" - Indicates an emission level in excess of the applicable limit (s).

pk - Peak detector
qp - Quasi-Peak detector
av - Average detector
avlg - denotes average log detection
ave - denotes average detection

LIMIT 1: FCC Part 15 Class B QPk
LIMIT 2: FCC Part 15 Class B Avg

Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
.68472	28.78 ave	10.4	0	39.18	56	46	-	-
			Margin [dB]:		-16.82	-6.82	-	-
.71716	29.25 ave	10.4	0	39.65	56	46	-	-
			Margin [dB]:		-16.35	-6.35	-	-
.74388	28.9 ave	10.4	0	39.3	56	46	-	-
			Margin [dB]:		-16.7	-6.7	-	-
.77441	28.86 ave	10.4	0	39.26	56	46	-	-
			Margin [dB]:		-16.74	-6.74	-	-
.80452	29.05 ave	10.4	0	39.45	56	46	-	-
			Margin [dB]:		-16.55	-6.55	-	-
.83526	29.3 ave	10.4	0	39.7	56	46	-	-
			Margin [dB]:		-16.3	-6.3	-	-
.86558	29.65 ave	10.4	0	40.05	56	46	-	-
			Margin [dB]:		-15.95	-5.95	-	-
.89441	30.06 ave	10.4	0	40.46	56	46	-	-
			Margin [dB]:		-15.54	-5.54	-	-
.92473	30.14 ave	10.4	0	40.54	56	46	-	-
			Margin [dB]:		-15.46	-5.46	-	-
.95717	30.23 ave	10.4	0	40.63	56	46	-	-
			Margin [dB]:		-15.37	-5.37	-	-
.98389	30.19 ave	10.4	0	40.59	56	46	-	-
			Margin [dB]:		-15.41	-5.41	-	-
Line 2 1 - 30MHz								
1.13021	28.99 ave	10.4	0	39.39	56	46	-	-
			Margin [dB]:		-16.61	-6.61	-	-
1.20254	28.26 ave	10.4	0	38.66	56	46	-	-
			Margin [dB]:		-17.34	-7.34	-	-
1.31105	27.04 ave	10.4	0	37.44	56	46	-	-
			Margin [dB]:		-18.56	-8.56	-	-
1.43402	25.49 ave	10.4	0	35.89	56	46	-	-
			Margin [dB]:		-20.11	-10.11	-	-

pk - Peak detector
qp - Quasi-Peak detector
av - Average detector
avlg - denotes average log detection
ave - denotes average detection

LIMIT 1: FCC Part 15 Class B QPk
LIMIT 2: FCC Part 15 Class B Avg

Leviton Manufacturing Inc.
RZC0P 120V 60Hz XMT Mode
Serial Interface Module
Proj: 07ME03926 File: MC15211
Tested By: GB

Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level [dB(uVolts)]	Limit:1	2	3	4
1.63657	24.64 ave	10.4	0	35.04	56	46	-	-
			Margin [dB]:		-20.96	-10.96	-	-
1.75954	25.83 ave	10.4	0	36.23	56	46	-	-
			Margin [dB]:		-19.77	-9.77	-	-
1.96209	25.7 ave	10.4	0	36.1	56	46	-	-
			Margin [dB]:		-19.9	-9.9	-	-
2.32377	25.77 ave	10.4	0	36.17	56	46	-	-
			Margin [dB]:		-19.83	-9.83	-	-
2.76503	26.32 ave	10.4	0	36.72	56	46	-	-
			Margin [dB]:		-19.28	-9.28	-	-
3.24245	25.62 ave	10.4	0	36.02	56	46	-	-
			Margin [dB]:		-19.98	-9.98	-	-
3.51734	24.23 ave	10.5	0	34.73	56	46	-	-
			Margin [dB]:		-21.27	-11.27	-	-
3.98753	24.31 ave	10.5	0	34.81	56	46	-	-
			Margin [dB]:		-21.19	-11.19	-	-
4.50112	23.62 ave	10.5	0	34.12	56	46	-	-
			Margin [dB]:		-21.88	-11.88	-	-
4.92068	21.58 ave	10.5	0	32.08	56	46	-	-
			Margin [dB]:		-23.92	-13.92	-	-

NOTE: "+" - Indicates an emission level in excess of the applicable limit (s).

pk - Peak detector
qp - Quasi-Peak detector
av - Average detector
avlg - denotes average log detection
ave - denotes average detection

LIMIT 1: FCC Part 15 Class B QPk
LIMIT 2: FCC Part 15 Class B Avg

4.2 Test Conditions and Results– RADIATED EMISSIONS

Test Description	Measurements were made in a 10-meter semi-anechoic chamber that complies to CISPR 16/ANSI C63.4. Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 3-meter. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in both horizontal and vertical polarities. Final measurements (quasi-peak or average as noted) were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4-meters. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable.	
Basic Standard		
UL LPG	80-EM-S0029	
	Frequency range	Measurement Point
Fully configured sample scanned over the following frequency range	30MHz – 1GHz	(3 meter measurement distance)
	1GHz - 10GHz	(3 meter measurement distance)

Limits - Section 15.209 Spurious Emissions

Frequency (MHz)	Limit (dBµV/m)	
	Quasi-Peak	Average
30-88	40	-
88-216	43.5	-
216-960	46	-
960-1000	54	-
1000-10000	-	54

Limits-15.249 (a): Fundamental & Harmonics

Frequency (MHz)	Limit (dBµV/m)	
	Quasi-Peak	Average
908.42	94	-
908-1000	54	-
1000-10000	-	54

Supplementary information: None

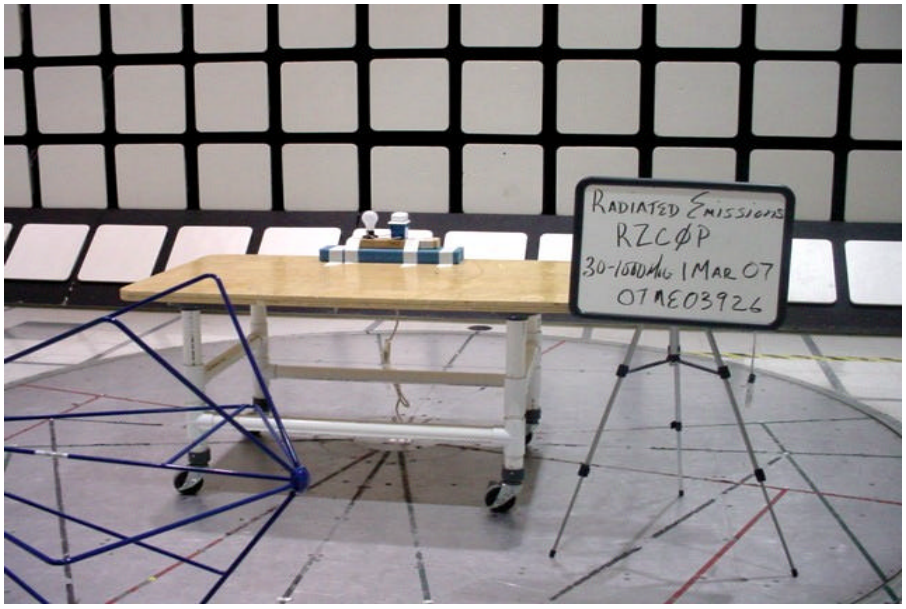
Table 4 Radiated Emissions EUT Configuration Settings

Power Interface Mode # (See Section 1.3.4)	EUT Configurations Mode # (See Section 1.6)	EUT Operation Mode # (See 1.5)
1	1	1
Supplementary information:		

Table 5 Radiated Emissions Test Equipment

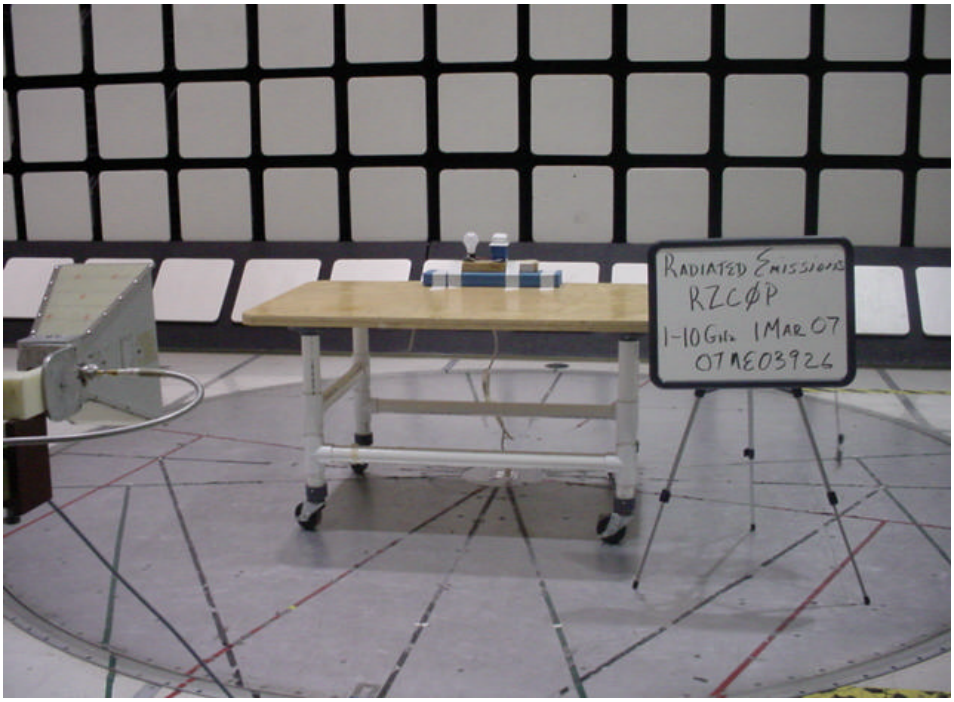
Test Equipment Used			
Description	Manufacturer	Model	Identifier
30-1000MHz			
EMI Receiver	Rohde & Schwarz	ESIB26	ME5B-081
Bicon Antenna	Schaffner	VBA6106A	43441
Log-P Antenna	Schaffner	UPA6109	44067
Preamp (10kHz - 1.3GHz)	HP	8447D	ME7A-758
Temp/Humidity/ Pressure Meter	Cole Parmer	99760-00	4268
Above 1GHz			
EMI Receiver	Rohde & Schwarz	ESIB26	ME5B-081
Horn Antenna	Electro-Metrics	RGA-180	ME5-565
Preamp (1 - 26GHz)	HP	8449B	ME5-914
Temp/Humidity/ Pressure Meter	Cole Parmer	99760-00	4268

Figure 4 Test setup for Radiated Emissions



Model RZC0P – Front View 30-1000MHz

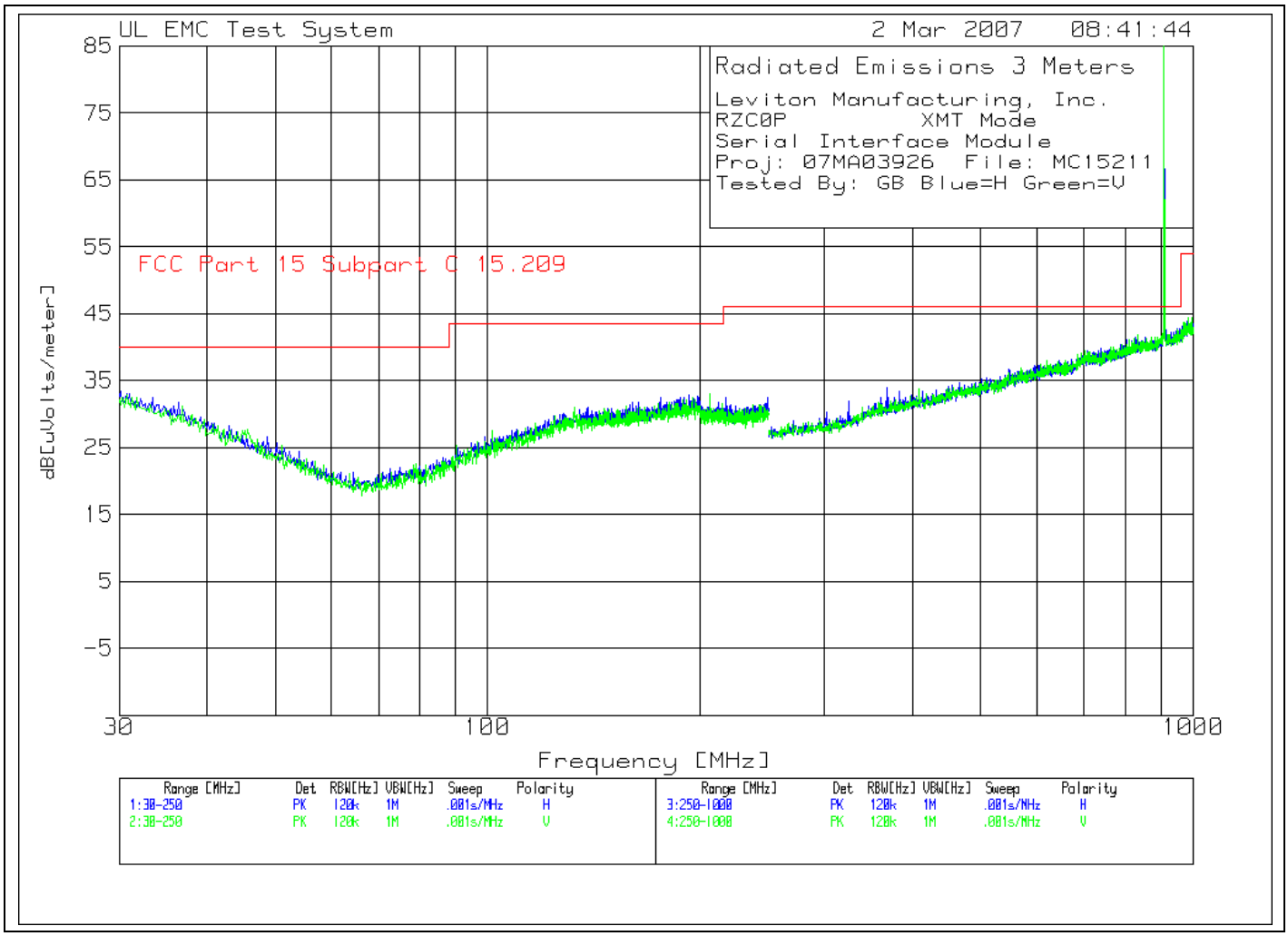
Model RZC0P – Rear View 30-1000MHz



Model RZC0P – Front View 1-10GHz

Model RZC0P – Rear View 1-10GHz

Figure 5 Radiated Emissions Graph



The device under test was tested in a Z- axis position that represents the worst-case orientation.

Table 6 Radiated Emissions Data Points

Leviton Manufacturing, Inc.
RZC0P XMT Mode
Serial Interface Module
Proj: 07MA03926 File: MC15211
Tested By: GB Blue=H Green=V

No.	Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts/meter]	Limit:1	2	3	4
Horizontal 30 - 250MHz									
1	33.5223	15.79 pk	-.3	16.9	32.39	40	-	-	-
	Azimuth:16	Height:250 Horz		Margin [dB]		-7.61	-	-	-
2	138.459	16.82 pk	0	14.2	31.02	43.5	-	-	-
	Azimuth:124	Height:250 Horz		Margin [dB]		-12.48	-	-	-
3	175.8839	17.2 pk	.1	15.2	32.5	43.5	-	-	-
	Azimuth:45	Height:250 Horz		Margin [dB]		-11	-	-	-
Horizontal 250 - 1000MHz									
4	368.5791	17.58 pk	.7	15.7	33.98	46	-	-	-
	Azimuth:350	Height:101 Horz		Margin [dB]		-12.02	-	-	-
5	908.439	69.81 pk	1.5	22.9	*85.21	46	94	-	-
	Azimuth:319	Height:199 Horz		Margin [dB]		39.21	-8.79	-	-
Vertical 250 - 1000MHz									
6	908.439	62.81 pk	1.5	22.9	87.21	46	94	-	-
	Azimuth:184	Height:200 Vert		Margin [dB]		41.21	-6.79	-	-

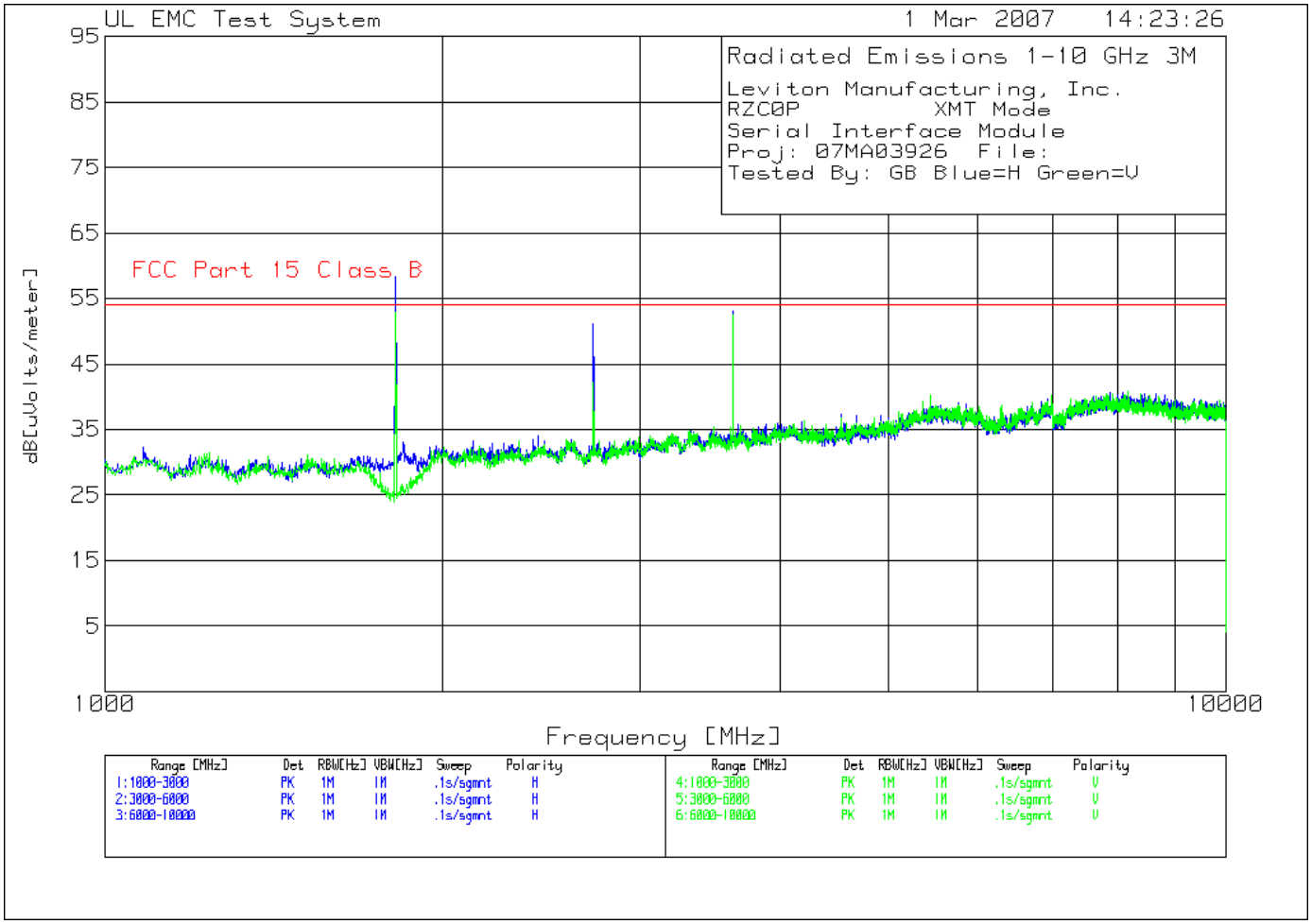
LIMIT 1: FCC Part 15 Class B
LIMIT 2: FCC Part 15 Section 15.249

* Added correction factor

pk - Peak detector
qp - Quasi-Peak detector
av - Average detector
avlg - denotes average log detection
ave - denotes average detection
tm - Trace Math Result

The device under test was tested in a Z- axis position that represents the worst-case orientation.

Figure 6 Radiated Emissions Graph



The device under test was tested in a Z- axis position that represents the worst-case orientation.

Table 7 Radiated Emissions Data Points

Leviton Manufacturing, Inc.
RZC0P XMT Mode
Serial Interface Module
Proj: 07MA03926 File:
Tested By: GB Blue=H Green=V

No.	Test Frequency [MHz]	Meter Reading [dB(uV)]	Gain/Loss Factor [dB]	Transducer Factor [dB]	Level dB[uVolts/meter]	Limit:1	2	3	4
Horizontal 1000 - 3000MHz									
1	1816.817	65.04 pk	-33.7	26.9	*50.34	54	-	-	-
	Azimuth:305	Height:101 Horz	Margin [dB]		-3.66		-	-	-
4	2725.726	54.31 pk	-32.6	29.4	51.11	54	-	-	-
	Azimuth:277	Height:199 Horz	Margin [dB]		-2.89		-	-	-
Horizontal 3000 - 6000MHz									
5	3632.422	52.52 pk	-31.2	31.8	*45.22	54	-	-	-
	Azimuth:277	Height:101 Horz	Margin [dB]		-8.78		-	-	-
7	4541.027	35.09 pk	-30.1	32.4	37.39	54	-	-	-
	Azimuth:137	Height:101 Horz	Margin [dB]		-16.61		-	-	-
10	5451.634	34.85 pk	-29.6	34.2	39.45	54	-	-	-
	Azimuth:195	Height:101 Horz	Margin [dB]		-14.55		-	-	-
Horizontal 6000 - 10000MHz									
12	6362.181	30.96 pk	-28.5	34.6	37.06	54	-	-	-
	Azimuth:31	Height:101 Horz	Margin [dB]		-16.94		-	-	-
Vertical 1000 - 3000MHz									
2	1816.817	59.73 pk	-33.7	26.9	*45.03	54	-	-	-
	Azimuth:195	Height:101 Vert	Margin [dB]		-8.97		-	-	-
3	2725.726	45.33 pk	-32.6	29.4	42.13	54	-	-	-
	Azimuth:358	Height:101 Vert	Margin [dB]		-11.87		-	-	-
Vertical 3000 - 6000MHz									
6	3632.422	52.13 pk	-31.2	31.6	*44.63	54	-	-	-
	Azimuth:31	Height:101 Vert	Margin [dB]		-9.37		-	-	-
8	4541.027	34.1 pk	-30.1	32.7	36.7	54	-	-	-
	Azimuth:328	Height:101 Vert	Margin [dB]		-17.3		-	-	-
9	5451.634	35.51 pk	-29.6	34.3	40.21	54	-	-	-
	Azimuth:250	Height:200 Vert	Margin [dB]		-13.79		-	-	-
Vertical 6000 - 10000MHz									
11	6366.183	30.13 pk	-28.5	34.7	36.33	54	-	-	-
	Azimuth:304	Height:101 Vert	Margin [dB]		-17.67		-	-	-

LIMIT 1: FCC Part 15 Section 15.249
* Added correction factor
pk - Peak detector
qp - Quasi-Peak detector
av - Average detector
avlg - denotes average log detection
ave - denotes average detection
tm - Trace Math Result

The device under test was tested in a Z- axis position that represents the worst-case orientation.

4.3 Test Conditions and Results: Supply Voltage Variation Versus Transmit Output Power

METHOD

For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the minimal rated supply voltage. For battery operated equipment the equipment test shall be performed using a new battery.

Mode*		
Power	Operation	Configuration
1	1	1

*See Power Interface EUT Operating Modes and Configurations for details

Spectrum Analyzer Settings				
Measurement Frequency	Preliminary Peak Scan		Final Detection	
	Resolution Bandwidth	Video Bandwidth	Quasi-Peak Bandwidth	Average Video Bandwidth
9kHz to 150kHz	10kHz	1MHz	200Hz	1Hz
150kHz to 30MHz	100kHz	1MHz	9kHz	1Hz
30 to 1000MHz	1MHz	1MHz	120kHz	1Hz

Unless specified otherwise in the individual Methods, the tests shall be conducted under the following ambient conditions. Confirmation of these conditions shall be verified at the time the test is conducted.

Ambient Temperature, °C	22.5 ± 2.5	Relative Humidity, %	45 ± 15	Barometric Pressure, mBar	950 ± 150

Results

The following test parameters shall be established prior to test.

Parameter	Value	Units
Laboratory Ambient Temperature	15 to 35	°C
Relative Humidity	10 to 90	%

The results of this test **complied** with the requirements.

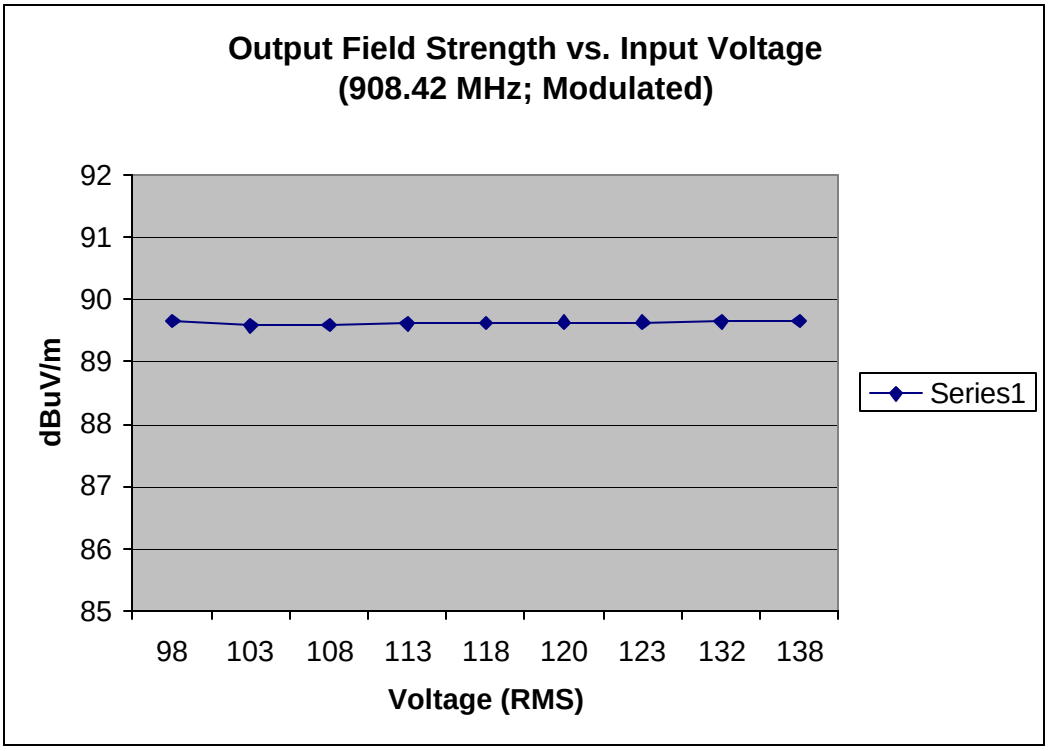
Test Equipment Used			
Description	Manufacturer	Model	Identifier
EMI Receiver	Rohde & Schwartz	ESIB 26	ME5B-081
Spectrum Analyzer	Aiglent	E7405A	19695
Biconical Antenna	Ailtech	94455-1	ME5-439
Antenna	Com-Power	7405	7A -930
Environmental Chamber	Thermotron	SE-1200-3-3	6-302
Log Periodic Antenna	EMCO	3146	ME5-451
Horn Antenna	Electro-metrics	RGA-180	ME5-565
Hygrometer/Temp/ Barometer	Cole–Parmer	99760-00	ME4-268
AC Power Source	Pacific Power	360-AMX	ME7A-626
1-26GHz Pre-Amp	Hewlett Packard	8449B	ME5-914
Measurement Software	UL	UL EMI Software	Version 9.3

Results

Ambient Conditions at the time of test.	Value	Value	Units
Temperature:	23	21.5	°C
Humidity:	33	54	%RH
Pressure:	1005	1001	Mbar
Test Date	1 March 07	8 August 07	

15.249 Limits

Input Voltage Level (RMS) @ 908.42MHz	Input Freq. Stability (MHz)	Measured @ 3 Meters (dBµV/m)	Limit @ 3 Meters (dBµV/m)	Max Delta @ 3 meters (dBµV/m)
98	908.395	89.66	94	-4.34
103	908.395	89.58	94	-4.42
108	908.395	89.59	94	-4.41
113	908.395	89.61	94	-4.39
118	908.395	89.62	94	-4.38
120	908.395	89.64	94	-4.36
123	908.395	89.64	94	-4.36
132	908.395	89.65	94	-4.35
138	908.395	89.67	94	-4.33



4.3.1 Test Conditions and Results: Frequency Stability

15.249 Paragraph B (2) Limits

Input Voltage Level (RMS) @ 908.395MHz	Temperature degree C	Input Freq. Stability (MHz)	Max Deviation (Hz)
120	-20	908.395325	325
120	-10	908.397661	2661
120	0	908.397294	2294
120	10	908.397094	2094
120	20	908.395619	619
120	30	908.393860	1140
120	40	908.392825	2175
120	50	908.391929	3071

Input Voltage Level (RMS) @ 908.395MHz	Temperature Degree C	Input Freq. Stability (MHz)	Max Deviation (Hz)
98	20	908.395622	622
103	20	908.395600	600
108	20	908.395619	619
113	20	908.395595	595
118	20	908.395622	622
120	20	908.395619	619
123	20	908.395620	620
132	20	908.395622	622
138	20	908.395620	620

4.4 Test Conditions and Results: Transmission On Time (Duty Cycle) Paragraph 15.35

Method

When the Radiated Limits are expressed in terms of the average value of the emissions, and pulse operation is employed, the pulse 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 (100ms) or in cases where the pulse train exceeds 0.1seconds 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.

Mode*		
Power	Operation	Configuration
1	1	1

*See Power Interface EUT Operating Modes and Configurations for details

Spectrum Analyzer Settings				
Measurement Frequency	Preliminary Peak Scan		Final Detection	
	Resolution Bandwidth	Video Bandwidth	Quasi-Peak Bandwidth	Average Video Bandwidth
9kHz to 150kHz	10kHz	10kHz	200Hz	1Hz
150kHz to 30MHz	100kHz	100kHz	9kHz	1Hz
30-1000MHz	100kHz	1MHz	120kHz	1Hz

The following test parameters shall be established prior to test.

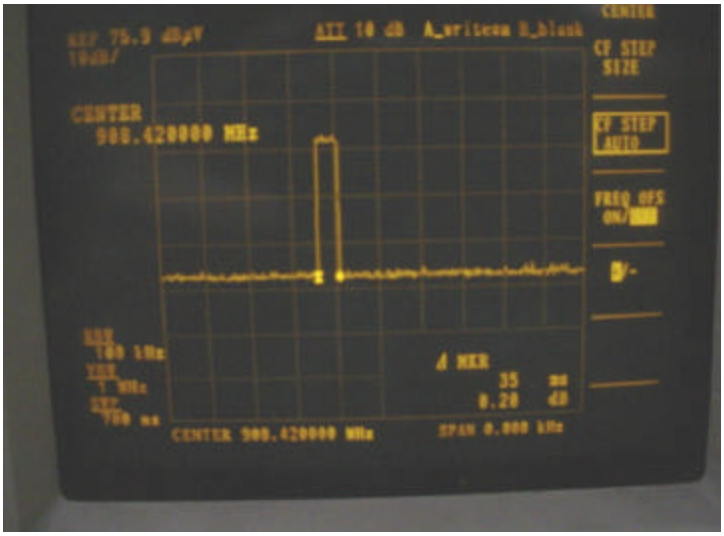
Parameter	Value	Units
Laboratory Ambient Temperature	10 to 40	°C
Relative Humidity	10 to 90	%

Results

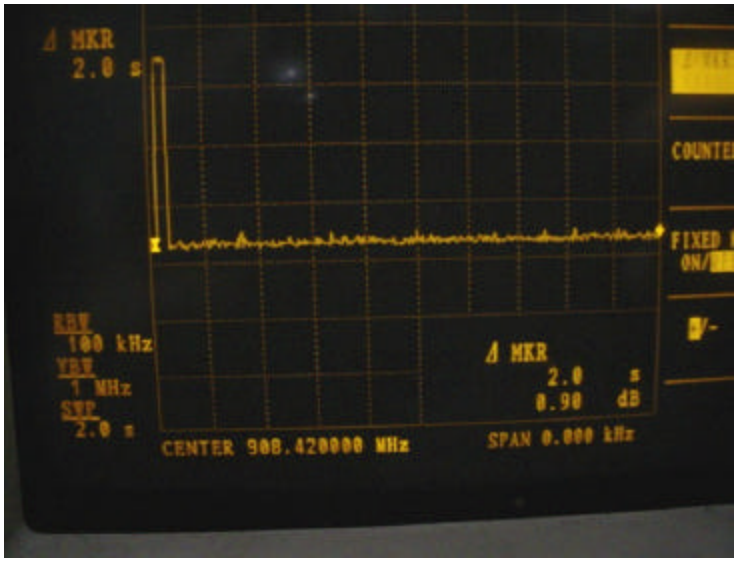
Ambient Conditions at the time of test.	Value	Units
Temperature:	22.5	°C
Humidity:	34	%RH
Pressure:	1001	Mbar
Test Date	24 July 2007	

The results of this test **did** comply with the requirements.

Figure 7: Transmission On Time

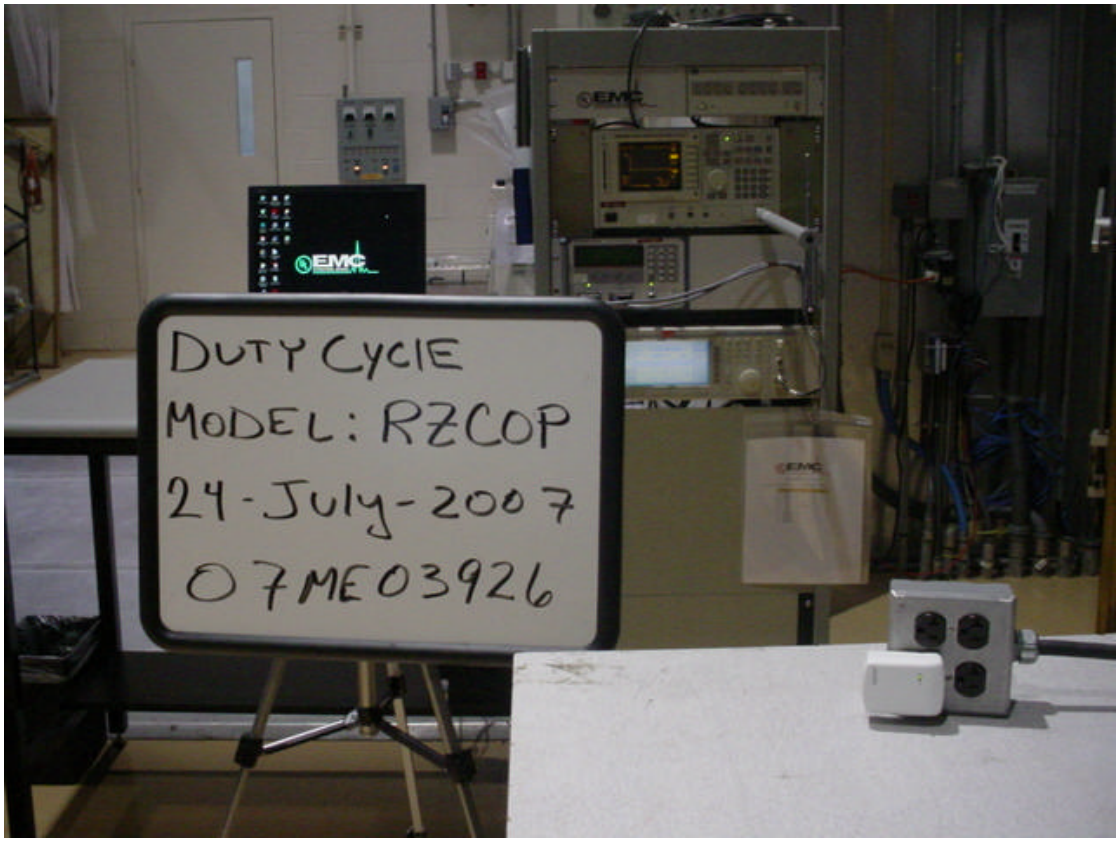


On time 35ms



Transmission on time < 1Second

Figure 8: Test Set Up Duty Cycle



Model RZC0P
Duty Cycle Test Set-Up

Test Equipment Used			
Description	Manufacturer	Model	Identifier
Dipole Antenna	ElectroMetrics	3121C-D134	5751
EMI Spectrum Analyzer	Advantest	R3261C	ME5A-229
Hygrometer/Temp/Barometer	Cole–Parmer	99760-00	ME4-268

Test Accessories Used			
Description	Manufacturer	Model	Identifier
Measurement Software	UL	UL EMI Software	Version 9.3

4.4 Test Conditions and Results: Occupied Bandwidth

Method

The bandwidth of the emissions shall be no wider than 99% of the center frequency for the devices operating at 908.42 MHz. The bandwidth is determined at the points 20 dB down from the modulated carrier. The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. The reference level is the level of the highest amplitude signal observed from the transmitter as either the fundamental frequency or the first order modulation products in all typical modes of operation, including the unmodulated carrier, even if atypical. Once the reference level is established, the equipment is conditioned with typical modulating signals to produce the worst-case bandwidth. If no bandwidth requirement is specified by the procuring or regulatory agency, measure the bandwidth at –26 Db with respect to the reference level.

In order to measure the modulated signal properly, a resolution bandwidth that is small compared with the bandwidth required by the procuring or regulatory agency shall be used on the measuring instrument. However, the resolution bandwidth of the measuring instrument shall be set to a value greater than 5% of the bandwidth requirement. When no bandwidth requirements are specified, the minimum resolution bandwidth of the measuring is given in the following table:

Fundamental Frequency	**Minimum Resolution Bandwidth**
9KHz to 30MHz	1KHz
30 to 1000MHz	10KHz
1000 MHz to 40GHz	100KHz

Occupied Bandwidth measured at 99% = 193KHz
20 dB Band edge Measured = 203KHz

Mode*		
Power	Operation	Configuration
1	1	1

*See Power Interface EUT Operating Modes and Configurations for details

The following test parameters shall be established prior to test.

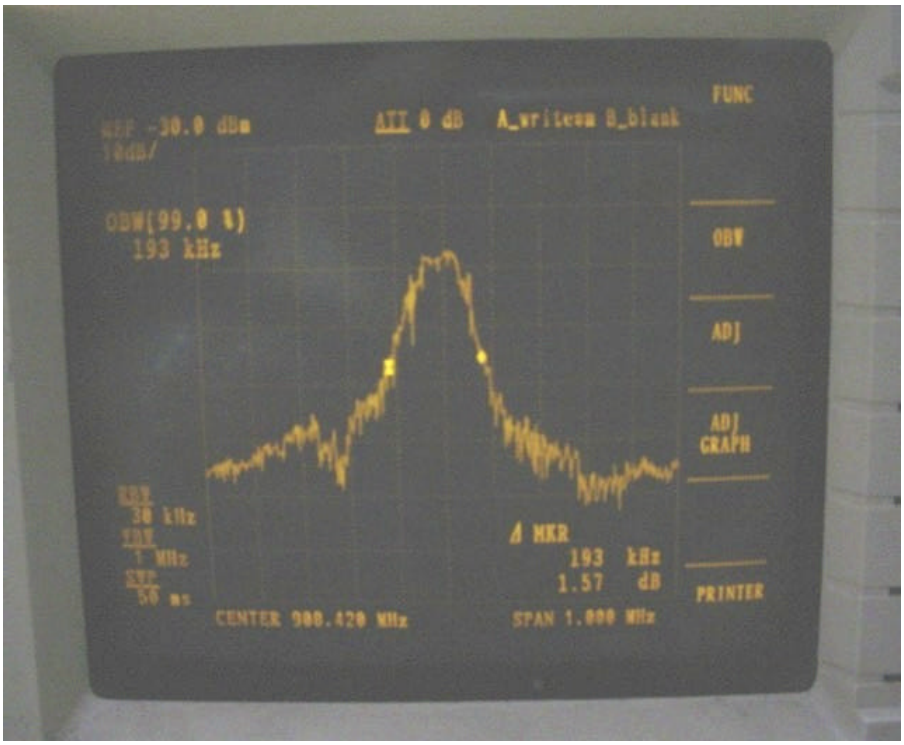
Results

Ambient conditions at time of test	Value	Units
Temperature:	20	°C
Humidity:	45	%RH
Pressure:	1013	Mbar
Test Date	20July 2007	

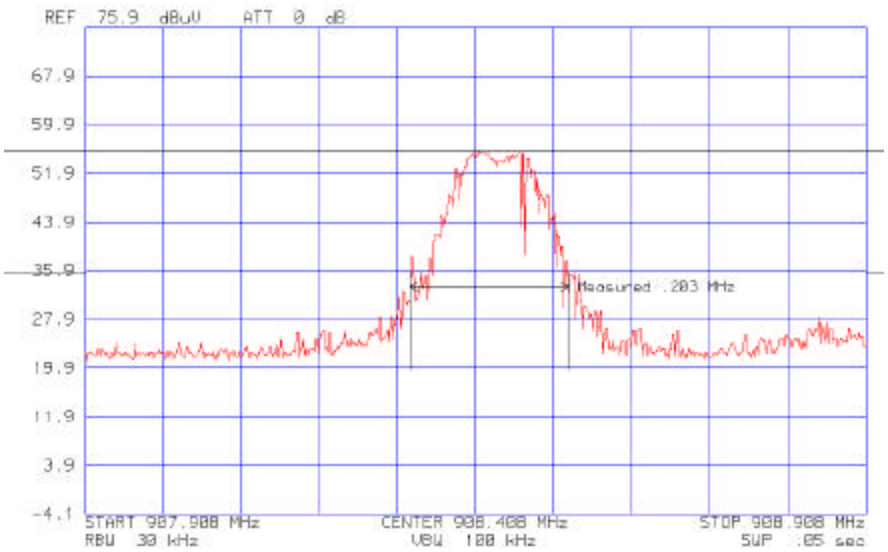
The results of this test **complied** with the requirements.

Test Equipment Used					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Spectrum Analyzer	Advantest	R3261C	ME5A-229	6 Feb. 07	29 Feb.08
Dipole Antenna	ElectroMetrics	3121C-D134	5751	26 Oct.06	26 Oct. 07
Hygrometer/Temp/Barometer	Cole –Parmer	99760-00	ME4-268	10 Jan.07	10 Jan. 08

Test Accessories Used					
Description	Manufacturer	Model	Identifier	Char/ Valid Date	Due
Measurement Software	UL	UL EMI Software	Version 9.3	NA	NA



99% Occupied Bandwidth



20dB Bandwidth RZC0P

Model RZC0P

Occupied Bandwidth Test Set-Up

4.5 Test Conditions and Results: Fundamental Frequency and Spurious Emissions Measurement Limit Calculations:

Limit Calculation

Fundamental Frequency is MHz
Limit = 20*log (mV/m)
Limit = 20 * log (50000)
Limit = 94dBuV

From table in section 15.209
Limit for Spurious Emissions = 20dB lower then fundamental = dBuV/m

Fundamental Frequency is 902-928MHz
Limit = 20*log (uV/m)
Limit = 20 * log (500)
Limit = 54dBuV
Limit for Harmonic Emissions = 50dB lower then fundamental = 54dBuV/m

Radiated Emissions Limit conversion from mV/m to dBmV/m (accordance with paragraph 15.109)

Radiated Emissions Limit (dBµV/m) = 20*log (µV/m)
Radiated Emissions Limit (dBµV/m) = 20 * log (90)
Radiated Emissions Limit (dBµV/m) = 39.1

Radiated Emissions test data obtained during measurements.

Field Strength (dBµV/m) = Measured field strength (dBµV/m) + Antenna Factor (dB) + Cable Factor (dB)
Field Strength (dBµV/m) = 19.7dBµV/m + 12.5dB + 0.3dB
Field Strength (dBµV/m) = 32.5

Duty Cycle factor calculation.

Total number of pulses counted in 100ms.
Total time on = 35ms
Duty cycle correction factor = 20 log (35ms / 100ms)
= 20 log (0.35)
= - 9dB

Appendix A

Accreditations and Authorizations

NVLAP Lab code: 100255-0

NVLAP: Recognized under the National Voluntary Laboratory Accreditation Program (NVLAP) for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC EN17025 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. For a full scope listing see http://ts.nist.gov/ts/htdocs/210/214/scopes/1002550.htm

FCC: Details of the measurement facilities used for these tests have been filed with the Federal Communications Commission's Laboratory in Columbia, Maryland (Ref. No. 91040).

Industry Canada Industrie Canada

Industry of Canada: Accredited by Industry Canada for performance of radiated measurements. Our test site complies with RSP 100, Issue 7, Section 3.3. File #: IC 2181

VCCI: Accepted as an Associate Member to the VCCI. The measurement facilities detailed in this test report have been registered in accordance with Regulations for Voluntary Control Measures, Article 8. Registration Nos.: (Radiated Emissions) R-797, (Conducted Emissions) C-832, C-833, C-834 and (Conducted Emissions - Telecommunications Ports) T-160.

ICASA: ICASA (Independent Communications Authority of South Africa) has appointed UL as a Designated Test Laboratory to test Telecommunications equipment for type approval in compliance with CISPR 22 to assist in fulfilling its mandate under section 54(1) of the Telecommunications Act, 1996 (Act 103 of 1996).

NIST/CAB: Validated by the European Commission as a U.S. Conformity Assessment Body (CAB) of the U.S.-EU Mutual Recognition Agreement (MRA) for the Electromagnetic Compatibility - Council Directive 89/336/EEC, Article 10 (2). Also validated for the Telecommunication Equipment-Council Directive 99/5/EC, Annex III and IV, Identification Number: 0983.

NIST/CAB: Provisioned to act as a U.S. Conformity Assessment Body (CAB) under Appendix B, Phase I Procedures, of the Asia Pacific Economic Cooperation (APEC) MRA between the American Institute in Taiwan (AIT) and the United States. Our laboratory is considered qualified to test equipment subject to the applicable EMC regulations of the Chinese Taipei Bureau of Standards, Metrology and Inspection (BSMI) which require testing to CNS 13438 (CISPR 22).

NIST/CAB: Recognized by the Infocomm Development Authority of Singapore (IDA) under the Asia Pacific Economic Cooperation Mutual Recognition Agreement (APEC MRA). Our laboratory is provisionally designated to act as a Conformity Assessment Body (CAB) under Appendix B, Phase I Procedures, of the APEC MRA. Our scope of designation includes IDA TS EMC (CISPR 22), IEC 61000-4-2, -4-3, -4-4, -4-5, and -4-6.

Compliance Certificate

Company Name and Location: LEVITON MFG CO INC.
59-25 LITTLE NECK PKY
LITTLE NECK, NY 11362

File Number: MC15211 *Date of Report:* 20 July 2007

Product Description: *Serial Interface Module*

Investigated in accordance with: FCC Part 15 Subpart C, Section 15.249

Model Designation: RZC0P *Serial Number:* Prototype

Job Number: 07ME03926

A sample of the product described above has been investigated by Underwriters Laboratories Inc. in accordance with the requirements indicated on this Certification and has been found in compliance with those requirements. It is the responsibility of the company shown above that the products it produces are in compliance with the applicable requirements.

The name of Underwriters Laboratories Inc. (UL), any abbreviation thereof, or any symbol shall not be used on or in connection with the product unless and until specifically authorized by UL.

Tested by: Joseph Danisi

UL EMC INTERNATIONAL SERVICES

Reviewed by: Bob DeLuca