



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

CERTIFICATION TEST REPORT

**LEVITON MFG. CO. INC.
201 NORTH SERVICE ROAD
MELVILLE, NY 11747**

USB STICK

MODEL NUMBER: VRUSB

REPORT NUMBER: 13U15045

**FCC ID: QGH – VRUSB
IC: 2473A - VRUSB**

ISSUE DATE: 2013-10-31

Prepared for

**LEVITON MFG. CO. INC.
201 NORTH SERVICE ROAD
MELVILLE, NY 11747**

Prepared by

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NVLAP LAB CODE 100255-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	2013-07-08	Initial Issue	Joseph Danisi
--	2013-09-09	Correct Fundamental frequency, Add peak data	Joseph Danisi
-	2013-10-31	Correct dates, added duty cycle statement, correct 20dB/99% plots, and corrected numeric data in section 8.1.3	Joseph Danisi

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LEVITON MFG. CO. INC.
201 NORTH SERVICE ROAD
MELVILLE, NY 11747

EUT DESCRIPTION: USB STICK

MODEL: VRUSB

SERIAL NUMBER: NON SERIALIZED

DATE TESTED: 2013-05-09 to 2013-05-014

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

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

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

Approved & Released For UL By:

Tested By:



Bob DeLisi
WiSE Principal Engineer
UL

Joseph Danisi
WiSE Project Lead
UL

2. TEST METHODOLOGY

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

3. FACILITIES AND ACCREDITATION

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

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

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

4.3. MEASUREMENT UNCERTAINTY

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

Test	Uncertainty
Conducted Emissions (worst case 9kHz-30MHz)	2.0, k=2 (95%)
Radiated Emissions, 30-200MHz, Horizontal	3.6, k=2 (95%)
Radiated Emissions, 30-200MHz, Vertical	3.8, k=2 (95%)
Radiated Emissions, 200-1000MHz, Horizontal	2.8, k=2 (95%)
Radiated Emissions, 200-1000MHz, Vertical	3.7, k=2 (95%)
Radiated Emissions, 1-26GHz (worst case, Ground Plane)	5.7, k=2 (95%)

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The Vizia RF VRUSB stick will be able to be plugged into a device with controlling software such as a laptop or desktop PC to remotely control and program a Vizia RF lighting control system

5.2. MAXIMUM OUTPUT E-FIELD STRENGTH

The transmitter has a maximum output peak E-field as follows:

Frequency Range (MHz)	Mode	Output PK E-field Strength (dBuV/m)
908.4	Constant Packet	92.62

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an integral antenna, permanently attached PCB.

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was Installer Tool Ink. Rev. A.

The test utility software used during testing was Vizia RF + Installer Tool Ink. Rev. A.

5.5. WORST-CASE CONFIGURATION AND MODE

The worst-case orientation was determined as the X-Axis and configured and evaluated throughout tests. The duty cycle is 100% therefore all testing was performed with 100% duty cycle.

5.6. MODIFICATIONS

No modifications were made during testing.

5.7 DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
USB Stick	Leviton Mfg. Co. Inc.	VRUSB	Non-serialized	QGH-VRUSB
Laptop	HP	HP Mini	110-3135DX	None
AC Adaptor	HP	VP-030ADU00-000	N/A	None

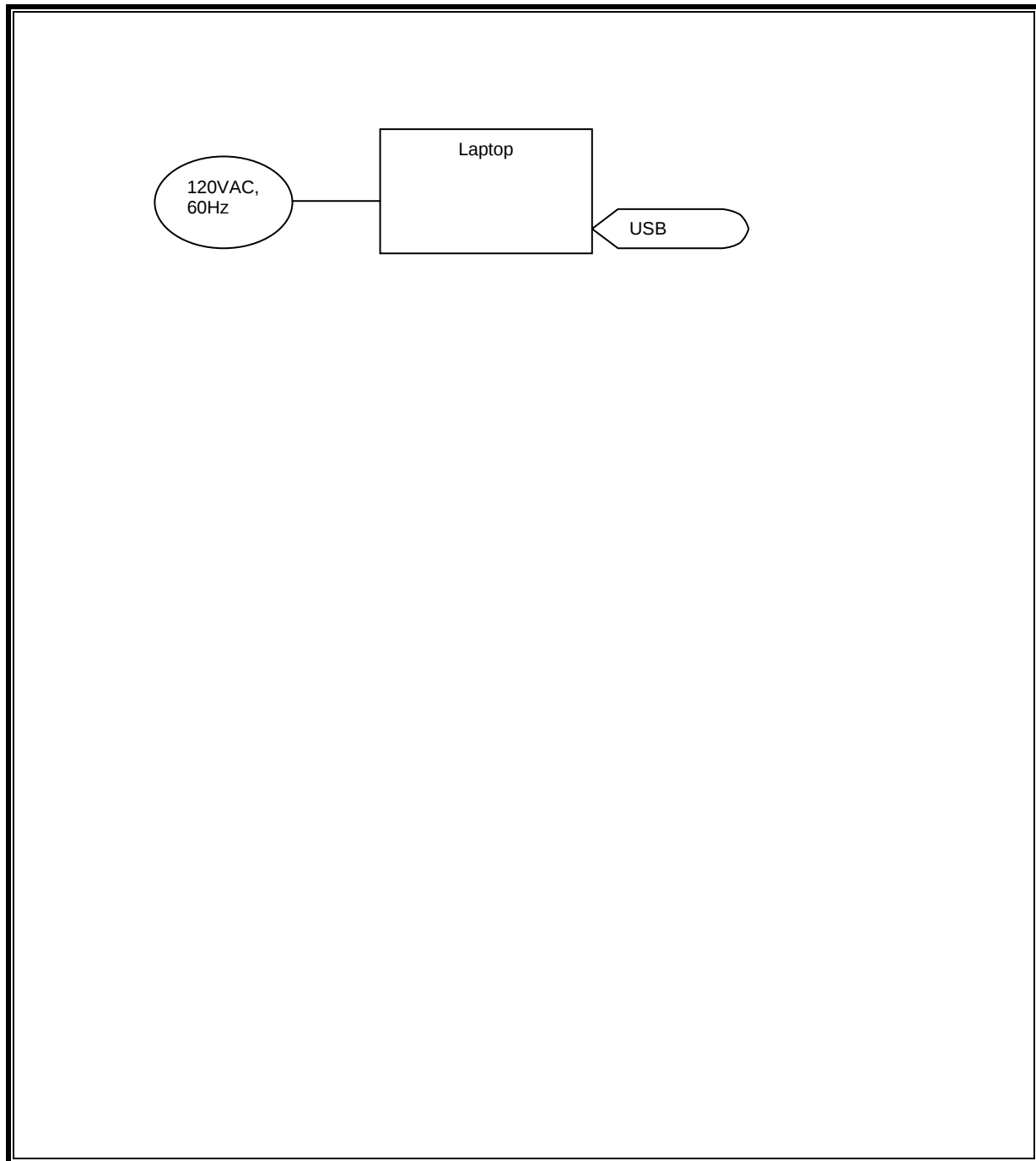
I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	1	1	AC	Wire	2.5m	Power cord plus AC
2	1	1	USB	Shielded	1.5m	USB CABLE

TEST SETUP

The EUT is connected to a host laptop computer during the tests. Test software exercised the radio card.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

Radiated Emissions					
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
30-1000MHz					
EMI Receiver	Rohde & Schwarz	ESIB26	ME5B-081	2013-01-29	2014-01-31
Log-P Antenna	Schaffner	UPA6109	44068	2013-04-03	2014-04-03
Bicon Antenna	Schaffner	VBA6106A	54	2013-04-03	2014-04-03
Preamp	Miteq	AM-3A-000110-7687	44391	N/A	N/A
Preamp	Miteq	AM-3A-000110-7687	44394	N/A	N/A
Switch Driver	HP	11713A	ME7A-627	N/A	N/A
System Controller	Sunol Sciences	SC99V	44396	N/A	N/A
Camera Controller	Panasonic	WV-CU254	44395	N/A	N/A
RF Switch Box	UL	1	44398	N/A	N/A
Measurement Software	UL	Version 9.5	44740	N/A	N/A
Multimeter	Fluke	83V	43443	2013-01-28	2014-01-31
Above 1GHz (Band Optimized System)					
EMI Receiver	Rohde & Schwarz	ESIB40	34968	2013-01-13	2014-01-13
Horn Antenna (1-2 GHz)	ETS	3161-01 (26°)**	51442	2008-03-28	See * below
Horn Antenna (2-4 GHz)	ETS	3161-02 (22°)**	48107	2007-09-27	See * below
Horn Antenna (4-8 GHz)	ETS	3161-03 (22°)**	48106	2007-09-27	See * below
Horn Antenna (12-18 GHz)	ETS	3160-08 (26°)**	8932	2007-09-27	See * below
Signal Path Controller	HP	11713A	50250	N/A	N/A
Gain Controller	HP	11713A	50251	N/A	N/A
RF Switch / Preamp Fixture	UL	BOMS1	50249	N/A	N/A
System Controller	UL	BOMS2	50252	N/A	N/A
Measurement Software	UL	Version 9.5	44740	N/A	N/A
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2012-12-22	2014-12-22
Multimeter	Fluke	83V	43443	2013-01-28	2014-01-31

* - Note: As allowed by the calibration standard ANSI C63.4 Section 4.4.2, standard gain horns need only a one-time calibration. Only if physical damage occurs will the horn antenna require re-calibration.

Gain standard horn antennas (sometimes called standard gain horn antennas) need not be calibrated beyond that which is provided by the manufacturer unless they are damaged or deterioration is suspected, or they are used at a distance closer than $2D^2/\lambda$. Gain standard horn antennas have gains that are fixed by their dimensions and dimensional tolerances.

** - Number in parentheses denotes antenna beam width.

Conducted Emissions					
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
Conducted Emissions – GP 1					
EMI Receiver	Rohde & Schwarz	ESIB26	ME5B-081	2013-01-29	2014-01-31
LISN	Solar	9252-50-R-24-BNC	ME5A-636	2013-02-01	2014-02-28
Switch Driver	HP	11713A	44397	N/A	N/A
RF Switch Box	UL	4	44404	N/A	N/A
Measurement Software	UL	Version 9.5	44736	N/A	N/A
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	43734	2012-03-13	2014-03-13

Bench Tests					
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date
RF Room 1					
Spectrum Analyzer	Agilent	E4446A	72823	2013-01-29	2014-01-31
Dipole Antenna	EMCO	3121C	3359	2012-12-27	2013-12-27
Thermal Chamber	Thermotron	SE-1200L	6-302	2013-04-30	2014-04-30
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2012-03-13	2014-03-13
Multimeter	Fluke	83III	ME5B-305	2013-01-29	2014-01-31

7. TEST RESULTS

7.1.1. 20dB & 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

20dB Bandwidth: The RBW is set to 10 KHz. The VBW is set to 100 KHz. The sweep time is coupled. Bandwidth is determined at the points 20 dB down from the modulated carrier.

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

20dB BANDWIDTH

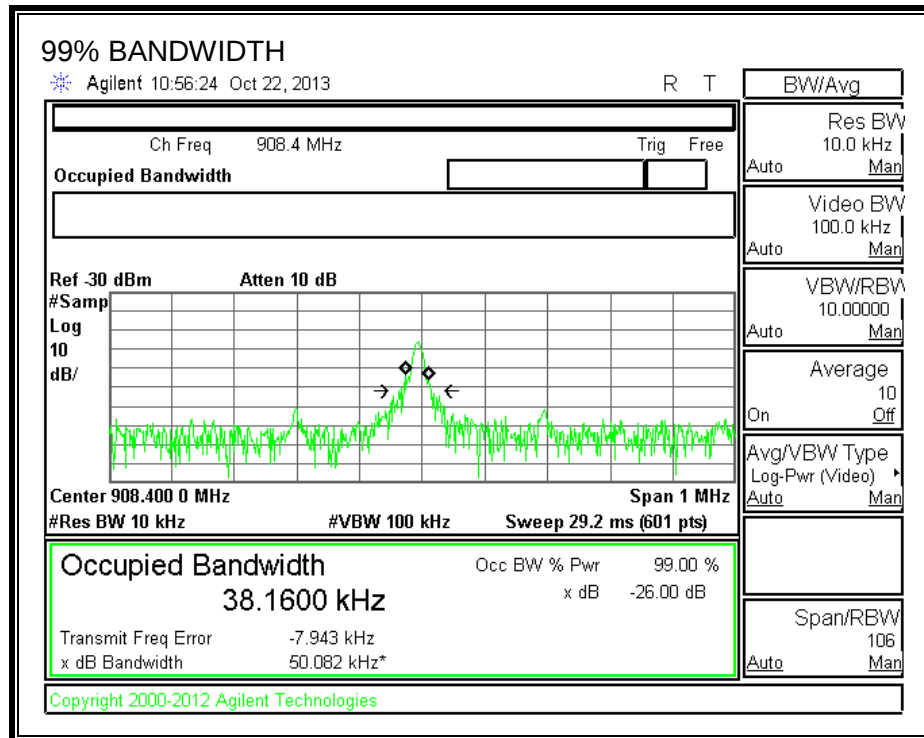
Channel	Frequency (MHz)	20dB Bandwidth (MHz)
Middle	908.4	0.0642

99% BANDWIDTH

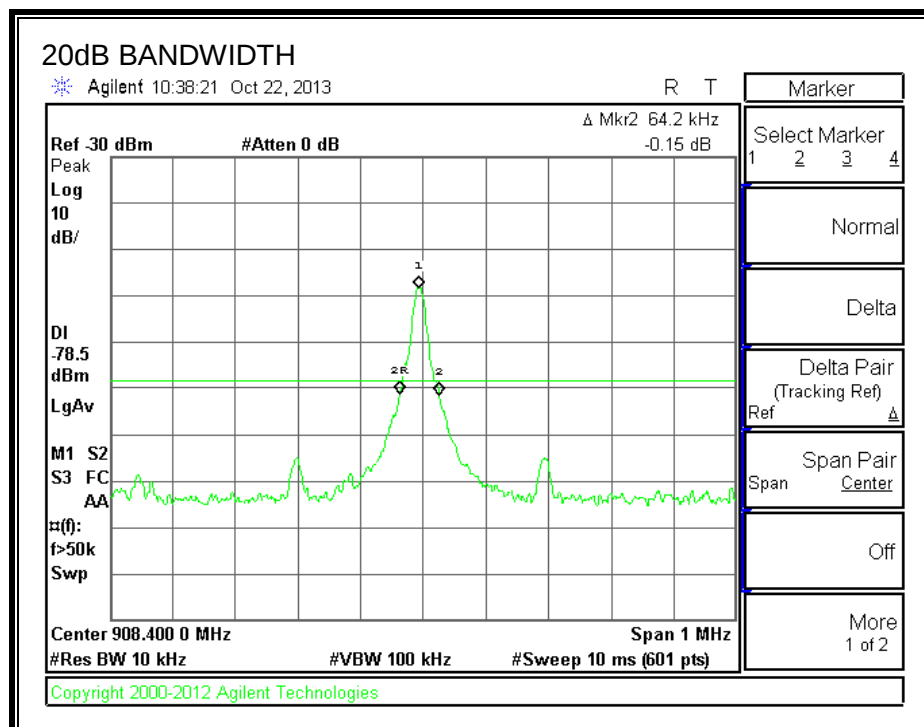
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Middle	908.4	0.03816

RESULTS

99% BANDWIDTH



20dB BANDWIDTH



8. RADIATED EMISSION TEST RESULTS

8.1. RADIATED EMISSIONS

TEST PROCEDURE

ANSI C63.4

LIMIT

IC RSS-210, A2.9
FCC 15.249

Operation within the bands 902–928 MHz, 2400–2483.5 MHz, 5725–5875 MHz, and 24.0–24.25 GHz.

(a) Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

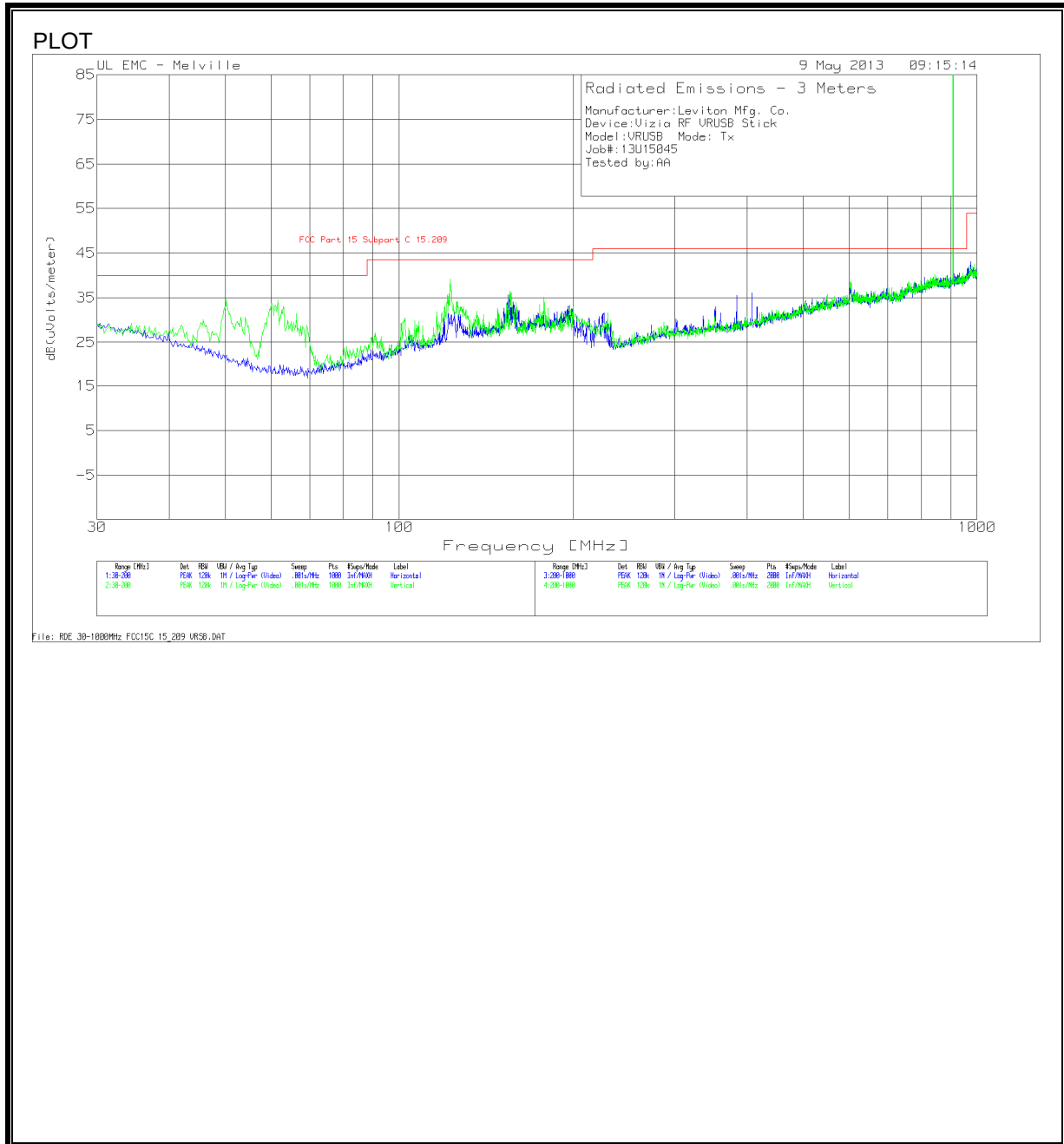
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009–0.490	2400/F(kHz)	300
0.490–1.705	24000/F(kHz)	30
1.705–30.0	30	30
30–88	100 **	3
88–216	150 **	3
216–960	200 **	3
Above 960	500	3

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

RESULTS

No non-compliance noted:

8.1.2 TX SPURIOUS EMISSION 30 TO 1000 MHz (VERTICAL AND HORIZONTAL)



DATA

Manufacturer: Leviton Mfg. Co.

Device: Vizia RF VRUSB Stick

Model: VRUSB Mode: Tx

Job#:13U15045

Tested by: AA

Vertical 30 - 200MHz

Test Frequency	Meter Reading	Detector	AF-43441 (db/m)	GL-3M	dB(uVolts/meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
50.5807	20.27	QP	9.8	0.1	30.17	40	-9.83	174	109	Vert
59.6187	18.89	QP	6.5	0.1	25.49	40	-14.51	192	171	Vert
61.65	21.65	QP	6.2	0.2	28.05	40	-11.95	65	116	Vert
121.5606	19.88	QP	13.2	0.6	33.68	43.5	-9.82	301	108	Vert

Horizontal 200 - 1000MHz

Test Frequency	Meter Reading	Detector	AF-44067 (db/m)	GL-3M	dB(uVolts/meter)	FCC Part 15 Subpart C 15.249	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
908.3776	67.62	PK	22.8	2.2	92.62	94	-1.38	228	169	Horz

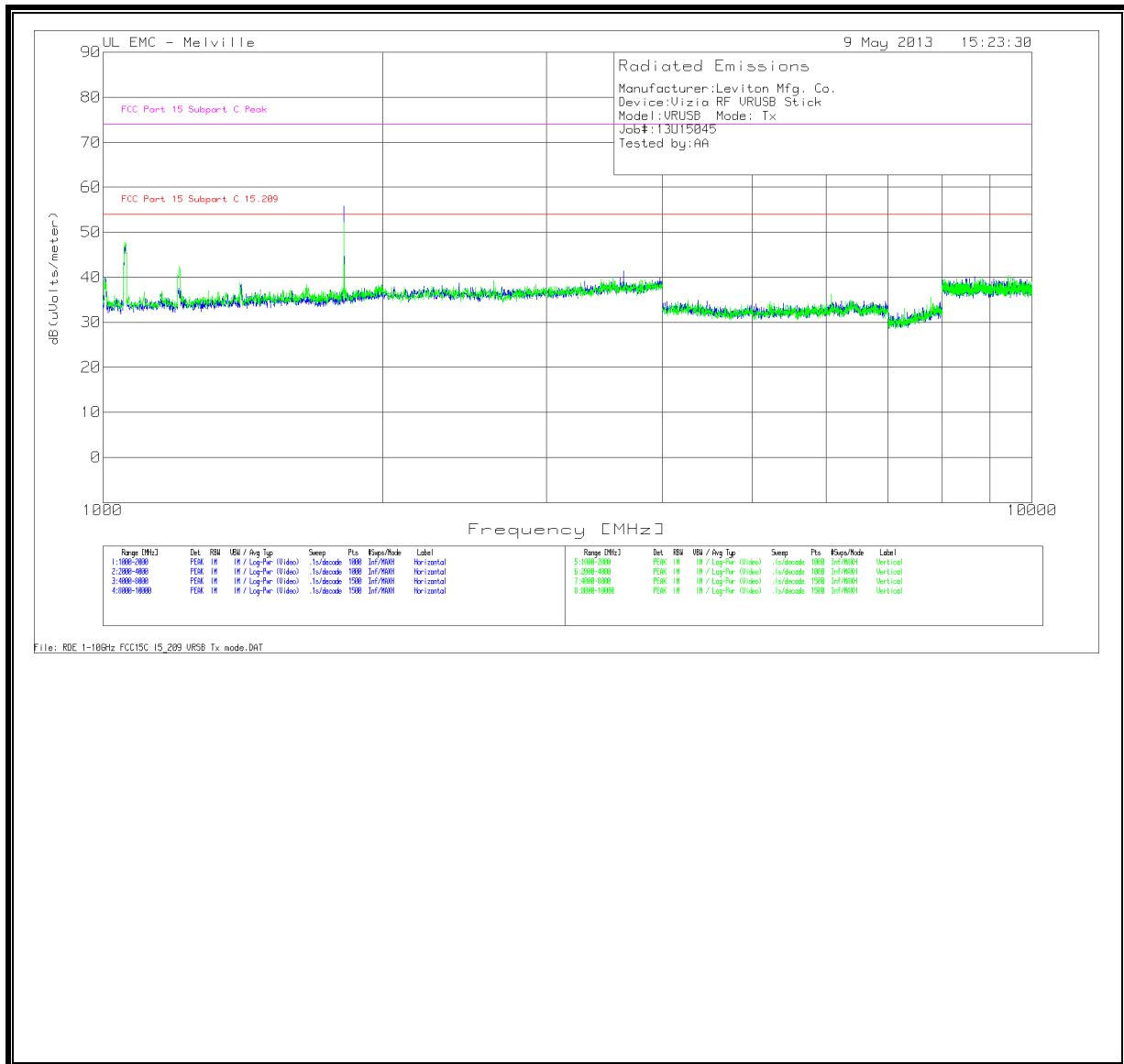
Vertical 200 - 1000MHz

Test Frequency	Meter Reading	Detector	AF-44067 (db/m)	GL-3M	dB(uVolts/meter)	FCC Part 15 Subpart C 15.249	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
908.3794	65.22	PK	22.8	2.2	90.22	94	-3.78	308	165	Vert

PK - Peak detector

QP - Quasi-Peak detector

8.1.3 HARMONICS AND SPURIOUS EMISSIONS ABOVE 1GHz



DATA

Manufacturer: Leviton Mfg. Co.

Device: Vizia RF VRUSB Stick

Model: VRUSB Mode: Tx

Job#:13U15045

Tested by: AA

Horizontal 1000 - 2000MHz

Marker No.	Test Frequency	Meter Reading	Detector	AF-51442	BOMS Factor (dB)	dB(uVolts/meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	FCC Part 15 Subpart C Peak	Margin (dB)	Azimuth [Degs]	Height [cm]
1	1005.005	65.78	PK	19.3	-45.17	39.91	-	-	74	-34.09	197	250
2	1056.056	72.39	PK	19.7	-44.96	47.13	-	-	74	-26.87	287	250
3	1816.817	79.18	PK	21.1	-44.49	55.79	-	-	74	-18.21	323	99

Vertical 1000 - 2000MHz

Marker No.	Test Frequency	Meter Reading	Detector	AF-51442	BOMS Factor (dB)	dB(uVolts/meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	FCC Part 15 Subpart C Peak	Margin (dB)	Azimuth [Degs]	Height [cm]
4	1055.055	73.02	PK	19.7	-44.91	47.81	-	-	74	-26.19	32	249
5	1209.209	67.46	PK	19.9	-44.95	42.41	-	-	74	-31.59	122	249
6	1816.817	75.52	PK	21.1	-44.49	52.13	-	-	74	-21.87	282	249

PK - Peak detector

Manufacturer: Leviton Mfg. Co.

Device: Vizia RF VRUSB Stick

Model: VRUSB Mode: Tx

Job#:13U15045

Tested by: AA

Horizontal 1000 - 2000MHz

Test Frequency	Meter Reading	Detector	AF-51442 (db/m)	BOMS Factor [dB]	dB(uVolts/ meter)	FCC Part 15 Subpart C 15.249	Margin (dB)	FCC Part 15 Subpart C Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1816.808	72.65	Av	21.1	-44.49	49.26	54	-4.74	-	-	247	304	Horz

Test Frequency	Meter Reading	Detector	AF-51442 (db/m)	BOMS Factor [dB]	dB(uVolts/ meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	FCC Part 15 Subpart C Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1006.899	52.52	Av	19.3	-44.95	26.87	54	-27.13	-	-	102	272	Horz
1057.228	60.49	Av	19.7	-45	35.19	54	-18.81	-	-	67	397	Horz

Vertical 1000 - 2000MHz

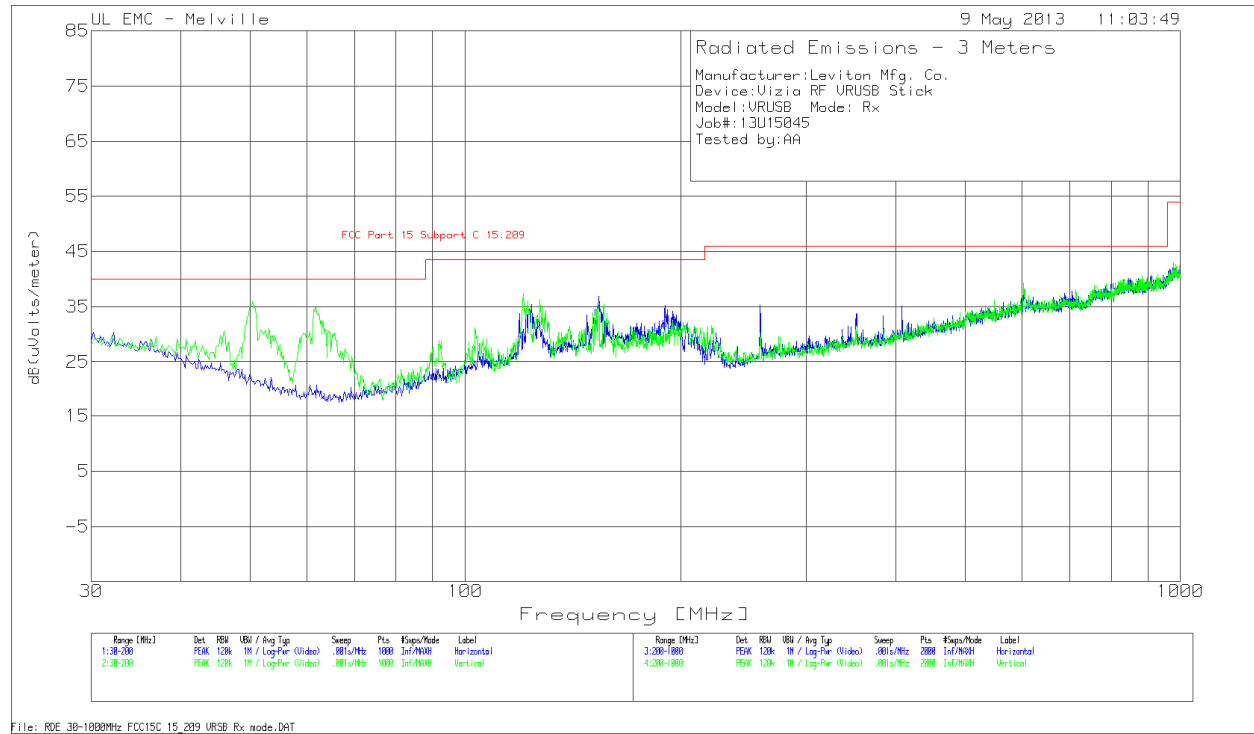
Test Frequency	Meter Reading	Detector	AF-51442 (db/m)	BOMS Factor [dB]	dB(uVolts/ meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	FCC Part 15 Subpart C Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1055	57.48	Av	19.7	-44.91	32.27	54	-21.73	-	-	90	296	Vert
1208.108	53.66	Av	19.9	-45	28.56	54	-25.44	-	-	357	397	Vert

Test Frequency	Meter Reading	Detector	AF-51442 (db/m)	BOMS Factor [dB]	dB(uVolts/ meter)	FCC Part 15 Subpart C 15.249	Margin (dB)	FCC Part 15 Subpart C Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1816.798	74.74	Av	21.1	-44.49	51.35	54	-2.65	-	-	301	301	Vert

PK - Peak detector

Av - Average detector

8.1.4 RX SPURIOUS EMISSIONS BELOW 1 GHz (WORST-CASE CONFIGURATION)



DATA

Manufacturer: Leviton Mfg. Co.

Device: Vizia RF VRUSB Stick

Model: VRUSB Mode: Rx

Job#:13U15045

Tested by: AA

Horizontal 30 - 200MHz

Test Frequency	Meter Reading	Detector	AF-43441(db/m)	GL-3M	dB(uVolts/meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
156.0046	8.94	QP	15.1	0.6	24.64	43.5	-18.86	324	314	Horz

Vertical 30 - 200MHz

Test Frequency	Meter Reading	Detector	AF-43441(db/m)	GL-3M	dB(uVolts/meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
50.42	17.12	QP	9.9	0.1	27.12	40	-12.88	301	164	Vert
61.9102	23.47	QP	6.2	0.2	29.87	40	-10.13	357	114	Vert
121.9528	21.77	QP	13.2	0.5	35.47	43.5	-8.03	360	120	Vert
120.53	22.32	QP	13.2	0.5	36.02	43.5	-7.48	337	133	Vert
122.4	18.29	QP	13.3	0.5	32.09	43.5	-11.41	284	160	Vert
127.9366	15.61	QP	13.8	0.5	29.91	43.5	-13.59	160	121	Vert

PK - Peak detector

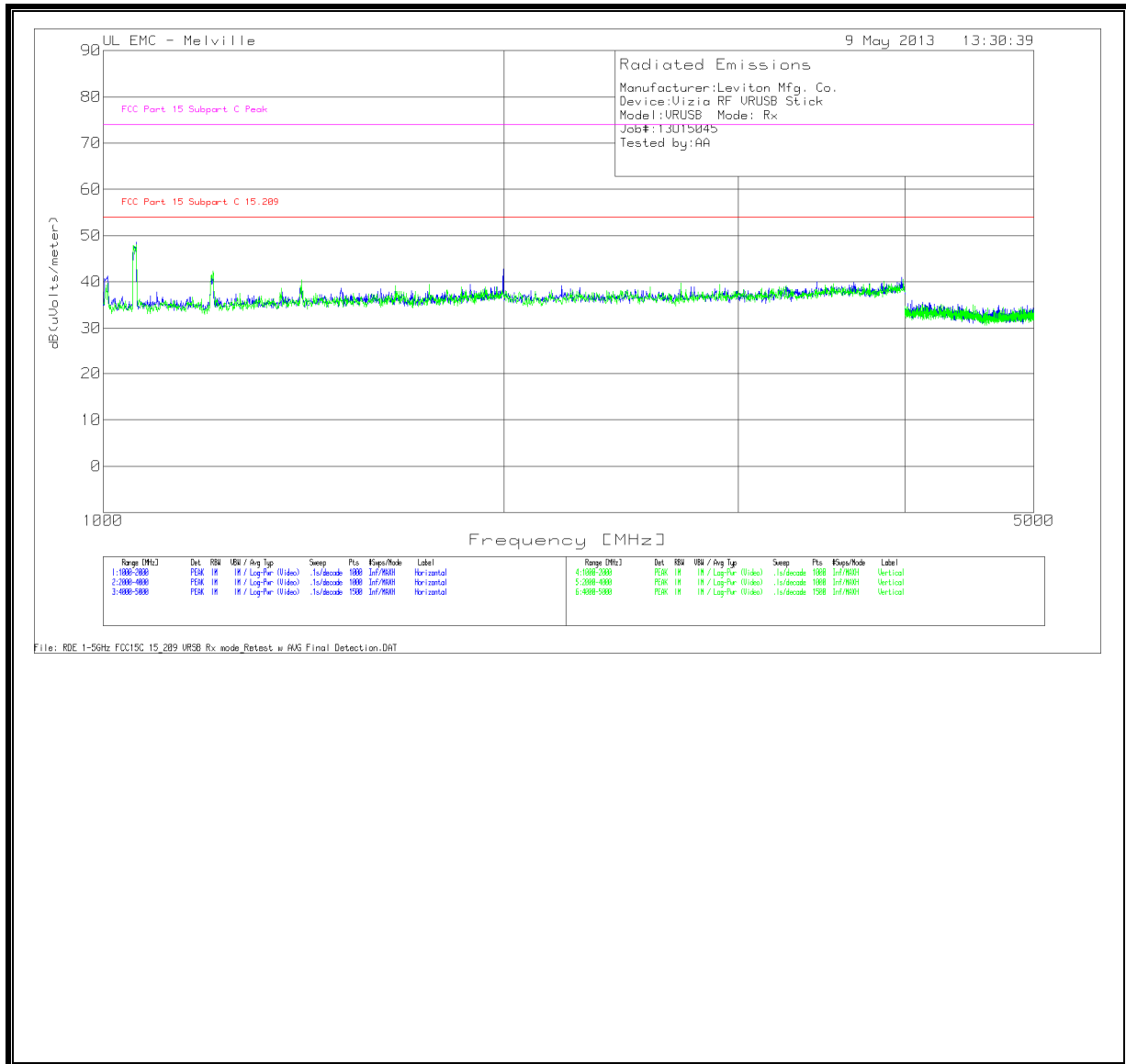
QP - Quasi-Peak detector

LnAv - Linear Average detector

LgAv - Log Average detector

Av - Average detector

8.1.5 RX SPURIOUS EMISSIONS ABOVE 1 GHz (WORST-CASE CONFIGURATION)



DATA

Manufacturer: Leviton Mfg. Co.

Device: Vizia RF VRUSB Stick

Model: VRUSB Mode: Rx

Job#:13U15045

Tested by: AA

Horizontal 1000 - 2000MHz

Test Frequency	Meter Reading	Detector	AF-51442 (db/m)	BOMS Factor (dB)	dB(uVolts /meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	FCC Part 15 Subpart C Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1008.008	66.68	PK	19.4	-44.86	41.22	54	-12.78	74	-32.78	8	100	Horz
1059.059	73.91	PK	19.7	-44.99	48.62	54	-5.38	74	-25.38	167	250	Horz
1996.997	64.84	PK	22.2	-44.24	42.8	54	-11.2	74	-31.2	358	250	Horz

Vertical 1000 - 2000MHz

Test Frequency	Meter Reading	Detector	AF-51442 (db/m)	BOMS Factor (dB)	dB(uVolts /meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	FCC Part 15 Subpart C Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1008.008	65.19	PK	19.4	-44.86	39.73	54	-14.27	74	-34.27	44	250	Vert
1055.055	73.02	PK	19.7	-44.91	47.81	54	-6.19	74	-26.19	358	250	Vert
1209.209	67.45	PK	19.9	-44.95	42.4	54	-11.6	74	-31.6	290	250	Vert

PK - Peak detector

Manufacturer: Leviton Mfg. Co.

Device: Vizia RF VRUSB Stick

Model: VRUSB Mode: Rx

Job#:13U15045

Tested by: AA

Horizontal 1000 - 2000MHz

Test Frequency	Meter Reading	Detector	AF-51442 (db/m)	BOMS Factor [dB]	dB(uVolts /meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	FCC Part 15 Subpart C Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1008.895	51.58	Av	19.4	-44.81	26.17	54	-27.83	74	-47.83	74	111	Horz
1054.491	57.43	Av	19.7	-44.91	32.22	54	-21.78	74	-41.78	70	393	Horz
1994.22	49.1	Av	22.2	-44.09	27.21	54	-26.79	74	-46.79	50	104	Horz

Vertical 1000 - 2000MHz

Test Frequency	Meter Reading	Detector	AF-51442 (db/m)	BOMS Factor [dB]	dB(uVolts /meter)	FCC Part 15 Subpart C 15.209	Margin (dB)	FCC Part 15 Subpart C Peak	Margin (dB)	Azimuth [Degs]	Height [cm]	Polarity
1008.657	50.69	Av	19.4	-44.79	25.3	54	-28.7	74	-48.7	81	254	Vert
1055.1	57.68	Av	19.7	-44.91	32.47	54	-21.53	74	-41.53	63	396	Vert
1209	52.9	Av	19.9	-44.93	27.87	54	-26.13	74	-46.13	50	371	Vert

Av - Average detector

9 AC MAINS LINE CONDUCTED EMISSIONS

LIMITS

§15.207 (a)
IC RSS-GEN, Section 7.2.2

Frequency of emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50
* Decreases with the logarithm of the frequency.		

TEST PROCEDURE

ANSI C63.4

RESULTS

No non-compliance noted:

6 WORST EMISSIONS

Manufacturer Leviton Mfg. Co. Inc

Device: USB Stic

Model: VRUS

Job: 109620 Constant transmi

Tested by: JD

Test	Meter	Transducer	Gain/Loss	Level	Limit:1	2			
Frequency	Reading	Factor	Factor	(dB(uVolts)					
[MHz]	(dBuV)	[dB]	[dB]						
=====									
Line - L1 .15 - 30MH									
.1509	37.56 QP	0	10	47.56	65.95	55.95	-	-	-
			Margin [dB]:		-18.39	-8.39	-	-	-
.1725	34.94 QP	0	10	44.94	64.84	54.84	-	-	-
			Margin [dB]:		-19.9	-9.9	-	-	-
.29805	36.25 QP	0	10	46.25	60.3	50.3	-	-	-
			Margin [dB]:		-14.05	-4.05	-	-	-
.5244	26.73 QP	0	10	36.73	56	46	-	-	-
			Margin [dB]:		-19.27	-9.27	-	-	-
.6324	30.25 QP	0	10	40.25	56	46	-	-	-
			Margin [dB]:		-15.75	-5.75	-	-	-
21.2721	22.83 QP	0	11.2	34.03	60	50	-	-	-
			Margin [dB]:		-25.97	-15.97	-	-	-

PK - Peak detectio

QP - Quasi-Peak detectio

LnAv - Linear average detectio

LgAv - average log detectio

Av - average detectio

CAV - CISPR average detectio

RMS - RMS detectio

CRMS - CISPR RMS detectio

LIMIT 1: FCC Part 15 Subpart C QPk

LIMIT 2: FCC Part 15 Subpart C Avg

Manufacturer Leviton Mfg. Co. Inc

Device: USB Stic

Model: VRUS

Job: 109620 Constant transmi

Tested by: JD

Test	Meter	Transducer	Gain/Loss	Level	Limit:1	2			
Frequency	Reading	Factor	Factor	(dB(uVolts)					
[MHz]	(dBuV)	[dB]	[dB]						
=====									
Neutral .15 - 30MH									
.1626	37.15 QP	0	10	47.15	65.33	55.33	-	-	-
			Margin [dB]:		-18.18	-8.18	-	-	-
.2913	36.13 QP	0	10	46.13	60.49	50.49	-	-	-
			Margin [dB]:		-14.36	-4.36	-	-	-
.3516	29.76 QP	0	10	39.76	58.92	48.92	-	-	-
			Margin [dB]:		-19.16	-9.16	-	-	-
.4407	33.7 QP	0	10	43.7	57.05	47.05	-	-	-
			Margin [dB]:		-13.35	-3.35	-	-	-
.5685	32.25 QP	0	10.1	42.35	56	46	-	-	-
			Margin [dB]:		-13.65	-3.65	-	-	-

PK - Peak detectio

QP - Quasi-Peak detectio

LnAv - Linear average detectio

LgAv - average log detectio

Av - average detectio

CAV - CISPR average detectio

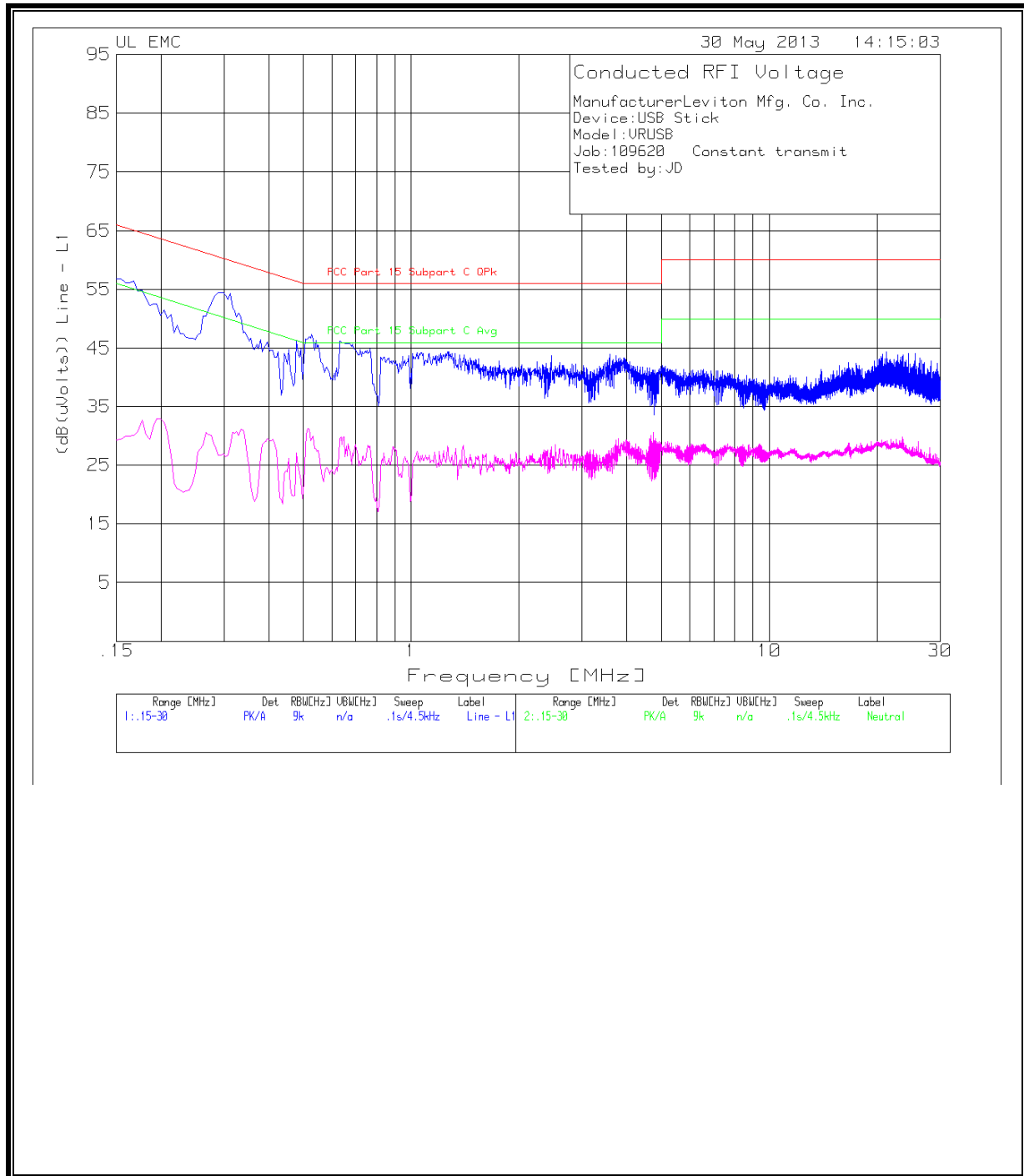
RMS - RMS detectio

CRMS - CISPR RMS detectio

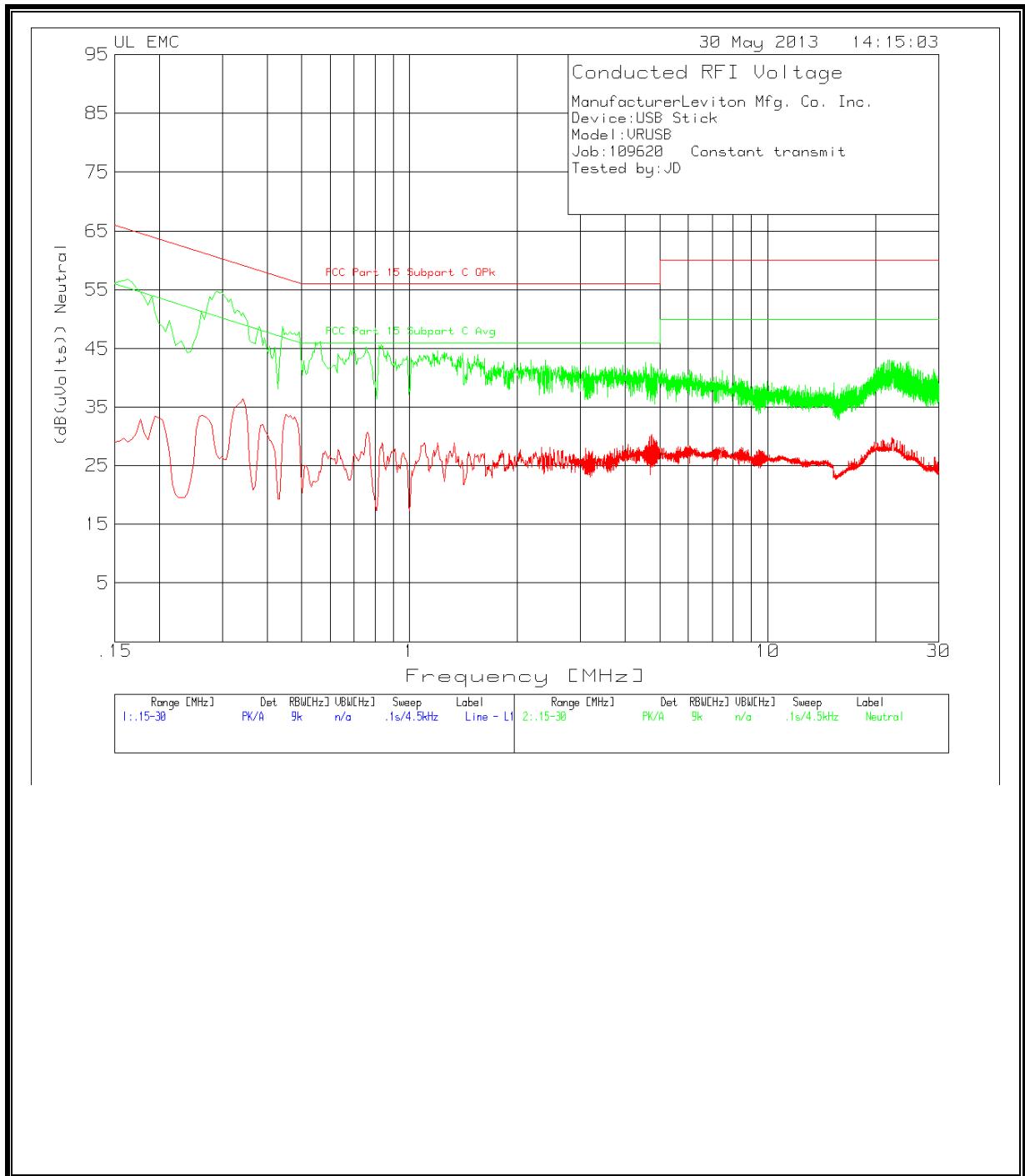
LIMIT 1: FCC Part 15 Subpart C QPk

LIMIT 2: FCC Part 15 Subpart C Avg

LINE 1 RESULTS

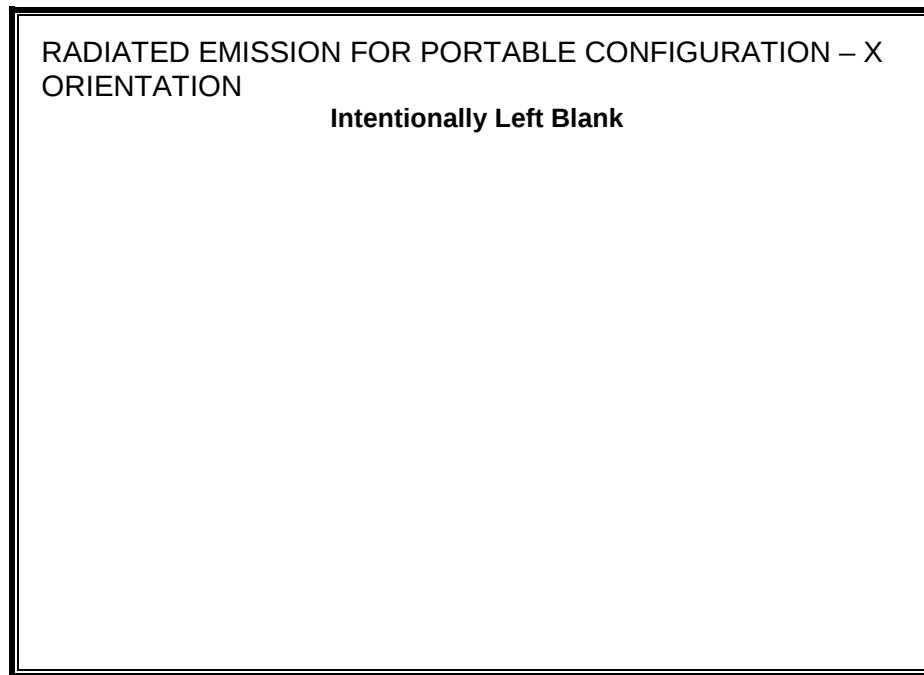


LINE 2 RESULTS



10 SETUP PHOTOS

RADIATED EMISSION FOR PORTABLE CONFIGURATION – X ORIENTATION



RADIATED EMISSION FOR PORTABLE CONFIGURATION – Y ORIENTATION

RADIATED EMISSION FOR PORTABLE CONFIGURATION – Y
ORIENTATION

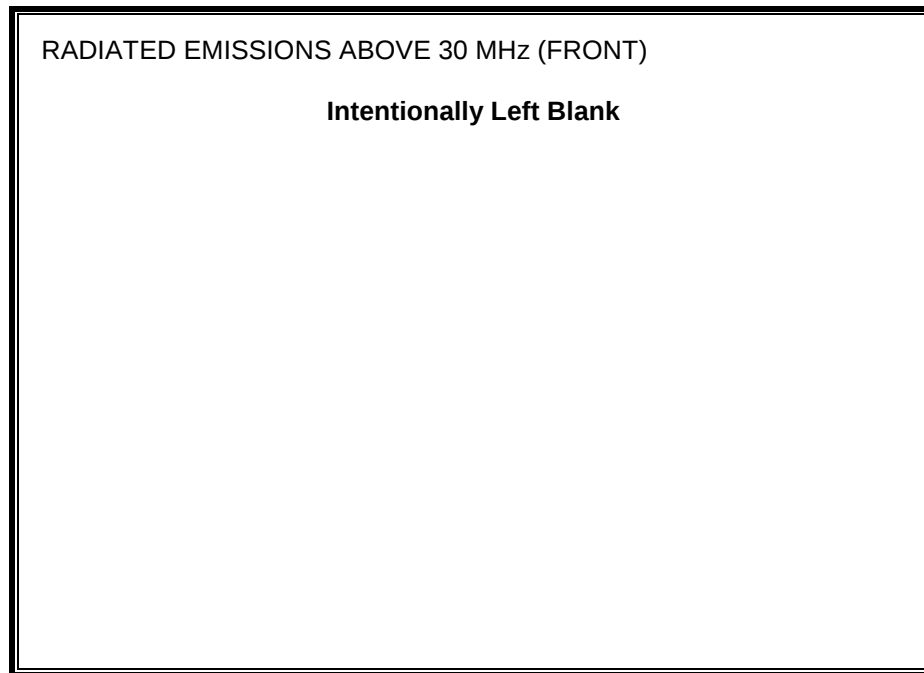
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RADIATED EMISSION FOR PORTABLE CONFIGURATION – Z ORIENTATION

RADIATED EMISSION FOR PORTABLE CONFIGURATION – Z
ORIENTATION

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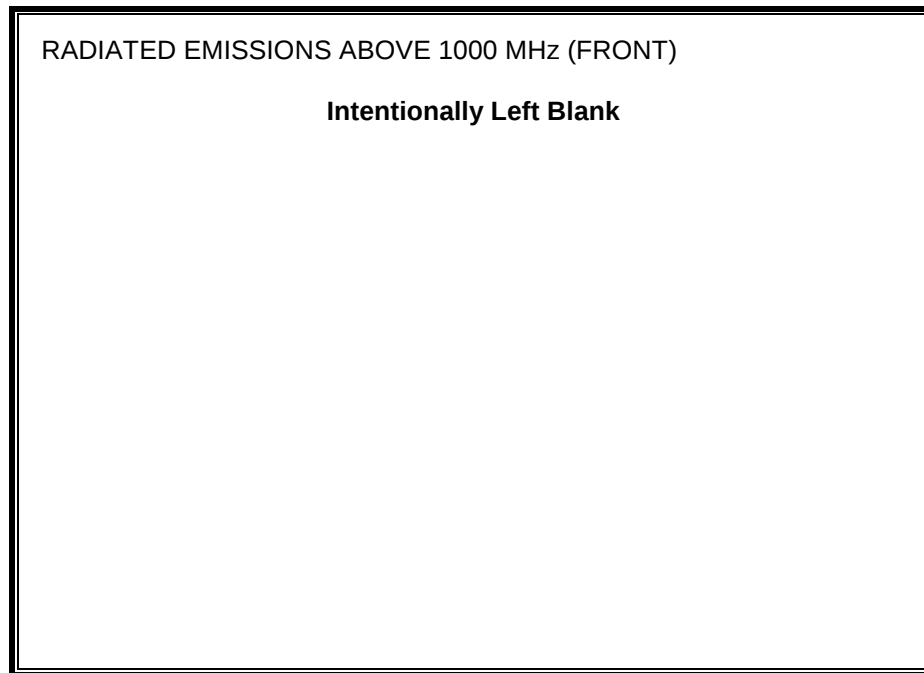
RADIATED EMISSION ABOVE 30 MHz



RADIATED EMISSIONS ABOVE 30 MHz (BACK)

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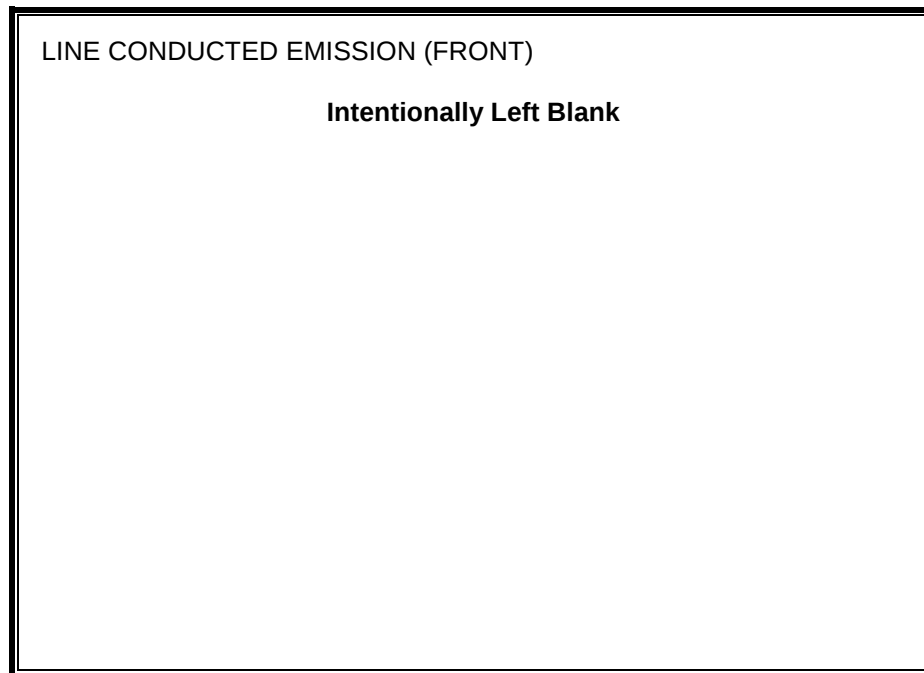
RADIATED EMISSION ABOVE 1000MHz



RADIATED EMISSIONS ABOVE 1000 MHz (BACK)

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AC MAINS LINE CONDUCTED EMISSION



LINE CONDUCTED EMISSION (BACK)

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END OF REPORT