



Engineering and Testing for EMC and Safety Compliance



Accredited under A2LA Testing Certificate # 2653.01

Radiated Test Data

for

Models: Pencil, Panic, Repeater

**Resolution Engineering, LLC
226 Locust Street, Suite 4
Hudson, WI 54016**

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Rhein Tech Laboratories, Inc.
 360 Herndon Parkway, Suite 1400
 Herndon, VA 20170
<http://www.rheintech.com>

Client: Resolution Engineering, LLC.
 Models: Pencil, Panic, Repeater
 Standards: FCC 15.231(b)
 Report #: 2009209

Repeater – Horizontal Peak

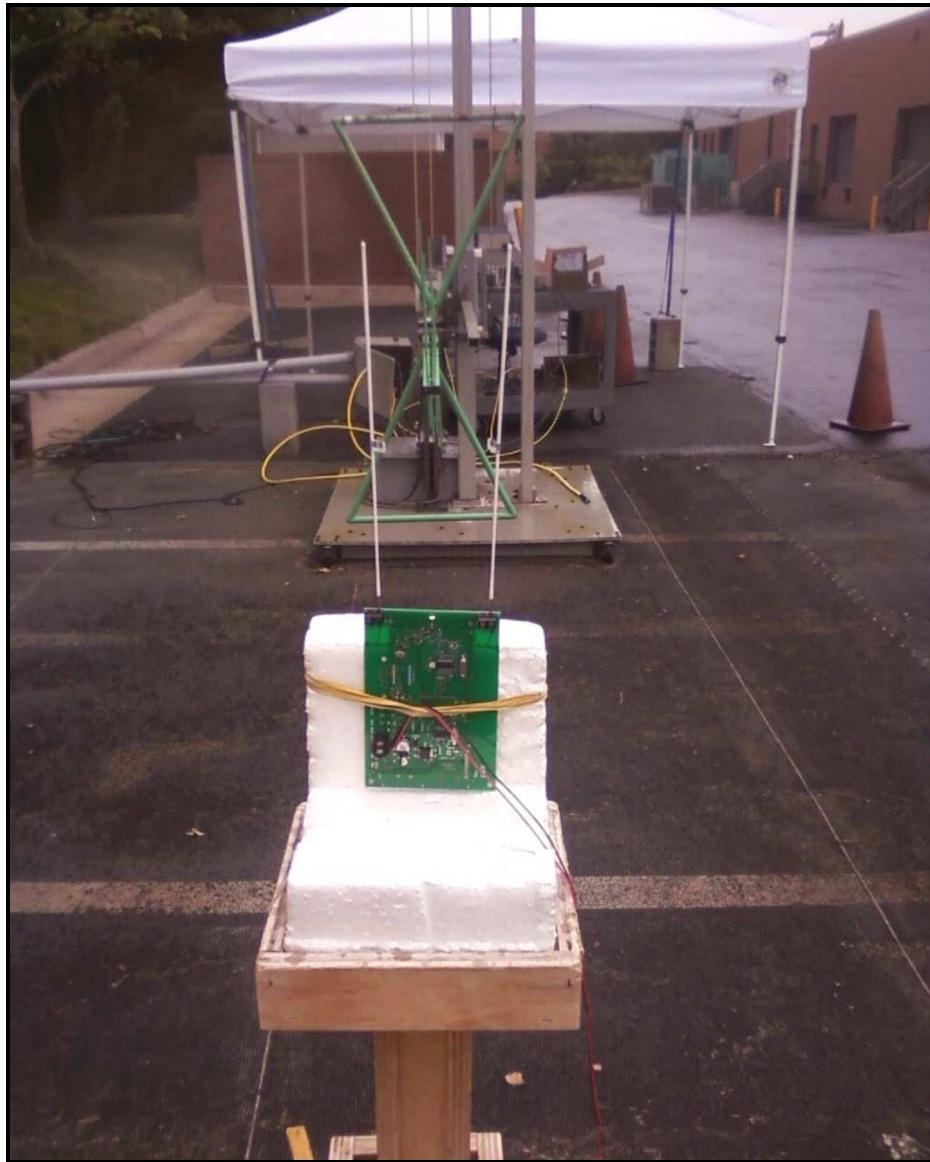
Frequency (MHz)	Horizontal Peak (dBuV)	Site Correction Factor (dB/m)	Corrected Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)
345.0	111.2	-14.6	96.6	97.3	-0.7
690.0	68.8	-7.2	61.6	77.3	-15.7
1035.0	48.9	-2.5	46.4	74.0	-27.6
1380.0	45.7	2.1	47.8	74.0	-26.2
1725.0	38.5	5.4	43.9	77.3	-33.4
2070.0	45.8	-1.1	44.7	77.3	-32.6
2415.0	54.4	-0.4	54.0	77.3	-23.3
2760.0	51.7	-0.5	51.2	74.0	-22.8
3105.0	59.0	-3.2	55.8	77.3	-21.5
3450.0	55.2	-2.9	52.3	77.3	-25.0

Repeater – Vertical Peak

Frequency (MHz)	Vertical Peak (dBuV)	Site Correction Factor (dB/m)	Corrected Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)
345.0	111.9	-14.6	97.3	97.3	0.0
690.0	70.5	-7.2	63.3	77.3	-14.0
1035.0	45.7	-2.5	43.2	74.0	-30.8
1380.0	49.5	2.1	51.6	74.0	-22.4
1725.0	37.9	5.4	43.3	77.3	-34.0
2070.0	48.8	-1.1	47.7	77.3	-29.6
2415.0	52.2	-0.4	51.8	77.3	-25.5
2760.0	52.8	-0.5	52.3	74.0	-21.7
3105.0	55.3	-3.2	52.1	77.3	-25.2
3450.0	51.3	-2.9	48.4	77.3	-28.9

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Repeater Front View

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Repeater Back View

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Test Equipment List

Barcode	Manufacturer	Model	Part Type	Serial Number	Calibration Due
901516	Insulated Wire, Inc.	KPS-1503-2400-KPS	RF cable, 20'	NA	10/17/09
901517	Insulated Wire Inc.	KPS-1503-360-KPS	RF cable 36"	NA	10/17/09
901365	MITEQ	JS4-00102600-41-5P	Amplifier, 0.1-26 GHz, 30dB gain	N/A	3/4/10
900791	Chase	CBL6111B	Bilog antenna (30 MHz – 2000 MHz)	N/A	12/12/10
901215	Hewlett Packard	8596EM	Spectrum Analyzer (9kHz-12.8GHz)	3826A00144	10/23/09
900772	EMCO	3161-02	Horn Antenna (2 - 4 GHz)	9804-1044	6/14/10
900905	Rhein Tech Labs	PR-1040	OATS 1 Preamplifier 40dB (30 MHz – 2 GHz)	1006	4/10/10
900913	Hewlett Packard	85462A	EMI Receiver RF Section (9 KHz – 6.5 GHz)	3325A00159	6/8/10

Note: Limit/Distance: FCC 15.231(b)/3m

Test Personnel:

Daniel W. Baltzell
Test Engineer

Signature

June 29, 30, 2009

Dates Of Tests