

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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360 Herndon Parkway Suite 1400 Herndon, VA 20170 Tel: 703-689-0368 Fax: 703-689-2056 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

Pencil 319.5 MHz - Horizontal Peak

Frequency (MHz)	Horizontal Peak (dBuV)	Site Correction Factor (dB/m)	Corrected Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)
319.5	102.1	-15.3	86.8	95.9	-9.1
639.0	68.1	-8.4	59.7	75.9	-16.2
958.5	51.8	-3.4	48.4	75.9	-27.5
1278.0	51.7	1.1	52.8	75.9	-23.1
1597.5	41.4	4.8	46.2	74.0	-27.8
1917.0	37.2	8.0	45.2	75.9	-30.7
2236.5	46.3	-1.3	45.0	74.0	-29.0
2556.0	44.2	-1.8	42.4	75.9	-33.5
2875.5	42.0	-0.4	41.6	74.0	-32.4
3195.0	39.9	-3.5	36.4	75.9	-39.5

Pencil 319.5 MHz - Vertical Peak

Frequency (MHz)	Vertical Peak (dBuV)	Site Correction Factor (dB/m)	Corrected Peak (dBuV/m)	Limit (dBuV/m)	Margin (dB)
319.5	102.9	-15.3	87.6	95.9	-8.3
639.0	67.6	-8.4	59.2	75.9	-16.7
958.5	50.2	-3.4	46.8	75.9	-29.1
1278.0	51.1	1.1	52.2	75.9	-23.7
1597.5	39.0	4.8	43.8	74.0	-30.2
1917.0	31.2	8.0	39.2	75.9	-36.7
2236.5	44.2	-1.3	42.9	74.0	-31.1
2556.0	42.8	-1.8	41.0	75.9	-34.9
2875.5	42.3	-0.4	41.9	74.0	-32.1
3195.0	41.7	-3.5	38.2	75.9	-37.7

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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

Daniel W. Bolgel

June 29, 30, 2009

Dates Of Tests