



Engineering and Testing for EMC and Safety Compliance



FCC 15.231 Radiated Test Data

for Model:

RE324 433.9 MHz

for

Resolution Engineering

RTL Project Number 2010117

Test Engineer: Jon Wilson

Radiated Test Data - OATS 1

Test Date: June 24, 2010

Work Order: 2010117

Customer Reference: na

Model: RE324

Mode: Antenna 1

Name: Jon Wilson

Limit/Distance: FCC B/3m

Emission Frequency (MHz)	Test Detector	Antenna Polarity (H/V)	Analyzer Reading (dBuV)	Site Correction Factor (dB/m)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pass/Fail
433.930	Peak	V	63.5	32.9	96.4	100.8	-4.4	Pass
867.838	Peak	V	45.2	0.7	45.9	80.8	-34.9	Pass
1301.778	Peak	H	70.2	8.4	78.6	80.8	-2.2	Pass
1735.698	Peak	H	49.1	13.1	62.2	80.8	-18.6	Pass
2169.650	Peak	V	63.0	-3.4	59.6	80.8	-21.2	Pass
2603.580	Peak	H	59.6	-2.2	57.4	80.8	-23.4	Pass
3037.510	Peak	V	55.4	-1.6	53.8	80.8	-27.0	Pass
3471.440	Peak	V	49.3	-1.3	48.0	80.8	-32.8	Pass
3905.370	Peak	H	57.5	0.0	57.5	80.8	-23.3	Pass
4339.300	Peak	H	40.9	4.6	45.5	80.8	-35.3	Pass

Radiated Test Data - OATS 1

Test Date: June 24, 2010

Work Order: 2010117

Customer Reference: na

Model: RE324

Mode: Antenna 2

Name: Jon Wilson

Limit/Distance: FCC B/3m

Emission Frequency (MHz)	Test Detector	Antenna Polarity (H/V)	Analyzer Reading (dBuV)	Site Correction Factor (dB/m)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pass/Fail
433.93	Peak	H	62.8	32.9	95.7	100.8	-5.1	Pass
867.84	Peak	V	46.4	0.7	47.1	80.8	-33.7	Pass
1301.782	Peak	H	70.2	8.4	78.6	80.8	-2.2	Pass
1735.698	Peak	H	46.8	13.1	59.9	80.8	-20.9	Pass
2169.650	Peak	H	62.4	-3.4	59.0	80.8	-21.8	Pass
2603.580	Peak	H	58.9	-2.2	56.7	80.8	-24.1	Pass
3037.510	Peak	H	55.7	-1.6	54.1	80.8	-26.7	Pass
3471.440	Peak	H	51.2	-1.3	49.9	80.8	-30.9	Pass
3905.370	Peak	H	56.8	0.0	56.8	80.8	-24.0	Pass
4339.300	Peak	H	40.9	4.6	45.5	80.8	-35.3	Pass

Notes:

Device was tested through its three orthogonal planes (X, Y, Z axis) as shown in the photographs beginning on p. 3. The test antenna was raised and lowered from 1-4 meters and polarized. These steps were taken in order to find the maximum emission level at each frequency.

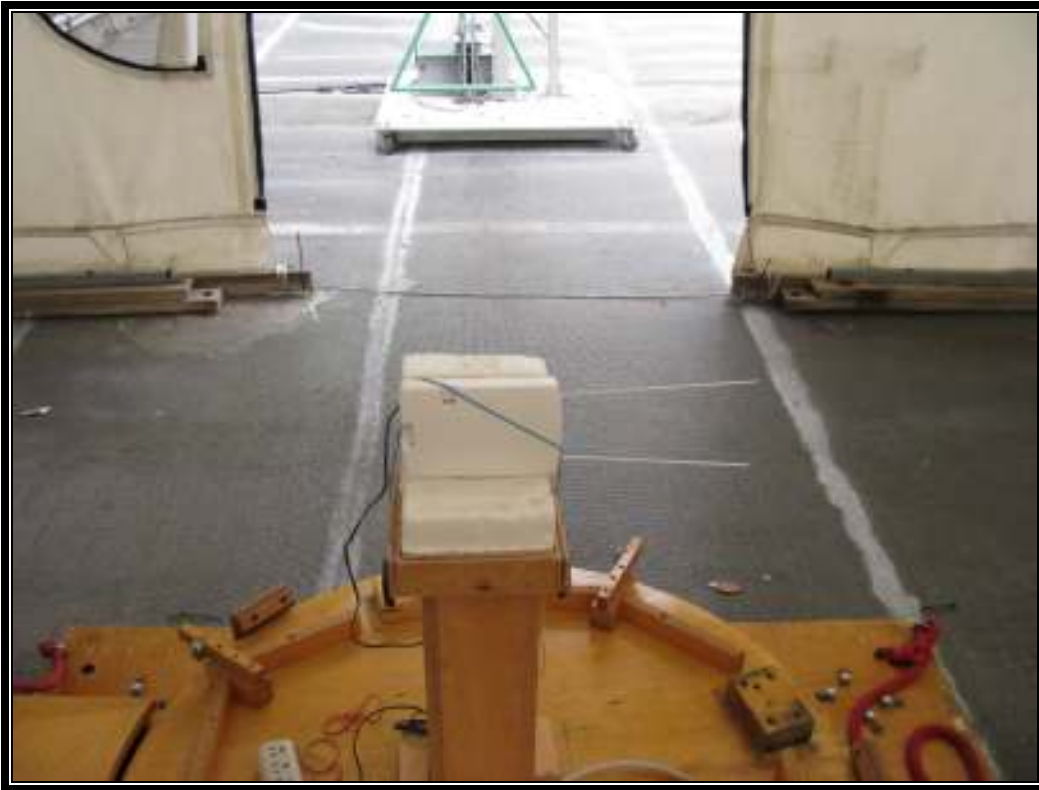
Radiated Emissions Test Equipment

Part	Manufacturer	Model	Serial Number	RTL Bar Code	Calibration Due Date
Amplifier (20 MHz-2 GHz)	Rhein Tech Laboratories, Inc.	PR-1040	900905	900905	4/10/2011
Bilog Periodic Antenna (25 MHz-2 GHz)	Schaffner Chase	CBL6112	2099	900791	12/12/2010
EMI Receiver RF Section (9 KHz-6.5 GHz)	Hewlett Packard	85462A	3325A00159	900913	6/8/2011
RF Filter Section (100 KHz-6.5 GHz)	Hewlett Packard	85460A	3330A00107	900914	6/8/2011
Spectrum Analyzer	Hewlett Packard	8596EM	3826A00144	901215	11/23/2010
Amplifier (1 GHz – 26.4 GHz)	Rhein Tech Laboratories, Inc.	JS4-01002600-36-5P	849863	901364	2/22/2010
Horn Antenna, 2.0-4.0 GHz	EMCO	3161-02	9804-1044	900772	6/13/2011
Horn Antenna, 4.0-8.2 GHz	EMCO	3161-03	9508-1020	900321	6/13/2011
Emissions Testing Software	Rhein Tech Laboratories, Inc.	Automated Emission Tester	Rev. 14.0.2	N/A	N/A

X-Axis



Y-Axis



Z-Axis

