Engineering and Testing for EMC and Safety Compliance

Radiated Test Data

for Model:

Driveway Sensor 319 MHz

for

Resolution Engineering

RTL Project Number 2009319

Test Engineer: Jon Wilson

Radiated Test Data - OATS 1
Test Date: April 21, 2010 - 12:01:00 PM
Work Order: 2009319
Customer Reference: na
Model: 319.5 MHz (RTL BC# 019362)
Name: Jon Wilson
Limit/Distance: FCC A/3m

Emission Frequency (MHz)	Test Detector	Analyzer Reading (dBuV)	Site Correction Factor (dB/m)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pass/ Fail
319.570	Pk	65.8	29.3	95.1	95.9	-0.8	Pass
639.122	Pk	70.6	-4.1	66.5	75.9	-9.4	Pass
958.660	Pk	66.1	2.3	68.4	75.9	-7.5	Pass
1278.205	Pk	41.6	7.8	49.4	75.9	-26.5	Pass
1597.778	Pk	55.5	12.0	67.5	75.9	-8.4	Pass
1917.323	Pk	54.0	15.8	69.8	75.9	-6.1	Pass
2236.500	Pk	76.5	-8.2	68.3	75.9	-7.6	Pass
2556.000	Pk	66.3	0.2	66.5	75.9	-9.4	Pass
2875.500	Pk	54.6	16.1	70.7	75.9	-5.2	Pass
3195.000	Pk	24.5	33.6	58.1	75.9	-17.8	Pass

Notes:
Device was tested through its thee orthogonal planes (X, Y, Z axis) and 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.
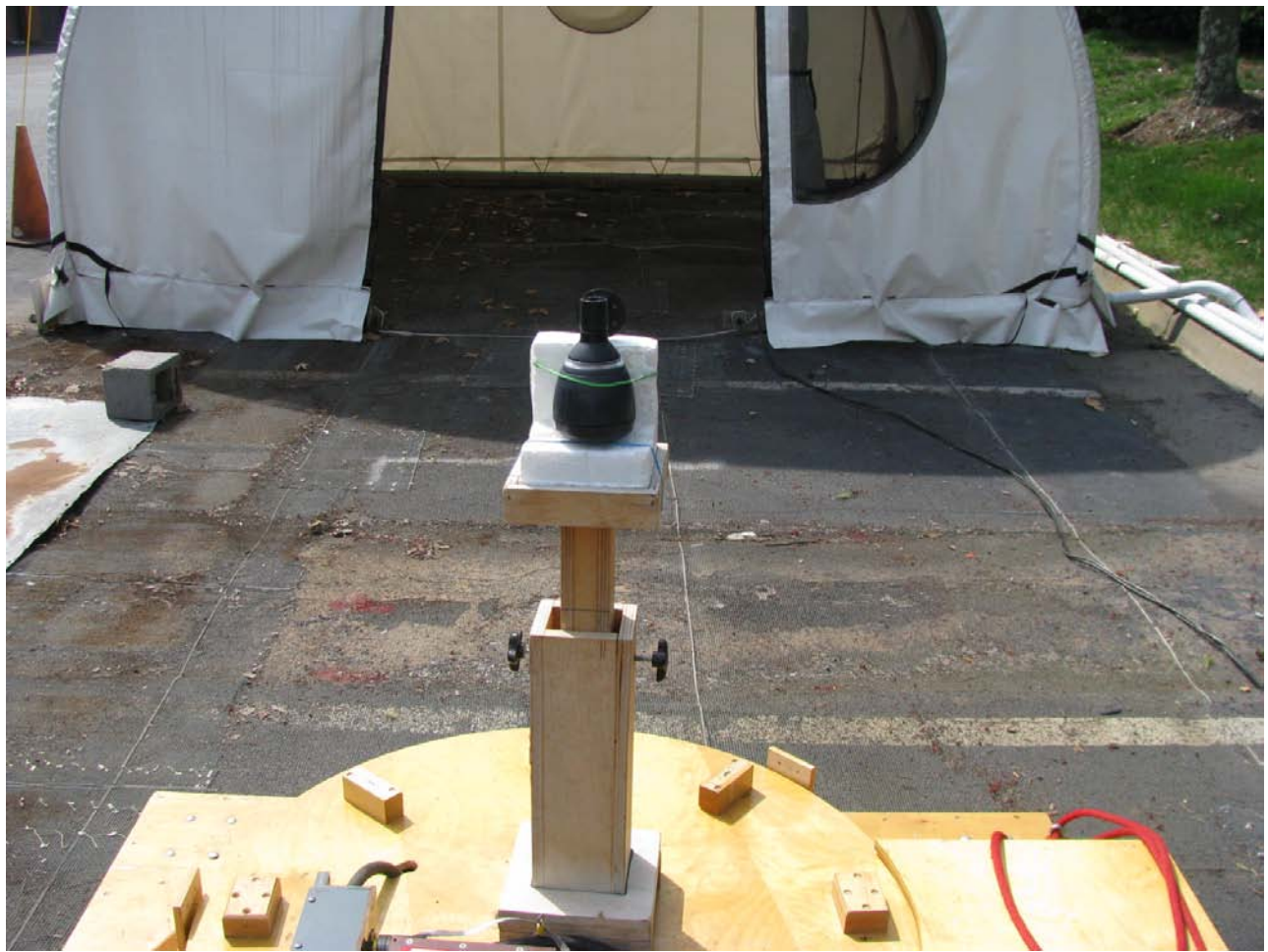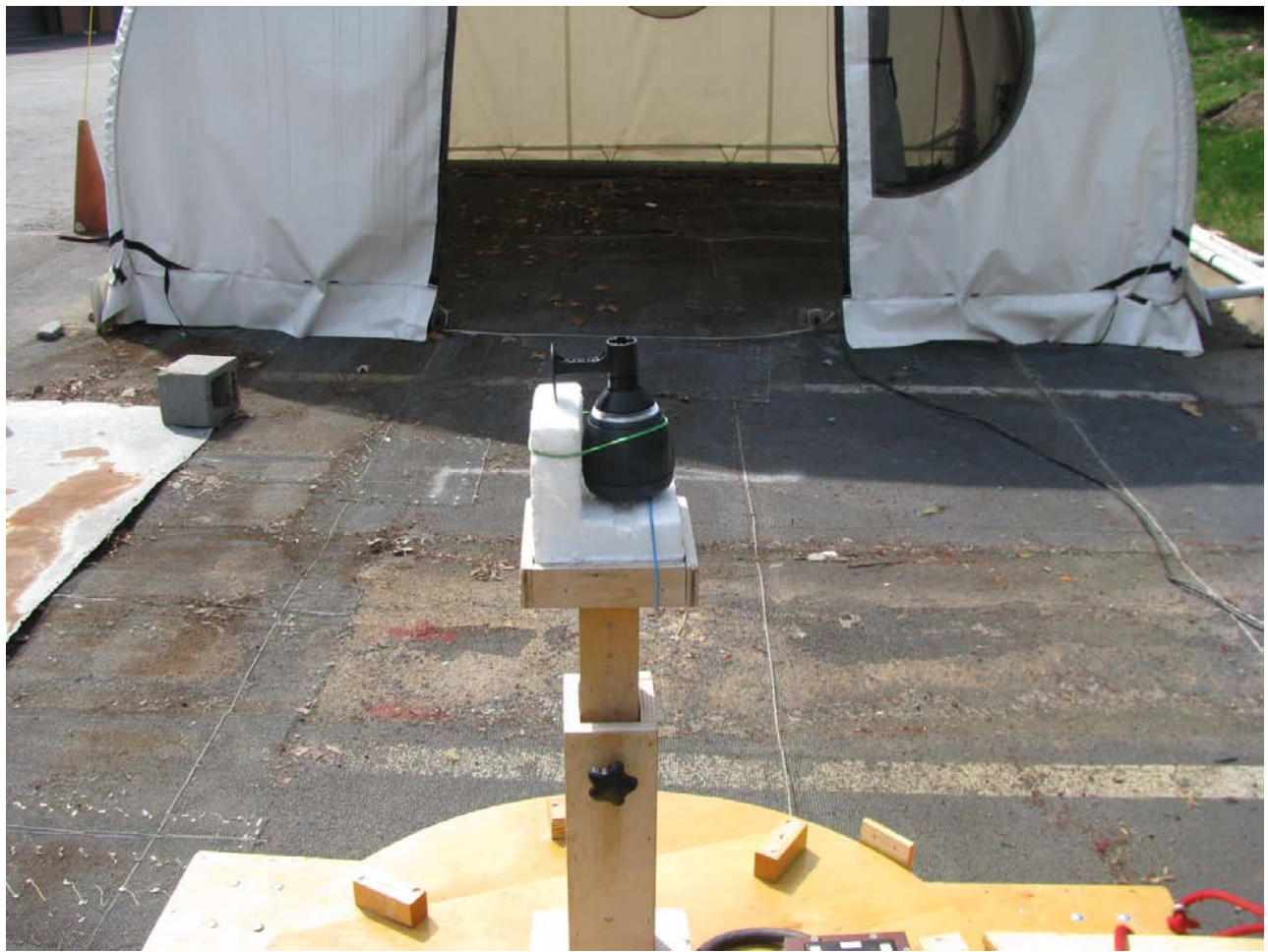
Radiated Emissions Test Equipment

Part	Manufacturer	Model	Serial Number	RTL Bar Code	Calibration Due Date
Amplifier (20 MHz-2 GHz)	Rhein Tech Laboratories, Inc.	PR-1040	900905	900905	5/10/2010
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	6/8/2010
RF Filter Section (100 KHz-6.5 GHz)	Hewlett Packard	85460A	3330A00107	900914	6/8/2010
Spectrum Analyzer	Hewlett Packard	8596EM	3826A00144	901215	11/23/2010
Amplifier	Rhein Tech Laboratories, Inc.	PR-1040	1003	900811	7/8/2011
Horn Antenna, 2.0-4.0 GHz	EMCO	3161-02	9804-1044	900772	6/13/2010
Emissions Testing Software	Rhein Tech Laboratories, Inc.	Automated Emission Tester	Rev. 14.0.2	N/A	N/A