

EMC Test Report

Project Number: 3101838

Report Number: 3101838EMC03

Revision Level: 1

Client: Radio Systems

Equipment Under Test: Invisible Fence pet containment unit

Model Name: Invisible Fence GPS Base

Model Number: RIG00-13727

Applicable Standards: FCC Part 95J

Report issued on: 13 June 2013

Test Result: Compliant

Tested by:



Brian Forster
EMC Engineer

Reviewed by:



David Schramm
EMC Manager

Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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1 Summary of Test Results

Basic Standards		Test Result
Emissions Testing		
Radiated Power: ERP		Reported

1.1 Modifications Required to Compliance

None

2 General Information

2.1 Client Information

Name: Radio Systems
 Address: 10427 Petsafe Way
 City, State, Zip, Country: Knoxville TN 37932

2.2 Test Laboratory

Name: SGS North America, Inc.
 Address: 620 Old Peachtree Road NW, Suite 100
 City, State, Zip, Country: Suwanee, GA 30024, USA

2.3 General Information of EUT

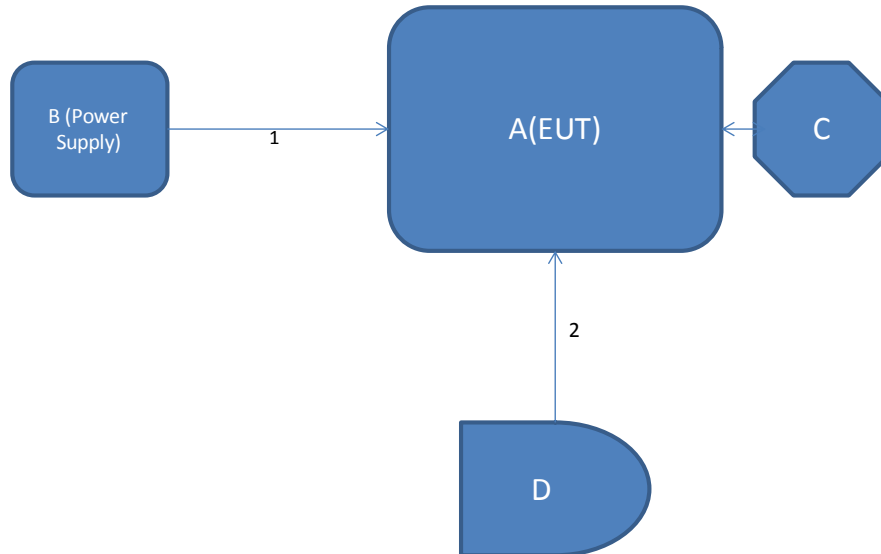
Model Name: GPSC Mobile Unit
 Model Number: RIG00-13671
 Hardware Version: 00
 Software Version: V0.407
 Rated Voltage: 3.7VDC
 Test Voltage: 3.7VDC

Sample Received Date: 20MAR2013
 Dates of testing: 27MAR to 03APR2013

2.4 Operating Modes and Conditions

The EUT was programmed by the manufacturer to run continuously exercising all modes of operation.

2.5 EUT Connection Block Diagram



2.1 System Configurations

Device reference	Manufacturer	Description	Model Number	Serial Number
A	Radio Systems	EUT	RIG00-13727	NA
B	Radio Systems	EUT Power supply	SPS-02C5-0.75-US	NA
C	Radio Systems	EUT MURS Antenna	100-1130 Rev0	NA
D	Radio Systems	GPS Antenna	NA	NA

2.2 Cable List

Cable reference	Port Name	Start	End	Cable Length (m)	Ferrite installed?	Shielded?
1	DC Power	AC Mains	EUT	1.9	N	N
2	GPS Receive	GPS Antenna	EUT	4.86	N	Y

3 Radiated ERP

3.1 Test Result

Test Description	Product Specific Standard	Test Result
Radiated ERP	FCC Part 1.1310	Compliant

3.2 Test Method

The EUT was placed in the ALSE uniform field and was made to function as indicated in the "Operating Modes and Conditions" section of this report. The test system was set to generate the required field strength. The EUT was monitored for performance.

3.3 Test Site

3m Absorber Lined Shielded Enclosure, SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 24.0 °C
 Relative Humidity: 23.3 %
 Atmospheric Pressure: 98.4 kPa

3.4 Test Equipment

Test Start Date: 4/1/2013

Tested By: BKF

Test End Date: 4/2/2013

Equipment	Model	Manufacturer	Asset Number	Cal Due Date
BiLog Antenna	JB6	Sunol	B079690	12-Sep-13
Receiver	ESU40	R & S	B079629	24-Sep-13
Coaxial Cable	Sucoflex 106	Huber+Suhner	B079714	13-Aug-13
Coaxial Cable	Sucoflex 106	Huber+Suhner	B079661	13-Aug-13

Note: The calibration period equipment is 1 year.

3.5 Test Data

Band of Operation		Conducted Power, dBm	
Type	MHz	dBm	mW
MURS	151.2	14.1	25

Antenna Gain
-1.1

Cable Loss

Band of Operation	Peak Radiated Power, dBm		Average EIRP (50% duty cycle)	Distance (R)	Power Density $EIRP_{Avg}/(4\pi R^2)$	FCC/IC Limit	Verdict	Verdict
Type	dBm	mW	mW	cm	mW	mW/cm ²		
MURS	13.0	20	10	20	0.00197	0.20	Pass	Pass

4 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	6 June 2013
1	Corrected limit.	13 June 2013