FCC Part 15.247
Transmitter Certification

Frequency Hopping Spread Spectrum Transmitter

Test Report

FCC ID: P2SNTGR900G

FCC Rule Part: 15.247

ACS Report Number: 06-0101-15C

Manufacturer: Neptune Technology Group, Inc.
Model: R900G

Test Begin Date: March 16, 2006
Test End Date: March 17, 2006

Report Issue Date: April 3, 2006

FOR THE SCOPE OF ACCREDITATION UNDER LAB Code 200612

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This report contains 18 pages

Table of Contents

Additional Exhibits Included In Filing

Internal Photographs
External Photographs
Test Setup Photographs
Product Labeling
RF Exposure – MPE Calculations
Installation/Users Guide
Theory of Operation
BOM (Parts List)
System Block Diagram
Schematics

1.0 GENERAL

1.1 Purpose
The purpose of this report is to demonstrate compliance with Part 15, Subpart C of the FCC's Code of Federal Regulations.

1.2 Product Description

1.2.1 General
The R900G is a one-way RF module that operates in the unlicensed 902-928MHz bandwidth. The data is transmitted via a high power signal to an enhanced data collection device, boosting range and meter reading success rates, while reducing meter reading time.

The R900G will attach to new or existing meters, and encodes consumption and tamper information from the meter to a handheld, mobile, or a targeted fixed network reading device.

Detailed photographs of the EUT are filed separately with this filing.

1.2.2 Intended Use
The R900G will be a transmit-only meter module that collects and transmits metering data over the 902 - 928 MHz Industrial, Scientific and Medical (ISM) RF band for collection by electric utility companies.

2.0 TEST FACILITIES

2.1 Location
The radiated and conducted emissions test sites are located at the following address:

Advanced Compliance Solutions
5015 B.U. Bowman Drive
Buford, GA 30518
Phone: (770) 831-8048
Fax: (770) 831-8598

2.2 Laboratory Accreditations/Recognitions/Certifications
The Semi-Anechoic Chamber Test Site, Open Area Test Site (OATS) and Conducted Emissions Site have been fully described, submitted to, and accepted by the FCC, Industry Canada and the Japanese Voluntary Control Council for Interference by information technology equipment. In addition, ACS is compliant to ISO 17025 as certified by the National Institute of Standards and Technology under their National Voluntary Laboratory Accreditation Program. The following certification numbers have been issued in recognition of these accreditations and certifications:

FCC Registration Number: 89450
Industry Canada Lab Code: IC 4175
VCCI Member Number: 1831
- VCCI OATS Registration Number R-1526
- VCCI Conducted Emissions Site Registration Number: C-1608

NVLAP Lab Code: 200612

2.3 Radiated Emissions Test Site Description

2.3.1 Semi-Anechoic Chamber Test Site

The Semi-Anechoic Chamber Test Site consists of a 20' x 30' x 18' shielded enclosure. The chamber is lined with Toyo Ferrite Grid Absorber, model number FFG-1000. The ferrite tile grid is 101 x 101 x 19mm thick and weighs approximately 550 grams. These tiles are mounted on steel panels and installed directly on the inner walls of the chamber.

The turntable is 150cm in diameter and is located 160cm from the back wall of the chamber. The chamber is grounded via 1 - 8' copper ground rod, installed at the center of the back wall, it is bound to the ground plane using 3/4" stainless steel braided cable.

The turntable is all steel, flush mounted table installed in an all steel frame. The table is remotely operated from inside the control room located 25' from the range. The turntable is electrically bonded to the surrounding ground plane via steel fingers installed on the edge of the turn table. The steel fingers make constant contact with the ground plane during operation.

Behind the turntable is a 3' x 6' x 4' deep shielded pit used for support equipment if necessary. The pit is equipped with 1 - 4" PVC chases from the turntable to the pit that allow for cabling to the EUT if necessary. The underside of the turntable can be accessed from the pit so cables can be supplied to the EUT from the pit.

A diagram of the Semi-Anechoic Chamber Test Site is shown in Figure 2.3-1 below:

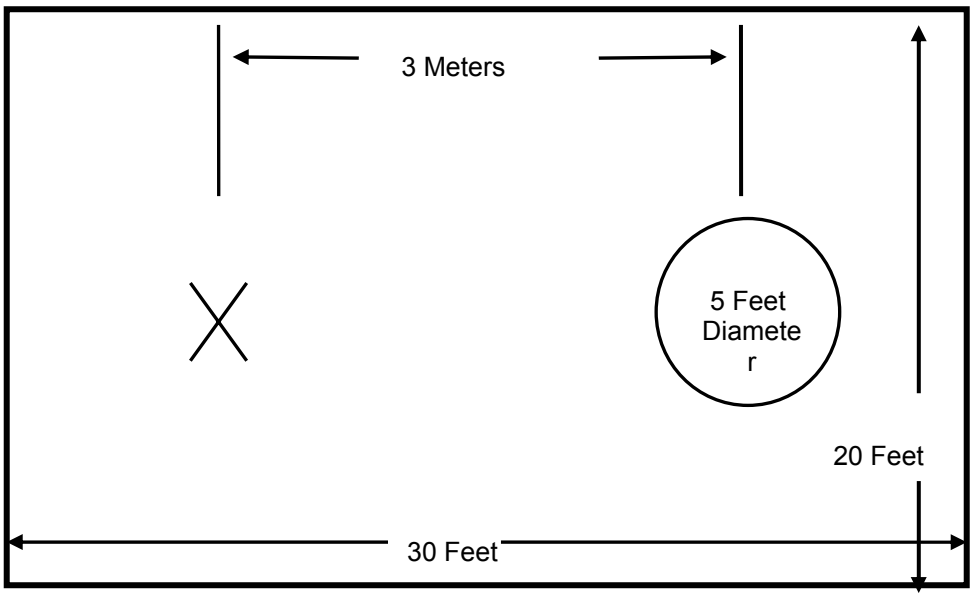

Figure 2.3-1: Semi-Anechoic Chamber Test Site

2.3.2 Open Area Tests Site (OATS)

The open area test site consists of a 40' x 66' concrete pad covered with a perforated electro-plated galvanized sheet metal. The perforations in the sheet metal are 1/8" holes that are staggered every 3/16". The individual sheets are placed to overlap each other by 1/4" and are riveted together to provide a continuous seam. Rivets are spaced every 3" in a 3 x 20 meter perimeter around the antenna mast and EUT area. Rivets in the remaining area are spaced as necessary to properly secure the ground plane and maintain the electrical continuity.

The entire ground plane extends 12' beyond the turntable edge and 16' beyond the antenna mast when set to a 10 meter measurement distance. The ground plane is grounded via 4 - 8' copper ground rods, each installed at a corner of the ground plane and bound to the ground plane using 3/4" stainless steel braided cable.

The turntable is an all aluminum 10' flush mounted table installed in an all aluminum frame. The table is remotely operated from inside the control room located 40' from the range. The turntable is electrically bonded to the surrounding ground plane via steel fingers installed on the edge of the turn table. The steel fingers make constant contact with the ground plane during operation.

Adjacent to the turntable is a 7' x 7' square and 4' deep concrete pit used for support equipment if necessary. The pit is equipped with 5 - 4" PVC chases from the pit to the control room that allow for cabling to the EUT if necessary. The underside of the turntable can be accessed from the pit so cables can be supplied to the EUT from the pit. The pit is covered with 2 sheets of 1/4" diamond style re-enforced steel sheets. The sheets are painted to match the perforated steel ground plane; however the underside edges have been masked off to maintain the electrical continuity of the ground plane. All reflecting objects are located outside of the ellipse defined in ANSI C63.4.

A diagram of the Open Area Test Site is shown in Figure 2.3-2 below:

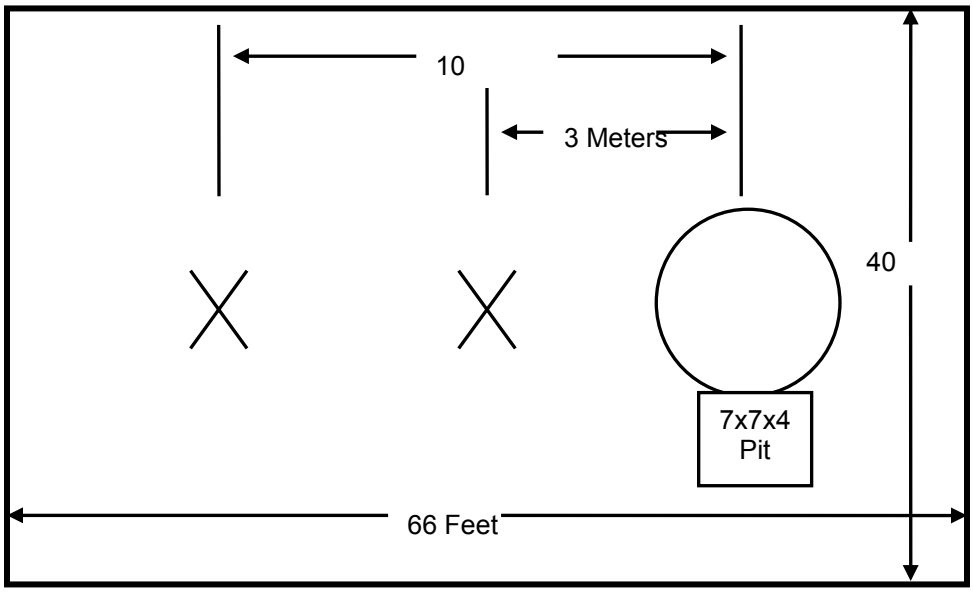

Figure 2.3-2: Open Area Test Site

2.4 Conducted Emissions Test Site Description

The AC mains conducted EMI site is a shielded room with the following dimensions:

- Height: 3.0 Meters
- Width: 3.6 Meters
- Length: 4.9 Meters

The room is manufactured by Rayproof Corporation and installed by Panashield, Inc. Earth ground is provided to the room via an 8' copper ground rod. Each panel of the room is connected electrically at intervals of 4".

Power to the room is filtered to prevent ambient noise from coupling to the EUT and measurement equipment. Filters are models 1B42-60P manufactured by Rayproof Corporation.

The room is of sufficient size to test table top and floor standing equipment in accordance with section 6.1.4 of ANSI C63.4.

A diagram of the room is shown below in figure 2.4-1:

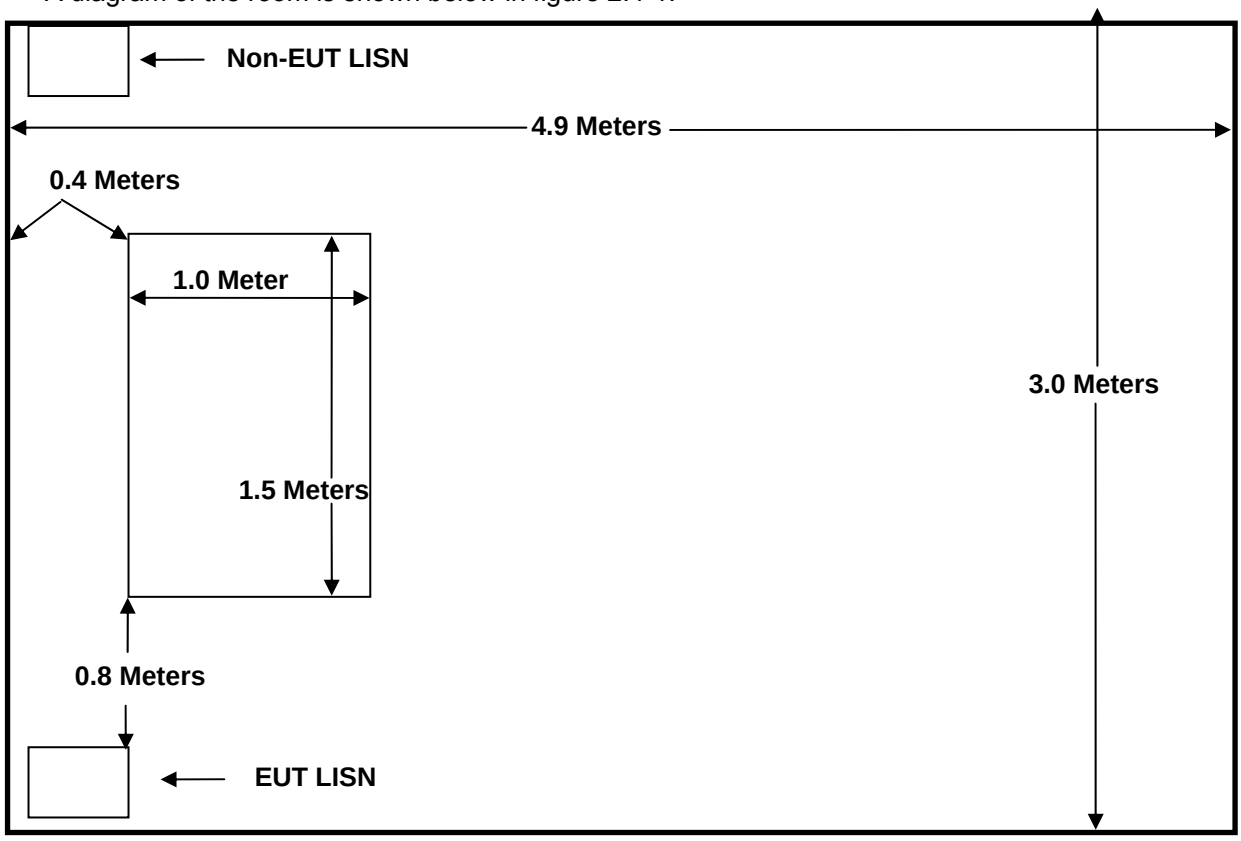

Figure 2.4-1: AC Mains Conducted EMI Site

3.0 APPLICABLE STANDARD REFERENCES

The following standards were used:

- ANSI C63.4-2003: Method of Measurements of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the 9KHz to 40GHz
- US Code of Federal Regulations (CFR): Title 47, Part 2, Subpart J: Equipment Authorization Procedures
- US Code of Federal Regulations (CFR): Title 47, Part 15, Subpart C: Radio Frequency Devices, Intentional Radiators
- FCC OET Bulletin 65 Appendix C - Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields

4.0 LIST OF TEST EQUIPMENT

All test equipment used for regulatory testing is calibrated yearly or according to manufacturer's specifications.

Table 4.0-1: Test Equipment

Equipment Calibration Information					
ACS#	**Mfg.**	**Eq. type**	**Model**	**S/N**	**Cal. Due**
☐ 25	Chase	Bi-Log Antenna	CBL6111	1043	5/23/06
☐ 22	Agilent	Pre-Amplifier	8449B	3008A00526	5/06/06
☐ 73	Agilent	Pre-Amplifier	8447D	272A05624	5/18/06
☐ 30	Spectrum Technologies	Horn Antenna	DRH-0118	970102	5/09/06
☐ 105	Microwave Circuits	High Pass Filter	H1G810G1	2123-01 DC0225	9/13/06
☐ 3	Rohde & Schwarz	Receiver Display	804.8932.52	839379/011	11/02/06
☐ 4	Rohde & Schwarz	ESMI Receiver	1032.5640.53	833827/003	11/02/06
☐ ---	Agilent	Spectrum Analyzer	E7405A	US39110103	6/6/06
☐ 204	ACS	Cable	RG8	204	3/16/06
☐ 6	Harbour Industries	HF RF Cable	LL-335	00006	3/10/07
☐ 7	Harbour Industries	HF RF Cable	LL-335	00007	3/13/07
☐ 208	Harbour Industries	HF RF Cable	LL142	00208	3/13/07
☐ 167	ACS	Chamber EMI Cable Set	RG6	167	1/7/07
☐ 204	ACS	Chamber EMI RF cable	RG8	204	3/16/06

5.0 SUPPORT EQUIPMENT

Table 5-3: Support Equipment

Manufacturer	Equipment Type	Model Number	Serial Number	FCC ID
EUT Was Self Supporting and Standalone				

6.0 EQUIPMENT UNDER TEST SETUP BLOCK DIAGRAM

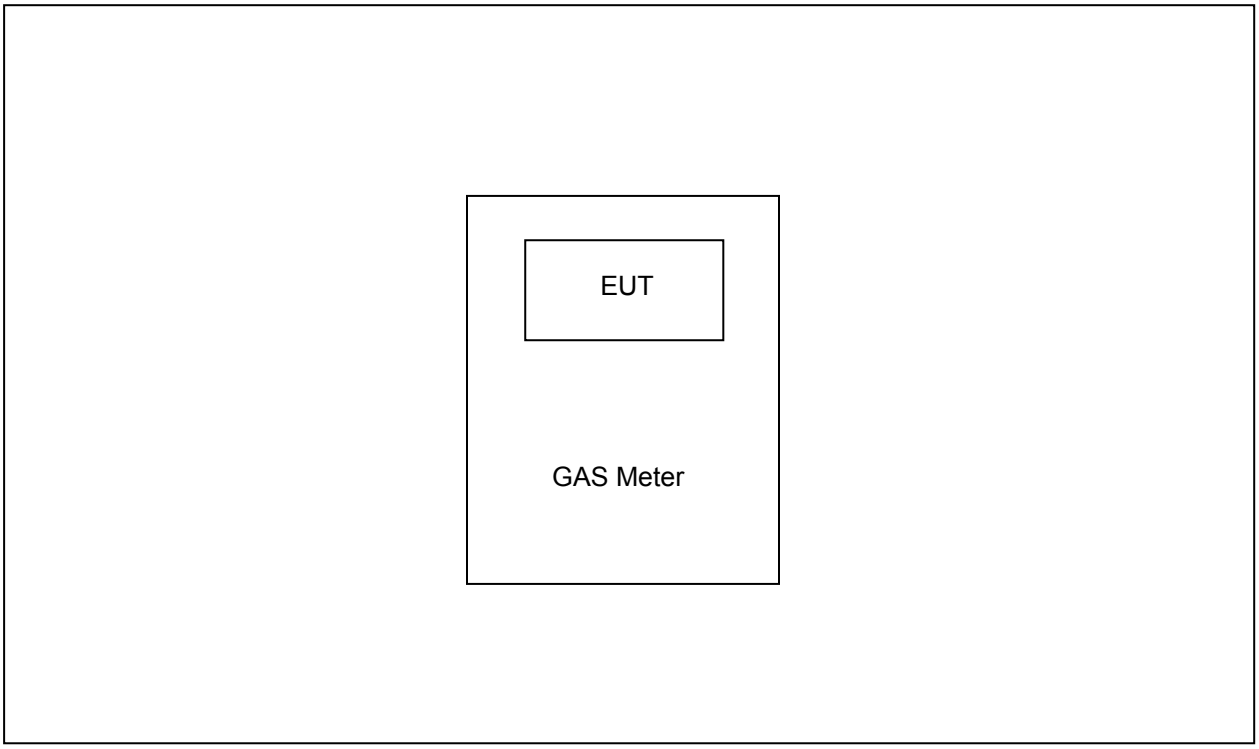

Figure 6-1: EUT Test Setup

*See Test Setup photographs for additional detail.

7.0 SUMMARY OF TESTS

Along with the tabular data shown below, plots were taken of all signals deemed important enough to document.

7.1 Antenna Requirement - FCC Section 15.203

The EUT employs a 0 dBi integrated PCB Mounted Helix antenna that cannot be modified without damaging the device.

7.2 Radiated Emissions - FCC Section 15.109(Unintentional Radiation)

7.2.1 Test Methodology

Radiated emissions tests were performed over the frequency range of 30MHz to 1 GHz. Measurements of the radiated field strength were made at a distance of 3m from the boundary of the equipment under test (EUT) and the receiving antenna. The antenna height was varied from 1m to 4m so that the maximum radiated emissions level would be detected. Radiated measurements were made with the Spectrum Analyzer's resolution bandwidth set to 120 KHz for measurements above 30MHz. Average measurements are taken with the RBW and VBW were set to 1MHz and 10 Hz respectively for measurements above 1000MHz.

7.2.2 Test Results

Results of the test are given in Table 7.2-1 below:

Table 7.2-1: Radiated Emissions Tabulated Data

Frequency MHz	Level dBµV/m	Transducer dB	Limit dBµV/m	Margin dB	Height cm	Azimuth deg
30.000	11.9	-8.4	40.0	28.1	130	13
171.680	7.9	-14.6	43.5	35.6	190	316
267.200	24.9	-11.8	46.0	21.1	110	201
276.640	20.3	-11.8	46.0	25.7	119	233
286.320	23.7	-11.4	46.0	22.3	100	310
495.360	15.8	-6.7	46.0	30.2	390	353
704.080	20.0	-2.8	46.0	26.0	110	132
868.400	28.0	-0.6	46.0	18.0	310	90
906.640	29.2	-0.2	46.0	16.8	299	322
944.800	32.9	1.7	46.0	13.1	179	90

* Note: All emissions above 944.8 MHz were attenuated below the permissible limit.

7.3 Peak Output Power – FCC Section 15.247(b)(2)

7.3.1 Test Methodology

Antenna conducted measurements could not be performed on this device, therefore radiated tests were performed to show compliance with the peak output power limit specified in Section 15.247(b) according to the alternative test methods in the FCC publication DA 00-705.

The procedures set forth in ANSI C63.4 were followed with respect to maximizing the peak emission. The resolution bandwidth of the spectrum analyzer was set to 1 MHz which was greater the 20 dB bandwidth measured in section 7.4.4. The video bandwidth was set to 3 MHz and a peak detector using the Max Hold function was utilized.

The power was calculated using the following equation:

$$P = \frac{(E * d)^2}{30 * G}$$

Where: G = Numeric Gain of the transmitting antenna with reference to an isotropic radiator
d = The distance in meters from which the field strength was measured
E = The measured maximum fundamental field strength in V/m

7.3.2 Test Results

Results are shown below in tables 7.3-1 and 7.3-2 and in figures 7.3-1 to 7.3-3 below:

Table 7.3-1: Fundamental Field Strength

Frequency (MHz)	Uncorrected Reading (dBµV/m)	Antenna Polarity (H/V)	Total Correction Factor (dB)	Corrected Reading (dBµV/m)
911.080	113.10	H	0.35	113.45
915.014	111.90	H	0.61	112.51
919.070	111.60	H	0.87	112.47

Table 7.5.2-2: Peak Output Power

Frequency (MHz)	Numeric Gain	Distance (m)	Max. Fund. Field Strength (V/m)	Output Power (dBm)
911.080	0	3	0.470	18.22
915.014	0	3	0.422	17.28
919.070	0	3	0.420	17.24

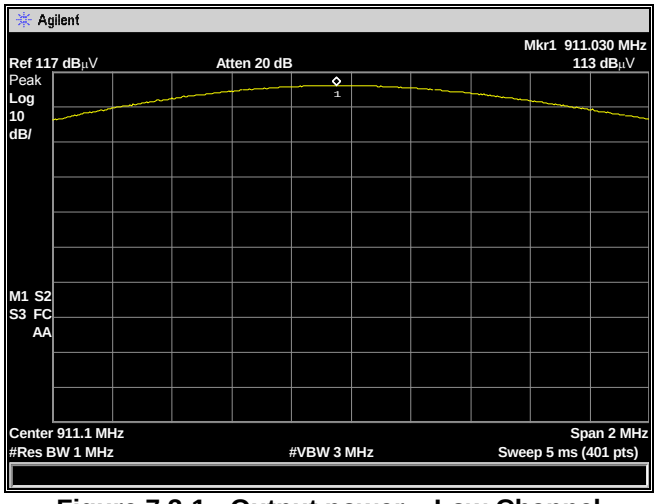

Figure 7.3-1: Output power – Low Channel

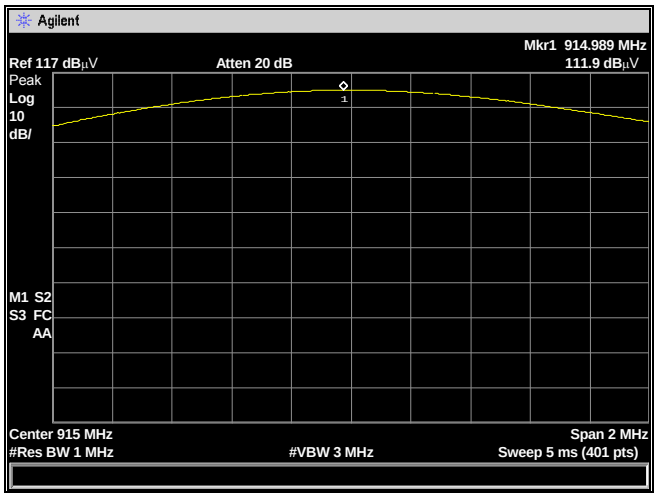

Figure 7.3-2: Output power – Mid Channel

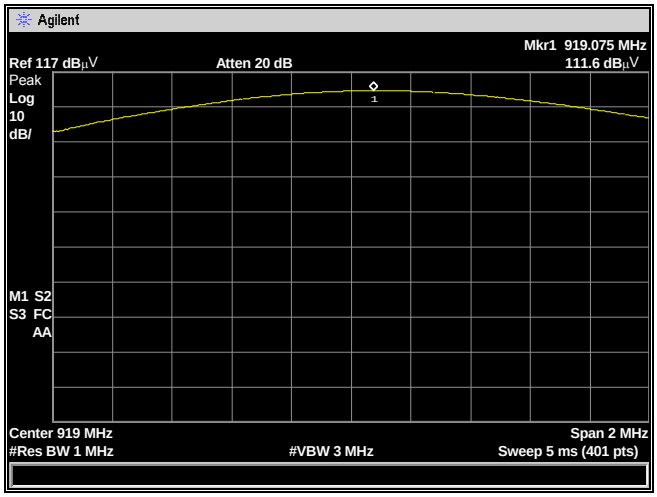

Figure 7.3-3: Output power – High Channel

7.4 Channel Usage Requirements - FCC Section 15.247(a) (1)

15.247(a)(1): Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

15.247(a) (1) (i): For frequency hopping systems operating in the 902–928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

7.4.1 Carrier Frequency Separation

7.4.1.1 Test Methodology

The span of the spectrum analyzer was set wide enough to capture two adjacent peaks and the RBW and VBW were set to ≥ 1% of the span.

7.4.1.2 Test Results

The maximum 20dB bandwidth of the hopping channel was measured to be 133.50 kHz (See figure 7.4.4-1 to 7.4.4-3 below). The adjacent channel separation was measured to be 142.31 kHz. Results are shown in figure 7.4.1-1 below:

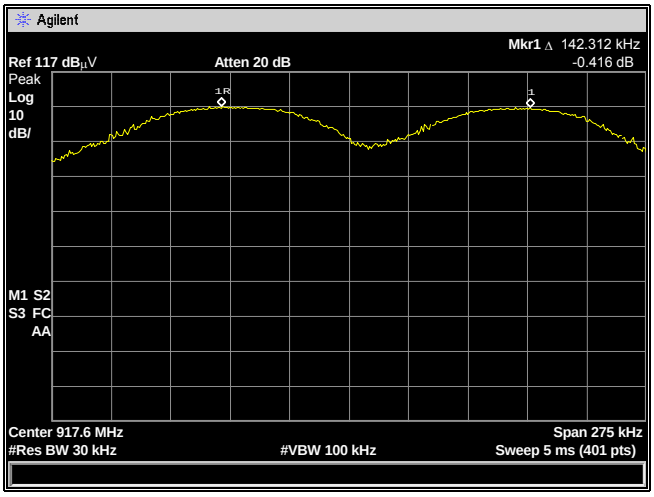

Figure 7.4.1-1: Carrier Frequency Separation

7.4.2 Number of Hopping Channels

The 20dB bandwidth of the device is less than 250 kHz. The device employs 50 hopping channels as required. Results are shown in Figure 7.4.2-1 below:

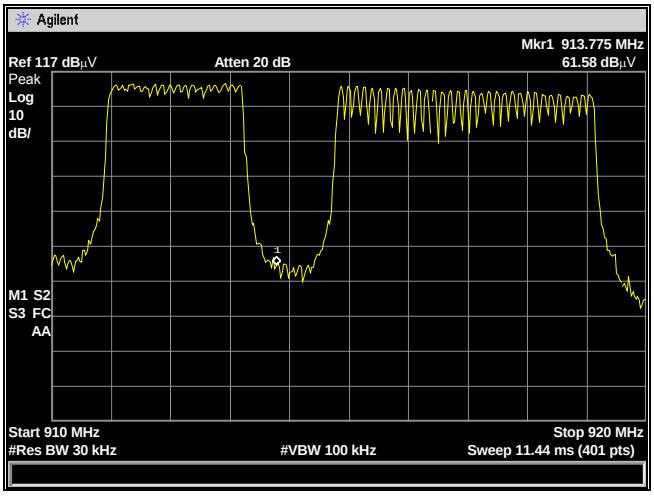

Figure 7.4.2-1: Number of Hopping Channels

7.4.3 Channel Dwell Time

7.4.3.1 Test Methodology

The emission measured centered on the analyzer and the span set to 0 Hz. The RBW was set to 1 MHz and the VBW to 3 MHz. Sweep time was set to 20 ms to capture the burst duration of the emission. The marker –delta function of the analyzer was employed to measure the burst duration.

7.4.3.2 Test Results

The duration of the RF transmission is 7.0 ms. There is a minimum 10 second rest period in which the device hops to another channel according to the pseudorandom frequency table before transmitting another 7.0ms burst. Therefore the average time of occupancy on any channel in a 20 second period is 7.0ms. A single transmission is shown in figure 7.4.3-1 below:

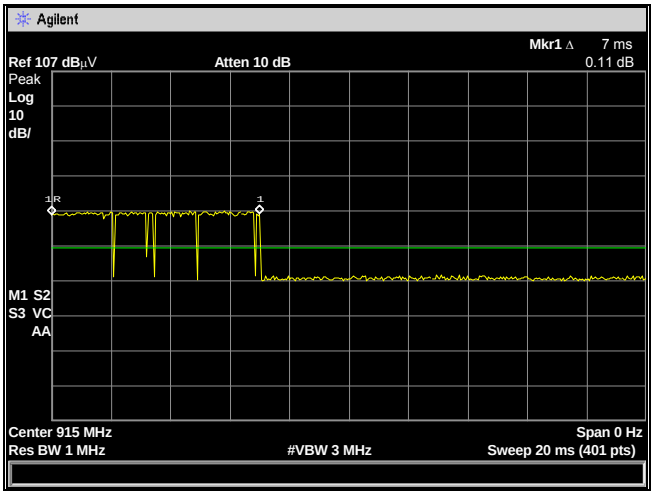

Figure 7.4.3-1: Channel Dwell Time

7.4.4 20dB Bandwidth

7.4.4.1 Test Methodology

The spectrum analyzer span was set to 2 to 3 times the estimated 20 dB bandwidth of the emission. The RBW was to ≥ 1% of the estimated 20 dB bandwidth. The trace was set to max hold with a peak detector active. The Delta function of the analyzer was utilized to determine the 20 dB bandwidth of the emission. The span and RBW were examined and re-adjusted if necessary to meet the requirements of 2 to 3 times the 20 bandwidth for the span and ≥ 1% of the 20 dB bandwidth for the RBW.

7.4.4.2 Test Results

The maximum 20dB bandwidth was found to be approximately 133.50 kHz. Results are shown below in Table 7.4.4-1 and Figures 7.4.4-1 through 7.4.4-3.

Table 7.4.4-1

Channel	Frequency (MHz)	20dB Bandwidth (kHz)
Low	911.080	133.50
Mid	915.014	120.0
High	919.070	123.0

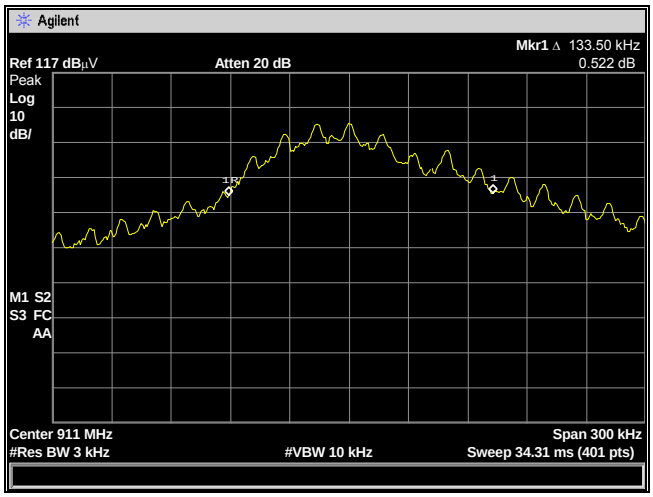

Figure 7.4.4-1: 20dB Bandwidth Low Channel

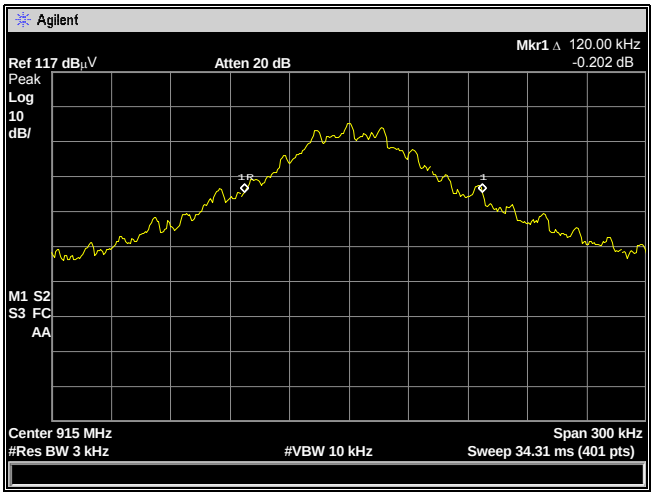

Figure 7.4.4-2: 20dB Bandwidth Mid Channel

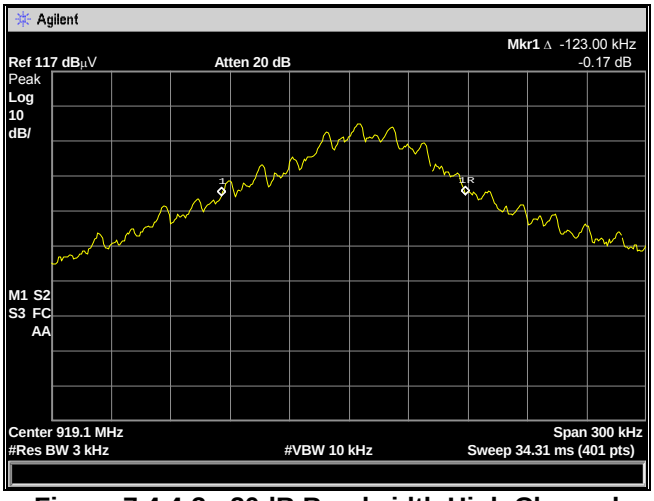

Figure 7.4.4-3: 20dB Bandwidth High Channel

7.5 Band-Edge Compliance and Spurious Emissions - FCC Section 15.247(c)

7.5.1 Band-Edge Compliance of RF Emissions

7.5.1.1 Test Methodology

The EUT was investigated at the lowest and highest channel available to determine band-edge compliance. For each measurement the spectrum analyzer's RBW was set to 100 kHz, which is ≥ 1% of the span, and the VBW was set to 300 kHz.

7.5.1.2 Test Results

In a 100 kHz bandwidth at the lower and upper band-edge, the radio frequency power that was produced by the EUT is at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of desired power. Band-edge compliance is displayed in Figures 7.5.1-1 and 7.5.2-2

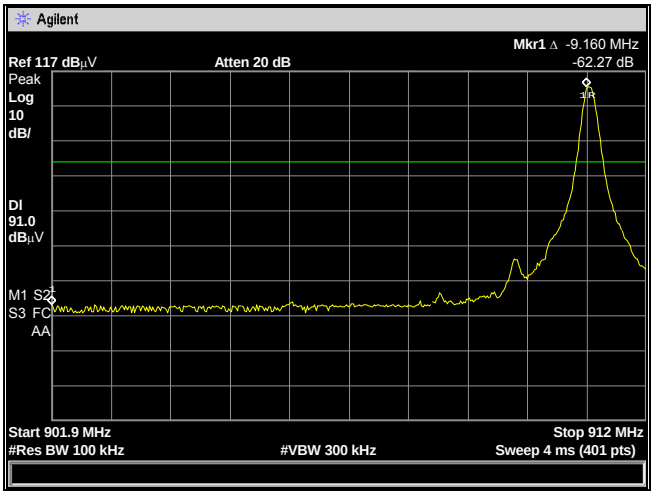

Figure 7.5.1-1: Lower Band-edge

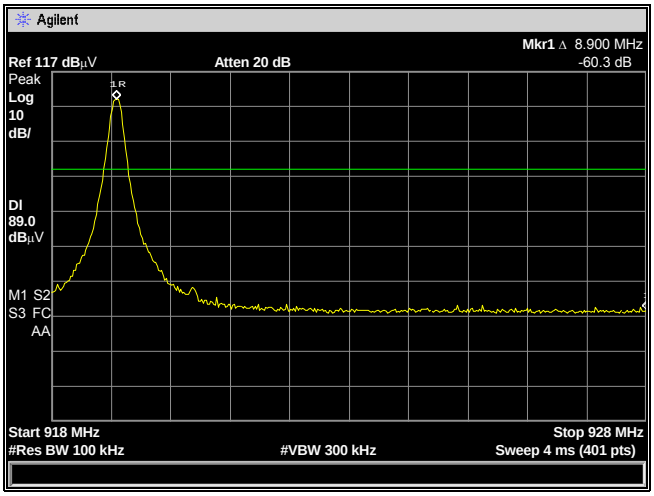

Figure 7.5.1-2: Upper Band-edge

7.5.2 RF Conducted Spurious Emissions

7.5.2.1 Test Methodology

Antenna conducted measurements could not be performed on this device, therefore radiated tests were performed to show compliance with the spurious RF conducted limit specified in Section 15.247(d) according to FCC publication DA 00-705.

For each measurement, the spectrum analyzer's RBW was set to 100 kHz and the VBW was set to 300 kHz. The peak detector and Max Hold function of the analyzer were utilized. The field strength of both the fundamental emission and all spurious emissions were measured with these settings. Procedures in ANSI C63.4 with respect to maximizing the emissions were followed. The measured field strength of all spurious emissions must be below the measured field strength of the fundamental emission by the amount specified in Section 15.247(d).

7.5.2.2 Test Results

The magnitude of all emissions are reported in section 7.5.3 with the appropriate limit as referenced to 20 dB below the fundamental frequency field strength. Emissions that fell within the restricted bands were referenced to the radiated emissions limit set forth in Section 15.209.

7.5.3 Radiated Spurious Emissions - FCC Section 15.205

7.5.2.1 Test Methodology

Radiated emissions tests were made over the frequency range of 30MHz to 10GHz, 10 times the highest fundamental frequency.

The EUT was rotated through 360° and the receive antenna height was varied from 1m to 4m so that the maximum radiated emissions level would be detected. For frequencies below 1000MHz, quasi-peak measurements were made using a resolution bandwidth (RBW) of 120 kHz and a video bandwidth (VBW) of 300 kHz. For frequencies above 1000MHz, peak measurements were made using an RBW of 1 MHz and a VBW of 3 MHz and for the average emissions a VBW of 10Hz. For those frequencies that fell outside the restricted bands as defined in 15.205, the alternative test methods in the FCC publication DA 00-705 was followed using a RBW of 100kHz and VBW of 300kHz and peak detector.

The EUT was caused to generate a continuous carrier signal on the hopping channel.

7.5.2.2 Duty Cycle Correction

For average radiated measurements, the measured level was reduced by a factor 23.1dB to account for the duty cycle of the EUT. The EUT transmits for 7.00mS on a channel followed by a minimum 10 second rest period before hopping to the next channel. The EUT does not return to the same channel for over 500 seconds. Therefore the duty cycle is 7.00%. The duty cycle correction factor is determined using the formula: 20log (0.07) = -23.1dB.

7.5.2.3 Test Results

Radiated spurious emissions found in the band of 30MHz to 10GHz are reported in Table 7.5.2-1. Each emission found to be in a restricted band as defined by section 15.205, was compared to the radiated emission limits as defined in section 15.209.

Table 7.5.2-1: Radiated Spurious Emissions

Frequency (MHz)	Level (dBuV)		Antenna Polarity	Correction Factors	Corrected Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
	pk	avg	(H/V)	(dB)	pk	avg	pk	avg	pk	avg
Low Channel										
Fundamental Frequency										
911.08	113.00	---------	H	0.35	113.35	---------	---------	---------	---------	---------
911.08	104.90	---------	V	0.55	105.45	---------	---------	---------	---------	---------
Spurious Emissions										
1822.16	58.31	---------	H	-2.10	56.21	----------	93.35	---------	37.14	---------
1822.16	63.71	---------	V	-2.10	61.61	----------	93.35	---------	31.74	---------
2733.24	57.17	51.02	H	2.22	59.39	30.14	74	54	14.61	23.86
2733.24	56.08	52.51	V	2.22	58.30	31.63	74	54	15.70	22.37
3644.32	53.21	49.78	H	5.58	58.79	32.26	74	54	15.21	21.74
3644.32	51.35	44.75	V	5.58	56.93	27.23	74	54	17.07	26.77
4555.4	46.86	32.84	H	7.61	54.47	17.35	74	54	19.53	36.65
4555.4	46.27	35.68	V	7.61	53.88	20.19	74	54	20.12	33.81
5466.48	35.96	---------	H	11.12	47.08	----------	93.35	---------	46.27	---------
5466.48	37.44	---------	V	11.12	48.56	----------	93.35	---------	44.79	---------
6377.56	32.99	---------	H	13.25	46.24	----------	93.35	---------	47.11	---------
6377.56	35.30	---------	V	13.25	48.55	----------	93.35	---------	44.80	---------
Middle Channel										
Fundamental Frequency										
915.014	111.60	---------	H	0.61	112.21	---------	---------	---------	---------	---------
915.014	103.20	---------	V	0.81	104.01	---------	---------	---------	---------	---------
Spurious Emissions										
1830.028	62.97	---------	H	-2.05	60.92	----------	92.206	---------	31.28	---------
1830.028	63.52	---------	V	-2.05	61.47	----------	92.206	---------	30.73	---------
2745.042	59.17	57.62	H	2.26	61.43	36.78	74	54	12.57	17.22
2745.042	56.86	55.01	V	2.26	59.12	34.17	74	54	14.88	19.83
3660.056	53.36	49.85	H	5.65	59.01	32.40	74	54	14.99	21.60
3660.056	50.51	47.11	V	5.65	56.16	29.66	74	54	17.84	24.34
4575.07	46.68	33.07	H	7.70	54.38	17.67	74	54	19.62	36.33
4575.07	45.97	34.49	V	7.70	53.67	19.09	74	54	20.33	34.91
5490.084	35.68	---------	H	11.19	46.87	----------	92.206	---------	45.34	---------
5490.084	36.01	---------	V	11.19	47.20	----------	92.206	---------	45.01	---------
6405.098	31.96	---------	H	13.33	45.29	----------	92.206	---------	46.92	---------
6405.098	32.82	---------	V	13.33	46.15	----------	92.206	---------	46.06	---------
High Channel										
Fundamental Frequency										
919.07	111.40	---------	H	0.87	112.27	---------	---------	---------	---------	---------
919.07	104.00	---------	V	1.07	105.07	---------	---------	---------	---------	---------
Spurious Emissions										
1838.14	57.55	---------	H	-1.99	55.56	----------	92.27	---------	36.71	---------
1838.14	61.43	---------	V	-1.99	59.44	----------	92.27	---------	32.83	---------
2757.21	53.28	49.38	H	2.30	55.58	28.58	74	54	18.42	25.42
2757.21	55.95	53.79	V	2.30	58.25	32.99	74	54	15.75	21.01
3676.28	52.27	48.64	H	5.73	58.00	31.27	74	54	16.00	22.73
3676.28	48.71	43.73	V	5.73	54.44	26.36	74	54	19.56	27.64
4595.35	45.16	31.75	H	7.80	52.96	16.45	74	54	21.04	37.55
4595.35	44.47	34.36	V	7.80	52.27	19.06	74	54	21.73	34.94
5514.42	31.93	---------	H	11.25	43.18	----------	92.27	---------	49.09	---------
5514.42	36.42	---------	V	11.25	47.67	----------	92.27	---------	44.60	---------

***** The magnitude of all emissions not reported were below the noise floor of the measurement system.

7.5.2.3 Sample Calculation:

$R_C = R_U + CF_T$

Where:

CF_T	=	Total Correction Factor (AF+CA+AG)-DC (Average Measurements Only)
R_U	=	Uncorrected Reading
R_C	=	Corrected Level
AF	=	Antenna Factor
CA	=	Cable Attenuation
AG	=	Amplifier Gain
DC	=	Duty Cycle Correction Factor

Example Calculation

PEAK:
Corrected Level: 57.17 + 2.22 = 59.39 dBuV
Margin: 74dBuV – 59.38 dBuV = 14.61 dB

AVERAGE:
Corrected Level: 51.02 + 2.22 -23.1 = 30.14 dBuV
Margin: 54dBuV – 30.14 dBuV = 23.86 dB

8.0 CONCLUSION
In the opinion of ACS, Inc. the R900G, manufactured by Neptune Technology Group, Inc., meets the requirements of FCC Part 15 subpart C.