

Application For Grant of Certification FOR

Model: **Seeker**
Field Disturbance Monitor

FCC ID: PAY-00006

FOR

GTS Engineering Technologies, LLC

15954 Mur-Len #144

Olathe, KS 66062

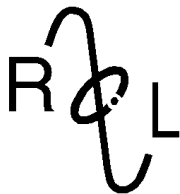
Test Report Number 120615

Authorized Signatory: *Scot D Rogers*

Scot D. Rogers



NVLAP Lab Code 200087-0



ROGERS LABS, INC.

4405 West 259th Terrace
Louisburg, KS 66053
Phone / Fax (913) 837-3214

Test Report for Application of Certification

For

GTS Engineering Technologies, LLC

15954 Mur-Len #144
Olathe, KS 66062

Phone: 816 738-4768

Mr. Robert Godsy
Compliance Manager

Model: Seeker Field Disturbance Monitor

Field Disturbance Sensor

Frequency Range: 24,125 MHz

FCC ID: PAY-00006

Test Report Number: 120615

Test Date: June 15, 2012

Authorized Signatory: *Scot D. Rogers*

Scot D. Rogers
Rogers Labs, Inc.
4405 West 259th Terrace
Louisburg, KS 66053
Telephone/Facsimile: (913) 837-3214

This report shall not be reproduced except in full, without the written approval of the laboratory.
This report must not be used by the client to claim product endorsement by NVLAP, NIST, or any agency of the Federal Government.



Table of Contents

TABLE OF CONTENTS.....	3
FORWARD	5
APPLICABLE STANDARDS & TEST PROCEDURES	5
OPINION / INTERPRETATION OF RESULTS	5
STATEMENT OF MODIFICATIONS AND DEVIATIONS	6
ENVIRONMENTAL CONDITIONS.....	6
UNITS OF MEASUREMENTS	6
TEST SITE LOCATIONS	6
LIST OF TEST EQUIPMENT	7
APPLICATION FOR CERTIFICATION.....	8
EQUIPMENT TESTED SETUP, FUNCTION AND CONFIGURATIONS	9
Equipment Function and Test Setup.....	9
EUT Configuration Options	9
SUBPART C - INTENTIONAL RADIATORS.....	9
AC Line Conducted Emission Test Procedure.....	10
Radiated Emission Test Procedure	10
ANTENNA REQUIREMENTS.....	10
RESTRICTED BANDS OF OPERATION	10
Radiated Emissions in Restricted Bands Data	11
Summary of Results for Radiated Emissions in Restricted Bands	11
General Radiated EMI Testing Procedure	11
General Radiated Emissions Data (worst-case)	12
Summary of Results for General Radiated Emissions.....	13



OPERATION IN THE BAND 24,075-24,175 MHZ	13
Figure One radiated transmitter output across frequency band	14
Transmitter Radiated Emissions Data	14
Transmitter Radiated Emissions.....	14
Summary of Results for Transmitter Radiated Emissions.....	15
ANNEX.....	16
Annex A Measurement Uncertainty Calculations	17
Annex B Rogers Labs Test Equipment List	18
Annex C Rogers Qualifications.....	19
Annex D FCC Test Site Registration Letter	20
Annex E Industry Canada Test Site Registration Letter	21



Forward

The following information is submitted for consideration in obtaining Grant of Certification for low power field disturbance sensing intentional radiator per CFR 47 Paragraph 15.245, operation in the 24,000 - 24,250 MHz band.

Name of Applicant: GTS Engineering Technologies, LLC
15954 Mur-Len #144
Olathe, KS 66062

Model: Seeker Field Disturbance Monitor

FCC ID: PAY-00006

Frequency Range: 24,125 MHz

Operating Power: Measured Peak power of 111.1 dB μ V/m @ 3 meters (and average 110.9 dB μ V/m @ 3 meters) (Limit 128 dB μ V/m @ 3 meters)

Applicable Standards & Test Procedures

In accordance with the Federal Communications Commission and Code of Federal Regulations CFR 47, dated October 1, 2011, Part 2, Subpart J, Paragraphs 2.907, 2.911, 2.913, 2.925, 2.926, 2.1031 through 2.1057, applicable parts of paragraph 15, Part 15C paragraph 15.245 the following information is submitted. Test procedures used are the established Methods of Measurement of Radio-Noise Emissions as described in the ANSI C63.4-2009 Document.

Opinion / Interpretation of Results

Test Performed	Minimum Margin (dB)	Results
Antenna requirement per CFR 47 15.203	N/A	Complies
Restricted Bands Emissions as per CFR 47 15.205	-12.7	Complies
AC Line Conducted Emissions as per CFR 47 15.207	N/A	Complies
Radiated Emissions as per CFR 47 15.209	-12.7	Complies
Emissions per CFR 47 15.245 (Harmonics)	-12.7	Complies
Emissions per CFR 47 15.245 (Fundamental)	-17.1	Complies

Statement of Modifications and Deviations

No modifications to the EUT were required for the equipment to demonstrate compliance with CFR 47 Part 15C Emissions Requirements. There were no deviations or modification to the specifications.

Environmental Conditions

Ambient Temperature	22.9° C
Relative Humidity	43%
Atmospheric Pressure	1015.6 mb

Units of Measurements

Conducted EMI: Data is in dB μ V; dB referenced to one microvolt.

Radiated EMI: Data is in dB μ V/m; dB/m referenced to one microvolt per meter.

Radiated Emissions Calculations:

Note: The limit is expressed for a measurement in dB μ V/m when the measurement is taken at a distance of 3 meters. Data taken for this report was taken at a distance of 3 meters.

$$\text{dB}\mu\text{V/m @ 3m} = \text{FSM}(\text{dB}\mu\text{V}) + \text{A.F.}(\text{dB/m}) - \text{Amp Gain}(\text{dB})$$

Test Site Locations

Conducted EMI	Rogers Labs, Inc. located at 4405 W. 259 th Terrace, Louisburg, KS.
Radiated EMI	Performed at Rogers Labs, Inc. 3 meters Open Area Test Site (OATS) located at 4405 W. 259th Terrace, Louisburg, KS.
Site Registration	Refer to Annex for FCC Site Registration Letter, Reference 90910, Industry Canada Site Registration Reference 3041A-1
Accreditation	NVLAP Accreditation Lab Code 200087-0

List of Test Equipment

A Rohde and Schwarz ESU40, Hewlett Packard 8591EM and or 8562A Spectrum Analyzer was used as the measuring equipment for emissions testing. The analyzer settings used are described in the following table. Refer to the annex for a complete list of Test Equipment.

Spectrum Analyzer Settings		
AC Line Conducted Emissions		
RBW	AVG. BW	Detector Function
9 kHz	30 kHz	Peak/Quasi Peak
Radiated Emissions (30 – 1000 MHz)		
RBW	AVG. BW	Detector Function
120 kHz	300 kHz	Peak/Quasi Peak
Spectrum Analyzer Settings		
Radiated Emissions (1 – 40 GHz)		
RBW	AVG. BW	Detector Function
1 MHz	1 MHz	Peak/Average
Antenna Conducted Emissions		
RBW	AVG. BW	Detector Function
120 kHz	300 kHz	Peak

<u>Equipment</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Calibration Date</u>	<u>Due</u>
LISN	Comp. Design	FCC-LISN-2-MOD.CD	10/11	10/12
Antenna	ARA	BCD-235-B	10/11	10/12
Antenna	EMCO	3147	10/11	10/12
Antenna	Com Power	AH-118	10/11	10/12
Antenna	EMCO	3143	5/12	5/13
Analyzer	HP	8591EM	5/12	5/13
Analyzer	HP	8562A	5/12	5/13
Analyzer	Rohde & Schwarz	ESU40	5/12	5/13



Application for Certification

- (1) Manufacturer: GTS Engineering Technologies, LLC
15954 Mur-Len #144
Olathe, KS 66062
Telephone: 816 738-4768
- (2) Identification: FCC I.D.: PAY-00006
- (3) Copy of the installation and operating manual: Refer to exhibit for Draft Instruction Manual.
- (4) Description of Circuit Functions, Device Operation: Refer to operational description exhibit for circuit device operation.
- (5) Block Diagram with Frequencies: Refer to exhibit for Block Diagram
- (6) Report of measurements demonstrating compliance with the pertinent FCC technical requirements provided in this report.
- (7) Photographs of equipment are provided in other application exhibits.
- (8) Peripheral equipment or accessories for the equipment. No optional equipment is currently available for the EUT. The available configuration options were investigated for this and other reports in compliance with required standards with worst-case data presented.
- (9) Transition Provisions of 15.37 are not being requested
- (10) The equipment is not a scanning receiver.
- (11) The equipment is not a transmitter operating in the 59-64 GHz frequency range.
- (12) The equipment is not software defined and this section is not applicable.

Equipment Tested Setup, Function and Configurations

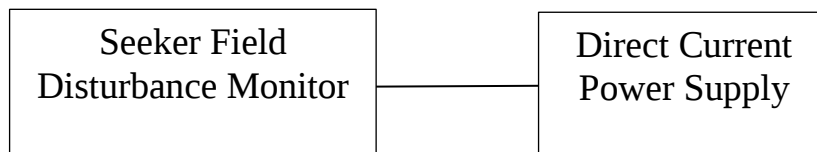
<u>Equipment</u>	<u>Serial Number</u>	<u>FCC I.D. #</u>
Seeker Field Disturbance Monitor	ENG1	PAY-00006
DC Power supply	N/A	N/A

Test results in this report relate only to the items tested.

Equipment Function and Test Setup

The EUT is a 24.125 GHz field disturbance sensor. The design utilizes radio frequency transmitter to detect movement within the frequency field. The product was designed to monitor remote areas and provide signal upon detection of a disturbance within the field. The unit utilizes the 24.125 GHz radio frequency field in its vicinity to detect and measure changes in resulting from the movement of objects within range. Changes to the field are used to notify user of detected motion. The EUT operates from 12-volt direct current power only and has no provision for connection to the utility AC power system. No AC line-conducted emissions testing were performed, as the EUT is battery operated.

EUT Configuration Options



Subpart C - Intentional Radiators

As per CFR 47 Part 15, Subpart C paragraph 15.245 the following information is submitted for consideration in obtaining grant of certification for unlicensed intentional radiators.

AC Line Conducted Emission Test Procedure

The design operates from direct current power only and offers no provision for connection to the utility power system. Therefore, no AC power line conducted emissions testing was required or performed.

Radiated Emission Test Procedure

Testing for the radiated emissions was performed as defined in sections 8.3 and 13.1 of ANSI C63.4-2009. The EUT was arranged in the test configurations as shown above during testing. The test configuration was placed on a rotating 1 x 1.5-meter wooden platform 0.8 meters above the ground plane at a distance of 3 meters from the FSM antenna. EMI energy was maximized by equipment placement, raising and lowering the FSM antenna, changing the antenna polarization, and by rotating the turntable. Each emission was maximized before final data was taken using a spectrum analyzer. Refer to photographs in exhibits for EUT placement used during testing.

Antenna Requirements

The unit is produced with permanently attached transmitter antenna located inside the sealed case. No provisions for modification or alterations of the antenna configuration are available to the end user. The unique antenna connection requirements of 15.203 are met there are no deviations or exceptions to the specification.

Restricted Bands of Operation

Spurious emissions falling in the restricted frequency bands of operation were measured at the OATS. The EUT utilizes frequency, determining circuitry, which generates harmonics falling in the restricted bands. Emissions were investigated at the OATS, using appropriate antennas or pyramidal horns, amplification stages, and a spectrum analyzer. Peak and average amplitudes of frequencies above 1000 MHz were compared to the required limits with worst-case data presented below. Test procedures of ANSI C63.4-2009 paragraphs 13.1 and 8.3.1.2 were used during testing. No other significant emission was observed which fell into the restricted bands of operation. Computed emission values take into account the received radiated field strength, receive antenna correction factor, amplifier gain stage, and test system cable losses.

Radiated Emissions in Restricted Bands Data

Frequency in MHz	Horizontal Peak (dBμV/m)	Horizontal Quasi-Peak (dBμV/m)	Horizontal Average (dBμV/m)	Vertical Peak (dBμV/m)	Vertical Quasi-Peak (dBμV/m)	Vertical Average (dBμV/m)	Limit @ 3m (dBμV/m)
120.6	28.3	19.9	N/A	21.7	16.7	N/A	43.5
121.5	26.4	18.6	N/A	20.8	15.4	N/A	43.5
123.4	24.6	17.2	N/A	20.4	14.5	N/A	43.5
123.8	27.0	18.8	N/A	21.3	16.2	N/A	43.5
276.0	28.5	24.2	N/A	21.6	17.3	N/A	46.0
401.5	35.0	33.3	N/A	34.1	32.8	N/A	46.0
48250.0	58.5	N/A	51.2	58.6	N/A	52.3	77.5
72375.0	69.7	N/A	62.7	70.9	N/A	64.8	77.5
96500.0	74.5	N/A	67.1	75.4	N/A	67.2	88.0

Other emissions present had amplitudes at least 20 dB below the limit.

Peak and Quasi-Peak amplitude emissions are recorded above for frequency range of 26-1000 MHz. Peak and Average amplitude emissions are recorded above for frequency range above 1000 MHz.

Summary of Results for Radiated Emissions in Restricted Bands

The EUT demonstrated compliance with the radiated emissions requirements of FCC CFR 47 Part 15.205 restricted bands of operation. The EUT worst-case configuration demonstrated minimum margin of -12.7 dB below the CFR 47 requirements. Other emissions were present with amplitudes at least 20 dB below the required limits.

General Radiated EMI Testing Procedure

The EUT was investigated while arranged in all typical equipment configurations and operated through all applicable modes. Preliminary testing was performed in a screen room with the EUT positioned 1 meter from the FSM. Investigations were performed to identify the frequencies, which produced the highest radiated emissions. Radiated emission investigations were performed from 9 kHz to 110,000 MHz with the EUT positioned in three orthogonal axes per regulations. Frequencies of interest were recorded for use during testing on the OATS. Each emission was then maximized at the OATS site before final radiated emissions measurements were performed. Final data was taken with the EUT located at the open field test site at a distance of 3 meters

between the EUT and the receiving antenna. Test procedures of ANSI C63.4-2009 paragraphs 13.1 and 8.3.1.2 were used during radiated emissions testing. Peak and average amplitudes of frequencies above 1000 MHz were compared to the required limits with worst-case data presented below. Measured emission levels were maximized by EUT placement on the table, changing cable location, rotating the turntable through 360 degrees, varying the antenna height between 1 and 4 meters above the ground plane and changing antenna polarization between horizontal and vertical. Antennas used were Loop from 0.09 to 30 MHz, Broadband Biconical from 30 MHz to 200 MHz, Log Periodic from 200 MHz to 1 GHz, and/or Biconilog from 30 MHz to 1000 MHz, Double-Ridge, and/or Pyramidal Horns and mixers above 1 GHz.

General Radiated Emissions Data (worst-case)

Frequency in MHz	Horizontal Peak (dBμV/m)	Horizontal Quasi-Peak (dBμV/m)	Horizontal Average (dBμV/m)	Vertical Peak (dBμV/m)	Vertical Quasi-Peak (dBμV/m)	Vertical Average (dBμV/m)	Limit @ 3m (dBμV/m)
79.8	27.9	23.2	N/A	30.4	24.1	N/A	40.0
81.2	30.1	23.4	N/A	31.0	25.8	N/A	40.0
81.6	29.4	20.0	N/A	34.0	24.2	N/A	40.0
120.6	28.3	19.9	N/A	21.7	16.7	N/A	43.5
121.5	26.4	18.6	N/A	20.8	15.4	N/A	43.5
122.0	24.4	18.0	N/A	20.2	15.1	N/A	43.5
122.4	25.0	18.6	N/A	20.6	14.8	N/A	43.5
122.8	26.6	21.0	N/A	22.6	19.1	N/A	43.5
123.4	24.6	17.2	N/A	20.4	14.5	N/A	43.5
123.8	27.0	18.8	N/A	21.3	16.2	N/A	43.5
225.3	30.3	25.1	N/A	23.8	18.3	N/A	46.0
276.0	28.5	24.2	N/A	21.6	17.3	N/A	46.0
301.1	36.2	33.2	N/A	29.6	27.3	N/A	46.0
401.5	35.0	33.3	N/A	34.1	32.8	N/A	46.0

Other emissions present had amplitudes at least 20 dB below the limit.

Peak and Quasi-Peak amplitude emissions are recorded above for frequency range of 9 kHz to 1000 MHz. Peak and Average amplitude emissions are recorded above for frequency range above 1000 MHz.

Summary of Results for General Radiated Emissions

The EUT demonstrated compliance with the general radiated emissions requirements of FCC Part 15C and other applicable standards for Intentional Radiators. The EUT worst-case configuration demonstrated minimum margin of at -12.7 dB below the general radiated emissions limit. Other emissions were present with amplitudes at least 20 dB below the Limits.

Operation in the Band 24,075-24,175 MHz

The power output was measured on an open area test site @ 3 meters. Test procedures of ANSI C63.4-2009 paragraphs 13.1 and 8.3.1.2 were used during testing. The EUT was placed on a wooden turntable 0.8 meters above the ground plane and at a distance of 3 meters from the FSM antenna. The peak and quasi-peak amplitude of frequencies below 1000 MHz were measured using a spectrum analyzer. The peak and average amplitude of frequencies above 1000 MHz were measured using a spectrum analyzer. The amplitude of each emission was then recorded from the analyzer display. Emissions radiated outside of the specified bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in 15.209, whichever is the lesser attenuation. Refer to figure one showing the transmitter output across frequency band as displayed on the spectrum analyzer. The amplitude of each emission was measured on the OATS at a distance of 3 meters from the FSM antenna (testing was performed on sample 1 representative of production with integral antenna). The amplitude of each radiated emission was maximized by varying the FSM antenna height, polarization, and by rotating the turntable. A Loop antenna was used for measuring emissions from 0.009 to 30 MHz, Biconilog Antenna for 30 to 1000 MHz, Double-Ridge, and/or Pyramidal Horn Antennas and external mixers from 1 GHz to 110 GHz. Emissions were measured in dB μ V/m @ 3 meters.

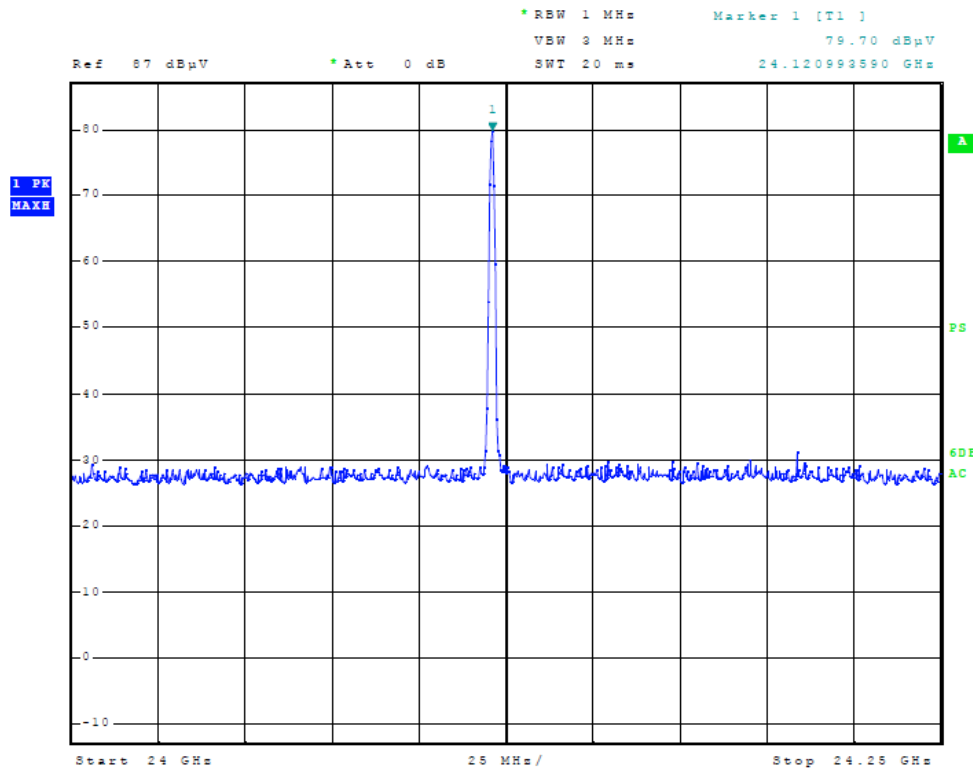


Figure One radiated transmitter output across frequency band

Transmitter Radiated Emissions Data

Transmitter Radiated Emissions

Frequency in MHz	Horizontal Peak (dBμV/m)	Horizontal Quasi-Peak (dBμV/m)	Horizontal Average (dBμV/m)	Vertical Peak (dBμV/m)	Vertical Quasi-Peak (dBμV/m)	Vertical Average (dBμV/m)	Limit @ 3m (dBμV/m)
24125.0	97.4	N/A	96.9	111.1	N/A	110.9	128.0
48250.0	58.5	N/A	51.2	58.6	N/A	52.3	77.5
72375.0	69.7	N/A	62.7	70.9	N/A	64.8	77.5
96500.0	74.5	N/A	67.1	75.4	N/A	67.2	88.0

Other emissions present had amplitudes at least 20 dB below the limit.

Peak and Quasi-Peak amplitude emissions are recorded above for frequency range of 26-1000 MHz. Peak and Average amplitude emissions are recorded above for frequency range above 1000 MHz.



Summary of Results for Transmitter Radiated Emissions

The EUT demonstrated compliance with the radiated emissions requirements of FCC CFR 47 Part 15.245 and other applicable standards for Intentional Radiators. The EUT worst-case configuration demonstrated minimum margin of -17.1 dB below the limit for fundamental transmission emission. The EUT worst-case configuration demonstrated minimum radiated harmonic emission margin of -12.7 dB below limits. No other radiated emissions were found in the restricted bands less than 20 dB below limits than those recorded in this report. Other emissions were present with amplitudes at least 20 dB below the limits.



NVLAP Lab Code 200087-0

Annex

- Annex A Measurement Uncertainty Calculations
- Annex B Rogers Labs Test Equipment List
- Annex C Rogers Qualifications
- Annex D FCC Test Site Registration Letter
- Annex E Industry Canada Test Site Registration Letter

Annex A Measurement Uncertainty Calculations

Measurement uncertainty calculations were made for the laboratory. Result of measurement uncertainty calculations are recorded below for AC line conducted and radiated emission measurements.

Measurement Uncertainty	$U_{(E)}$	$U_{(lab)}$
3 Meter Horizontal 30-200 MHz Measurements	2.08	4.16
3 Meter Vertical 30-200 MHz Measurements	2.16	4.33
3 Meter Vertical Measurements 200-1000 MHz	2.99	5.97
10 Meter Horizontal Measurements 30-200 MHz	2.07	4.15
10 Meter Vertical Measurements 30-200 MHz	2.06	4.13
10 Meter Horizontal Measurements 200-1000 MHz	2.32	4.64
10 Meter Vertical Measurements 200-1000 MHz	2.33	4.66
3 Meter Measurements 1-6 GHz	2.57	5.14
3 Meter Measurements 6-18 GHz	2.58	5.16
AC Line Conducted	1.72	3.43



Annex B Rogers Labs Test Equipment List

List of Test Equipment	Calibration Date
Spectrum Analyzer: Rohde & Schwarz ESU40	5/12
Spectrum Analyzer: HP 8562A, HP Adapters: 11518, 11519, and 11520	5/12
Mixers: 11517A, 11970A, 11970K, 11970U, 11970V, 11970W	
Spectrum Analyzer: HP 8591EM	5/12
Antenna: EMCO Biconilog Model: 3143	5/12
Antenna: Sunol Biconilog Model: JB6	10/11
Antenna: EMCO Log Periodic Model: 3147	10/11
Antenna: Antenna Research Biconical Model: BCD 235	10/11
LISN: Compliance Design Model: FCC-LISN-2.Mod.cd, 50 μ Hy/50 ohm/0.1 μ f	10/11
R.F. Preamp CPPA-102	10/11
Attenuator: HP Model: HP11509A	10/11
Attenuator: Mini Circuits Model: CAT-3	10/11
Attenuator: Mini Circuits Model: CAT-3	10/11
Cable: Belden RG-58 (L1)	10/11
Cable: Belden RG-58 (L2)	10/11
Cable: Belden 8268 (L3)	10/11
Cable: Time Microwave: 4M-750HF290-750	10/11
Cable: Time Microwave: 10M-750HF290-750	10/11
Frequency Counter: Leader LDC825	2/12
Oscilloscope Scope: Tektronix 2230	2/12
Wattmeter: Bird 43 with Load Bird 8085	2/12
Power Supplies: Sorensen SRL 20-25, SRL 40-25, DCR 150, DCR 140	2/12
R.F. Generators: HP 606A, HP 8614A, HP 8640B	2/12
R.F. Power Amp 65W Model: 470-A-1010	2/12
R.F. Power Amp 50W M185- 10-501	2/12
R.F. Power Amp A.R. Model: 10W 1010M7	2/12
R.F. Power Amp EIN Model: A301	2/12
LISN: Compliance Eng. Model 240/20	2/12
LISN: Fischer Custom Communications Model: FCC-LISN-50-16-2-08	2/12
Antenna: EMCO Dipole Set 3121C	2/12
Antenna: C.D. B-101	2/12
Antenna: Solar 9229-1 & 9230-1	2/12
Antenna: EMCO 6509	2/12
Antenna: Com Power AH-840	2/12
Audio Oscillator: H.P. 201CD	2/12
Peavey Power Amp Model: IPS 801	2/12
ELGAR Model: 1751	2/12
ELGAR Model: TG 704A-3D	2/12
ESD Test Set 2010i	2/12
Fast Transient Burst Generator Model: EFT/B-101	2/12
Field Intensity Meter: EFM-018	2/12
KEYTEK Ecat Surge Generator	2/12
Shielded Room 5 M x 3 M x 3.0 M	



Annex C Rogers Qualifications

Scot D. Rogers, Engineer

Rogers Labs, Inc.

Mr. Rogers has approximately 17-years' experience in the field of electronics. Six years working in the automated controls industry and 6 years working with the design, development and testing of radio communications and electronic equipment.

Positions Held

Systems Engineer: A/C Controls Mfg. Co., Inc. 6 Years

Electrical Engineer: Rogers Consulting Labs, Inc. 5 Years

Electrical Engineer: Rogers Labs, Inc. Current

Educational Background

Bachelor of Science Degree in Electrical Engineering from Kansas State University

Bachelor of Science Degree in Business Administration Kansas State University

Several Specialized Training courses and seminars pertaining to Microprocessors and Software programming



NVLAP Lab Code 200087-0

Annex D FCC Test Site Registration Letter

FEDERAL COMMUNICATIONS COMMISSION

**Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046**

November 01, 2011

Registration Number: 90910

Rogers Labs, Inc.
4405 West 259th Terrace,
Louisburg, KS 66053

Attention: Scot Rogers,

Re: Measurement facility located at Louisburg
3 & 10 meter site
Date of Renewal: November 01, 2011

Dear Sir or Madam:

Your request for renewal of the registration of the subject measurement facility has been received. The information submitted has been placed in your file and the registration has been renewed. The name of your organization will remain on the list of facilities whose measurement data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Please note that the file must be updated for any changes made to the facility and the registration must be renewed at least every three years.

Measurement facilities that have indicated that they are available to the public to perform measurement services on a fee basis may be found on the FCC website www.fcc.gov under E-Filing, OET Equipment Authorization Electronic Filing, Test Firms.

Sincerely,

Phyllis Parrish
Industry Analyst

Rogers Labs, Inc.
4405 West 259th Terrace
Louisburg, KS 66053
Phone/Fax: (913) 837-3214
Revision 1

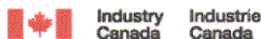
GTS Engineering Technologies, LLC
Model: Seeker Field Disturbance Monitor
Test #:120615
Test to: FCC CFR 47 15.245
File: GTS Seeker TstRpt 120615

FCC ID: PAY-00006
SN: ENG1
Date: August 8, 2012
Page 20 of 21



NVLAP Lab Code 200087-0

Annex E Industry Canada Test Site Registration Letter



December 28, 2011

OUR FILE: 46405-3041

Submission No: 152685

Rogers Labs Inc.
4405 West 259th Terrance
Louisburg, KS, 66053
USA

Attention: Mr. Scot D. Rogers

Dear Sir/Madame:

The Bureau has received your application for the renewal of 3/10m OATS. Be advised that the information received was satisfactory to Industry Canada. The following number(s) is now associated to the site(s) for which registration / renewal was sought (**Site# 3041A-1**). Please reference the appropriate site number in the body of test reports containing measurements performed on the site. In addition, please keep for your records the following information;

- The company address code associated to the site(s) located at the above address is: **3041A**

Furthermore, to obtain or renew a unique site number, the applicant shall demonstrate that the site has been accredited to ANSI C63.4-2003 or later. A scope of accreditation indicating the accreditation by a recognized accreditation body to ANSI C63.4-2003 or later shall be accepted. Please indicate in a letter the previous assigned site number if applicable and the type of site (example: 3 metre OATS or 3 metre chamber). If the test facility is not accredited to ANSI C63.4-2003 or later, the test facility shall submit test data demonstrating full compliance with the ANSI standard. The Bureau will evaluate the filing to determine if recognition shall be granted.

The frequency for re-validation of the test site and the information that is required to be filed or retained by the testing party shall comply with the requirements established by the accrediting organization. However, in all cases, test site re-validation shall occur on an interval not to **exceed three years**. There is no fee or form associated with an OATS filing. OATS submissions are encouraged to be submitted electronically to the Bureau using the following URL;

http://strategis.ic.gc.ca/epic/internet/inceb-bhst.nsf/en/h_tt00052e.html.

If you have any questions, you may contact the Bureau by e-mail at certification.bureau@ic.gc.ca Please reference our file and submission number above for all correspondence.

Yours sincerely,

Dalwinder Gill
For: Wireless Laboratory Manager
Certification and Engineering Bureau
3701 Carling Ave., Building 94
P.O. Box 11490, Station "H"
Ottawa, Ontario K2H 8S2
Email: dalwinder.gill@ic.gc.ca
Tel. No. (613) 998-8363
Fax. No. (613) 990-4752

Rogers Labs, Inc.
4405 West 259th Terrace
Louisburg, KS 66053
Phone/Fax: (913) 837-3214
Revision 1

GTS Engineering Technologies, LLC
Model: Seeker Field Disturbance Monitor
Test #:120615
Test to: FCC CFR 47 15.245
File: GTS Seeker TstRpt 120615

FCC ID: PAY-00006
SN: ENG1
Date: August 8, 2012
Page 21 of 21