

## COMPLIANCE WORLDWIDE INC. TEST REPORT 115-11

In Accordance with the Requirements of  
Federal Communications Commission CFR Title 47 Part 15.225, Subpart C  
Industry Canada RSS 210, Issue 8, Annex 2

Low Power License-Exempt Radio Communication Devices  
Intentional Radiators

Issued to

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for the

**B5000B Document Reader**

**FCC ID: TSP0B5000B**  
**IC: 9974A-0B5000B**

**Report Issued on March 15, 2011**

Tested by

  
\_\_\_\_\_  
Brian F. Breault

Reviewed by

  
\_\_\_\_\_  
Larry K. Stillings

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## 1. Scope

This test report certifies that the L1 Identity Solutions, Inc. B5000B Document Scanner, as tested, meets the CFR Title 47 Part 15.225, Subpart C and Industry Canada RSS 210, Issue 8, Annex 2 requirements. The scope of this test report is limited to the test sample provided by the client, only in as much as that sample represents other production units. If any significant changes are made to the unit, the changes shall be evaluated and a retest may be required.

## 2. Product Details

**2.1. Manufacturer:** L1 Identity Solutions

**2.2. Model Number:** B5000B Document Scanner

**2.3. Serial Number:** N/A

**2.4. Description:** The B5000B document scanner has the ability to not only read passports, driver's licenses and ID cards that people use as proof of identity, but also authenticate documents that have the embedded RFID chips in them. The document scanner supports faster customer processing and has a very small footprint which is ideal for environments where counter space is limited.

The B5000B operates in the 13.553 - 13.567 MHz band in accordance with section 15.225.

**2.5. Power Source:** 12 VDC (external power adapter - 100-240 VAC, 47 - 63 Hz)

**2.6. EMC Modifications:** Added Wurth part # 74271111 ferrite bead, two turns, on the internal USB cable near the transmitter module

## 3. Product Configuration

### 3.1. Support Equipment

Device	Manufacturer	Model	Serial No.	Comment
Notebook PC	Dell	Latitude	6231549709	

### 3.2. Cables

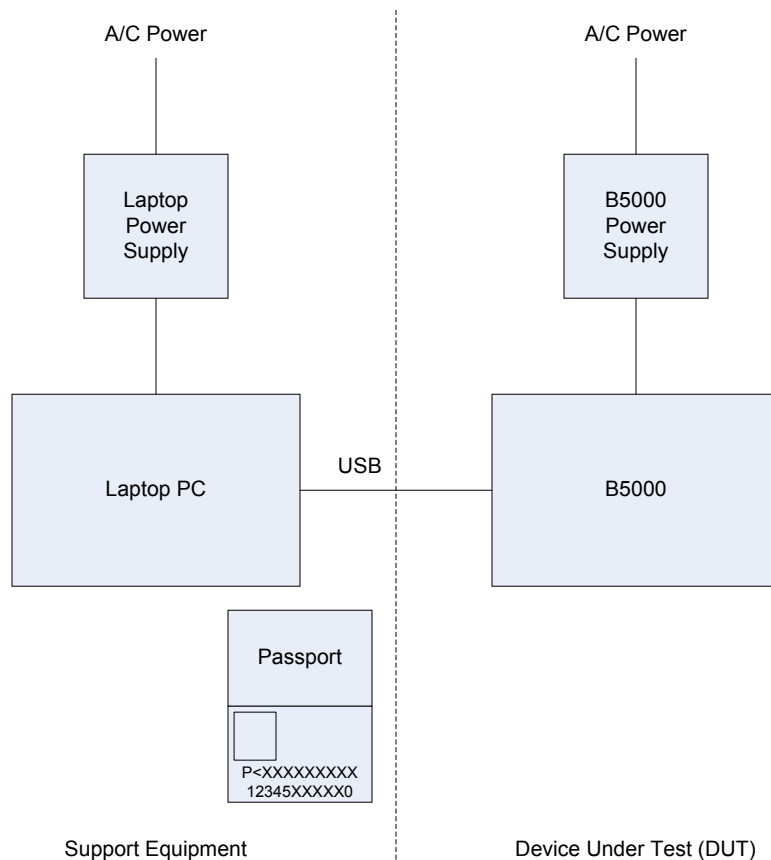
Cable Type	Length	Shield	From	To
USB	1.5 Meters	Yes	Notebook PC	B5000B Passport Reader

### 3. Product Configuration

#### 3.3. Operational Characteristics & Software

1. Power on the PC.
2. Login as Administrator:
  - Username : Administrator
  - Password :
3. Ignore any complaints about virus profiles not being updated or Windows Updates.
4. Connect the L1 Identity Solutions, Inc. B5000B power supply but do not power up.
5. Connect the L1 Identity Solutions, Inc. B5000B to the PC using the supplied USB cable.
6. Power on the B5000B.
7. Run the iA-Examiner application from the desktop. This application has been setup to run in a test mode that will continuously scan and authenticate the supplied demo passport.

#### 3.4. Block Diagram



#### 4. Measurements Parameters

##### 4.1. Measurement Equipment Used to Perform Test

Device	Manufacturer	Model No.	Serial No.	Cal Due
EMI Receiver	Agilent	E7405A	MY45115430	10/22/2011
Spectrum Analyzer	Hewlett Packard	8593E	3829A03887	8/23/2011
Loop Antenna	EMCO	6502	2197	7/21/2012
Bilog Antenna	Com-Power	AC-220	25509	8/30/2011
Horn Antenna	Electro-Metrics	EM-6961	6337	10/19/2012
Horn Antenna	ComPower	AH-840	03075	7/20/2012
LISN	EMCO	3825/2	9109-1860	6/2/2011
DMM / Temperature	Fluke	187	79690058	10/9/2012
RF Signal Generator	Hewlett Packard	8648C	3642U01557	7/16/2011
RF Power Meter	Boonton	4220A	203603AA	5/28/2012
Power Sensor	Boonton	51075	23339	5/28/2012
Thermal Chamber	Associated Testing Labs	SLHU-1-CRLC	N/A	N/A

##### 4.2. Measurement & Equipment Setup

Test Dates: Jan 25 – Feb 11, 2011  
 Test Engineer: Brian Breault  
 Normal Site Temperature (15 - 35°C): 24.0  
 Relative Humidity (20 -75%RH): 33%  
 Frequency Range: .009 MHz to 1 GHz  
 Measurement Distance: 3 Meters  
 EMI Receiver IF Bandwidth: 200 Hz – 9 kHz to 150 kHz  
 9 kHz – 150 kHz to 30 MHz  
 120 kHz- 30 MHz to 1 GHz  
 1 MHz - Above 1 GHz  
 EMI Receiver Avg Bandwidth: 300 Hz – 9 kHz to 150 kHz  
 30 kHz – 150 kHz to 30 MHz  
 300 kHz - 30 MHz to 1 GHz  
 3 MHz - Above 1 GHz  
 Detector Function: Peak, QP, Avg – 150 kHz to 30 MHz  
 Peak, QP - 30 MHz to 1 GHz  
 Peak, Avg - Above 1 GHz  
 Unless otherwise specified.

##### 4.3. Measurement Procedure

The test measurements contained in this report are based on the requirements detailed in FCC Part 15, Subpart C - Intentional Radiators, notably Section 15.225, Operation within the band 13.110 – 14.010 MHz.

The test methods used to generate the data in this test report are in accordance with ANSI C63.4: 2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.

## 5. Measurement Summary

Test Requirement	FCC Part 15 Reference	RSS Reference	Test Report Section	Result	Comment
Antenna Requirement	15.203	RSS-GEN Section 7.1.2	6.1	Compliant	
Power Line Conducted Emissions	15.207	RSS-GEN Section 7.2.4	6.2	Compliant	Reference ANSI C63.4 Annex H, Paragraph H1(b)
Spurious Radiated Emissions	15.209		6.3	Compliant	
Field Strength of Fundamental	15.225(a)	RSS-210 Section A2.6	6.4	Compliant	
Frequency Tolerance of the Carrier Signal	15.225(e)	RSS-210 Section A6.1.6	6.5	Compliant	
Occupied Bandwidth/ Lower and Upper Band Edges	15.215(c)	N/A	6.6	Compliant	
99% Power Bandwidth	N/A	RSS-GEN Section 4.6.1	6.7	Compliant	
Receiver Spurious Emissions	N/A	RSS-GEN Section 4.10	6.8	Compliant	

## 6. Measurement Data

### 6.1. Antenna Requirement (Section 15.203)

Requirement : An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

Justification : The tested product uses an internal integrated antenna.

### 6.2. Power Line Conducted Emissions (15.207)

Requirement: For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal.

Test Note: A Sinpro model SPU40-105 12 volt power supply, supplied by L1 Identity Solutions, was used for all conducted emissions measurements.

#### 6.2.1. Test Procedure

Test measurements were made in accordance with ANSI C63.4-2003, Standard Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronics Equipment in the Range of 9 kHz to 40 GHz. Specifically, Annex H, paragraph H1(b) regarding the use of a dummy load for a Part 15 transmitter.

#### 6.2.2. Test Limits

Frequency Range (MHz)	Limits (dB $\mu$ V)	
	Quasi-Peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5.0	56	46
5.0 to 30.0	60	50
* Decreases with the logarithm of the frequency.		

Test Number: 115-11

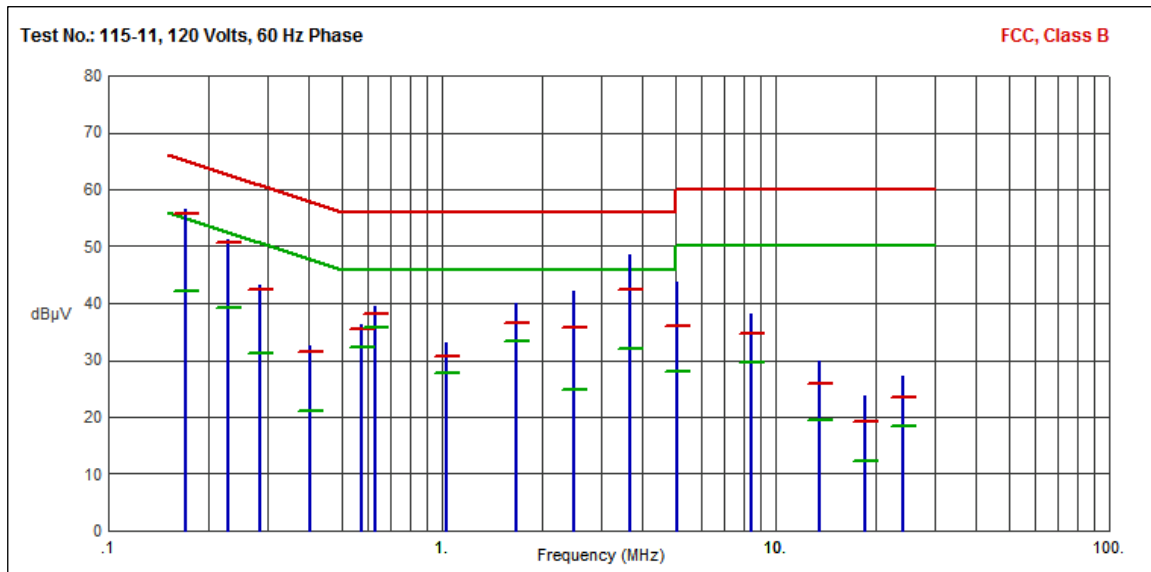
Issue Date: 3/15/2011

## 6. Measurement Data (continued)

### 6.2. Power Line Conducted Emissions (15.207) (continued)

6.2.3. Conducted Emissions Test Data (with antenna attached, measured outside the transmitter's fundamental emissions band)

6.2.3.1. 120 Volts, 60 Hz Phase



Frequency (MHz)	Pk Amp (dBµV)	QP Amp (dBµV)	QP Limit (dBµV)	QP Margin (dB)	Avg Amp (dBµV)	Avg Limit (dBµV)	Avg Margin (dB)	Comments
.1712	56.40	55.79	64.90	-9.11	42.18	54.90	-12.72	
.2297	51.32	50.67	62.46	-11.79	39.26	52.46	-13.20	
.2858	43.10	42.31	60.65	-18.34	31.19	50.65	-19.46	
.4011	32.43	31.48	57.83	-26.35	21.00	47.83	-26.83	
.5727	36.19	35.38	56.00	-20.62	32.31	46.00	-13.69	
.6297	39.35	38.01	56.00	-17.99	35.79	46.00	-10.21	
1.0307	33.00	30.59	56.00	-25.41	27.65	46.00	-18.35	
1.6615	40.07	36.50	56.00	-19.50	33.23	46.00	-12.77	
2.4982	42.01	35.73	56.00	-20.27	24.91	46.00	-21.09	
3.6553	48.62	42.30	56.00	-13.70	32.01	46.00	-13.99	
5.0816	43.65	36.12	60.00	-23.88	27.87	50.00	-22.13	
8.4296	38.09	34.66	60.00	-25.34	29.57	50.00	-20.43	
13.5878	29.78	25.86	60.00	-34.14	19.48	50.00	-30.52	
18.5208	23.67	19.16	60.00	-40.84	12.38	50.00	-37.62	
24.0013	27.18	23.59	60.00	-36.41	18.44	50.00	-31.56	

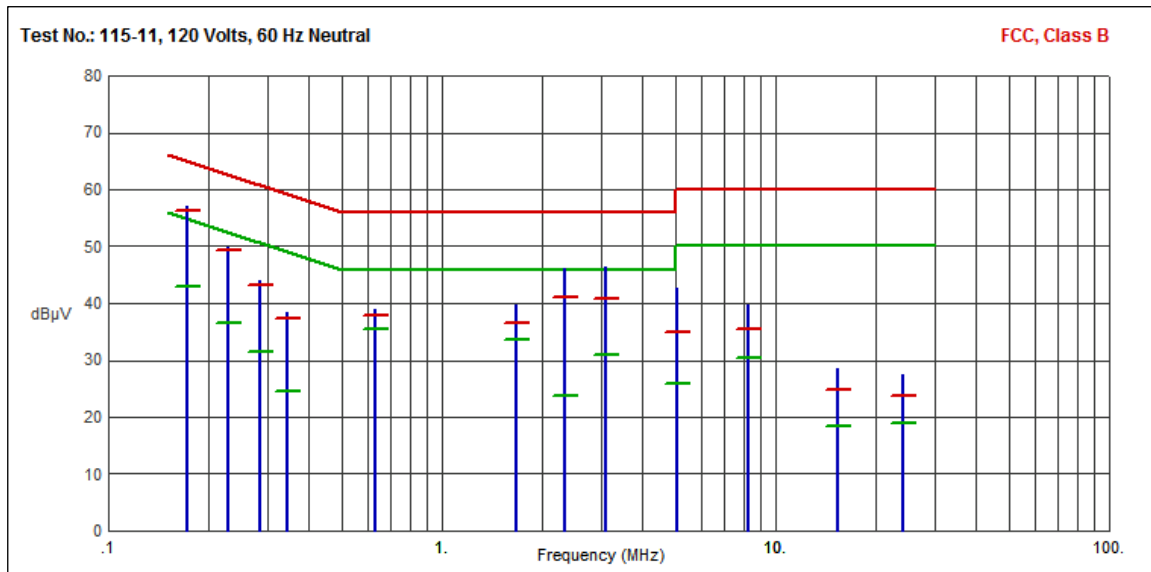


## 6. Measurement Data (continued)

### 6.2. Power Line Conducted Emissions (15.207) (continued)

6.2.3. Conducted Emissions Test Data (with antenna attached, measured outside the transmitter's fundamental emissions band) (continued)

6.2.3.2. 120 Volts, 60 Hz Neutral



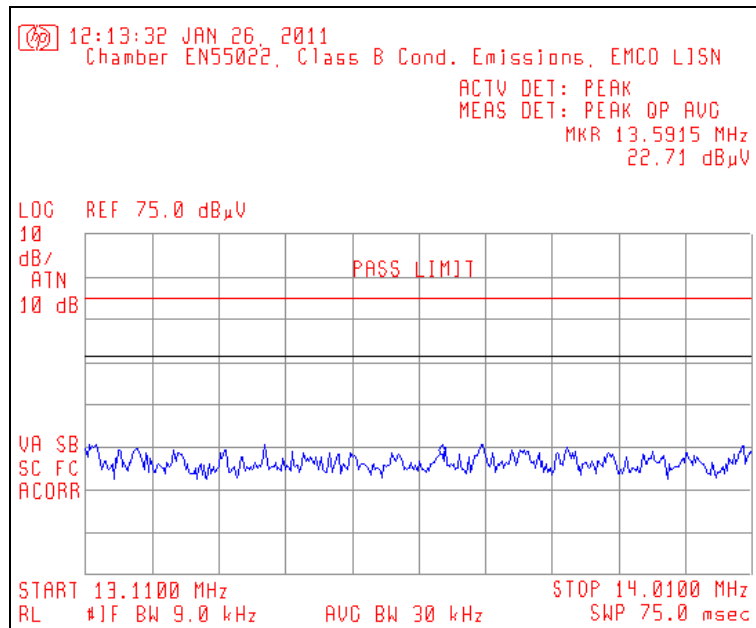
Frequency (MHz)	Pk Amp (dBµV)	QP Amp (dBµV)	QP Limit (dBµV)	QP Margin (dB)	Avg Amp (dBµV)	Avg Limit (dBµV)	Avg Margin (dB)	Comments
.1722	57.04	56.32	64.85	-8.53	42.95	54.85	-11.90	
.2291	49.91	49.36	62.48	-13.12	36.45	52.48	-16.03	
.2860	44.10	43.20	60.64	-17.44	31.49	50.64	-19.15	
.3434	38.30	37.38	59.12	-21.74	24.49	49.12	-24.63	
.6307	38.86	38.00	56.00	-18.00	35.59	46.00	-10.41	
1.6618	39.62	36.56	56.00	-19.44	33.71	46.00	-12.29	
2.3249	46.24	41.12	56.00	-14.88	23.74	46.00	-22.26	
3.0946	46.29	40.72	56.00	-15.28	31.03	46.00	-14.97	
5.0387	42.74	34.97	60.00	-25.03	25.90	50.00	-24.10	
8.3092	39.71	35.37	60.00	-24.63	30.38	50.00	-19.62	
15.3617	28.51	24.73	60.00	-35.27	18.46	50.00	-31.54	
24.0019	27.42	23.78	60.00	-36.22	18.81	50.00	-31.19	

## 6. Measurement Data (continued)

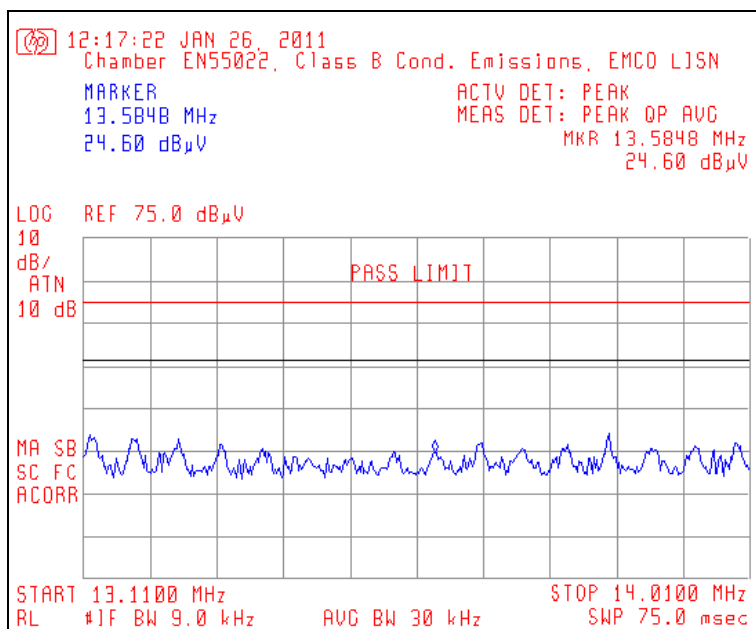
### 6.2. Power Line Conducted Emissions (15.207) (continued)

6.2.4. Conducted Emissions Test Data (measurement with dummy load, measured inside the transmitter's fundamental emissions band)

#### 6.2.4.1. 120 Volts, 60 Hz Phase



#### 6.2.4.2. 120 Volts, 60 Hz Neutral



**6. Measurement Data (continued)**
**6.3. Spurious Radiated Emissions (15.209)**

Requirement: The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table (Reference FCC 15.209):

Frequency MHz	Distance Meters	Limit dB $\mu$ V/m (Quasi-Peak)	Limit $\mu$ V/m
1.705 - 30	30 [10]	29.5 [39.0]	30 [89]
30 - 88	3	40.0	100
88 - 216	3	43.5	150
216 - 960	3	46.0	200
960 - 1000	3	54.0	500
1000 - 40000	3	54.0	500

**6.3.1. Test Procedure**

Test measurements were made in accordance with ANSI C63.4-2003, Standard Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronics Equipment in the Range of 9 kHz to 40 GHz.

**6.3.2. Spurious Radiated Emissions – 150 kHz to 30 MHz**

Frequency (MHz)	Pk Amp (dB $\mu$ V/m)	QP Amp (dB $\mu$ V/m)	QP Limit (dB $\mu$ V/m) <sup>1</sup>	Margin (dB)	Ant Ht (cm)	Table (Deg)	Result
27.12	47.6	36.6	39.0	-2.4	100	95	Compliant

<sup>1</sup> Limit has been extrapolated to 10 meters

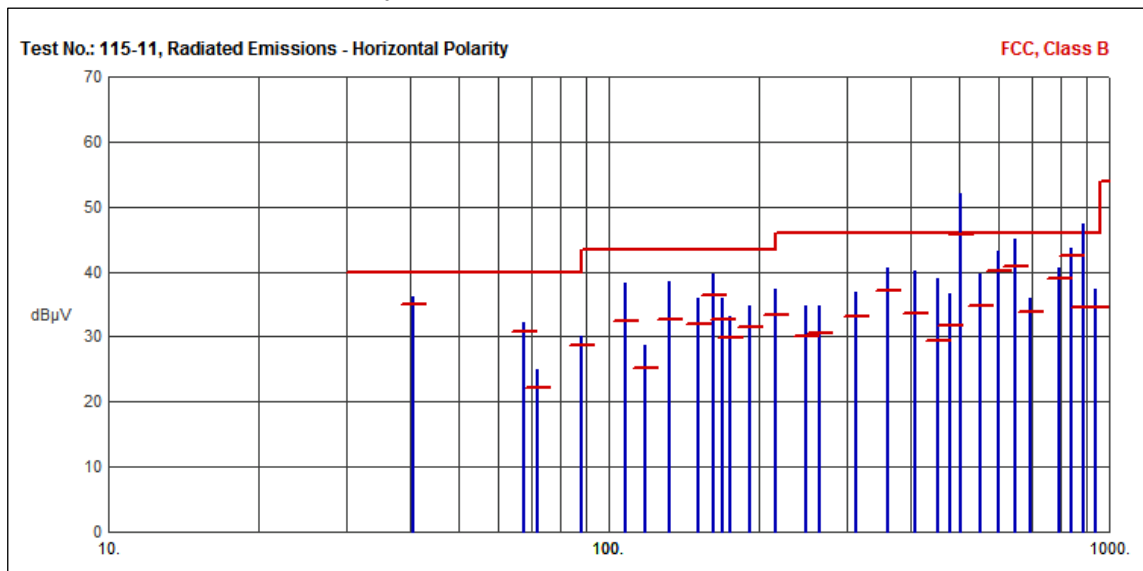
No other spurious emissions were detected between 150 kHz and 30 MHz.

## 6. Measurement Data (continued)

### 6.3. Spurious Radiated Emissions (continued)

#### 6.3.3. Spurious Radiated Emissions - 30 MHz to 1 GHz,

##### 6.3.3.1. Horizontal Polarity



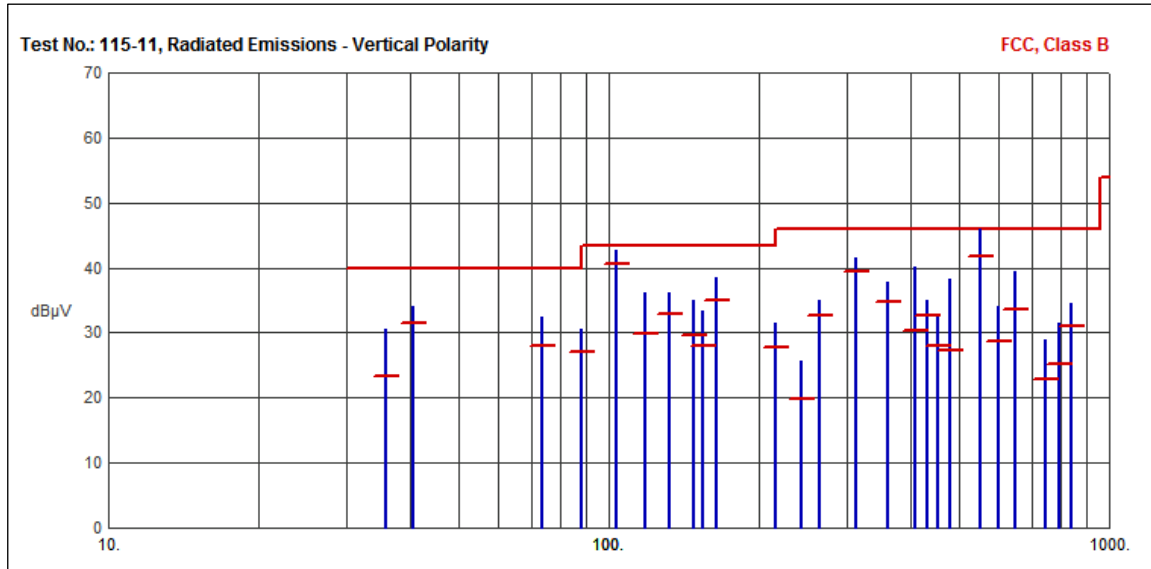
Frequency (MHz)	Pk Amp (dBμV/m)	QP Amp (dBμV/m)	QP Limit (dBμV/m)	Margin (dB)	Ant Ht (cm)	Table (Deg)	Comments
40.6755	36.25	35.04	40.00	-4.96	N/A	N/A	
67.8044	32.17	30.71	40.00	-9.29	N/A	N/A	
72.0162	24.97	22.21	40.00	-17.79	N/A	N/A	
88.4747	30.18	28.63	43.50	-14.87	N/A	N/A	
107.9736	38.31	32.45	43.50	-11.05	N/A	N/A	
117.9663	28.77	25.11	43.50	-18.39	N/A	N/A	
132.0104	38.58	32.71	43.50	-10.79	N/A	N/A	
150.9904	35.83	32.03	43.50	-11.47	N/A	N/A	
161.9095	39.78	36.36	43.50	-7.14	N/A	N/A	
168.3969	36.00	32.61	43.50	-10.89	N/A	N/A	
175.0223	33.09	29.82	43.50	-13.68	N/A	N/A	
192.0031	34.71	31.42	43.50	-12.08	N/A	N/A	
215.9628	37.22	33.41	43.50	-10.09	N/A	N/A	
248.4461	34.71	30.01	46.00	-15.99	N/A	N/A	
263.9901	34.70	30.67	46.00	-15.33	N/A	N/A	
312.0043	36.98	33.21	46.00	-12.79	N/A	N/A	
359.9930	40.58	37.06	46.00	-8.94	N/A	N/A	
407.9970	40.10	33.69	46.00	-12.31	N/A	N/A	
455.9941	38.89	29.39	46.00	-16.61	N/A	N/A	
480.0688	36.73	31.73	46.00	-14.27	N/A	N/A	
504.0926	51.97	45.70	46.00	-0.30	N/A	N/A	
551.9782	39.78	34.72	46.00	-11.28	N/A	N/A	
600.1066	43.12	40.11	46.00	-5.89	N/A	N/A	
648.1158	45.12	40.90	46.00	-5.10	N/A	N/A	
696.1239	35.98	33.94	46.00	-12.06	N/A	N/A	
792.1282	40.67	39.04	46.00	-6.96	N/A	N/A	
840.1478	43.74	42.36	46.00	-3.64	N/A	N/A	
888.1534	47.42	34.53	46.00	-11.47	N/A	N/A	
936.1640	37.37	34.48	46.00	-11.52	N/A	N/A	

## 6. Measurement Data (continued)

### 6.3. Spurious Radiated Emissions (continued)

#### 6.3.3. Radiated Emissions - 30 MHz to 1 GHz,

##### 6.3.3.2. Vertical Polarity



Frequency (MHz)	Pk Amp (dBµV/m)	QP Amp (dBµV/m)	QP Limit (dBµV/m)	Margin (dB)	Ant Ht (cm)	Table (Deg)	Comments
35.9792	30.55	23.45	40.00	-16.55	N/A	N/A	
40.6862	34.16	31.59	40.00	-8.41	N/A	N/A	
73.7228	32.39	27.99	40.00	-12.01	N/A	N/A	
88.4755	30.52	27.11	43.50	-16.39	N/A	N/A	
103.2339	42.59	40.56	43.50	-2.94	N/A	N/A	
117.9502	36.08	29.98	43.50	-13.52	N/A	N/A	
132.0170	36.27	33.01	43.50	-10.49	N/A	N/A	
147.5905	35.05	29.59	43.50	-13.91	N/A	N/A	
154.3935	33.28	28.10	43.50	-15.40	N/A	N/A	
164.2827	38.50	34.97	43.50	-8.53	N/A	N/A	
216.0166	31.40	27.67	46.00	-18.33	N/A	N/A	
243.0813	25.58	19.79	46.00	-26.21	N/A	N/A	
263.9921	34.98	32.73	46.00	-13.27	N/A	N/A	
311.9907	41.46	39.41	46.00	-6.59	N/A	N/A	
359.9919	37.81	34.79	46.00	-11.21	N/A	N/A	
407.9908	40.15	30.28	46.00	-15.72	N/A	N/A	
431.9714	35.00	32.58	46.00	-13.42	N/A	N/A	
456.0037	32.78	27.90	46.00	-18.10	N/A	N/A	
480.0077	38.36	27.28	46.00	-18.72	N/A	N/A	
551.9922	45.99	41.84	46.00	-4.16	N/A	N/A	
600.0046	34.05	28.70	46.00	-17.30	N/A	N/A	
648.0074	39.38	33.60	46.00	-12.40	N/A	N/A	
744.0092	29.00	22.94	46.00	-23.06	N/A	N/A	
792.0453	31.46	25.14	46.00	-20.86	N/A	N/A	
840.1362	34.57	30.95	46.00	-15.05	N/A	N/A	

## 6. Measurement Data (continued)

### 6.3. Spurious Radiated Emissions (continued)

#### 6.3.4. Harmonic Radiated Emissions

Frequency (MHz)	Pk Amp (dBμV/m)	QP Amp (dBμV/m)	QP Limit (dBμV/m)	Margin (dB)	Ant Pol (H/V)	Ant Ht (cm)	Table (Deg)	Result
27.12	47.6	36.6	39	-2.4	V	100	95	Compliant
40.68	39.6	34.1	40.0	-5.9	V	100	270	Compliant
54.24	33.7	29.6	40.0	-10.4	V	100	270	Compliant
67.80	31.7	30.5	40.0	-9.5	H	267	90	Compliant
81.36	25.0	20.3	40.0	-19.7	H	270	0	Compliant
94.92	38.3	32.5	43.5	-11.0	H	230	65	Compliant
108.48	23.0	18.3	43.5	-25.2	V	100	270	Compliant
122.04	41.1	37.4	43.5	-6.1	H	157	131	Compliant
135.60	34.0	29.8	43.5	-13.7	V	100	6	Compliant
149.16	37.5	35.1	43.5	-8.4	H	122	65	Compliant
162.72	33.5	31.2	43.5	-12.3	H	127	60	Compliant

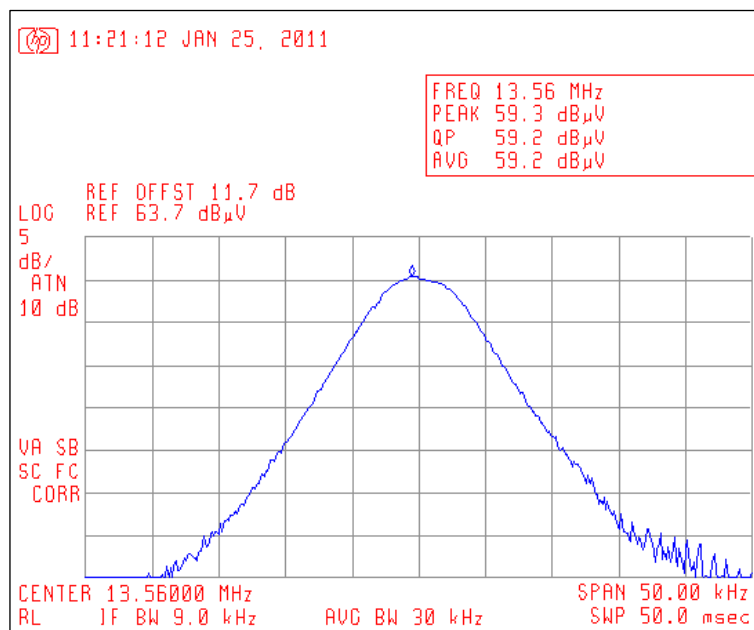
### 6.4. Field Strength of Fundamental

Requirement: The field strength of any emissions within the band 13.553 - 13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.

Freq.	Dist.	Measurement		Limit <sup>1</sup>		Margin	Power
MHz	Meters	μV/m	dBμV/m	μV/m	dBμV/m	dBμV/m	Watts
13.56	10	912.01	59.2	47,544.00	93.54	-34.34	0.0000251

<sup>1</sup> Limit has been extrapolated to 10 meters.

#### 6.4.1. Measurement Plot



## 6. Measurement Data (continued)

### 6.5. Frequency Tolerance of the Carrier Signal

Requirement : The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.01\%$  of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

#### 6.5.1. Normal Operating Conditions

Ambient Temp (°C)	Normal Voltage	Measured Frequency (MHz)
21.5	120	13.559993

Based on the measured frequency under normal operating conditions, the allowable tolerance of the carrier signal is 13.558637 MHz to 13.561348 MHz.

#### 6.5.2. Temperature Stability (measured at the normal voltage)

Extreme Temp	Measured Frequency	Acceptable Range		Result
°C	MHz	F <sub>LO</sub>	F <sub>HI</sub>	
-20	13.56006	13.558637	13.561348	Compliant
+50	13.56009			Compliant

#### 6.5.3. Voltage Stability (measured at ambient temperature)

Extreme Voltage	Measured Frequency	Acceptable Range		Result
VDC	MHz	F <sub>LO</sub>	F <sub>HI</sub>	
10.2	13.55999	13.558637	13.561348	Compliant
13.8	13.56000			Compliant

## 6. Measurement Data (continued)

### 6.6. Occupied Bandwidth

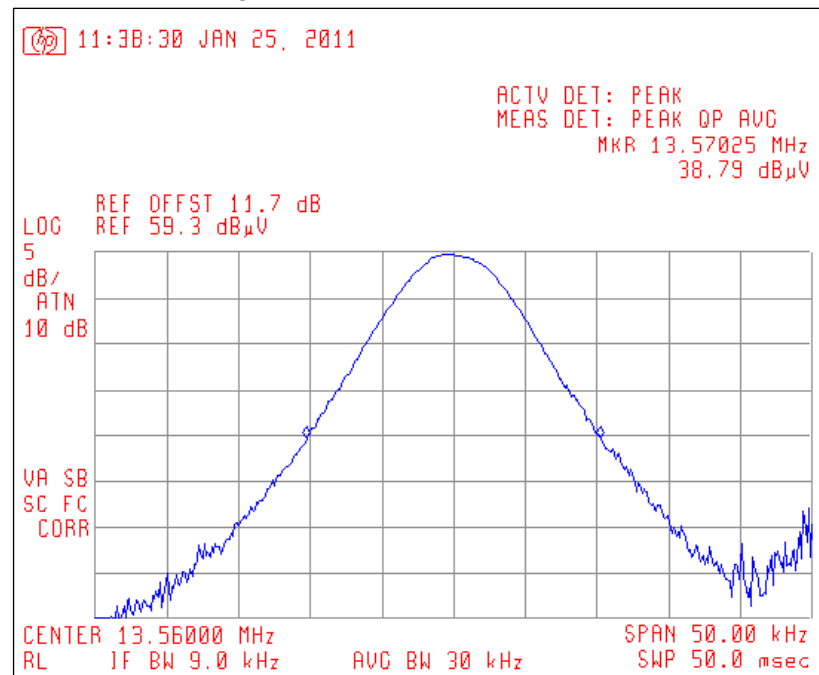
Requirement: Intentional radiators operating under the alternative provisions to the general emission limits, as contained in Sections 15.217 through 15.255 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission is contained within the frequency band designated in the rule.

Frequency Band:  $F_{MIN} = 13.110$  MHz

$F_{MAX} = 14.010$  MHz

	-20 dB Frequency Measured	Lower & Upper Band Edge	Result
	MHz	MHz	
$F_{LO}$	13.54975	13.110	Compliant ( $F_{LO} > F_{MIN}$ )
$F_{HI}$	13.57025	14.010	Compliant ( $F_{HI} < F_{MAX}$ )

#### 6.6.1. Plot of 20 dB Bandwidth vs. Frequency Band Lower and Upper Band Edges





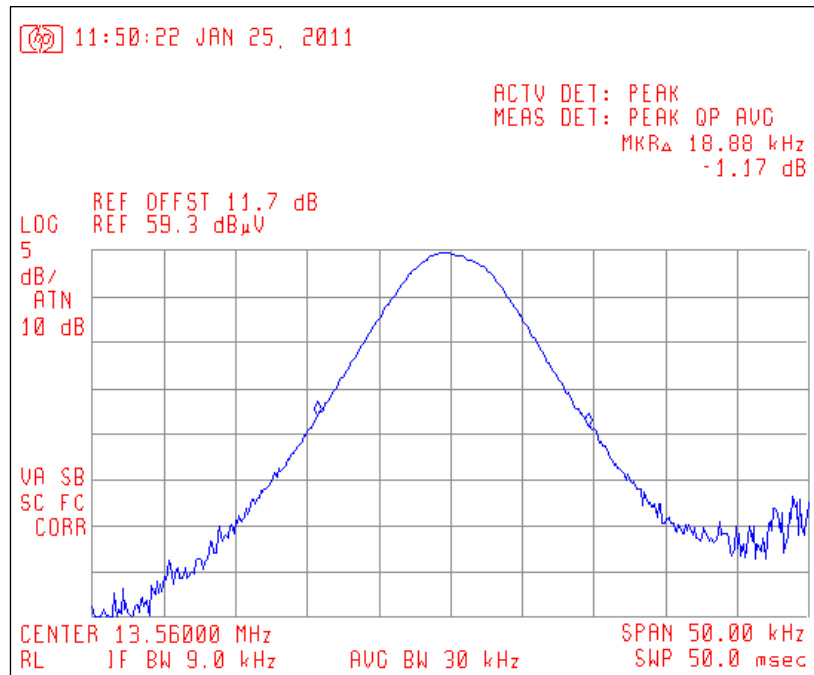
Test Number: 115-11

Issue Date: 3/15/2011

## 6. Measurement Data (continued)

### 6.7. 99% Power Bandwidth

#### 6.7.1. Plot of 99% Power Bandwidth



## 6. Measurement Data (continued)

### 6.8 Receiver Spurious Emissions (RSS-GEN Issue 3, Section 4.10)

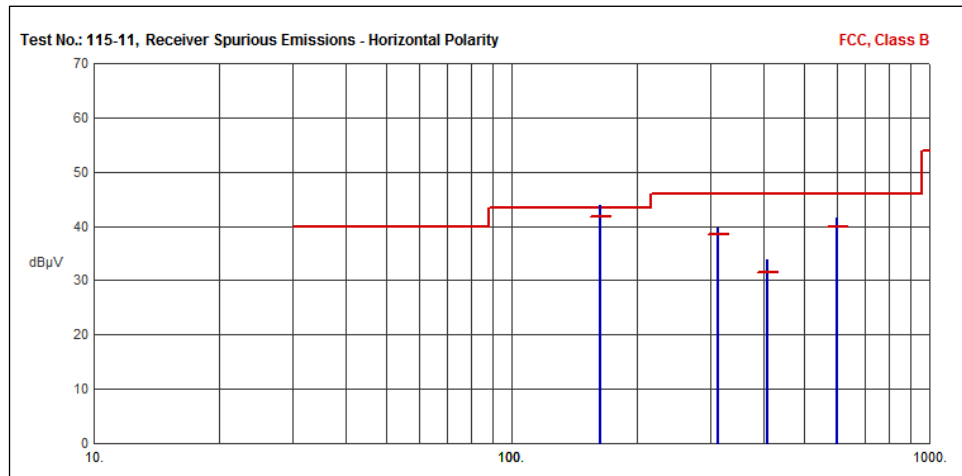
Requirement: The search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (e.g. local oscillator, intermediate or carrier frequency), or 30 MHz, whichever is higher, to at least 3 times the highest tunable or local oscillator frequency, whichever is higher, without exceeding 40 GHz.

Test Note: In order to perform this test, the transmitter was disabled by internally disconnecting the feed cable to the module. This does not represent a normal operating condition.

#### 6.8.1. 150 kHz to 30 MHz

No measurable signals.

#### 6.8.2. 30 MHz to 1 GHz, Horizontal Polarity



Frequency (MHz)	Pk Amp (dBμV/m)	QP Amp (dBμV/m)	QP Limit (dBμV/m)	Margin (dB)	Ant Ht (cm)	Table (Deg)	Comments
162.4372	43.94	41.74	43.50	-1.76	N/A	N/A	
312.0346	39.69	38.53	46.00	-7.47	N/A	N/A	
408.0220	33.92	31.59	46.00	-14.41	N/A	N/A	
600.0848	41.62	40.00	46.00	-6.00	N/A	N/A	

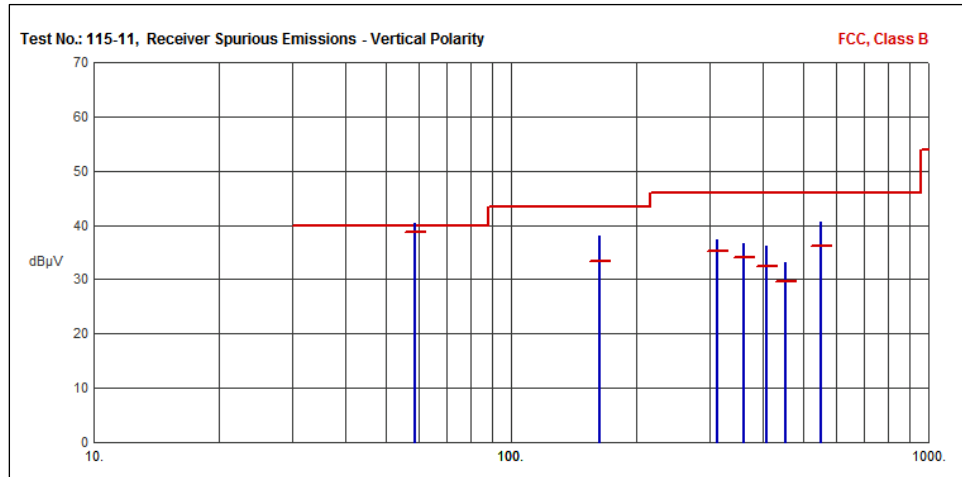
Test Number: 115-11

Issue Date: 3/15/2011

## 6. Measurement Data (continued)

### 6.8 Receiver Spurious Emissions (RSS-GEN Issue 3, Section 4.10)

#### 6.8.3. 30 MHz to 1 GHz, Vertical Polarity



Frequency (MHz)	Pk Amp (dBμV/m)	QP Amp (dBμV/m)	QP Limit (dBμV/m)	Margin (dB)	Ant Ht (cm)	Table (Deg)	Comments
58.9622	40.45	38.79	40.00	-1.21	N/A	N/A	
163.1884	38.02	33.31	43.50	-10.19	N/A	N/A	
312.0337	37.24	35.32	46.00	-10.68	N/A	N/A	
360.0312	36.67	34.06	46.00	-11.94	N/A	N/A	
408.0232	36.10	32.54	46.00	-13.46	N/A	N/A	
456.0671	33.02	29.72	46.00	-16.28	N/A	N/A	
552.0207	40.53	36.27	46.00	-9.73	N/A	N/A	

**7. Test Site Description**

Compliance Worldwide is located at 357 Main Street in Sandown, New Hampshire. The test sites at Compliance Worldwide are used for conducted and radiated emissions testing in accordance with Federal Communications Commission (FCC), Industry Canada, and Voluntary Control Council Interference (VCCI) standards. A description of the test sites is on file with the FCC (registration number 96392), Industry Canada (file number IC 3023A-1), and VCCI (member number 2147, registration numbers C-1987 and R-1856).

The radiated emissions test site is a 3 and 10 meter enclosed open area test site (OATS). Personnel, support equipment and test equipment are located in the basement beneath the OATS ground plane.

The conducted emissions site is part of a 16' x 20' x 12' ferrite tile chamber and uses one of the walls for the vertical ground plane required by EN 55022.

Both sites are designed to test products or systems 1.5 meters W x 1.5 meters L x 2.0 meters H, floor standing or table top.