

**COMPLIANCE WORLDWIDE INC.
TEST REPORT 341-15R1**

In Accordance with the Requirements of
Industry Canada RSS 210, Issue 8
Federal Communications Commission CFR Title 47 Part 15.229
Low Power License-Exempt Radio Communication Devices
Intentional Radiators

Issued to

**Secure Care Products, LLC
39 Chenell Drive
Concord, NH 03301
603-223-0745**

for the

**Secure Care
Model 135 STAT[®] ID
40.68 MHz Door Management Radio**

FCC ID: KNK-NRTLS4068

Report Issued on August 7, 2015
Report Revised on September 2, 2015

Testing performed by



Brian F. Breault
EMC Test Engineer

Reviewed By


Larry K. Stillings

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1. Scope

This test report certifies that the Secure Care Products, LLC. Model 135 STAT ID 40.68 MHz door management radio, as tested, meets the Subpart C, FCC Part 15.229 requirements and the RSS 210 Annex II Rules. 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.

Revision R1 – Test engineer name, title and signature updated.

2. Product Details

- 2.1. **Manufacturer:** Secure Care Products, LLC.
- 2.2. **Model Number:** A20470901
- 2.3. **Serial Number:** ID 108, A20470901
- 2.4. **Description:** Model 135 STAT ID
Infant and child abduction protection device
40.68 MHz door management radio
Software version 1165
- 2.5. **Power Source:** 3.0 VDC (Lithium) non-replaceable
- 2.6. **EMC Modifications:** None

3. Product Configuration

3.1. Operational Characteristics & Software

Operating Instructions for Test

Use the tester to enable continuous wave features. With the transmitter at the top of the tester, push the “6” key to enable continuous wave output on the low frequency radio. This will output a continuous wave for one minute and then revert back to normal operation.

The “#” key will put the transmitter in sleep mode. The strap needs to be removed to stay in sleep mode.

The “7” key will enable a quick wakeup of the transmitter. The strap must be installed to wake up the transmitter.

3.2. EUT Hardware

Manufacturer	Model/Part # / Options	Serial Number	Volts	Frq (Hz)	Description/Function
Secure Care Products, LLC.	Door management Radio	ID 108	3.0	DC	Infant and child abduction protection device

3.3. Support Equipment

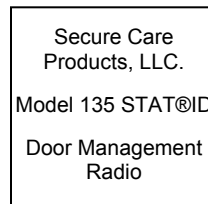
Manufacturer	Model/Part # / Options	Serial Number	Input Voltage	Frq (Hz)	Description/Function
Secure Care Products, LLC.	A07390900	0121200014	N/A	-	For setting up the DUT operation. Not used during testing.

3. Product Configuration (continued)

3.4. Support Equipment Cables

Cable Type	Length	Shield	From	To
None				

3.5. Block Diagram



4. Measurements Parameters

4.1 Measurement Equipment Used to Perform Test

Device	Manufacturer	Model No.	Serial No.	Cal Due	Interval
EMI Test Receiver, 9kHz - 7GHz ¹	Rohde & Schwarz	ESR7	101156	7/23/2017	2 Years
Spectrum Analyzer 20 Hz – 40 GHz ²	Rohde & Schwarz	FSV40	100899	7/23/2017	2 Years
Spectrum Analyzer, 9 kHz to 40 GHz ³	Rohde & Schwarz	FSVR40	100909	7/23/2017	2 Years
EMI Receiver, 9 kHz to 6.5 GHz	Hewlett Packard	8546A	3650A00360	6/4/2016	2 Years
Loop Antenna, 9 kHz to 30 MHz	EMCO	6512	9309-1139	9/23/2016	2 Years
Biconilog Antenna, 30 MHz to 2 GHz	Sunol Sciences Corp	JB1	25509	5/15/2016	3 Years
Horn Antenna, 960 MHz – 18 GHz	Electro-Metrics	RGA-50 / 60	2813	7/15/2016	2 Years
LISN 50 Ω 50 μH, 9 kHz to 30 MHz	EMCO	3825/2	9109-1860	7/23/2016	1 Year
Power Supply	Hewlett Packard	6296A	7M0599	8/26/2015	1 Year
Barometric Press/Humidity & Temp Datalogger	Extech Instruments	SD700	Q590483	9/18/2015	2 Years
Temperature Chamber	Associated Research	E-0029	N/A	N/A	---

¹ ESR7 Firmware revision: V2.26, Date installed: 8/15/2014 Previous V2.17, installed 6/11/2014.
² FSV40 Firmware revision: V2.30 SP1 Date installed: 10/22/2014 Previous V2.30, installed 7/23/2014.
³ FSVR40 Firmware revision: V2.23, Date installed: 10/20/2014 Previous V1.63 SP1, installed 8/28/2013.

4. Measurements Parameters (continued)

4.2 Measurement & Equipment Setup

Test Dates:	7/31/2015 to 8/7/2015
Test Engineers:	Cody Merry Brian Breault
Site Temperature (°C):	21.4
Relative Humidity (%RH):	32
Frequency Range:	30 kHz to 2.0 GHz
Measurement Distance:	3 Meters
EMI Receiver IF Bandwidth:	120 kHz (30 MHz – 1 GHz) 1 MHz (>1 GHz)
EMI Receiver Avg Bandwidth:	300 kHz (30 MHz – 1 GHz) 3 MHz (>1 GHz)
Detector Functions:	Peak, Quasi-Peak and Average

4.3 Test Procedure

Test measurements were made in accordance FCC Part 15.229: Operation within the band 40.66–40.70 MHz.

The test methods used to generate the data in this test report are in accordance with ANSI C63.10: 2013, American National Standard for Methods for Unlicensed Wireless Devices

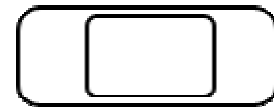
In addition, the measurements were performed with the device in three orthogonal positions in accordance with ANSI C63.10-2013, sections 5.10.1, 6.4.6 and Annex H. The three orthogonal axes were defined as follows:



X-Axis



Y-Axis



Z-Axis

X Axis	Upright (Strap toward rear)	Front of unit is facing the antenna at 0°
Y Axis	Horizontal on left edge	Front of unit is facing the antenna at 0°
Z Axis	Face Up (Strap down)	Bottom edge of the unit is facing the antenna at 0°

5. Measurement Summary

Test Requirement	FCC Requirement	IC Requirement	Test Report Section	Result	Comment
Antenna Requirement	15.203	RSS210 A1.1	6.1	Compliant	The antenna is enclosed within the device under test.
Emission Bandwidth	C63.10-2013 §6.9	Not Required	6.2	Compliant	
Bandwidth Requirement in the Band 40.66 MHz - 40.70 MHz	Not Required	IC RSS-210 §2.7 RSS-Gen 4.6.2	6.3	Compliant	
Radiated Field Strength of Fundamental	15.229 (b)	RSS210 A1.1.2	6.4	Compliant	
Spurious Radiated Emissions	15.231 (b)(3), 15.209	A13.1.2 (2)	6.5	Compliant	
Frequency Stability	15.229 (d)	Not Required	6.6	Compliant	
Emission Bandwidth	15.231 (c)	Not Required	6.6	Compliant	
Bandwidth of Momentary Signals	Not Required	IC RSS-210 A1.1.3	6.7	Compliant	
Conducted Emissions	15.207	---	---	Not Required	Unit operates on an internal battery.
Public Exposure to Radio Frequency Energy Levels.	15.247(i) 1.1307 (b)(1)	RSS-GEN 5.5, RSS 102	---	Not Required	Frequency is below 100 MHz.

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section.

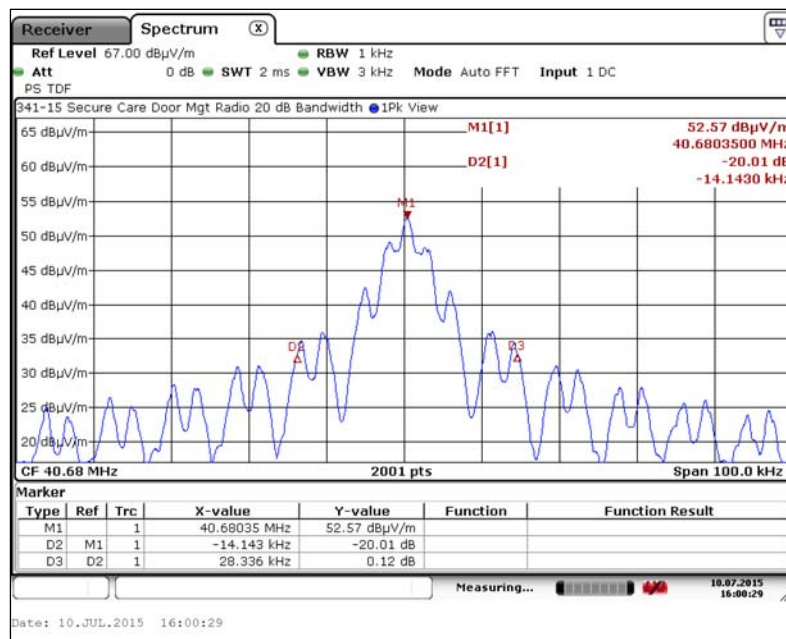
Status: The Model 135 STAT ID door management radio antenna is contained inside a sealed unit.

6.2. Emission Bandwidth

Requirement: The bandwidth requirement for FCC Part 15.229 is not specified. The 20 dB bandwidth has been included as part of this test report.

Test Note: Reference ANSI C63.10-2013, Section 6.9.1. The span range for the SA display shall be between two times and five times the OBW. The nominal IF filter bandwidth (3 dB RBW) should be approximately 1% to 5% of the OBW, unless otherwise specified, depending on the applicable requirement. The dynamic range of the SA at the selected RBW shall be more than 10 dB below the target “dB down” (attenuation) requirement.

Fundamental Frequency (MHz)	-20 dB Bandwidth (kHz)	Limit (kHz)	Result
40.68	28.336	N/A	Compliant



6. Measurement Data (continued)

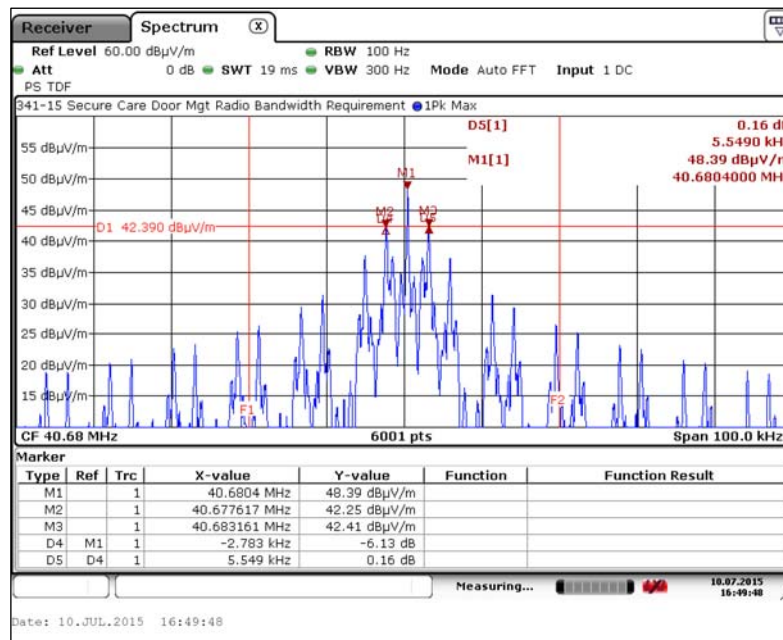
**6.3. Bandwidth Requirement in the Band 40.66 MHz - 40.70 MHz
(IC RSS-210 2.7, RSS-Gen 4.6.2)**

Requirement: The -6 dB bandwidth of the emission shall be confined within the 40.66 - 40.70 MHz band edges.

Test Note: Reference RSS-Gen, Section 4.6.2. Where indicated, the -6 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 6 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

Conclusion: The Emissions from the DUT meets the above requirement.

Fundamental Frequency (MHz)	-6 dB Bandwidth		Band Edges		Result
	Lower Edge (MHz)	Upper Edge (MHz)	Lower Edge (MHz)	Upper Edge (MHz)	
40.68	40.6776	40.6832	40.66	40.70	Compliant



6. Measurement Data (continued)

6.4. Radiated Field Strength of Fundamental (15.229, Section (a))

Requirement: Unless operating pursuant to the provisions in section 15.231, the field strength of any emissions within this band shall not exceed 1,000 microvolts/meter at 3 meters.

Fundamental Frequency (MHz)	Field Strength of Fundamental (μV/m)
40.66 – 40.70	1000 μV/m

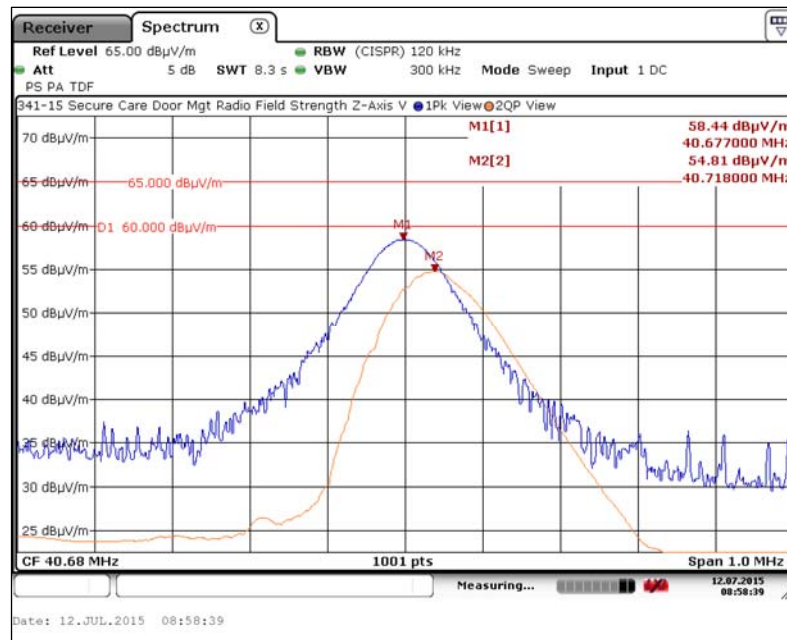
Fundamental Limit at 40.68 MHz = 1000 μV/m = 60.00 dBμV/m

Test Note: The data detailed in this section of the test report represents the worst case product orientation.

Conclusion: The radiated field strength of the device under test complies with the requirements detailed in FCC Part 15.229, Section (a).

6.3.1. Worst Case Radiated Field Strength of Fundamental

Frequency (MHz)	Amplitude ¹ (dBμV/m)		Limit (dBμV/m)		Margin (dB)		Ant Polarity	Ant Height	Turntable Azimuth	Result
	Peak	QP	Peak	QP	Peak	Avg				
40.68	58.44	54.81	60.00	60.00	-1.56	-5.19	V	100	94	Compliant



6. Measurement Data (continued)**6.5. Spurious Radiated Emissions, 30 MHz to 2.0 GHz (15.229 Section (c), 15.209)**

Requirement: The spurious radiated emissions requirements for intentional radiators shall demonstrate compliance with the field strength limits detailed in Part 15.229, Section (c): The field strength of any emissions appearing outside of this band shall not exceed the general radiated emissions limits in Section 15.209. FCC Part 15.33 requires that, due to the highest frequency used in the device being between 108 MHz and 500 MHz (433.92 MHz), the upper frequency of measurement will be 2 GHz.

Procedure: This test was performed in accordance with the information provided in ANSI C63.10-2013, Section 6.5.

Test Notes: Section 6.5.3 screen captures test notes:

1. The emission marked by marker M1 is the fundamental intentional emissions frequency.
2. The emission marked by the pair of vertical cursors is also a DUT intentional emissions frequency covered by a separate test report.

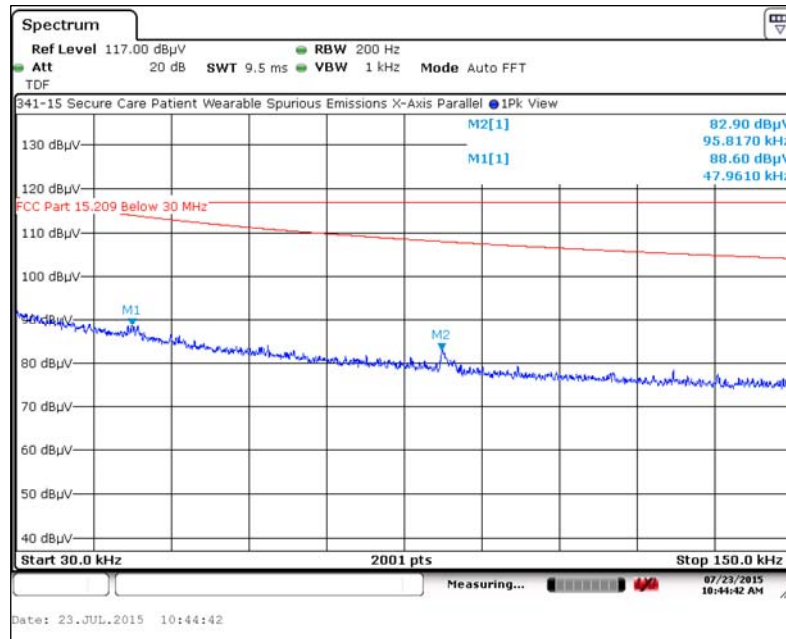
Conclusion: Compliant. The Emissions from the DUT did not exceed the field strength levels specified in FCC Part 15.209.

6. Measurement Data (continued)

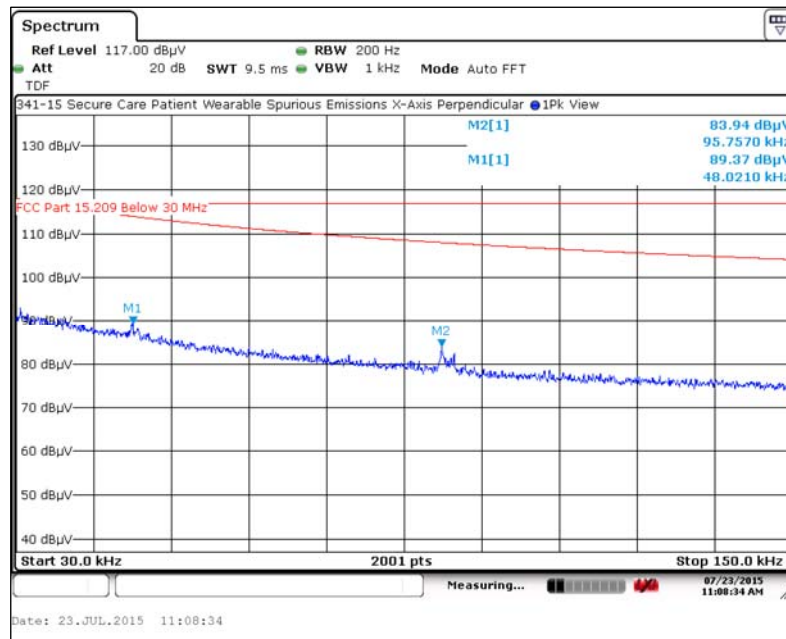
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.1. Spurious Radiated Emissions, 30 kHz to 150 kHz Test Results

6.5.1.1. X-Axis, Parallel Antenna



6.5.1.2. X-Axis, Perpendicular Antenna

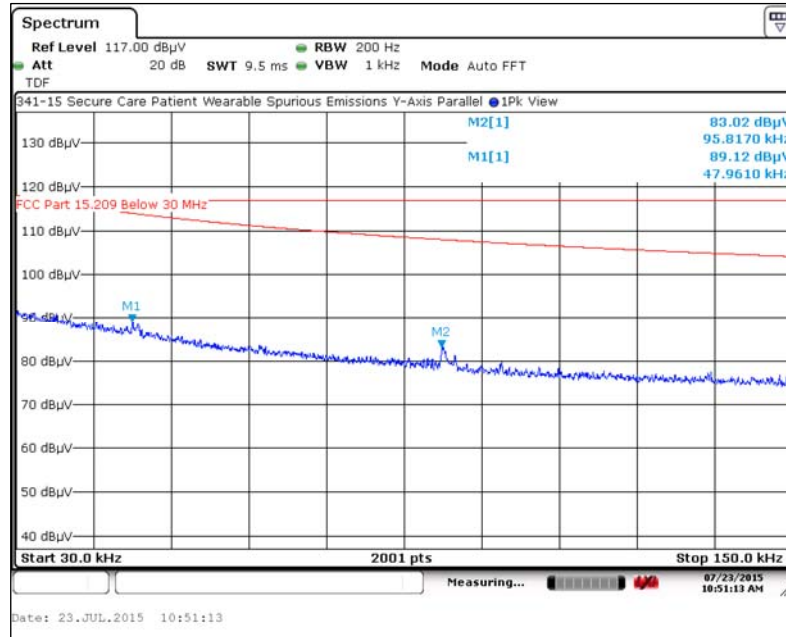


6. Measurement Data (continued)

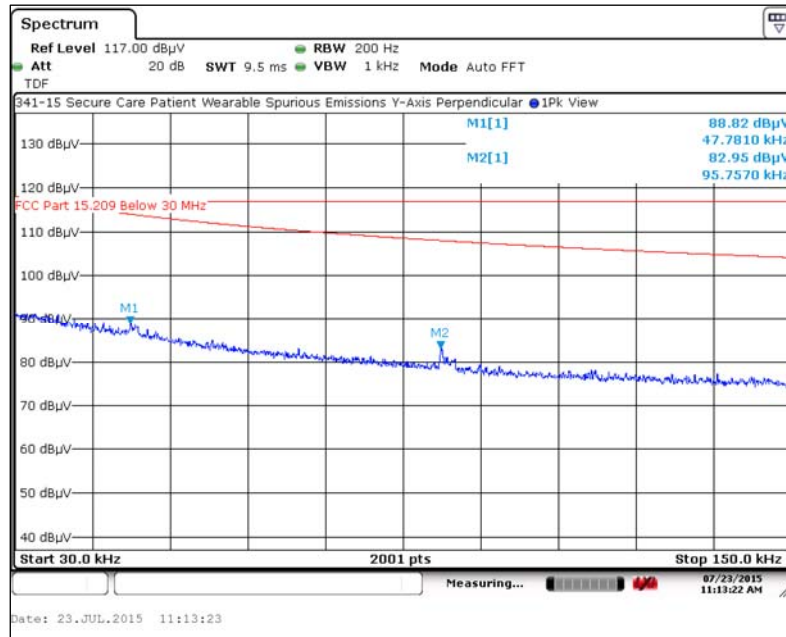
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.1. Spurious Radiated Emissions, 30 kHz to 150 kHz Test Results

6.5.1.3. Y-Axis, Parallel Antenna



6.5.1.4. Y-Axis, Perpendicular Antenna

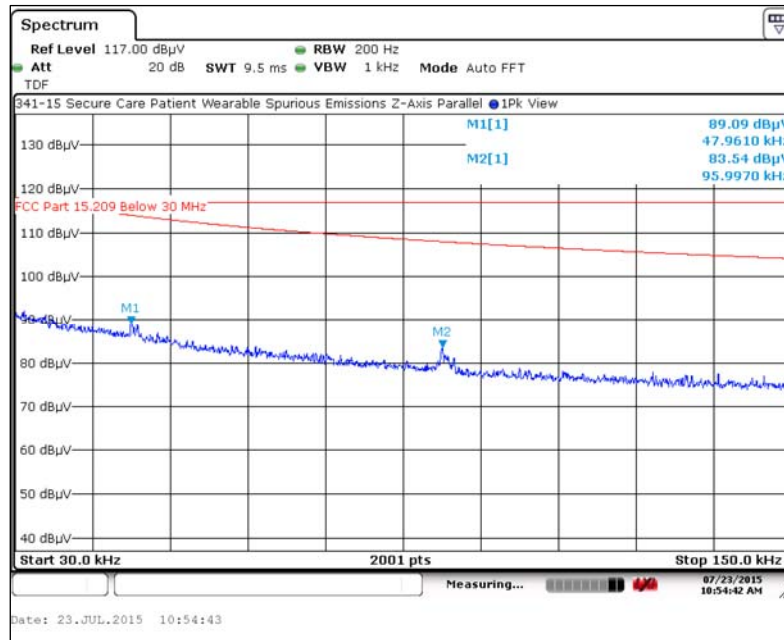


6. Measurement Data (continued)

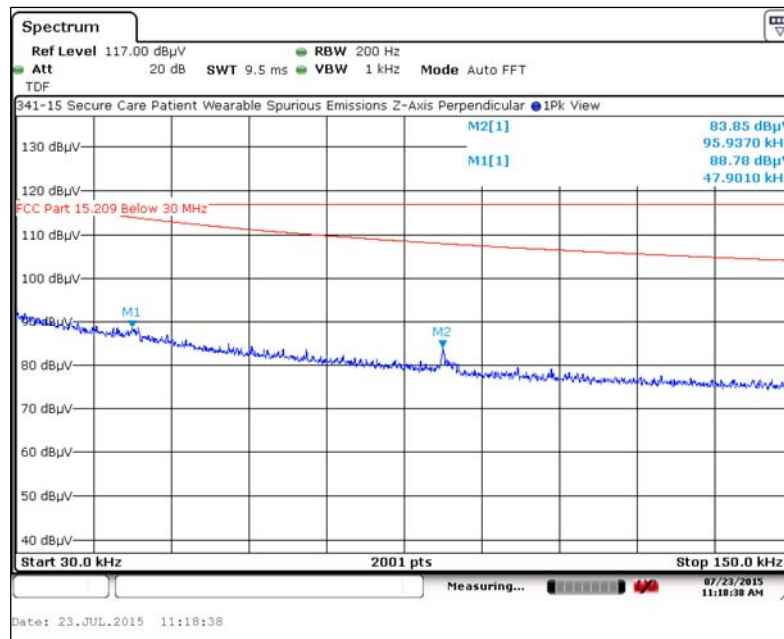
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.1. Spurious Radiated Emissions, 30 kHz to 150 kHz Test Results

6.5.1.5. Z-Axis, Parallel Antenna



6.5.1.6. Z-Axis, Perpendicular Antenna

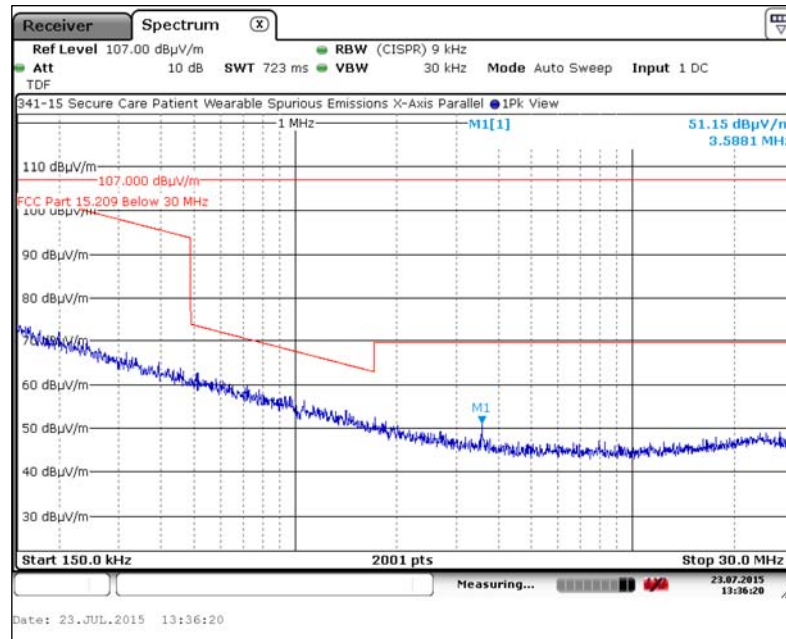


6. Measurement Data (continued)

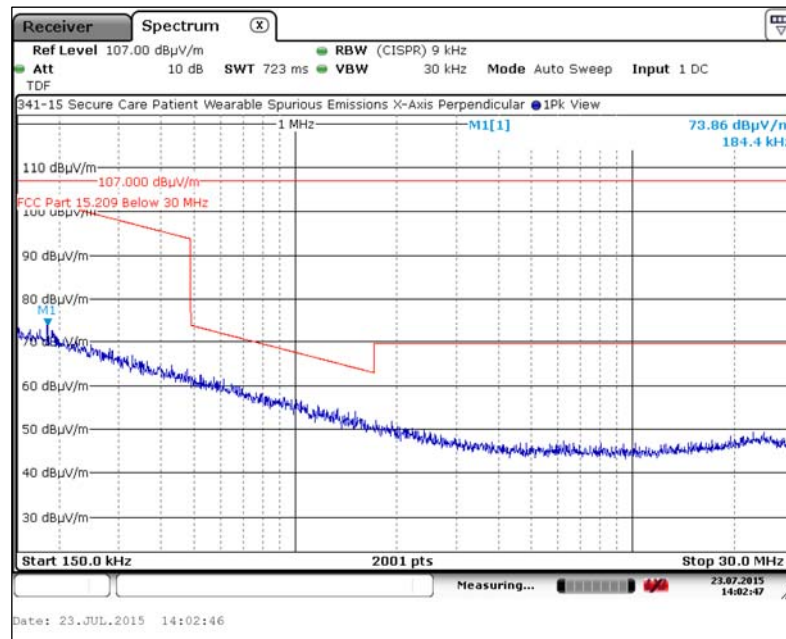
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.2. Spurious Radiated Emissions, 150 kHz to 30 MHz Test Results

6.5.2.1. X-Axis, Parallel Antenna



6.5.2.2. X-Axis, Perpendicular Antenna

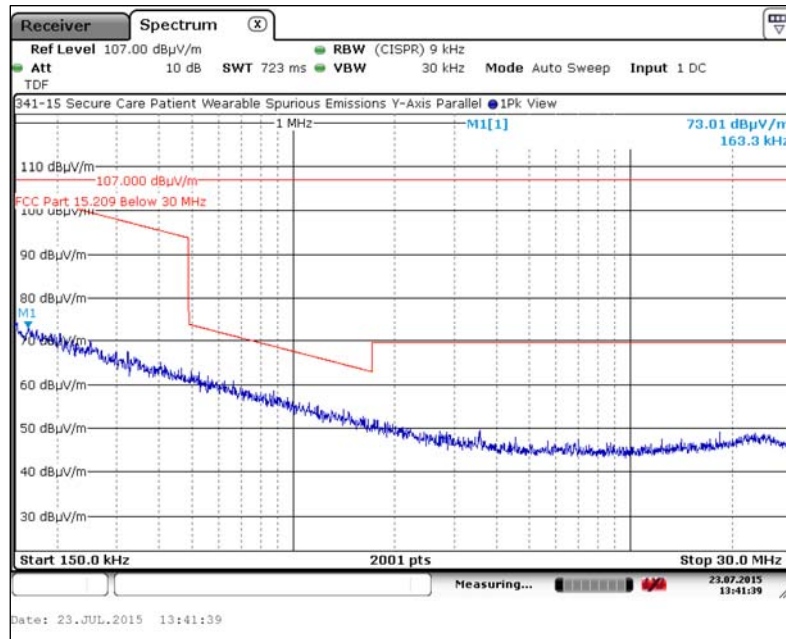


6. Measurement Data (continued)

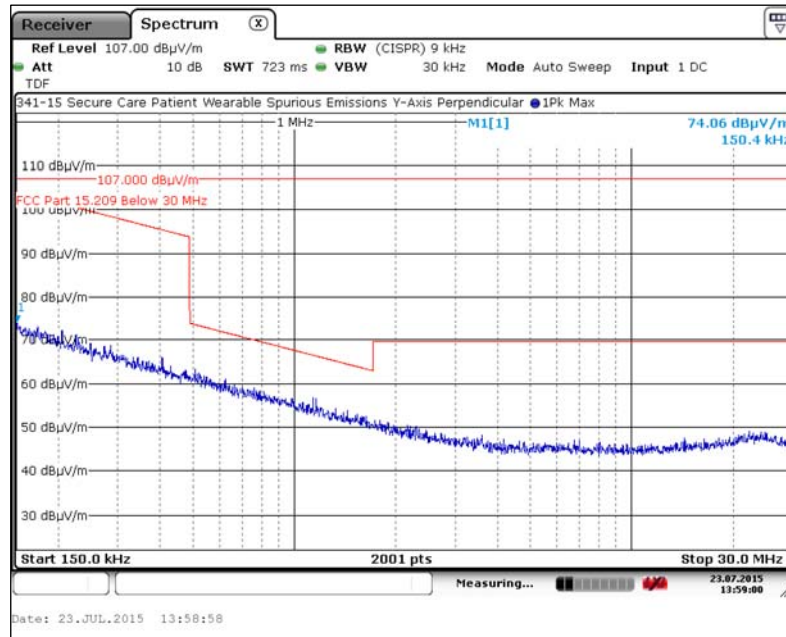
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.2. Spurious Radiated Emissions, 150 kHz to 30 MHz Test Results

6.5.2.3. Y-Axis, Parallel Antenna



6.5.2.4. Y-Axis, Perpendicular Antenna

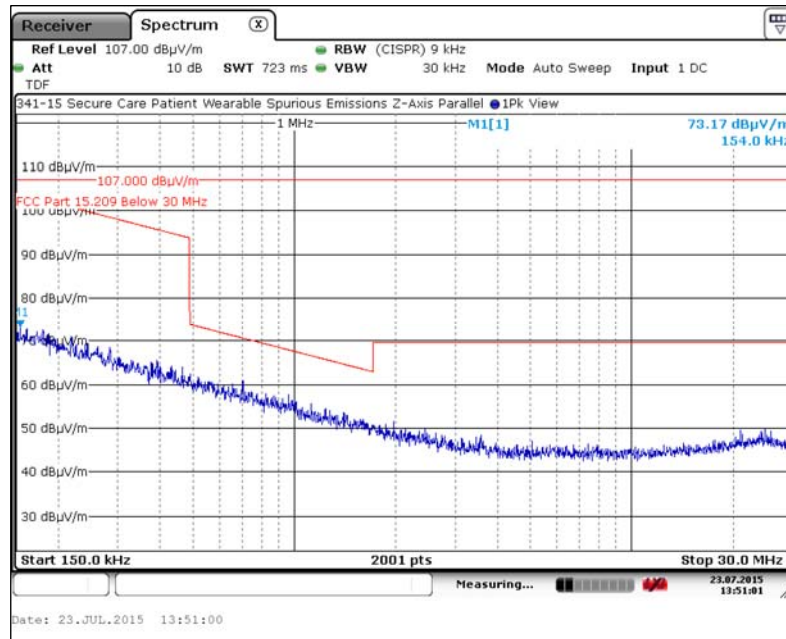


6. Measurement Data (continued)

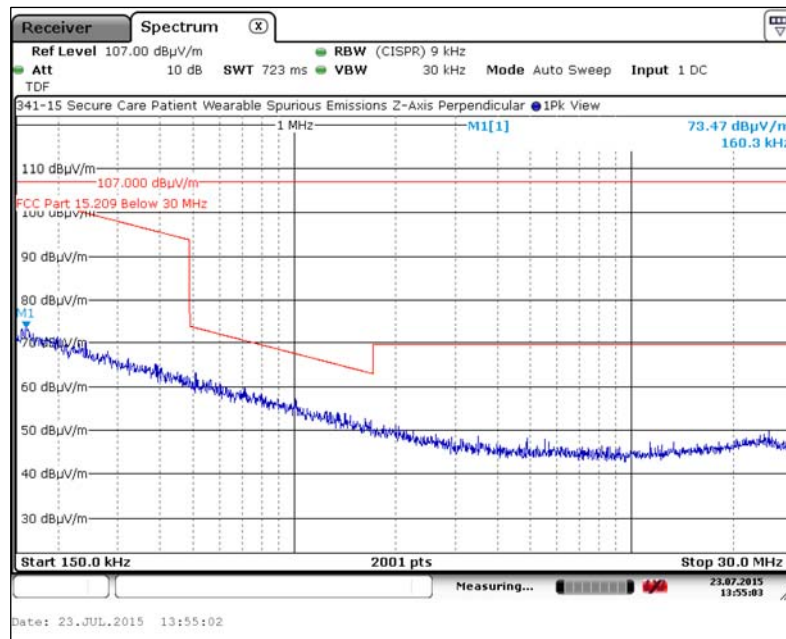
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.2. Spurious Radiated Emissions, 150 kHz to 30 MHz Test Results

6.5.2.5. Z-Axis, Parallel Antenna



6.5.2.6. Z-Axis, Perpendicular Antenna

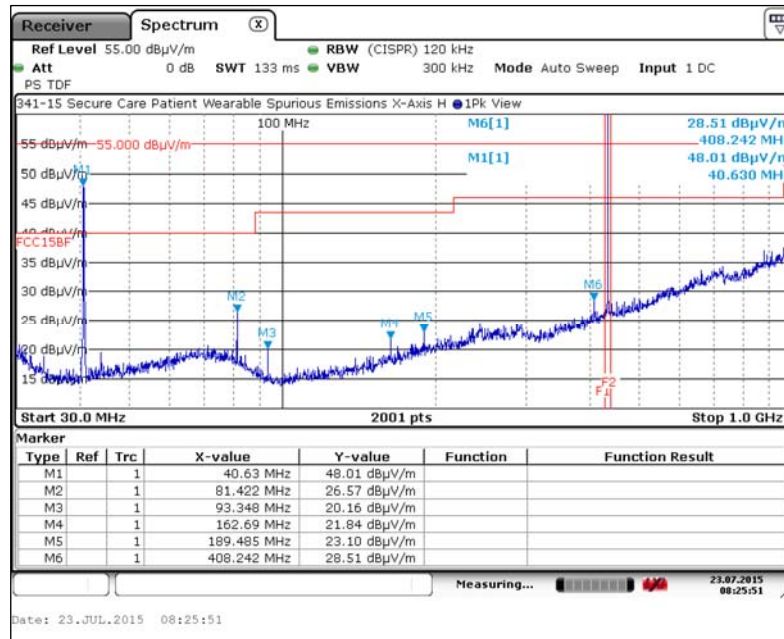


6. Measurement Data (continued)

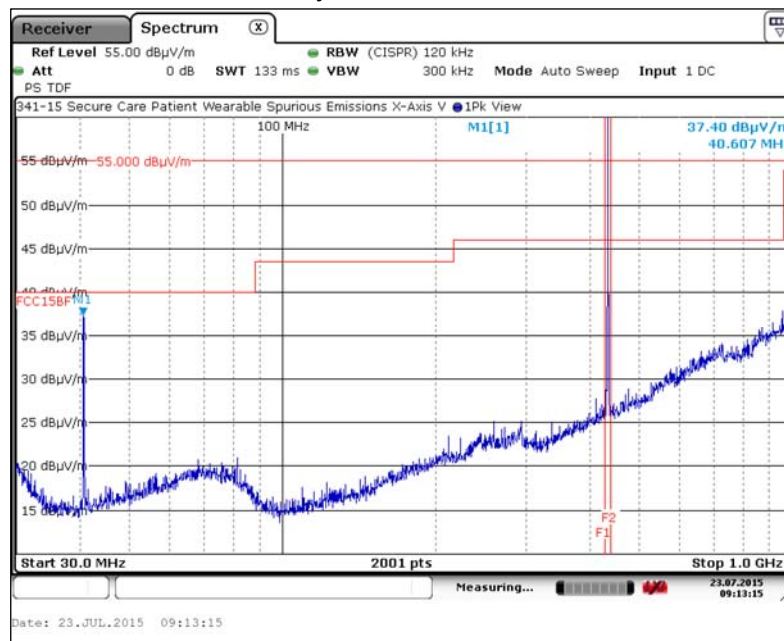
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.3. Spurious Radiated Emissions, 30 MHz to 1 GHz Test Results

6.5.3.1. X-Axis, Horizontal Polarity



6.5.3.2. X-Axis, Vertical Polarity

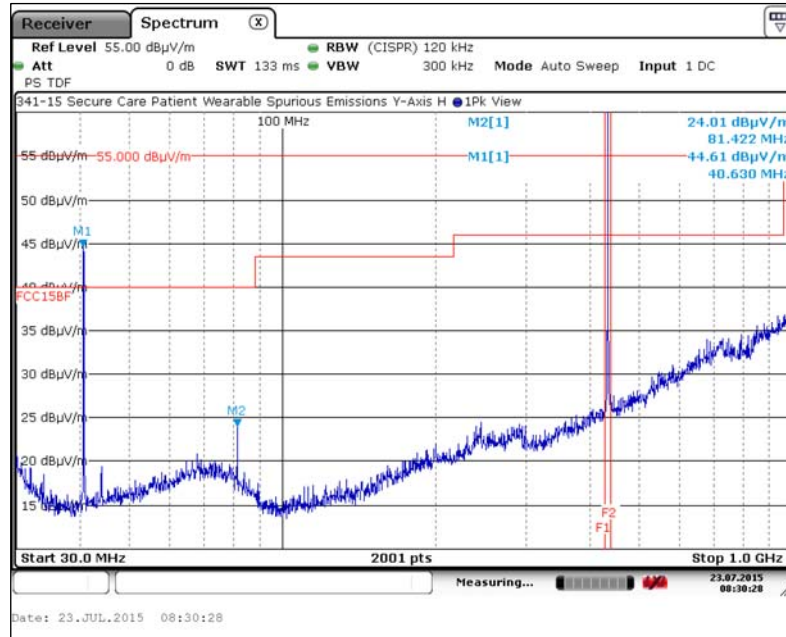


6. Measurement Data (continued)

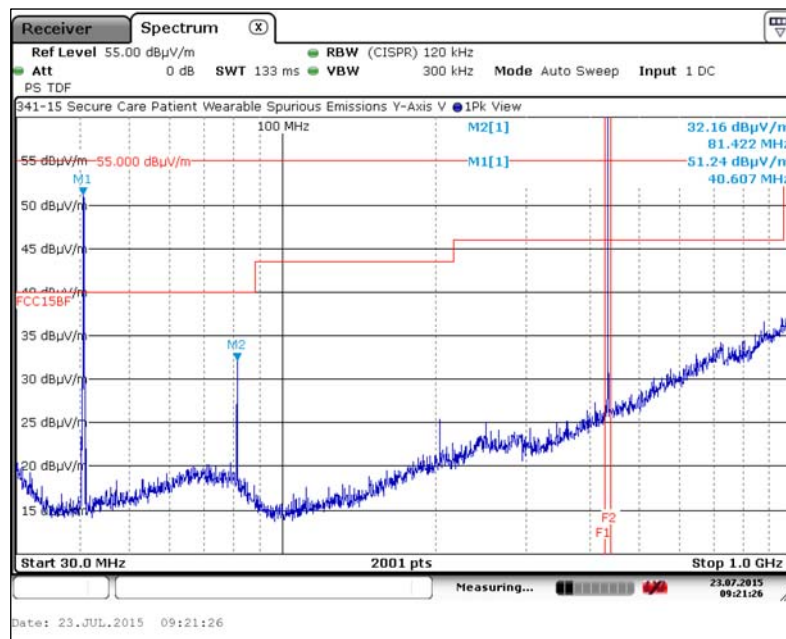
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.3. Spurious Radiated Emissions, 30 MHz to 1 GHz Test Results

6.5.3.3. Y-Axis, Horizontal Polarity



6.5.3.4. Y-Axis, Vertical Polarity

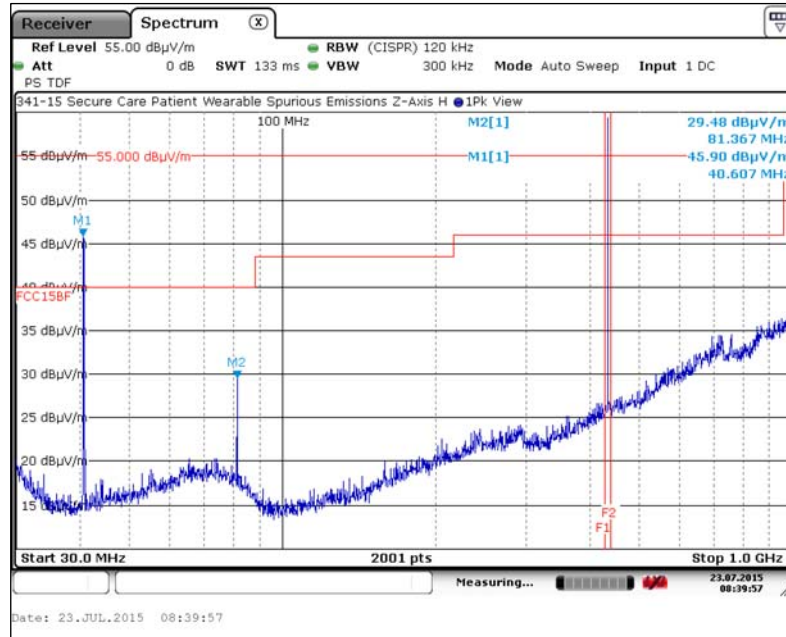


6. Measurement Data (continued)

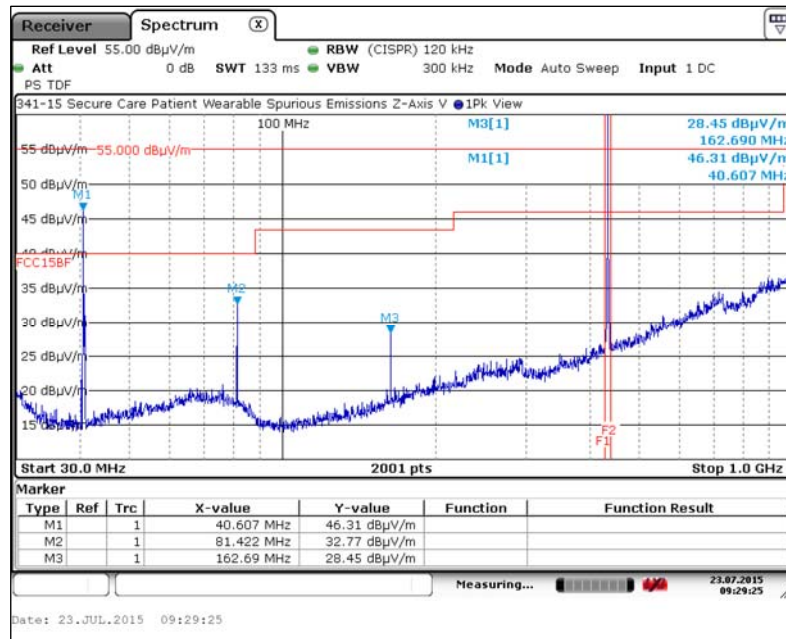
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.3. Spurious Radiated Emissions, 30 MHz to 1 GHz Test Results

6.5.3.5. Z-Axis, Horizontal Polarity



6.5.3.6. Z-Axis, Vertical Polarity

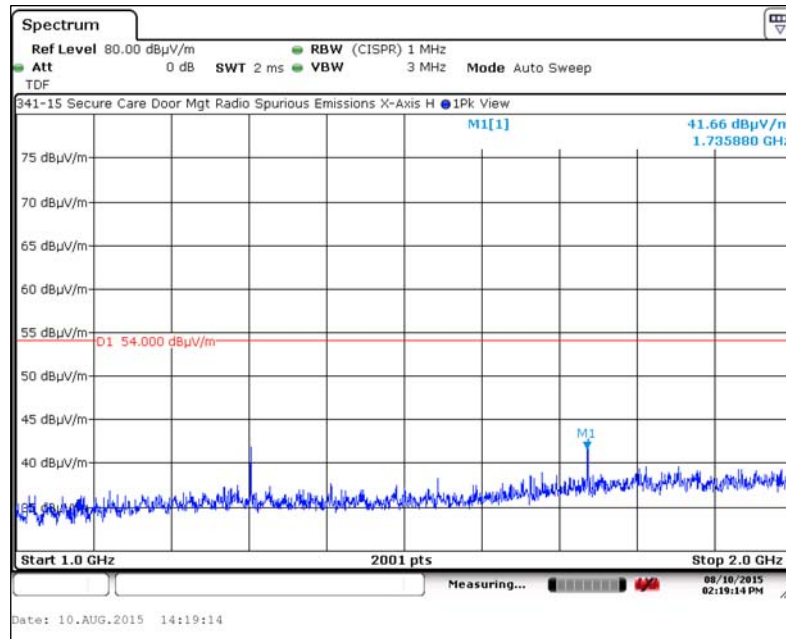


6. Measurement Data (continued)

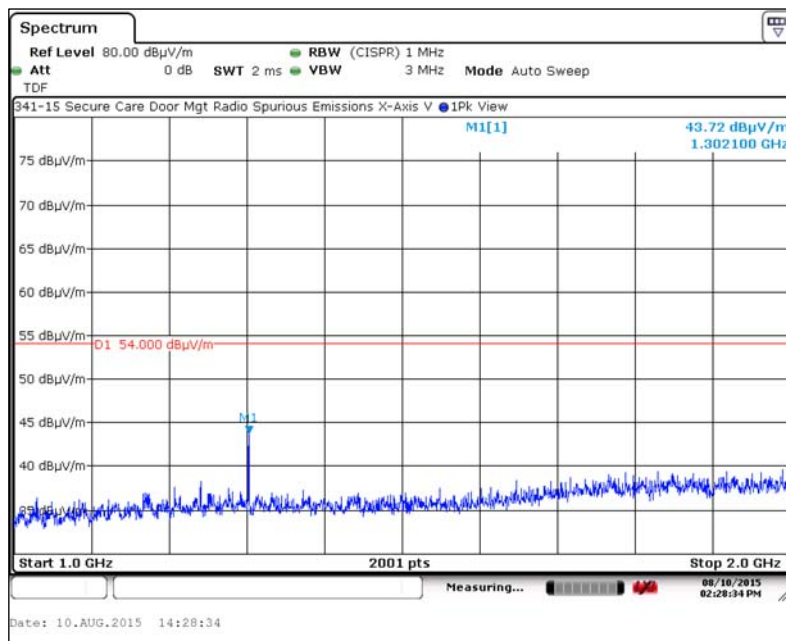
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.4. Spurious Radiated Emissions, 1 MHz to 2 GHz Test Results

6.5.4.1. X-Axis, Horizontal Polarity



6.5.4.2. X-Axis, Vertical Polarity

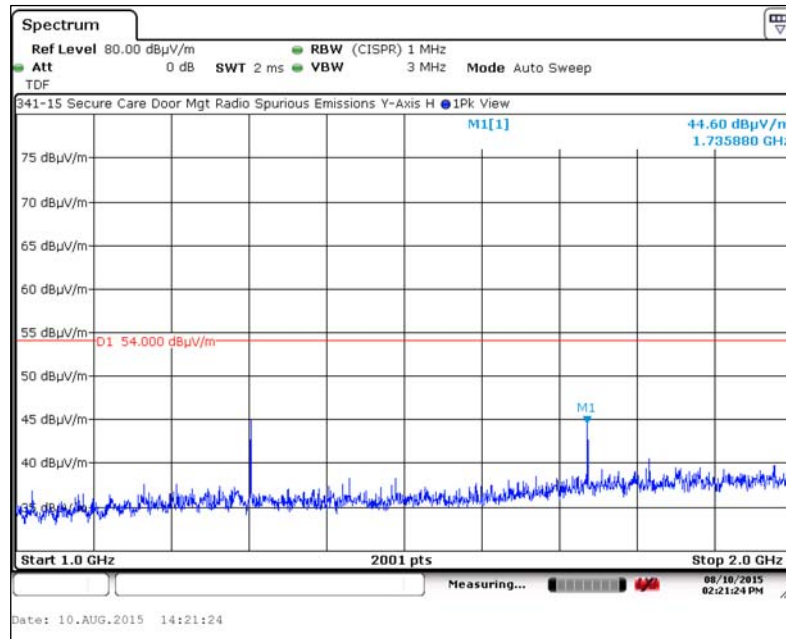


6. Measurement Data (continued)

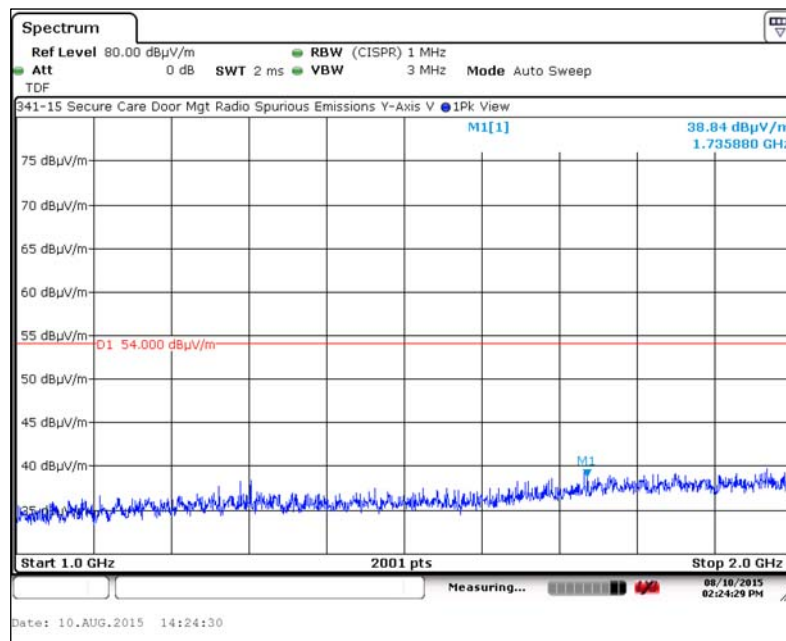
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.4. Spurious Radiated Emissions, 1 GHz to 2 GHz Test Results

6.5.4.3. Y-Axis, Horizontal Polarity



6.5.4.4. Y-Axis, Vertical Polarity

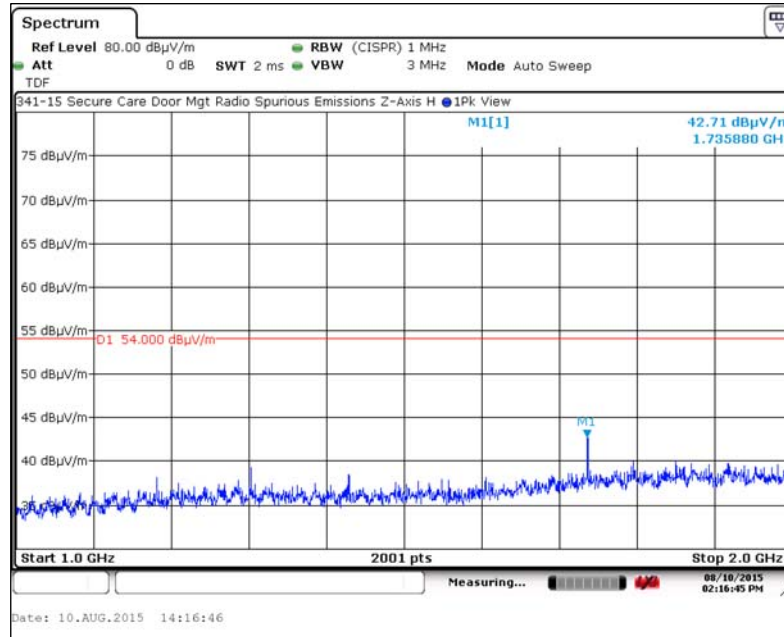


6. Measurement Data (continued)

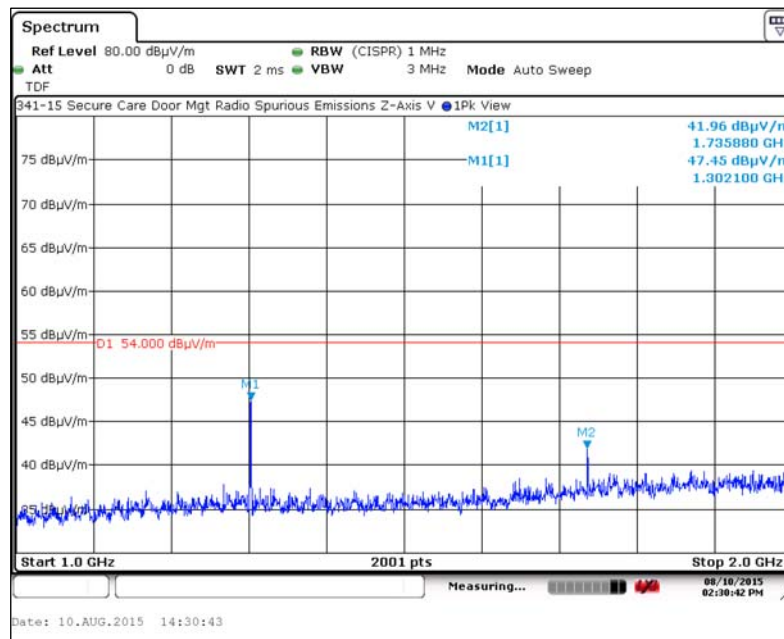
6.5. Spurious Radiated Emissions, 30 kHz to 2.0 GHz (15.229, § (c), 15.209) (cont'd)

6.5.4. Spurious Radiated Emissions, 1 GHz to 2 GHz Test Results

6.5.4.5. Z-Axis, Horizontal Polarity



6.5.4.6. Z-Axis, Vertical Polarity



6. Measurement Data (continued)

6.6. Frequency Stability (15.229 Section (d))

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. For battery operated equipment, the equipment tests shall be performed using a new battery.

Test Note: The Secure Care Model 135 STAT@ID Is housed in a sealed enclosure with a permanent Lithium-ion battery.

Conclusion: The intentional emission falls within the frequency tolerance required by FCC Part 15.229 Section (d)).

Assigned Freq.	Temperature	Voltage	Meas. Frequency	Tolerance %	Result
MHz	Deg. C	VDC	MHz		
40.68	Nominal	3 VDC	40.680270	N/A	N/A
	50		40.680010	0.000600	Compliant
	40		40.680090	0.000400	Compliant
	30		40.680120	0.000400	Compliant
	20		40.680340	0.000200	Compliant
	10		40.680500	0.000600	Compliant
	0		40.680580	0.000800	Compliant
	-10		40.680790	0.001300	Compliant
	-20		40.680790	0.001900	Compliant

7. Test Setup Photographs

7.1. Radiated Emissions Front View



7. Test Setup Photographs

7.2. Radiated Emissions Rear View < 30 MHz



7. Test Setup Photographs

7.3. Radiated Emissions Front View 30 MHz – 1 GHz



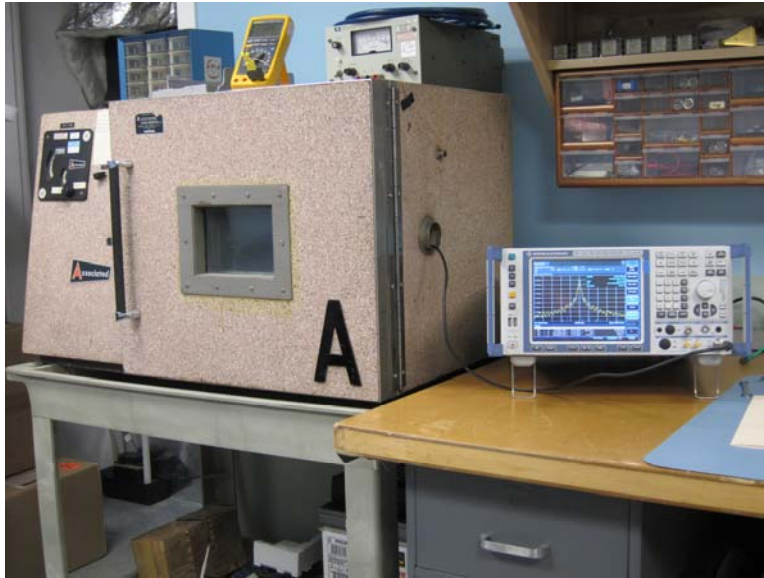
7. Test Setup Photographs

7.4. Radiated Emissions Rear View 30 MHz – 1 GHz



7. Test Setup Photographs

7.5. Frequency Stability Test Setup



8. 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) and Industry Canada standards. A description of the test sites is on file with the FCC (registration number **96392**) and Industry Canada (file number **IC 3023A-1**).

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 meter W x 1.5 meter L x 2.0 meter H, floor standing or table top.