

CLASS II PERMISSIVE CHANGE  
 TEST REPORT

for

COMCAST XFINITY HOME MOTION SENSOR  
 MODEL: URC4470BC0-X-R

Prepared for

ECOLINK INTELLIGENT TECHNOLOGY, INC.  
 2055 CORTE DEL NOGAL  
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DATE: DECEMBER 28, 2016

	REPORT	APPENDICES					TOTAL
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## GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government.

Device Tested: Comcast Xfinity Home Motion Sensor  
Model: URC4470BC0-X-R  
S/N: N/A

Product Description: The EUT is a wireless device used to detect motion inside homes.

Modifications: The EUT was not modified during the testing.

Customer: Ecolink Intelligent Technology, Inc.  
2055 Corte Del Nogal  
Carlsbad, California 92011

Test Dates: December 19, 20 and 22, 2017

Test Specification covered by accreditation:



Test Specifications: Emissions requirements  
CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.247

Test Procedure: ANSI C63.4, ANSI C63.10

Test Deviations: The test procedure was not deviated from during the testing.

## SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz – 30 MHz	This test was not performed because the EUT is battery powered only and cannot be connected to the AC public mains.
2	Fundamental and Emissions produced by the intentional radiator in non-restricted bands, 9 kHz – 25 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247(d)
3	Emissions produced by the intentional radiator in restricted bands, 9 kHz – 25 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209, and section 15.247 (d)
4	DTS Bandwidth	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (a)(2)
5	Peak Power Output	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (b)(3)
6	RF Conducted Antenna Test	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247 (d)
7	Peak Power Spectral Density from the Intentional Radiator to the Antenna	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247 (e)

**1. PURPOSE**

This document is a class II Permissive change test report based on the emissions tests performed on the Comcast Xfinity Home Motion Sensor, Model: URC4470BC0-X-R. The emissions measurements were performed according to the measurement procedure described in ANSI C63.10 and ANSI C63.4. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the Class B specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.247.

The original test report for the certification was Compatible Electronics, Inc. test report number: B60705D1.

## 2. ADMINISTRATIVE DATA

### 2.1 Location of Testing

The emissions tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

### 2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

### 2.3 Cognizant Personnel

Ecolink Intelligent Technology, Inc.

Mike Archbold	Product Development Engineer
Mike Bailey	VP of Operations and Product Development

Compatible Electronics Inc.

Kyle Fujimoto	Test Engineer
James Ross	Test Engineer

### 2.4 Date Test Sample was Received

The test sample was received on December 19, 2016.

### 2.5 Disposition of the Test Sample

The test sample has not been returned to Ecolink Intelligent Technology, Inc. as of the date of this test report.

### 2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
N/A	Not Applicable
VP	Vice President

### 3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this emissions Test Report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
ANSI C63.4 2014	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz
ANSI C63.10 2013	American National Standard for Testing Unlicensed Wireless Devices
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators
558074 D01 DTS Meas Guidance v03r05	Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating under 15.247



#### **4. DESCRIPTION OF TEST CONFIGURATION**

##### **4.1 Description of Test Configuration – Emissions**

The Comcast Xfinity Home Motion Sensor Model: URC4470BC0-X-R (EUT) was tested as a stand-alone unit. The EUT was continuously transmitting on the selected antenna.

The EUT was tested in the X, Y and Z axis. The X orientation is when the EUT is parallel to the ground. The Y orientation is when the EUT is perpendicular to the ground mounted vertically. The Z orientation is when the EUT is perpendicular to the ground mounted horizontally.

The EUT was tested with a fresh set of batteries. The duty cycle is the same from the previous unit tested in Compatible Electronics, Inc. Report Number: B60705D1

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. The final emissions data was taken in this mode of operation and any cables were maximized. All initial investigations were performed with the measurement receiver in manual mode scanning the frequency range continuously. Photographs of the test setup are in Appendix D of this report.

##### **4.1.1 Cable Construction and Termination**

The EUT has no external cables.

**5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT****5.1 EUT and Accessory List**

<b>EQUIPMENT</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>FCC ID</b>
COMCAST XFINITY HOME MOTION SENSOR	ECOLINK INTELLIGENT TECHNOLOGY, INC.	URC4470BC0-X-R	N/A	XQC-PIRZB1

## 5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CAL. CYCLE
<b>GENERAL TEST EQUIPMENT USED IN LAB D</b>					
TDK TestLab	TDK RF Solutions, Inc.	9.22	700145	N/A	N/A
Computer	Hewlett Packard	p6716f	MXX1030PX0	N/A	N/A
LCD Monitor	Hewlett Packard	52031a	3CQ046N3MG	N/A	N/A
EMI Receiver, 20 Hz – 26.5 GHz	Keysight	N9038A	MY51210150	December 29, 2015	1 Year
<b>RF RADIATED EMISSIONS TEST EQUIPMENT</b>					
CombiLog Antenna	Com-Power	AC-220	61060	September 3, 2015	2 Year
Preamplifier	Com-Power	PAM-118A	551024	May 12, 2016	1 Year
Preamplifier	Com-Power	PA-840	711013	May 13, 2016	2 Year
Loop Antenna	Com-Power	AL-130	17089	February 6, 2015	2 Year
Horn Antenna	Com-Power	AH-826	71957	N/A	N/A
Horn Antenna	Com-Power	AH-118	071175	February 26, 2016	2 Year
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
System Controller	Sunol Sciences Corporation	SC110V	112213-1	N/A	N/A
Turntable	Sunol Sciences Corporation	2011VS	N/A	N/A	N/A
Antenna-Mast	Sunol Sciences Corporation	TWR95-4	112213-3	N/A	N/A

## 6. TEST SITE DESCRIPTION

### 6.1 Test Facility Description

Please refer to section 2.1 and 7.1 of this report for emissions test location.

### 6.2 EUT Mounting, Bonding and Grounding

**For frequencies 1 GHz and below:** The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

**For frequencies above 1 GHz:** The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 1.5 meters above the ground plane.

The EUT was not grounded.

## 7. CHARACTERISTICS OF THE TRANSMITTER

### 7.1 Channel Description and Frequencies

The lowest frequency the EUT will use is 2405 MHz and the highest frequency the EUT will use is 2480 MHz. The EUT will be able to be tuned every 5 MHz between the lowest frequency and the highest frequency.

### 7.2 Antenna Gain

The EUT utilizes two internal inverted-F PCB trace antennas. The first antenna has a gain of -1.6 dBi and the second antenna has a gain of -3.9 dBi.

## 8. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

### 8.1 RF Emissions

#### 8.1.1 Conducted Emissions Test

The spectrum analyzer was used as a measuring meter. The data was collected with the spectrum analyzer in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the spectrum analyzer input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer. The output of the second LISN was terminated by a 50 ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the Compatible Electronics conducted emissions software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E.

#### **Test Results:**

This test was not performed because the EUT is battery powered only and cannot be connected to the AC public mains.

### 8.1.2 Radiated Emissions (Spurious and Harmonics) Test

The EMI Receiver was used as the measuring meter. Below 1 GHz, a built-in, internal preamplifier was used to increase the sensitivity of the instrument. The EMI Receiver was initially used with the Analyzer mode feature activated. In this mode, the EMI receiver can then record the actual frequency to be measured. This final reading is then taken accurately in the EMI Receiver mode, which takes into account the cable loss, amplifier gain and antenna factors, so that a true reading is compared to the true limit.

The frequencies above 1 GHz were averaged by using a duty cycle correction factor.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
9 kHz to 150 kHz	200 Hz	Loop Antenna
150 kHz to 30 MHz	9 kHz	Loop Antenna
30 MHz to 1 GHz	120 kHz	Combilog Antenna
1 GHz to 25 GHz	1 MHz	Horn Antenna

The EMI test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is in full compliance with ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results.

#### Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Sections 15.209 and 15.247 (d) for radiated emissions. Please see Appendix E for the data sheets.



## 8.2 DTS Bandwidth

The DTS Bandwidth was measured using the EMI Receiver. The bandwidth was measured using a direct connection from the RF output of the EUT. The following steps were performed for measuring the DTS Bandwidth.

1. Set RBW = 100 kHz
2. Set the video bandwidth (VBW) to equal or greater than 3 times the RBW
3. Detector = Peak
4. Trace Mode = Max Hold
5. Sweep = Auto Couple
6. Allow the trace to stabilize
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (a)(2).

## 8.3 Peak Output Power

The Peak Output Power was measured using the EMI Receiver. The peak output power was measured using a direct connection from the RF output of the EUT. The resolution bandwidth was 8 MHz and the video bandwidth was 50 MHz. The cable loss was also added back into the reading using the reference level offset. The Peak Output Power was then taken.

### Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (b)(3).



#### 8.4 Emissions in Non-Restricted Bands

The emissions in the non-restricted frequency bands measurements were performed via radiated per section 8.1.2. of this test report to maximize the emission. The reference level was established by setting the instrument center frequency to DTS channel center frequency. A peak detector was used with sweep set to auto. A max hold trace was used and allowed to fully stabilize. The peak marker function was used to determine the level and 20 dB below that was the reference level. For emission level measurement, the center frequency and span were set to encompass the frequency range to be measured. A peak detector was used with a sweep time set to auto. The number of measurement points were greater than the span/RBW. A max hold trace was used and allowed to fully stabilize. The peak marker function was used to determine the maximum amplitude level. The final qualification data sheets are located in Appendix E.

##### **Test Results:**

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d).

#### 8.5 RF Band Edges

The RF band edges were taken at 2390 MHz when the EUT was on the low channel and 2483.5 MHz when the EUT was on the high channel using the EMI Receiver. A preamplifier was used to boost the signal level, with the plots being taken at a 3 meter test distance. The radiated emissions test procedure as describe in section 8.1.2 of this test report was used to maximize the emission.

##### **Test Results:**

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d). The RF power at the restricted bands closest to the band edges at 2390 MHz and 2483.5 MHz also meet the limits of section 15.209. Please see the data sheets located in Appendix E.

## 8.6 Spectral Density Test

The spectrum density output was measured using the EMI Receiver. The spectral density output was measured using a direct connection from the RF out on the EUT into the input of the EMI Receiver. The following steps were performed for measuring the spectral density.

1. Set analyzer center frequency to DTS channel center frequency
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to 3 kHz  $\leq$  RBW  $\leq$  100 kHz
4. Set the VBW  $\geq$  3 X RBW
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow trace to fully stabilize
9. Use the peak marker function to determine the maximum amplitude level within the RBW
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat..

### Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (e).

## 9. CONCLUSIONS

The Comcast Xfinity Home Motion Sensor, Model: URC4470BC0-X-R (EUT), as tested, meets all of the specification limits defined in FCC Title 47, Part 15, Subpart B, and Subpart C, sections 15.205, 15.209, 15.207, and 15.247.



  
**APPENDIX A*****LABORATORY ACCREDITATIONS AND RECOGNITIONS***

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**Brea Division**  
114 Olinda Drive  
Brea, CA 92823  
(714) 579-0500

**Agoura Division**  
2337 Troutdale Drive  
Agoura, CA 91301  
(818) 597-0600

**Silverado Division**  
19121 El Toro Road  
Silverado, CA 92676  
(949) 589-0700

**Lake Forest Division**  
20621 Pascal Way  
Lake Forest, CA 92630  
(949) 587-0400

## LABORATORY ACCREDITATIONS AND RECOGNITIONS



® For US, Canada, Australia/New Zealand, Japan, Taiwan, Korea, and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025.

**For the most up-to-date version of our scopes and certificates please visit**

**<http://celectronics.com/quality/scope/>**

Quote from ISO-ILAC-IAF Communiqué on 17025:

"A laboratory's fulfilment of the requirements of ISO/IEC 17025:2005 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025:2005 (Section 4) are written in language relevant to laboratory operations and meet the principles of ISO 9001:2008 Quality Management Systems — Requirements."



FCC Listing, from FCC OET site

[FCC test lab search](https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm) <https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm>





**APPENDIX B**

***MODIFICATIONS TO THE EUT***

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## **MODIFICATIONS TO THE EUT**

The modifications listed below were made to the EUT to pass FCC Subpart B and FCC 15.247 specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

The EUT was not modified during the testing.





**APPENDIX C**

***ADDITIONAL MODELS COVERED  
UNDER THIS REPORT***

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**Brea Division**  
114 Olinda Drive  
Brea, CA 92823  
(714) 579-0500

**Agoura Division**  
2337 Troutdale Drive  
Agoura, CA 91301  
(818) 597-0600

**Silverado Division**  
19121 El Toro Road  
Silverado, CA 92676  
(949) 589-0700

**Lake Forest Division**  
20621 Pascal Way  
Lake Forest, CA 92630  
(949) 587-0400



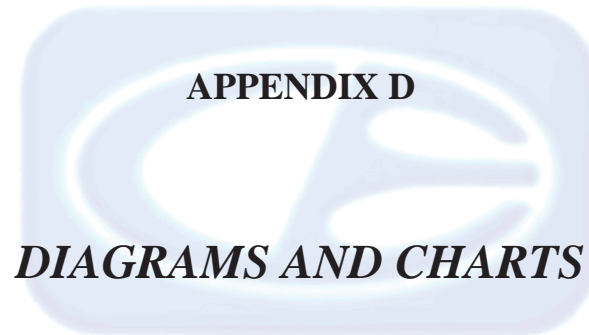
## **ADDITIONAL MODELS COVERED UNDER THIS REPORT**

USED FOR THE PRIMARY TEST

Comcast Xfinity Home Motion Sensor  
Model: URC4470BC0-X-R  
S/N: N/A

There were no additional models covered under this report.

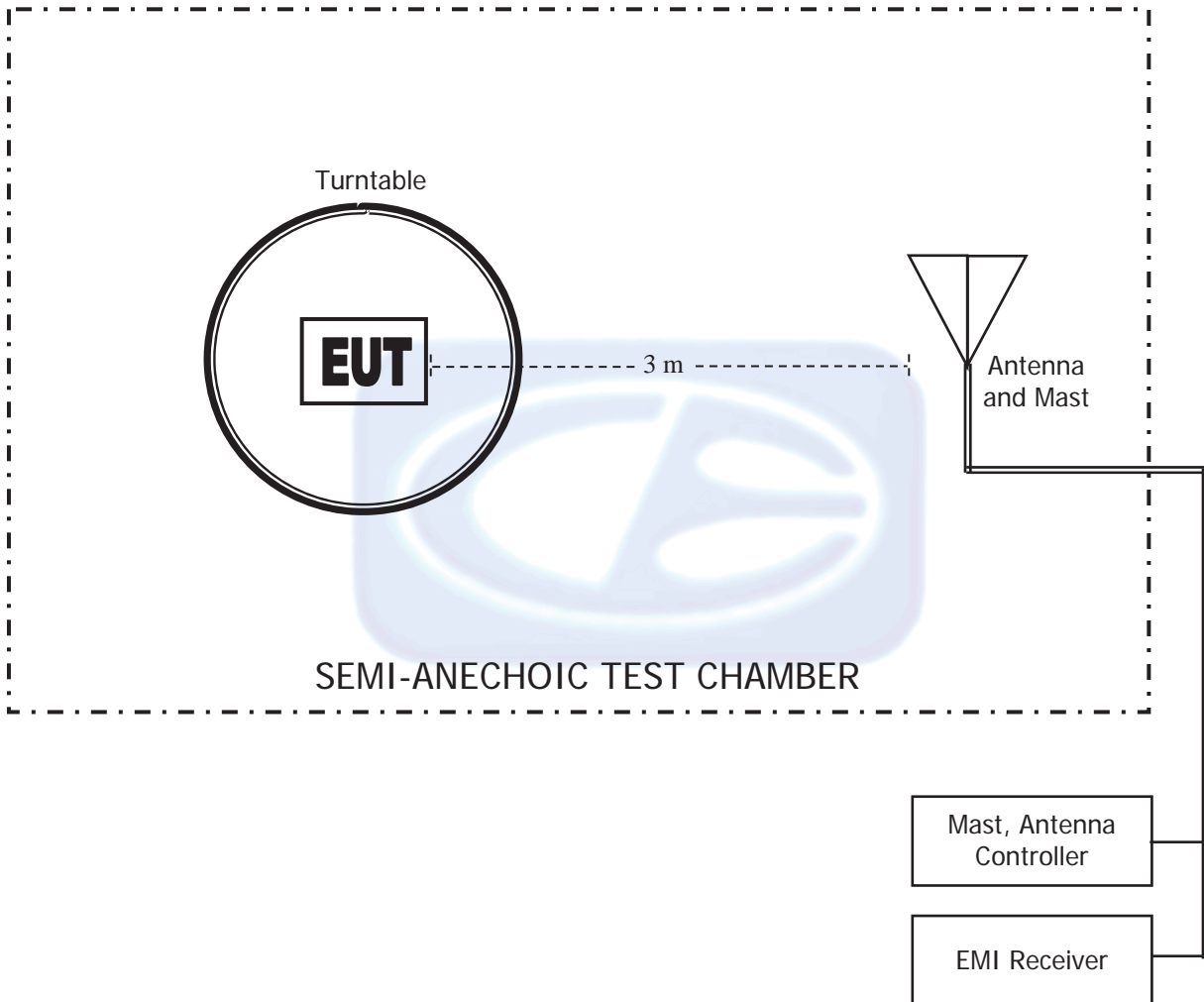




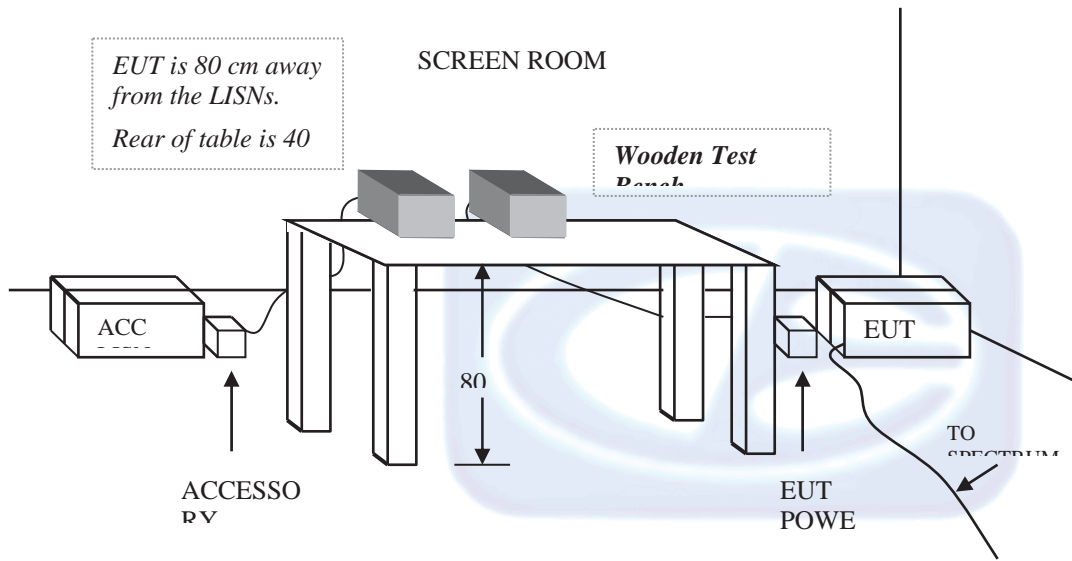
**APPENDIX D**

***DIAGRAMS AND CHARTS***

**FIGURE 1: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER**



**FIGURE 2: CONDUCTED EMISSIONS TEST SETUP**



**COM-POWER AL-130****LOOP ANTENNA**

S/N: 17089

CALIBRATION DATE: FEBRUARY 6, 2015

<b>FREQUENCY (MHz)</b>	<b>MAGNETIC (dB/m)</b>	<b>ELECTRIC (dB/m)</b>
0.009	-33.18	18.32
0.01	-34.10	17.40
0.02	-38.65	12.85
0.03	-39.28	12.22
0.04	-40.09	11.41
0.05	-40.85	10.65
0.06	-40.88	10.62
0.07	-41.07	10.43
0.08	-41.04	10.46
0.09	-41.19	10.31
0.1	-41.20	10.30
0.2	-41.52	9.98
0.3	-41.53	9.97
0.4	-41.42	10.08
0.5	-41.53	9.97
0.6	-41.53	9.97
0.7	-41.43	10.07
0.8	-41.23	10.27
0.9	-41.13	10.37
1	-41.14	10.36
2	-40.80	10.70
3	-40.66	10.84
4	-40.61	10.89
5	-40.33	11.17
6	-40.53	10.97
7	-40.47	11.03
8	-40.48	11.02
9	-39.93	11.57
10	-39.81	11.69
15	-43.35	8.15
20	-39.16	12.34
25	-40.24	11.26
30	-43.18	8.32

**COM-POWER AC-220****COMBILOG ANTENNA****S/N: 61060****CALIBRATION DATE: SEPTEMBER 3, 2015**

<b>FREQUENCY (MHz)</b>	<b>FACTOR (dB)</b>	<b>FREQUENCY (MHz)</b>	<b>FACTOR (dB)</b>
30	24.00	200	13.00
35	24.30	250	15.30
40	25.40	300	18.20
45	21.50	350	17.90
50	22.50	400	18.60
60	15.40	450	19.80
70	12.70	500	21.60
80	11.10	550	22.40
90	13.40	600	23.70
100	13.80	650	24.30
120	15.40	700	24.00
125	15.40	750	24.50
140	13.10	800	24.30
150	17.20	850	26.30
160	13.20	900	26.90
175	14.20	950	26.00
180	14.30	1000	25.60

**COM POWER AH-118****HORN ANTENNA**

S/N: 071175

CALIBRATION DATE: FEBRUARY 26, 2016

<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>	<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>
1.0	23.93	10.0	39.33
1.5	25.54	10.5	39.64
2.0	28.09	11.0	41.04
2.5	30.21	11.5	44.29
3.0	30.15	12.0	41.22
3.5	30.17	12.5	41.50
4.0	31.90	13.0	41.62
4.5	33.51	13.5	40.63
5.0	33.87	14.0	39.94
5.5	35.08	14.5	41.84
6.0	34.81	15.0	42.69
6.5	34.26	15.5	39.03
7.0	36.33	16.0	39.07
7.5	37.03	16.5	41.40
8.0	37.56	17.0	43.18
8.5	40.07	17.5	47.01
9.0	38.92	18.0	46.48
9.5	38.21		

**COM-POWER PA-118****PREAMPLIFIER**

S/N: 551024

CALIBRATION DATE: MAY 12, 2016

<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>	<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>
1.0	39.84	6.0	39.05
1.1	39.40	6.5	38.94
1.2	39.58	7.0	39.25
1.3	39.68	7.5	39.09
1.4	39.91	8.0	39.01
1.5	39.78	8.5	38.60
1.6	39.50	9.0	38.64
1.7	39.81	9.5	39.67
1.8	39.89	10.0	39.30
1.9	39.94	11.0	39.15
2.0	39.57	12.0	39.24
2.5	40.39	13.0	39.49
3.0	40.63	14.0	39.44
3.5	40.80	15.0	39.94
4.0	40.86	16.0	40.09
4.5	39.94	17.0	40.06
5.0	34.47	18.0	39.76
5.5	39.32		



**COM-POWER AH-826****HORN ANTENNA**

S/N: 71957

<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>	<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>
18.0	33.5	22.5	35.5
18.5	33.5	23.0	35.9
19.0	34.0	23.5	35.7
19.5	34.0	24.0	35.6
20.0	34.3	24.5	36.0
20.5	34.9	25.0	36.2
21.0	34.7	25.5	36.1
21.5	35.0	26.0	36.2
22.0	35.0	26.5	35.7

**COM-POWER PA-840****MICROWAVE PREAMPLIFIER**

S/N: 711013

CALIBRATION DATE: MAY 13, 2016

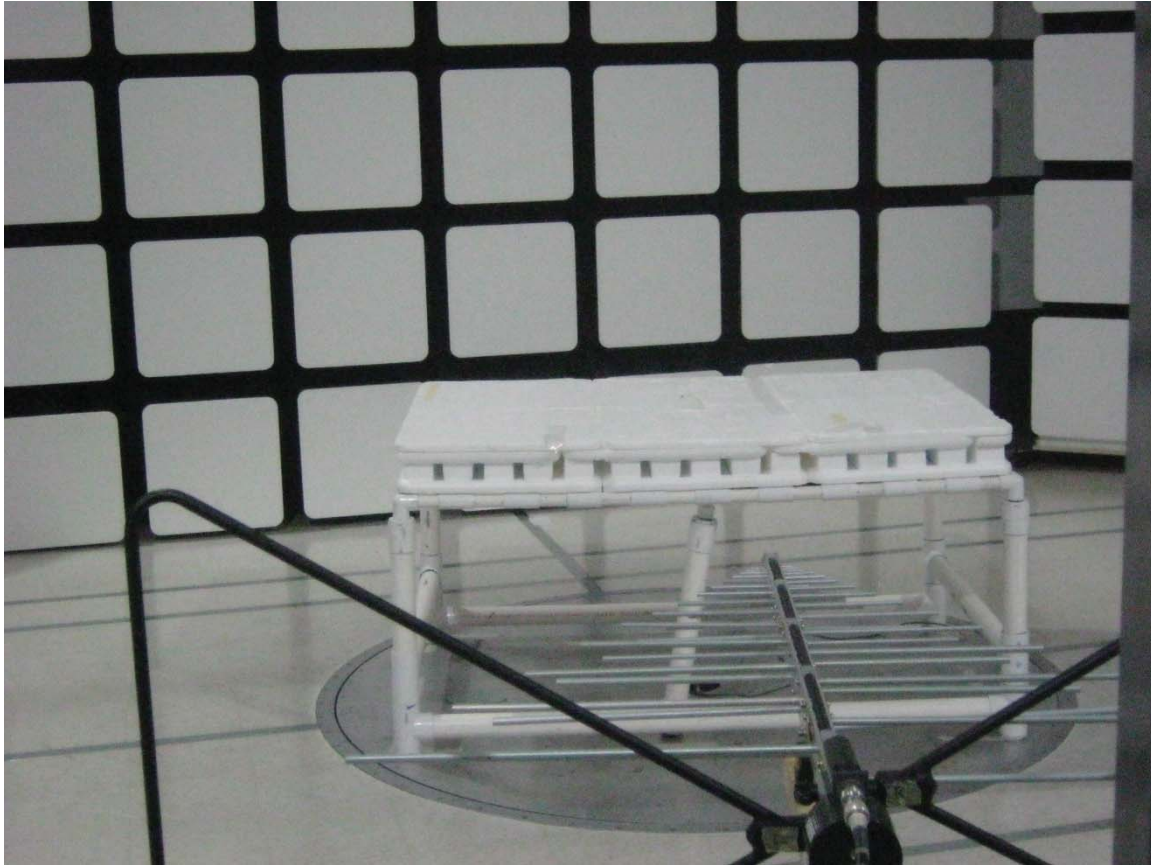
<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>	<b>FREQUENCY (GHz)</b>	<b>FACTOR (dB)</b>
18.0	25.19	31.0	25.69
19.0	24.48	31.5	25.74
20.0	24.39	32.0	26.35
21.0	24.73	32.5	26.64
22.0	23.49	33.0	25.98
23.0	24.23	33.5	24.68
24.0	24.59	34.0	24.61
25.0	25.32	34.5	23.78
26.0	25.66	35.0	24.74
26.5	25.99	35.5	24.39
27.0	26.26	36.0	23.46
27.5	25.33	36.5	23.71
28.0	24.49	37.0	26.35
28.5	24.74	37.5	23.49
29.0	25.93	38.0	25.42
29.5	26.28	38.5	24.87
30.0	26.17	39.0	22.60
30.5	26.11	39.5	20.57
		40.0	19.15



**FRONT VIEW**

ECOLINK INTELLIGENT TECHNOLOGY, INC.  
COMCAST XFINITY HOME MOTION SENSOR  
MODEL: URC4470BC0-X-R  
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION  
FOR MAXIMUM EMISSIONS**

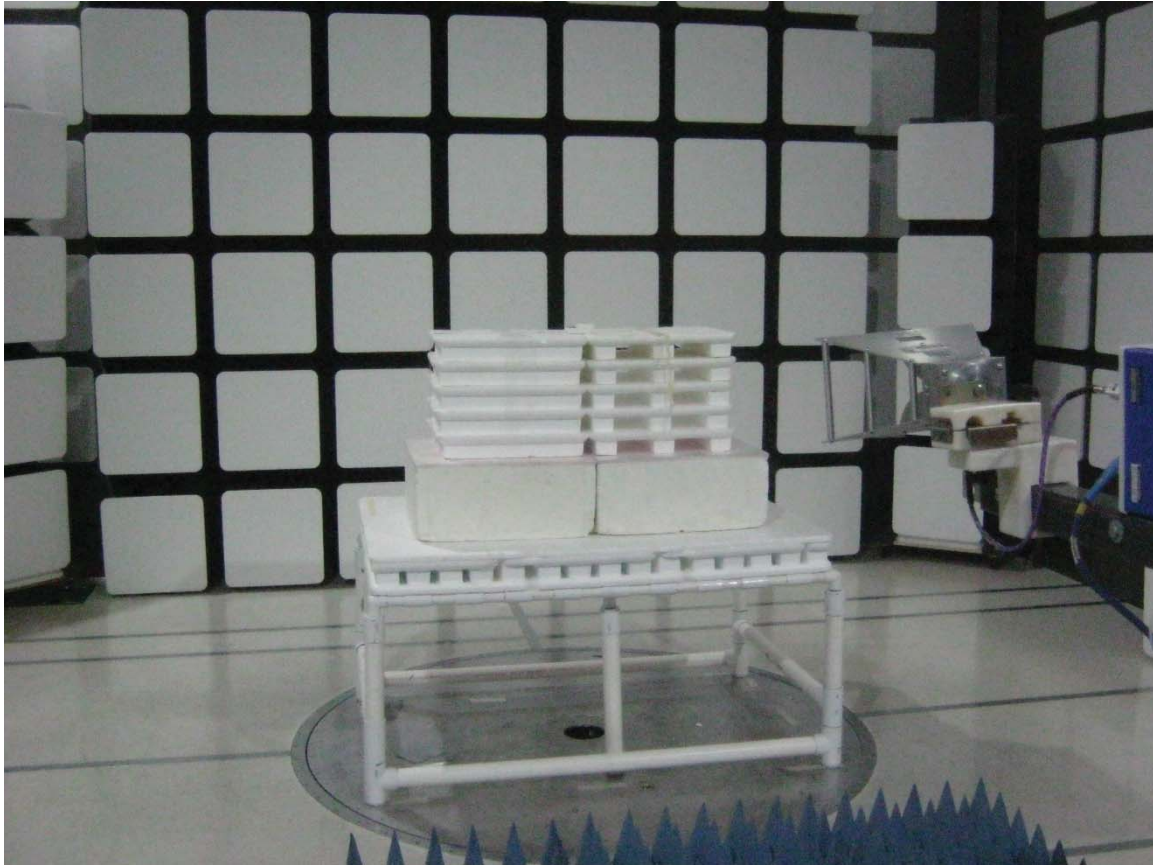


**REAR VIEW**

ECOLINK INTELLIGENT TECHNOLOGY, INC.  
COMCAST XFINITY HOME MOTION SENSOR  
MODEL: URC4470BC0-X-R

FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION  
FOR MAXIMUM EMISSIONS**



**FRONT VIEW**

ECOLINK INTELLIGENT TECHNOLOGY, INC.  
COMCAST XFINITY HOME MOTION SENSOR

MODEL: URC4470BC0-X-R

FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION  
FOR MAXIMUM EMISSIONS**



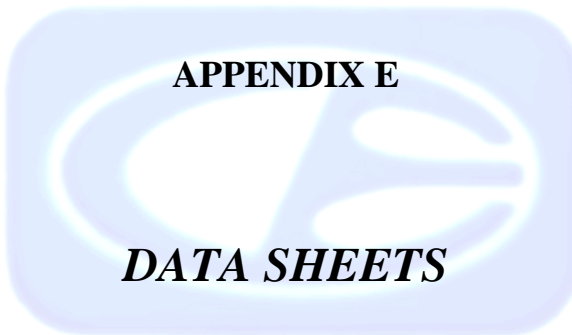
**REAR VIEW**

ECOLINK INTELLIGENT TECHNOLOGY, INC.  
COMCAST XFINITY HOME MOTION SENSOR  
MODEL: URC4470BC0-X-R

FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION  
FOR MAXIMUM EMISSIONS**

**APPENDIX E**



***DATA SHEETS***



***RADIATED EMISSIONS  
DATA SHEETS***



**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 X-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	37.86	V	73.97	-36.11	Peak	322.00	111.61	
4810	26.14	V	53.97	-27.83	Avg	322.00	111.61	
7215	46.56	V	--	--	Peak	55.75	111.43	<b>Not in</b>
7215	34.84	V	--	--	Avg	55.75	111.43	<b>Restricted Band</b>
9620	48.38	V	--	--	Peak	313.00	111.19	<b>Not in</b>
9620	36.66	V	--	--	Avg	313.00	111.19	<b>Restricted Band</b>
12025	47.42	V	73.97	-26.55	Peak	222.25	110.83	
12025	35.70	V	53.97	-18.27	Avg	222.25	110.83	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 X-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	39.09	H	73.97	-34.88	Peak	101.75	110.47	
4810	27.37	H	53.97	-26.60	Avg	101.75	110.47	
7215	46.21	H	--	--	Peak	57.00	127.19	<b>Not in</b>
7215	34.49	H	--	--	Avg	57.00	127.19	<b>Restricted Band</b>
9620	48.96	H	--	--	Peak	310.75	111.19	<b>Not in</b>
9620	37.24	H	--	--	Avg	310.75	111.19	<b>Restricted Band</b>
12025	47.48	H	73.97	-26.49	Peak	204.00	142.89	
12025	35.76	H	53.97	-18.21	Avg	204.00	142.89	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 Y-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	37.89	V	73.97	-36.08	Peak	264.00	127.43	
4810	26.17	V	53.97	-27.80	Avg	264.00	127.43	
7215	45.91	V	--	--	Peak	10.25	111.37	<b>Not in</b>
7215	34.19	V	--	--	Avg	10.25	111.37	<b>Restricted Band</b>
9620	44.68	V	--	--	Peak	322.00	128.92	<b>Not in</b>
9620	32.96	V	--	--	Avg	322.00	128.92	<b>Restricted Band</b>
12025	44.67	V	73.97	-29.30	Peak	167.50	145.16	
12025	32.95	V	53.97	-21.02	Avg	167.50	145.16	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 Y-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	39.01	H	73.97	-34.96	Peak	141.75	144.98	
4810	27.29	H	53.97	-26.68	Avg	141.75	144.98	
7215	46.37	H	--	--	Peak	297.25	129.04	<b>Not in</b>
7215	34.65	H	--	--	Avg	297.25	129.04	<b>Restricted Band</b>
9620	47.79	H	--	--	Peak	222.00	209.46	<b>Not in</b>
9620	36.07	H	--	--	Avg	222.00	209.46	<b>Restricted Band</b>
12025	45.39	H	73.97	-28.58	Peak	180.75	113.22	
12025	33.67	H	53.97	-20.30	Avg	180.75	113.22	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 Z-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	33.38	V	73.97	-40.59	Peak	260.50	128.86	
4810	21.66	V	53.97	-32.31	Avg	260.50	128.86	
7215	42.52	V	--	--	Peak	160.25	249.11	<b>Not in</b>
7215	30.80	V	--	--	Avg	160.25	249.11	<b>Restricted Band</b>
9620	48.99	V	--	--	Peak	189.50	241.52	<b>Not in</b>
9620	37.27	V	--	--	Avg	189.50	241.52	<b>Restricted Band</b>
12025	45.23	V	73.97	-28.74	Peak	305.75	128.98	
12025	33.51	V	53.97	-20.46	Avg	305.75	128.98	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 Z-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	39.42	H	73.97	-34.55	Peak	278.00	128.92	
4810	27.70	H	53.97	-26.27	Avg	278.00	128.92	
7215	44.65	H	--	--	Peak	287.50	161.16	<b>Not in</b>
7215	32.93	H	--	--	Avg	287.50	161.16	<b>Restricted Band</b>
9620	45.24	H	--	--	Peak	140.25	225.70	<b>Not in</b>
9620	33.52	H	--	--	Avg	140.25	225.70	<b>Restricted Band</b>
12025	44.48	H	73.97	-29.49	Peak	243.25	193.10	
12025	32.76	H	53.97	-21.21	Avg	243.25	193.10	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 X-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	43.88	V	73.97	-30.09	Peak	261.25	127.43	
4880	32.16	V	53.97	-21.81	Avg	261.25	127.43	
7320	46.31	V	73.97	-27.66	Peak	218.00	111.25	
7320	34.59	V	53.97	-19.38	Avg	218.00	111.25	
9760	50.51	V	--	--	Peak	129.50	127.25	<b>Not in Restricted Band</b>
9760	38.79	V	--	--	Avg	129.50	127.25	
12200	49.40	V	73.97	-24.57	Peak	349.25	127.37	
12200	37.68	V	53.97	-16.29	Avg	349.25	127.37	
14640								<b>No Emissions Detected</b>
17080								<b>No Emissions Detected</b>
19520								<b>No Emissions Detected</b>
21960								<b>No Emissions Detected</b>
24400								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 X-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	43.08	H	73.97	-30.89	Peak	305.50	175.55	
4880	31.36	H	53.97	-22.61	Avg	305.50	175.55	
7320	46.64	H	73.97	-27.33	Peak	215.50	142.95	
7320	34.92	H	53.97	-19.05	Avg	215.50	142.95	
9760	50.02	H	--	--	Peak	183.25	111.25	<b>Not in Restricted Band</b>
9760	38.30	H	--	--	Avg	183.25	111.25	
12200	48.53	H	73.97	-25.44	Peak	33.75	127.25	
12200	36.81	H	53.97	-17.16	Avg	33.75	127.25	
14640								<b>No Emissions Detected</b>
17080								<b>No Emissions Detected</b>
19520								<b>No Emissions Detected</b>
21960								<b>No Emissions Detected</b>
24400								<b>No Emissions Detected</b>



**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 Y-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	41.87	V	73.97	-32.10	Peak	256.50	144.80	
4880	30.15	V	53.97	-23.82	Avg	256.50	144.80	
7320	46.96	V	73.97	-27.01	Peak	4.00	111.31	
7320	35.24	V	53.97	-18.73	Avg	4.00	111.31	
9760	45.11	V	--	--	Peak	53.75	111.07	<b>Not in Restricted Band</b>
9760	33.39	V	--	--	Avg	53.75	111.07	
12200	49.54	V	73.97	-24.43	Peak	168.25	159.43	
12200	37.82	V	53.97	-16.15	Avg	168.25	159.43	
14640								<b>No Emissions Detected</b>
17080								<b>No Emissions Detected</b>
19520								<b>No Emissions Detected</b>
21960								<b>No Emissions Detected</b>
24400								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 Y-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	46.33	H	73.97	-27.64	Peak	215.25	127.07	
4880	34.61	H	53.97	-19.36	Avg	215.25	127.07	
7320	48.20	H	73.97	-25.77	Peak	292.25	127.37	
7320	36.48	H	53.97	-17.49	Avg	292.25	127.37	
9760	49.50	H	--	--	Peak	221.75	207.55	<b>Not in Restricted Band</b>
9760	37.78	H	--	--	Avg	221.75	207.55	
12200	51.31	H	73.97	-22.66	Peak	183.25	110.89	
12200	39.59	H	53.97	-14.38	Avg	183.25	110.89	
14640								<b>No Emissions Detected</b>
14640								
17080								<b>No Emissions Detected</b>
17080								
19520								<b>No Emissions Detected</b>
19520								
21960								<b>No Emissions Detected</b>
21960								
24400								<b>No Emissions Detected</b>
24400								

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 Z-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	41.45	V	73.97	-32.52	Peak	232.50	113.04	
4880	29.73	V	53.97	-24.24	Avg	232.50	113.04	
7320	44.64	V	73.97	-29.33	Peak	147.75	209.22	
7320	32.92	V	53.97	-21.05	Avg	147.75	209.22	
9760	51.27	V	--	--	Peak	202.50	113.04	<b>Not in Restricted Band</b>
9760	39.55	V	--	--	Avg	202.50	113.04	
12200	49.33	V	73.97	-24.64	Peak	14.75	113.10	
12200	37.61	V	53.97	-16.36	Avg	14.75	113.10	
14640								<b>No Emissions Detected</b>
17080								<b>No Emissions Detected</b>
19520								<b>No Emissions Detected</b>
21960								<b>No Emissions Detected</b>
24400								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 Z-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	42.79	H	73.97	-31.18	Peak	290.25	112.92	
4880	31.07	H	53.97	-22.90	Avg	290.25	112.92	
7320	47.83	H	73.97	-26.14	Peak	107.00	193.58	
7320	36.11	H	53.97	-17.86	Avg	107.00	193.58	
9760	48.02	H	--	--	Peak	100.50	128.98	<b>Not in Restricted Band</b>
9760	36.30	H	--	--	Avg	100.50	128.98	
12200	48.15	H	73.97	-25.82	Peak	195.00	128.92	<b>No Emissions Detected</b>
12200	36.43	H	53.97	-17.54	Avg	195.00	128.92	
14640								<b>No Emissions Detected</b>
14640								
17080								<b>No Emissions Detected</b>
17080								
19520								<b>No Emissions Detected</b>
19520								
21960								<b>No Emissions Detected</b>
21960								
24400								<b>No Emissions Detected</b>
24400								

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 X-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	30.33	V	73.97	-43.64	Peak	359.50	127.61	
4960	18.61	V	53.97	-35.36	Avg	359.50	127.61	
7440	33.94	V	73.97	-40.03	Peak	10.25	159.55	
7440	22.22	V	53.97	-31.75	Avg	10.25	159.55	
9920	36.90	V	--	--	Peak	211.50	127.31	<b>Not in Restricted Band</b>
9920	25.18	V	--	--	Avg	211.50	127.31	
12400	43.70	V	73.97	-30.27	Peak	32.00	143.37	
12400	31.98	V	53.97	-21.99	Avg	32.00	143.37	
14880								<b>No Emissions Detected</b>
17360								<b>No Emissions Detected</b>
19840								<b>No Emissions Detected</b>
22320								<b>No Emissions Detected</b>
24800								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 X-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	30.50	H	73.97	-43.47	Peak	347.00	223.55	
4960	18.78	H	53.97	-35.19	Avg	347.00	223.55	
7440	35.05	H	73.97	-38.92	Peak	210.50	159.49	
7440	23.33	H	53.97	-30.64	Avg	210.50	159.49	
9920	37.44	H	--	--	Peak	18.25	239.67	<b>Not in</b>
9920	25.72	H	--	--	Avg	18.25	239.67	<b>Restricted Band</b>
12400	43.74	H	73.97	-30.23	Peak	165.25	159.25	
12400	32.02	H	53.97	-21.95	Avg	165.25	159.25	
14880								<b>No Emissions</b>
14880								<b>Detected</b>
17360								<b>No Emissions</b>
17360								<b>Detected</b>
19840								<b>No Emissions</b>
19840								<b>Detected</b>
22320								<b>No Emissions</b>
22320								<b>Detected</b>
24800								<b>No Emissions</b>
24800								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 Y-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	29.91	V	73.97	-44.06	Peak	340.75	191.13	
4960	18.19	V	53.97	-35.78	Avg	340.75	191.13	
7440	34.70	V	73.97	-39.27	Peak	123.75	127.31	
7440	22.98	V	53.97	-30.99	Avg	123.75	127.31	
9920	36.90	V	--	--	Peak	181.25	223.31	<b>Not in Restricted Band</b>
9920	25.18	V	--	--	Avg	181.25	223.31	
12400	43.81	V	73.97	-30.16	Peak	1.75	191.43	
12400	32.09	V	53.97	-21.88	Avg	1.75	191.43	
14880								<b>No Emissions Detected</b>
17360								<b>No Emissions Detected</b>
19840								<b>No Emissions Detected</b>
22320								<b>No Emissions Detected</b>
24800								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 Y-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	29.85	H	73.97	-44.12	Peak	98.75	239.73	
4960	18.13	H	53.97	-35.84	Avg	98.75	239.73	
7440	33.91	H	73.97	-40.06	Peak	278.00	250.00	
7440	22.19	H	53.97	-31.78	Avg	278.00	250.00	
9920	37.06	H	--	--	Peak	207.75	207.13	<b>Not in Restricted Band</b>
9920	25.34	H	--	--	Avg	207.75	207.13	
12400	43.97	H	73.97	-30.00	Peak	180.75	175.49	
12400	32.25	H	53.97	-21.72	Avg	180.75	175.49	
14880								<b>No Emissions Detected</b>
17360								<b>No Emissions Detected</b>
19840								<b>No Emissions Detected</b>
22320								<b>No Emissions Detected</b>
24800								<b>No Emissions Detected</b>



**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 Z-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	30.01	V	73.97	-43.96	Peak	33.25	128.80	
4960	18.29	V	53.97	-35.68	Avg	33.25	128.80	
7440	34.86	V	73.97	-39.11	Peak	86.00	160.98	
7440	23.14	V	53.97	-30.83	Avg	86.00	160.98	
9920	37.31	V	--	--	Peak	178.75	161.04	<b>Not in Restricted Band</b>
9920	25.59	V	--	--	Avg	178.75	161.04	
12400	43.44	V	73.97	-30.53	Peak	236.25	225.28	
12400	31.72	V	53.97	-22.25	Avg	236.25	225.28	
14880								<b>No Emissions Detected</b>
17360								<b>No Emissions Detected</b>
19840								<b>No Emissions Detected</b>
22320								<b>No Emissions Detected</b>
24800								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/19/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 Z-Axis - Antenna #1**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	29.76	H	73.97	-44.21	Peak	132.75	145.04	
4960	18.04	H	53.97	-35.93	Avg	132.75	145.04	
7440	34.27	H	73.97	-39.70	Peak	109.75	129.04	
7440	22.55	H	53.97	-31.42	Avg	109.75	129.04	
9920	38.14	H	--	--	Peak	54.50	225.28	<b>Not in</b>
9920	26.42	H	--	--	Avg	54.50	225.28	<b>Restricted Band</b>
12400	43.21	H	73.97	-30.76	Peak	235.25	113.22	
12400	31.49	H	53.97	-22.48	Avg	235.25	113.22	
14880								<b>No Emissions</b>
14880								<b>Detected</b>
17360								<b>No Emissions</b>
17360								<b>Detected</b>
19840								<b>No Emissions</b>
19840								<b>Detected</b>
22320								<b>No Emissions</b>
22320								<b>Detected</b>
24800								<b>No Emissions</b>
24800								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 X-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	36.87	V	73.97	-37.10	Peak	110.25	111.55	
4810	25.15	V	53.97	-28.82	Avg	110.25	111.55	
7215	43.39	V	--	--	Peak	157.00	127.49	<b>Not in</b>
7215	31.67	V	--	--	Avg	157.00	127.49	<b>Restricted Band</b>
9620	46.62	V	--	--	Peak	308.00	127.19	<b>Not in</b>
9620	34.90	V	--	--	Avg	308.00	127.19	<b>Restricted Band</b>
12025	45.99	V	73.97	-27.98	Peak	216.25	143.19	
12025	34.27	V	53.97	-19.70	Avg	216.25	143.19	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 X-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	37.84	H	73.97	-36.13	Peak	96.75	111.49	
4810	26.12	H	53.97	-27.85	Avg	96.75	111.49	
7215	43.07	H	--	--	Peak	51.00	111.49	<b>Not in</b>
7215	31.35	H	--	--	Avg	51.00	111.49	<b>Restricted Band</b>
9620	46.48	H	--	--	Peak	309.00	111.73	<b>Not in</b>
9620	34.76	H	--	--	Avg	309.00	111.73	<b>Restricted Band</b>
12025	43.95	H	73.97	-30.02	Peak	83.50	207.97	
12025	32.23	H	53.97	-21.74	Avg	83.50	207.97	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 Y-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	32.39	V	73.97	-41.58	Peak	277.75	143.37	
4810	20.67	V	53.97	-33.30	Avg	277.75	143.37	
7215	42.60	V	--	--	Peak	0.50	111.49	<b>Not in</b>
7215	30.88	V	--	--	Avg	0.50	111.49	<b>Restricted Band</b>
9620	44.94	V	--	--	Peak	320.00	128.74	<b>Not in</b>
9620	33.22	V	--	--	Avg	320.00	128.74	<b>Restricted Band</b>
12025	44.46	V	73.97	-29.51	Peak	234.75	209.40	
12025	32.74	V	53.97	-21.23	Avg	234.75	209.40	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 Y-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	38.50	H	73.97	-35.47	Peak	205.75	153.40	
4810	26.78	H	53.97	-27.19	Avg	205.75	153.40	
7215	43.44	H	--	--	Peak	233.75	113.28	<b>Not in</b>
7215	31.72	H	--	--	Avg	233.75	113.28	<b>Restricted Band</b>
9620	45.20	H	--	--	Peak	214.00	225.58	<b>Not in</b>
9620	33.48	H	--	--	Avg	214.00	225.58	<b>Restricted Band</b>
12025	44.08	H	73.97	-29.89	Peak	132.25	191.97	
12025	32.36	H	53.97	-21.61	Avg	132.25	191.97	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 Z-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	37.46	V	73.97	-36.51	Peak	25.75	209.58	
4810	25.74	V	53.97	-28.23	Avg	25.75	209.58	
7215	42.05	V	--	--	Peak	175.00	161.40	<b>Not in</b>
7215	30.33	V	--	--	Avg	175.00	161.40	<b>Restricted Band</b>
9620	46.01	V	--	--	Peak	171.00	129.10	<b>Not in</b>
9620	34.29	V	--	--	Avg	171.00	129.10	<b>Restricted Band</b>
12025	44.81	V	73.97	-29.16	Peak	357.75	250.00	
12025	33.09	V	53.97	-20.88	Avg	357.75	250.00	
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Low Channel - Power Level -7  
 Z-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810	38.48	H	73.97	-35.49	Peak	276.50	128.98	
4810	26.76	H	53.97	-27.21	Avg	276.50	128.98	
7215	42.74	H	--	--	Peak	115.75	113.10	<b>Not in</b>
7215	31.02	H	--	--	Avg	115.75	113.10	<b>Restricted Band</b>
9620	46.46	H	--	--	Peak	116.50	113.28	<b>Not in</b>
9620	34.74	H	--	--	Avg	116.50	113.28	<b>Restricted Band</b>
12025								<b>No Emissions</b>
12025								<b>Detected</b>
14430								<b>No Emissions</b>
14430								<b>Detected</b>
16835								<b>No Emissions</b>
16835								<b>Detected</b>
19240								<b>No Emissions</b>
19240								<b>Detected</b>
21645								<b>No Emissions</b>
21645								<b>Detected</b>
24050								<b>No Emissions</b>
24050								<b>Detected</b>



**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 X-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	41.38	V	73.97	-32.59	Peak	302.25	127.43	
4880	29.66	V	53.97	-24.31	Avg	302.25	127.43	
7320	43.50	V	73.97	-30.47	Peak	231.25	127.19	
7320	31.78	V	53.97	-22.19	Avg	231.25	127.19	
9760	49.48	V	--	--	Peak	180.50	111.55	<b>Not in Restricted Band</b>
9760	37.76	V	--	--	Avg	180.50	111.55	
12200	46.57	V	73.97	-27.40	Peak	234.00	127.55	
12200	34.85	V	53.97	-19.12	Avg	234.00	127.55	
14640								<b>No Emissions Detected</b>
17080								<b>No Emissions Detected</b>
19520								<b>No Emissions Detected</b>
21960								<b>No Emissions Detected</b>
24400								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 X-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	43.10	H	73.97	-30.87	Peak	265.50	159.55	
4880	31.38	H	53.97	-22.59	Avg	265.50	159.55	
7320	43.19	H	73.97	-30.78	Peak	216.25	111.07	
7320	31.47	H	53.97	-22.50	Avg	216.25	111.07	
9760	49.66	H	--	--	Peak	129.75	127.25	<b>Not in</b>
9760	37.94	H	--	--	Avg	129.75	127.25	<b>Restricted Band</b>
12200	46.67	H	73.97	-27.30	Peak	349.50	144.20	
12200	34.95	H	53.97	-19.02	Avg	349.50	144.20	
14640								<b>No Emissions</b>
14640								<b>Detected</b>
17080								<b>No Emissions</b>
17080								<b>Detected</b>
19520								<b>No Emissions</b>
19520								<b>Detected</b>
21960								<b>No Emissions</b>
21960								<b>Detected</b>
24400								<b>No Emissions</b>
24400								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 Y-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	43.79	V	73.97	-30.18	Peak	139.25	143.25	
4880	32.07	V	53.97	-21.90	Avg	139.25	143.25	
7320	44.70	V	73.97	-29.27	Peak	180.75	111.55	
7320	32.98	V	53.97	-20.99	Avg	180.75	111.55	
9760	47.79	V	--	--	Peak	132.25	127.37	<b>Not in Restricted Band</b>
9760	36.07	V	--	--	Avg	132.25	127.37	
12200	45.16	V	73.97	-28.81	Peak	349.00	191.13	
12200	33.44	V	53.97	-20.53	Avg	349.00	191.13	
14640								<b>No Emissions Detected</b>
17080								<b>No Emissions Detected</b>
19520								<b>No Emissions Detected</b>
21960								<b>No Emissions Detected</b>
24400								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 Y-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	43.83	H	73.97	-30.14	Peak	22.25	159.31	
4880	32.11	H	53.97	-21.86	Avg	22.25	159.31	
7320	42.14	H	73.97	-31.83	Peak	308.75	121.16	
7320	30.42	H	53.97	-23.55	Avg	308.75	121.16	
9760	48.91	H	--	--	Peak	343.25	207.55	<b>Not in Restricted Band</b>
9760	37.19	H	--	--	Avg	343.25	207.55	
12200	47.15	H	73.97	-26.82	Peak	0.00	127.79	
12200	35.43	H	53.97	-18.54	Avg	0.00	127.79	
14640								<b>No Emissions Detected</b>
17080								<b>No Emissions Detected</b>
19520								<b>No Emissions Detected</b>
21960								<b>No Emissions Detected</b>
24400								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 Z-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	37.56	V	73.97	-36.41	Peak	160.25	143.31	
4880	25.84	V	53.97	-28.13	Avg	160.25	143.31	
7320	41.55	V	73.97	-32.42	Peak	335.00	127.13	
7320	29.83	V	53.97	-24.14	Avg	335.00	127.13	
9760	47.89	V	--	--	Peak	7.25	111.37	<b>Not in Restricted Band</b>
9760	36.17	V	--	--	Avg	7.25	111.37	
12200	49.87	V	73.97	-24.10	Peak	346.25	127.19	
12200	38.15	V	53.97	-15.82	Avg	346.25	127.19	
14640								<b>No Emissions Detected</b>
17080								<b>No Emissions Detected</b>
19520								<b>No Emissions Detected</b>
21960								<b>No Emissions Detected</b>
24400								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - Middle Channel - Power Level -7  
 Z-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880	41.94	H	73.97	-32.03	Peak	177.50	112.98	
4880	30.22	H	53.97	-23.75	Avg	177.50	112.98	
7320	45.11	H	73.97	-28.86	Peak	115.25	111.07	
7320	33.39	H	53.97	-20.58	Avg	115.25	111.07	
9760	47.47	H	--	--	Peak	146.75	127.31	<b>Not in Restricted Band</b>
9760	35.75	H	--	--	Avg	146.75	127.31	
12200	46.00	H	73.97	-27.97	Peak	252.25	249.94	
12200	34.28	H	53.97	-19.69	Avg	252.25	249.94	
14640								<b>No Emissions Detected</b>
17080								<b>No Emissions Detected</b>
19520								<b>No Emissions Detected</b>
21960								<b>No Emissions Detected</b>
24400								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 X-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	30.68	V	73.97	-43.29	Peak	169.25	144.74	
4960	18.96	V	53.97	-35.01	Avg	169.25	144.74	
7440	35.79	V	73.97	-38.18	Peak	122.75	128.80	
7440	24.07	V	53.97	-29.90	Avg	122.75	128.80	
9920	39.36	V	--	--	Peak	337.50	113.04	<b>Not in Restricted Band</b>
9920	27.64	V	--	--	Avg	337.50	113.04	
12400	46.73	V	73.97	-27.24	Peak	227.25	249.94	
12400	35.01	V	53.97	-18.96	Avg	227.25	249.94	
14880								<b>No Emissions Detected</b>
17360								<b>No Emissions Detected</b>
19840								<b>No Emissions Detected</b>
22320								<b>No Emissions Detected</b>
24800								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 X-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	31.04	H	73.97	-42.93	Peak	165.75	193.10	
4960	19.32	H	53.97	-34.65	Avg	165.75	193.10	
7440	35.81	H	73.97	-38.16	Peak	319.00	127.61	
7440	24.09	H	53.97	-29.88	Avg	319.00	127.61	
9920	38.97	H	--	--	Peak	99.50	177.22	<b>Not in Restricted Band</b>
9920	27.25	H	--	--	Avg	99.50	177.22	
12400	46.69	H	73.97	-27.28	Peak	271.00	160.92	
12400	34.97	H	53.97	-19.00	Avg	271.00	160.92	
14880								<b>No Emissions Detected</b>
17360								<b>No Emissions Detected</b>
19840								<b>No Emissions Detected</b>
22320								<b>No Emissions Detected</b>
24800								<b>No Emissions Detected</b>



**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 Y-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	31.45	V	73.97	-42.52	Peak	337.75	111.55	
4960	19.73	V	53.97	-34.24	Avg	337.75	111.55	
7440	35.23	V	73.97	-38.74	Peak	150.25	209.40	
7440	23.51	V	53.97	-30.46	Avg	150.25	209.40	
9920	38.96	V	--	--	Peak	211.25	177.22	<b>Not in Restricted Band</b>
9920	27.24	V	--	--	Avg	211.25	177.22	
12400	46.81	V	73.97	-27.16	Peak	91.75	177.22	
12400	35.09	V	53.97	-18.88	Avg	91.75	177.22	
14880								<b>No Emissions Detected</b>
17360								<b>No Emissions Detected</b>
19840								<b>No Emissions Detected</b>
22320								<b>No Emissions Detected</b>
24800								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 Y-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	30.97	H	73.97	-43.00	Peak	349.75	159.61	
4960	19.25	H	53.97	-34.72	Avg	349.75	159.61	
7440	35.50	H	73.97	-38.47	Peak	300.00	175.67	
7440	23.78	H	53.97	-30.19	Avg	300.00	175.67	
9920	39.78	H	--	--	Peak	15.25	223.91	<b>Not in</b>
9920	28.06	H	--	--	Avg	15.25	223.91	<b>Restricted Band</b>
12400	46.46	H	73.97	-27.51	Peak	244.00	223.61	
12400	34.74	H	53.97	-19.23	Avg	244.00	223.61	
14880								<b>No Emissions</b>
14880								<b>Detected</b>
17360								<b>No Emissions</b>
17360								<b>Detected</b>
19840								<b>No Emissions</b>
19840								<b>Detected</b>
22320								<b>No Emissions</b>
22320								<b>Detected</b>
24800								<b>No Emissions</b>
24800								<b>Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 Z-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	31.37	V	73.97	-42.60	Peak	163.50	239.67	
4960	19.65	V	53.97	-34.32	Avg	163.50	239.67	
7440	35.13	V	73.97	-38.84	Peak	327.75	127.55	
7440	23.41	V	53.97	-30.56	Avg	327.75	127.55	
9920	39.28	V	--	--	Peak	256.75	159.31	<b>Not in Restricted Band</b>
9920	27.56	V	--	--	Avg	256.75	159.31	
12400	45.26	V	73.97	-28.71	Peak	348.25	157.25	
12400	33.54	V	53.97	-20.43	Avg	348.25	157.25	
14880								<b>No Emissions Detected</b>
17360								<b>No Emissions Detected</b>
19840								<b>No Emissions Detected</b>
22320								<b>No Emissions Detected</b>
24800								<b>No Emissions Detected</b>

**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

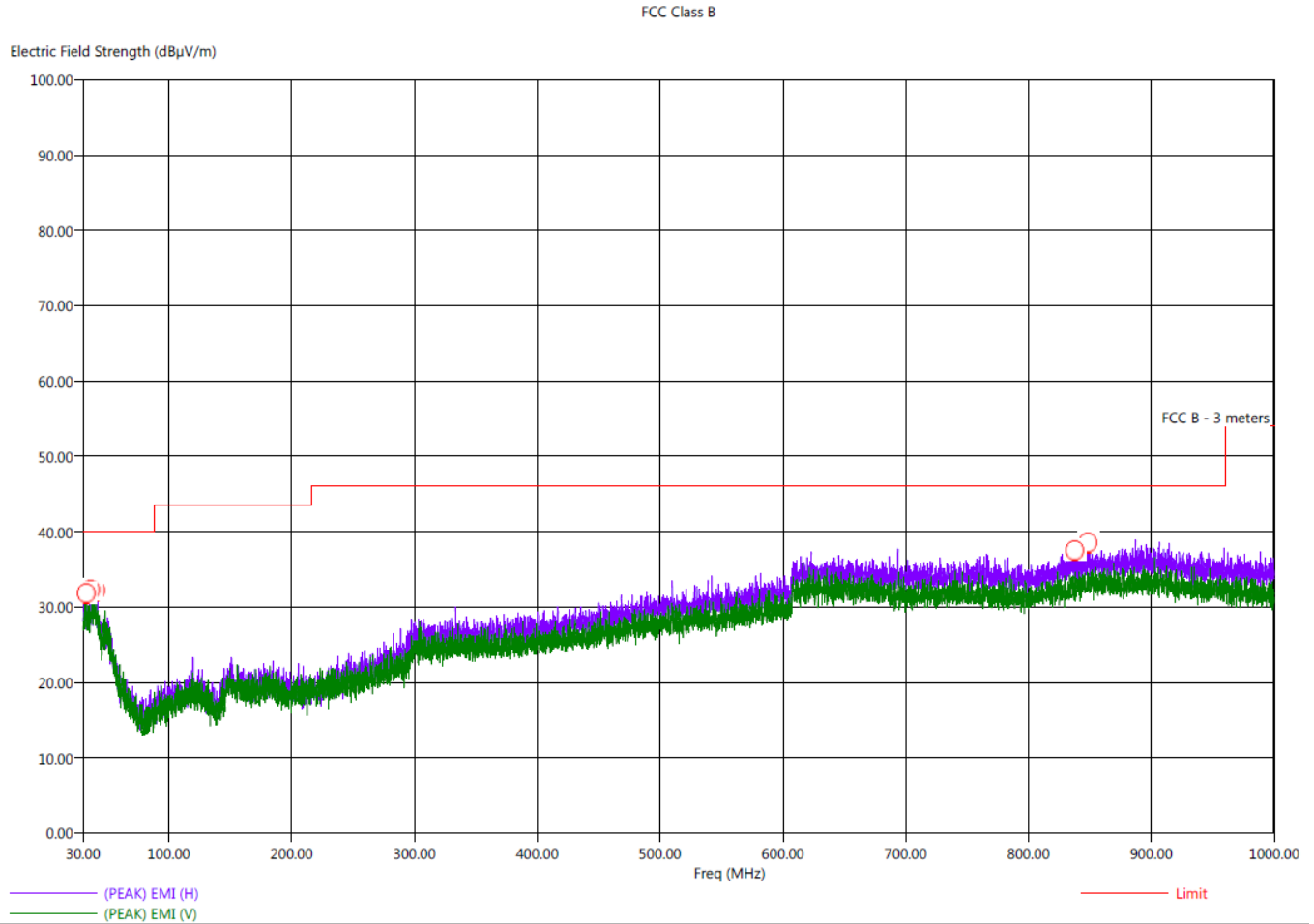
Date: 12/20/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonics - High Channel - Power Level -15  
 Z-Axis - Antenna #2**

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960	31.35	H	73.97	-42.62	Peak	159.75	249.11	
4960	19.63	H	53.97	-34.34	Avg	159.75	249.11	
7440	36.01	H	73.97	-37.96	Peak	307.00	223.61	
7440	24.29	H	53.97	-29.68	Avg	307.00	223.61	
9920	39.13	H	--	--	Peak	167.25	239.55	<b>Not in</b>
9920	27.41	H	--	--	Avg	167.25	239.55	<b>Restricted Band</b>
12400	47.45	H	73.97	-26.52	Peak	235.50	249.94	
12400	35.73	H	53.97	-18.24	Avg	235.50	249.94	
14880								<b>No Emissions</b>
14880								<b>Detected</b>
17360								<b>No Emissions</b>
17360								<b>Detected</b>
19840								<b>No Emissions</b>
19840								<b>Detected</b>
22320								<b>No Emissions</b>
22320								<b>Detected</b>
24800								<b>No Emissions</b>
24800								<b>Detected</b>

Title: Pre-Scan - FCC Class B  
 File: Agilent - Pre-Scan - Antenna 1 - X-Axis - FCC Class B - 30 MHz to 1000 MHz.set  
 Operator: Kyle Fujimoto  
 EUT Type: Comcast Xfinity Home Motion Sensor  
 EUT Condition: The EUT is continuously transmitting at low channel - Antenna 1 - X-Axis Worst Case  
 Comments: Company: Ecolink Intelligent Technology, Inc.  
 Model: URC4470BC0-X-R

12/22/2016 10:00:13 AM  
 Sequence: Preliminary Scan



No additional emissions, except for harmonics, were found between 9 kHz – 30 MHz and 1 GHz – 25 GHz.

Title: Radiated Final - FCC Class B  
 File: Agilent - Final Scan - Antenna 1 - FCC Class B - 30 MHz to 1000 MHz.set  
 Operator: Kyle Fujimoto  
 EUT Type: Comcast Xfinity Home Motion Sensor  
 EUT Condition: The EUT is continuously transmitting at low channel - Antenna 1 - X-Axis Worst Case  
 Comments: Company: Ecolink Intelligent Technology, Inc.  
 Model: URC4470BC0-X-R

12/22/2016 10:29:17 AM  
 Sequence: Final Measurements

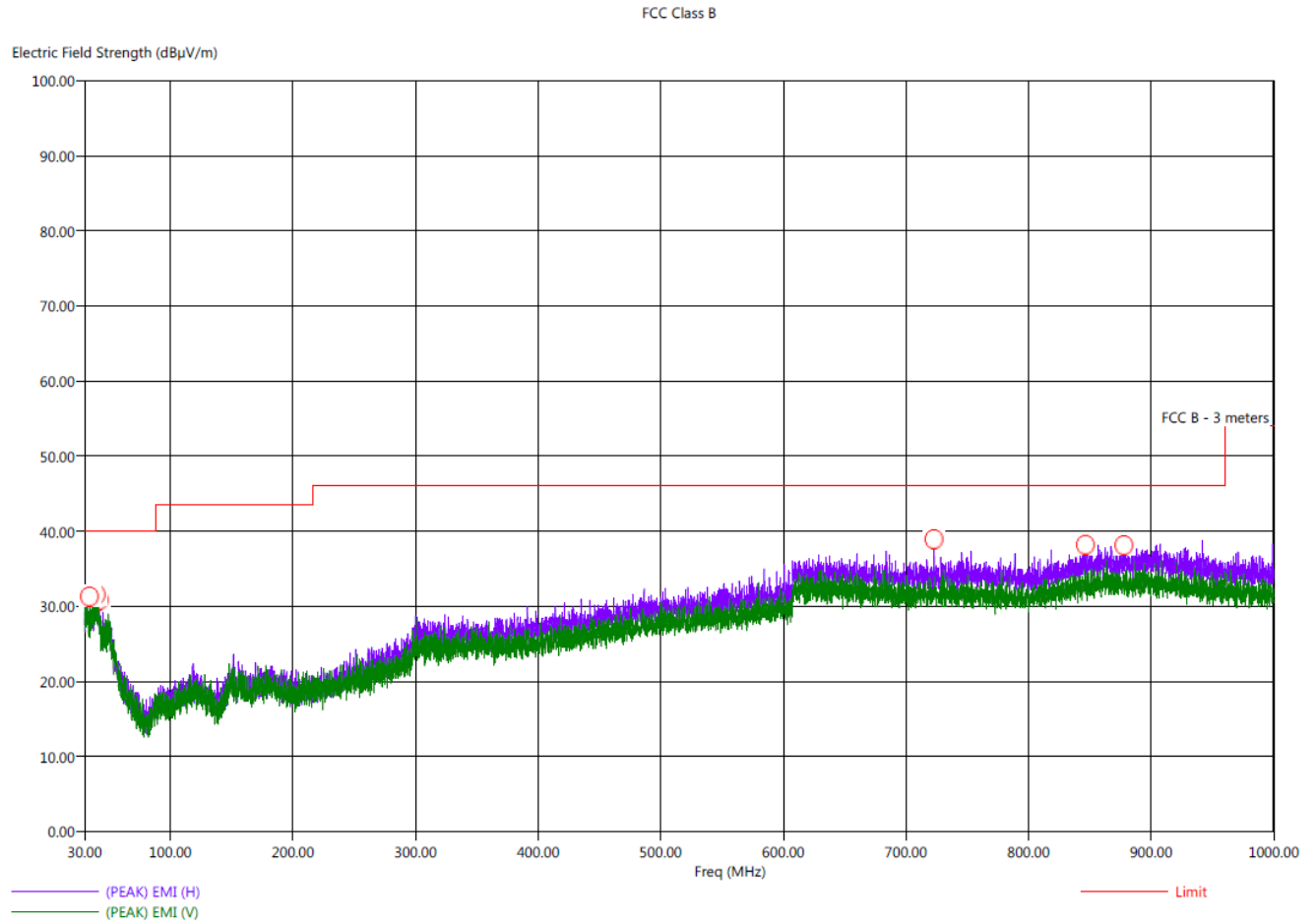
FCC Class B

Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(OP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Aql (deg)	Twr Ht (cm)
32.80	V	33.19	27.03	-6.81	-12.97	40.00	24.18	0.33	100.25	399.91
36.40	H	32.18	27.27	-7.82	-12.73	40.00	24.57	0.37	234.50	400.02
37.10	H	32.35	27.50	-7.65	-12.50	40.00	24.79	0.37	287.75	111.55
40.60	H	33.01	27.68	-6.99	-12.32	40.00	25.03	0.40	270.25	304.26
837.70	H	38.12	32.67	-7.88	-13.33	46.00	25.82	2.55	72.50	272.20
848.40	H	38.19	33.09	-7.81	-12.91	46.00	26.24	2.59	148.75	207.55



Title: Pre-Scan - FCC Class B  
 File: Agilent - Pre-Scan - Antenna 2 - X-Axis - FCC Class B - 30 MHz to 1000 MHz.set  
 Operator: Kyle Fujimoto  
 EUT Type: Comcast Xfinity Home Motion Sensor  
 EUT Condition: The EUT is continuously transmitting at low channel - Antenna 2 - X-Axis Worst Case  
 Comments: Company: Ecolink Intelligent Technology, Inc.  
 Model: URC4470BC0-X-R

12/22/2016 8:55:25 AM  
 Sequence: Preliminary Scan



No additional emissions, except for harmonics, were found between 9 kHz – 30 MHz and 1 GHz – 25 GHz.

Title: Radiated Final - FCC Class B  
 File: Agilent - Final Scan - Antenna 2 - FCC Class B - 30 MHz to 1000 MHz.set  
 Operator: Kyle Fujimoto  
 EUT Type: Comcast Xfinity Home Motion Sensor  
 EUT Condition: The EUT is continuously transmitting at low channel - Antenna 2 - X-Axis Worst Case  
 Comments: Company: Ecolink Intelligent Technology, Inc.  
 Model: URC4470BC0-X-R

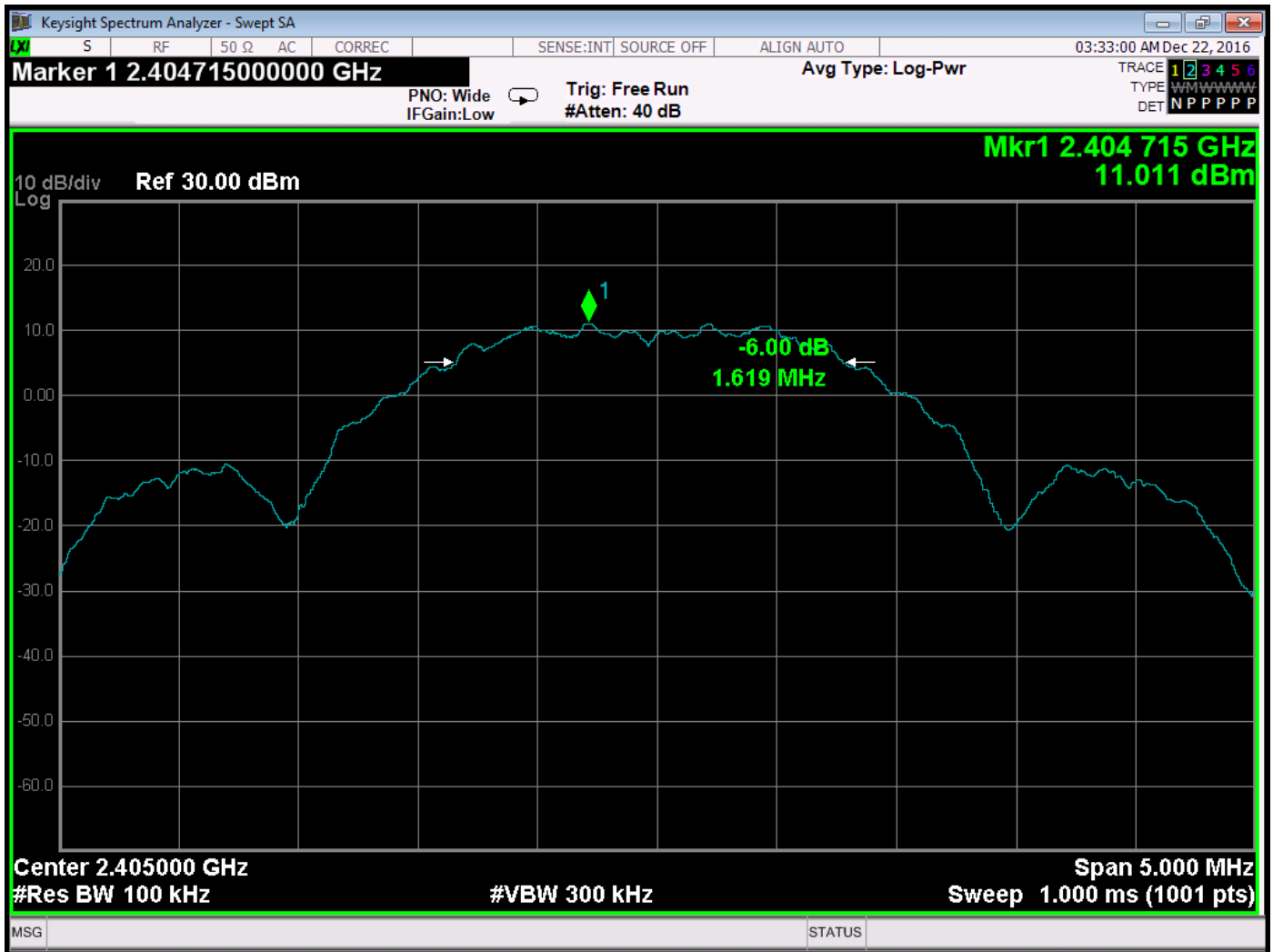
12/22/2016 9:24:14 AM  
 Sequence: Final Measurements

FCC Class B											
Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(OP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Aql (dea)	Twr Ht (cm)	
34.00	V	32.45	27.63	-7.55	-12.37	40.00	24.25	0.34	215.00	224.62	
39.70	H	33.15	28.05	-6.85	-11.95	40.00	25.34	0.40	334.25	159.43	
42.10	H	31.47	26.27	-8.53	-13.73	40.00	23.72	0.40	210.50	399.85	
723.00	H	36.46	31.59	-9.54	-14.41	46.00	24.23	2.44	277.00	223.55	
846.50	H	38.34	33.03	-7.66	-12.97	46.00	26.17	2.59	122.75	368.92	
877.90	H	38.37	33.26	-7.63	-12.74	46.00	26.64	2.60	266.50	175.43	

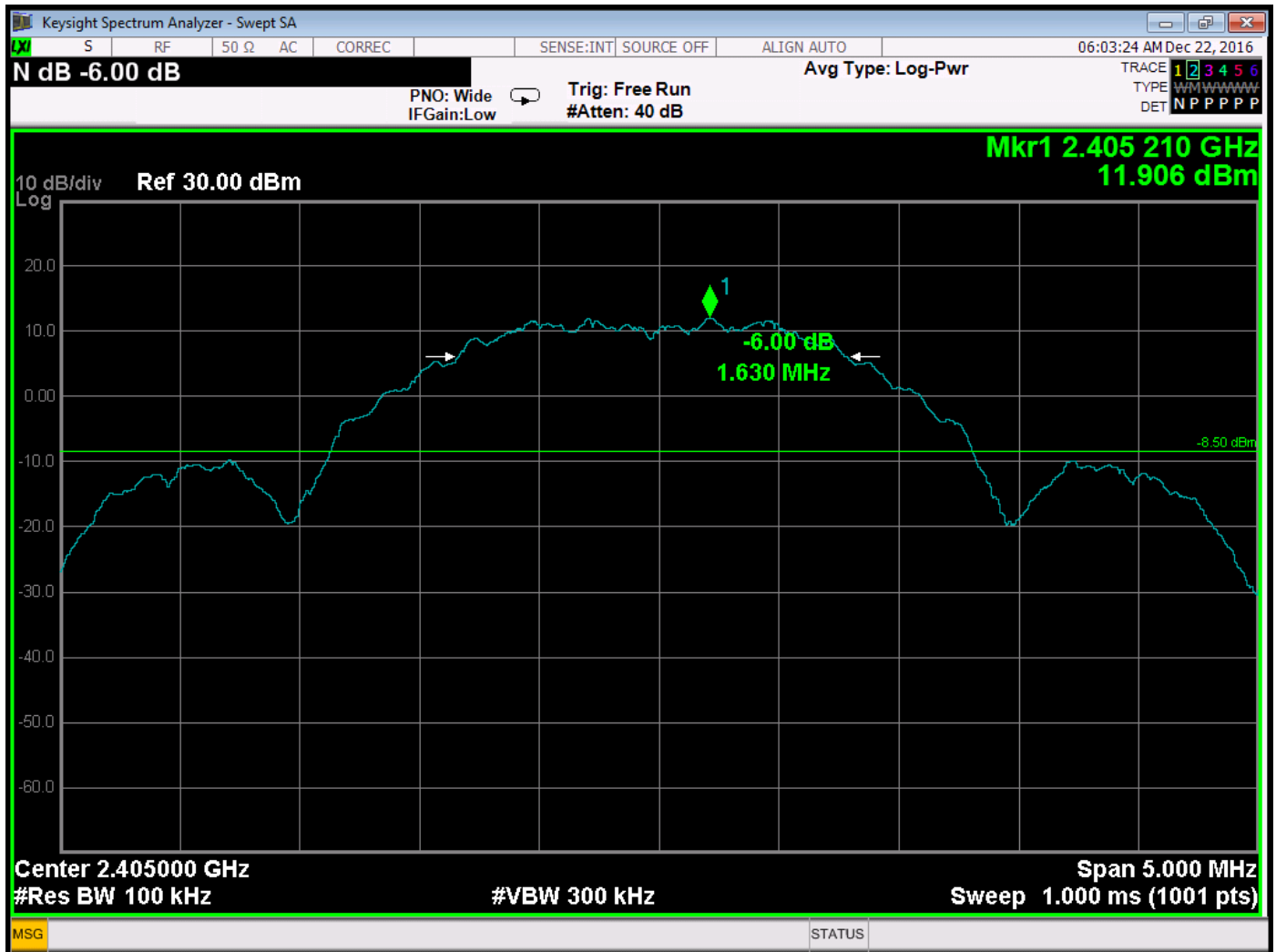




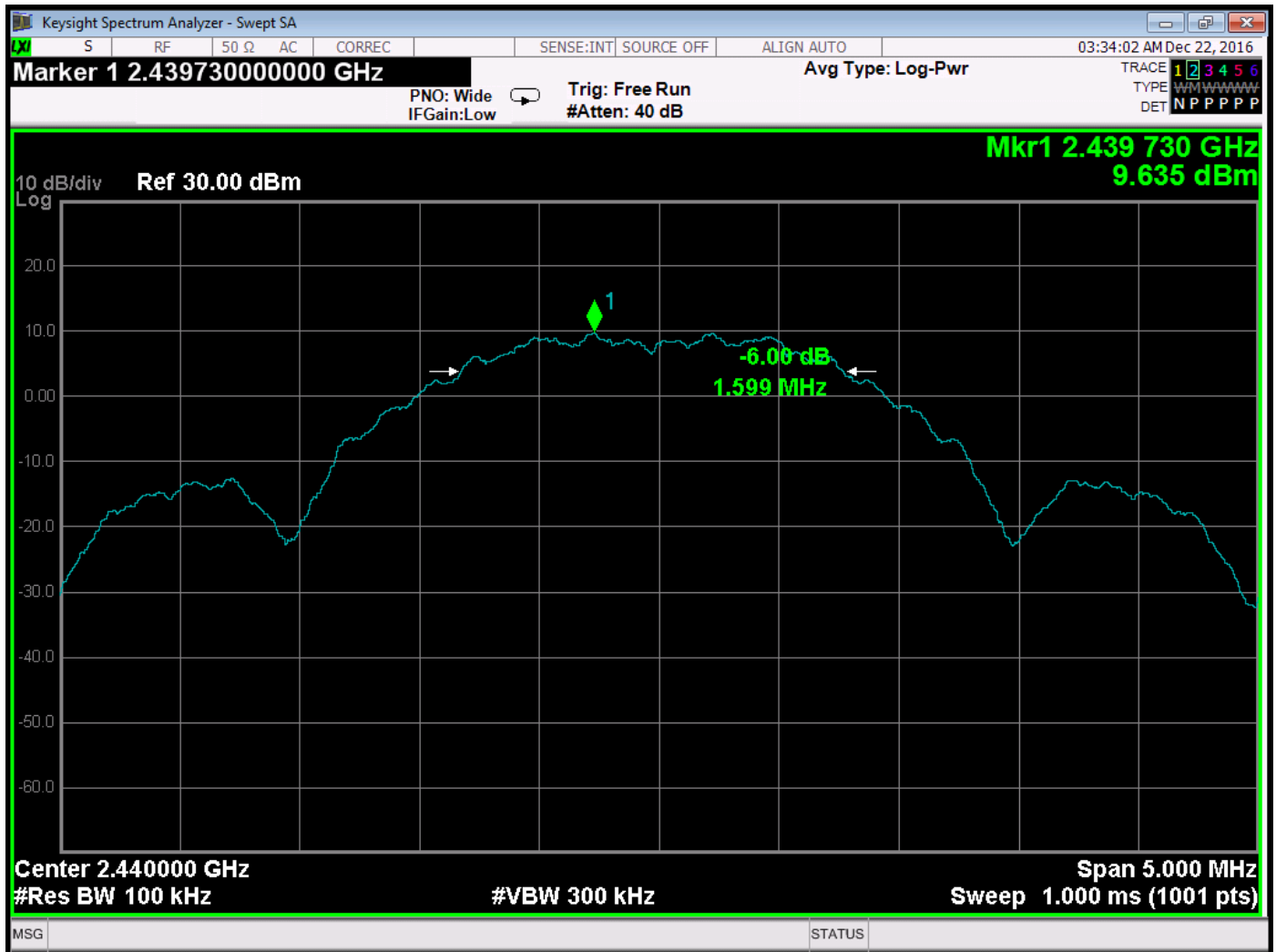




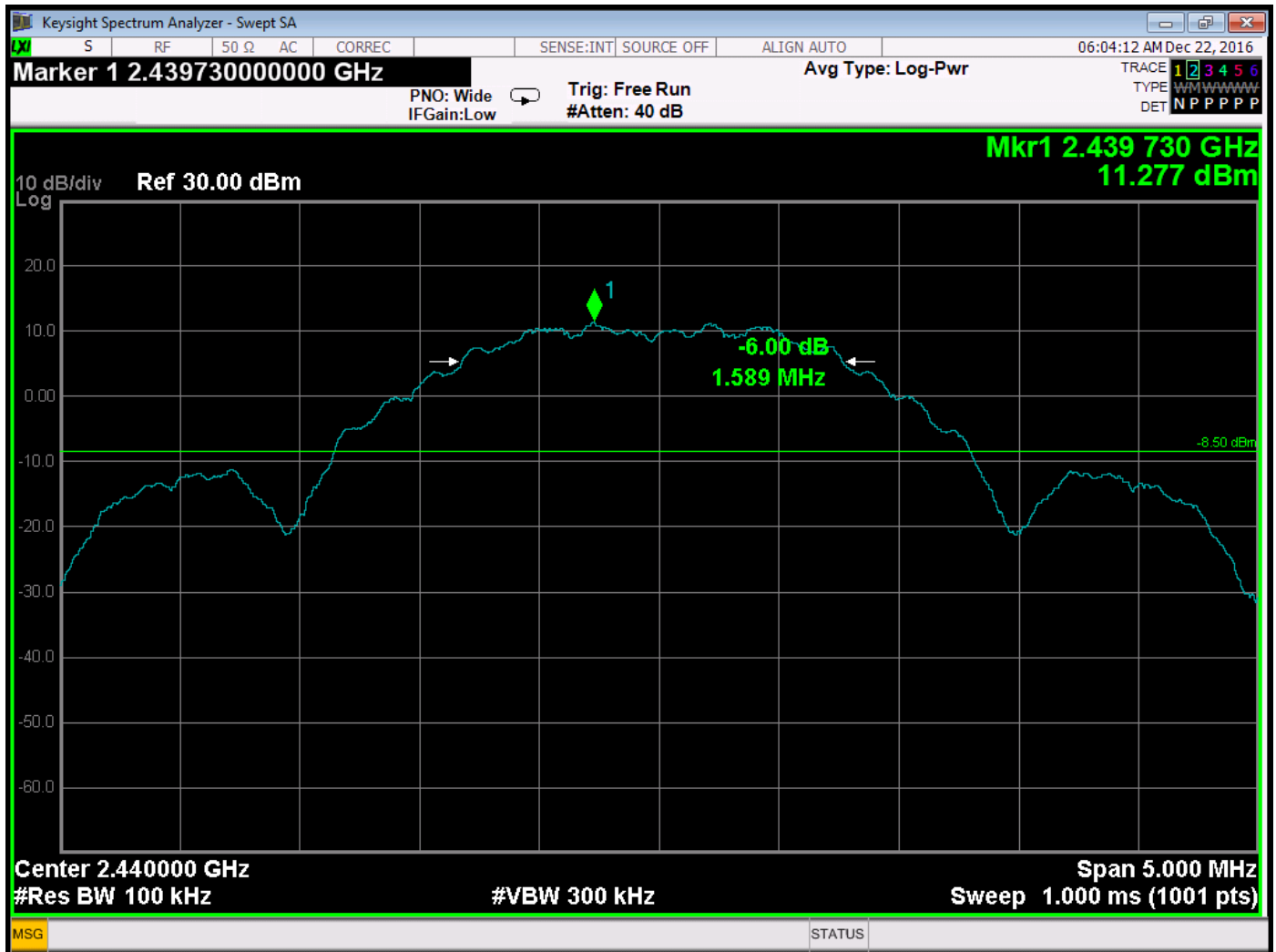
-6 dB Bandwidth – Low Channel – Antenna #1



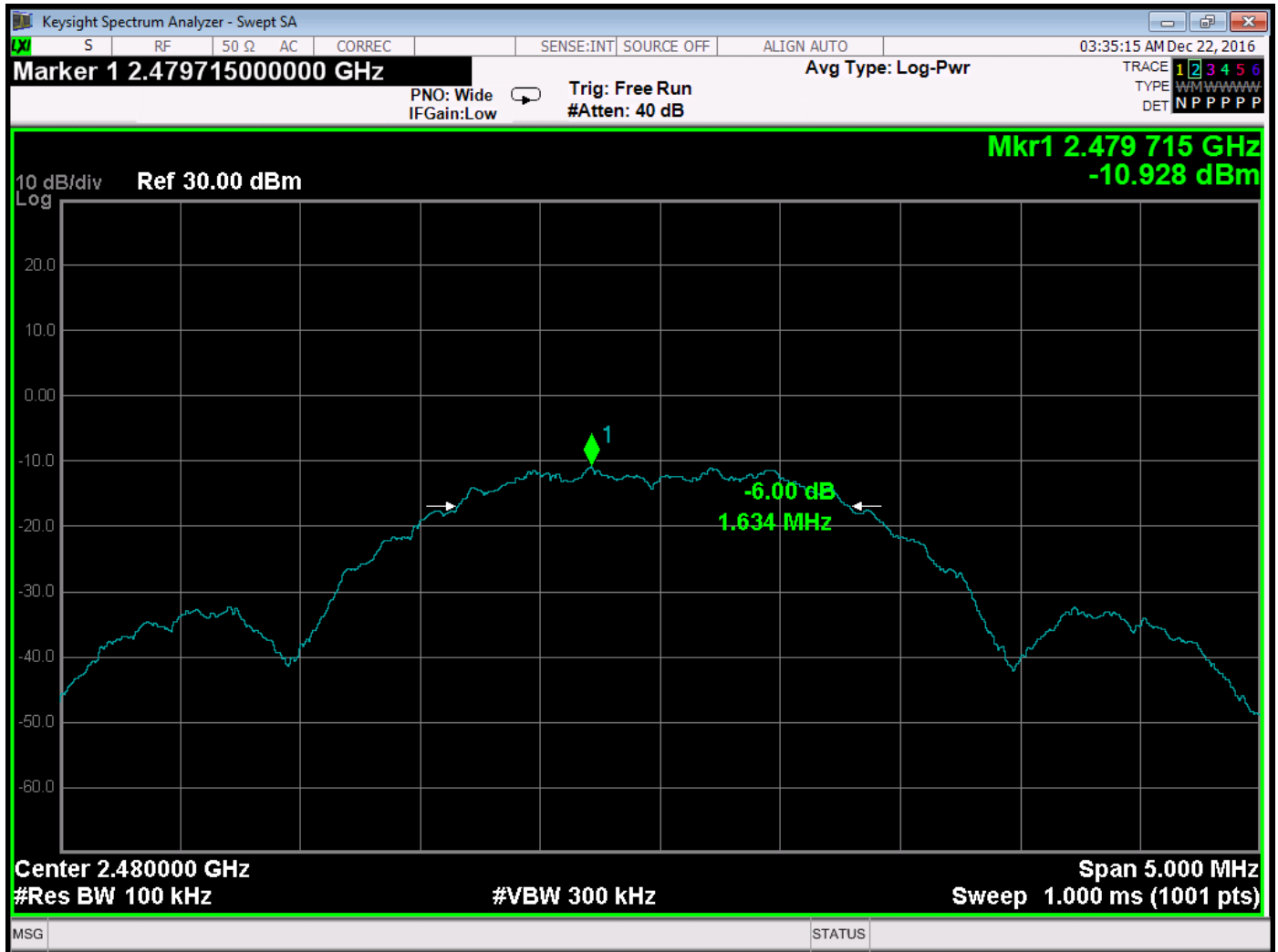
-6 dB Bandwidth – Low Channel – Antenna #2



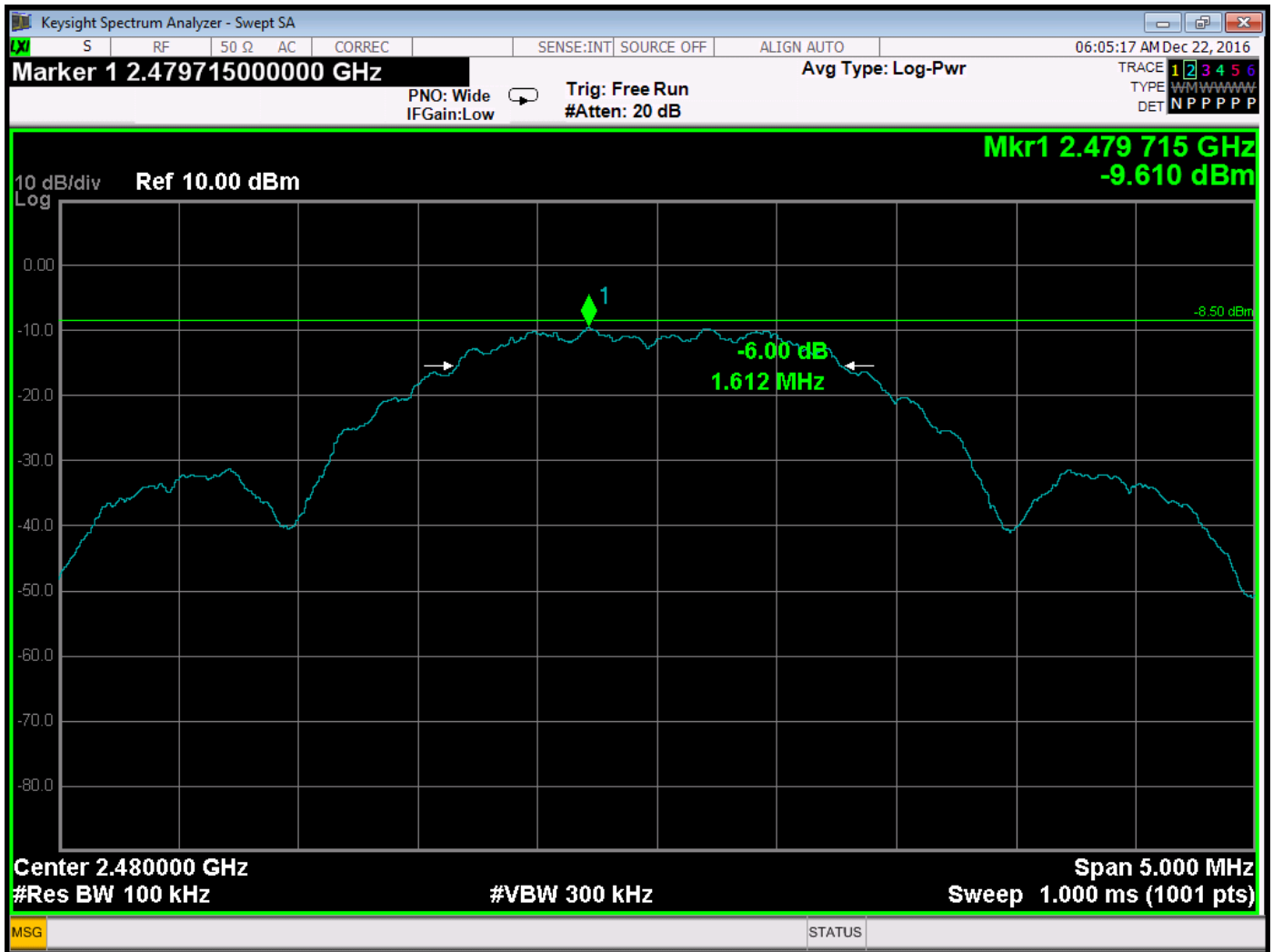
-6 dB Bandwidth – Middle Channel – Antenna #1



-6 dB Bandwidth – Middle Channel – Antenna #2



-6 dB Bandwidth – High Channel – Antenna #1

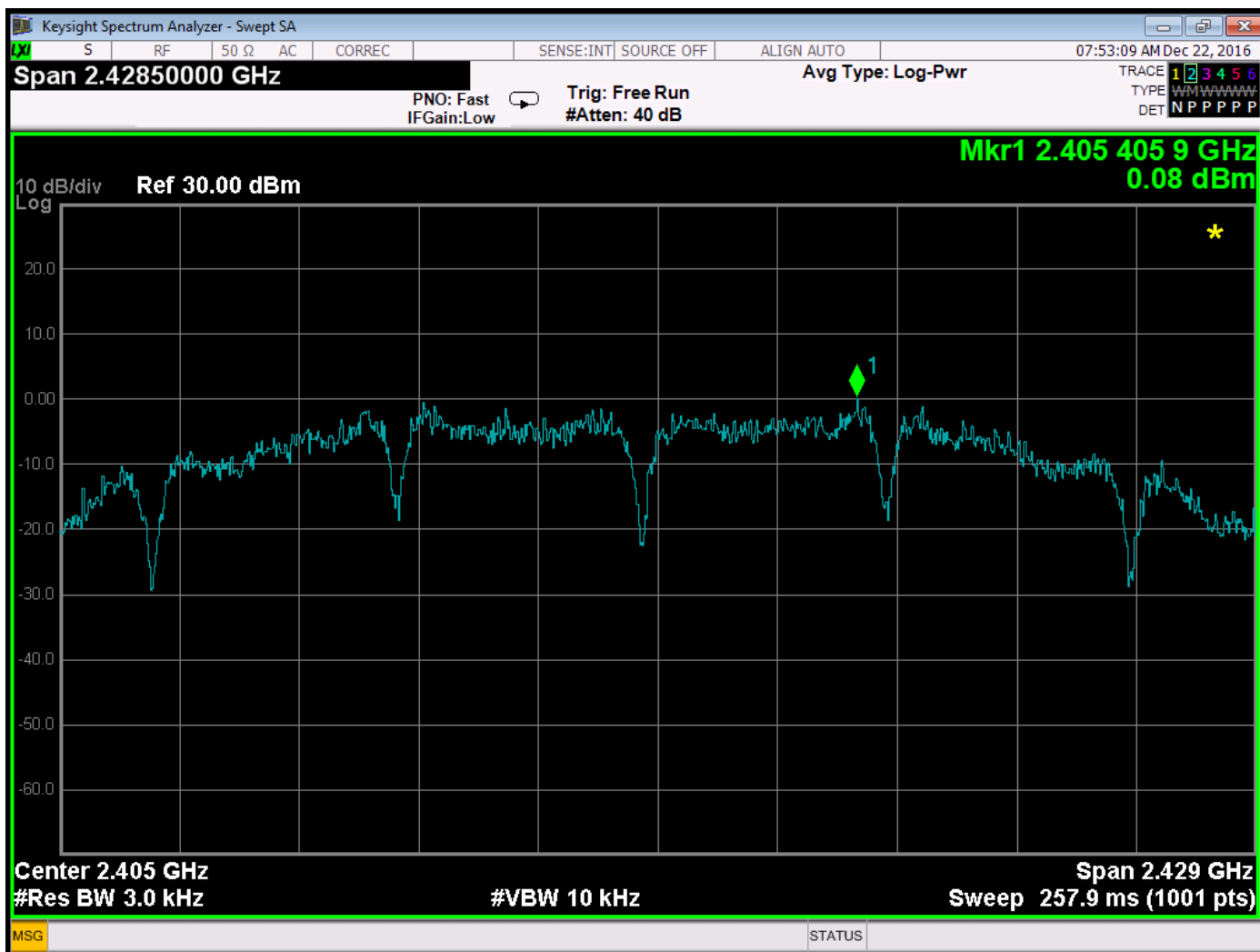


-6 dB Bandwidth – High Channel – Antenna #2

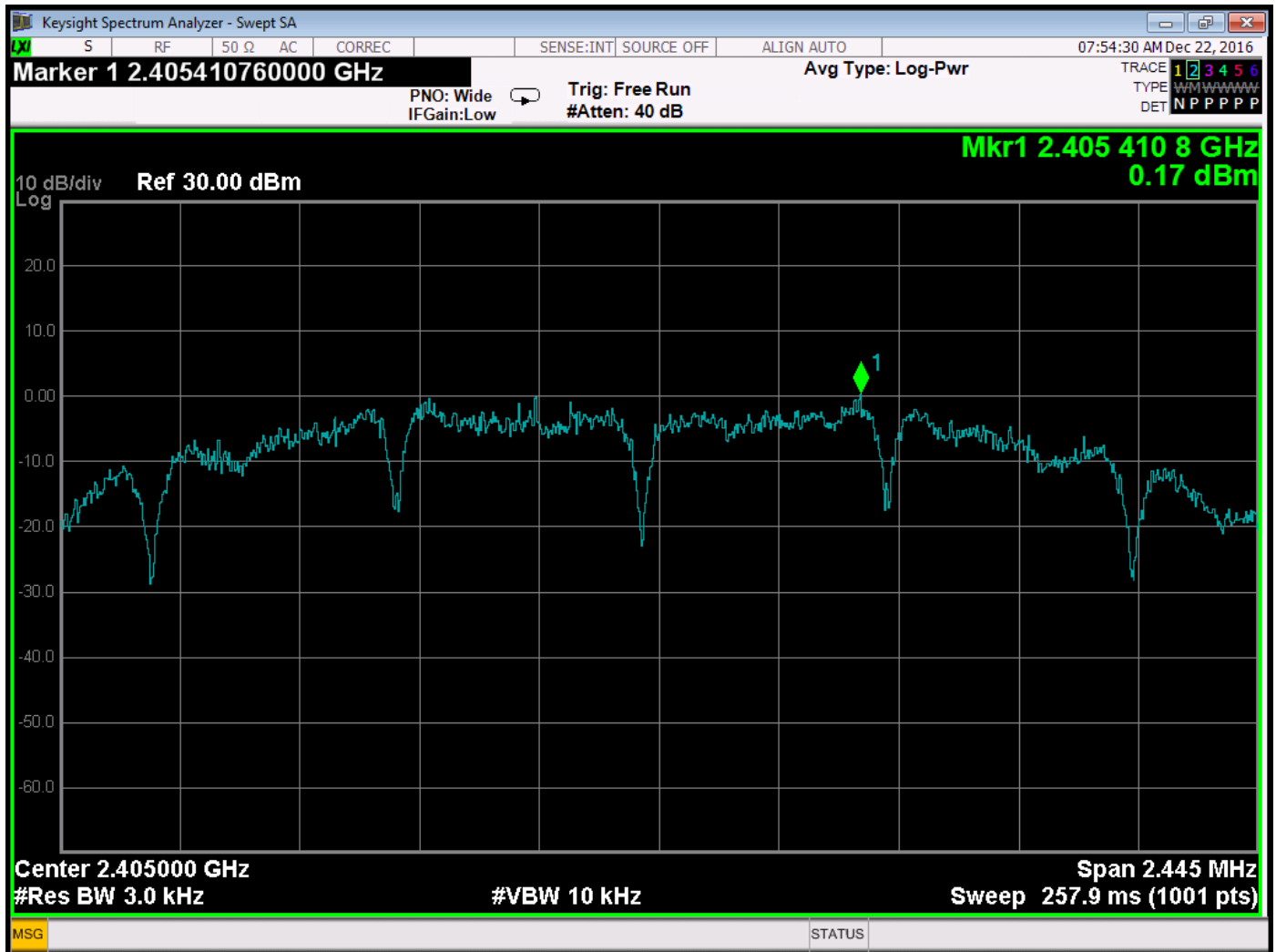
***SPECTRAL DENSITY OUTPUT***

***DATA SHEETS***

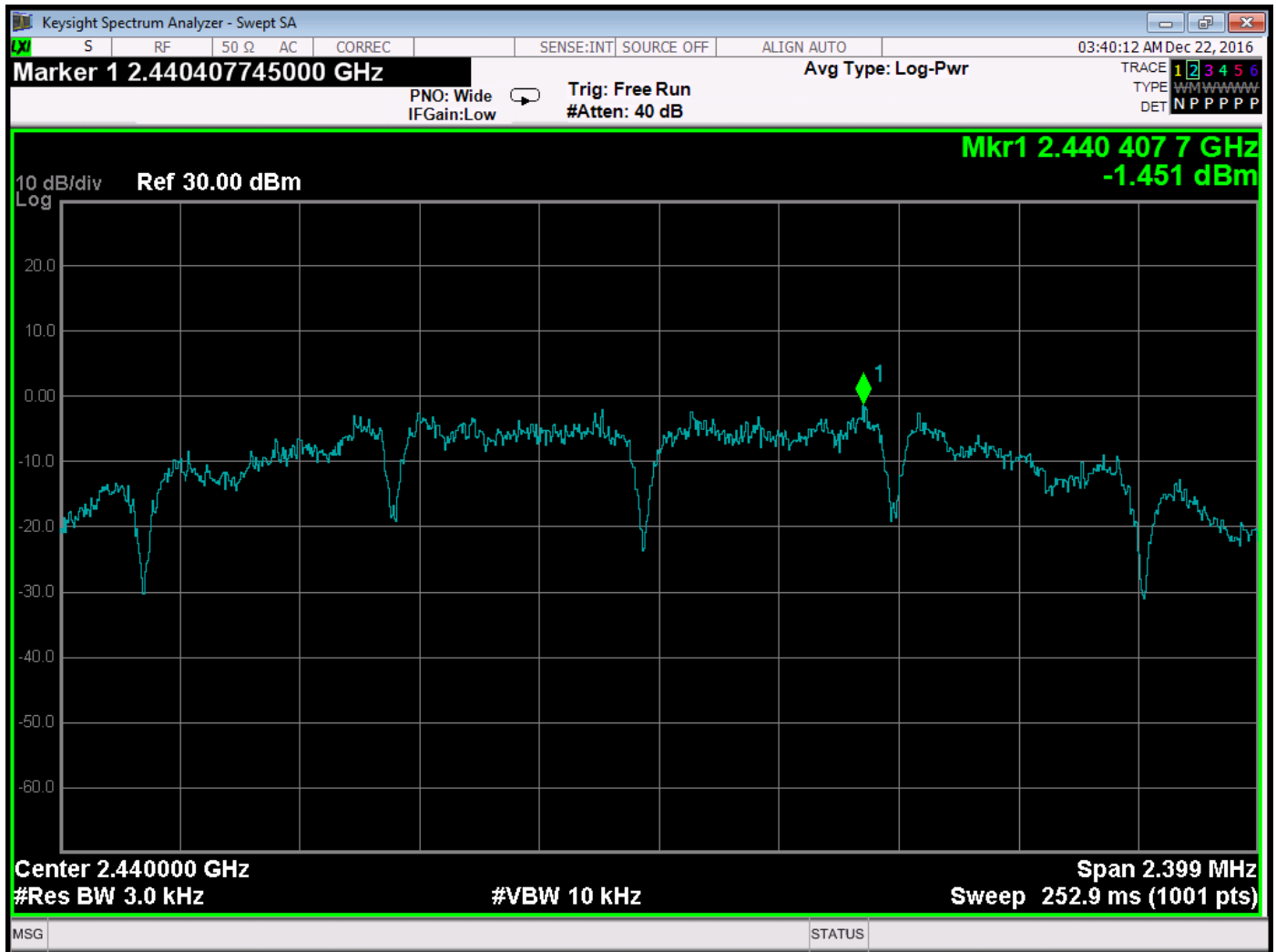




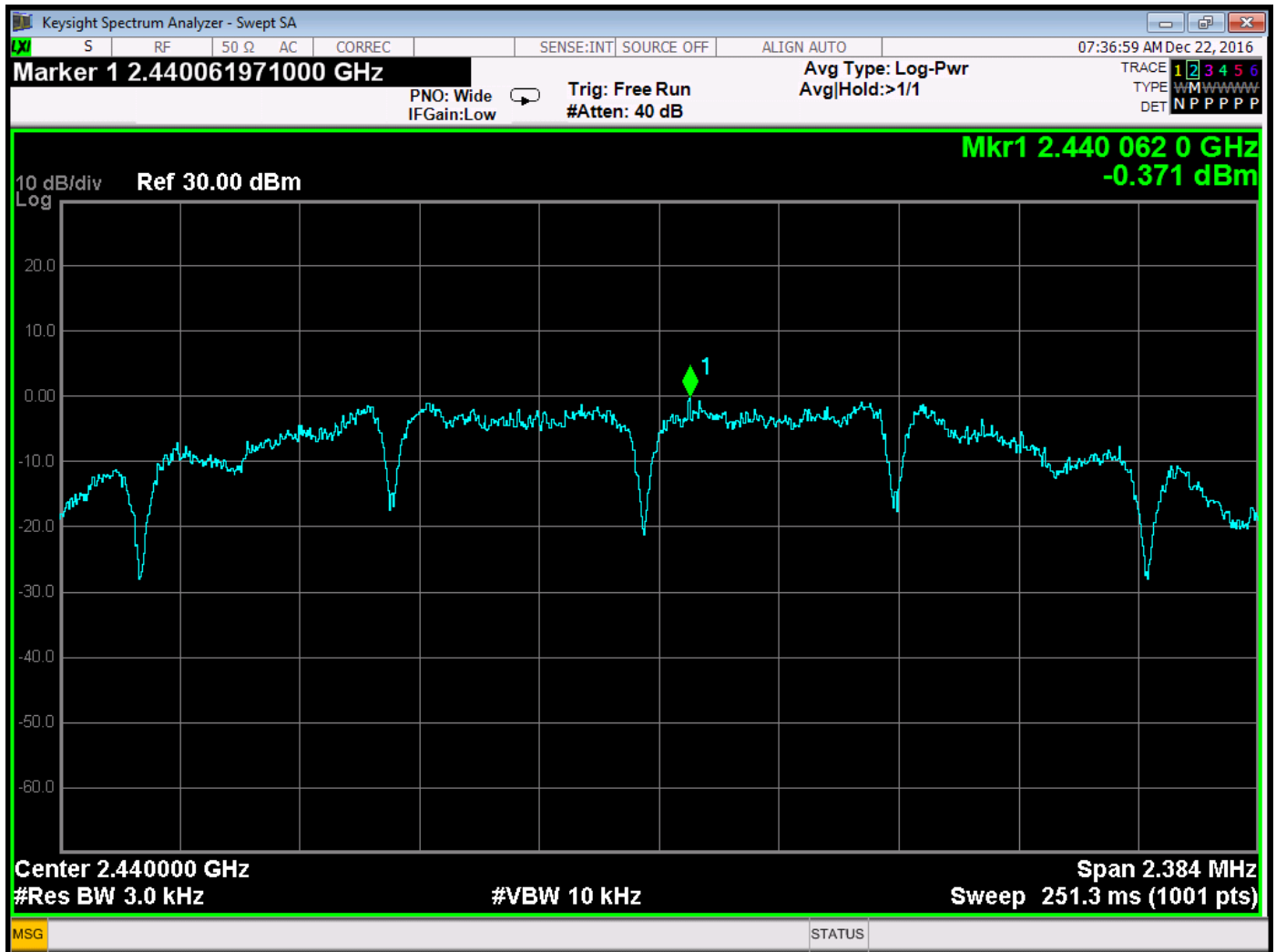
Spectral Density – Low Channel – Antenna #1



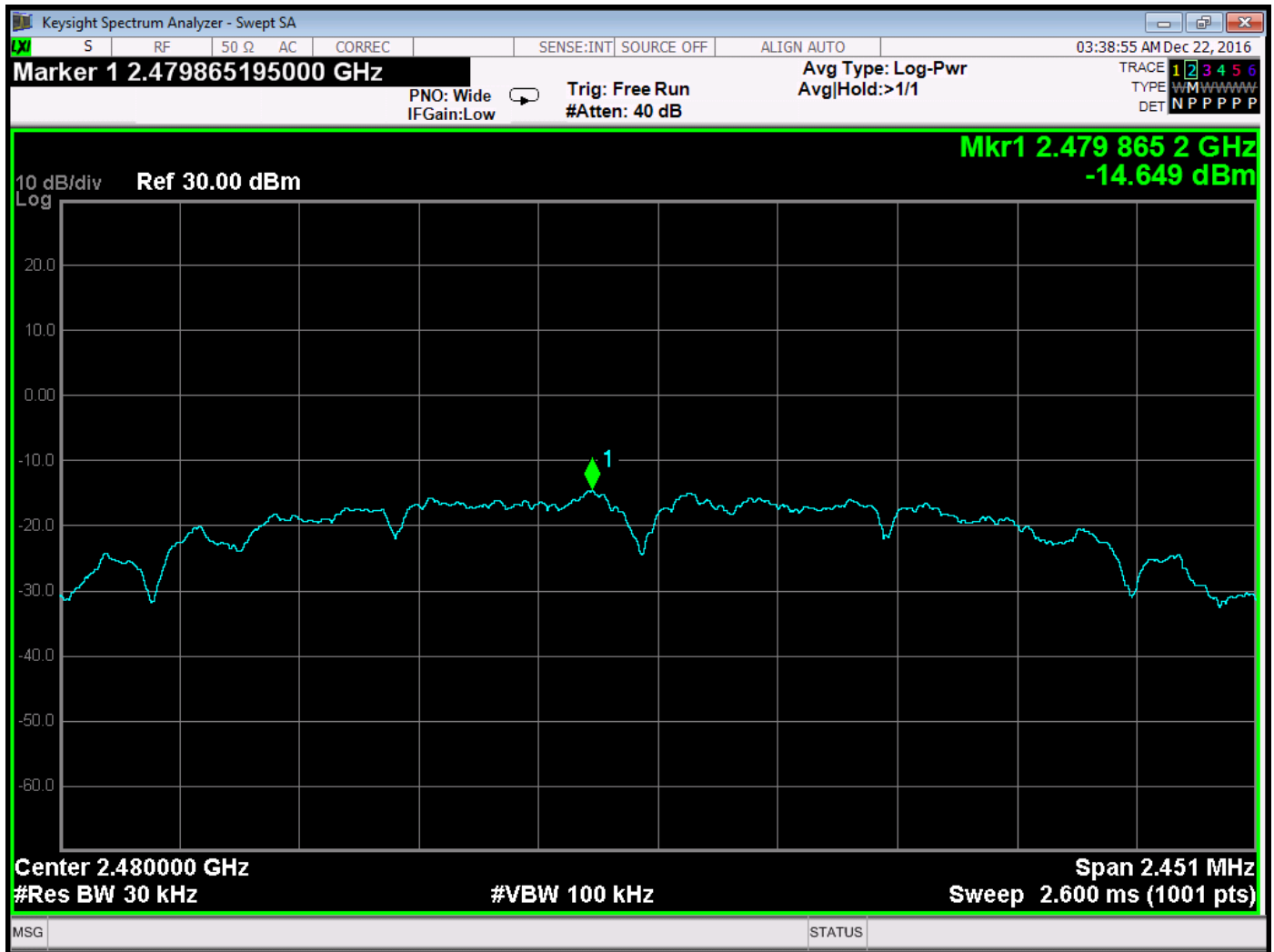
Spectral Density – Low Channel – Antenna #2



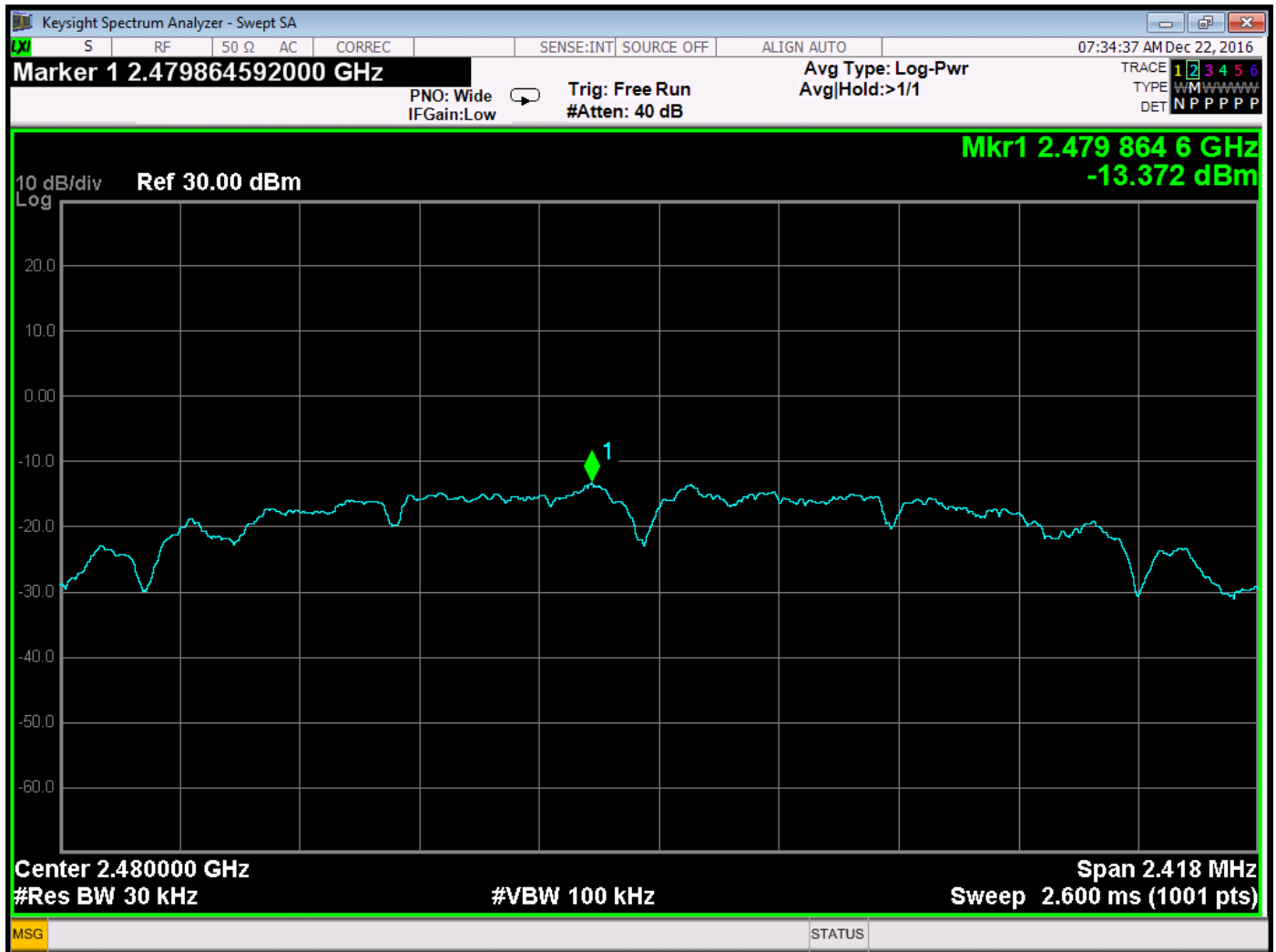
Spectral Density – Middle Channel – Antenna #1



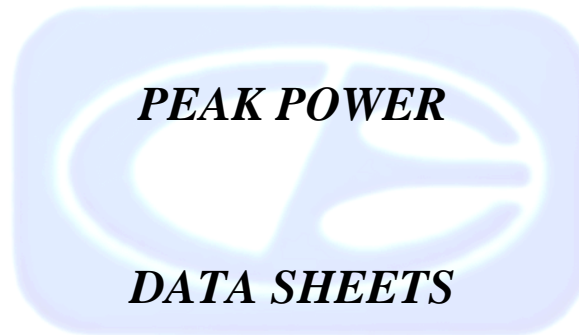
Spectral Density – Middle Channel – Antenna #2

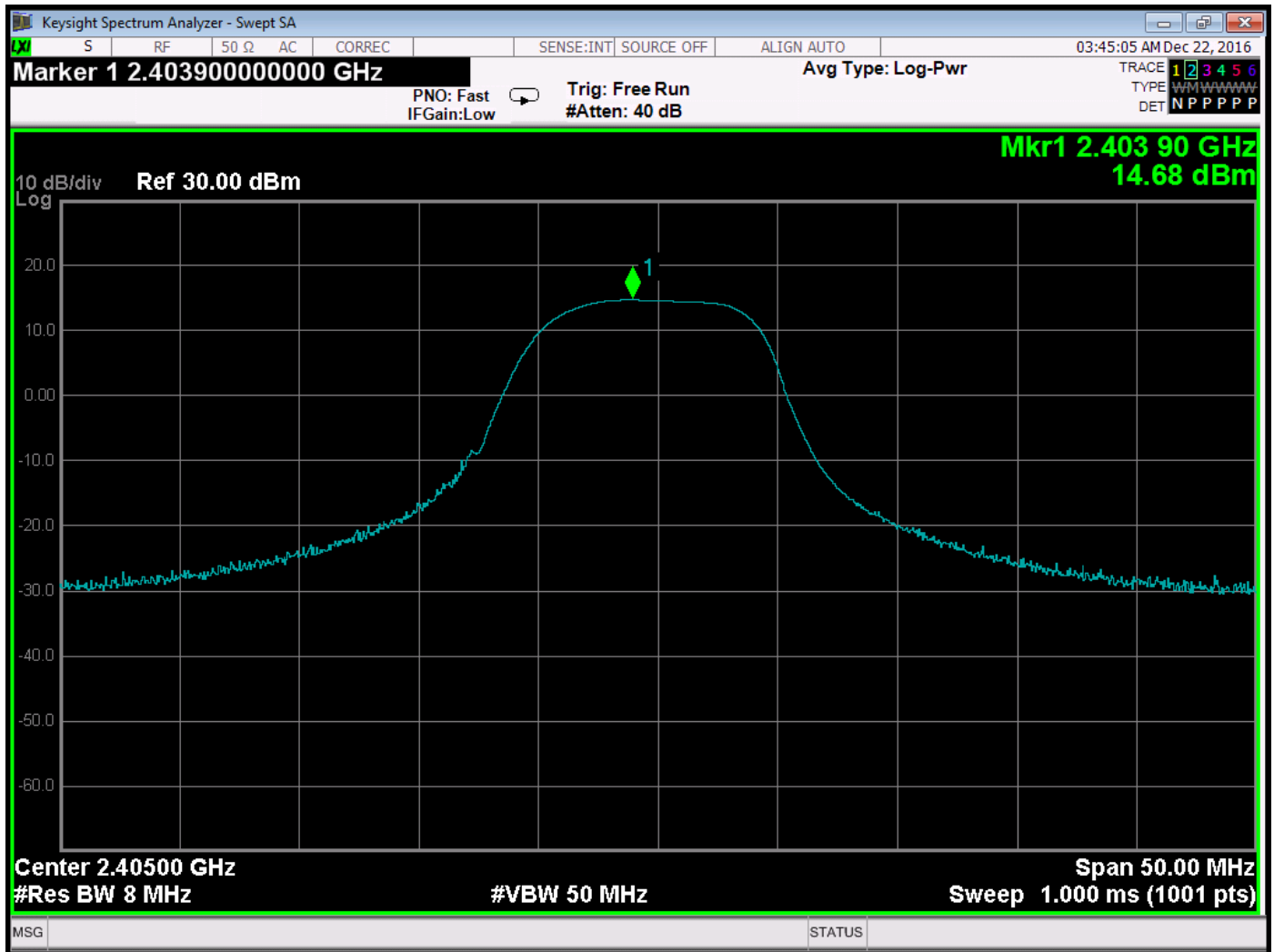


Spectral Density – High Channel – Antenna #1



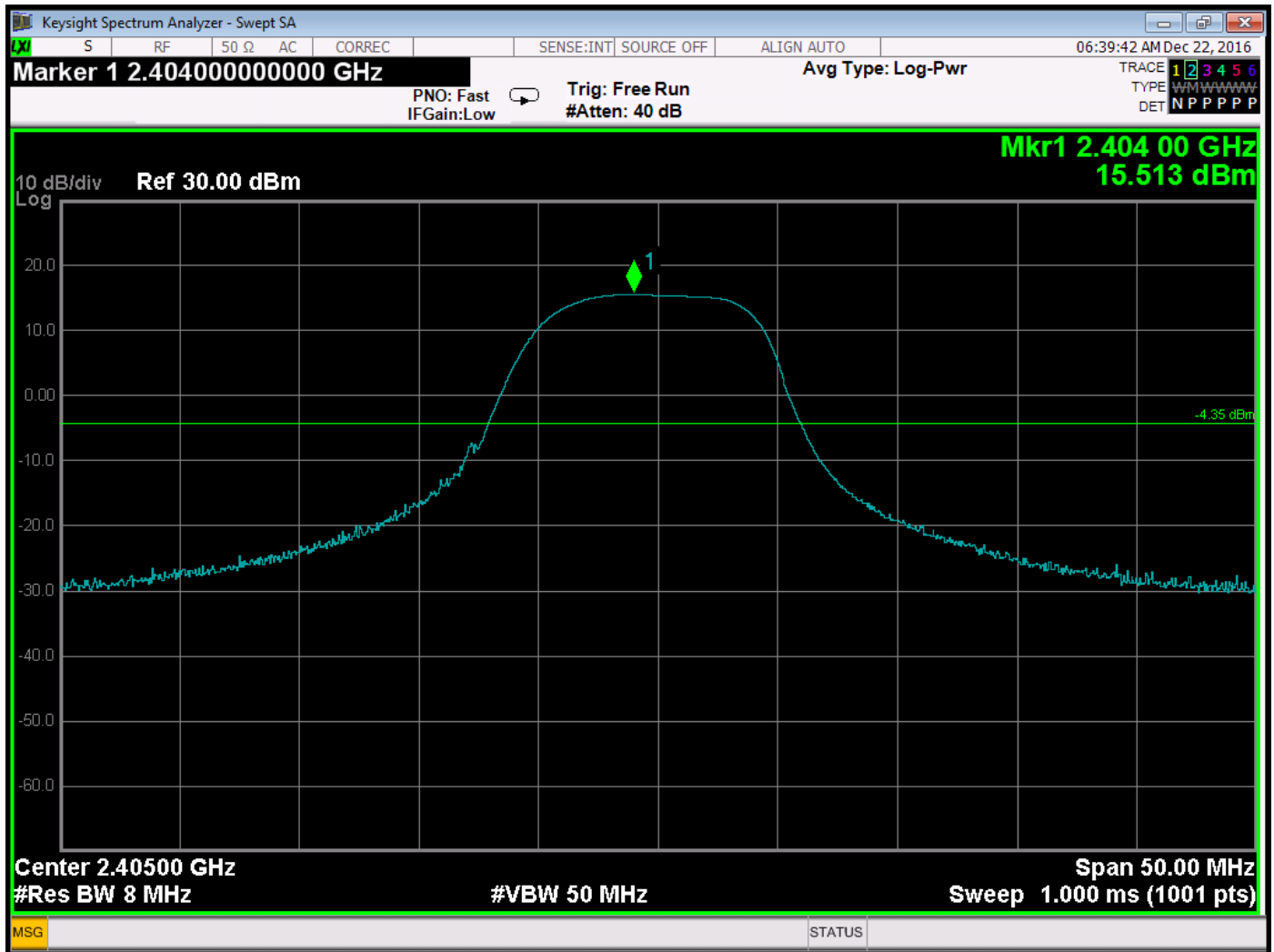
Spectral Density – High Channel – Antenna #2



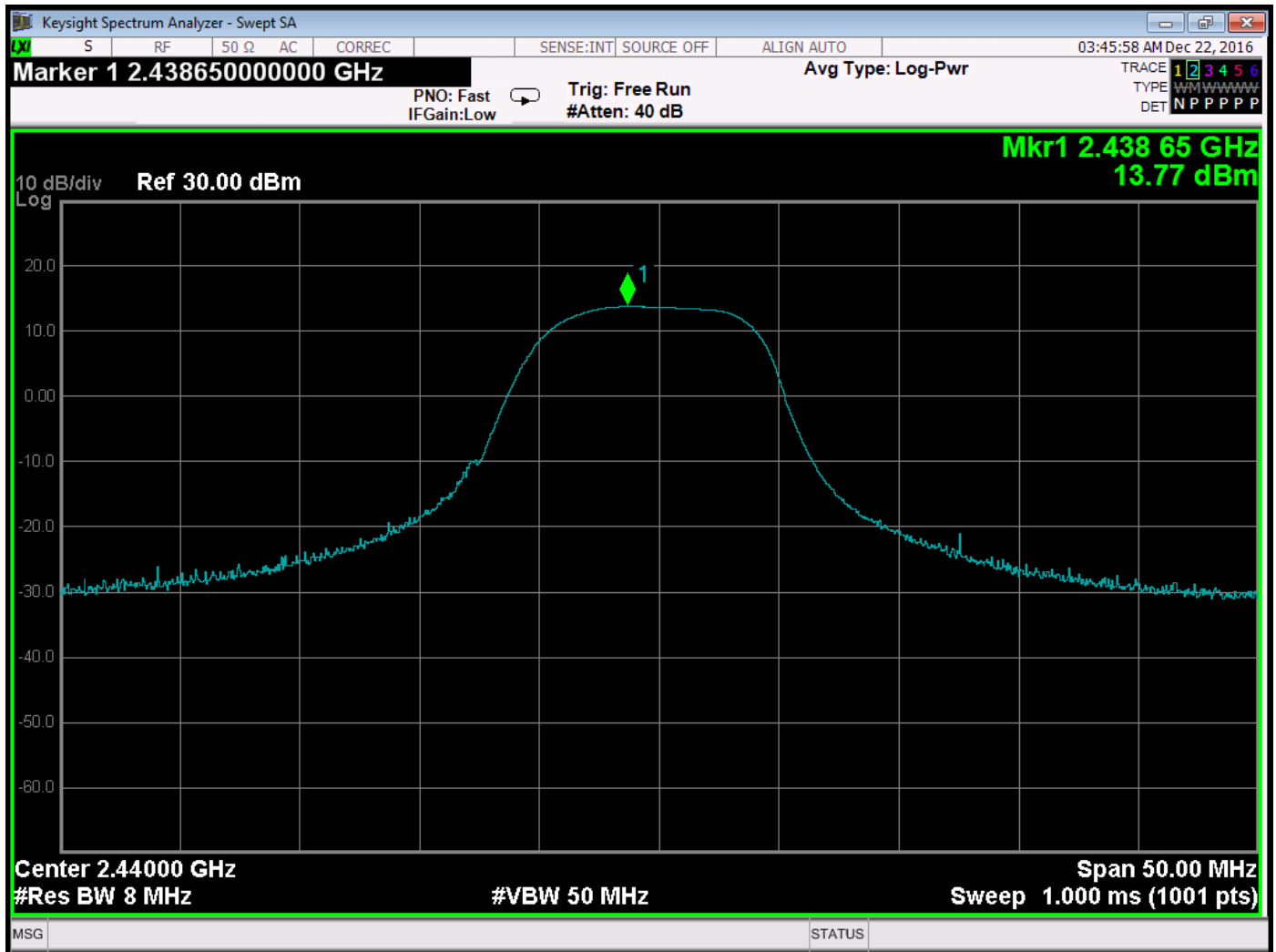


Peak Power Output – Low Channel – Antenna #1

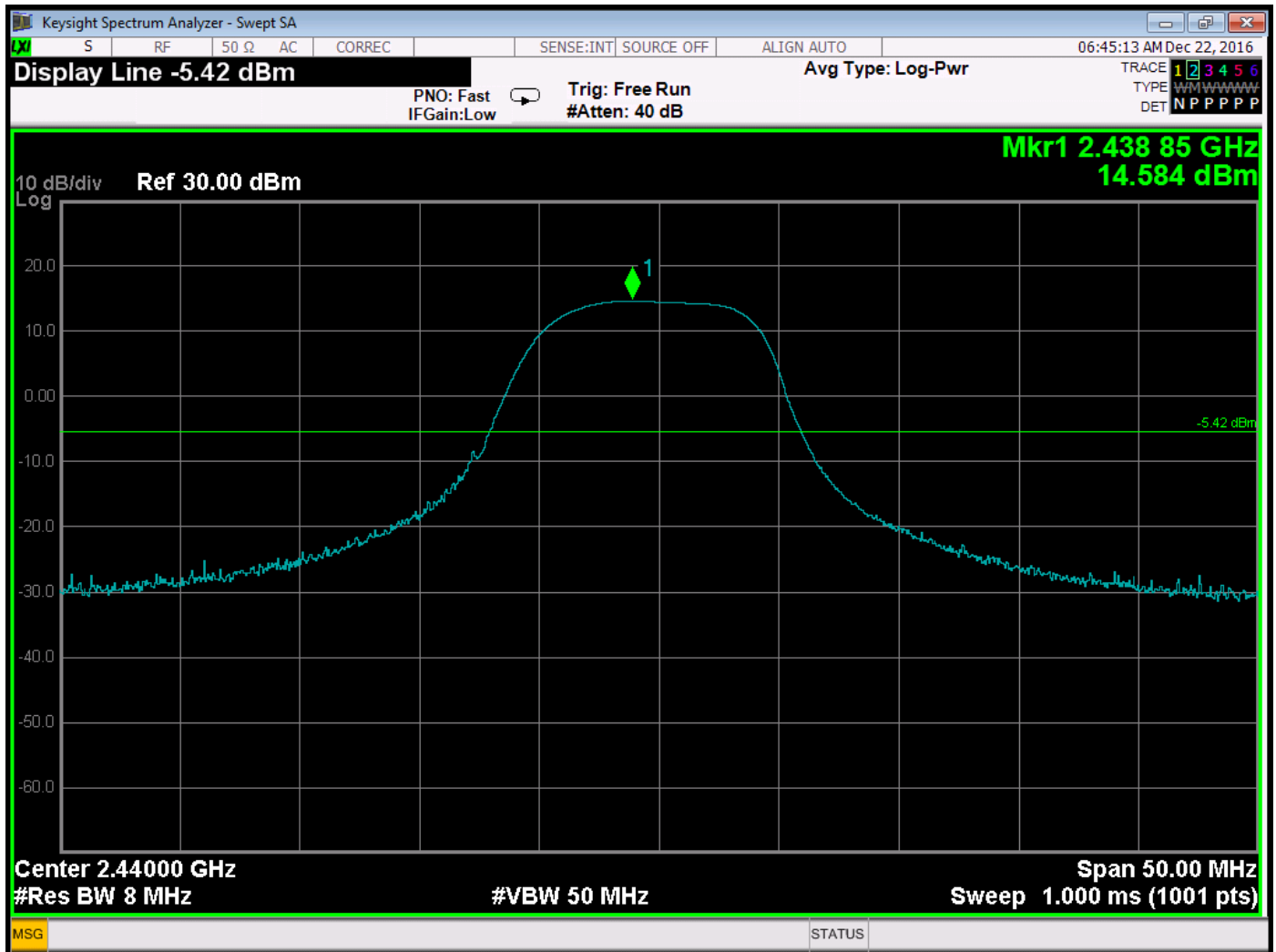




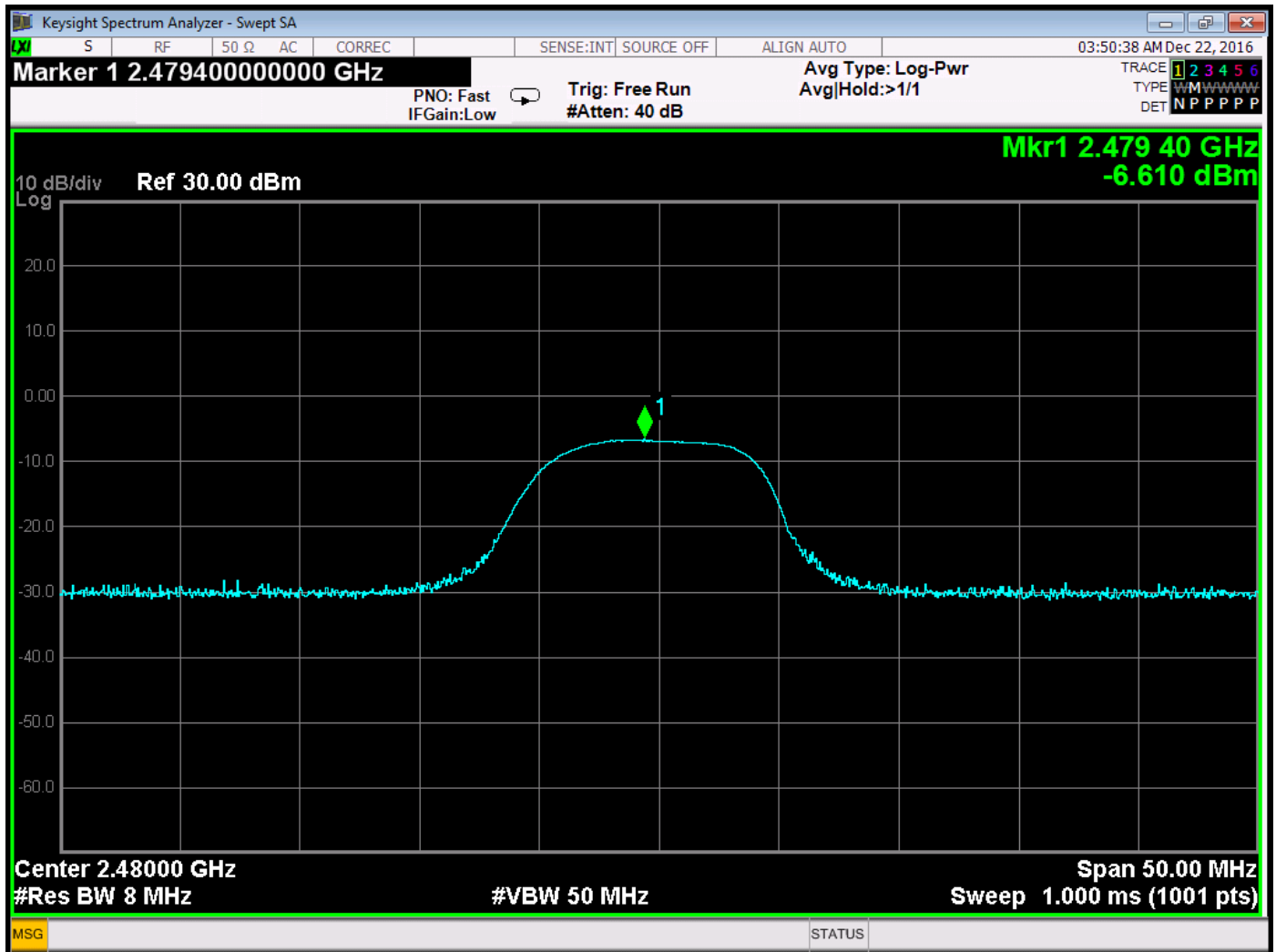
Peak Power Output – Low Channel – Antenna #2



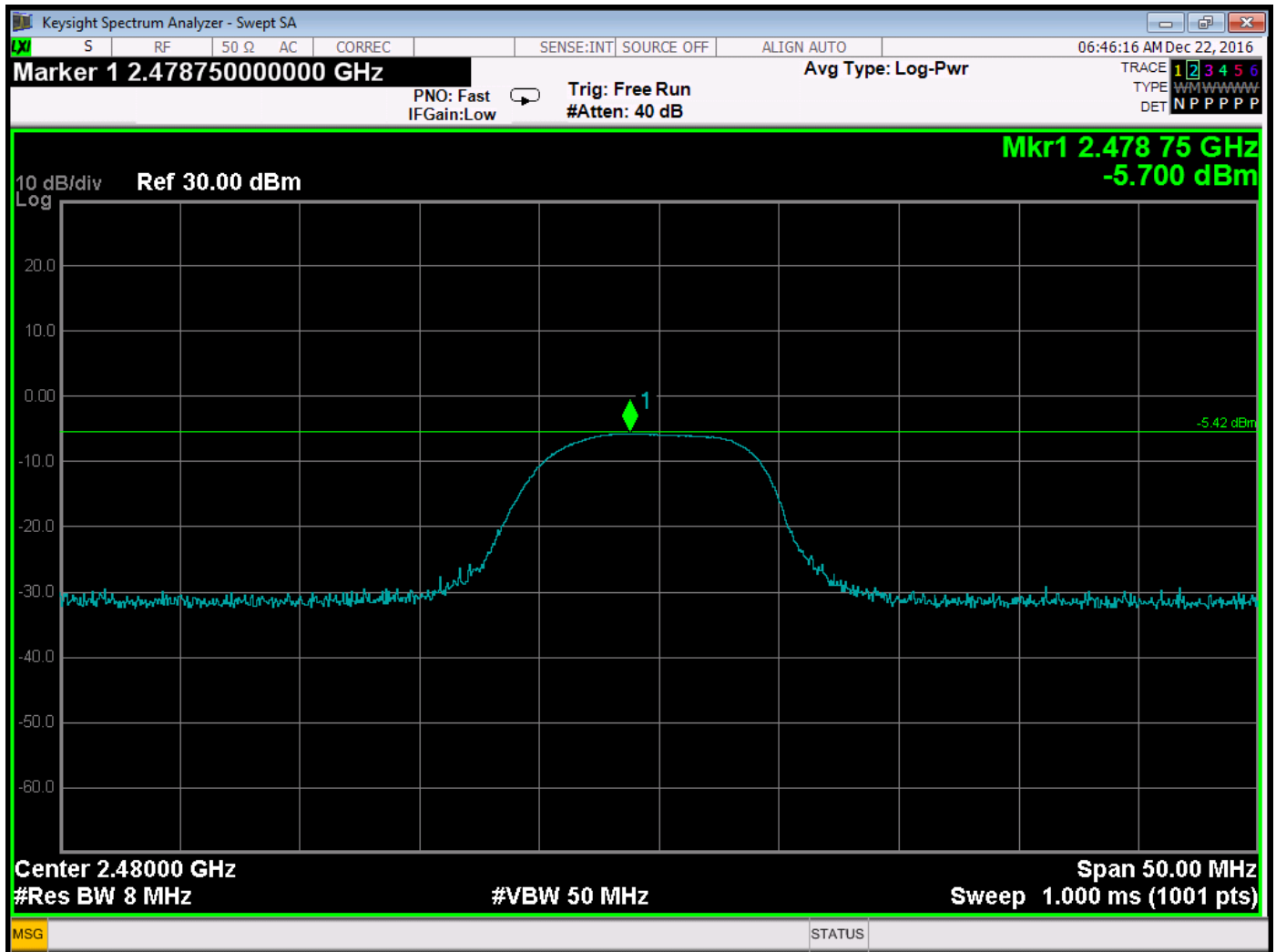
Peak Power Output – Middle Channel – Antenna #1



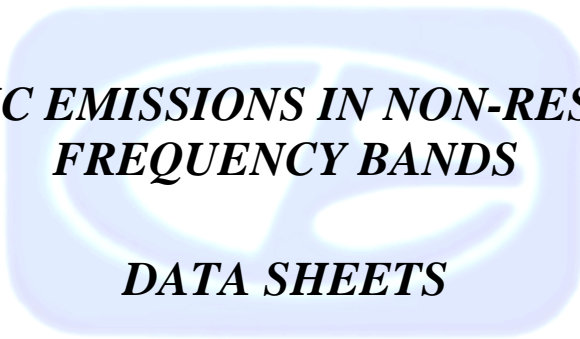
Peak Power Output – Middle Channel – Antenna #2



Peak Power Output – High Channel – Antenna #1



Peak Power Output – High Channel – Antenna #2



***HARMONIC EMISSIONS IN NON-RESTRICTED  
FREQUENCY BANDS  
DATA SHEETS***

**FCC 15.247**

Ecolink Intelligent Technology, Inc., Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/22/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Reference Levels to Determine Three  
 Highest Non-Restricted Band Harmonics**

Freq. (MHz)	Level (dBm)	Antenna	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2405	11.496	1	--	--	Peak	'--	'--	Low Channel Reference Done via Condcuted
2405	11.683	2	--	--	Peak	'--	'--	Low Channel Reference Done via Condcuted
2440	10.37	1	--	--	Peak	'--	'--	Middle Channel Reference Done via Condcuted
2440	10.87	2	--	--	Peak	'--	'--	Middle Channel Reference Done via Condcuted
2480	-11.07	1	-	--	Peak	'--	'--	High Channel Reference Done via Condcuted
2480	-11.12	2	--	--	Peak	'--	'--	High Channel Reference Done via Condcuted

**FCC 15.247**

Ecolink Intelligent Technology, Inc., Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/22/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonic Emissions in Non-Restricted  
 Frequency Bands – Antenna #1**

Freq. (MHz)	Level (dBm)	Antenna	Limit	Margin	Peak / QP / Avg	Comments
24775	-35.847	1	-31.07	-4.777	Peak	
24715	-36.005	1	-31.07	-4.935	Peak	
24325	-39.23	1	-31.07	-8.16	Peak	

**Highest Three Non-Restricted Band Harmonics for Antenna #1**



**FCC 15.247**

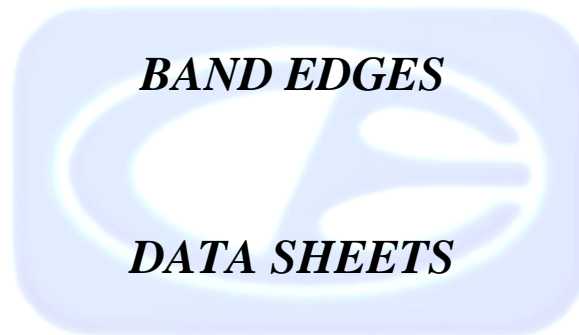
Ecolink Intelligent Technology, Inc., Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/22/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Harmonic Emissions in Non-Restricted  
 Frequency Bands – Antenna #2**

Freq. (MHz)	Level (dBm)	Antenna	Limit	Margin	Peak / QP / Avg	Comments
24325	-36.21	2	-31.12	-5.09	Peak	
24775	-37.05	2	-31.12	-5.93	Peak	
6122.50	-46.777	2	-31.12	-5.657	Peak	

**Highest Three Non-Restricted Band Harmonics for Antenna #2**





**FCC 15.247**

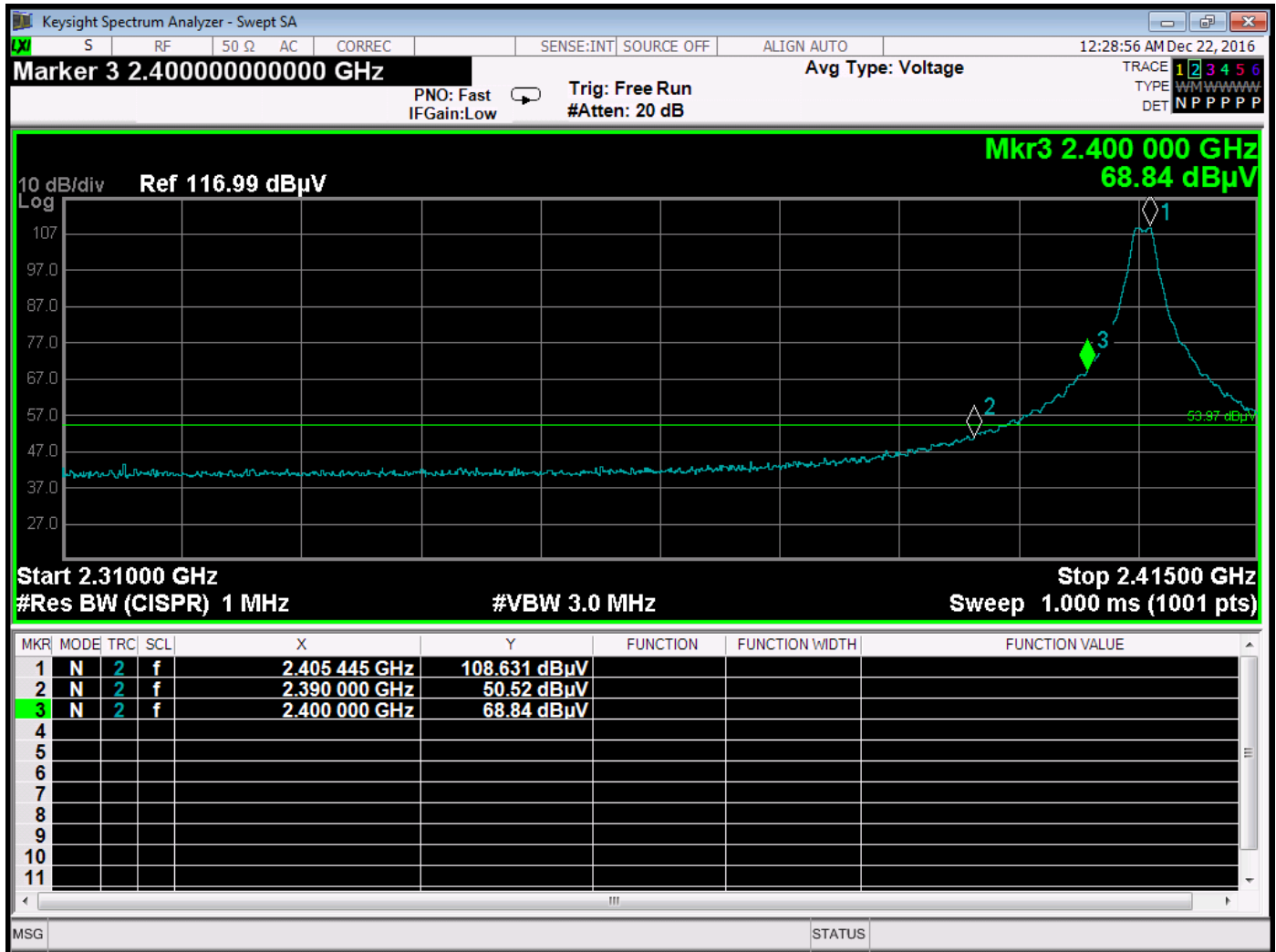
Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

Date: 12/22/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

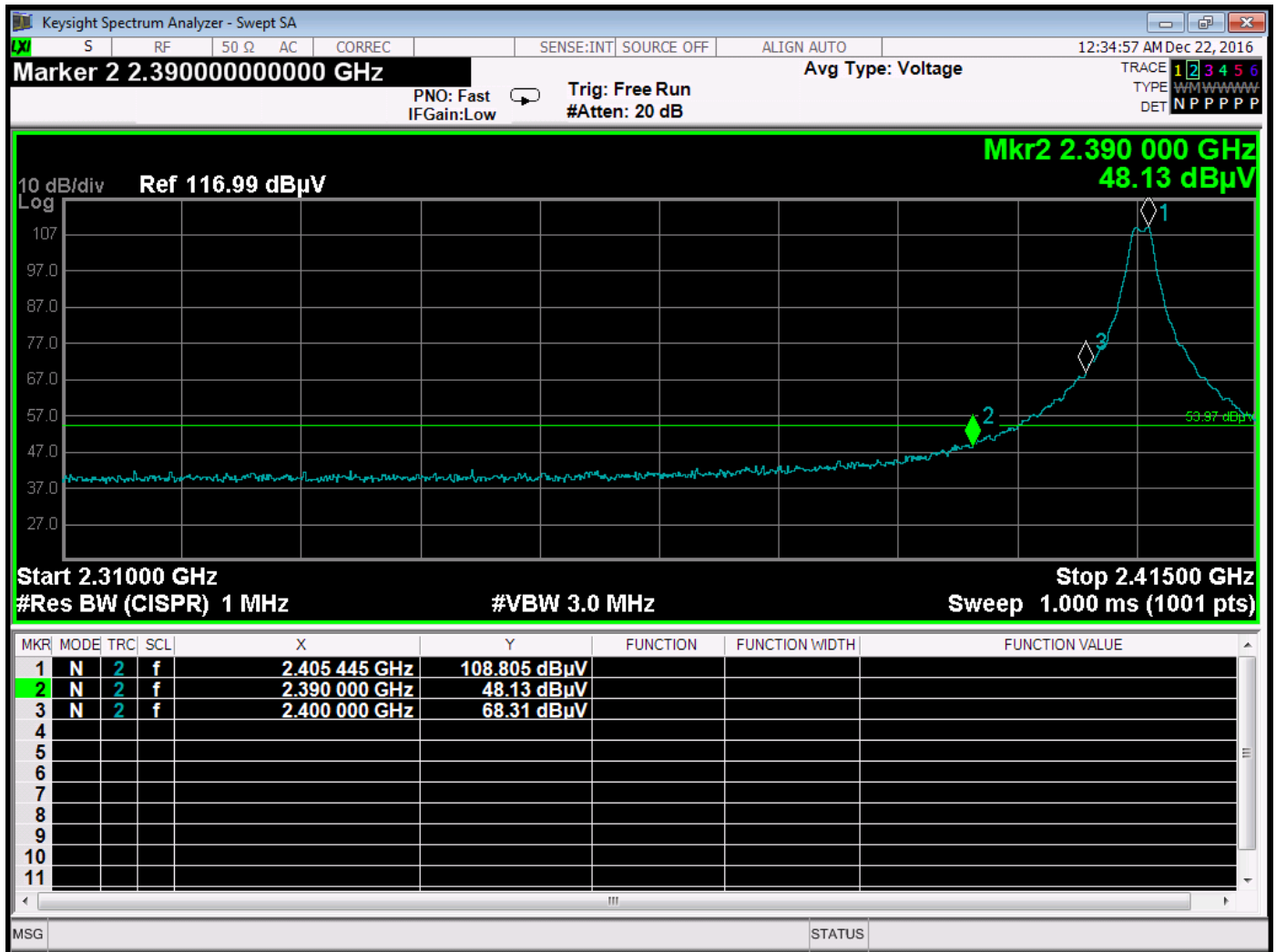
**Band Edge - High Channel - Antenna #1**

**Duty Cycle: 25.92% - Power Level -15**

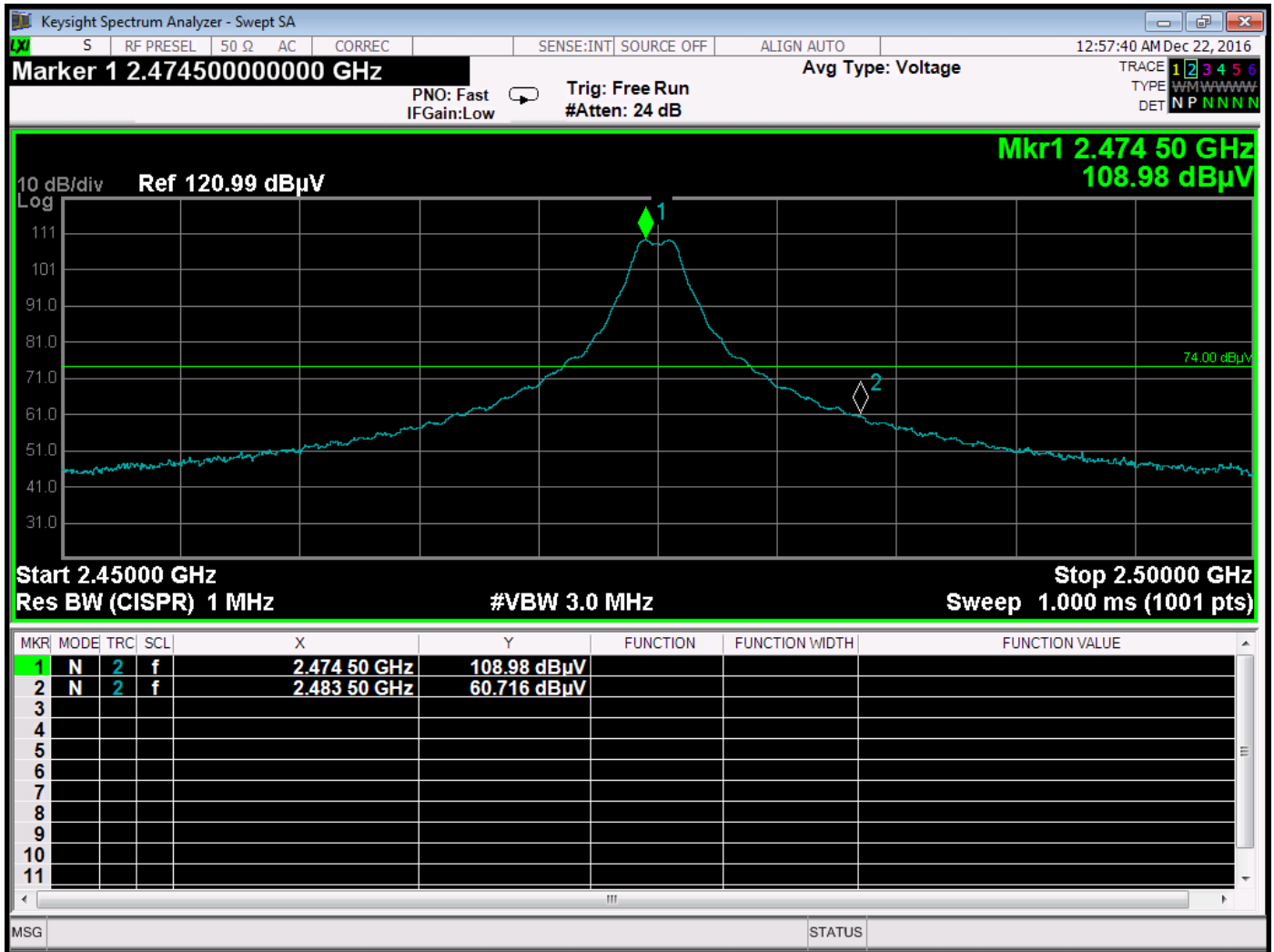
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2480	94.74	V	--	--	Peak	273.50	189.52	Fund. of High Channel
2480	83.02	V	--	--	Avg	273.50	189.52	Y-Axis Worst Case
2483.5	62.45	V	73.97	-11.52	Peak	273.50	189.52	Band Edge of High Ch.
2483.5	50.73	V	53.97	-3.24	Avg	273.50	189.52	Y-Axis Worst Case
2480	94.36	H	113.97	-19.61	Peak	94.75	122.11	Fund. of High Channel
2480	82.64	H	93.97	-11.33	Avg	94.75	122.11	X-Axis Worst Case
2483.5	62.18	H	73.97	-11.79	Peak	94.75	122.11	Fund. of High Channel
2483.5	50.46	H	53.97	-3.51	Avg	94.75	122.11	X-Axis Worst Case
2475	108.98	V	--	--	Peak	275.75	196.44	Fundamental
2475	97.26	V	--	--	Avg	275.75	196.44	Y-Axis Worst Case
2483.5	60.72	V	73.97	-13.25	Peak	275.75	196.44	Band Edge
2483.5	49.00	V	53.97	-4.97	Avg	275.75	196.44	Y-Axis Worst Case
2475	108.44	H	--	--	Peak	263.25	165.94	Fundamental
2475	96.72	H	--	--	Avg	263.25	165.94	X-Axis Worst Case
2483.5	59.92	H	73.97	-14.05	Peak	263.25	165.94	Band Edge
2483.5	48.20	H	53.97	-5.77	Avg	263.25	165.94	X-Axis Worst Case



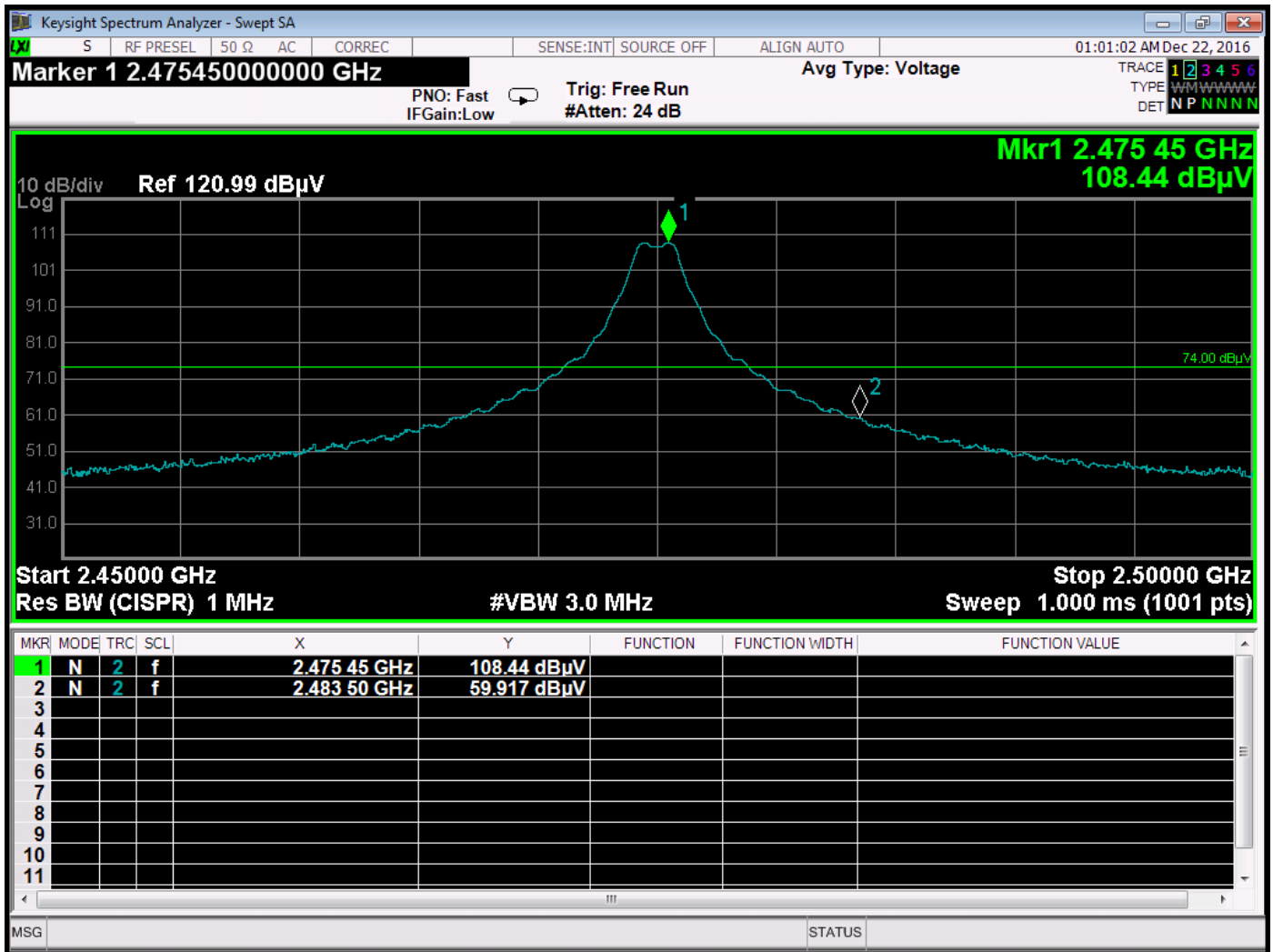
Band Edge – Low Channel – Vertical – Z-Axis – Worst Case – Antenna #1



Band Edge – Low Channel – Horizontal – X-Axis – Worst Case – Antenna #1

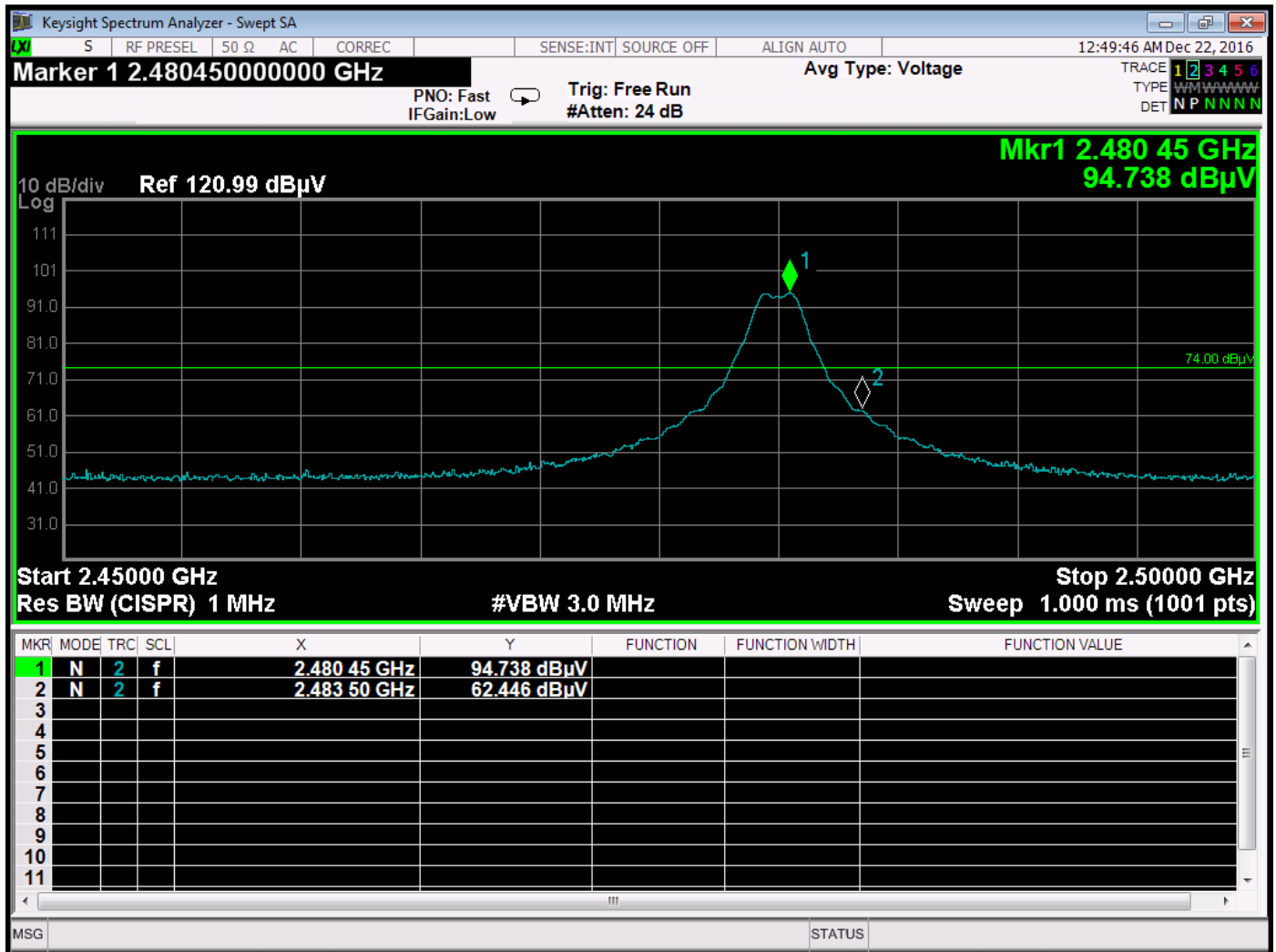


Band Edge – High Channel (2475 MHz) – Vertical – Y-Axis – Worst Case – Antenna #1

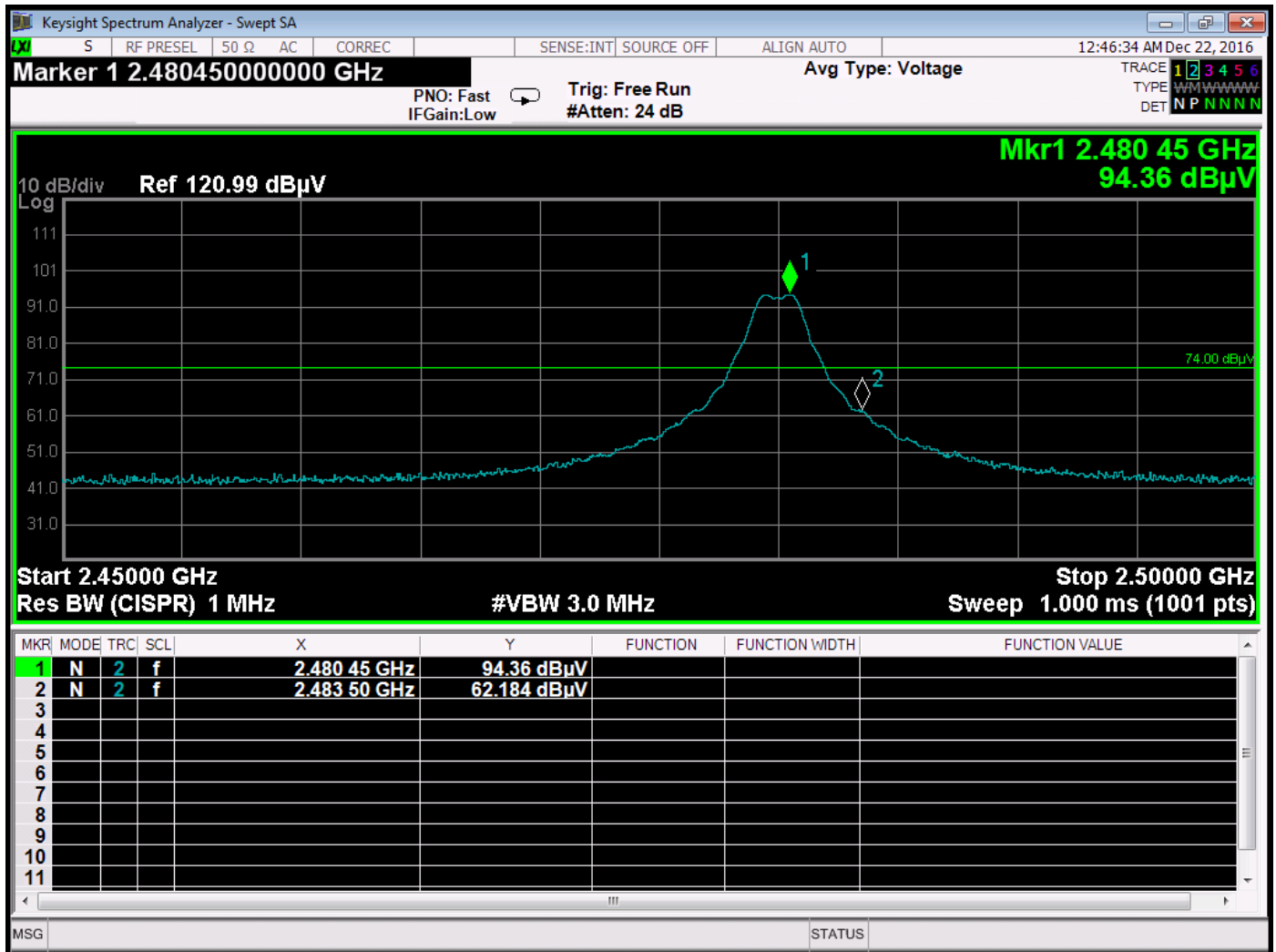


Band Edge – High Channel (2475 MHz) – Horizontal – X-Axis – Worst Case – Antenna #1





Band Edge – High Channel (2480 MHz) – Vertical – Y-Axis – Worst Case – Antenna #1



Band Edge – High Channel (2480 MHz) – Horizontal – X-Axis – Worst Case – Antenna #1



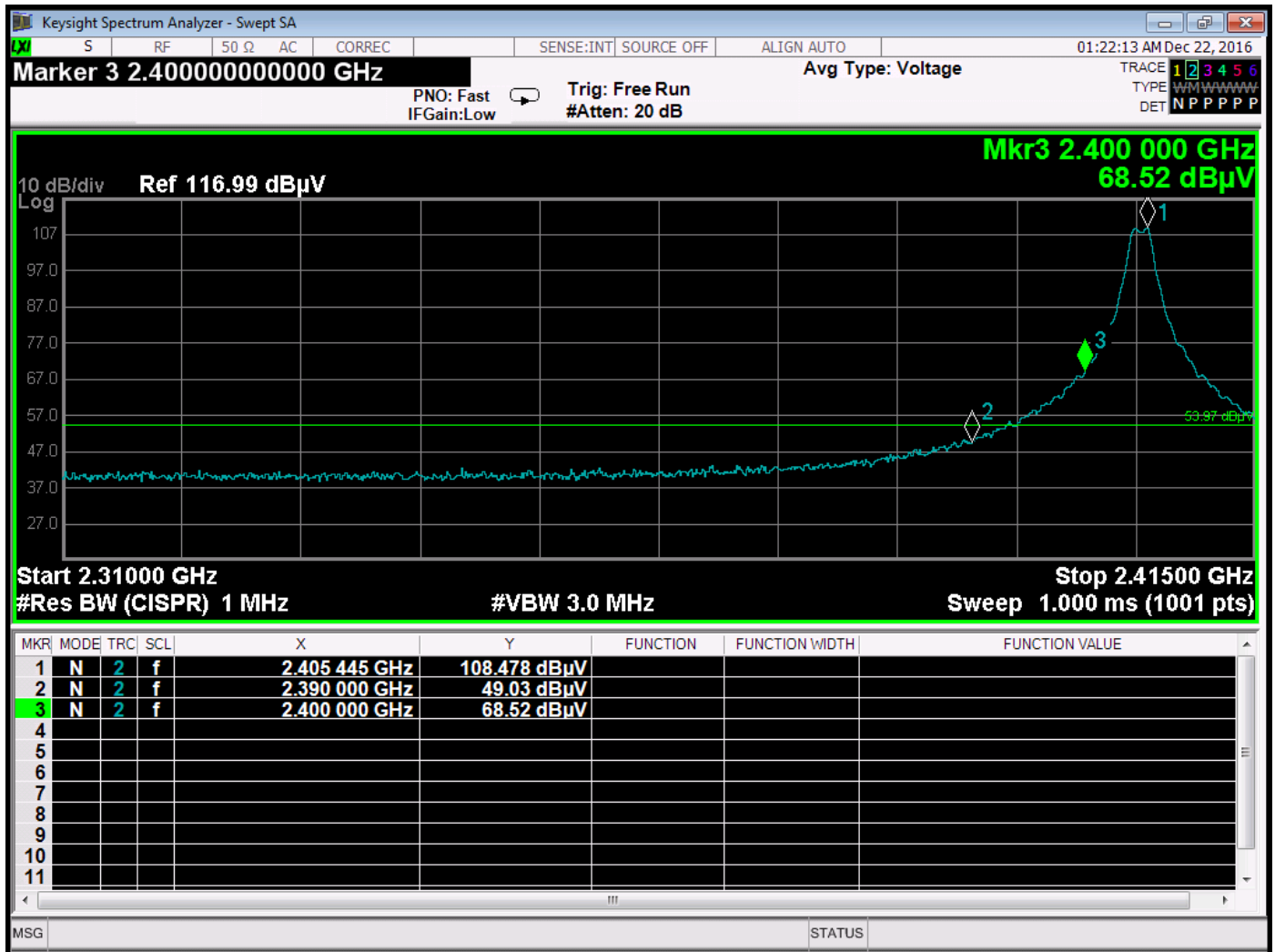
**FCC 15.247**

Ecolink Intelligent Technology, Inc.  
 Comcast Xfinity Home Motion Sensor  
 Model: URC4470BC0-X-R

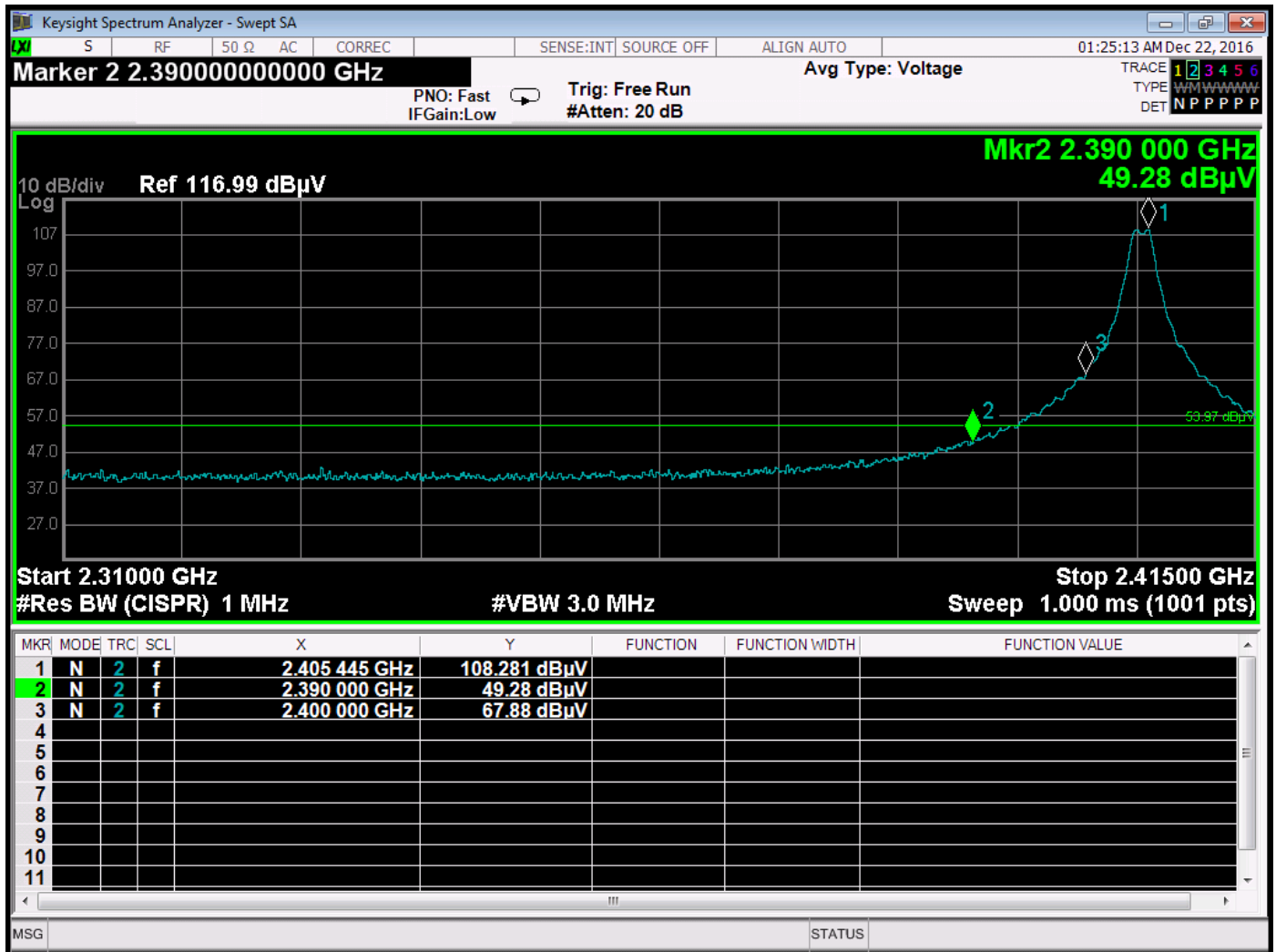
Date: 12/22/2016  
 Lab: D  
 Tested By: Kyle Fujimoto

**Band Edge - High Channel - Antenna #2**  
**Duty Cycle: 25.92% - Power Level -15**

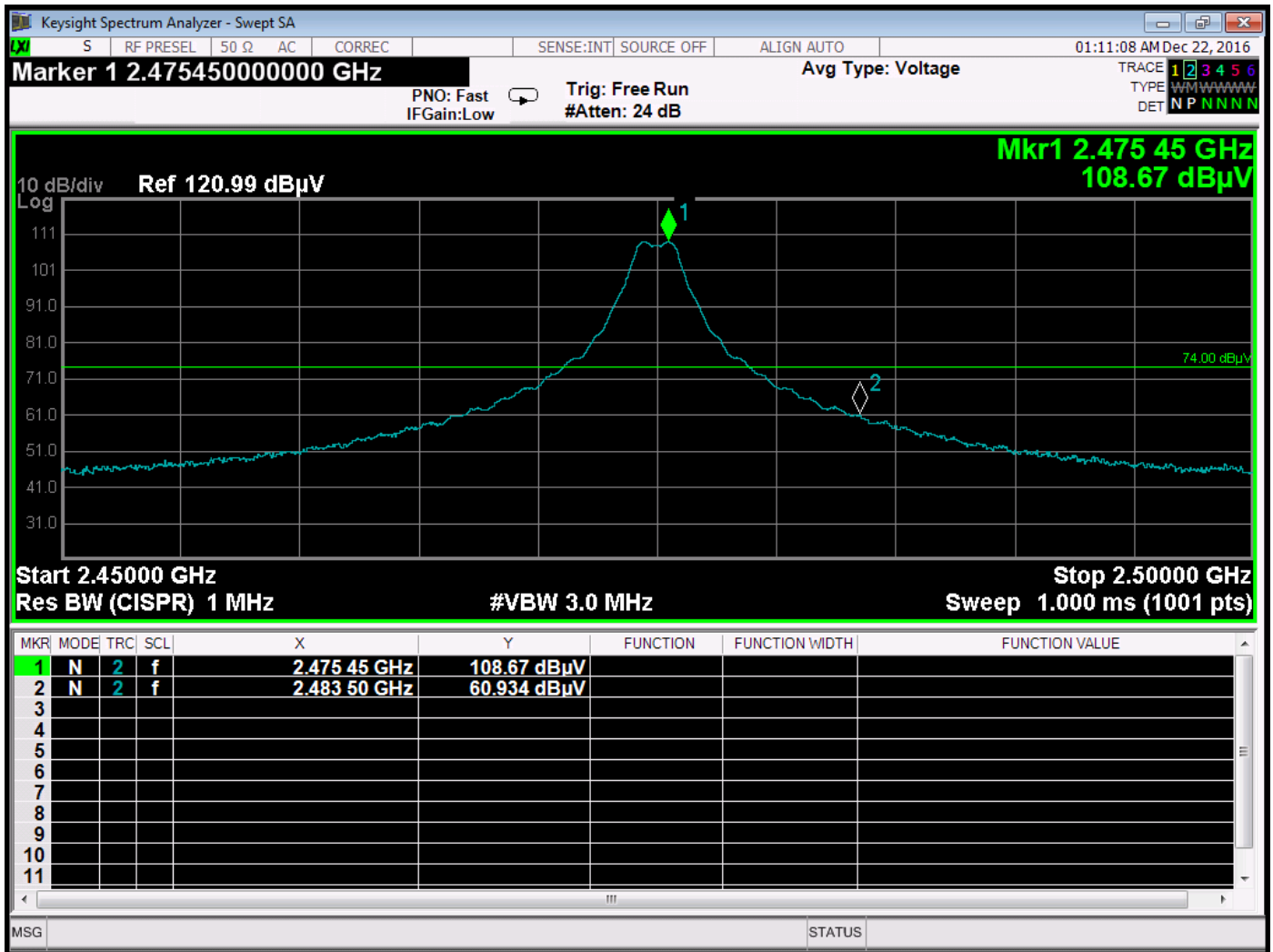
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
2480	95.19	V	--	--	Peak	349.75	155.01	Fund. of High Channel
2480	83.47	V	--	--	Avg	349.75	155.01	Y-Axis Worst Case
2483.5	63.22	V	73.97	-10.75	Peak	349.75	155.01	Band Edge of High Ch.
2483.5	51.50	V	53.97	-2.47	Avg	349.75	155.01	Y-Axis Worst Case
2480	94.34	H	--	--	Peak	292.75	234.05	Fund. of High Channel
2480	82.62	H	--	--	Avg	292.75	234.05	X-Axis Worst Case
2483.5	61.65	H	73.97	-12.32	Peak	292.75	234.05	Fund. of High Channel
2483.5	49.93	H	53.97	-4.04	Avg	292.75	234.05	X-Axis Worst Case
2475	108.67	V	--	--	Peak	350.00	129.64	Fundamental
2475	96.95	V	--	--	Avg	350.00	129.64	Y-Axis Worst Case
2483.5	60.93	V	73.97	-13.04	Peak	350.00	129.64	Band Edge
2483.5	49.21	V	53.97	-4.76	Avg	350.00	129.64	Y-Axis Worst Case
2475	108.67	H	--	--	Peak	312.25	190.53	Fundamental
2475	96.95	H	--	--	Avg	312.25	190.53	X-Axis Worst Case
2483.5	59.79	H	73.97	-14.18	Peak	312.25	190.53	Band Edge
2483.5	48.07	H	53.97	-5.90	Avg	312.25	190.53	X-Axis Worst Case



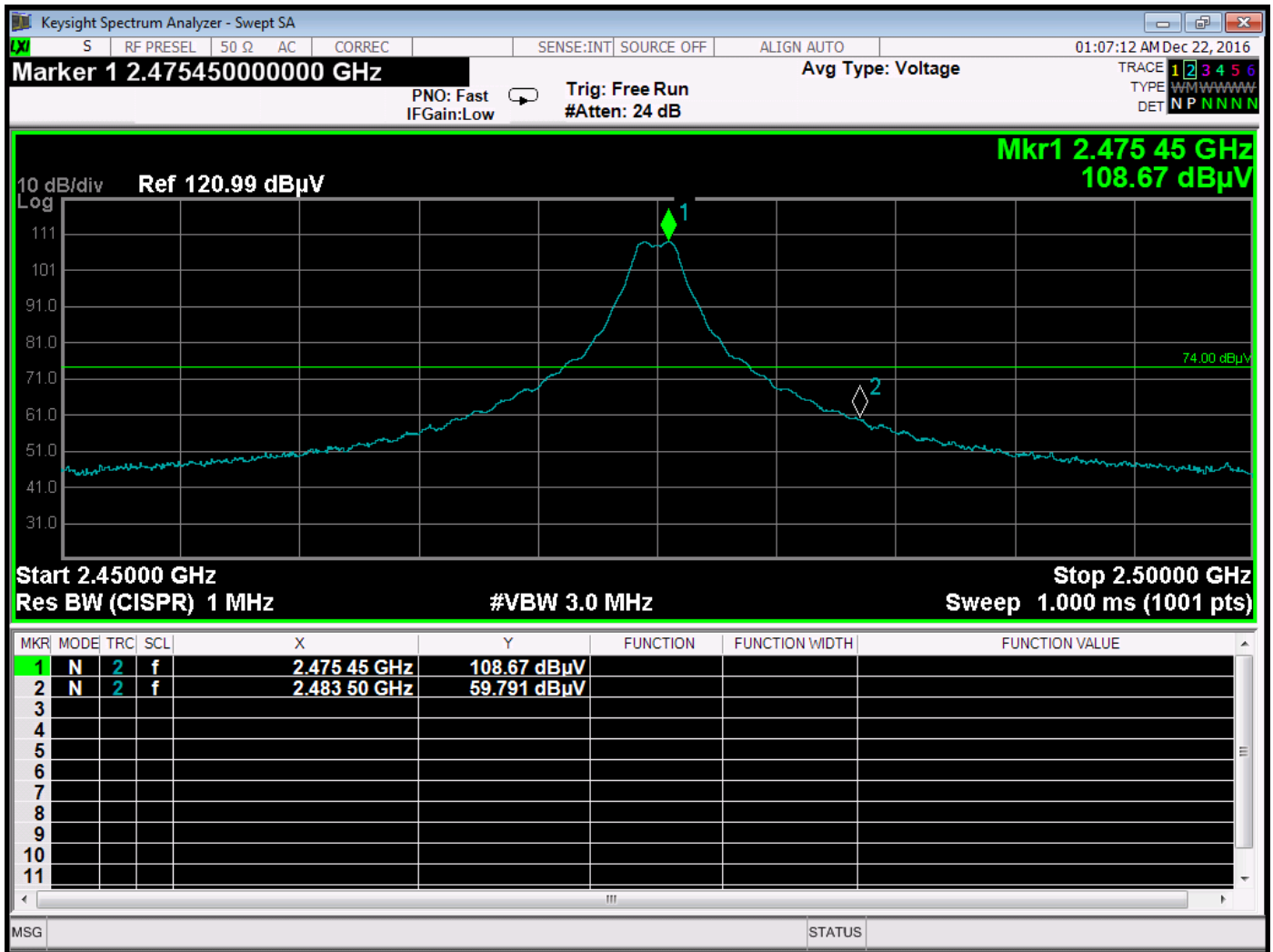
Band Edge – Low Channel – Vertical – Y-Axis – Worst Case – Antenna #2



Band Edge – Low Channel – Horizontal – X-Axis – Worst Case – Antenna #2

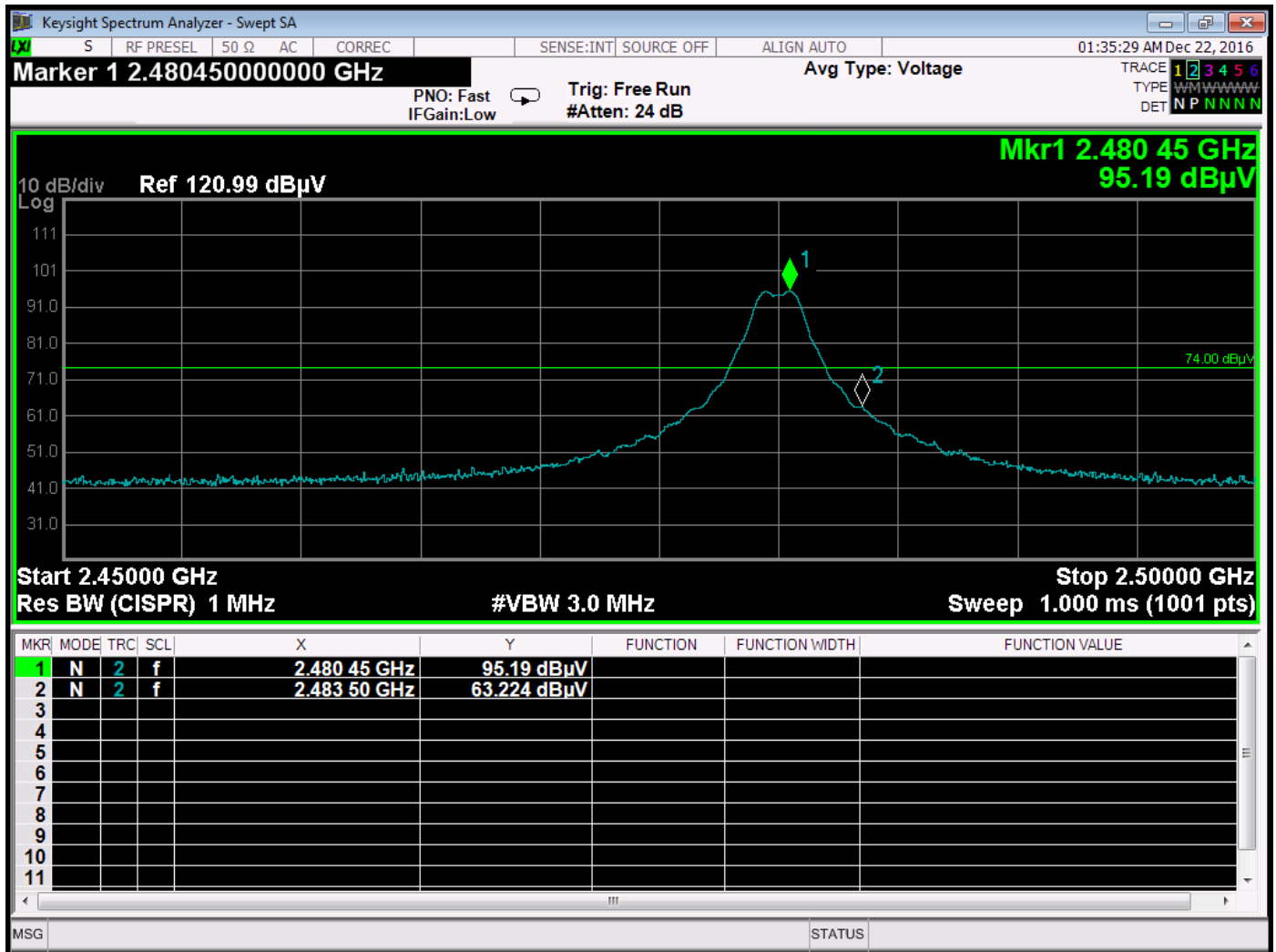


Band Edge – High Channel (2475 MHz) – Vertical – Y-Axis – Worst Case – Antenna #2

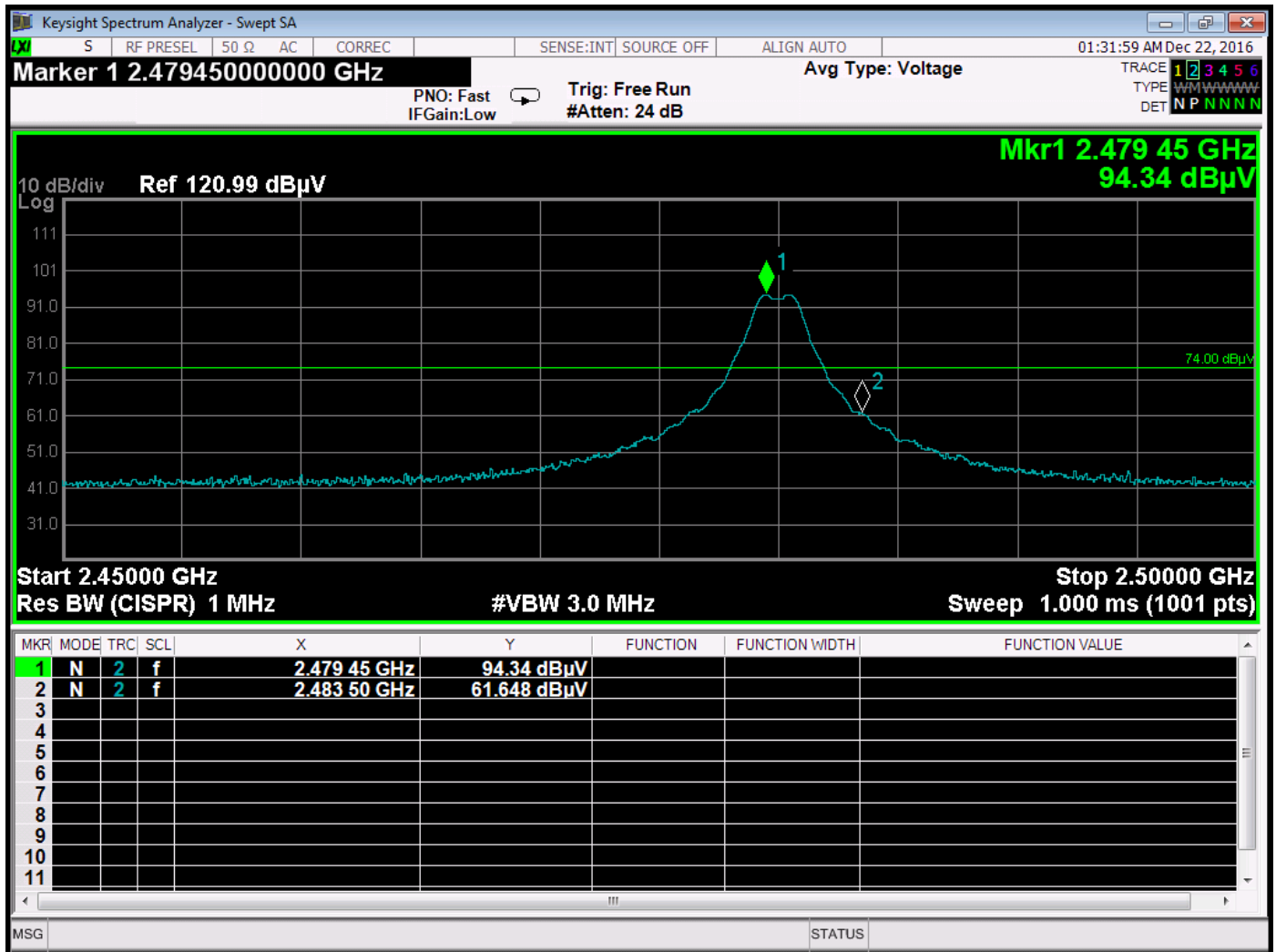


Band Edge – High Channel (2475 MHz) – Horizontal – X-Axis – Worst Case – Antenna #2





Band Edge – High Channel (2480 MHz) – Vertical – Y-Axis – Worst Case – Antenna #2



Band Edge – High Channel (2480 MHz) – Horizontal – X-Axis – Worst Case – Antenna #2