



166 South Carter, Genoa City, WI 53128

Company:	Whirlpool Corporation
Model Tested:	XPWG3
Report Number:	20912
DLS Project:	7037

Code of Federal Regulations 47 Part 15 – Radio Frequency Devices

Subpart C – Intentional Radiators

Section 15.247

Operation within the bands 902 - 928 MHz,
2400 - 2483.5 MHz, 5725 - 5875 MHz,
and 24.0 - 24.25 GHz.

Class II Permissive Change Report

THE FOLLOWING **MEETS** THE ABOVE TEST SPECIFICATION

Formal Name:	Wifi Gen3
Kind of Equipment:	802.11b/g/n Wi-Fi appliance module
Frequency Range:	2412-2462 MHz
Test Configuration:	DC powered transceiver module
Model Number(s):	XPWG3
Model(s) Tested:	XPWG3
Serial Number(s):	Configuration 1 SN: GW95013003GG - above 1 GHz Configuration 1 SN: 02W5071000CG - below 1 GHz Configuration 2 SN: 02W50580006H Configuration 3 SN: GW95013003KG
Date of Tests:	April 6 th to 21 st and May 1 st to 13 th of 2015
Test Conducted For:	Whirlpool Corporation 750 Monte Rd Benton Harbor, MI 49022, USA

NOTICE: “This test report relates only to the items tested and must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government”. Please see the "Description of Test Sample" page listed inside of this report.

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DLS Project:

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SIGNATURE PAGE

Tested By:

A handwritten signature in black ink that reads "Craig Brandt". The signature is written in a cursive style with a long horizontal stroke at the end.

Craig Brandt
Senior Test Engineer

Reviewed By:

A handwritten signature in black ink that reads "William Stumpf". The signature is written in a cursive style with a long horizontal stroke at the end.

William Stumpf
OATS Manager

Approved By:

A handwritten signature in black ink that reads "Brian J. Mattson". The signature is written in a cursive style with a long horizontal stroke at the end.

Brian Mattson
General Manager



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	802.11g F antenna 2	90



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802.11g PIFA antenna 1	110
802.11g PIFA antenna 2	130
802.11n F antenna 1	150
802.11n F antenna 2	170
802.11n PIFA antenna 1	190
802.11n PIFA antenna 2	210
Upper Band-Edge	230
802.11b F antenna 1	230
802.11b F antenna 2	238
802.11b PIFA antenna 1	246
802.11b PIFA antenna 2	254
802.11g F antenna 1	262
802.11g F antenna 2	278
802.11g PIFA antenna 1	302
802.11g PIFA antenna 2	318
802.11n F antenna 1	342
802.11n F antenna 2	358
802.11n PIFA antenna 1	378
802.11n PIF antenna 2	394

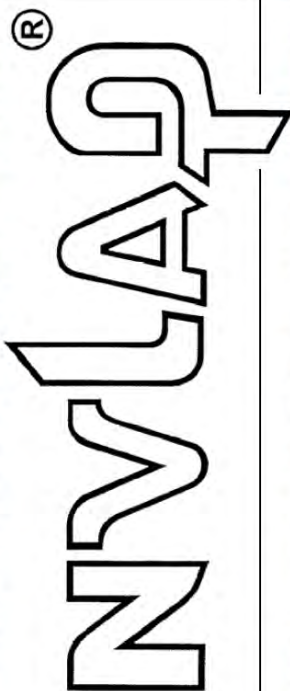


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United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 100276-0

D.L.S. Electronic Systems, Inc.
Wheeling, IL

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

2014-10-01 through 2015-09-30

Effective dates



For the National Institute of Standards and Technology

NVLAP-01C (REV. 2009-01-28)



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1.0 Summary of Test Report

It was determined that the Whirlpool Inc Wifi Gen3 model XPWG3, complies with the requirements of CFR 47 Part 15 Subpart C Section 15.247 for a Class II Permissive Change to add one or two external antennas to the module.

Subpart C Section 15.247 Applicable Technical Requirements Tested for Class II PC:

Section	Description	Procedure	Note	Compliant?
15.247(d) 15.205(a) 15.209(a)	Emissions in Restricted Frequency Bands – Radiated with antennas	558074 D01 DTS Meas Guidance v03r02 Sections 12.0, 12.1, 12.2.4 & 12.2.5.3 And ANSI C63.10-2009	1	Yes
15.247(d) 15.205(a) 15.209(a)	Band-Edge Measurements – Radiated with antennas	558074 D01 DTS Meas Guidance v03r02 Sections 12.0, 12.1, 12.2.4, 13.0 & 13.3.3 and ANSI C63.10-2009	1	Yes

Note 1: Radiated emission measurement.

2.0 Introduction

In April and May, 2015, the WIFI Gen3 model XPWG3, as provided from Whirlpool was tested to the requirements of CFR 47 Part 15 Subpart C Section 15.247 for a Class II Permissive Change to add one or two external antennas to the module. To meet these requirements, the procedures contained within this report were performed by personnel of D.L.S Electronic Systems, Inc.

3.0 Test Facilities

D.L.S. Electronic Systems, Inc. is a full service EMC/Safety Testing Laboratory accredited to ISO 17025. NVLAP Certificate and Scope can be viewed at <http://www.dlsemc.com/certificate>. Our facilities are registered with the FCC, Industry Canada, and VCCI.

Wisconsin Test Facility:

D.L.S. Electronic Systems, Inc.
166 S. Carter Street
Genoa City, Wisconsin 53128

Wheeling Test Facility:

D.L.S. Electronic Systems, Inc.
1250 Peterson Drive
Wheeling, IL 60090

FCC Registration #90531



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4.0 Description of Test Samples

Description:

The XPWG3 Module is an 802.11b/g/n Wi-Fi radio transceiver. The transceiver was mounted on an FR4 substrate which included integrated printed circuit board with two “on-board” or imbedded antennas and a shield covering the RF circuitry. Through a hardware configuration, “FAKRA” connectors can be mounted directly on the PCB to allow the internal antennas to be bypassed and external antennas to be used depending on the geographical environment. Firmware was included which allowed different modulation types, power settings and frequency of operation to be set as needed. The unit is powered by a 4.5V to 14V power source.

Configuration 1 is a fully populated board

Configuration 2 has the RS485 serial communication interface.

(All WIN circuitry and 14V to 5V LDO removed)

Configuration 3 has the WIN serial communication interface and the optional 14V to 5V LDO to supply a 5V power bus back to the WIN circuit for 14V appliances.

(All RS485 circuitry removed)

Type of Equipment / Frequency Range:

Mobile / 2412-2462 MHz

Physical Dimensions of Equipment Under Test:

91mm x 26mm x 10mm

Power Source:

4.5 to 14 VDC -- supplied from host appliances

Internal Frequencies:

38.4 MHz, 32 MHz

Transmit / Receive Frequencies Used For Test Purpose:

For modulation types DSSS and OFDM

Low channel: 2412 MHz, Middle channel: 2437 MHz, High channel: 2462 MHz



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Type of Modulation(s) / Antenna Type:

DSSS (802.11b), OFDM (802.11g and 802.11n) Modulations

2 x PCB Slot antennas (1.76 dBi antenna gain) (in original certification report #20850)

1 or 2 external F-type antennas (1.24 dBi antenna gain)

OR 1 or 2 external Planar F antennas (4.2 dBi gain)

Description of Circuit Board(s) / Part Number(s):

PC Board	W10719302 Rev C
F type antenna(s)	W1050366 Rev C with FAKRA connector(s)
Planar F (PIFA) antenna(s)	W10445530 Rev C with FAKRA connector(s)



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5.0 Test Equipment

A list of the equipment used can be found in the table below. All primary equipment was calibrated against known reference standards with a verified traceable path to NIST.

Radiated 30 – 1000 MHz (Site 3)

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Date	Cal Due Dates
Receiver	Rohde & Schwarz	ESI 40	837808/006	20 Hz – 40 GHz	7-24-14	7-24-15
Preamplifier	Rohde & Schwarz	TS-PR10	032001/005	9 kHz – 1 GHz	1-7-15	1-7-16
Antenna	EMCO	3104C	97014785	20 MHz – 200 MHz	9-4-14	9-4-16
Antenna	EMCO	3146	97024895	200 MHz – 1 GHz	9-24-14	9-24-16
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A

Radiated 1-18 GHz (G1)

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Date	Cal Due Dates
Receiver	Rohde & Schwarz	ESI 40	837808/005	20 Hz – 40 GHz	7-17-14	7-17-15
Preamp	Ciao	CA118-4010	101	1GHz-18GHz	1-26-15	1-26-16
Horn Antenna	EMCO	3115	9903-5731	1-18GHz	7-11-13	7-11-15
Filter- High-Pass	Q-Microwave	100462	2	4.2GHz-18GHz	6-24-14	6-24-15
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A

Additional Radiated 18-26 GHz (Site 3)

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Date	Cal Due Dates
Filter- High-Pass	K & L	50140-11SH10-18000/T40000-K-K	8	18 – 40 GHz	3-6-14	3-6-16
Preamp	Miteq	AMF-8B-180265-40-10P-H/S	438727	18GHz-26GHz	8-11-14	8-11-15
Horn Antenna	ETS Lindgren	3116	00062917	18 – 40GHz	10-24-13	9-24-15
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A



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6.0 Test Arrangements

Radiated Emissions Measurement Arrangement:

All radiated emission measurements were performed at D.L.S. Electronic Systems, Inc. and set up according to FCC KDB 558074 D01 DTS Meas Guidance v03r02 and ANSI C63.10-2009, unless otherwise noted. Description of procedures and measurements can be found in Appendix B – Measurement Data. See Appendix A for additional photos of the test set up.

Unless otherwise noted, the bandwidth of the measuring receiver / analyzer used during testing is shown below.

Frequency Range	Bandwidth (-6 dB)
10 to 150 kHz	200 Hz
150 kHz to 30 MHz	9 kHz
30 MHz to 1 GHz	120 kHz
Above 1 GHz	1 MHz

7.0 Normal Test Conditions

Temperature and Humidity:

72°F at 32% RH unless otherwise noted on test data

Supply Voltage: 4.5 to 14 VDC -- 6, 7.5 or 9 VDC for board configurations 1 & 2
-- 4.5 VDC for board configuration 3

8.0 Modifications Made To EUT For Compliance

The output power settings were set during testing. The output power setting is not related to the output power level in dBm.

9.0 Additional Descriptions

The EUT was powered with a battery pack.

The EUT was tested stand-alone for a Class II Permissive Change appraisal for addition to the existing Single Modular Approval.

The EUT was programmed to transmit on Low, Mid, and High channels, using 802.11-b, g, and n modulation types with various data rates.

The EUT was rotated through 3 orthogonal axis to find worst-case.

3 different board configurations were tested. Data shows worst-case emissions of all three.



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10.0 Final Settings

802.11b											
Channel	1	2	3	4	5	6	7	8	9	10	11
Power Setting	19	19	19	19	19	19	19	19	19	19	19

802.11g											
Channel	1	2	3	4	5	6	7	8	9	10	11
Power Setting	10	14	16	17	18	18	17	16	14	14	9

802.11n											
Channel	1	2	3	4	5	6	7	8	9	10	11
Power Setting	9	14	15	16	17	17	17	15	14	14	9

11.0 Results

Measurements were performed in accordance with FCC KDB 558074 D01 DTS Meas Guidance v03r02 and ANSI C63.10-2009. Graphical and tabular data can be found in Appendix B at the end of this report.

12.0 Conclusion

The Wifi Gen3 model XPWG3, as provided from Whirlpool, tested in April and May of 2015 **meets** the requirements of CFR 47 Part 15 Subpart C Section 15.247 for a Class II Permissive Change to add one or two external antennas to the module.



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Appendix A – Test Photos

Photo Information and Test Setup:

Item0: Whirlpool Corporation Model XPWG3
Item1: External Antennas with 20 cm shielded cables
Item2: 4.5, 6, 7.5 or 9 Volt battery pack with 13cm wire harness to load/termination (not part of the EUT)

Radiated Emissions Below 1GHz with F type Antenna – 5V

Position X



Position Y



Position Z



Appendix A

Radiated Emissions Below 1GHz with F type Antenna – 12V

Position X



Position Y



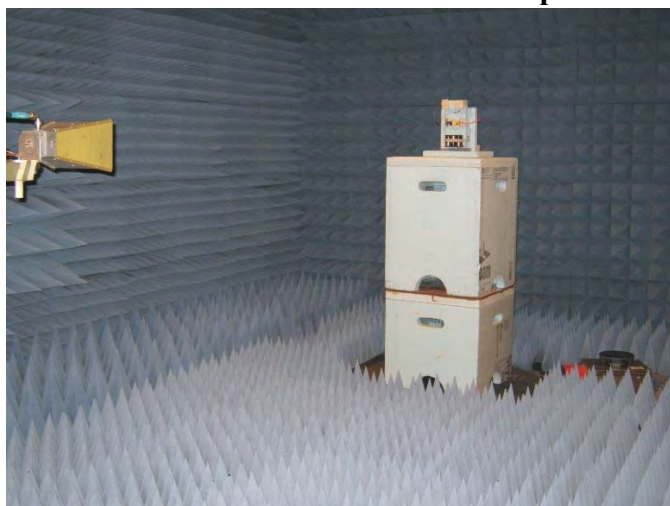
Position Z



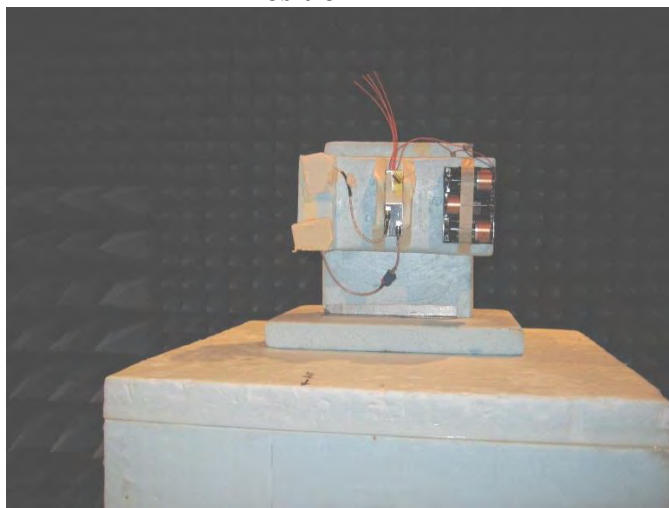
Appendix A

Radiated Emissions Above 1GHz with F type Antenna – 5V

Above 1GHz Setup



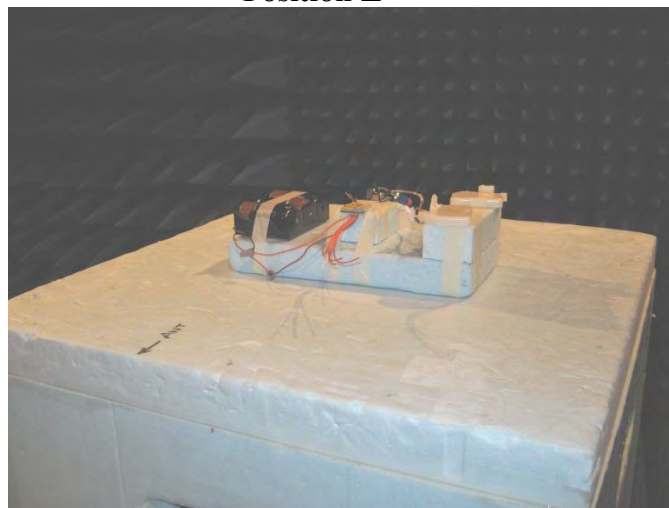
Position X



Position Y



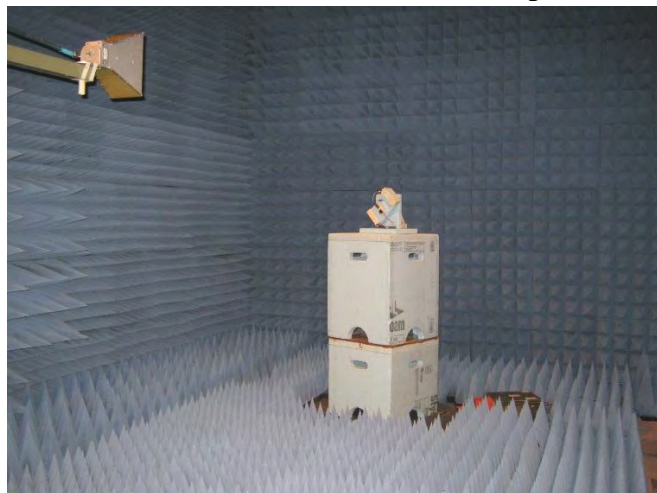
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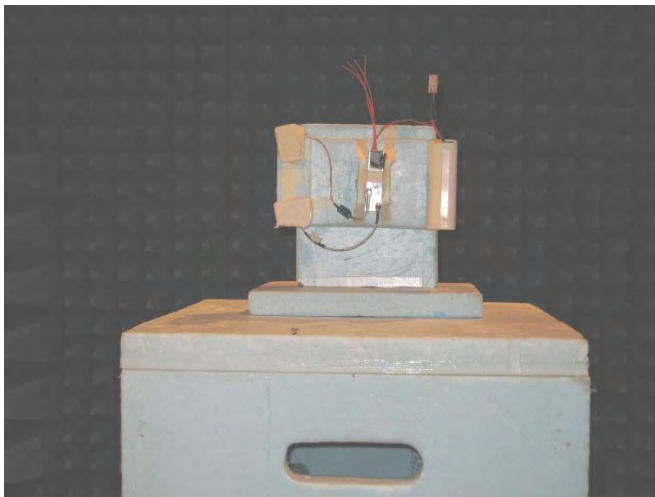
Appendix A

Radiated Emissions Above 1GHz with F type Antenna – 12V

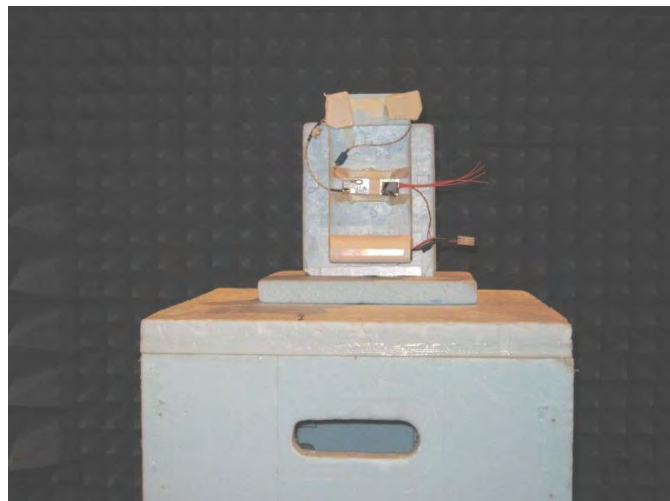
Above 1GHz Setup



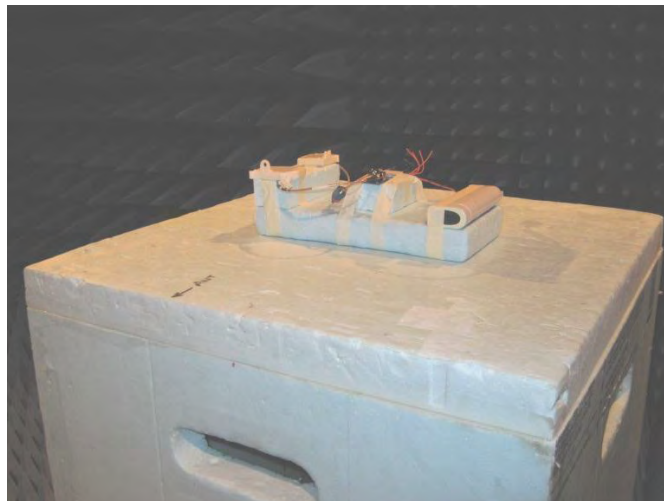
Position X



Position Y



Position Z



Appendix A

Radiated Emissions Below 1GHz with Planar F (PIFA) Antenna – 5V

Position X



Position Y



Position Z



Appendix A

Radiated Emissions Below 1GHz with Planar F (PIFA) Antenna – 12V

Position X



Position Y



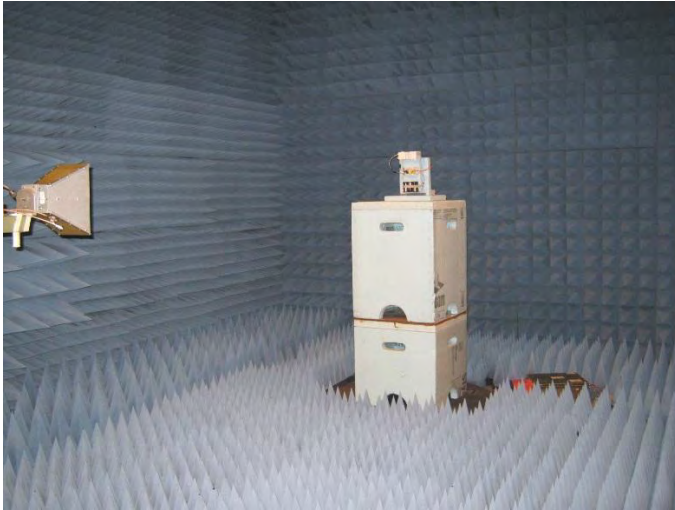
Position Z



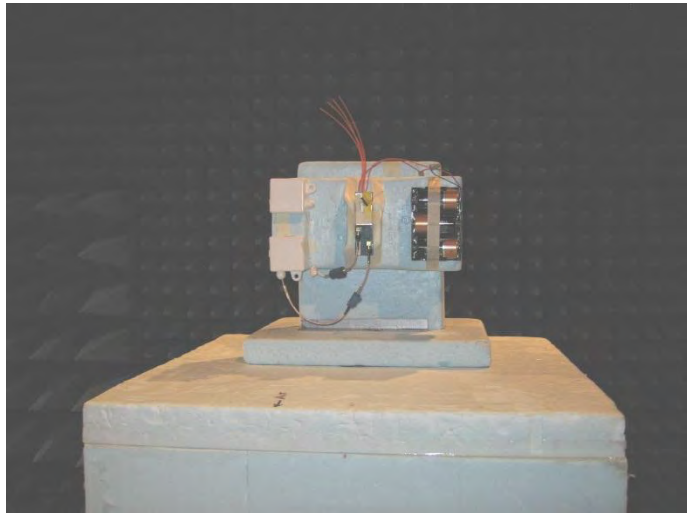
Appendix A

Radiated Emissions Above 1GHz with Planar F (PIFA) Antenna – 5V

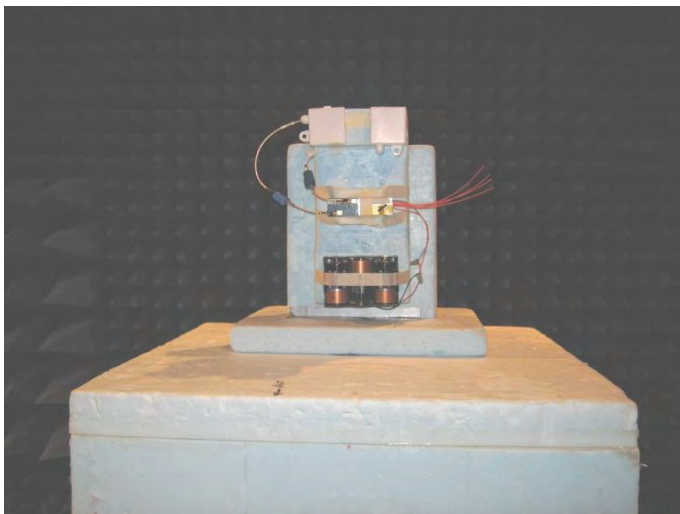
Above 1GHz Setup



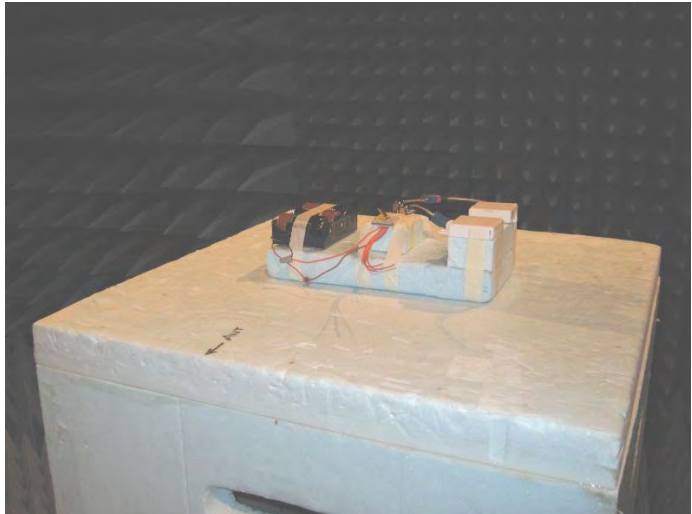
Position X



Position Y



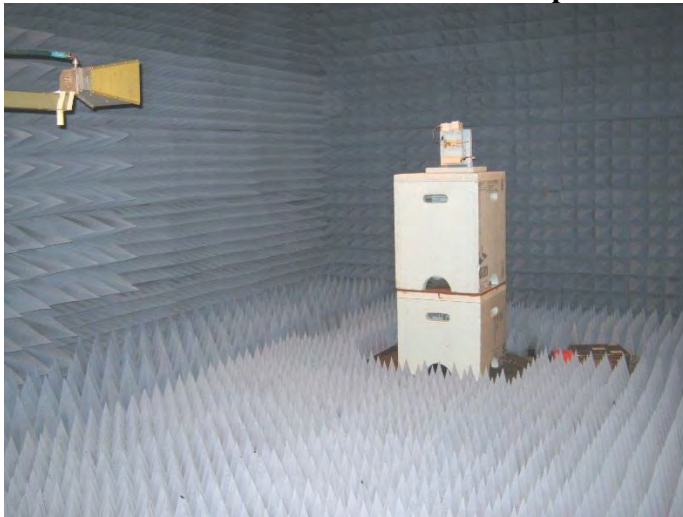
Position Z



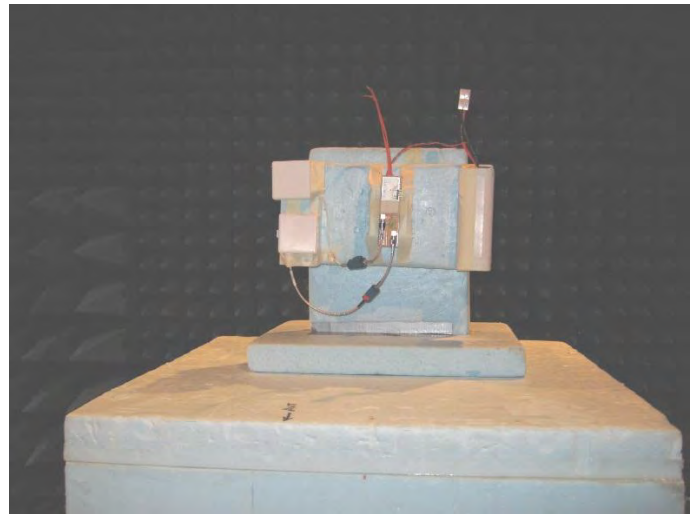
Appendix A

Radiated Emissions Above 1GHz with Planar F (PIFA) Antenna – 12V

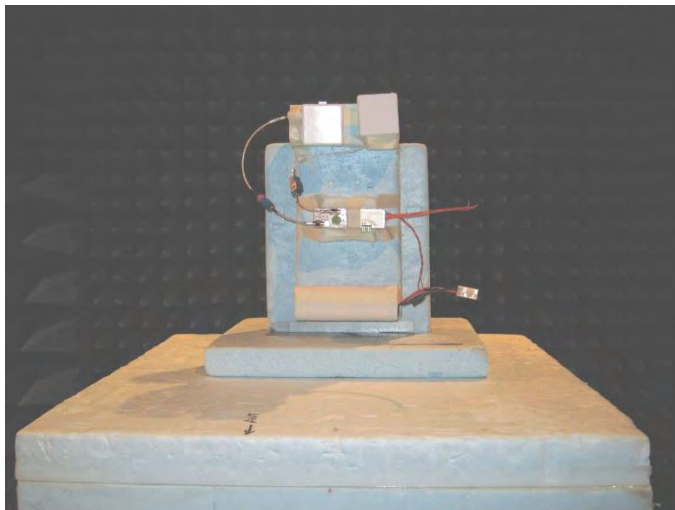
Above 1GHz Setup



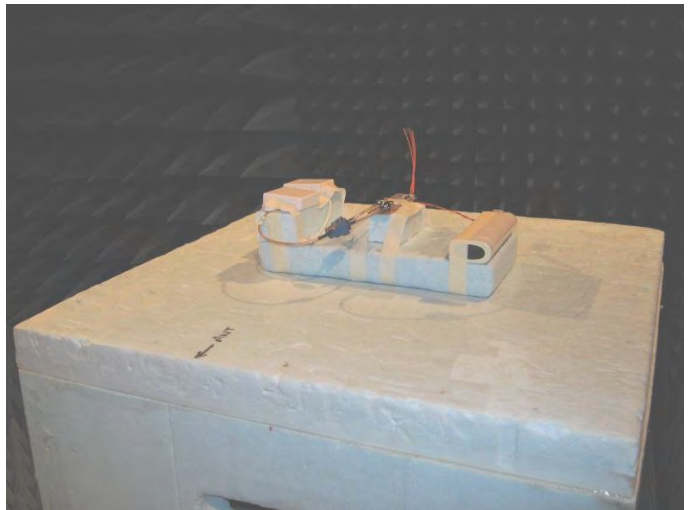
Position X



Position Y



Position Z





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Appendix B – Measurement Data

B1.0 Emissions in Restricted Frequency Bands – Radiated with antennas

Rule Part:

15.247(d), 15.205(5), 15.209(a)

Test Procedure:

558074 D01 DTS Meas Guidance v03r02
12.0 Emissions in Restricted Frequency Bands
12.1 Radiated Emissions Measurements
12.2.4 Peak power measurement procedure
12.2.5.3 Reduced VBW averaging across on and off times of the EUT
transmissions with max hold – to be used when duty cycle ≥ 98
percent cannot be achieved and the duty cycle is not constant
Measurement Procedure – ANSI C63.10-2009

Limits:

15.209(a)

Results:

Compliant

Notes:

Measurements were performed while the EUT was transmitting from antenna number 1. Testing was then repeated with the EUT transmitting from antenna number 2. Testing was performed with 802.11-b 1 Mbps modulation (found to be worst-case) and output power setting 19. The EUT was tested at the low, middle, and high channels of operation. Testing was performed with F antennas, and then repeated with PIFA antennas. Three different board configurations were tested. The data shows the worst-case emissions from all three configurations.

The host appliances this module will be used in will supply either 5, 12, or 14 volts to the module. The voltage regulator on the module is rated for 4.5 volts to 14 volts input. The voltage to the transmit circuit is regulated to 3.3 volts. Power can be supplied via a castellated connector or a JST connector. Testing below 1 GHz was performed using a 6 volt battery pack and a 9 volt battery using the JST connector with the JST wire harness connected to a simulated load (representing typical application). Testing above 1 GHz was performed using a 4.5 volt battery pack and a 7.5 volt battery pack using the JST connector.



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F antenna below 1GHz – 5V

Company: Whirlpool Corporation
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Radiated Emissions in Restricted Bands – 30 MHz to 1 GHz

Tested at a 3 Meter Distance

Worst case of 3 board configurations: Fully populated

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 70 deg F; 41% R.H.
Test Site: Site 3
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **Low, Mid, and High channels, 802.11-b, DSSS, 1 Mbps; F - Antennas #1 & #2**
6 Volt input; wires from JST connector terminated with simulated typical load
Date: 05-13-2015
Notes: All other restricted band emissions at least 20 dB under the limit.

Frequency (MHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
163.82	Max Peak	Vert	34.66	13.41	-22.9	25.17	43.5	18.33	1.00	180	
165.94	Max Peak	Vert	36.27	13.87	-22.9	27.24	43.5	16.26	1.00	5	
167.99	Max Peak	Vert	35.65	14.20	-22.9	26.95	43.5	16.55	1.00	0	
170.10	Max Peak	Vert	38.50	14.51	-22.9	30.11	43.5	13.39	1.00	80	
172.25	Max Peak	Vert	41.91	14.90	-22.9	33.91	43.5	9.59	1.00	185	
243.89	Max Peak	Vert	45.46	12.05	-22.4	35.11	46.0	10.89	2.10	260	
401.68	Max Peak	Vert	36.47	15.90	-21.7	30.67	46.0	15.33	1.20	180	
111.12	Max Peak	Horz	37.92	12.00	-23.5	26.42	43.5	17.08	2.00	210	
163.74	Max Peak	Horz	38.12	13.41	-22.9	28.63	43.5	14.87	2.00	220	
165.84	Max Peak	Horz	38.35	13.87	-22.9	29.32	43.5	14.18	1.90	15	
167.98	Max Peak	Horz	41.59	14.20	-22.9	32.89	43.5	10.61	1.10	10	
170.06	Max Peak	Horz	39.49	14.51	-22.9	31.10	43.5	12.40	1.00	10	
172.17	Max Peak	Horz	46.92	14.90	-22.9	38.92	43.5	4.58	1.00	10	
243.74	Max Peak	Horz	47.20	12.05	-22.4	36.85	46.0	9.15	1.00	180	
401.47	Max Peak	Horz	36.12	15.90	-21.7	30.32	46.0	15.68	2.00	185	



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F antenna below 1GHz – 12V

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

Radiated Emissions in Restricted Bands – 30 MHz to 1 GHz

Tested at a 3 Meter Distance

Worst case of 3 board configurations: Fully populated

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 70 deg F; 41% R.H.
Test Site: Site 3
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **Low, Mid, and High channels, 802.11-b, DSSS, 1 Mbps; F - Antennas #1 & #2**
Date: 05-13-2015
Notes: **9 Volt input; wires from JST connector terminated with simulated typical load**
All other restricted band emissions at least 20 dB under the limit.

Frequency (MHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
249.67	Max Peak	Vert	45.49	12.36	-22.4	35.45	46.0	10.55	2.10	270	
405.06	Max Peak	Vert	44.92	15.90	-21.6	39.22	46.0	6.78	1.20	280	
613.26	Max Peak	Vert	32.99	19.43	-20.9	31.52	46.0	14.48	1.00	0	
108.99	Max Peak	Horz	43.45	11.79	-23.5	31.74	43.5	11.76	1.90	30	
111.07	Max Peak	Horz	37.61	12.00	-23.5	26.11	43.5	17.39	2.00	190	
171.86	Max Peak	Horz	31.20	14.90	-22.9	23.2	43.5	20.30	1.00	0	
196.76	Max Peak	Horz	29.66	15.21	-22.8	22.07	43.5	21.43	1.00	10	
251.60	Max Peak	Horz	47.56	12.48	-22.4	37.64	46.0	8.36	1.20	185	
404.75	Max Peak	Horz	44.26	15.90	-21.7	38.46	46.0	7.54	2.00	170	
612.60	Max Peak	Horz	35.46	19.40	-20.9	33.96	46.0	12.04	1.10	20	



166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

_F antenna 1 above 1GHz

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 71 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **Low channel: 2.412 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #1 F**
Date: 04-20-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.824	Max Peak	Vert	52.19	33.03	-36.7	48.52	74	25.48	1.74	90	Harmonic
4.824	Average	Vert	46.75	33.03	-36.7	43.08	54	10.92	1.74	90	Harmonic
4.824	Max Peak	Horz	51.71	33.03	-36.7	48.04	74	25.96	1.51	241	Harmonic
4.824	Average	Horz	45.48	33.03	-36.7	41.81	54	12.19	1.51	241	Harmonic



166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 71 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: Mid channel: 2.437 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #1 F
Date: 04-20-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.874	Max Peak	Vert	54.48	33.07	-36.8	50.75	74	23.25	1.68	86	Harmonic
4.874	Average	Vert	50.01	33.07	-36.8	46.28	54	7.72	1.68	86	Harmonic
4.874	Max Peak	Horz	54.33	33.07	-36.8	50.60	74	23.40	1.68	171	Harmonic
4.874	Average	Horz	49.21	33.07	-36.8	45.48	54	8.52	1.68	171	Harmonic
7.311	Max Peak	Vert	47.12	36.39	-34.2	49.31	74	24.69	1.49	181	Harmonic
7.311	Average	Vert	33.81	36.39	-34.2	36.00	54	18.00	1.49	181	Harmonic
7.311	Max Peak	Horz	47.02	36.39	-34.2	49.21	74	24.79	1.50	194	Harmonic
7.311	Average	Horz	33.75	36.39	-34.2	35.94	54	18.06	1.50	194	Harmonic



166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 72 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **High channel: 2.462 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #1 F**
Date: 04-17-2015 and 04-20-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.924	Max Peak	Vert	53.83	33.13	-36.8	50.16	74	23.84	1.84	25	Harmonic
4.924	Average	Vert	48.73	33.13	-36.8	45.06	54	8.94	1.84	25	Harmonic
4.924	Max Peak	Horz	53.37	33.13	-36.8	49.70	74	24.30	1.77	171	Harmonic
4.924	Average	Horz	48.22	33.13	-36.8	44.55	54	9.45	1.77	171	Harmonic
7.386	Max Peak	Vert	48.02	36.47	-34.2	50.29	74	23.71	1.45	182	Harmonic
7.386	Average	Vert	34.32	36.47	-34.2	36.59	54	17.41	1.45	182	Harmonic
7.386	Max Peak	Horz	46.53	36.47	-34.2	48.80	74	25.20	1.47	199	Harmonic
7.386	Average	Horz	33.86	36.47	-34.2	36.13	54	17.87	1.47	199	Harmonic



166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

_F antenna 2 above 1GHz

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 71 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **Low channel: 2.412 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #2 F**
Date: 04-14-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.824	Max Peak	Vert	52.97	33.03	-36.7	49.30	74	24.70	1.75	66	Harmonic
4.824	Average	Vert	47.57	33.03	-36.7	43.90	54	10.10	1.75	66	Harmonic
4.824	Max Peak	Horz	52.84	33.03	-36.7	49.17	74	24.83	1.37	100	Harmonic
4.824	Average	Horz	46.85	33.03	-36.7	43.18	54	10.82	1.37	100	Harmonic



166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 71 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: Mid channel: 2.437 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #2 F
Date: 04-20-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.874	Max Peak	Vert	52.70	33.07	-36.8	48.97	74	25.03	1.76	64	Harmonic
4.874	Average	Vert	46.75	33.07	-36.8	43.02	54	10.98	1.76	64	Harmonic
4.874	Max Peak	Horz	52.16	33.07	-36.8	48.43	74	25.57	1.47	105	Harmonic
4.874	Average	Horz	44.21	33.07	-36.8	40.48	54	13.52	1.47	105	Harmonic
7.311	Max Peak	Vert	49.67	36.39	-34.2	51.86	74	22.14	1.37	229	Harmonic
7.311	Average	Vert	39.90	36.39	-34.2	42.09	54	11.91	1.37	229	Harmonic
7.311	Max Peak	Horz	49.69	36.39	-34.2	51.88	74	22.12	2.09	14	Harmonic
7.311	Average	Horz	39.45	36.39	-34.2	41.64	54	12.36	2.09	14	Harmonic



166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 71 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **High channel: 2.462 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #2 F**
Date: 04-20-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.924	Max Peak	Vert	52.26	33.13	-36.8	48.59	74	25.41	1.56	80	Harmonic
4.924	Average	Vert	46.69	33.13	-36.8	43.02	54	10.98	1.56	80	Harmonic
4.924	Max Peak	Horz	52.10	33.13	-36.8	48.43	74	25.57	1.83	156	Harmonic
4.924	Average	Horz	45.39	33.13	-36.8	41.72	54	12.28	1.83	156	Harmonic
7.386	Max Peak	Vert	48.95	36.47	-34.2	51.22	74	22.78	1.60	52	Harmonic
7.386	Average	Vert	38.38	36.47	-34.2	40.65	54	13.35	1.60	52	Harmonic
7.386	Max Peak	Horz	47.75	36.47	-34.2	50.02	74	23.98	2.11	197	Harmonic
7.386	Average	Horz	36.55	36.47	-34.2	38.82	54	15.18	2.11	197	Harmonic



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_PIFA antenna below 1GHz – 5V

Company: Whirlpool Corporation
 Model Tested: XPWG3
 Report Number: 20912
 DLS Project: 7037

Radiated Emissions in Restricted Bands – 30 MHz to 1 GHz

Tested at a 3 Meter Distance

Worst case of 3 board configurations: Fully populated

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 70 deg F; 41% R.H.
Test Site: Site 3
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **Low, Mid, and High channels, 802.11-b, DSSS, 1 Mbps; PIFA - Antennas #1 & #2**
6 Volt input; wires from JST connector terminated with simulated typical load
Date: 05-13-2015
Notes: All other restricted band emissions at least 20 dB under the limit.

Frequency (MHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
164.21	Max Peak	Vert	40.85	13.41	-22.9	31.36	43.5	12.14	1.00	170	
166.31	Max Peak	Vert	40.82	13.87	-22.9	31.79	43.5	11.71	1.00	30	
168.41	Max Peak	Vert	44.62	14.20	-22.9	35.92	43.5	7.58	1.00	350	
170.49	Max Peak	Vert	40.97	14.51	-22.9	32.58	43.5	10.92	1.00	45	
172.60	Max Peak	Vert	41.77	14.90	-22.9	33.77	43.5	9.73	1.00	135	
244.27	Max Peak	Vert	37.17	12.07	-22.4	26.84	46.0	19.16	2.20	280	
402.22	Max Peak	Vert	37.32	15.90	-21.7	31.52	46.0	14.48	1.30	0	
111.43	Max Peak	Horz	42.14	12.00	-23.5	30.64	43.5	12.86	2.00	0	
164.13	Max Peak	Horz	45.40	13.41	-22.9	35.91	43.5	7.59	2.00	180	
166.18	Max Peak	Horz	46.17	13.87	-22.9	37.14	43.5	6.36	2.00	180	
168.38	Max Peak	Horz	50.25	14.20	-22.9	41.55	43.5	1.95	1.80	180	
170.46	Max Peak	Horz	50.24	14.51	-22.9	41.85	43.5	1.65	1.00	180	
172.58	Max Peak	Horz	48.56	14.90	-22.9	40.56	43.5	2.94	1.00	0	
244.33	Max Peak	Horz	39.34	12.07	-22.4	29.01	46.0	16.99	1.10	170	
400.19	Max Peak	Horz	37.33	15.90	-21.7	31.53	46.0	14.47	2.00	0	



166 South Carter, Genoa City, WI 53128
_ PIFA antenna below 1GHz – 12V

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

Radiated Emissions in Restricted Bands – 30 MHz to 1 GHz

Tested at a 3 Meter Distance

Worst case of 3 board configurations: Fully populated

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 70 deg F; 41% R.H.
Test Site: Site 3
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: Low, Mid, and High channels, 802.11-b, DSSS, 1 Mbps; PIFA - Antennas #1 & #2
9 Volt input; wires from JST connector terminated with simulated typical load
Date: 05-13-2015
Notes: All other restricted band emissions at least 20 dB under the limit.

Frequency (MHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
171.87	Max Peak	Vert	30.41	14.90	-22.9	22.41	43.5	21.09	1.00	75	
240.97	Max Peak	Vert	38.94	11.93	-22.5	28.37	46.0	17.63	2.10	270	
408.67	Max Peak	Vert	43.21	15.90	-21.6	37.51	46.0	8.49	1.20	90	
613.96	Max Peak	Vert	30.13	19.46	-20.9	28.69	46.0	17.31	1.80	315	
169.74	Max Peak	Horz	29.36	14.51	-22.9	20.97	43.5	22.53	1.00	20	
170.17	Max Peak	Horz	32.36	14.51	-22.9	23.97	43.5	19.53	2.00	0	
171.84	Max Peak	Horz	32.41	14.90	-22.9	24.41	43.5	19.09	1.00	0	
240.99	Max Peak	Horz	42.06	11.93	-22.5	31.49	46.0	14.51	1.10	200	
408.64	Max Peak	Horz	39.09	15.90	-21.6	33.39	46.0	12.61	2.30	180	
613.96	Max Peak	Horz	35.06	19.46	-20.9	33.62	46.0	12.38	1.30	10	



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Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

_PIFA antenna 1 above 1GHz

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 71 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **Low channel: 2.412 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #1 PIFA**
Date: 04-20-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.824	Max Peak	Vert	59.63	33.03	-36.7	55.96	74	18.04	2.01	21	Harmonic
4.824	Average	Vert	56.77	33.03	-36.7	53.10	54	0.90	2.01	21	Harmonic
4.824	Max Peak	Horz	59.61	33.03	-36.7	55.94	74	18.06	1.59	15	Harmonic
4.824	Average	Horz	57.19	33.03	-36.7	53.52	54	0.48	1.59	15	Harmonic



166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 71 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: Mid channel: 2.437 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #1 PIFA
Date: 04-20-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.874	Max Peak	Vert	58.99	33.07	-36.8	55.26	74	18.74	1.80	19	Harmonic
4.874	Average	Vert	56.38	33.07	-36.8	52.65	54	1.35	1.80	19	Harmonic
4.874	Max Peak	Horz	58.93	33.07	-36.8	55.20	74	18.80	1.73	12	Harmonic
4.874	Average	Horz	56.21	33.07	-36.8	52.48	54	1.52	1.73	12	Harmonic
7.311	Max Peak	Vert	48.56	36.39	-34.2	50.75	74	23.25	1.89	46	Harmonic
7.311	Average	Vert	36.24	36.39	-34.2	38.43	54	15.57	1.89	46	Harmonic
7.311	Max Peak	Horz	47.96	36.39	-34.2	50.15	74	23.85	1.27	194	Harmonic
7.311	Average	Horz	36.15	36.39	-34.2	38.34	54	15.66	1.27	194	Harmonic



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Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 71 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **High channel: 2.462 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #1 PIFA**
Date: 04-21-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.924	Max Peak	Vert	57.58	33.13	-36.8	53.91	74	20.09	1.70	16	Harmonic
4.924	Average	Vert	54.28	33.13	-36.8	50.61	54	3.39	1.70	16	Harmonic
4.924	Max Peak	Horz	57.71	33.13	-36.8	54.04	74	19.96	1.78	344	Harmonic
4.924	Average	Horz	54.69	33.13	-36.8	51.02	54	2.98	1.78	344	Harmonic
7.386	Max Peak	Vert	47.23	36.47	-34.2	49.50	74	24.50	1.76	364	Harmonic
7.386	Average	Vert	34.26	36.47	-34.2	36.53	54	17.47	1.76	364	Harmonic
7.386	Max Peak	Horz	47.78	36.47	-34.2	50.05	74	23.95	1.37	194	Harmonic
7.386	Average	Horz	35.68	36.47	-34.2	37.95	54	16.05	1.37	194	Harmonic



166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

_PIFA antenna 2 above 1GHz

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 71 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **Low channel: 2.412 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #2 PIFA**
Date: 04-20-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.824	Max Peak	Vert	59.80	33.03	-36.7	56.13	74	17.87	1.78	14	Harmonic
4.824	Average	Vert	57.41	33.03	-36.7	53.74	54	0.26	1.78	14	Harmonic
4.824	Max Peak	Horz	59.58	33.03	-36.7	55.91	74	18.09	1.84	4	Harmonic
4.824	Average	Horz	56.75	33.03	-36.7	53.08	54	0.92	1.84	4	Harmonic



166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 70 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: Mid channel: 2.437 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #2 PIFA
Date: 04-20-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.874	Max Peak	Vert	58.52	33.07	-36.8	54.79	74	19.21	1.46	344	Harmonic
4.874	Average	Vert	55.54	33.07	-36.8	51.81	54	2.19	1.46	344	Harmonic
4.874	Max Peak	Horz	58.63	33.07	-36.8	54.90	74	19.10	1.52	28	Harmonic
4.874	Average	Horz	55.76	33.07	-36.8	52.03	54	1.97	1.52	28	Harmonic
7.311	Max Peak	Vert	49.32	36.39	-34.2	51.51	74	22.49	1.65	18	Harmonic
7.311	Average	Vert	38.99	36.39	-34.2	41.18	54	12.82	1.65	18	Harmonic
7.311	Max Peak	Horz	48.45	36.39	-34.2	50.64	74	23.36	2.17	30	Harmonic
7.311	Average	Horz	37.07	36.39	-34.2	39.26	54	14.74	2.17	30	Harmonic



166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation
Model Tested: XPWG3
Report Number: 20912
DLS Project: 7037

Radiated Emissions in Restricted Bands – 1 GHz to 26 GHz

1 GHz to 18 GHz Tested at a 3 Meter Distance

18 GHz to 26 GHz Tested at a 1 Meter Distance

Worst case of 3 board configurations: Fully populated, 12 V WIN, & No LDO or WIN

EUT: XPWG3 RF Module
Manufacturer: Whirlpool Corporation
Operating Condition: 71 deg F; 29% R.H.
Test Site: Site G1
Operator: Craig B
Test Specification: FCC Part 15.247 and Part 15.205
Comment: **High channel: 2.462 GHz, 802.11-b, DSSS, 1 Mbps; Antenna #2 PIFA**
Date: 04-20-2015
Notes: All other emissions at least 20 dB under the limit.

Frequency (GHz)	Measurement Type	Antenna Polarization	Level (dBuV)	Antenna Factor (dB/m)	System Loss (dB)	Total Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	EUT Angle (deg)	Comment
4.924	Max Peak	Vert	59.85	33.13	-36.8	56.18	74	17.82	1.71	14	Harmonic
4.924	Average	Vert	56.76	33.13	-36.8	53.09	54	0.91	1.71	14	Harmonic
4.924	Max Peak	Horz	59.07	33.13	-36.8	55.4	74	18.60	2.04	9	Harmonic
4.924	Average	Horz	55.11	33.13	-36.8	51.44	54	2.56	2.04	9	Harmonic
7.386	Max Peak	Vert	48.68	36.47	-34.2	50.95	74	23.05	1.50	84	Harmonic
7.386	Average	Vert	37.61	36.47	-34.2	39.88	54	14.12	1.50	84	Harmonic
7.386	Max Peak	Horz	47.56	36.47	-34.2	49.83	74	24.17	1.76	30	Harmonic
7.386	Average	Horz	34.41	36.47	-34.2	36.68	54	17.32	1.76	30	Harmonic



166 South Carter, Genoa City, WI 53128

Company:
Model Tested:
Report Number:
DLS Project:

Whirlpool Corporation
XPWG3
20912
7037

Appendix B

B2.0 Band-Edge Measurements – Radiated with antennas

Measured at nearest restricted bands

Rule Part:

15.247(d), 15.205(a), 15.209(a)

Test Procedure:

558074 D01 DTS Meas Guidance v03r02
12.0 Emissions in Restricted Frequency Bands
12.1 Radiated Emissions Measurements
12.2.4 Peak power measurement procedure
13.0 Band-edge measurements
13.3.3 Reduced VBW averaging across on and off times of the EUT
transmissions with max hold – to be used when duty cycle ≥ 98
percent cannot be achieved and the duty cycle is not constant
Measurement Procedure – ANSI C63.10-2009

Limit:

15.209(a)

Results:

Compliant

Notes:

Measurements were performed while the EUT was transmitting from antenna number 1. Testing was then repeated with the EUT transmitting from antenna number 2. Testing was performed with all modulation types using the data rate that produced the widest signal. The EUT was tested at various channels of operation. The highest output power setting that resulted in a passing condition is noted on the data. Measurements were performed at the 2.39 GHz and 2.4835 GHz restricted band edges. The duty cycle of the EUT using the manufacturer's test software is less than 98% and not constant. Testing was performed with F antennas, and then repeated with PIFA antennas. Three different board configurations were tested. The data shows the worst-case emissions from all three configurations.

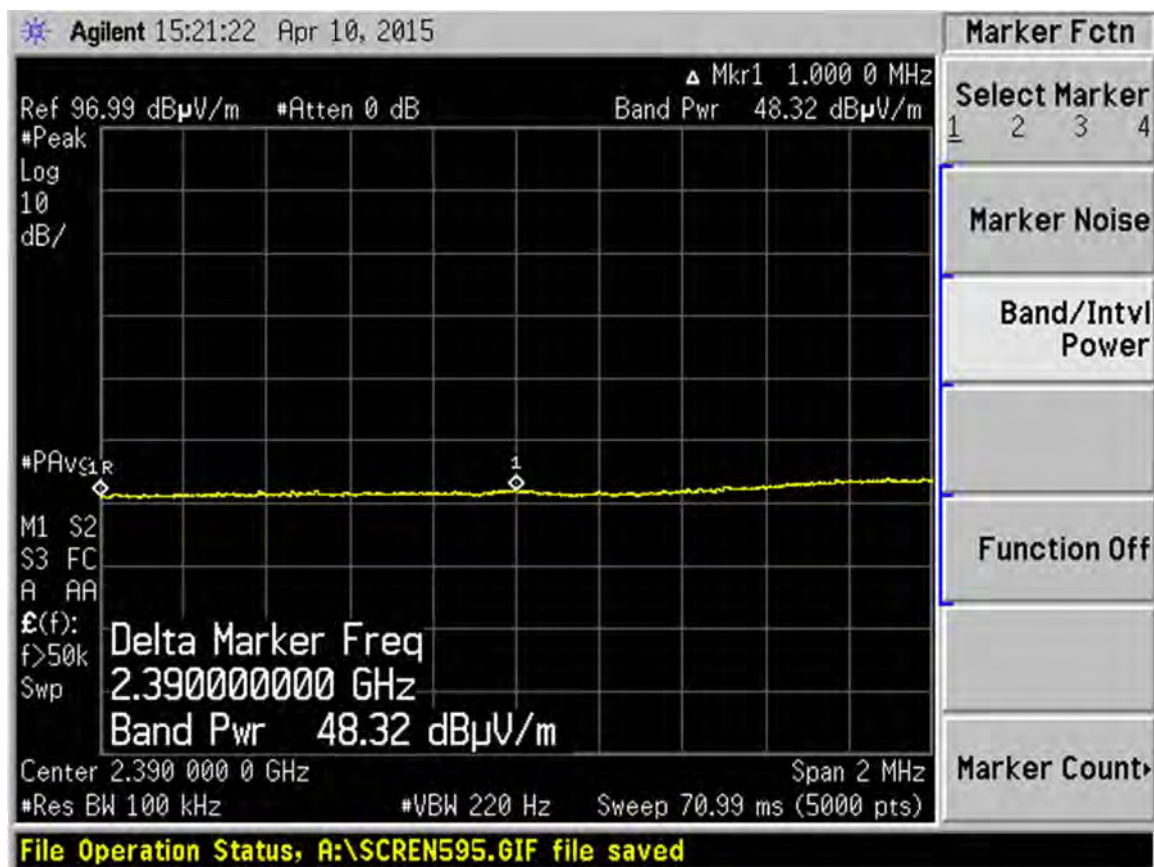
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 4.62 mS, VBW = 220 Hz

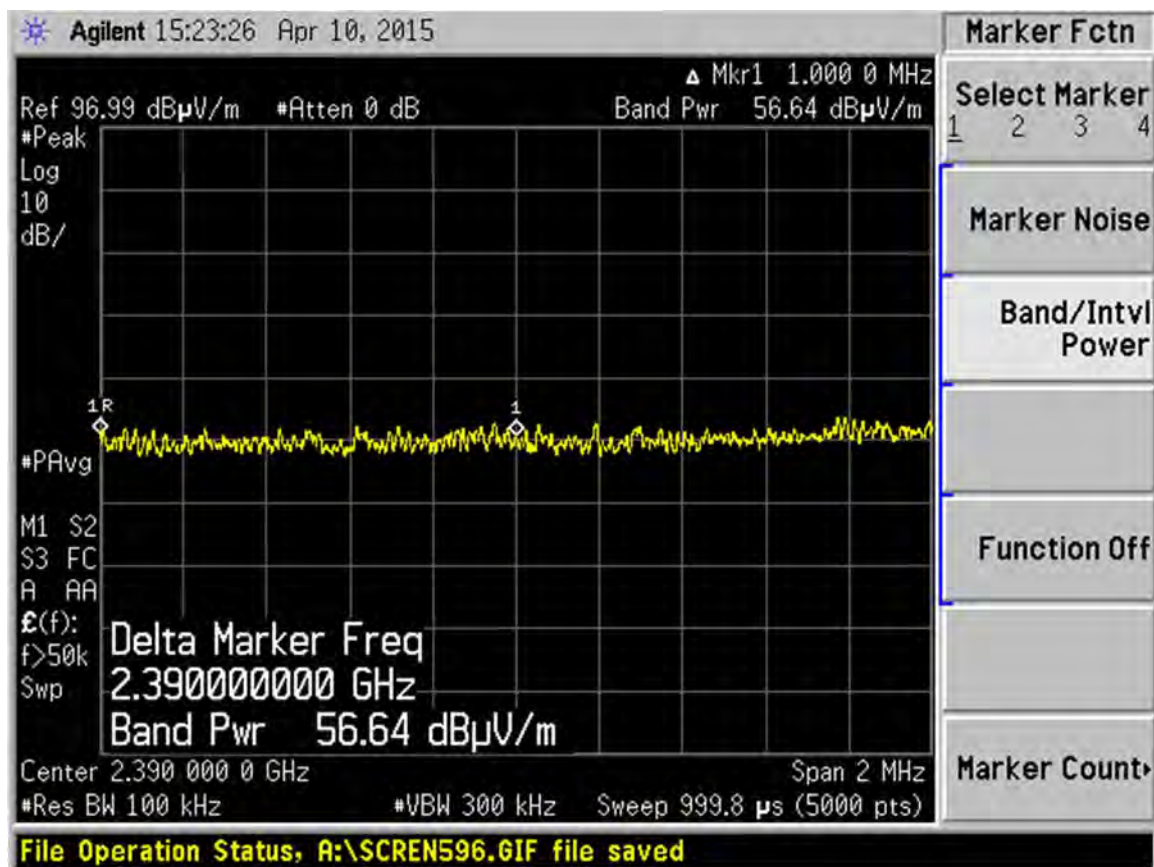


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



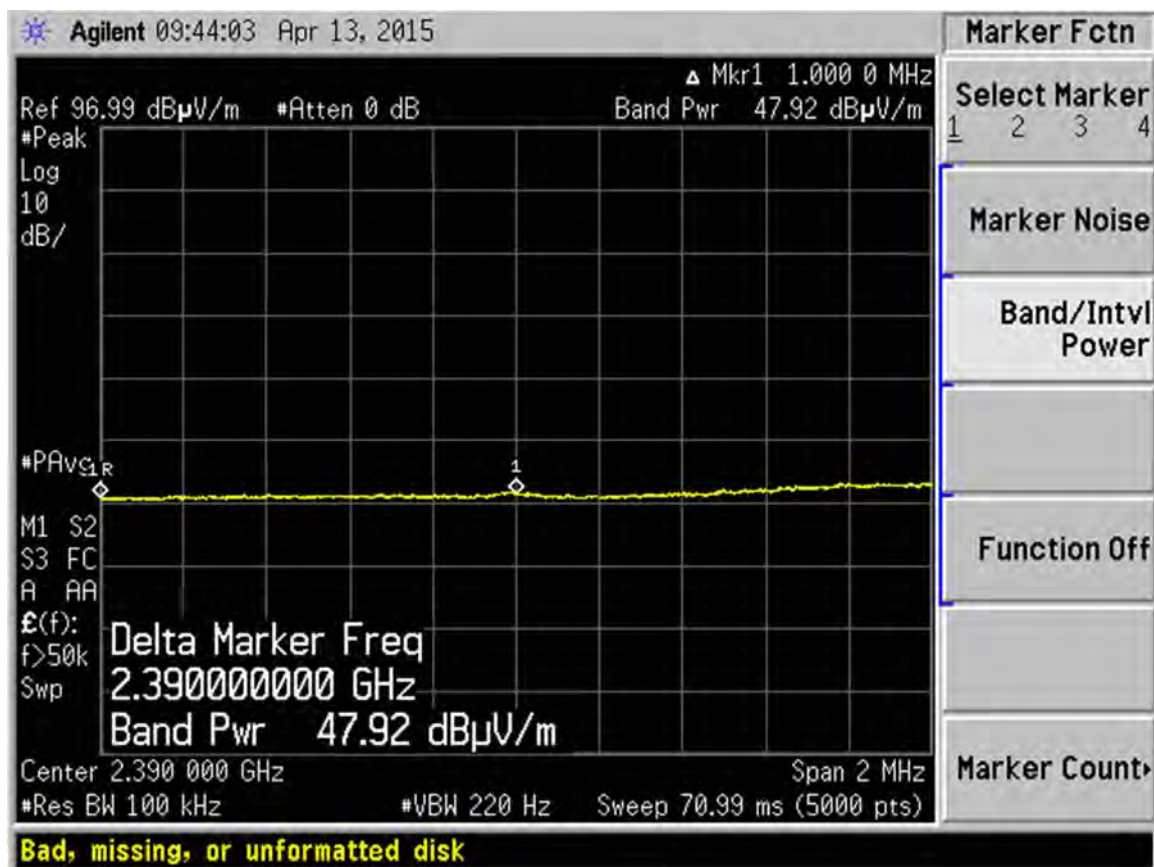
Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 4.62 mS, VBW = 220 Hz

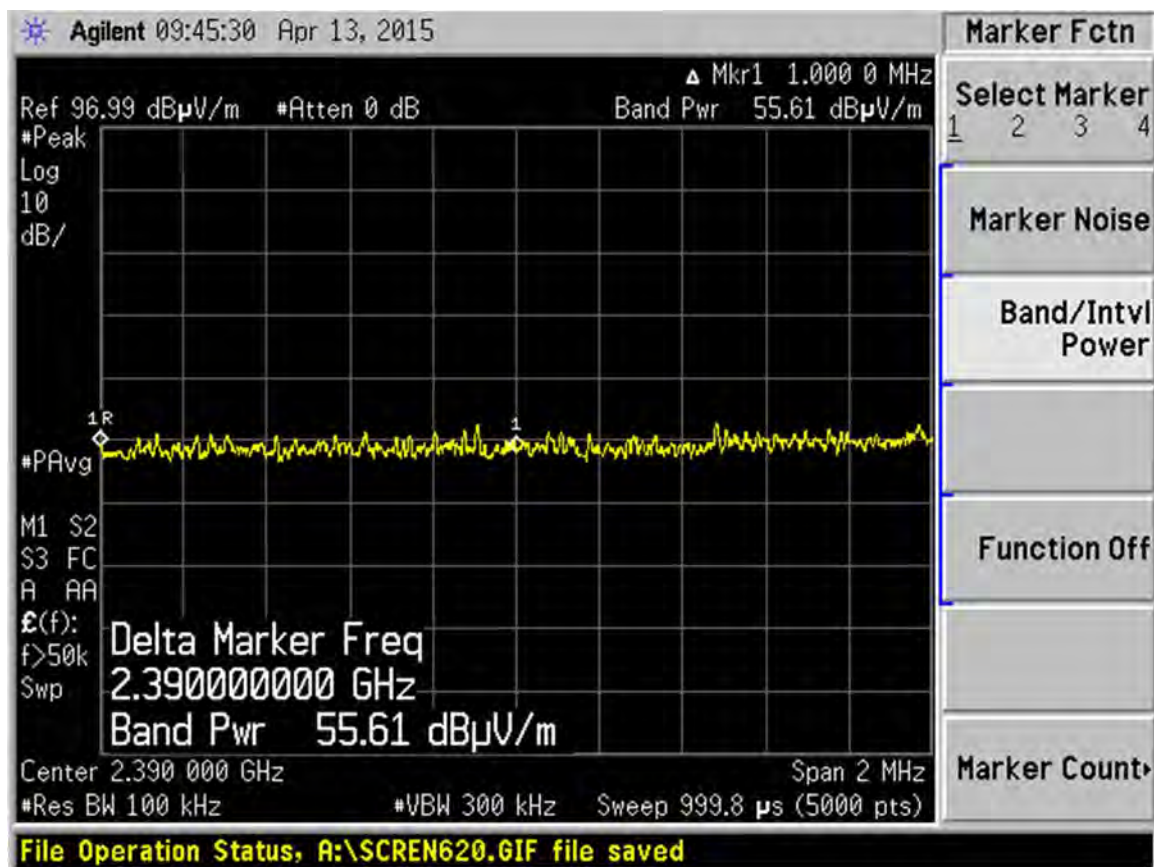


Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



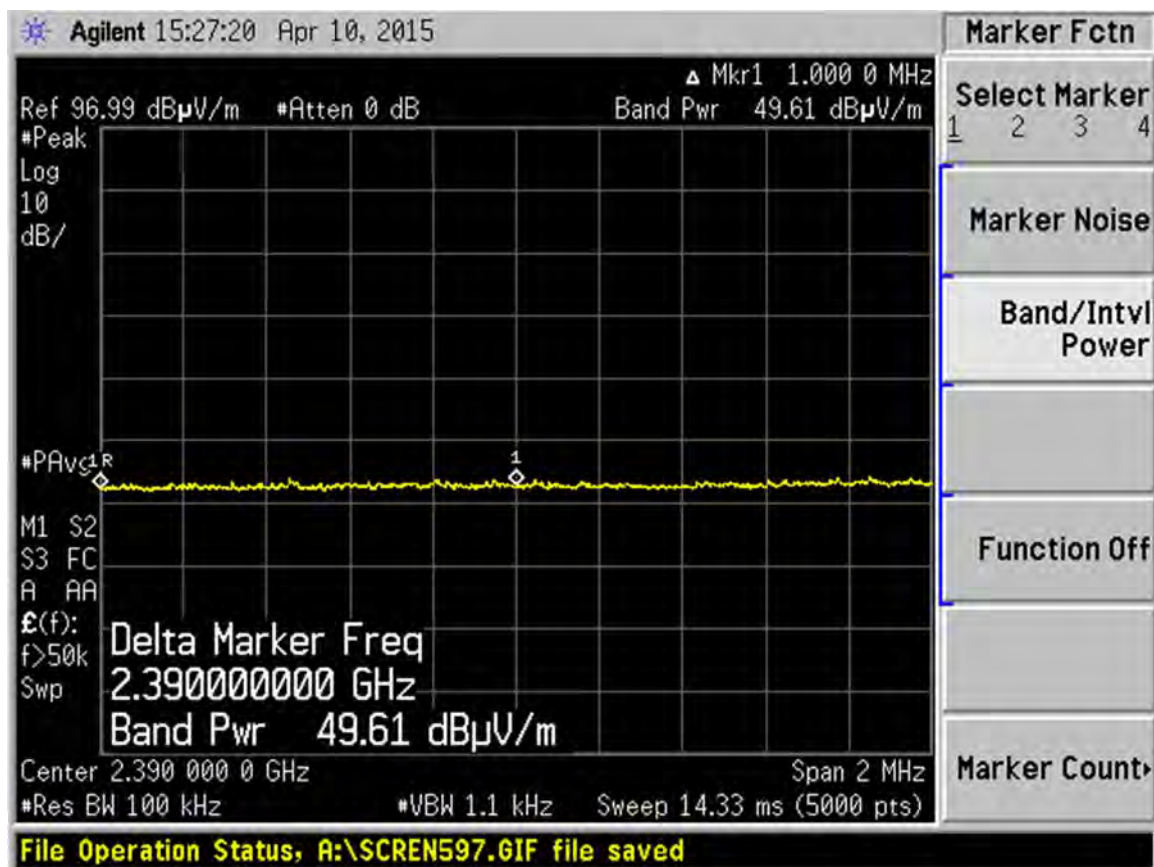
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: 19

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 962 μ S, VBW = 1.1 kHz

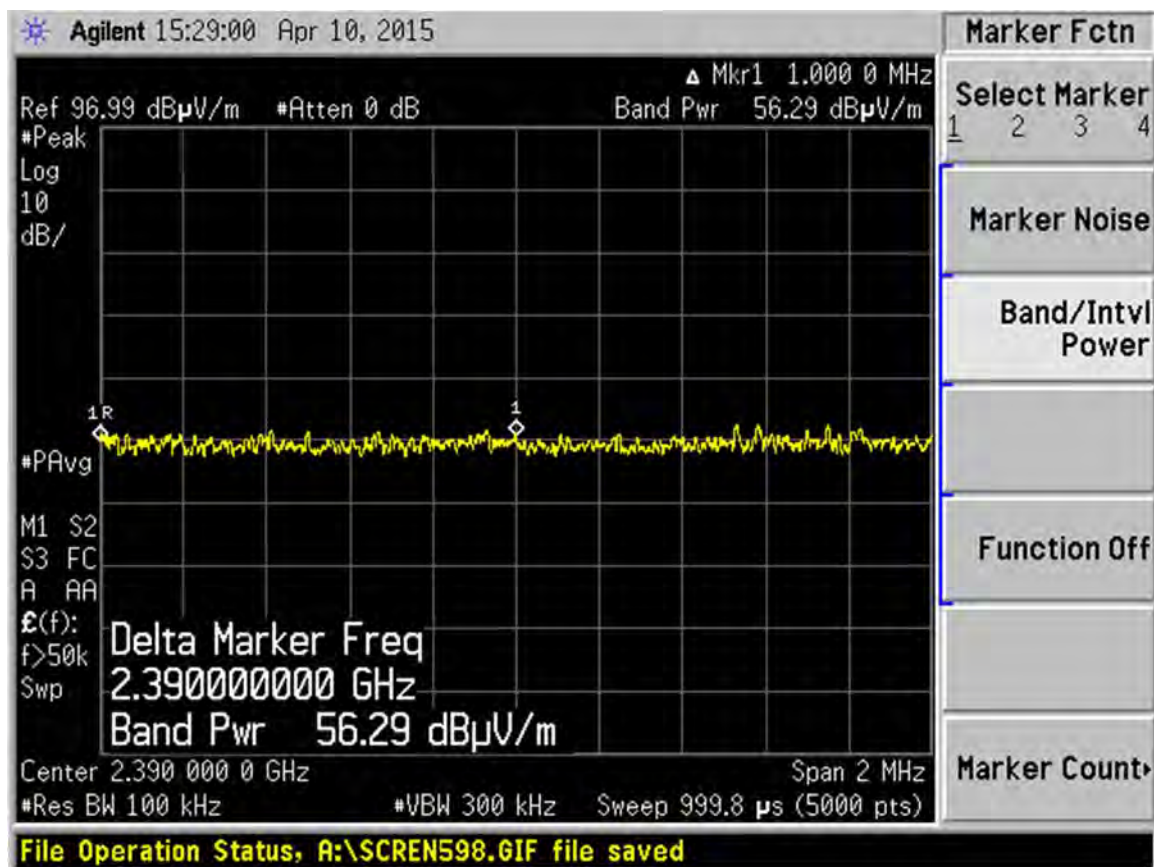


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: 19

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



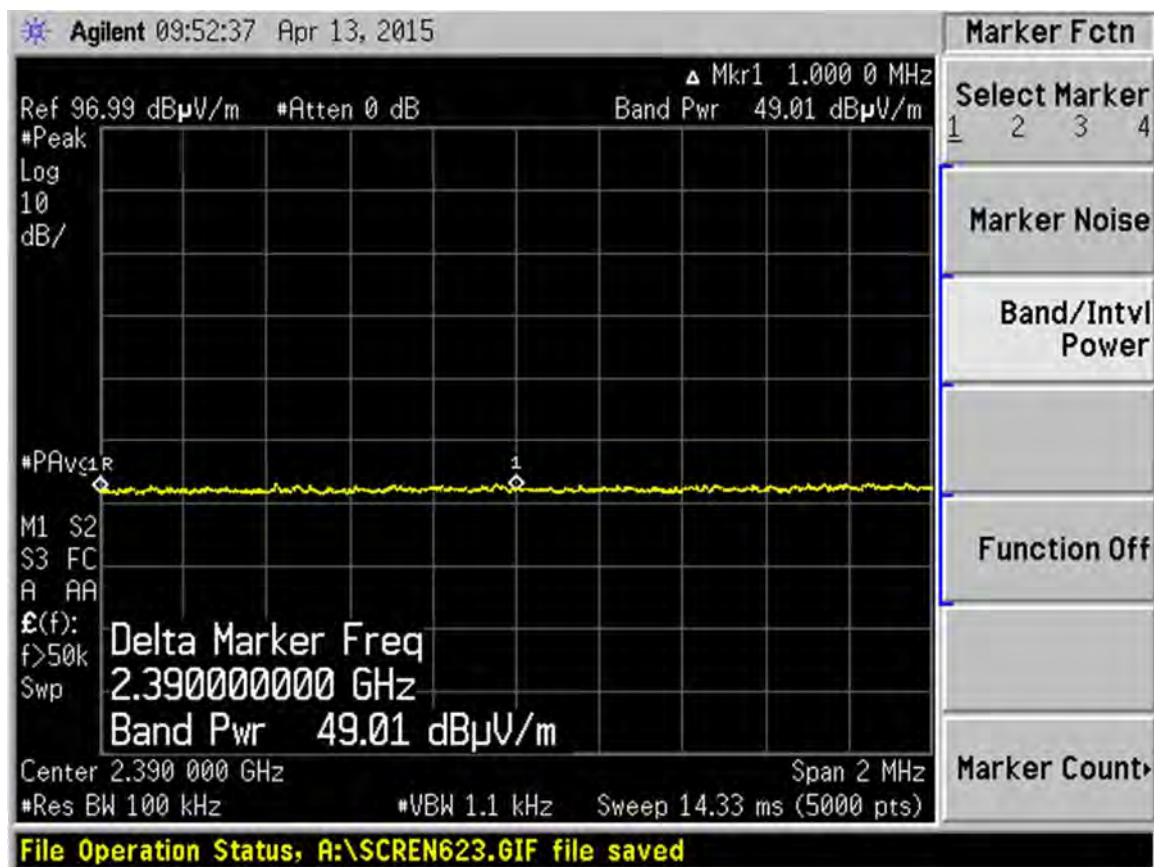
Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: Low, 2412 MHz, **channel 1**
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: **19**

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

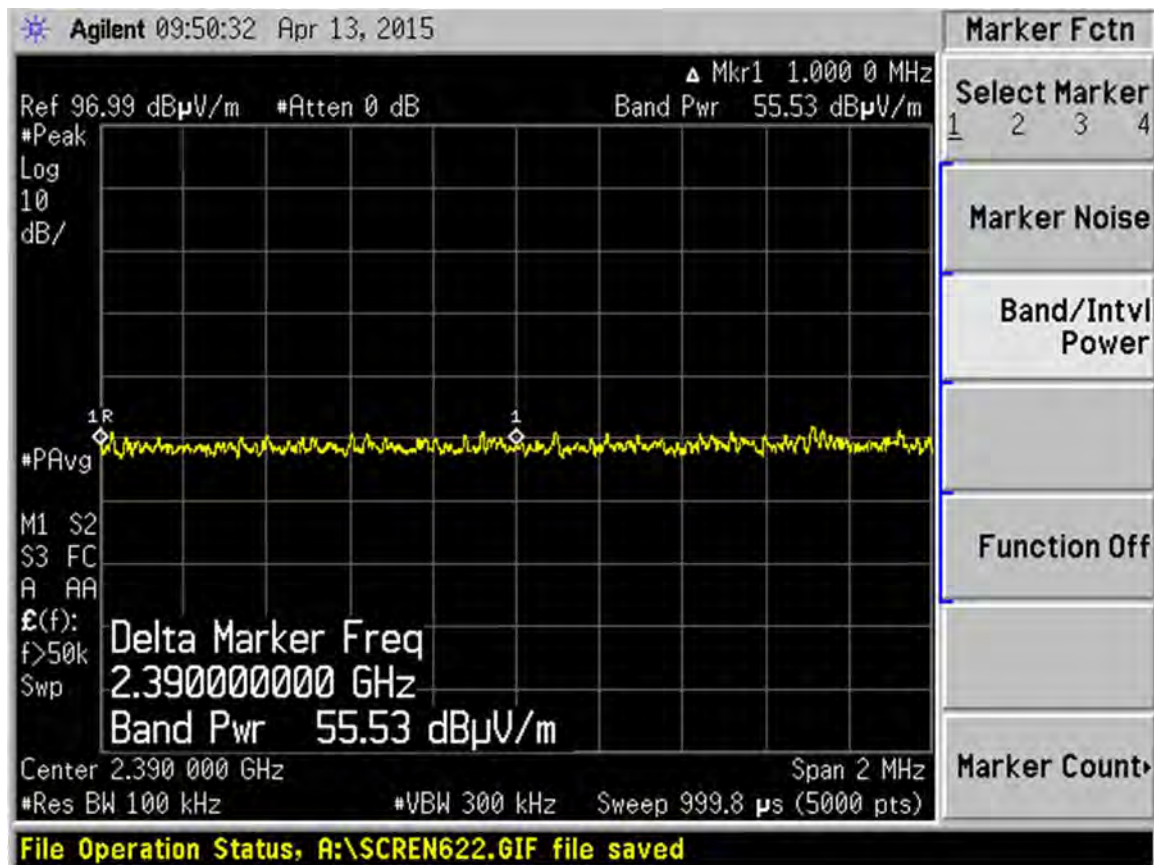
Using procedure 13.3.3, T = 962 μ S, VBW = 1.1 kHz



Antenna: 1, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: 19

VERTICAL:

PEAK: Limit = 74 dBμV/m @ 3 meters



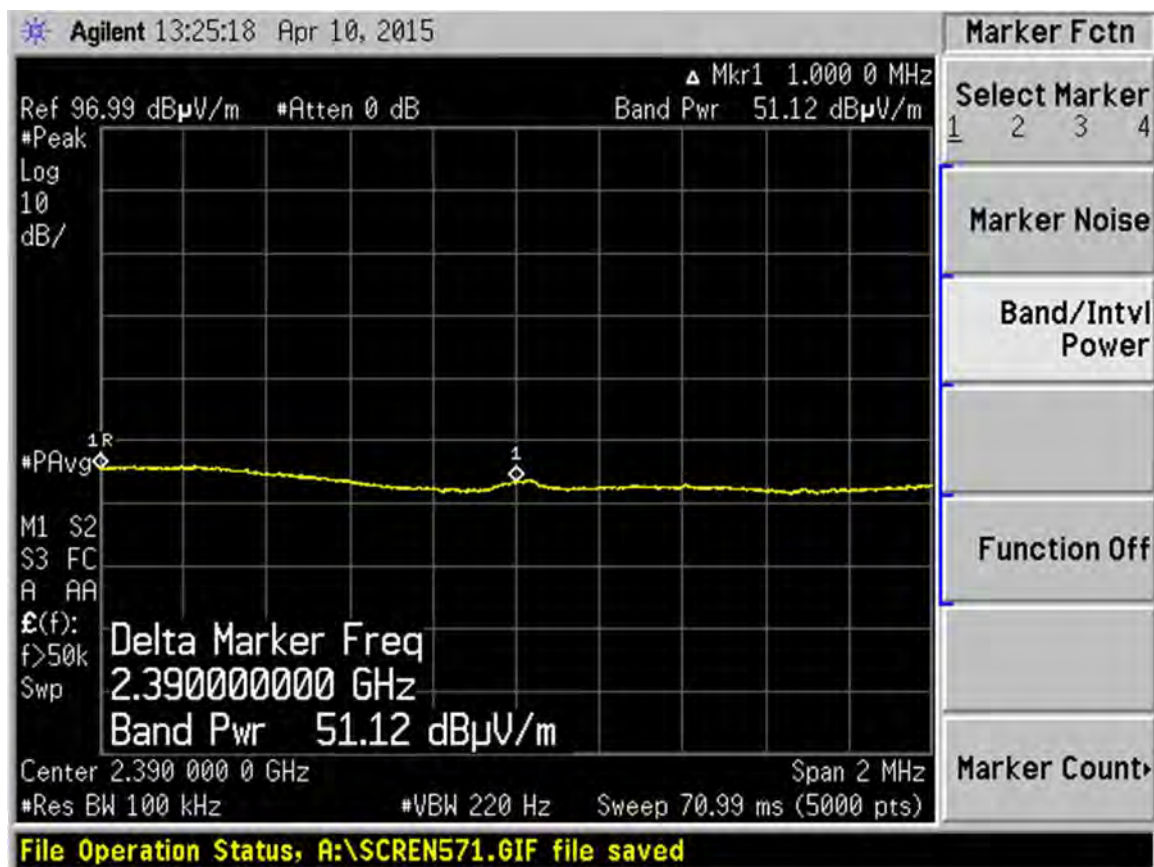
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 4.62 mS, VBW = 220 Hz

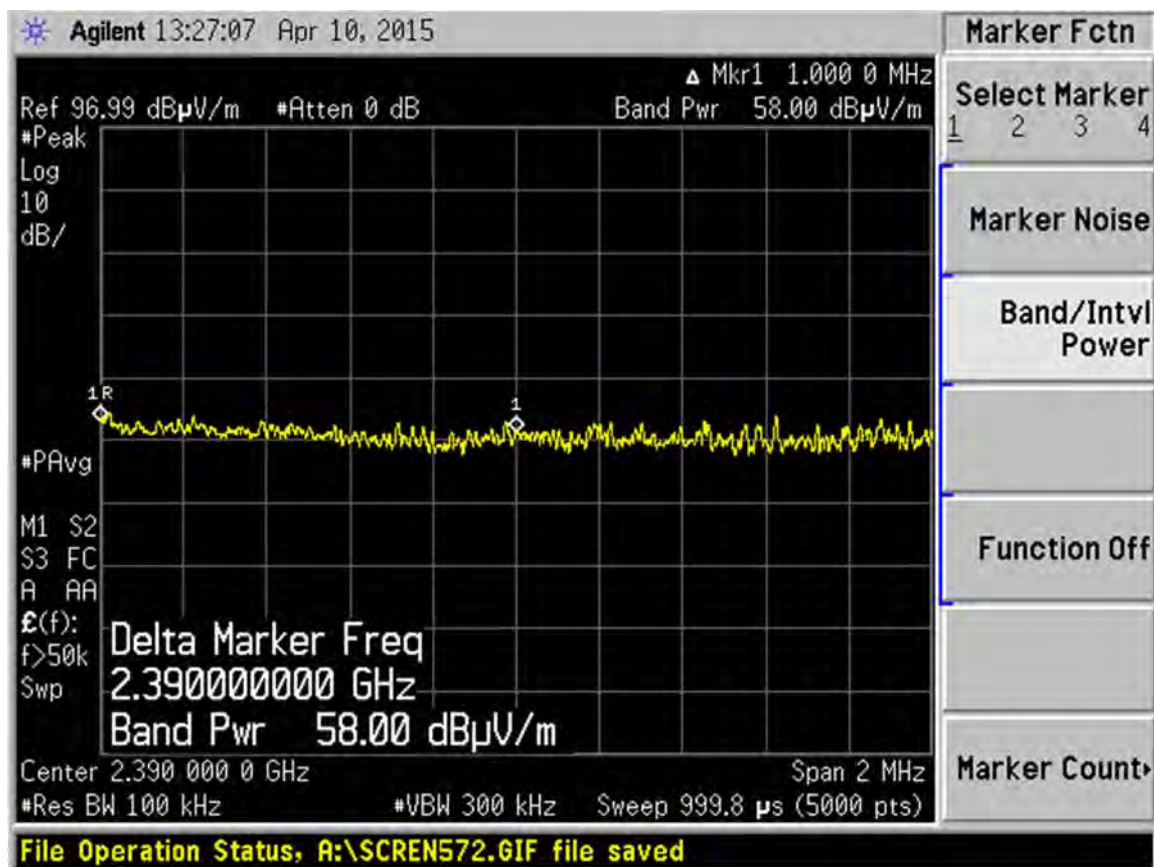


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



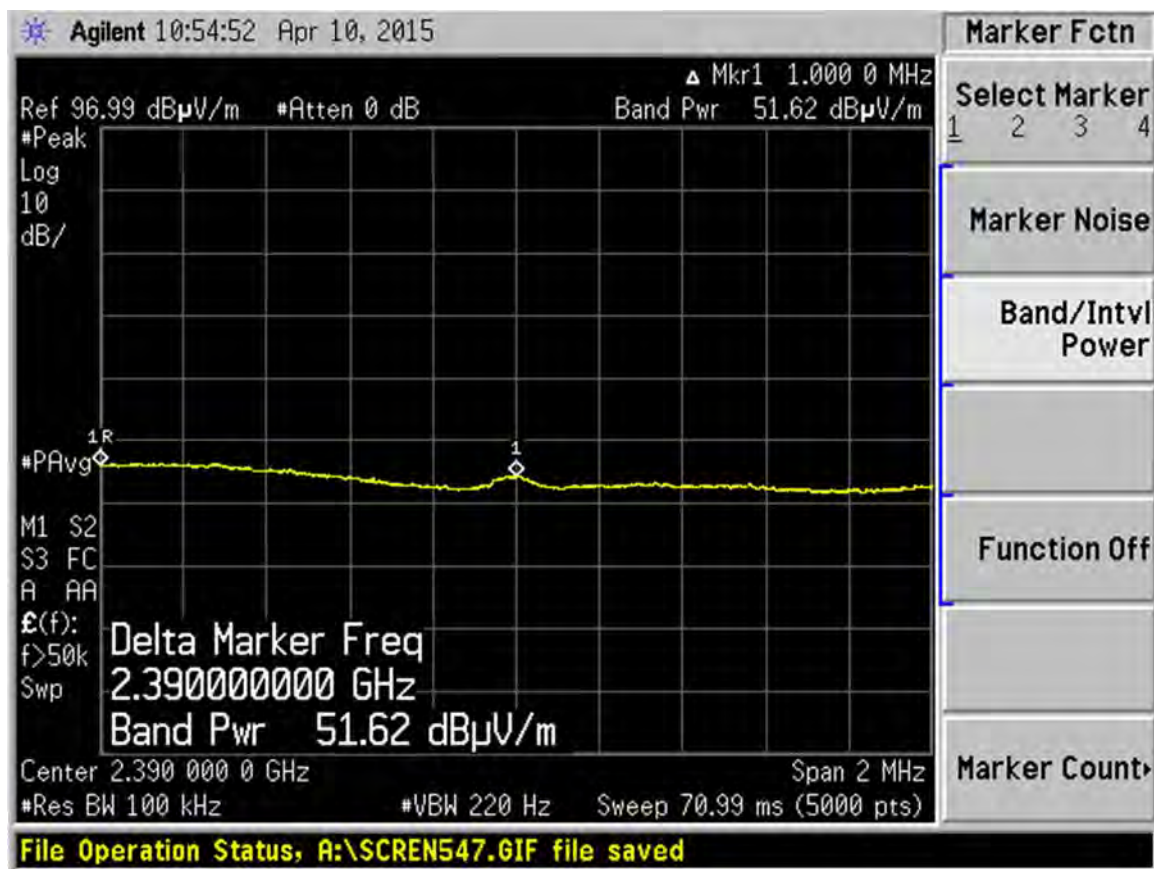
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 4.62 mS, VBW = 220 Hz

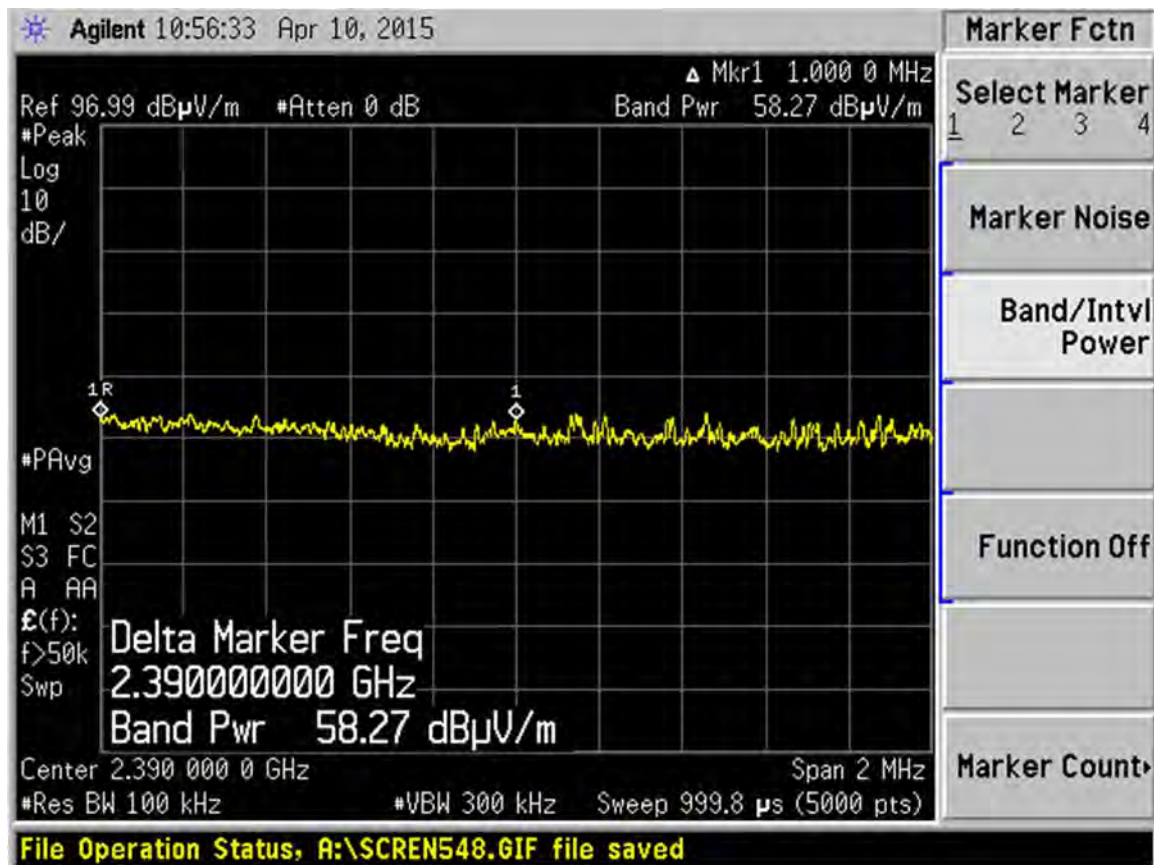


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



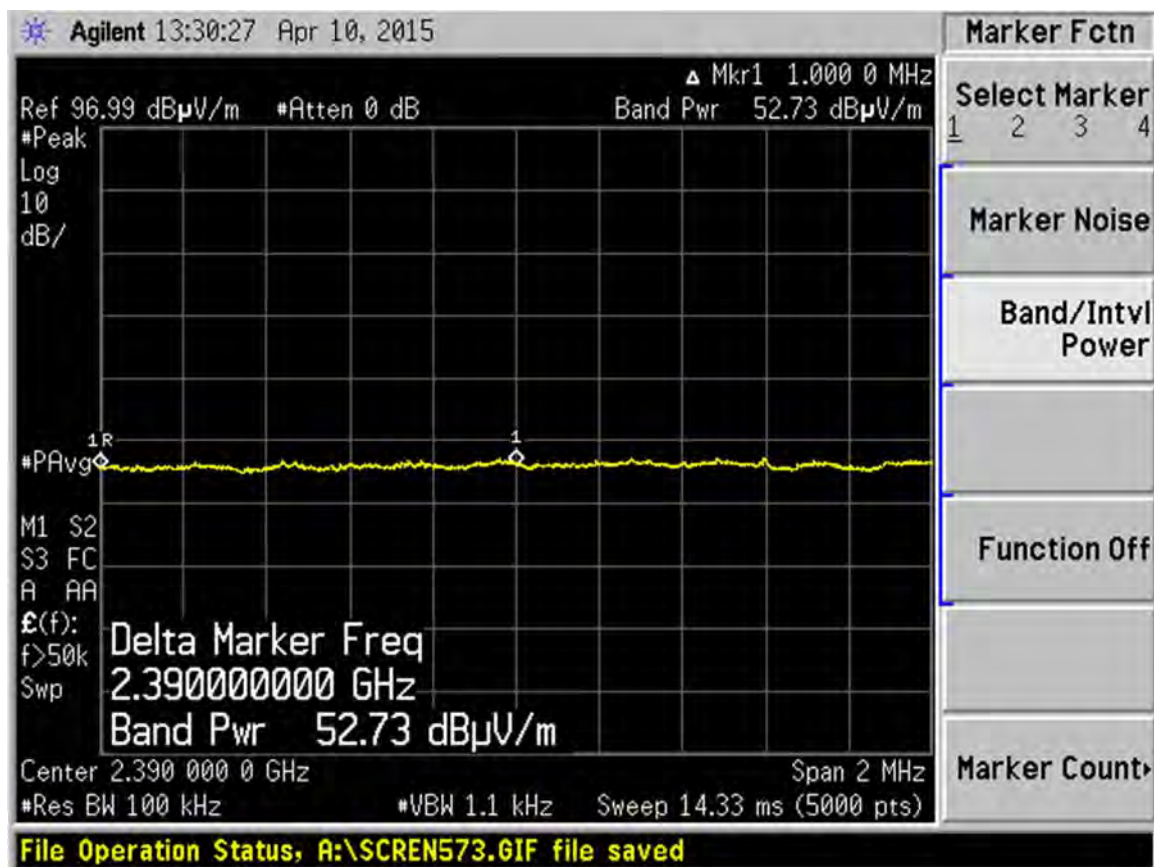
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: 19

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 962 μ S, VBW = 1.1 kHz

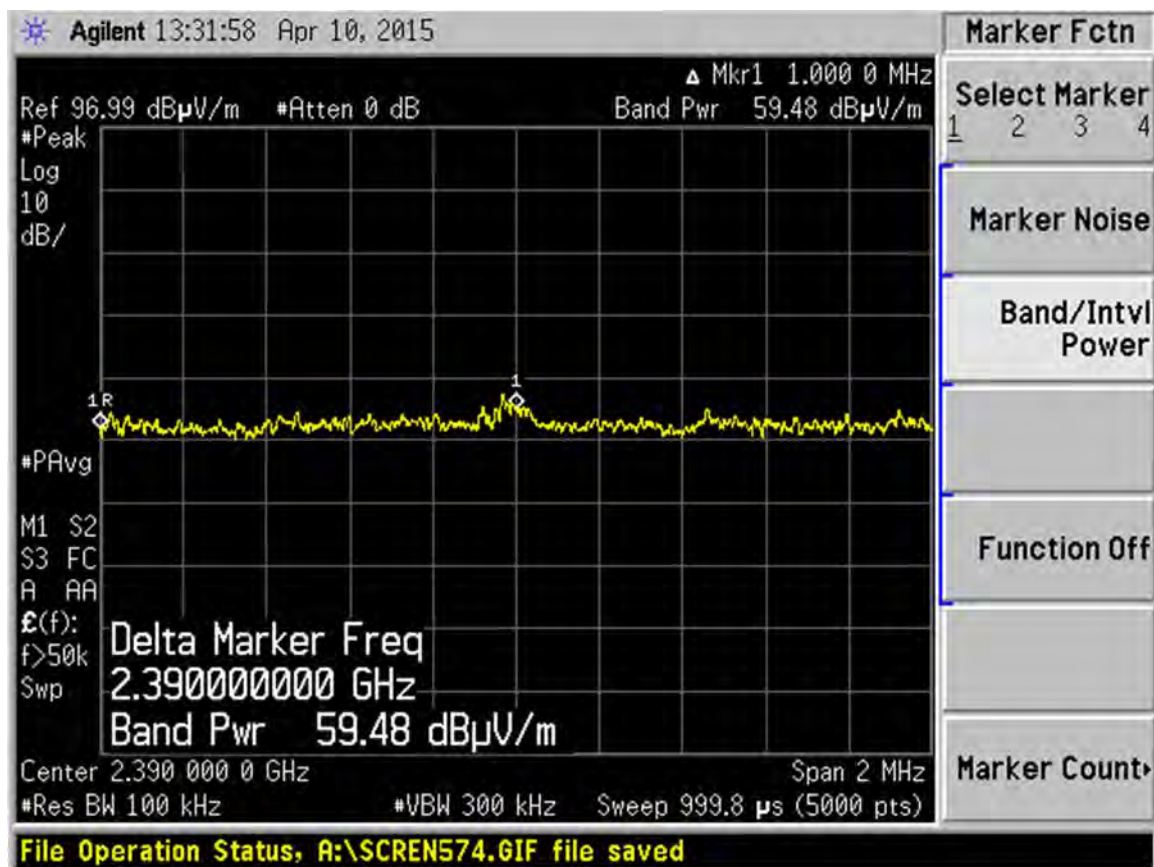


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: 19

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



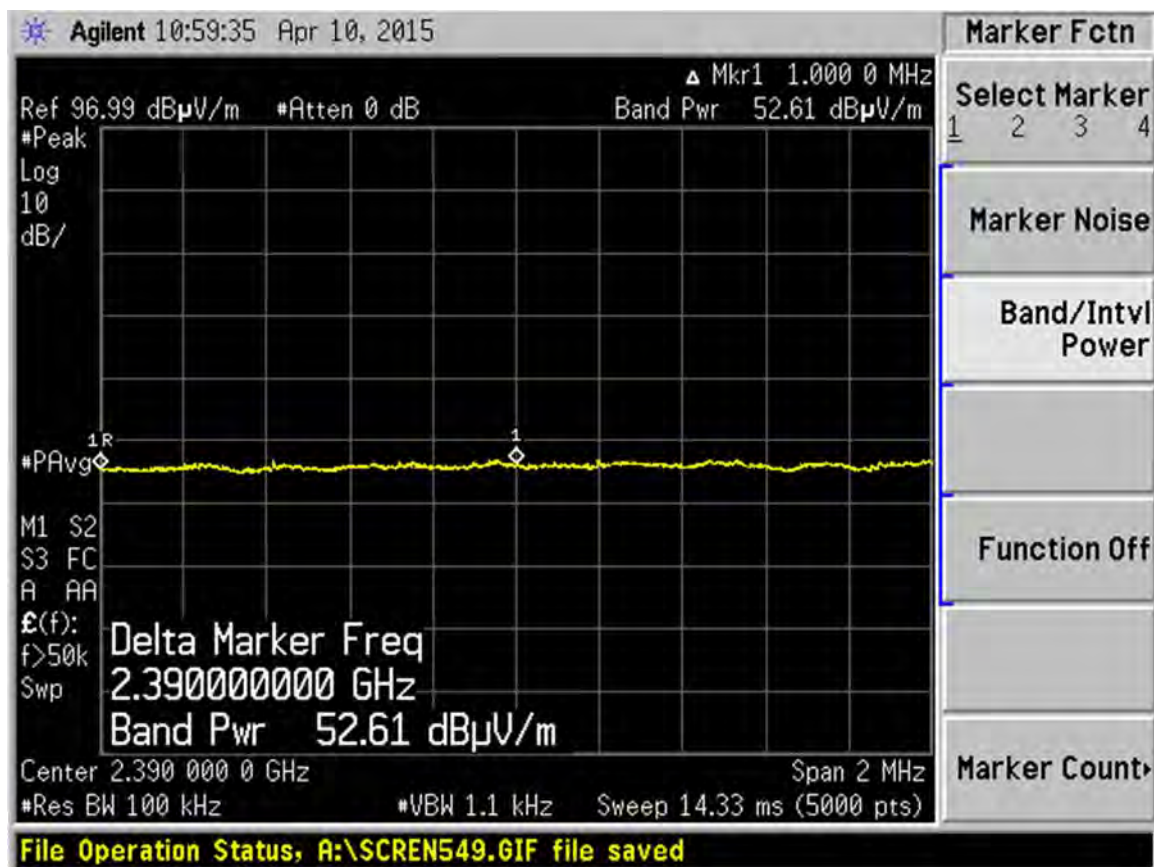
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: Low, 2412 MHz, **channel 1**
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: **19**

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 962 μ S, VBW = 1.1 kHz

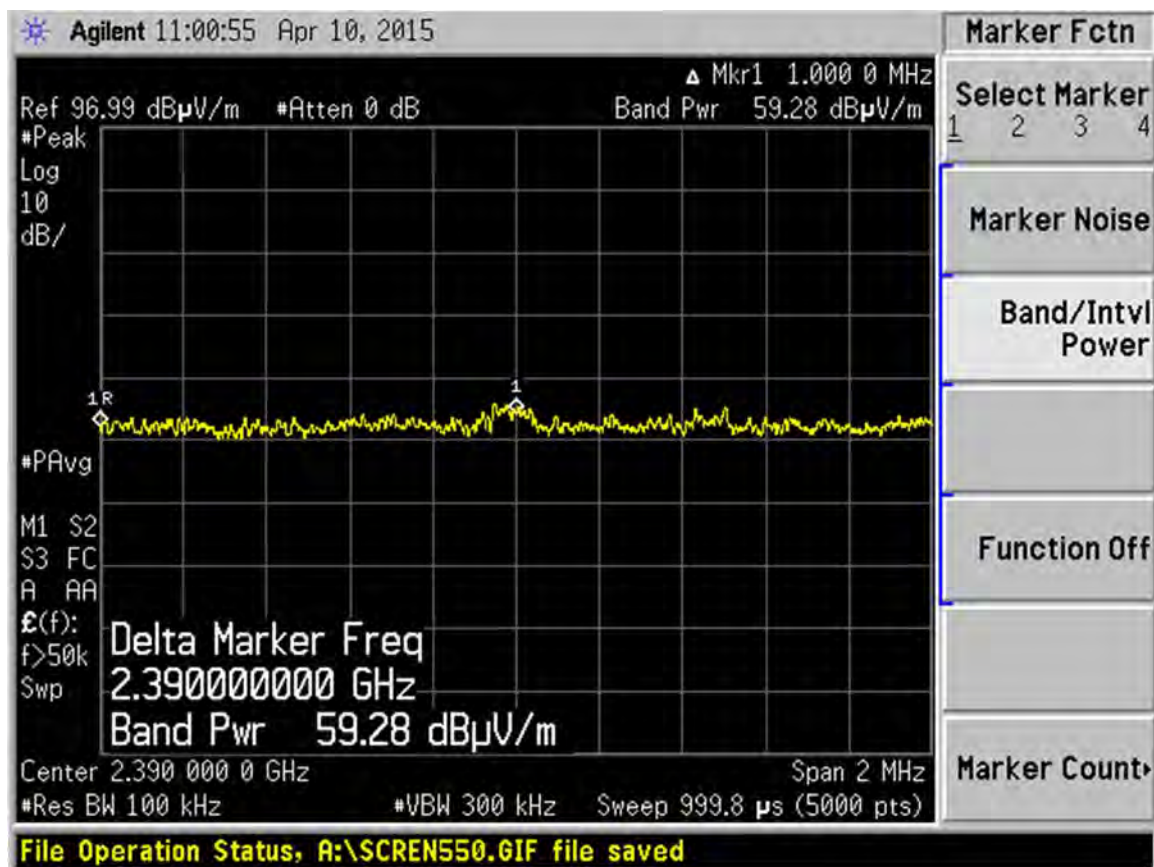


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: Low, 2412 MHz, **channel 1**
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: **19**

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



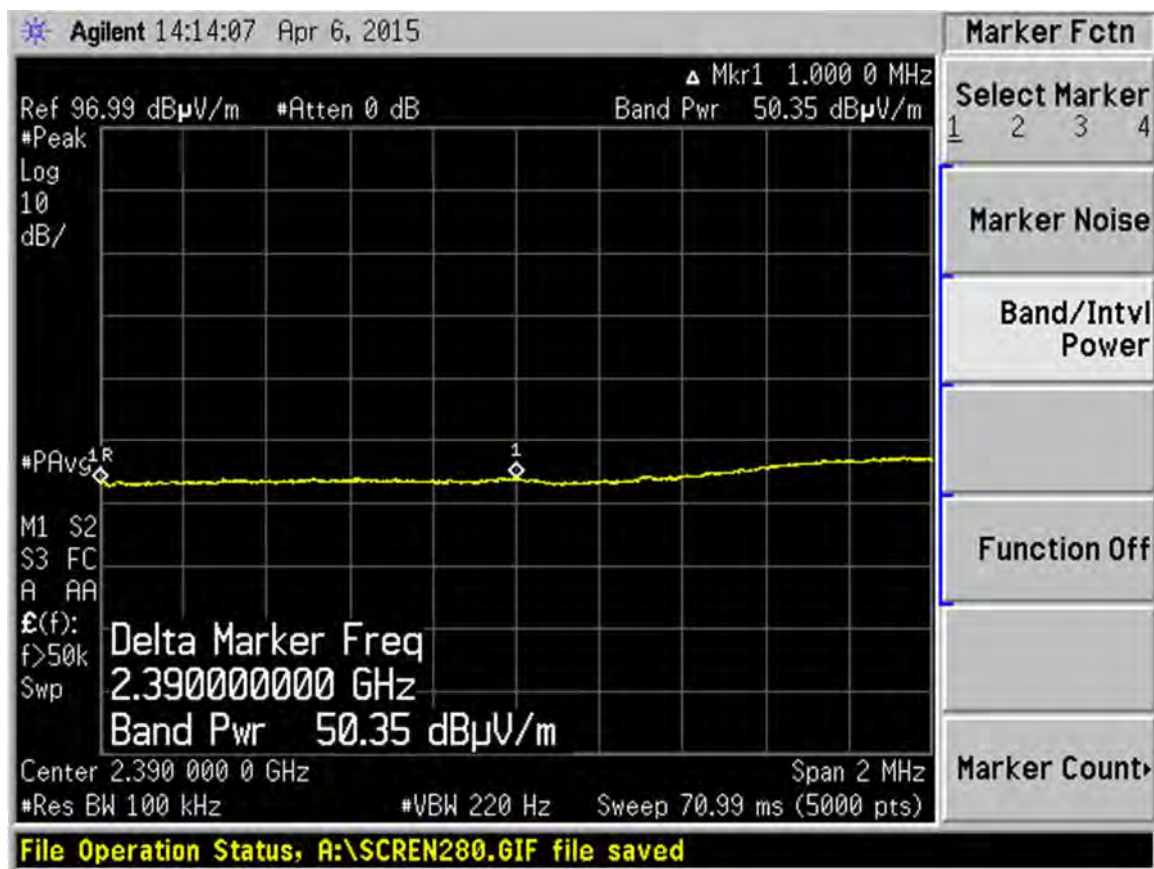
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 4.62 mS, VBW = 220 Hz

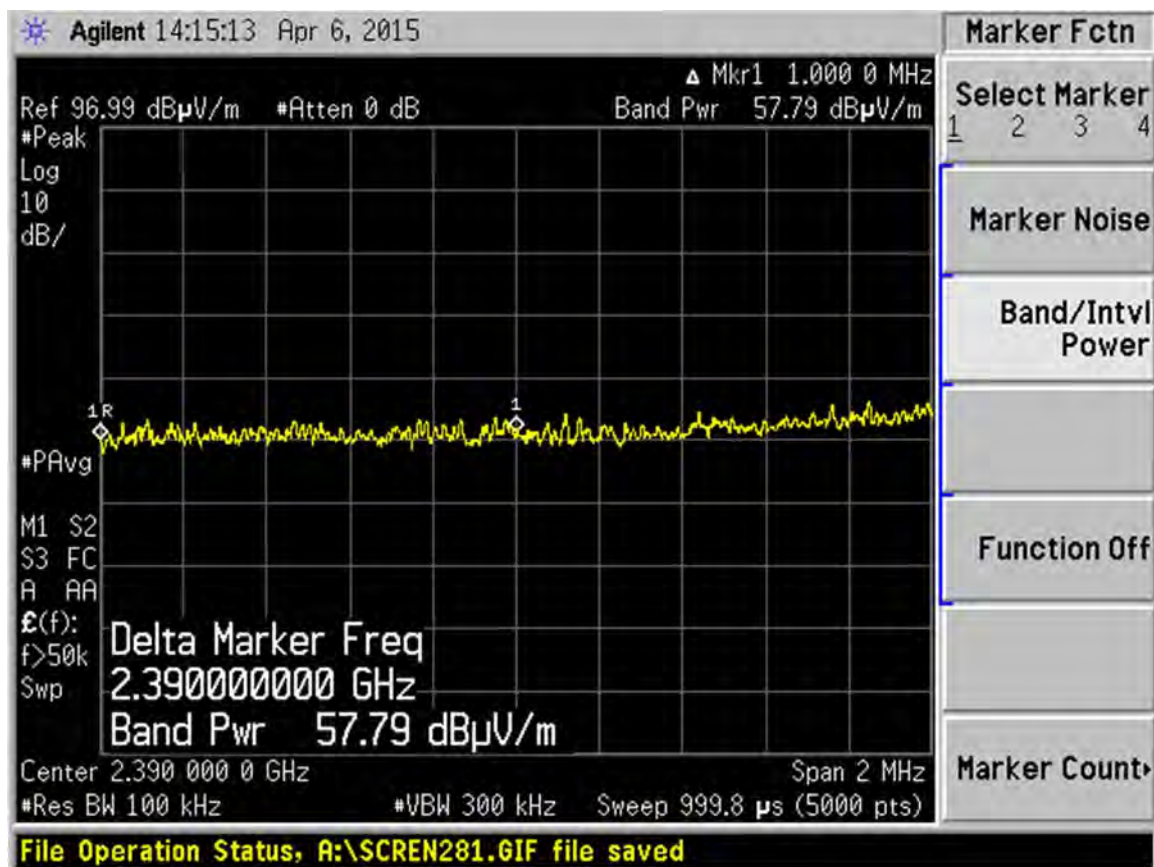


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



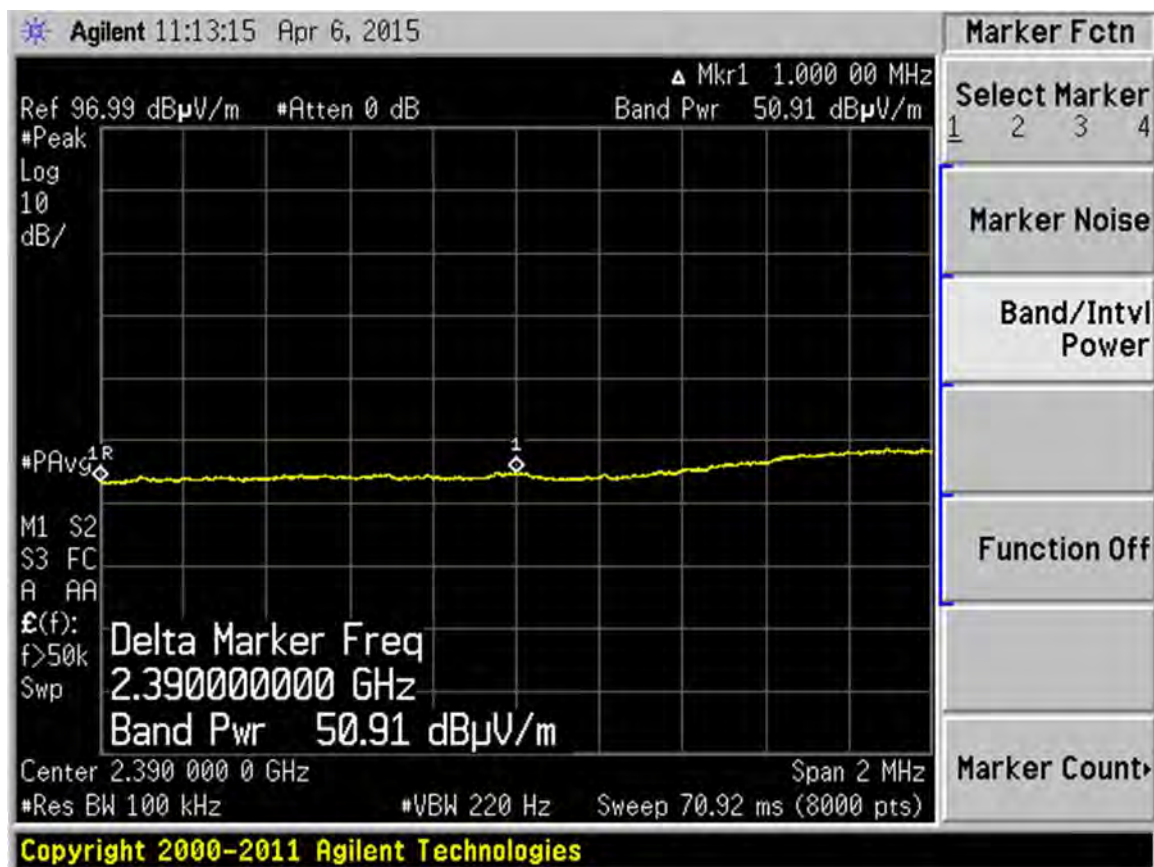
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: Low, 2412 MHz, **channel 1**
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: **19**

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 4.62 mS, VBW = 220 Hz

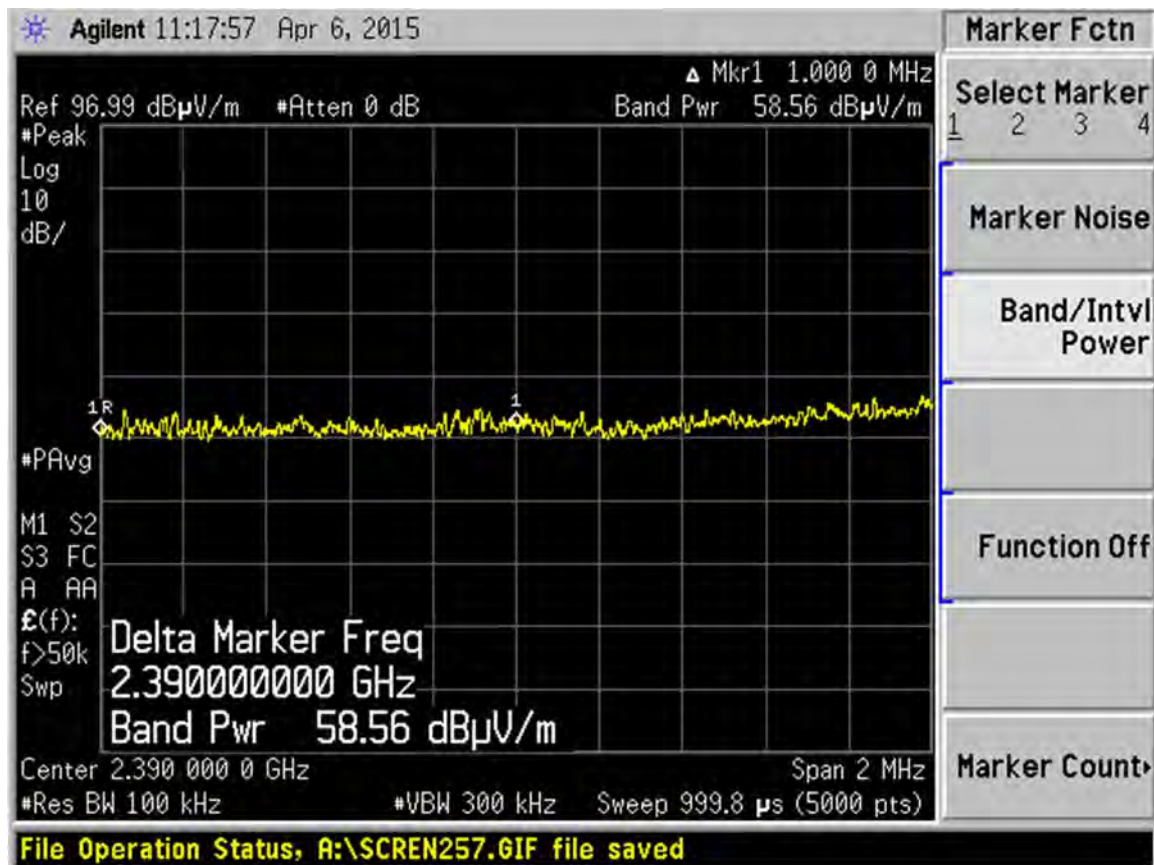


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



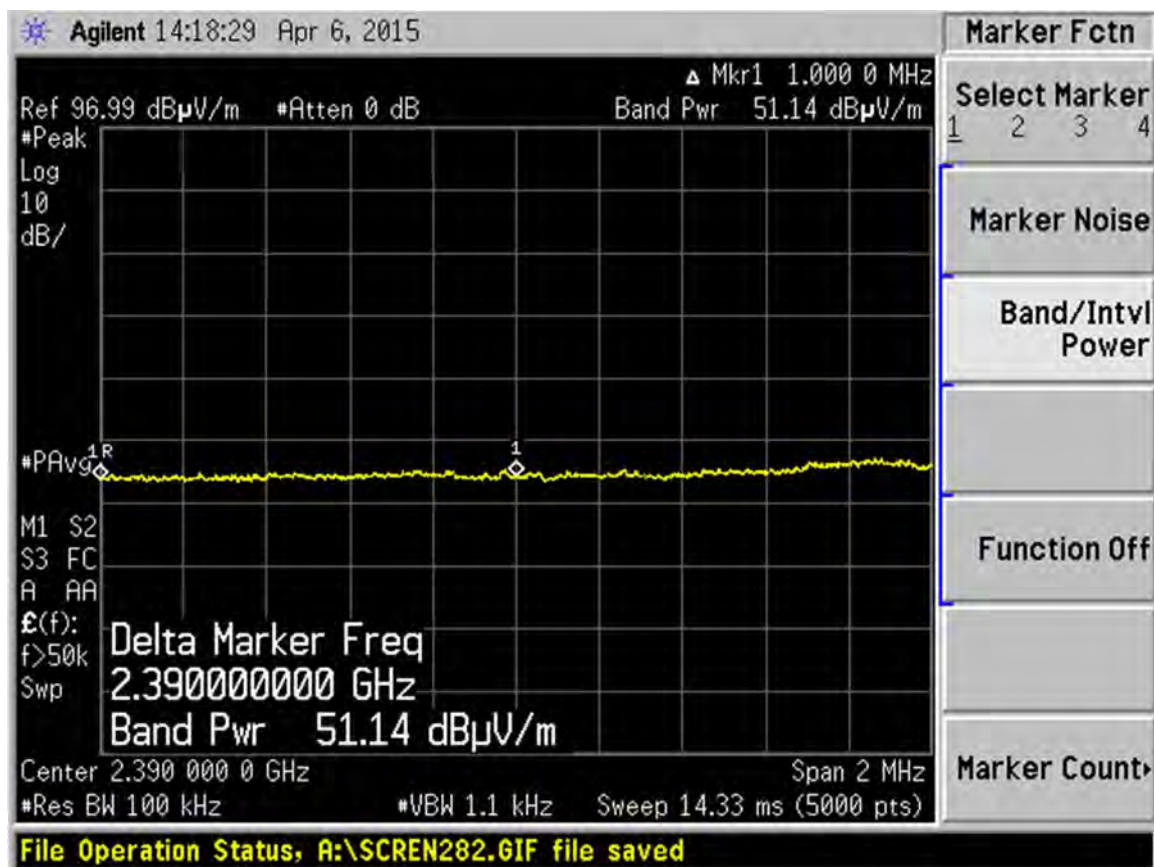
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: 19

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 962 μ S, VBW = 1.1 kHz

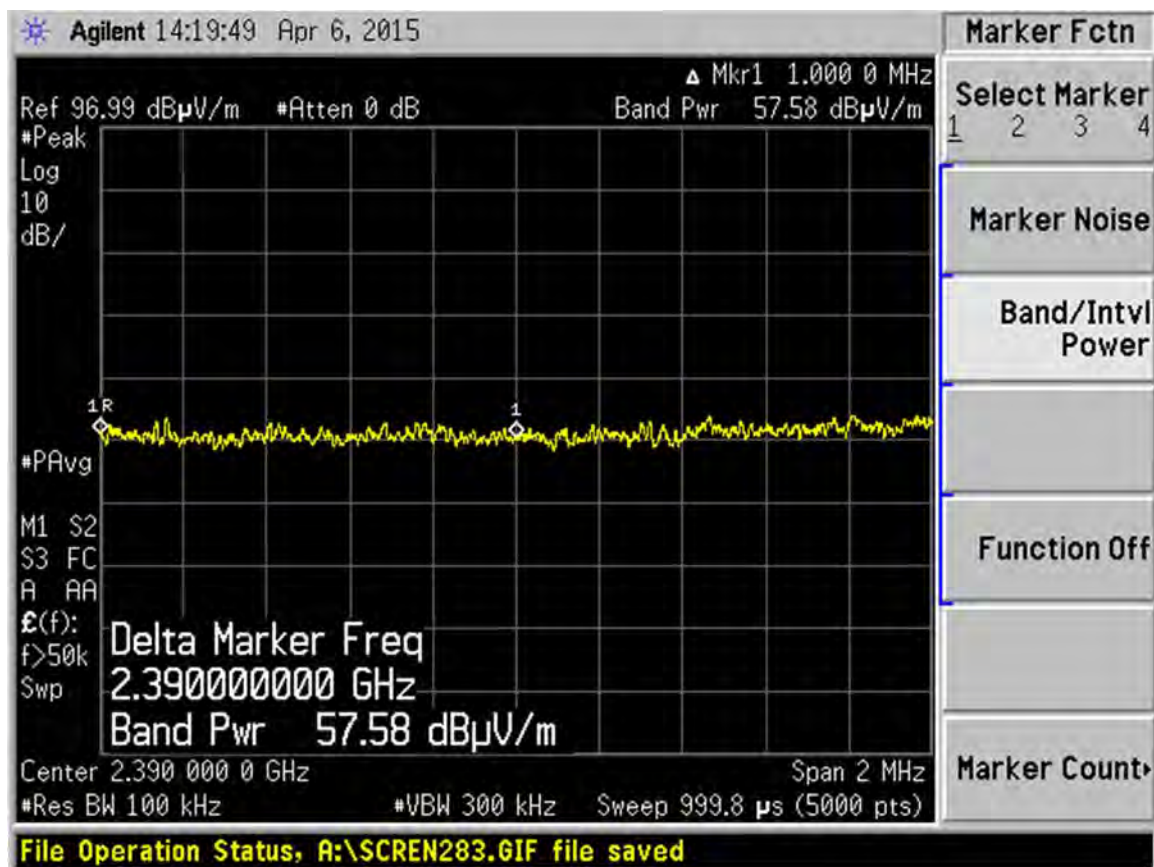


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: 19

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



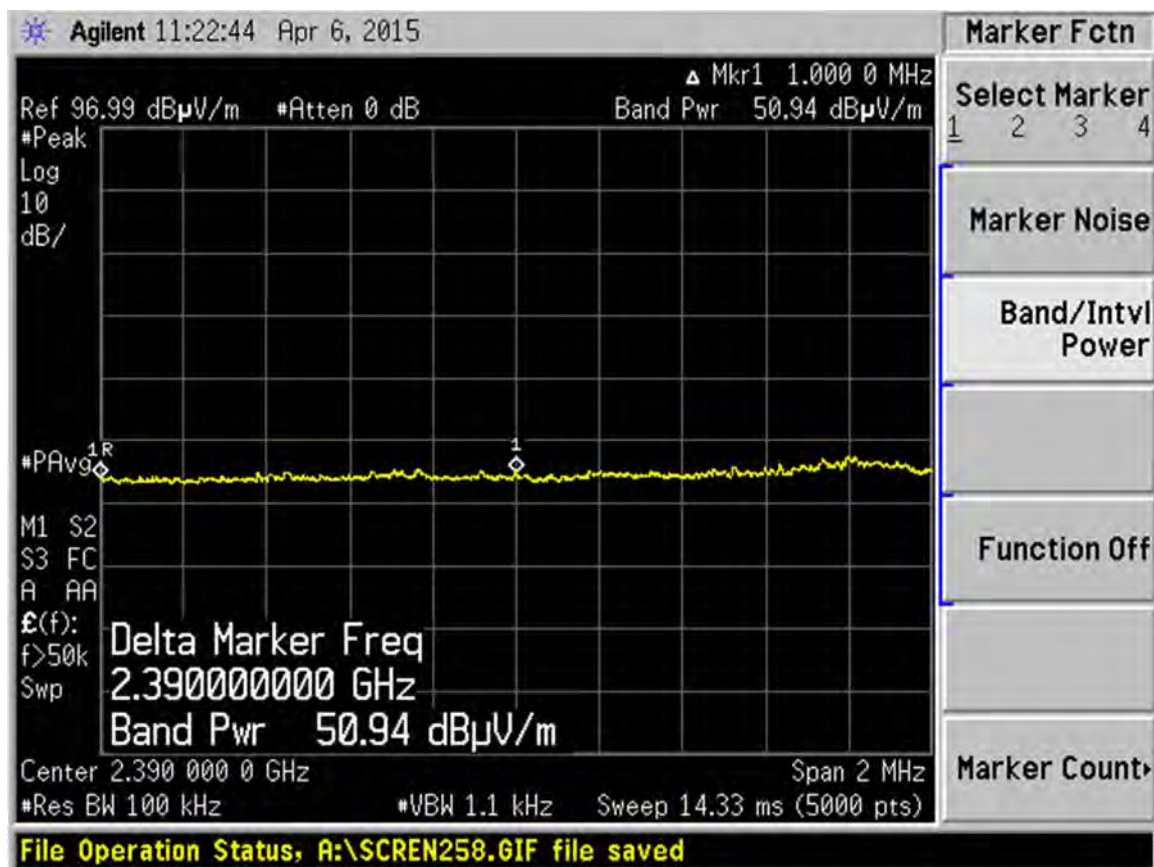
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: Low, 2412 MHz, **channel 1**
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: **19**

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 962 μ S, VBW = 1.1 kHz

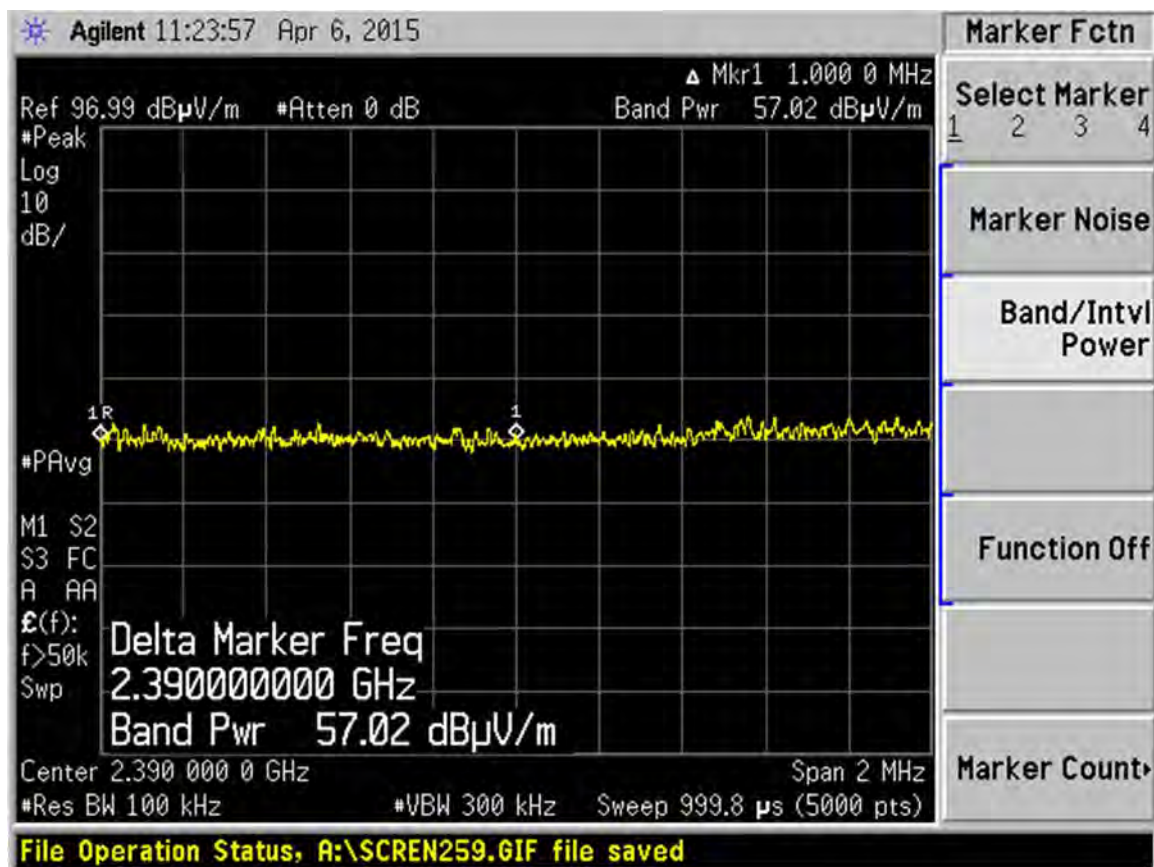


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: 19

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



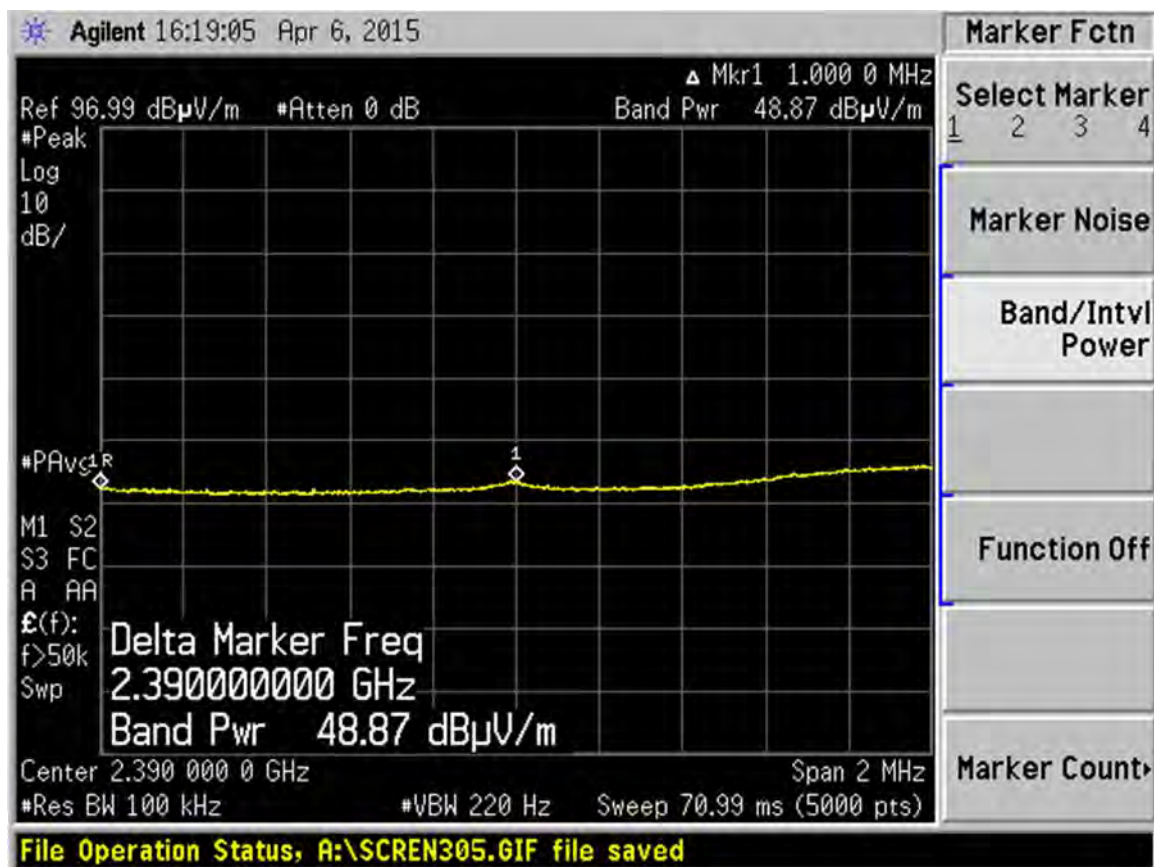
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 4.62 mS, VBW = 220 Hz

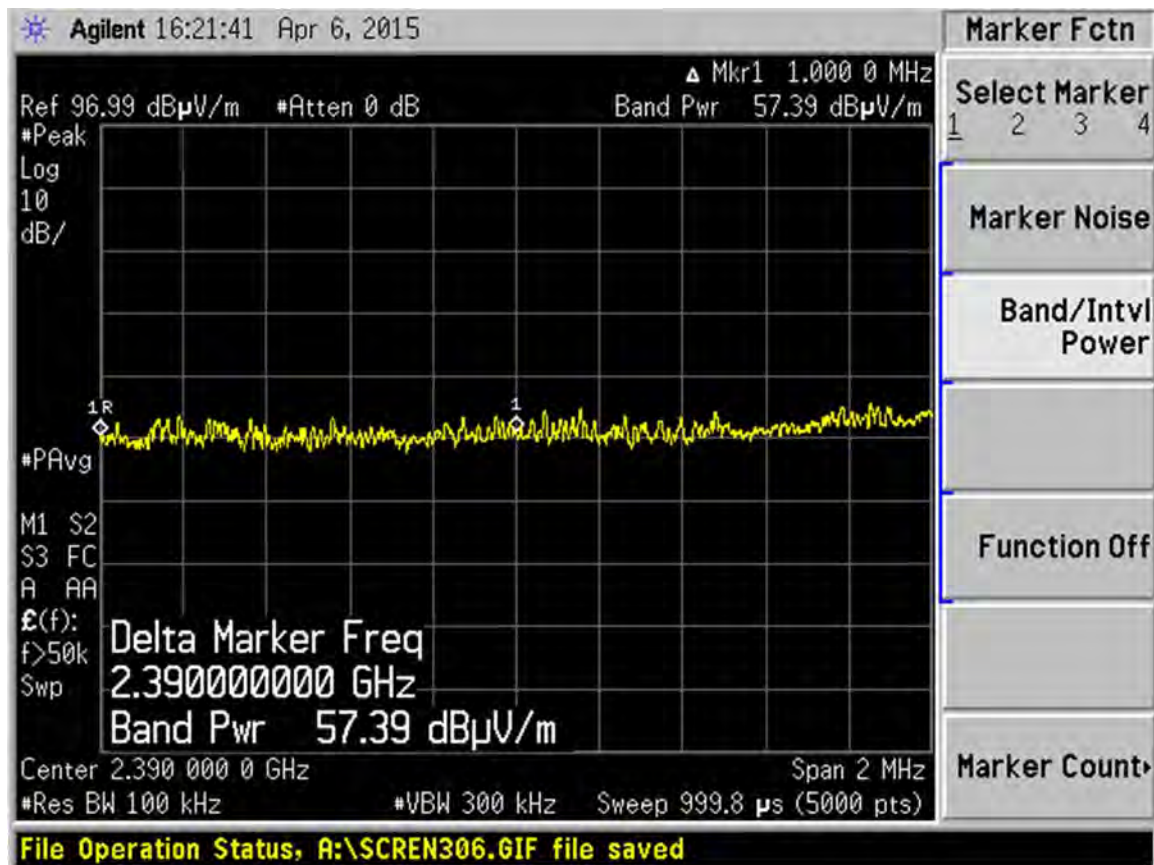


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



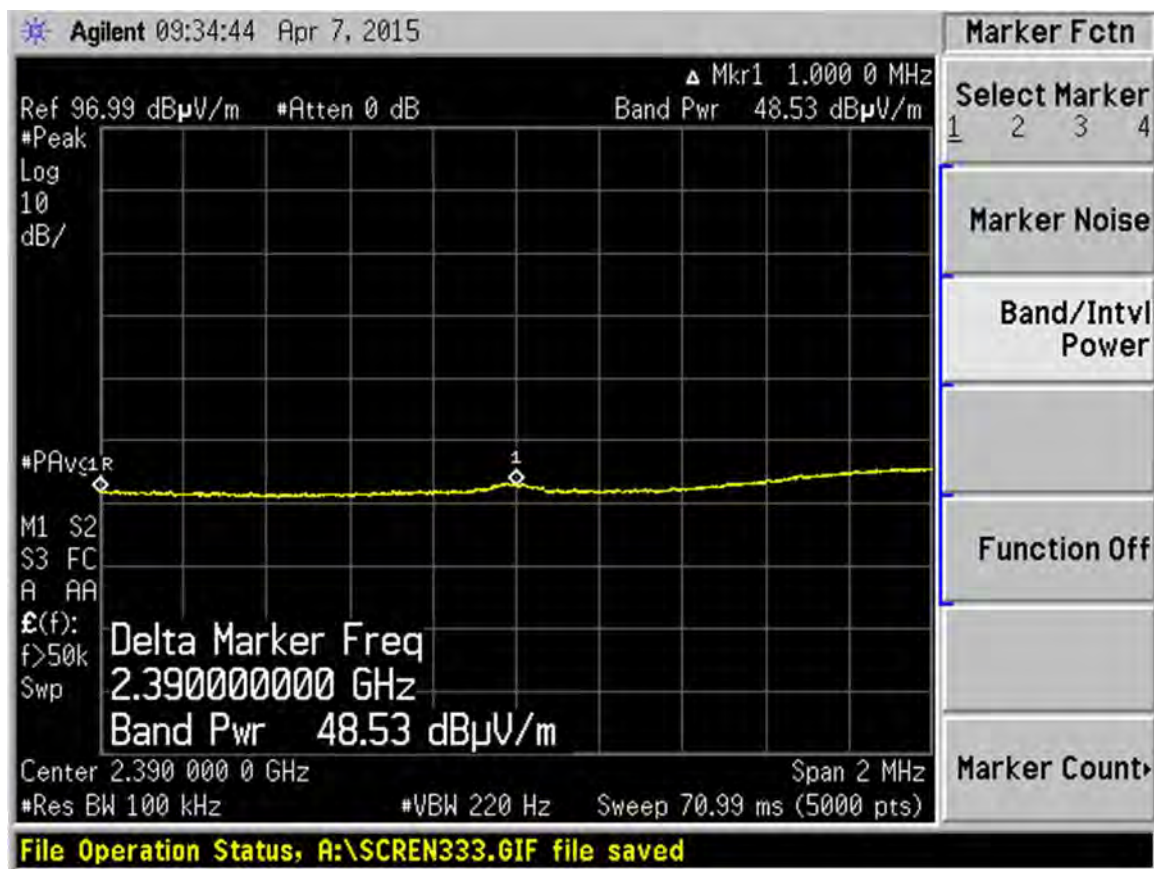
Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 4.62 mS, VBW = 220 Hz

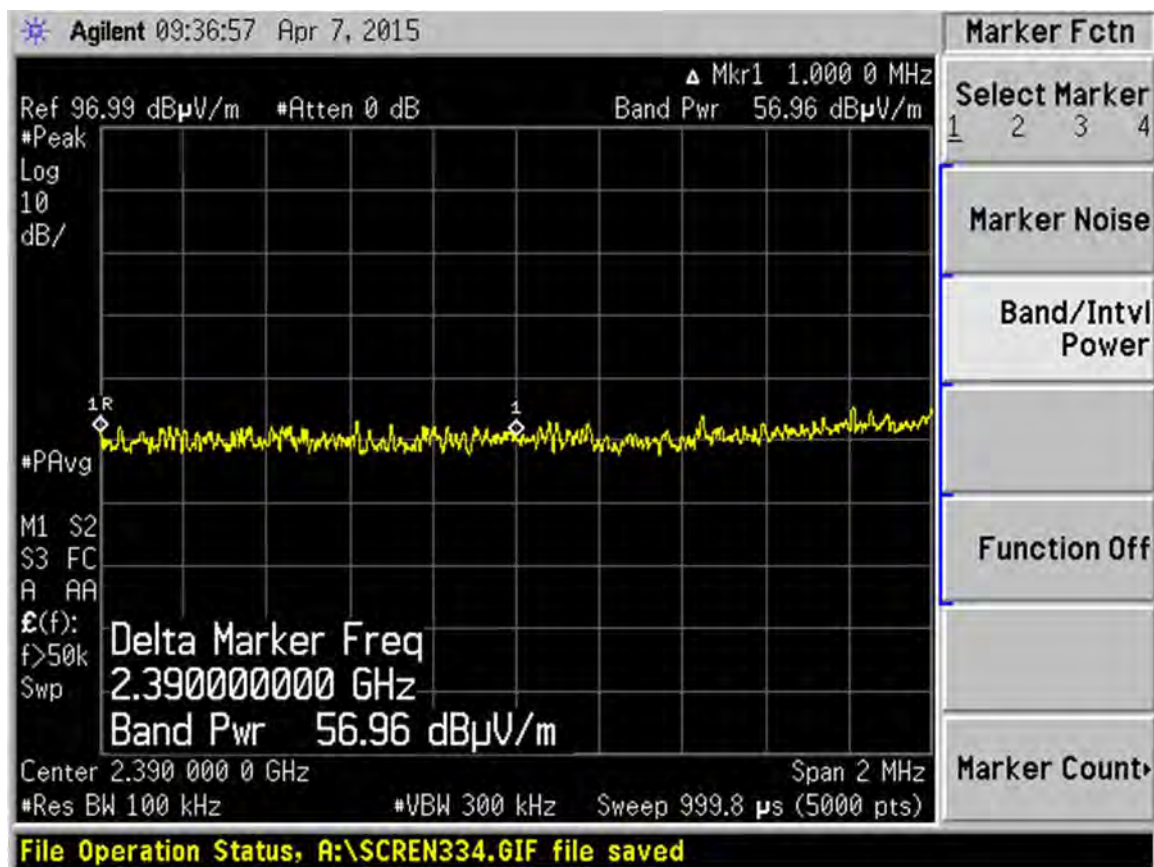


Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: Low, 2412 MHz, channel 1
Modulation: 802.11-b, DSSS, 1 Mbps
Power setting: 19

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



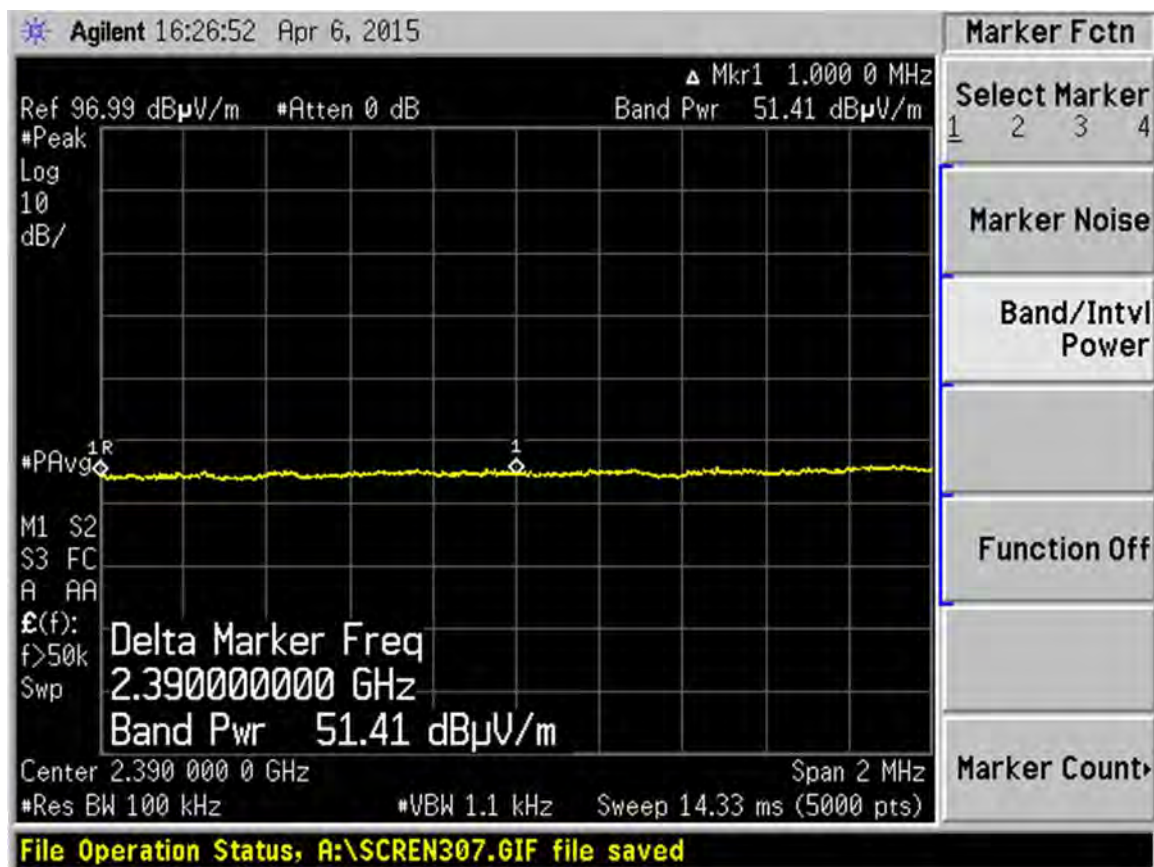
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: Low, 2412 MHz, **channel 1**
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: **19**

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 962 μ S, VBW = 1.1 kHz

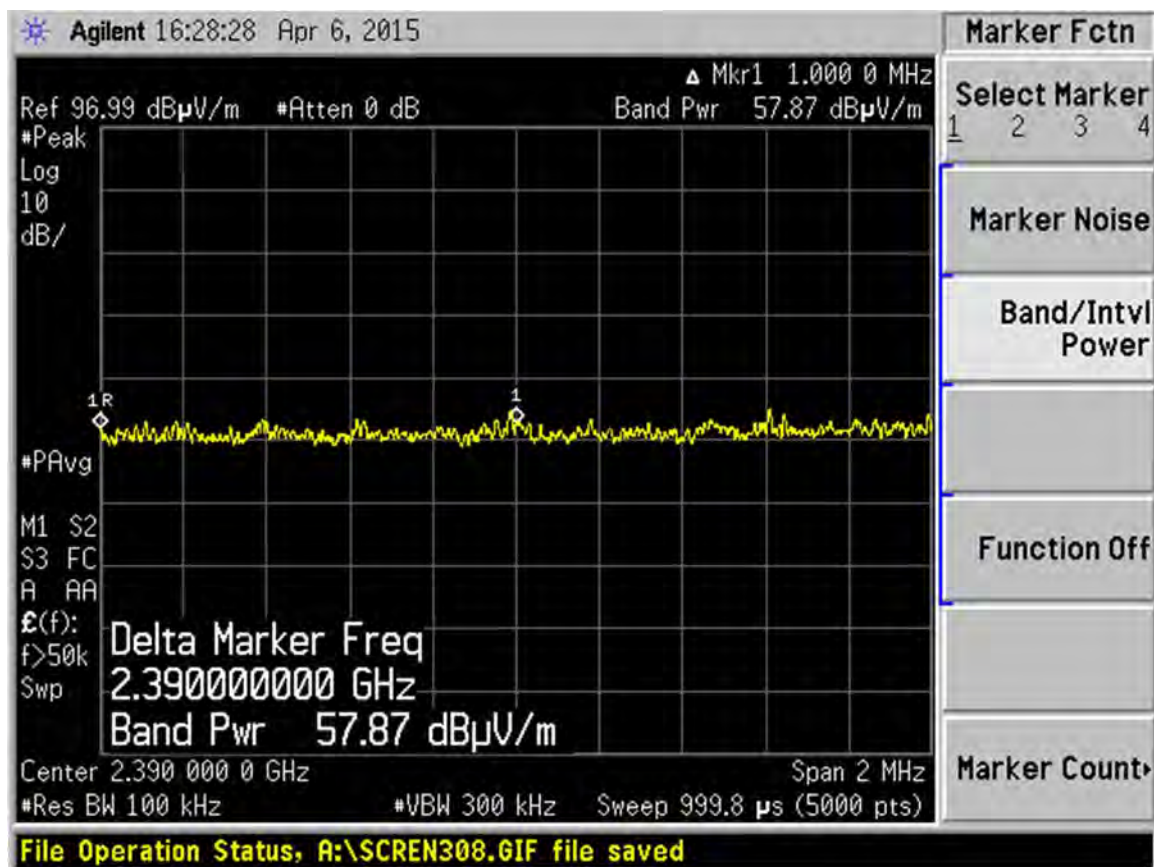


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: Low, 2412 MHz, **channel 1**
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: **19**

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



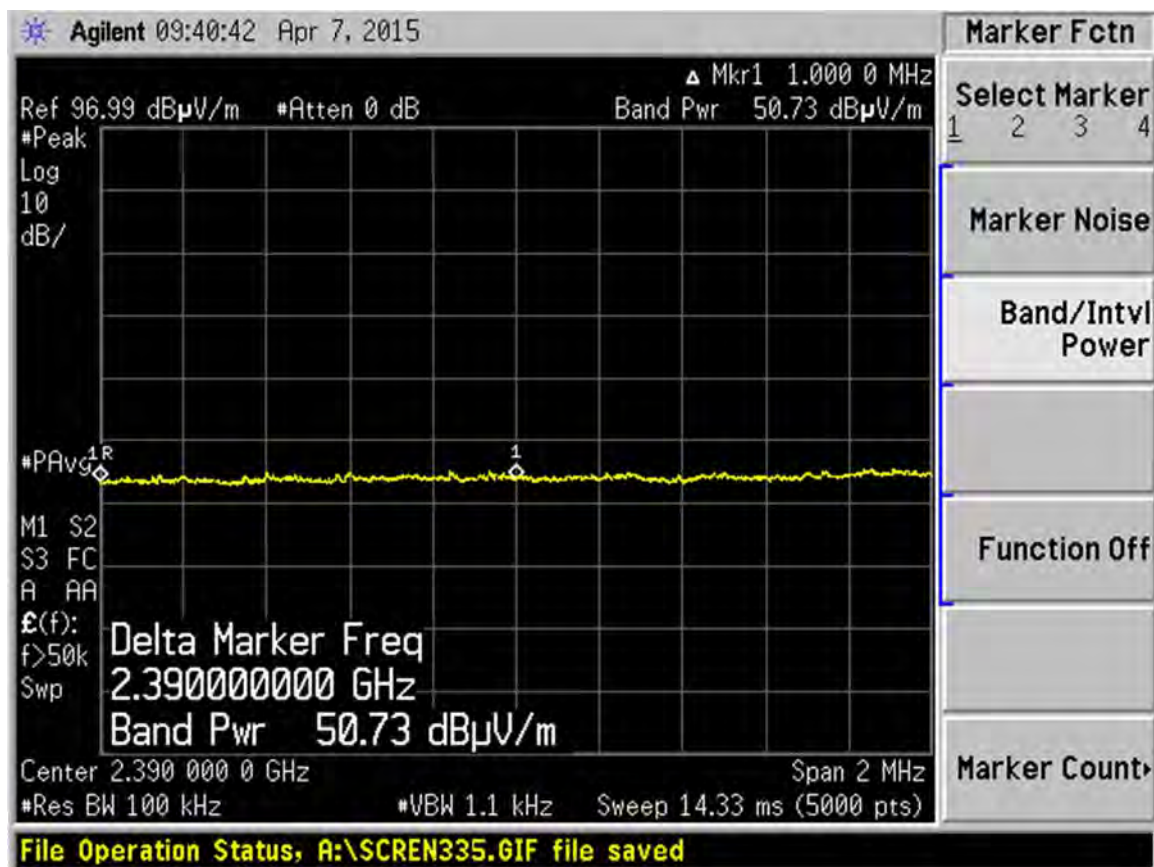
Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: Low, 2412 MHz, **channel 1**
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: **19**

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 962 μ S, VBW = 1.1 kHz

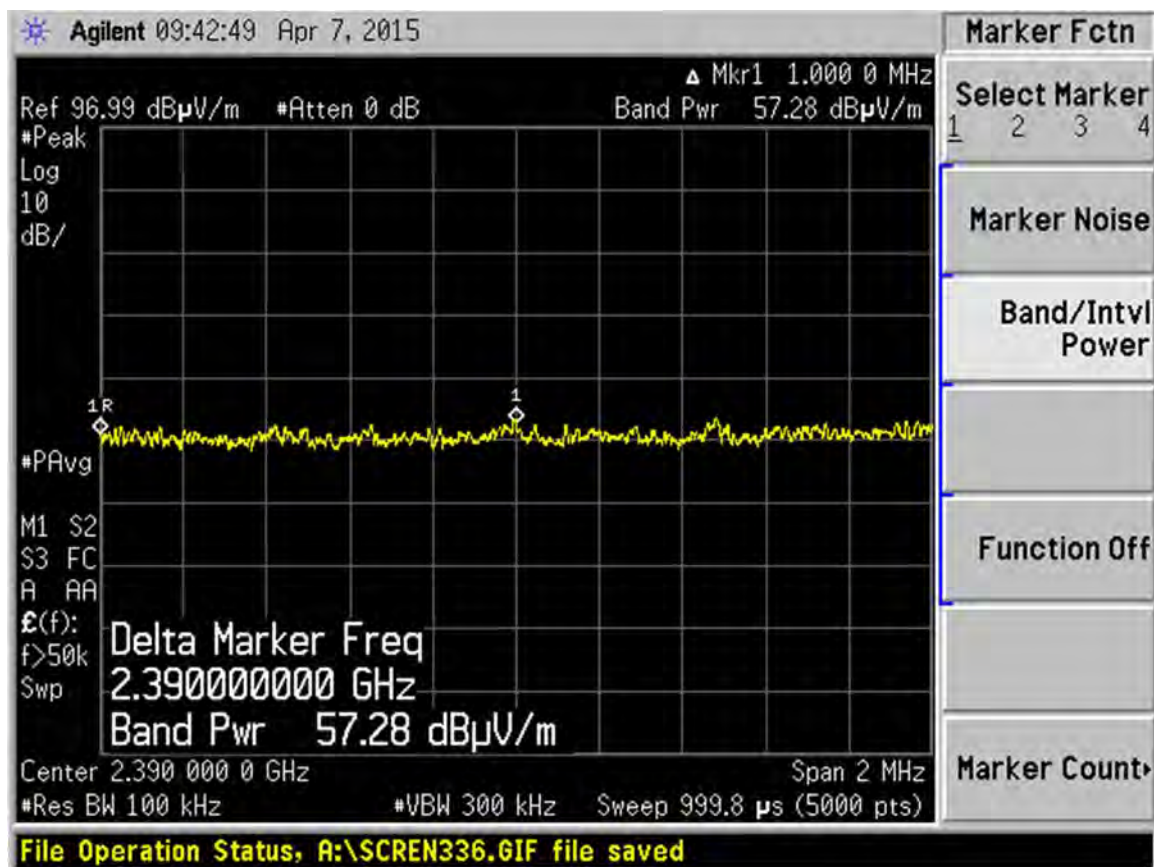


Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: Low, 2412 MHz, **channel 1**
Modulation: 802.11-b, DSSS, 11 Mbps
Power setting: **19**

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



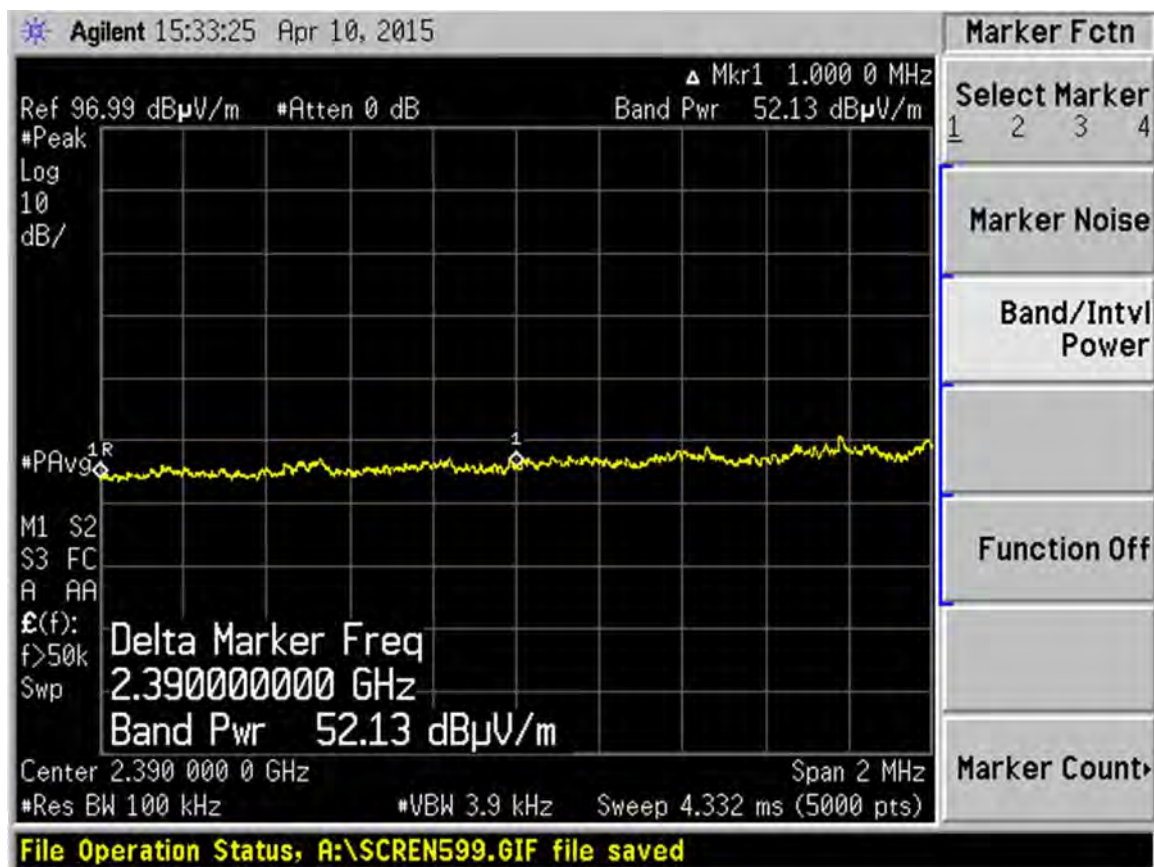
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 11

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

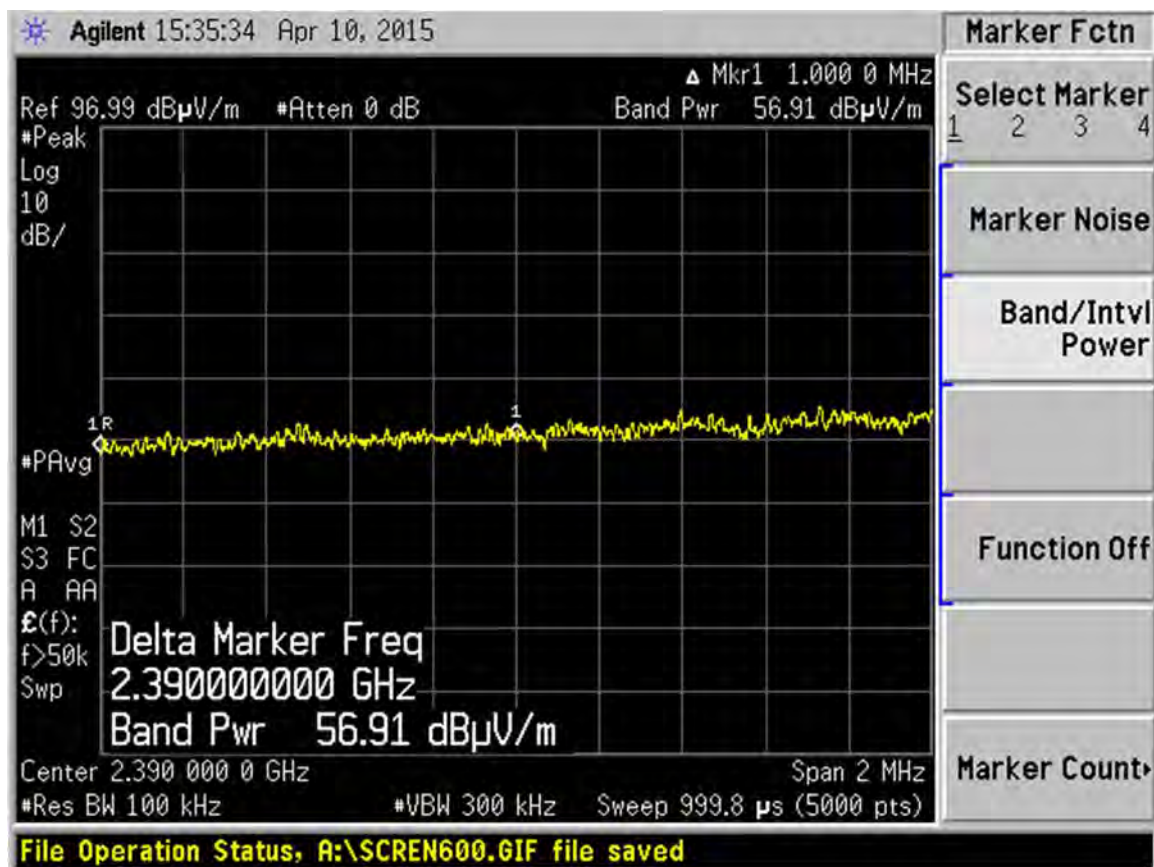


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 11

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



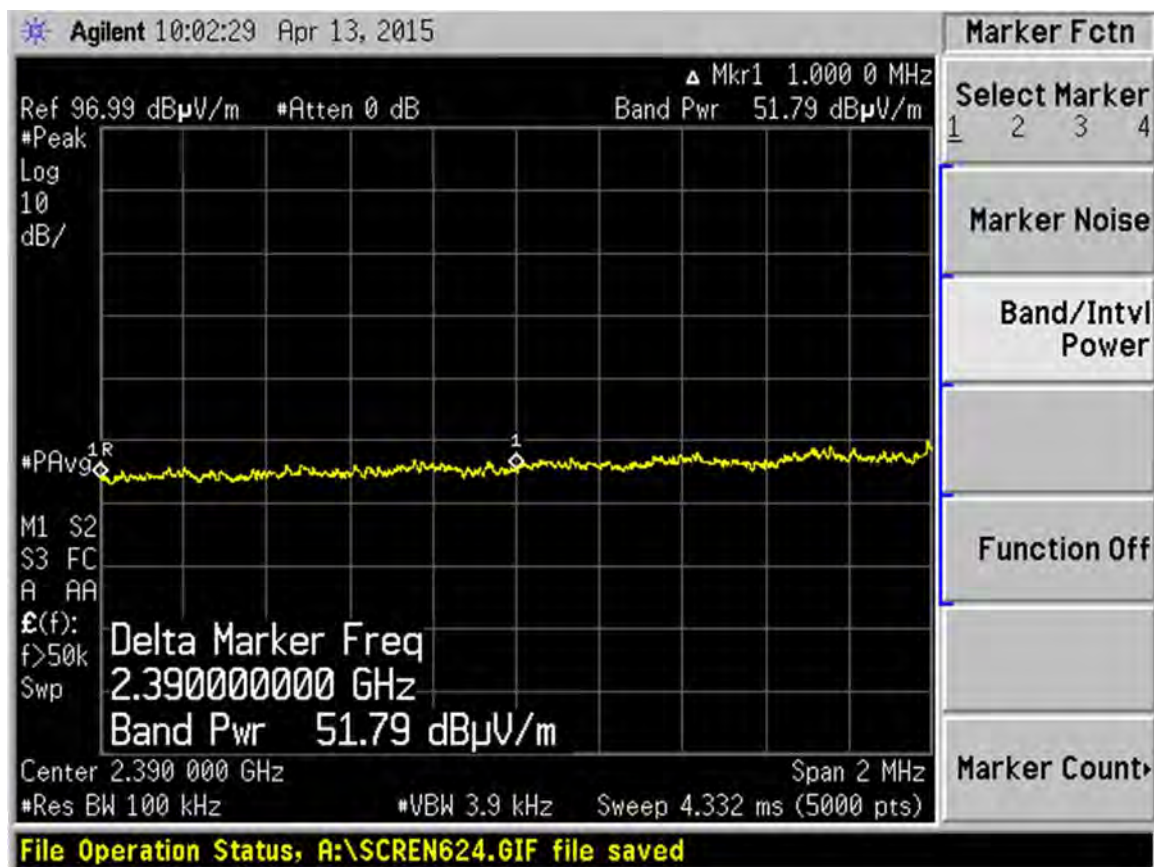
Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 11

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

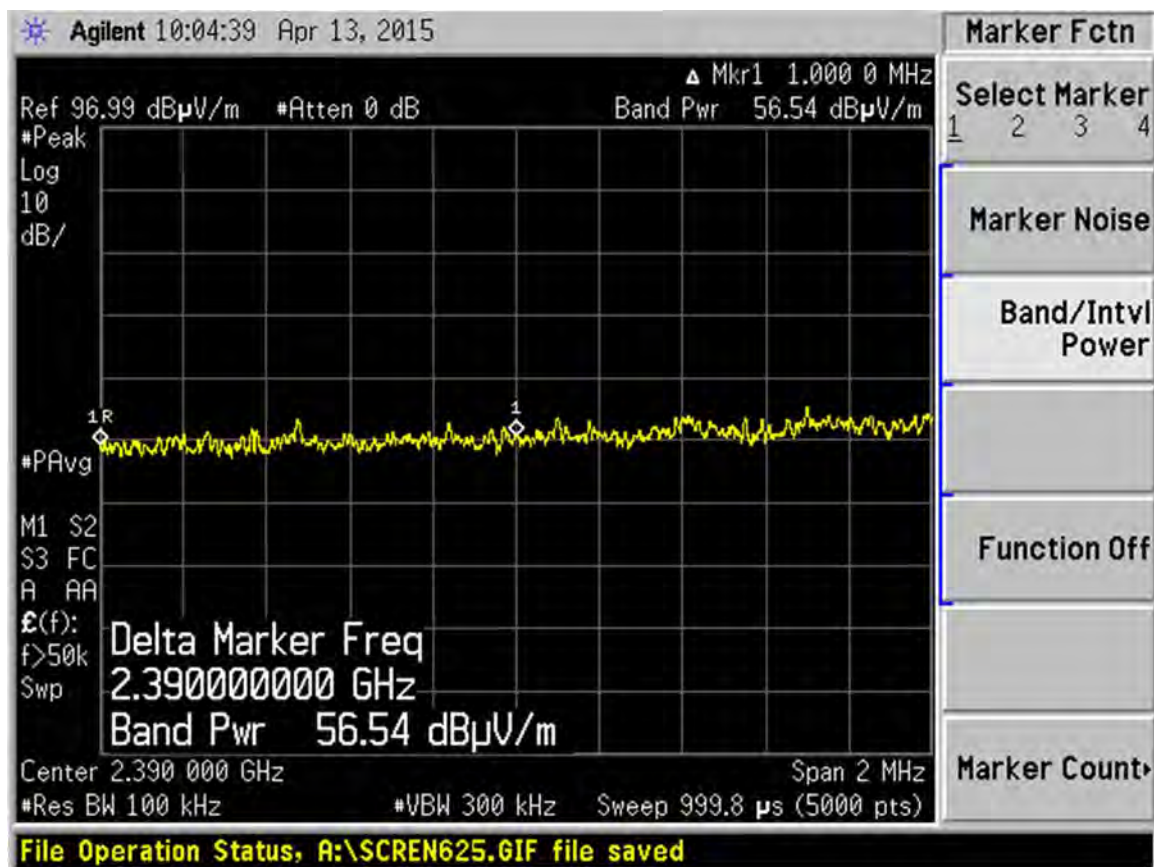


Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 11

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



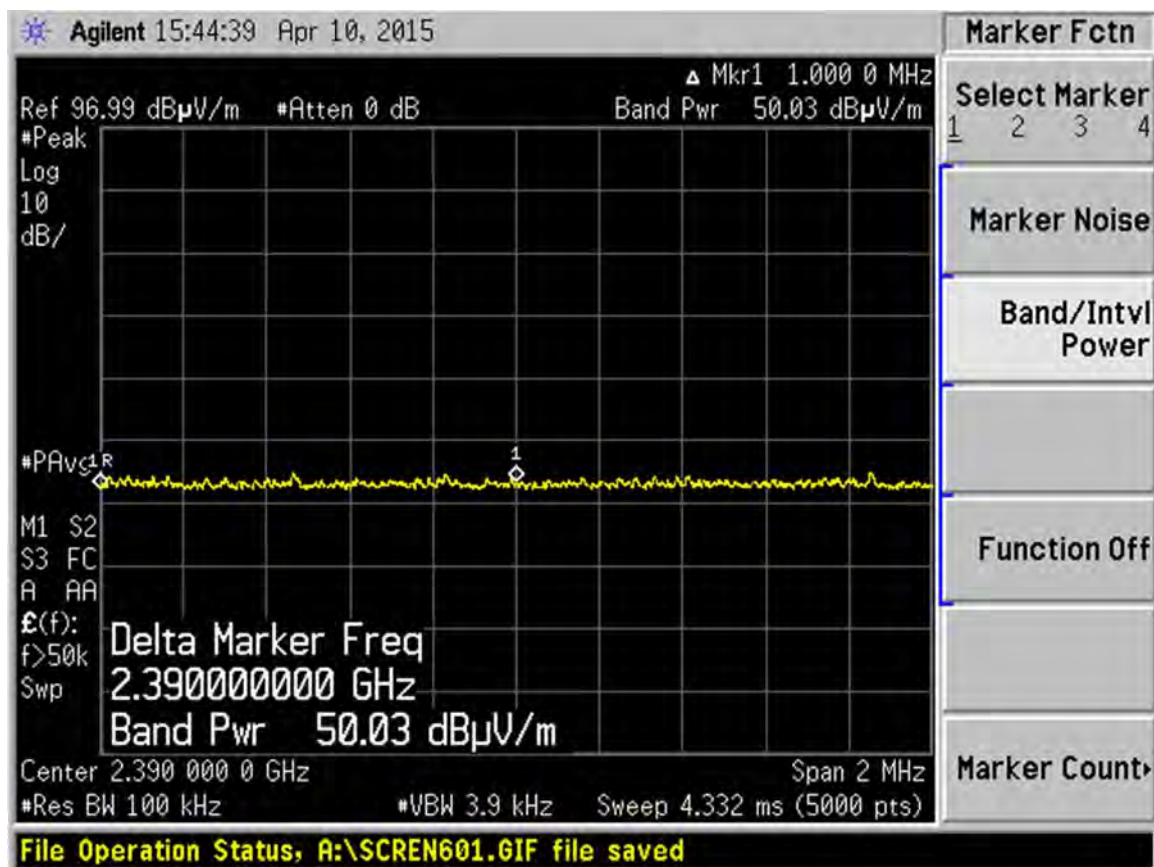
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

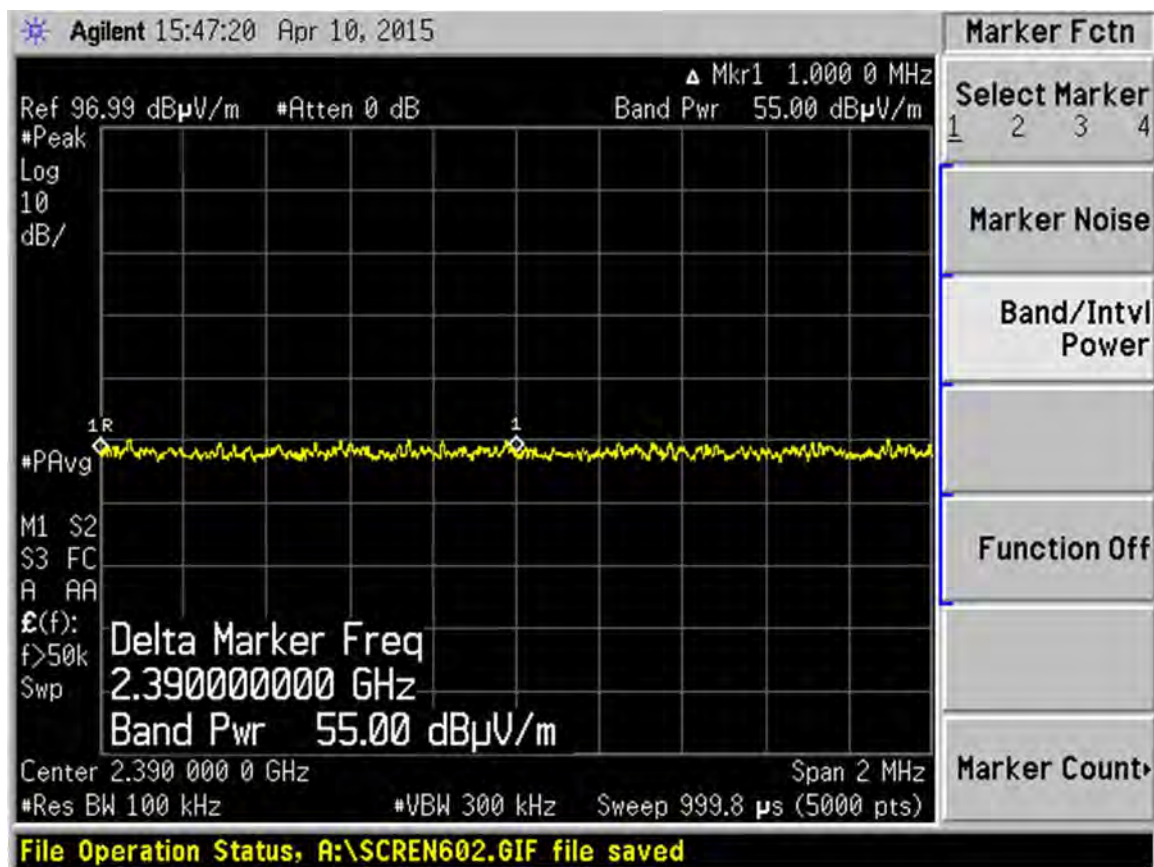


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



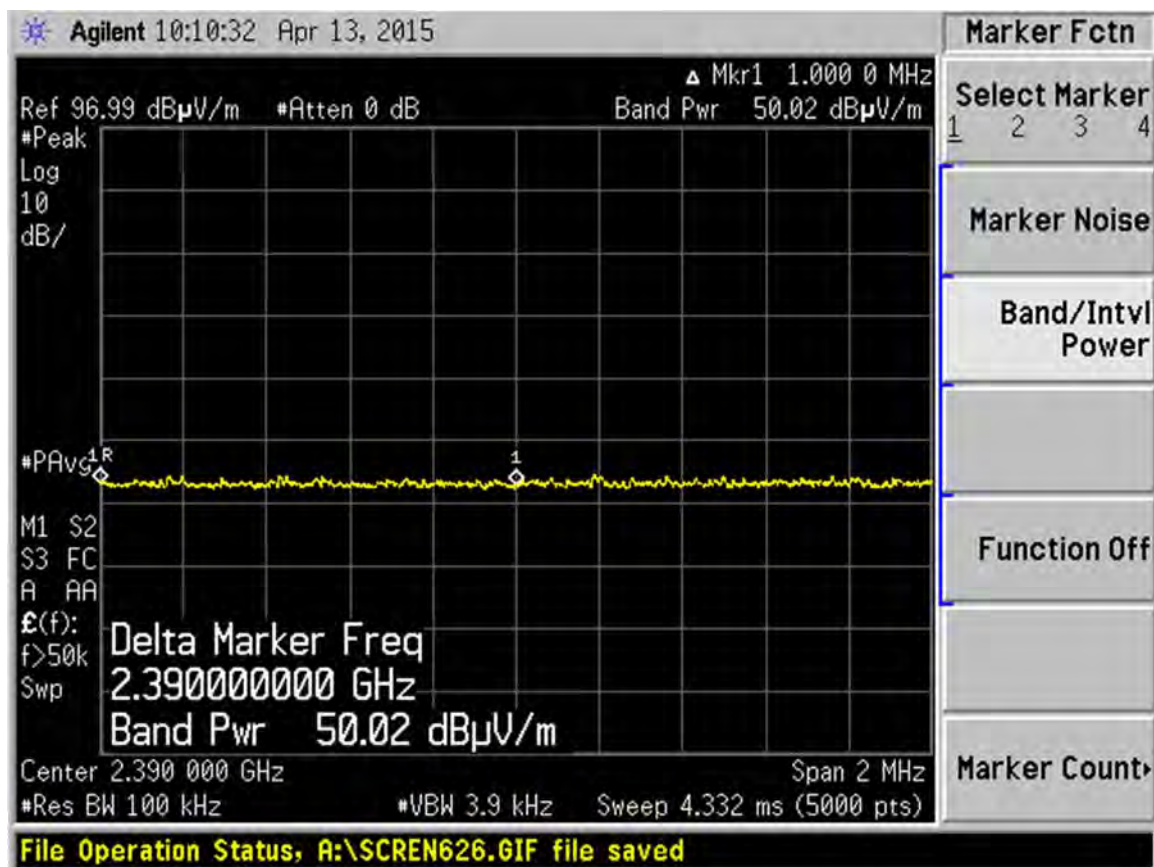
Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

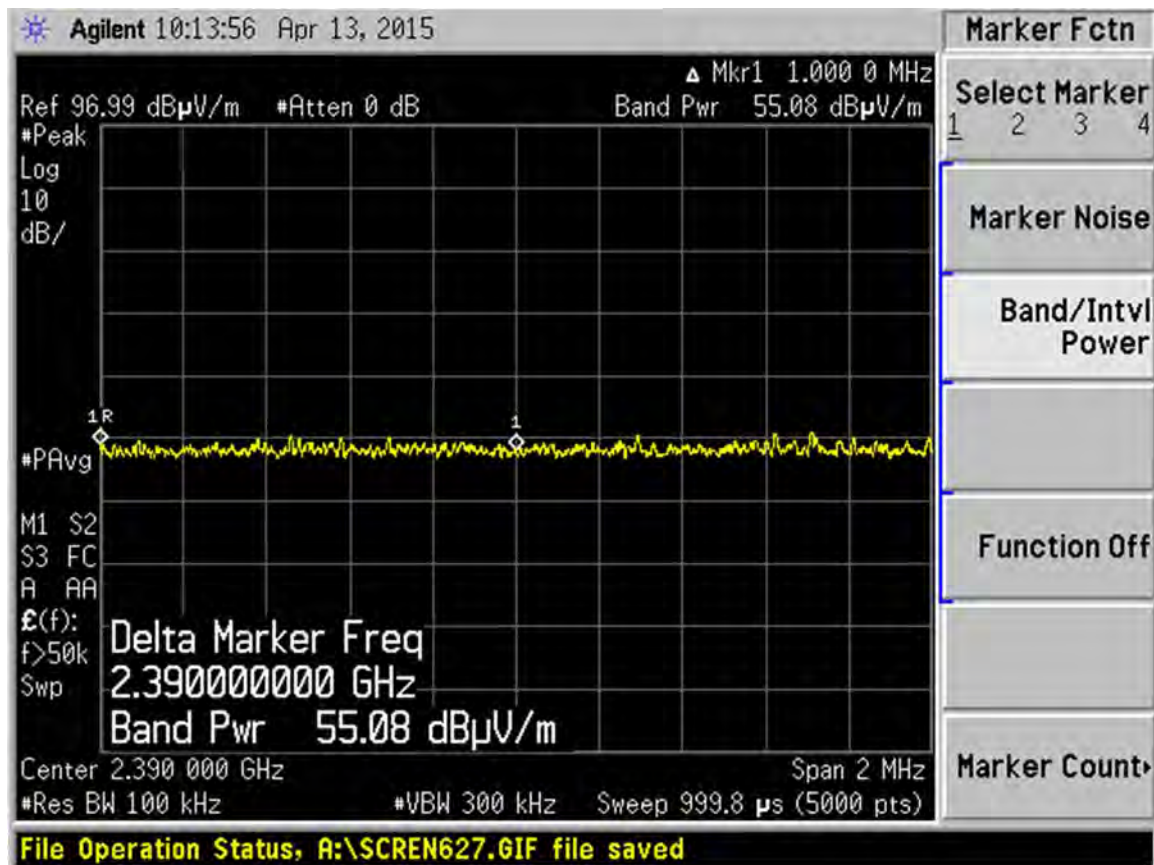


Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



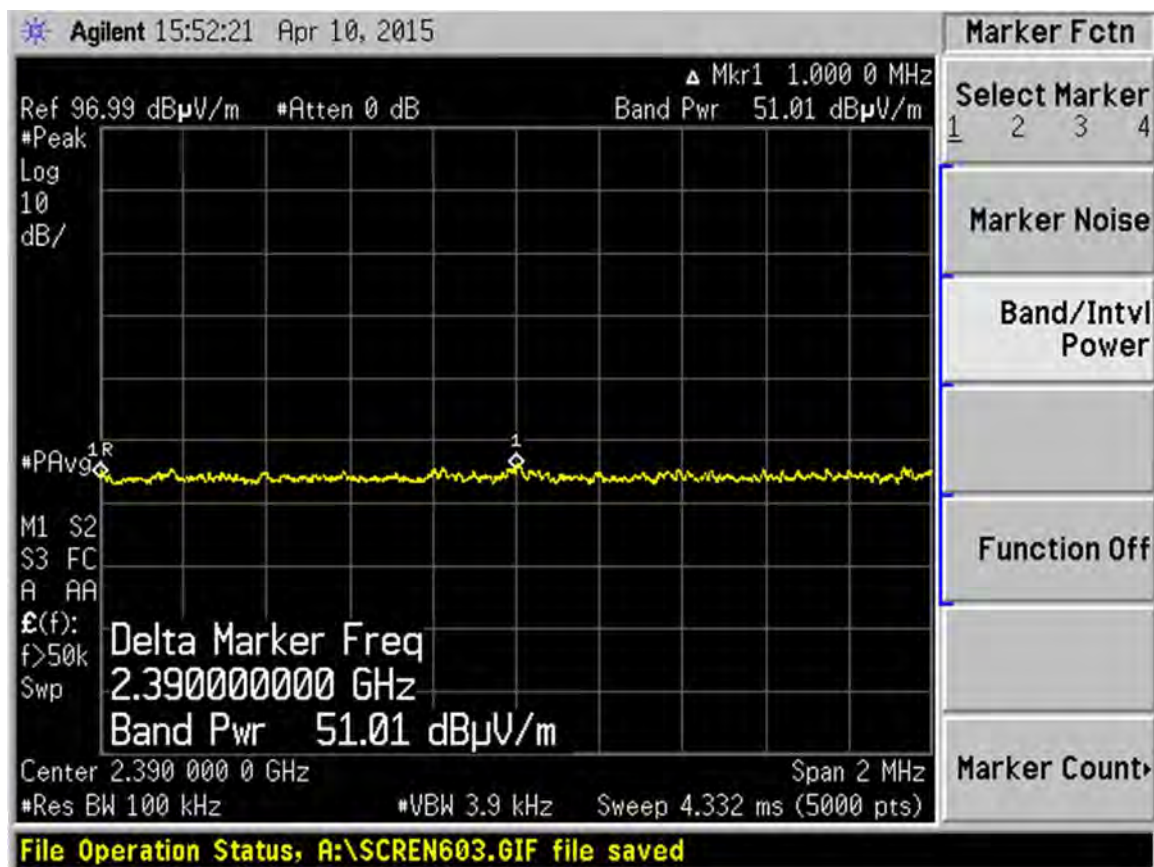
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

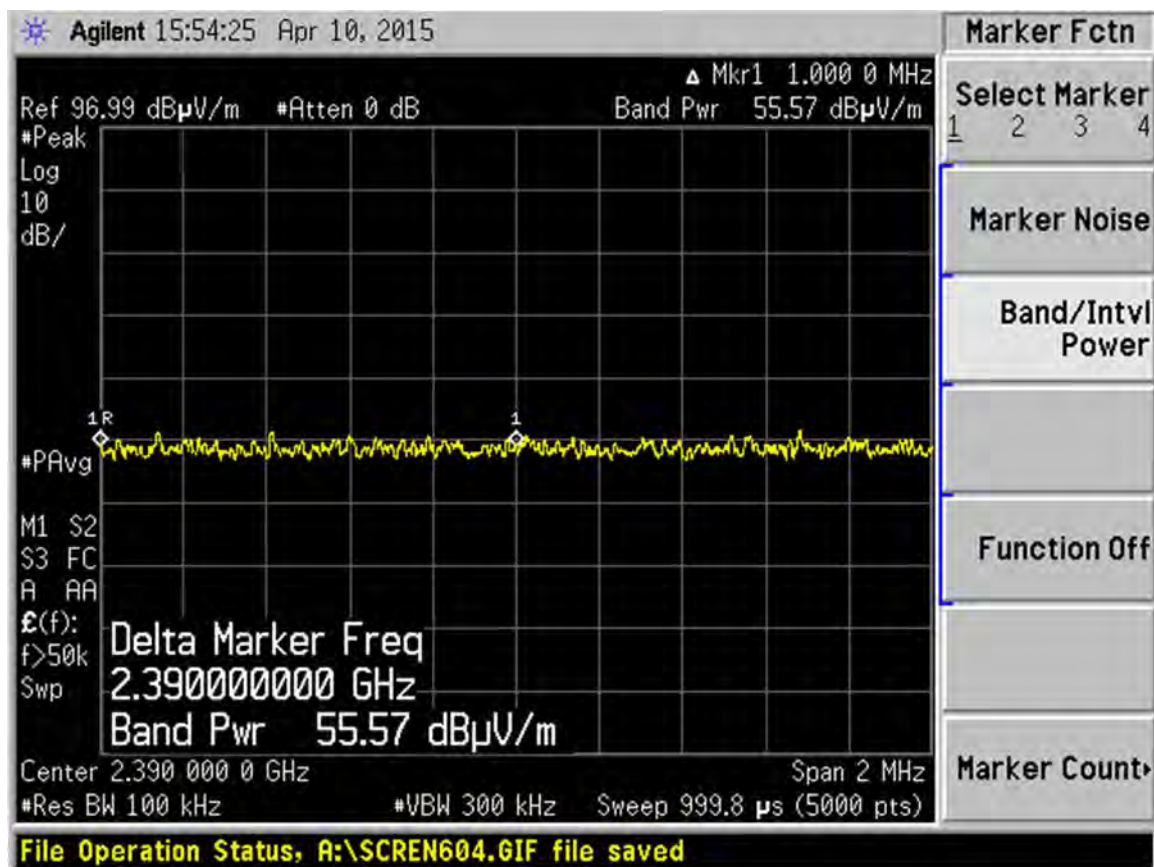


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



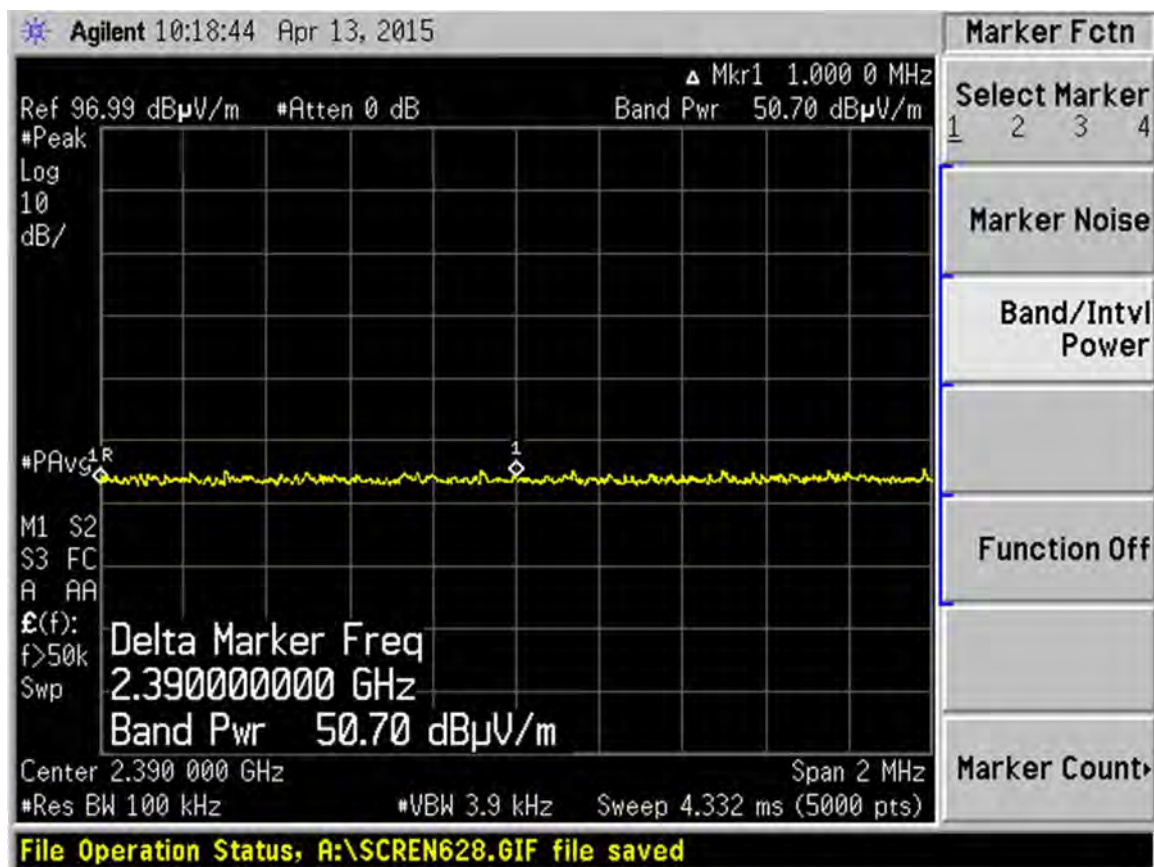
Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

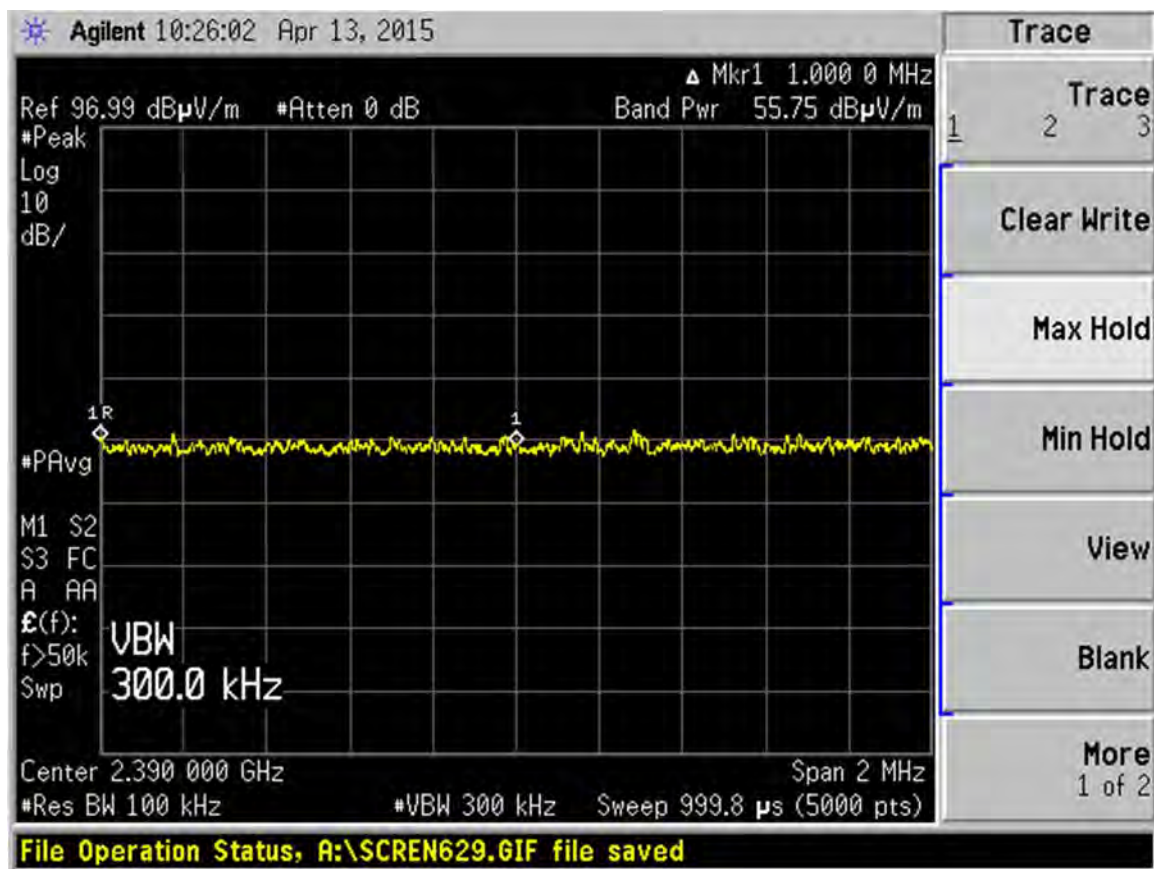


Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



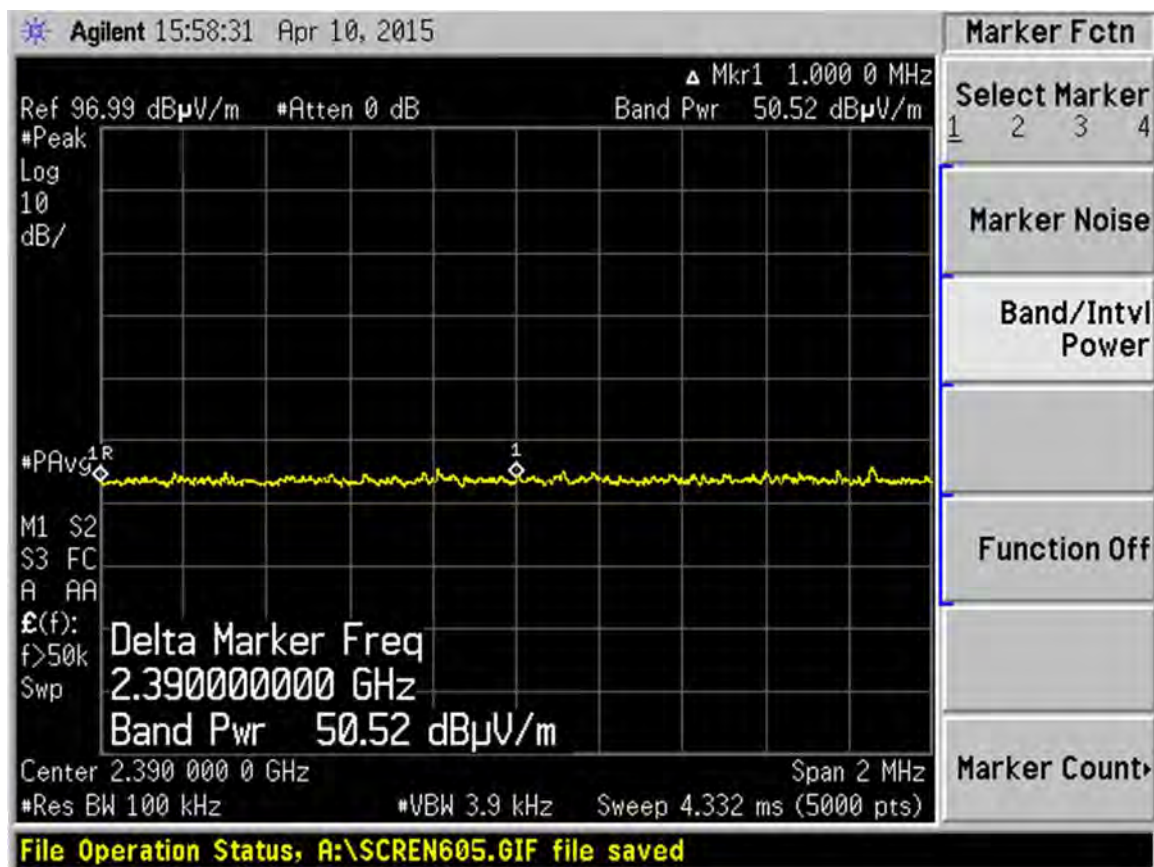
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

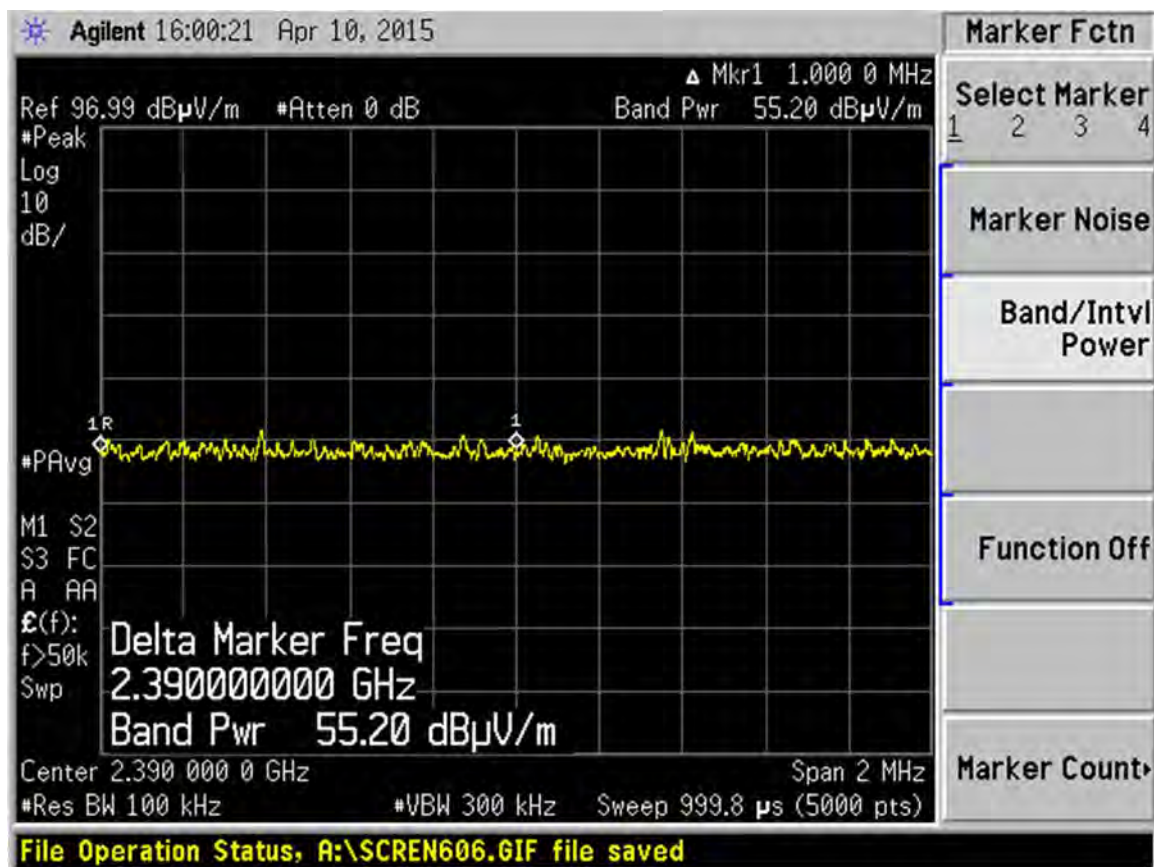


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



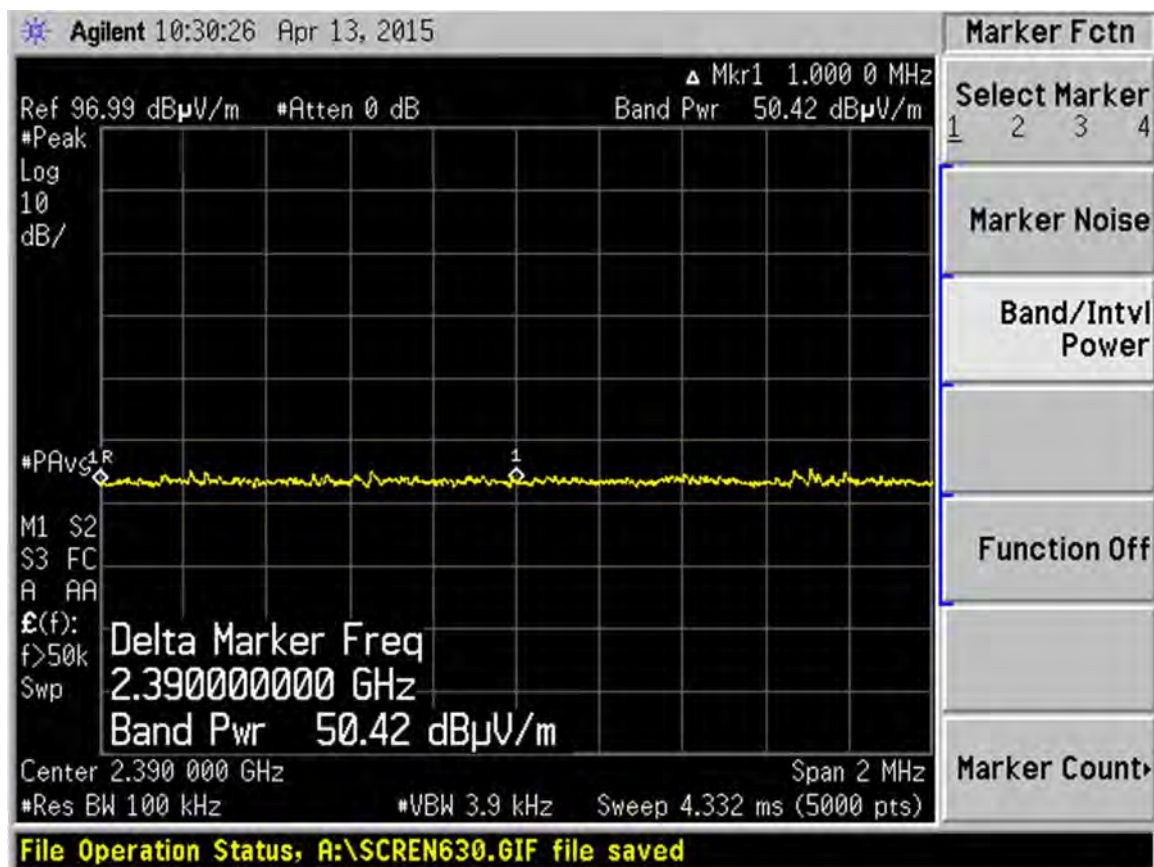
Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

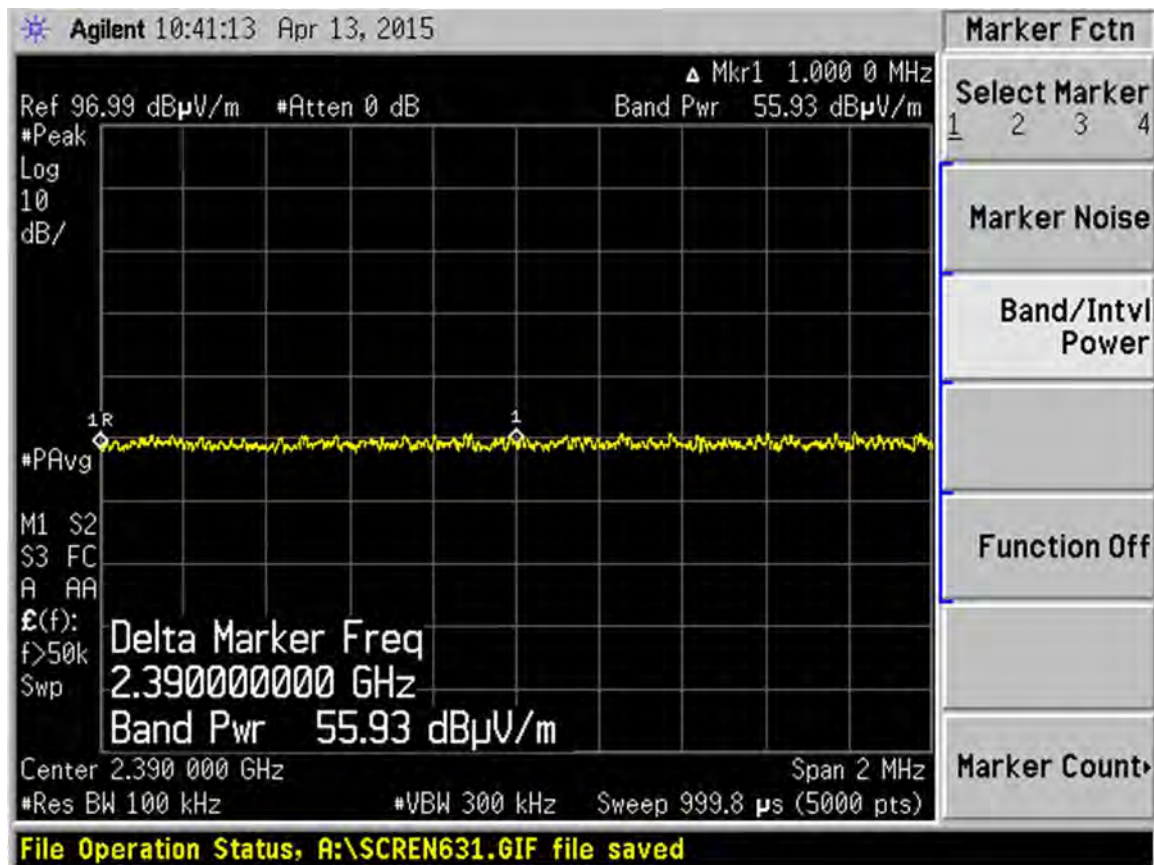


Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



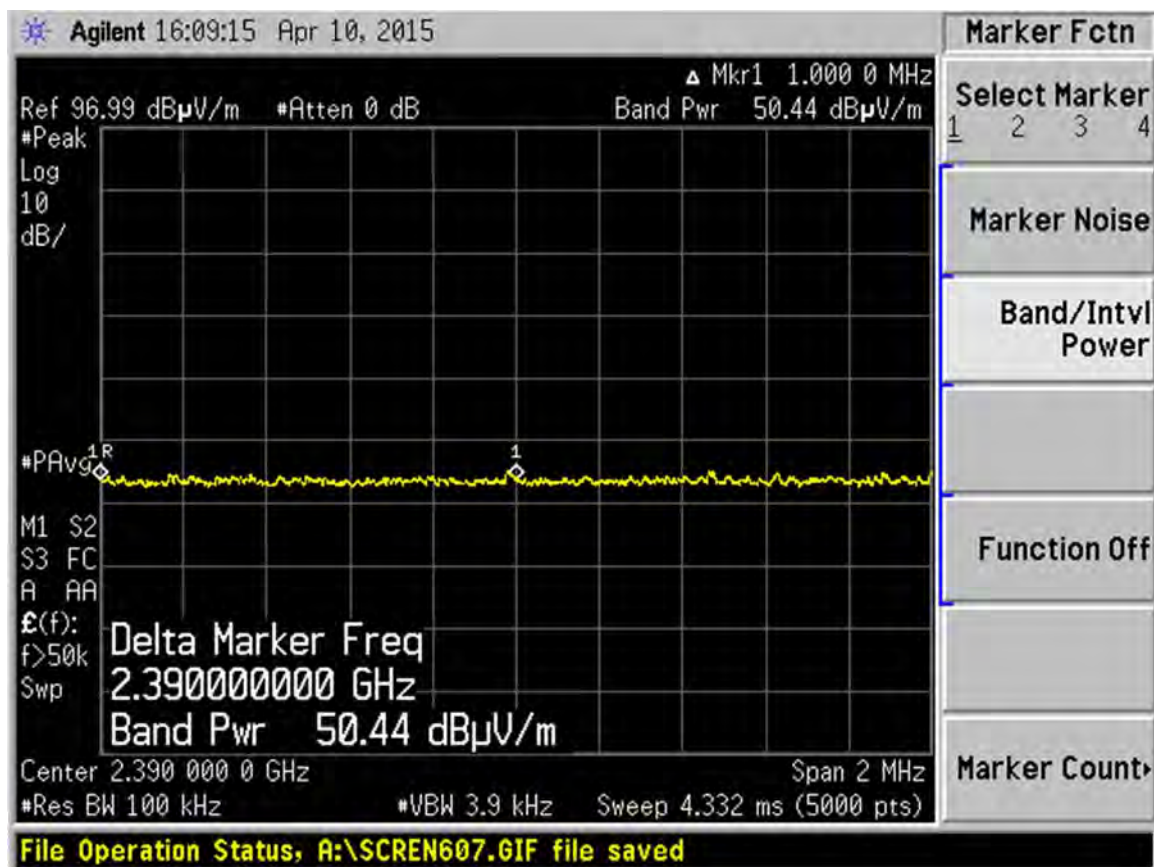
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

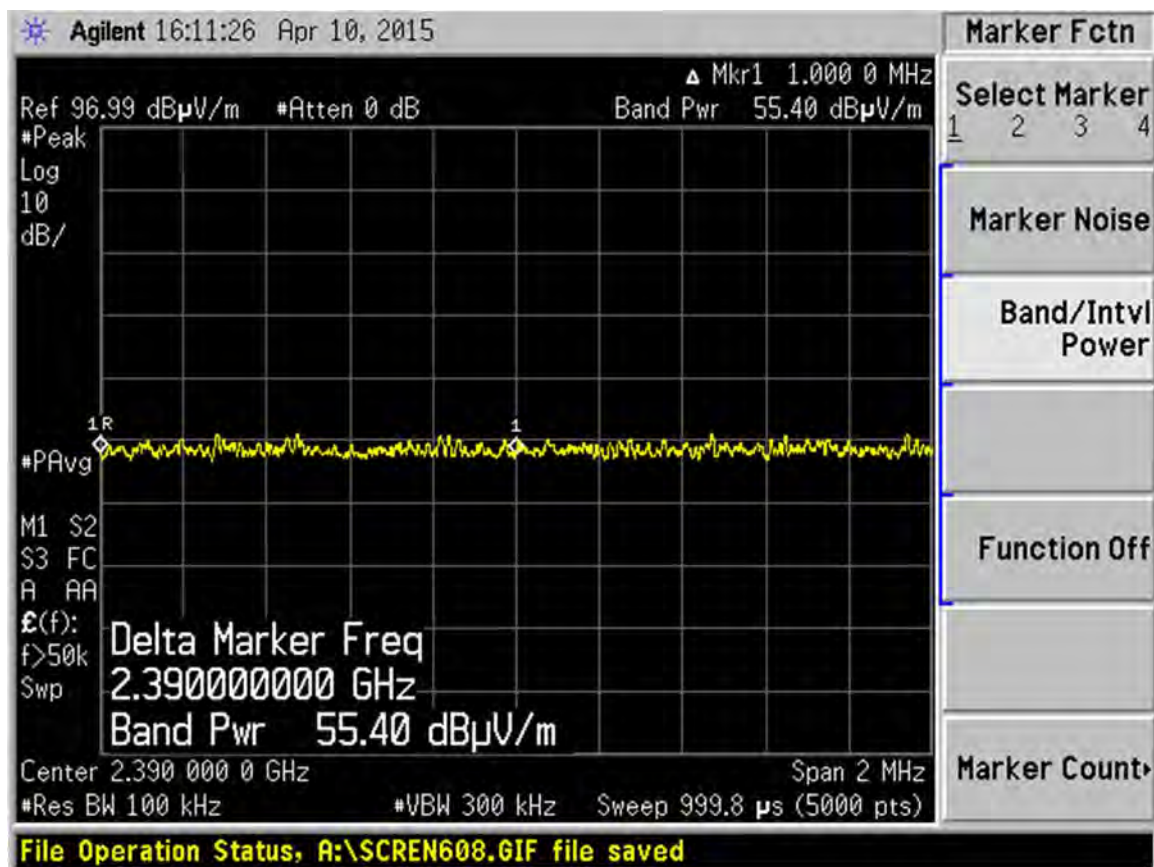


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



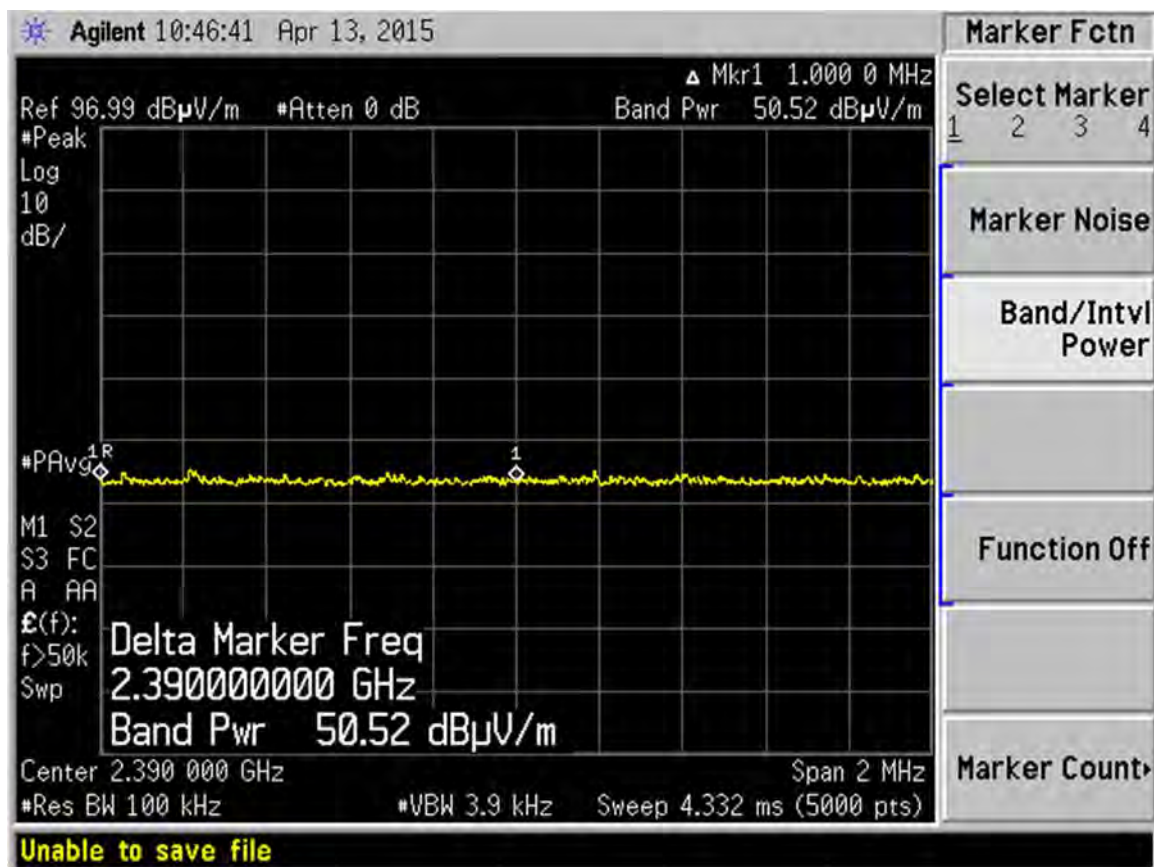
Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

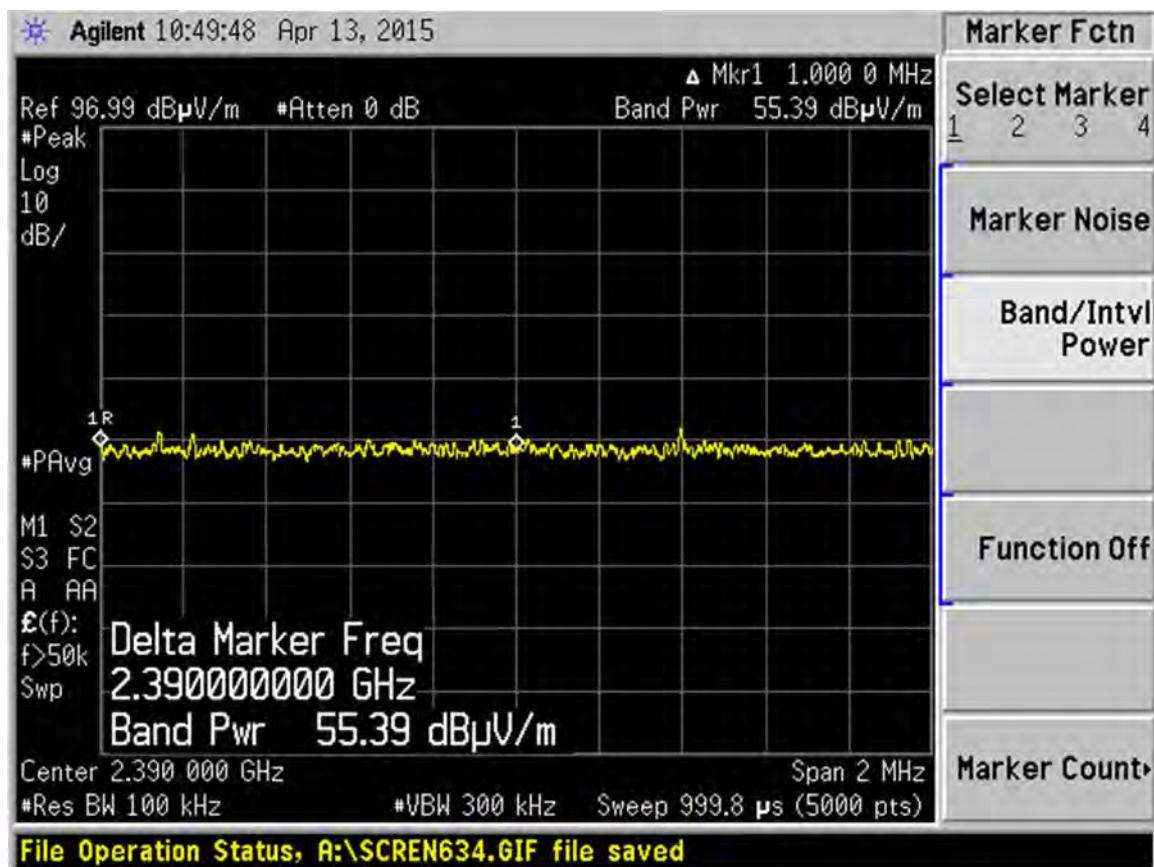


Test Date: 04-13-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, F
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



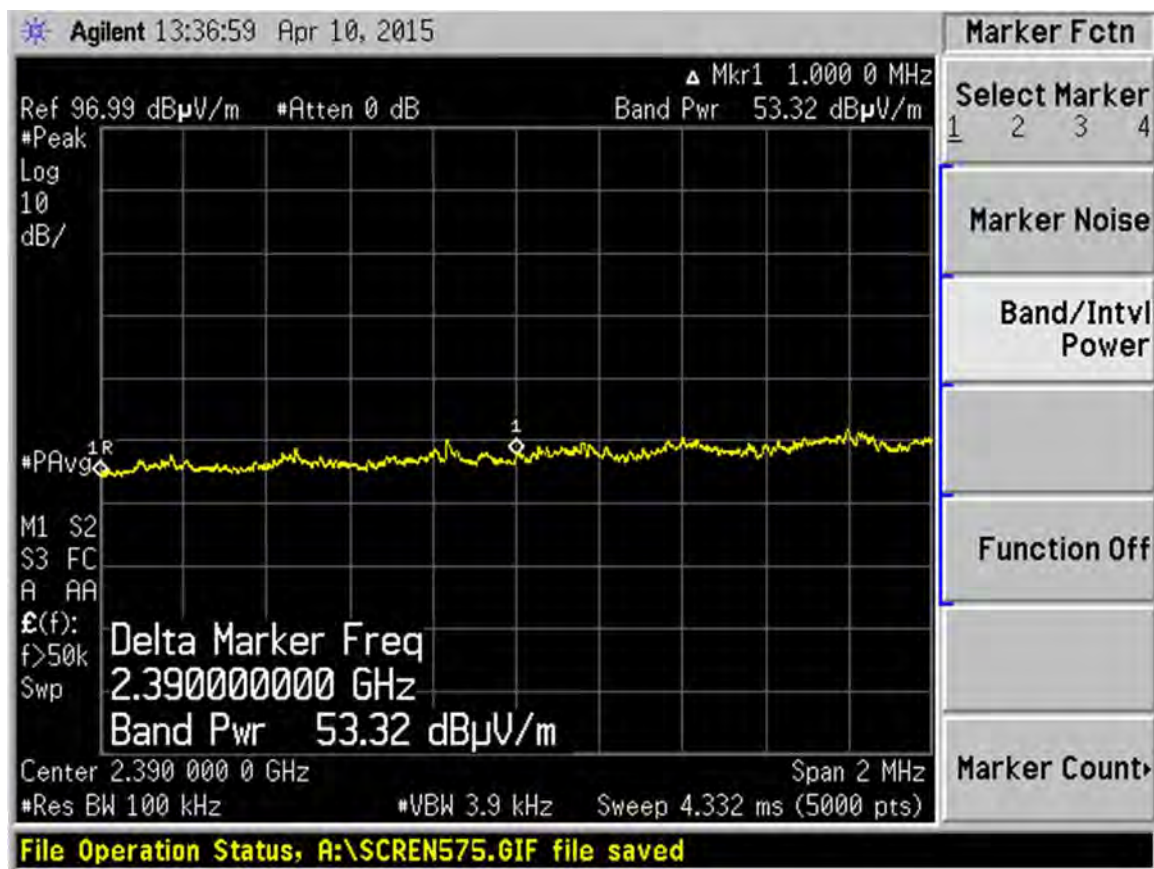
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 10

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

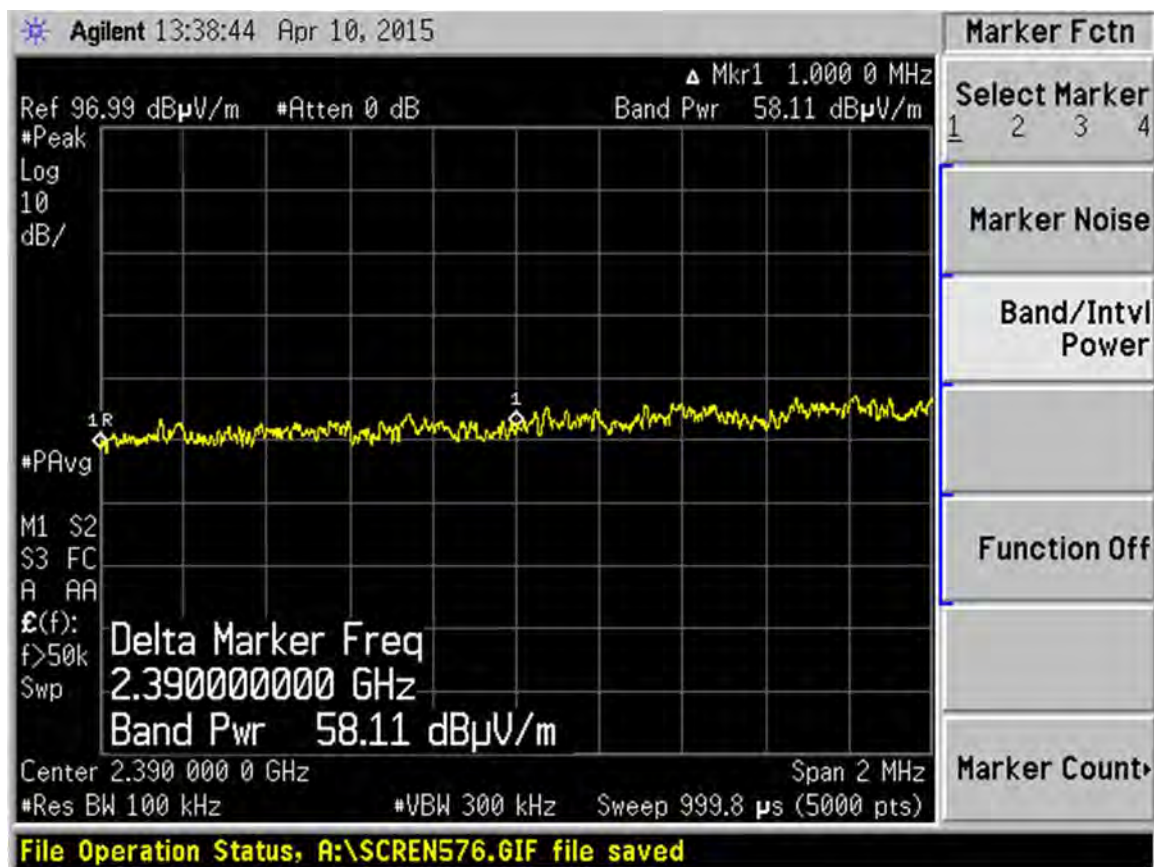


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 10

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



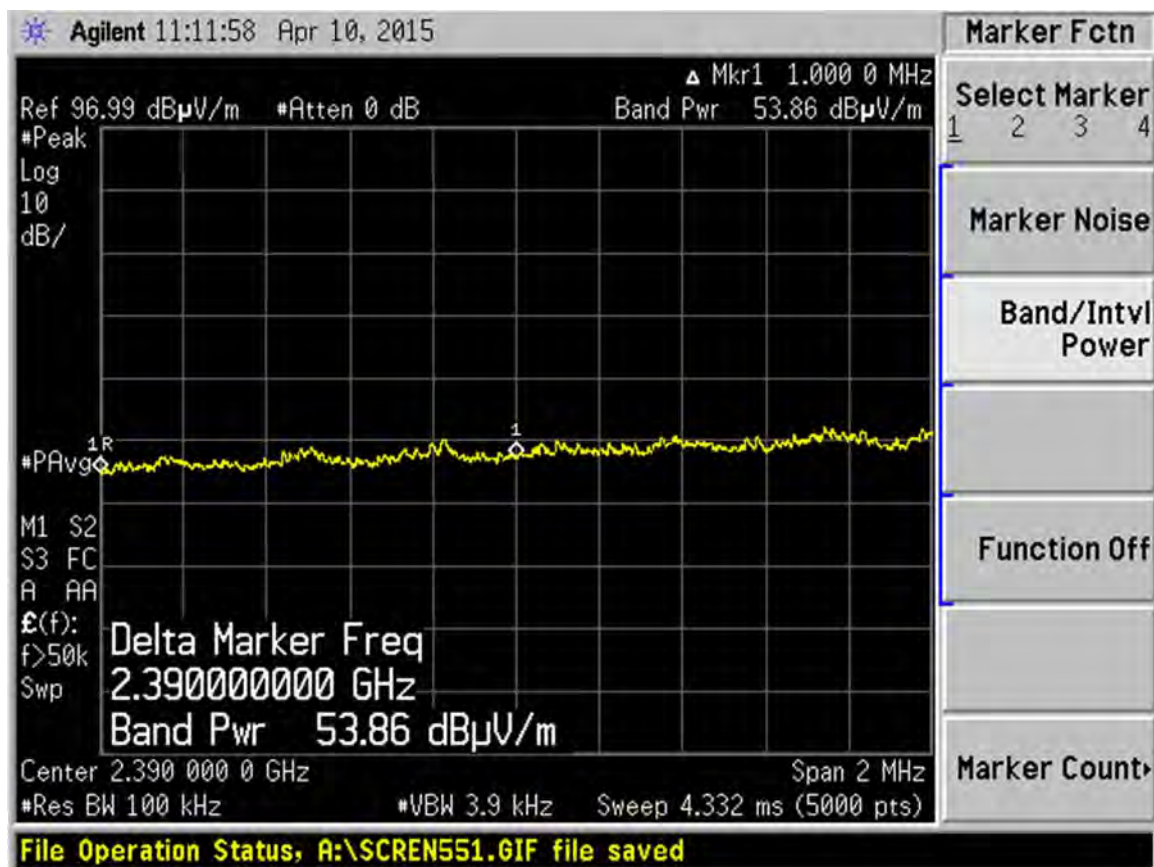
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 10

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

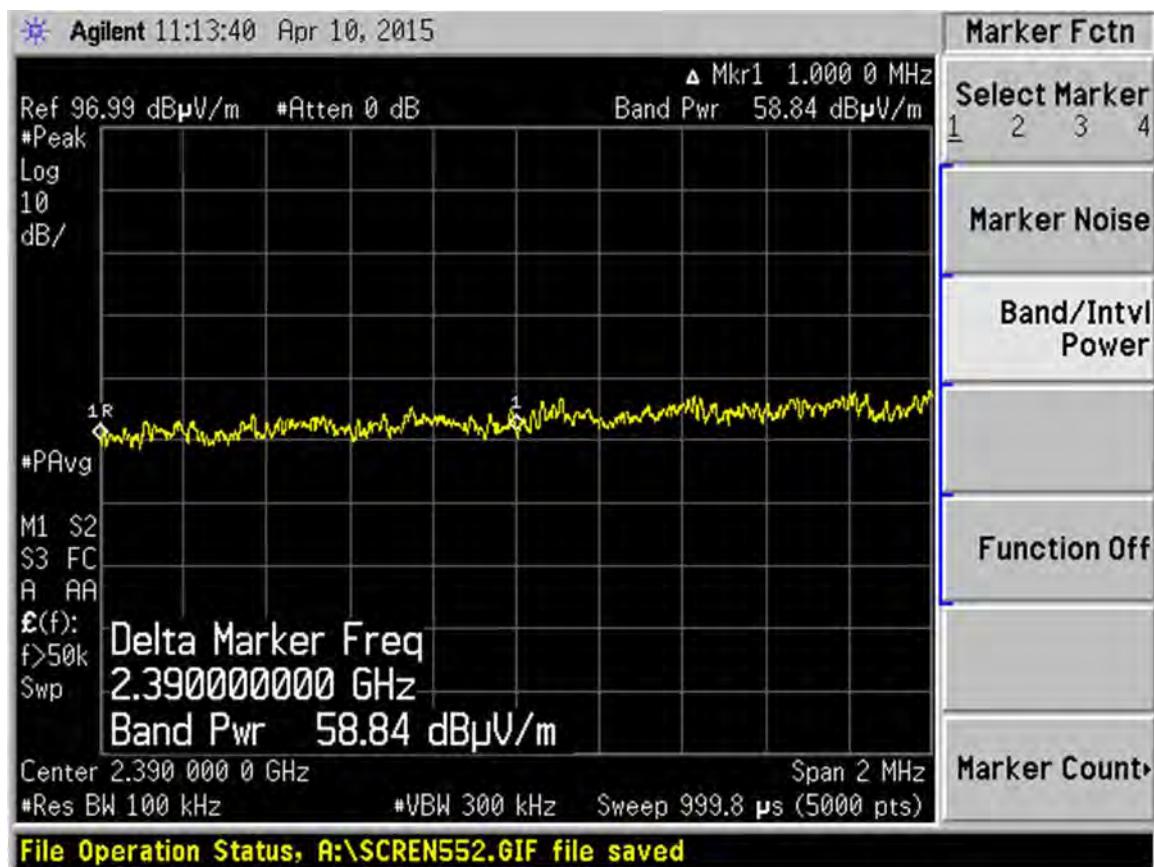


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 10

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



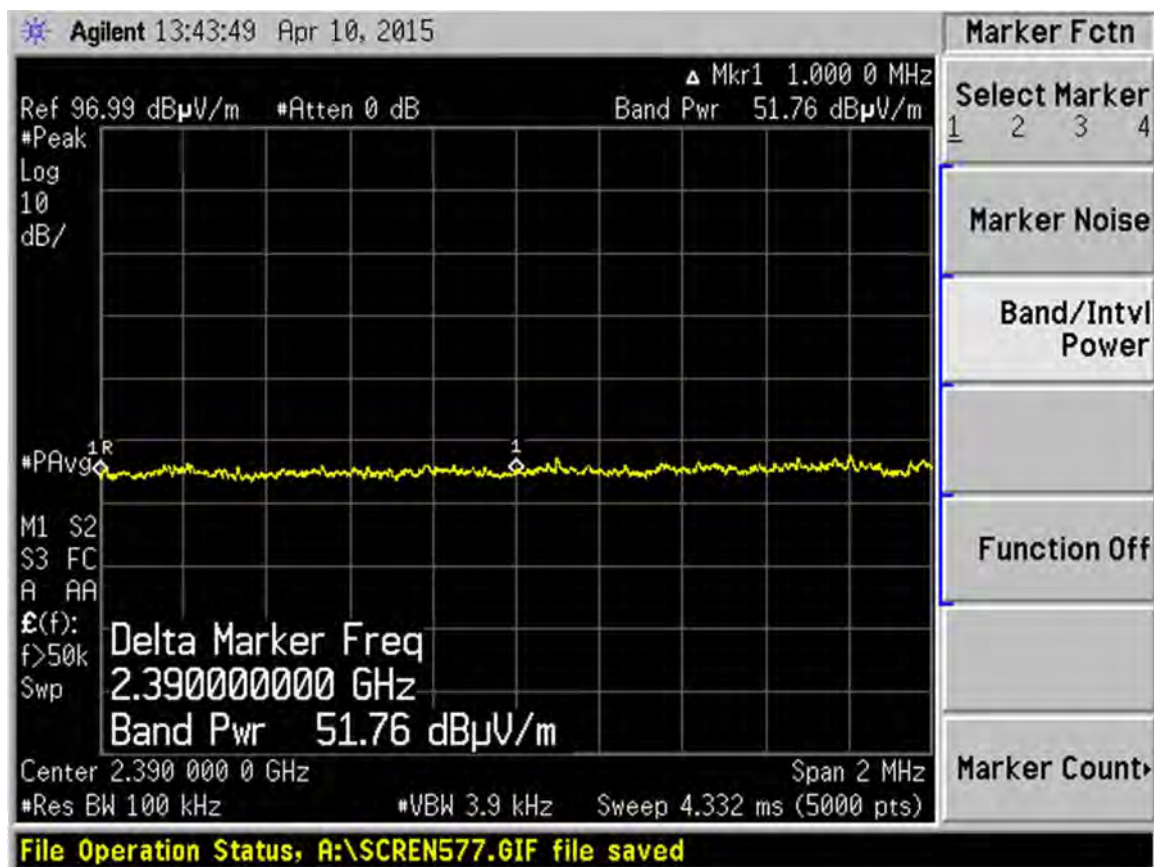
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

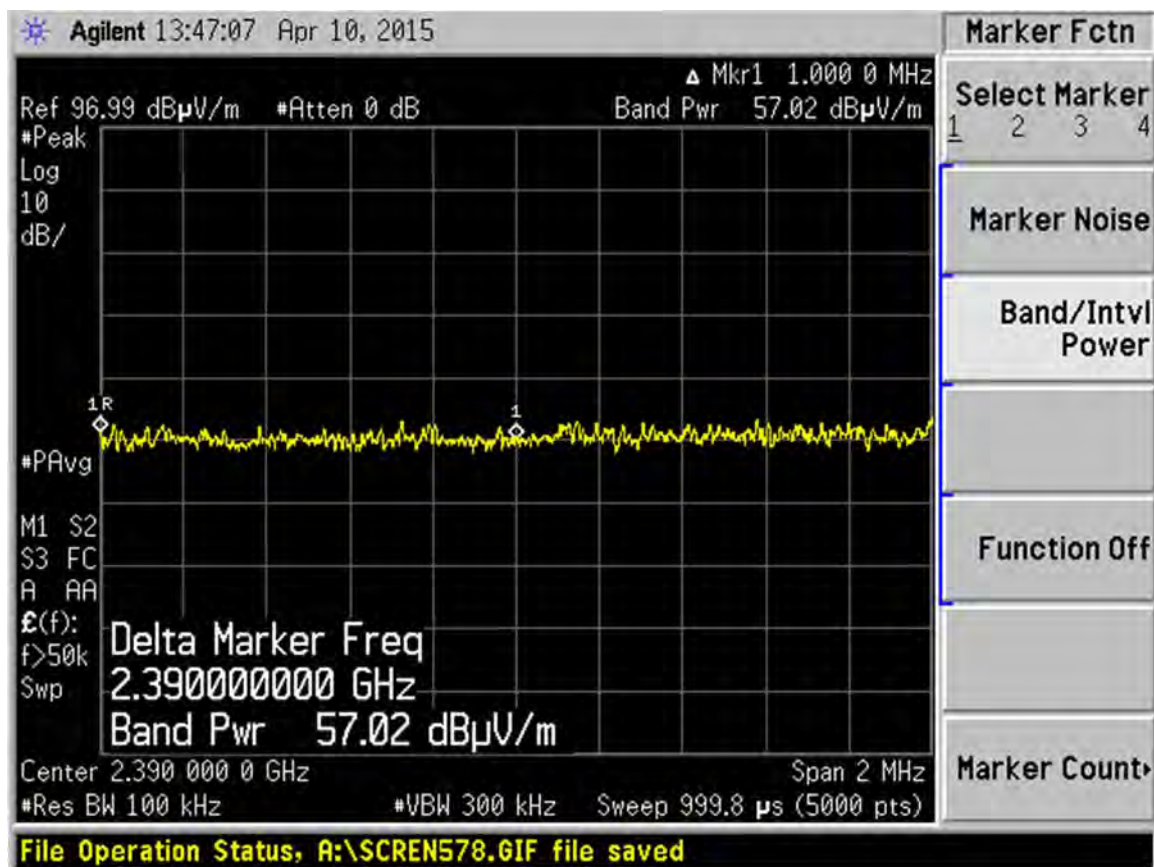


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



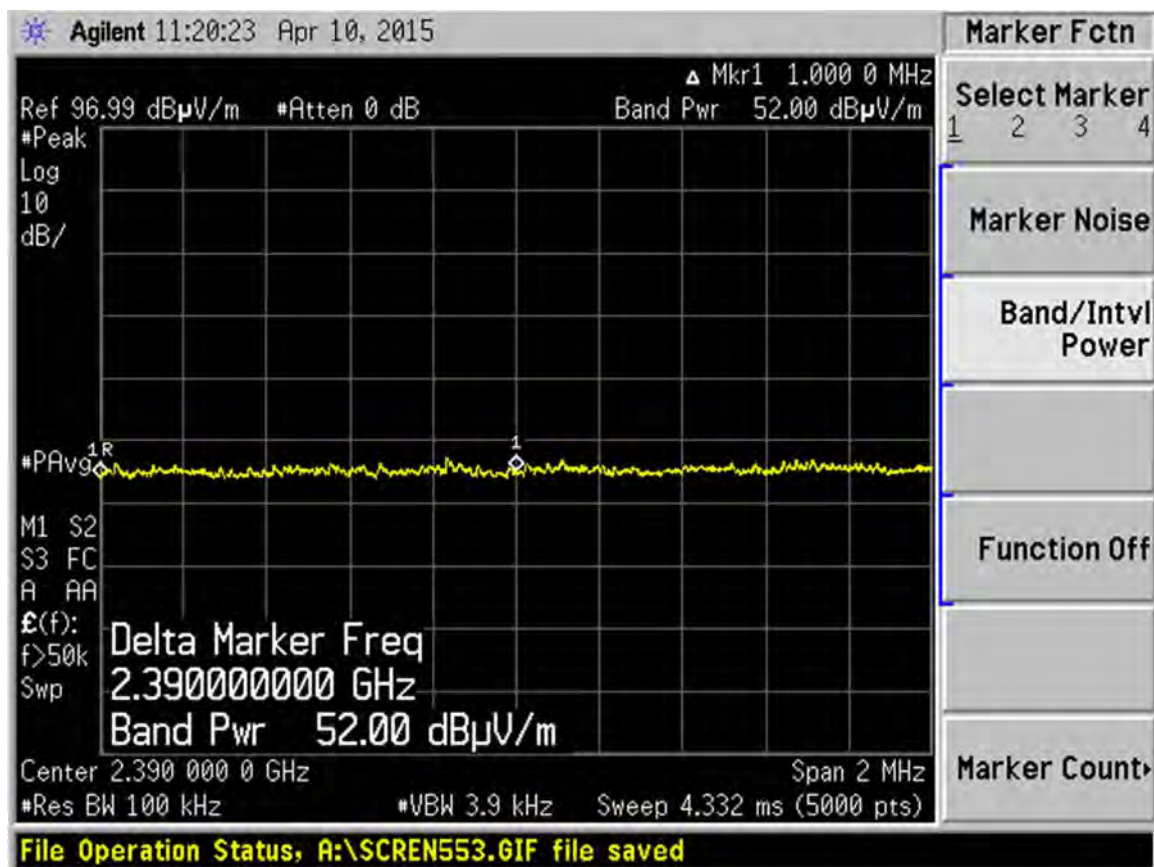
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

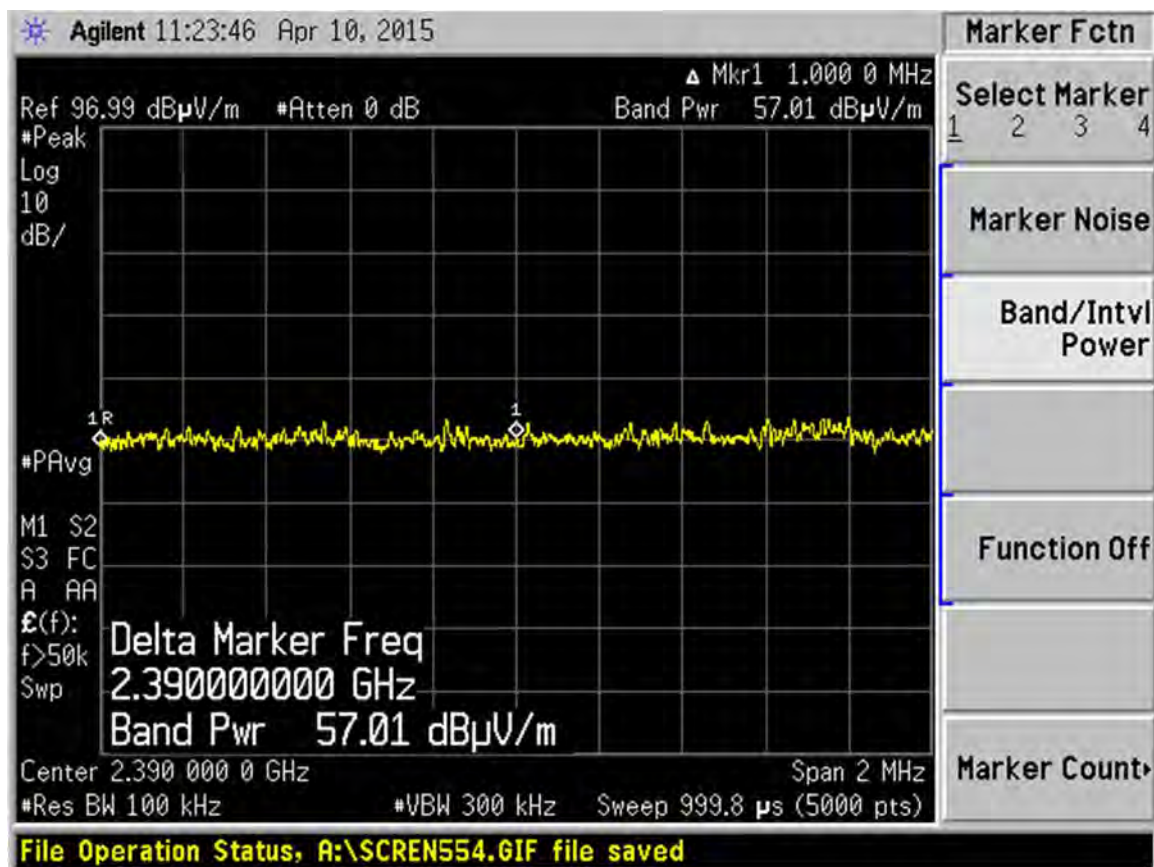


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



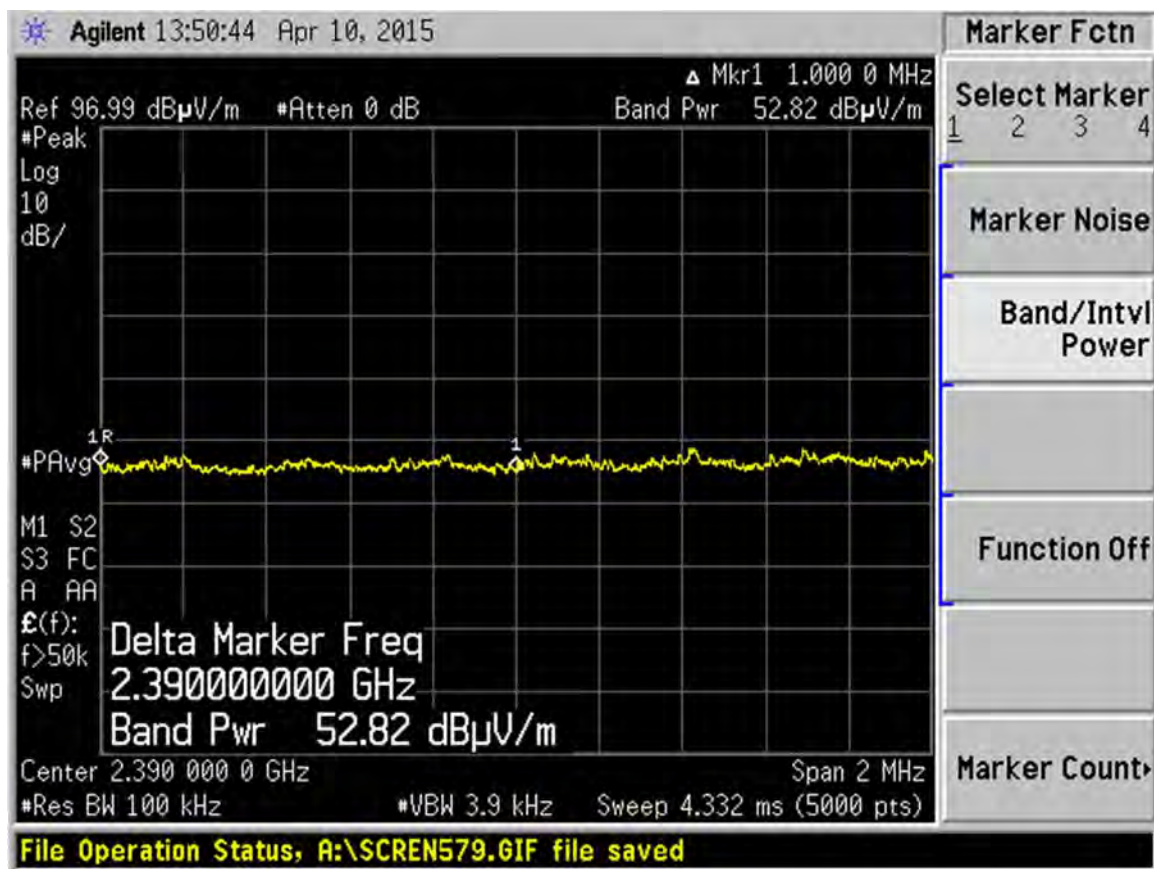
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

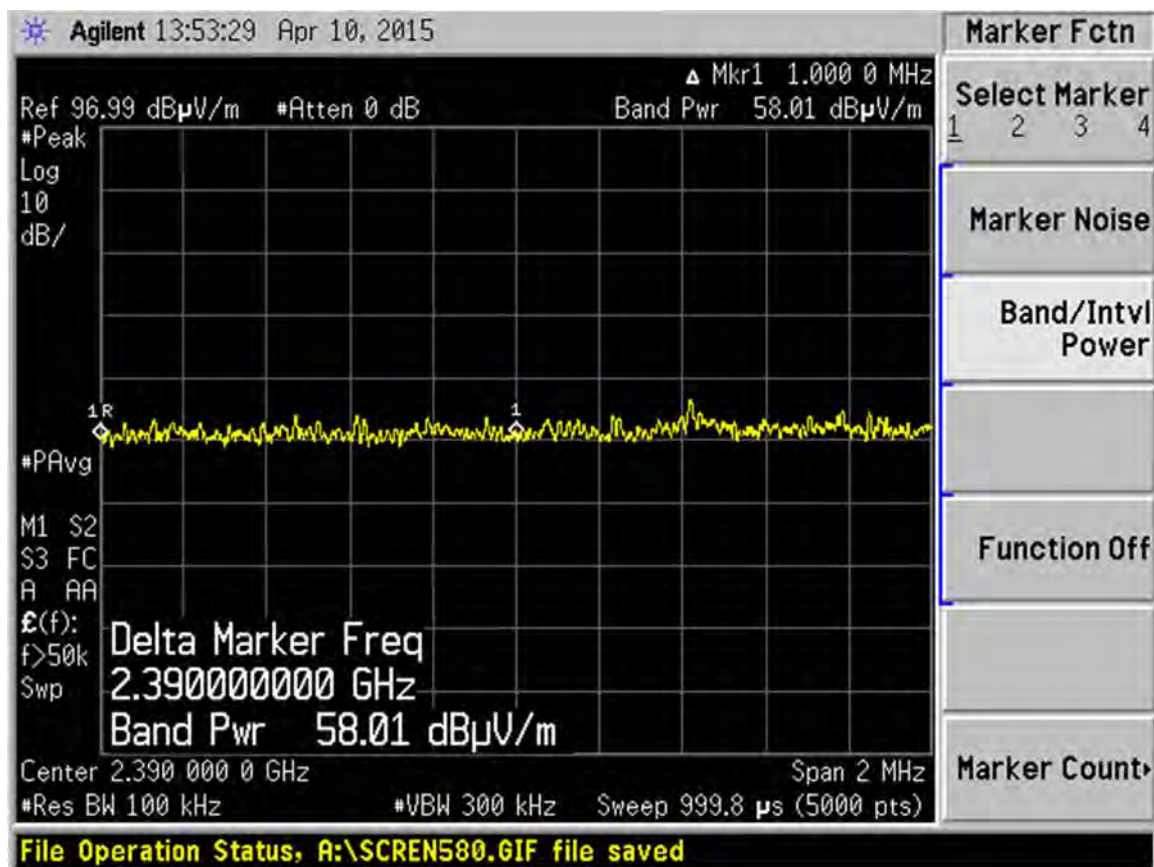


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



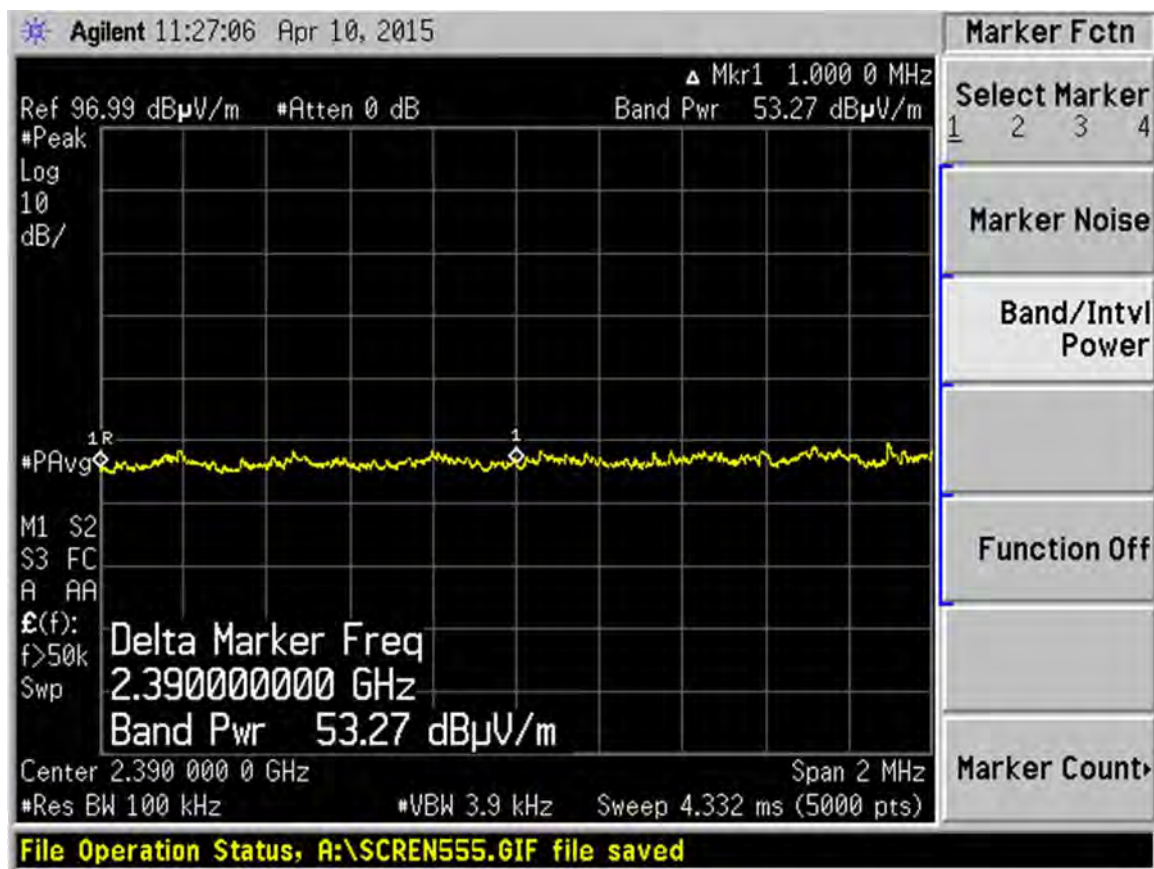
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

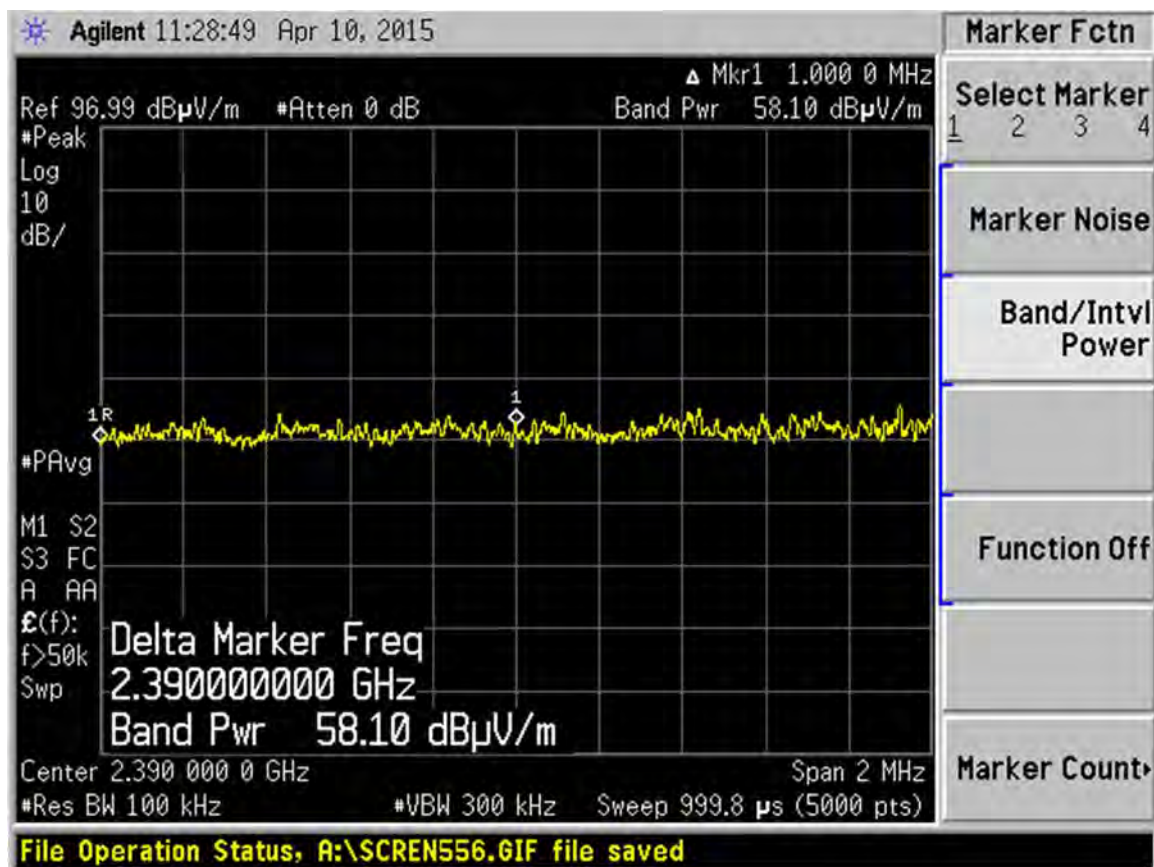


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



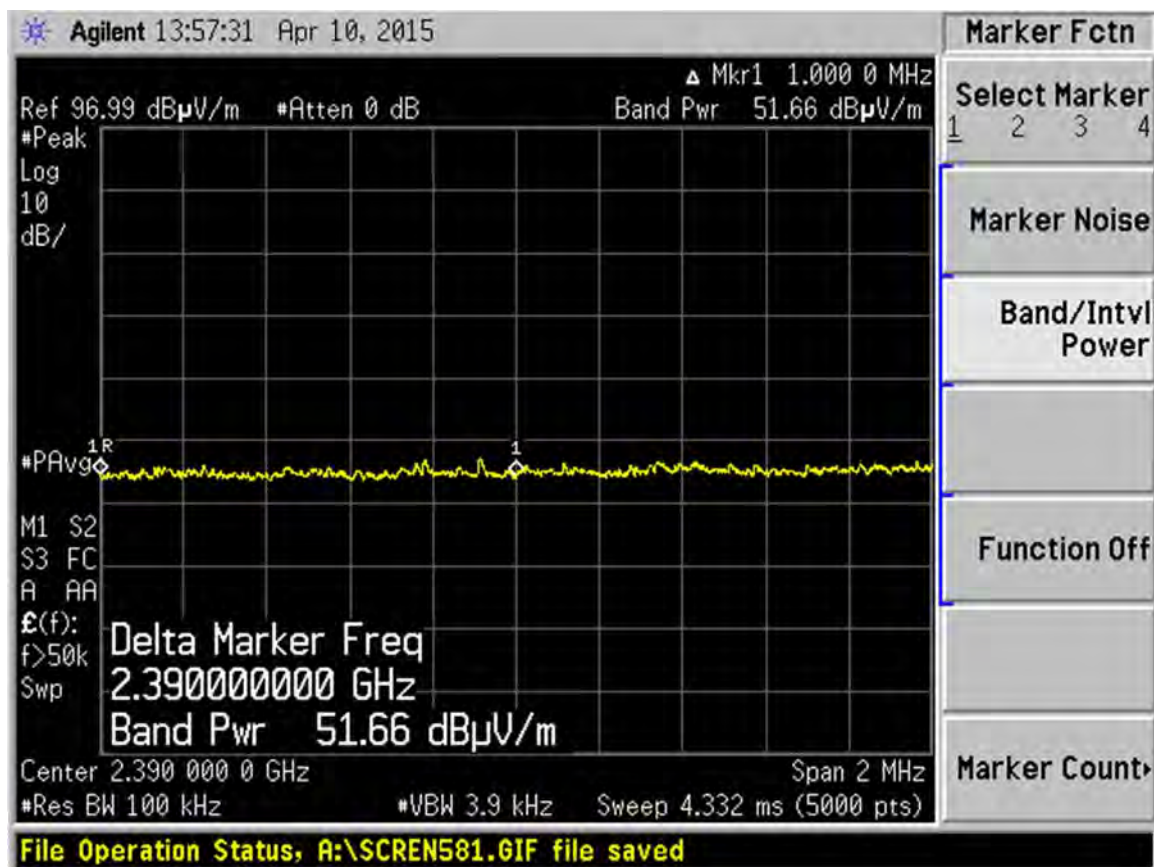
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

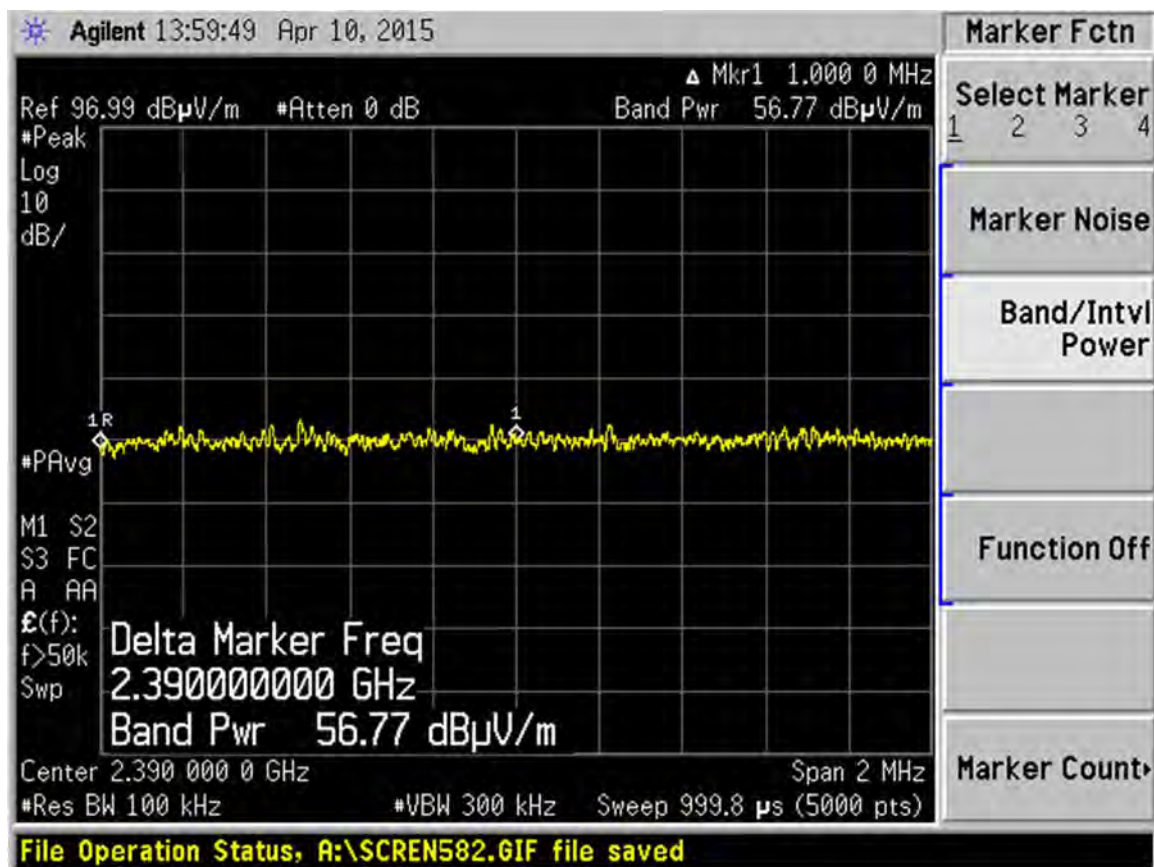


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



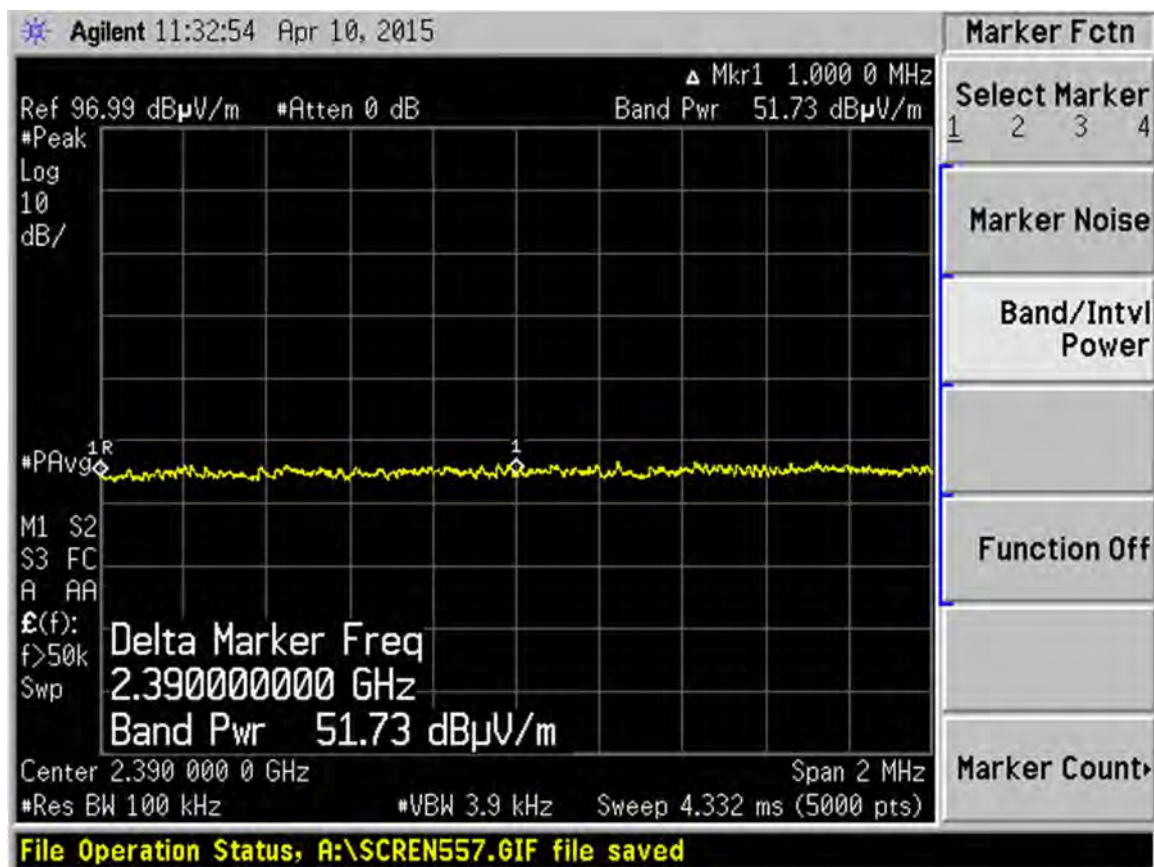
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

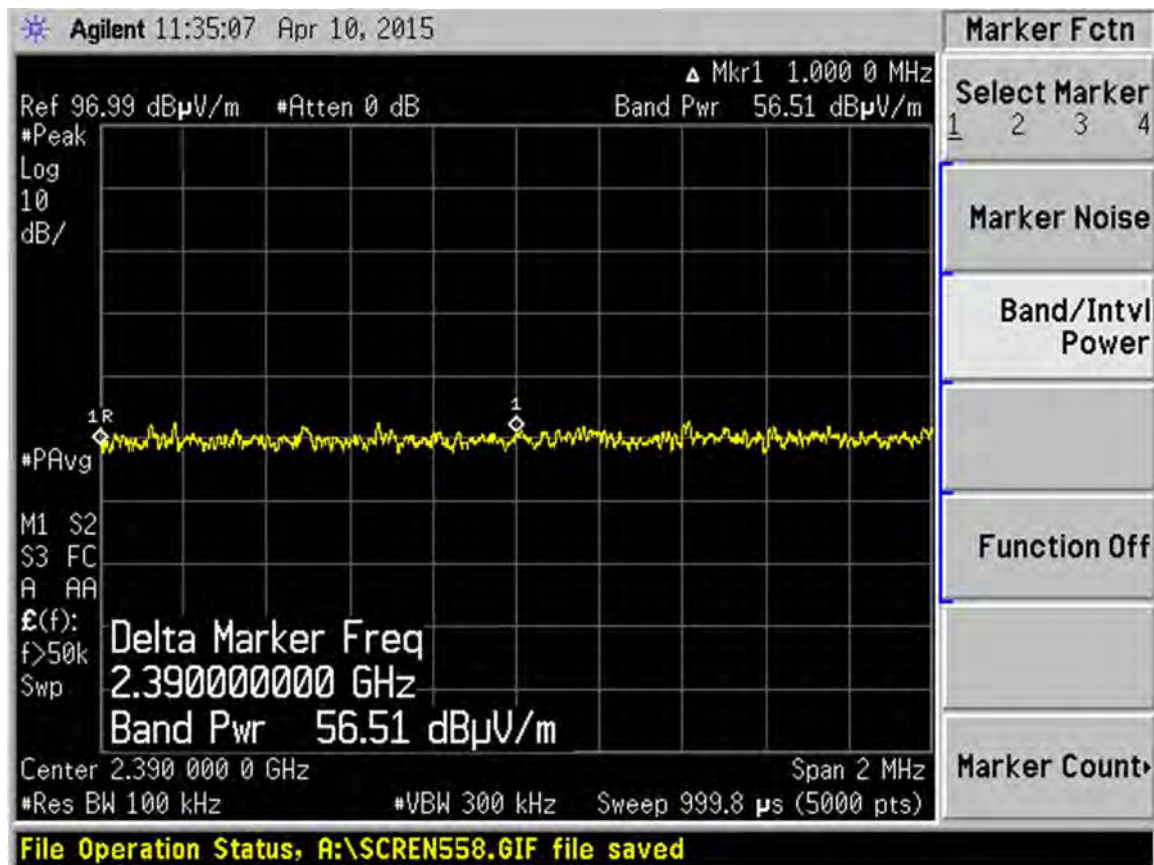


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



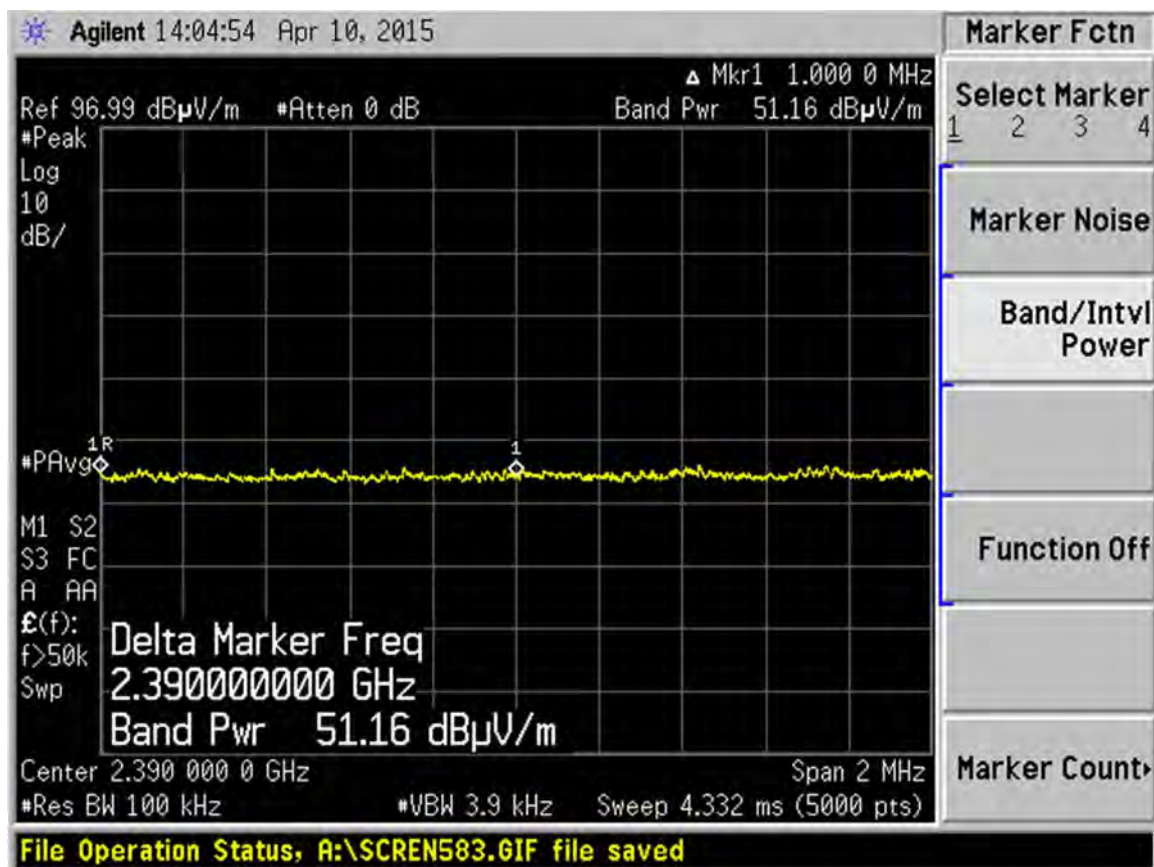
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

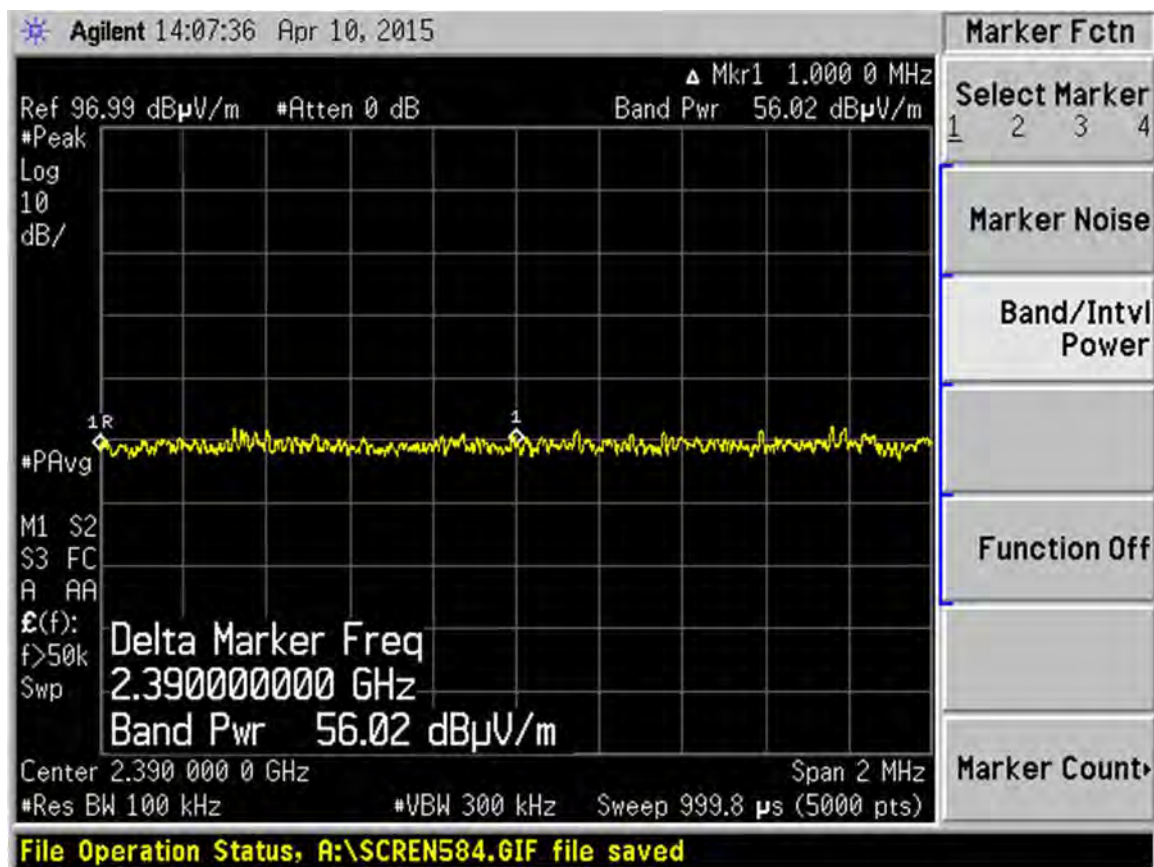


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



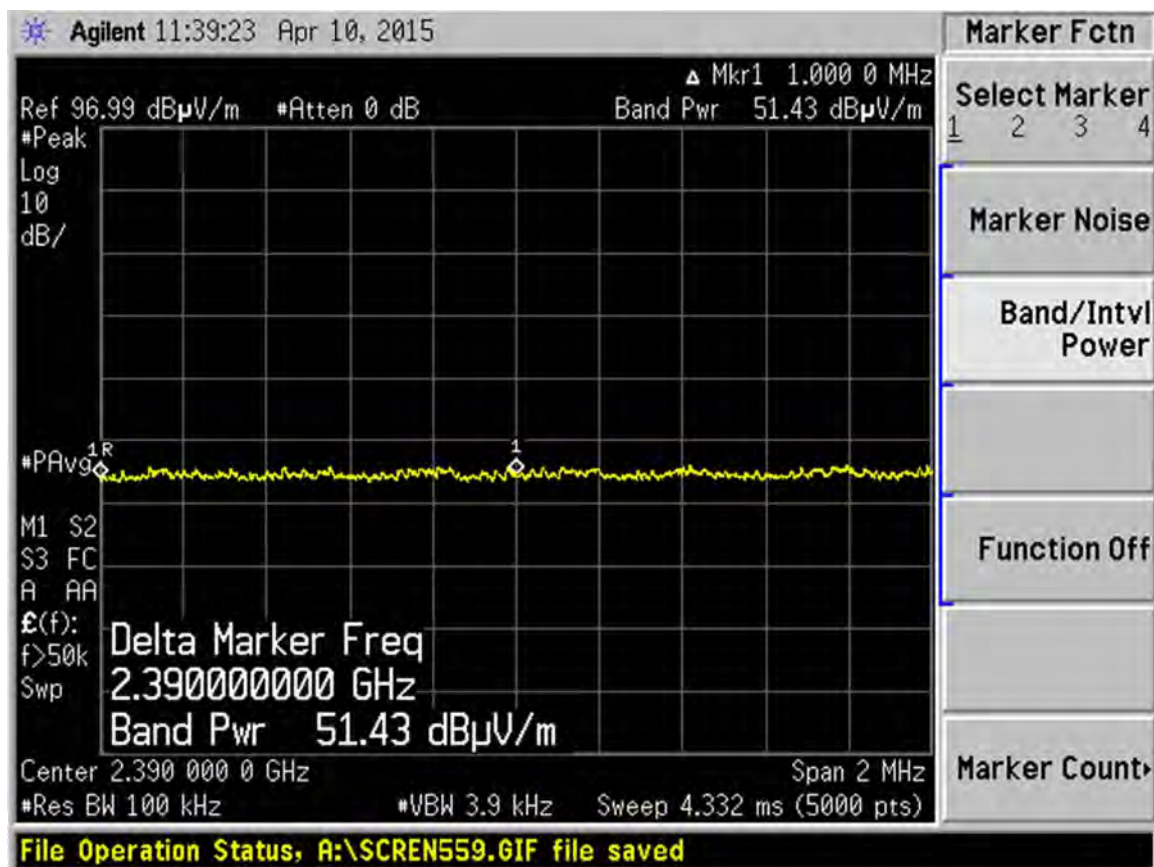
Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

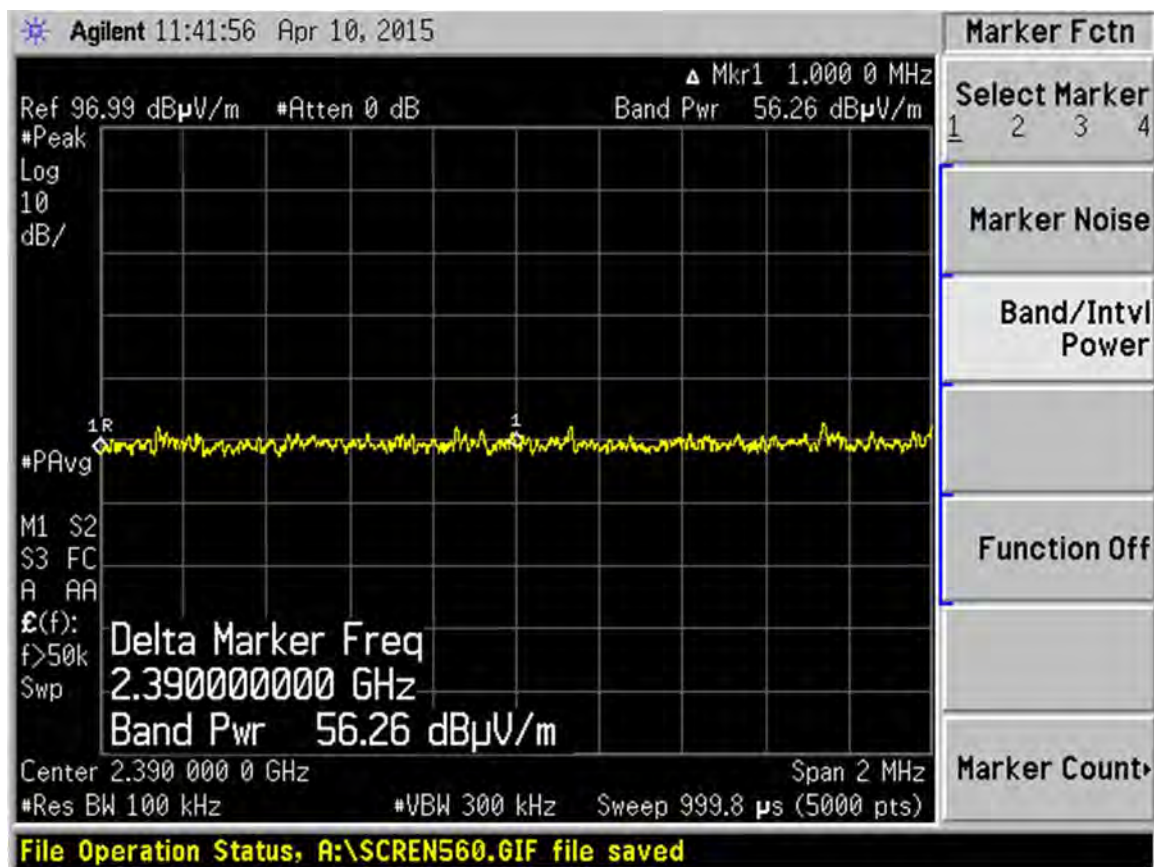


Test Date: 04-10-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, F
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



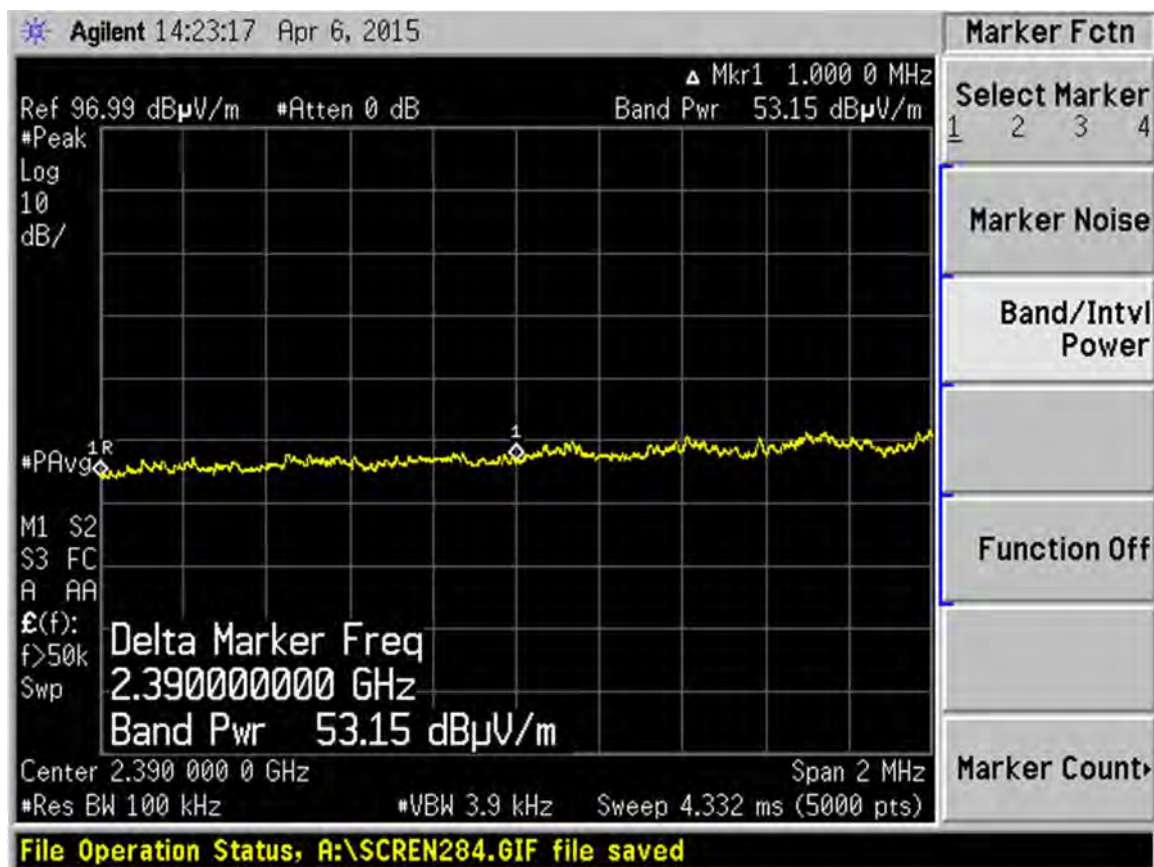
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 11

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

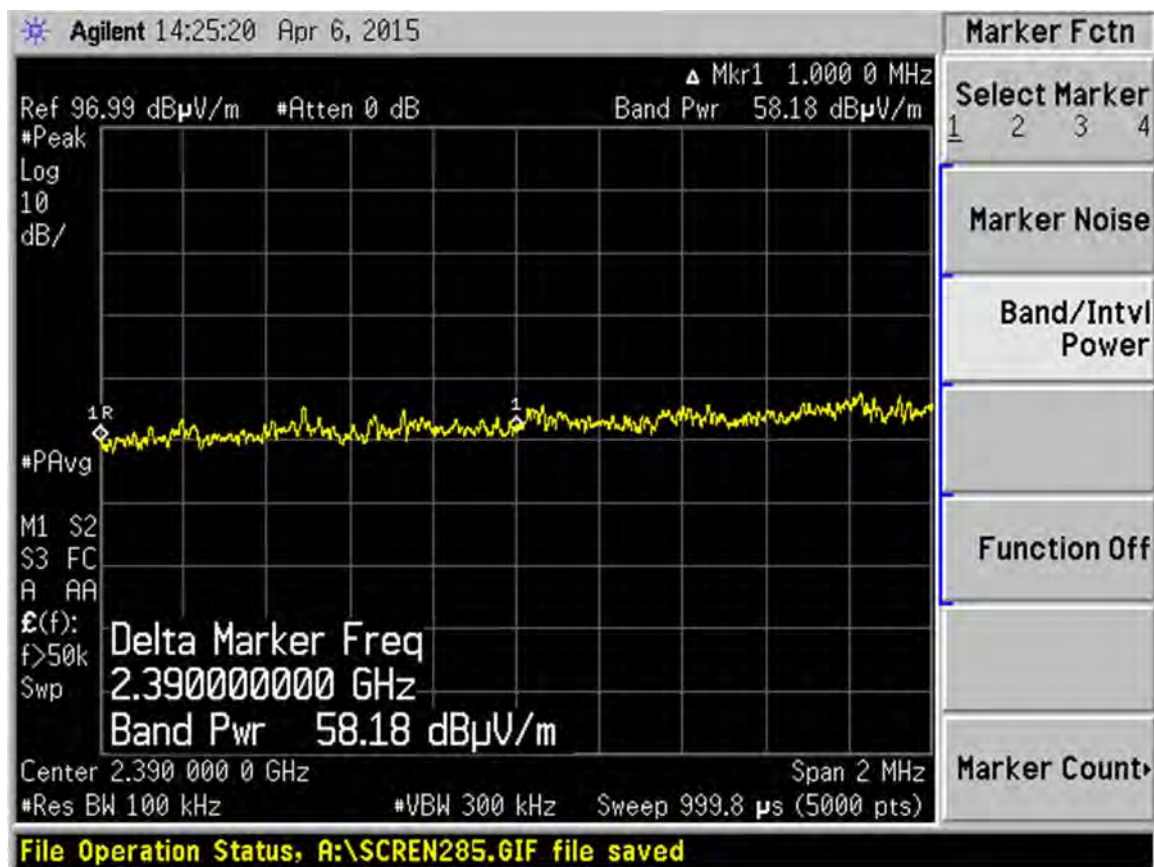


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 11

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



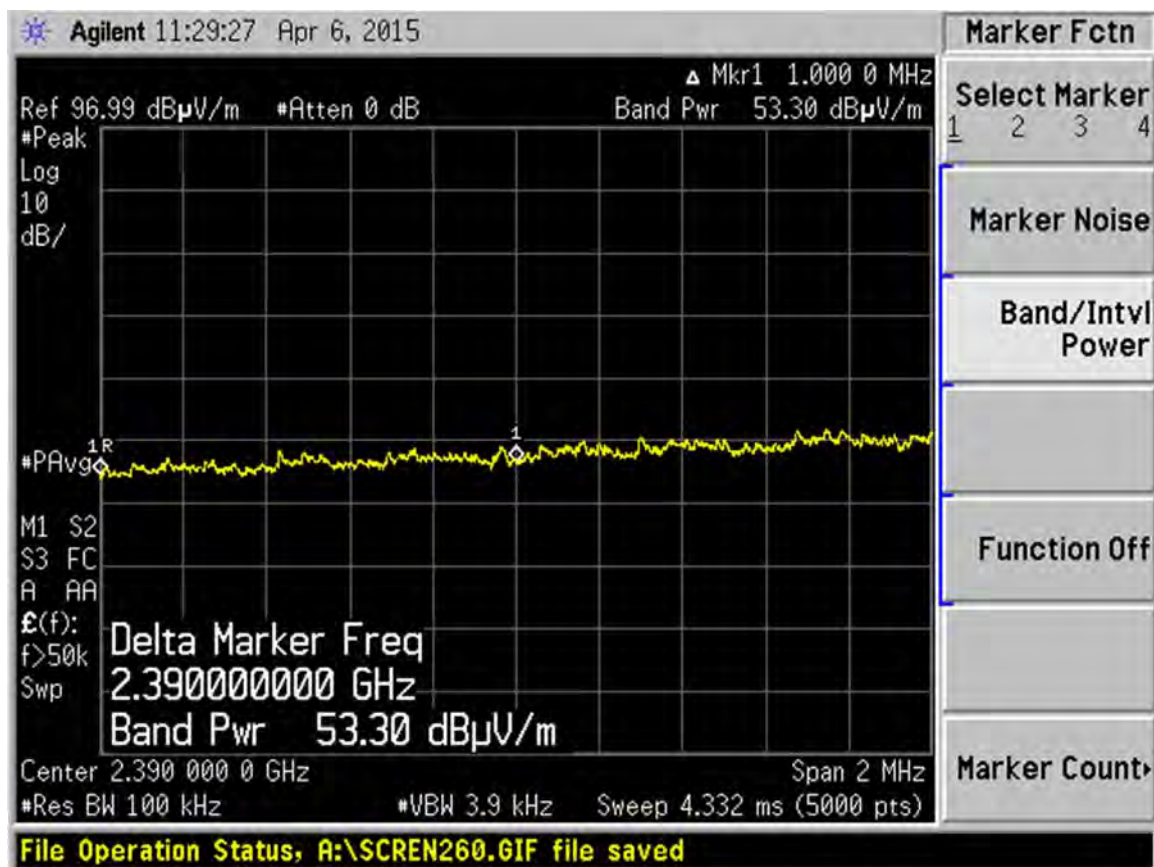
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 11

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

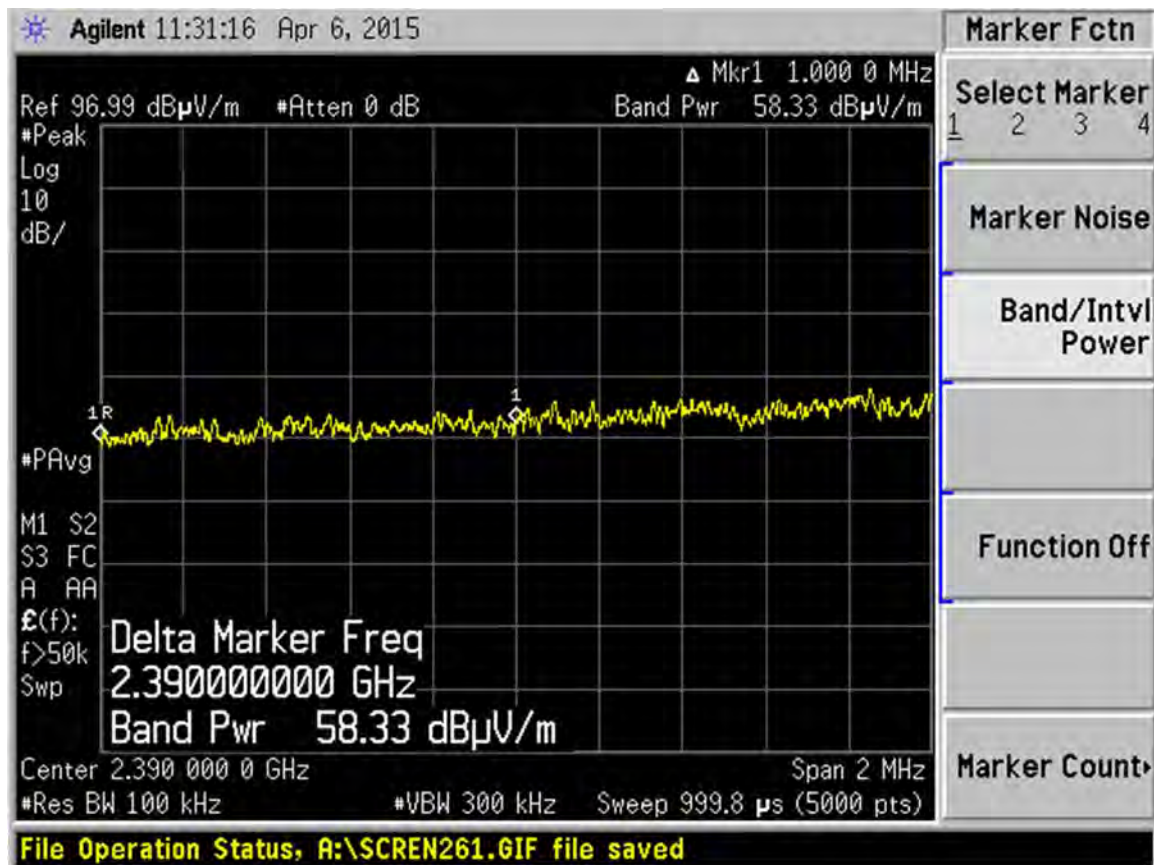


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 11

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



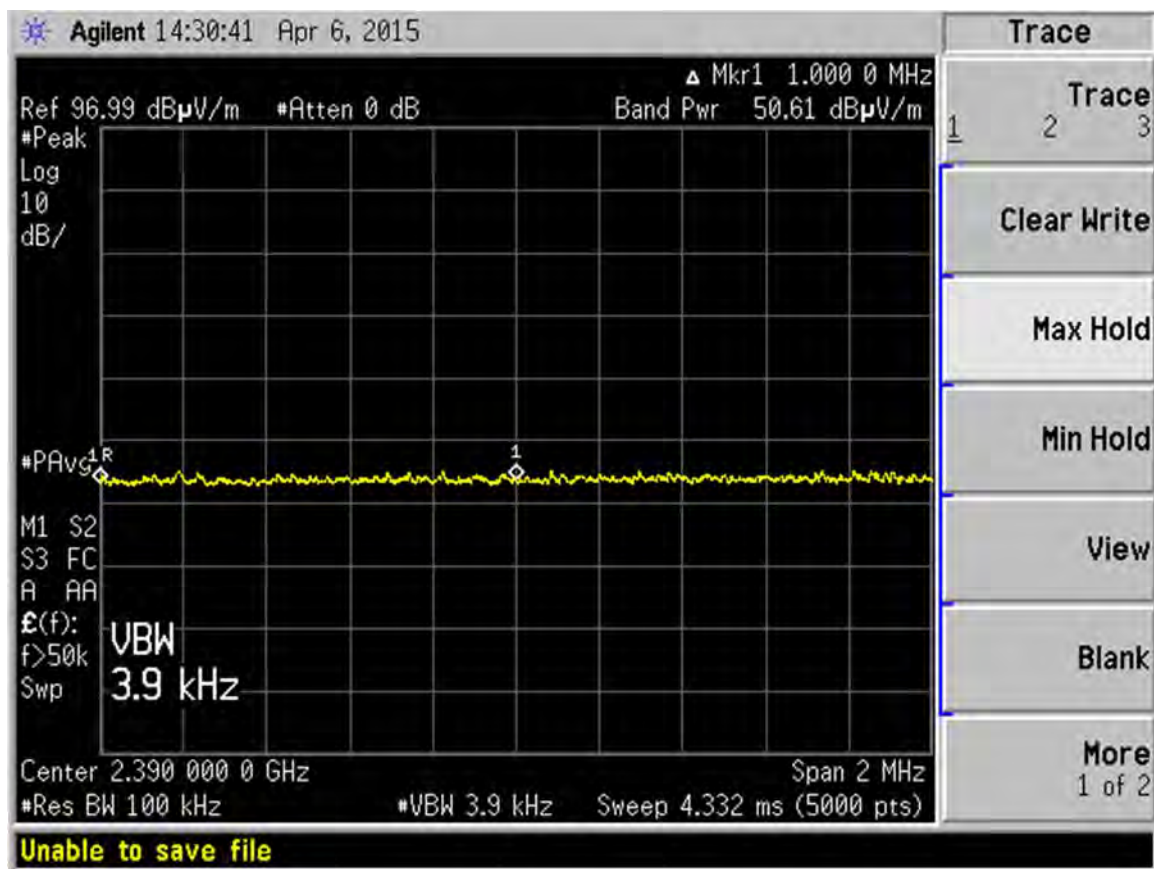
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

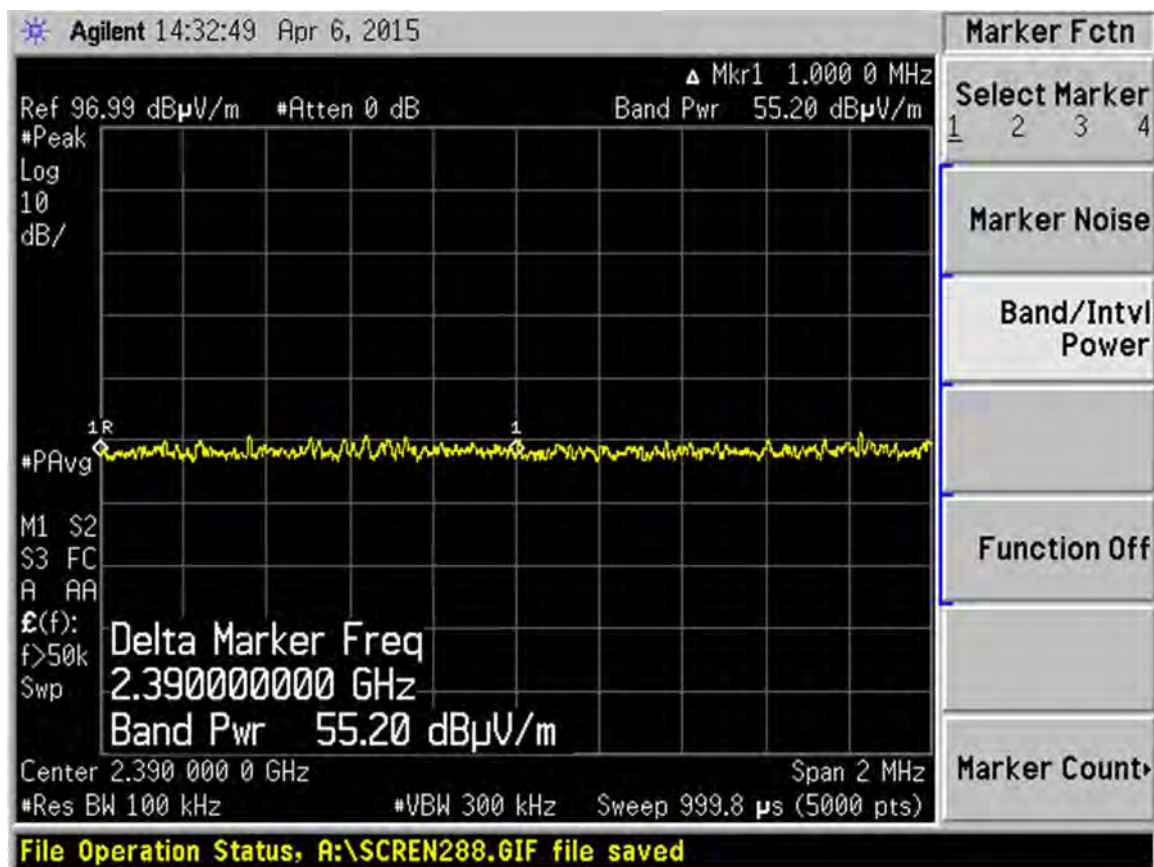


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



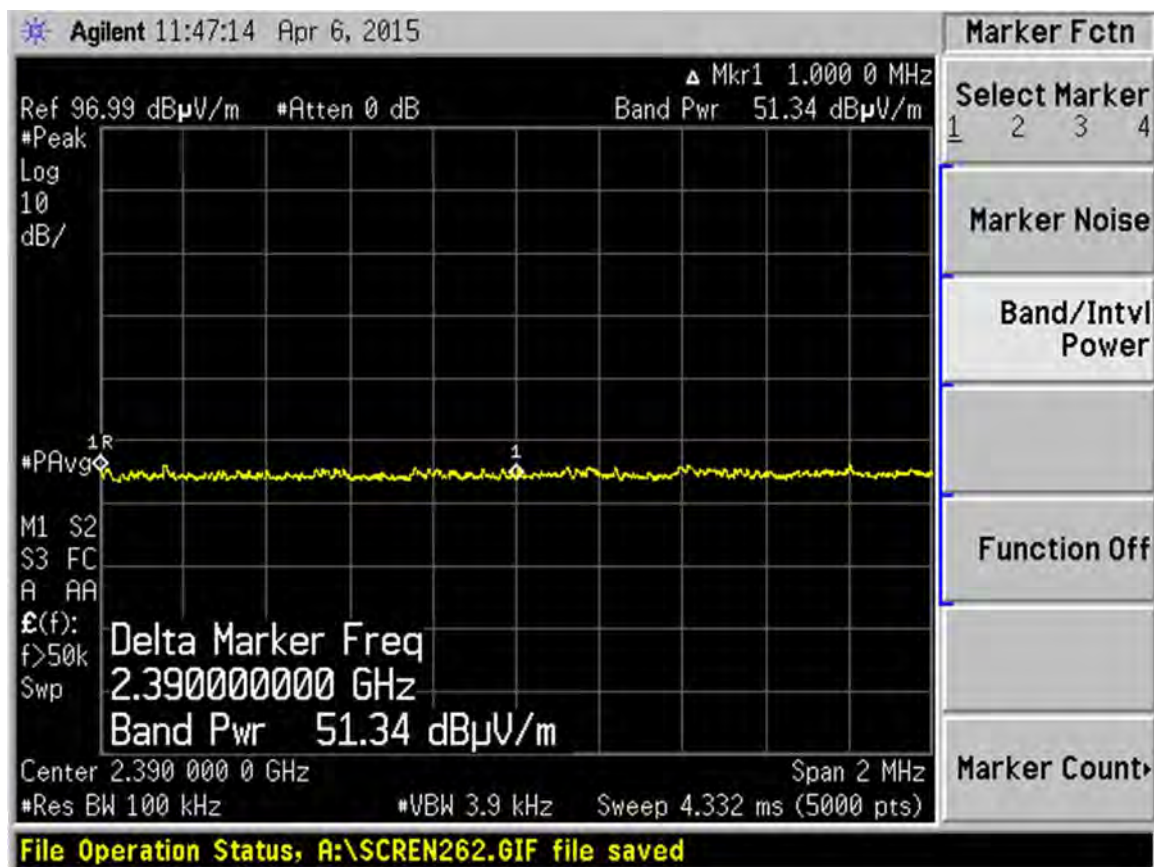
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

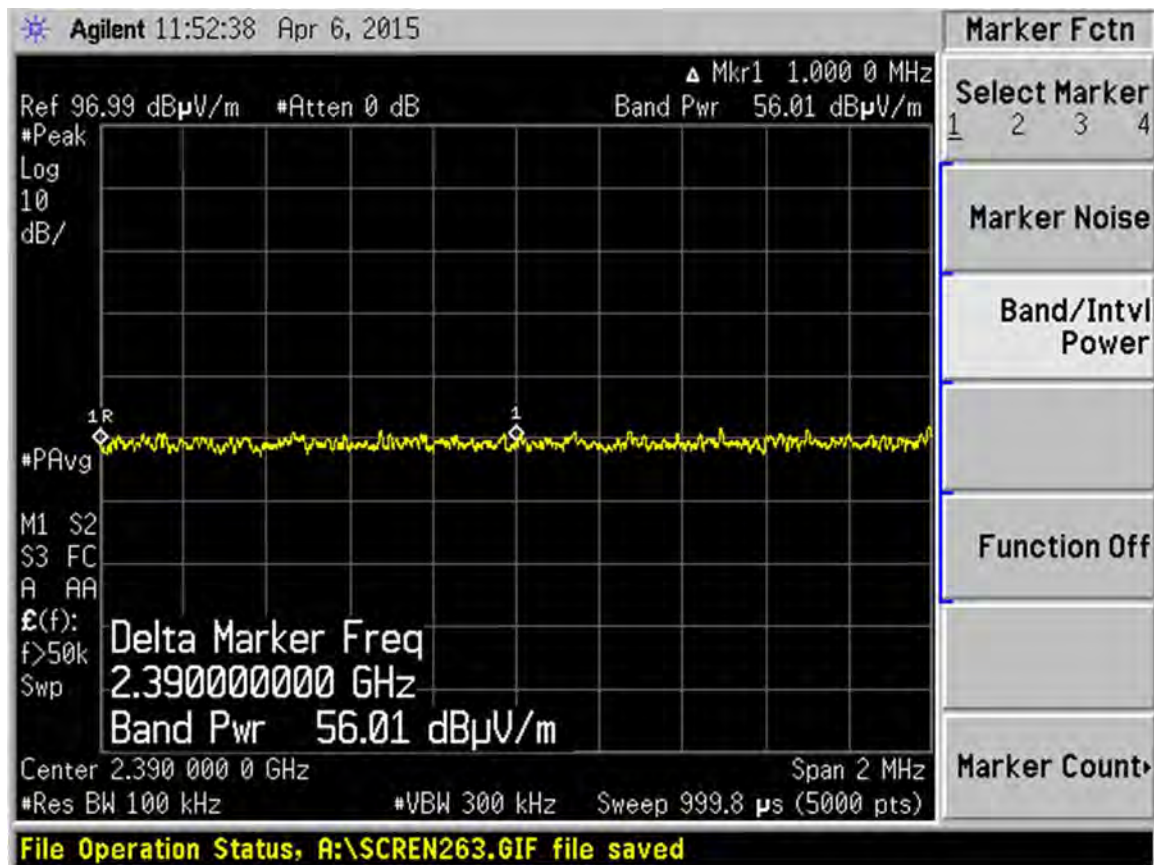


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



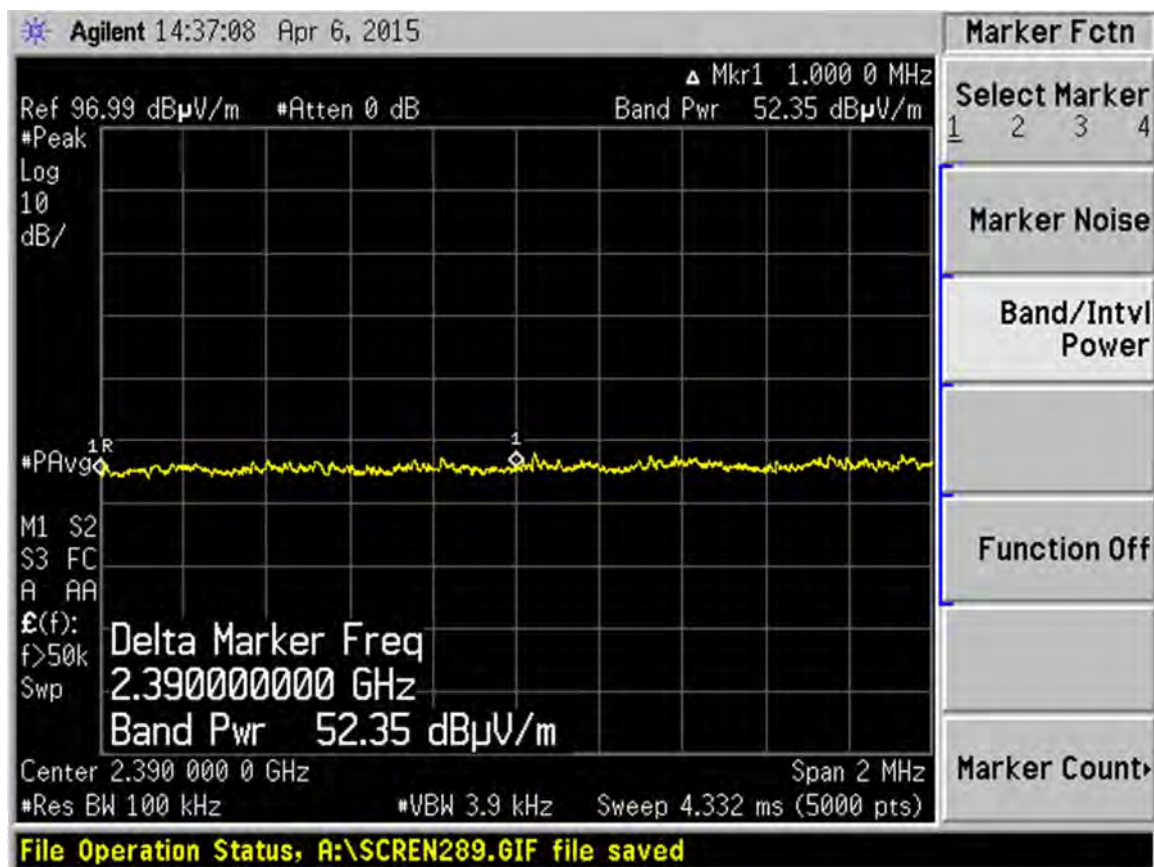
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

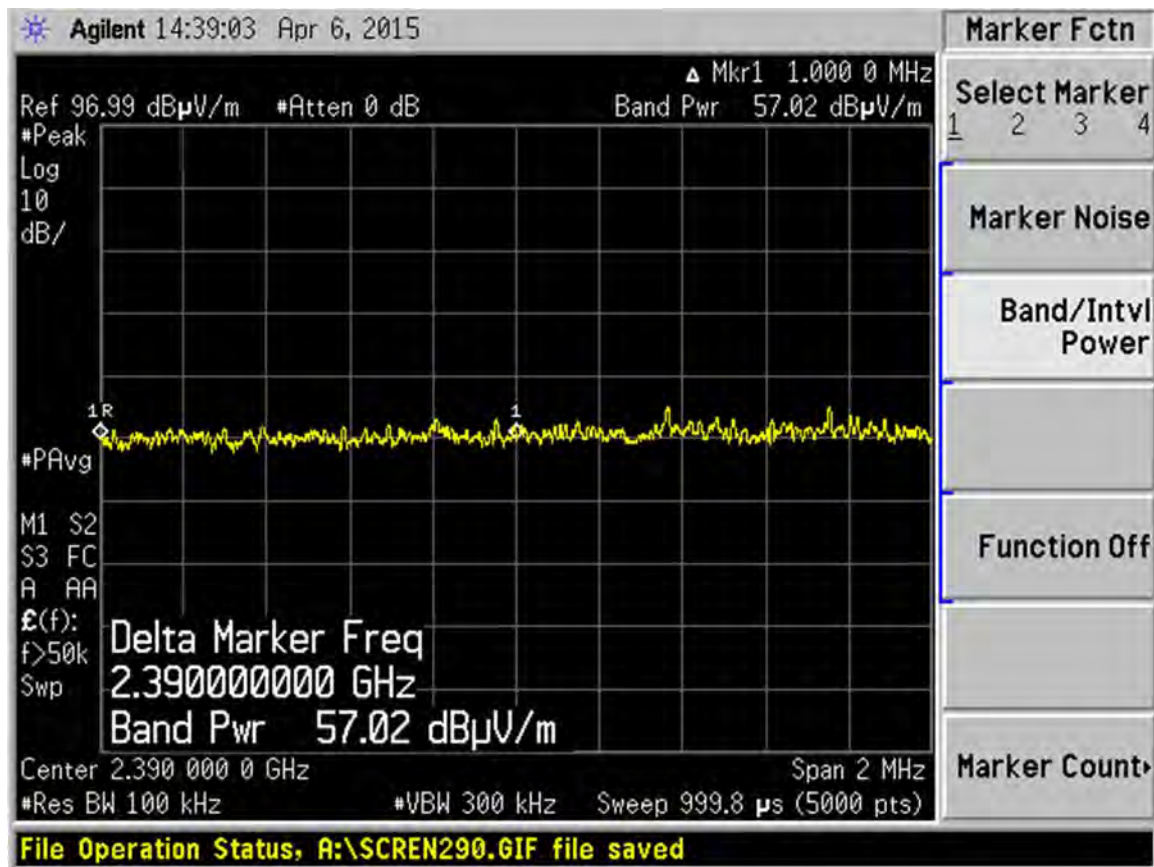


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



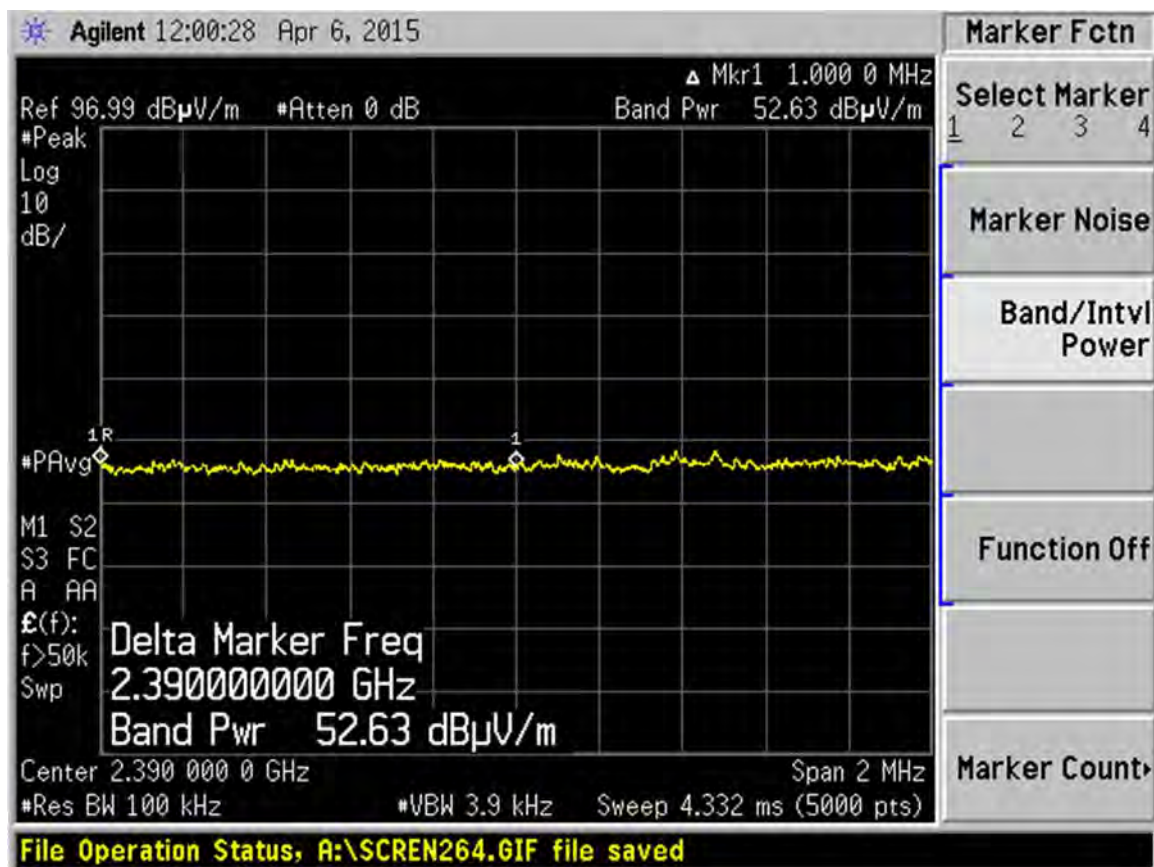
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

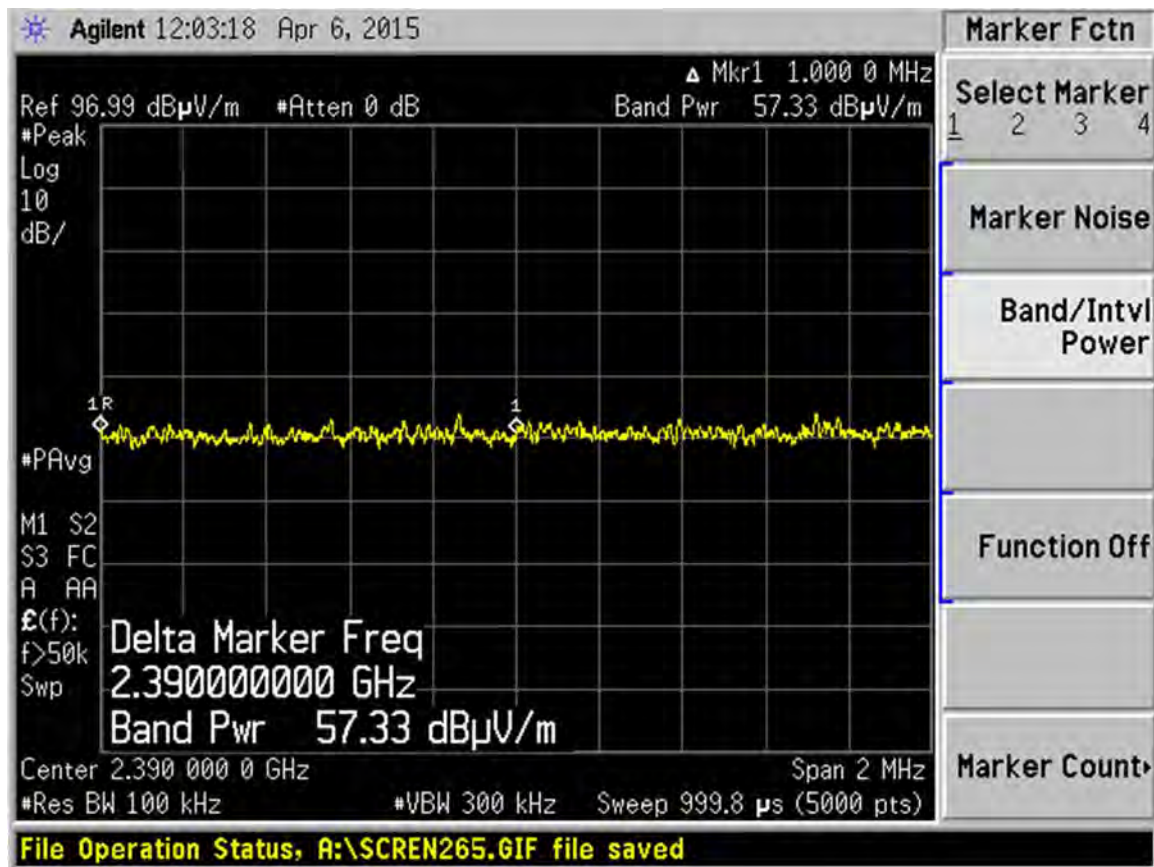


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



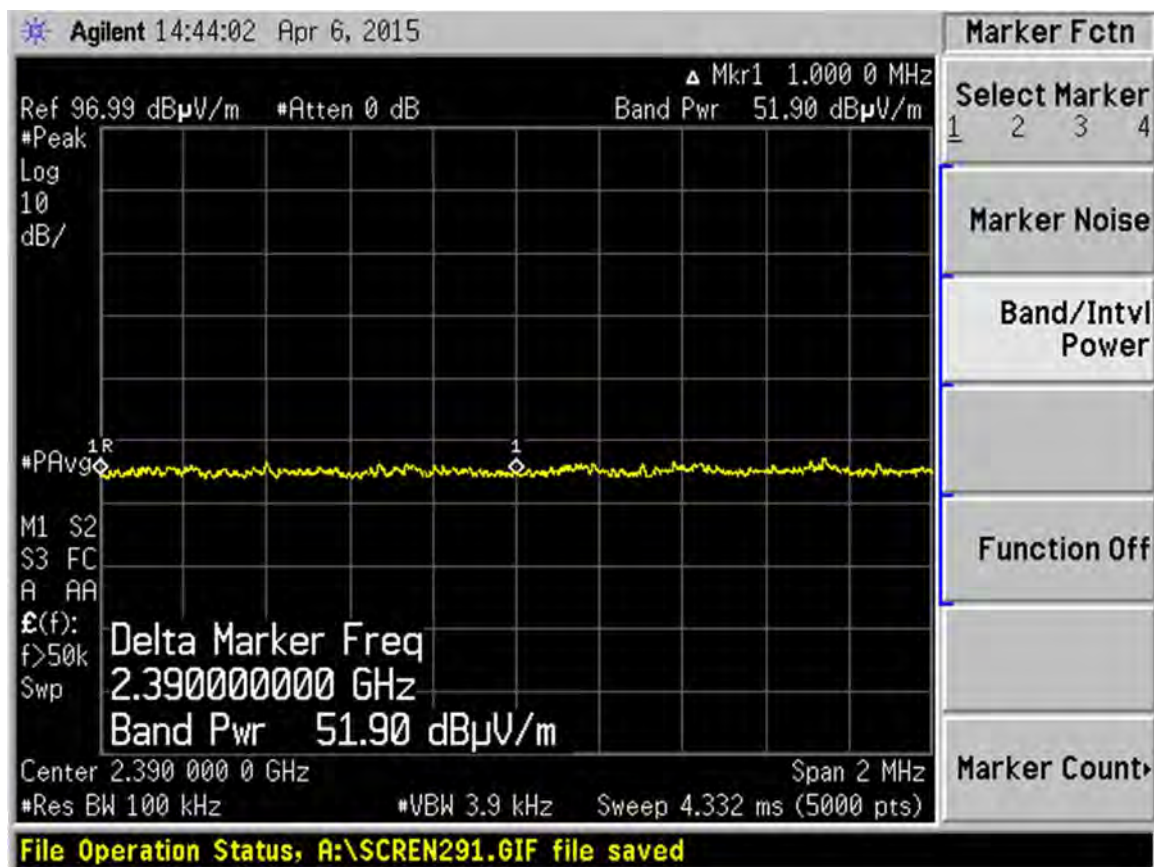
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

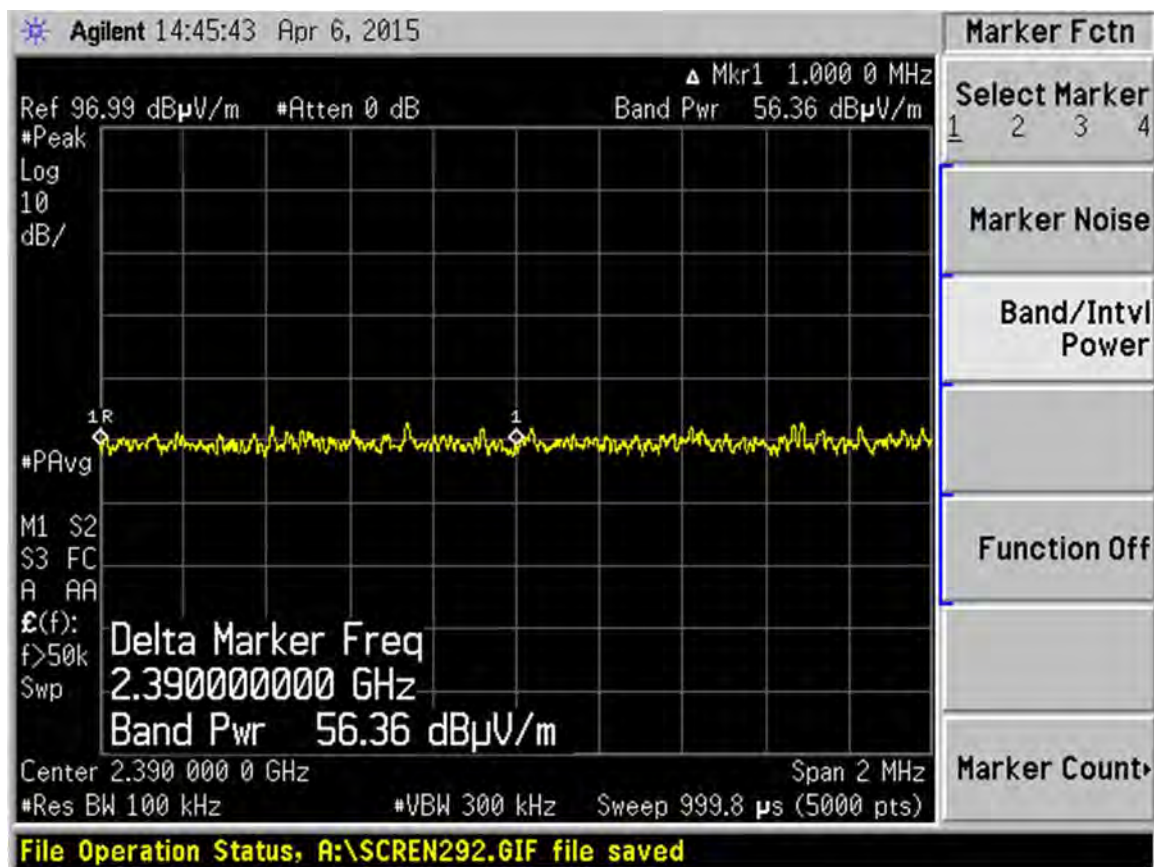


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



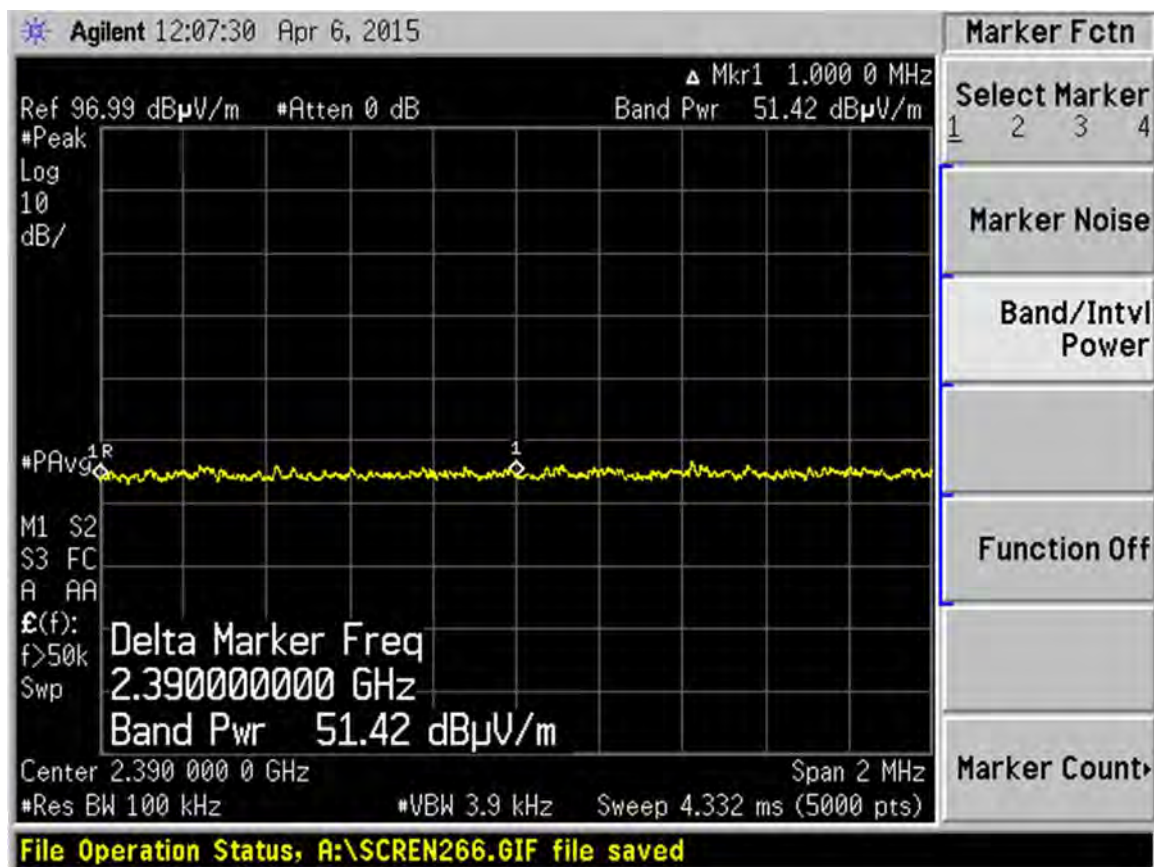
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

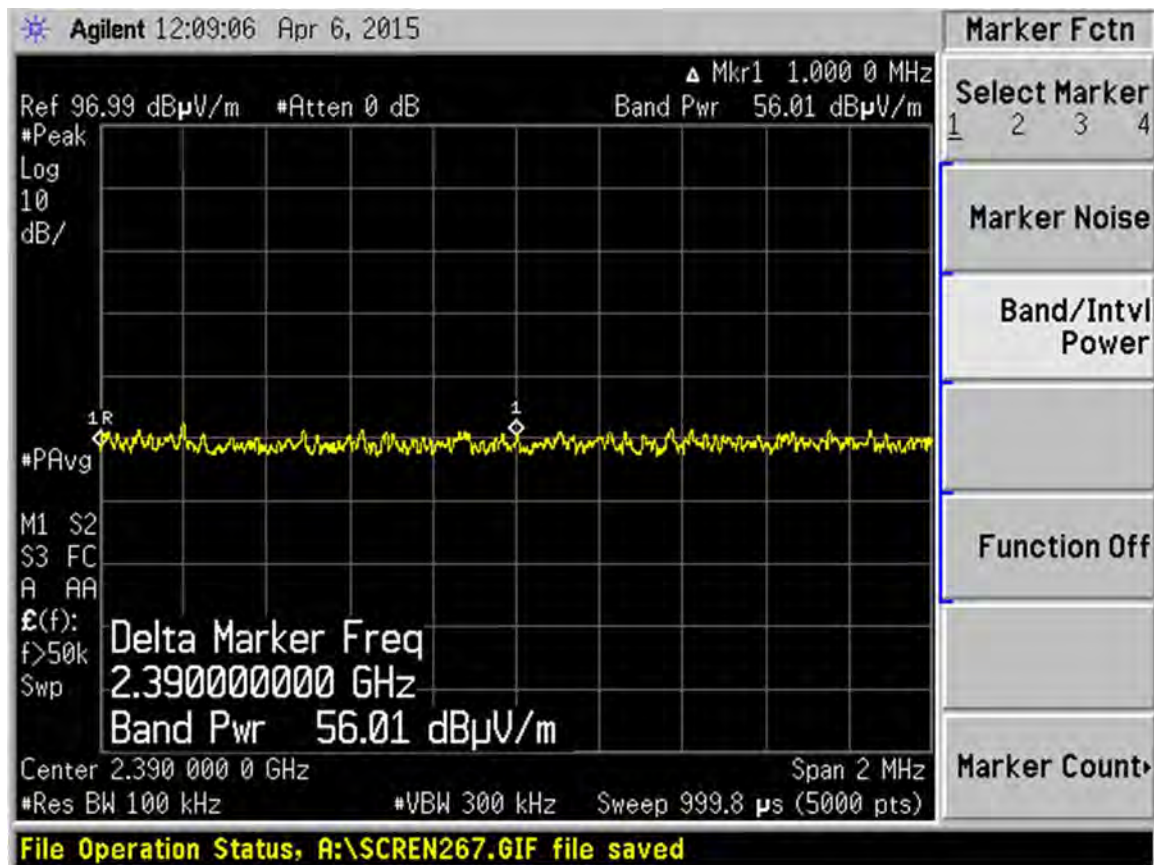


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



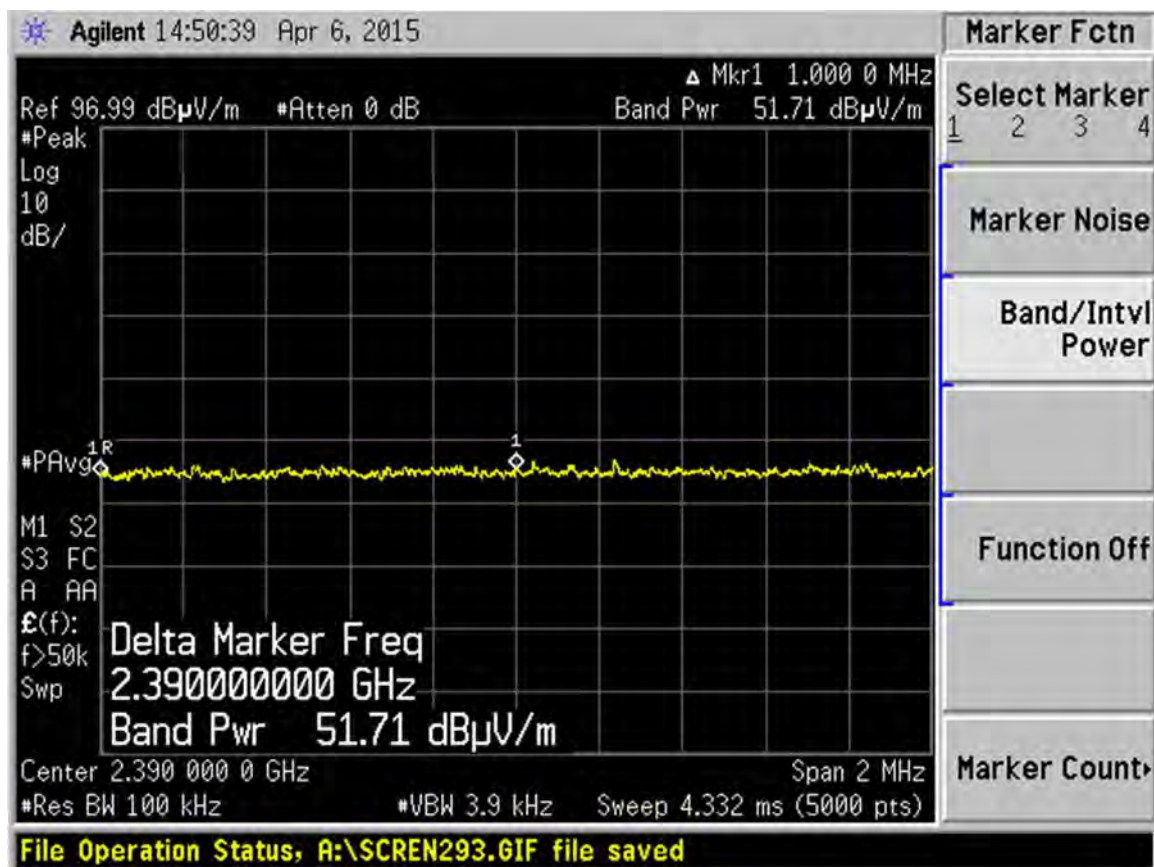
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

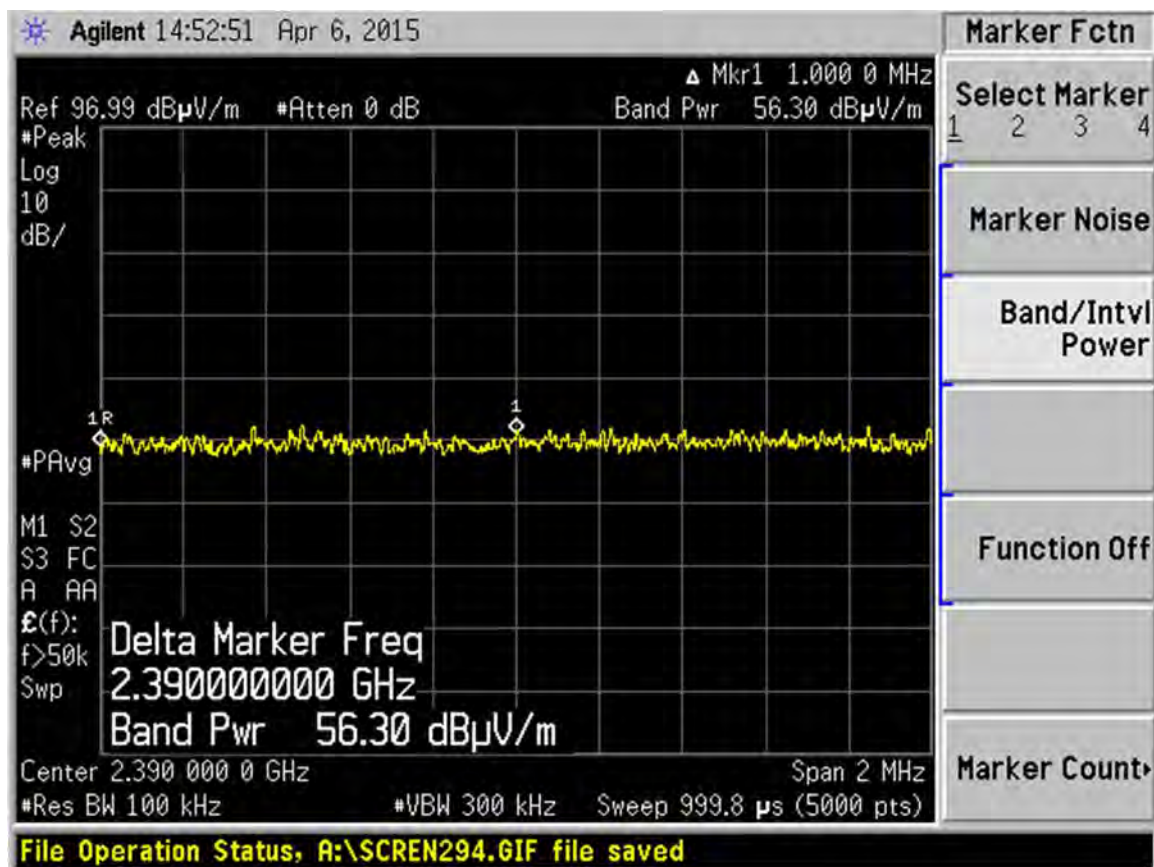


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



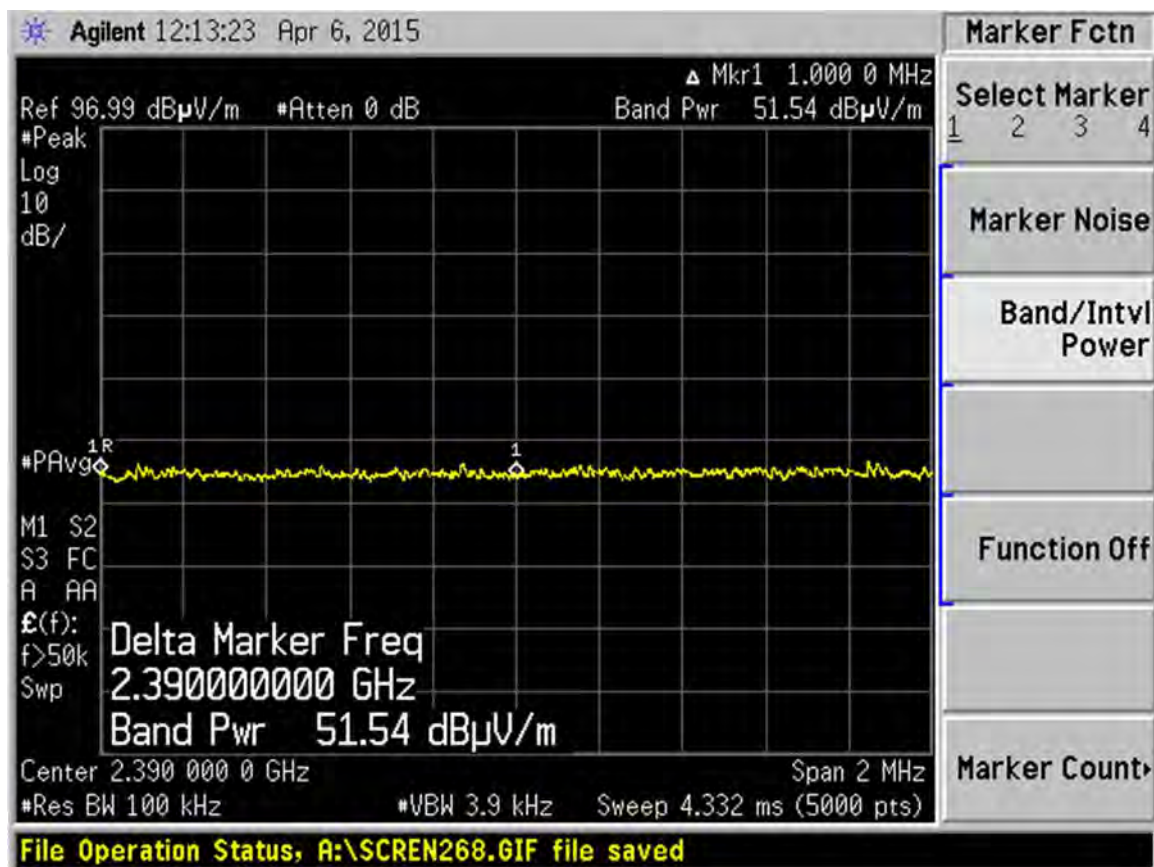
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

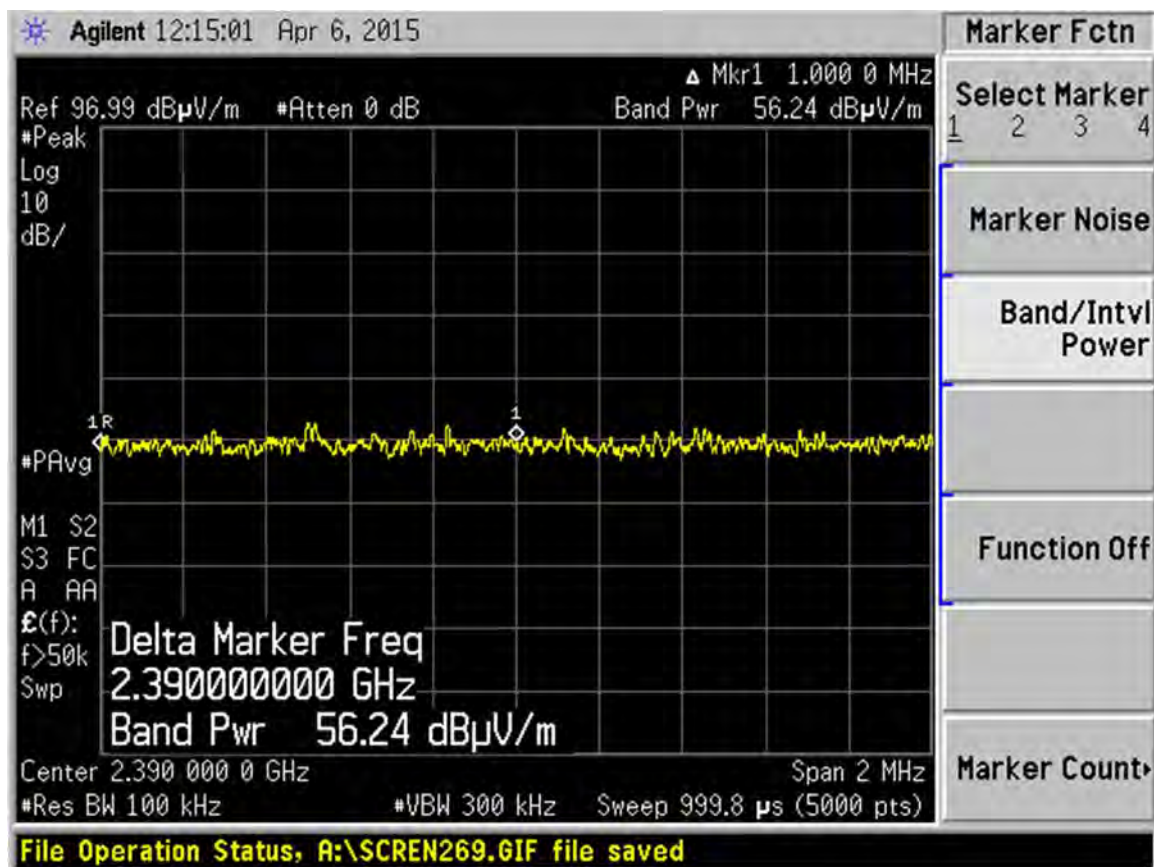


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 1, PIFA
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



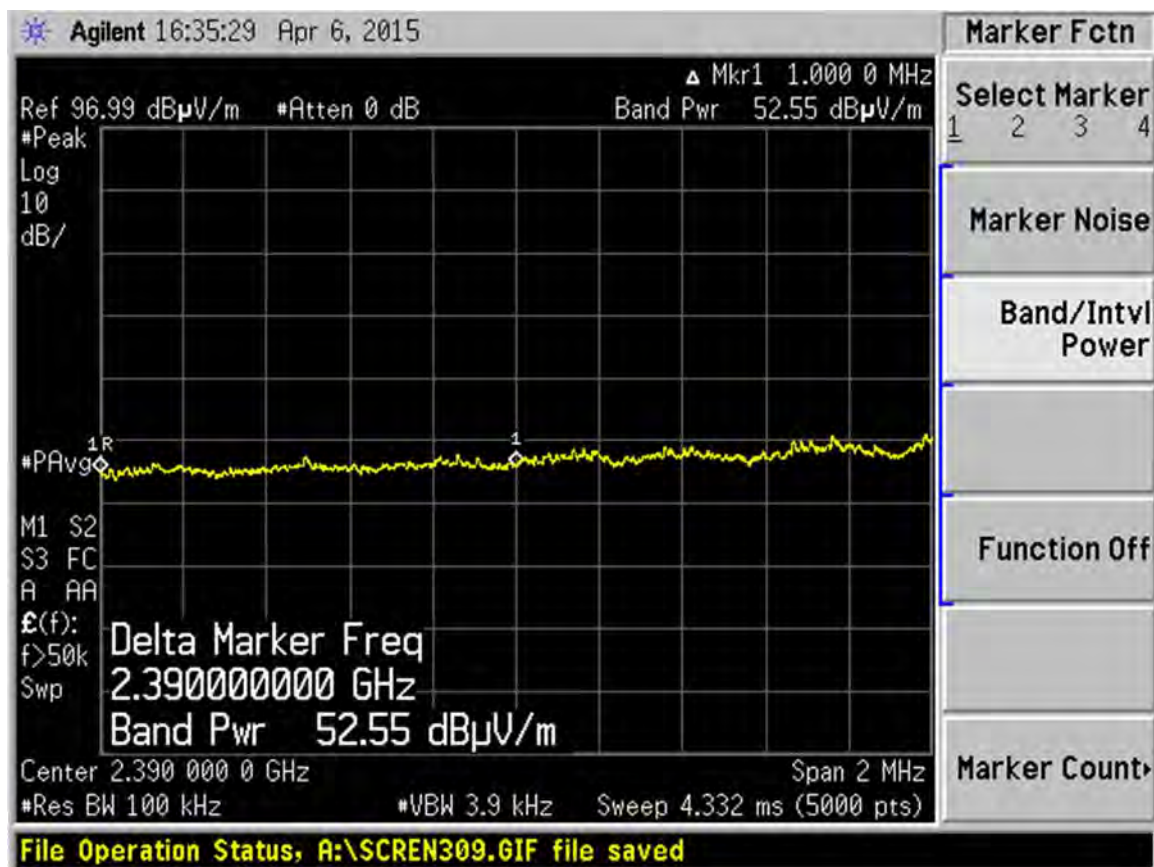
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 10

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

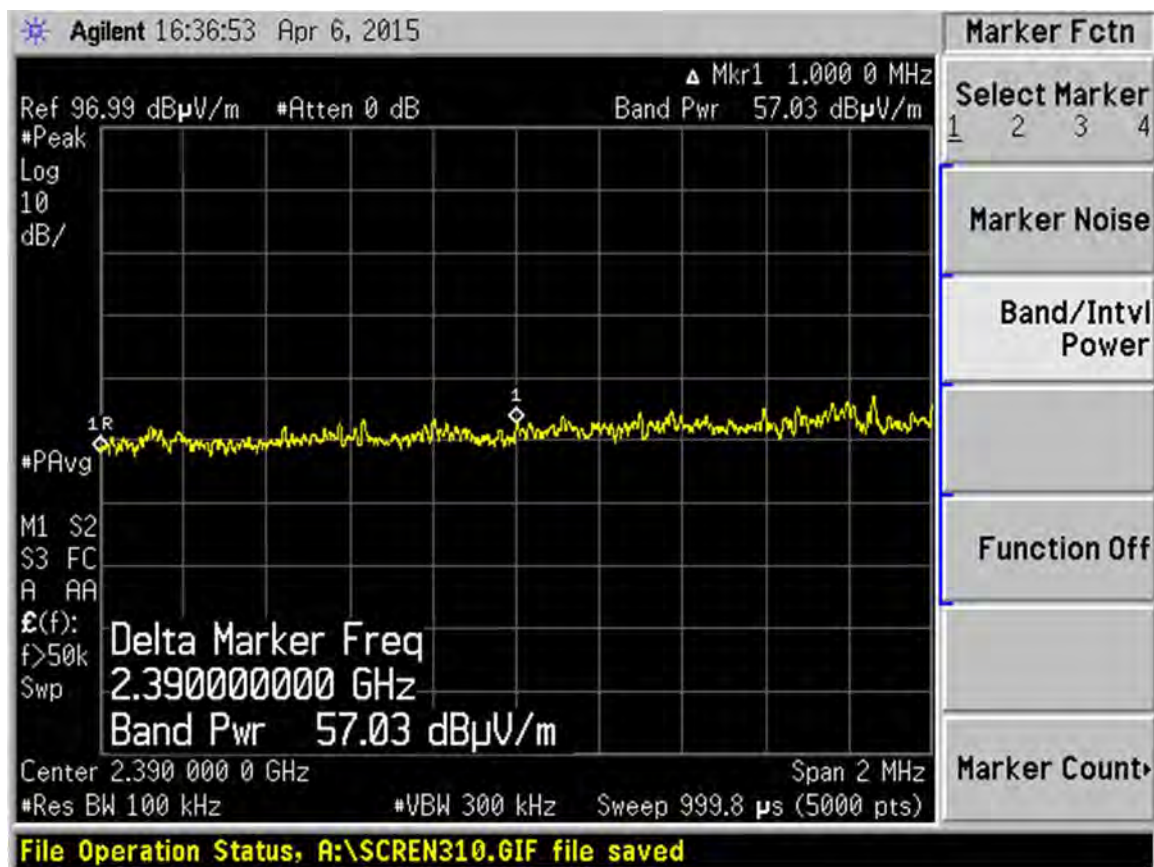


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 10

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



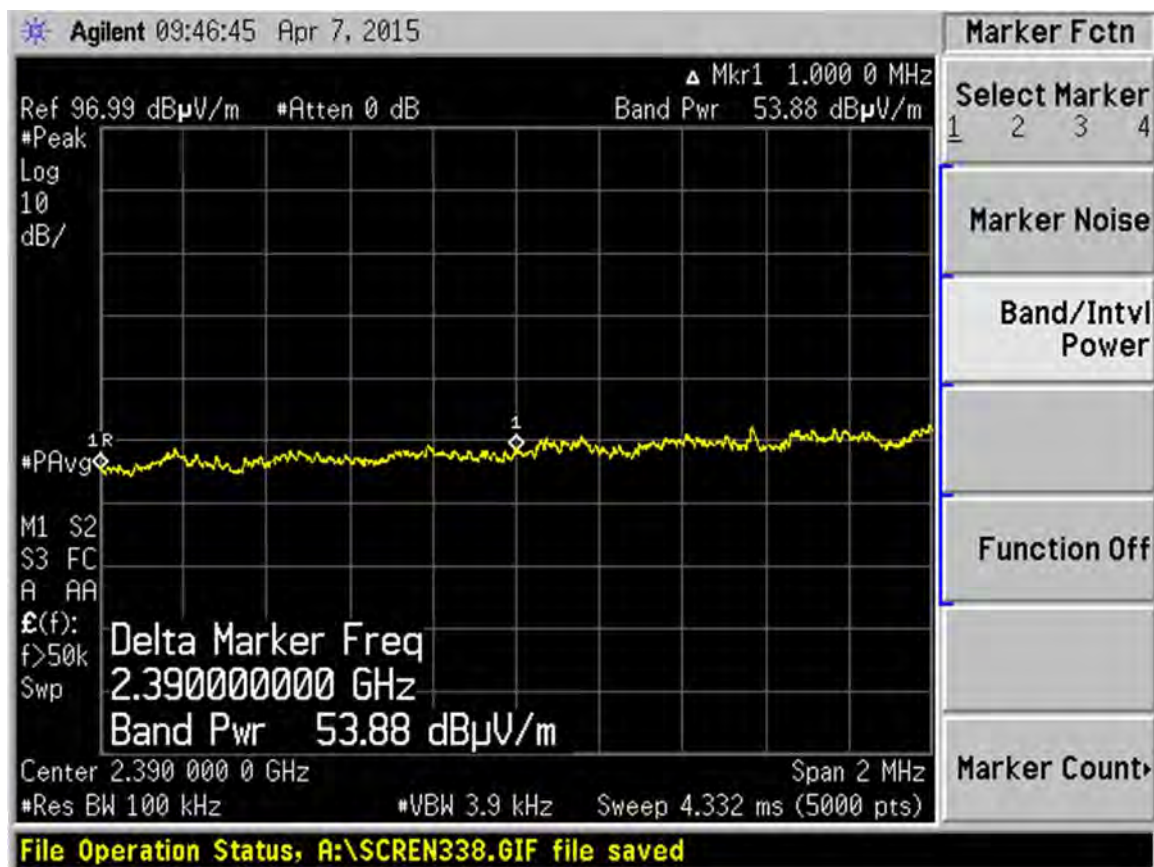
Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 11

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

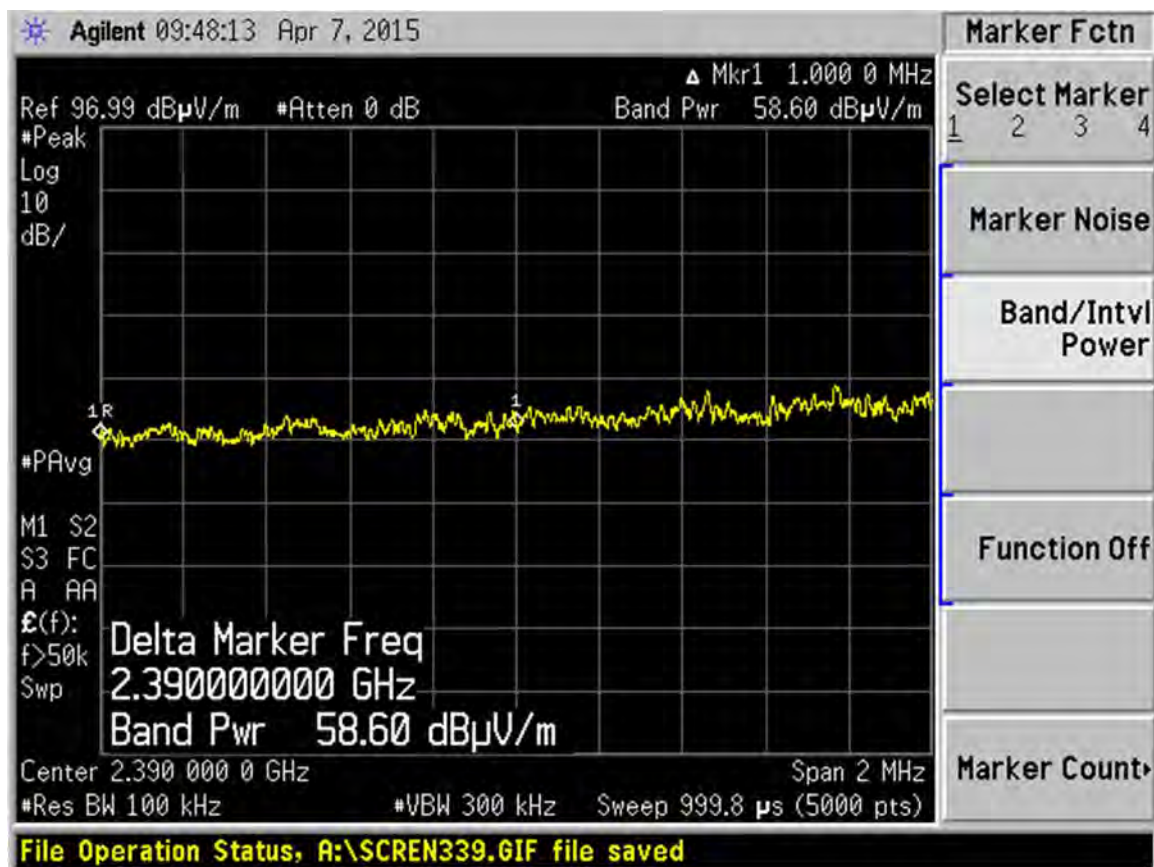


Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2412 MHz, channel 1
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 11

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



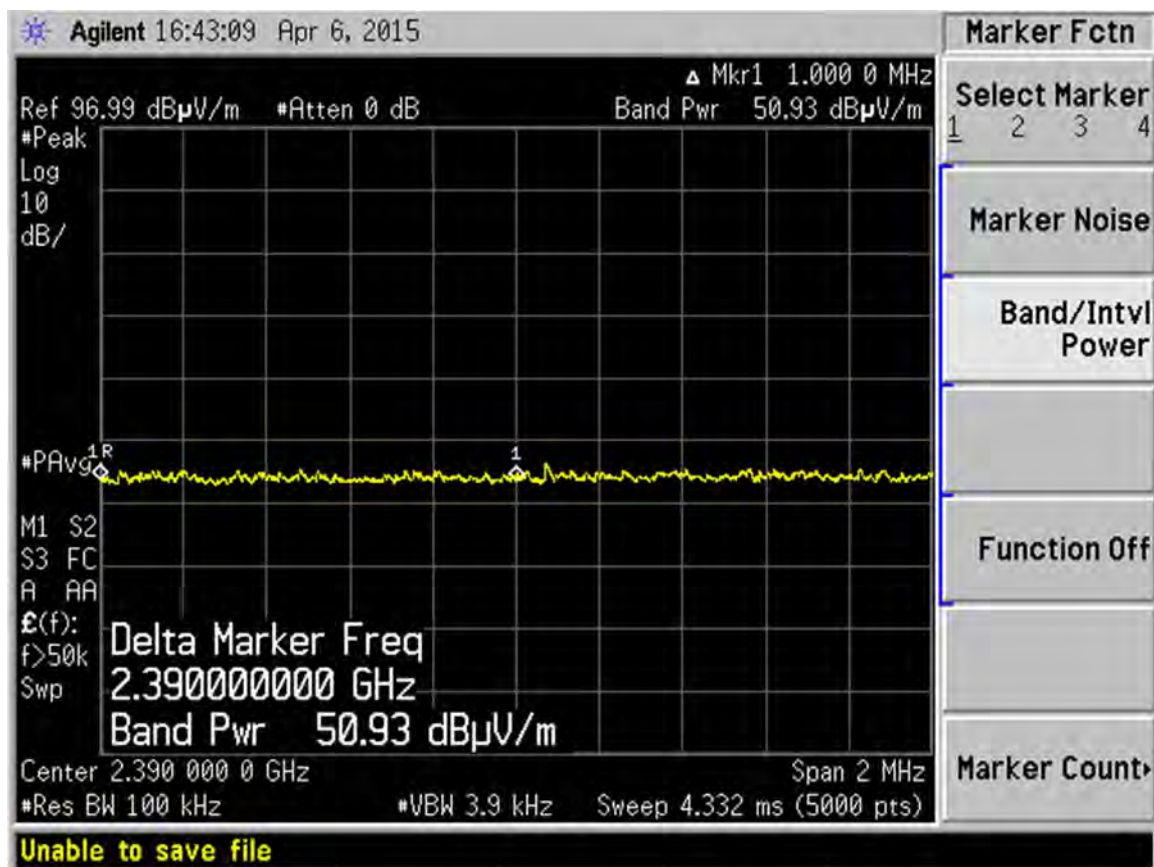
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

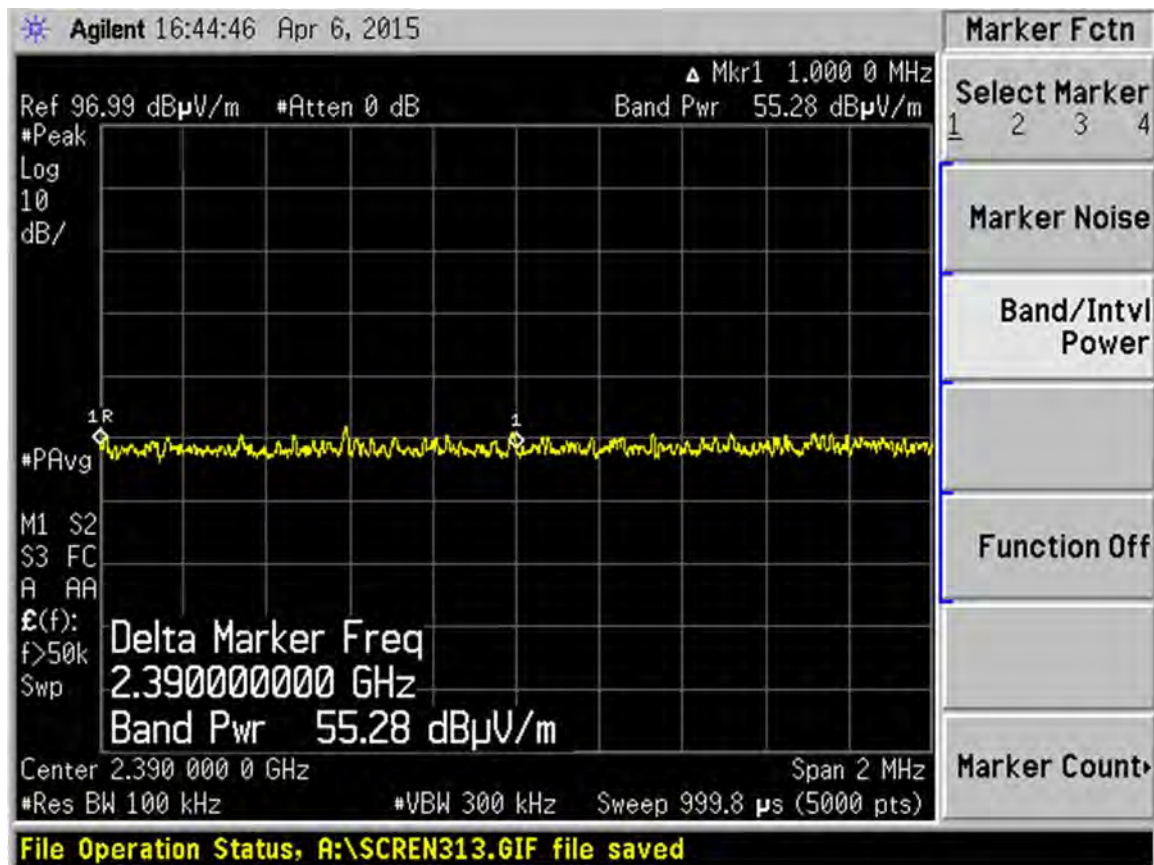


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



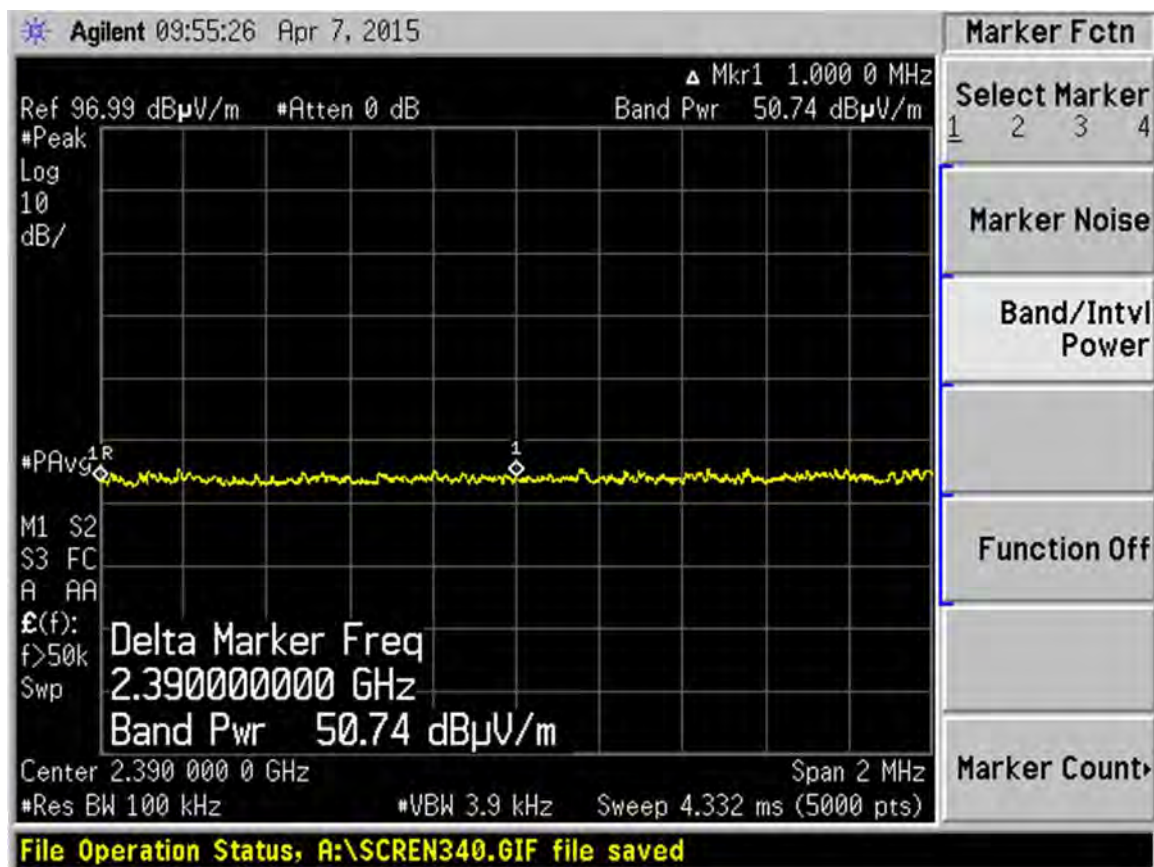
Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

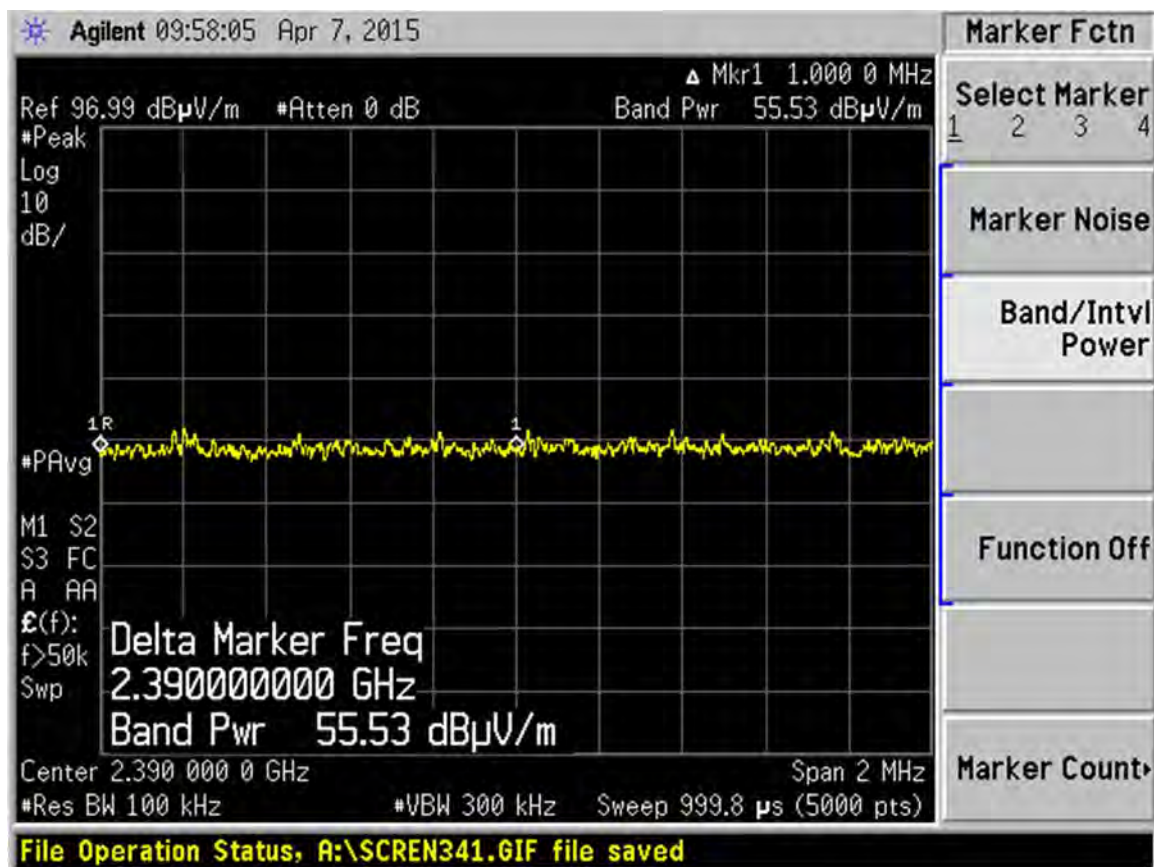


Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2417 MHz, channel 2
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 14

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



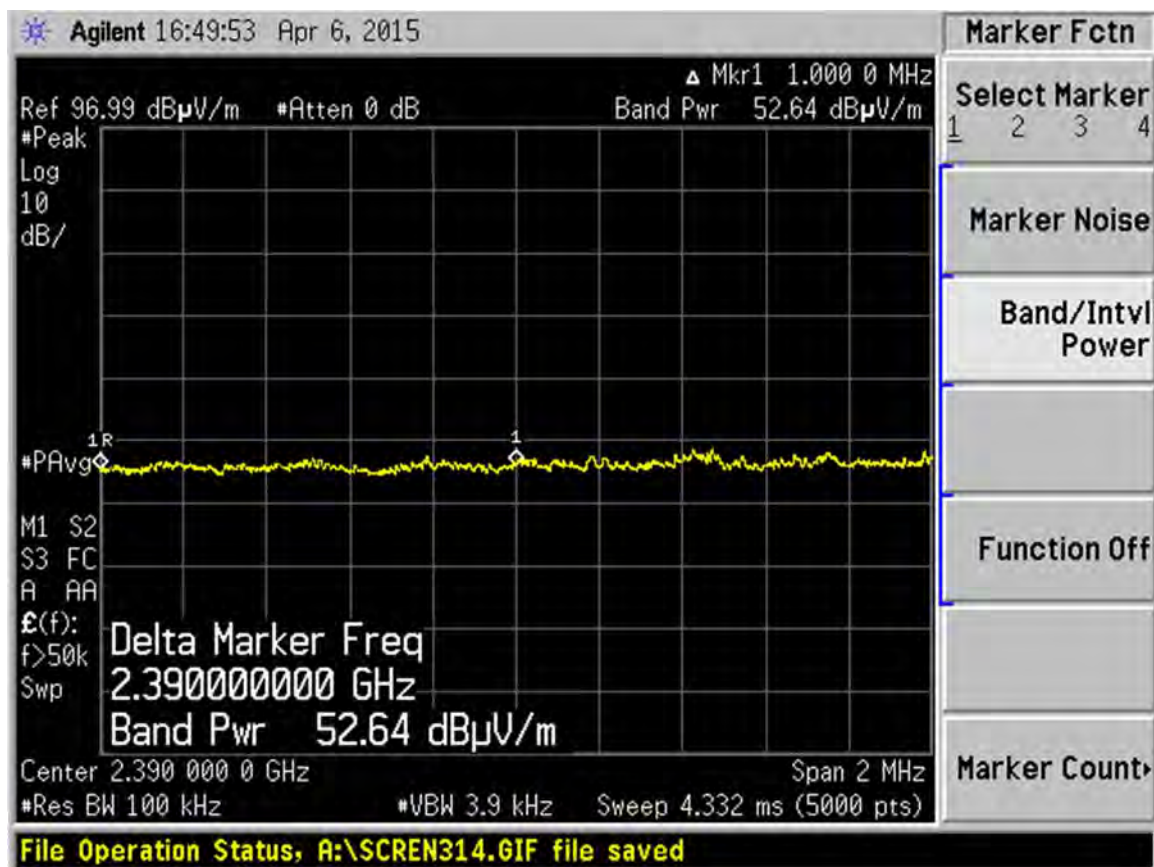
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

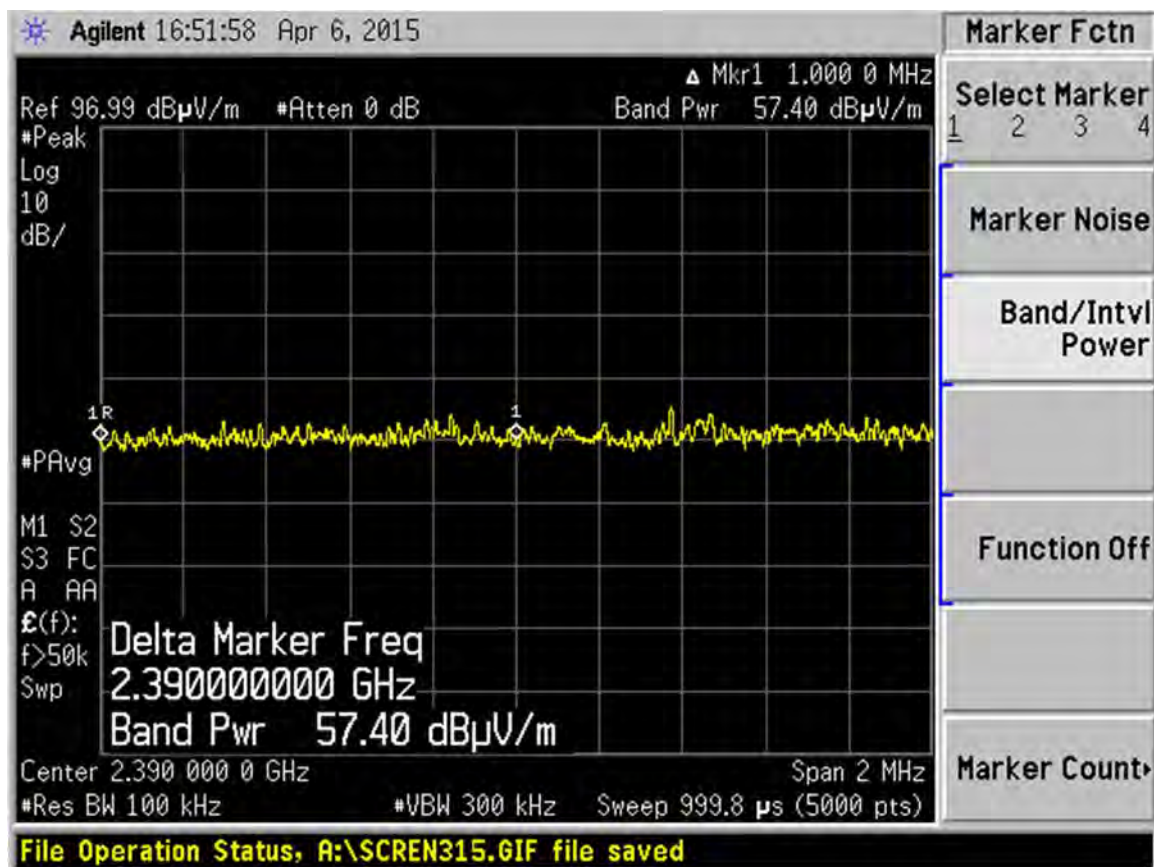


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



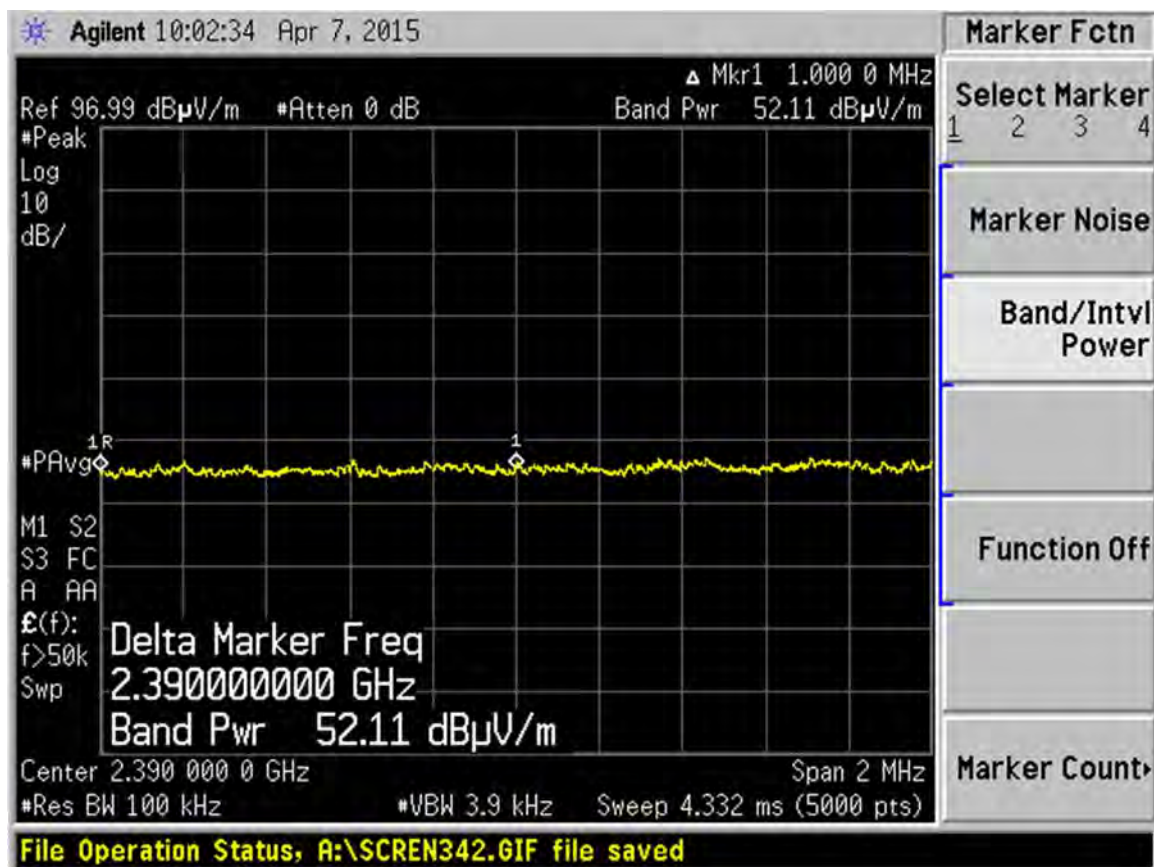
Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

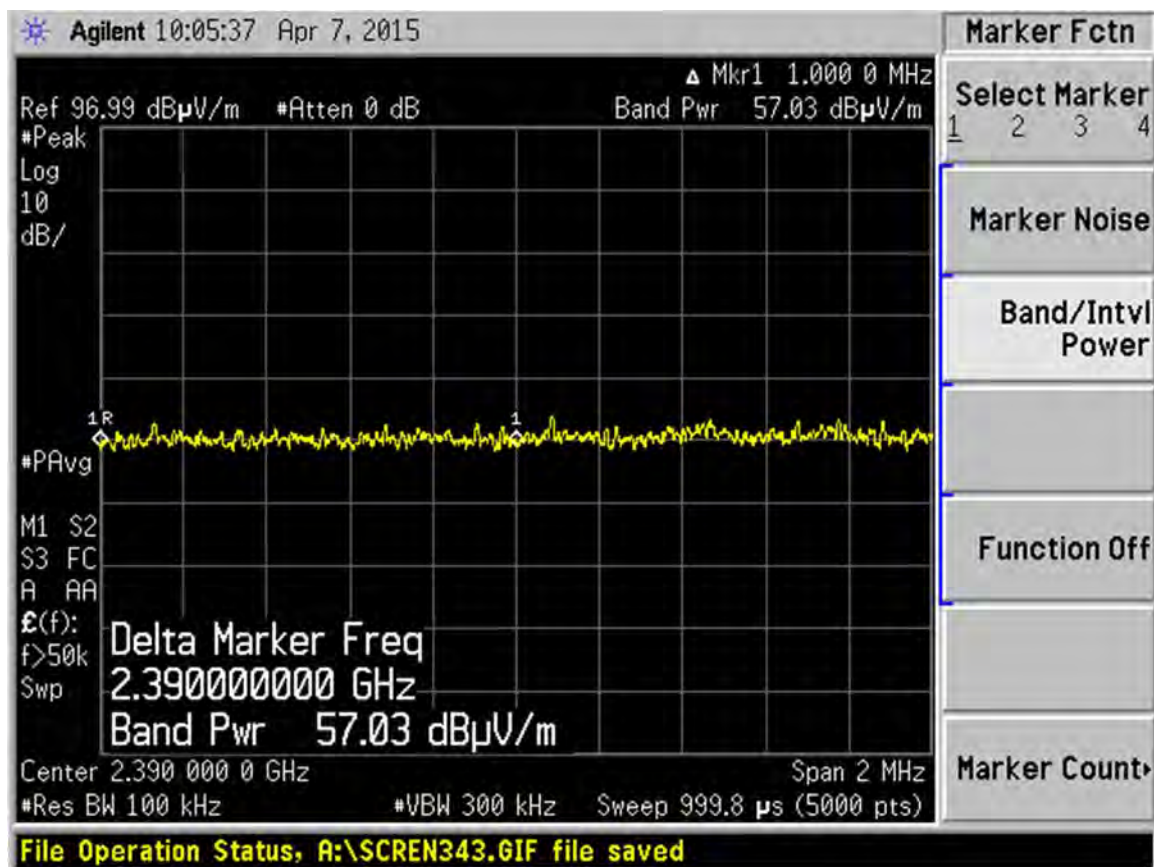


Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2422 MHz, channel 3
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 16

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



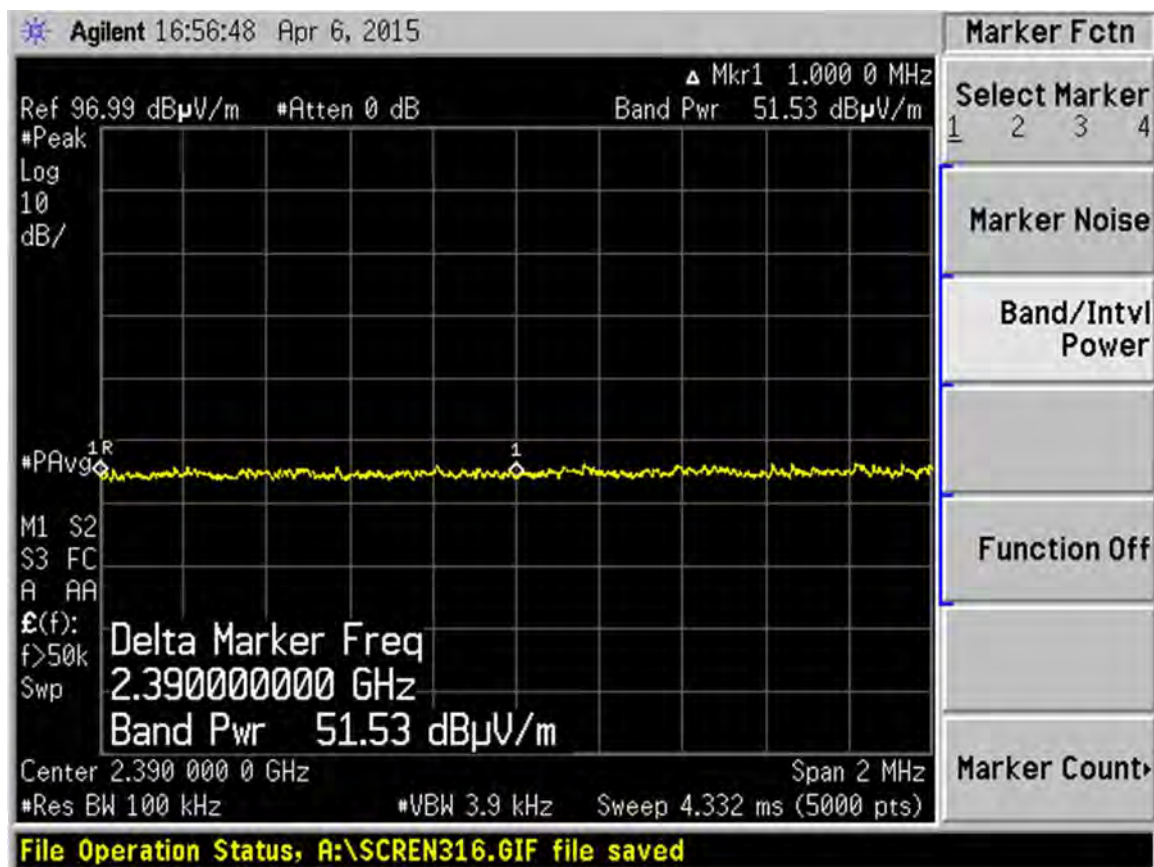
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

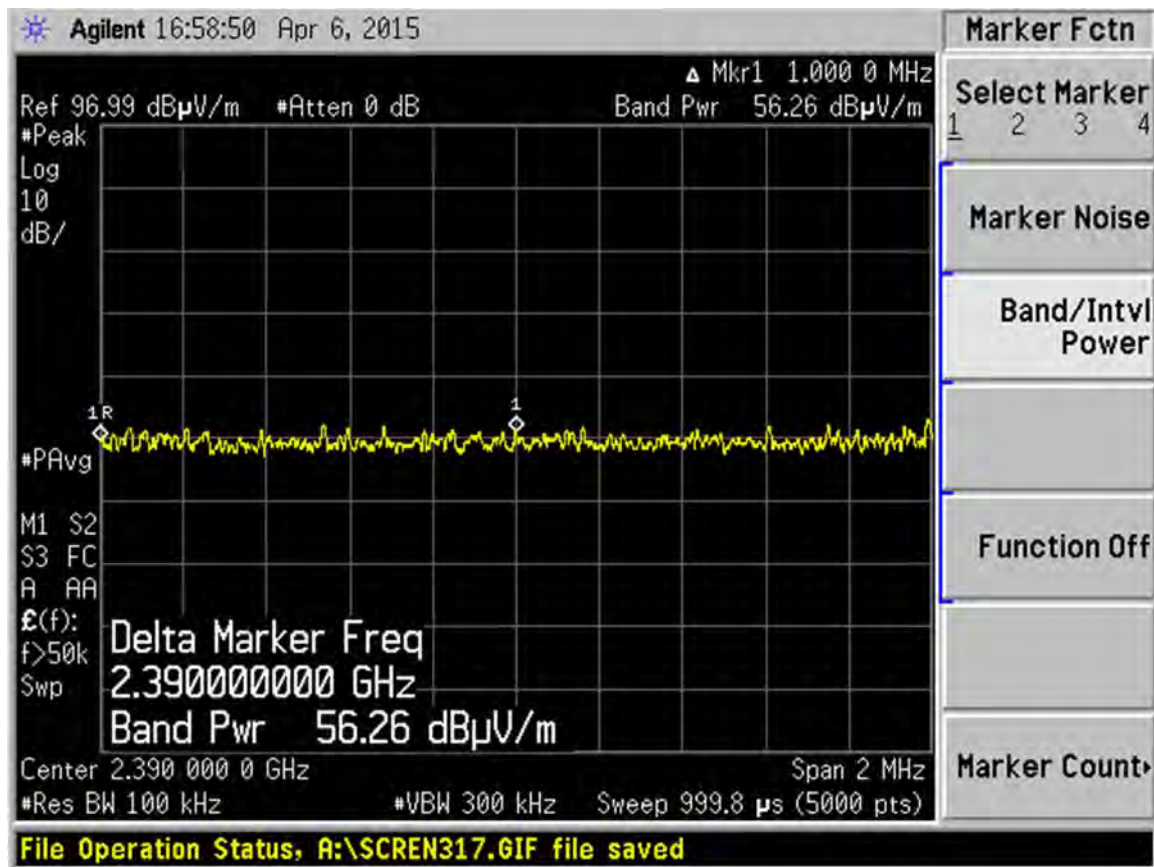


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



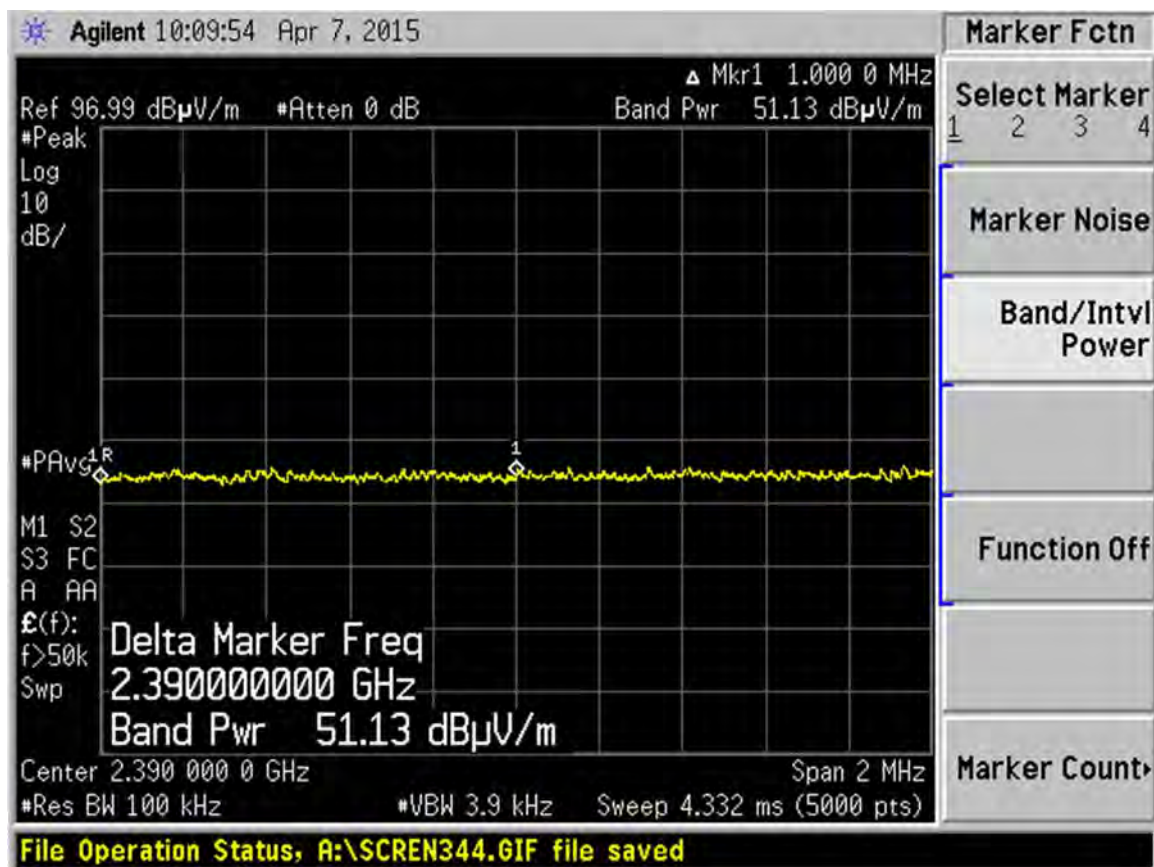
Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

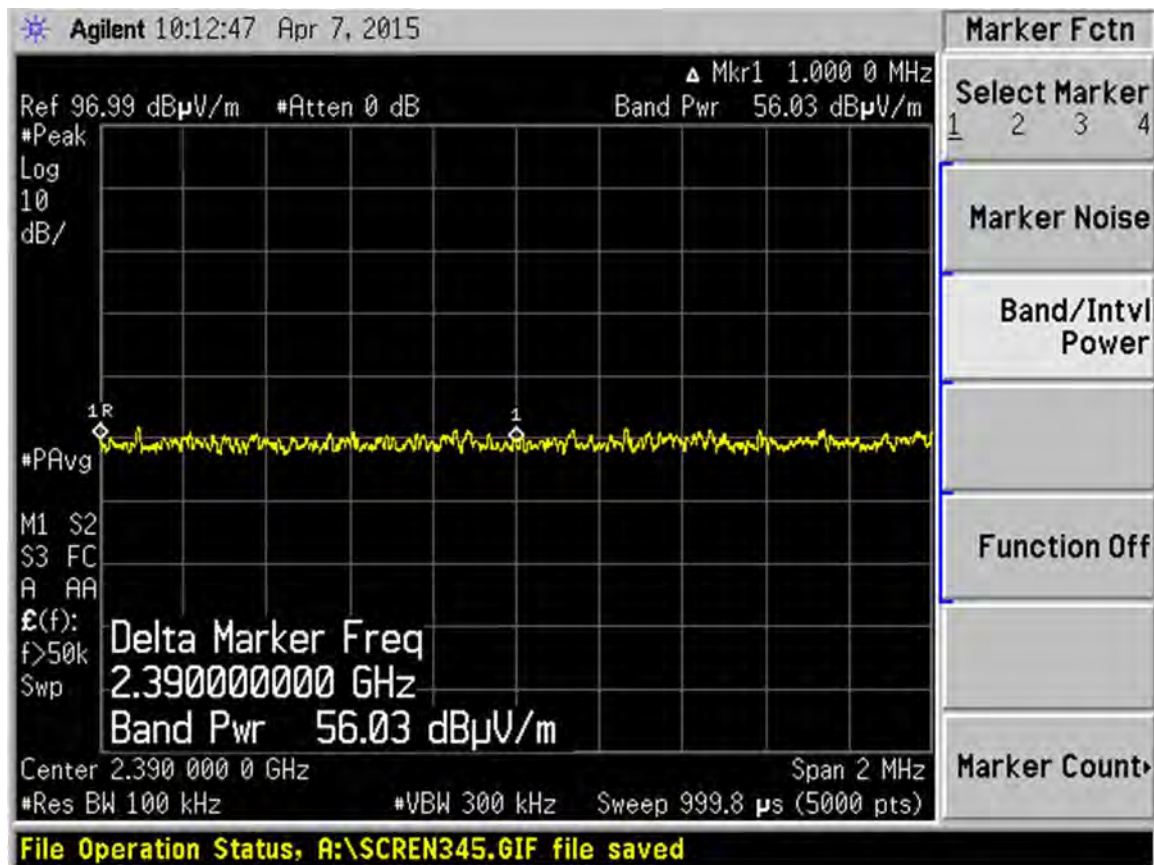


Test Date: 03-16-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2427 MHz, channel 4
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 17

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



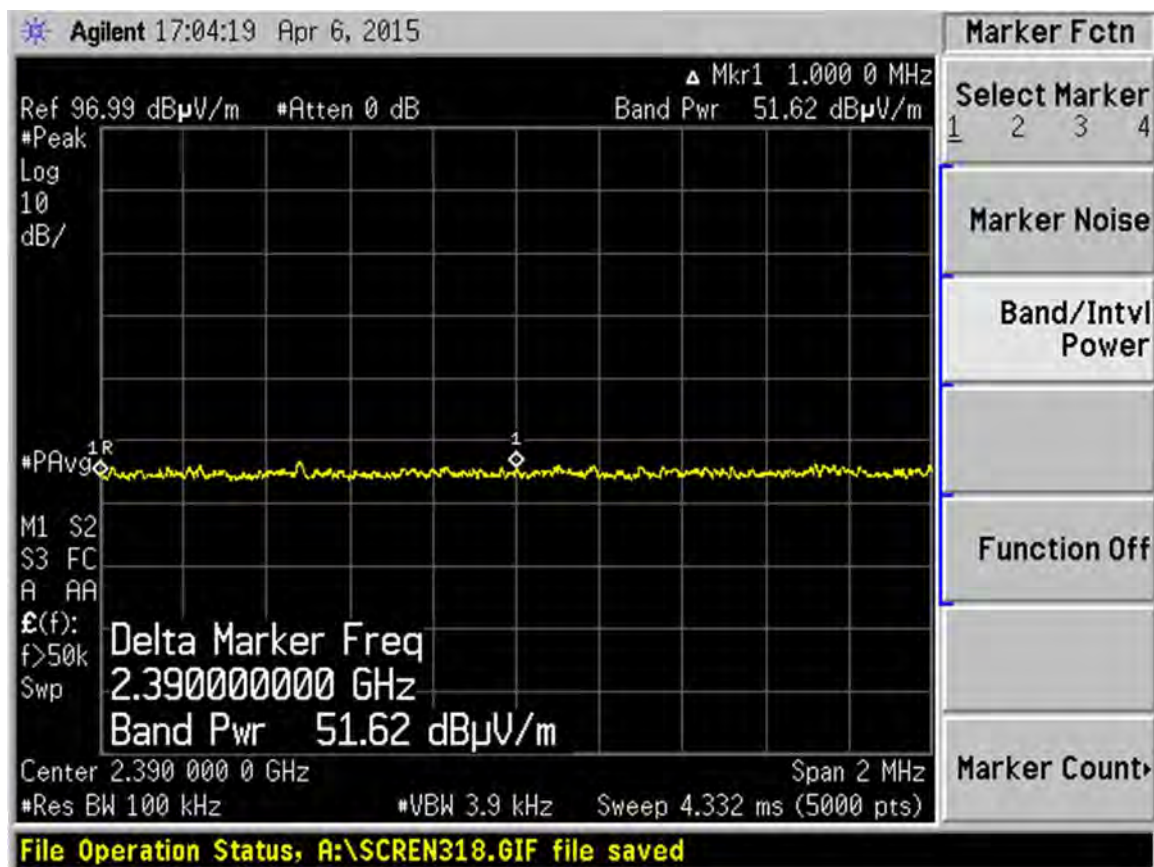
Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

HORIZONTAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz

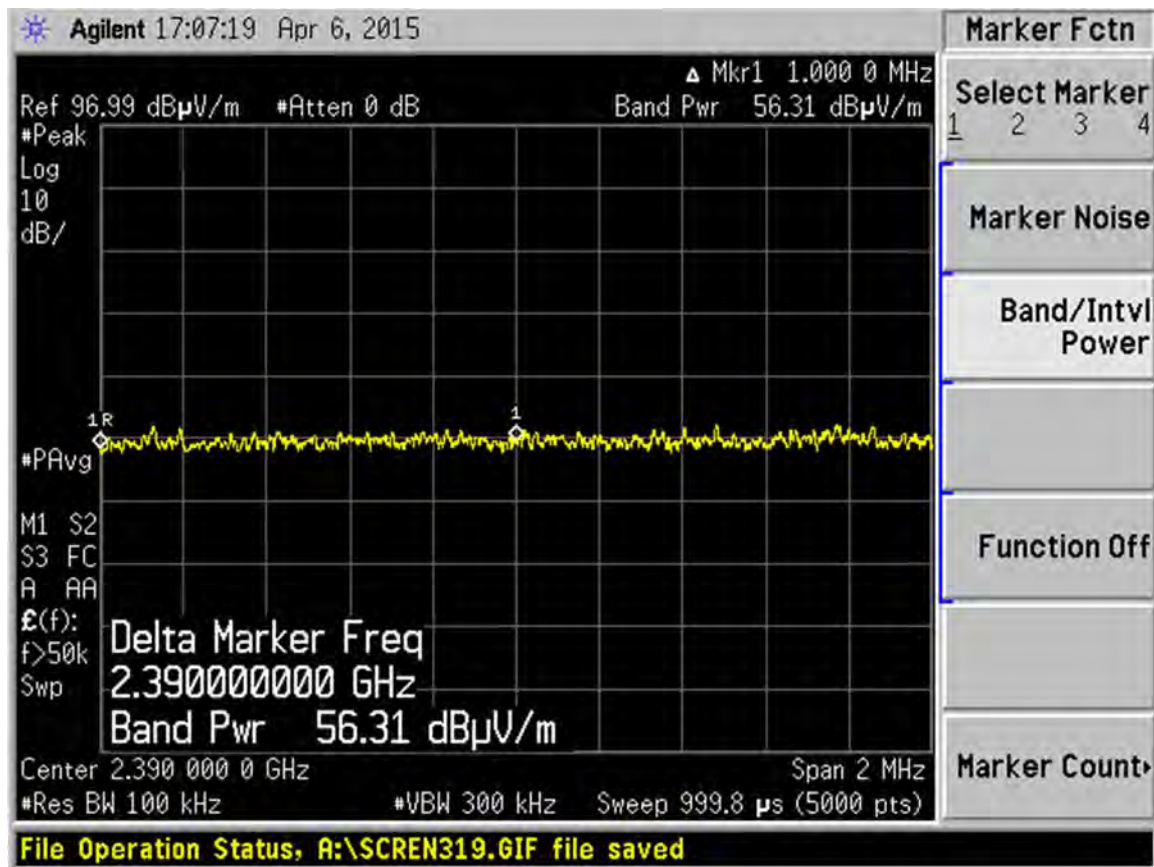


Test Date: 04-06-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

HORIZONTAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters



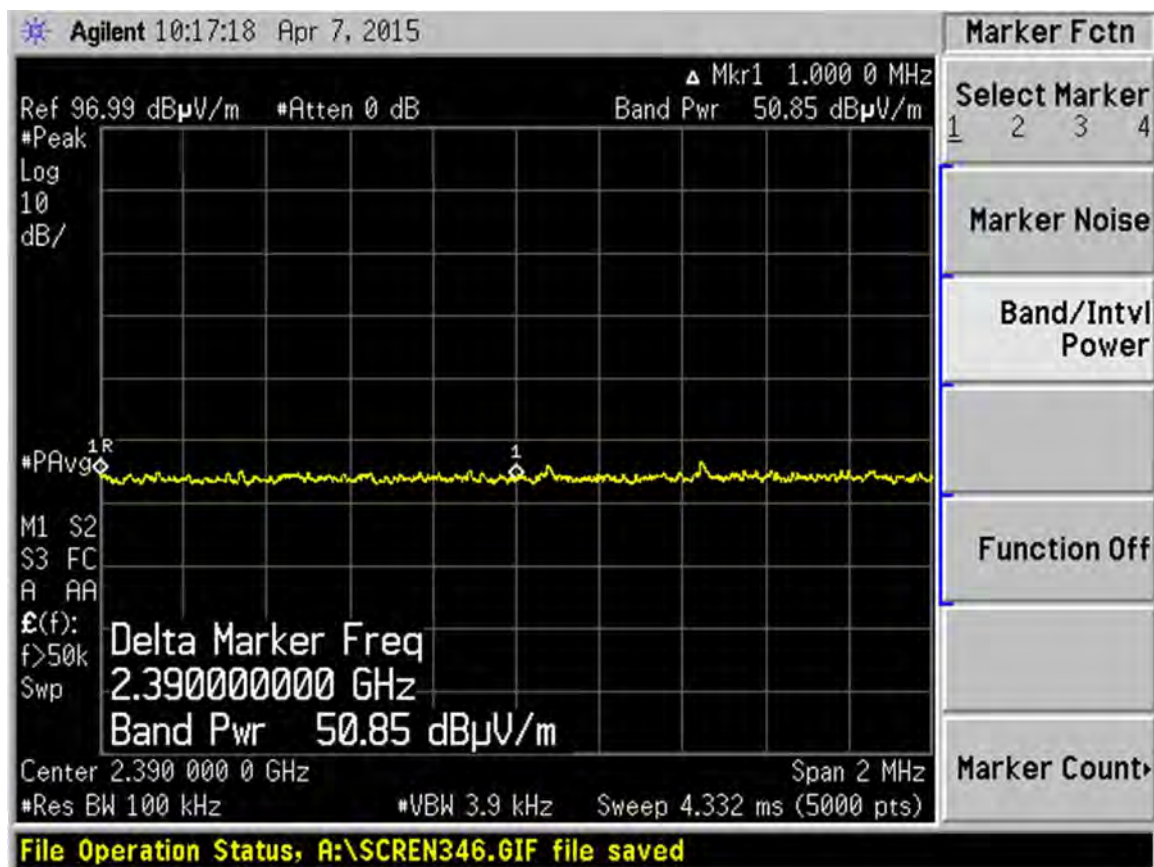
Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

VERTICAL:

AVERAGE: Limit = 54 dB μ V/m @ 3 meters

Using procedure 13.3.3, T = 260 μ S, VBW = 3.9 kHz



Test Date: 04-07-2015
Company: Whirlpool Corporation
EUT: XPWG3 RF module
Test: Lower Restricted Band-Edge Radiated
Rule part: FCC Part 15.247(d) and FCC Part 15.205
Operator: Craig B

Antenna: 2, PIFA
Channel: 2432 MHz, channel 5
Modulation: 802.11-g, OFDM, 54 Mbps
Power setting: 18

VERTICAL:

PEAK: Limit = 74 dB μ V/m @ 3 meters

