

*Testing Tomorrow's Technology*

**Application**

**For**

**Part 2, Subpart J, Paragraph 2.907 Equipment Authorization of Certification for an Intentional Radiator per Part 15, Subpart C, paragraphs 15.207, 15.209 and 15.247**

**And**

**RSS-247 Issue 1 for Industry Canada**

**For the**

**Polycom Inc.**

**Model: P008**

**FCC ID: M72-P008  
IC:1849C-P008**

**UST Project: 15-0085  
Issue Date: July 31, 2015**

Total Pages in This Report: 189

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I certify that I am authorized to sign for the Test Agency and that all of the statements in this report and in the Exhibits attached hereto are true and correct to the best of my knowledge and belief:

US TECH (Agent Responsible For Test):

By: Alan Ghasiani

Name: Alan Ghasiani

Title: Compliance Engineer – President

Date July 31, 2015



NVLAP LAB CODE 200162-0

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US Tech Test Report:  
FCC ID:  
IC:  
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Issue Date:  
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FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

## MEASUREMENT TECHNICAL REPORT

**COMPANY NAME:** Polycom Inc.

**MODEL:** P008

**FCC ID:** M72-P008

**IC:** 1849C-P008

**DATE:** July 31, 2015

This report concerns (check one): Original grant  Class II change

Equipment type: 2412 - 2462 MHz Transmitter Module

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? yes  No

If yes, defer until: N/A  
date

agrees to notify the Commission by N/A  
date

of the intended date of announcement of the product so that the grant can be issued on that date.

Report prepared by:

US Tech  
3505 Francis Circle  
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Phone Number: (770) 740-0717  
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US Tech Test Report:	FCC Part 15 Certification/ RSS 247
FCC ID:	M72-P008
IC:	1849C-P008
Test Report Number:	15-0085
Issue Date:	July 31, 2015
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### List of Attachments

- Agency Agreement
- Application Forms
- Letter of Confidentiality
- Equipment Label(s)
- Block Diagram(s)
- Schematic(s)
- Test Configuration Photographs
- Internal Photographs
- External Photographs
- Antenna Photographs
- Theory of Operation
- RF Exposure
- User's Manual

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## 1 General Information

### 1.1 Purpose of this Report

This report is prepared as a means of conveying test results and information concerning the suitability of this exact product for public distribution according to the FCC Rules and Regulations Part 15, Section 247 and IC RSS 247 Issue 1.

### 1.2 Characterization of Test Sample

The sample used for testing was received by US Tech on April 27, 2015 in good operating condition.

### 1.3 Product Description

The Equipment Under Test (EUT) is the Polycom Inc. Model P008 SIP Application Module. The P008 SIP Application Module is an embedded wireless internet connectivity module that operates in the 2.4 and 5.0 GHz spectrum. The Wi-Fi modules' hardware consists of an ARM Cortex M4 host processor, Broadcom BCM43341/0 Dual-Band 802.11 a/b/g/n MAC/Baseband/Radio with integrated Bluetooth 4.0 and NFC support.

The EUT does have two antennas, however it can only broadcast on one or the other; never both at the same time. The antenna uses an RF switch that will attenuate the signal to the antenna that is not being used for transmission.

The 5.0 GHz Wi-Fi, integrated Bluetooth, and NFC radio features have been tested and the results detailed in a separate report.

Antenna Gain: 1.4 (Chip)

Modulation: 20 MHz and 40 MHz bandwidth modulation

Maximum Output Power: 19.9 dBm

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## 1.4 Configuration of Tested System

The Test Sample was tested per *ANSI C63.4:2009/2014, Methods of Measurement of Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz (2009/2014)*, *ANSI C63.10:2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices* and per FCC KDB Publication number 558074 for Digital Transmission Systems Operating Under section 15.247. Also, FCC, KDB Publication No. 558074 was used as a test procedure guide.

A list of EUT and Peripherals is found in Table 1 below. A block diagram of the tested system is shown in Figure 1. Test configuration photographs are provided in separate Appendices.

## 1.5 Test Facility

Testing was performed at US Tech's measurement facility at 3505 Francis Circle, Alpharetta, GA 30004. This site has been fully described and registered with the FCC. Its designation number is 186022. Additionally this site has also been fully described and submitted to Industry Canada (IC), and has been approved under file number 9900A-1.

## 1.6 Related Submittals

### 1.6.1 The EUT is subject to the following FCC authorizations:

- a) Certification under section 15.247 as a transmitter.
- b) Verification under 15.101 as a digital device and receiver.
- c) Certification under section 15.249 as a transmitter.
- d) Certification under section 15.225 as a transmitter.
- e) Certification under section 15.407 as a transmitter

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### 1.6.2 Verification of the Digital apparatus

The Verification requirement shares many common report elements with the Certification report. Therefore, though this report is mostly intended to provide data for the Certification process, the Verification authorization report (part 15.107 and 15.109) for the EUT is included herein.

**Table 1. EUT and Peripherals**

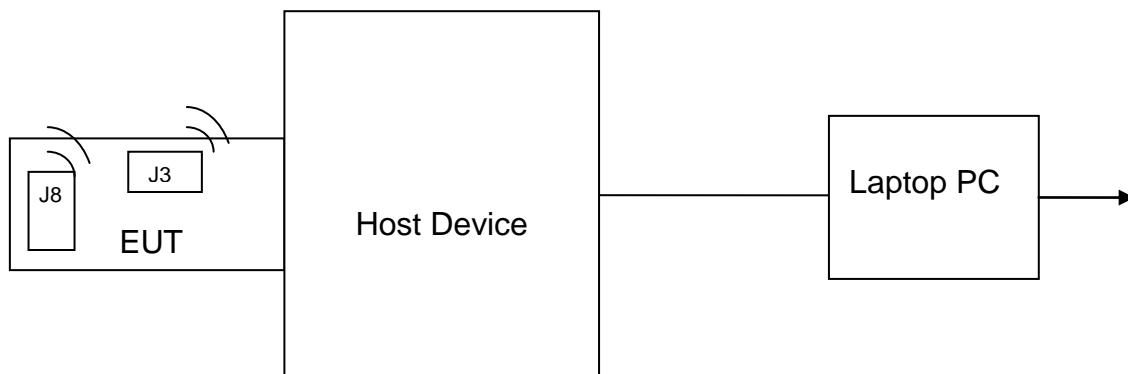
PERIPHERAL MANUFACTURER.	MODEL NUMBER	SERIAL NUMBER	FCC/IC ID:	CABLES P/D
Polycom Inc.	P008 SIP Application Module	Engineering Sample	M72-P008 1849C-P008	N/A
Antenna See antenna details	--	--	--	--

U= Unshielded

S= Shielded

P= Power

D= Data



**Figure 1. Block Diagram of Test Configuration**

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## 2 Tests and Measurements

### 2.1 Test Equipment

The table below lists test equipment used to evaluate this product. Model numbers, serial numbers, and calibration status are indicated.

**Table 2. Test Instruments**

TEST INSTRUMENT	MODEL NUMBER	MANUFACTURER	SERIAL NUMBER	DATE OF LAST CALIBRATION
SPECTRUM ANALYZER	8593E	HEWLETT-PACKARD	3205A00124	1/6/2015
SPECTRUM ANALYZER	E4407B	AGILENT	US41442935	1/28/2015
LOOP ANTENNA	SAS-200/562	A.H. Systems	142	9/12/2013 2 yr.
BICONICAL ANTENNA	3110B	EMCO	9306-1708	11/24/2014 2 yr.
LOG PERIODIC ANTENNA	3146	EMCO	9110-3236	11/19/2014 2 yr.
LOG PERIODIC ANTENNA	3146	EMCO	9305-3600	7/1/2014 2 yr.
HORN ANTENNA	SAS-571	A.H. Systems	605	7/23/2013 2 yr.
HORN ANTENNA	3115	EMCO	9107-3723	7/8/2014 2 yr.
HORN ANTENNA	3116	EMCO	9505-2255	1/27/2015 2 yr.
AMPLIFIER	11975A	HEWLETT-PACKARD	2517A00647	12/05/2014
HARMONIC MIXER	11970K	HEWLETT-PACKARD	2332A01241	Not Required
PRE-AMPLIFIER	8449B	HEWLETT-PACKARD	3008A00480	12/5/2014
PRE-AMPLIFIER	8477E	HEWLETT-PACKARD	1145A00307	11/21/2014
PRE-AMPLIFIER	8447D	HEWLETT-PACKARD	1937A02980	12/4/2014
LISN x 2	9247-50-TS-50-N	SOLAR ELECTRONICS	955824 and 955825	12/30/2014

Note: The calibration interval of the above test instruments are 12 months unless stated otherwise and all calibrations are traceable to NIST/USA.

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## 2.2 Modifications to EUT Hardware

No physical modifications were made by US Tech in order to bring the EUT into compliance with FCC Part 15, Subpart C Intentional Radiator Limits for the transmitter portion of the EUT or the Subpart B Unintentional Radiator Limits (Receiver and Digital Device) Requirements.

## 2.3 Number of Measurements for Intentional Radiators (15.31(m))

Measurements of intentional radiators or receivers shall be performed and reported for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in Table 3 below.

**Table 3. Number of Test Frequencies for Intentional Radiators**

Frequency Range over which the device operates	Number of Frequencies	Location in the Range of operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near the top 1 near the bottom
Greater than 10 MHz	3	1 near top 1 near middle 1 near bottom

Because the EUT operates at 2412 MHz to 2462 MHz, 3 test frequencies were used.

## 2.4 Frequency Range of Radiated Measurements (Part 15.33)

### 2.4.1 Intentional Radiator

The spectrum shall be investigated for the intentional radiator from the lowest RF signal generated in the EUT, without going below 9 kHz to the 10<sup>th</sup> harmonic of the highest fundamental frequency generated or 40 GHz, whichever is the lowest.

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## 2.4.2 Unintentional Radiator

For the digital device, an unintentional radiator, the frequency range shall be 30 MHz to 1000 MHz, or to 5 times the highest internal clock frequency.

## 2.5 Measurement Detector Function and Bandwidth (CFR 15.35)

The radiated and conducted emissions limits shown herein are based on the following:

### 2.5.1 Detector Function and Associated Bandwidth

On frequencies below 1000 MHz, the limits herein are based upon measurement equipment employing a CISPR Quasi-peak detector function and related measurement bandwidths (i.e. 9 kHz from 150 kHz to 30 MHz and 120 kHz from 30 MHz to 1000 MHz). Alternatively, measurements may be made with equipment employing a peak detector function as long as the same bandwidths specified for the Quasi-peak device are used.

### 2.5.2 Corresponding Peak and Average Requirements

Above 1000 MHz, radiated limits are based on measuring instrumentation employing an average detector function. When average radiated emissions are specified there is also a corresponding Peak requirement, as measured using a peak detector, of 20 dB greater than the average limit. For all measurements above 1000 MHz the Resolution Bandwidth shall be at least 1 MHz.

### 2.5.3 Pulsed Transmitter Averaging

When the radiated emissions limit is expressed as an average value, and the transmitter is pulsed, the measured field strength shall be determined by applying a Duty Cycle Correction Factor based upon dividing the total ON time during the first 100 ms period by 100 ms (or by the period if less than 100 ms). The duty cycle may be expressed logarithmically in dB.

NOTE: If the transmitter was programmed to transmit at >98% duty cycle, then, wherever applicable (where the detection mode was AVG) the duty cycle factor calculated will be applied.

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## 2.6 EUT Antenna Requirements (CFR 15.203)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. Only the antenna(s) listed in Table 4 will be used with this module.

**Table 4. Allowed Antenna(s)**

REPORT REFERENCE	MANUFACTURER	TYPE OF ANTENNA	MODEL	GAIN dB <sub>i</sub>	TYPE OF CONNECTOR
J3 and J8	Unictron Technologies Corp.	Chip	AA077	1.4	Chip

## 2.7 Restricted Bands of Operation (Part 15.205)

Only spurious emissions can fall in the frequency bands of CFR 15.205. The field strength of these spurious cannot exceed the limits of 15.209. Radiated harmonics and other Spurious are examined for this requirement see paragraph 2.1

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## 2.8 Transmitter Duty Cycle (CFR 35 (c))

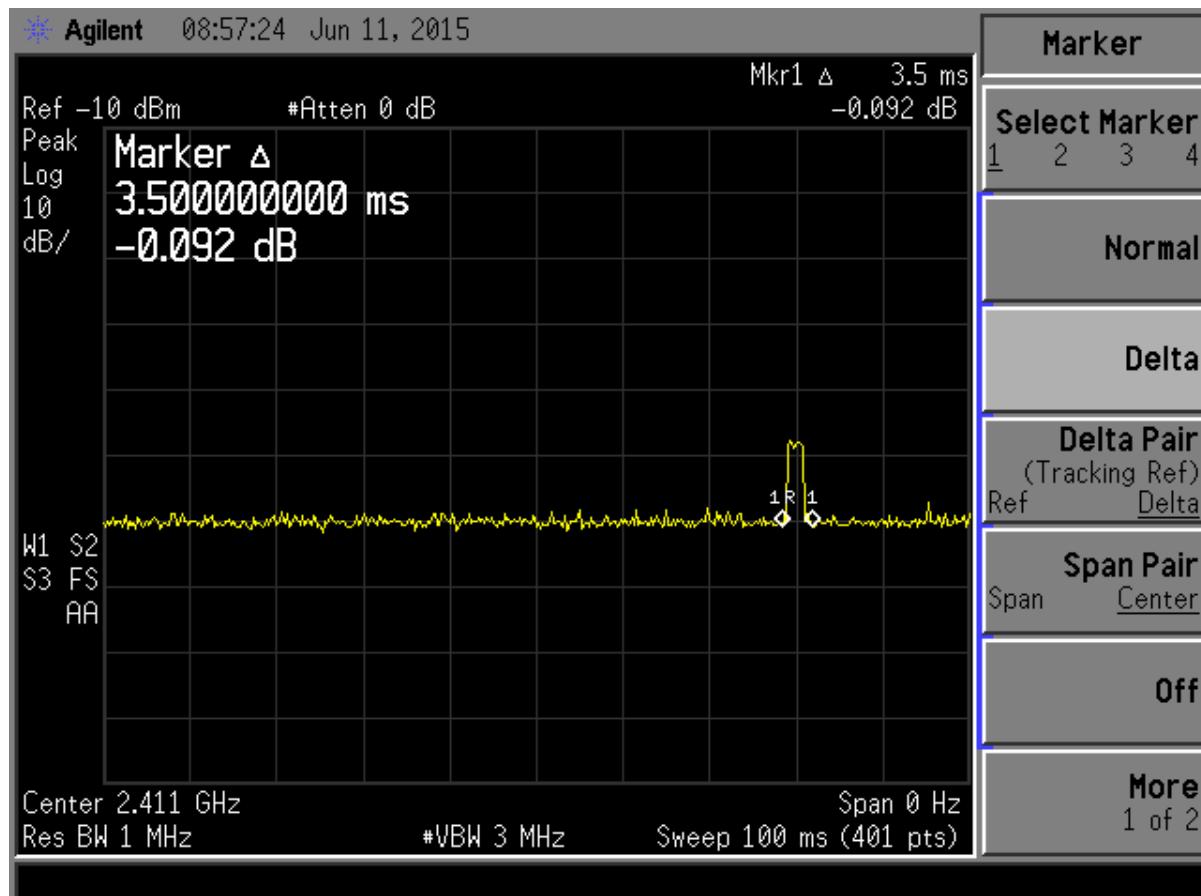
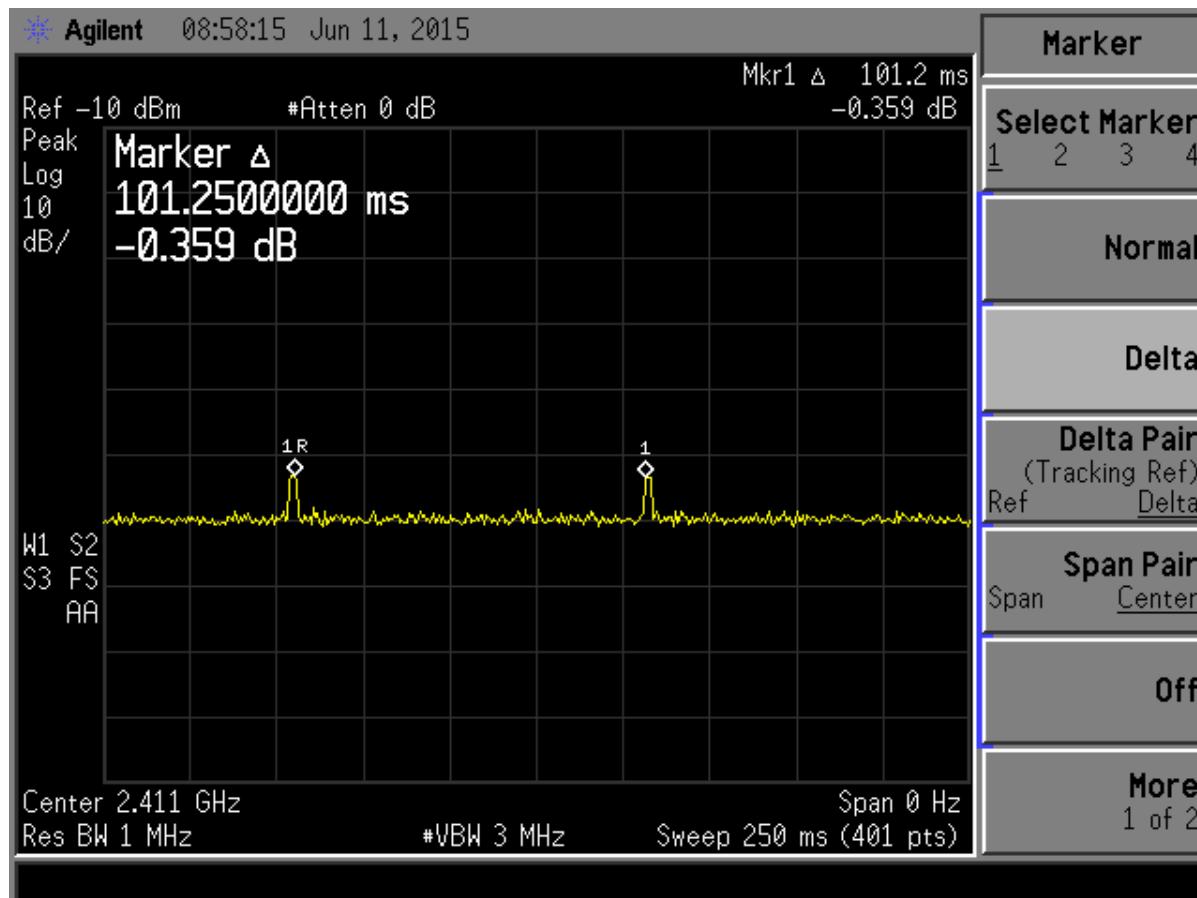


Figure 2. Duty Cycle 100ms Sweep

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**Figure 3. Transmitter Pulse Width**

**Total Time On from Figure 2 = 3.5 ms (Transmitter Pulse Width)**  
**Total Pulse Train from Figure 3 = 101.25 ms (Pulse Train)**

$$(3.5 \text{ ms Total Time On}) / (100 \text{ ms Total Pulse Train}) = .035 \text{ Numeric Duty Cycle}$$
$$\text{Duty Cycle} = 20 \log (A/B) = \boxed{-29.12 \text{ dB}}$$

Since the Duty Cycle less than -20 dB, the Duty cycle utilized in this test report is -20 dB.

NOTE: The transmitter was programmed to transmit at >98% duty cycle, therefore wherever applicable (where the detection mode was AVG) the duty cycle factor calculated above will be applied.

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## 2.9 Intentional Radiator, Power Line Conducted Emissions (CFR 15.207)

The EUT is powered by 3.3 VDC through a host device, since the host device was connected to the AC mains, the power line conducted emissions testing was performed. Power line conducted emissions testing was performed to ensure that with the EUT in operation (exercising all transmitter functions), the complete system continues to meet the applicable requirements for CFR 15.207. These measurements were completed and are displayed below.

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**Table 5. Transmitter Power Line Conducted Emissions Test Data, Part 15.207**

150KHz to 30 MHz with Class B Limits						
Test: Power Line Conducted Emissions			Client: Polycom Inc.			
Project: 15-0085			Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	LISN+CL-PA (dB)	Results (dBuV)	AVG Limits (dBuV)	Margin (dB)	Detector PK, QP, or AVG
120 VAC, 60 Hz Phase						
0.15	51.10	1.36	52.46	55.8	3.3	PK
0.51	42.90	0.43	43.33	46.0	2.7	PK
4.85	41.50	0.44	41.94	46.0	4.1	PK
6.14	46.70	0.47	47.17	50.0	2.8	PK
19.60	41.00	0.62	41.62	50.0	8.4	PK
24.45	42.80	0.69	43.49	50.0	6.5	PK
120VAC, 60 Hz Neutral						
0.46	44.70	0.44	45.14	56.6*	11.5	QP
0.46	41.00	0.44	41.44	46.6	5.2	AVG
0.54	45.40	0.41	45.81	56.0*	10.2	QP
0.54	41.70	0.41	42.11	46.0	3.9	AVG
4.61	42.00	0.42	42.42	46.0	3.6	PK
6.14	46.60	0.46	47.06	50.0	2.9	PK
11.16	41.10	0.59	41.69	50.0	8.3	PK
21.23	41.20	0.64	41.84	50.0	8.2	PK

Note: \* denotes QP Limits

SAMPLE CALCULATION at 0.15 MHz:

Magnitude of Measured Frequency	51.10	dBuV
+ Cable Loss+ LISN Loss	1.36	dB
=Corrected Result	52.46	dBuV

Limit	55.80	dBuV
-Corrected Result	52.46	dBuV
Margin	3.34	dB

Test Date: August 3, 2015

Tested By

Signature: Sina Sobheniyan Name: Sina Sobheniyan

US Tech Test Report:	FCC Part 15 Certification/ RSS 247
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## 2.10 Intentional Radiator, Radiated Emissions (CFR 15.209, 15.247(d)) (IC RSS 247, 5.4)

Radiated Spurious measurements: the EUT was placed into a continuous transmit mode of operation (>98% duty cycle) and tested per FCC KDB Publication 558074 D01 v03r03 and ANSI C63.10:2013. A preliminary scan was performed on the EUT to find signal frequencies that were caused by the transmitter part of the device. To obtain worse case results the EUT was tested in X, Y, and Z axes or in the orientation of normal operation if the device is designed to operation in a fixed position.

Radiated measurements were then conducted between the frequency range of 9KHz (or lowest frequency used/generated by the device) up to the tenth harmonic of the device (no greater than 40 GHz). In the band below 30 MHz a resolution bandwidth (RBW) of 9 kHz was used, emissions below 1 GHz were tested with a RBW of 120 KHz and emissions above 1 GHz were tested with a RBW of 1 MHz. All video bandwidth settings were at least three times the RBW value.

The EUT was investigated to CFR 15.209, General requirements for unwanted spurious emissions. The conducted spurious method as described below was use to investigate all other emissions emanating from the antenna port.

Conducted Spurious measurements: the EUT was put into a continuous-transmit mode of operation (>98% duty cycle) and tested per FCC KDB Publication 558074 D01 v03r03 for conducted out of band emissions emanating from the antenna port over the frequency range of 30 MHz to 25 GHz. A conducted scan was performed on the EUT to identify and record spurious signals that were related to the transmitter. The conducted spurious emissions were measured at both antenna ports, but the spurious emissions on the J3 port were minimal and not considered.

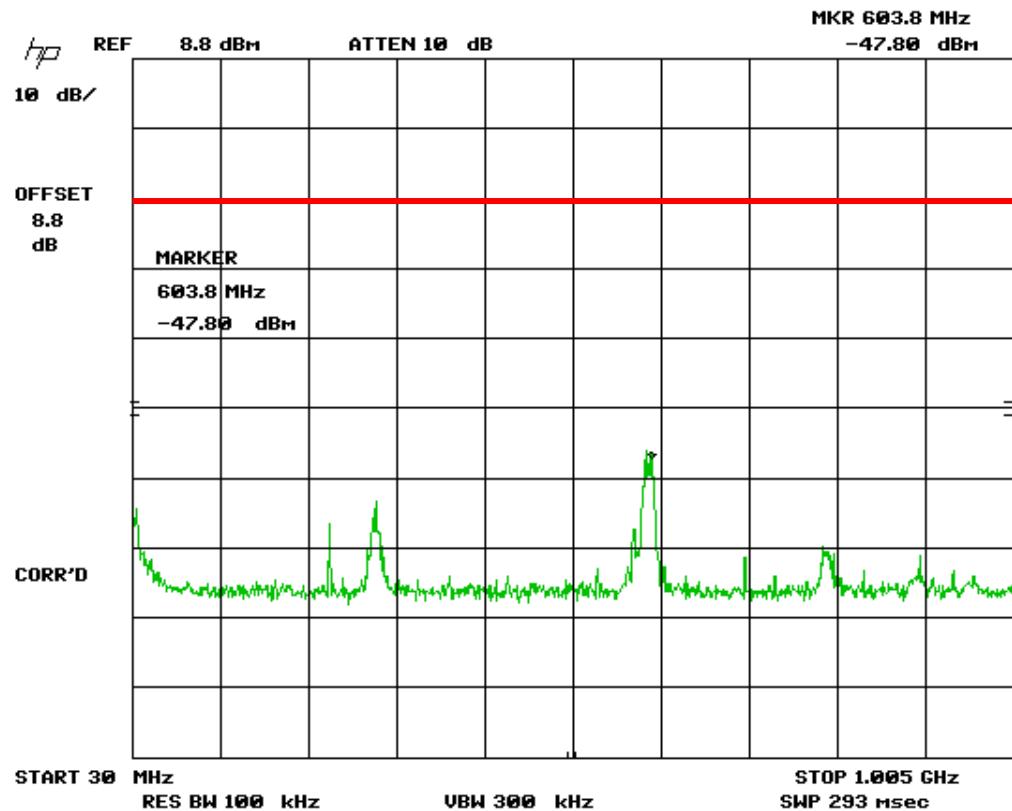
The results are displayed in the plots following. Radiated emissions per CFR 15.209 were performed with to address the concerns of unwanted emissions that may radiate from the EUT cabinet, control circuits, or power leads. The results for this test can be found in section 2.18 below.

Note 1: The results below are compared to Peak limits.

Note 2: For emissions levels below 1000 MHz, the restricted band limits were applied to show worst case

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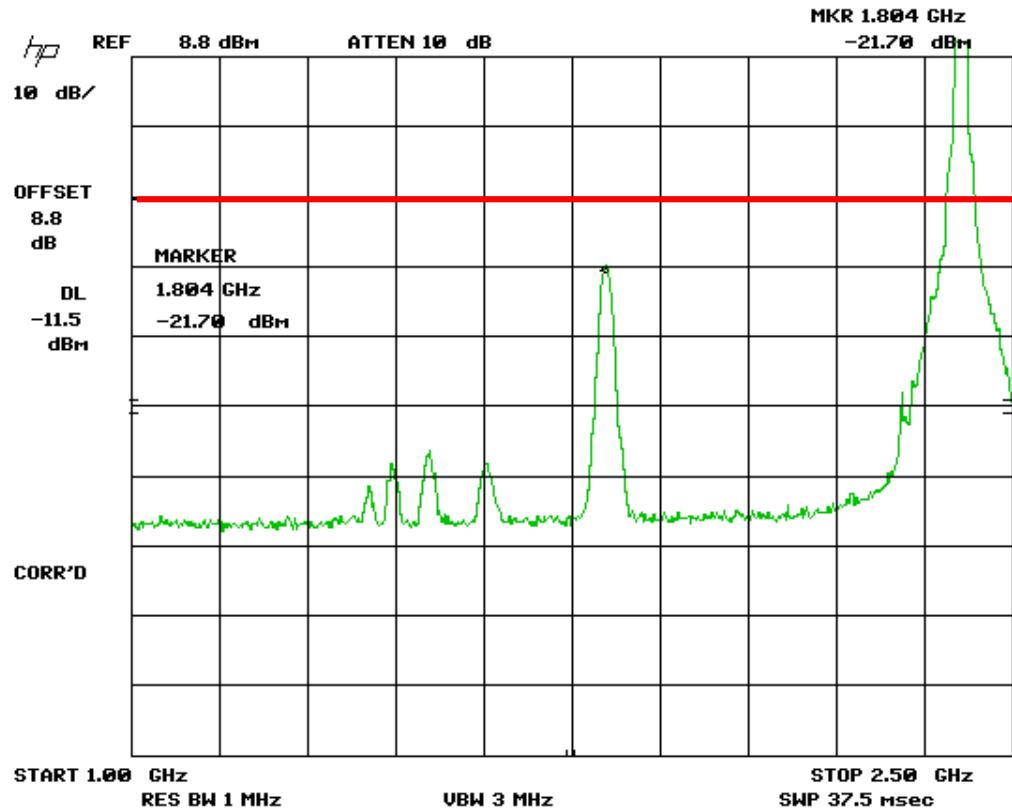


**Figure 4. Antenna Conducted Emissions 802.11n Low, Part 1**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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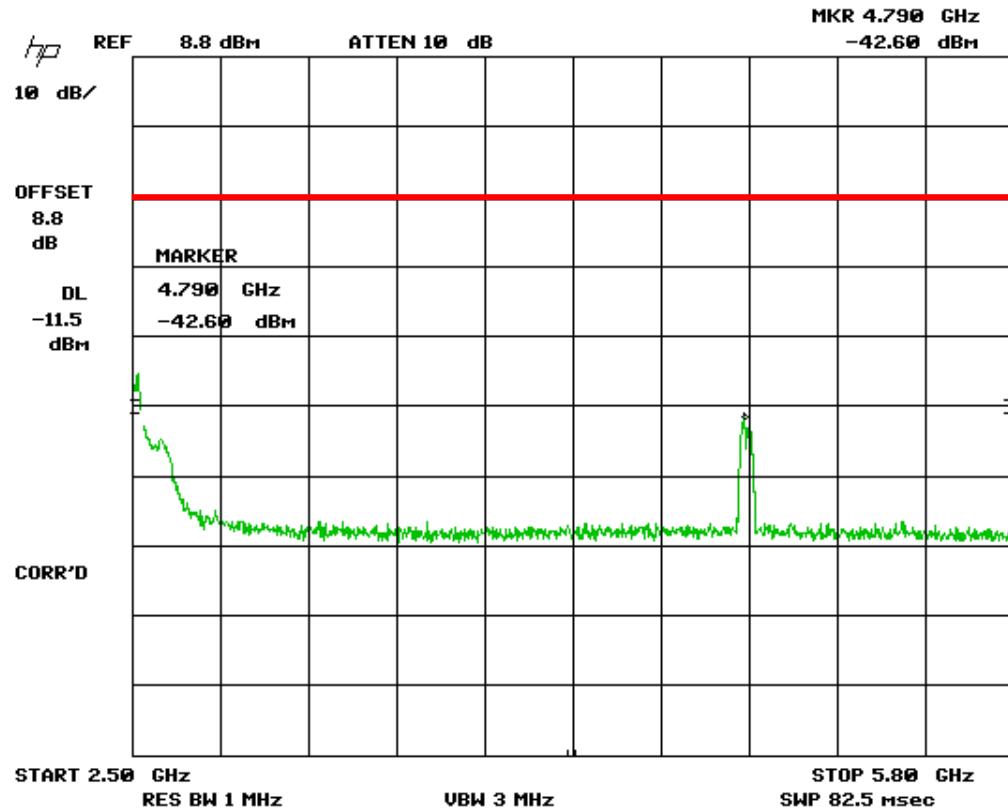


**Figure 5. Antenna Conducted Emissions 802.11n Low, Part 2**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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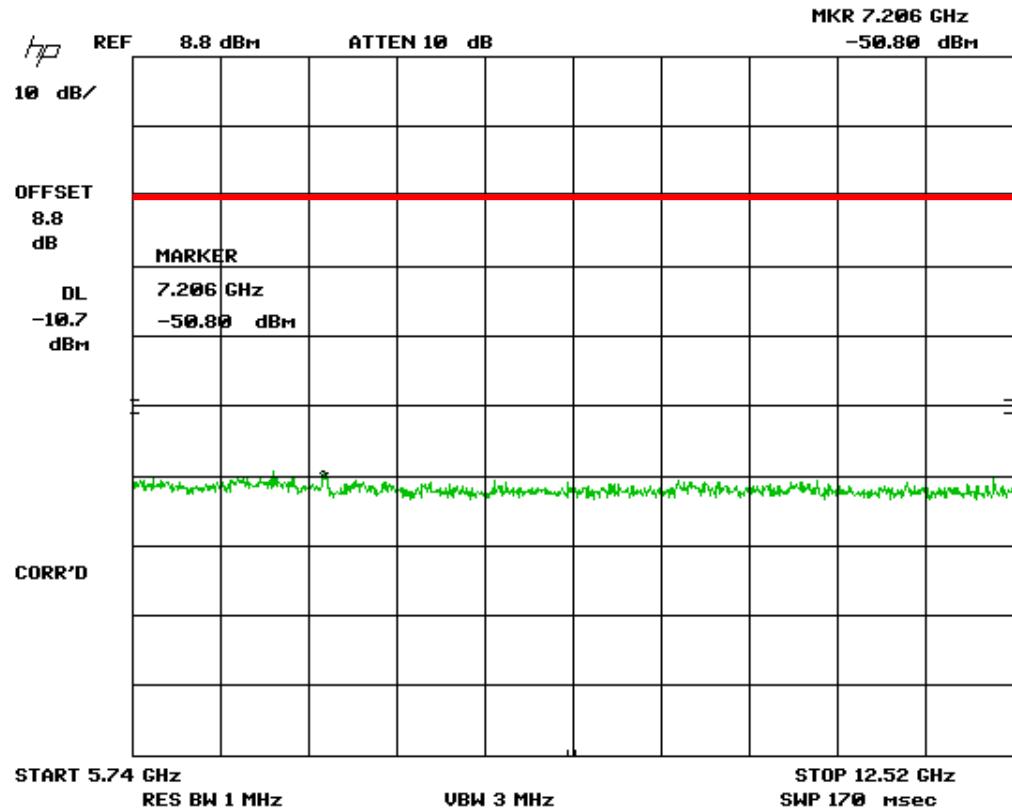


**Figure 6. Antenna Conducted Emissions 802.11n Low, Part 3**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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FCC ID:  
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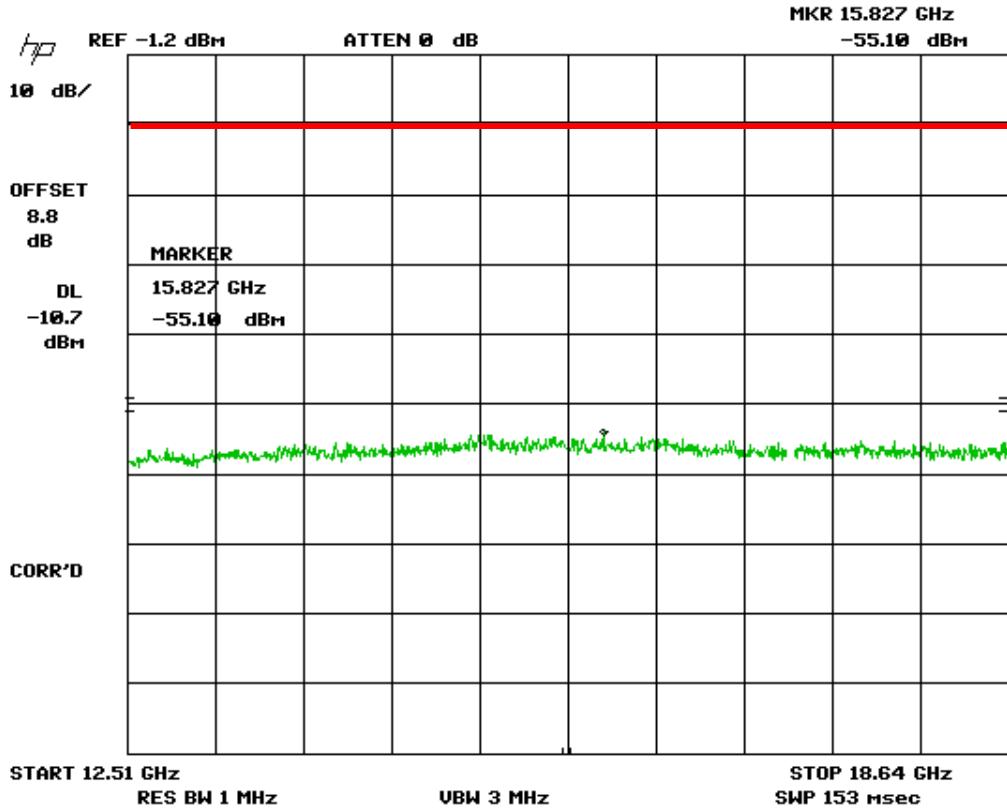


**Figure 7. Antenna Conducted Emissions 802.11n Low, Part 4**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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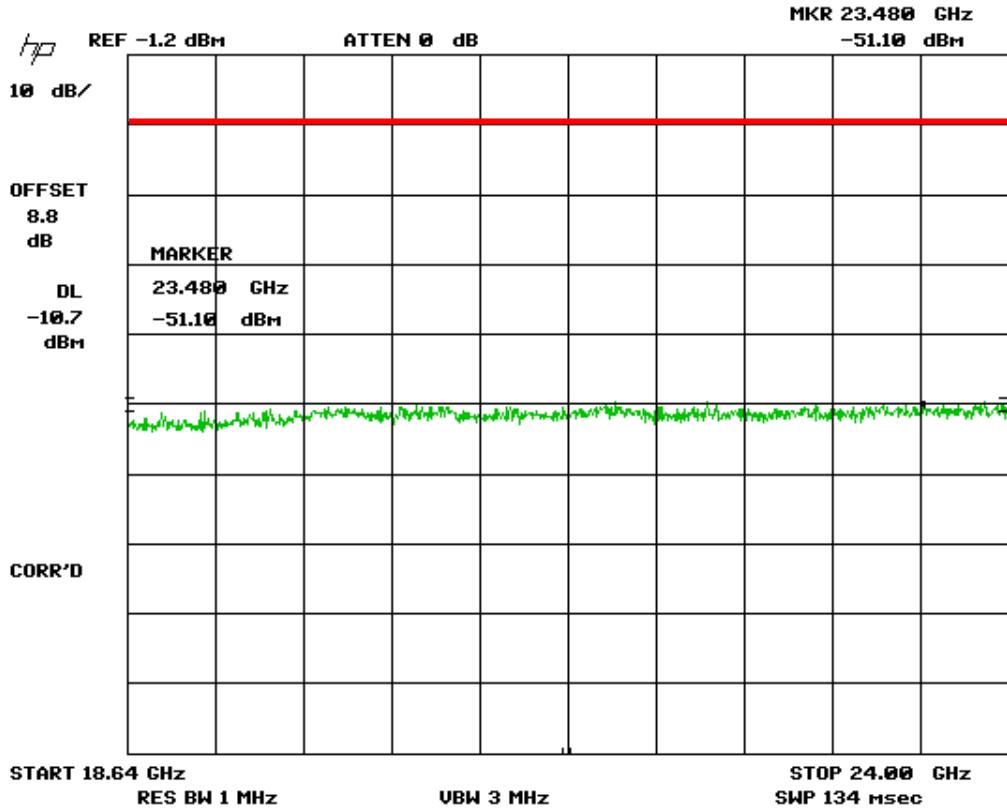


**Figure 8. Antenna Conducted Emissions 802.11n Low, Part 5**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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FCC ID:  
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Customer:  
Model:

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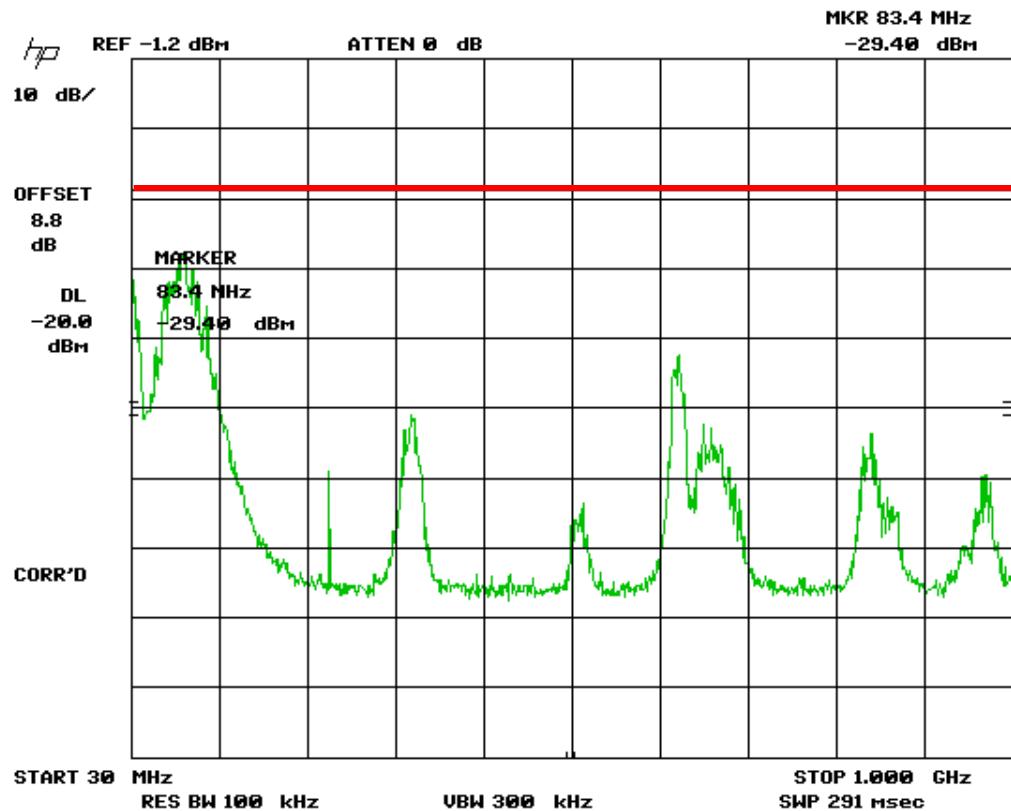


**Figure 9. Antenna Conducted Emissions 802.11n Low, Part 6**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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Model:

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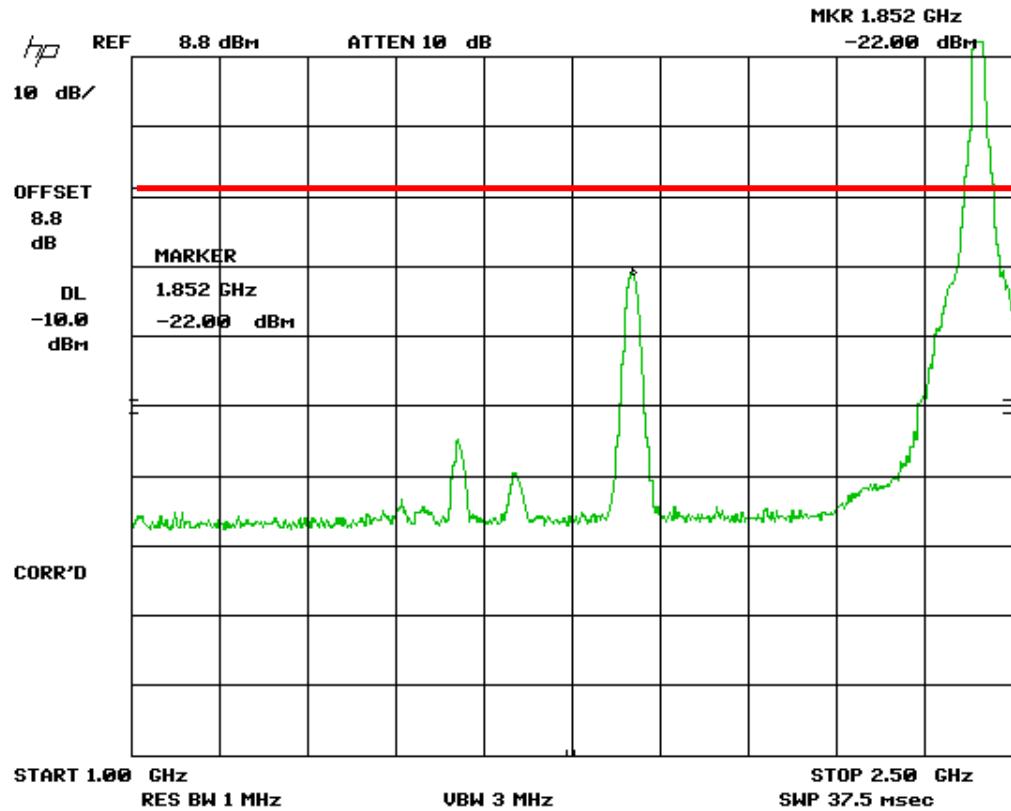


**Figure 10. Antenna Conducted Emissions 802.11n Mid, Part 1**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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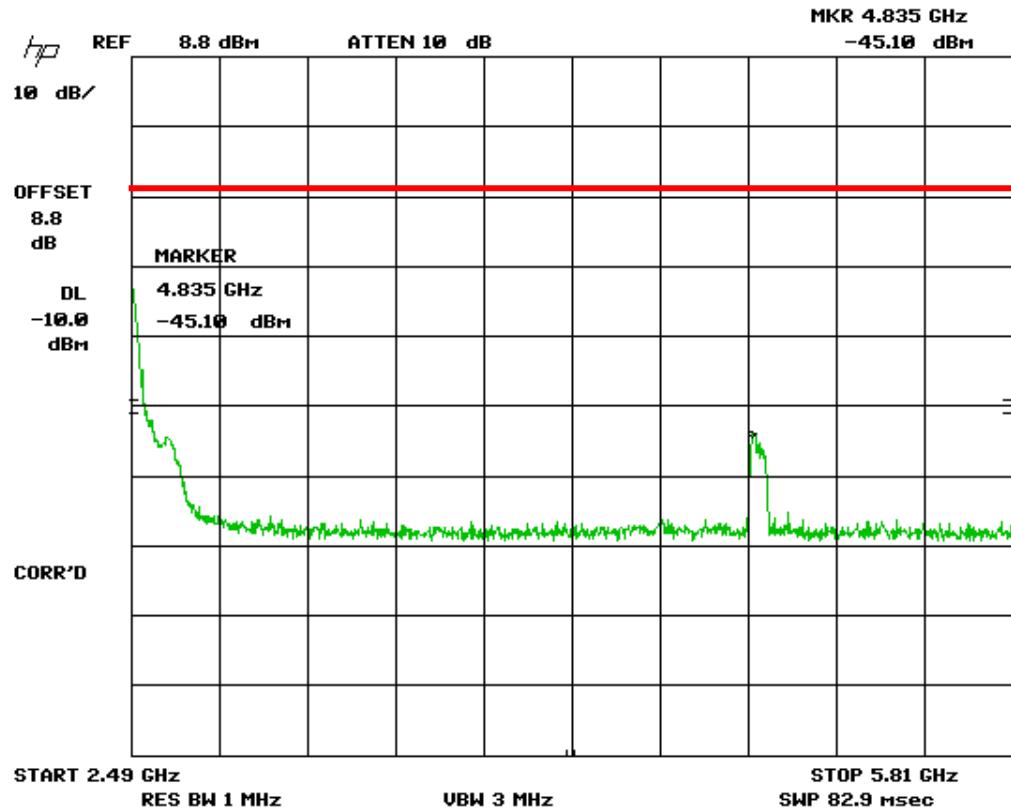


**Figure 11. Antenna Conducted Emissions 802.11n Mid, Part 2**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental. The larger peak to the right is the fundamental emission.

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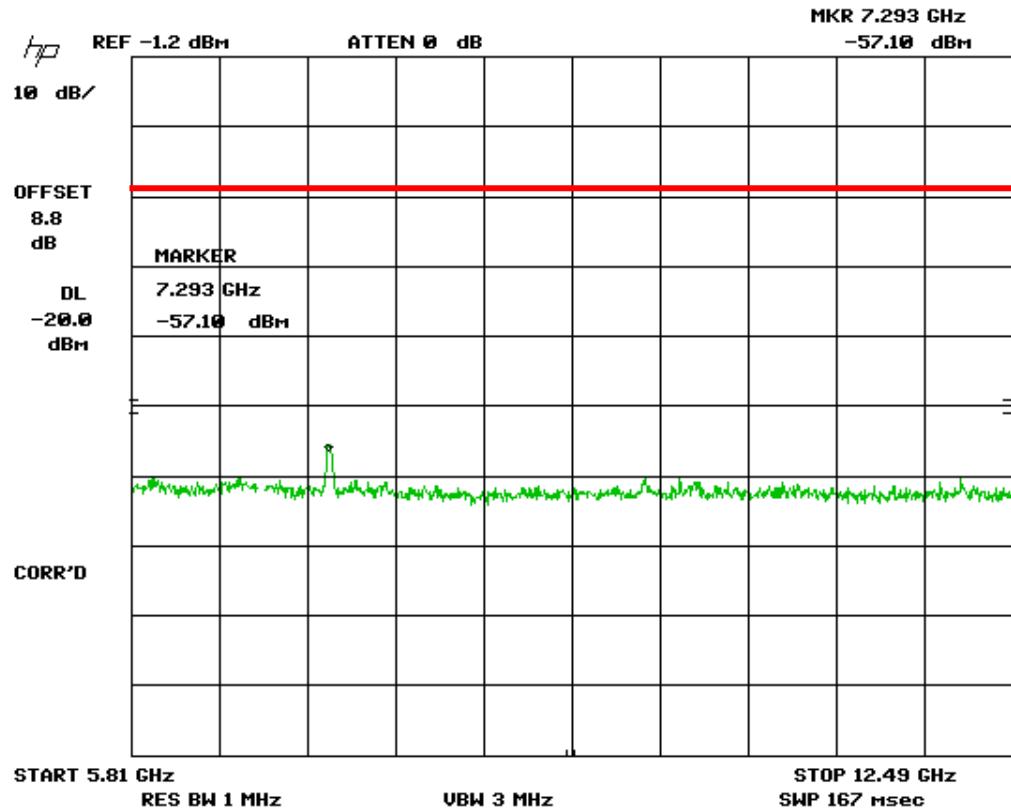


**Figure 12. Antenna Conducted Emissions 802.11n Mid, Part 3**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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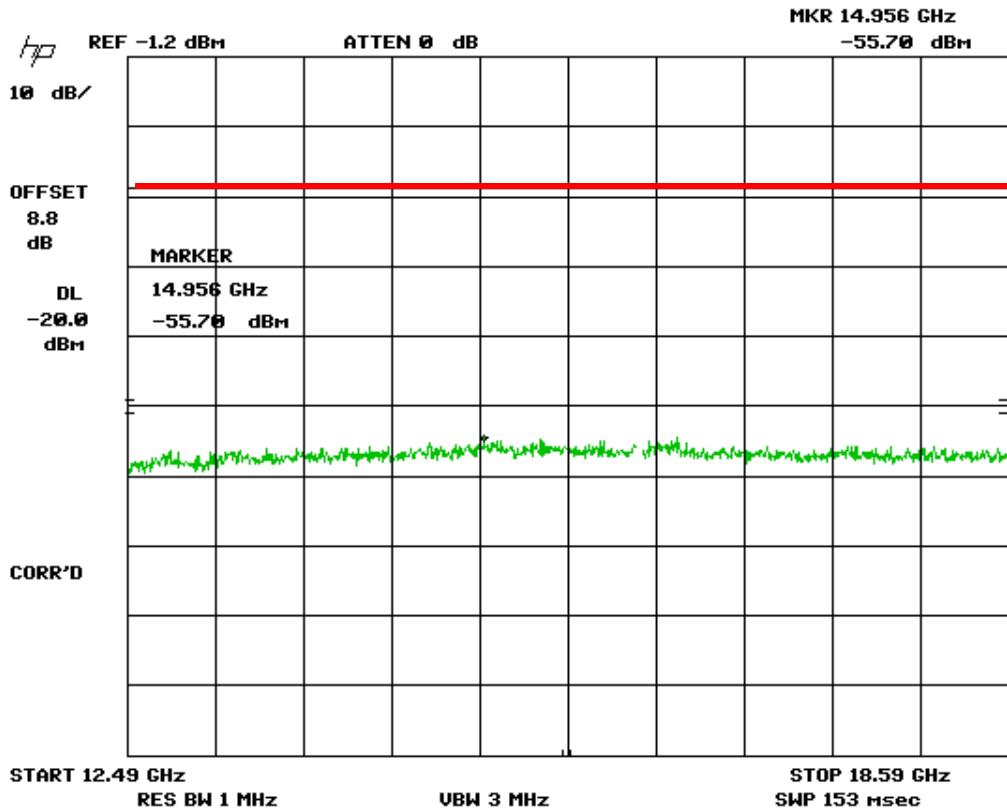


**Figure 13. Antenna Conducted Emissions 802.11n Mid, Part 4**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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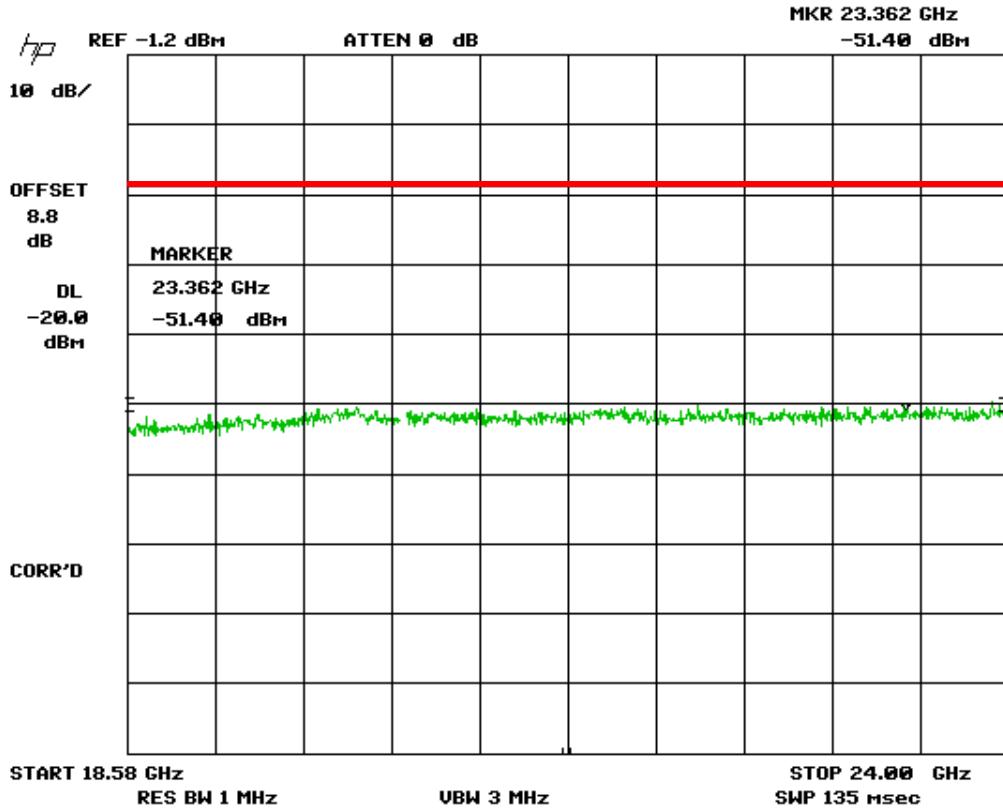


**Figure 14. Antenna Conducted Emissions 802.11n Mid, Part 5**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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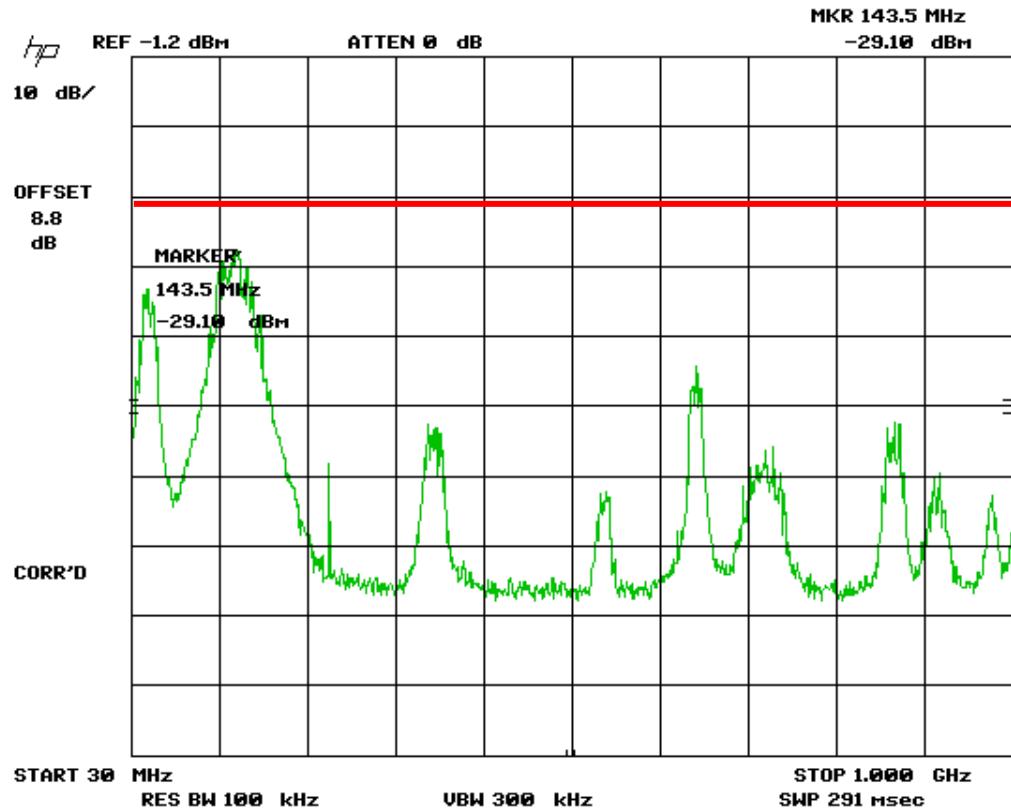


**Figure 15. Antenna Conducted Emissions 802.11n Mid, Part 6**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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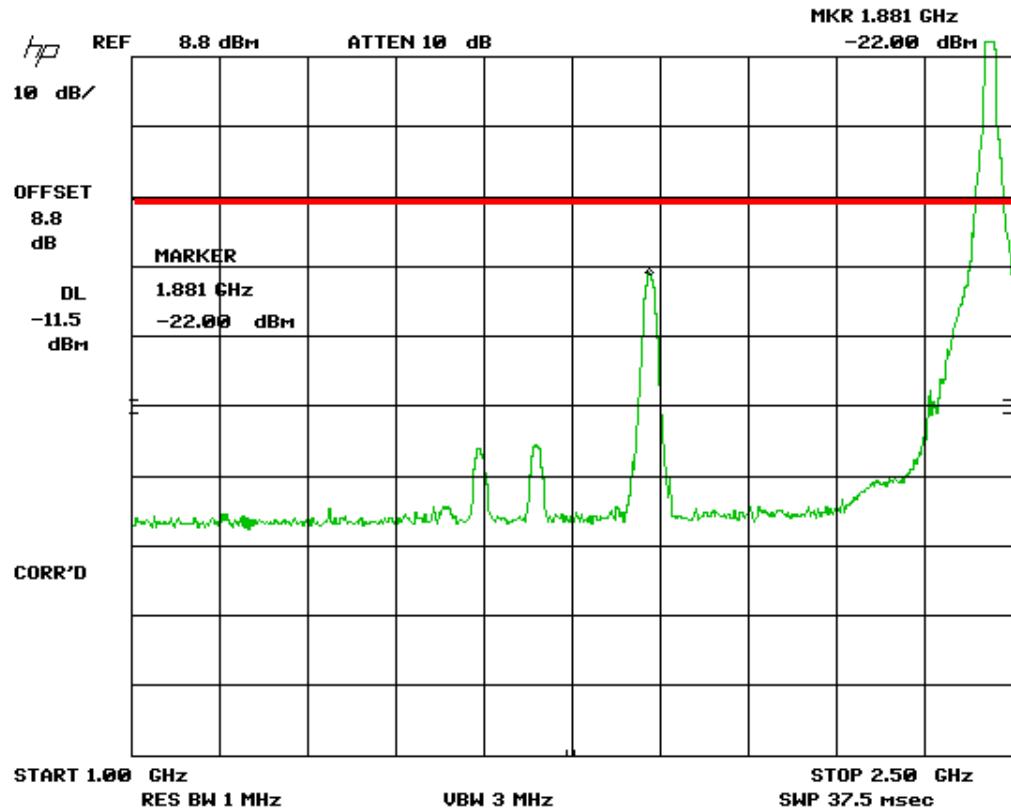


**Figure 16. Antenna Conducted Emissions 802.11n High, Part 1**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
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Model:

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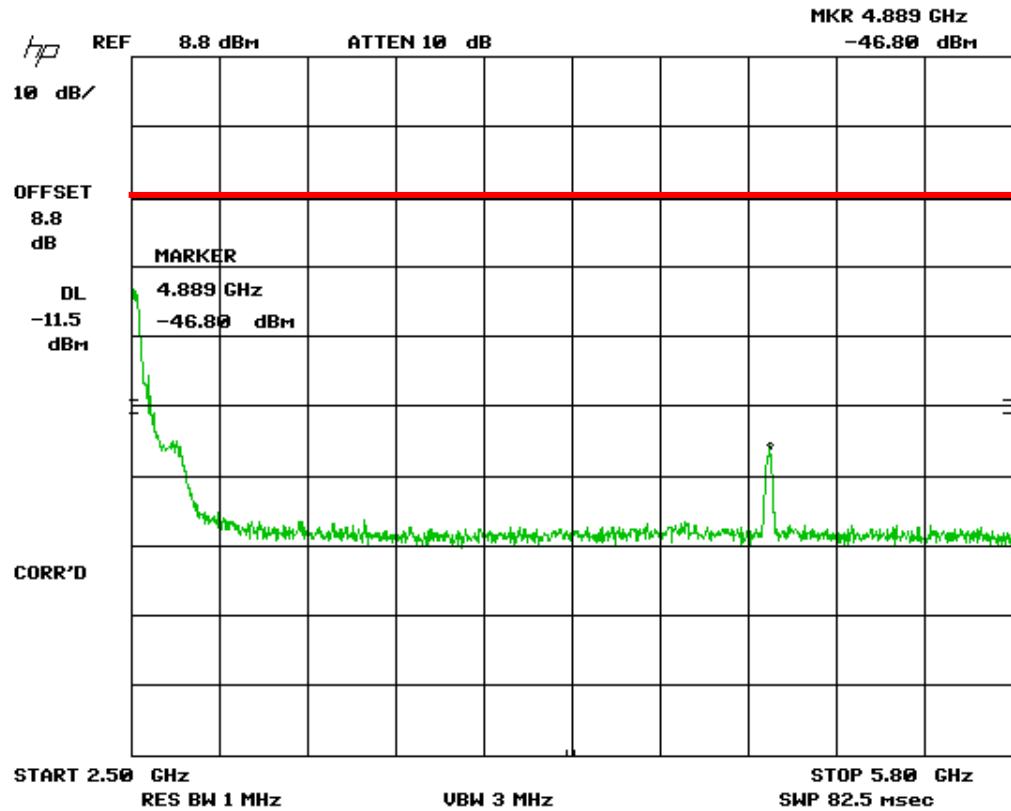


**Figure 17. Antenna Conducted Emissions 802.11n High, Part 2**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental. The larger peak to the right is the fundamental emission.

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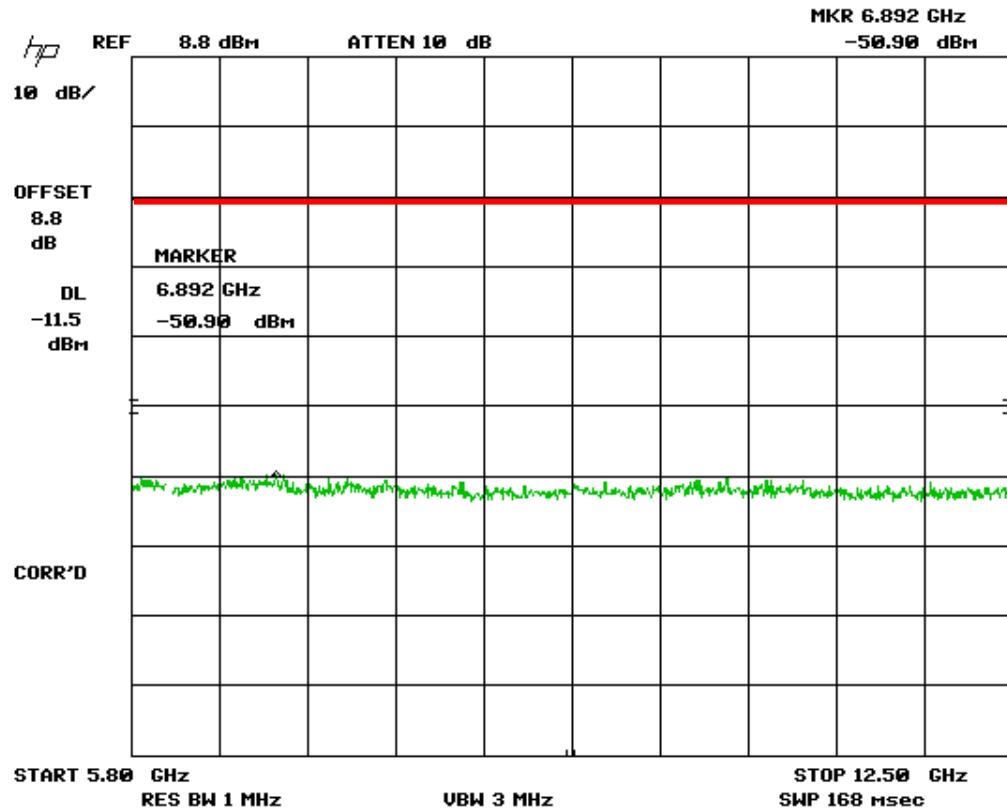


**Figure 18. Antenna Conducted Emissions 802.11n High, Part 3**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

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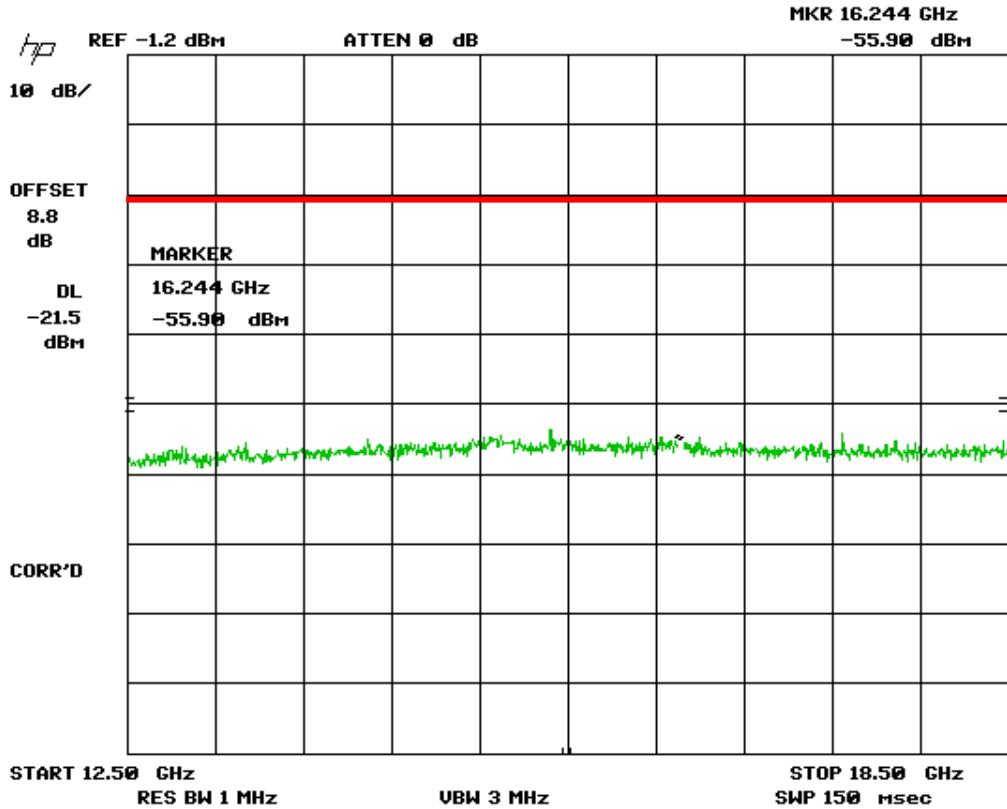


**Figure 19. Antenna Conducted Emissions 802.11n High, Part 4**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
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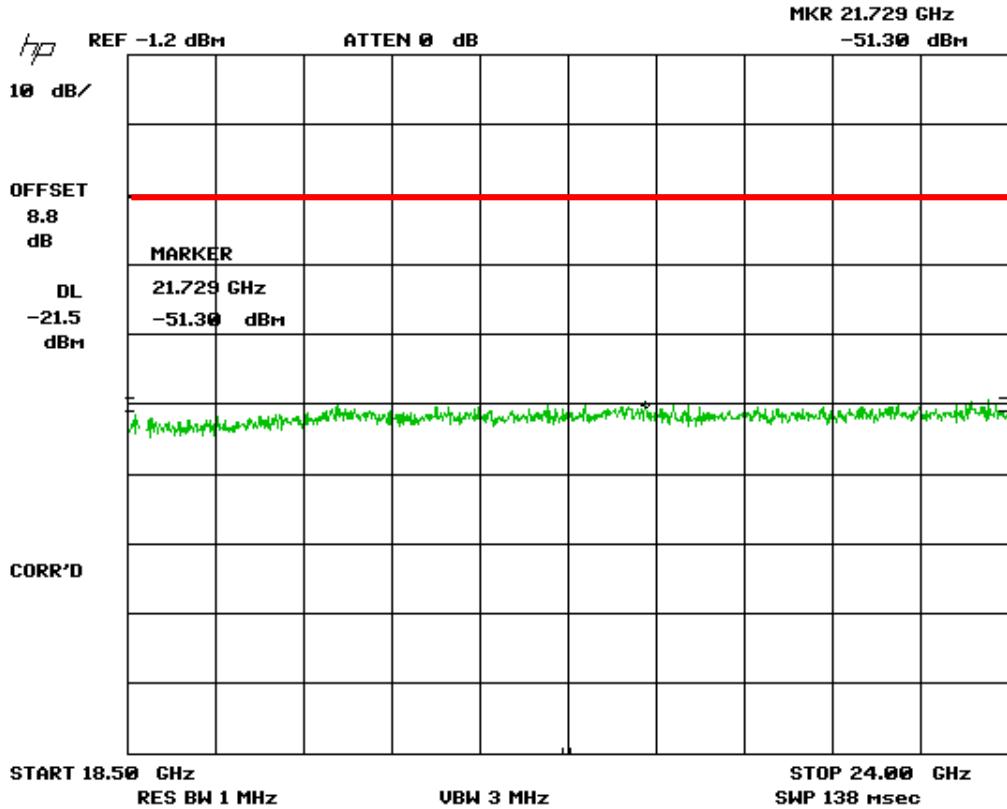


**Figure 20. Antenna Conducted Emissions 802.11n High, Part 5**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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Polycom Inc.  
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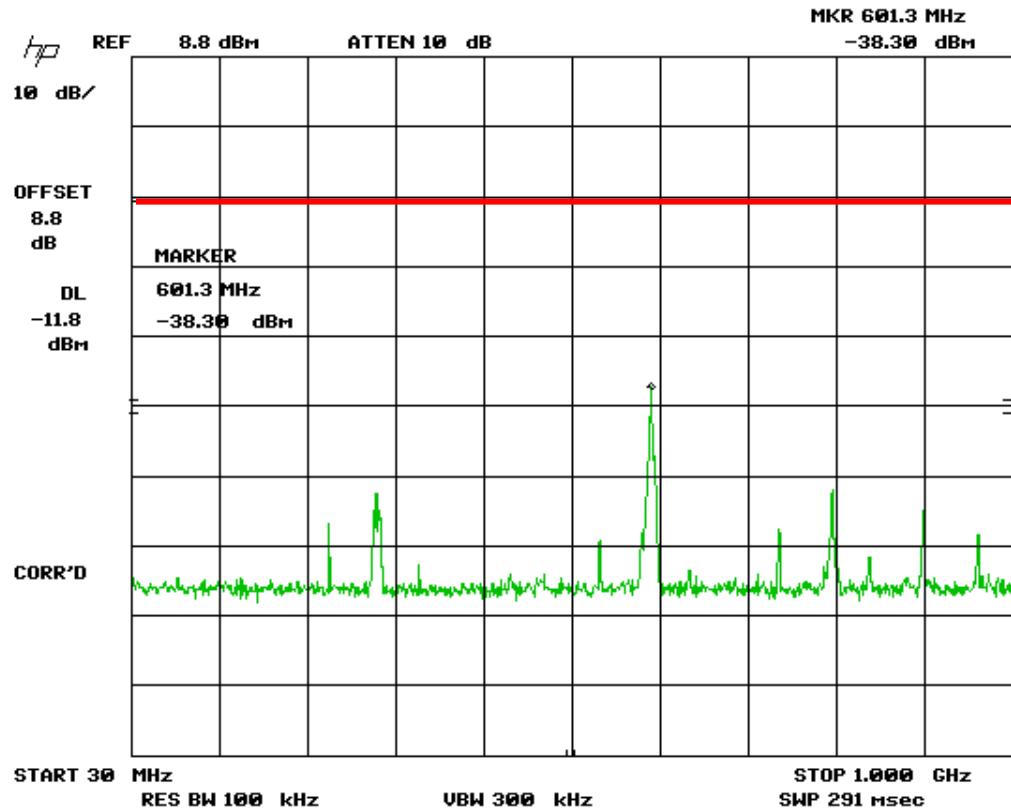


**Figure 21. Antenna Conducted Emissions 802.11n High, Part 6**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
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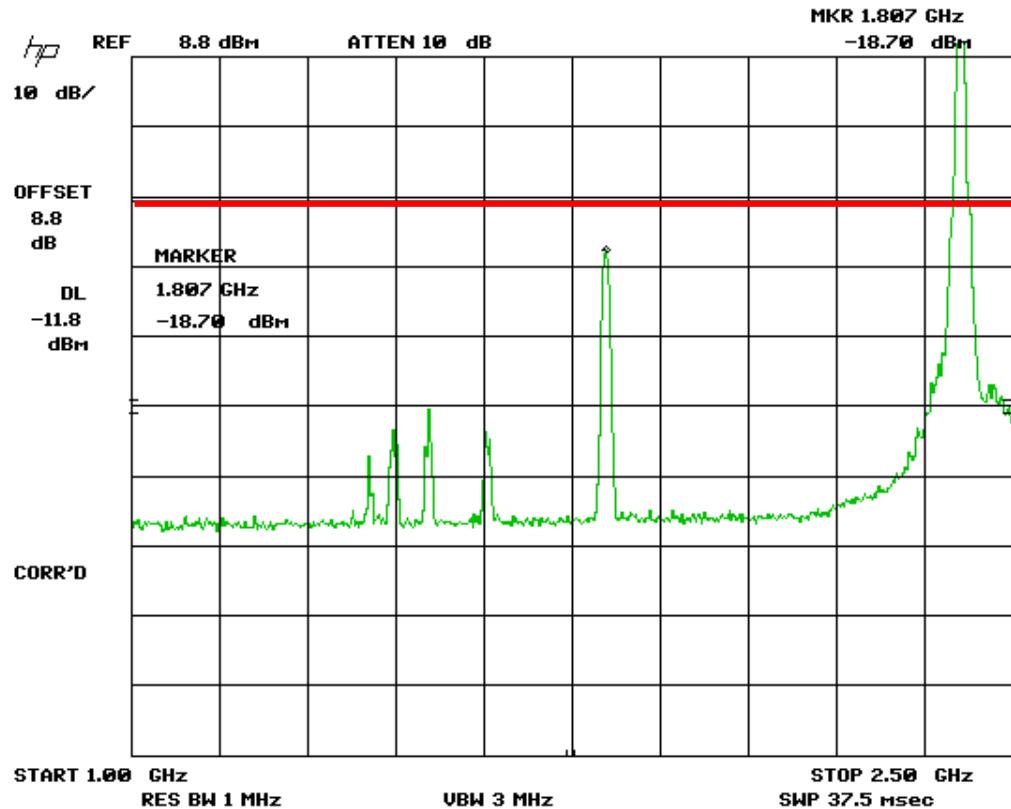


**Figure 22. Antenna Conducted Emissions 802.11b Low, Part 1**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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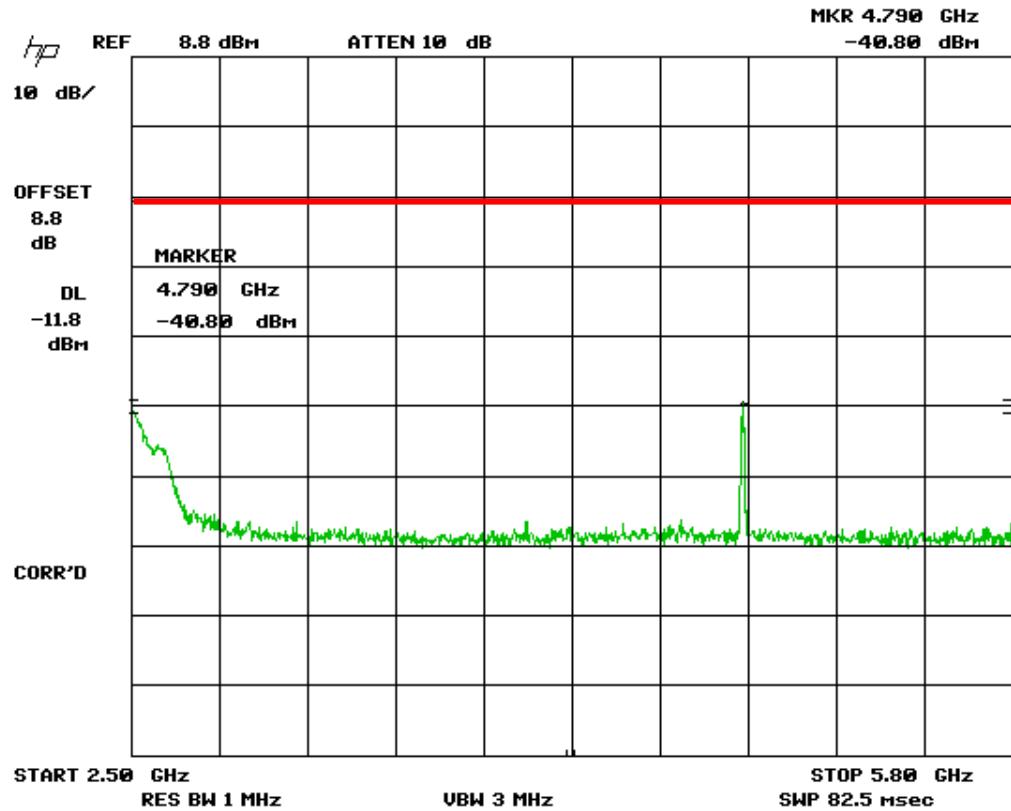


**Figure 23. Antenna Conducted Emissions 802.11b Low, Part 2**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental. The larger peak to the right is the fundamental emission.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
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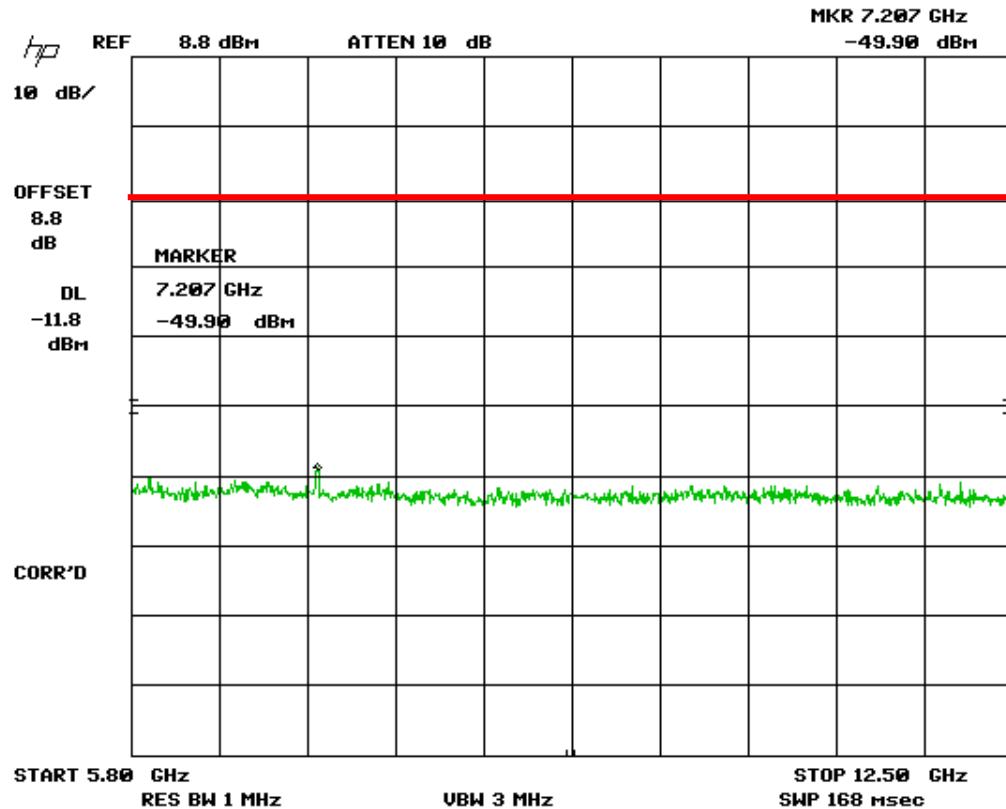


**Figure 24. Antenna Conducted Emissions 802.11b Low, Part 3**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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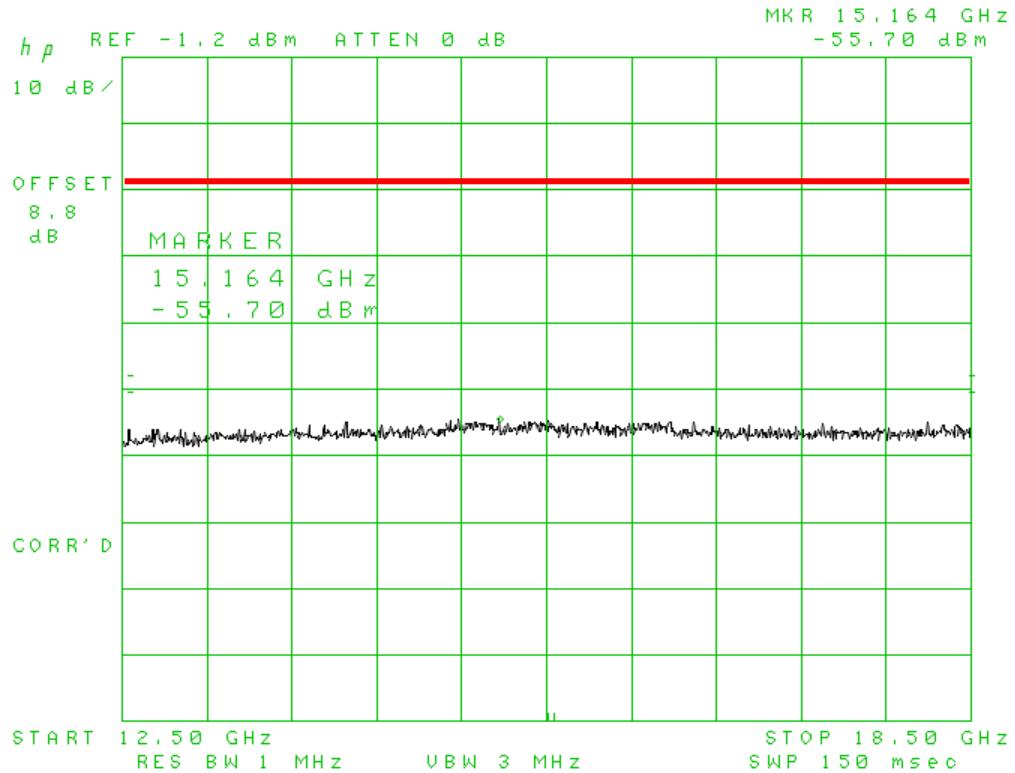


**Figure 25. Antenna Conducted Emissions 802.11b Low, Part 4**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
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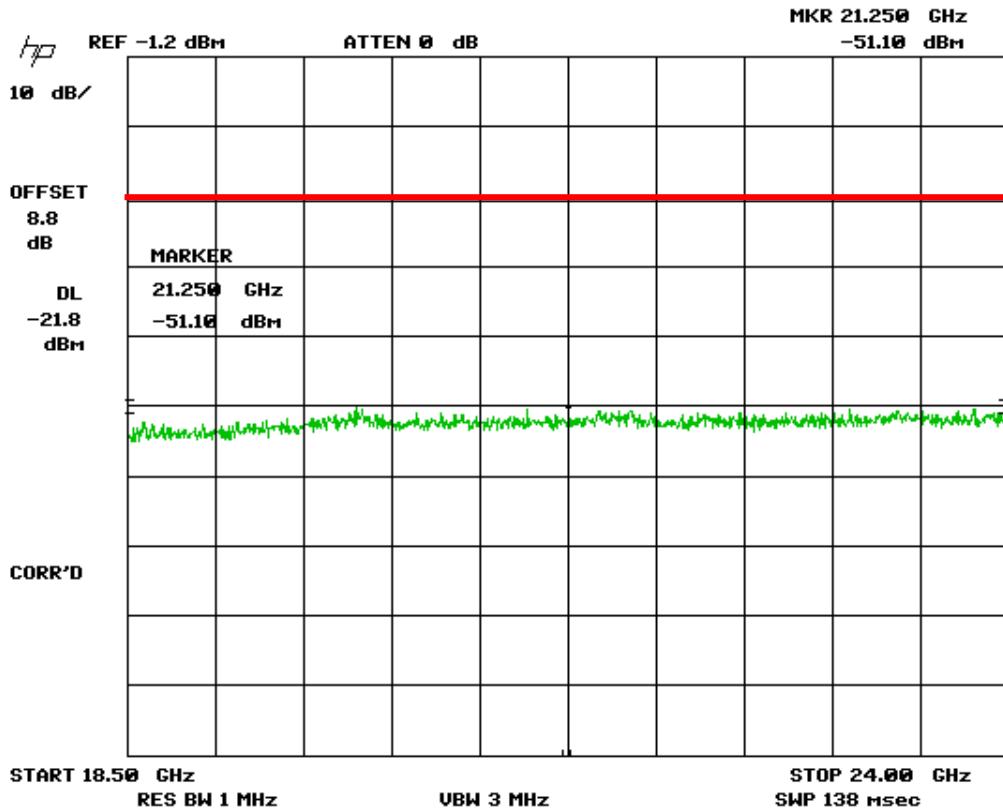


**Figure 26. Antenna Conducted Emissions 802.11b Low, Part 5**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
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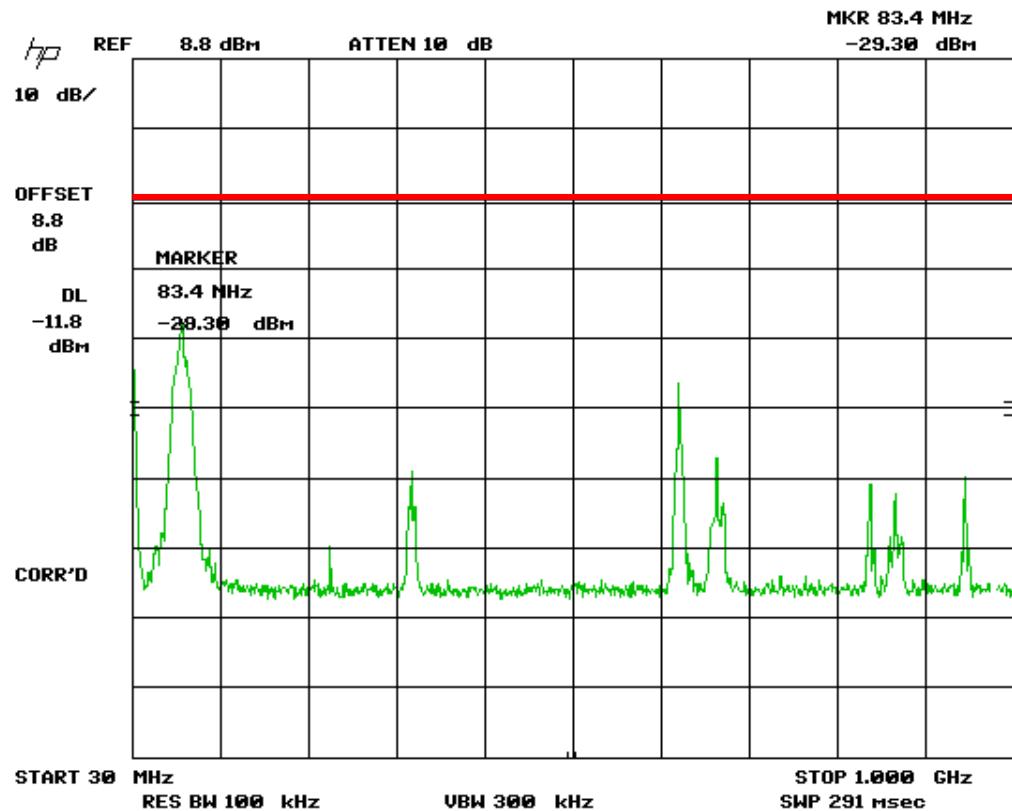


**Figure 27. Antenna Conducted Emissions 802.11b Low, Part 6**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
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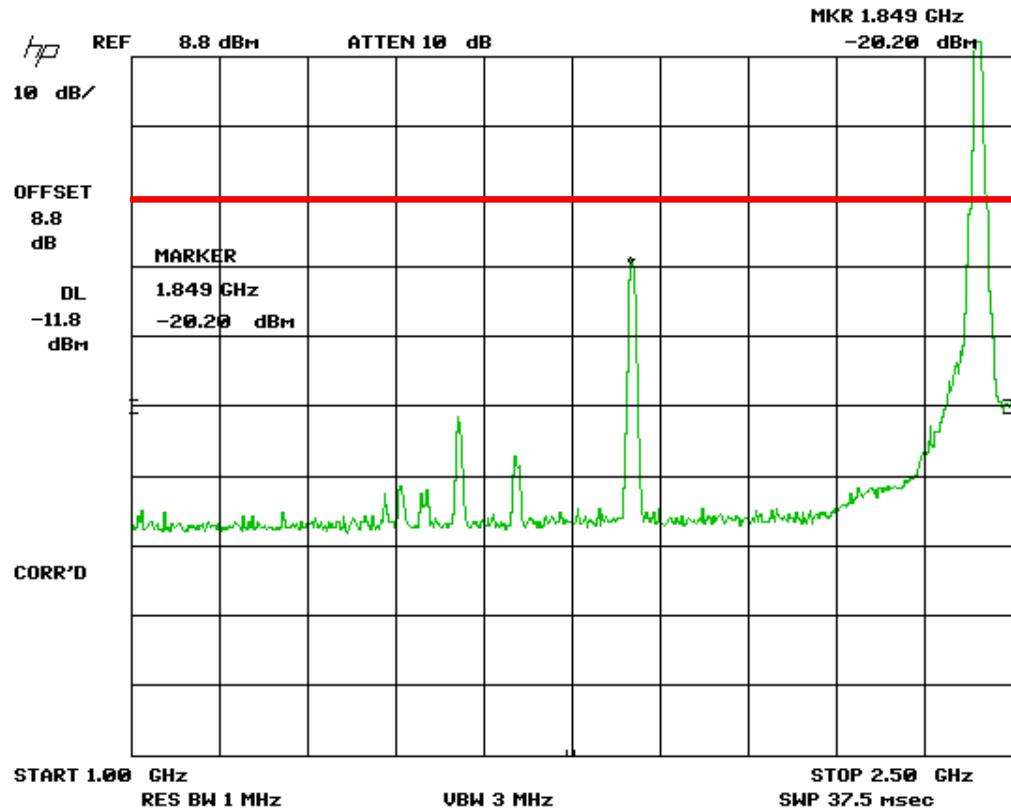


**Figure 28. Antenna Conducted Emissions 802.11b Mid, Part 1**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

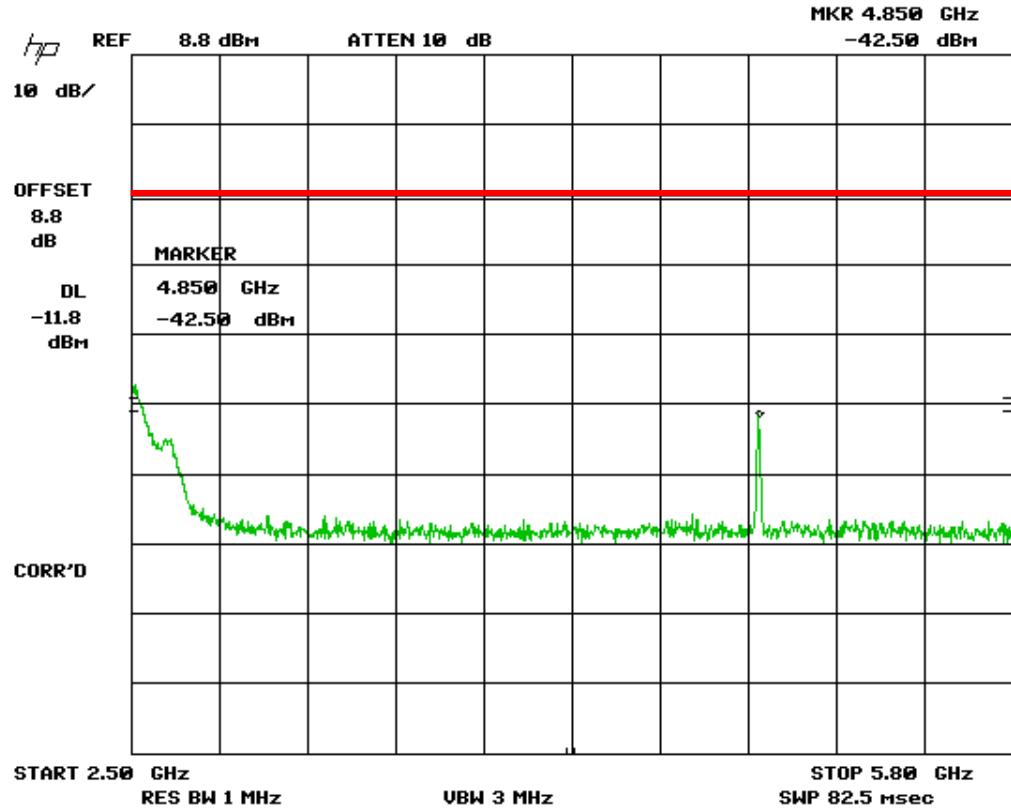


**Figure 29. Antenna Conducted Emissions 802.11b Mid, Part 2**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental. The larger peak to the right is the fundamental emission.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
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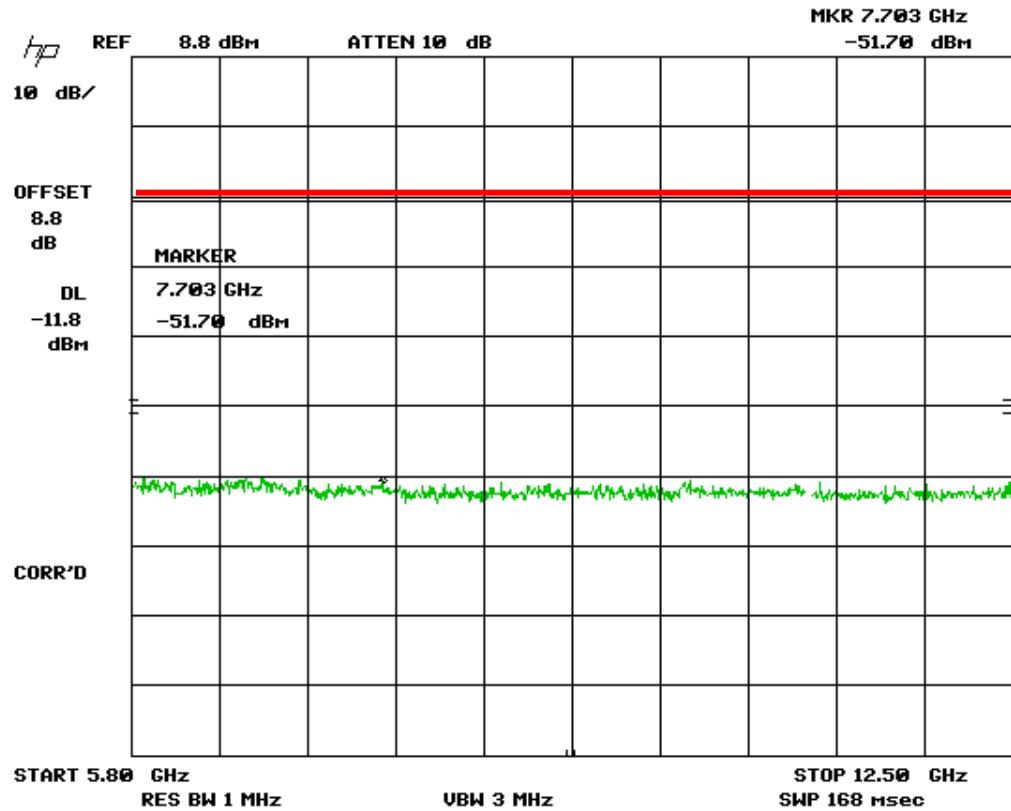


**Figure 30. Antenna Conducted Emissions 802.11b Mid, Part 3**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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Polycom Inc.  
P008

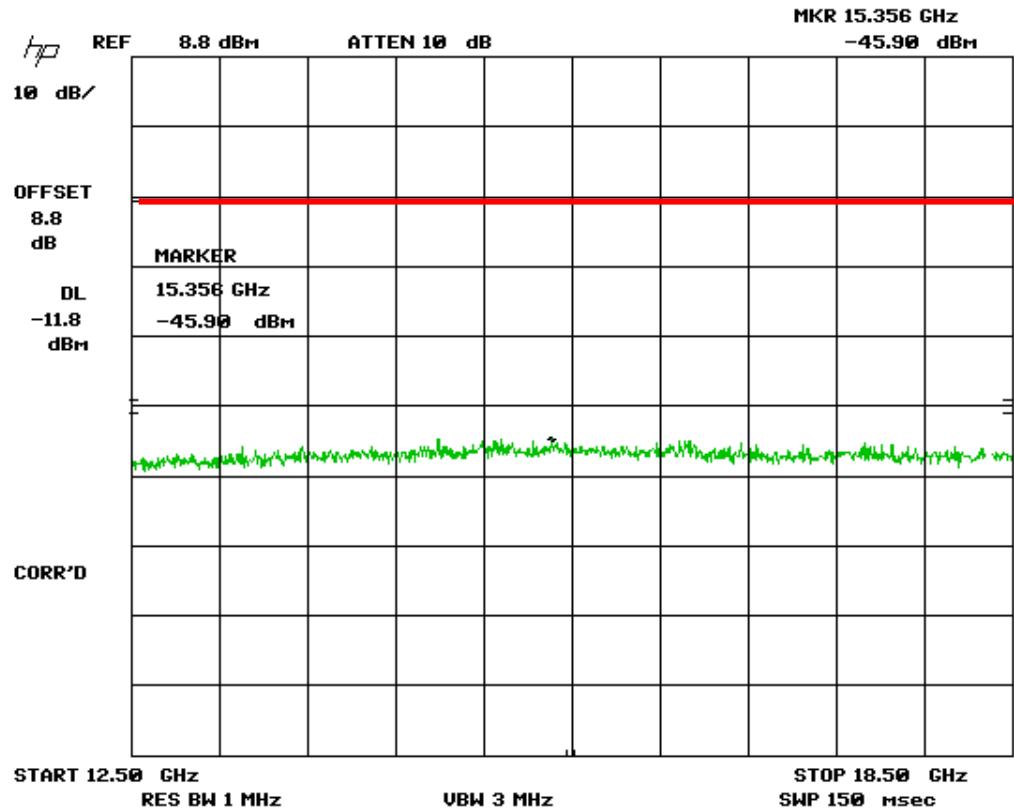


**Figure 31. Antenna Conducted Emissions 802.11b Mid, Part 4**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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Polycom Inc.  
P008

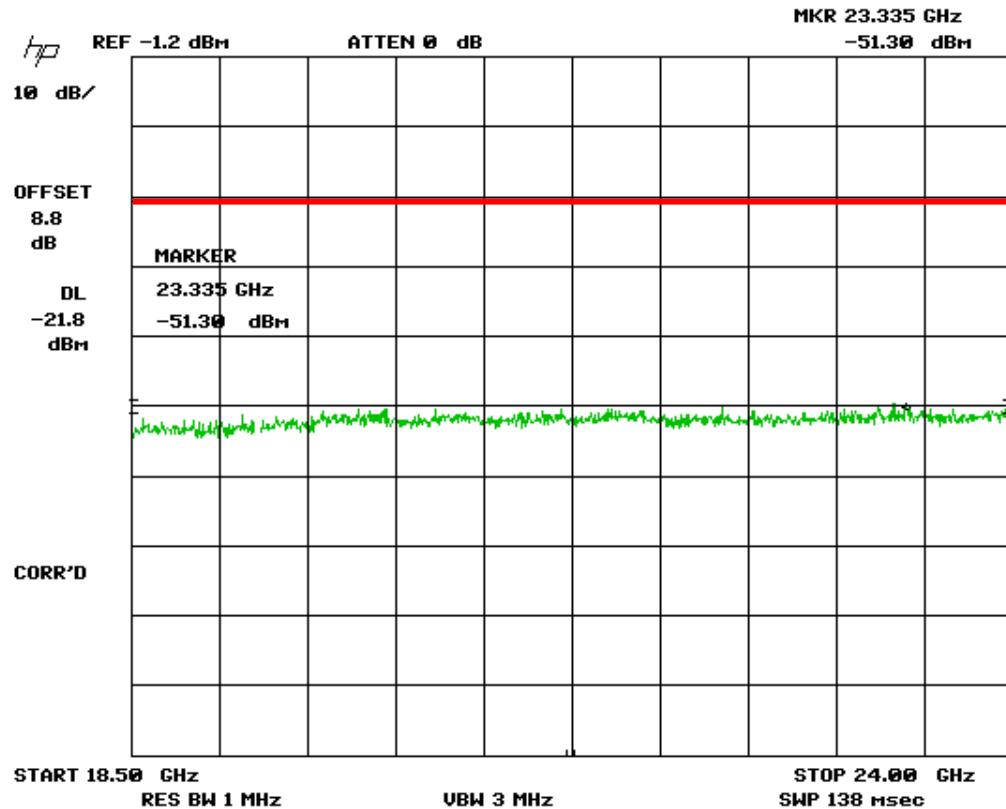


**Figure 32. Antenna Conducted Emissions 802.11b Mid, Part 5**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

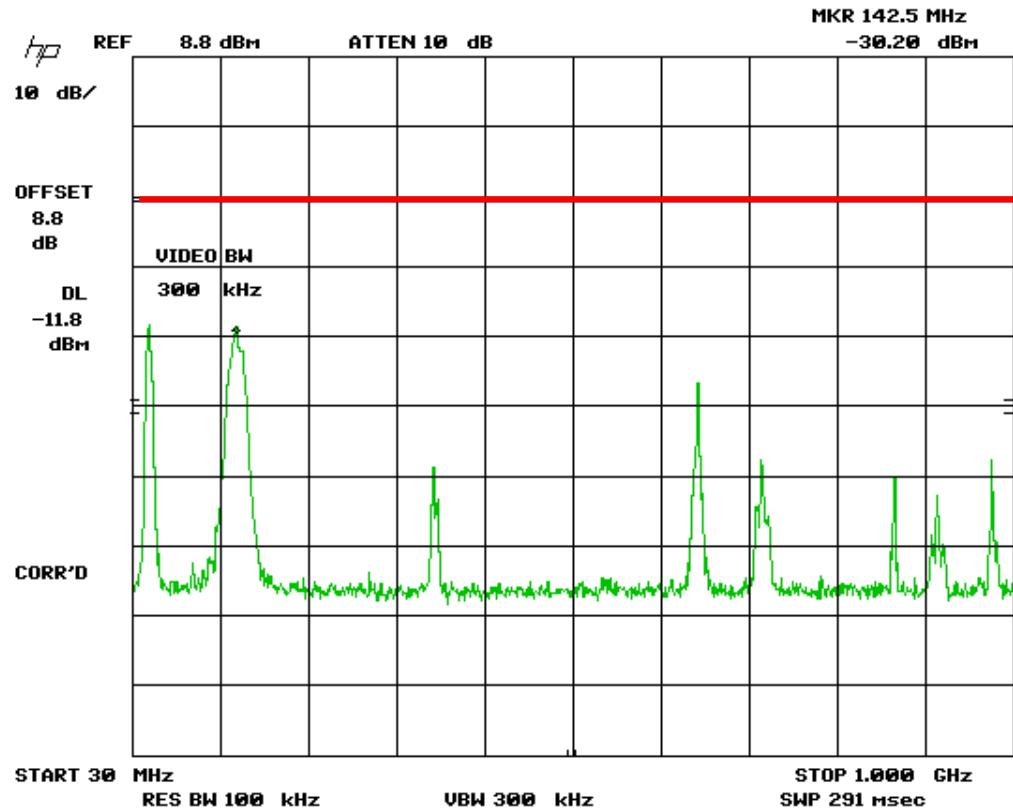


**Figure 33. Antenna Conducted Emissions 802.11b Mid, Part 6**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

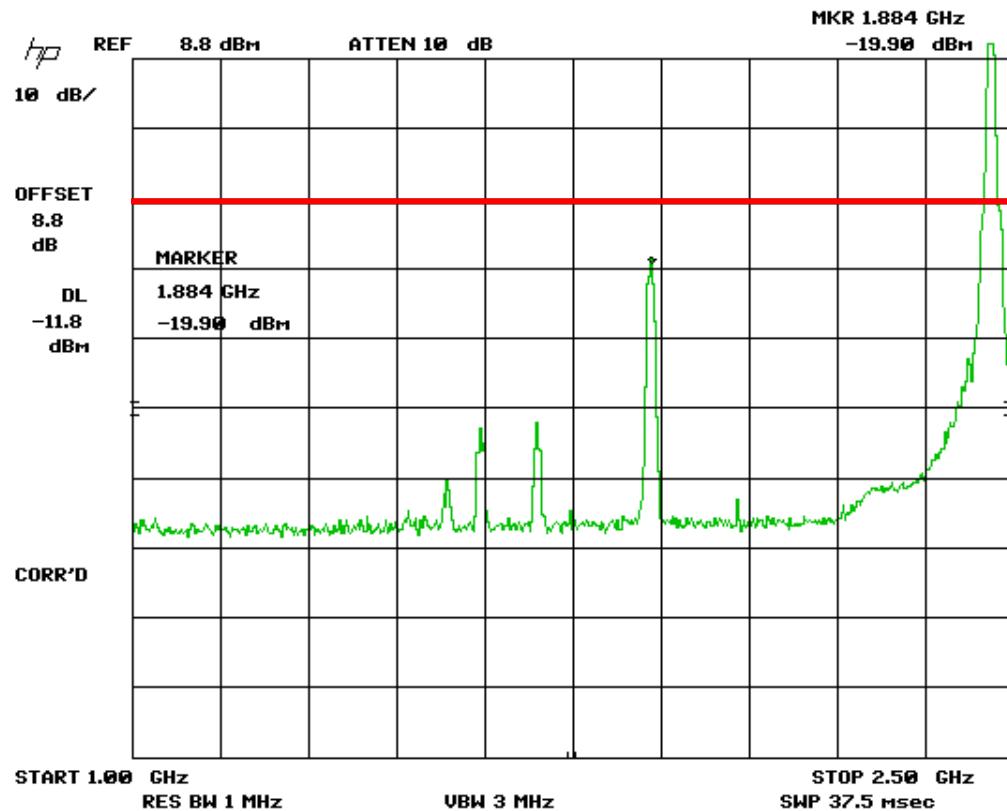


**Figure 34. Antenna Conducted Emissions 802.11b High, Part 1**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

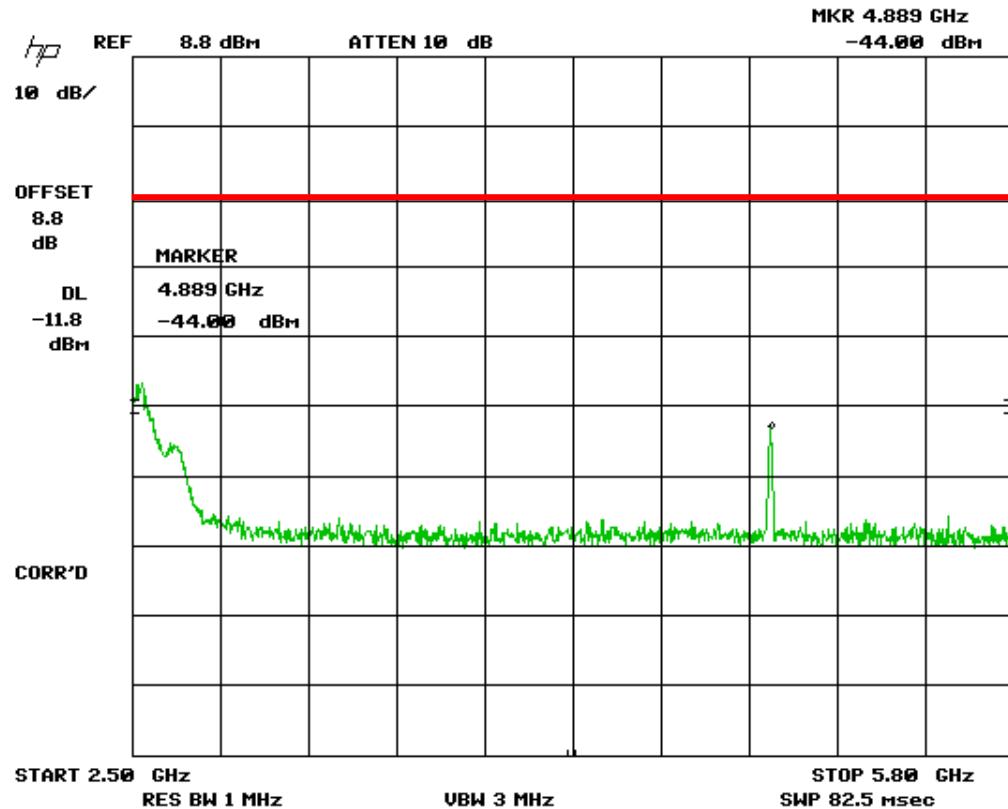


**Figure 35. Antenna Conducted Emissions 802.11b High, Part 2**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental. The larger peak to the right is the fundamental emission.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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15-0085  
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Polycom Inc.  
P008

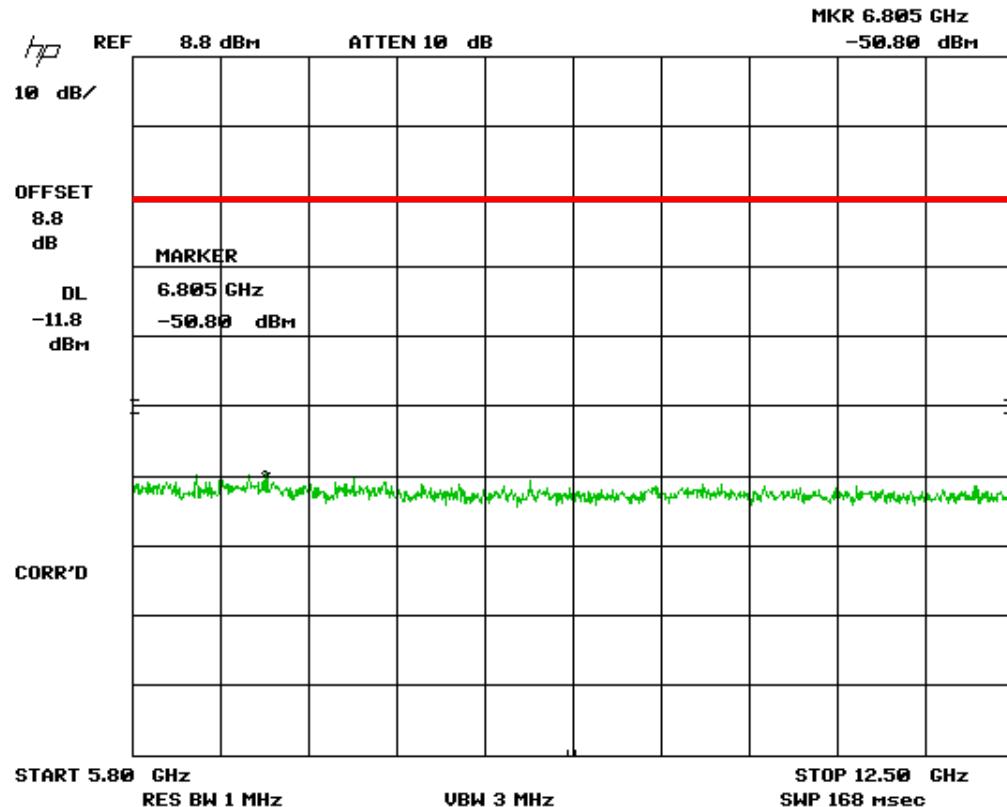


**Figure 36. Antenna Conducted Emissions 802.11b High, Part 3**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
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Polycom Inc.  
P008

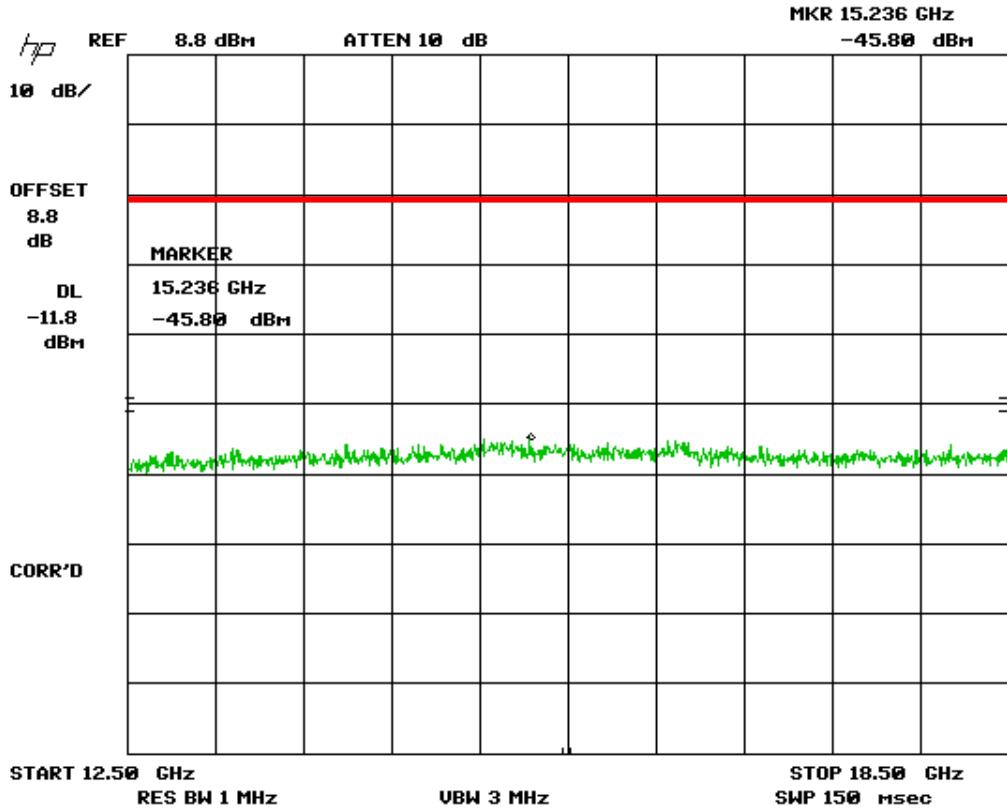


**Figure 37. Antenna Conducted Emissions 802.11b High, Part 4**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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Polycom Inc.  
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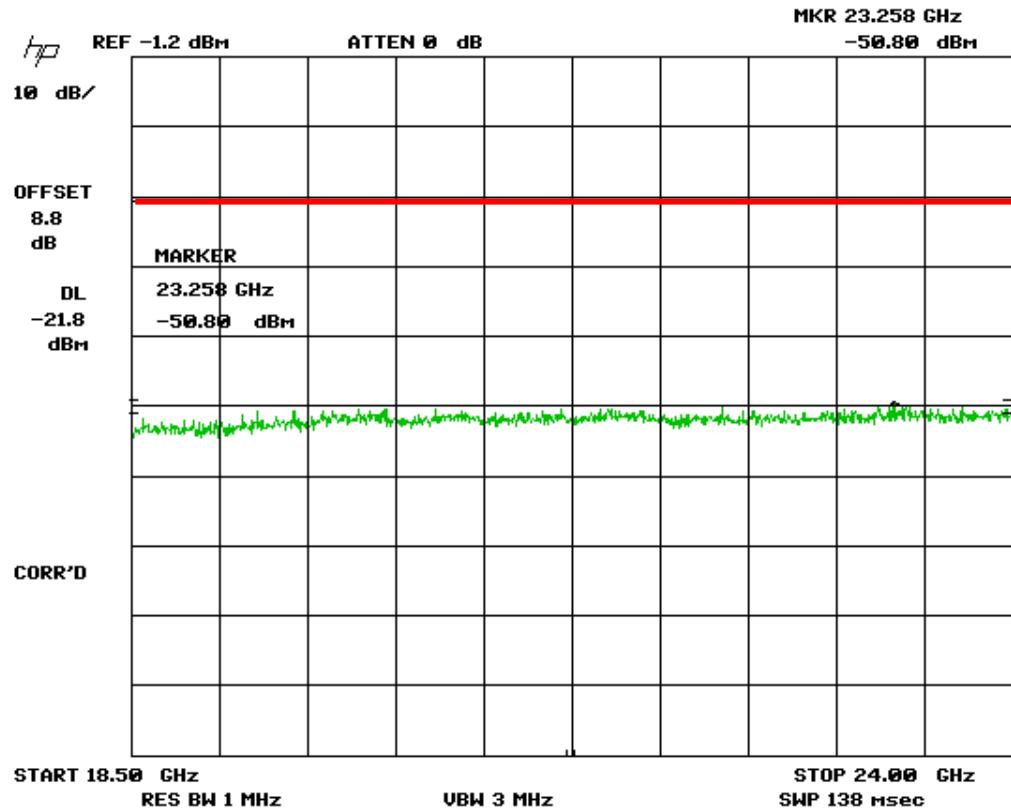


**Figure 38. Antenna Conducted Emissions 802.11b High, Part 5**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
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Polycom Inc.  
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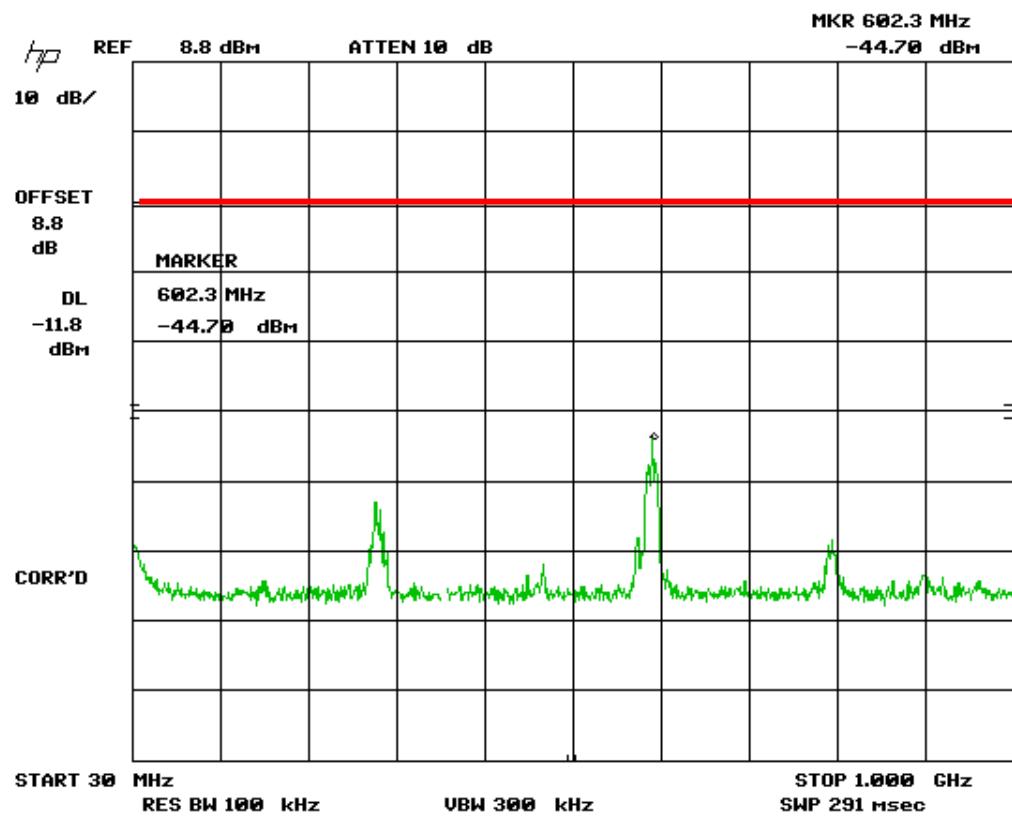


**Figure 39. Antenna Conducted Emissions 802.11b High, Part 6**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
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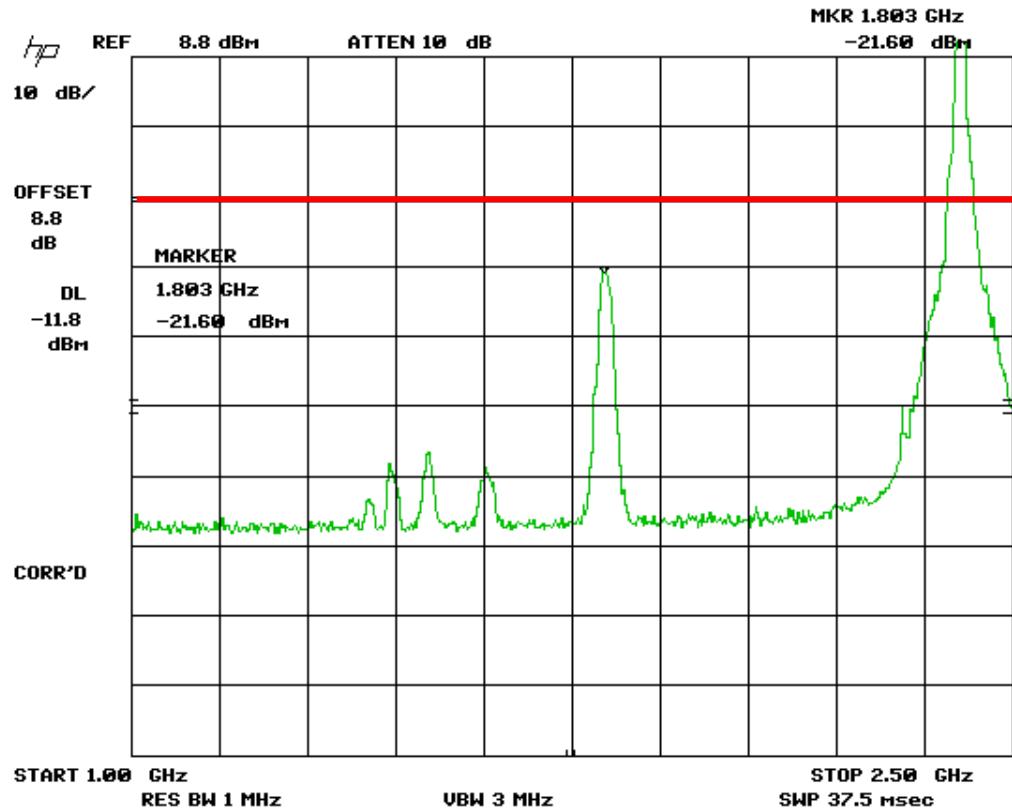


**Figure 40. Antenna Conducted Emissions 802.11g Low, Part 1**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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Polycom Inc.  
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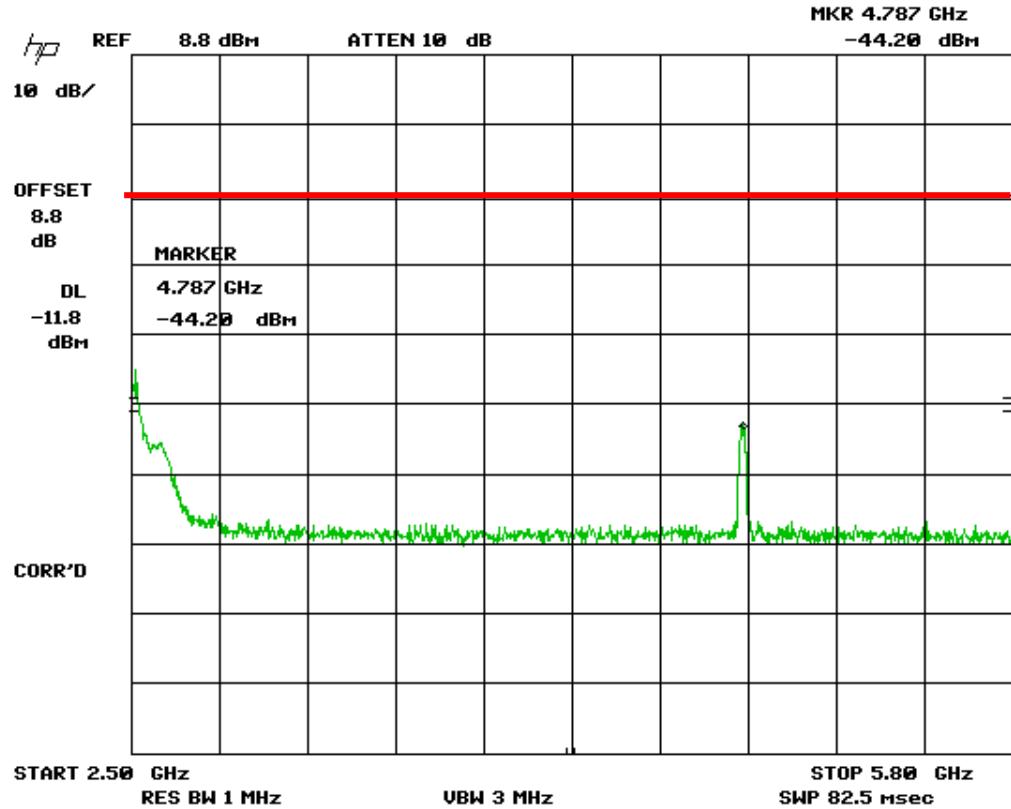


**Figure 41. Antenna Conducted Emissions 802.11g Low, Part 2**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental. The larger peak to the right is the fundamental emission.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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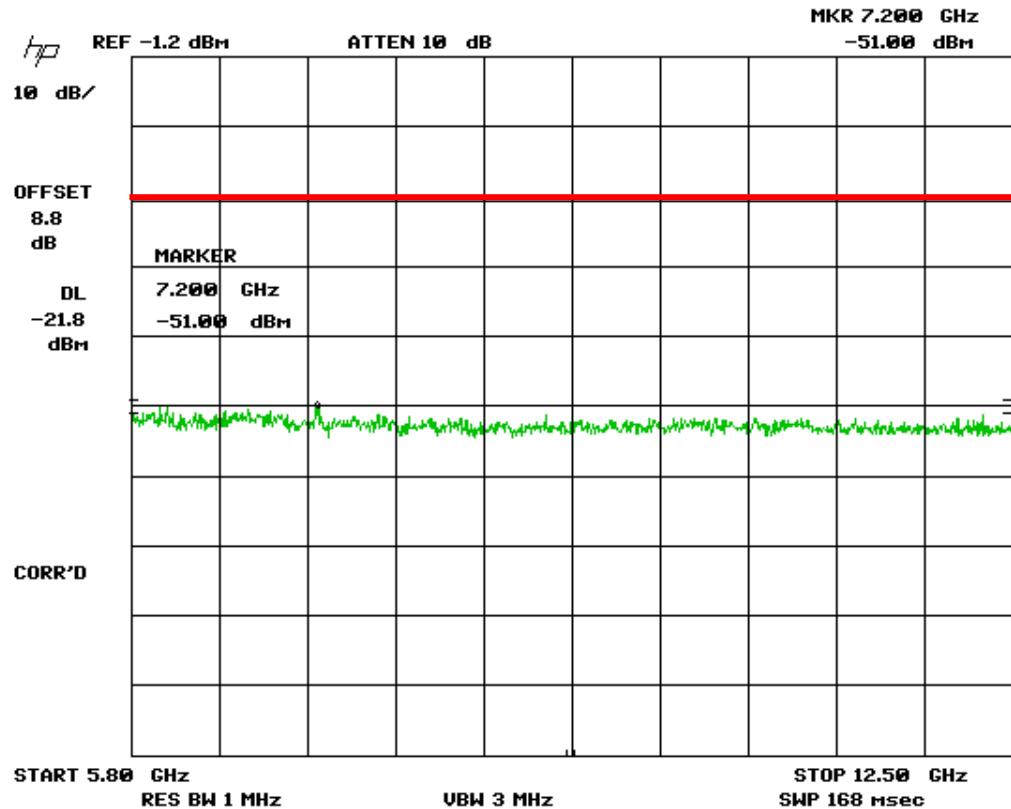


**Figure 42. Antenna Conducted Emissions 802.11g Low, Part 3**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
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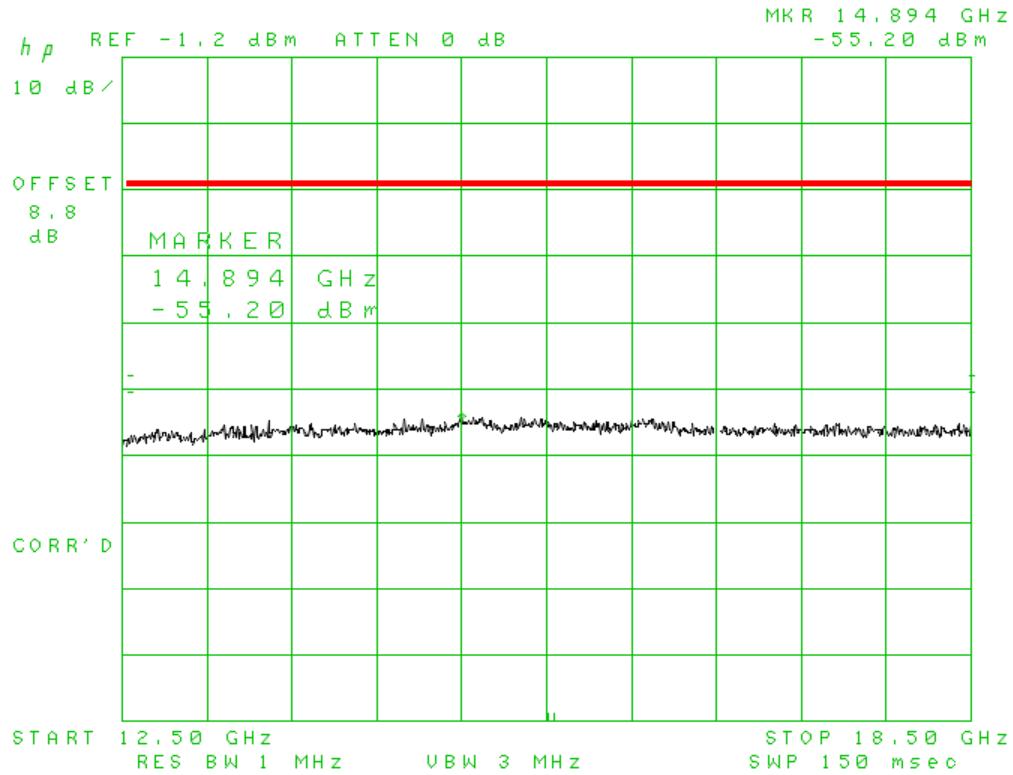


**Figure 43. Antenna Conducted Emissions 802.11g Low, Part 4**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
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Polycom Inc.  
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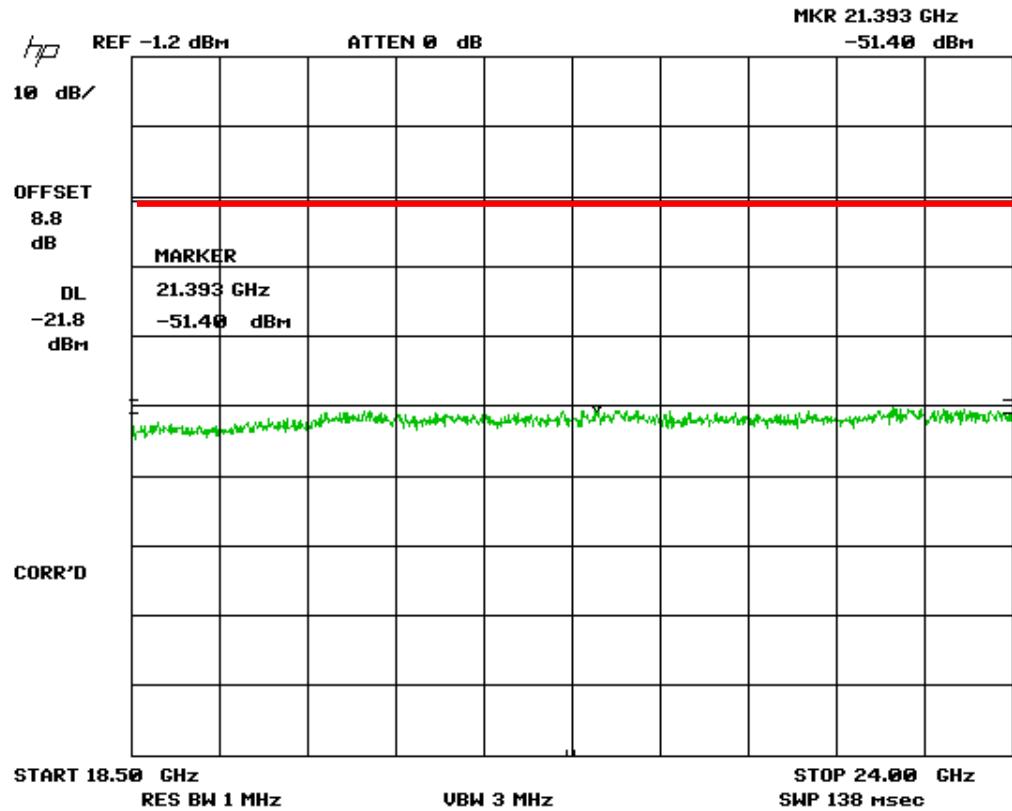


**F**  
**Figure 44. Antenna Conducted Emissions 802.11g Low, Part 5**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
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Polycom Inc.  
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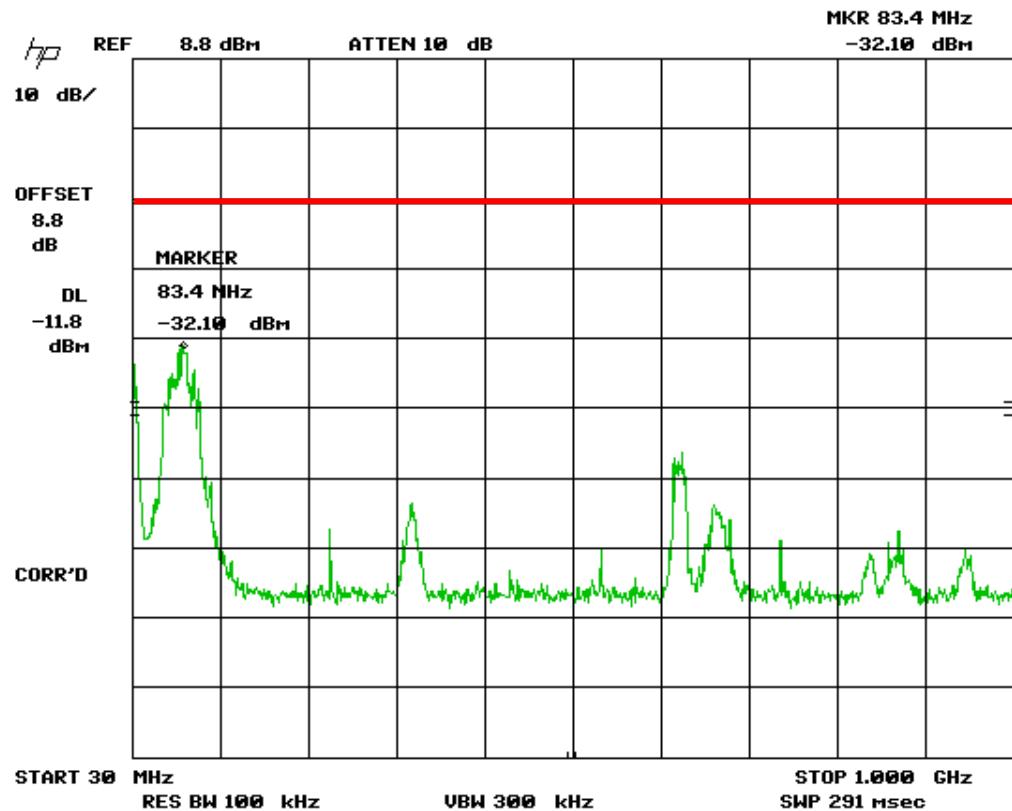


**Figure 45. Antenna Conducted Emissions 802.11g Low, Part 6**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
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Polycom Inc.  
P008

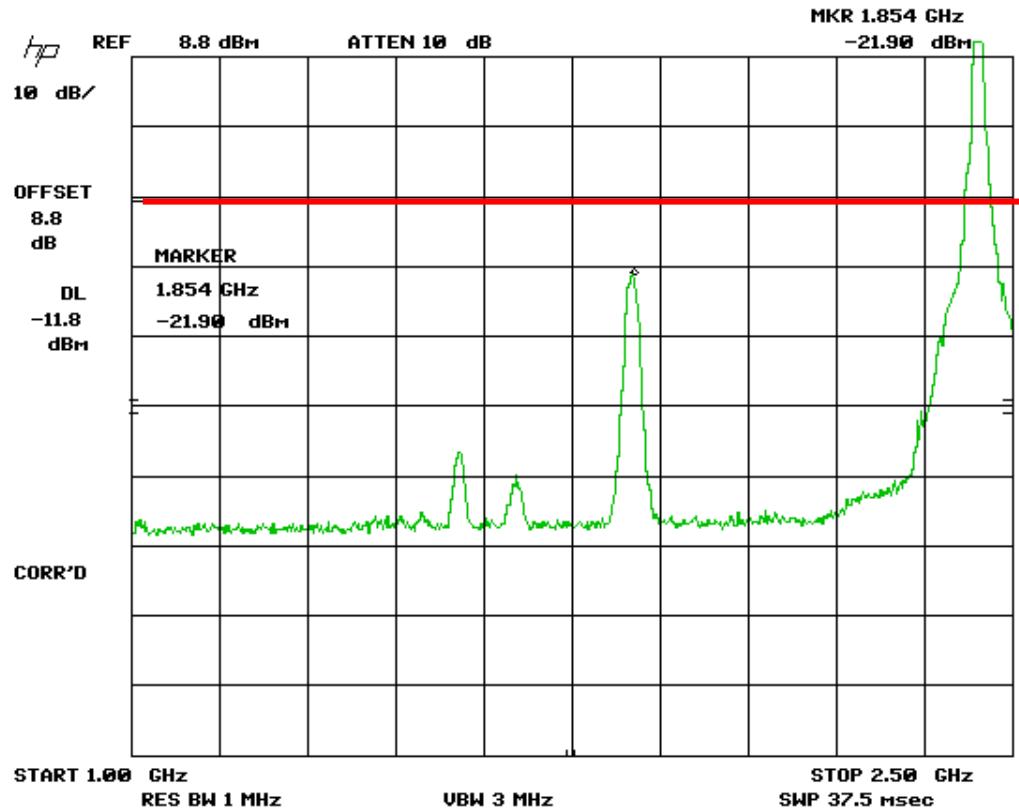


**Figure 46. Antenna Conducted Emissions 802.11g Mid, Part 1**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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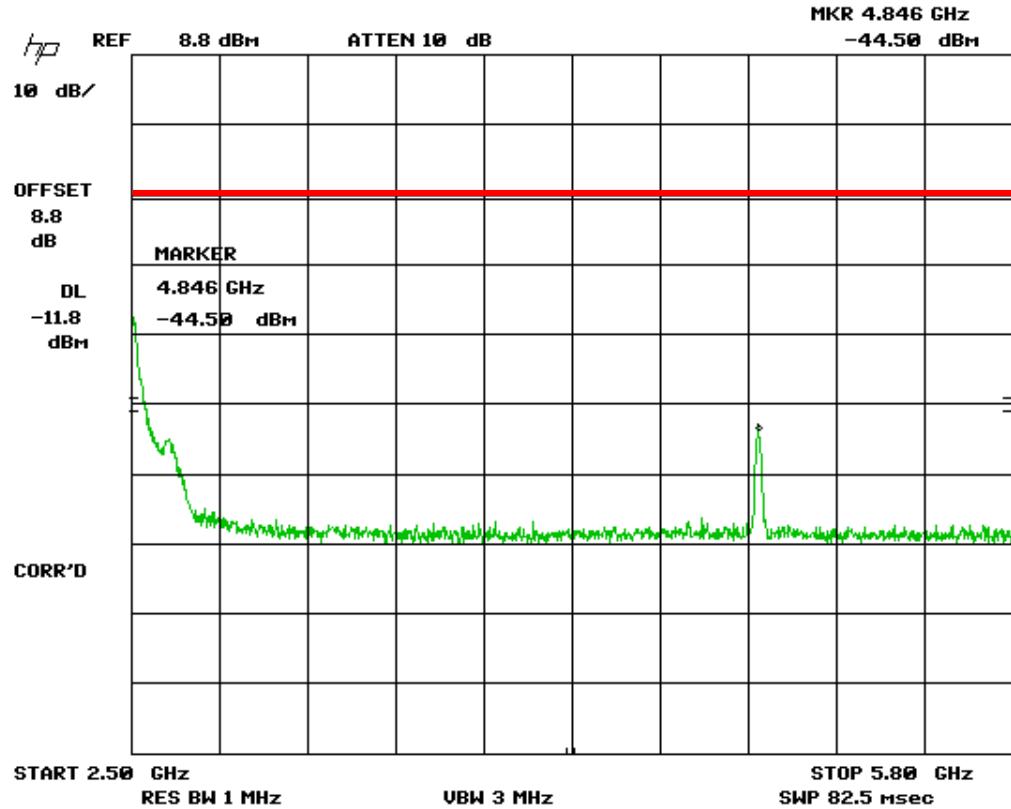


**Figure 47. Antenna Conducted Emissions 802.11g Mid, Part 2**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental. The larger peak to the right is the fundamental emission.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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Polycom Inc.  
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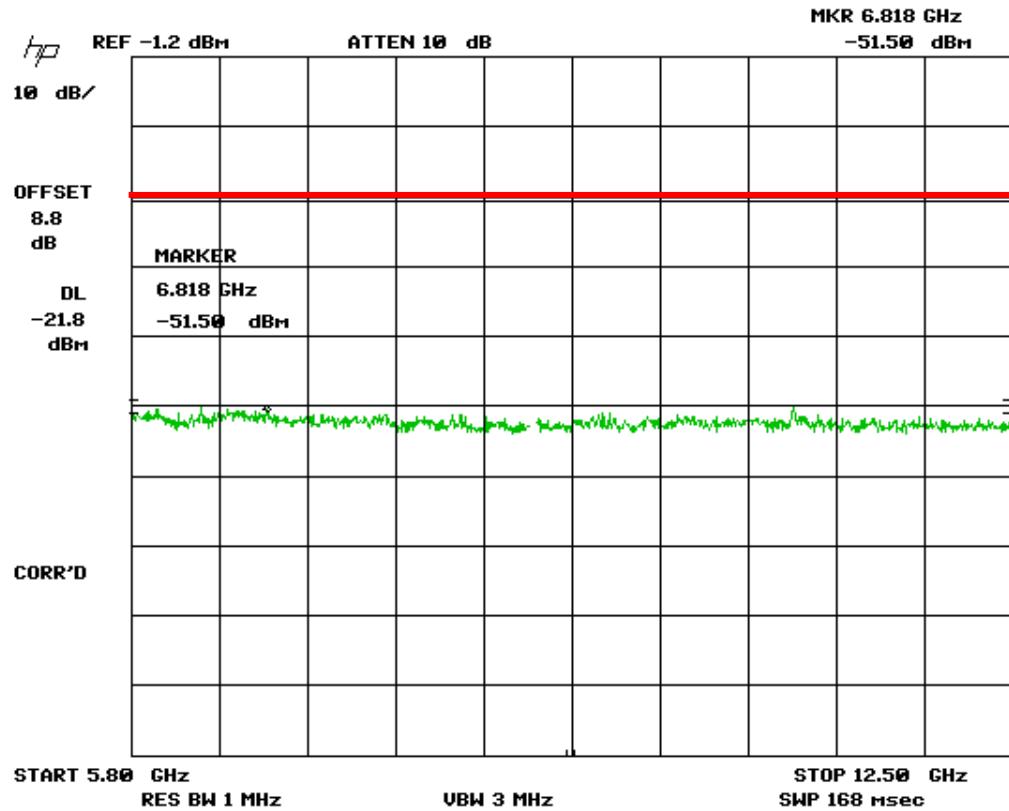


**Figure 48. Antenna Conducted Emissions 802.11g Mid, Part 3**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
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Polycom Inc.  
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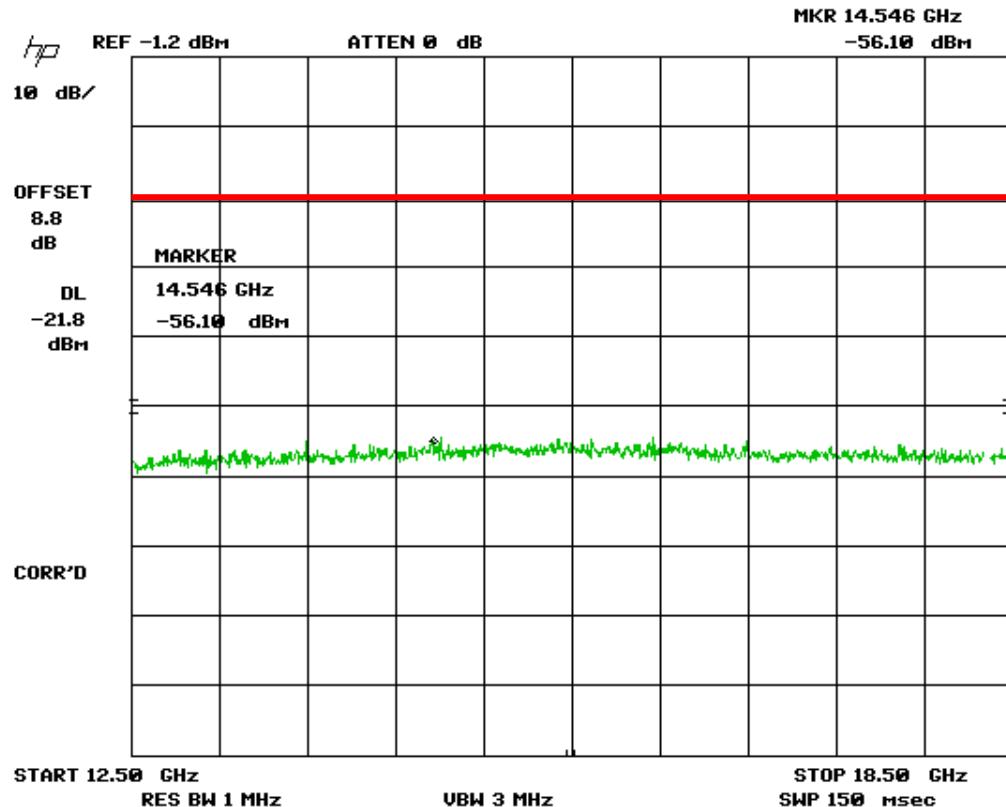


**Figure 49. Antenna Conducted Emissions 802.11g Mid, Part 4**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
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Polycom Inc.  
P008

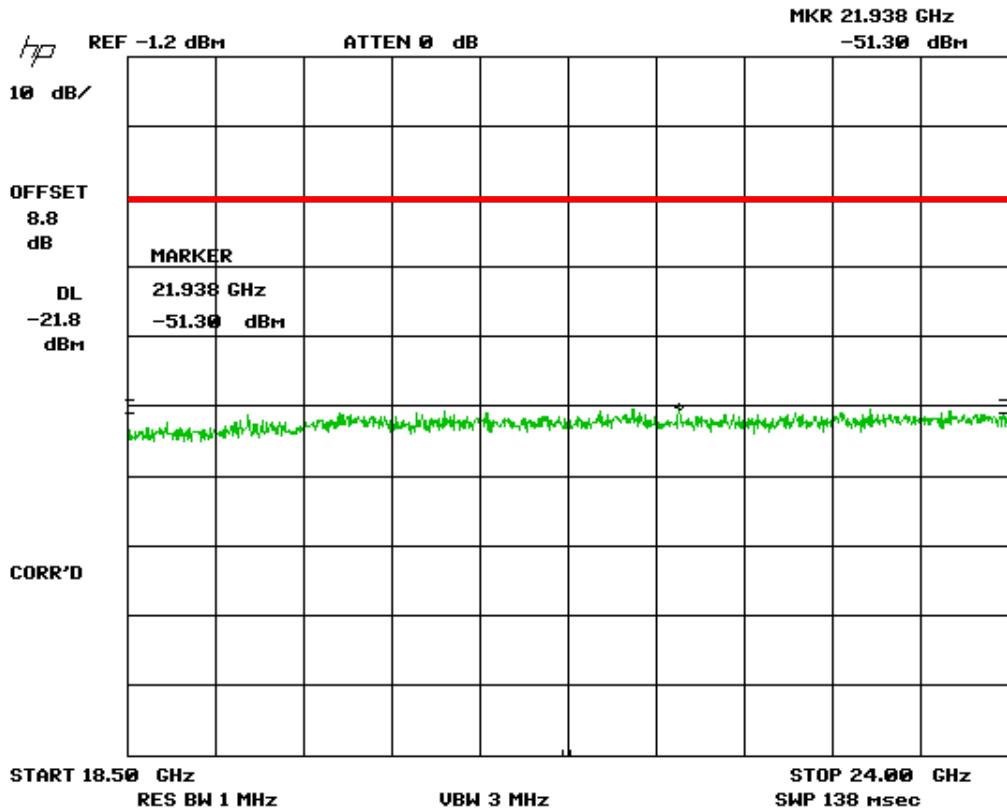


**Figure 50. Antenna Conducted Emissions 802.11g Mid, Part 5**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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Polycom Inc.  
P008

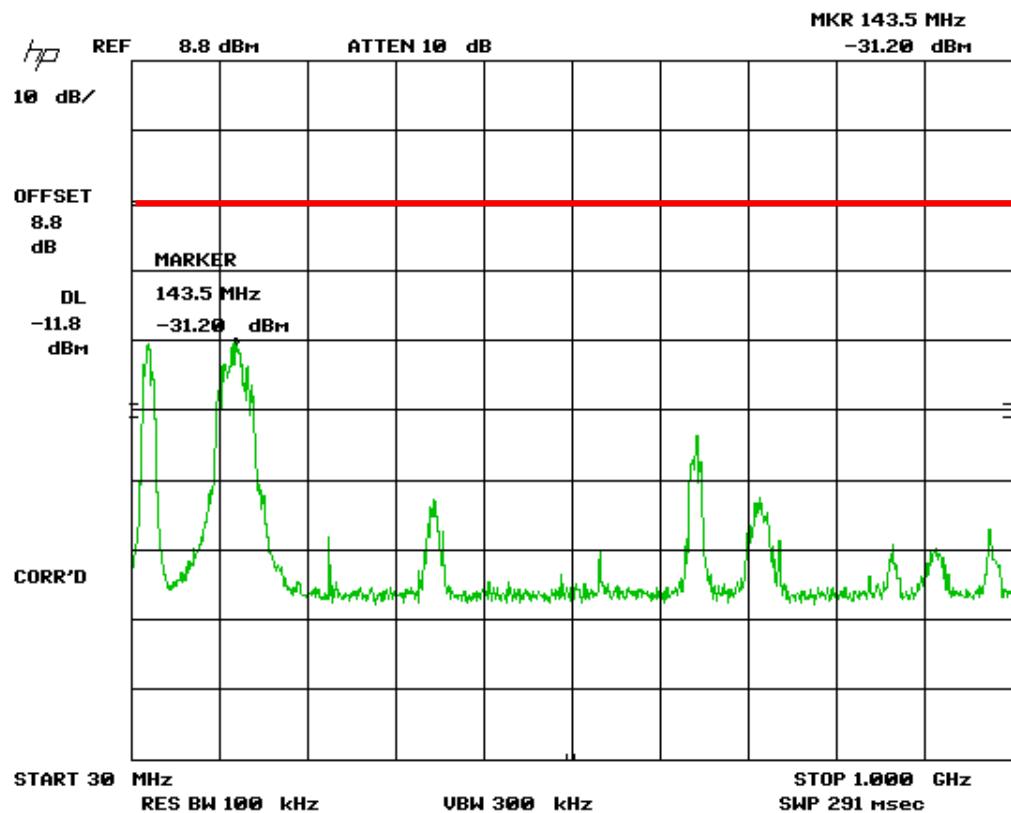


**Figure 51. Antenna Conducted Emissions 802.11g Mid, Part 6**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

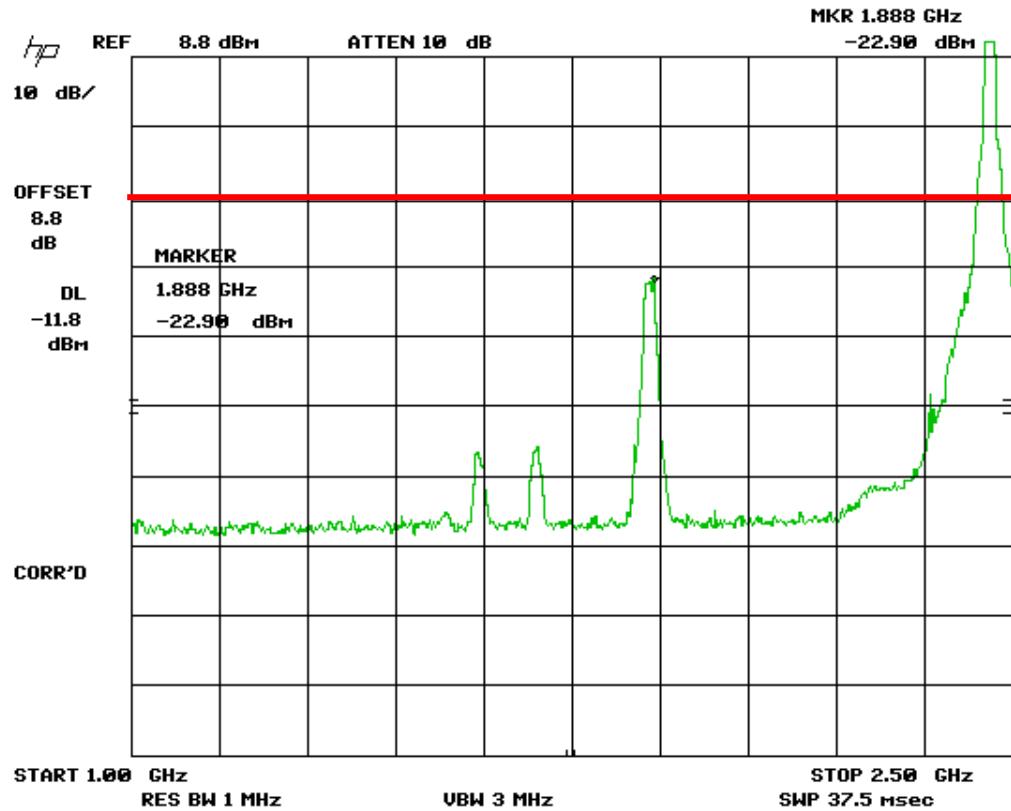


**Figure 52. Antenna Conducted Emissions 802.11g High, Part 1**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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Polycom Inc.  
P008

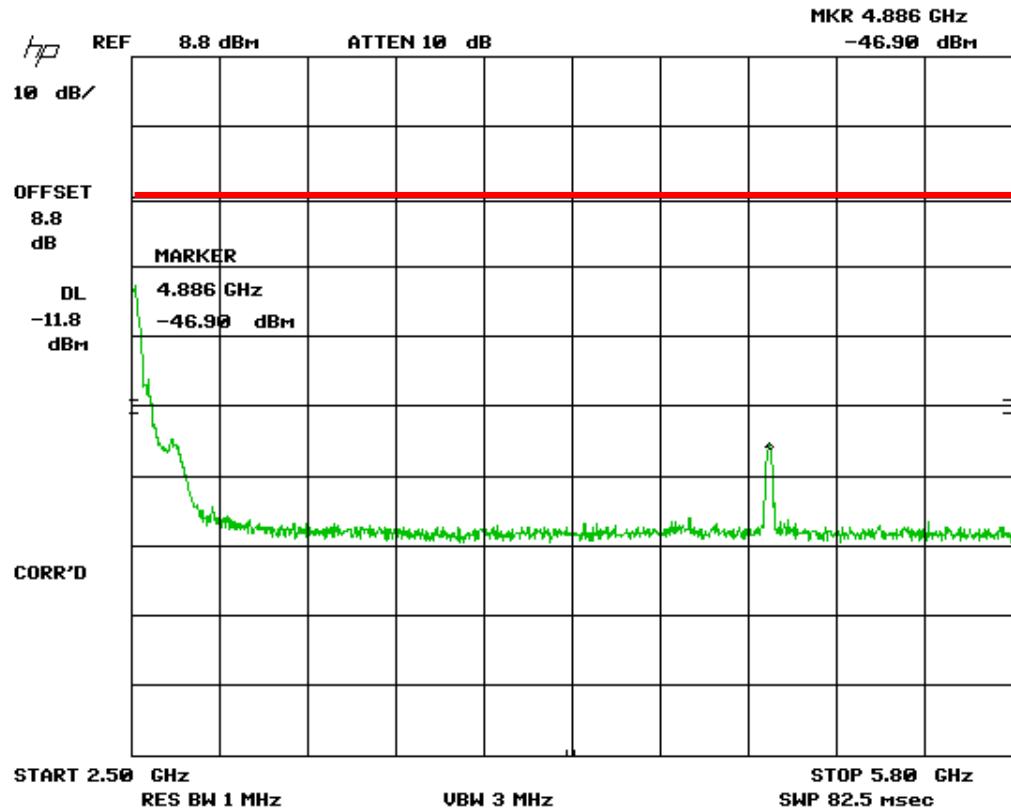


**Figure 53. Antenna Conducted Emissions 802.11g High, Part 2**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental. The larger peak to the right is the fundamental emission.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

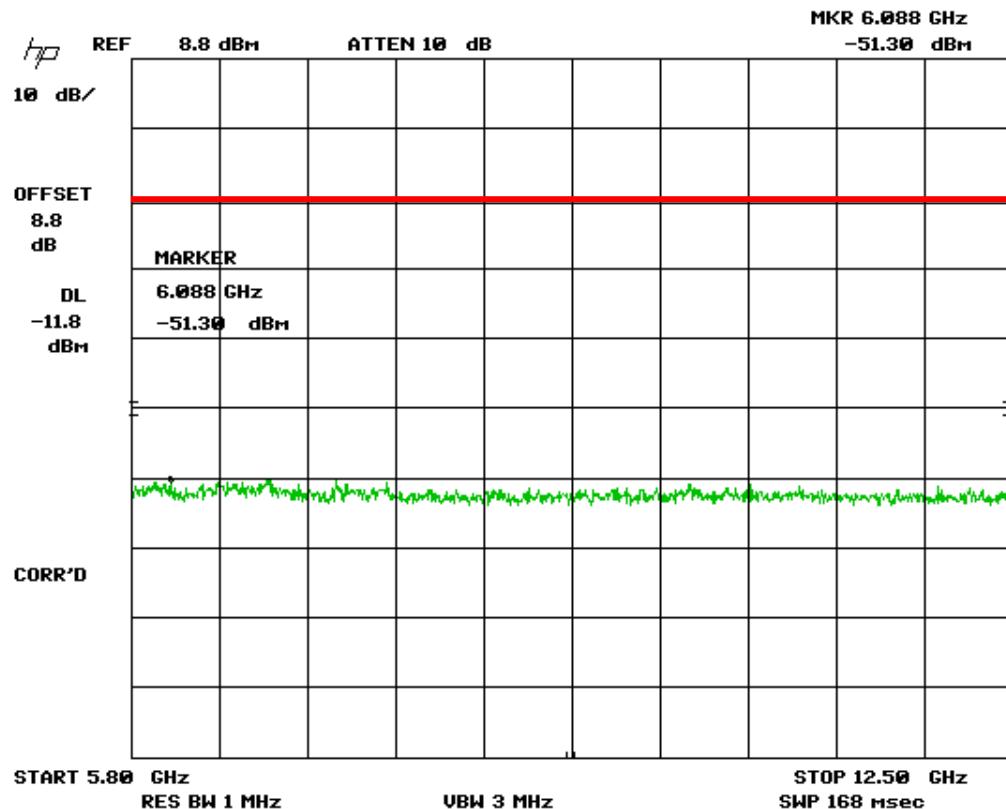


**Figure 54. Antenna Conducted Emissions 802.11g High, Part 3**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

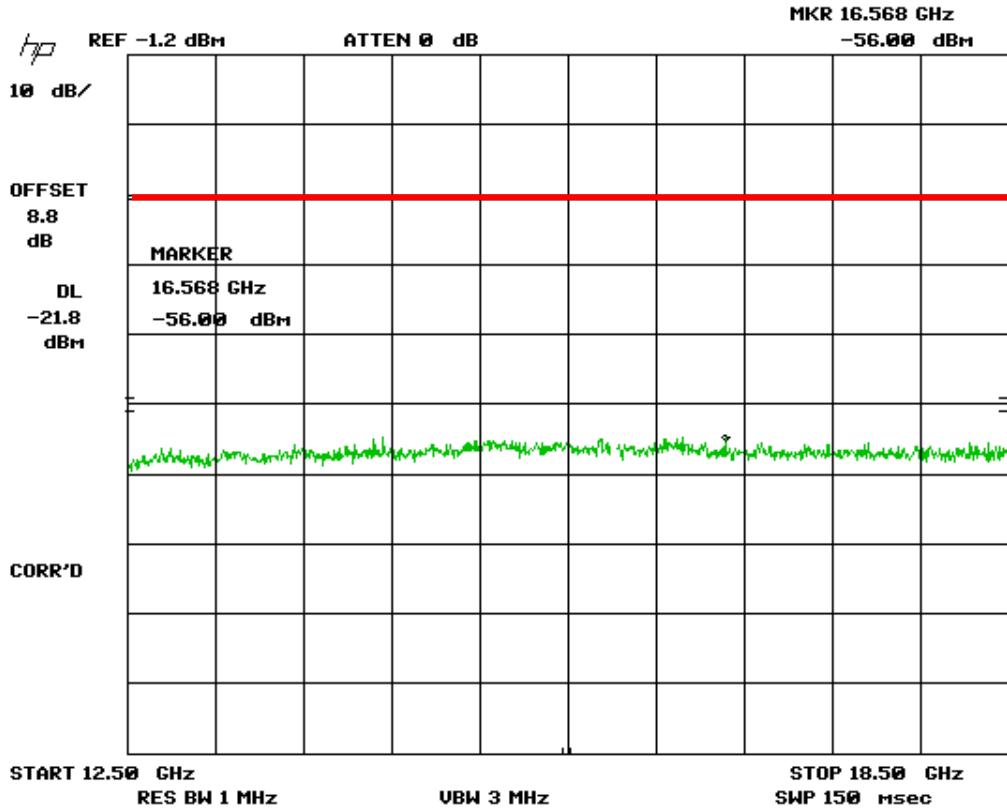


**Figure 55. Antenna Conducted Emissions 802.11g High, Part 4**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

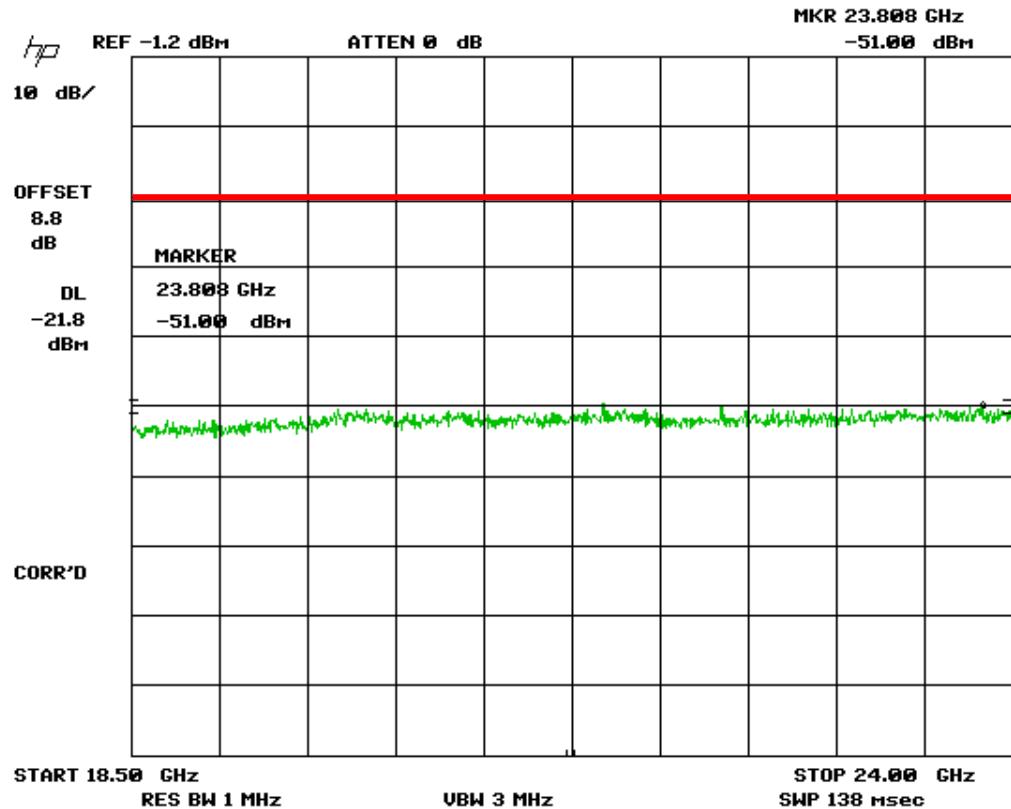


**Figure 56. Antenna Conducted Emissions 802.11g High, Part 5**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008



**Figure 57. Antenna Conducted Emissions 802.11g High, Part 6**

Note: Offset is used to correct for cable loss and attenuator used. The red line is at least 20 dB down from the measured fundamental.

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008

**Table 6. 802.11n Peak Radiated Fundamental & Harmonic Emissions**

Test: FCC Part 15, Para 15.209, 15.247(d)					Client: Polycom Inc			
Project: 15-0085					Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	Factor (dB)	AF+CA -AMP (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector Mode
<b>Low Channel</b>								
2412.00	80.43	0	32.96	113.39	-	3.0m./HORZ	-	PK
4824.00	50.13	0	3.93	54.06	74.0*	3.0m./HORZ	19.9	PK
7236.00	47.22	-9.50	10.91	48.63	93.4	1.0m./HORZ	44.8	PK
<b>Mid Channel</b>								
2442.00	79.81	0	33.08	112.89	-	3.0m./HORZ	-	PK
4884.00	52.91	0	4.33	57.24	74.0*	3.0m./HORZ	16.7	PK
7326.00	45.74	-9.50	10.98	47.22	74.0*	1.0m./HORZ	26.8	PK
9768.00	45.77	-9.50	12.85	49.12	92.9	1.0m./HORZ	43.8	PK
<b>High Channel</b>								
2462.00	80.73	0	33.08	113.81	-	3.0m./HORZ	-	PK
4924.00	54.36	0	4.64	59.00	74.0*	3.0m./HORZ	15.0	PK
7383.00	46.61	-9.50	11.06	48.17	74.0*	1.0m./HORZ	25.8	PK

1. (\*) Falls within the restricted bands of CFR 15.205. Limits based on CFR15.209 & 20 dB relaxation for peak measurements of CFR 15.35.
2. No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10<sup>th</sup> harmonic
3. Measurements taken at 1 meter were extrapolated to 3 meters using a factor of -9.5 dB.
4. The EUT was placed in three orthogonal positions, tested while broadcasting from each antenna, and the transmitter was in constant broadcast mode, with a duty cycle of greater than 98%. The emissions were measured with the receive antenna in vertical and horizontal polarizations. The data listed in the above table was worst case.

Sample Calculation at 7236.00 MHz:

Magnitude of Measured Frequency	47.22	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain	10.91	dB/m
1 meter to 3 meter extrapolation	-9.50	dB
Corrected Result	48.63	dBuV/m

Test Date: April 27-28, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008

**Table 7. 802.11n Average Radiated Fundamental & Harmonic Emissions**

Test: FCC Part 15, Para 15.209, 15.247(d)					Client: Polycom Inc			
Project: 15-0085					Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	Factor (dB)	AF+CA-AMP (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector Mode
<b>Low Channel</b>								
2412.00	62.67		32.96	95.63		3.0m./HORZ		<b>AVG</b>
4824.00	36.63		3.93	40.56	54.0*	3.0m./HORZ	13.4	<b>AVG</b>
7236.00	34.38	-9.50	10.91	35.79	75.6	1.0m./HORZ	39.8	<b>AVG</b>
<b>Mid Channel</b>								
2442.00	79.81		33.08	112.89		3.0m./HORZ		<b>AVG</b>
4884.00	39.48		4.33	43.81	54.0*	3.0m./HORZ	10.2	<b>AVG</b>
7326.00	32.70	-9.50	10.98	34.18	54.0*	1.0m./HORZ	19.8	<b>AVG</b>
<b>High Channel</b>								
2462.00	63.04		33.08	96.12		3.0m./HORZ		<b>AVG</b>
4924.00	39.22		4.64	43.86	54.0*	3.0m./HORZ	10.1	<b>AVG</b>
7383.00	32.83	-9.50	11.06	34.39	54.0*	1.0m./HORZ	19.6	<b>AVG</b>

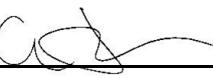
1. (\*) Falls within the restricted bands of CFR 15.205. Limits based on CFR15.209 & 20 dB relaxation for peak measurements of CFR 15.35.
2. No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10<sup>th</sup> harmonic
3. Measurements taken at 1 meter were extrapolated to 3 meters using a factor of (-9.5 dB).
4. The EUT was placed in three orthogonal positions, tested while broadcasting from each antenna, and the transmitter was in constant broadcast mode, with a duty cycle of greater than 98%. The emissions were measured with the receive antenna in vertical and horizontal polarizations. The data listed in the above table was worst case.

Sample Calculation at 7236.00 MHz:

Magnitude of Measured Frequency	34.38	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain – Duty Cycle	10.91	dB/m
1 meter to 3 meter extrapolation	-9.50	dB
Corrected Result	35.79	dBuV/m

Test Date: April 27-28, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008

**Table 8. 802.11b Peak Radiated Fundamental & Harmonic Emissions**

Test: FCC Part 15, Para 15.209, 15.247(d)					Client: Polycom Inc.			
Project: 15-0085					Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	Factor (dB)	AF+CA-AMP (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Antenna Distance/Polarization	Margin (dB)	Detector Mode
<b>Low Channel</b>								
2412.00	80.65		32.96	113.61		3.0m./HORZ		PK
4824.00	53.70		3.93	57.63	74.0*	3.0m./HORZ	16.3	PK
7236.00	48.01	-9.50	10.91	49.42	93.6	1.0m./HORZ	44.2	PK
9648.00	46.79	-9.50	12.66	49.95	93.6	1.0m./HORZ	43.7	PK
<b>Mid Channel</b>								
2442.00	82.08		33.08	115.16		3.0m./HORZ		PK
4884.00	58.17		4.33	62.50	74.0*	3.0m./HORZ	11.5	PK
7326.00	47.52	-9.50	10.98	49.00	74.0*	1.0m./HORZ	25.0	PK
9768.00	47.04	-9.50	12.85	50.39	95.2	1.0m./HORZ	44.8	PK
<b>High Channel</b>								
2462.00	80.82		33.08	113.90		3.0m./HORZ		PK
4924.00	59.52		4.64	64.16	74.0*	3.0m./HORZ	9.8	PK
7383.00	47.36	-9.50	11.06	48.92	93.9	1.0m./HORZ	45.0	PK
9848.00	47.82	-9.50	13.54	51.86	93.9	1.0m./HORZ	42.0	PK

1. (\*) Falls within the restricted bands of CFR 15.205. Limits based on CFR15.209 & 20 dB relaxation for peak measurements of CFR 15.35.
2. No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10<sup>th</sup> harmonic
3. Measurements taken at 1 meter were extrapolated to 3 meters using a factor of (-9.5 dB).
4. The EUT was placed in three orthogonal positions, tested while broadcasting from each antenna, and the transmitter was in constant broadcast mode, with a duty cycle of greater than 98%. The emissions were measured with the receive antenna in vertical and horizontal polarizations. The data listed in the above table was worst case.

Sample Calculation at 7236.00 MHz:

Magnitude of Measured Frequency	48.01	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain	10.91	dB/m
<u>1 meter to 3 meter extrapolation</u>	-9.50	dB
Corrected Result	49.42	dBuV/m

Test Date: April 27-28, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008

**Table 9. 802.11b Average Radiated Fundamental & Harmonic Emissions**

Test: FCC Part 15, Para 15.209, 15.247(d)					Client: Polycom Inc			
Project: 15-0085					Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	Factor (dB)	AF+CA -AMP (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Antenna Distance/Polarization	Margin (dB)	Detector Mode
<b>Low Channel</b>								
2412.00	71.06		32.96	104.02		3.0m./HORZ		<b>AVG</b>
4824.00	39.85		3.93	43.78	54.0*	3.0m./HORZ	10.2	<b>AVG</b>
7236.00	36.42	-9.50	10.91	37.83	84.0	1.0m./HORZ	46.2	<b>AVG</b>
9648.00	34.24	-9.50	12.66	37.40	84.0	1.0m./HORZ	46.6	<b>AVG</b>
<b>Mid Channel</b>								
2442.00	72.50		33.08	105.58		3.0m./HORZ		<b>AVG</b>
4884.00	44.83		4.33	49.16	54.0*	3.0m./HORZ	4.8	<b>AVG</b>
7326.00	34.58	-9.50	10.98	36.06	54.0*	1.0m./HORZ	17.9	<b>AVG</b>
9768.00	35.30	-9.50	12.85	38.65	85.6	1.0m./HORZ	46.9	<b>AVG</b>
<b>High Channel</b>								
2462.00	71.69		33.08	104.77		3.0m./HORZ		<b>AVG</b>
4924.00	45.82		4.64	50.46	54.0*	3.0m./HORZ	3.5	<b>AVG</b>
7383.00	35.37	-9.50	11.06	36.93	54.0*	1.0m./HORZ	17.1	<b>AVG</b>
9848.00	36.83	-9.50	13.54	40.87	84.8	1.0m./HORZ	43.9	<b>AVG</b>

1. (\*) Falls within the restricted bands of CFR 15.205. Limits based on CFR15.209 & 20 dB relaxation for peak measurements of CFR 15.35.
2. No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10<sup>th</sup> harmonic
3. Measurements taken at 1 meter were extrapolated to 3 meters using a factor of (-9.5 dB).
4. The EUT was placed in three orthogonal positions, tested while broadcasting from each antenna, and the transmitter was in constant broadcast mode, with a duty cycle of greater than 98%. The emissions were measured with the receive antenna in vertical and horizontal polarizations. The data listed in the above table was worst case.

Sample Calculation at 7236.00 MHz:

Magnitude of Measured Frequency	36.42	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain – Duty Cycle	10.91	dB/m
<u>1 meter to 3 meter extrapolation</u>	-9.50	dB
Corrected Result	37.83	dBuV/m

Test Date: April 27-28, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008

**Table 10. 802.11g Peak Radiated Fundamental & Harmonic Emissions**

Test: FCC Part 15, Para 15.209, 15.247(d)					Client: Polycom Inc			
Project: 15-0085					Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	Factor (dB)	AF+CA -AMP (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Antenna Distance/Polarization	Margin (dB)	Detector Mode
<b>Low Channel</b>								
2412	81.49	0.00	32.96	114.45		3.0m./HORZ		PK
4824	52.70	0.00	3.93	56.63	74.0*	3.0m./HORZ	17.3	PK
7236	46.63	-9.50	10.91	48.04	94.5	1.0m./HORZ	46.4	PK
<b>Mid Channel</b>								
2442	79.31	0.00	33.08	112.39		3.0m./HORZ		PK
4884	54.53	0.00	4.33	58.86	74.0*	3.0m./HORZ	15.1	PK
7326	47.04	-9.50	10.98	48.52	74.0*	1.0m./HORZ	25.5	PK
<b>High Channel</b>								
2462	80.72	0.00	33.08	113.80		3.0m./HORZ		PK
4924	54.74	0.00	4.64	59.38	74.0*	3.0m./HORZ	14.6	PK
7386	44.44	-9.50	11.06	46.00	93.8	1.0m./HORZ	47.8	PK
9648	46.89	-9.50	12.66	50.05	93.8	1.0m./HORZ	43.8	PK

1. (\*) Falls within the restricted bands of CFR 15.205. Limits based on CFR15.209 & 20 dB relaxation for peak measurements of CFR 15.35.
2. No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10<sup>th</sup> harmonic
3. Measurements taken at 1 meter were extrapolated to 3 meters using a factor of (-9.5 dB).
4. The EUT was placed in three orthogonal positions, tested while broadcasting from each antenna, and the transmitter was in constant broadcast mode, with a duty cycle of greater than 98%. The emissions were measured with the receive antenna in vertical and horizontal polarizations. The data listed in the above table was worst case.

Sample Calculation at 7236.00 MHz:

Magnitude of Measured Frequency	46.63	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain	10.91	dB/m
1 meter to 3 meter extrapolation	-9.50	dB
Corrected Result	48.04	dBuV/m

Test Date: April 27-28, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008

**Table 11. 802.11g Average Radiated Fundamental & Harmonic Emissions**

Test: FCC Part 15, Para 15.209, 15.247(d)					Client: Polycom Inc			
Project: 15-0085					Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	Factor (dB)	AF+CA -AMP (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Antenna Distance/Polarization	Margin (dB)	Detector Mode
<b>Low Channel</b>								
2412	62.91	0.00	32.96	95.87		3.0m./HORZ		<b>AVG</b>
4824	37.39	0.00	3.93	41.32	54.0*	3.0m./HORZ	12.7	<b>AVG</b>
7236	33.87	-9.50	10.91	35.28	54.0*	1.0m./HORZ	18.7	<b>AVG</b>
<b>Mid Channel</b>								
2442	62.09	0.00	33.08	95.17		3.0m./HORZ		<b>AVG</b>
4884	39.55	0.00	4.33	43.88	54.0*	3.0m./HORZ	10.1	<b>AVG</b>
7326	33.00	-9.50	10.98	34.48	54.0*	1.0m./HORZ	19.5	<b>AVG</b>
<b>High Channel</b>								
2462	62.88	0.00	33.08	95.96		3.0m./HORZ		<b>AVG</b>
4924	40.64	0.00	4.64	45.28	54.0*	3.0m./HORZ	8.7	<b>AVG</b>
7386	31.98	-9.50	11.06	33.54	76.0	1.0m./HORZ	42.4	<b>AVG</b>
9648	32.33	-9.50	13.54	36.37	76.0	1.0m./HORZ	39.6	<b>AVG</b>

1. (\*) Falls within the restricted bands of CFR 15.205. Limits based on CFR15.209 & 20 dB relaxation for peak measurements of CFR 15.35.
2. No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10<sup>th</sup> harmonic
3. Measurements taken at 1 meter were extrapolated to 3 meters using a factor of (-9.5 dB).
4. The EUT was placed in three orthogonal positions, tested while broadcasting from each antenna, and the transmitter was in constant broadcast mode, with a duty cycle of greater than 98%. The emissions were measured with the receive antenna in vertical and horizontal polarizations. The data listed in the above table was worst case.

Sample Calculation at 7236 MHz:

Magnitude of Measured Frequency	33.87	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain – Duty Cycle	10.91	dB/m
1 meter to 3 meter extrapolation	-9.50	dB
Corrected Result	35.28	dBuV/m

Test Date: April 27-28, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008

**Table 12. 802.11 40 MHz BW Peak Radiated Fundamental & Harmonic Emissions**

Test: FCC Part 15, Para 15.209, 15.247(d)					Client: Polycom Inc			
Project: 15-0085					Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	Factor (dB)	AF+CA -AMP (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector Mode
<b>Low Channel</b>								
2422	69.40	0.00	31.03	100.43		3.0m./HORZ		PK
4844	48.86	0.00	3.26	52.12	74.0*	3.0m./HORZ	21.9	PK
<b>Mid Channel</b>								
2437	70.59	0.00	31.03	101.62		3.0m./HORZ		PK
4874	53.64	0.00	3.13	56.77	74.0*	3.0m./HORZ	17.2	PK
<b>High Channel</b>								
2452	72.304	0.00	31.03	103.07		3.0m./HORZ		PK
4904	50.89	0.00	3.21	54.10	74.0*	3.0m./HORZ	19.9	PK

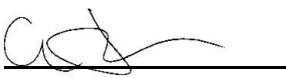
1. (\*) Falls within the restricted bands of CFR 15.205. Limits based on CFR15.209 & 20 dB relaxation for peak measurements of CFR 15.35.
2. No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10<sup>th</sup> harmonic
3. Measurements taken at 1 meter were extrapolated to 3 meters using a factor of (-9.5 dB).
4. The EUT was placed in three orthogonal positions, tested while broadcasting from each antenna, and the transmitter was in constant broadcast mode, with a duty cycle of greater than 98%. The emissions were measured with the receive antenna in vertical and horizontal polarizations. The data listed in the above table was worst case.

Sample Calculation at 4844 MHz:

Magnitude of Measured Frequency	48.86	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain	3.26	dB/m
1 meter to 3 meter extrapolation	0.00	dB
Corrected Result	52.12	dBuV/m

Test Date: July 24, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008

**Table 13. 802.11 40 MHz BW Average Radiated Fundamental & Harmonic Emissions**

Test: FCC Part 15, Para 15.209, 15.247(d)					Client: Polycom Inc			
Project: 15-0085					Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	Factor (dB)	AF+CA -AMP (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector Mode
<b>Low Channel</b>								
2422	41.46	0.00	31.03	72.49		3.0m./HORZ		<b>AVG</b>
4844	33.50	0.00	3.26	36.76	54.0*	3.0m./HORZ	17.2	<b>AVG</b>
<b>Mid Channel</b>								
2437	42.61	0.00	31.03	73.64		3.0m./HORZ		<b>AVG</b>
4874	35.85	0.00	3.13	38.98	54.0*	3.0m./HORZ	15.0	<b>AVG</b>
<b>High Channel</b>								
2452	43.64	0.00	31.03	74.67		3.0m./HORZ		<b>AVG</b>
4904	34.27	0.00	3.21	37.48	54.0*	3.0m./HORZ	16.5	<b>AVG</b>

1. (\*) Falls within the restricted bands of CFR 15.205. Limits based on CFR15.209 & 20 dB relaxation for peak measurements of CFR 15.35.
2. No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10<sup>th</sup> harmonic
3. (~)Measurements taken at 1 meter were extrapolated to 3 meters using a factor of (-9.5 dB).
4. The EUT was placed in three orthogonal positions, tested while broadcasting from each antenna, and the transmitter was in constant broadcast mode, with a duty cycle of greater than 98%. The emissions were measured with the receive antenna in vertical and horizontal polarizations. The data listed in the above table was worst case.

Sample Calculation at 4844 MHz:

Magnitude of Measured Frequency	33.50	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain – Duty Cycle	3.26	dB/m
1 meter to 3 meter extrapolation	0.00	dB
Corrected Result	36.76	dBuV/m

Test Date: July 24, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:	FCC Part 15 Certification/ RSS 247
FCC ID:	M72-P008
IC:	1849C-P008
Test Report Number:	15-0085
Issue Date:	July 31, 2015
Customer:	Polycom Inc.
Model:	P008

## 2.11 Band Edge Measurements – (CFR 15.247 (d))

Band Edge measurements are made following the guidelines in FCC KDB Publication No. 558074 with the EUT initially operating on the Lowest Channel and then operating on the Highest Channel within its band of operation. Antenna port conducted measurements are performed to demonstrate compliance with the requirement of 15.247(d) that all emissions outside of the band edges be attenuated by at least 20 dB when compared to its highest in-band value (contained in a 100 kHz band).

To capture the band edge set the Spectrum Analyzer frequency span set to 2 MHz to capture the peak level of the emission operating on the channel closest to the band edge as well as any modulation products falling outside of the authorized band of operation. Conducted measurements are performed with RBW approximately  $1.5^*$  Span. In all cases, the VBW is set  $\geq$  RBW. See figure and calculations below for more detail.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

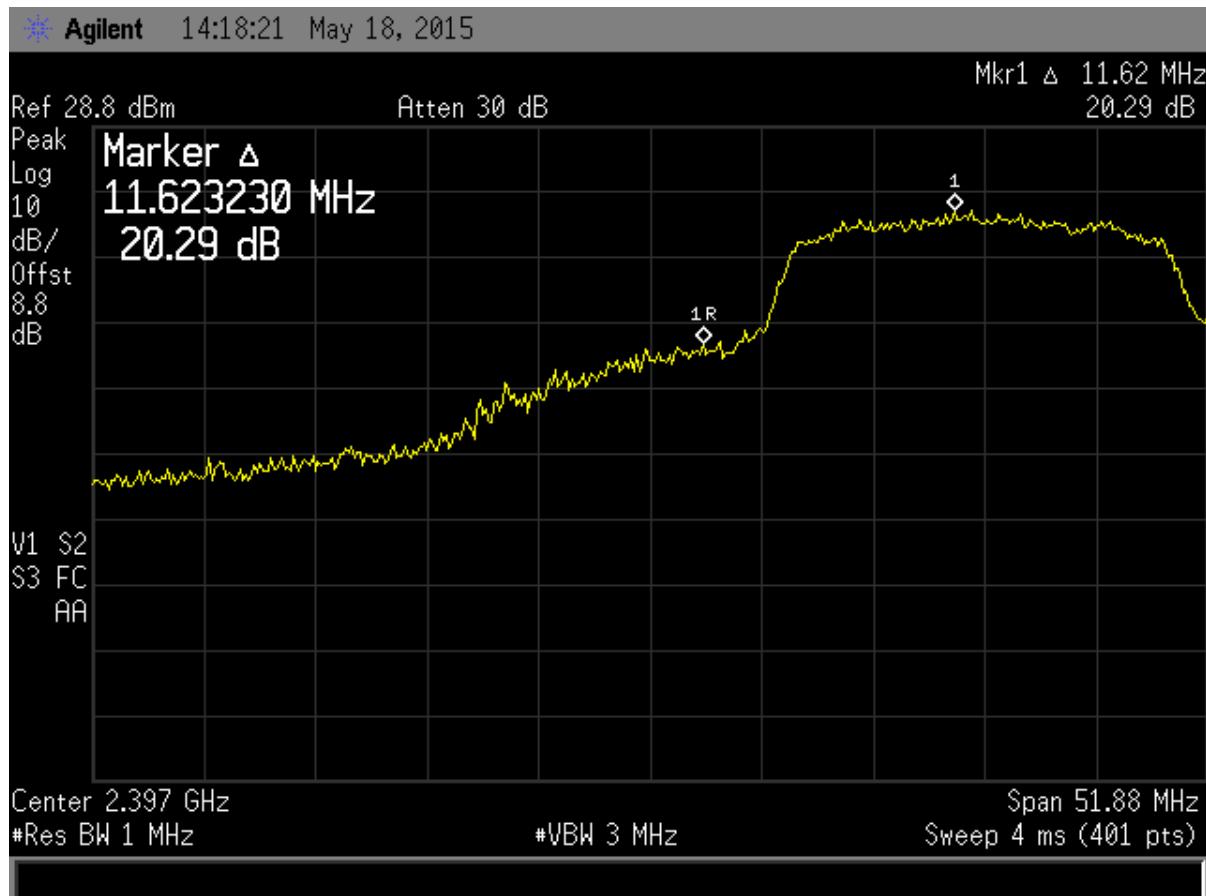


Figure 58. Band Edge Compliance, 802.11n Low Channel Delta - Peak

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

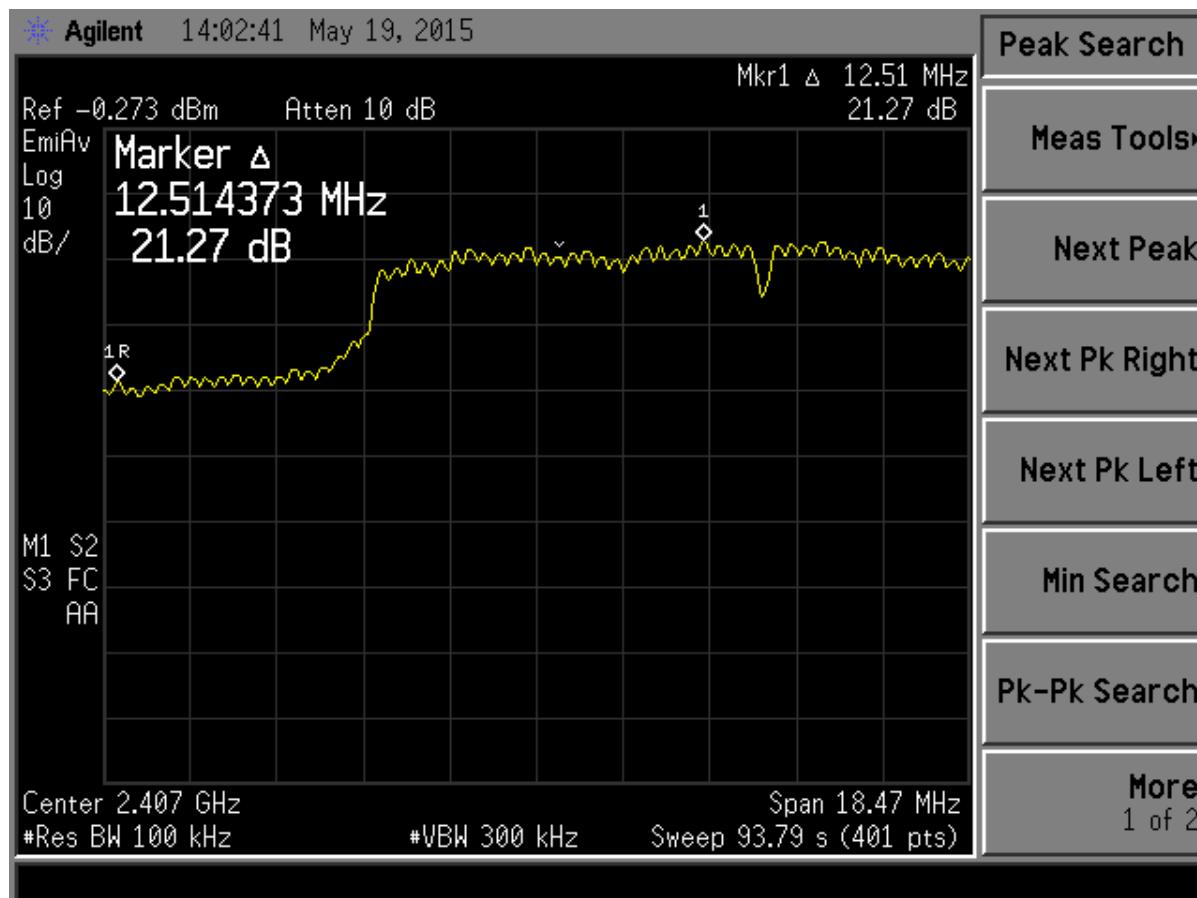


Figure 59. Band Edge Compliance, 802.11n Low Channel Delta - Average

Calculation of worst case lower band edge measurement:

Band Edge Calculated Result	20.29	dB
Band Edge Limit (20 dB from Fundamental)	20.00	dB
Band Edge Margin	0.29	dB

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
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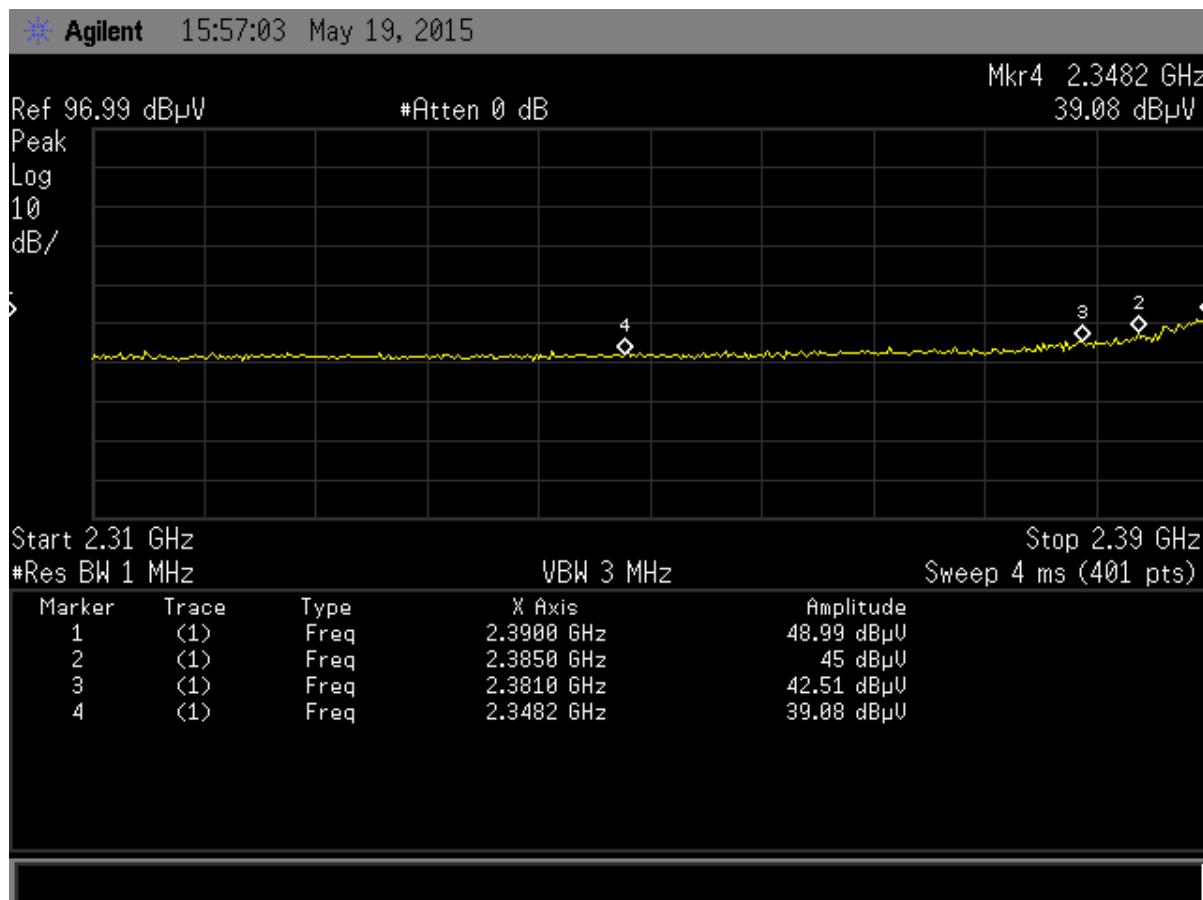


Figure 60. Radiated Restricted band 2310 MHz to 2390 MHz, 802.11 - Peak

Table 14. Radiated Restricted Band 2310 MHz to 2390 MHz, 802.11 – Peak

2310 MHz to 2390 MHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBμV)	AF+CA-AMP (dB/m)	Results (dBμV/m)	PK Limits (dBμV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
2390.00	48.99	23.55	72.54	74.0	1.0m./HORZ	1.5	PK
2385.00	45.00	23.55	68.55	74.0	1.0m./HORZ	5.5	PK
2381.00	42.51	23.55	66.06	74.0	1.0m./HORZ	7.9	PK
2348.20	39.08	23.29	62.37	74.0	1.0m./HORZ	11.6	PK

Test Date: May 19, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008



Figure 61. Radiated Restricted band 2310 MHz to 2390 MHz, 802.11 - Average

Table 15. Radiated Restricted Band 2310 MHz to 2390 MHz, 802.11 – Average

2310 MHz to 2390 MHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB $\mu$ V)	AF+CA-AMP (dB/m)	Results (dB $\mu$ V/m)	AVG Limits (dB $\mu$ V/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
2390.00	27.32	23.55	50.87	54.0	1.0m./HORZ	3.1	AVG
2386.00	23.83	23.55	47.38	54.0	1.0m./HORZ	6.6	AVG
2381.40	21.96	23.55	45.51	54.0	1.0m./HORZ	8.5	AVG
2348.20	16.68	23.29	39.97	54.0	1.0m./HORZ	14.0	AVG

Test Date: May 19, 2015

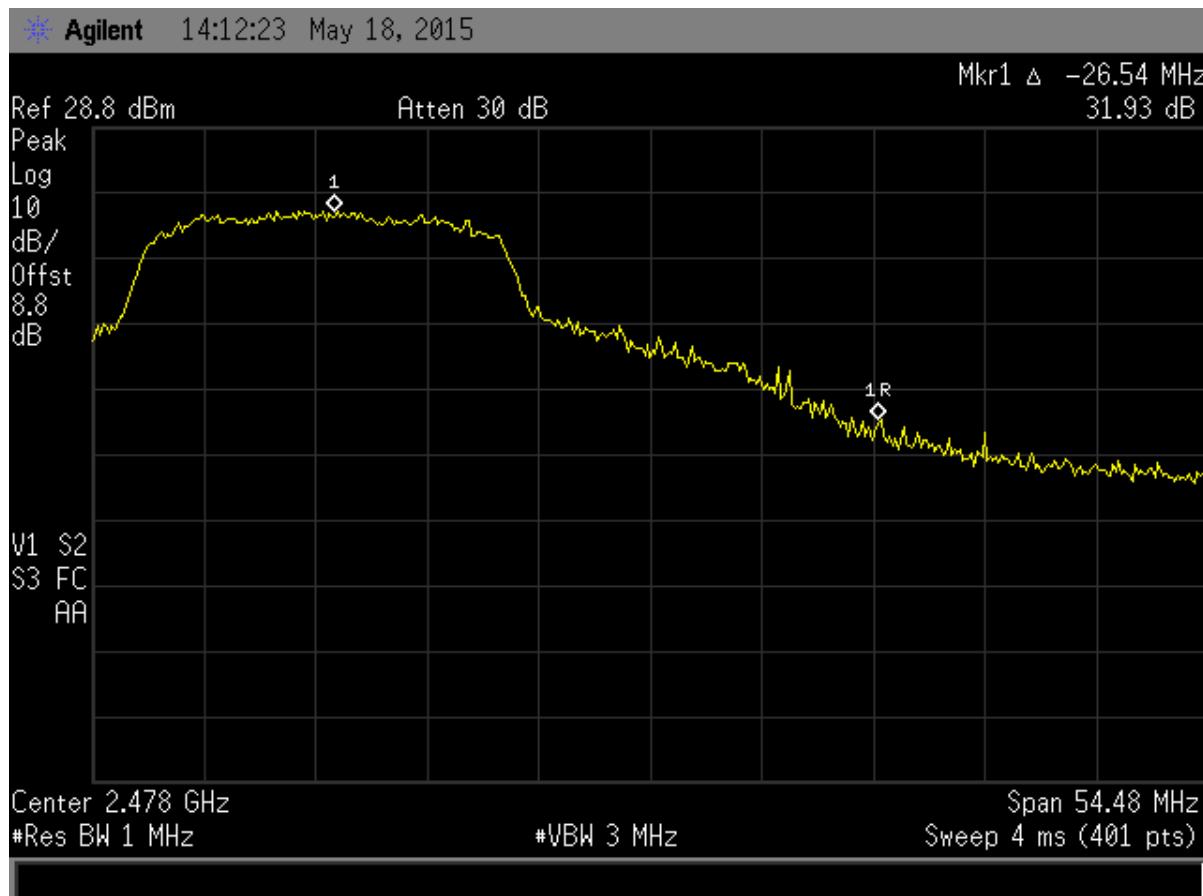
Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
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15-0085  
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**Figure 62. Band Edge Compliance, 802.11n High Channel Delta – Peak**

Note: Plots shows 20 dB in-band limit. Restricted band emissions evaluated below.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
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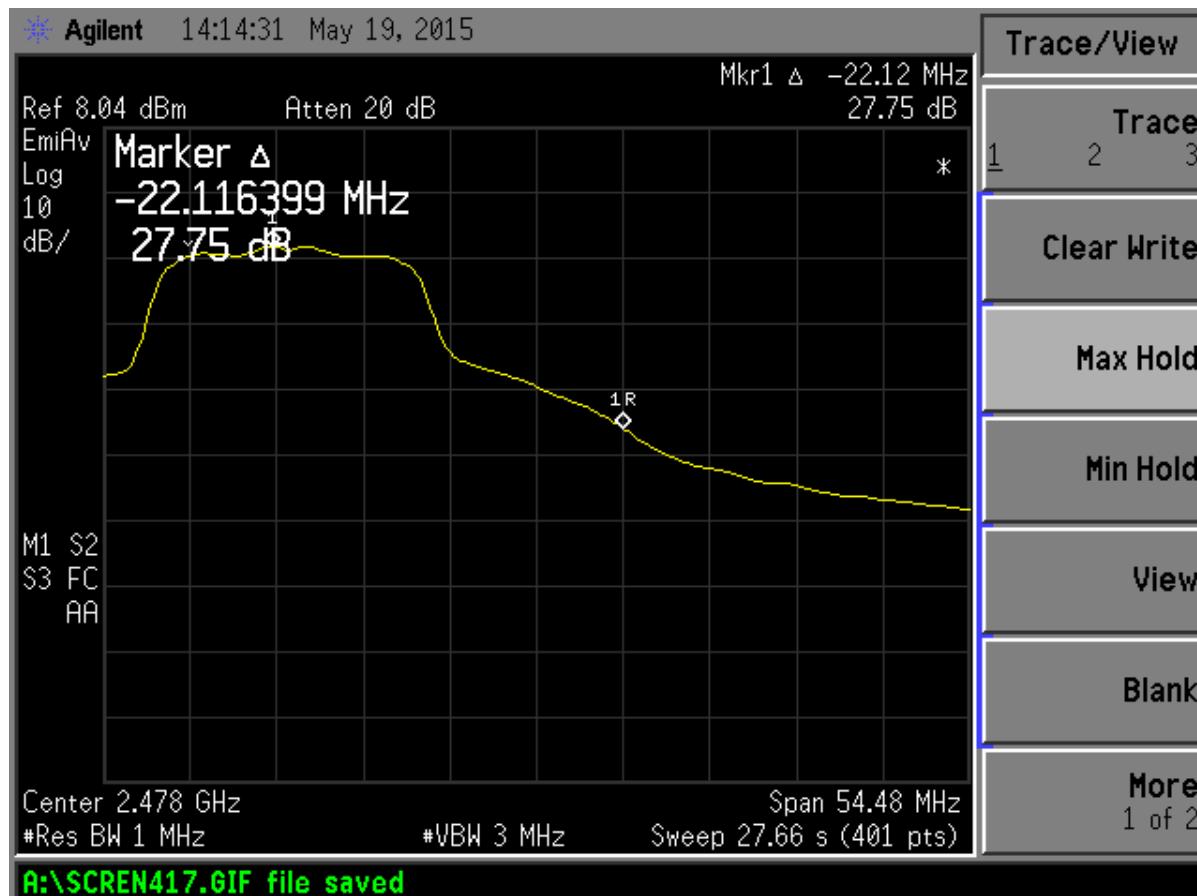


Figure 63. Band Edge Compliance, 802.11n High Channel Delta – Average

Note: Plots shows 20 dB in-band limit. Restricted band emissions evaluated below.

Calculation of worst case lower band edge measurement:

Band Edge Calculated Result	27.75	dB
Band Edge Limit (20 dB from Fundamental)	20.00	dB
Band Edge Margin	7.75	dB

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
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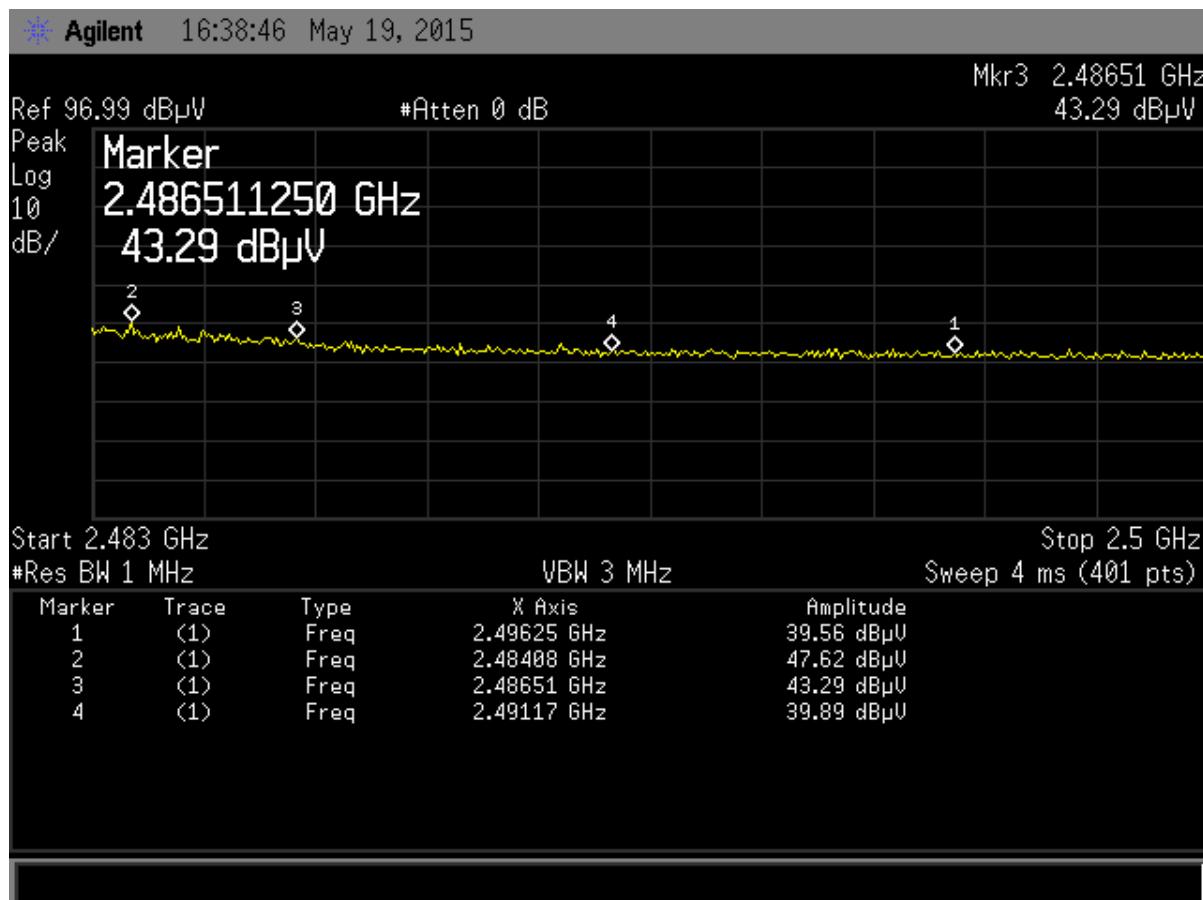


Figure 64. Radiated Restricted band 2483.5 MHz to 2500 MHz, 802.11 - Peak

Table 16. Radiated Restricted Band 2483.5 MHz to 2500 MHz, 802.11 – Peak

2483.5 MHz to 2500 MHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>BuV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>BuV/m</sub> )	PK Limits (dB <sub>BuV/m</sub> )	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
2496.25	39.56	24.11	63.67	74.0	1.0m./HORZ	10.3	PK
2484.08	47.62	24.11	71.73	74.0	1.0m./HORZ	2.3	PK
2486.51	43.29	24.11	67.40	74.0	1.0m./HORZ	6.6	PK
2491.17	39.89	24.11	64.00	74.0	1.0m./HORZ	10.0	PK

Test Date: May 19, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

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Figure 65. Radiated Restricted band 2483.5 MHz to 2500 MHz, 802.11 - Average

Table 17. Radiated Restricted Band 2483.5 MHz to 2500 MHz, 802.11 – Average

2483.5 MHz to 2500 MHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>BuV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>BuV/m</sub> )	PK Limits (dB <sub>BuV/m</sub> )	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
2496.2500	20.02	24.11	44.13	54.0	1.0m./HORZ	9.9	AVG
2483.8300	26.64	24.11	50.75	54.0	1.0m./HORZ	3.3	AVG
2486.5100	24.07	24.11	48.18	54.0	1.0m./HORZ	5.8	AVG
2491.1700	21.49	24.11	45.60	54.0	1.0m./HORZ	8.4	AVG

Test Date: May 19, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
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Polycom Inc.  
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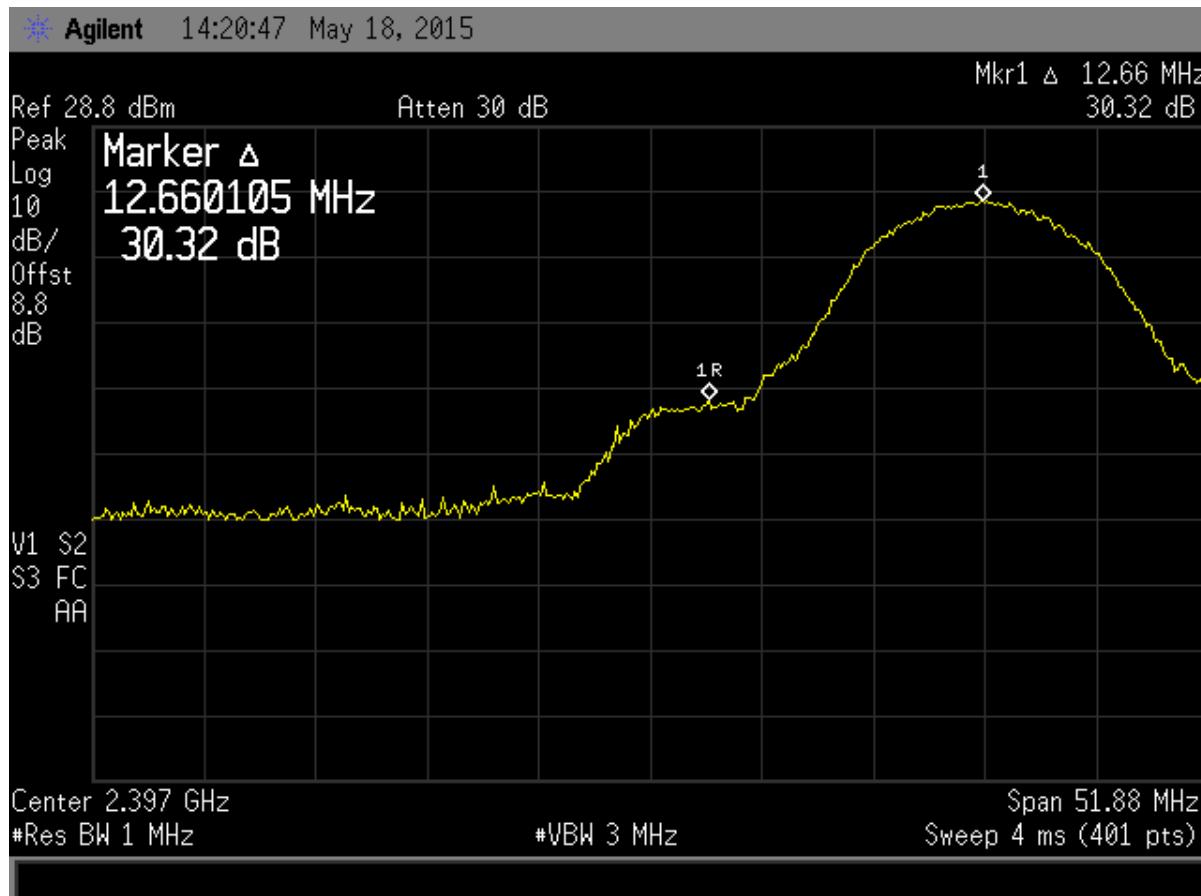


Figure 66. Band Edge Compliance, 802.11b Low Channel Delta - Peak

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

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July 31, 2015  
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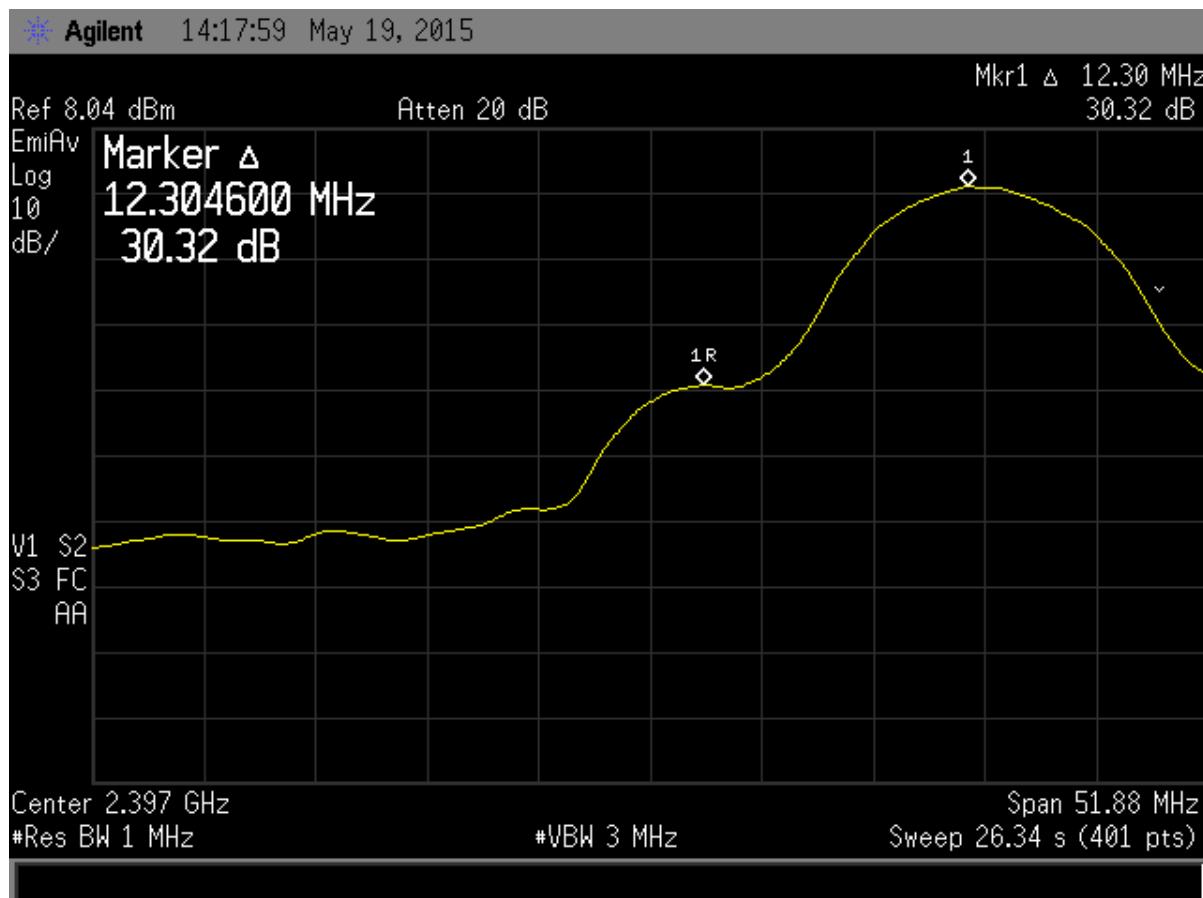


Figure 67. Band Edge Compliance, 802.11b Low Channel Delta - Average

Calculation of worst case lower band edge measurement:

Band Edge Calculated Result	30.32	dB
Band Edge Limit (20 dB from Fundamental)	20.00	dB
Band Edge Margin	10.32	dB

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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15-0085  
July 31, 2015  
Polycom Inc.  
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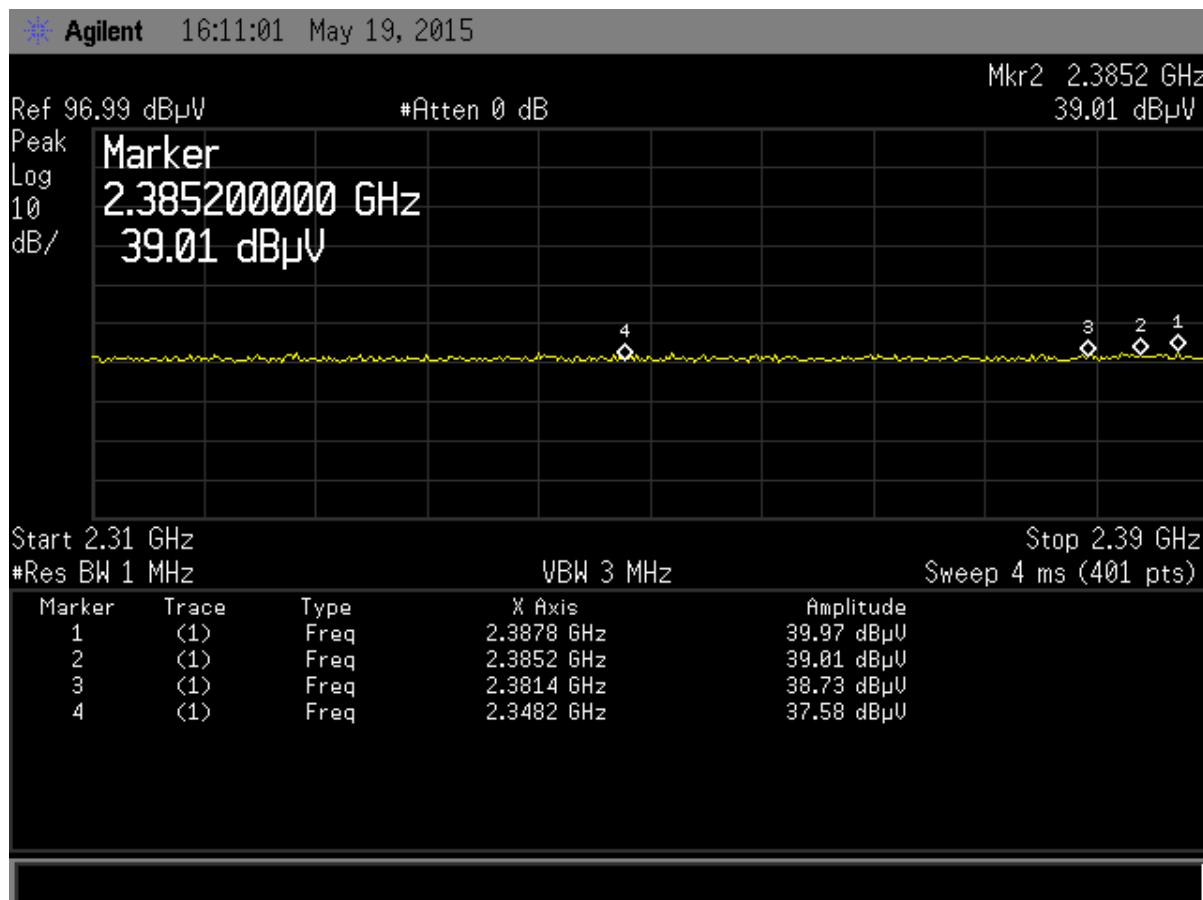


Figure 68. Radiated Restricted band 2310 MHz to 2390 MHz, 802.11b - Peak

Table 18. Radiated Restricted Band 2310 MHz to 2390 MHz, 802.11b – Peak

2310 MHz to 2390 MHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>BuV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>BuV/m</sub> )	PK Limits (dB <sub>BuV/m</sub> )	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
2387.80	39.97	23.55	63.52	74.0	1.0m./HORZ	10.5	PK
2385.20	39.01	23.55	62.56	74.0	1.0m./HORZ	11.4	PK
2381.40	38.73	23.55	62.28	74.0	1.0m./HORZ	11.7	PK
2348.20	37.58	23.29	60.87	74.0	1.0m./HORZ	13.1	PK

Test Date: May 19, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
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Figure 69. Radiated Restricted band 2310 MHz to 2390 MHz, 802.11b -Average

Table 19. Radiated Restricted Band 2310 MHz to 2390 MHz, 802.11b – Peak

2310 MHz to 2390 MHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>UV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>UV</sub> /m)	AVG Limits (dB <sub>UV</sub> /m)	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
2386.60	20.10	23.55	43.65	54.0	1.0m./HORZ	10.4	AVG
2388.80	19.35	23.55	42.90	54.0	1.0m./HORZ	11.1	AVG
2381.40	18.10	23.55	41.65	54.0	1.0m./HORZ	12.4	AVG
2348.20	15.96	23.29	39.25	54.0	1.0m./HORZ	14.7	AVG

Test Date: May 19, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

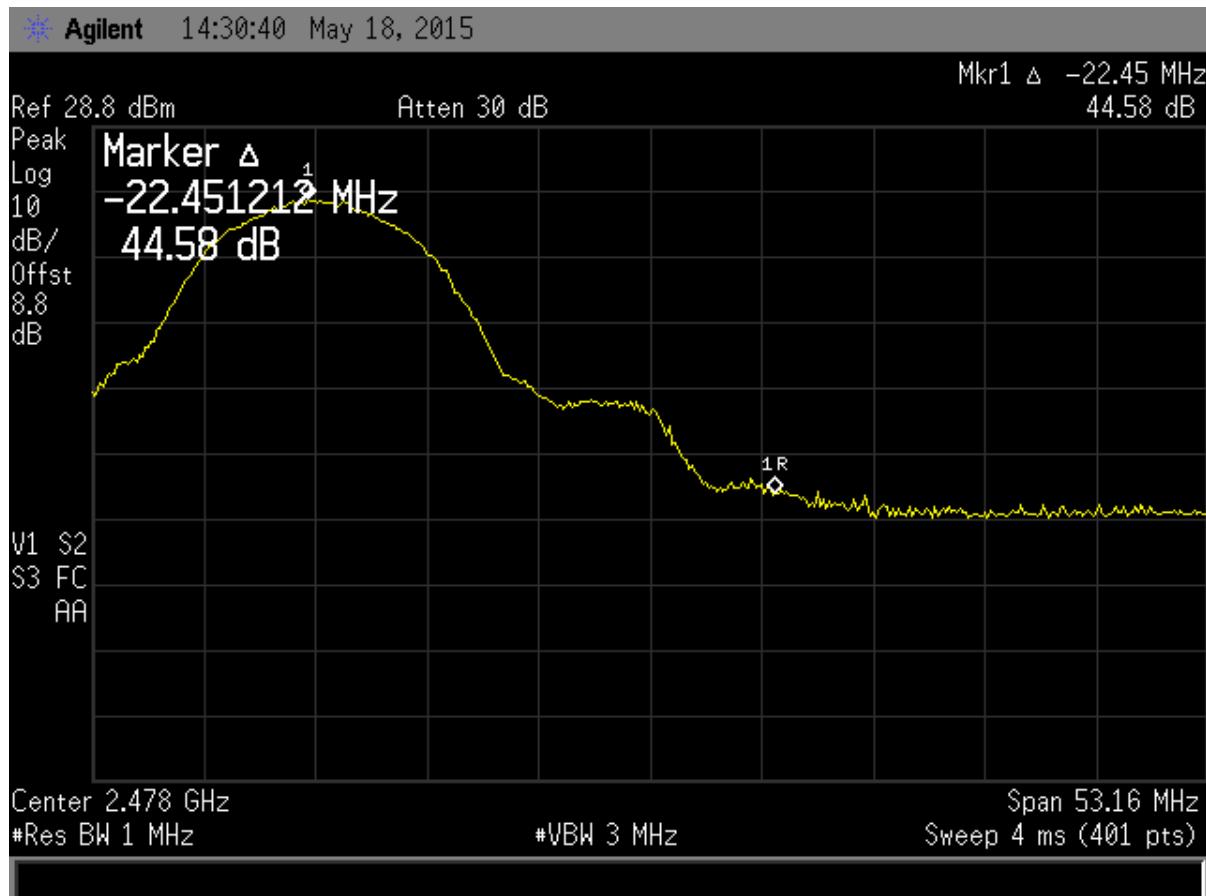


Figure 70. Band Edge Compliance, 802.11b High Channel Delta – Peak

Note: Plots shows 20 dB in-band limit. Restricted band emissions evaluated below.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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Polycom Inc.  
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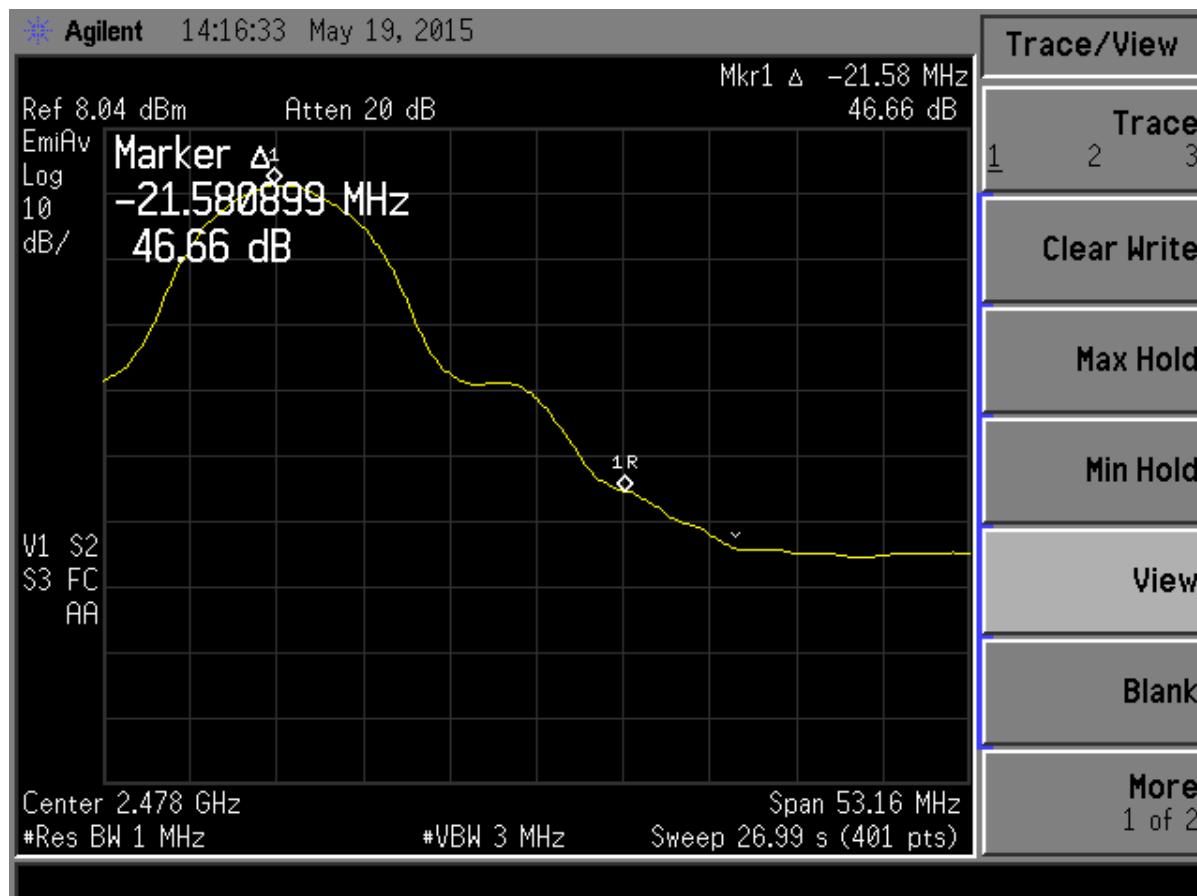


Figure 71. Band Edge Compliance, 802.11b High Channel Delta – Average

Note: Plots shows 20 dB in-band limit. Restricted band emissions evaluated below.

Calculation of worst case upper band edge measurement:

Band Edge Calculated Result	44.58	dB
Band Edge Limit (20 dB from Fundamental)	20.00	dB
Band Edge Margin	24.58	dB

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

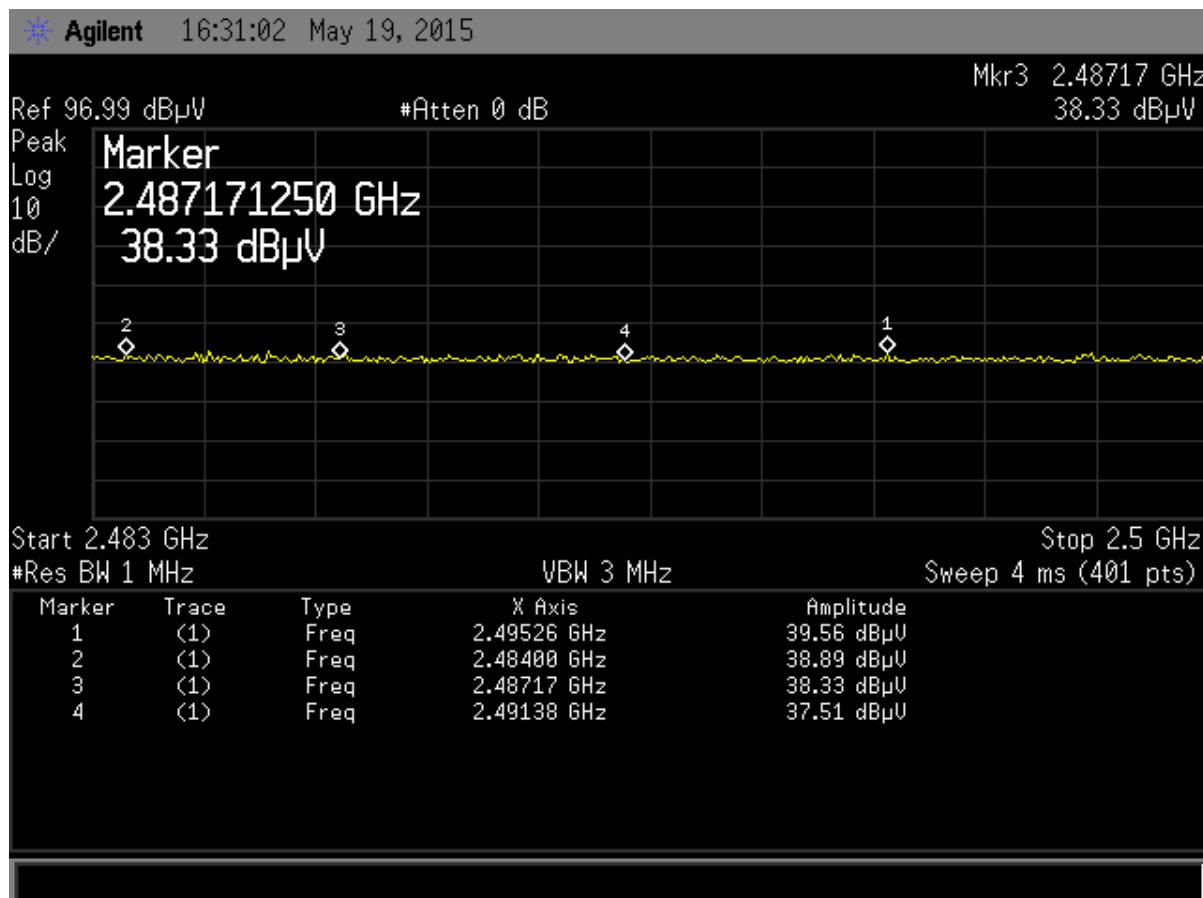


Figure 72. Radiated Restricted band 2483.5 MHz to 2500 MHz, 802.11b - Peak

Table 20. Radiated Restricted Band 2483.5 MHz to 2500 MHz, 802.11b – Peak

2483.5 MHz to 2500 MHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>BuV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>BuV/m</sub> )	PK Limits (dB <sub>BuV/m</sub> )	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
2495.26	39.56	24.11	63.67	74.0	1.0m./HORZ	10.3	PK
2484.00	38.89	24.11	63.00	74.0	1.0m./HORZ	11.0	PK
2487.17	38.33	24.11	62.44	74.0	1.0m./HORZ	11.6	PK
2491.38	37.51	24.11	61.62	74.0	1.0m./HORZ	12.4	PK

Test Date: May 19, 2015

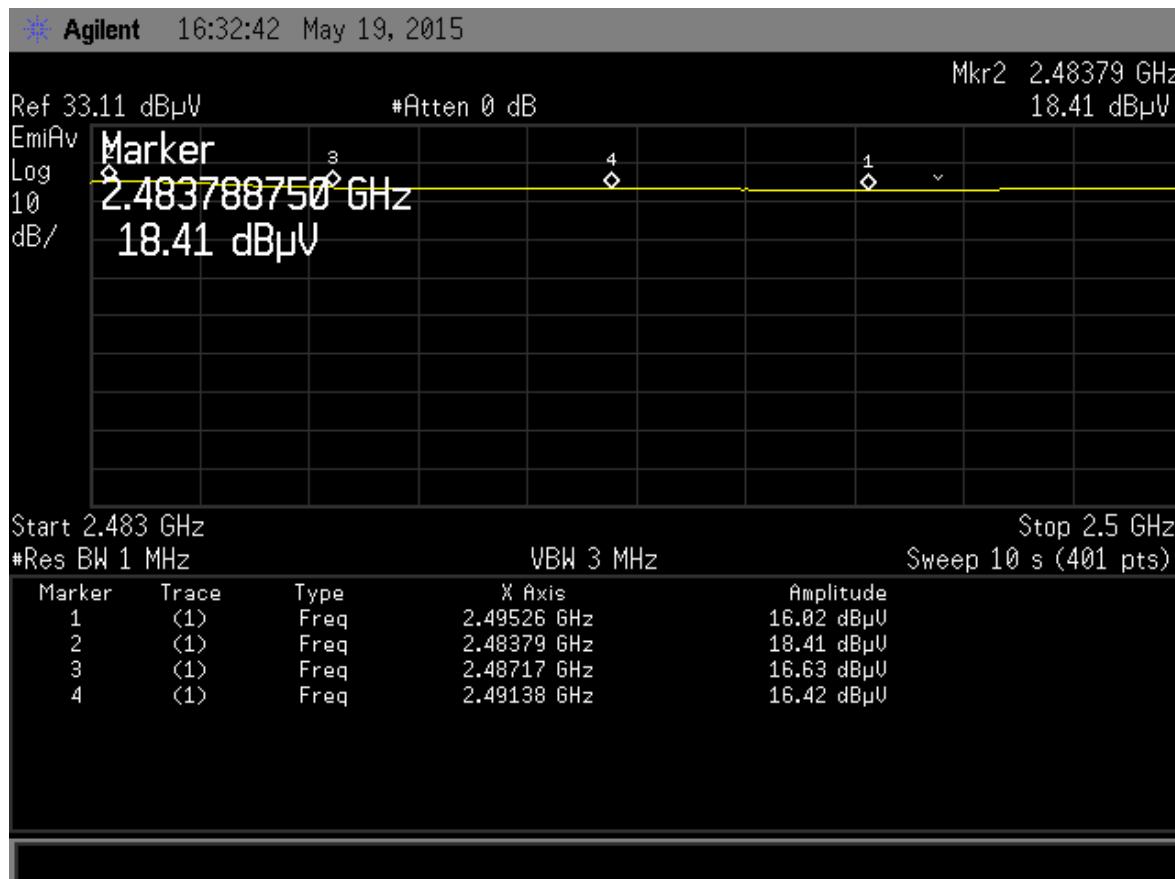
Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
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 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008



**Figure 73. Radiated Restricted Band 2483.5 MHz to 2500 MHz, 802.11b - Average**

**Table 21. Radiated Restricted Band 2483.5 MHz to 2500 MHz, 802.11b – Average**

2483.5 MHz to 2500 MHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>BuV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>BuV/m</sub> )	AVG Limits (dB <sub>BuV/m</sub> )	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
2495.2600	16.02	24.11	40.13	54.0	1.0m./HORZ	13.9	AVG
2483.7900	18.41	24.11	42.52	54.0	1.0m./HORZ	11.5	AVG
2487.1700	16.63	24.11	40.74	54.0	1.0m./HORZ	13.3	AVG
2491.3800	16.42	24.11	40.53	54.0	1.0m./HORZ	13.5	AVG

Test Date: May 19, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

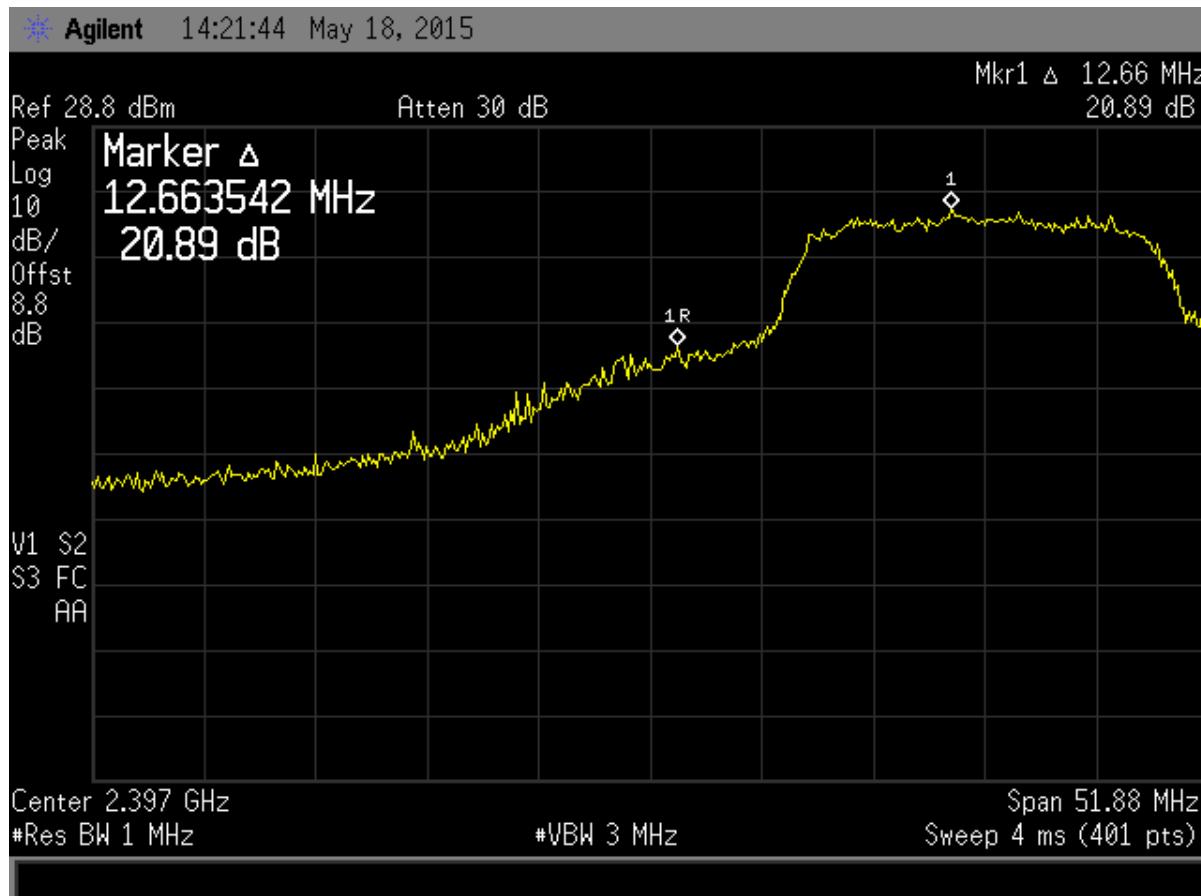
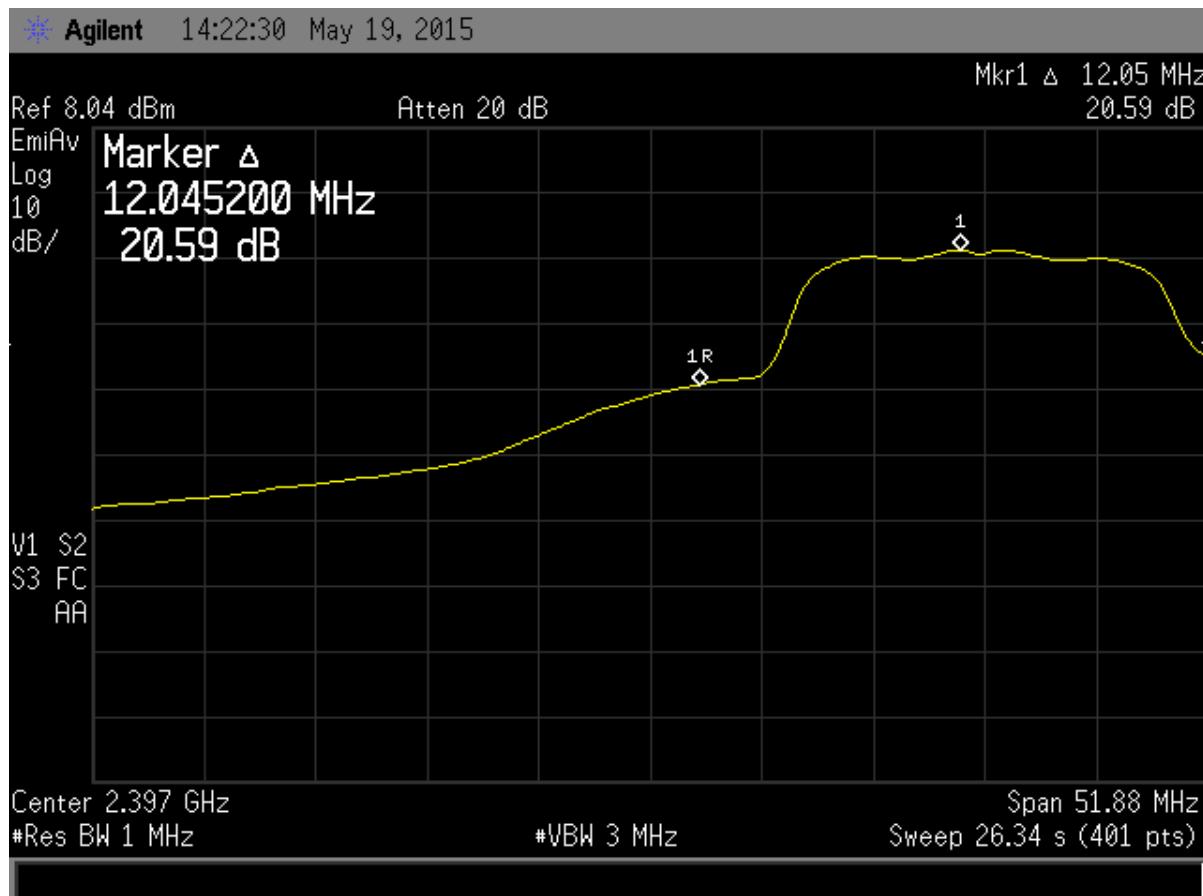


Figure 74. Band Edge Compliance, 802.11g Low Channel Delta – Peak

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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**Figure 75. Band Edge Compliance, 802.11g Low Channel Delta - Average**

Calculation of worst case lower band edge measurement:

Band Edge Calculated Result	20.59	dB
Band Edge Limit (20 dB from Fundamental)	20.00	dB
Band Edge Margin	0.59	dB

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

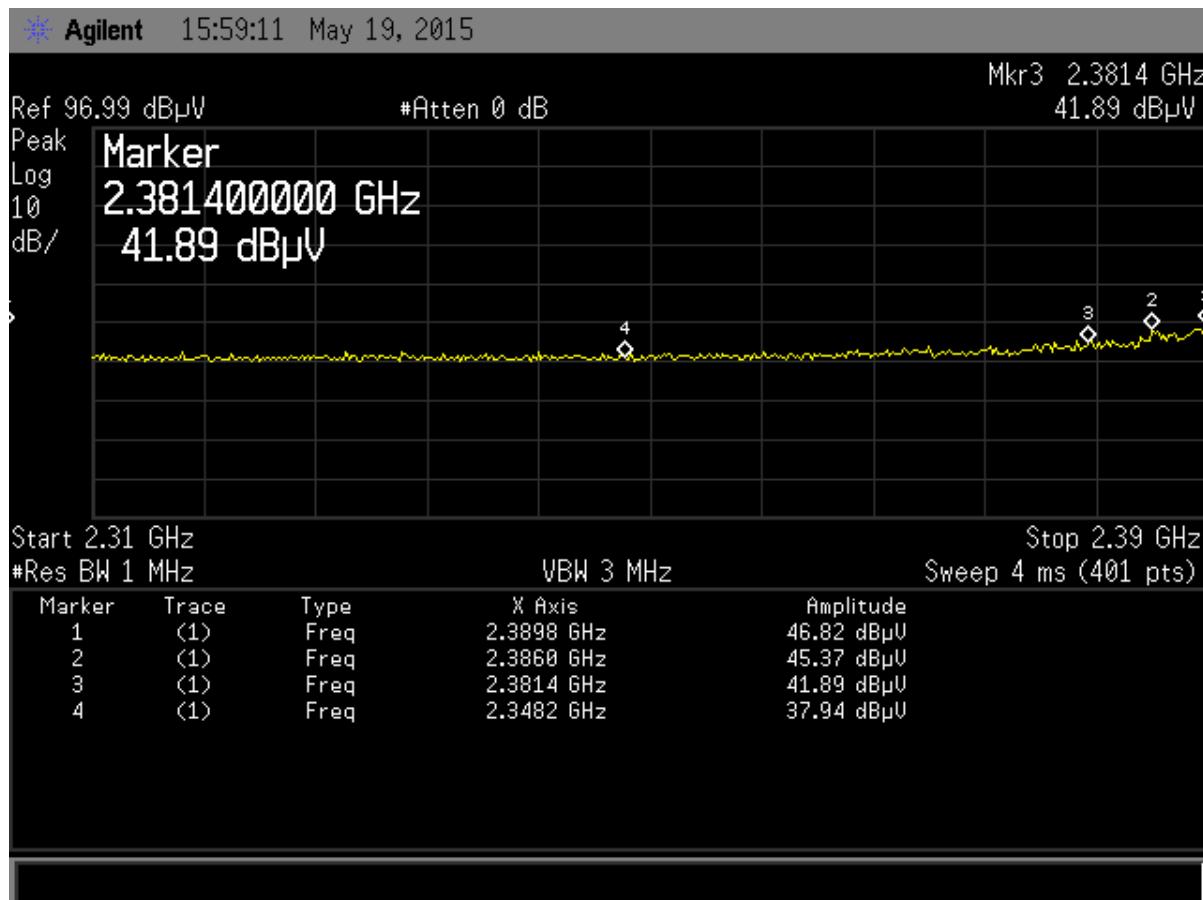


Figure 76. Radiated Restricted band 2310 MHz to 2390 MHz, 802.11g - Peak

Table 22. Radiated Restricted Band 2310 MHz to 2390 MHz, 802.11g – Peak

2310 MHz to 2390 MHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>BuV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>BuV</sub> /m)	PK Limits (dB <sub>BuV</sub> /m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
2389.80	46.82	23.55	70.37	74.0	1.0m./HORZ	3.6	PK
2386.00	45.37	23.55	68.92	74.0	1.0m./HORZ	5.1	PK
2381.40	41.89	23.55	65.44	74.0	1.0m./HORZ	8.6	PK
2348.20	37.94	23.29	61.23	74.0	1.0m./HORZ	12.8	PK

Test Date: May 19, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
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15-0085  
July 31, 2015  
Polycom Inc.  
P008



Figure 77. Radiated Restricted band 2310 MHz to 2390 MHz, 802.11g -Average

Table 23. Radiated Restricted Band 2310 MHz to 2390 MHz, 802.11g – Peak

2310 MHz to 2390 MHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>BuV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>BuV</sub> /m)	AVG Limits (dB <sub>BuV</sub> /m)	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
2390.00	26.03	23.55	49.58	54.0	1.0m./HORZ	4.4	AVG
2386.00	23.53	23.55	47.08	54.0	1.0m./HORZ	6.9	AVG
2381.40	21.84	23.55	45.39	54.0	1.0m./HORZ	8.6	AVG
2348.20	16.60	23.29	39.89	54.0	1.0m./HORZ	14.1	AVG

Test Date: May 19, 2015

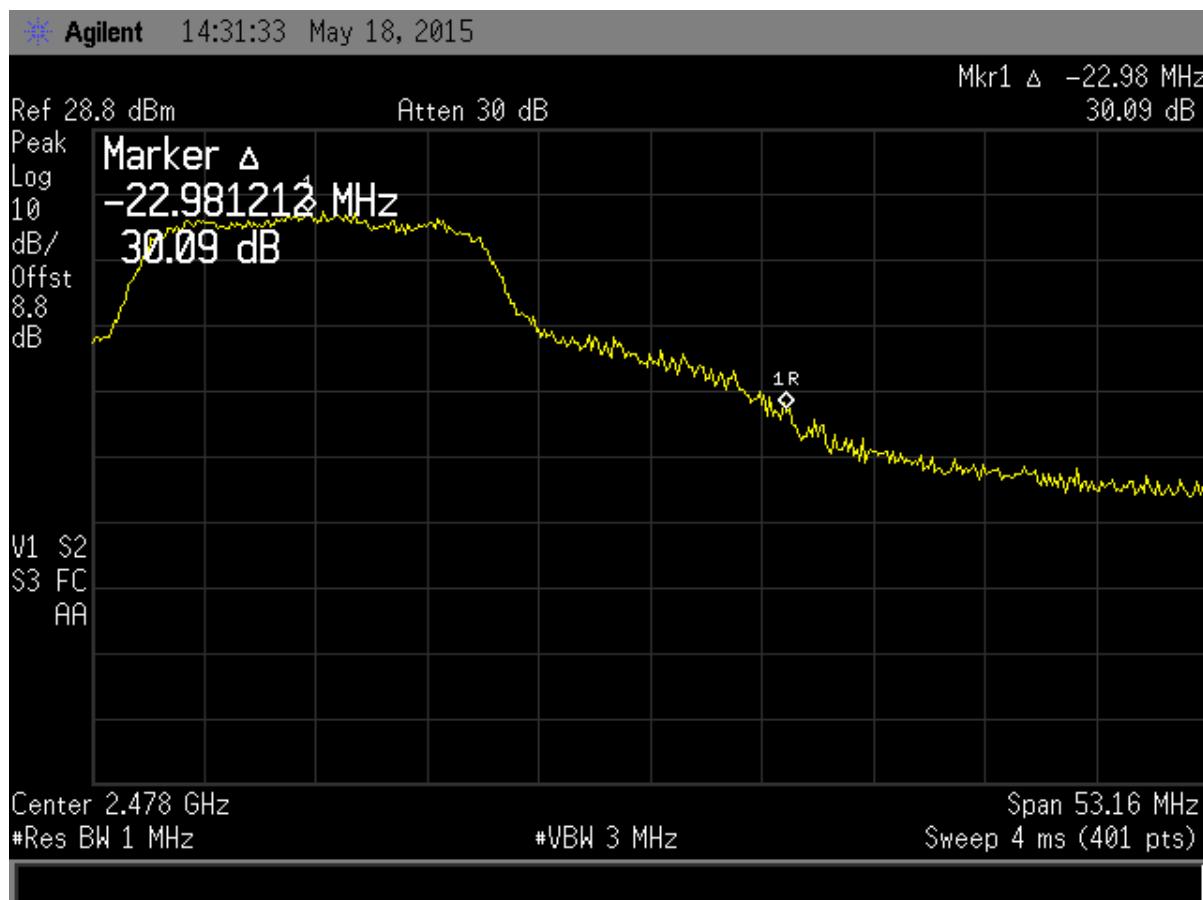
Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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P008

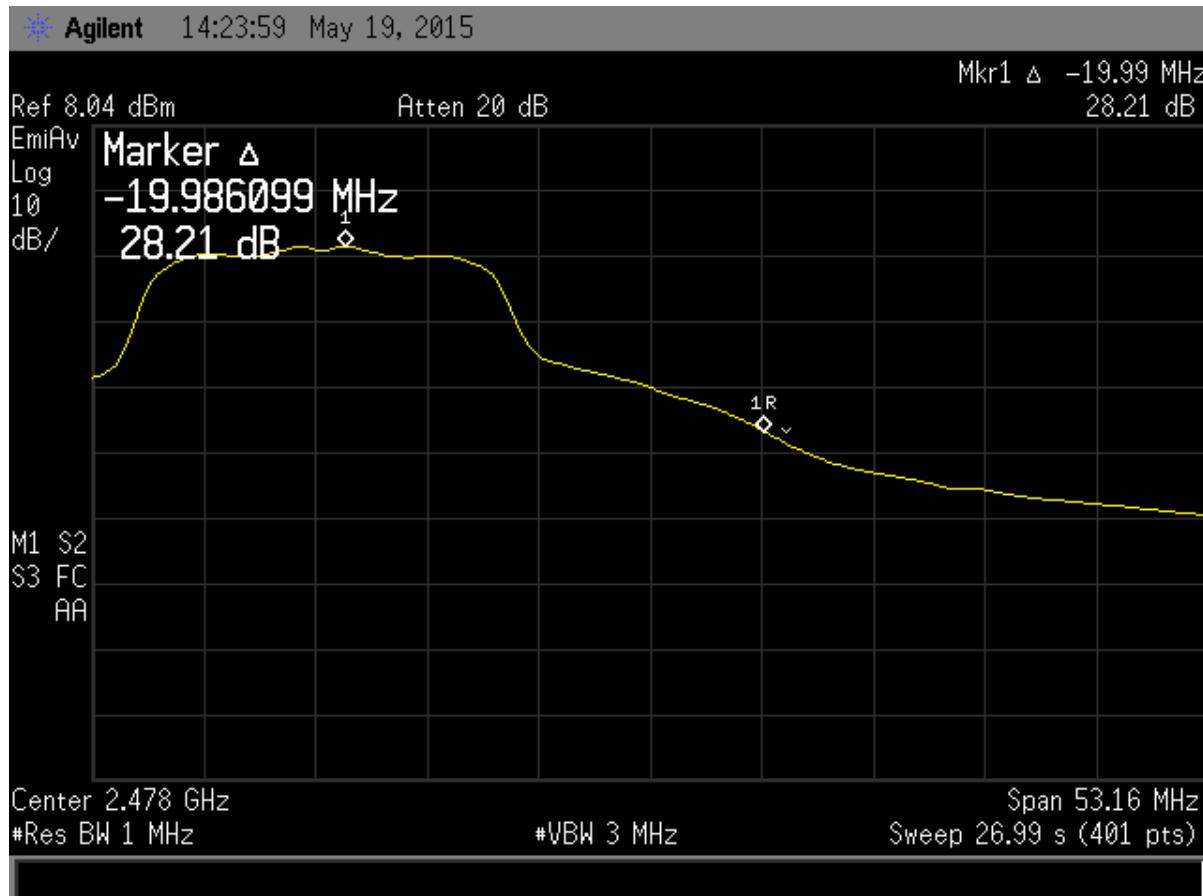


**Figure 78. Band Edge Compliance, 802.11g High Channel Delta – Peak**

Note: Plots shows 20 dB in-band limits. Restricted band emissions evaluated below.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008



**Figure 79. Band Edge Compliance, 802.11g High Channel Delta – Average**

Note: Plots shows 20 dB in-band limits. Restricted band emissions evaluated below.

Calculation of worst case upper band edge measurement:

Band Edge Calculated Result	28.21	dB
Band Edge Limit (20 dB from Fundamental)	20.00	dB
Band Edge Margin	8.21	dB

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

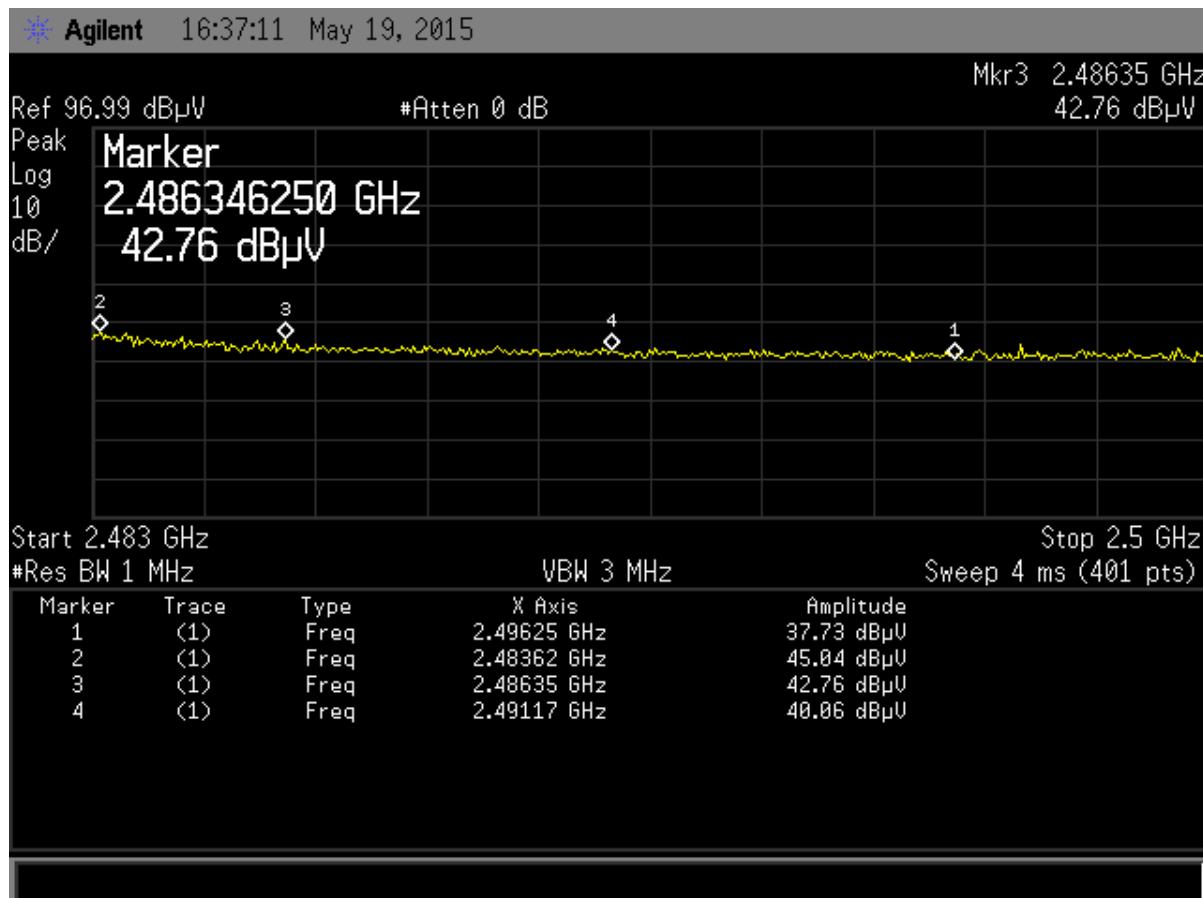


Figure 80. Radiated Restricted band 2483.5 MHz to 2500 MHz, 802.11g - Peak

Table 24. Radiated Restricted Band 2483.5 MHz to 2500 MHz, 802.11g – Peak

2483.5 MHz to 2500 MHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>BuV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>BuV/m</sub> )	PK Limits (dB <sub>BuV/m</sub> )	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
2496.2500	37.73	24.11	61.84	74.0	1.0m./HORZ	12.2	PK
2483.6200	45.04	24.11	69.15	74.0	1.0m./HORZ	4.9	PK
2486.3500	42.76	24.11	66.87	74.0	1.0m./HORZ	7.1	PK
2491.1700	40.06	24.11	64.17	74.0	1.0m./HORZ	9.8	PK

Test Date: May 19, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

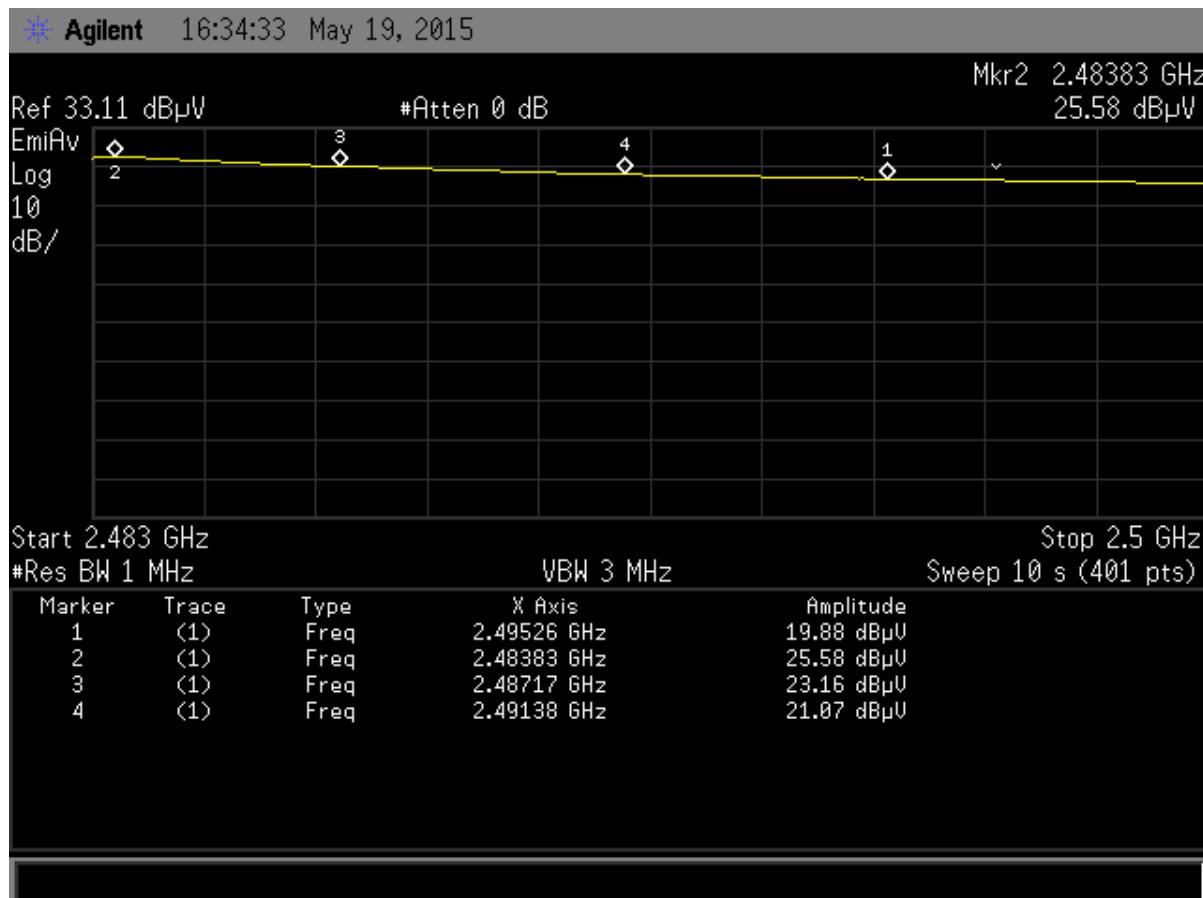


Figure 81. Radiated Restricted band 2310 MHz to 2390 MHz, 802.11g -Average

Table 25. Radiated Restricted Band 2483.5 MHz to 2500 MHz, 802.11g – Average

2483.5 MHz to 2500 MHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>UV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>UV</sub> /m)	AVG Limits (dB <sub>UV</sub> /m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
2495.26	19.88	24.11	43.99	54.0	1.0m./HORZ	10.0	AVG
2483.83	25.58	24.11	49.69	54.0	1.0m./HORZ	4.3	AVG
2487.17	23.16	24.11	47.27	54.0	1.0m./HORZ	6.7	AVG
2491.38	21.07	24.11	45.18	54.0	1.0m./HORZ	8.8	AVG

Test Date: May 19, 2015

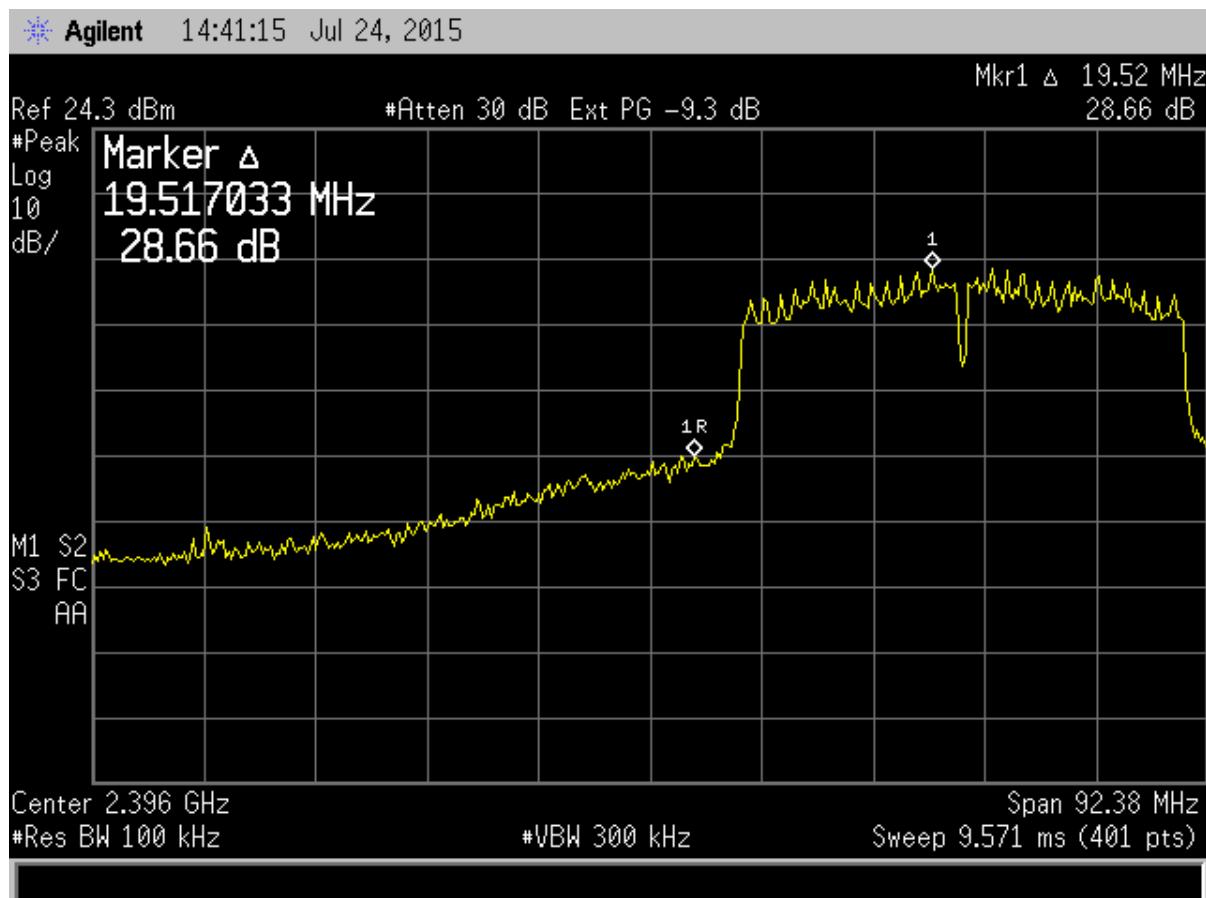
Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

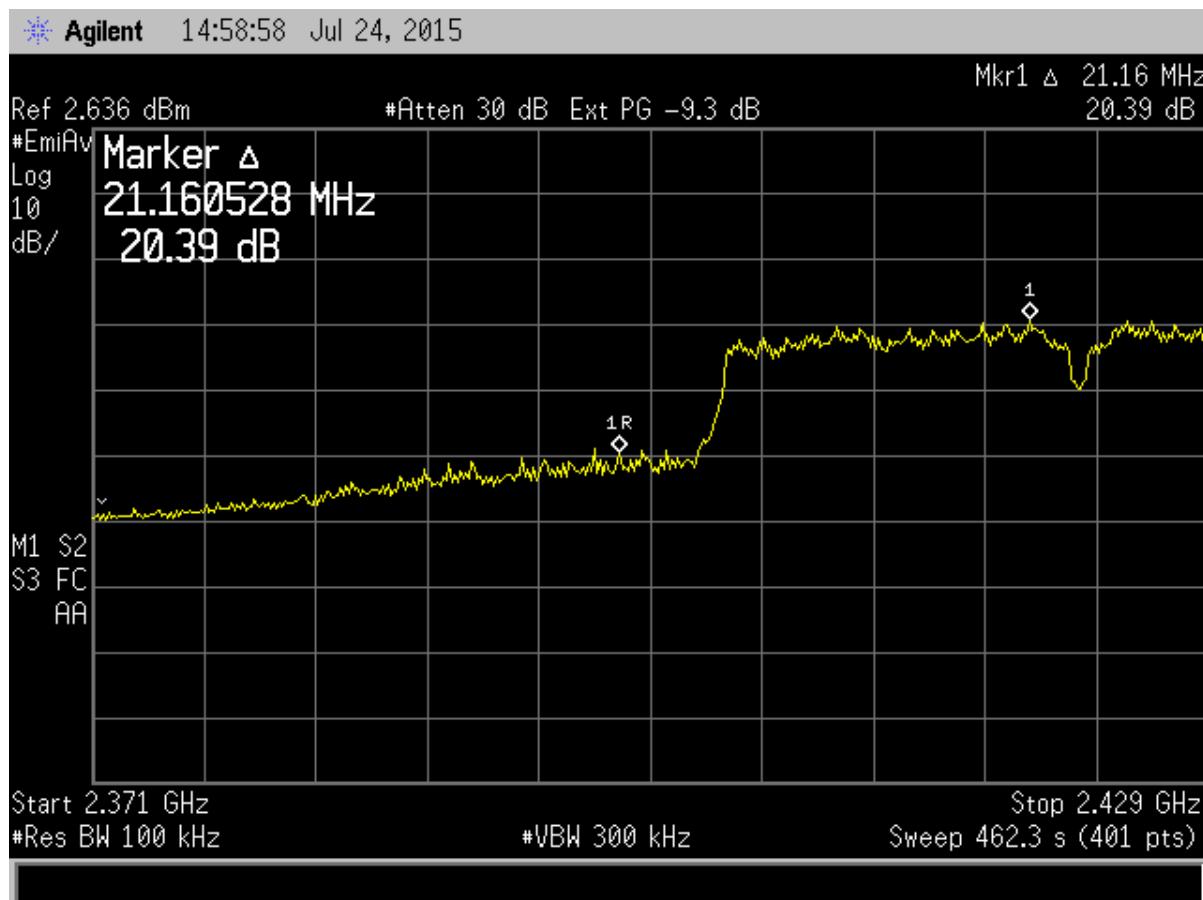
FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008



**Figure 82. Band Edge Compliance, 802.11 40 MHz BW Low Channel Delta - Peak**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008



**Figure 83. Band Edge Compliance, 802.11 40 MHz BW Low Channel Delta - Average**

Calculation of worst case lower band edge measurement:

Band Edge Calculated Result	20.39	dB
<u>Band Edge Limit (20 dB from Fundamental)</u>	20.00	dB
Band Edge Margin	0.39	dB

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

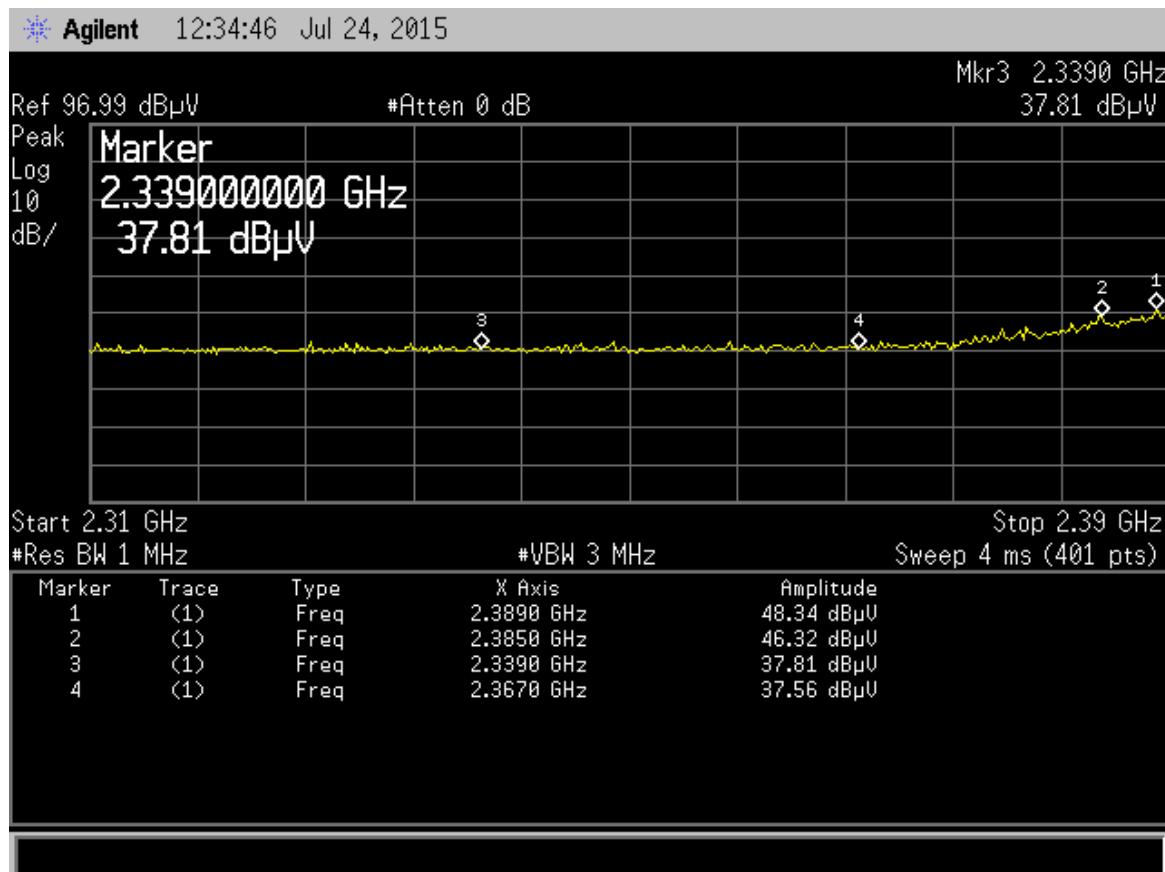


Figure 84. Radiated Restricted band 2310 MHz to 2390 MHz, 802.11 40 MHz BW - Peak

Table 26. Radiated Restricted Band 2310 MHz to 2390 MHz, 802.11 40 MHz BW- Peak

2310 MHz to 2390 MHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>B</sub> uV)	AF+CA-AMP (dB/m)	Results (dB <sub>B</sub> uV/m)	PK Limits (dB <sub>B</sub> uV/m)	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
2390.00	48.34	32.12	70.96	74.0	1.0m./HORZ	3.0	PK
2385.00	46.32	32.12	68.94	74.0	1.0m./HORZ	5.1	PK
2390.00	37.81	32.12	60.43	74.0	1.0m./HORZ	13.6	PK
2367.00	37.56	32.12	60.18	74.0	1.0m./HORZ	13.8	PK

Test Date: July 24, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008



**Figure 85. Radiated Restricted band 2310 MHz to 2390 MHz, 802.11 40 MHz BW – Average**

**Table 27. Radiated Restricted Band 2310 MHz to 2390 MHz, 802.11 40 MHz BW – Average**

2310 MHz to 2390 MHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB $\mu$ V)	AF+CA-AMP (dB/m)	Results (dB $\mu$ V/m)	AVG Limits (dB $\mu$ V/m)	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
2390.00	25.36	32.12	47.98	54.0	1.0m./HORZ	6.0	AVG
2385.00	23.65	32.12	46.27	54.0	1.0m./HORZ	7.7	AVG
2339.00	16.82	31.95	39.27	54.0	1.0m./HORZ	14.7	AVG
2367.00	18.73	32.12	41.35	54.0	1.0m./HORZ	12.7	AVG

Test Date: July 24, 2015

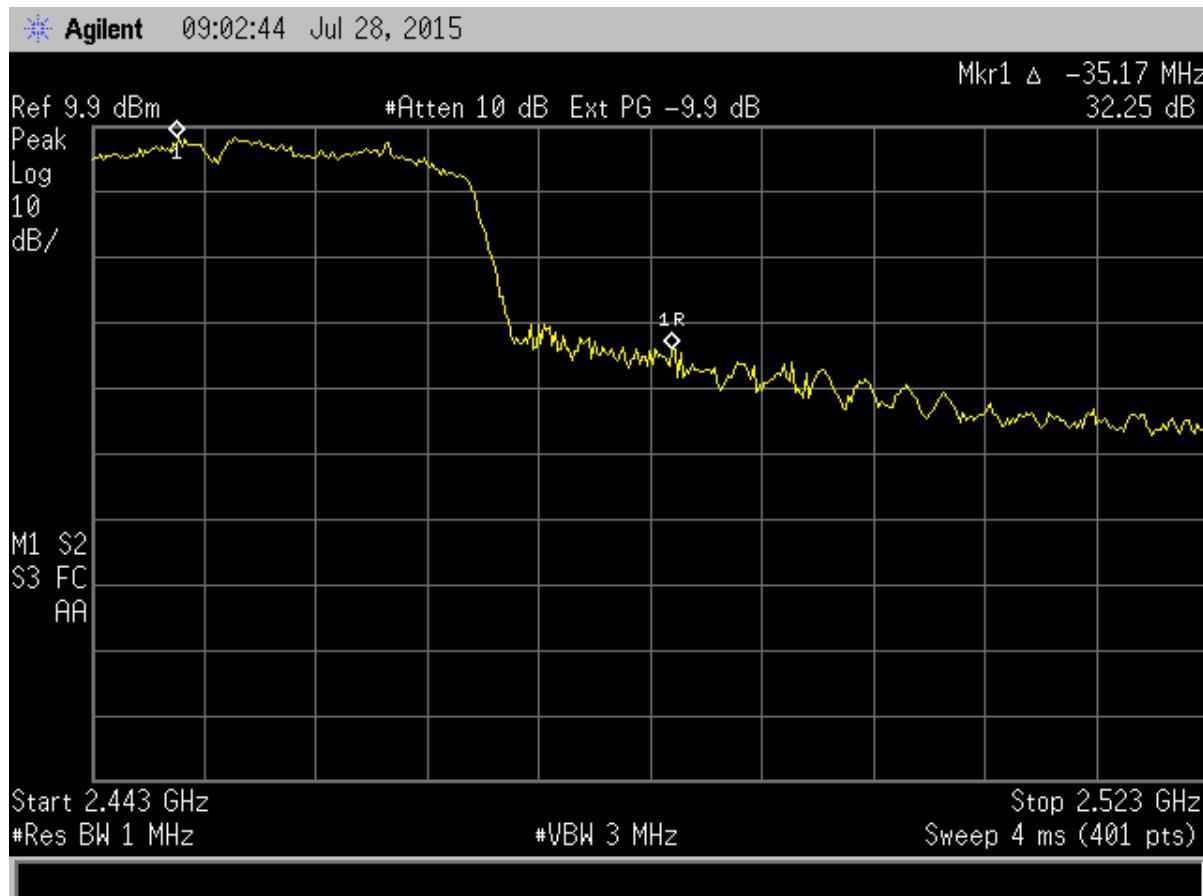
Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

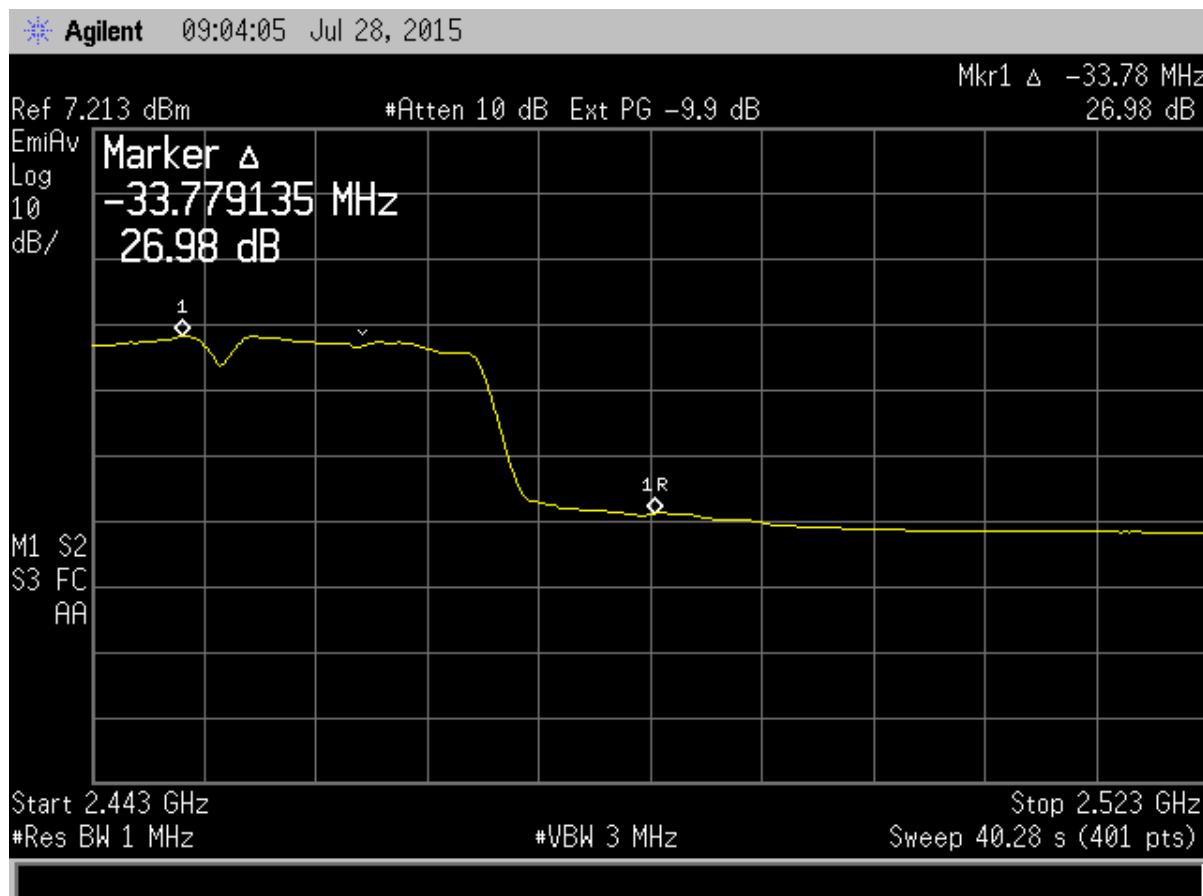


**Figure 86. Band Edge Compliance, 802.11 40 MHz BW High Channel Delta - Peak**

Note: Plots shows 20 dB in-band limits. Restricted band emissions evaluated below.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008



**Figure 87. Band Edge Compliance, 802.11 40 MHz BW High Channel Delta - Average**

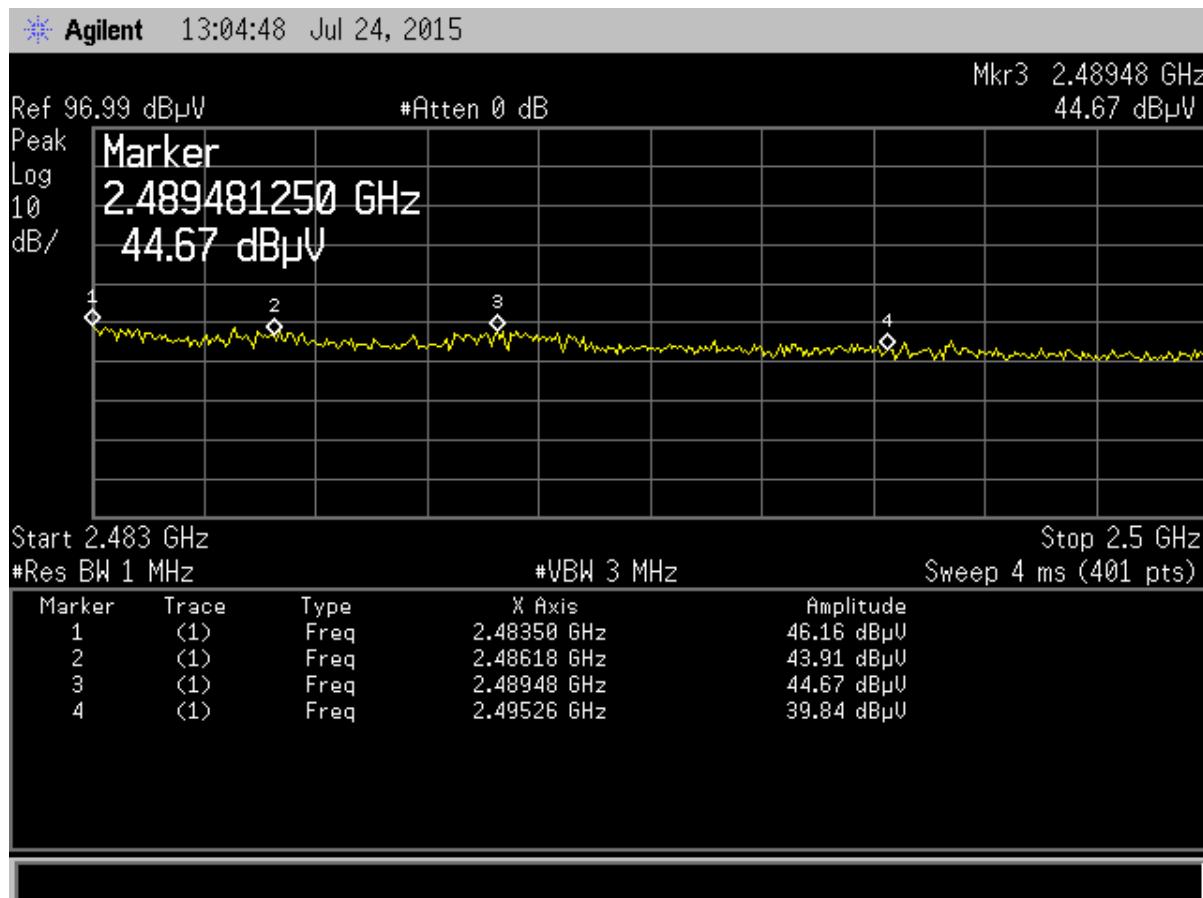
Note: Plots shows 20 dB in-band limits. Restricted band emissions evaluated below.

Calculation of worst case lower band edge measurement:

Band Edge Calculated Result	26.98	dB
Band Edge Limit (20 dB from Fundamental)	20.00	dB
Band Edge Margin	6.98	dB

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008



**Figure 88. Radiated Restricted band 2483.5 MHz to 2500 MHz, 802.11 40 MHz BW - Peak**

**Table 28. Radiated Restricted Band 2483.5 MHz to 2500 MHz, 802.11 40 MHz BW- Peak**

2483.5 MHz to 2500 MHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>UV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>UV</sub> /m)	PK Limits (dB <sub>UV</sub> /m)	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
2483.50	46.16	32.40	69.06	74.0	1.0m./HORZ	4.9	PK
2486.18	43.91	32.40	66.81	74.0	1.0m./HORZ	7.2	PK
2489.48	44.67	32.40	67.57	74.0	1.0m./HORZ	6.4	PK
2495.26	39.84	32.40	62.74	74.0	1.0m./HORZ	11.3	PK

Test Date: July 24, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008



**Figure 89. Radiated Restricted band 2483.5 MHz to 2500 MHz, 802.11 40 MHz BW - Average**

**Table 29. Radiated Restricted Band 2483.5 MHz to 2500 MHz, 802.11 40 MHz BW – Average**

2483.5 MHz to 2500 MHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB $\mu$ V)	AF+CA-AMP (dB/m)	Results (dB $\mu$ V/m)	AVG Limits (dB $\mu$ V/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
2484.82	22.27	32.40	45.17	54.0	1.0m./HORZ	8.8	AVG
2487.13	21.40	32.40	44.30	54.0	1.0m./HORZ	9.7	AVG
2489.48	21.27	32.40	44.17	54.0	1.0m./HORZ	9.8	AVG
2495.26	20.10	32.40	43.00	54.0	1.0m./HORZ	11.0	AVG

Test Date: July 24, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

## 2.12 Six (6) dB Bandwidth per CFR 15.247(a)(2),

The EUT antenna port was connected to a spectrum analyzer having a  $50\ \Omega$  input impedance. Measurements were performed similar to the method of FCC, KDB Publication No. 558074 for a bandwidth of 6 dB. The RBW was set to 100 kHz and with the VBW  $\geq$  RBW. The results of this test are given in the table below and Figures below.

**Table 30. 802.11n Six (6) dB Bandwidth**

Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum FCC Bandwidth (MHz)
2412	16.032	0.500
2442	16.027	0.500
2462	16.124	0.500

**Table 31. 802.11b Six (6) dB Bandwidth**

Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum FCC Bandwidth (MHz)
2412	8.794	0.500
2442	8.091	0.500
2462	8.809	0.500

**Table 32. 802.11g Six (6) dB Bandwidth**

Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum FCC Bandwidth (MHz)
2412	15.195	0.500
2442	15.199	0.500
2462	15.181	0.500

Test Date: May 19, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

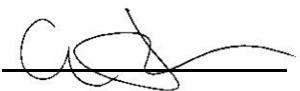
**Table 33. 802.11 40 MHz BW Six (6) dB Bandwidth**

Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum FCC Bandwidth (MHz)
2422	35.284	0.500
2437	35.258	0.500
2452	35.273	0.500

Test Date: July 24, 2015

Tested By

Signature:



Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

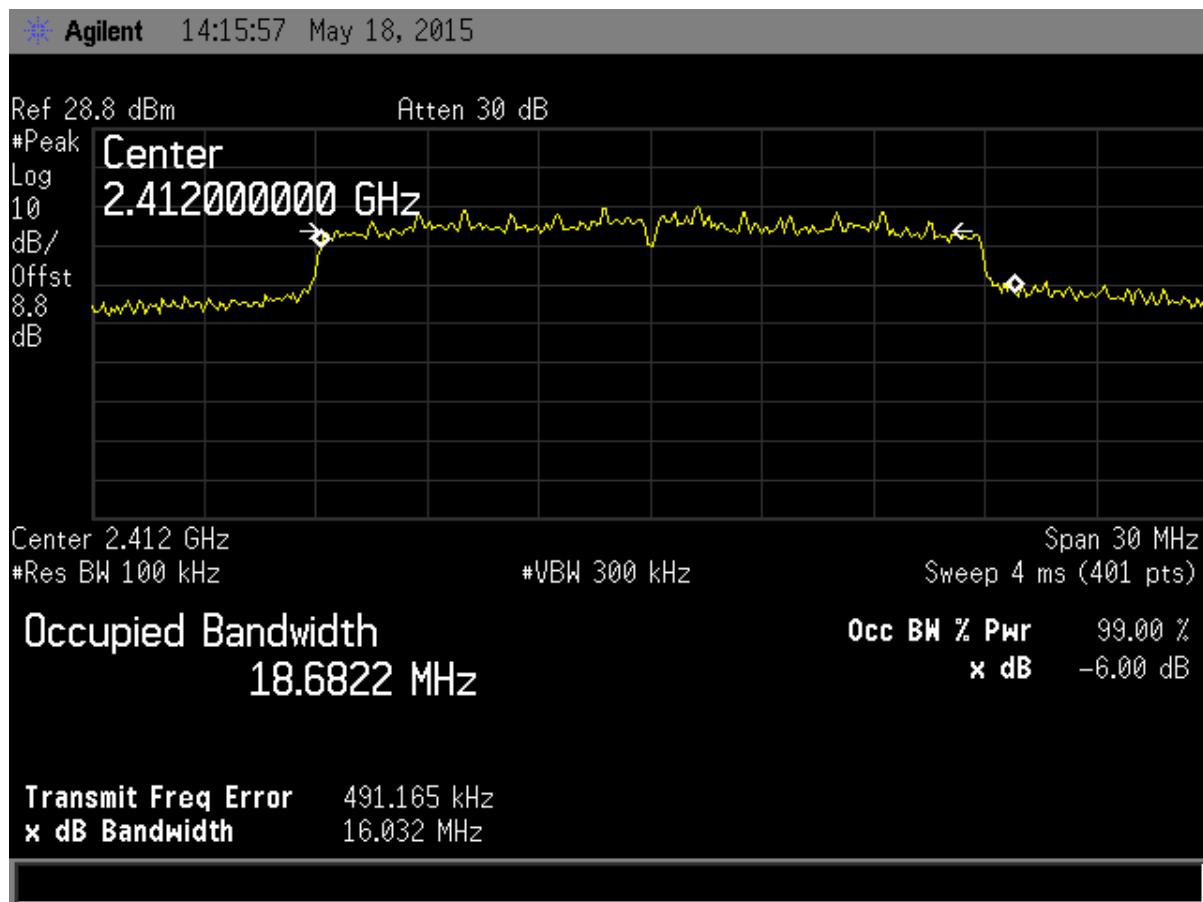


Figure 90. Six dB Bandwidth - 15.247 – 802.11n Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

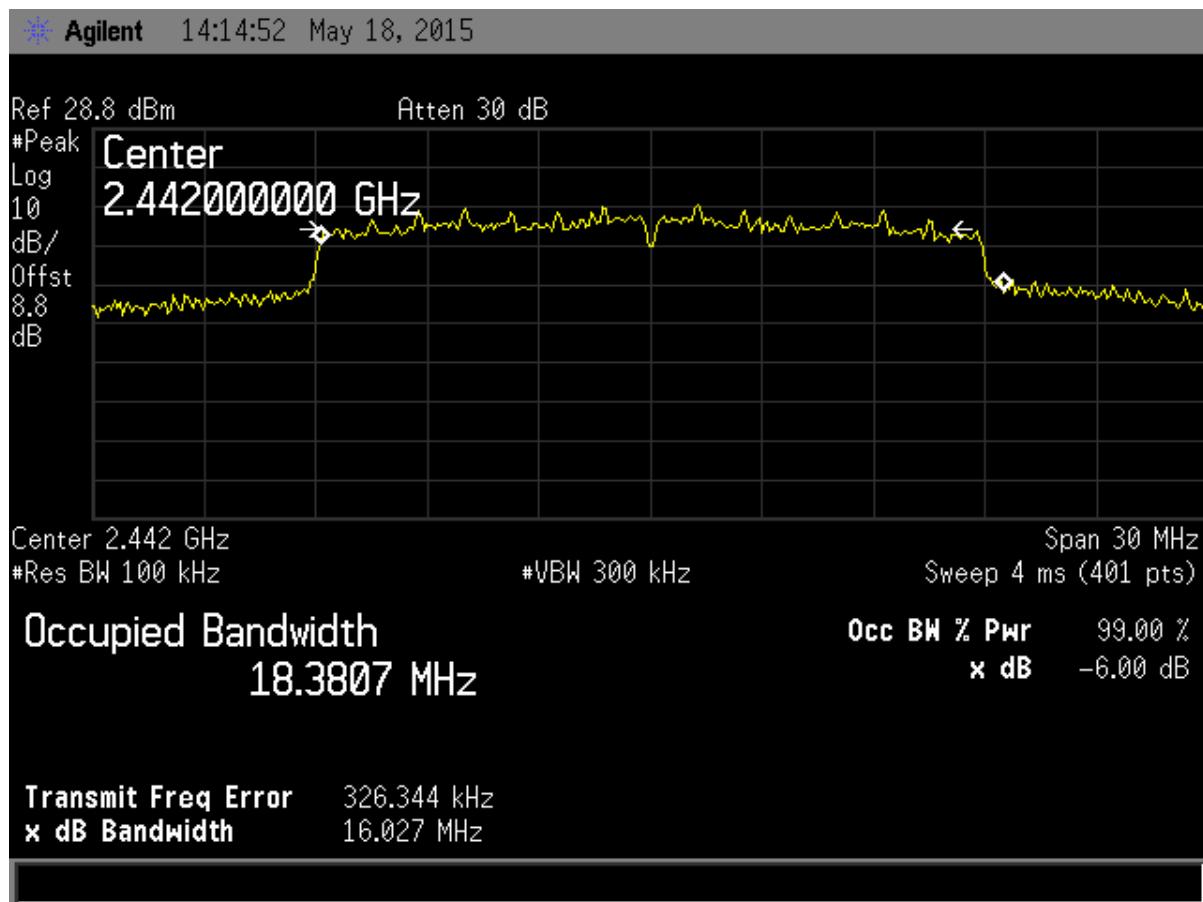


Figure 91. Six dB Bandwidth - 15.247 – 802.11n Mid Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

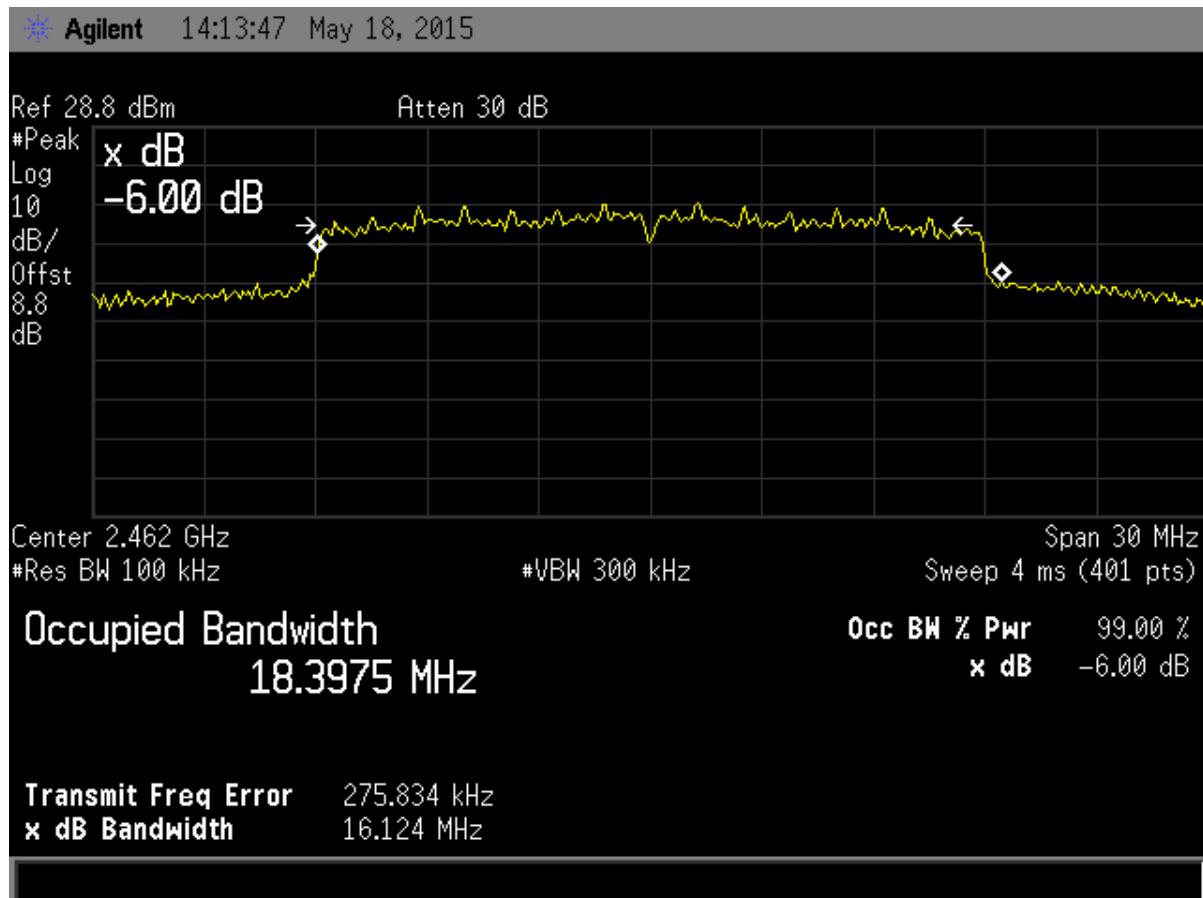


Figure 92. Six dB Bandwidth - 15.247 – 802.11n High Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

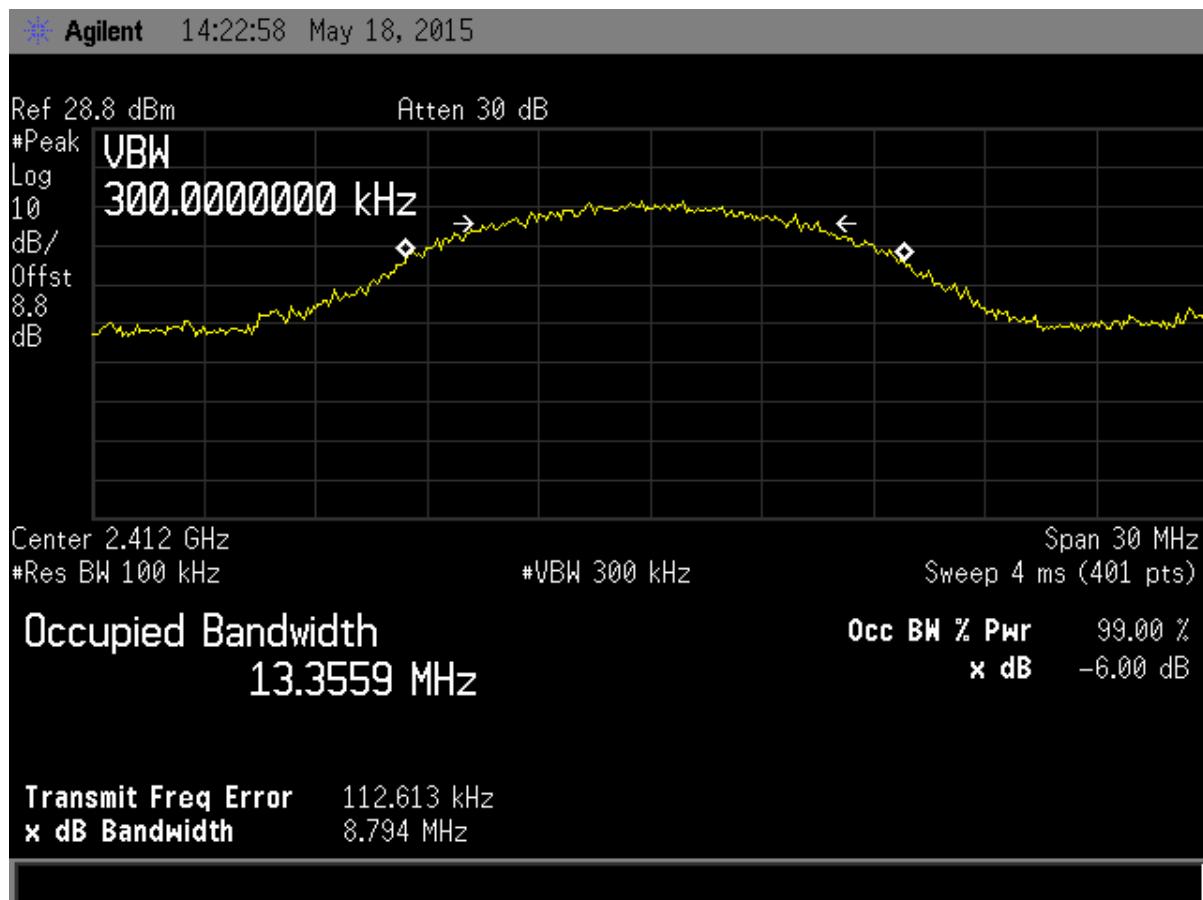


Figure 93. Six dB Bandwidth - 15.247 – 802.11b Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008



**Figure 94. Six dB Bandwidth - 15.247 – 802.11b Mid Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

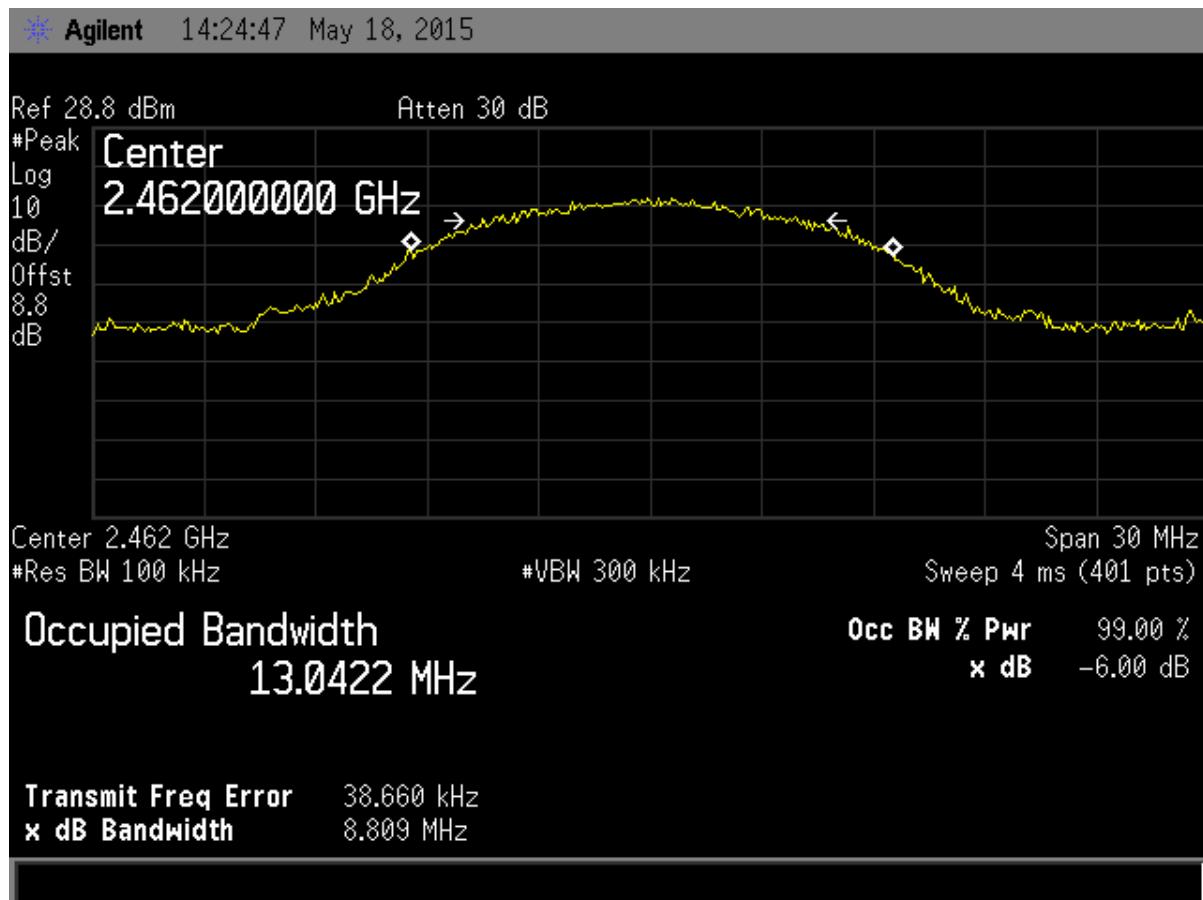


Figure 95. Six dB Bandwidth - 15.247 – 802.11b High Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

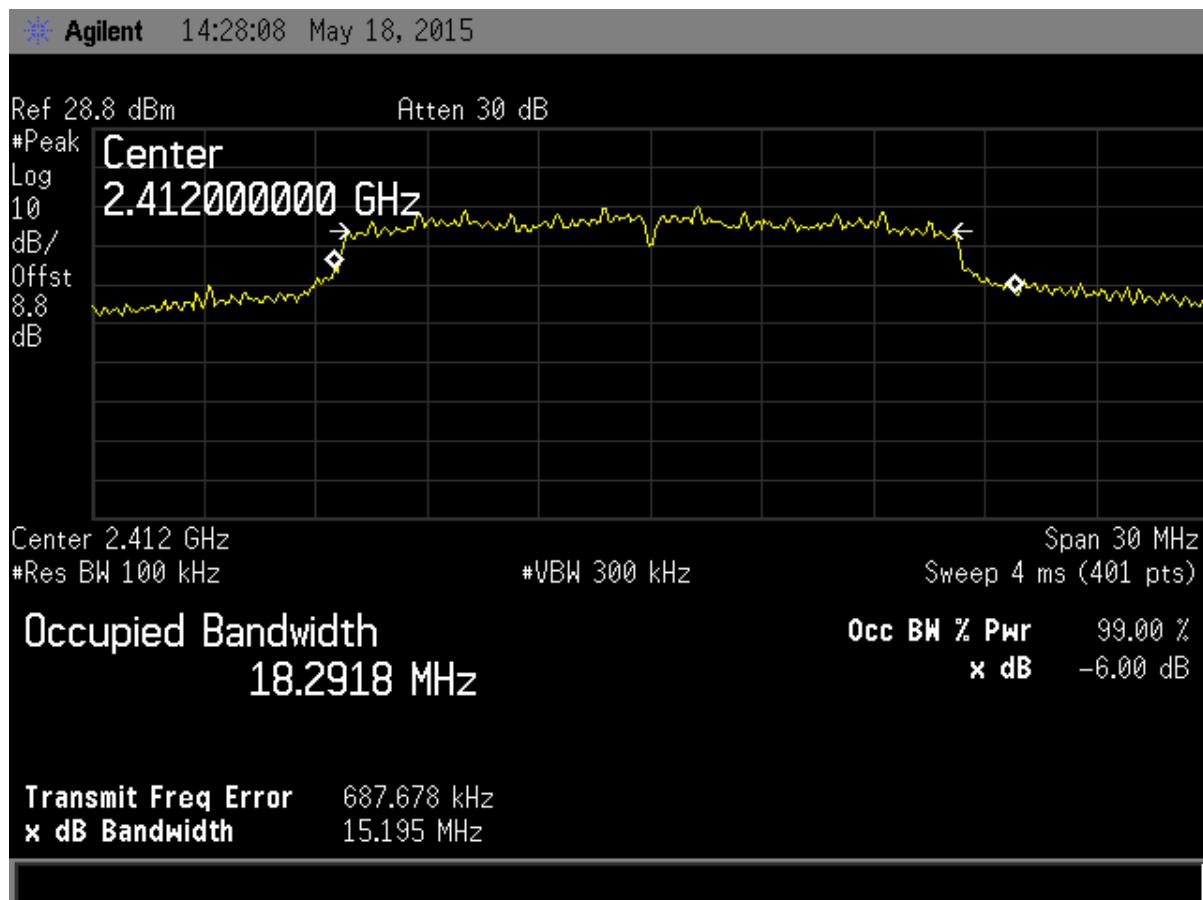


Figure 96. Six dB Bandwidth - 15.247 – 802.11g Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

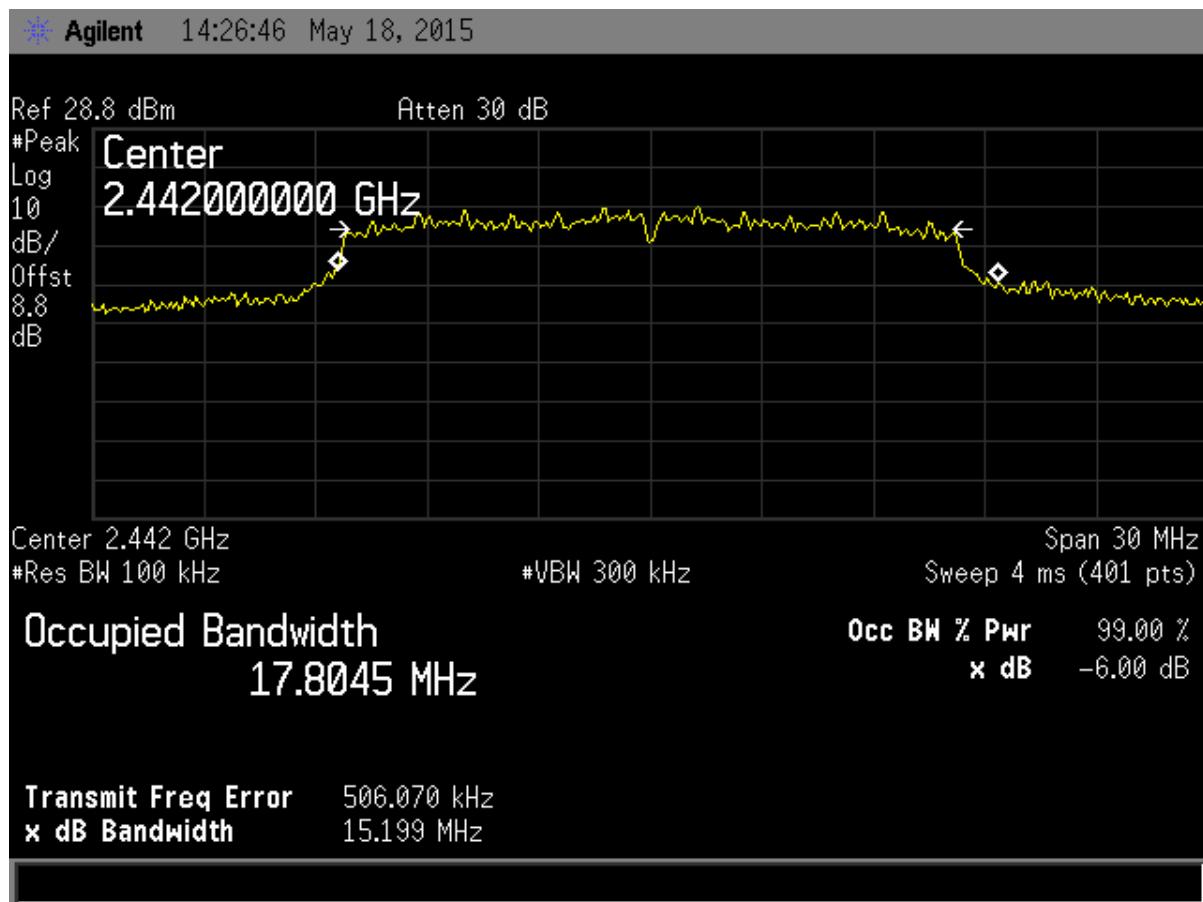


Figure 97. Six dB Bandwidth - 15.247 – 802.1g Mid Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

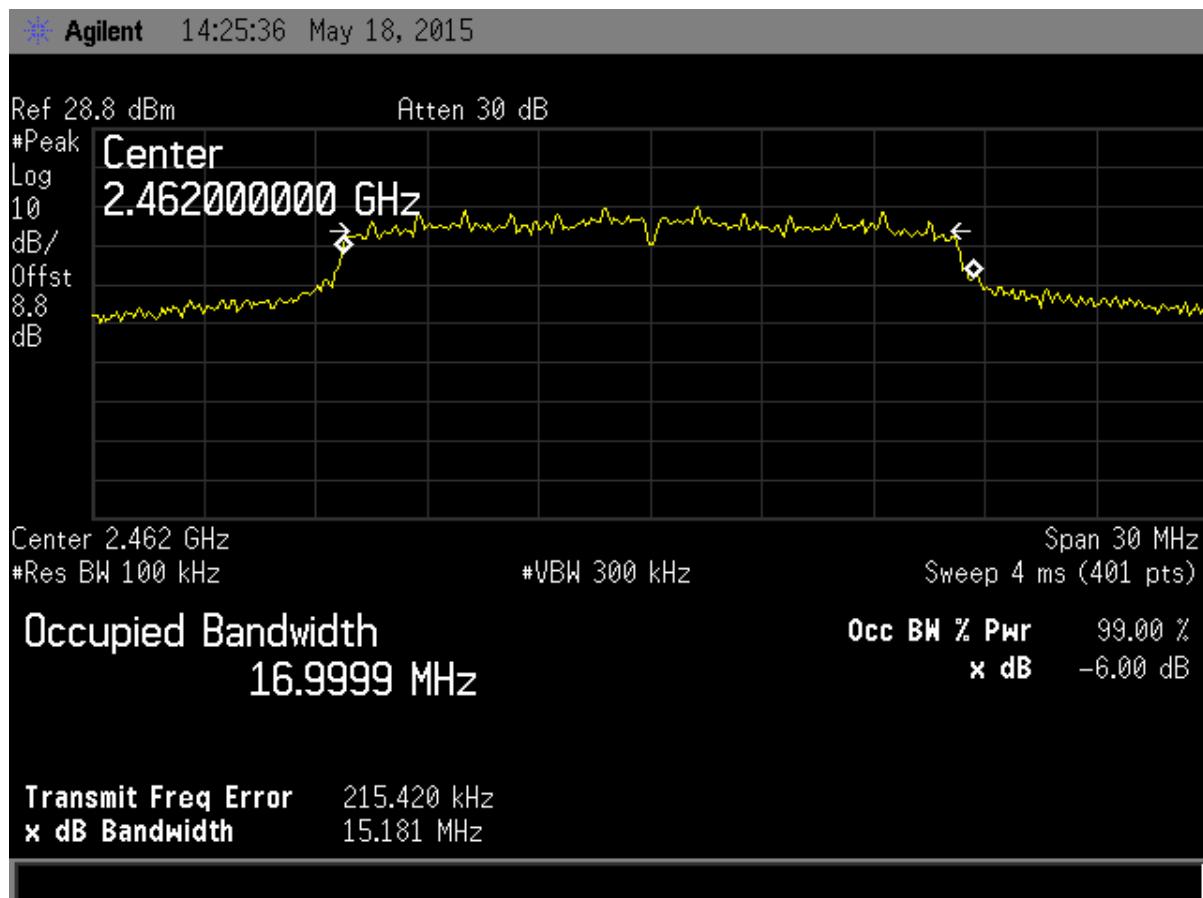


Figure 98. Six dB Bandwidth - 15.247 – 802.11g High Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

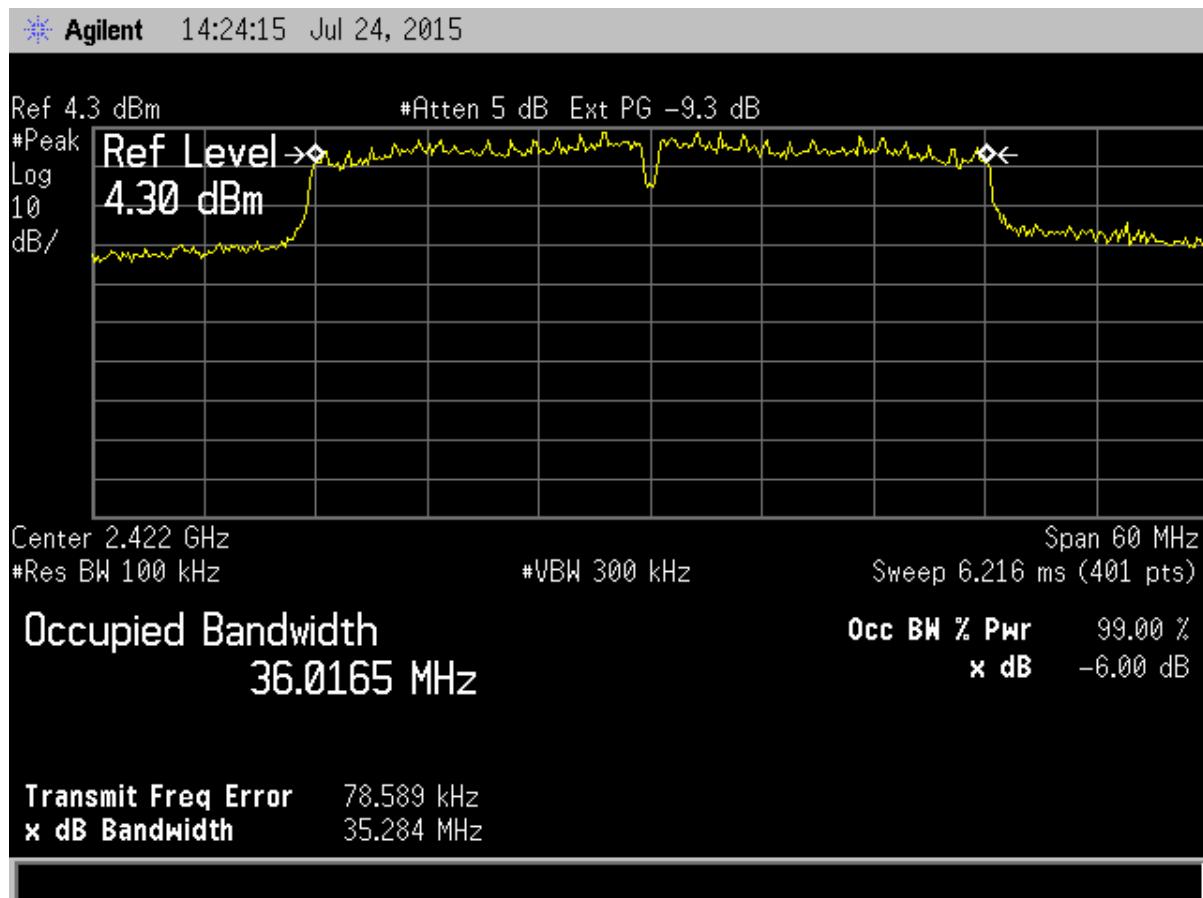


Figure 99. Six dB Bandwidth - 15.247 – 802.11 40 MHz BW Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

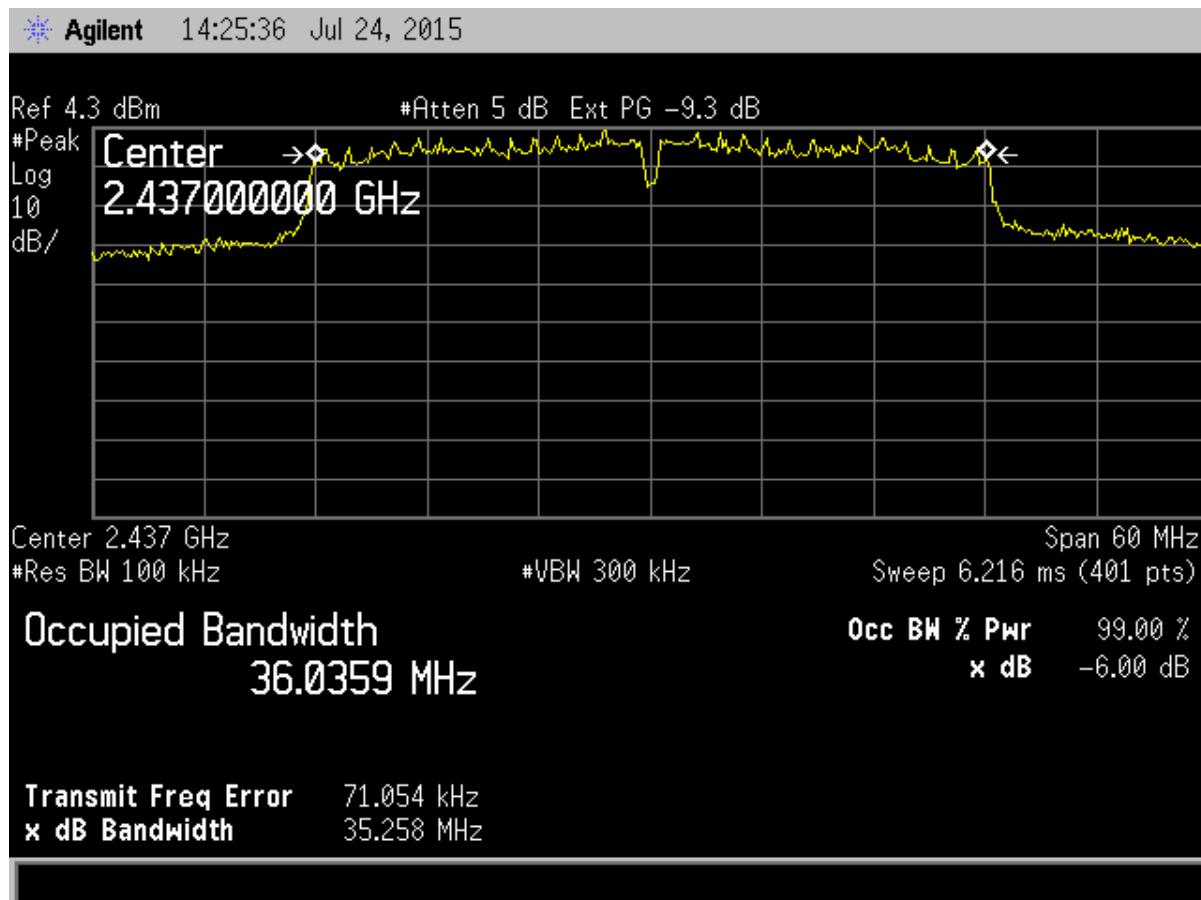


Figure 100. Six dB Bandwidth - 15.247 – 802.11 40 MHz BW Mid Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

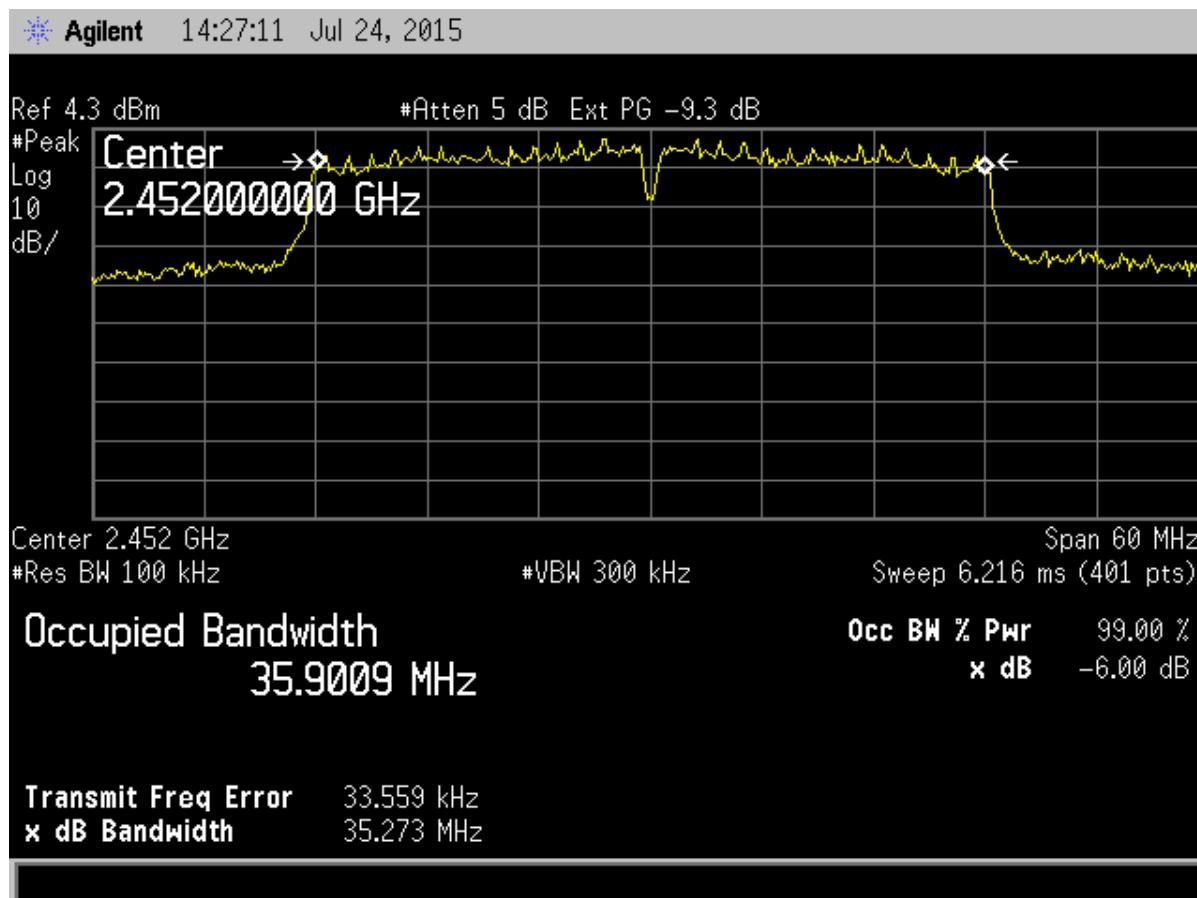


Figure 101. Six dB Bandwidth - 15.247 – 802.11 40 MHz BW High Channel

US Tech Test Report:	FCC Part 15 Certification/ RSS 247
FCC ID:	M72-P008
IC:	1849C-P008
Test Report Number:	15-0085
Issue Date:	July 31, 2015
Customer:	Polycom Inc.
Model:	P008

## 2.13 99% Occupied Bandwidth (IC RSS Gen, 6.6)

These measurements were performed while the EUT was in a constant transmit mode. A method similar to the marker delta method was used to capture the points. The RBW was set to approximately 1/100 of the manufacturers claimed RBW and with the VBW  $\geq$  RBW. The results of this test are given in Table 14 thru 16 and Figures 43 thru 51, above.

**Table 34. 802.11n 20 dB Bandwidth and 99% Occupied Bandwidth**

Frequency (MHz)	99% Occupied Bandwidth (MHz)
2412	18.6822
2442	18.3807
2462	18.3975

**Table 35. 802.11b 20 dB Bandwidth and 99% Occupied Bandwidth**

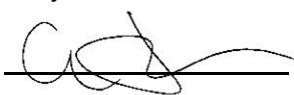
Frequency (MHz)	99% Occupied Bandwidth (MHz)
2412	13.3559
2442	13.1818
2462	13.0422

**Table 36. 802.11g 20 dB Bandwidth and 99% Occupied Bandwidth**

Frequency (MHz)	99% Occupied Bandwidth (MHz)
2412	18.2918
2442	17.8045
2462	16.9999

Test Date: May 19, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

**Table 37. 802.11g 20 dB Bandwidth and 99% Occupied Bandwidth**

Frequency (MHz)	99% Occupied Bandwidth (MHz)
2422	36.02
2437	36.04
2452	35.90

Test Date: July 24, 2015

Tested By

Signature:



Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
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## 2.14 Maximum Peak Conducted Output Power (CFR 15.247 (b) (3))

For this test, the transmitter was programmed to operate at a maximum output power across the bandwidth.

Peak power within the band 2.4 GHz to 2.5 GHz was measured per FCC KDB Publication 558074 as an Antenna Conducted test with a spectrum analyzer by connecting the spectrum analyzer directly, via a short RF cable, and attenuators to the antenna output terminals on the EUT. The spectrum analyzer was set for an impedance of  $50 \Omega$  with the RBW set greater than the 6 dB bandwidth of the EUT, and the VBW  $\geq$  RBW. Peak antenna conducted output power is tabulated in the table below.

The EUT is designed to only transmit from one of the two ports, during investigational testing the port that yields the highest emissions was port J8. Therefore the EUT was programmed to transmit from J8, that value was recorded. Additional while the EUT was transmitting from port J8, port J3 was measured and those emissions levels were summed together with the recorded values from J8. The results are presented below.

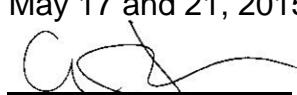
**Table 38. 802.11n Peak Antenna Conducted Output Power per Part 15.247 (b) (3)**

Frequency of Fundamental (MHz)	Raw Test Data from Port J8 dBm	Converted Data from J8 (mW)	Raw Test Data from Port J dBm	Converted Data from J3 (mW)	Total output Power (mW)	FCC Limit (mW)
2412	19.30	85.11	-5.70	0.27	85.38	1000
2442	19.90	97.72	-4.20	0.38	98.10	1000
2462	19.80	95.50	-3.30	0.47	95.97	1000

Test Date: May 17 and 21, 2015

Tested By

Signature:



Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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**Table 39. 802.11b Peak Antenna Conducted Output Power per Part 15.247 (b) (3)**

Frequency of Fundamental (MHz)	Raw Test Data from Port J8 (dBm)	Converted Data from J8 (mW)	Raw Test Data from Port J (dBm)	Converted Data from J3 (mW)	Total output Power (mW)	FCC Limit (mW)
2412	19.50	89.13	-5.30	0.30	89.33	1000
2442	19.80	95.50	-2.10	0.62	96.12	1000
2462	20.10	102.33	-3.40	0.46	102.79	1000

Test Date: May 17 and 21, 2015

Tested By

Signature:

Name: Carrie Ingram

**Table 40. 802.11g Peak Antenna Conducted Output Power per Part 15.247 (b) (3)**

Frequency of Fundamental (MHz)	Raw Test Data from Port J8 dBm	Converted Data from J8 (mW)	Raw Test Data from Port J dBm	Converted Data from J3 (mW)	Total output Power (mW)	FCC Limit (mW)
2412	19.10	81.28	-5.80	0.26	81.54	1000
2442	19.30	85.11	-4.10	0.39	85.50	1000
2462	19.10	81.28	-3.20	0.48	81.78	1000

Test Date: May 17 and 21, 2015

Tested By

Signature:

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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15-0085  
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**Table 41. 802.11 40 MHz BW Peak Antenna Conducted Output Power per Part 15.247 (b) (3)**

Frequency of Fundamental (MHz)	Raw Test Data from Port J8 dBm	Output Power (mW)	FCC Limit (mW)
2422	15.93	48.87	1000
2437	17.16	52.00	1000
2452	16.09	40.64	1000

Note: The output power from the additional antenna port was deemed insignificant therefore those measurements were not applied.

Test Date: July 24, 2015

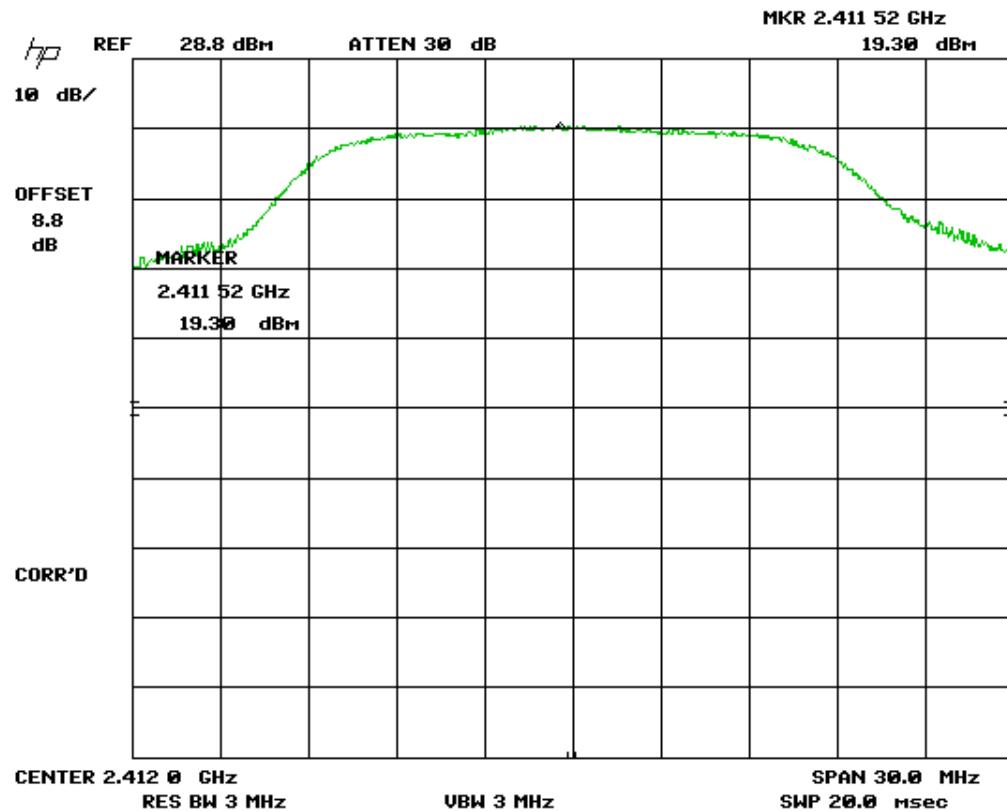
Tested By

Signature:

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
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15-0085  
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**Figure 102. Peak Antenna Conducted Output Power from J8, 802.11n Low Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
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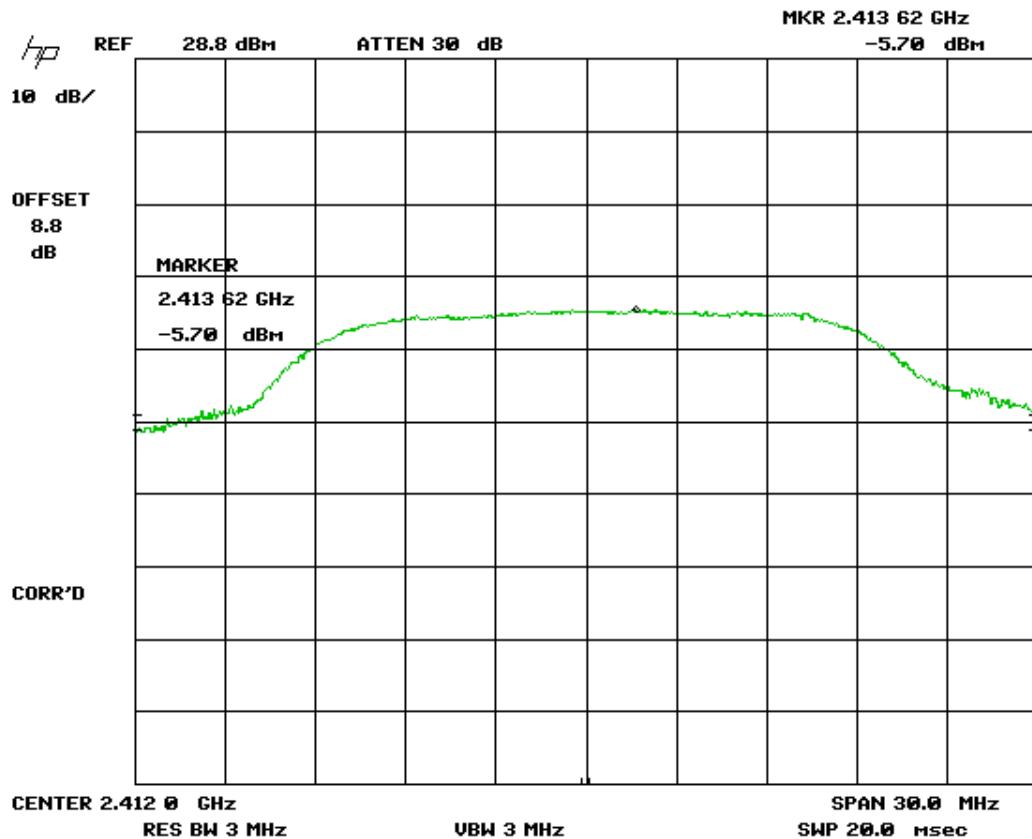
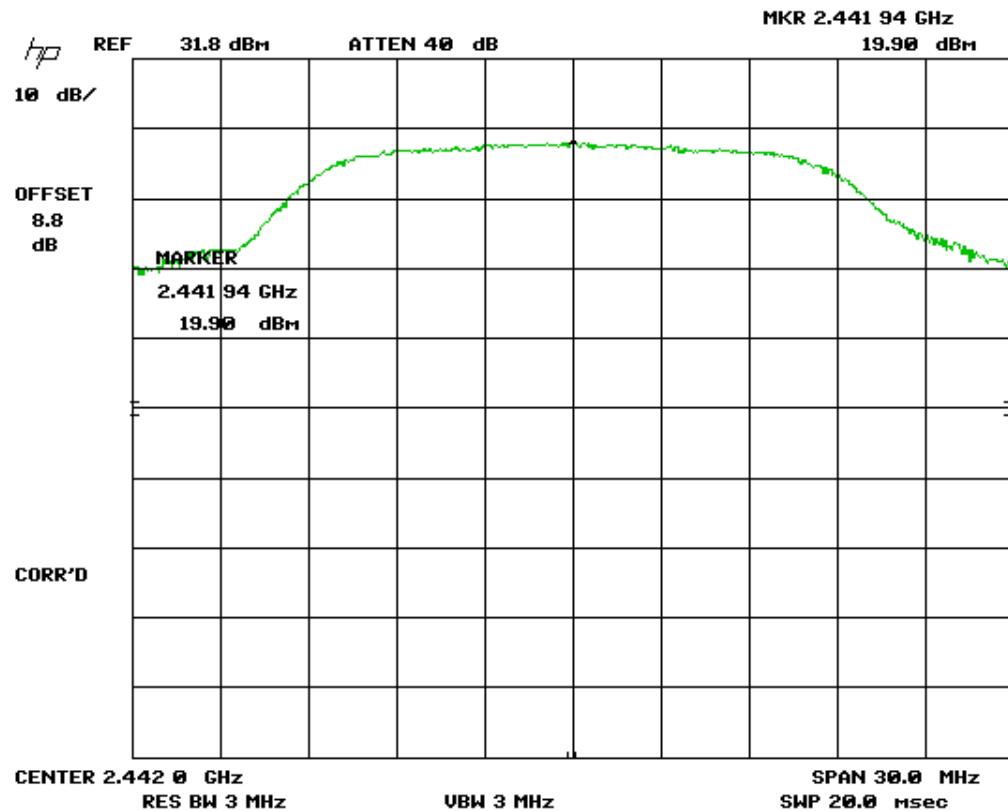


Figure 103. Peak Antenna Conducted Output Power from J3, 802.11n Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

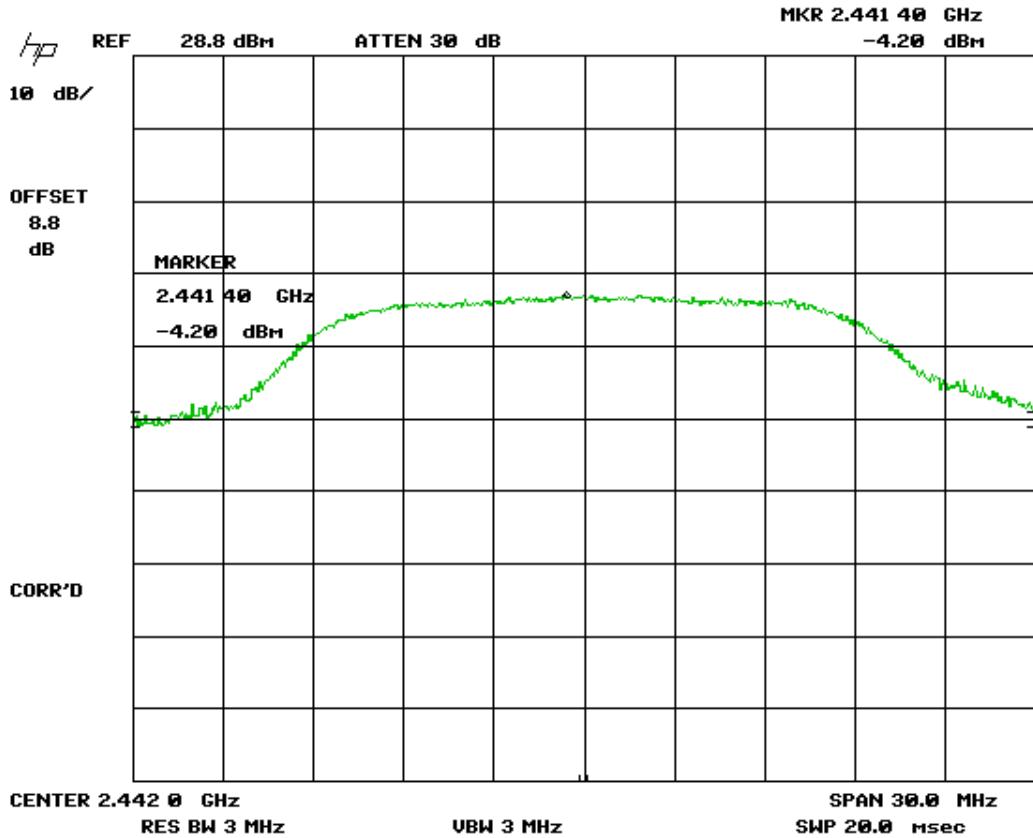
FCC Part 15 Certification/ RSS 247  
M72-P008  
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15-0085  
July 31, 2015  
Polycom Inc.  
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**Figure 104. Peak Antenna Conducted Output Power from J8, 802.11n Mid Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

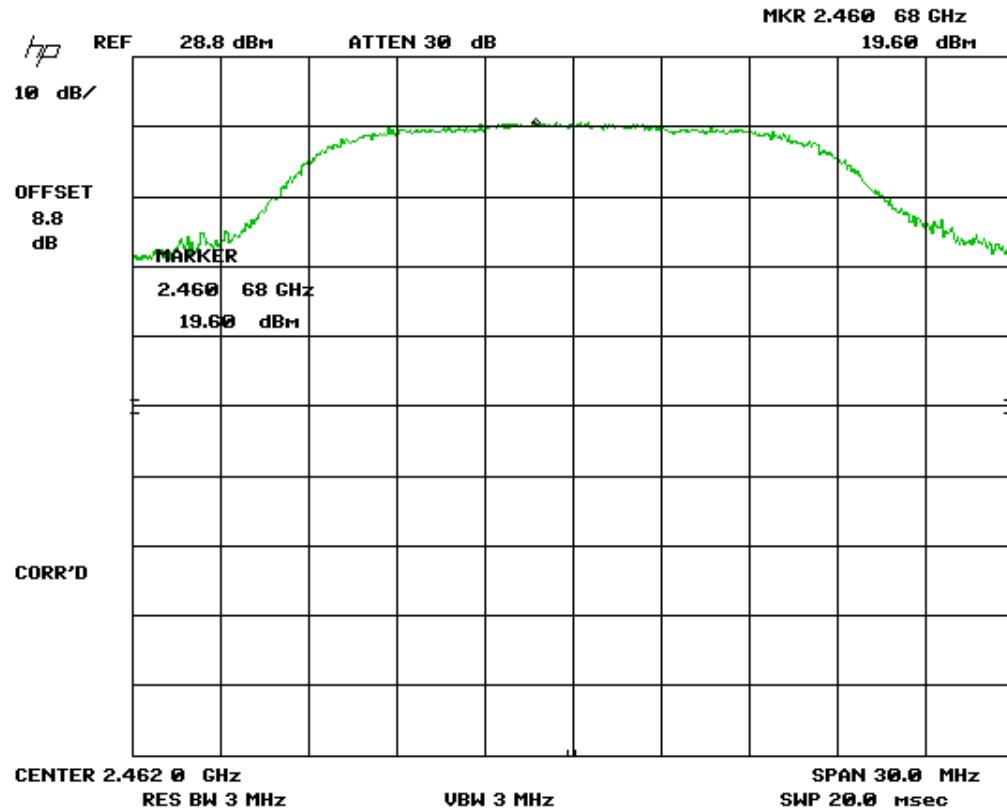
FCC Part 15 Certification/ RSS 247  
M72-P008  
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15-0085  
July 31, 2015  
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**Figure 105. Peak Antenna Conducted Output Power from J3, 802.11n Mid Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

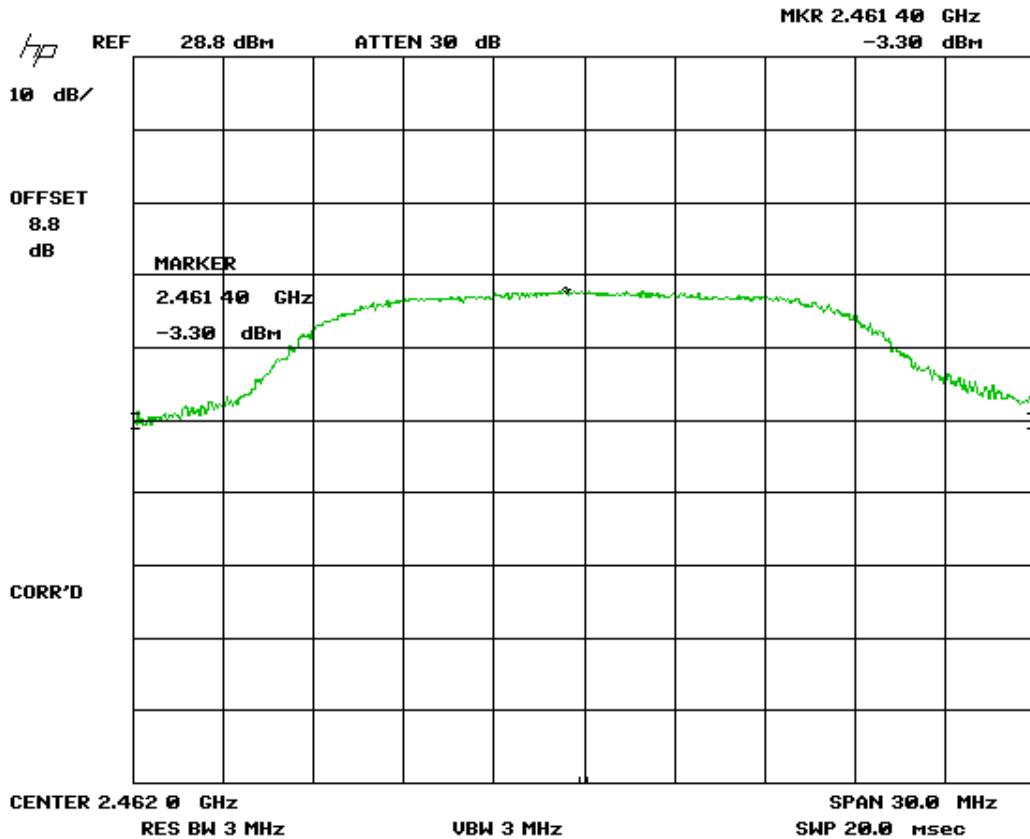
FCC Part 15 Certification/ RSS 247  
M72-P008  
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15-0085  
July 31, 2015  
Polycom Inc.  
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**Figure 106. Peak Antenna Conducted Output Power from J8, 802.11n High Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

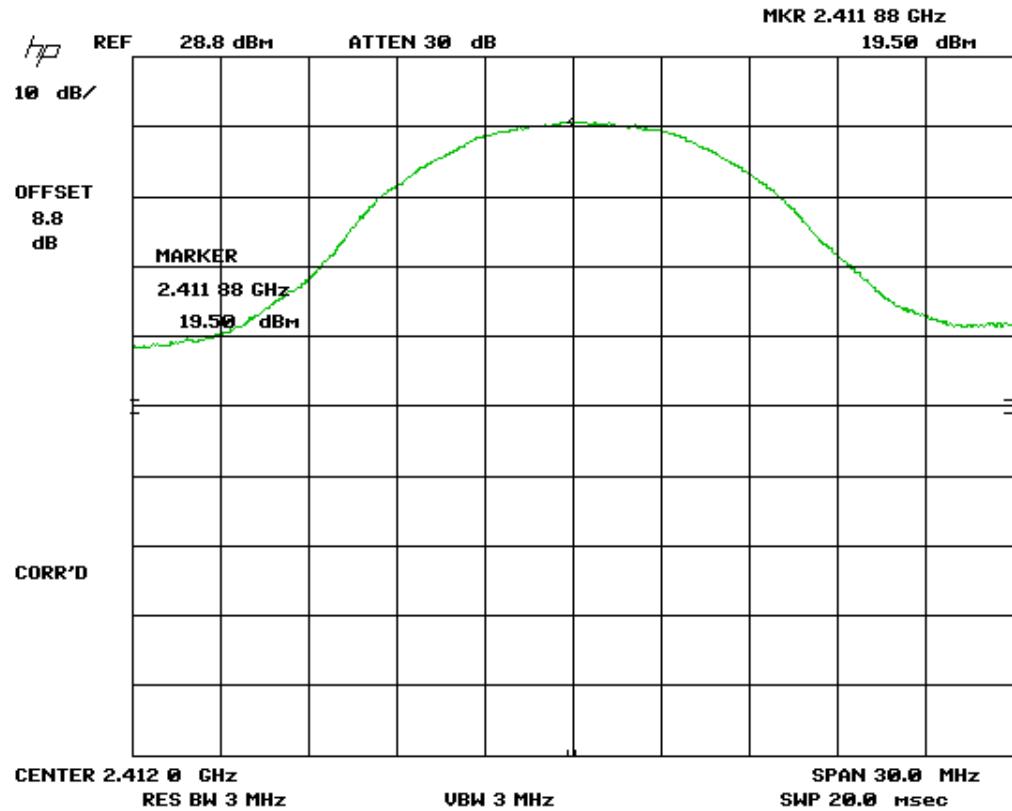
FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
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**Figure 107. Peak Antenna Conducted Output Power from J3, 802.11n High Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

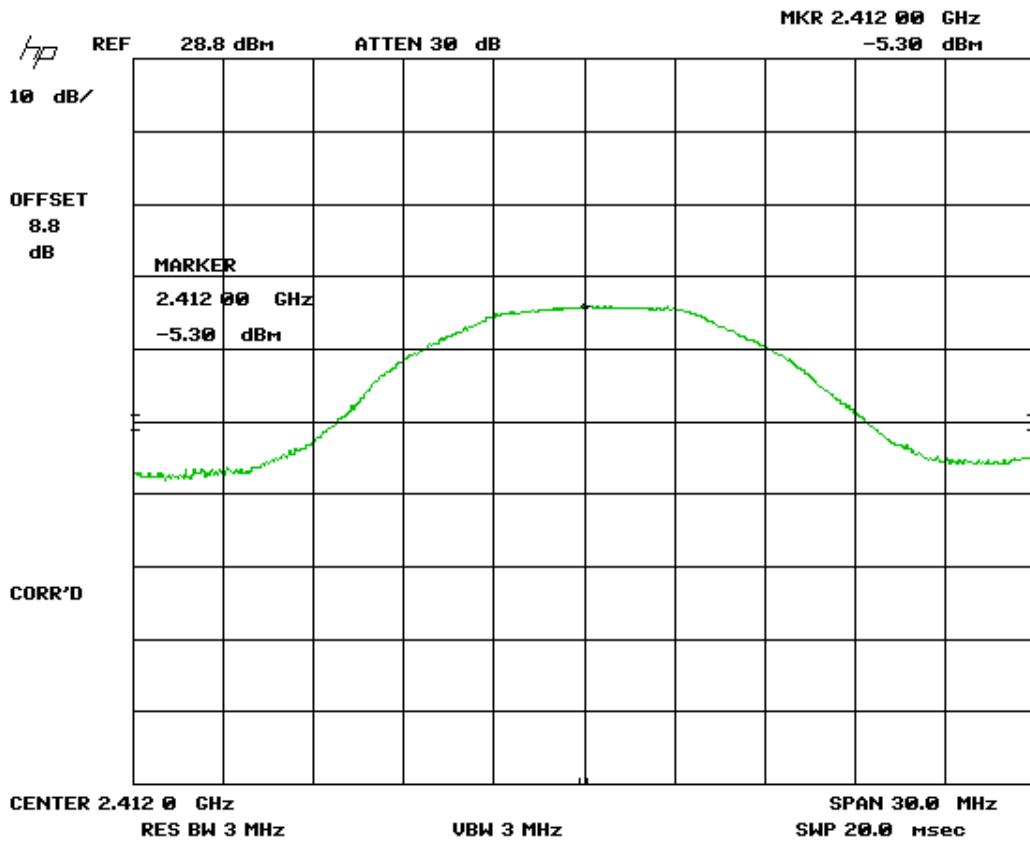
FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
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**Figure 108. Peak Antenna Conducted Output Power from J8, 802.11b Low Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

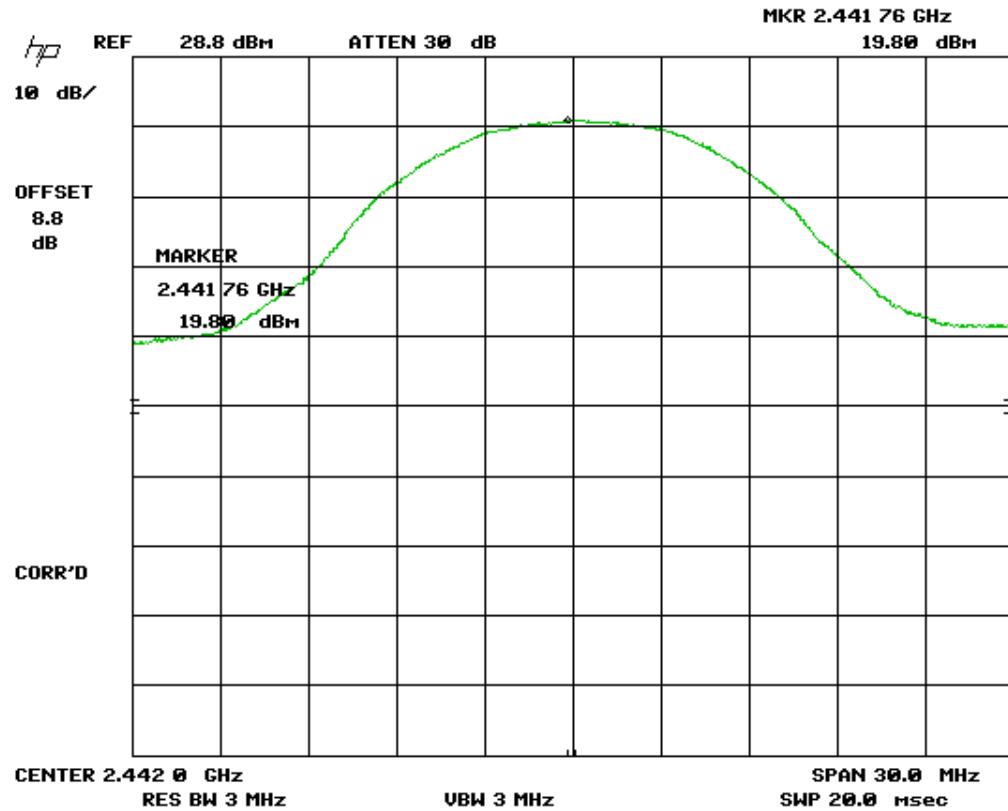
FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
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**Figure 109. Peak Antenna Conducted Output Power from J3, 802.11b Low Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

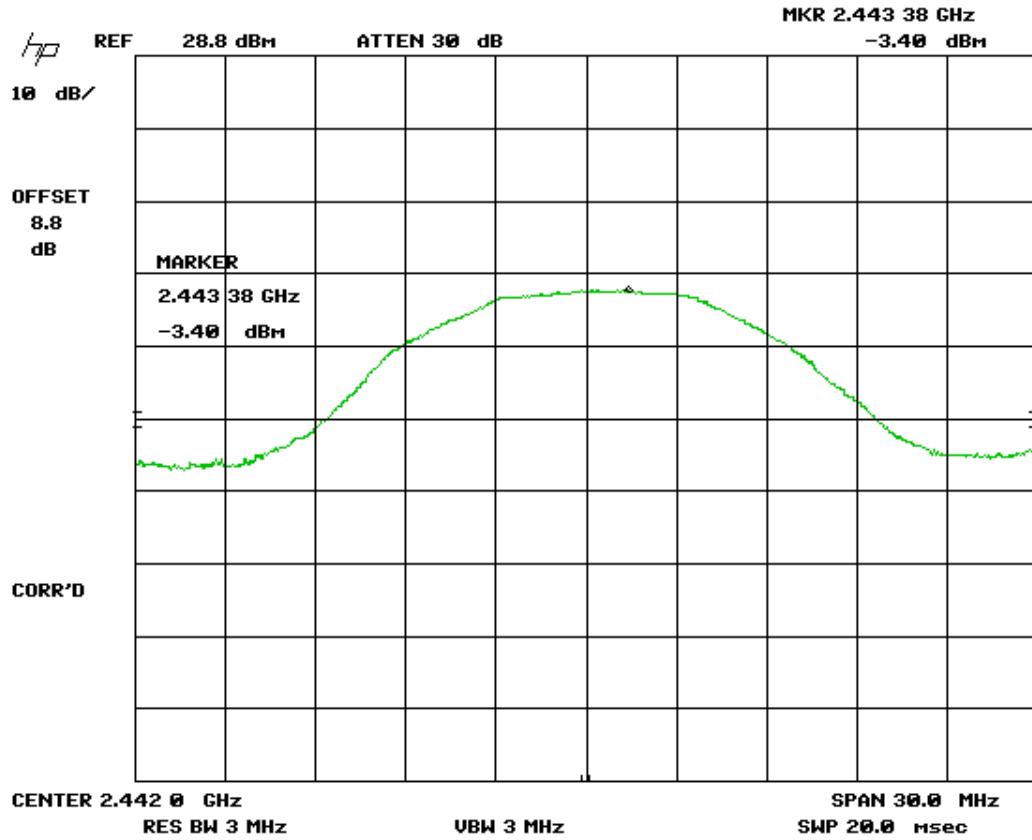
FCC Part 15 Certification/ RSS 247  
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15-0085  
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**Figure 110. Peak Antenna Conducted Output Power from J8, 802.11b Mid Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

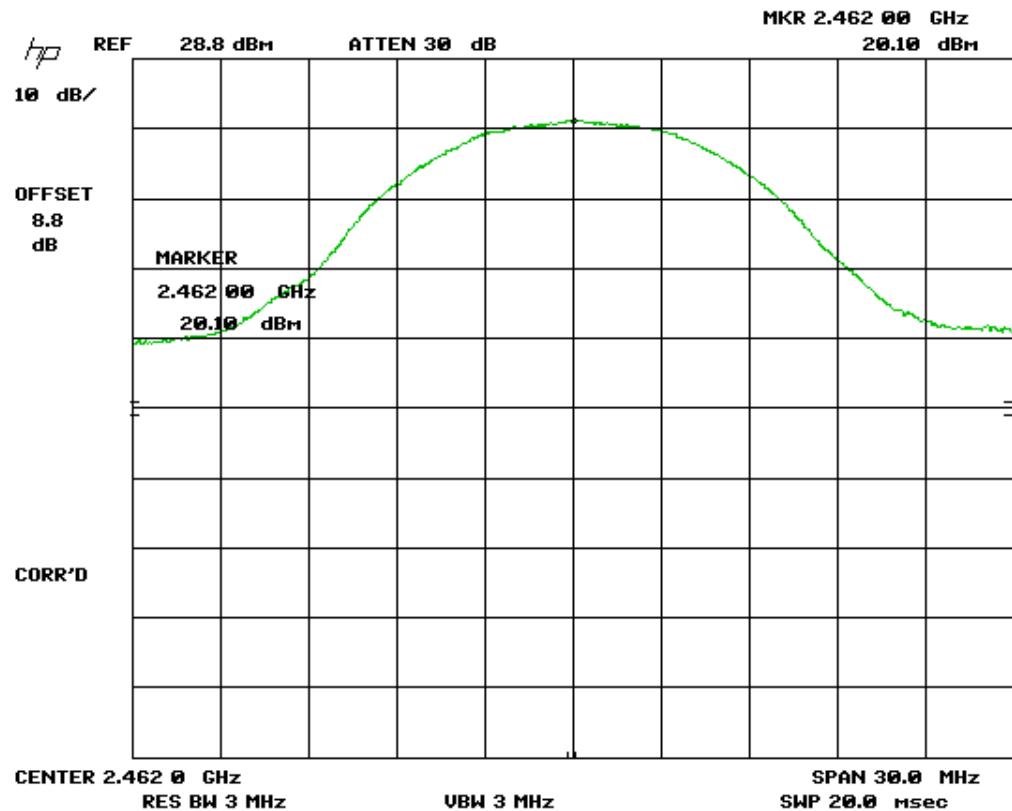
FCC Part 15 Certification/ RSS 247  
M72-P008  
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**Figure 111. Peak Antenna Conducted Output Power from J3, 802.11b Mid Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

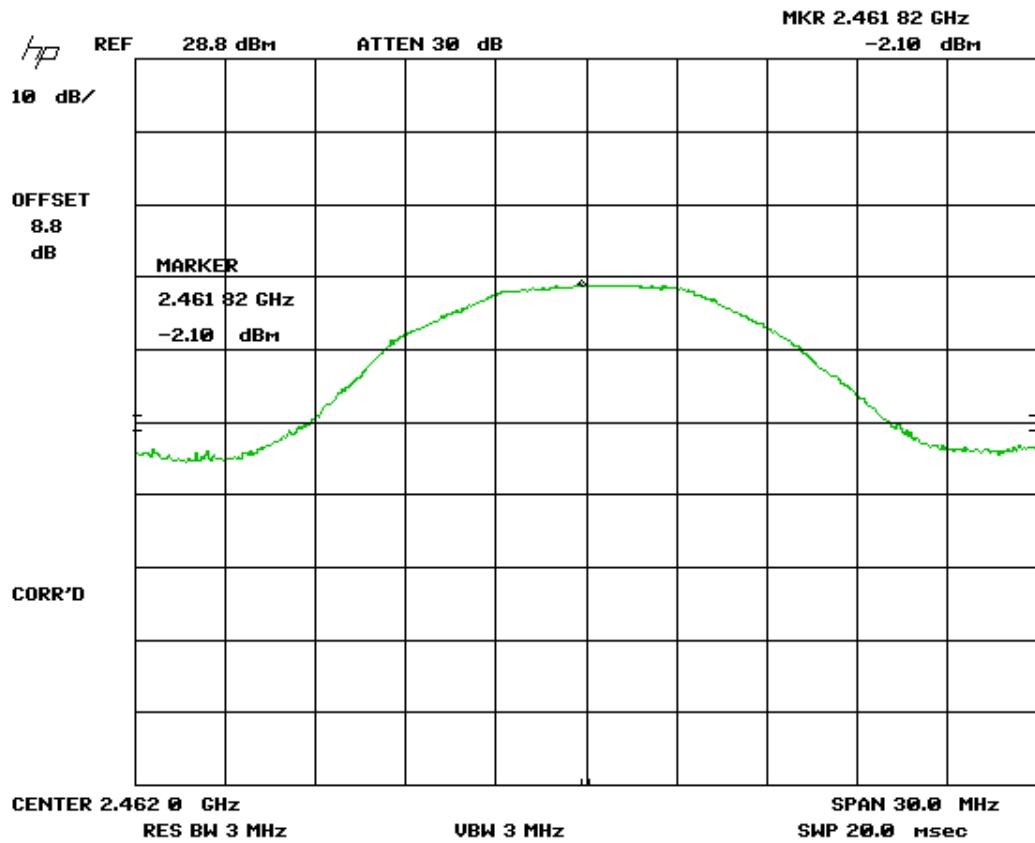
FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
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**Figure 112. Peak Antenna Conducted Output Power from J8, 802.11b High Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

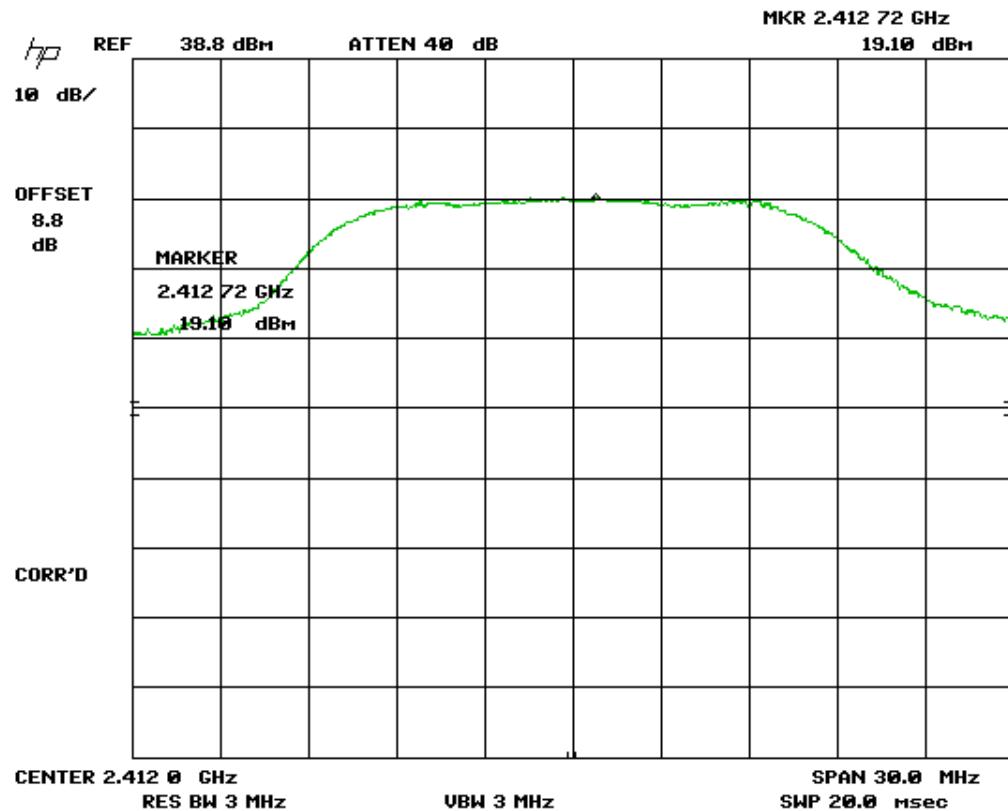
FCC Part 15 Certification/ RSS 247  
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**Figure 113. Peak Antenna Conducted Output Power from J3, 802.11b High Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

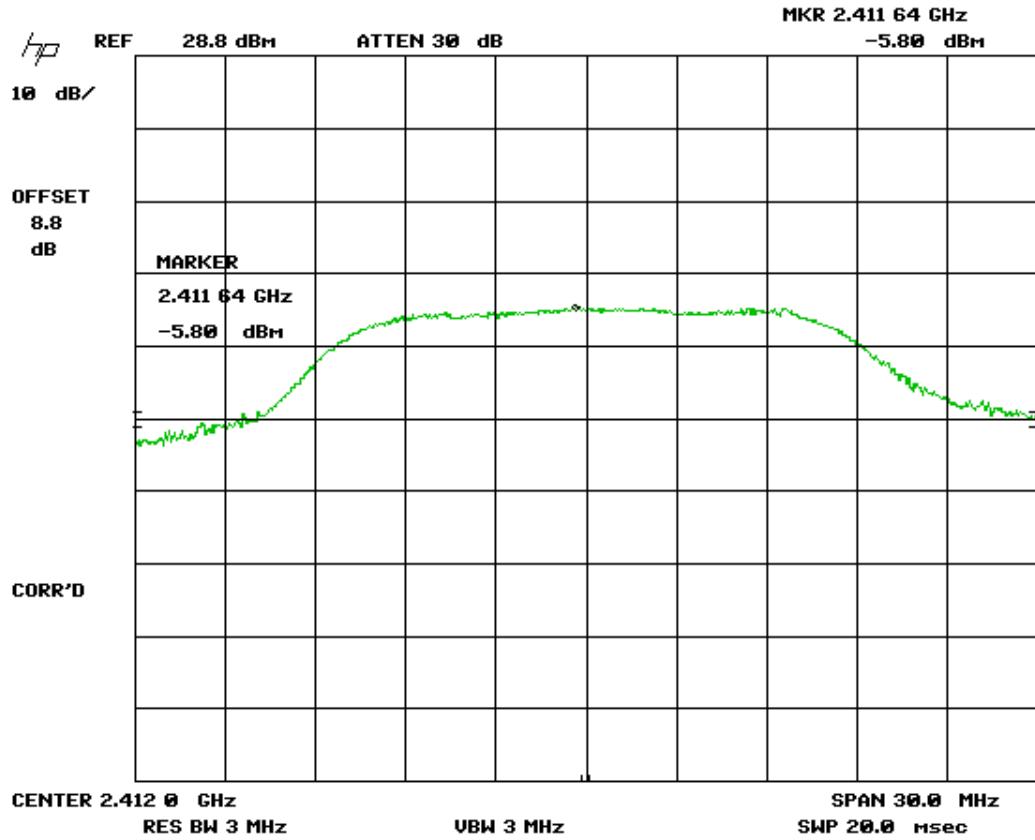
FCC Part 15 Certification/ RSS 247  
M72-P008  
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**Figure 114. Peak Antenna Conducted Output Power from J8, 802.11g Low Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

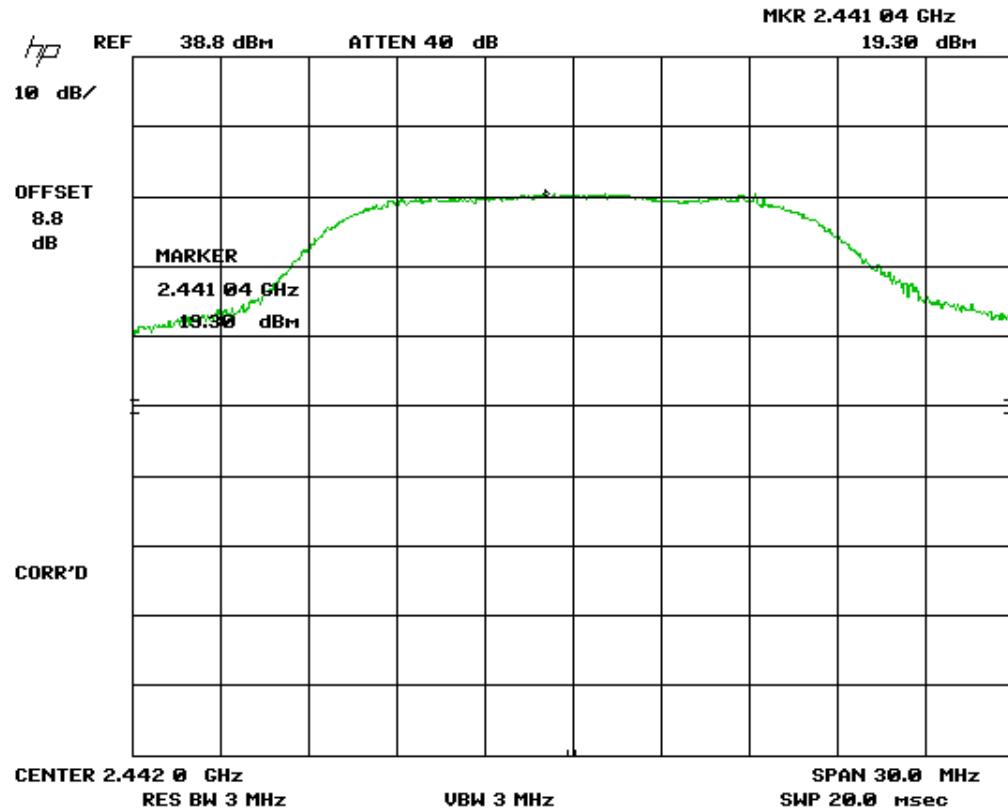
FCC Part 15 Certification/ RSS 247  
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**Figure 115. Peak Antenna Conducted Output Power from J3, 802.11g Low Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

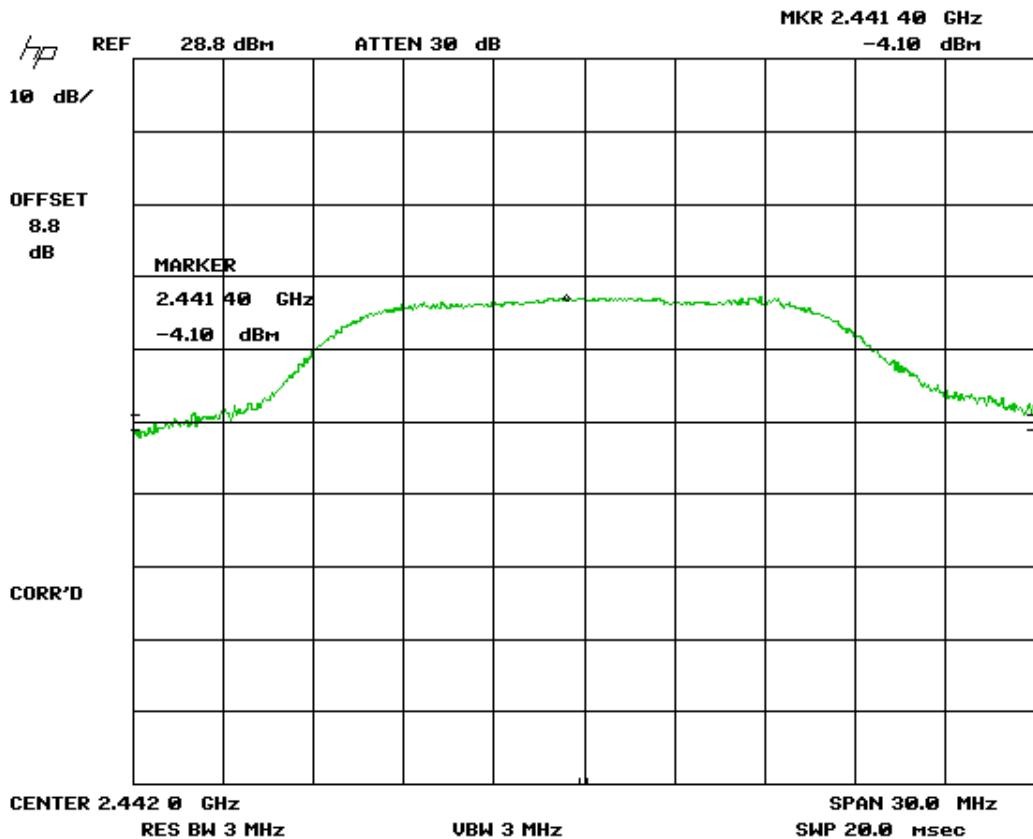
FCC Part 15 Certification/ RSS 247  
M72-P008  
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**Figure 116. Peak Antenna Conducted Output Power from J8, 802.11g Mid Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

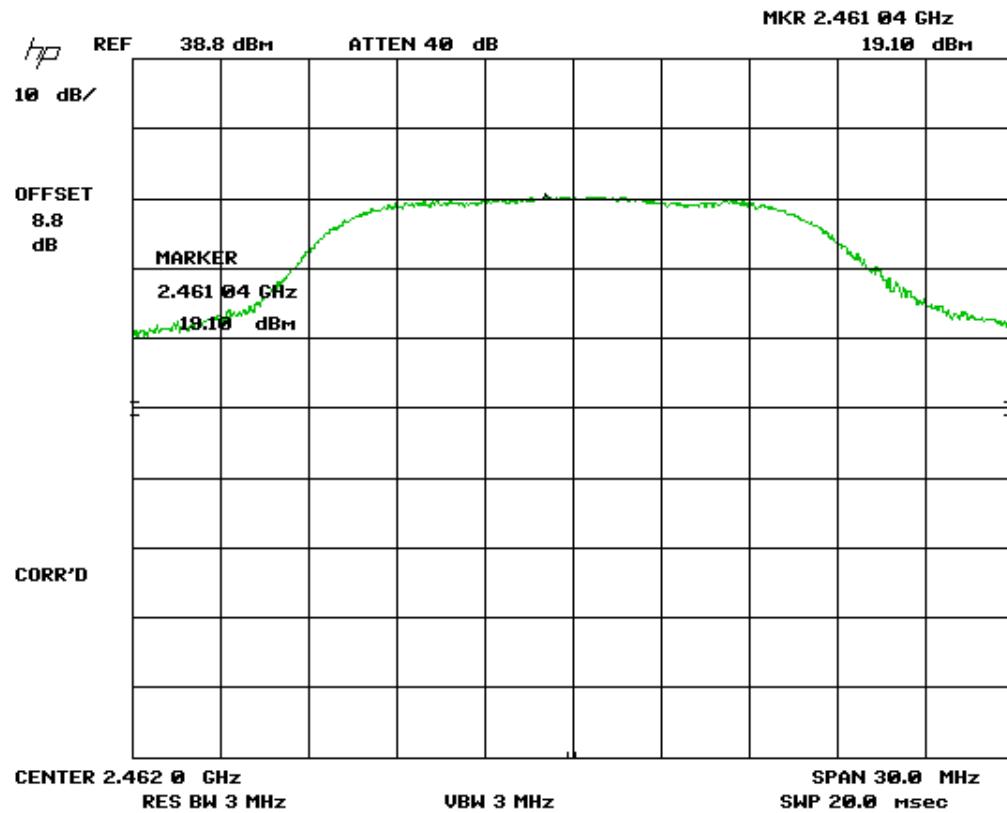
FCC Part 15 Certification/ RSS 247  
M72-P008  
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Polycom Inc.  
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**Figure 117. Peak Antenna Conducted Output Power from J3, 802.11g Mid Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

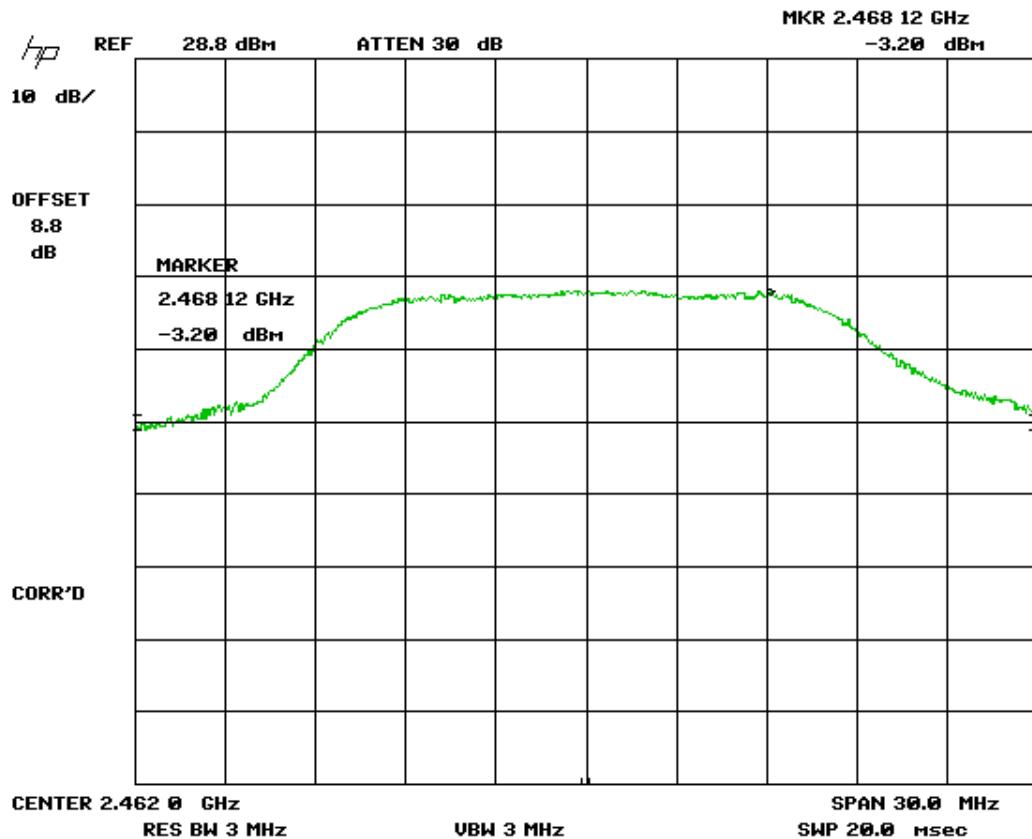
FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
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**Figure 118. Peak Antenna Conducted Output Power from J8, 802.11g High Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

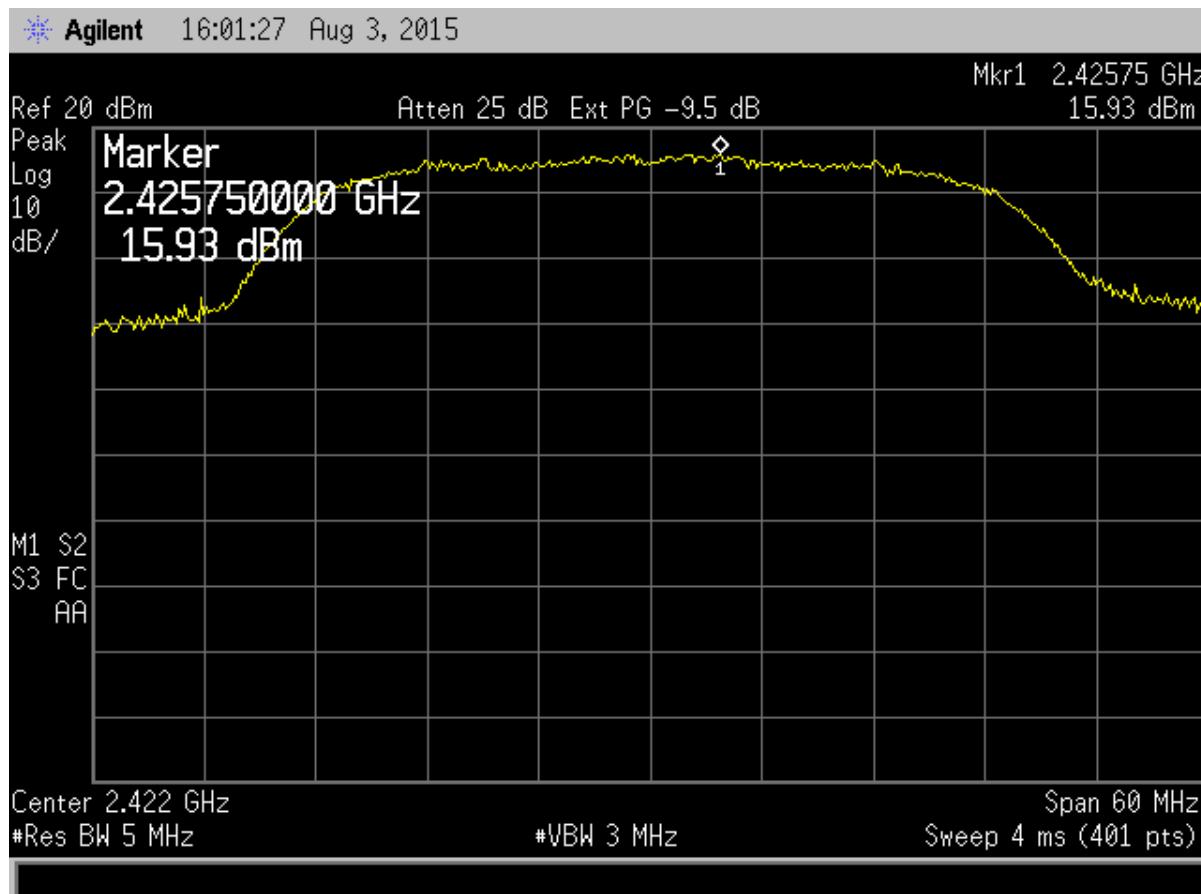
FCC Part 15 Certification/ RSS 247  
M72-P008  
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**Figure 119. Peak Antenna Conducted Output Power from J3, 802.11g High Channel**

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
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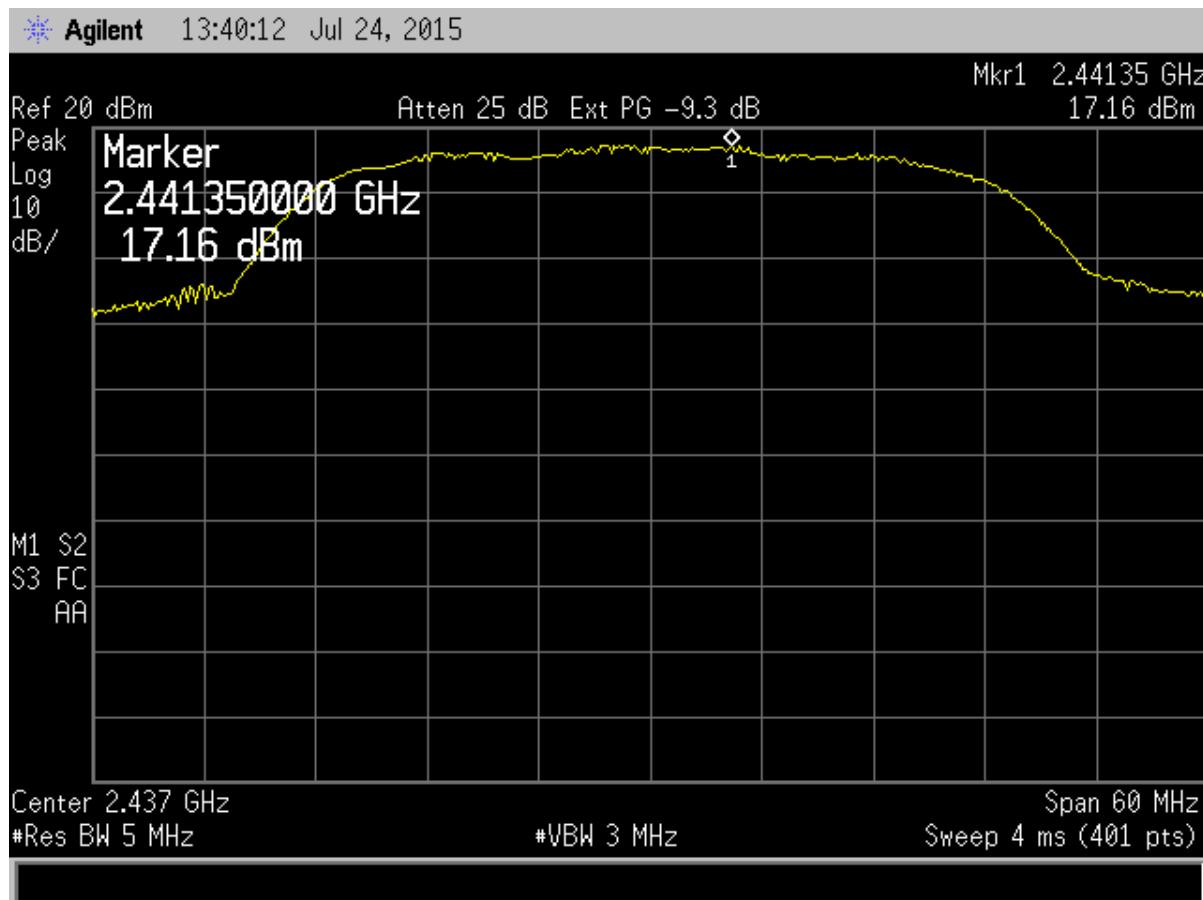


**Figure 120. Peak Antenna Conducted Output Power from J8, 802.11 40 MHz BW Low Channel**

Note: the RBW and VBW were set to their respective maximum levels for this measurement.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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15-0085  
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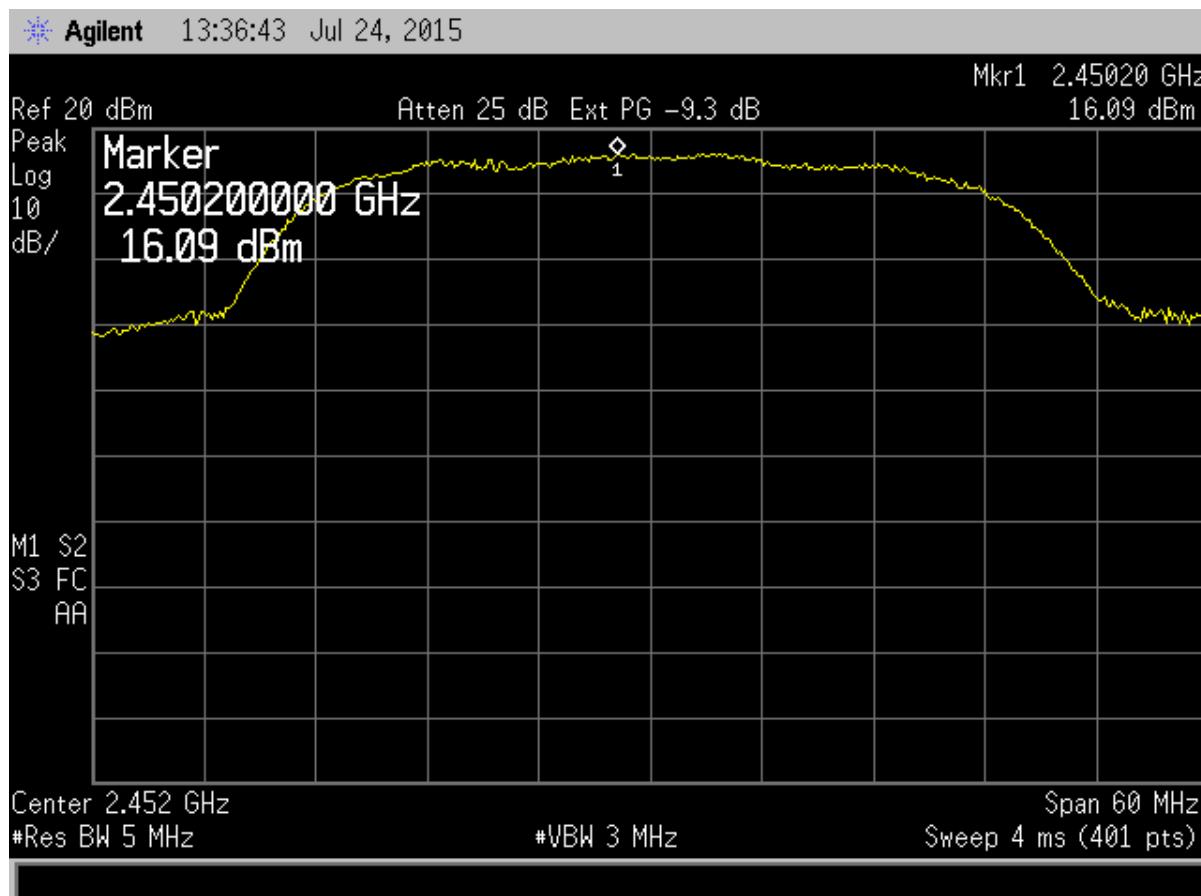


**Figure 121. Peak Antenna Conducted Output Power from J8, 802.11 40 MHz BW Mid Channel**

Note: the RBW and VBW were set to their respective maximum levels for this measurement.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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**Figure 122. Peak Antenna Conducted Output Power from J8, 802.11 40 MHz BW High Channel**

Note: the RBW and VBW were set to their respective maximum levels for this measurement.

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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## 2.15 Power Spectral Density (CFR 15.247(e)) (IC RSS 247 5.2(2))

The transmitter was placed into a continuous mode of operation at all applicable frequencies. The measurements were performed per the procedures of FCC KDB Procedure 558074. The RBW was set to 3 kHz and the Video Bandwidth was set to  $\geq$  RBW. The span was set to 1.5 times the OBW.

In accordance with 15.247 (e), the power spectral density shall be no greater than +8 dBm per any 3 kHz band.

The following results show that all are less than +8 dBm per 3 kHz band.

The EUT is designed to only transmit from one of the two ports, during investigational testing the port that yields the highest emissions was port J8. Therefore the EUT was programmed to transmit from J8, that value was recorded. Additional while the EUT was transmitting from port J8, port J3 was measured and those emissions levels were summed together with the recorded values from J8. The results are presented below.

**Table 42. 802.11n Power Spectral Density for Low, Mid and High Bands**

Frequency (MHz)	Raw Test Data from Port J8 (dBm/3 kHz)	Converted results from Port J8 (mW/3 kHz)	Raw Test Data from Port J3 (dBm/3 kHz)	Converted results from Port J8 (mW/3 kHz)	Total PSD (mW/3kHz)	Total PSD (dBm/3kHz)	FCC Limit (dBm/3 kHz)
2412	-5.54	0.279	-29.26	.001	.280	-5.53	+8.0
2442	-6.33	0.233	-28.62	.001	.234	-6.31	+8.0
2462	-6.57	0.220	-27.68	.002	.222	-6.54	+8.0

Test Date: May 17 and 21, 2015

Tested By

Signature:

Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
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 1849C-P008  
 15-0085  
 July 31, 2015  
 Polycom Inc.  
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**Table 43. 802.11b Power Spectral Density for Low, Mid and High Bands**

Frequency (MHz)	Raw Test Data from Port J8 (dBm/3 kHz)	Converted results from Port J8 (mW/3 kHz)	Raw Test Data from Port J3 (dBm/3 kHz)	Converted results from Port J8 (mW/3 kHz)	Total PSD (mW/3kHz)	Total PSD (dBm/3kHz)	FCC Limit (dBm/3 kHz)
2412	-4.05	0.394	-28.08	.002	.396	-4.02	+8.0
2442	-3.06	0.495	-26.59	.002	.497	-3.04	+8.0
2462	-3.28	0.470	-25.74	.003	.473	-3.25	+8.0

Test Date: May 17 and 21, 2015

Tested By

Signature: 

Name: Carrie Ingram

**Table 44. 802.11g Power Spectral Density for Low, Mid and High Bands**

Frequency (MHz)	Raw Test Data from Port J8 (dBm/3 kHz)	Converted results from Port J8 (mW/3 kHz)	Raw Test Data from Port J3 (dBm/3 kHz)	Converted results from Port J8 (mW/3 kHz)	Total PSD (mW/3kHz)	Total PSD (dBm/3kHz)	FCC Limit (dBm/3 kHz)
2412	-5.69	0.270	-29.84	.001	.271	-5.67	+8.0
2442	-5.29	0.300	-28.41	.001	.301	-5.21	+8.0
2462	-5.87	0.259	-27.34	.002	.261	-5.83	+8.0

Test Date: May 17 and 21, 2015

Tested By

Signature: 

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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15-0085  
July 31, 2015  
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**Table 45. 802.11 40 MHz BW Power Spectral Density for Low, Mid and High Bands**

Frequency (MHz)	Test Data (dBm/ 3 kHz)	Limit (dBm/kHz)	Margin (dB)
2422	-12.99	8.0	20.99
2437	-12.89	8.0	20.89
2452	-14.64	8.0	22.64

Note: The output power from the additional antenna port was deemed insignificant therefore those measurements were not applied.

Test Date: July 24, 2015

Tested By

Signature:

Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

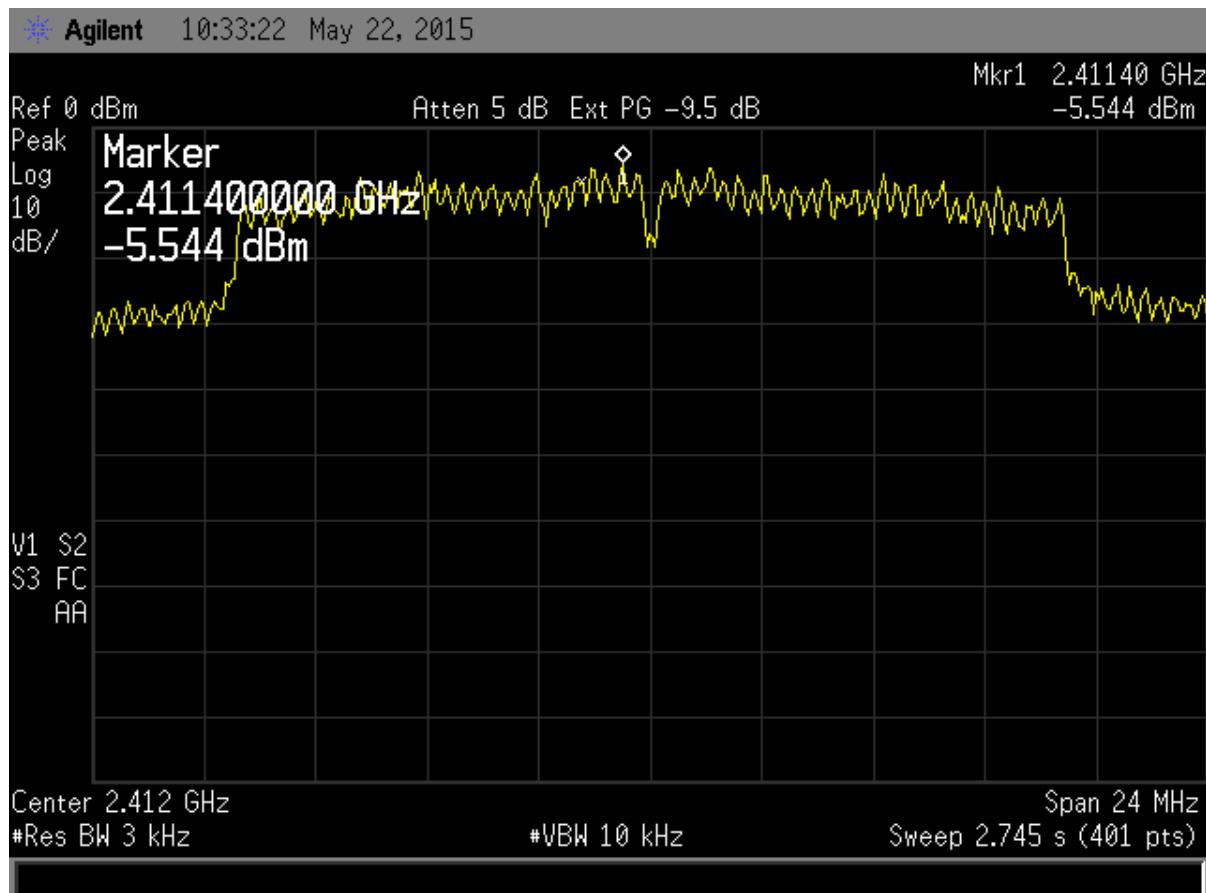


Figure 123. Peak Power Spectral Density on from J8, 802.11n Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

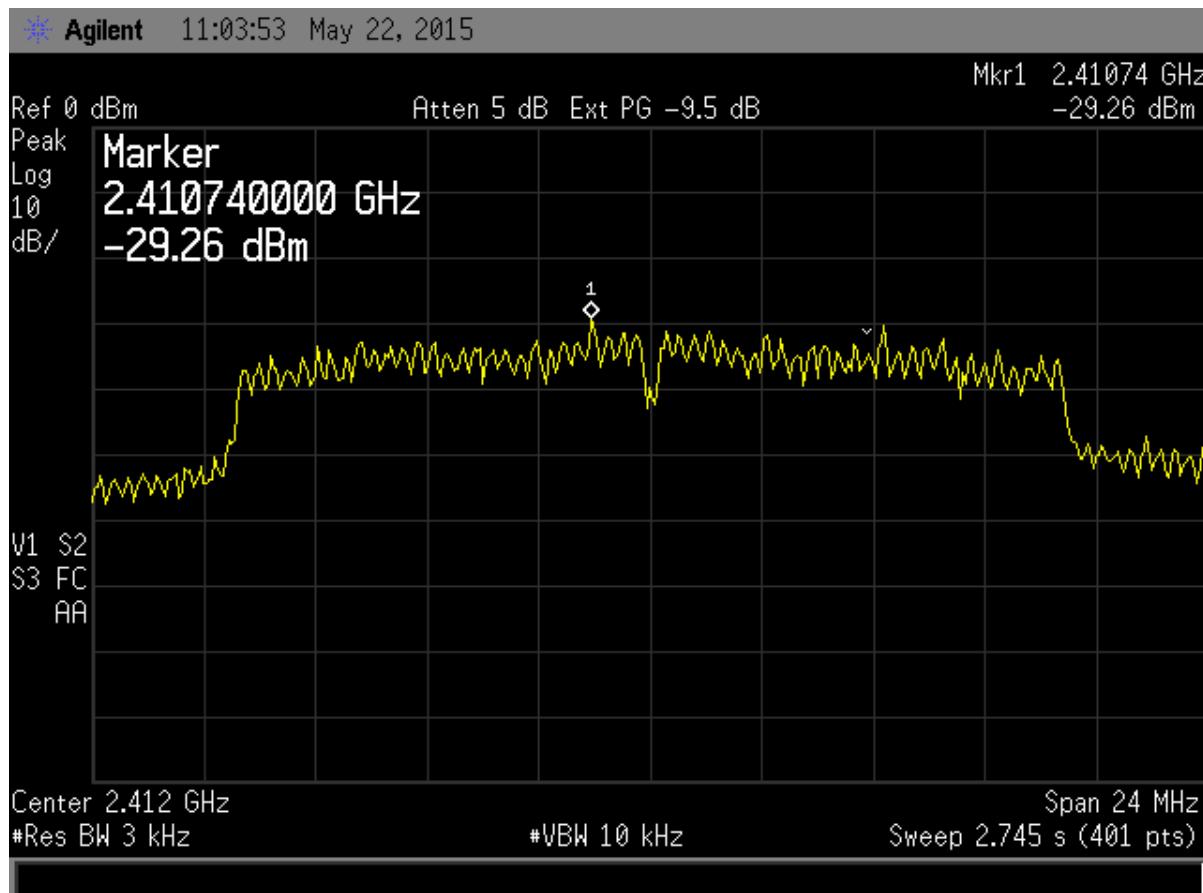


Figure 124. Peak Power Spectral Density on from J3, 802.11n Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

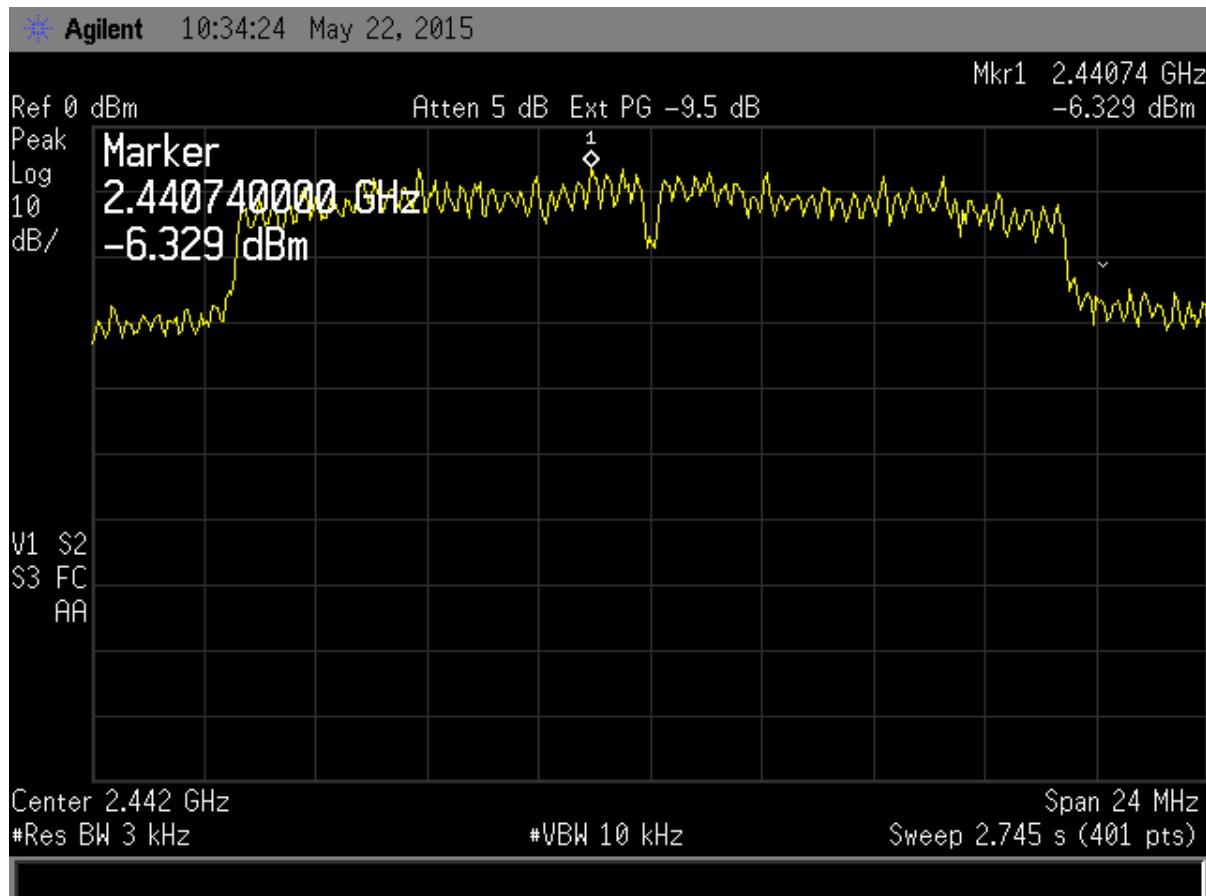


Figure 125. Peak Power Spectral Density from J8, 802.11n Mid Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

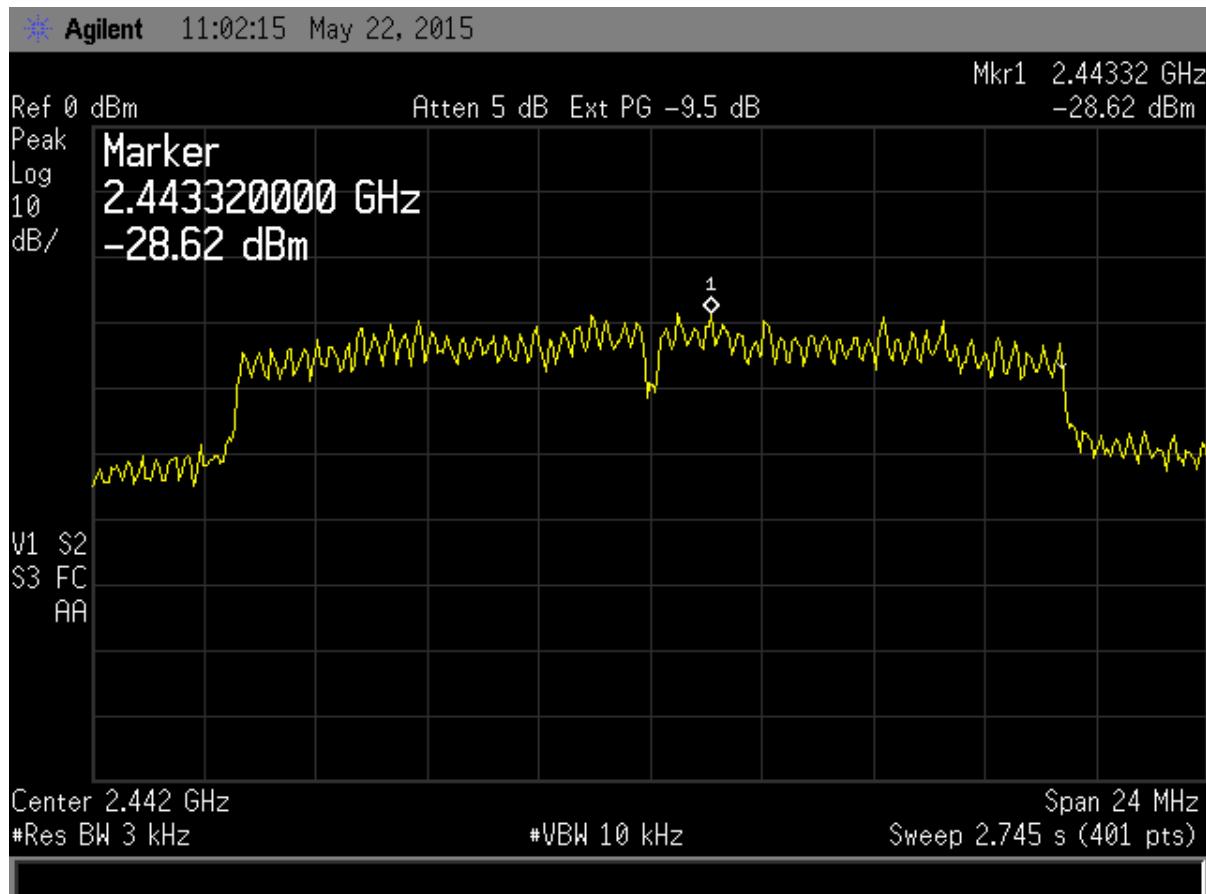


Figure 126. Peak Power Spectral Density from J3, 802.11n Mid Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
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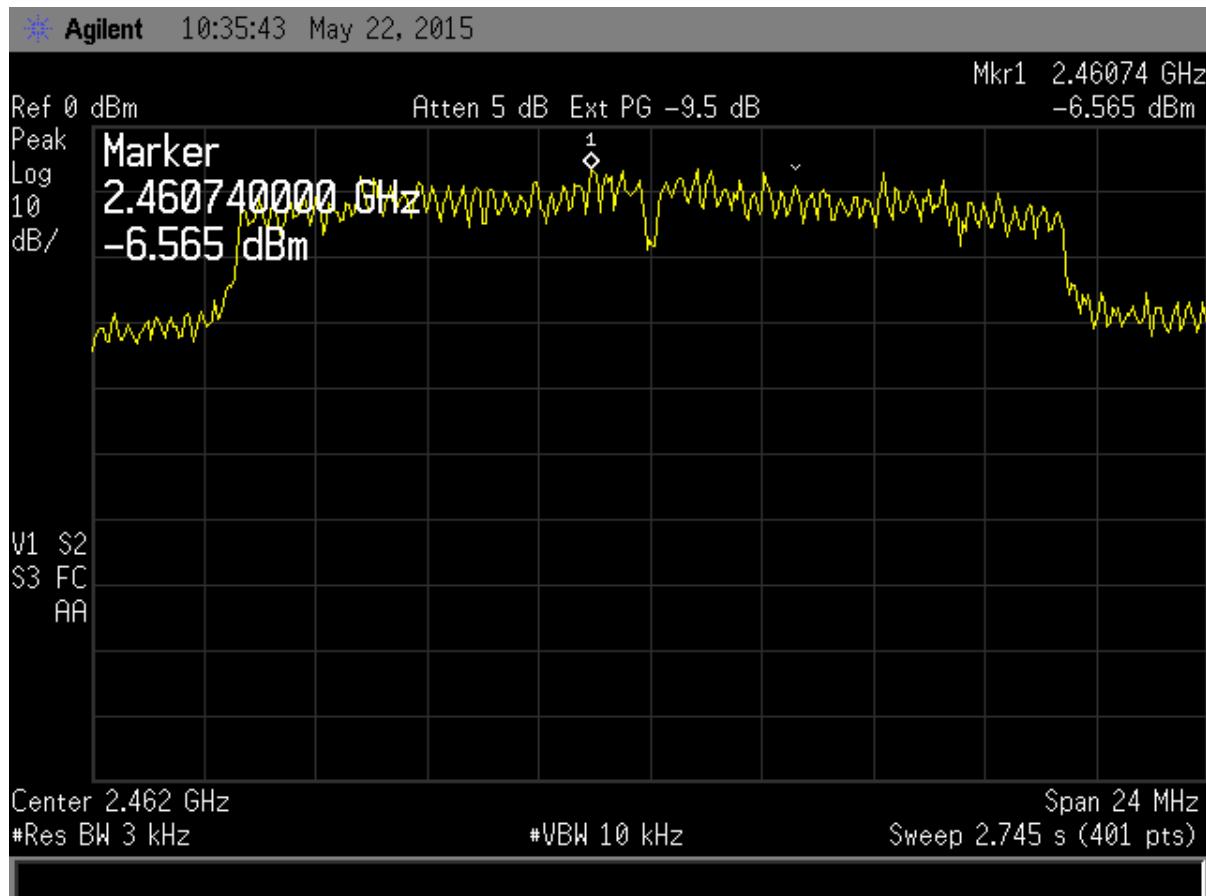


Figure 127. Peak Power Spectral Density from J8, 802.11n High Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

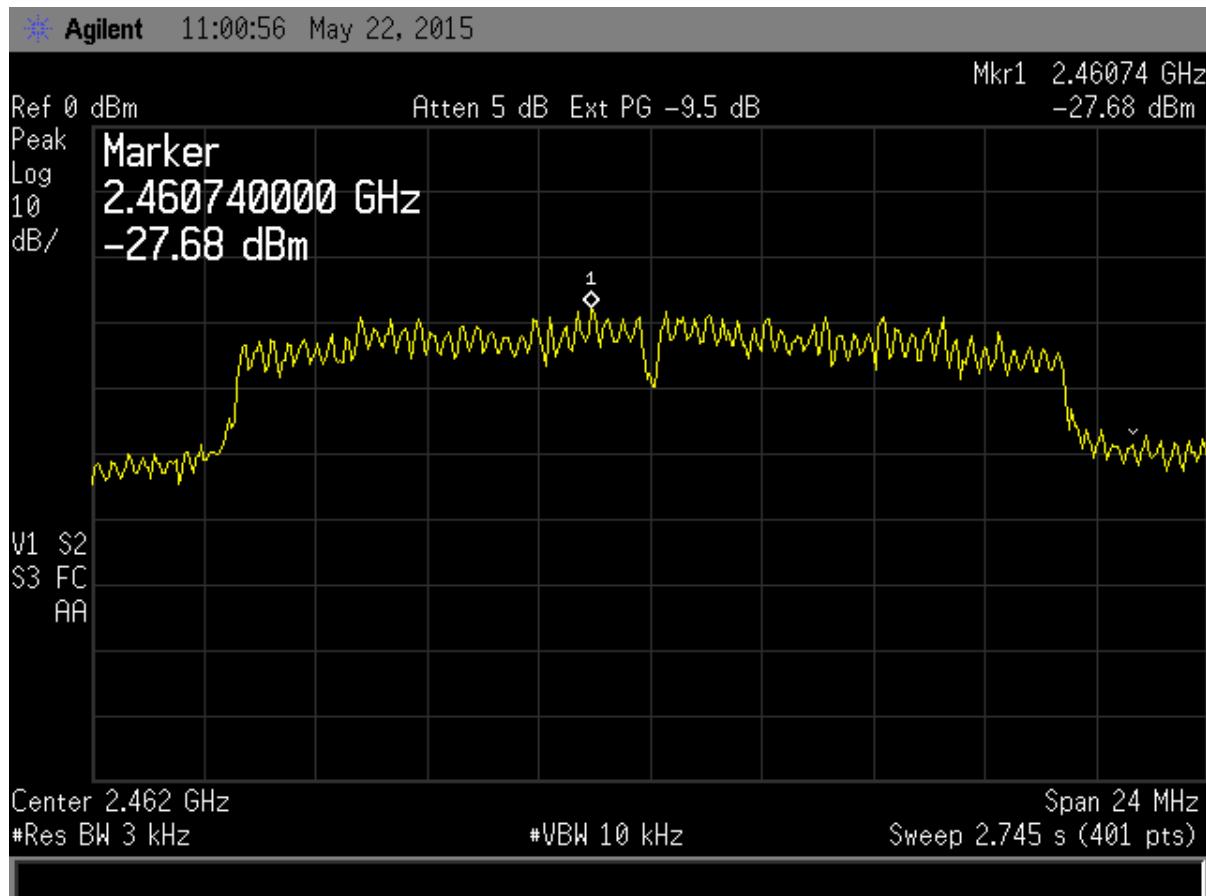


Figure 128. Peak Power Spectral Density from J3, 802.11n High Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

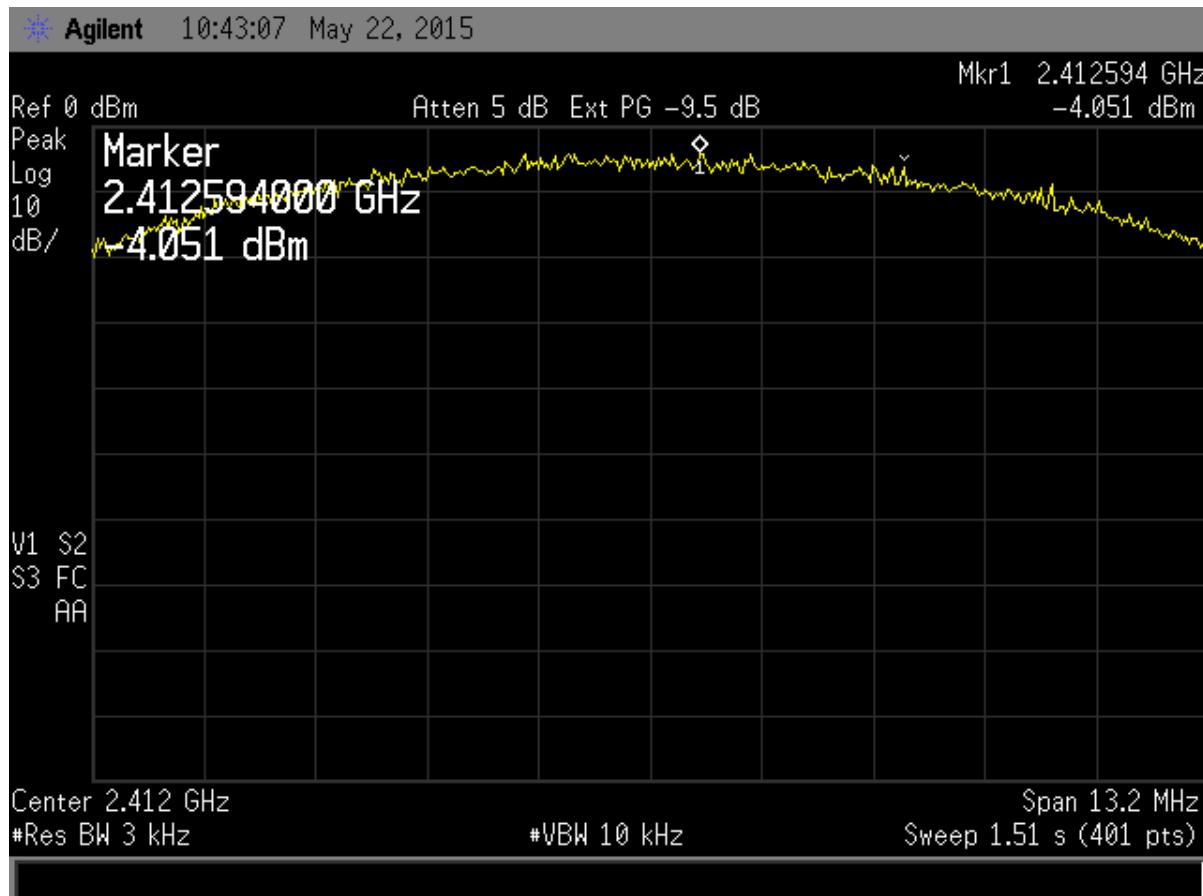


Figure 129. Peak Power Spectral Density from J8, 802.11b Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

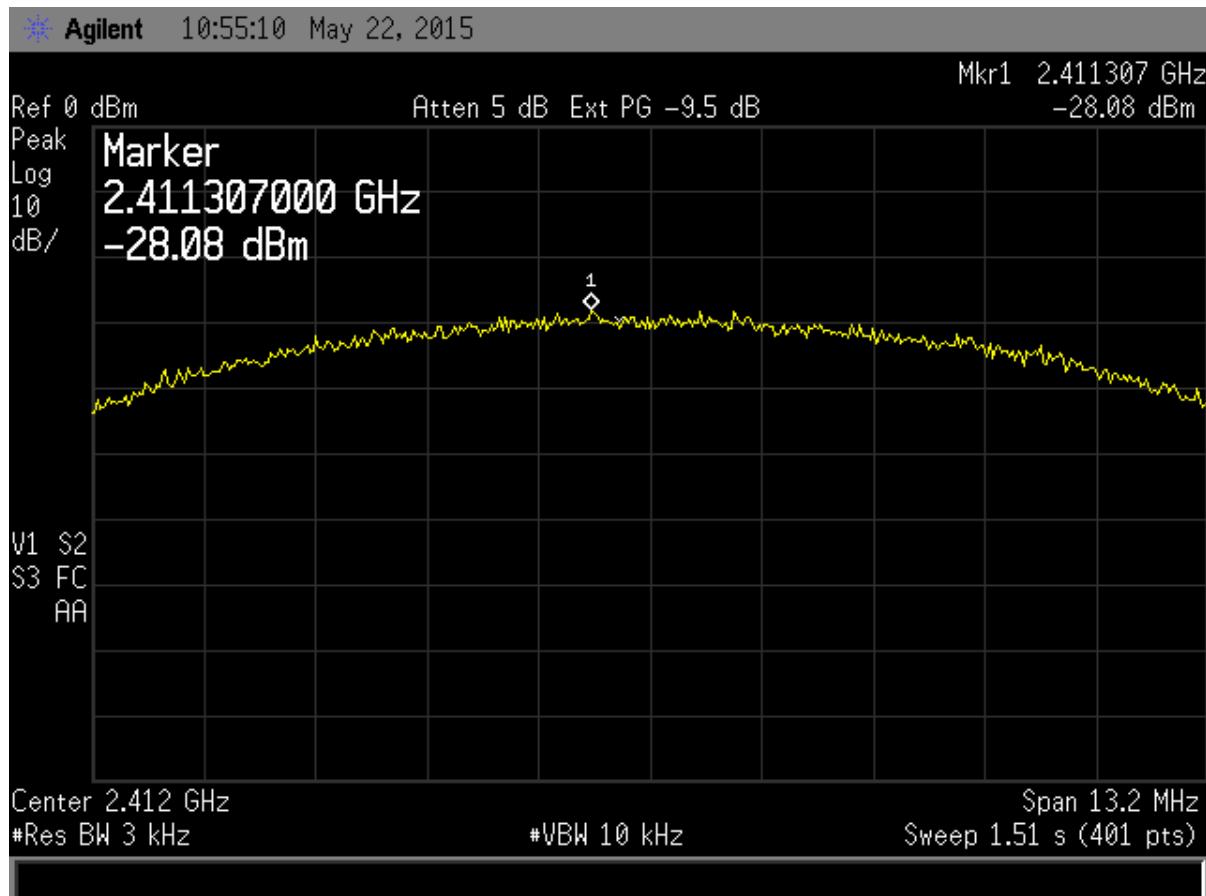


Figure 130. Peak Power Spectral Density from J3, 802.11b Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

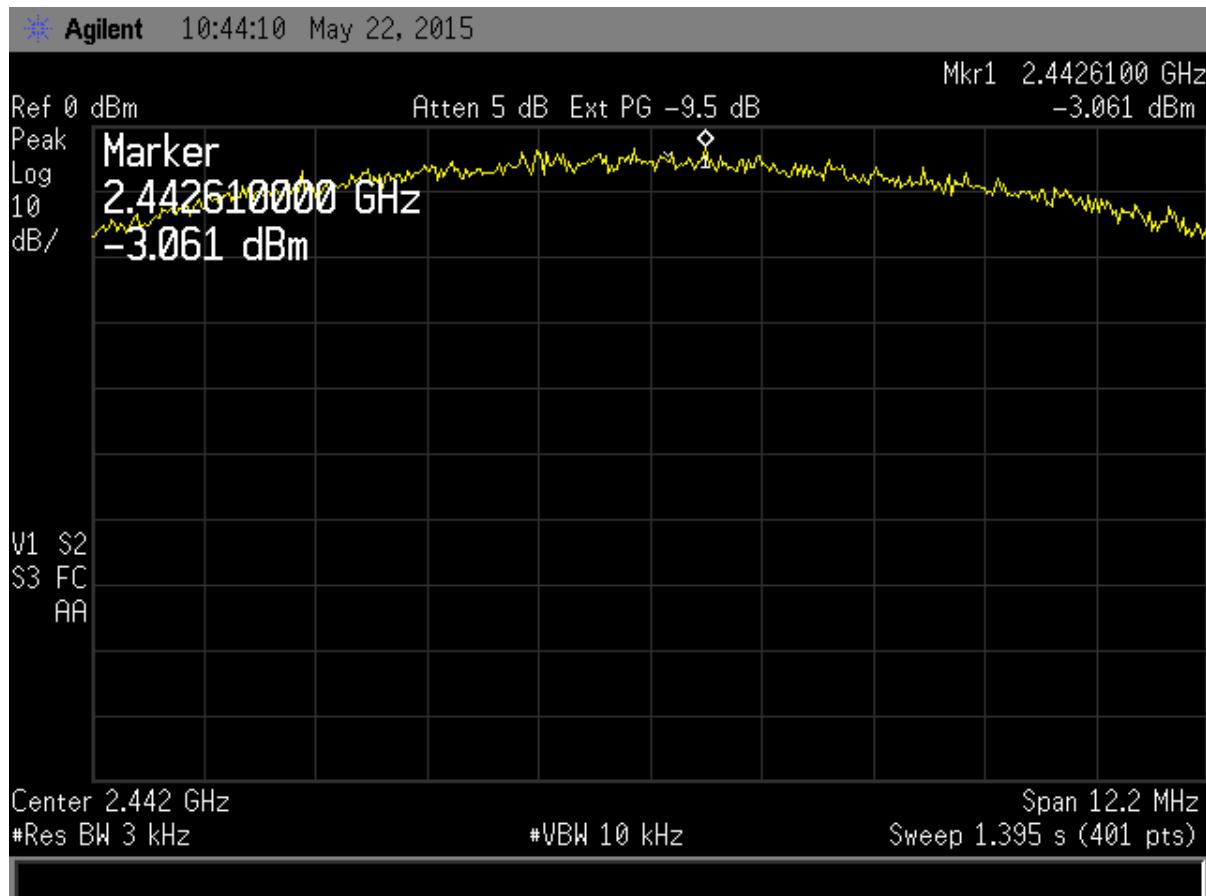


Figure 131. Peak Power Spectral Density from J8, 802.11b Mid Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

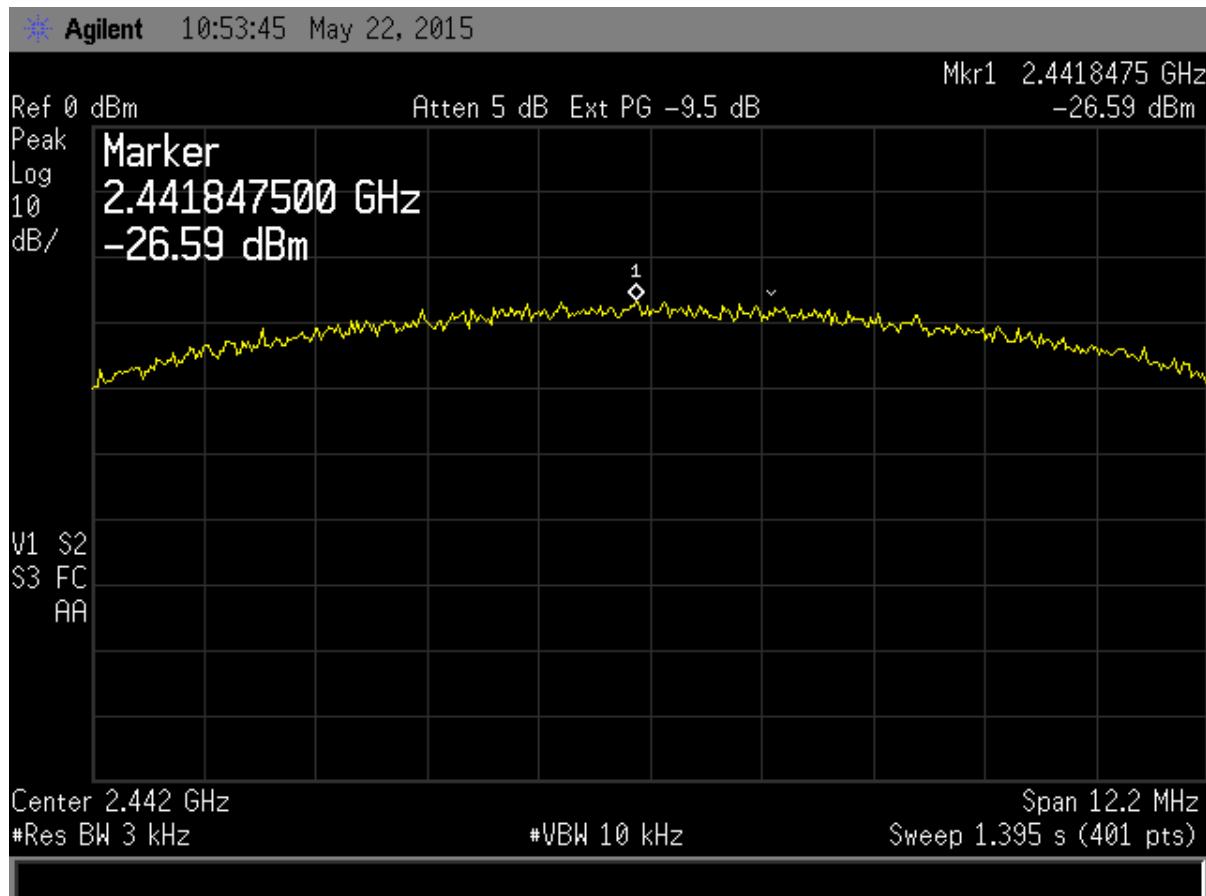


Figure 132. Peak Power Spectral Density from J3, 802.11b Mid Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

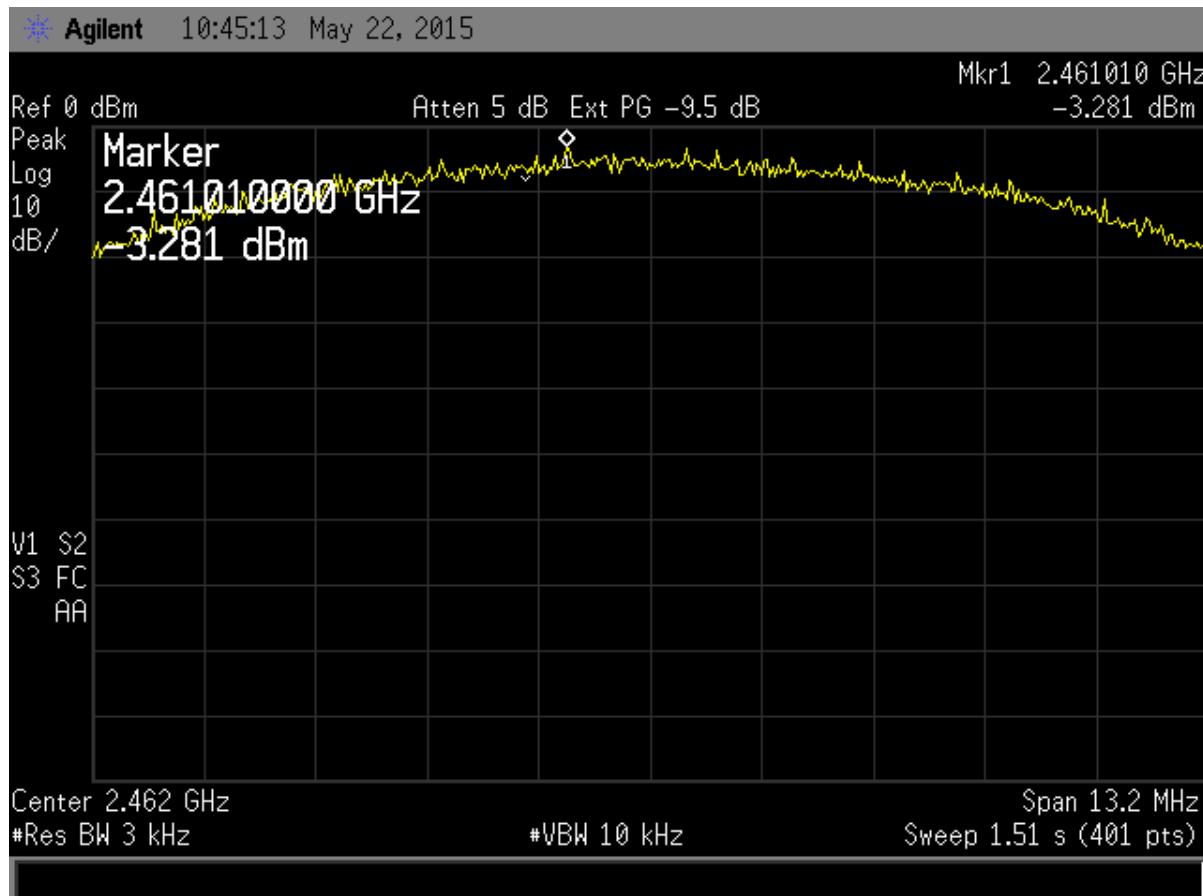


Figure 133. Peak Power Spectral Density from J8, 802.11b High Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

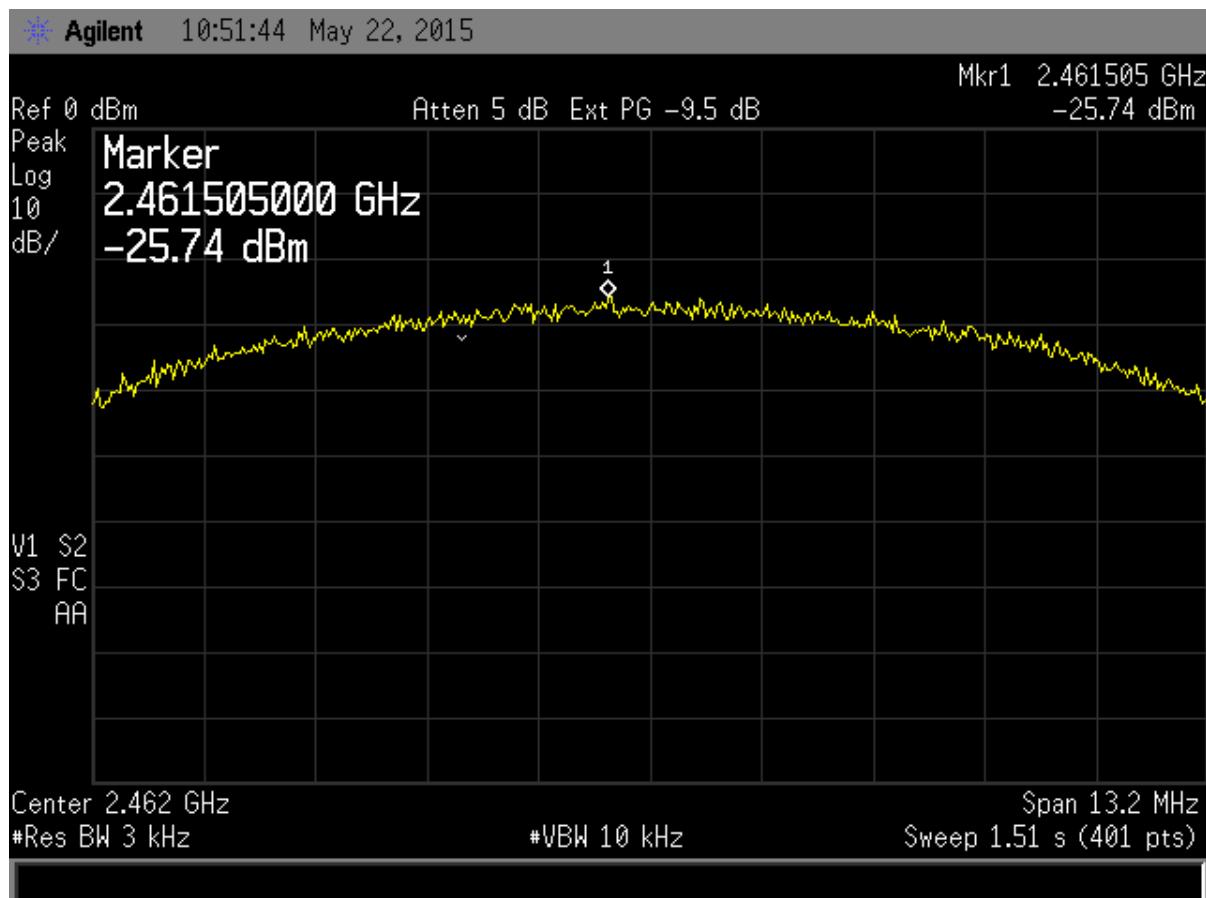


Figure 134. Peak Power Spectral Density from J3, 802.11b High Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

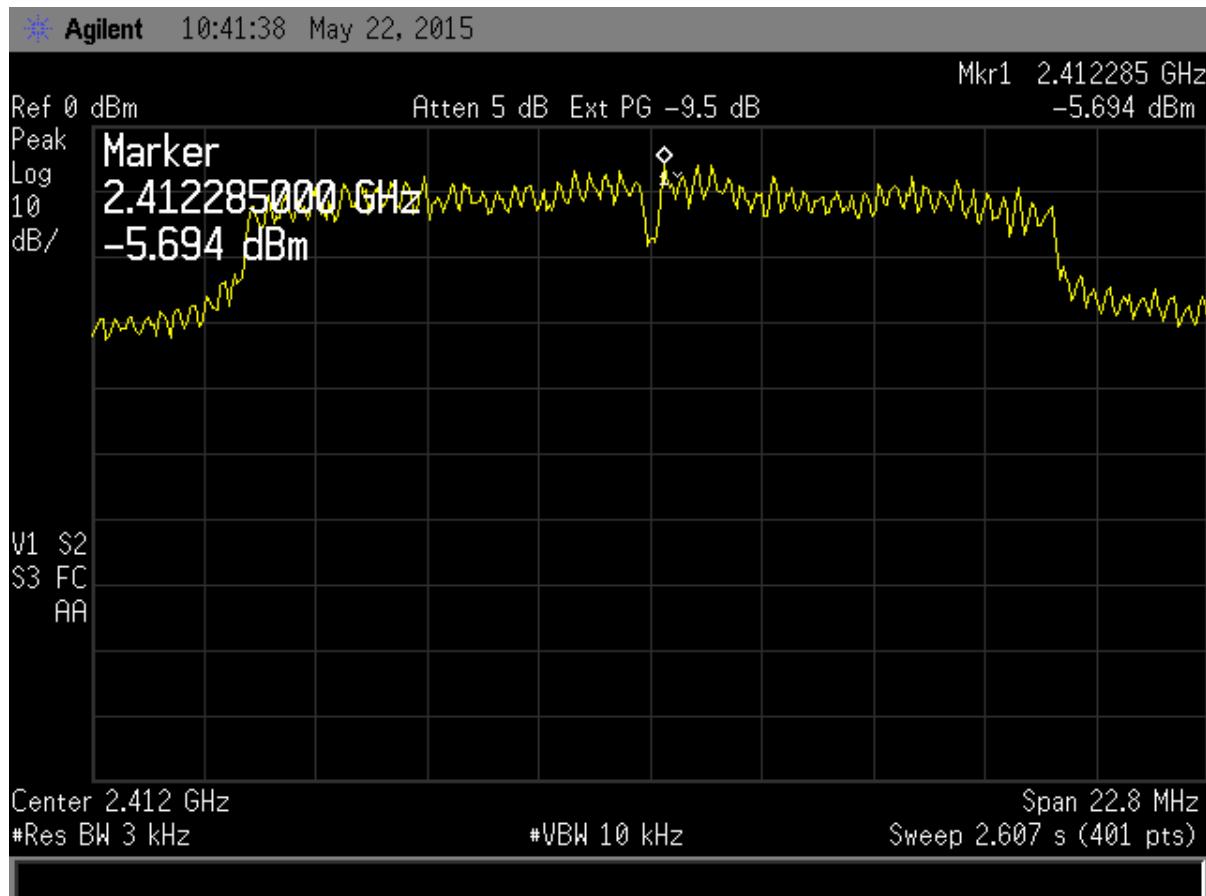


Figure 135. Peak Power Spectral Density from J8, 802.11g Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

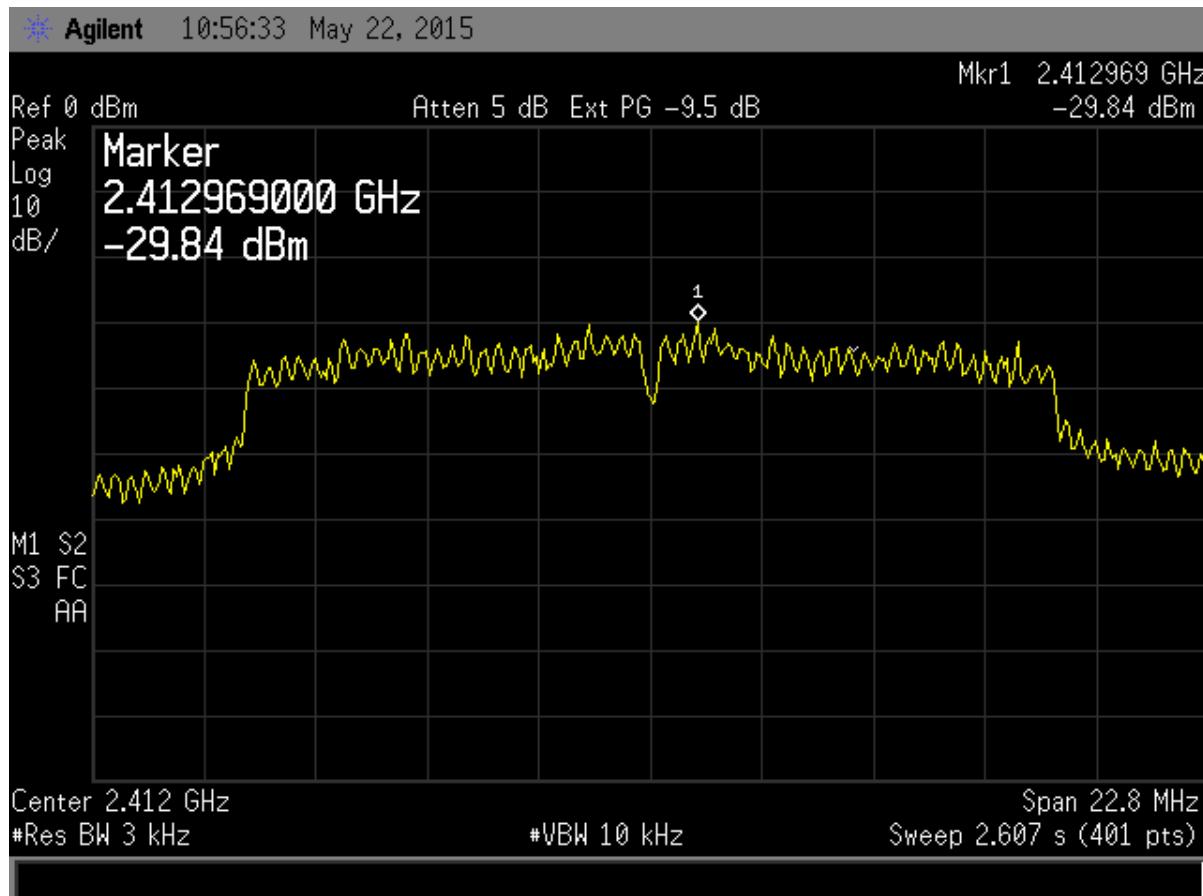


Figure 136. Peak Power Spectral Density from J3, 802.11g Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

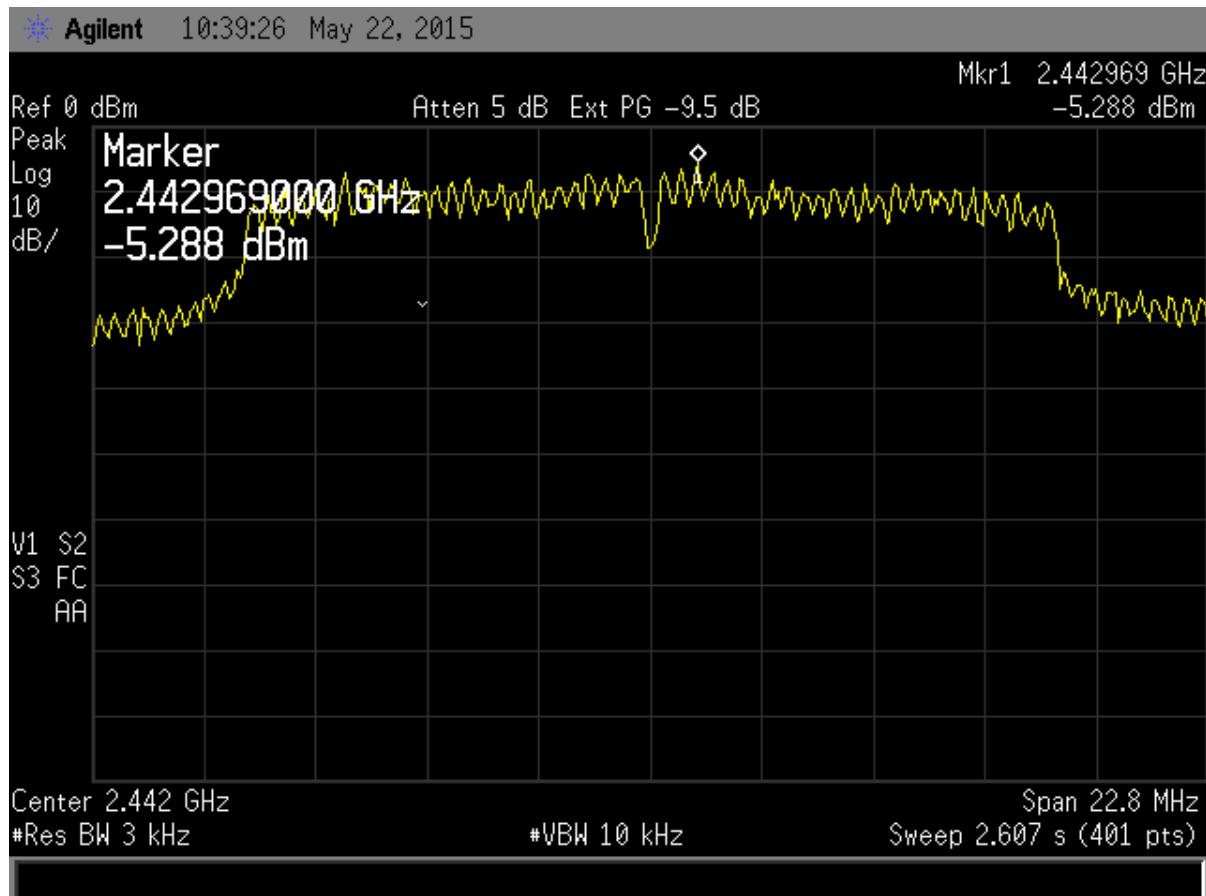


Figure 137. Peak Power Spectral Density from J8, 802.11g Mid Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

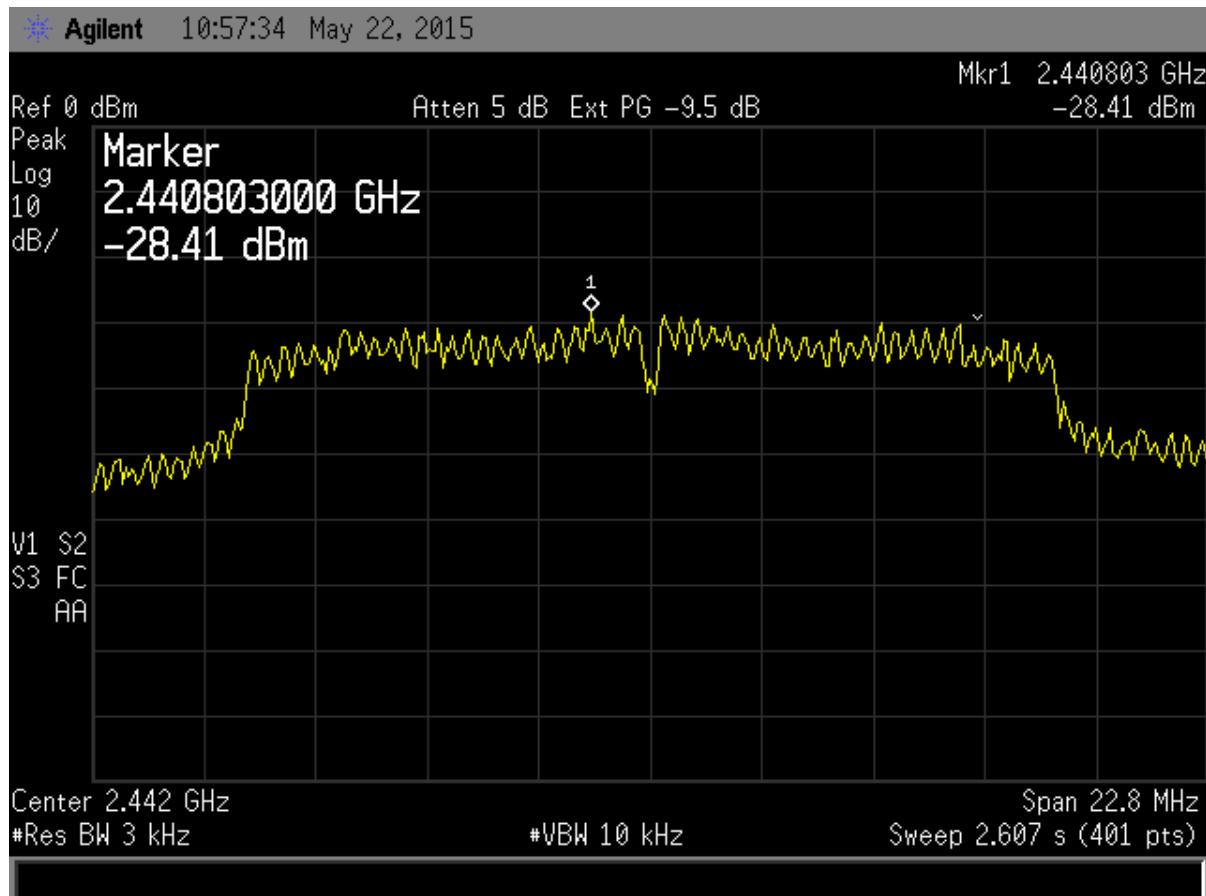


Figure 138. Peak Power Spectral Density from J3, 802.11g Mid Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

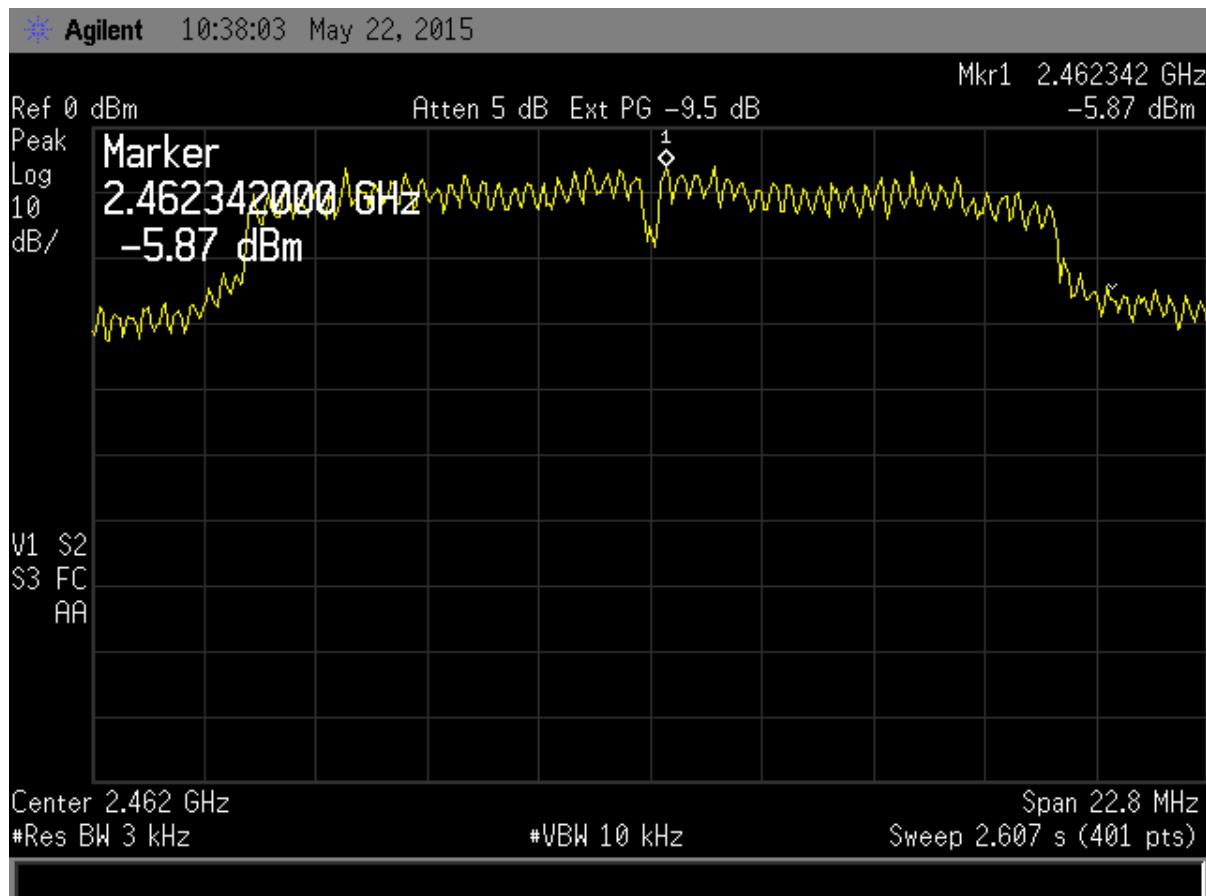


Figure 139. Peak Power Spectral Density from J8, 802.11g High Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

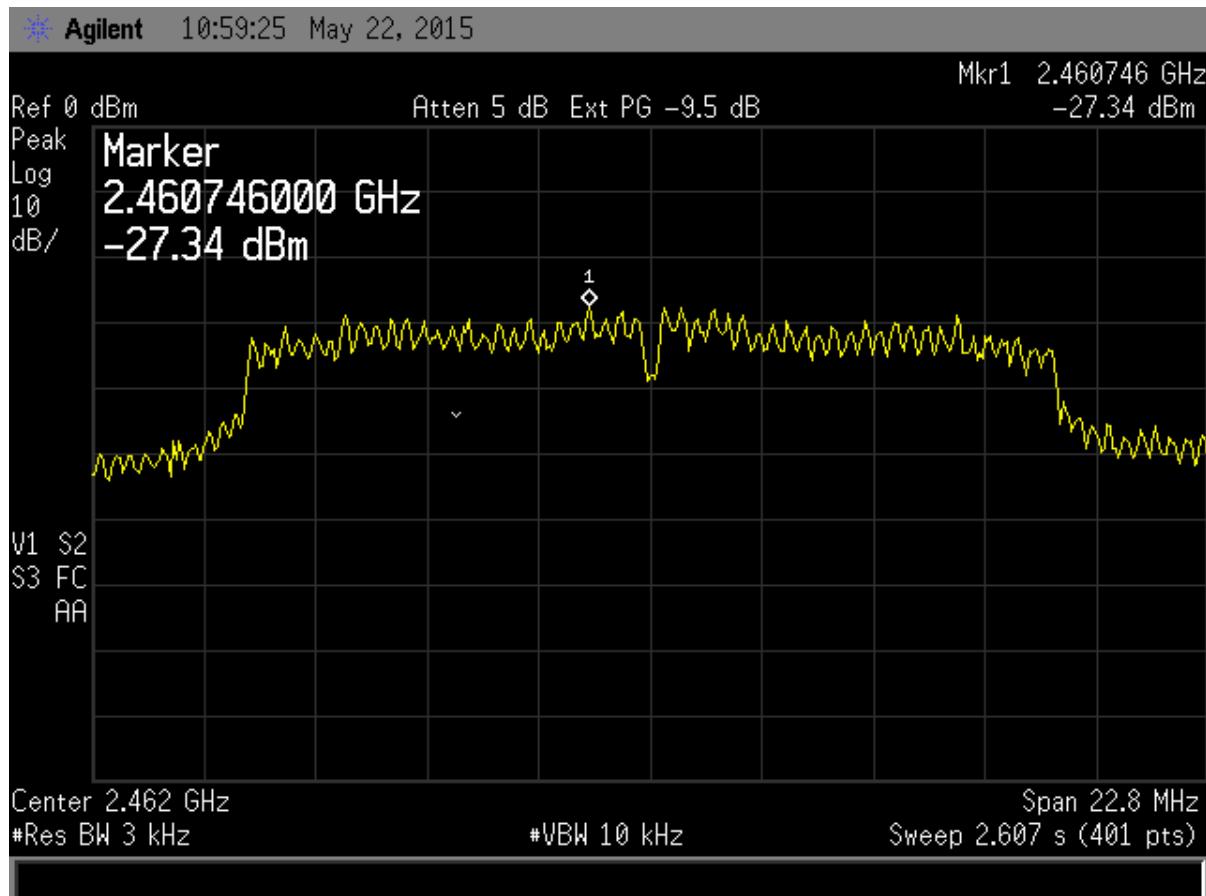


Figure 140. Peak Power Spectral Density from J3, 802.11g High Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

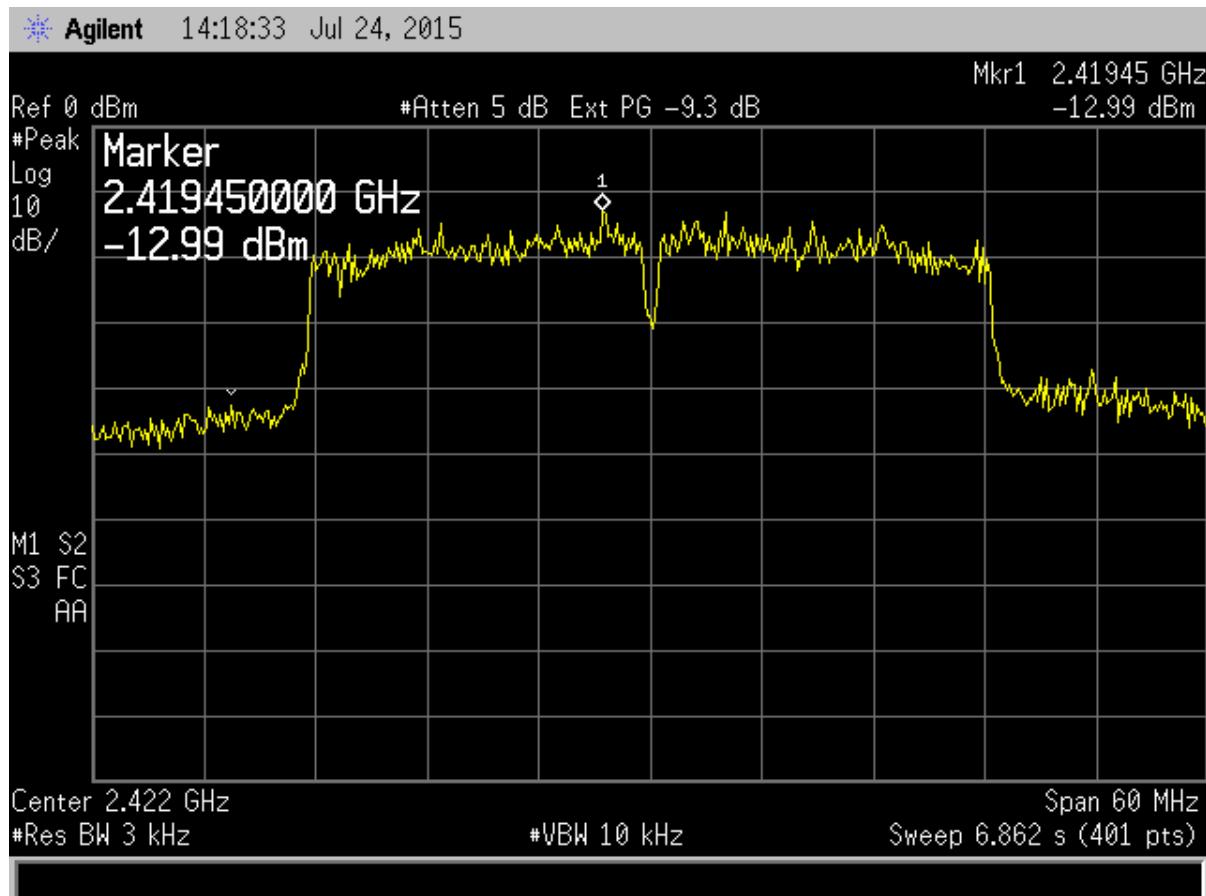


Figure 141. Peak Power Spectral Density from J8, 802.11 40 MHz BW Low Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

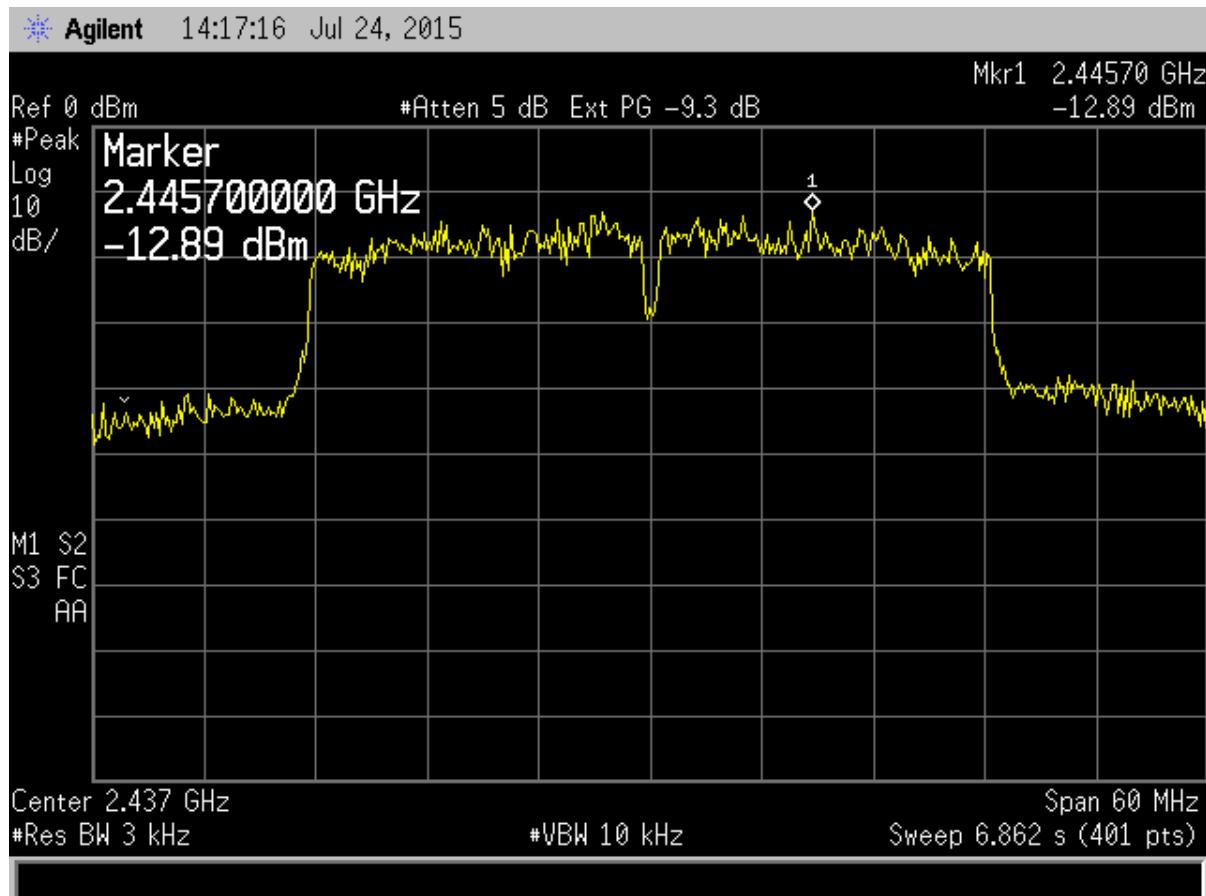


Figure 142. Peak Power Spectral Density from J8, 802.11 40 MHz BW Mid Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

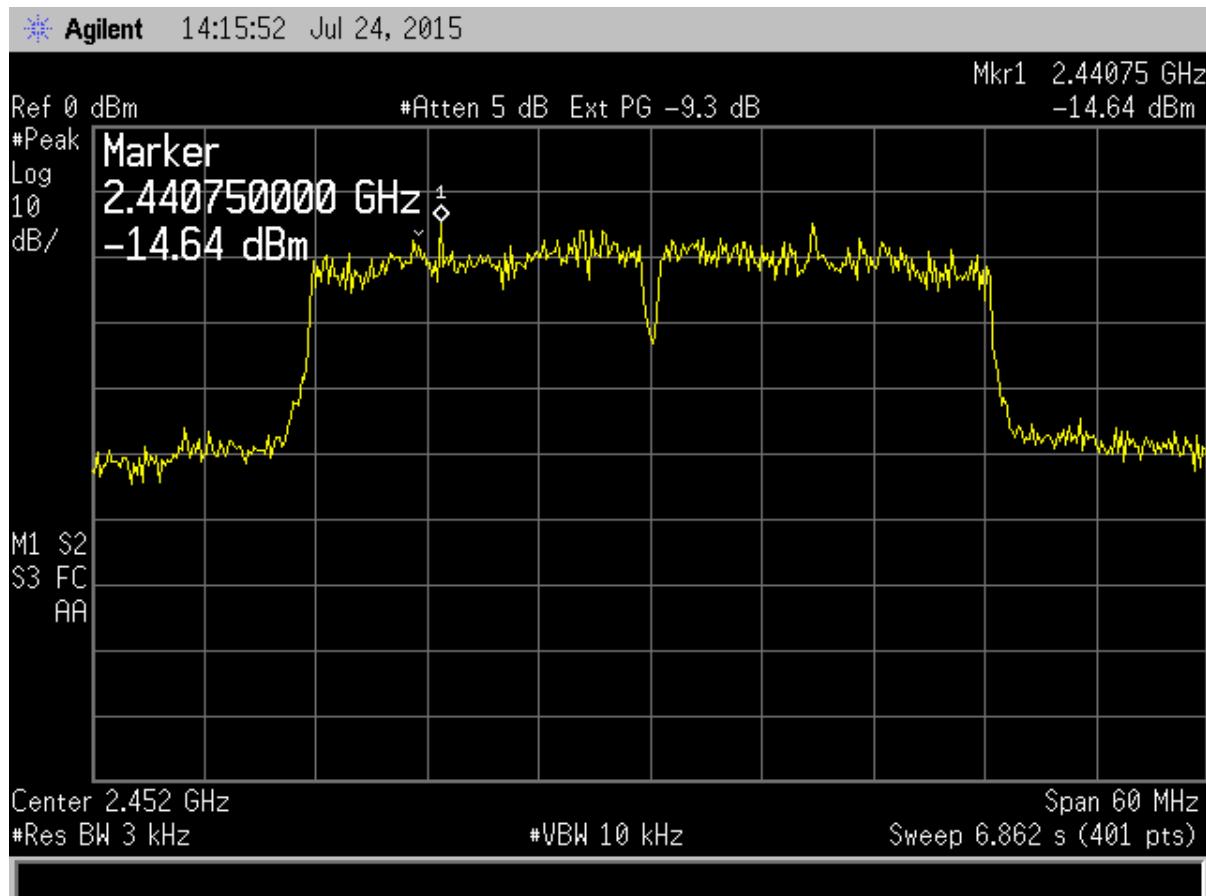


Figure 143. Peak Power Spectral Density from J8, 802.11 40 MHz BW High Channel

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
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July 31, 2015  
Polycom Inc.  
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## **2.16 Unintentional Radiator, Powerline Emissions (CFR 15.107)**

The power line conducted voltage emission measurements have been carried out in accordance with CFR 15.107, per ANSI C63.4:2009, Paragraph 7, with a spectrum analyzer connected to a LISN and the EUT placed into a continuous mode of transmission.

The worst-case results for conducted emissions were determined to be produced when the EUT was operating under continuous transmission. The worst case measurement occurred on the Phase line at 0.51 MHz. The emission level was 2.7 dB from the applicable limit. All other emissions were at least 2.8 dB from the limit. Those results are given in the table following.

**NOTE: The test data provided in this section is to support the Verification and co-location requirement for the digital apparatus and the radios within.**

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

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 July 31, 2015  
 Polycom Inc.  
 P008

**Table 46. Transmitter Power Line Conducted Emissions Test Data, Part 15.107**

150KHz to 30 MHz with Class B Limits						
Test: Power Line Conducted Emissions				Client: Polycom Inc.		
Project: 15-0085				Model: P008 SIP Application Module		
Frequency (MHz)	Test Data (dBuV)	LISN+CL-PA (dB)	Results (dBuV)	AVG Limits (dBuV)	Margin (dB)	Detector PK, QP, or AVG
120 VAC, 60 Hz Phase						
0.15	51.10	1.36	52.46	55.8	3.3	PK
0.51	42.90	0.43	43.33	46.0	2.7	PK
4.85	41.50	0.44	41.94	46.0	4.1	PK
6.14	46.70	0.47	47.17	50.0	2.8	PK
19.60	41.00	0.62	41.62	50.0	8.4	PK
24.45	42.80	0.69	43.49	50.0	6.5	PK
120VAC, 60 Hz Neutral						
0.46	44.70	0.44	45.14	56.6*	11.5	QP
0.46	41.00	0.44	41.44	46.6	5.2	AVG
0.54	45.40	0.41	45.81	56.0*	10.2	QP
0.54	41.70	0.41	42.11	46.0	3.9	AVG
4.61	42.00	0.42	42.42	46.0	3.6	PK
6.14	46.60	0.46	47.06	50.0	2.9	PK
11.16	41.10	0.59	41.69	50.0	8.3	PK
21.23	41.20	0.64	41.84	50.0	8.2	PK

Note: \* denotes QP Limits

SAMPLE CALCULATION at 0.15 MHz:

Magnitude of Measured Frequency	51.10	dBuV
+ Cable Loss+ LISN Loss	1.36	dB
=Corrected Result	52.46	dBuV
Limit	55.80	dBuV
-Corrected Result	52.46	dBuV
Margin	3.34	dB

Test Date: August 3, 2015

Tested By

Signature: Sina Sobheniyan

Name: Sina Sobheniyan

US Tech Test Report:	FCC Part 15 Certification/ RSS 247
FCC ID:	M72-P008
IC:	1849C-P008
Test Report Number:	15-0085
Issue Date:	July 31, 2015
Customer:	Polycom Inc.
Model:	P008

## **2.17 Unintentional Radiator, Radiated Emissions (CFR 15.109)**

Radiated emissions disturbance Measurements were performed with an instrument having both peak and quasi-peak detectors over the frequency range of 30 MHz to 5 times the highest frequency used or generated by the test unit. Measurements of the radiated emissions were made with the receiver antenna at a distance of 3 m from the boundary of the test unit.

The test antenna was varied from 1 m to 4 m in height while watching the analyzers' display for the maximum magnitude of the signal at the test frequency. The antenna polarization (horizontal or vertical) and test sample azimuth were varied during the measurements to find the maximum field strength readings to record.

The worst-case radiated emission in the range of 30 MHz to 10 GHz was 0.1 dB below the limit at 239.93 MHz. This signal is found in Table 46. All other radiated emissions in this range were 2.9 dB or more below the limit.

The worst-case radiated emissions in the range of 30 MHz to 26 GHz was 6.2 dB below the limit at 1444.7 MHz. This signal is found in Table 47. All other radiated emissions in this range were 7.8 dB or more below the limit.

**NOTE: The test data provided in this section is to support the Verification and co-location requirement for the digital apparatus and the radios within. During this testing the radio were placed into normal operation mode.**

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
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 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008

**Table 47. Unintentional Radiator, Peak Radiated Emissions (CFR 15.109),  
 30 MHz to 1000 MHz**

30 MHz to 1000 MHz with Class B Limits							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>BuV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>BuV/m</sub> )	QP Limits (dB <sub>BuV/m</sub> )	Antenna Distance/Polarization	Margin (dB)	Detector PK, or QP
39.25	39.60	-8.53	31.07	40.0	3m./HORZ	8.9	QP
41.37	39.30	-8.83	30.47	40.0	3m./HORZ	9.5	QP
49.59	41.40	-9.87	31.53	40.0	3m./HORZ	8.5	PK
124.12	41.40	-7.28	34.12	43.5	3m./HORZ	9.4	PK
125.00	34.90	-7.28	27.62	43.5	3m./HORZ	15.9	QP
135.19	41.60	-6.68	34.92	43.5	3m./HORZ	8.6	PK
214.80	39.00	-6.80	32.20	43.5	3m./HORZ	11.3	QP
234.20	44.30	-6.49	37.81	46.0	3m./HORZ	8.2	PK
239.93	52.40	-6.48	45.92	46.0	3m./HORZ	0.1	QP
285.80	37.10	-3.86	33.24	46.0	3m./HORZ	12.8	PK
319.50	42.20	-3.18	39.02	46.0	3m./HORZ	7.0	QP
325.70	41.40	-3.43	37.97	46.0	3m./HORZ	8.0	PK
335.90	44.30	-3.08	41.22	46.0	3m./HORZ	4.8	QP
343.70	46.00	-2.89	43.11	46.0	3m./HORZ	2.9	PK
350.55	41.10	-2.86	38.24	46.0	3m./HORZ	7.8	PK
431.90	39.90	-1.40	38.50	46.0	3m./HORZ	7.5	PK
662.31	36.70	3.90	40.60	46.0	3m./HORZ	5.4	PK
42.23	42.00	-9.63	32.37	40.0	3m./VERT	7.6	QP
49.77	39.20	-9.77	29.43	40.0	3m./VERT	10.6	QP
53.36	34.50	-9.81	24.69	40.0	3m./VERT	15.3	QP
71.97	42.20	-11.27	30.93	40.0	3m./VERT	9.1	PK
135.28	38.30	-6.38	31.92	43.5	3m./VERT	11.6	PK
137.03	35.10	-6.31	28.79	43.5	3m./VERT	14.7	QP
240.37	42.00	-6.19	35.81	46.0	3m./VERT	10.2	PK
290.38	37.20	-3.44	33.76	46.0	3m./VERT	12.2	PK
343.70	42.50	-3.59	38.91	46.0	3m./VERT	7.1	PK
352.72	36.50	-3.46	33.04	46.0	3m./VERT	13.0	PK
431.90	37.80	-1.90	35.90	46.0	3m./VERT	10.1	PK
564.00	35.70	1.09	36.79	46.0	3m./VERT	9.2	PK

Tested from 30 MHz to 1 GHz

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0085  
July 31, 2015  
Polycom Inc.  
P008

SAMPLE CALCULATION at 39.25 MHz:

Magnitude of Measured Frequency	39.60	dBuV
<u>+ Cable Loss+ LISN Loss</u>	<u>-8.53</u>	<u>dB</u>
=Corrected Result	31.07	dBuV
Limit	40.00	dBuV
<u>-Corrected Result</u>	<u>31.07</u>	<u>dBuV</u>
Margin	8.93	dB

Test Date: July 22,23,27,28, 2015

Tested By

Signature:  Name: George Yang

Signature:  Name: Carrie Ingram

US Tech Test Report:  
 FCC ID:  
 IC:  
 Test Report Number:  
 Issue Date:  
 Customer:  
 Model:

FCC Part 15 Certification/ RSS 247  
 M72-P008  
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 15-0085  
 July 31, 2015  
 Polycom Inc.  
 P008

**Table 48. Unintentional Radiator, Peak Radiated Emissions (CFR 15.109),  
 Above 1 GHz**

1 GHz to 10 GHz with Class B Limits							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0085				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dB <sub>BuV</sub> )	AF+CA-AMP (dB/m)	Results (dB <sub>BuV/m</sub> )	AVG Limits (dB <sub>BuV/m</sub> )	Antenna Distance/Polarization	Margin (dB)	Detector PK, or AVG
1445.20	36.84	-7.43	29.41	54.0	3.0m./VERT	24.6	AVG
1599.99	42.03	-7.37	34.66	54.0	3.0m./VERT	19.3	AVG
1029.90	55.58	-9.41	46.17	54.0	3.0m./HORZ	7.8	PK
1038.90	39.43	-10.92	28.51	54.0	3.0m./HORZ	25.5	AVG
1444.40	40.66	-8.64	32.02	54.0	3.0m./HORZ	22.0	AVG
1444.70	55.39	-7.60	47.79	54.0	3.0m./HORZ	6.2	PK
1595.50	37.90	-7.93	29.97	54.0	3.0m./HORZ	24.0	AVG
1599.95	52.75	-7.51	45.24	54.0	3.0m./HORZ	8.8	PK
2511.70	39.27	-1.50	37.77	54.0	3.0m./HORZ	16.2	AVG
2664.60	38.08	-0.94	37.14	54.0	3.0m./HORZ	16.9	AVG

SAMPLE CALCULATION at 1445.2 MHz:

Magnitude of Measured Frequency	36.84	dB <sub>BuV</sub>
+ Cable Loss+ LISN Loss	-7.43	dB
=Corrected Result	29.41	dB <sub>BuV</sub>
Limit	54.00	dB <sub>BuV</sub>
-Corrected Result	29.41	dB <sub>BuV</sub>
Margin	24.59	dB

Test Date: July 21, 2015

Signature:  Name: Carrie Ingram

US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
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15-0085  
July 31, 2015  
Polycom Inc.  
P008

## 2.18 Measurement Uncertainty

The measurement uncertainties given were calculated using the method detailed in CISPR 16-4. A coverage factor of  $k=2$  was used to give a level of confidence of approximately 95%.

### 2.18.1 Conducted Emissions Measurement Uncertainty

Measurement Uncertainty (within a 95% confidence level) for this test is  $\pm 2.78$  dB.

The data listed in this test report does not have sufficient margin to negate the effects of uncertainty. Therefore, the EUT conditionally meets this requirement.

### 2.18.2 Radiated Emissions Measurement Uncertainty

For a measurement distance of 3 m the measurement uncertainty (with a 95% confidence level) for this test using a Biconical Antenna (30 MHz to 200 MHz) is  $\pm 5.39$  dB. This value includes all elements of measurement.

The measurement uncertainty (with a 95% confidence level) for this test using a Log Periodic Antenna (200 MHz to 1000 MHz) is  $\pm 5.18$  dB.

The measurement uncertainty (with a 95% confidence level) for this test using a Horn Antenna is  $\pm 5.21$  dB.

The data listed in this test report does not have sufficient margin to negate the effects of uncertainty. Therefore, the EUT conditionally meets this requirement.