



*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 E, paragraphs 15.401, 15.403, 15.405 and 15.407**

**And**

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

**For the**

**Polycom Inc.**

**Model: P008**

**FCC ID: M72-P008**

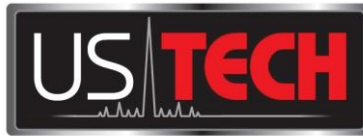
**IC: 1849C-P008**

**UST Project: 15-0086**

**Issue Date: July 7, 2015**

Total Pages in This Report: 214

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*Testing Tomorrow's Technology*

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 7, 2015



NVLAP LAB CODE 200162-0

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US Tech Test Report:  
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FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

## MEASUREMENT TECHNICAL REPORT

**COMPANY NAME:** Polycom Inc.

**MODEL:** P008

**FCC ID:** M72-P008

**IC:** 1849C-P008

**DATE:** July 7, 2015

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

Equipment type: 5.15-5.35 GHz, 5.47-5.75 GHz, and 5.725- 5.85 GHz Transmitter

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

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  
Alpharetta, GA 30004

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US Tech Test Report:  
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### **List of Attachments**

Agency Agreement  
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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

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

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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 407 and IC RSS 247 Issue 1.

### **1.2 Characterization of Test Sample**

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

### **1.3 Product Description**

The Equipment under Test (EUT) is the Polycom Inc. Model P008 Application Module. The EUT is an embedded wireless internet connectivity module that operates in the 2.4 and 5.0 GHz spectrums. 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 2.4 GHz Wi-Fi, integrated Bluetooth, and NFC radios have been tested and results reported in a separate report.

Antenna Gain: 3.2 dBi

Modulation: 20 MHz and 40 MHz bandwidth modulation

Maximum Output Power: 20.98 dBm

### **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)* for FCC subpart A Digital equipment Verification requirements and per *ANSI C63.10:2013, Procedures for Compliance Testing of Unlicensed Wireless Devices(2013)*.

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.

US Tech Test Report:  
FCC ID:  
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## **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**

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.

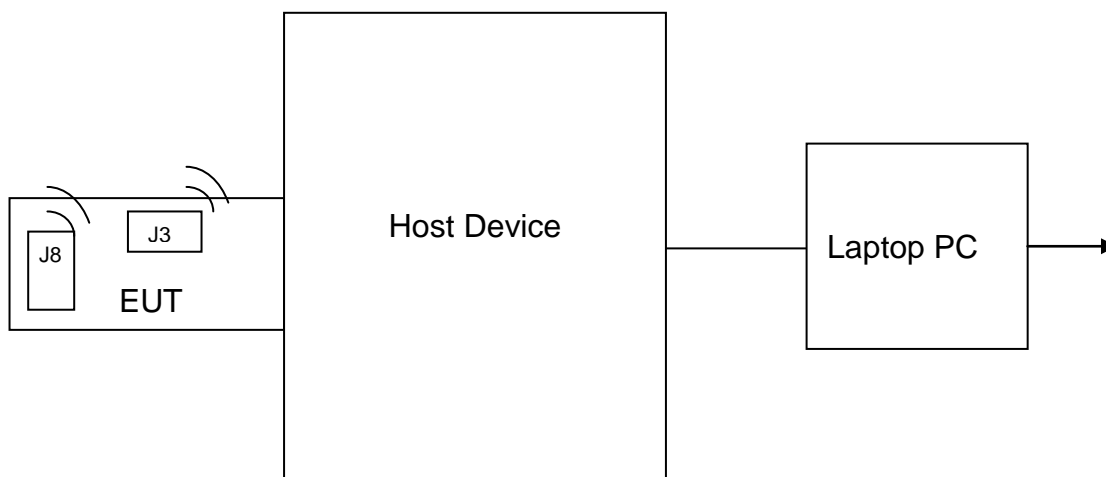
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**Table 1. EUT and Peripherals**

PERIPHERAL MANUFACTURER.	MODEL NUMBER	SERIAL NUMBER	FCC ID:	CABLES P/D
Polycom Inc.	P008 SIP Application Module	Engineering Sample	M72-P008 (pending) 1849C-P008 (pending)	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 their 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.

## 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 5.15 GHz to 5.85 MHz, at least 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.



## **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	2.3	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))

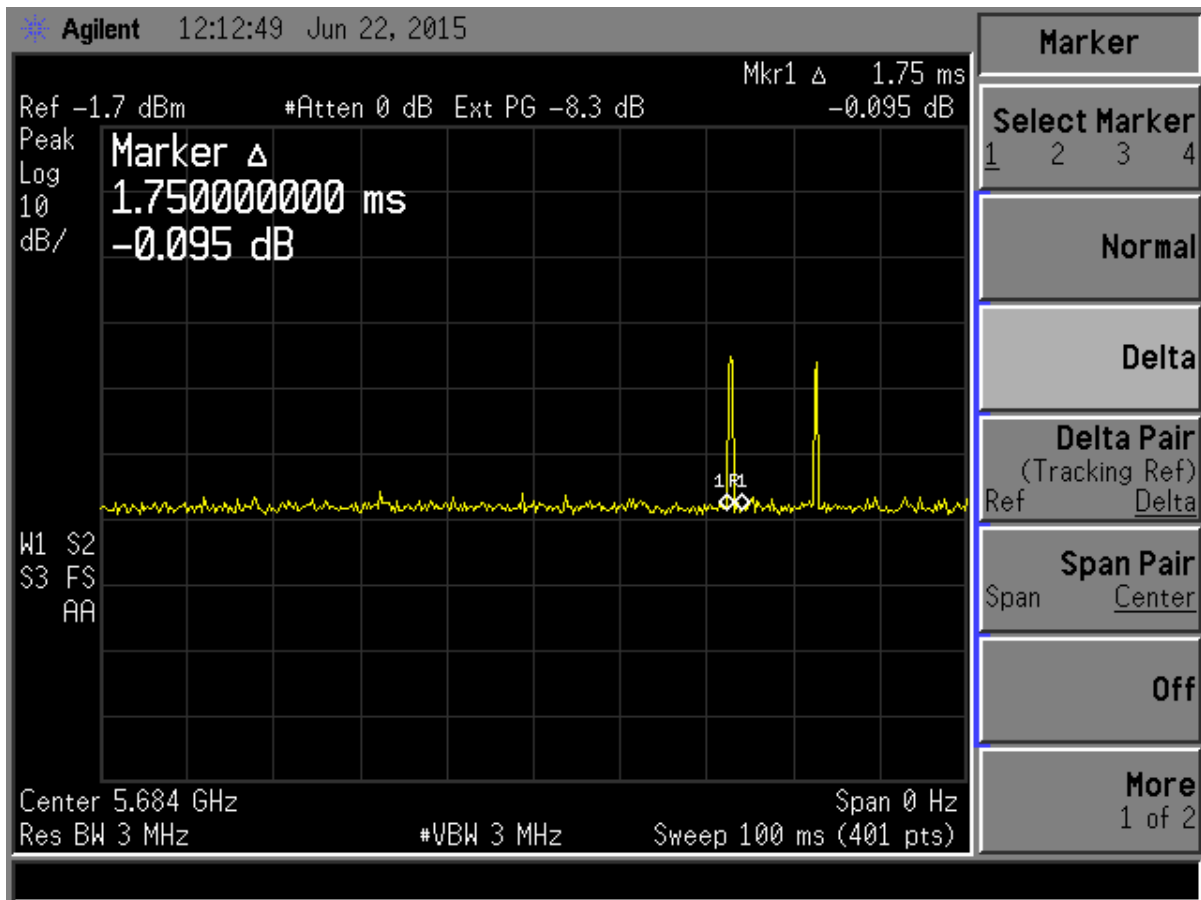
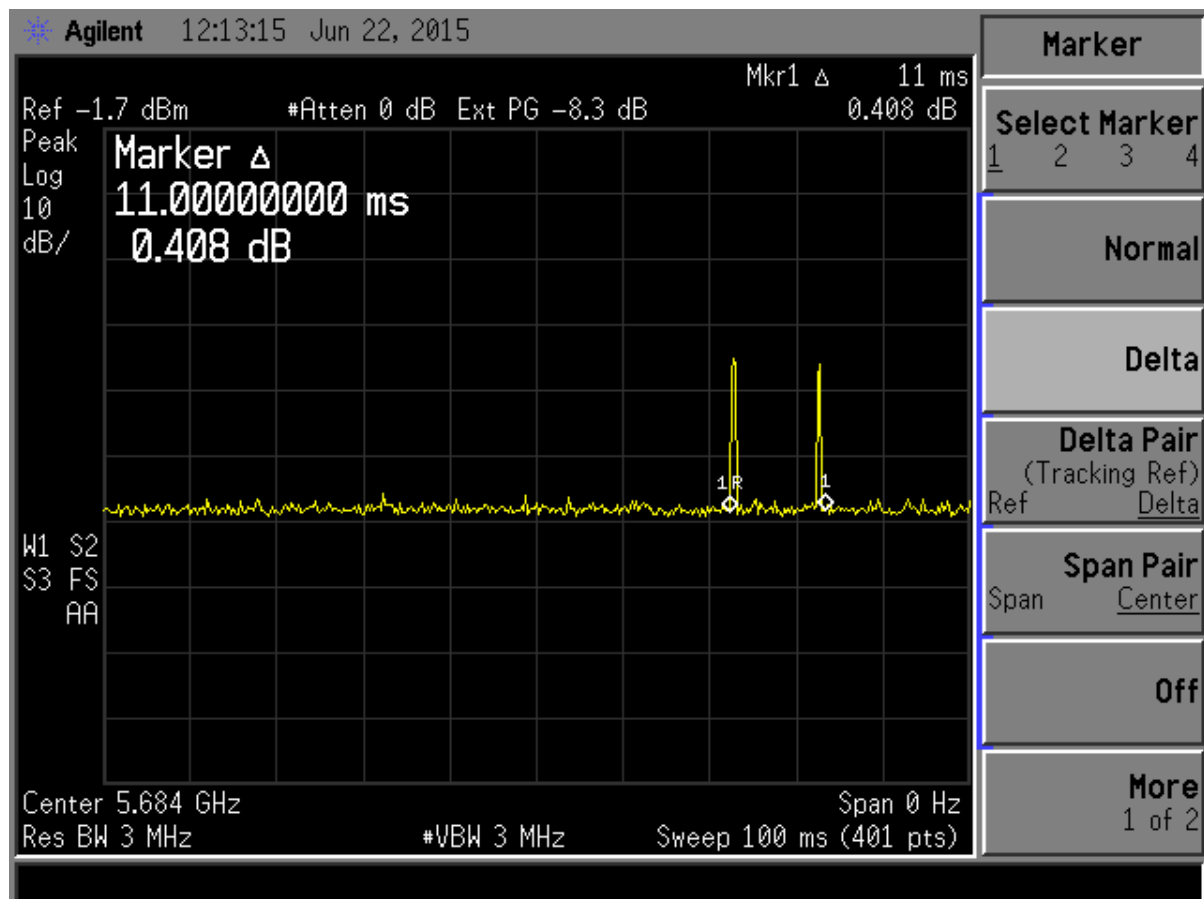


Figure 2. Duty Cycle 100ms Sweep

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**Figure 3. Transmitter Pulse Width**

**Total Time On from Figure 2 = 1.75 ms (Transmitter Pulse Width)**

**Total Pulse Train from Figure 3 = 11.00 ms (Pulse Train)**

**(1.75 ms Total Time On)/(11.00 ms Total Pulse Train) = 0.16 Numeric Duty Cycle**

**Duty Cycle = 20 Log (0.16) = -15.97 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 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 along with the 15.107 power line test data in the sections 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

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## **2.10 Intentional Radiator, Radiated Emissions (CFR 15.209, 15.407(d)) (IC RSS 247, 6.2)**

Radiated Spurious measurements: the EUT was placed into a continuous transmit mode of operation (>98% duty cycle) and tested per FCC KDB Publication 789033 D02 General UNII Test Procedures New Rules v01 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 7789033 for conducted out of band emissions emanating from the antenna port over the frequency range of 30 MHz to 50 GHz. A conducted scan was performed on the EUT to identify and record spurious signals that were related to the transmitter.

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The conducted output power (in dBm) was recorded. The maximum transmit antenna gain in dBi was added to determine the EIRP level. The appropriate maximum ground reflection factor to the EIRP level, 6 dB for frequencies  $\leq 30$  MHz, 4.7 dB for frequencies between 30 MHz – 1000 MHz, and 0 dB for frequencies  $> 1000$  MHz, was also added to the EIRP calculation.

The results are displayed in the plots below. Radiated emissions per CFR 15.209 were performed 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.



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**Table 6. Peak Radiated Fundamental & Harmonic Emissions, 802.11a**

Test: FCC Part 15, Para 15.209, 15.407(a)					Client: Polycom Inc.			
Project: 15-0086					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
Channel 36								
5180.00	70.06	0.00	38.07	107.80	137.00	3.0 m./HORZ	28.90	PK
10360.00	51.78	-9.50	10.22	52.50	74.0	1.0m./HORZ	21.5	PK
15540.00	50.11	-9.50	10.72	51.33	74.0	1.0m./HORZ	22.7	PK
20720.00	50.17	-9.50	25.16	65.83	74.0	1.0m./HORZ	8.2	PK
Channel 48								
5240.00	69.13	0.00	38.31	107.44	137.00	3.0m./HORZ	29.6	PK
10480.00	48.22	-9.50	10.62	49.34	74.0	1.0m./HORZ	24.7	PK
15720.00	46.53	-9.50	9.97	47.00	74.0	1.0m./HORZ	27.0	PK
20960.00	46.66	-9.50	25.16	62.32	74.0	1.0m./HORZ	11.7	PK
Channel 52								
5260.00	69.15	0.00	38.31	107.46	137.00	3.0m./HORZ	29.50	PK
10520.00	46.09	-9.50	10.71	47.30	74.0	1.0m./HORZ	26.7	PK
15780.00	45.69	-9.50	9.97	46.16	74.0	1.0m./HORZ	27.8	PK
21040.00	46.54	-9.50	25.16	62.20	74.0	1.0m./HORZ	11.8	PK
Channel 64								
5320.00	70.77	0.00	38.40	109.17	137.00	3.0m./HORZ	27.80	PK
10640.00	51.02	-9.50	10.64	52.16	74.0	1.0m./HORZ	21.8	PK
15960.00	50.30	-9.50	9.86	50.66	74.0	1.0m./HORZ	23.3	PK
21280.00	50.91	-9.50	25.16	66.57	74.0	1.0m./HORZ	7.4	PK
Channel 100								
5500.00	70.22	0.00	38.66	108.88	137.00	3.0m./HORZ	28.10	PK
11000.00	45.14	-9.50	10.86	46.50	74.0	1.0m./HORZ	27.5	PK
16500.00	45.38	-9.50	12.59	48.47	74.0	1.0m./HORZ	25.5	PK
22000.00	45.59	-9.50	25.16	61.25	74.0	1.0m./HORZ	12.8	PK
Channel 140								
5700.00	70.50	0.00	38.39	108.89	137.00	3.0m./HORZ	28.10	PK
11400.00	44.86	-9.50	11.19	46.55	74.0	1.0m./HORZ	27.4	PK
17100.00	45.56	-9.50	18.20	54.26	74.0	1.0m./HORZ	19.7	PK
22800.00	46.96	-9.50	25.16	62.62	74.0	1.0m./HORZ	11.4	PK

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**Table 6. Continued**

Test: FCC Part 15, Para 15.209, 15.407(a)					Client: Polycom Inc.			
Project: 15-0086					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
Channel 149								
5745.00	71.64	0.00	38.39	110.03	137.00	3.0m./HORZ	27.0	PK
11490.00	44.25	-9.50	11.19	45.94	74.0	1.0m./HORZ	28.1	PK
17235.00	45.58	-9.50	19.26	55.34	74.0	1.0m./HORZ	18.7	PK
22980.00	47.04	-9.50	25.16	62.70	74.0	1.0m./HORZ	11.3	PK
Channel 165								
5825.00	69.39	0.00	38.41	107.80	137.00	3.0m./HORZ	29.20	PK
11650.00	44.12	-9.50	11.48	46.10	74.0	1.0m./HORZ	27.9	PK
17475.00	45.03	-9.50	19.74	55.27	74.0	1.0m./HORZ	18.7	PK
23300.00	47.53	-9.50	25.16	63.19	74.00	1.0m./HORZ	10.8	PK

- (\*) Falls within the restricted bands of CFR 15.205. Limits based on CFR15.209 & 20 dB relaxation for peak measurements of CFR 15.35.
- No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10<sup>th</sup> harmonic
- (~)Measurements taken at 1 meter were extrapolated to 3 meters using a factor of (-9.5 dB).
- The EUT was placed in three orthogonal positions 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 17475.00 MHz:

Magnitude of Measured Frequency	45.03	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain	19.74	dB/m
1 meter to 3 meter extrapolation	-9.50	dB
Corrected Result	55.27	dBuV/m

Test Date: June 4, 2015

Tested By

Signature:



Name: George, Yang

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

Test: FCC Part 15, Para 15.209, 15.407(a)					Client: Polycom Inc.			
Project: 15-0086					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
Channel 36								
5180.00	57.50	0.00	38.07	95.57	117.0	3.0 m./HORZ	21.40	AVG
10360.00	36.01	-9.50	10.22	36.73	54.0	1.0m./HORZ	17.3	AVG
15540.00	34.07	-9.50	10.72	35.29	54.0	1.0m./HORZ	18.7	AVG
20720.00	33.84	-9.50	25.16	49.50	54.0	1.0m./HORZ	4.5	AVG
Channel 48								
5240.00	55.92	0.00	38.31	94.23	117.0	3.0 m./HORZ	22.80	AVG
10480.00	34.36	-9.50	10.62	35.48	54.0	1.0m./HORZ	18.5	AVG
15720.00	33.80	-9.50	9.97	34.27	54.0	1.0m./HORZ	19.7	AVG
20960.00	33.40	-9.50	25.16	49.06	54.0	1.0m./HORZ	4.9	AVG
Channel 52								
5260.00	56.97	0.00	38.31	94.58	117.0	3.0 m./HORZ	22.40	AVG
10520.00	32.98	-9.50	10.71	34.19	54.0	1.0m./HORZ	19.8	AVG
15780.00	32.48	-9.50	9.97	32.95	54.0	1.0m./HORZ	21.0	AVG
21040.00	33.00	-9.50	25.16	48.66	54.0	1.0m./HORZ	5.3	AVG
Channel 64								
5320.00	56.97	0.00	38.40	96.12	117.0	3.0 m./HORZ	21.60	AVG
10640.00	34.68	-9.50	10.64	35.82	54.0	1.0m./HORZ	18.2	AVG
15960.00	33.56	-9.50	9.86	33.92	54.0	1.0m./HORZ	20.1	AVG
21280.00	33.98	-9.50	25.16	49.64	54.0	1.0m./HORZ	4.4	AVG
Channel 100								
5500.00	57.33	0.00	38.66	95.99	117.0	3.0 m./HORZ	21.00	AVG
11000.00	32.10	-9.50	10.86	33.46	54.0	1.0m./HORZ	20.5	AVG
16500.00	32.27	-9.50	12.59	35.36	54.0	1.0m./HORZ	18.6	AVG
22000.00	32.95	-9.50	25.16	48.61	54.0	1.0m./HORZ	5.4	AVG
Channel 140								
5700.00	59.29	0.00	38.39	97.68	117.0	3.0 m./HORZ	19.30	AVG
11400.00	31.25	-9.50	11.19	32.94	54.0	1.0m./HORZ	21.1	AVG
17100.00	32.37	-9.50	18.20	41.07	54.0	1.0m./HORZ	12.9	AVG
22800.00	33.79	-9.50	25.16	49.45	54.0	1.0m./HORZ	4.6	AVG

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**Table 7. Continued**

Test: FCC Part 15, Para 15.209, 15.407(a)					Client: Polycom Inc.			
Project: 15-0086					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
Channel 149								
5745.00	57.71	0.00	38.41	96.12	117.0	3.0 m./HORZ	20.90	AVG
11490.00	32.50	-9.50	11.48	34.48	54.0	1.0m./HORZ	19.5	AVG
17235.00	32.16	-9.50	19.74	42.40	54.0	1.0m./HORZ	11.6	AVG
22980.00	34.54	-9.50	25.16	50.20	54.0	1.0m./HORZ	3.80	AVG
Channel 165								
5825.00	57.71	0.00	38.41	96.12	117.00	3.0m./HORZ	20.9	AVG
11650.00	32.20	-9.50	25.16	47.86	54.0	1.0m./HORZ	6.1	AVG
17475.00	32.50	-9.50	11.48	34.48	54.0	1.0m./HORZ	19.5	AVG
23300.00	34.54	-9.50	25.16	50.20	54.0	1.0m./HORZ	3.8	AVG

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 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 11490.00MHz:

Magnitude of Measured Frequency	32.50	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain – Duty Cycle	11.48	dB/m
1 meter to 3 meter extrapolation	-9.50	dB
Corrected Result	34.48	dBuV/m

Test Date: June 4, 2015

Tested By

Signature:



Name: George, Yang

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

**Table 8. Peak Radiated Fundamental & Harmonic Emissions, 802.11n**

Test: FCC Part 15, Para 15.209, 15.407(a)					Client: Polycom Inc.			
Project: 15-0086					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
Channel 36								
5180.00	69.67	0.00	38.07	107.74	137.0	3.0m./HORZ	29.3	PK
10360.00	48.38	-9.50	10.22	49.10	74.0	1.0m./HORZ	24.9	PK
15540.00	47.21	-9.50	10.72	48.43	74.0	1.0m./HORZ	25.6	PK
20720.00	47.99	-9.50	25.16	63.65	74.0	1.0m./HORZ	10.4	PK
Channel 48								
5240.00	70.23	0.00	38.31	108.54	137.0	3.0m./HORZ	28.5	PK
10480.00	47.52	-9.50	10.62	48.64	74.0	1.0m./HORZ	25.4	PK
15720.00	45.97	-9.50	9.97	46.44	74.0	1.0m./HORZ	27.6	PK
20960.00	47.24	-9.50	25.16	62.90	74.0	1.0m./HORZ	11.1	PK
Channel 52								
5260.00	68.64	0.00	38.31	106.95	137.0	3.0m./HORZ	30.0	PK
10520.00	46.05	-9.50	10.71	47.26	74.0	1.0m./HORZ	26.7	PK
15780.00	45.72	-9.50	9.97	46.19	74.0	1.0m./HORZ	27.8	PK
21040.00	46.89	-9.50	25.16	62.55	74.0	1.0m./HORZ	11.5	PK
Channel 64								
5320.00	68.79	0.00	38.40	107.19	137.00	3.0m./HORZ	29.8	PK
10640.00	46.01	-9.50	10.64	47.15	74.0	1.0m./HORZ	26.9	PK
15960.00	46.22	-9.50	9.86	46.58	74.0	1.0m./HORZ	27.4	PK
21280.00	46.89	-9.50	25.16	62.55	74.0	1.0m./HORZ	11.5	PK
Channel 100								
5500.00	70.64	0.00	38.66	109.30	137.00	3.0m./HORZ	27.7	PK
11000.00	45.16	-9.50	10.72	46.38	74.0	1.0m./HORZ	27.6	PK
16500.00	46.49	-9.50	14.19	51.18	74.0	1.0m./HORZ	22.8	PK
22000.00	46.58	-9.50	25.16	62.24	74.0	1.0m./HORZ	11.8	PK
Channel 140								
5700.00	70.22	0.00	38.53	108.75	137.00	3.0m./HORZ	28.3	PK
11400.00	44.96	-9.50	11.09	46.55	74.0	1.0m./HORZ	27.4	PK
17100.00	46.51	-9.50	17.91	54.92	74.0	1.0m./HORZ	19.1	PK
22800.00	47.37	-9.50	25.16	63.03	74.0	1.0m./HORZ	11.0	PK

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

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 1849C-P008  
 15-0086  
 July 7, 2015  
 Polycom Inc.  
 P008

**Table 8. Continued**

Test: FCC Part 15, Para 15.209, 15.407(a)					Client: Polycom Inc.			
Project: 15-0086					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
Channel 149								
5745.00	70.88	0.00	38.39	109.27	137.00	3.0m./HORZ	27.7	PK
11490.00	44.67	-9.50	11.27	46.44	74.0	1.0m./HORZ	27.6	PK
17235.00	45.81	-9.50	18.83	55.14	74.0	1.0m./HORZ	18.9	PK
22980.00	47.78	-9.50	25.16	63.44	74.0	1.0m./HORZ	10.6	PK
Channel 165								
5825.00	70.22	0.00	38.41	108.63	137.00	3.0m./HORZ	28.4	PK
11650.00	41.66	-9.50	11.48	43.64	74.0	1.0m./HORZ	30.4	PK
17475.00	46.21	-9.50	19.74	56.45	74.0	1.0m./HORZ	17.6	PK
23300.00	47.64	-9.50	25.16	63.30	74.0	1.0m./HORZ	10.7	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 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 11650.00 MHz:

Magnitude of Measured Frequency	41.66	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain	11.48	dB/m
1 meter to 3 meter extrapolation	-9.50	dB
Corrected Result	43.64	dBuV/m

Test Date: June 4, 2015

Tested By

Signature:



Name: George, Yang

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

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

Test: FCC Part 15, Para 15.209, 15.407(a)					Client: Polycom Inc.			
Project: 15-0086					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
Channel 36								
5180.00	54.81	0.00	38.07	92.88	117.0	3.0 m./HORZ	24.1	AVG
10360.00	34.21	-9.50	10.22	34.93	54.0	1.0m./HORZ	19.1	AVG
15540.00	33.01	-9.50	10.72	34.23	54.0	1.0m./HORZ	19.8	AVG
20720.00	34.12	-9.50	25.16	49.78	54.0	1.0m./HORZ	4.2	AVG
Channel 48								
5240.00	54.60	0.00	38.31	92.91	117.0	3.0 m./HORZ	21.1	AVG
10480.00	34.32	-9.50	10.62	35.44	54.0	1.0m./HORZ	18.6	AVG
15720.00	32.43	-9.50	9.97	32.90	54.0	1.0m./HORZ	21.1	AVG
20960.00	32.97	-9.50	25.16	48.63	54.0	1.0m./HORZ	5.4	AVG
Channel 52								
5260.00	54.10	0.00	38.31	92.41	117.0	3.0 m./HORZ	24.6	AVG
10520.00	33.35	-9.50	10.71	34.56	54.0	1.0m./HORZ	19.4	AVG
15780.00	32.20	-9.50	9.97	32.67	54.0	1.0m./HORZ	21.3	AVG
21040.00	33.23	-9.50	25.16	48.89	54.0	1.0m./HORZ	5.1	AVG
Channel 64								
5320.00	54.48	0.00	38.40	92.88	117.0	3.0 m./HORZ	24.1	AVG
10640.00	32.82	-9.50	10.64	33.96	54.0	1.0m./HORZ	20.0	AVG
15960.00	32.57	-9.50	9.86	32.93	54.0	1.0m./HORZ	21.1	AVG
21280.00	33.77	-9.50	25.16	49.43	54.0	1.0m./HORZ	4.6	AVG
Channel 100								
5500.00	54.50	0.00	38.13	88.78	117.0	3.0 m./HORZ	28.2	AVG
11000.00	32.30	-9.50	10.72	33.52	54.0	1.0m./HORZ	20.5	AVG
16500.00	32.18	-9.50	14.19	36.87	54.0	1.0m./HORZ	17.1	AVG
22000.00	33.22	-9.50	25.16	48.88	54.0	1.0m./HORZ	5.1	AVG
Channel 140								
5700.00	55.05	0.00	38.53	93.58	117.0	3.0 m./HORZ	23.4	AVG
11400.00	31.45	-9.50	11.09	33.04	54.0	1.0m./HORZ	21.0	AVG
17100.00	32.25	-9.50	17.91	40.66	54.0	1.0m./HORZ	13.3	AVG
22800.00	33.47	-9.50	25.16	49.13	54.0	1.0m./HORZ	4.9	AVG

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

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15-0086  
July 7, 2015  
Polycom Inc.  
P008

**Table 9. Continued**

Test: FCC Part 15, Para 15.209, 15.407(a)					Client: Polycom Inc.			
Project: 15-0086					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
Channel 149								
5745.00	57.10	0.00	38.39	95.49	117.0	3.0 m./HORZ	21.5	AVG
11490.00	31.38	-9.50	11.27	33.15	54.0	1.0m./HORZ	20.9	AVG
17235.00	32.13	-9.50	18.83	41.46	54.0	1.0m./HORZ	12.5	AVG
22980.00	33.67	-9.50	25.16	49.33	54.0	1.0m./HORZ	4.7	AVG
Channel 165								
5825.00	55.64	0.00	38.41	94.05	117.00	3.0m./HORZ	22.9	AVG
11650.00	31.69	-9.50	11.48	33.67	74.0	1.0m./HORZ	20.3	AVG
17475.00	31.51	-9.50	19.74	41.75	74.0	1.0m./HORZ	12.3	AVG
23300.00	34.07	-9.50	25.16	49.73	74.0	1.0m./HORZ	4.3	AVG

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 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 11650.00 MHz:

Magnitude of Measured Frequency	31.69	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain – Duty Cycle	11.48	dB/m
1 meter to 3 meter extrapolation	-9.50	dB
Corrected Result	33.67	dBuV/m

Test Date: June 4, 2015

Tested By

Signature:



Name: George, Yang



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

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0086  
 July 7, 2015  
 Polycom Inc.  
 P008

**Table 10. Peak Radiated Fundamental & Harmonic Emissions 802.11n 40 MHz BW**

Test: FCC Part 15, Para 15.209, 15.407(a)					Client: Polycom Inc.			
Project: 15-0086					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
Channel 38								
5190	65.46	0.00	39.49	104.95	137.0	3.0m./VERT	32.0	PK
1038	66.64	-9.50	-9.81	47.33	74.0	1.0m./VERT	26.7	PK
15570	50.31	-9.50	-6.64	34.17	74.0	1.0m./VERT	39.8	PK
Channel 62								
5310	65.52	0.00	38.99	104.51	137.0	3.0m./VERT	32.5	PK
1062	66.54	-9.50	-10.06	46.98	74.0	1.0m./VERT	27.0	PK
1593	49.73	-9.50	13.96	54.19	74.0	1.0m./VERT	19.8	PK
Channel 102								
5510	62.84	0.00	38.99	102.56	137.0	3.0m./VERT	34.4	PK
1102	59.46	-9.50	-10.06	41.72	74.0	1.0m./VERT	32.3	PK
1653	51.30	-9.50	13.96	59.12	74.0	1.0m./VERT	14.9	PK
Channel 110								
5550	62.19	0.00	39.76	101.95	137.0	3.0m./VERT	35.1	PK
11100	64.02	-9.50	12.98	67.50	74.0	1.0m./VERT	6.5	PK
16650	49.85	-9.50	18.23	58.58	74.0	1.0m./VERT	15.4	PK

- (\*) Falls within the restricted bands of CFR 15.205. Limits based on CFR15.209 & 20 dB relaxation for peak measurements of CFR 15.35.
- No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10<sup>th</sup> harmonic
- (~)Measurements taken at 1 meter were extrapolated to 3 meters using a factor of (-9.5 dB).
- The EUT was placed in three orthogonal positions 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 1038.00 MHz:

Magnitude of Measured Frequency	66.64	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain – Duty Cycle	-9.81	dB/m
1 meter to 3 meter extrapolation	-9.50	dB
Corrected Result	47.33	dBuV/m

Test Date: July 23, 2015, 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  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

**Table 11. Average Radiated Fundamental & Harmonic Emissions 802.11n 40 MHz BW**

Test: FCC Part 15, Para 15.209, 15.407(a)					Client: Polycom Inc.			
Project: 15-0086					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
Channel 38								
5190	37.23	0.00	39.49	76.72	107.0	3.0m./VERT	30.3	PK
1038	45.03	-9.50	-9.81	25.72	54.0	1.0m./VERT	28.3	PK
Channel 62								
5310	37.88	0.00	38.99	76.87	107.0	3.0m./VERT	30.1	PK
1062	43.90	-9.50	-10.06	24.34	54.0	1.0m./VERT	29.7	PK
Channel 102								
5510	35.32	0.00	39.72	75.04	107.0	3.0m./VERT	32.0	PK
1102	41.08	-9.50	-8.24	23.34	54.0	1.0m./VERT	30.7	PK
Channel 110								
5550	34.87	0.00	39.76	74.63	107.0	3.0m./VERT	32.4	PK
11100	43.97	-9.50	12.98	47.45	54.0	1.0m./VERT	6.6	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 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 1038.00 MHz:

Magnitude of Measured Frequency	45.03	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain – Duty Cycle	-9.81	dB/m
1 meter to 3 meter extrapolation	-9.50	dB
Corrected Result	25.72	dBuV/m

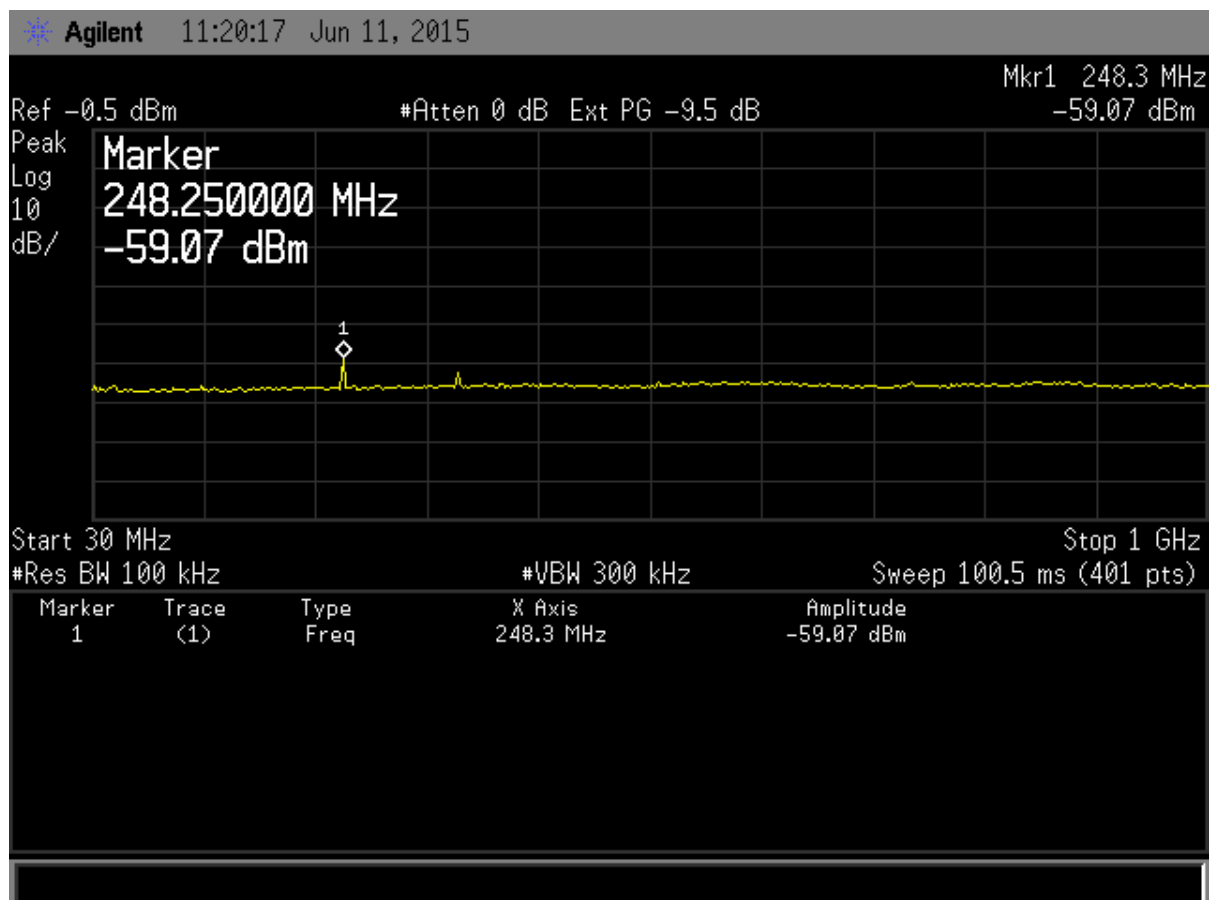
Test Date: July 23, 2015, 2015

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 4. Antenna Conducted Emissions Channel 36 802.11a, Part 1**

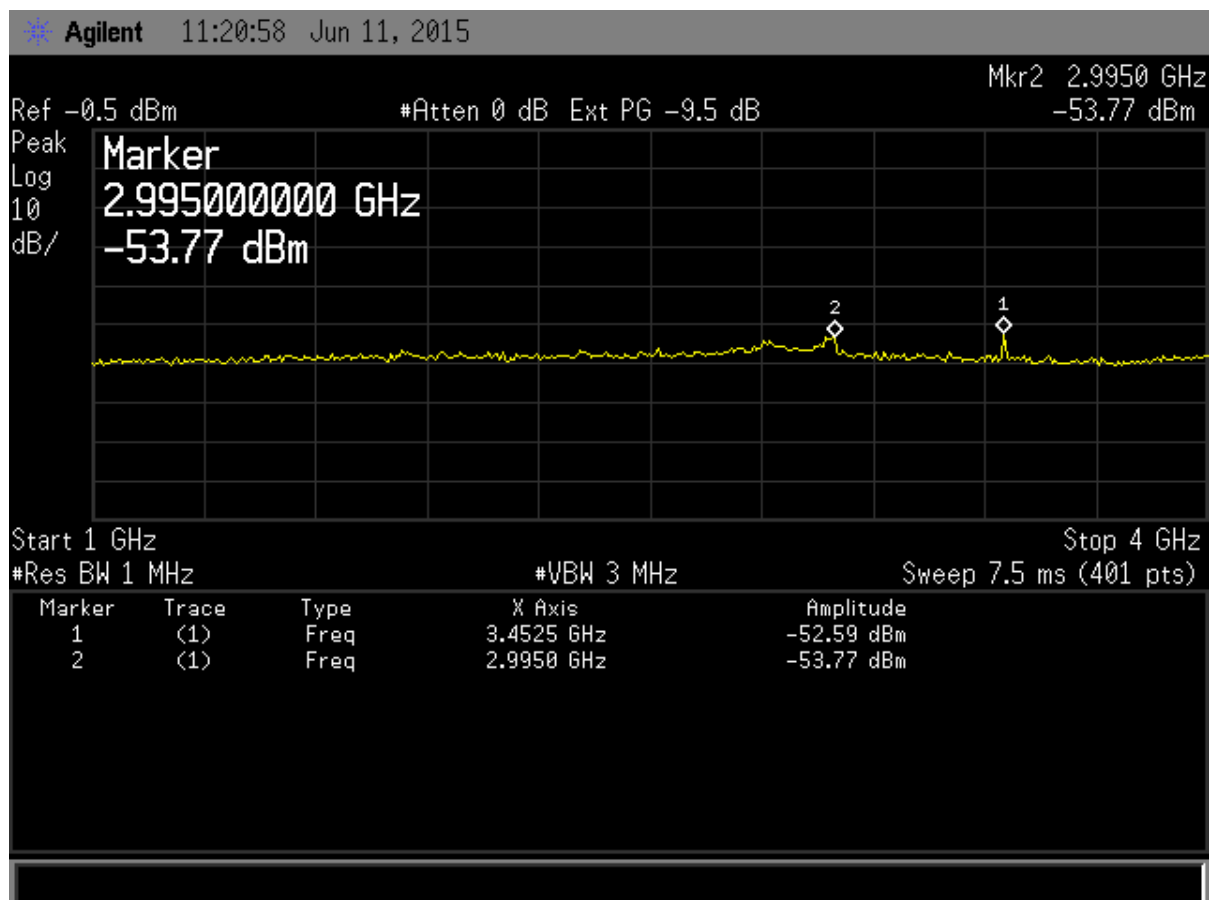
EIRP= -59.07 dBm) + 3.0 dBi (applied antenna gain) + 4.7 dB (ground reflection factor)= -51.37 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-51.37) dBm/MHz = 24.37 dB

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

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15-0086  
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**Figure 5. Antenna Conducted Emissions Channel 36 802.11a, Part 2**

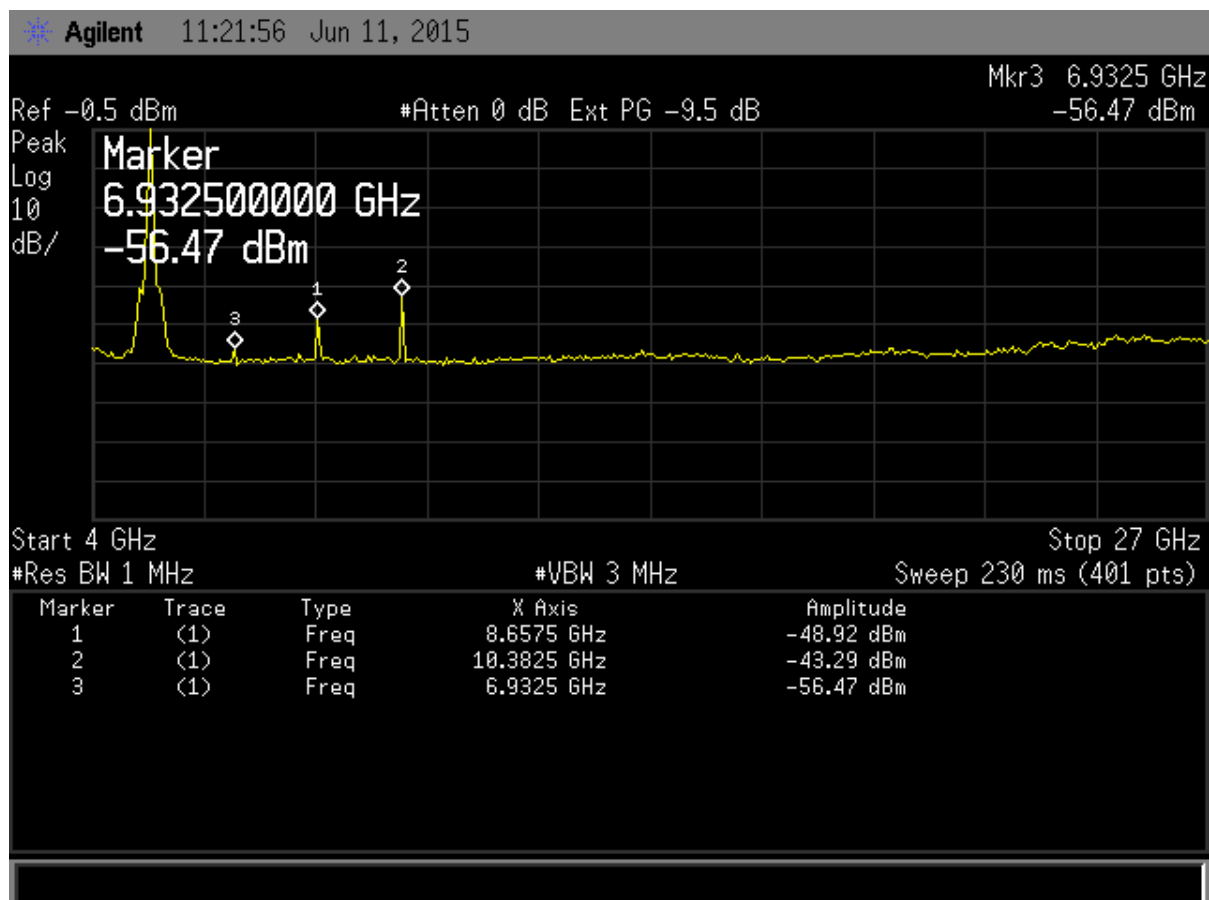
EIRP= -53.77 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -50.77 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-50.77) dBm/MHz = 23.77 dB

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

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 M72-P008  
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 15-0086  
 July 7, 2015  
 Polycom Inc.  
 P008



**Figure 6. Antenna Conducted Emissions Channel 36 802.11a, Part 3**

Note: Large signal seen in the figure above is the fundamental emission.

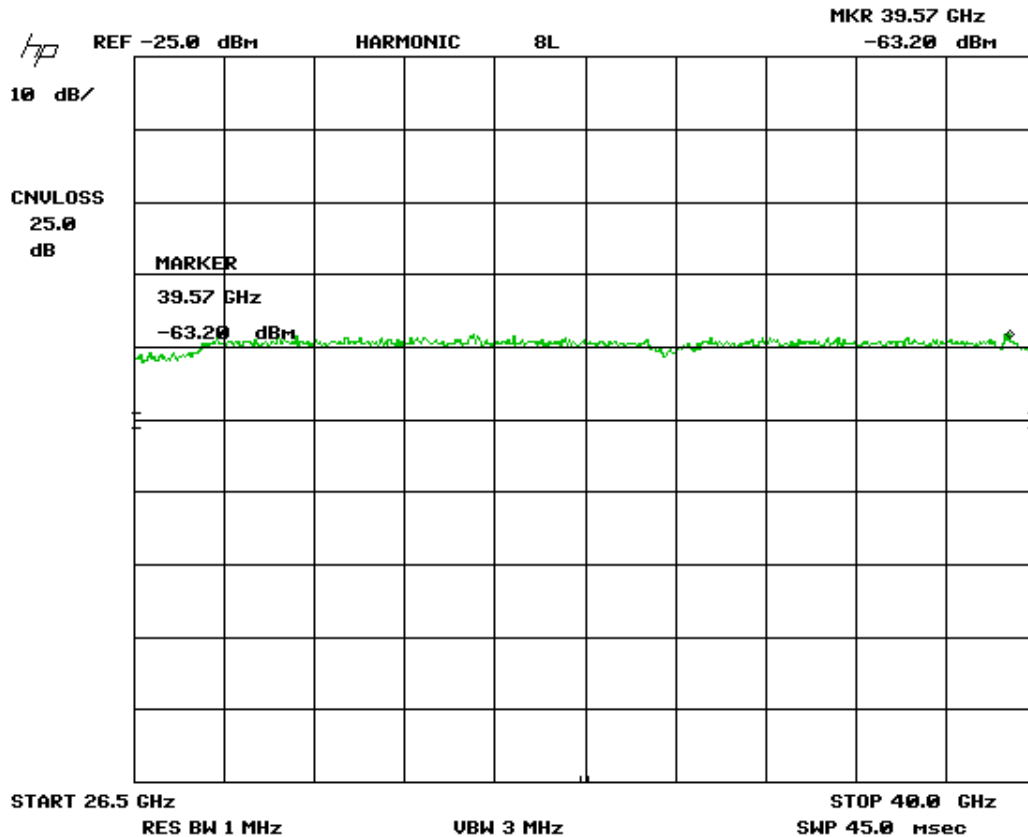
EIRP= -43.29 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -40.29 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-40.29) dBm/MHz = 14.29 dB

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

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 July 7, 2015  
 Polycom Inc.  
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**Figure 7. Antenna Conducted Emissions Channel 36 802.11a, Part 4**

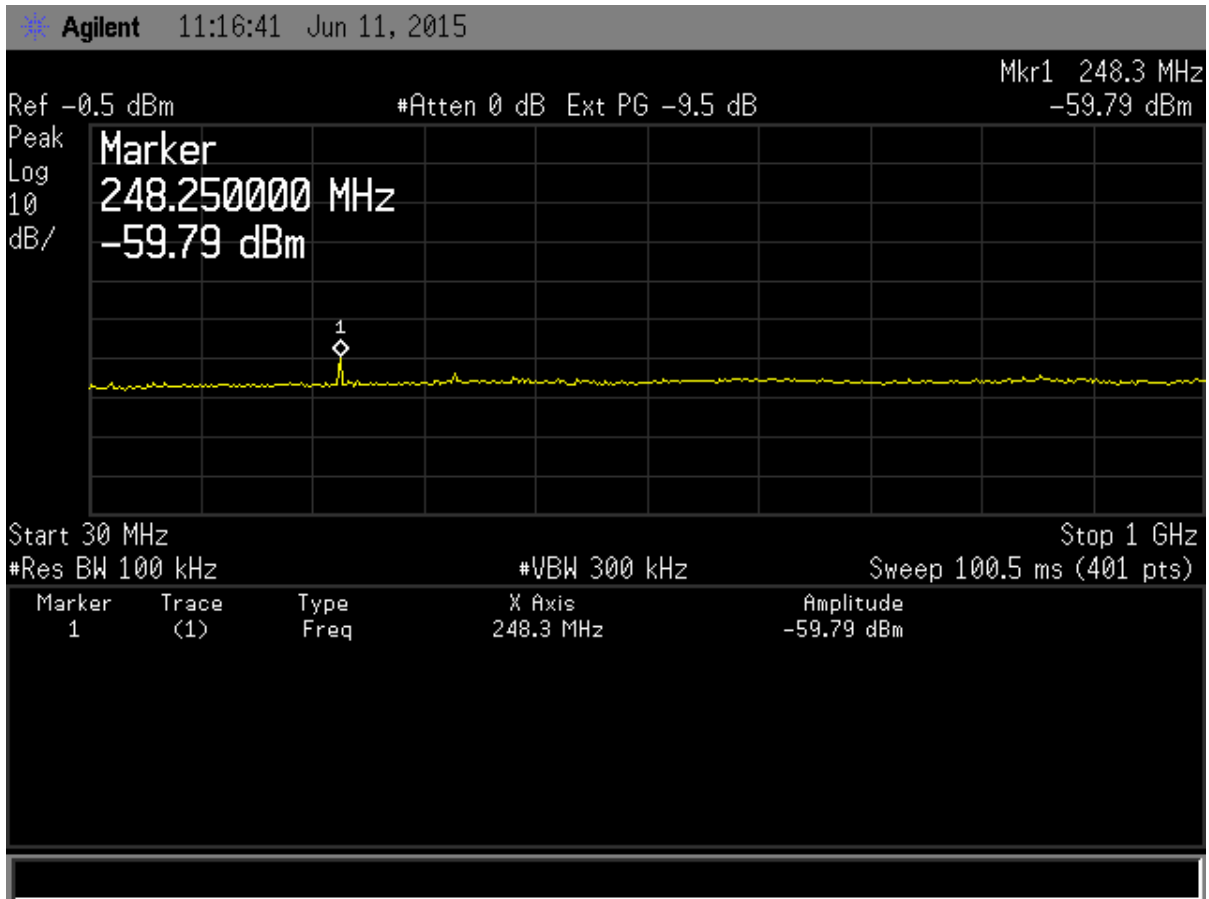
$EIRP = -63.20 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -60.20 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-60.20) \text{ dBm/MHz} = 33.20 \text{ dB}$

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

FCC Part 15 Certification/ RSS 247  
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**Figure 8. Antenna Conducted Emissions Channel 48 802.11a, Part 1**

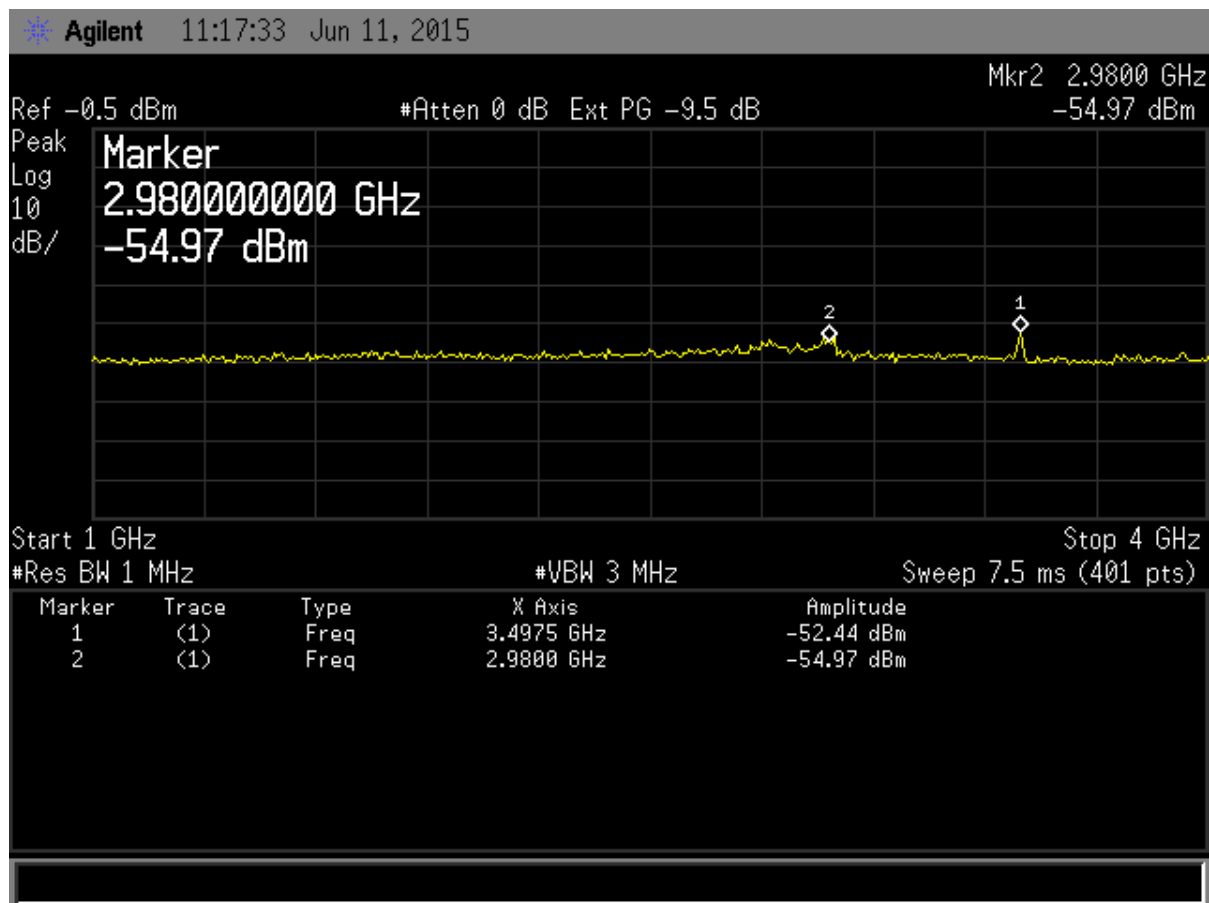
EIRP= -59.79 dBm + 3.0 dBi (applied antenna gain) + 4.7 dB (ground reflection factor)= -52.09 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-52.09) dBm/MHz = 24.09 dB

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

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**Figure 9. Antenna Conducted Emissions Channel 48 802.11a, Part 2**

$EIRP = -54.97 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -51.97 \text{ dBm}$

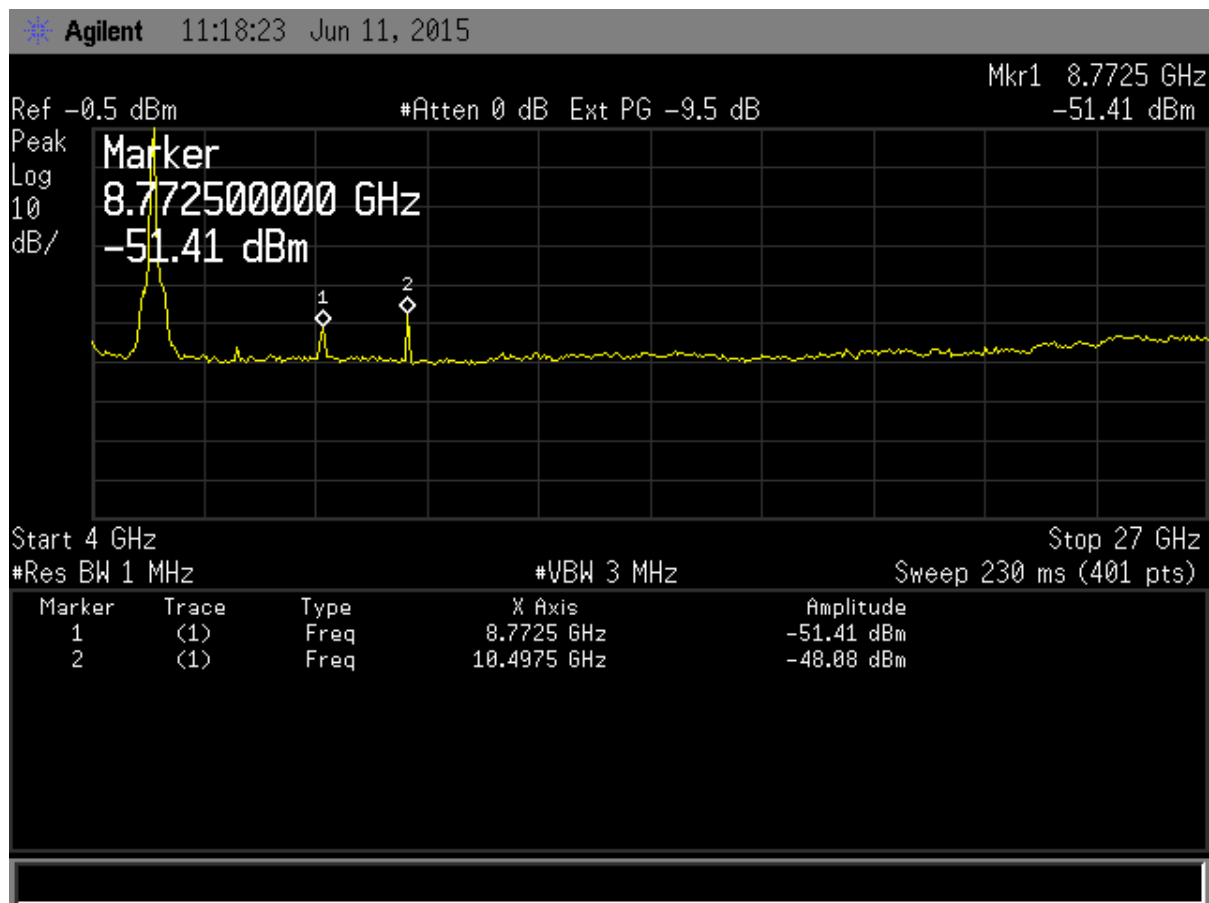
$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-51.97) \text{ dBm/MHz} = 24.97 \text{ dB}$



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

FCC Part 15 Certification/ RSS 247  
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15-0086  
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**Figure 10. Antenna Conducted Emissions Channel 48 802.11a, Part 3**

Note: Large signal seen in the figure above is the fundamental emission.

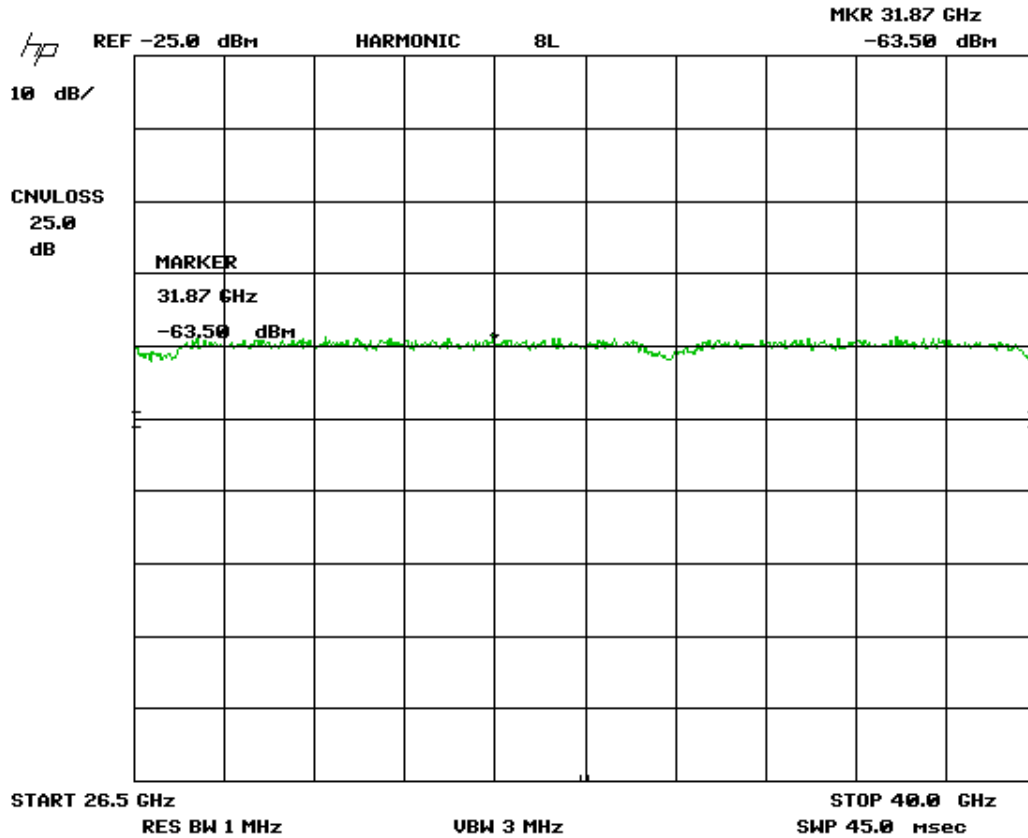
$EIRP = -48.08 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -45.08 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-45.08) \text{ dBm/MHz} = 18.08 \text{ dB}$

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

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0086  
 July 7, 2015  
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**Figure 11. Antenna Conducted Emissions Channel 48 802.11a, Part 4**

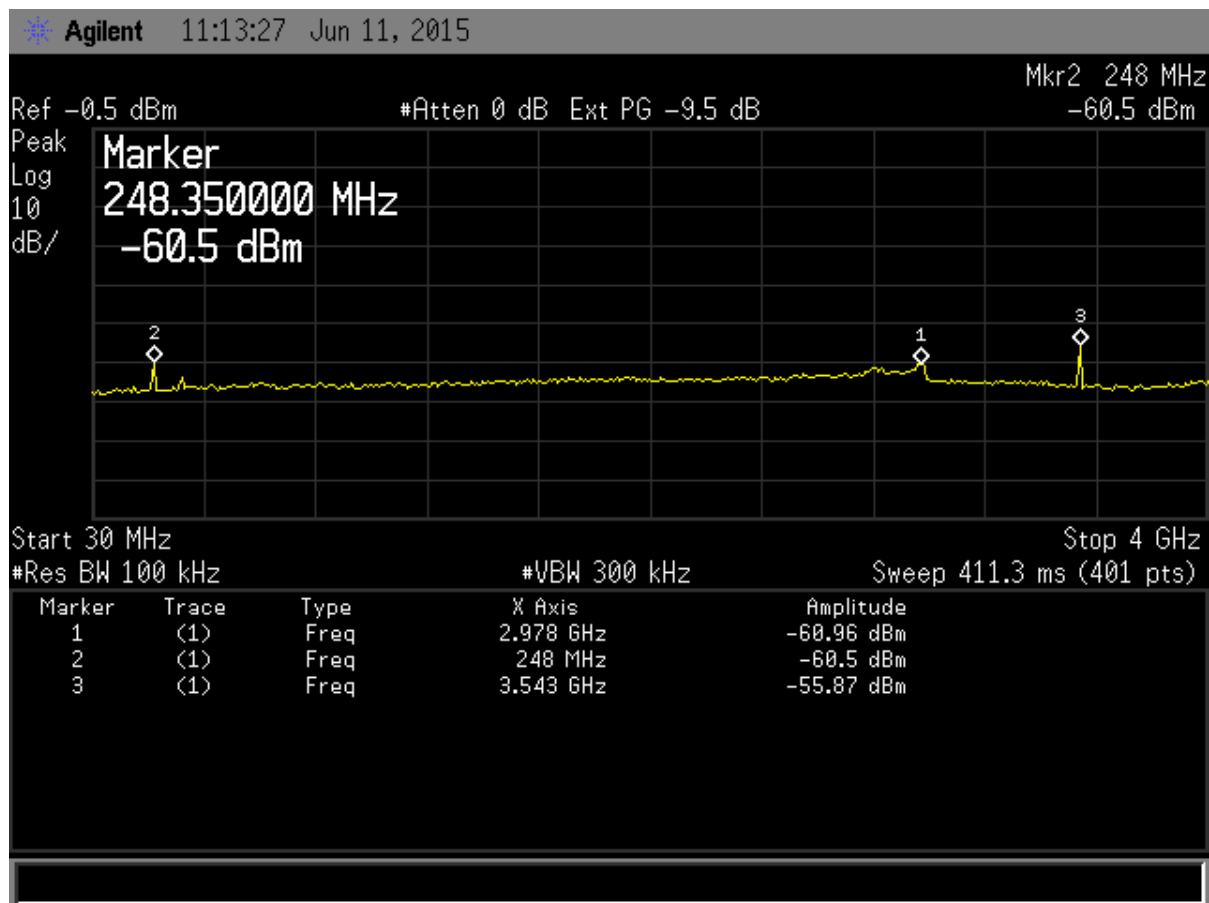
EIRP= -63.50 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -60.50 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-60.50) dBm/MHz = 33.50 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  
 15-0086  
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**Figure 12. Antenna Conducted Emissions Channel 64 802.11a, Part 1**

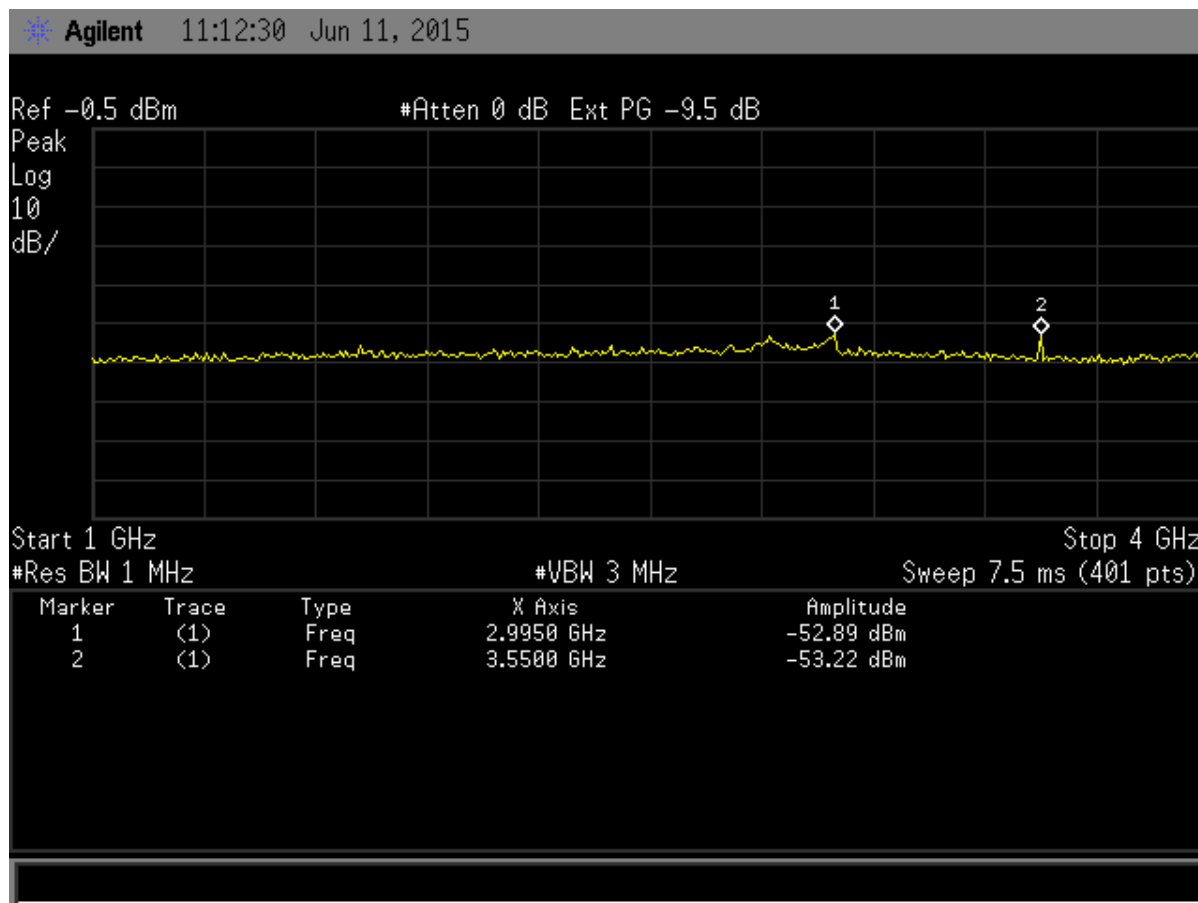
$EIRP = -55.87 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 4.7 \text{ dB (ground reflection factor)} = -48.17 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-48.17) \text{ dBm/MHz} = 21.17 \text{ dB}$

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

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**Figure 13. Antenna Conducted Emissions Channel 64 802.11a, Part 2**

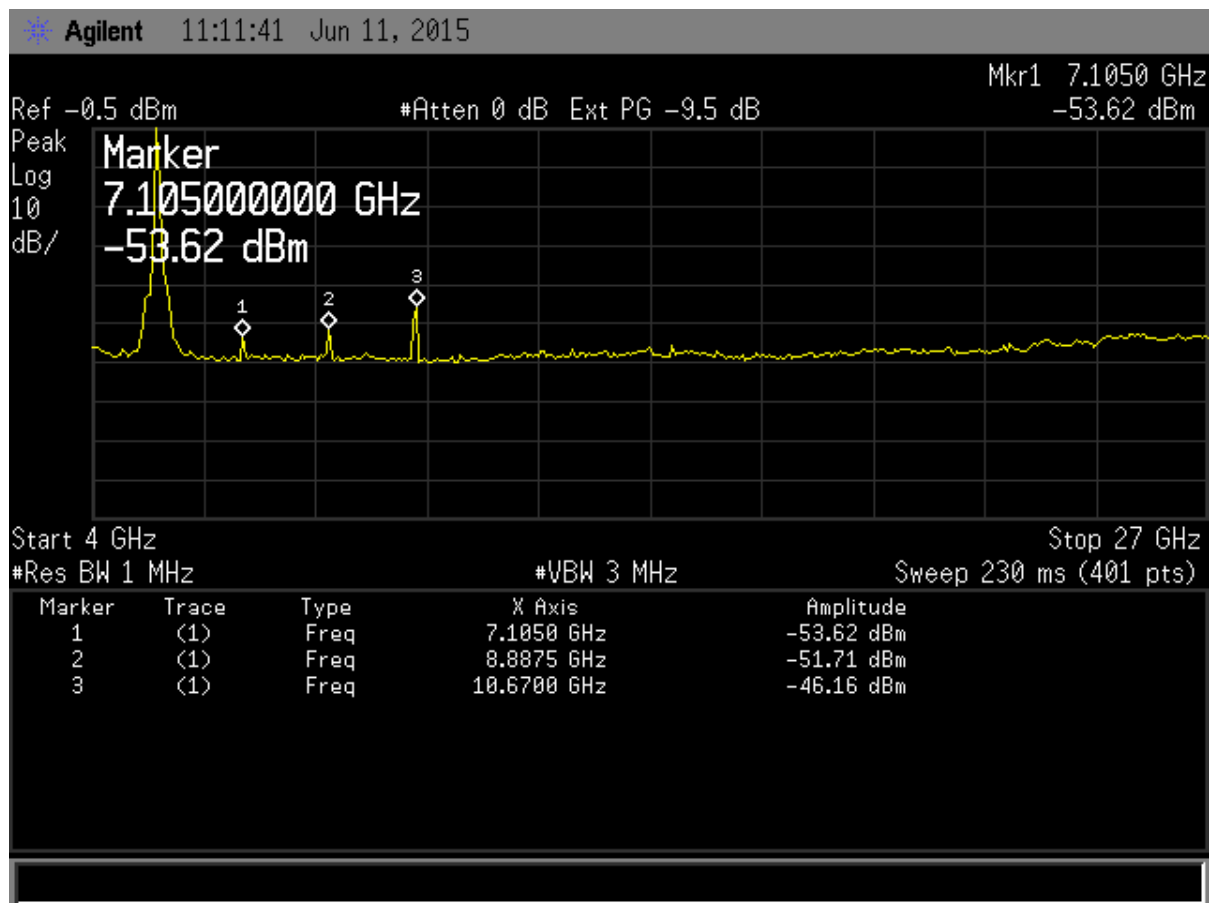
EIRP= -52.89 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -49.89 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-49.89) dBm/MHz = 22.89 dB

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

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**Figure 14. Antenna Conducted Emissions Channel 64 802.11a, Part 3**

Note: Large signal seen in the figure above is the fundamental emission

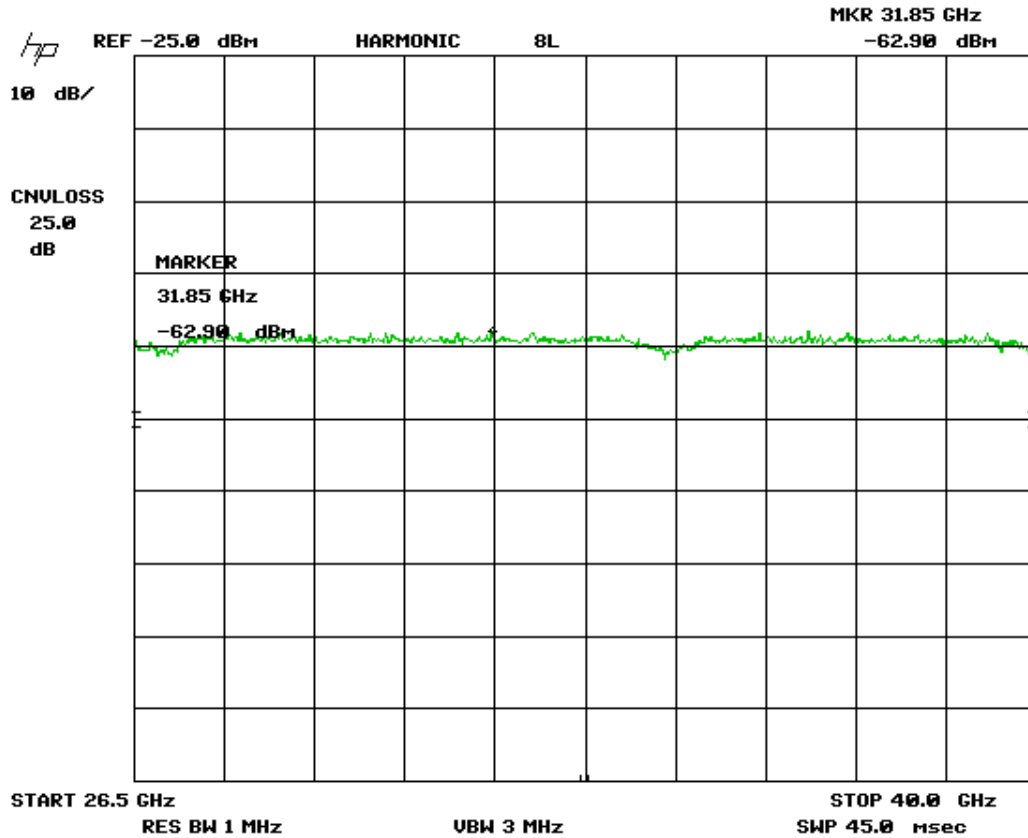
EIRP= -46.16 dBm + 2.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -43.16 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-43.16) dBuV/m= 16.16 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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**Figure 15. Antenna Conducted Emissions Channel 64 802.11a, Part 4**

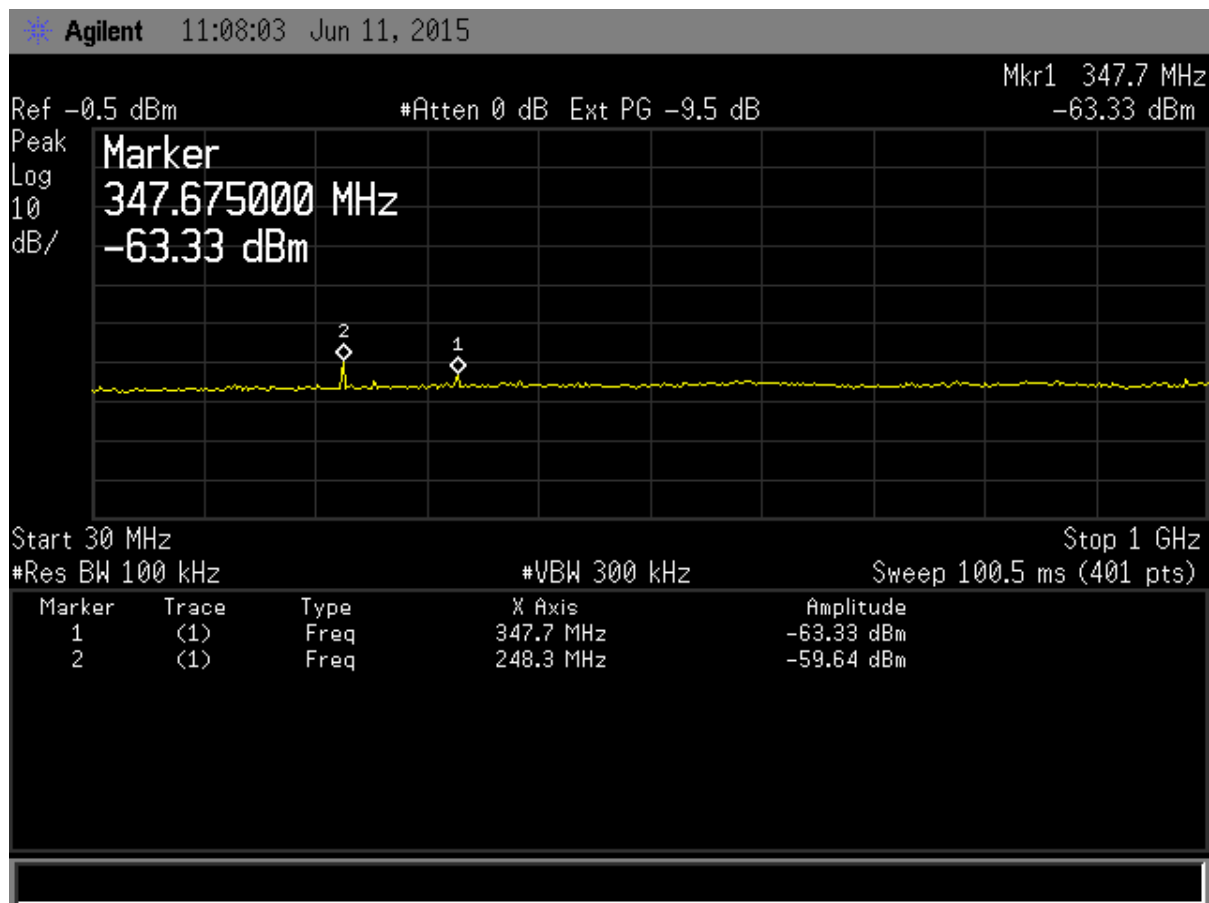
EIRP= -62.90 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -59.90 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-59.90) dBm/MHz = 32.90 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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**Figure 16. Antenna Conducted Emissions Channel 100 802.11a, Part 1**

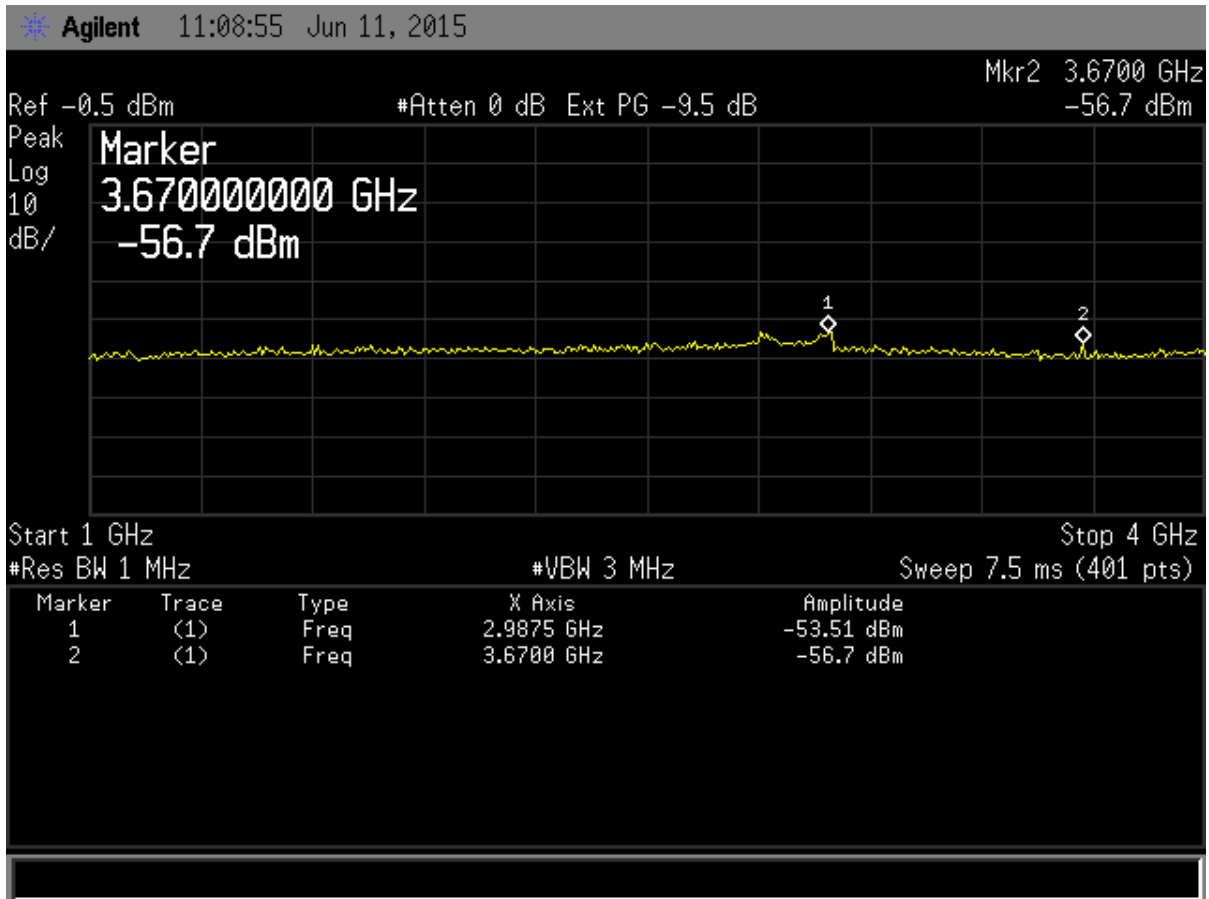
$EIRP = -59.64\text{dBm} + 3.0\text{ dBi (applied antenna gain)} + 4.7\text{ dB (ground reflection factor)} = -51.94\text{ dBm}$

$Limit = -27\text{ dBm/MHz (15.407 (b))}$

$Margin = -27\text{ dBm/MHz} - (-51.94)\text{ dBm/MHz} = 24.94\text{ dB}$

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

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**Figure 17. Antenna Conducted Emissions Channel 100 802.11a, Part 2**

EIRP= -53.51 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -50.51 dBm

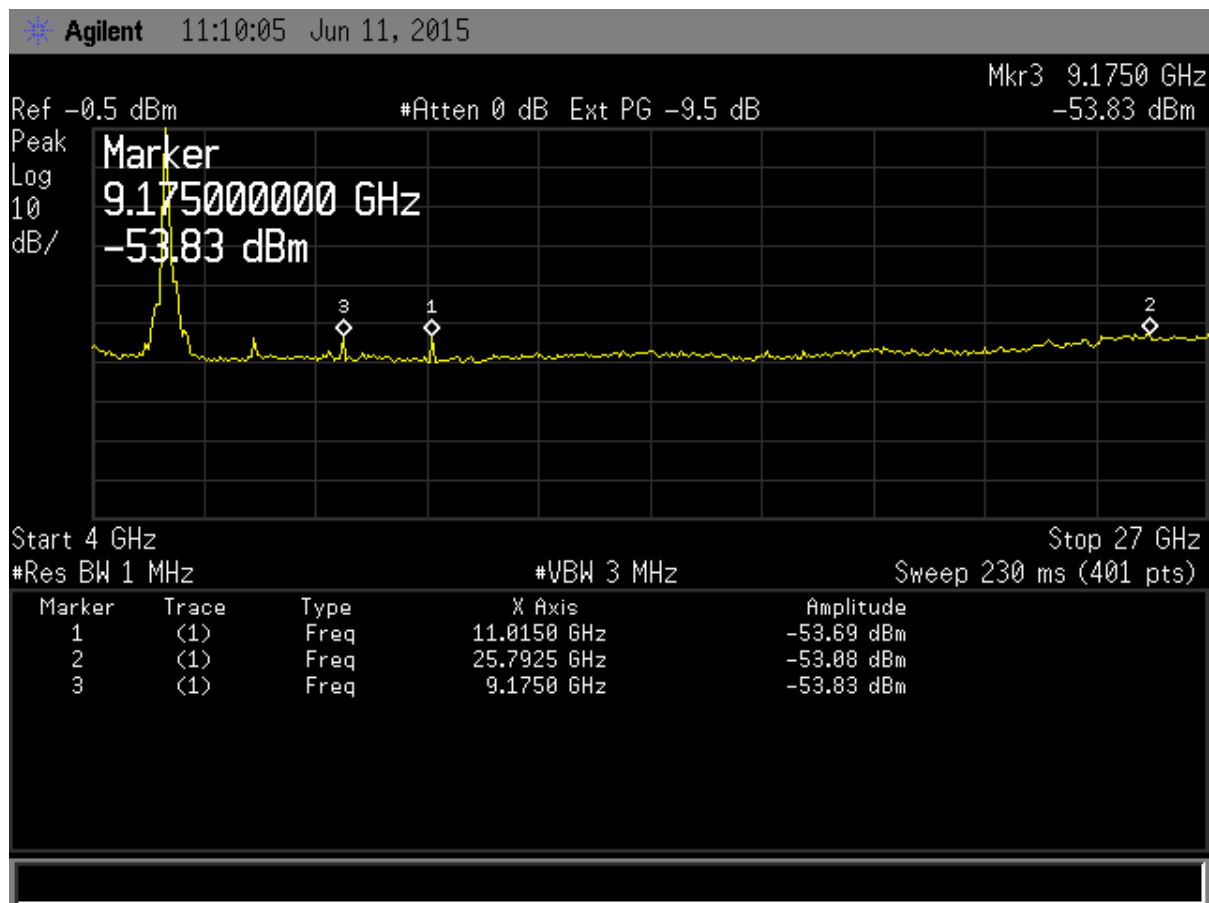
Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-50.51) dBm/MHz = 23.51 dB



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

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**Figure 18. Antenna Conducted Emissions Channel 100 802.11a, Part 3**

Note: Large signal seen is the fundamental emissions

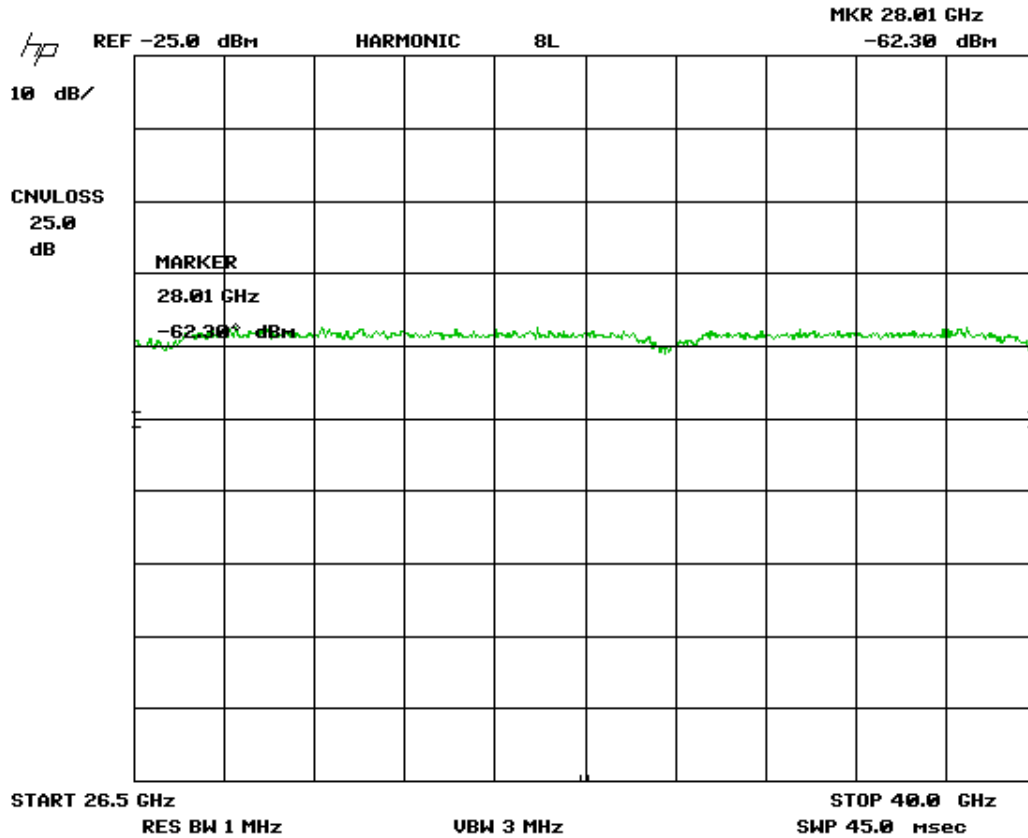
EIRP= -53.08 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -50.08 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-50.08) dBm/MHz = 23.08 dB

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

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**Figure 19. Antenna Conducted Emissions Channel 100 802.11a, Part 4**

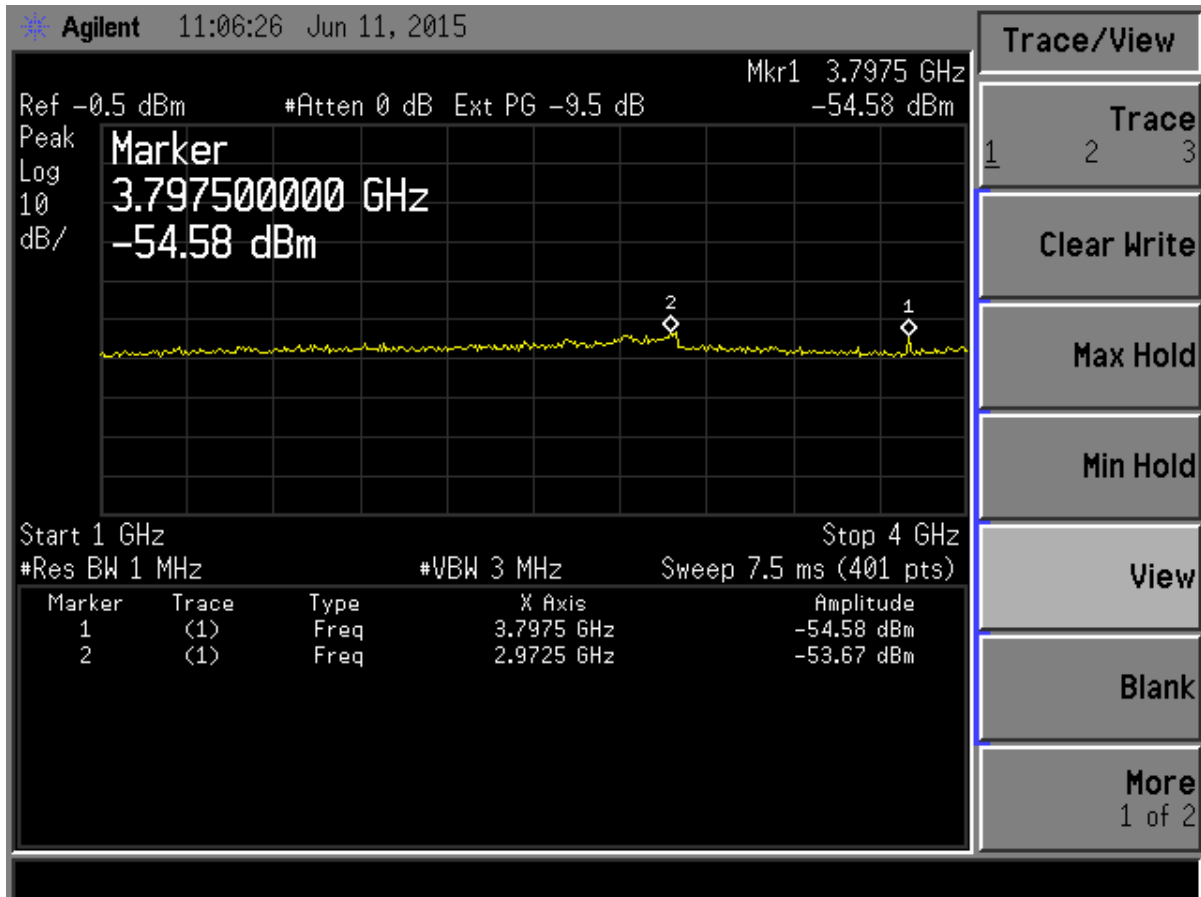
$EIRP = -62.30 \text{ dBm} + 3.0 \text{ dBi (max antenna gain)} + 0 \text{ dB (ground reflection factor)} = -59.30 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-59.30) \text{ dBm/MHz} = 32.30 \text{ dB}$

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

FCC Part 15 Certification/ RSS 247  
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**Figure 20. Antenna Conducted Emissions Channel 140 802.11a, Part 1**

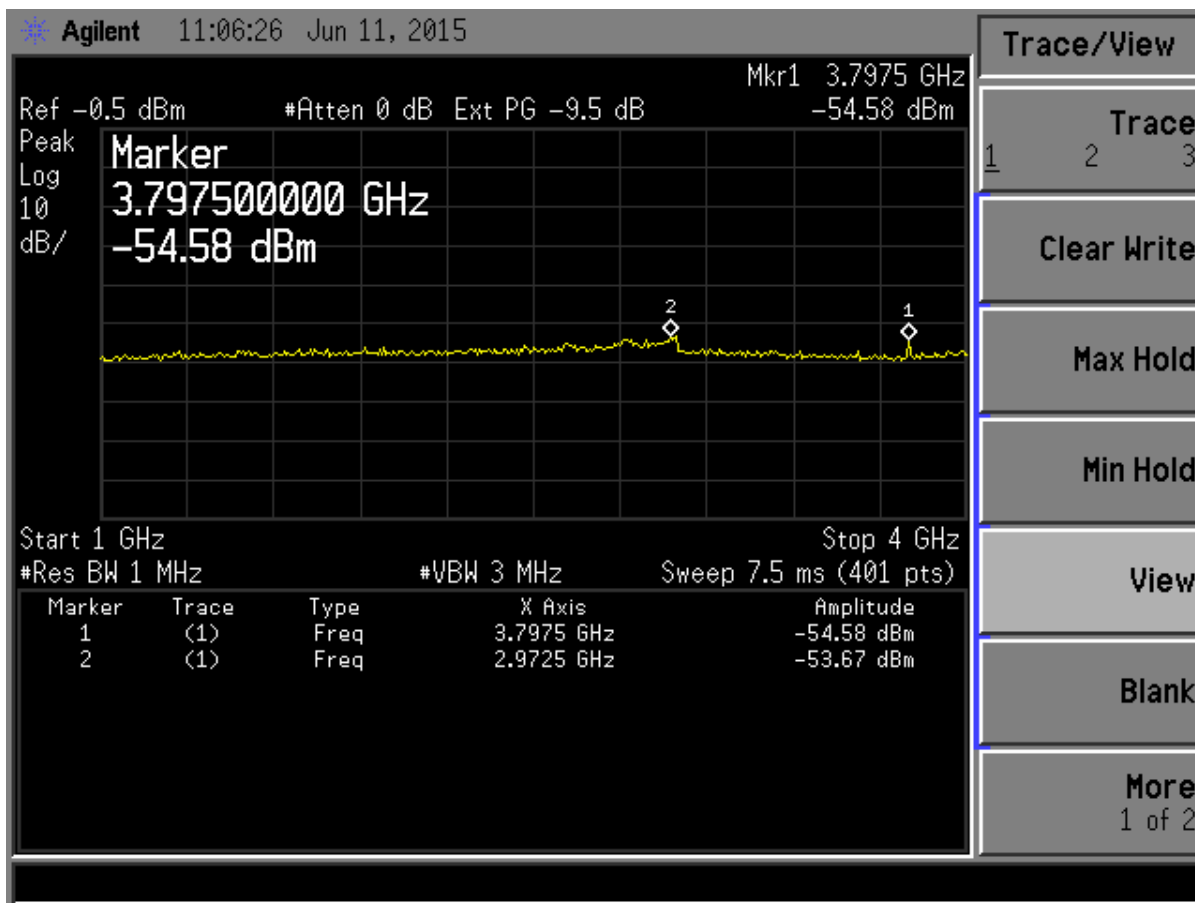
EIRP= -53.67 dBm + 3.0 dBi (applied antenna gain) + 4.7 dB (ground reflection factor)= -45.97 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-45.97) dBm/MHz = 18.97 dB

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

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**Figure 21. Antenna Conducted Emissions Channel 140 802.11a, Part 2**

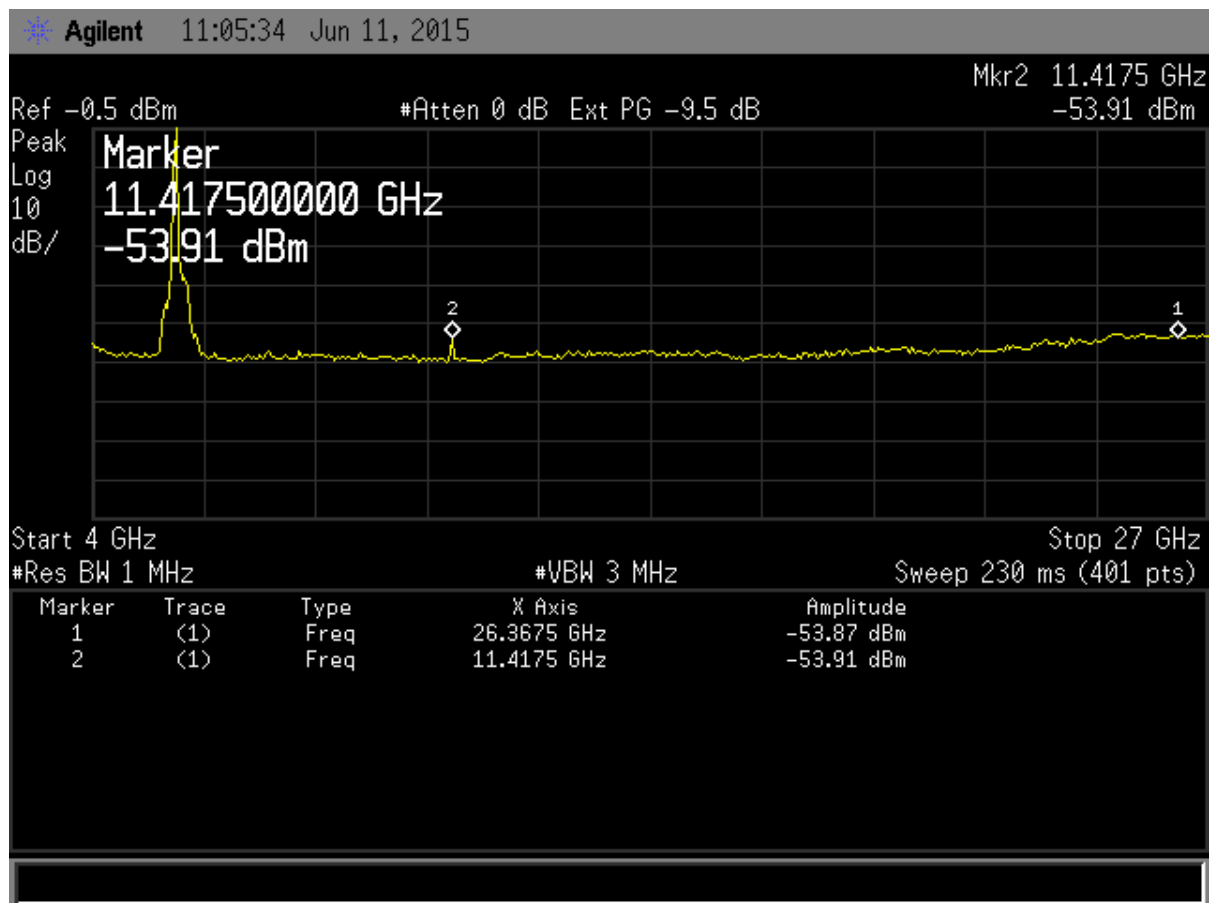
$EIRP = -54.58 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -51.58 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-51.58) \text{ dBm/MHz} = 24.58 \text{ dB}$

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

FCC Part 15 Certification/ RSS 247  
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**Figure 22. Antenna Conducted Emissions Channel 140 802.11a, Part 3**

Note: Large signal seen in the figure above is the fundamental emission

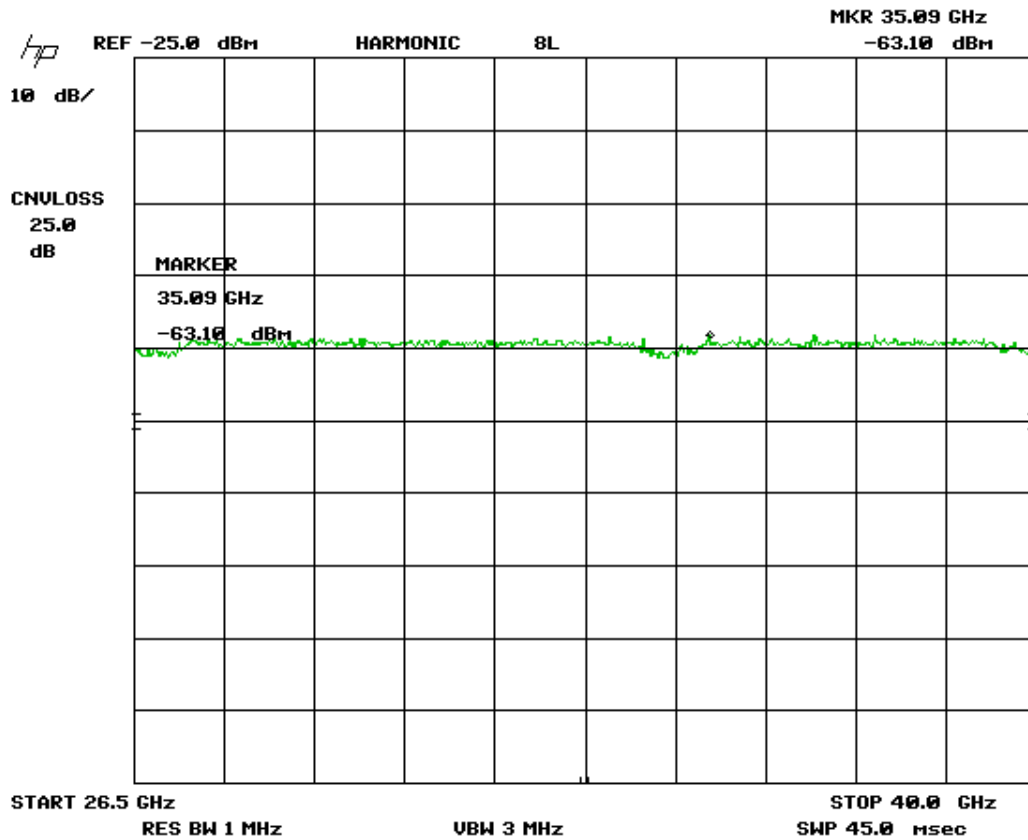
EIRP= -53.87 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -50.87 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-50.87) dBm/MHz = 23.87 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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**Figure 23. Antenna Conducted Emissions Channel 140 802.11a, Part 4**

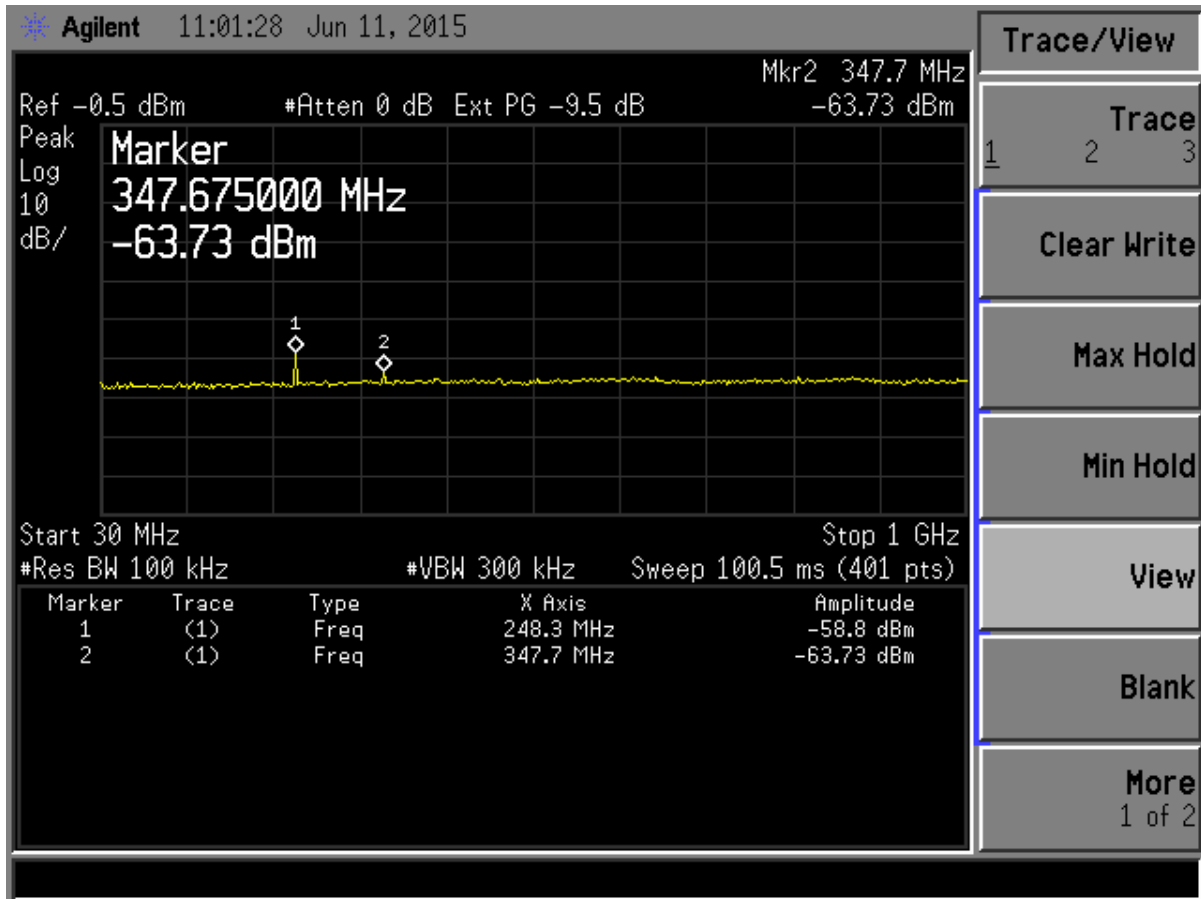
$EIRP = -63.10 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -60.10 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-60.10) \text{ dBm/MHz} = 33.10 \text{ dB}$

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

FCC Part 15 Certification/ RSS 247  
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**Figure 24. Antenna Conducted Emissions Channel 149 802.11a, Part 1**

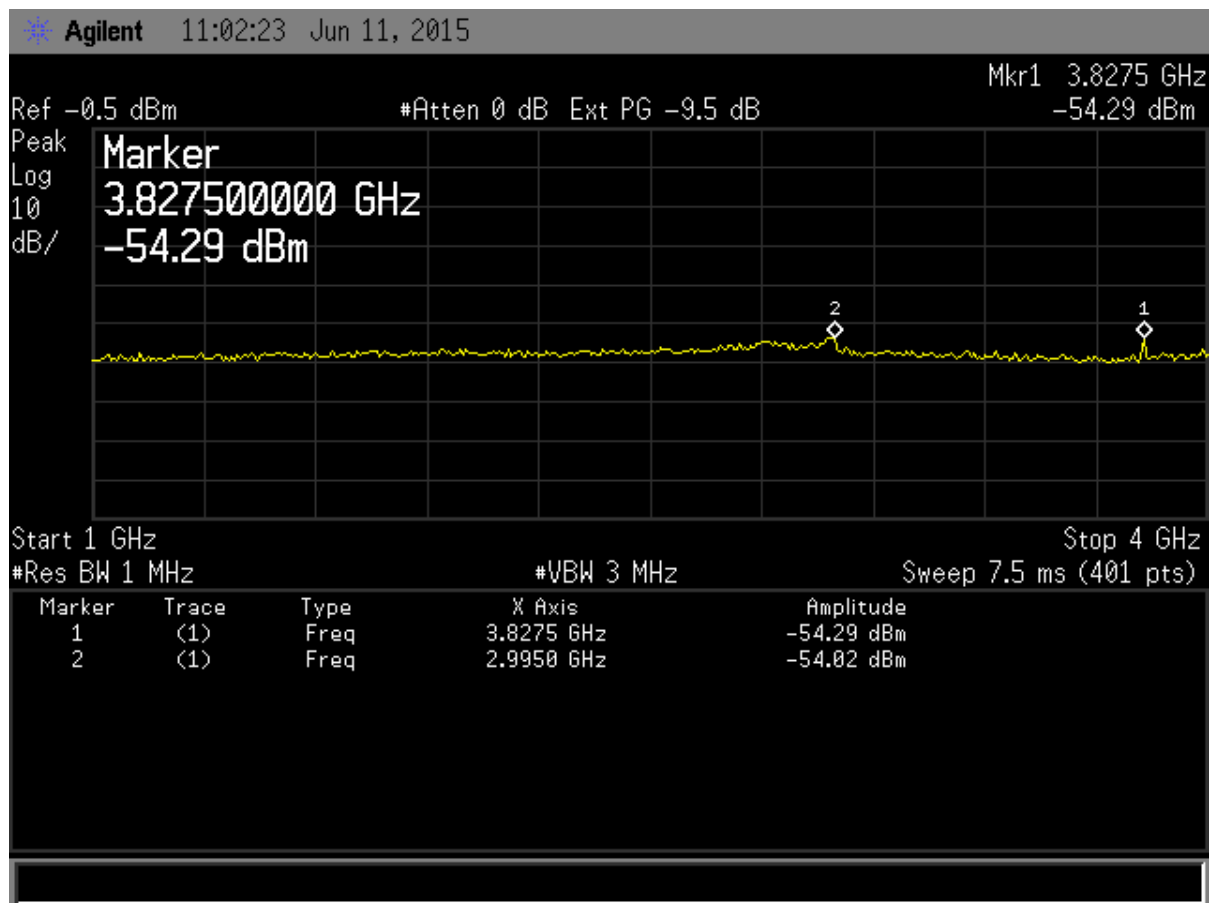
$EIRP = -58.80 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 4.7 \text{ dB (ground reflection factor)} = 51.10 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-51.10) \text{ dBm/MHz} = 24.10 \text{ dB}$

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

FCC Part 15 Certification/ RSS 247  
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**Figure 25. Antenna Conducted Emissions Channel 149 802.11a, Part 2**

$EIRP = -54.02 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -51.02 \text{ dBm}$

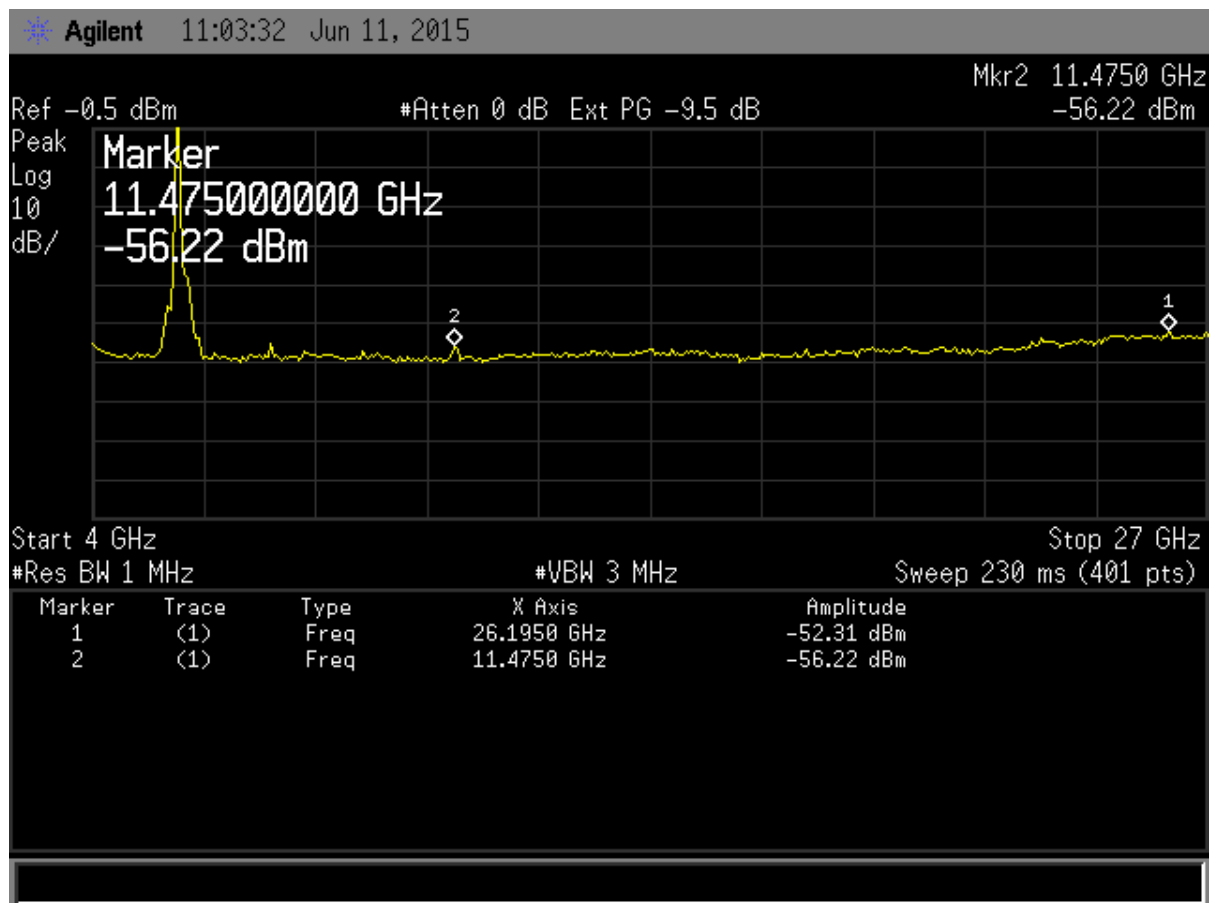
$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-51.02) \text{ dBm/MHz} = 24.02 \text{ dB}$



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

FCC Part 15 Certification/ RSS 247  
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**Figure 26. Antenna Conducted Emissions Channel 149 802.11a, Part 3**

Note: Large signal seen in the figure above is the fundamental emission

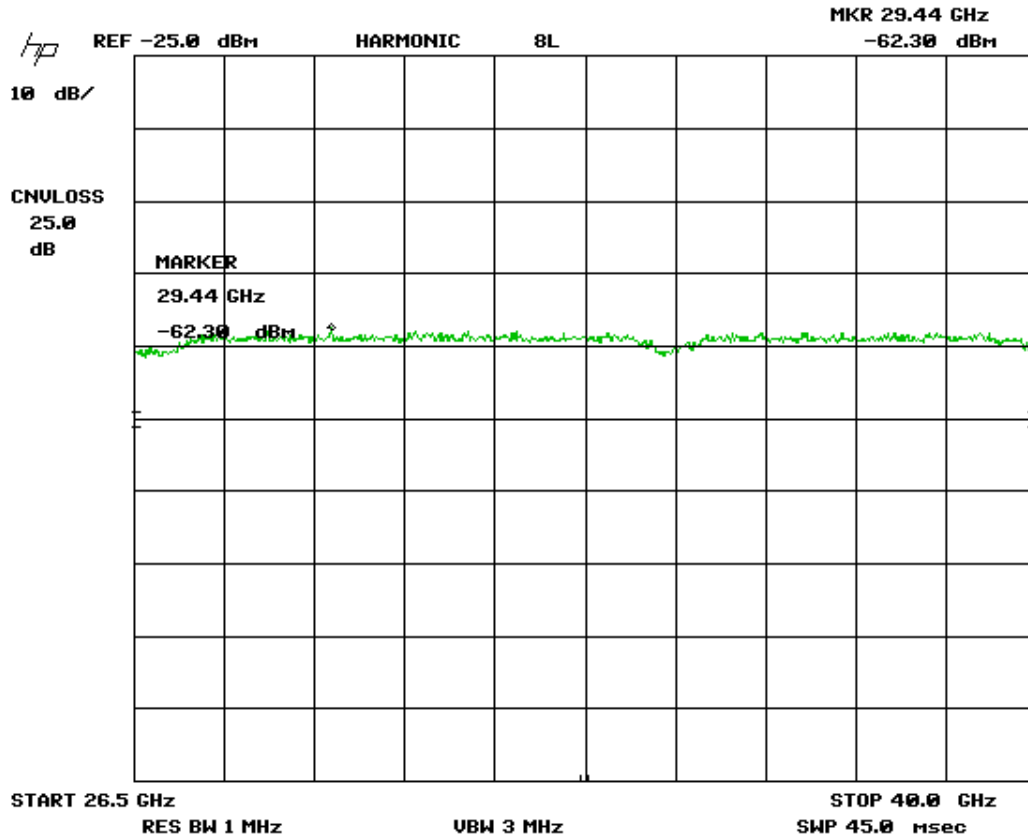
EIRP= -52.31 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -49.31 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-49.31) dBm/MHz= 22.31 dB

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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 15-0086  
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**Figure 27. Antenna Conducted Emissions Channel 149 802.11a, Part 4**

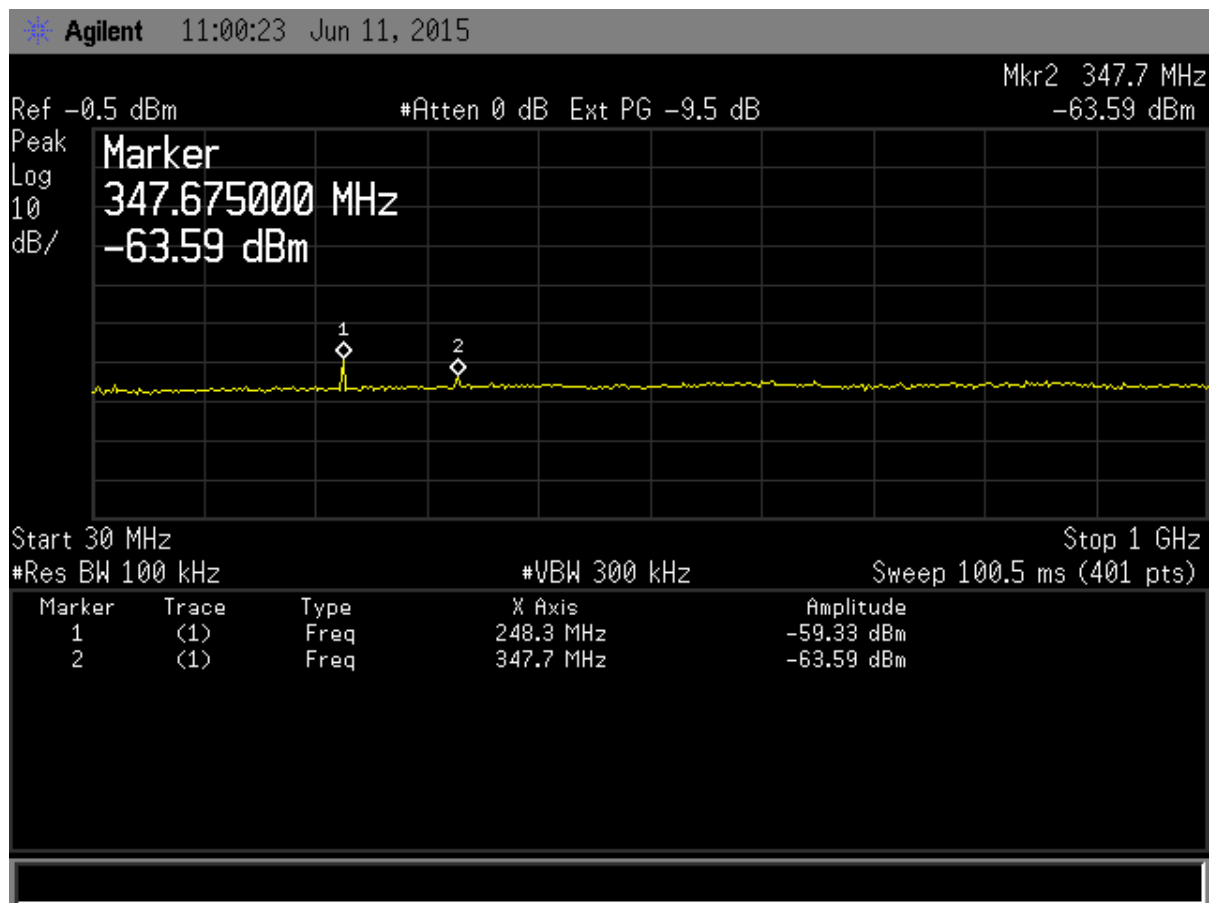
EIRP= -62.30 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -59.30 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-59.30) dBm/MHz= 34.30 dB

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

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**Figure 28. Antenna Conducted Emissions Channel 165 802.11a, Part 1**

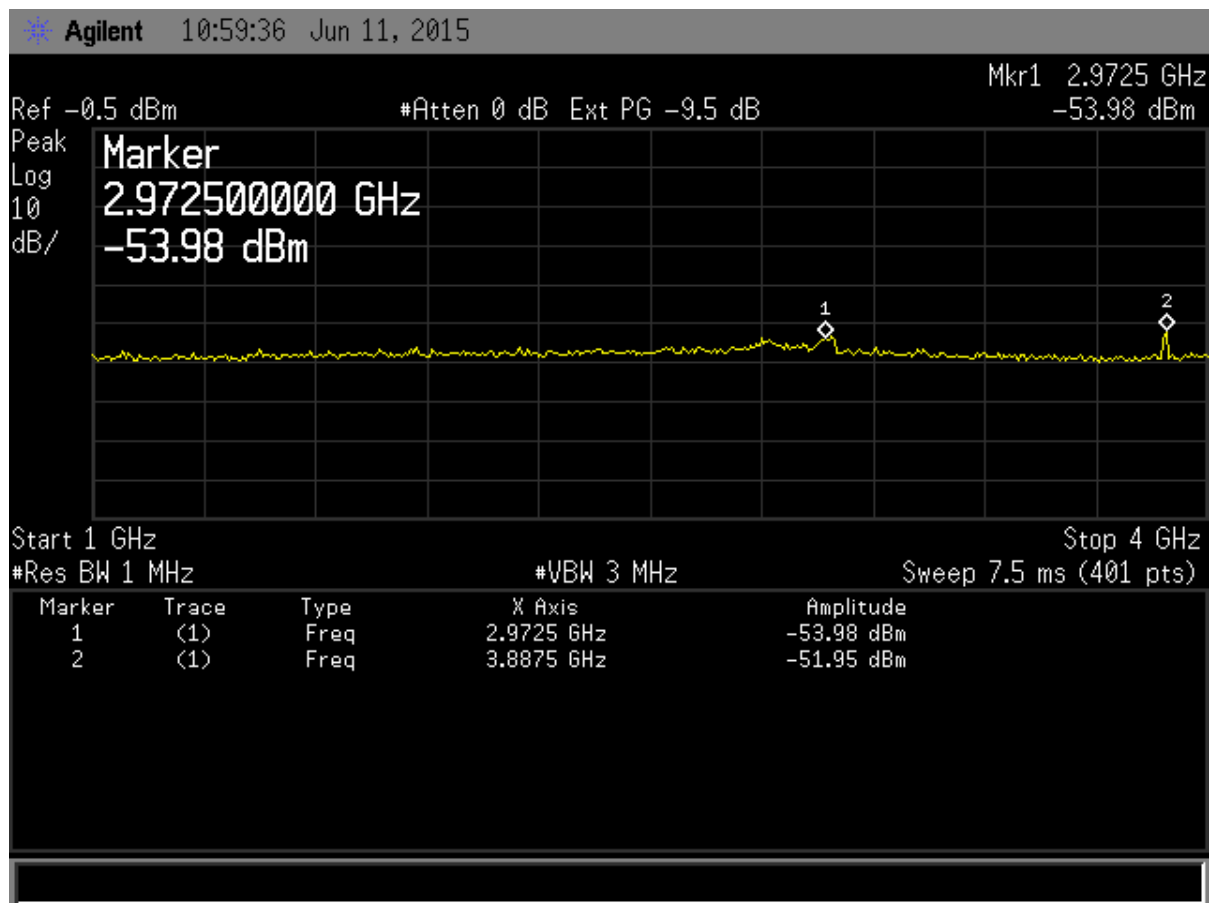
EIRP= -59.33 dBm + 3.0 dBi (applied antenna gain) + 4.7 dB (ground reflection factor)= -51.63 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-51.63) dBm/MHz= 24.63 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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**Figure 29. Antenna Conducted Emissions Channel 165 802.11a, Part 2**

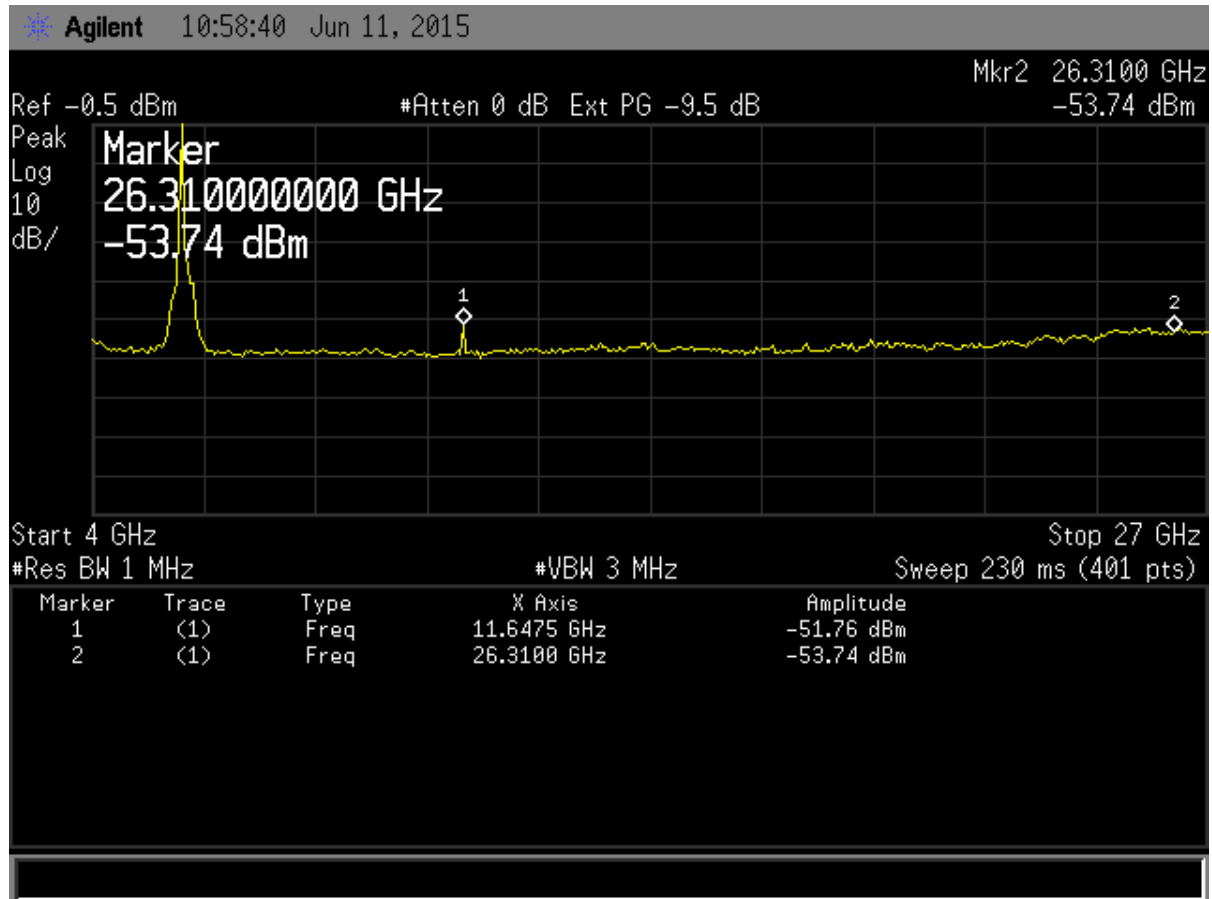
$EIRP = -51.95 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -48.95 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-48.95) \text{ dBm/MHz} = 21.95 \text{ dB}$

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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 15-0086  
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**Figure 30. Antenna Conducted Emissions Channel 165 802.11a, Part 3**

Note: Large signal seen in the above figure is the fundamental emission

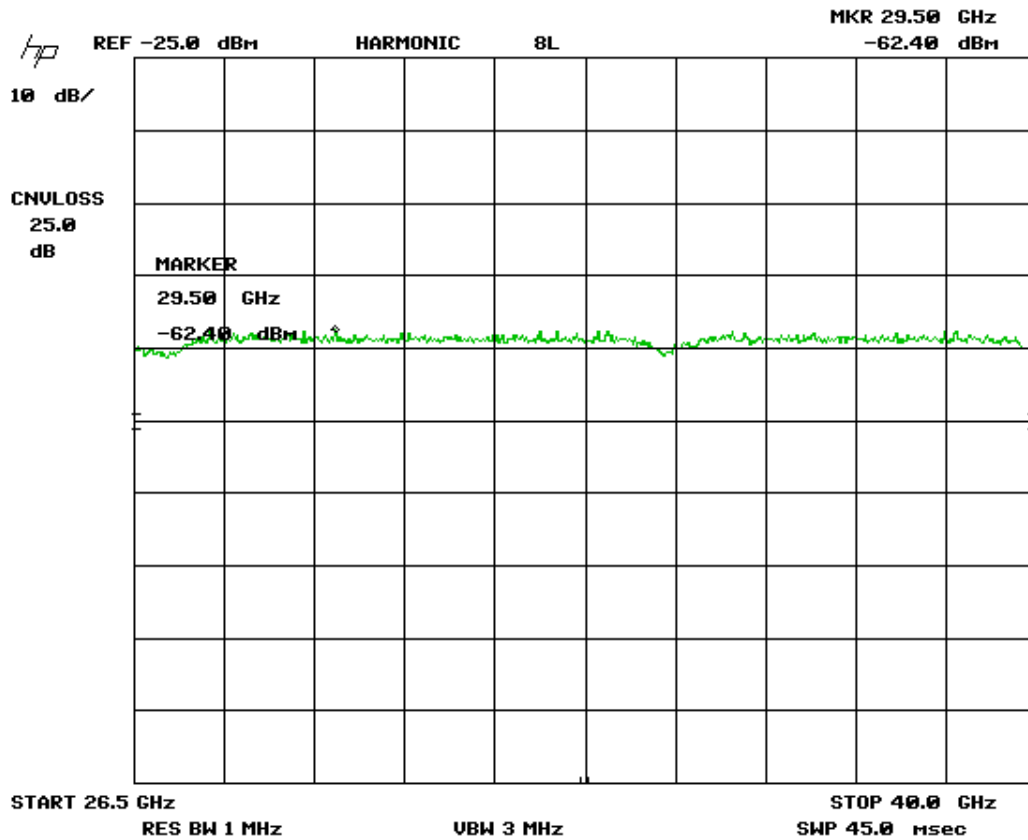
EIRP= -51.79dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -48.79 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-48.79) dBm/MHz= 21.79 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  
 15-0086  
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**Figure 31. Antenna Conducted Emissions Channel 165 802.11a, Part 4**

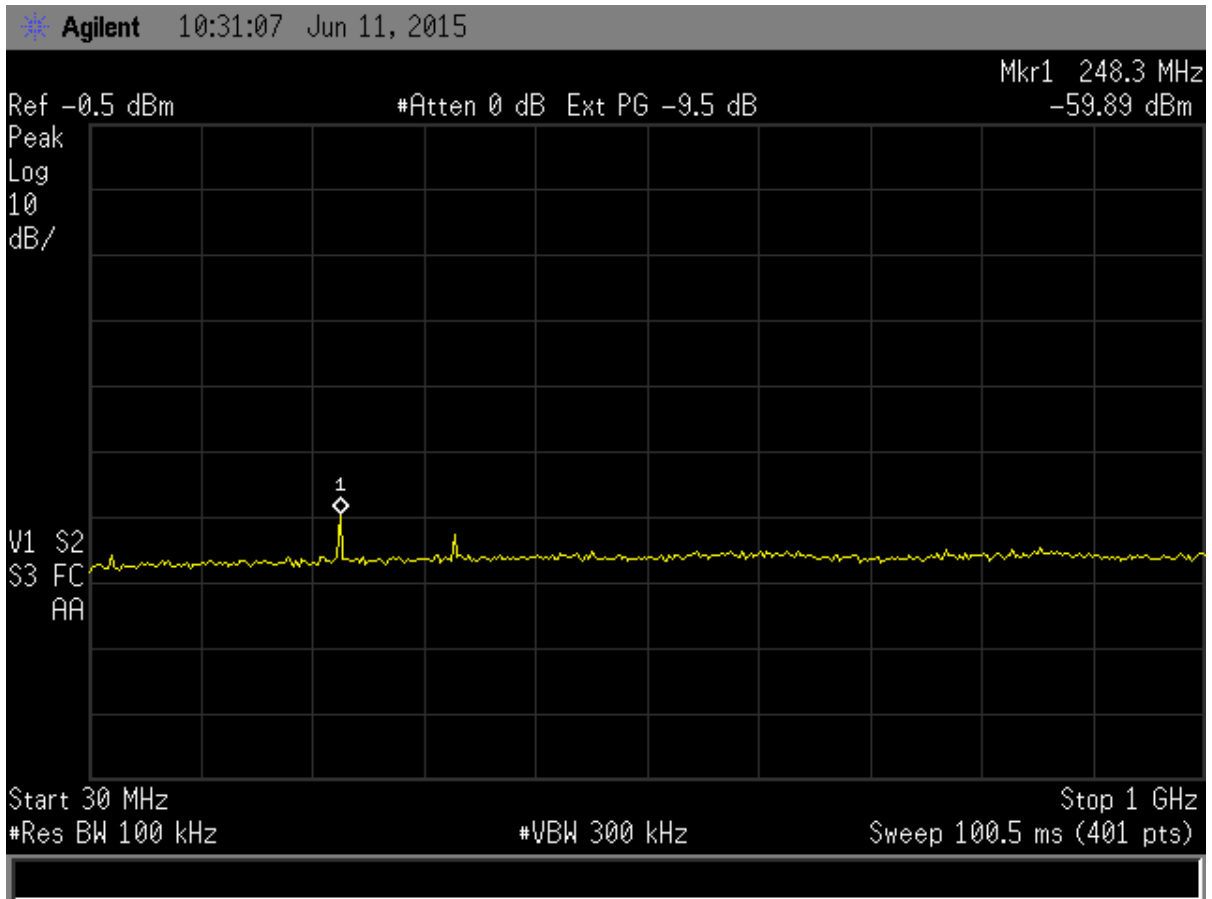
EIRP= -62.40 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -59.40 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-59.40) dBm/MHz= 32.40 dB

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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15-0086  
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**Figure 32. Antenna Conducted Emissions Channel 36 802.11n, Part 1**

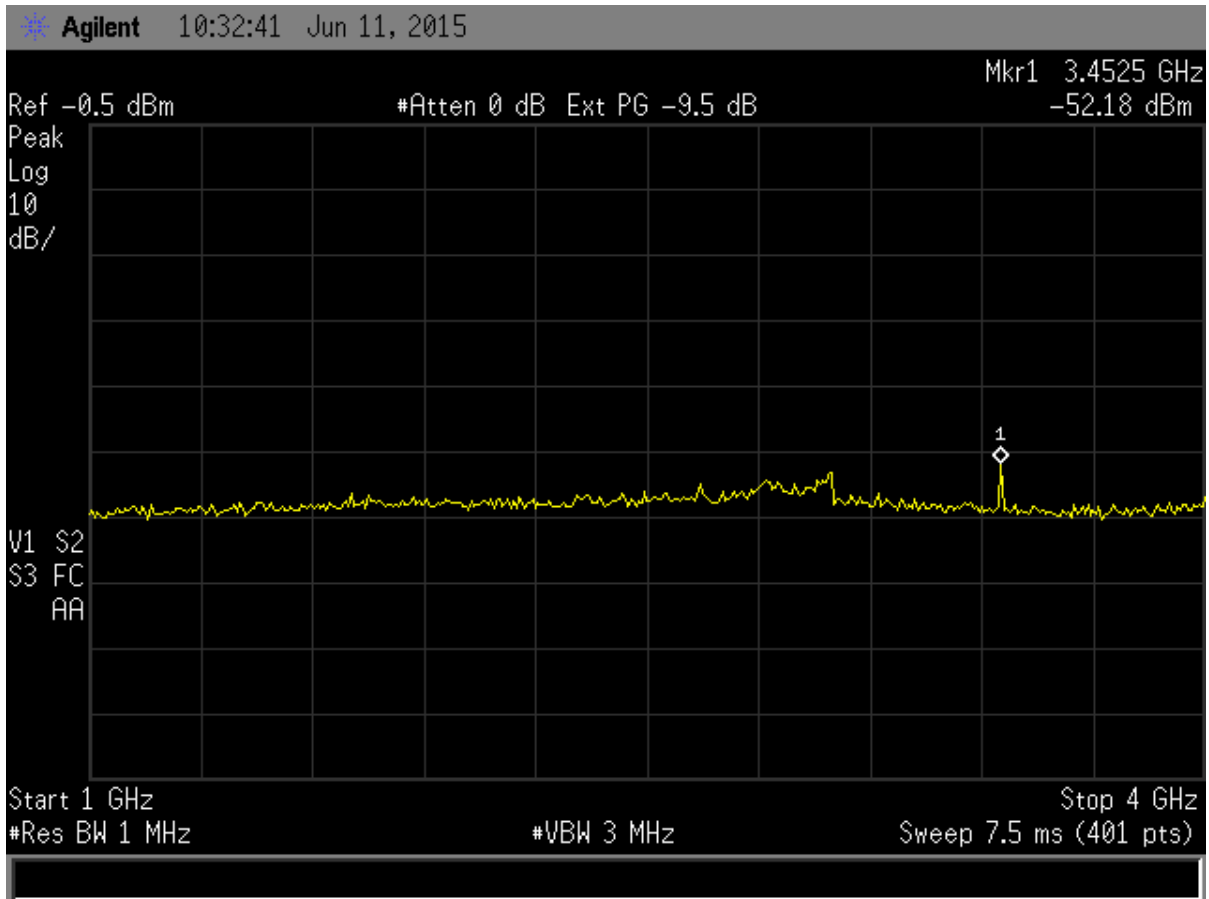
$EIRP = -59.89 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 4.7 \text{ dB (ground reflection factor)} = -56.89 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-56.89) \text{ dBm/MHz} = 29.89 \text{ dB}$

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

FCC Part 15 Certification/ RSS 247  
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**Figure 33. Antenna Conducted Emissions Channel 36 802.11n, Part 2**

$EIRP = -52.18 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -49.18 \text{ dBm}$

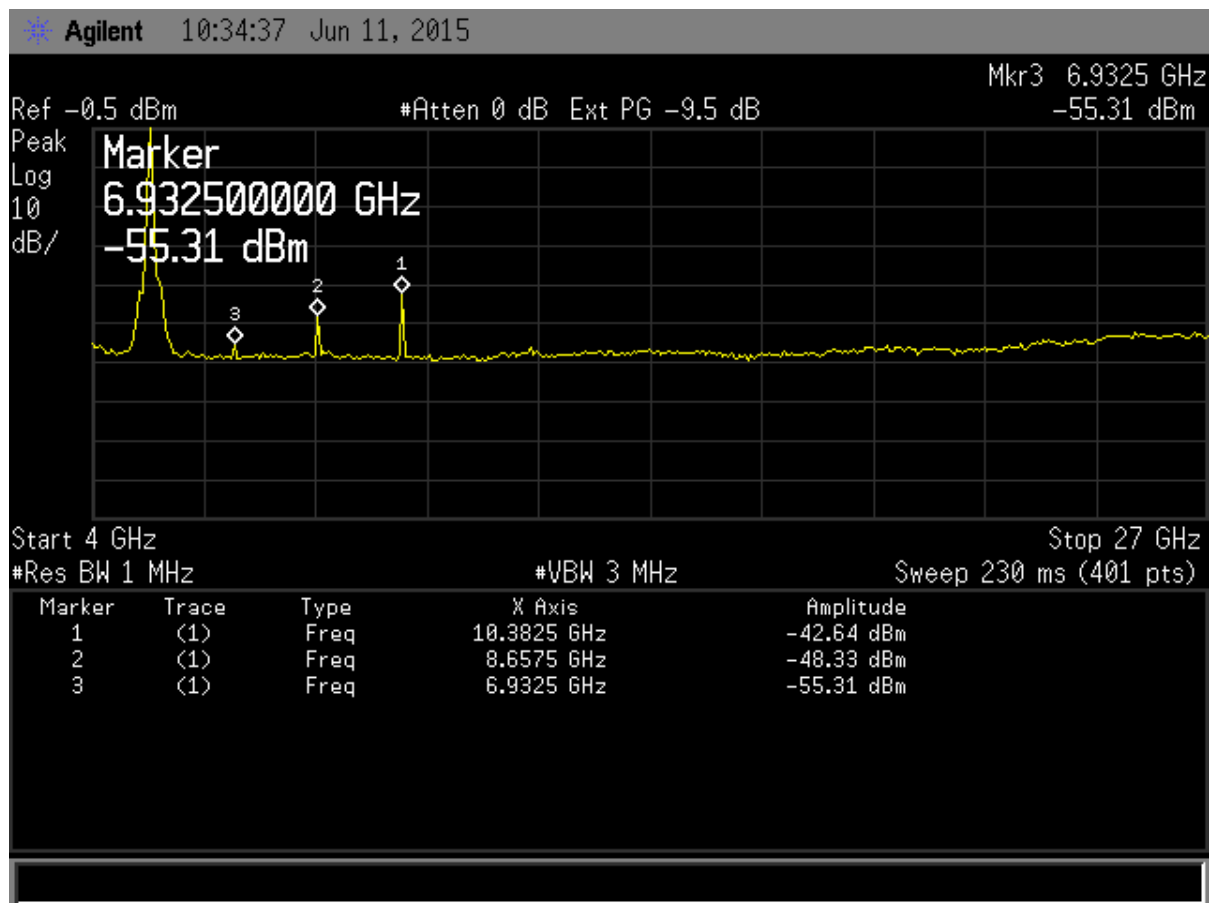
$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-49.18) \text{ dBm/MHz} = 22.18 \text{ dB}$



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

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**Figure 34. Antenna Conducted Emissions Channel 36 802.11n, Part 3**

Note: Large signal seen in the figure above is the fundamental emission

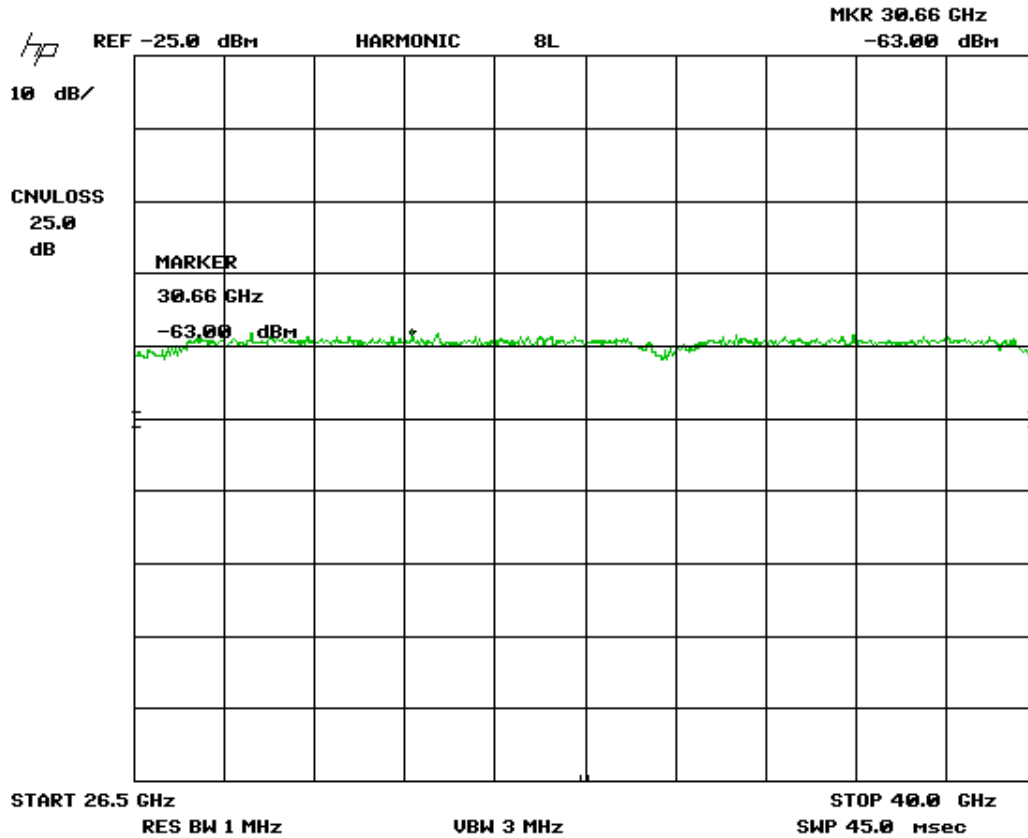
EIRP= -42.64 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -39.64 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-39.64) dBm/MHz= 12.64 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  
 15-0086  
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**Figure 35. Antenna Conducted Emissions Channel 36 802.11n, Part 4**

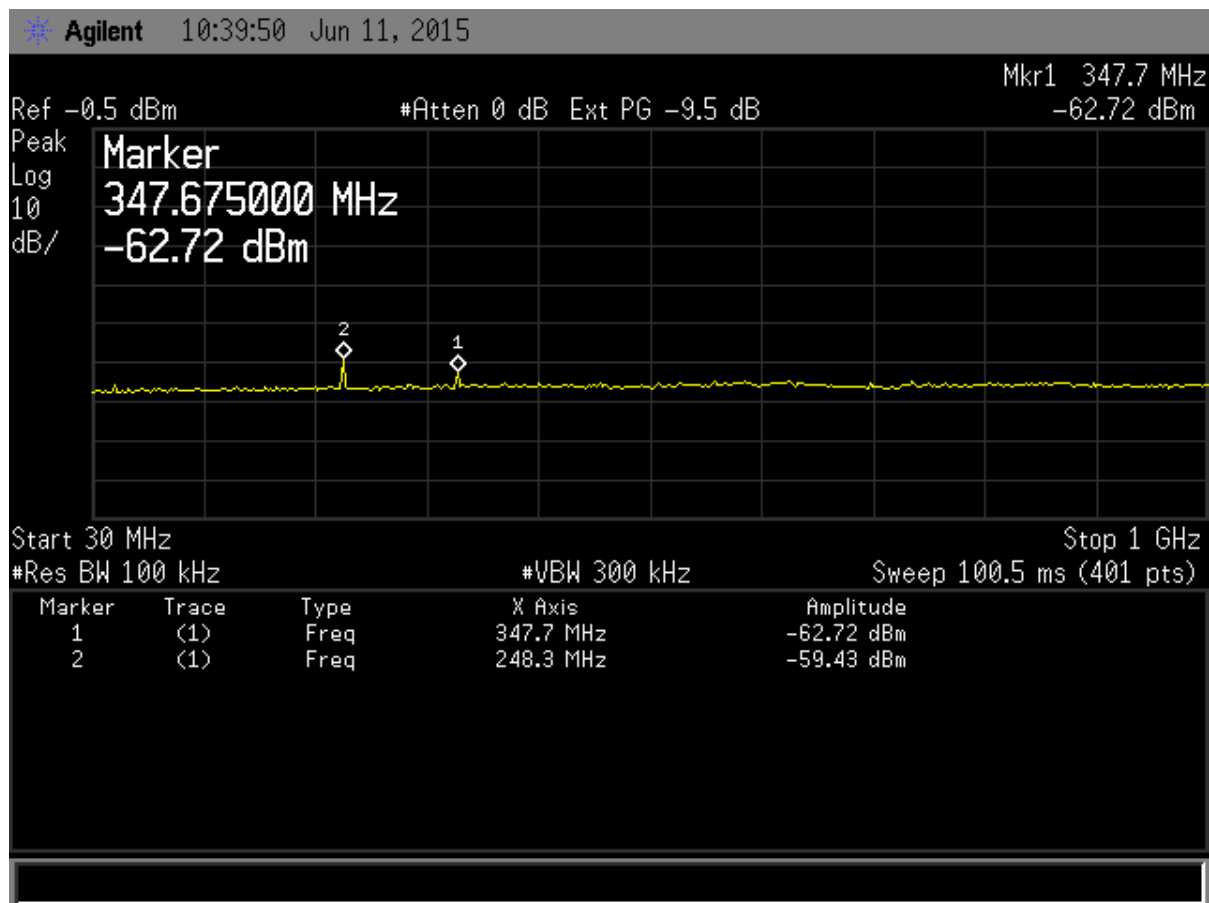
EIRP= -63.00 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -60.00 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-60.00) dBm/MHz= 33.00 dB

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

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1849C-P008  
15-0086  
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**Figure 36. Antenna Conducted Emissions Channel 48 802.11n, Part 1**

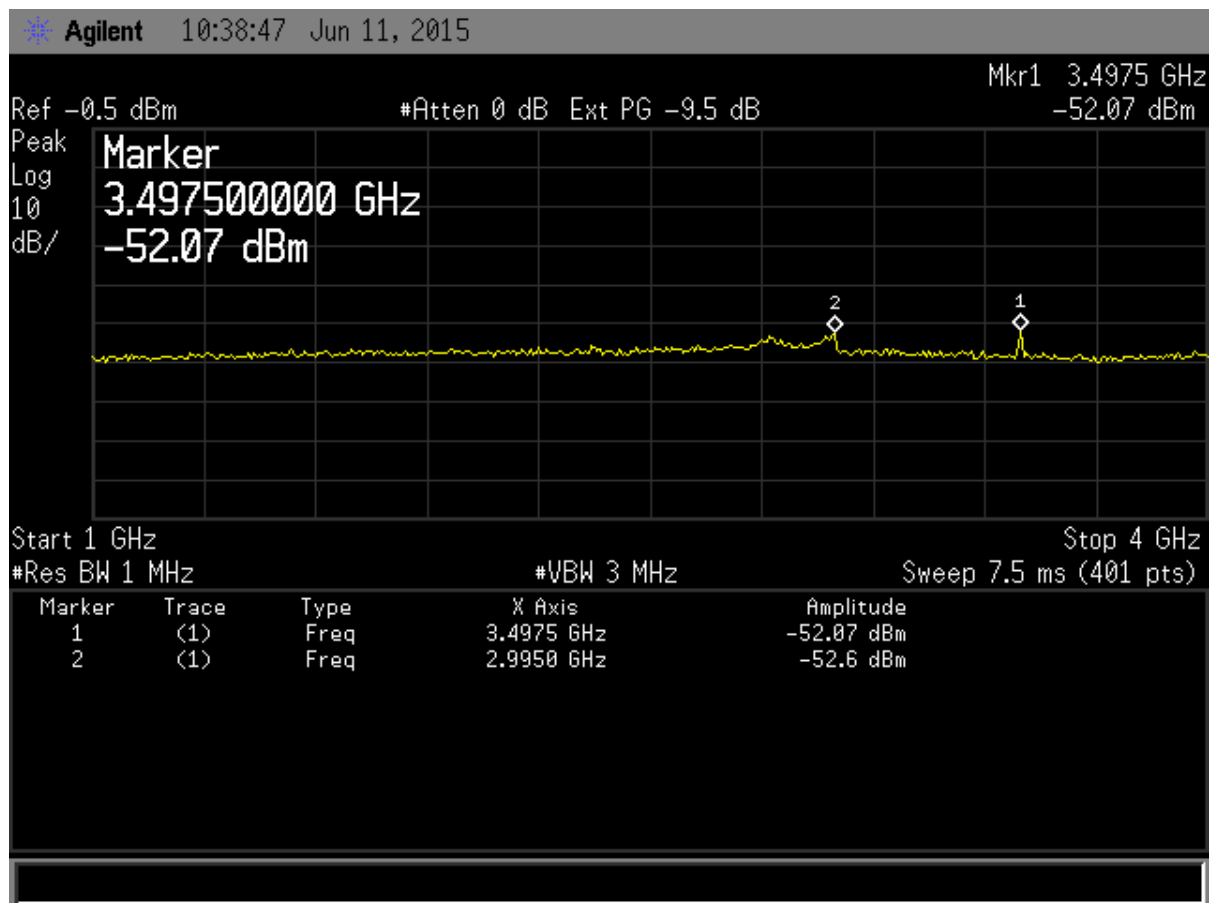
$EIRP = -59.43 \text{ dBm} + 3.0 \text{ dBi (max antenna gain)} + 4.7 \text{ dB (ground reflection factor)} = -51.73 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-51.73) \text{ dBm/MHz} = 24.73 \text{ dB}$

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

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**Figure 37. Antenna Conducted Emissions Channel 48 802.11n, Part 2**

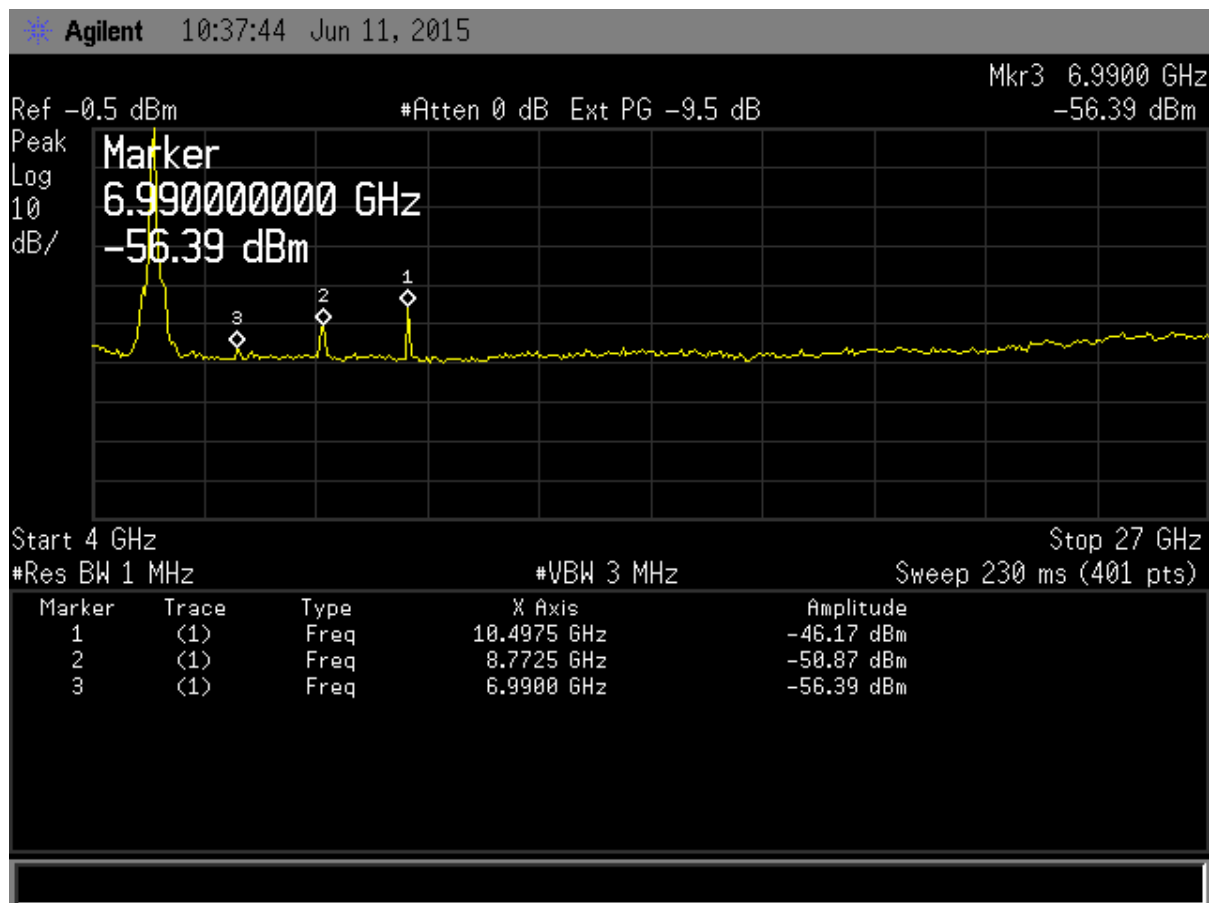
$EIRP = -52.07 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -49.07 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-49.07) \text{ dBm/MHz} = 22.07 \text{ dB}$

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

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**Figure 38. Antenna Conducted Emissions Channel 48 802.11n, Part 3**

Note: Large signal seen in the above figure is the fundamental emission

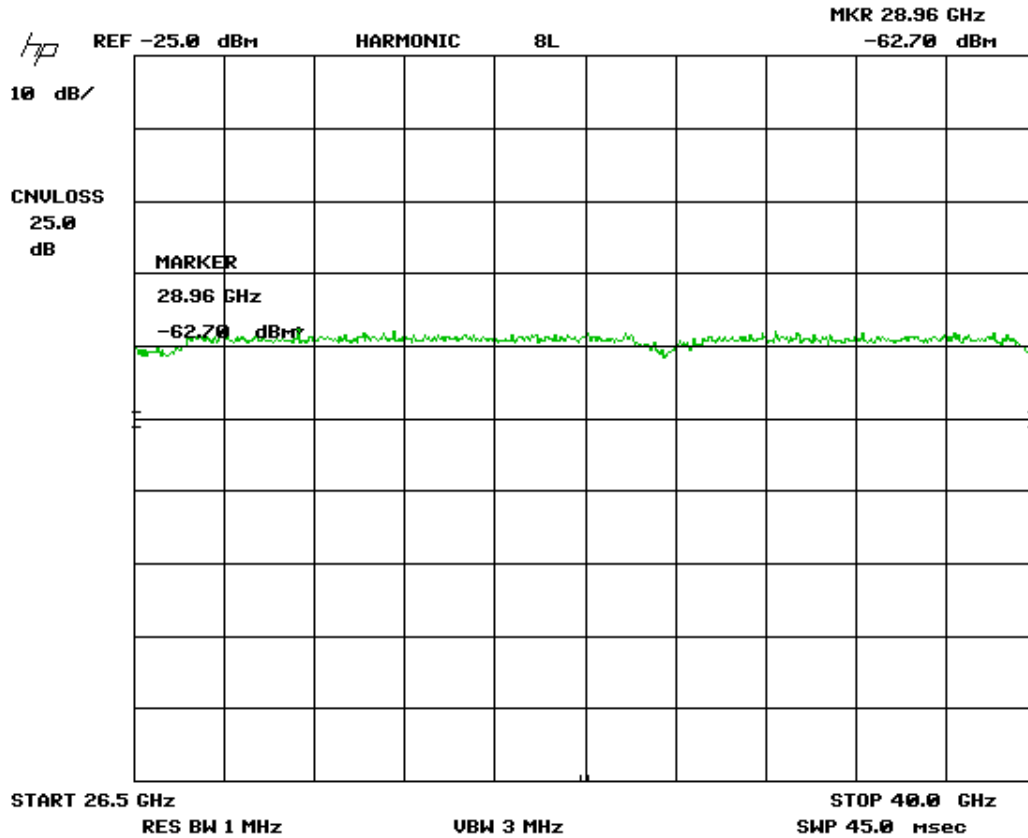
EIRP= -46.17 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -43.17 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-43.17) dBm/MHz= 16.17 dB

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

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**Figure 39. Antenna Conducted Emissions Channel 48 802.11n, Part 4**

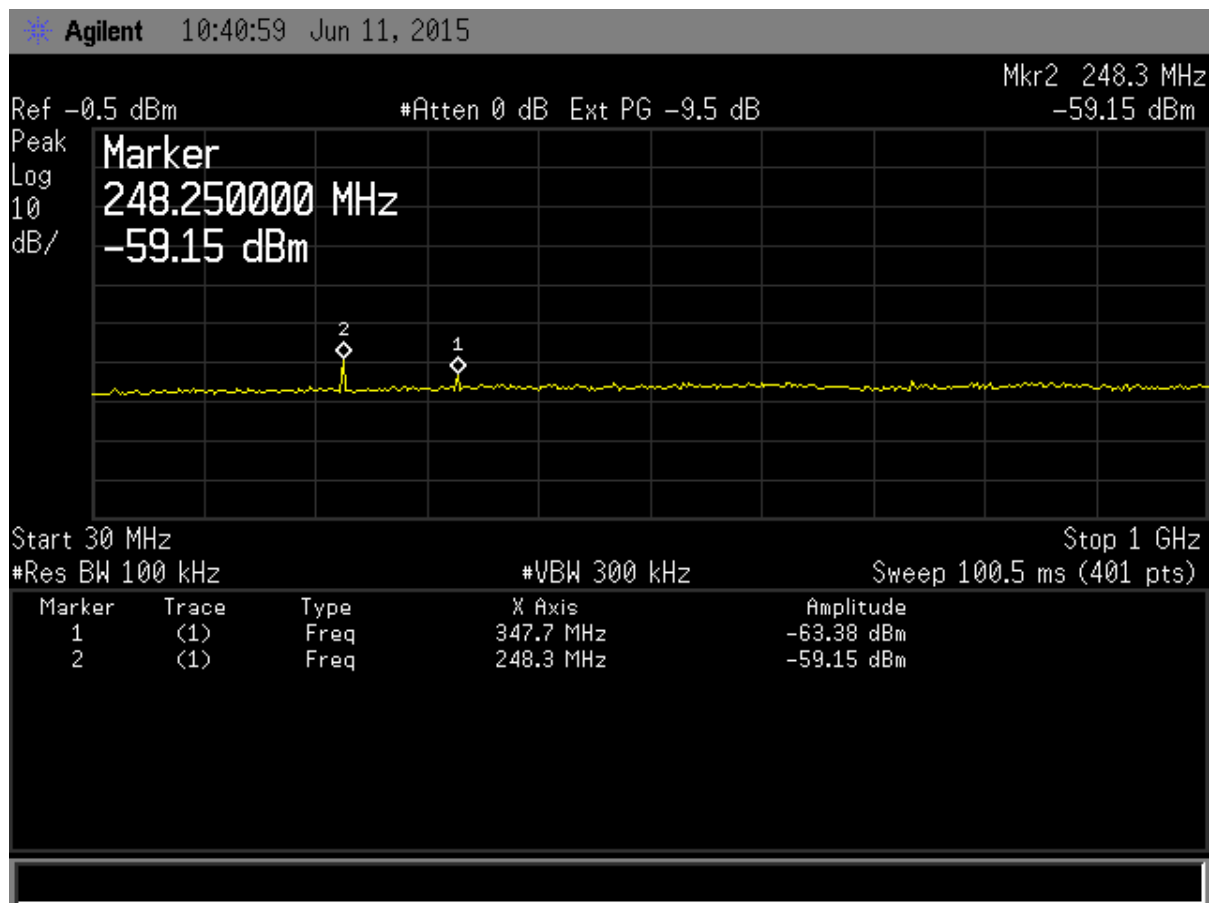
$EIRP = -62.70 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -59.70 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-59.70) \text{ dBm/MHz} = 34.70 \text{ dB}$

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

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**Figure 40. Antenna Conducted Emissions Channel 64 802.11n, Part 1**

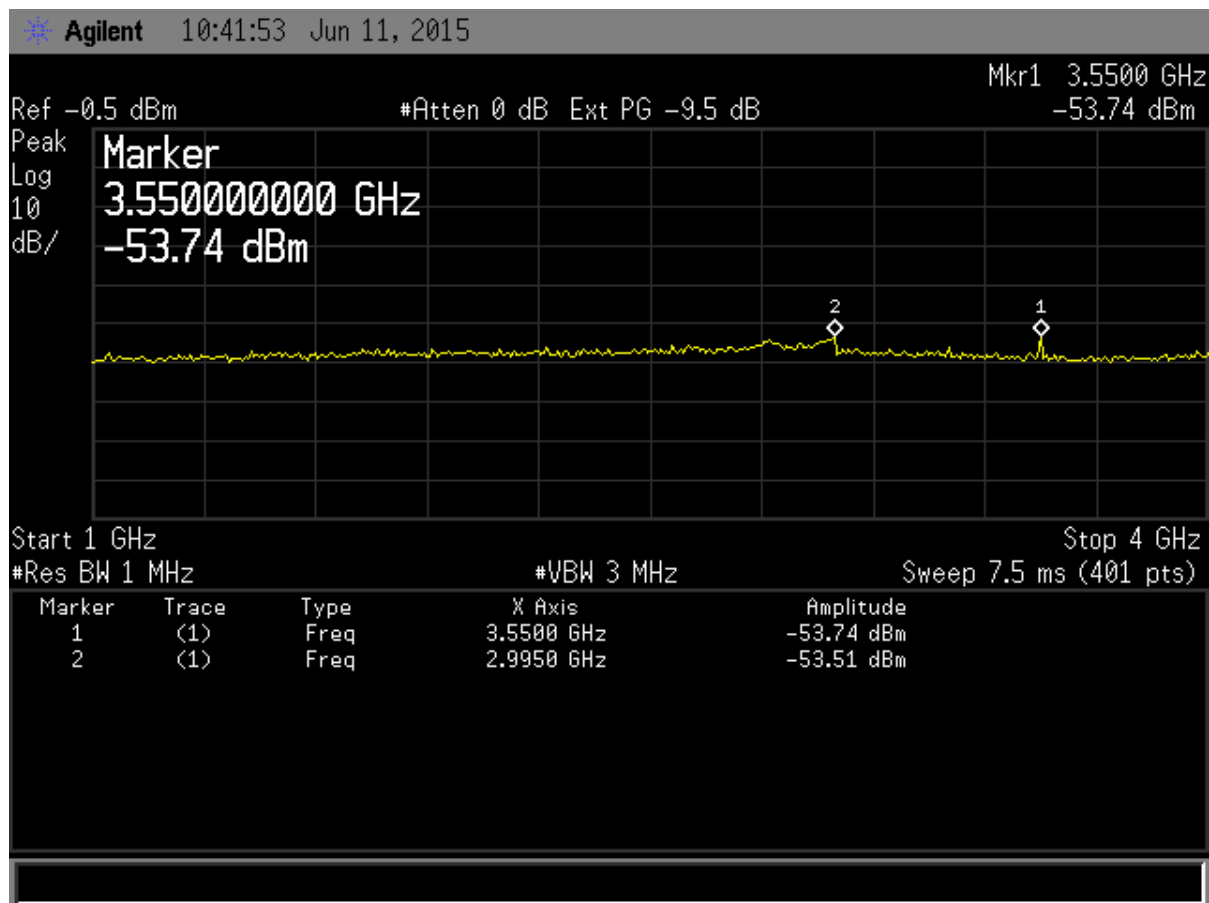
$EIRP = -59.15 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 4.7 \text{ dB (ground reflection factor)} = -51.45 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-51.45) \text{ dBm/MHz} = 24.45 \text{ dB}$

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

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**Figure 41. Antenna Conducted Emissions Channel 64 802.11n, Part 2**

$EIRP = -53.51 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -50.51 \text{ dBm}$

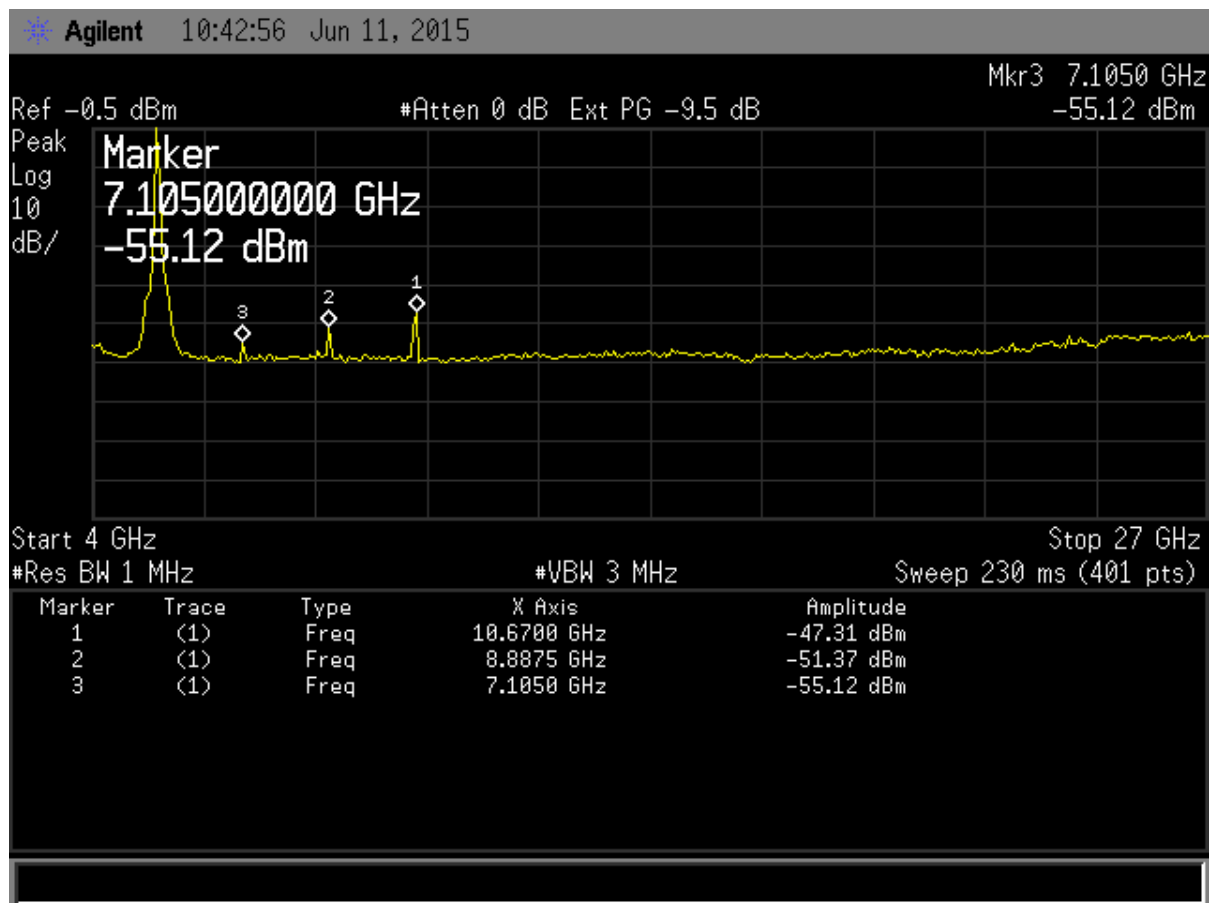
$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-50.51) \text{ dBm/MHz} = 23.51 \text{ dB}$



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

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**Figure 42. Antenna Conducted Emissions Channel 64 802.11n, Part 3**

Note: Large signal seen in the figure above to the fundamental emissions

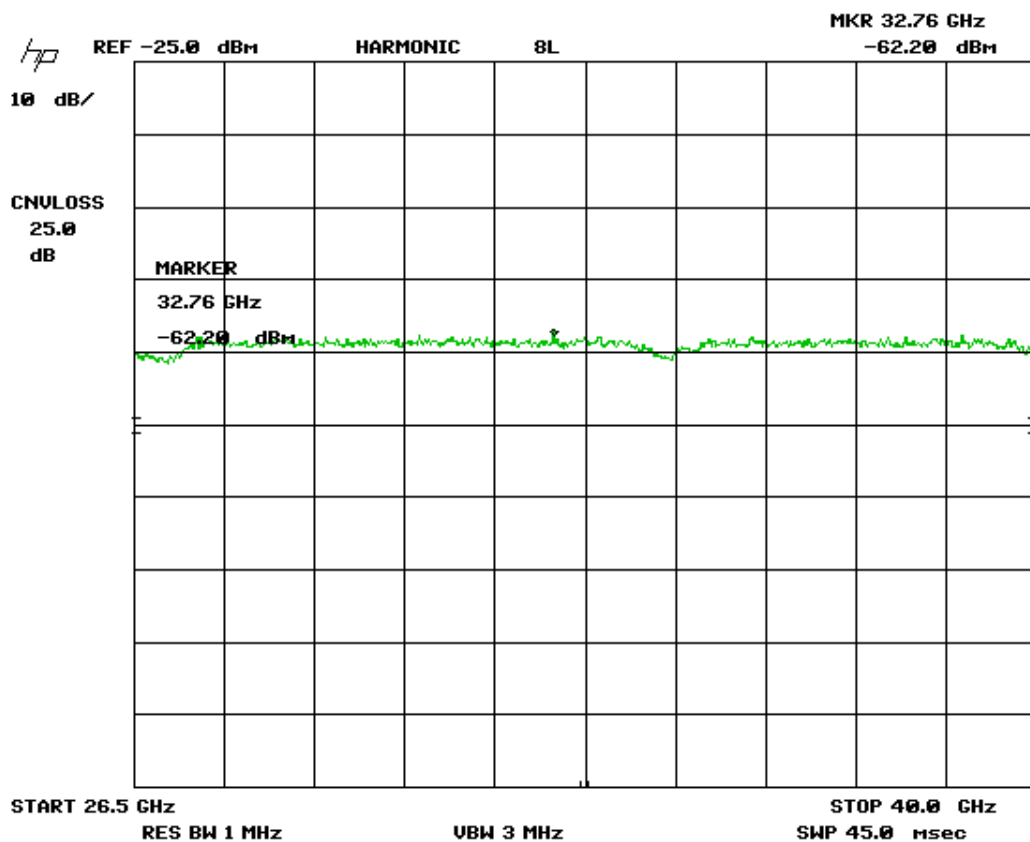
EIRP= -47.31 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -44.31 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-44.31) dBm/MHz= -17.31 dB

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

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**Figure 43. Antenna Conducted Emissions Channel 64 802.11n, Part 4**

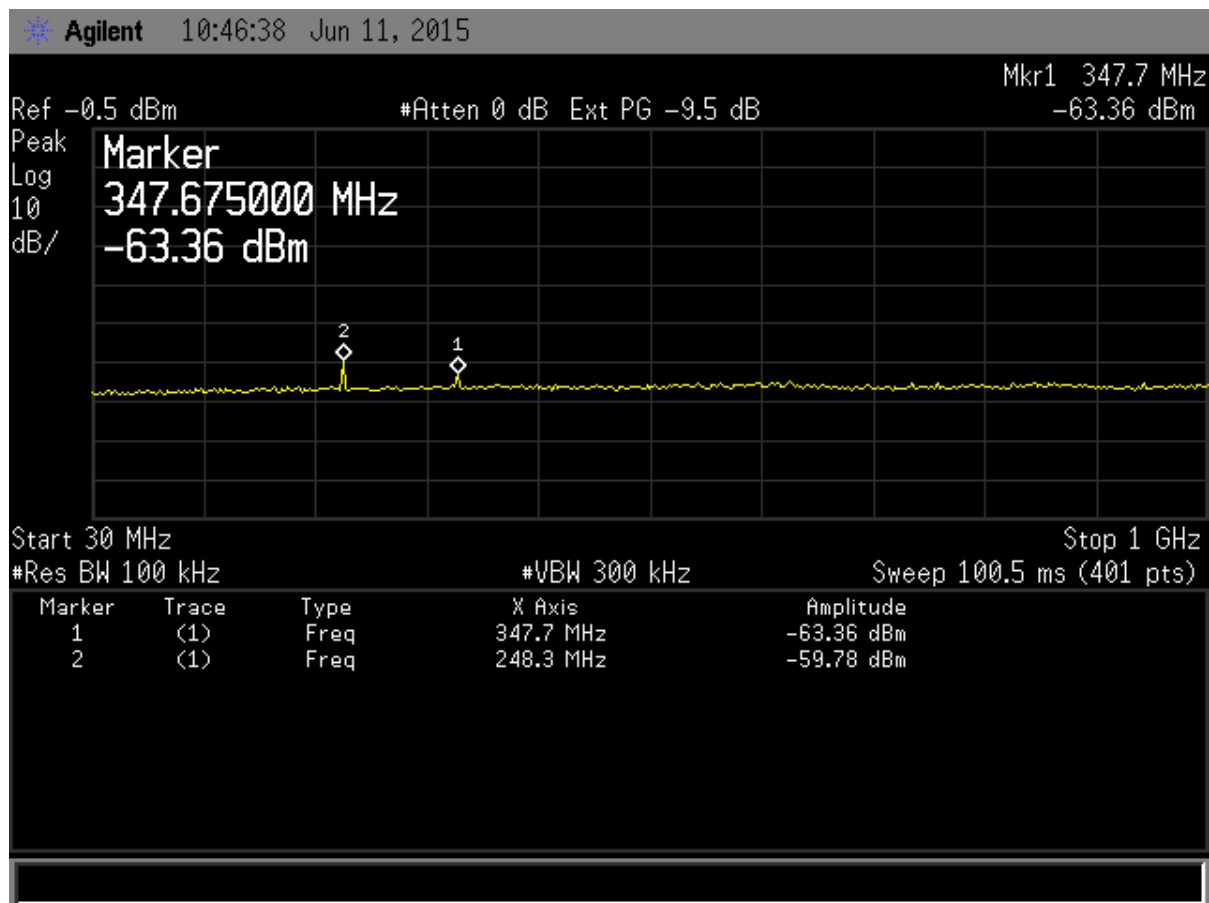
$EIRP = -62.20 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -59.20 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-59.20) \text{ dBm/MHz} = 32.20 \text{ dB}$

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

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**Figure 44. Antenna Conducted Emissions Channel 100 802.11n, Part 1**

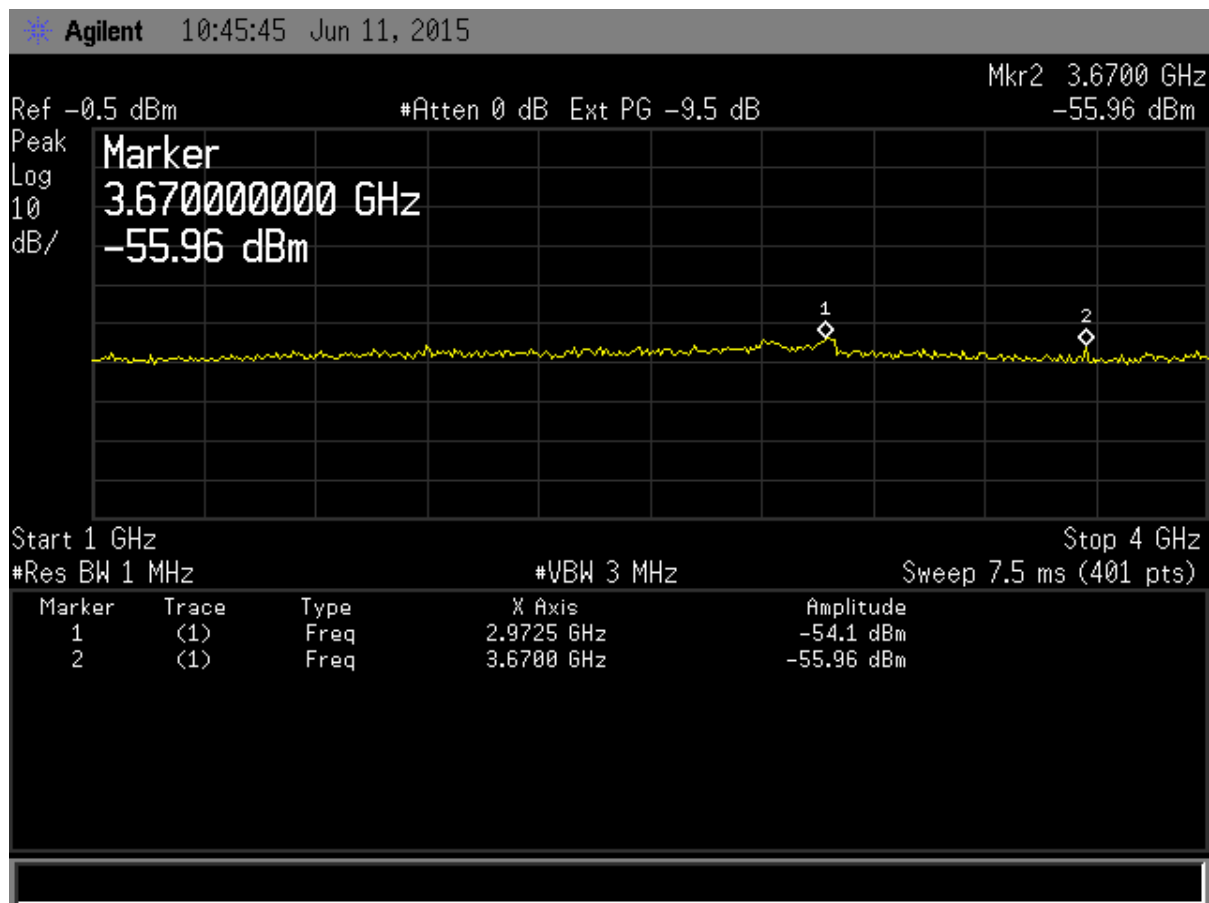
$EIRP = -59.78 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 4.7 \text{ dB (ground reflection factor)} = -52.08 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-52.08) \text{ dBuV/m} = 25.08 \text{ dB}$

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

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**Figure 45. Antenna Conducted Emissions Channel 64 802.11n, Part 2**

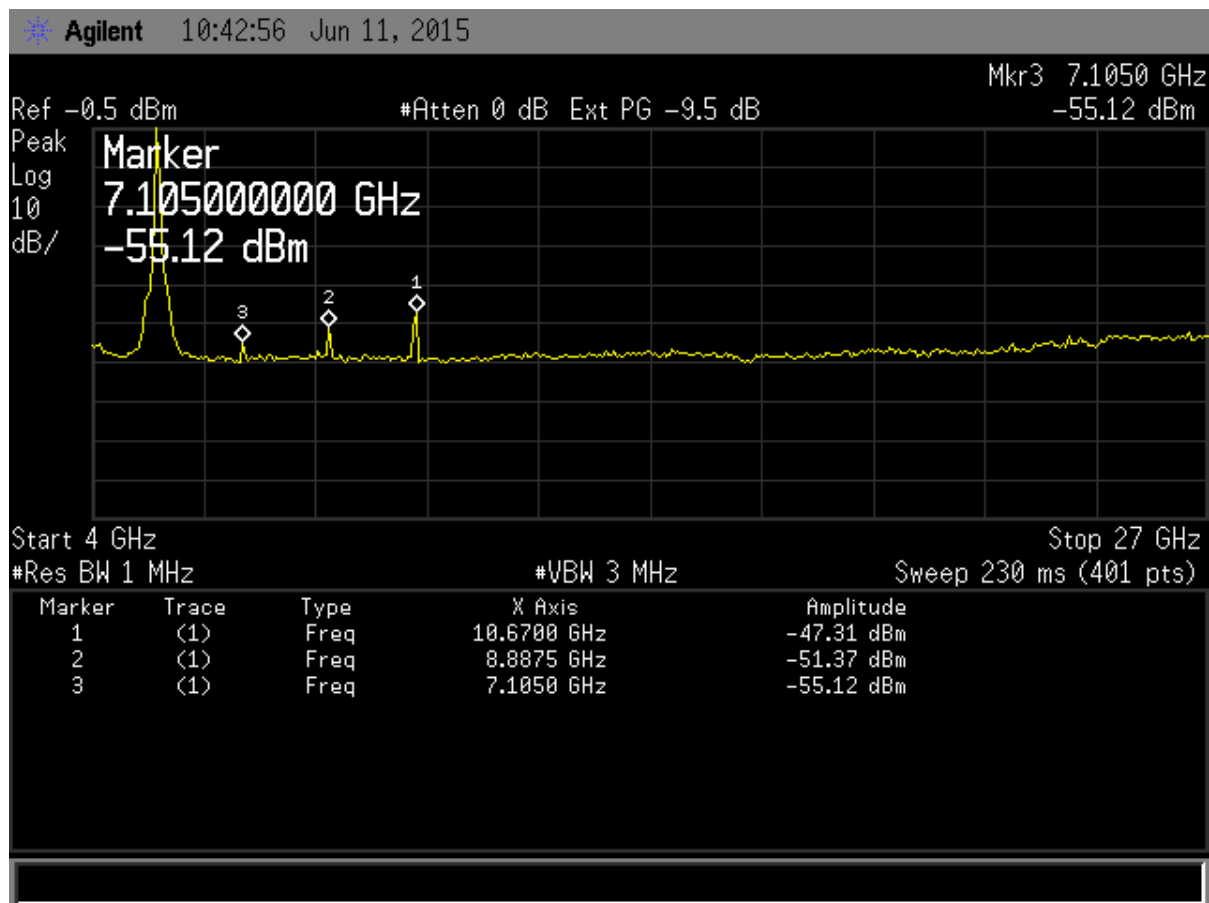
$EIRP = -54.10 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -51.10 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-51.10) \text{ dBm/MHz} = 24.10 \text{ dB}$

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

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**Figure 46. Antenna Conducted Emissions Channel 64 802.11n, Part 3**

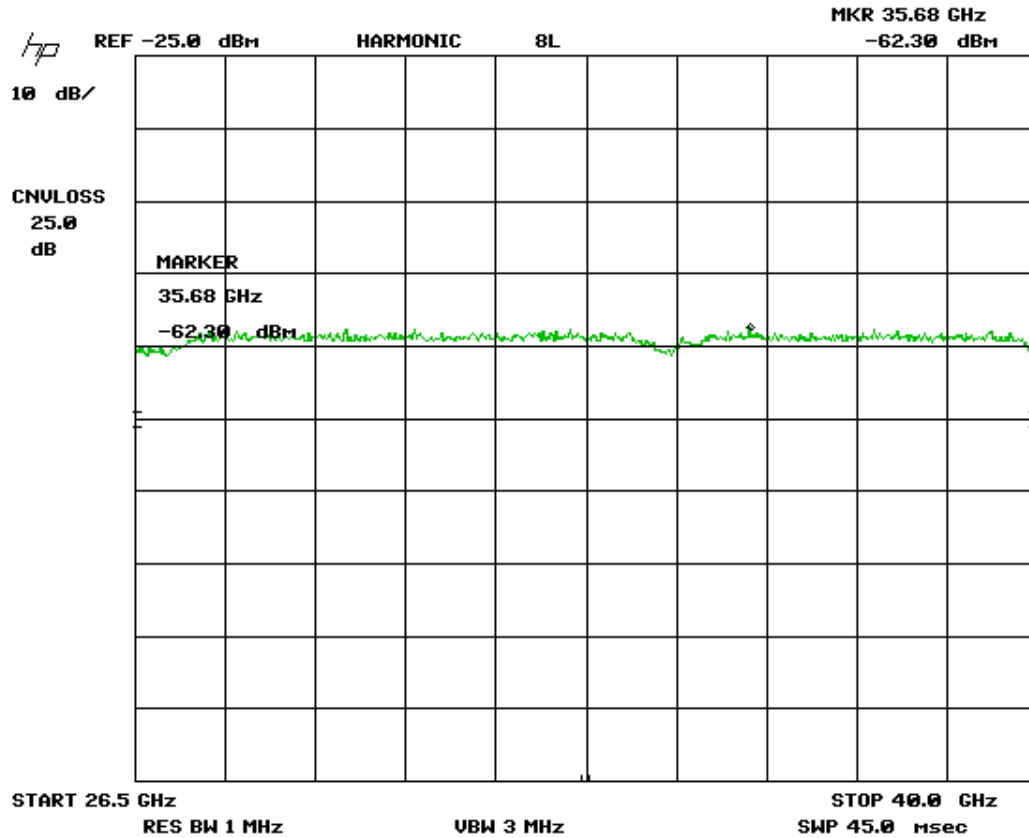
$EIRP = -51.37 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -48.37 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-48.37) \text{ dBm/MHz} = 21.37 \text{ dB}$

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

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**Figure 47. Antenna Conducted Emissions Channel 64 802.11n, Part 4**

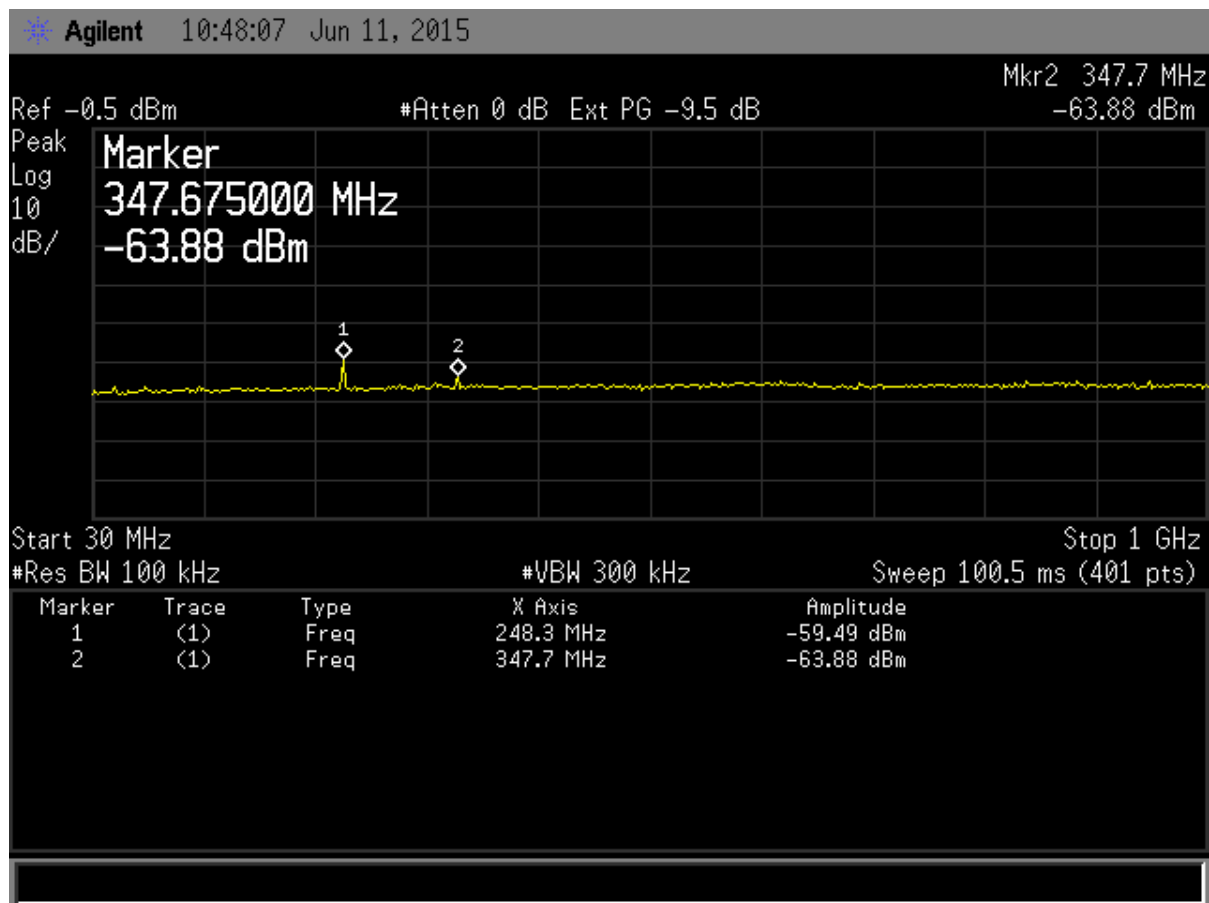
EIRP= -62.30 dBm + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -59.30 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-59.30) dBm/MHz= 32.30 dB

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

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 15-0086  
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**Figure 48. Antenna Conducted Emissions Channel 140 802.11n, Part 1**

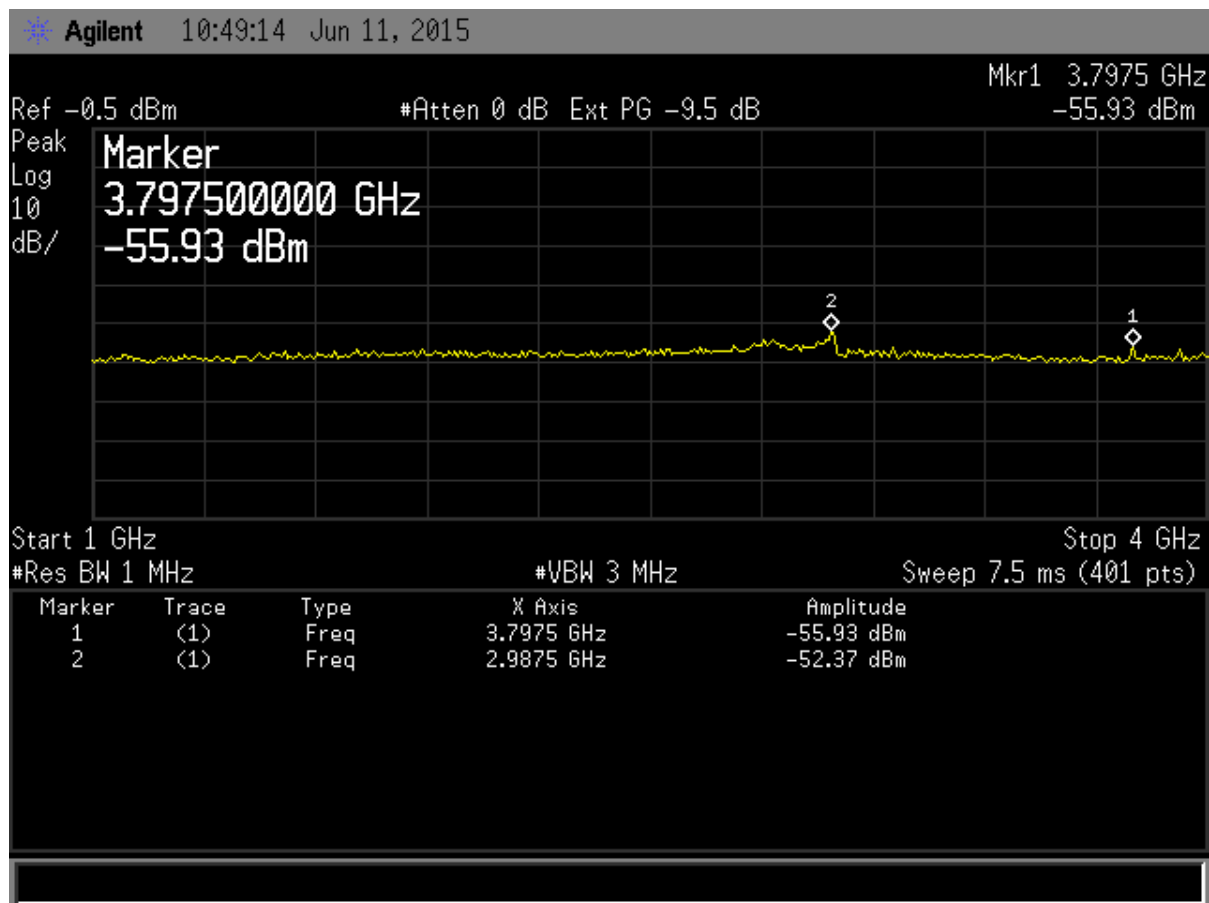
$EIRP = -59.49 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 4.7 \text{ dB (ground reflection factor)} = -51.89 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-59.89) \text{ dBm/MHz} = 24.89 \text{ dB}$

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

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**Figure 49. Antenna Conducted Emissions Channel 140 802.11an, Part 2**

$EIRP = -52.37\text{dBm} + 3.0\text{ dBi (applied antenna gain)} + 0\text{ dB (ground reflection factor)} = -49.37\text{ dBm}$

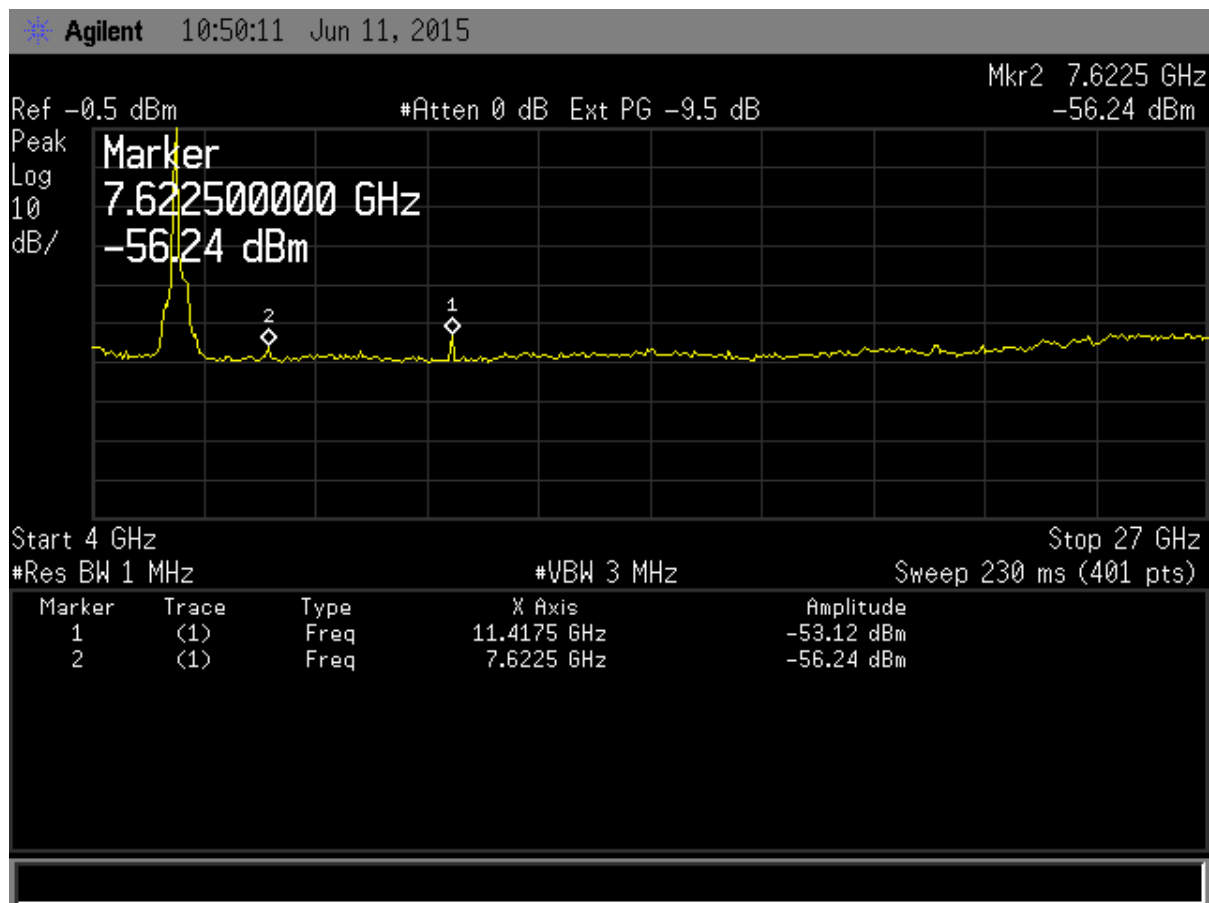
$Limit = -27\text{ dBm/MHz (15.407 (b))}$

$Margin = -27\text{ dBm/MHz} - (-49.37)\text{ dBm/MHz} = 22.37\text{ dB}$



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

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**Figure 50. Antenna Conducted Emissions Channel 140 802.11n, Part 3**

Note: The large signal seen in the above figure is the fundamental emission

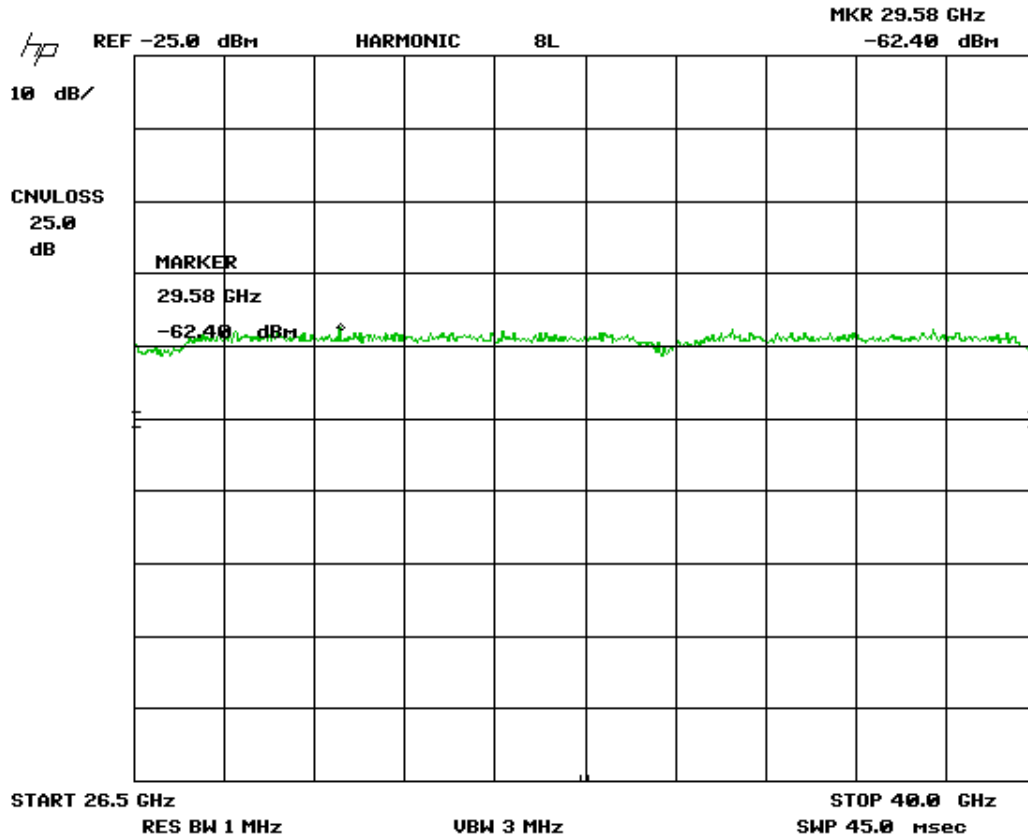
$EIRP = -53.12 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -50.12 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-50.12) \text{ dBm/MHz} = 23.12 \text{ dB}$

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

FCC Part 15 Certification/ RSS 247  
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**Figure 51. Antenna Conducted Emissions Channel 140 802.11n, Part 4**

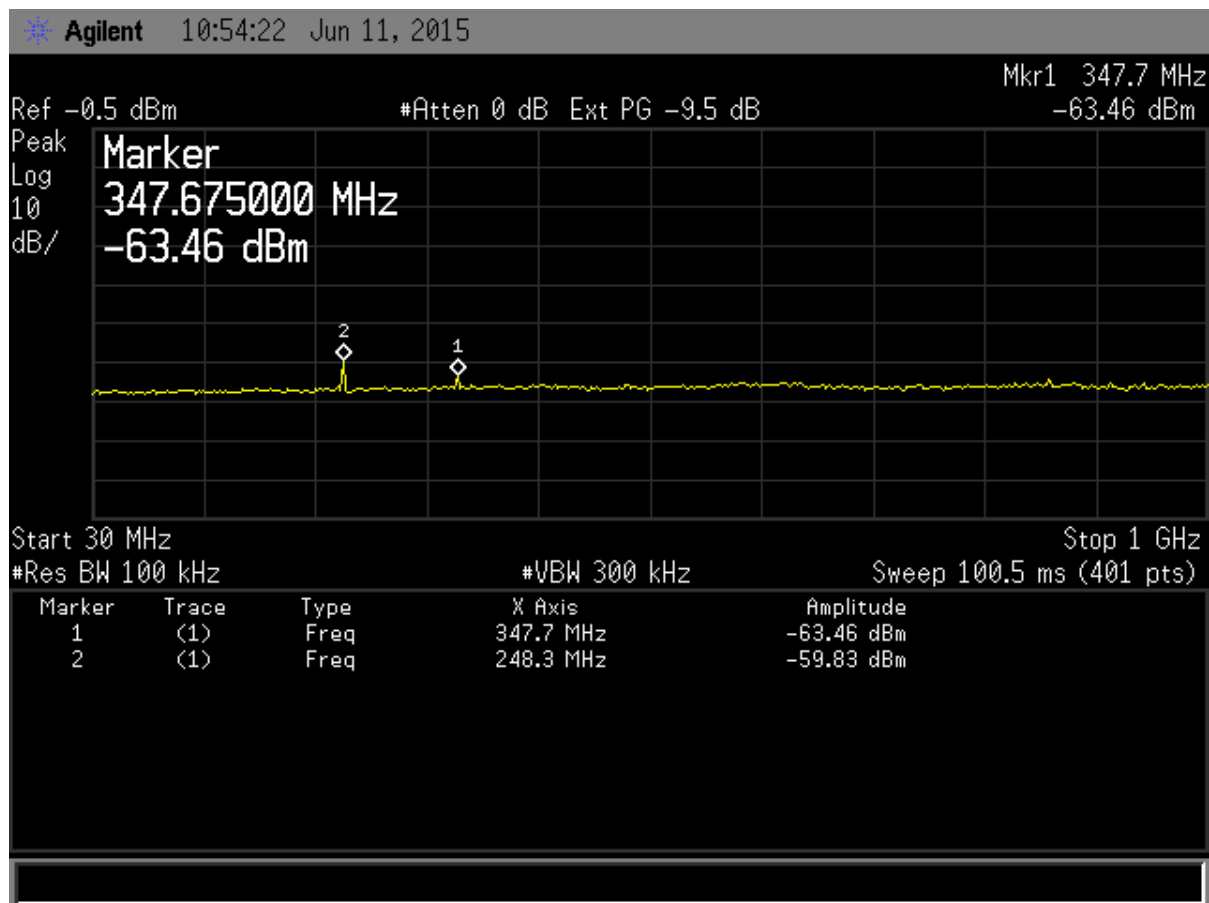
EIRP= -62.40 dBm/MHz + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -59.40 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-59.40) dBm/MHz= 32.40 dB

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 52. Antenna Conducted Emissions Channel 149 802.11n, Part 1**

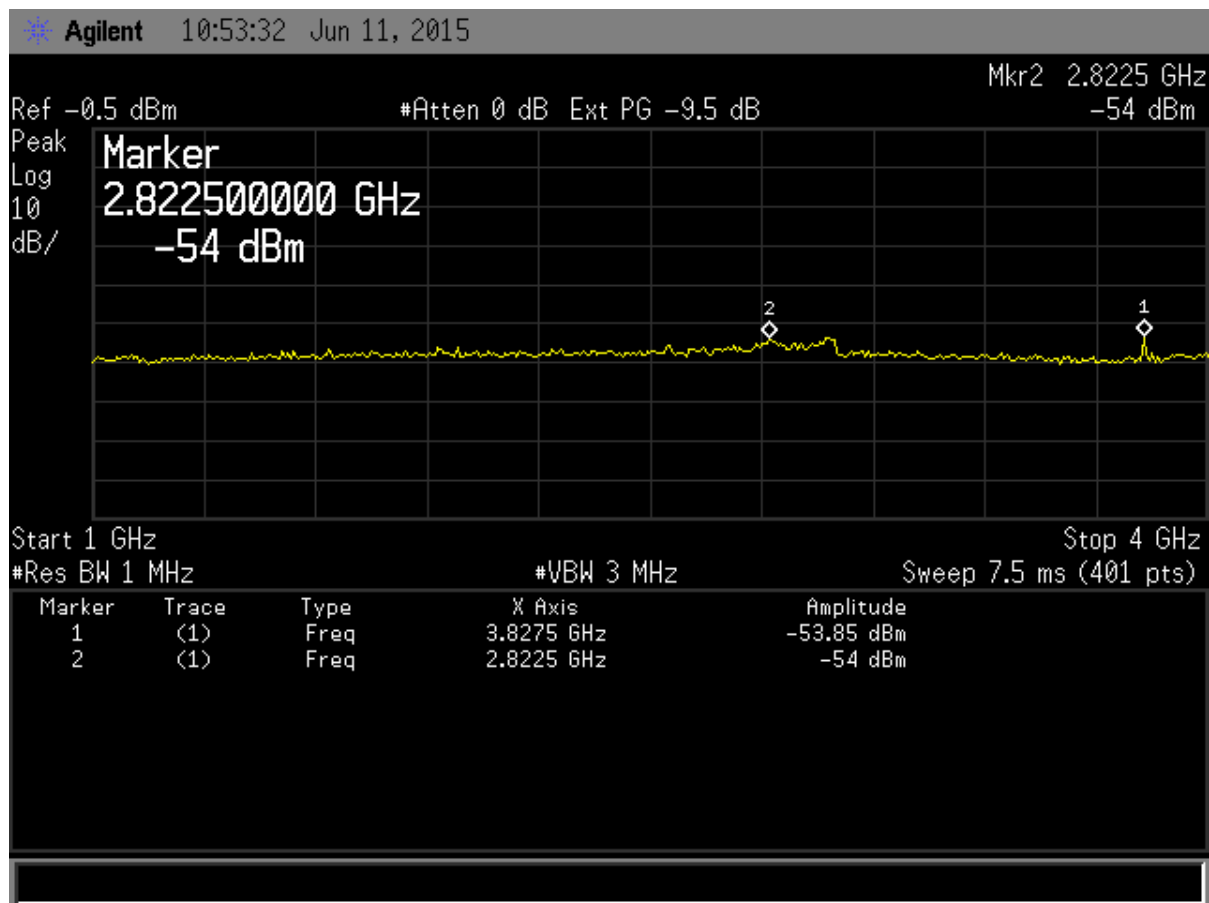
$EIRP = -59.83 \text{ dBm} + 3.0 \text{ dBi (applied antenna gain)} + 4.7 \text{ dB (ground reflection factor)} = 52.13 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-52.13) \text{ dBm/MHz} = 25.13 \text{ dB}$

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

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**Figure 53. Antenna Conducted Emissions Channel 149 802.11n, Part 2**

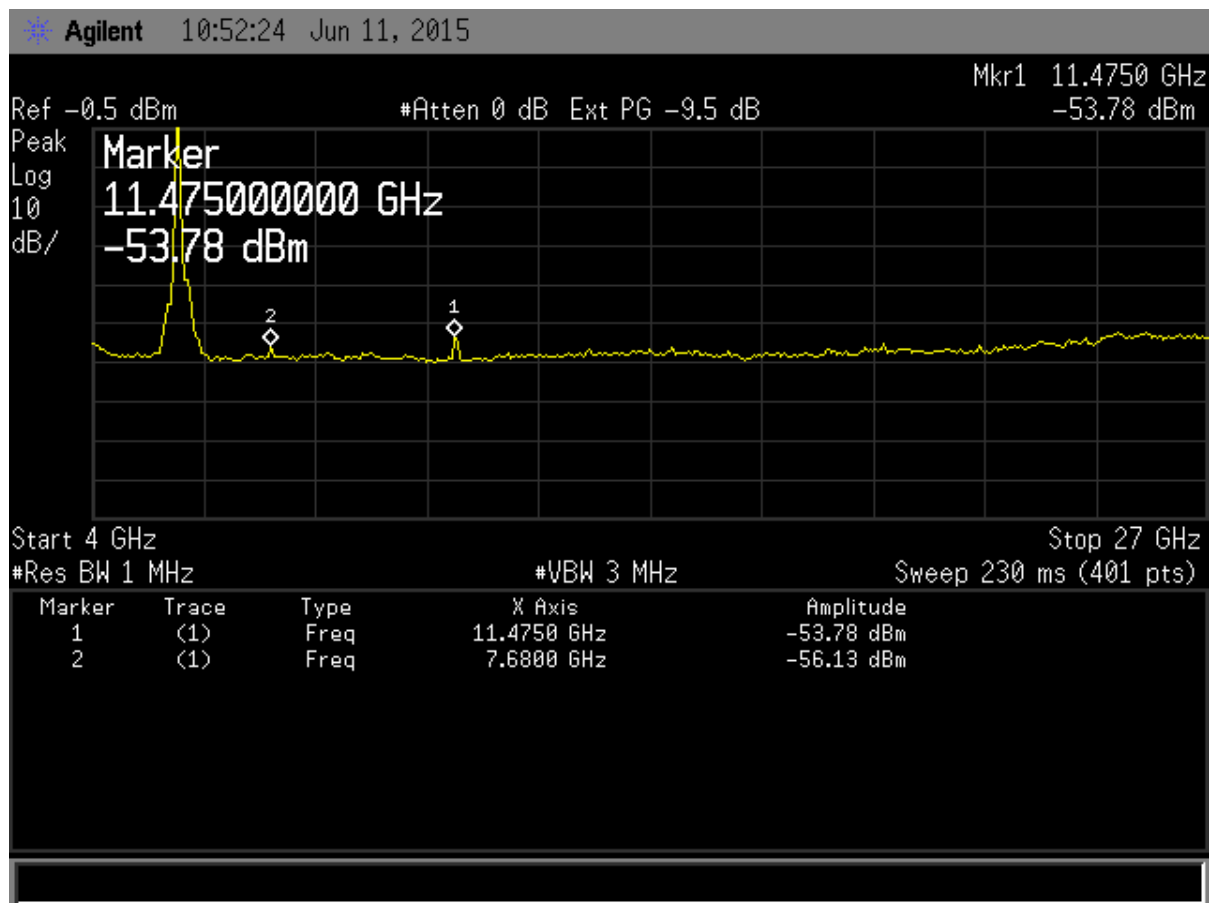
$EIRP = -53.85\text{dBm} + 3.0\text{ dBi (applied antenna gain)} + 0\text{ dB (ground reflection factor)} = -50.85\text{ dBm}$

$Limit = -27\text{ dBm/MHz (15.407 (b))}$

$Margin = -27\text{ dBm/MHz} - (-50.85)\text{ dBuV/m} = 23.85\text{ Db}$

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

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**Figure 54. Antenna Conducted Emissions Channel 149 802.11n, Part 3**

Note: Large signal seen in the above figure is the fundamental emission

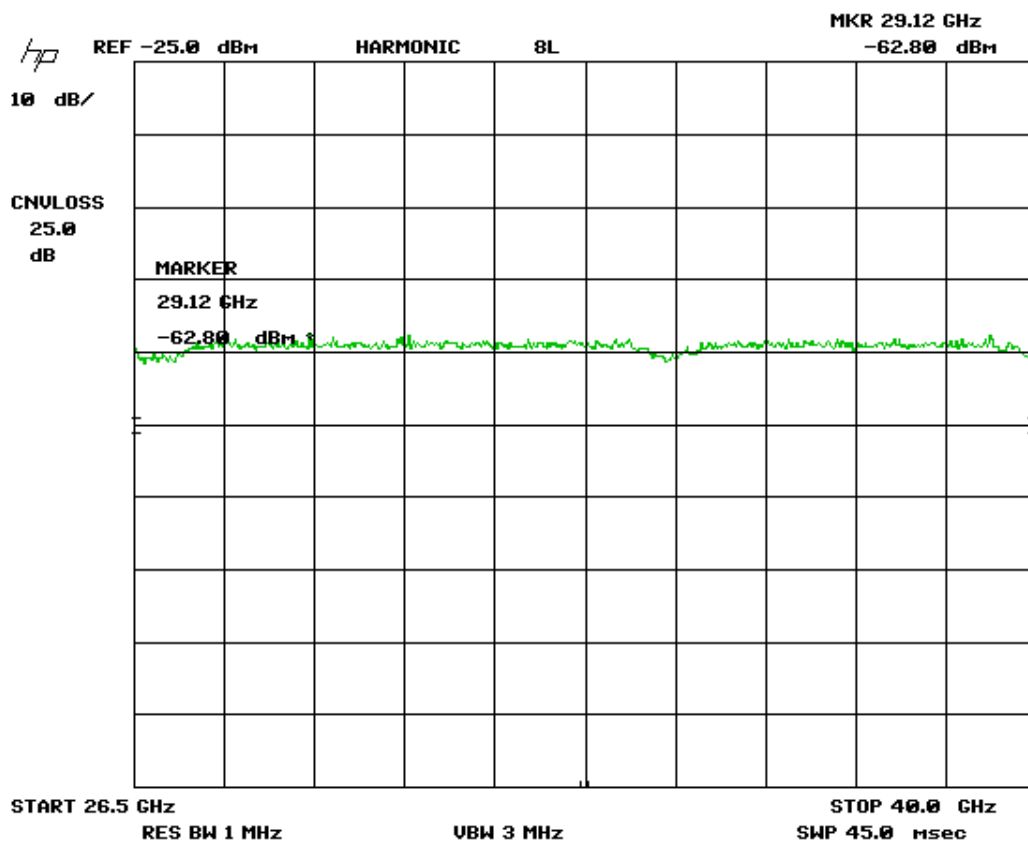
EIRP= -53.78 dBm/MHz + 3.0 dBi (applied antenna gain) + 0 dB (ground reflection factor)= -50.78 dBm

Limit= -27 dBm/MHz (15.407 (b))

Margin= -27 dBm/MHz – (-50.78) dBm/MHz= 23.78 dB

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

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**Figure 55. Antenna Conducted Emissions Channel 149 802.11n, Part 4**

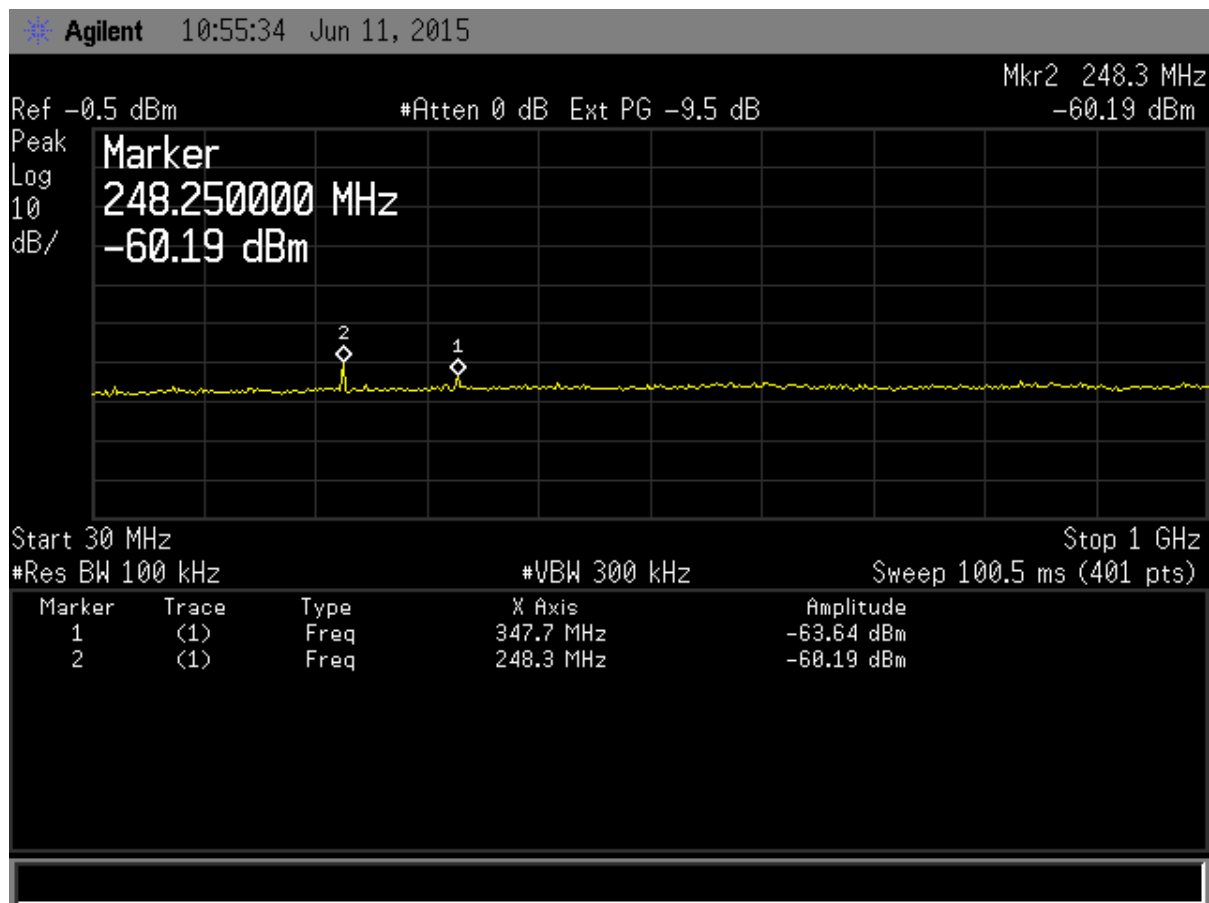
$EIRP = -62.80 \text{ dBm/MHz} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -59.80 \text{ dBm}$

$\text{Limit} = -27 \text{ dBm/MHz (15.407 (b))}$

$\text{Margin} = -27 \text{ dBm/MHz m} - (-59.80) \text{ dBm/MHz} = 32.80 \text{ dB}$

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

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 1849C-P008  
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**Figure 56. Antenna Conducted Emissions Channel 165 802.11n, Part 1**

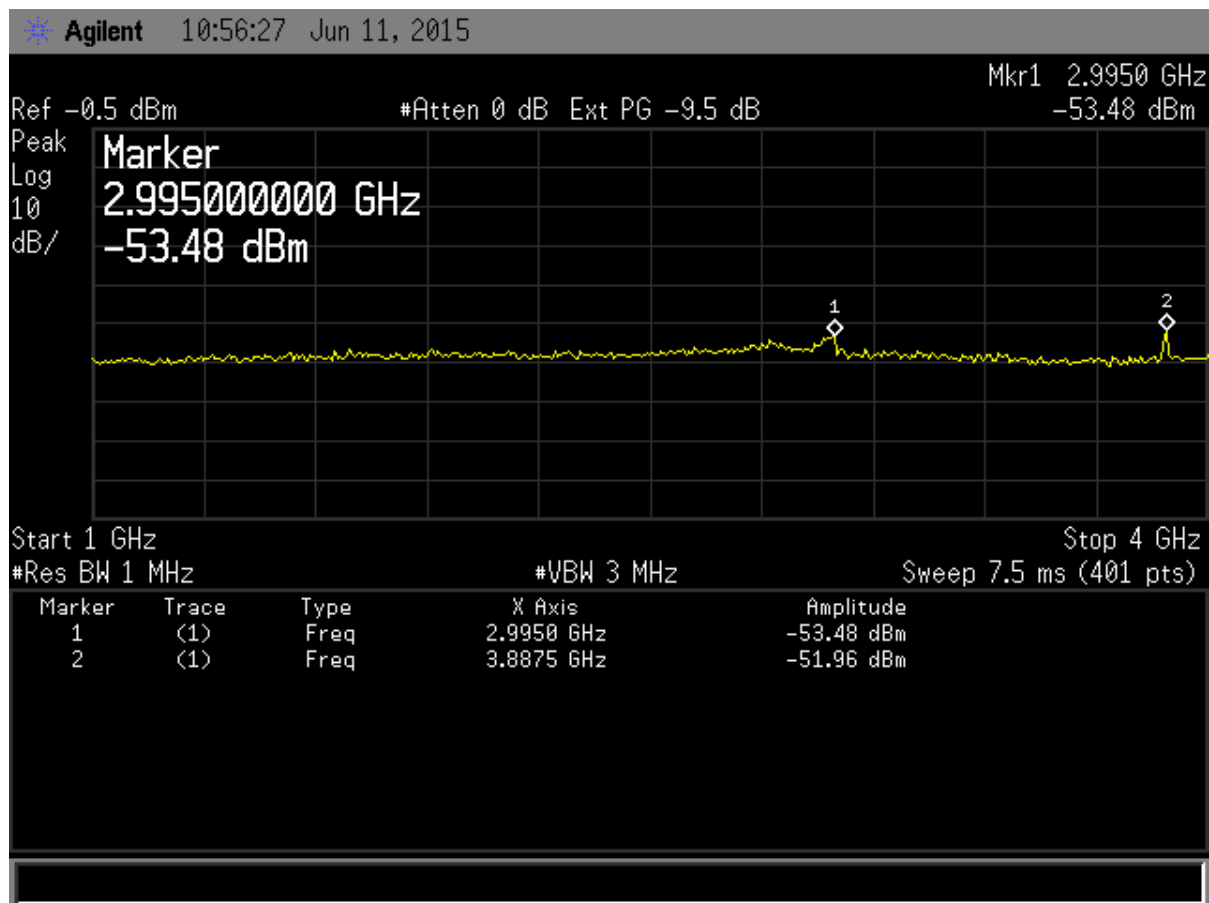
$EIRP = -60.19 \text{ dBm/MHz} + 3.0 \text{ dBi (applied antenna gain)} + 4.7 \text{ dB (ground reflection factor)} = -52.49 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-52.49) \text{ dBm/MHz} = 25.49 \text{ dB}$

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

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**Figure 57. Antenna Conducted Emissions Channel 165 802.11n, Part 2**

$EIRP = -51.89 \text{ dBm/MHz} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -48.89 \text{ dBm}$

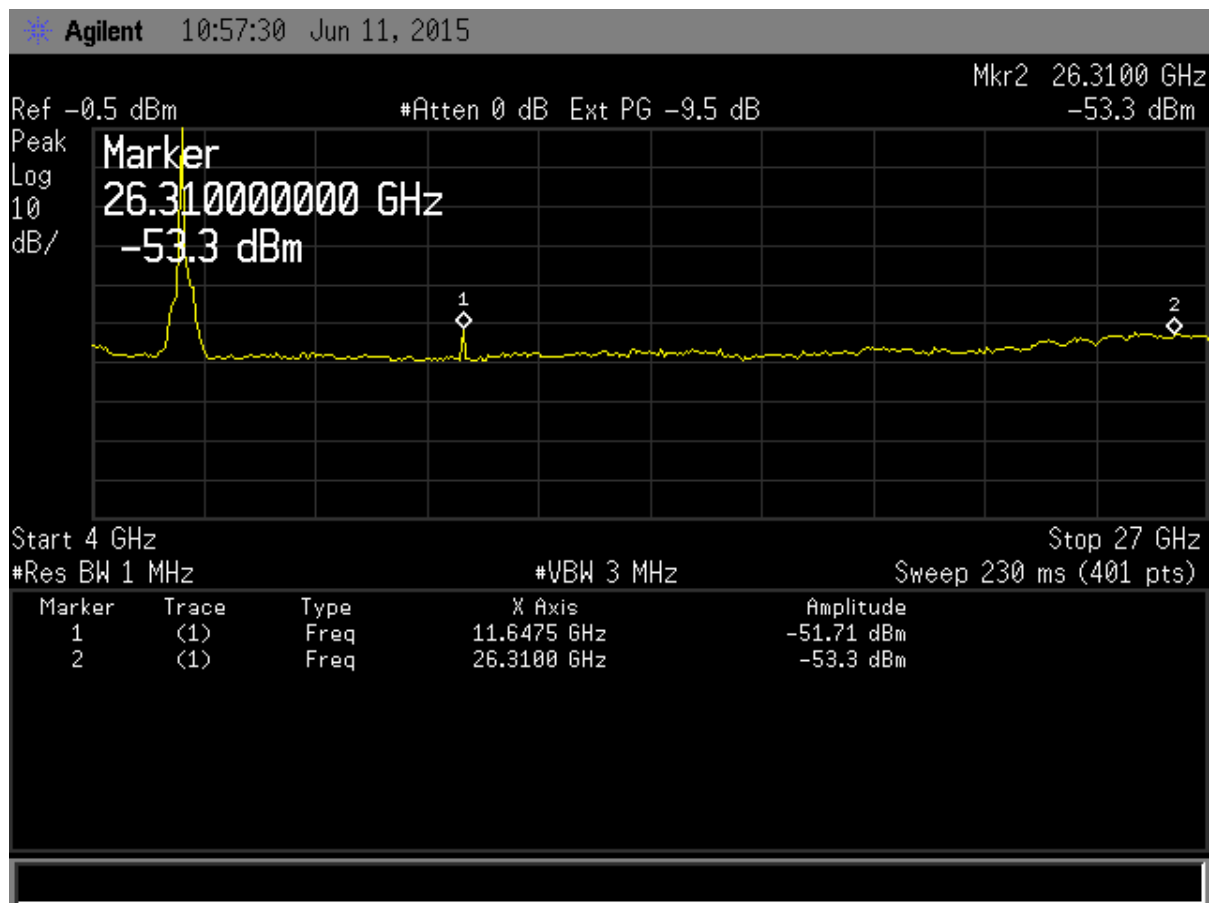
$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-48.89) \text{ dBm/MHz} = 21.89 \text{ dB}$



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

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**Figure 58. Antenna Conducted Emissions Channel 165 802.11n, Part 3**

Note: Large signal seen in the figure above is the fundamental emission

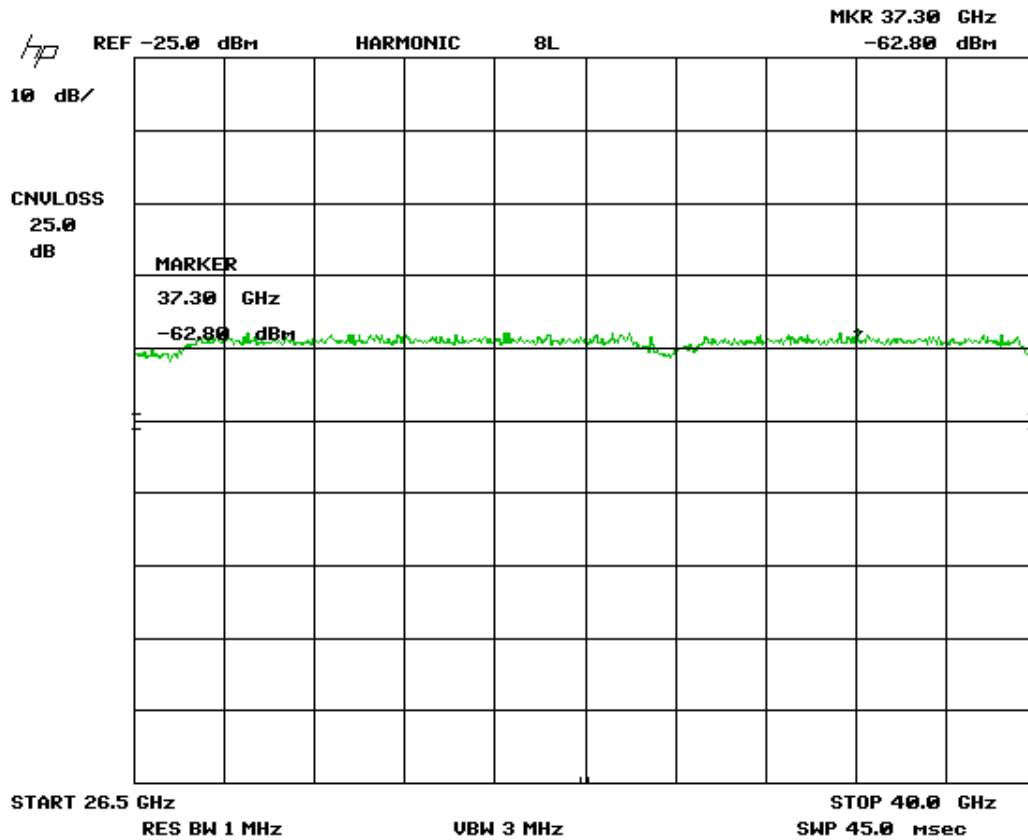
$EIRP = -51.71 \text{ dBm}/\text{MHz} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -48.71 \text{ dBm}$

$Limit = -27 \text{ dBm}/\text{MHz} (15.407 (b))$

$Margin = -27 \text{ dBm}/\text{MHz} - (-48.71) \text{ dBm}/\text{MHz} = 21.7 \text{ dB}$

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  
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**Figure 59. Antenna Conducted Emissions Channel 165 802.11n, Part 4**

$EIRP = -62.80 \text{ dBm/MHz} + 3.0 \text{ dBi (applied antenna gain)} + 0 \text{ dB (ground reflection factor)} = -59.80 \text{ dBm}$

$Limit = -27 \text{ dBm/MHz (15.407 (b))}$

$Margin = -27 \text{ dBm/MHz} - (-59.80) \text{ dBm/MHz} = 32.80 \text{ dB}$

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

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## **2.11 Band Edge Measurements – (CFR 15.407 (b))**

Band Edge measurements are made following the guidelines in FCC KDB Publication No. 789033 with the EUT initially operating on the Lowest Channel and then operating on the Highest Channel within its band of operation for all modes of operation. Antenna port conducted measurements are performed to demonstrate compliance with the requirement of 15.407(b) that all emissions outside of the band edges do not exceed an e.i.r.p of -27 dBm/MHz.

The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

To capture the band edge the Spectrum Analyzer frequency span was set to 2.5 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 = 100 kHz. In all cases, the VBW is set  $\geq 3 \times \text{RBW}$ . The integration function on the spectrum analyzer was used to calculate the Band edge measurement over 1 MHz. See figure and calculations below for more detail.

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

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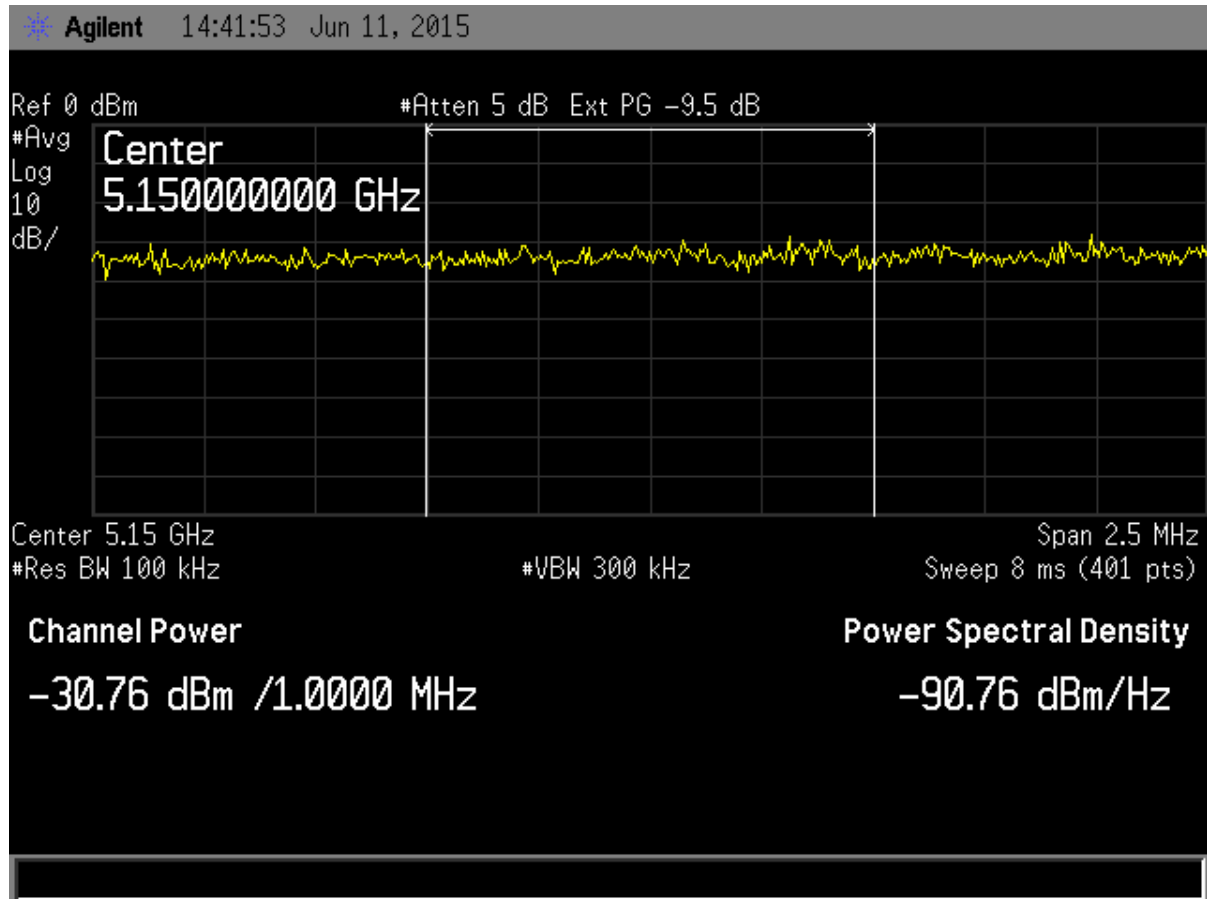


Figure 60. 5.15 GHz Band Edge Compliance, 802.11a - Peak

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

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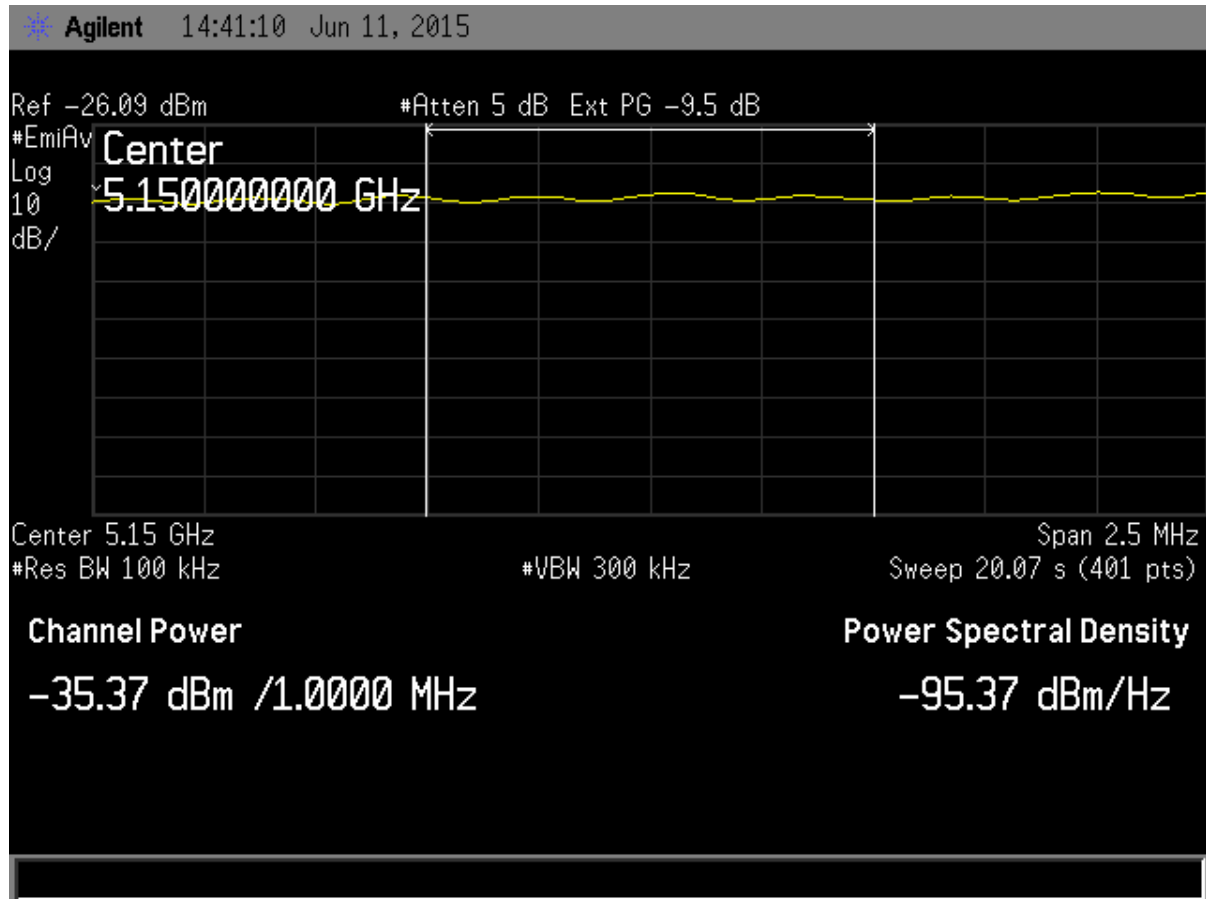


Figure 61. 5.15 GHZ Band Edge Compliance, 802.11a - Average

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-30.76dBm/MHz
Band Edge Margin	3.76 dB

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

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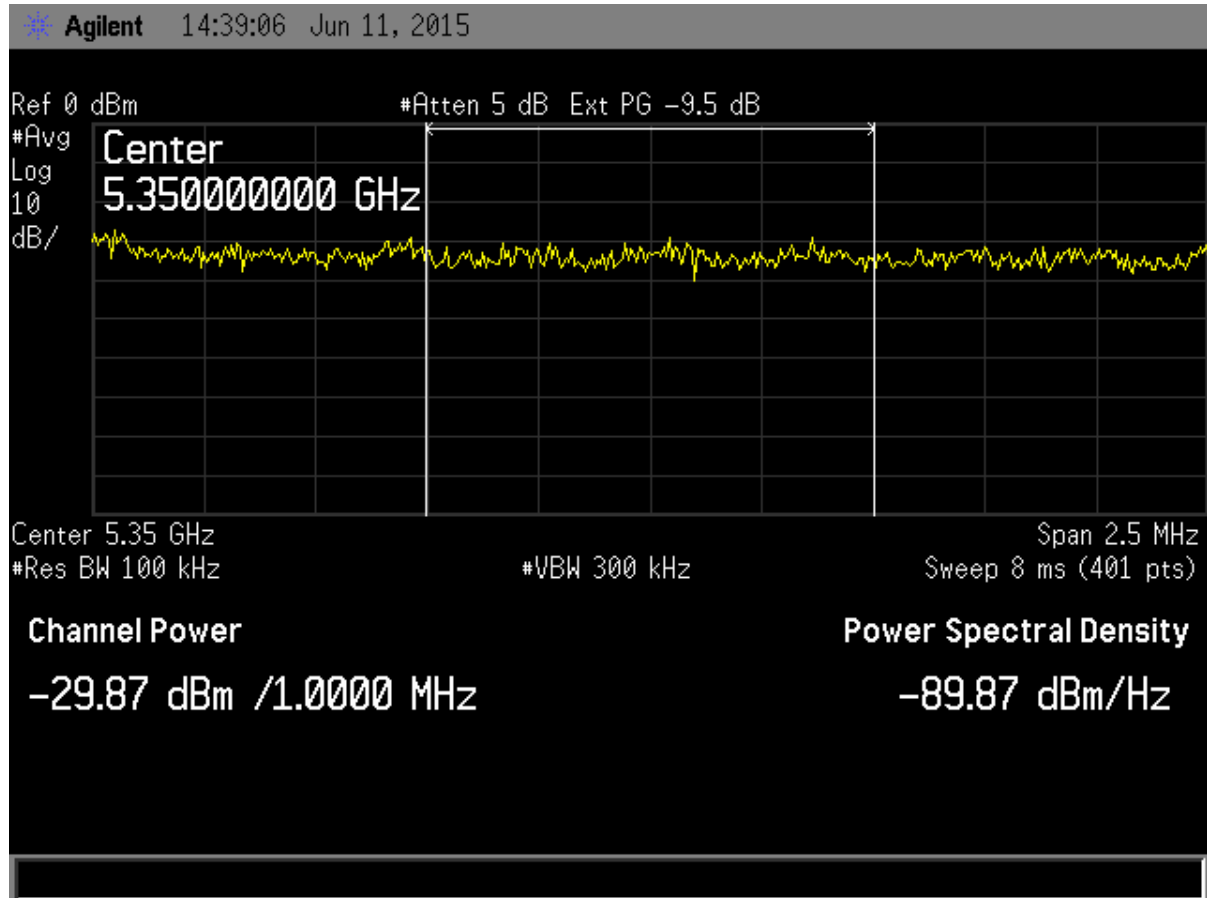


Figure 62. 5.35 GHZ Band Edge Compliance, 802.11a - Peak

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

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0086  
 July 7, 2015  
 Polycom Inc.  
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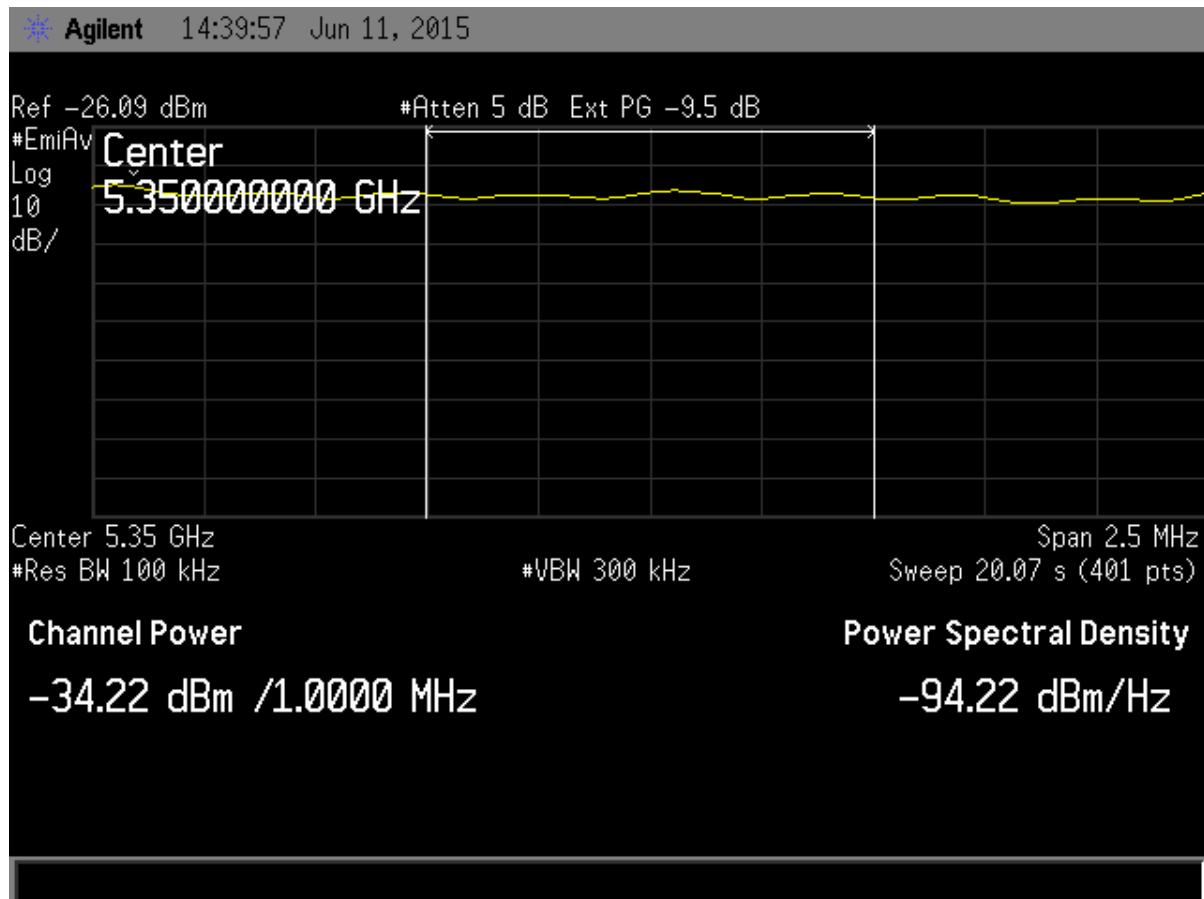


Figure 63. 5.35 GHZ Band Edge Compliance, 802.11a - Average

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-29.87dBm/MHz
Band Edge Margin	2.87 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  
15-0086  
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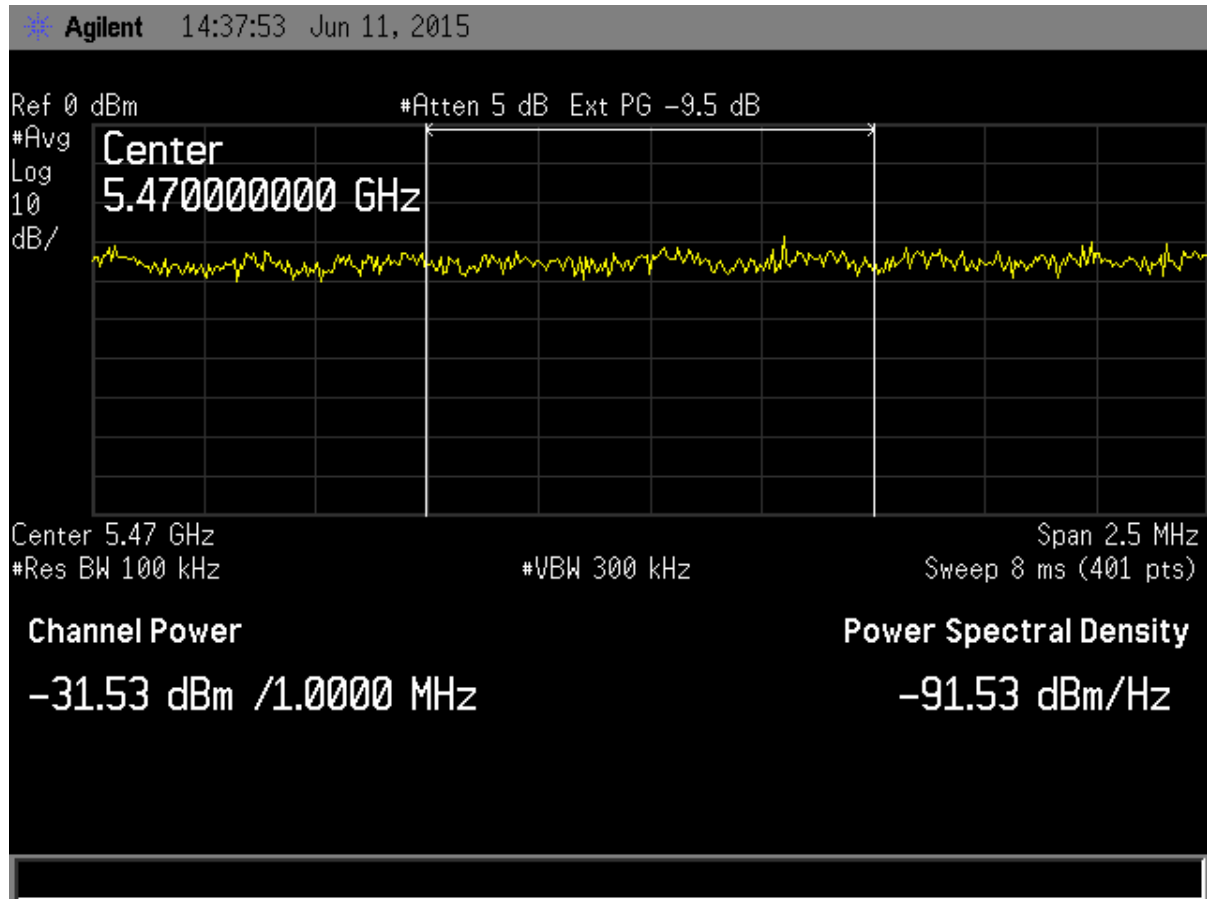


Figure 64. 5.47 GHZ Band Edge Compliance, 802.11a – Peak



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

FCC Part 15 Certification/ RSS 247  
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15-0086  
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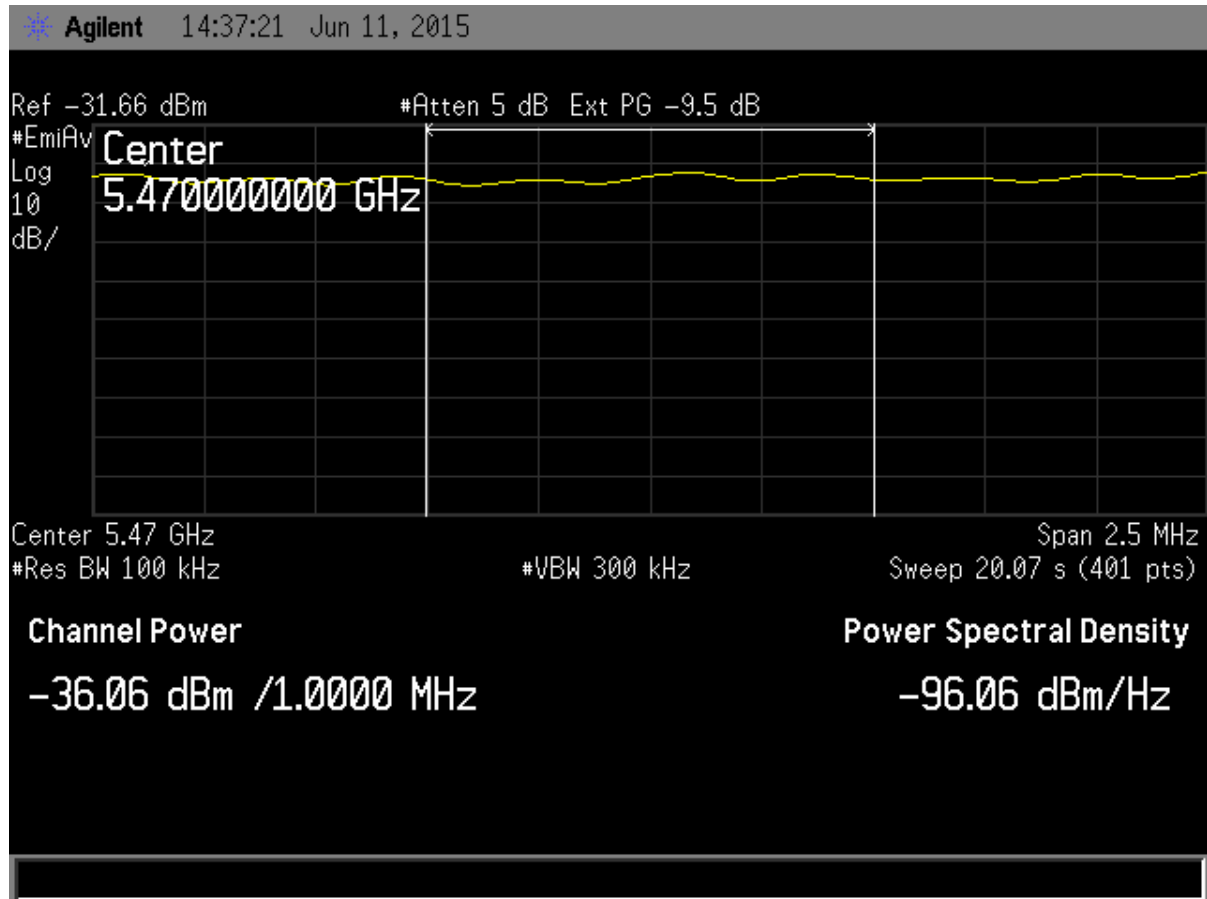


Figure 65. 5.47 GHZ Band Edge Compliance, 802.11a - Average

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-31.53dBm/MHz
Band Edge Margin	4.53 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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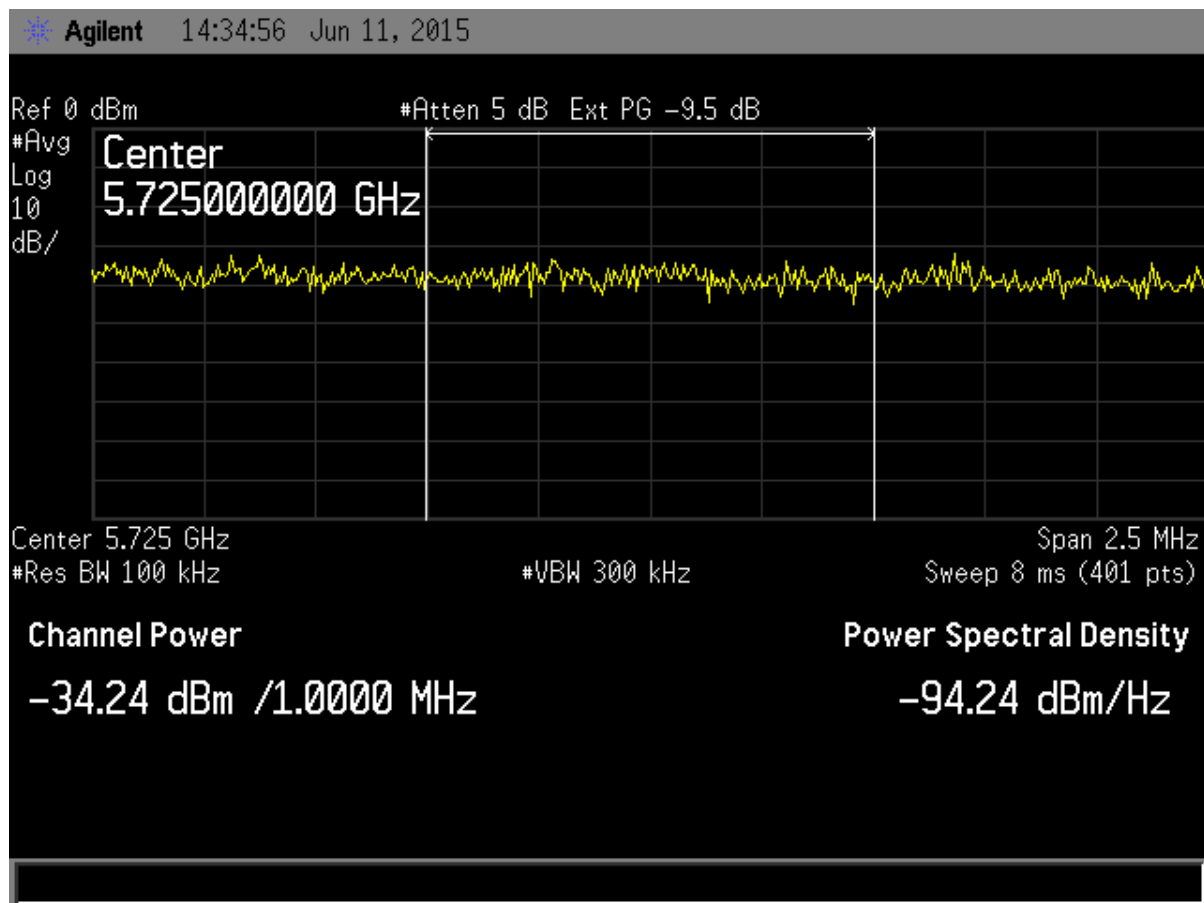
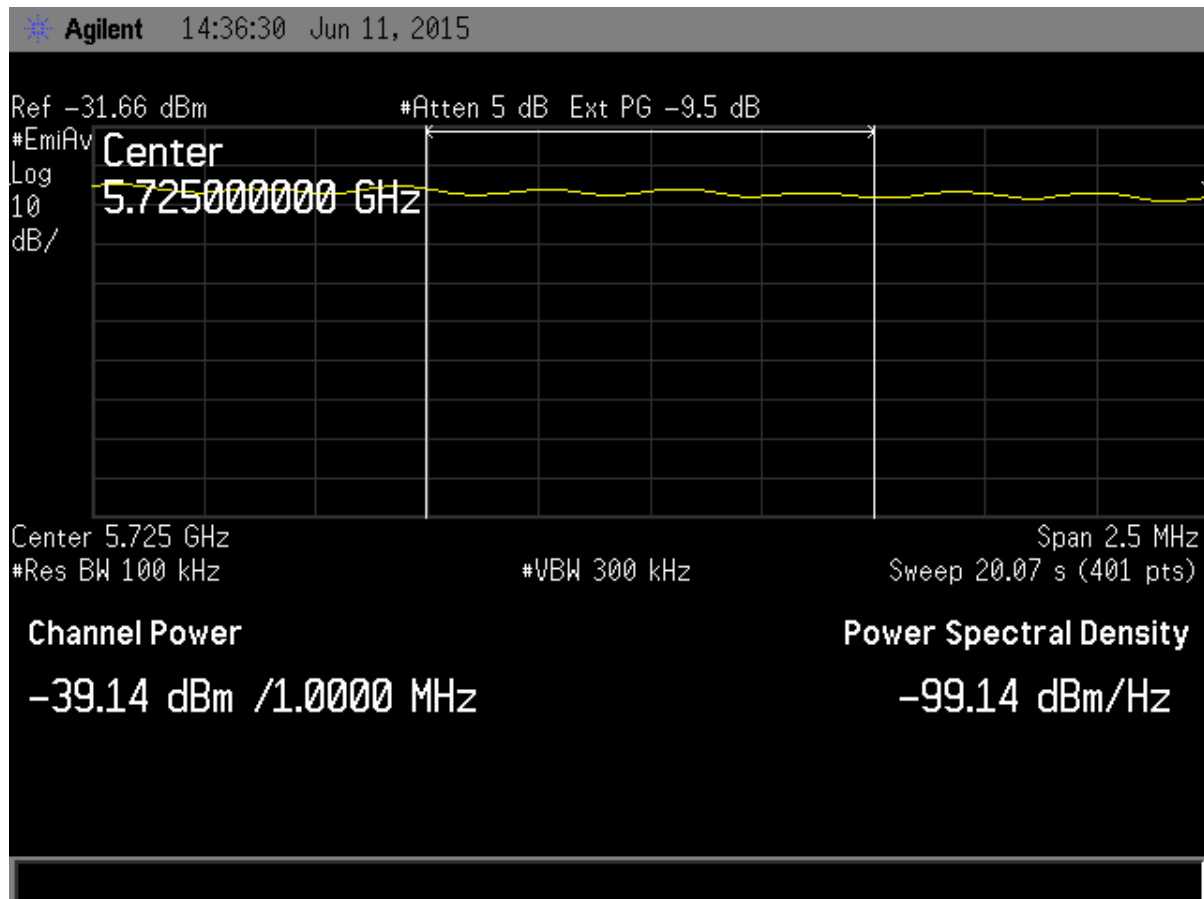


Figure 66. 5.725 GHZ Band Edge Compliance, 802.11a Channel 140- Peak

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 67. 5.725 GHZ Band Edge Compliance, 802.11a Channel 140- Average**

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-34.24dBm/MHz
Band Edge Margin	7.24 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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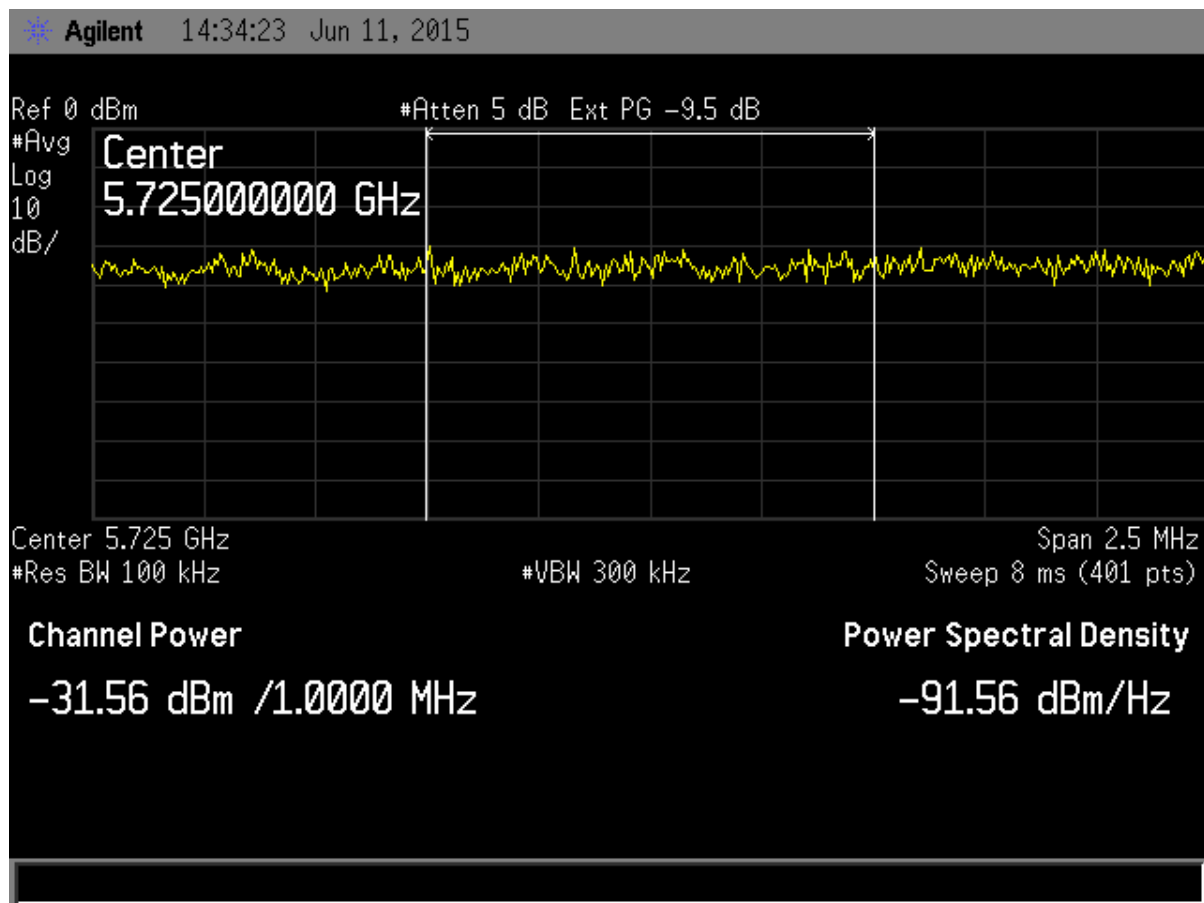
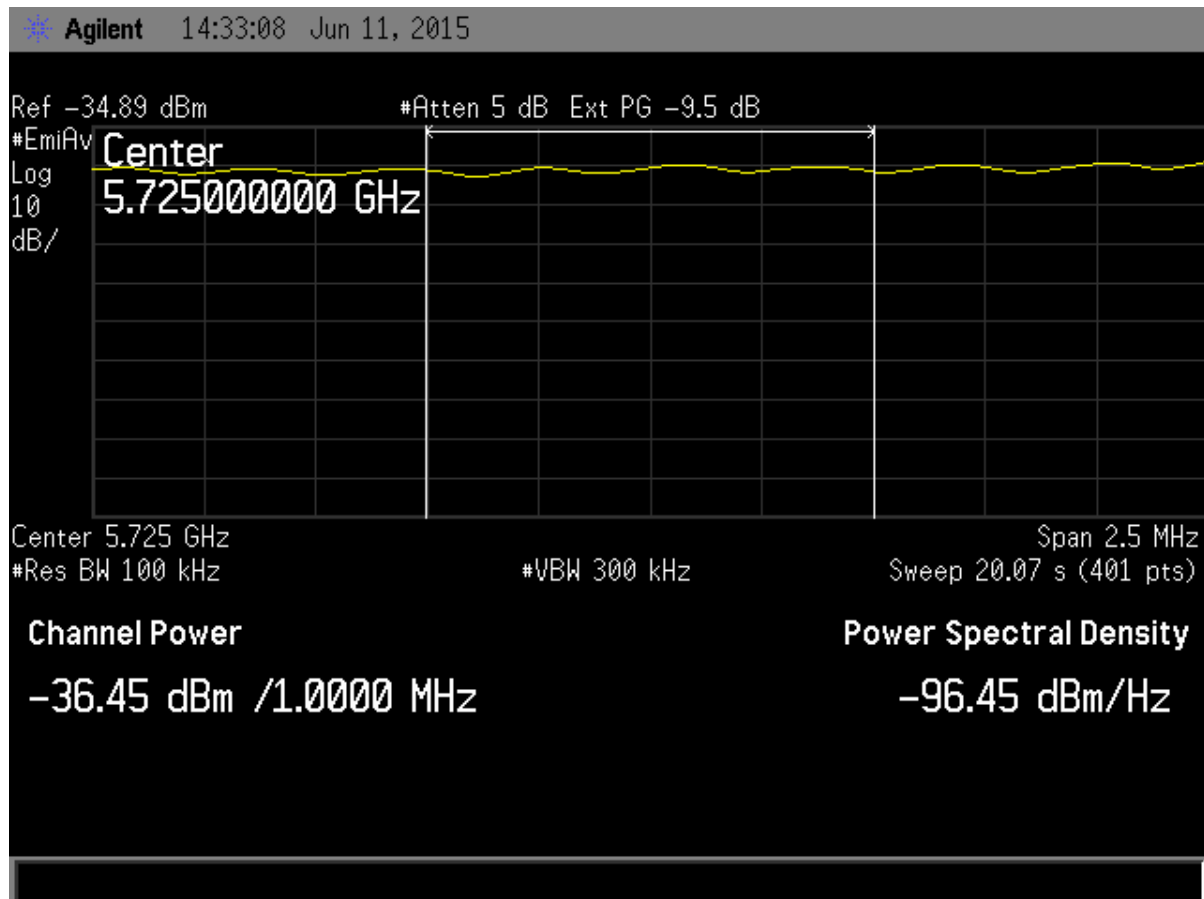


Figure 68. 5.725 GHZ Band Edge Compliance, 802.11a Channel 149- Peak

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

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**Figure 69. 5.725 GHZ Band Edge Compliance, 802.11a Channel 149- Average**

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-31.56dBm/MHz
Band Edge Margin	4.56 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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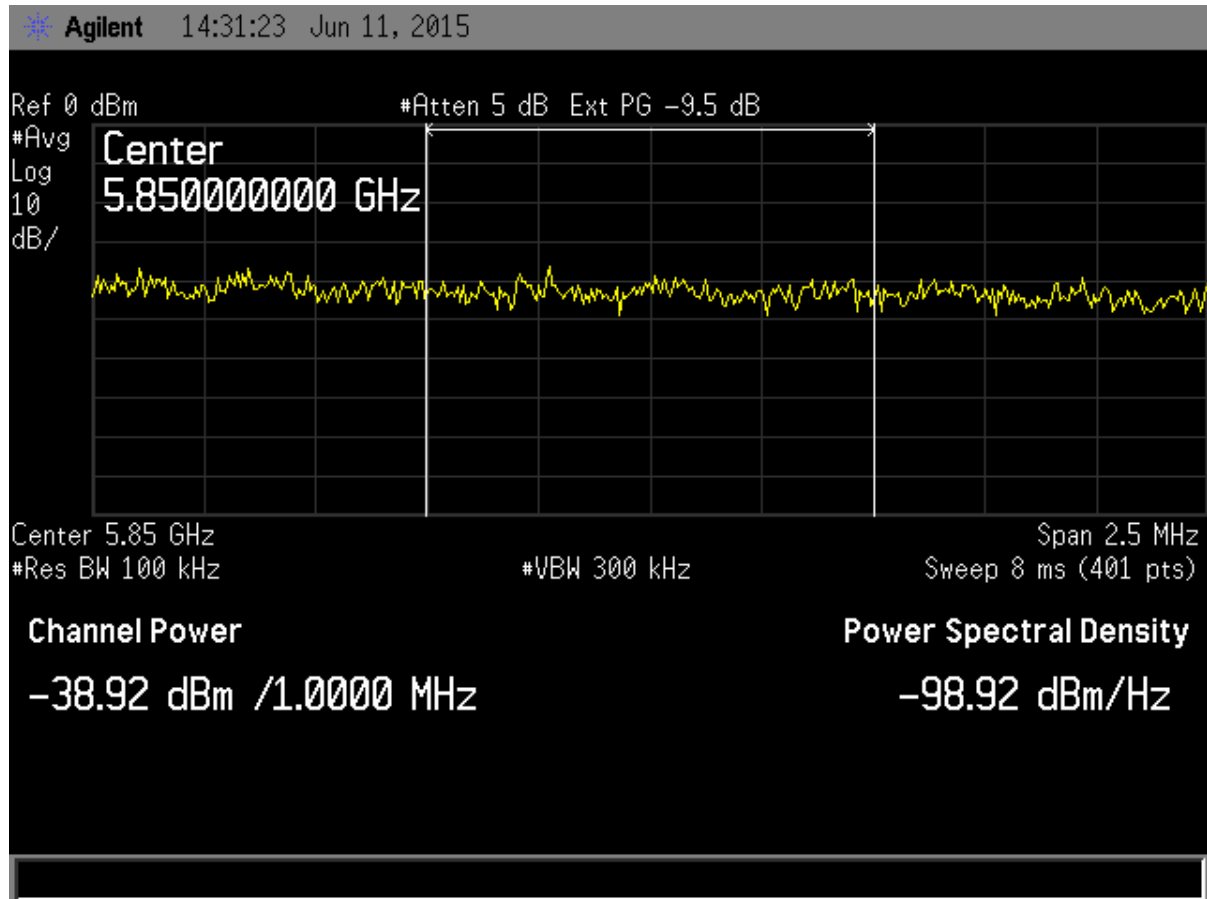


Figure 70. 5.85 GHZ Band Edge Compliance, 802.11a – Peak

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

FCC Part 15 Certification/ RSS 247  
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 1849C-P008  
 15-0086  
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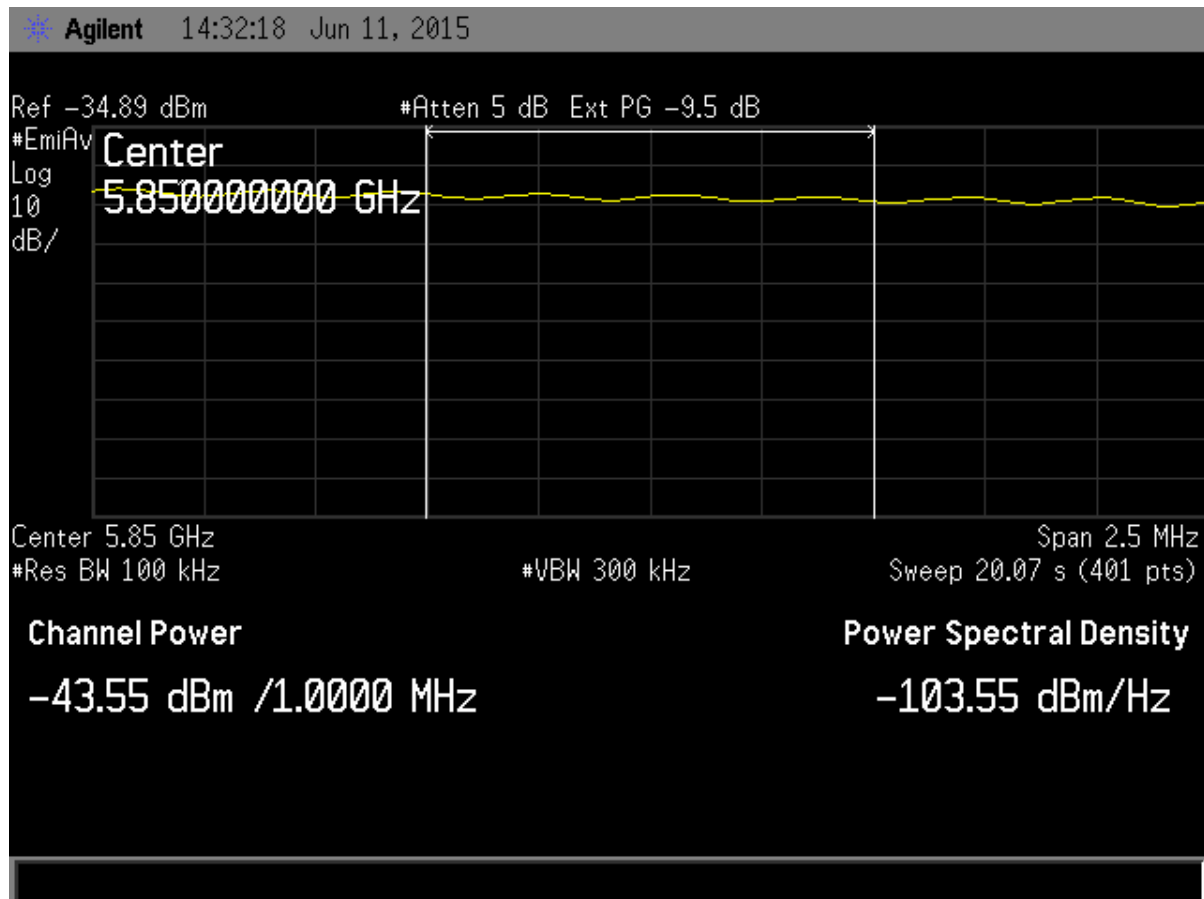


Figure 71. 5.85 GHZ Band Edge Compliance, 802.11a - Average

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-38.92dBm/MHz
Band Edge Margin	11.92 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  
15-0086  
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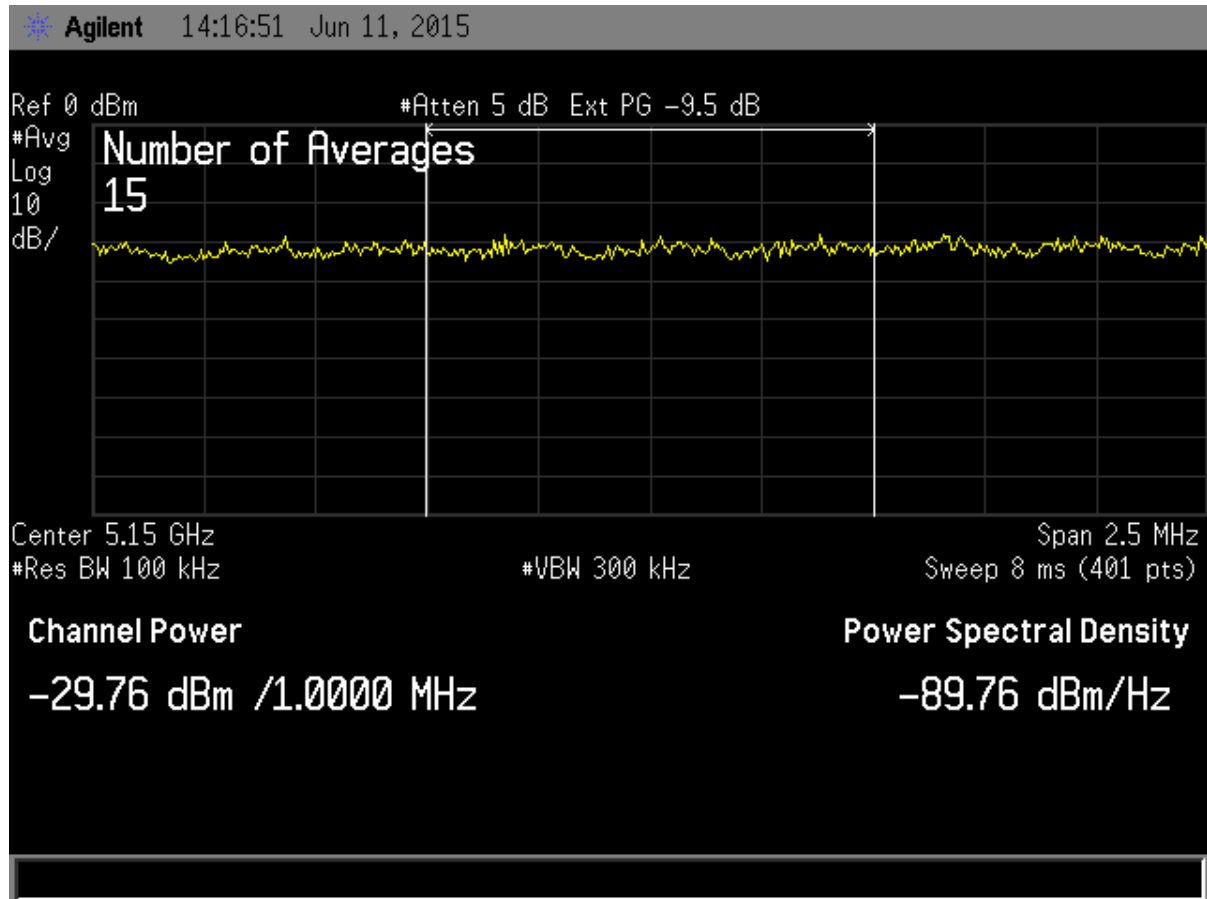


Figure 72. 5.15 GHZ Band Edge Compliance, 802.11n – Peak



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

FCC Part 15 Certification/ RSS 247  
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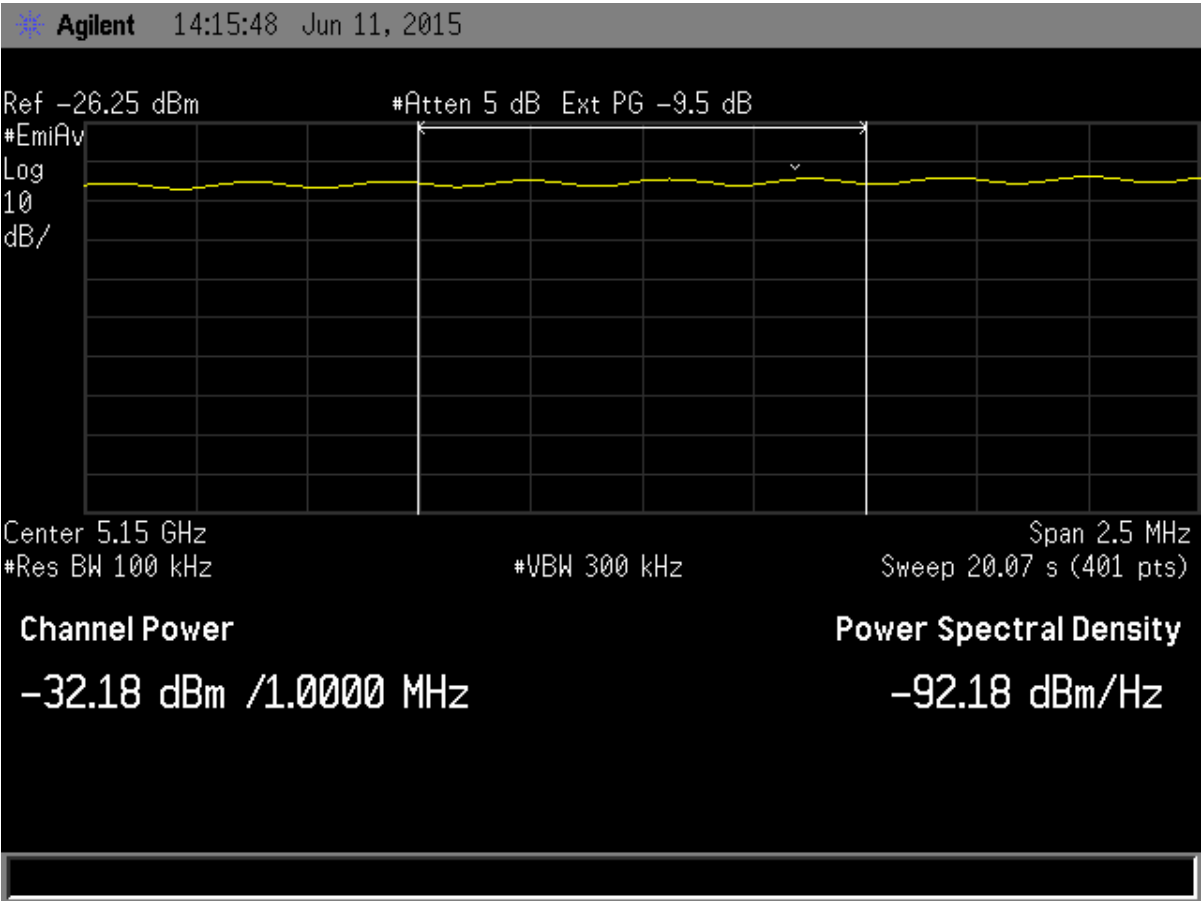


Figure 73. 5.15 GHZ Band Edge Compliance, 802.11n - Average

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-29.76dBm/MHz
Band Edge Margin	2.76 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  
15-0086  
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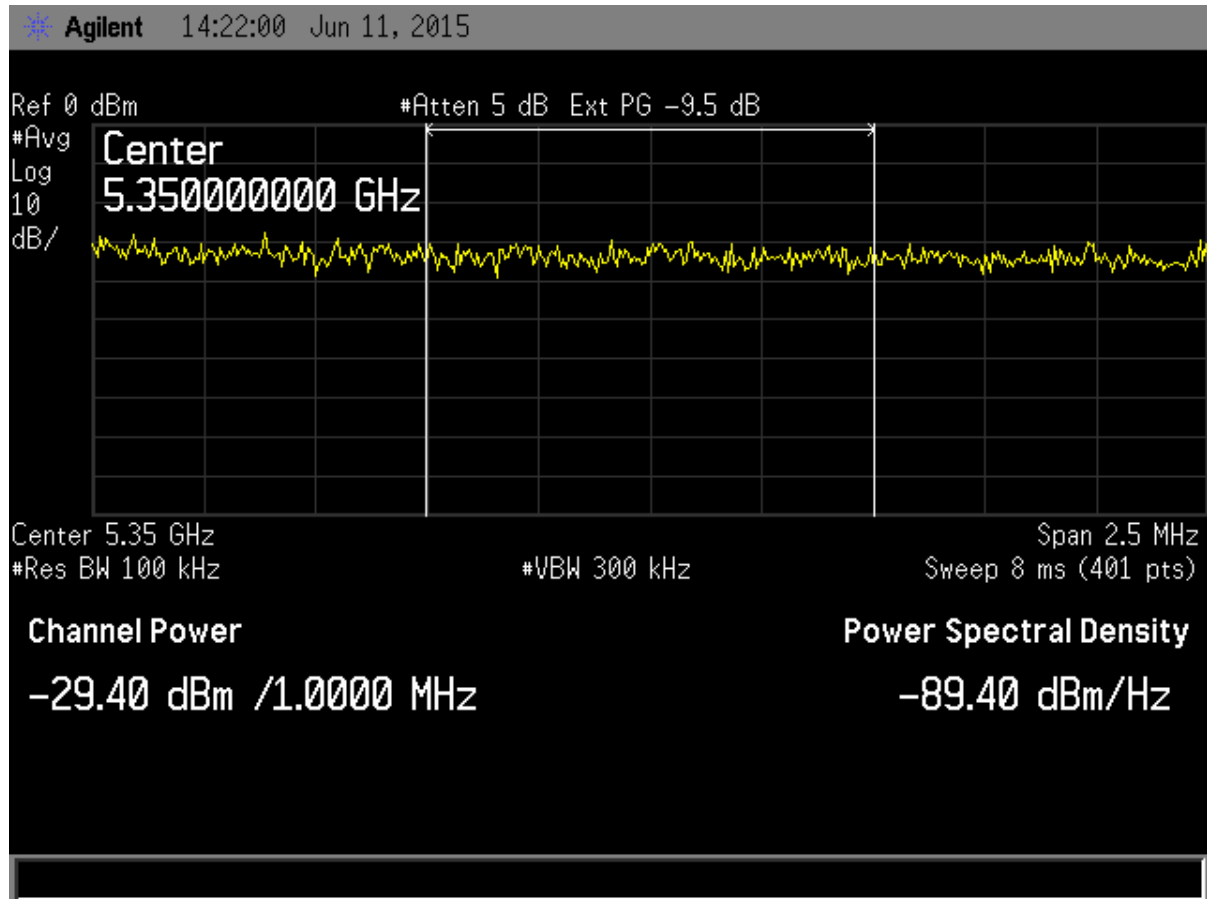


Figure 74. 5.35 GHZ Band Edge Compliance, 802.11n – Peak

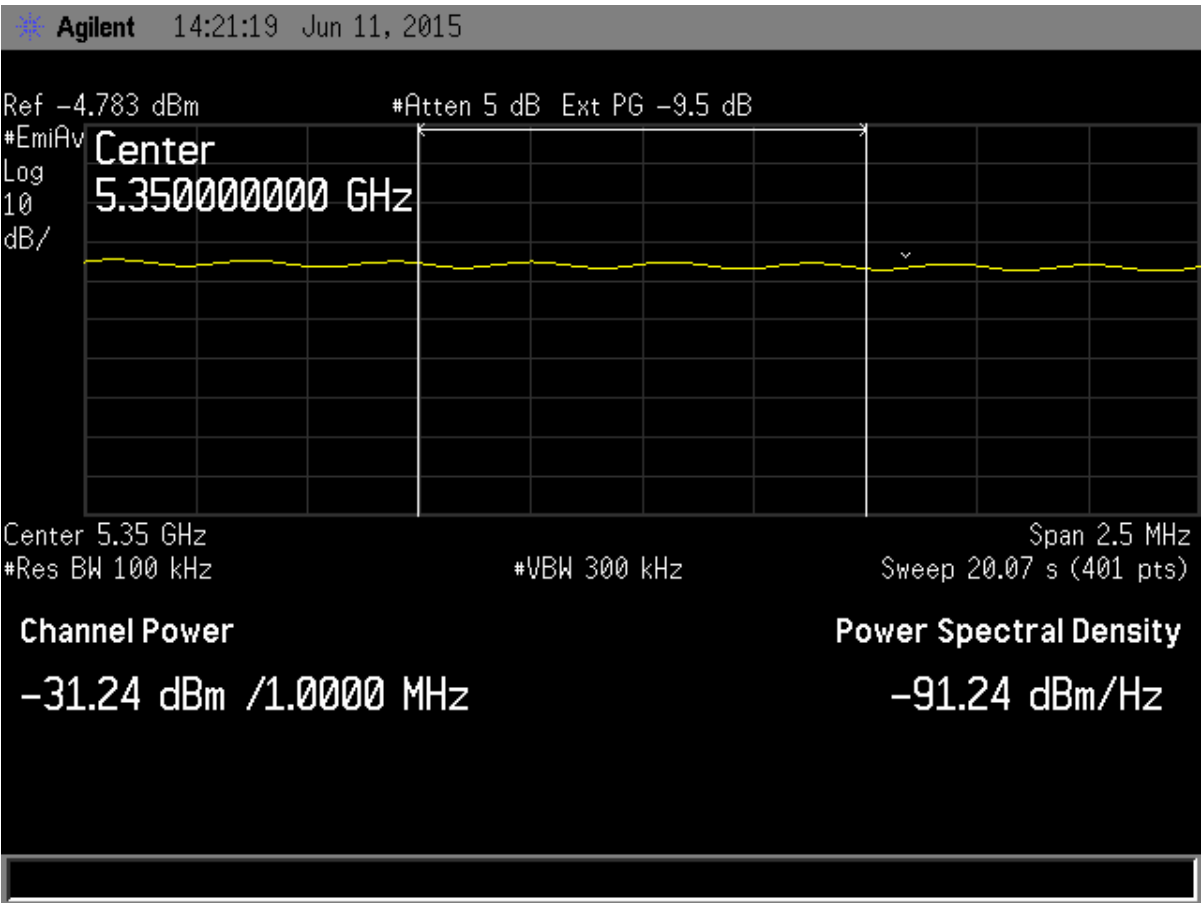


Figure 75. 5.35 GHZ Band Edge Compliance, 802.11n - Average

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-29.40dBm/MHz
Band Edge Margin	2.40 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  
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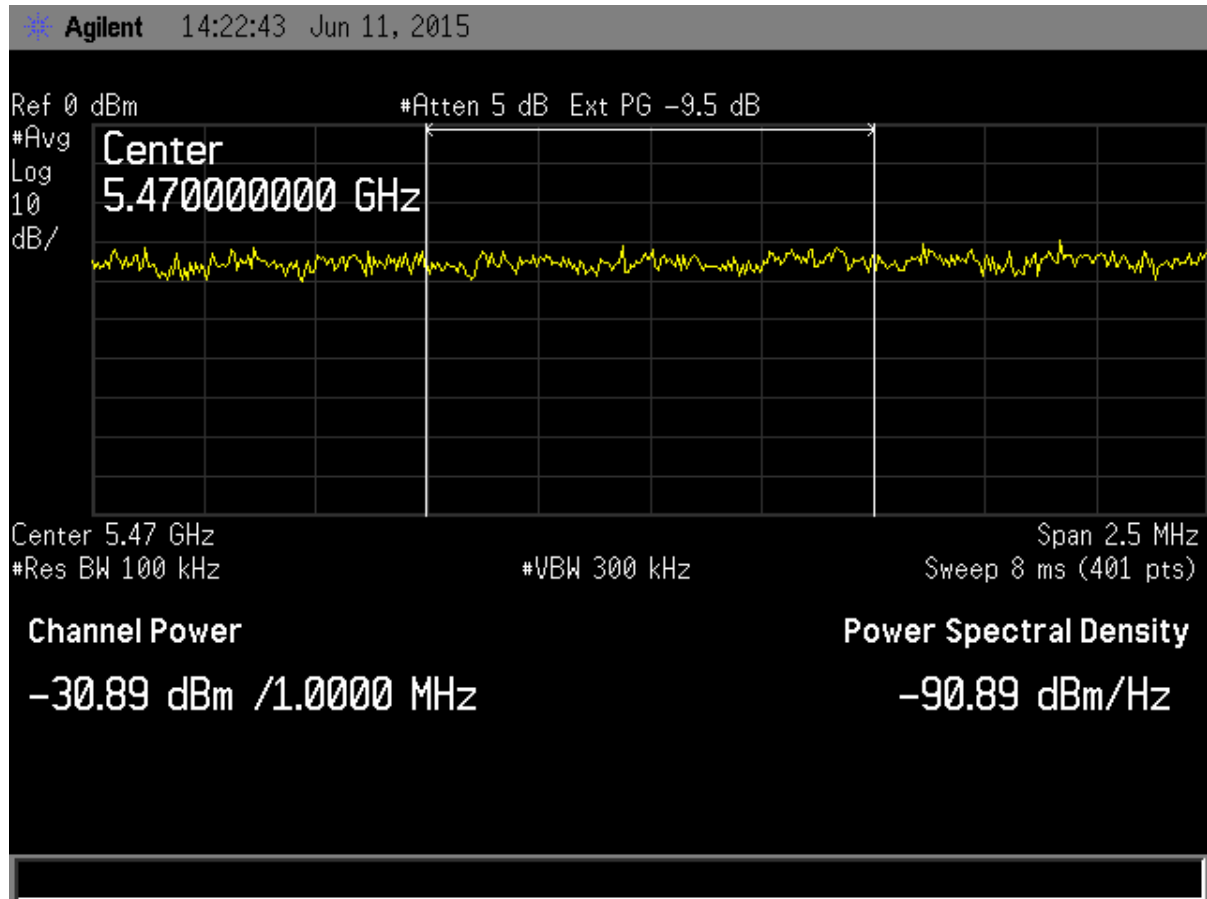


Figure 76. 5.47 GHZ Band Edge Compliance, 802.11n – Peak

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

FCC Part 15 Certification/ RSS 247  
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1849C-P008  
15-0086  
July 7, 2015  
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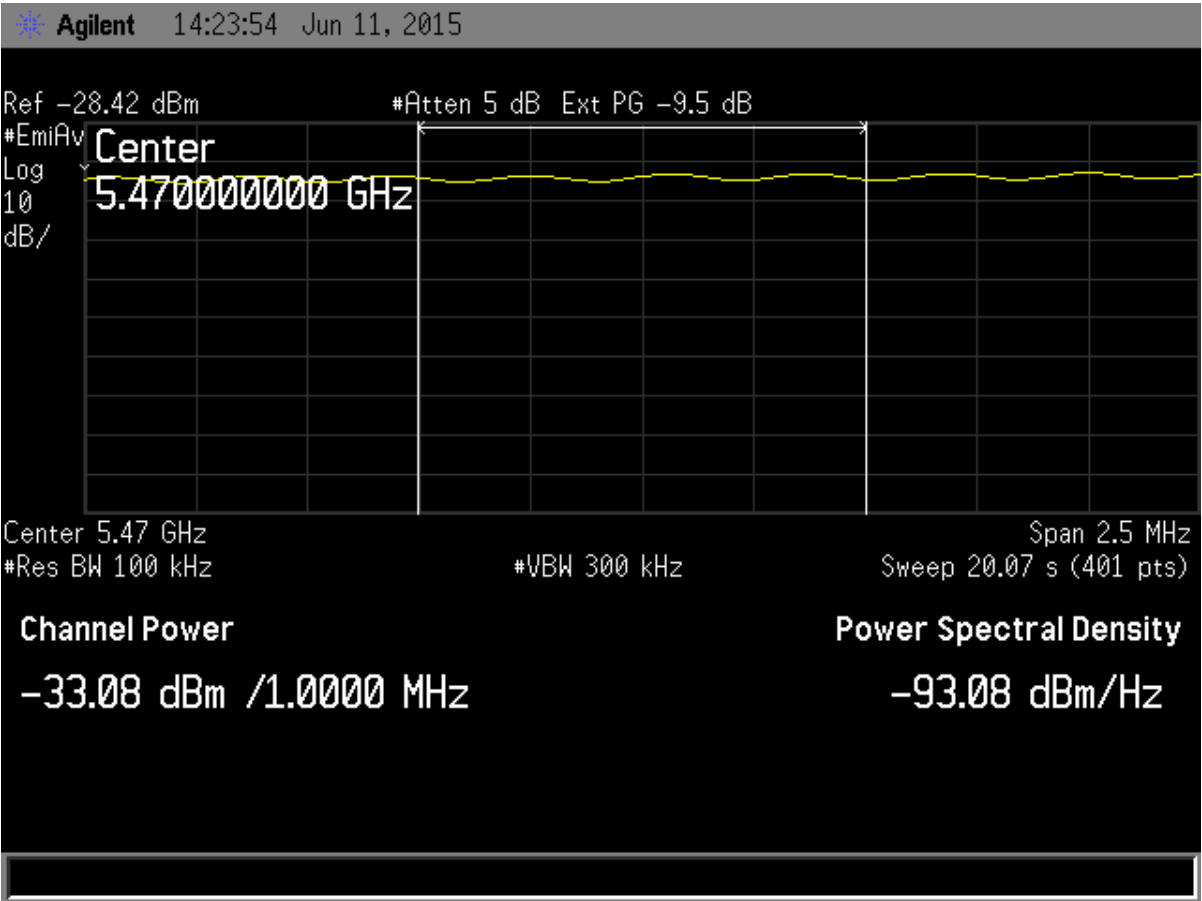


Figure 77. 5.47 GHZ Band Edge Compliance, 802.11n - Average

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00 dBuV/m
-Calculated Result	-30.89 dBuV/m
Band Edge Margin	3.89 dBuV/m

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

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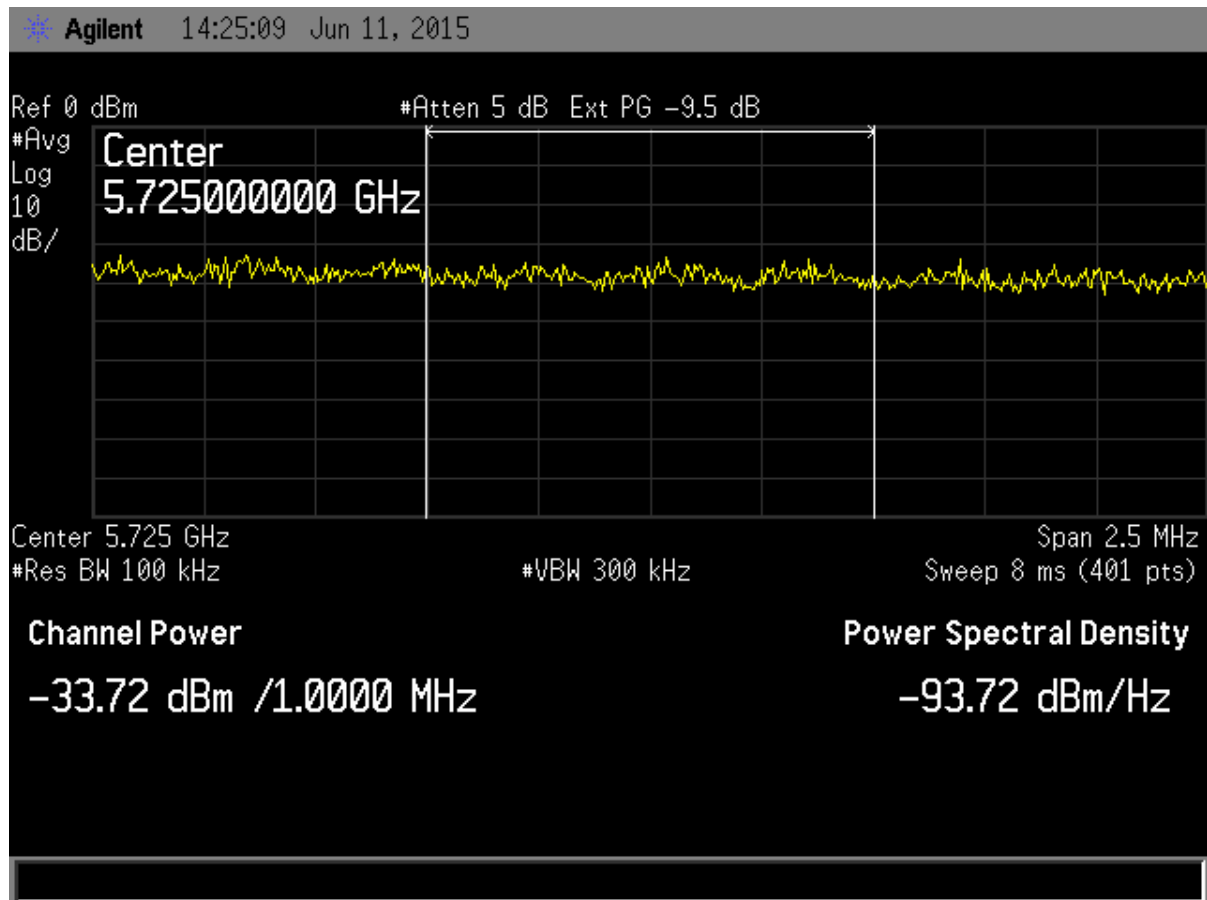
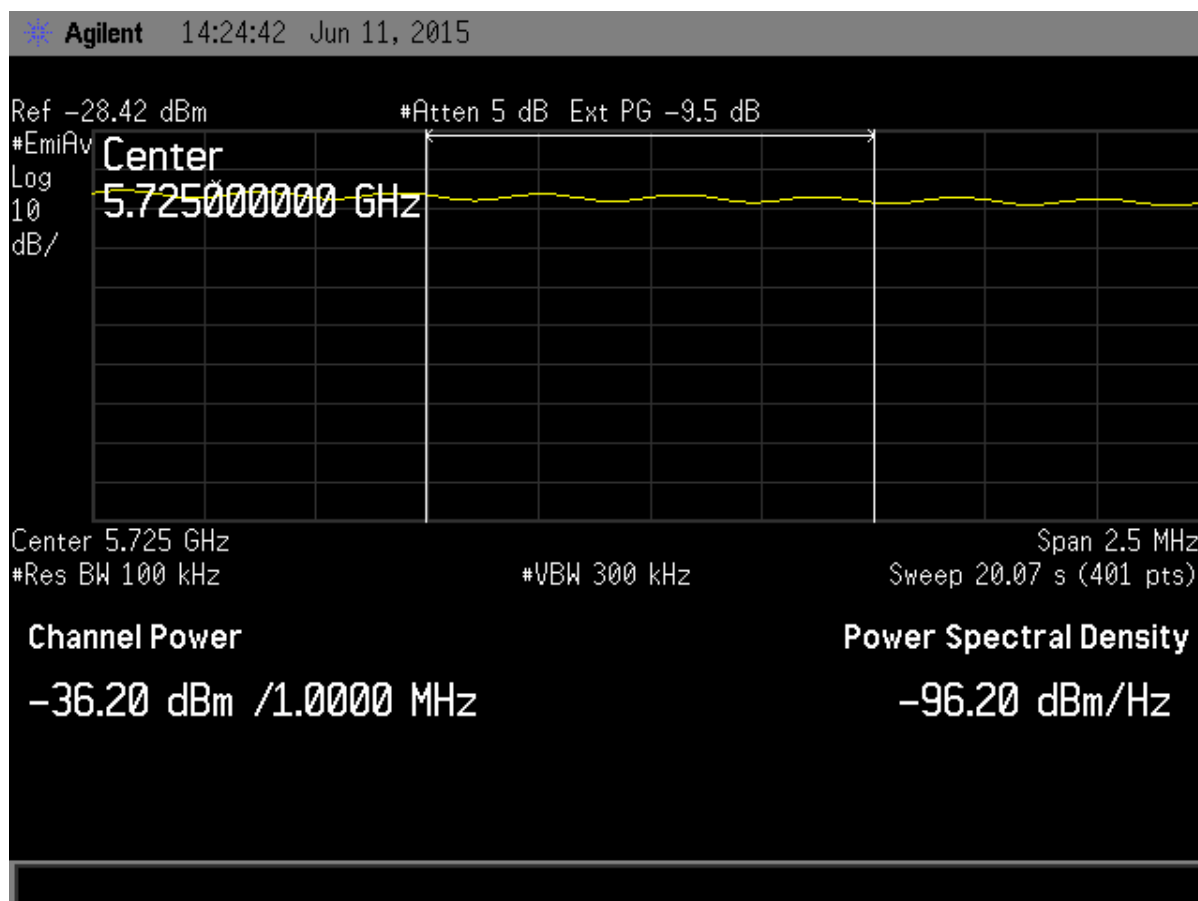


Figure 78. 5.725 GHZ Band Edge Compliance, 802.11n Channel 140 - Peak

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

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**Figure 79. 5.725 GHZ Band Edge Compliance, 802.11 n Channel 140- Average**

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-33.72dBm/MHz
Band Edge Margin	6.72 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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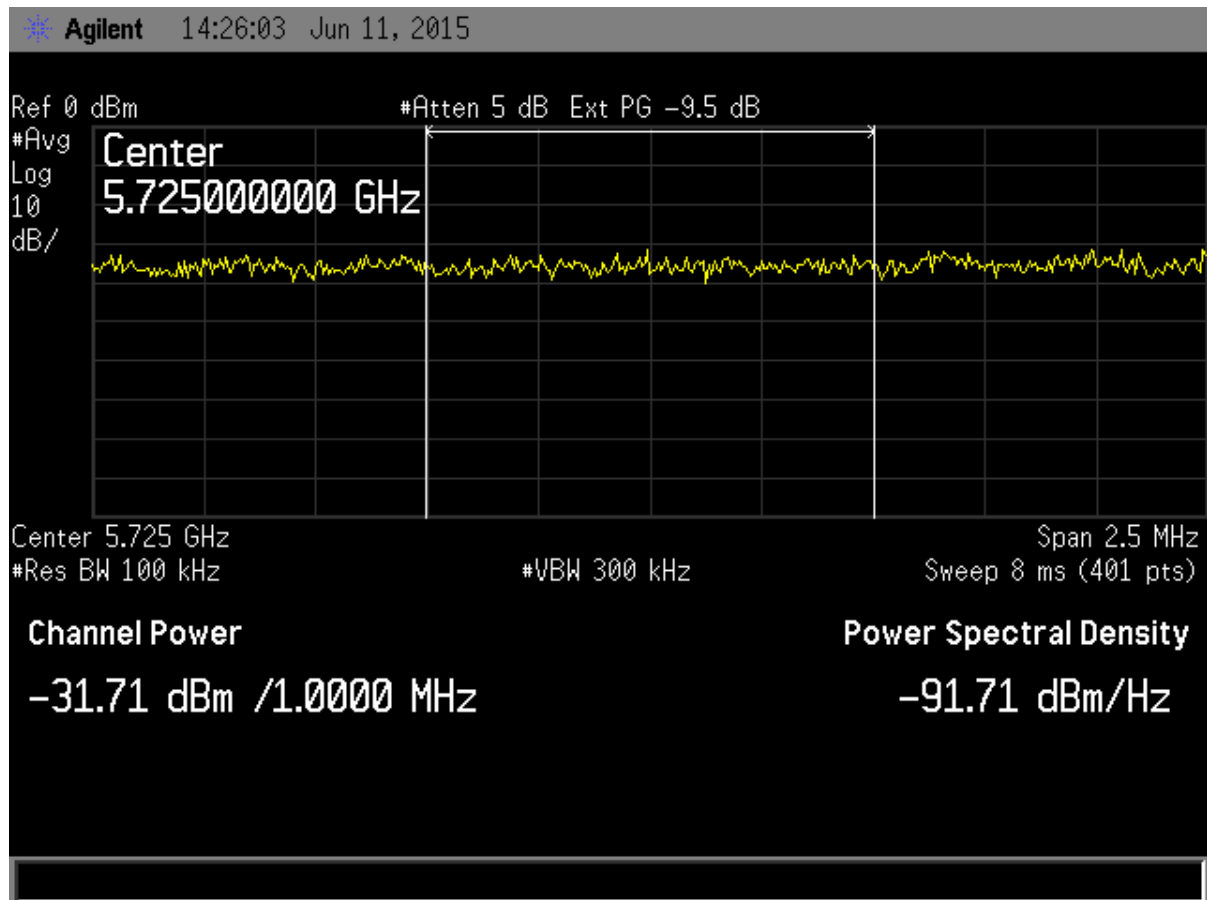
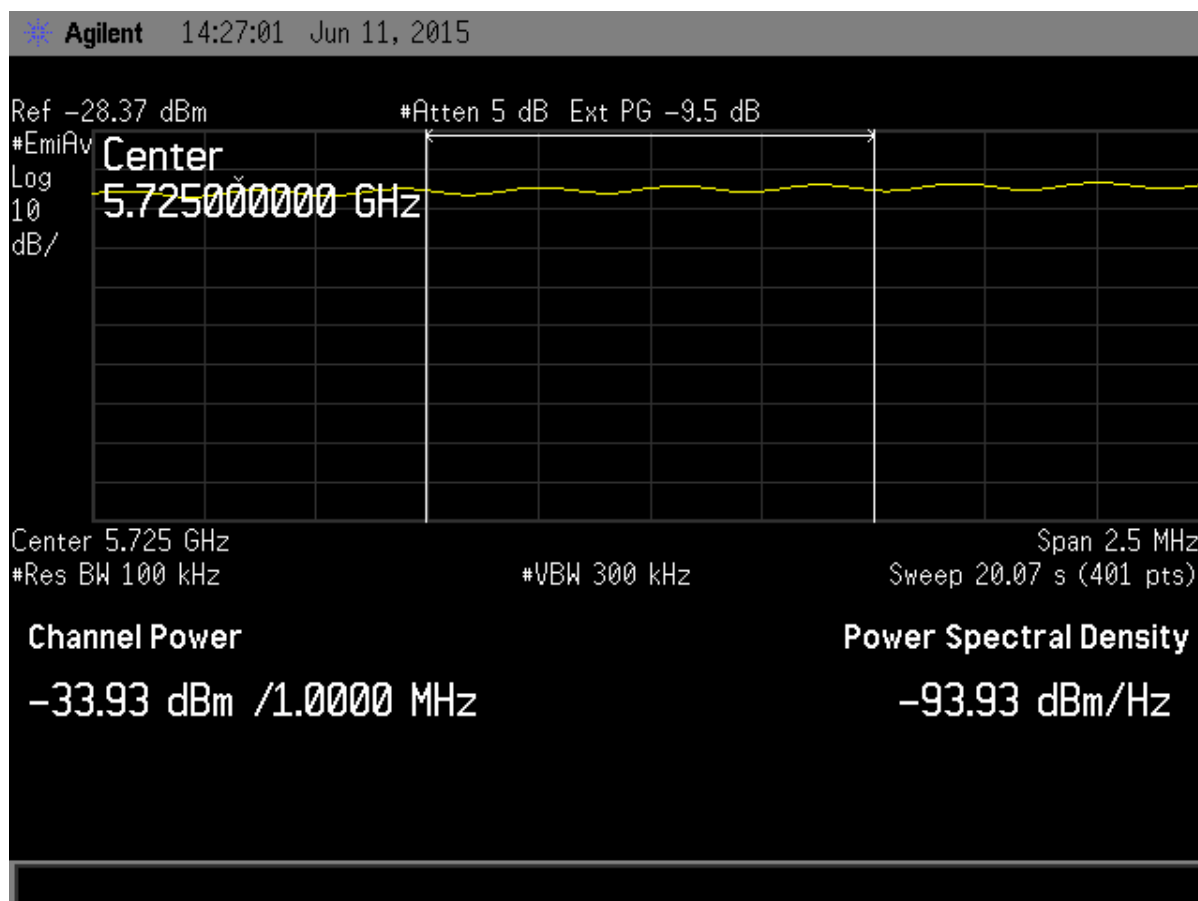


Figure 80. 5.725 GHZ Band Edge Compliance, 802.11n Channel 149 - Peak



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

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**Figure 81. 5.725 GHZ Band Edge Compliance, 802.11n Channel 149 - Average**

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-31.71dBm/MHz
Band Edge Margin	4.71 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  
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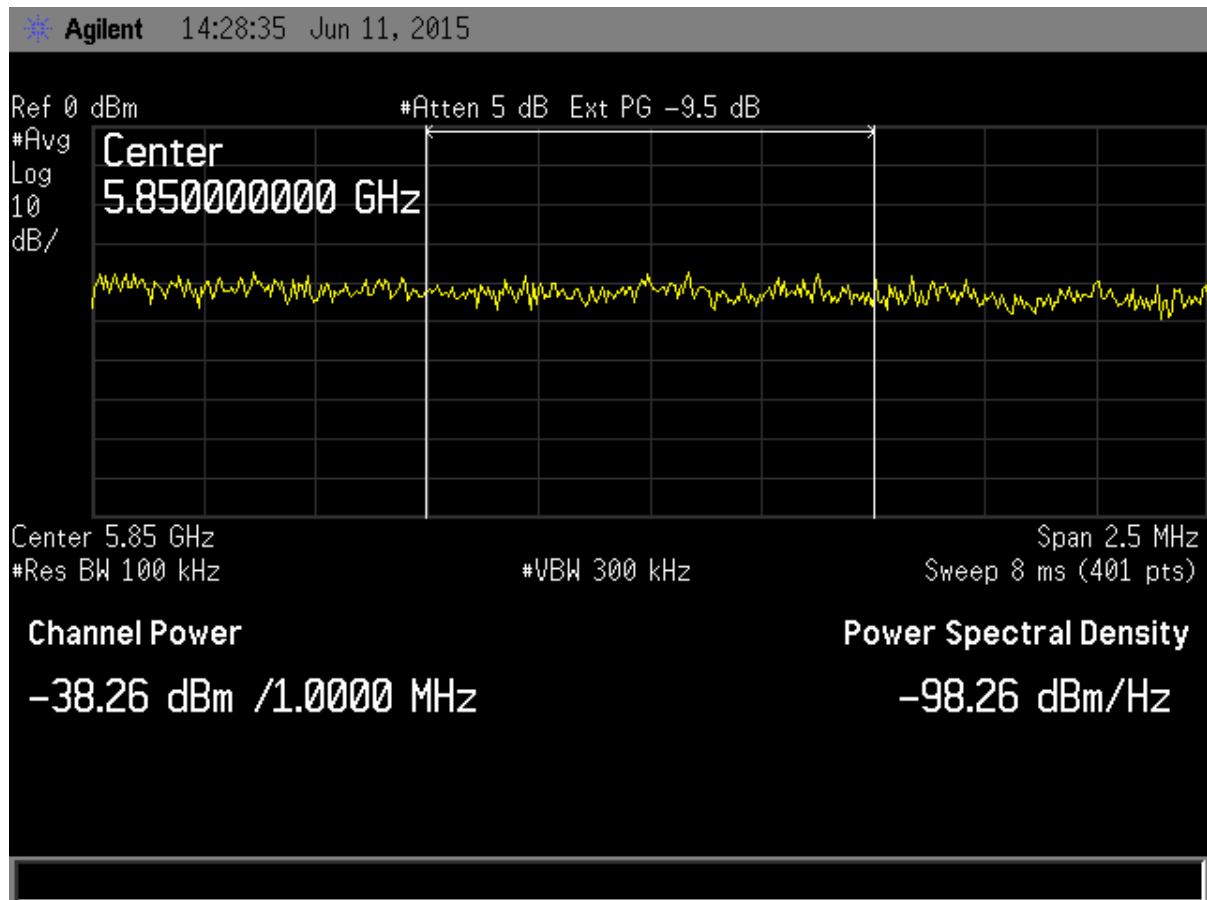
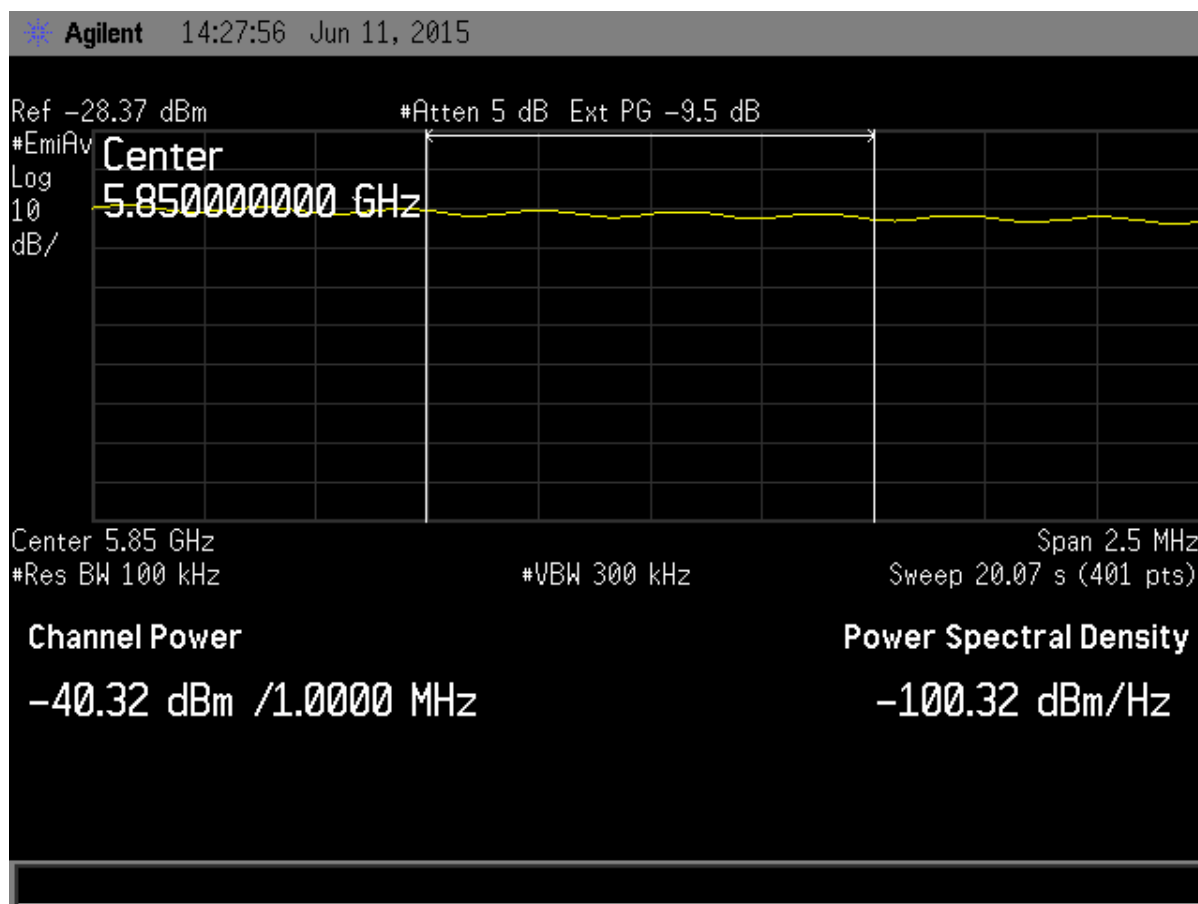


Figure 82. 5.85 GHZ Band Edge Compliance, 802.11n - Peak

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

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**Figure 83. 5.85 GHZ Band Edge Compliance, 802.11n - Average**

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-38.26dBm/MHz
Band Edge Margin	11.26 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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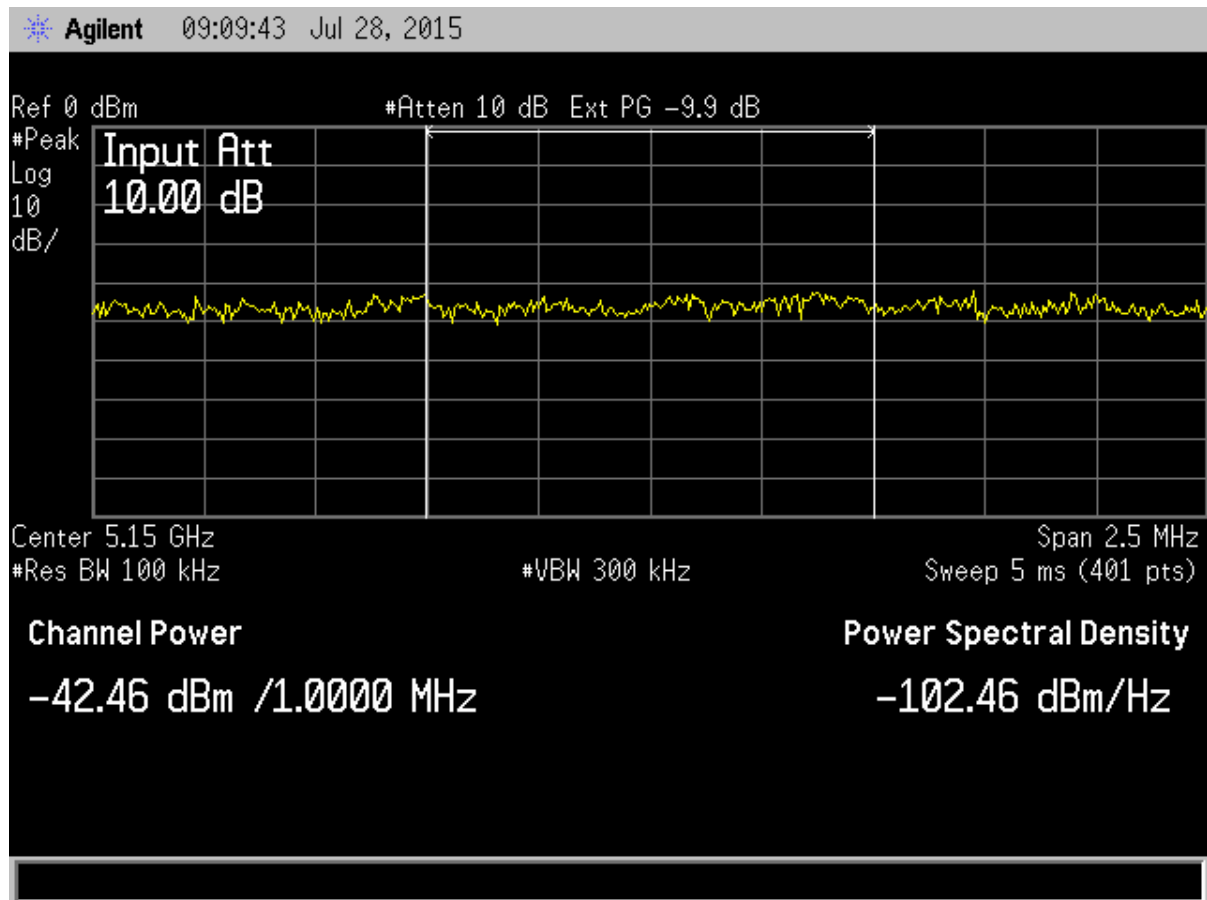


Figure 84. 5.15 GHz Band Edge Compliance 802.11n 40 MHz BW - Peak

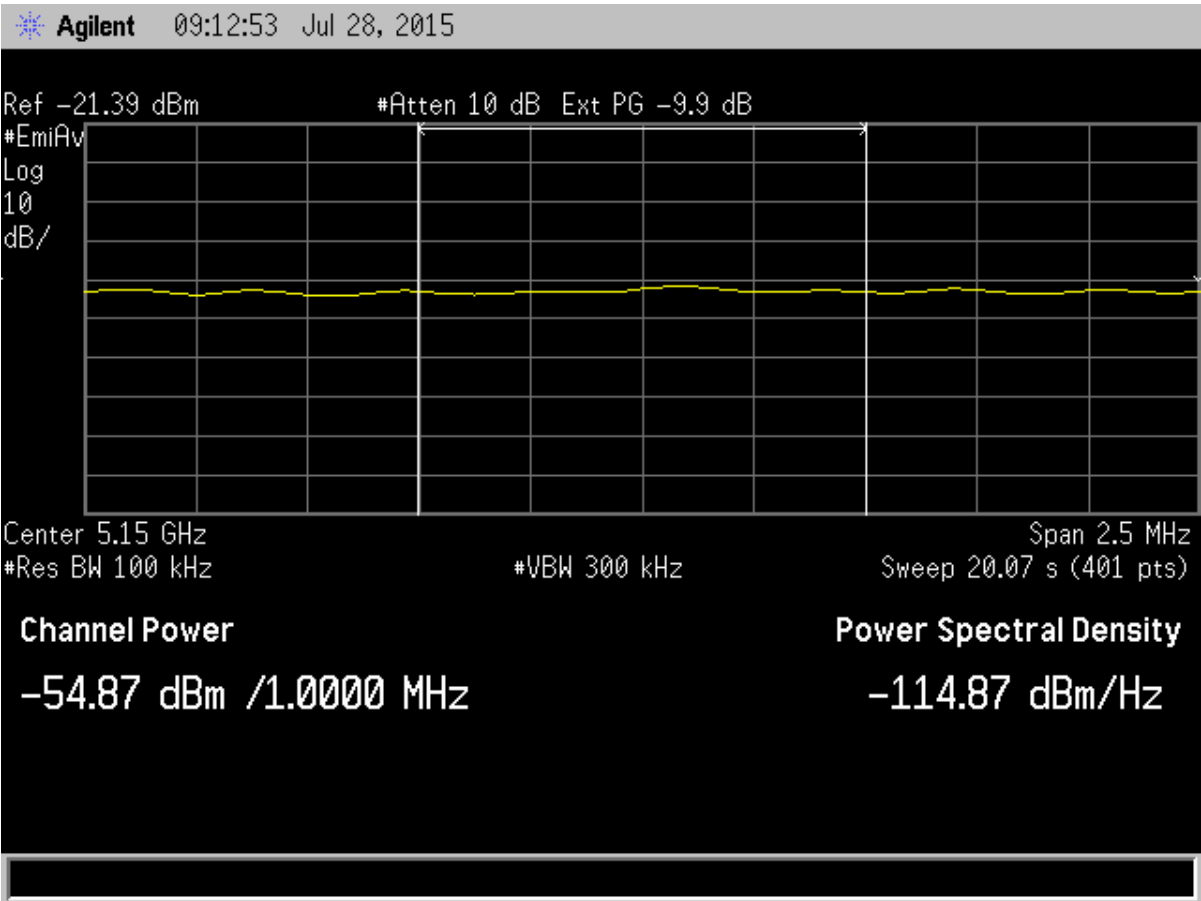


Figure 85. 5.15 GHz Band Edge Compliance 802.11n 40 MHz BW - Average

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-42.46dBm/MHz
Band Edge Margin	15.46 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  
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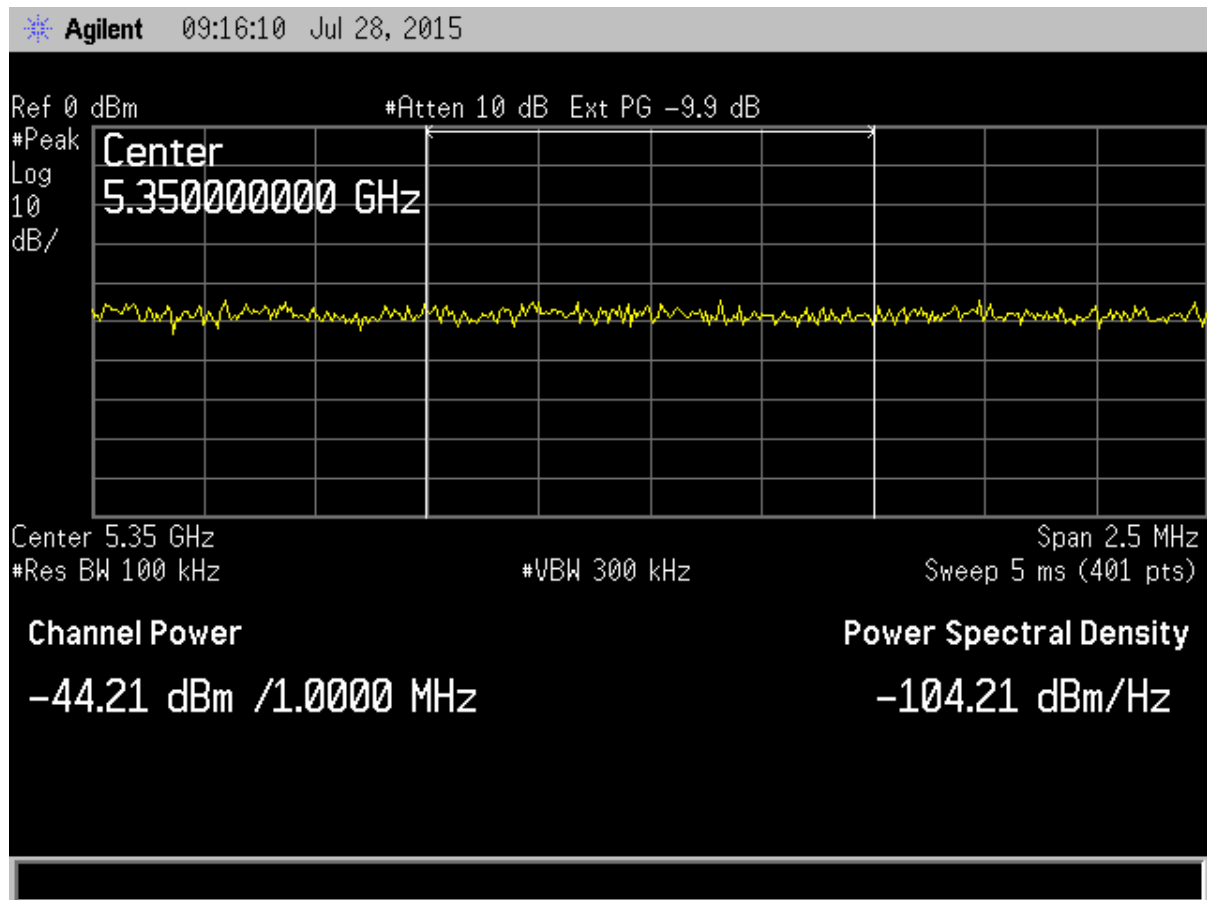
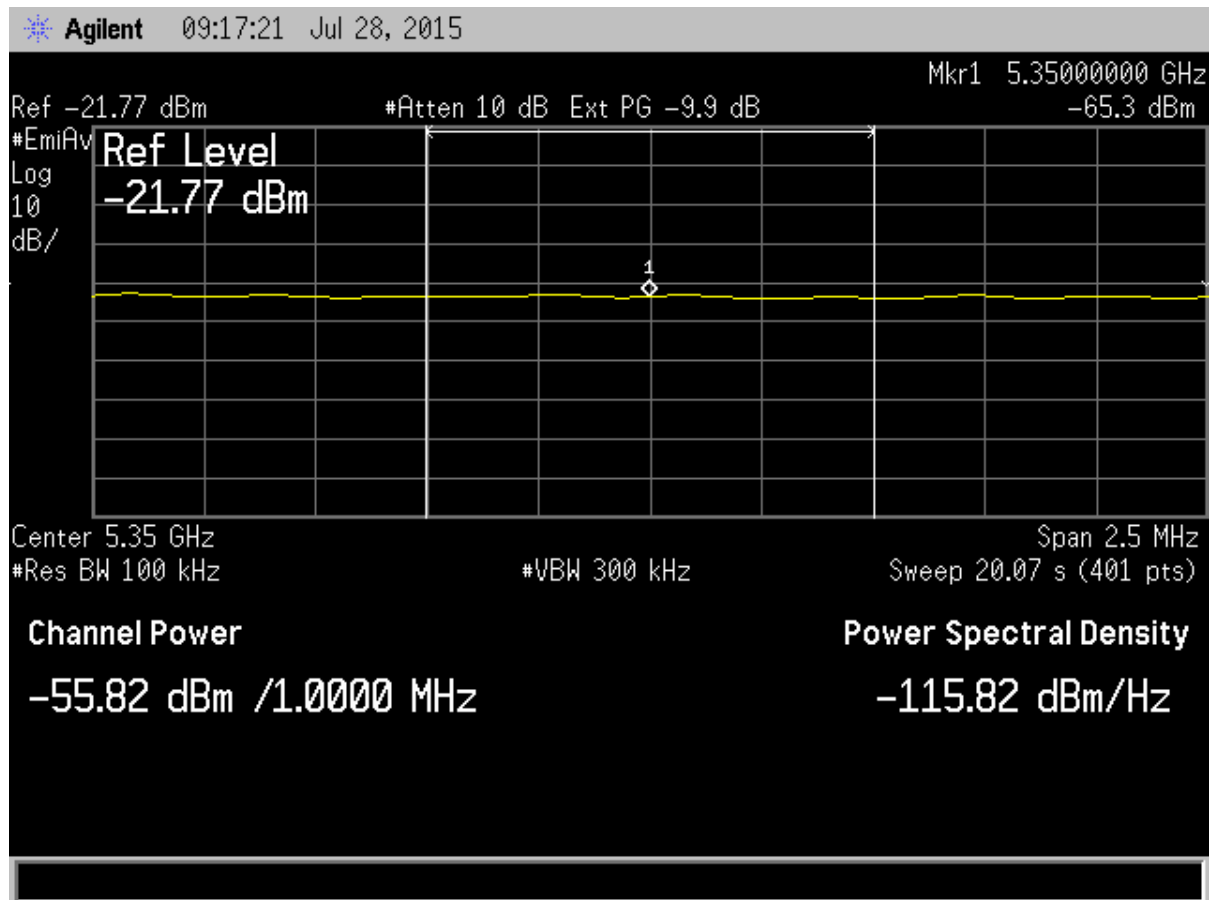


Figure 86. 5.35 GHz Band Edge Compliance 802.11n 40 MHz BW – Peak

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 87. 5.35 GHz Band Edge Compliance 802.11n 40 MHz BW – Average**

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-44.21dBm/MHz
Band Edge Margin	17.21 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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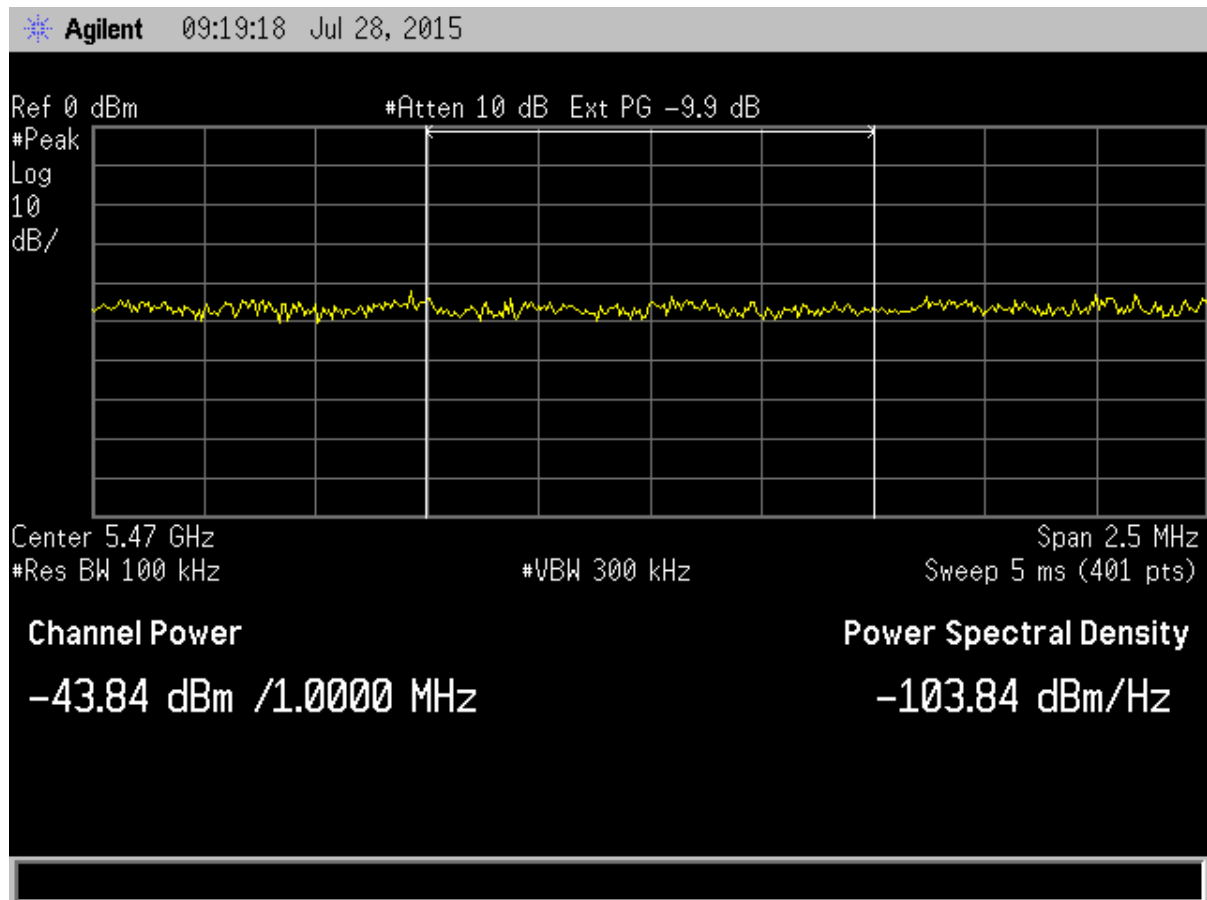


Figure 88. 5.47 GHz Band Edge Compliance 802.11n 40 MHz BW – Peak



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

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 15-0086  
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**Figure 89. 5.47 GHz Band Edge Compliance 802.11n 40 MHz BW – Average**

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-43.84dBm/MHz
Band Edge Margin	16.84 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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15-0086  
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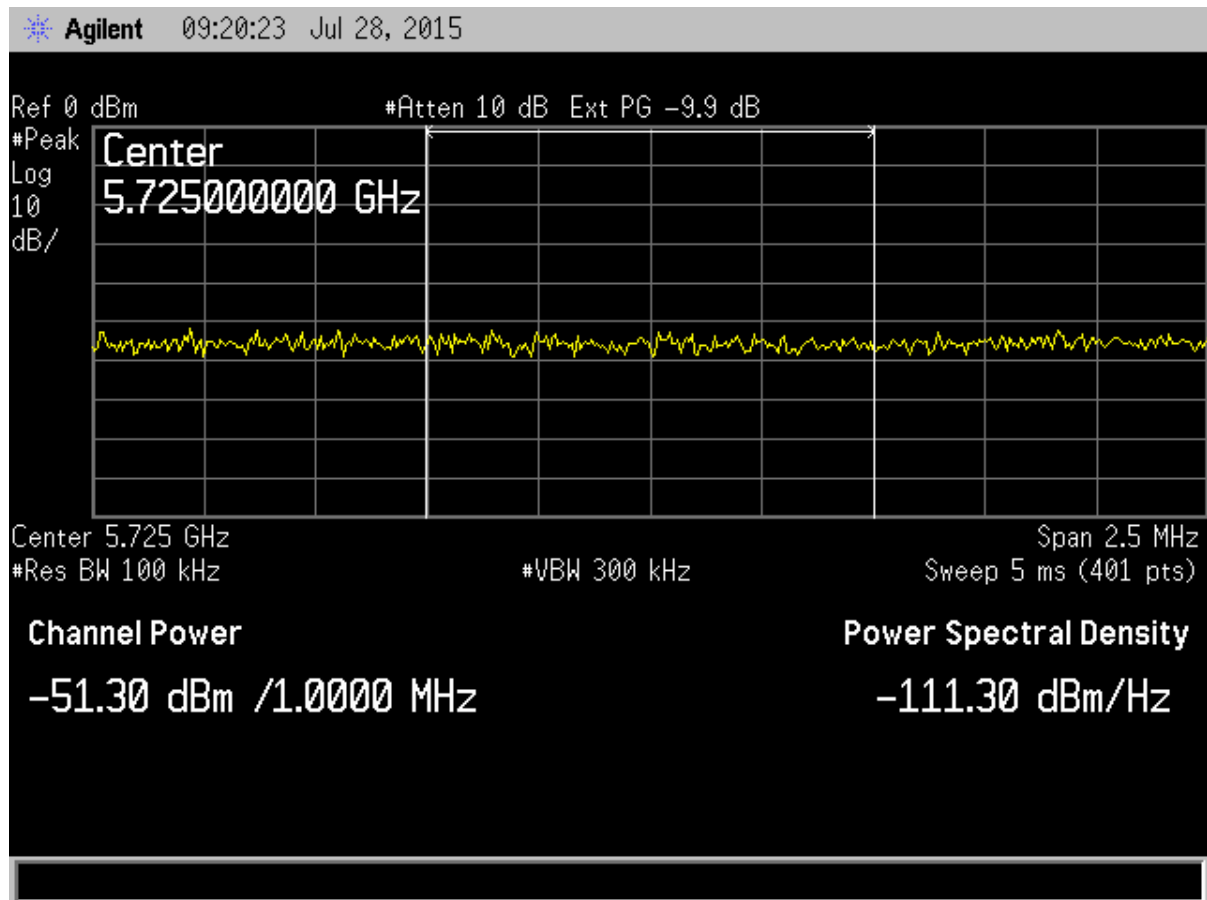


Figure 90. 5.725 GHz Band Edge Compliance 802.11n 40 MHz BW – Peak

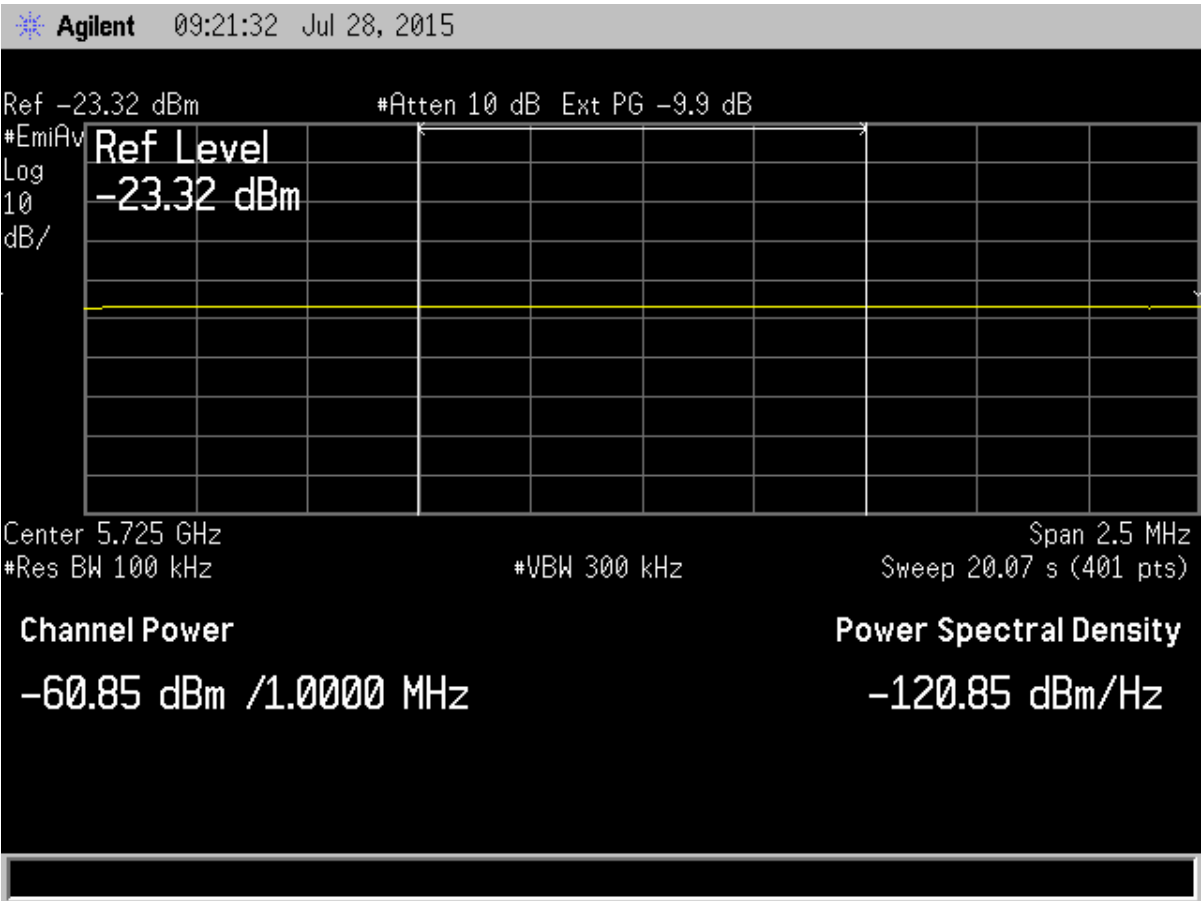


Figure 91. 5.725 GHz Band Edge Compliance 802.11n 40 MHz BW – Average

Calculation of worst case lower band edge measurement:

Band Edge Limit	-27.00dBm/MHz
-Calculated Result	-51.30dBm/MHz
Band Edge Margin	24.30 dB

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

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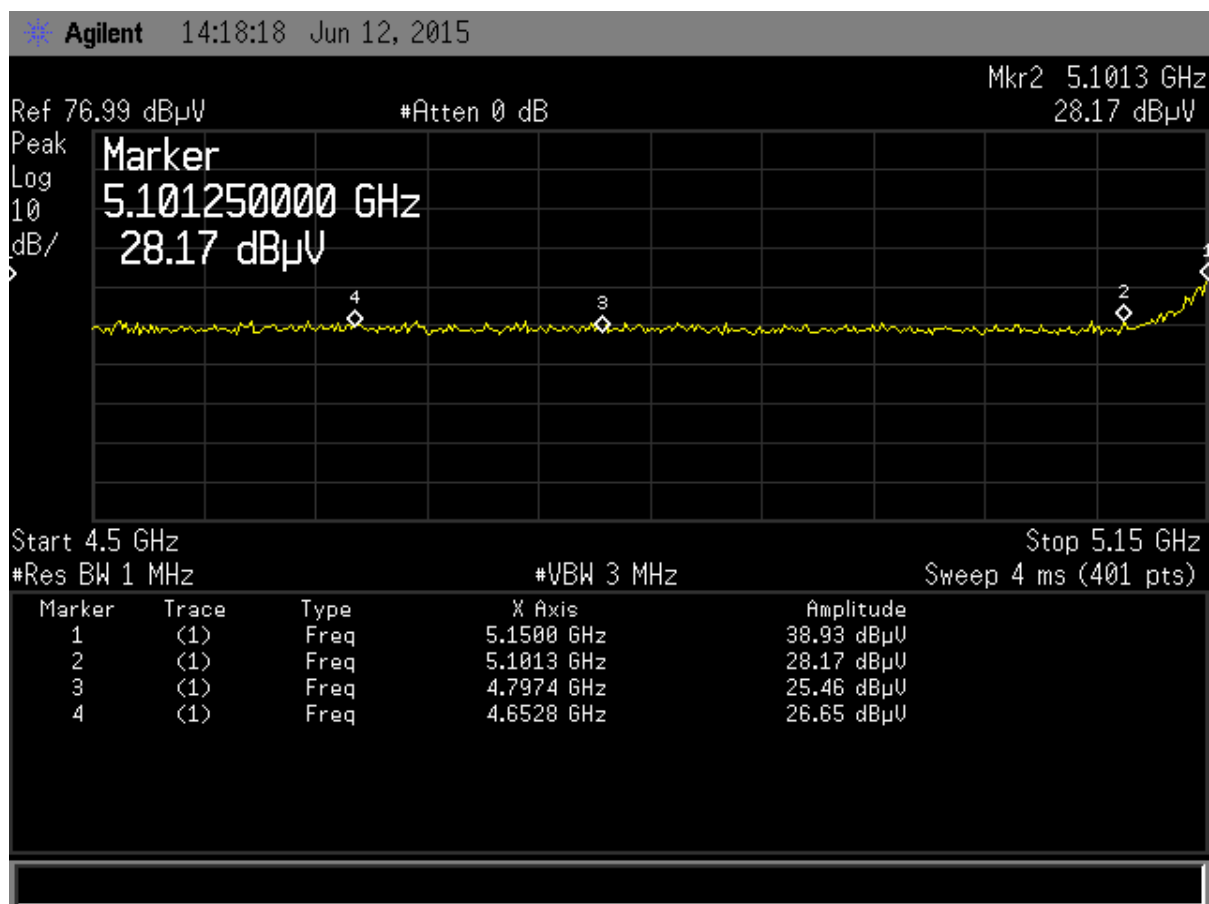
## **2.12 Unwanted Emissions in the Restricted Bands (CFR 15.205, 15.209)**

Unwanted Emissions in the Restricted Bands were made following the guidelines in FCC KDB Publication No. 789033 with the EUT operating on the channels closest to the restricted bands of operation. These measurements were performed with the EUT transmitting at <98% duty Cycle.

To capture the unwanted emissions the Spectrum Analyzer frequency span set cover the full restricted band. Radiated measurements are performed with RBW = 1 MHz. In all cases, the VBW is set  $\geq 3 \times \text{RBW}$ .

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

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**Figure 92. Restricted Band 4.5 - 5.15 GHz operating on Channel 36, 802.11a – Peak**

**Table 12. Radiated Restricted Band 4.5 GHz to 5.15 GHz, 802.11a – Peak**

4.5 GHz to 5.15 GHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	PK Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5150.00	38.93	29.19	68.12	74.0	1.0m./HORZ	5.9	PK
5101.30	28.17	29.19	57.36	74.0	1.0m./HORZ	16.6	PK
4794.40	25.46	27.81	53.27	74.0	1.0m./HORZ	20.7	PK
4652.80	26.65	27.63	54.28	74.0	1.0m./HORZ	19.7	PK

Test Date: June 12, 2015

Tested By

Signature: 

Name: Carrie Fincannon

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

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**Figure 93. Restricted Band 4.5 - 5.15 GHz operating on Channel 36, 802.11a - Average**

**Table 13. Radiated Restricted Band 4.5 GHz to 5.15 GHz, 802.11a – Average**

4.5 GHz to 5.15 GHz Restricted Band AVG Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5146.80	23.77	29.19	52.96	54.0	1.0m./HORZ	1.0	AVG
5101.30	15.06	29.19	44.25	54.0	1.0m./HORZ	9.8	AVG
4797.40	14.01	27.81	41.82	54.0	1.0m./HORZ	12.2	AVG
4652.80	14.74	27.63	42.37	54.0	1.0m./HORZ	11.6	AVG

Test Date: June 12, 2015

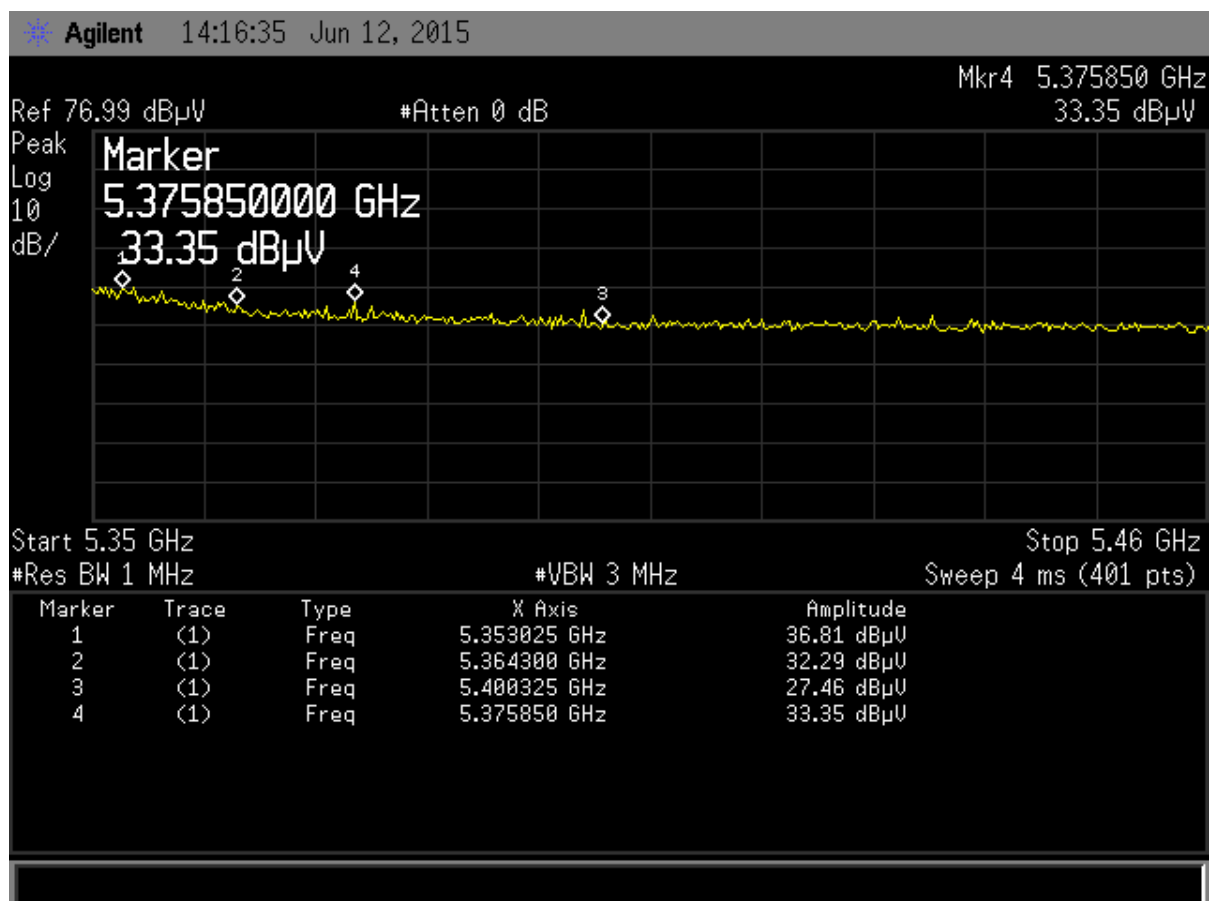
Tested By

Signature: 

Name: Carrie Fincannon

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

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**Figure 94. Restricted Band 5.35 - 5.46 GHz operating on Channel 64, 802.11a – Peak**

**Table 14. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11a – Peak**

5.35 GHz to 5.46 GHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	PK Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5353.03	36.81	29.23	66.04	74.0	1.0m./HORZ	8.0	PK
5364.30	32.29	29.23	61.52	74.0	1.0m./HORZ	12.5	PK
5400.33	27.46	29.52	56.98	74.0	1.0m./HORZ	17.0	PK
5375.85	33.35	29.23	62.58	74.0	1.0m./HORZ	11.4	PK

Test Date: June 12, 2015

Tested By

Signature: 

Name: Carrie Fincannon

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

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**Figure 95. Restricted Band 5.35 - 5.46 GHz operating on Channel 64, 802.11a - Average**

**Table 15. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11a – Average**

5.35 GHz to 5.46 GHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5350.55	23.38	29.23	52.61	54.0	3.0m./HORZ	1.4	AVG
5370.90	17.75	29.23	46.98	54.0	3.0m./HORZ	7.0	AVG
5400.33	15.72	29.52	45.24	54.0	3.0m./HORZ	8.8	AVG
5377.50	17.50	29.23	46.73	54.0	3.0m./HORZ	7.3	AVG

Test Date: June 12, 2015

Tested By

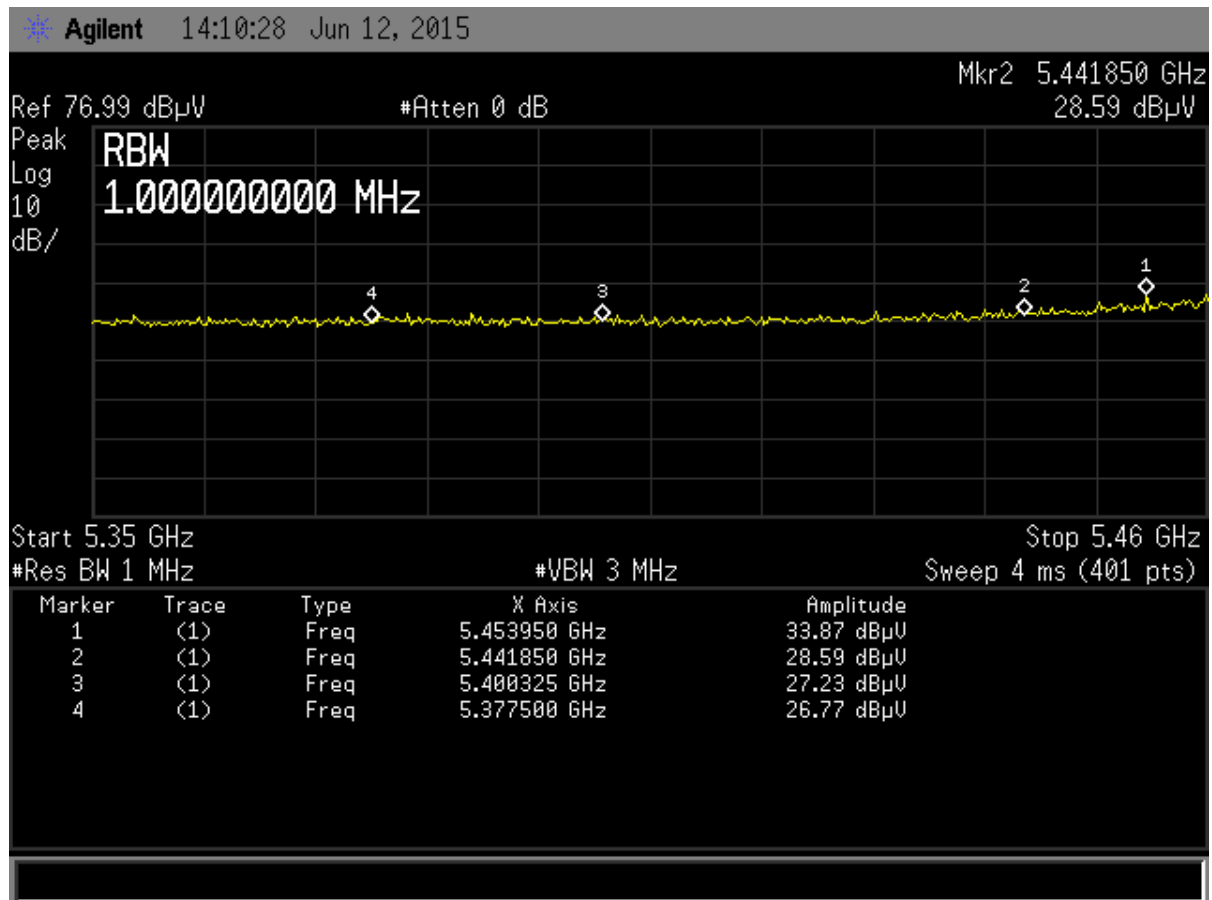
Signature:

Name: Carrie Fincannon



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

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**Figure 96. Restricted Band 5.35 – 5.46 GHz operating on Channel 100, 802.11a – Peak**

**Table 16. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11a – Peak**

5.35 GHz to 5.46 GHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	PK Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5453.95	33.87	29.52	63.39	74.0	3.0m./HORZ	10.6	PK
5441.85	28.59	29.52	58.11	74.0	3.0m./HORZ	15.9	PK
5400.33	27.23	29.52	56.75	74.0	3.0m./HORZ	17.3	PK
5377.50	26.77	29.23	56.00	74.0	3.0m./HORZ	18.0	PK

Test Date: June 12, 2015

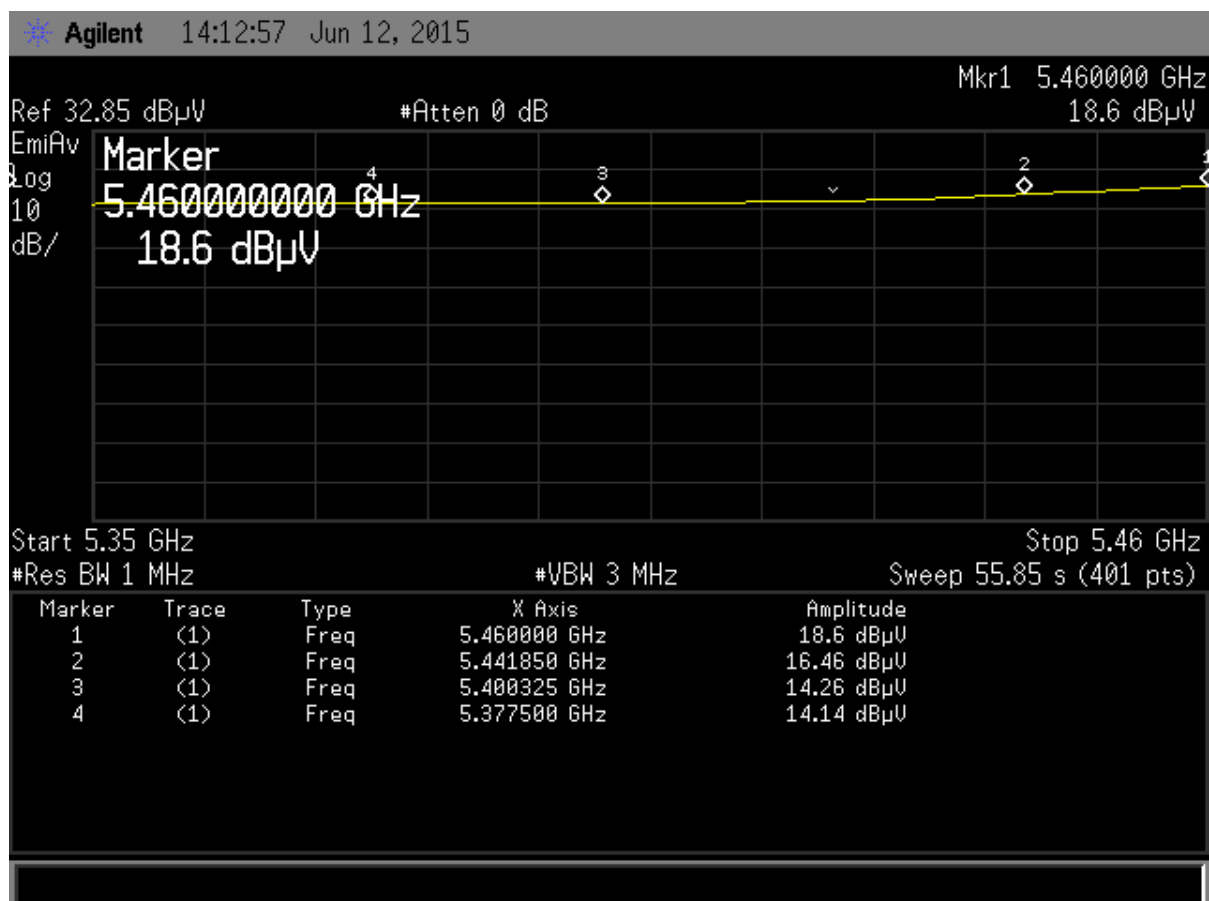
Tested By

Signature: 

Name: Carrie Fincannon

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

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**Figure 97. Restricted Band 5.35- 5.46 GHz operating on Channel 100, 802.11a - Average**

**Table 17. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11a – Average**

5.35 GHz to 5.46 GHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5460.00	18.60	29.52	48.12	54.0	1.0m./HORZ	5.9	AVG
5441.85	16.46	29.52	45.98	54.0	1.0m./HORZ	8.0	AVG
5400.33	14.26	29.52	43.78	54.0	1.0m./HORZ	10.2	AVG
5377.50	14.14	29.23	43.37	54.0	1.0m./HORZ	10.6	AVG

Test Date: June 12, 2015

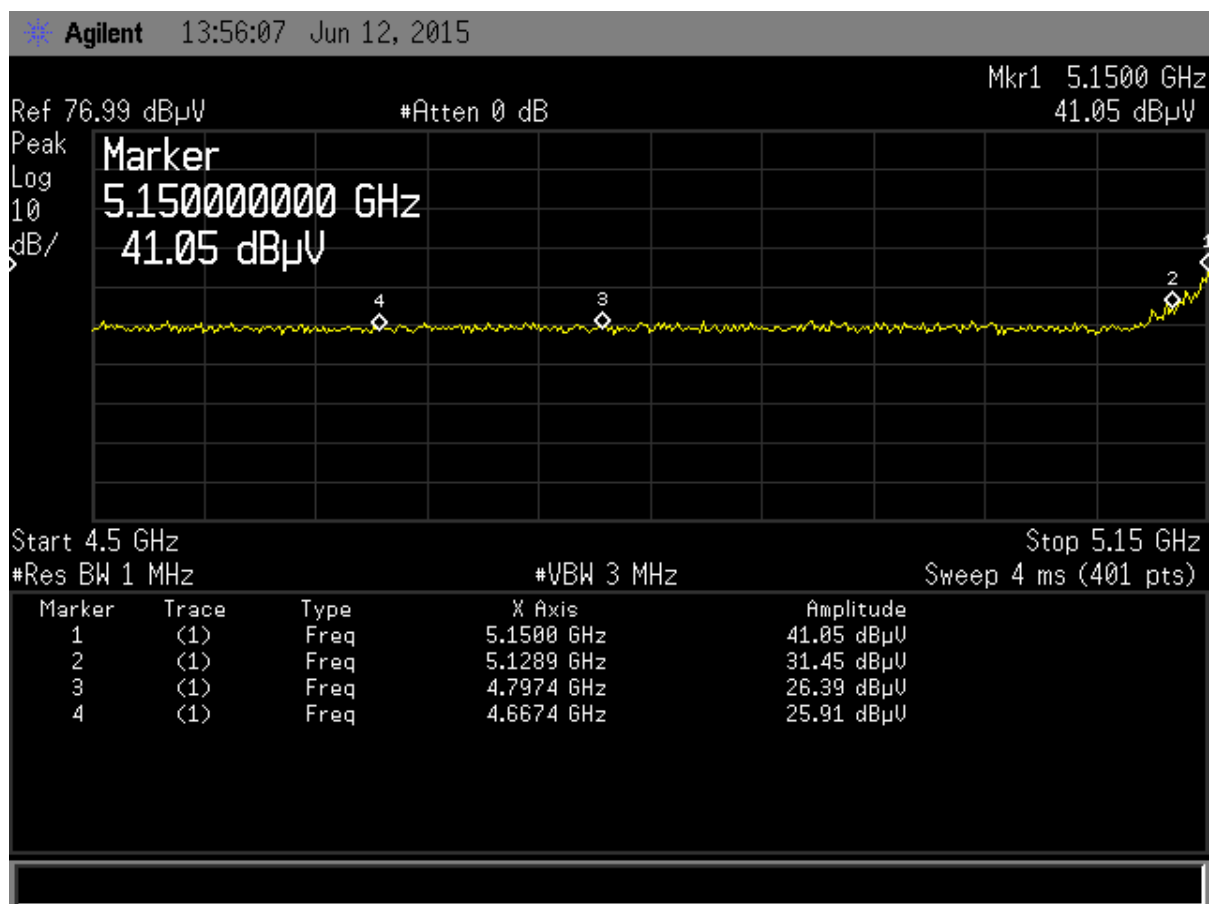
Tested By

Signature: 

Name: Carrie Fincannon

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

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**Figure 98. Restricted Band 4.5 - 5.15 GHz operating on Channel 36, 802.11n - Peak**

**Table 18. Radiated Restricted Band 4.5 GHz to 5.15 GHz, 802.11n – Peak**

4.5 GHz to 5.15 GHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	PK Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5150.00	41.05	29.19	70.24	74.0	1.0m./HORZ	3.8	PK
5128.90	31.45	29.19	60.64	74.0	1.0m./HORZ	13.4	PK
4797.40	26.39	27.81	54.20	74.0	1.0m./HORZ	19.8	PK
4667.40	25.91	27.63	53.54	74.0	1.0m./HORZ	20.5	PK

Test Date: June 12, 2015

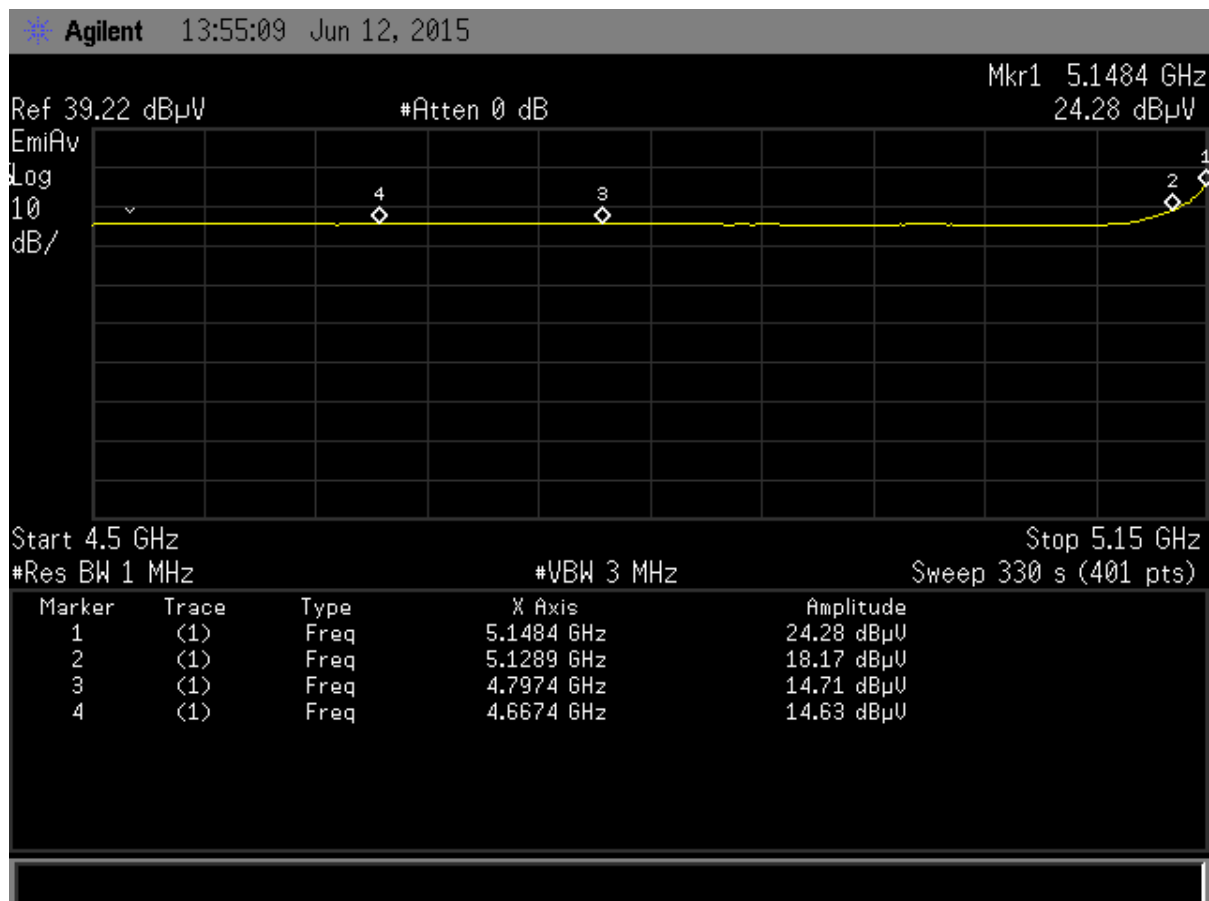
Tested By

Signature: 

Name: Carrie Fincannon

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

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**Figure 99. Restricted Band 4.5 - 5.15 GHz operating on Channel 36, 802.11n – Average**

**Table 19. Radiated Restricted Band 4.5 GHz to 5.15 GHz, 802.11n – Average**

4.5 GHz to 5.15 GHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5148.40	24.28	29.19	53.47	54.0	1.0m./HORZ	.5	AVG
5128.90	18.17	29.19	47.36	54.0	1.0m./HORZ	6.6	AVG
4797.40	14.71	27.81	42.52	54.0	1.0m./HORZ	11.5	AVG
4667.40	14.63	27.63	42.26	54.0	1.0m./HORZ	11.7	AVG

Test Date: June 12, 2015

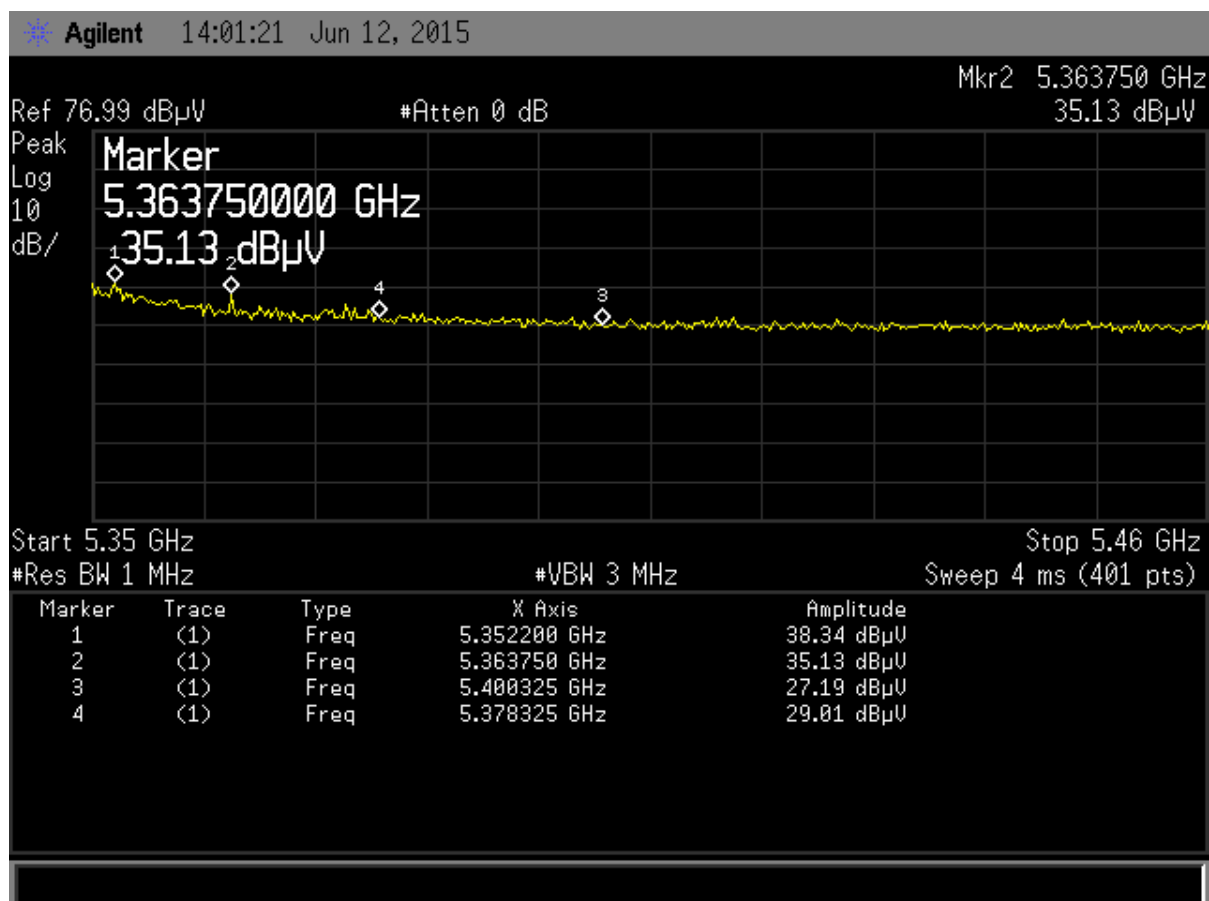
Tested By

Signature:

Name: Carrie Fincannon

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

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**Figure 100. Restricted Band 5.35 - 5.46 GHz operating on Channel 64, 802.11n - Peak**

**Table 20. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11n – Peak**

5.35 GHz to 5.46 GHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	PK Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5352.20	38.34	29.23	67.57	74.0	1.0m./HORZ	6.4	PK
5363.75	35.13	29.23	64.36	74.0	1.0m./HORZ	9.6	PK
5400.33	27.19	29.52	56.71	74.0	1.0m./HORZ	17.3	PK
5378.33	29.01	29.23	58.24	74.0	1.0m./HORZ	15.8	PK

Test Date: June 12, 2015

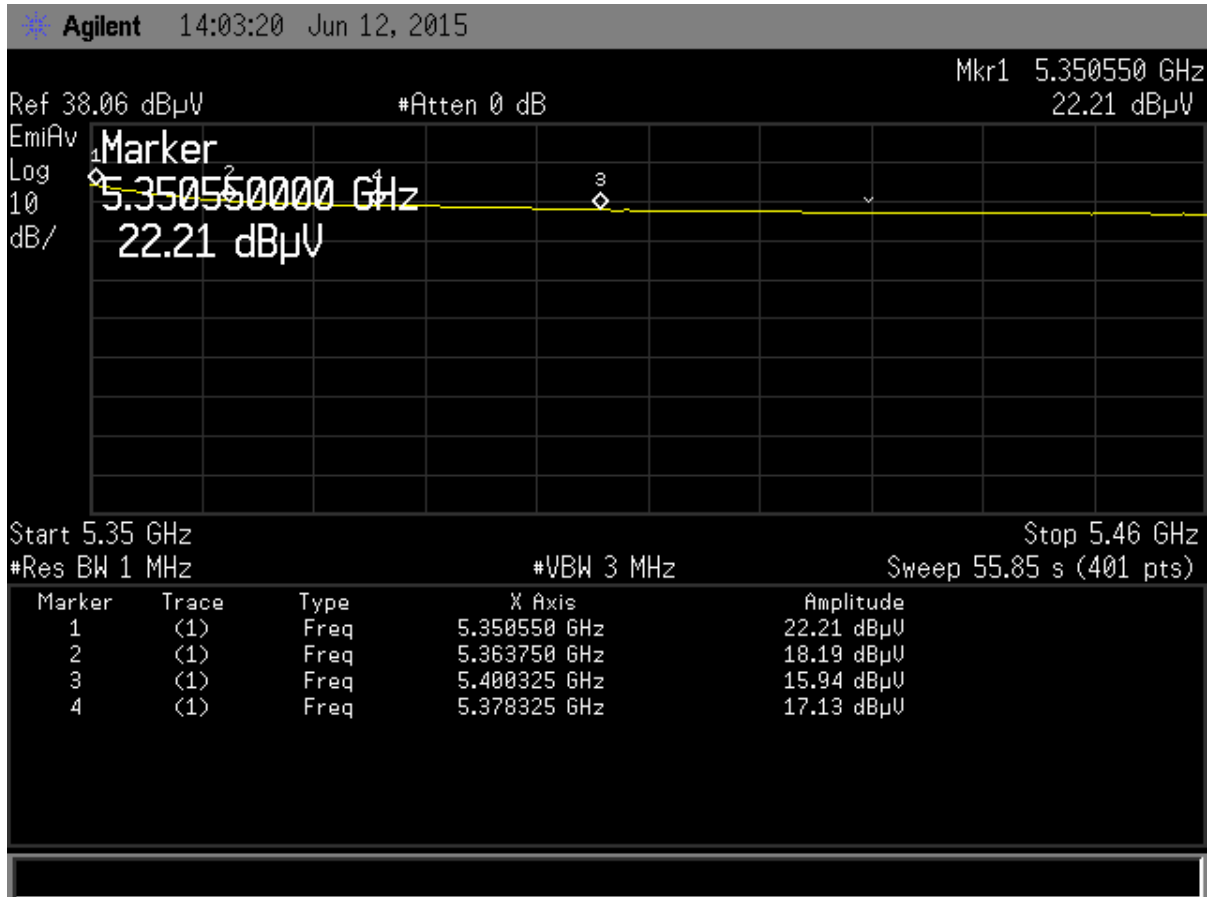
Tested By

Signature:

Name: Carrie Fincannon

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

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**Figure 101. Restricted Band 5.35 - 5.46 GHz operating on Channel 64, 802.11n – Average**

**Table 21. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11a – Average**

5.35 GHz to 5.46 GHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5350.55	22.21	29.23	51.44	54.0	1.0m./HORZ	2.6	AVG
5363.75	18.19	29.23	47.42	54.0	1.0m./HORZ	6.6	AVG
5400.33	15.94	29.52	45.46	54.0	1.0m./HORZ	8.5	AVG
5378.33	17.13	29.23	46.36	54.0	1.0m./HORZ	7.6	AVG

Test Date: June 12, 2015

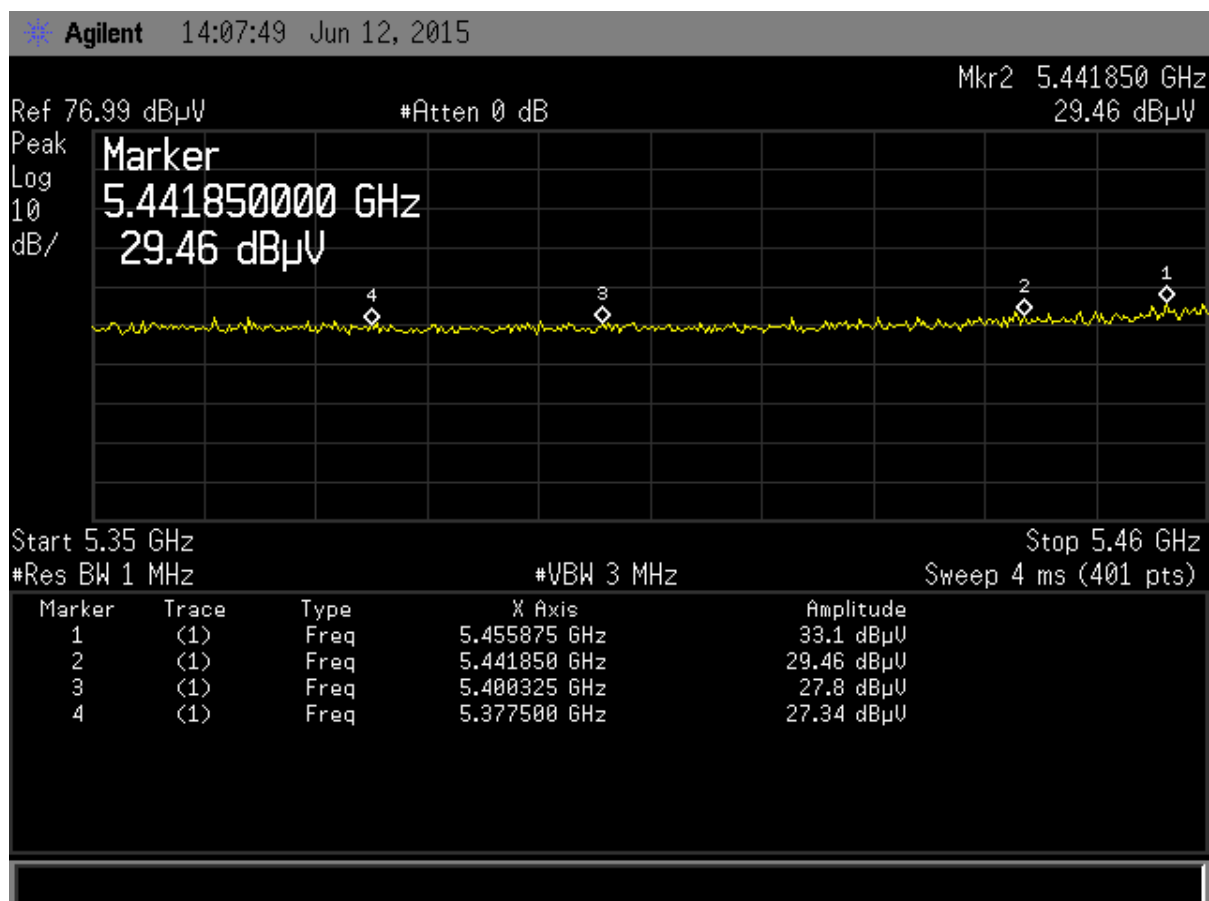
Tested By

Signature:

Name: Carrie Fincannon

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

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**Figure 102. Restricted Band 5.35 - 5.46 GHz operating on Channel 100, 802.11n - Peak**

**Table 22. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11n – Average**

4.5 GHz to 5.15 GHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	PK Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5455.88	33.10	29.52	62.62	74.0	1.0m./HORZ	11.4	PK
5441.85	29.46	29.52	58.98	74.0	1.0m./HORZ	15.0	PK
5400.33	27.80	29.52	57.32	74.0	1.0m./HORZ	16.7	PK
5377.80	27.34	29.23	56.57	74.0	1.0m./HORZ	17.4	PK

Test Date: June 12, 2015

Tested By

Signature:

Name: Carrie Fincannon

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

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**Figure 103. Restricted Band 5.35 - 5.46 GHz operating on Channel 100, 802.11n – Average**

**Table 23. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11n – Average**

5.35 GHz to 5.46 GHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	PK Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5460.00	17.80	29.52	47.32	54.0	1.0m./HORZ	6.7	AVG
5442.95	16.44	29.52	45.96	54.0	1.0m./HORZ	8.0	AVG
5400.33	14.64	29.52	44.16	54.0	1.0m./HORZ	9.8	AVG
5378.33	14.56	29.23	43.79	54.0	1.0m./HORZ	10.2	AVG

Test Date: June 12, 2015

Tested By

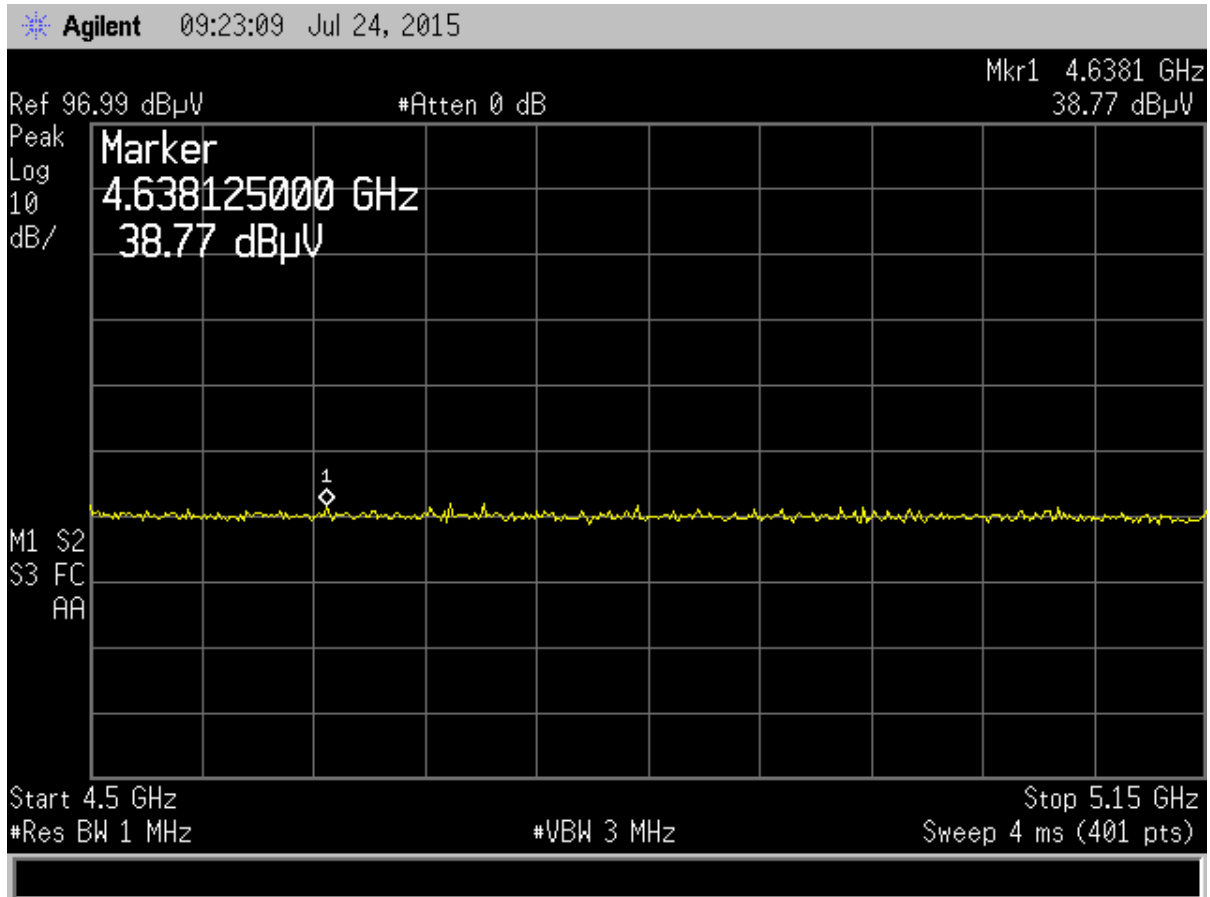
Signature: 

Name: Carrie Fincannon



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

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**Figure 104. Restricted Band 4.5 - 5.15 GHz operating on Channel 38, 802.11n 40 MHz BW – Peak**

**Table 24. Radiated Restricted Band 4.5 GHz to 5.15 GHz, 802.11n 40 MHz BW – Peak**

4.5 GHz to 5.15 GHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	PK Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
4638.13	38.77	37.94	67.21	74.0	1.0m./HORZ	6.8	PK

Test Date: July 24, 2015

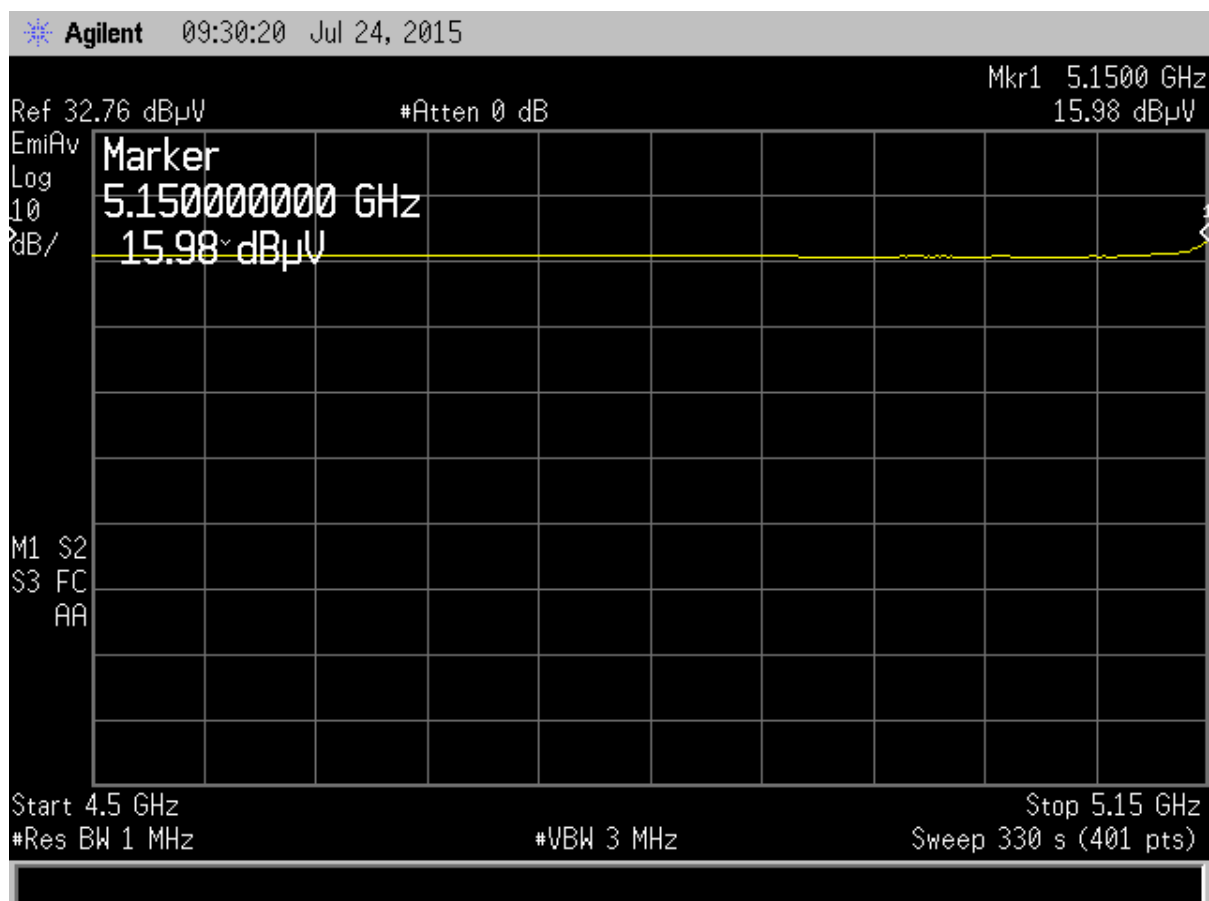
Tested By

Signature: 

Name: Carrie Ingram

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

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**Figure 105. Restricted Band 4.5 - 5.15 GHz operating on Channel 38, 802.11n 40 MHz BW – Average**

**Table 25. Radiated Restricted Band 4.5 GHz to 5.15 GHz, 802.11n 40 MHz BW – Average**

4.5 GHz to 5.15 GHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5150	15.98	39.73	46.21	54.0	1.0m./HORZ	7.8	AVG

Test Date: July 24, 2015

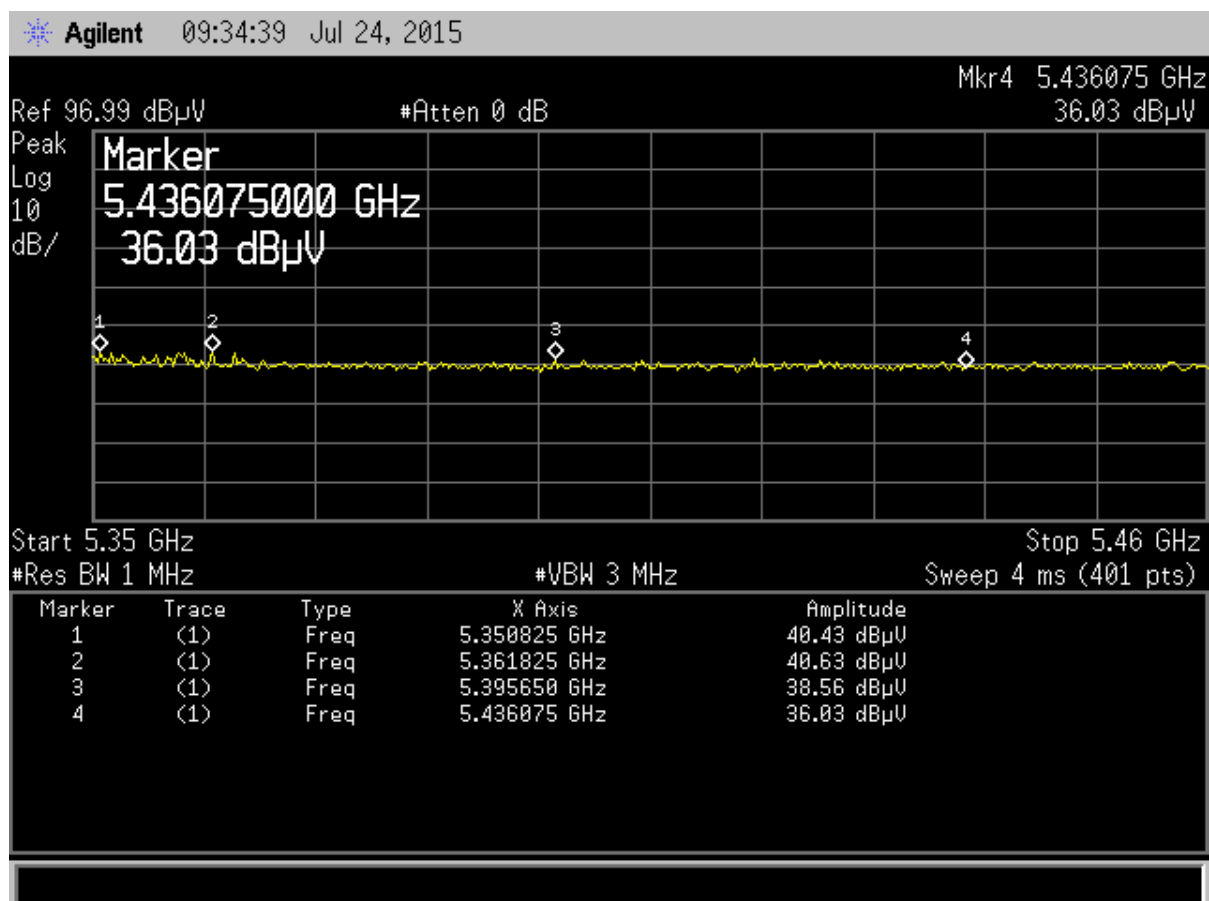
Tested By

Signature: 

Name: Carrie Ingram

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

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**Figure 106. Restricted Band 5.35 - 5.46 GHz operating on Channel 62, 802.11n 40 MHz BW – Peak**

**Table 26. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11n 40 MHz BW – Peak**

5.35 GHz to 5.46 GHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	PK Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5350.83	40.43	39.73	70.66	74.0	1.0m./VERT	3.3	PK
5361.83	40.63	39.73	70.86	74.0	1.0m./VERT	3.1	PK
5395.65	38.56	39.66	68.72	74.0	1.0m./VERT	5.3	PK
5360.75	36.03	39.73	66.26	74.0	1.0m./VERT	7.7	PK

Test Date: July 24, 2015

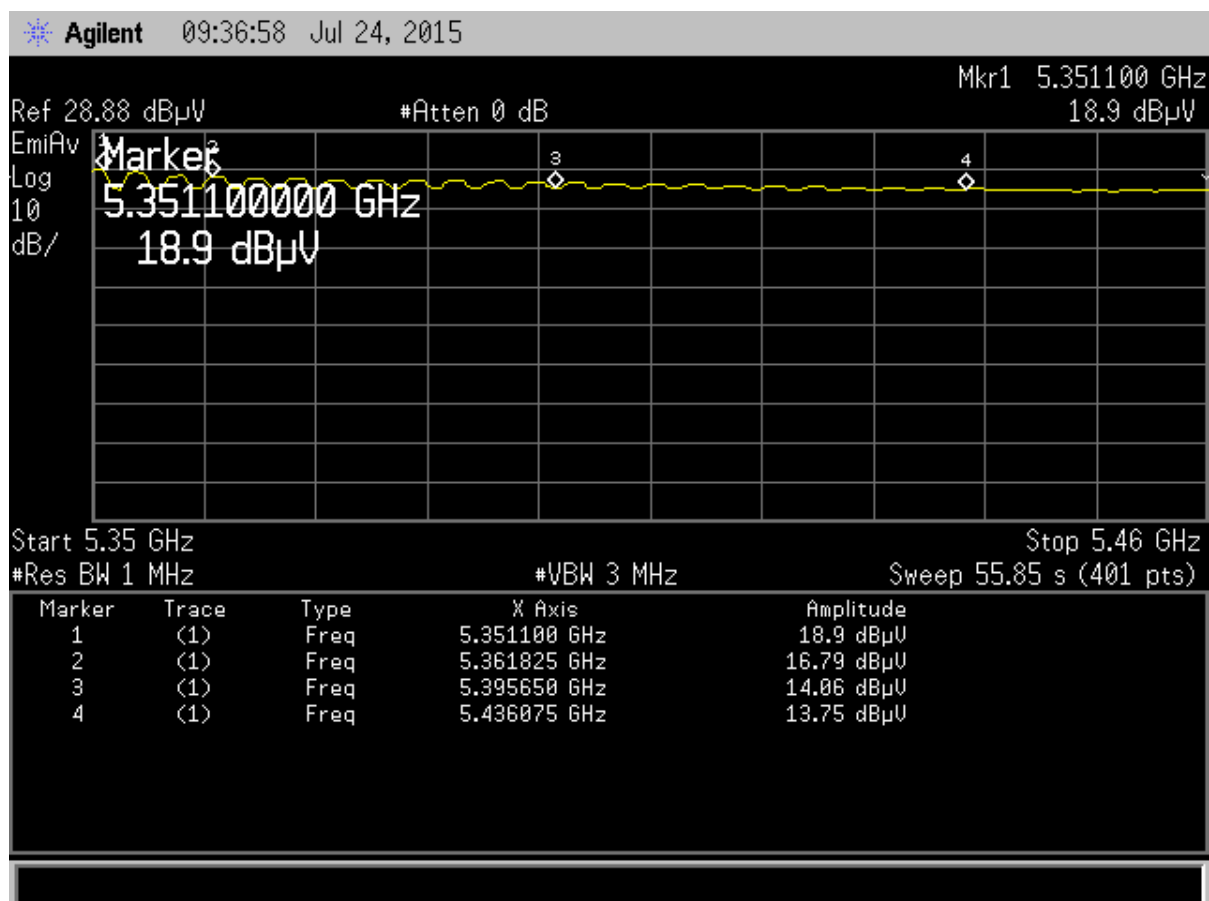
Tested By

Signature: 

Name: Carrie Ingram

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

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**Figure 107. Restricted Band 5.35 - 5.46 GHz operating on Channel 62, 802.11n 40 MHz BW – Average**

**Table 27. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11n 40 MHz BW – Average**

5.35 GHz to 5.46 GHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5351.10	18.90	39.73	49.13	54.0	1.0m./VERT	4.9	AVG
5361.83	16.79	39.73	47.02	54.0	1.0m./VERT	7.0	AVG
5395.65	14.06	39.66	44.22	54.0	1.0m./VERT	9.8	AVG
5436.08	13.75	40.04	44.29	54.0	1.0m./VERT	9.7	AVG

Test Date: July 24, 2015

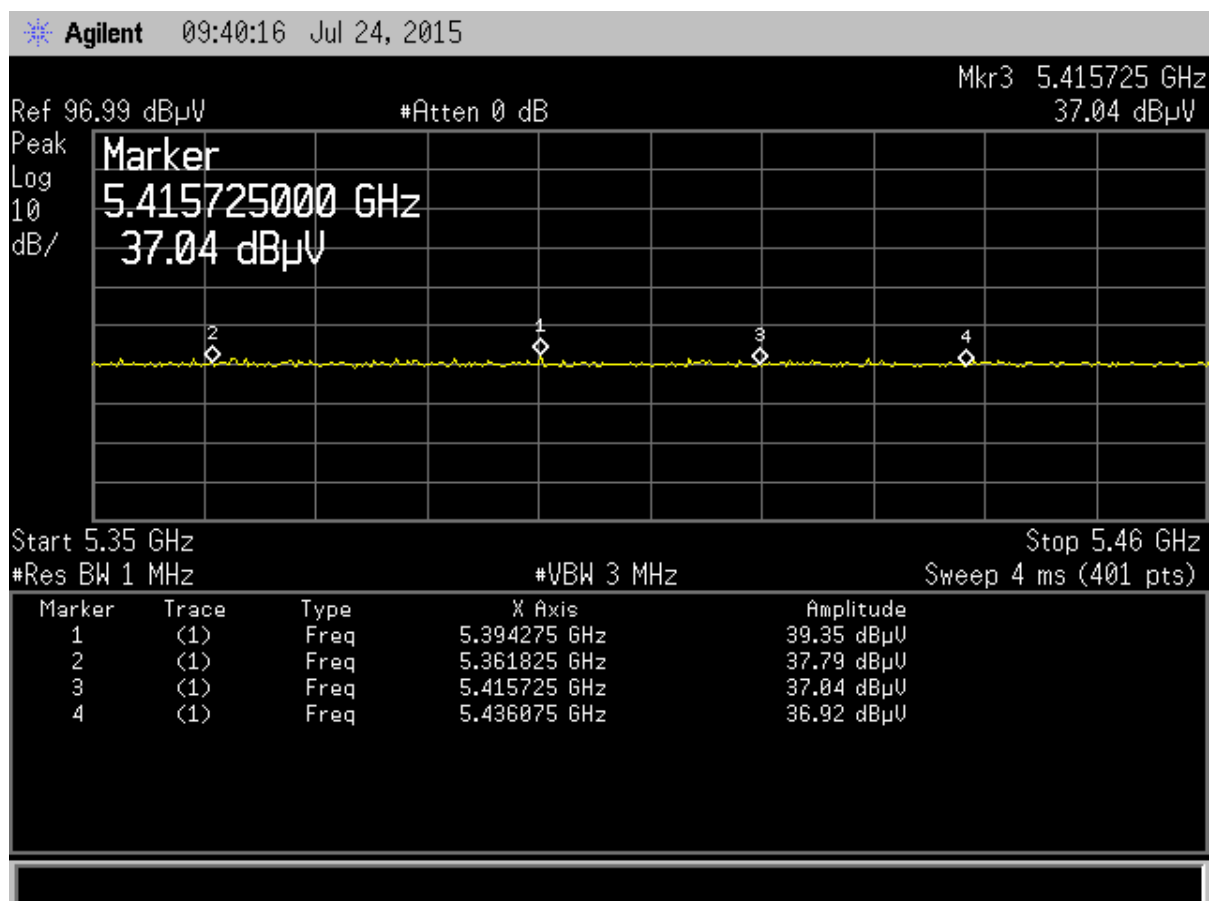
Tested By

Signature: \_\_\_\_\_

Name: Carrie Ingram

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

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**Figure 108. Restricted Band 5.35 - 5.46 GHz operating on Channel 102, 802.11n 40 MHz BW – Peak**

**Table 28. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11n 40 MHz BW – Peak**

5.35 GHz to 5.46 GHz Restricted Band Peak Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	PK Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5394.28	39.35	39.66	69.51	74.0	1.0m./VERT	4.5	PK
5361.83	37.79	39.73	68.02	74.0	1.0m./VERT	6.0	PK
5415.73	37.04	40.04	67.58	74.0	1.0m./VERT	6.4	PK
5436.08	36.92	40.04	67.46	74.0	1.0m./VERT	6.5	PK

Test Date: July 24, 2015

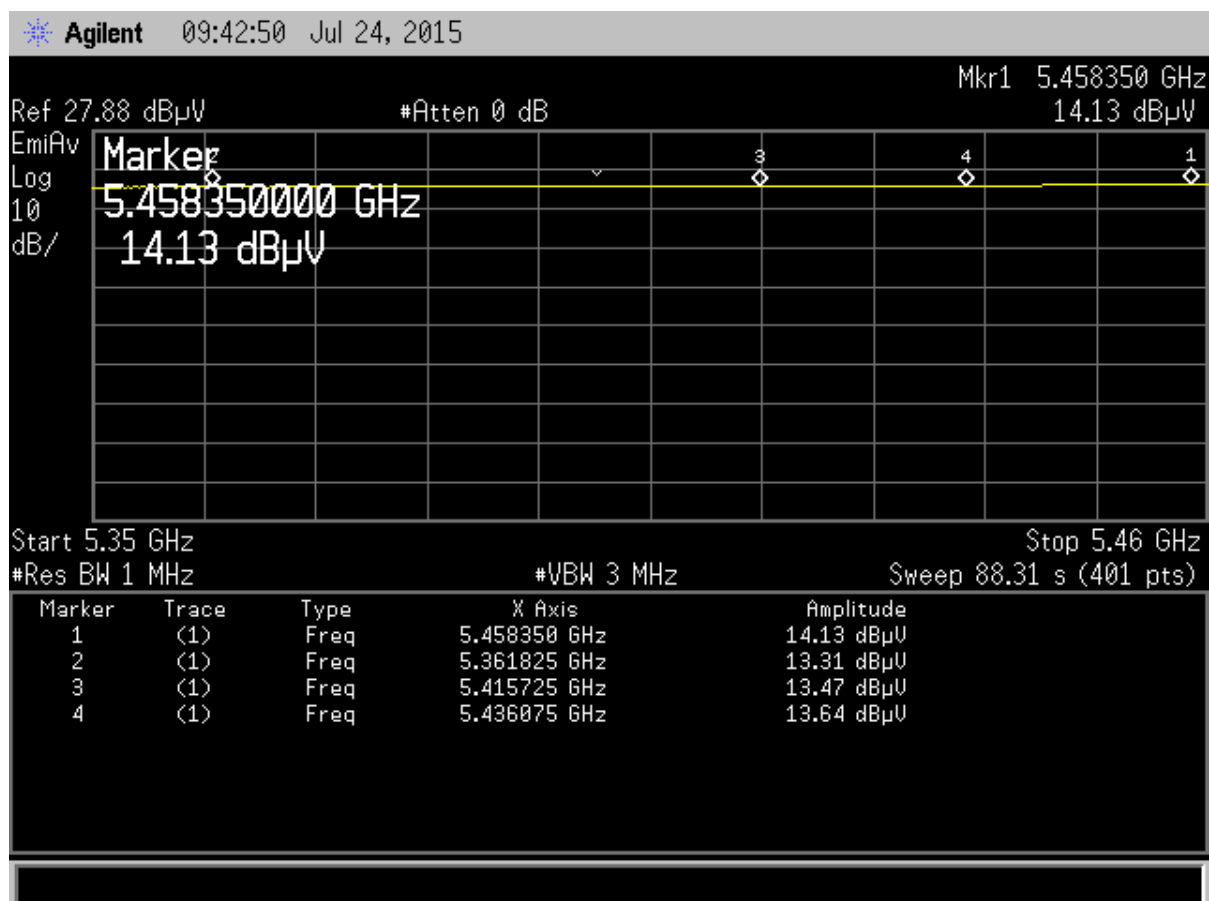
Tested By

Signature:

Name: Carrie Ingram

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

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**Figure 109. Restricted Band 5.35 - 5.46 GHz operating on Channel 102, 802.11n 40 MHz BW – Average**

**Table 29. Radiated Restricted Band 5.35 GHz to 5.46 GHz, 802.11n 40 MHz BW – Average**

5.35 GHz to 5.46 GHz Restricted Band Average Measurements							
Test: Radiated Emissions				Client: Polycom Inc.			
Project: 15-0086				Model: P008 SIP Application Module			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
5458.35	14.13	40.04	44.67	54.0	1.0m./VERT	9.3	AVG
5361.83	13.31	39.73	43.54	54.0	1.0m./VERT	10.5	AVG
5415.73	13.47	40.04	44.01	54.0	1.0m./VERT	10.0	AVG
5436.08	13.64	40.04	44.18	54.0	1.0m./VERT	9.8	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:

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### 2.13 Six (6) dB Bandwidth per CFR 15.407(e),

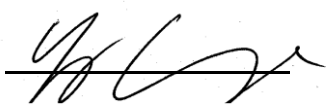
The EUT antenna port was connected to a spectrum analyzer having a 50  $\Omega$  input impedance. The RBW was set to 1 MHz and with the VBW  $\geq$  RBW. The results of this test are given in the table below and Figures below. The Highest and Lowest Channel that the EUT can operate on in the 5.74525 to 5.85 GHz were measured to ensure that the 6 dB bandwidth is at least 500 kHz.

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

Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum FCC Bandwidth (MHz)
802.11a		
5745	17.33	0.500
5825	17.21	0.500
802.11n		
5745	17.33	0.500
5825	17.46	0.500

Test Date: June 2, 2015

Tested By

Signature:  Name: George Yang

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

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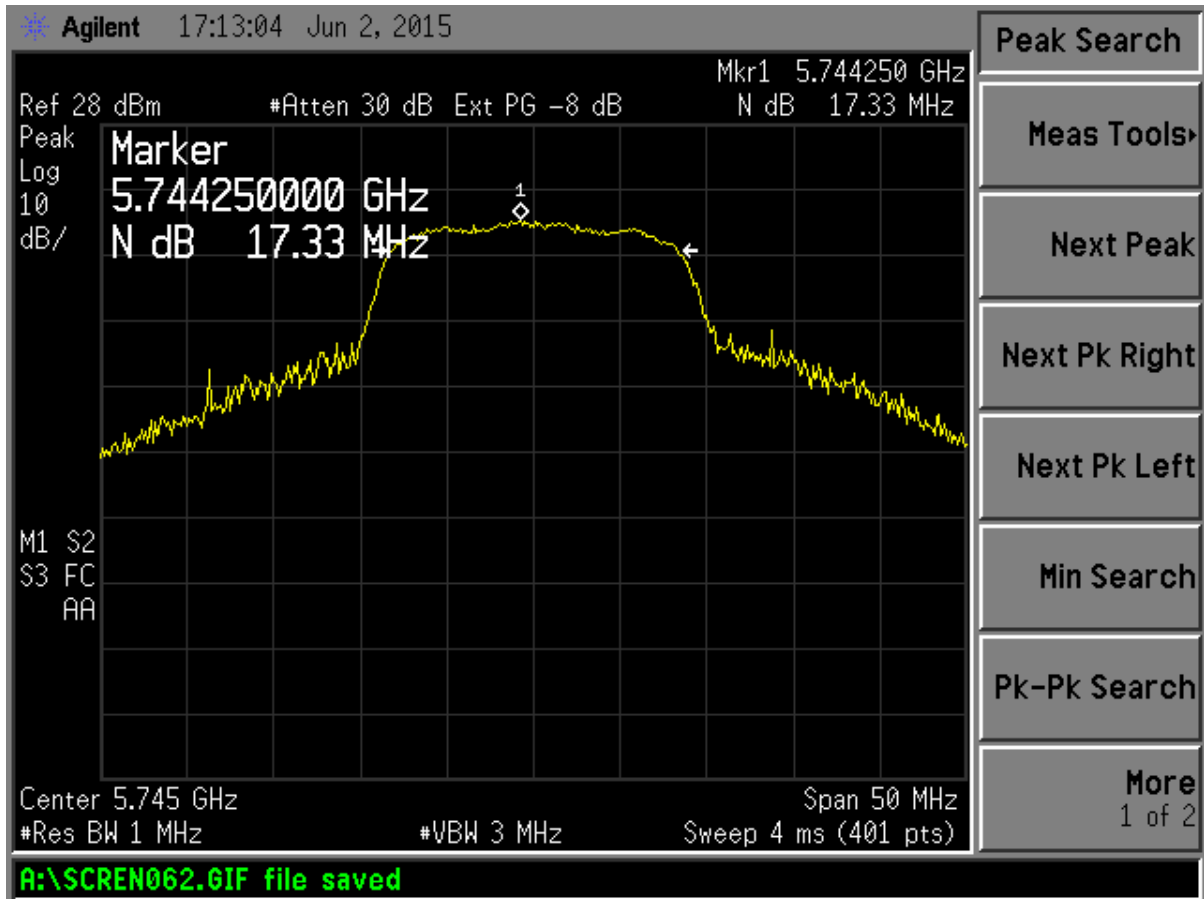


Figure 110. Six dB Bandwidth 802.11a - 15.407 - Low Channel



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IC:  
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Issue Date:  
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1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
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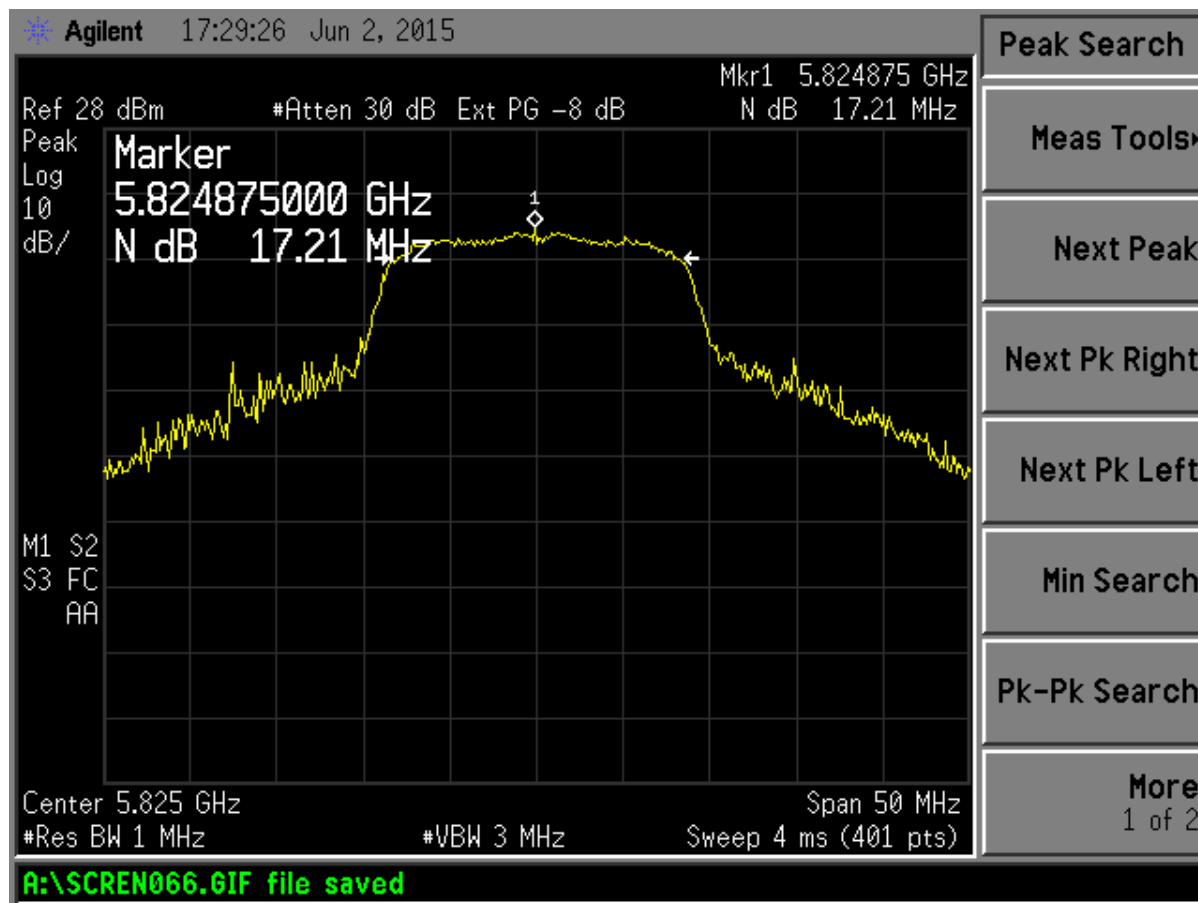


Figure 111. Six dB Bandwidth 802.11a - 15.407 - High Channel

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

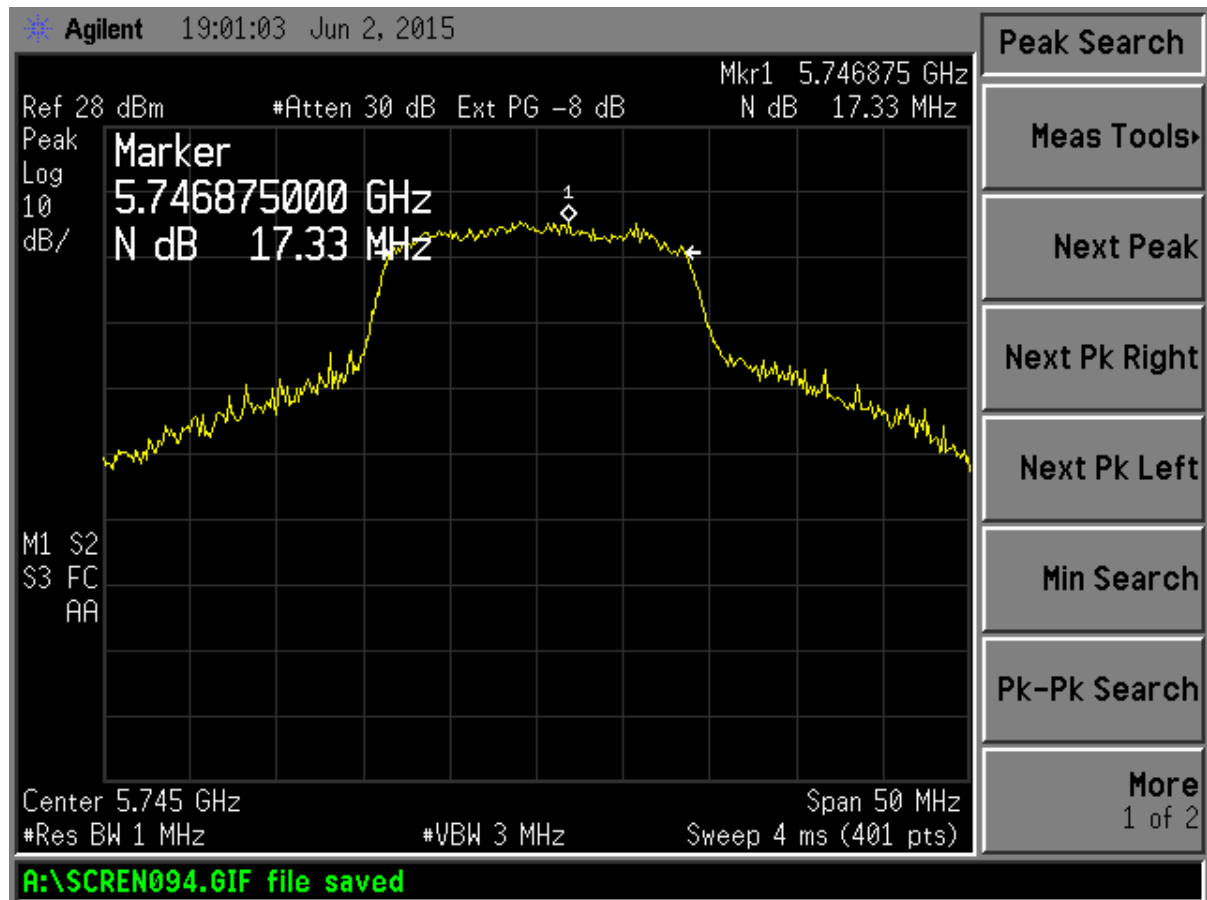


Figure 112. Six dB Bandwidth 802.11n - 15.407 - Low Channel

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

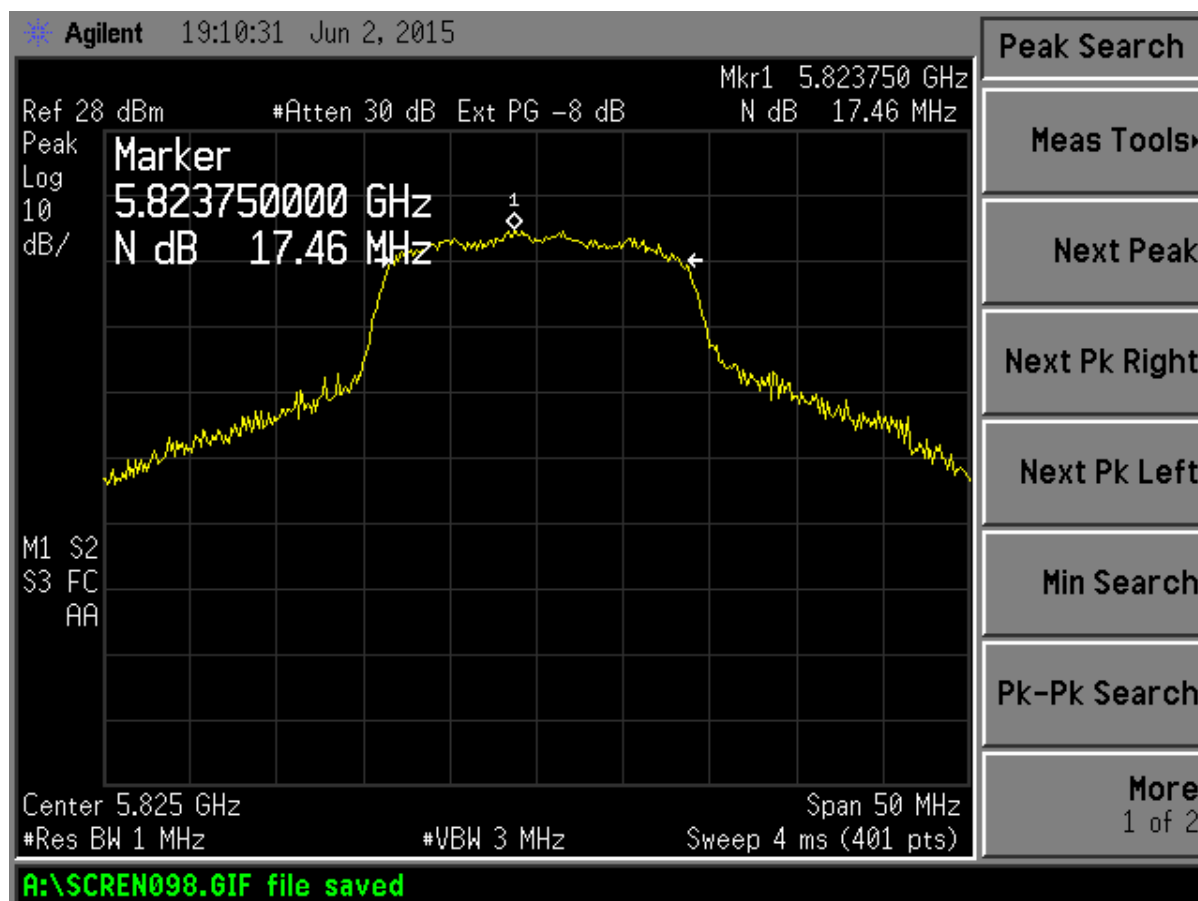


Figure 113. Six dB Bandwidth 802.11n - 15.407 - High Channel

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
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## 2.14 99% Occupied Bandwidth (15.407(a) (5), IC RSS 247, 6.4)

These measurements were performed while the EUT was in a constant transmit mode. The spectrum analyzers bandwidth measurement was used to determine the 26 dB bandwidth and the 99 % BW. The test procedures in the KDB document 789033 were followed. The RBW was set to approximately 1 % to 5 % times the OBW with the VBW  $\geq$  RBW and the span 1.5 to 5.0 times the OBW.. The results of this test are given in Table 10 and 11 and Figures 86-99.

**Table 31. 26 dB Bandwidth and 99% Occupied Bandwidth for 802.11a**

Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	20.445	17.656
5240	22.022	17.652
5320	21.701	17.529
5500	33.465	18.907
5700	34.749	17.715
5745	25.704	17.734
5825	23.794	17.673

Test Date: June 11, 2015

Tested By

Signature:



Name: Carrie Fincannon

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
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**Table 32. 26 dB Bandwidth and 99% Occupied Bandwidth for 802.11n**

Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	18.836	17.592
5240	26.813	17.649
5320	18.753	17.556
5500	33.559	17.839
5700	21.031	17.604
5745	23.539	17.653
5825	22.624	17.666

Test Date: June 11, 2015

Tested By

Signature:



Name: Carrie Fincannon

**Table 33. 26 dB Bandwidth and 99% Occupied Bandwidth for 802.11n 40 MHz BW**

Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	45.557	36.3617
5310	43.524	36.1996
5550	63.486	36.5594

Test Date: July 24, 2014

Tested By

Signature:



Name: Carrie Fincannon

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

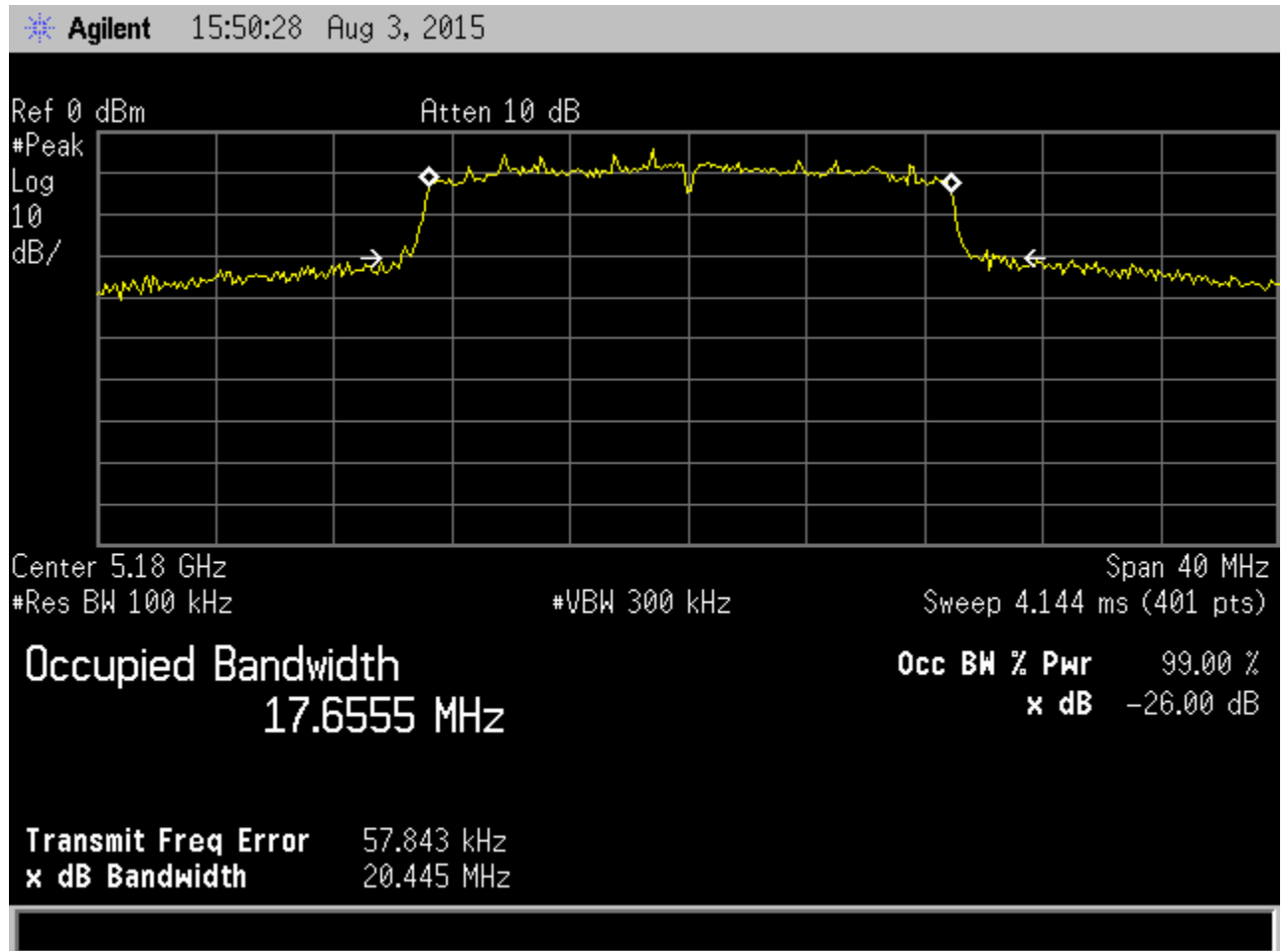


Figure 114. 26 dB BW and OBW -802.11a- Channel 36

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
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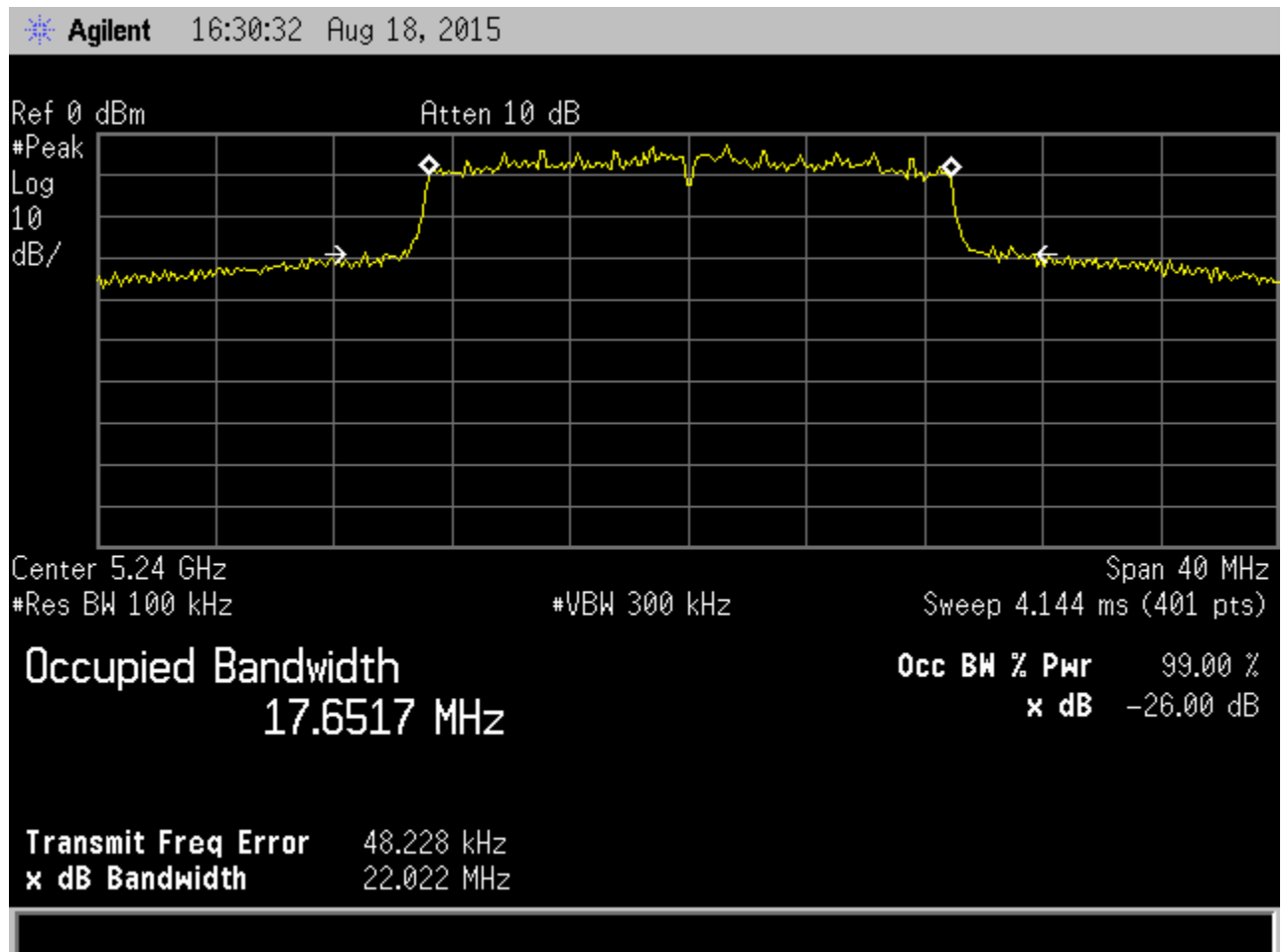


Figure 115. 26 dB BW and OBW -802.11a- Channel 48

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

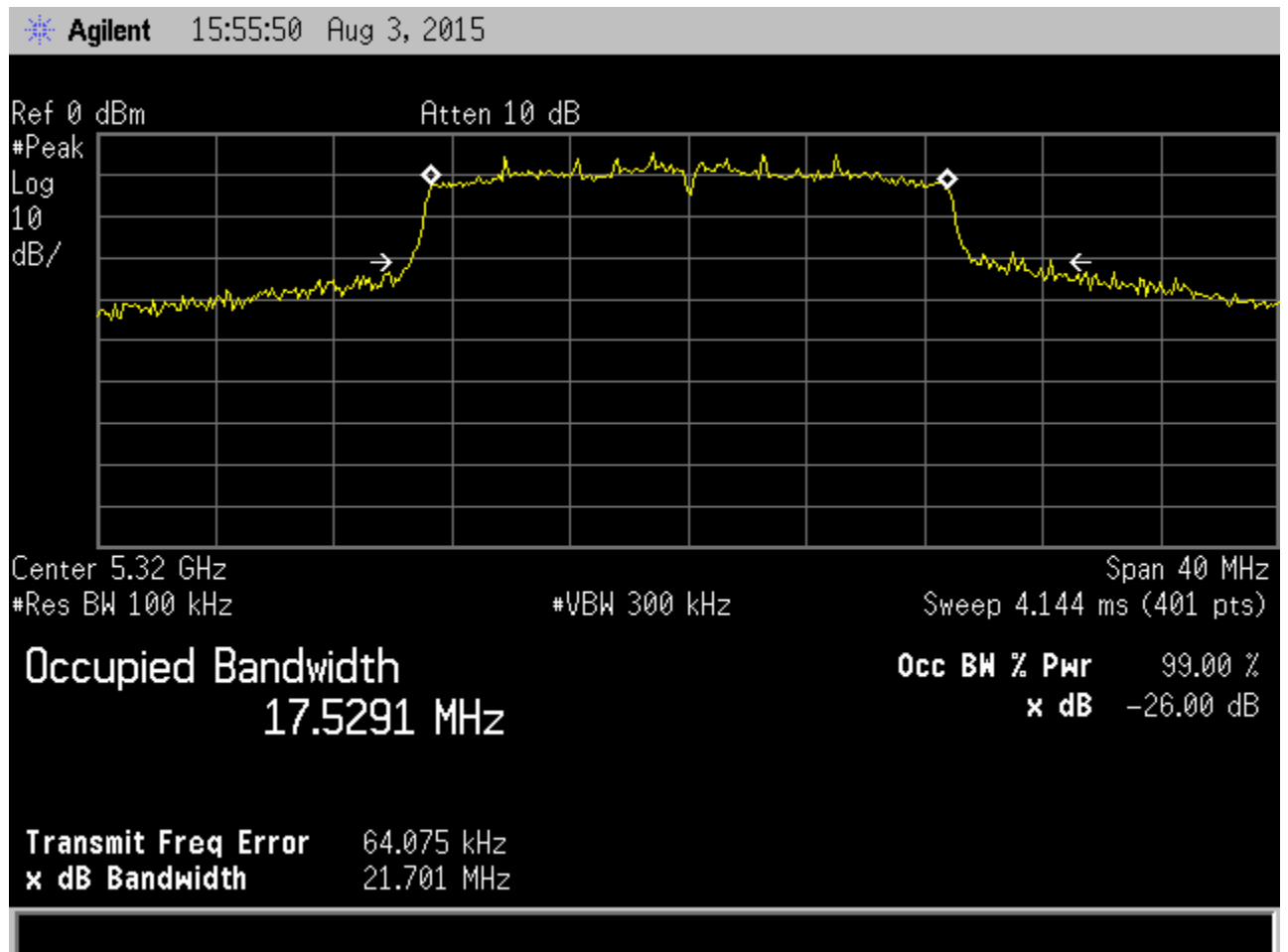


Figure 116. 26 dB BW and OBW -802.11a- Channel 64



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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

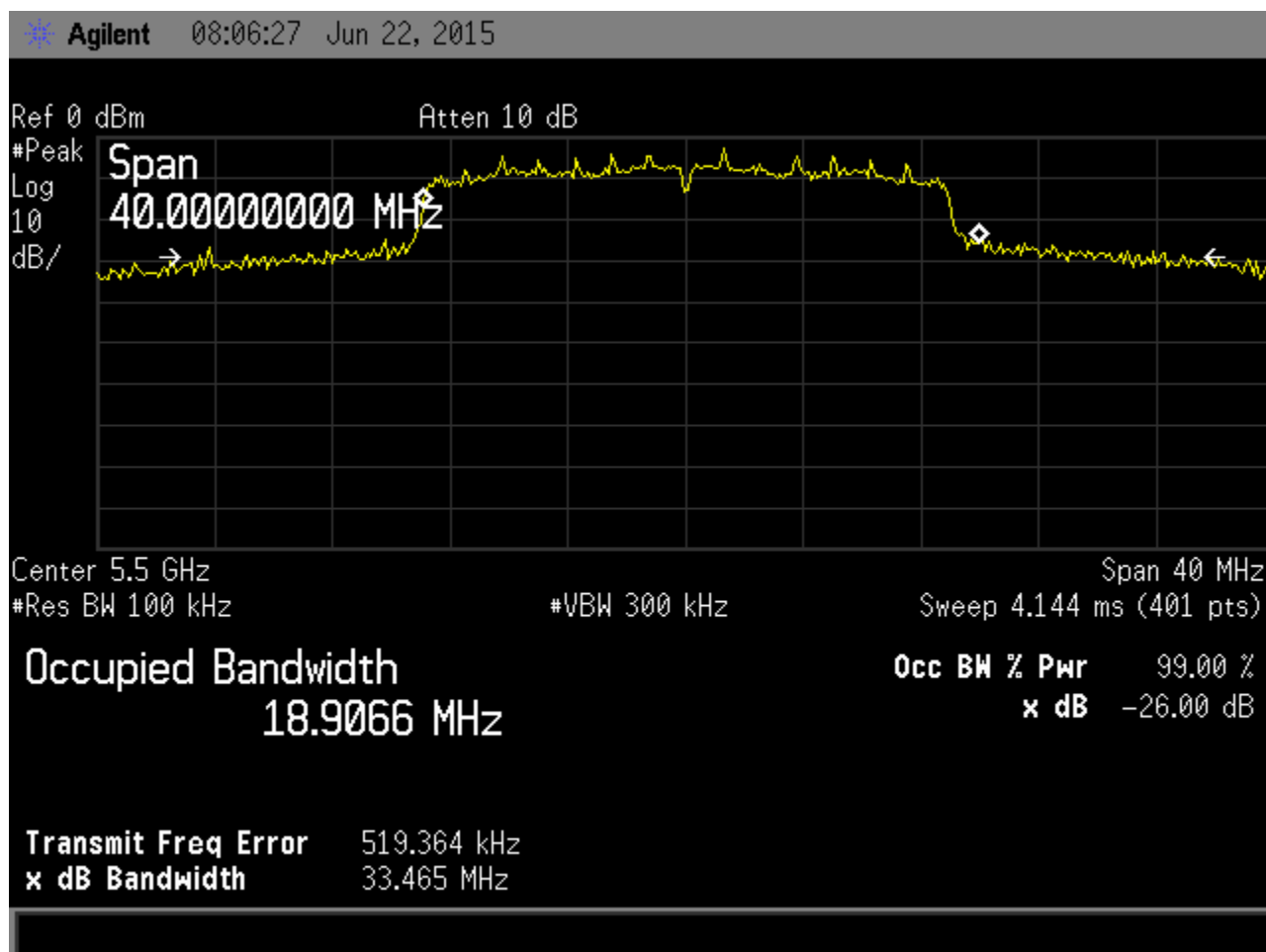
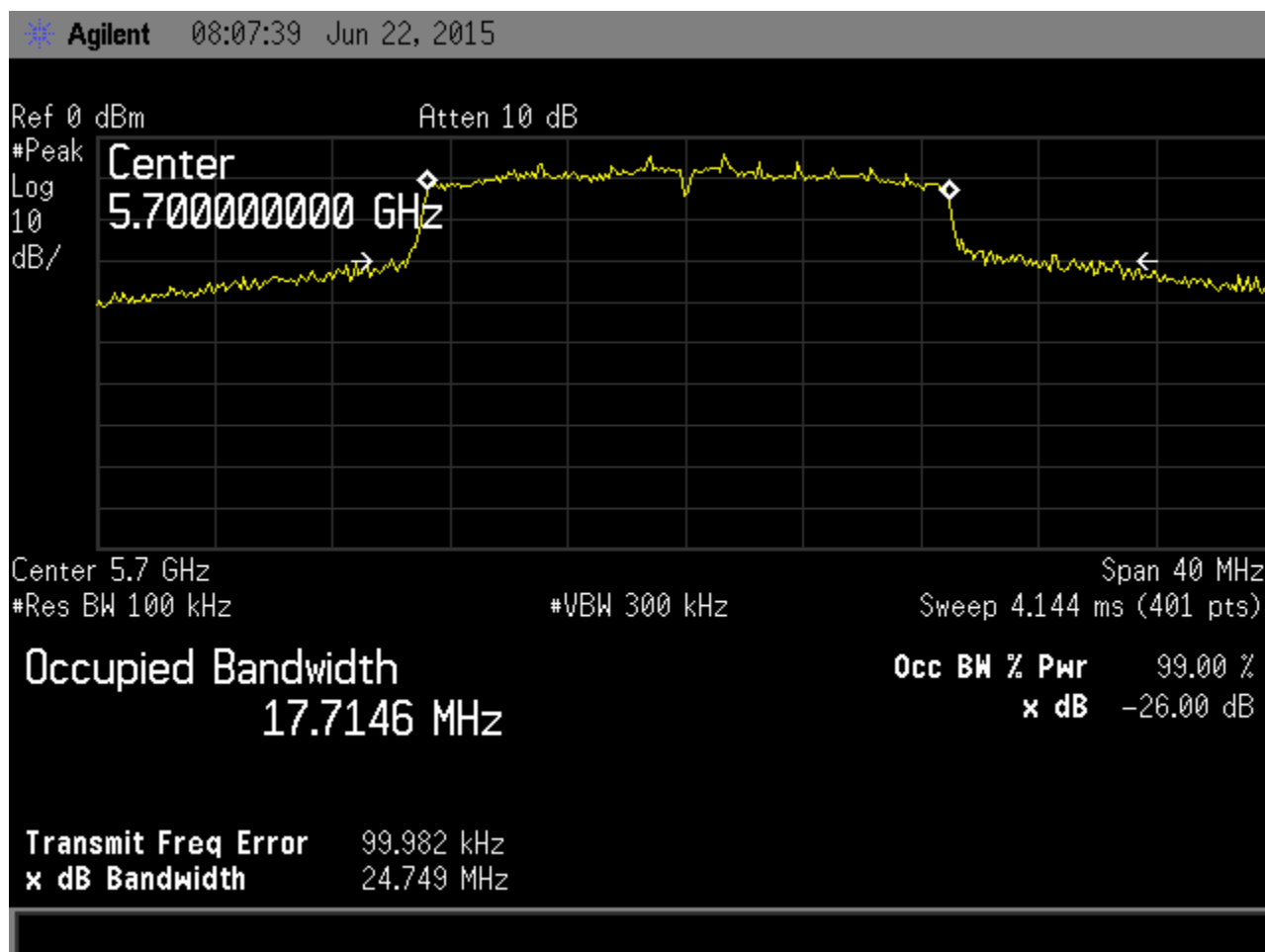


Figure 117. 26 dB BW and OBW -802.11a- Channel 100

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
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US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

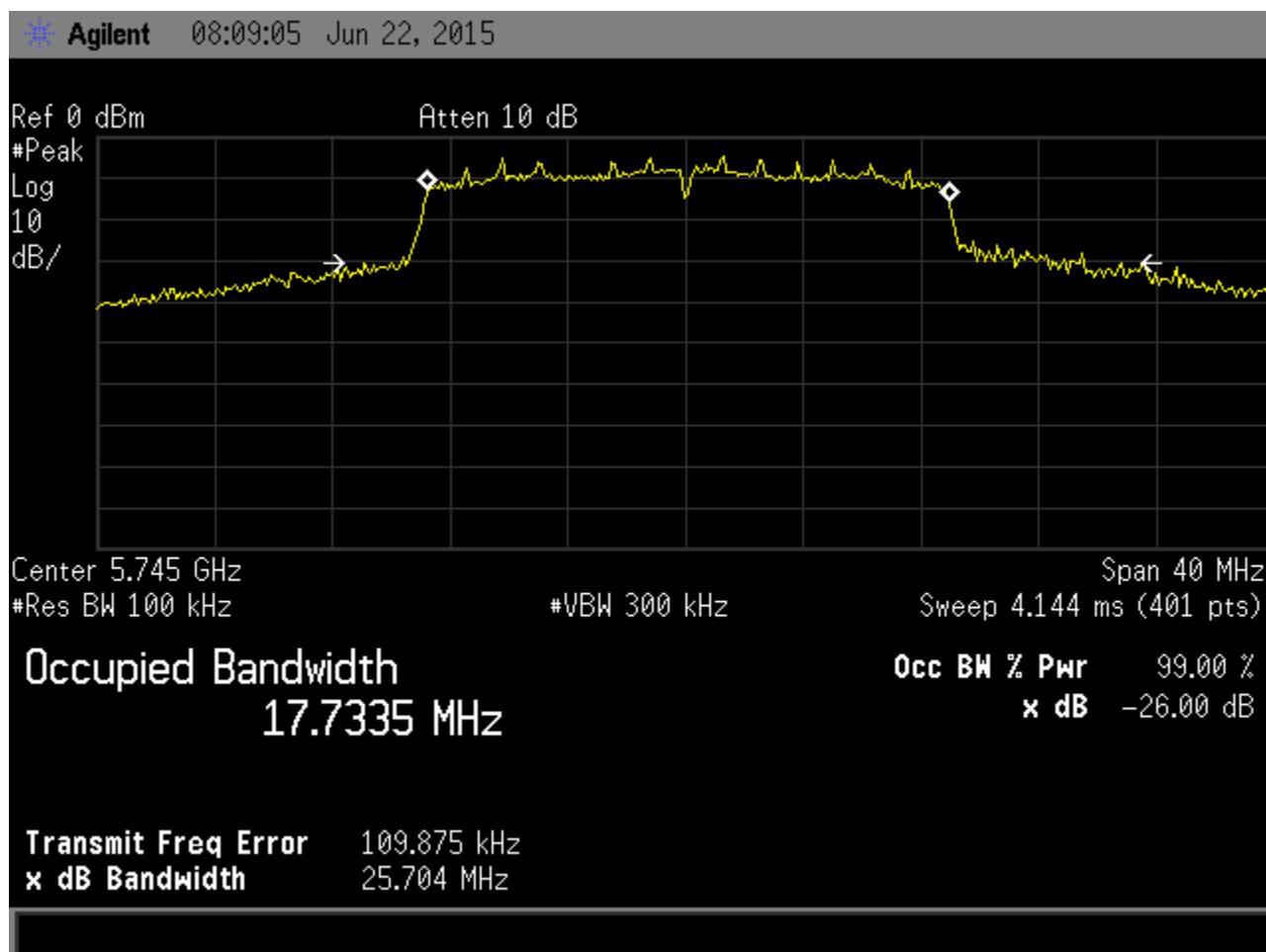


Figure 119. 26 dB BW and OBW -802.11a- Channel 149

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

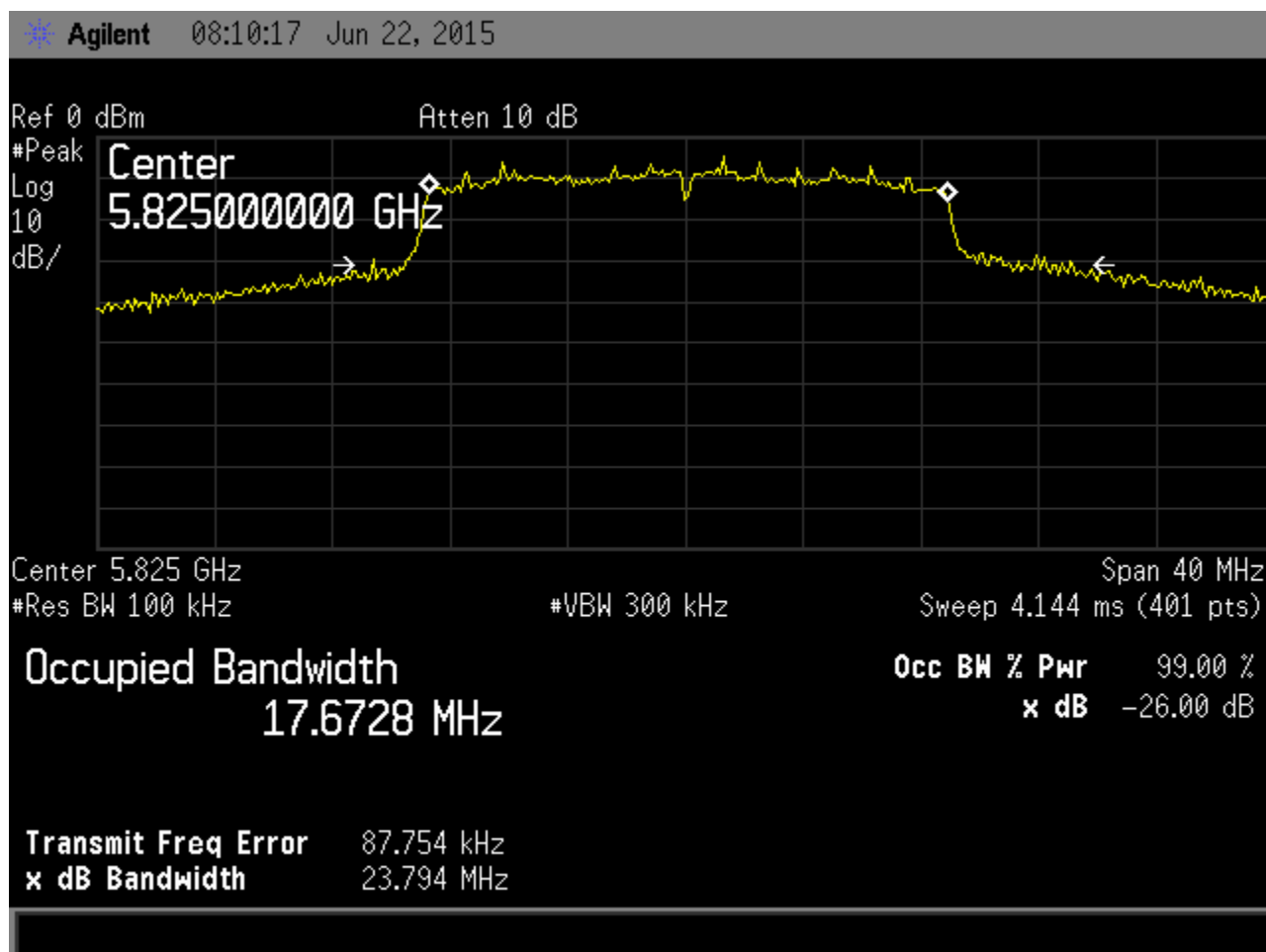


Figure 120. 26 dB BW and OBW -802.11a- Channel 165

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
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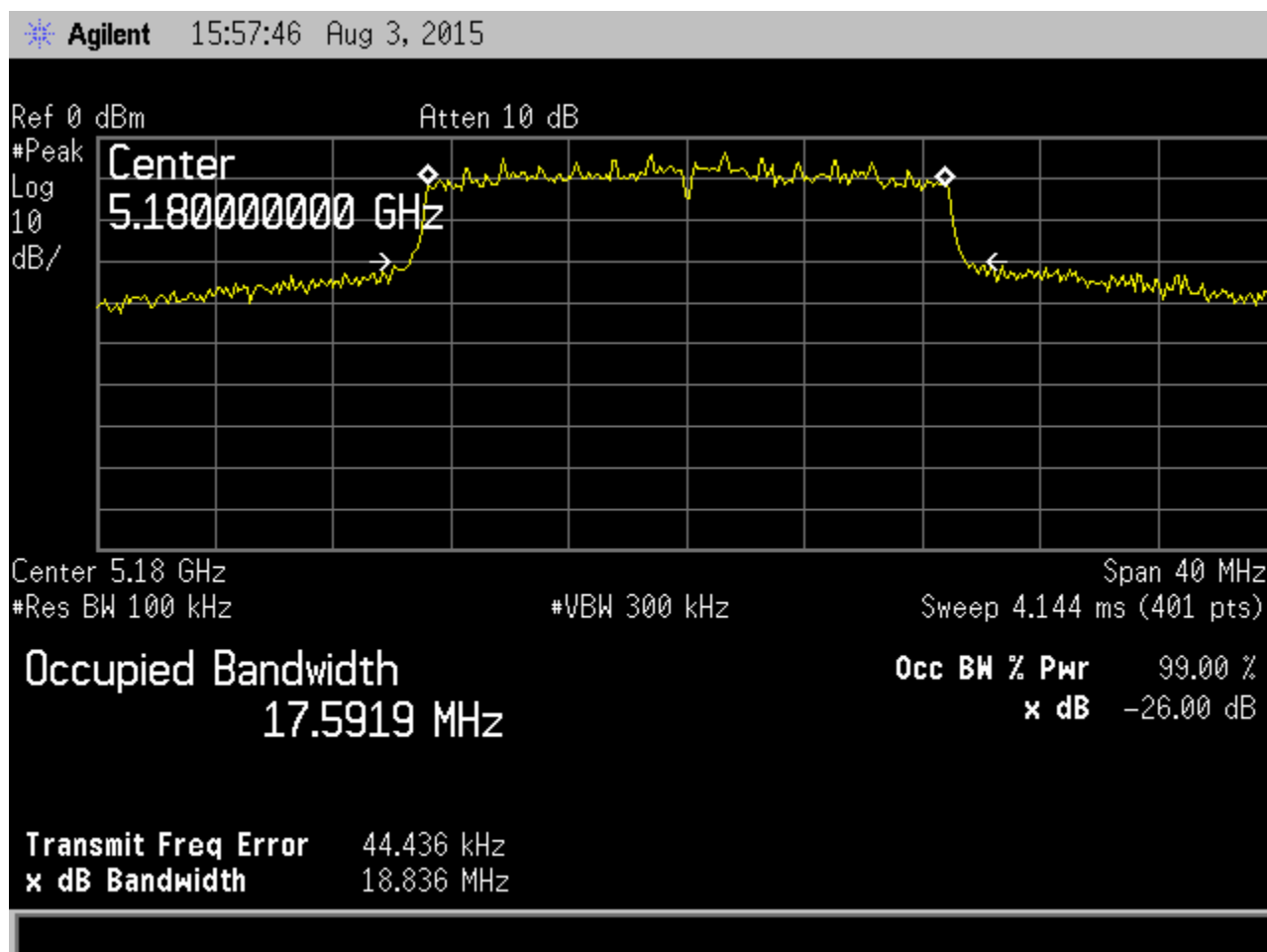


Figure 121. 26 dB BW and OBW -802.11n- Channel 36

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

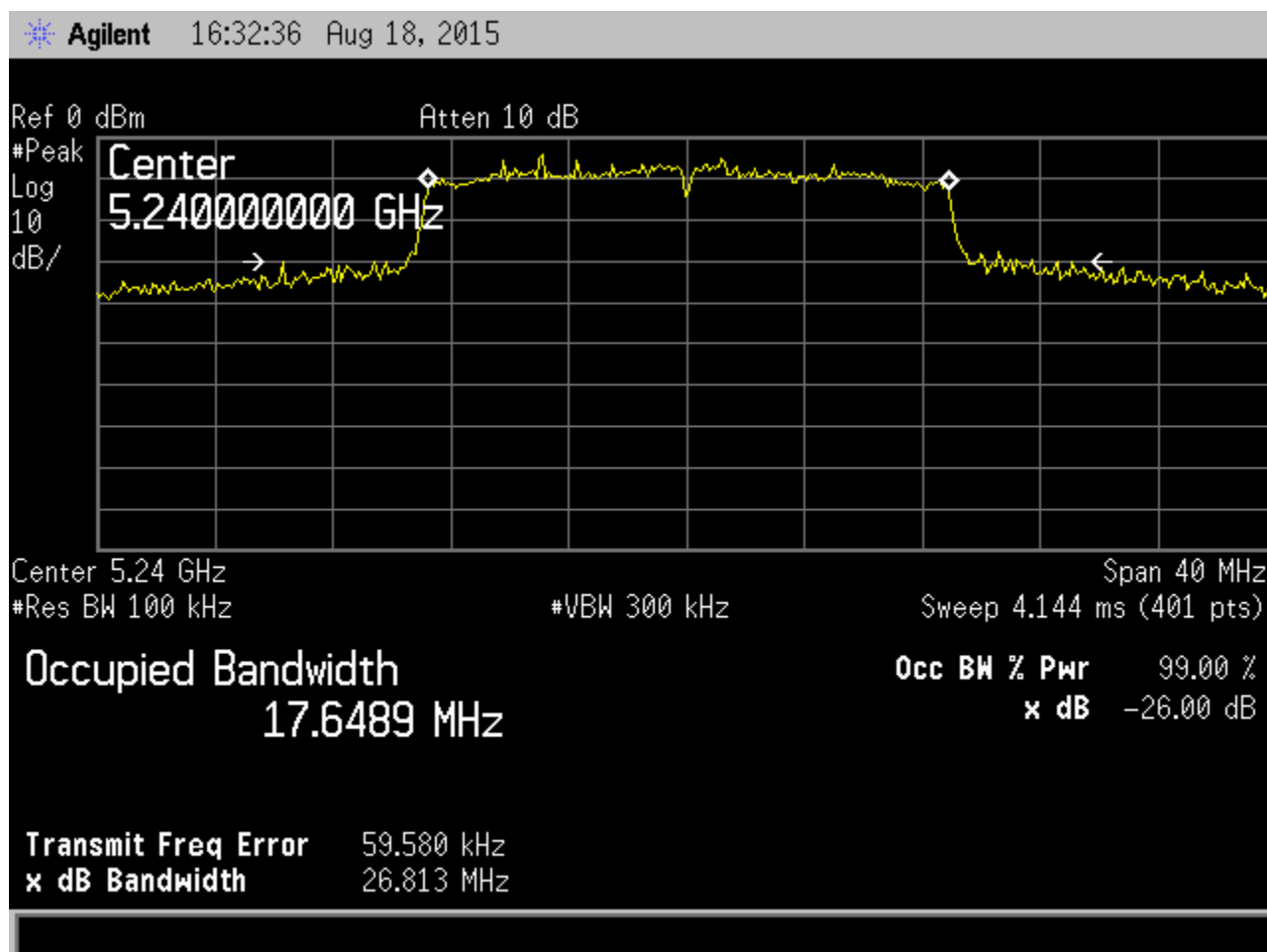


Figure 122. 26 dB BW and OBW -802.11n- Channel 48

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

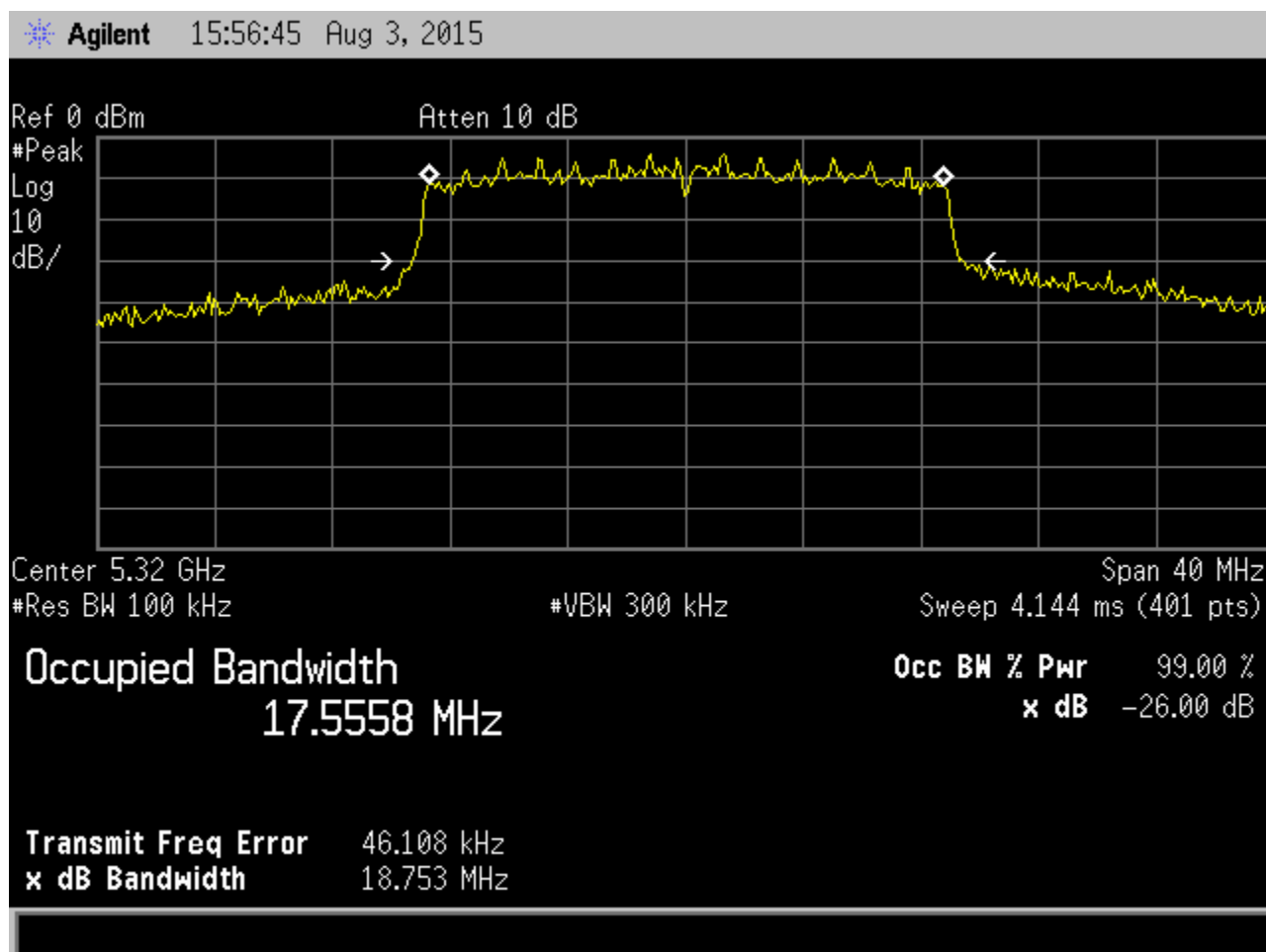
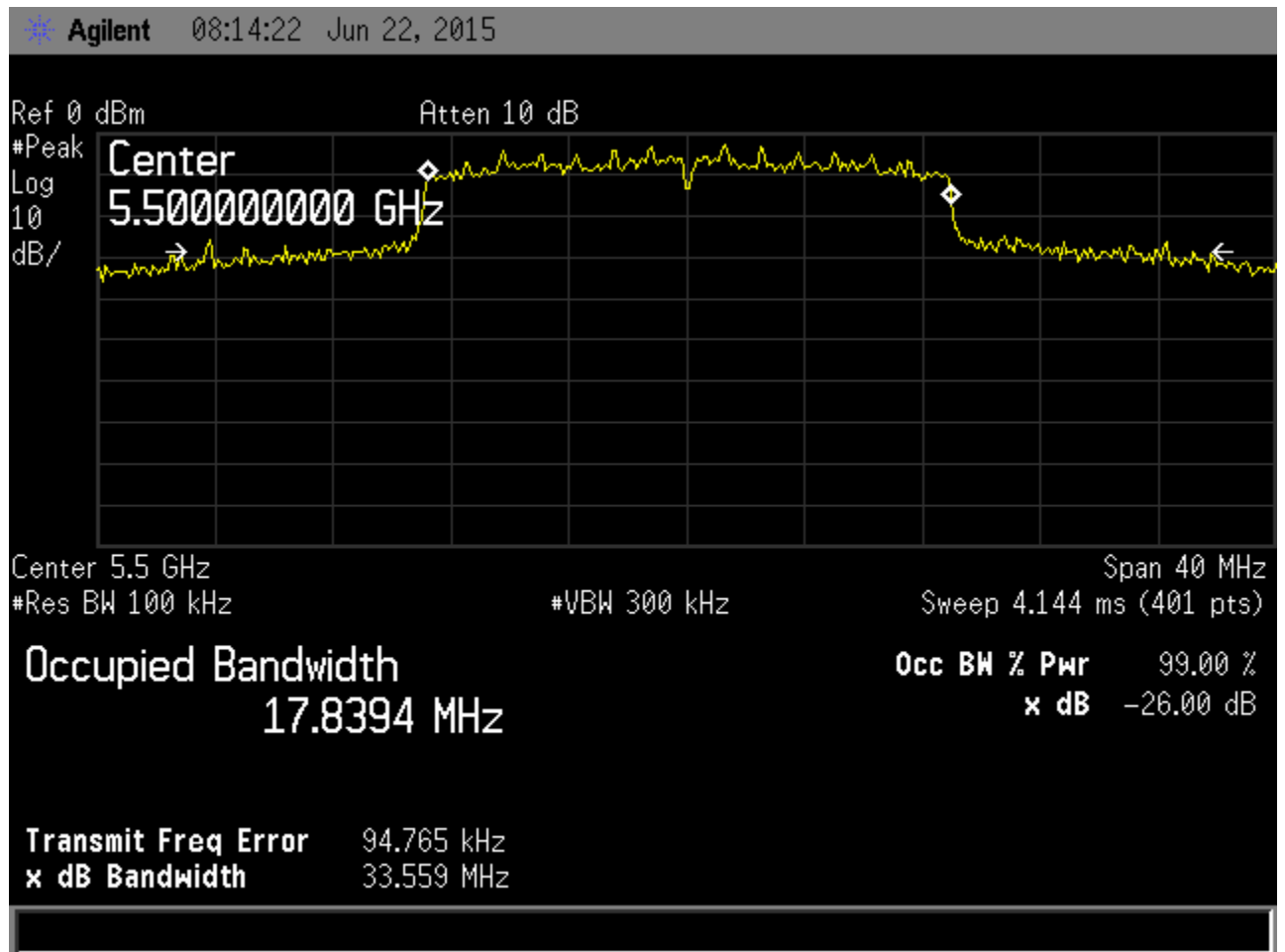


Figure 123. 26 dB BW and OBW -802.11n- Channel 64

FCC Part 15 Certification/ RSS 247  
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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  
15-0086  
July 7, 2015  
Polycom Inc.  
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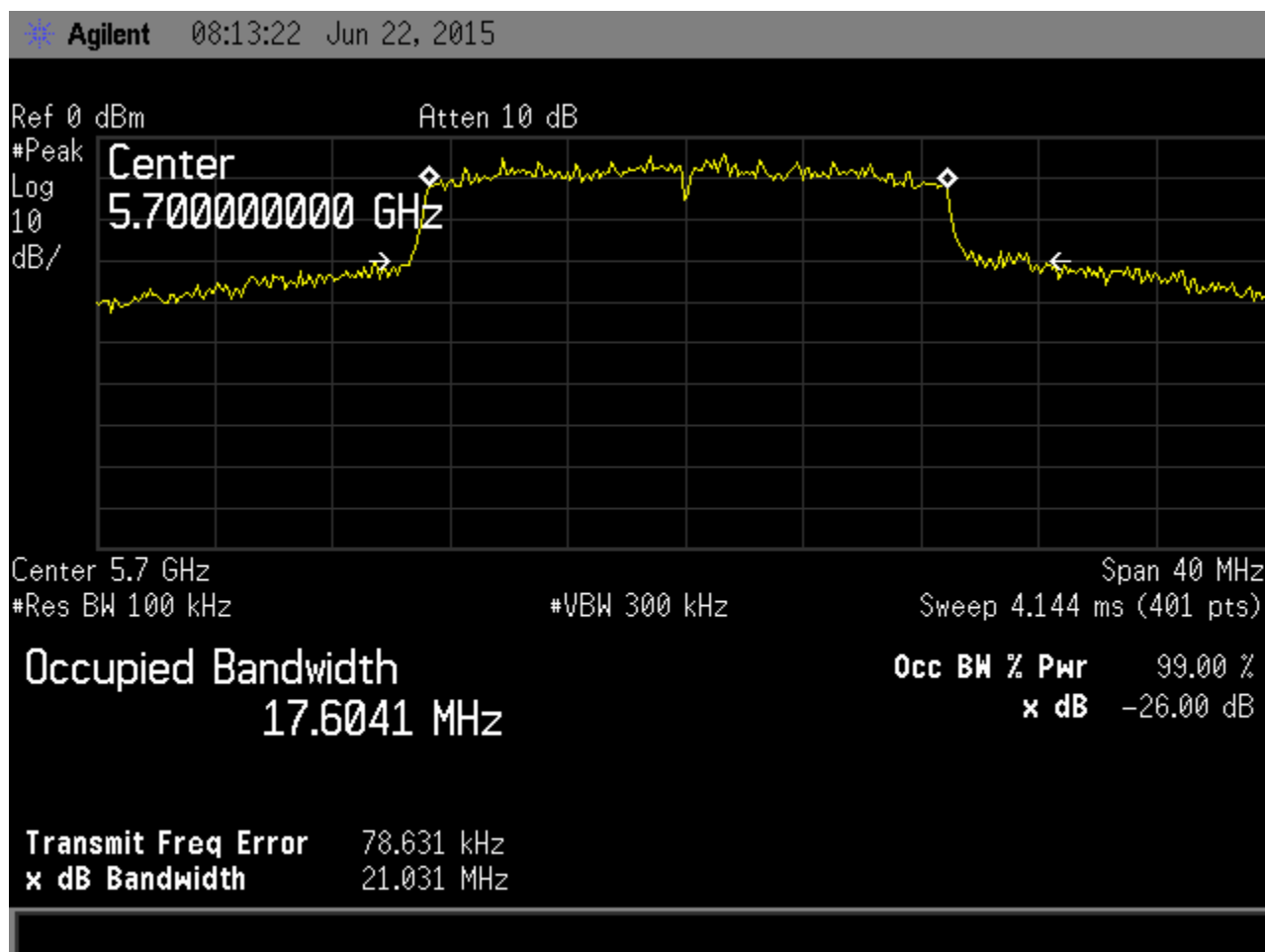


Figure 125. 26 dB BW and OBW -802.11n- Channel 140

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
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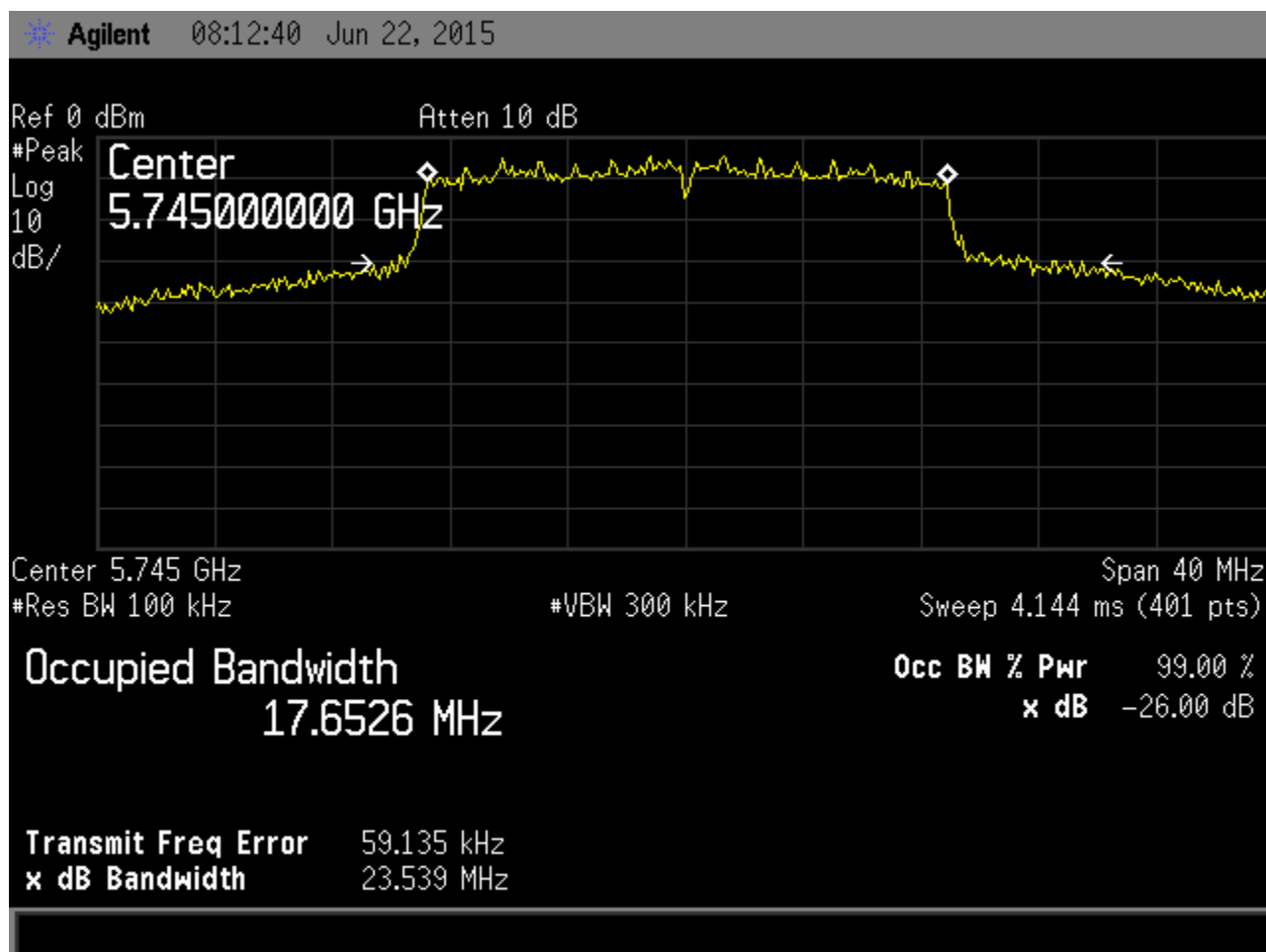


Figure 126. 26 dB BW and OBW -802.11n- Channel 149

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

FCC Part 15 Certification/ RSS 247  
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15-0086  
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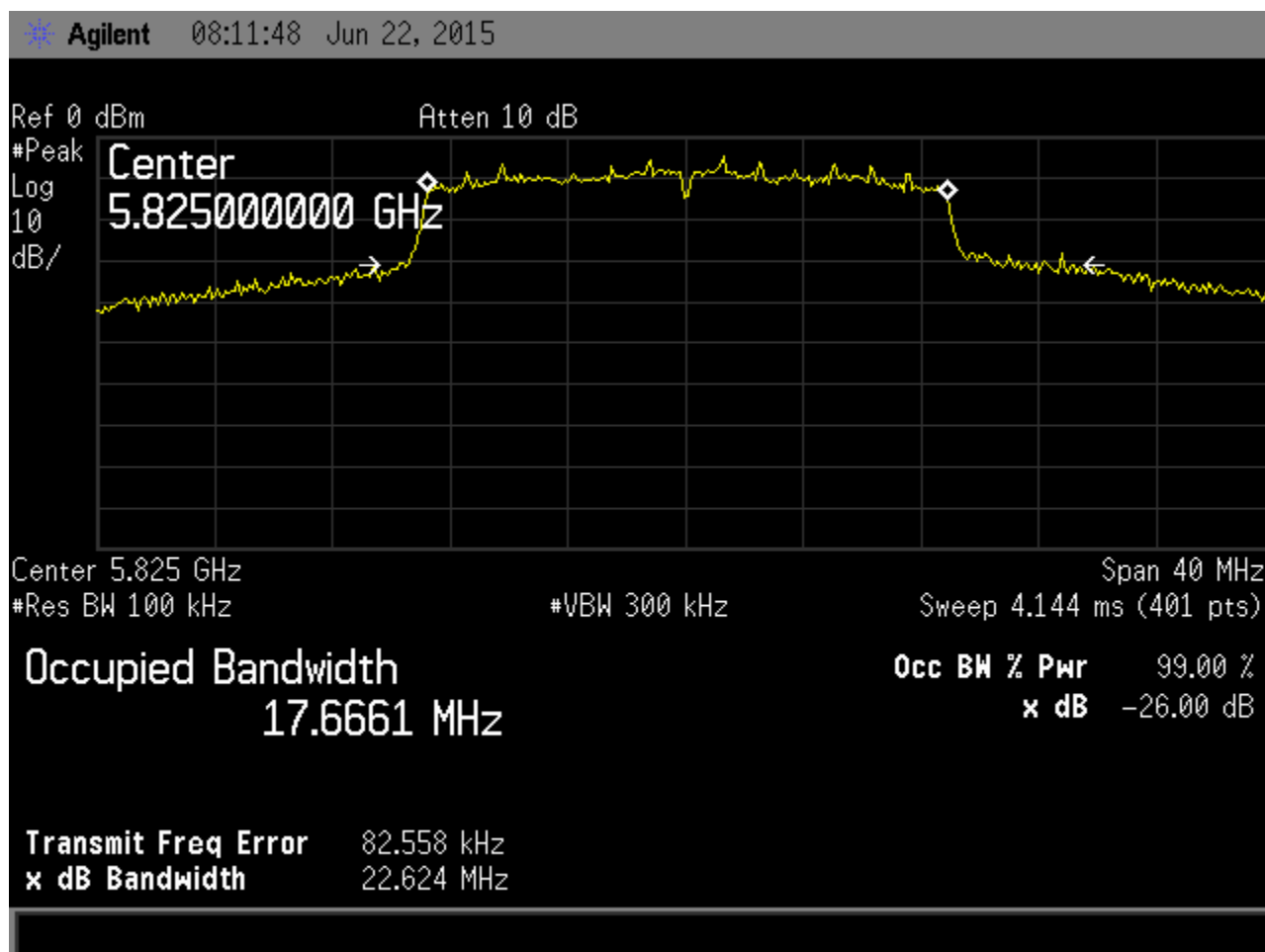


Figure 127. 26 dB BW and OBW -802.11n- Channel 165

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
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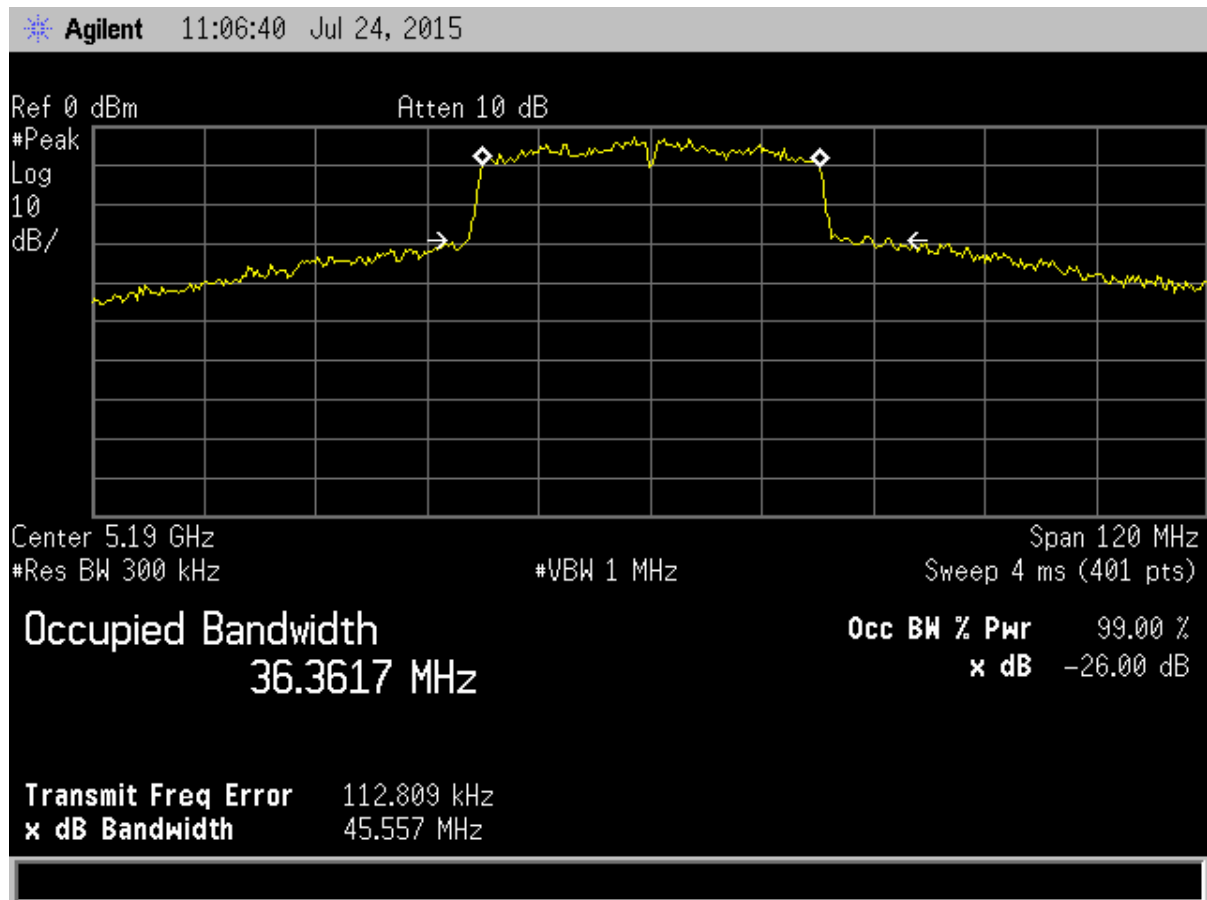


Figure 128. 26 dB BW and OBW -802.11n 40 MHz BW- Channel 38

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

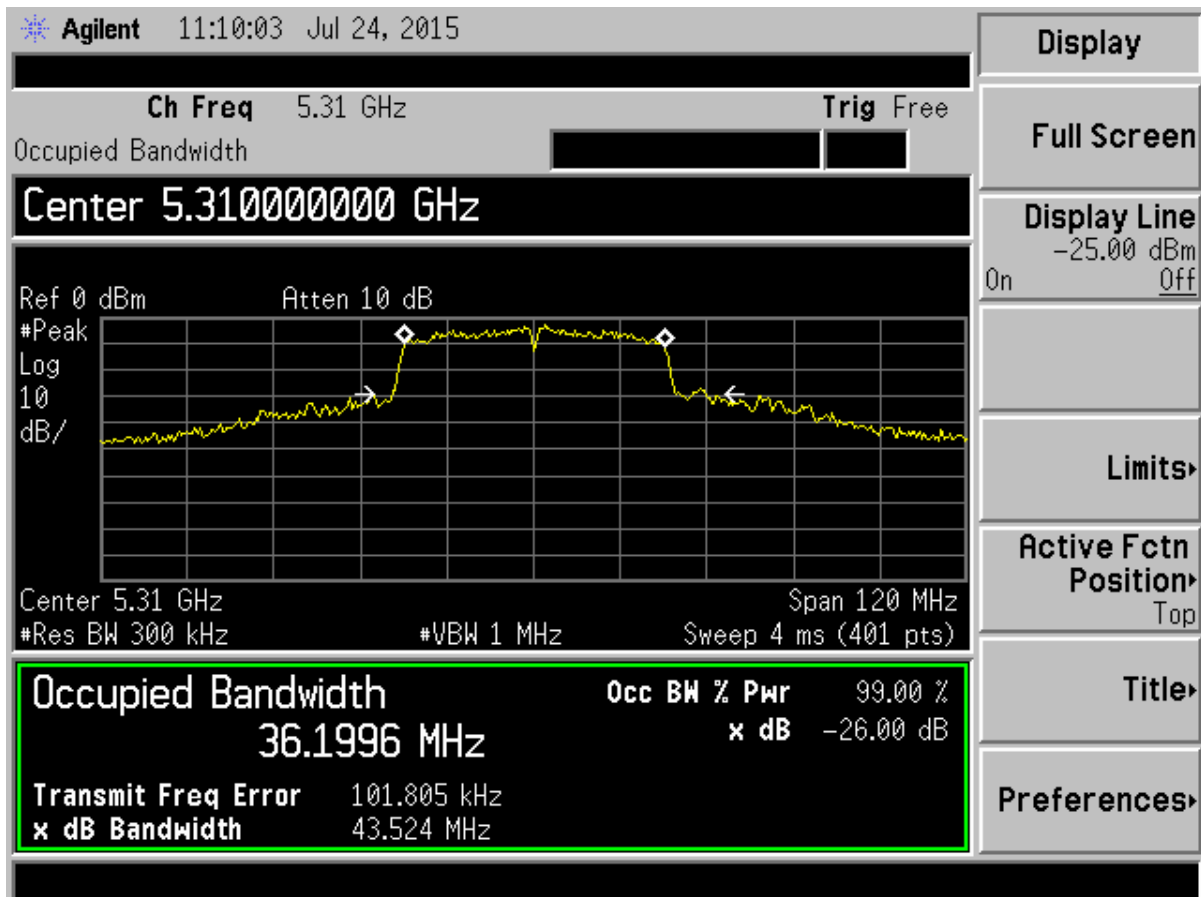


Figure 129. 26 dB BW and OBW -802.11n 40 MHz BW - Channel 62

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

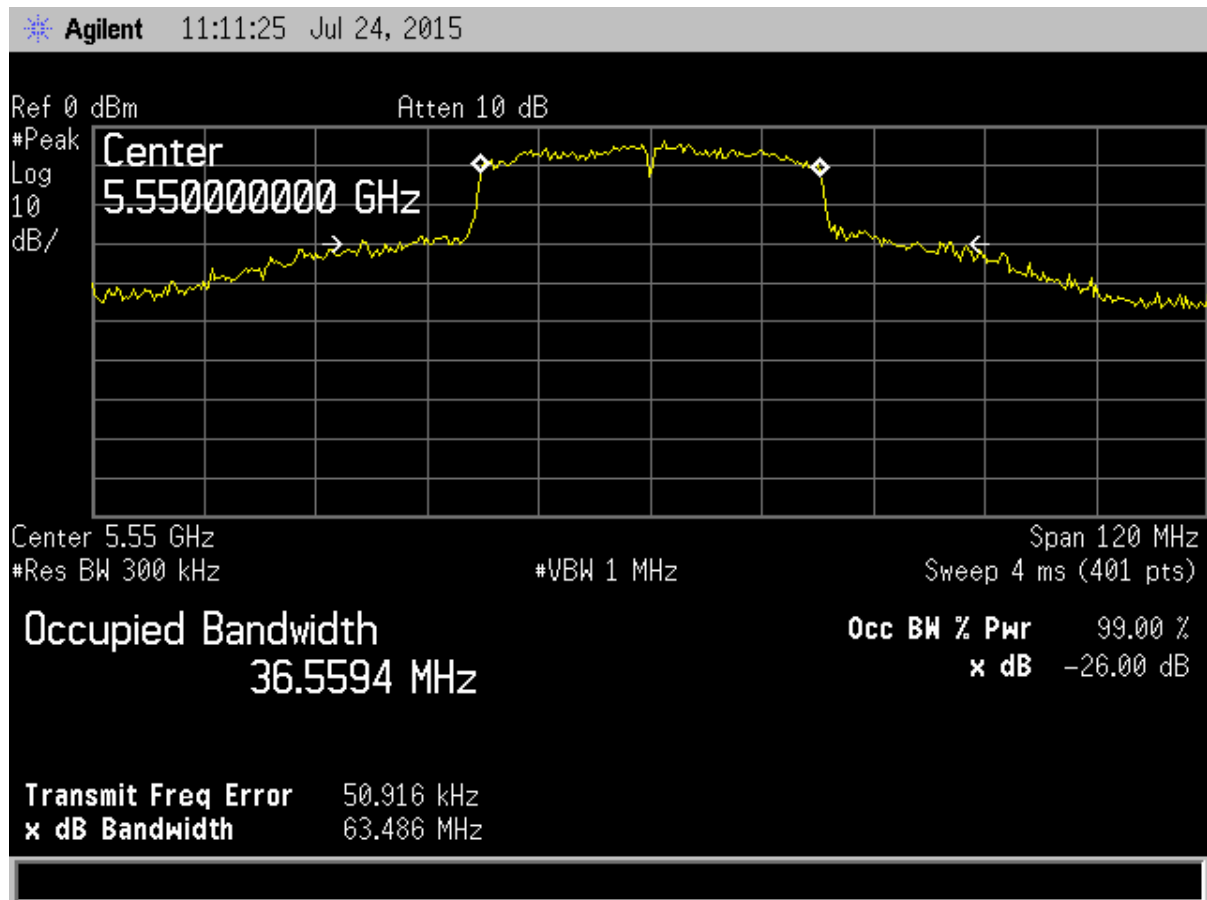


Figure 130. 26 dB BW and OBW -802.11n 40 MHz BW - Channel 110

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
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## **2.15 Maximum Peak Conducted Output Power (CFR 15.407 (a) (1,2,3))**

The transmitter was programmed to operate at a maximum output power across the bandwidth.

Peak power within the transmitting bands was measured per FCC KDB Publication 789033 D02 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 to 1 MHz, the VBW  $\geq 3 \times$  RBW, and span large enough to encompass the entire 99 % bandwidth and the channel power was integrated over the whole band. Peak antenna conducted output power is tabulated in the table below.

Note: The output power from the other antenna port was deemed insignificant. See US Tech Report 15-0085.

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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**Table 34. Peak Antenna Conducted Output Power per 15.407 (a) (1,2,3) for 802.11a**

Frequency of Fundamental (MHz)	Peak Test Data (dBm)	FCC Limit (dBm)	Margin (dB)
5180	18.84	23.98	5.14
5240	19.33	23.98	4.65
5260	19.16	23.98	4.82
5320	19.33	23.98	4.65
5500	18.23	23.98	5.75
5700	18.20	23.98	5.78
5745	17.35	30.00	12.65
5825	16.33	30.00	13.67

Test Date: July 25, 2015

Tested By

Signature: 

Name: Carrie Fincannon



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 7, 2015  
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**Table 35. Peak Antenna Conducted Output Power per 15.407 (a) (1,2,3) for 802.11n**

Frequency of Fundamental (MHz)	Test Data (dBm)	FCC Limit (dBm)	Margin (dB)
5180	20.21	23.98	3.77
5240	20.98	23.98	3.00
5260	20.70	23.98	3.28
5320	20.07	23.98	3.91
5500	19.89	23.98	4.09
5700	19.77	23.98	4.21
5745	18.83	30.00	11.17
5825	17.96	30.00	12.04

Test Date: July 25, 2015

Tested By

Signature:



Name: Carrie Fincannon

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
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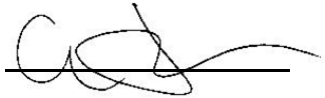
**Table 36. Peak Antenna Conducted Output Power per 15.407 (a) (1,2,3) for 802.11n 40 MHz BW**

Frequency of Fundamental (MHz)	Test Data (dBm)	FCC Limit (dBm)	Margin (dB)
5190	17.50	23.98	6.48
5310	17.37	23.98	6.61
5550	17.03	23.98	6.95

Test Date: July 24, 2015

Tested By

Signature:



Name: George Yang

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
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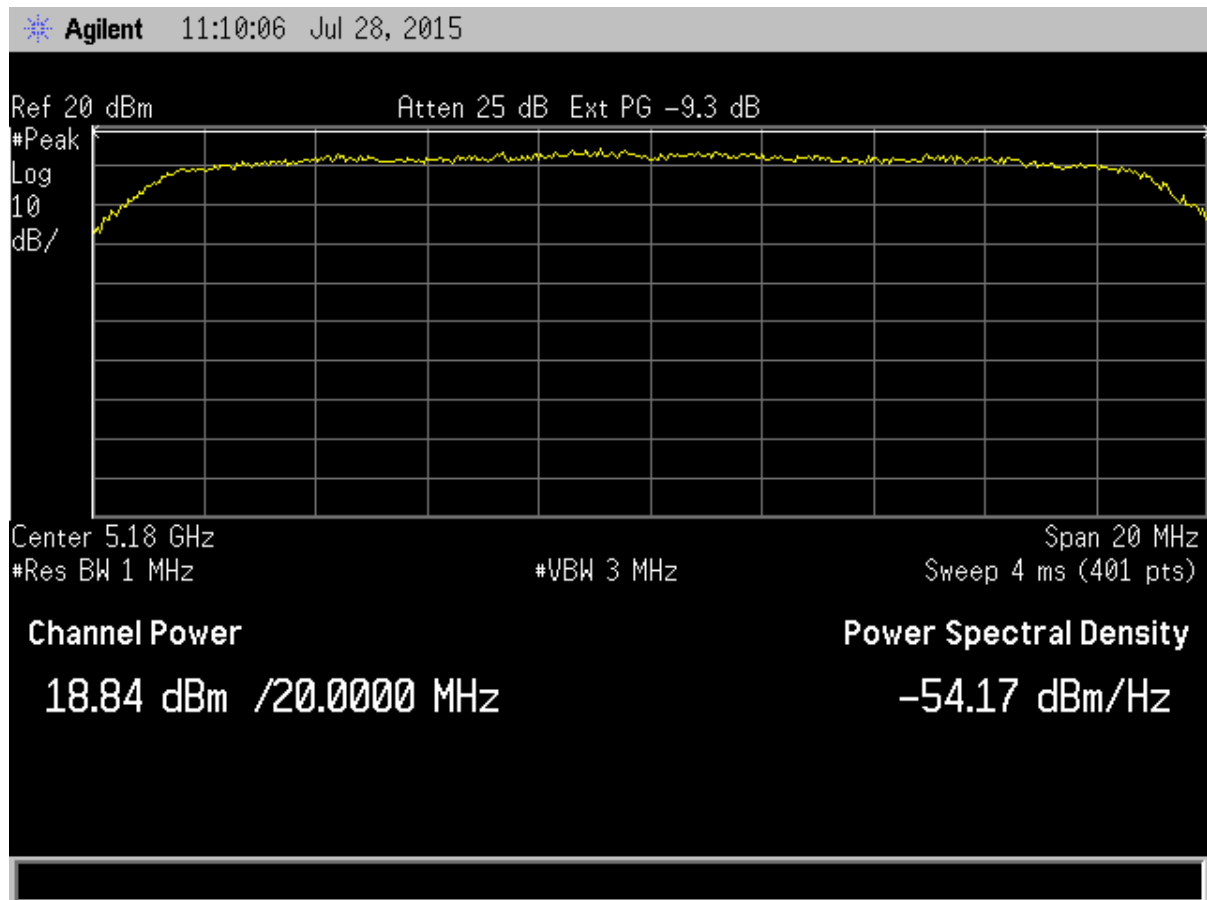


Figure 131. Peak Antenna Conducted Output Power, 802.11a Channel 36

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

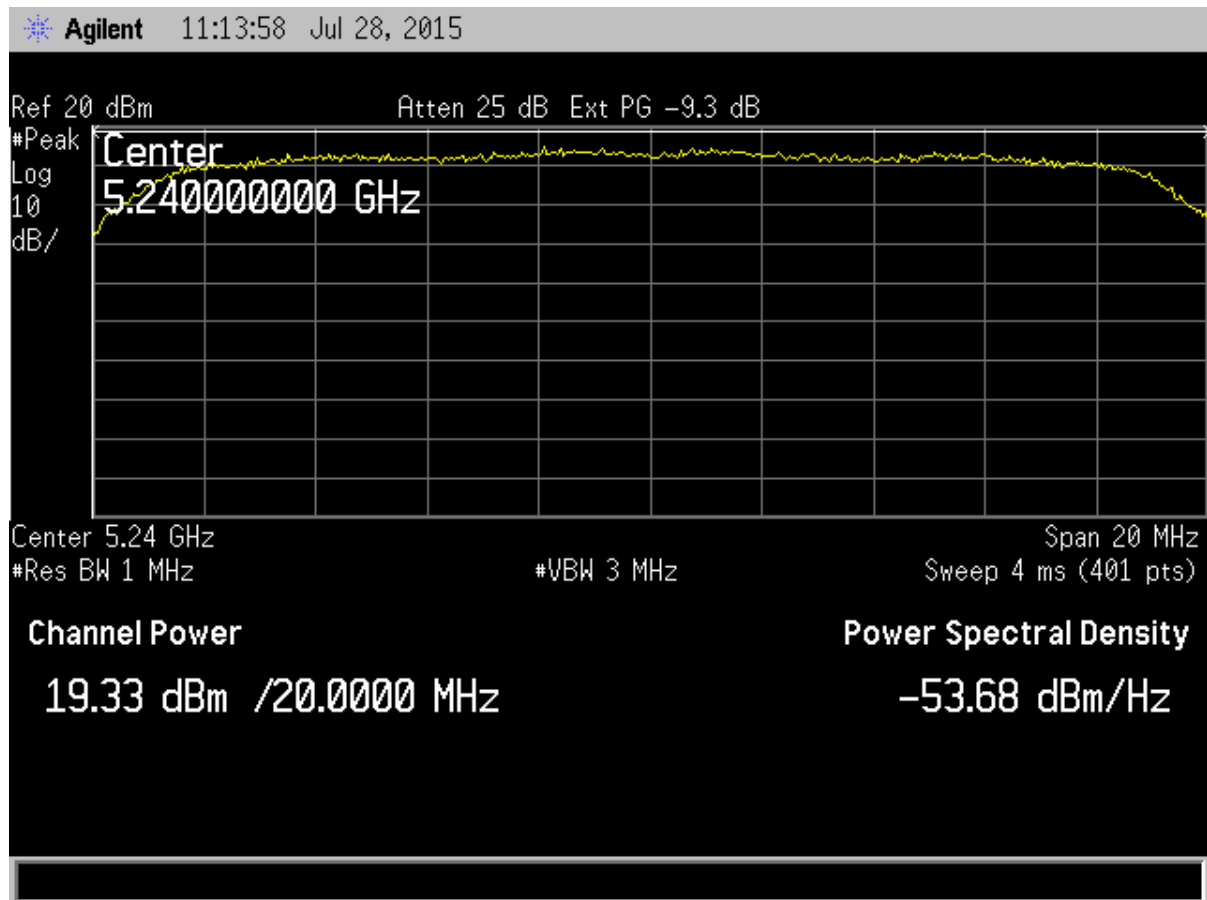


Figure 132. Peak Antenna Conducted Output Power, 802.11a Channel 48

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

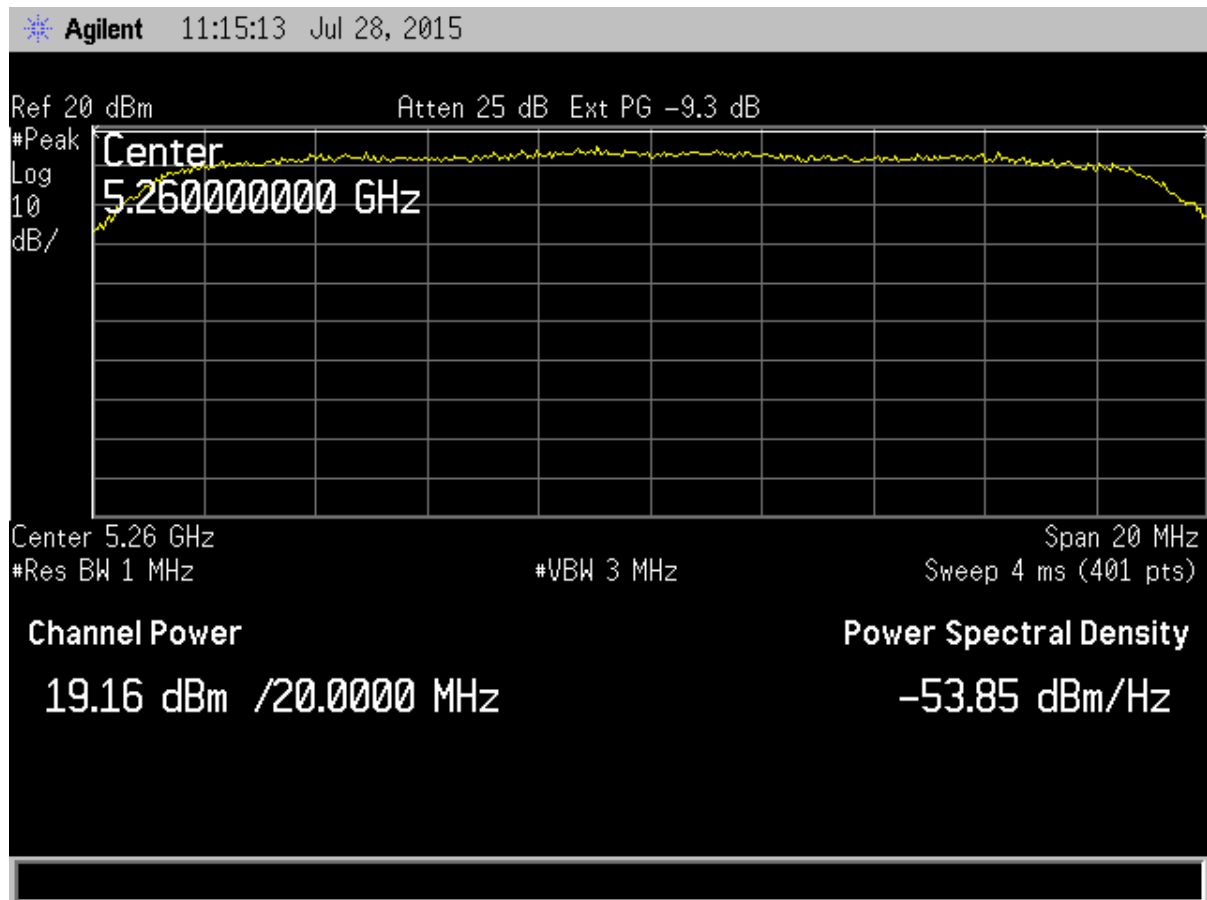


Figure 133. Peak Antenna Conducted Output Power, 802.11a Channel 52

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

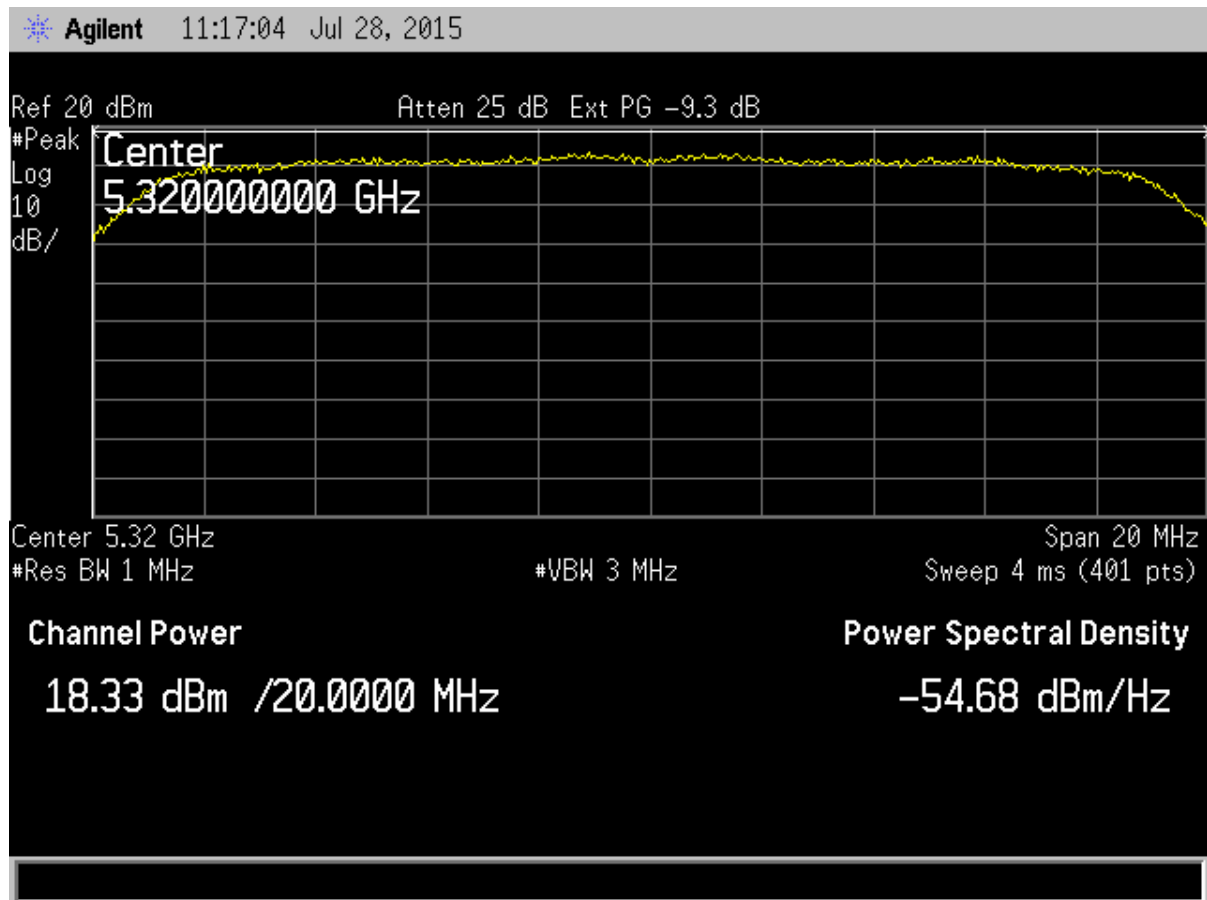


Figure 134. Peak Antenna Conducted Output Power, 802.11a Channel 64

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

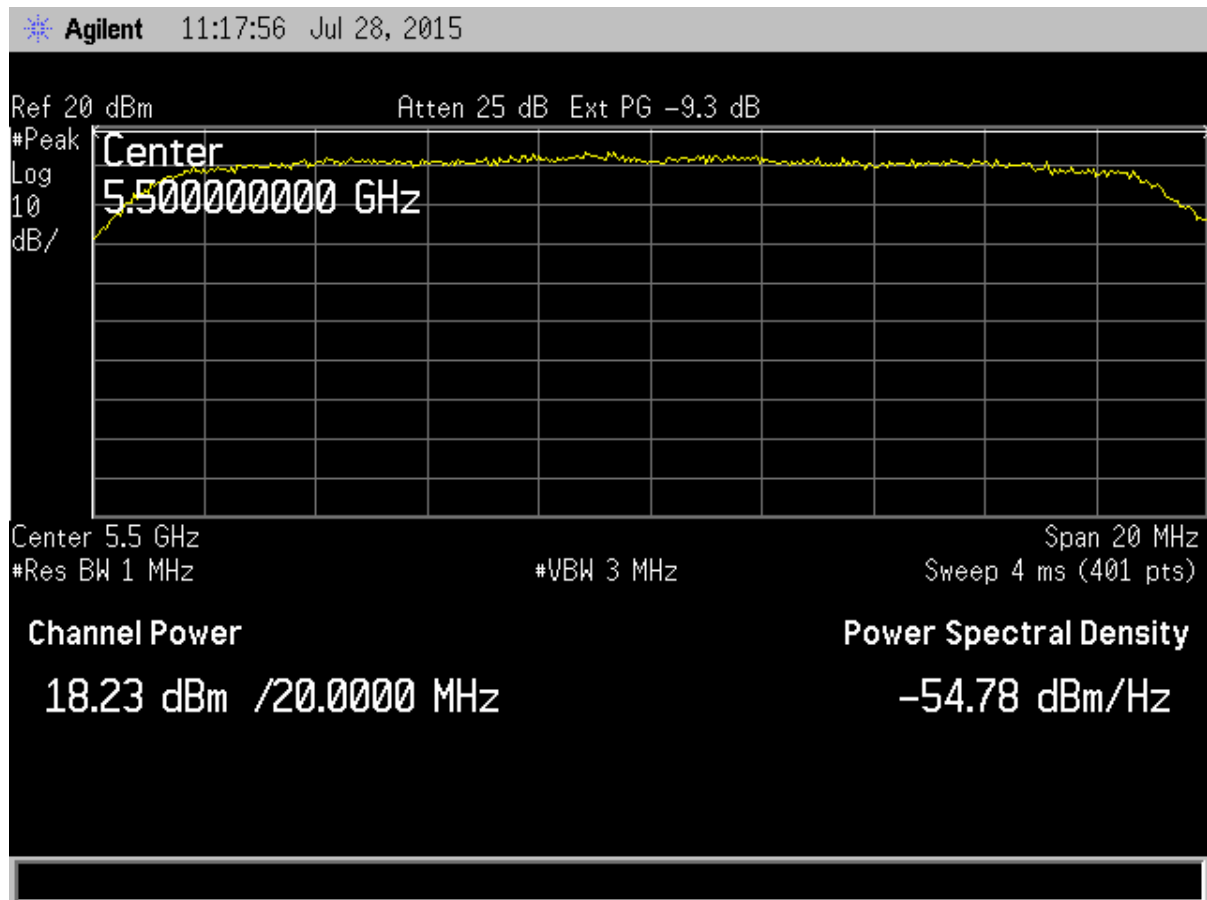


Figure 135. Peak Antenna Conducted Output Power, 802.11a Channel 100

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

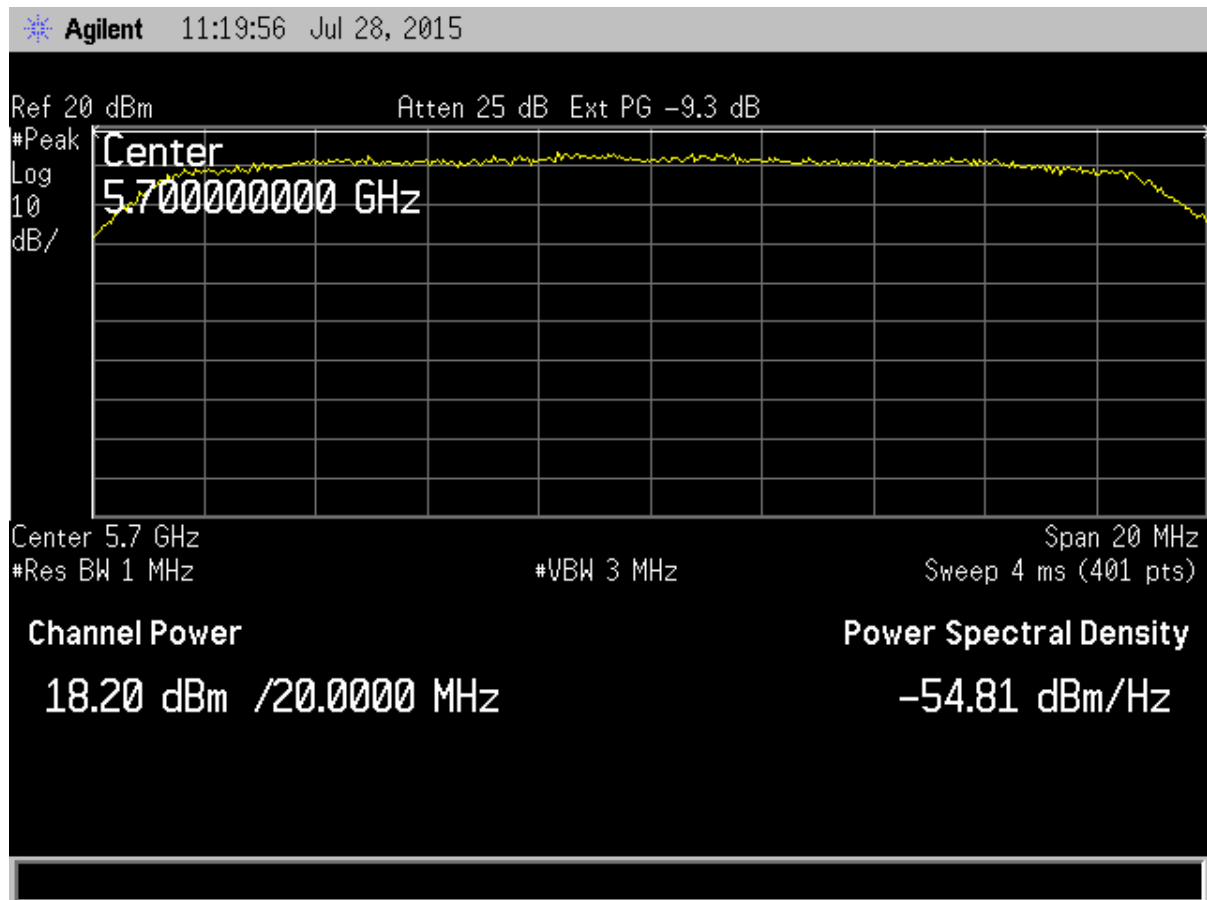


Figure 136. Peak Antenna Conducted Output Power, 802.11a Channel 140



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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

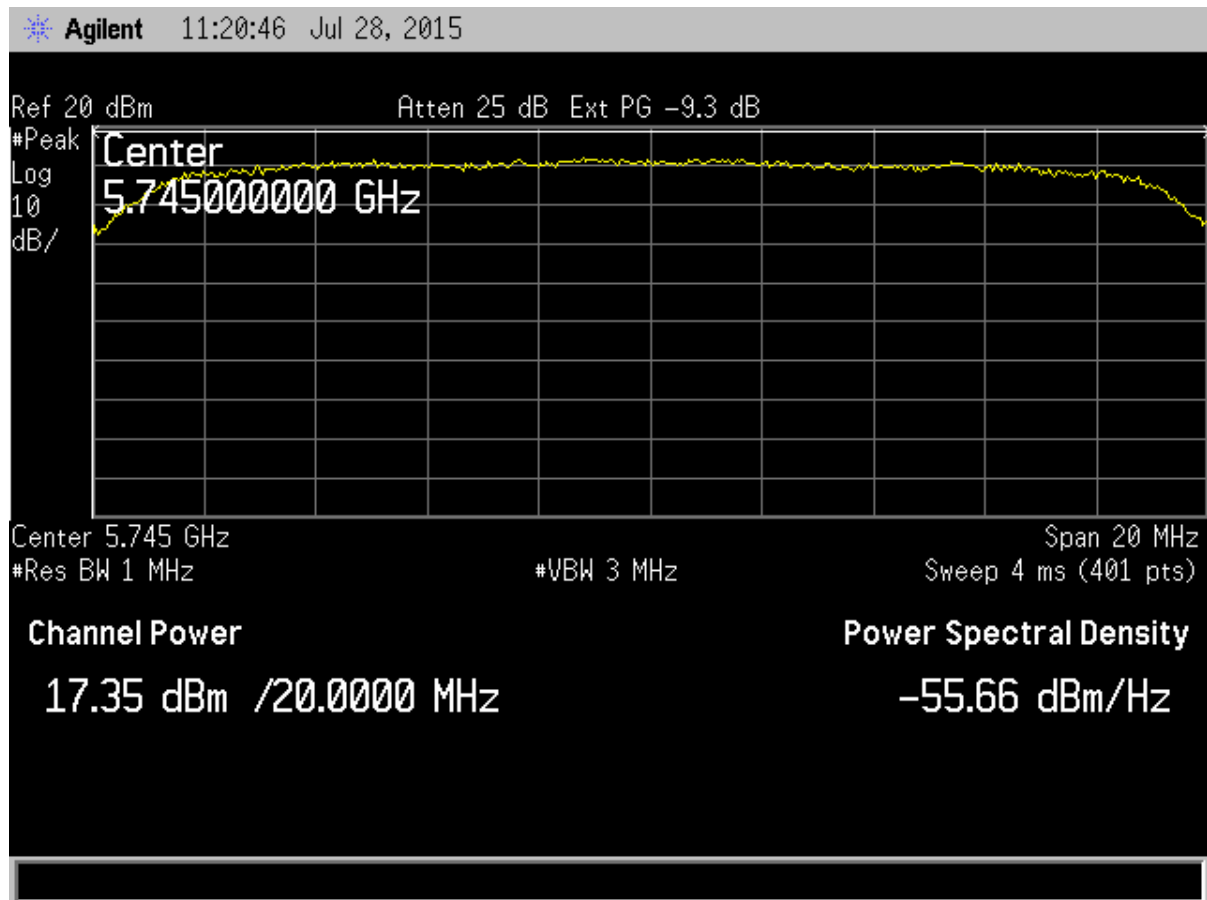


Figure 137. Peak Antenna Conducted Output Power, 802.11a Channel 149

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

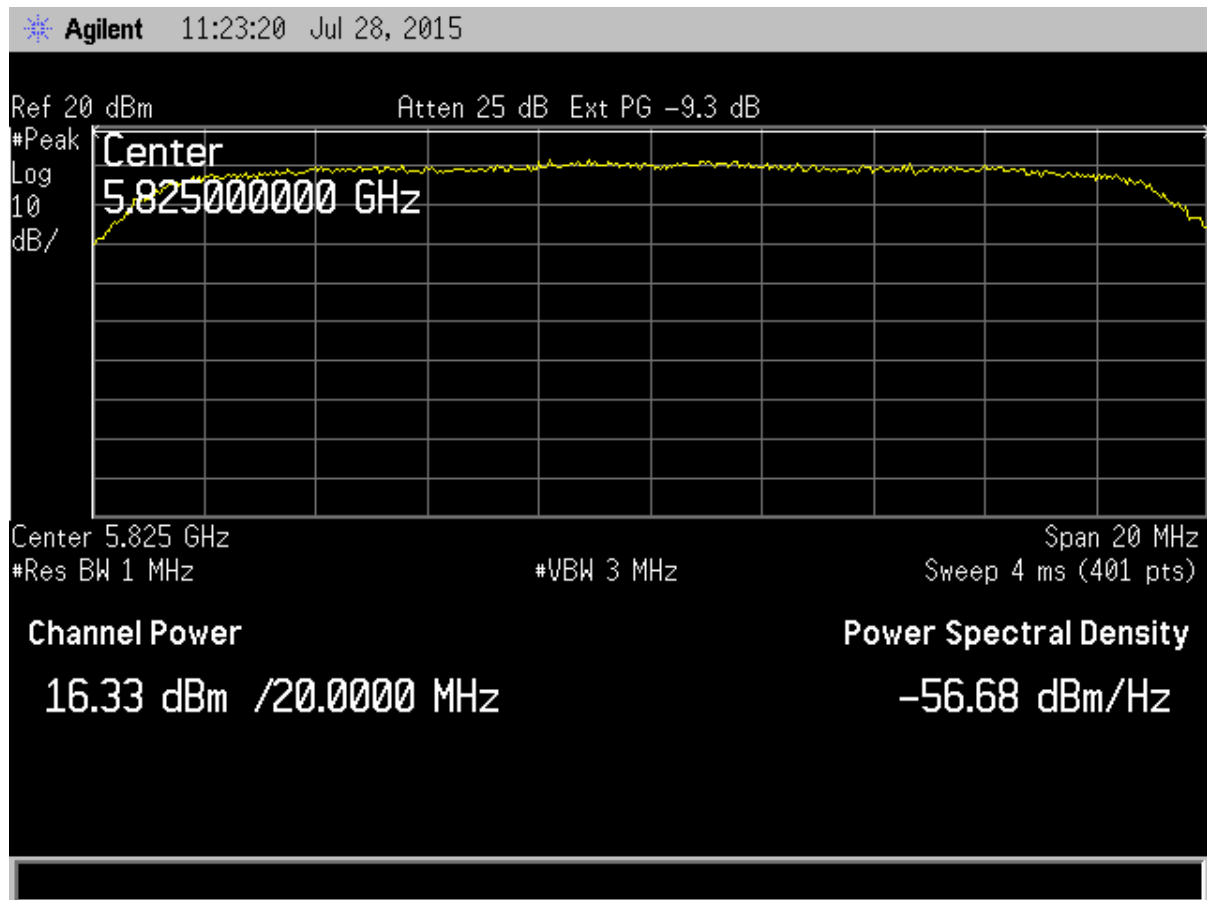


Figure 138. Peak Antenna Conducted Output Power, 802.11a Channel 165

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

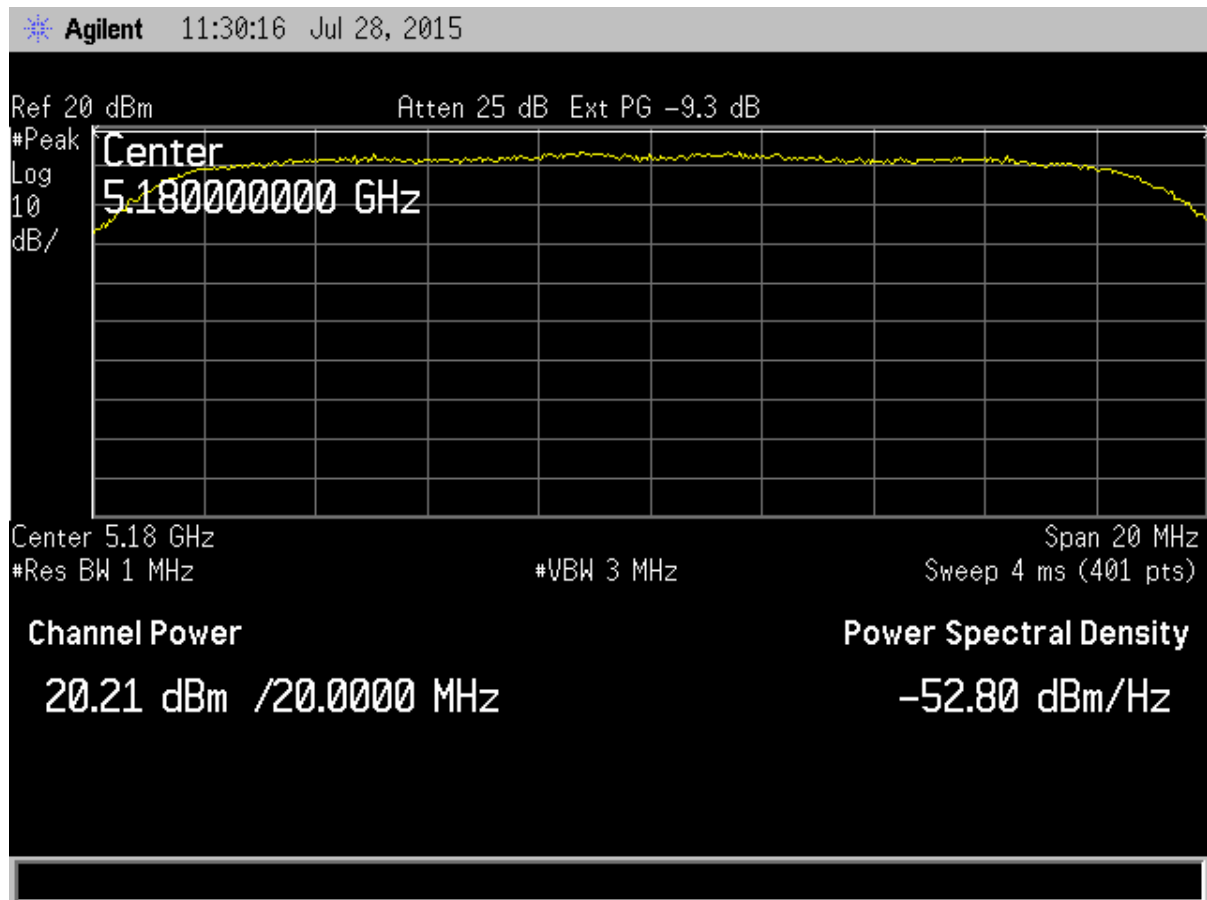


Figure 139. Peak Antenna Conducted Output Power, 802.11n Channel 36

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

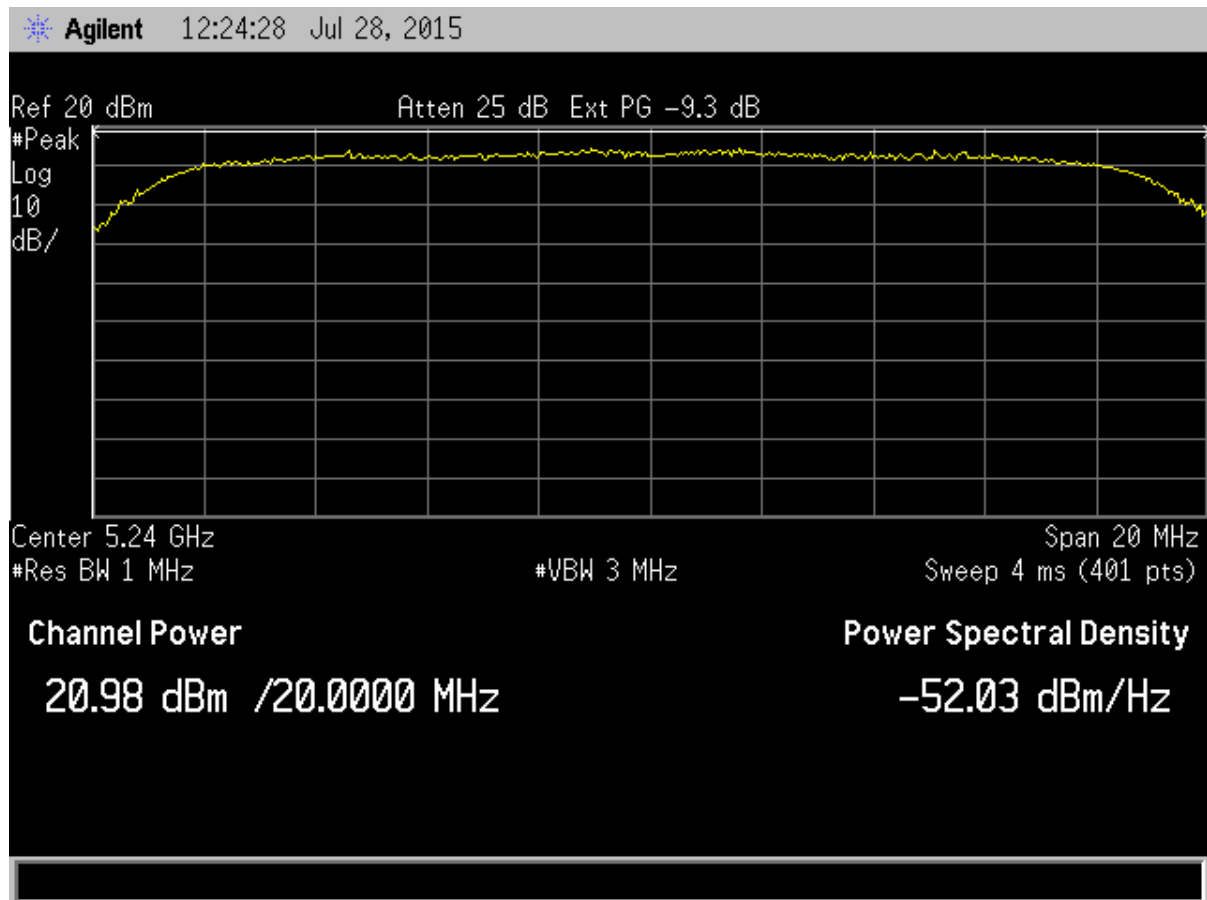


Figure 140. Peak Antenna Conducted Output Power, 802.11n Channel 48

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

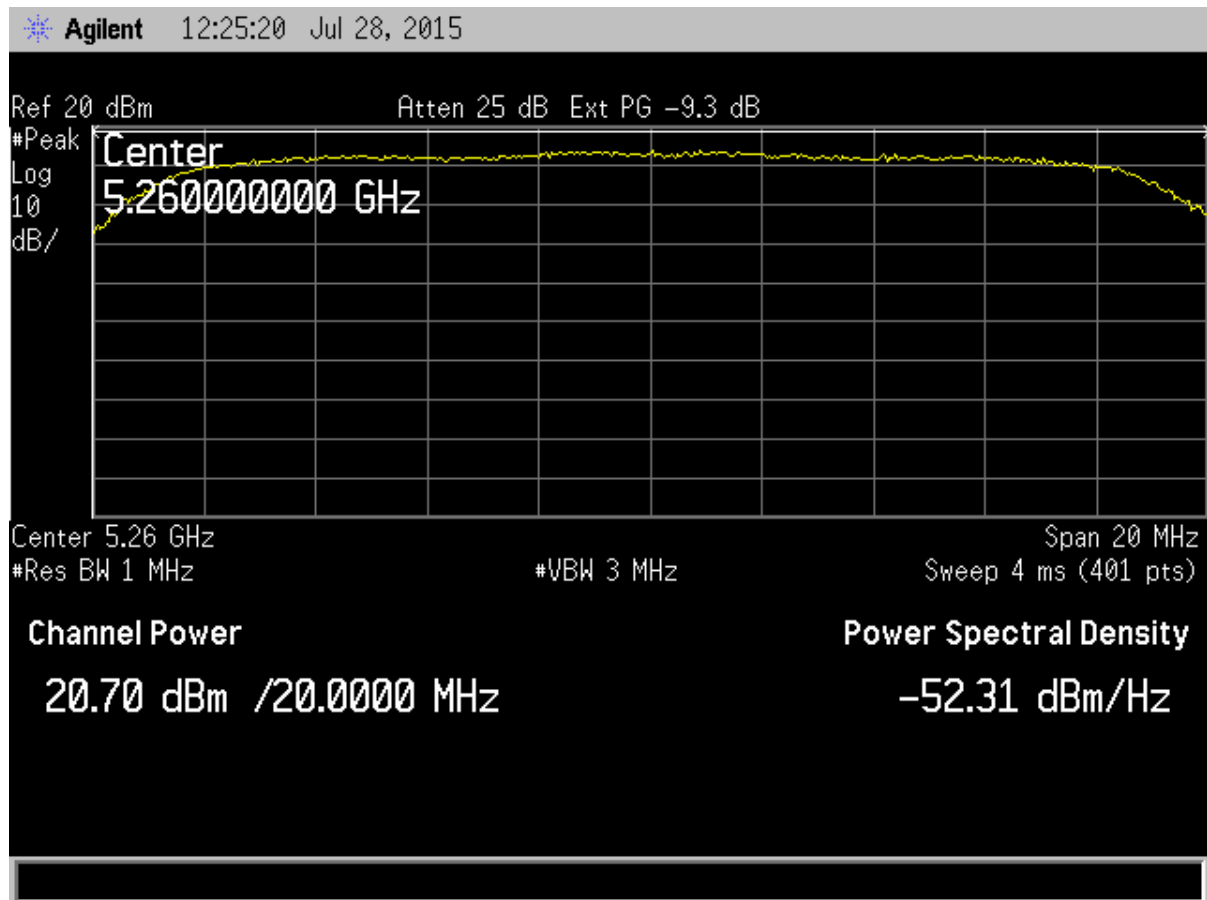


Figure 141. Peak Antenna Conducted Output Power, 802.11n Channel 52

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

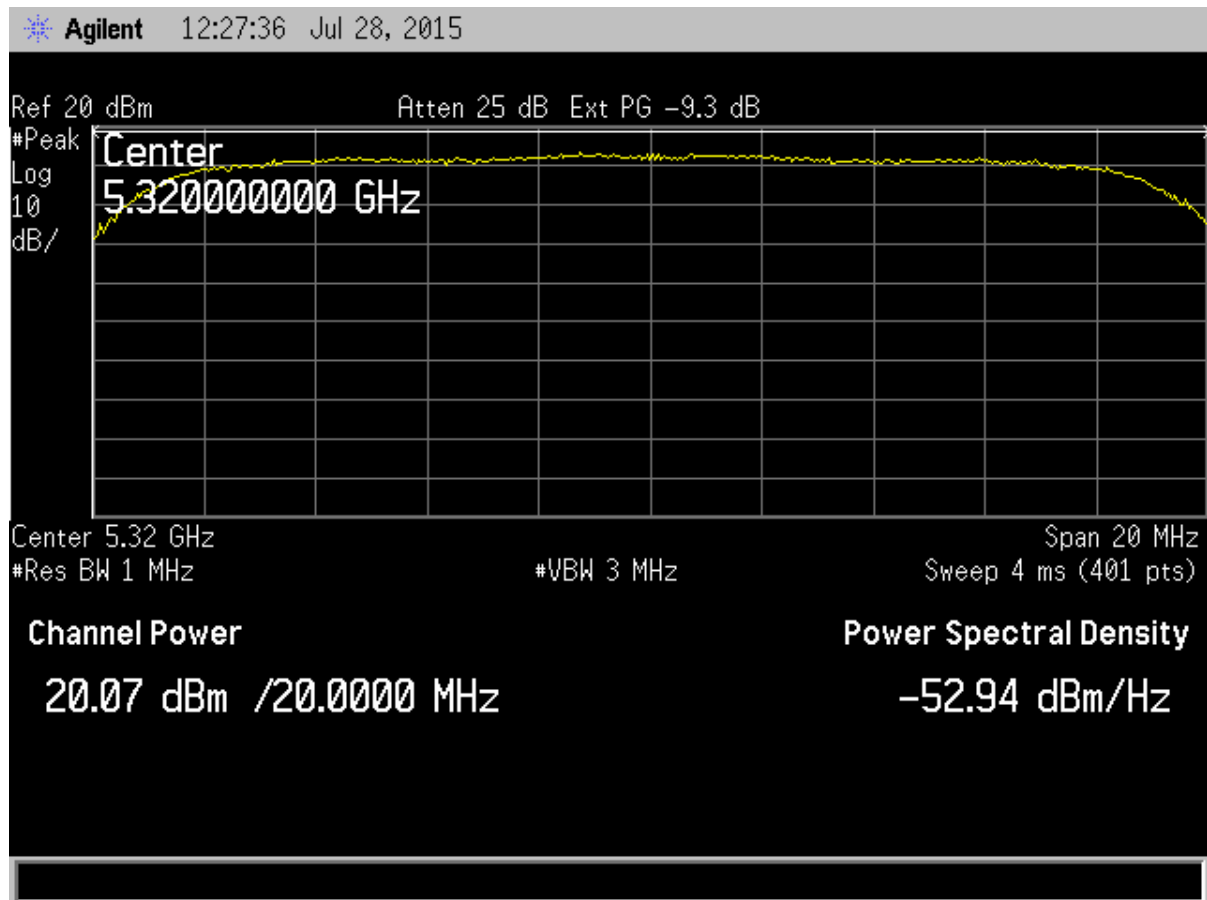


Figure 142. Peak Antenna Conducted Output Power, 802.11n Channel 64

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

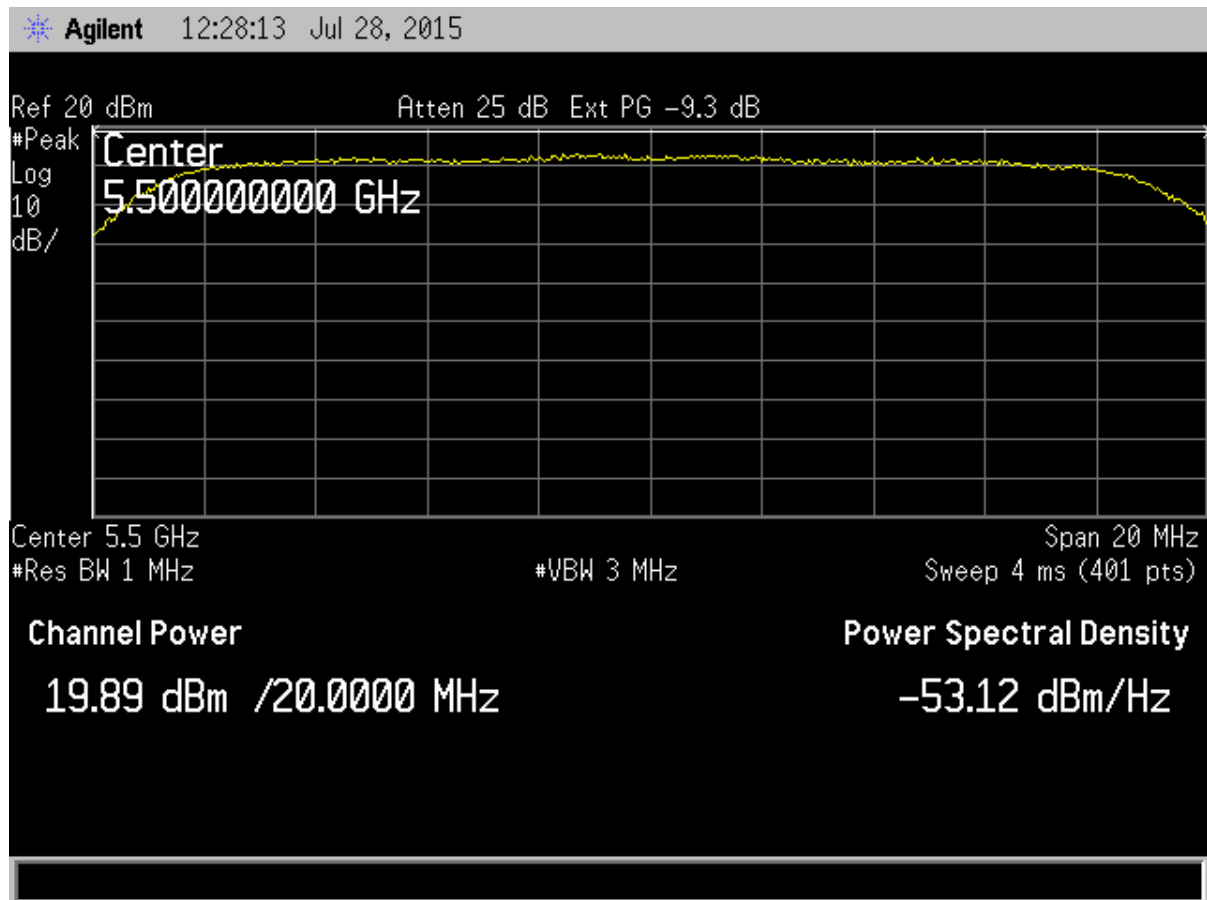


Figure 143. Peak Antenna Conducted Output Power, 802.11n Channel 100

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

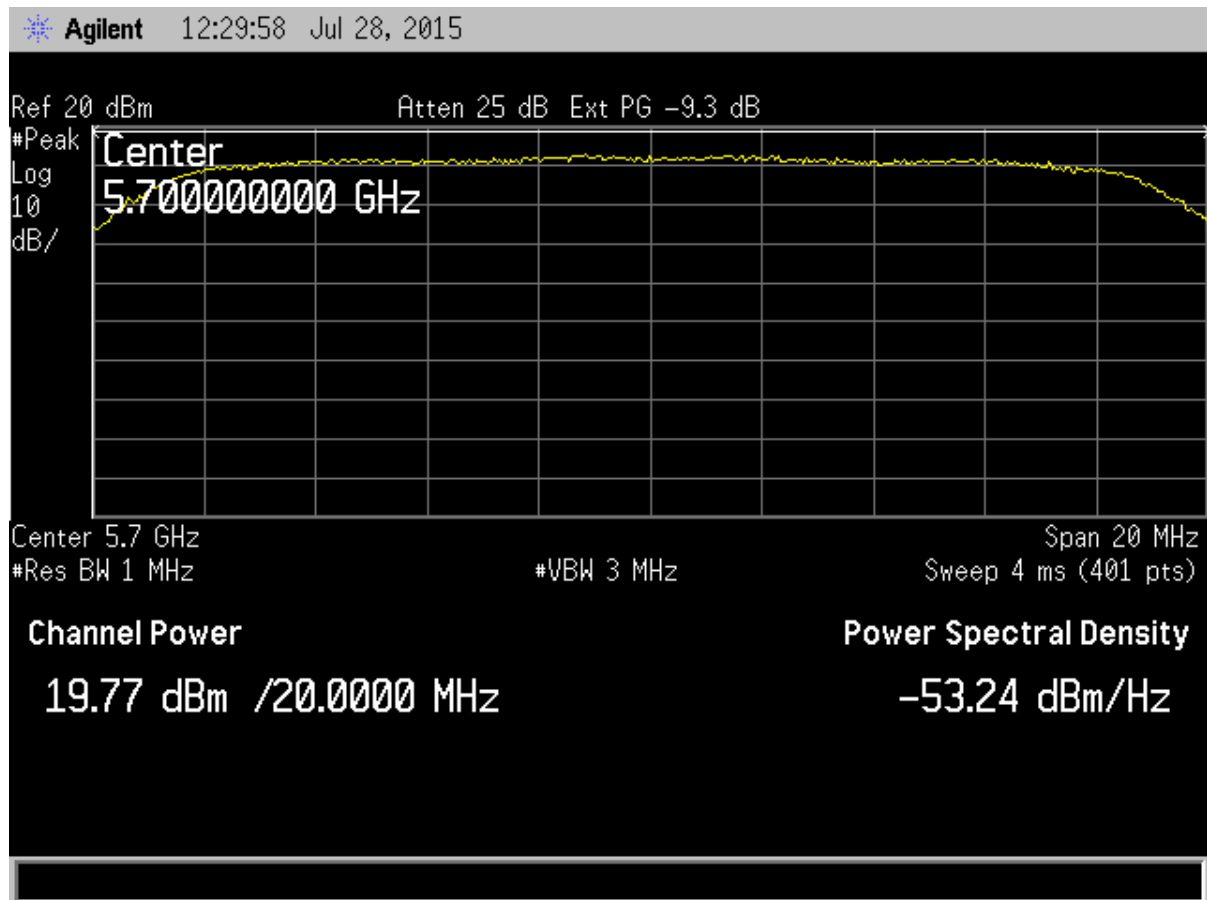


Figure 144. Peak Antenna Conducted Output Power, 802.11n Channel 140



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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
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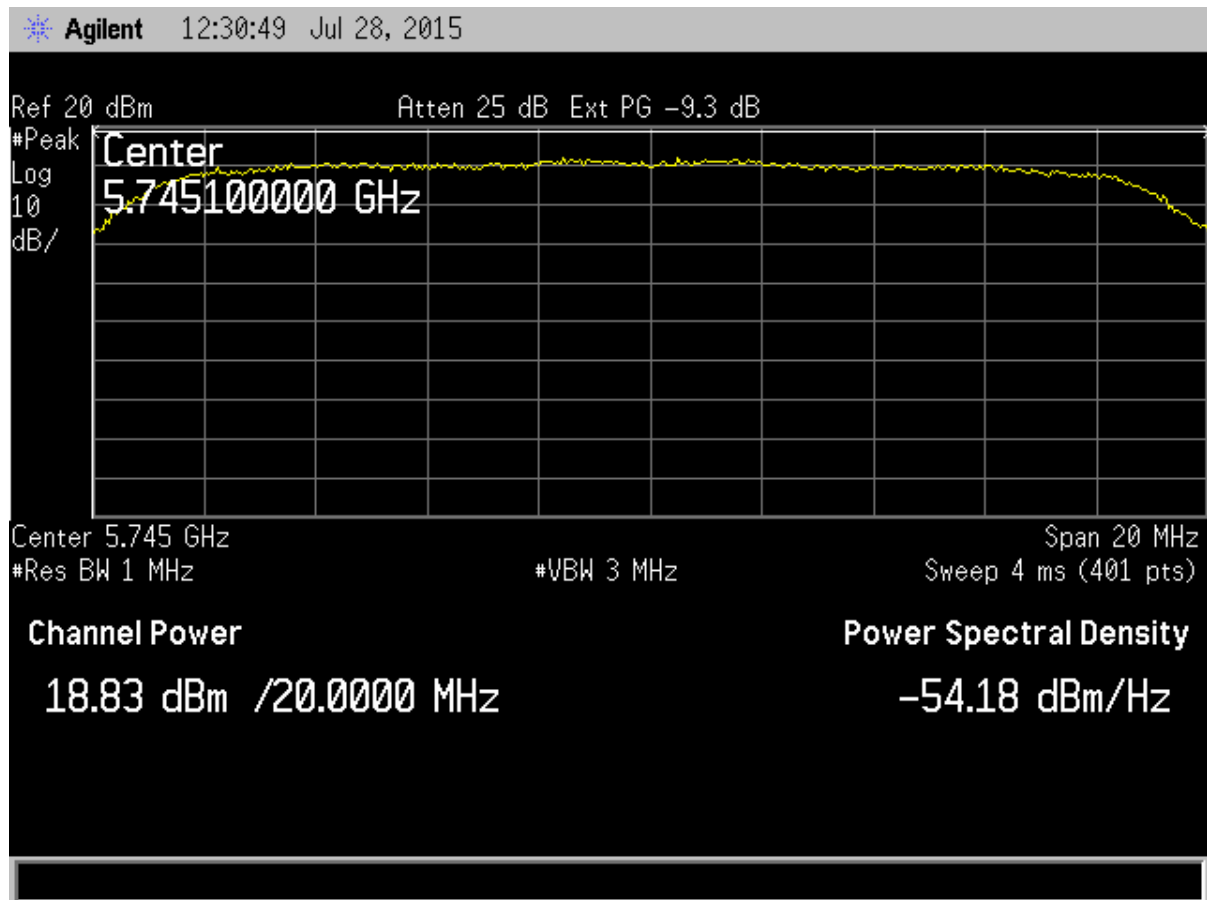


Figure 145. Peak Antenna Conducted Output Power, 802.11n Channel 149

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
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Polycom Inc.  
P008

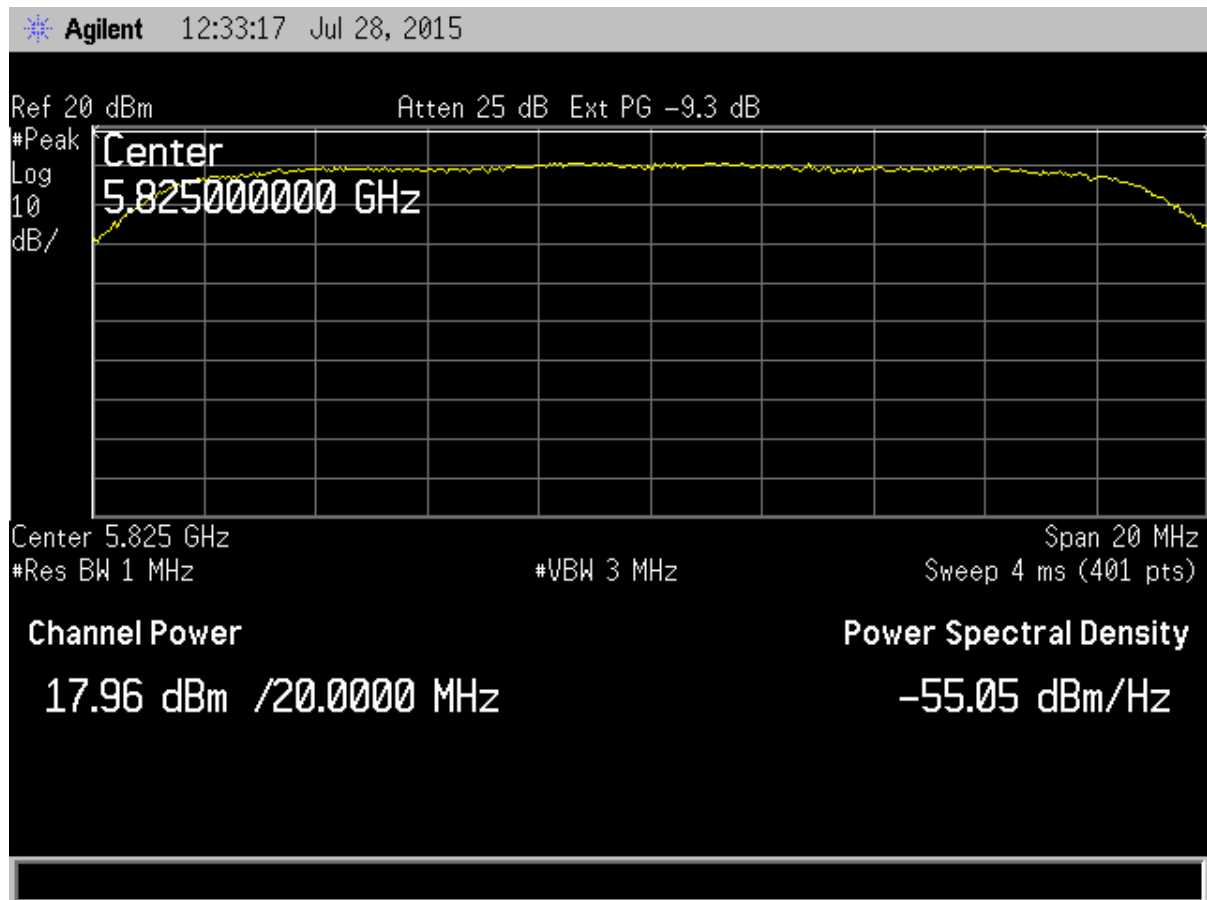


Figure 146. Peak Antenna Conducted Output Power, 802.11n Channel 165

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
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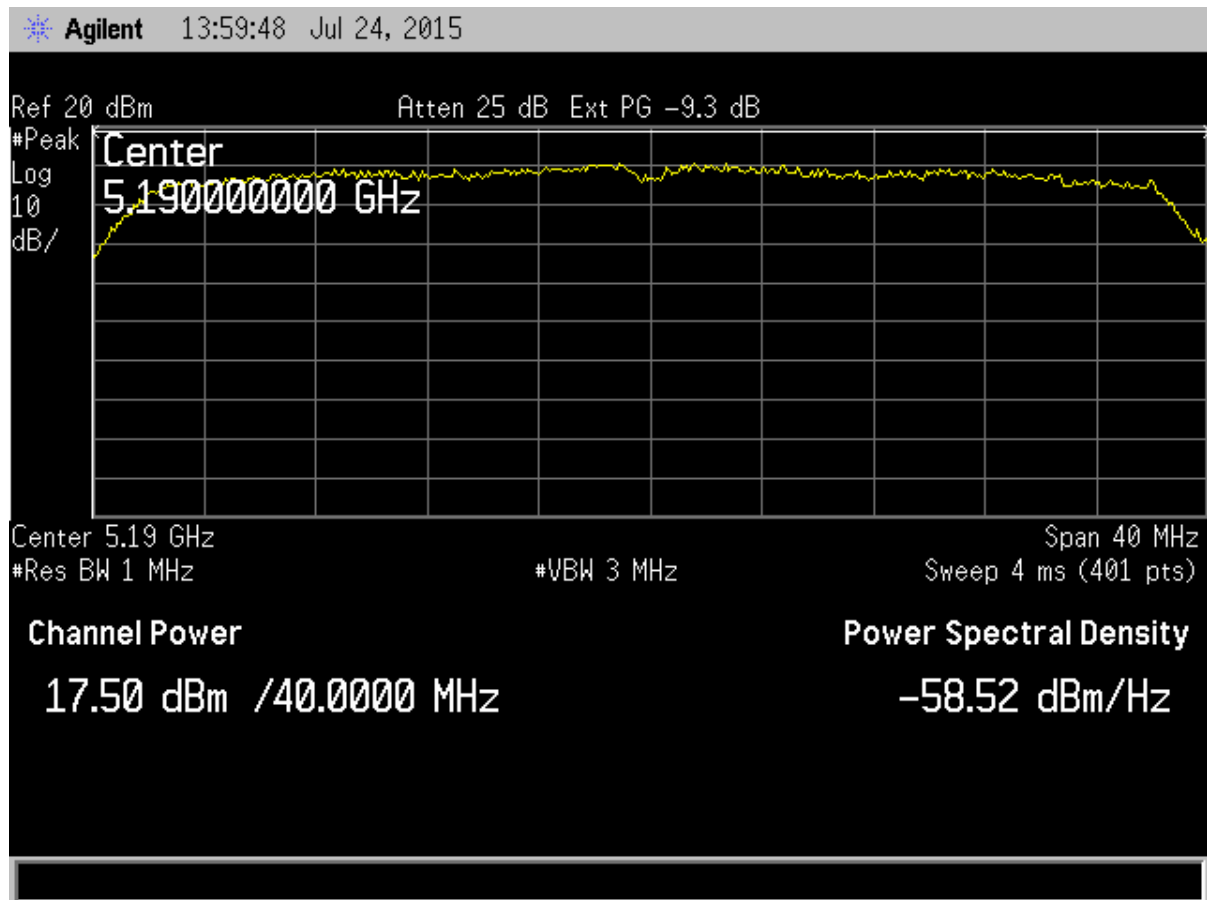


Figure 147. Peak Antenna Conducted Output Power, 802.11 with 40 MHz BW  
Channel 38

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
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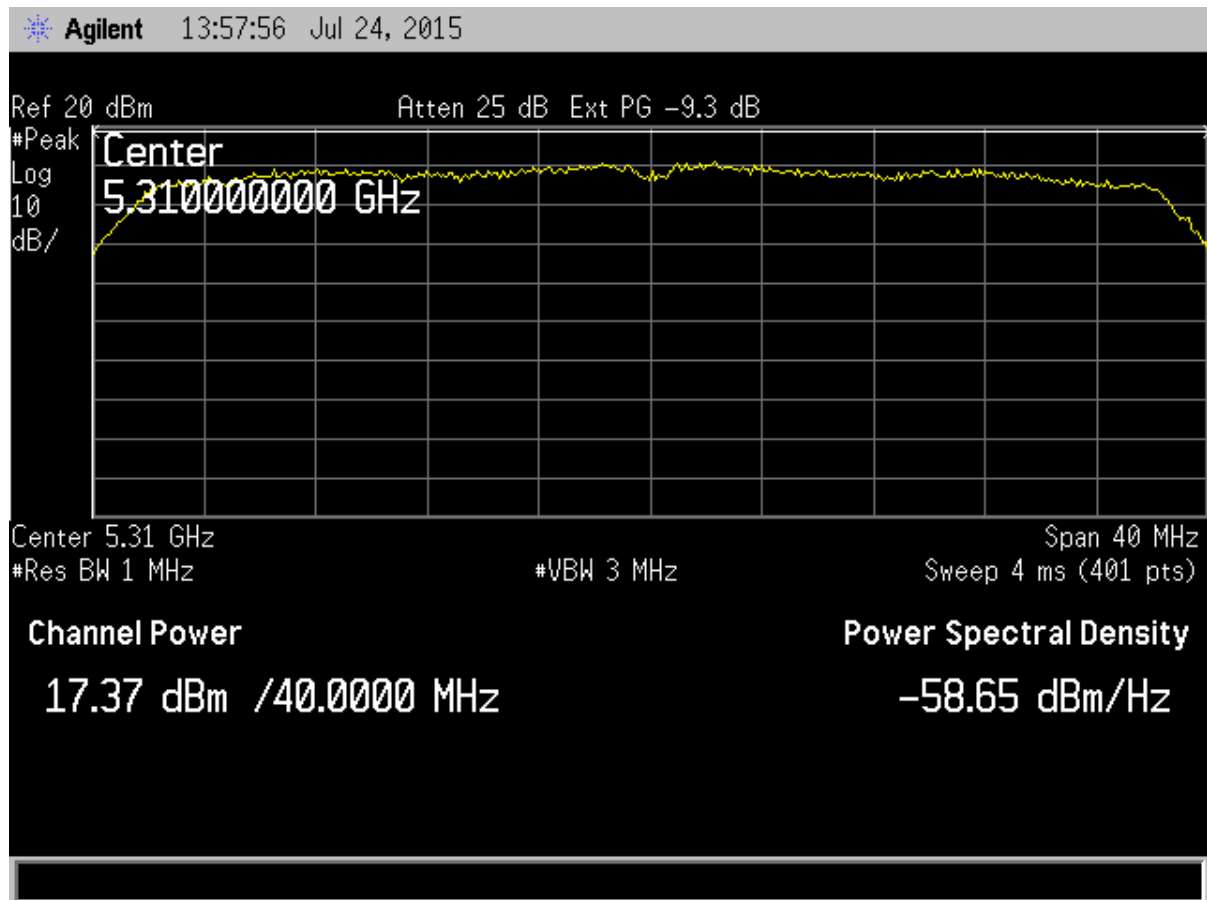


Figure 148. Peak Antenna Conducted Output Power, 802.11 with 40 MHz BW  
Channel 62

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

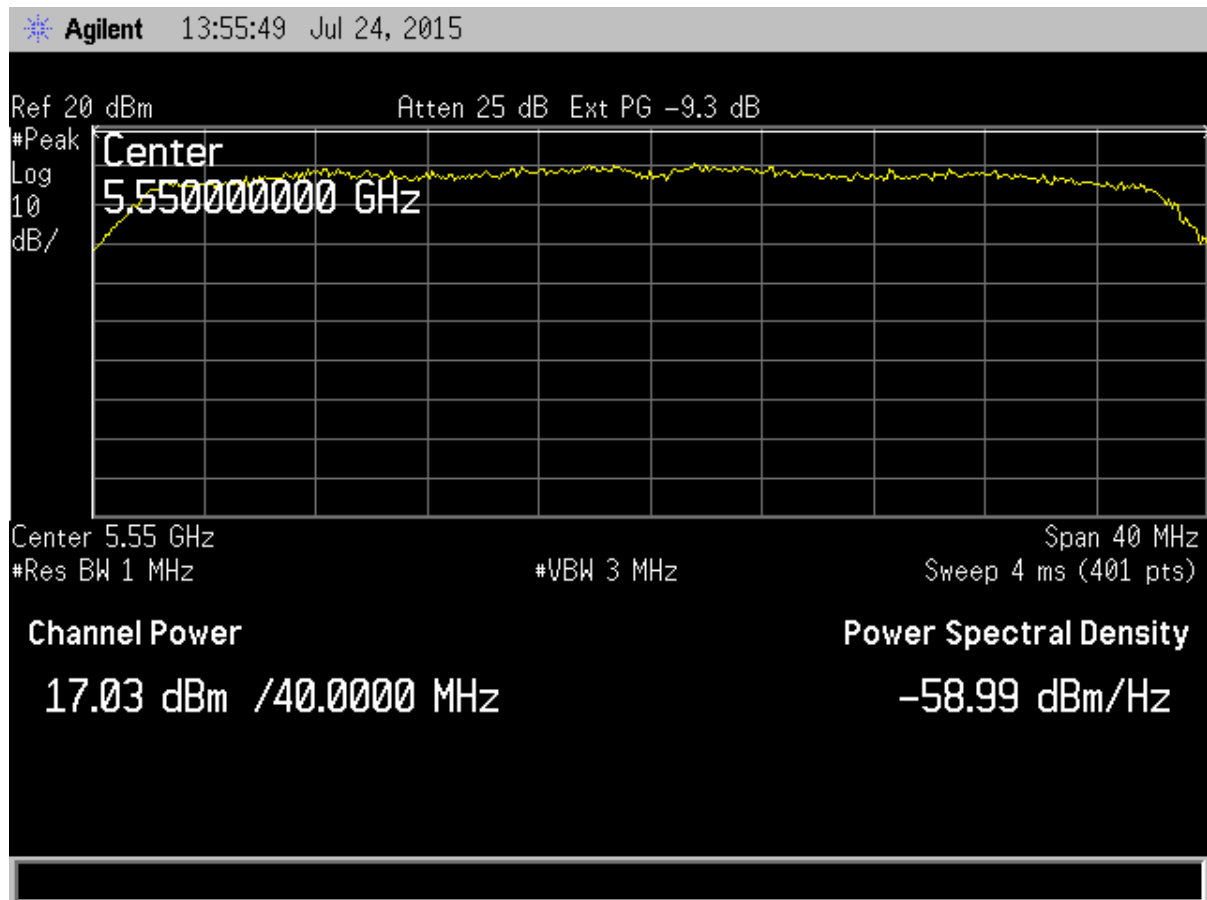


Figure 149. Peak Antenna Conducted Output Power, 802.11 with 40 MHz BW  
Channel 110

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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## 2.16 Power Spectral Density (CFR 15.407(a) (5)) (IC RSS 247 5.1, 5.2)

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 789033. The RBW was set to 1 MHz and the Video Bandwidth was set to  $\geq 3 \times \text{RBW}$ . The span was set to encompass the OBW. The averaging detector was used on the spectrum analyzer was used to determine the maximum PSD over the corresponding bandwidth

In the operating bands 15.15 – 5.25 GHz, 5.25 - 5.355 GHz, and 5.47 - 5.725 GHz, the maximum power spectral density shall not exceed 11 dBm in any 1 MHz band. In the operating band 5.725 - 5.85 GHz the maximum conducted output power spectral density shall not exceed 30 dBm in any 500 kHz band. Since the spectrum analyzer used for testing is not have a 500 kHz RBW, the RBW was set to 1 MHz for a worst case testing configuration.

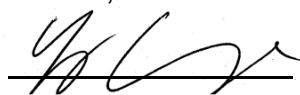
**Table 37. Power Spectral Density for 802.11a in the Lower Frequency Bands**

Frequency (MHz)	Test Data (dBm/1 MHz)	FCC Limit (dBm/1 MHz)	Margin (dB)
5180	1.79	11.00	9.21
5240	1.21	11.00	9.79
2560	1.08	11.00	9.92
5320	1.45	11.00	9.55
5500	1.74	11.00	9.26
5700	1.95	11.00	9.05

Test Date: June 2, 2015

Tested By

Signature:



Name: George Yang

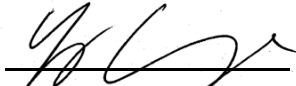
US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
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**Table 38. Power Spectral Density for 802.11a in the Upper Frequency Bands**

Frequency (MHz)	Test Data (dBm/1 MHz)	FCC Limit (dBm/500 kHz)	Margin (dB)
5745	2.28	30	27.72
5825	1.24	30	28.76

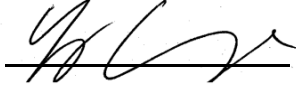
Test Date: June 2, 2015

Tested By  
Signature:  Name: George Yang

**Table 39. Power Spectral Density for 802.11n in the Lower Frequency Bands**

Frequency (MHz)	Test Data (dBm/1 MHz)	FCC Limit (dBm/1 MHz)	Margin (dB)
5180	-1.63	11.00	12.63
5240	-1.86	11.00	12.86
5260	-2.35	11.00	13.35
5320	-2.27	11.00	13.27
5500	-1.96	11.00	12.96
5700	-1.15	11.00	12.15

Test Date: June 2, 2015

Tested By  
Signature:  Name: George Yang

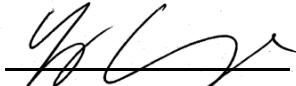
US Tech Test Report:  
FCC ID:  
IC:  
Test Report Number:  
Issue Date:  
Customer:  
Model:

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**Table 40. Power Spectral Density for 802.11n in the Upper Frequency Bands**

Frequency (MHz)	Test Data (dBm/1 MHz)	FCC Limit (dBm/500 kHz)	Margin (dB)
5745	-0.77	30.00	30.77
5825	-1.55	30.00	31.55


Test Date: June 2, 2015

Tested By  
Signature:  Name: George Yang

**Table 41. Power Spectral Density for 802.11n 40 MHz BW in the Lower Frequency Bands**

Frequency (MHz)	Test Data (dBm/1 MHz)	FCC Limit (dBm/1 MHz)	Margin (dB)
5190	8.54	11.00	2.46
5310	8.11	11.00	2.89
5550	7.95	11.00	3.05

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  
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15-0086  
July 7, 2015  
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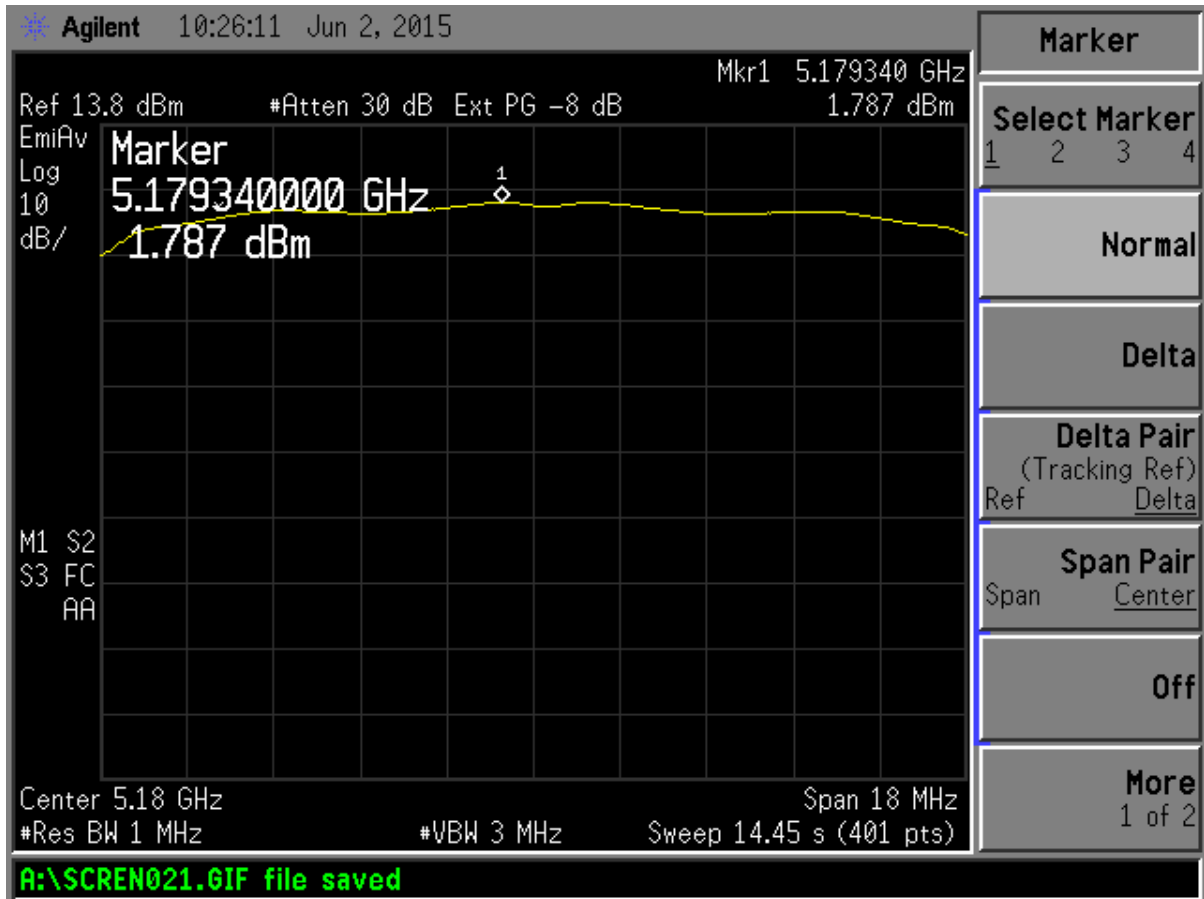


Figure 150. Power Spectral Density, Channel 36, 802.11a

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
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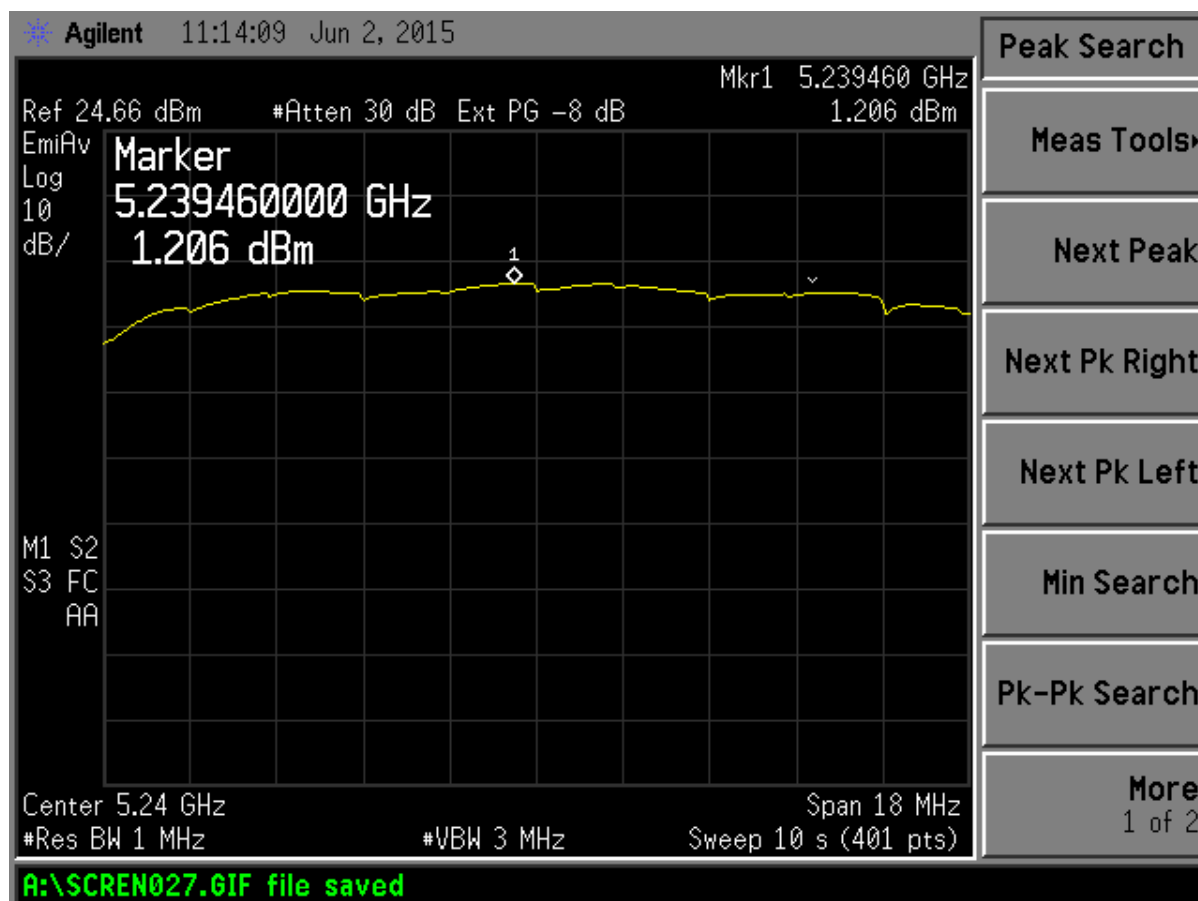


Figure 151. Power Spectral Density, Channel 48, 802.11a

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
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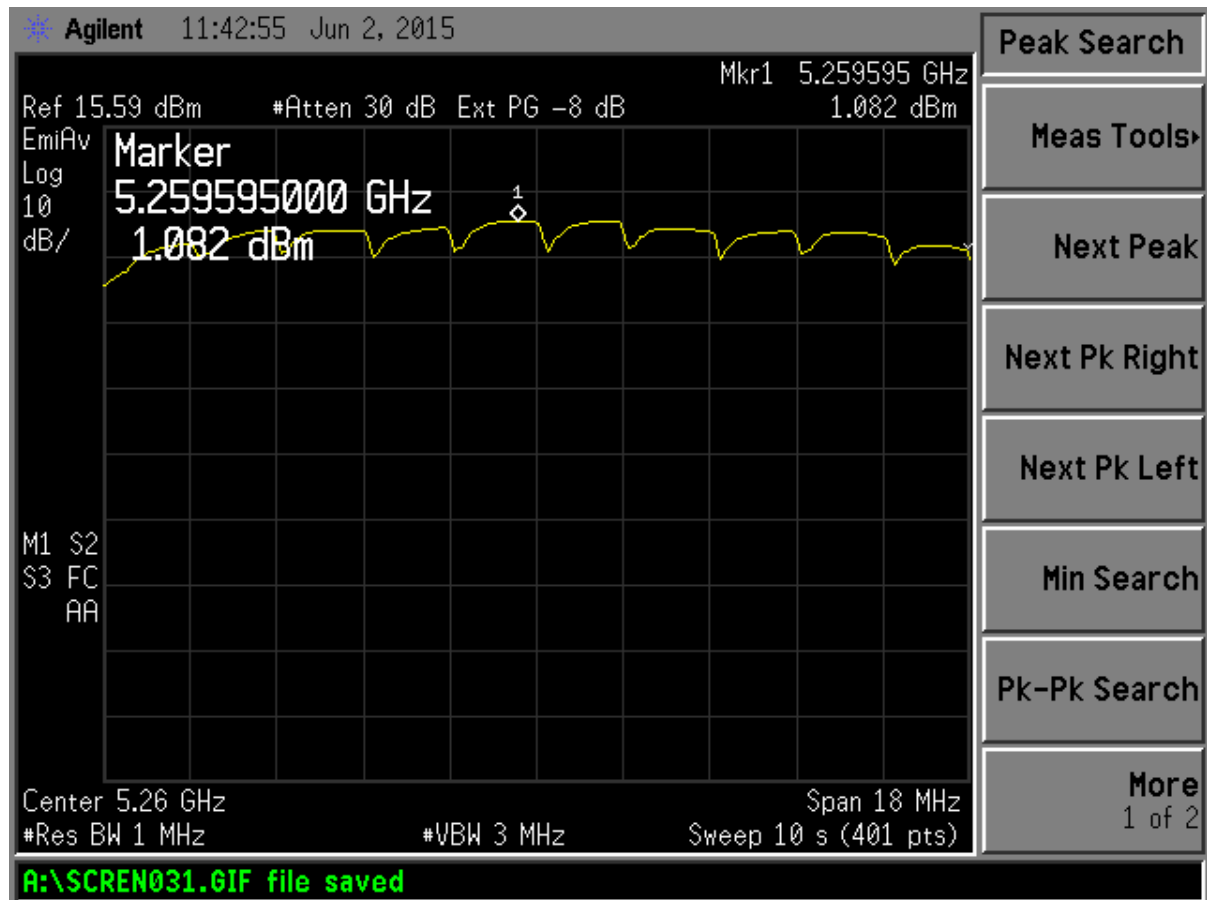


Figure 152. Power Spectral Density, Channel 52, 802.11a

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

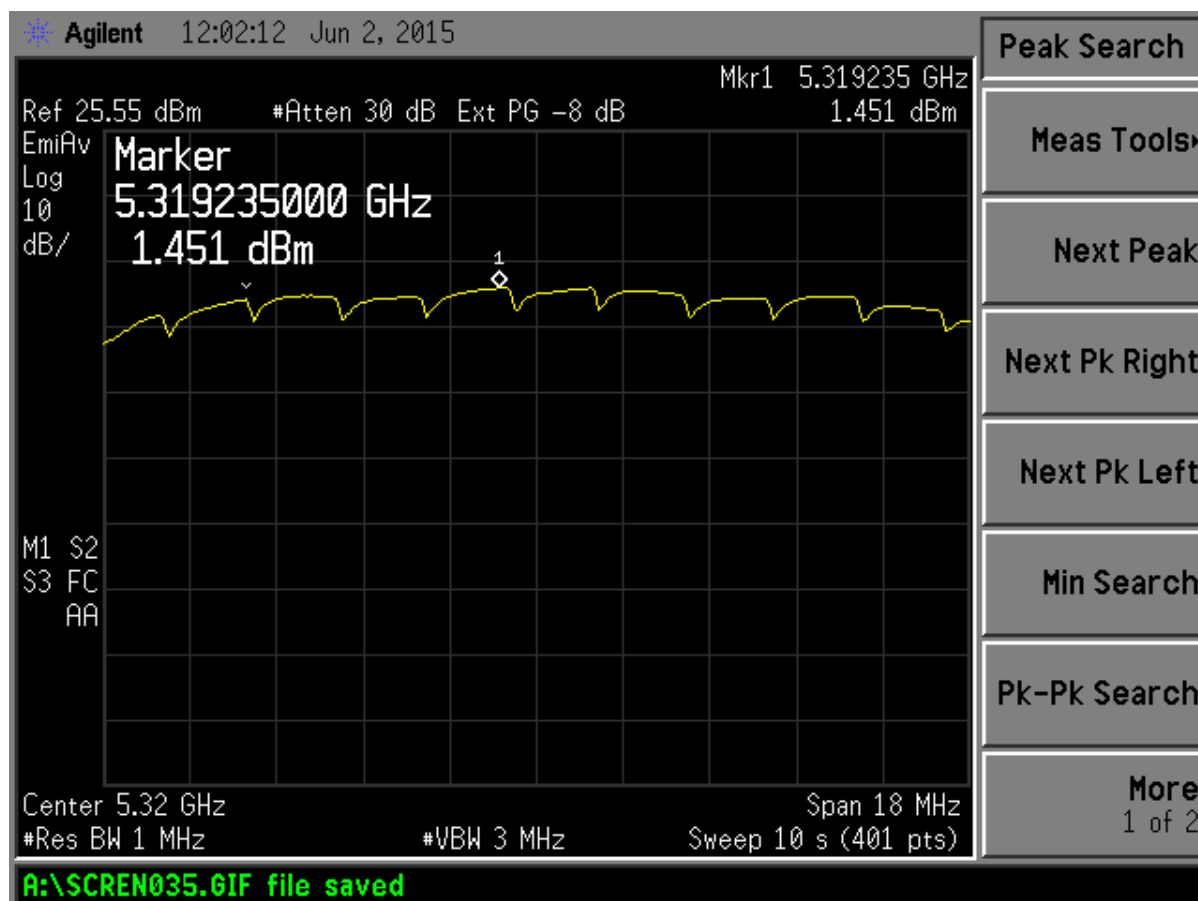


Figure 153. Power Spectral Density, Channel 64, 802.11a

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

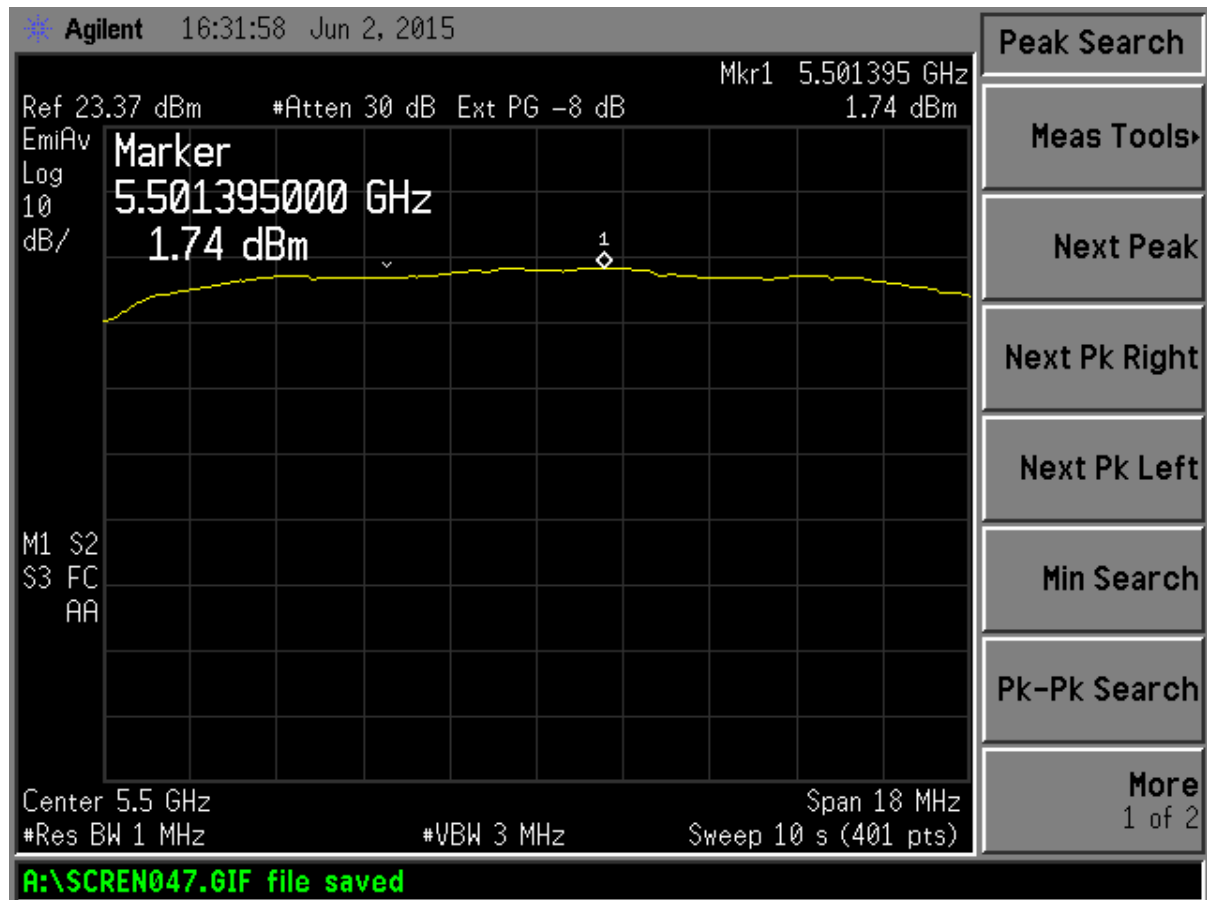


Figure 154. Power Spectral Density, Channel 100, 802.11a

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

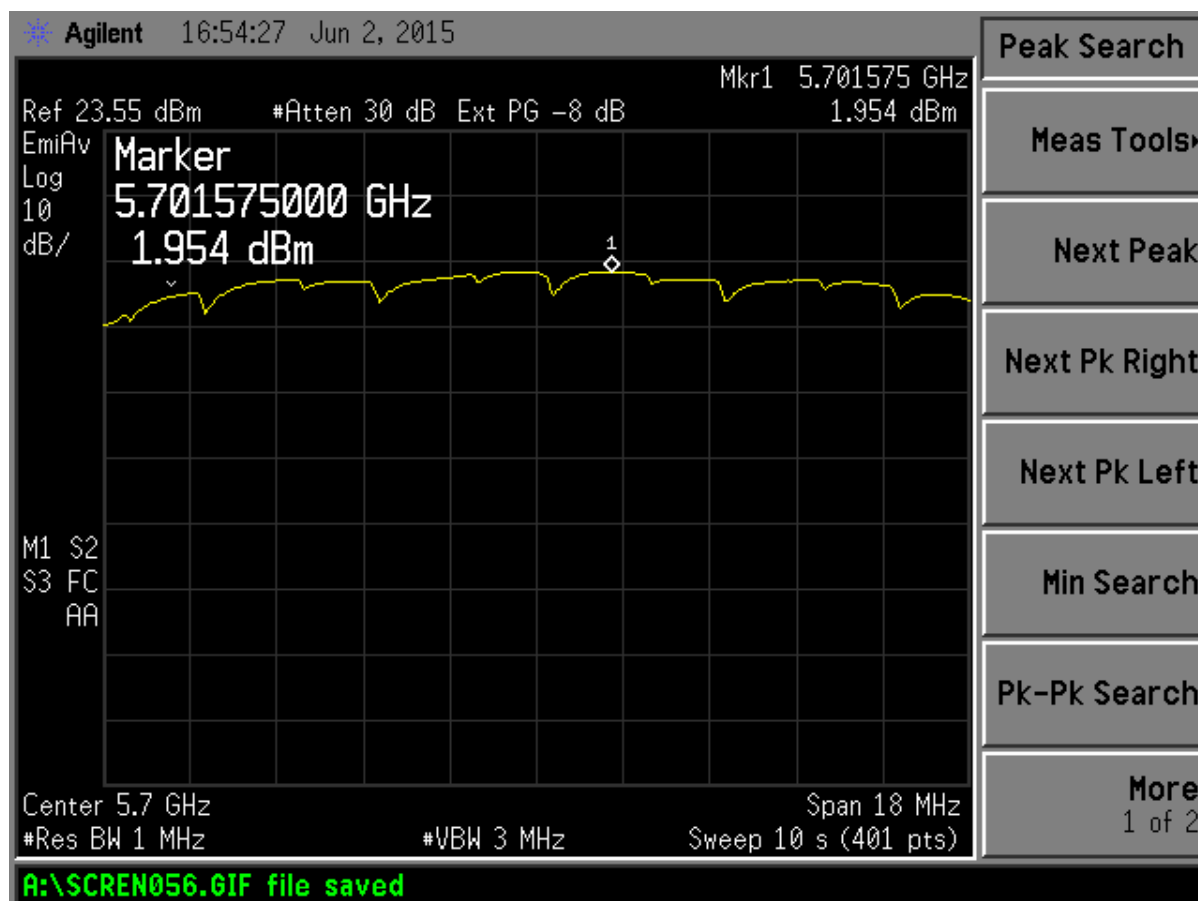


Figure 155. Power Spectral Density, Channel 140, 802.11a

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

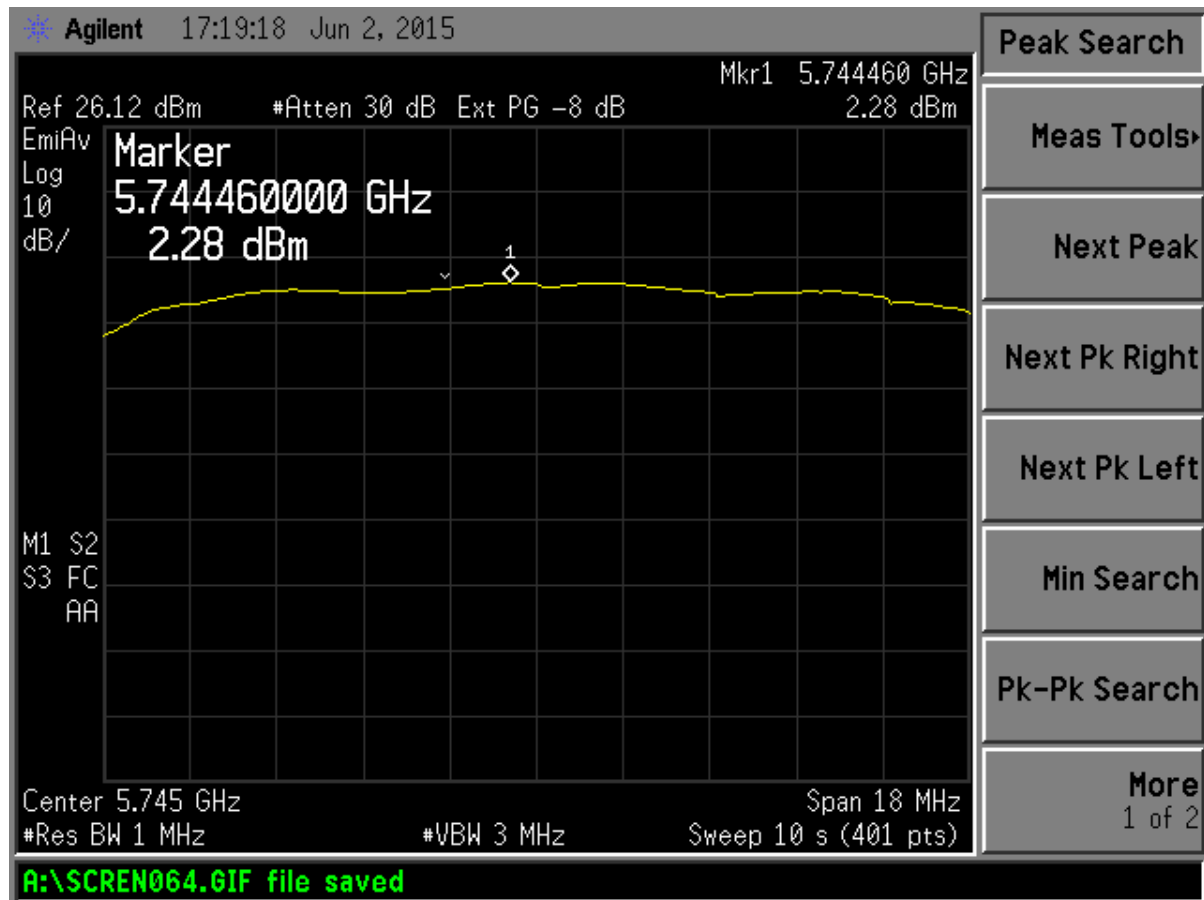


Figure 156. Power Spectral Density, Channel 149, 802.11a

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

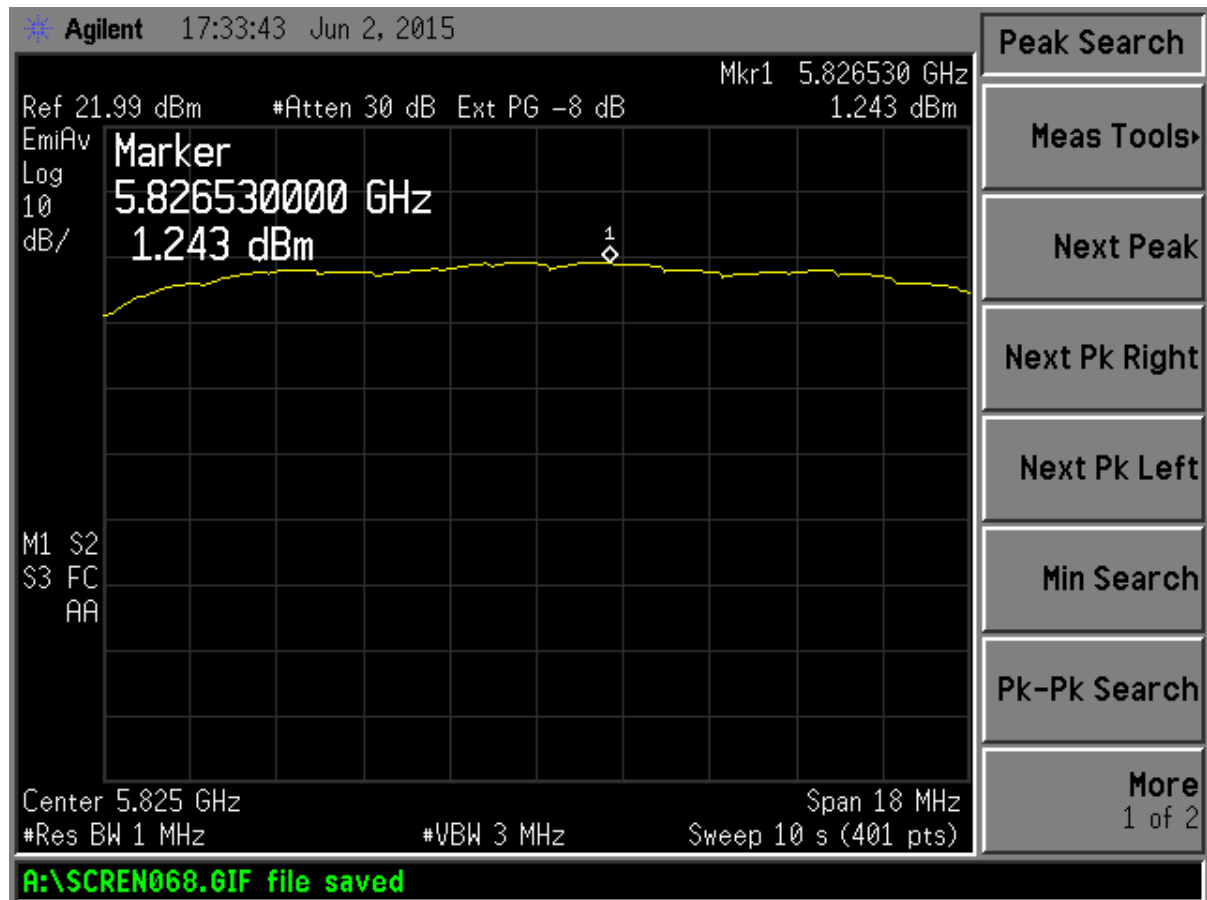


Figure 157. Power Spectral Density, Channel 165, 802.11a



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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

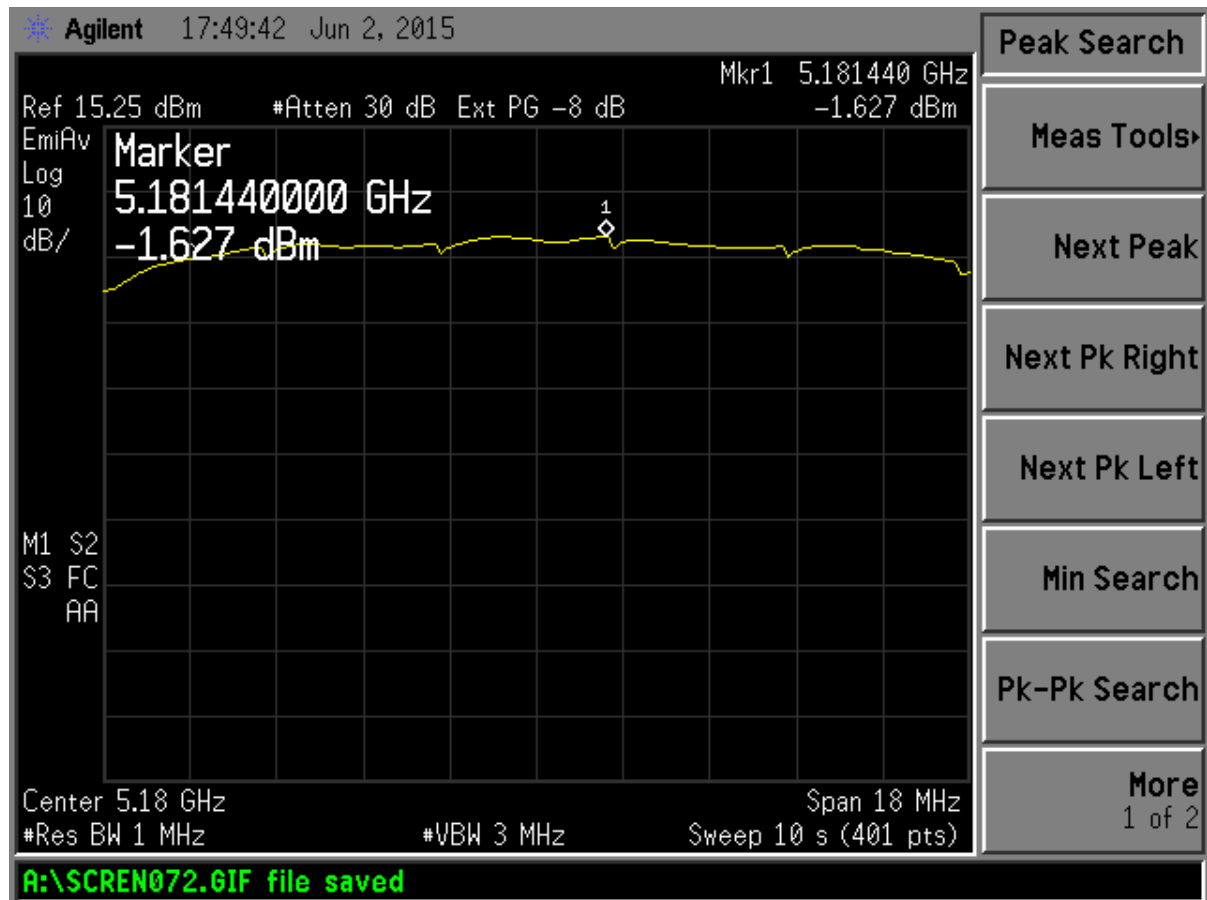


Figure 158. Power Spectral Density, Channel 36, 802.11n

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

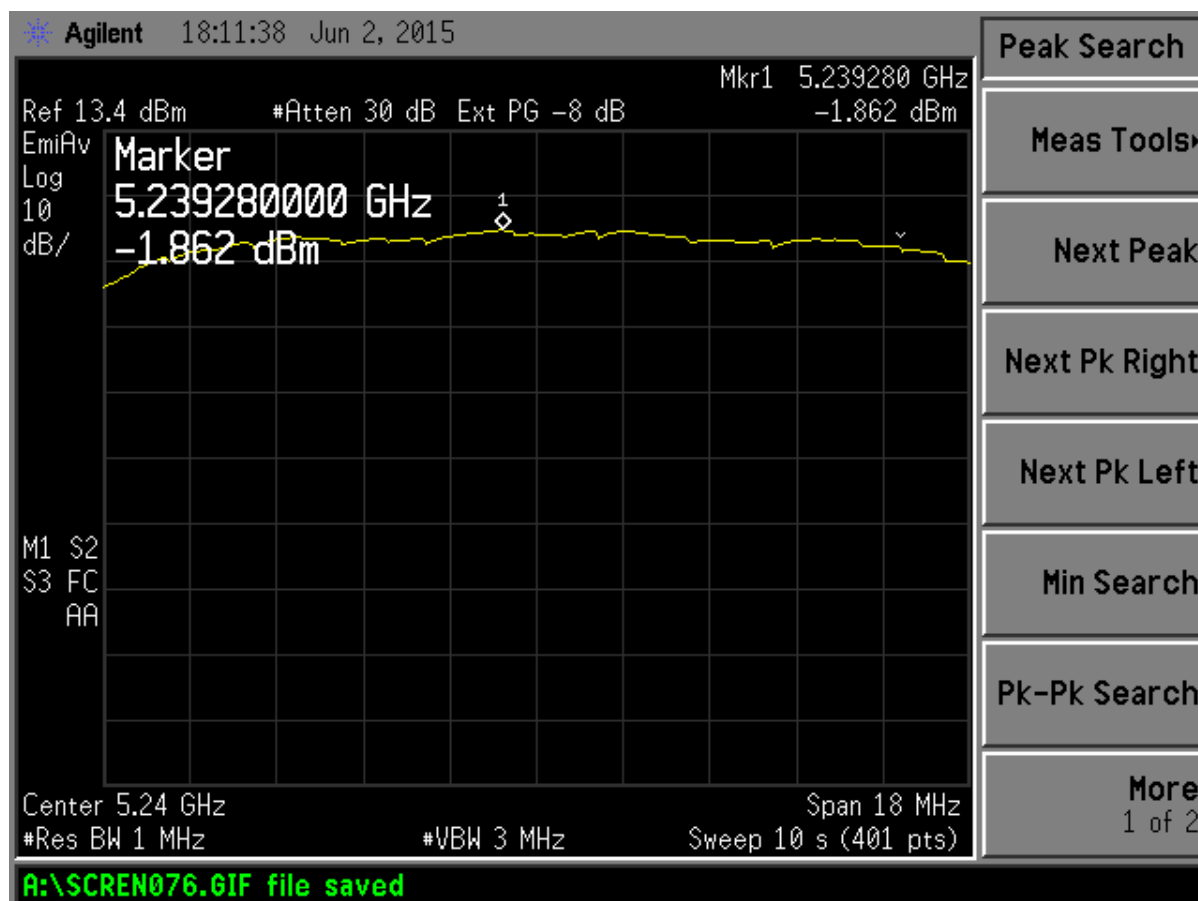


Figure 159. Power Spectral Density, Channel 48, 802.11n

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

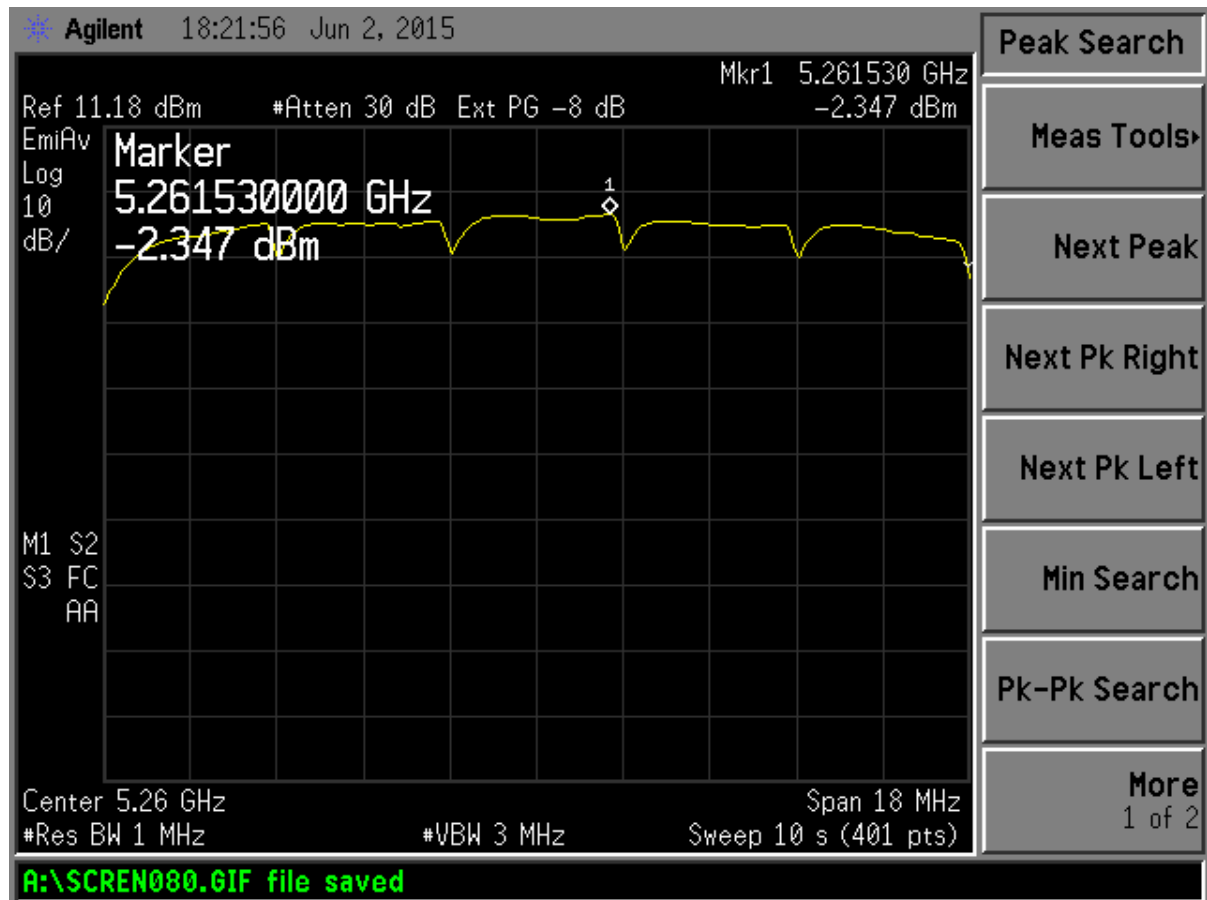


Figure 160. Power Spectral Density, Channel 52, 802.11n

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

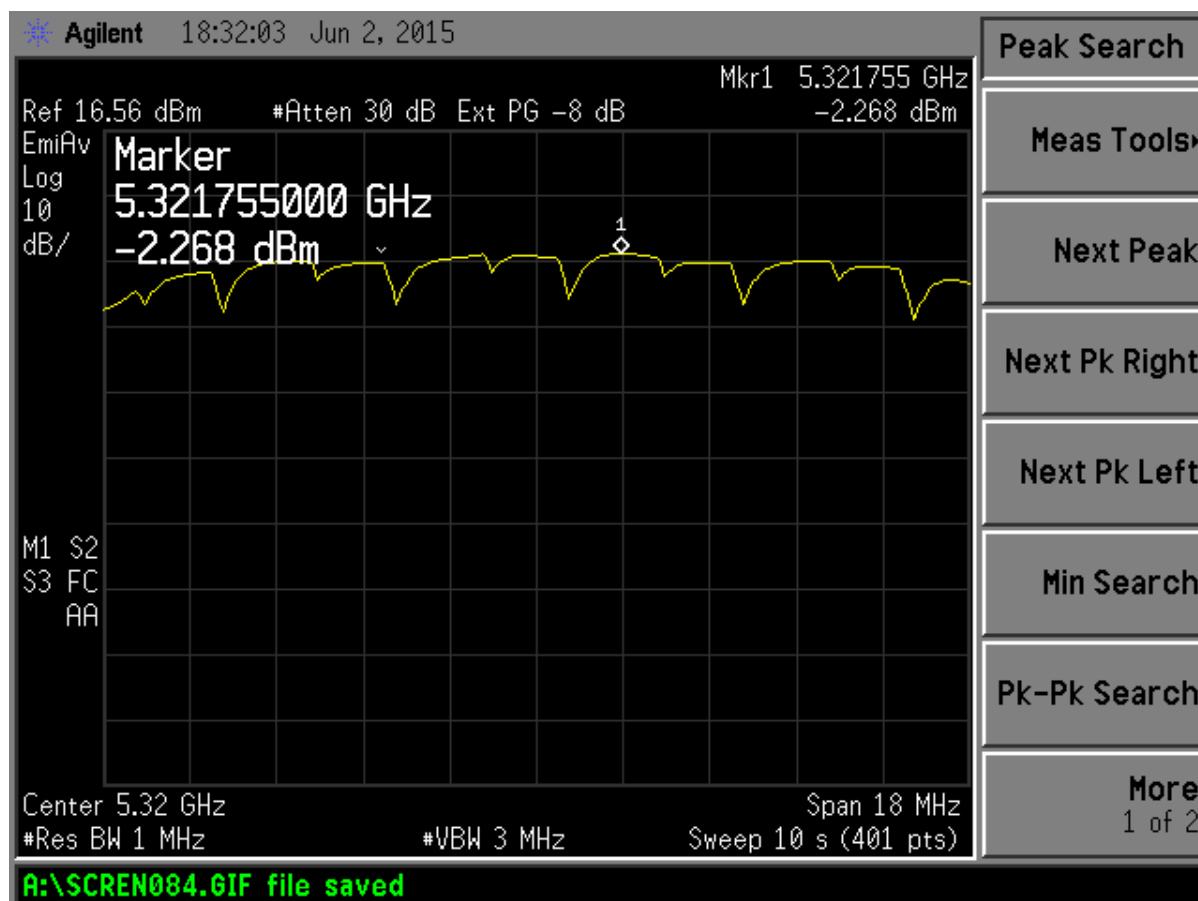


Figure 161. Power Spectral Density, Channel 64, 802.11n

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

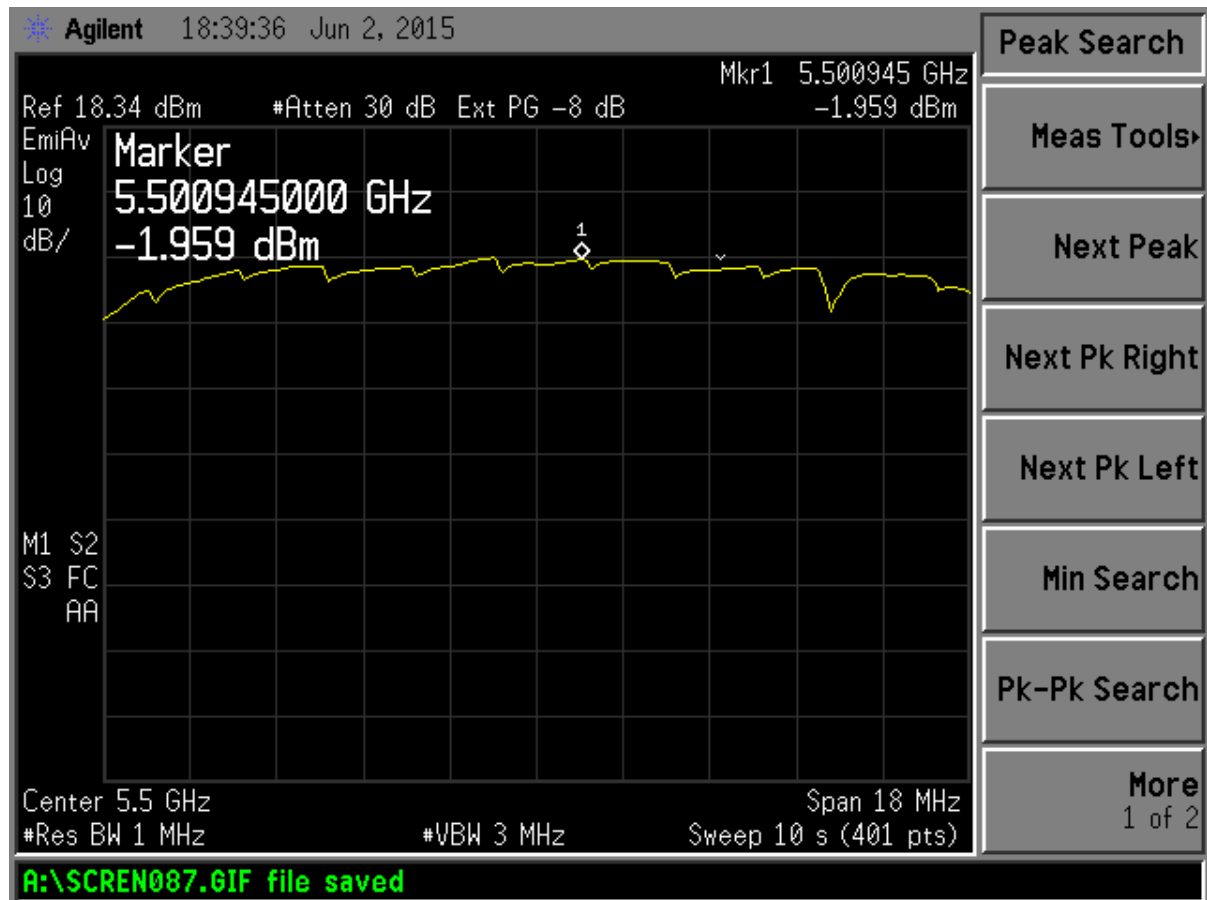


Figure 162. Power Spectral Density, Channel 100, 802.11n

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

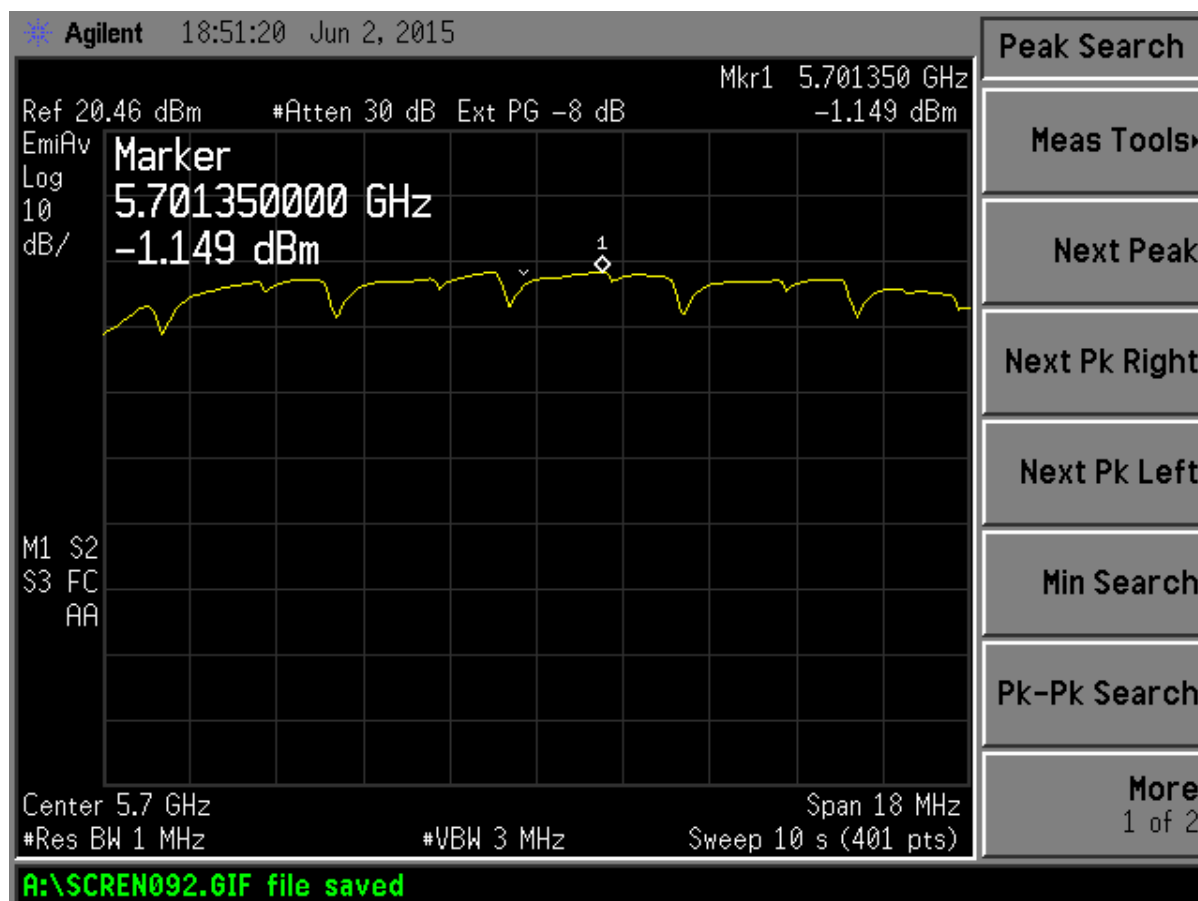


Figure 163. Power Spectral Density, Channel 140, 802.11n

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
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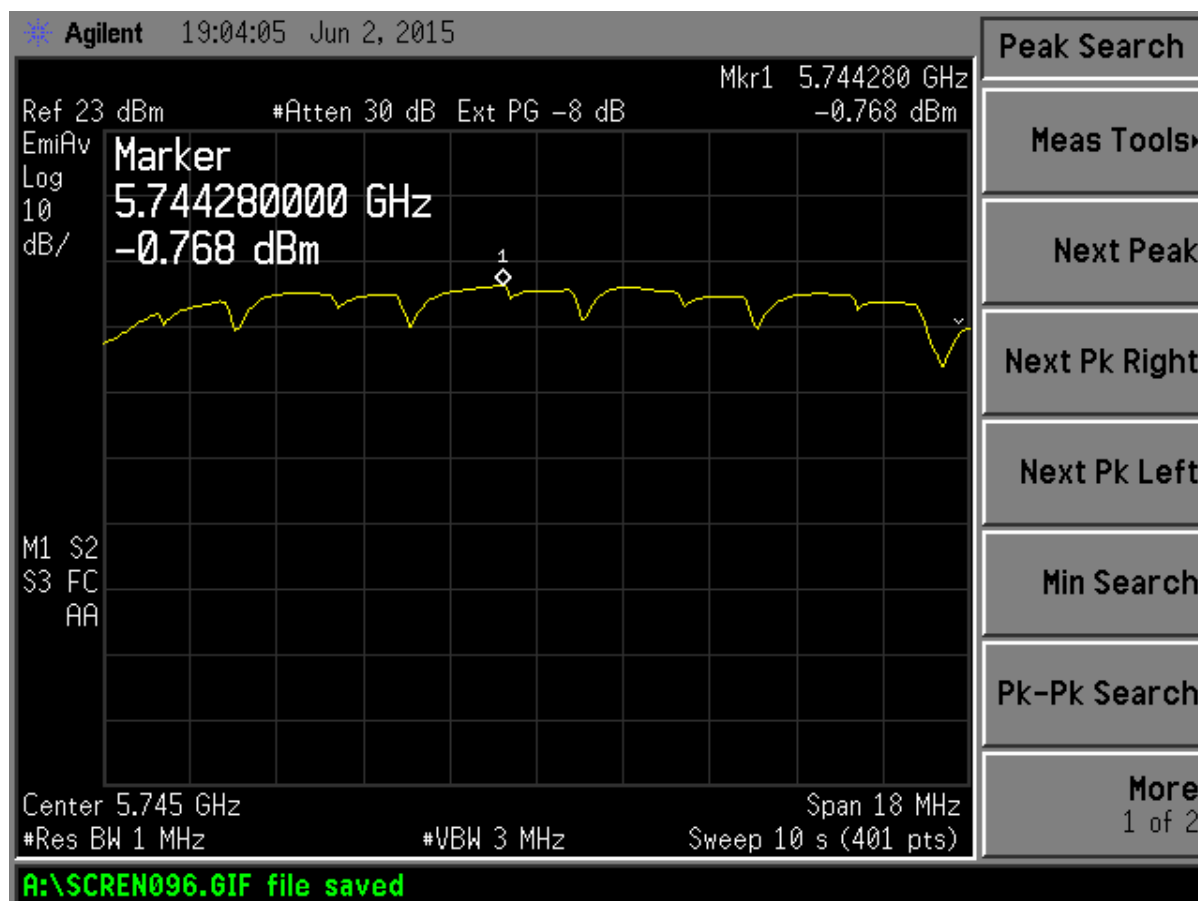


Figure 164. Power Spectral Density, Channel 149, 802.11n

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

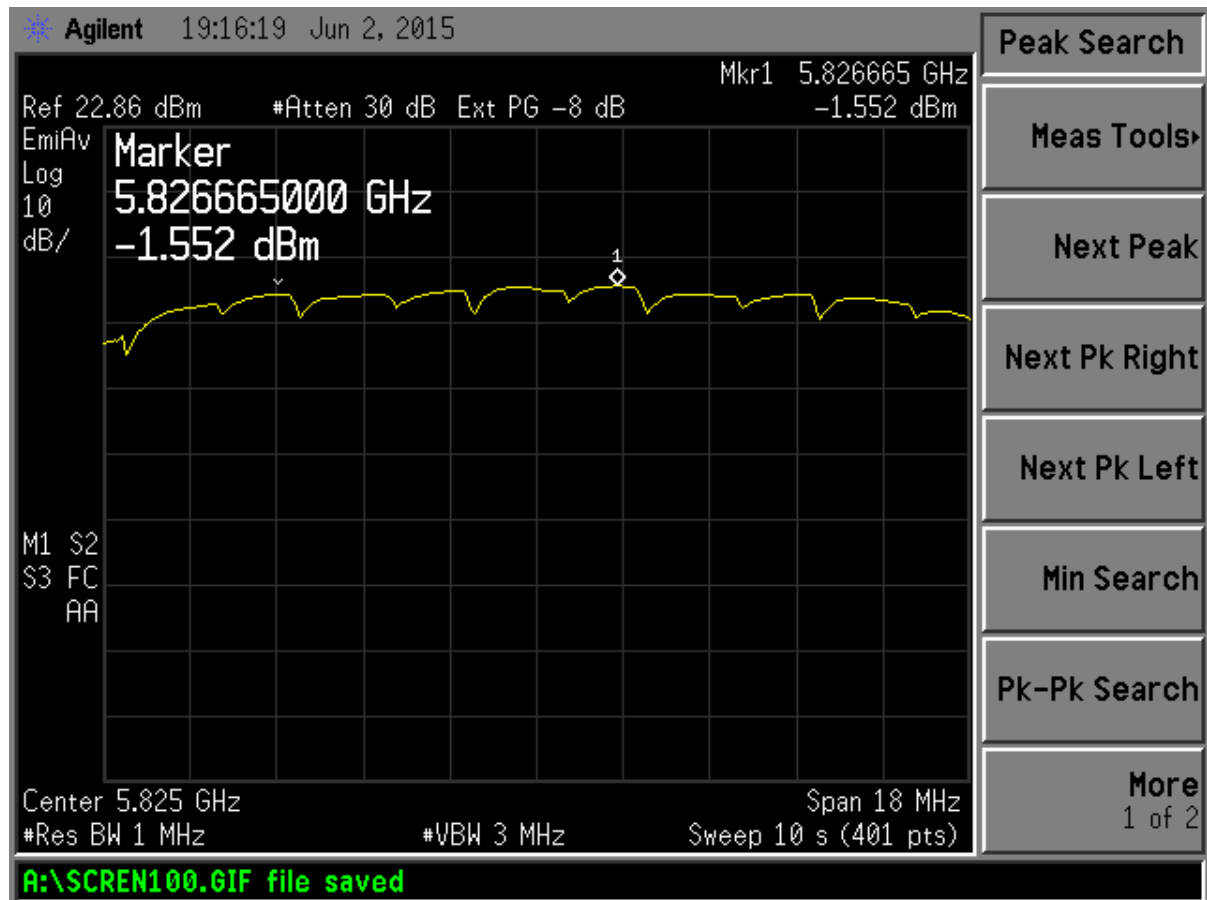


Figure 165. Power Spectral Density, Channel 165, 802.11n



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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
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Polycom Inc.  
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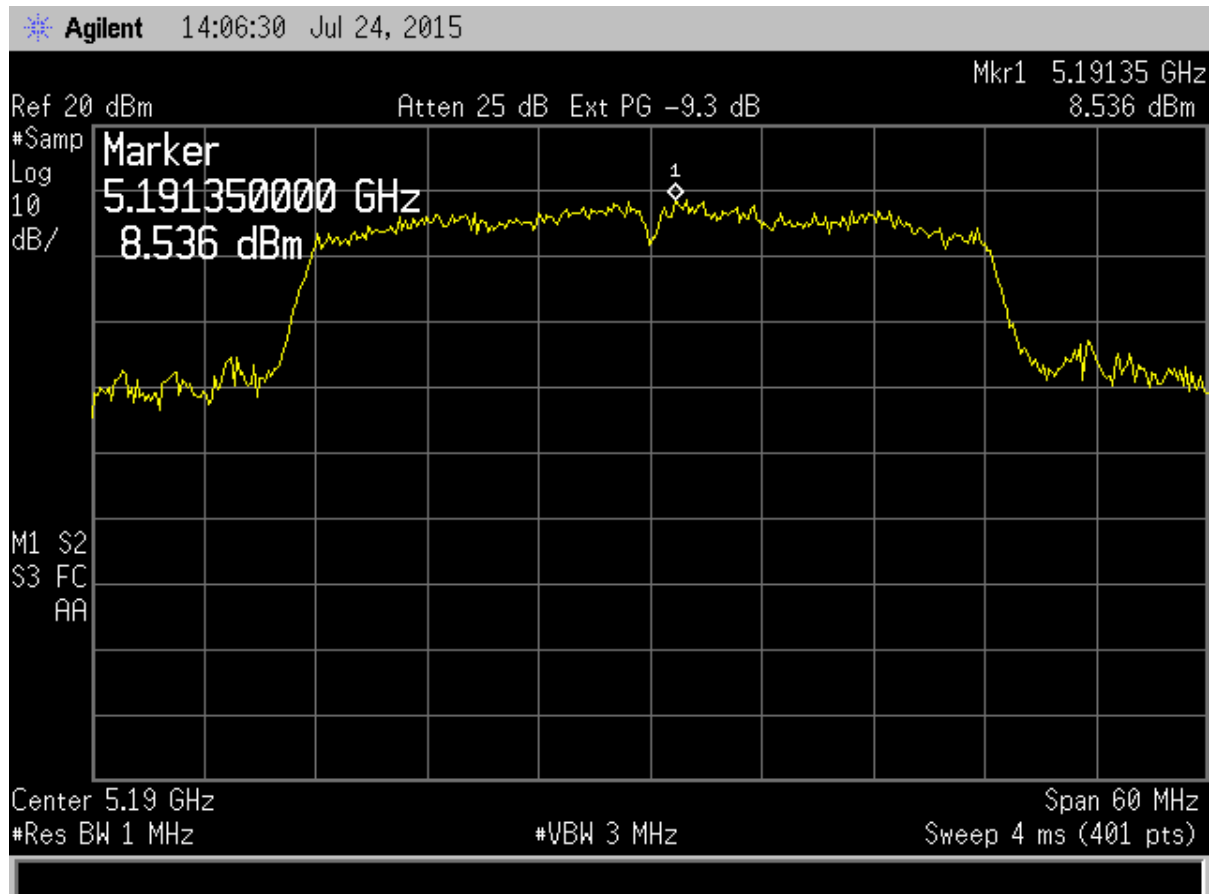


Figure 166. Power Spectral Density, Channel 38, 802.11n 40 MHz BW

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

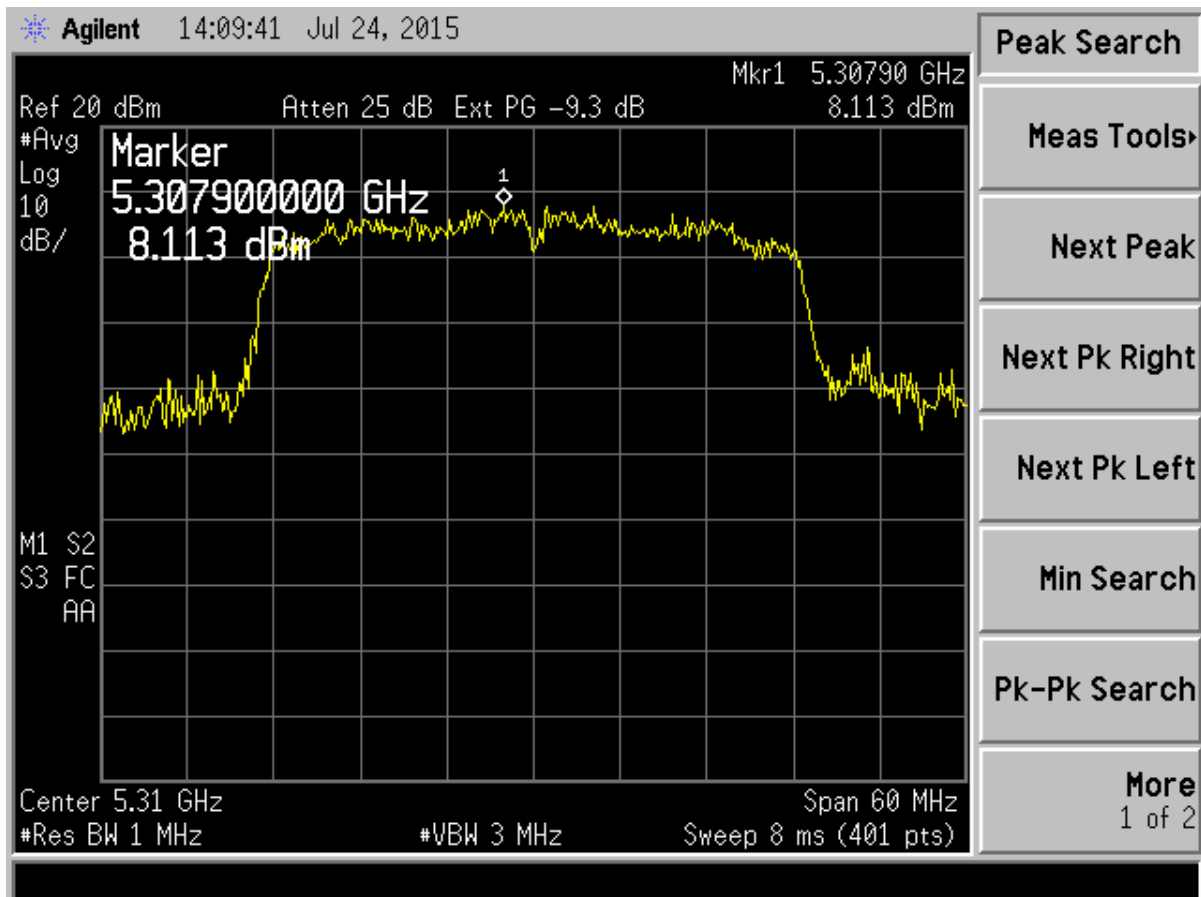


Figure 167. Power Spectral Density, Channel 62, 802.11n 40 MHz BW

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

FCC Part 15 Certification/ RSS 247  
M72-P008  
1849C-P008  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

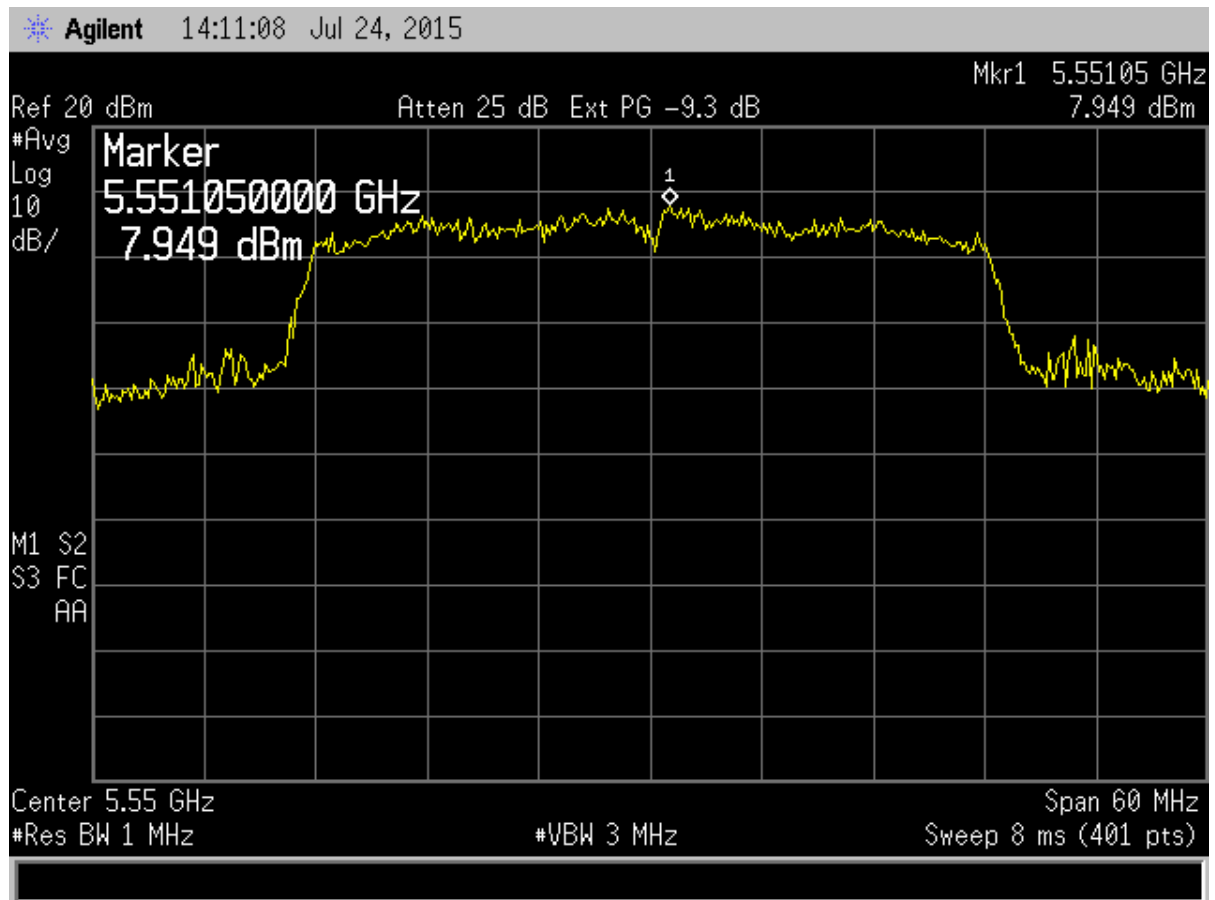


Figure 168. Power Spectral Density, Channel 110, 802.11n 40 MHz BW

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

FCC Part 15 Certification/ RSS 247  
 M72-P008  
 1849C-P008  
 15-0086  
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## 2.17 Frequency Stability

**Table 42. Frequency Deviation/Stability (802.11a Mode)**

Channel 64 @ Nominal Voltage, 120VAC				
Temperature (C)	Measured Frequency (Mhz)	Deviation (ppm)		
50	5319.954000	16.8231707	Actual TX Frequency (Mhz):	5320.043500
40	5320.137500	17.6690285		
30	5320.158935	21.6981309		
20	5320.043500	0		
10	5319.973000	13.2517713		
0	5319.984000	11.1841191		
-10	5320.085000	7.8006881		
-20	5320.097000	10.0563088		
-30	5320.105000	11.5600559		

Channel 64				
Voltage (% or Nom)	Measured Frequency (Mhz)	Deviation (ppm)		
85	5319.970505	13.7207525	Actual TX Frequency (Mhz):	5320.043500
100	5320.043500	0		
115	5319.965000	14.7555184		

Test Date: June 9, 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  
 15-0086  
 July 7, 2015  
 Polycom Inc.  
 P008

**Table 43. Frequency Deviation/Stability (802.11n Mode)**

Channel 64				
Temperature (C)	Measured Frequency (Mhz)	Deviation (ppm)		
50	5320.039500	4.04130705	Actual TX Frequency (Mhz):	5320.061000
40	5320.033500	5.16911366		
30	5320.037250	4.46423453		
20	5320.061000	0		
10	5320.076000	2.81951654		
0	5320.077500	3.1014682		
-10	5320.093500	6.10895251		
-20	5320.095000	6.39090416		
-30	5320.071000	1.8796777		

Channel 64				
Voltage (% or Nom)	Measured Frequency (Mhz)	Deviation (ppm)		
85	5320.049500	4.98113185	Actual TX Frequency (Mhz):	5320.076000
100	5320.043500	6.10893529		
115	5320.066500	1.78568878		

Test Date: June 9, 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  
15-0086  
July 7, 2015  
Polycom Inc.  
P008

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## **2.18 Radiated Digital Emissions (Co-Location)**

See US Tech report # 15-0085 for test details of radiated emissions for co-location testing of the radio.

## **2.19 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%.

### **2.19.1 Conducted Emissions Measurement Uncertainty**

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

### **2.19.2 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.