# FCC Test Report

Product Name ： Dual-band Wireless Range Extender

Trade Name ： ASUS

Model No. ： RP-AC68U

FCC ID. ： MSQ-RP0S01

Applicant ： ASUSTeK COMPUTER INC.

Address ： 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

Date of Receipt ： May 15, 2015

Issued Date ： Sep. 24, 2015

Report No. ： 1560497R-RFUSP56V00

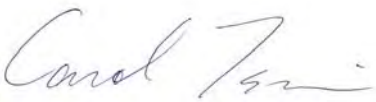
Report Version ： V1.0

# Test Report Certification

Issued Date : Sep. 24, 2015
Report No. : 1560497R-RFUSP56V00

| | | |
|---|---|---|
| Product Name | : | Dual-band Wireless Range Extender |
| Applicant | : | ASUSTeK COMPUTER INC. |
| Address | : | 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan |
| Manufacturer | : | (1) ASKEY COMPUTER CORPORATION |
| | | (2) ASKEY TECHNOLOGY( JIANG SU) LTD. |
| Model No. | : | RP-AC68U |
| FCC ID. | : | MSQ-RP0S01 |
| EUT Voltage | : | AC 100-240V, 50-60Hz |
| Testing Voltage | : | AC 120V/60Hz |
| Trade Name | : | ASUS |
| Applicable Standard | : | FCC CFR Title 47 Part 15 Subpart E Section 15.407: 2014 |
| | | ANSI C63.10: 2013 |
| Test Lab | : | QuieTek Hsin Chu Laboratory |
| Test Result | : | Complied |

The test results relate only to the samples tested.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Documented By : 
( Carol Tsai / Engineering Adm. Specialist )

Tested By : 
( Jimmie Liu / Senior Engineer )

Approved By : 
( Roy Wang / Director Manager )

# Revision History

| Report No. | Version | Description | Issued Date |
|---|---|---|---|
| 1560497R-RFUSP56V00 | Rev. 1.0 | Initial issue of report | Sep. 24, 2015 |
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**Laboratory Information**

We, **QuieTek Corporation**, are an independent RF consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025 specified testing scopes:

| | | |
|---|---|---|
| **Taiwan R.O.C.** | **:** | **TAF, Accreditation Number: 3024** |
| **USA** | **:** | **FCC, Registration Number: 365520** |
| **Canada** | **:** | **IC, Submission No: 181665 / IC Registration Number: 4075C-4** |

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site:http://www.quietek.com/english/about/certificates.aspx?bval=5
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/index_en.aspx
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

**LinKou Testing Laboratory:**
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# 1. General Information

## 1.1. EUT Description

| | | |
|---|---|---|
| Product Name | Dual-band Wireless Range Extender | |
| Product Type | WLAN (3TX, 4RX) | |
| Trade Name | ASUS | |
| Model No. | RP-AC68U | |
| Frequency Range/ Channel Number | IEEE 802.11a/ IEEE 802.11n (20MHz) / IEEE 802.11ac (20MHz) | 5180~5240MHz / 4 Channels |
| | IEEE 802.11n (40MHz) / IEEE 802.11ac (40MHz) | 5190~5230MHz / 2 Channels |
| | IEEE 802.11ac (80MHz) | 5210~5210MHz / 1 Channel |
| Type of Modulation | IEEE 802.11a/n/ac | Orthogonal Frequency Division Multiplexing (OFDM) |
| Data Speed | IEEE 802.11a | 6, 9, 18, 24, 36, 48, 54Mbps |
| | IEEE 802.11n | Support a subset of the combination of GI, MCS 0~MCS 23 and bandwidth defined in 802.11n |
| | IEEE 802.11ac | Support a subset of the combination of GI, MCS 0~MCS 9 and bandwidth defined in 802.11ac |
| Antenna Gain | Rx (chain A) 120 mm : 5 G: 6.23 dBi<br>Tx/Rx Ant0 (chain B) 225 mm : 5 G: 3.66 dBi<br>Tx/Rx Ant1 (chain C) 235 mm : 5 G: 4.31 dBi<br>Tx/Rx Ant2 (chain D) 290 mm : 5 G: 3.42 dBi | |
| Antenna Type | Dipole antenna | |

| Component | |
|---|---|
| LAN Cable | Non-Shielded, 1.8m |
| Power Adatper | PIE, AD890326<br>I/P: 100-240V~ 50/60Hz 0.8A<br>O/P : 19V⎓1.75A<br>Cable Out: Non-Shielded, 1.8m |
| Power Adatper | Delta, ADP-33AW<br>I/P: 100-240V~1A 50-60Hz<br>O/P : 19V⎓1.75A<br>Cable Out: Non-Shielded, 1.8m |

**ANT-TX / RX & Bandwidth**

| ANT-TX / RX | TX | | | RX | | |
|---|---|---|---|---|---|---|
| Mode/ Channel Bandwidth | 20MHz | 40MHz | 80MHz | 20MHz | 40MHz | 80MHz |
| IEEE802.11a | ✓ | | | ✓ | | |
| IEEE802.11n | ✓ | ✓ | | ✓ | ✓ | |
| IEEE802.11ac | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

**3TX / 4RX**

## IEEE 802.11n

| MCS Index | Modulation | R | $N_{BPSCS}$ | $N_{CBPS}$ | | $N_{DBPS}$ | | Data Rate(Mb/s) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 20MHz | 40MHz | 20MHz | 40MHz | 800ns GI | | 400ns GI | |
| | | | | | | | | 20MHz | 40MHz | 20MHz | 40MHz |
| 0 | BPSK | 1/2 | 1 | 52 | 108 | 26 | 54 | 6.5 | 13.5 | 7.2 | 15.0 |
| 1 | QPSK | 1/2 | 2 | 104 | 216 | 52 | 108 | 13.0 | 27.0 | 14.4 | 30.0 |
| 2 | QPSK | 3/4 | 2 | 104 | 216 | 78 | 162 | 19.5 | 40.5 | 21.7 | 45.0 |
| 3 | 16-QAM | 1/2 | 4 | 208 | 432 | 104 | 216 | 26.0 | 54.0 | 28.9 | 60.0 |
| 4 | 16-QAM | 3/4 | 4 | 208 | 432 | 156 | 324 | 39.0 | 81.0 | 43.3 | 90.0 |
| 5 | 64-QAM | 2/3 | 6 | 312 | 648 | 208 | 432 | 52.0 | 108.0 | 57.8 | 120.0 |
| 6 | 64-QAM | 3/4 | 6 | 312 | 648 | 234 | 486 | 58.5 | 121.5 | 65.0 | 135.0 |
| 7 | 64-QAM | 5/6 | 6 | 312 | 648 | 260 | 540 | 65.0 | 135.0 | 72.2 | 150.0 |
| Note 1: Support of 400ns GI is optional on transmit and receive. | | | | | | | | | | | |

Table 1 – MCS parameters for TX Antenna number = 1

| MCS Index | Modulation | R | $N_{BPSCS}$ | $N_{CBPS}$ | | $N_{DBPS}$ | | Data Rate(Mb/s) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 20MHz | 40MHz | 20MHz | 40MHz | 800ns GI | | 400ns GI | |
| | | | | | | | | 20MHz | 40MHz | 20MHz | 40MHz |
| 8 | BPSK | 1/2 | 1 | 104 | 216 | 52 | 108 | 13.0 | 27.0 | 14.4 | 30.0 |
| 9 | QPSK | 1/2 | 2 | 208 | 432 | 104 | 216 | 26.0 | 54.0 | 28.9 | 60.0 |
| 10 | QPSK | 3/4 | 2 | 208 | 432 | 156 | 324 | 39.0 | 81.0 | 43.3 | 90.0 |
| 11 | 16-QAM | 1/2 | 4 | 416 | 864 | 208 | 432 | 52.0 | 108.0 | 57.8 | 120.0 |
| 12 | 16-QAM | 3/4 | 4 | 416 | 864 | 312 | 648 | 78.0 | 162.0 | 86.7 | 180.0 |
| 13 | 64-QAM | 2/3 | 6 | 624 | 1296 | 416 | 864 | 104.0 | 216.0 | 115.6 | 240.0 |
| 14 | 64-QAM | 3/4 | 6 | 624 | 1296 | 468 | 972 | 117.0 | 243.0 | 130.0 | 270.0 |
| 15 | 64-QAM | 5/6 | 6 | 624 | 1296 | 520 | 1080 | 130.0 | 270.0 | 144.4 | 300.0 |
| Note 1: Support of 400ns GI is optional on transmit and receive. | | | | | | | | | | | |

Table 2 – MCS parameters for TX Antenna number = 2

| MCS Index | Modulation | R | $N_{BPSCS}$ | $N_{CBPS}$ | | $N_{DBPS}$ | | Data Rate(Mb/s) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 20MHz | 40MHz | 20MHz | 40MHz | 800ns GI | | 400ns GI | |
| | | | | | | | | 20MHz | 40MHz | 20MHz | 40MHz |
| 16 | BPSK | 1/2 | 1 | 156 | 324 | 78 | 162 | 19.5 | 40.5 | 21.7 | 45.0 |
| 17 | QPSK | 1/2 | 2 | 312 | 648 | 156 | 324 | 39.0 | 81.0 | 43.3 | 90.0 |
| 18 | QPSK | 3/4 | 2 | 312 | 648 | 234 | 486 | 58.5 | 121.5 | 65.0 | 135.0 |
| 19 | 16-QAM | 1/2 | 4 | 624 | 1296 | 312 | 648 | 78.0 | 162.0 | 86.7 | 180.0 |
| 20 | 16-QAM | 3/4 | 4 | 624 | 1296 | 468 | 972 | 117.0 | 243.0 | 130.0 | 270.0 |
| 21 | 64-QAM | 2/3 | 6 | 936 | 1944 | 624 | 1296 | 156.0 | 324.0 | 173.3 | 360.0 |
| 22 | 64-QAM | 3/4 | 6 | 936 | 1944 | 702 | 1458 | 175.5 | 364.5 | 195.0 | 405.0 |
| 23 | 64-QAM | 5/6 | 6 | 936 | 1944 | 780 | 1620 | 195.0 | 405.0 | 216.7 | 450.0 |
| Note 1: Support of 400ns GI is optional on transmit and receive. | | | | | | | | | | | |

Table 3 – MCS parameters for TX Antenna number = 3

| Symbol | Explanation |
|---|---|
| R | Code rate |
| $N_{BPSC}$ | Number of coded bits per single carrier |
| $N_{CBPS}$ | Number of coded bits per symbol |
| $N_{DBPS}$ | Number of data bits per symbol |
| GI | guard interval |

## IEEE 802.11ac Data Rate

| Spatial Streams (Note1) | MCS Index | Modulation type | Coding rate | Data Rate(Mb/s) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 20 MHz | | 40 MHz | | 80 MHz | | 160 MHz | |
| | | | | Guard Interval | | Guard Interval | | Guard Interval | | Guard Interval | |
| | | | | 800ns | 400ns | 800ns | 400ns | 800ns | 400ns | 800ns | 400ns |
| 1 | 0 | BPSK | 1/2 | 6.5 | 7.2 | 13.5 | 15 | 29.3 | 32.5 | 58.5 | 65 |
| | 1 | QPSK | 1/2 | 13 | 14.4 | 27 | 30 | 58.5 | 65 | 117 | 130 |
| | 2 | QPSK | 3/4 | 19.5 | 21.7 | 40.5 | 45 | 87.8 | 97.5 | 175.5 | 195 |
| | 3 | 16-QAM | 1/2 | 26 | 28.9 | 54 | 60 | 117 | 130 | 234 | 260 |
| | 4 | 16-QAM | 3/4 | 39 | 43.3 | 81 | 90 | 175.5 | 195 | 351 | 390 |
| | 5 | 64-QAM | 2/3 | 52 | 57.8 | 108 | 120 | 234 | 260 | 468 | 520 |
| | 6 | 64-QAM | 3/4 | 58.5 | 65 | 121.5 | 135 | 263.3 | 292.5 | 526.5 | 585 |
| | 7 | 64-QAM | 5/6 | 65 | 72.2 | 135 | 150 | 292.5 | 325 | 585 | 650 |
| | 8 | 256-QAM | 3/4 | 78 | 86.7 | 162 | 180 | 351 | 390 | 702 | 780 |
| | 9 | 256-QAM | 5/6 | N/A | N/A | 180 | 200 | 390 | 433.3 | 780 | 866.7 |
| 2 | 0 | BPSK | 1/2 | 13 | 14.4 | 27 | 30 | 58.6 | 65 | 117 | 130 |
| | 1 | QPSK | 1/2 | 26 | 28.8 | 54 | 60 | 117 | 130 | 234 | 260 |
| | 2 | QPSK | 3/4 | 39 | 43.4 | 81 | 90 | 175.6 | 195 | 351 | 390 |
| | 3 | 16-QAM | 1/2 | 52 | 57.8 | 108 | 120 | 234 | 260 | 468 | 520 |
| | 4 | 16-QAM | 3/4 | 78 | 86.6 | 162 | 180 | 351 | 390 | 702 | 780 |
| | 5 | 64-QAM | 2/3 | 104 | 115.6 | 216 | 240 | 468 | 520 | 936 | 1040 |
| | 6 | 64-QAM | 3/4 | 117 | 130 | 243 | 270 | 526.6 | 585 | 1053 | 1170 |
| | 7 | 64-QAM | 5/6 | 130 | 144.4 | 270 | 300 | 585 | 650 | 1170 | 1300 |
| | 8 | 256-QAM | 3/4 | 156 | 173.4 | 324 | 360 | 702 | 780 | 1404 | 1560 |
| | 9 | 256-QAM | 5/6 | N/A | N/A | 360 | 400 | 780 | 866.6 | 1560 | 1733.4 |
| 3 | 0 | BPSK | 1/2 | 19.5 | 21.6 | 40.5 | 45 | 87.9 | 97.5 | 175.5 | 195 |
| | 1 | QPSK | 1/2 | 39 | 43.2 | 81 | 90 | 175.5 | 195 | 351 | 390 |
| | 2 | QPSK | 3/4 | 58.5 | 65.1 | 121.5 | 135 | 263.4 | 292.5 | 526.5 | 585 |
| | 3 | 16-QAM | 1/2 | 78 | 86.7 | 162 | 180 | 351 | 390 | 702 | 780 |
| | 4 | 16-QAM | 3/4 | 117 | 129.9 | 243 | 270 | 526.5 | 585 | 1053 | 1170 |
| | 5 | 64-QAM | 2/3 | 156 | 173.4 | 324 | 360 | 702 | 780 | 1404 | 1560 |
| | 6 | 64-QAM | 3/4 | 175.5 | 195 | 364.5 | 405 | 789.9 | 877.5 | 1579.5 | 1755 |
| | 7 | 64-QAM | 5/6 | 195 | 216.6 | 405 | 450 | 877.5 | 975 | 1755 | 1950 |
| | 8 | 256-QAM | 3/4 | 234 | 260.1 | 486 | 540 | 1053 | 1170 | 2106 | 2340 |
| | 9 | 256-QAM | 5/6 | N/A | N/A | 540 | 600 | 1170 | 1299.9 | 2340 | 2600.1 |

IEEE 802.11a & IEEE 802.11n (20MHz) & IEEE 802.11ac (20MHz)

| Working Frequency of Each Channel | | | | | | | |
|---|---|---|---|---|---|---|---|
| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 36 | 5180MHz | 40 | 5200MHz | 44 | 5220MHz | 48 | 5240MHz |

IEEE 802.11n (40MHz) & IEEE 802.11ac (40MHz)

| Working Frequency of Each Channel | | | |
|---|---|---|---|
| Channel | Frequency | Channel | Frequency |
| 38 | 5190MHz | 46 | 5230MHz |

IEEE 802.11ac (80MHz)

| Working Frequency of Each Channel | |
|---|---|
| Channel | Frequency |
| 42 | 5210 MHz |

Note:

1. This device is a Dual-band Wireless Range Extender including 2.4GHz b (3x4) and 5GHz a/n/ac (3x4) transmitting and receiving function.
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart E Paragraph 15.407.
3. Regards to the frequency band operation; the lowest、middle and highest frequency of channel were selected to perform the test, and then shown on this report.
4. The function of the 2.4GHz & 5.8GHz transmitting is measured and makes a test report of the report number: 1560497R-RFUSP39V00.
5. This device has USB and Ethernet ports, which can be connected to computer. It is a Class B personal computer and peripheral. Its test report number is 1560497R-RFUSP01V00 .

## 1.2. Test Mode

QuieTek has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

| | |
|---|---|
| TX | Mode 1: Transmit_CDD Mode_AD890326<br>Mode 2: Transmit_Beamforming Mode_AD890326<br>Mode 3: Transmit_ADP-33AW |

| Test Items | Modulation | Channel | Antenna | Result |
|---|---|---|---|---|
| Conducted Emission | a | 44 | 0+1+2 | Complies |
| | 11ac (80MHz) | 42 | 0+1+2 | Complies |
| 99 % & 26dB Bandwidth | a | 36/44/48 | 0/1/2 | Complies |
| | 11n/ac (20MHz) | 36/44/48 | 0/1/2 | Complies |
| | 11n/ac (40MHz) | 38/46 | 0/1/2 | Complies |
| | 11ac (80MHz) | 42 | 0/1/2 | Complies |
| Peak Transmit Output | a | 36/44/48 | 0+1+2 | Complies |
| | 11n/ac (20MHz) | 36/44/48 | 0+1+2 | Complies |
| | 11n/ac (40MHz) | 38/46 | 0+1+2 | Complies |
| | 11ac (80MHz) | 42 | 0+1+2 | Complies |
| Peak Power Spectrum Density | a | 36/44/48 | 0+1+2 | Complies |
| | 11n/ac (20MHz) | 36/44/48 | 0+1+2 | Complies |
| | 11n/ac (40MHz) | 38/46 | 0+1+2 | Complies |
| | 11ac (80MHz) | 42 | 0+1+2 | Complies |

| Test Items | Modulation | Channel | Antenna | Result |
|---|---|---|---|---|
| Radiated Emission | a | 36/44/48 | 0+1+2 | Complies |
| | 11n/ac (20MHz) | 36/44/48 | 0+1+2 | Complies |
| | 11n/ac (40MHz) | 38/46 | 0+1+2 | Complies |
| | 11ac (80MHz) | 42 | 0+1+2 | Complies |
| Band Edge | a | 36 | 0+1+2 | Complies |
| | 11n/ac (20MHz) | 36 | 0+1+2 | Complies |
| | 11n/ac (40MHz) | 38 | 0+1+2 | Complies |
| | 11ac (80MHz) | 42 | 0+1+2 | Complies |
| Frequency Stability | a | 36/44/48 | 0/1/2 | Complies |
| | 11n/ac (20MHz) | 36/44/48 | 0/1/2 | Complies |
| | 11n/ac (40MHz) | 38/46 | 0/1/2 | Complies |
| | 11ac (80MHz) | 42 | 0/1/2 | Complies |

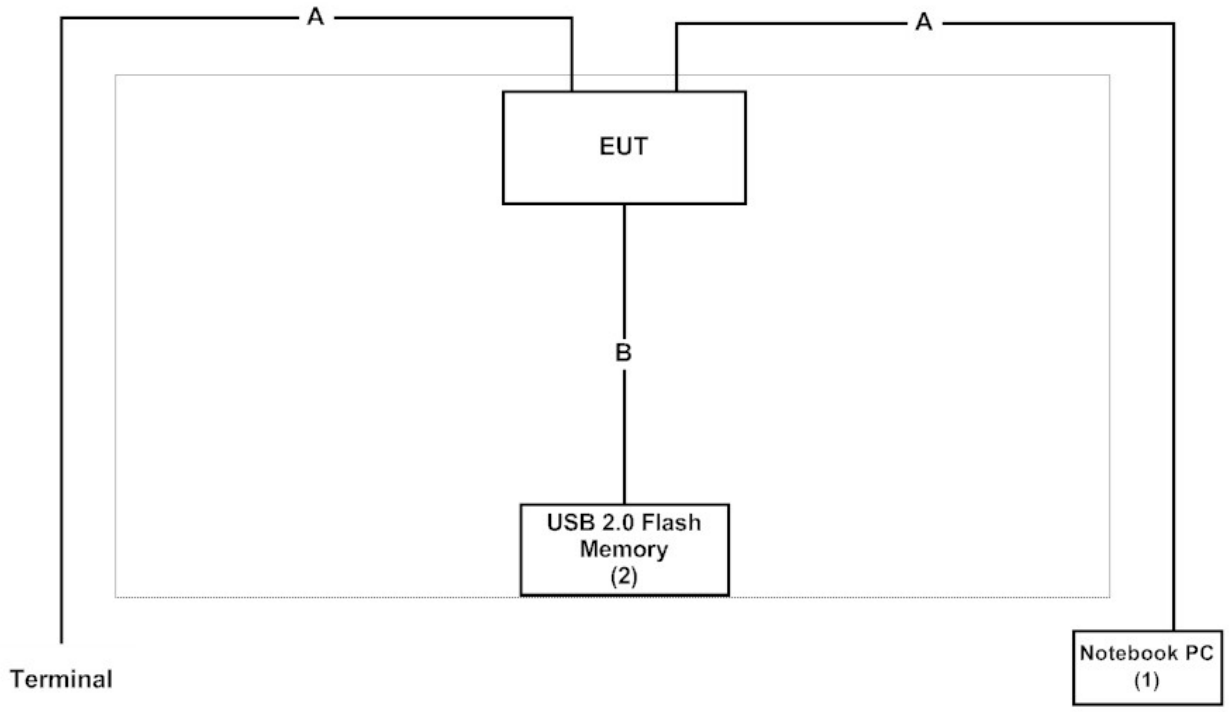
## 1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

| Product | | Manufacturer | Model No. | Serial No. | FCC ID | Power Cord |
|---|---|---|---|---|---|---|
| 1 | Notebook PC | ACER | MS2296 | LUSCV021391 150332C2000 | DoC | Non-Shielded, 2.5m one ferrite core bonded |
| 2 | USB 2.0 Flash Memory | Apacer | AH223 | N/A | DoC | -- |

## 1.4. Configuration of tested System

Connection Diagram




| Signal Cable Type | | Signal cable Description |
|---|---|---|
| A | LAN Cable | Shielded, 2m |
| B | USB 2.0 Flash Memory Cable | Non-Shielded, 1m |

## 1.5. EUT Exercise Software

| | |
|---|---|
| 1 | Setup the EUT as shown in Section 1.4 |
| 2 | Execute the MP Tool on the EUT. |
| 3 | Configure the test mode, the test channel, and the data rate. |
| 4 | Press “Start TX” to start the continuous transmitting. |
| 5 | Verify that the EUT works properly. |

## 1.6. Test Facility

Ambient conditions in the laboratory:

| Items | Test Item | Required (IEC 68-1) | Actual |
|---|---|---|---|
| Temperature (°C) | FCC PART 15 E 15.407 Conducted Emission | 15 - 35 | 20°C |
| Humidity (%RH) | | 25 - 75 | 50%RH |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |
| Temperature (°C) | FCC PART 15 E 15.407 99 % & 26dB Bandwidth | 15 - 35 | 25°C |
| Humidity (%RH) | | 25 - 75 | 45%RH |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |
| Temperature (°C) | FCC PART 15 E 15.407 Peak Transmit Power | 15 - 35 | 25°C |
| Humidity (%RH) | | 25 - 75 | 65%RH |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |
| Temperature (°C) | FCC PART 15 E 15.407 Peak Power Spectrum Density | 15 - 35 | 25°C |
| Humidity (%RH) | | 25 - 75 | 45%RH |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |
| Temperature (°C) | FCC PART 15 E 15.407 Radiated Emission | 15 - 35 | 25°C |
| Humidity (%RH) | | 25 - 75 | 45%RH |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |
| Temperature (°C) | FCC PART 15 E 15.407 Band Edge | 15 - 35 | 25°C |
| Humidity (%RH) | | 25 - 75 | 45%RH |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |
| Temperature (°C) | FCC PART 15 E 15.407 Frequency Stability | 15 - 35 | 25°C |
| Humidity (%RH) | | 25 - 75 | 45%RH |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |

# 2. Conducted Emission

## 2.1. Test Equipment

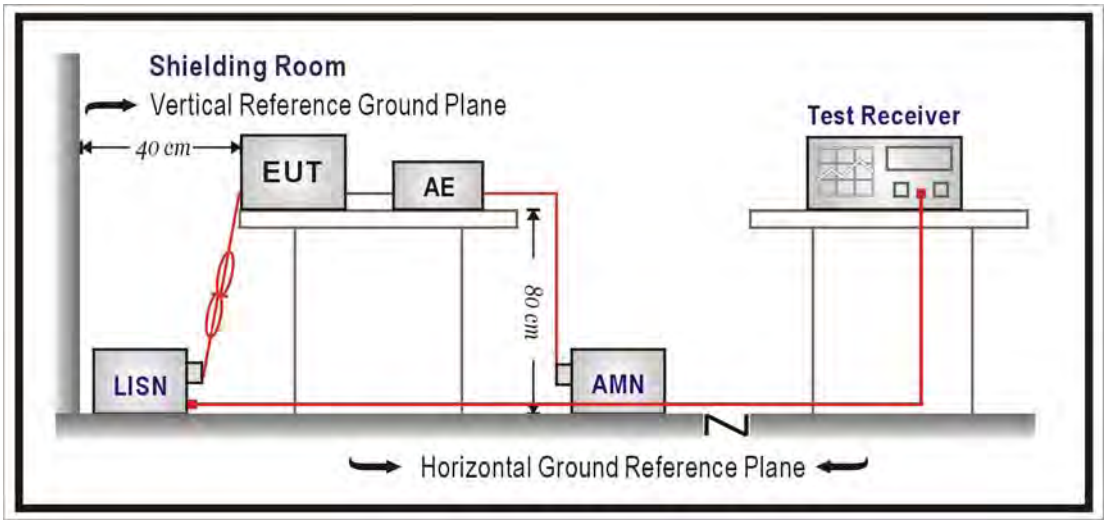
The following test equipments are used during the test:

Conducted Emission / SR2

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|---|---|---|---|---|
| Artificial Mains Network | R&S | ENV4200 | 848411/010 | 2016/01/25 |
| LISN | R&S | ENV216 | 100092 | 2016/08/17 |
| Test Receiver | R&S | ESCS 30 | 825442/014 | 2016/07/16 |

Note: All equipments that need to calibrate are with calibration period of 1 year.

## 2.2. Test Setup



## 2.3. Limits

| FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV) | | |
|---|---|---|
| Frequency MHz | QP | AV |
| 0.15 - 0.50 | 66-56 | 56-46 |
| 0.50 - 5.0 | 56 | 46 |
| 5.0 - 30 | 60 | 50 |

Remark: In the above table, the tighter limit applies at the band edges.

## 2.4. Test Procedure

The EUT was setup according to ANSI C63.10:2013. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

## 2.5. Test Specification

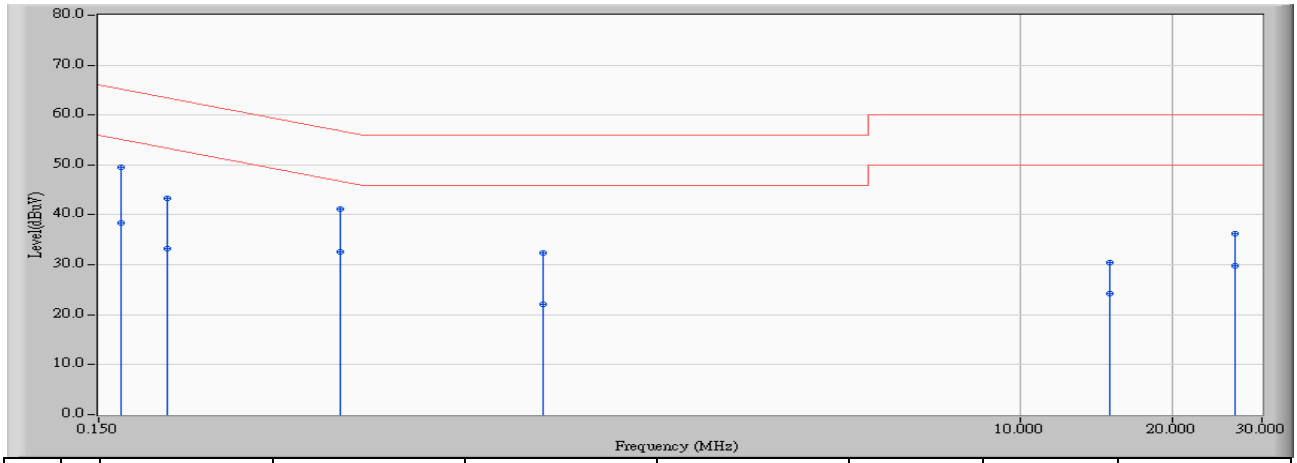
According to FCC Part 15 Subpart C Paragraph 15.207: 2014

## 2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

## 2.7. Test Result

| | |
|---|---|
| **Site : SR2** | **Time : 2015/05/15 - 19:39** |
| **Limit : CISPR_B_00M_QP** | **Margin : 10** |
| **Probe : SR2_LISN(16A)-4_0825 - Line1** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5220MHz** |

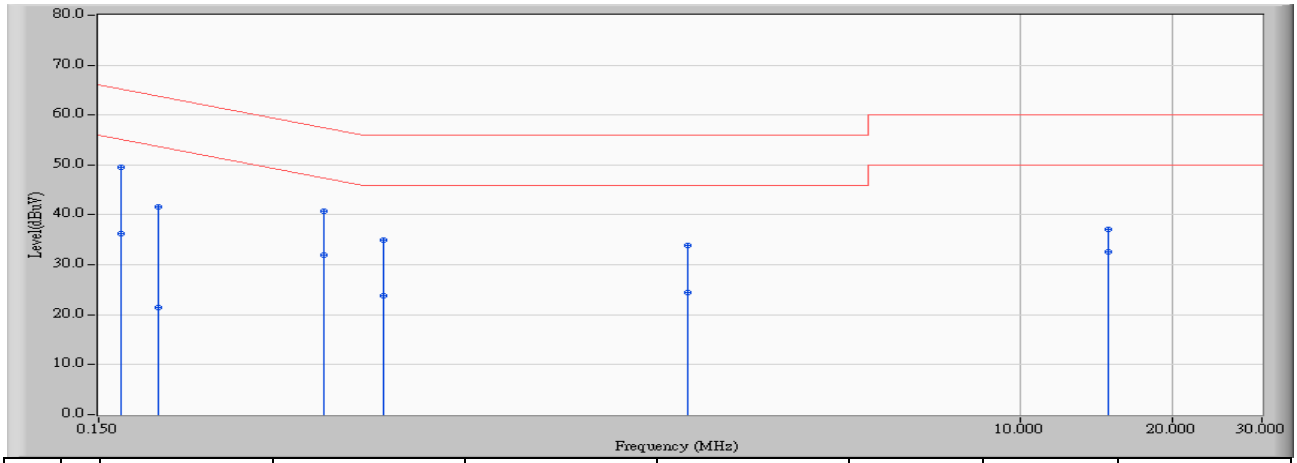



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV) | Margin (dB) | Limit (dBuV) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 0.166 | 9.760 | 39.790 | 49.550 | -15.627 | 65.177 | QUASIPEAK |
| 2 | | 0.166 | 9.760 | 28.590 | 38.350 | -16.827 | 55.177 | AVERAGE |
| 3 | | 0.205 | 9.760 | 33.610 | 43.370 | -20.049 | 63.418 | QUASIPEAK |
| 4 | | 0.205 | 9.760 | 23.410 | 33.170 | -20.249 | 53.418 | AVERAGE |
| 5 | | 0.451 | 9.751 | 31.360 | 41.111 | -15.750 | 56.861 | QUASIPEAK |
| 6 | * | 0.451 | 9.751 | 22.810 | 32.561 | -14.300 | 46.861 | AVERAGE |
| 7 | | 1.138 | 9.811 | 22.580 | 32.391 | -23.609 | 56.000 | QUASIPEAK |
| 8 | | 1.138 | 9.811 | 12.210 | 22.021 | -23.979 | 46.000 | AVERAGE |
| 9 | | 15.029 | 10.186 | 20.290 | 30.476 | -29.524 | 60.000 | QUASIPEAK |
| 10 | | 15.029 | 10.186 | 14.150 | 24.336 | -25.664 | 50.000 | AVERAGE |
| 11 | | 26.509 | 10.340 | 25.820 | 36.160 | -23.840 | 60.000 | QUASIPEAK |
| 12 | | 26.509 | 10.340 | 19.540 | 29.880 | -20.120 | 50.000 | AVERAGE |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : SR2** | **Time : 2015/05/15 - 19:42** |
| **Limit : CISPR_B_00M_QP** | **Margin : 10** |
| **Probe : SR2_LISN(16A)-4_0825 - Line2** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5220MHz** |

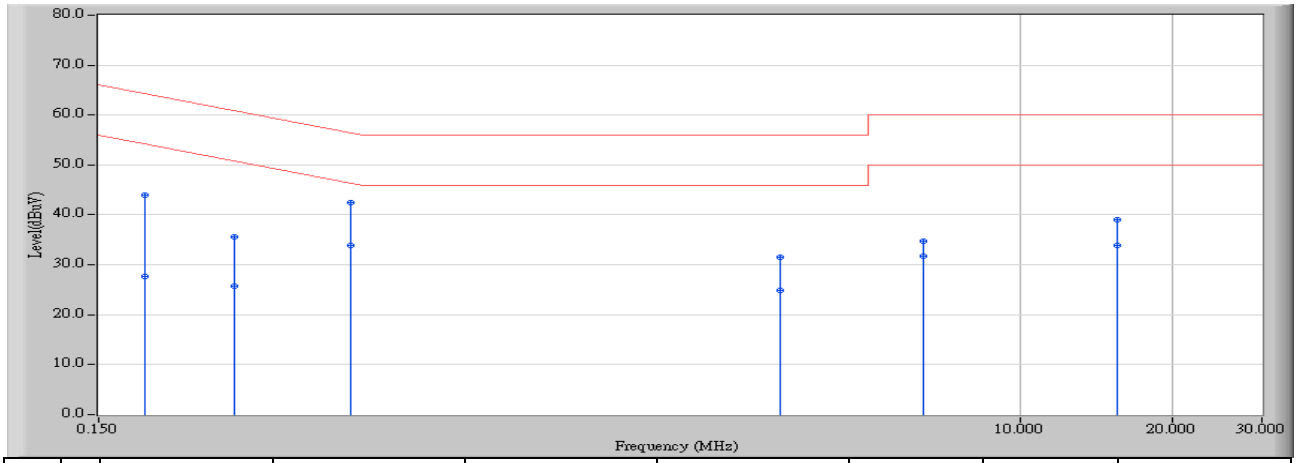



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV) | Margin (dB) | Limit (dBuV) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 0.166 | 9.810 | 39.790 | 49.600 | -15.577 | 65.177 | QUASIPEAK |
| 2 | | 0.166 | 9.810 | 26.390 | 36.200 | -18.977 | 55.177 | AVERAGE |
| 3 | | 0.197 | 9.810 | 31.890 | 41.700 | -22.041 | 63.741 | QUASIPEAK |
| 4 | | 0.197 | 9.810 | 11.730 | 21.540 | -32.201 | 53.741 | AVERAGE |
| 5 | | 0.420 | 9.820 | 30.950 | 40.770 | -16.687 | 57.457 | QUASIPEAK |
| 6 | * | 0.420 | 9.820 | 22.140 | 31.960 | -15.497 | 47.457 | AVERAGE |
| 7 | | 0.548 | 9.825 | 25.120 | 34.945 | -21.055 | 56.000 | QUASIPEAK |
| 8 | | 0.548 | 9.825 | 13.970 | 23.795 | -22.205 | 46.000 | AVERAGE |
| 9 | | 2.193 | 9.890 | 23.990 | 33.880 | -22.120 | 56.000 | QUASIPEAK |
| 10 | | 2.193 | 9.890 | 14.570 | 24.460 | -21.540 | 46.000 | AVERAGE |
| 11 | | 14.912 | 10.323 | 26.820 | 37.143 | -22.857 | 60.000 | QUASIPEAK |
| 12 | | 14.912 | 10.323 | 22.240 | 32.563 | -17.437 | 50.000 | AVERAGE |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : SR2** | **Time : 2015/09/24 - 19:24** |
| **Limit : CISPR_B_00M_QP** | **Margin : 10** |
| **Probe : SR2_LISN(16A)-5_0818 - Line1** | **Power : AC120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 3: Transmit_ADP-33AW 802.11ac(80M) 5210MHz** |

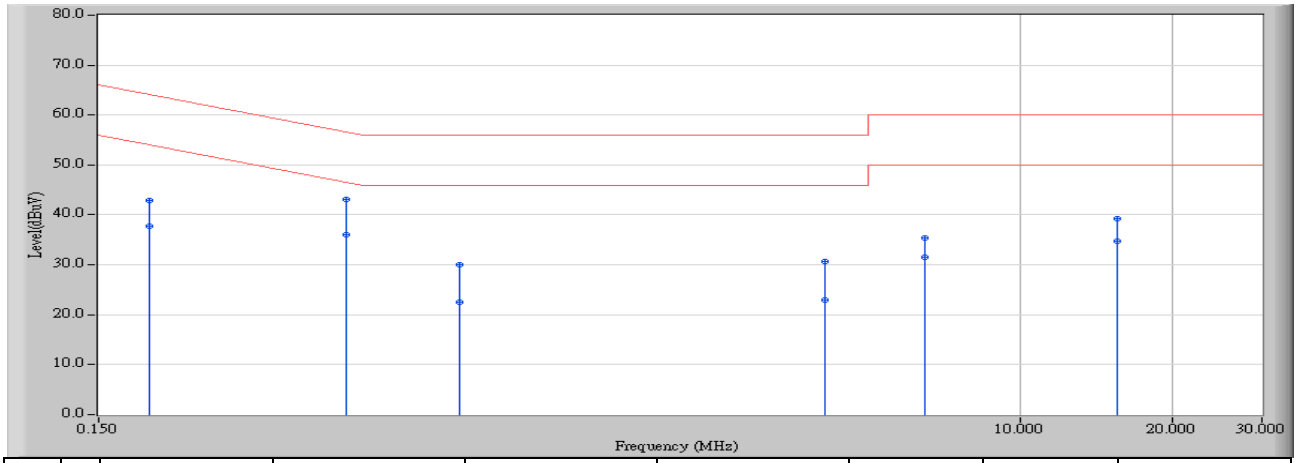



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV) | Margin (dB) | Limit (dBuV) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 0.185 | 9.688 | 34.200 | 43.888 | -20.363 | 64.251 | QUASIPEAK |
| 2 | | 0.185 | 9.688 | 17.960 | 27.648 | -26.603 | 54.251 | AVERAGE |
| 3 | | 0.279 | 9.694 | 25.820 | 35.514 | -25.334 | 60.848 | QUASIPEAK |
| 4 | | 0.279 | 9.694 | 16.070 | 25.764 | -25.084 | 50.848 | AVERAGE |
| 5 | | 0.474 | 9.716 | 32.790 | 42.506 | -13.934 | 56.440 | QUASIPEAK |
| 6 | * | 0.474 | 9.716 | 24.100 | 33.816 | -12.624 | 46.440 | AVERAGE |
| 7 | | 3.341 | 9.838 | 21.720 | 31.558 | -24.442 | 56.000 | QUASIPEAK |
| 8 | | 3.341 | 9.838 | 14.940 | 24.778 | -21.222 | 46.000 | AVERAGE |
| 9 | | 6.404 | 9.968 | 24.780 | 34.749 | -25.251 | 60.000 | QUASIPEAK |
| 10 | | 6.404 | 9.968 | 21.690 | 31.659 | -18.341 | 50.000 | AVERAGE |
| 11 | | 15.537 | 10.231 | 28.720 | 38.951 | -21.049 | 60.000 | QUASIPEAK |
| 12 | | 15.537 | 10.231 | 23.660 | 33.891 | -16.109 | 50.000 | AVERAGE |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : SR2** | **Time : 2015/09/24 - 20:04** |
| **Limit : CISPR_B_00M_QP** | **Margin : 10** |
| **Probe : SR2_LISN(16A)-5_0818 - Line2** | **Power : AC120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 3: Transmit_ADP-33AW 802.11ac(80M) 5210MHz** |




| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV) | Margin (dB) | Limit (dBuV) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 0.189 | 9.765 | 33.220 | 42.985 | -21.092 | 64.078 | QUASIPEAK |
| 2 | | 0.189 | 9.765 | 27.990 | 37.755 | -16.322 | 54.078 | AVERAGE |
| 3 | | 0.463 | 9.795 | 33.260 | 43.056 | -13.592 | 56.648 | QUASIPEAK |
| 4 | * | 0.463 | 9.795 | 26.290 | 36.086 | -10.562 | 46.648 | AVERAGE |
| 5 | | 0.775 | 9.806 | 20.290 | 30.096 | -25.904 | 56.000 | QUASIPEAK |
| 6 | | 0.775 | 9.806 | 12.790 | 22.596 | -23.404 | 46.000 | AVERAGE |
| 7 | | 4.088 | 9.950 | 20.690 | 30.640 | -25.360 | 56.000 | QUASIPEAK |
| 8 | | 4.088 | 9.950 | 13.010 | 22.960 | -23.040 | 46.000 | AVERAGE |
| 9 | | 6.455 | 10.030 | 25.410 | 35.440 | -24.560 | 60.000 | QUASIPEAK |
| 10 | | 6.455 | 10.030 | 21.580 | 31.610 | -18.390 | 50.000 | AVERAGE |
| 11 | | 15.537 | 10.172 | 29.060 | 39.232 | -20.768 | 60.000 | QUASIPEAK |
| 12 | | 15.537 | 10.172 | 24.680 | 34.852 | -15.148 | 50.000 | AVERAGE |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

# 3. 99% & 26dB Bandwidth

## 3.1. Test Equipment

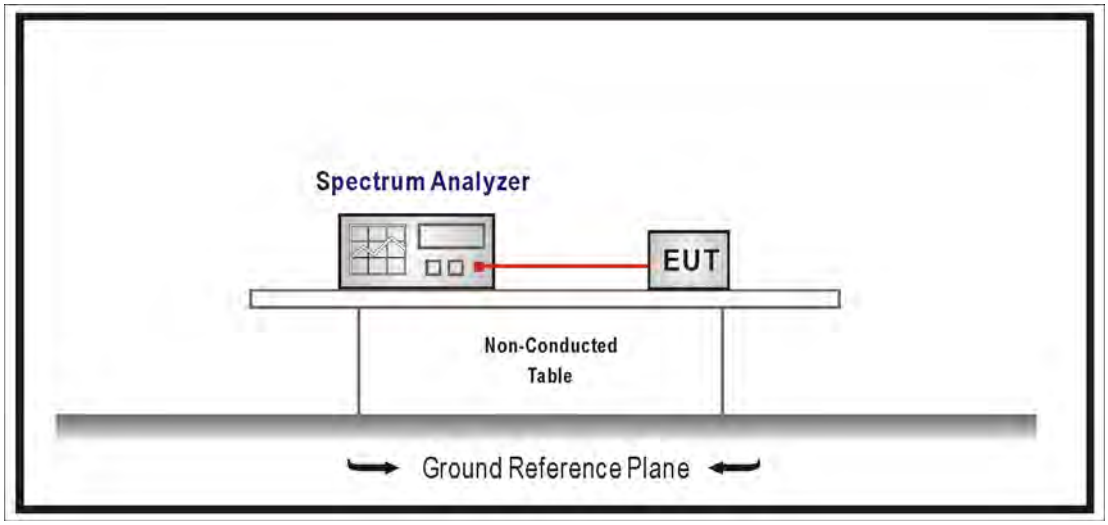
The following test equipments are used during the radiated emission tests:

99% & 26dB Bandwidth / SR7

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|---|---|---|---|---|
| Spectrum Analyzer | Agilent | N9010A-EXA | US47140172 | 2016/08/23 |

Note: All equipments that need to calibrate are with calibration period of 1 year.

## 3.2. Test Setup




## 3.3. Limits

99% & 26dB Bandwidth : No Required

## 3.4. Test Procedure

99% & 26dB Bandwidth :
The EUT was tested according to U-NII test procedure of KDB 789033 D02
Set RBW 1% of the emission bandwidth, VBW equal to 3 times the RBW.

## 3.5. Uncertainty

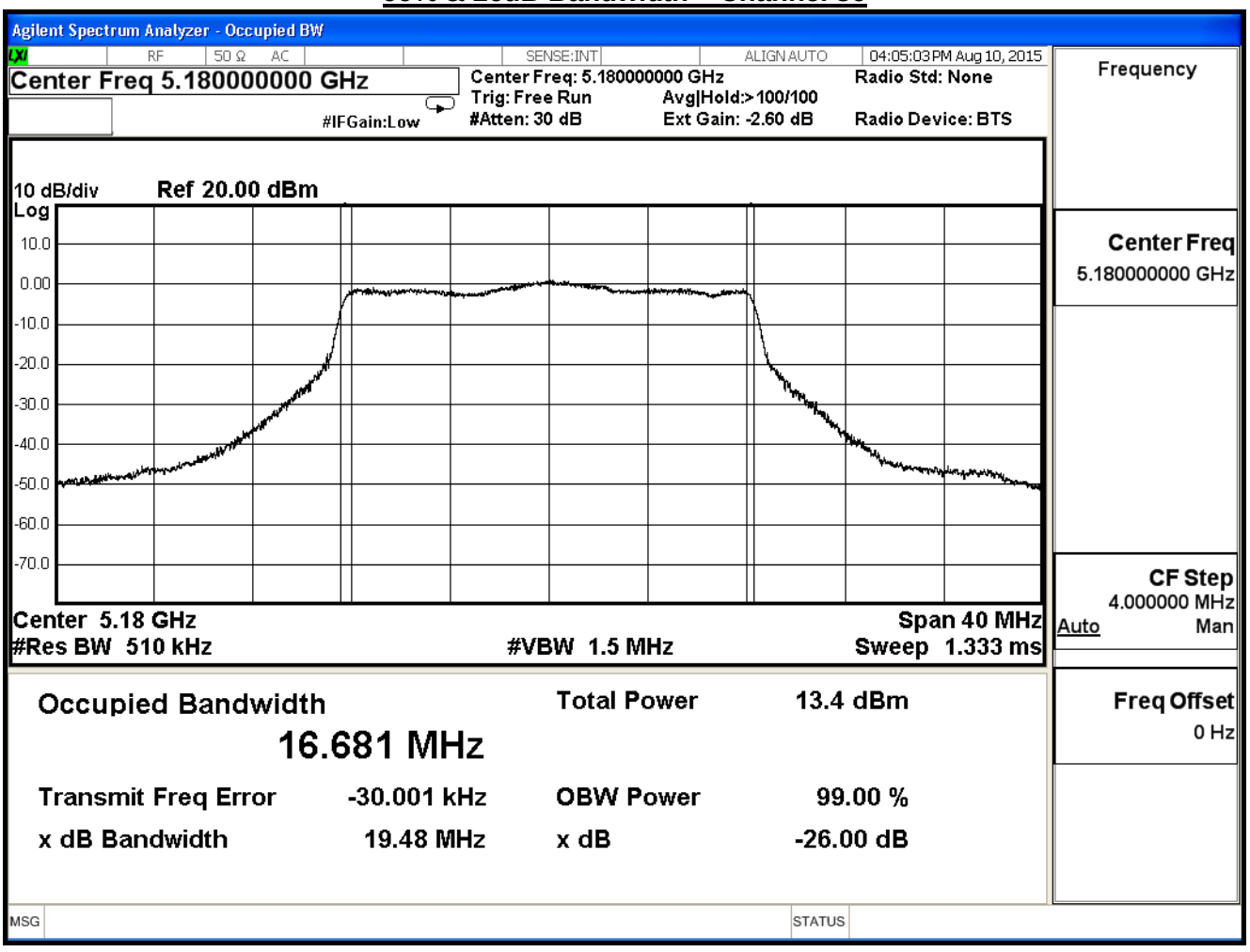
The measurement uncertainty is defined as ±150Hz

## 3.6. Test Result

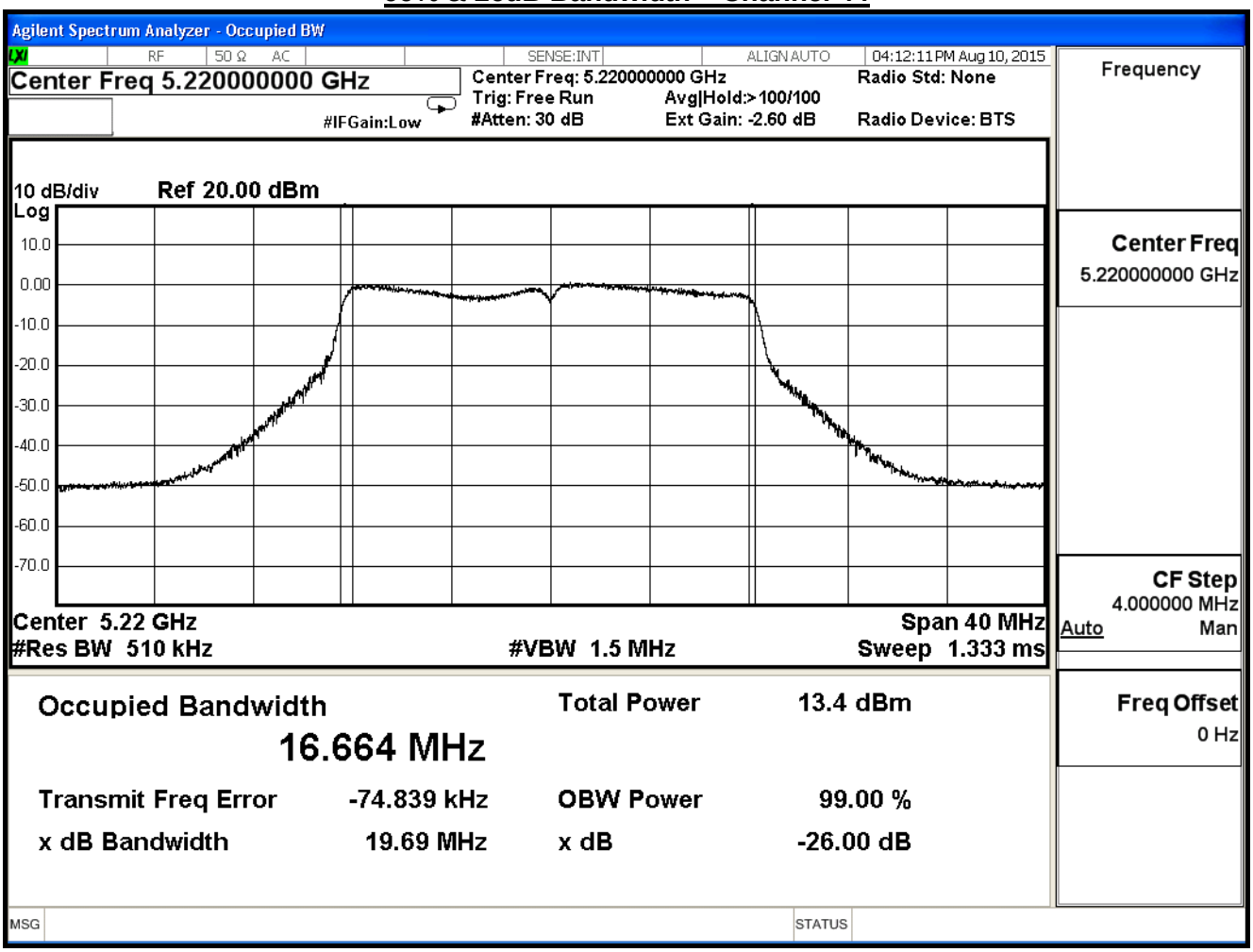
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| 802.11a (ANT 0) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 36 | 5180 | 19.48 | 16.68 | -- |
| 44 | 5220 | 19.69 | 16.66 | -- |
| 48 | 5240 | 19.83 | 16.66 | -- |

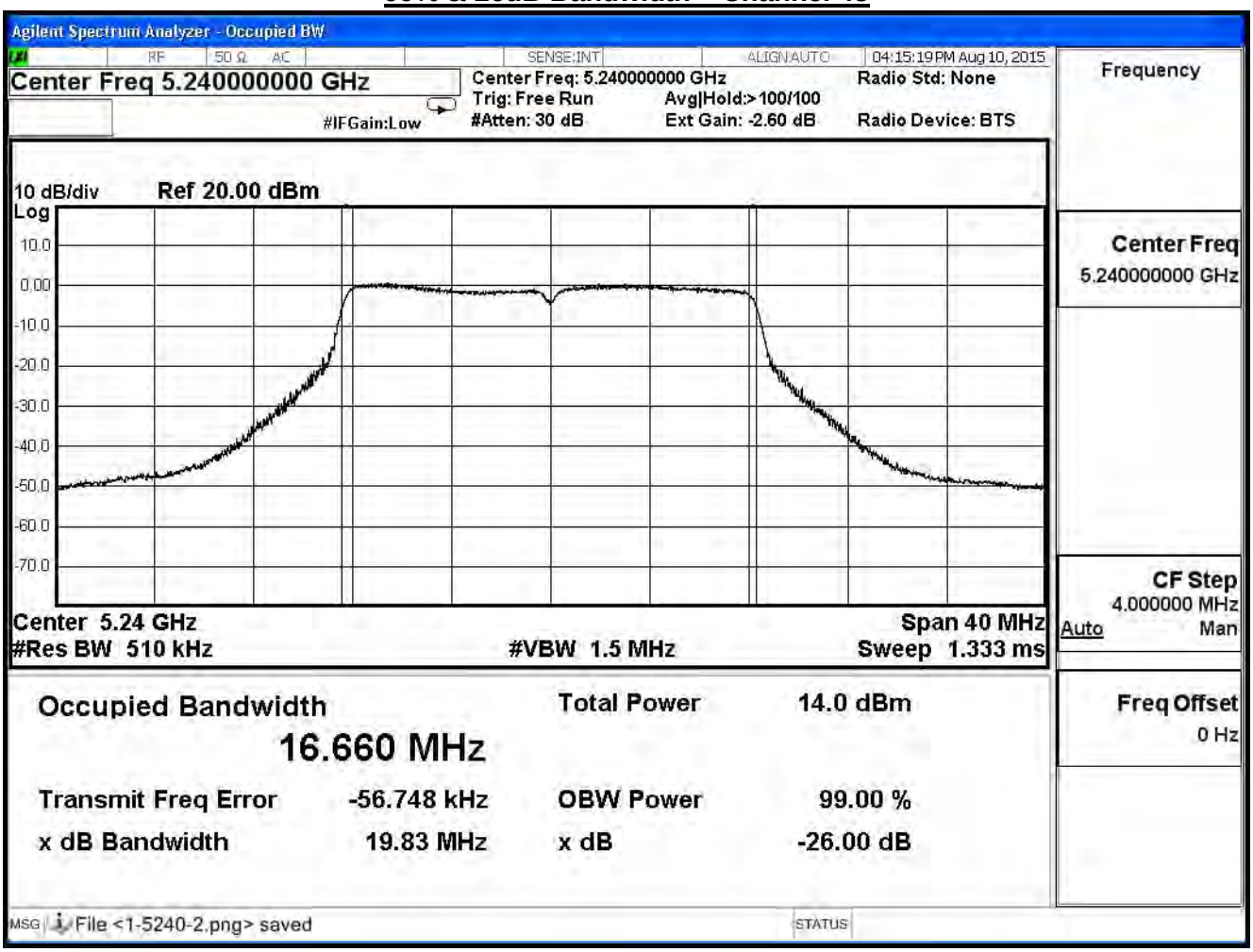
**99% & 26dB Bandwidth – Channel 36**



## 99% & 26dB Bandwidth – Channel 44



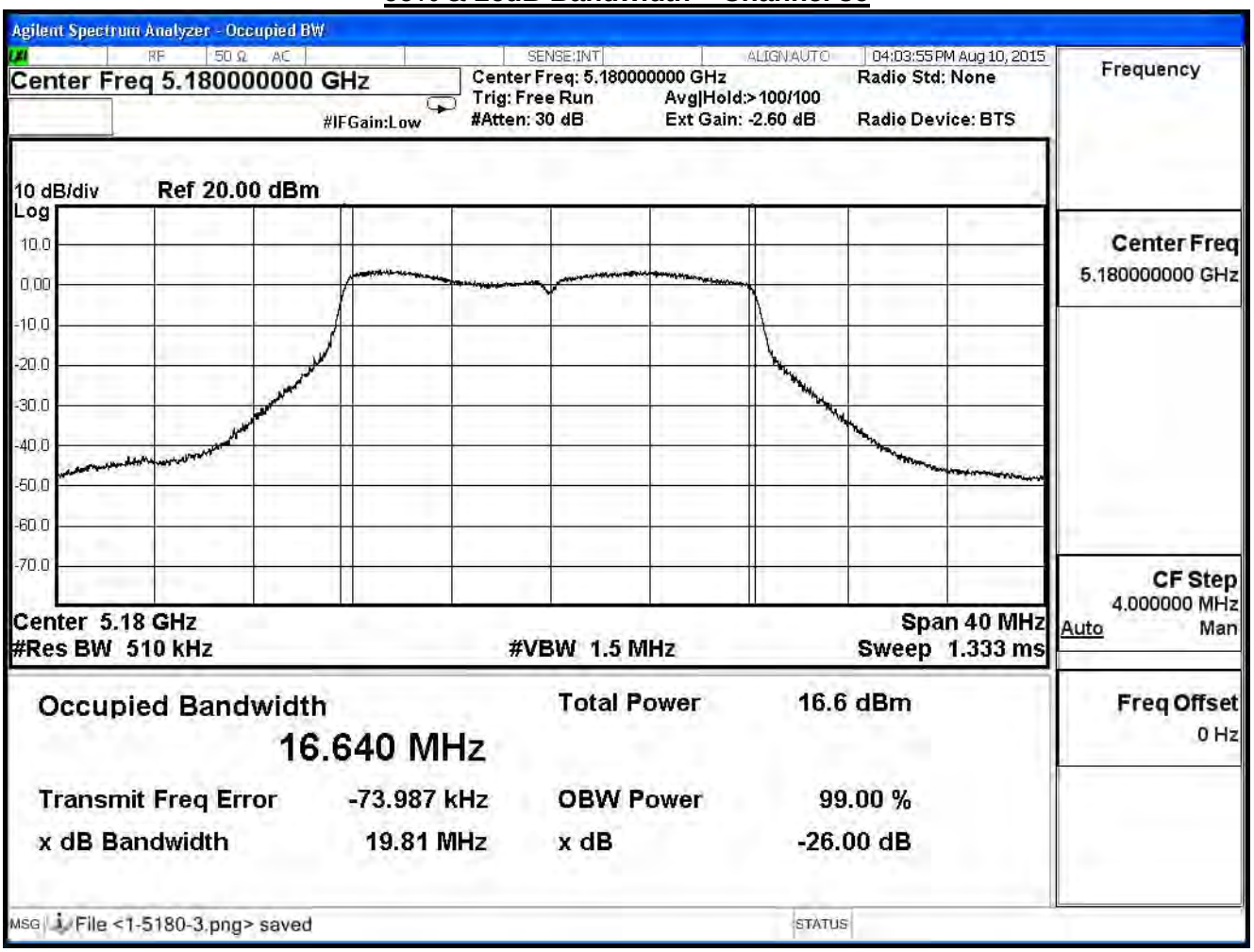
## 99% & 26dB Bandwidth – Channel 48



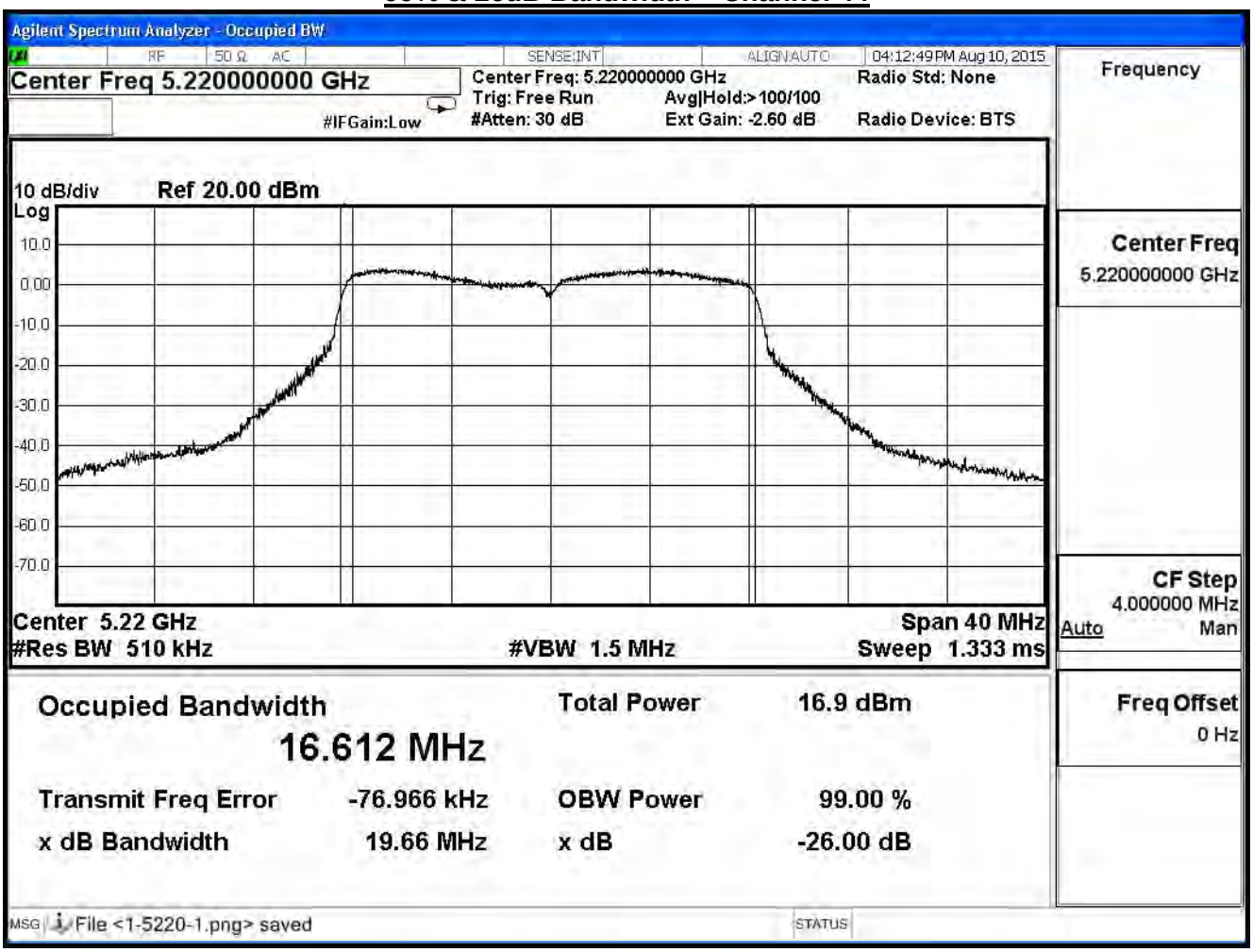
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| 802.11a (ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 36 | 5180 | 19.81 | 16.64 | -- |
| 44 | 5220 | 19.66 | 16.61 | -- |
| 48 | 5240 | 19.72 | 16.62 | -- |

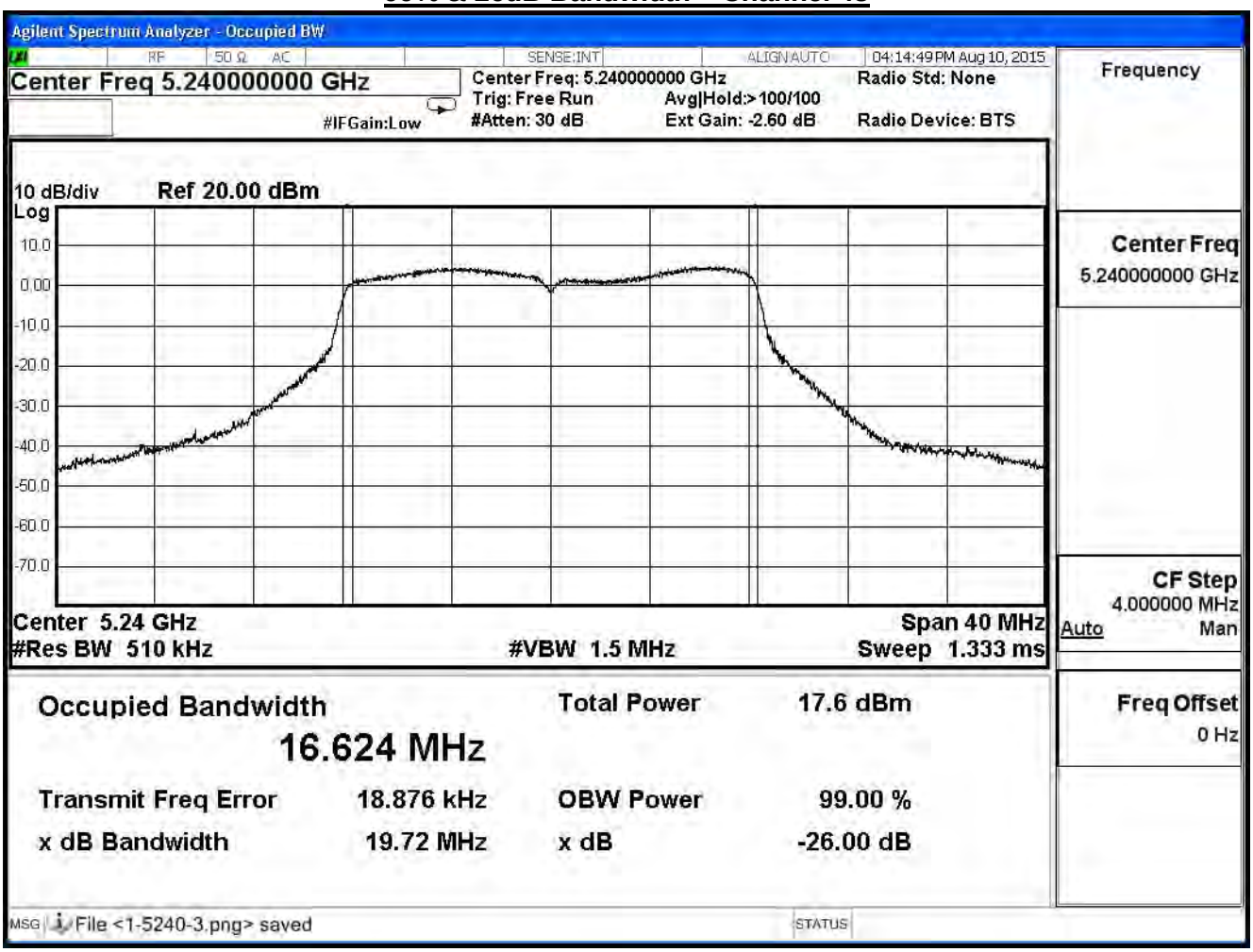
**99% & 26dB Bandwidth – Channel 36**



**99% & 26dB Bandwidth – Channel 44**



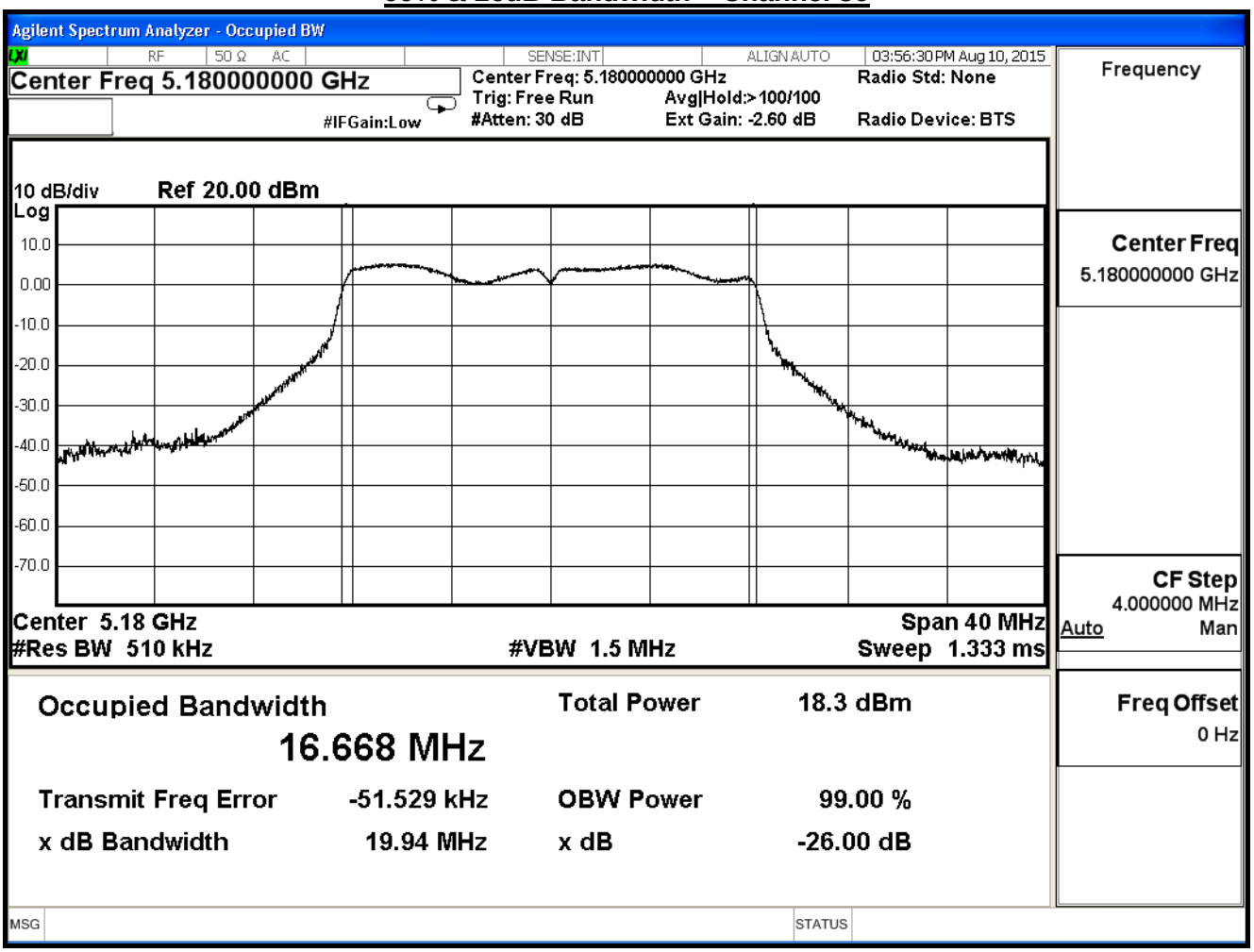
## 99% & 26dB Bandwidth – Channel 48



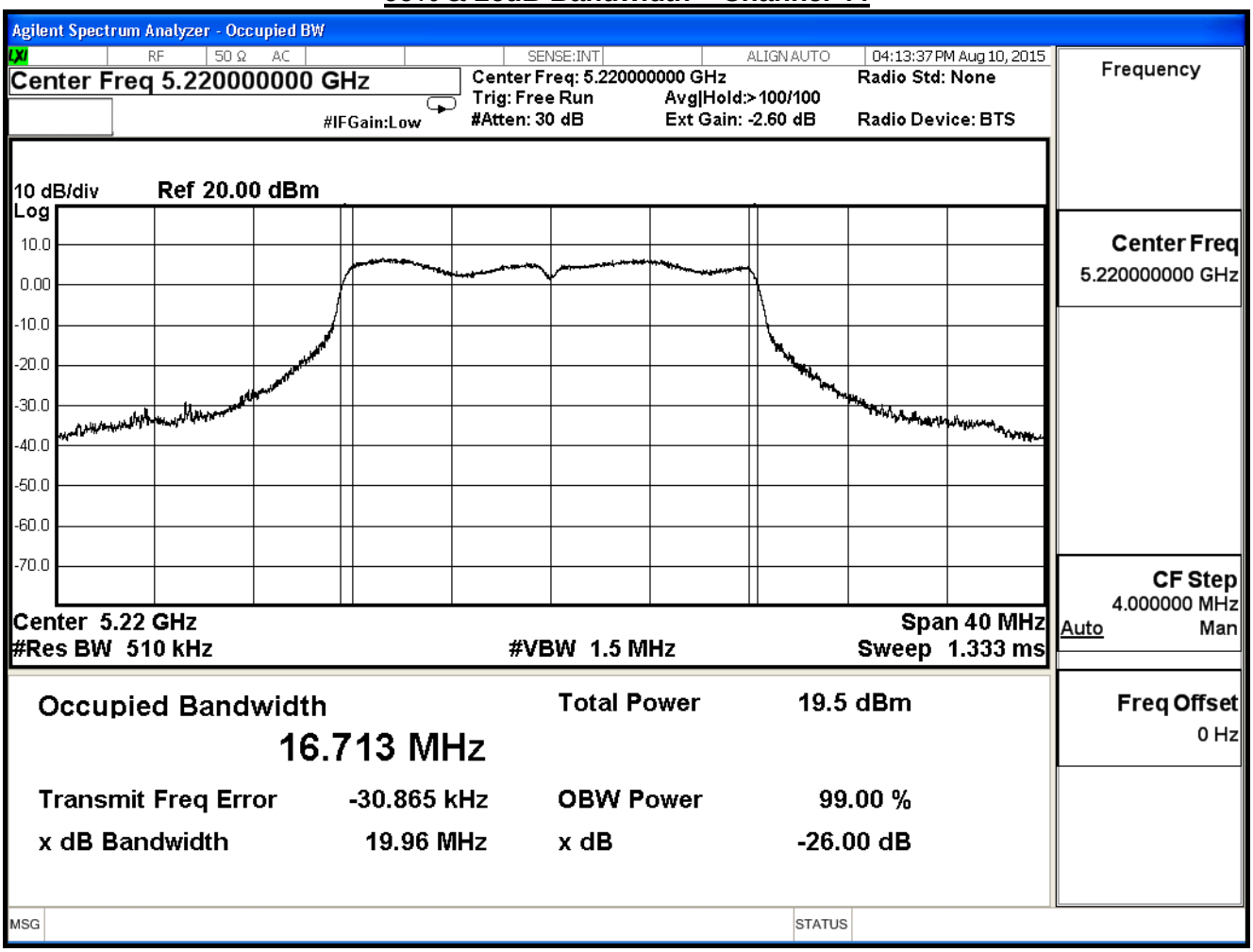
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| 802.11a (ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 36 | 5180 | 19.94 | 16.67 | -- |
| 44 | 5220 | 19.96 | 16.71 | -- |
| 48 | 5240 | 19.81 | 16.63 | -- |

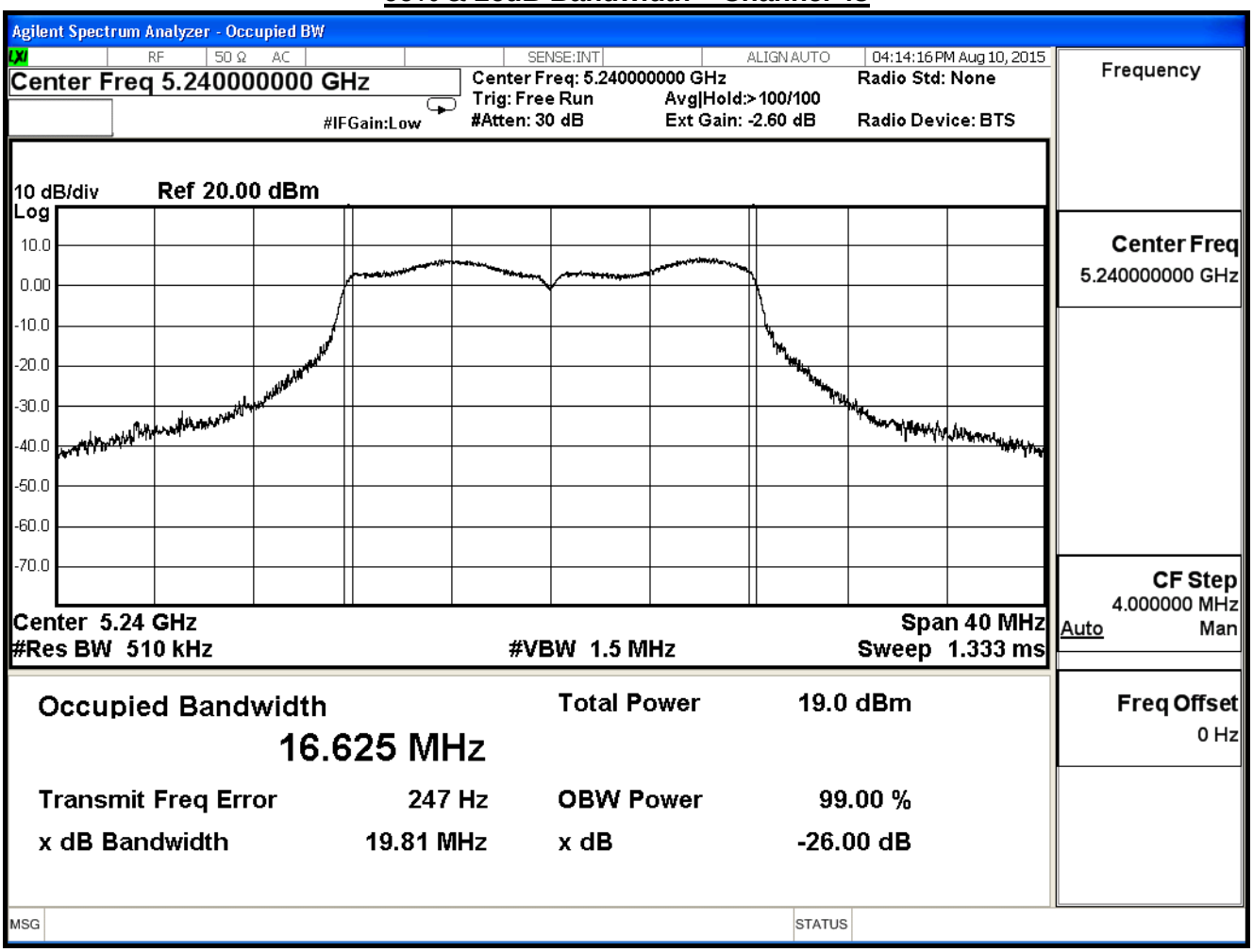
**99% & 26dB Bandwidth – Channel 36**



## 99% & 26dB Bandwidth – Channel 44



## 99% & 26dB Bandwidth – Channel 48

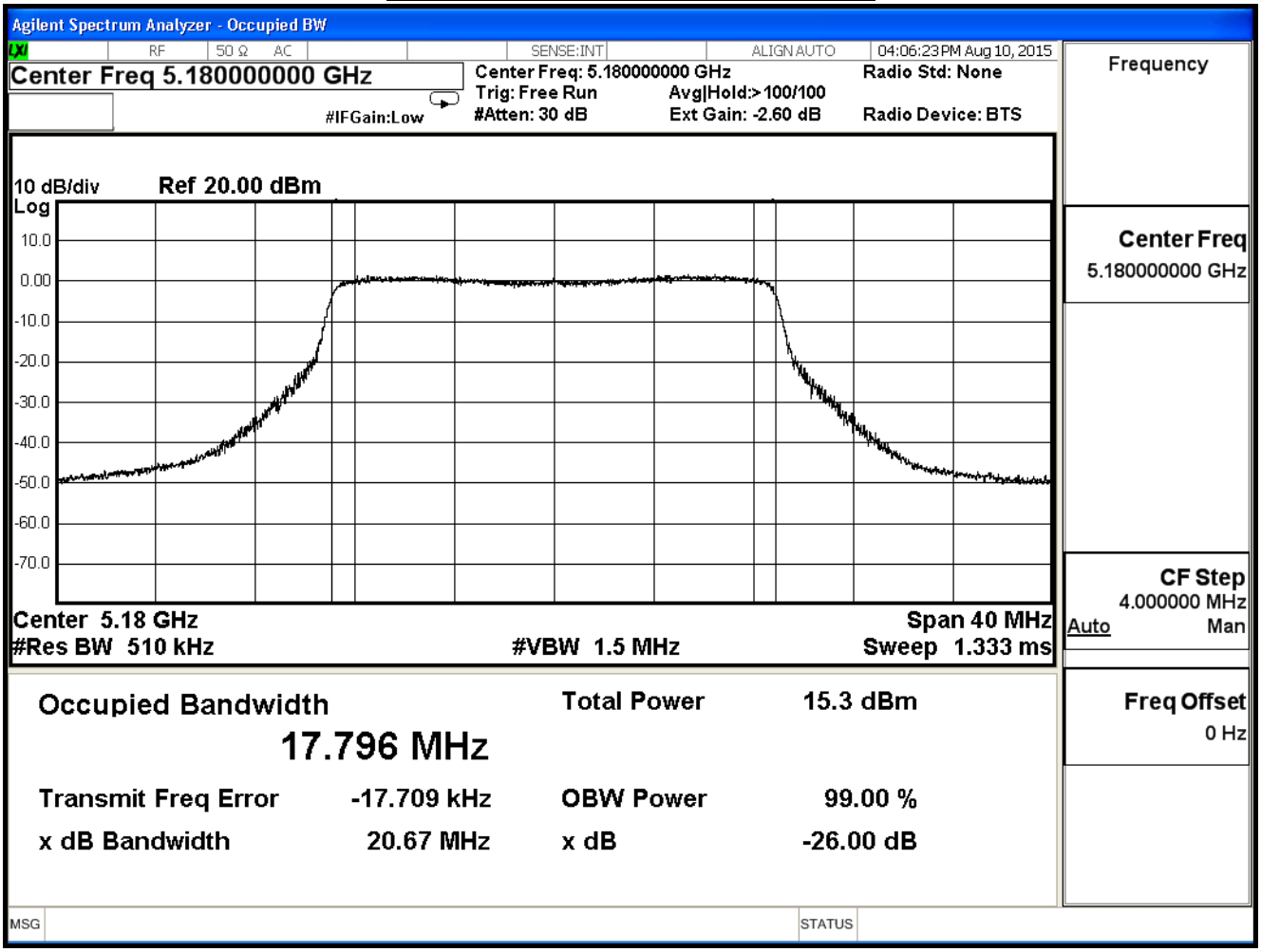


| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

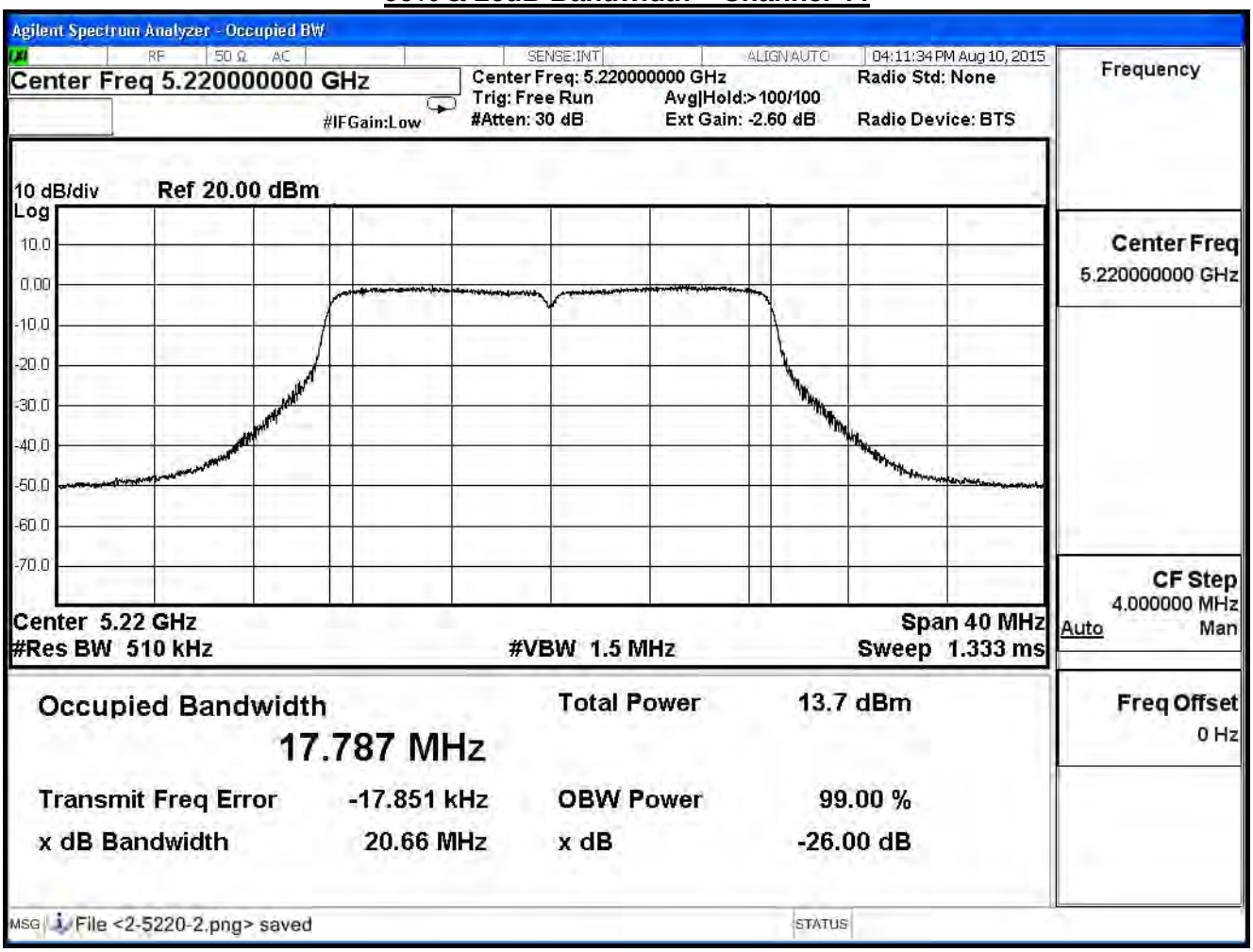
IEEE 802.11n(20MHz)(ANT 0)

| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
|---|---|---|---|---|
| 36 | 5180 | 20.67 | 17.80 | -- |
| 44 | 5220 | 20.66 | 17.79 | -- |
| 48 | 5240 | 20.44 | 17.78 | -- |

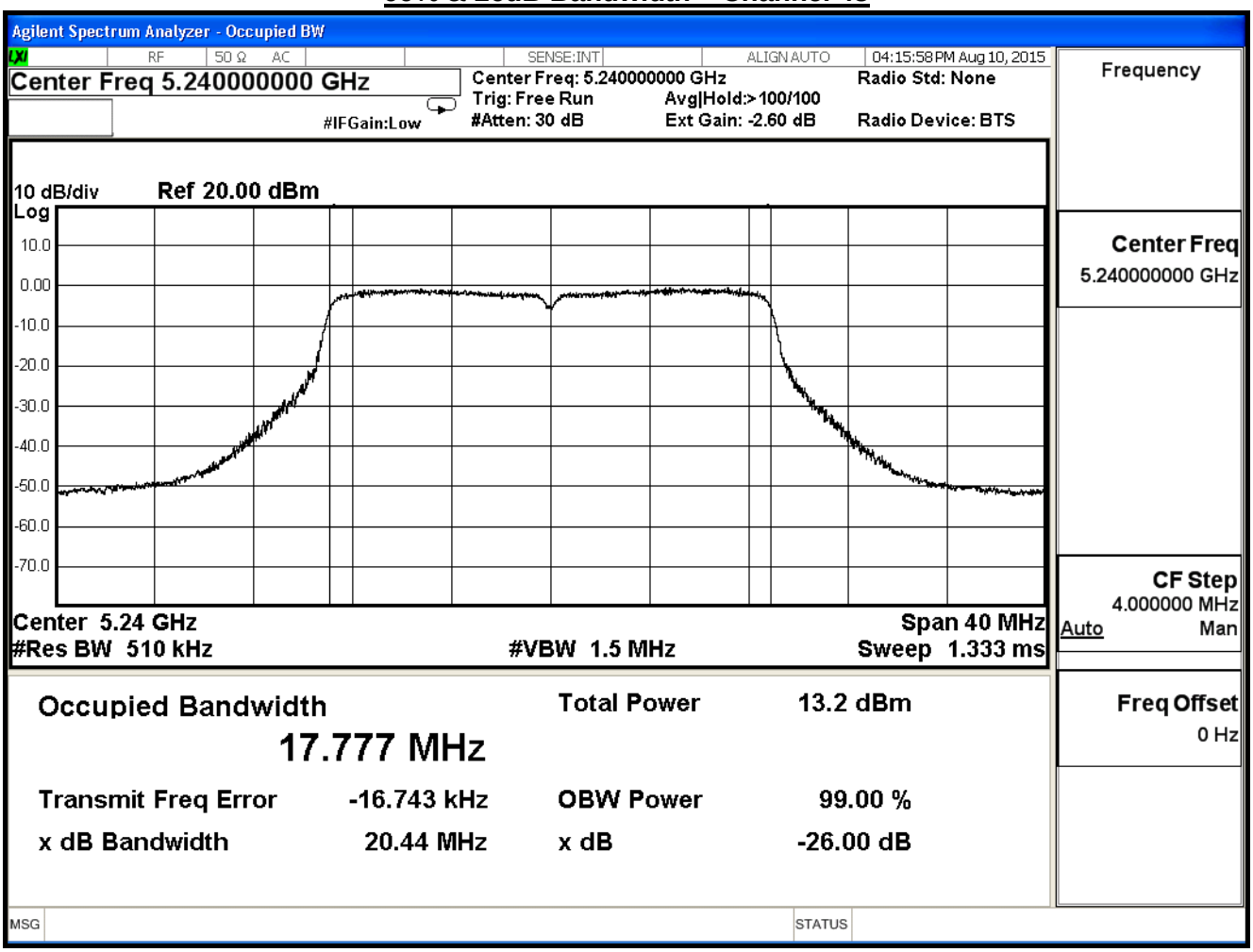
**99% & 26dB Bandwidth – Channel 36**



**99% & 26dB Bandwidth – Channel 44**



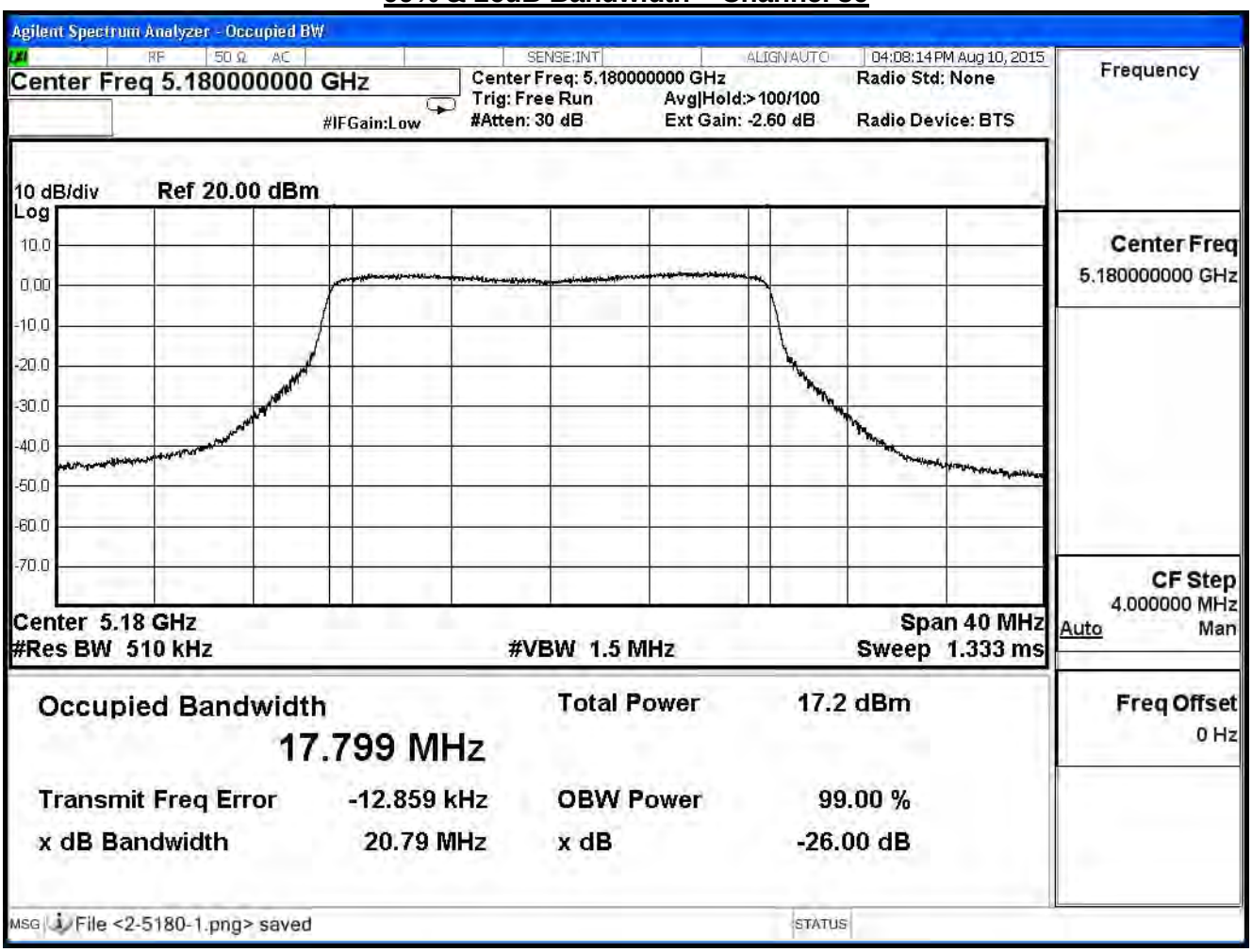
## 99% & 26dB Bandwidth – Channel 48



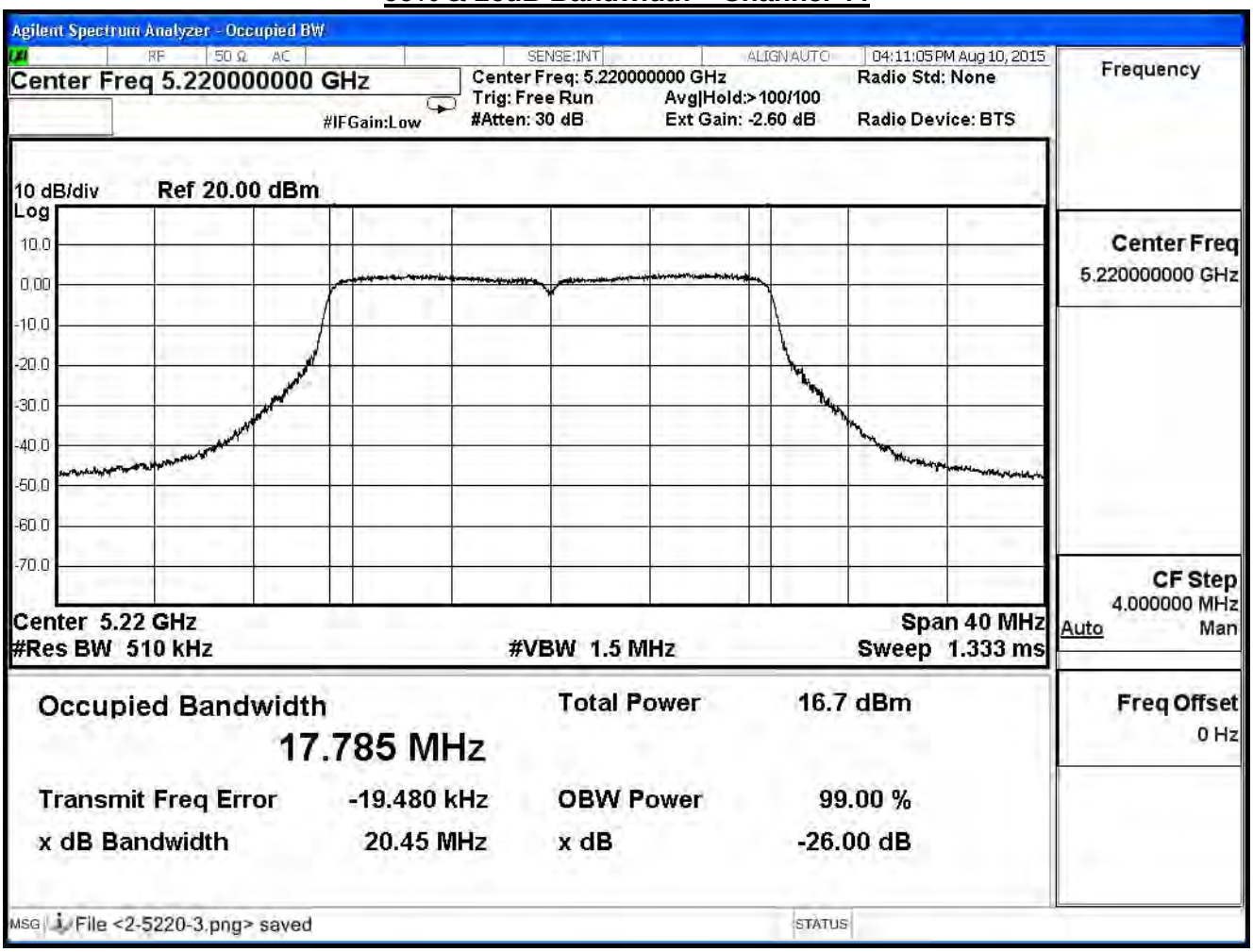
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 36 | 5180 | 20.79 | 17.80 | -- |
| 44 | 5220 | 20.45 | 17.79 | -- |
| 48 | 5240 | 20.59 | 17.79 | -- |

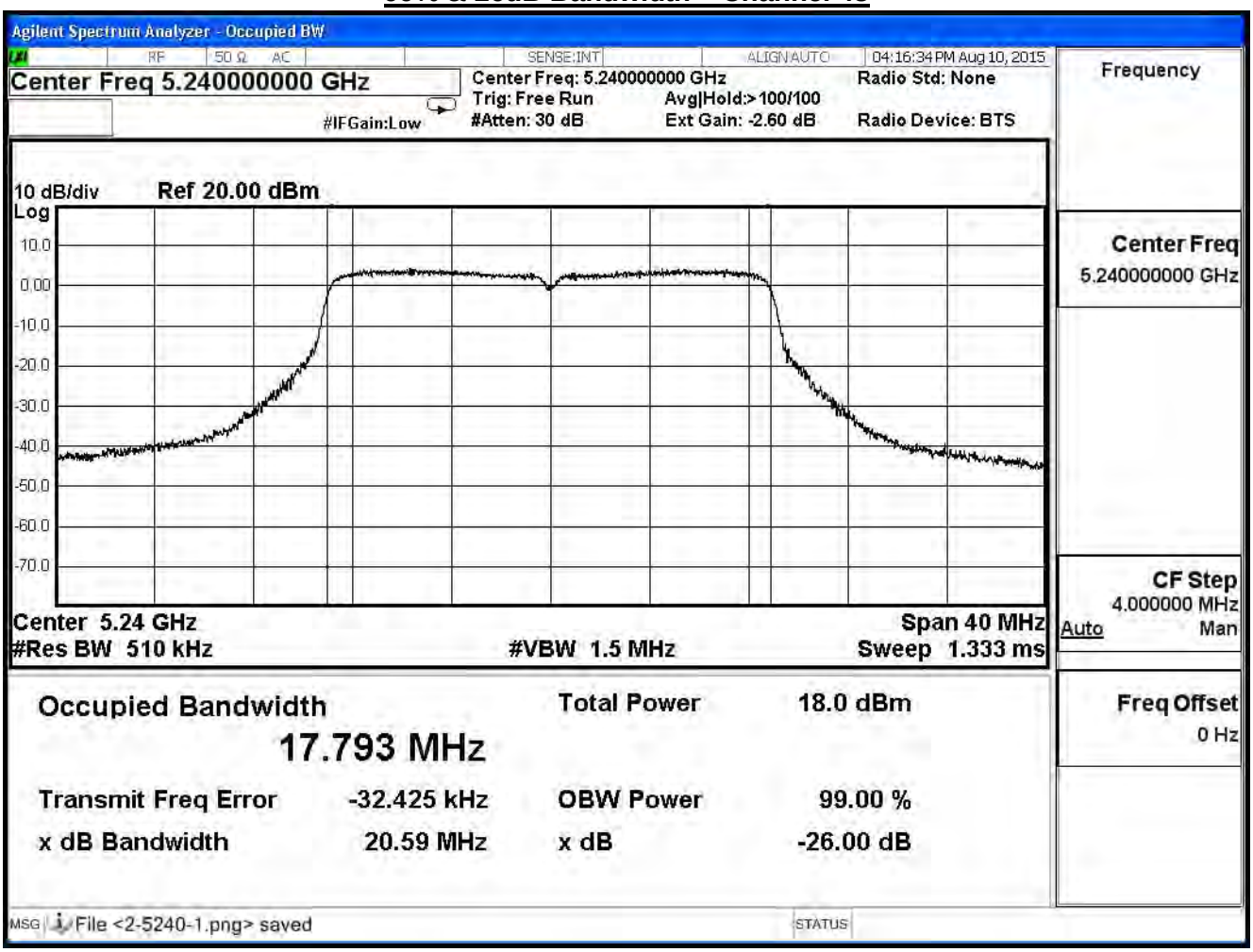
**99% & 26dB Bandwidth – Channel 36**



**99% & 26dB Bandwidth – Channel 44**



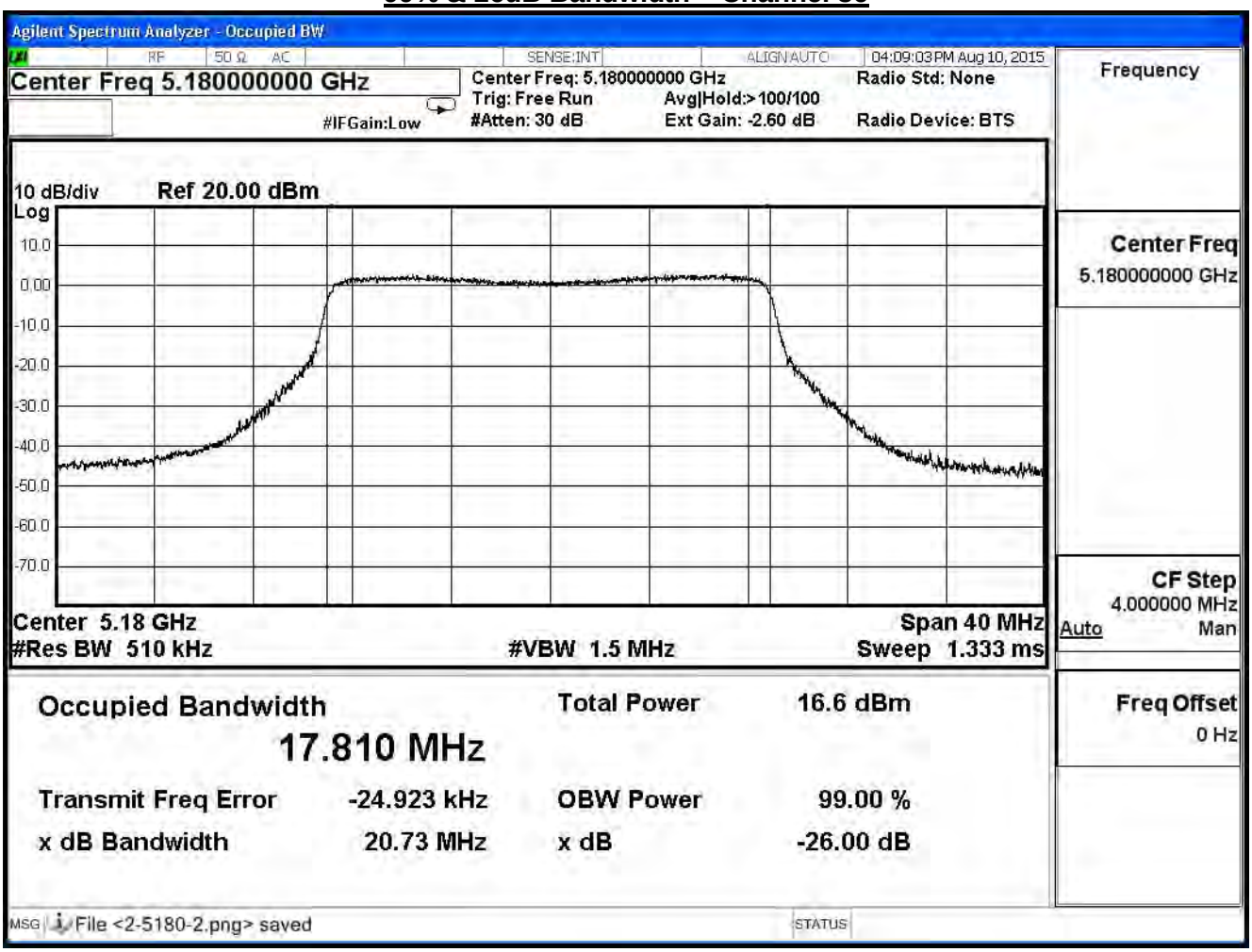
## 99% & 26dB Bandwidth – Channel 48



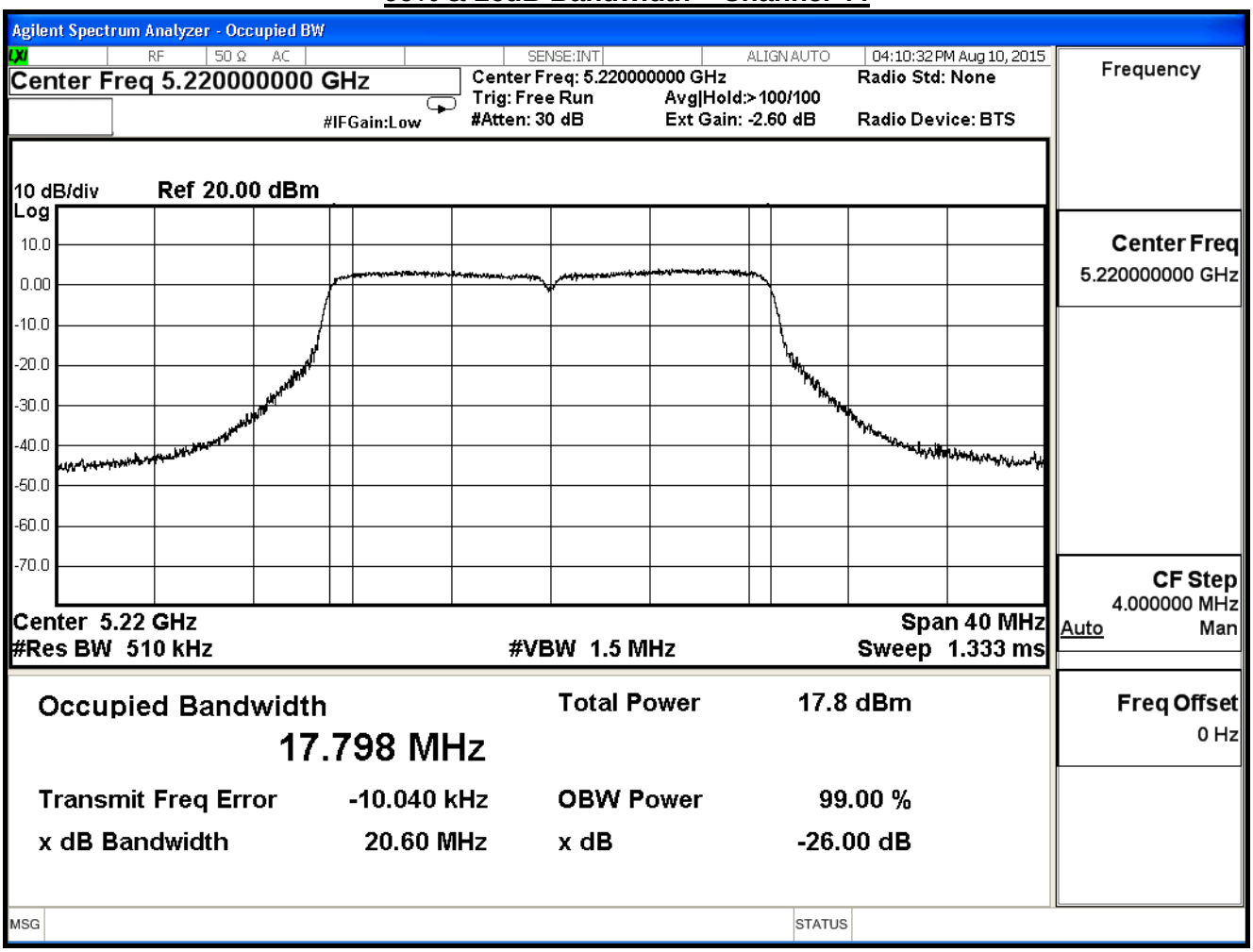
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 36 | 5180 | 20.73 | 17.81 | -- |
| 44 | 5220 | 20.60 | 17.80 | -- |
| 48 | 5240 | 20.72 | 17.79 | -- |

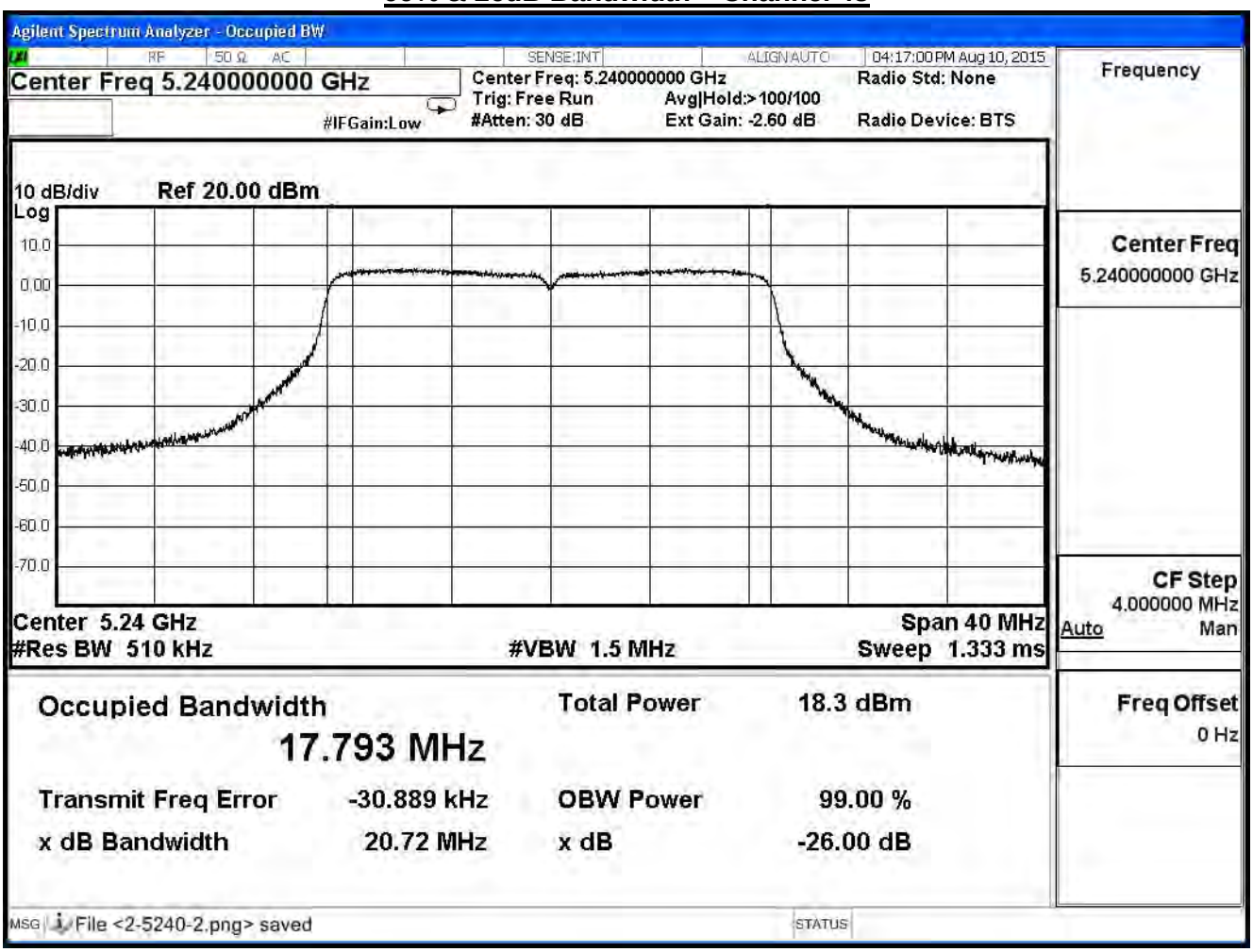
**99% & 26dB Bandwidth – Channel 36**



## 99% & 26dB Bandwidth – Channel 44



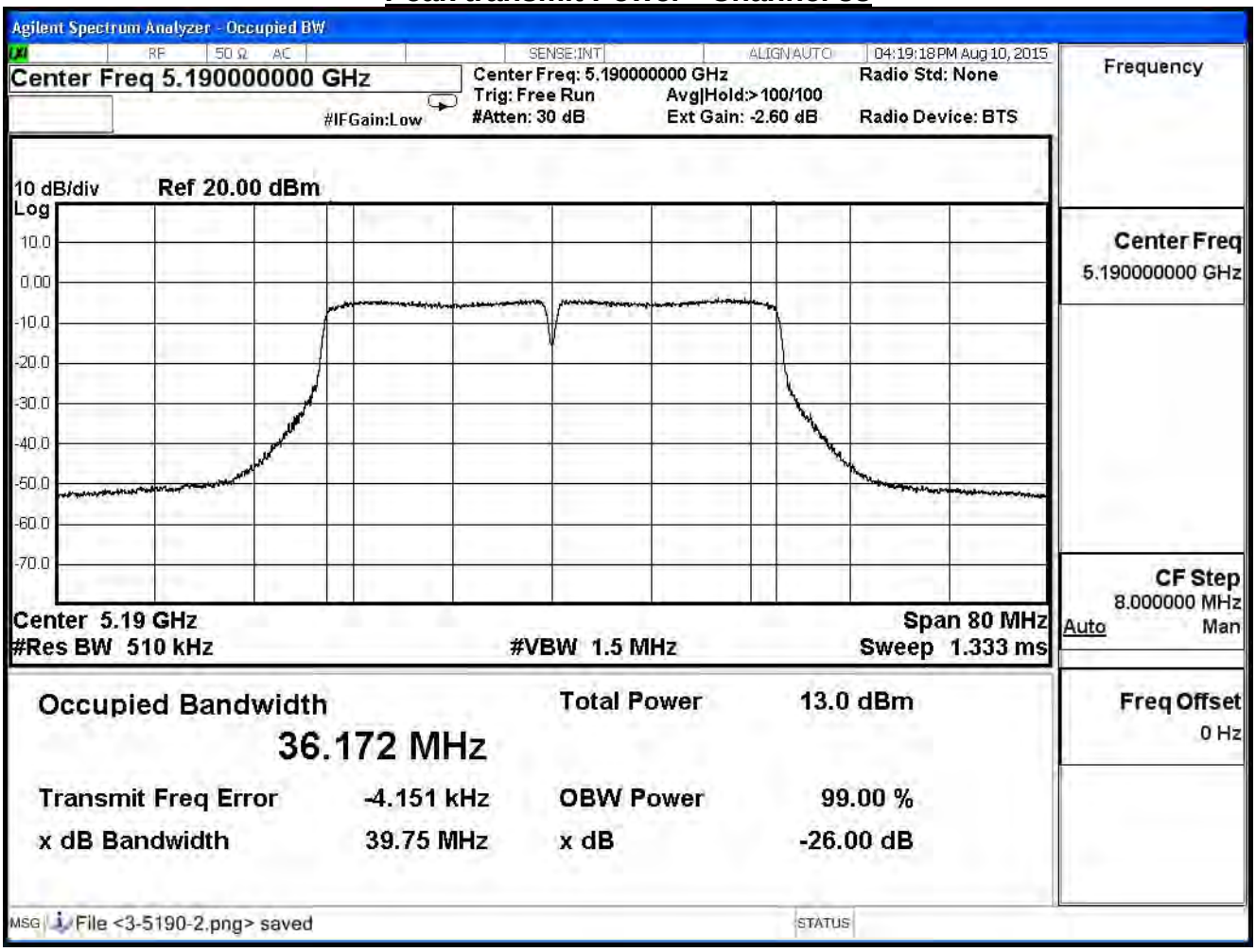
## 99% & 26dB Bandwidth – Channel 48



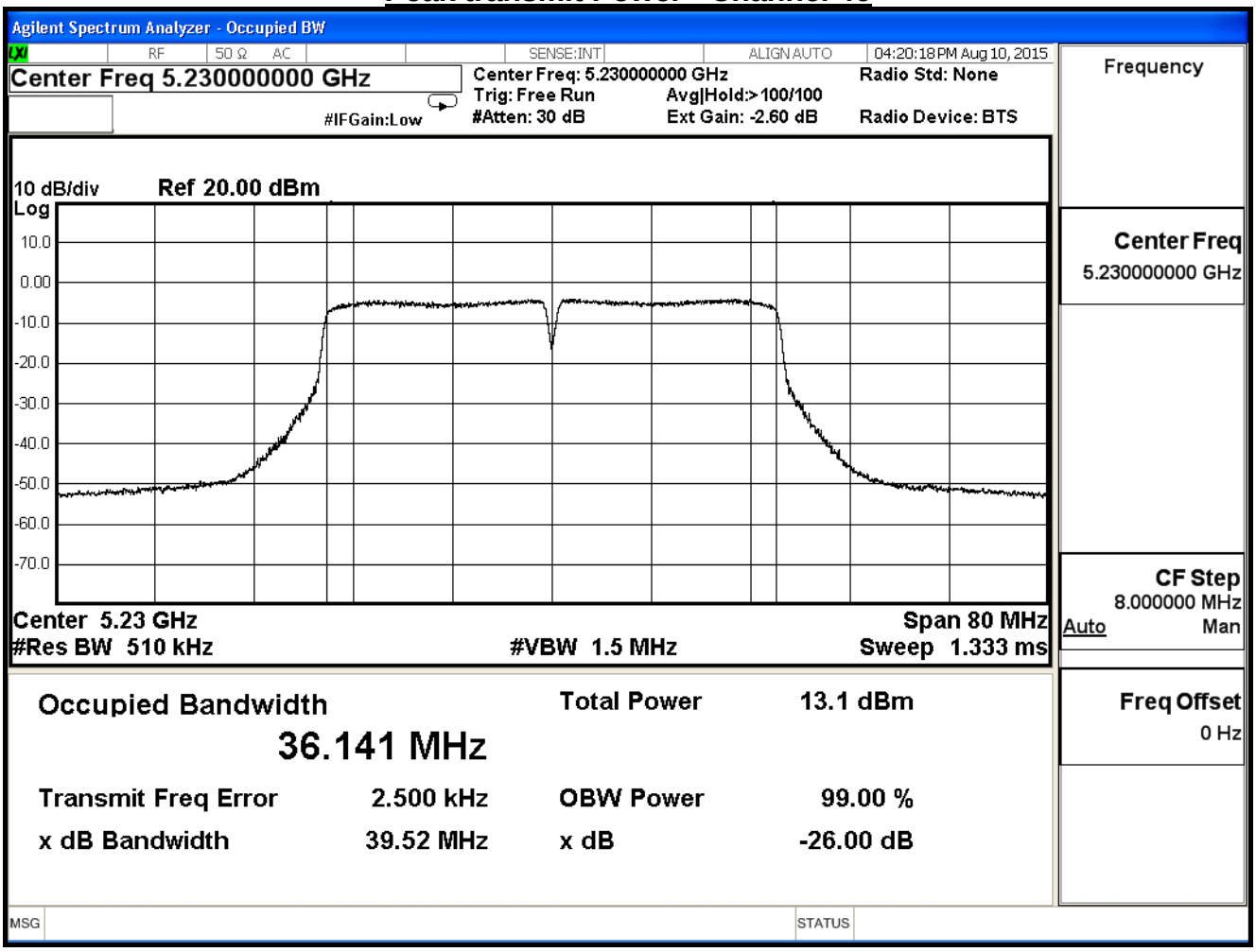
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 0) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 38 | 5190 | 39.75 | 36.17 | -- |
| 46 | 5230 | 39.52 | 36.14 | -- |

**Peak transmit Power - Channel 38**



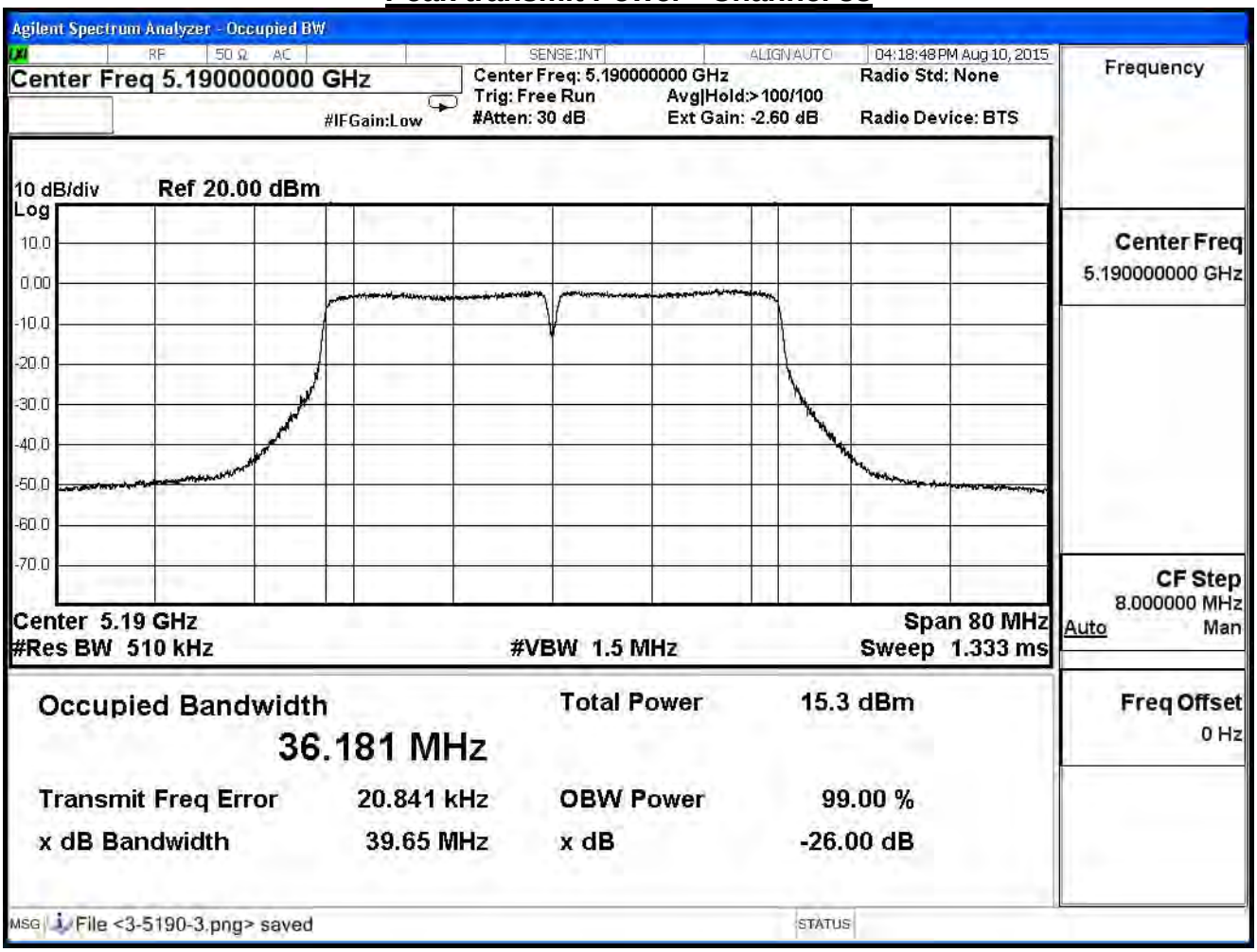
## Peak transmit Power - Channel 46



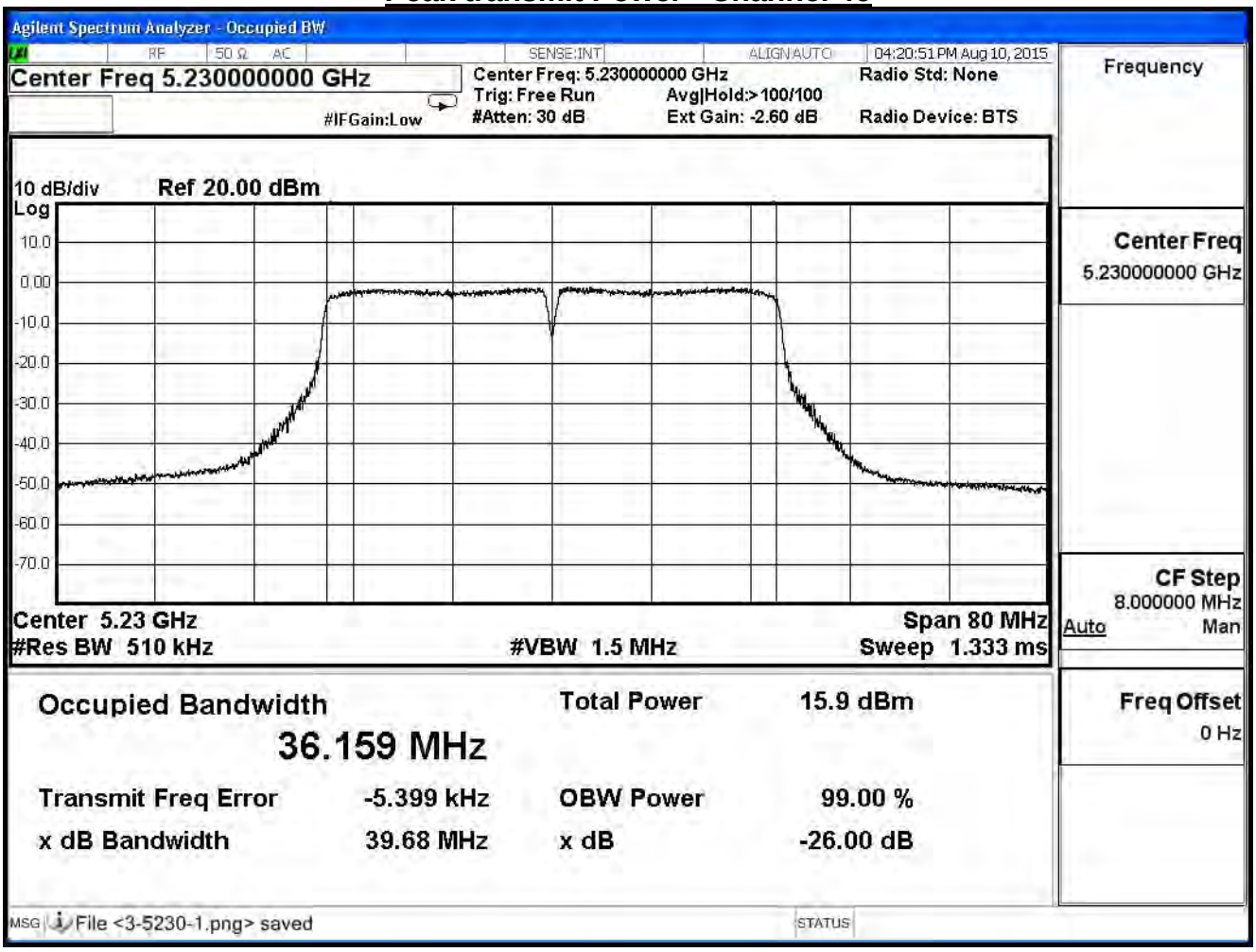
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 38 | 5190 | 39.65 | 36.18 | -- |
| 46 | 5230 | 39.68 | 36.16 | -- |

**Peak transmit Power - Channel 38**



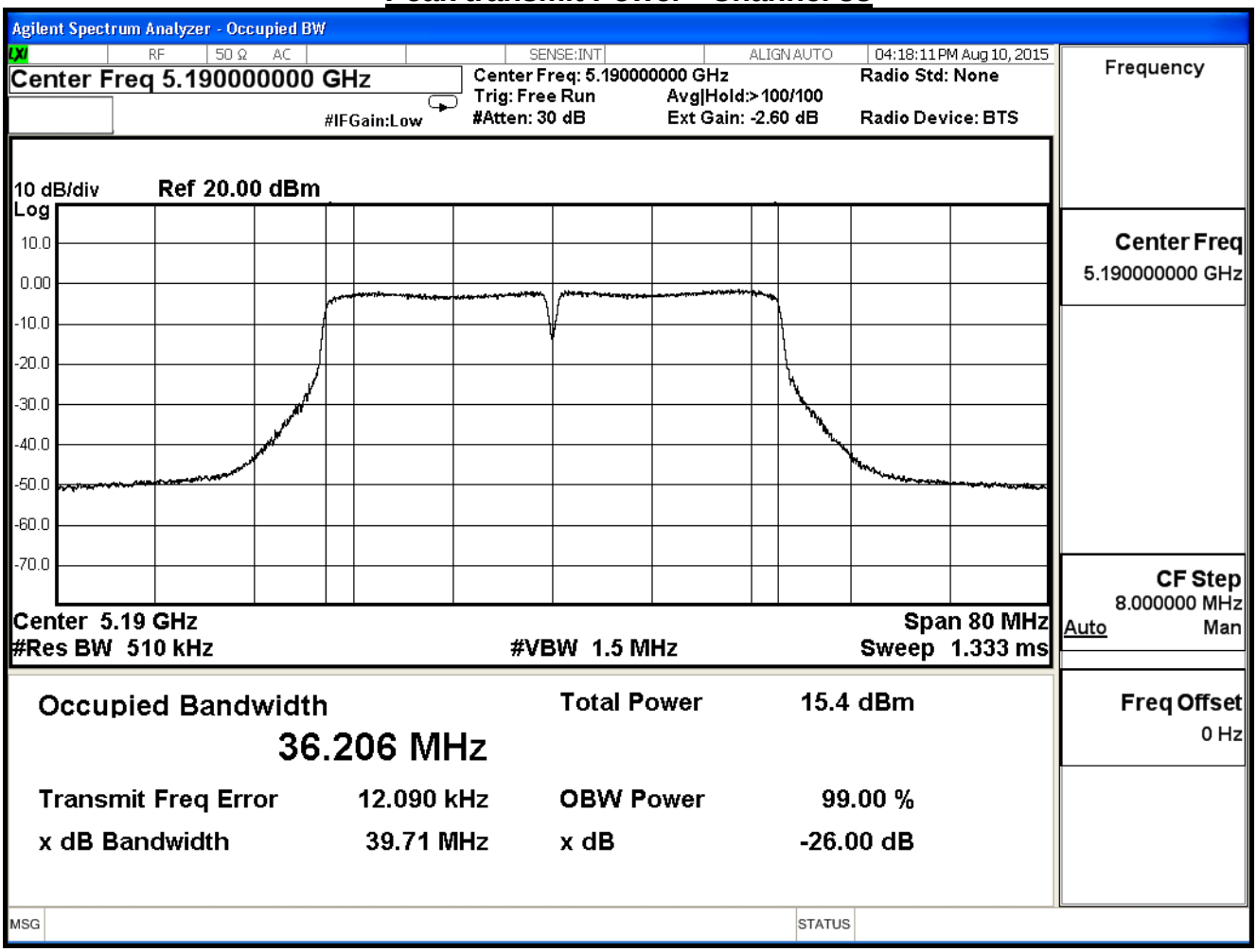
## Peak transmit Power - Channel 46



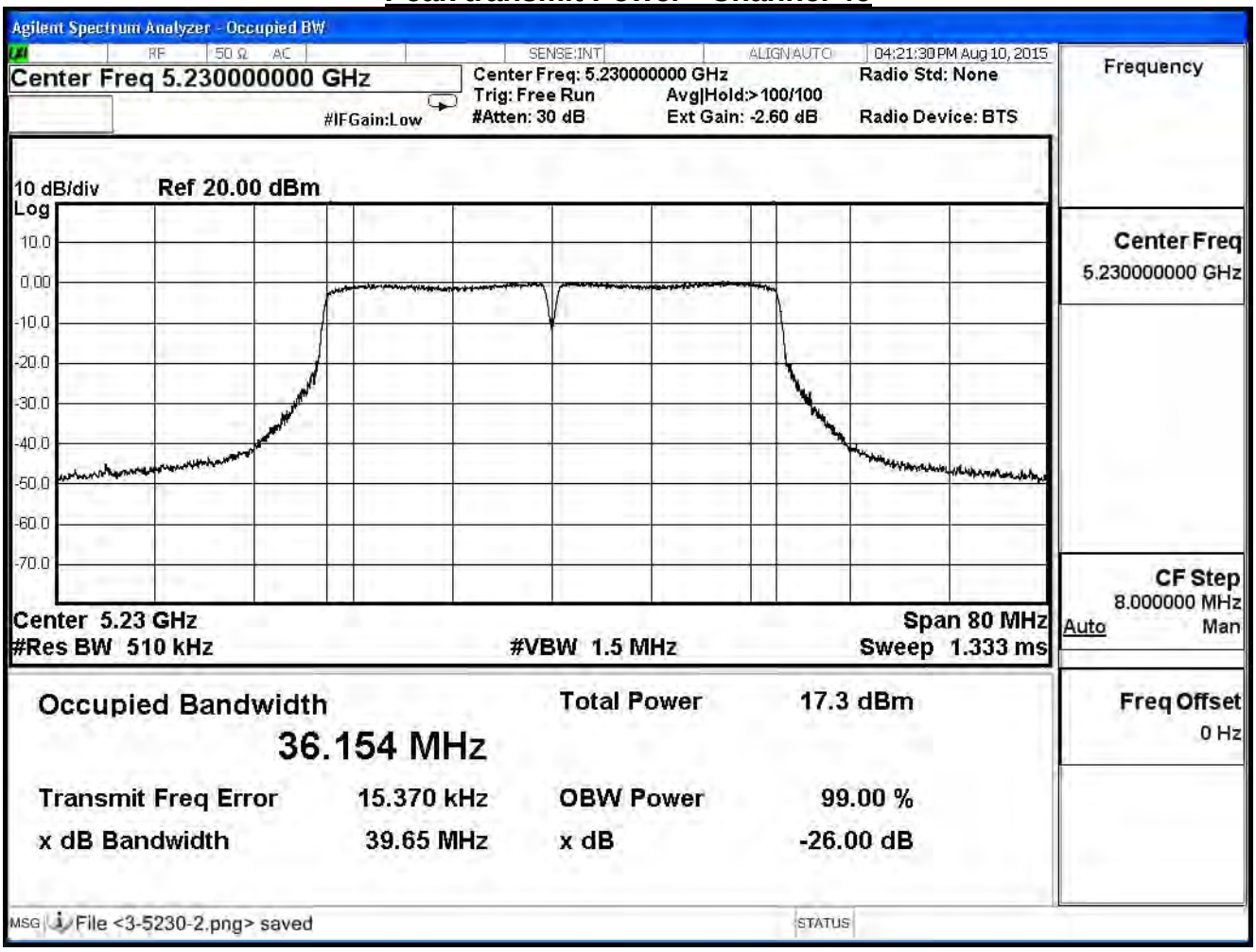
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 38 | 5190 | 39.71 | 36.21 | -- |
| 46 | 5230 | 39.65 | 36.15 | -- |

**Peak transmit Power - Channel 38**



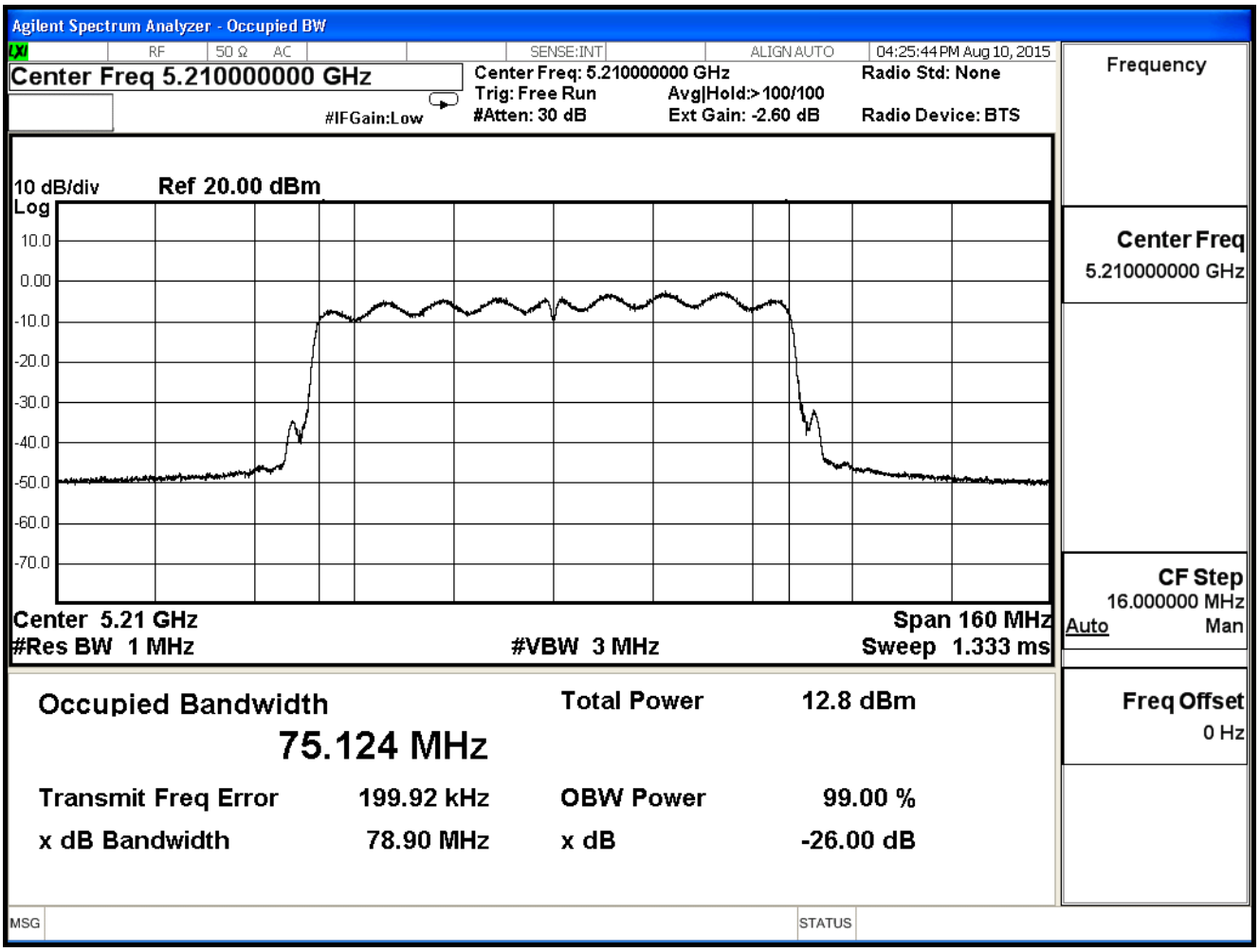
## Peak transmit Power - Channel 46



| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz)(ANT 0) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 42 | 5210 | 78.90 | 75.12 | -- |

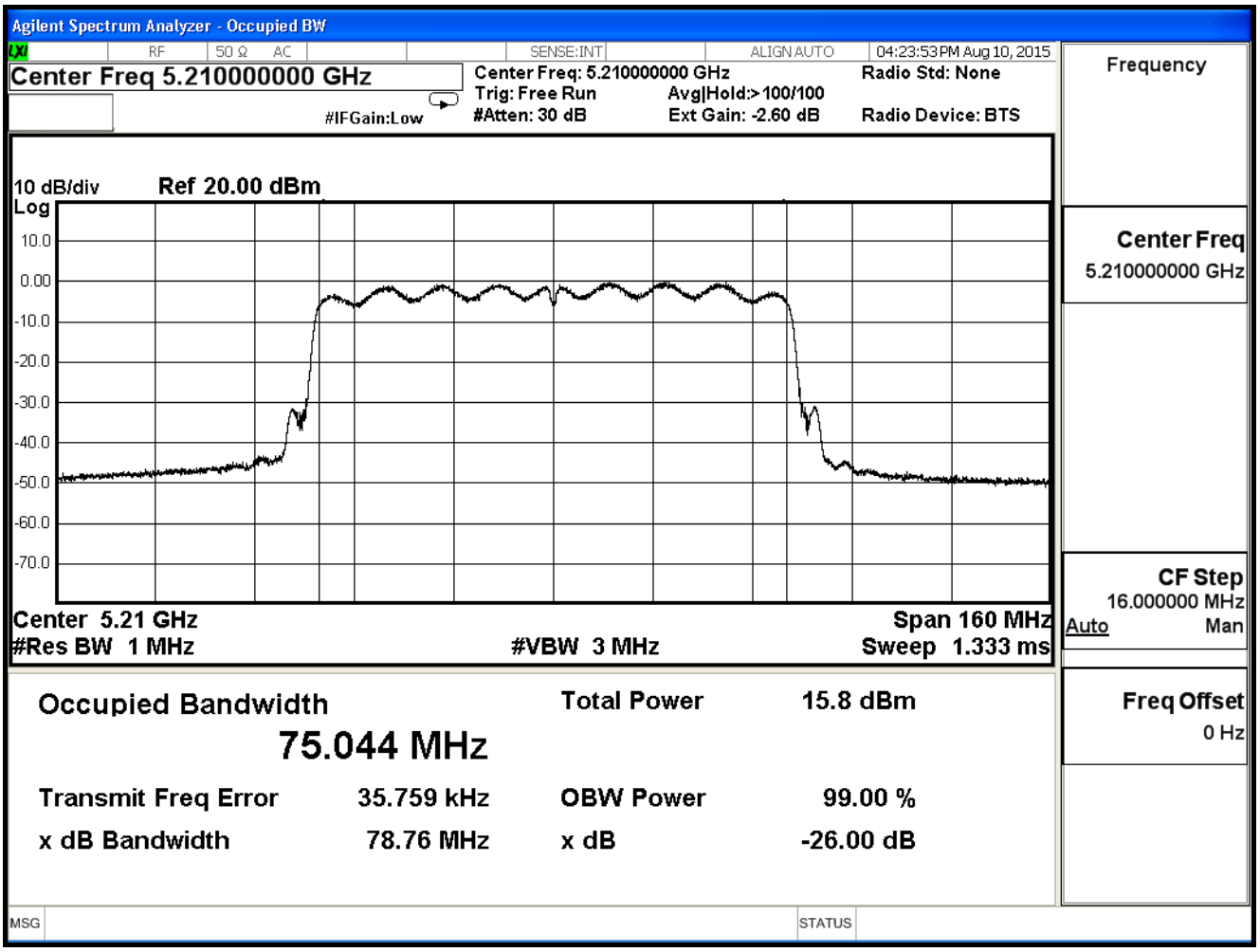
**99% & 26dB Bandwidth – Channel 42**



| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz)(ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 42 | 5210 | 78.76 | 75.04 | -- |

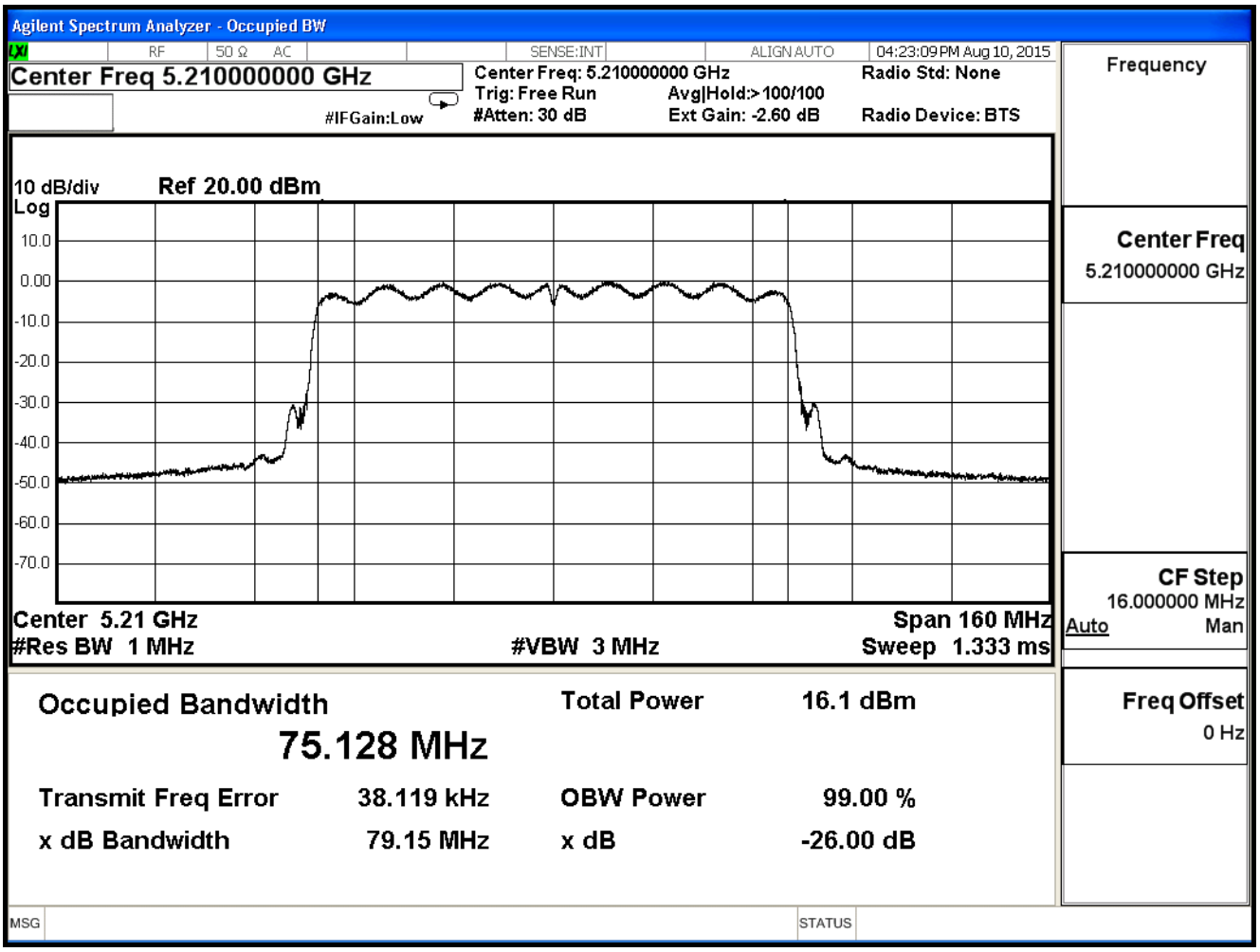
**99% & 26dB Bandwidth – Channel 42**



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | 99% & 26dB Bandwidth | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz)(ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB BW (MHz) | 99 % OBW (MHz) | Limit (MHz) |
| 42 | 5210 | 79.15 | 75.13 | -- |

**99% & 26dB Bandwidth – Channel 42**



# 4. Peak Transmit Output

## 4.1. Test Equipment

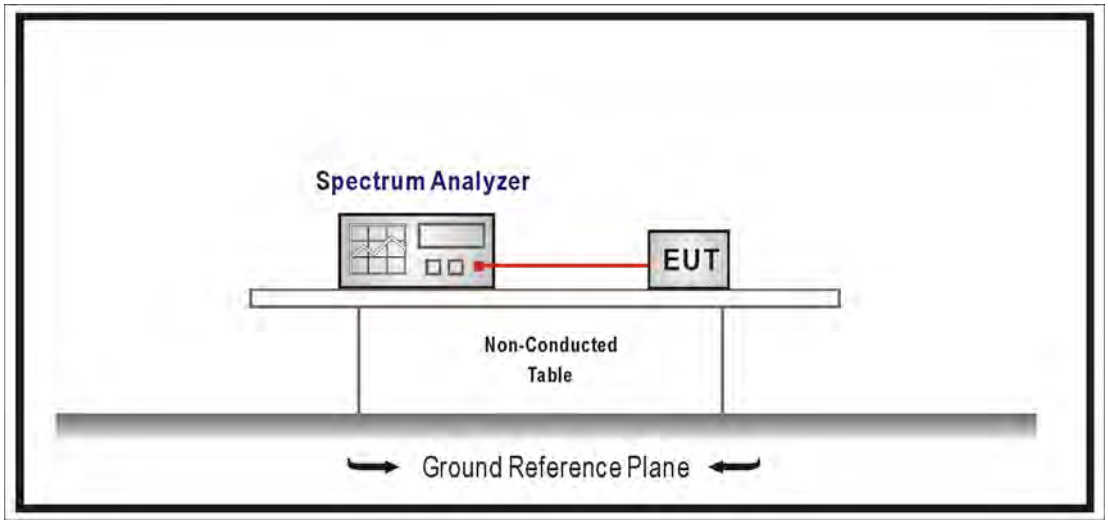
The following test equipments are used during the radiated emission tests:

Peak Transmit Output / SR7

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|---|---|---|---|---|
| Spectrum Analyzer | Agilent | N9010A-EXA | US47140172 | 2015/07/14 |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

## 4.2. Test Setup



## 4.3. Limits

1. For the band 5.15-5.25 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 1W. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
2. For the band 5.25-5.35 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 250 mW. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
3. For the band 5.725-5.850 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 1W. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

## 4.4. Test Procedure

The EUT was setup to ANSI C63.10:2013; tested to U-NII test procedure of KDB 789033 D02 for compliance to FCC 47CFR Subpart E requirements. The Method SA-1 of the Maximum conducted output power was used.

Set RBW=1MHz, VBW=3MHz with RMS detector and trace average 100 traces in power averaging mode. Set span to encompass the entire emission bandwidth (EBW) of the signal. Compute power by integrating the spectrum across the 26 dB EBW of the signal.

## 4.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

## 4.6. Test Result

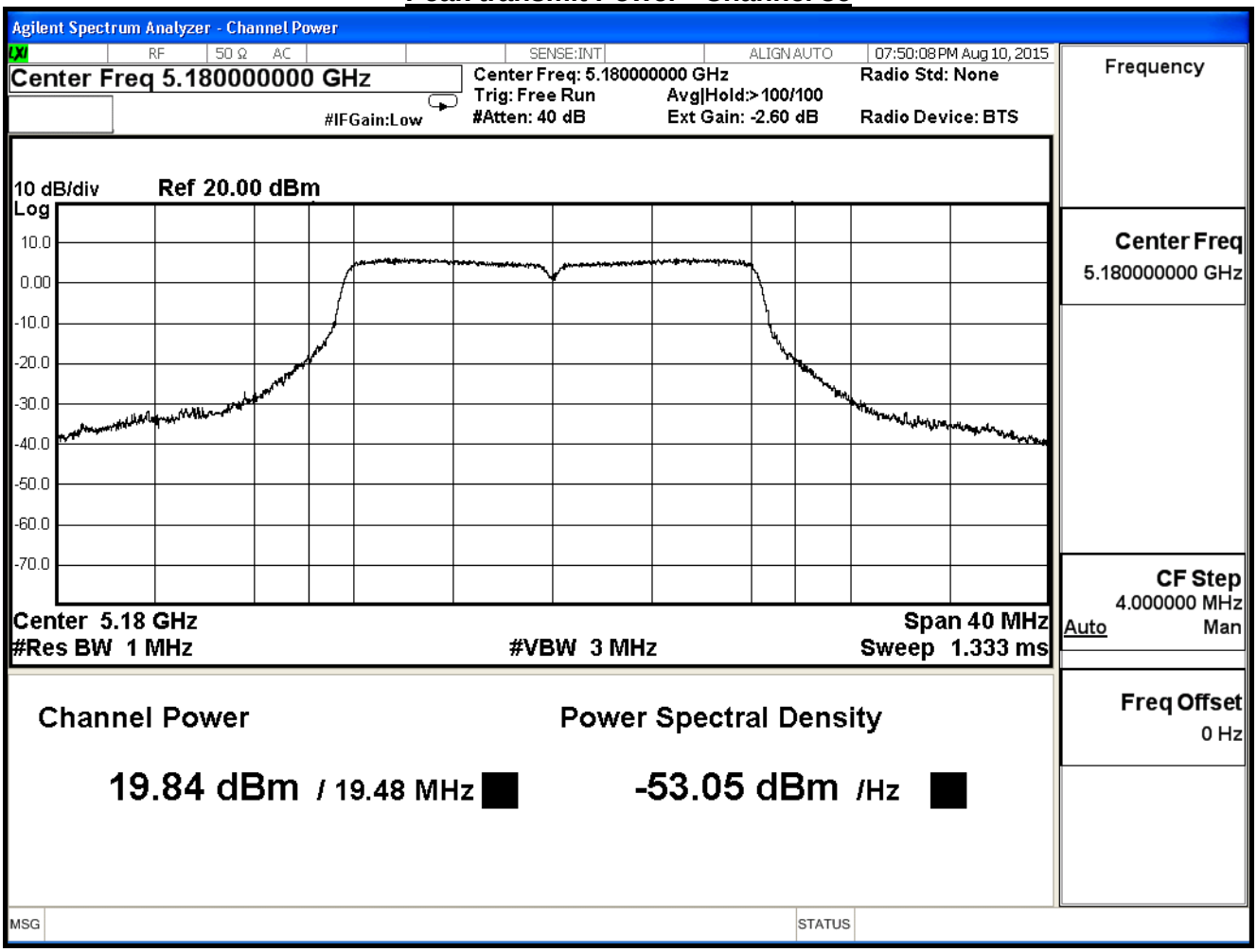
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| 802.11a (ANT 0) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 36 | 5180 | 19.48 | 19.84 | ≤30 | Pass |
| 44 | 5220 | 19.69 | 21.43 | ≤30 | Pass |
| 48 | 5240 | 19.83 | 21.41 | ≤30 | Pass |

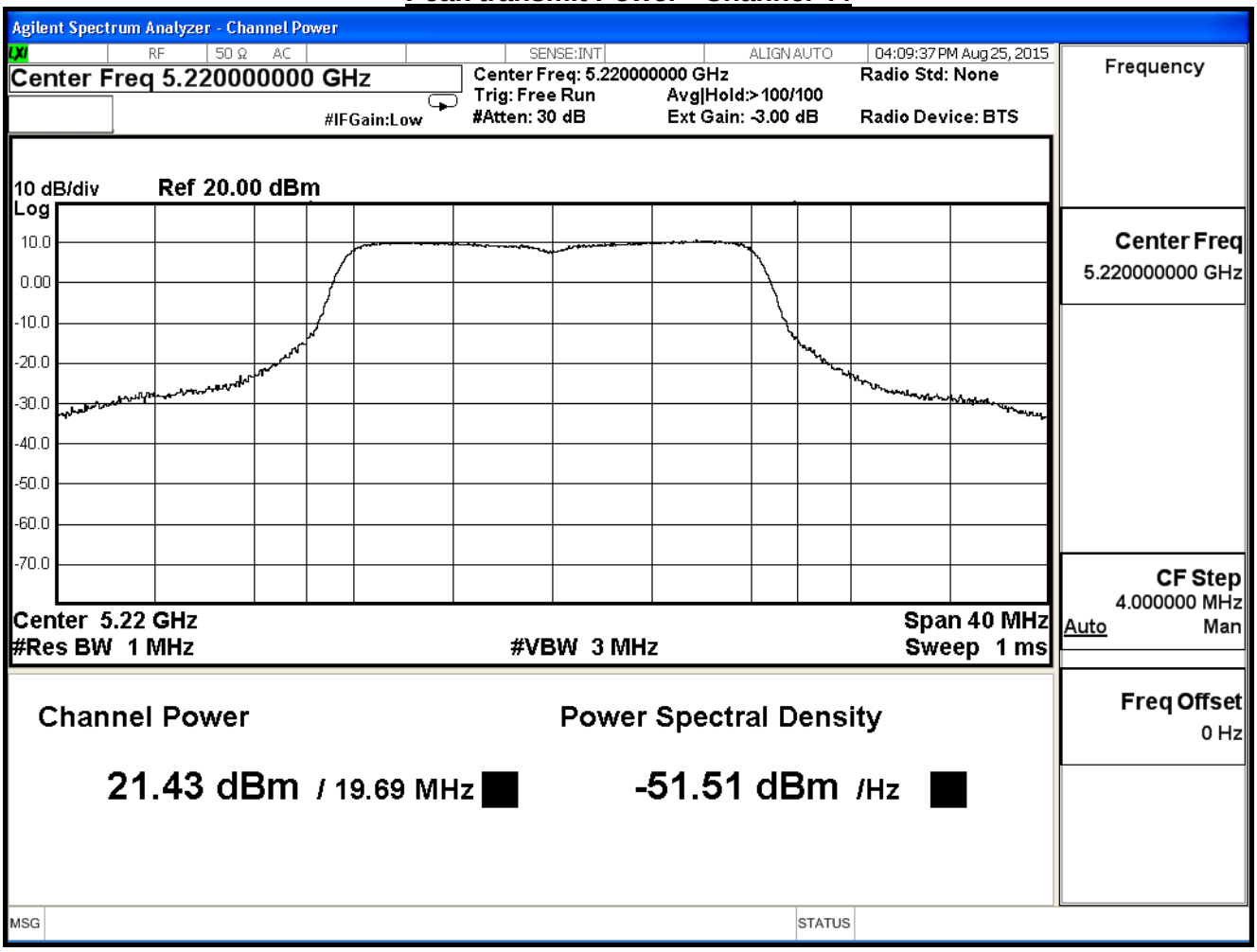
The worst emission of data rate is 6Mbps.

| Peak Power Output (dBm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel No | Frequency (MHz) | Data Rate | | | | | | | Required Limit |
| | | 6 | 12 | 18 | 24 | 36 | 48 | 54 | |
| 36 | 5180 | 19.84 | -- | -- | -- | -- | -- | -- | 30dBm |
| 44 | 5220 | 21.43 | 21.33 | 21.23 | 21.13 | 21.03 | 20.83 | 20.73 | 30dBm |
| 48 | 5240 | 21.41 | -- | -- | -- | -- | -- | -- | 30dBm |

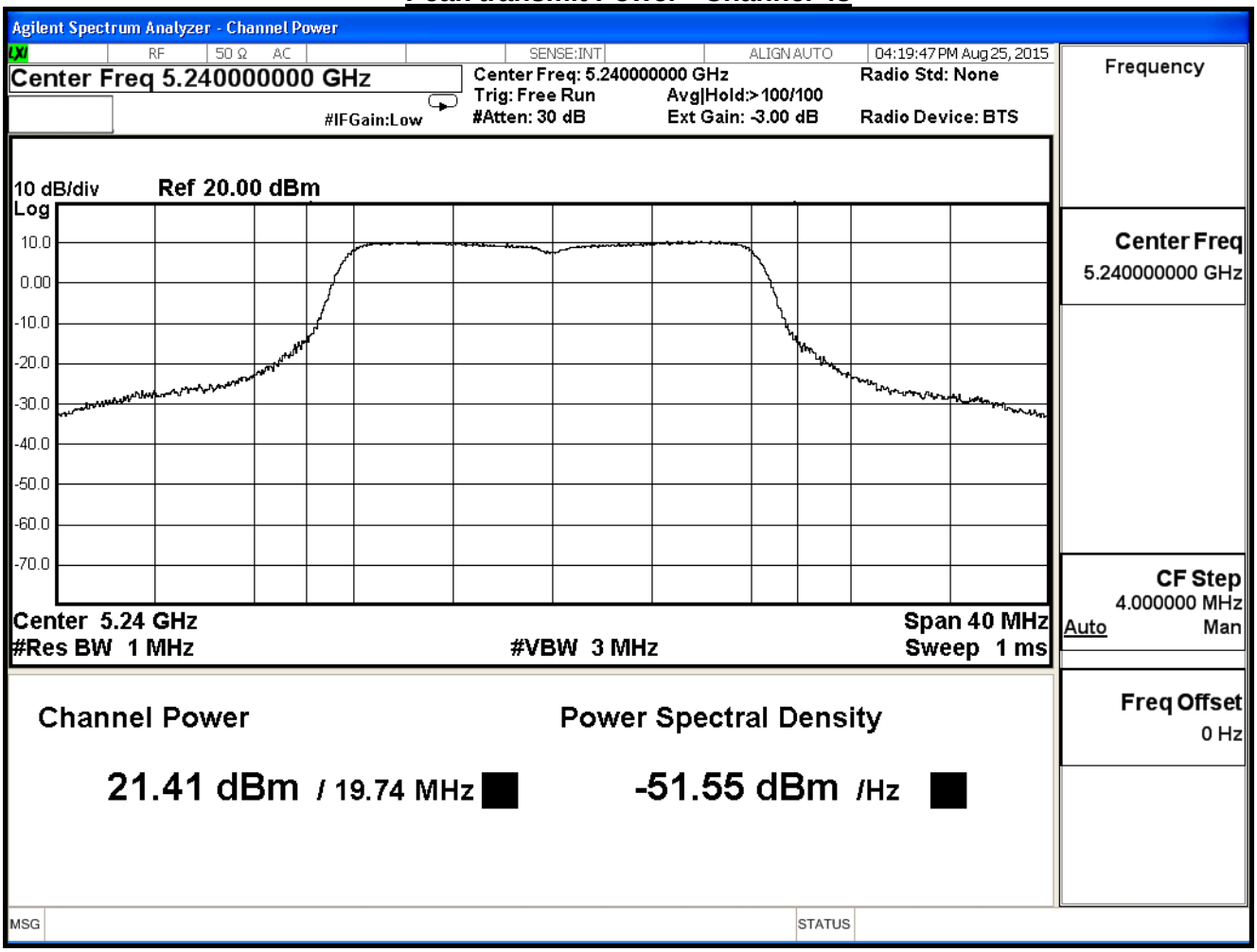
**Peak transmit Power - Channel 36**



**Peak transmit Power - Channel 44**



**Peak transmit Power - Channel 48**



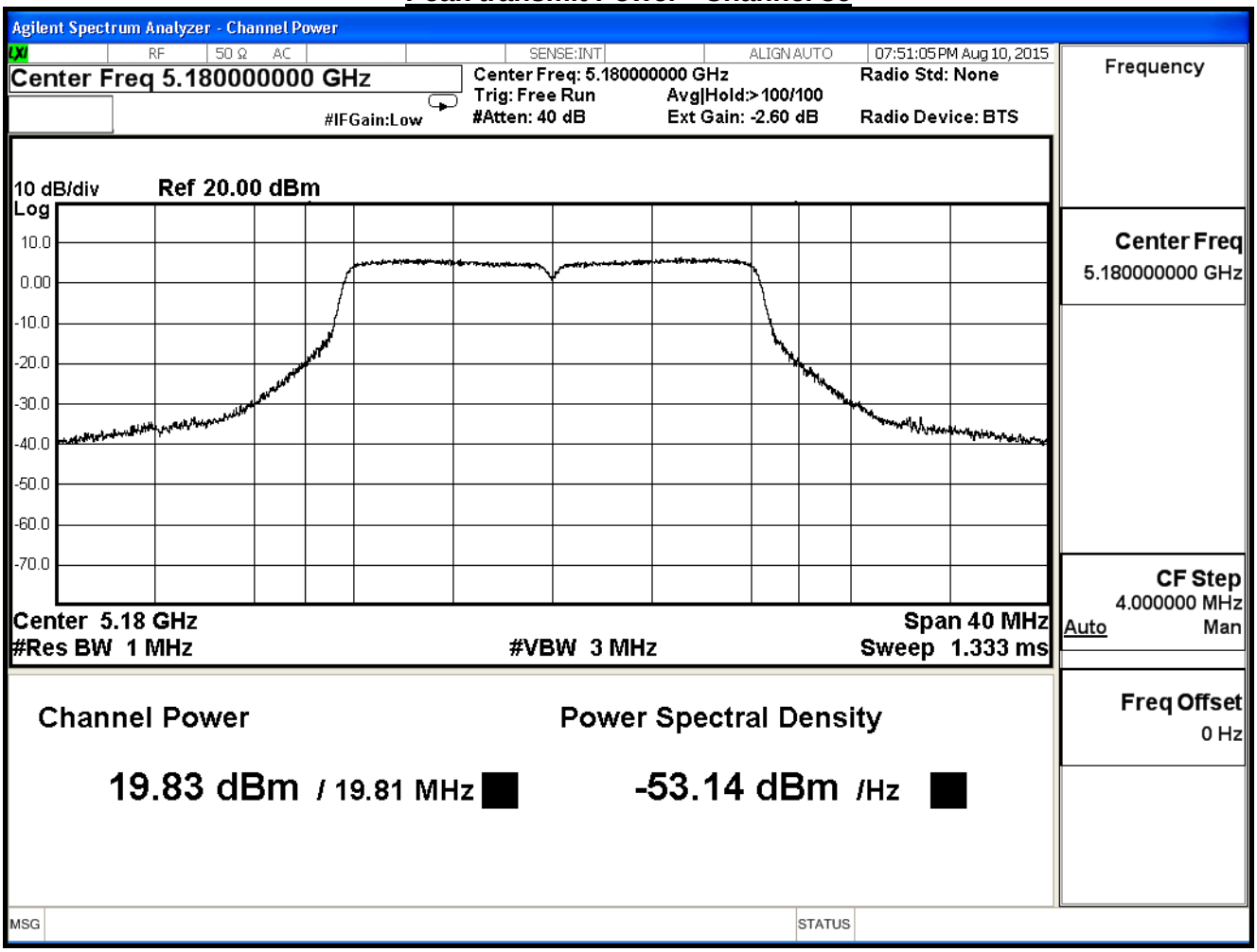
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| 802.11a (ANT 1) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 36 | 5180 | 19.81 | 19.83 | ≤30 | Pass |
| 44 | 5220 | 19.66 | 21.44 | ≤30 | Pass |
| 48 | 5240 | 19.72 | 21.28 | ≤30 | Pass |

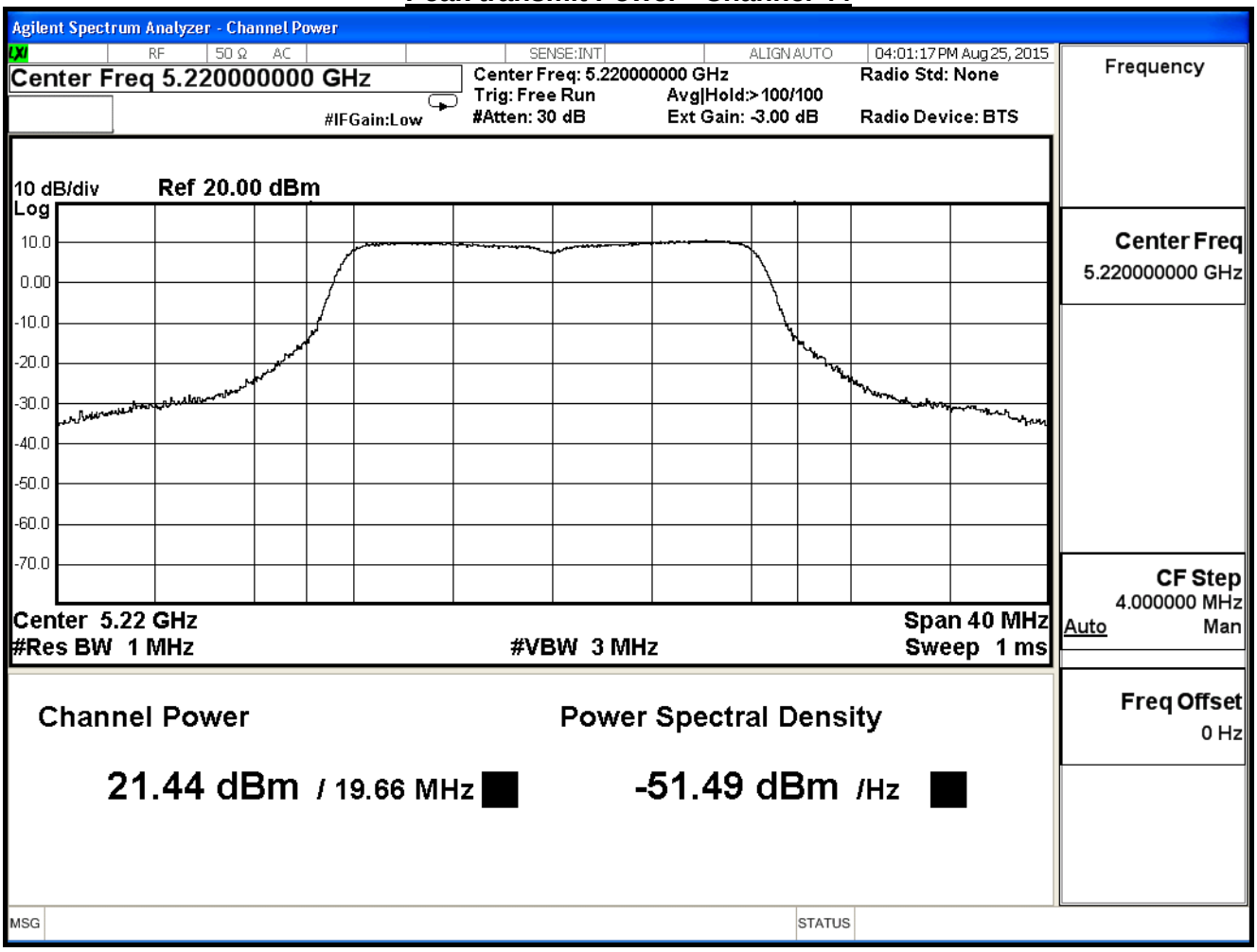
The worst emission of data rate is 6Mbps.

| Peak Power Output (dBm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel No | Frequency (MHz) | Data Rate | | | | | | | Required Limit |
| | | 6 | 12 | 18 | 24 | 36 | 48 | 54 | |
| 36 | 5180 | 19.83 | -- | -- | -- | -- | -- | -- | 30dBm |
| 44 | 5220 | 21.44 | 21.24 | 21.14 | 21.04 | 20.84 | 20.74 | 20.54 | 30dBm |
| 48 | 5240 | 21.28 | -- | -- | -- | -- | -- | -- | 30dBm |

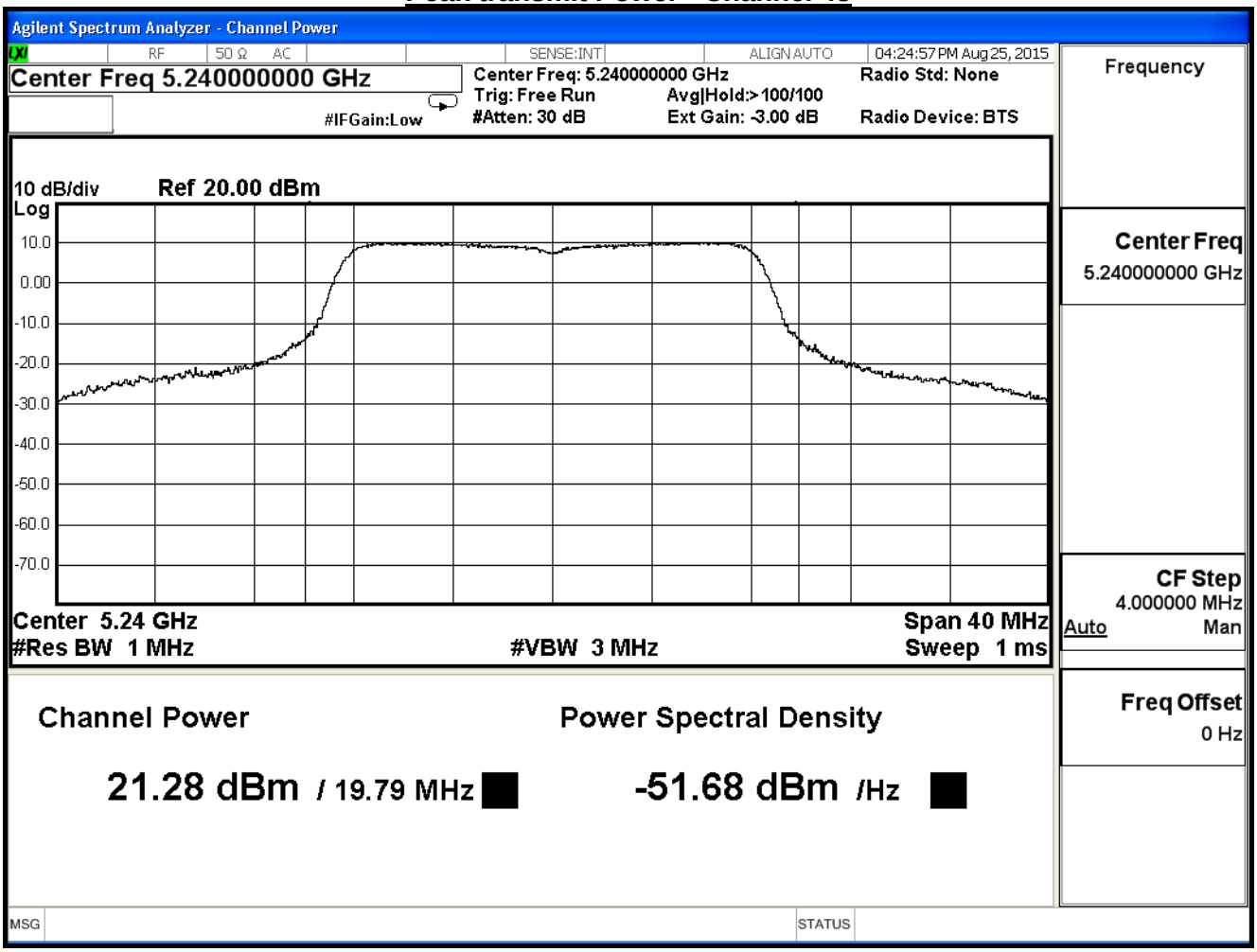
**Peak transmit Power - Channel 36**



**Peak transmit Power - Channel 44**



**Peak transmit Power - Channel 48**



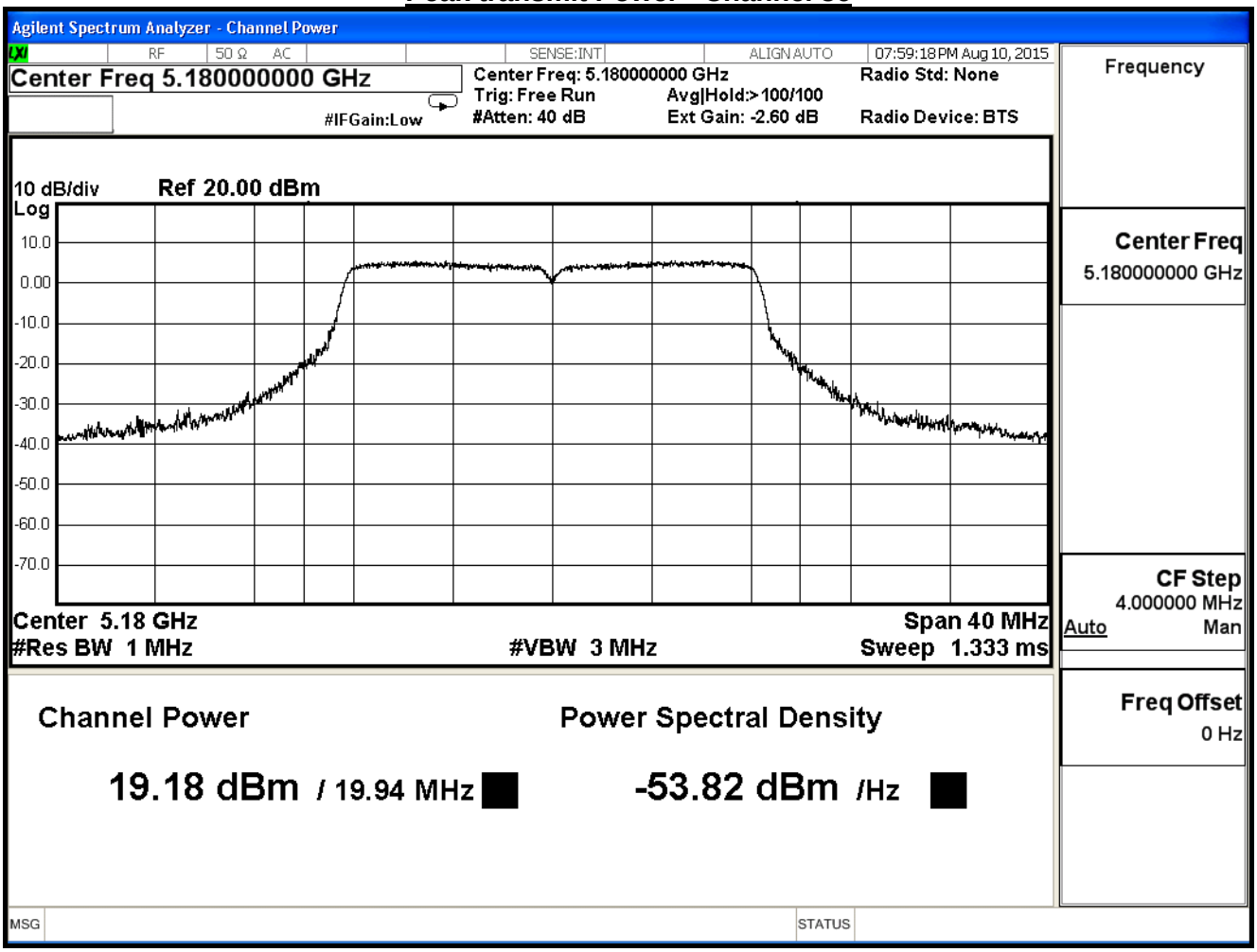
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| 802.11a (ANT 2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 36 | 5180 | 19.94 | 19.18 | ≤30 | Pass |
| 44 | 5220 | 19.96 | 21.44 | ≤30 | Pass |
| 48 | 5240 | 19.81 | 21.46 | ≤30 | Pass |

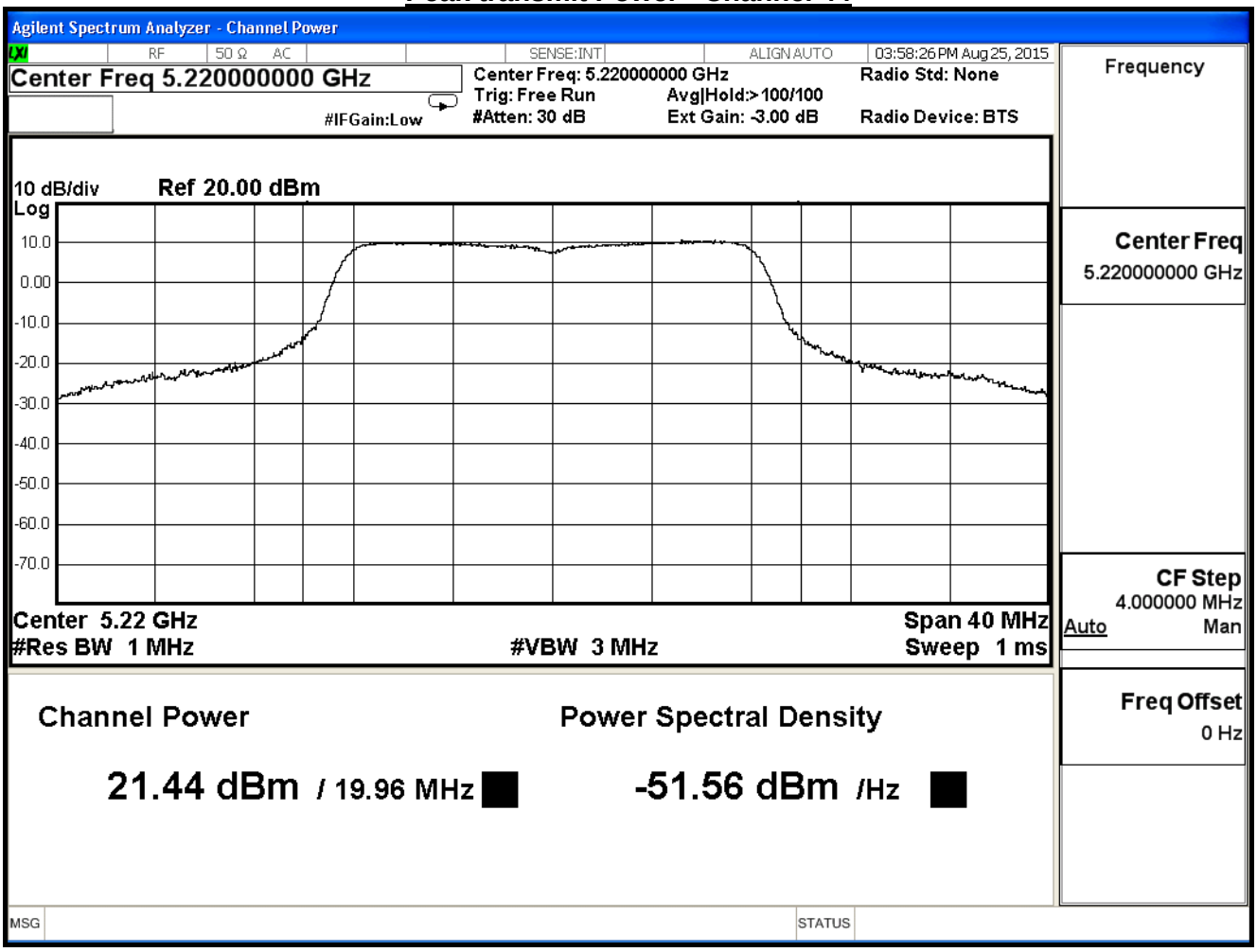
The worst emission of data rate is 6Mbps.

| Peak Power Output (dBm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel No | Frequency (MHz) | Data Rate | | | | | | | Required Limit |
| | | 6 | 12 | 18 | 24 | 36 | 48 | 54 | |
| 36 | 5180 | 19.18 | -- | -- | -- | -- | -- | -- | 30dBm |
| 44 | 5220 | 21.44 | 21.34 | 21.14 | 21.04 | 20.94 | 20.84 | 20.64 | 30dBm |
| 48 | 5240 | 21.46 | -- | -- | -- | -- | -- | -- | 30dBm |

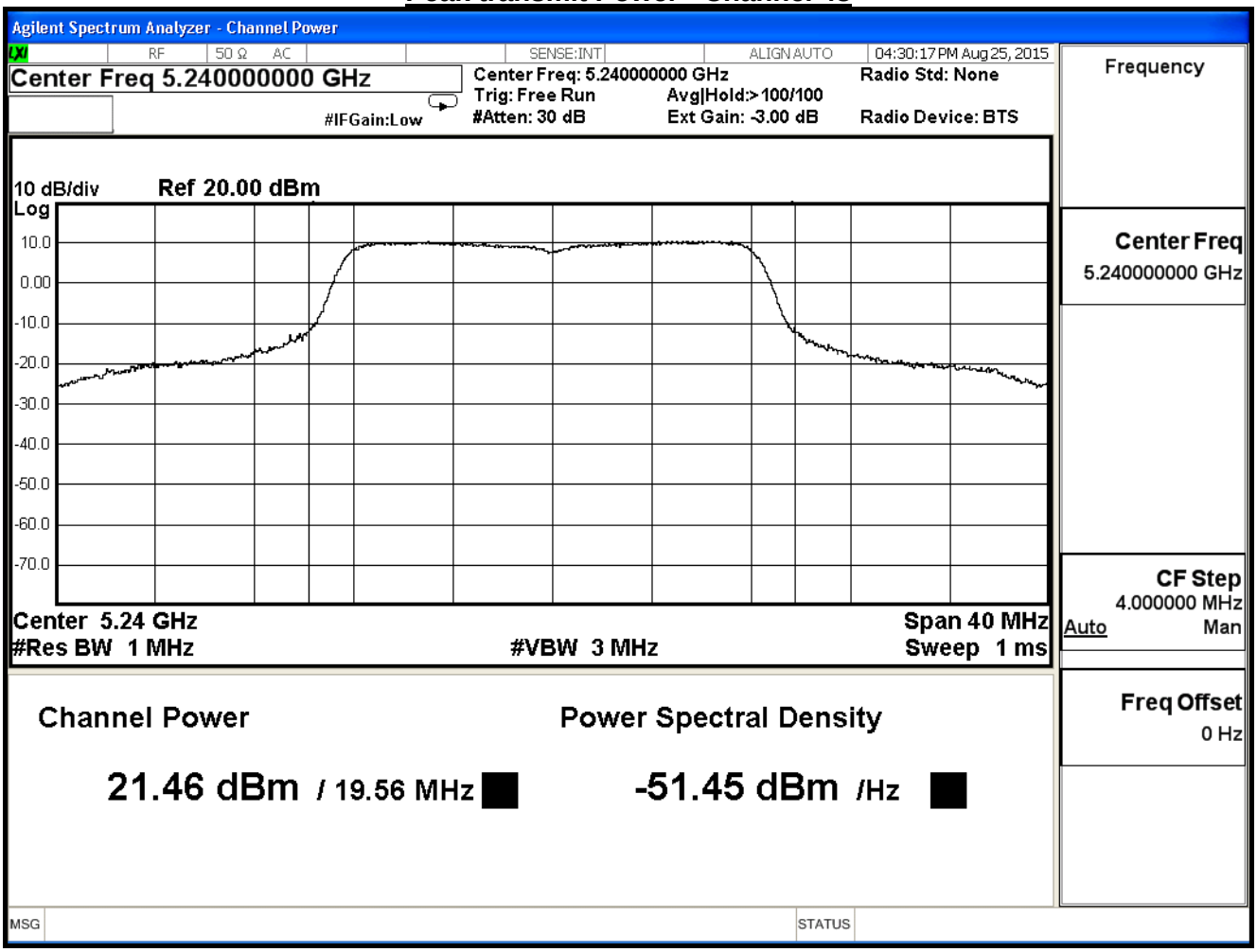
**Peak transmit Power - Channel 36**



**Peak transmit Power - Channel 44**



**Peak transmit Power - Channel 48**



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| 802.11a (ANT 0+1+2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Output Power (mW) | Output Power (dBm) | Required Limit (dBm) | Result |
| 36 | 5180 | 275.34 | 24.40 | ≤30 | Pass |
| 44 | 5220 | 417.63 | 26.21 | ≤30 | Pass |
| 48 | 5240 | 412.59 | 26.16 | ≤30 | Pass |

| Peak Power Output (dBm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel No | Frequency (MHz) | Data Rate | | | | | | | Required Limit |
| | | 6 | 12 | 18 | 24 | 36 | 48 | 54 | |
| 36 | 5180 | 24.40 | -- | -- | -- | -- | -- | -- | 30dBm |
| 44 | 5220 | 26.21 | 26.07 | 25.94 | 25.84 | 25.71 | 25.57 | 25.41 | 30dBm |
| 48 | 5240 | 26.16 | -- | -- | -- | -- | -- | -- | 30dBm |

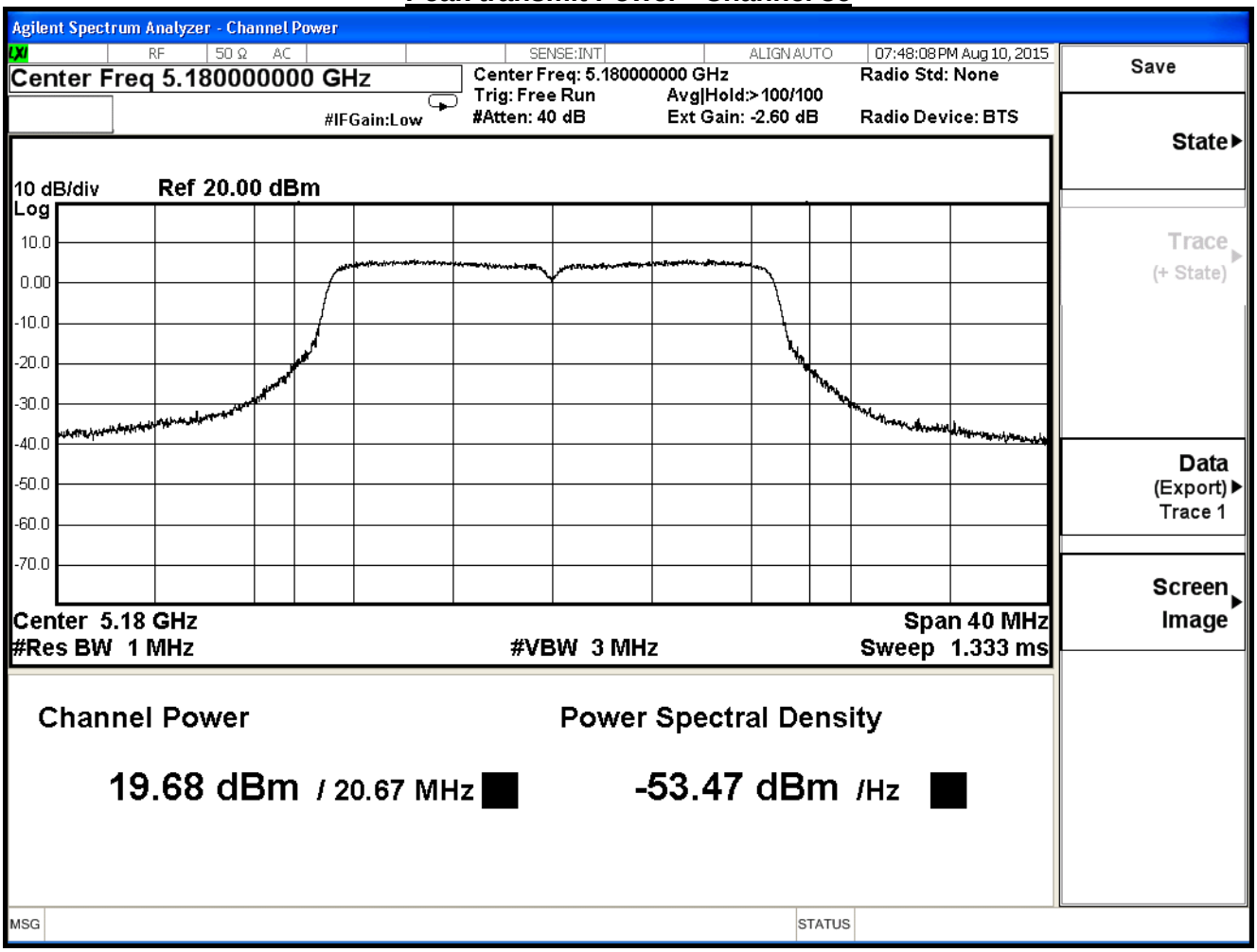
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 0) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 36 | 5180 | 20.67 | 19.68 | ≤30 | Pass |
| 44 | 5220 | 20.66 | 21.52 | ≤30 | Pass |
| 48 | 5240 | 20.44 | 21.53 | ≤30 | Pass |

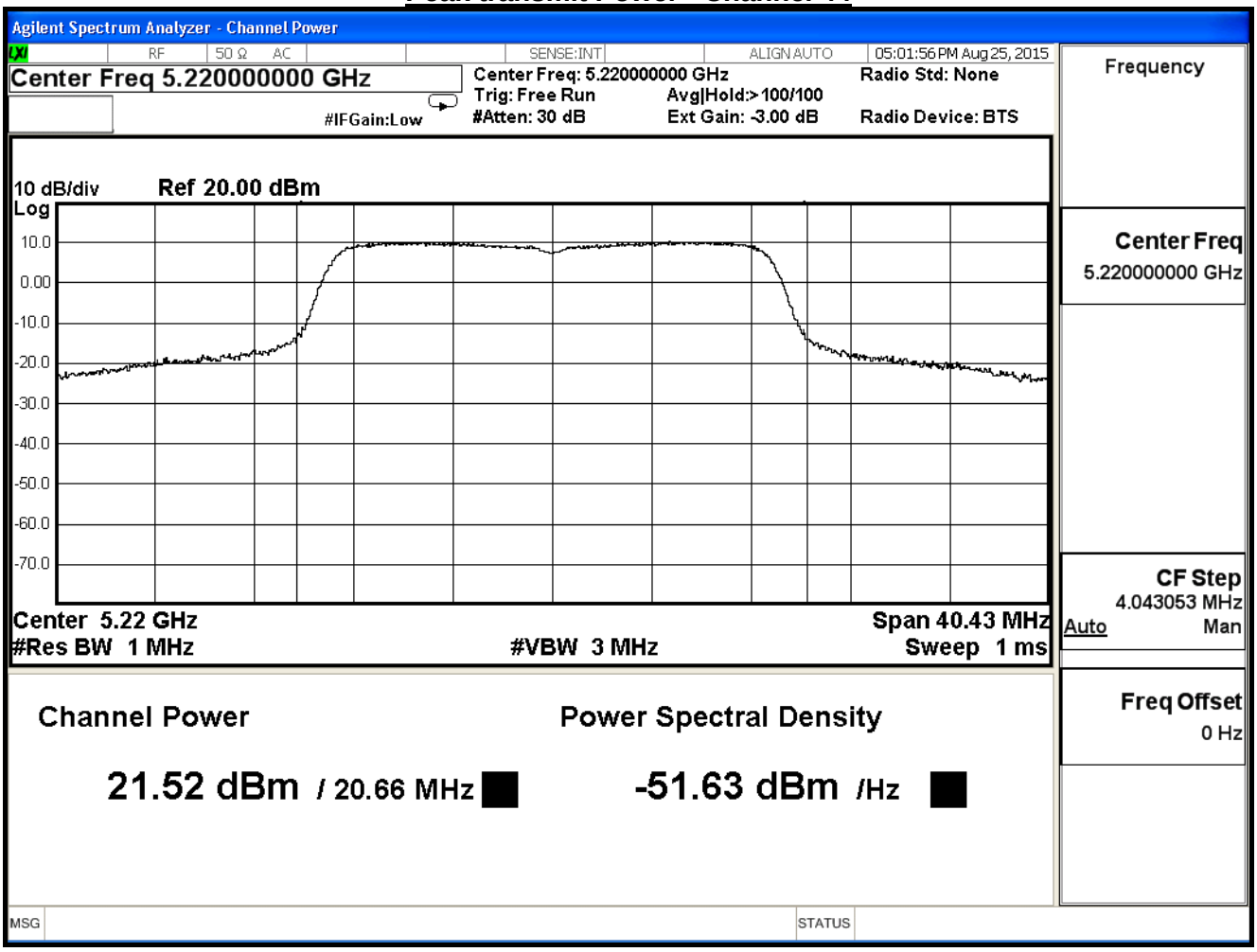
The worst emission of data rate is 6.5 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 6.5 | 13 | 19.5 | 26 | 39 | 52 | 58.5 | 65 | |
| 36 | 5180 | 19.68 | -- | -- | -- | -- | -- | -- | -- | 30dBm |
| 44 | 5220 | 21.52 | 21.28 | 21.16 | 20.92 | 20.68 | 20.56 | 20.32 | 20.20 | 30dBm |
| 48 | 5240 | 21.53 | -- | -- | -- | -- | -- | -- | -- | 30dBm |

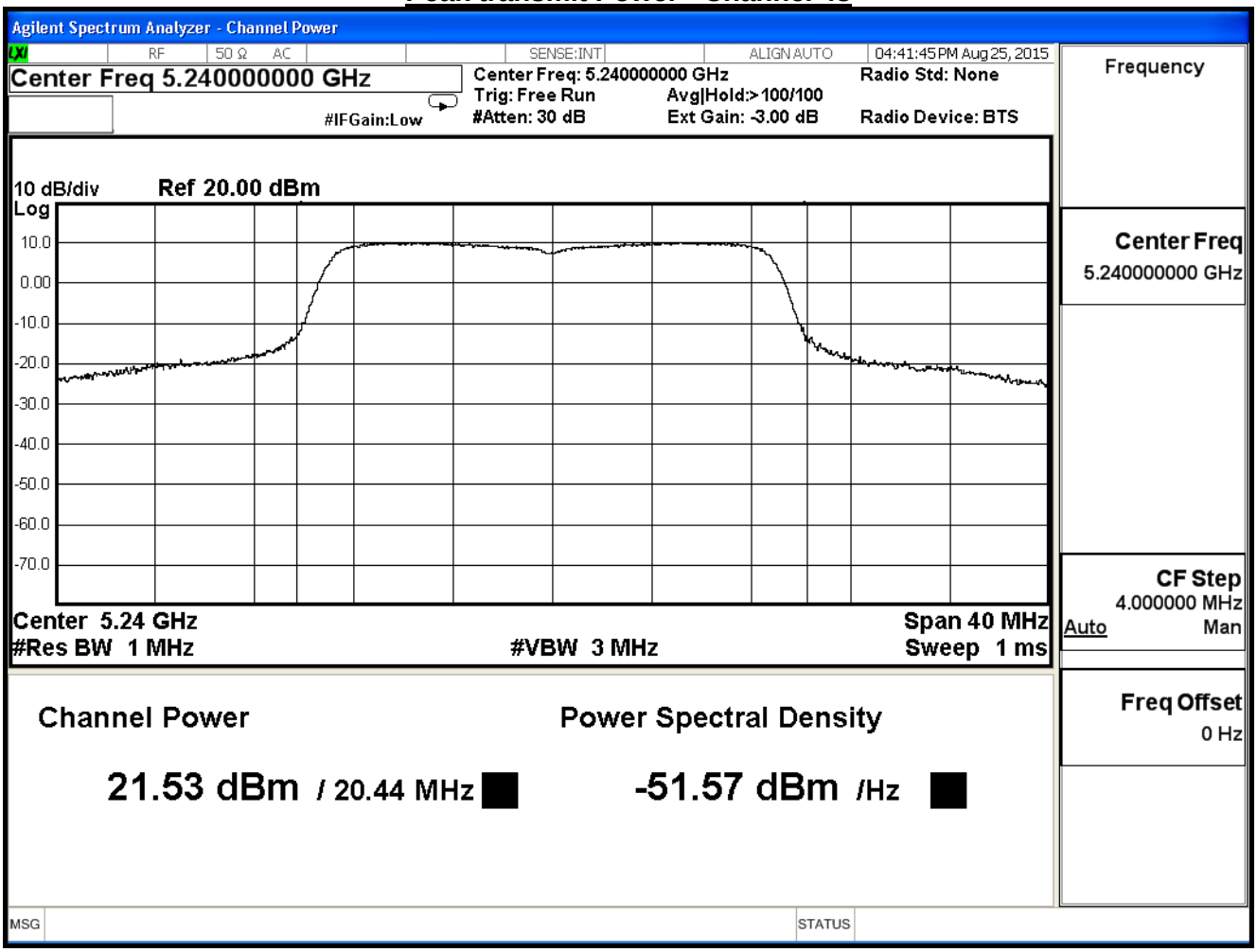
**Peak transmit Power - Channel 36**



**Peak transmit Power - Channel 44**



**Peak transmit Power - Channel 48**



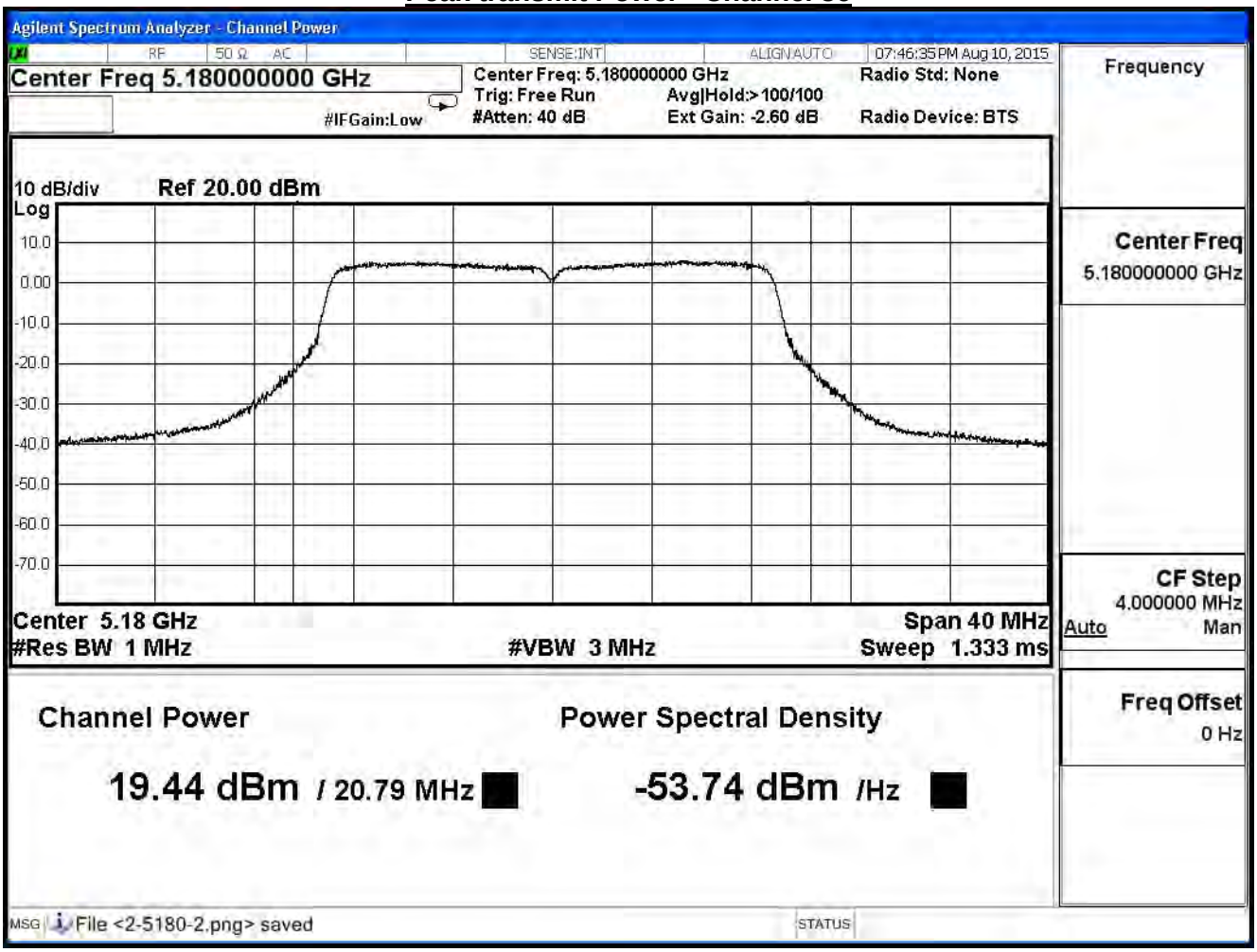
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 1) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 36 | 5180 | 20.79 | 19.44 | ≤30 | Pass |
| 44 | 5220 | 20.45 | 21.24 | ≤30 | Pass |
| 48 | 5240 | 20.59 | 21.45 | ≤30 | Pass |

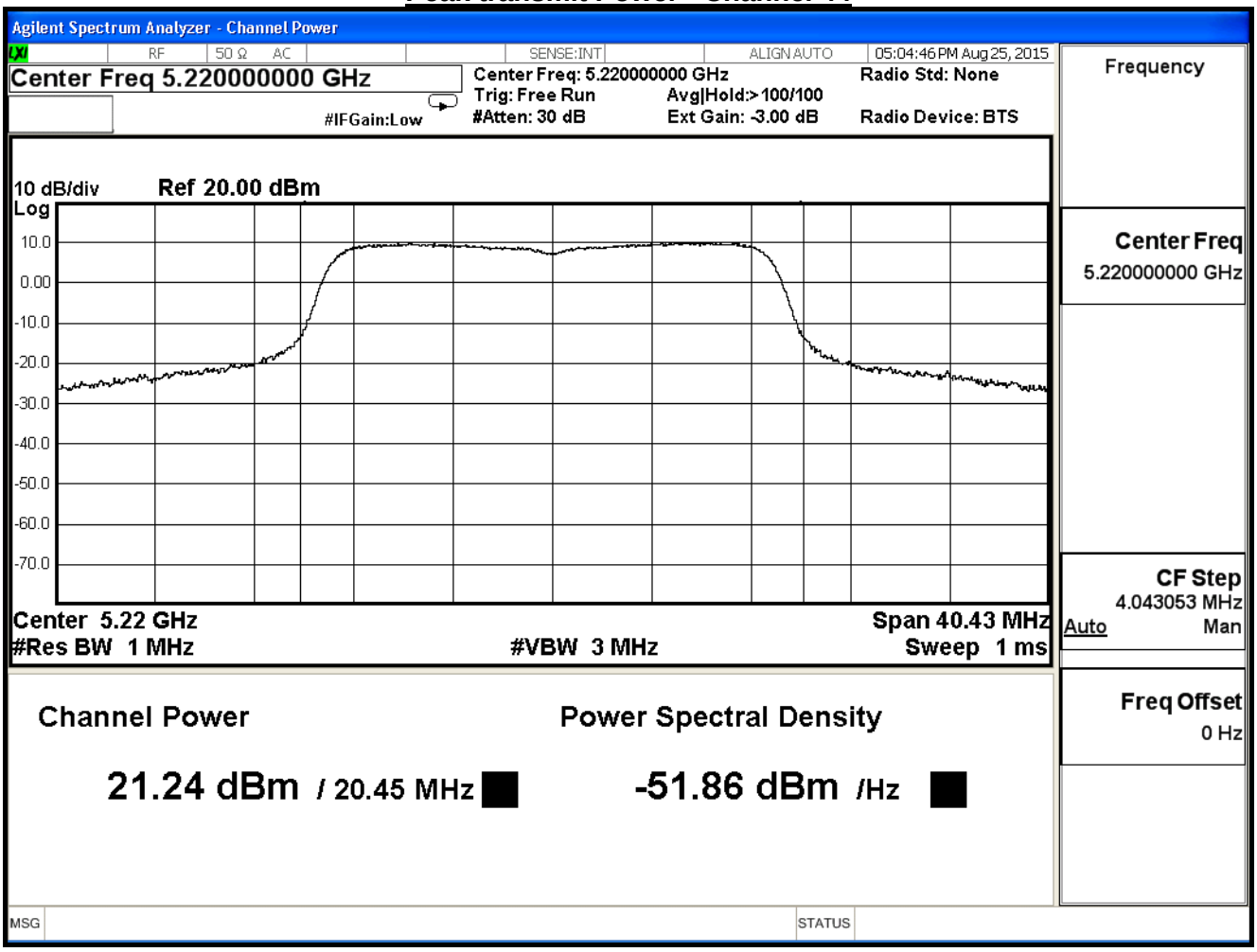
The worst emission of data rate is 6.5Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 6.5 | 13 | 19.5 | 26 | 39 | 52 | 58.5 | 65 | |
| 36 | 5180 | 19.44 | -- | -- | -- | -- | -- | -- | -- | 30dBm |
| 44 | 5220 | 21.24 | 21.12 | 21.00 | 20.76 | 20.64 | 20.52 | 20.28 | 20.04 | 30dBm |
| 48 | 5240 | 21.45 | -- | -- | -- | -- | -- | -- | -- | 30dBm |

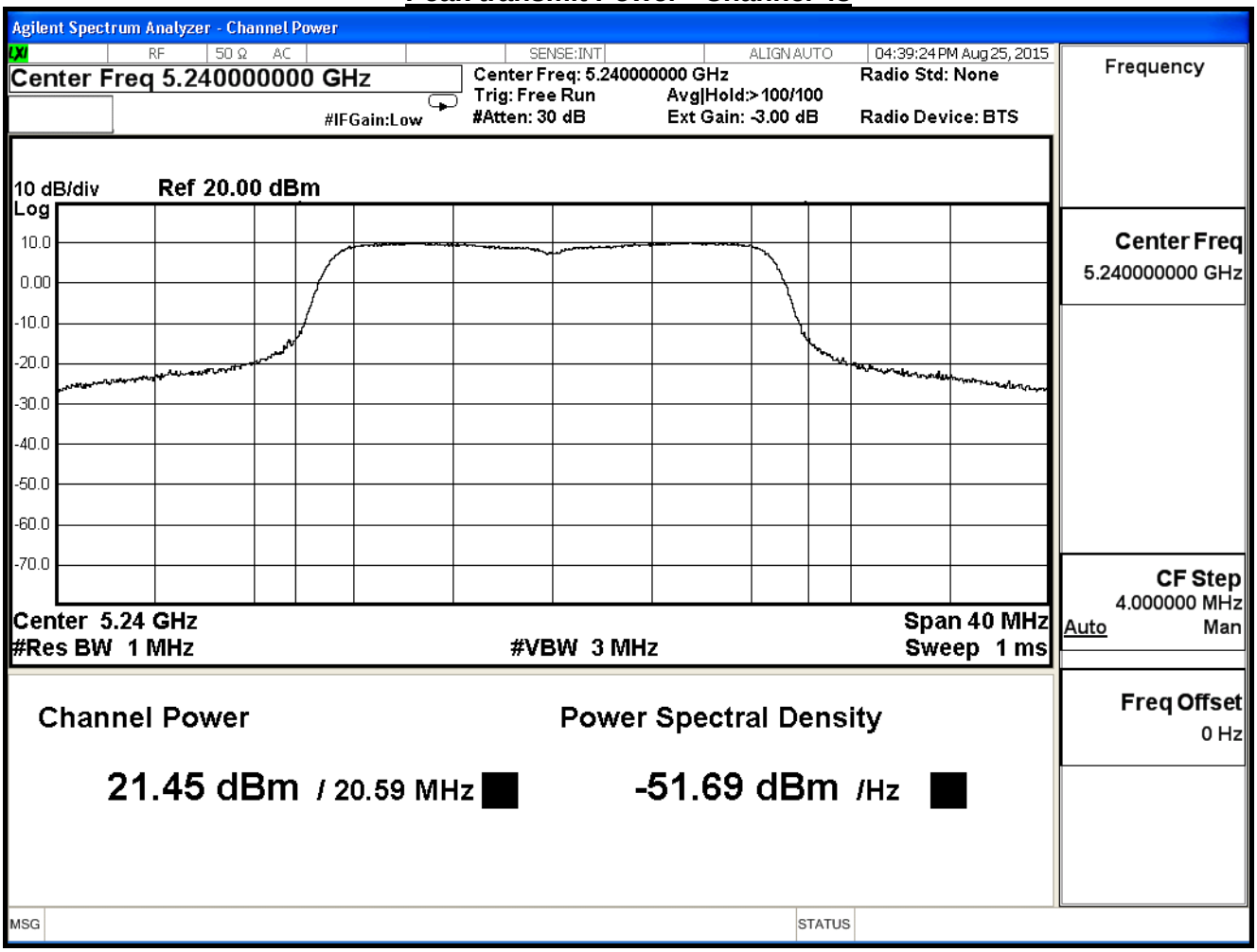
**Peak transmit Power - Channel 36**



**Peak transmit Power - Channel 44**



## Peak transmit Power - Channel 48



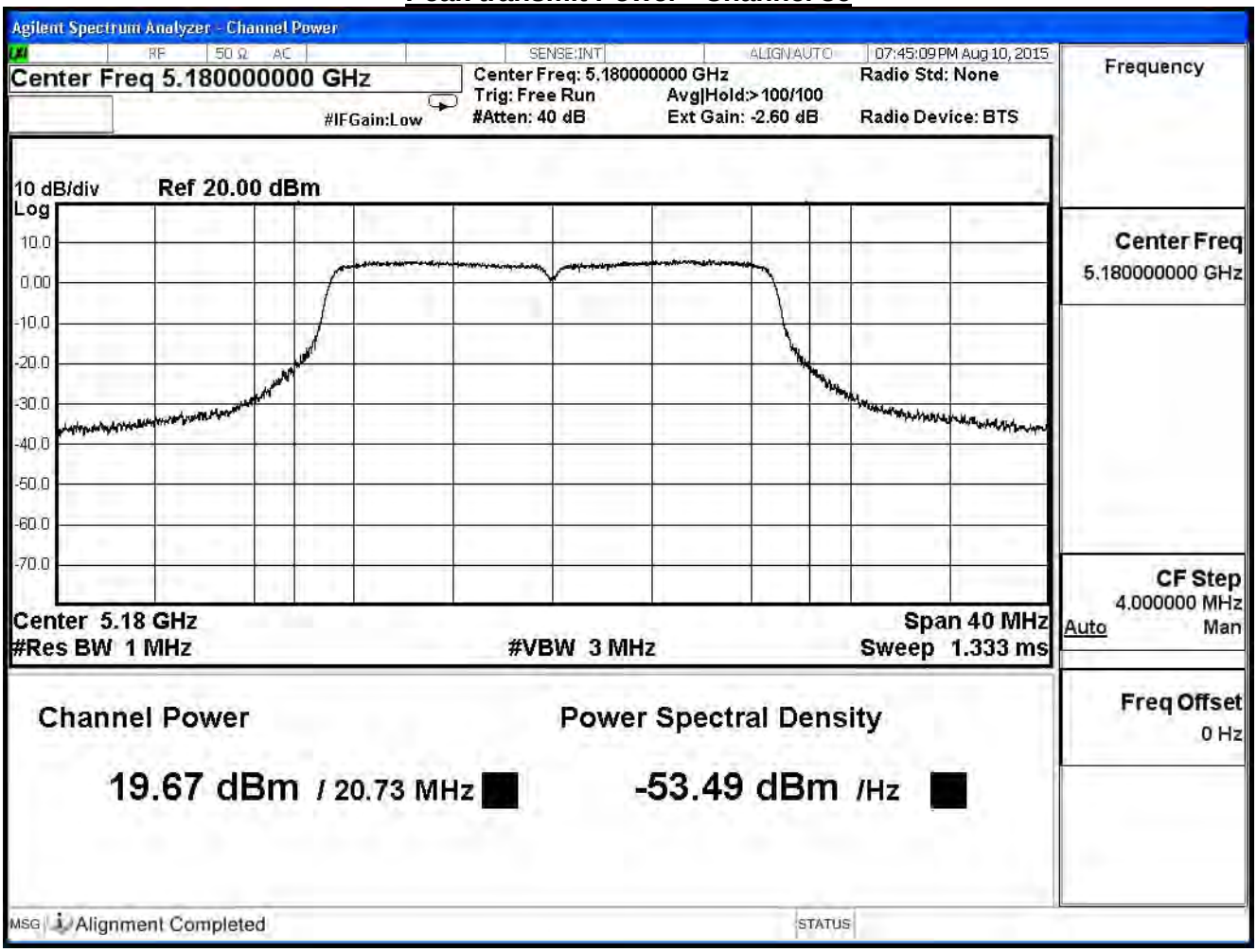
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 36 | 5180 | 20.73 | 19.67 | ≤30 | Pass |
| 44 | 5220 | 20.60 | 21.35 | ≤30 | Pass |
| 48 | 5240 | 20.72 | 21.76 | ≤30 | Pass |

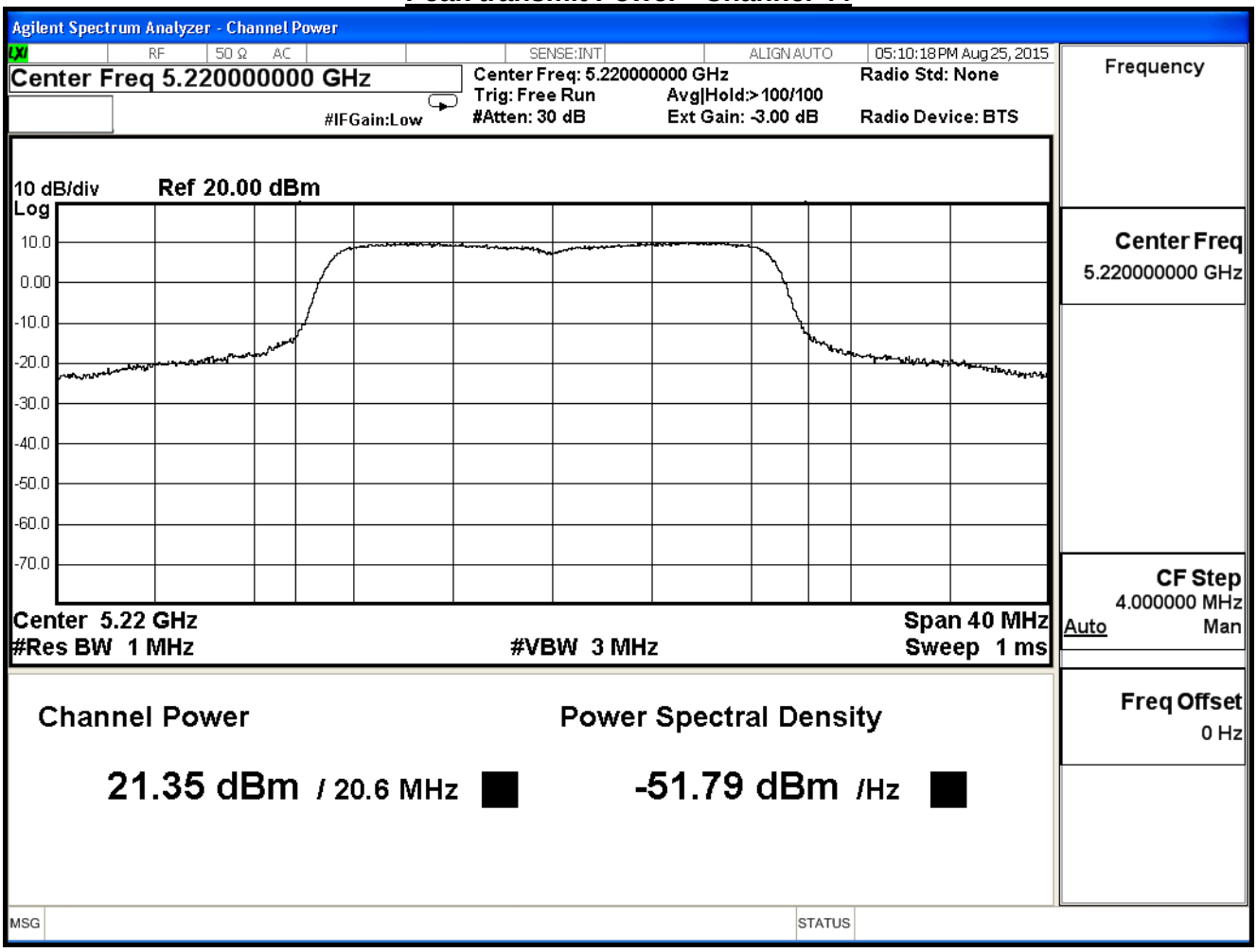
The worst emission of data rate is 6.5Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 6.5 | 13 | 19.5 | 26 | 39 | 52 | 58.5 | 65 | |
| 36 | 5180 | 19.67 | -- | -- | -- | -- | -- | -- | -- | 30dBm |
| 44 | 5220 | 21.35 | 21.23 | 21.11 | 20.87 | 20.63 | 20.51 | 20.39 | 20.15 | 30dBm |
| 48 | 5240 | 21.76 | -- | -- | -- | -- | -- | -- | -- | 30dBm |

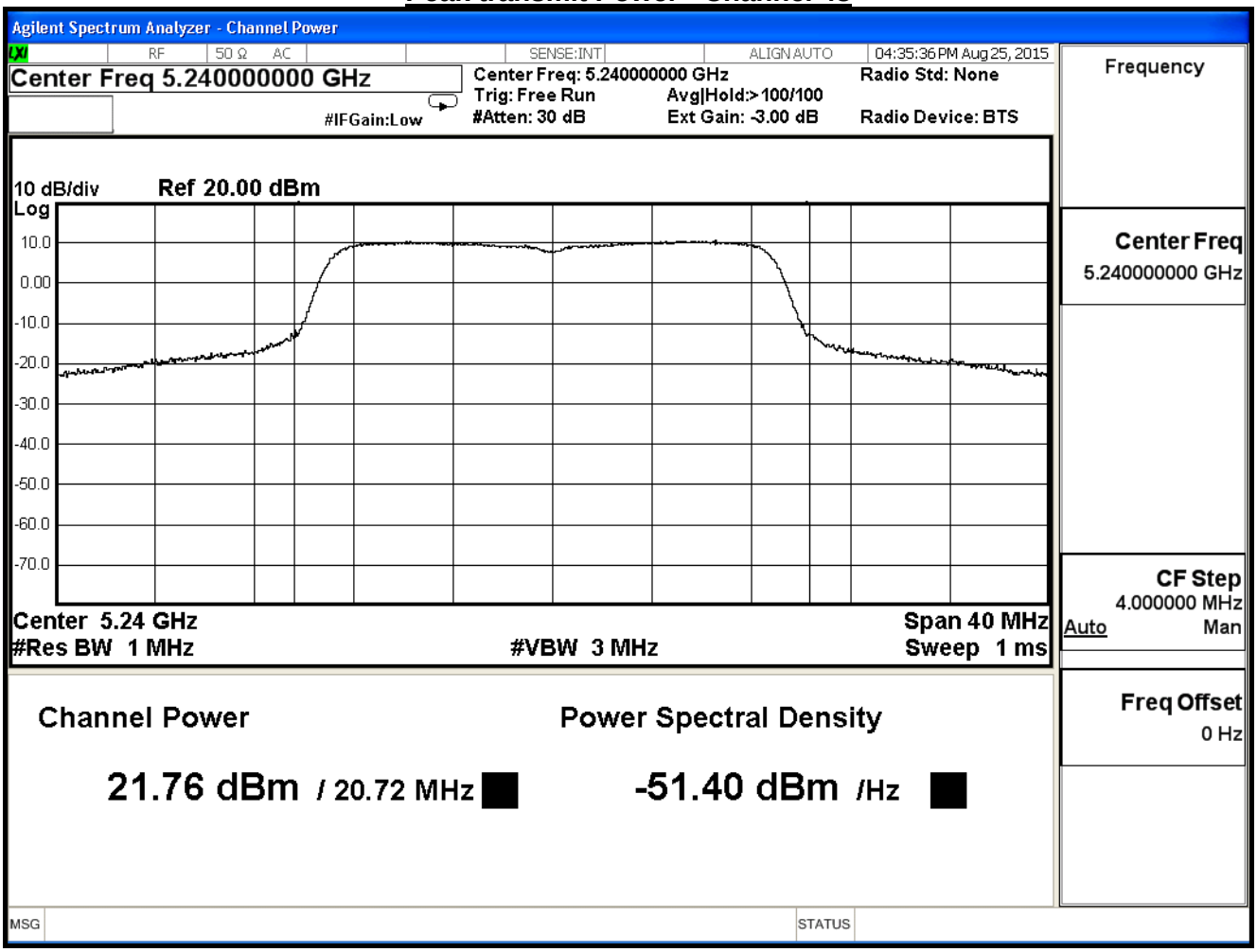
**Peak transmit Power - Channel 36**



**Peak transmit Power - Channel 44**



**Peak transmit Power - Channel 48**



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 0+1+2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Output Power (mW) | Output Power (dBm) | Required Limit (dBm) | Result |
| 36 | 5180 | 273.48 | 24.37 | ≤30 | Pass |
| 44 | 5220 | 411.41 | 26.14 | ≤30 | Pass |
| 48 | 5240 | 431.84 | 26.35 | ≤30 | Pass |

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 6.5 | 13 | 19.5 | 26 | 39 | 52 | 58.5 | 65 | |
| 36 | 5180 | 24.37 | -- | -- | -- | -- | -- | -- | -- | 30dBm |
| 44 | 5220 | 26.14 | 25.98 | 25.86 | 25.62 | 25.42 | 25.30 | 25.10 | 24.90 | 30dBm |
| 48 | 5240 | 26.35 | -- | -- | -- | -- | -- | -- | -- | 30dBm |

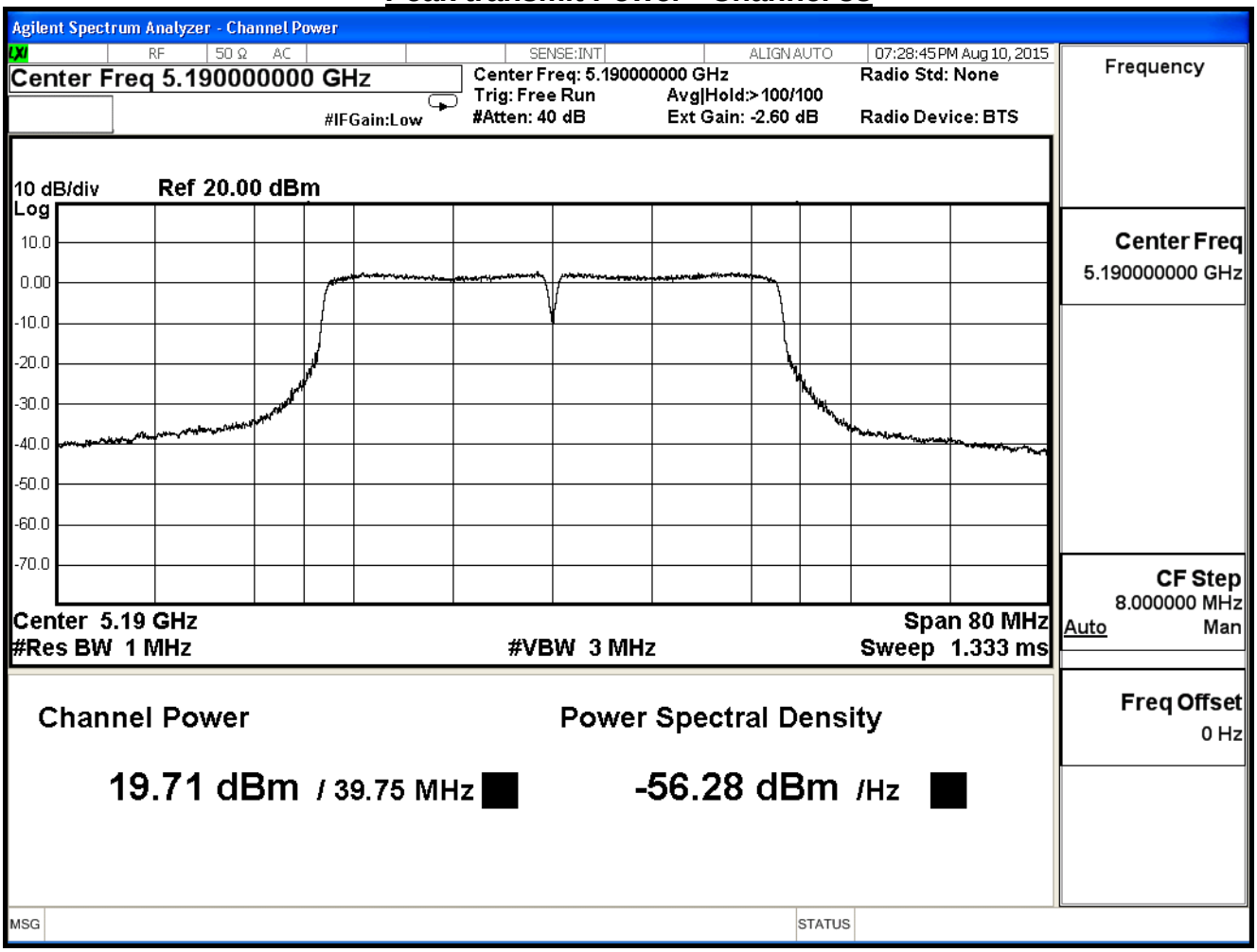
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 0) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 38 | 5190 | 39.75 | 19.71 | ≤30 | Pass |
| 46 | 5230 | 39.52 | 22.76 | ≤30 | Pass |

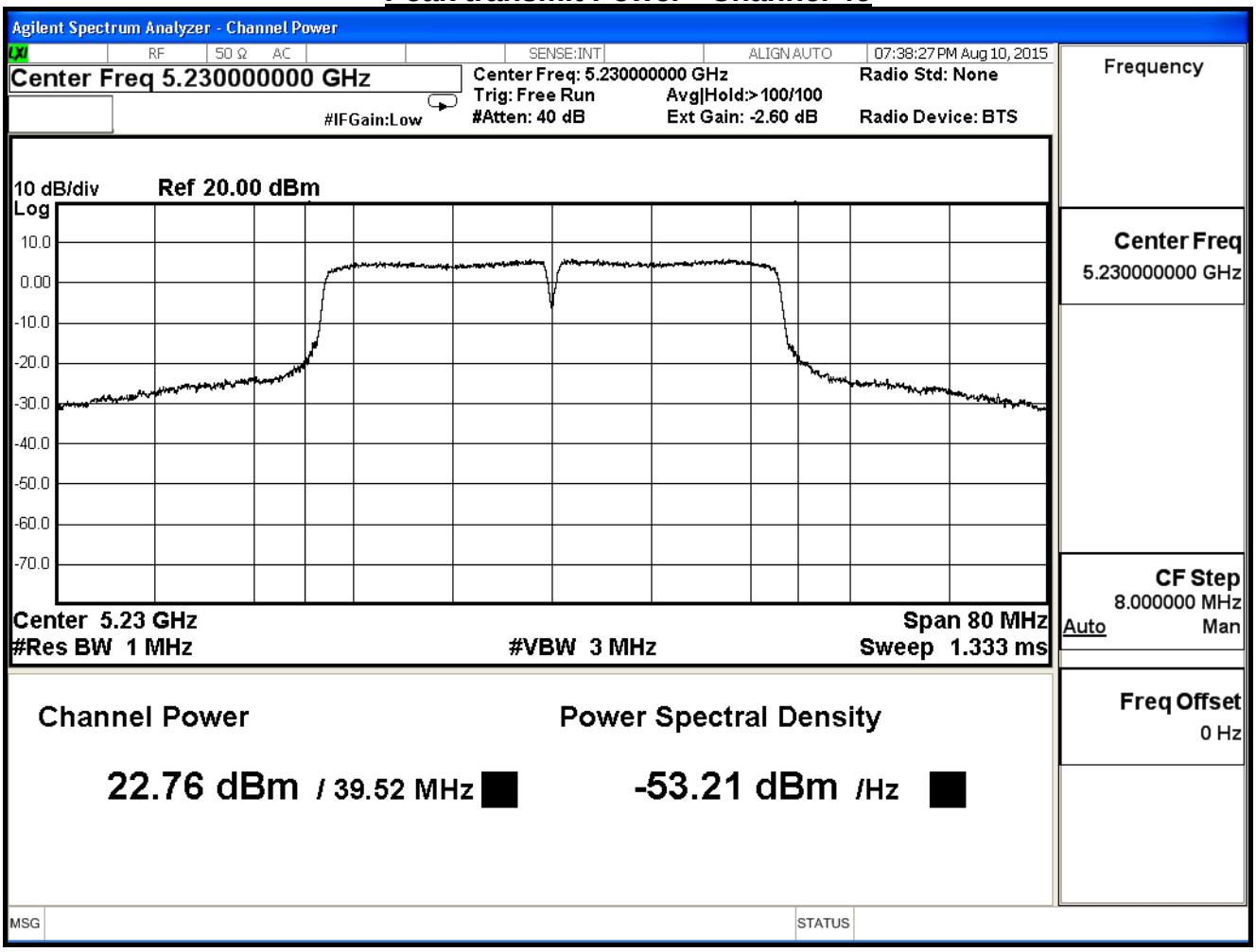
The worst emission of data rate is 13.5 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 13.5 | 27 | 40.5 | 54 | 81 | 108 | 121.5 | 135 | |
| 38 | 5190 | 19.71 | -- | -- | -- | -- | -- | -- | -- | 30dBm |
| 46 | 5230 | 22.76 | 22.68 | 22.58 | 22.38 | 22.28 | 22.04 | 21.92 | 21.72 | 30dBm |

## Peak transmit Power - Channel 38



## Peak transmit Power - Channel 46



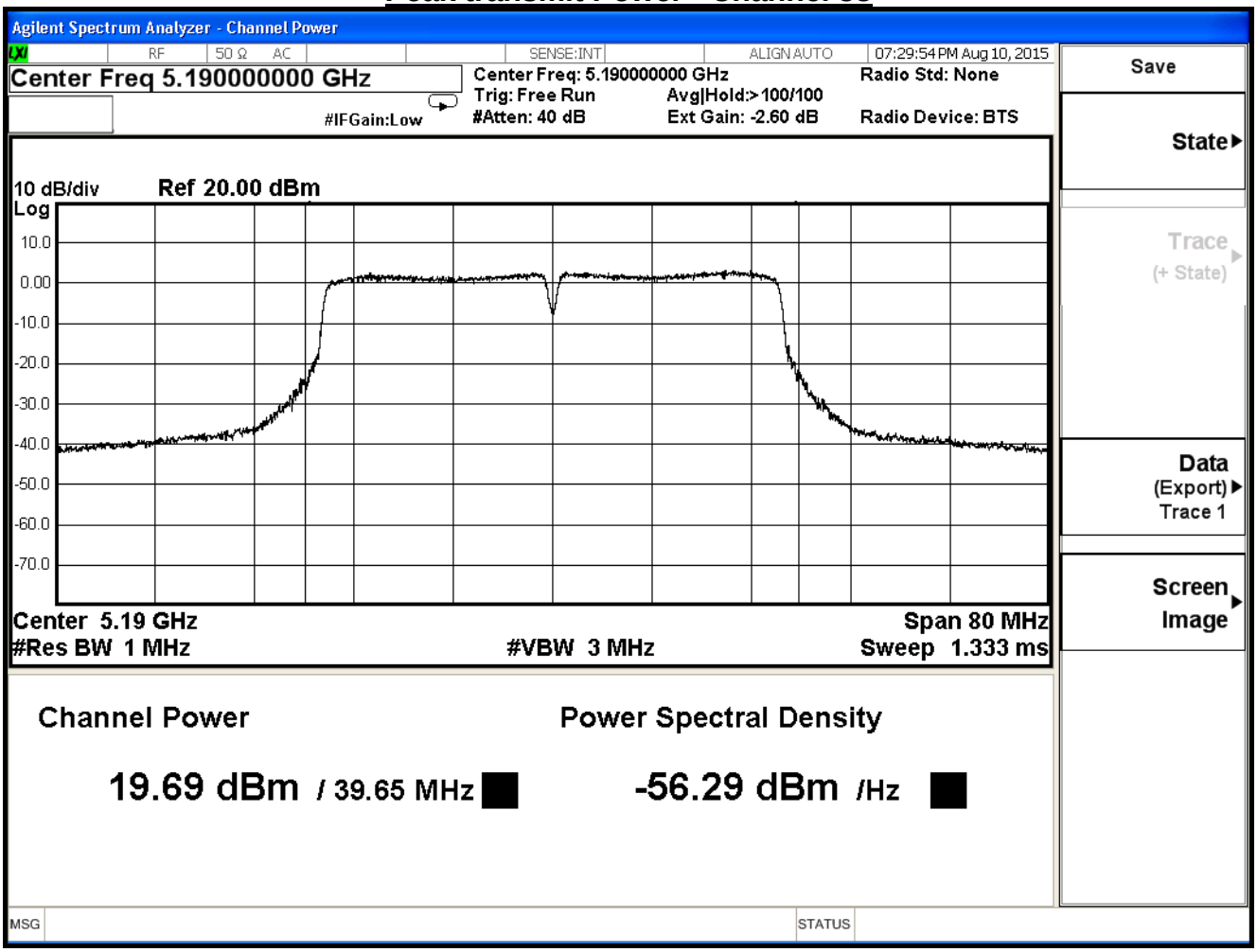
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 1) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 38 | 5190 | 39.65 | 19.69 | ≤30 | Pass |
| 46 | 5230 | 39.68 | 22.76 | ≤30 | Pass |

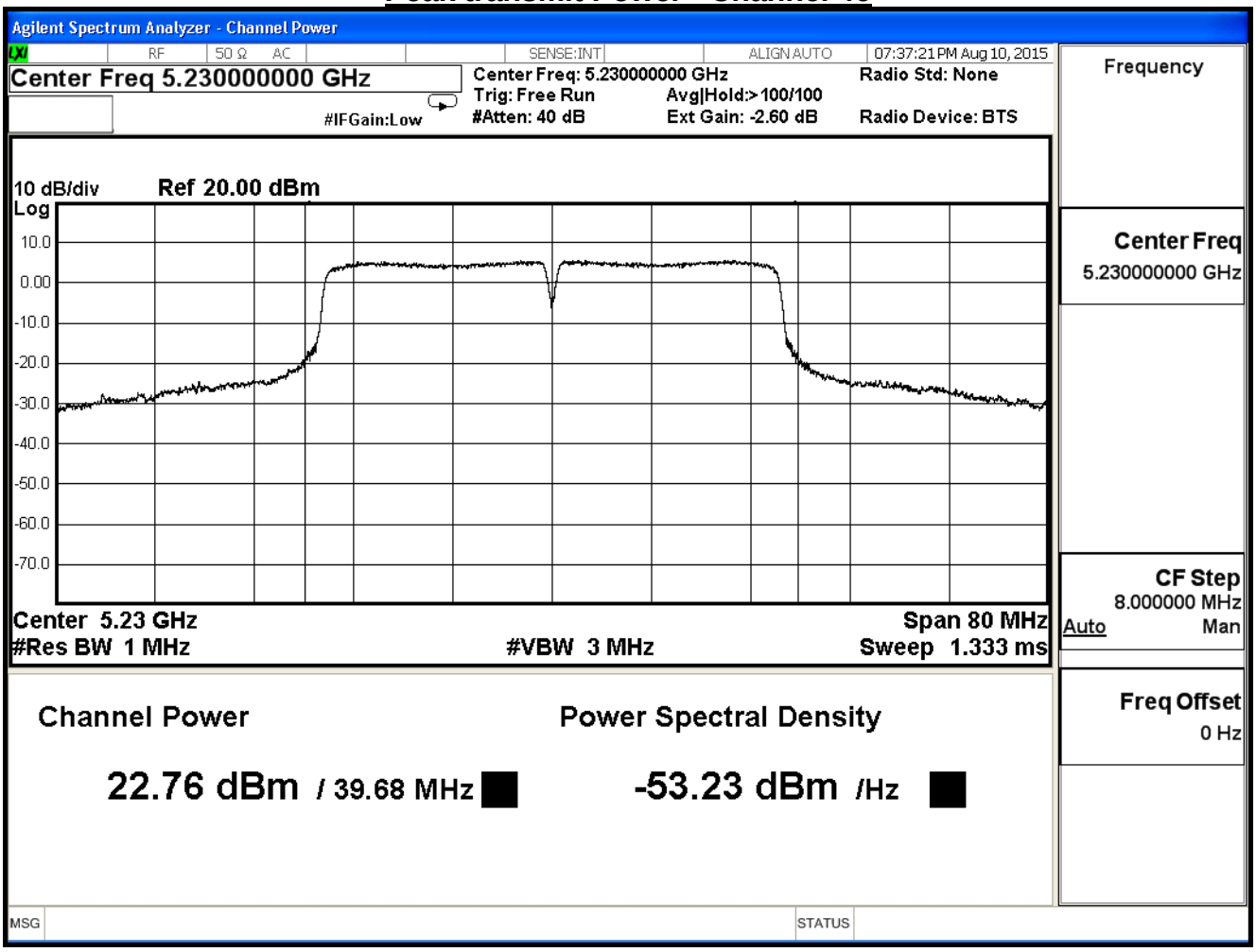
The worst emission of data rate is 13.5 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 13.5 | 27 | 40.5 | 54 | 81 | 108 | 121.5 | 135 | |
| 38 | 5190 | 19.69 | -- | -- | -- | -- | -- | -- | -- | 30dBm |
| 46 | 5230 | 22.76 | 22.66 | 22.48 | 22.38 | 22.30 | 22.18 | 21.94 | 21.82 | 30dBm |

## Peak transmit Power - Channel 38



## Peak transmit Power - Channel 46



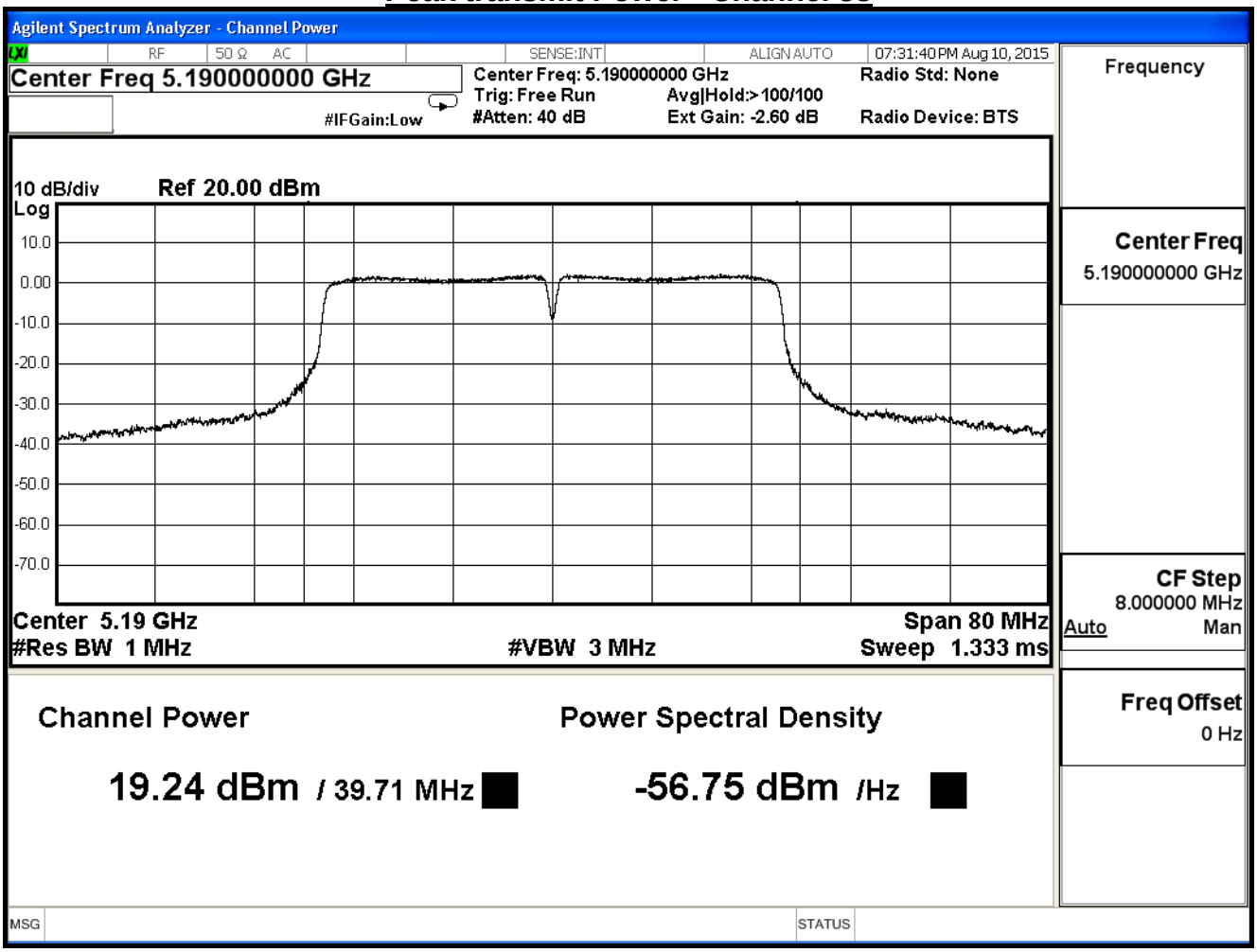
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 38 | 5190 | 39.71 | 19.24 | ≤30 | Pass |
| 46 | 5230 | 39.65 | 22.41 | ≤30 | Pass |

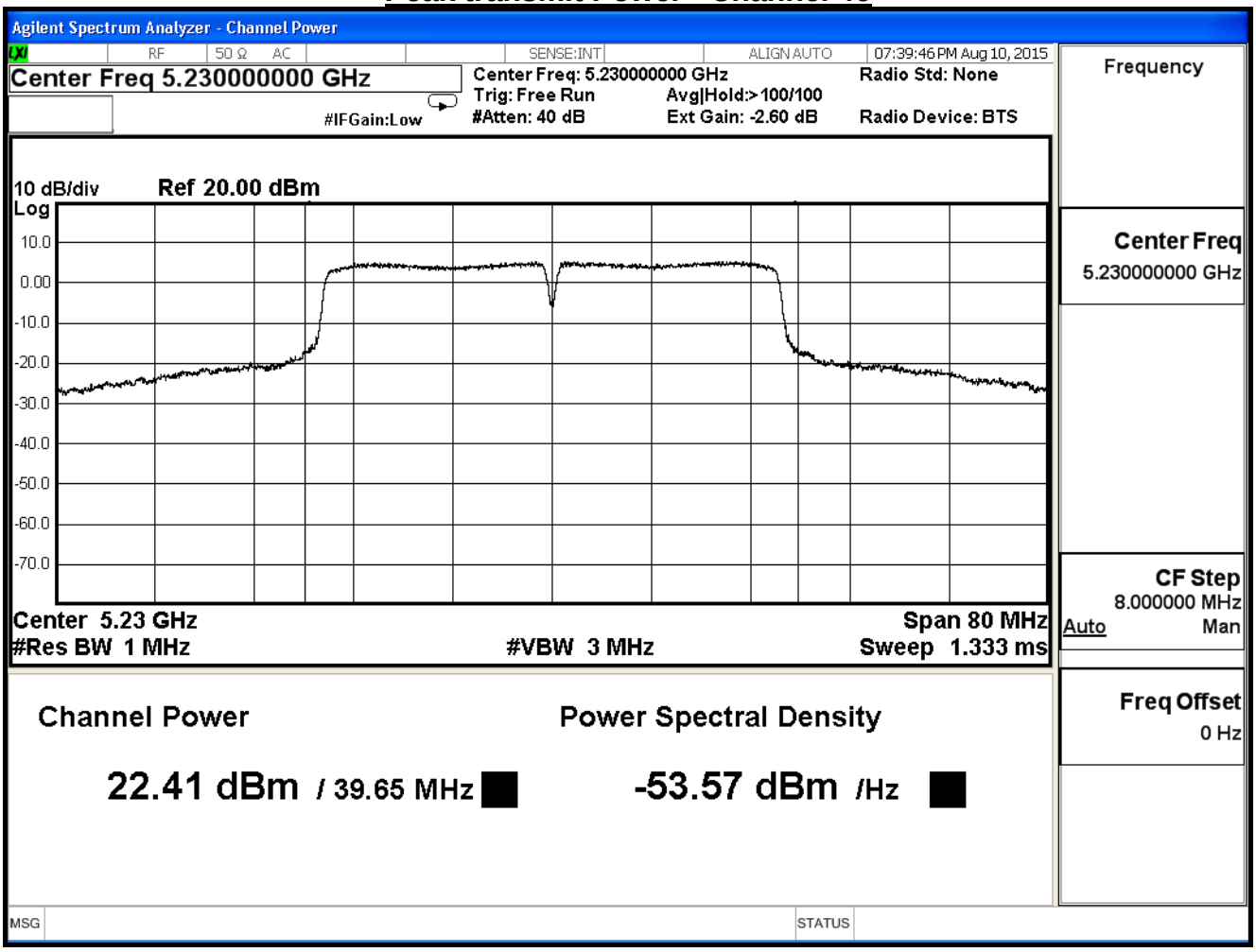
The worst emission of data rate is 13.5 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 13.5 | 27 | 40.5 | 54 | 81 | 108 | 121.5 | 135 | |
| 38 | 5190 | 19.24 | -- | -- | -- | -- | -- | -- | -- | 30dBm |
| 46 | 5230 | 22.41 | 22.30 | 22.20 | 22.10 | 21.90 | 21.78 | 21.65 | 21.41 | 30dBm |

## Peak transmit Power - Channel 38



## Peak transmit Power - Channel 46



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 0+1+2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Output Power (mW) | Output Power (dBm) | Required Limit (dBm) | Result |
| 38 | 5190 | 270.60 | 24.32 | ≤30 | Pass |
| 46 | 5230 | 551.78 | 27.42 | ≤30 | Pass |

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 13.5 | 27 | 40.5 | 54 | 81 | 108 | 121.5 | 135 | |
| 38 | 5190 | 24.32 | -- | -- | -- | -- | -- | -- | -- | 30dBm |
| 46 | 5230 | 27.42 | 27.32 | 27.19 | 27.06 | 26.94 | 26.77 | 26.61 | 26.42 | 30dBm |

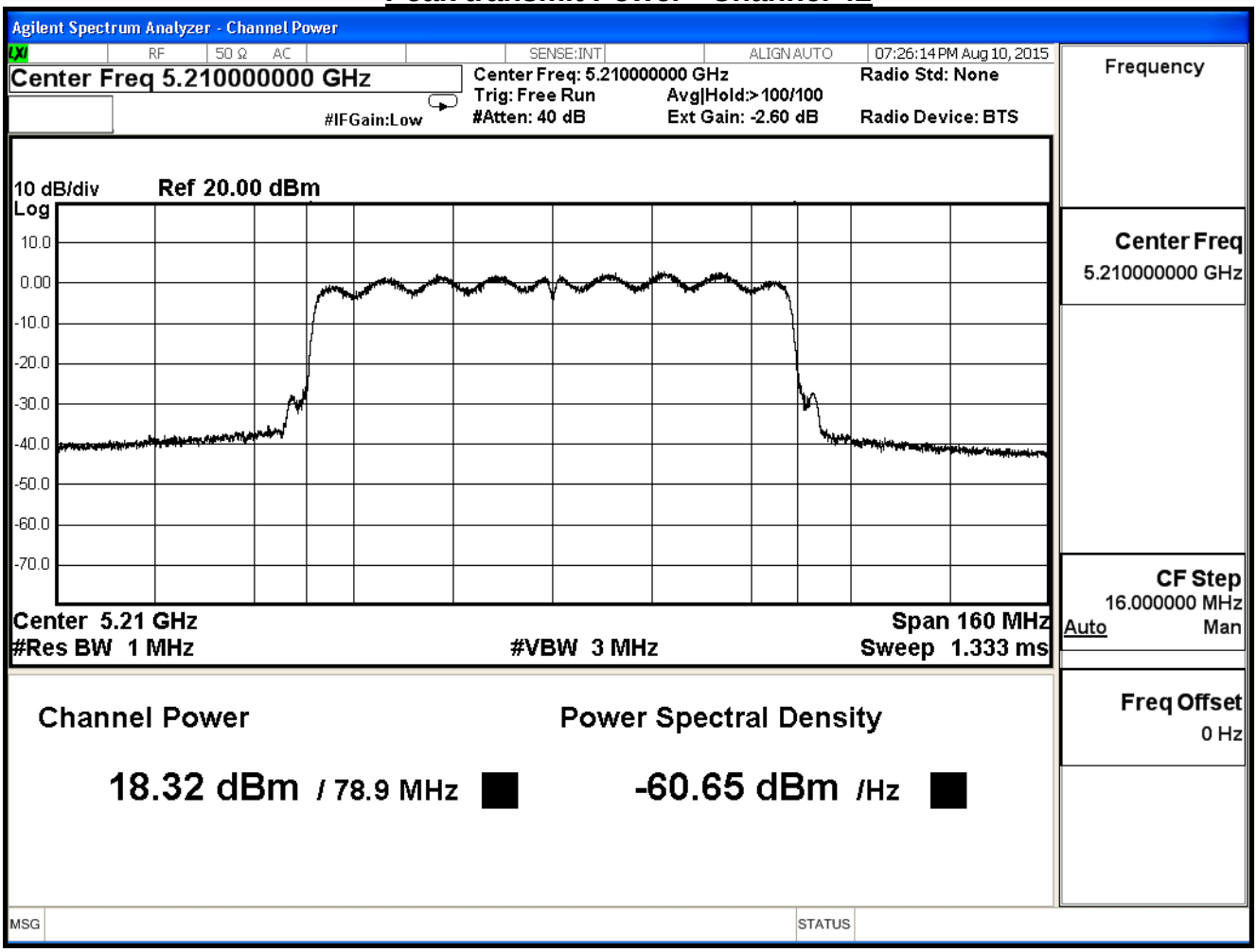
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz) (ANT 0) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 42 | 5210 | 78.90 | 18.32 | ≤30 | Pass |

The worst emission of data rate is 29.3 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | | |
| | | 29.3 | 58.5 | 87.8 | 117 | 175.5 | 234 | 263.3 | 292.5 | 351 | 390 |
| 42 | 5210 | 18.32 | 18.22 | 18.02 | 17.92 | 17.82 | 17.72 | 17.52 | 17.32 | 17.22 | 17.12 |

## Peak transmit Power - Channel 42



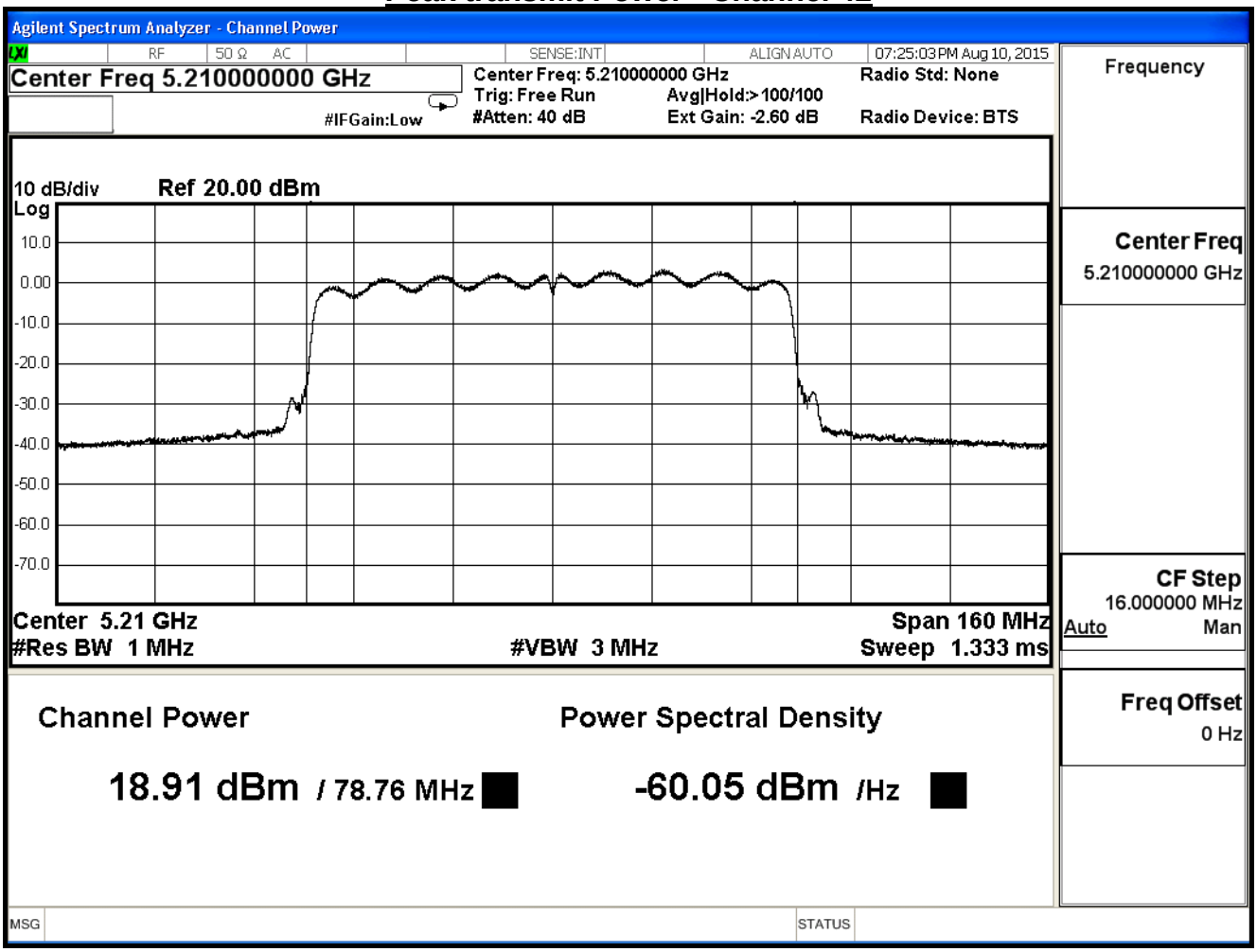
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz) (ANT 1) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 42 | 5210 | 78.76 | 18.91 | ≤30 | Pass |

The worst emission of data rate is 29.3 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | | |
| | | 29.3 | 58.5 | 87.8 | 117 | 175.5 | 234 | 263.3 | 292.5 | 351 | 390 |
| 42 | 5210 | 18.91 | 18.81 | 18.71 | 18.66 | 18.61 | 18.51 | 18.46 | 18.41 | 18.36 | 18.26 |

## Peak transmit Power - Channel 42



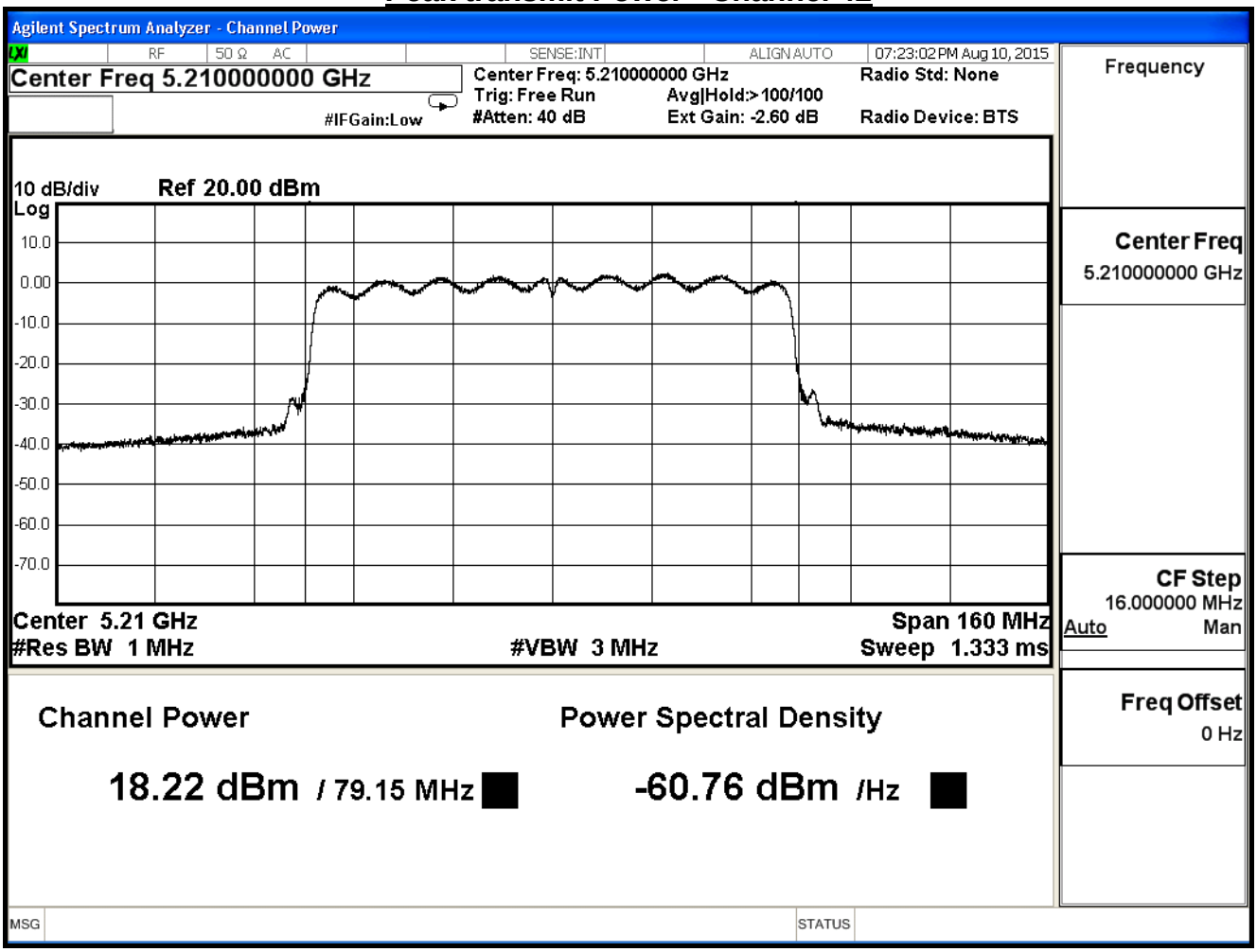
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz) (ANT 2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 42 | 5210 | 79.15 | 18.22 | ≤30 | Pass |

The worst emission of data rate is 29.3 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | | |
| | | 29.3 | 58.5 | 87.8 | 117 | 175.5 | 234 | 263.3 | 292.5 | 351 | 390 |
| 42 | 5210 | 18.22 | 18.12 | 18.07 | 18.02 | 17.92 | 17.87 | 17.82 | 17.72 | 17.67 | 17.57 |

## Peak transmit Power - Channel 42



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz)(ANT 0+1+2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Output Power (mW) | Output Power (dBm) | Required Limit (dBm) | Result |
| 42 | 5210 | 212.10 | 23.27 | ≤30 | Pass |

| Peak Power Output (dBm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | | |
| | | 29.3 | 58.5 | 87.8 | 117 | 175.5 | 234 | 263.3 | 292.5 | 351 | 390 |
| 42 | 5210 | 23.27 | 23.17 | 23.05 | 22.98 | 22.90 | 22.82 | 22.72 | 22.61 | 22.55 | 22.45 |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 0) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 36 | 5180 | 20.67 | 18.68 | ≤28.69 | Pass |
| 44 | 5220 | 20.66 | 21.02 | ≤28.69 | Pass |
| 48 | 5240 | 20.44 | 20.77 | ≤28.69 | Pass |

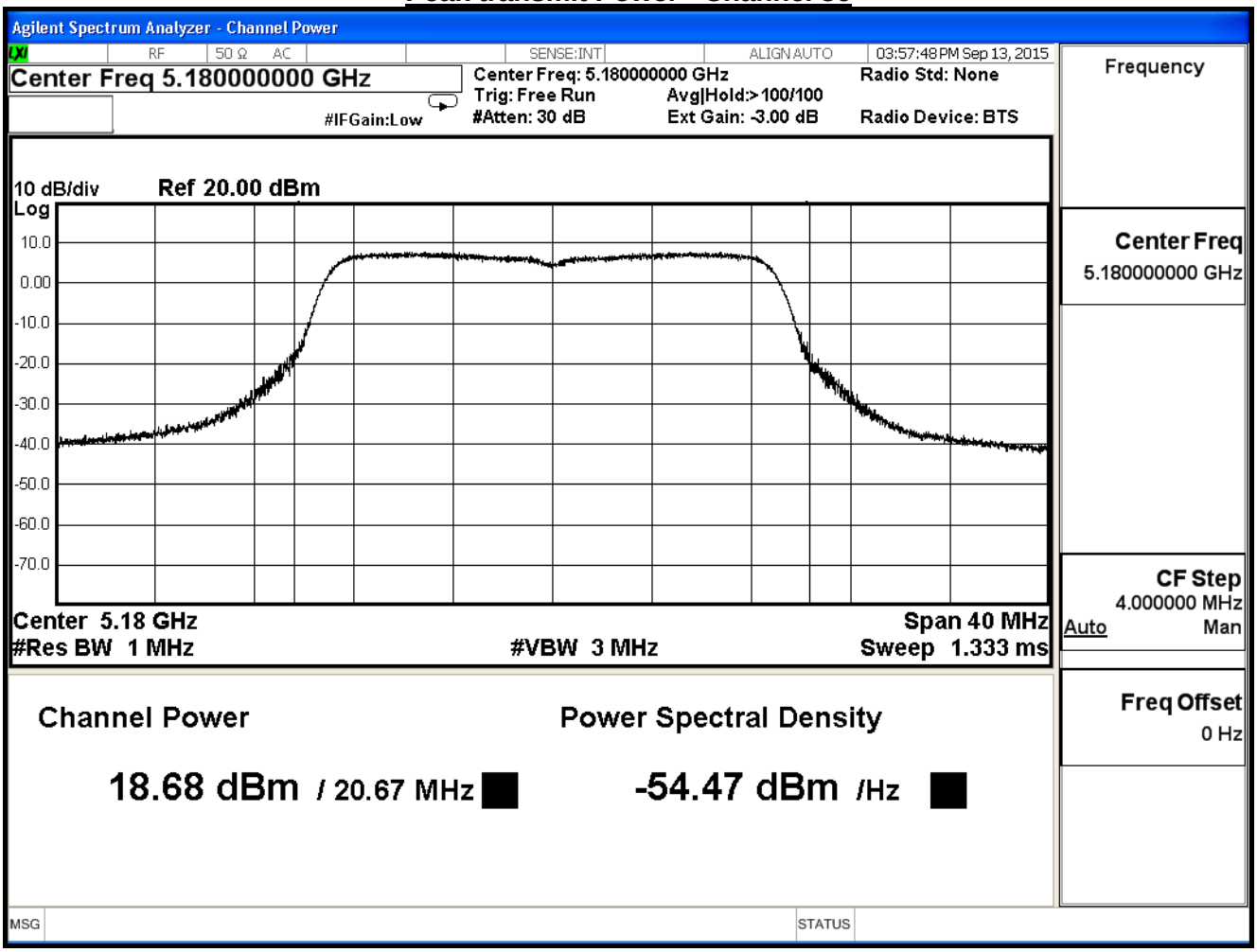
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

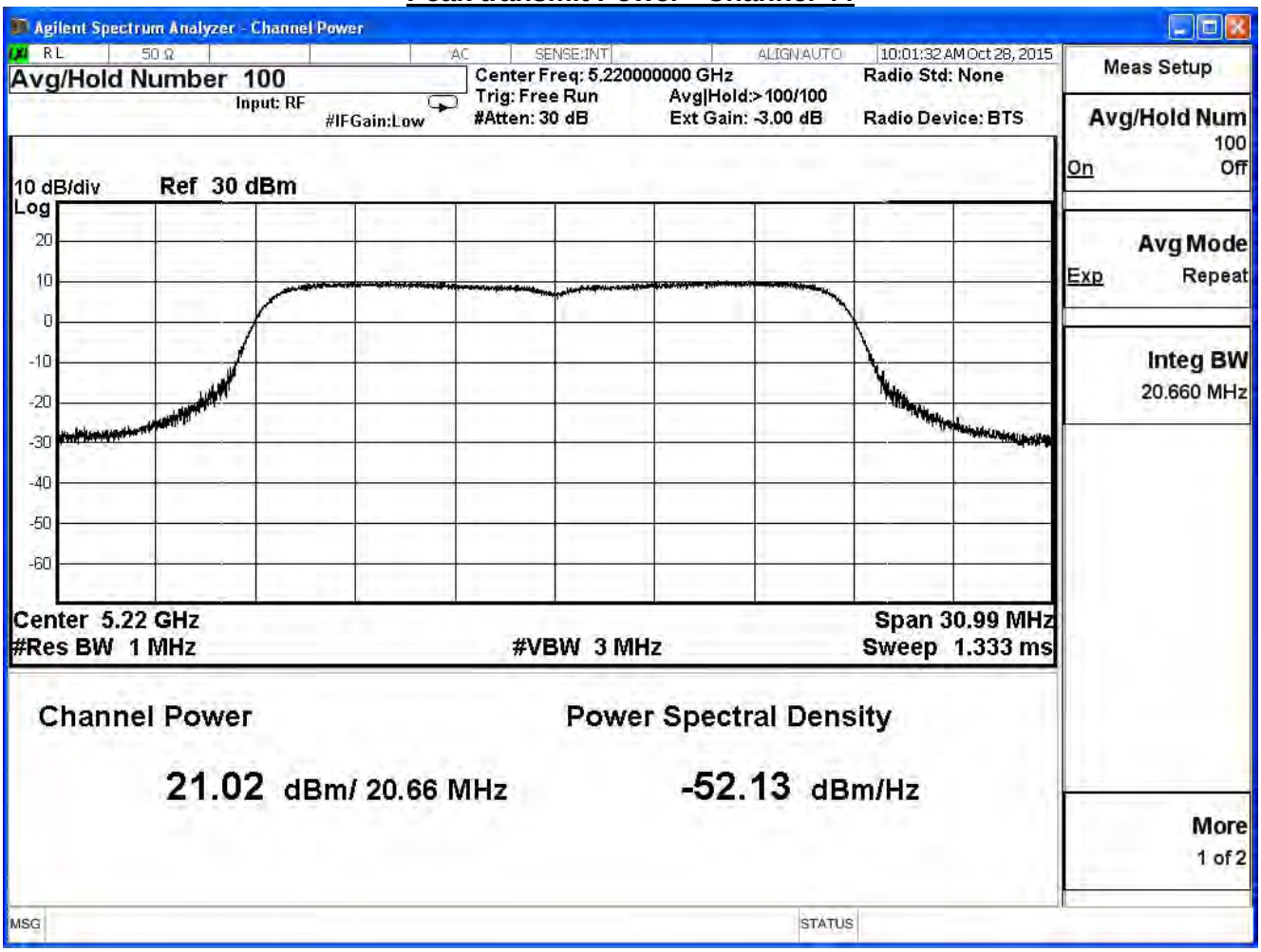
The worst emission of data rate is 6.5 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 6.5 | 13 | 19.5 | 26 | 39 | 52 | 58.5 | 65 | |
| 36 | 5180 | 18.68 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |
| 44 | 5220 | 21.02 | 20.90 | 20.78 | 20.66 | 20.42 | 20.30 | 20.06 | 19.94 | 28.69dBm |
| 48 | 5240 | 20.77 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |

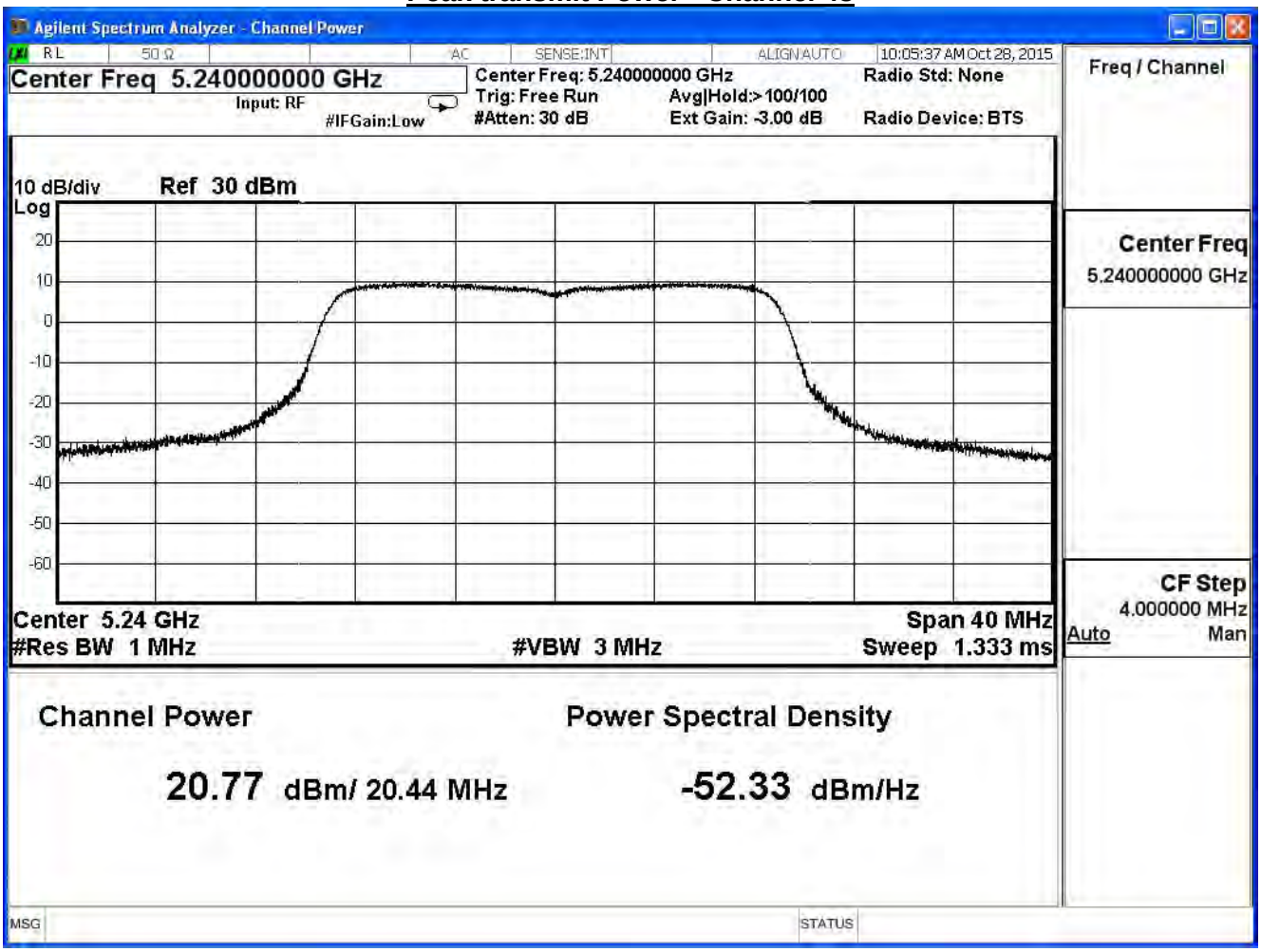
**Peak transmit Power - Channel 36**



**Peak transmit Power - Channel 44**



**Peak transmit Power - Channel 48**



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 1) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 36 | 5180 | 20.79 | 18.19 | ≤28.69 | Pass |
| 44 | 5220 | 20.45 | 21.03 | ≤28.69 | Pass |
| 48 | 5240 | 20.59 | 20.68 | ≤28.69 | Pass |

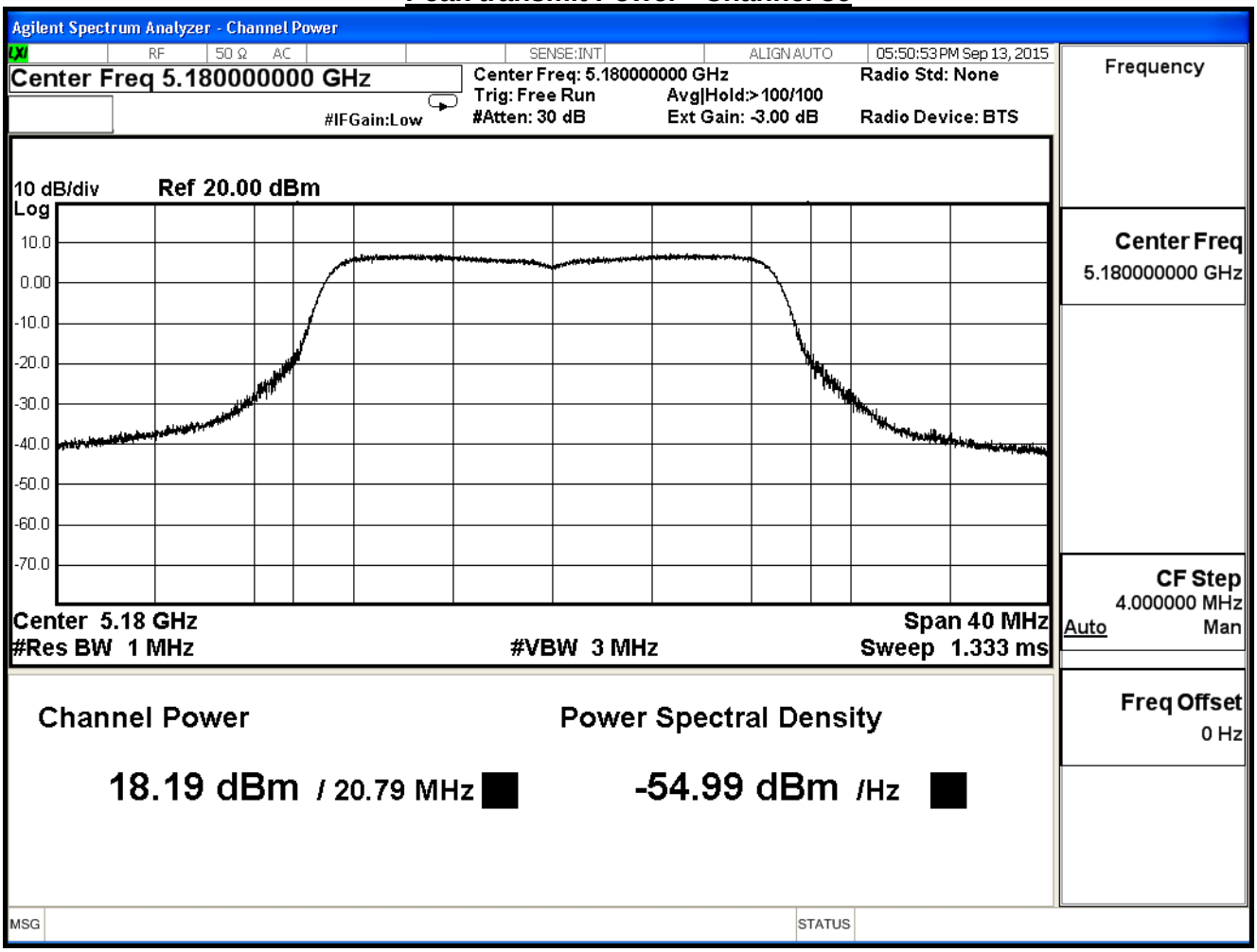
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

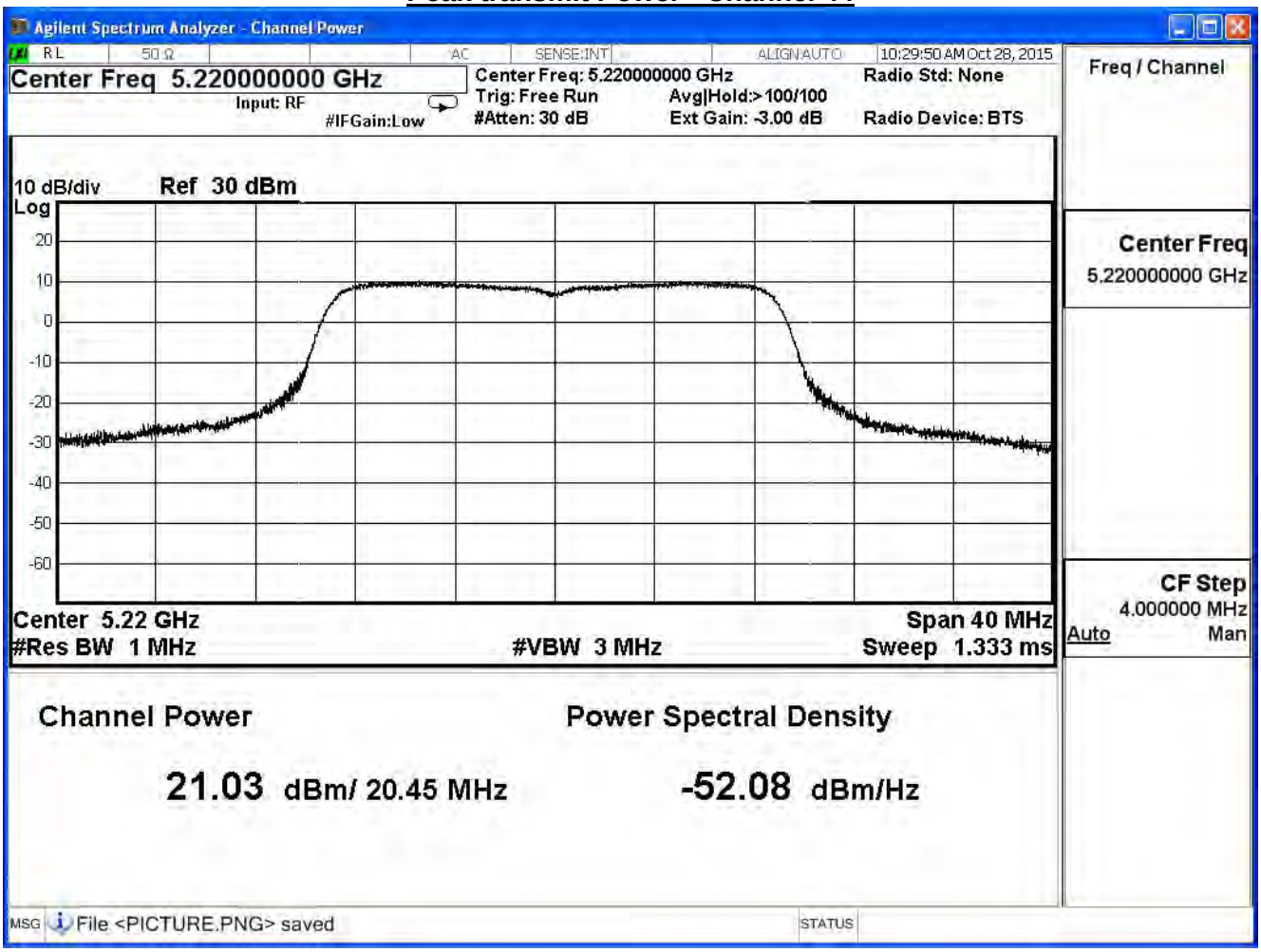
The worst emission of data rate is 6.5Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 6.5 | 13 | 19.5 | 26 | 39 | 52 | 58.5 | 65 | |
| 36 | 5180 | 18.19 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |
| 44 | 5220 | 21.03 | 20.79 | 20.67 | 20.55 | 20.43 | 20.31 | 20.19 | 20.07 | 28.69dBm |
| 48 | 5240 | 20.60 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |

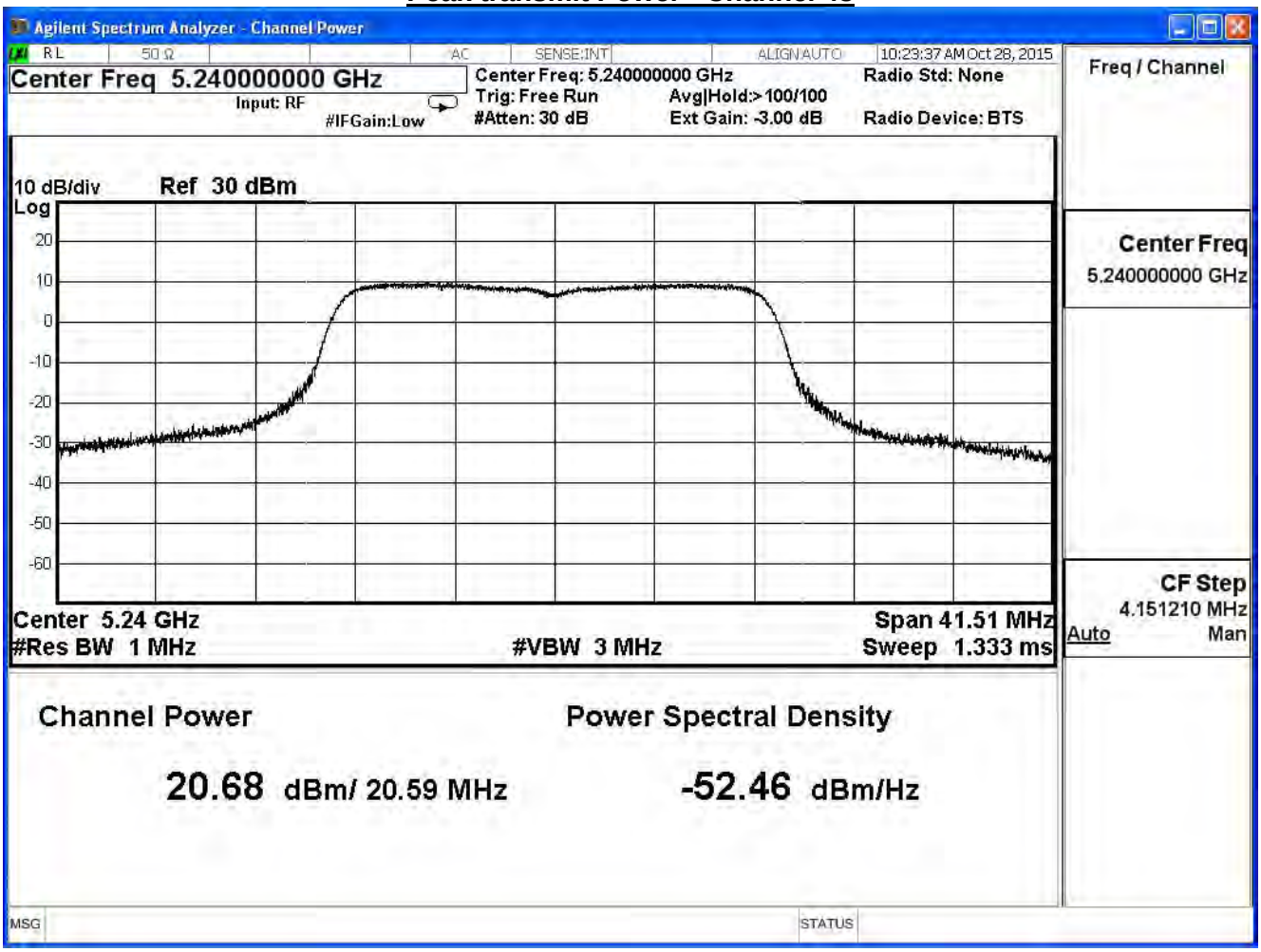
**Peak transmit Power - Channel 36**



**Peak transmit Power - Channel 44**



**Peak transmit Power - Channel 48**



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit | Result |
| 36 | 5180 | 20.73 | 18.19 | ≤28.69 | Pass |
| 44 | 5220 | 20.60 | 21.00 | ≤28.69 | Pass |
| 48 | 5240 | 20.72 | 20.97 | ≤28.69 | Pass |

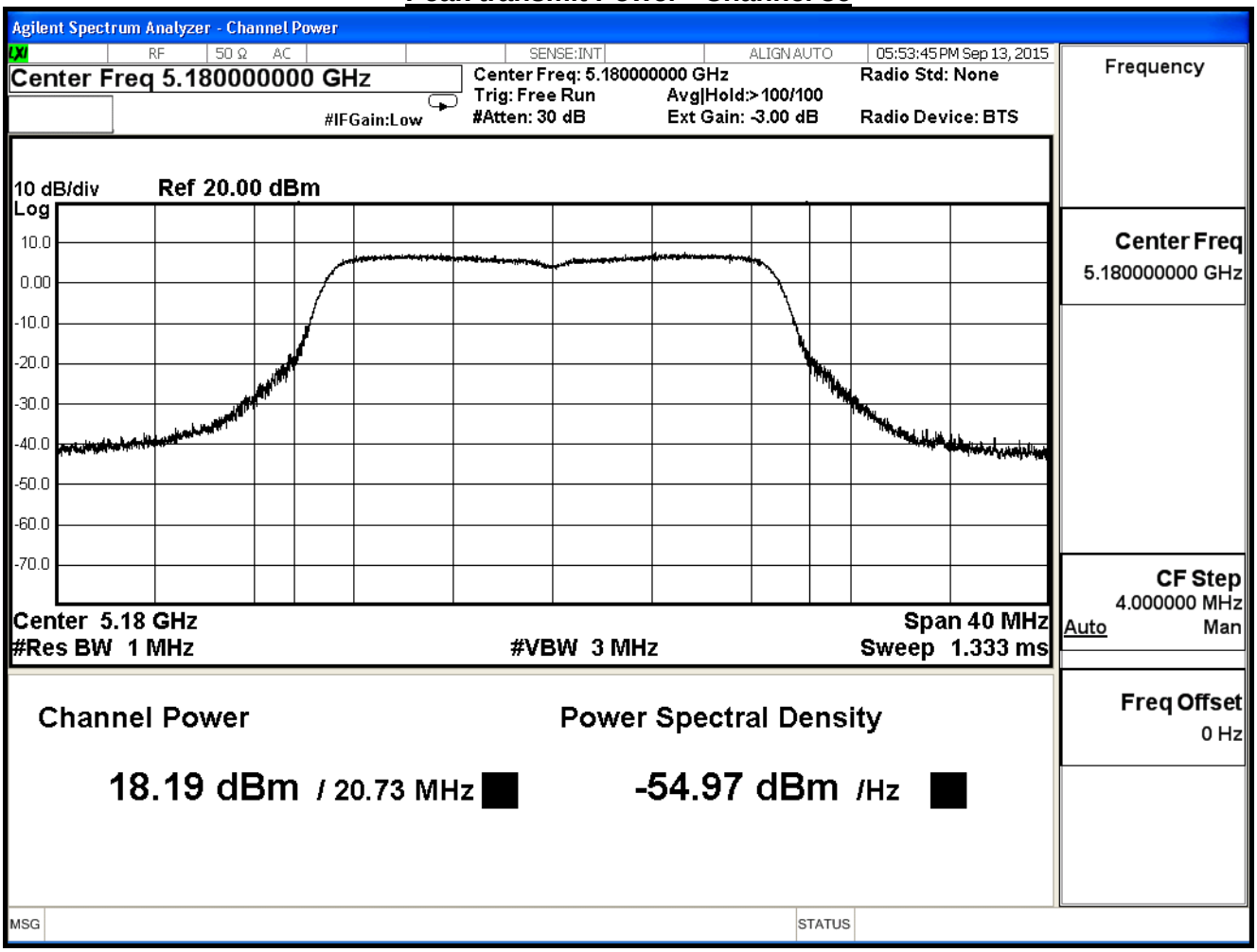
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

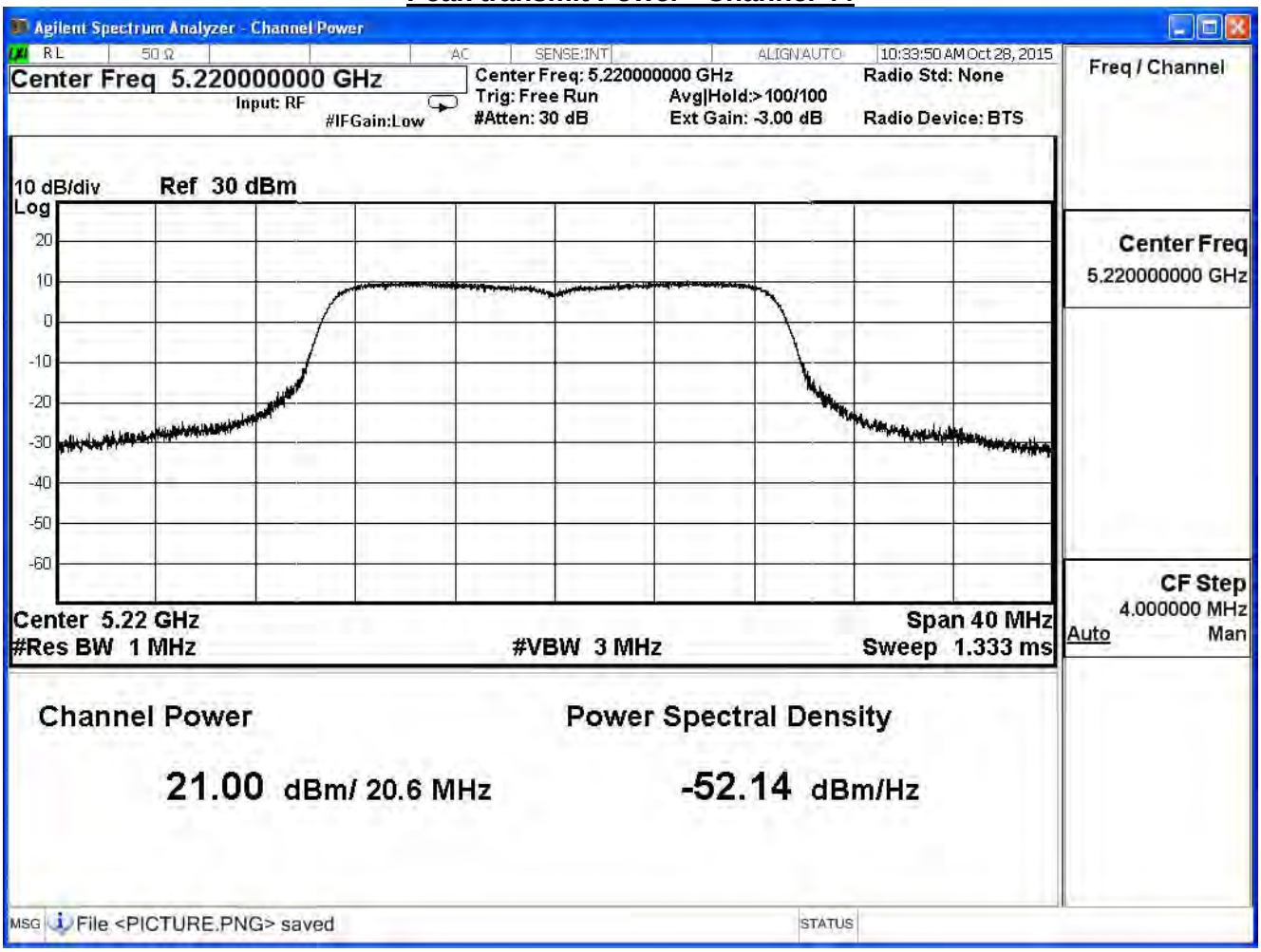
The worst emission of data rate is 6.5Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 6.5 | 13 | 19.5 | 26 | 39 | 52 | 58.5 | 65 | |
| 36 | 5180 | 18.19 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |
| 44 | 5220 | 21.00 | 20.88 | 20.64 | 20.52 | 20.40 | 20.28 | 20.04 | 19.80 | 28.69dBm |
| 48 | 5240 | 20.97 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |

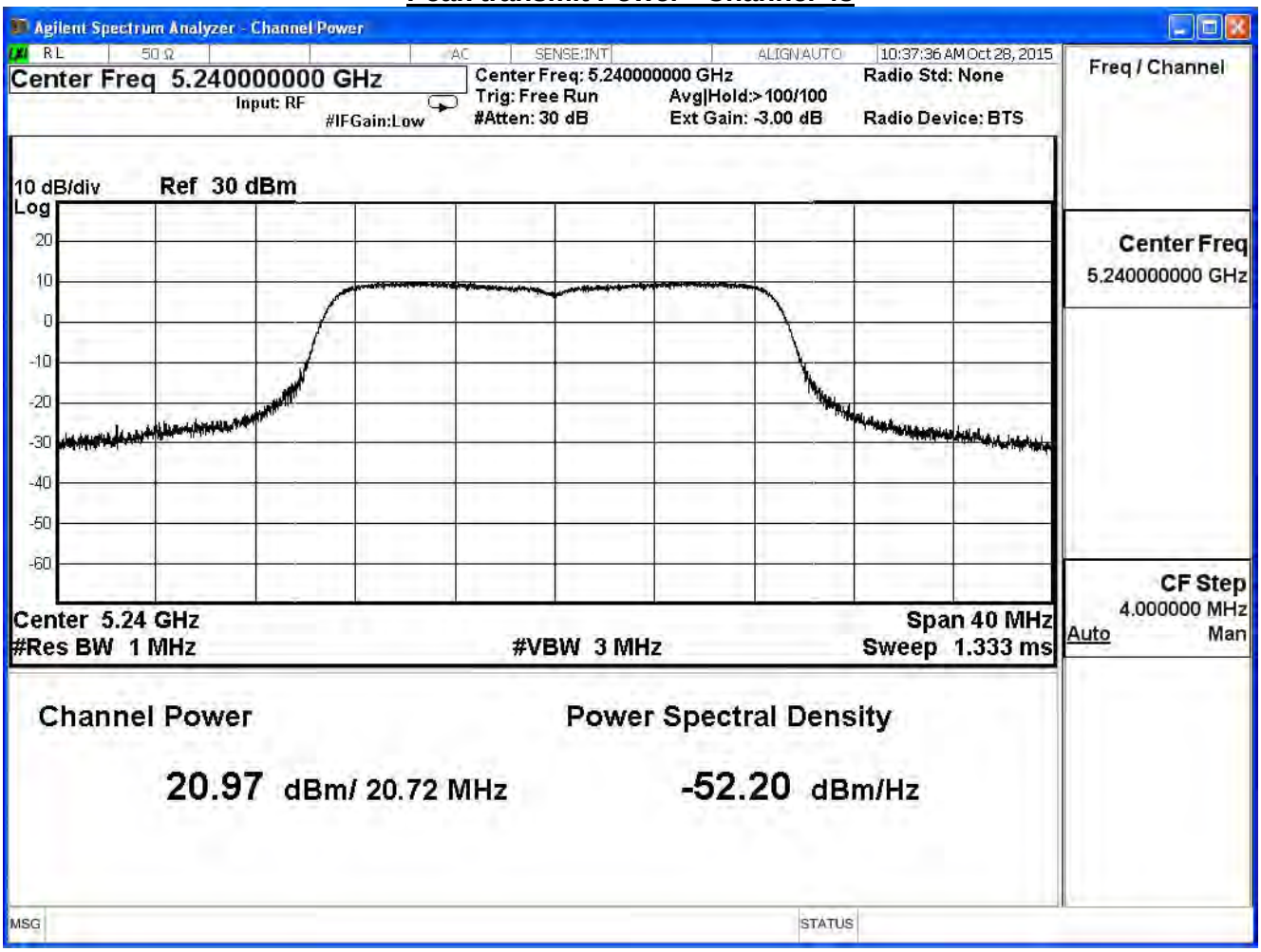
**Peak transmit Power - Channel 36**



**Peak transmit Power - Channel 44**



**Peak transmit Power - Channel 48**



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 0+1+2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Output Power (mW) | Output Power (dBm) | Required Limit (dBm)t | Result |
| 36 | 5180 | 205.63 | 23.13 | ≤28.69 | Pass |
| 44 | 5220 | 379.31 | 25.79 | ≤28.69 | Pass |
| 48 | 5240 | 361.41 | 25.58 | ≤28.69 | Pass |

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 6.5 | 13 | 19.5 | 26 | 39 | 52 | 58.5 | 65 | |
| 36 | 5180 | 23.13 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |
| 44 | 5220 | 25.79 | 25.63 | 25.47 | 25.35 | 25.19 | 25.07 | 24.87 | 24.71 | 28.69dBm |
| 48 | 5240 | 25.58 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 0) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 38 | 5190 | 39.75 | 16.32 | ≤28.69 | Pass |
| 46 | 5230 | 39.52 | 21.60 | ≤28.69 | Pass |

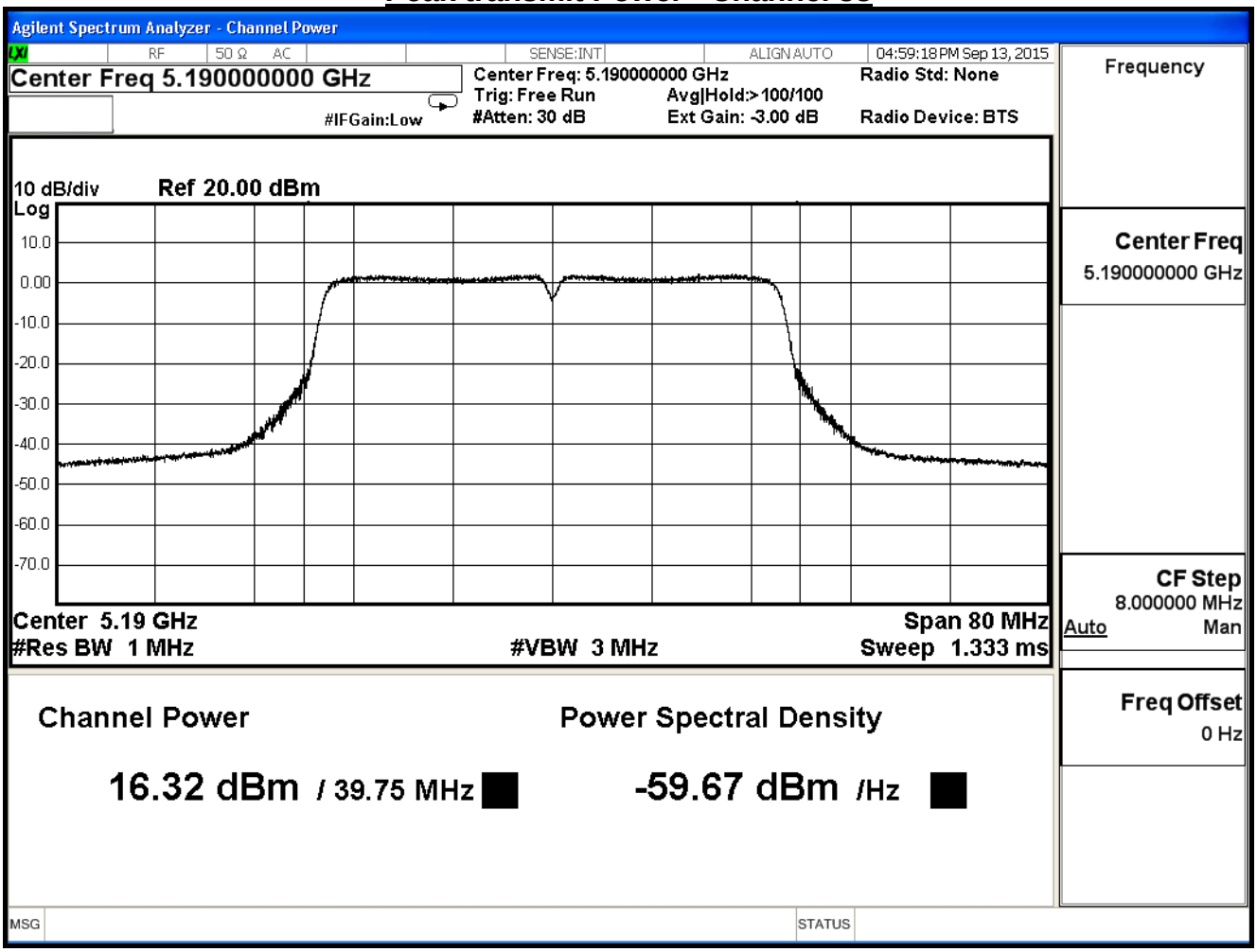
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

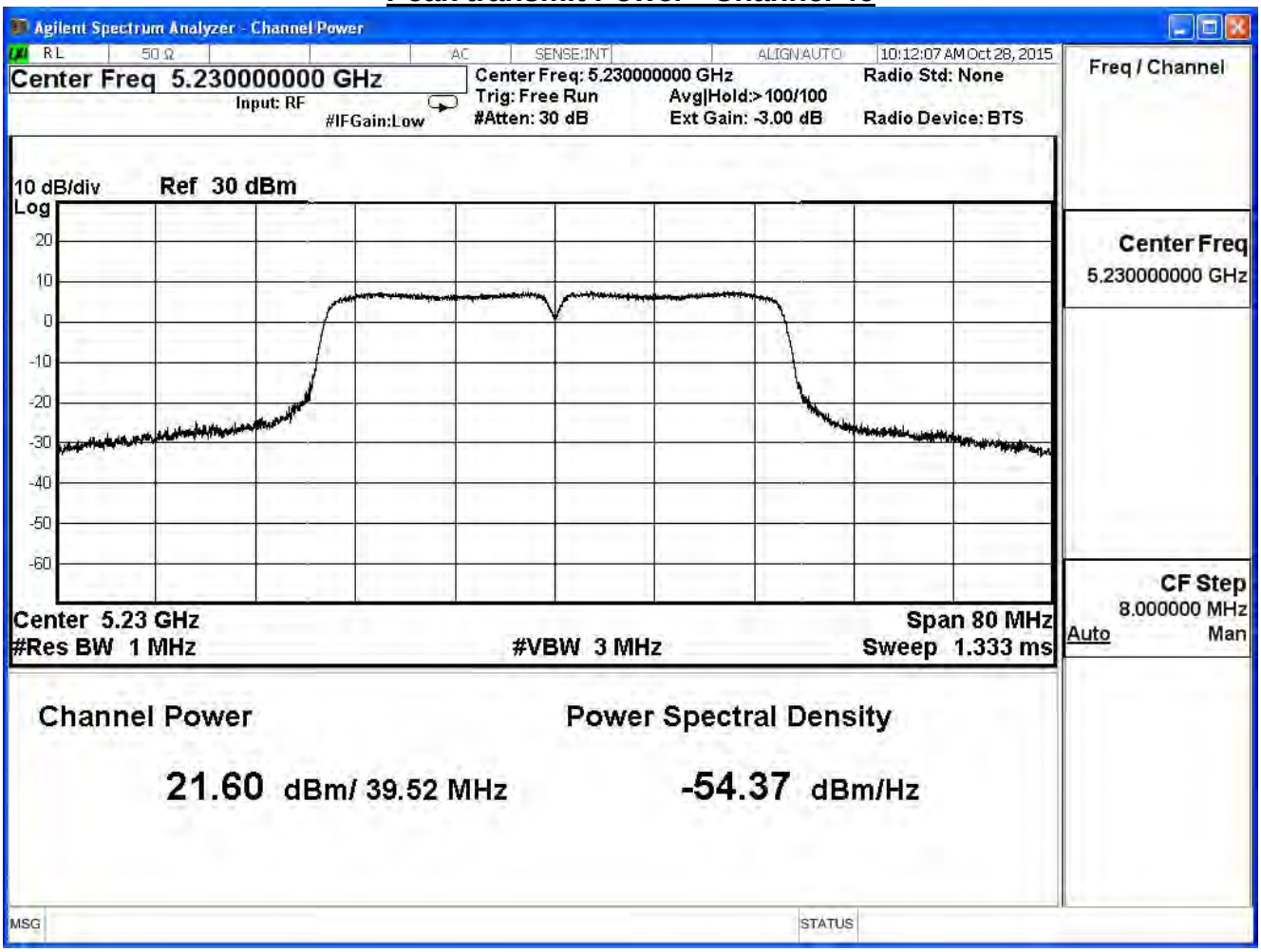
The worst emission of data rate is 13.5 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 13.5 | 27 | 40.5 | 54 | 81 | 108 | 121.5 | 135 | |
| 38 | 5190 | 16.32 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |
| 46 | 5230 | 21.60 | 21.44 | 21.34 | 21.14 | 20.94 | 20.82 | 20.58 | 20.48 | 28.69dBm |

## Peak transmit Power - Channel 38



## Peak transmit Power - Channel 46



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 1) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 38 | 5190 | 39.65 | 16.91 | ≤28.69 | Pass |
| 46 | 5230 | 39.68 | 21.89 | ≤28.69 | Pass |

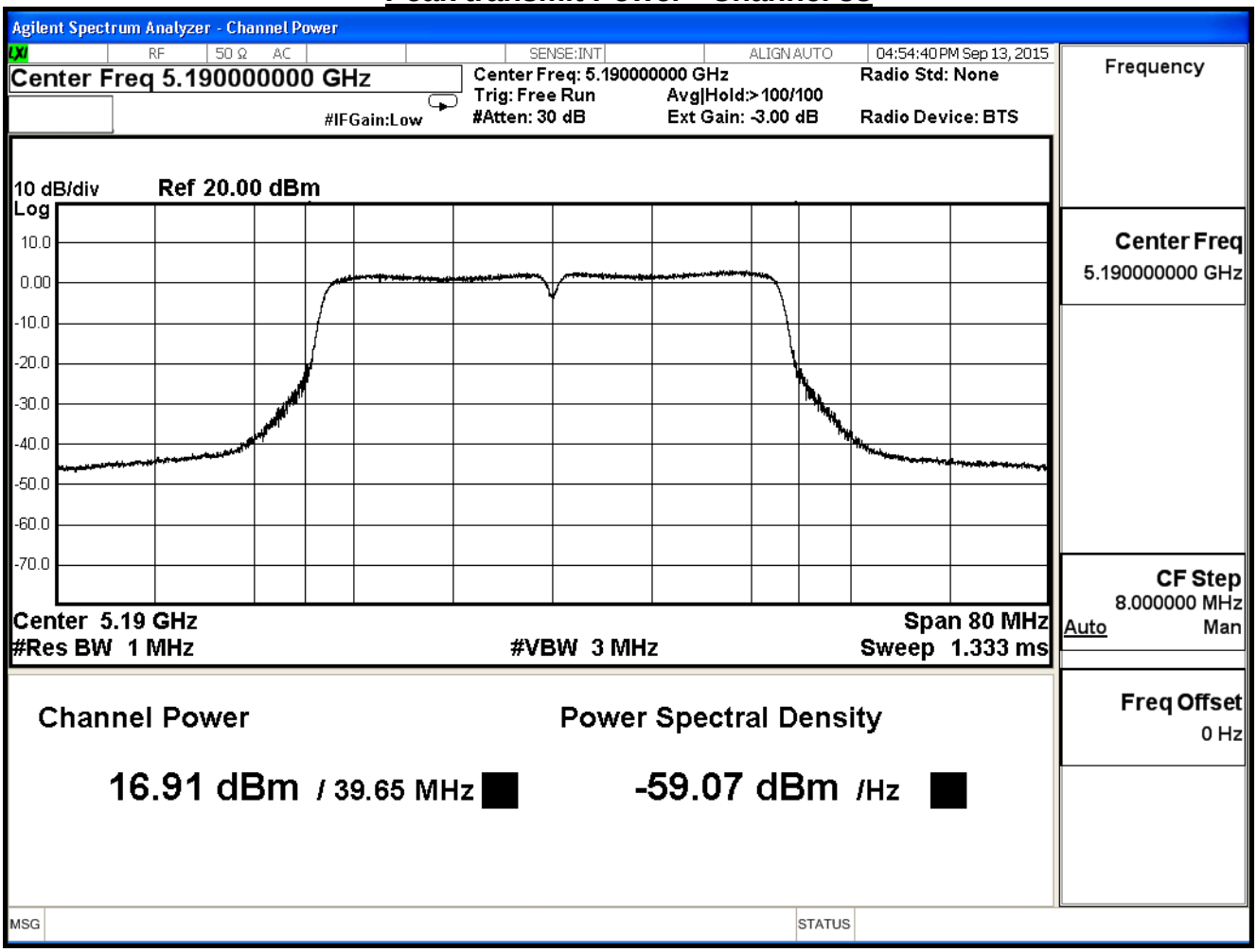
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

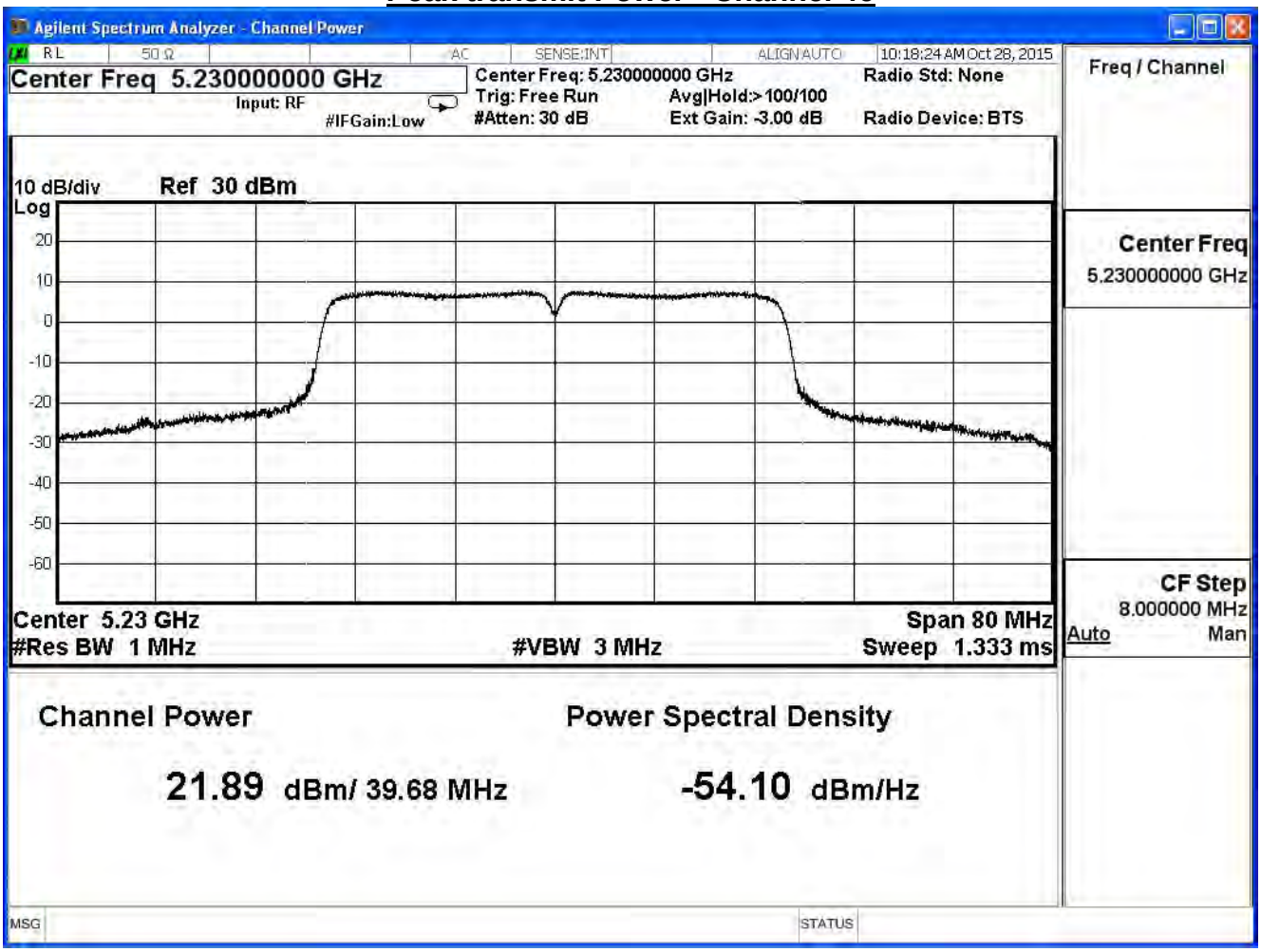
The worst emission of data rate is 13.5 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 13.5 | 27 | 40.5 | 54 | 81 | 108 | 121.5 | 135 | |
| 38 | 5190 | 16.91 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |
| 46 | 5230 | 21.89 | 21.69 | 21.60 | 21.50 | 21.34 | 21.22 | 21.10 | 20.98 | 28.69dBm |

## Peak transmit Power - Channel 38



## Peak transmit Power - Channel 46



| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 38 | 5190 | 39.71 | 16.69 | ≤28.69 | Pass |
| 46 | 5230 | 39.65 | 21.84 | ≤28.69 | Pass |

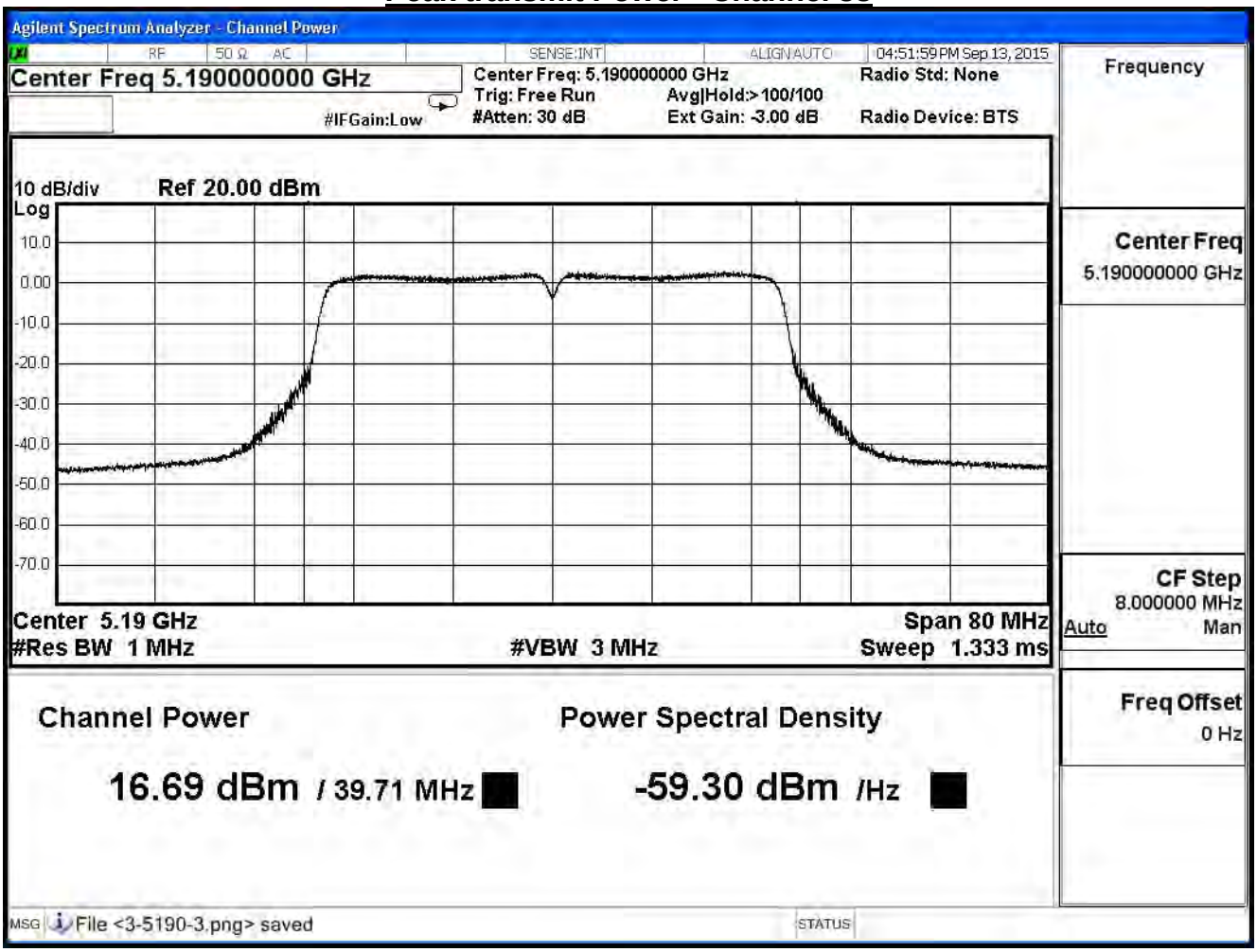
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

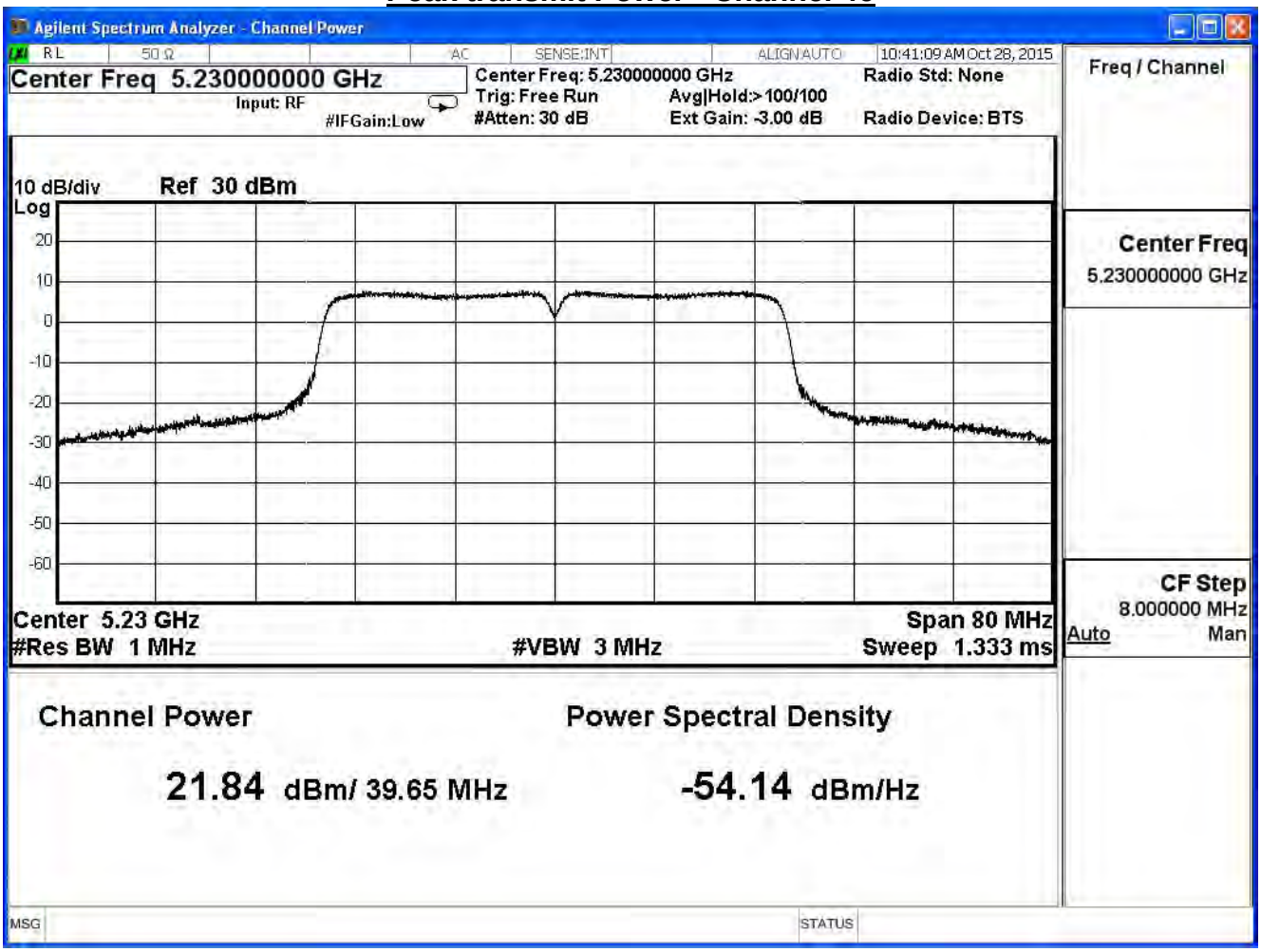
The worst emission of data rate is 13.5 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 13.5 | 27 | 40.5 | 54 | 81 | 108 | 121.5 | 135 | |
| 38 | 5190 | 16.69 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |
| 46 | 5230 | 21.84 | 21.62 | 21.52 | 21.42 | 21.22 | 21.10 | 20.97 | 20.73 | 28.69dBm |

## Peak transmit Power - Channel 38



## Peak transmit Power - Channel 46



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 0+1+2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Output Power (mW) | Output Power (dBm) | Required Limit (dBm) | Result |
| 38 | 5190 | 138.61 | 21.42 | ≤28.69 | Pass |
| 46 | 5230 | 451.86 | 26.55 | ≤28.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

The worst emission of data rate is 13.5 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Required Limit |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | |
| | | 13.5 | 27 | 40.5 | 54 | 81 | 108 | 121.5 | 135 | |
| 38 | 5190 | 21.42 | -- | -- | -- | -- | -- | -- | -- | 28.69dBm |
| 46 | 5230 | 26.55 | 26.36 | 26.26 | 26.13 | 25.94 | 25.82 | 25.66 | 25.51 | 28.69dBm |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11ac(80MHz) (ANT 0) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 42 | 5210 | 78.90 | 16.38 | ≤28.69 | Pass |

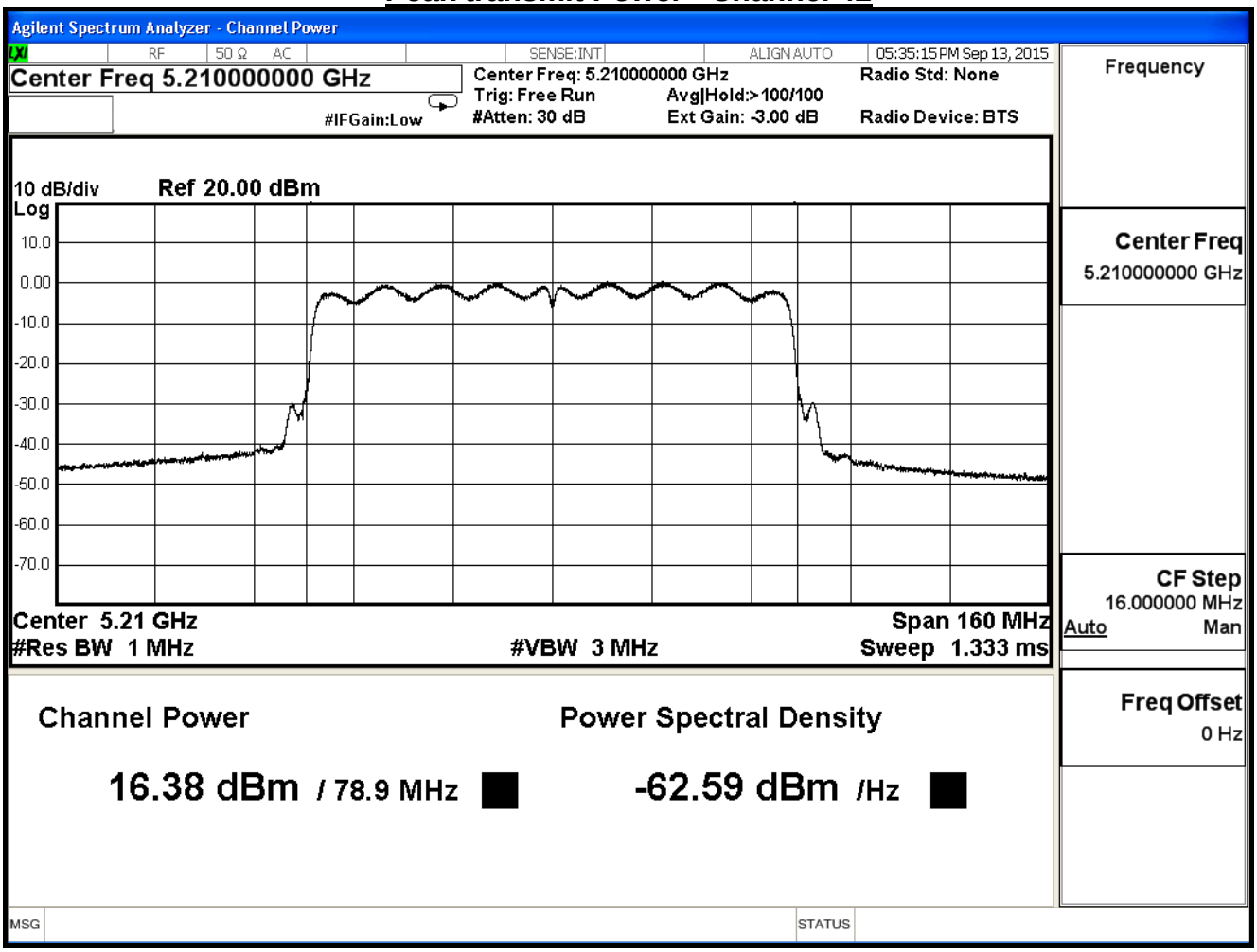
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

The worst emission of data rate is 29.3 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | | |
| | | 29.3 | 58.5 | 87.8 | 117 | 175.5 | 234 | 263.3 | 292.5 | 351 | 390 |
| 42 | 5210 | 16.38 | 16.28 | 16.18 | 15.98 | 15.88 | 15.78 | 15.58 | 15.48 | 15.28 | 15.08 |

## Peak transmit Power - Channel 42



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11ac(80MHz) (ANT 1) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 42 | 5210 | 78.76 | 16.30 | ≤28.69 | Pass |

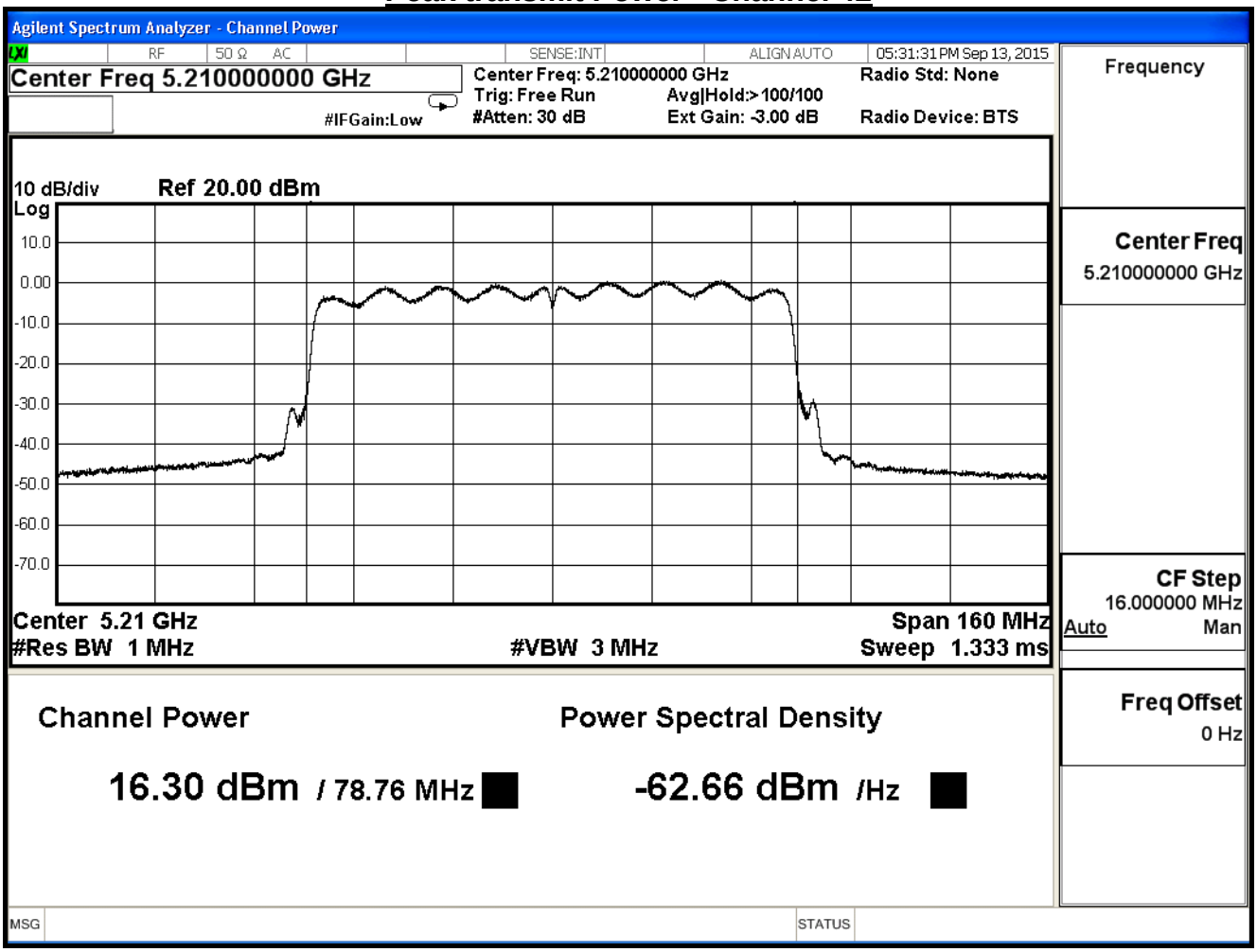
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

The worst emission of data rate is 29.3 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | | |
| | | 29.3 | 58.5 | 87.8 | 117 | 175.5 | 234 | 263.3 | 292.5 | 351 | 390 |
| 42 | 5210 | 16.30 | 16.25 | 16.20 | 16.10 | 16.00 | 15.95 | 15.85 | 15.80 | 15.70 | 15.60 |

## Peak transmit Power - Channel 42



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11ac(80MHz) (ANT 2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | 26dB Bandwidth (MHz) | Output Power (dBm) | Required Limit (dBm) | Result |
| 42 | 5210 | 79.15 | 16.77 | ≤28.69 | Pass |

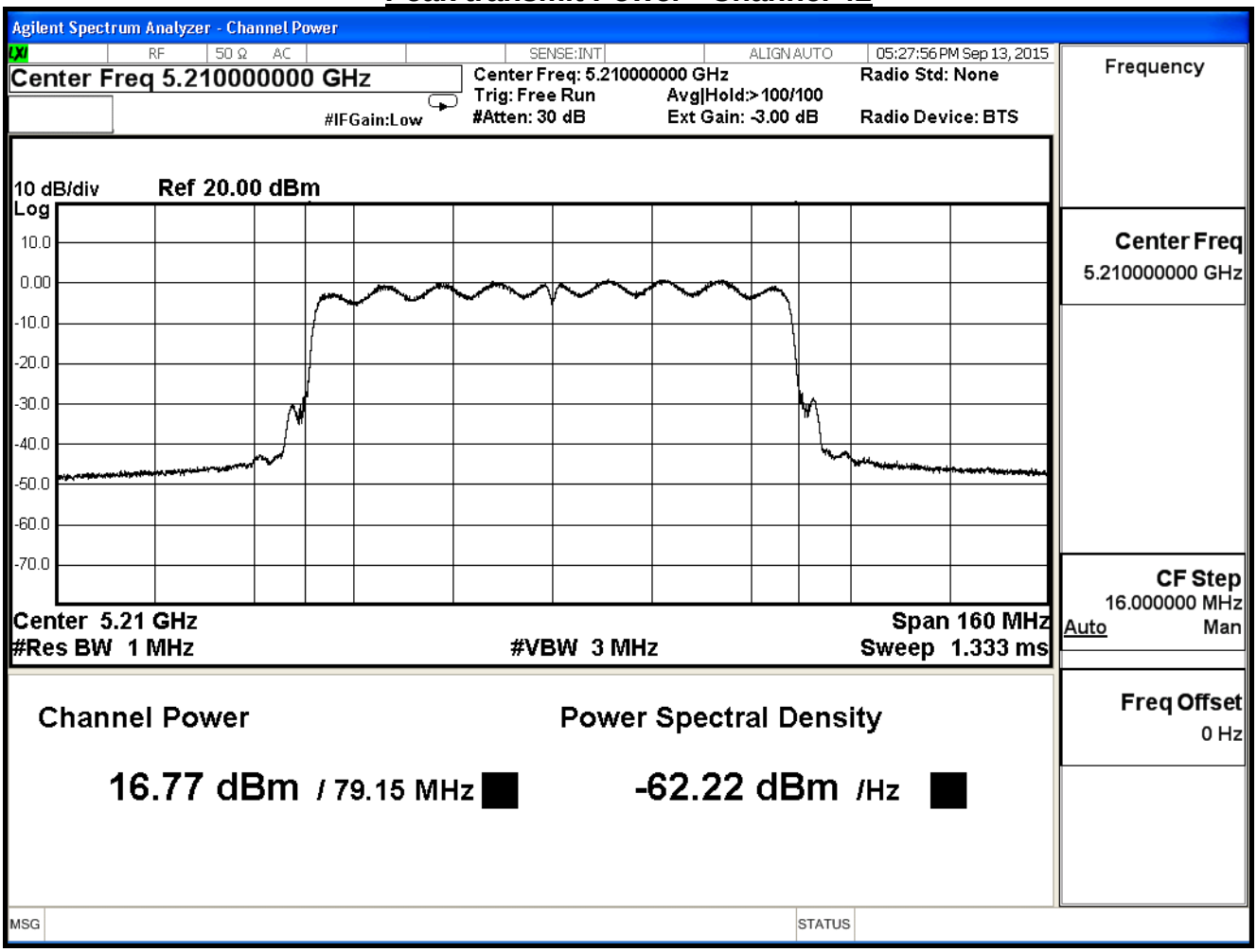
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

The worst emission of data rate is 29.3 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | | |
| | | 29.3 | 58.5 | 87.8 | 117 | 175.5 | 234 | 263.3 | 292.5 | 351 | 390 |
| 42 | 5210 | 16.77 | 16.72 | 16.67 | 16.62 | 16.57 | 16.52 | 16.42 | 16.32 | 16.27 | 16.17 |

## Peak transmit Power - Channel 42



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Transmit Output | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11ac(80MHz)(ANT 0+1+2) | | | | | |
|---|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Output Power (mW) | Output Power (dBm) | Required Limit (dBm) | Result |
| 42 | 5210 | 133.64 | 21.26 | ≤28.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Peak Transmit Output Limit:30dBm-(7.31dBi-6dB)= 28.69dBm

The worst emission of data rate is 29.3 Mbps.

| Peak Power Output (dBm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MCS Index | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Channel No | Frequency (MHz) | Data Rate | | | | | | | | | |
| | | 29.3 | 58.5 | 87.8 | 117 | 175.5 | 234 | 263.3 | 292.5 | 351 | 390 |
| 42 | 5210 | 21.26 | 21.19 | 21.13 | 21.01 | 20.93 | 20.87 | 20.74 | 20.65 | 20.54 | 20.41 |

# 5. Peak Power Spectrum Density

## 5.1. Test Equipment

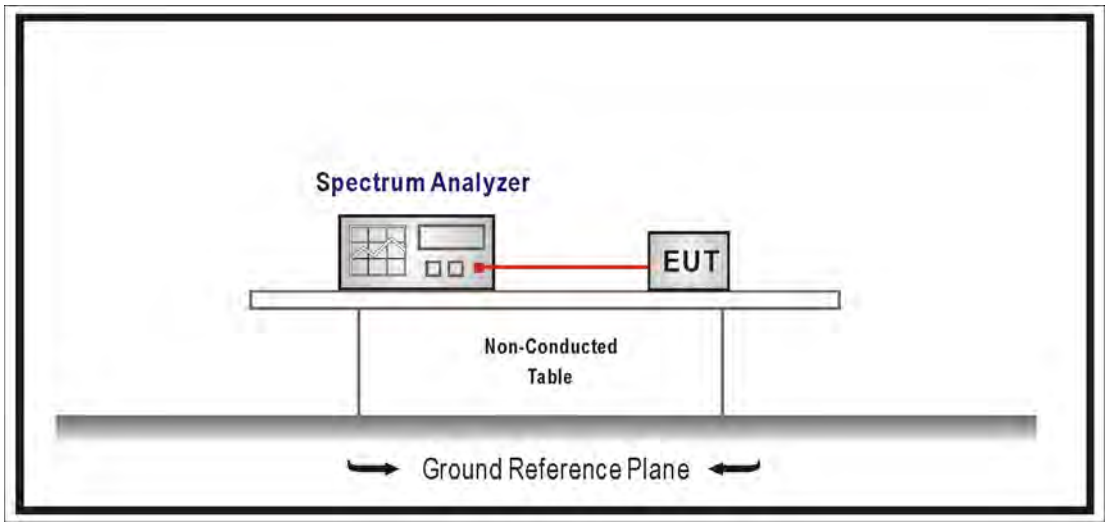
The following test equipments are used during the radiated emission tests:

Peak Power Spectrum Density / SR7

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|---|---|---|---|---|
| Spectrum Analyzer | Agilent | N9010A-EXA | US47140172 | 2016/08/23 |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

## 5.2. Test Setup




## 5.3. Limits

1. For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 17 dBm in any 1MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
2. For the band 5.25-5.35 GHz, the peak power spectral density shall not exceed 11 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
3. For the band 5.725-5.850 GHz, the peak power spectral density shall not exceed 30 dBm in any 500KHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

## 5.4. Test Procedure

The EUT was setup to ANSI C63.10:2013; tested to U-NII test procedure of KDB 789033 D02 for compliance to FCC 47CFR Subpart E requirements.

For Band1 : Set RBW=1MHz, VBW=3MHz with RMS detector. The PPSD is the highest level found across the emission in any 1-MHz band after 100 sweeps of averaging.

For Band4 : Set RBW=500KHz, VBW=1.5MHz with RMS detector. The PPSD is the highest level found across the emission in any 500KHz band after 100 sweeps of averaging.

## 5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

## 5.6. Test Result

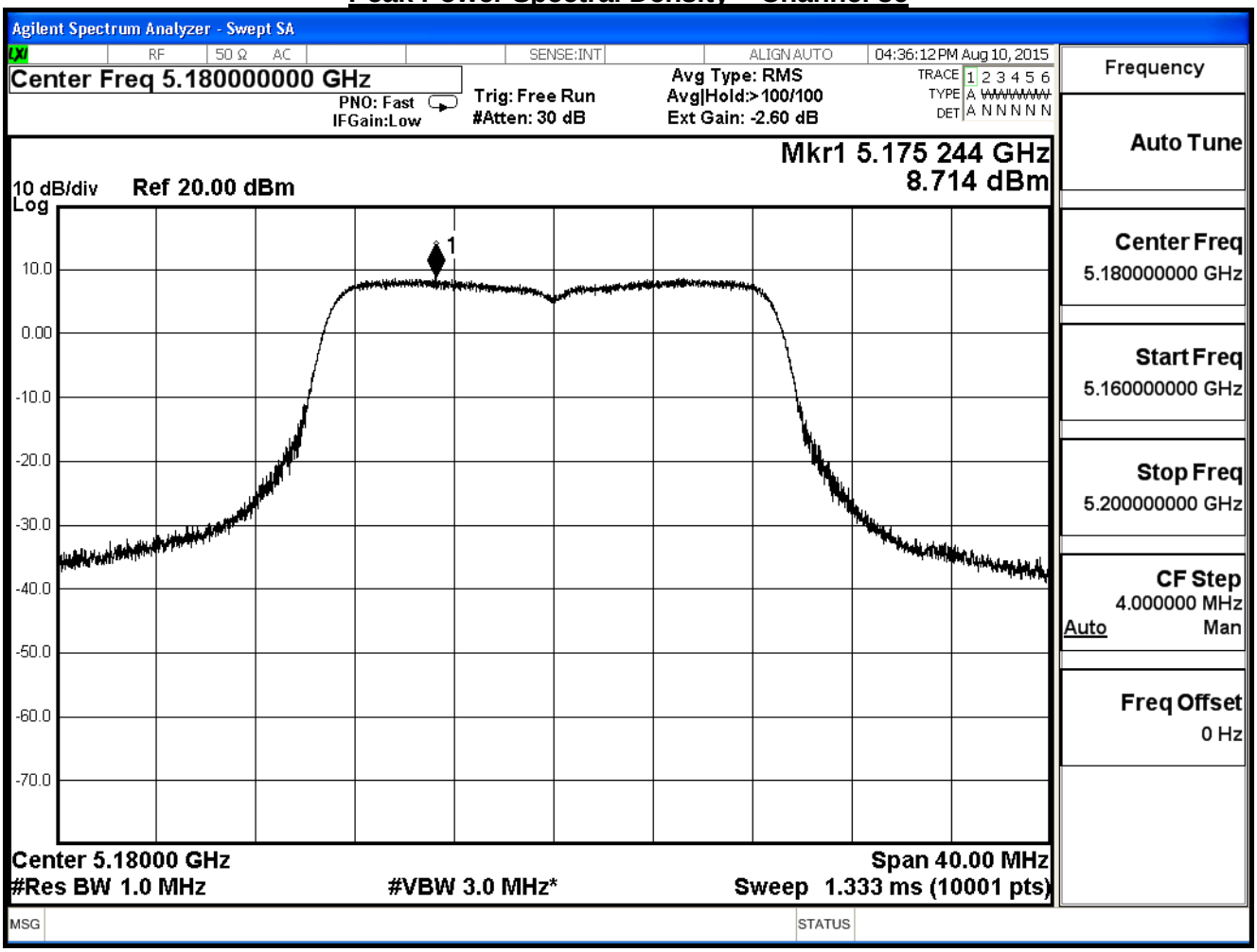
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11a (ANT 0) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 8.714 | ≦15.69 | Pass |
| 44 | 5220 | 10.711 | ≦15.69 | Pass |
| 48 | 5240 | 10.838 | ≦15.69 | Pass |

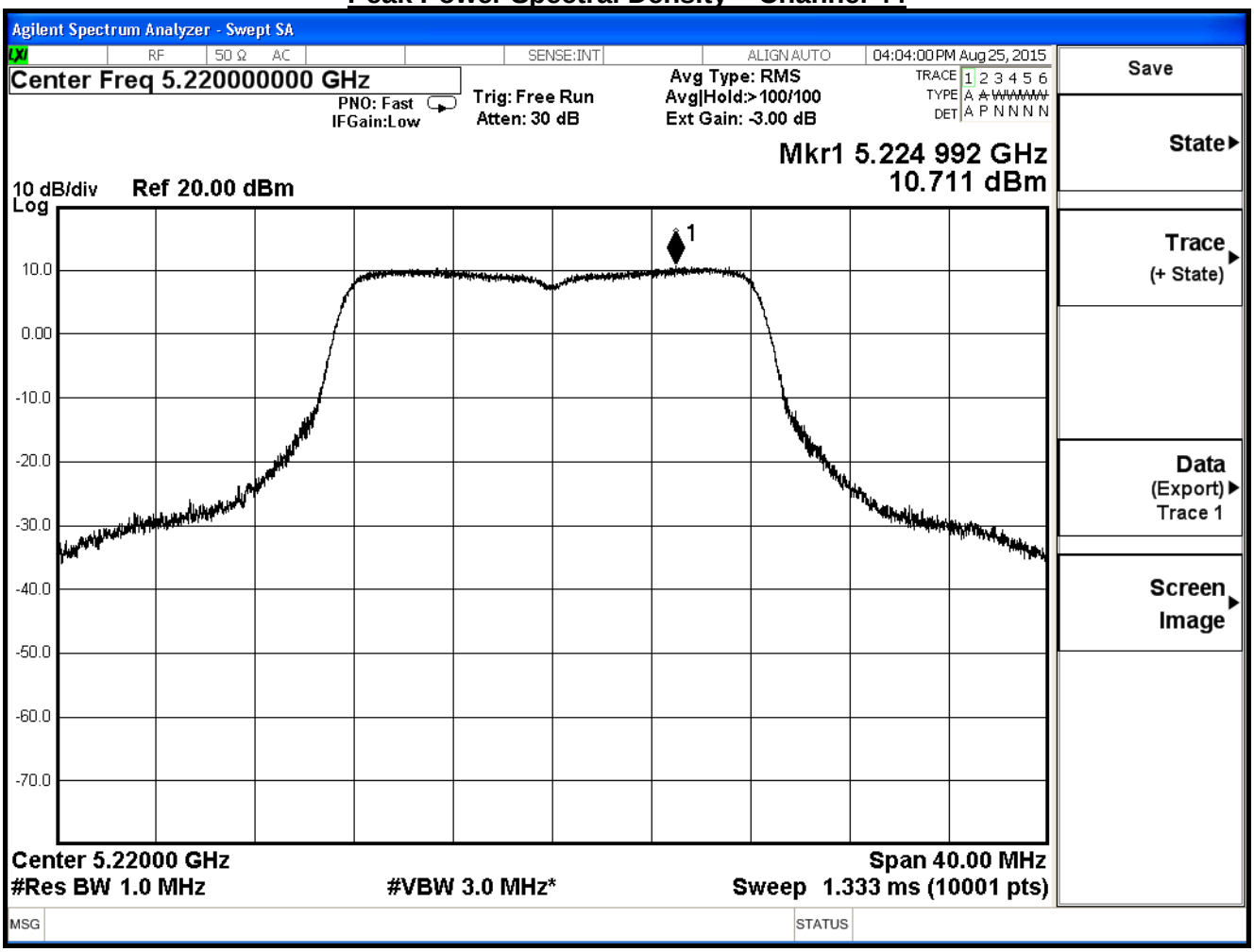
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

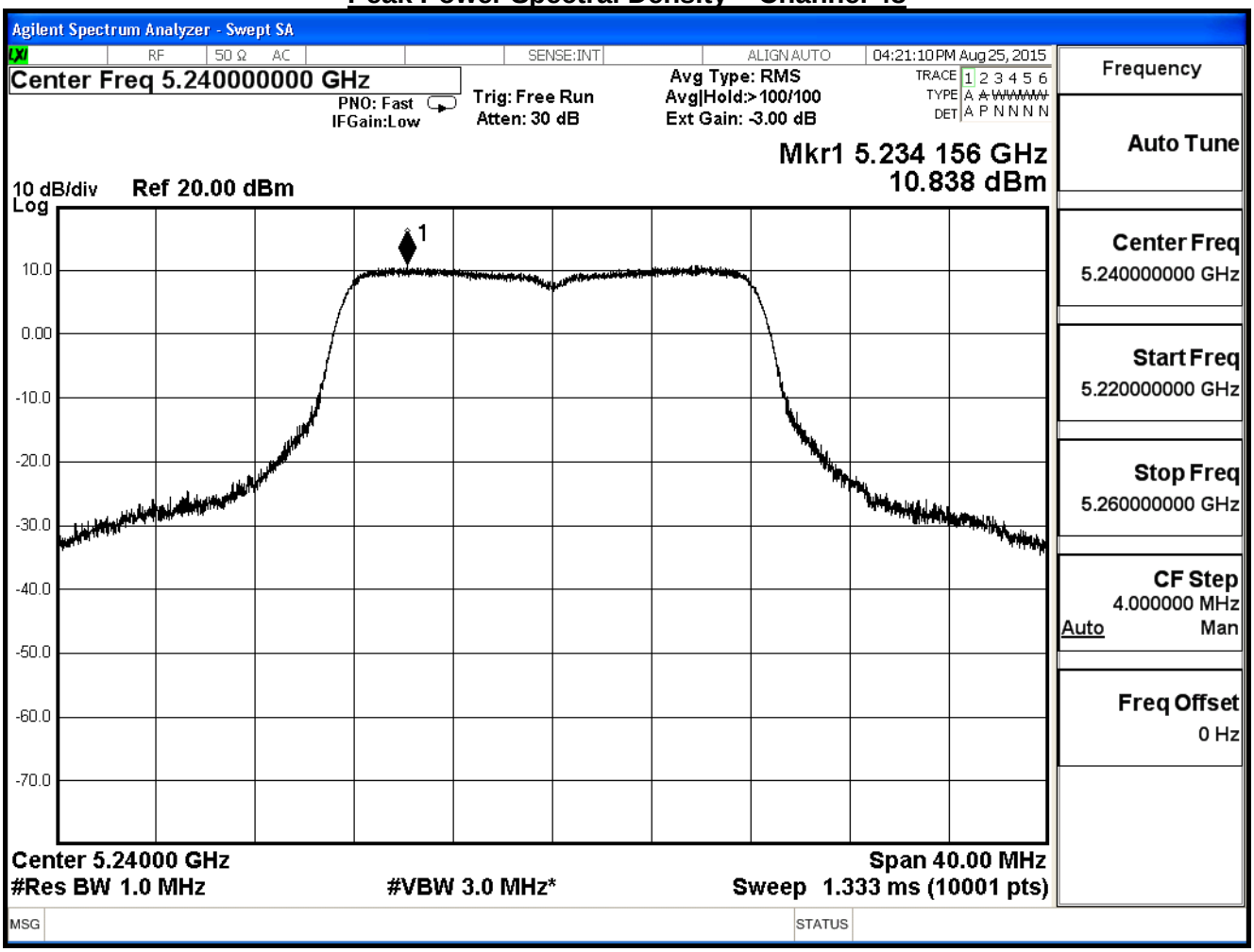
**Peak Power Spectral Density – Channel 36**



## Peak Power Spectral Density – Channel 44



## Peak Power Spectral Density – Channel 48



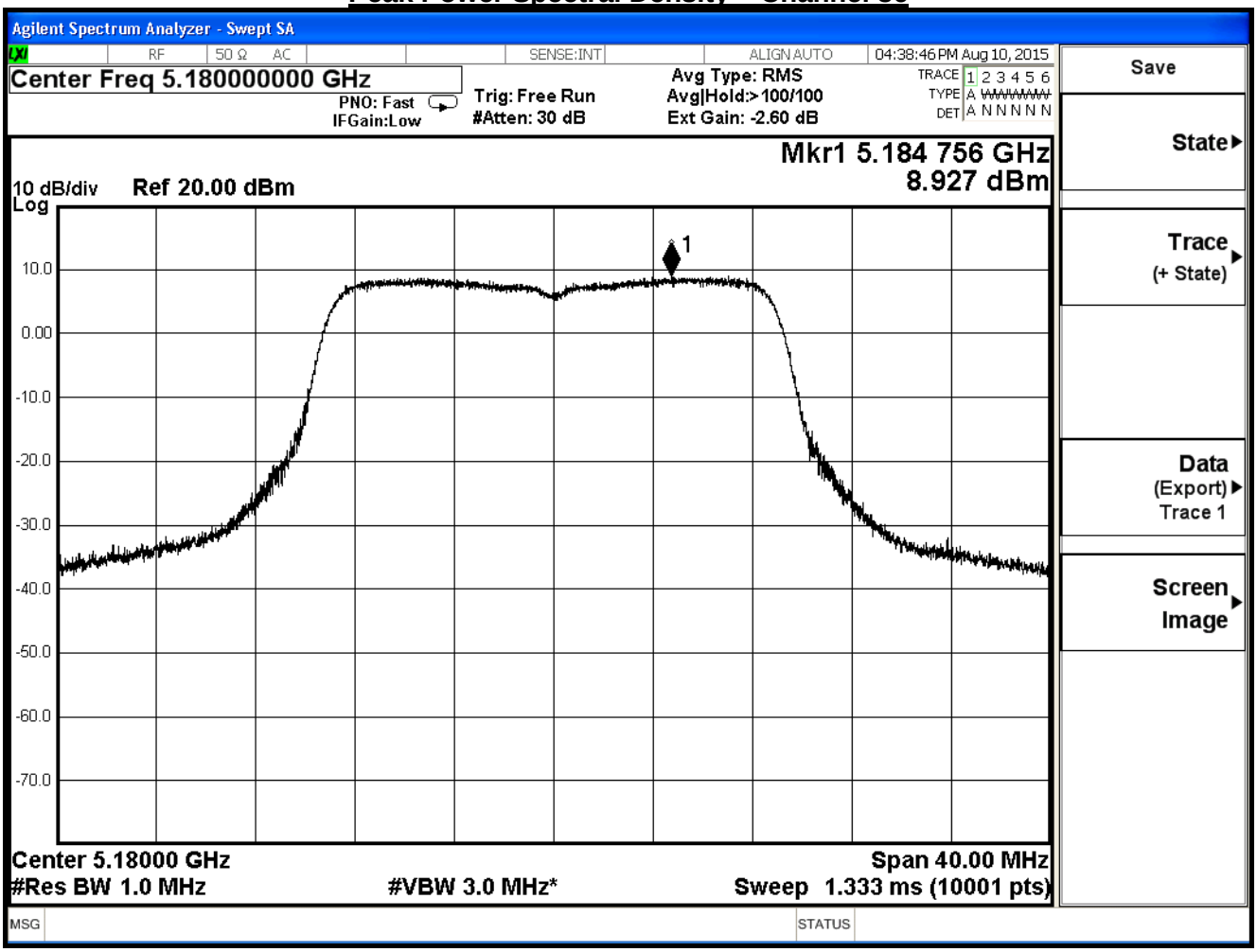
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11a (ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measurement (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 8.927 | ≦15.69 | Pass |
| 44 | 5220 | 10.828 | ≦15.69 | Pass |
| 48 | 5240 | 10.748 | ≦15.69 | Pass |

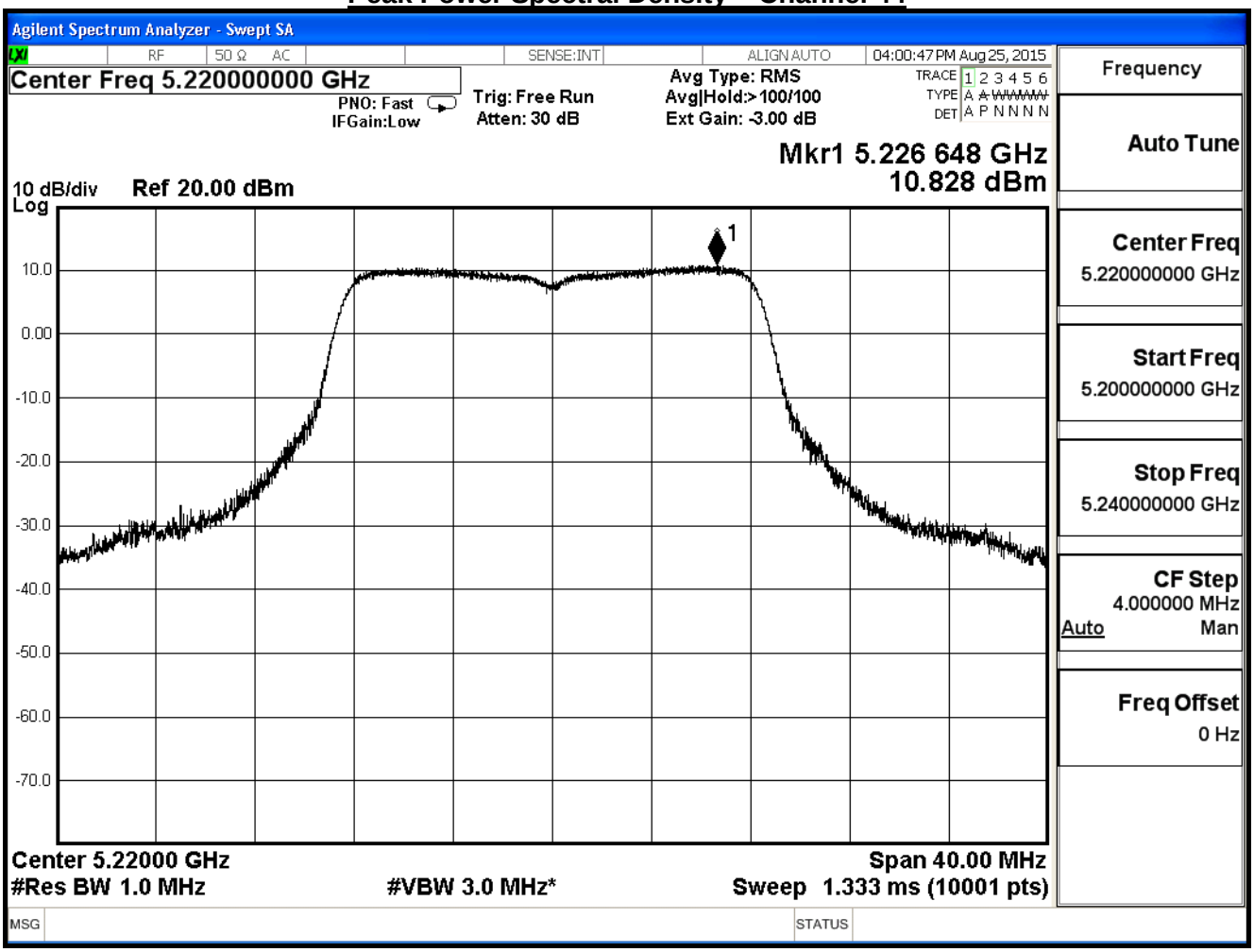
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

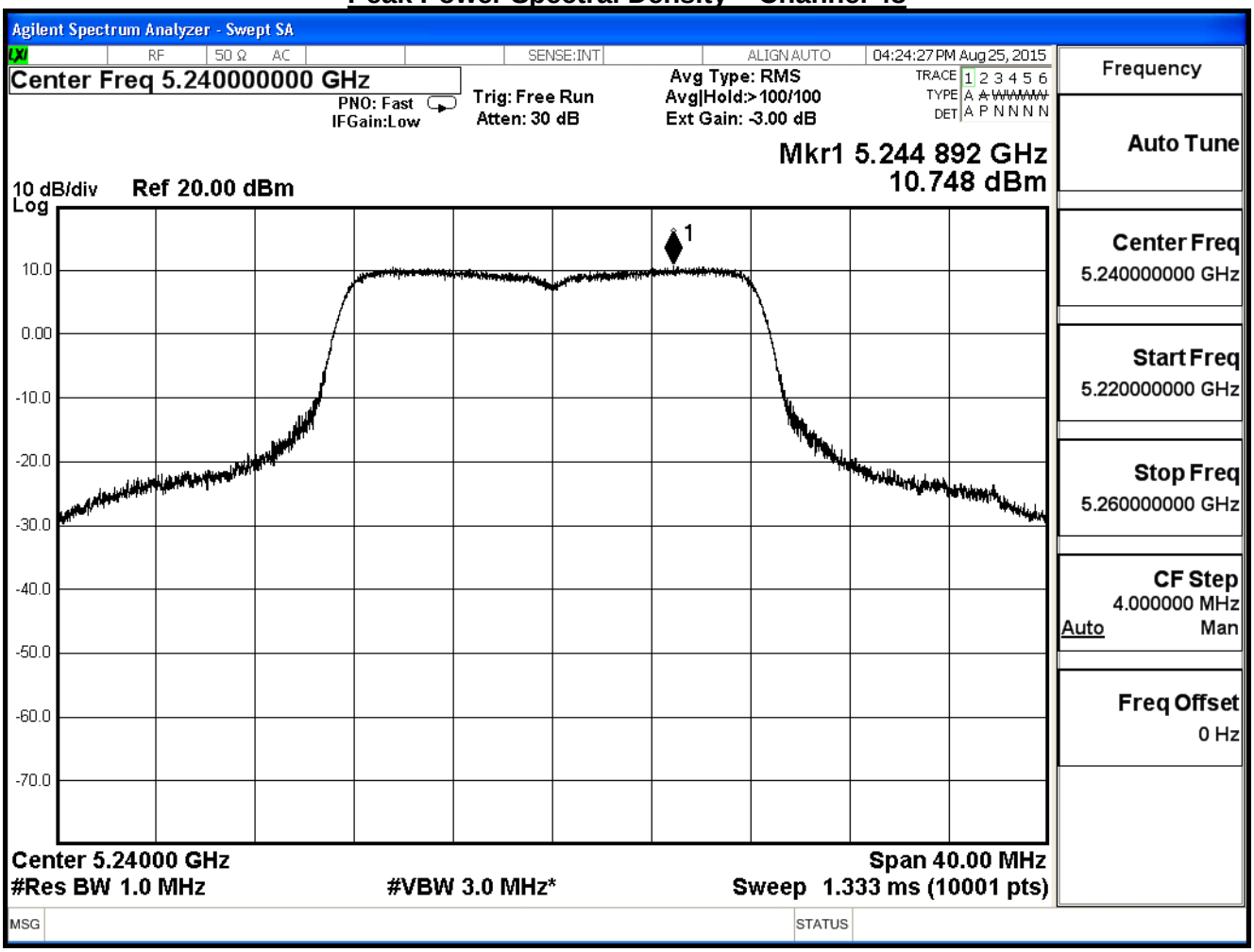
**Peak Power Spectral Density – Channel 36**



## Peak Power Spectral Density – Channel 44



## Peak Power Spectral Density – Channel 48



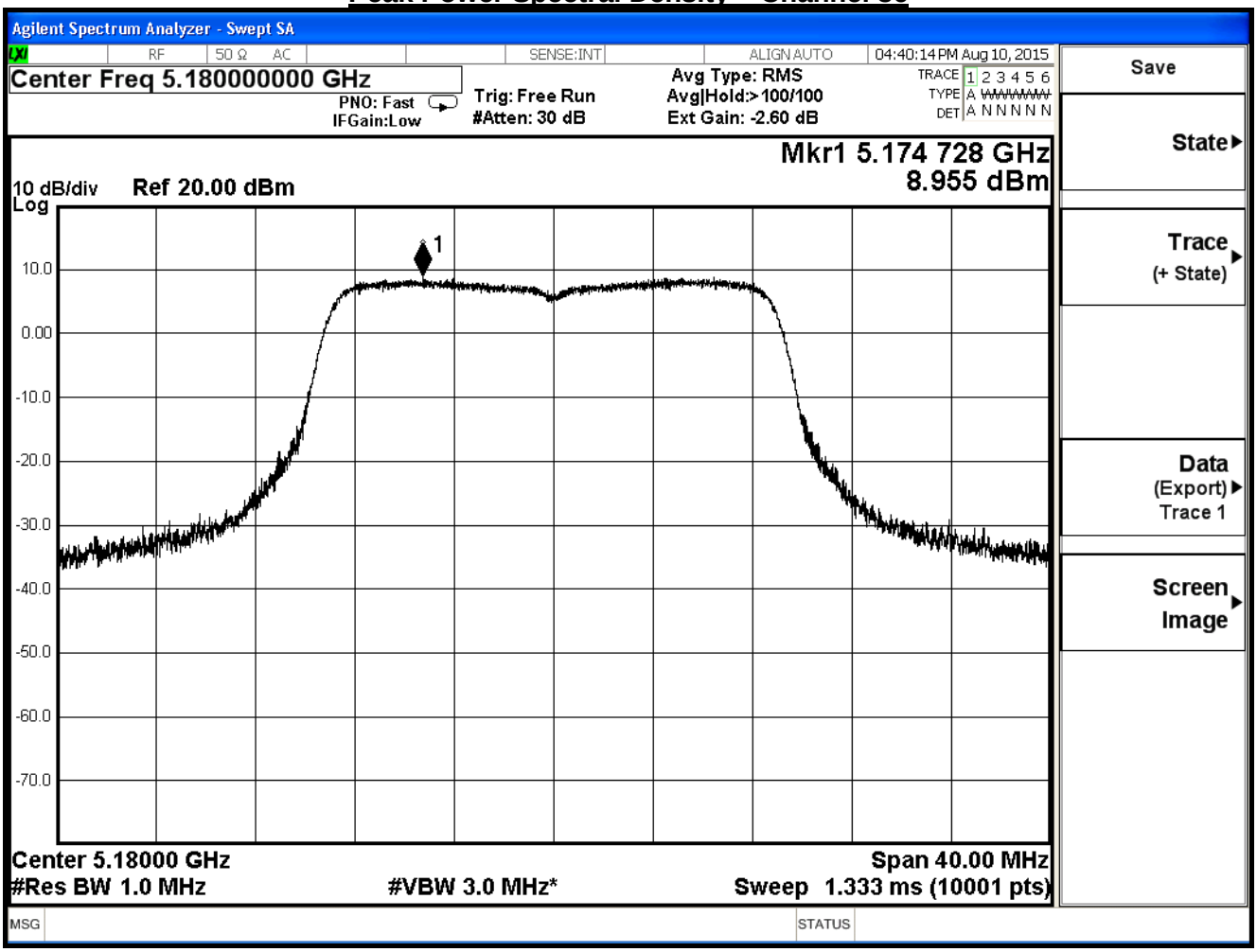
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11a (ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 8.955 | ≦15.69 | Pass |
| 44 | 5220 | 10.739 | ≦15.69 | Pass |
| 48 | 5240 | 10.900 | ≦15.69 | Pass |

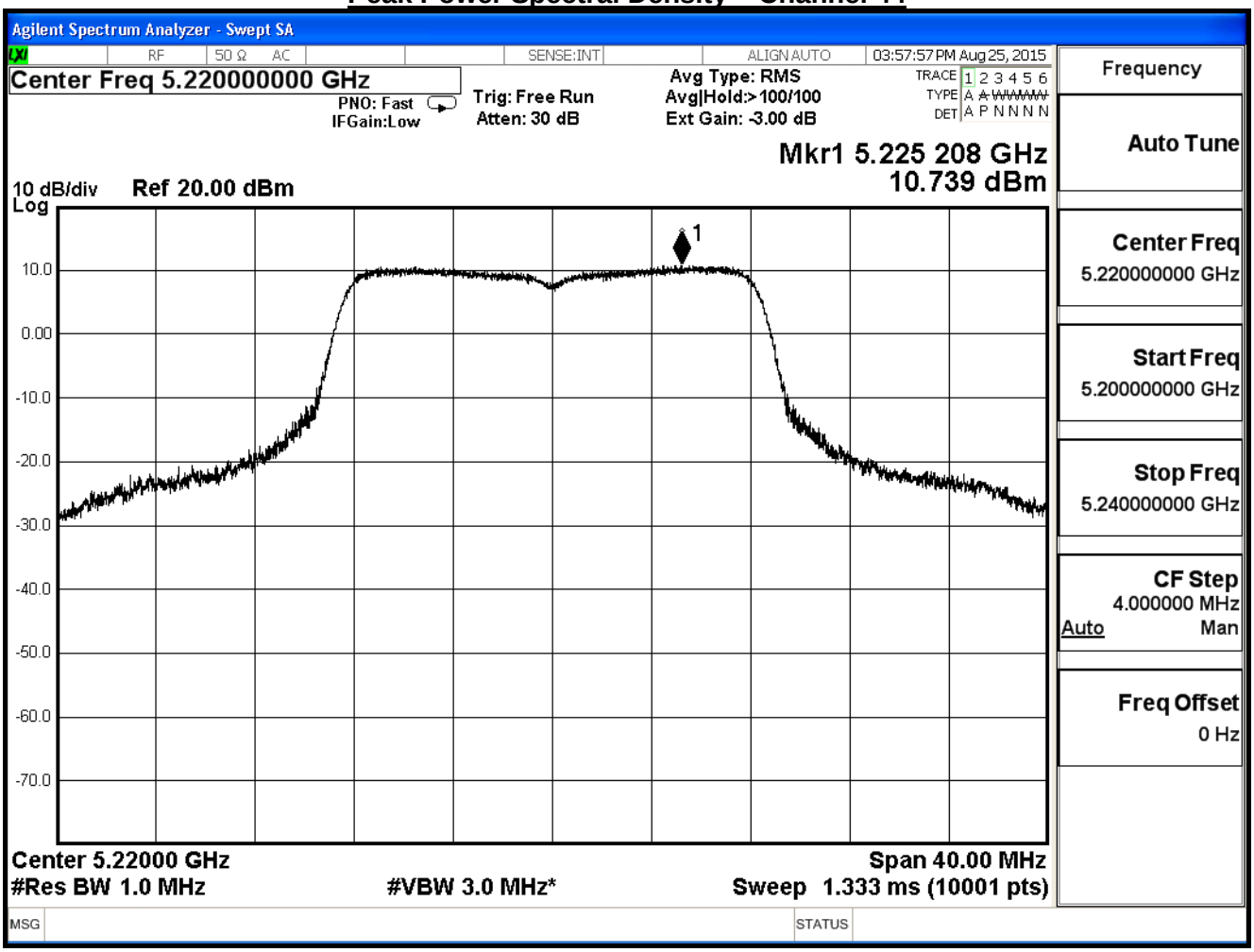
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

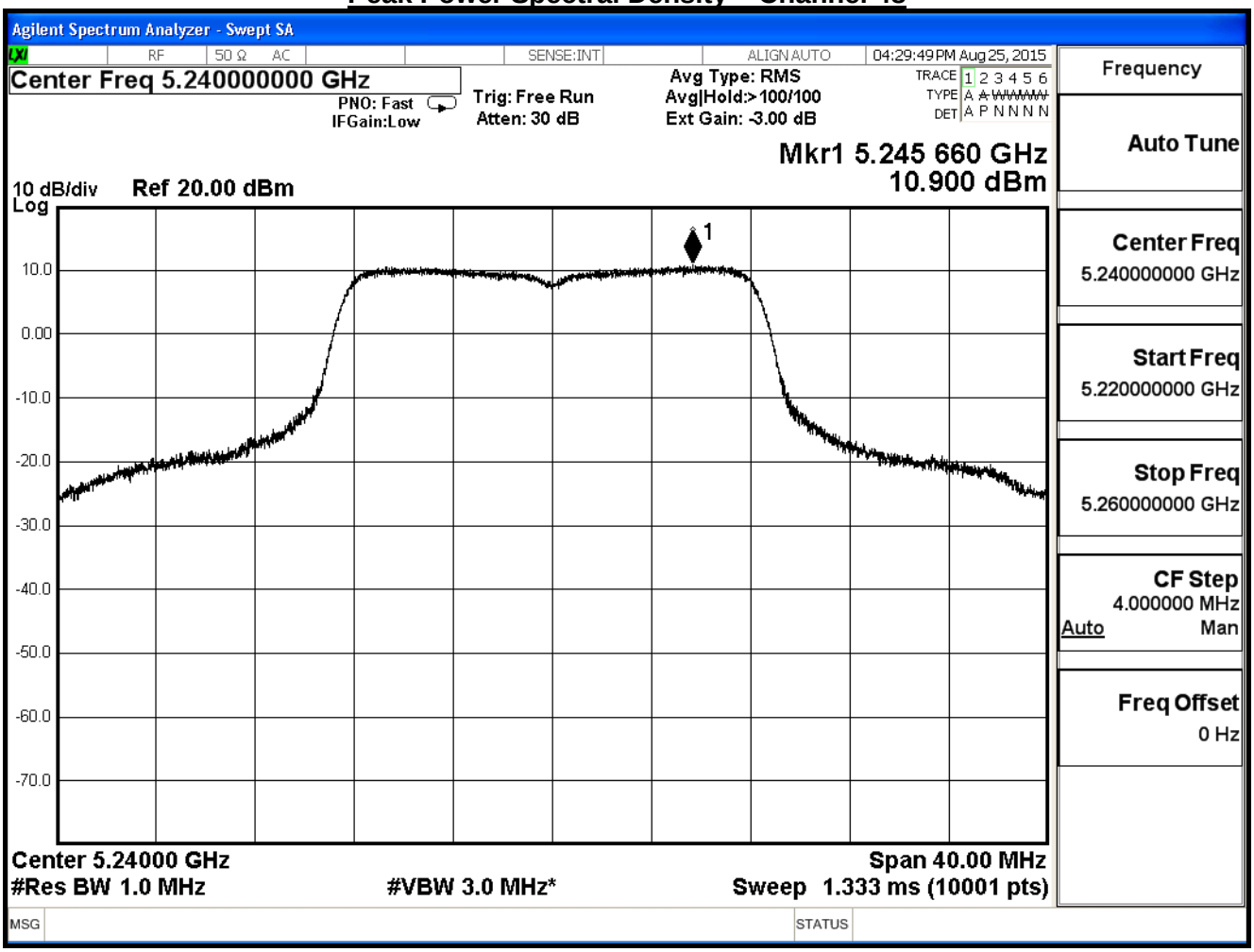
**Peak Power Spectral Density – Channel 36**



## Peak Power Spectral Density – Channel 44



## Peak Power Spectral Density – Channel 48



| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11a (ANT 0+1+2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 13.635 | ≦15.69 | Pass |
| 44 | 5220 | 15.531 | ≦15.69 | Pass |
| 48 | 5240 | 15.600 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

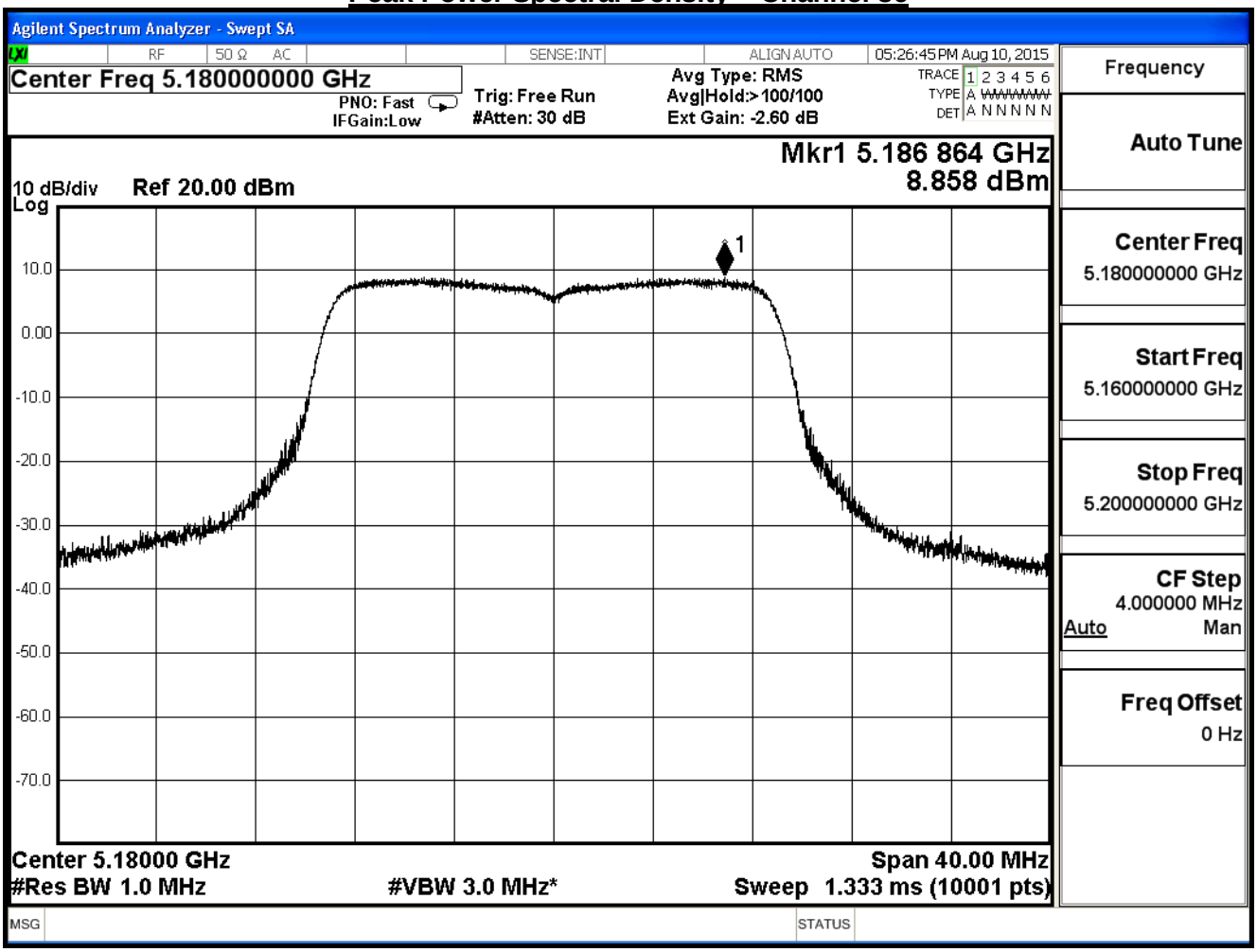
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 0) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 8.858 | ≦15.69 | Pass |
| 44 | 5220 | 10.780 | ≦15.69 | Pass |
| 48 | 5240 | 10.688 | ≦15.69 | Pass |

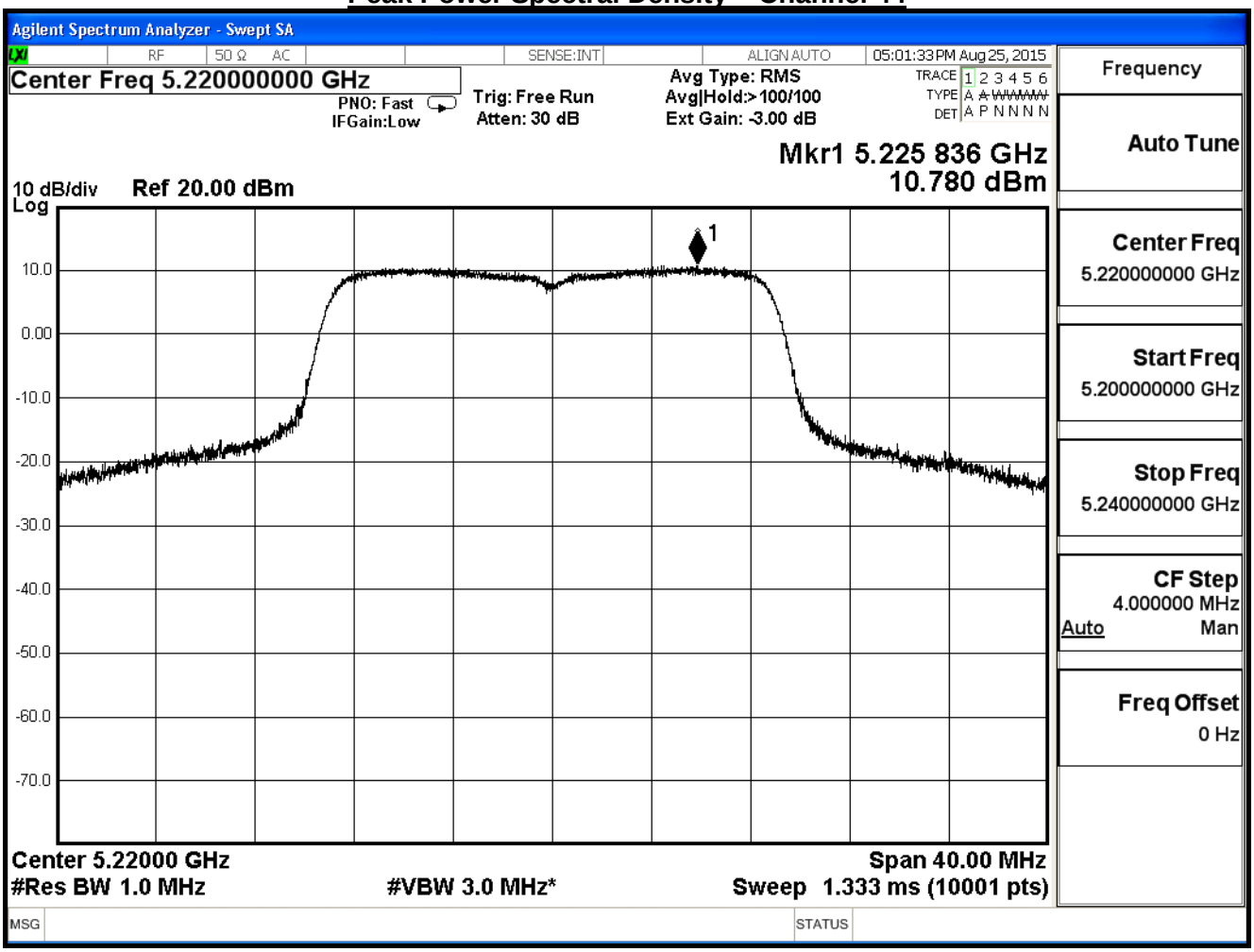
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

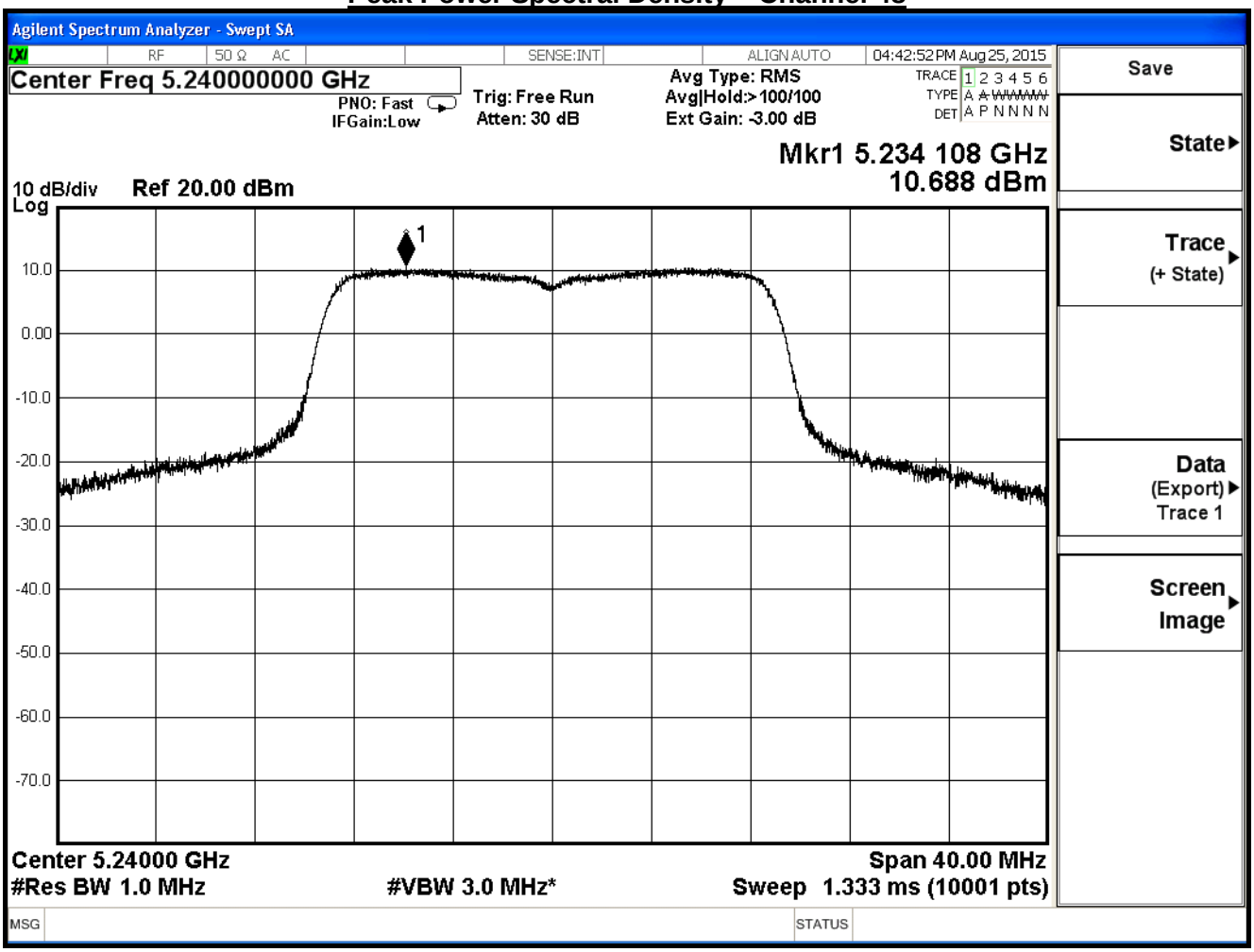
**Peak Power Spectral Density – Channel 36**



## Peak Power Spectral Density – Channel 44



## Peak Power Spectral Density – Channel 48



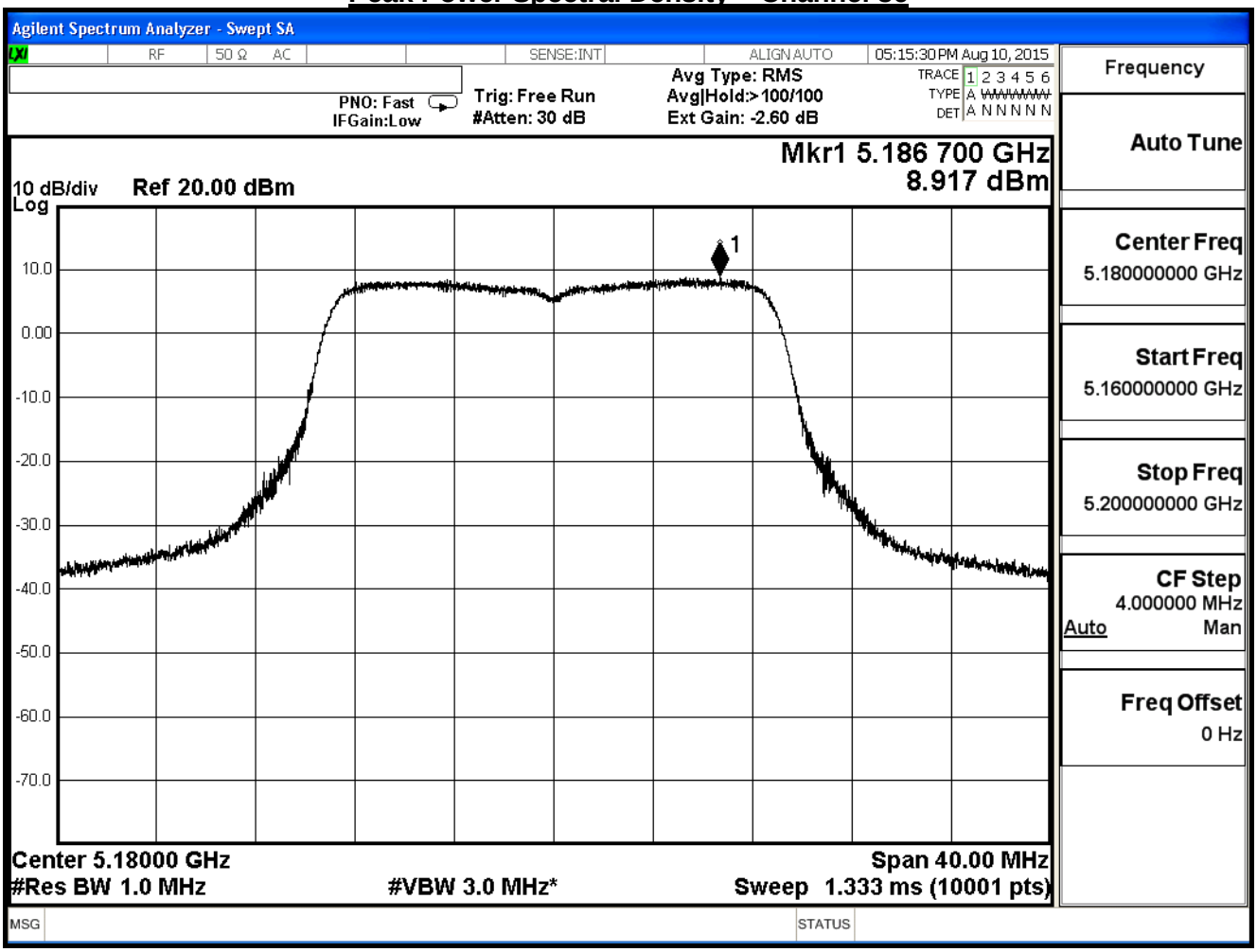
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11n(20MHz) (ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measurement (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 8.917 | ≦15.69 | Pass |
| 44 | 5220 | 10.671 | ≦15.69 | Pass |
| 48 | 5240 | 10.895 | ≦15.69 | Pass |

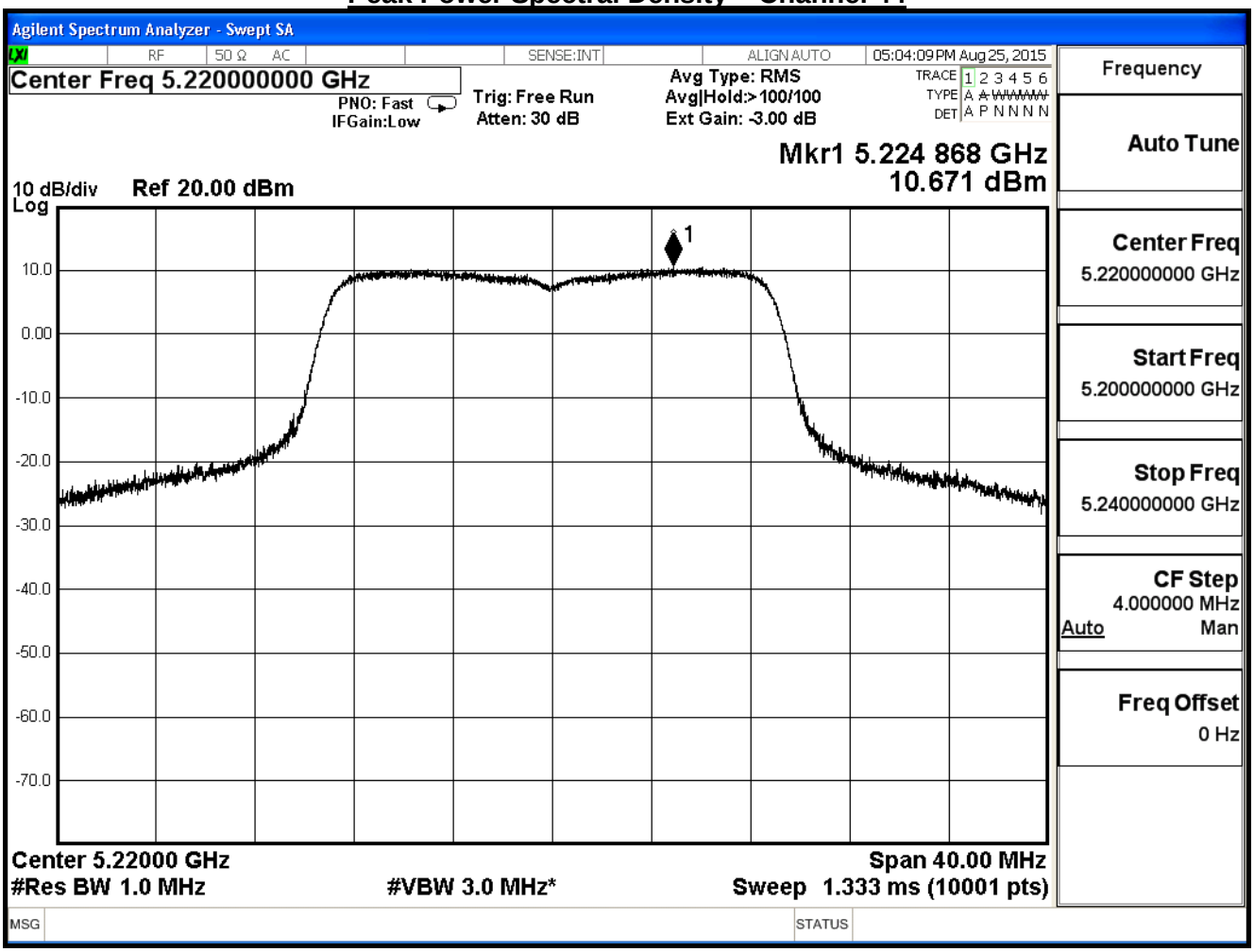
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

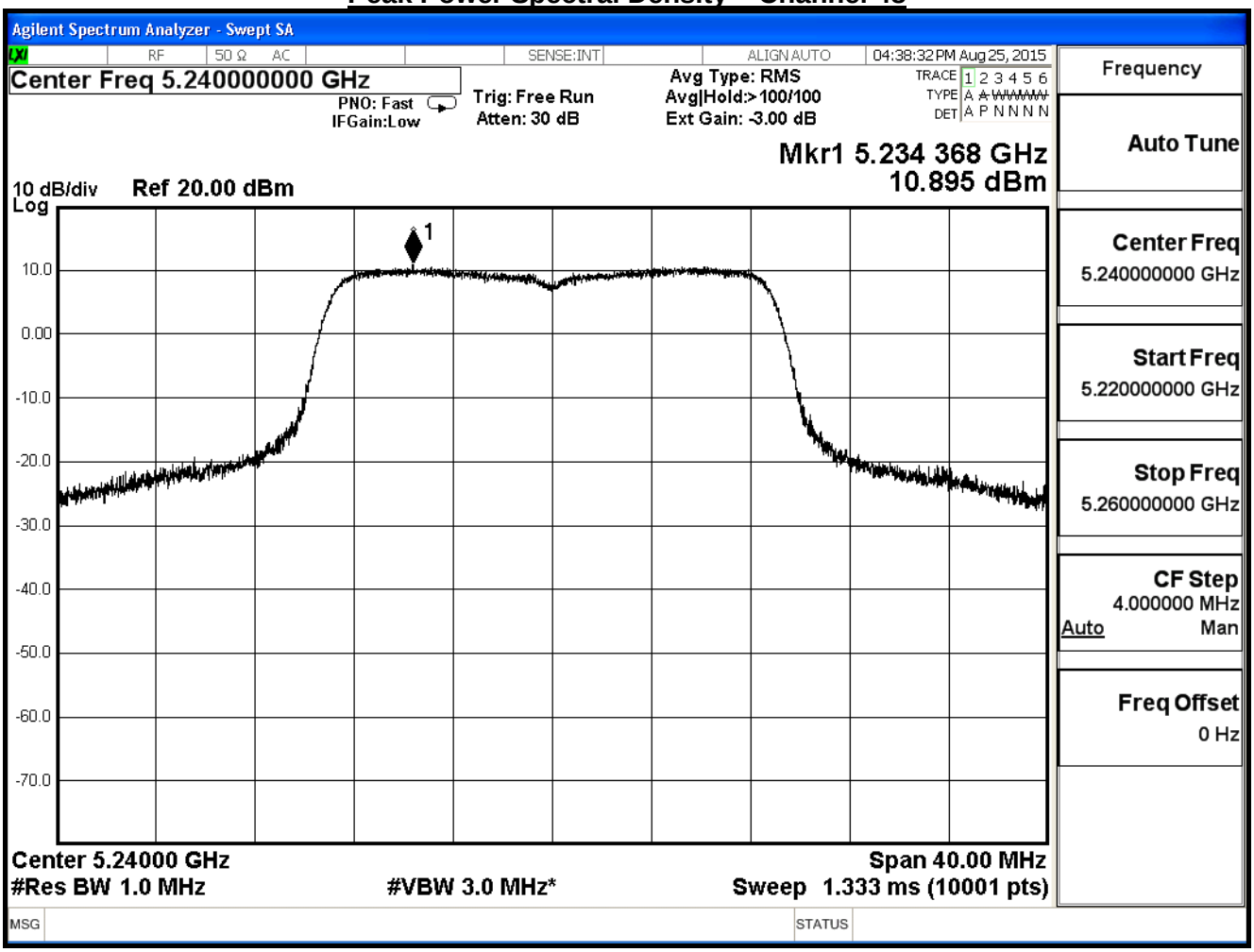
**Peak Power Spectral Density – Channel 36**



## Peak Power Spectral Density – Channel 44



## Peak Power Spectral Density – Channel 48



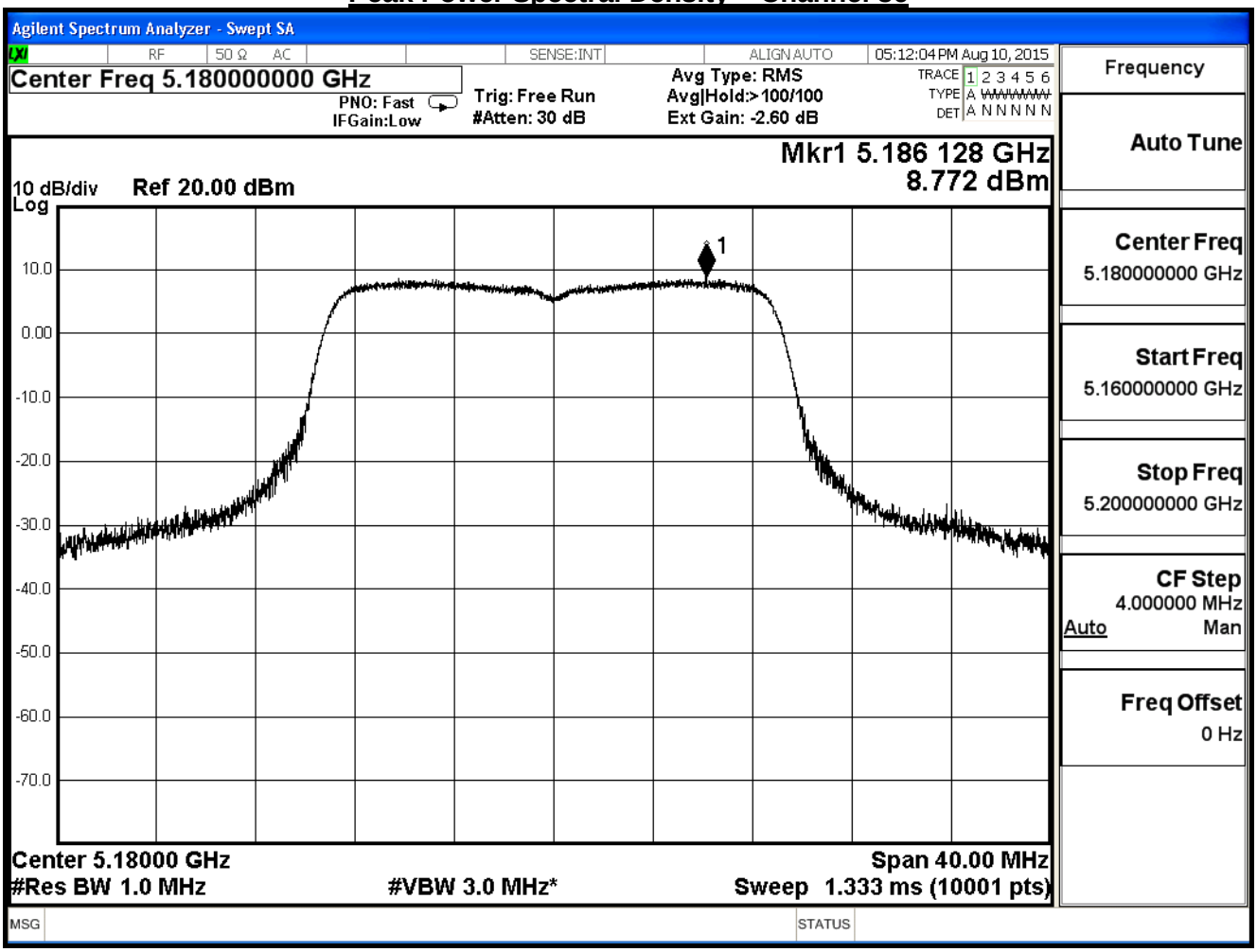
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11n(20MHz) (ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 8.772 | ≦15.69 | Pass |
| 44 | 5220 | 10.752 | ≦15.69 | Pass |
| 48 | 5240 | 10.870 | ≦15.69 | Pass |

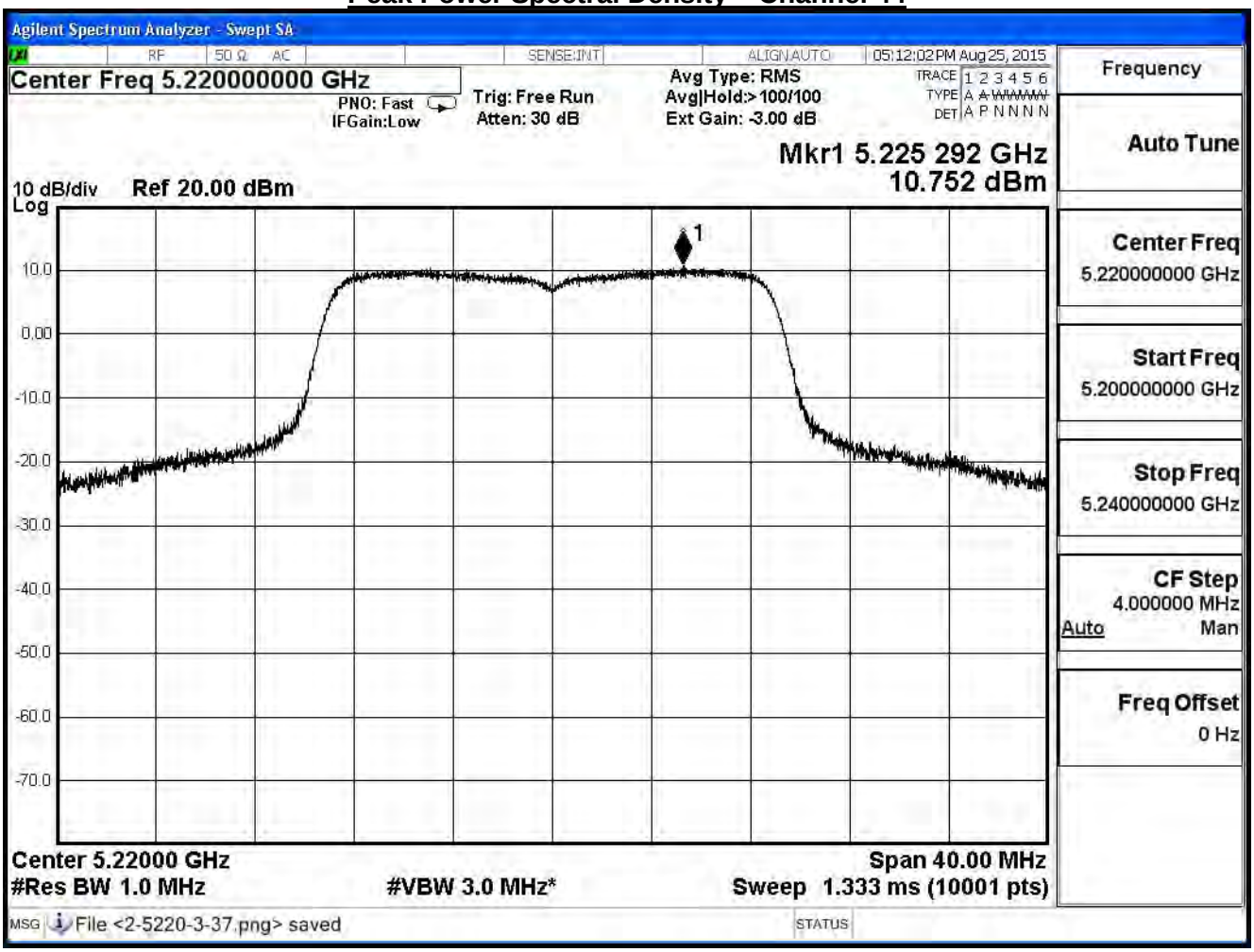
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

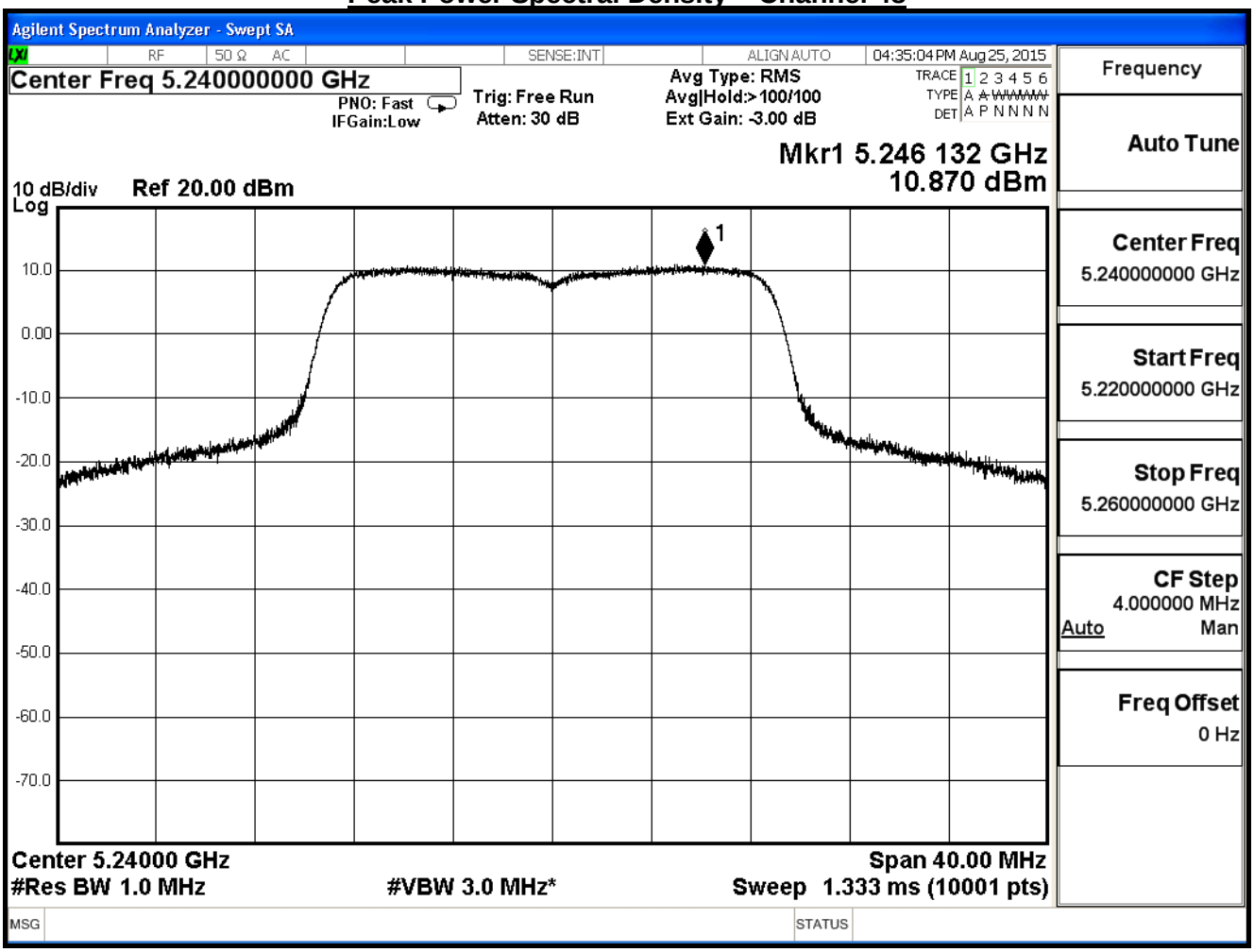
**Peak Power Spectral Density – Channel 36**



**Peak Power Spectral Density – Channel 44**



## Peak Power Spectral Density – Channel 48



| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/25 | Test Site | SR7 |

| IEEE 802.11n(20MHz) (ANT 0+1+2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 13.621 | ≦15.69 | Pass |
| 44 | 5220 | 15.506 | ≦15.69 | Pass |
| 48 | 5240 | 15.590 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

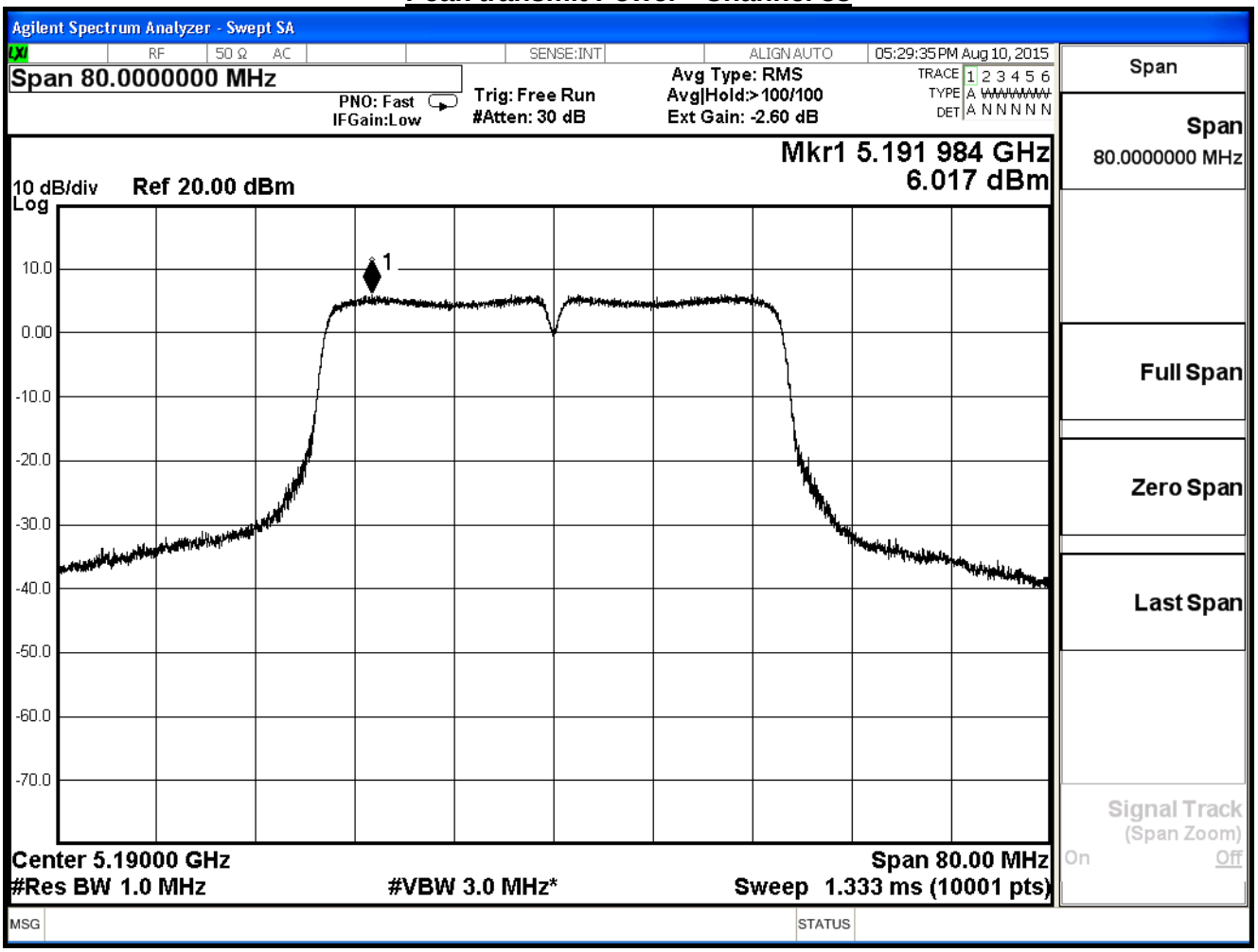
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 0) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 38 | 5190 | 6.017 | ≦15.69 | Pass |
| 46 | 5230 | 8.893 | ≦15.69 | Pass |

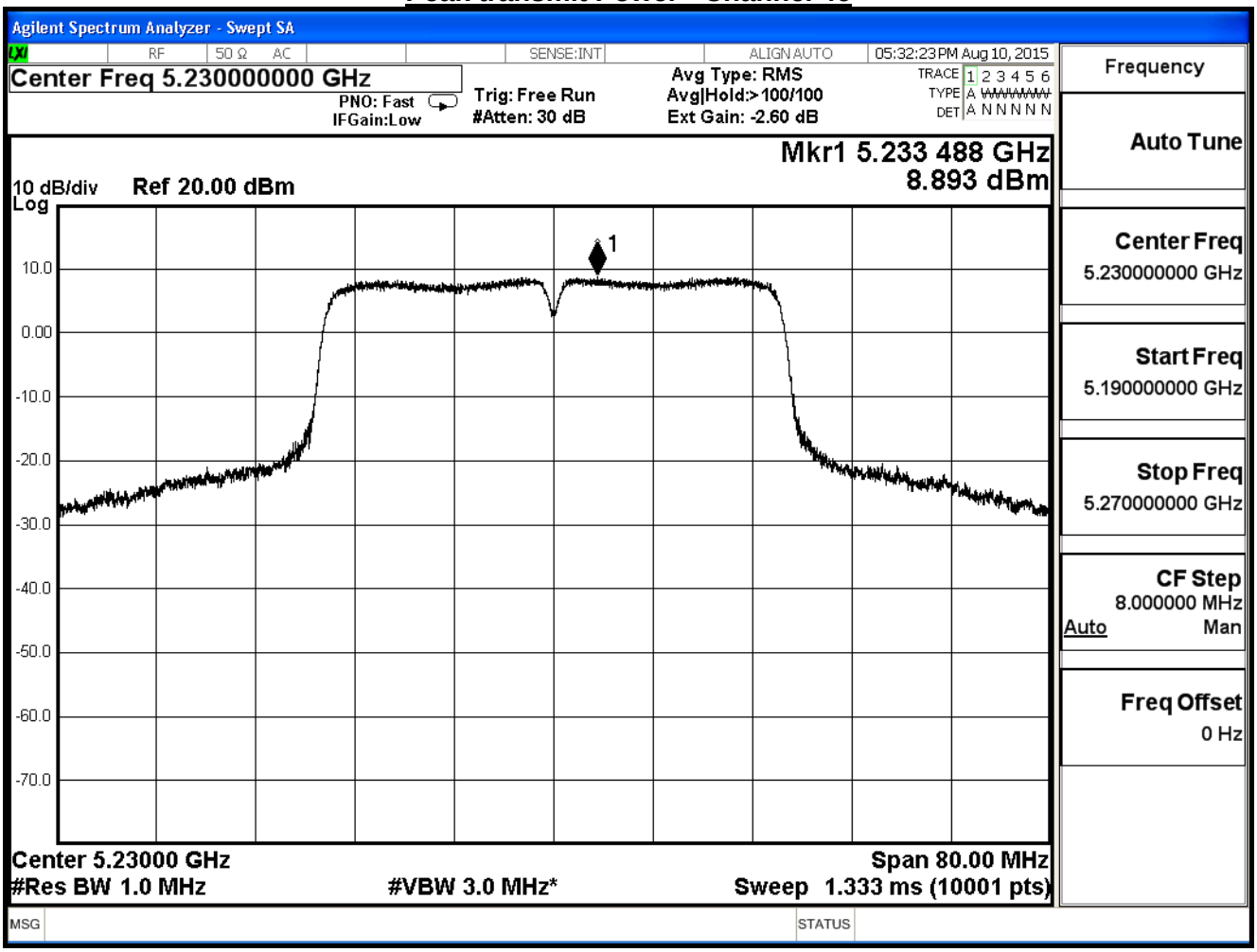
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 38**



**Peak transmit Power - Channel 46**



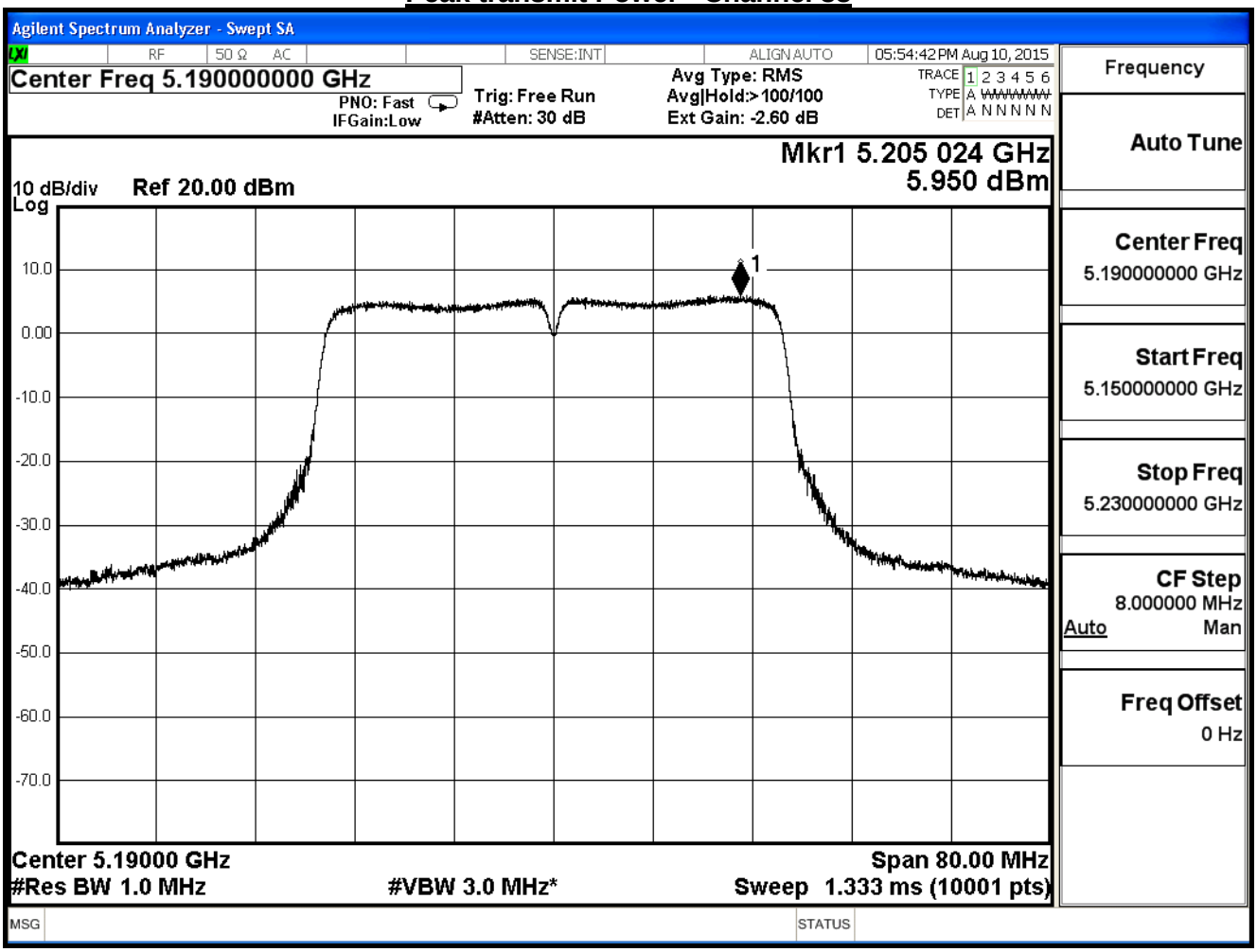
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz) (ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measurement (dBm) | Limit (dBm) | Result |
| 38 | 5190 | 5.950 | ≦15.69 | Pass |
| 46 | 5230 | 8.826 | ≦15.69 | Pass |

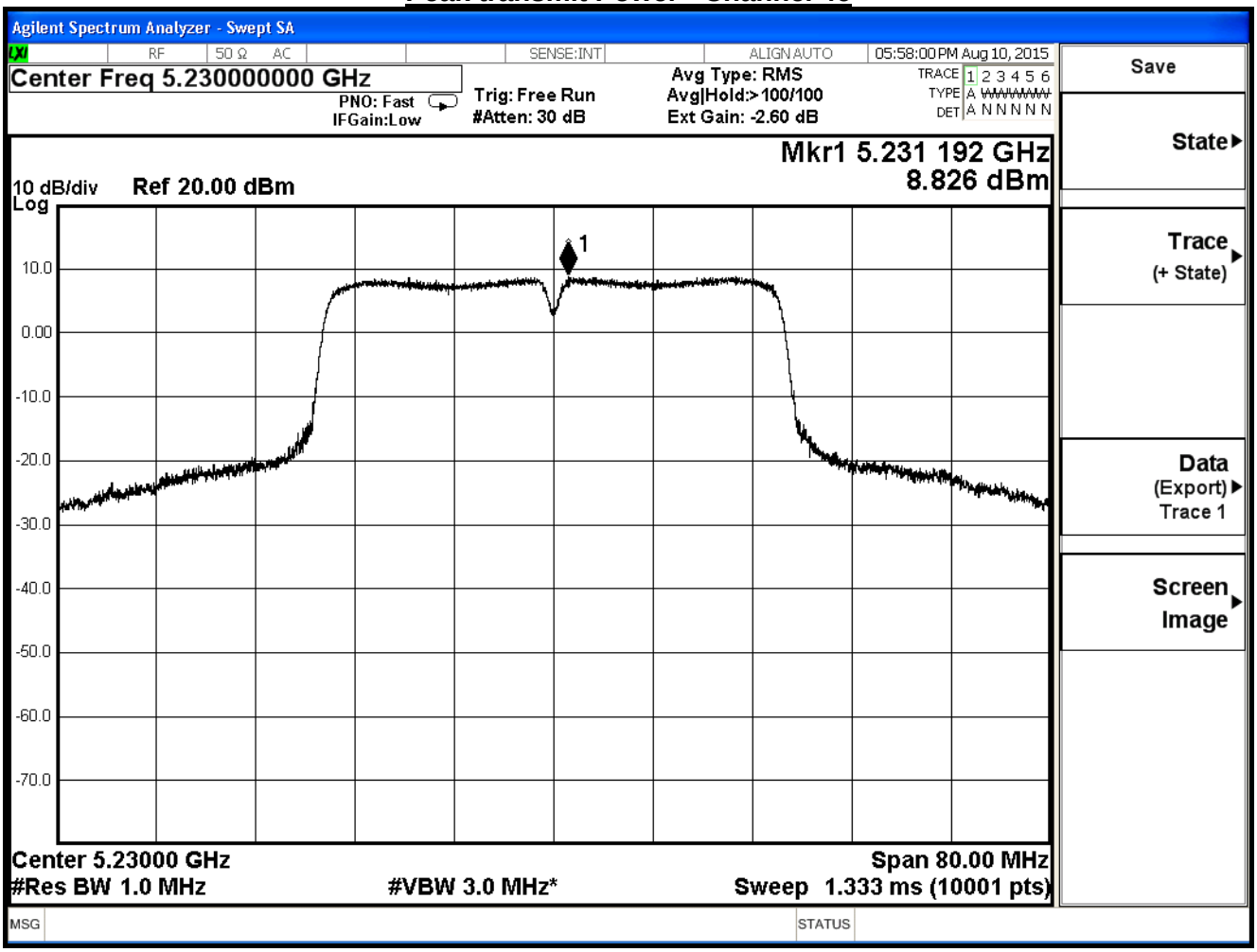
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 38**



**Peak transmit Power - Channel 46**



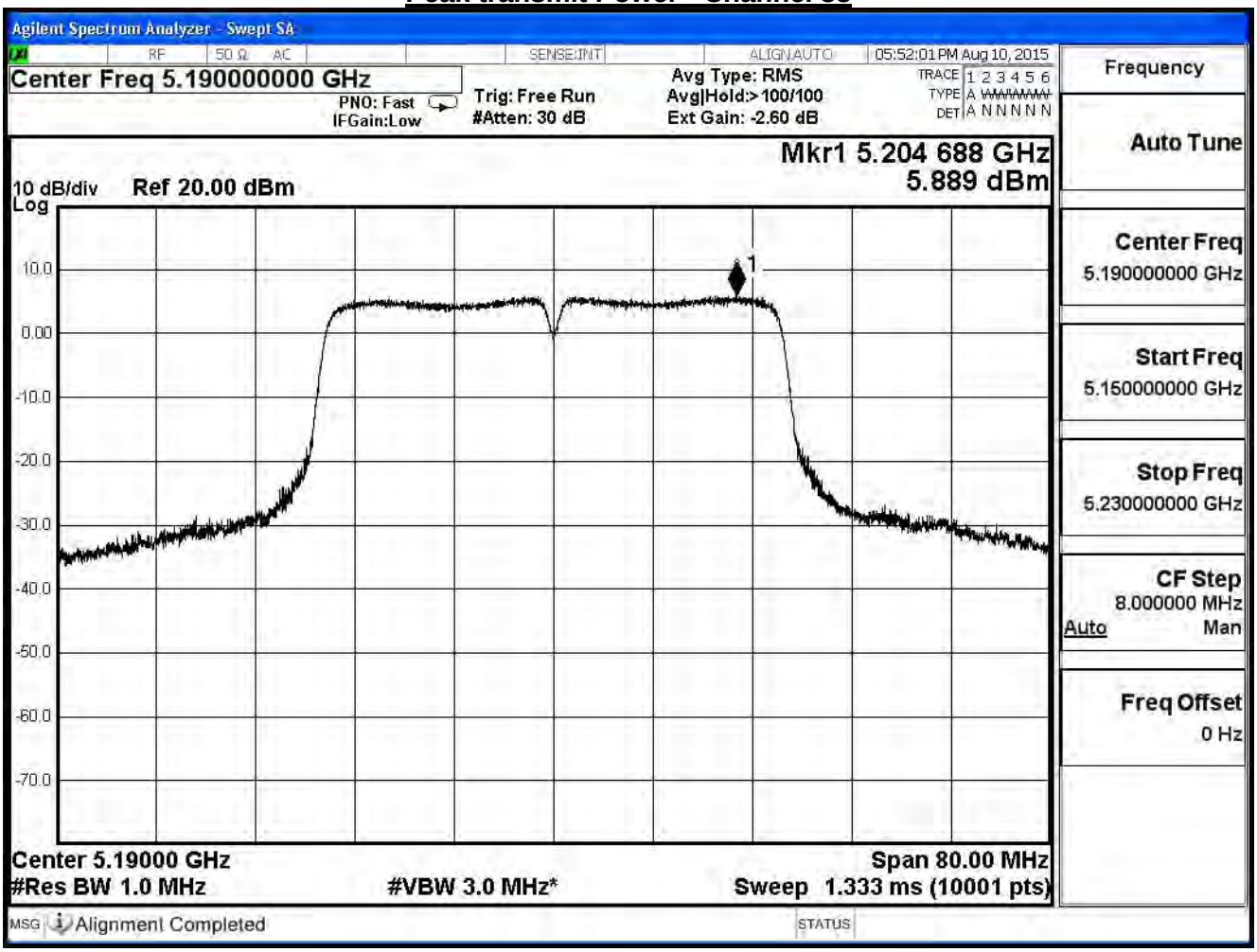
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz) (ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 38 | 5190 | 5.889 | ≦15.69 | Pass |
| 46 | 5230 | 8.674 | ≦15.69 | Pass |

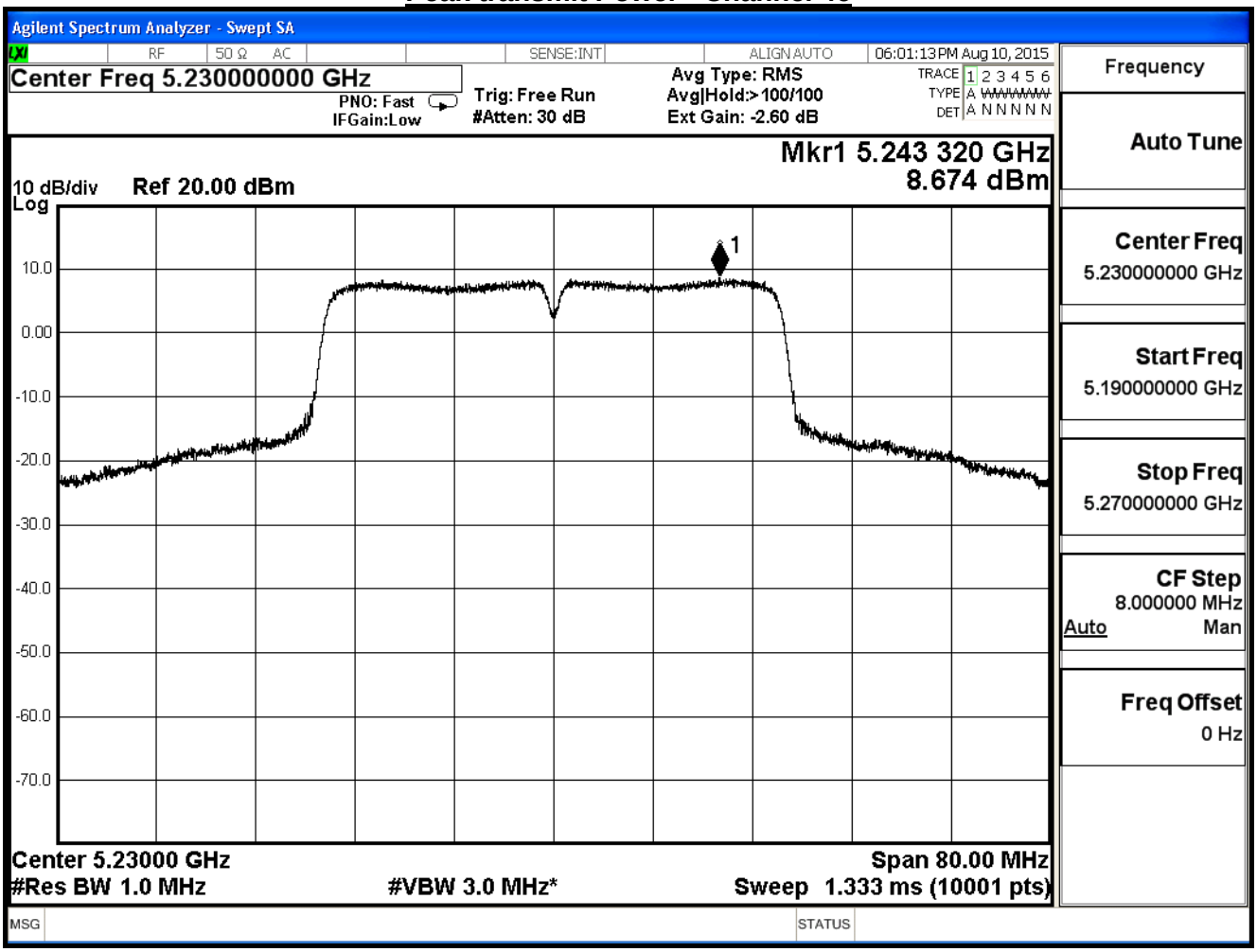
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 38**



**Peak transmit Power - Channel 46**



| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11n(40MHz) (ANT 0+1+2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 38 | 5190 | 10.724 | ≦15.69 | Pass |
| 46 | 5230 | 13.570 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

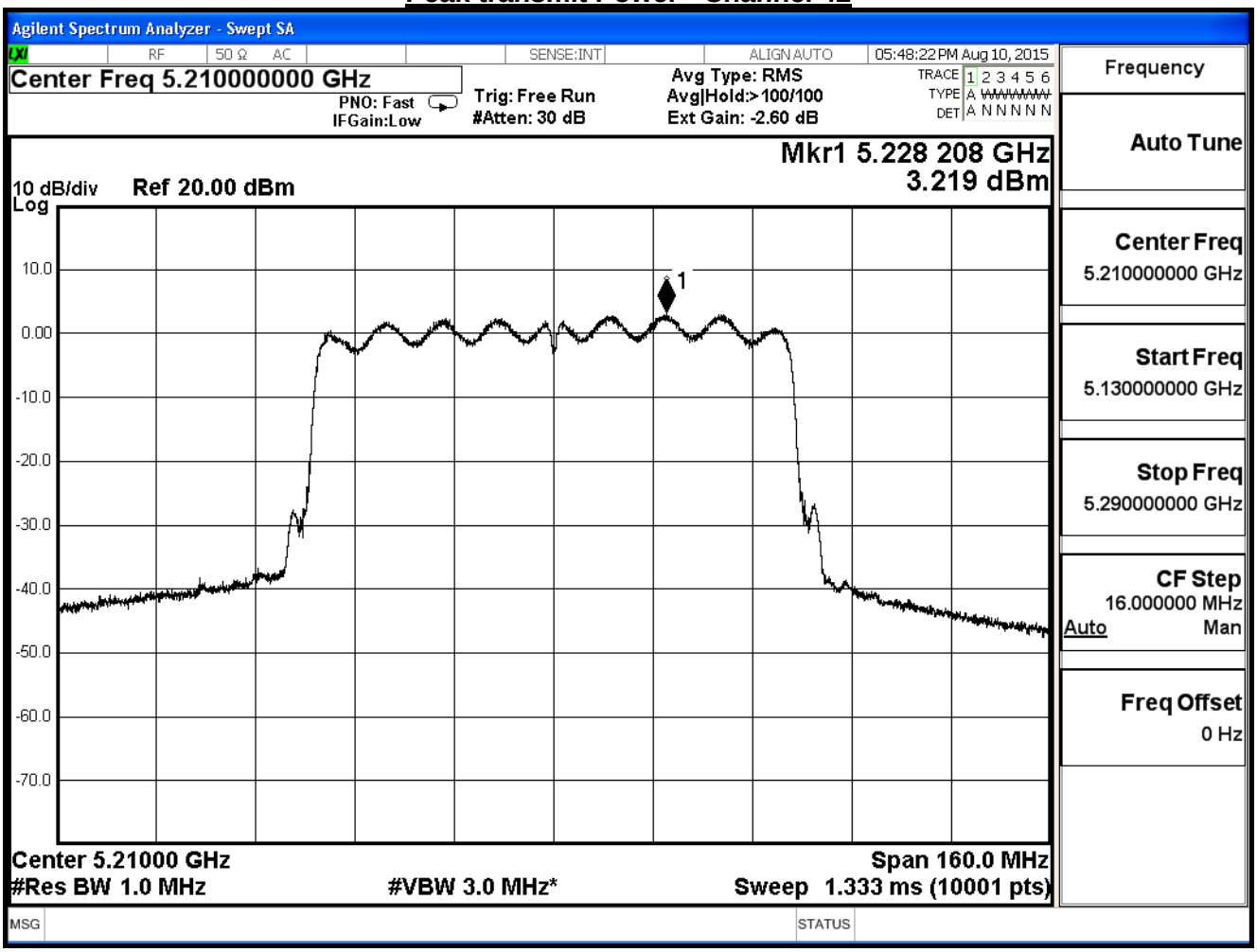
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz)(ANT 0) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 42 | 5210 | 3.219 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 42**



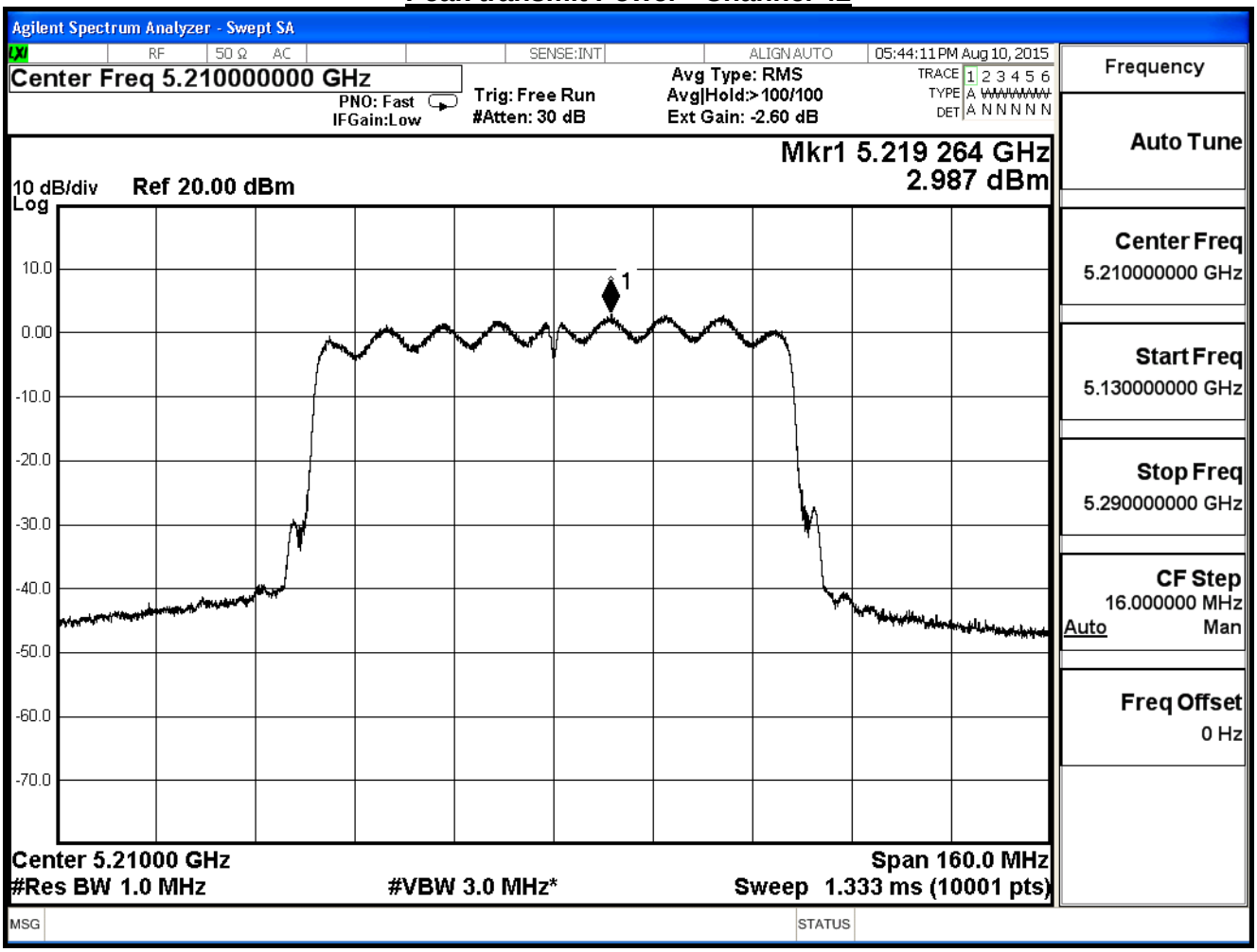
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz) (ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measurement (dBm) | Limit (dBm) | Result |
| 42 | 5210 | 2.987 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 42**



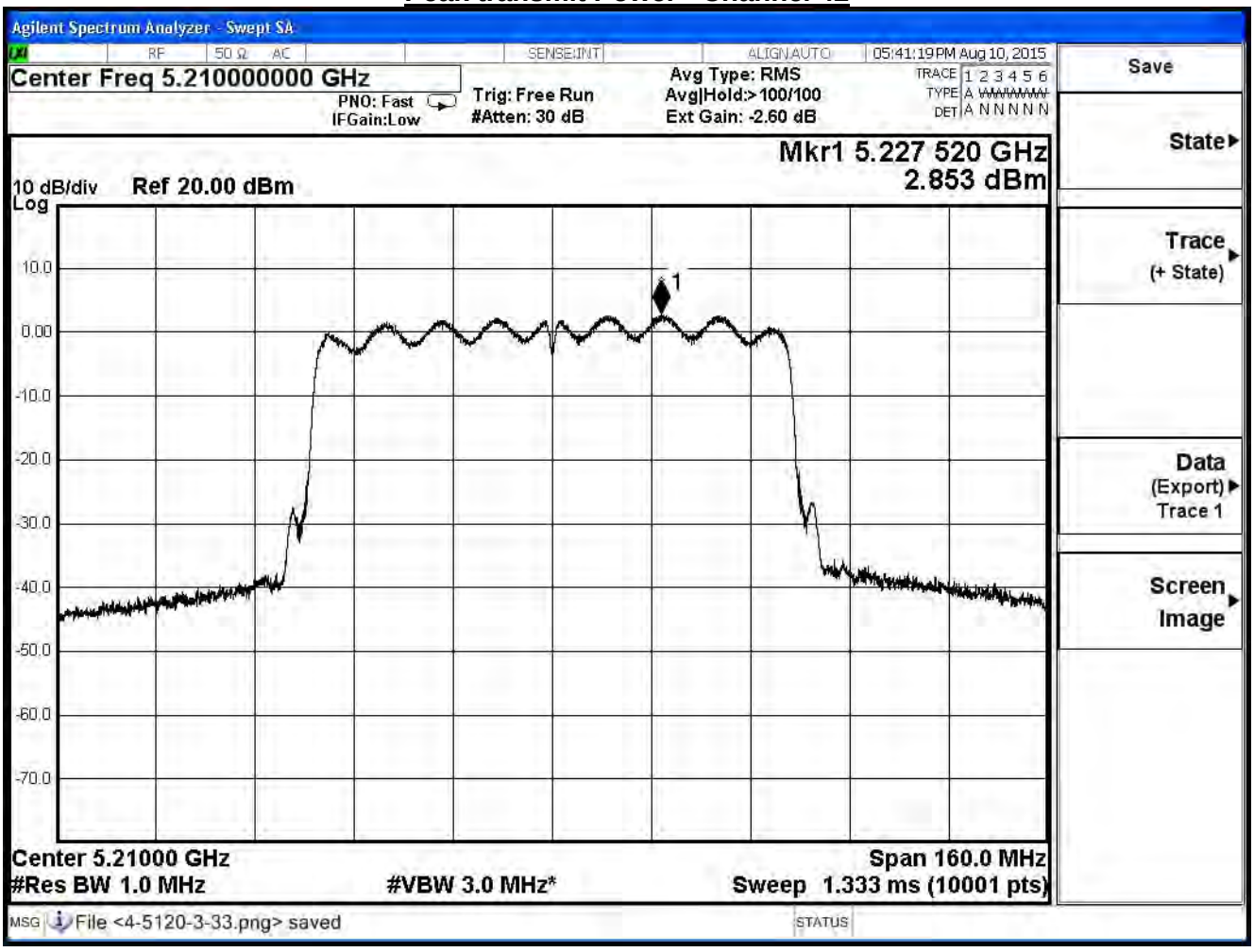
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz) (ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 42 | 5210 | 2.853 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 42**



| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326 | | |
| Date of Test | 2015/08/10 | Test Site | SR7 |

| IEEE 802.11ac(80MHz)(ANT 0+1+2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 42 | 5210 | 7.794 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

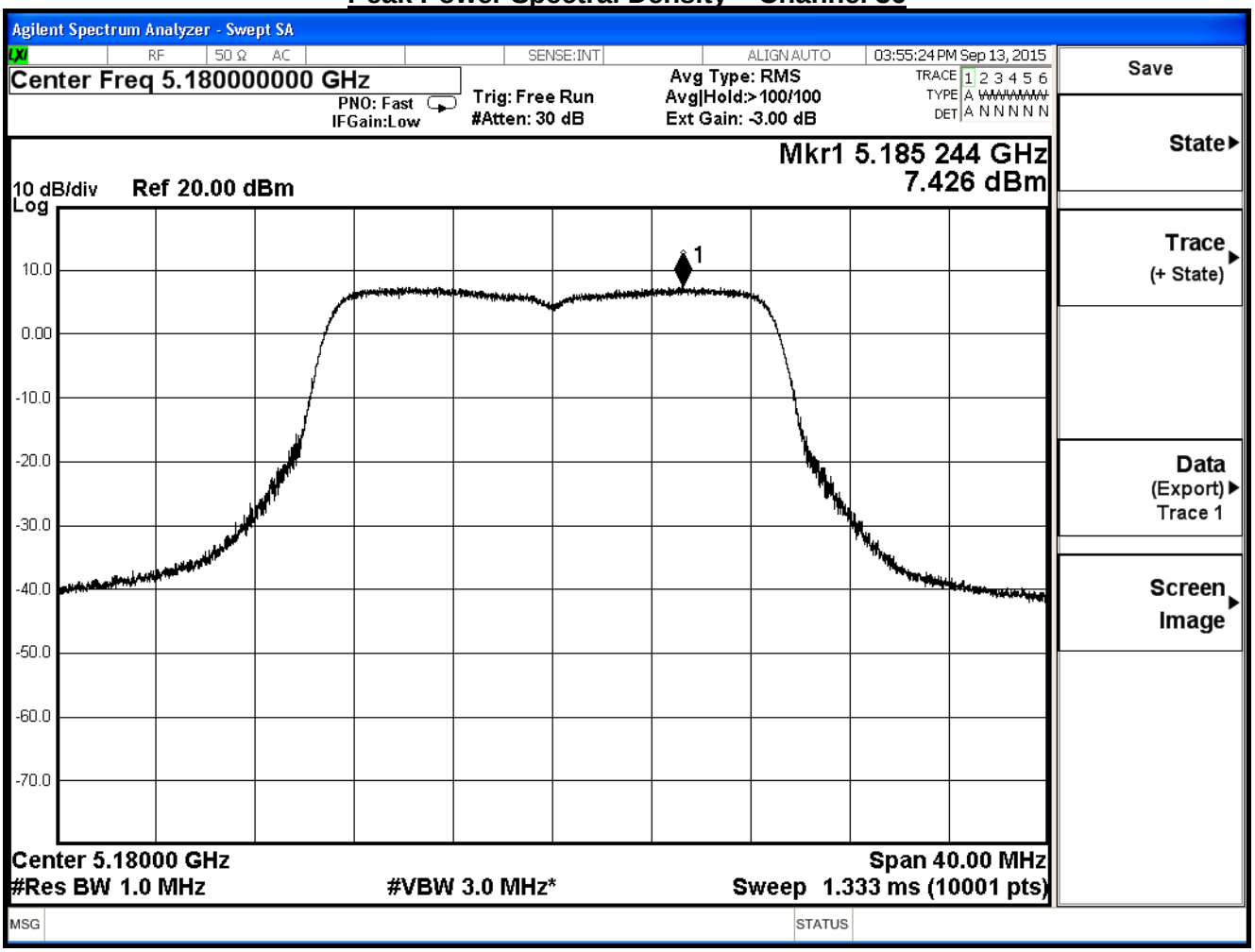
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(20MHz)(ANT 0) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 7.426 | ≦15.69 | Pass |
| 44 | 5220 | 10.331 | ≦15.69 | Pass |
| 48 | 5240 | 10.465 | ≦15.69 | Pass |

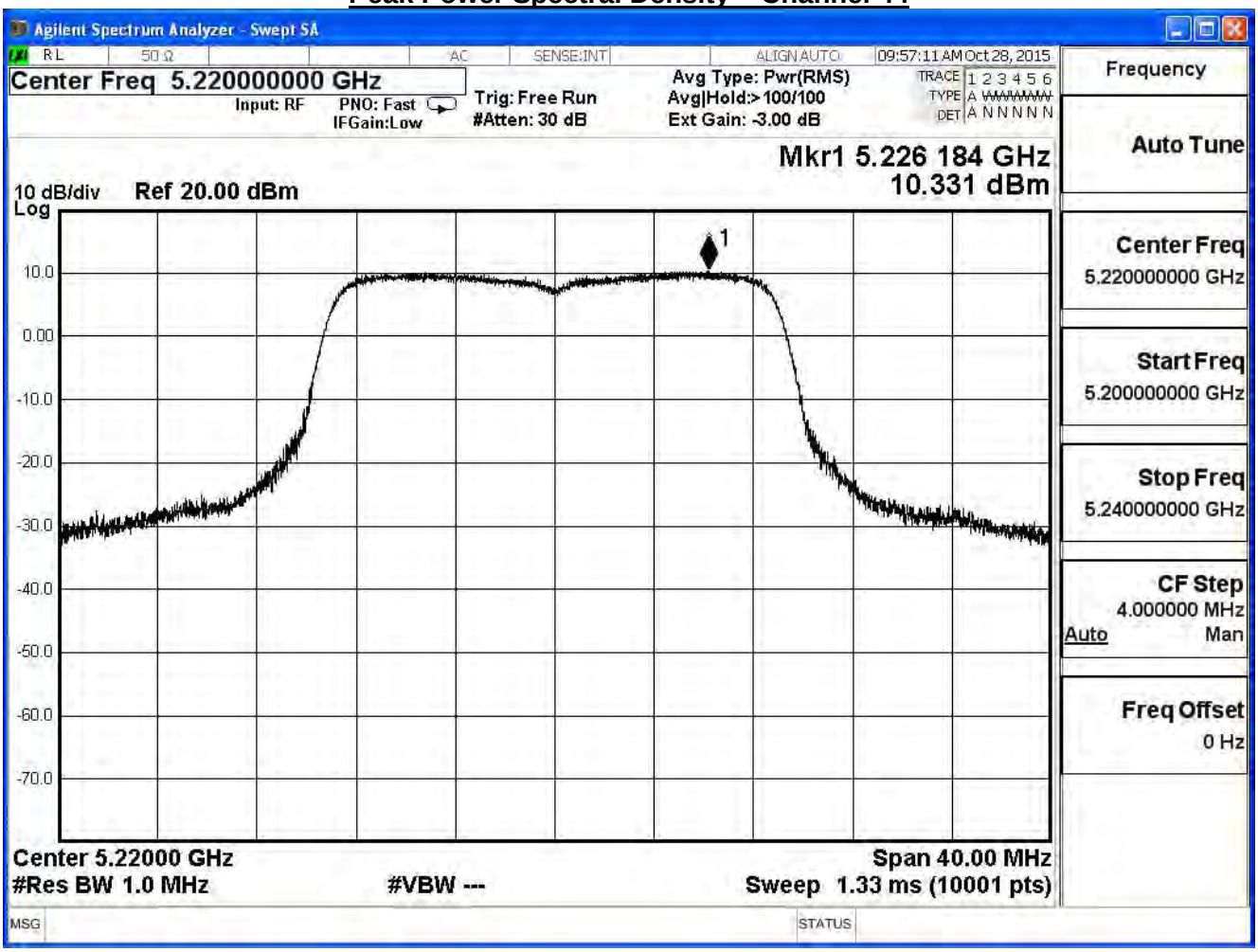
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

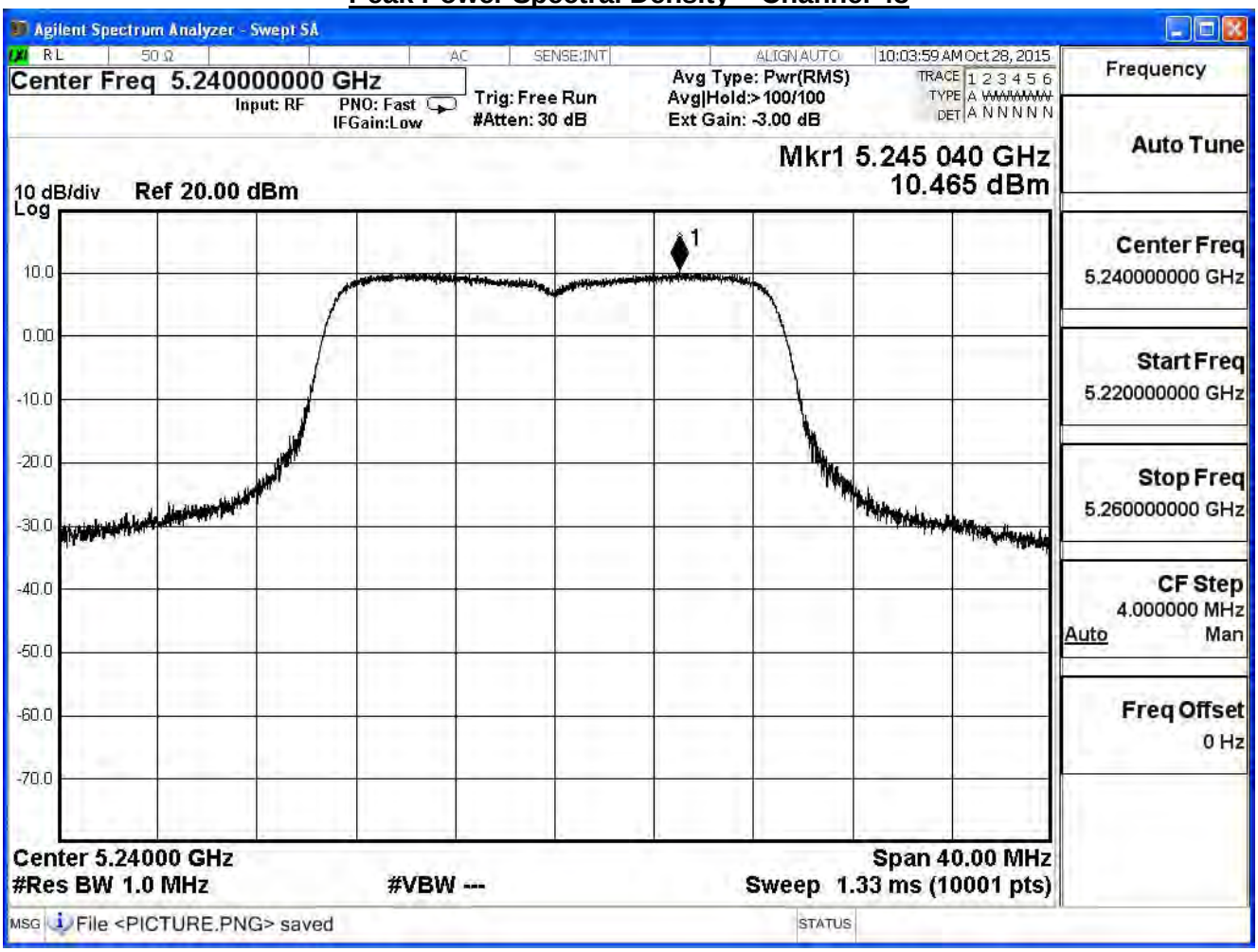
**Peak Power Spectral Density – Channel 36**



## Peak Power Spectral Density – Channel 44



## Peak Power Spectral Density – Channel 48



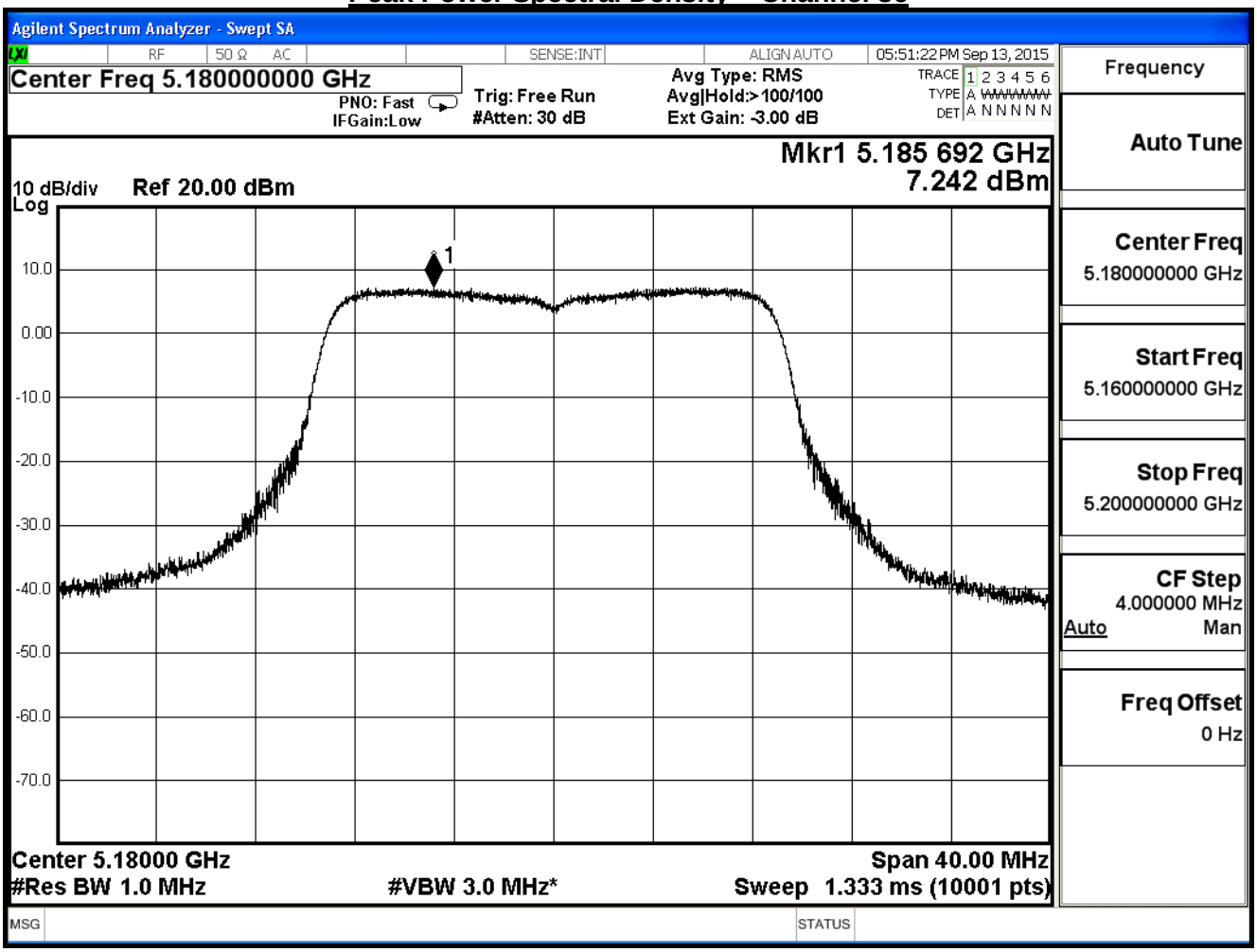
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(20MHz) (ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measurement (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 7.242 | ≦15.69 | Pass |
| 44 | 5220 | 10.555 | ≦15.69 | Pass |
| 48 | 5240 | 10.055 | ≦15.69 | Pass |

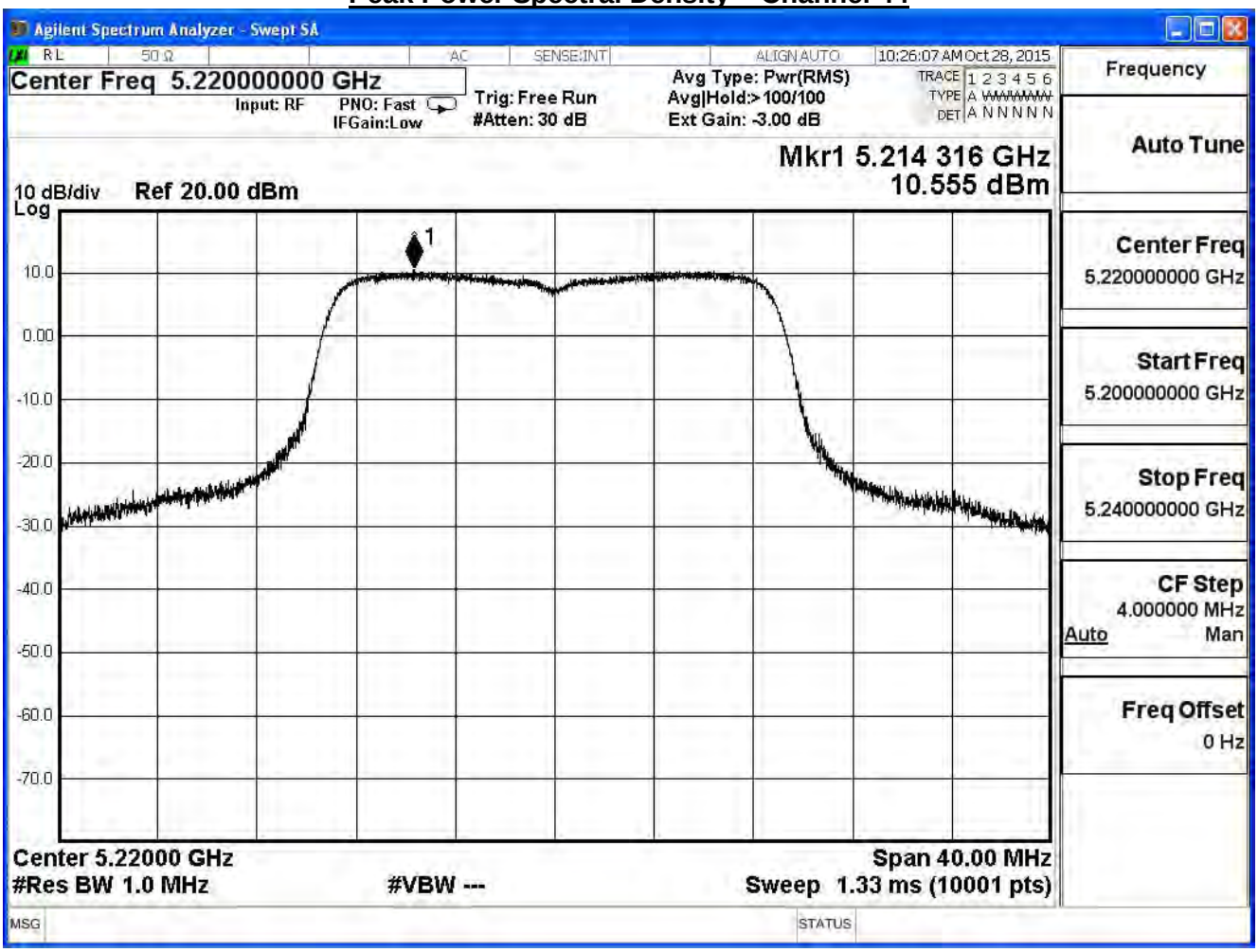
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

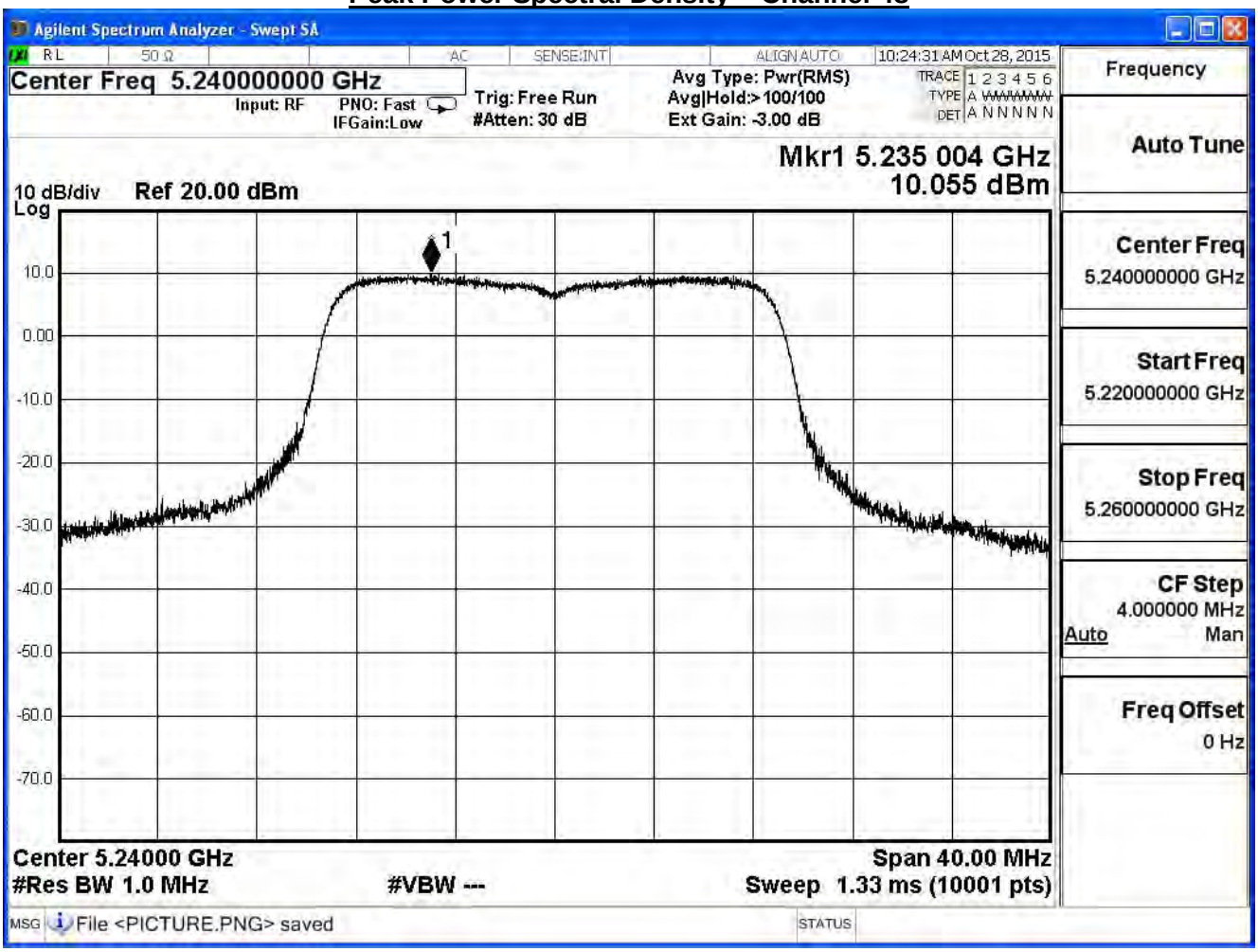
**Peak Power Spectral Density – Channel 36**



## Peak Power Spectral Density – Channel 44



## Peak Power Spectral Density – Channel 48



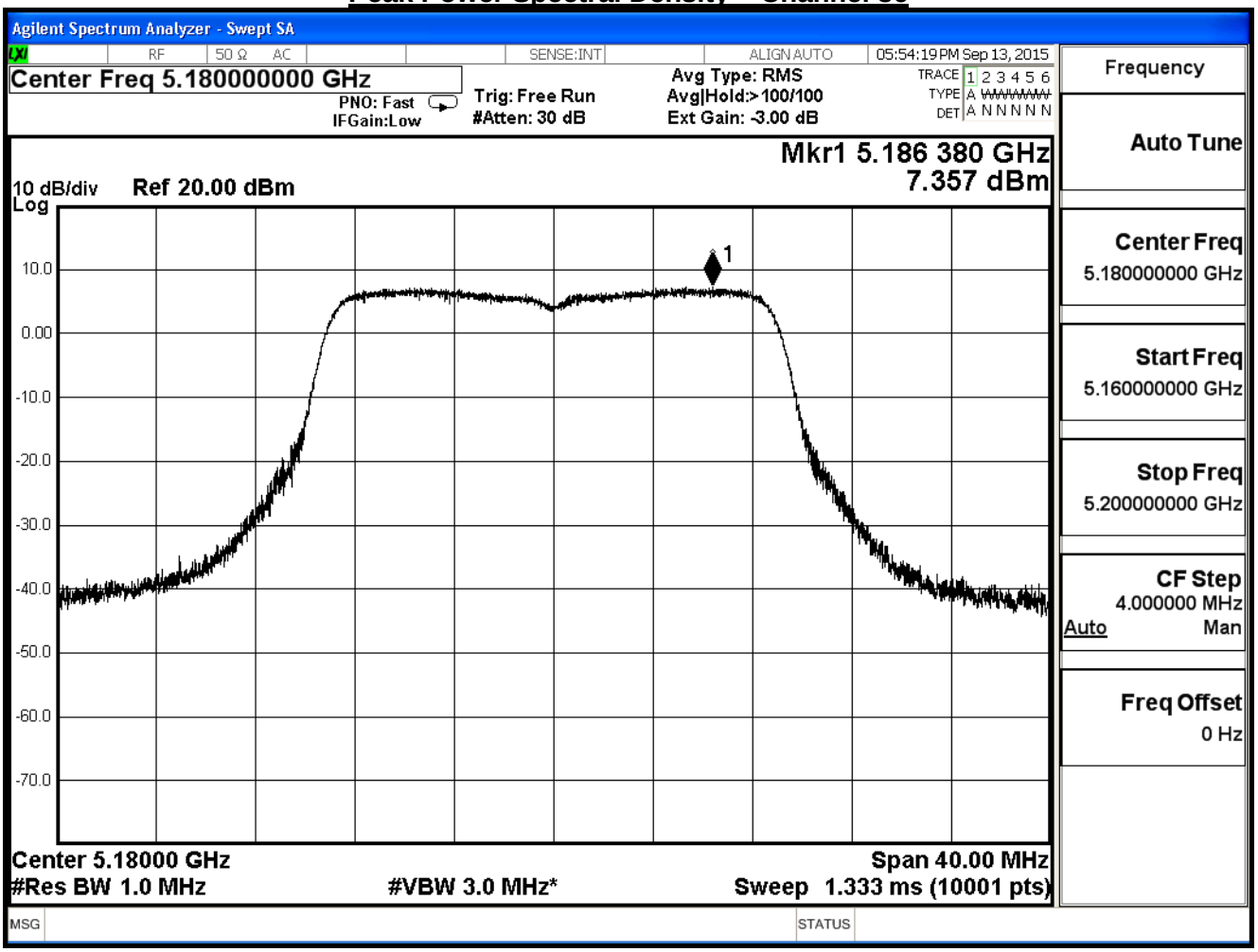
| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(20MHz) (ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 7.357 | ≦15.69 | Pass |
| 44 | 5220 | 10.181 | ≦15.69 | Pass |
| 48 | 5240 | 10.257 | ≦15.69 | Pass |

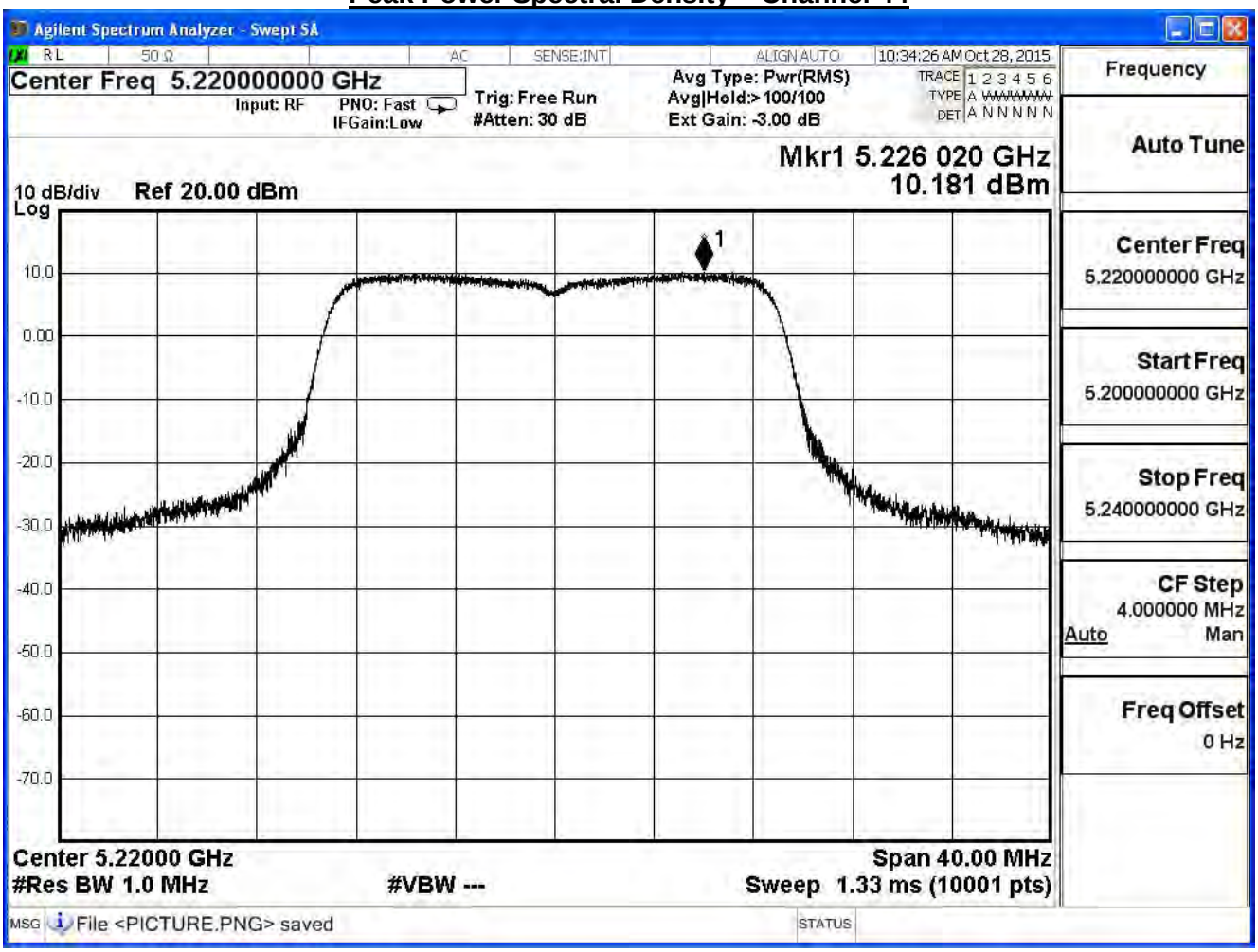
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

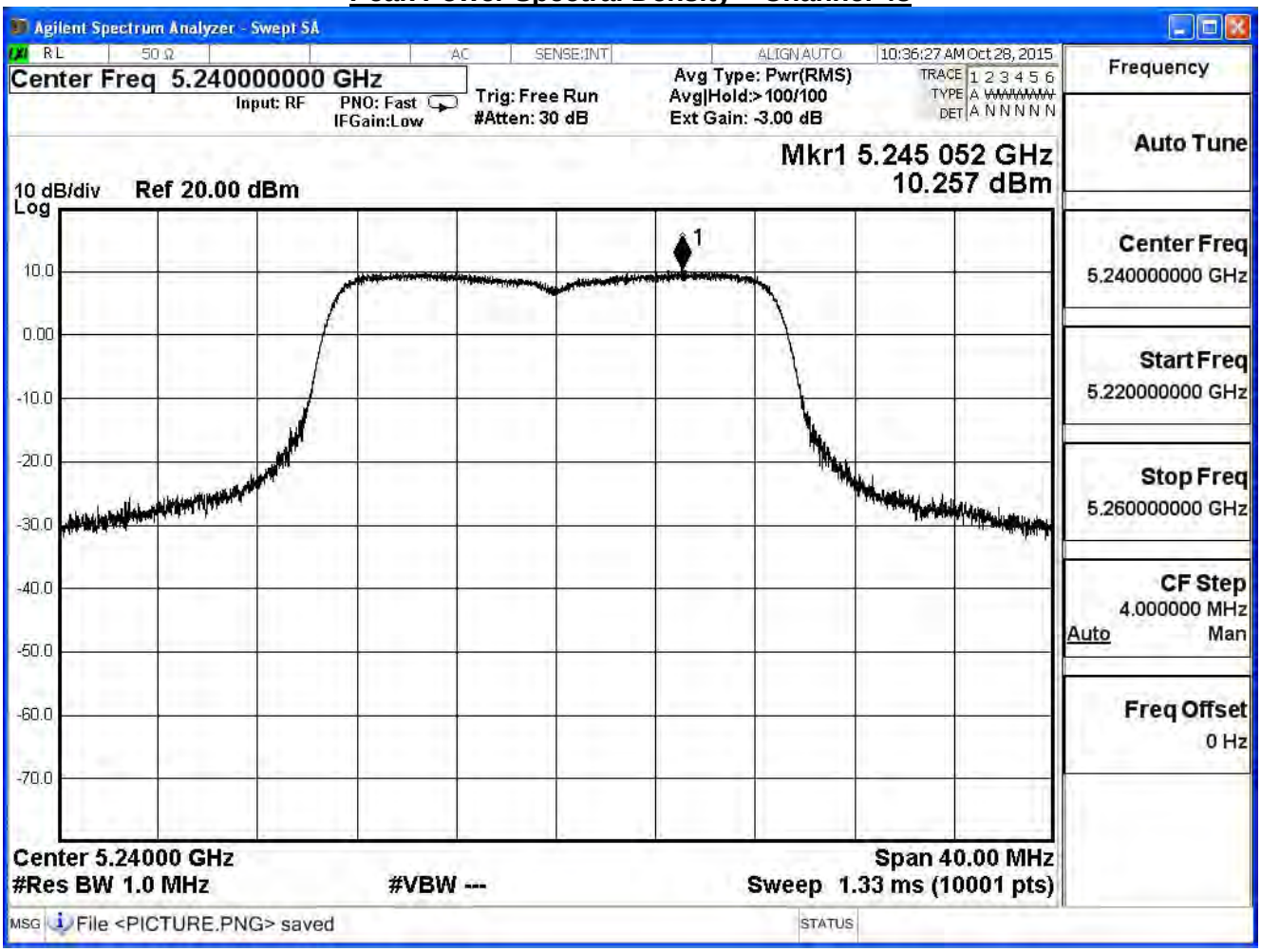
**Peak Power Spectral Density – Channel 36**



**Peak Power Spectral Density – Channel 44**



## Peak Power Spectral Density – Channel 48



| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(20MHz) (ANT 0+1+2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 36 | 5180 | 12.114 | ≦15.69 | Pass |
| 44 | 5220 | 15.130 | ≦15.69 | Pass |
| 48 | 5240 | 15.033 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

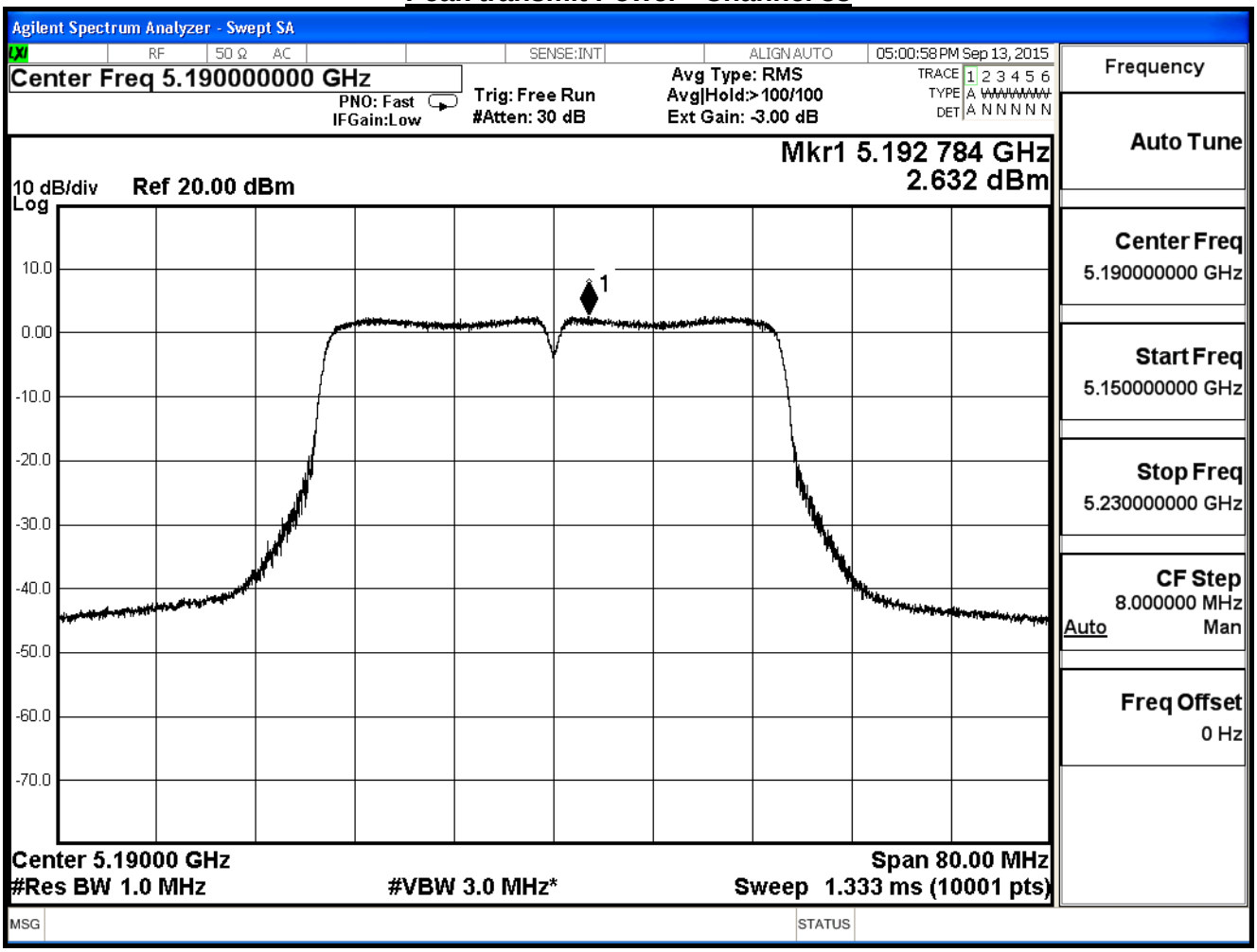
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(40MHz)(ANT 0) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 38 | 5190 | 2.632 | ≦15.69 | Pass |
| 46 | 5230 | 7.546 | ≦15.69 | Pass |

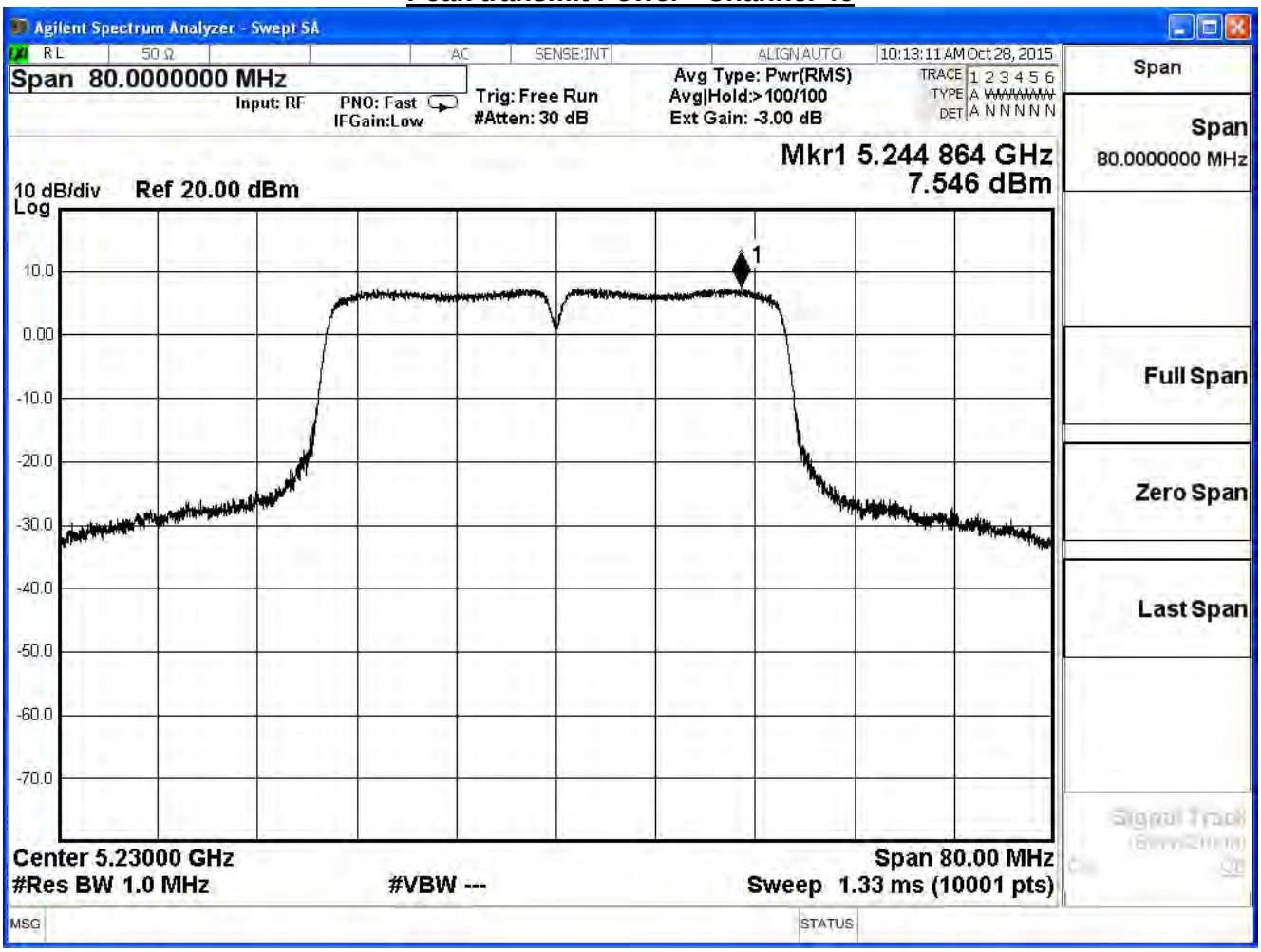
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 38**



**Peak transmit Power - Channel 46**



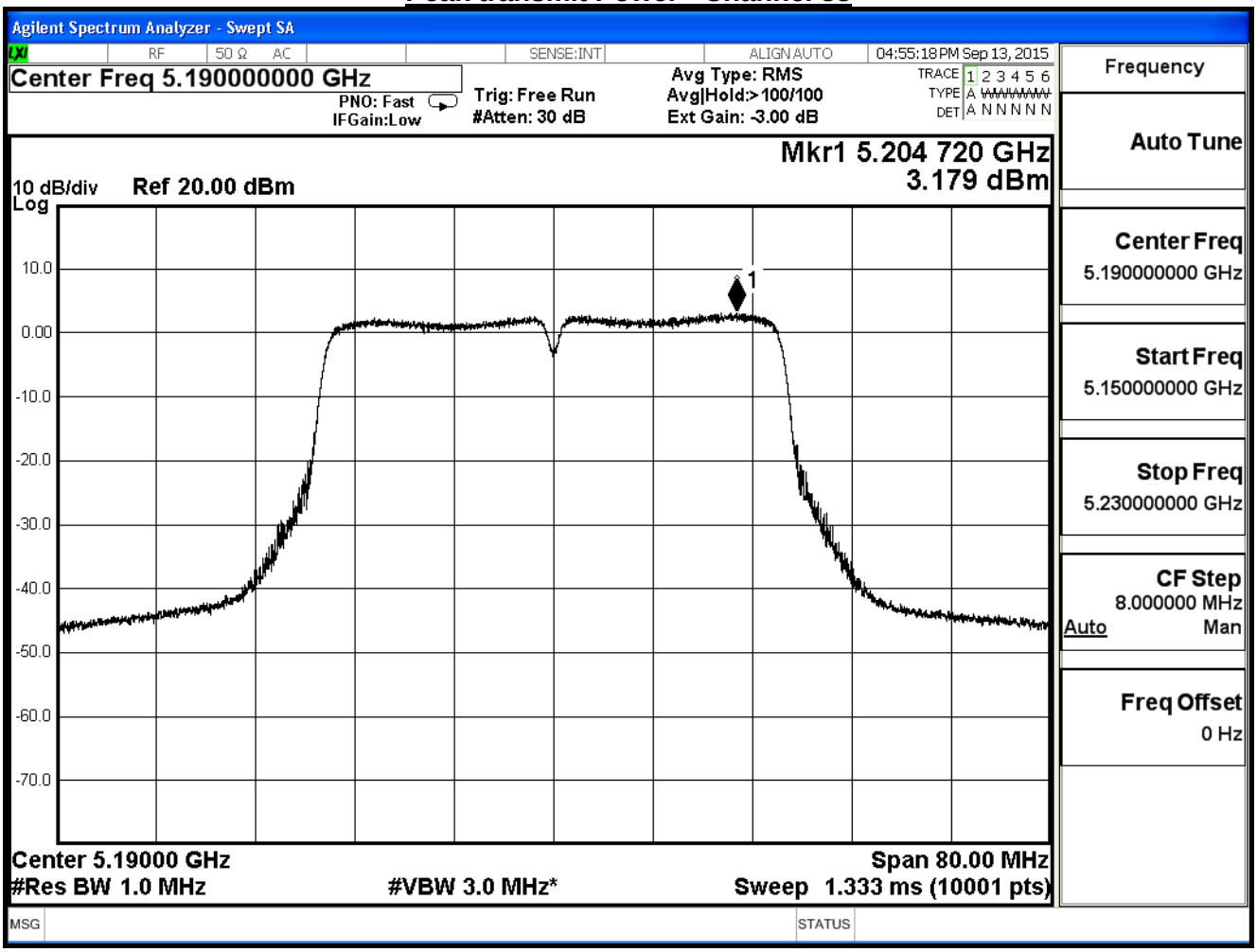
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(40MHz) (ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measurement (dBm) | Limit (dBm) | Result |
| 38 | 5190 | 3.179 | ≦15.69 | Pass |
| 46 | 5230 | 7.869 | ≦15.69 | Pass |

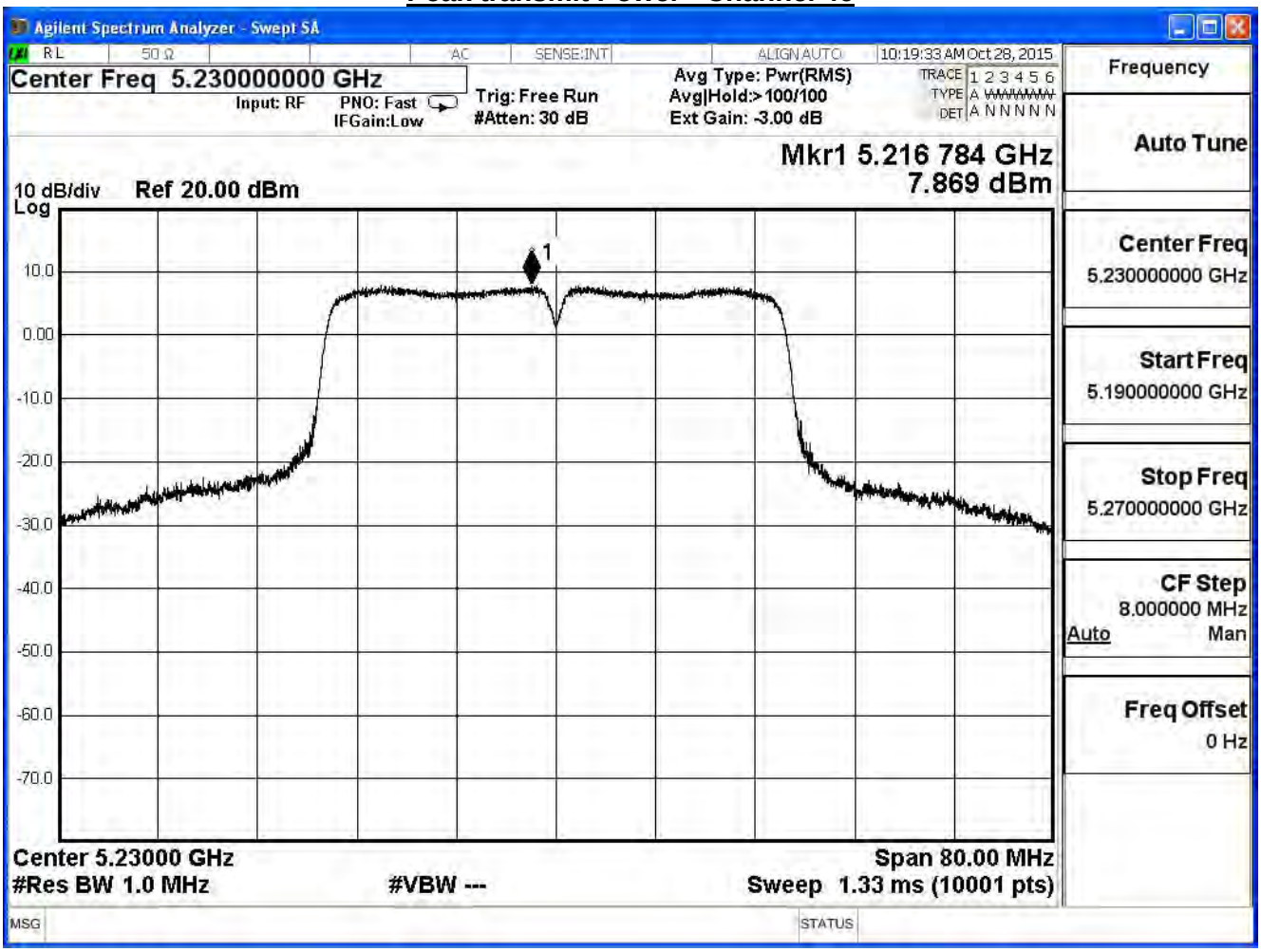
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 38**



**Peak transmit Power - Channel 46**



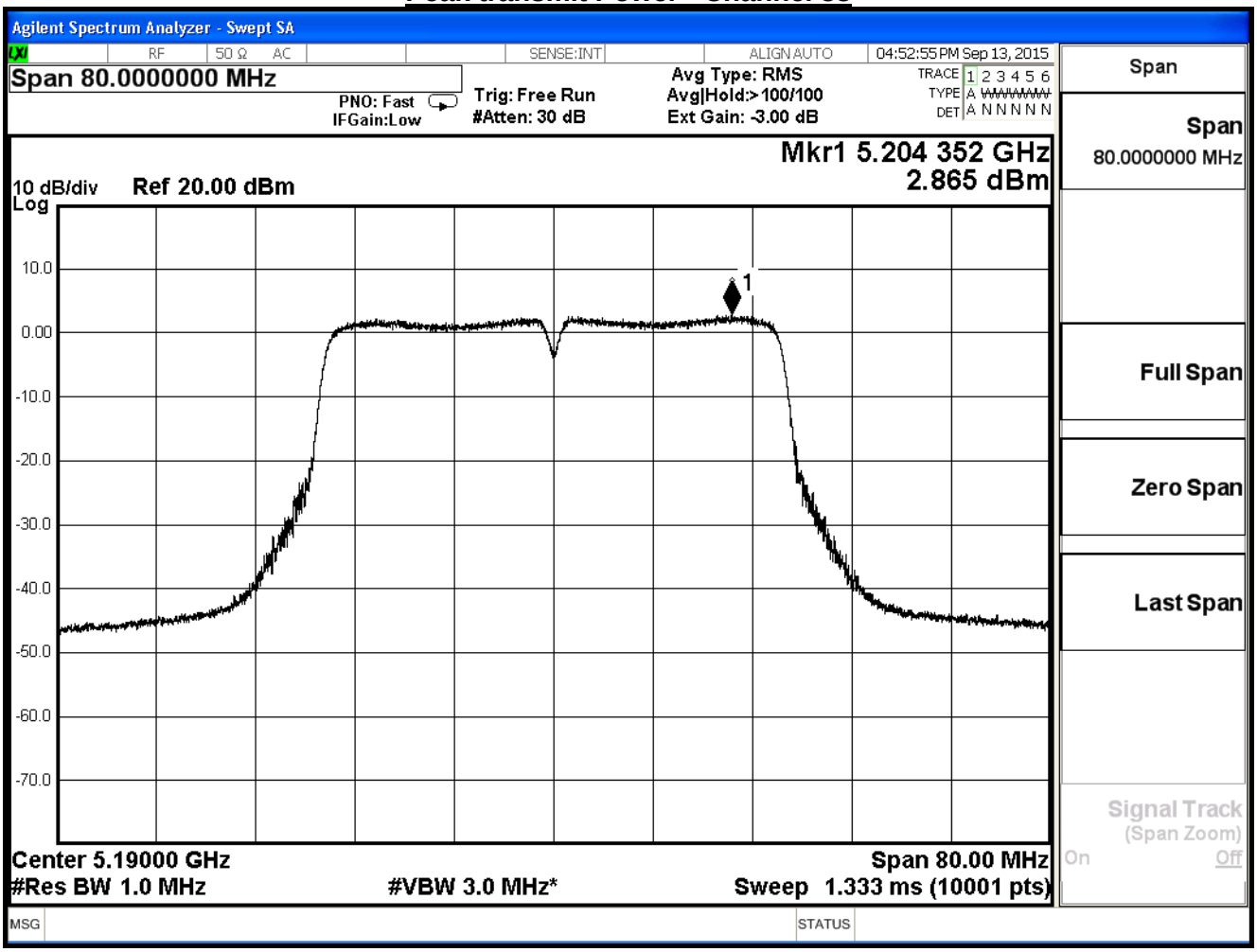
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(40MHz) (ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 38 | 5190 | 2.865 | ≦15.69 | Pass |
| 46 | 5230 | 7.724 | ≦15.69 | Pass |

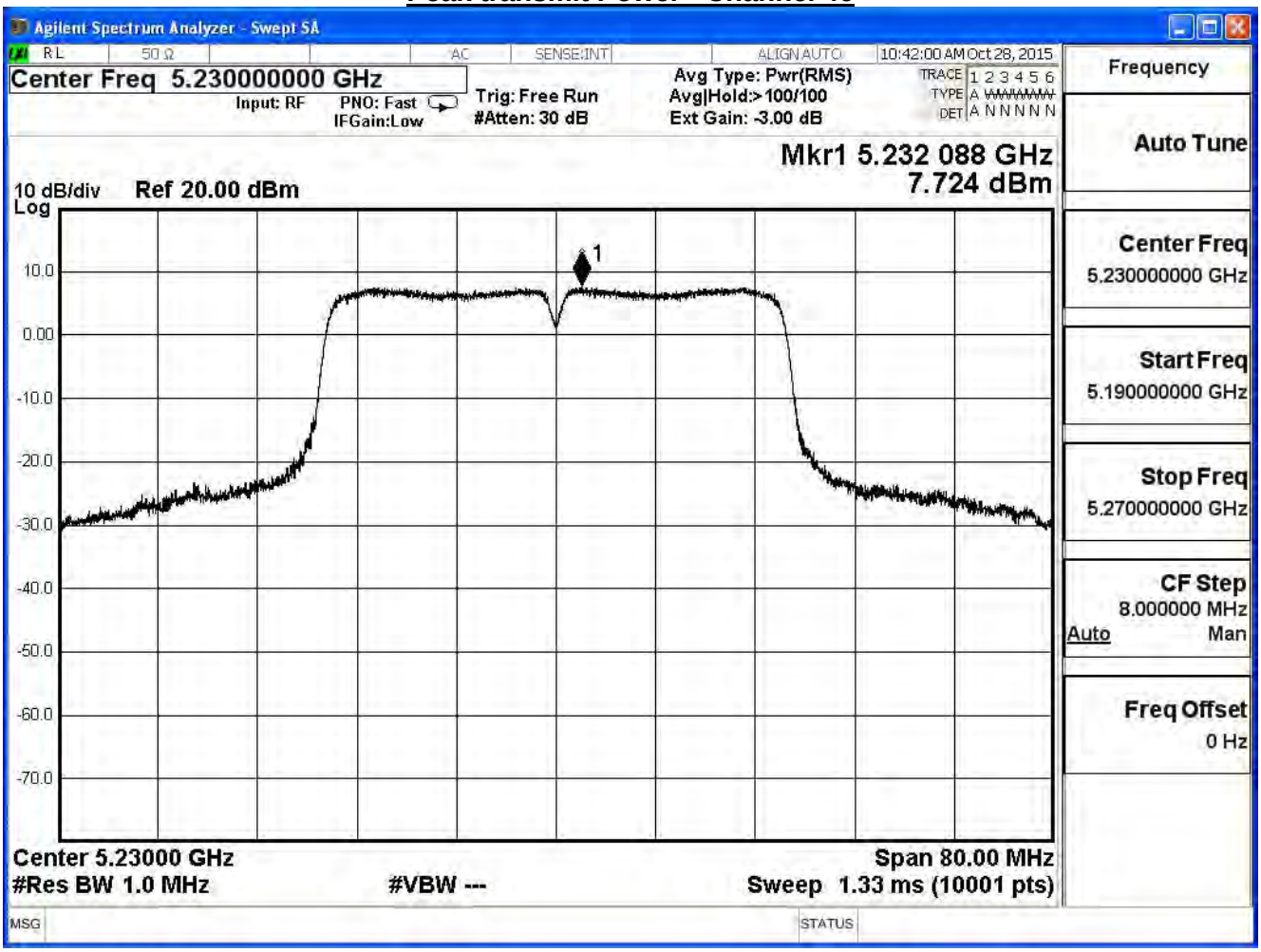
Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 38**



**Peak transmit Power - Channel 46**



| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11n(40MHz) (ANT 0+1+2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 38 | 5190 | 7.669 | ≦15.69 | Pass |
| 46 | 5230 | 12.486 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

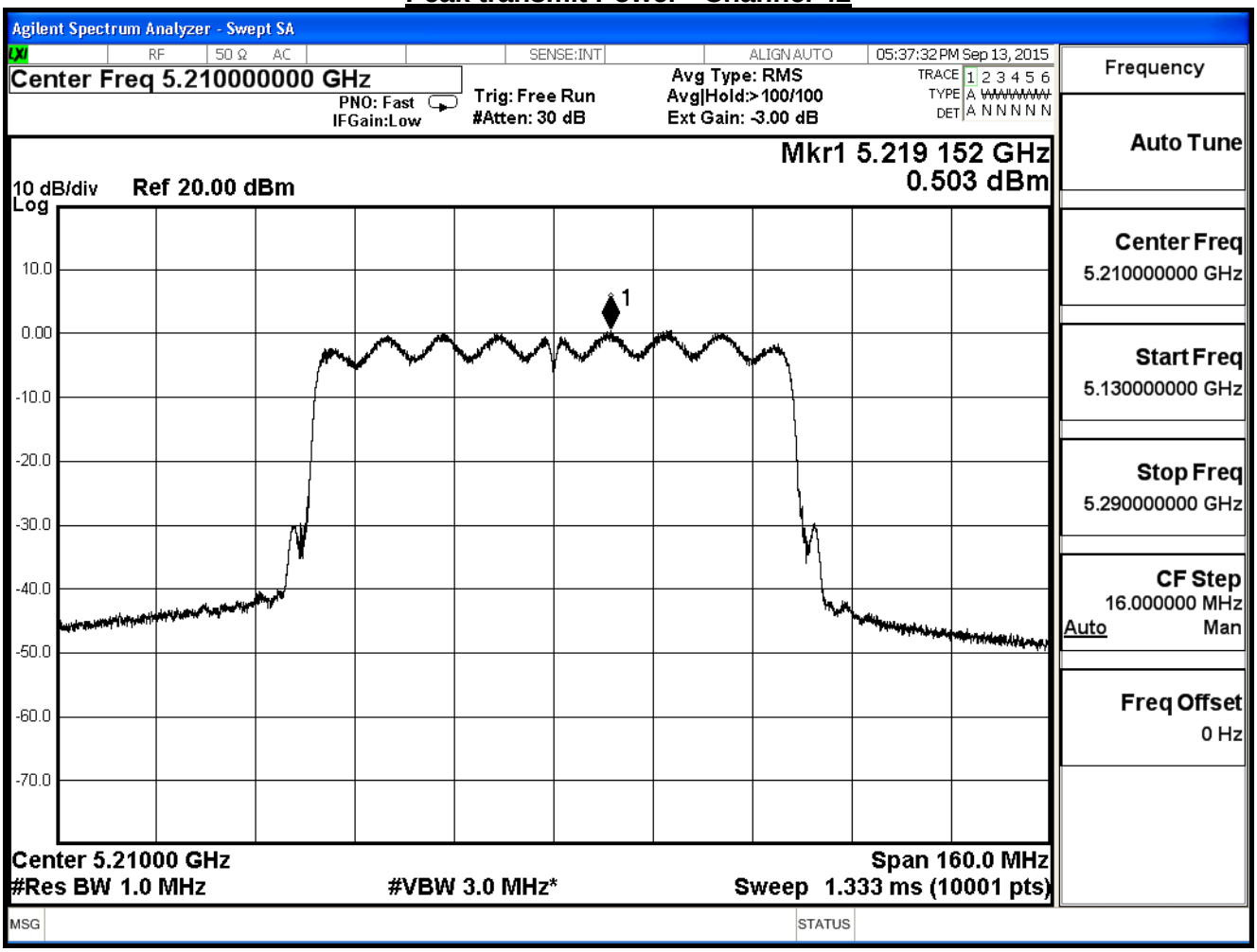
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11ac(80MHz)(ANT 0) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 42 | 5210 | 0.503 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 42**



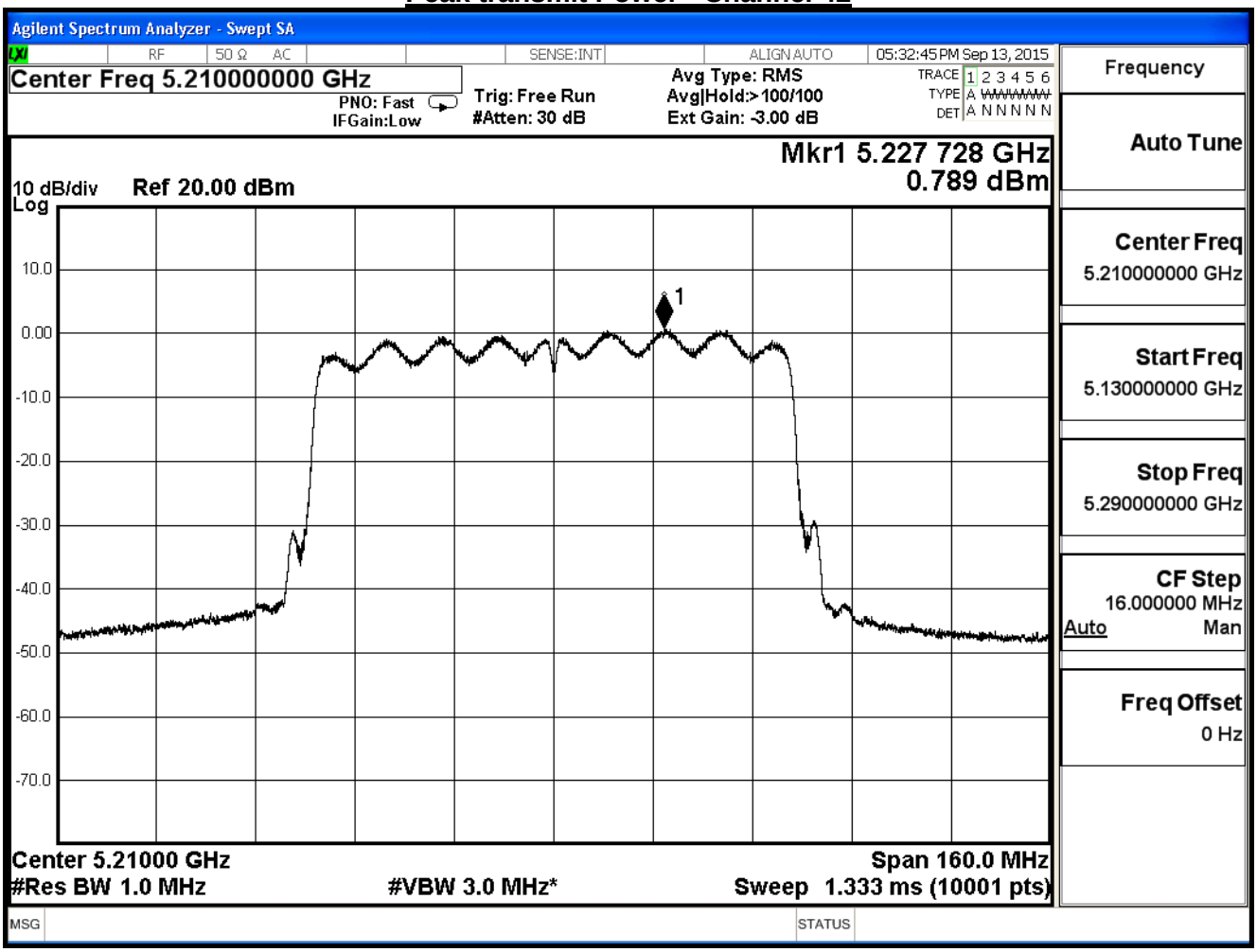
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11ac(80MHz) (ANT 1) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measurement (dBm) | Limit (dBm) | Result |
| 42 | 5210 | 0.789 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 42**



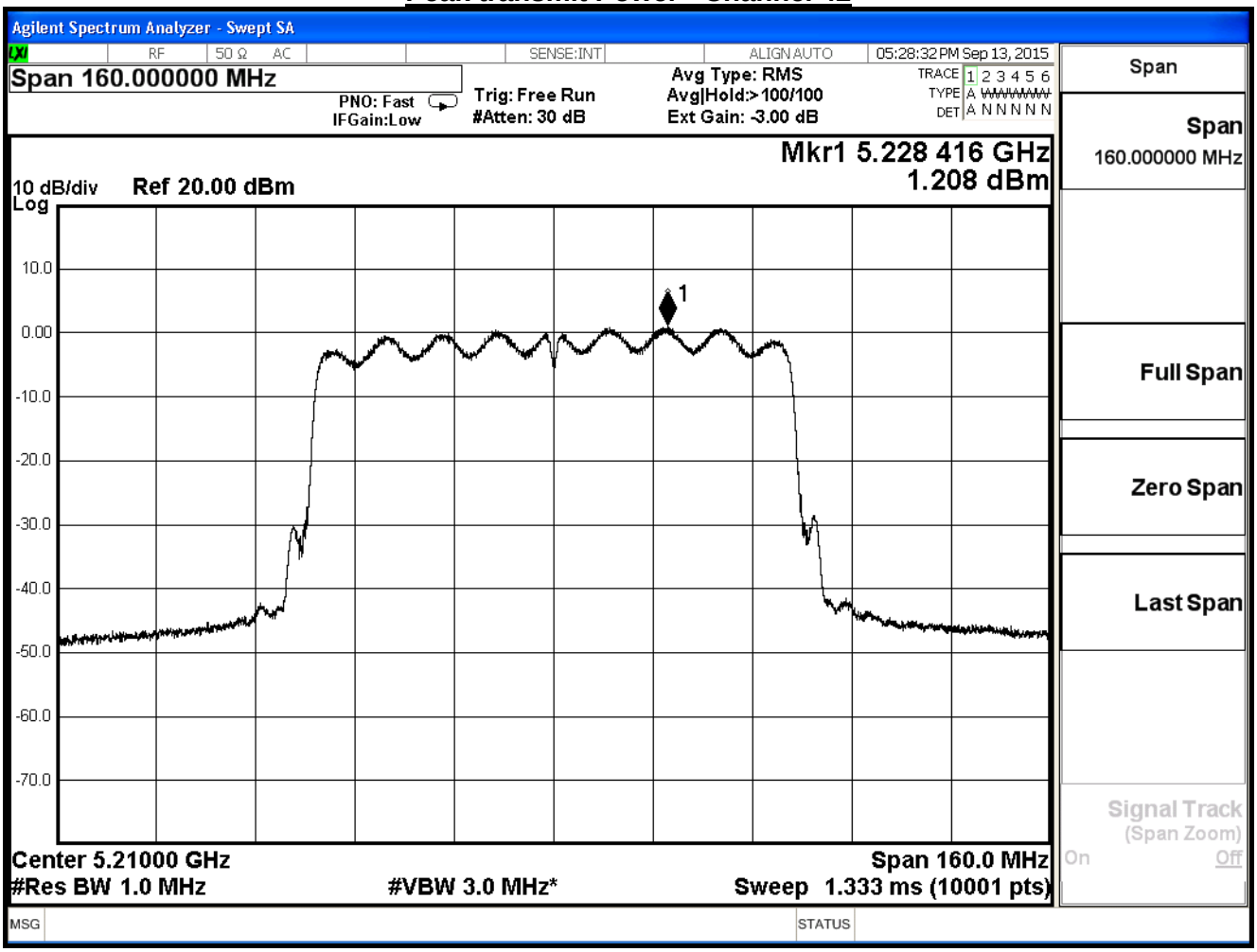
| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11ac(80MHz) (ANT 2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 42 | 5210 | 1.208 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

**Peak transmit Power - Channel 42**



| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Peak Power Spectral Density | | |
| Test Mode | Mode 2: Transmit_Beamforming Mode_AD890326 | | |
| Date of Test | 2015/09/13 | Test Site | SR7 |

| IEEE 802.11ac(80MHz)(ANT 0+1+2) | | | | |
|---|---|---|---|---|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 42 | 5210 | 5.614 | ≦15.69 | Pass |

Directional Antenna: 10log(Ant N)+Max Gain =10log(2)+4.31= 7.31dBi

Power Density Limit:17dBm-(7.31dBi-6dB)= 15.69dBm

# 6. Radiated Emission

## 6.1. Test Equipment

The following test equipments are used during the radiated emission test:

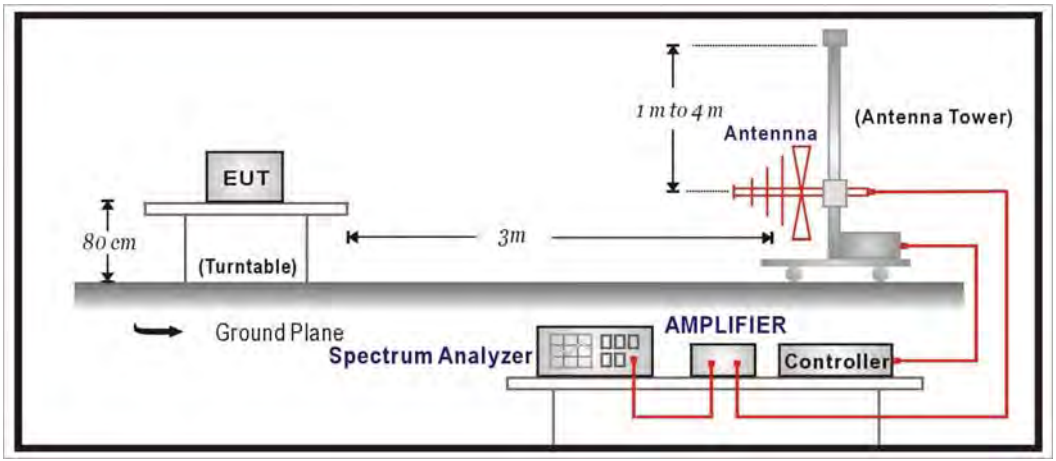
Radiated Emission / CB1

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|---|---|---|---|---|
| Bilog Antenna | Schaffner | CBL6112B | 2895 | 2016/08/14 |
| Double Ridged Guide Horn Antenna | Schwarzbeck | BBHA 9120 | D743 | 2016/01/26 |
| Pre-Amplifier | EMCI | EMC0031835 | 980233 | 2016/01/18 |
| Pre-Amplifier | QuieTek | AP-025C | CHM-0706049 | 2016/01/18 |
| Spectrum Analyzer | Agilent | E4440A | MY46187335 | 2016/01/07 |
| k Type Cable | Huber+Suhner | SF 102 | 25623/2 | 2016/01/26 |
| Horn Antenna | Schwarzbeck | BBHA 9170 | 203 | 2016/09/07 |
| Signal & Spectrum Analyzer | R&S | FSV40 | 101049 | 2015/10/30 |

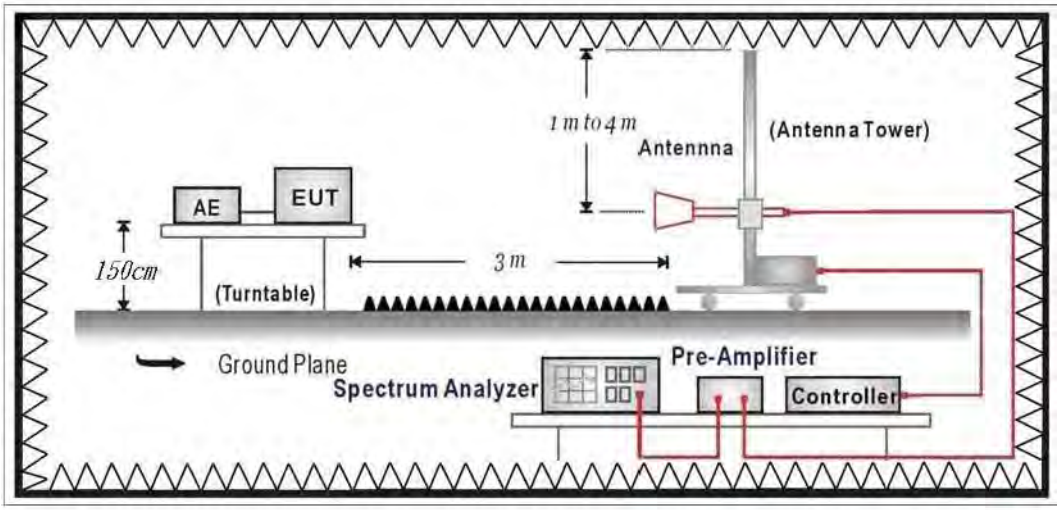
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

## 6.2. Test Setup

Under 1GHz Test Setup:




Above 1GHz Test Setup:



## 6.3. Limits

### ➢ General Radiated Emission Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section. Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

| FCC Part 15 Subpart C Paragraph 15.209 Limits | | |
|---|---|---|
| Frequency MHz | uV/m @3m | dBuV/m@3m |
| 30-88 | 100 | 40 |
| 88-216 | 150 | 43.5 |
| 216-960 | 200 | 46 |
| Above 960 | 500 | 54 |

Remark:

1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

### ➢ Unwanted Emission out of the restricted bands Limits

| FCC Part 15 Subpart C Paragraph 15.407(b) Limits | | |
|---|---|---|
| Frequency (MHz) | EIRP Limit (dBm) | Equivalent Field Strength (dBuV/m@3m) |
| 5150~5250 | -27 | 68.3 |
| 5250~5350 | -27 | 68.3 |
| 5470~5725 | -27 | 68.3 |
| 5725~5850 | -27 (Note1) | 68.3 |
| | -17 (Note2) | 78.3 |

Remark:

1. For frequencies more than 10 MHz above or below the band edges.
2. For frequency range from the band edges to 10 MHz above or below the band edges.
3. uV/m = $\frac{1000000\sqrt{30 \times EIRP}}{3}$, RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)

## 6.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 or 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.
The additional latch filter below 1GHz was used to measure the level of harmonics radiated emission during field dtrength of harmonics measurement.
The bandwidth below 1GHz setting on the field strength meter is 120 KHz, above 1GHz are 1 MHz.
The frequency range from 30MHz to 10th harminics is checked.

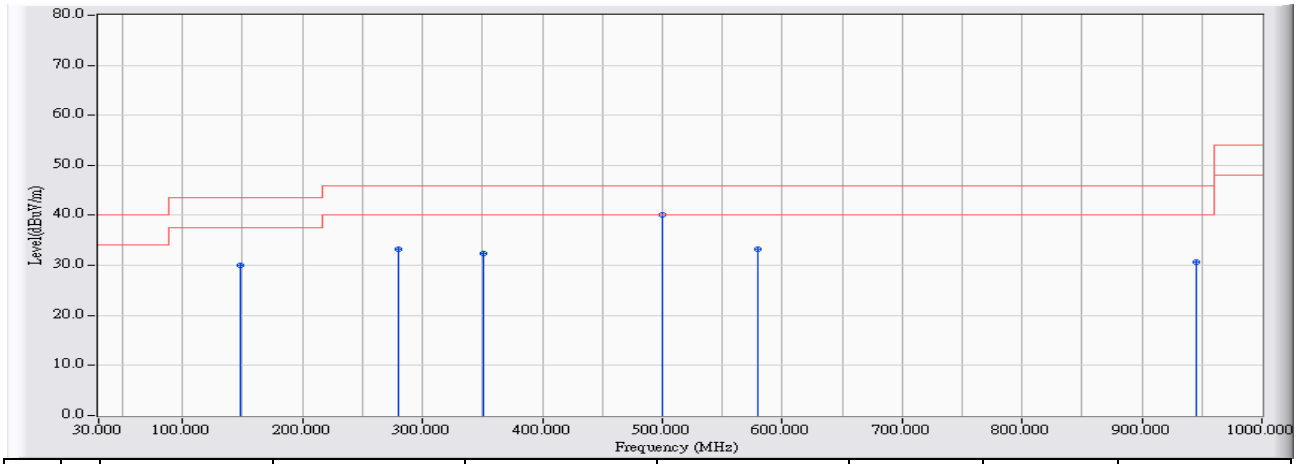
## 6.5. Uncertainty

The measurement uncertainty
30MHz～1GHz as ±3.43dB
1GHz～26.5Ghz as ±3.65dB

## 6.6. Test Result

### 30MHz-1GHz Spurious

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/23 - 10:11** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_30-1G-2_1011 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5220MHz** |

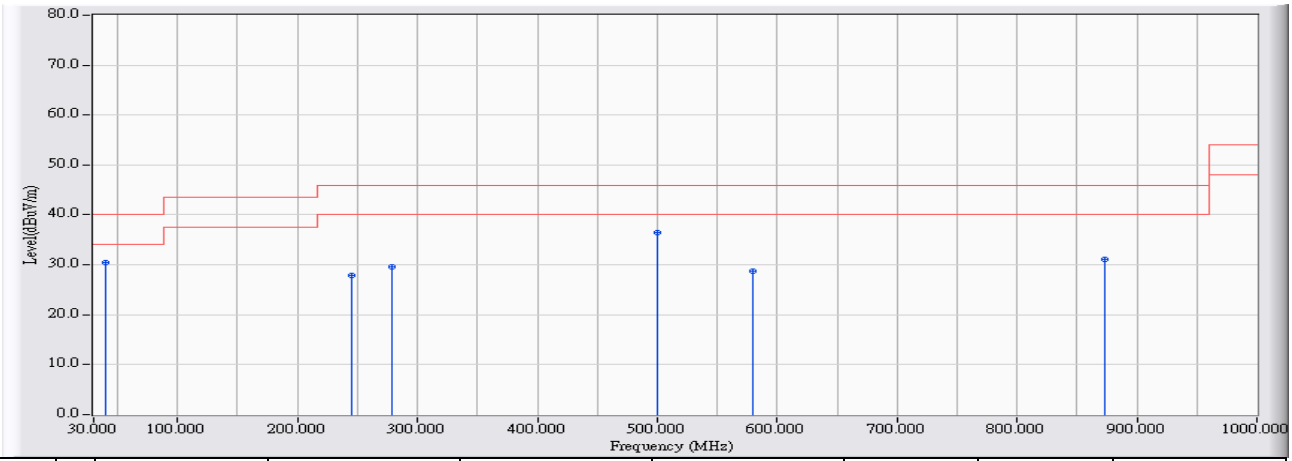



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 148.037 | 9.732 | 20.212 | 29.944 | -13.556 | 43.500 | QUASIPEAK |
| 2 | | 280.526 | 12.414 | 20.781 | 33.195 | -12.805 | 46.000 | QUASIPEAK |
| 3 | | 351.329 | 13.985 | 18.439 | 32.424 | -13.576 | 46.000 | QUASIPEAK |
| 4 | * | 499.918 | 17.178 | 23.012 | 40.190 | -5.810 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 17.423 | 15.725 | 33.148 | -12.852 | 46.000 | QUASIPEAK |
| 6 | | 945.103 | 19.841 | 10.814 | 30.655 | -15.345 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/23 - 10:13** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_30-1G-2_1011 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5220MHz** |

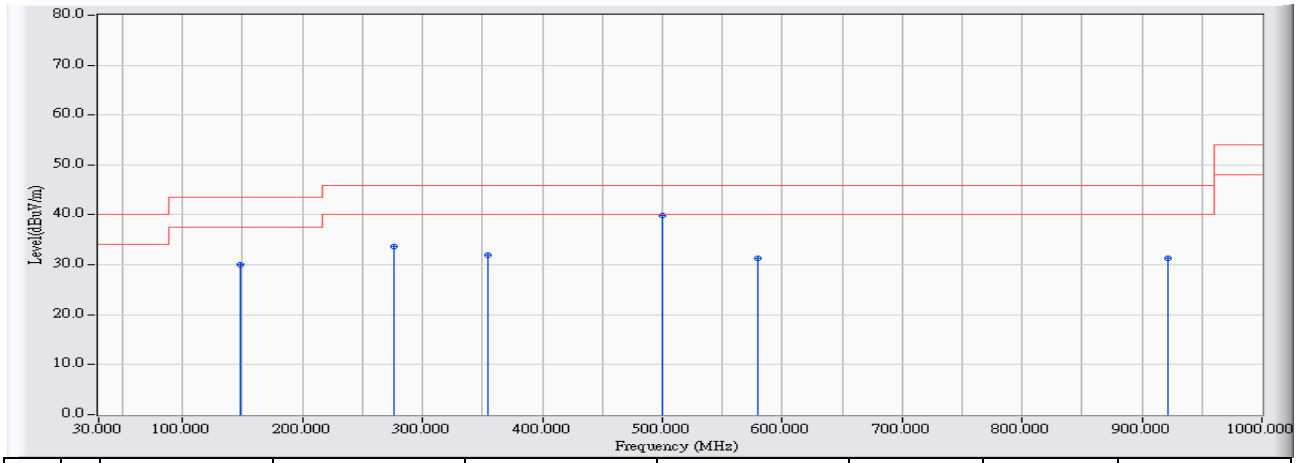



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 39.408 | 10.848 | 19.668 | 30.516 | -9.484 | 40.000 | QUASIPEAK |
| 2 | | 245.124 | 11.521 | 16.400 | 27.921 | -18.079 | 46.000 | QUASIPEAK |
| 3 | | 278.974 | 12.387 | 17.256 | 29.643 | -16.357 | 46.000 | QUASIPEAK |
| 4 | * | 499.918 | 17.178 | 19.340 | 36.518 | -9.482 | 46.000 | QUASIPEAK |
| 5 | | 580.032 | 17.423 | 11.221 | 28.644 | -17.356 | 46.000 | QUASIPEAK |
| 6 | | 872.555 | 19.401 | 11.791 | 31.192 | -14.808 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/23 - 09:51** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_30-1G-2_1011 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5220MHz** |

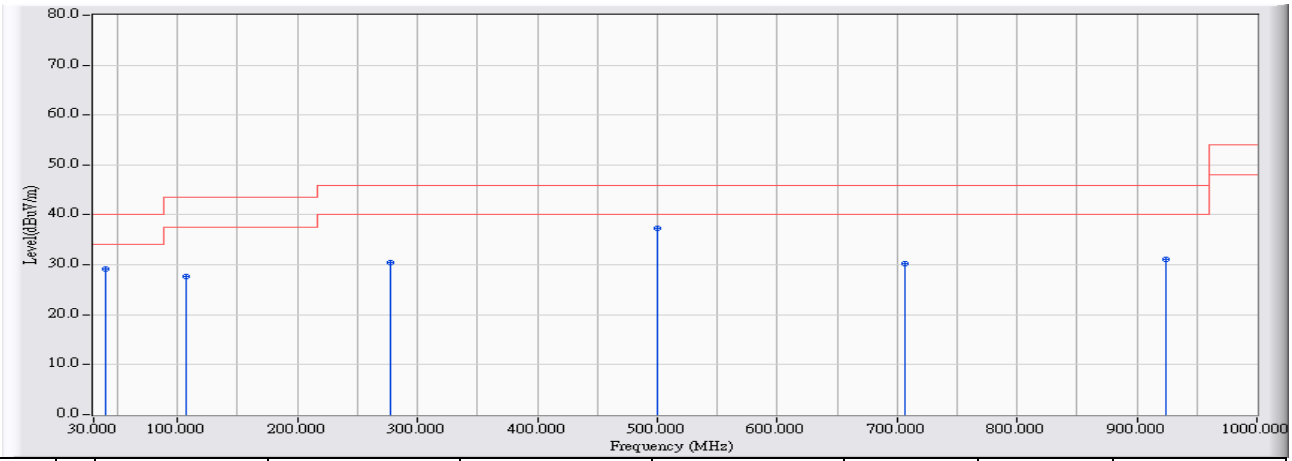



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 148.037 | 9.732 | 20.244 | 29.976 | -13.524 | 43.500 | QUASIPEAK |
| 2 | | 276.355 | 12.341 | 21.278 | 33.619 | -12.381 | 46.000 | QUASIPEAK |
| 3 | | 354.045 | 14.051 | 17.809 | 31.859 | -14.141 | 46.000 | QUASIPEAK |
| 4 | * | 499.918 | 17.178 | 22.741 | 39.919 | -6.081 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 17.423 | 13.913 | 31.336 | -14.664 | 46.000 | QUASIPEAK |
| 6 | | 922.214 | 19.654 | 11.732 | 31.386 | -14.614 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/23 - 09:49** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_30-1G-2_1011 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5220MHz** |

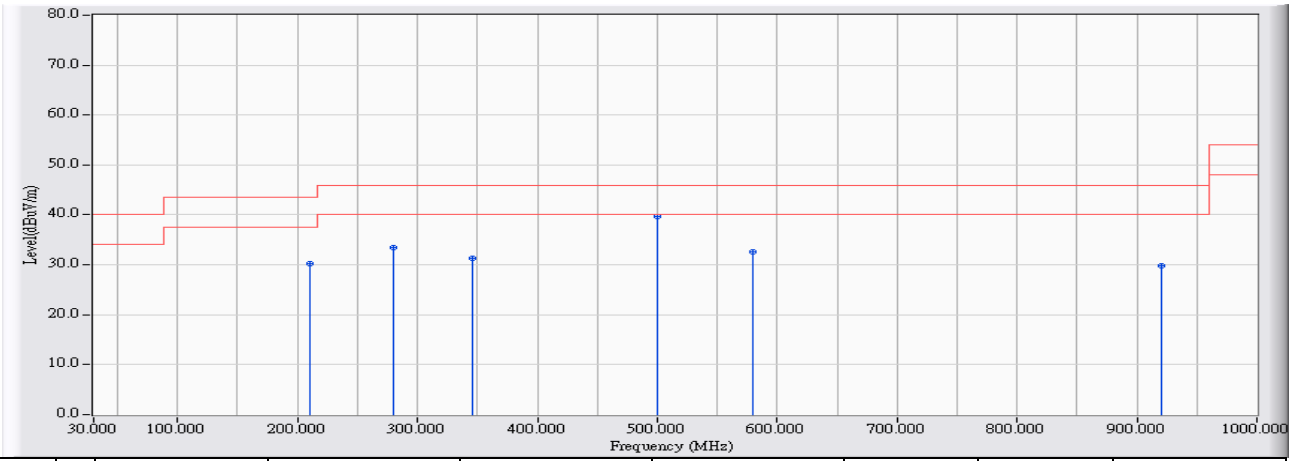



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 39.408 | 10.848 | 18.322 | 29.170 | -10.830 | 40.000 | QUASIPEAK |
| 2 | | 106.622 | 10.166 | 17.449 | 27.615 | -15.885 | 43.500 | QUASIPEAK |
| 3 | | 277.325 | 12.358 | 18.199 | 30.557 | -15.443 | 46.000 | QUASIPEAK |
| 4 | * | 499.918 | 17.178 | 20.157 | 37.335 | -8.665 | 46.000 | QUASIPEAK |
| 5 | | 706.992 | 18.078 | 12.184 | 30.262 | -15.738 | 46.000 | QUASIPEAK |
| 6 | | 924.154 | 19.670 | 11.384 | 31.053 | -14.947 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/23 - 09:52** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_30-1G-2_1011 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(40M)_5230MHz** |

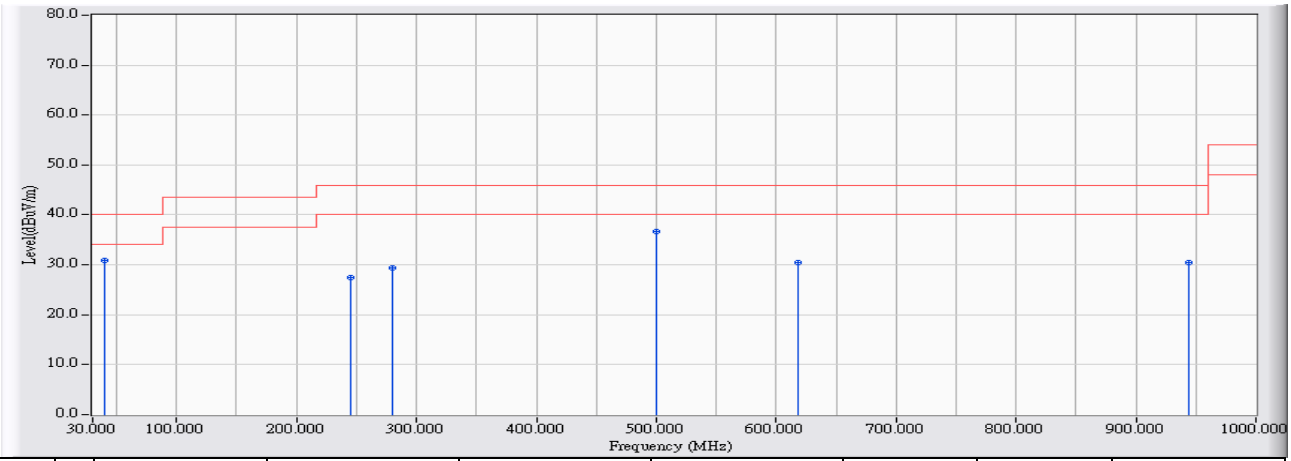



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 210.014 | 8.910 | 21.319 | 30.229 | -13.271 | 43.500 | QUASIPEAK |
| 2 | | 279.556 | 12.397 | 21.024 | 33.421 | -12.579 | 46.000 | QUASIPEAK |
| 3 | | 346.285 | 13.864 | 17.407 | 31.271 | -14.729 | 46.000 | QUASIPEAK |
| 4 | * | 499.918 | 17.178 | 22.558 | 39.736 | -6.264 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 17.423 | 15.132 | 32.555 | -13.445 | 46.000 | QUASIPEAK |
| 6 | | 920.468 | 19.640 | 10.275 | 29.914 | -16.086 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/23 - 09:54** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_30-1G-2_1011 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(40M)_5230MHz** |

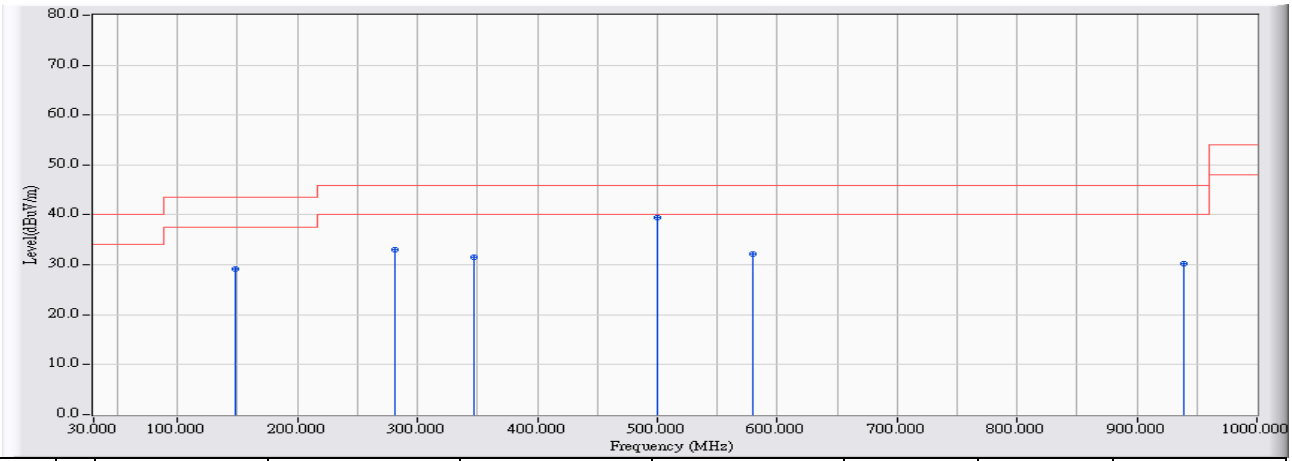



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | * | 39.408 | 10.848 | 19.936 | 30.784 | -9.216 | 40.000 | QUASIPEAK |
| 2 | | 244.543 | 11.478 | 15.909 | 27.387 | -18.613 | 46.000 | QUASIPEAK |
| 3 | | 279.459 | 12.395 | 17.001 | 29.396 | -16.604 | 46.000 | QUASIPEAK |
| 4 | | 499.918 | 17.178 | 19.566 | 36.744 | -9.256 | 46.000 | QUASIPEAK |
| 5 | | 617.664 | 17.574 | 12.847 | 30.420 | -15.580 | 46.000 | QUASIPEAK |
| 6 | | 943.746 | 19.829 | 10.699 | 30.528 | -15.472 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/23 - 09:58** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_30-1G-2_1011 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11ac(80M)_5210MHz** |

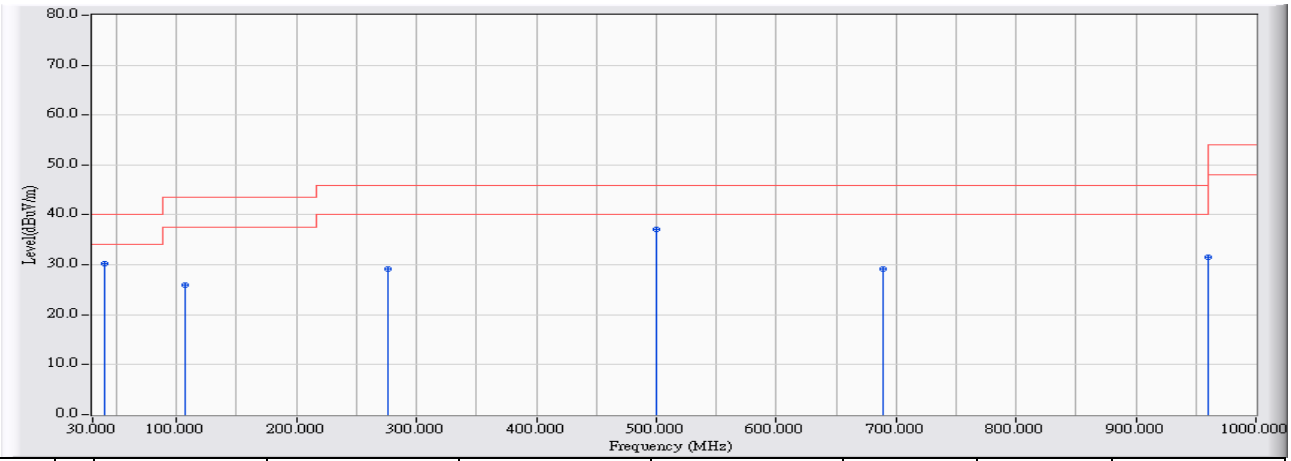



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 148.037 | 9.732 | 19.503 | 29.235 | -14.265 | 43.500 | QUASIPEAK |
| 2 | | 281.496 | 12.431 | 20.666 | 33.097 | -12.903 | 46.000 | QUASIPEAK |
| 3 | | 346.770 | 13.876 | 17.725 | 31.601 | -14.399 | 46.000 | QUASIPEAK |
| 4 | * | 500.015 | 17.179 | 22.261 | 39.440 | -6.560 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 17.423 | 14.746 | 32.169 | -13.831 | 46.000 | QUASIPEAK |
| 6 | | 938.993 | 19.790 | 10.460 | 30.251 | -15.749 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/23 - 09:56** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_30-1G-2_1011 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11ac(80M)_5210MHz** |

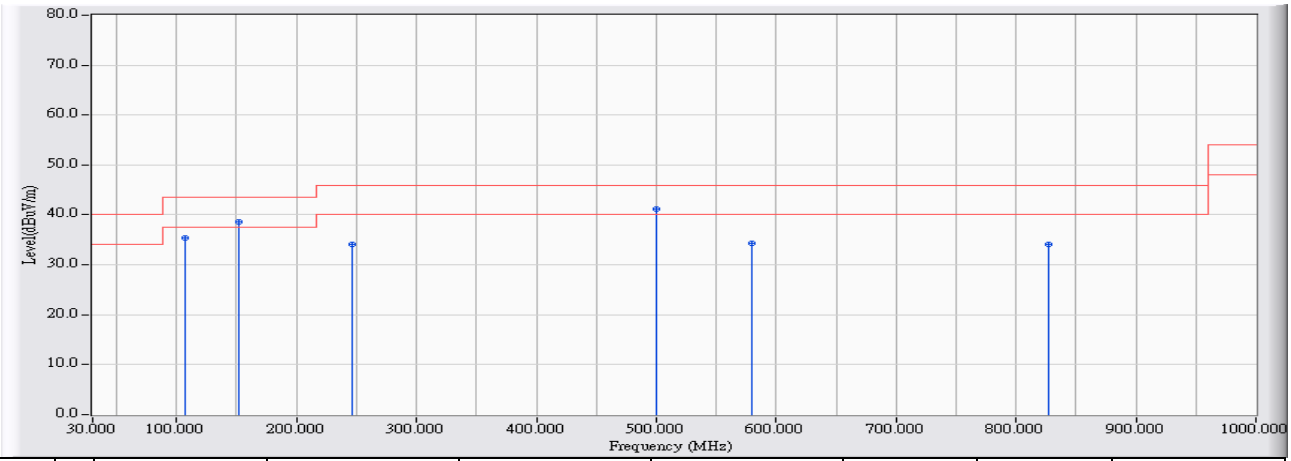



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 39.505 | 10.810 | 19.461 | 30.271 | -9.729 | 40.000 | QUASIPEAK |
| 2 | | 106.719 | 10.171 | 15.748 | 25.919 | -17.581 | 43.500 | QUASIPEAK |
| 3 | | 276.355 | 12.341 | 16.919 | 29.260 | -16.740 | 46.000 | QUASIPEAK |
| 4 | * | 499.918 | 17.178 | 20.031 | 37.209 | -8.791 | 46.000 | QUASIPEAK |
| 5 | | 688.952 | 17.936 | 11.315 | 29.251 | -16.749 | 46.000 | QUASIPEAK |
| 6 | | 959.943 | 19.962 | 11.466 | 31.428 | -14.572 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/24 - 15:04** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL** | **Power : AC120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 3: Transmit_ADP-33AW 802.11a 5220MHz** |

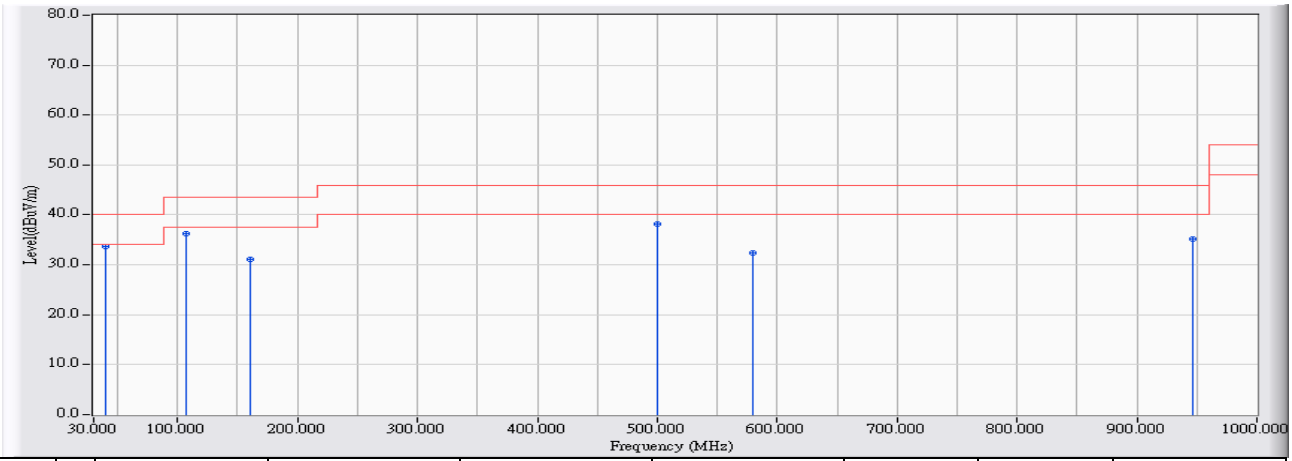



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 106.719 | 12.558 | 22.837 | 35.395 | -8.105 | 43.500 | QUASIPEAK |
| 2 | | 151.529 | 17.810 | 20.737 | 38.546 | -4.954 | 43.500 | QUASIPEAK |
| 3 | | 246.773 | 12.228 | 21.861 | 34.089 | -11.911 | 46.000 | QUASIPEAK |
| 4 | * | 499.918 | 17.754 | 23.376 | 41.129 | -4.871 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 19.312 | 15.036 | 34.348 | -11.652 | 46.000 | QUASIPEAK |
| 6 | | 826.872 | 22.627 | 11.557 | 34.184 | -11.816 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/24 - 15:02** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL** | **Power : AC120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 3: Transmit_ADP-33AW 802.11a 5220MHz** |

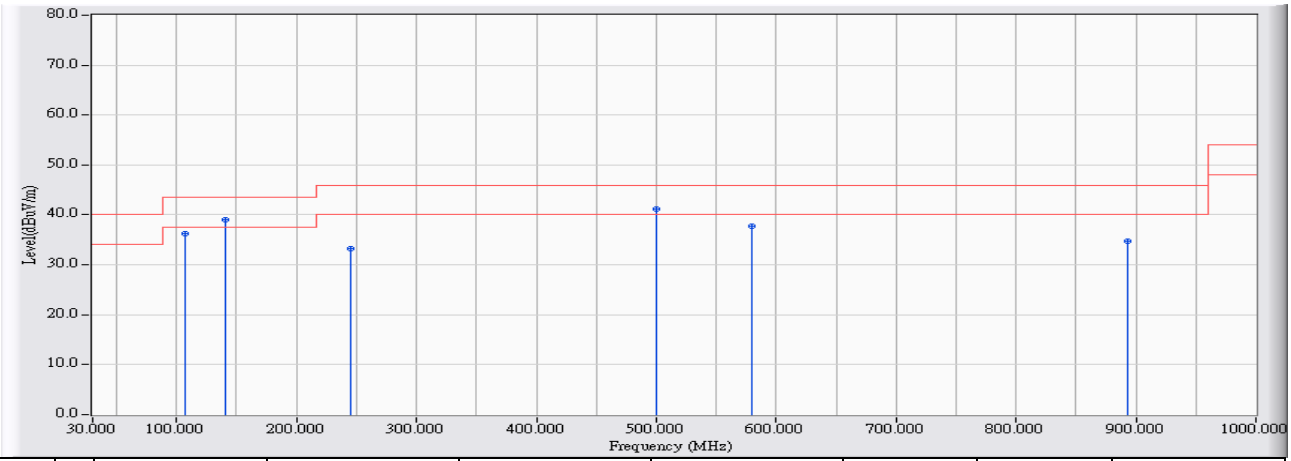



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | * | 39.408 | 12.249 | 21.398 | 33.647 | -6.353 | 40.000 | QUASIPEAK |
| 2 | | 106.622 | 12.558 | 23.621 | 36.179 | -7.321 | 43.500 | QUASIPEAK |
| 3 | | 160.258 | 17.924 | 13.186 | 31.110 | -12.390 | 43.500 | QUASIPEAK |
| 4 | | 500.015 | 17.755 | 20.342 | 38.097 | -7.903 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 19.312 | 13.159 | 32.471 | -13.529 | 46.000 | QUASIPEAK |
| 6 | | 946.364 | 23.896 | 11.267 | 35.163 | -10.837 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/24 - 15:06** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL** | **Power : AC120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 3: Transmit_ADP-33AW 802.11n(20M) 5220MHz** |

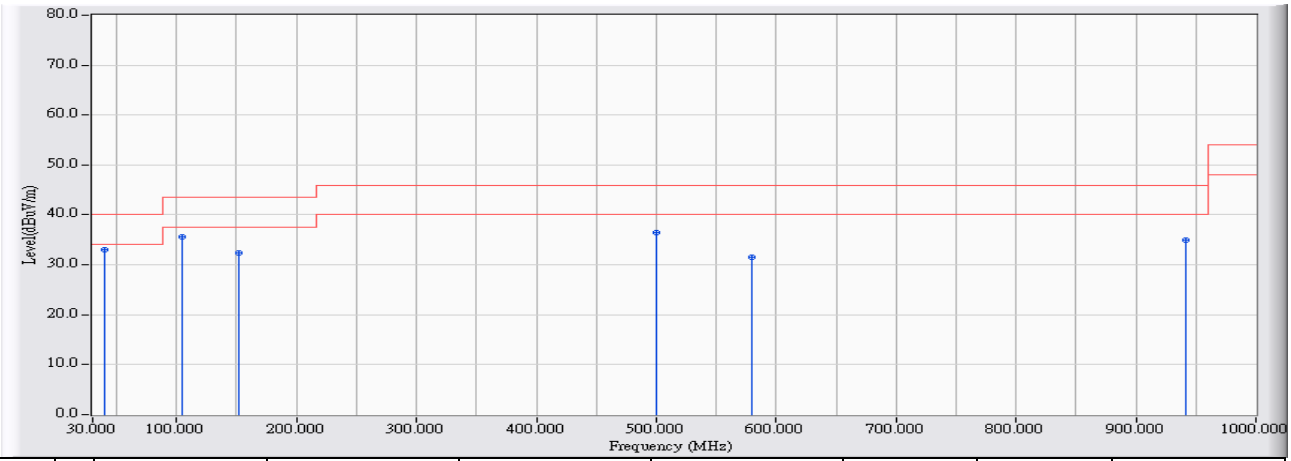



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 106.719 | 12.558 | 23.652 | 36.210 | -7.290 | 43.500 | QUASIPEAK |
| 2 | * | 141.151 | 16.260 | 22.675 | 38.935 | -4.565 | 43.500 | QUASIPEAK |
| 3 | | 245.706 | 12.197 | 20.992 | 33.189 | -12.811 | 46.000 | QUASIPEAK |
| 4 | | 499.918 | 17.754 | 23.340 | 41.093 | -4.907 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 19.312 | 18.479 | 37.791 | -8.209 | 46.000 | QUASIPEAK |
| 6 | | 892.632 | 23.369 | 11.469 | 34.838 | -11.162 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/24 - 15:08** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL** | **Power : AC120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 3: Transmit_ADP-33AW 802.11n(20M) 5220MHz** |

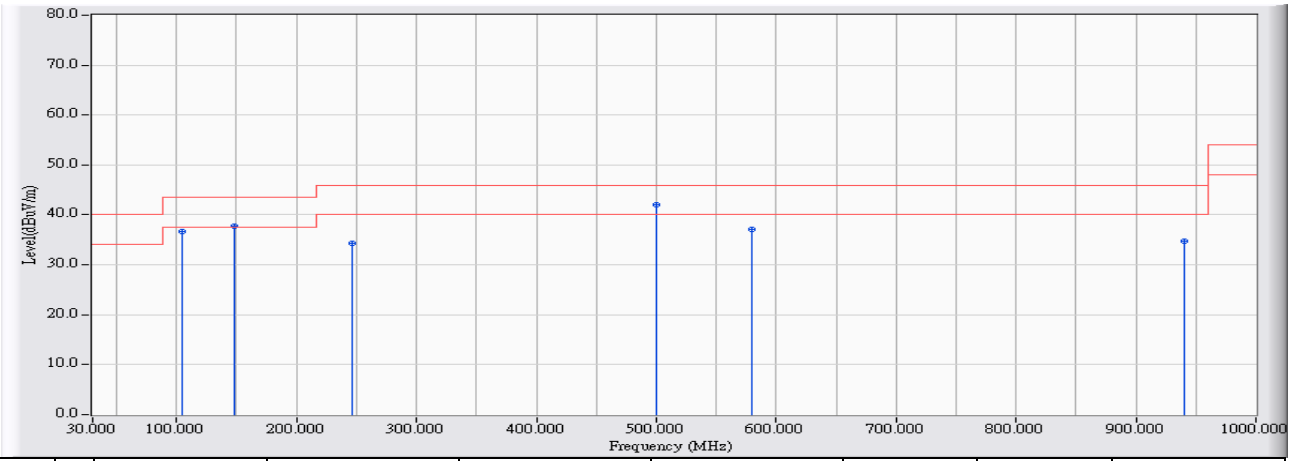



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | * | 39.408 | 12.249 | 20.789 | 33.038 | -6.962 | 40.000 | QUASIPEAK |
| 2 | | 104.683 | 12.550 | 22.974 | 35.525 | -7.975 | 43.500 | QUASIPEAK |
| 3 | | 151.529 | 17.810 | 14.487 | 32.296 | -11.204 | 43.500 | QUASIPEAK |
| 4 | | 499.918 | 17.754 | 18.779 | 36.532 | -9.468 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 19.312 | 12.199 | 31.511 | -14.489 | 46.000 | QUASIPEAK |
| 6 | | 941.418 | 23.849 | 11.076 | 34.924 | -11.076 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/24 - 15:12** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL** | **Power : AC120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 3: Transmit_ADP-33AW 802.11n(40M) 5230MHz** |

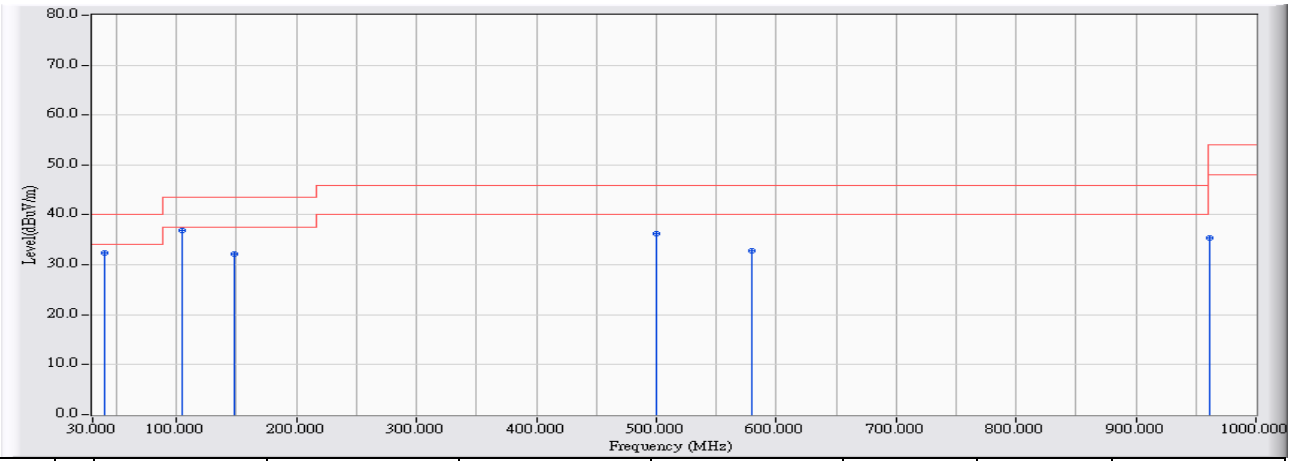



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 104.683 | 12.550 | 24.142 | 36.693 | -6.807 | 43.500 | QUASIPEAK |
| 2 | | 148.037 | 17.442 | 20.274 | 37.716 | -5.784 | 43.500 | QUASIPEAK |
| 3 | | 245.803 | 12.199 | 22.070 | 34.269 | -11.731 | 46.000 | QUASIPEAK |
| 4 | * | 499.918 | 17.754 | 24.179 | 41.932 | -4.068 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 19.312 | 17.863 | 37.175 | -8.825 | 46.000 | QUASIPEAK |
| 6 | | 940.351 | 23.838 | 11.008 | 34.846 | -11.154 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/24 - 15:10** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL** | **Power : AC120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 3: Transmit_ADP-33AW 802.11n(40M) 5230MHz** |

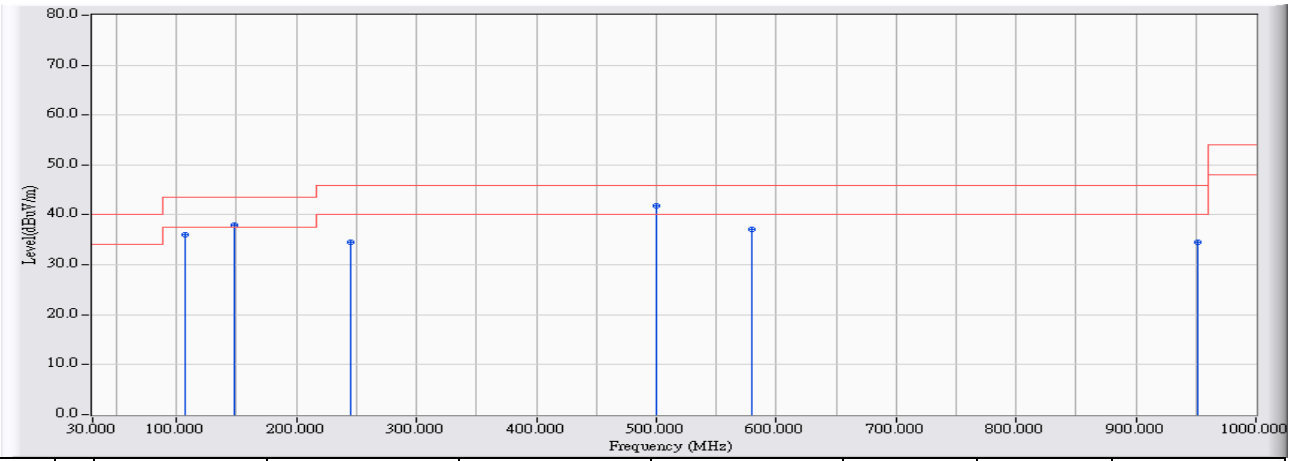



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 39.408 | 12.249 | 20.061 | 32.310 | -7.690 | 40.000 | QUASIPEAK |
| 2 | * | 104.683 | 12.550 | 24.424 | 36.975 | -6.525 | 43.500 | QUASIPEAK |
| 3 | | 148.134 | 17.459 | 14.625 | 32.084 | -11.416 | 43.500 | QUASIPEAK |
| 4 | | 499.918 | 17.754 | 18.533 | 36.286 | -9.714 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 19.312 | 13.534 | 32.846 | -13.154 | 46.000 | QUASIPEAK |
| 6 | | 961.495 | 24.040 | 11.361 | 35.402 | -18.598 | 54.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/24 - 15:14** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL** | **Power : AC120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 3: Transmit_ADP-33AW 802.11ac(80M) 5210MHz** |

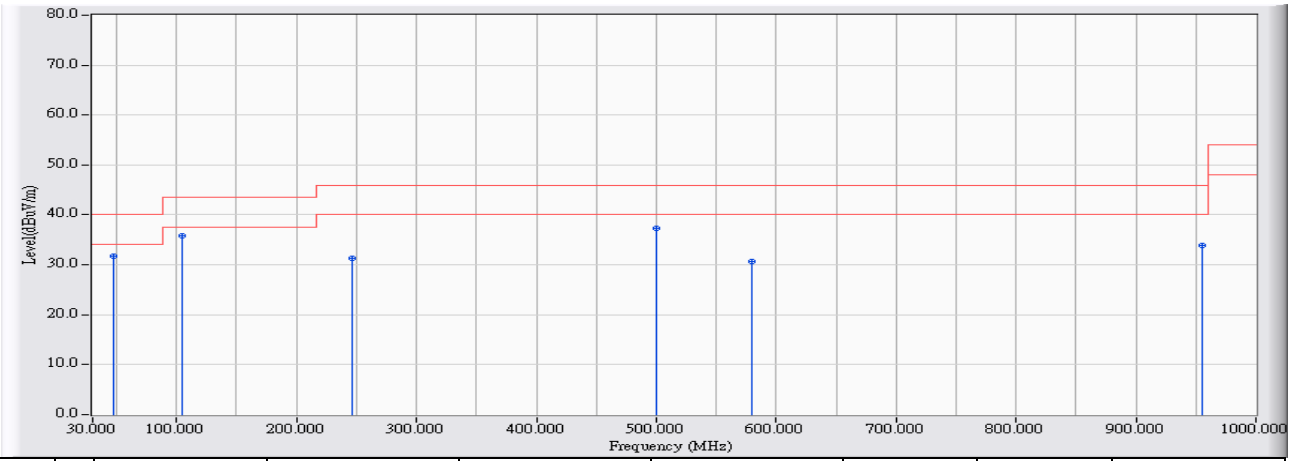



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 106.622 | 12.558 | 23.461 | 36.019 | -7.481 | 43.500 | QUASIPEAK |
| 2 | | 148.037 | 17.442 | 20.491 | 37.933 | -5.567 | 43.500 | QUASIPEAK |
| 3 | | 245.318 | 12.185 | 22.331 | 34.516 | -11.484 | 46.000 | QUASIPEAK |
| 4 | * | 499.918 | 17.754 | 24.086 | 41.839 | -4.161 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 19.312 | 17.882 | 37.194 | -8.806 | 46.000 | QUASIPEAK |
| 6 | | 952.087 | 23.951 | 10.555 | 34.506 | -11.494 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/24 - 15:16** |
| **Limit : FCC_CLASS_B_03M_QP** | **Margin : 6** |
| **Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL** | **Power : AC120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 3: Transmit_ADP-33AW 802.11ac(80M) 5210MHz** |



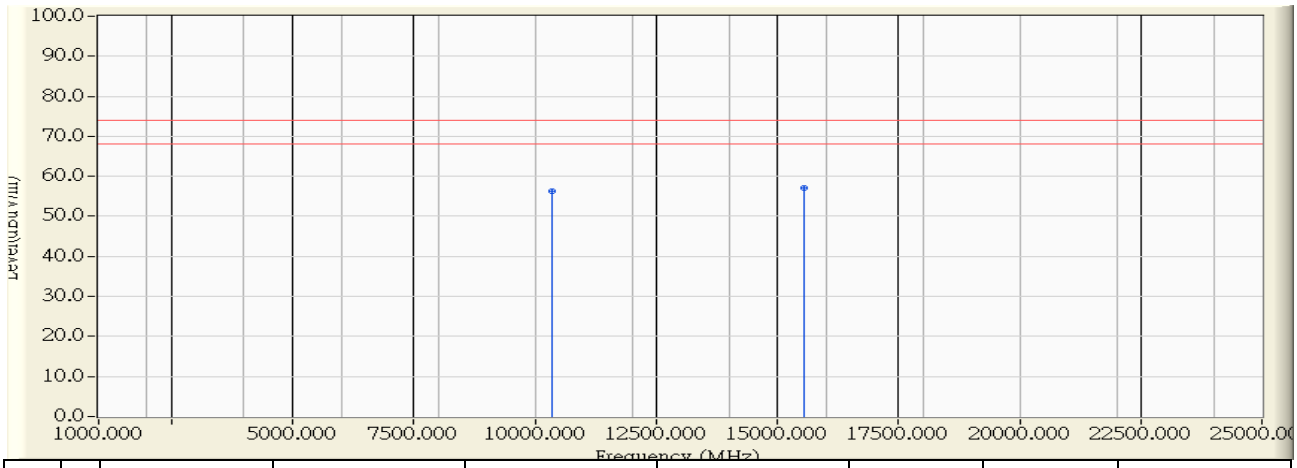

| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 47.749 | 11.828 | 19.830 | 31.658 | -8.342 | 40.000 | QUASIPEAK |
| 2 | * | 104.683 | 12.550 | 23.214 | 35.765 | -7.735 | 43.500 | QUASIPEAK |
| 3 | | 245.803 | 12.199 | 19.127 | 31.326 | -14.674 | 46.000 | QUASIPEAK |
| 4 | | 499.918 | 17.754 | 19.620 | 37.373 | -8.627 | 46.000 | QUASIPEAK |
| 5 | | 579.935 | 19.312 | 11.316 | 30.628 | -15.372 | 46.000 | QUASIPEAK |
| 6 | | 955.093 | 23.980 | 9.963 | 33.942 | -12.058 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

**Harmonic & Spurious:**

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 10:36** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5180MHz** |

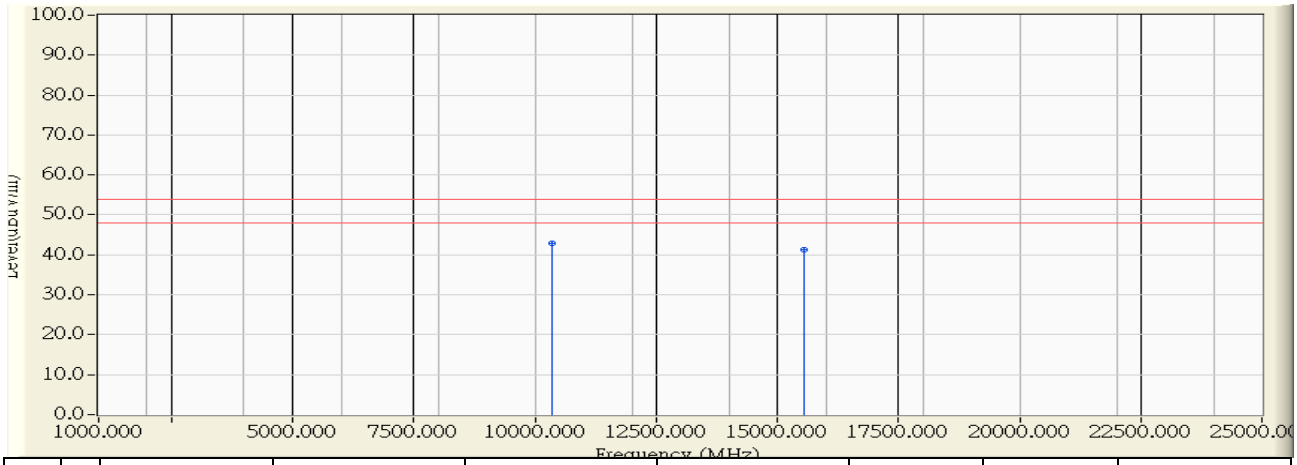



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10360.000 | 10.136 | 46.180 | 56.316 | -17.684 | 74.000 | PEAK |
| 2 | * | 15540.000 | 11.090 | 46.020 | 57.110 | -16.890 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 10:57** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5180MHz** |

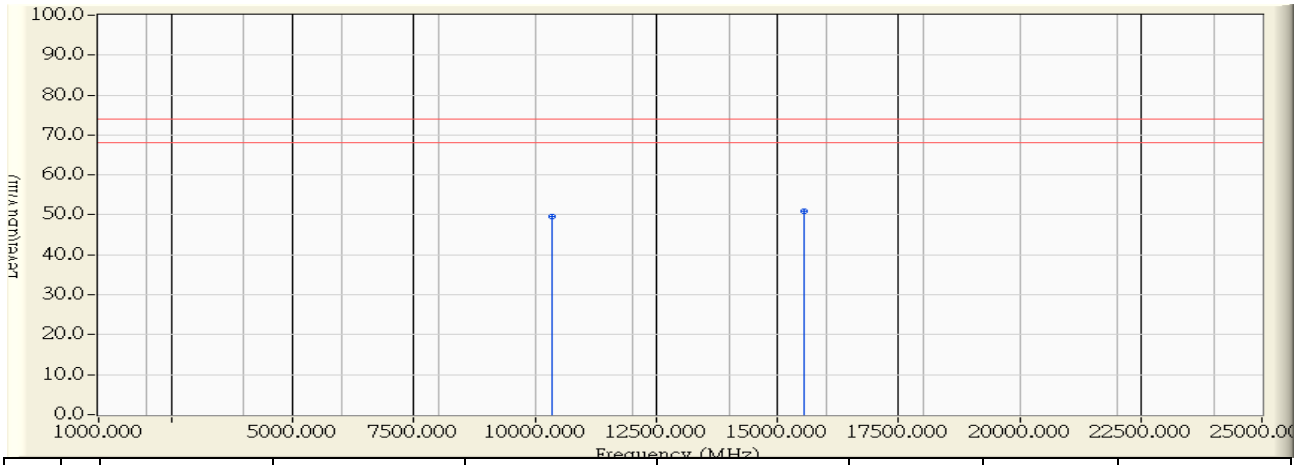



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | * | 10360.000 | 10.136 | 32.640 | 42.776 | -11.224 | 54.000 | AVERAGE |
| 2 | | 15540.000 | 11.090 | 30.190 | 41.280 | -12.720 | 54.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 10:33** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5180MHz** |

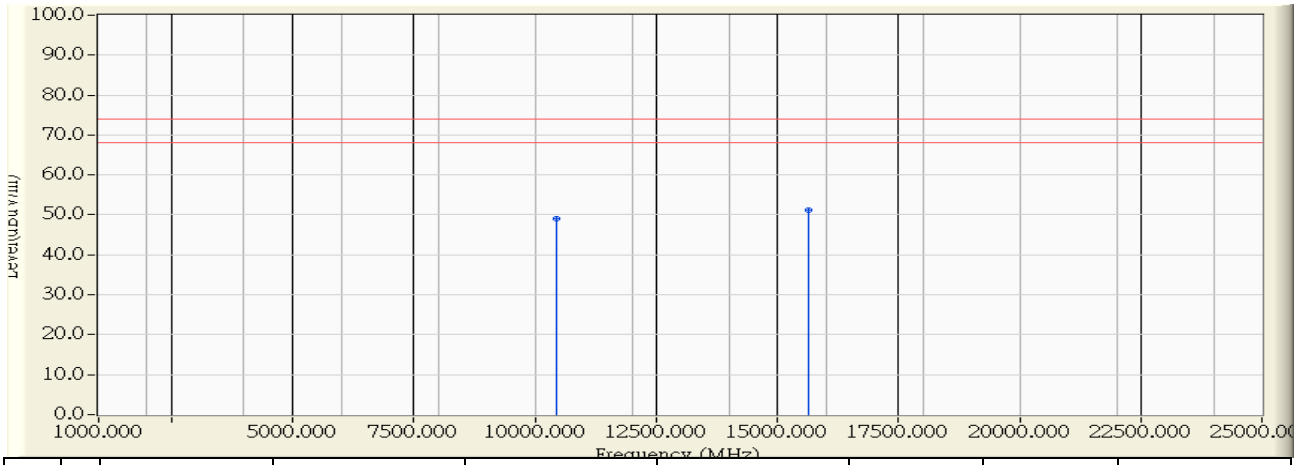



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10360.000 | 9.513 | 40.150 | 49.663 | -24.337 | 74.000 | PEAK |
| 2 | * | 15540.000 | 11.090 | 39.920 | 51.010 | -22.990 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 11:06** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5220MHz** |

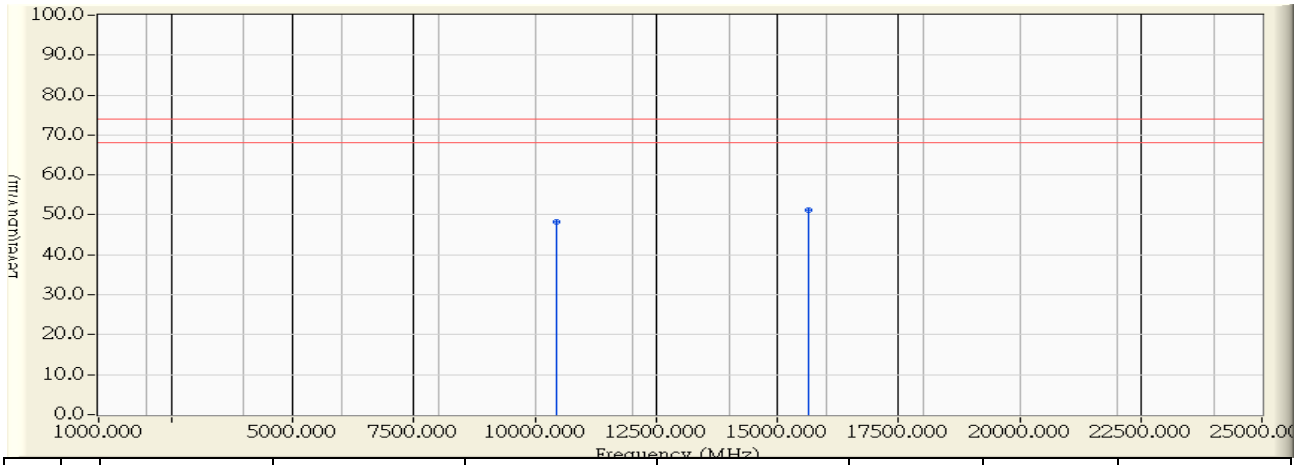



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10440.000 | 10.057 | 39.070 | 49.127 | -24.873 | 74.000 | PEAK |
| 2 | * | 15660.000 | 10.956 | 40.260 | 51.216 | -22.784 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 11:03** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5220MHz** |

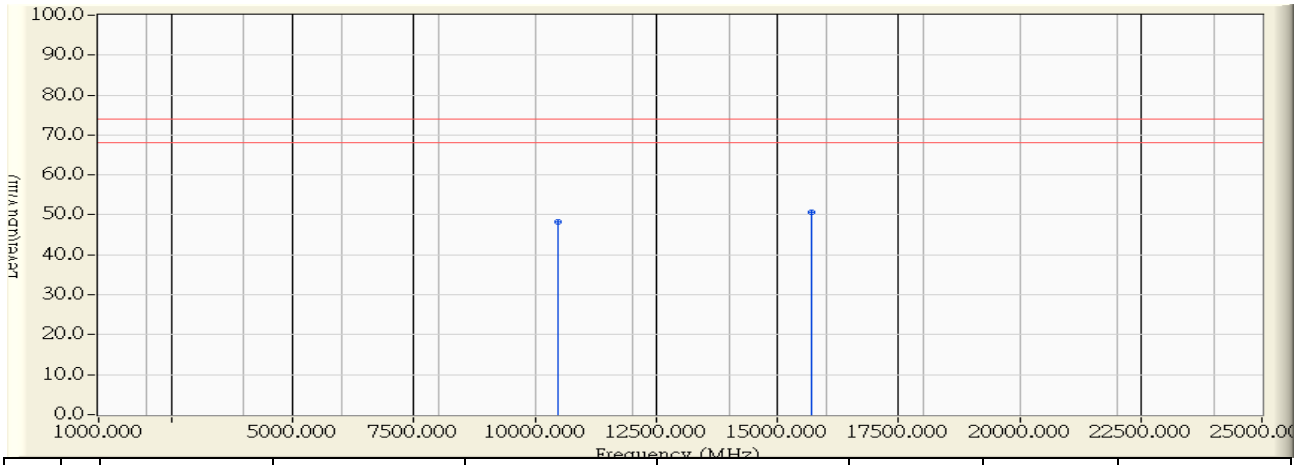



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10440.000 | 9.514 | 38.630 | 48.144 | -25.856 | 74.000 | PEAK |
| 2 | * | 15660.000 | 10.956 | 40.250 | 51.206 | -22.794 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 11:09** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5240MHz** |

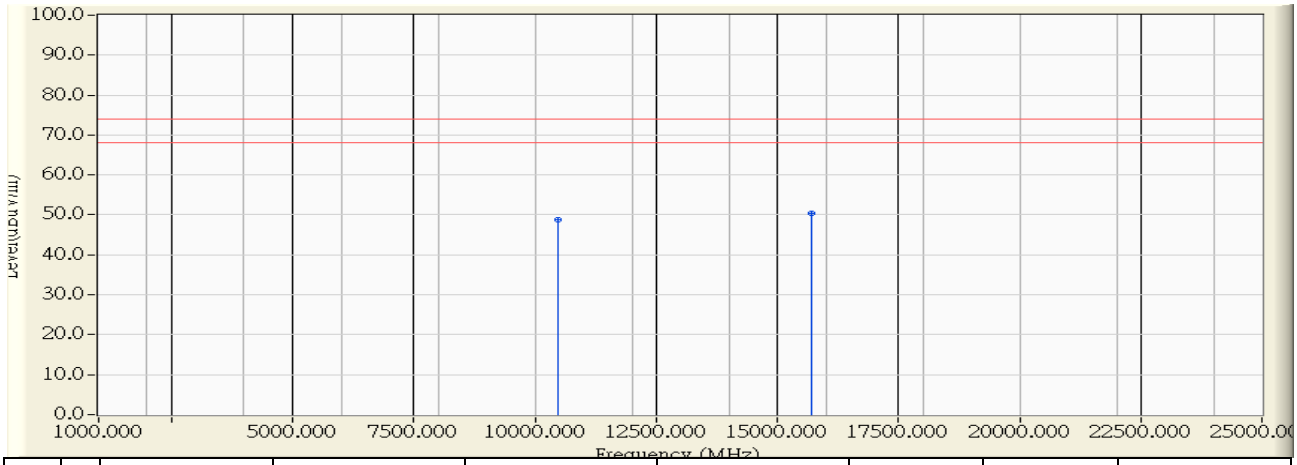



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10480.000 | 10.029 | 38.260 | 48.289 | -25.711 | 74.000 | PEAK |
| 2 | * | 15720.000 | 10.889 | 39.680 | 50.569 | -23.431 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 11:12** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5240MHz** |

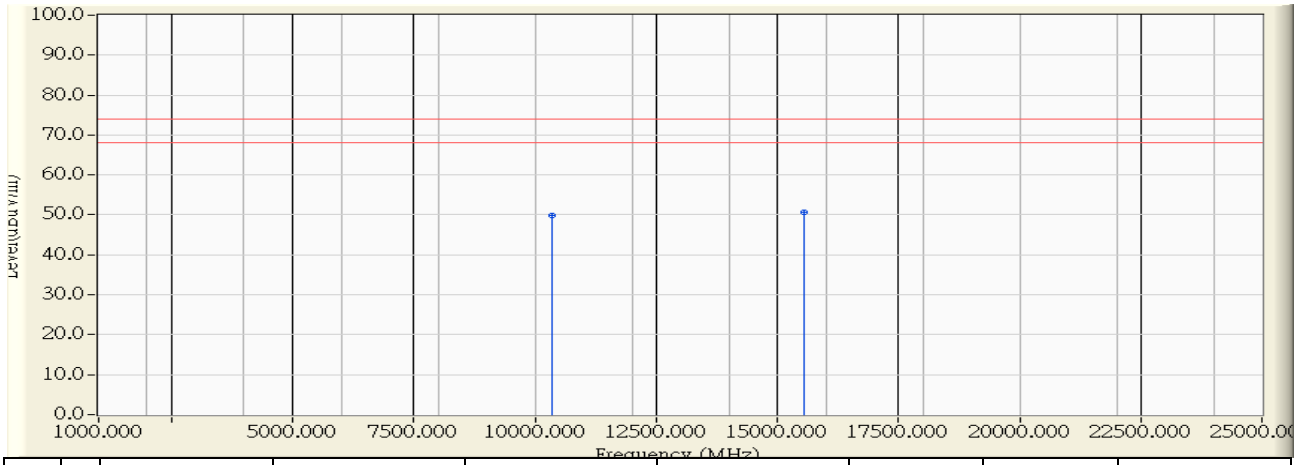



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10480.000 | 9.526 | 39.230 | 48.756 | -25.244 | 74.000 | PEAK |
| 2 | * | 15720.000 | 10.889 | 39.420 | 50.309 | -23.691 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 14:50** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5180MHz** |

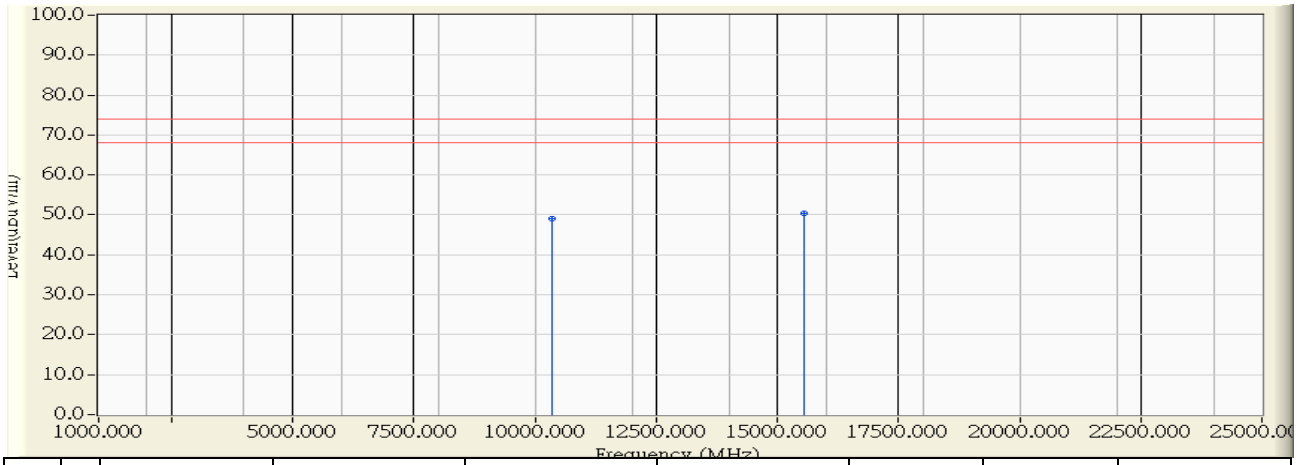



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10360.000 | 10.136 | 39.680 | 49.816 | -24.184 | 74.000 | PEAK |
| 2 | * | 15540.000 | 11.090 | 39.650 | 50.740 | -23.260 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 14:54** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5180MHz** |

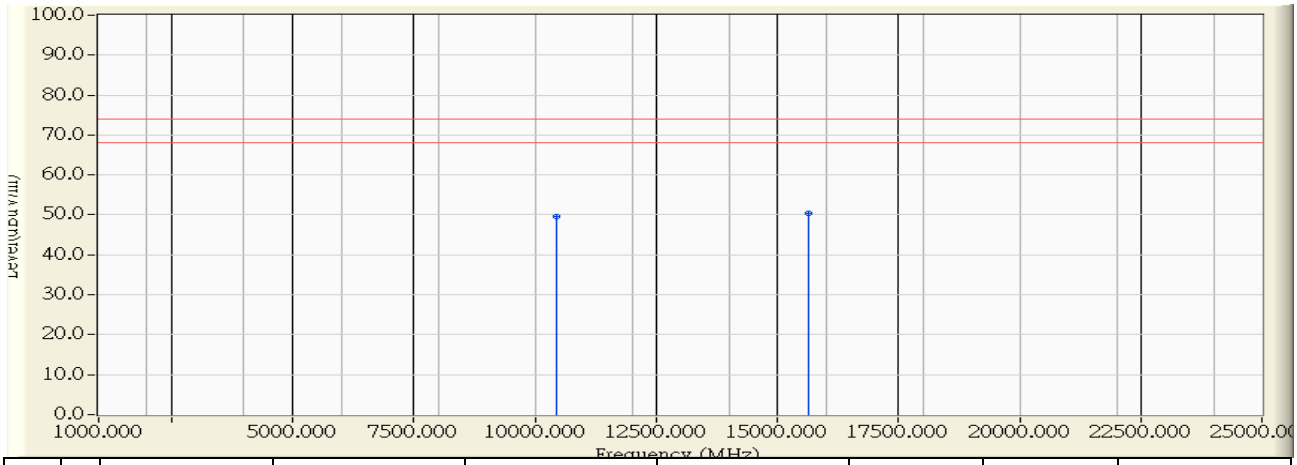



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10360.000 | 9.513 | 39.570 | 49.083 | -24.917 | 74.000 | PEAK |
| 2 | * | 15540.000 | 11.090 | 39.340 | 50.430 | -23.570 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 14:42** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5220MHz** |

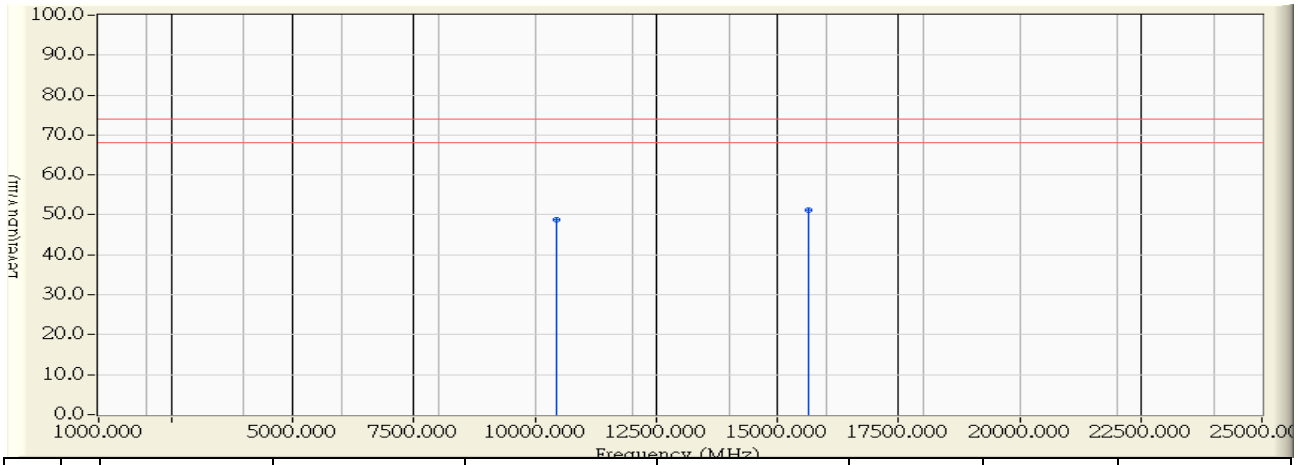



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10440.000 | 10.057 | 39.520 | 49.577 | -24.423 | 74.000 | PEAK |
| 2 | * | 15660.000 | 10.956 | 39.490 | 50.446 | -23.554 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 14:46** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5220MHz** |

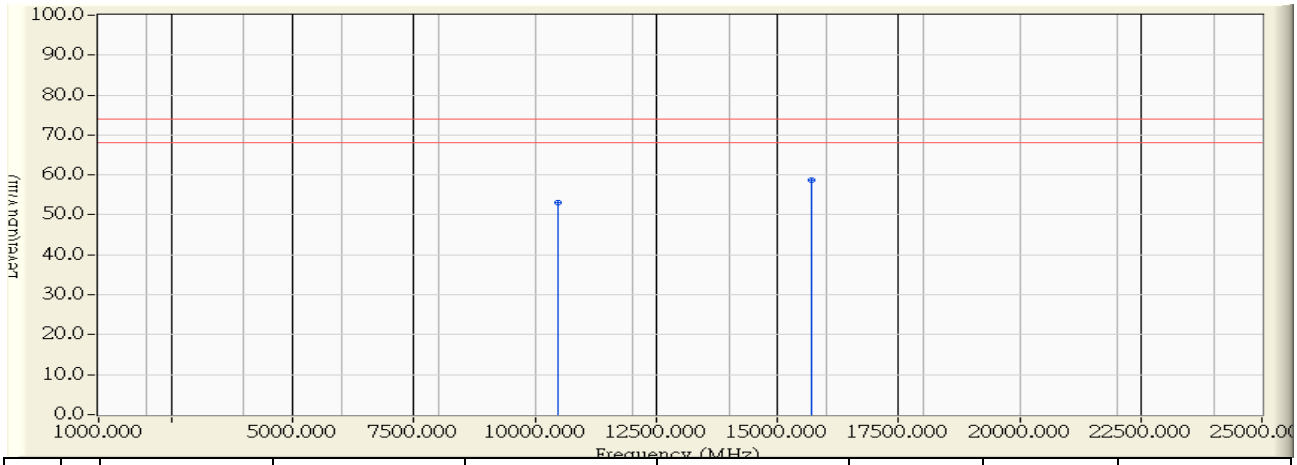



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10440.000 | 9.514 | 39.310 | 48.824 | -25.176 | 74.000 | PEAK |
| 2 | * | 15660.000 | 10.956 | 40.180 | 51.136 | -22.864 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 14:38** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5240MHz** |

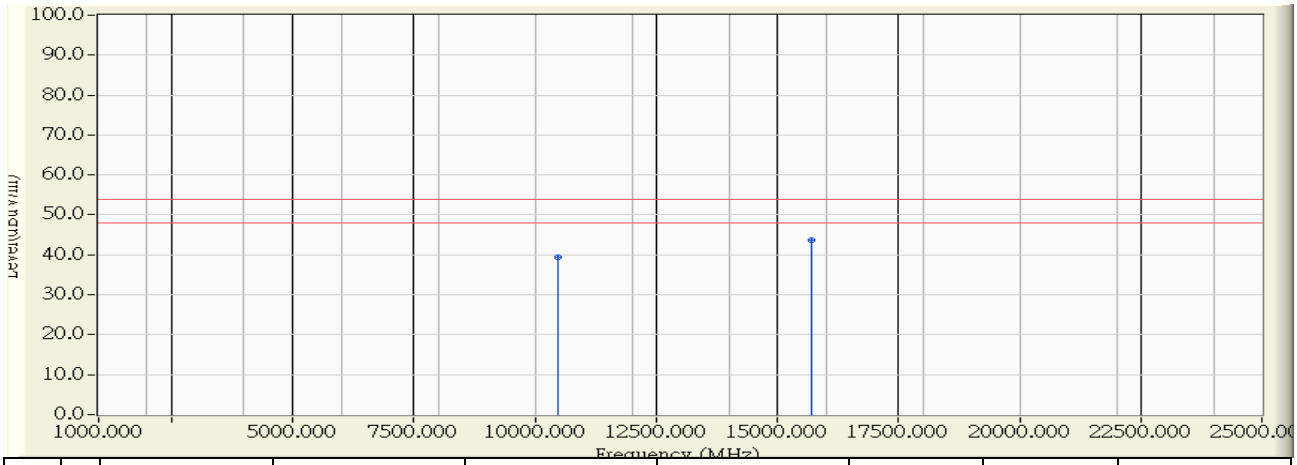



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10480.000 | 10.029 | 42.930 | 52.959 | -21.041 | 74.000 | PEAK |
| 2 | * | 15720.000 | 10.889 | 47.780 | 58.669 | -15.331 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 14:39** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5240MHz** |

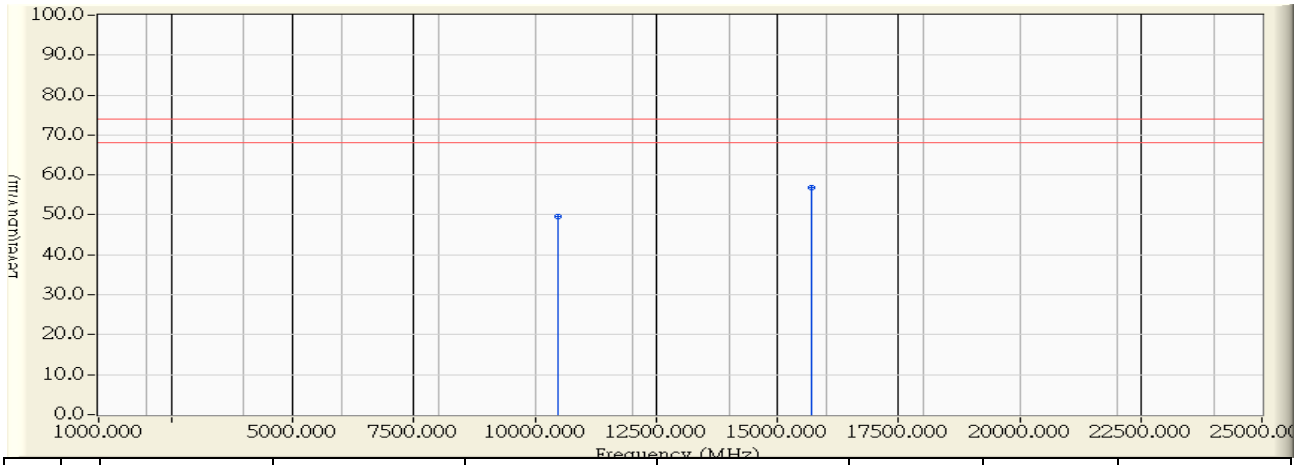



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10480.000 | 10.029 | 29.320 | 39.349 | -14.651 | 54.000 | AVERAGE |
| 2 | * | 15720.000 | 10.889 | 32.790 | 43.679 | -10.321 | 54.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 11:18** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5240MHz** |

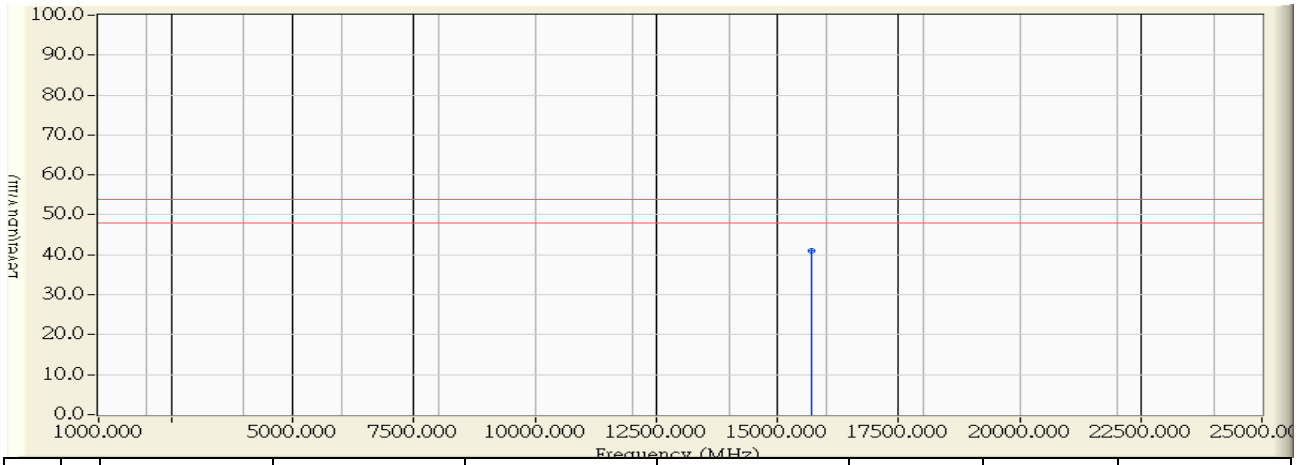



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10480.000 | 9.526 | 40.110 | 49.636 | -24.364 | 74.000 | PEAK |
| 2 | * | 15720.000 | 10.889 | 46.020 | 56.909 | -17.091 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 11:19** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5240MHz** |

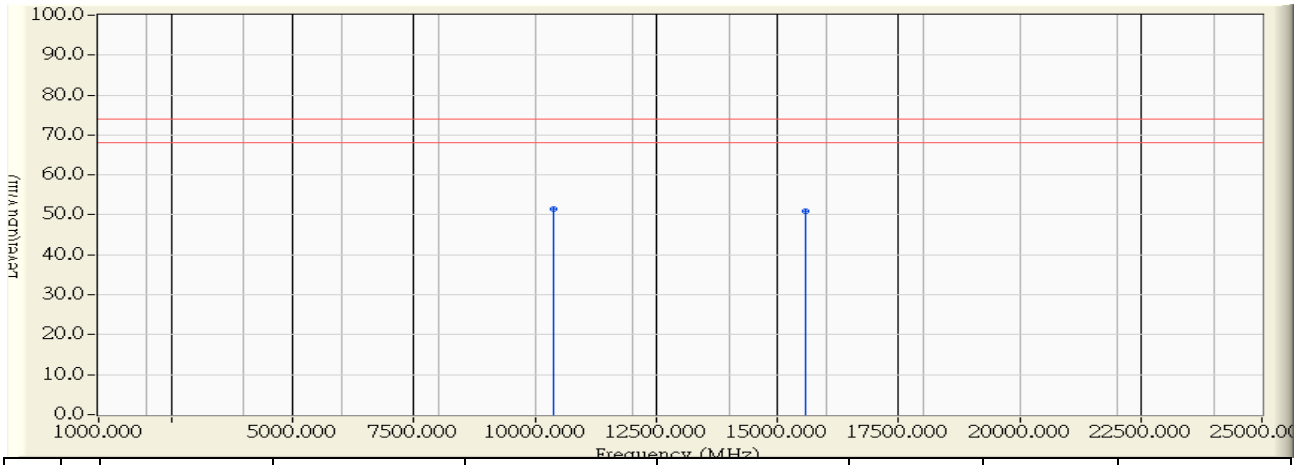



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | * | 15720.000 | 10.889 | 30.040 | 40.929 | -13.071 | 54.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 15:05** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(40M)_5190MHz** |

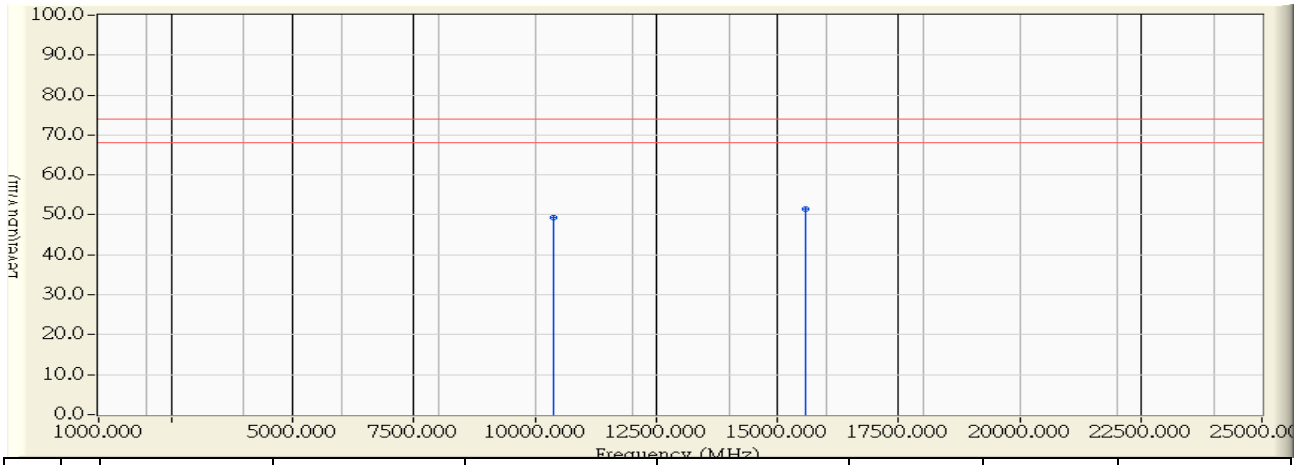



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | * | 10380.000 | 10.116 | 41.240 | 51.356 | -22.644 | 74.000 | PEAK |
| 2 | | 15570.000 | 11.056 | 39.860 | 50.917 | -23.083 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 14:58** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(40M)_5190MHz** |

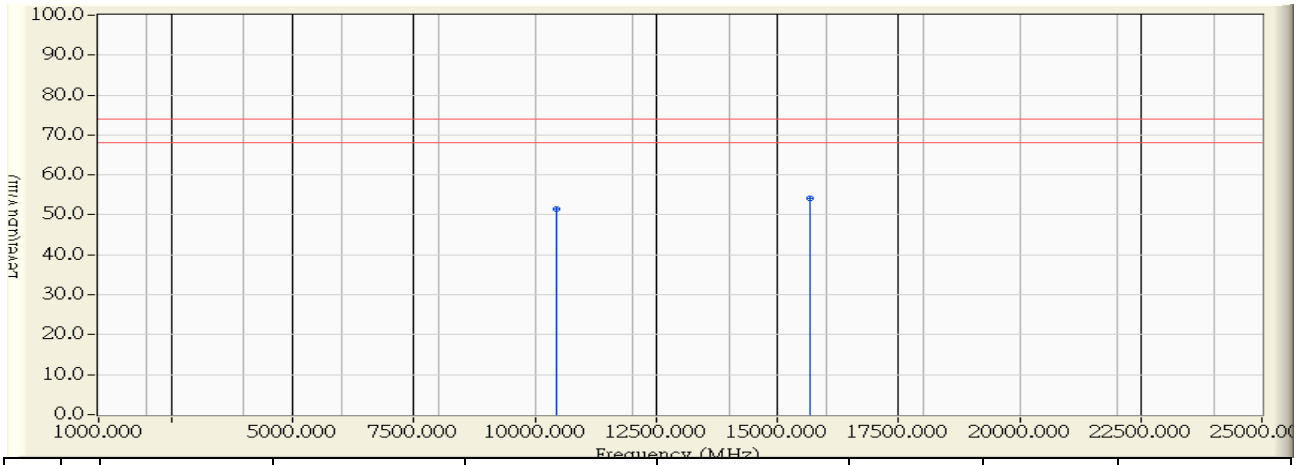



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10380.000 | 9.513 | 39.710 | 49.223 | -24.777 | 74.000 | PEAK |
| 2 | * | 15570.000 | 11.056 | 40.290 | 51.347 | -22.653 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 15:11** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(40M)_5230MHz** |

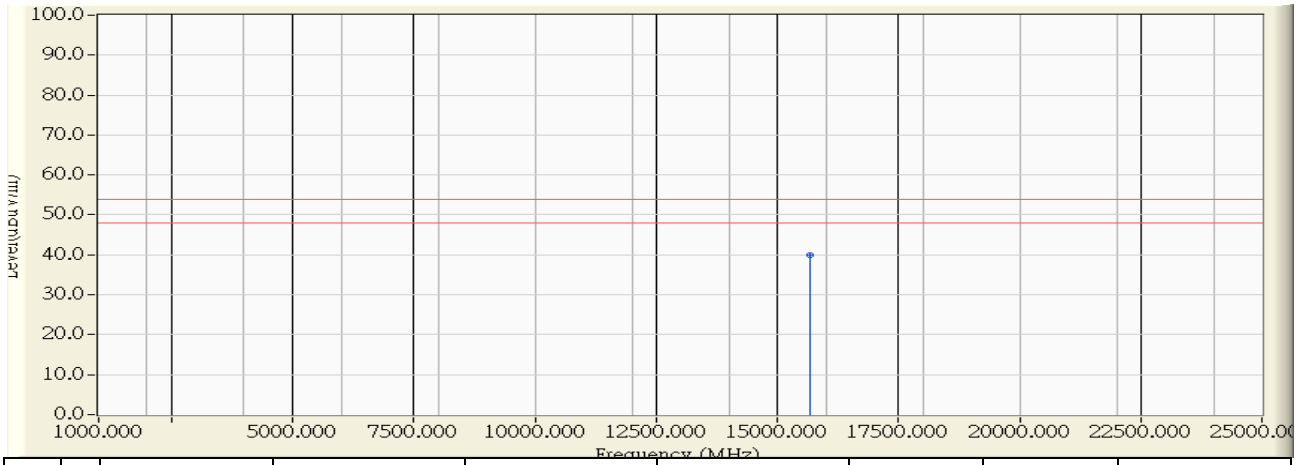



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10460.000 | 10.038 | 41.450 | 51.488 | -22.512 | 74.000 | PEAK |
| 2 | * | 15690.000 | 10.922 | 43.240 | 54.163 | -19.837 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 15:11** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(40M)_5230MHz** |

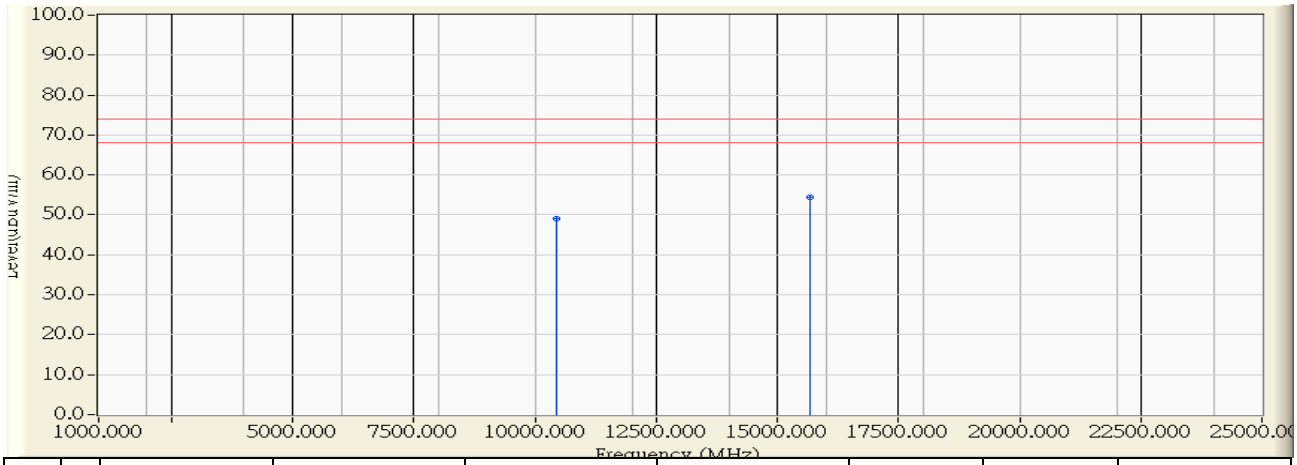



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | * | 15690.000 | 10.922 | 29.070 | 39.993 | -14.007 | 54.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 15:17** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(40M)_5230MHz** |

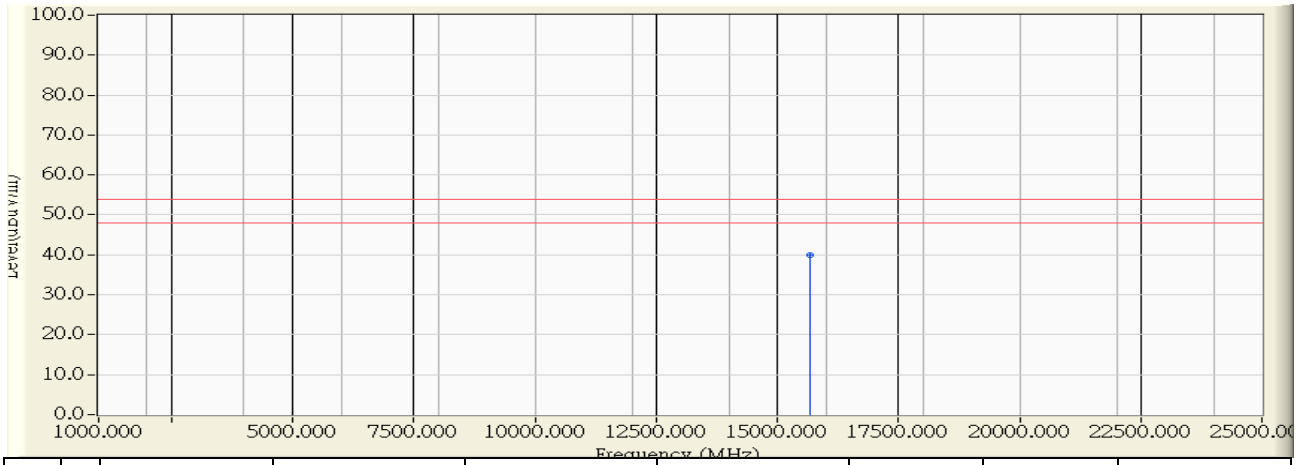



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10460.000 | 9.515 | 39.520 | 49.035 | -24.965 | 74.000 | PEAK |
| 2 | * | 15690.000 | 10.922 | 43.550 | 54.473 | -19.527 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 15:15** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(40M)_5230MHz** |

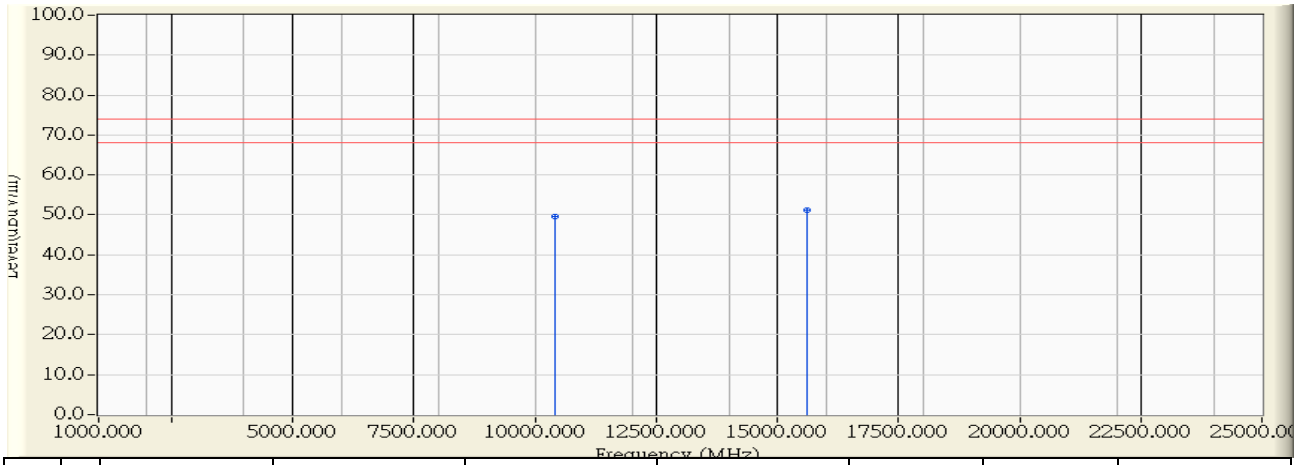



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | * | 15690.000 | 10.922 | 28.930 | 39.853 | -14.147 | 54.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 15:23** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11ac(80M)_5210MHz** |

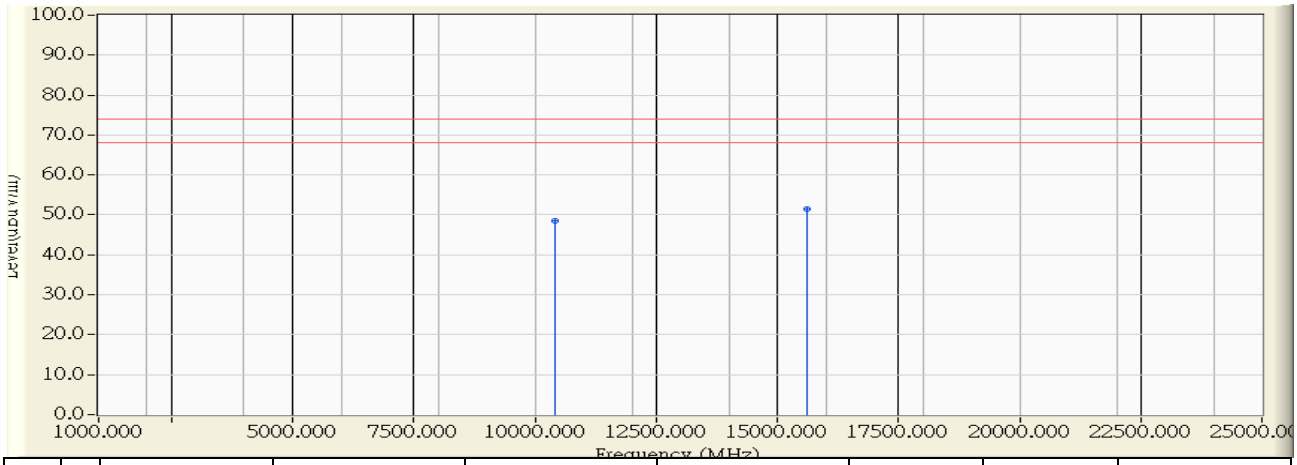



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10420.000 | 10.077 | 39.540 | 49.617 | -24.383 | 74.000 | PEAK |
| 2 | * | 15630.000 | 10.989 | 40.120 | 51.110 | -22.890 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. “ # ”, means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/09/16 - 15:20** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC120V/60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11ac(80M)_5210MHz** |




| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 10420.000 | 9.514 | 39.110 | 48.624 | -25.376 | 74.000 | PEAK |
| 2 | * | 15630.000 | 10.989 | 40.530 | 51.520 | -22.480 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. " # ", means the frequency is out of the restricted band.
6. Measurement Level = Reading Level + Correct Factor.
7. The average measurement was not performed when the peak measured data under the limit of average detection.

# 7. Band Edge

## 7.1. Test Equipment

The following test equipments are used during the band edge tests:

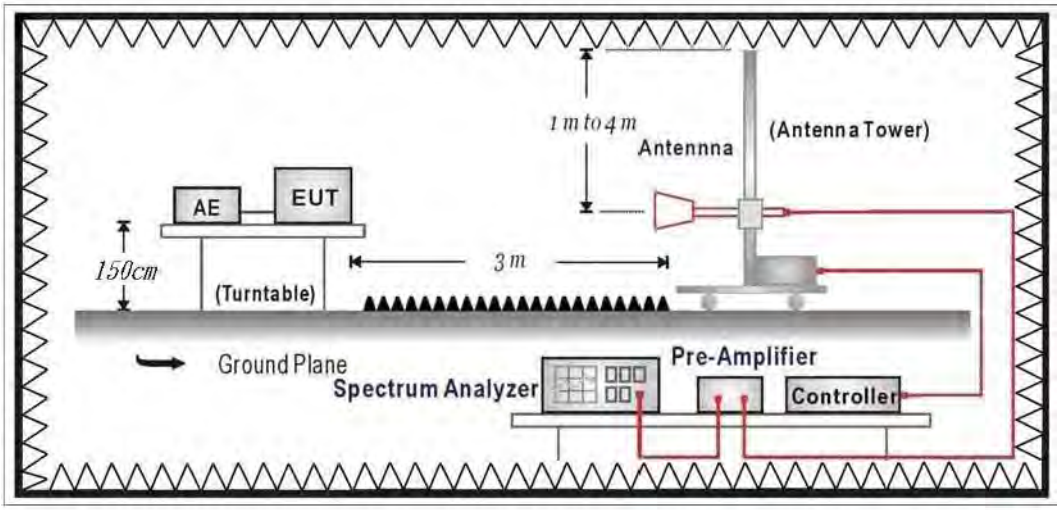
Band Edge / CB1

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|---|---|---|---|---|
| Double Ridged Guide Horn Antenna | Schwarzbeck | BBHA 9120 | D743 | 2016/01/26 |
| Spectrum Analyzer | Agilent | E4440A | MY46187335 | 2016/01/07 |
| k Type Cable | Huber+Suhner | SF 102 | 25623/2 | 2016/01/26 |
| Signal & Spectrum Analyzer | R&S | FSV40 | 101049 | 2015/10/30 |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

## 7.2. Test Setup

RF Radiated Measurement:



## 7.3. Limits

### ➢ General Radiated Emission Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section. Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

| FCC Part 15 Subpart C Paragraph 15.209 Limits | | |
|---|---|---|
| Frequency MHz | uV/m @3m | dBuV/m@3m |
| 30-88 | 100 | 40 |
| 88-216 | 150 | 43.5 |
| 216-960 | 200 | 46 |
| Above 960 | 500 | 54 |

Remark:

1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

### ➢ Unwanted Emission out of the restricted bands Limits

| FCC Part 15 Subpart E Paragraph 15.407(b) Limits | | |
|---|---|---|
| Frequency (MHz) | EIRP Limit (dBm) | Equivalent Field Strength (dBuV/m@3m) |
| 5150~5250 | -27 | 68.3 |
| 5250~5350 | -27 | 68.3 |
| 5470~5725 | -27 | 68.3 |
| 5725~5850 | -27 (Note1) | 68.3 |
| | -17 (Note2) | 78.3 |

Remark:

1. For frequencies more than 10 MHz above or below the band edges.
2. For frequency range from the band edges to 10 MHz above or below the band edges.
3. uV/m = $\frac{1000000\sqrt{30 \times EIRP}}{3}$, RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)

## 7.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 KHz, above 1GHz are 1 MHz.

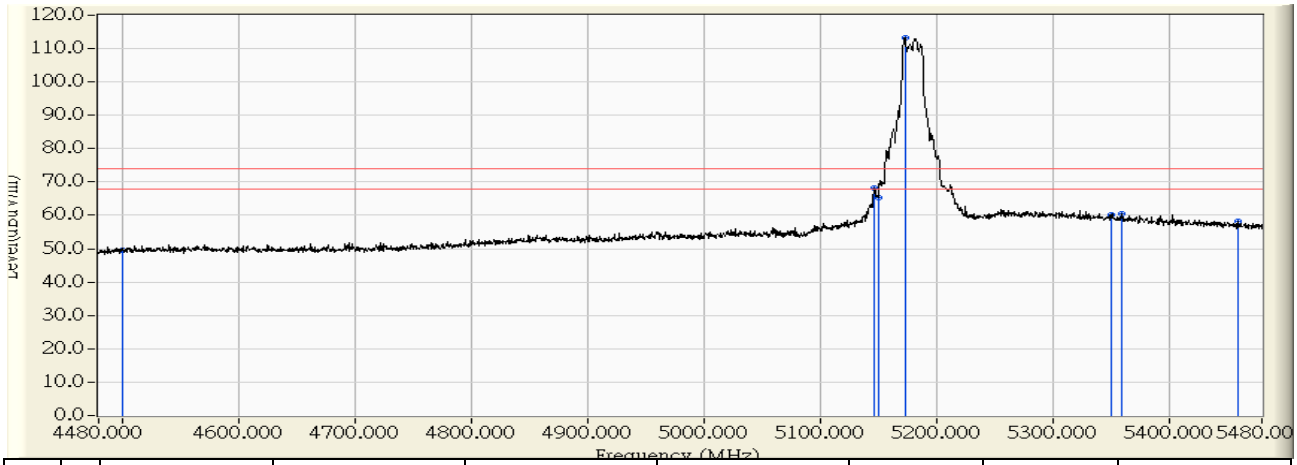
## 7.5. Uncertainty

The measurement uncertainty is defined as ± 3.65dB

## 7.6. Test Result

**Radiated is defined as**

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/31 - 15:03** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5180MHz** |

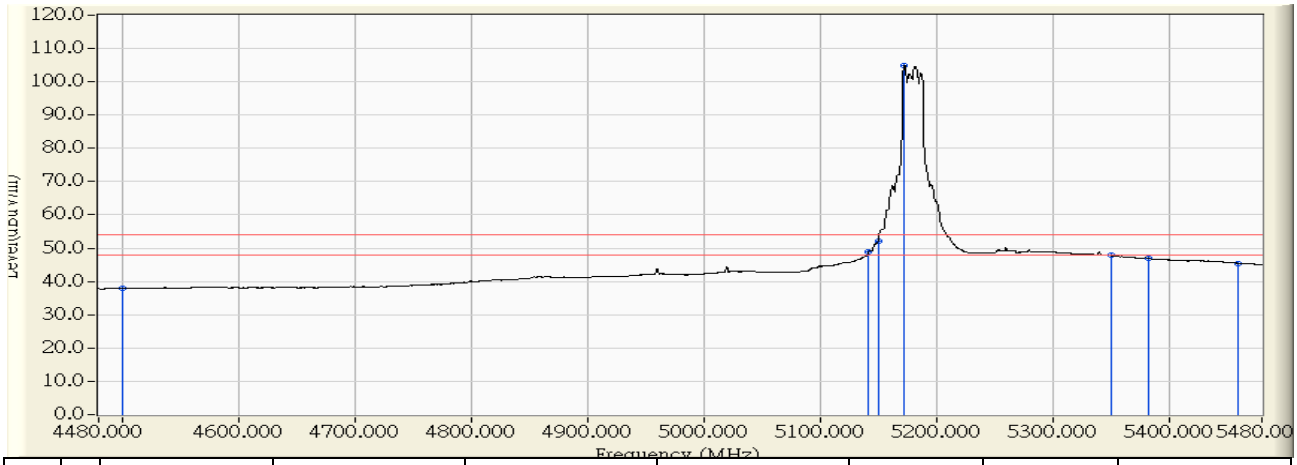



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 52.854 | 49.426 | -24.574 | 74.000 | PEAK |
| 2 | | 5146.500 | -0.768 | 68.887 | 68.120 | -5.880 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.737 | 66.169 | 65.431 | -8.569 | 74.000 | PEAK |
| 4 | * | 5173.000 | -0.545 | 113.758 | 113.213 | 39.213 | 74.000 | PEAK |
| 5 | | 5350.000 | 0.934 | 59.336 | 60.270 | -13.730 | 74.000 | PEAK |
| 6 | | 5360.000 | 1.018 | 59.418 | 60.435 | -13.565 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.853 | 56.411 | 58.264 | -15.736 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/31 - 14:59** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5180MHz** |

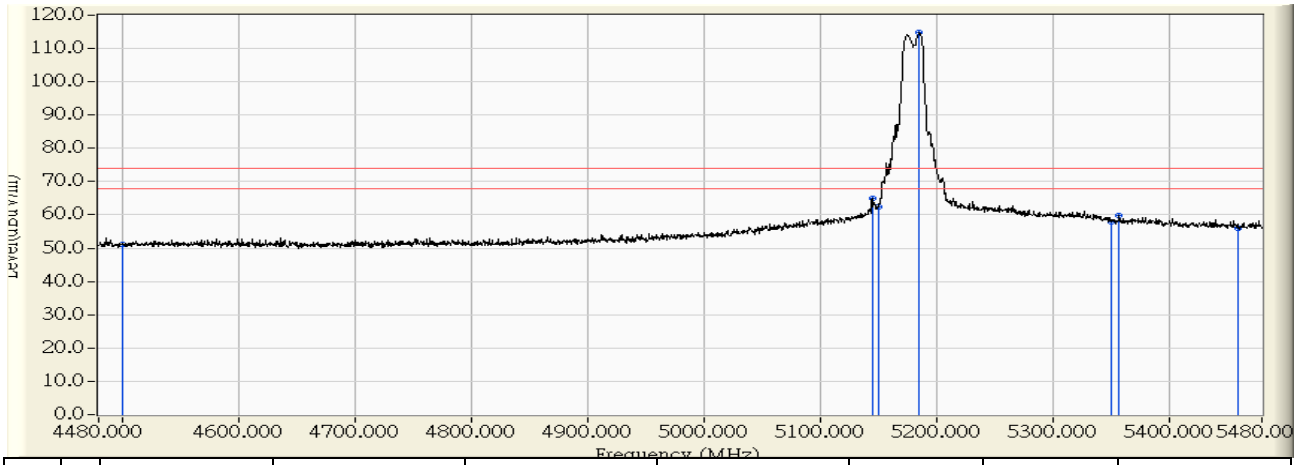



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 41.374 | 37.946 | -16.054 | 54.000 | AVERAGE |
| 2 | | 5142.000 | -0.804 | 49.732 | 48.928 | -5.072 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.737 | 52.907 | 52.169 | -1.831 | 54.000 | AVERAGE |
| 4 | * | 5172.500 | -0.549 | 105.372 | 104.822 | 50.822 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 0.934 | 46.848 | 47.782 | -6.218 | 54.000 | AVERAGE |
| 6 | | 5382.000 | 1.201 | 45.614 | 46.815 | -7.185 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.853 | 43.609 | 45.462 | -8.538 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 09:49** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5180MHz** |

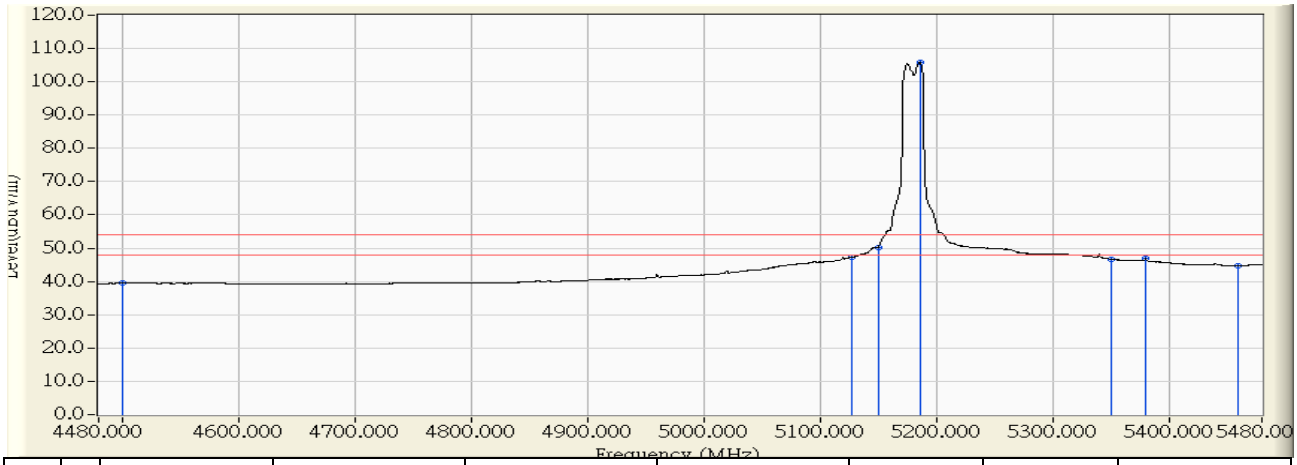



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 52.868 | 51.147 | -22.853 | 74.000 | PEAK |
| 2 | | 5145.000 | -0.360 | 65.273 | 64.913 | -9.087 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.321 | 62.799 | 62.478 | -11.522 | 74.000 | PEAK |
| 4 | * | 5185.500 | -0.041 | 114.891 | 114.849 | 40.849 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.250 | 56.804 | 58.054 | -15.946 | 74.000 | PEAK |
| 6 | | 5357.000 | 1.305 | 58.416 | 59.721 | -14.279 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.114 | 53.836 | 55.950 | -18.050 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 09:47** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5180MHz** |

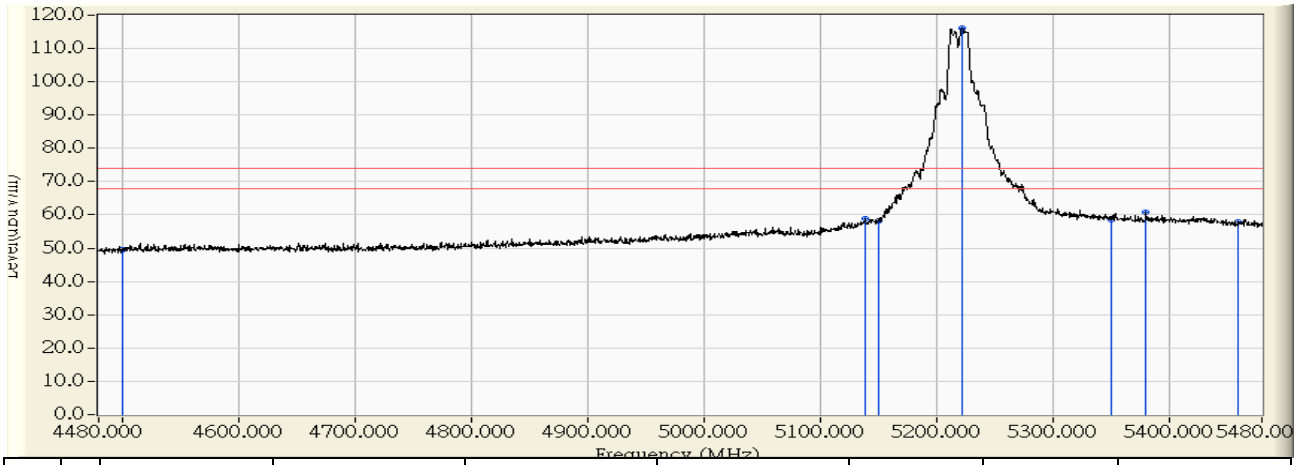



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 41.227 | 39.506 | -14.494 | 54.000 | AVERAGE |
| 2 | | 5127.500 | -0.497 | 47.795 | 47.297 | -6.703 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.321 | 50.622 | 50.301 | -3.699 | 54.000 | AVERAGE |
| 4 | * | 5186.000 | -0.038 | 106.020 | 105.982 | 51.982 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.250 | 45.407 | 46.657 | -7.343 | 54.000 | AVERAGE |
| 6 | | 5380.000 | 1.486 | 45.358 | 46.844 | -7.156 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.114 | 42.633 | 44.747 | -9.253 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:15** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5220MHz** |

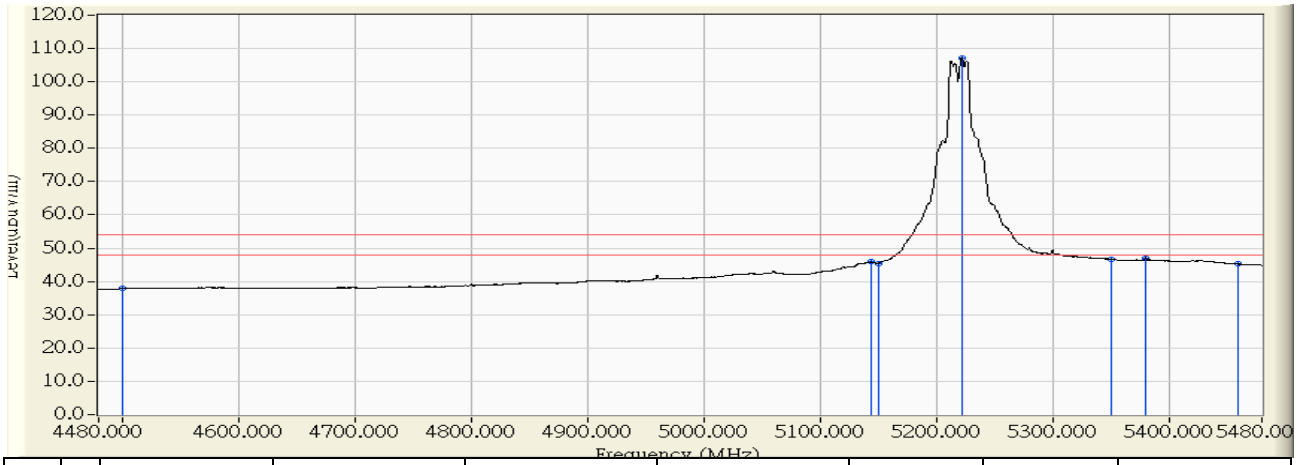



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 53.059 | 49.631 | -24.369 | 74.000 | PEAK |
| 2 | | 5139.000 | -0.830 | 59.630 | 58.801 | -15.199 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.737 | 58.983 | 58.245 | -15.755 | 74.000 | PEAK |
| 4 | * | 5222.000 | -0.136 | 116.168 | 116.032 | 42.032 | 74.000 | PEAK |
| 5 | | 5350.000 | 0.934 | 57.663 | 58.597 | -15.403 | 74.000 | PEAK |
| 6 | | 5380.500 | 1.188 | 59.705 | 60.894 | -13.106 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.853 | 56.027 | 57.880 | -16.120 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:16** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5220MHz** |

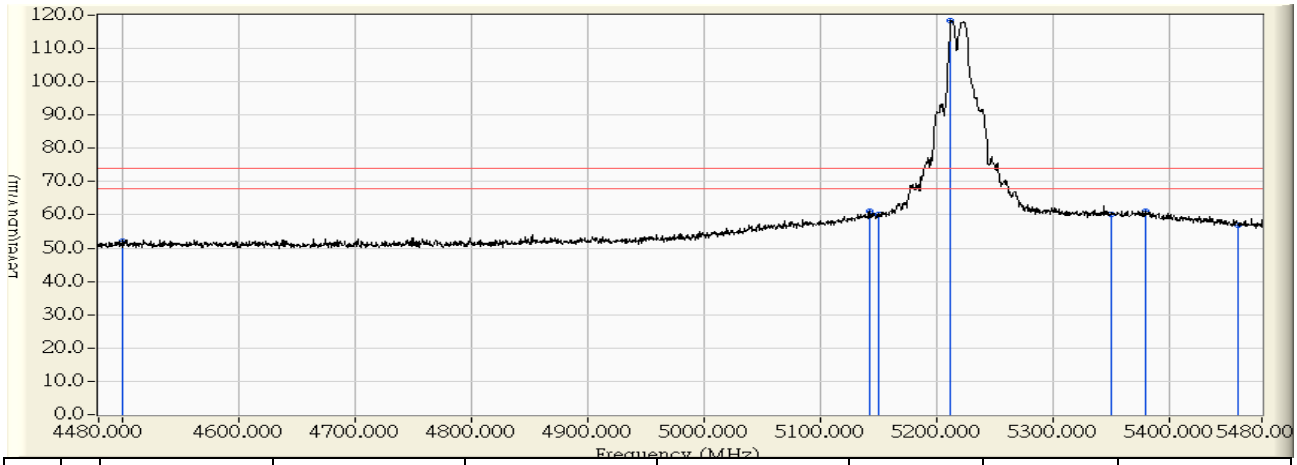



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 41.294 | 37.866 | -16.134 | 54.000 | AVERAGE |
| 2 | | 5143.500 | -0.792 | 46.666 | 45.874 | -8.126 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.737 | 46.219 | 45.481 | -8.519 | 54.000 | AVERAGE |
| 4 | * | 5222.000 | -0.136 | 107.120 | 106.984 | 52.984 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 0.934 | 45.818 | 46.752 | -7.248 | 54.000 | AVERAGE |
| 6 | | 5379.500 | 1.181 | 45.798 | 46.978 | -7.022 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.853 | 43.420 | 45.273 | -8.727 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:21** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5220MHz** |

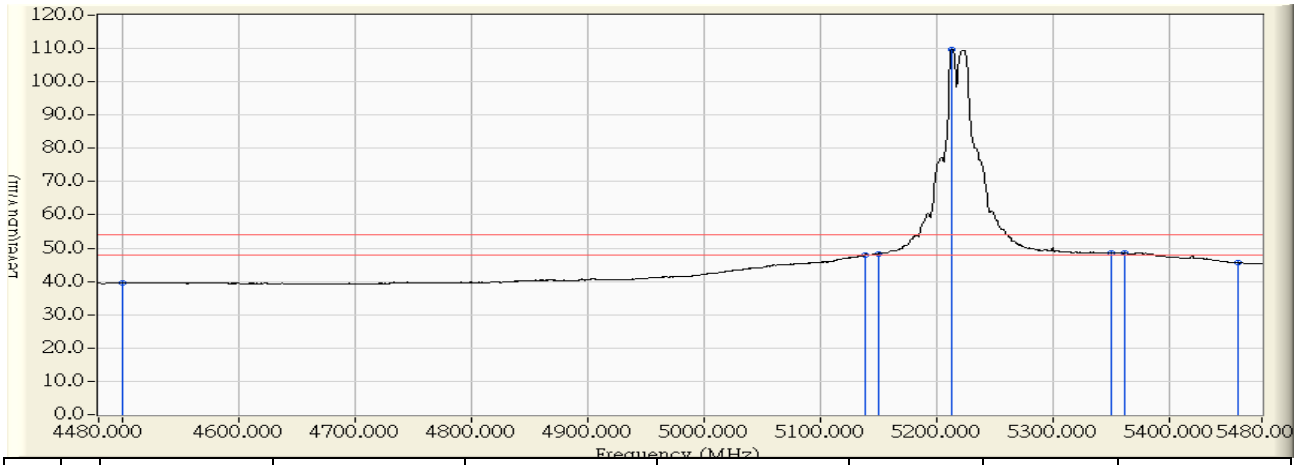



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 53.691 | 51.970 | -22.030 | 74.000 | PEAK |
| 2 | | 5142.500 | -0.380 | 61.642 | 61.262 | -12.738 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.321 | 60.446 | 60.125 | -13.875 | 74.000 | PEAK |
| 4 | * | 5212.500 | 0.170 | 118.207 | 118.377 | 44.377 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.250 | 58.785 | 60.035 | -13.965 | 74.000 | PEAK |
| 6 | | 5380.500 | 1.489 | 59.777 | 61.267 | -12.733 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.114 | 54.877 | 56.991 | -17.009 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:20** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5220MHz** |

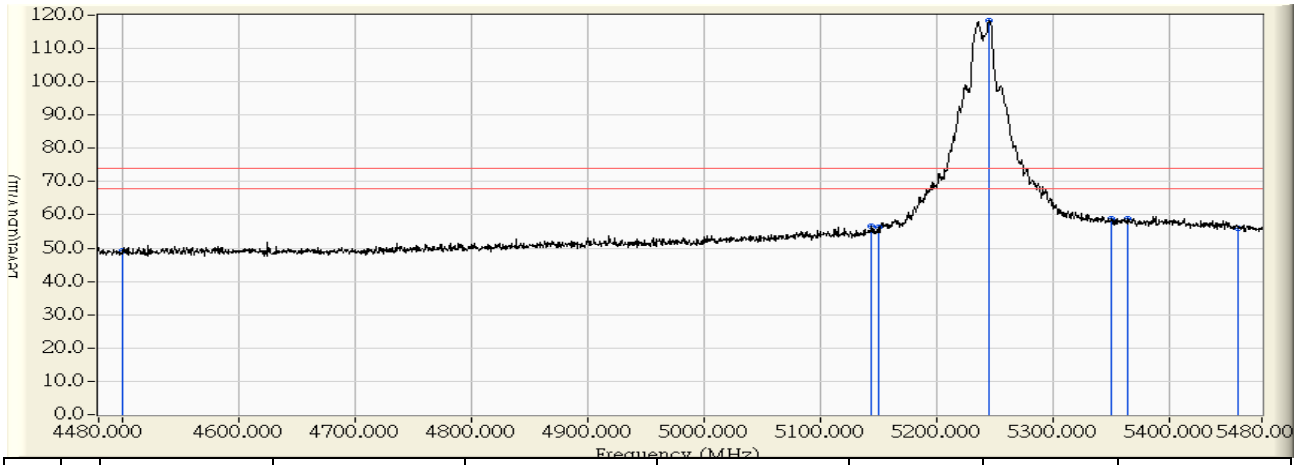



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 41.253 | 39.532 | -14.468 | 54.000 | AVERAGE |
| 2 | | 5138.500 | -0.412 | 48.300 | 47.889 | -6.111 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.321 | 48.591 | 48.270 | -5.730 | 54.000 | AVERAGE |
| 4 | * | 5213.500 | 0.178 | 109.466 | 109.644 | 55.644 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.250 | 47.353 | 48.603 | -5.397 | 54.000 | AVERAGE |
| 6 | | 5361.500 | 1.340 | 47.169 | 48.510 | -5.490 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.114 | 43.468 | 45.582 | -8.418 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 10:30** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5240MHz** |

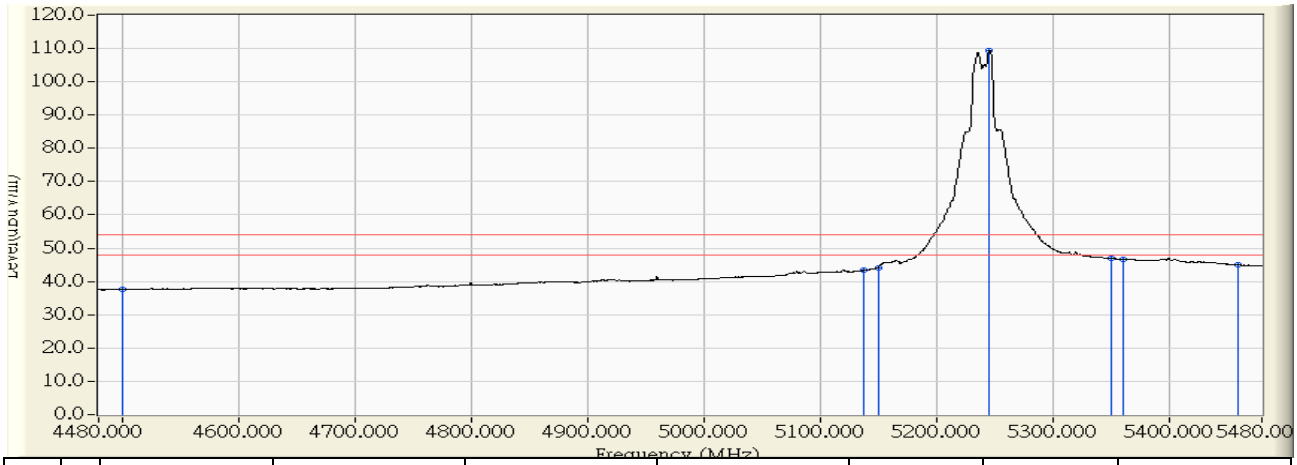



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 52.753 | 49.325 | -24.675 | 74.000 | PEAK |
| 2 | | 5144.500 | -0.783 | 57.297 | 56.513 | -17.487 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.737 | 57.035 | 56.297 | -17.703 | 74.000 | PEAK |
| 4 | * | 5245.500 | 0.061 | 118.289 | 118.349 | 44.349 | 74.000 | PEAK |
| 5 | | 5350.000 | 0.934 | 57.927 | 58.861 | -15.139 | 74.000 | PEAK |
| 6 | | 5364.000 | 1.050 | 57.750 | 58.801 | -15.199 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.853 | 54.169 | 56.022 | -17.978 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 10:29** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5240MHz** |

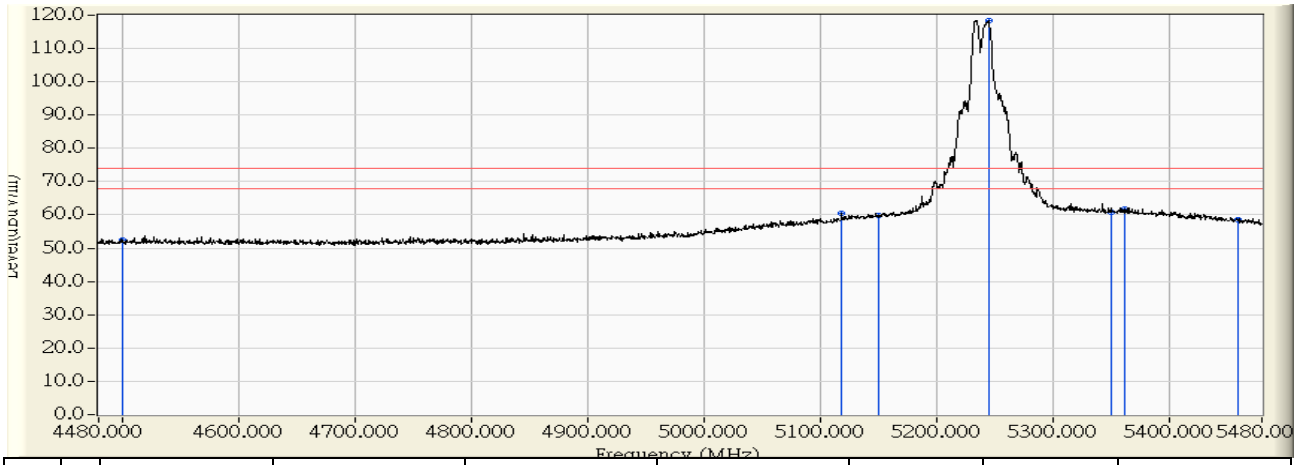



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 41.153 | 37.725 | -16.275 | 54.000 | AVERAGE |
| 2 | | 5137.500 | -0.842 | 44.156 | 43.314 | -10.686 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.737 | 44.844 | 44.106 | -9.894 | 54.000 | AVERAGE |
| 4 | * | 5246.000 | 0.064 | 109.367 | 109.432 | 55.432 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 0.934 | 46.090 | 47.024 | -6.976 | 54.000 | AVERAGE |
| 6 | | 5360.500 | 1.021 | 45.749 | 46.770 | -7.230 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.853 | 43.065 | 44.918 | -9.082 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 10:22** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5240MHz** |

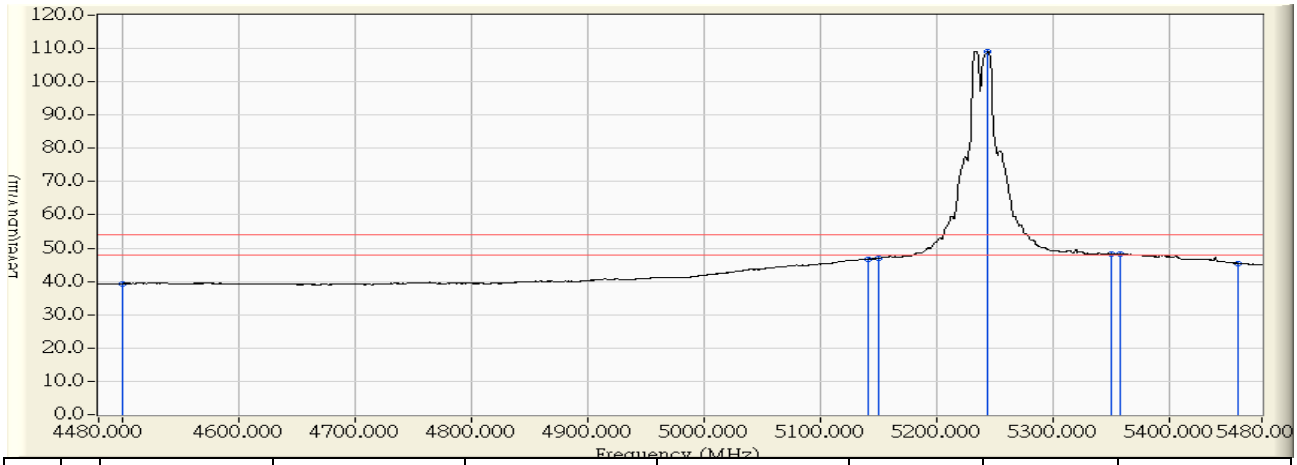



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 54.087 | 52.366 | -21.634 | 74.000 | PEAK |
| 2 | | 5119.000 | -0.565 | 60.951 | 60.386 | -13.614 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.321 | 60.066 | 59.745 | -14.255 | 74.000 | PEAK |
| 4 | * | 5245.500 | 0.430 | 117.911 | 118.340 | 44.340 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.250 | 59.684 | 60.934 | -13.066 | 74.000 | PEAK |
| 6 | | 5362.000 | 1.344 | 60.571 | 61.915 | -12.085 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.114 | 56.300 | 58.414 | -15.586 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 10:24** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a 5240MHz** |

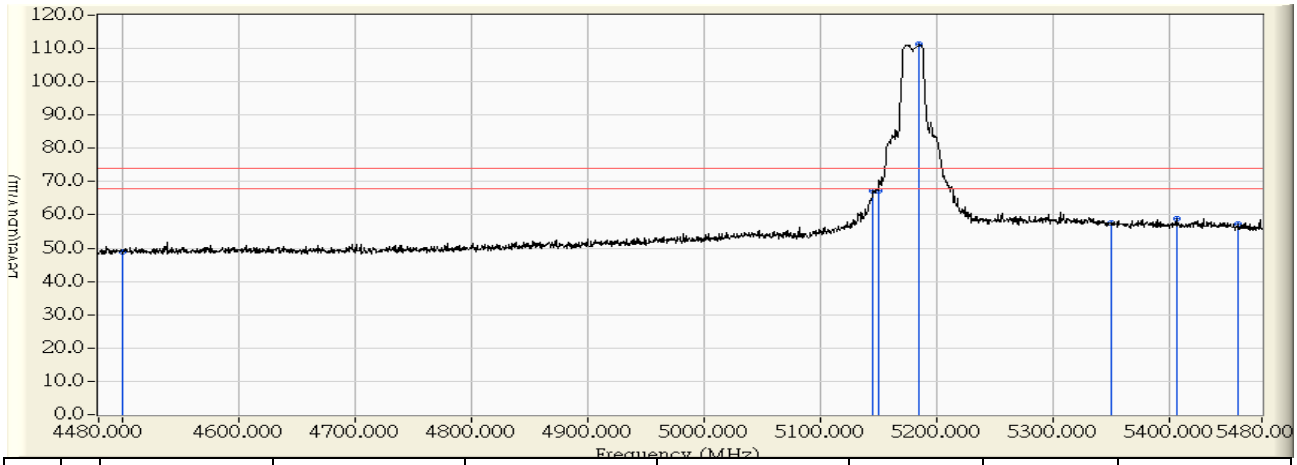



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 41.104 | 39.383 | -14.617 | 54.000 | AVERAGE |
| 2 | | 5142.000 | -0.384 | 47.174 | 46.790 | -7.210 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.321 | 47.264 | 46.943 | -7.057 | 54.000 | AVERAGE |
| 4 | * | 5244.500 | 0.422 | 108.784 | 109.205 | 55.205 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.250 | 47.093 | 48.343 | -5.657 | 54.000 | AVERAGE |
| 6 | | 5358.000 | 1.313 | 46.953 | 48.266 | -5.734 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.114 | 43.272 | 45.386 | -8.614 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:48** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5180MHz** |

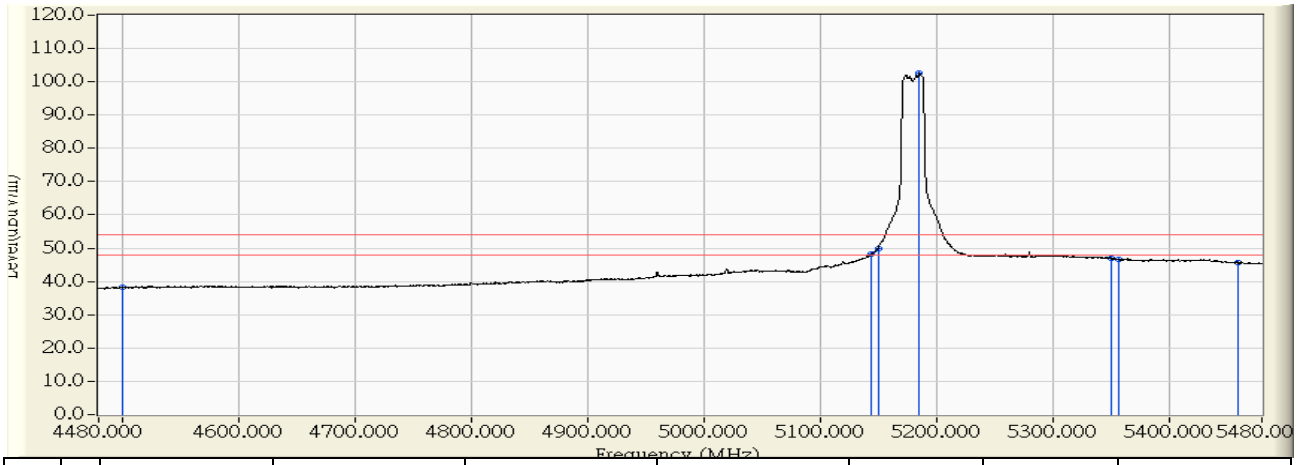



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 52.479 | 49.051 | -24.949 | 74.000 | PEAK |
| 2 | | 5146.000 | -0.772 | 68.102 | 67.331 | -6.669 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.737 | 68.024 | 67.286 | -6.714 | 74.000 | PEAK |
| 4 | * | 5185.500 | -0.440 | 111.648 | 111.207 | 37.207 | 74.000 | PEAK |
| 5 | | 5350.000 | 0.934 | 56.774 | 57.708 | -16.292 | 74.000 | PEAK |
| 6 | | 5406.500 | 1.405 | 57.348 | 58.754 | -15.246 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.853 | 55.389 | 57.242 | -16.758 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:46** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5180MHz** |

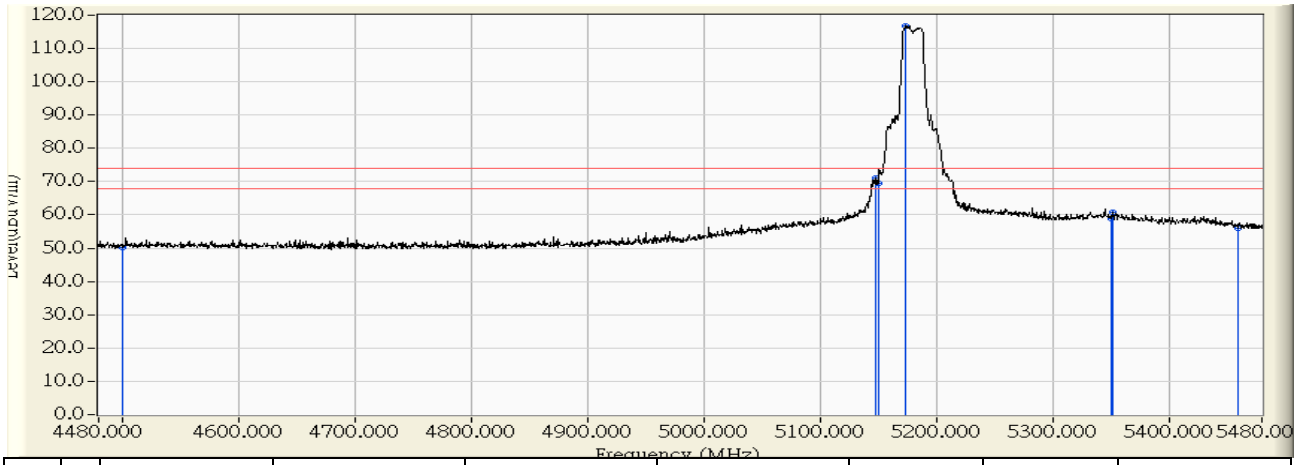



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 41.842 | 38.414 | -15.586 | 54.000 | AVERAGE |
| 2 | | 5144.500 | -0.783 | 49.107 | 48.323 | -5.677 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.737 | 50.730 | 49.992 | -4.008 | 54.000 | AVERAGE |
| 4 | * | 5185.500 | -0.440 | 102.966 | 102.525 | 48.525 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 0.934 | 45.948 | 46.882 | -7.118 | 54.000 | AVERAGE |
| 6 | | 5356.500 | 0.987 | 45.801 | 46.789 | -7.211 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.853 | 43.720 | 45.573 | -8.427 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:41** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5180MHz** |

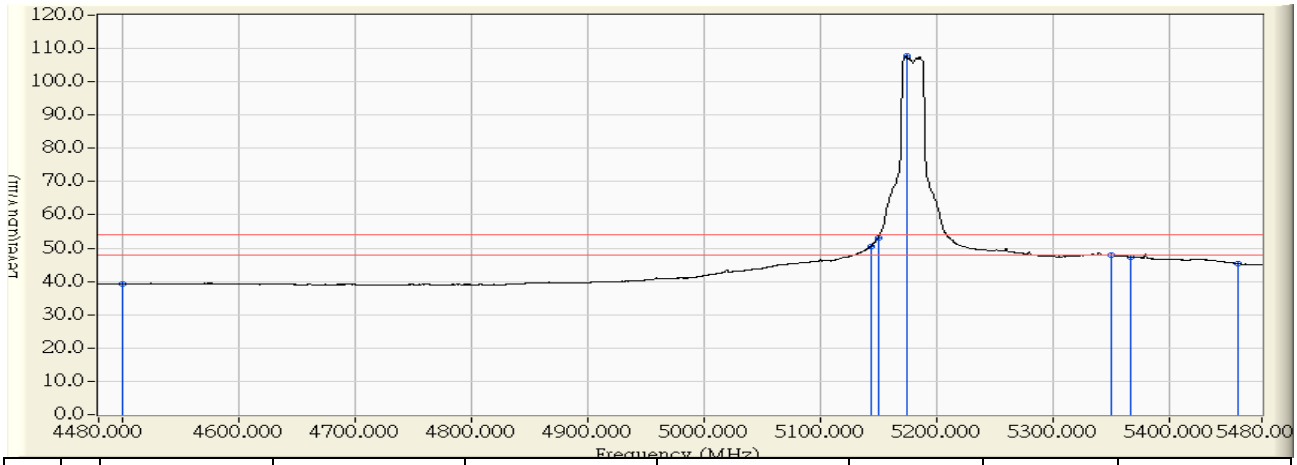



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 51.812 | 50.091 | -23.909 | 74.000 | PEAK |
| 2 | | 5148.500 | -0.333 | 71.593 | 71.260 | -2.740 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.321 | 69.883 | 69.562 | -4.438 | 74.000 | PEAK |
| 4 | * | 5174.000 | -0.132 | 116.786 | 116.653 | 42.653 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.250 | 57.500 | 58.750 | -15.250 | 74.000 | PEAK |
| 6 | | 5351.500 | 1.262 | 59.577 | 60.839 | -13.161 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.114 | 53.976 | 56.090 | -17.910 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:40** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5180MHz** |

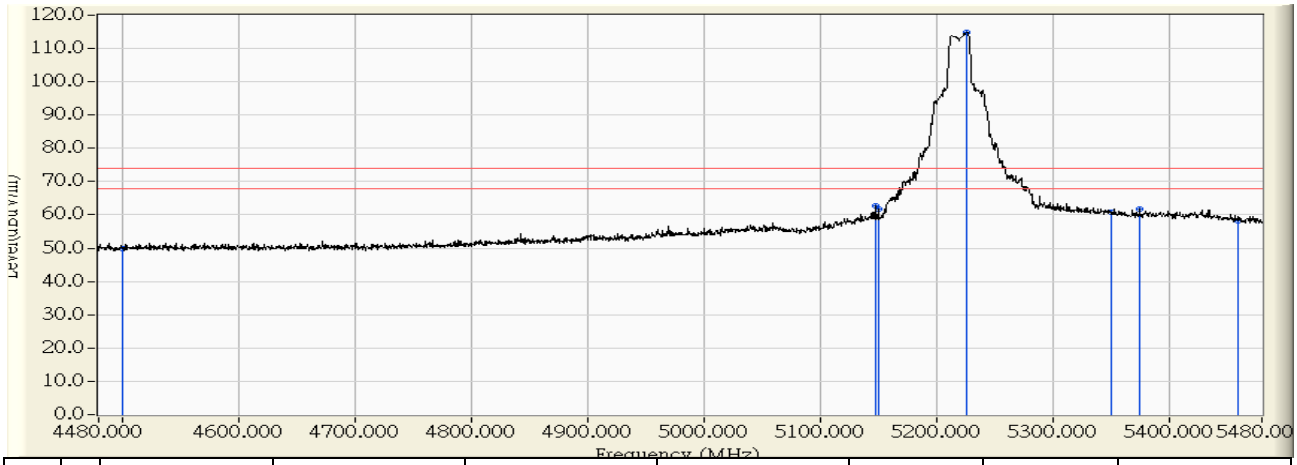



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 41.038 | 39.317 | -14.683 | 54.000 | AVERAGE |
| 2 | | 5143.500 | -0.372 | 50.855 | 50.483 | -3.517 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.321 | 53.380 | 53.059 | -0.941 | 54.000 | AVERAGE |
| 4 | * | 5174.500 | -0.128 | 107.818 | 107.689 | 53.689 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.250 | 46.657 | 47.907 | -6.093 | 54.000 | AVERAGE |
| 6 | | 5367.000 | 1.384 | 46.000 | 47.384 | -6.616 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.114 | 43.207 | 45.321 | -8.679 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:06** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5220MHz** |

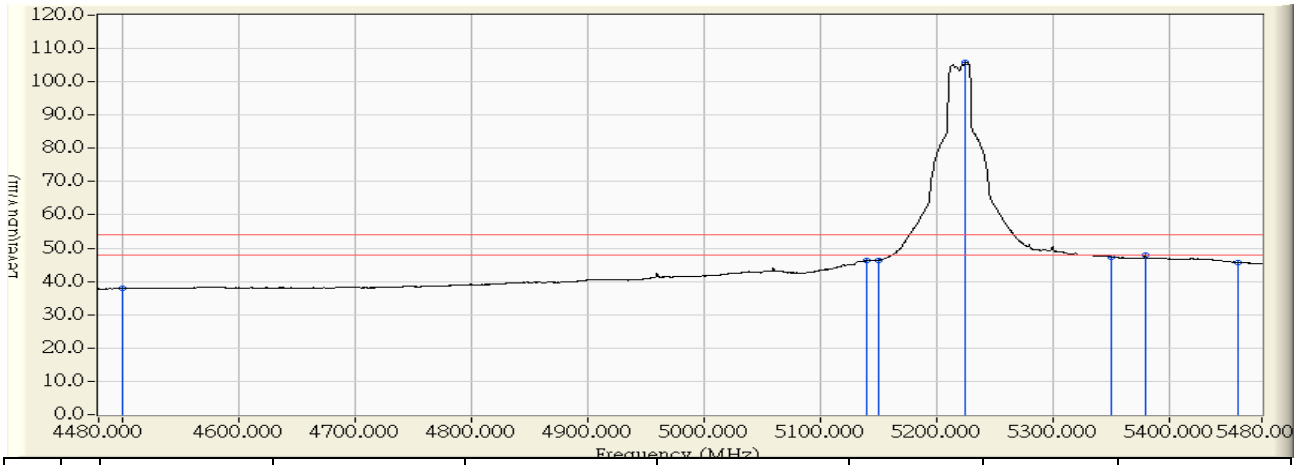



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 53.411 | 49.983 | -24.017 | 74.000 | PEAK |
| 2 | | 5148.000 | -0.754 | 63.647 | 62.893 | -11.107 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.737 | 62.351 | 61.613 | -12.387 | 74.000 | PEAK |
| 4 | * | 5226.500 | -0.099 | 115.088 | 114.990 | 40.990 | 74.000 | PEAK |
| 5 | | 5350.000 | 0.934 | 59.971 | 60.905 | -13.095 | 74.000 | PEAK |
| 6 | | 5375.000 | 1.143 | 60.770 | 61.913 | -12.087 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.853 | 56.268 | 58.121 | -15.879 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:08** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5220MHz** |

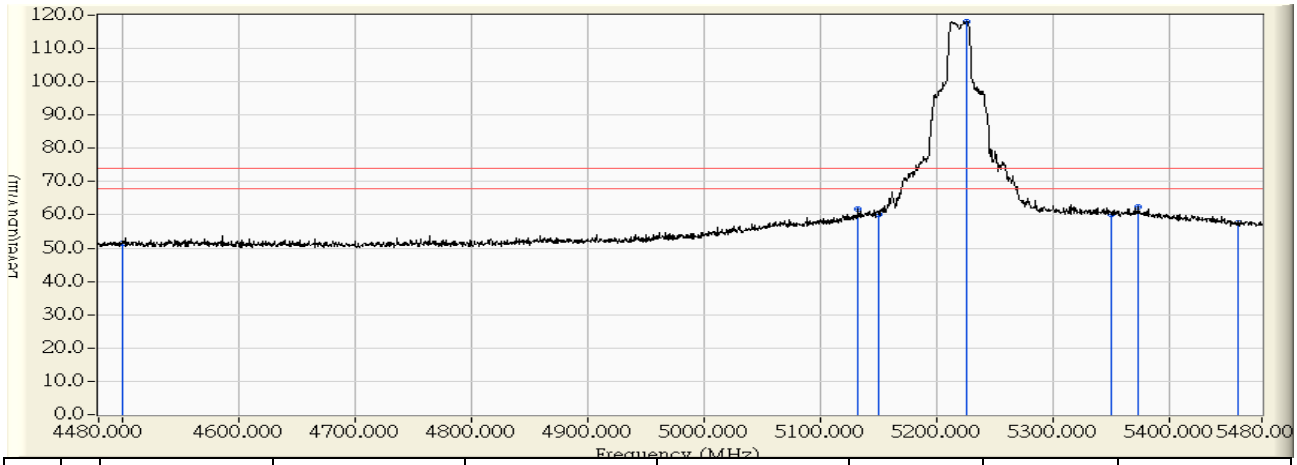



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 41.358 | 37.930 | -16.070 | 54.000 | AVERAGE |
| 2 | | 5140.000 | -0.821 | 47.091 | 46.270 | -7.730 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.737 | 46.970 | 46.232 | -7.768 | 54.000 | AVERAGE |
| 4 | * | 5225.500 | -0.106 | 106.075 | 105.968 | 51.968 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 0.934 | 46.482 | 47.416 | -6.584 | 54.000 | AVERAGE |
| 6 | | 5379.500 | 1.181 | 46.631 | 47.811 | -6.189 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.853 | 43.932 | 45.785 | -8.215 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:23** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5220MHz** |

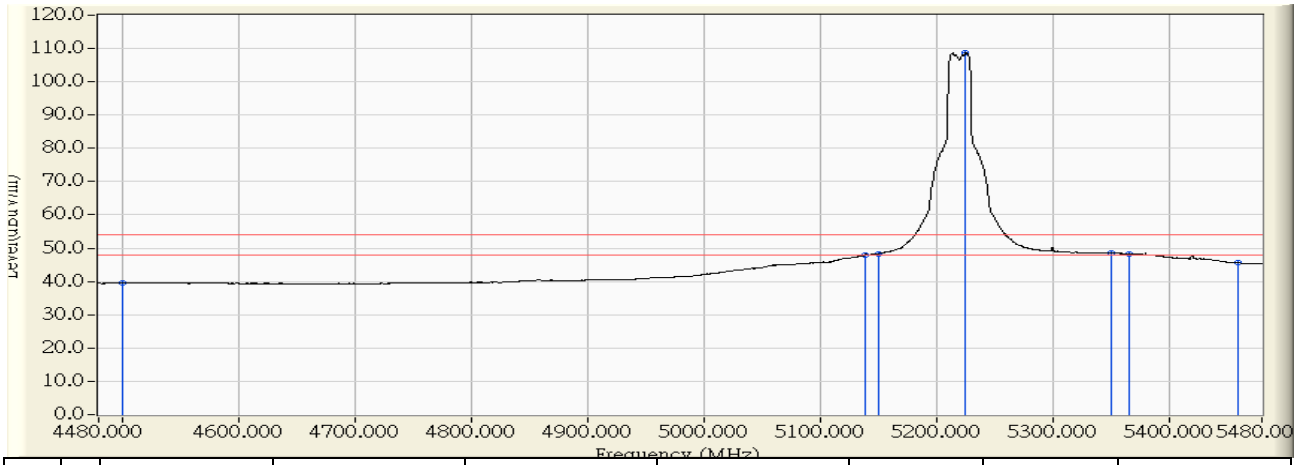



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 53.062 | 51.341 | -22.659 | 74.000 | PEAK |
| 2 | | 5133.000 | -0.455 | 62.165 | 61.710 | -12.290 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.321 | 60.498 | 60.177 | -13.823 | 74.000 | PEAK |
| 4 | * | 5226.000 | 0.276 | 117.751 | 118.027 | 44.027 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.250 | 59.025 | 60.275 | -13.725 | 74.000 | PEAK |
| 6 | | 5373.500 | 1.435 | 60.915 | 62.350 | -11.650 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.114 | 55.558 | 57.672 | -16.328 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:25** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5220MHz** |

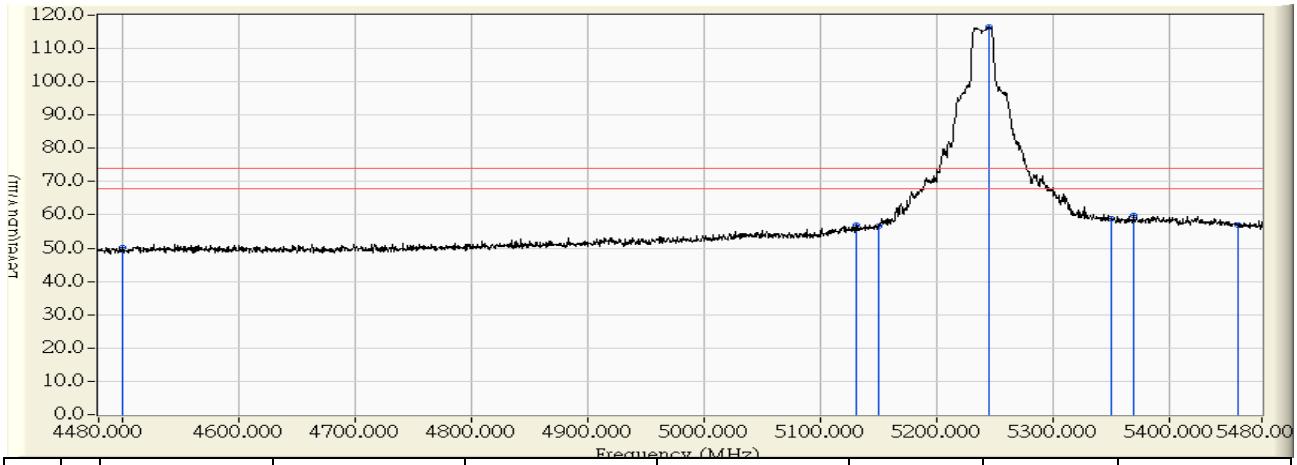



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 41.270 | 39.549 | -14.451 | 54.000 | AVERAGE |
| 2 | | 5138.500 | -0.412 | 48.254 | 47.843 | -6.157 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.321 | 48.565 | 48.244 | -5.756 | 54.000 | AVERAGE |
| 4 | * | 5225.500 | 0.273 | 108.417 | 108.689 | 54.689 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.250 | 47.315 | 48.565 | -5.435 | 54.000 | AVERAGE |
| 6 | | 5365.500 | 1.372 | 46.944 | 48.316 | -5.684 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.114 | 43.469 | 45.583 | -8.417 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:13** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5240MHz** |

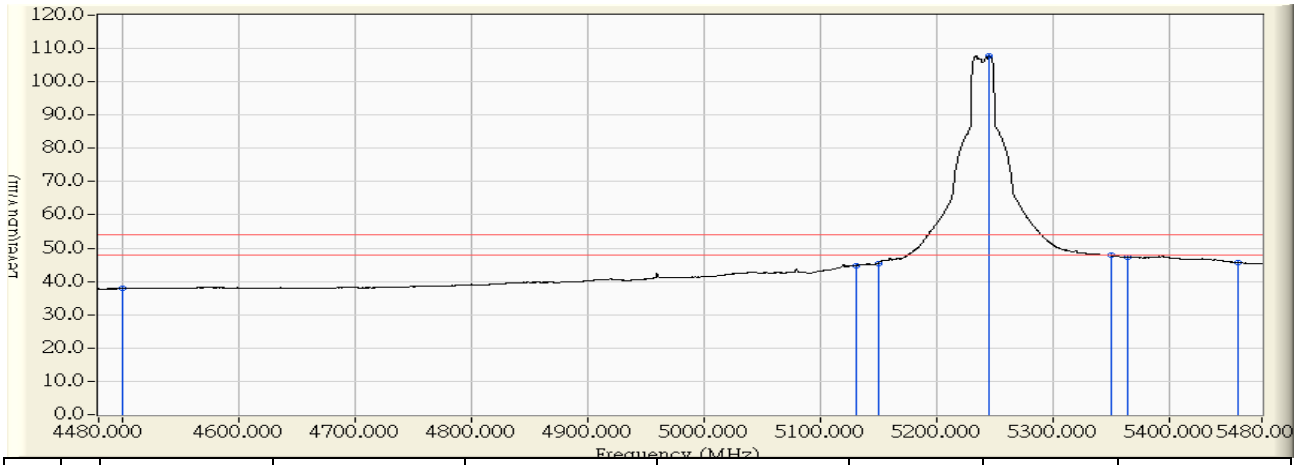



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 53.502 | 50.074 | -23.926 | 74.000 | PEAK |
| 2 | | 5131.000 | -0.897 | 57.824 | 56.928 | -17.072 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.737 | 57.231 | 56.493 | -17.507 | 74.000 | PEAK |
| 4 | * | 5246.000 | 0.064 | 116.434 | 116.499 | 42.499 | 74.000 | PEAK |
| 5 | | 5350.000 | 0.934 | 58.047 | 58.981 | -15.019 | 74.000 | PEAK |
| 6 | | 5369.500 | 1.097 | 58.659 | 59.756 | -14.244 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.853 | 55.109 | 56.962 | -17.038 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:11** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5240MHz** |

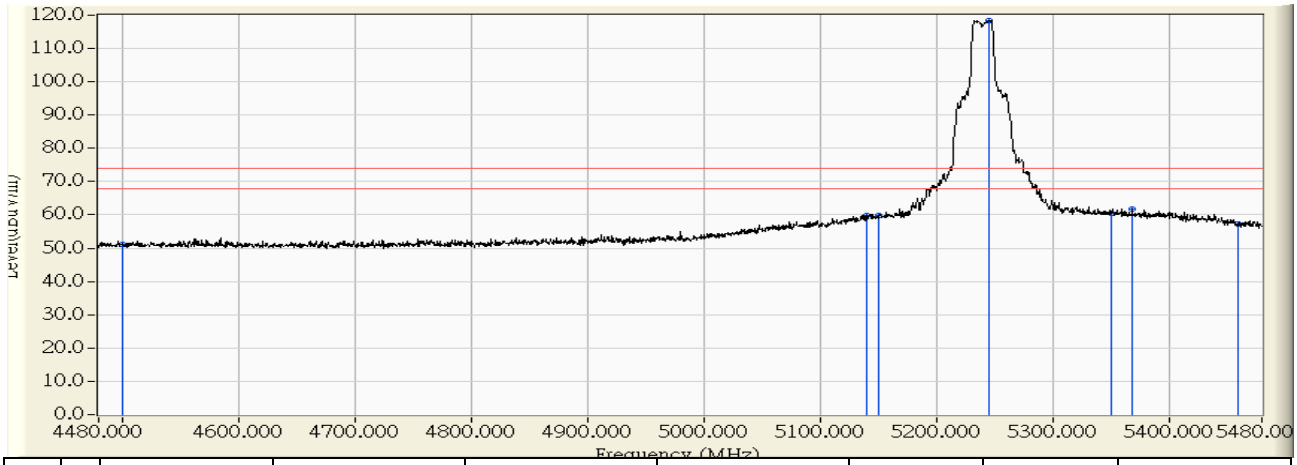



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 41.304 | 37.876 | -16.124 | 54.000 | AVERAGE |
| 2 | | 5131.000 | -0.897 | 45.673 | 44.777 | -9.223 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.737 | 46.077 | 45.339 | -8.661 | 54.000 | AVERAGE |
| 4 | * | 5245.500 | 0.061 | 107.724 | 107.784 | 53.784 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 0.934 | 46.858 | 47.792 | -6.208 | 54.000 | AVERAGE |
| 6 | | 5364.000 | 1.050 | 46.240 | 47.291 | -6.709 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.853 | 43.827 | 45.680 | -8.320 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:28** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5240MHz** |

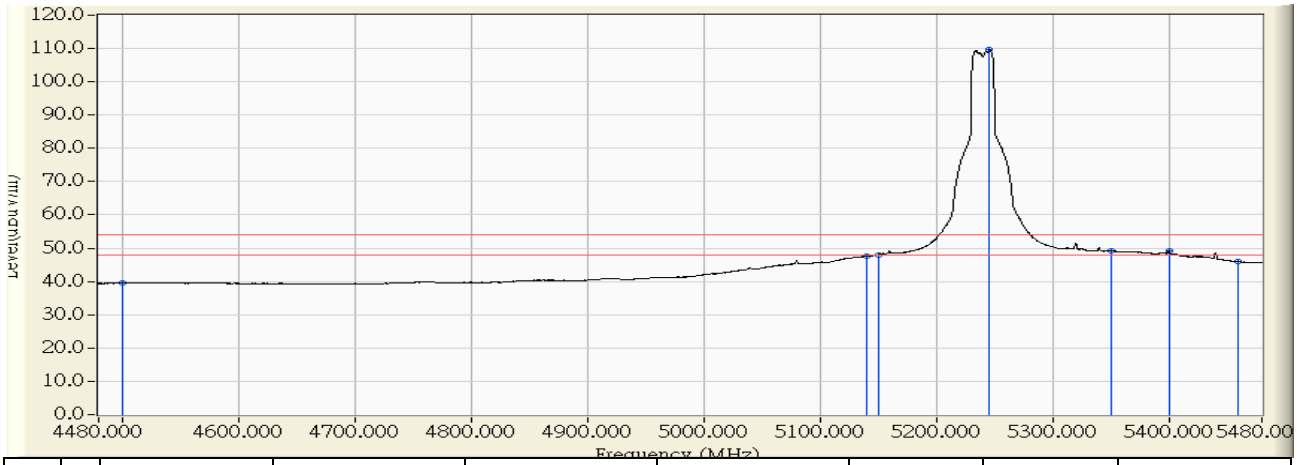



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 52.913 | 51.192 | -22.808 | 74.000 | PEAK |
| 2 | | 5140.000 | -0.400 | 60.322 | 59.922 | -14.078 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.321 | 60.222 | 59.901 | -14.099 | 74.000 | PEAK |
| 4 | * | 5246.000 | 0.433 | 118.063 | 118.496 | 44.496 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.250 | 59.238 | 60.488 | -13.512 | 74.000 | PEAK |
| 6 | | 5368.500 | 1.395 | 60.367 | 61.762 | -15.698 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.114 | 55.055 | 57.169 | -16.831 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 13:27** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 20MHz 5240MHz** |

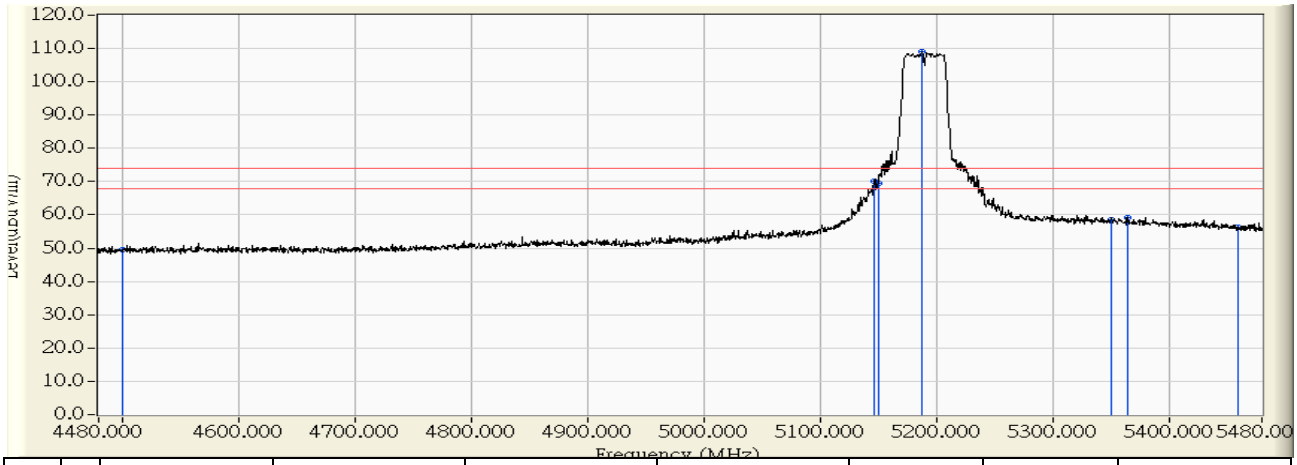



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 41.292 | 39.571 | -14.429 | 54.000 | AVERAGE |
| 2 | | 5140.500 | -0.395 | 48.160 | 47.764 | -6.236 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.321 | 48.372 | 48.051 | -5.949 | 54.000 | AVERAGE |
| 4 | * | 5245.500 | 0.430 | 109.134 | 109.563 | 55.563 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.250 | 47.867 | 49.117 | -4.883 | 54.000 | AVERAGE |
| 6 | | 5400.000 | 1.643 | 47.666 | 49.309 | -4.691 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.114 | 43.784 | 45.898 | -8.102 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 10:47** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 40MHz 5190MHz** |

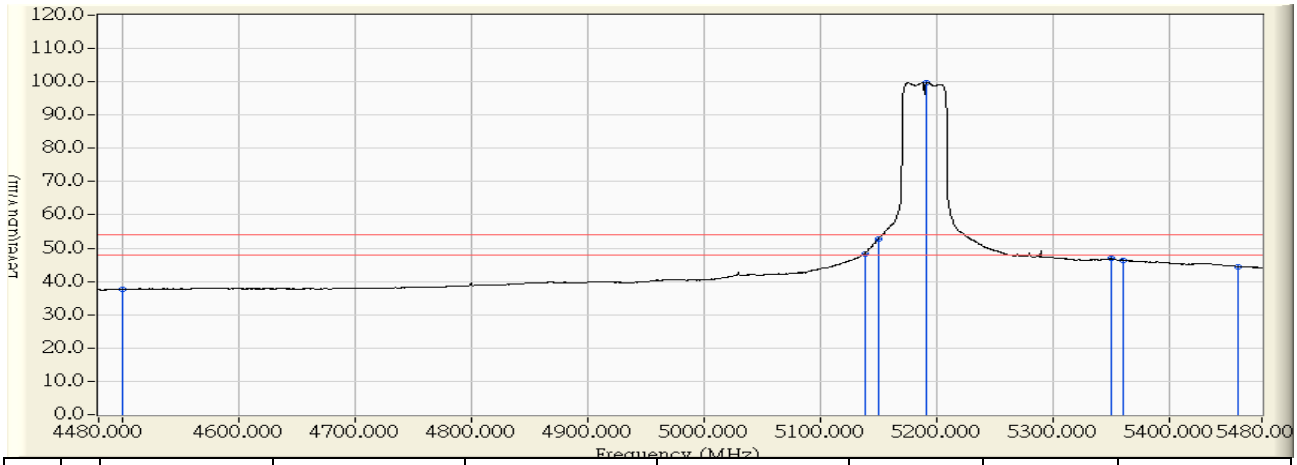



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 52.823 | 49.395 | -24.605 | 74.000 | PEAK |
| 2 | | 5147.000 | -0.762 | 70.868 | 70.105 | -3.895 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.737 | 70.331 | 69.593 | -4.407 | 74.000 | PEAK |
| 4 | * | 5187.500 | -0.424 | 109.633 | 109.209 | 35.209 | 74.000 | PEAK |
| 5 | | 5350.000 | 0.934 | 57.629 | 58.563 | -15.437 | 74.000 | PEAK |
| 6 | | 5364.500 | 1.056 | 58.256 | 59.311 | -14.689 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.853 | 54.519 | 56.372 | -17.628 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 10:45** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 40MHz 5190MHz** |

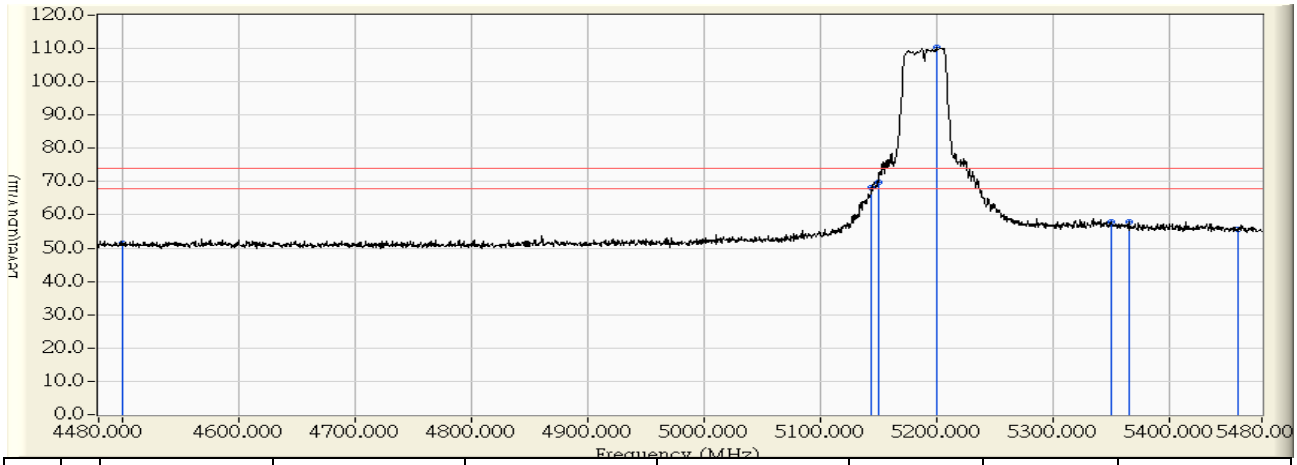



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 41.125 | 37.697 | -16.303 | 54.000 | AVERAGE |
| 2 | | 5138.500 | -0.834 | 49.241 | 48.407 | -5.593 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.737 | 53.526 | 52.788 | -1.212 | 54.000 | AVERAGE |
| 4 | * | 5192.000 | -0.386 | 100.167 | 99.780 | 45.780 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 0.934 | 46.143 | 47.077 | -6.923 | 54.000 | AVERAGE |
| 6 | | 5360.500 | 1.021 | 45.380 | 46.401 | -7.599 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.853 | 42.521 | 44.374 | -9.626 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 10:51** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 40MHz 5190MHz** |

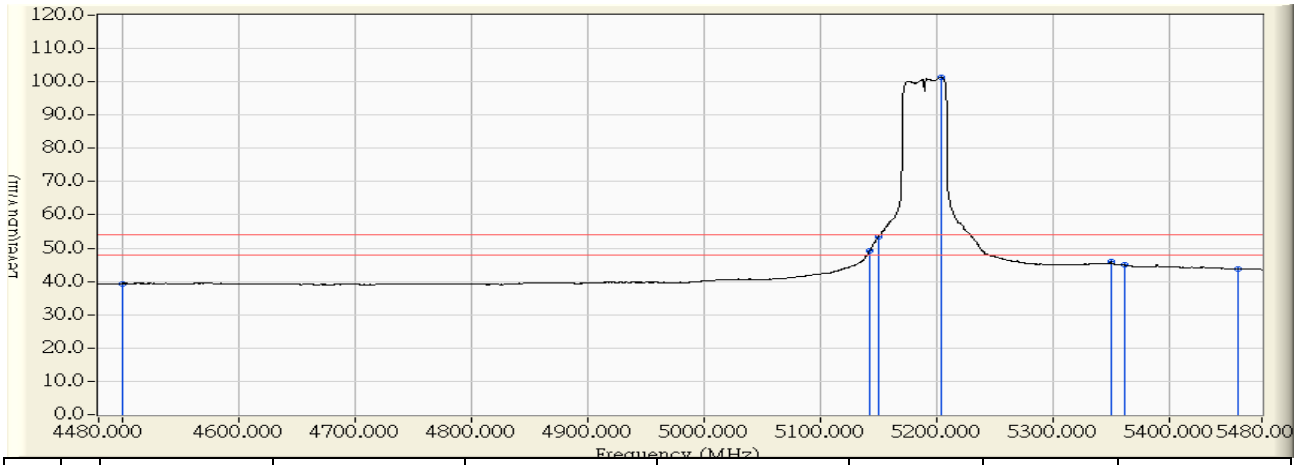



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 53.351 | 51.630 | -22.370 | 74.000 | PEAK |
| 2 | | 5144.000 | -0.368 | 68.600 | 68.232 | -5.768 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.321 | 70.287 | 69.966 | -4.034 | 74.000 | PEAK |
| 4 | * | 5200.000 | 0.072 | 110.216 | 110.288 | 36.288 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.250 | 56.695 | 57.945 | -16.055 | 74.000 | PEAK |
| 6 | | 5366.500 | 1.380 | 56.384 | 57.764 | -16.236 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.114 | 53.634 | 55.748 | -18.252 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 10:53** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 40MHz 5190MHz** |

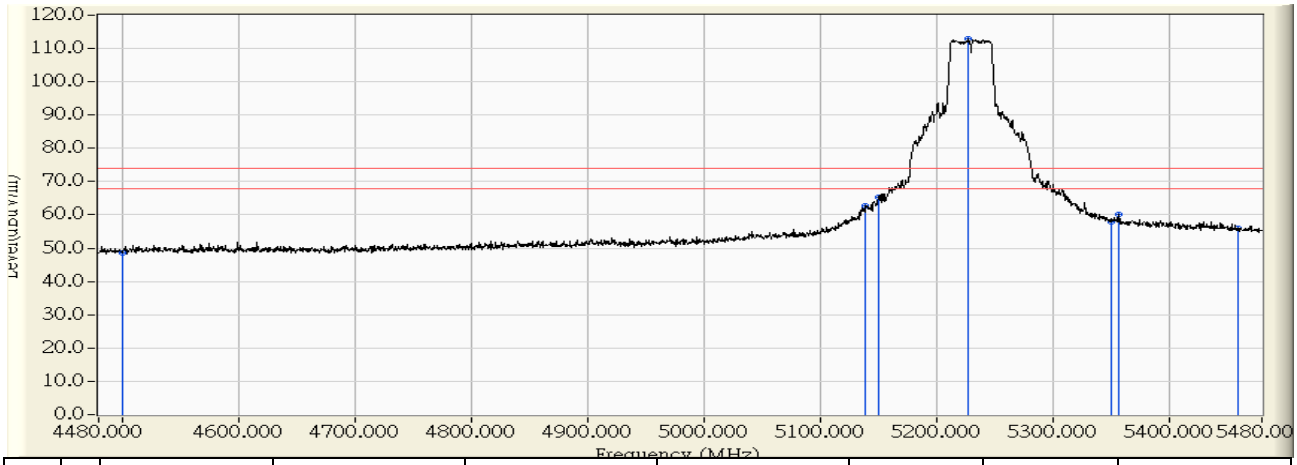



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 41.092 | 39.371 | -14.629 | 54.000 | AVERAGE |
| 2 | | 5142.500 | -0.380 | 49.582 | 49.202 | -4.798 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.321 | 53.636 | 53.315 | -0.685 | 54.000 | AVERAGE |
| 4 | * | 5204.500 | 0.108 | 101.216 | 101.323 | 47.323 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.250 | 44.676 | 45.926 | -8.074 | 54.000 | AVERAGE |
| 6 | | 5361.500 | 1.340 | 43.553 | 44.894 | -9.106 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.114 | 41.600 | 43.714 | -10.286 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:07** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 40MHz 5230MHz** |

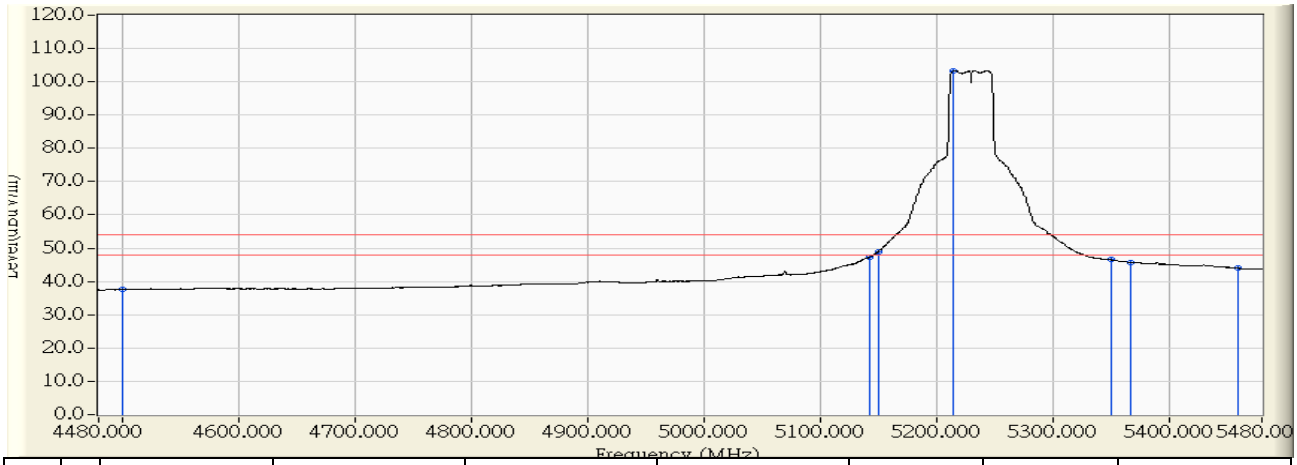



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 51.949 | 48.521 | -25.479 | 74.000 | PEAK |
| 2 | | 5139.500 | -0.825 | 63.429 | 62.604 | -11.396 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.737 | 65.911 | 65.173 | -8.827 | 74.000 | PEAK |
| 4 | * | 5228.000 | -0.086 | 112.983 | 112.897 | 38.897 | 74.000 | PEAK |
| 5 | | 5350.000 | 0.934 | 56.931 | 57.865 | -16.135 | 74.000 | PEAK |
| 6 | | 5356.500 | 0.987 | 59.067 | 60.055 | -13.945 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.853 | 54.000 | 55.853 | -18.147 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:09** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 40MHz 5230MHz** |

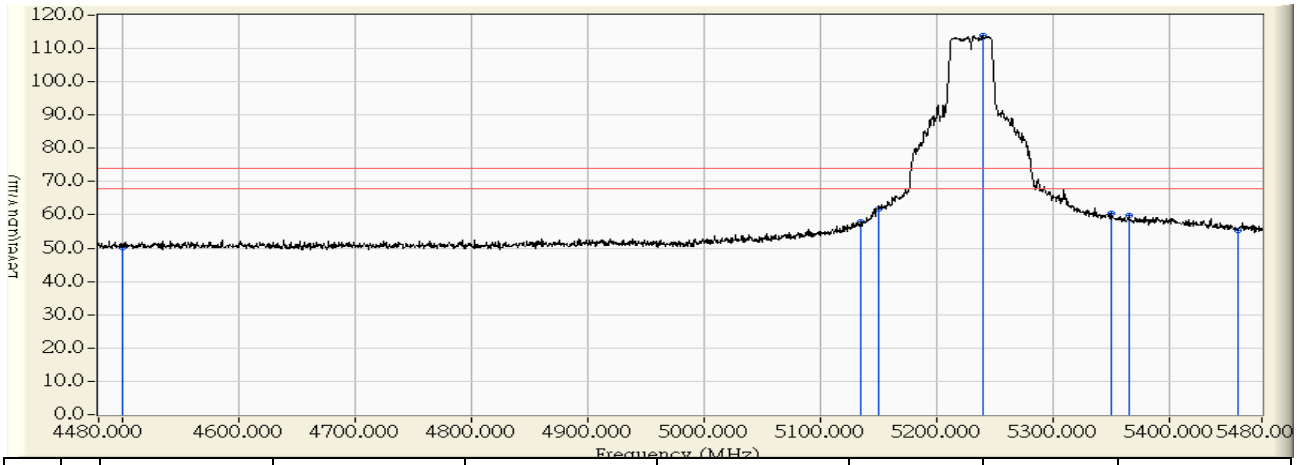



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 41.049 | 37.621 | -16.379 | 54.000 | AVERAGE |
| 2 | | 5142.500 | -0.800 | 48.202 | 47.402 | -6.598 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.737 | 49.709 | 48.971 | -5.029 | 54.000 | AVERAGE |
| 4 | * | 5215.000 | -0.194 | 103.596 | 103.402 | 49.402 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 0.934 | 45.620 | 46.554 | -7.446 | 54.000 | AVERAGE |
| 6 | | 5367.000 | 1.076 | 44.674 | 45.750 | -8.250 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.853 | 42.075 | 43.928 | -10.072 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:04** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 40MHz 5230MHz** |

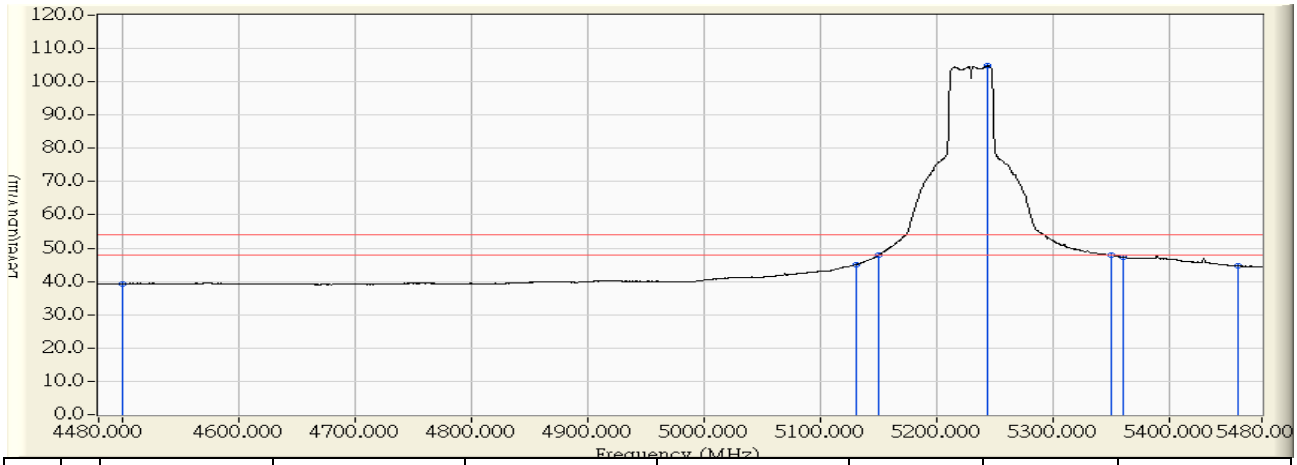



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 51.782 | 50.061 | -23.939 | 74.000 | PEAK |
| 2 | | 5134.500 | -0.442 | 58.323 | 57.880 | -16.120 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.321 | 62.056 | 61.735 | -12.265 | 74.000 | PEAK |
| 4 | * | 5240.000 | 0.386 | 113.380 | 113.766 | 39.766 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.250 | 59.092 | 60.342 | -13.658 | 74.000 | PEAK |
| 6 | | 5365.500 | 1.372 | 58.423 | 59.795 | -14.205 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.114 | 53.256 | 55.370 | -18.630 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:02** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n 40MHz 5230MHz** |

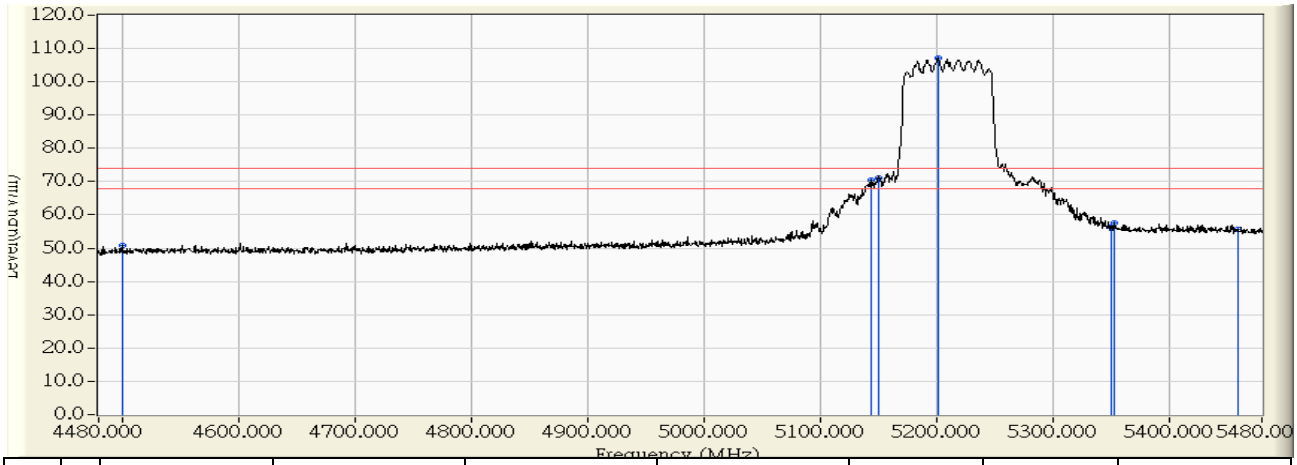



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 41.084 | 39.363 | -14.637 | 54.000 | AVERAGE |
| 2 | | 5131.000 | -0.471 | 45.519 | 45.049 | -8.951 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.321 | 48.307 | 47.986 | -6.014 | 54.000 | AVERAGE |
| 4 | * | 5244.500 | 0.422 | 104.317 | 104.738 | 50.738 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.250 | 46.577 | 47.827 | -6.173 | 54.000 | AVERAGE |
| 6 | | 5360.500 | 1.332 | 45.964 | 47.297 | -6.703 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.114 | 42.476 | 44.590 | -9.410 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:23** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11ac 80MHz 5210MHz** |

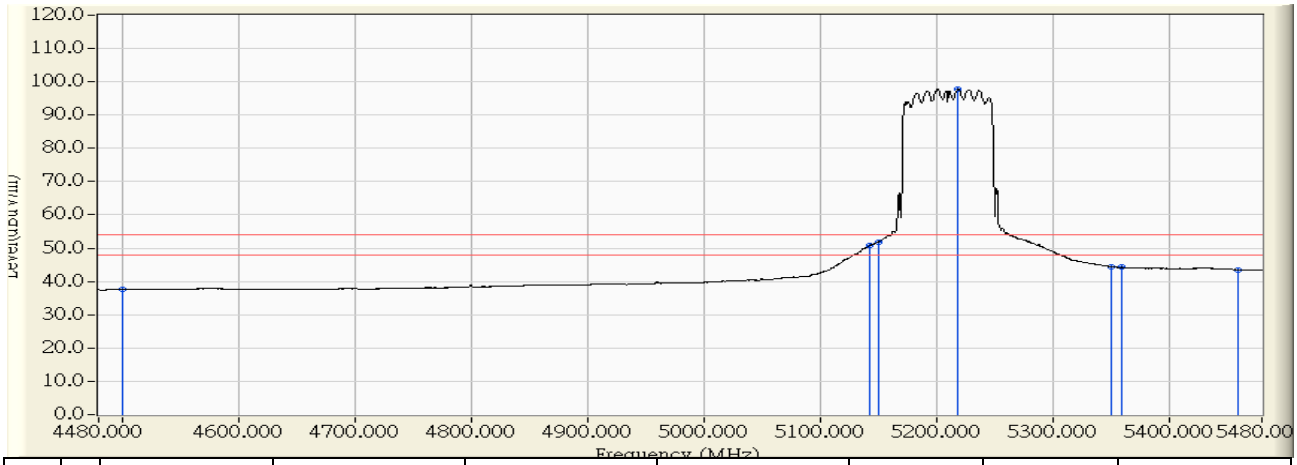



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 54.141 | 50.713 | -23.287 | 74.000 | PEAK |
| 2 | | 5144.500 | -0.783 | 71.181 | 70.397 | -3.603 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.737 | 71.750 | 71.012 | -2.988 | 74.000 | PEAK |
| 4 | * | 5201.500 | -0.308 | 107.481 | 107.174 | 33.174 | 74.000 | PEAK |
| 5 | | 5350.000 | 0.934 | 55.226 | 56.160 | -17.840 | 74.000 | PEAK |
| 6 | | 5353.500 | 0.963 | 56.704 | 57.667 | -16.333 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.853 | 53.842 | 55.695 | -18.305 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:22** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11ac 80MHz 5210MHz** |

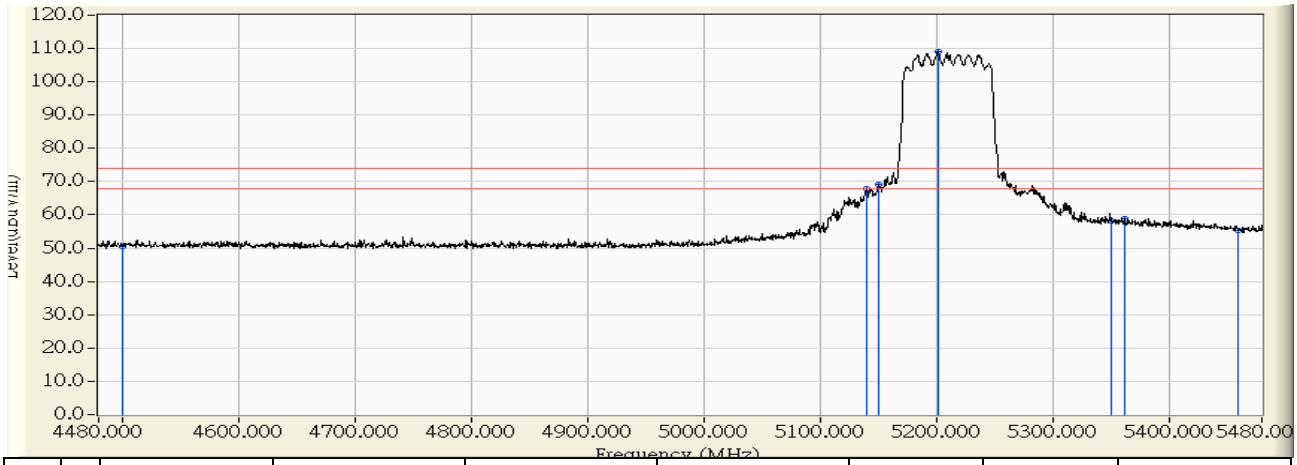



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.428 | 41.061 | 37.633 | -16.367 | 54.000 | AVERAGE |
| 2 | | 5143.000 | -0.796 | 51.561 | 50.765 | -3.235 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.737 | 52.635 | 51.897 | -2.103 | 54.000 | AVERAGE |
| 4 | * | 5219.000 | -0.161 | 97.897 | 97.736 | 43.736 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 0.934 | 43.575 | 44.509 | -9.491 | 54.000 | AVERAGE |
| 6 | | 5359.000 | 1.009 | 43.243 | 44.252 | -9.748 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.853 | 41.624 | 43.477 | -10.523 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:32** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11ac 80MHz 5210MHz** |

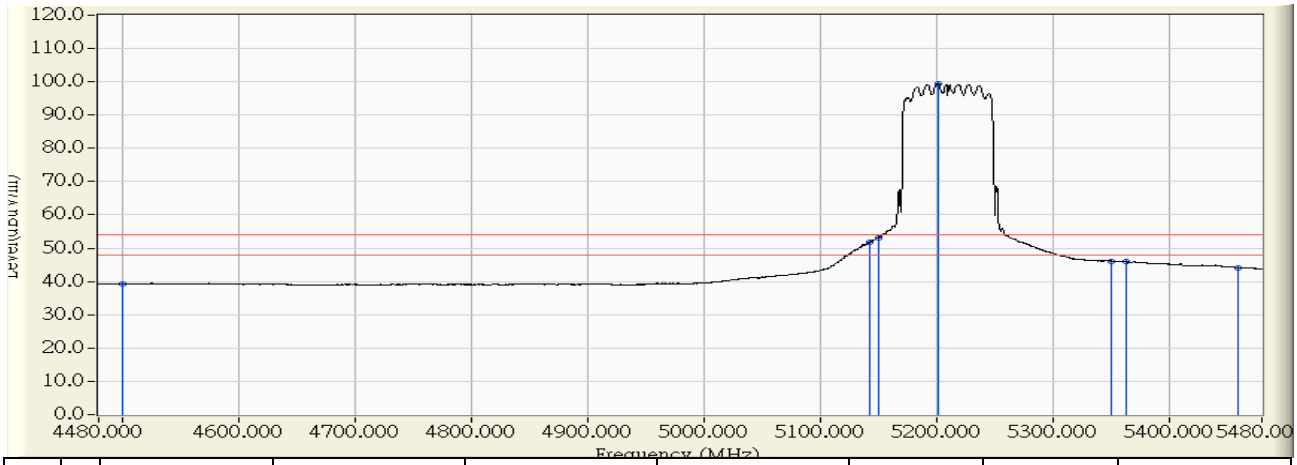



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 52.256 | 50.535 | -23.465 | 74.000 | PEAK |
| 2 | | 5140.000 | -0.400 | 68.194 | 67.794 | -6.206 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.321 | 69.491 | 69.170 | -4.830 | 74.000 | PEAK |
| 4 | * | 5201.500 | 0.083 | 108.939 | 109.023 | 35.023 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.250 | 56.953 | 58.203 | -15.797 | 74.000 | PEAK |
| 6 | | 5362.000 | 1.344 | 57.545 | 58.889 | -15.111 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.114 | 53.363 | 55.477 | -18.523 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/08/10 - 11:30** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 1: Transmit_CDD Mode_AD890326 802.11ac 80MHz 5210MHz** |

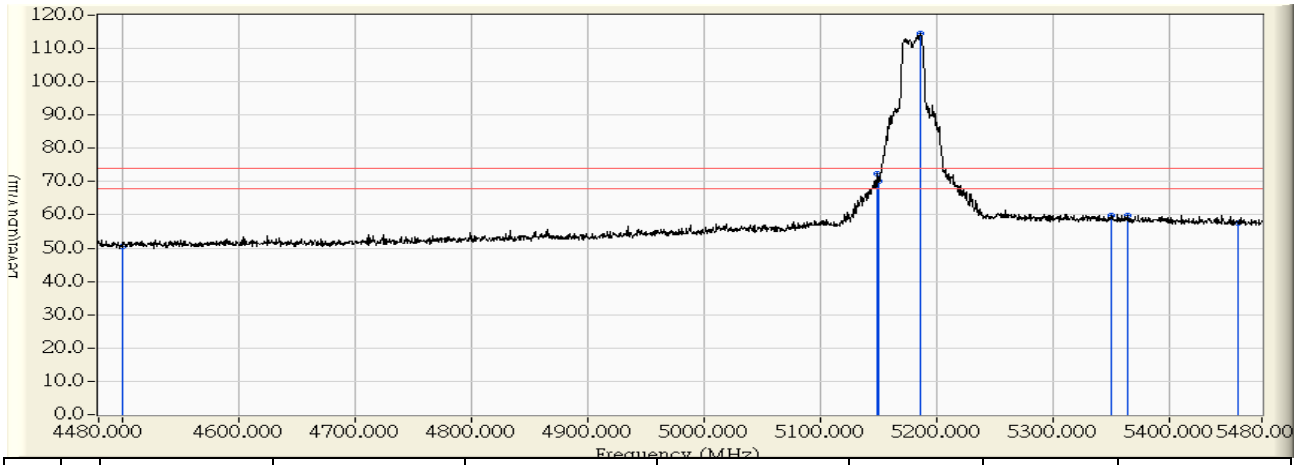



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.721 | 41.083 | 39.362 | -14.638 | 54.000 | AVERAGE |
| 2 | | 5142.500 | -0.380 | 52.145 | 51.765 | -2.235 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.321 | 53.427 | 53.106 | -0.894 | 54.000 | AVERAGE |
| 4 | * | 5201.500 | 0.083 | 99.480 | 99.564 | 45.564 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.250 | 44.902 | 46.152 | -7.848 | 54.000 | AVERAGE |
| 6 | | 5363.000 | 1.352 | 44.527 | 45.879 | -8.121 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.114 | 42.097 | 44.211 | -9.789 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/13 - 23:21** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5180MHz** |

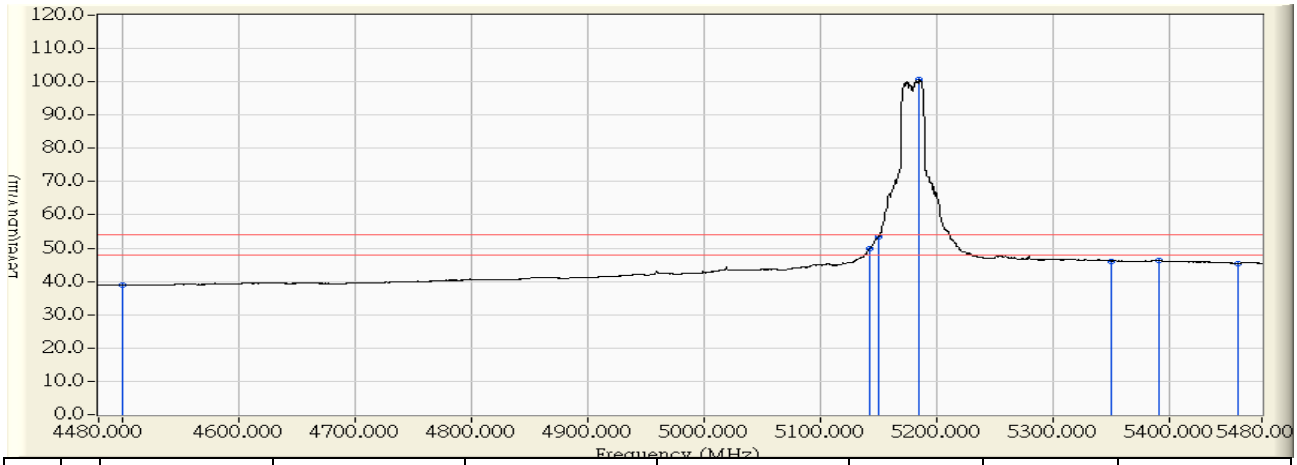



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 53.885 | 50.360 | -23.640 | 74.000 | PEAK |
| 2 | | 5148.666 | -0.772 | 73.267 | 72.495 | -1.505 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.760 | 70.941 | 70.181 | -3.819 | 74.000 | PEAK |
| 4 | * | 5186.147 | -0.441 | 114.937 | 114.497 | 40.497 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.012 | 58.703 | 59.715 | -14.285 | 74.000 | PEAK |
| 6 | | 5365.057 | 1.145 | 58.609 | 59.754 | -14.246 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.987 | 55.471 | 57.457 | -16.543 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/13 - 23:20** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5180MHz** |

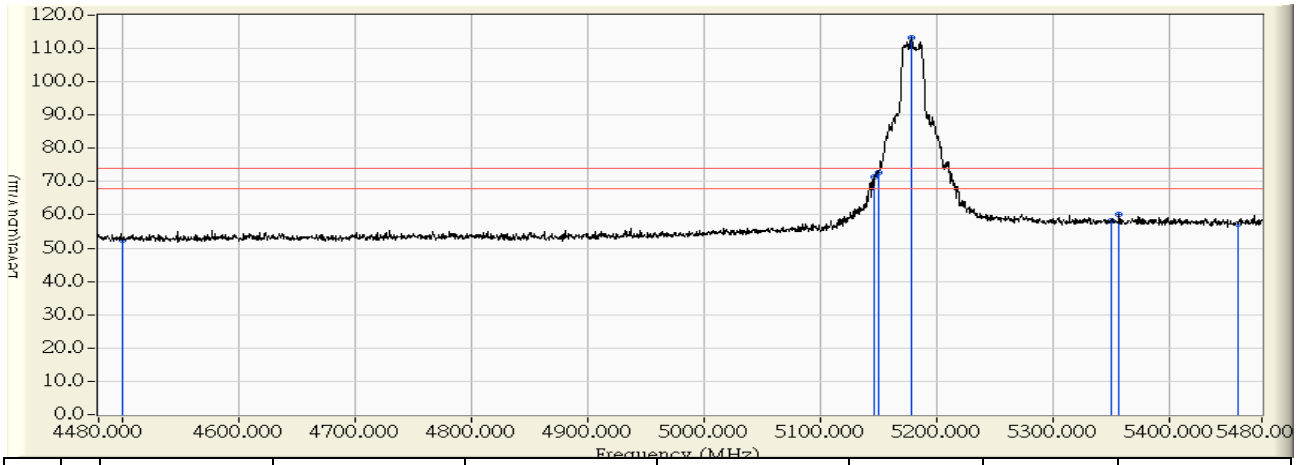



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 42.432 | 38.907 | -15.093 | 54.000 | AVERAGE |
| 2 | | 5142.669 | -0.826 | 50.786 | 49.961 | -4.039 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.760 | 54.027 | 53.267 | -0.733 | 54.000 | AVERAGE |
| 4 | * | 5185.647 | -0.445 | 101.056 | 100.611 | 46.611 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.012 | 45.151 | 46.163 | -7.837 | 54.000 | AVERAGE |
| 6 | | 5391.544 | 1.380 | 44.884 | 46.264 | -7.736 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.987 | 43.457 | 45.443 | -8.557 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/13 - 23:03** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5180MHz** |

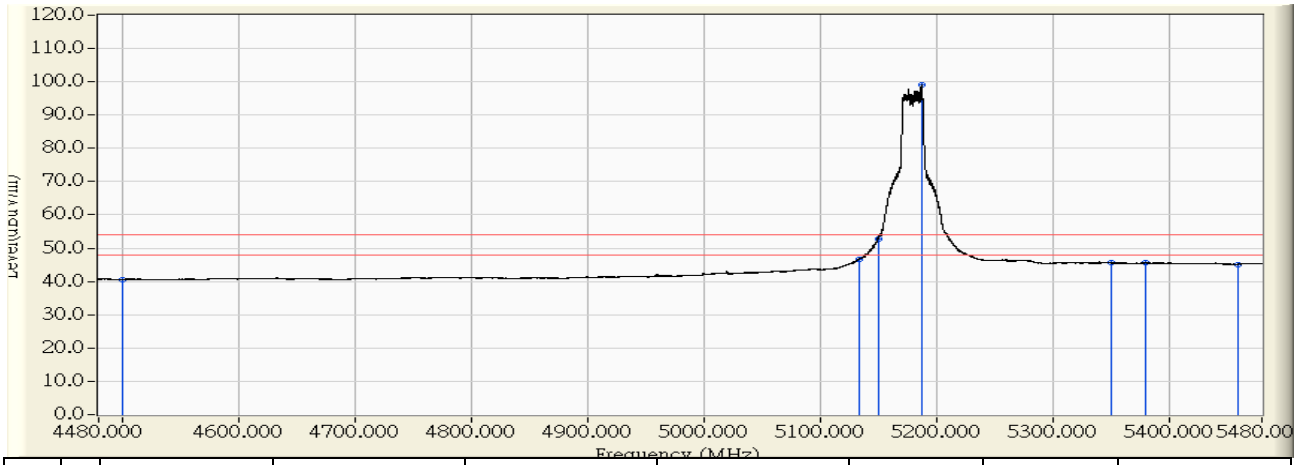



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 54.200 | 52.383 | -21.617 | 74.000 | PEAK |
| 2 | | 5147.166 | -0.368 | 71.651 | 71.283 | -2.717 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.344 | 72.999 | 72.655 | -1.345 | 74.000 | PEAK |
| 4 | * | 5179.150 | -0.100 | 113.274 | 113.174 | 39.174 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.328 | 56.888 | 58.216 | -15.784 | 74.000 | PEAK |
| 6 | | 5357.561 | 1.391 | 58.754 | 60.145 | -13.855 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.248 | 55.011 | 57.259 | -16.741 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/13 - 22:59** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5180MHz** |

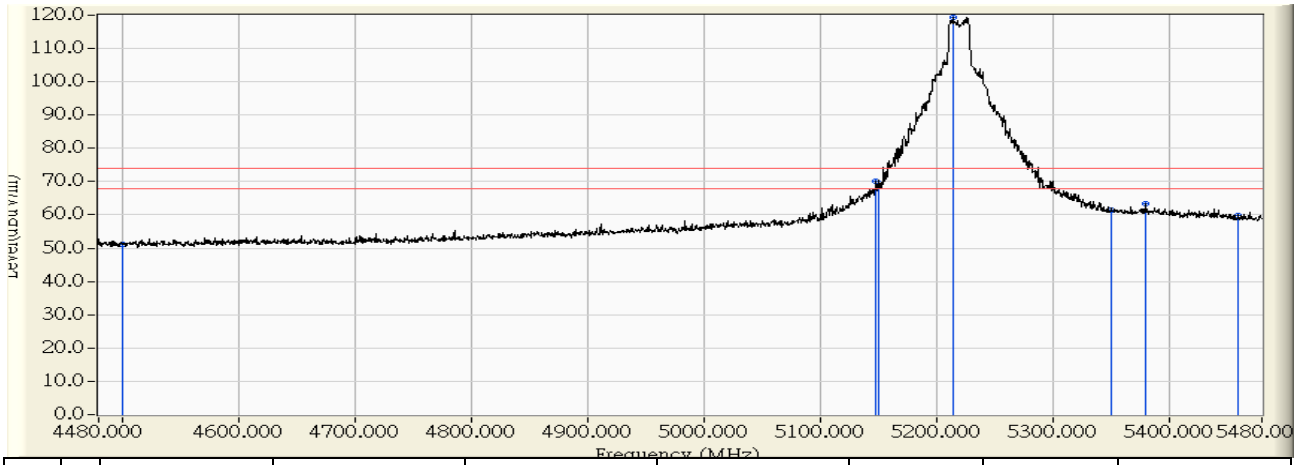



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 42.409 | 40.592 | -13.408 | 54.000 | AVERAGE |
| 2 | | 5133.535 | -0.482 | 47.263 | 46.781 | -7.219 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.344 | 53.227 | 52.883 | -1.117 | 54.000 | AVERAGE |
| 4 | * | 5187.129 | -0.033 | 98.982 | 98.949 | 44.949 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.328 | 44.310 | 45.638 | -8.362 | 54.000 | AVERAGE |
| 6 | | 5379.810 | 1.578 | 44.237 | 45.814 | -8.186 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.248 | 42.929 | 45.177 | -8.823 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/13 - 23:53** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5220MHz** |

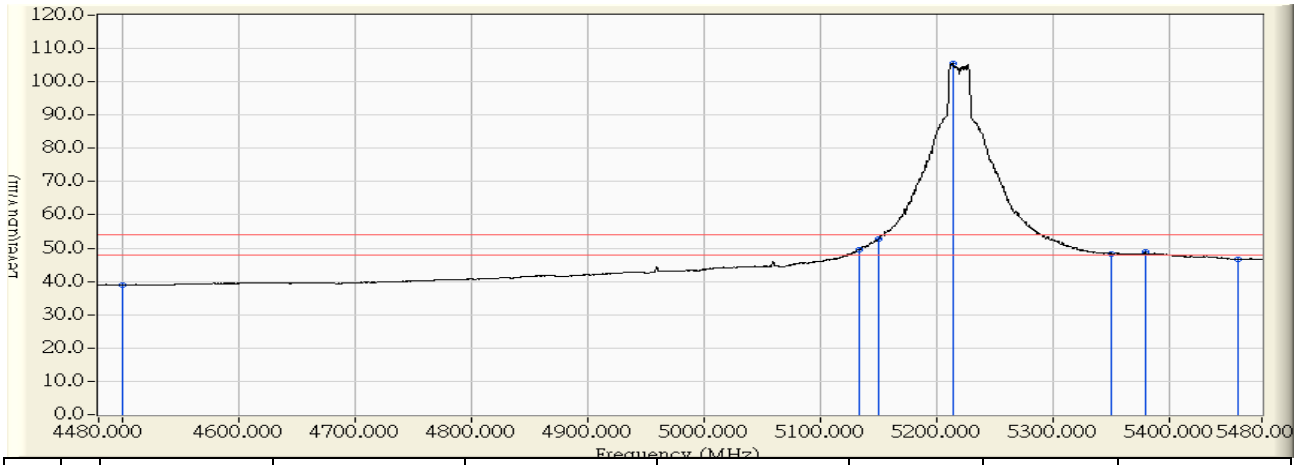



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 54.791 | 51.266 | -22.734 | 74.000 | PEAK |
| 2 | | 5148.166 | -0.777 | 71.032 | 70.255 | -3.745 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.760 | 70.358 | 69.598 | -4.402 | 74.000 | PEAK |
| 4 | * | 5214.133 | -0.191 | 119.578 | 119.386 | 45.386 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.012 | 60.403 | 61.415 | -12.585 | 74.000 | PEAK |
| 6 | | 5379.550 | 1.274 | 62.217 | 63.490 | -10.510 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.987 | 58.002 | 59.988 | -14.012 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/13 - 23:51** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5220MHz** |

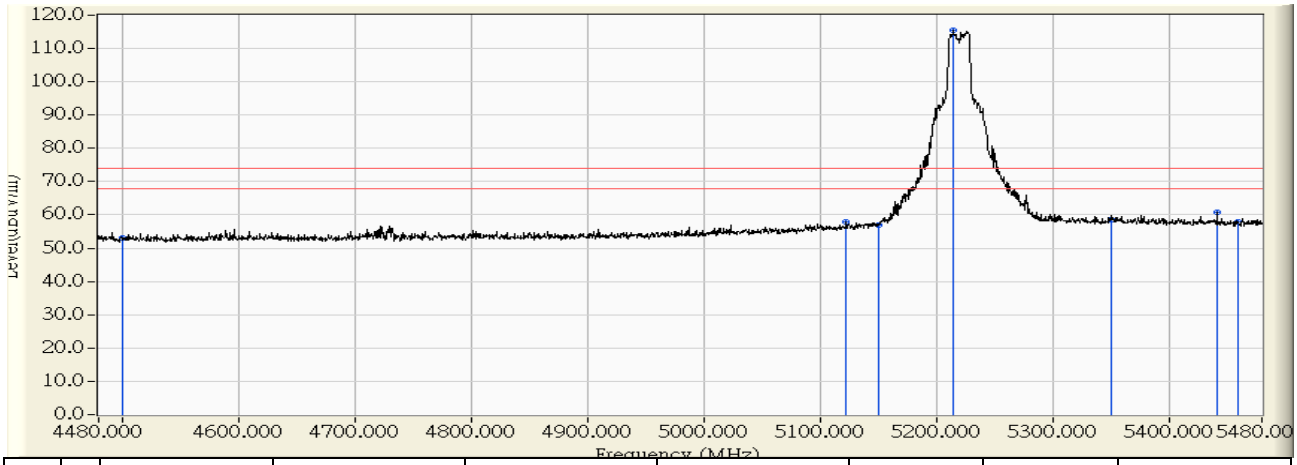



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 42.465 | 38.940 | -15.060 | 54.000 | AVERAGE |
| 2 | | 5133.673 | -0.905 | 50.408 | 49.503 | -4.497 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.760 | 53.455 | 52.695 | -1.305 | 54.000 | AVERAGE |
| 4 | * | 5214.633 | -0.187 | 105.602 | 105.414 | 51.414 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.012 | 47.402 | 48.414 | -5.586 | 54.000 | AVERAGE |
| 6 | | 5380.050 | 1.278 | 47.481 | 48.759 | -5.241 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.987 | 44.717 | 46.703 | -7.297 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 06:19** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5220MHz** |

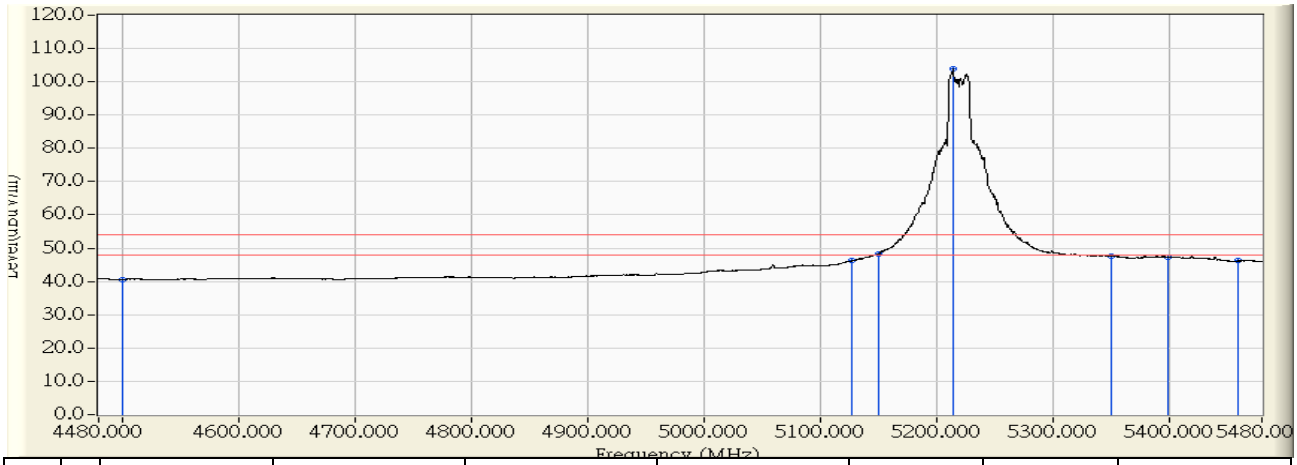



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 55.003 | 53.186 | -20.814 | 74.000 | PEAK |
| 2 | | 5122.679 | -0.573 | 58.322 | 57.750 | -16.250 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.344 | 57.137 | 56.793 | -17.207 | 74.000 | PEAK |
| 4 | * | 5214.633 | 0.197 | 115.422 | 115.618 | 41.618 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.328 | 57.192 | 58.520 | -15.480 | 74.000 | PEAK |
| 6 | | 5441.519 | 2.093 | 58.557 | 60.650 | -13.350 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.248 | 55.579 | 57.827 | -16.173 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/13 - 23:57** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5220MHz** |

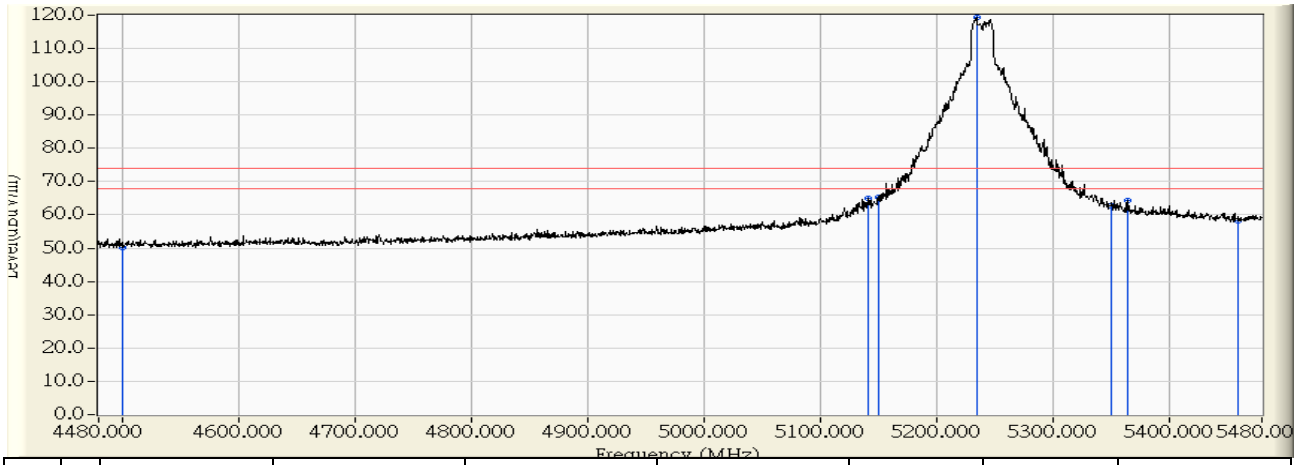



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 42.409 | 40.592 | -13.408 | 54.000 | AVERAGE |
| 2 | | 5127.676 | -0.530 | 46.802 | 46.272 | -7.728 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.344 | 48.661 | 48.317 | -5.683 | 54.000 | AVERAGE |
| 4 | * | 5214.633 | 0.197 | 103.683 | 103.879 | 49.879 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.328 | 46.290 | 47.618 | -6.382 | 54.000 | AVERAGE |
| 6 | | 5399.040 | 1.739 | 45.614 | 47.352 | -6.648 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.248 | 43.928 | 46.176 | -7.824 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 00:28** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5240MHz** |

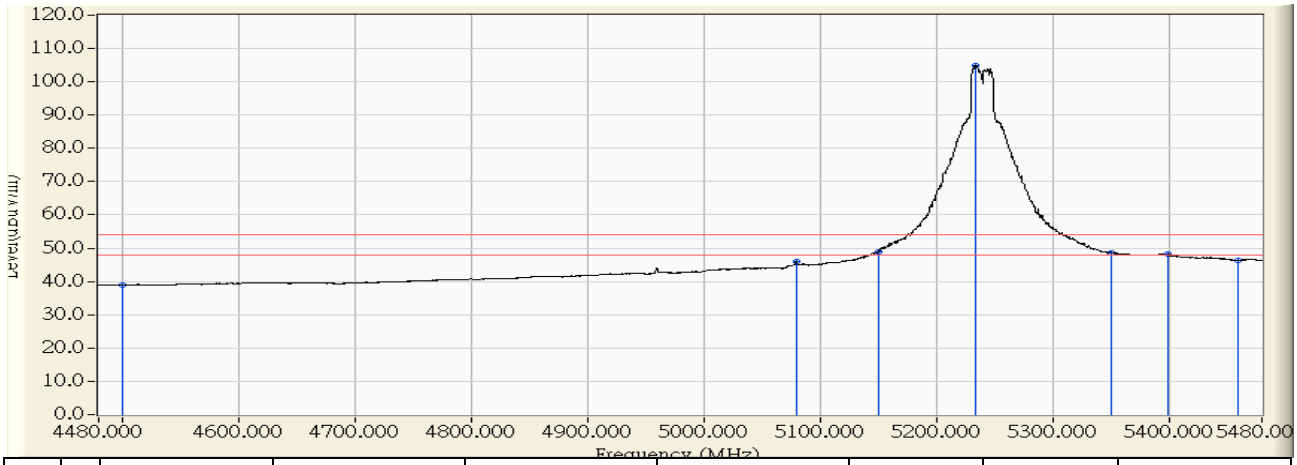



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 53.851 | 50.326 | -23.674 | 74.000 | PEAK |
| 2 | | 5141.169 | -0.839 | 65.827 | 64.988 | -9.012 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.760 | 66.004 | 65.244 | -8.756 | 74.000 | PEAK |
| 4 | * | 5234.623 | -0.010 | 119.234 | 119.223 | 45.223 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.012 | 61.668 | 62.680 | -11.320 | 74.000 | PEAK |
| 6 | | 5365.057 | 1.145 | 63.045 | 64.190 | -9.810 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.987 | 56.196 | 58.182 | -15.818 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 00:30** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5240MHz** |

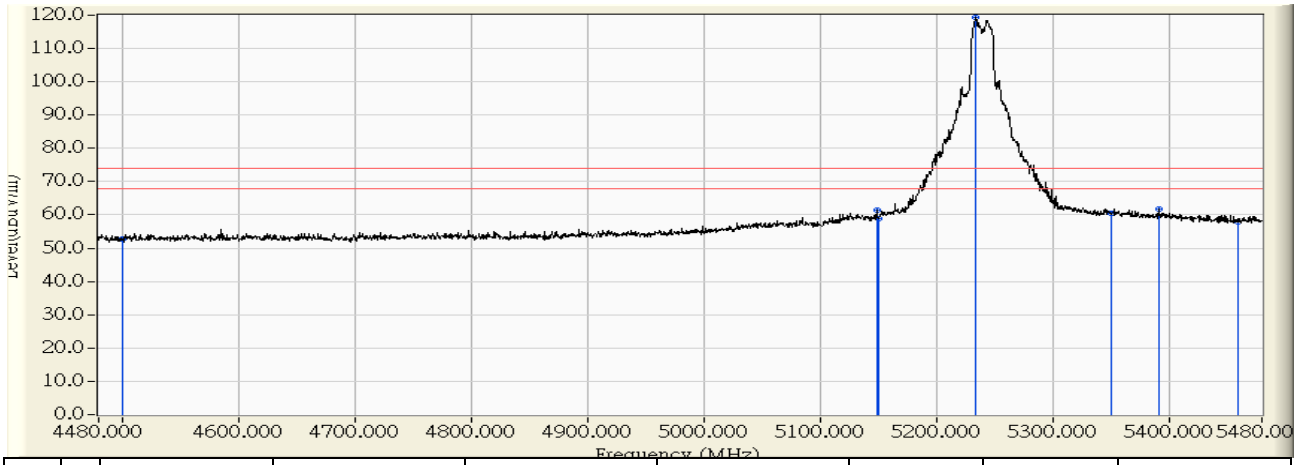



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 42.410 | 38.885 | -15.115 | 54.000 | AVERAGE |
| 2 | | 5079.700 | -1.383 | 47.244 | 45.861 | -8.139 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.760 | 49.680 | 48.920 | -5.080 | 54.000 | AVERAGE |
| 4 | * | 5233.623 | -0.020 | 105.002 | 104.983 | 50.983 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.012 | 47.606 | 48.618 | -5.382 | 54.000 | AVERAGE |
| 6 | | 5399.540 | 1.451 | 46.815 | 48.266 | -5.734 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.987 | 44.426 | 46.412 | -7.588 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 00:26** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5240MHz** |

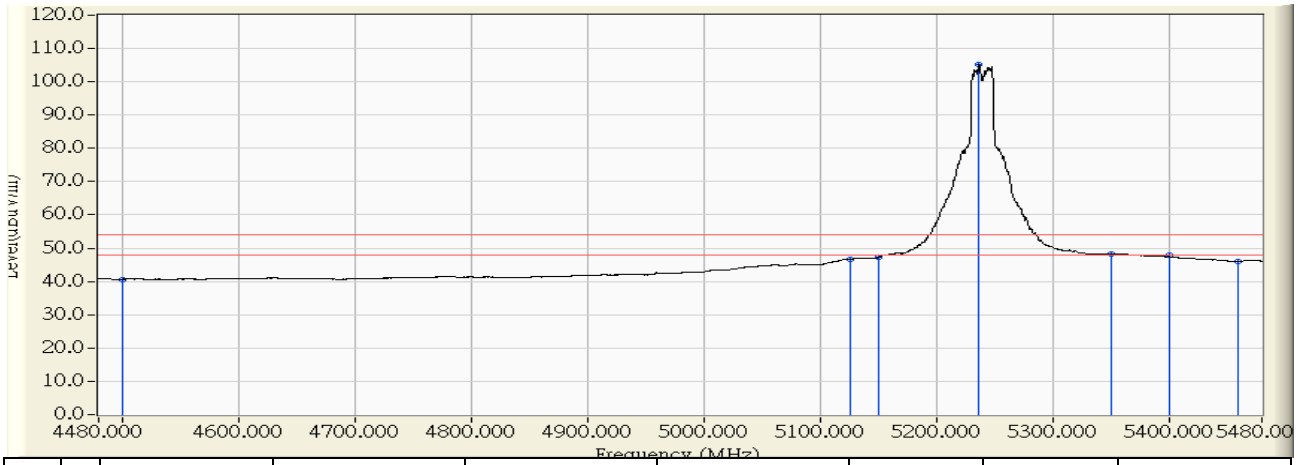



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 54.668 | 52.851 | -21.149 | 74.000 | PEAK |
| 2 | | 5148.666 | -0.355 | 61.863 | 61.508 | -12.492 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.344 | 59.295 | 58.951 | -15.049 | 74.000 | PEAK |
| 4 | * | 5234.123 | 0.360 | 118.868 | 119.227 | 45.227 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.328 | 59.038 | 60.366 | -13.634 | 74.000 | PEAK |
| 6 | | 5392.044 | 1.679 | 59.987 | 61.667 | -12.333 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.248 | 55.545 | 57.793 | -16.207 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 00:25** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n20 5240MHz** |

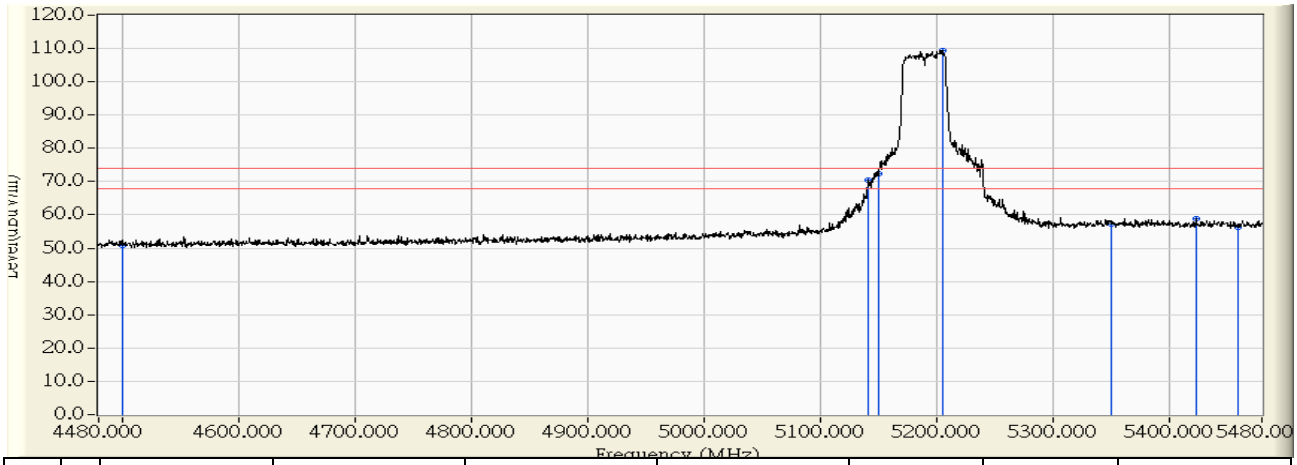



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 42.451 | 40.634 | -13.366 | 54.000 | AVERAGE |
| 2 | | 5126.177 | -0.543 | 47.317 | 46.774 | -7.226 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.344 | 47.593 | 47.249 | -6.751 | 54.000 | AVERAGE |
| 4 | * | 5236.622 | 0.380 | 104.729 | 105.109 | 51.109 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.328 | 46.994 | 48.322 | -5.678 | 54.000 | AVERAGE |
| 6 | | 5400.040 | 1.747 | 46.258 | 48.004 | -5.996 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.248 | 43.798 | 46.046 | -7.954 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 01:09** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n40 5190MHz** |

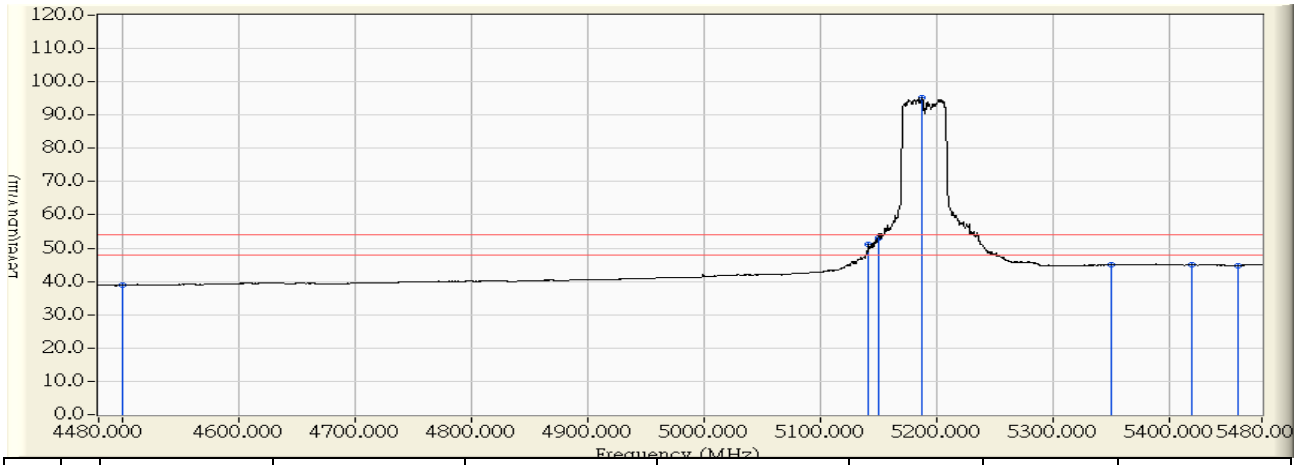



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 54.372 | 50.847 | -23.153 | 74.000 | PEAK |
| 2 | | 5141.169 | -0.839 | 71.216 | 70.377 | -3.623 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.760 | 73.279 | 72.519 | -1.481 | 74.000 | PEAK |
| 4 | * | 5205.637 | -0.268 | 109.720 | 109.453 | 35.453 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.012 | 56.403 | 57.415 | -16.585 | 74.000 | PEAK |
| 6 | | 5423.028 | 1.658 | 57.154 | 58.813 | -15.187 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.987 | 54.351 | 56.337 | -17.663 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 01:07** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n40 5190MHz** |

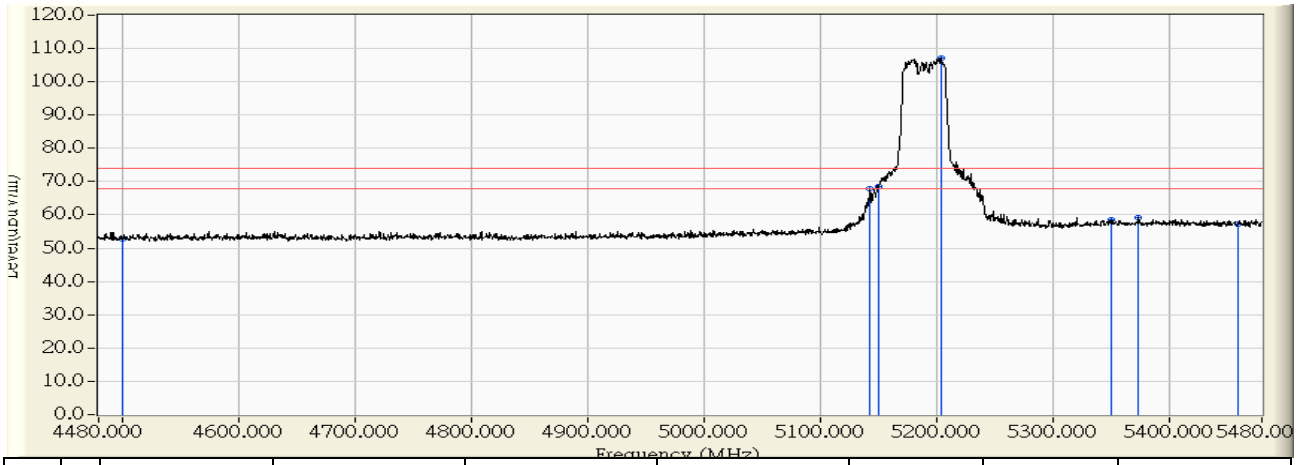



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 42.405 | 38.880 | -15.120 | 54.000 | AVERAGE |
| 2 | | 5142.169 | -0.830 | 51.979 | 51.149 | -2.851 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.760 | 53.970 | 53.210 | -0.790 | 54.000 | AVERAGE |
| 4 | * | 5188.146 | -0.423 | 95.697 | 95.275 | 41.275 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.012 | 44.106 | 45.118 | -8.882 | 54.000 | AVERAGE |
| 6 | | 5419.530 | 1.628 | 43.294 | 44.922 | -9.078 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.987 | 42.797 | 44.783 | -9.217 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 01:15** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n40 5190MHz** |

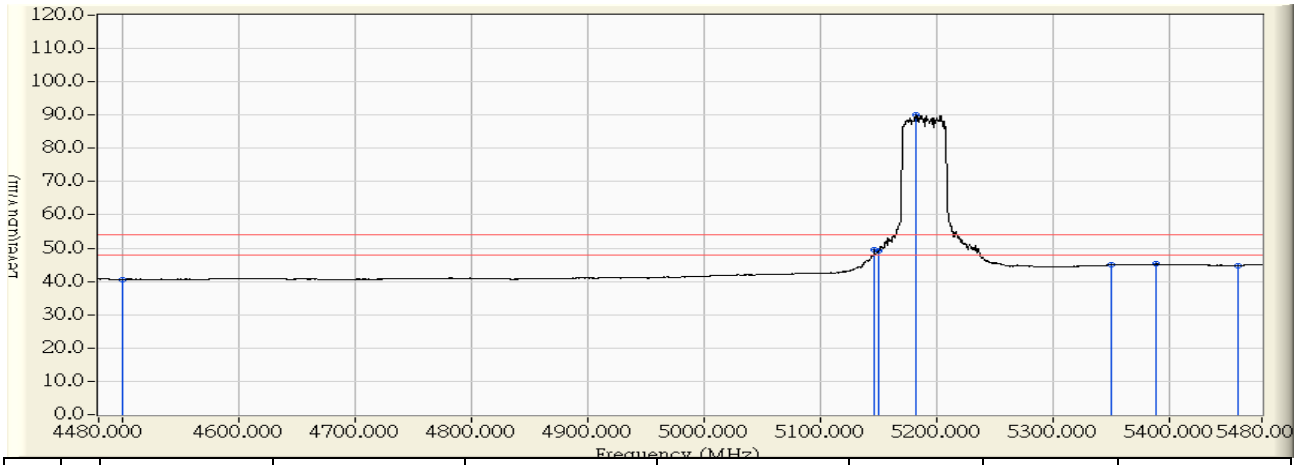



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 54.574 | 52.757 | -21.243 | 74.000 | PEAK |
| 2 | | 5143.168 | -0.401 | 68.178 | 67.777 | -6.223 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.344 | 68.997 | 68.653 | -5.347 | 74.000 | PEAK |
| 4 | * | 5204.138 | 0.109 | 106.954 | 107.063 | 33.063 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.328 | 57.283 | 58.611 | -15.389 | 74.000 | PEAK |
| 6 | | 5374.053 | 1.529 | 57.760 | 59.289 | -14.711 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.248 | 54.871 | 57.119 | -16.881 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 01:14** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n40 5190MHz** |

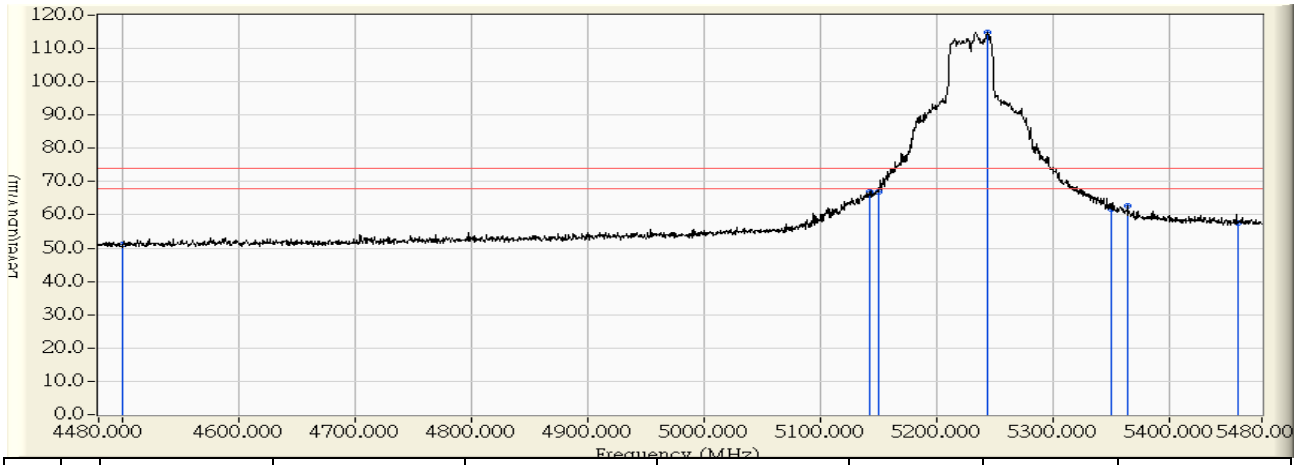



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 42.366 | 40.549 | -13.451 | 54.000 | AVERAGE |
| 2 | | 5146.667 | -0.372 | 49.815 | 49.443 | -4.557 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.344 | 49.573 | 49.229 | -4.771 | 54.000 | AVERAGE |
| 4 | * | 5183.148 | -0.067 | 90.094 | 90.027 | 36.027 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.328 | 43.697 | 45.025 | -8.975 | 54.000 | AVERAGE |
| 6 | | 5389.545 | 1.659 | 43.658 | 45.317 | -8.683 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.248 | 42.515 | 44.763 | -9.237 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 01:49** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n40 5230MHz** |

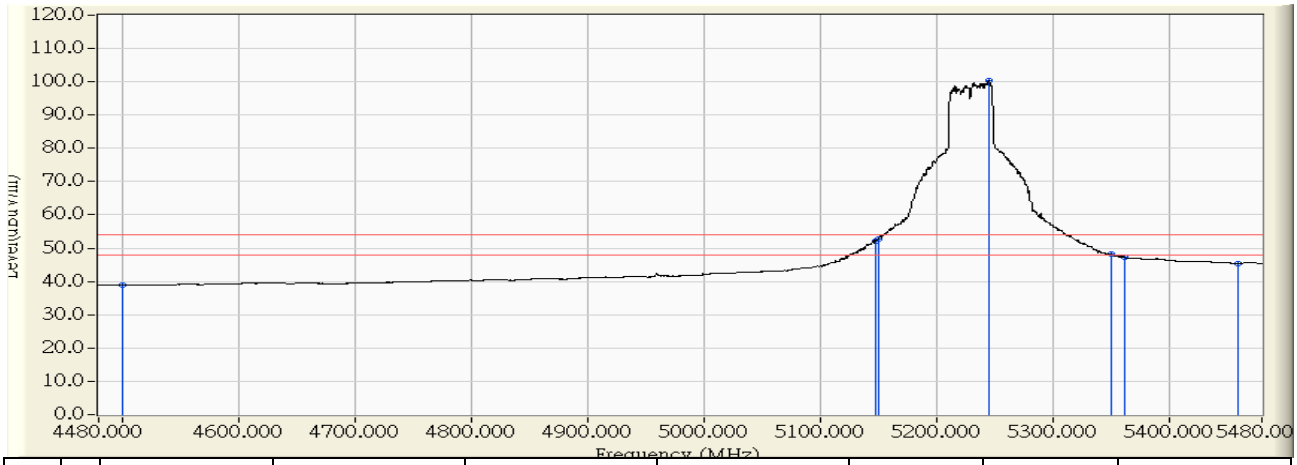



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 54.520 | 50.995 | -23.005 | 74.000 | PEAK |
| 2 | | 5143.168 | -0.821 | 67.636 | 66.815 | -7.185 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.760 | 67.742 | 66.982 | -7.018 | 74.000 | PEAK |
| 4 | * | 5243.618 | 0.069 | 114.822 | 114.891 | 40.891 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.012 | 60.789 | 61.801 | -12.199 | 74.000 | PEAK |
| 6 | | 5364.558 | 1.141 | 61.734 | 62.875 | -11.125 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.987 | 55.505 | 57.491 | -16.509 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 01:47** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n40 5230MHz** |

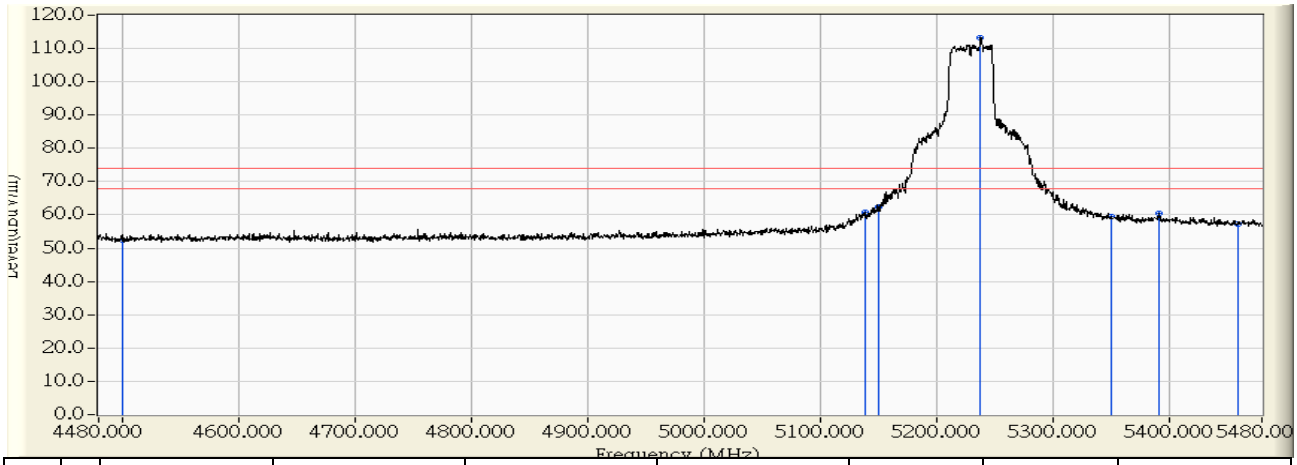



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 42.432 | 38.907 | -15.093 | 54.000 | AVERAGE |
| 2 | | 5147.666 | -0.781 | 53.048 | 52.267 | -1.733 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.760 | 53.405 | 52.645 | -1.355 | 54.000 | AVERAGE |
| 4 | * | 5245.617 | 0.086 | 100.229 | 100.316 | 46.316 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.012 | 47.186 | 48.198 | -5.802 | 54.000 | AVERAGE |
| 6 | | 5361.559 | 1.114 | 46.191 | 47.305 | -6.695 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.987 | 43.440 | 45.426 | -8.574 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 01:52** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n40 5230MHz** |

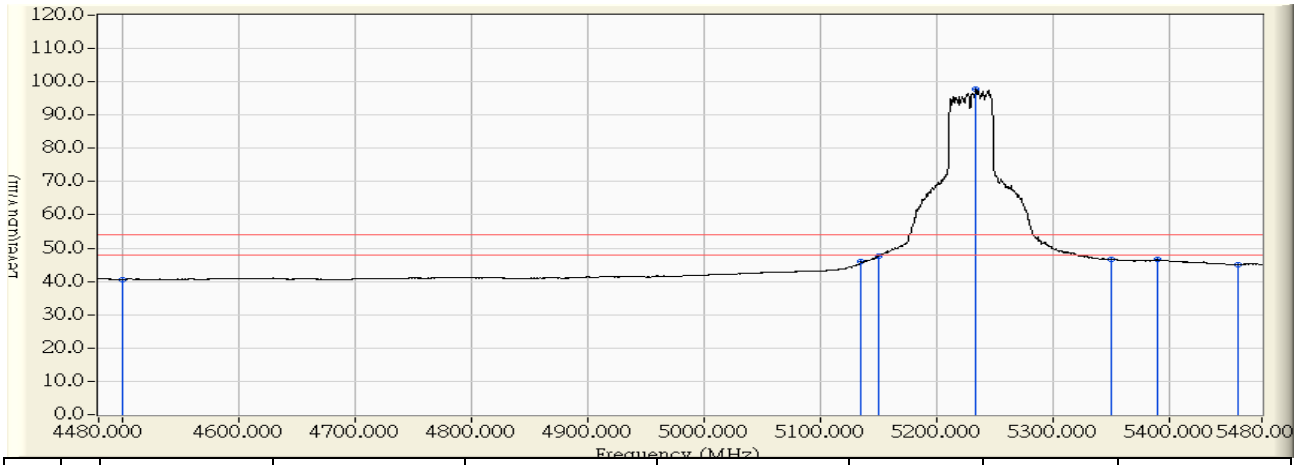



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 54.103 | 52.286 | -21.714 | 74.000 | PEAK |
| 2 | | 5138.671 | -0.438 | 61.262 | 60.823 | -13.177 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.344 | 62.657 | 62.313 | -11.687 | 74.000 | PEAK |
| 4 | * | 5238.121 | 0.392 | 113.002 | 113.395 | 39.395 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.328 | 58.130 | 59.458 | -14.542 | 74.000 | PEAK |
| 6 | | 5391.544 | 1.675 | 58.927 | 60.602 | -13.398 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.248 | 54.923 | 57.171 | -16.829 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 01:54** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11n40 5230MHz** |

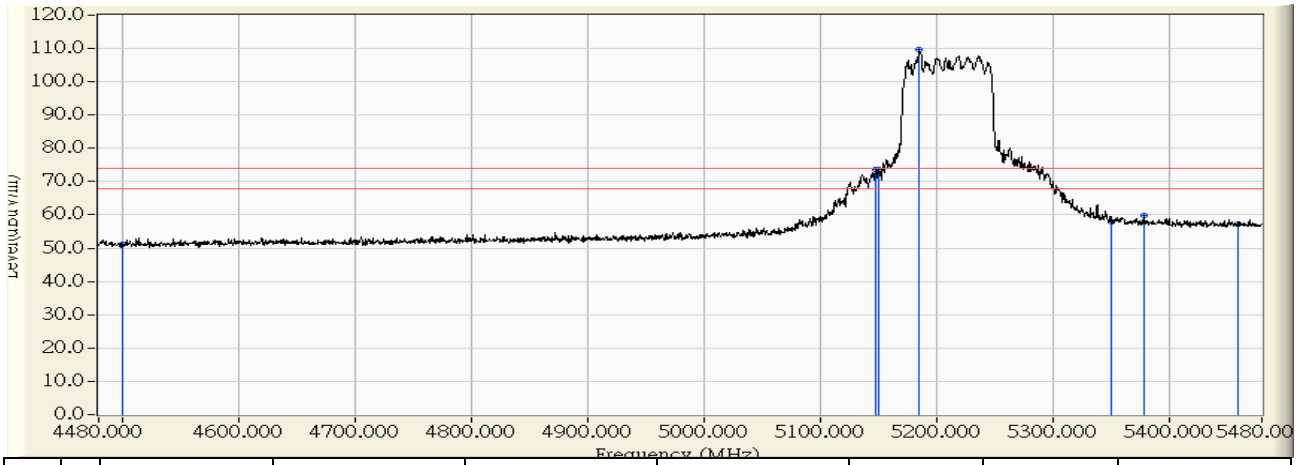



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 42.401 | 40.584 | -13.416 | 54.000 | AVERAGE |
| 2 | | 5135.172 | -0.468 | 46.323 | 45.855 | -8.145 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.344 | 47.957 | 47.613 | -6.387 | 54.000 | AVERAGE |
| 4 | * | 5234.123 | 0.360 | 97.305 | 97.664 | 43.664 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.328 | 45.192 | 46.520 | -7.480 | 54.000 | AVERAGE |
| 6 | | 5390.045 | 1.664 | 45.030 | 46.693 | -7.307 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.248 | 42.837 | 45.085 | -8.915 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 02:13** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11ac80 5210MHz** |

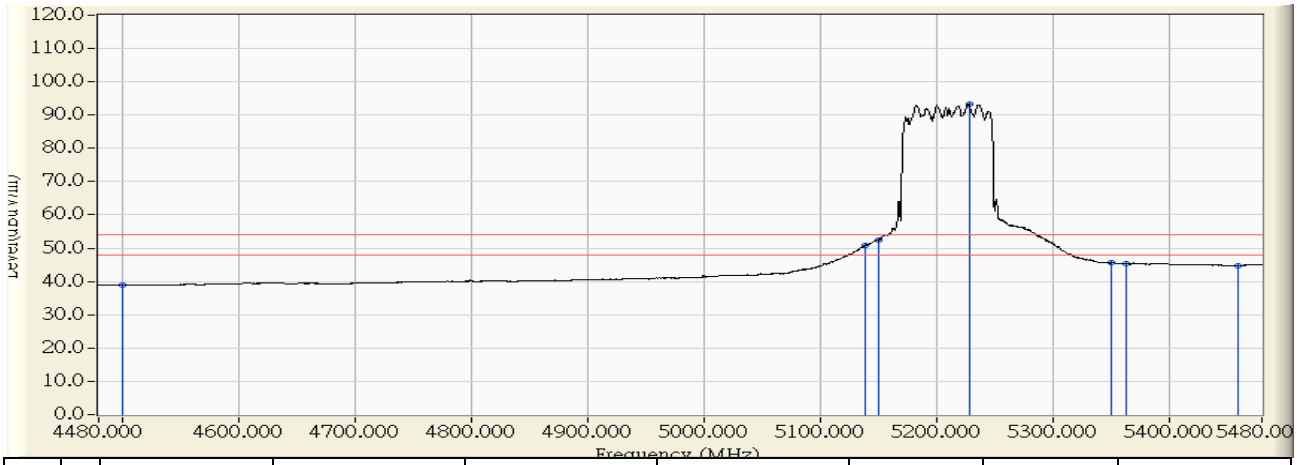



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 54.779 | 51.254 | -22.746 | 74.000 | PEAK |
| 2 | | 5147.666 | -0.781 | 74.384 | 73.603 | -0.397 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.760 | 74.338 | 73.578 | -0.422 | 74.000 | PEAK |
| 4 | * | 5185.647 | -0.445 | 110.086 | 109.641 | 35.641 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.012 | 56.765 | 57.777 | -16.223 | 74.000 | PEAK |
| 6 | | 5378.551 | 1.265 | 58.610 | 59.875 | -14.125 | 74.000 | PEAK |
| 7 | | 5460.000 | 1.987 | 55.352 | 57.338 | -16.662 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 02:11** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11ac80 5210MHz** |

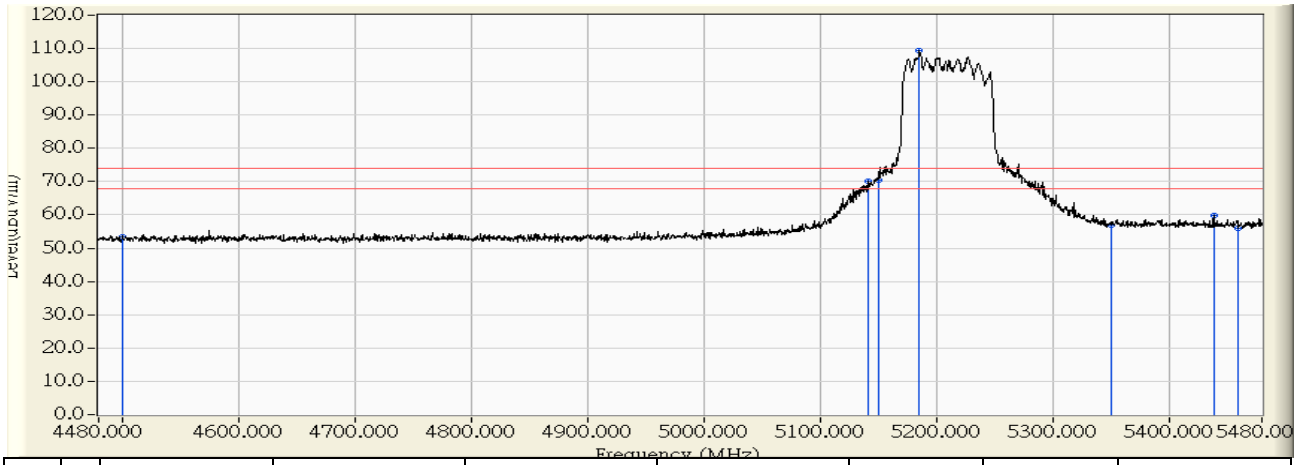



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -3.525 | 42.364 | 38.839 | -15.161 | 54.000 | AVERAGE |
| 2 | | 5138.671 | -0.860 | 51.615 | 50.754 | -3.246 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.760 | 53.040 | 52.280 | -1.720 | 54.000 | AVERAGE |
| 4 | * | 5228.126 | -0.068 | 93.394 | 93.326 | 39.326 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.012 | 44.549 | 45.561 | -8.439 | 54.000 | AVERAGE |
| 6 | | 5363.058 | 1.127 | 44.187 | 45.314 | -8.686 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 1.987 | 42.768 | 44.754 | -9.246 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 03:01** |
| **Limit : FCC_SpartC_15.209_03M_PK** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11ac80 5210MHz** |

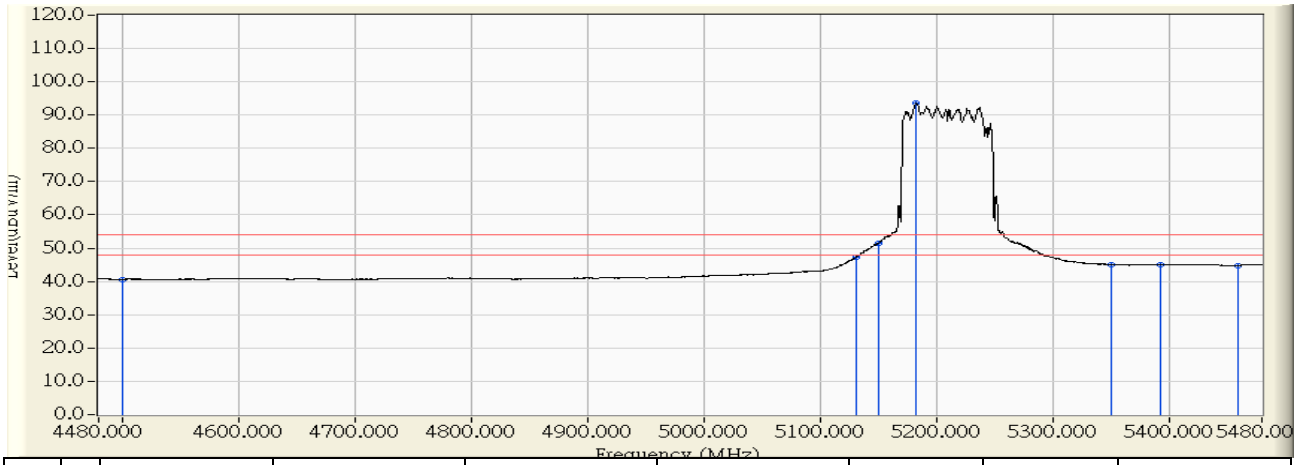



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 55.064 | 53.247 | -20.753 | 74.000 | PEAK |
| 2 | | 5141.669 | -0.414 | 70.388 | 69.974 | -4.026 | 74.000 | PEAK |
| 3 | | 5150.000 | -0.344 | 70.904 | 70.560 | -3.440 | 74.000 | PEAK |
| 4 | * | 5185.647 | -0.046 | 109.501 | 109.455 | 35.455 | 74.000 | PEAK |
| 5 | | 5350.000 | 1.328 | 55.636 | 56.964 | -17.036 | 74.000 | PEAK |
| 6 | | 5438.521 | 2.069 | 57.695 | 59.763 | -14.237 | 74.000 | PEAK |
| 7 | | 5460.000 | 2.248 | 53.819 | 56.067 | -17.933 | 74.000 | PEAK |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

| | |
|---|---|
| **Site : CB1** | **Time : 2015/07/14 - 02:22** |
| **Limit : FCC_SpartC_15.209_03M_AV** | **Margin : 6** |
| **Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL** | **Power : AC 120V / 60Hz** |
| **EUT : Dual-band Wireless Range Extender** | **Note : Mode 2: Transmit_Beamforming Mode_AD890326 802.11ac80 5210MHz** |




| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|---|---|---|---|---|---|---|
| 1 | | 4500.000 | -1.818 | 42.431 | 40.614 | -13.386 | 54.000 | AVERAGE |
| 2 | | 5130.675 | -0.506 | 47.658 | 47.153 | -6.847 | 54.000 | AVERAGE |
| 3 | | 5150.000 | -0.344 | 51.905 | 51.561 | -2.439 | 54.000 | AVERAGE |
| 4 | * | 5183.148 | -0.067 | 93.599 | 93.532 | 39.532 | 54.000 | AVERAGE |
| 5 | | 5350.000 | 1.328 | 43.761 | 45.089 | -8.911 | 54.000 | AVERAGE |
| 6 | | 5392.544 | 1.683 | 43.418 | 45.102 | -8.898 | 54.000 | AVERAGE |
| 7 | | 5460.000 | 2.248 | 42.517 | 44.765 | -9.235 | 54.000 | AVERAGE |

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.

# 8. Frequency Stability

## 8.1. Test Equipment

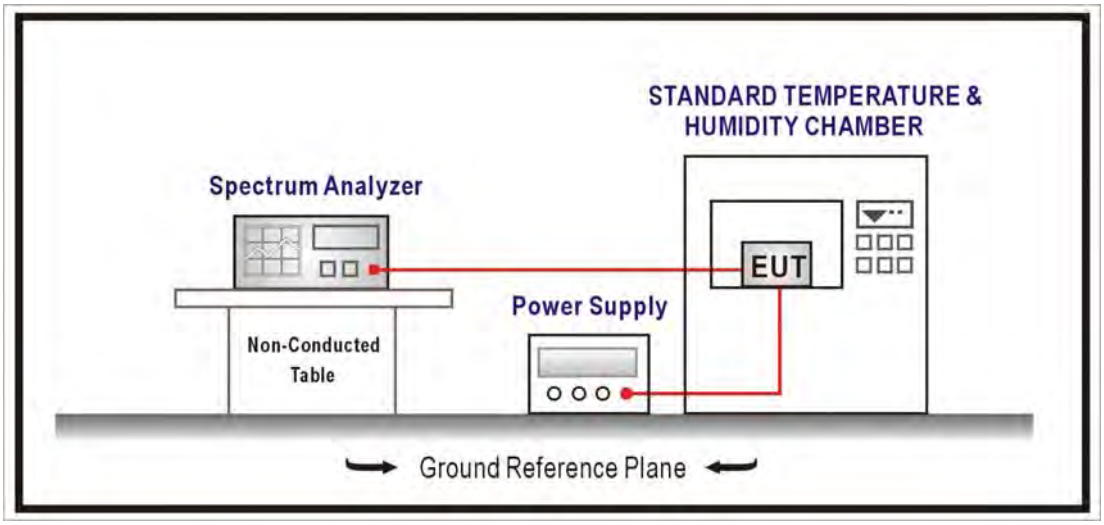
The following test equipments are used during the radiated emission tests:

Frequency Stability / SR7

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|---|---|---|---|---|
| Spectrum Analyzer | Agilent | N9010A-EXA | US47140172 | 2016/07/13 |
| Temperature & Humidity Chamber | WIT | TH-1S-B | 1082101 | 2016/01/22 |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

## 8.2. Test Setup




## 8.3. Limits

Manufactures of all devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified

## 8.4. Test Procedure

The EUT was setup to ANSI C63.10:2013; tested to U-NII test procedure of KDB 789033 D02 for compliance to FCC 47CFR Subpart E requirements.

## 8.5. Uncertainty

The measurement uncertainty is defined as ± 150 Hz

## 8.6. Test Result

| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>802.11a - 5180MHz(ANT 0) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5180.0696 | 13.4450 | PASS |
| -10 | | 5180.0153 | 2.9447 | PASS |
| 0 | | 5180.0357 | 6.8855 | PASS |
| 10 | | 5180.0822 | 15.8729 | PASS |
| 20 | | 5180.0002 | 0.0293 | PASS |
| 30 | | 5180.0870 | 16.7862 | PASS |
| 40 | | 5180.0406 | 7.8450 | PASS |
| 50 | | 5180.0404 | 7.7987 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5180.0774 | 14.9480 | PASS |
| | 120 | 5180.0079 | 1.5224 | PASS |
| | 138 | 5180.0342 | 6.6068 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>802.11a - 5240MHz(ANT 0) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5240.0549 | 10.4864 | PASS |
| -10 | | 5240.0830 | 15.8366 | PASS |
| 0 | | 5240.0730 | 13.9220 | PASS |
| 10 | | 5240.0518 | 9.8936 | PASS |
| 20 | | 5240.0042 | 0.8029 | PASS |
| 30 | | 5240.0492 | 9.3814 | PASS |
| 40 | | 5240.0486 | 9.2705 | PASS |
| 50 | | 5240.0511 | 9.7463 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5240.0183 | 3.4943 | PASS |
| | 120 | 5240.0548 | 10.4552 | PASS |
| | 138 | 5240.0022 | 0.4179 | PASS |

| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>802.11a - 5180MHz(ANT 1) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5180.0451 | 8.7103 | PASS |
| -10 | | 5180.0772 | 14.9052 | PASS |
| 0 | | 5180.0136 | 2.6247 | PASS |
| 10 | | 5180.0475 | 9.1746 | PASS |
| 20 | | 5180.0125 | 2.4149 | PASS |
| 30 | | 5180.0753 | 14.5296 | PASS |
| 40 | | 5180.0697 | 13.4598 | PASS |
| 50 | | 5180.0483 | 9.3260 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5180.0281 | 5.4343 | PASS |
| | 120 | 5180.0271 | 5.2231 | PASS |
| | 138 | 5180.0535 | 10.3331 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>802.11a - 5240MHz(ANT 1) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5240.0693 | 13.2264 | PASS |
| -10 | | 5240.0506 | 9.6513 | PASS |
| 0 | | 5240.0210 | 4.0072 | PASS |
| 10 | | 5240.0015 | 0.2818 | PASS |
| 20 | | 5240.0181 | 3.4449 | PASS |
| 30 | | 5240.0798 | 15.2379 | PASS |
| 40 | | 5240.0359 | 6.8458 | PASS |
| 50 | | 5240.0660 | 12.5880 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5240.0310 | 5.9160 | PASS |
| | 120 | 5240.0119 | 2.2682 | PASS |
| | 138 | 5240.0758 | 14.4598 | PASS |

| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>802.11a - 5180MHz(ANT 2) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5180.0199 | 3.8327 | PASS |
| -10 | | 5180.0780 | 15.0601 | PASS |
| 0 | | 5180.0732 | 14.1368 | PASS |
| 10 | | 5180.0537 | 10.3759 | PASS |
| 20 | | 5180.0527 | 10.1727 | PASS |
| 30 | | 5180.0755 | 14.5682 | PASS |
| 40 | | 5180.0811 | 15.6566 | PASS |
| 50 | | 5180.0419 | 8.0818 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5180.0111 | 2.1353 | PASS |
| | 120 | 5180.0400 | 7.7258 | PASS |
| | 138 | 5180.0838 | 16.1741 | PASS |

| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>802.11a - 5240MHz(ANT 2) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5240.0627 | 11.9574 | PASS |
| -10 | | 5240.0532 | 10.1517 | PASS |
| 0 | | 5240.0265 | 5.0633 | PASS |
| 10 | | 5240.0244 | 4.6584 | PASS |
| 20 | | 5240.0365 | 6.9702 | PASS |
| 30 | | 5240.0477 | 9.1075 | PASS |
| 40 | | 5240.0646 | 12.3342 | PASS |
| 50 | | 5240.0625 | 11.9355 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5240.0048 | 0.9085 | PASS |
| | 120 | 5240.0779 | 14.8702 | PASS |
| | 138 | 5240.0178 | 3.3977 | PASS |

| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(20MHz)- 5180MHz(ANT 0) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5180.0421 | 8.1354 | PASS |
| -10 | | 5180.0686 | 13.2389 | PASS |
| 0 | | 5180.0783 | 15.1217 | PASS |
| 10 | | 5180.0522 | 10.0796 | PASS |
| 20 | | 5180.0574 | 11.0862 | PASS |
| 30 | | 5180.0044 | 0.8524 | PASS |
| 40 | | 5180.0759 | 14.6431 | PASS |
| 50 | | 5180.0830 | 16.0247 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5180.0779 | 15.0308 | PASS |
| | 120 | 5180.0641 | 12.3671 | PASS |
| | 138 | 5180.0672 | 12.9676 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(20MHz)- 5240MHz(ANT 0) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5240.0693 | 13.2291 | PASS |
| -10 | | 5240.0555 | 10.5862 | PASS |
| 0 | | 5240.0210 | 4.0125 | PASS |
| 10 | | 5240.0270 | 5.1534 | PASS |
| 20 | | 5240.0443 | 8.4549 | PASS |
| 30 | | 5240.0093 | 1.7668 | PASS |
| 40 | | 5240.0669 | 12.7637 | PASS |
| 50 | | 5240.0009 | 0.1685 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5240.0493 | 9.4049 | PASS |
| | 120 | 5240.0839 | 16.0177 | PASS |
| | 138 | 5240.0483 | 9.2265 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(20MHz) - 5180MHz(ANT 1) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5180.0371 | 7.1574 | PASS |
| -10 | | 5180.0823 | 15.8875 | PASS |
| 0 | | 5180.0657 | 12.6853 | PASS |
| 10 | | 5180.0552 | 10.6582 | PASS |
| 20 | | 5180.0545 | 10.5220 | PASS |
| 30 | | 5180.0823 | 15.8821 | PASS |
| 40 | | 5180.0518 | 10.0076 | PASS |
| 50 | | 5180.0444 | 8.5804 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5180.0781 | 15.0862 | PASS |
| | 120 | 5180.0216 | 4.1660 | PASS |
| | 138 | 5180.0578 | 11.1612 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(20MHz)- 5240MHz(ANT 1) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5240.0543 | 10.3564 | PASS |
| -10 | | 5240.0448 | 8.5463 | PASS |
| 0 | | 5240.0862 | 16.4594 | PASS |
| 10 | | 5240.0213 | 4.0682 | PASS |
| 20 | | 5240.0556 | 10.6112 | PASS |
| 30 | | 5240.0819 | 15.6264 | PASS |
| 40 | | 5240.0186 | 3.5481 | PASS |
| 50 | | 5240.0493 | 9.4050 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5240.0575 | 10.9679 | PASS |
| | 120 | 5240.0330 | 6.2910 | PASS |
| | 138 | 5240.0782 | 14.9198 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(20MHz) - 5180MHz(ANT 2) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5180.0583 | 11.2542 | PASS |
| -10 | | 5180.0541 | 10.4404 | PASS |
| 0 | | 5180.0300 | 5.7875 | PASS |
| 10 | | 5180.0208 | 4.0184 | PASS |
| 20 | | 5180.0550 | 10.6164 | PASS |
| 30 | | 5180.0067 | 1.2868 | PASS |
| 40 | | 5180.0666 | 12.8509 | PASS |
| 50 | | 5180.0444 | 8.5791 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5180.0849 | 16.3918 | PASS |
| | 120 | 5180.0380 | 7.3370 | PASS |
| | 138 | 5180.0212 | 4.1018 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(20MHz) - 5240MHz(ANT 2) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5240.0640 | 12.2232 | PASS |
| -10 | | 5240.0121 | 2.3006 | PASS |
| 0 | | 5240.0104 | 1.9935 | PASS |
| 10 | | 5240.0517 | 9.8618 | PASS |
| 20 | | 5240.0626 | 11.9458 | PASS |
| 30 | | 5240.0545 | 10.3977 | PASS |
| 40 | | 5240.0200 | 3.8094 | PASS |
| 50 | | 5240.0339 | 6.4736 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5240.0020 | 0.3840 | PASS |
| | 120 | 5240.0794 | 15.1474 | PASS |
| | 138 | 5240.0190 | 3.6349 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(40MHz) - 5190MHz(ANT 0) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5190.0513 | 9.8817 | PASS |
| -10 | | 5190.0094 | 1.8091 | PASS |
| 0 | | 5190.0588 | 11.3259 | PASS |
| 10 | | 5190.0386 | 7.4347 | PASS |
| 20 | | 5190.0702 | 13.5212 | PASS |
| 30 | | 5190.0569 | 10.9706 | PASS |
| 40 | | 5190.0187 | 3.6051 | PASS |
| 50 | | 5190.0049 | 0.9470 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5190.0514 | 9.9128 | PASS |
| | 120 | 5190.0501 | 9.6496 | PASS |
| | 138 | 5190.0696 | 13.4173 | PASS |

| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(40MHz)　5230MHz(ANT 0) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5230.0661 | 12.6464 | PASS |
| -10 | | 5230.0552 | 10.5557 | PASS |
| 0 | | 5230.0131 | 2.5122 | PASS |
| 10 | | 5230.0411 | 7.8515 | PASS |
| 20 | | 5230.0271 | 5.1806 | PASS |
| 30 | | 5230.0404 | 7.7155 | PASS |
| 40 | | 5230.0269 | 5.1456 | PASS |
| 50 | | 5230.0223 | 4.2658 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5230.0073 | 1.4040 | PASS |
| | 120 | 5230.0284 | 5.4244 | PASS |
| | 138 | 5230.0682 | 13.0344 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(40MHz) - 5190MHz(ANT 1) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5190.0269 | 5.1788 | PASS |
| -10 | | 5190.0060 | 1.1526 | PASS |
| 0 | | 5190.0687 | 13.2337 | PASS |
| 10 | | 5190.0409 | 7.8868 | PASS |
| 20 | | 5190.0738 | 14.2142 | PASS |
| 30 | | 5190.0652 | 12.5635 | PASS |
| 40 | | 5190.0586 | 11.2979 | PASS |
| 50 | | 5190.0896 | 17.2665 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5190.0503 | 9.6886 | PASS |
| | 120 | 5190.0785 | 15.1225 | PASS |
| | 138 | 5190.0371 | 7.1497 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(40MHz)　5230MHz(ANT 1) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5230.0866 | 16.5622 | PASS |
| -10 | | 5230.0043 | 0.8216 | PASS |
| 0 | | 5230.0071 | 1.3528 | PASS |
| 10 | | 5230.0560 | 10.7029 | PASS |
| 20 | | 5230.0874 | 16.7131 | PASS |
| 30 | | 5230.0326 | 6.2360 | PASS |
| 40 | | 5230.0504 | 9.6393 | PASS |
| 50 | | 5230.0842 | 16.0983 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5230.0141 | 2.6912 | PASS |
| | 120 | 5230.0534 | 10.2090 | PASS |
| | 138 | 5230.0808 | 15.4550 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(40MHz) - 5190MHz(ANT 2) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5190.0498 | 9.5993 | PASS |
| -10 | | 5190.0009 | 0.1677 | PASS |
| 0 | | 5190.0593 | 11.4239 | PASS |
| 10 | | 5190.0430 | 8.2892 | PASS |
| 20 | | 5190.0262 | 5.0487 | PASS |
| 30 | | 5190.0831 | 16.0147 | PASS |
| 40 | | 5190.0252 | 4.8607 | PASS |
| 50 | | 5190.0322 | 6.2012 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5190.0768 | 14.8004 | PASS |
| | 120 | 5190.0171 | 3.3008 | PASS |
| | 138 | 5190.0019 | 0.3618 | PASS |

| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11n(40MHz)　5230MHz(ANT 2) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5230.0216 | 4.1218 | PASS |
| -10 | | 5230.0013 | 0.2512 | PASS |
| 0 | | 5230.0661 | 12.6318 | PASS |
| 10 | | 5230.0032 | 0.6158 | PASS |
| 20 | | 5230.0279 | 5.3345 | PASS |
| 30 | | 5230.0198 | 3.7843 | PASS |
| 40 | | 5230.0509 | 9.7358 | PASS |
| 50 | | 5230.0768 | 14.6797 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5230.0160 | 3.0622 | PASS |
| | 120 | 5230.0564 | 10.7897 | PASS |
| | 138 | 5230.0149 | 2.8558 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11ac(80MHz) - 5210MHz(ANT 0) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5210.0362 | 6.9575 | PASS |
| -10 | | 5210.0482 | 9.2435 | PASS |
| 0 | | 5210.0194 | 3.7238 | PASS |
| 10 | | 5210.0222 | 4.2648 | PASS |
| 20 | | 5210.0255 | 4.8874 | PASS |
| 30 | | 5210.0048 | 0.9220 | PASS |
| 40 | | 5210.0552 | 10.5865 | PASS |
| 50 | | 5210.0834 | 16.0046 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5210.0160 | 3.0615 | PASS |
| | 120 | 5210.0183 | 3.5033 | PASS |
| | 138 | 5210.0841 | 16.1427 | PASS |

| | | | |
|---|---|---|---|
| Product | Dual-band Wireless Range Extender | | |
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11ac(80MHz) - 5210MHz(ANT 1) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5210.0255 | 4.9024 | PASS |
| -10 | | 5210.0792 | 15.1981 | PASS |
| 0 | | 5210.0147 | 2.8310 | PASS |
| 10 | | 5210.0623 | 11.9514 | PASS |
| 20 | | 5210.0827 | 15.8659 | PASS |
| 30 | | 5210.0259 | 4.9677 | PASS |
| 40 | | 5210.0420 | 8.0604 | PASS |
| 50 | | 5210.0191 | 3.6657 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5210.0885 | 16.9896 | PASS |
| | 120 | 5210.0347 | 6.6514 | PASS |
| | 138 | 5210.0175 | 3.3548 | PASS |

| Product | Dual-band Wireless Range Extender | | |
|---|---|---|---|
| Test Item | Frequency Stability | | |
| Test Mode | Mode 1: Transmit_CDD Mode_AD890326<br>IEEE 802.11ac(80MHz) - 5210MHz(ANT 2) | | |
| Date of Test | 2015/09/20 | Test Site | SR7 |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| -20 | 120 | 5210.0409 | 7.8421 | PASS |
| -10 | | 5210.0038 | 0.7263 | PASS |
| 0 | | 5210.0785 | 15.0744 | PASS |
| 10 | | 5210.0528 | 10.1284 | PASS |
| 20 | | 5210.0618 | 11.8687 | PASS |
| 30 | | 5210.0706 | 13.5470 | PASS |
| 40 | | 5210.0368 | 7.0673 | PASS |
| 50 | | 5210.0038 | 0.7309 | PASS |

| Temperature Interval (°C) | AC Voltage (V) | Frequency (MHz) | Deviation (ppm) | Result |
|---|---|---|---|---|
| 25 | 102 | 5210.0382 | 7.3246 | PASS |
| | 120 | 5210.0368 | 7.0577 | PASS |
| | 138 | 5210.0446 | 8.5574 | PASS |