

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



The test results relate only to the samples tested.

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Test Report Certification

Issued Date : Sep. 24, 2015

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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.

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(Carol Tsai / Engineering Adm. Specialist)

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(Roy Wang / Director Manager)

Revision History

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

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

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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 Tx/Rx Ant0 (chain B) 225 mm : 5 G: 3.66 dBi Tx/Rx Ant1 (chain C) 235 mm : 5 G: 4.31 dBi 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 I/P: 100-240V~ 50/60Hz 0.8A O/P : 19V $\overline{=}$ 1.75A Cable Out: Non-Shielded, 1.8m
Power Adatper	Delta, ADP-33AW I/P: 100-240V~1A 50-60Hz O/P : 19V $\overline{=}$ 1.75A Cable Out: Non-Shielded, 1.8m

ANT-TX / RX & Bandwidth

ANT-TX / RX	TX			RX		
	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 Mode 2: Transmit_Beamforming Mode_AD890326 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

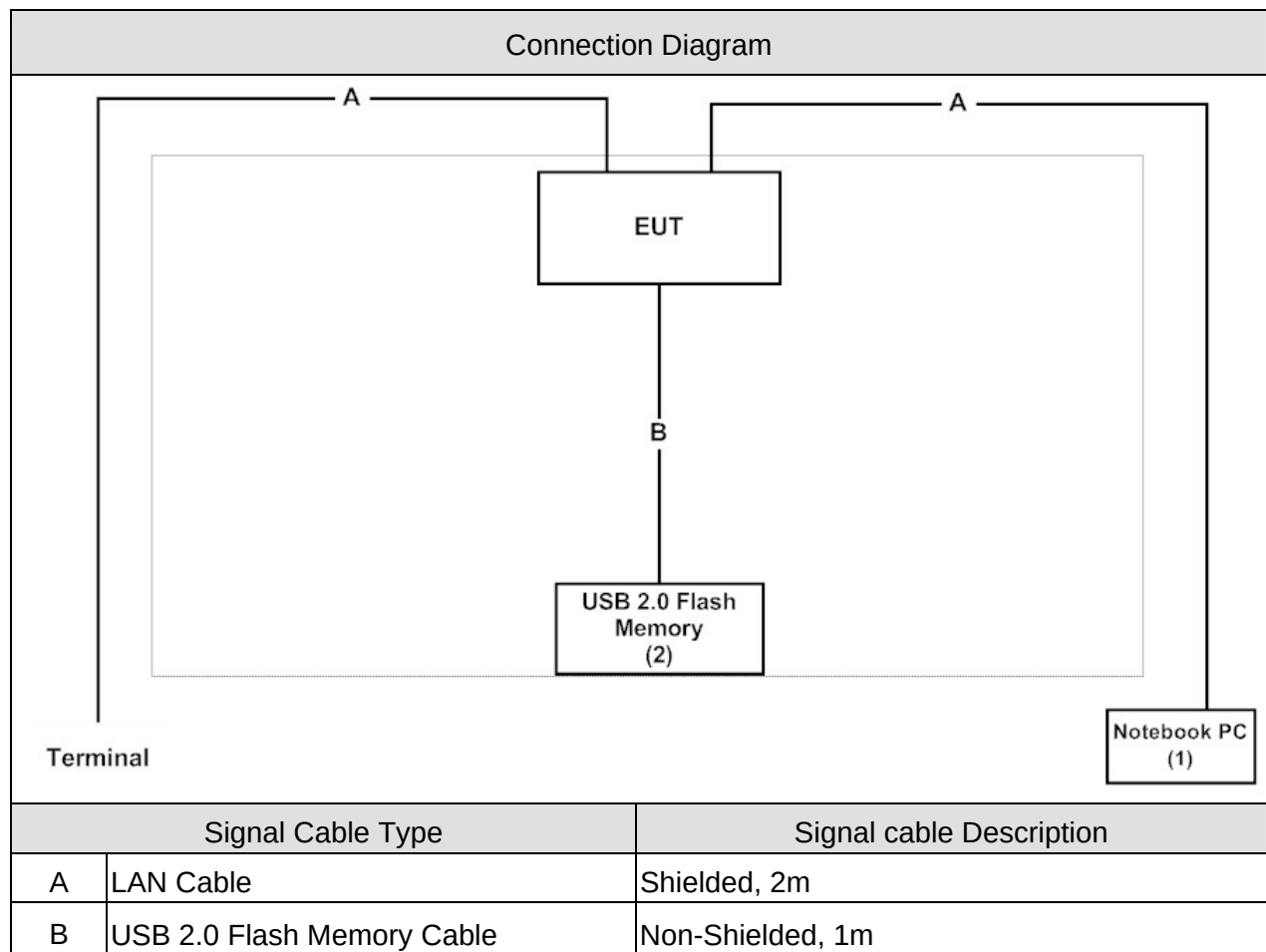
Test Items	Modulation	Channel	Antenna	Result
Radiated Emission	a	36/44/48	0+1+2	Complies
	11n/ac (20MHz)	36/44/48	0+1+2	Complies
	11n/ac (40MHz)	38/46	0+1+2	Complies
	11ac (80MHz)	42	0+1+2	Complies
Band Edge	a	36	0+1+2	Complies
	11n/ac (20MHz)	36	0+1+2	Complies
	11n/ac (40MHz)	38	0+1+2	Complies
	11ac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



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	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

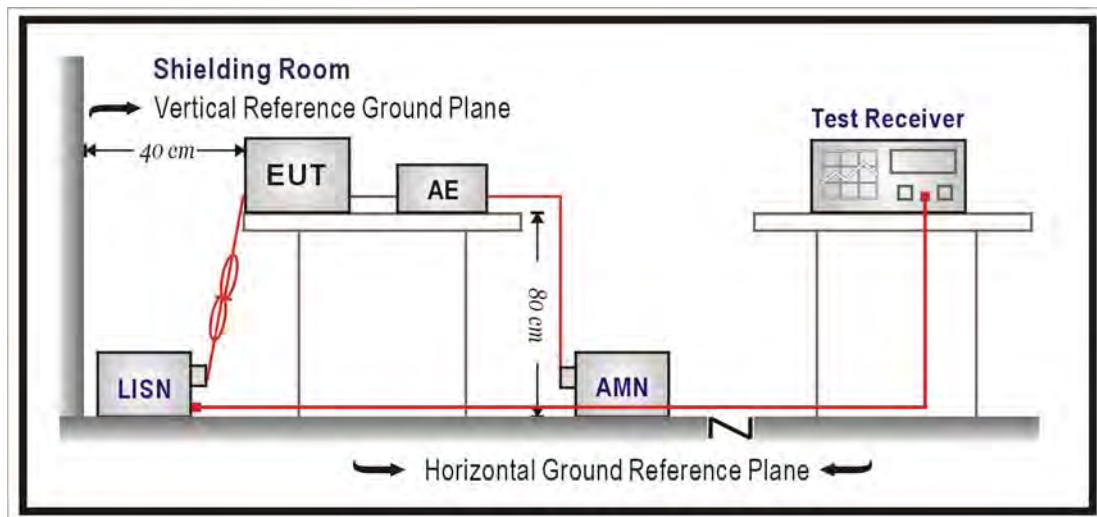
The following test equipments are used during the test:

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

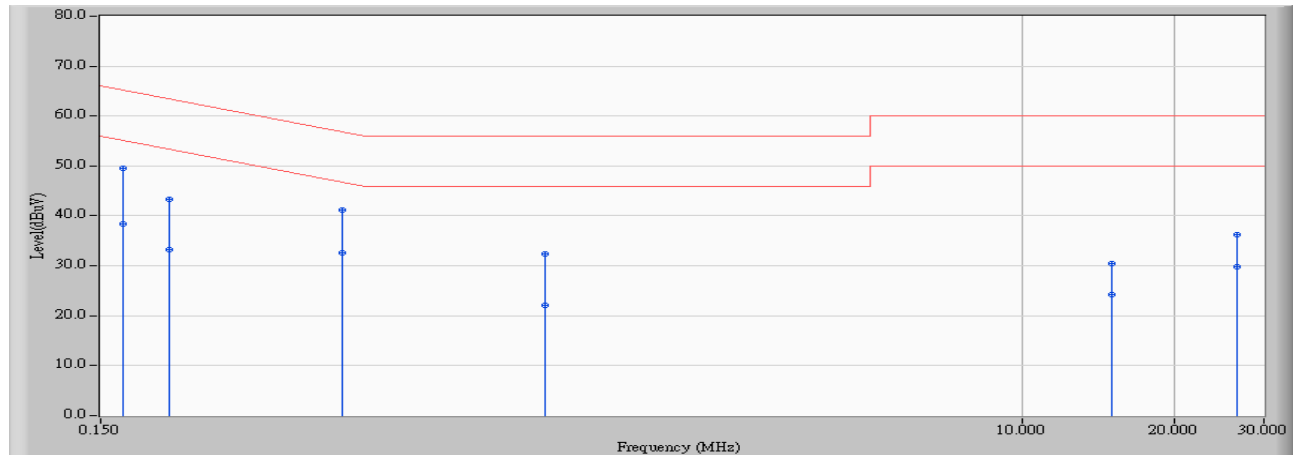
According to FCC Part 15 Subpart C Paragraph 15.207: 2014

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

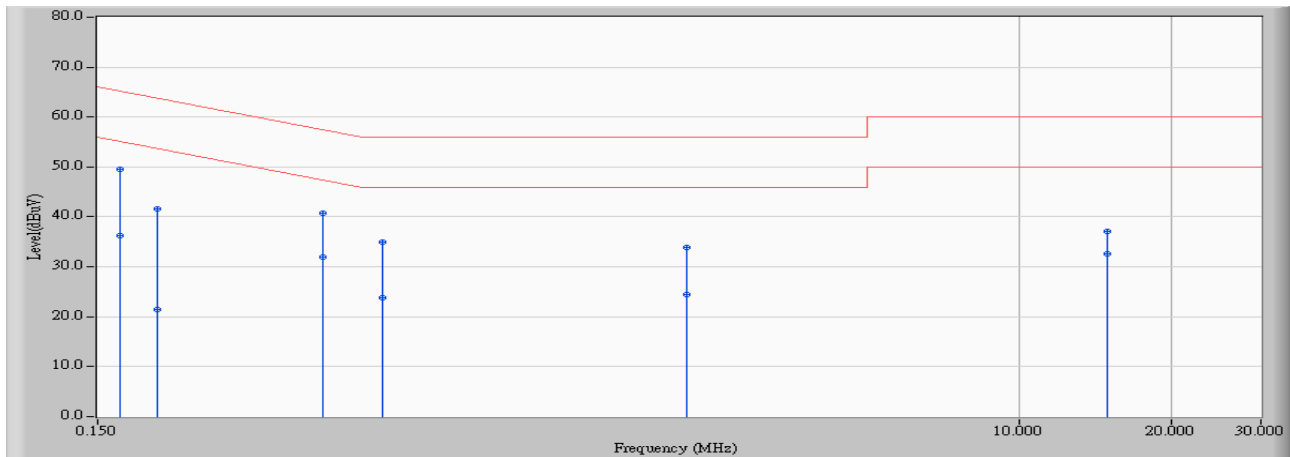


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.760	39.790	49.550	-15.627	65.177	QUASPEAK
2		0.166	9.760	28.590	38.350	-16.827	55.177	AVERAGE
3		0.205	9.760	33.610	43.370	-20.049	63.418	QUASPEAK
4		0.205	9.760	23.410	33.170	-20.249	53.418	AVERAGE
5		0.451	9.751	31.360	41.111	-15.750	56.861	QUASPEAK
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	QUASPEAK
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	QUASPEAK
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	QUASPEAK
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

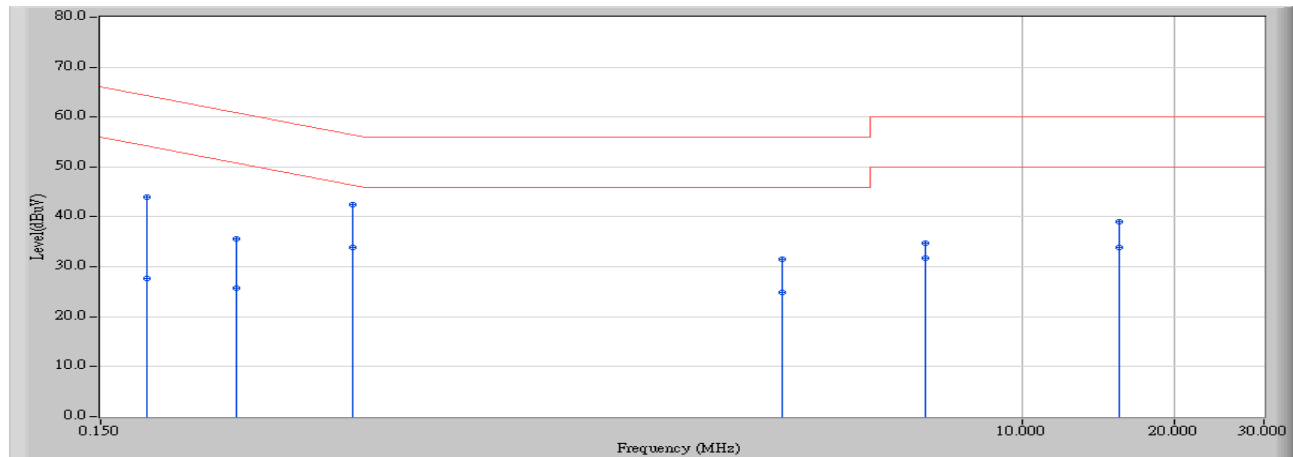


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.810	39.790	49.600	-15.577	65.177	QUASPEAK
2		0.166	9.810	26.390	36.200	-18.977	55.177	AVERAGE
3		0.197	9.810	31.890	41.700	-22.041	63.741	QUASPEAK
4		0.197	9.810	11.730	21.540	-32.201	53.741	AVERAGE
5		0.420	9.820	30.950	40.770	-16.687	57.457	QUASPEAK
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	QUASPEAK
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	QUASPEAK
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	QUASPEAK
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

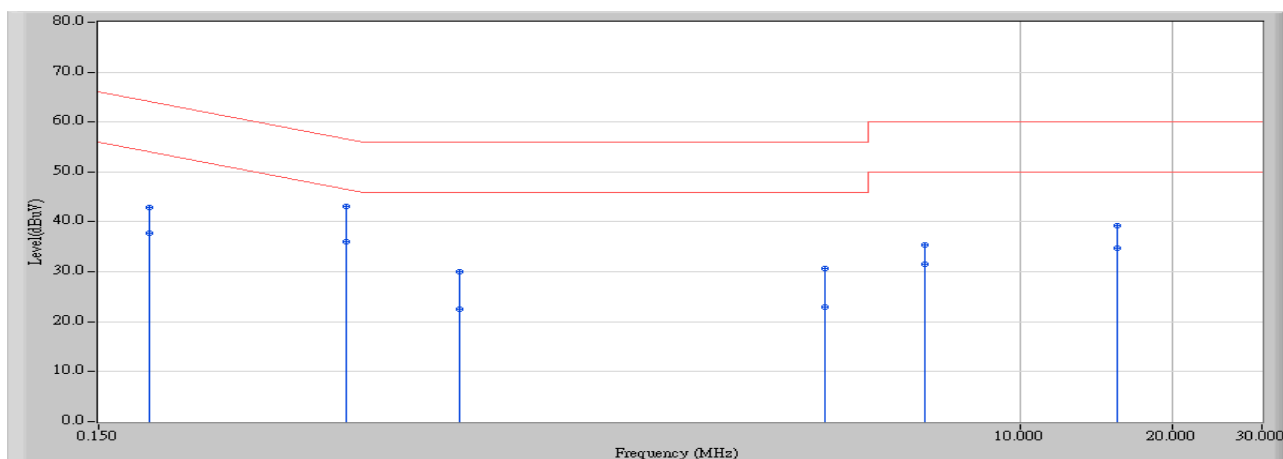


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.185	9.688	34.200	43.888	-20.363	64.251	QUASPEAK
2		0.185	9.688	17.960	27.648	-26.603	54.251	AVERAGE
3		0.279	9.694	25.820	35.514	-25.334	60.848	QUASPEAK
4		0.279	9.694	16.070	25.764	-25.084	50.848	AVERAGE
5		0.474	9.716	32.790	42.506	-13.934	56.440	QUASPEAK
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	QUASPEAK
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	QUASPEAK
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	QUASPEAK
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

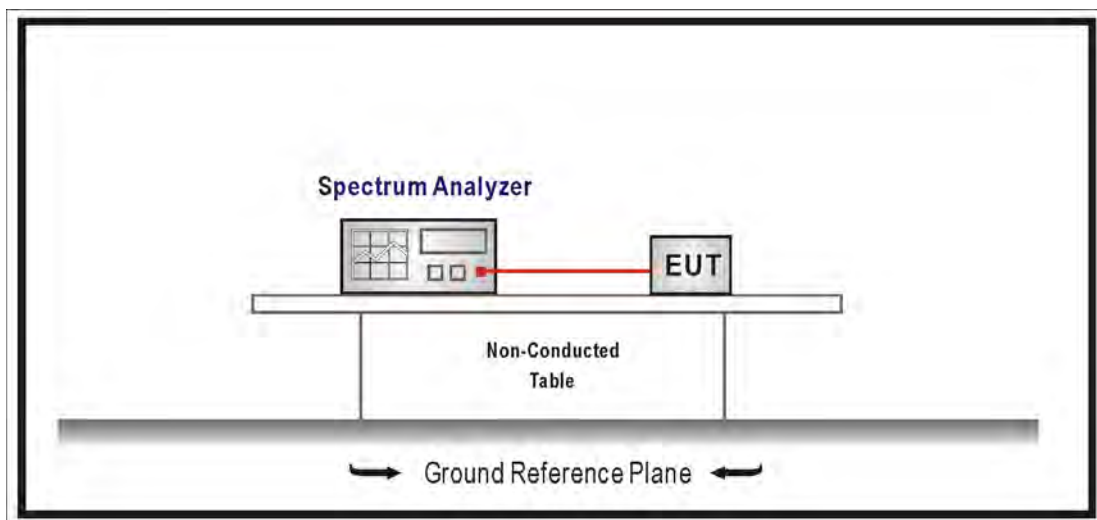
The following test equipments are used during the radiated emission tests:

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

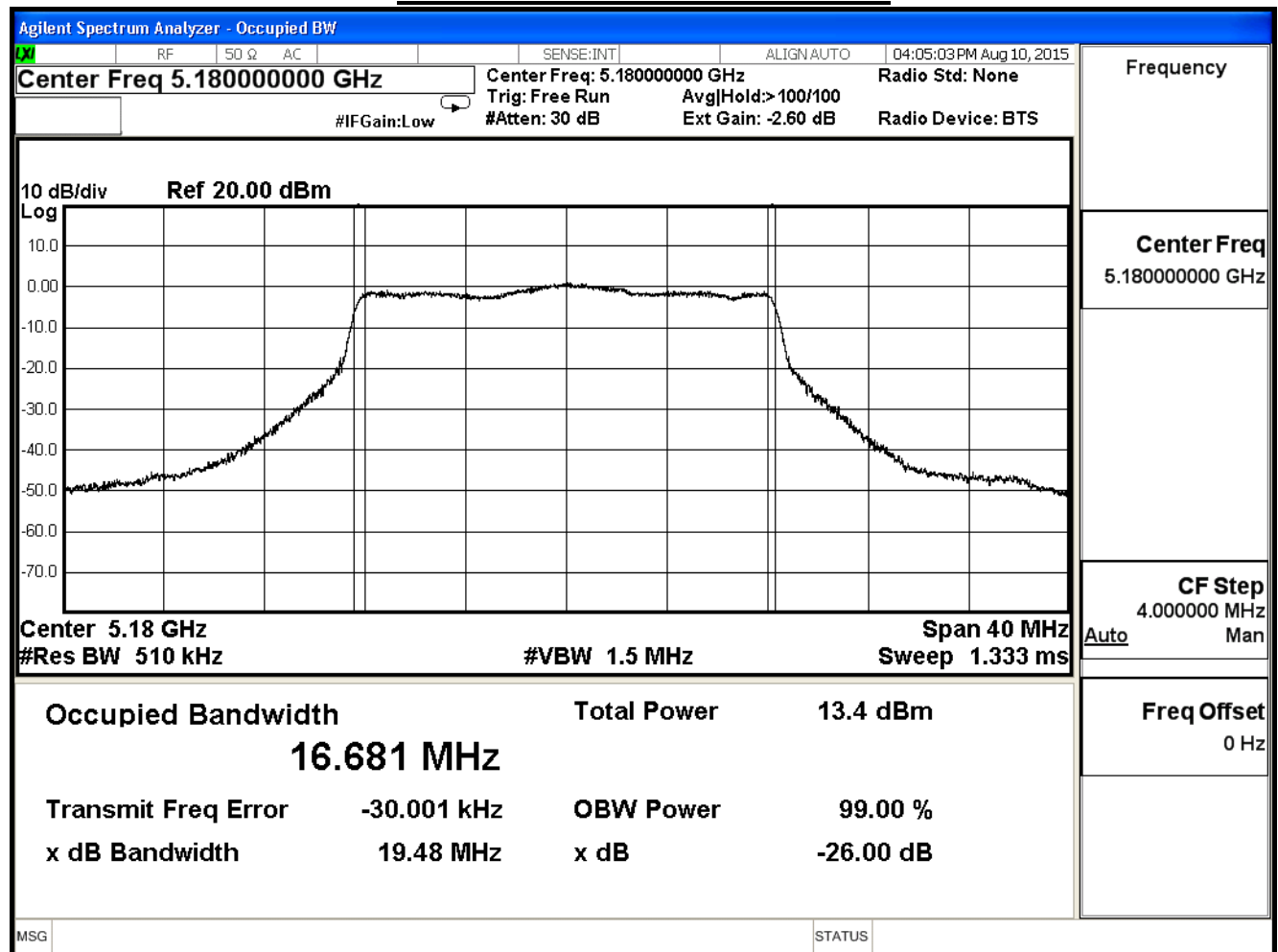
The measurement uncertainty is defined as $\pm 150\text{Hz}$

3.6. Test Result

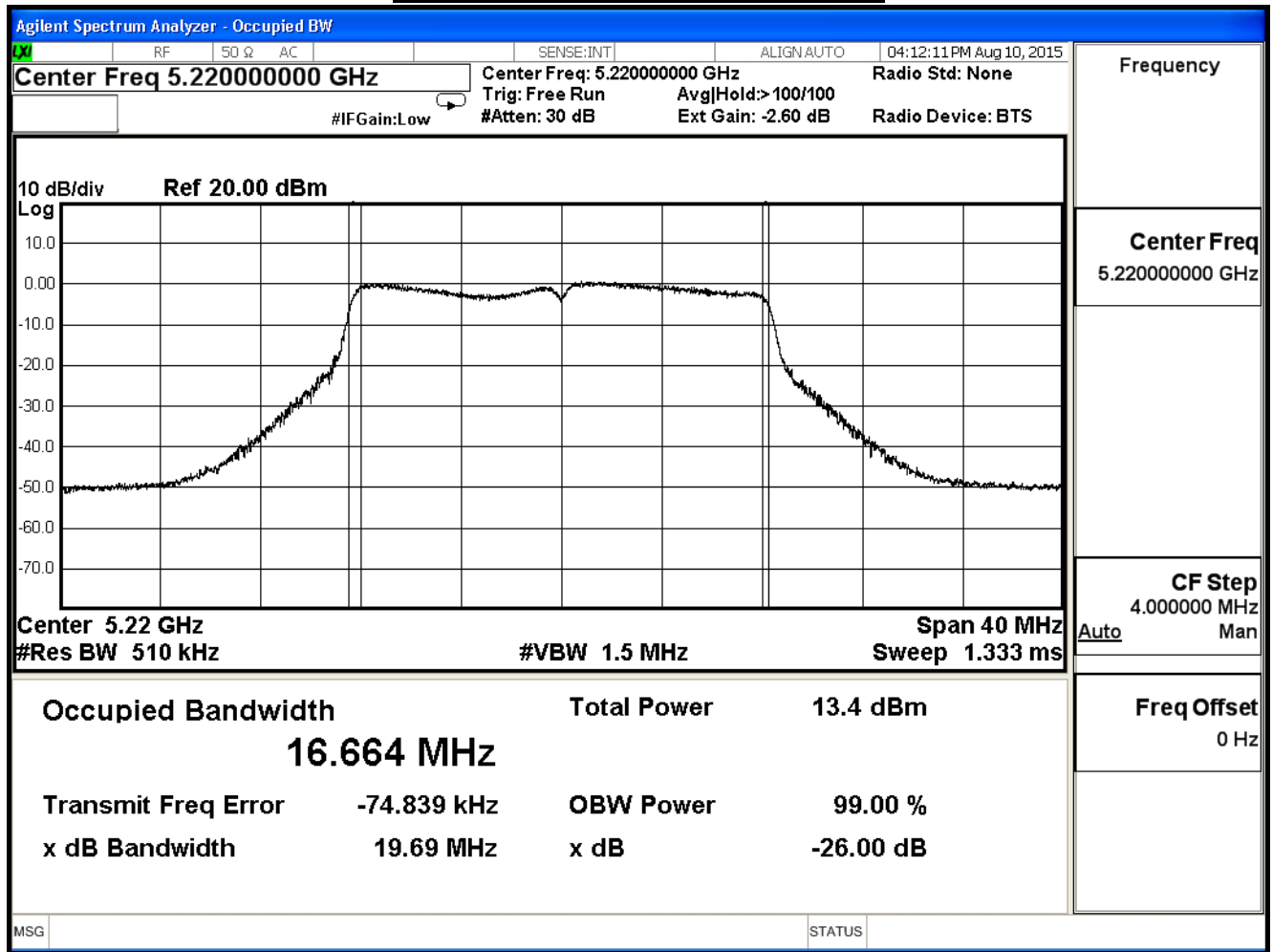
Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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	--

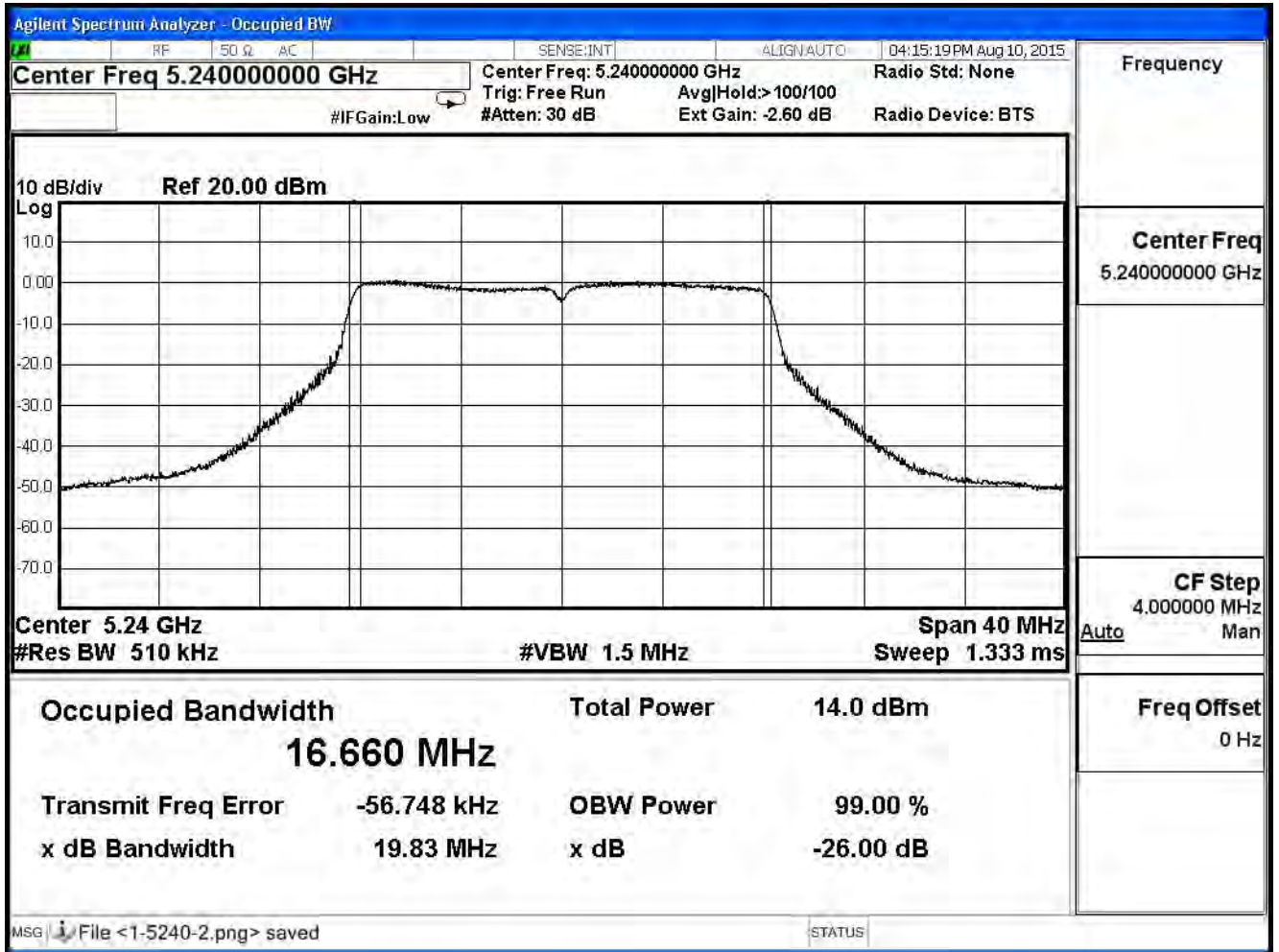
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



99% & 26dB Bandwidth – Channel 48

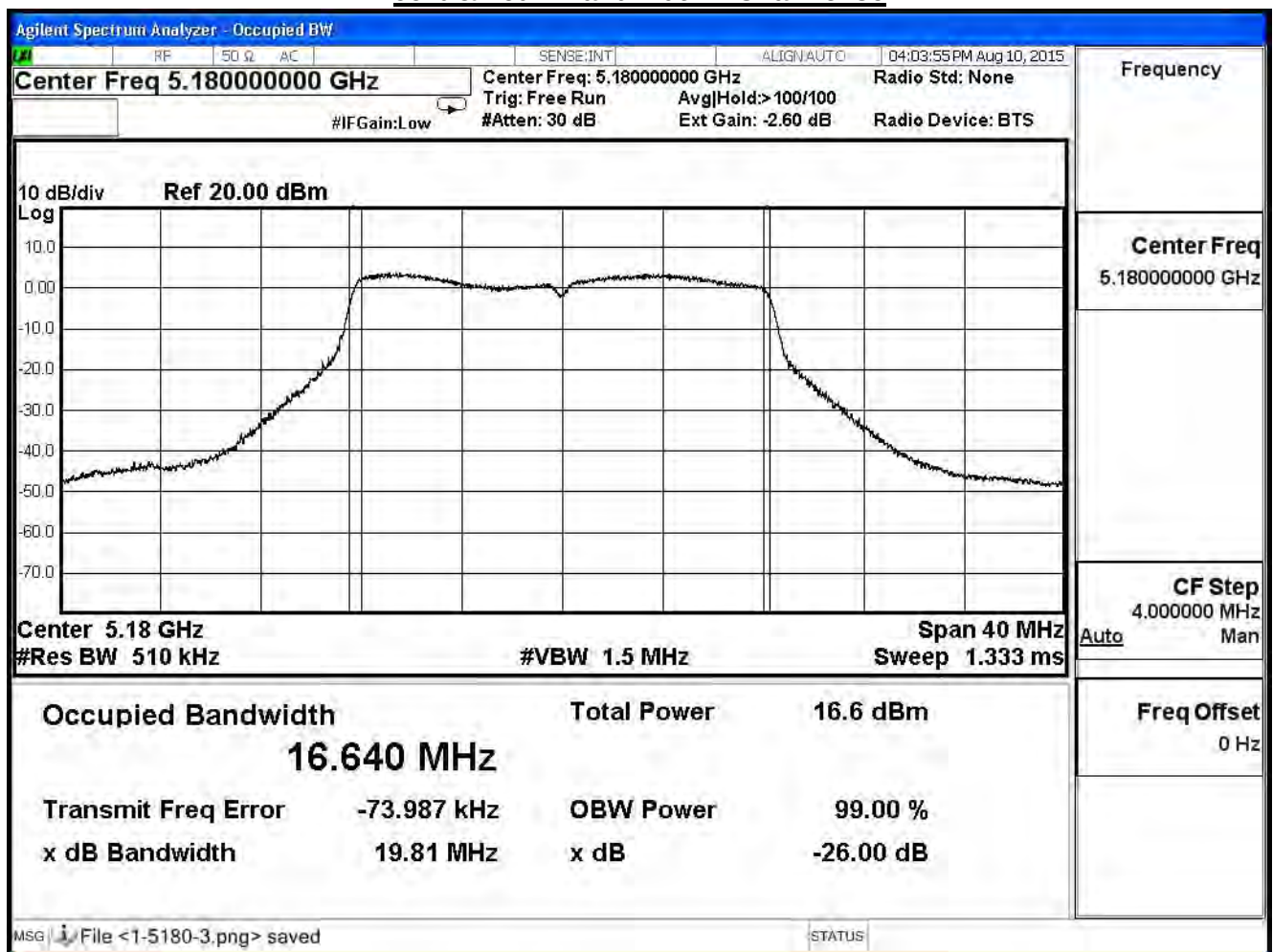


Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

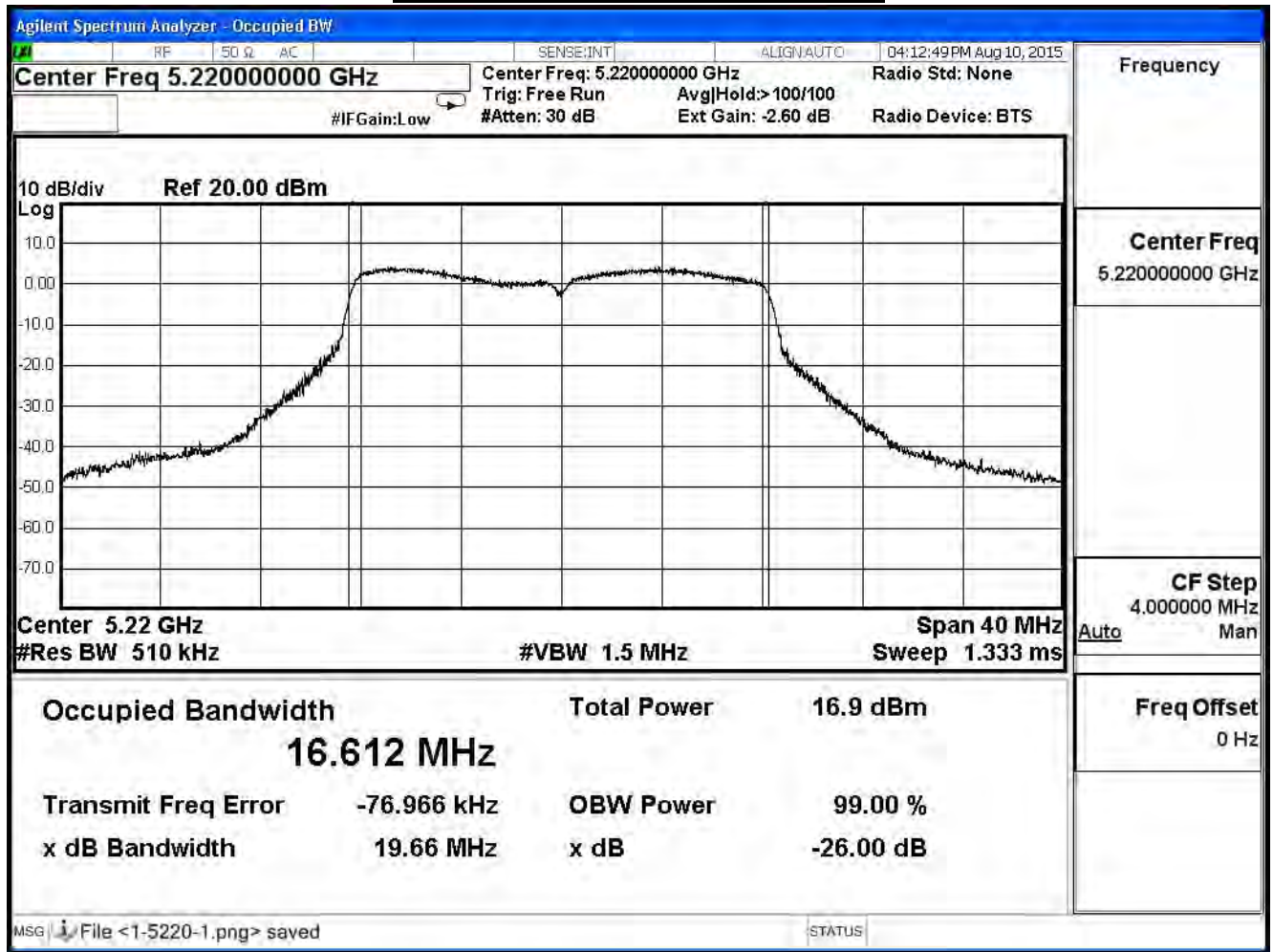
802.11a (ANT 1)

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	--

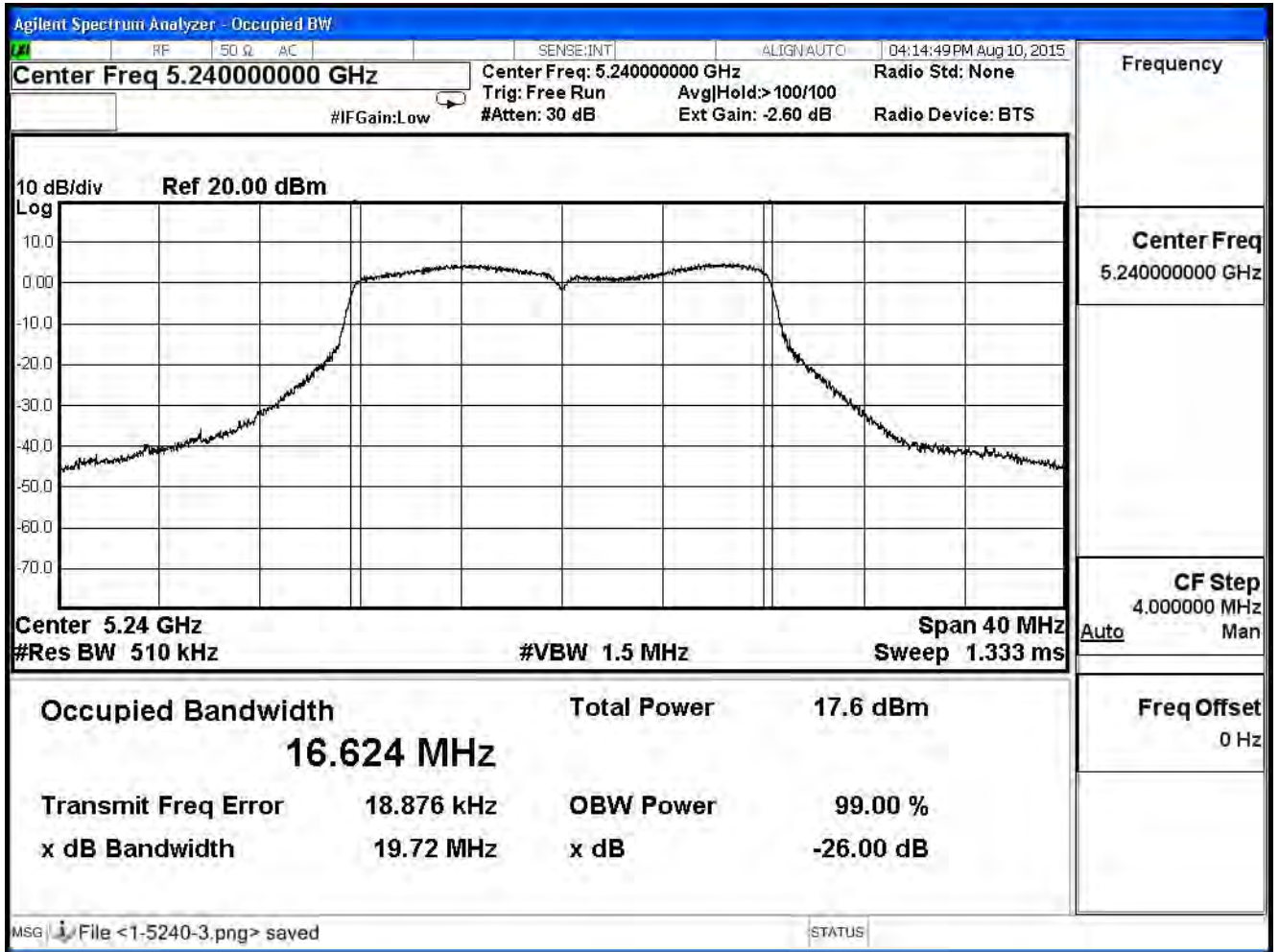
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



99% & 26dB Bandwidth – Channel 48

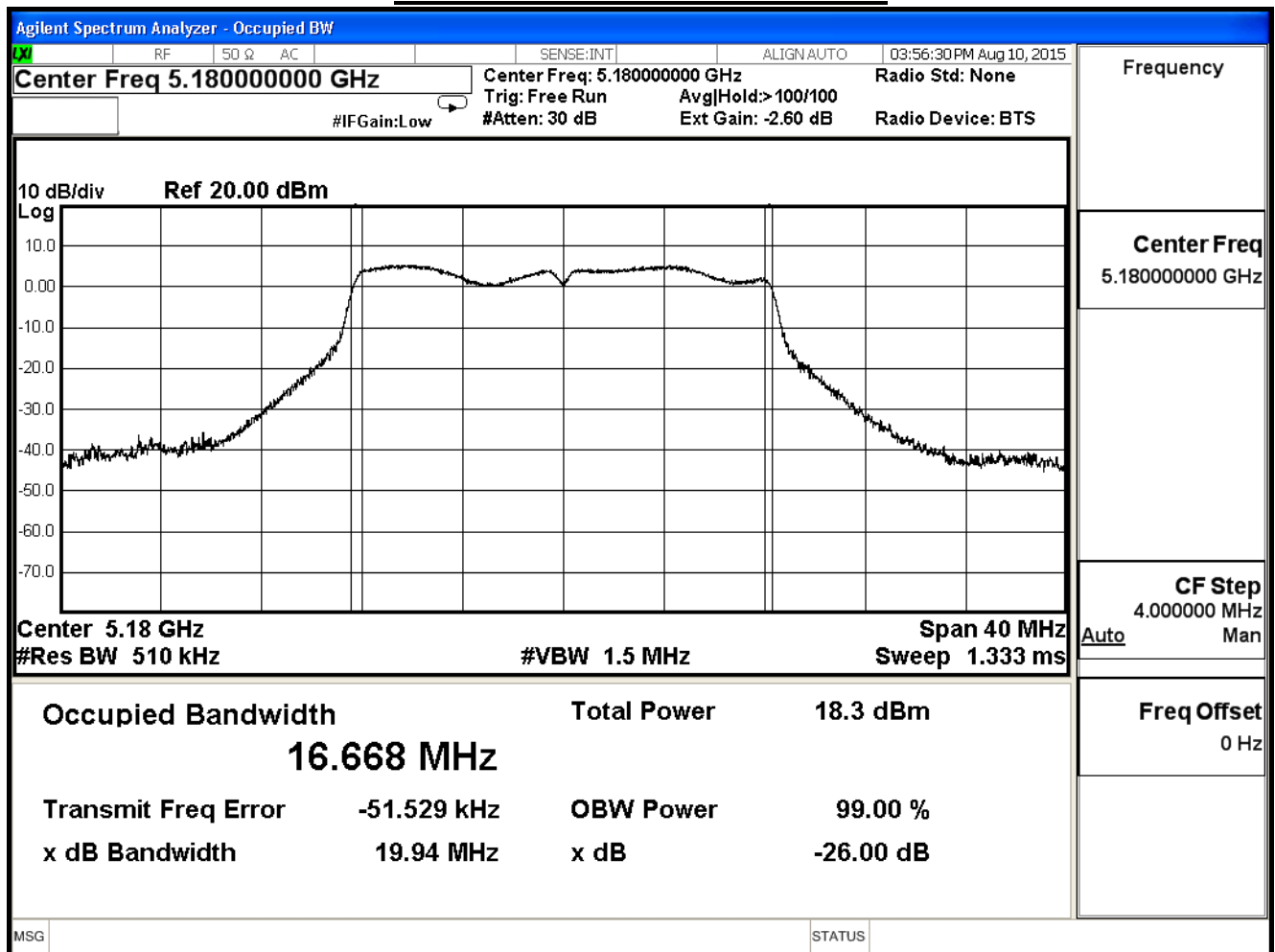


Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

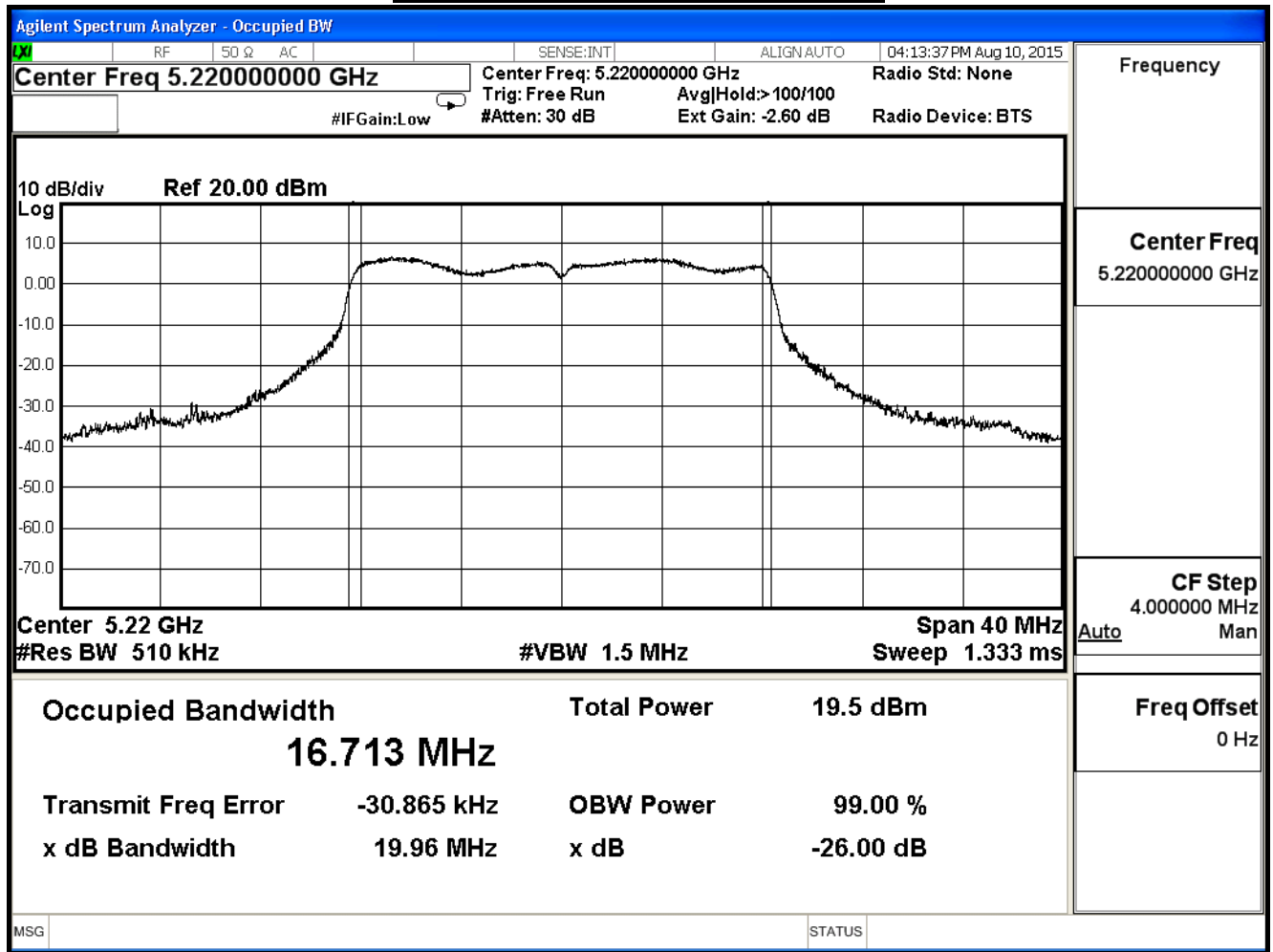
802.11a (ANT 2)

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	--

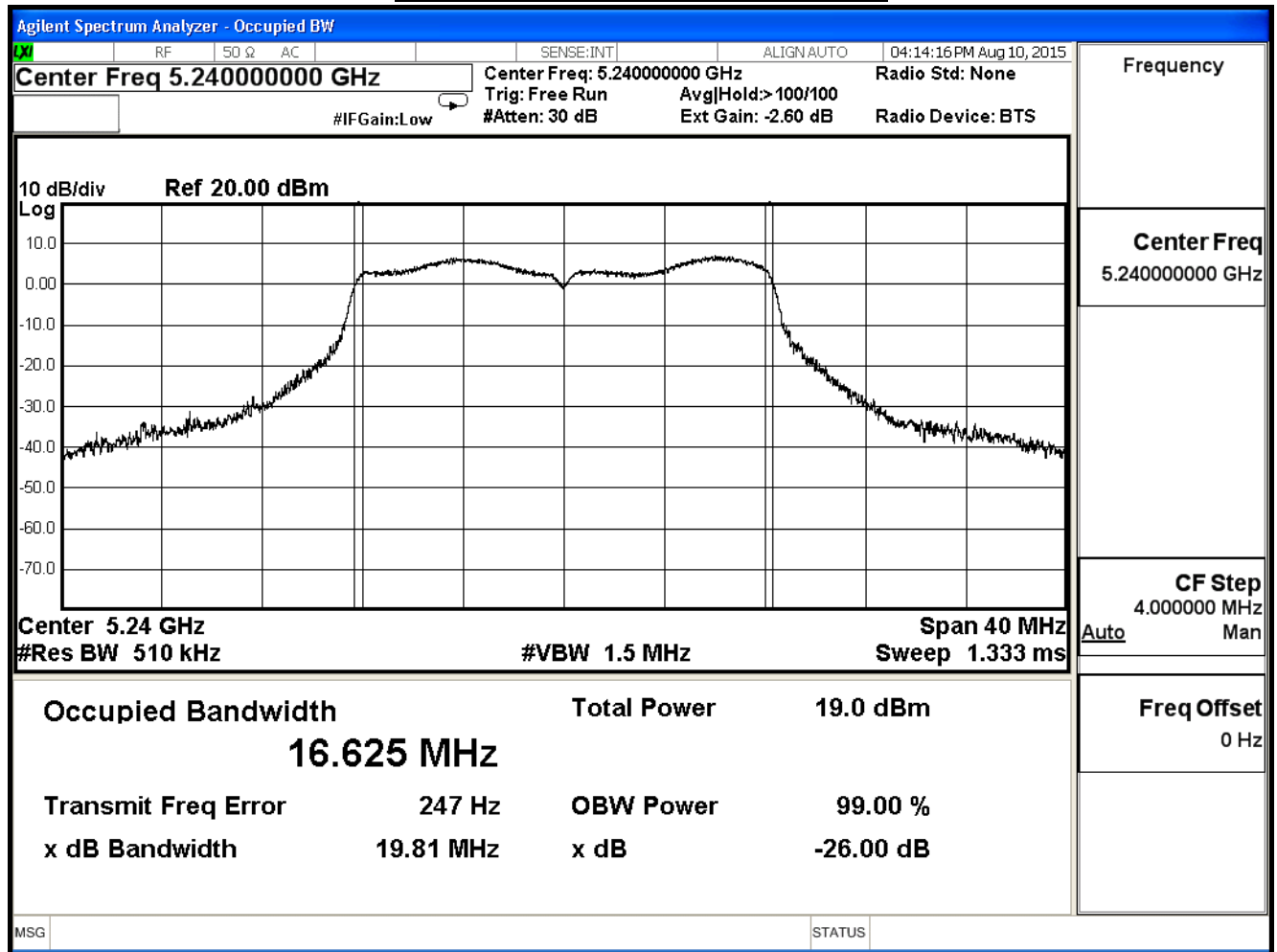
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



99% & 26dB Bandwidth – Channel 48

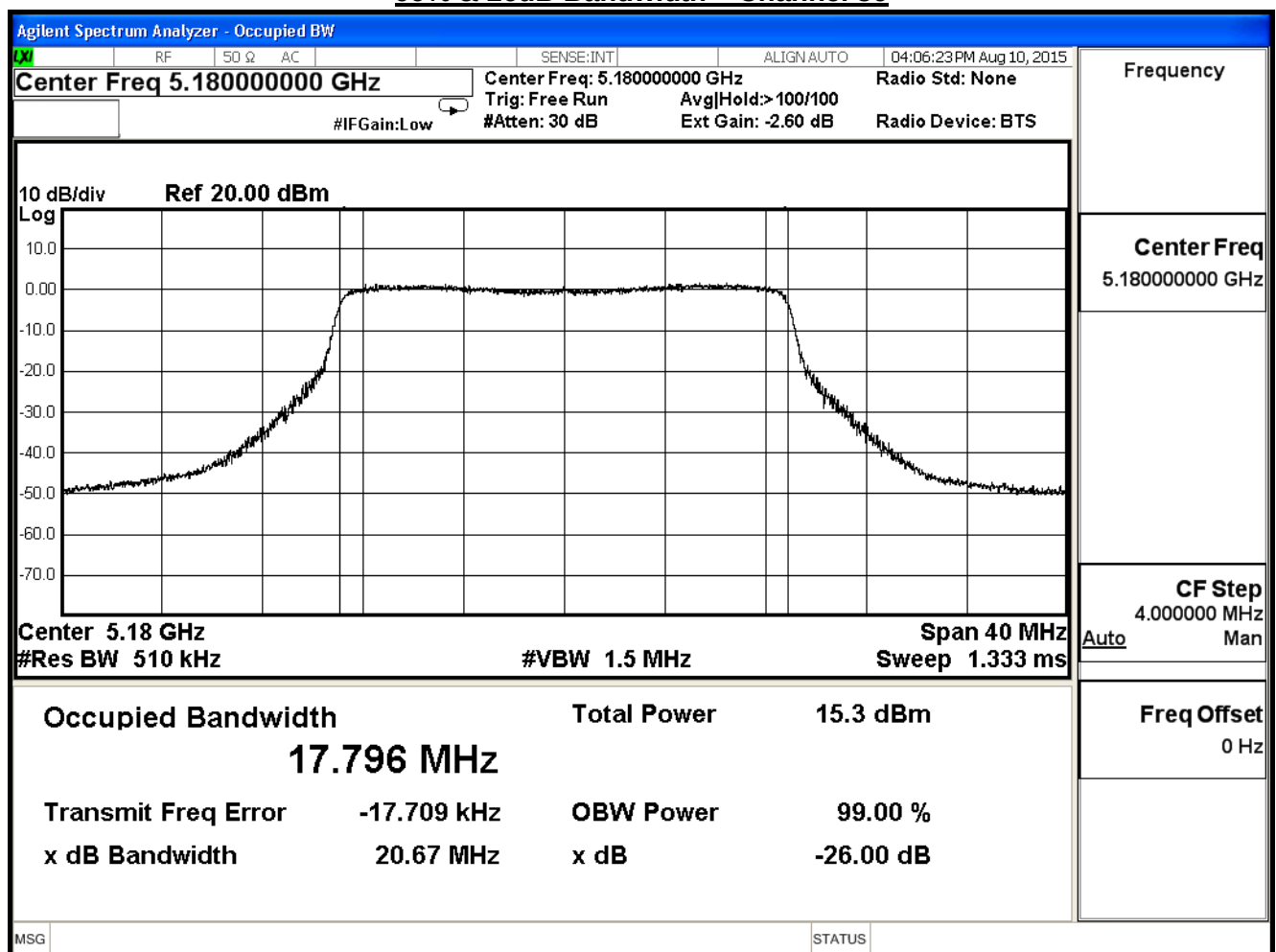


Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

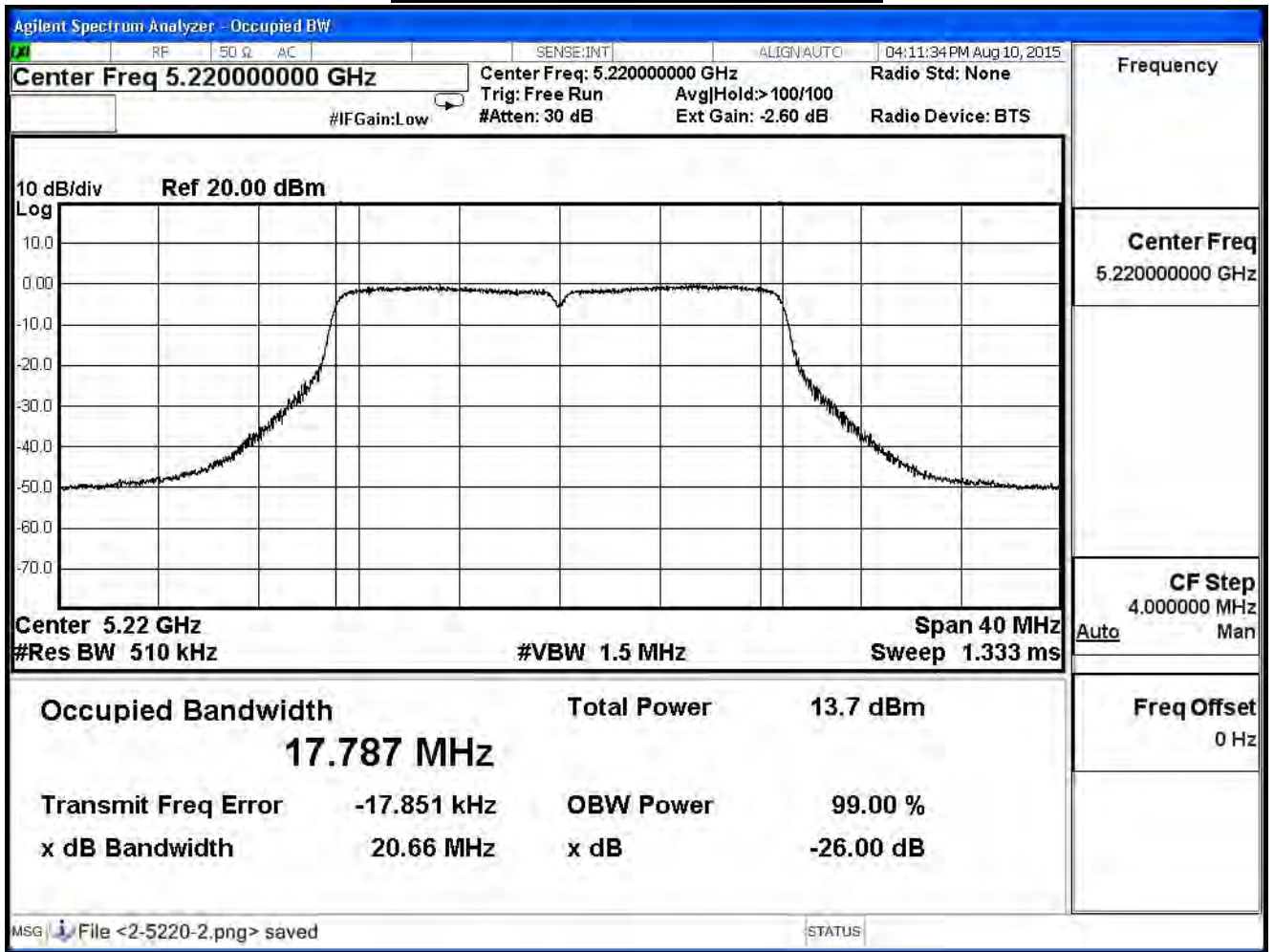
IEEE 802.11n(20MHz)(ANT 0)

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	--

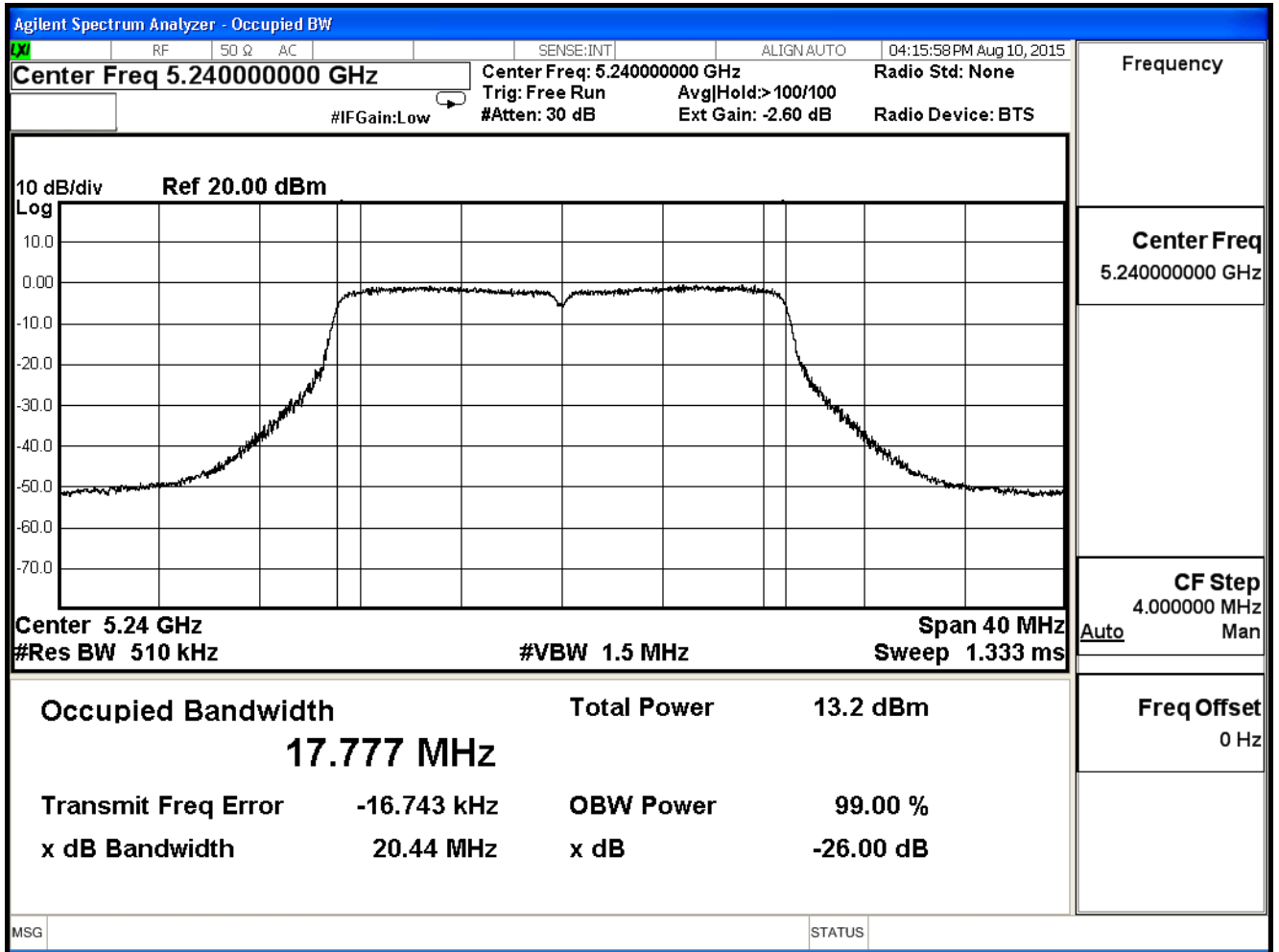
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



99% & 26dB Bandwidth – Channel 48

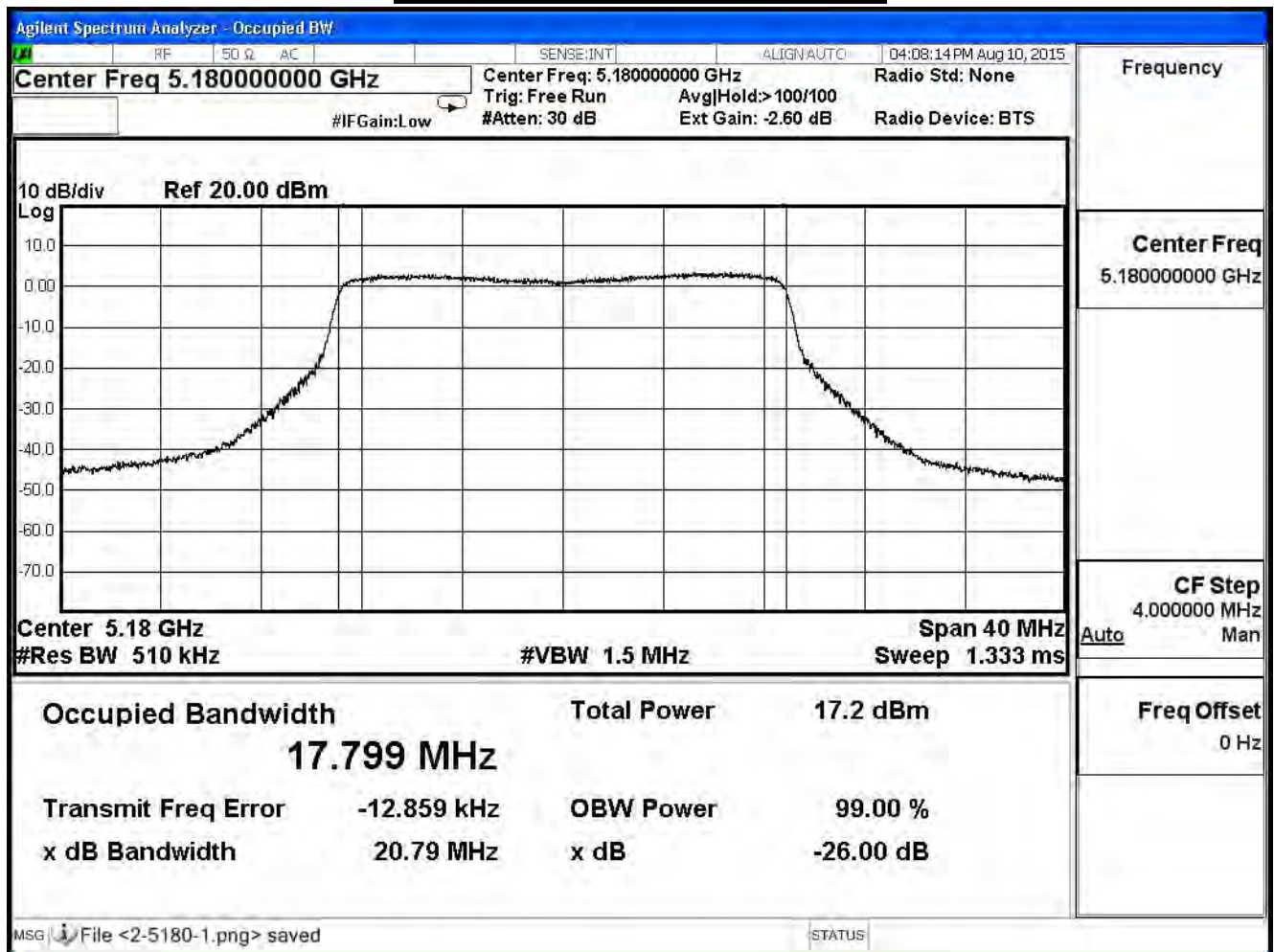


Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

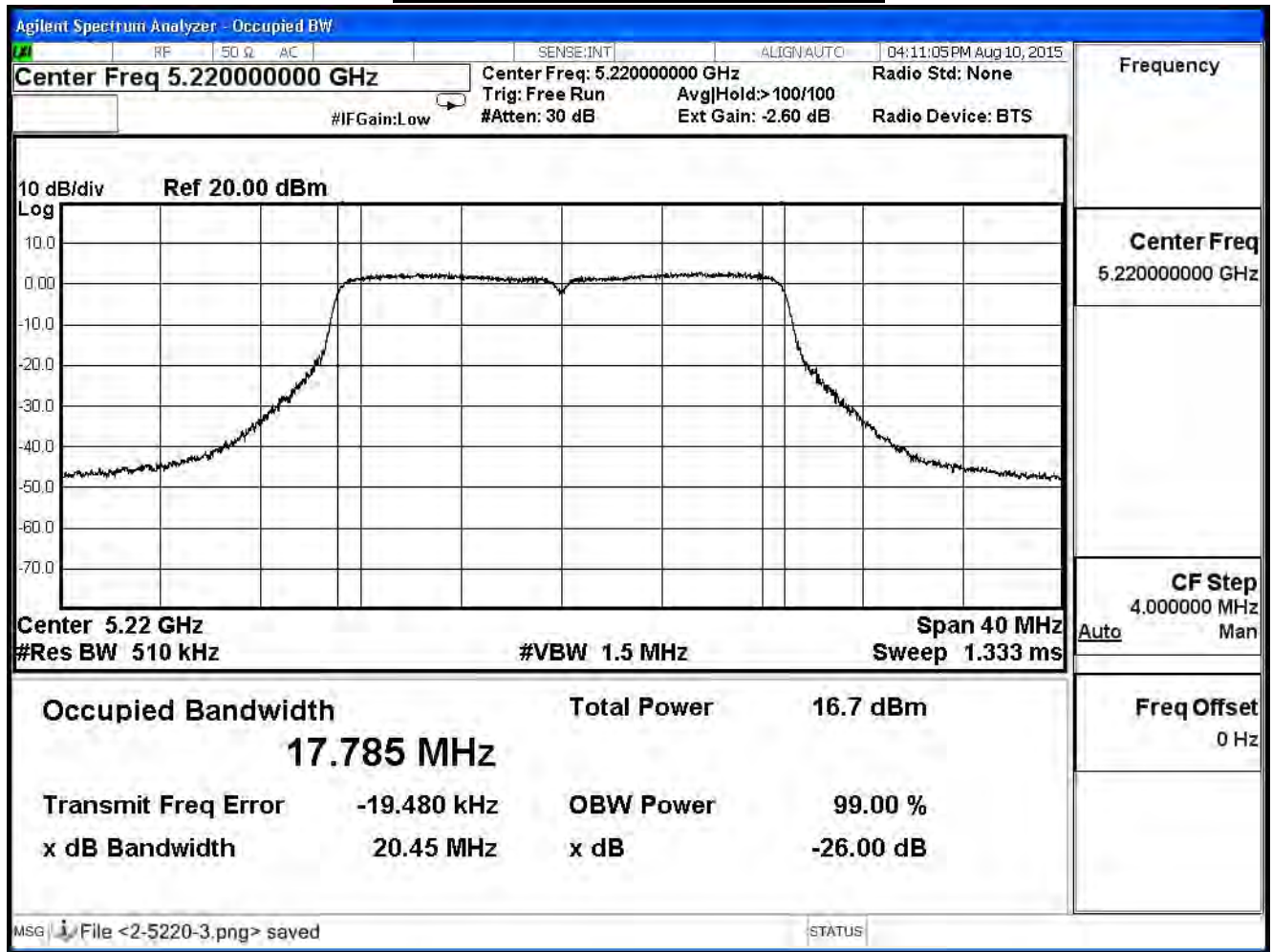
IEEE 802.11n(20MHz)(ANT 1)

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	--

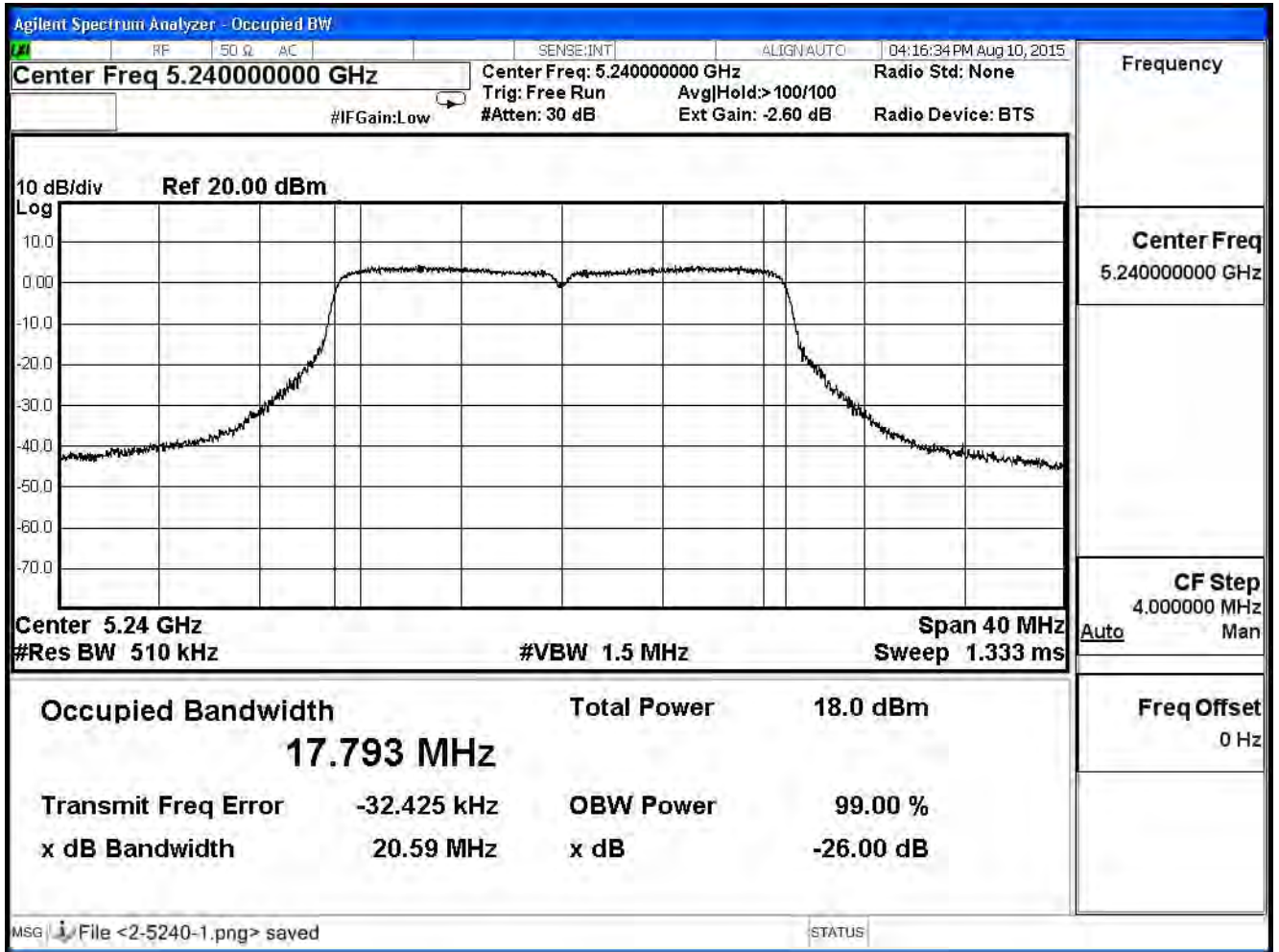
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



99% & 26dB Bandwidth – Channel 48

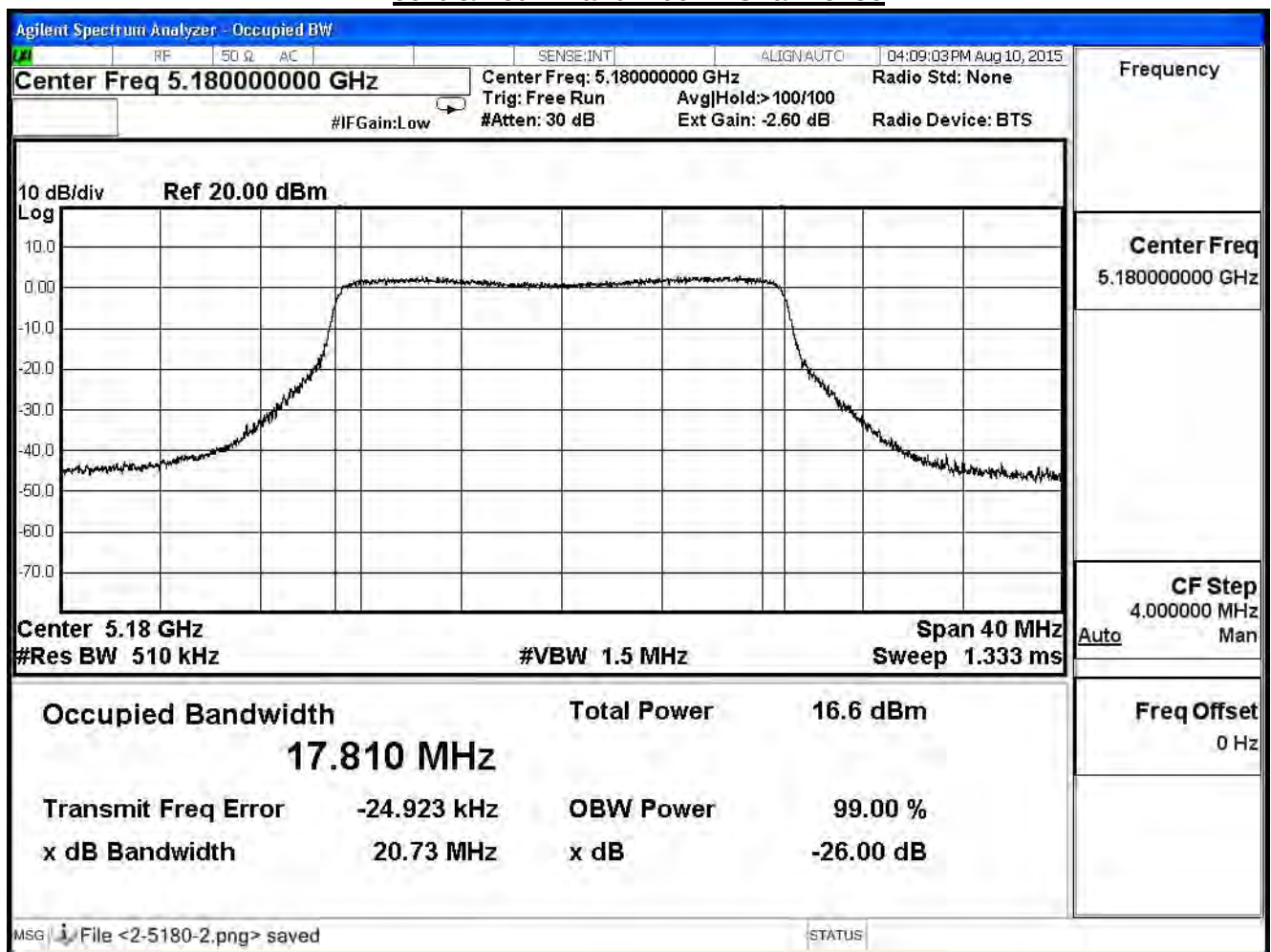


Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

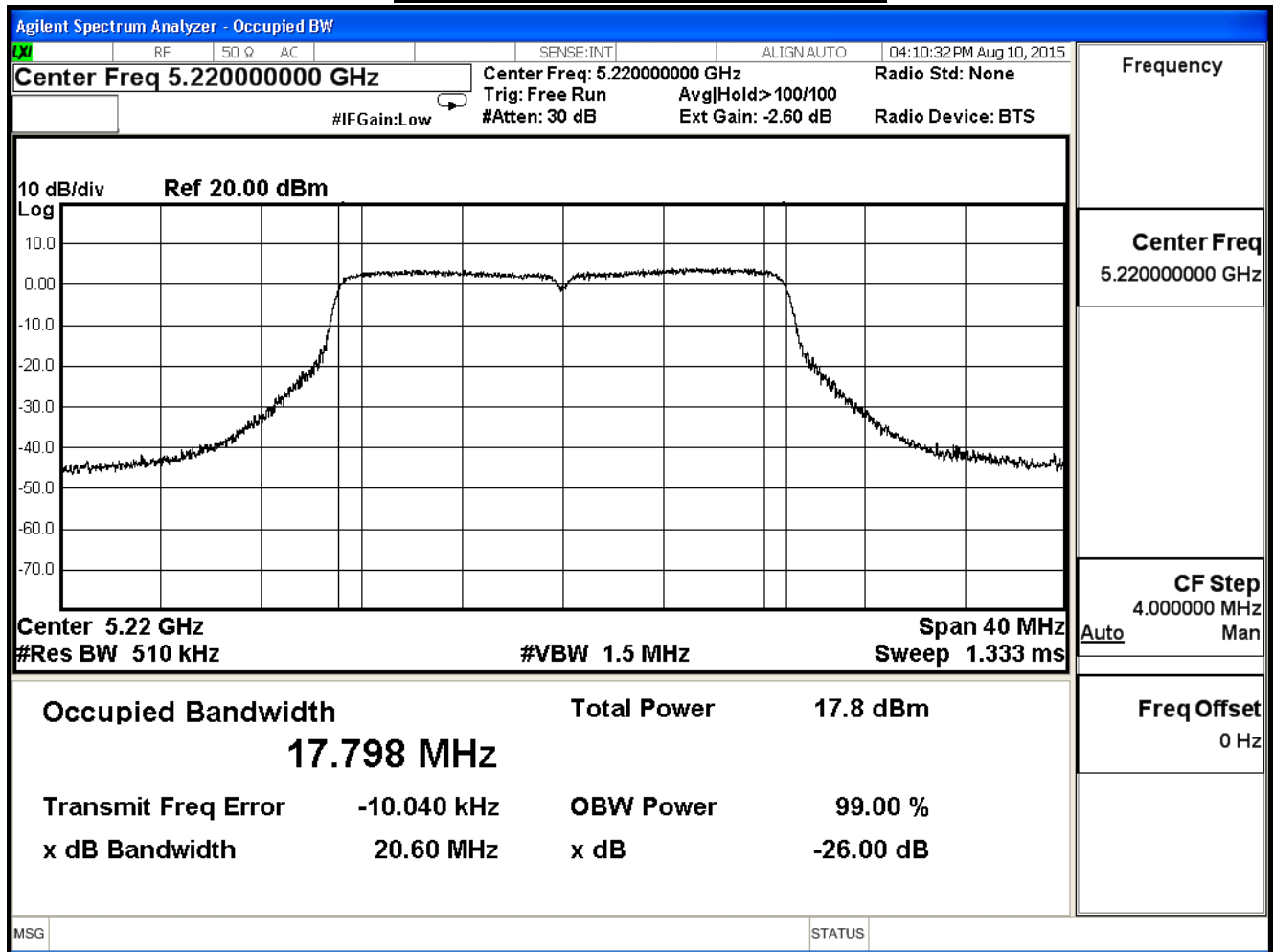
IEEE 802.11n(20MHz)(ANT 2)

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	--

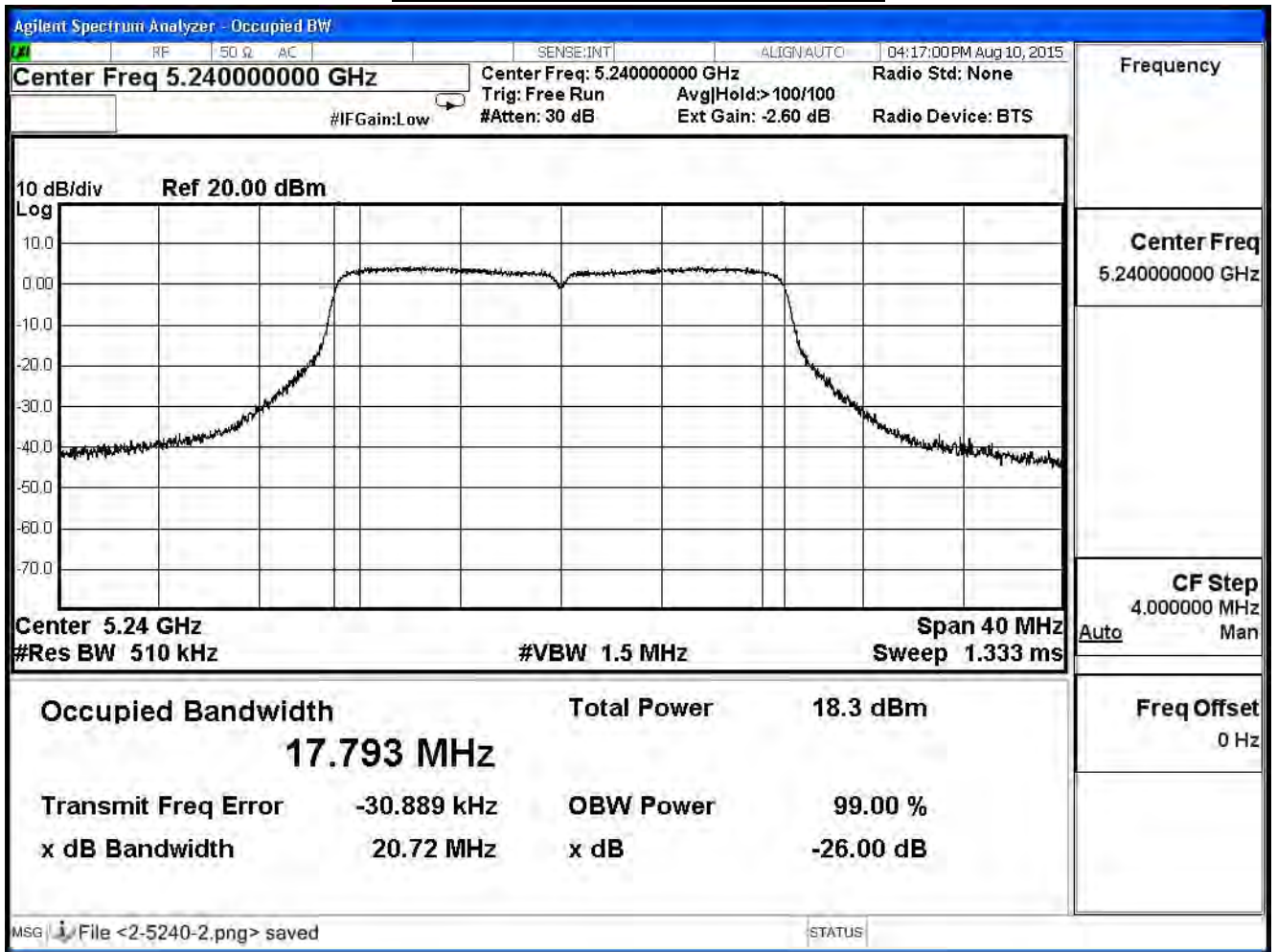
99% & 26dB Bandwidth – Channel 36



99% & 26dB Bandwidth – Channel 44



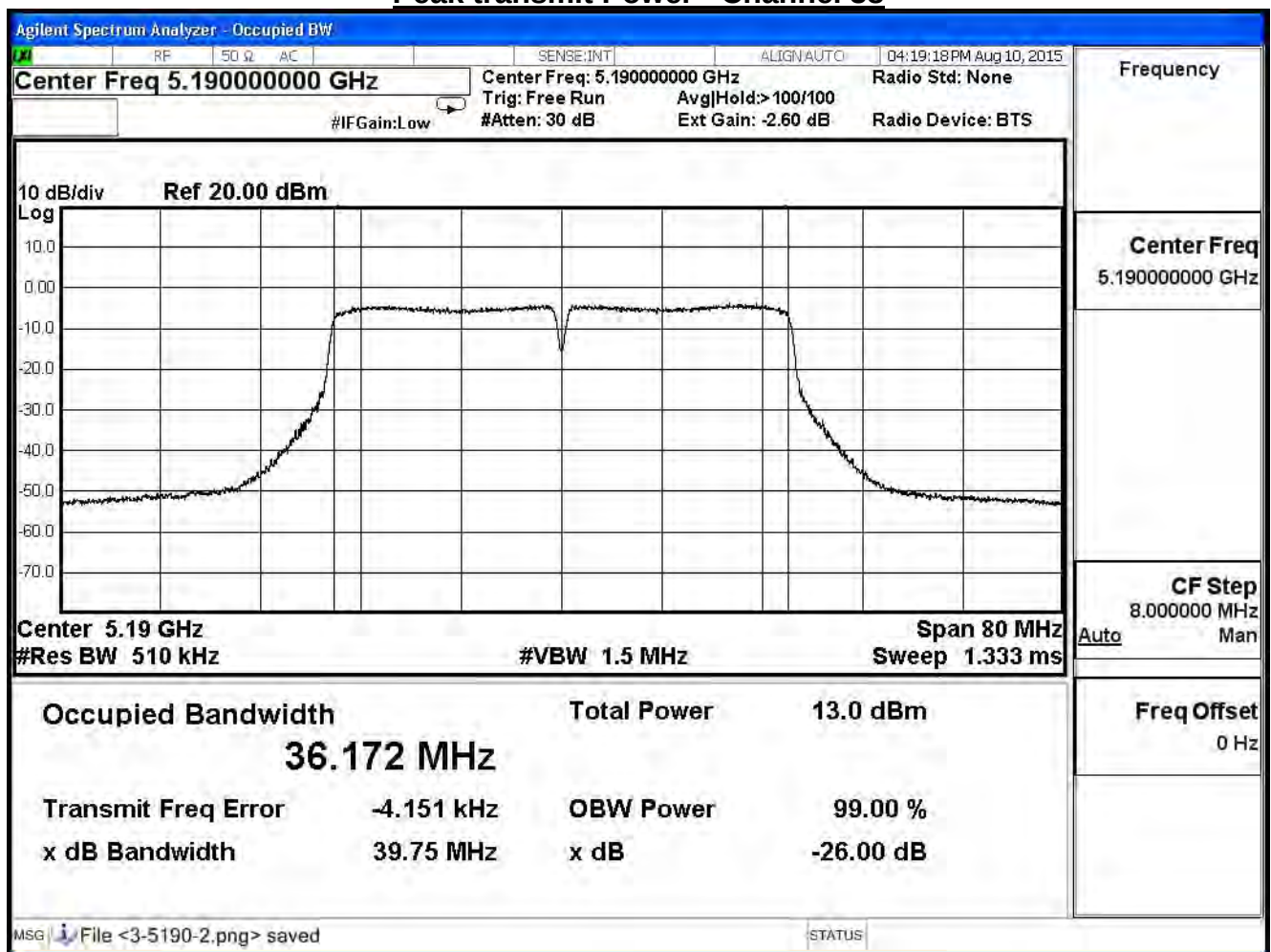
99% & 26dB Bandwidth – Channel 48



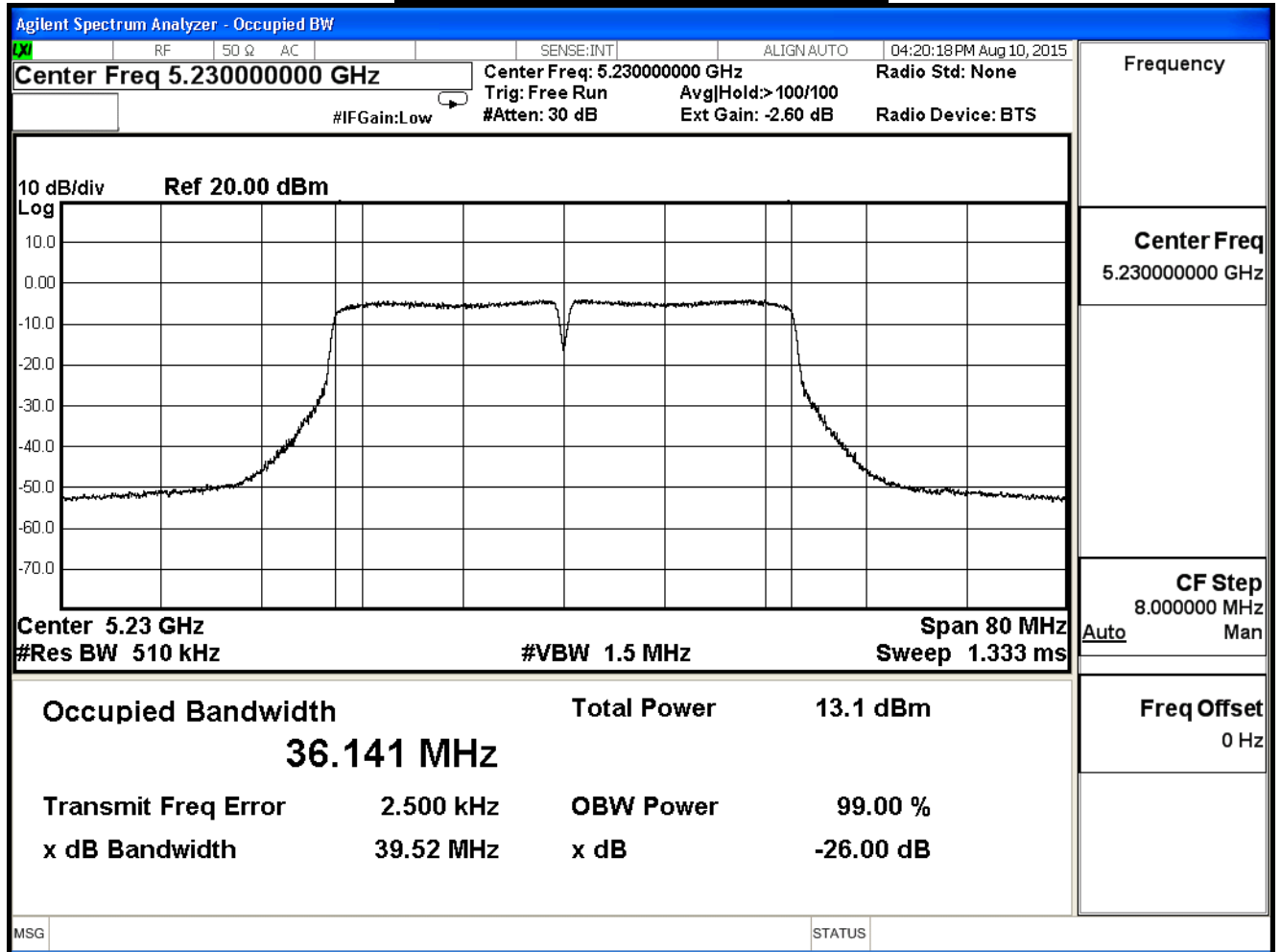
Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

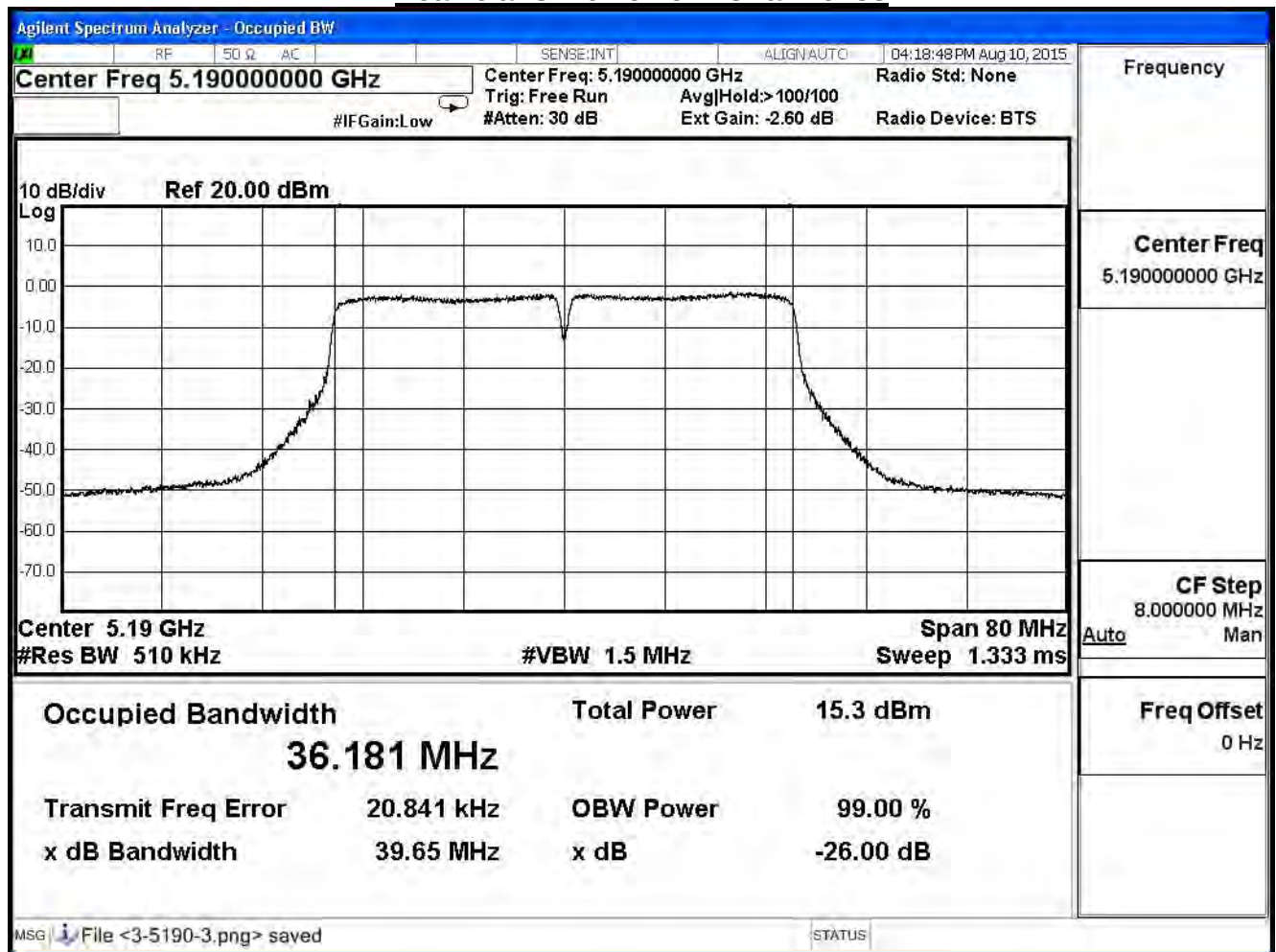


Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

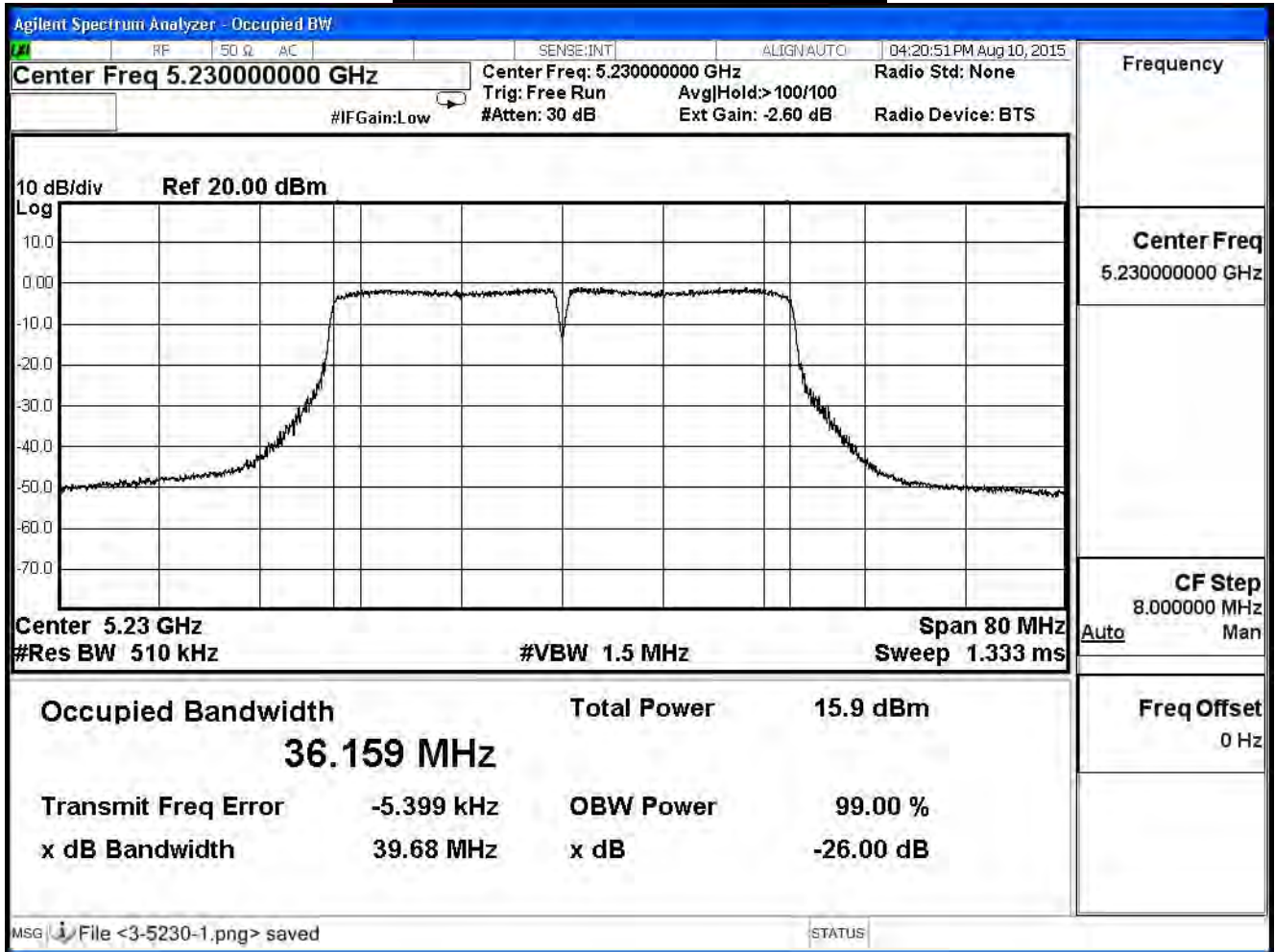
IEEE 802.11n(40MHz)(ANT 1)

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

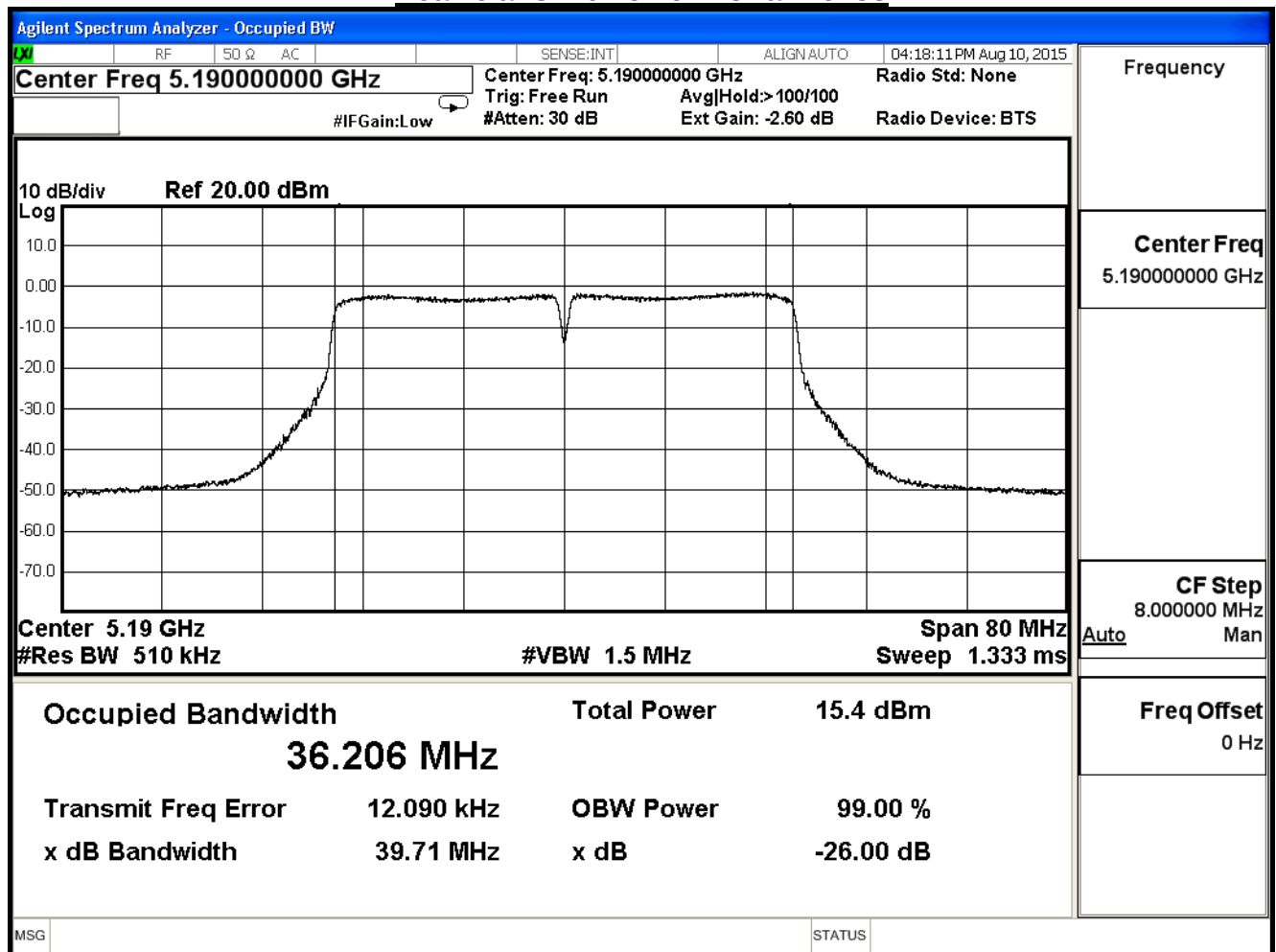


Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

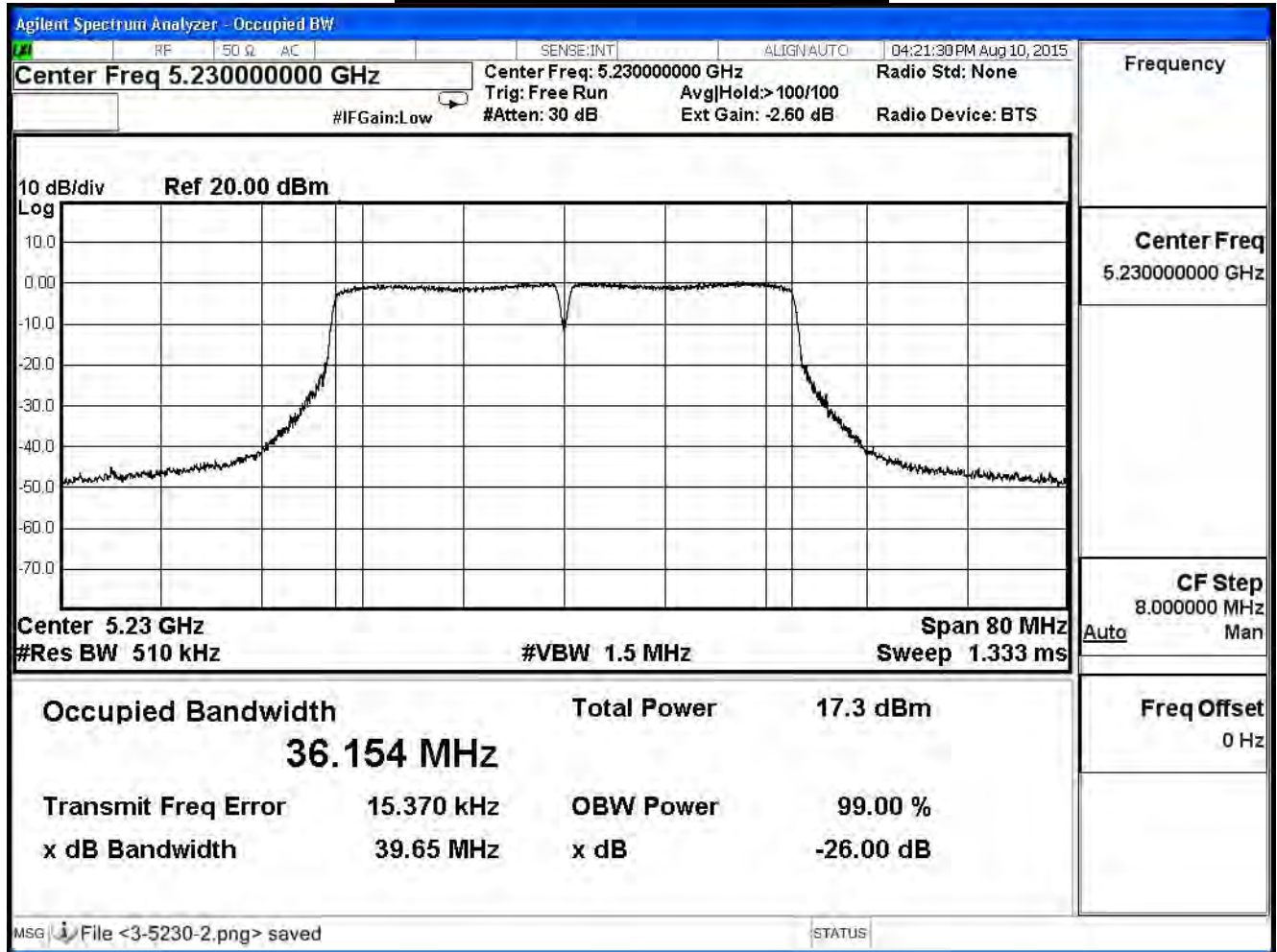
IEEE 802.11n(40MHz)(ANT 2)

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

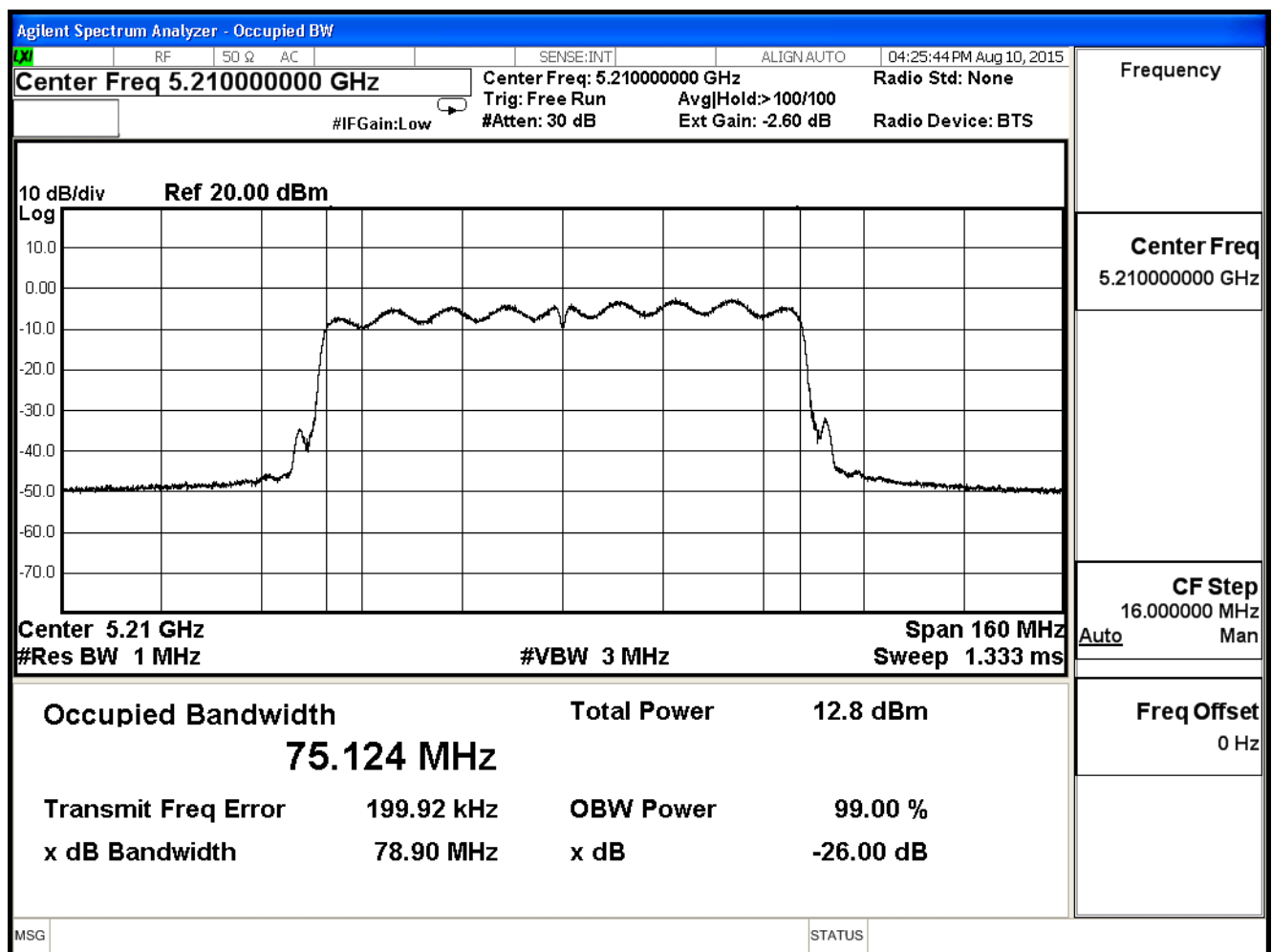


Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

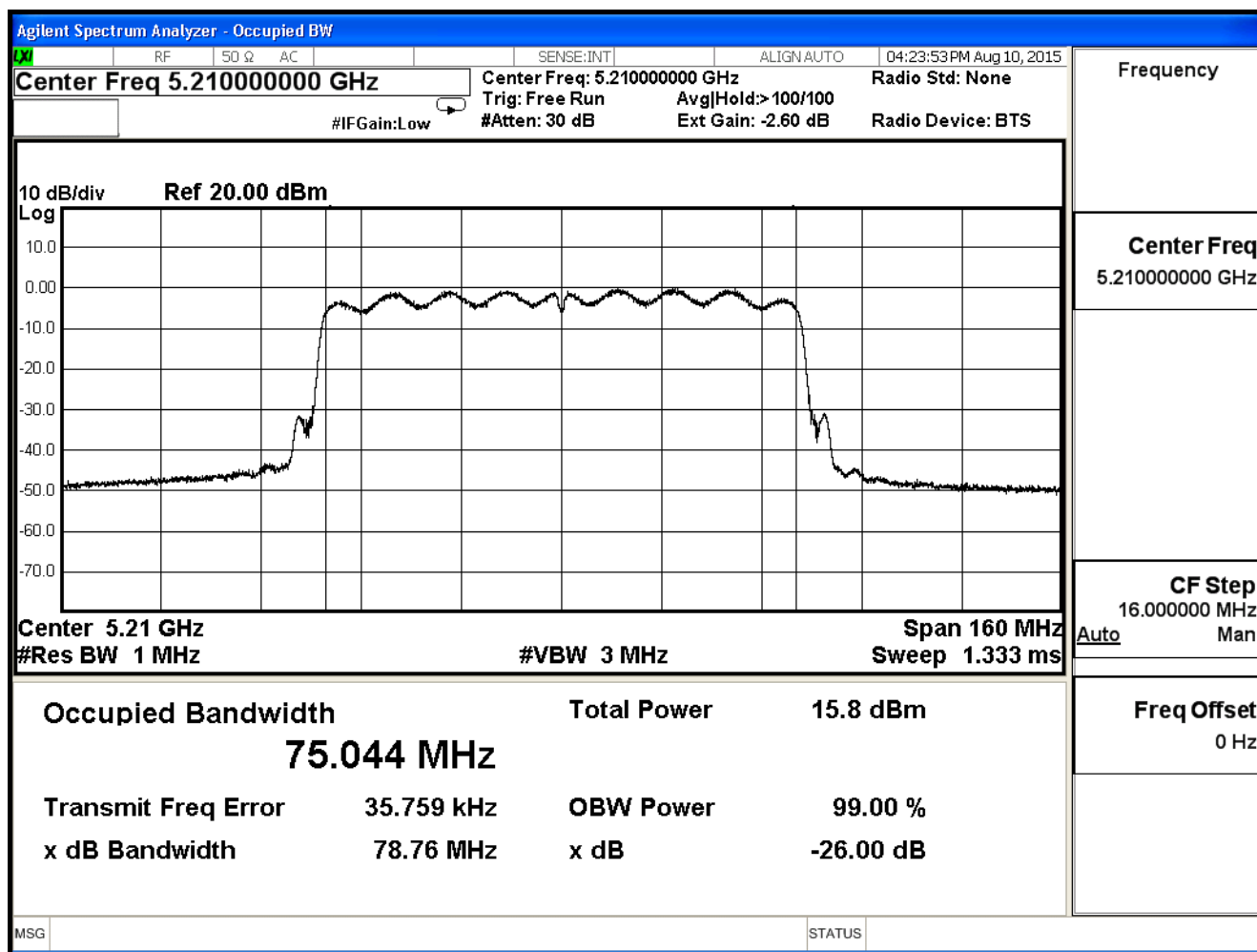


Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

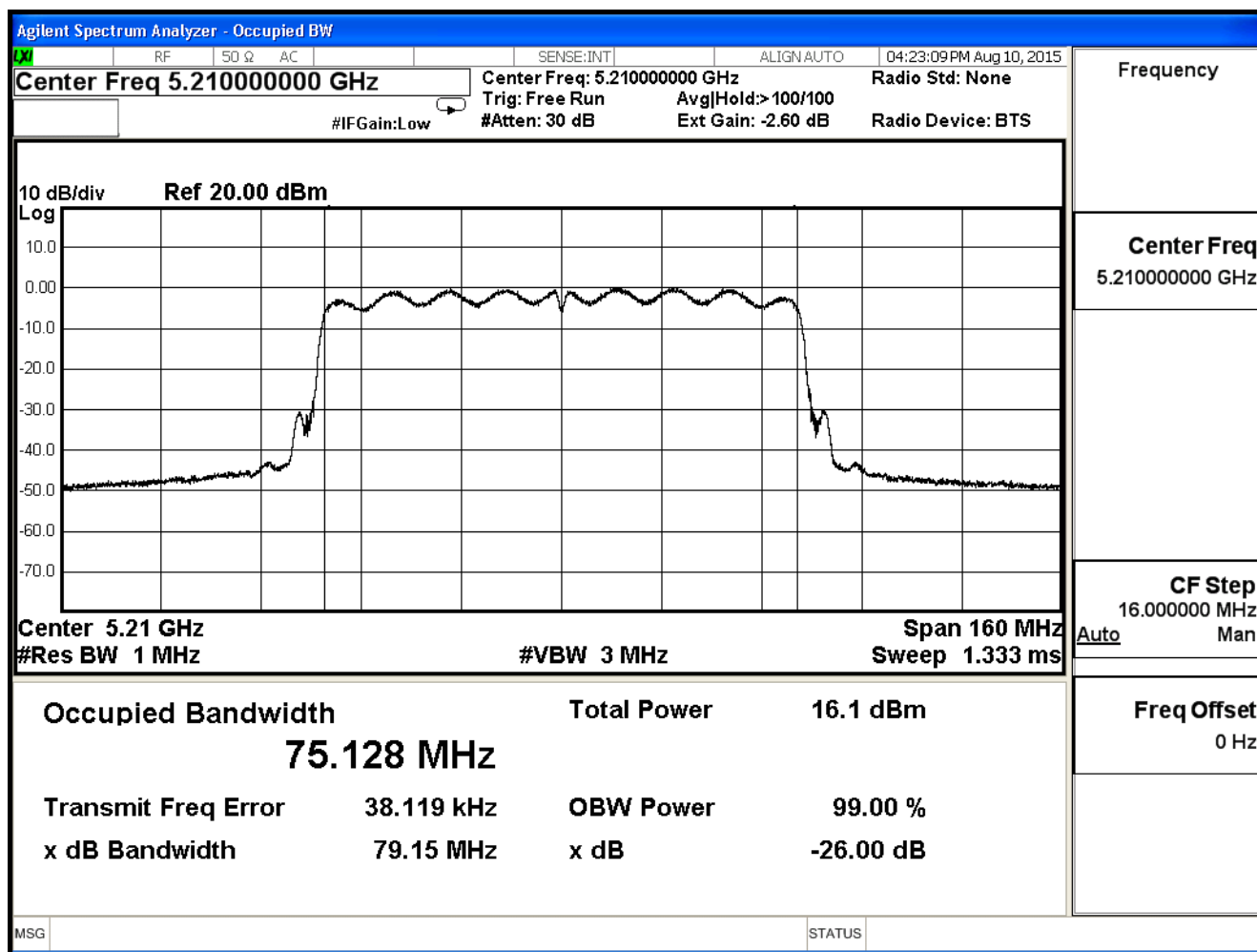


Product	Dual-band Wireless Range Extender		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

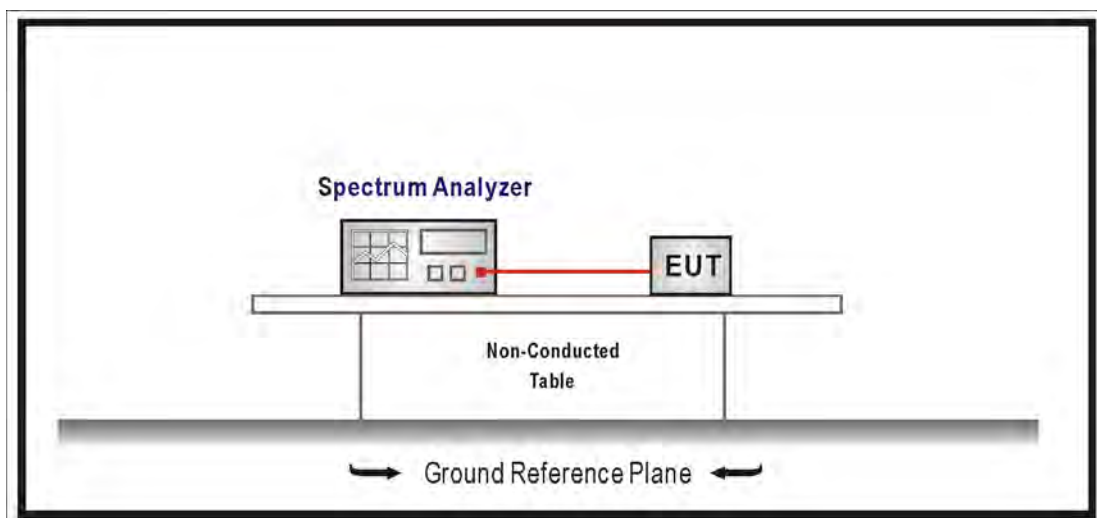
The following test equipments are used during the radiated emission tests:

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

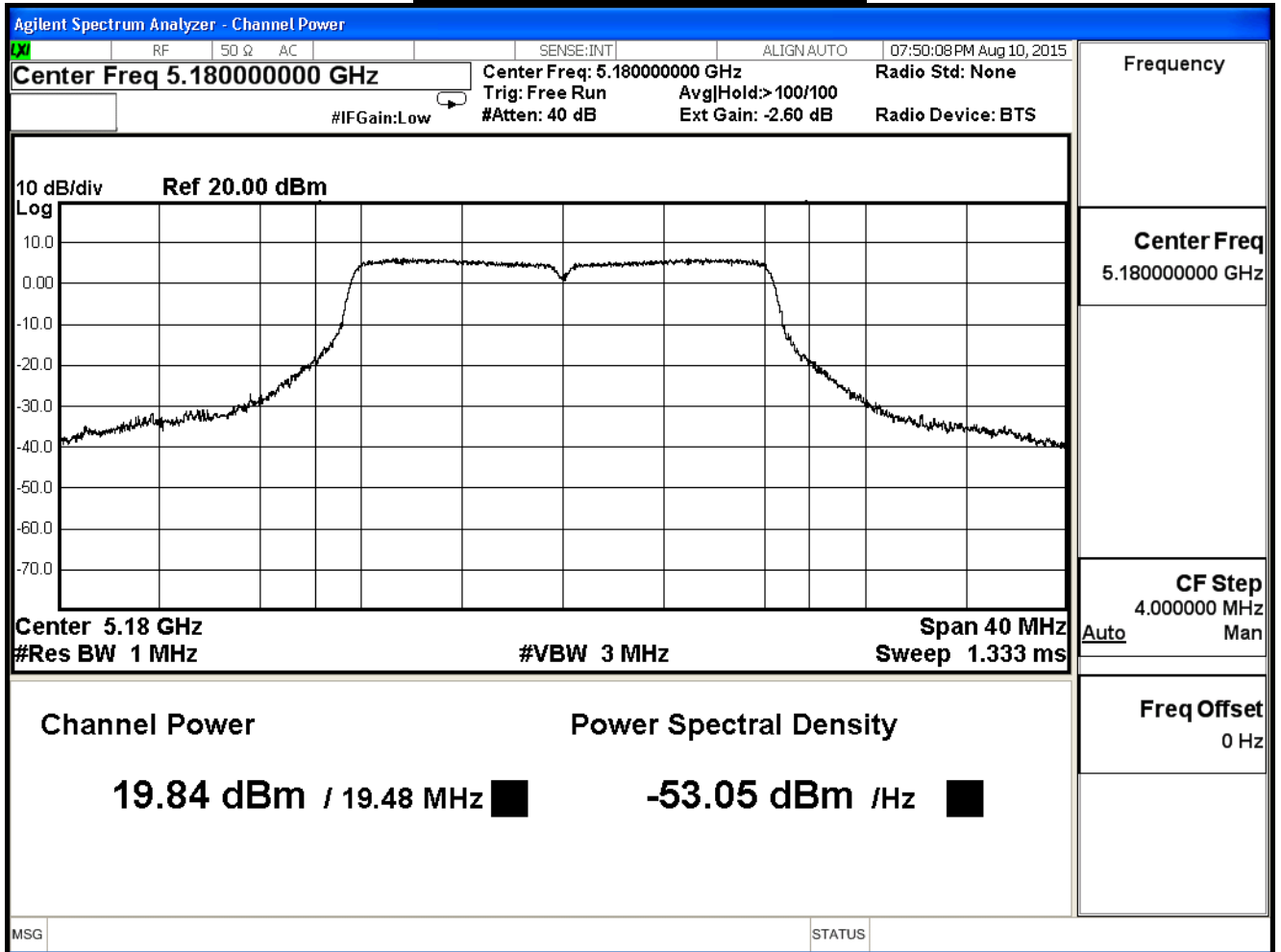
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

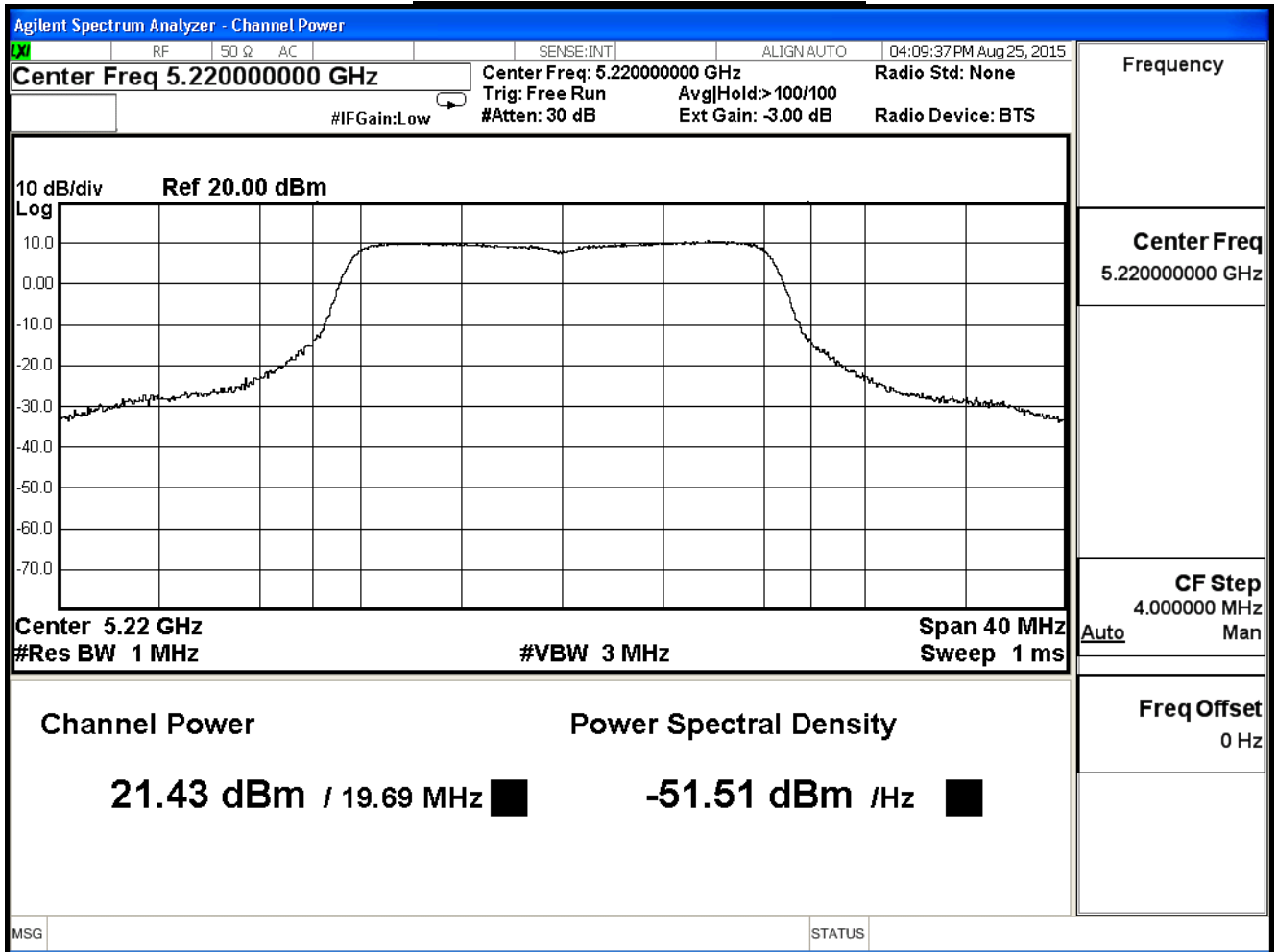
The worst emission of data rate is 6Mbps.

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

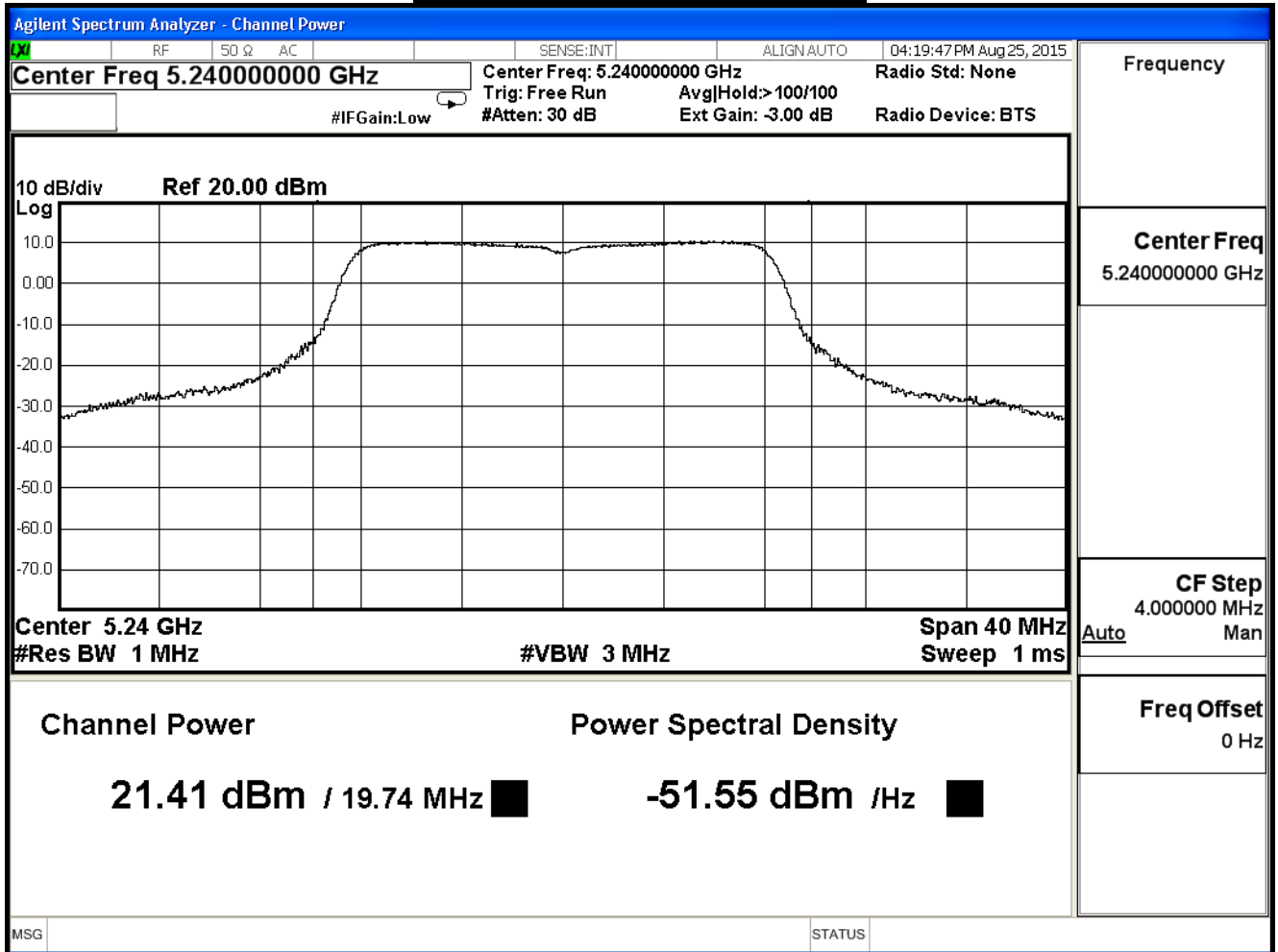
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



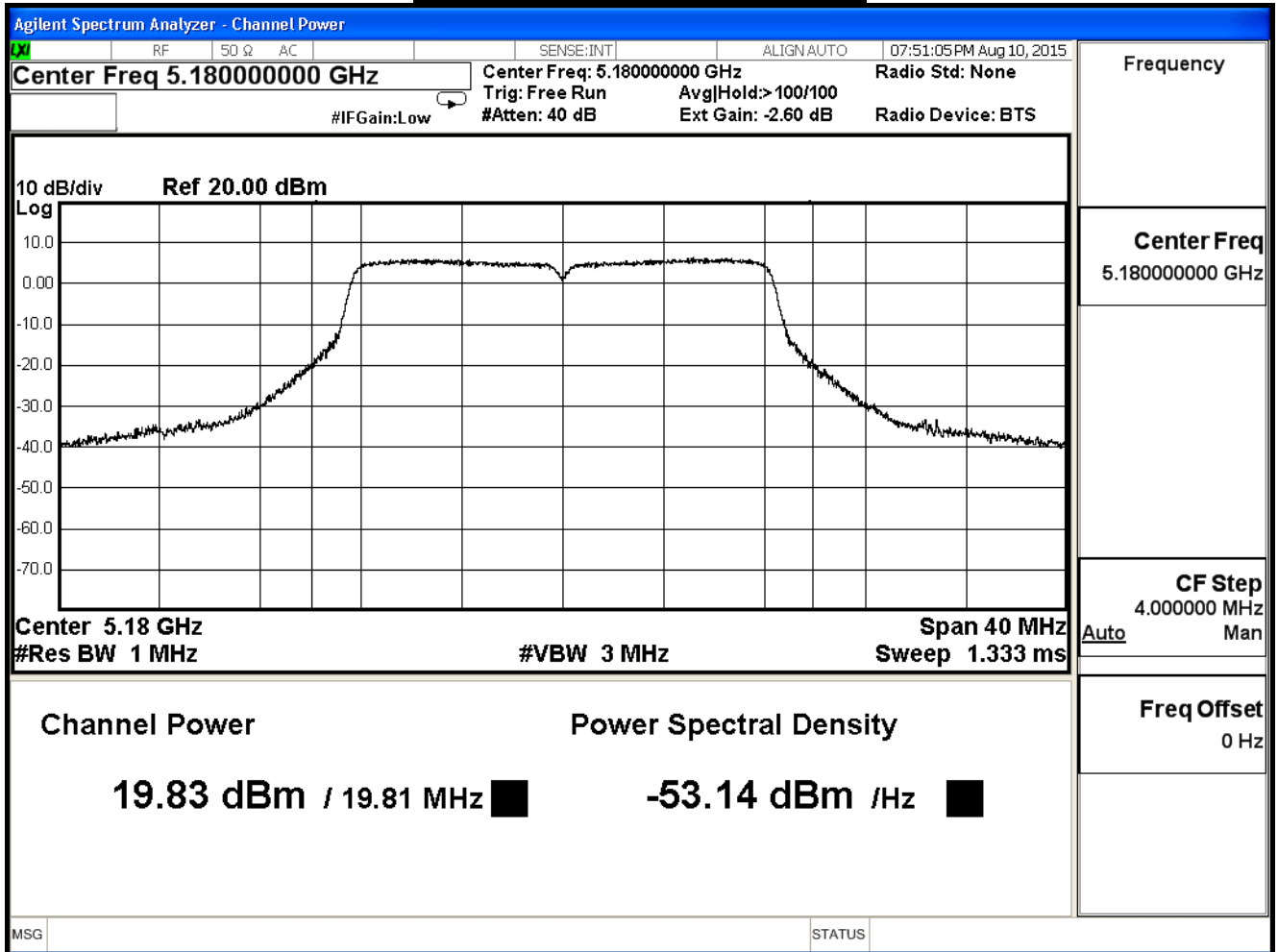
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

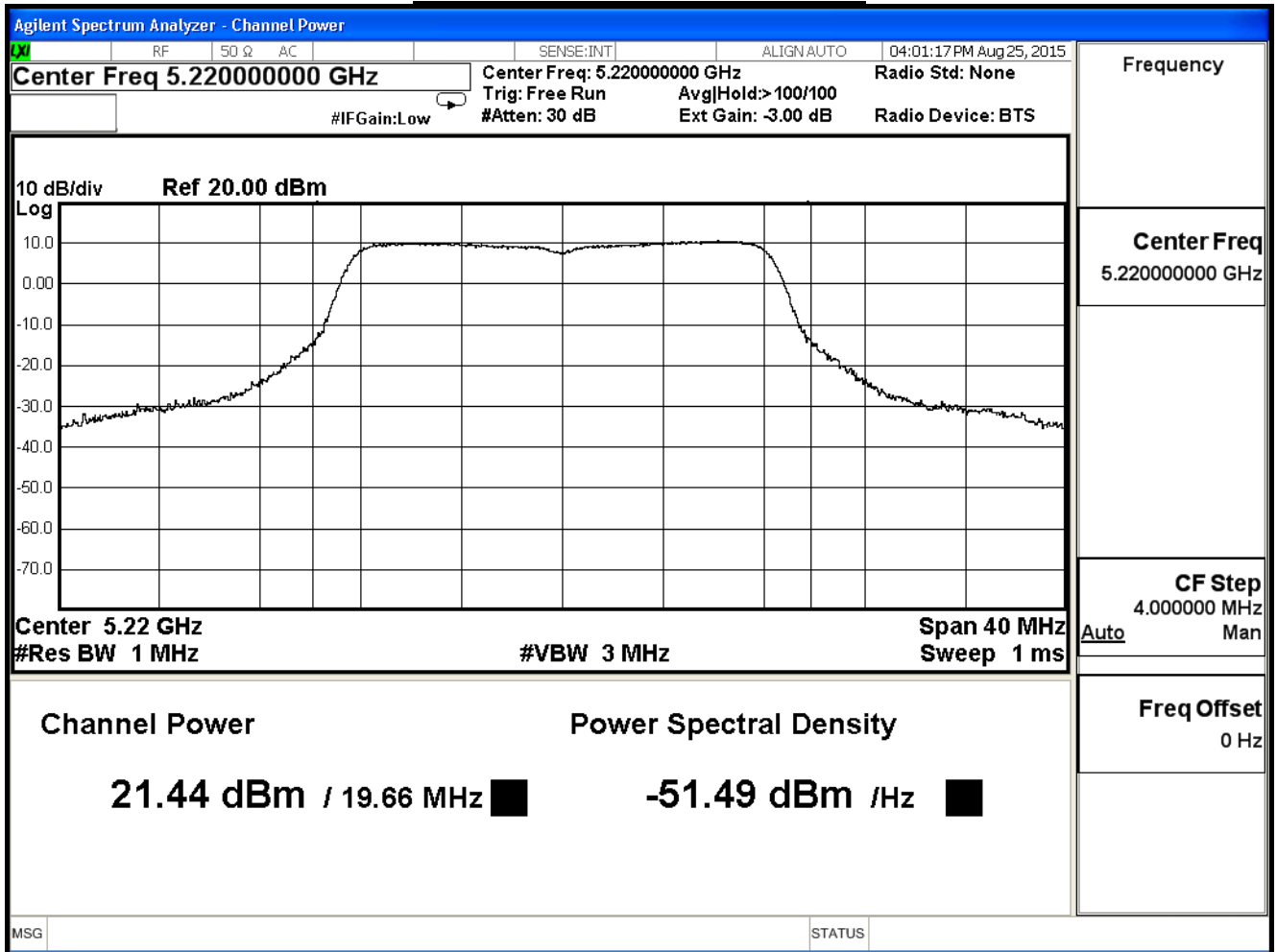
The worst emission of data rate is 6Mbps.

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

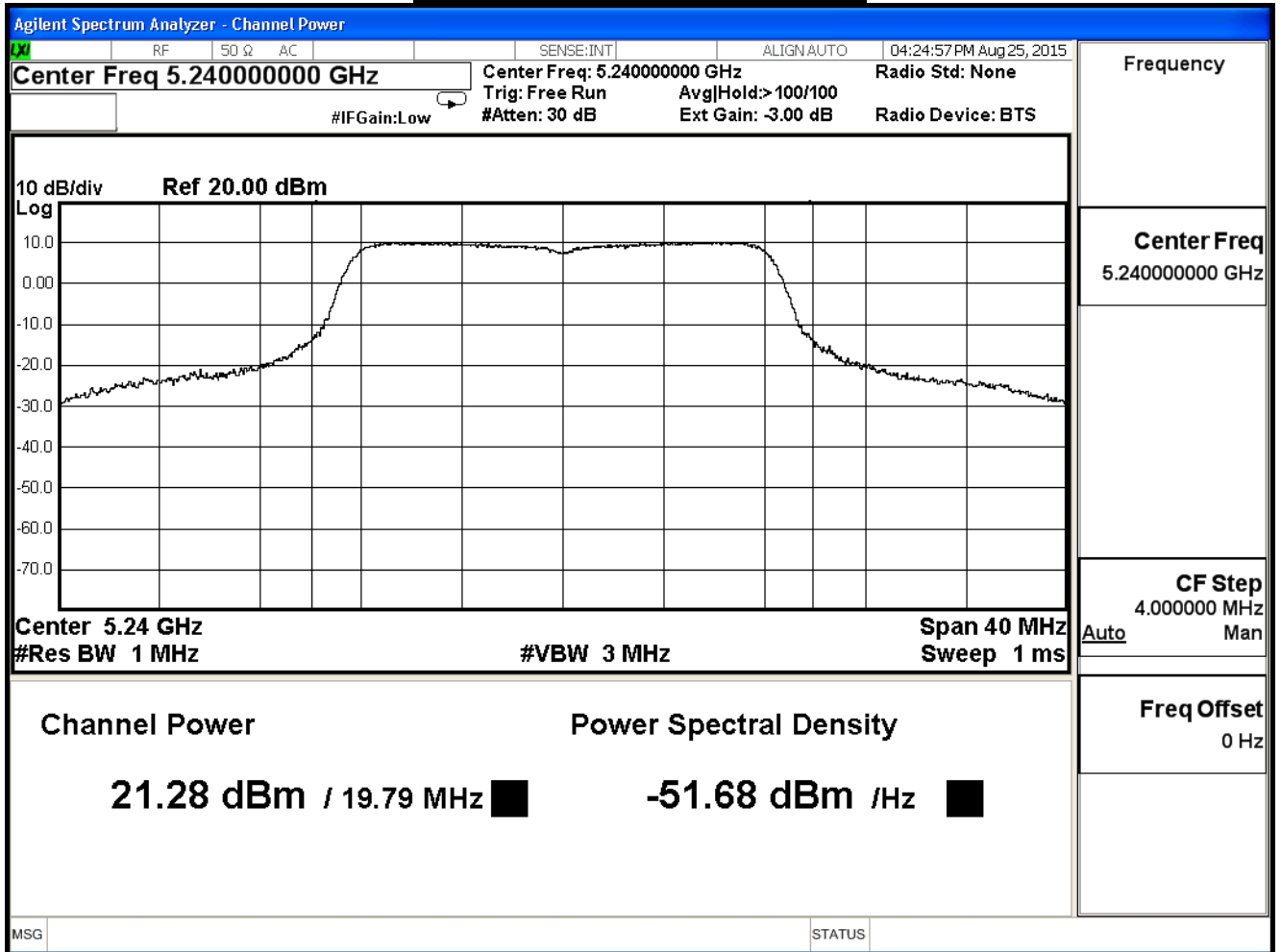
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



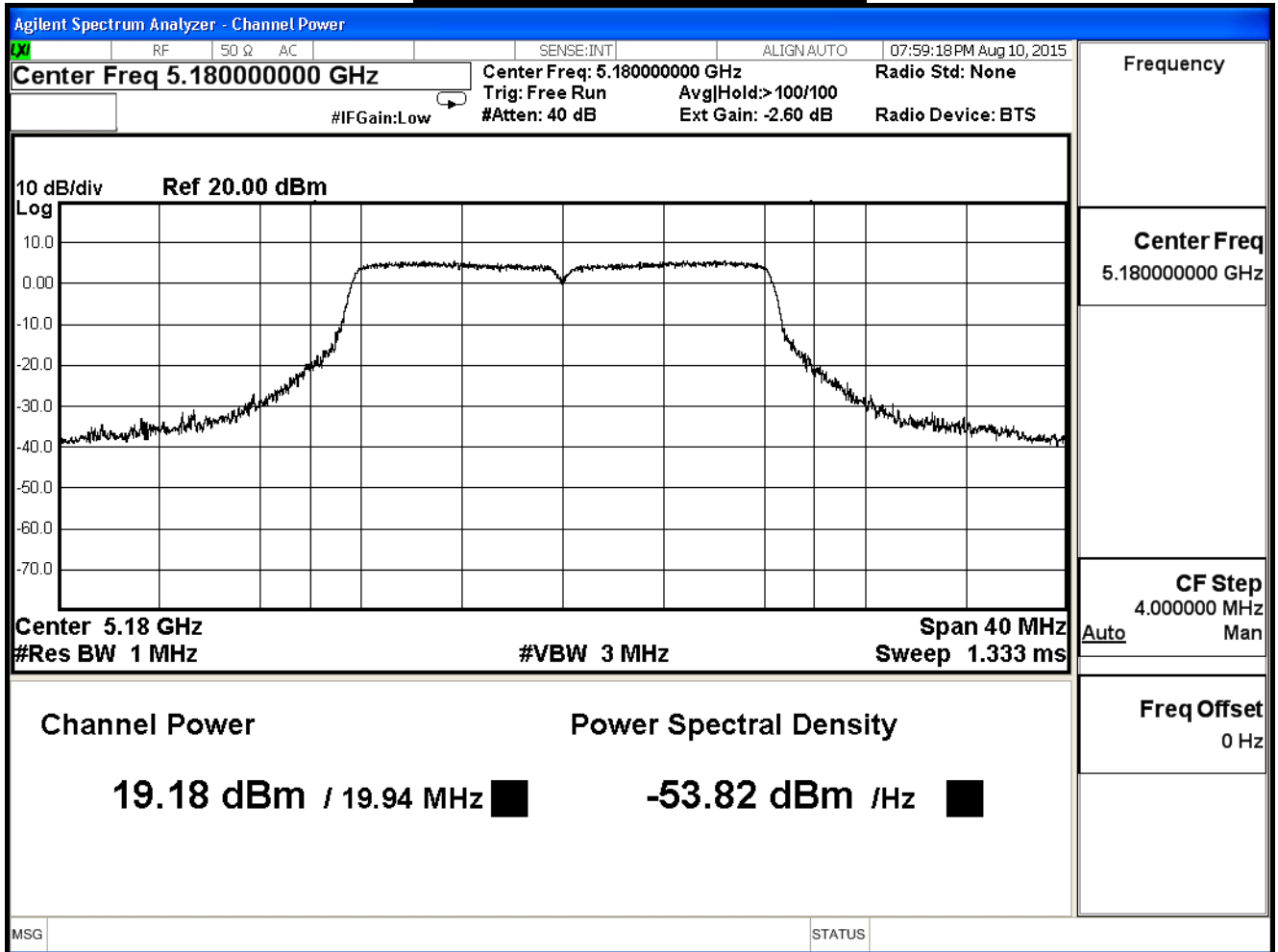
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

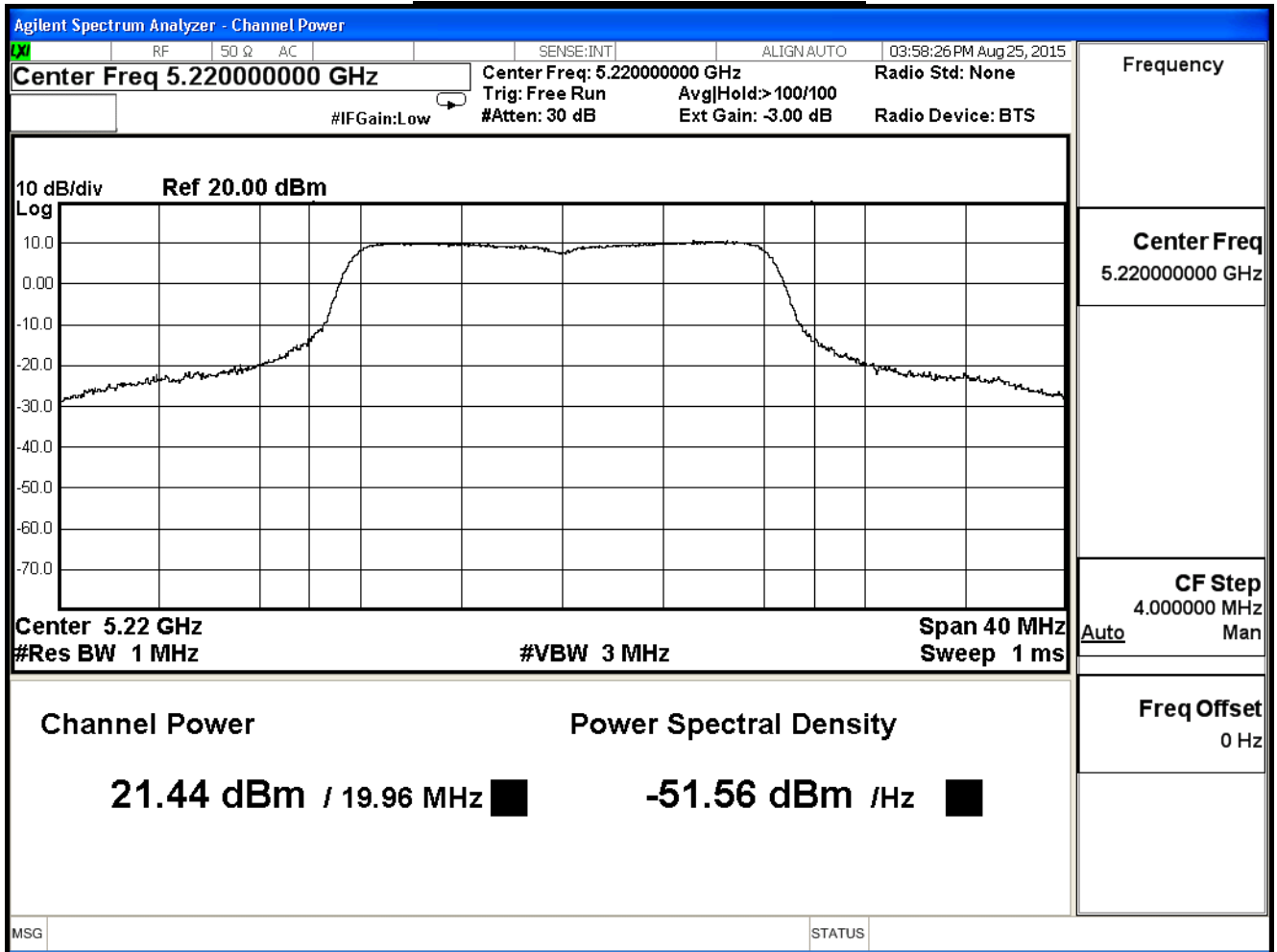
The worst emission of data rate is 6Mbps.

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

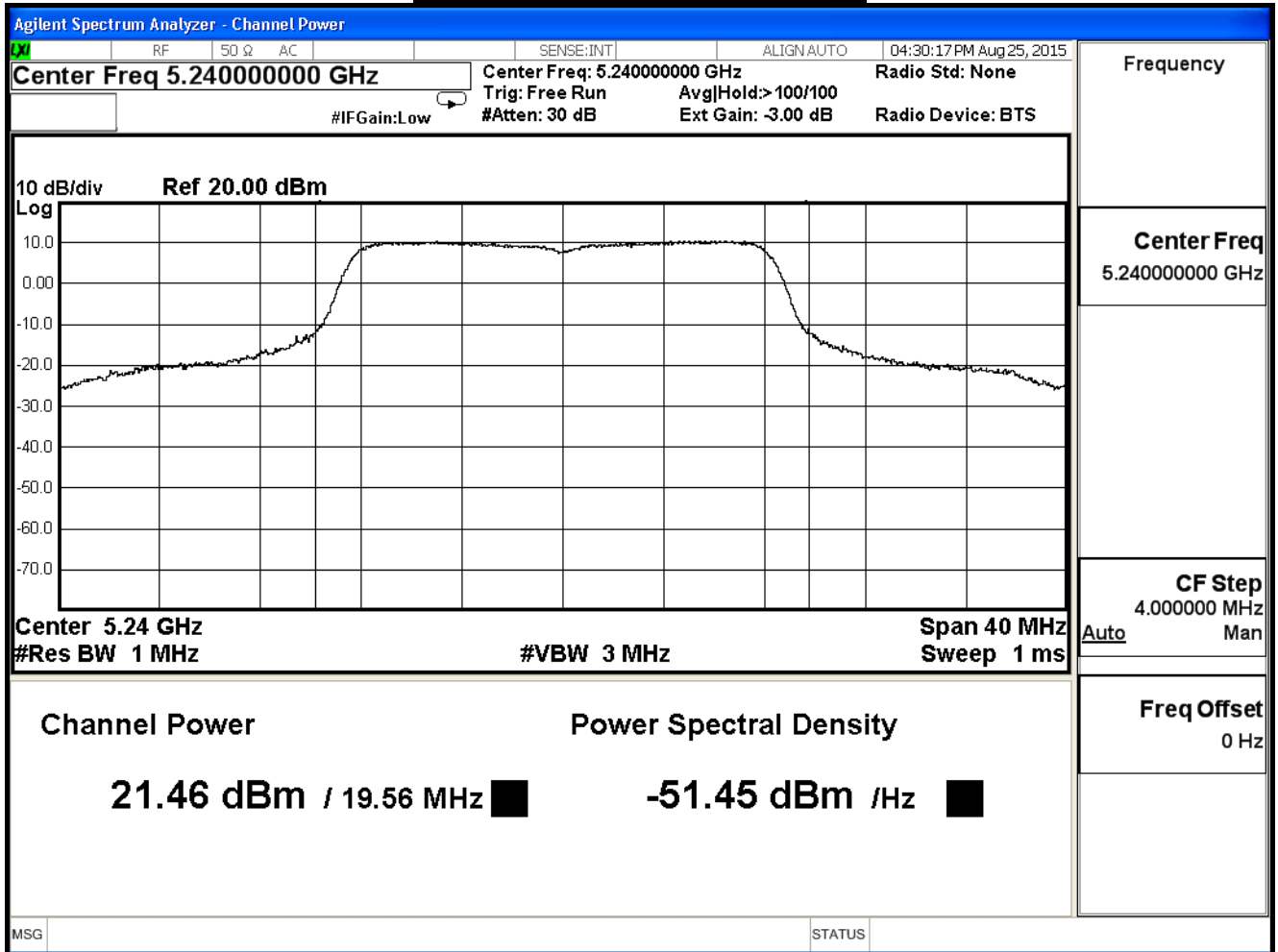
Peak transmit Power - Channel 36



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

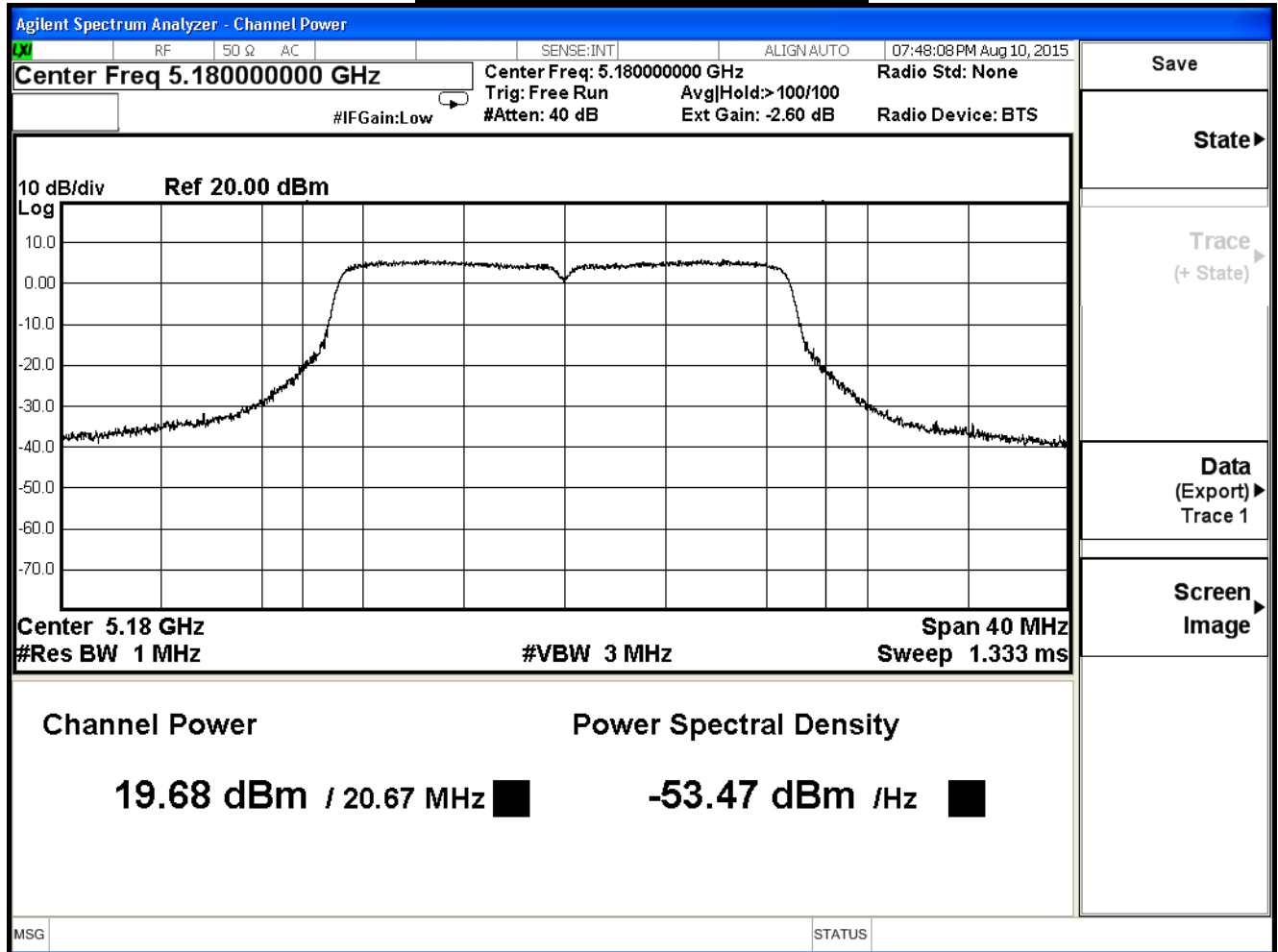
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

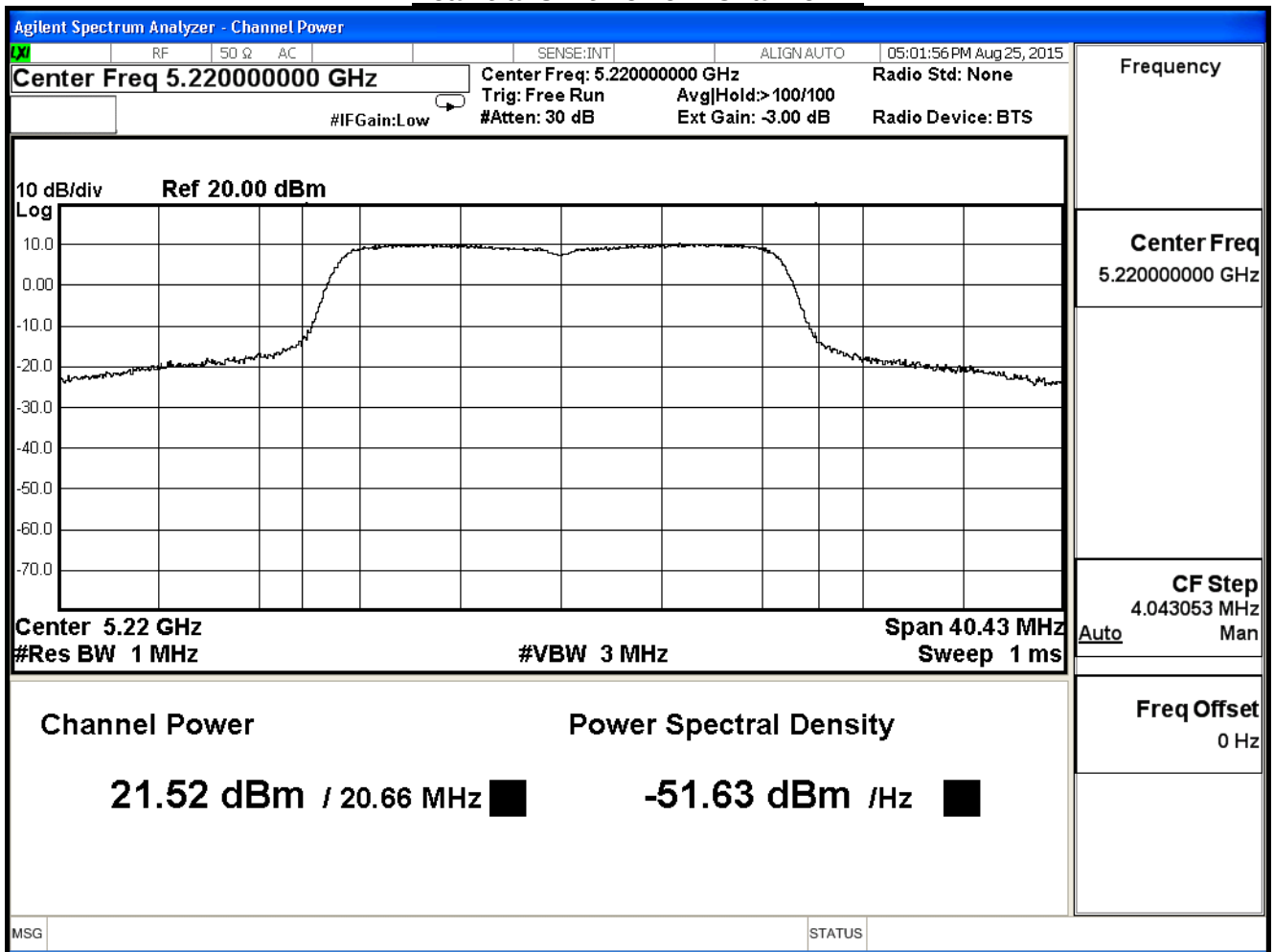
The worst emission of data rate is 6.5 Mbps.

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

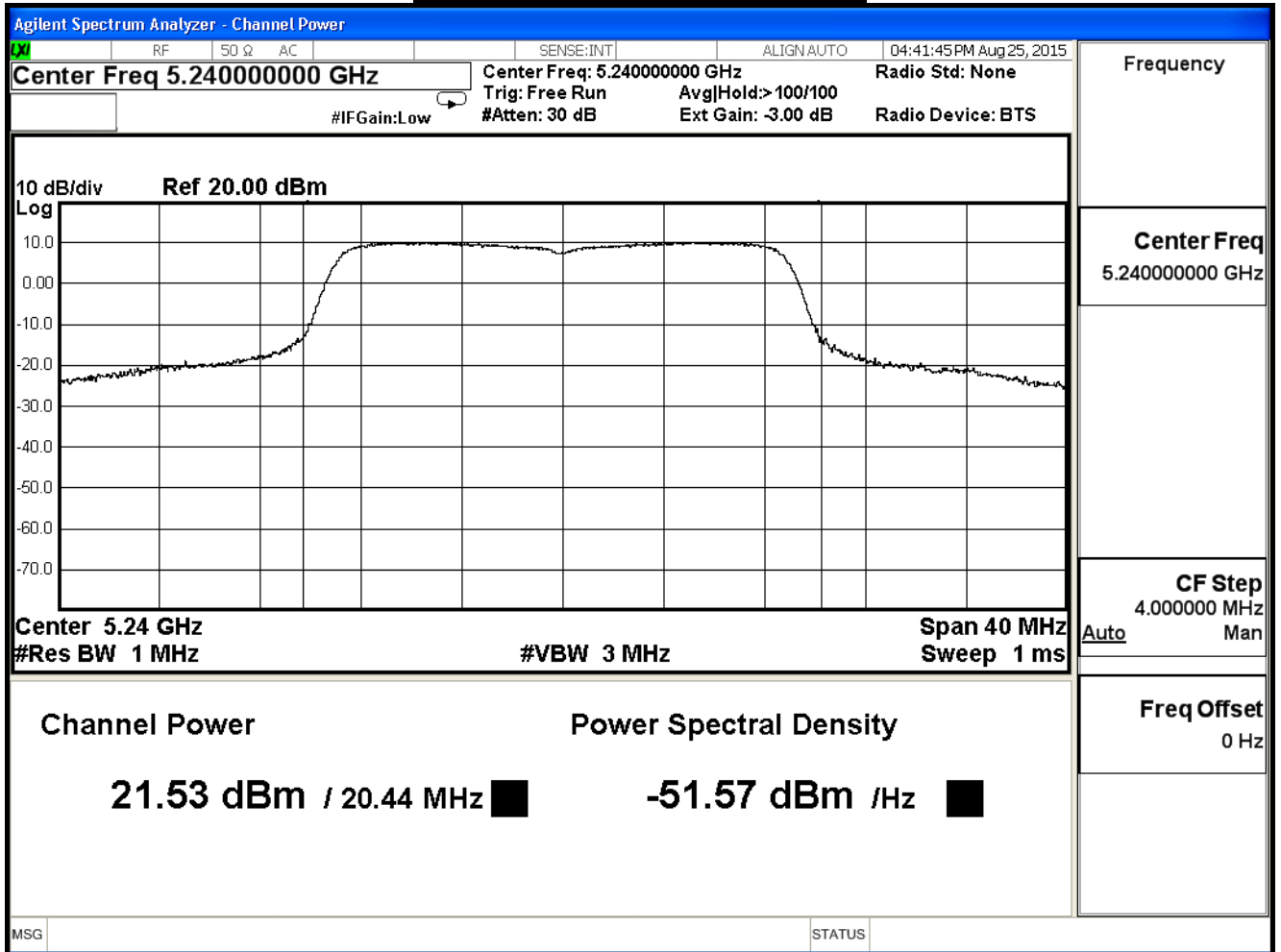
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



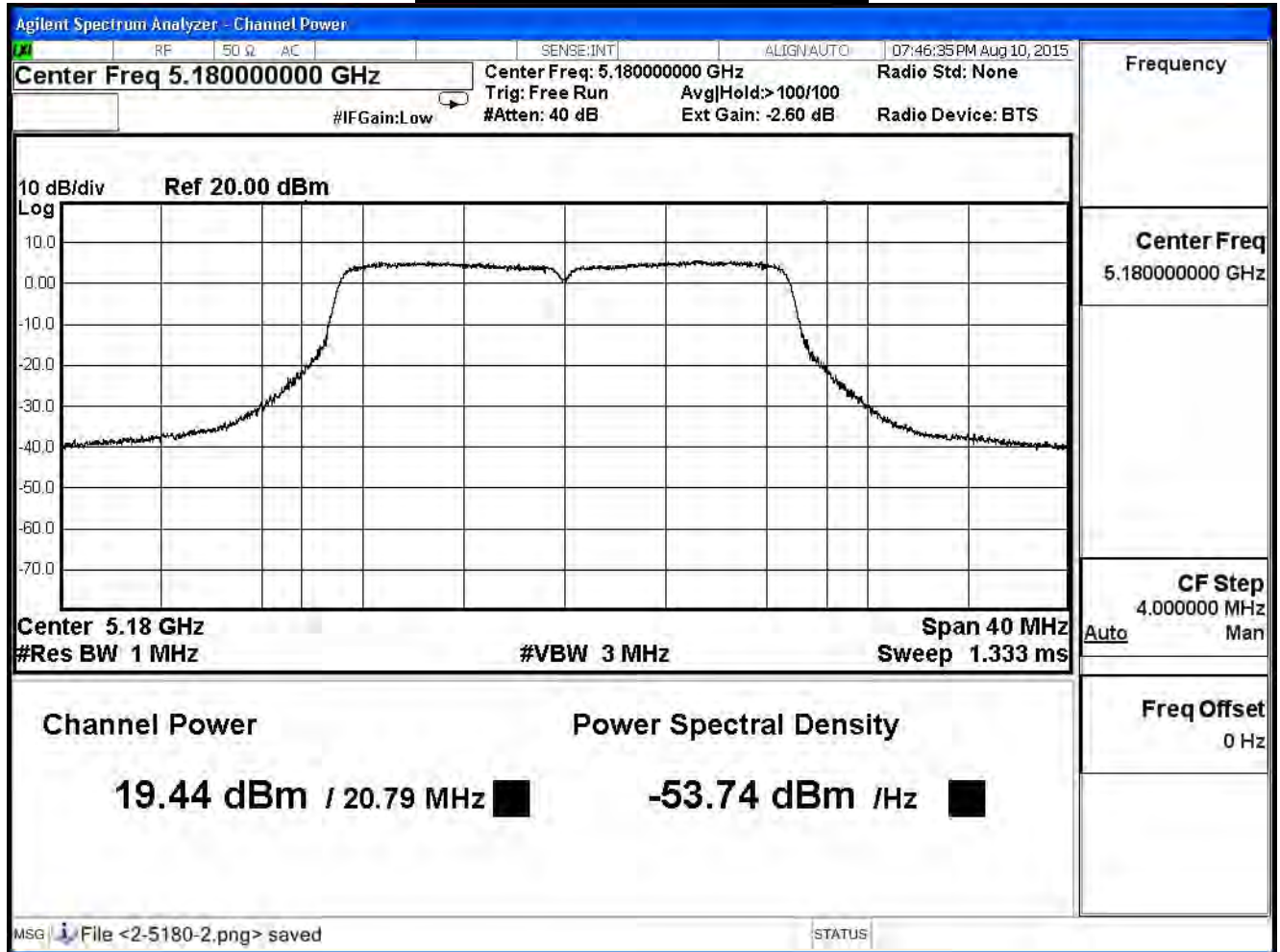
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

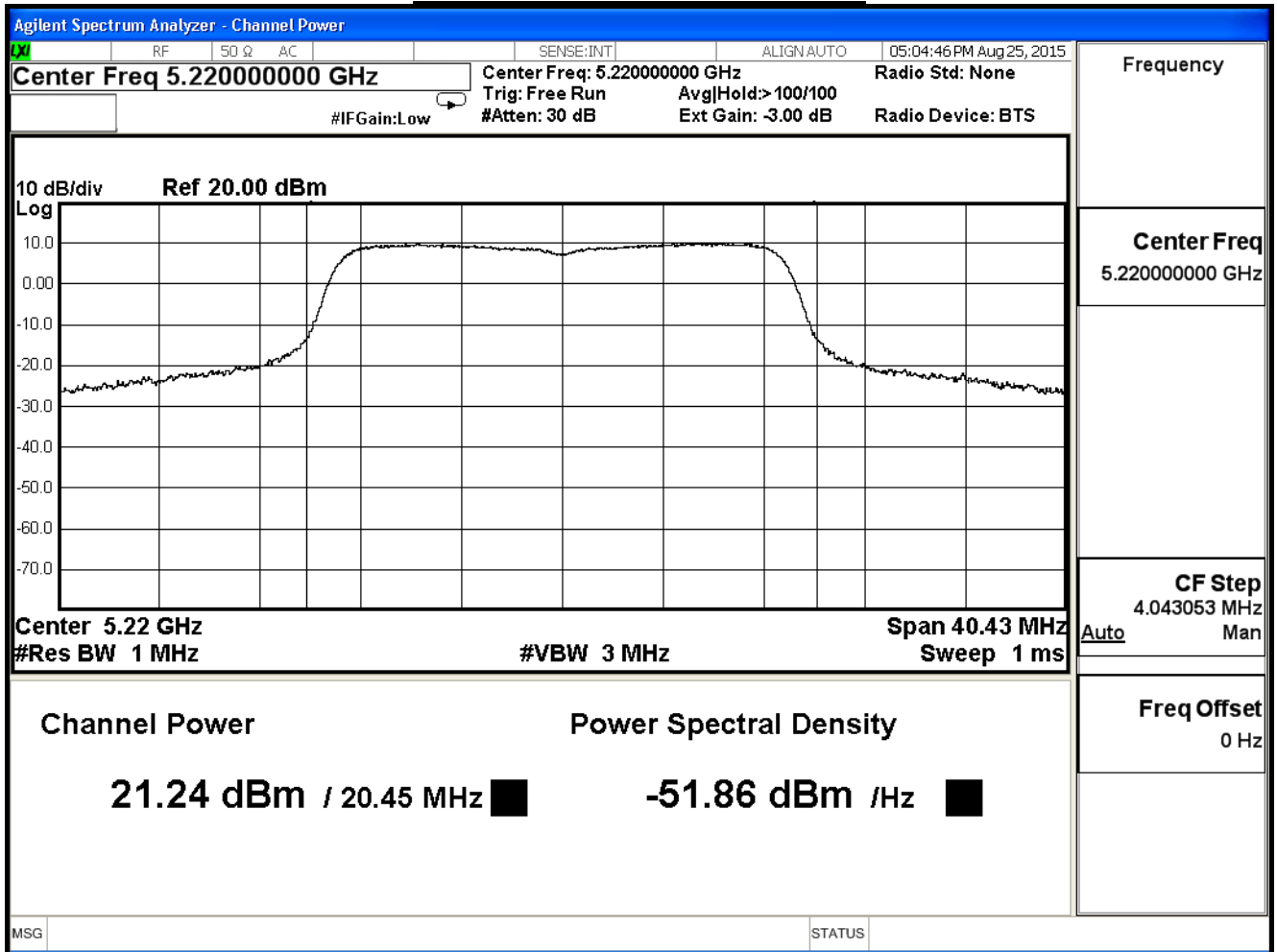
The worst emission of data rate is 6.5Mbps.

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

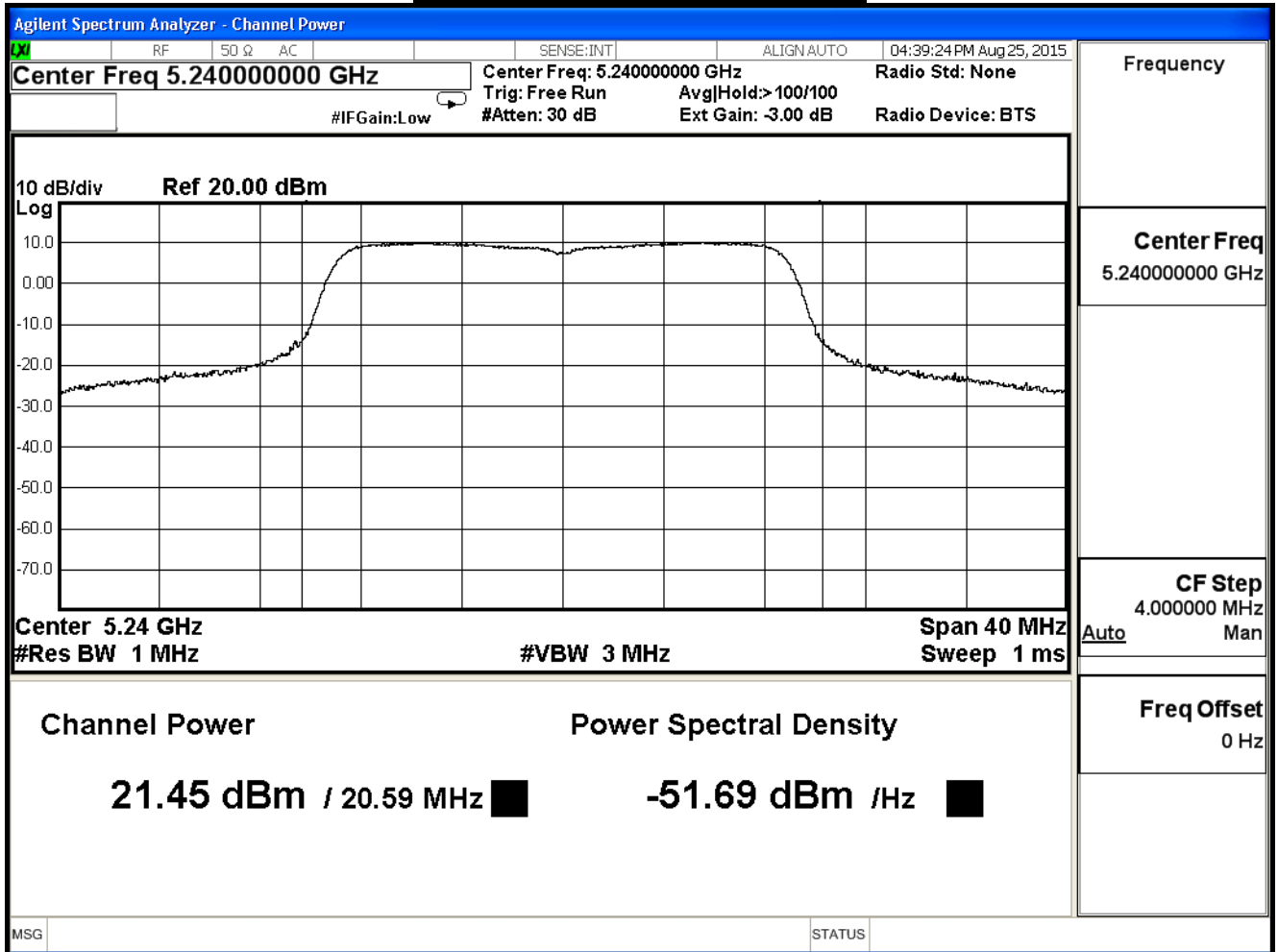
Peak transmit Power - Channel 36



Peak transmit Power - Channel 44



Peak transmit Power - Channel 48



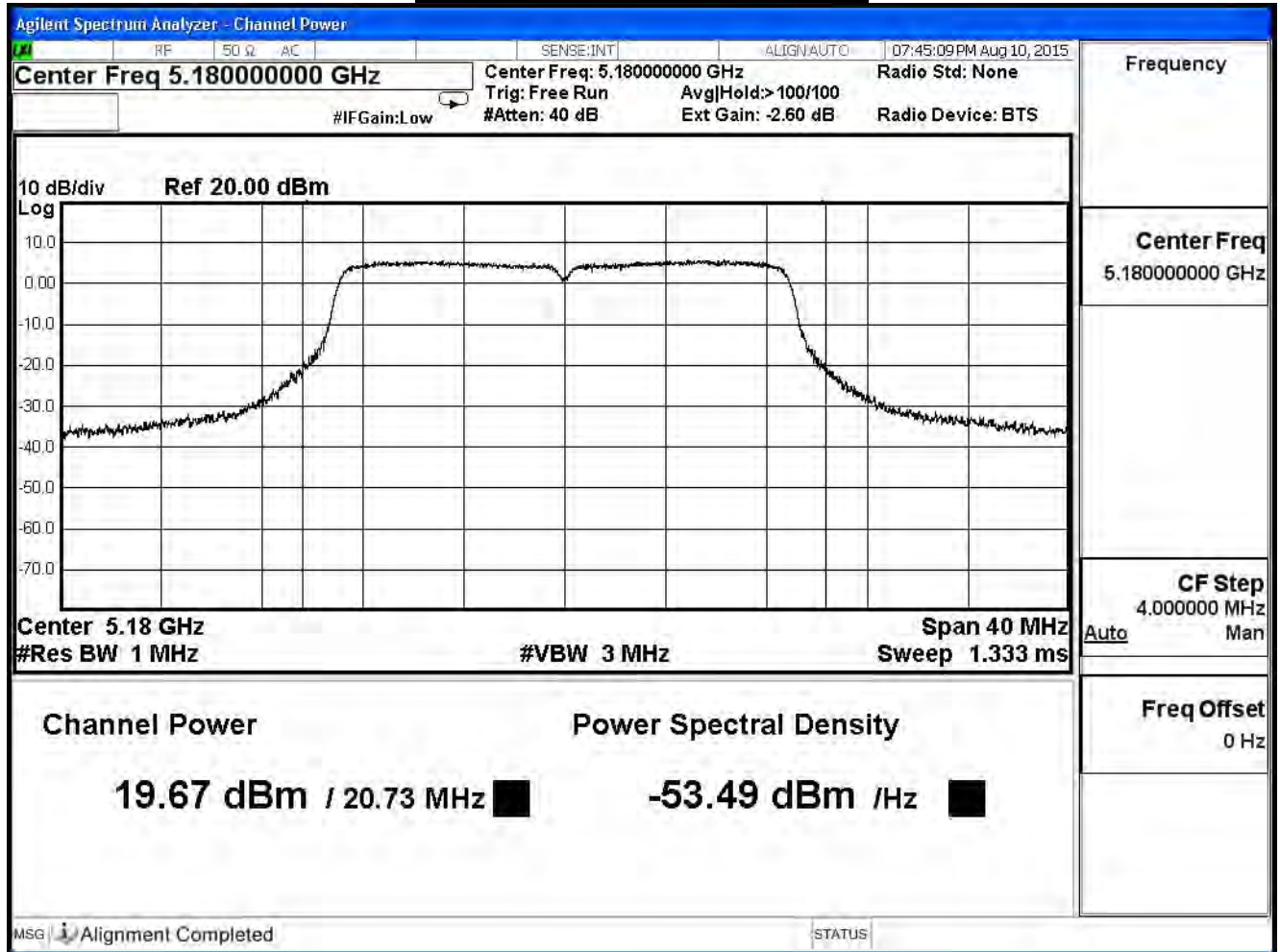
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

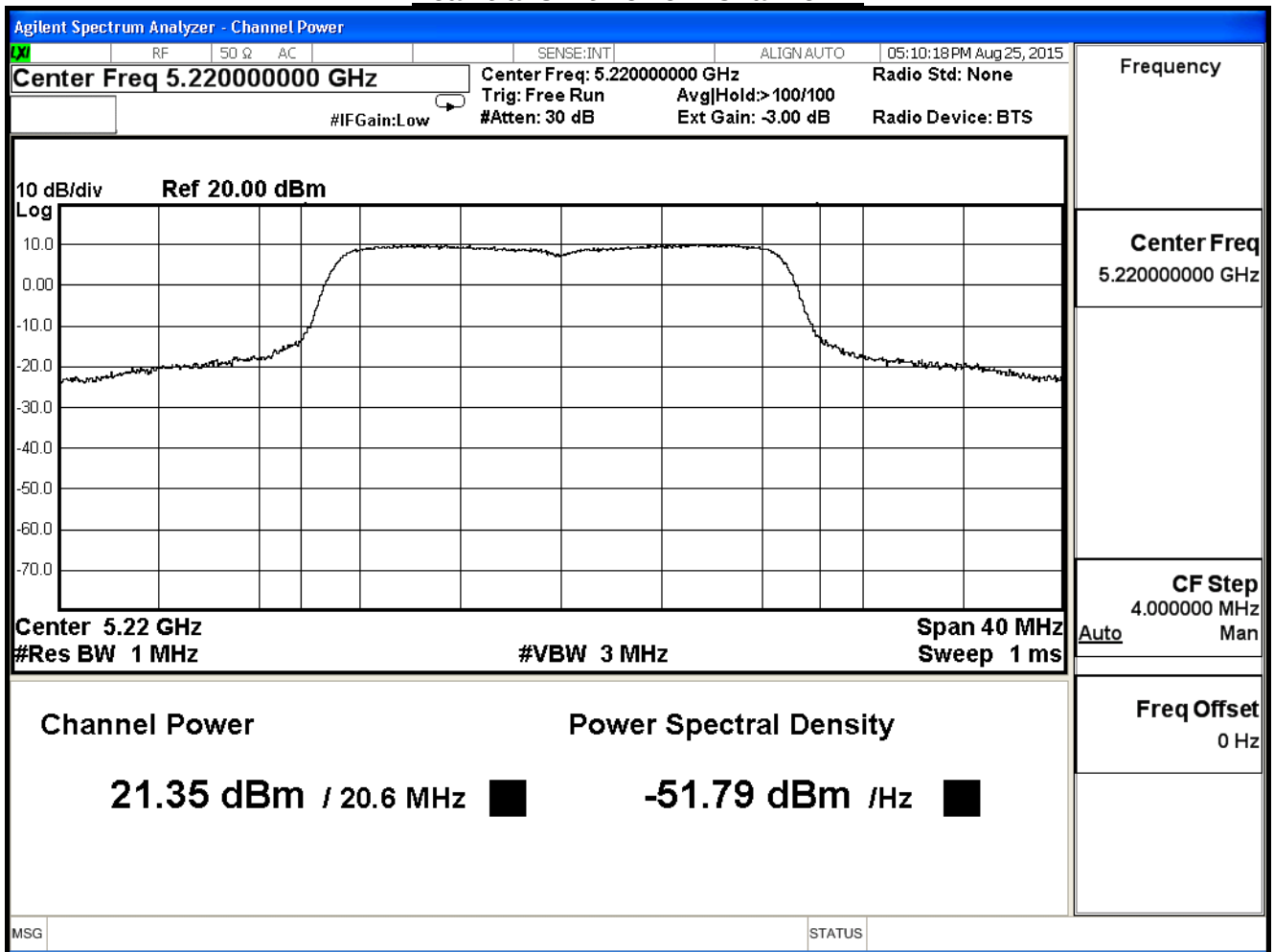
The worst emission of data rate is 6.5Mbps.

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

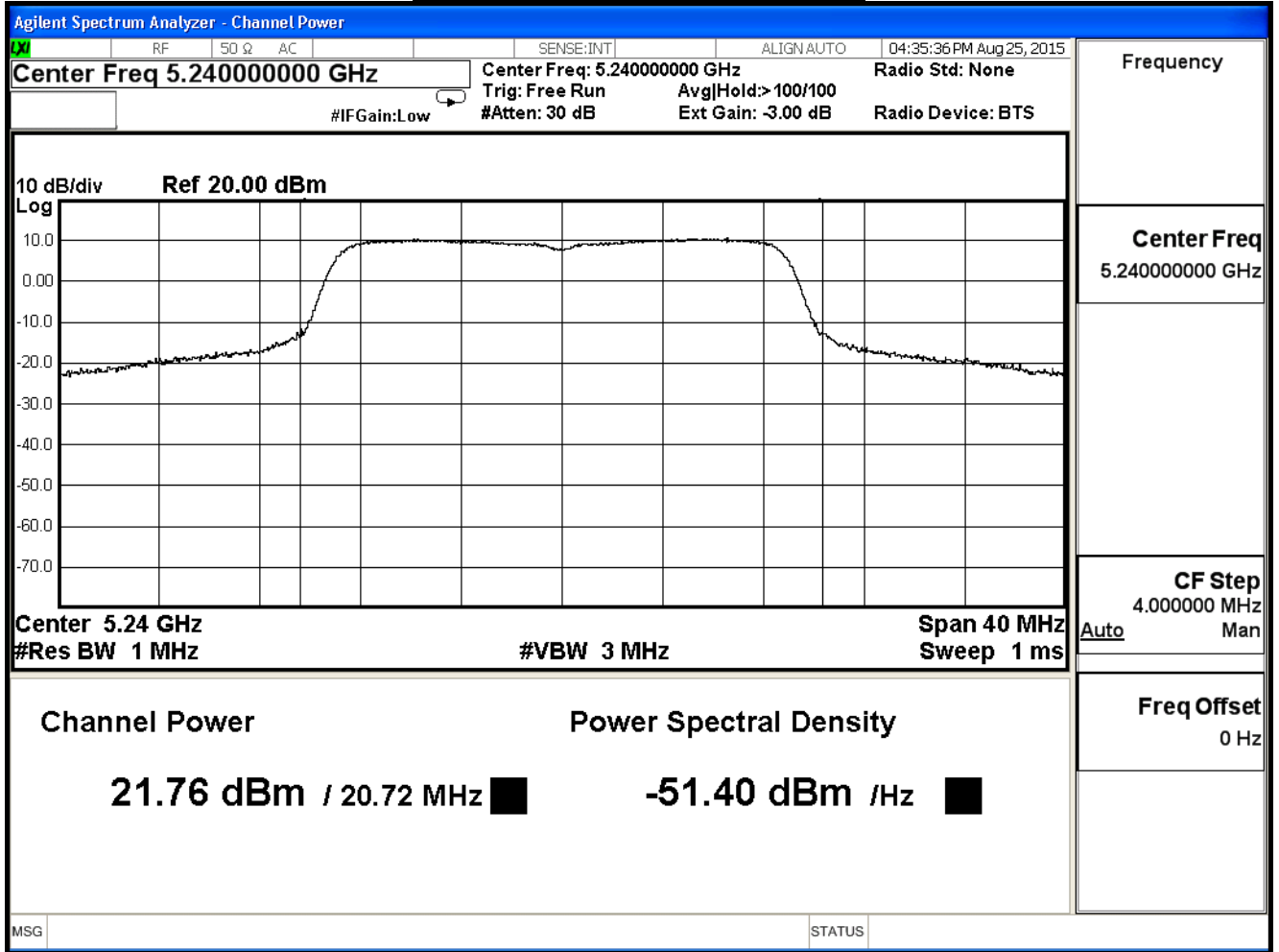
Peak transmit Power - Channel 36



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

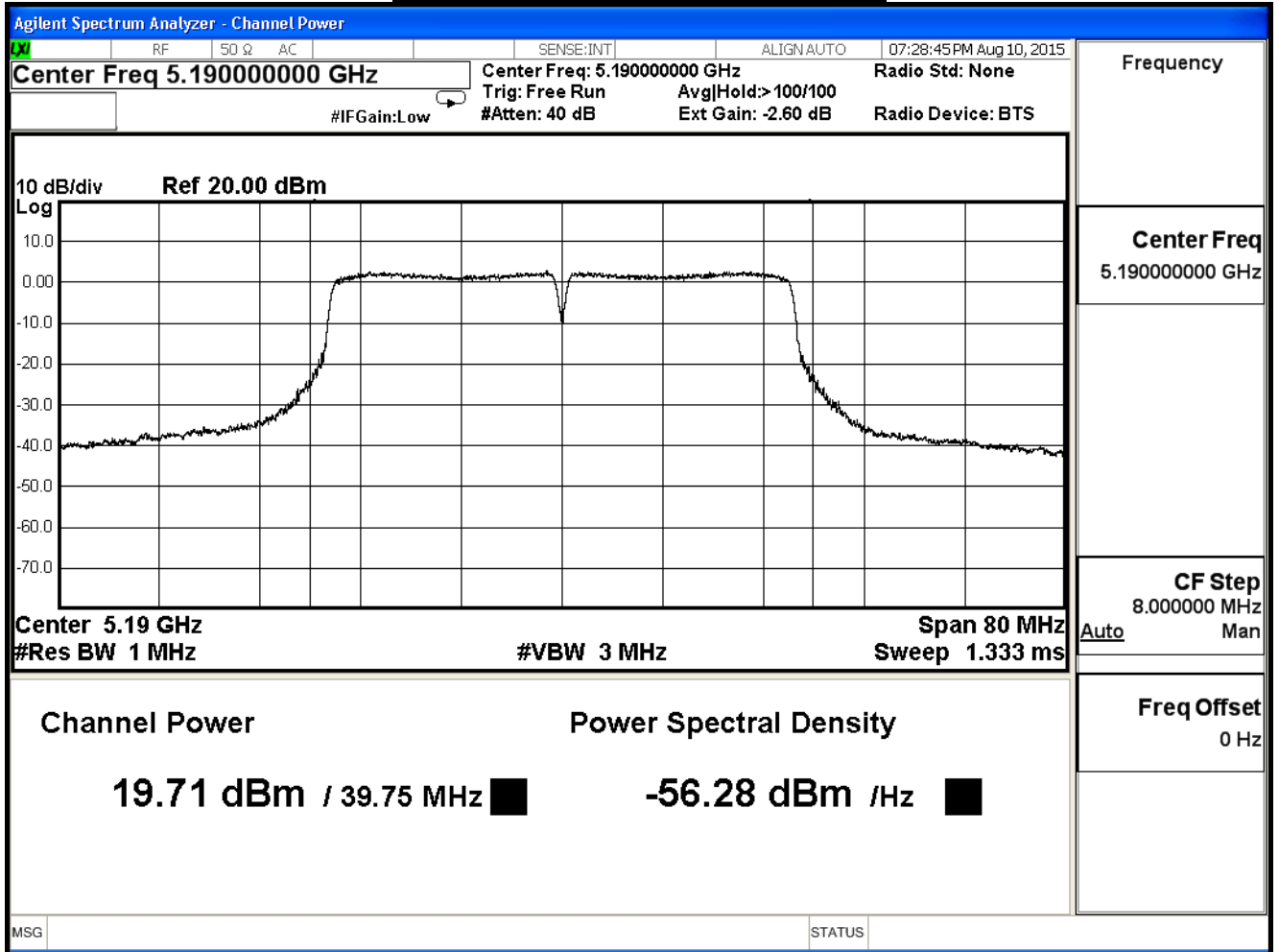
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

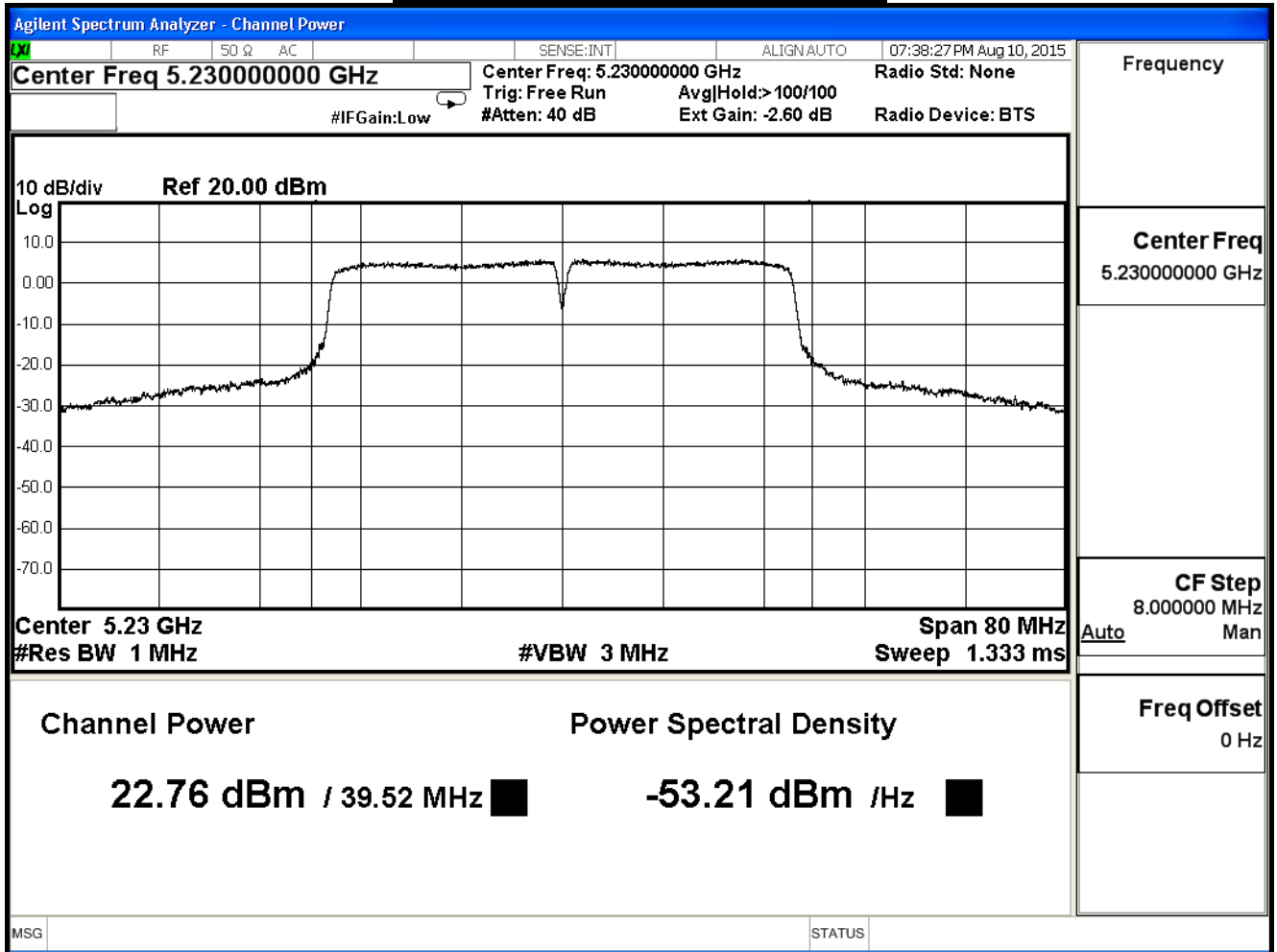
The worst emission of data rate is 13.5 Mbps.

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



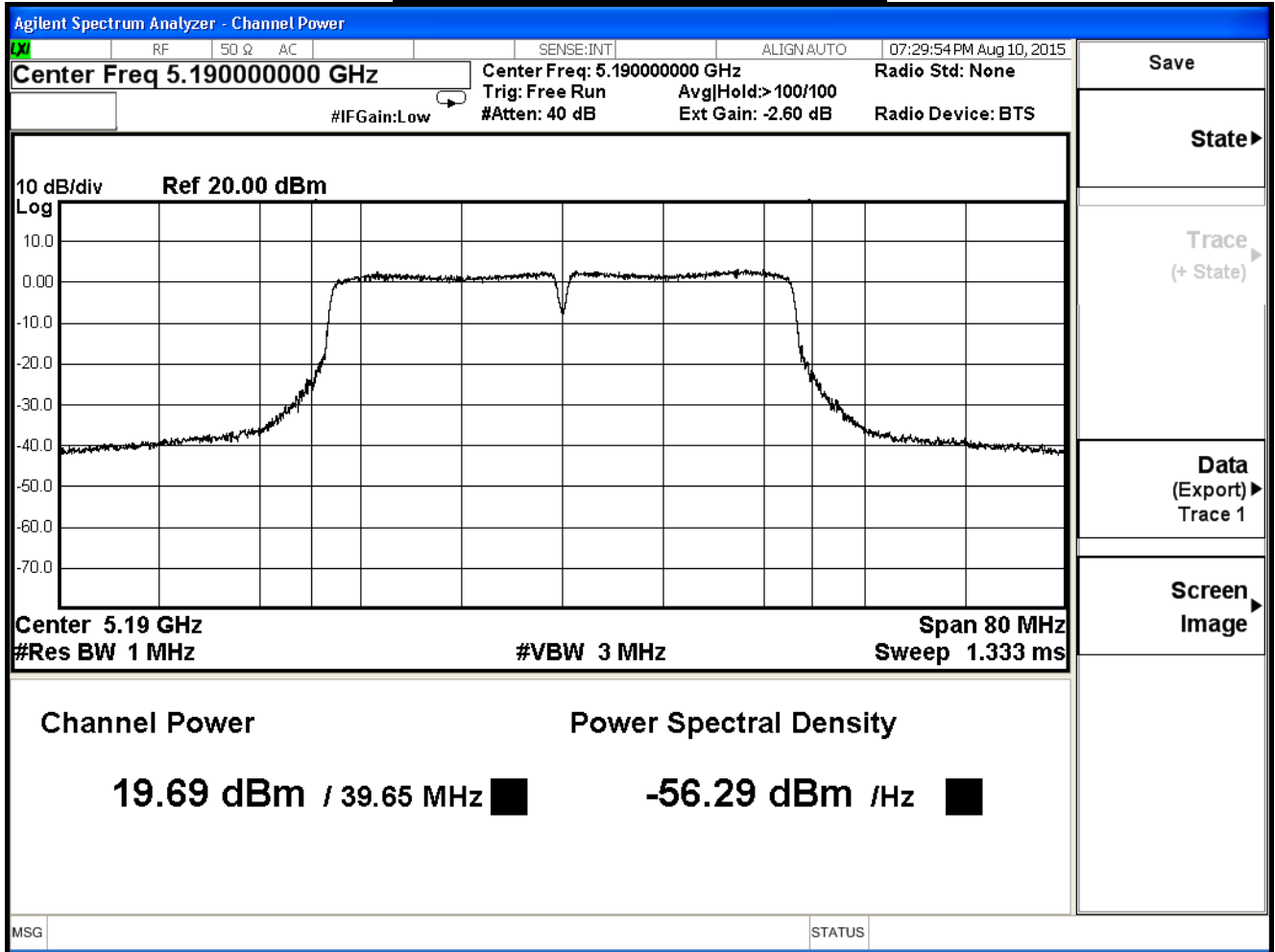
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

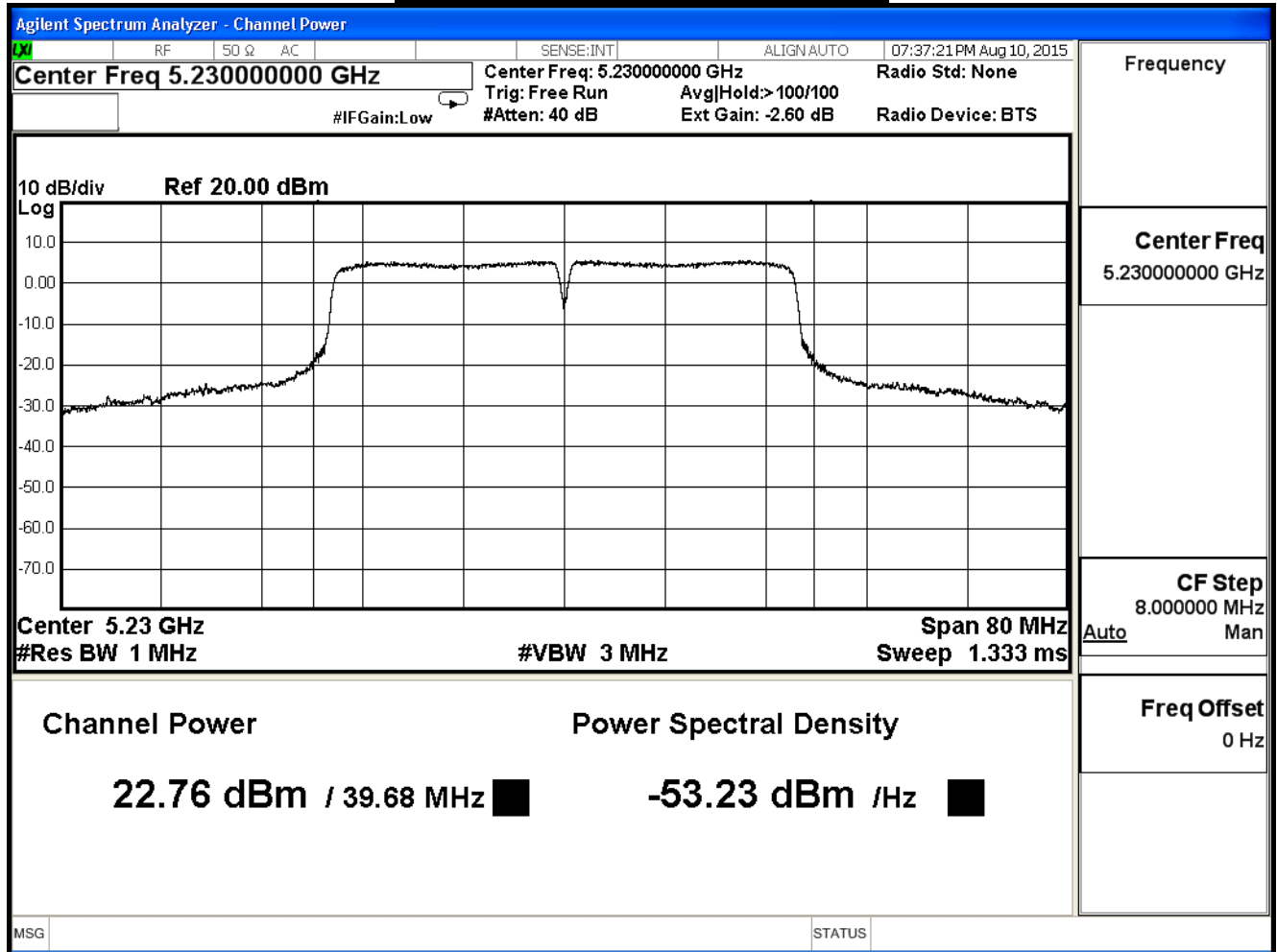
The worst emission of data rate is 13.5 Mbps.

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



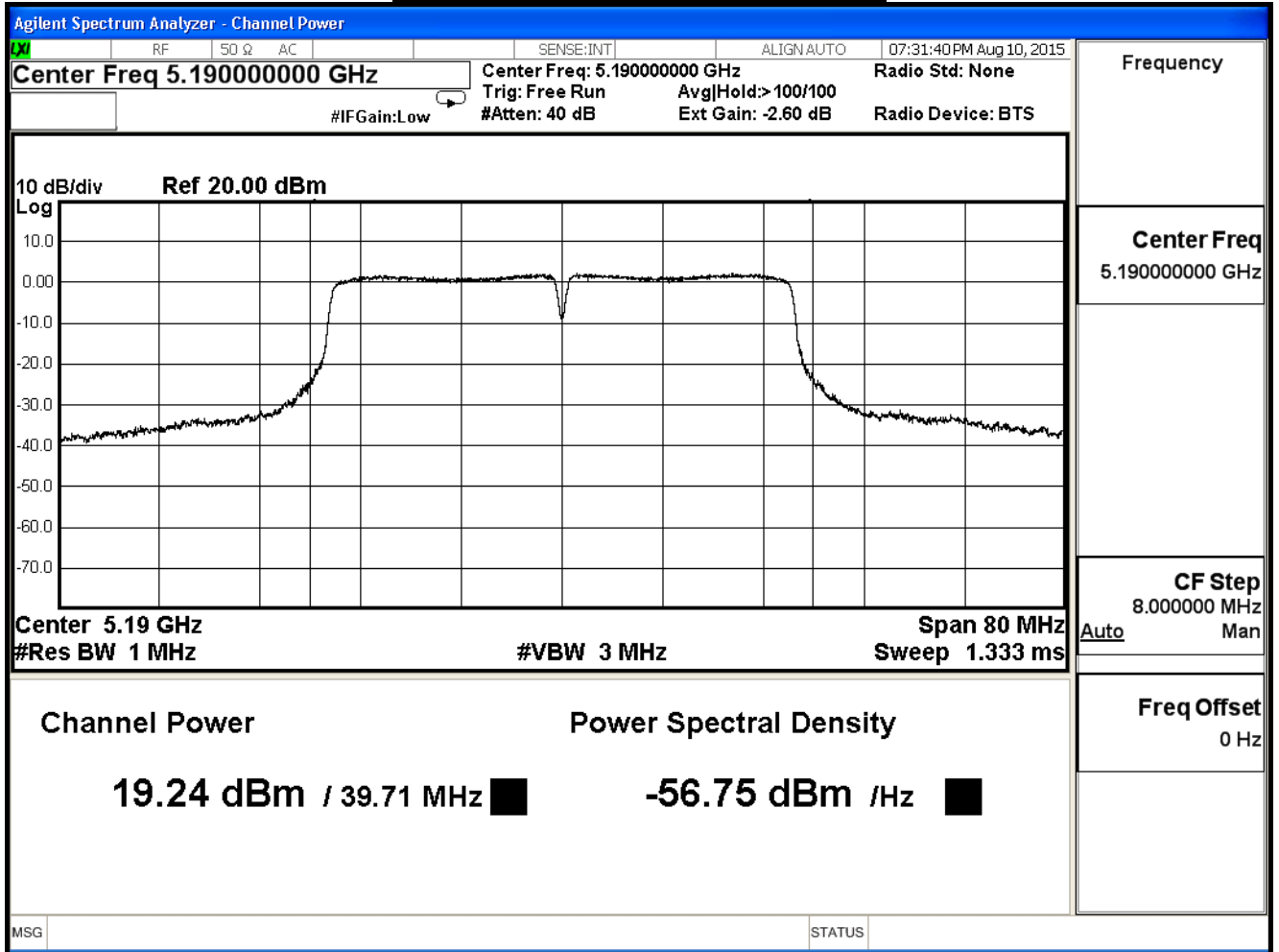
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

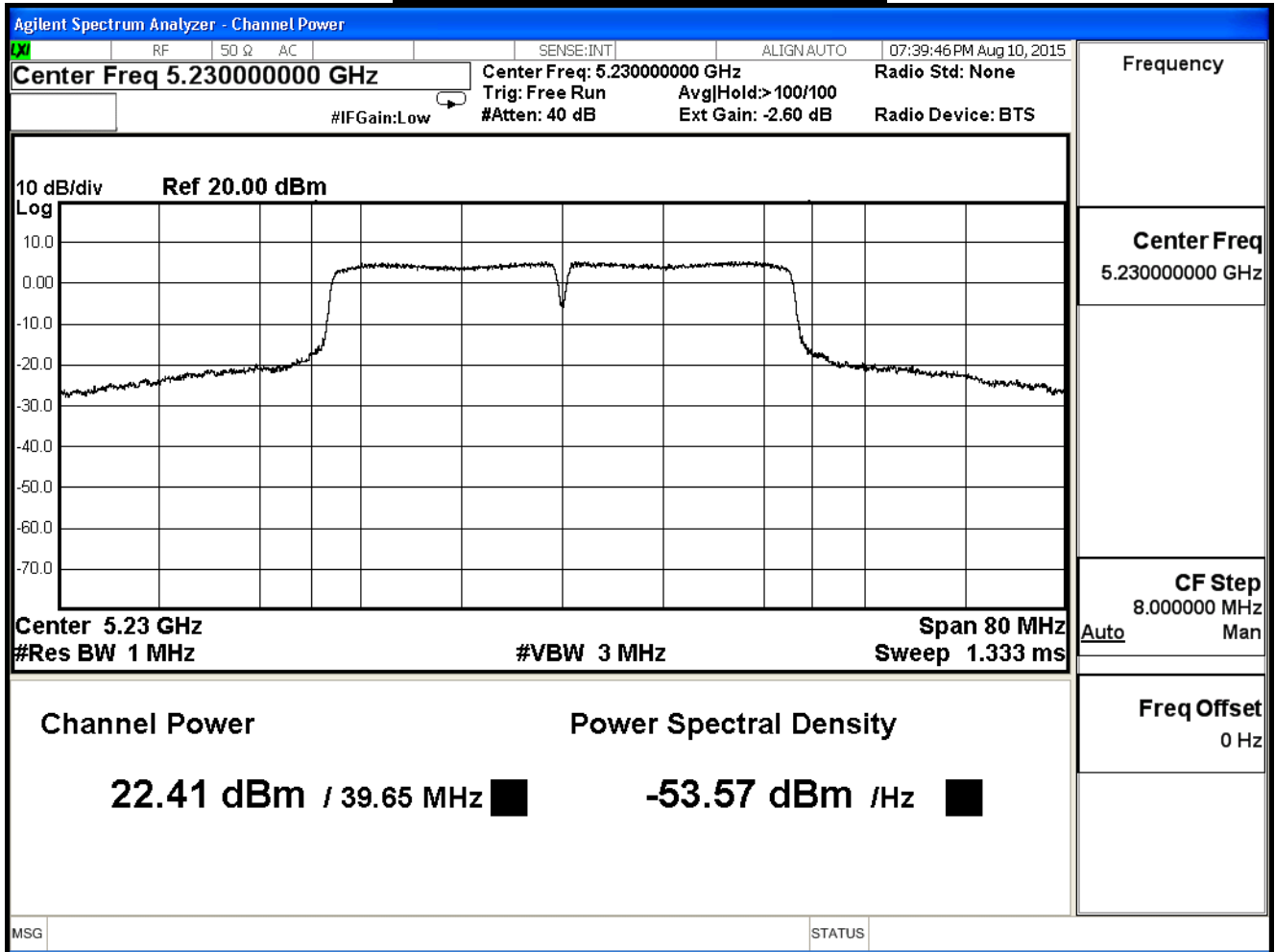
The worst emission of data rate is 13.5 Mbps.

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

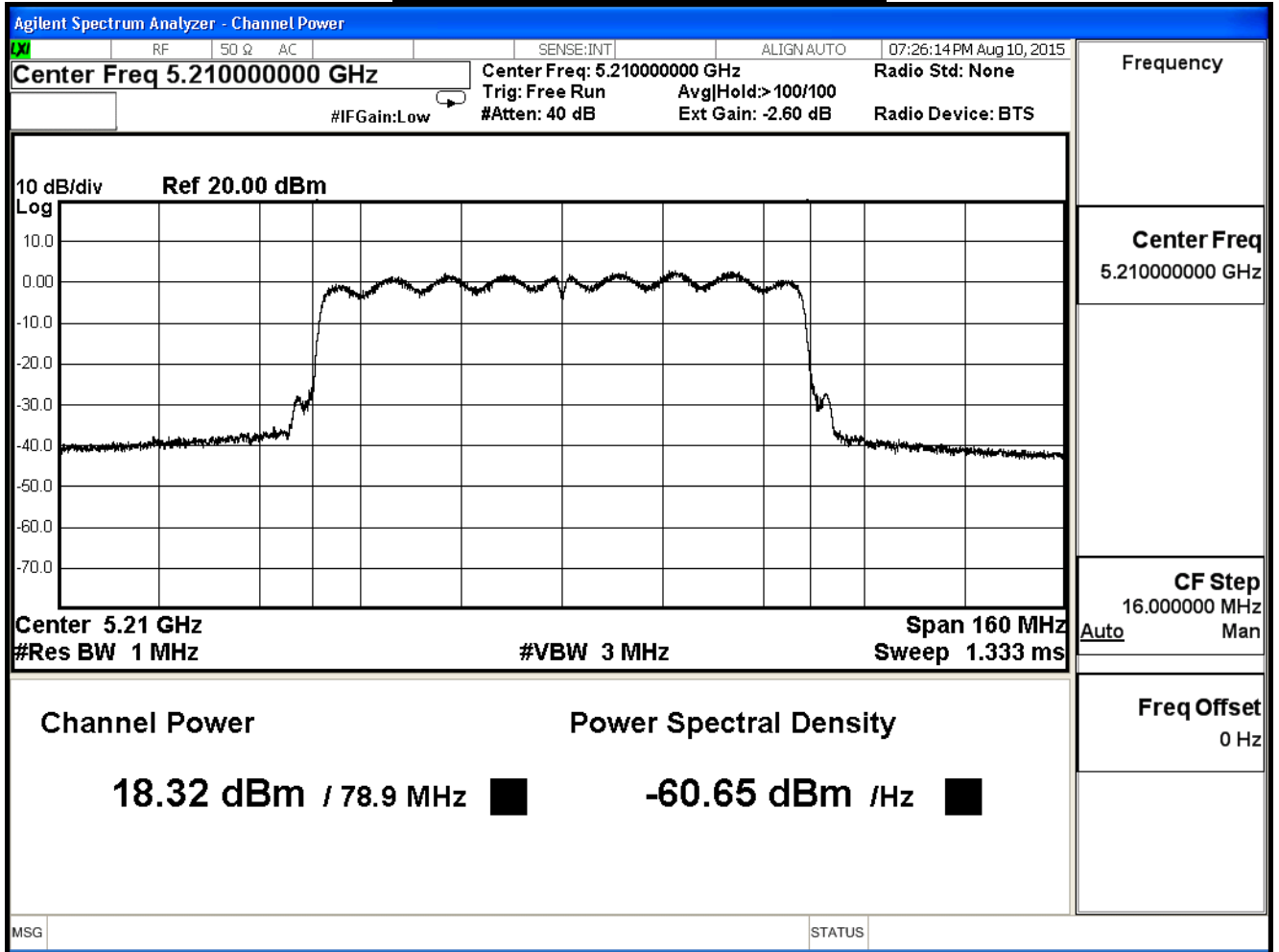
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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



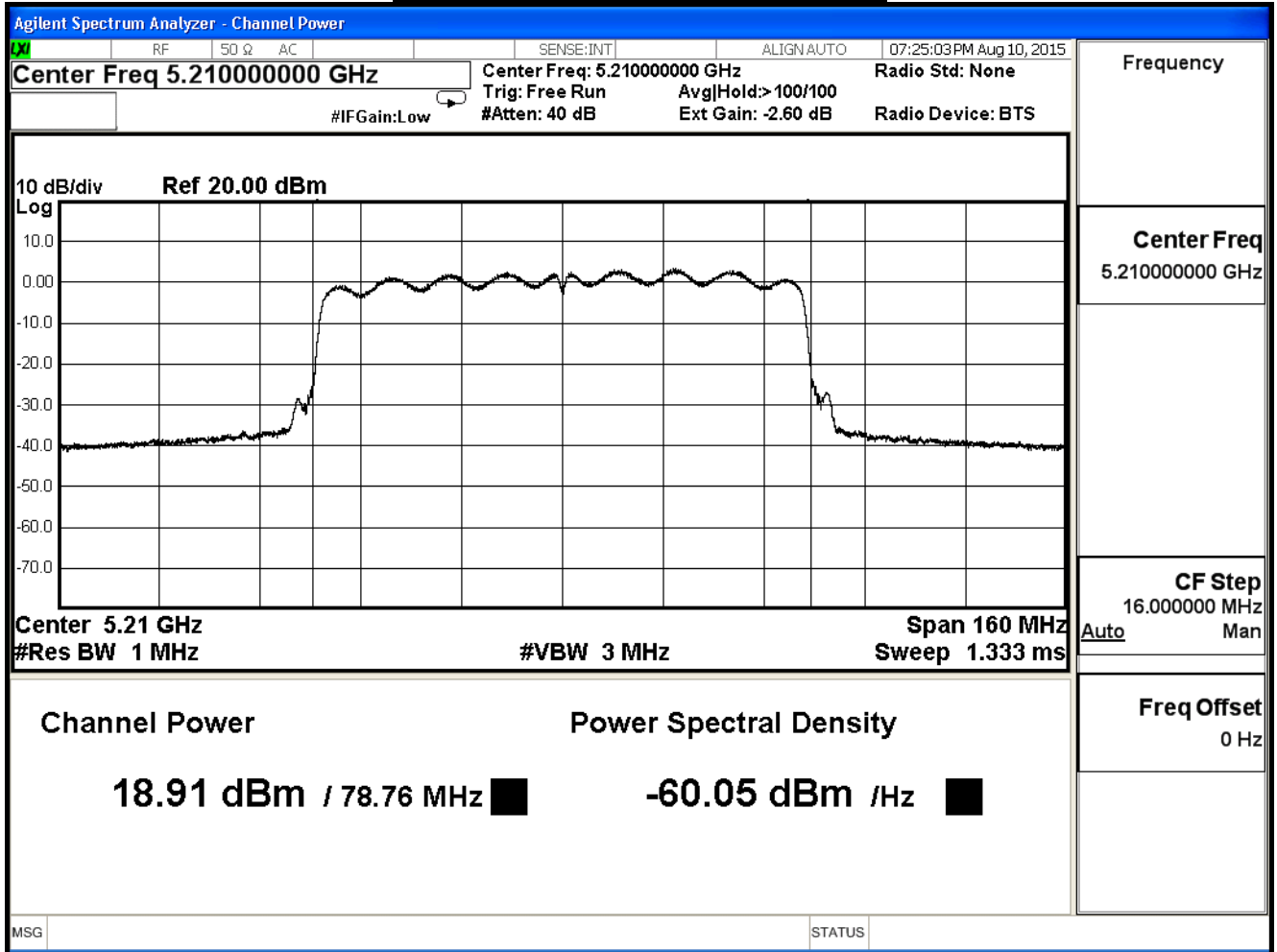
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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



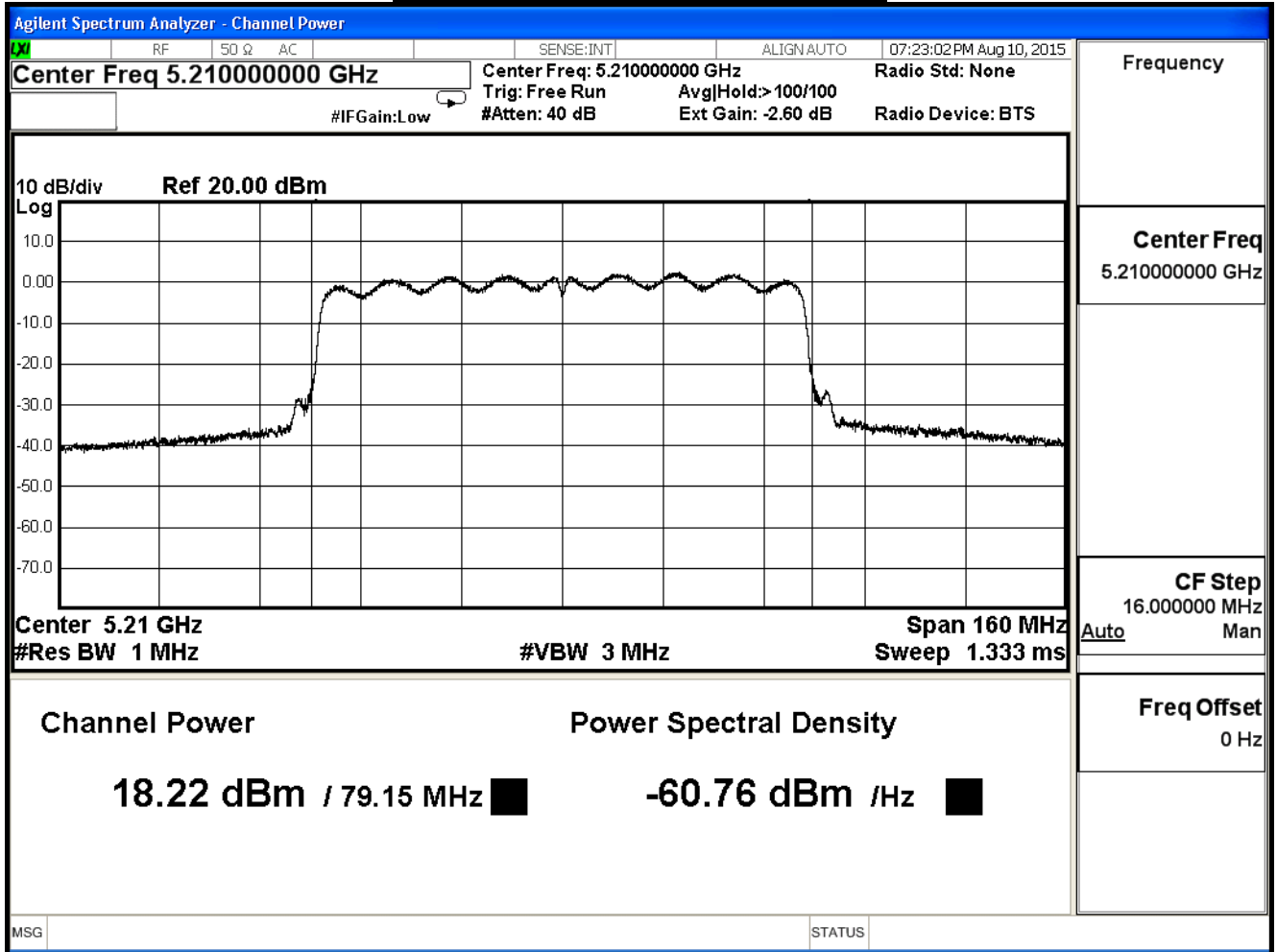
Product	Dual-band Wireless Range Extender		
Test Item	Peak Transmit Output		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

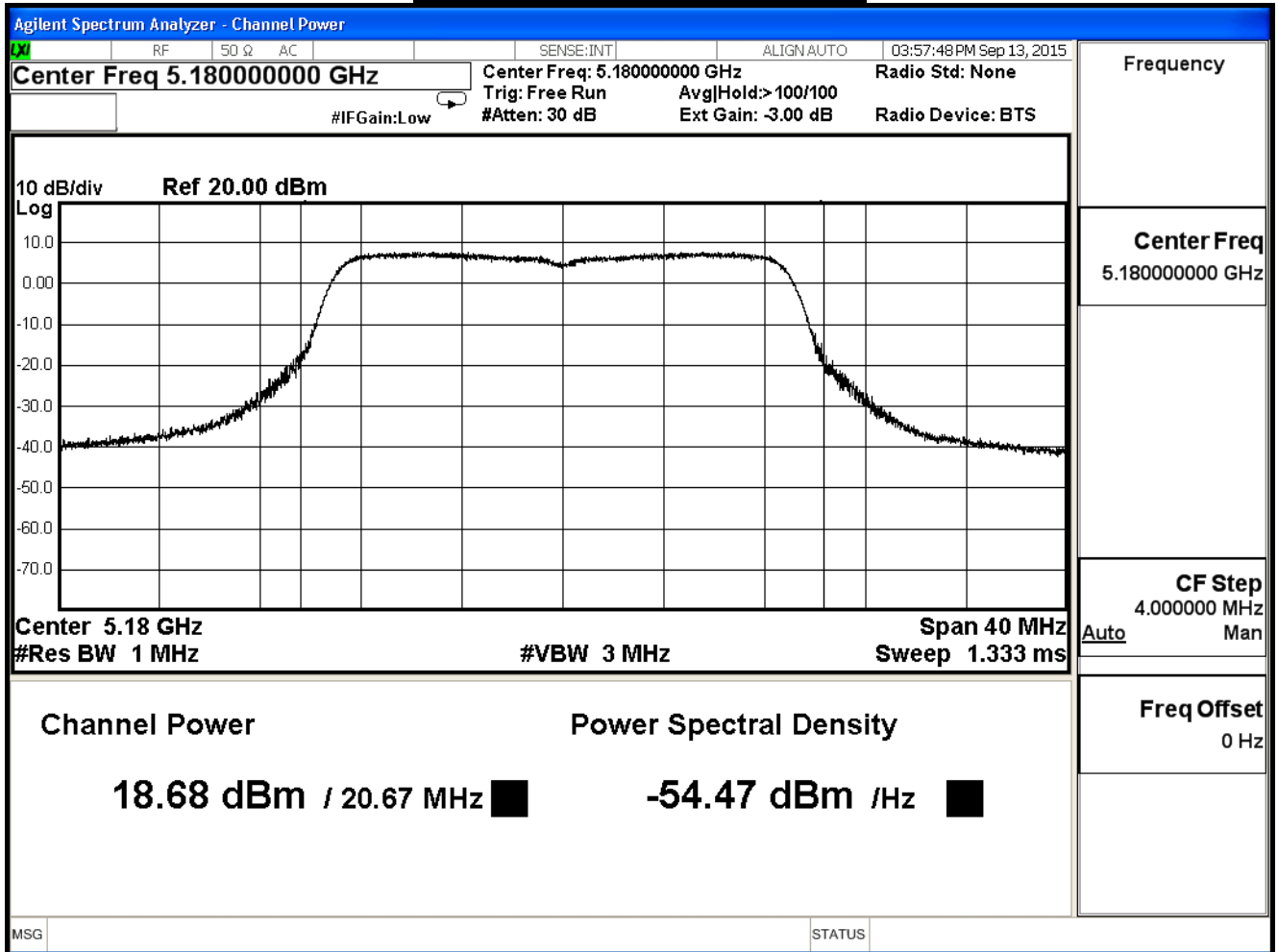
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

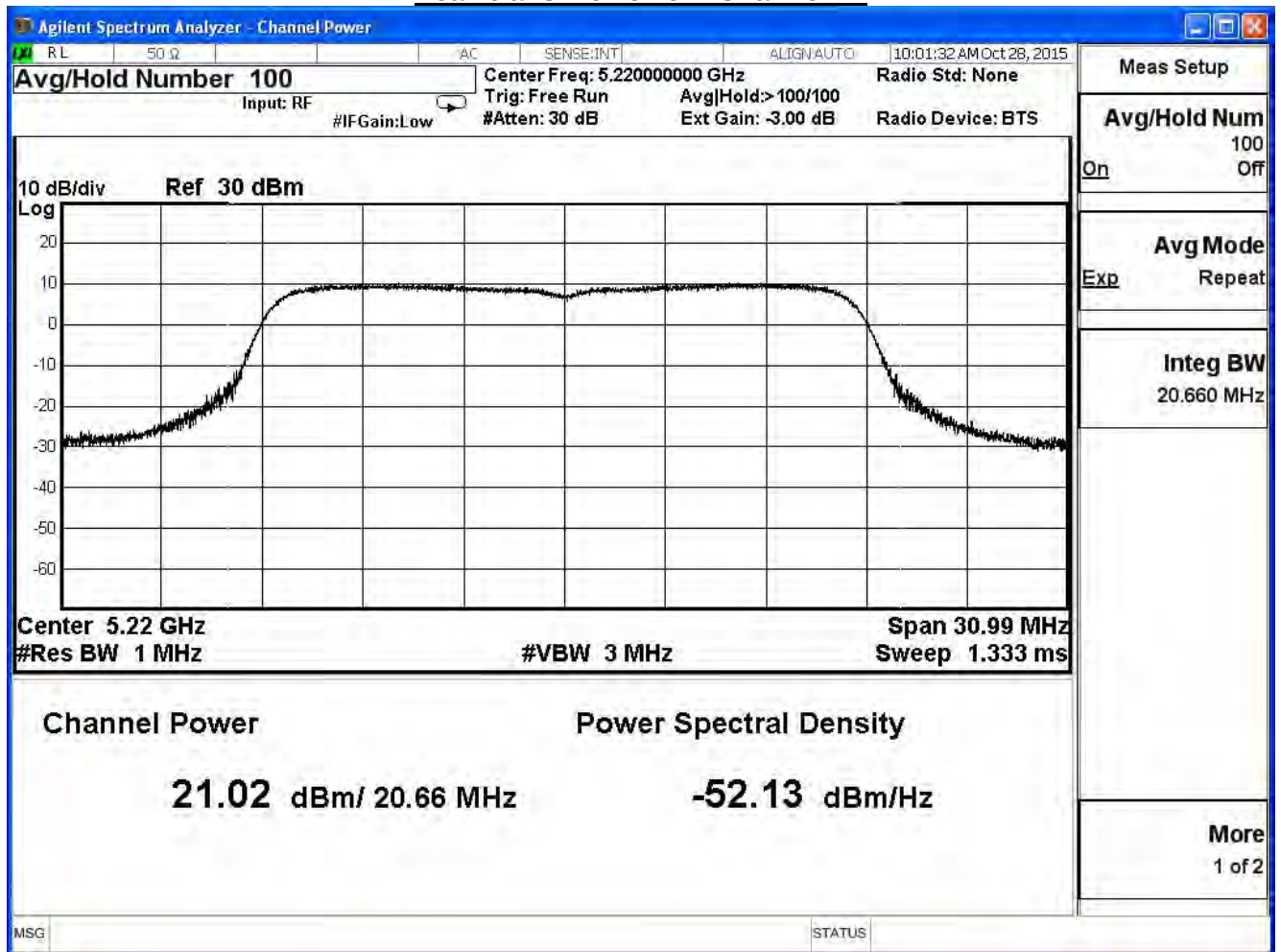
The worst emission of data rate is 6.5 Mbps.

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

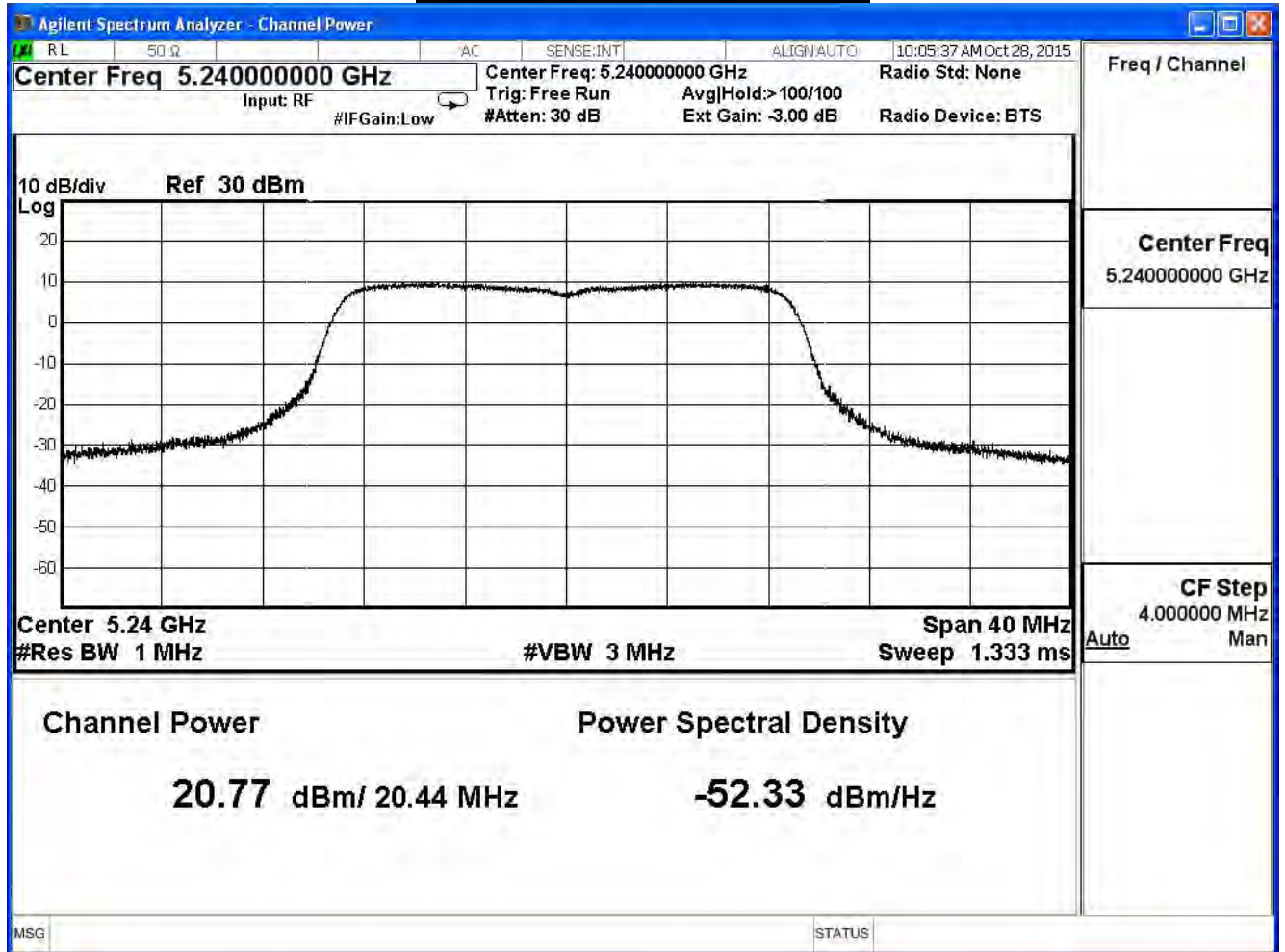
Peak transmit Power - Channel 36



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

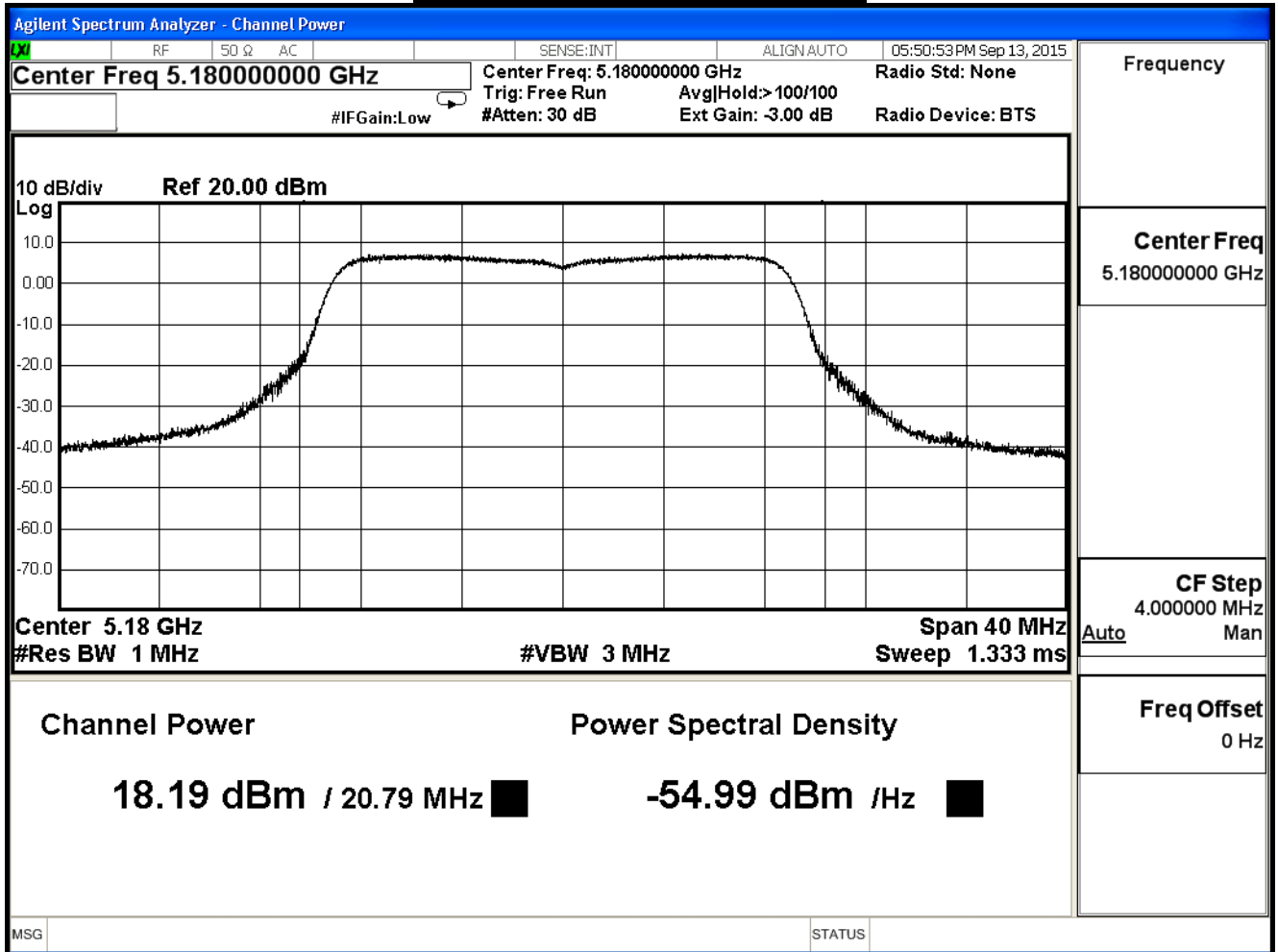
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

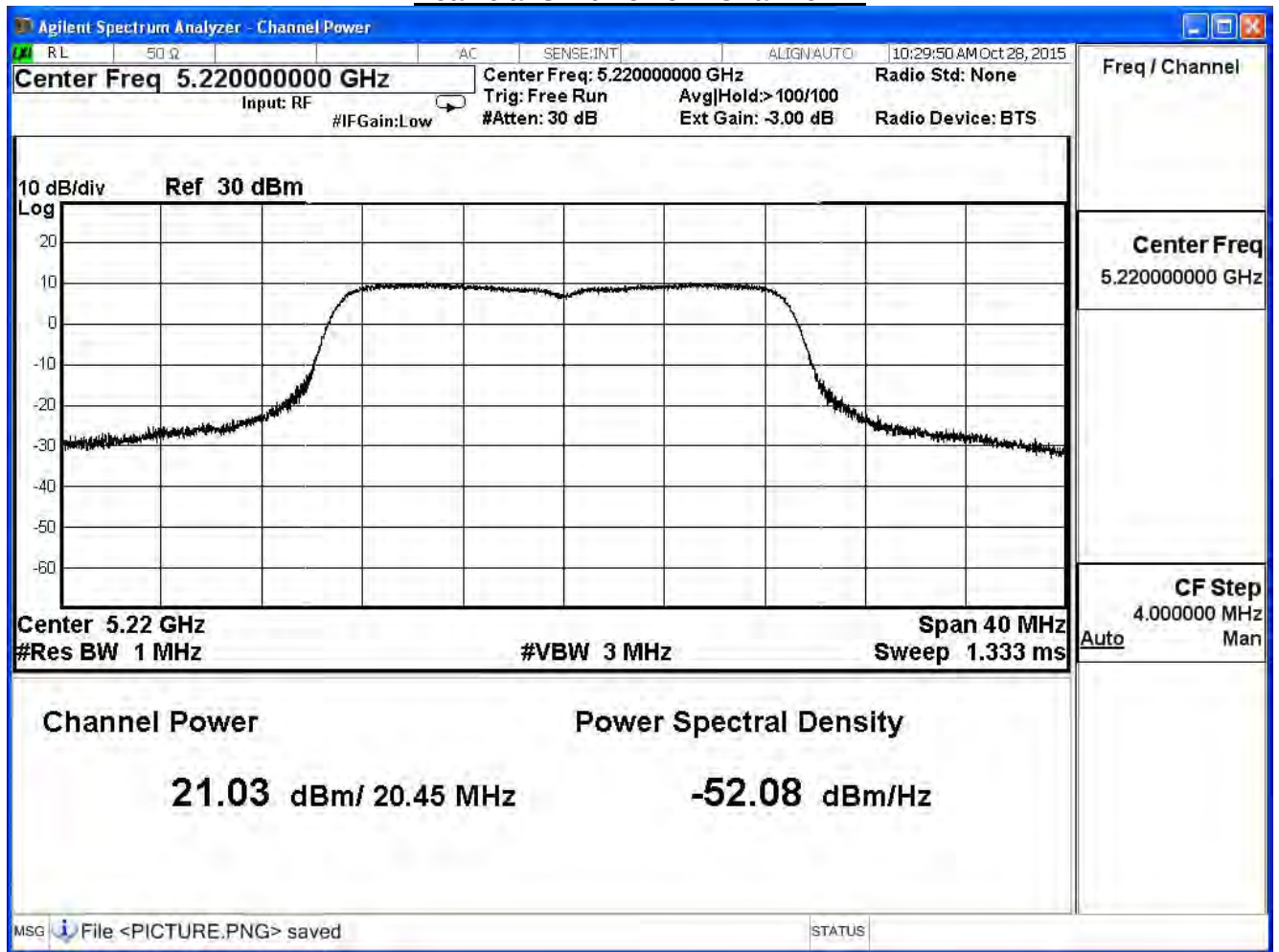
The worst emission of data rate is 6.5Mbps.

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

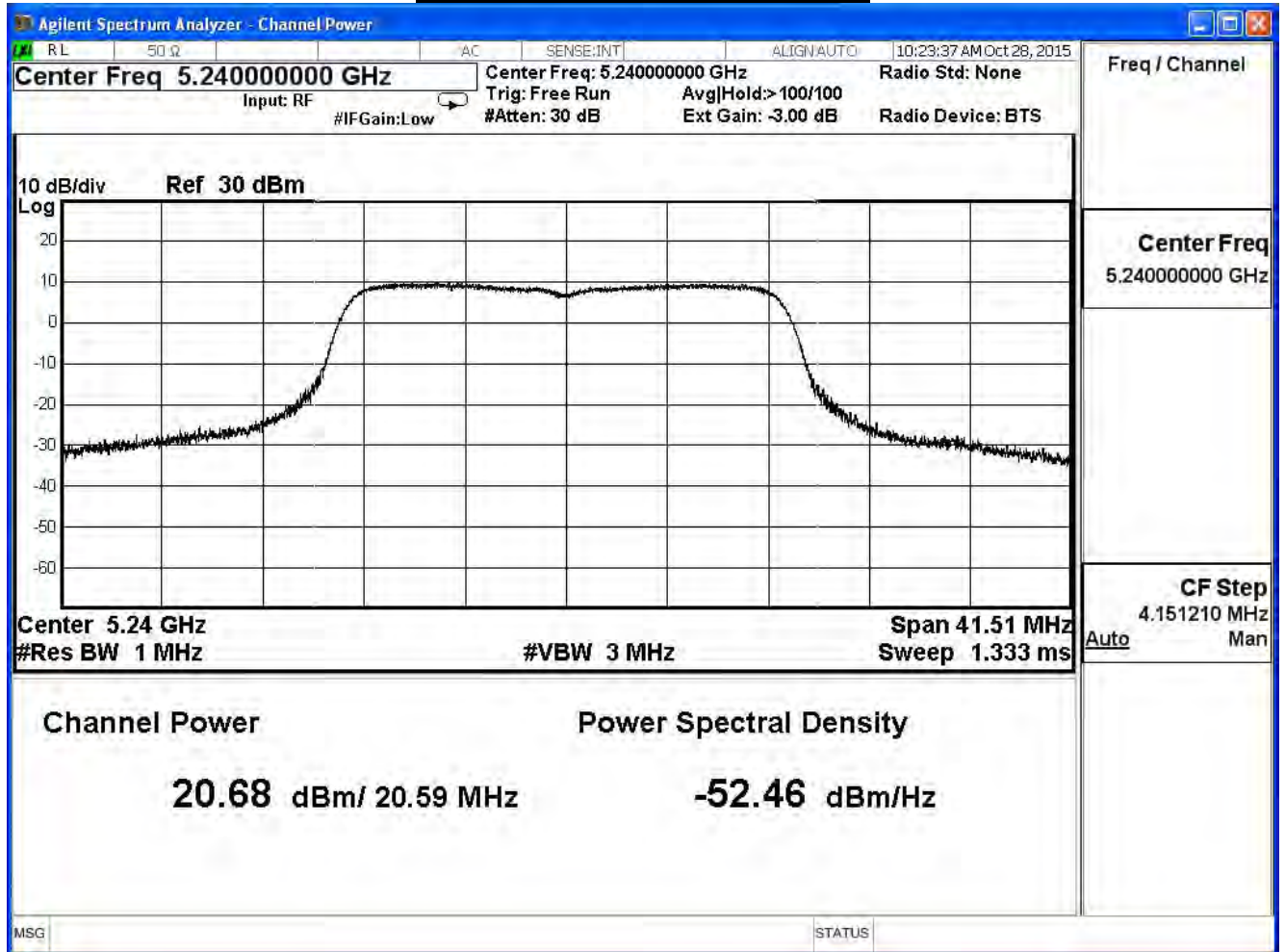
Peak transmit Power - Channel 36



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

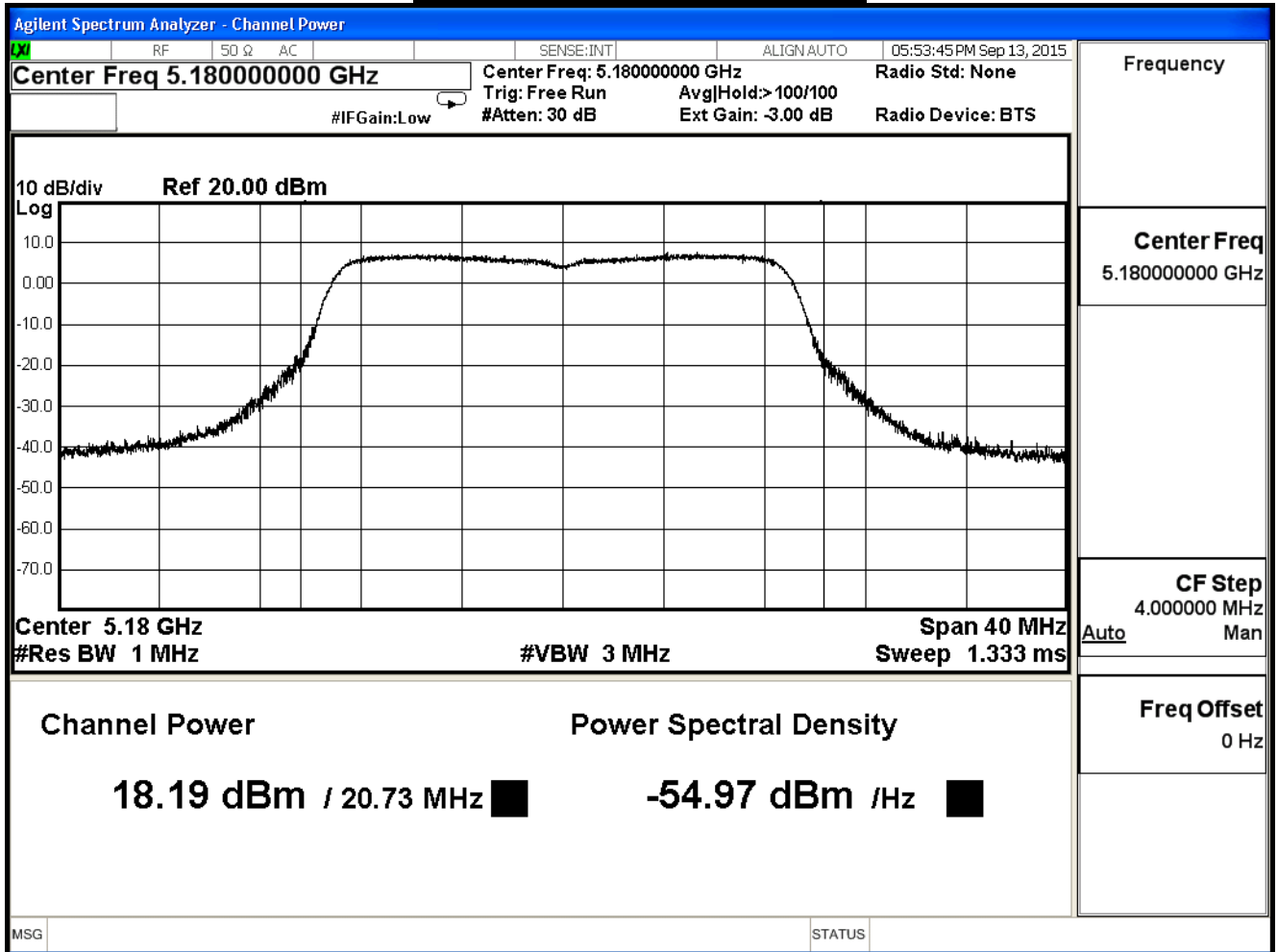
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

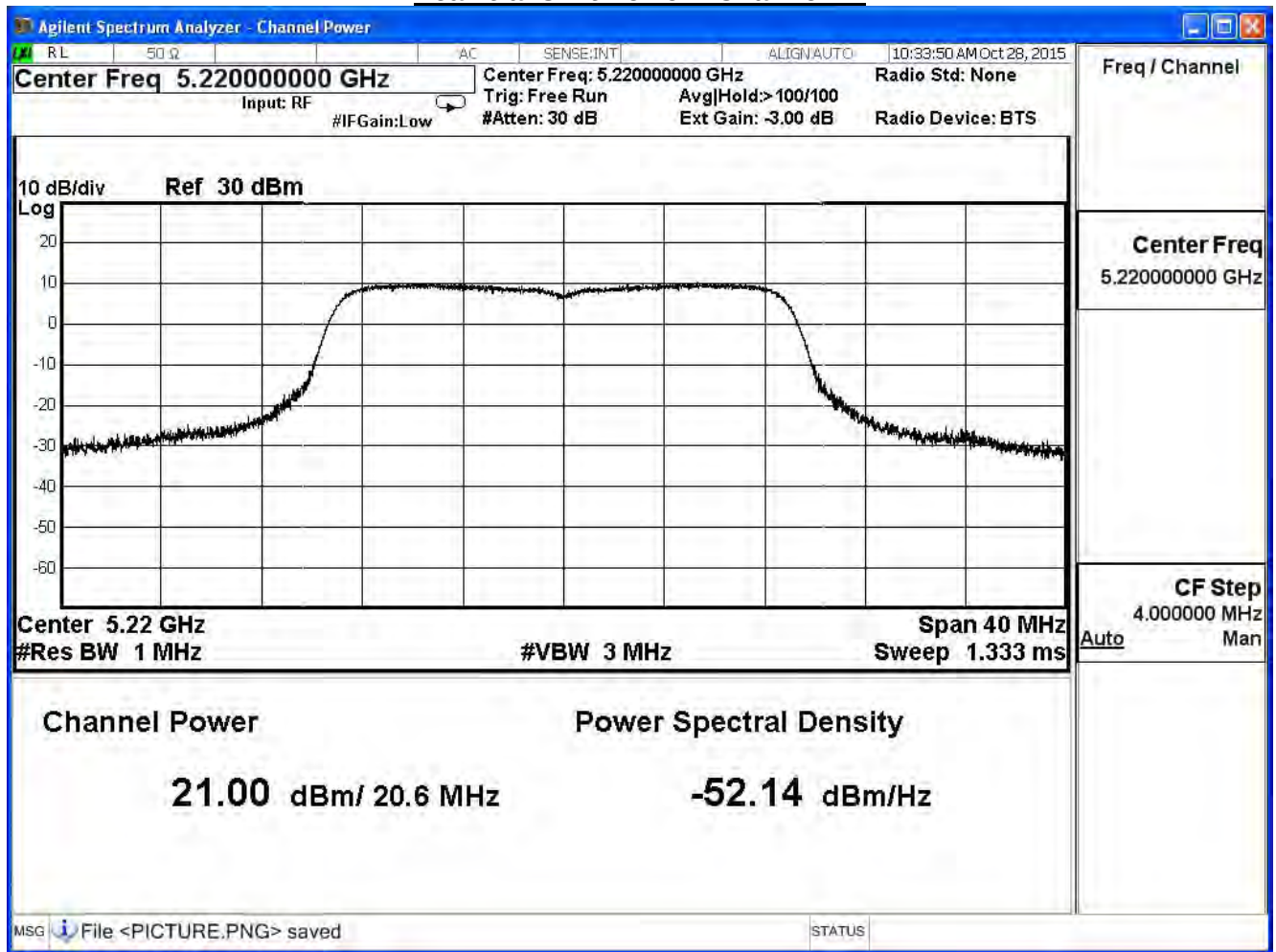
The worst emission of data rate is 6.5Mbps.

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

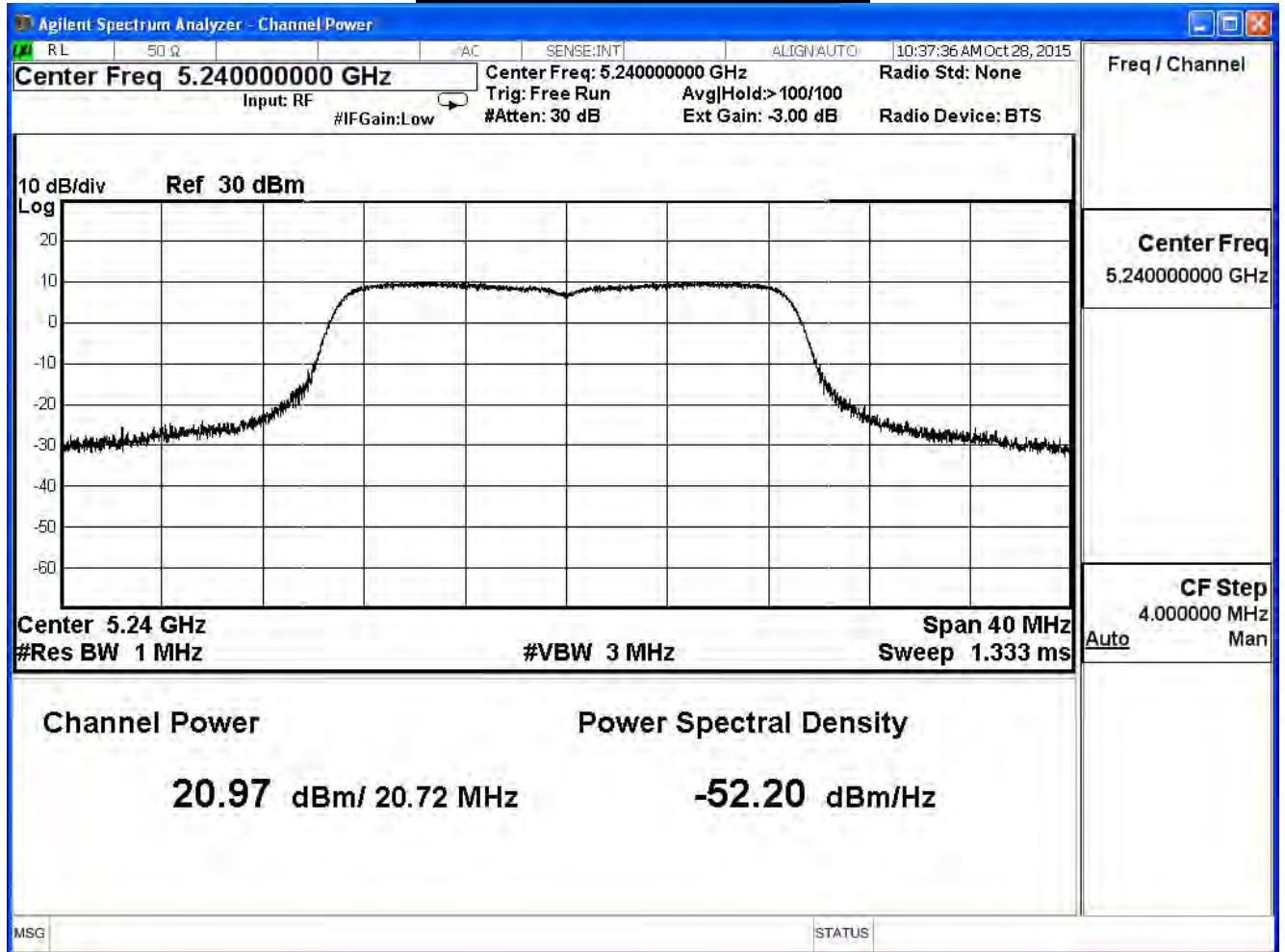
Peak transmit Power - Channel 36



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

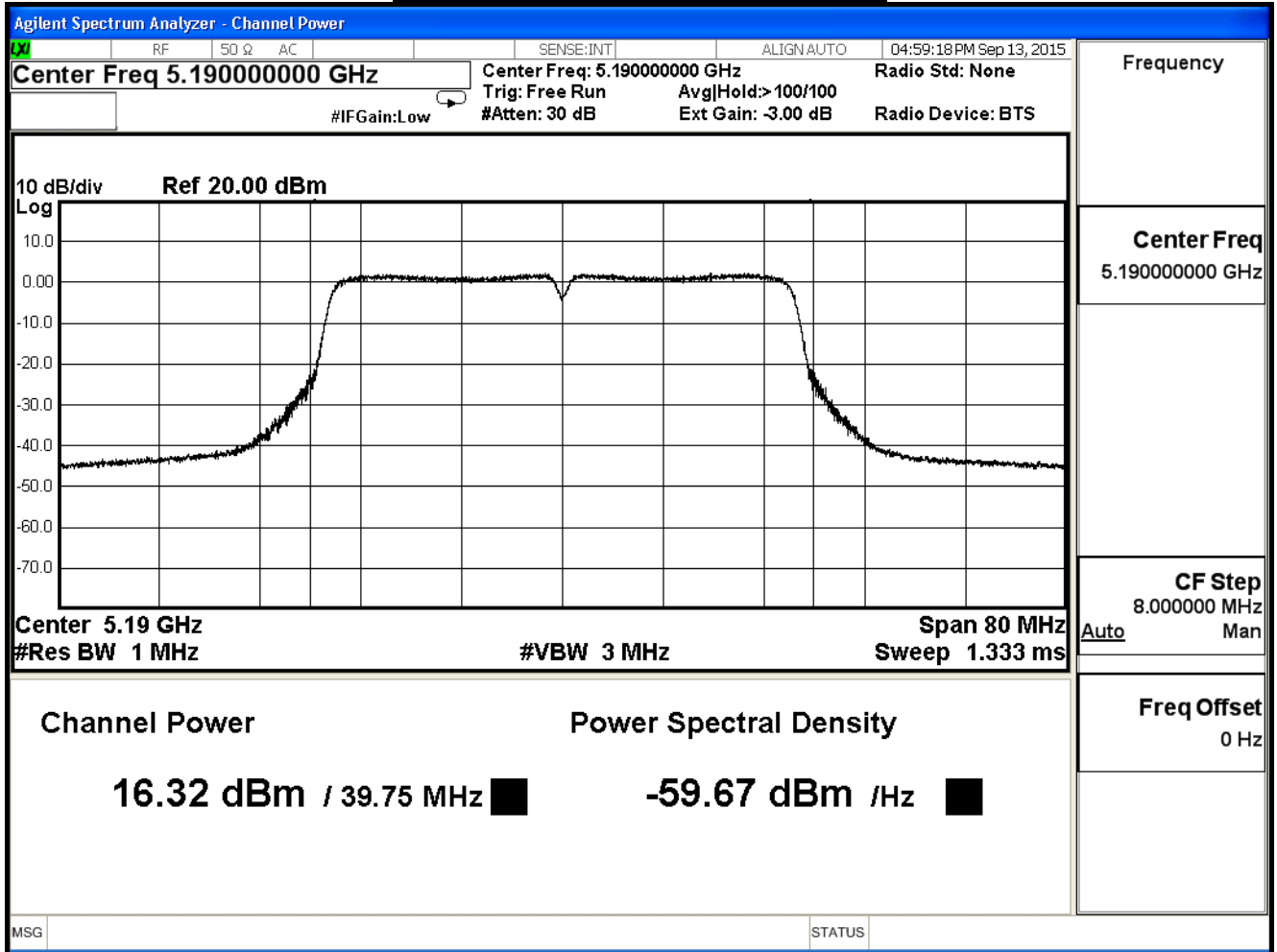
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

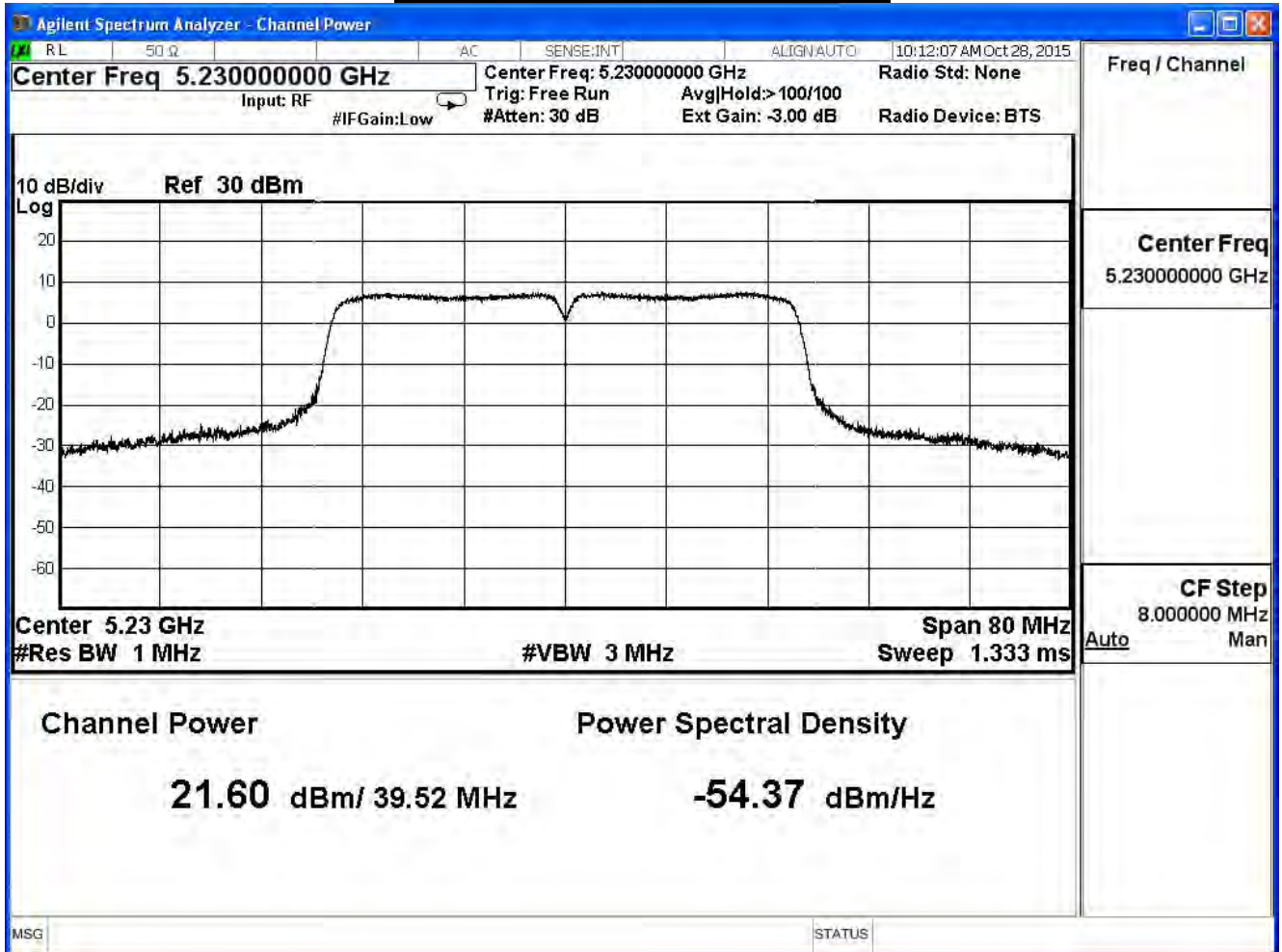
The worst emission of data rate is 13.5 Mbps.

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

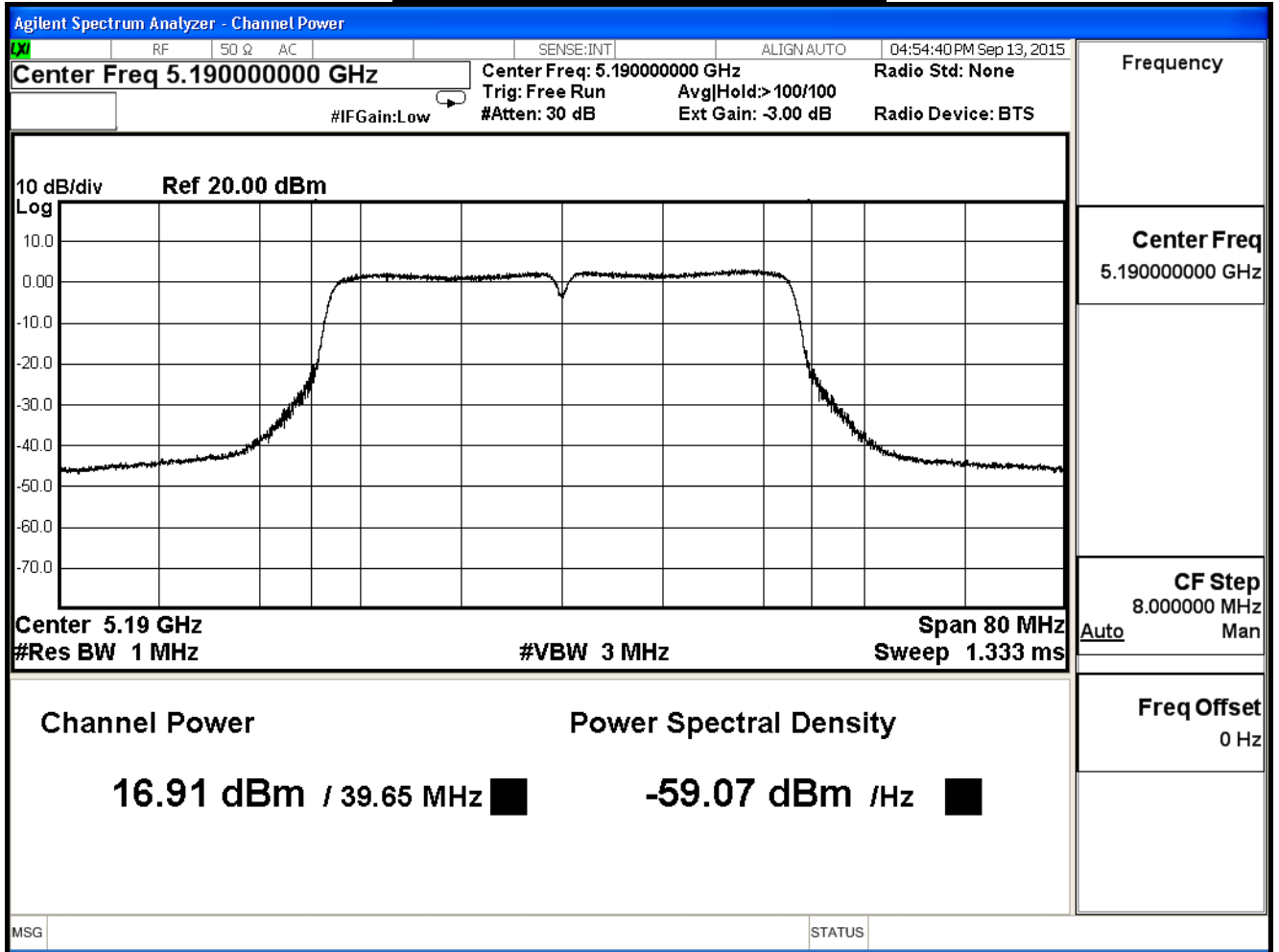
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

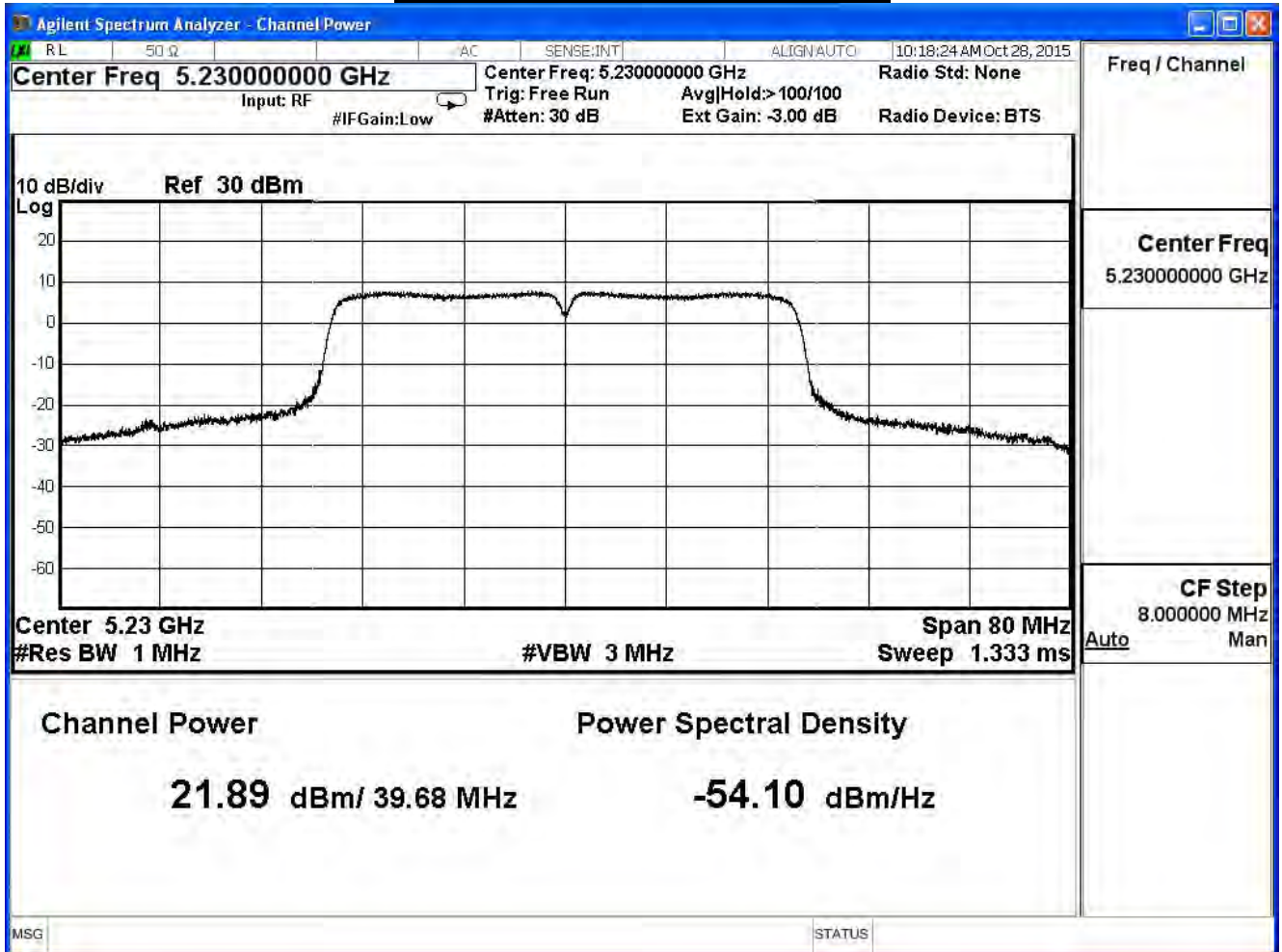
The worst emission of data rate is 13.5 Mbps.

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

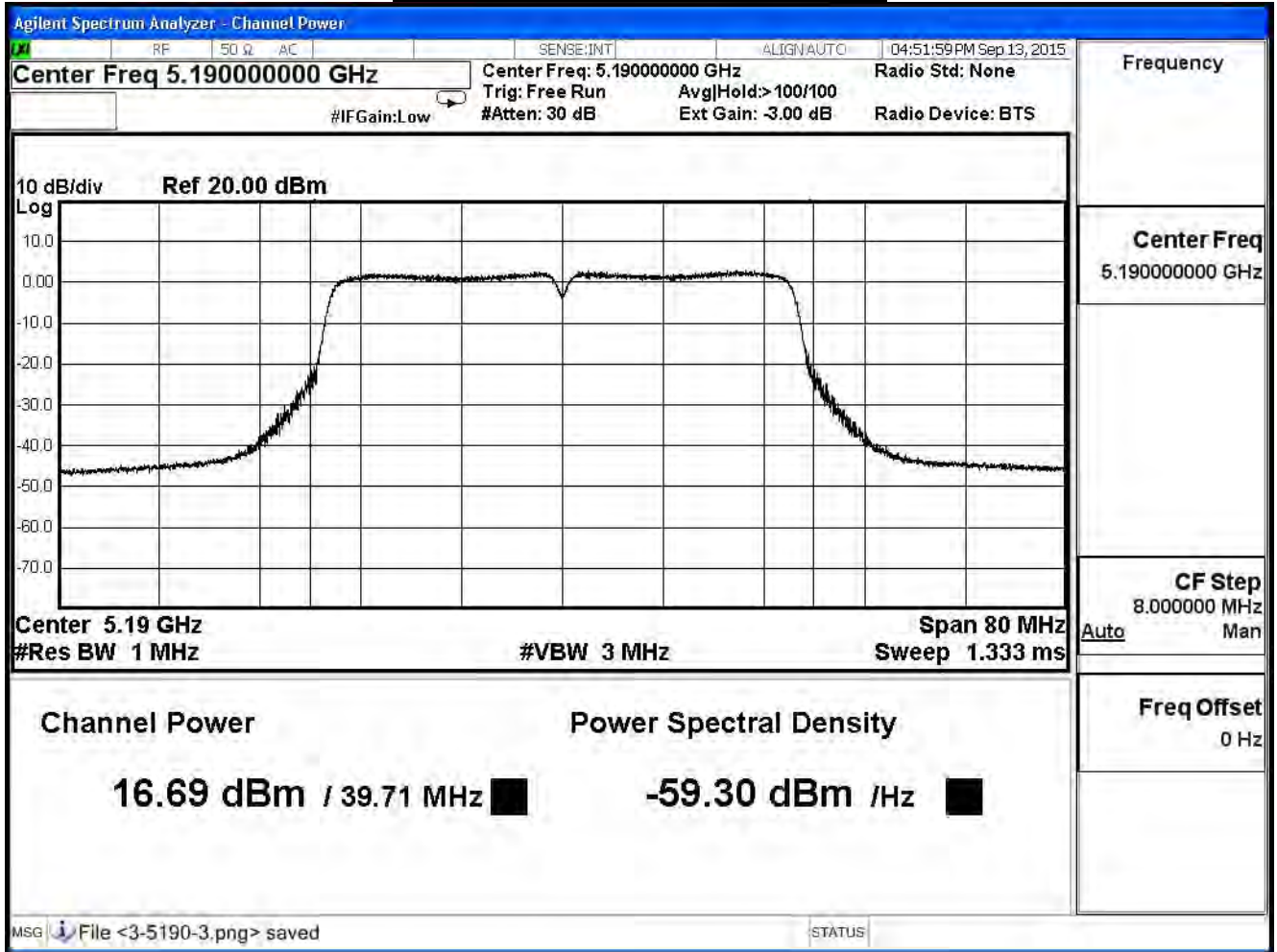
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

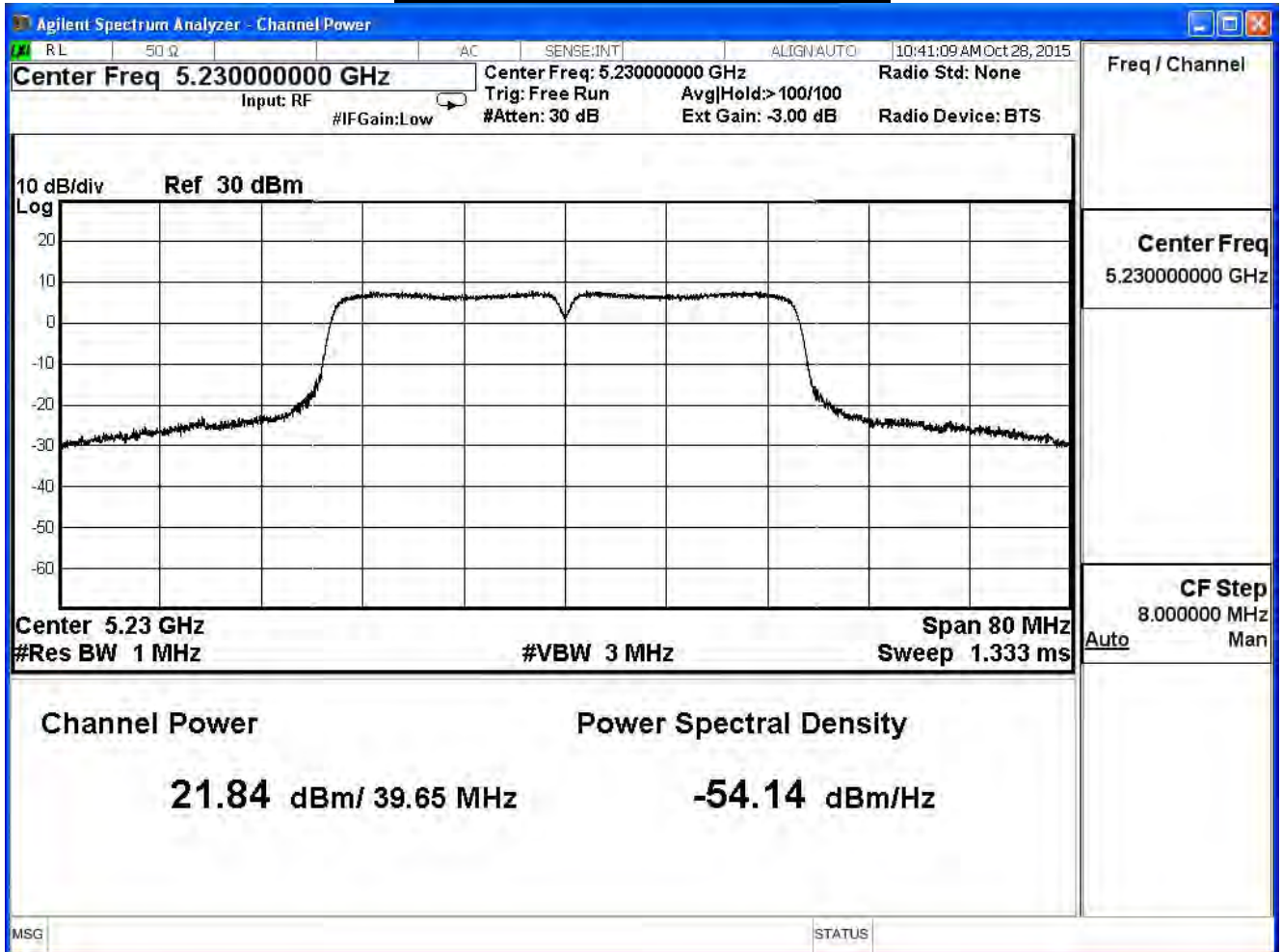
The worst emission of data rate is 13.5 Mbps.

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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

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

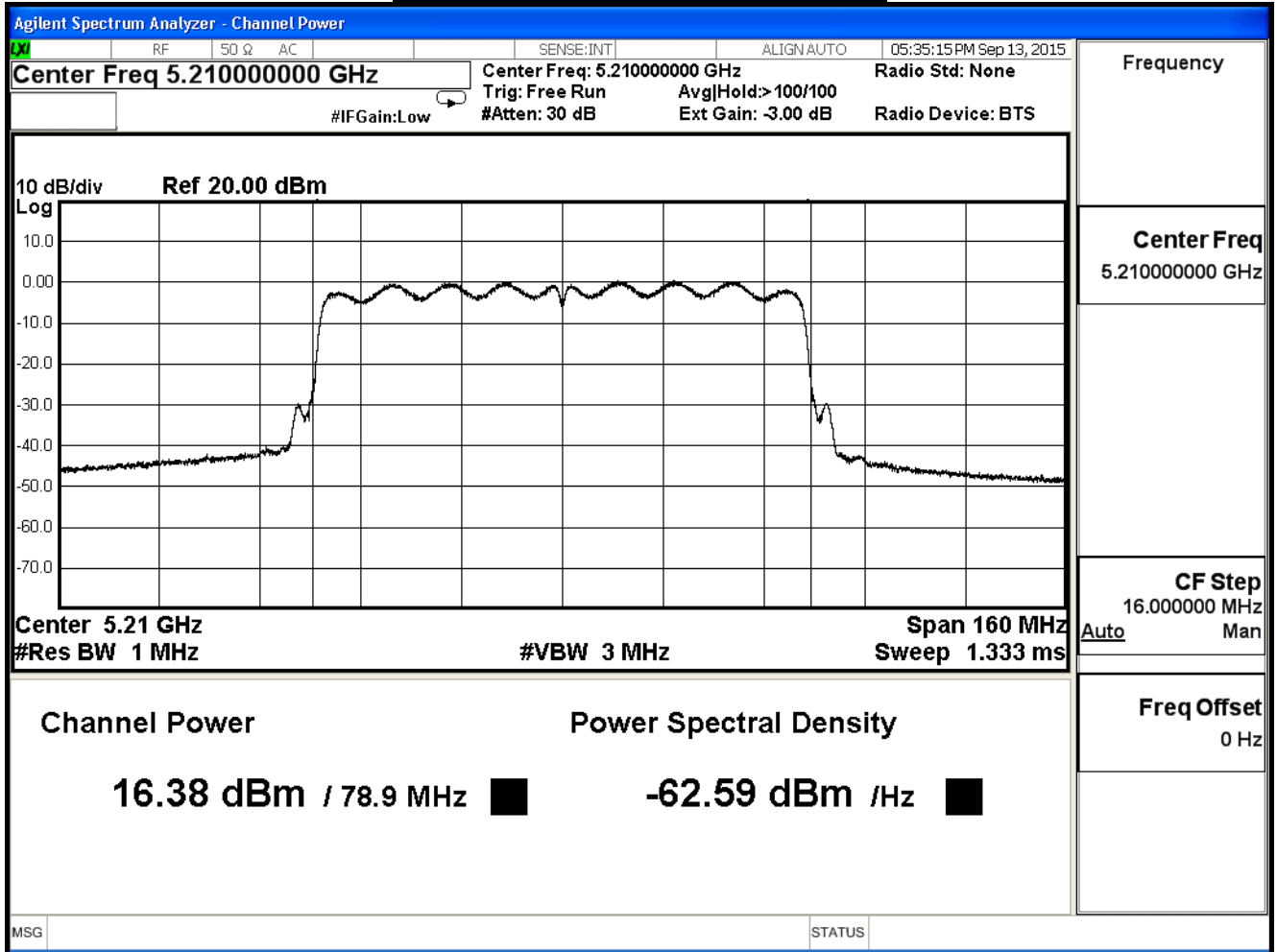
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

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

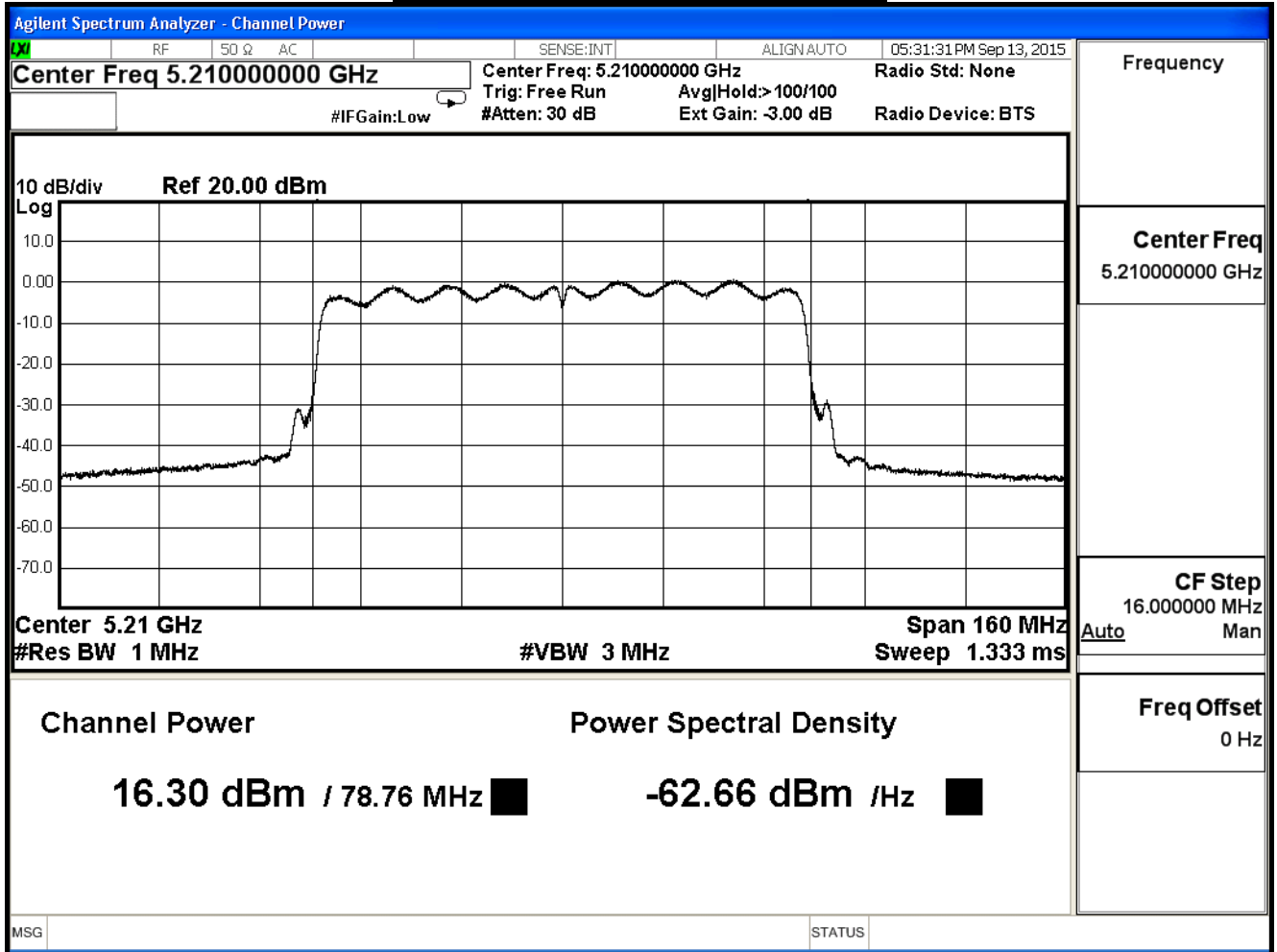
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

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

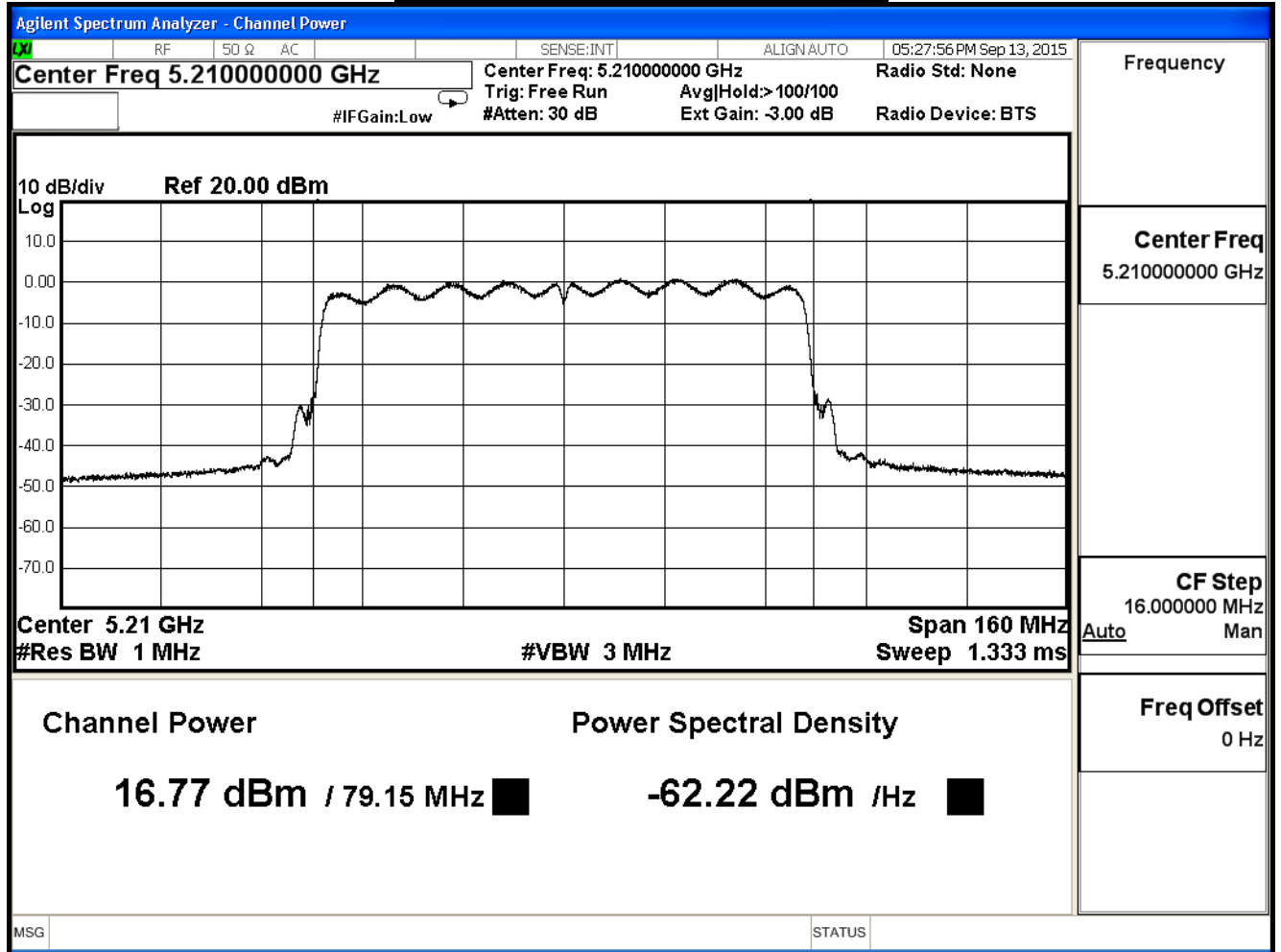
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Peak Transmit Output Limit: $30\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 28.69\text{dBm}$

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

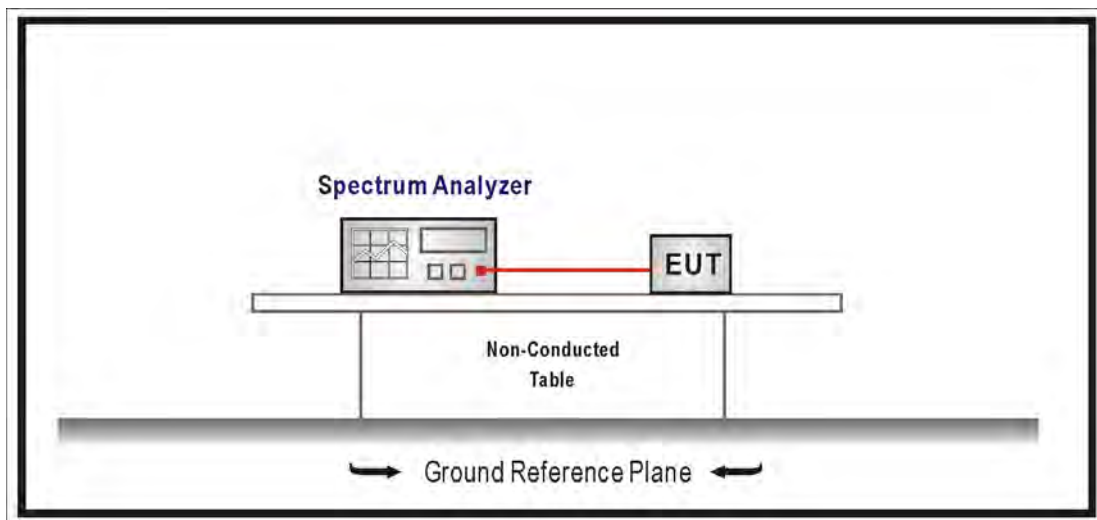
The following test equipments are used during the radiated emission tests:

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

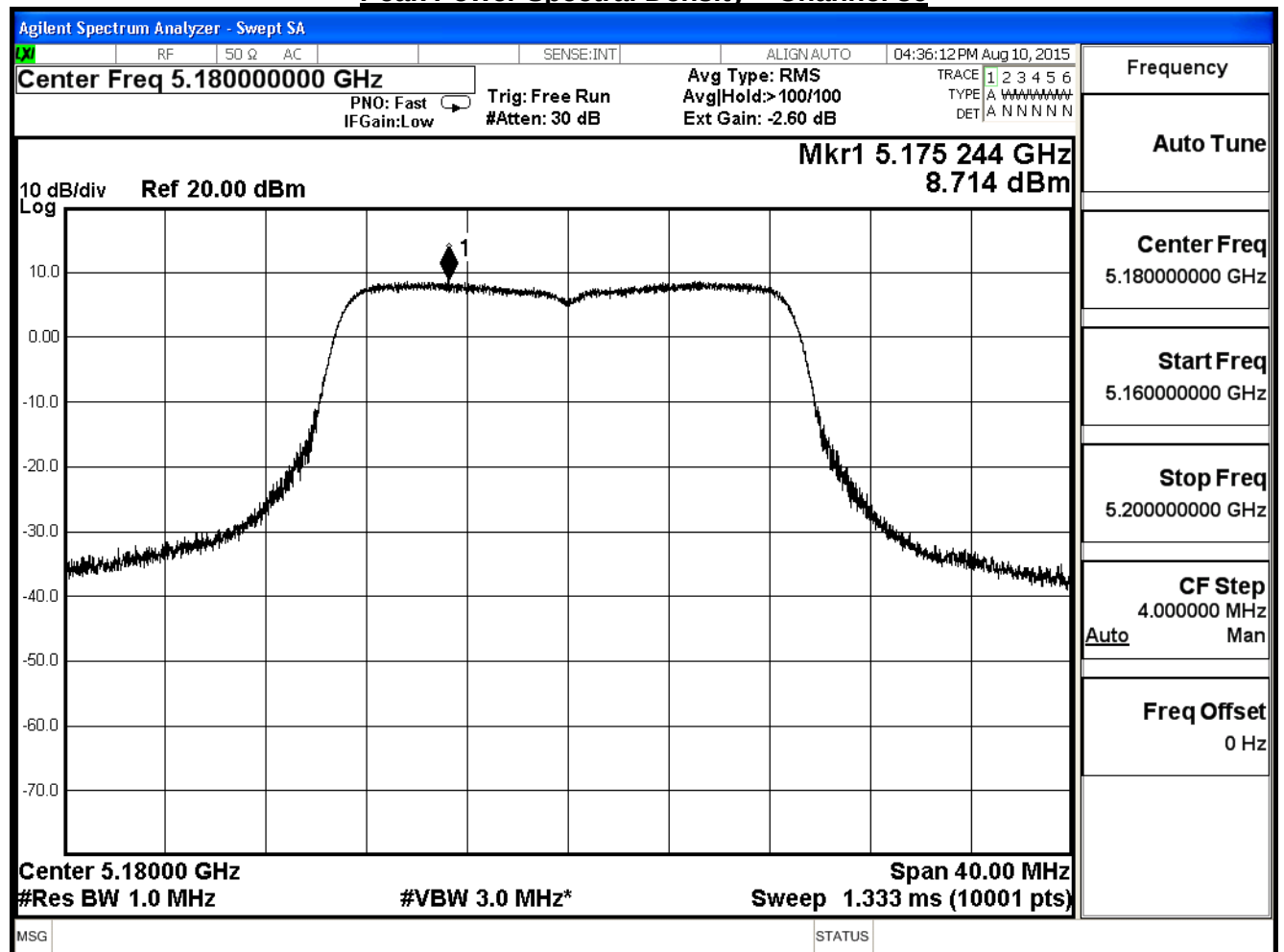
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

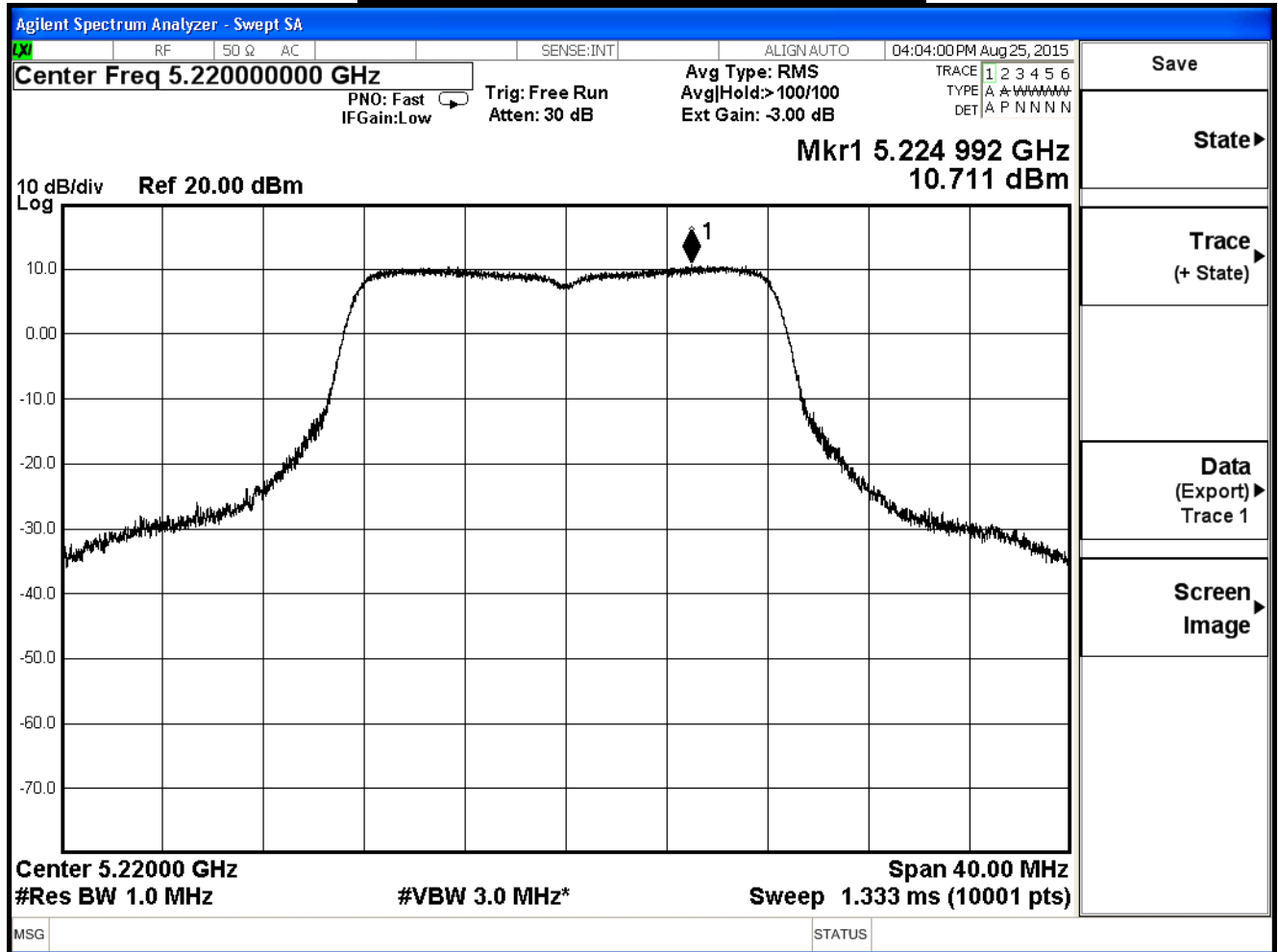
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

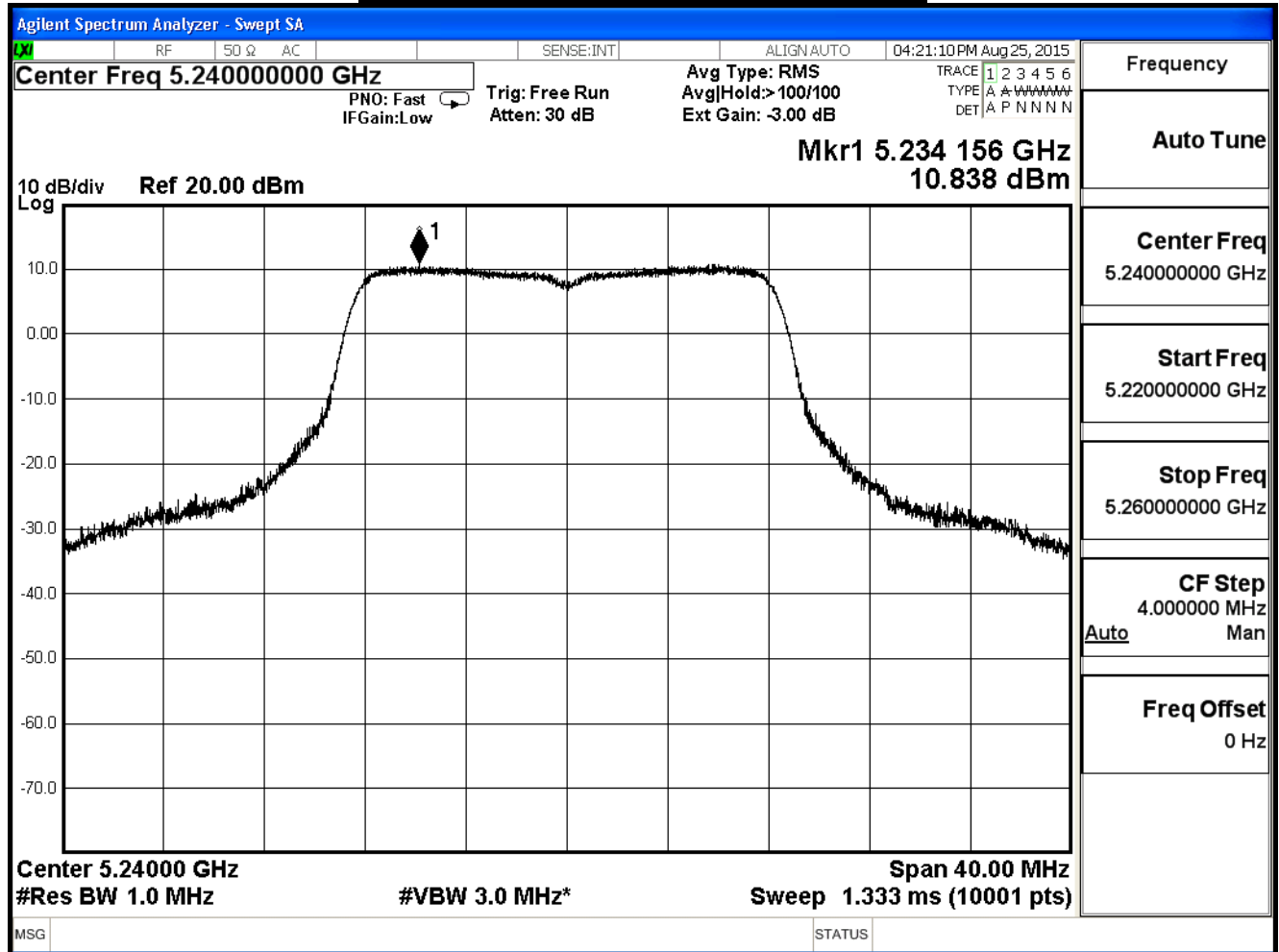
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



Peak Power Spectral Density – Channel 48



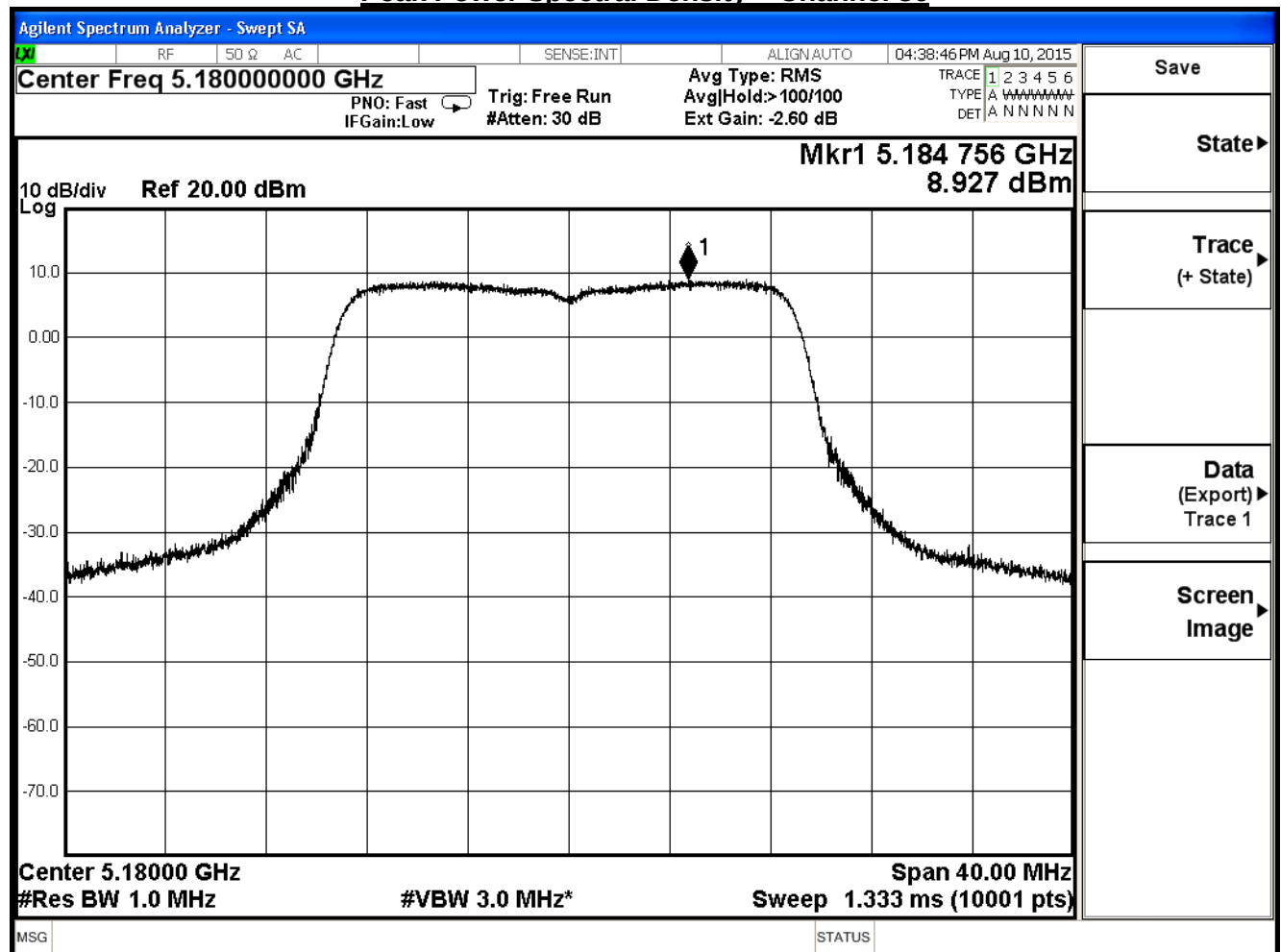
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

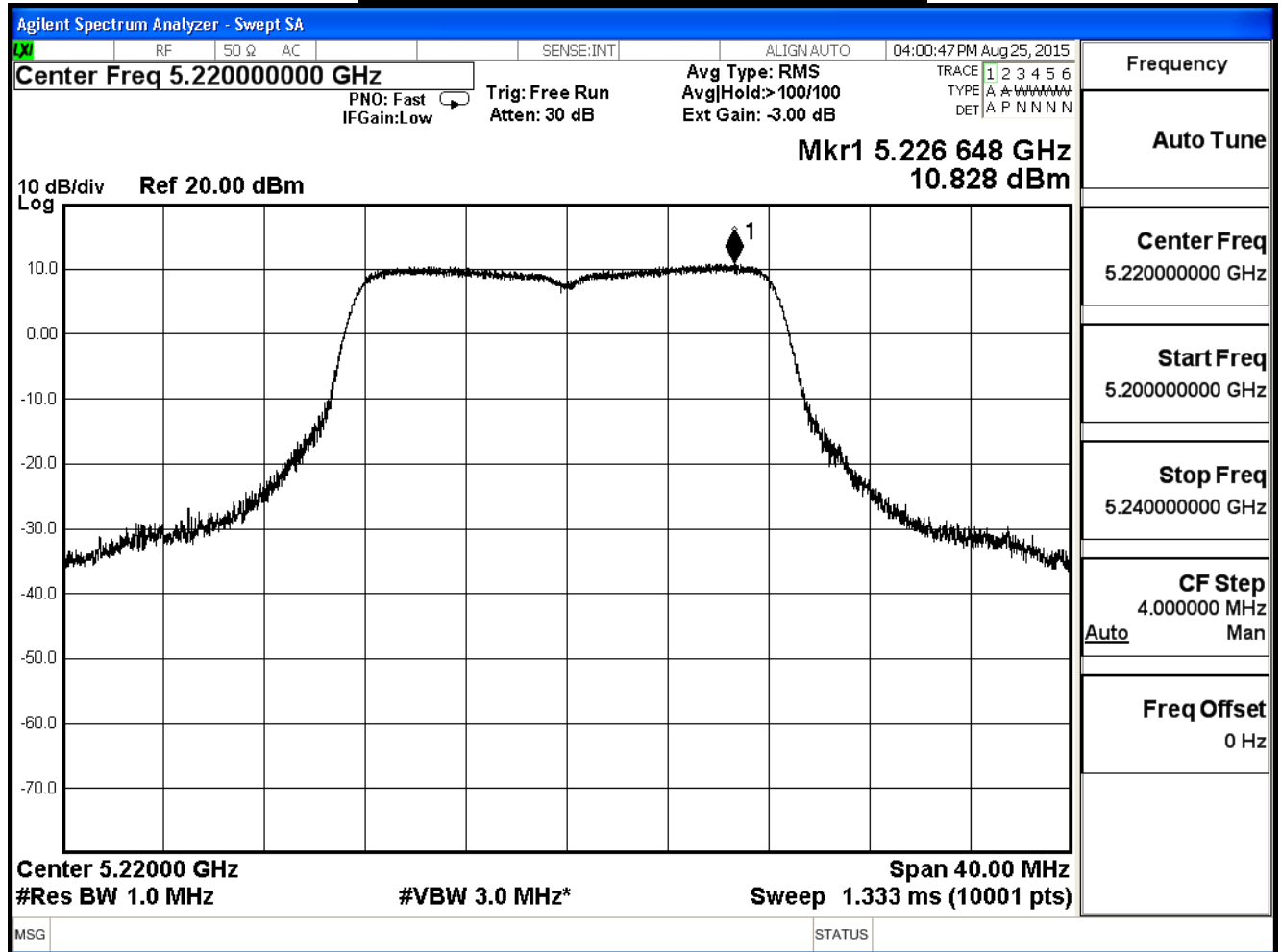
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

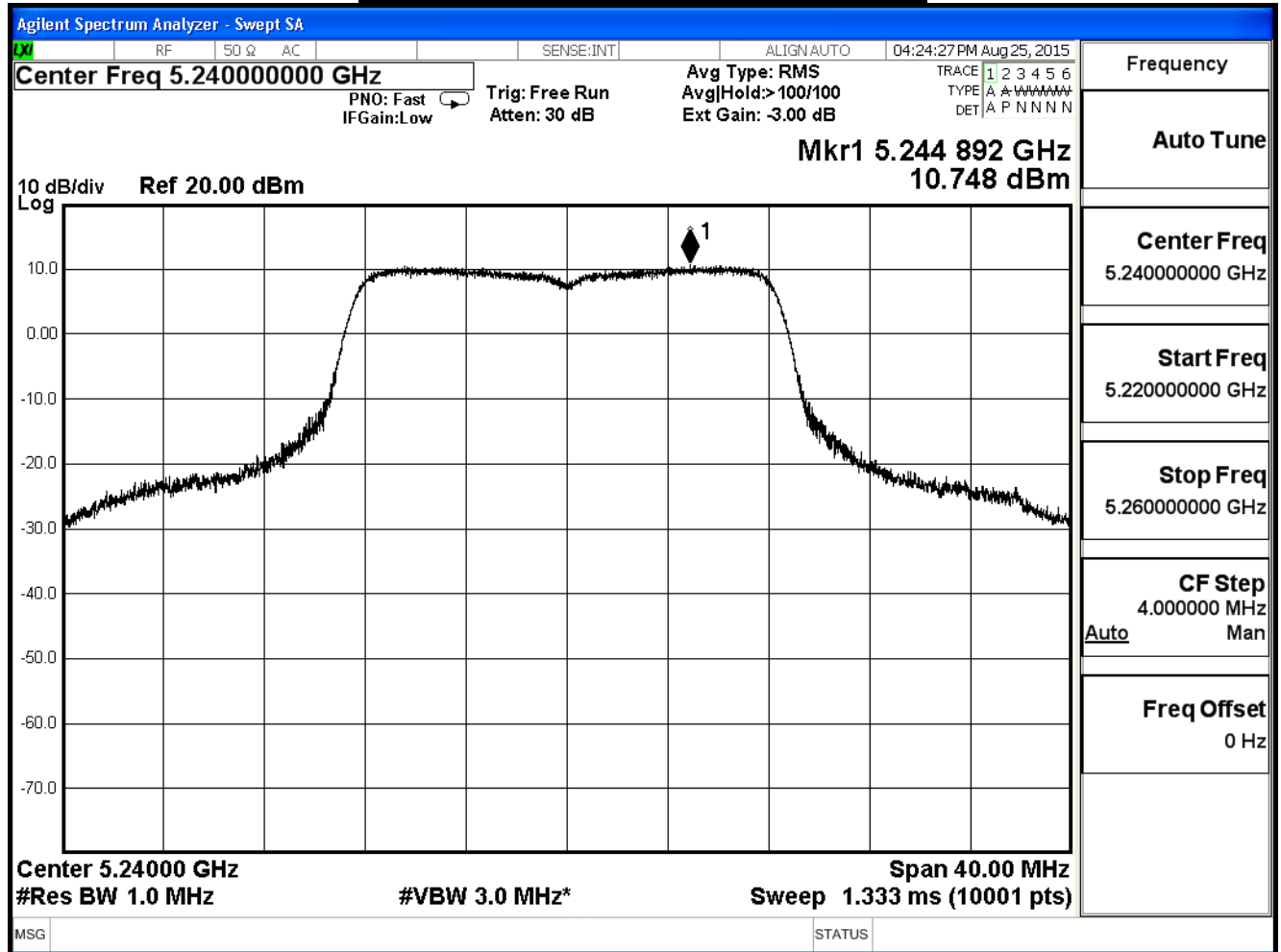
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



Peak Power Spectral Density – Channel 48



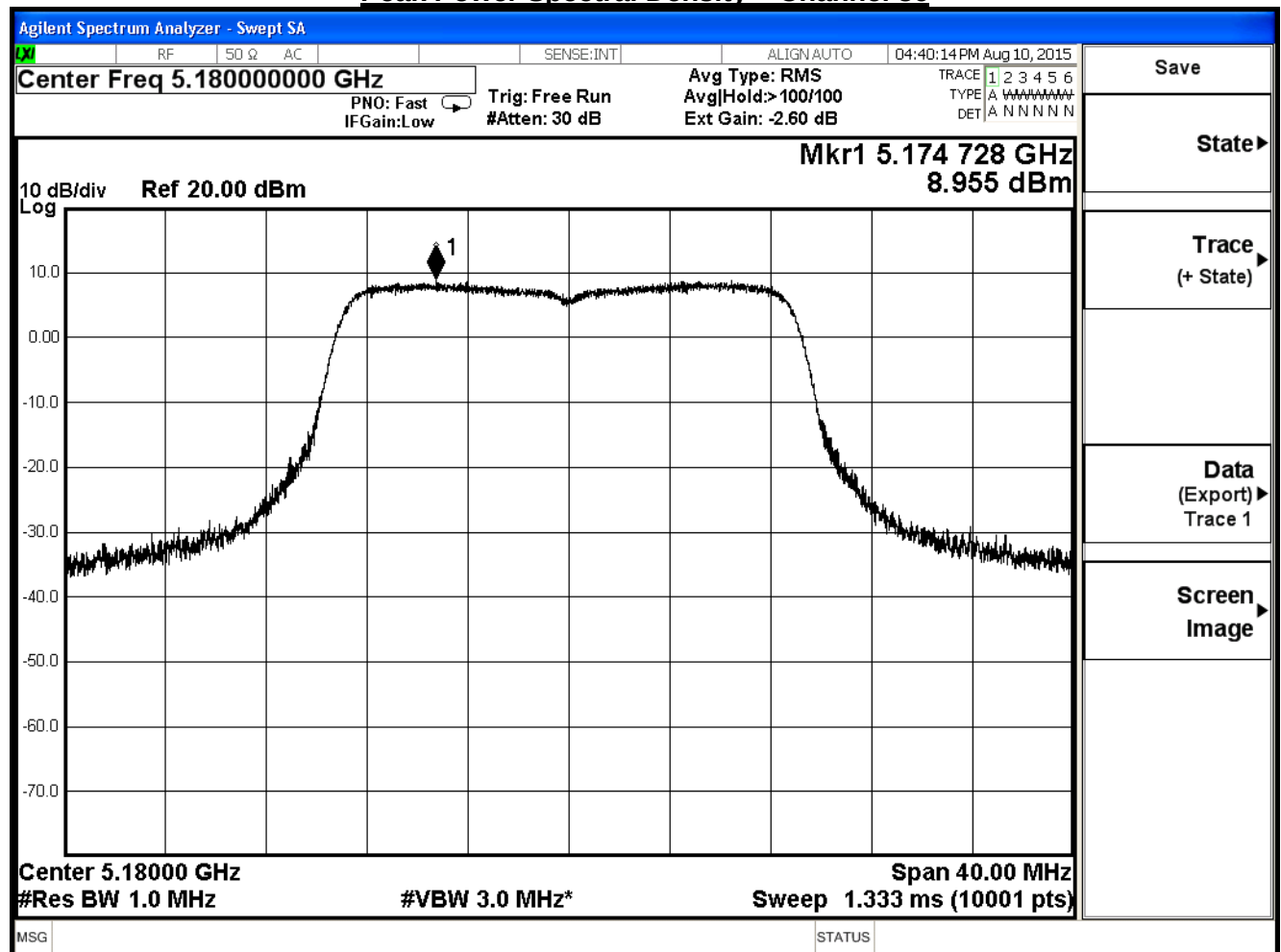
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

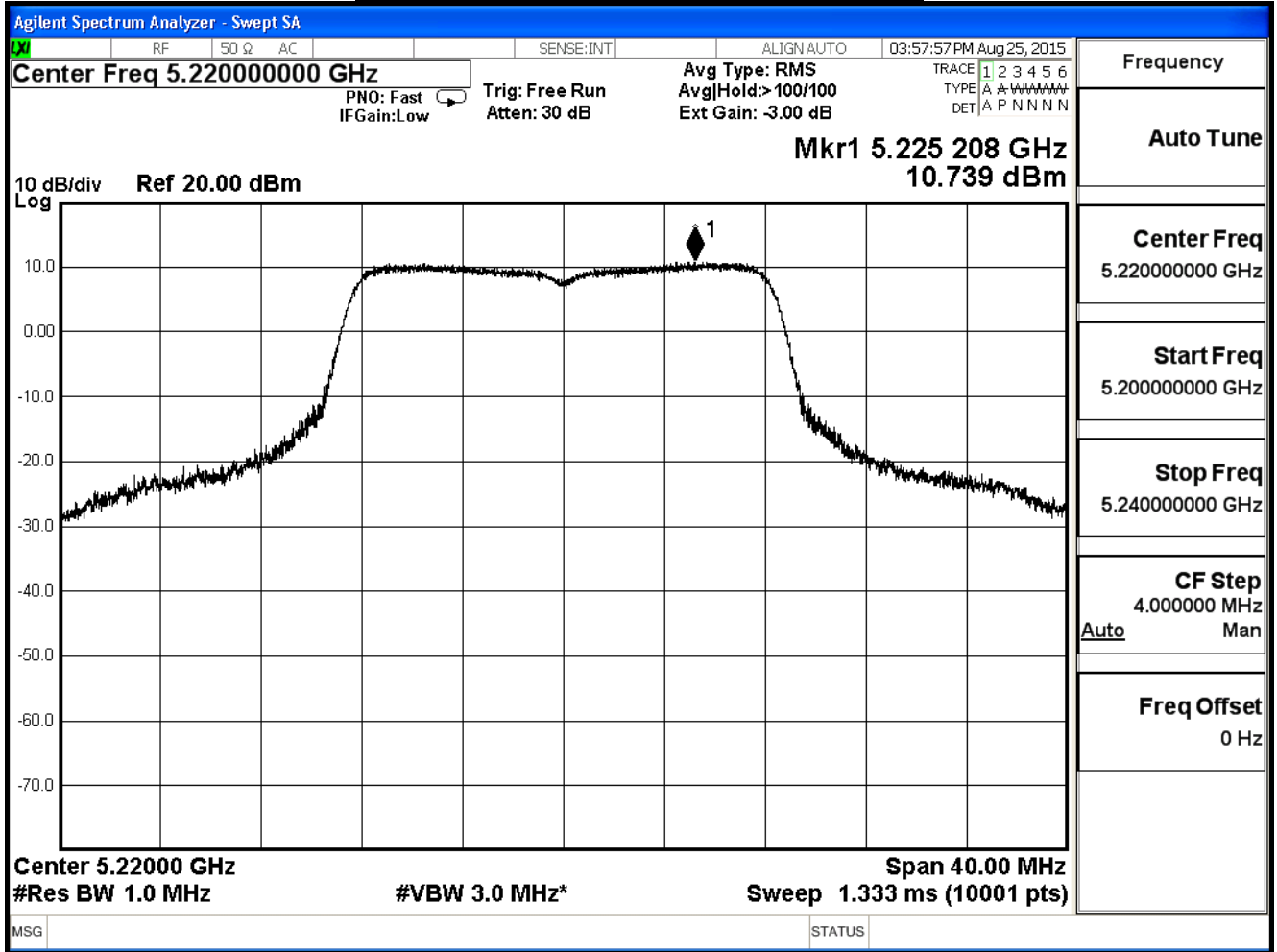
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

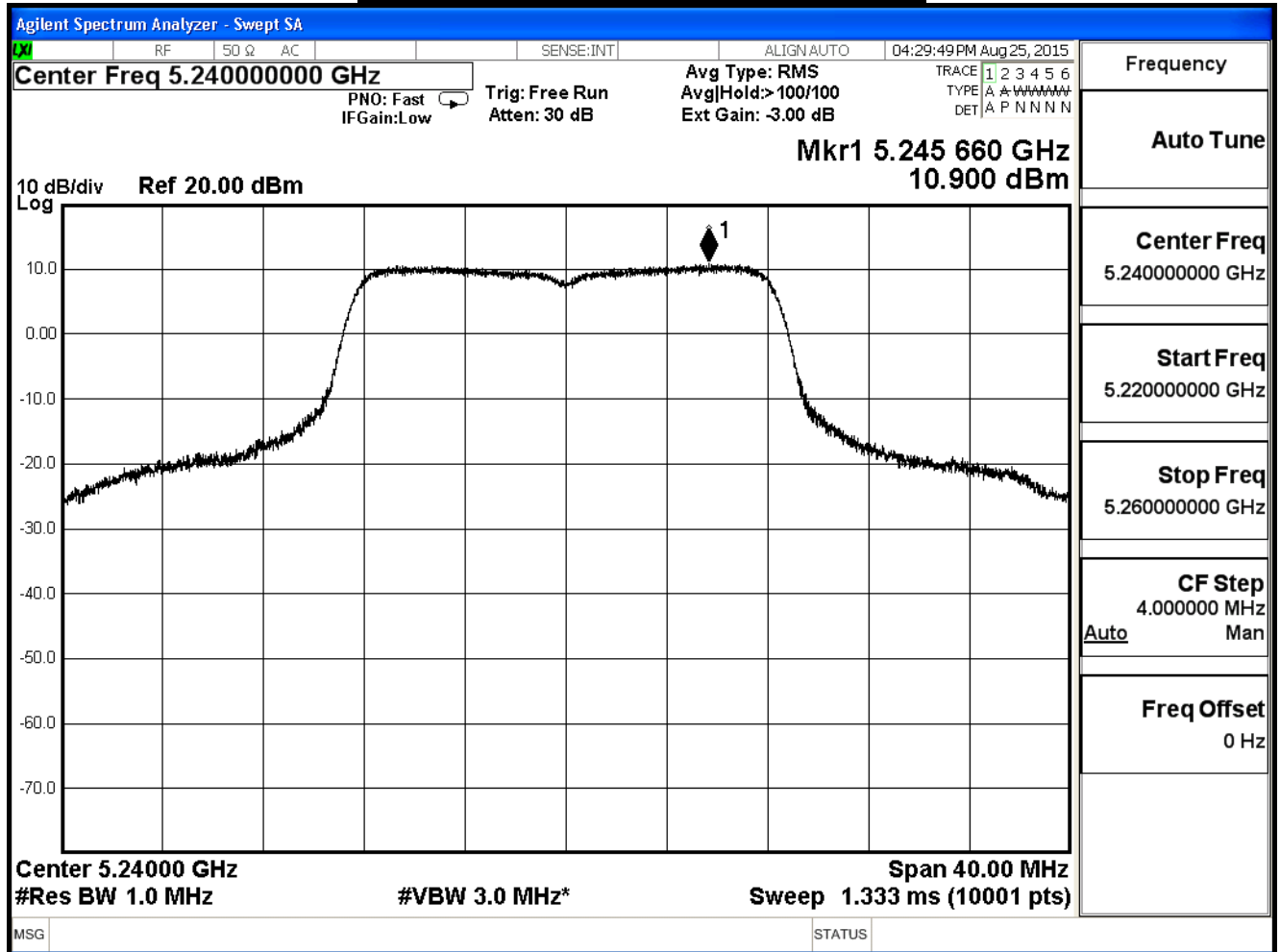
Peak Power Spectral Density – Channel 36



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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

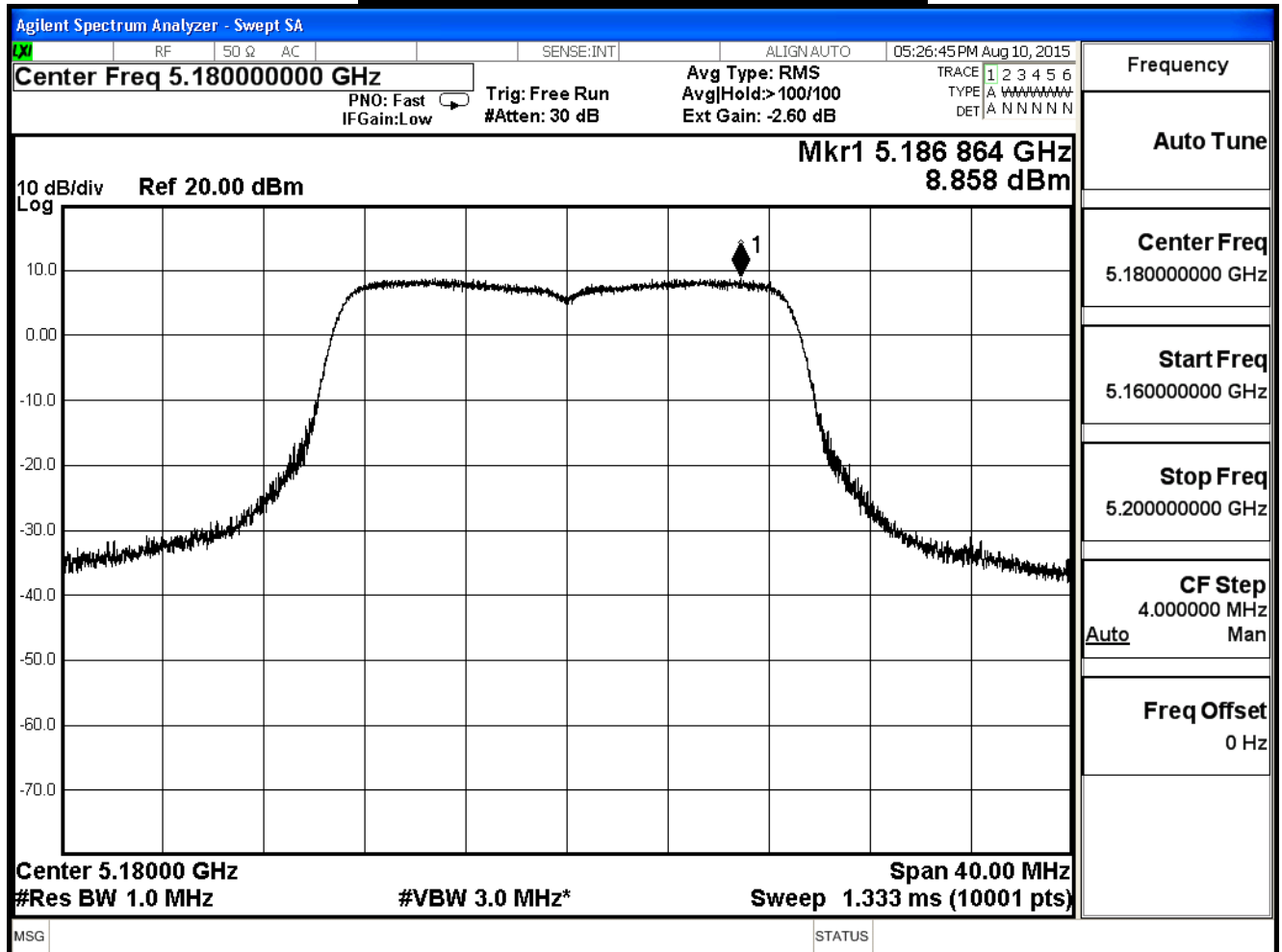
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

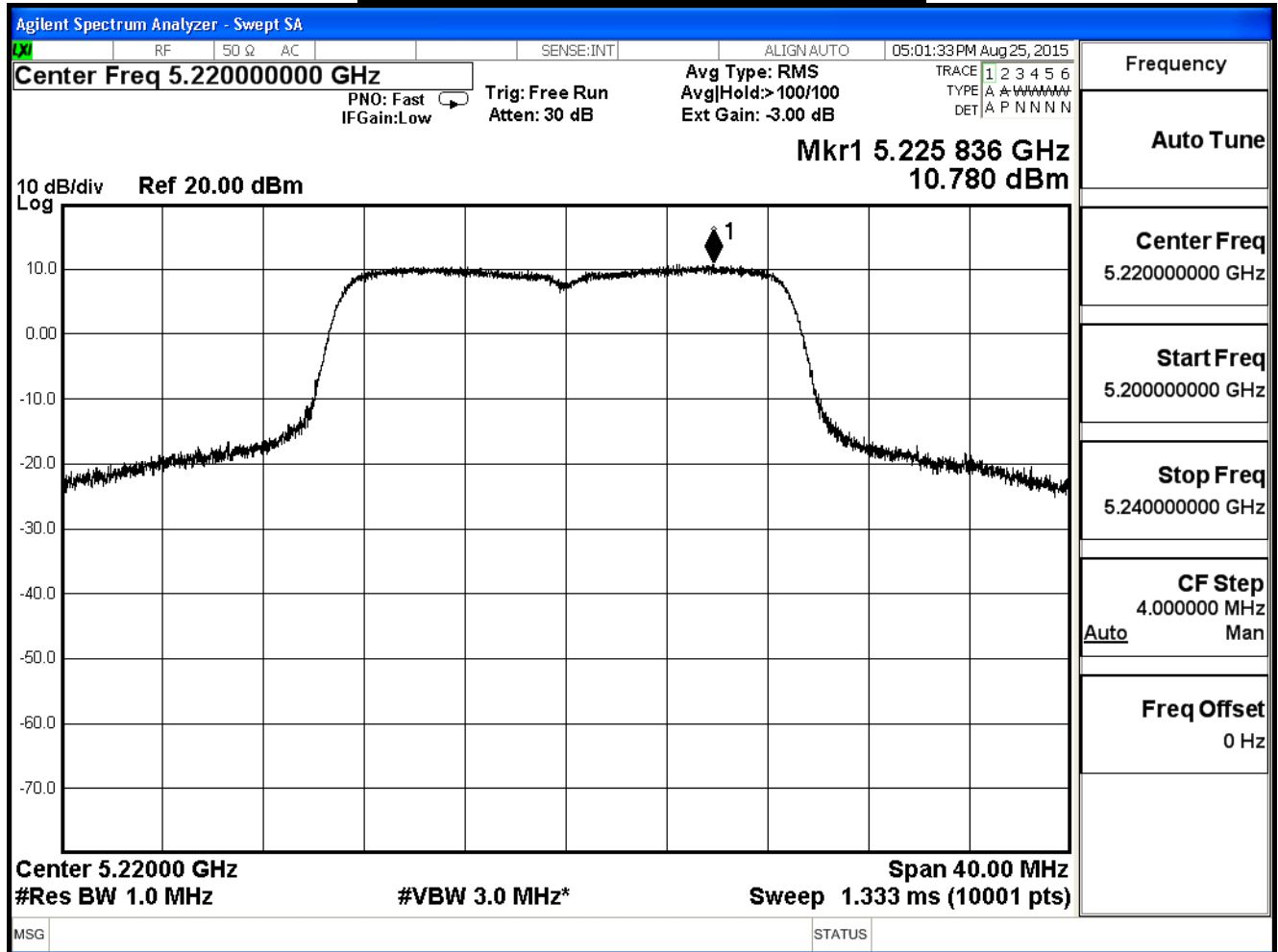
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

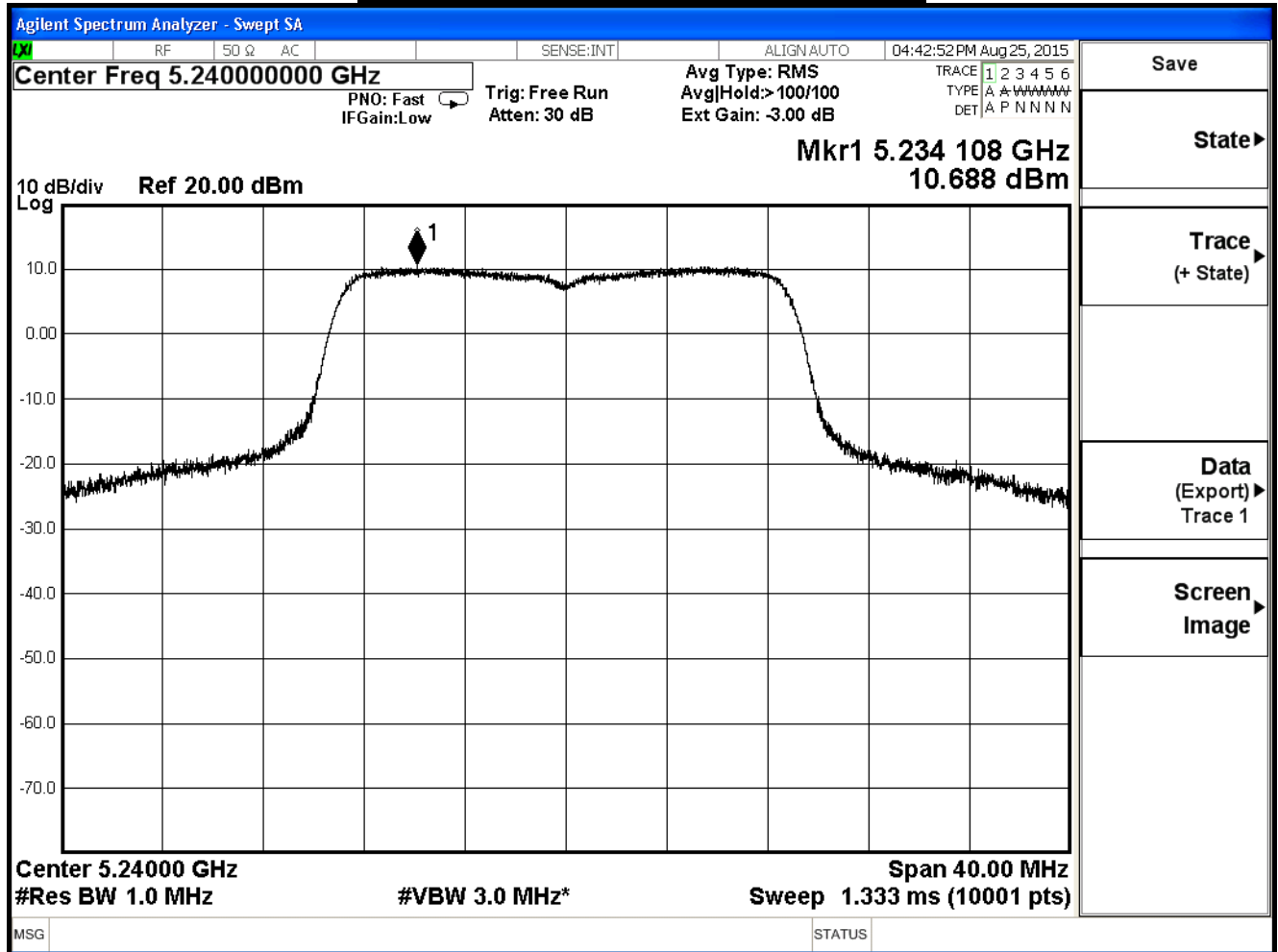
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



Peak Power Spectral Density – Channel 48



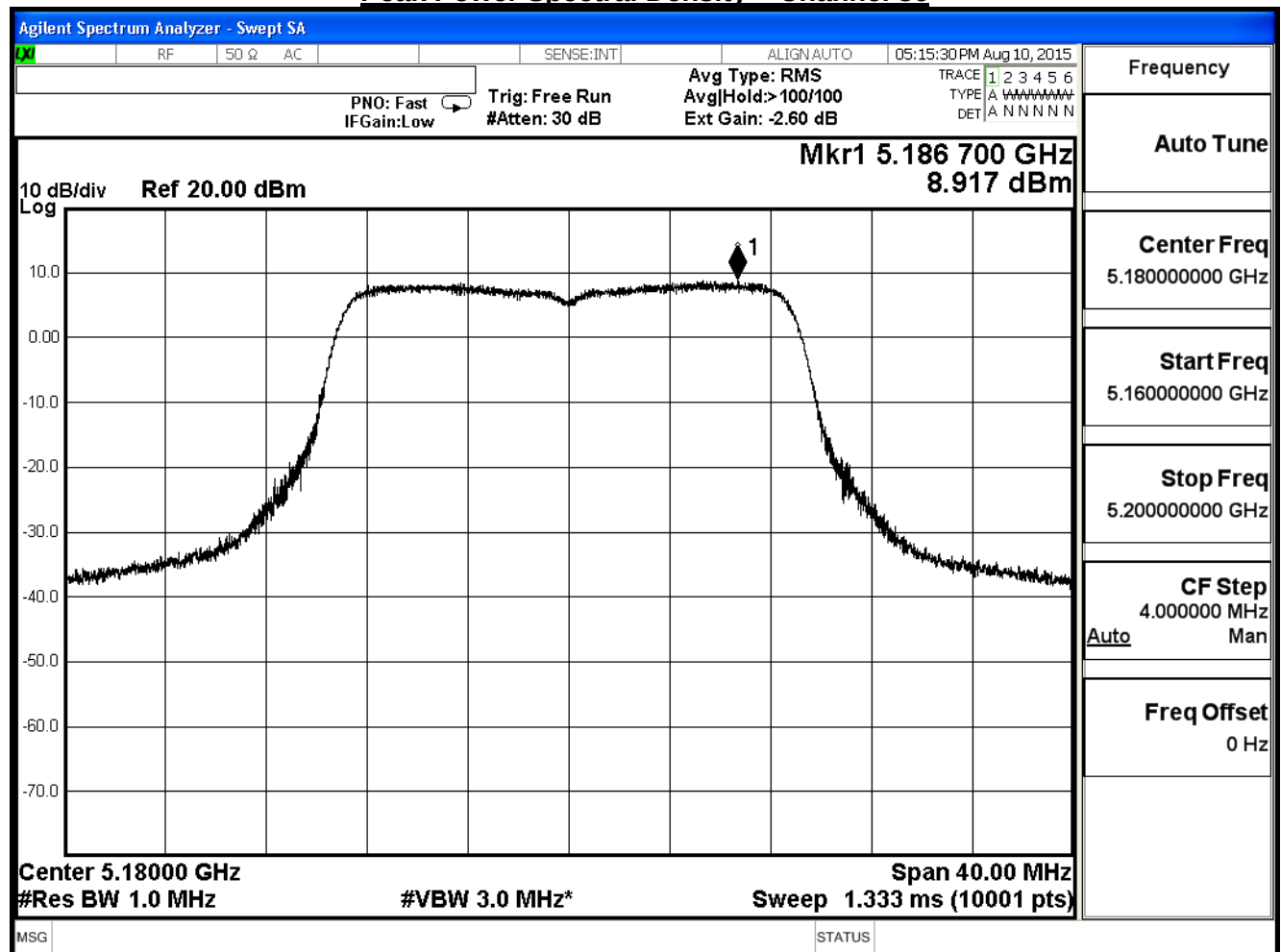
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

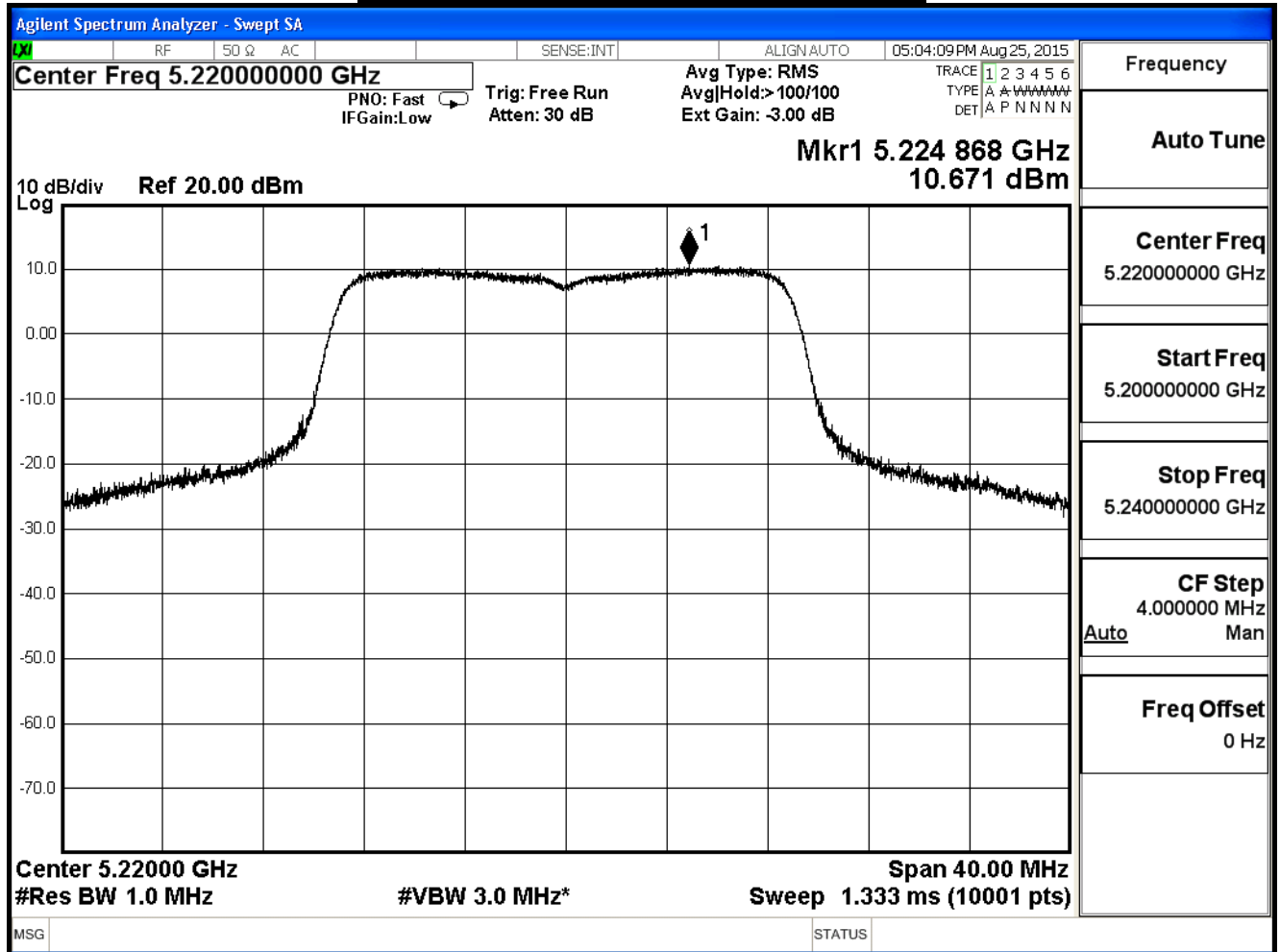
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

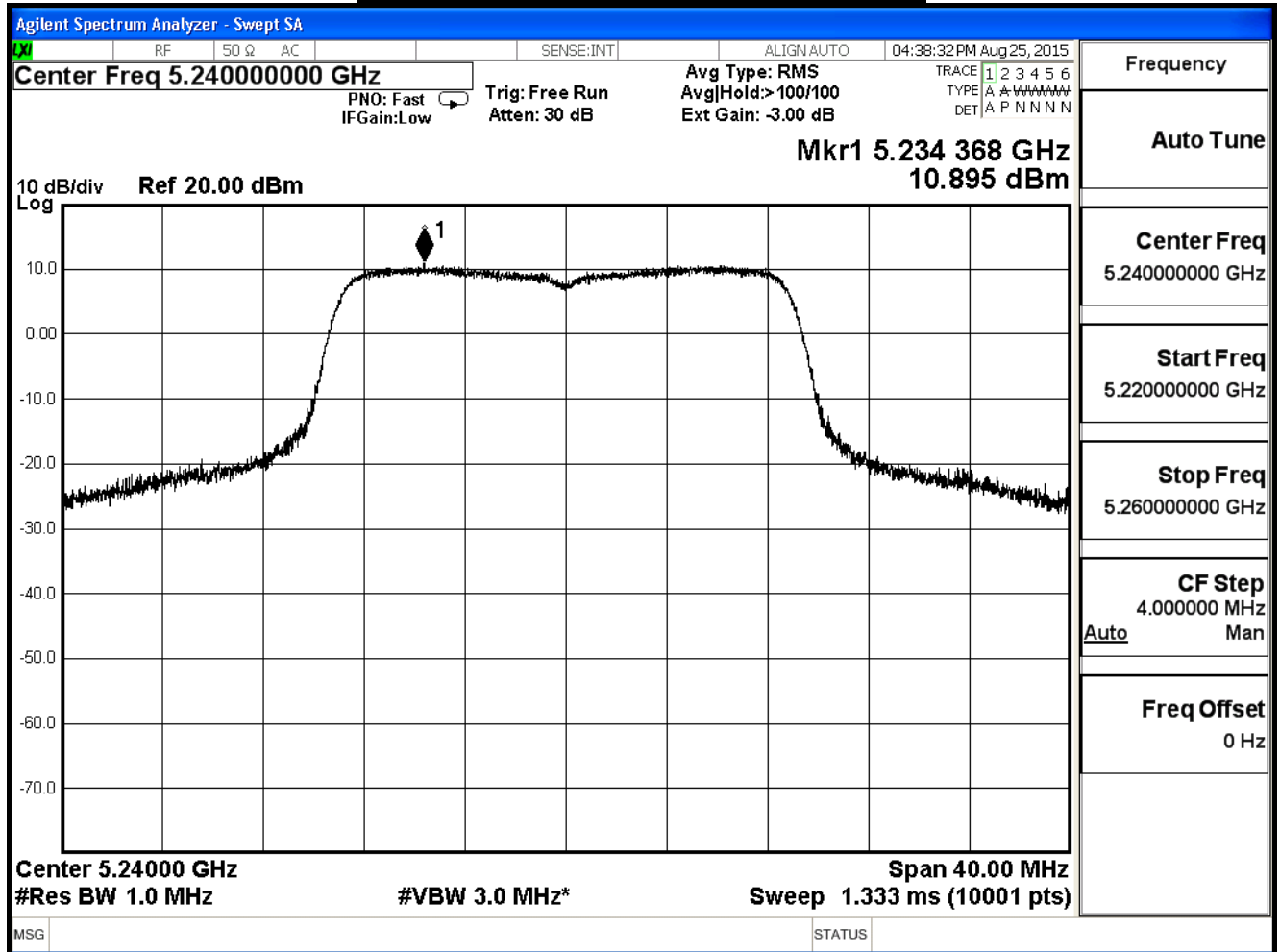
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



Peak Power Spectral Density – Channel 48



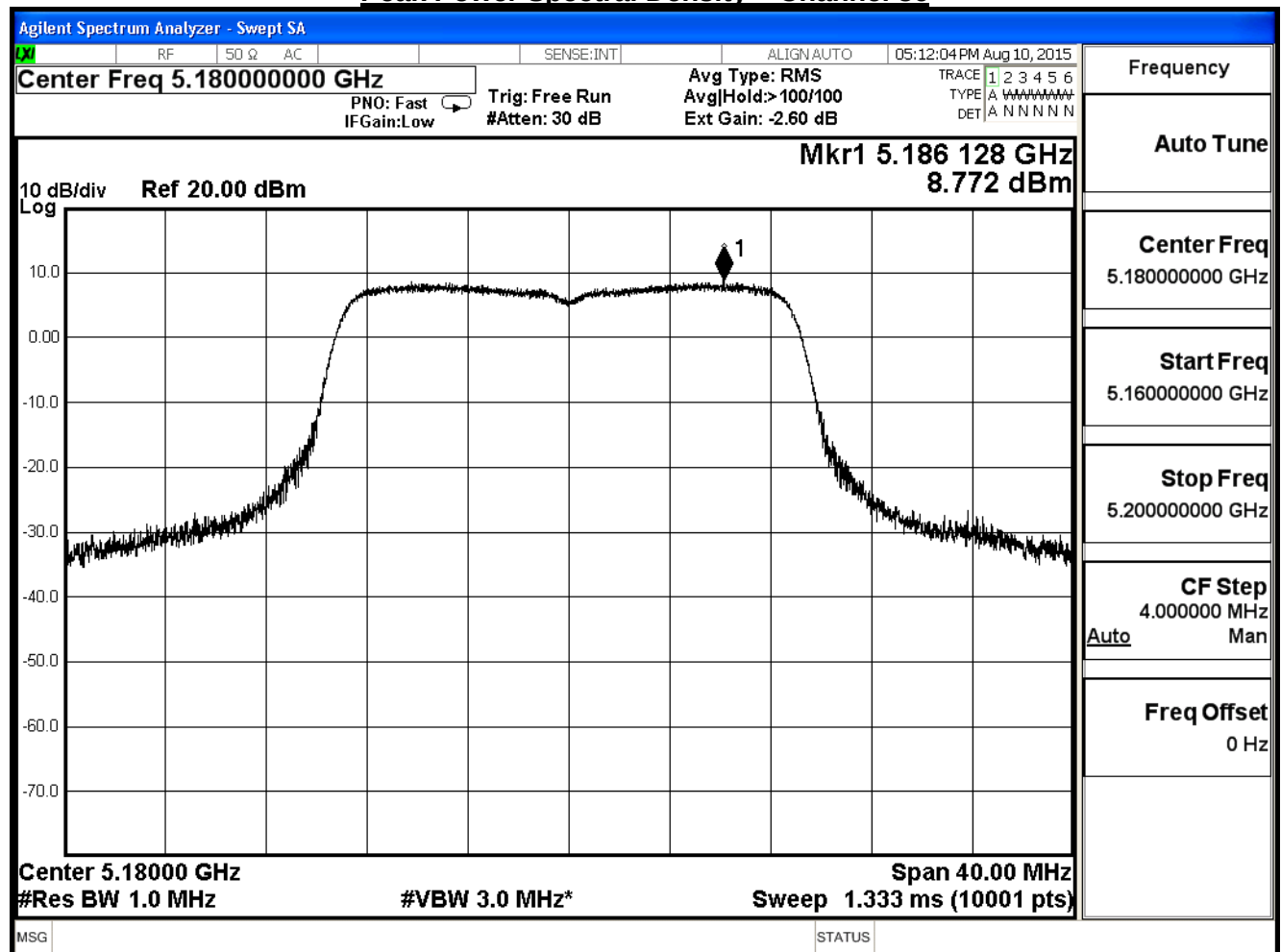
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/25	Test Site	SR7

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

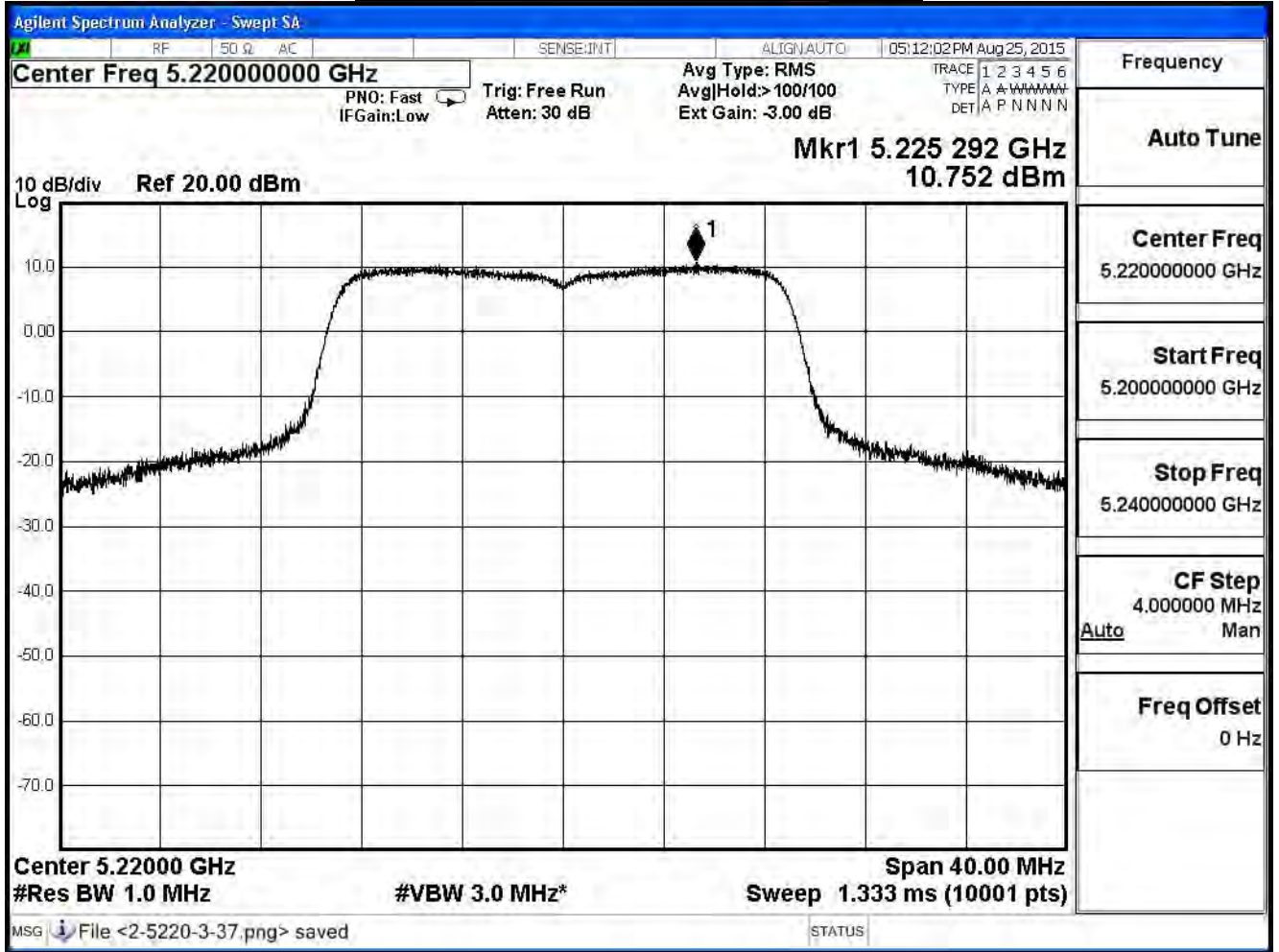
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

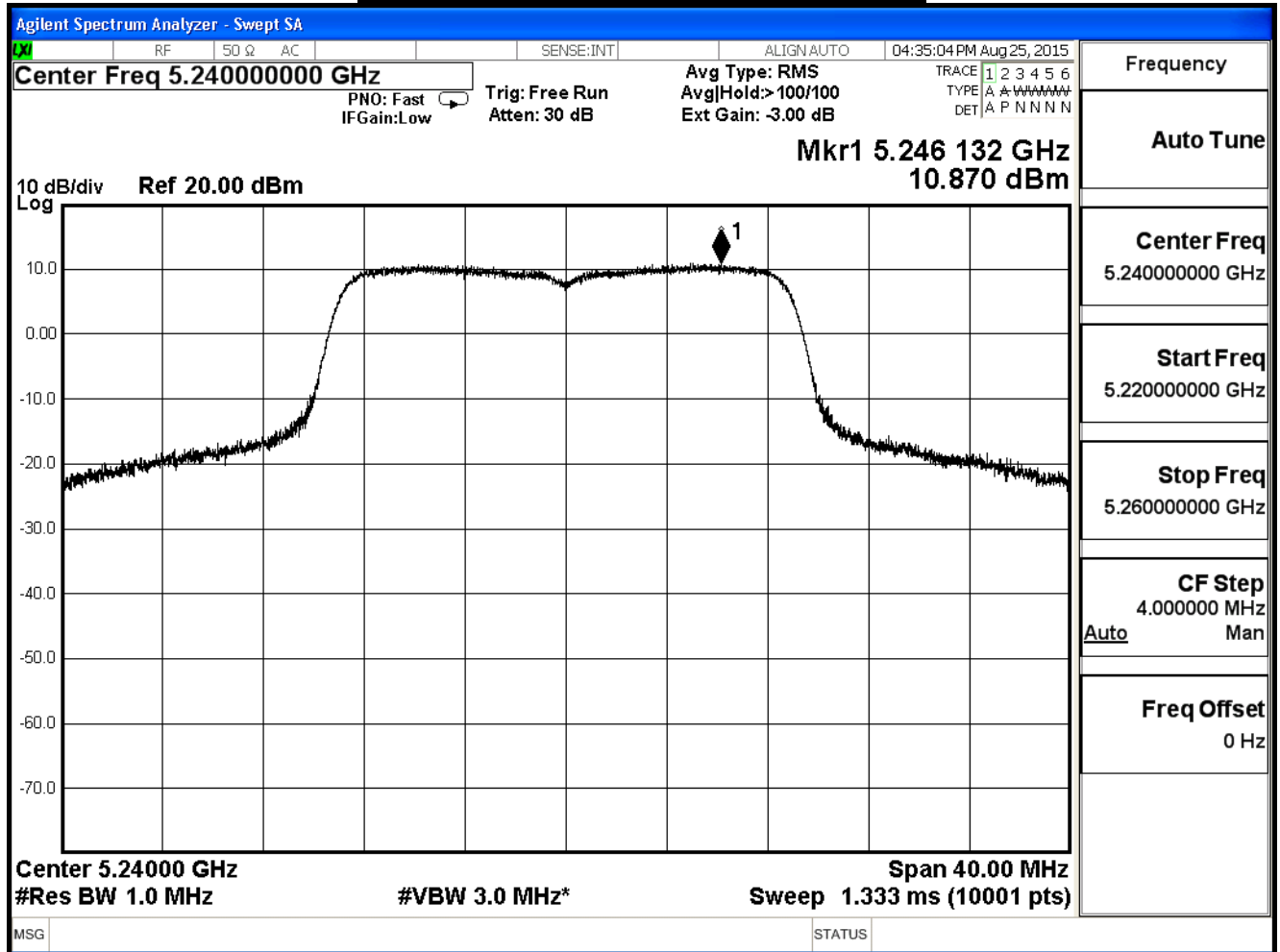
Peak Power Spectral Density – Channel 36



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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

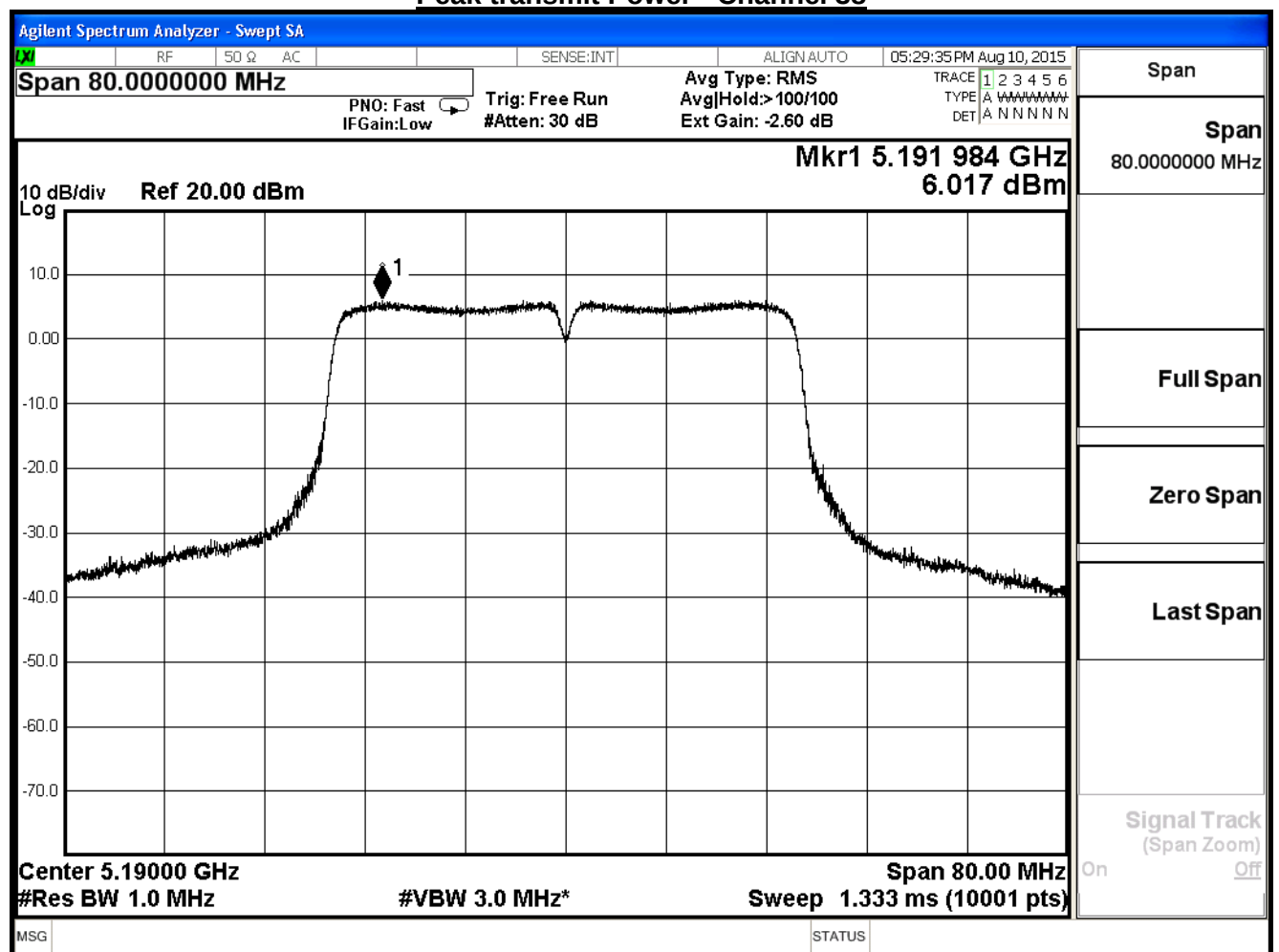
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

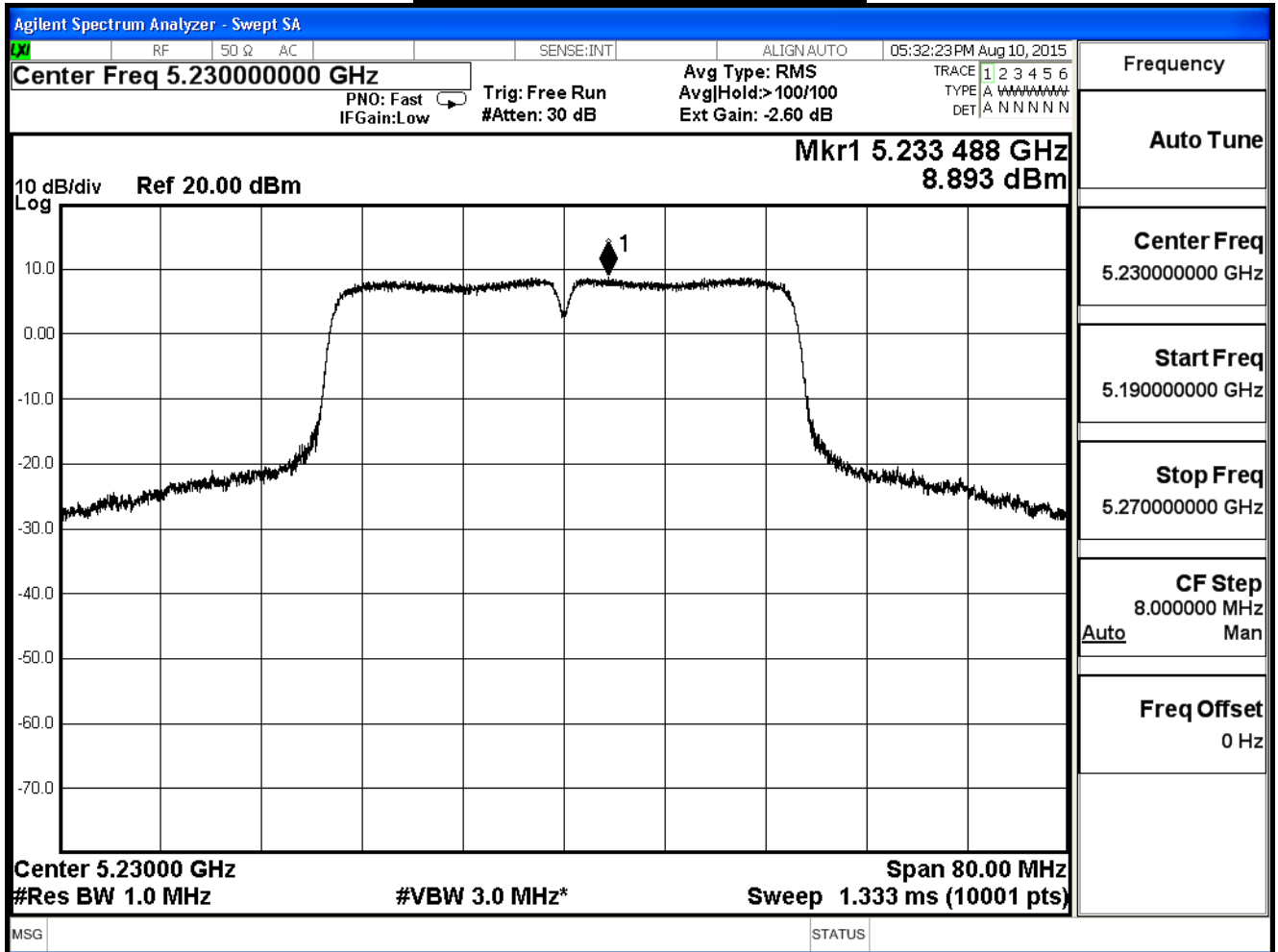
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

Peak transmit Power - Channel 38



Peak transmit Power - Channel 46



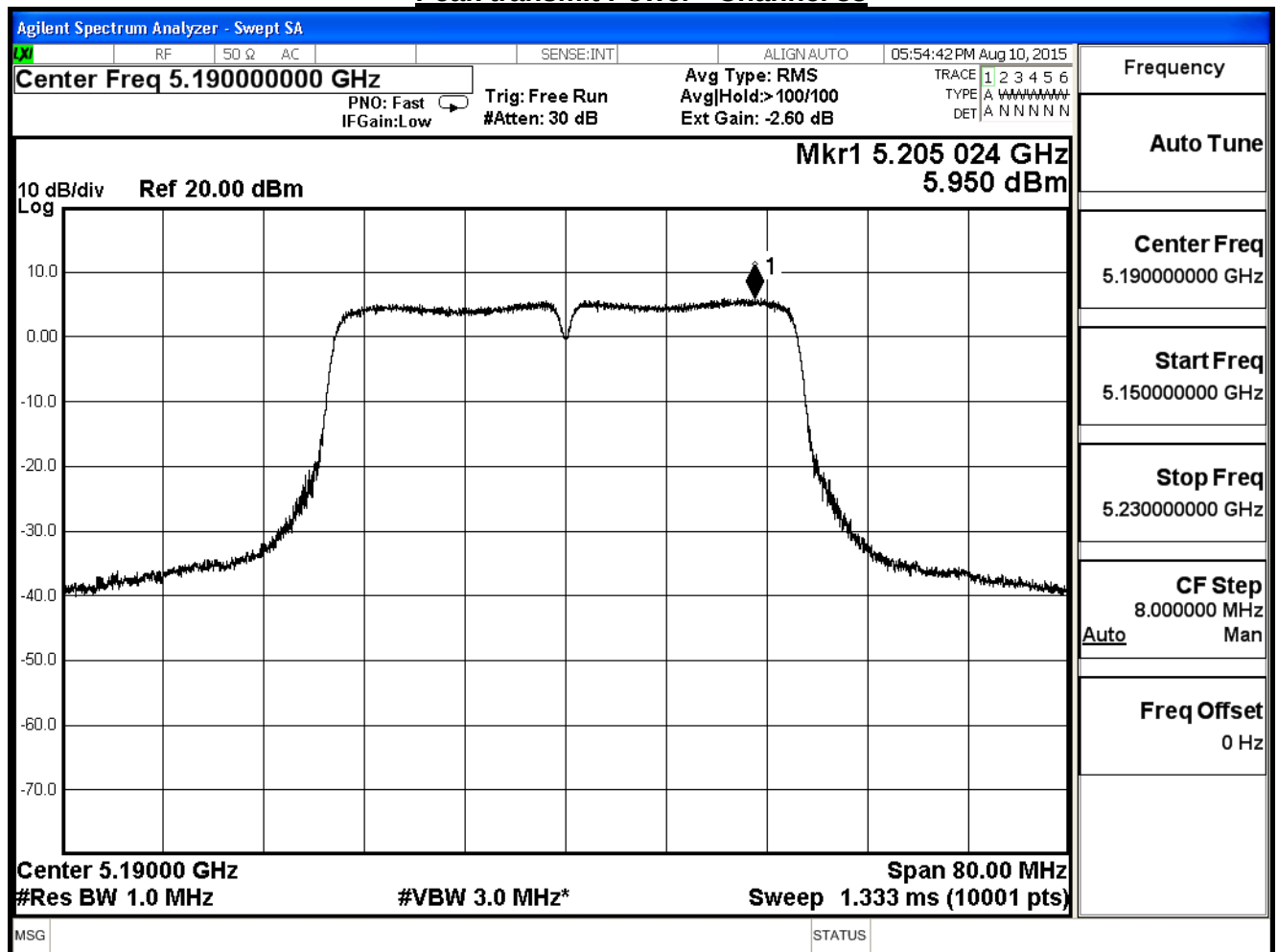
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

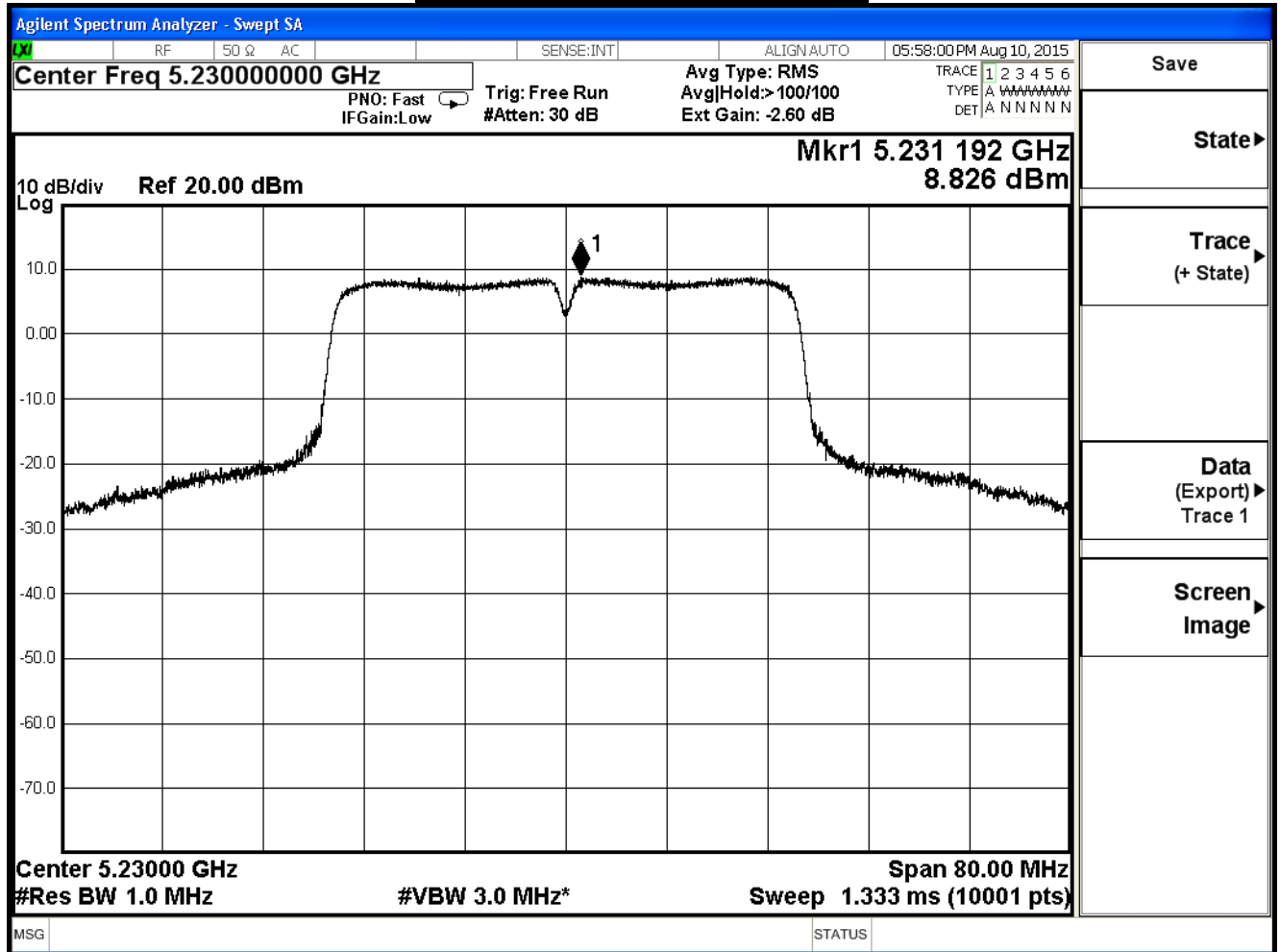
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

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

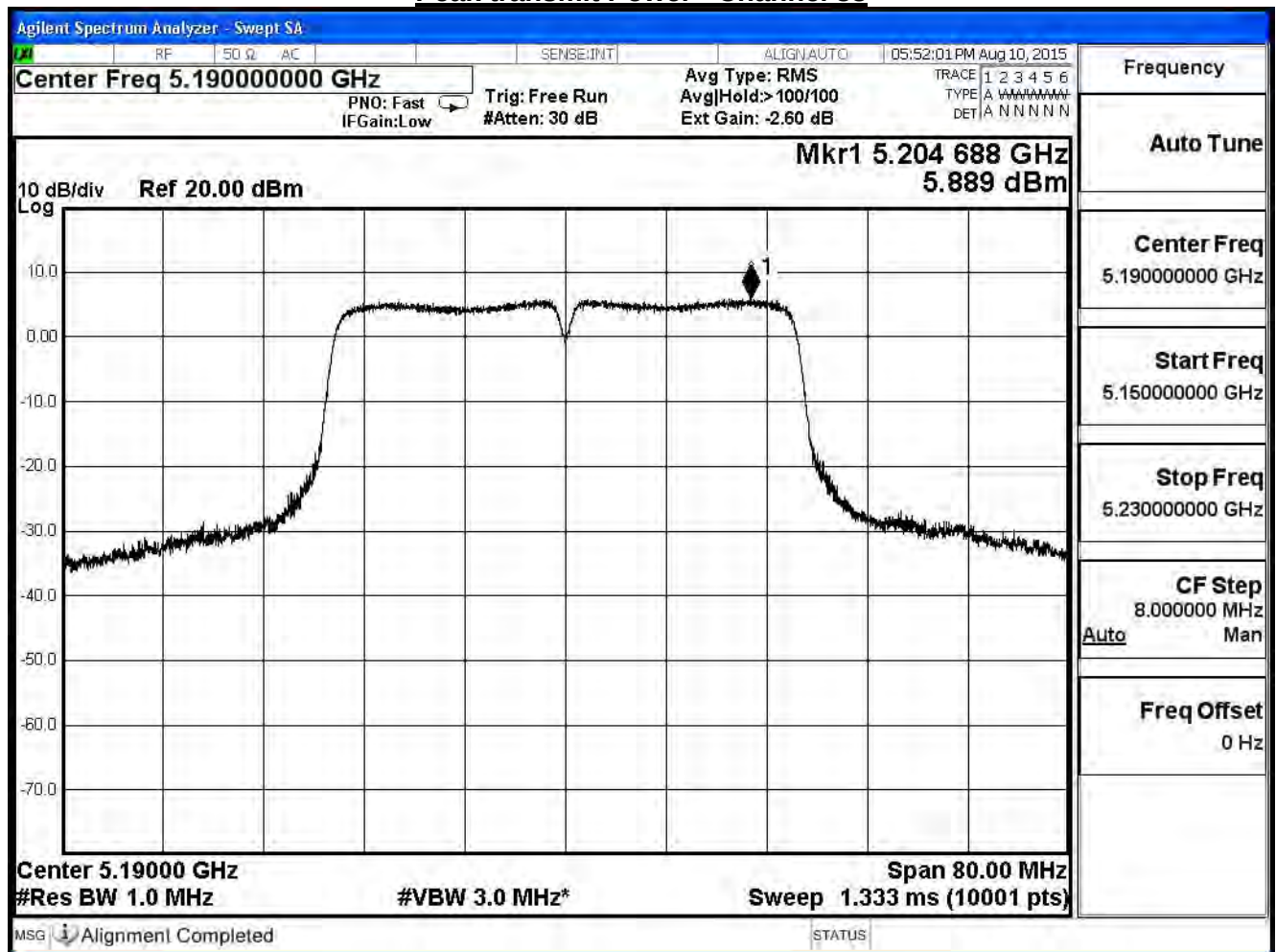
IEEE 802.11n(40MHz) (ANT 2)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
38	5190	5.889	≤ 15.69	Pass
46	5230	8.674	≤ 15.69	Pass

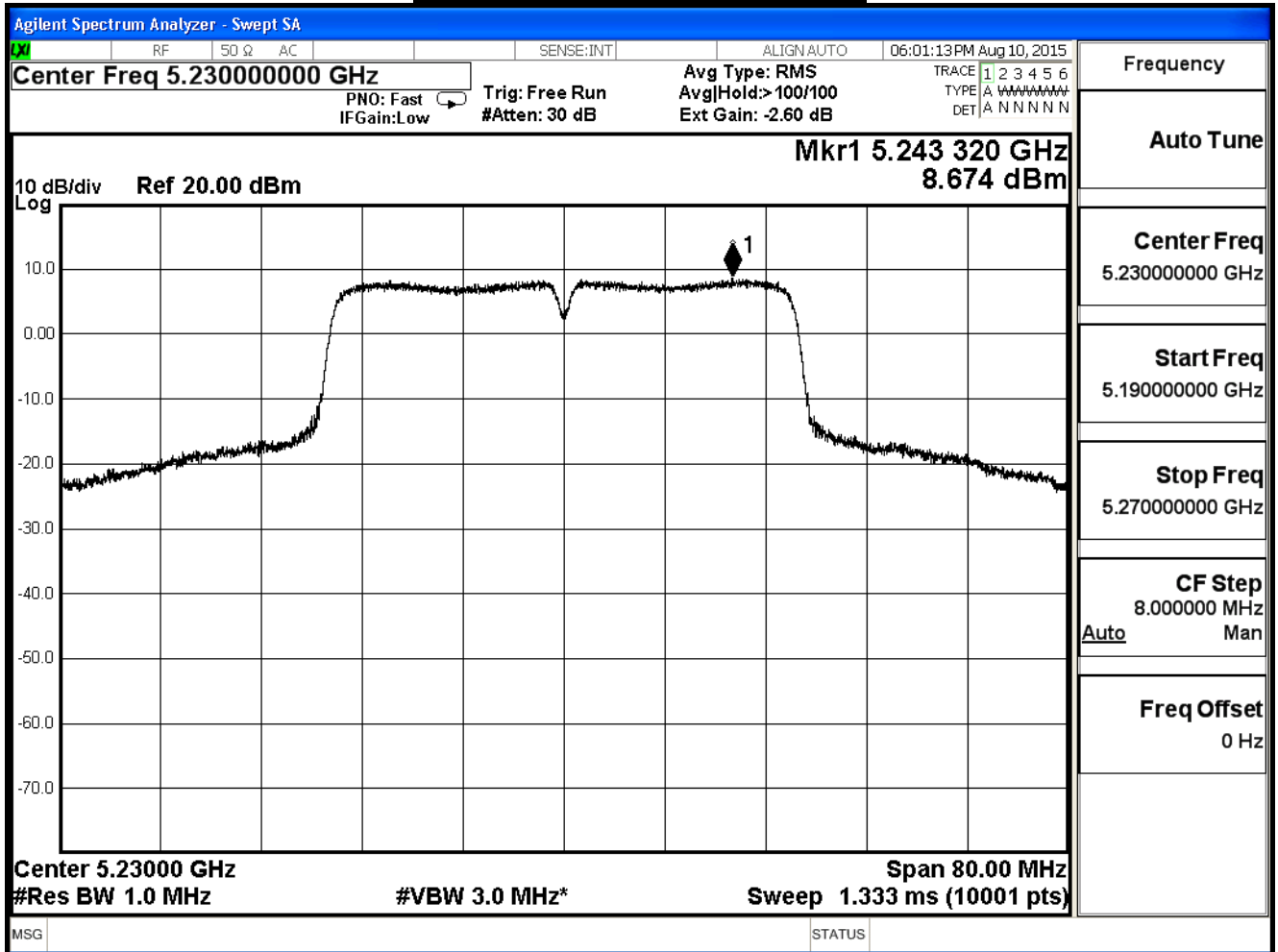
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

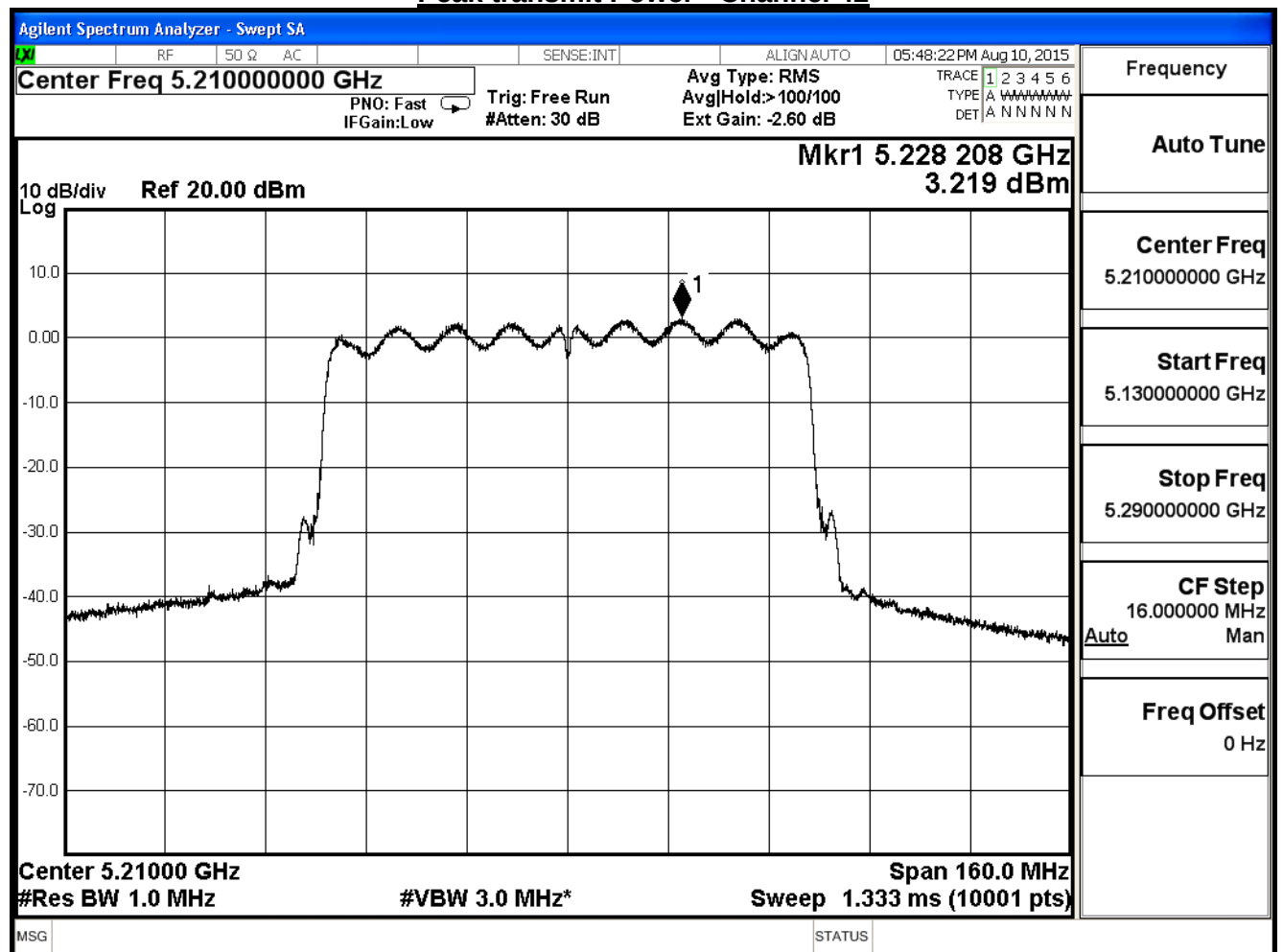
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

Peak transmit Power - Channel 42



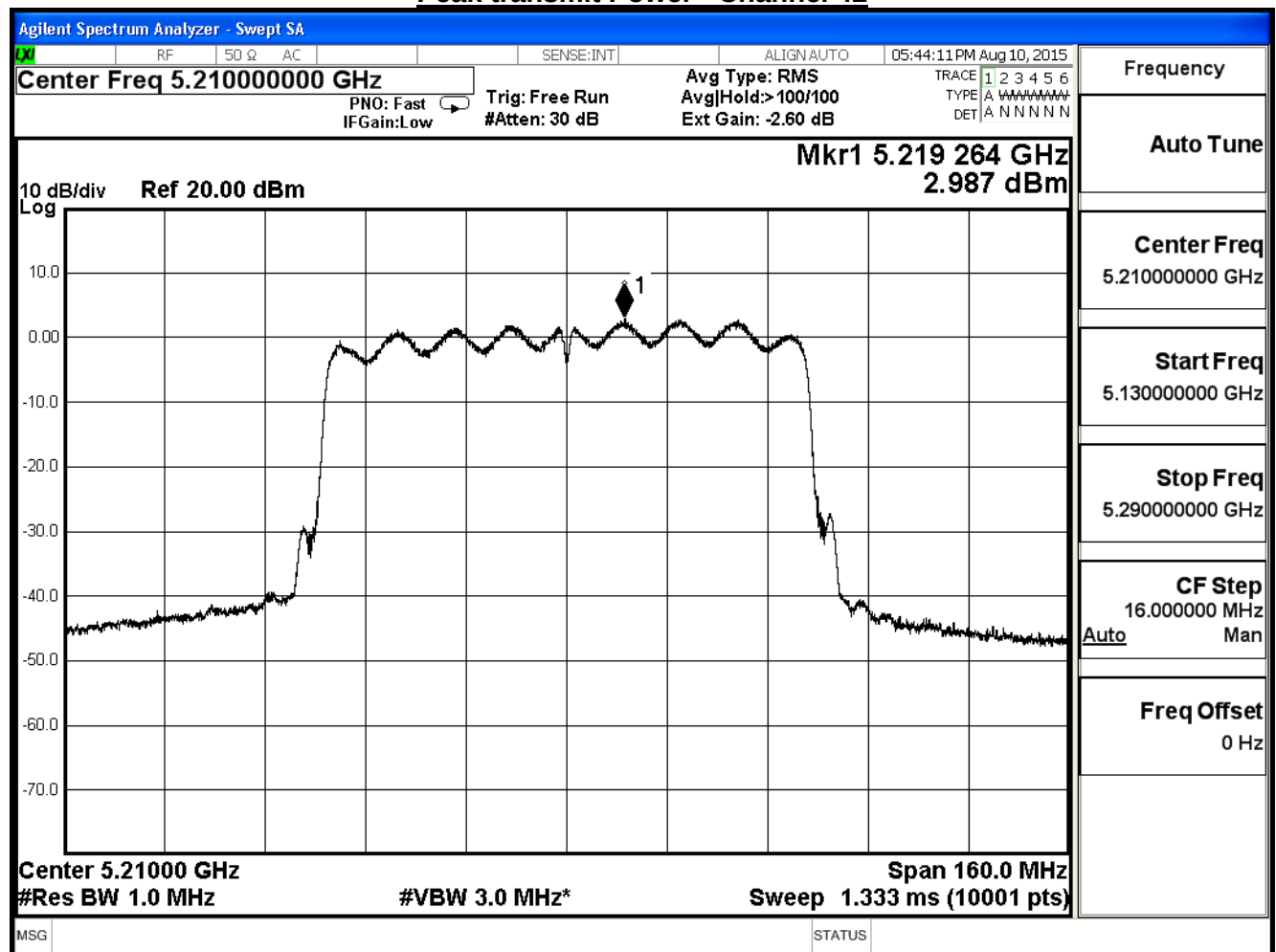
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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

Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

Peak transmit Power - Channel 42



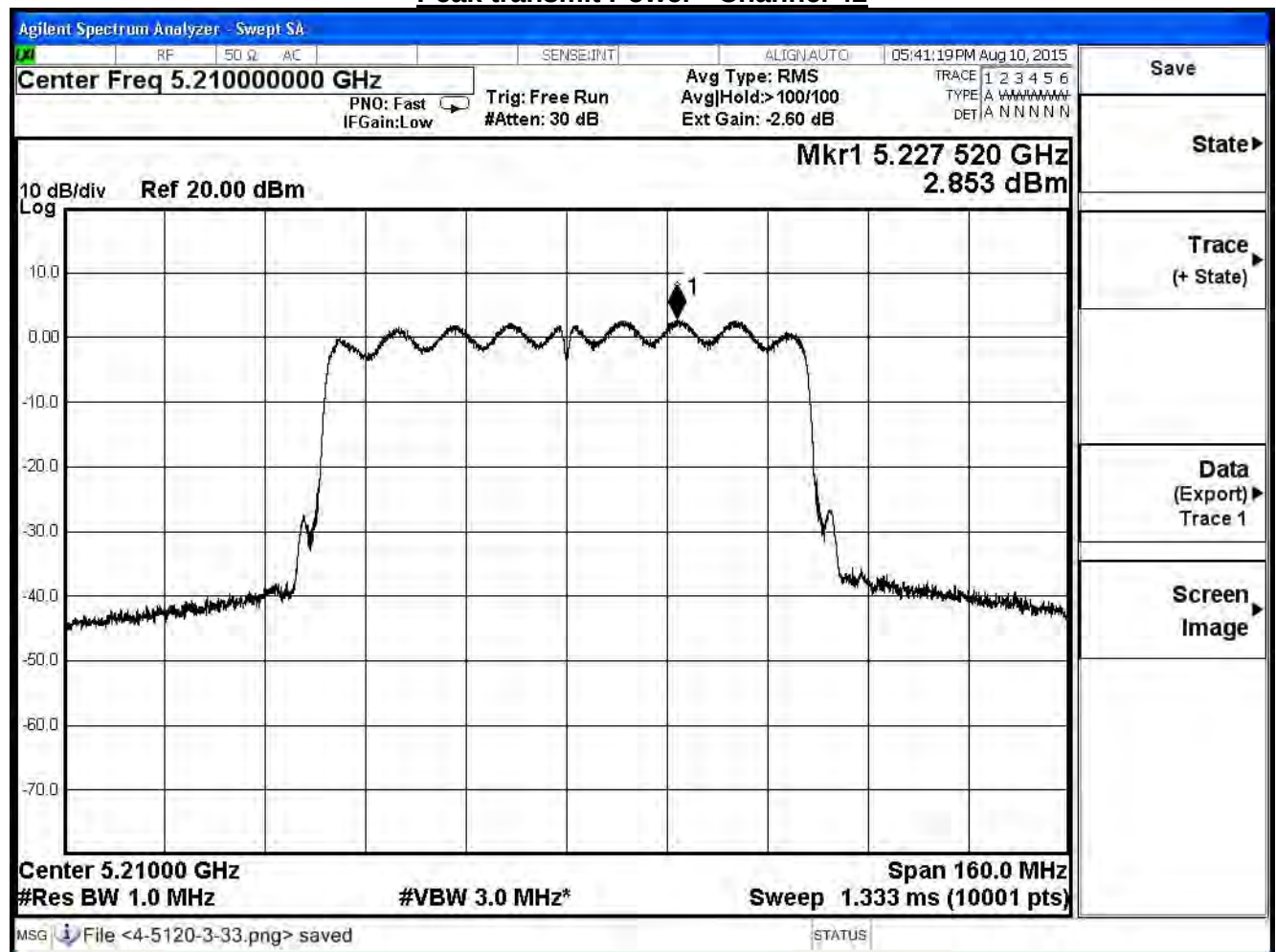
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit_CDD Mode_AD890326		
Date of Test	2015/08/10	Test Site	SR7

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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

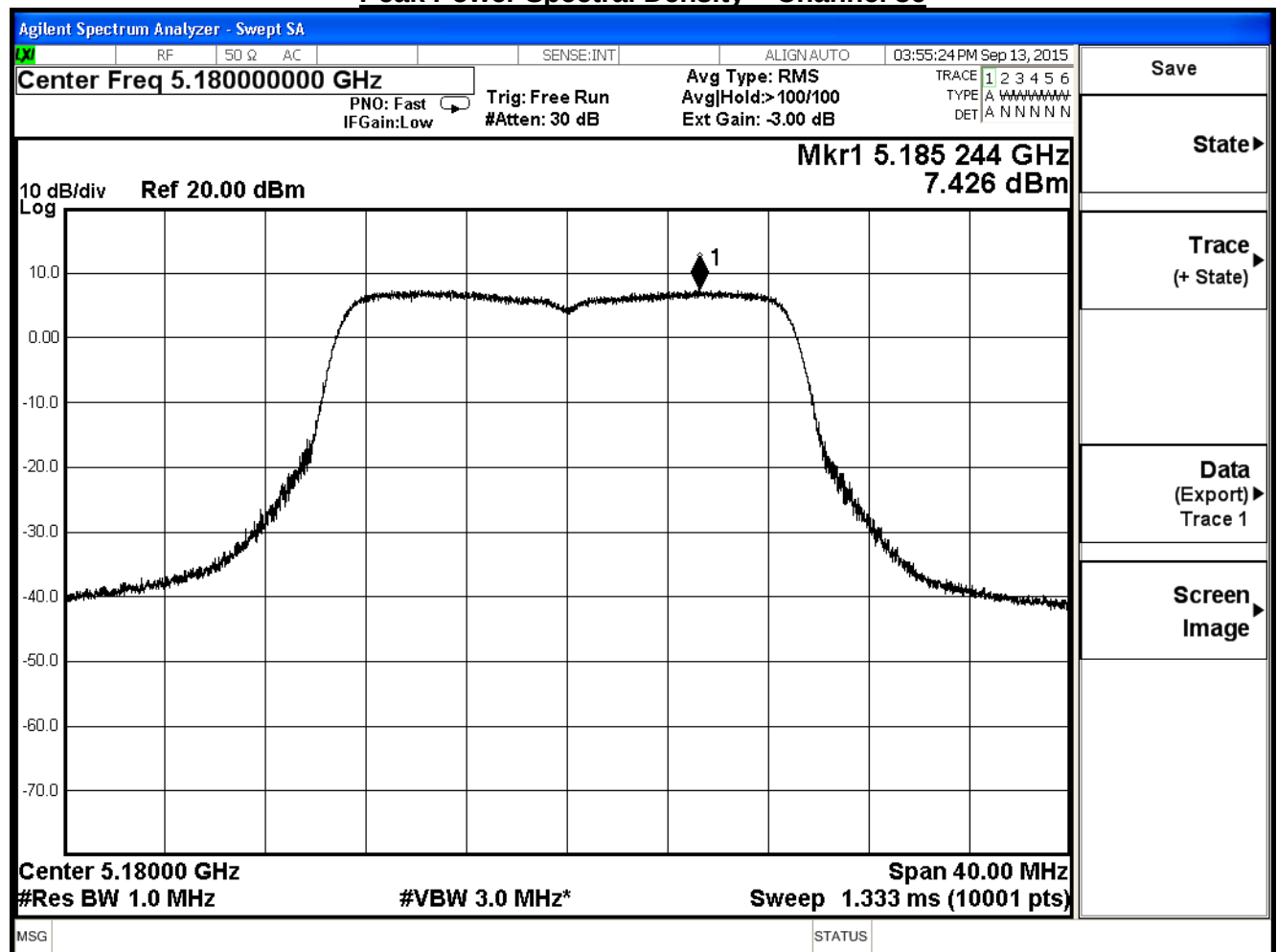
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 2: Transmit Beamforming Mode AD890326		
Date of Test	2015/09/13	Test Site	SR7

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

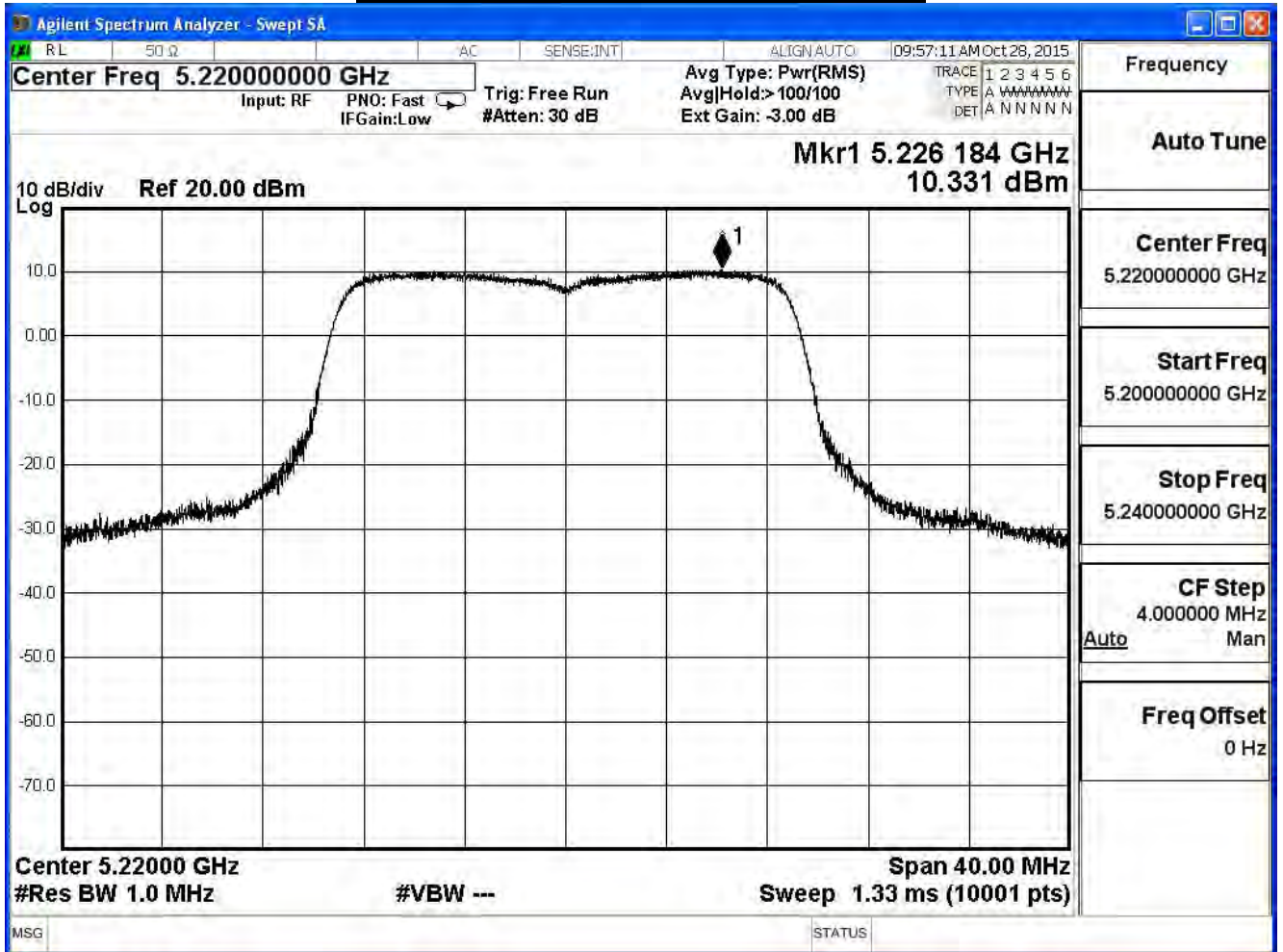
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

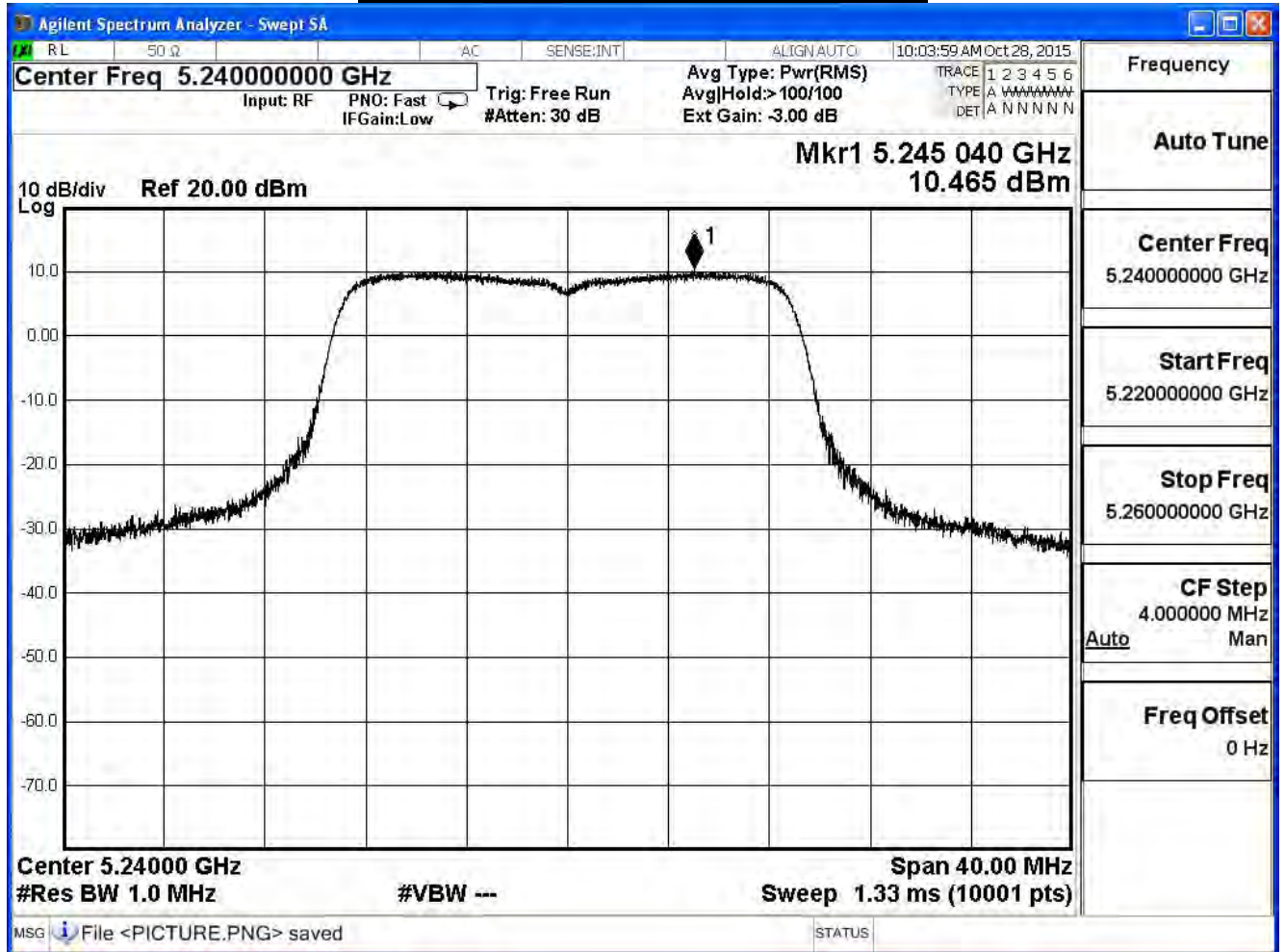
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



Peak Power Spectral Density – Channel 48



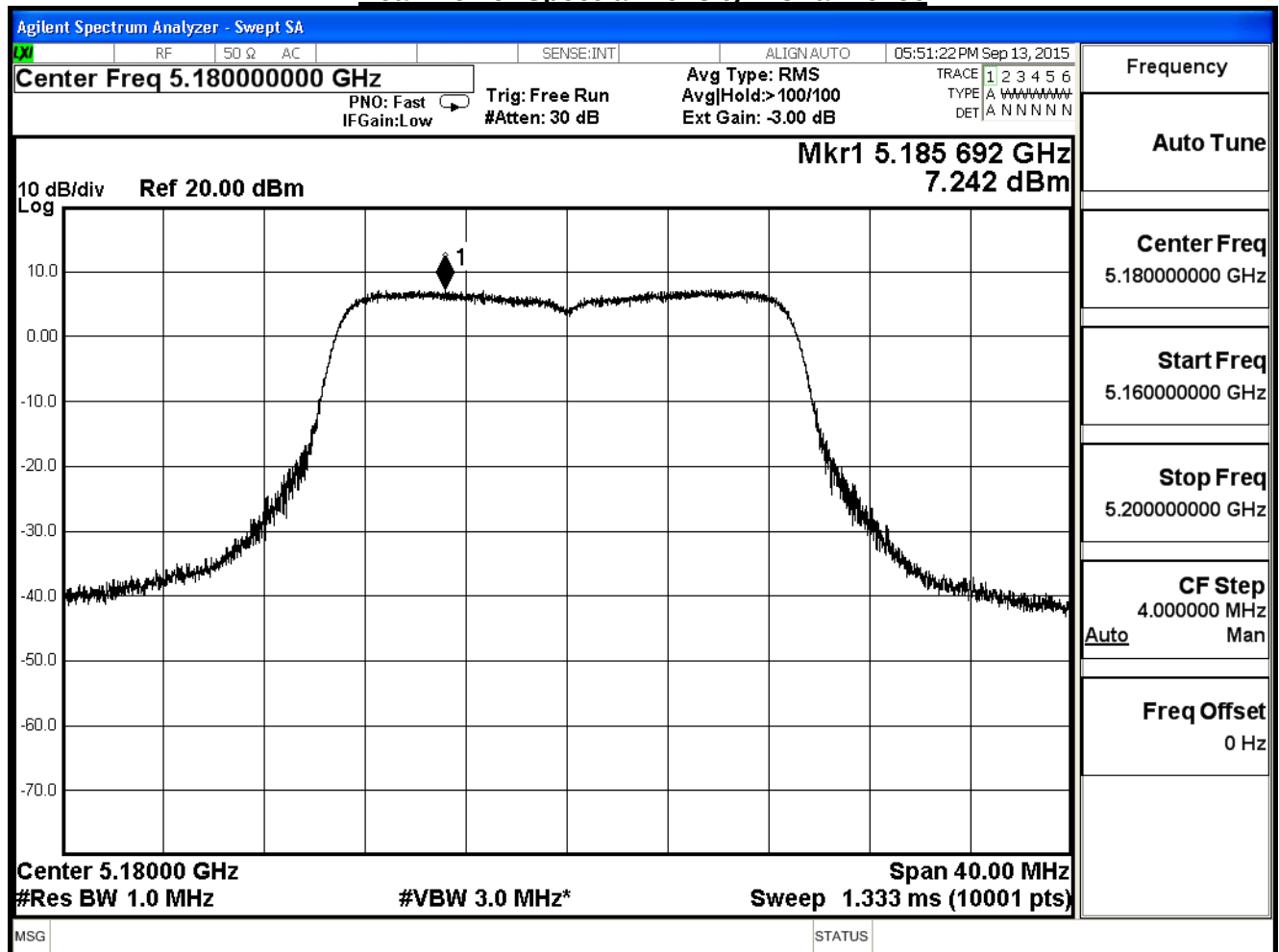
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 2: Transmit_Beamforming Mode_AD890326		
Date of Test	2015/09/13	Test Site	SR7

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

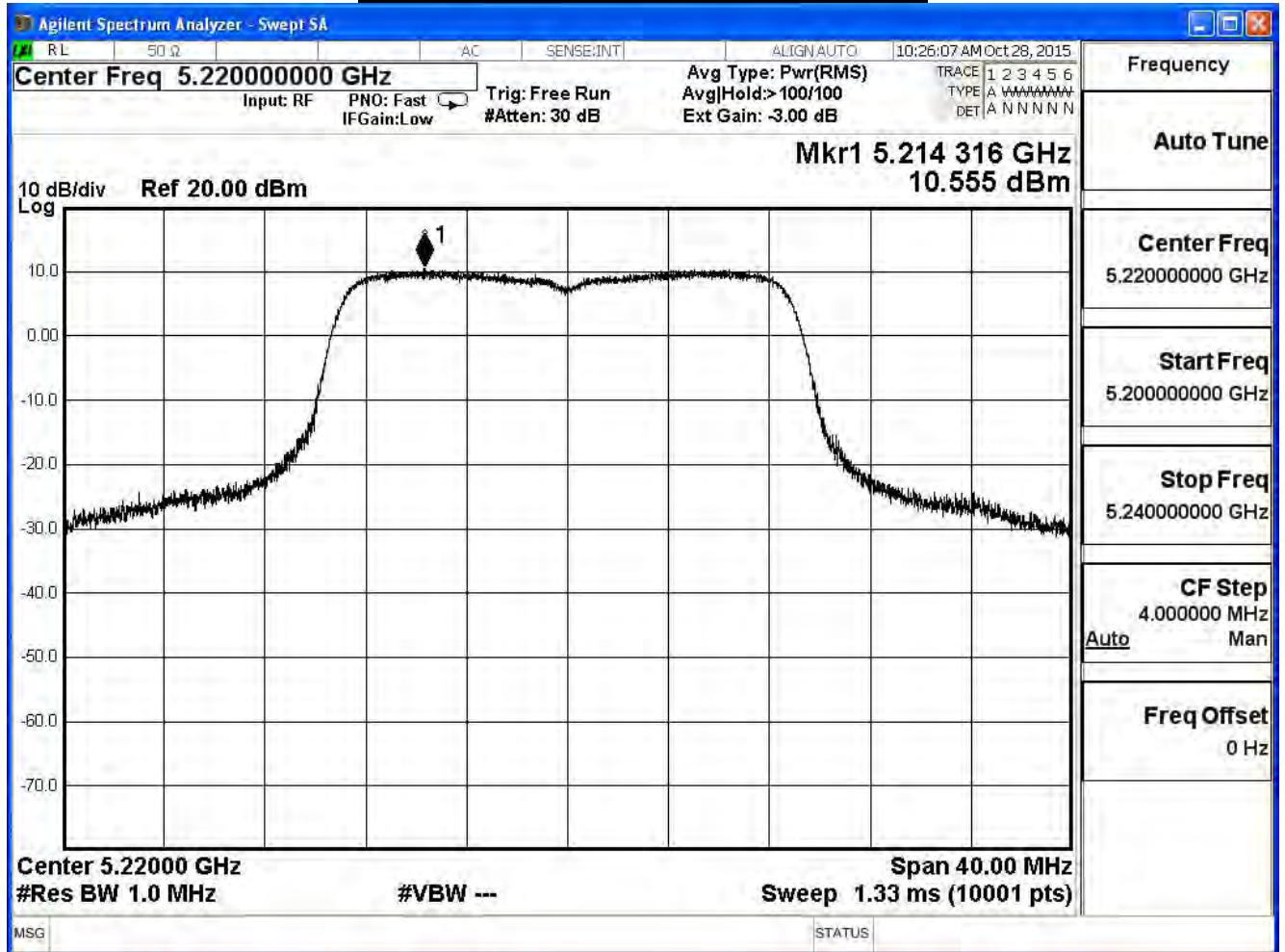
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dB} - 6\text{dB}) = 15.69\text{dBm}$

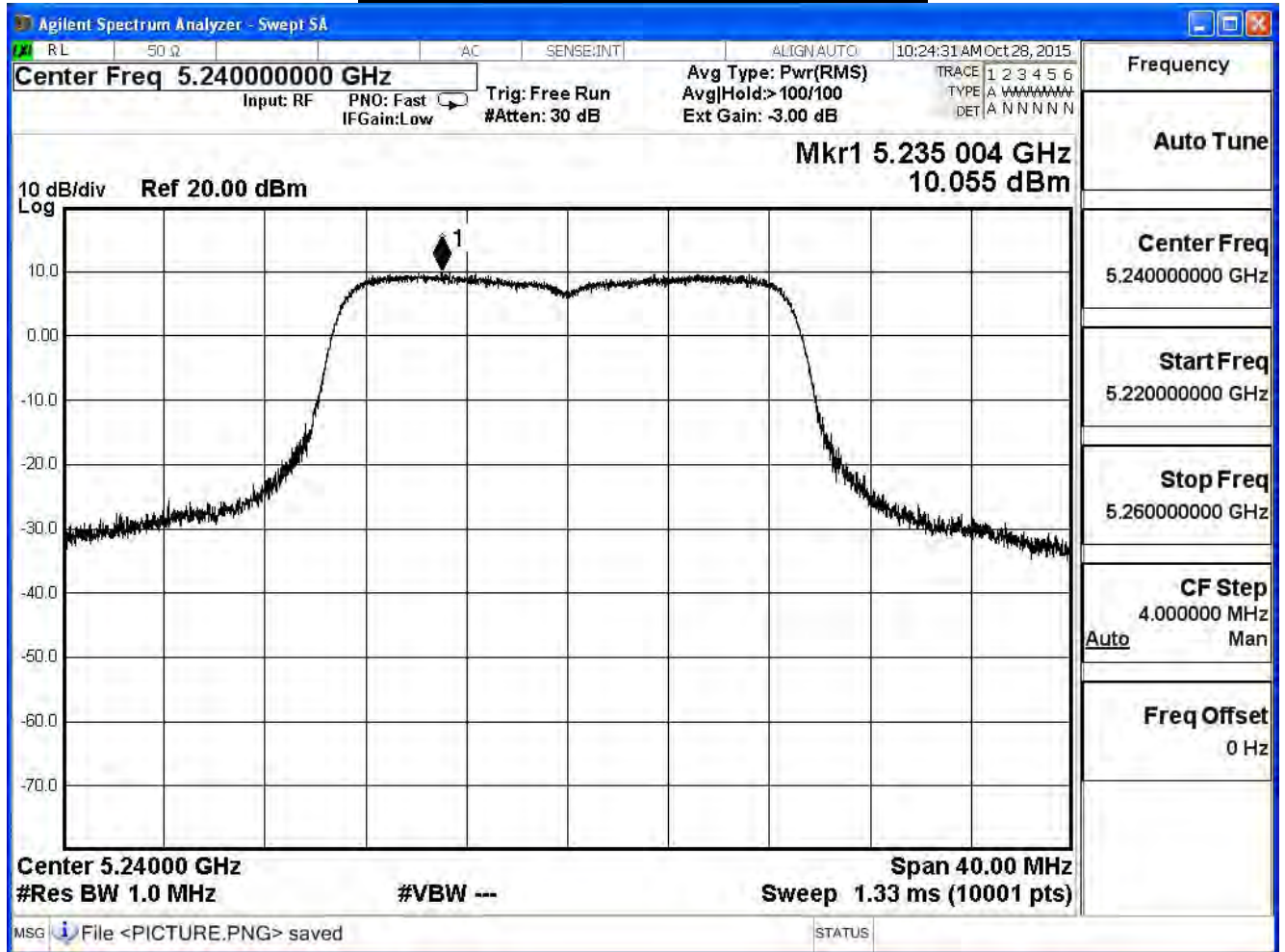
Peak Power Spectral Density – Channel 36



Peak Power Spectral Density – Channel 44



Peak Power Spectral Density – Channel 48



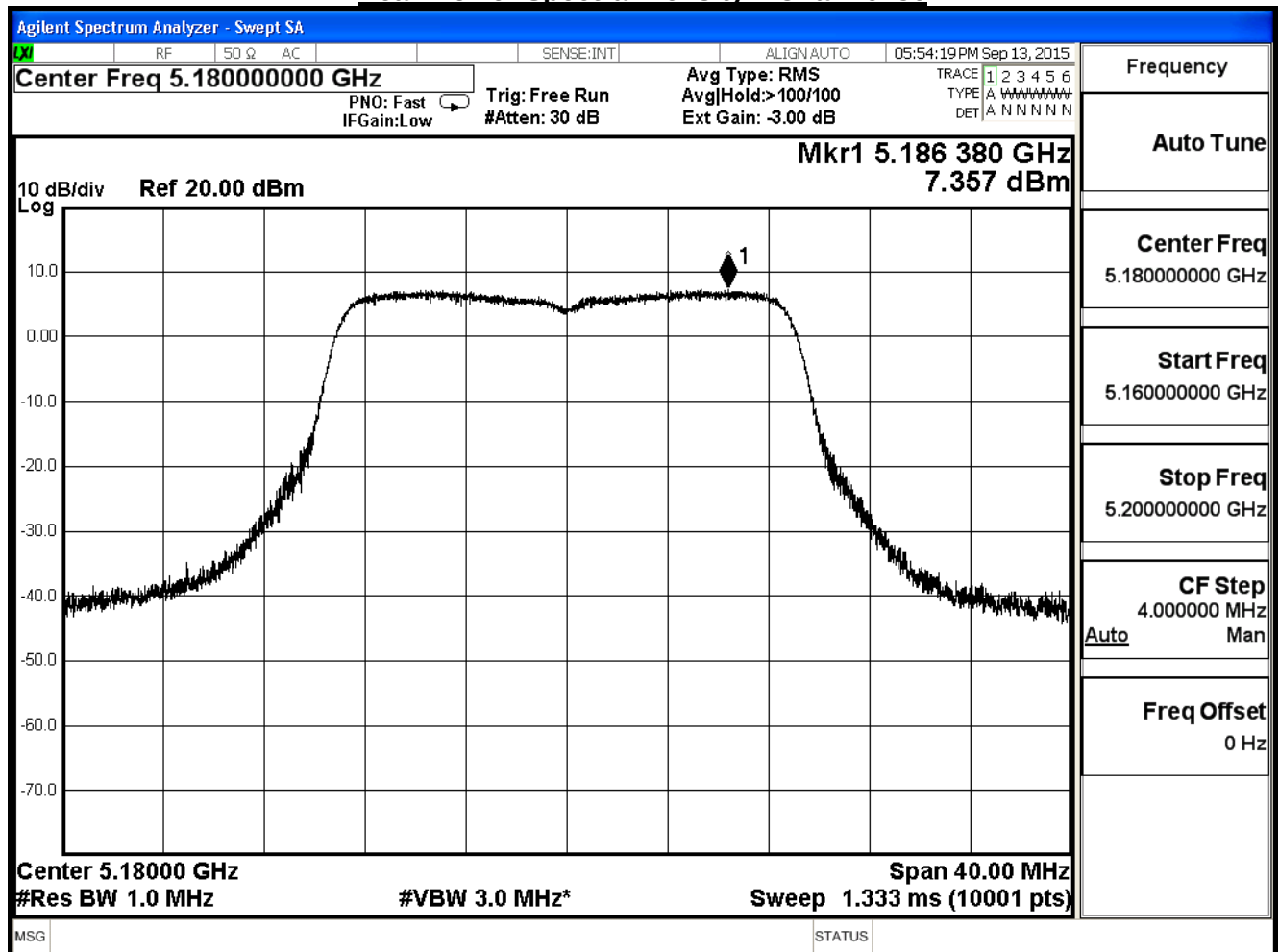
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 2: Transmit_Beamforming Mode_AD890326		
Date of Test	2015/09/13	Test Site	SR7

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

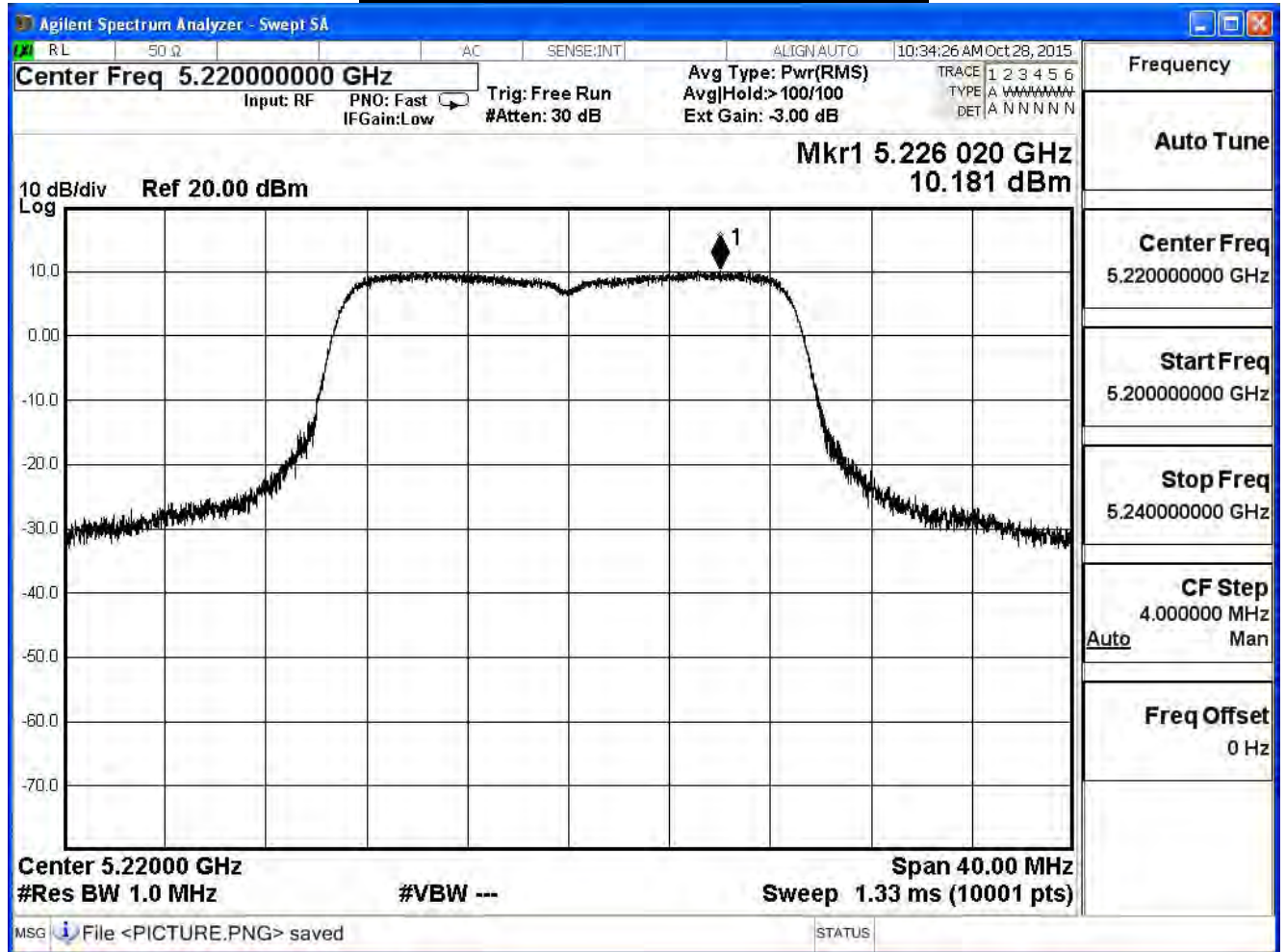
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dB} - 6\text{dB}) = 15.69\text{dBm}$

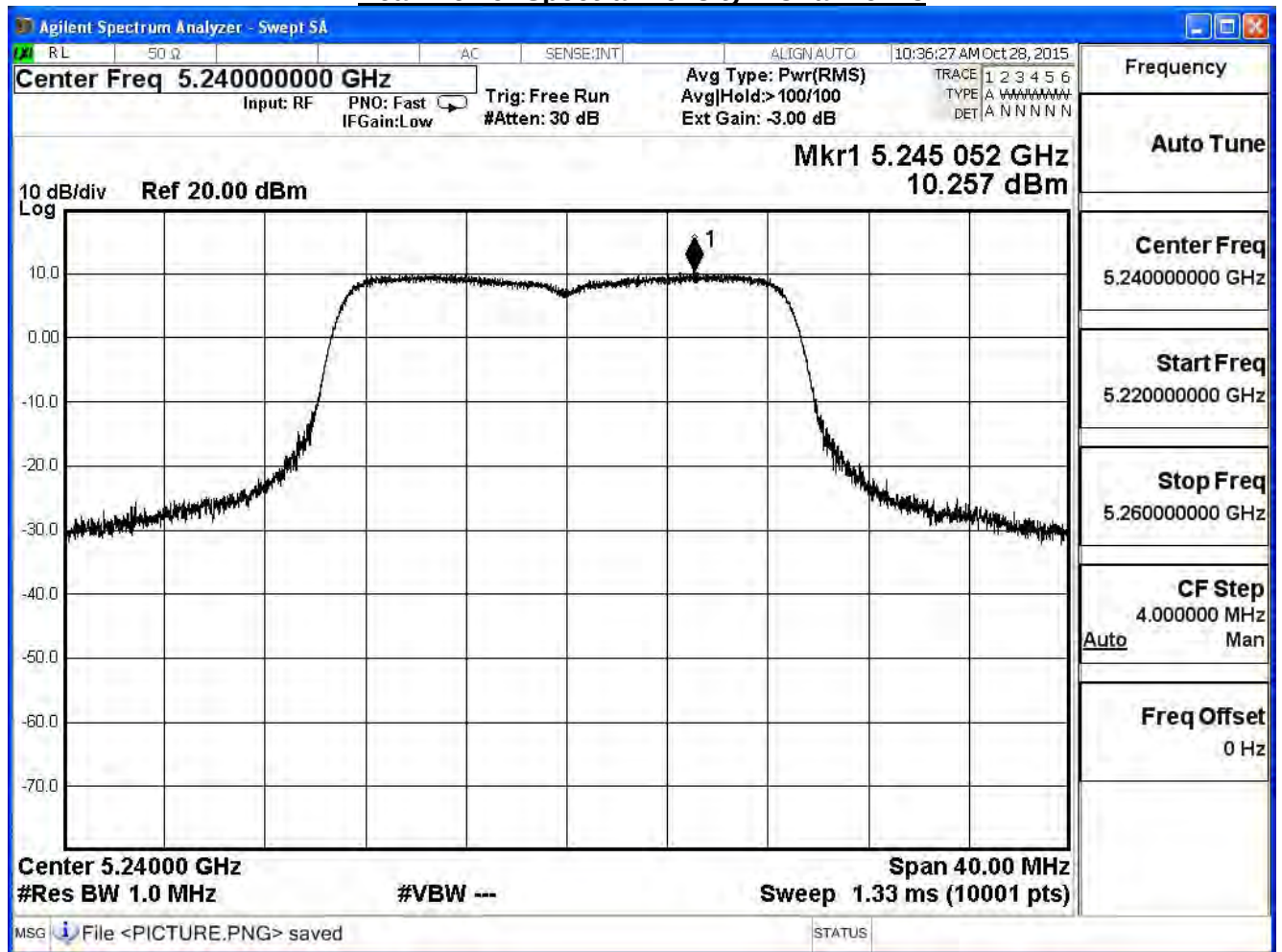
Peak Power Spectral Density – Channel 36



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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

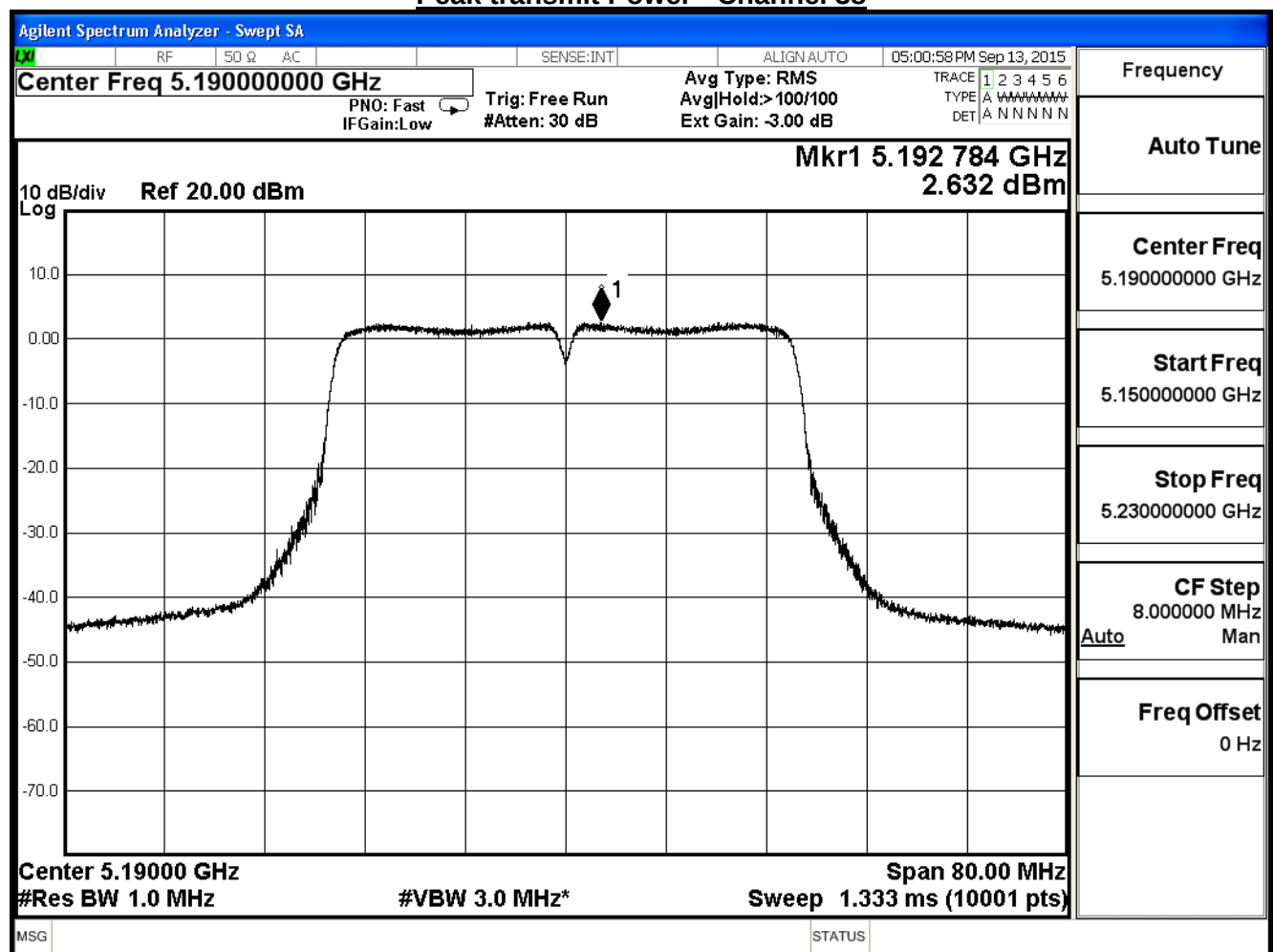
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 2: Transmit_Beamforming Mode_AD890326		
Date of Test	2015/09/13	Test Site	SR7

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

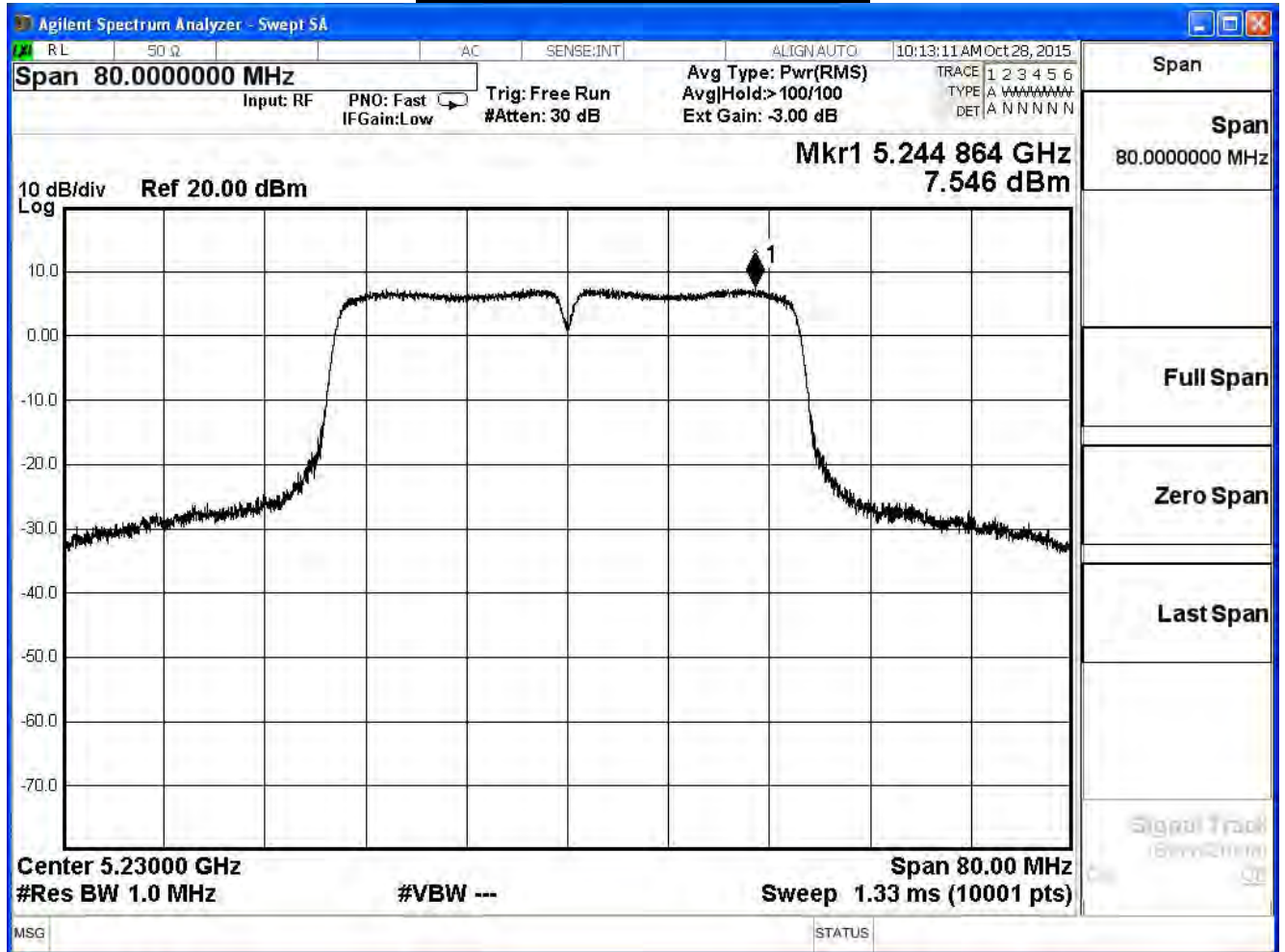
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

Peak transmit Power - Channel 38



Peak transmit Power - Channel 46



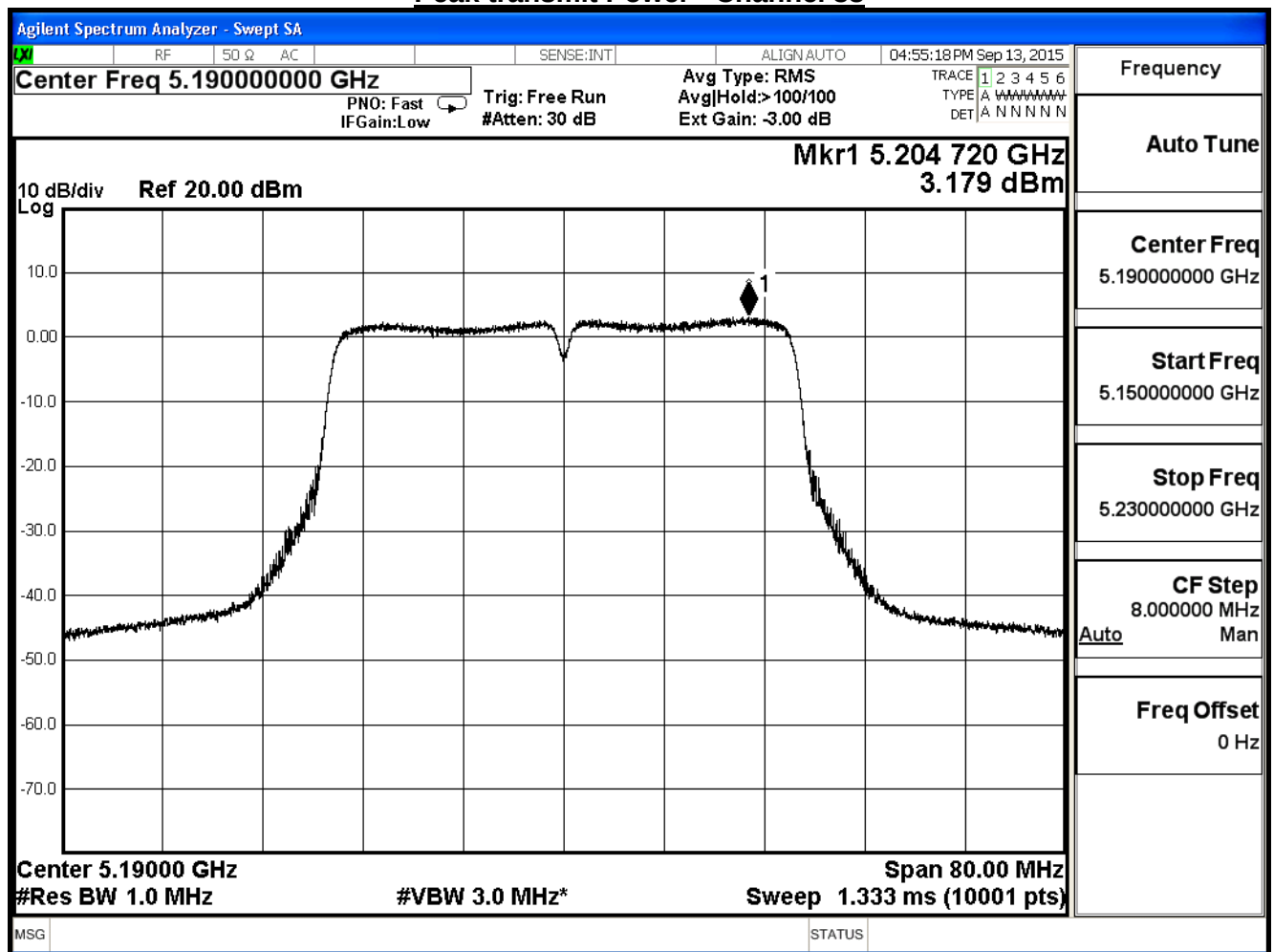
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 2: Transmit_Beamforming Mode_AD890326		
Date of Test	2015/09/13	Test Site	SR7

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

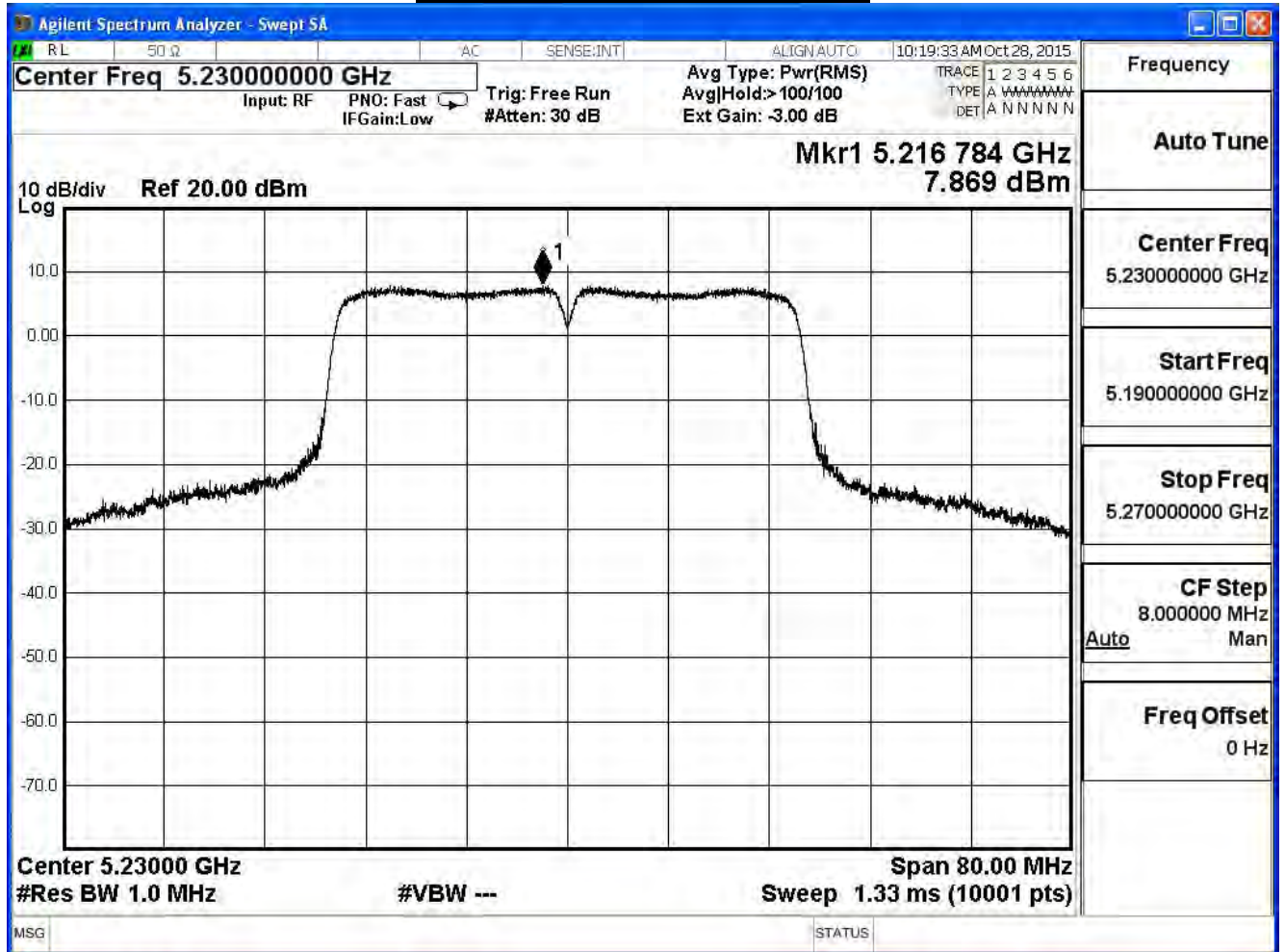
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

Peak transmit Power - Channel 38



Peak transmit Power - Channel 46



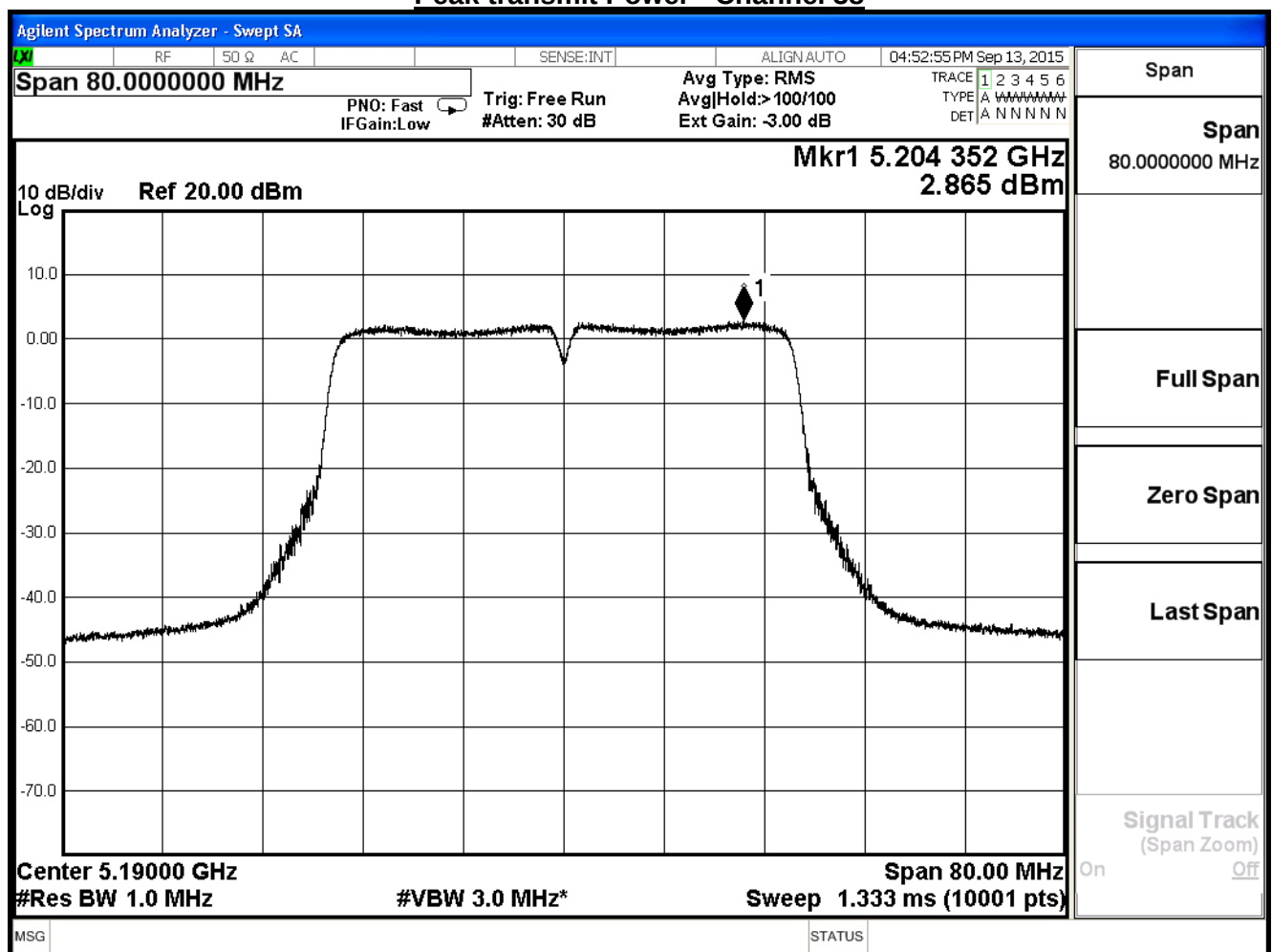
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 2: Transmit_Beamforming Mode_AD890326		
Date of Test	2015/09/13	Test Site	SR7

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

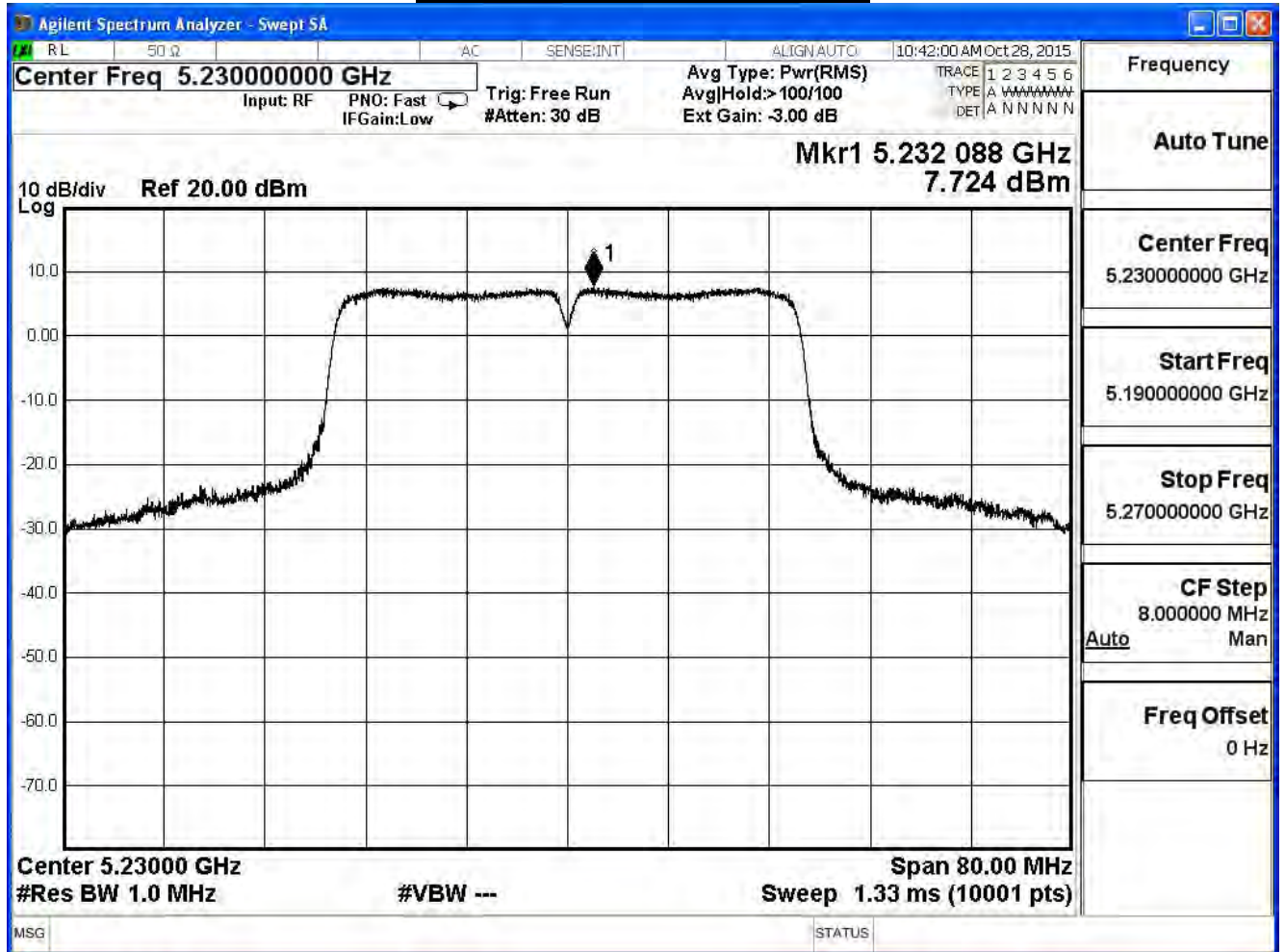
Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dB} - 6\text{dB}) = 15.69\text{dBm}$

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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

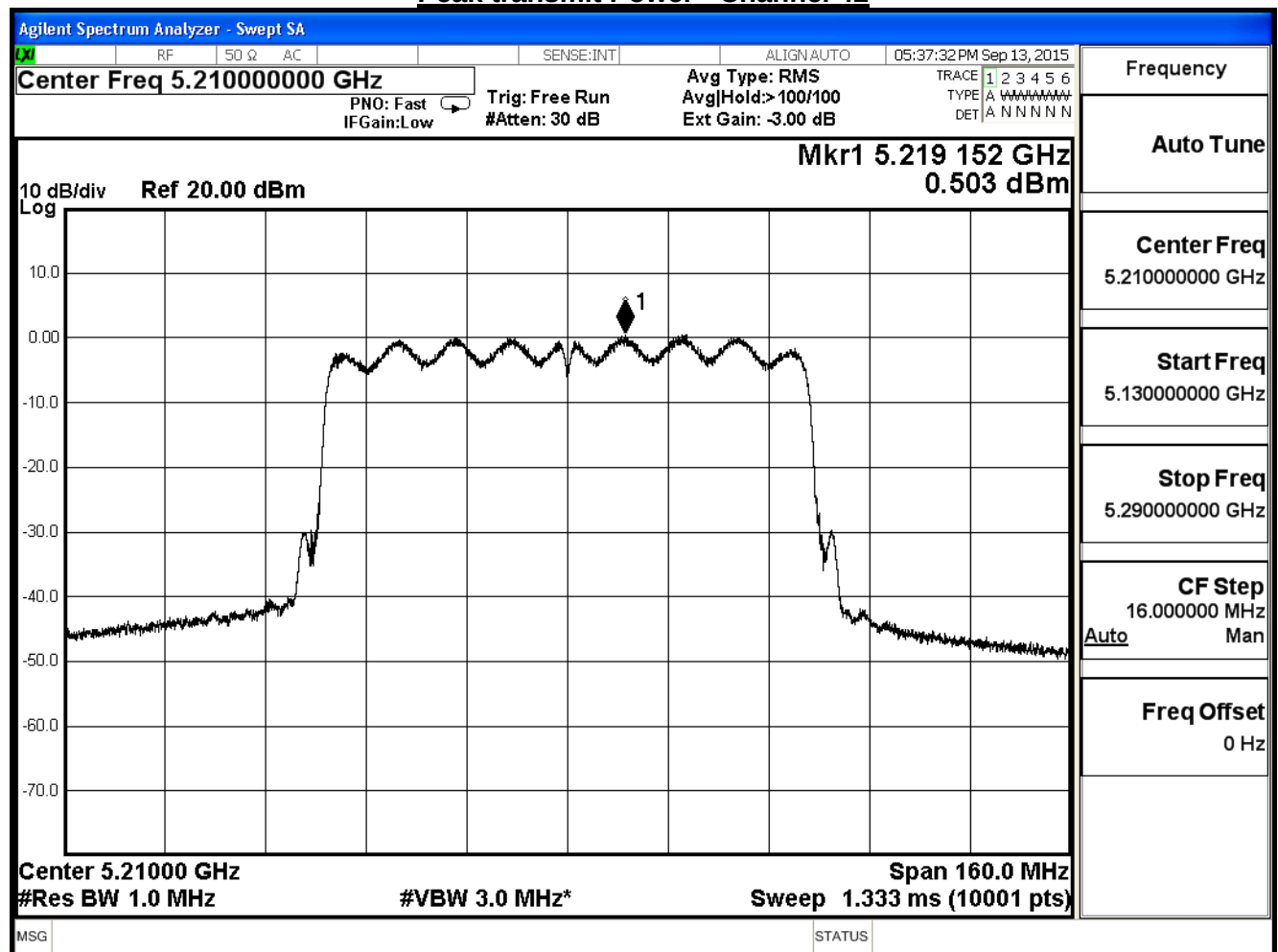
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 2: Transmit_Beamforming Mode_AD890326		
Date of Test	2015/09/13	Test Site	SR7

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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

Peak transmit Power - Channel 42



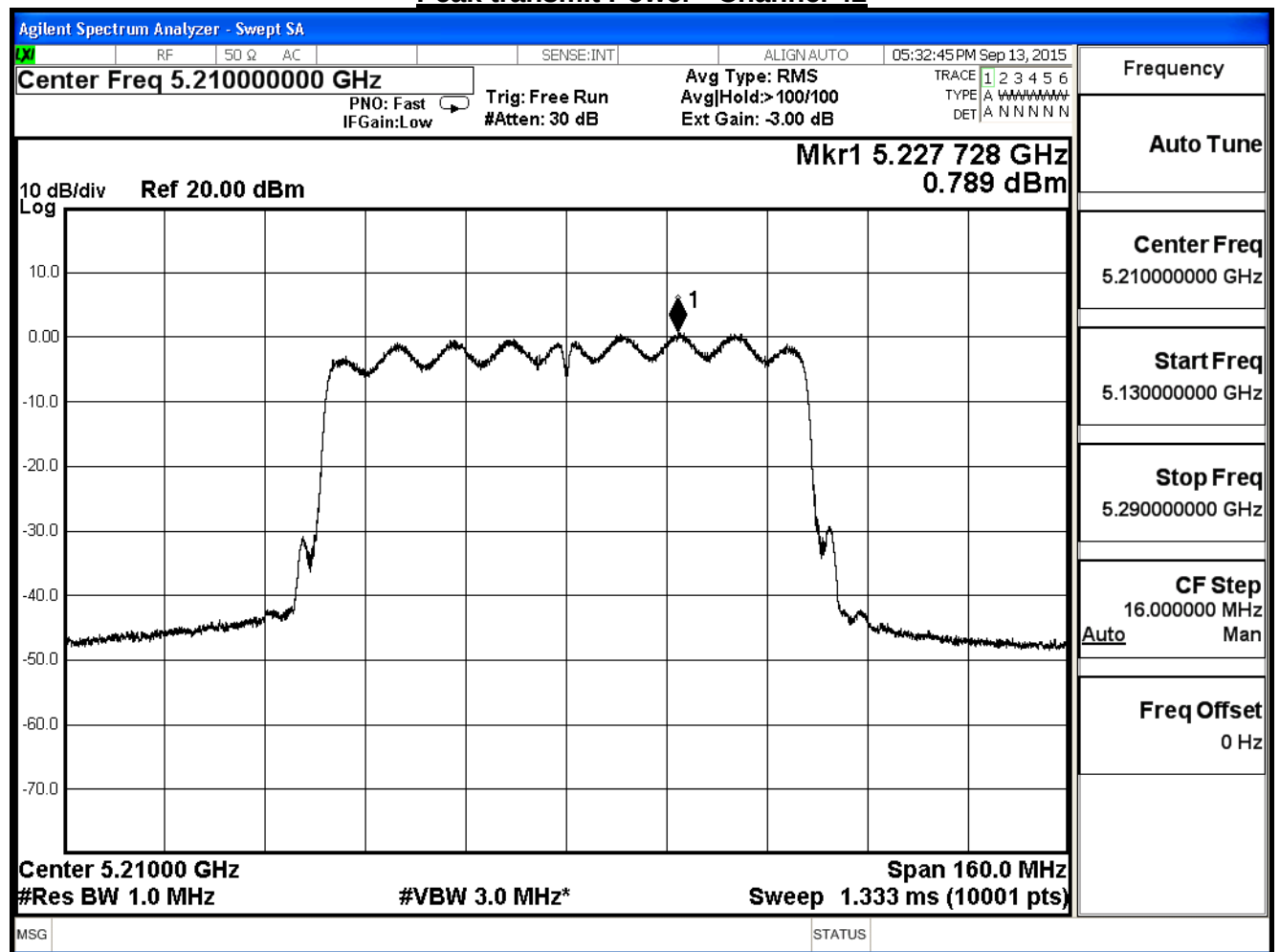
Product	Dual-band Wireless Range Extender		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 2: Transmit_Beamforming Mode_AD890326		
Date of Test	2015/09/13	Test Site	SR7

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

Directional Antenna: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

Peak transmit Power - Channel 42



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

Power Density Limit: $17\text{dBm} - (7.31\text{dB} - 6\text{dB}) = 15.69\text{dBm}$

Agilent Spectrum Analyzer - Swept SA

RF 50 Ω AC SENSE:INT ALIGN:AUTO 05:28:32 PM Sep 13, 2015

Span 160.000000 MHz

PNO: Fast IFGain:Low Trig: Free Run Avg Type: RMS
#Atten: 30 dB Avg|Hold:>100/100
Ext Gain: -3.00 dB

TRACE 1 2 3 4 5 6
TYPE A W W W W W W W
DET A N N N N N N

Mkr1 5.228 416 GHz
1.208 dBm

10 dB/div Ref 20.00 dBm
Log

Center 5.21000 GHz Span 160.0 MHz
#Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 1.333 ms (10001 pts)

MSG STATUS

Span

Span 160.000000 MHz

Full Span

Zero Span

Last Span

Signal Track (Span Zoom) On Off

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: $10\log(\text{Ant N}) + \text{Max Gain} = 10\log(2) + 4.31 = 7.31\text{dBi}$

Power Density Limit: $17\text{dBm} - (7.31\text{dBi} - 6\text{dB}) = 15.69\text{dBm}$

6. Radiated Emission

6.1. Test Equipment

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

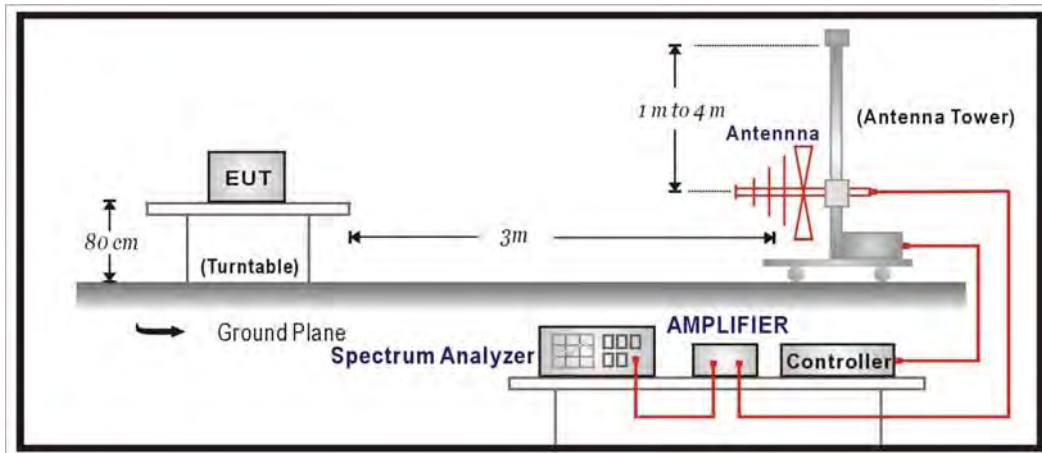
Radiated Emission / CB1

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

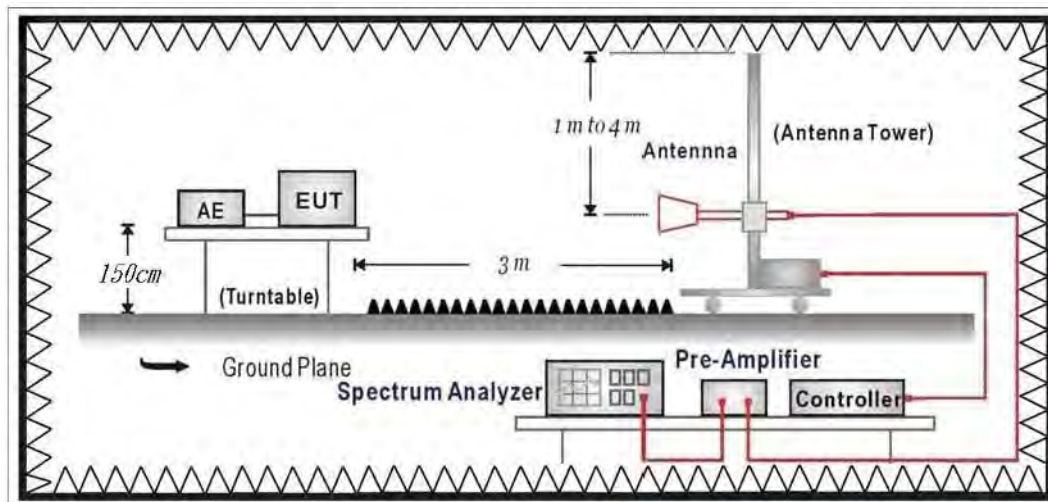
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

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 strength 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 harmonics is checked.

6.5. Uncertainty

The measurement uncertainty

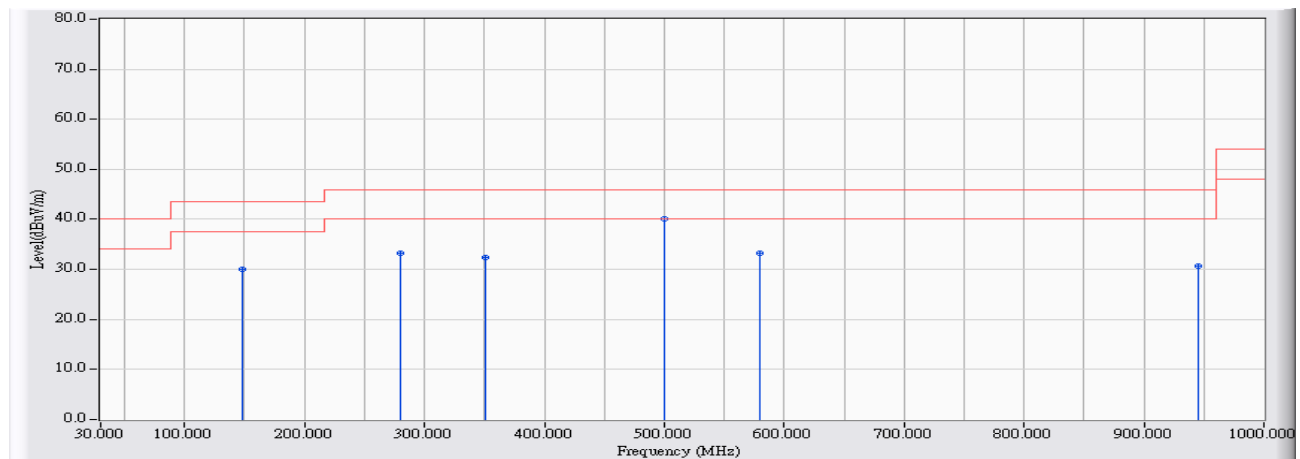
30MHz~1GHz as $\pm 3.43\text{dB}$

1GHz~26.5GHz as $\pm 3.65\text{dB}$

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

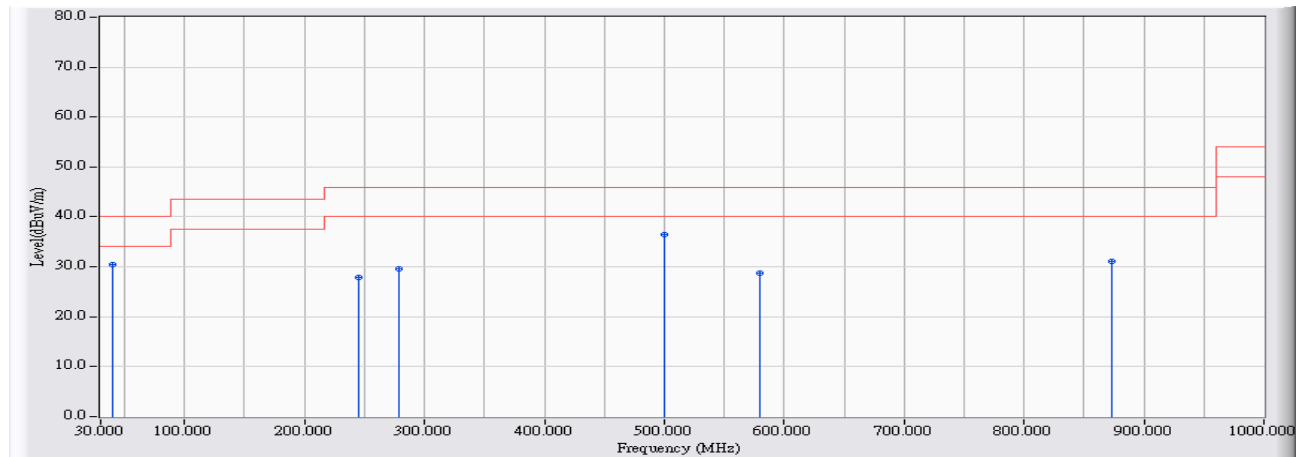


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		148.037	9.732	20.212	29.944	-13.556	43.500	QUASIPeAK
2		280.526	12.414	20.781	33.195	-12.805	46.000	QUASIPeAK
3		351.329	13.985	18.439	32.424	-13.576	46.000	QUASIPeAK
4	*	499.918	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

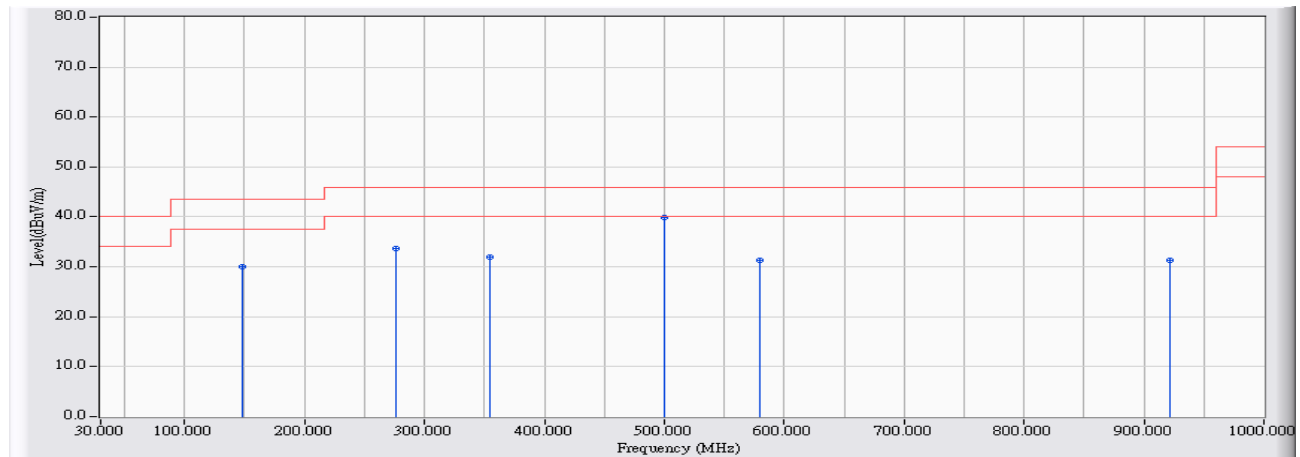


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	39.408	10.848	19.668	30.516	-9.484	40.000	QUASIPeAK
2	245.124	11.521	16.400	27.921	-18.079	46.000	QUASIPeAK
3	278.974	12.387	17.256	29.643	-16.357	46.000	QUASIPeAK
4	* 499.918	17.178	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

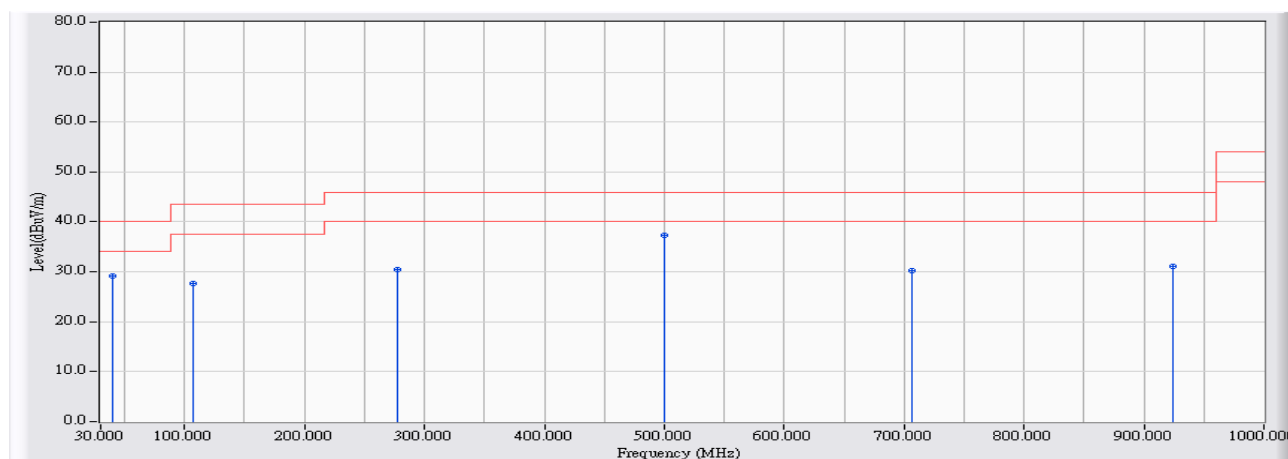


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	148.037	9.732	20.244	29.976	-13.524	43.500	QUASIPeAK
2	276.355	12.341	21.278	33.619	-12.381	46.000	QUASIPeAK
3	354.045	14.051	17.809	31.859	-14.141	46.000	QUASIPeAK
4	* 499.918	17.178	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

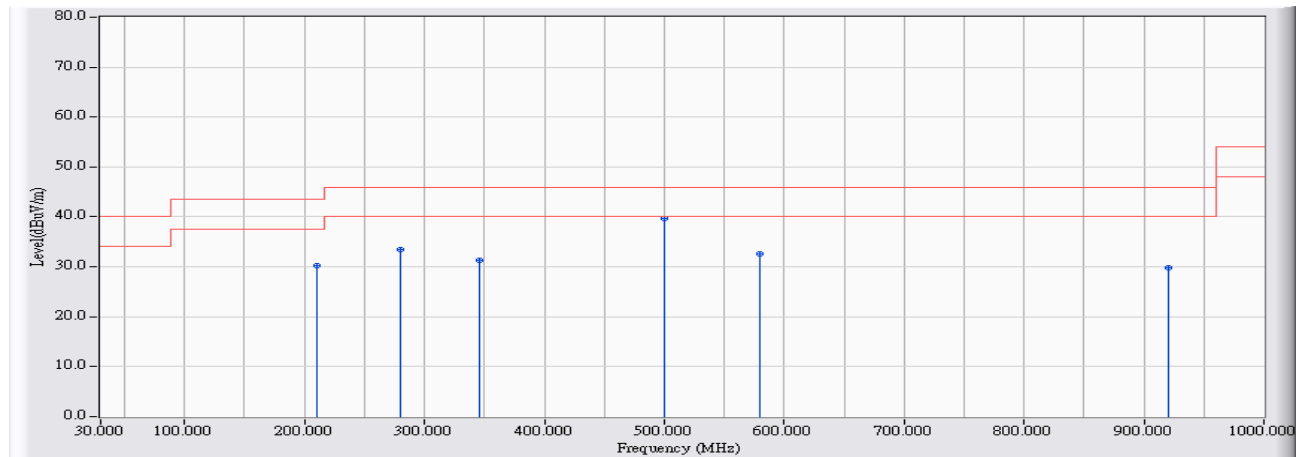


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	39.408	10.848	18.322	29.170	-10.830	40.000	QUASIPeAK
2	106.622	10.166	17.449	27.615	-15.885	43.500	QUASIPeAK
3	277.325	12.358	18.199	30.557	-15.443	46.000	QUASIPeAK
4	* 499.918	17.178	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

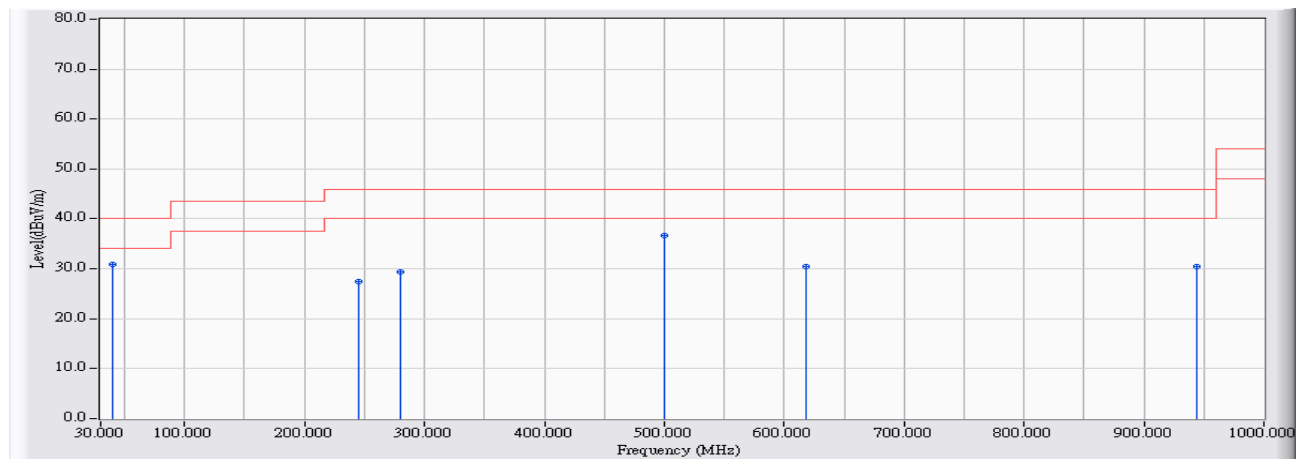


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	210.014	8.910	21.319	30.229	-13.271	43.500	QUASIPeAK
2	279.556	12.397	21.024	33.421	-12.579	46.000	QUASIPeAK
3	346.285	13.864	17.407	31.271	-14.729	46.000	QUASIPeAK
4	* 499.918	17.178	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

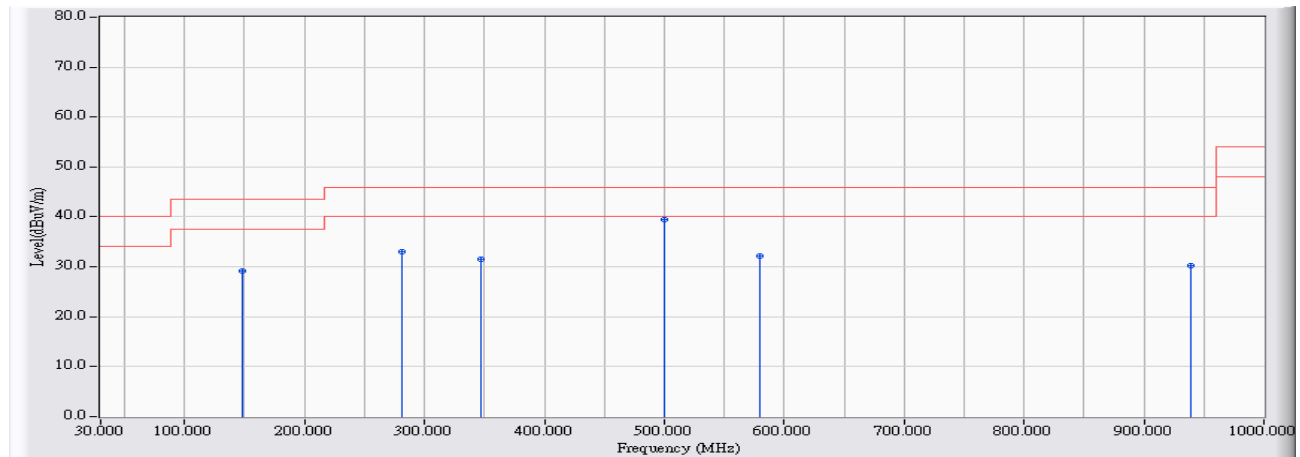


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	39.408	10.848	19.936	30.784	-9.216	40.000	QUASIPeAK
2		244.543	11.478	15.909	27.387	-18.613	46.000	QUASIPeAK
3		279.459	12.395	17.001	29.396	-16.604	46.000	QUASIPeAK
4		499.918	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

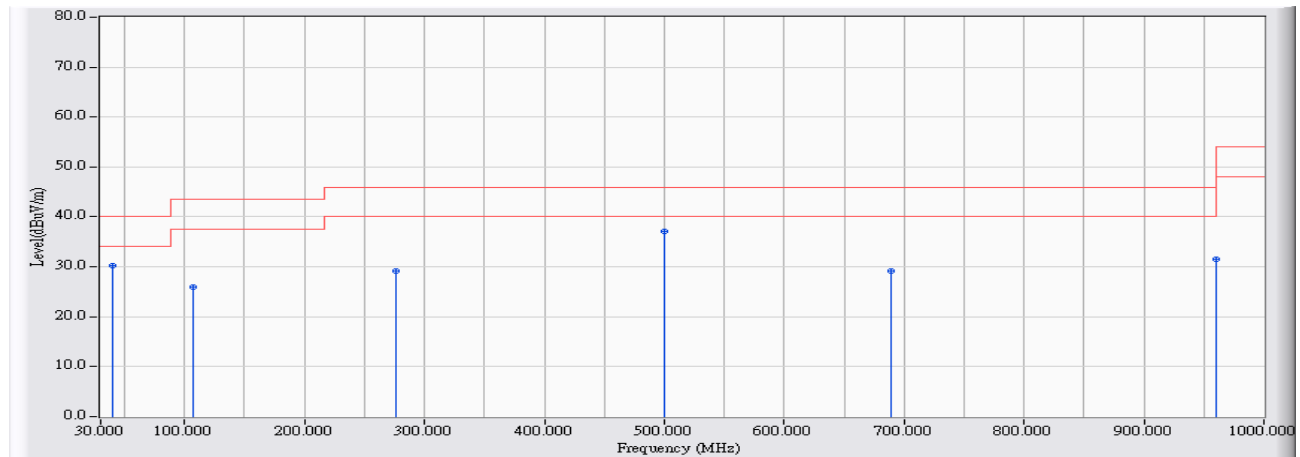


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	148.037	9.732	19.503	29.235	-14.265	43.500	QUASIPeAK
2	281.496	12.431	20.666	33.097	-12.903	46.000	QUASIPeAK
3	346.770	13.876	17.725	31.601	-14.399	46.000	QUASIPeAK
4	* 500.015	17.179	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

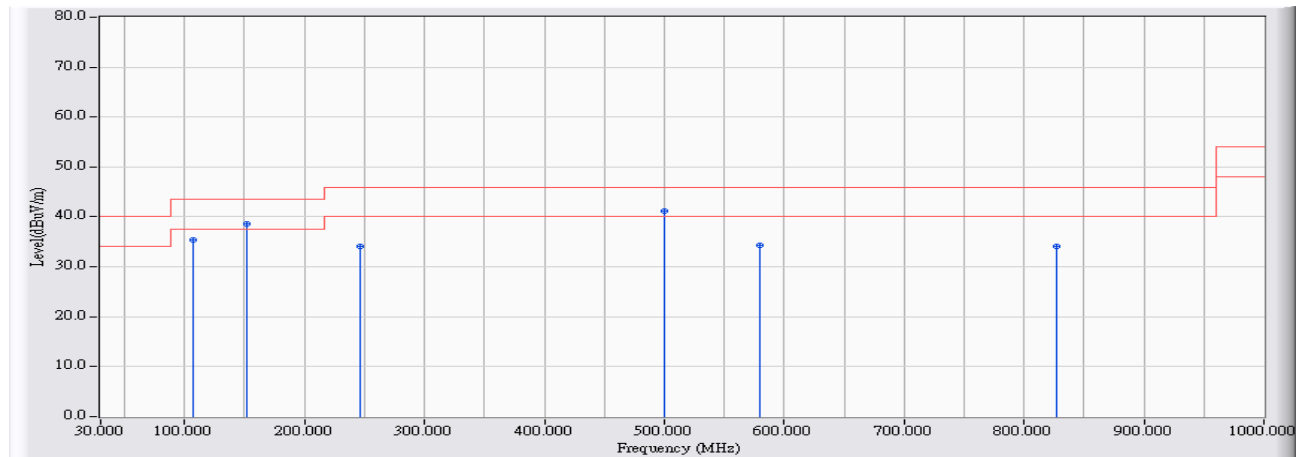


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	39.505	10.810	19.461	30.271	-9.729	40.000	QUASIPeAK
2	106.719	10.171	15.748	25.919	-17.581	43.500	QUASIPeAK
3	276.355	12.341	16.919	29.260	-16.740	46.000	QUASIPeAK
4	* 499.918	17.178	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

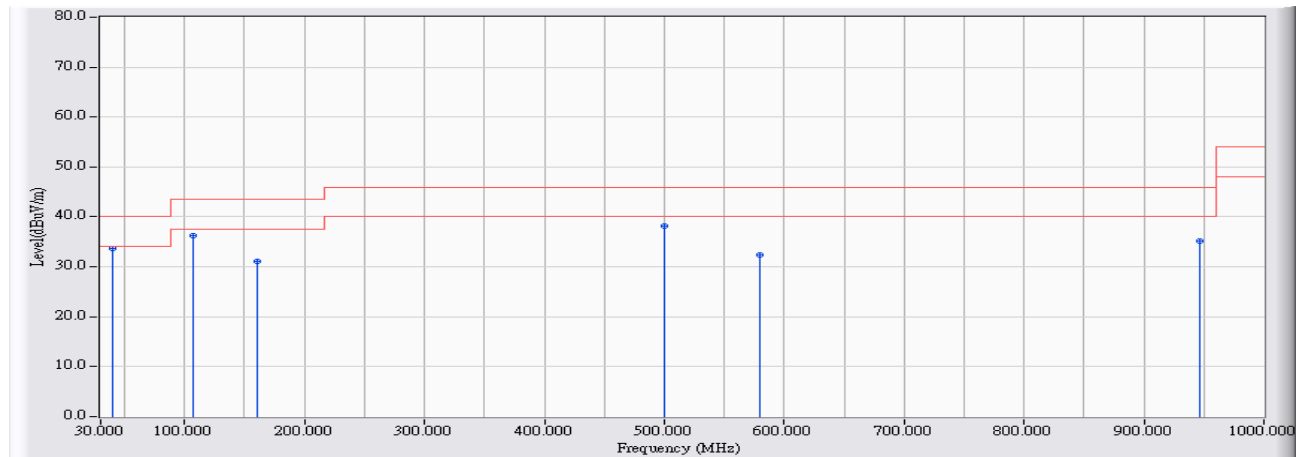


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	106.719	12.558	22.837	35.395	-8.105	43.500	QUASIPeAK
2	151.529	17.810	20.737	38.546	-4.954	43.500	QUASIPeAK
3	246.773	12.228	21.861	34.089	-11.911	46.000	QUASIPeAK
4	* 499.918	17.754	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

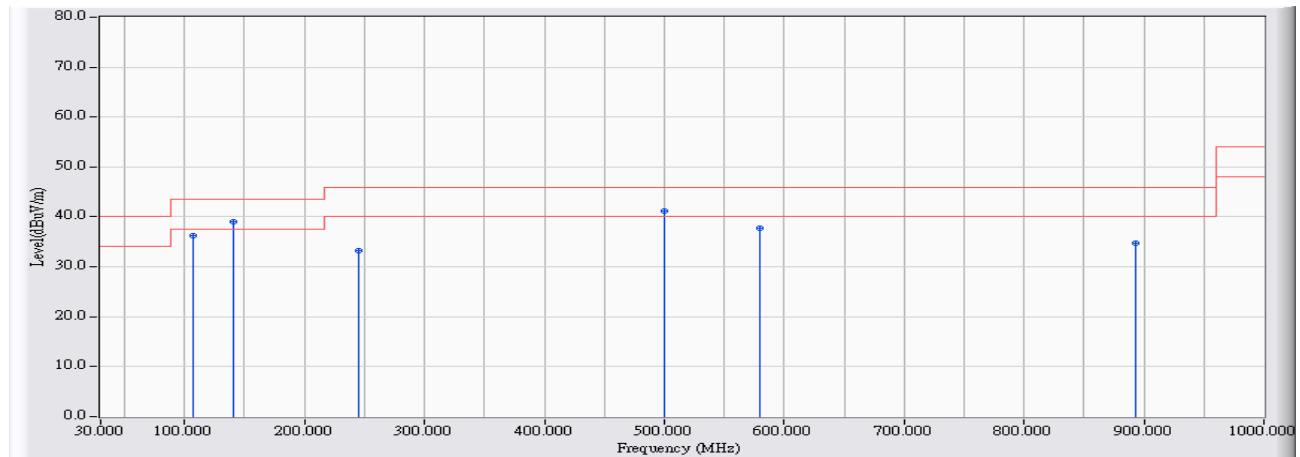


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	39.408	12.249	21.398	33.647	-6.353	40.000	QUASIPeAK
2		106.622	12.558	23.621	36.179	-7.321	43.500	QUASIPeAK
3		160.258	17.924	13.186	31.110	-12.390	43.500	QUASIPeAK
4		500.015	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

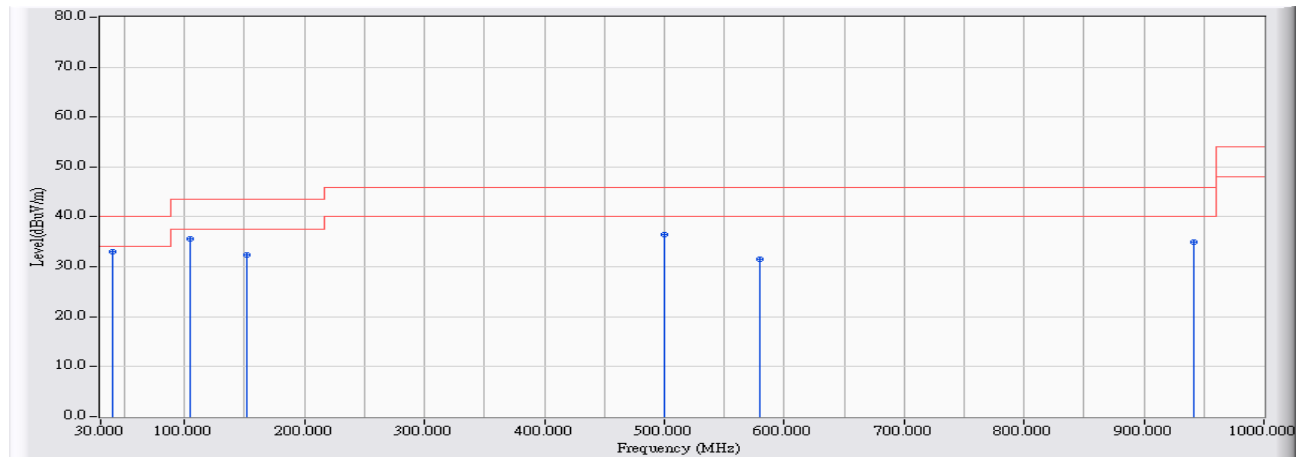


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		106.719	12.558	23.652	36.210	-7.290	43.500	QUASIPeAK
2	*	141.151	16.260	22.675	38.935	-4.565	43.500	QUASIPeAK
3		245.706	12.197	20.992	33.189	-12.811	46.000	QUASIPeAK
4		499.918	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

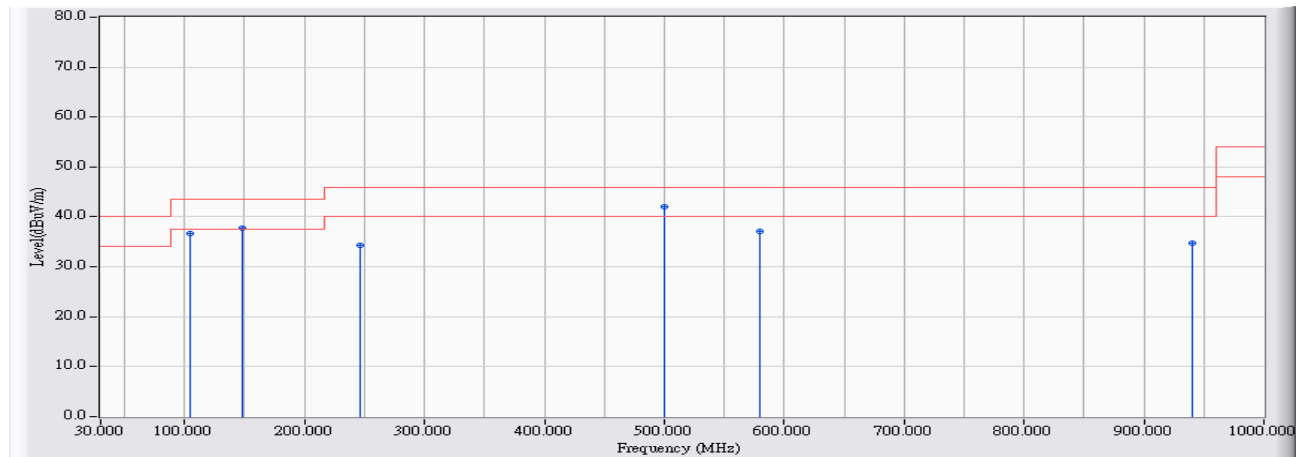


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	39.408	12.249	20.789	33.038	-6.962	40.000	QUASIPeak
2		104.683	12.550	22.974	35.525	-7.975	43.500	QUASIPeak
3		151.529	17.810	14.487	32.296	-11.204	43.500	QUASIPeak
4		499.918	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

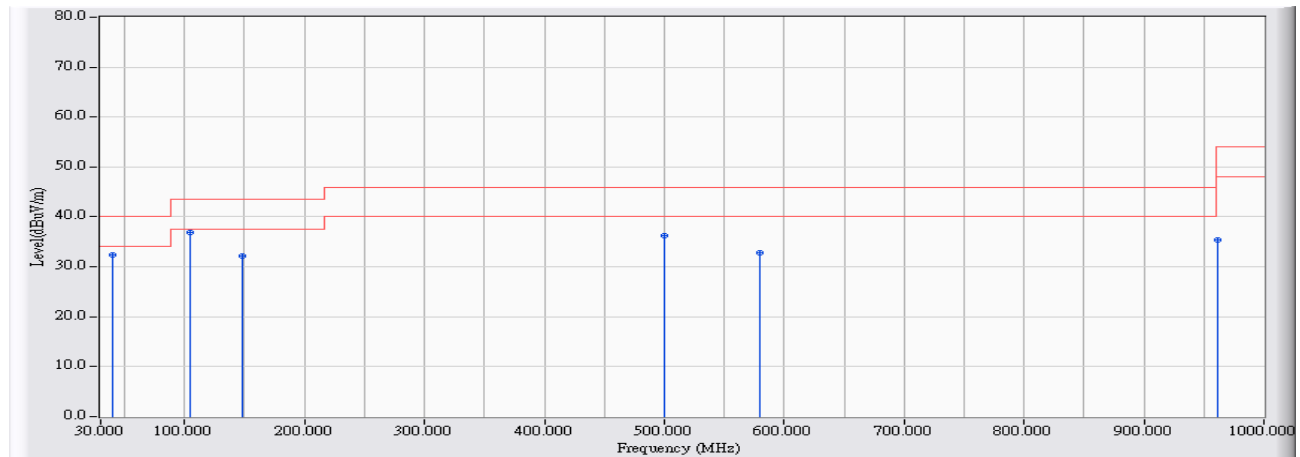


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	104.683	12.550	24.142	36.693	-6.807	43.500	QUASIPeAK
2	148.037	17.442	20.274	37.716	-5.784	43.500	QUASIPeAK
3	245.803	12.199	22.070	34.269	-11.731	46.000	QUASIPeAK
4	* 499.918	17.754	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

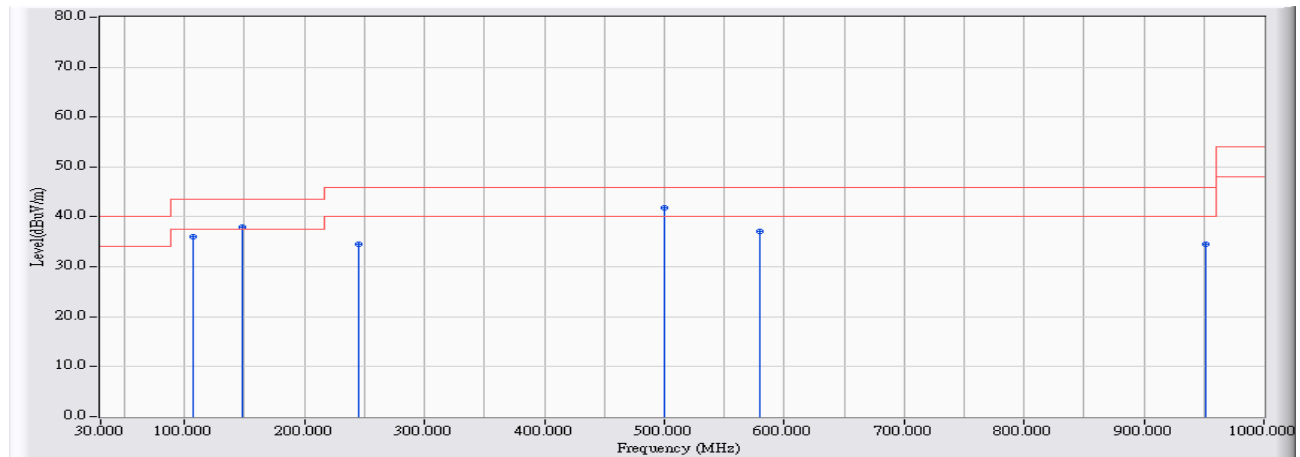


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		39.408	12.249	20.061	32.310	-7.690	40.000	QUASIPeAK
2	*	104.683	12.550	24.424	36.975	-6.525	43.500	QUASIPeAK
3		148.134	17.459	14.625	32.084	-11.416	43.500	QUASIPeAK
4		499.918	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

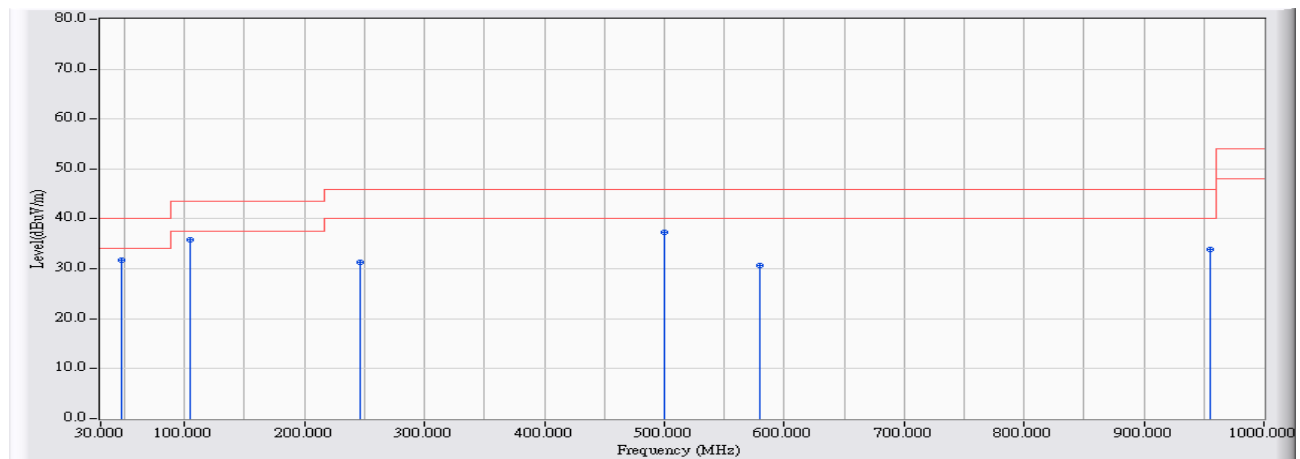


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	106.622	12.558	23.461	36.019	-7.481	43.500	QUASIPeAK
2	148.037	17.442	20.491	37.933	-5.567	43.500	QUASIPeAK
3	245.318	12.185	22.331	34.516	-11.484	46.000	QUASIPeAK
4	* 499.918	17.754	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



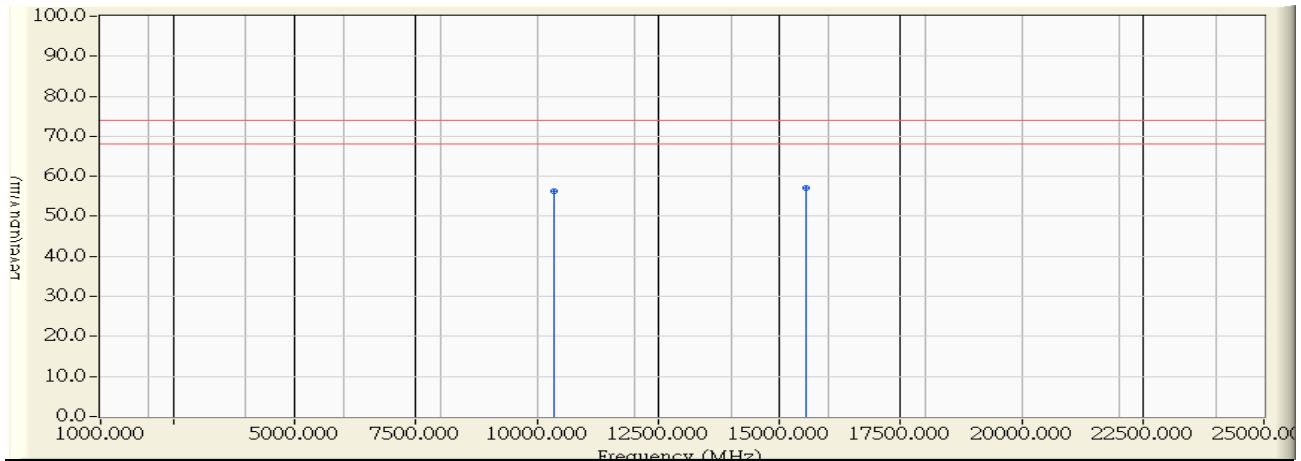
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	47.749	11.828	19.830	31.658	-8.342	40.000	QUASIPeAK
2	* 104.683	12.550	23.214	35.765	-7.735	43.500	QUASIPeAK
3	245.803	12.199	19.127	31.326	-14.674	46.000	QUASIPeAK
4	499.918	17.754	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

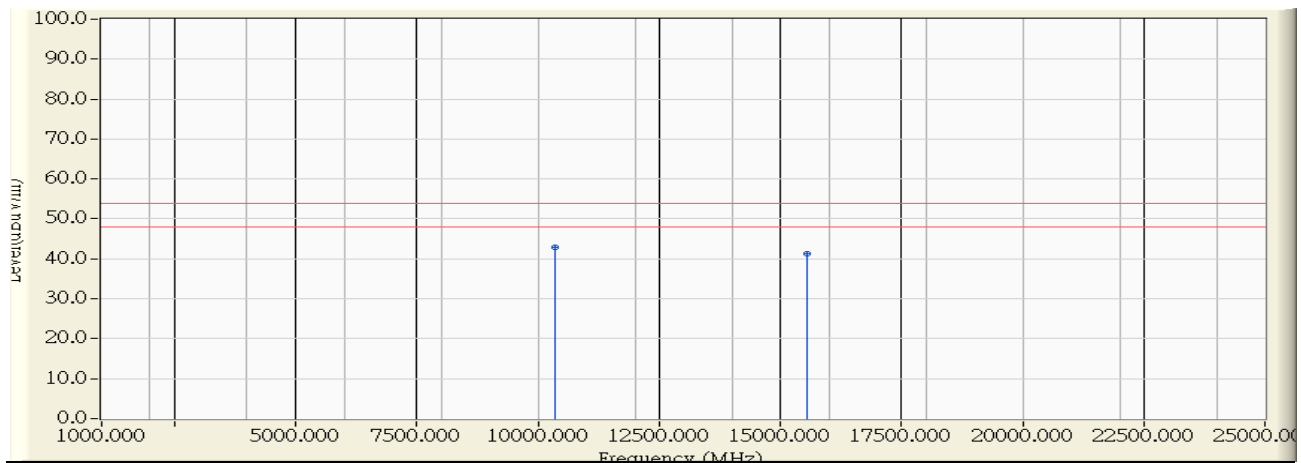


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10360.000	10.136	46.180	56.316	-17.684	74.000	PEAK
2	*	15540.000	11.090	46.020	57.110	-16.890	74.000	PEAK

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

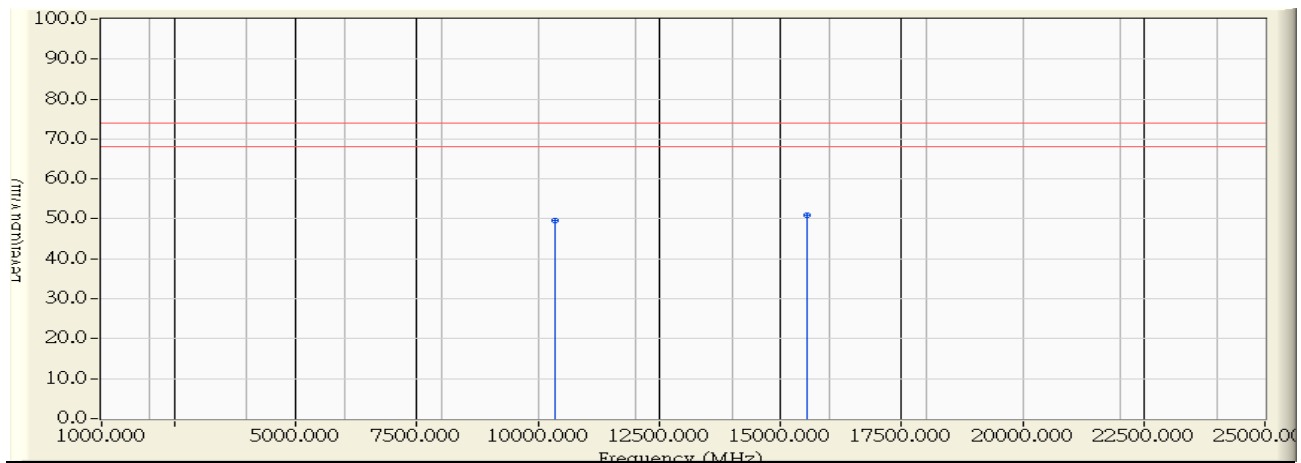


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	10360.000	10.136	32.640	42.776	-11.224	54.000	AVERAGE
2		15540.000	11.090	30.190	41.280	-12.720	54.000	AVERAGE

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

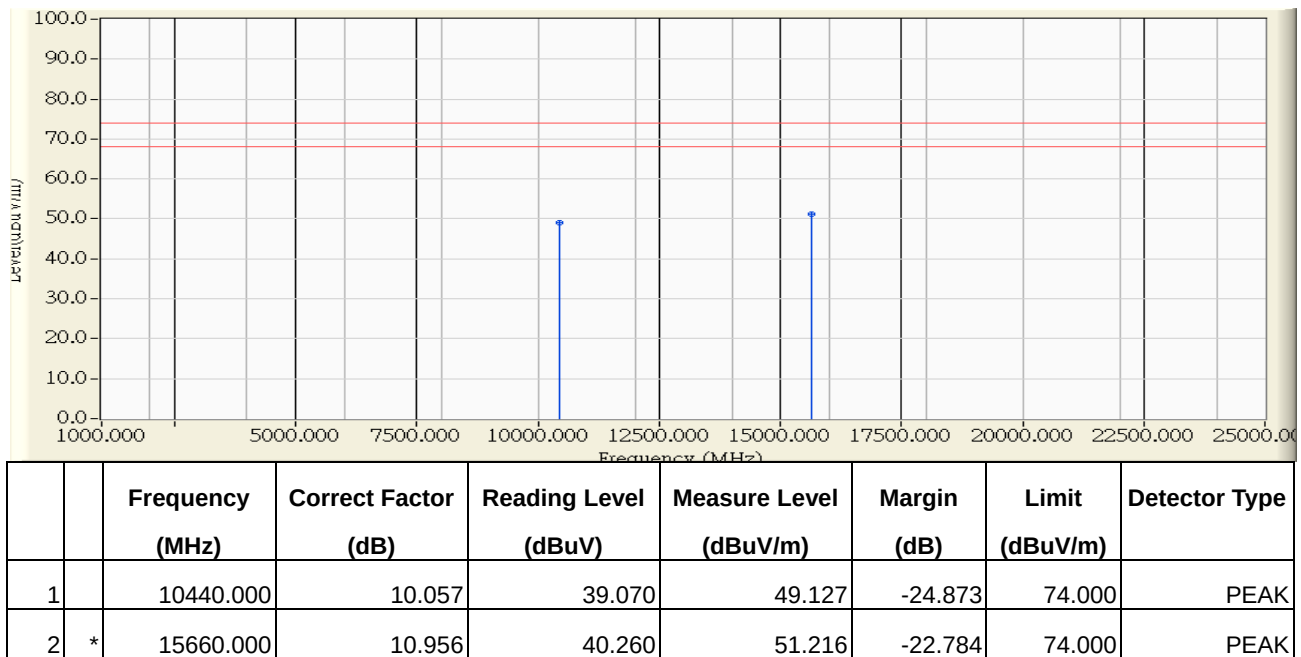


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10360.000	9.513	40.150	49.663	-24.337	74.000	PEAK
2	*	15540.000	11.090	39.920	51.010	-22.990	74.000	PEAK

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

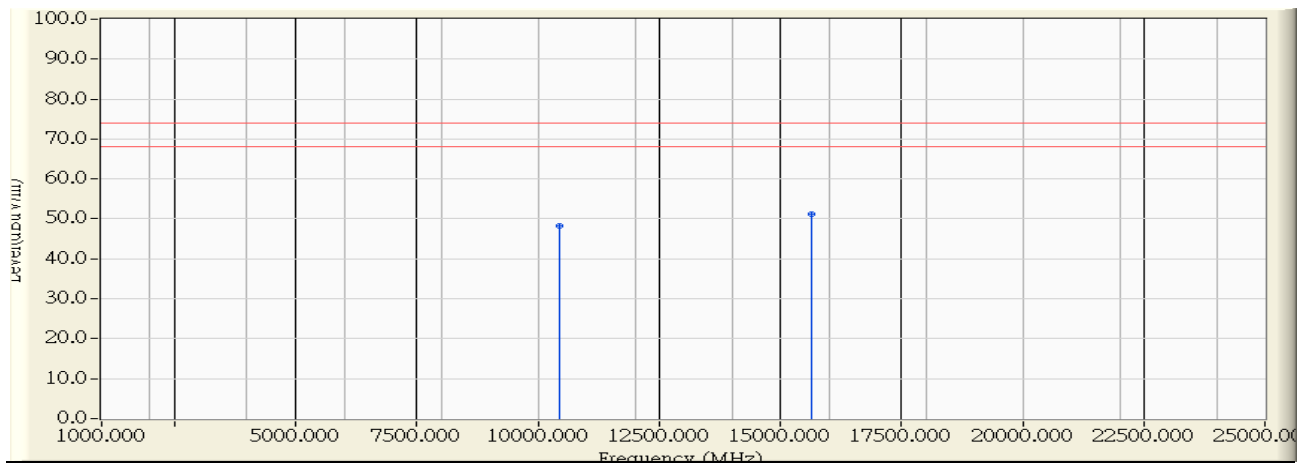


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	10440.000	10.057	39.070	49.127	-24.873	74.000	PEAK
2	* 15660.000	10.956	40.260	51.216	-22.784	74.000	PEAK

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

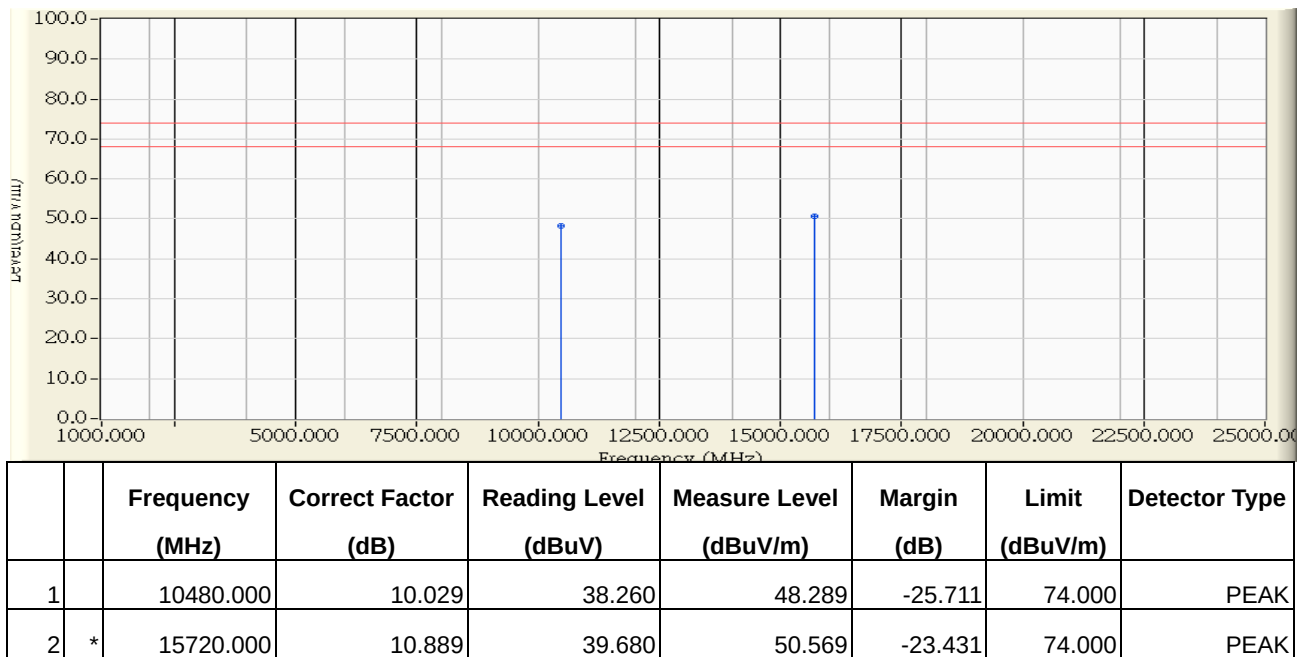


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10440.000	9.514	38.630	48.144	-25.856	74.000	PEAK
2	*	15660.000	10.956	40.250	51.206	-22.794	74.000	PEAK

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



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.

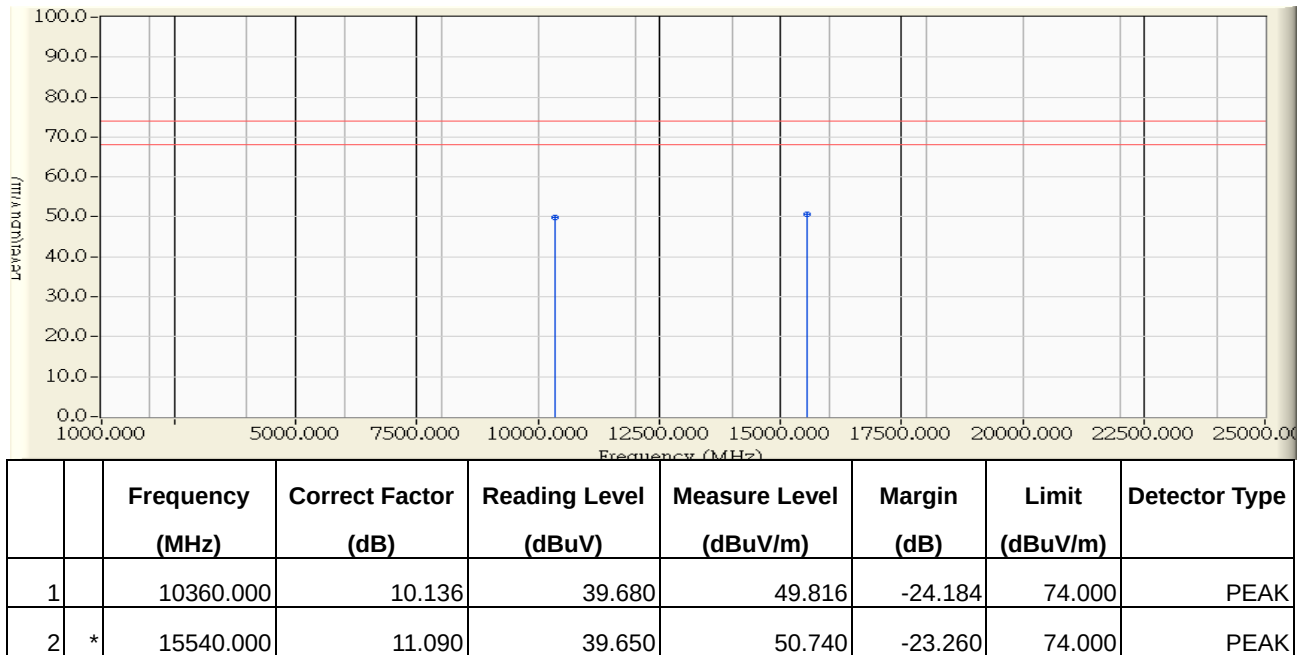
Site : CB1	Time : 2015/09/16 - 11:12
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	Power : AC120V/60Hz
EUT : Dual-band Wireless Range Extender	Note : Mode 1: Transmit_CDD Mode_AD890326 802.11a_5240MHz



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.

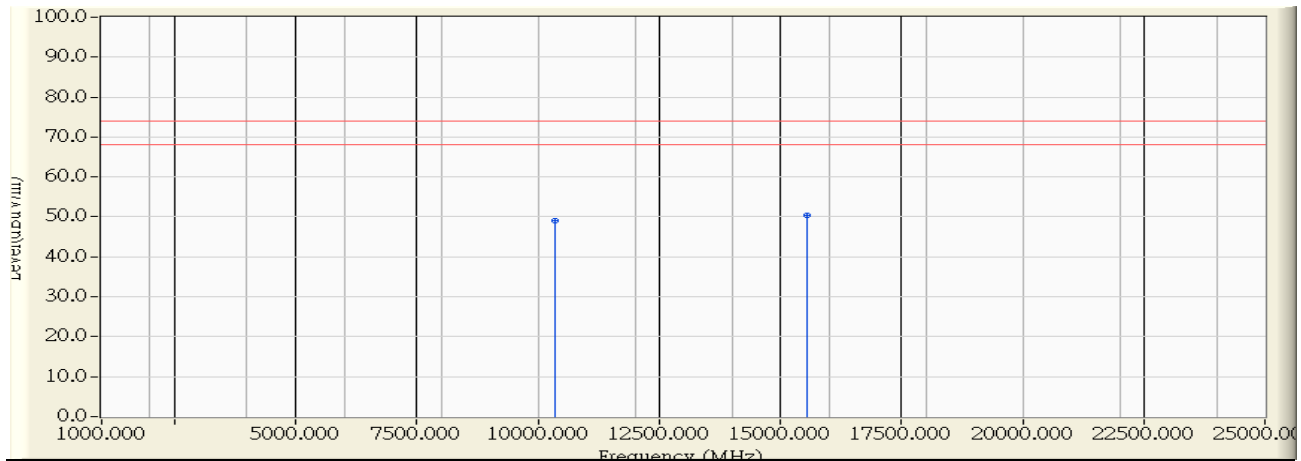
Site : CB1	Time : 2015/09/16 - 14:50
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	Power : AC120V/60Hz
EUT : Dual-band Wireless Range Extender	Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5180MHz



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

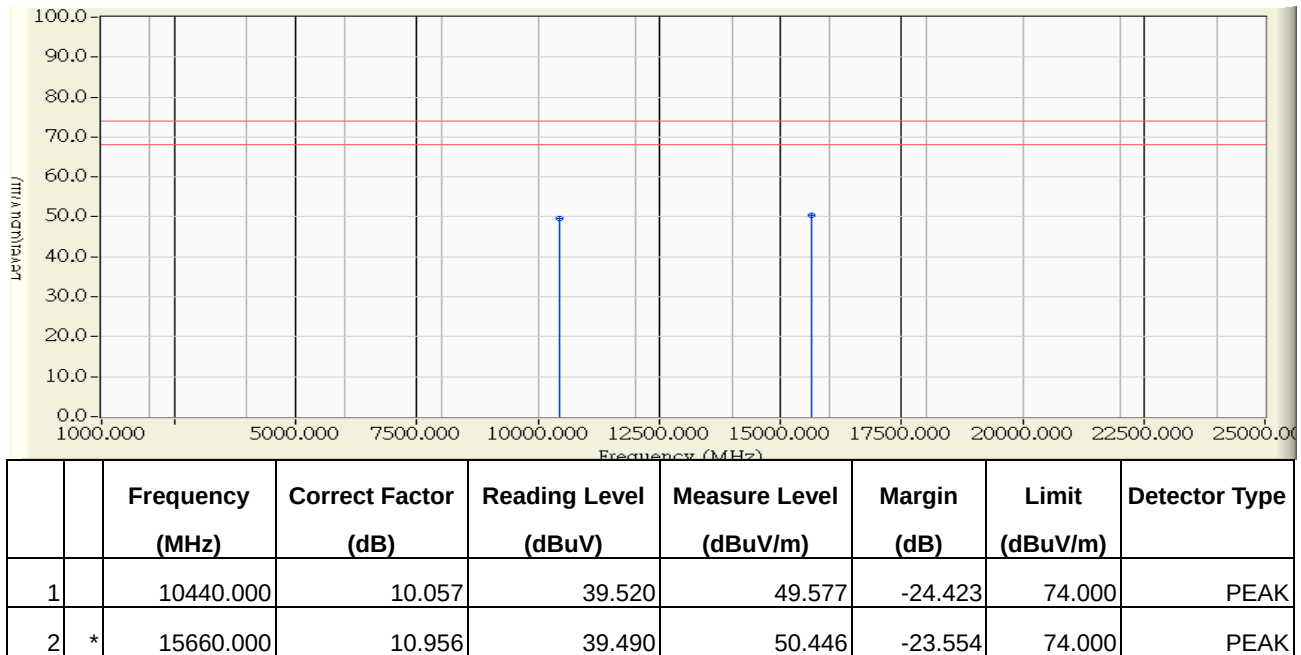


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10360.000	9.513	39.570	49.083	-24.917	74.000	PEAK
2	*	15540.000	11.090	39.340	50.430	-23.570	74.000	PEAK

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

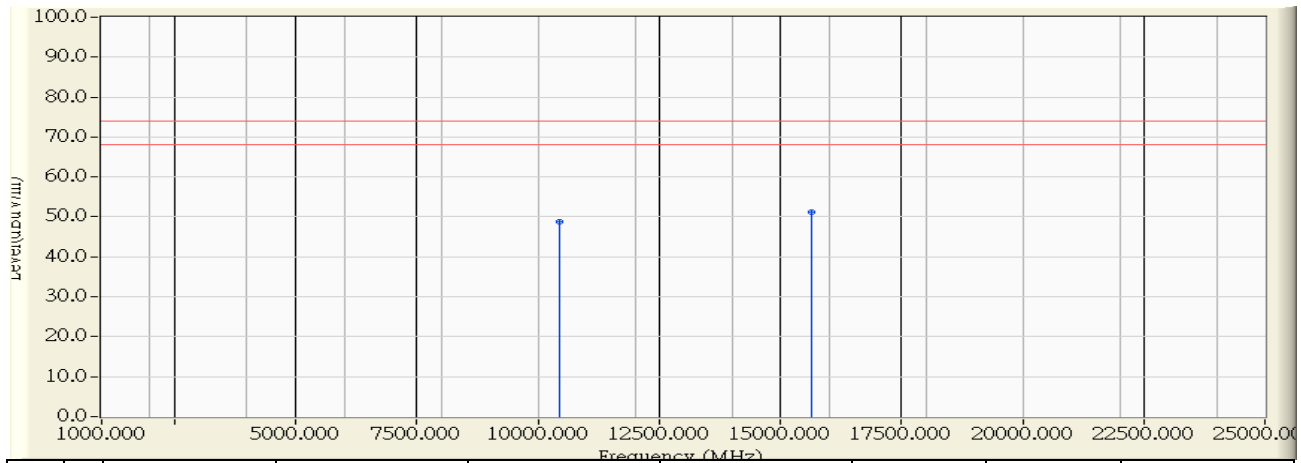


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10440.000	10.057	39.520	49.577	-24.423	74.000	PEAK
2	*	15660.000	10.956	39.490	50.446	-23.554	74.000	PEAK

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

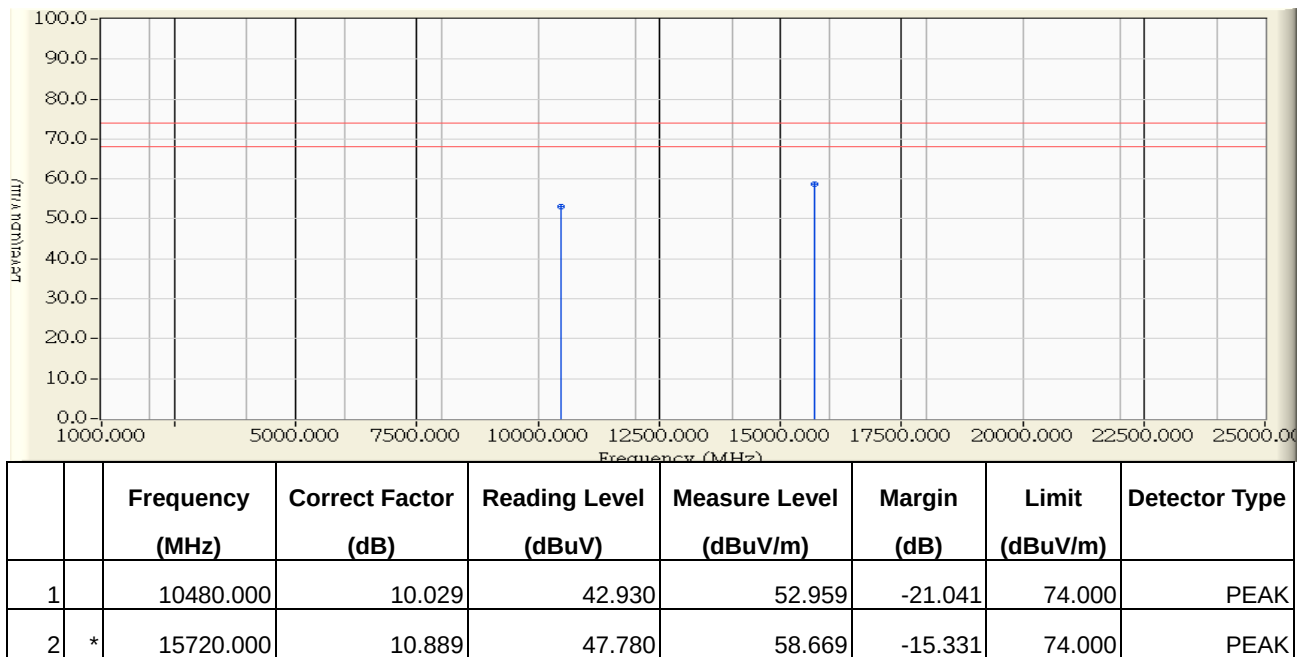


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10440.000	9.514	39.310	48.824	-25.176	74.000	PEAK
2	*	15660.000	10.956	40.180	51.136	-22.864	74.000	PEAK

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.

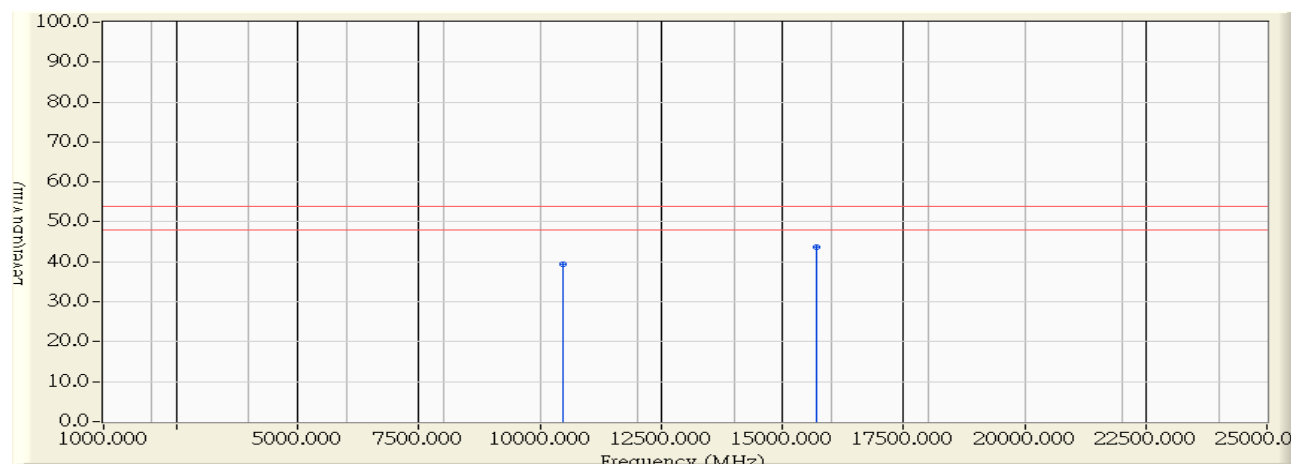
Site : CB1	Time : 2015/09/16 - 14:38
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	Power : AC120V/60Hz
EUT : Dual-band Wireless Range Extender	Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5240MHz



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.

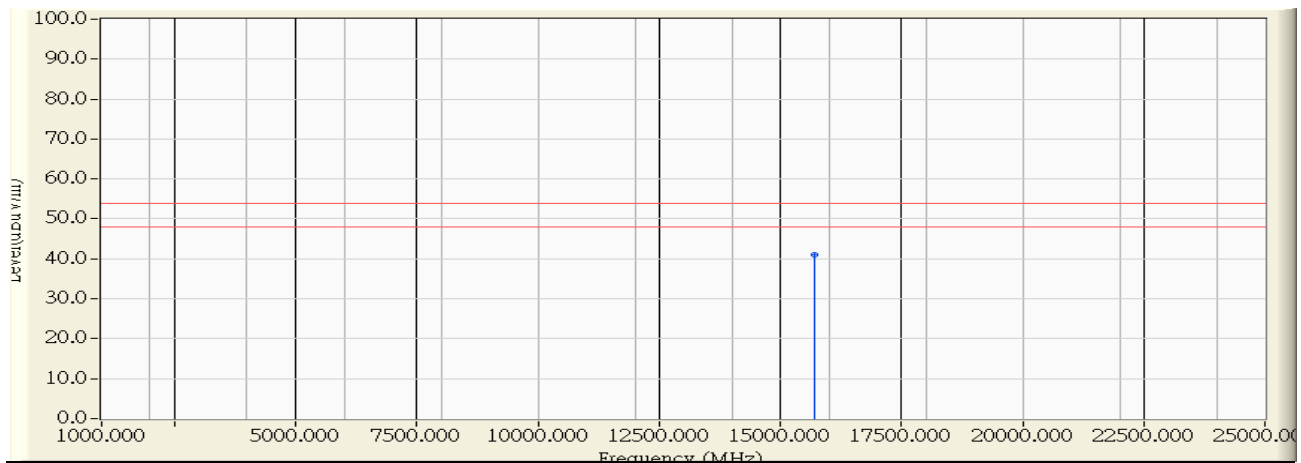
Site : CB1	Time : 2015/09/16 - 11:18
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	Power : AC120V/60Hz
EUT : Dual-band Wireless Range Extender	Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(20M)_5240MHz



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

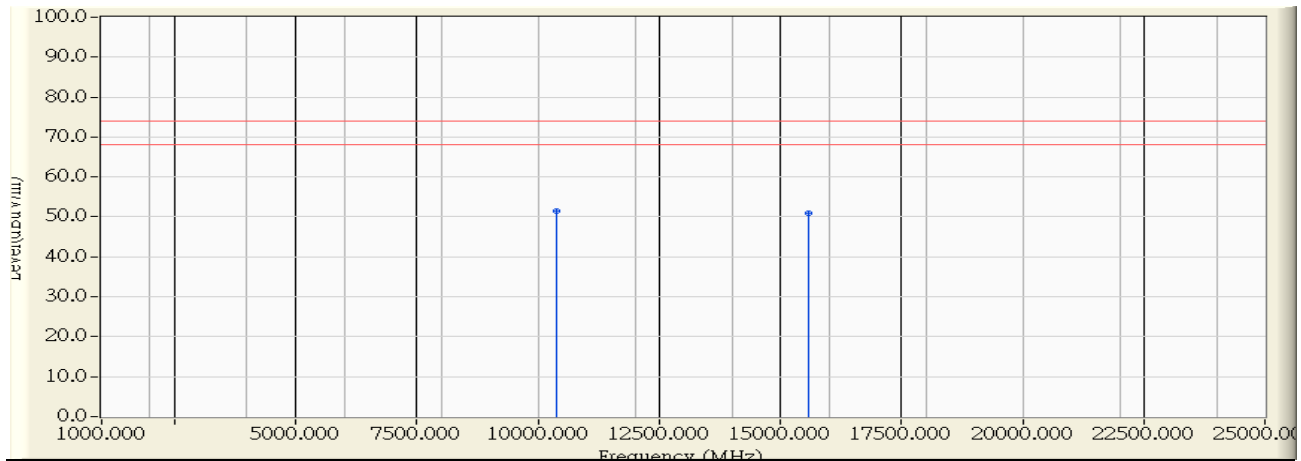


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	15720.000	10.889	30.040	40.929	-13.071	54.000	AVERAGE

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

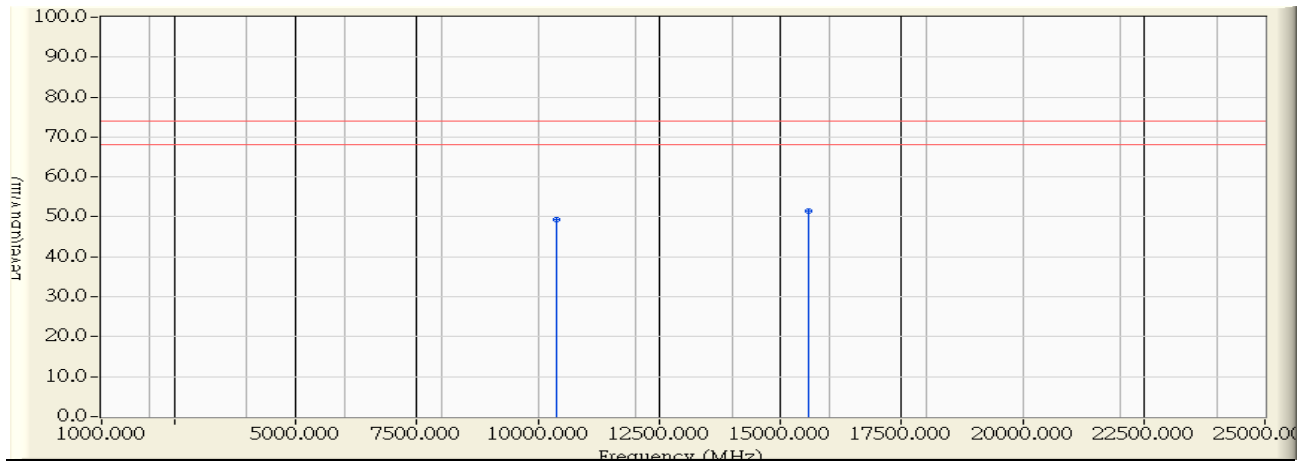


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	10380.000	10.116	41.240	51.356	-22.644	74.000	PEAK
2		15570.000	11.056	39.860	50.917	-23.083	74.000	PEAK

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

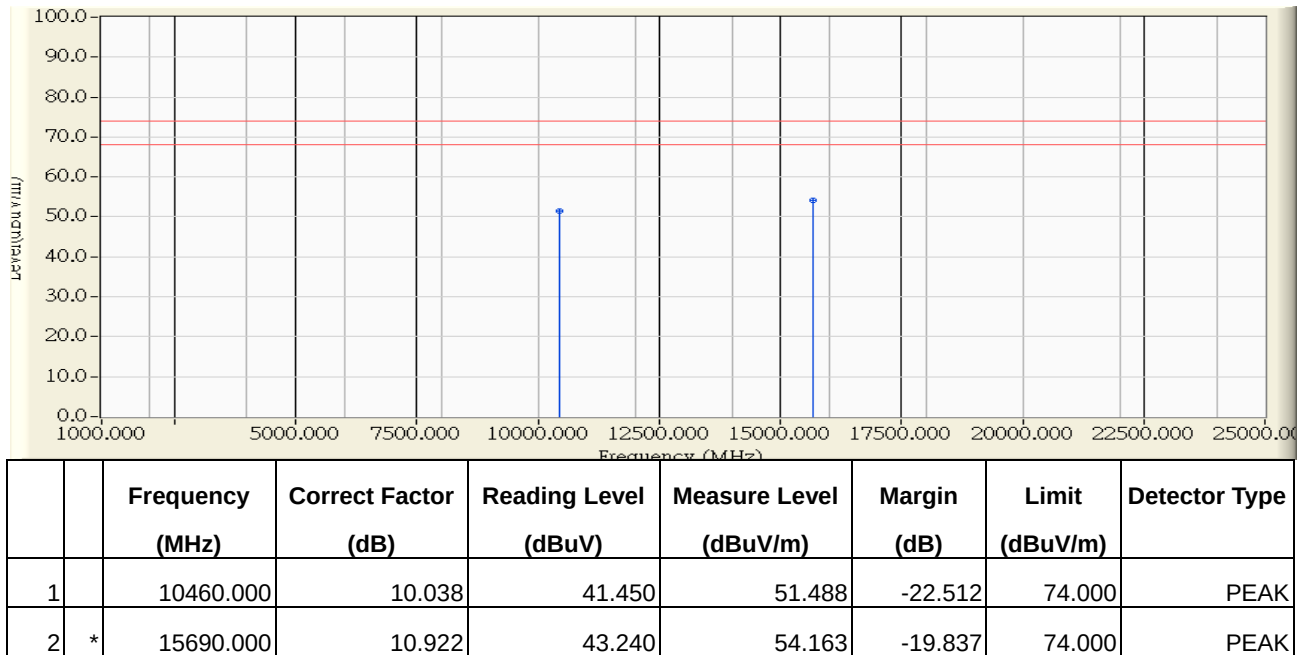


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10380.000	9.513	39.710	49.223	-24.777	74.000	PEAK
2	*	15570.000	11.056	40.290	51.347	-22.653	74.000	PEAK

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.

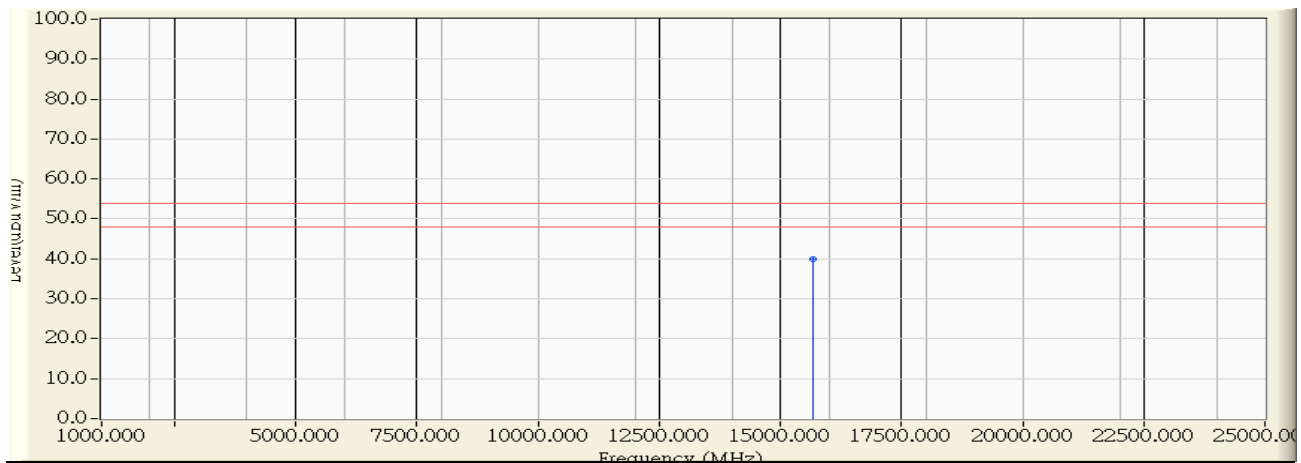
Site : CB1	Time : 2015/09/16 - 15:11
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	Power : AC120V/60Hz
EUT : Dual-band Wireless Range Extender	Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(40M)_5230MHz



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

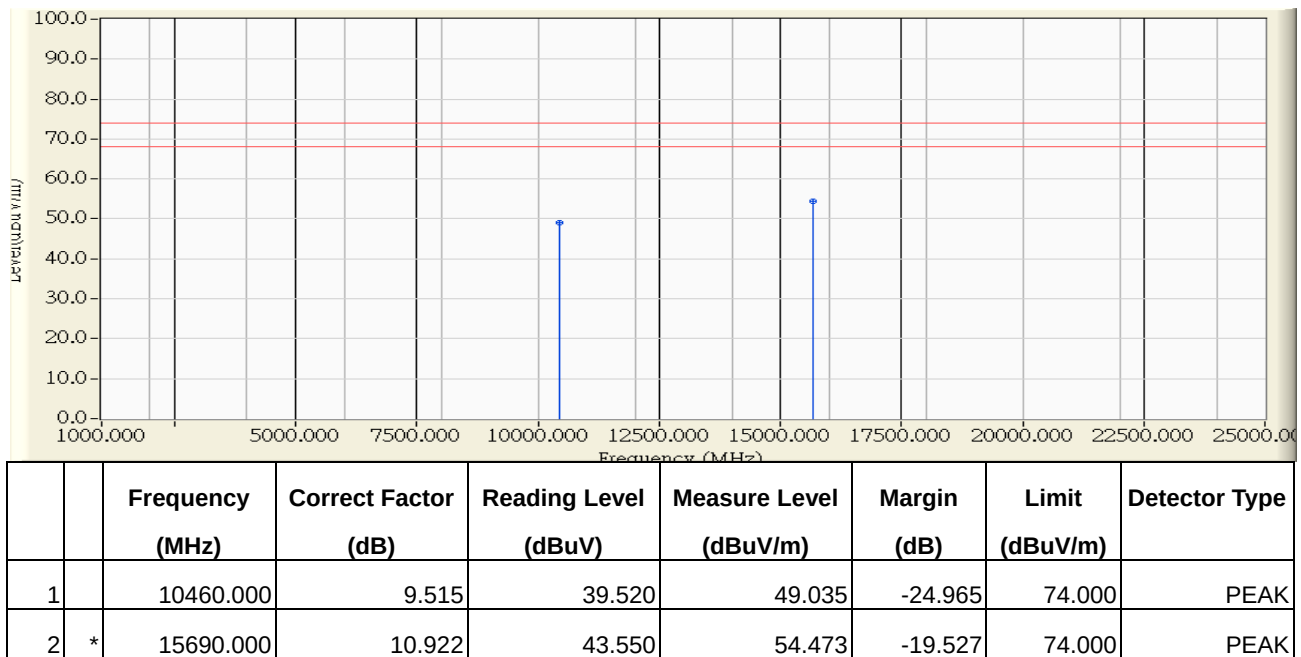


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	15690.000	10.922	29.070	39.993	-14.007	54.000	AVERAGE

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.

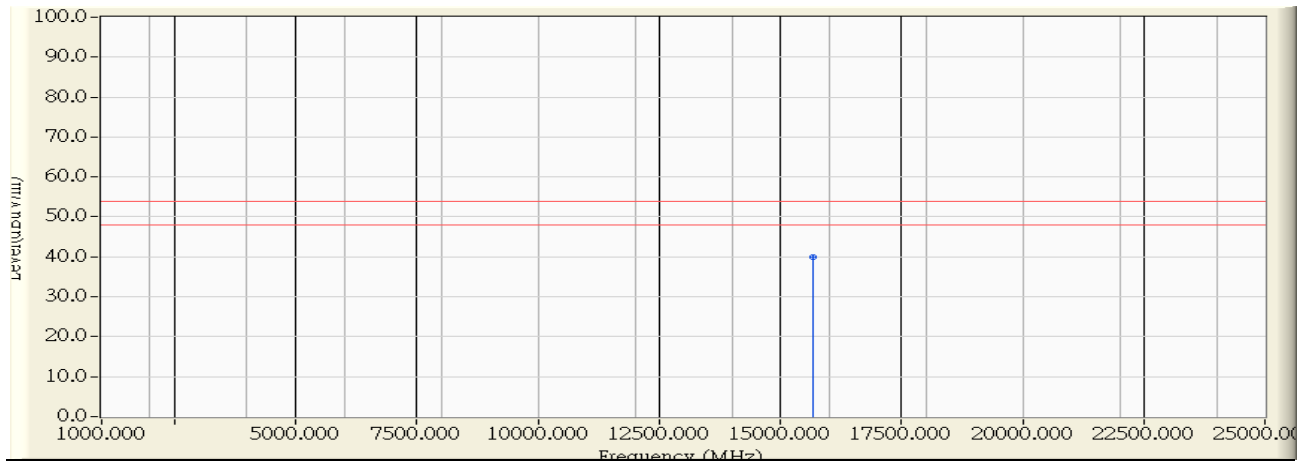
Site : CB1	Time : 2015/09/16 - 15:17
Limit : FCC_SpartC_15.209_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	Power : AC120V/60Hz
EUT : Dual-band Wireless Range Extender	Note : Mode 1: Transmit_CDD Mode_AD890326 802.11n(40M)_5230MHz



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

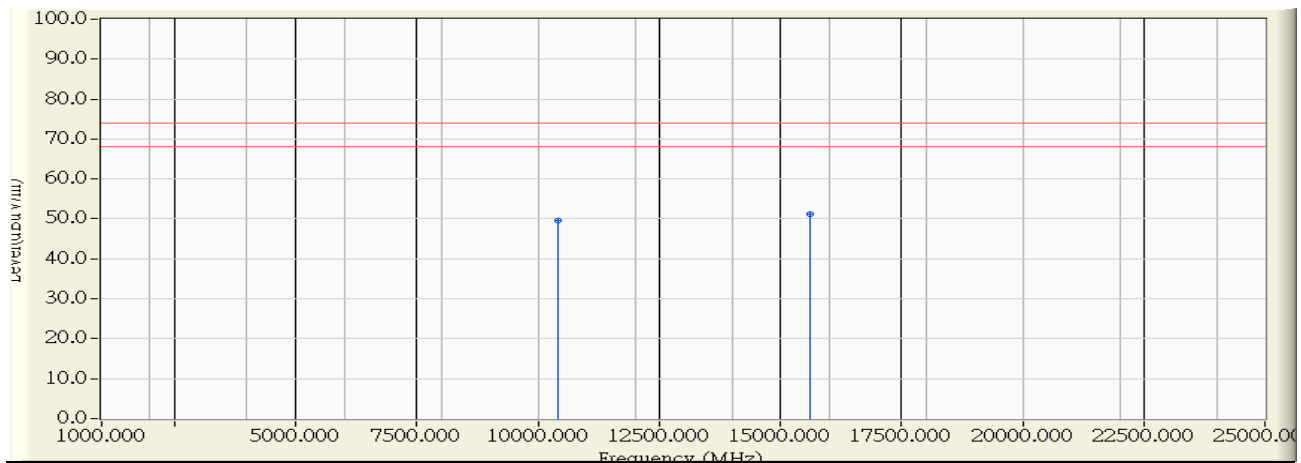


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	15690.000	10.922	28.930	39.853	-14.147	54.000	AVERAGE

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

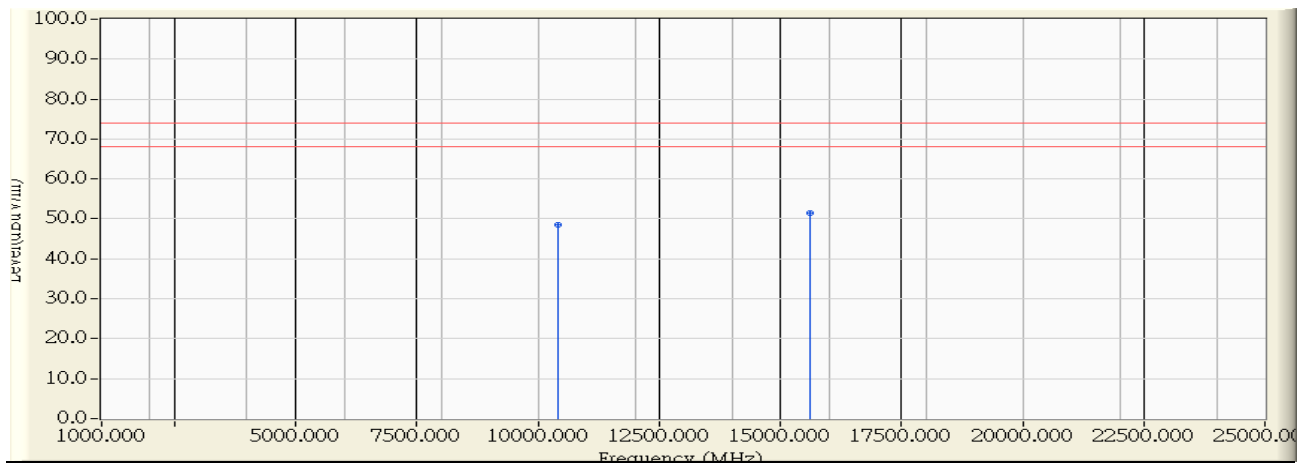


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		10420.000	10.077	39.540	49.617	-24.383	74.000	PEAK
2	*	15630.000	10.989	40.120	51.110	-22.890	74.000	PEAK

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:

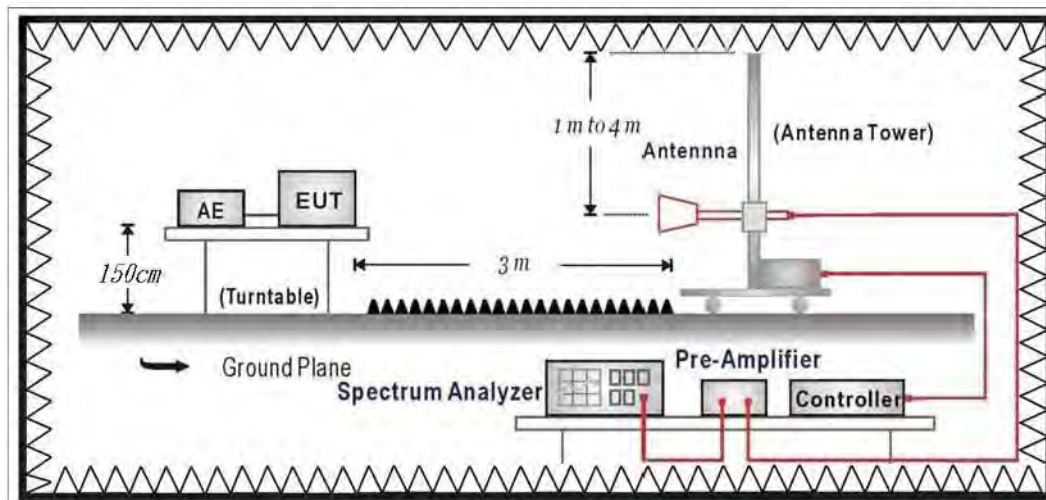
Band Edge / CB1

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.

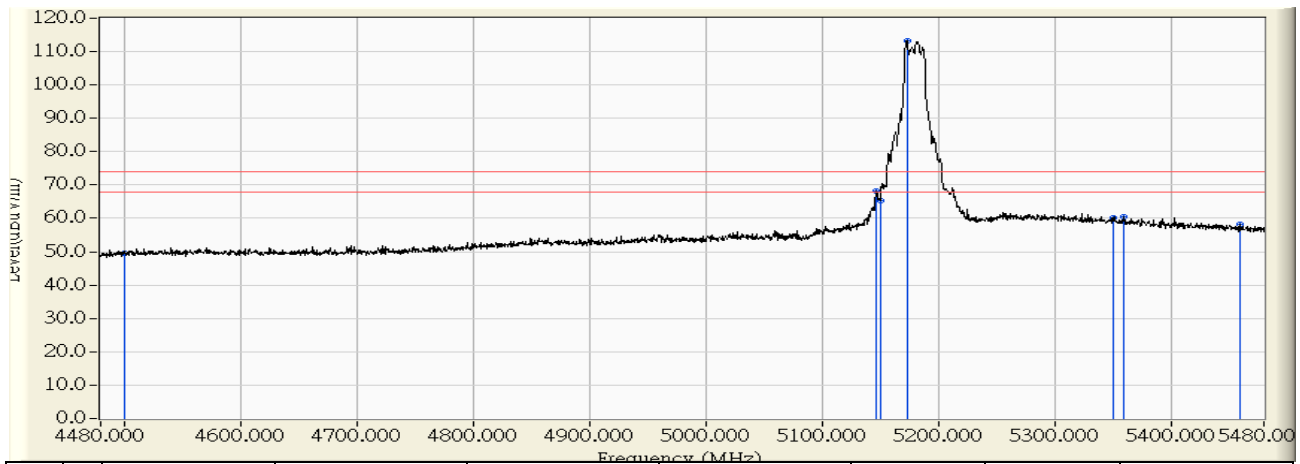
7.5. Uncertainty

The measurement uncertainty is defined as $\pm 3.65\text{dB}$

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

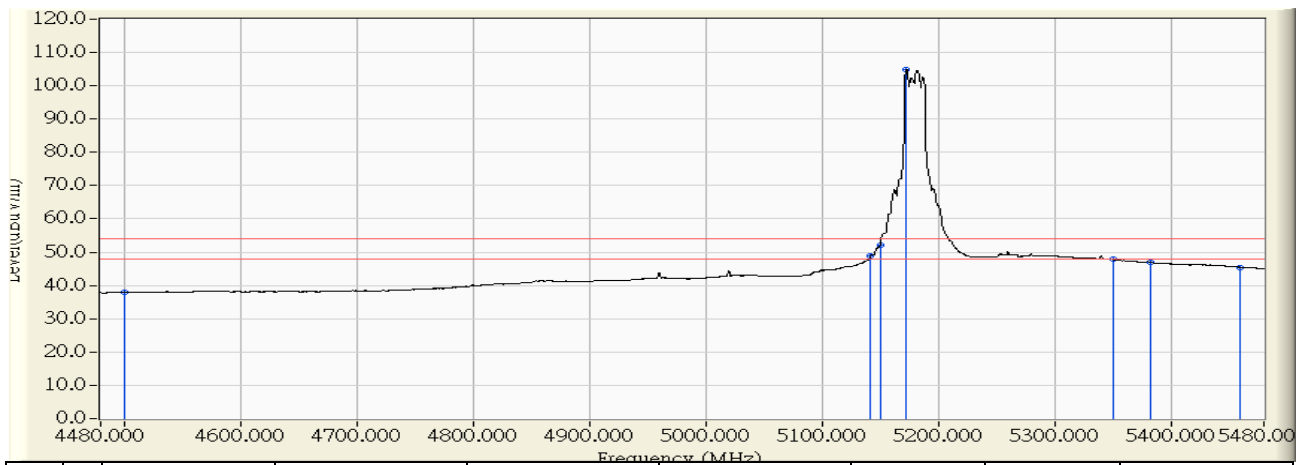


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	52.854	49.426	-24.574	74.000	PEAK
2	5146.500	-0.768	68.887	68.120	-5.880	74.000	PEAK
3	5150.000	-0.737	66.169	65.431	-8.569	74.000	PEAK
4	* 5173.000	-0.545	113.758	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

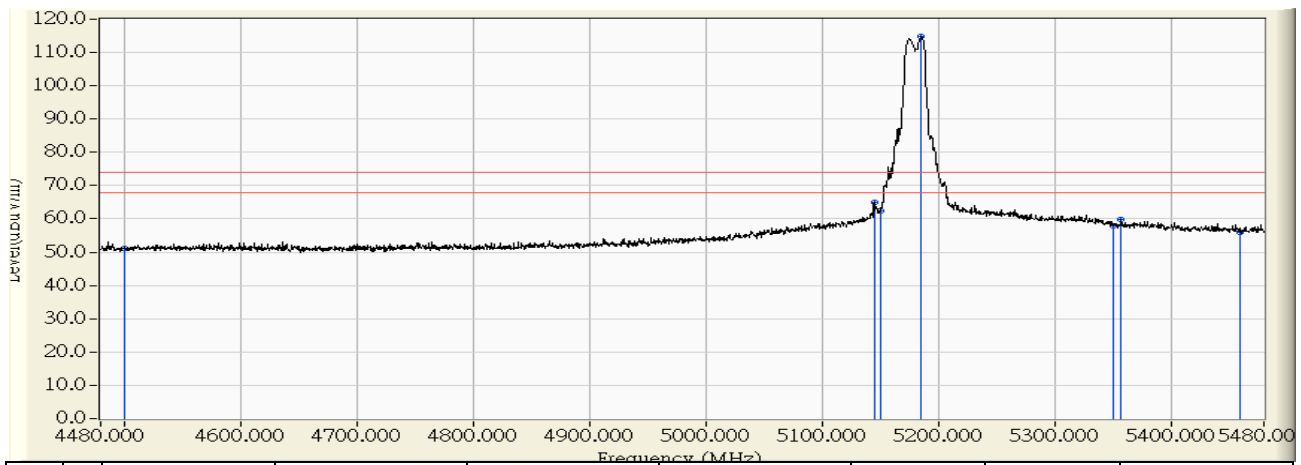


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	41.374	37.946	-16.054	54.000	AVERAGE
2	5142.000	-0.804	49.732	48.928	-5.072	54.000	AVERAGE
3	5150.000	-0.737	52.907	52.169	-1.831	54.000	AVERAGE
4	* 5172.500	-0.549	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

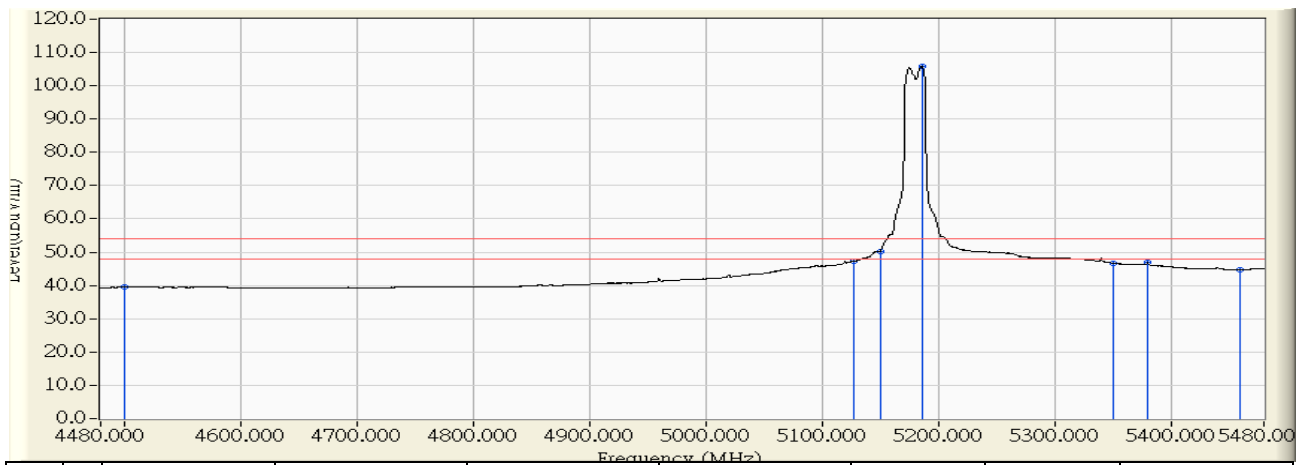


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	52.868	51.147	-22.853	74.000	PEAK
2	5145.000	-0.360	65.273	64.913	-9.087	74.000	PEAK
3	5150.000	-0.321	62.799	62.478	-11.522	74.000	PEAK
4	* 5185.500	-0.041	114.891	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

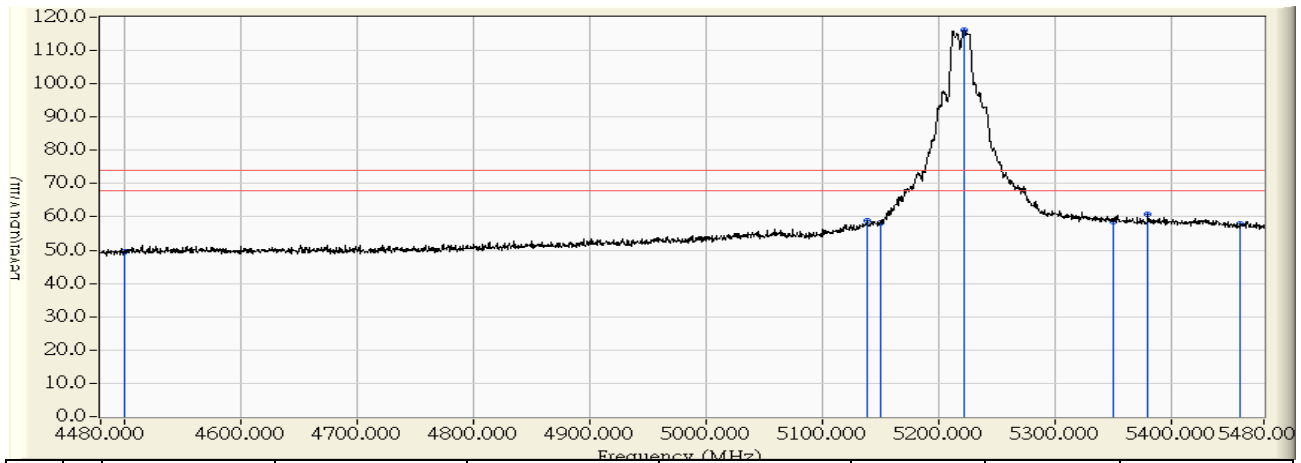


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	41.227	39.506	-14.494	54.000	AVERAGE
2		5127.500	-0.497	47.795	47.297	-6.703	54.000	AVERAGE
3		5150.000	-0.321	50.622	50.301	-3.699	54.000	AVERAGE
4	*	5186.000	-0.038	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

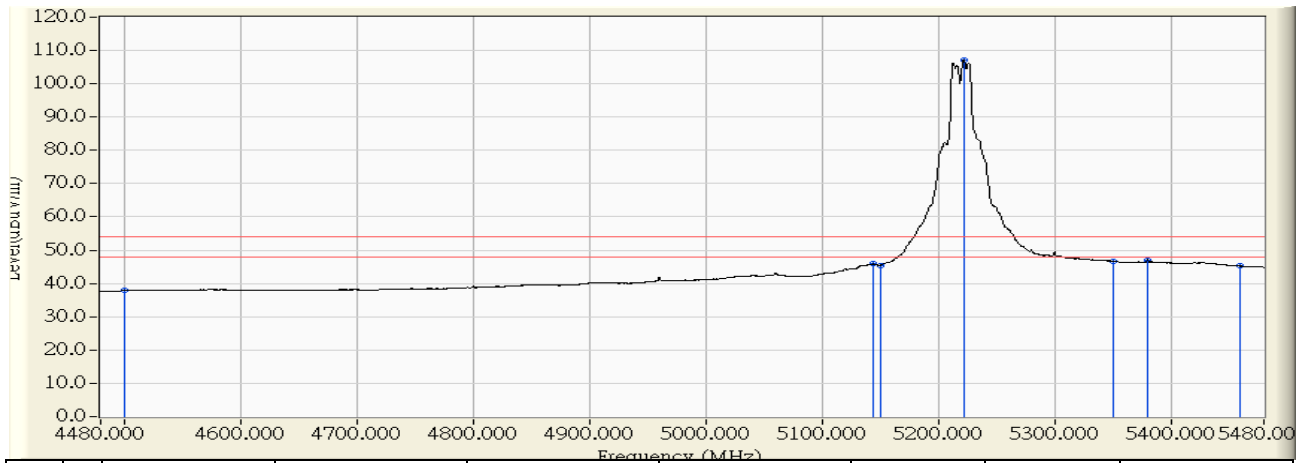


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	53.059	49.631	-24.369	74.000	PEAK
2	5139.000	-0.830	59.630	58.801	-15.199	74.000	PEAK
3	5150.000	-0.737	58.983	58.245	-15.755	74.000	PEAK
4	* 5222.000	-0.136	116.168	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

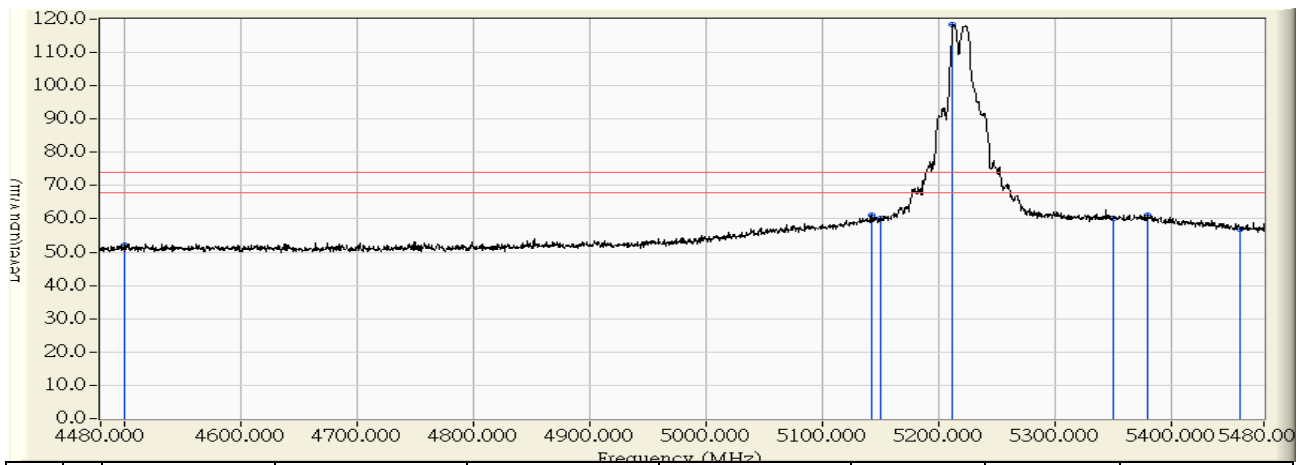


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	41.294	37.866	-16.134	54.000	AVERAGE
2	5143.500	-0.792	46.666	45.874	-8.126	54.000	AVERAGE
3	5150.000	-0.737	46.219	45.481	-8.519	54.000	AVERAGE
4	* 5222.000	-0.136	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

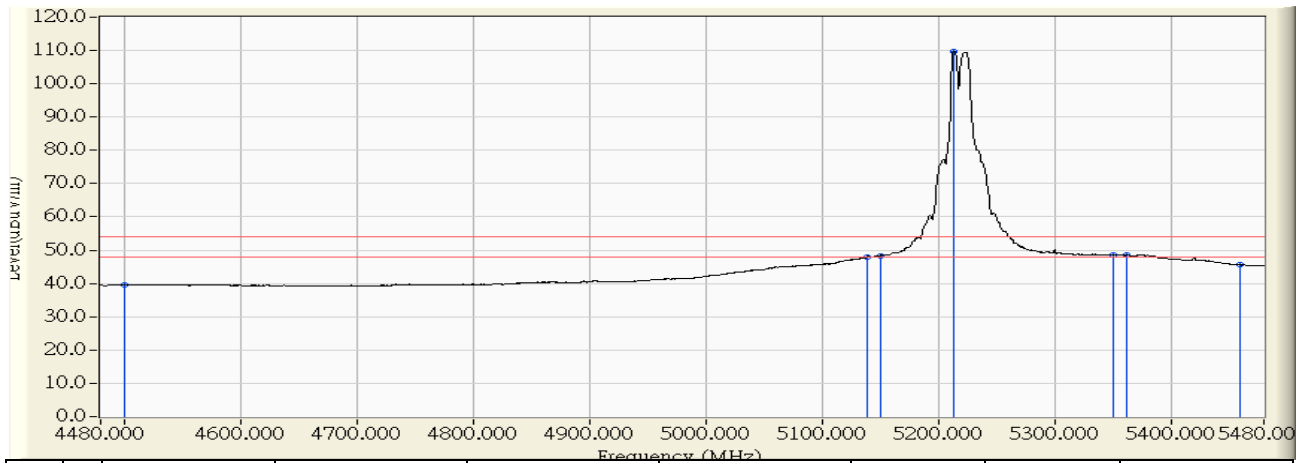


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	53.691	51.970	-22.030	74.000	PEAK
2	5142.500	-0.380	61.642	61.262	-12.738	74.000	PEAK
3	5150.000	-0.321	60.446	60.125	-13.875	74.000	PEAK
4	* 5212.500	0.170	118.207	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

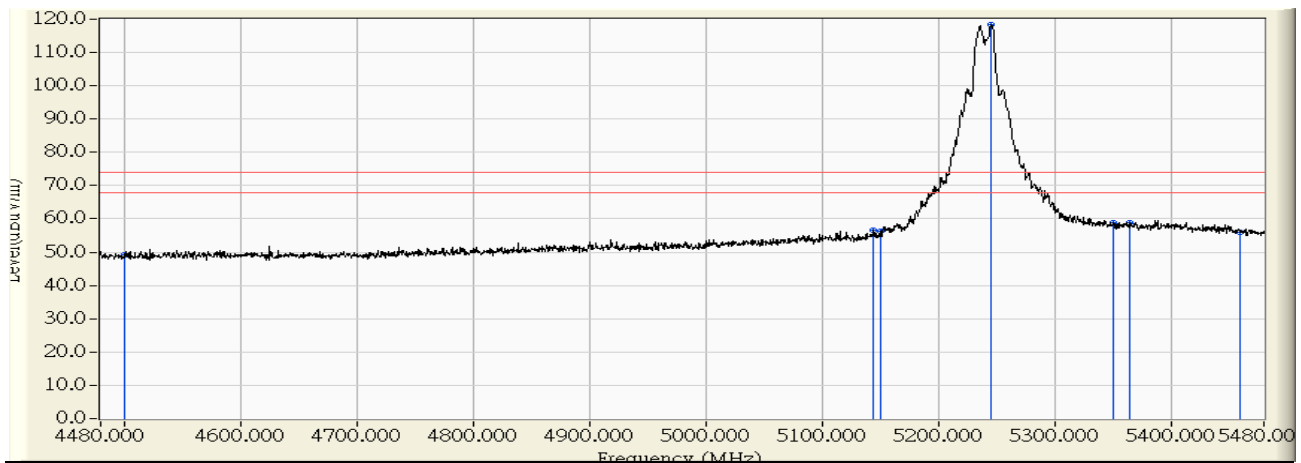


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	41.253	39.532	-14.468	54.000	AVERAGE
2	5138.500	-0.412	48.300	47.889	-6.111	54.000	AVERAGE
3	5150.000	-0.321	48.591	48.270	-5.730	54.000	AVERAGE
4	* 5213.500	0.178	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

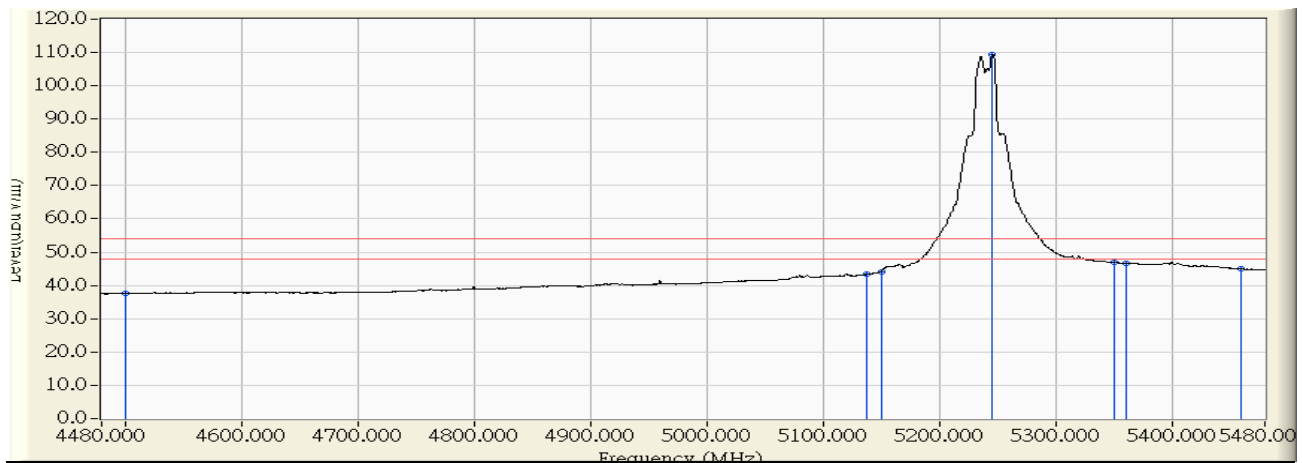


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	52.753	49.325	-24.675	74.000	PEAK
2	5144.500	-0.783	57.297	56.513	-17.487	74.000	PEAK
3	5150.000	-0.737	57.035	56.297	-17.703	74.000	PEAK
4	* 5245.500	0.061	118.289	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

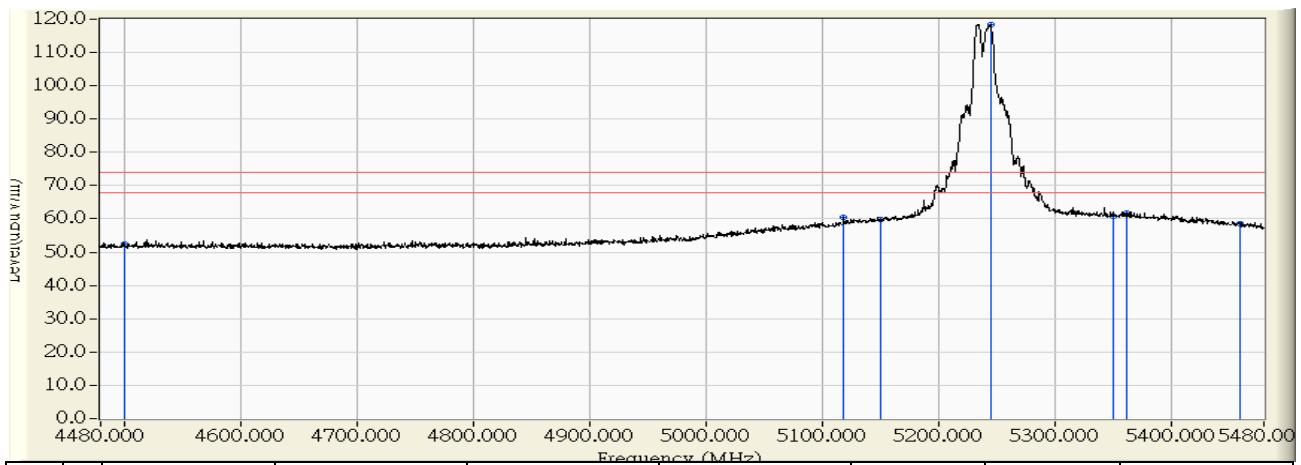


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	41.153	37.725	-16.275	54.000	AVERAGE
2	5137.500	-0.842	44.156	43.314	-10.686	54.000	AVERAGE
3	5150.000	-0.737	44.844	44.106	-9.894	54.000	AVERAGE
4	* 5246.000	0.064	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

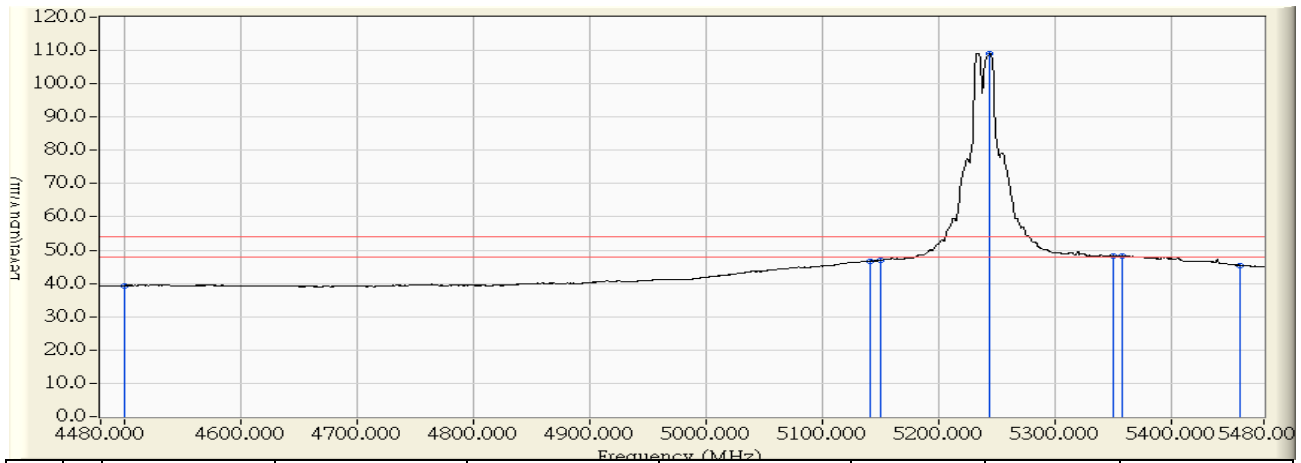


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	54.087	52.366	-21.634	74.000	PEAK
2	5119.000	-0.565	60.951	60.386	-13.614	74.000	PEAK
3	5150.000	-0.321	60.066	59.745	-14.255	74.000	PEAK
4	* 5245.500	0.430	117.911	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

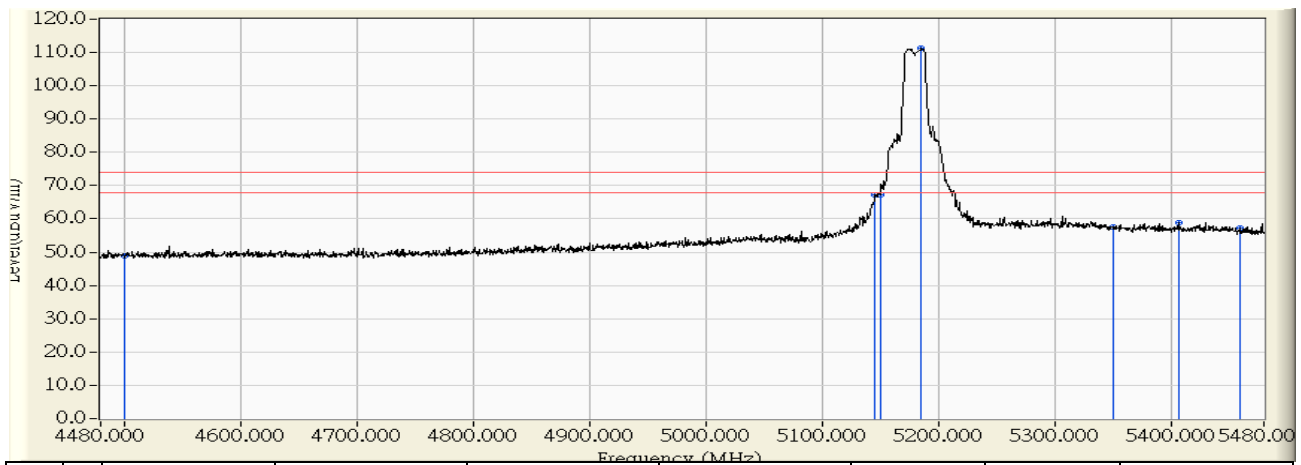


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.721	41.104	39.383	-14.617	54.000	AVERAGE
2		5142.000	-0.384	47.174	46.790	-7.210	54.000	AVERAGE
3		5150.000	-0.321	47.264	46.943	-7.057	54.000	AVERAGE
4	*	5244.500	0.422	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

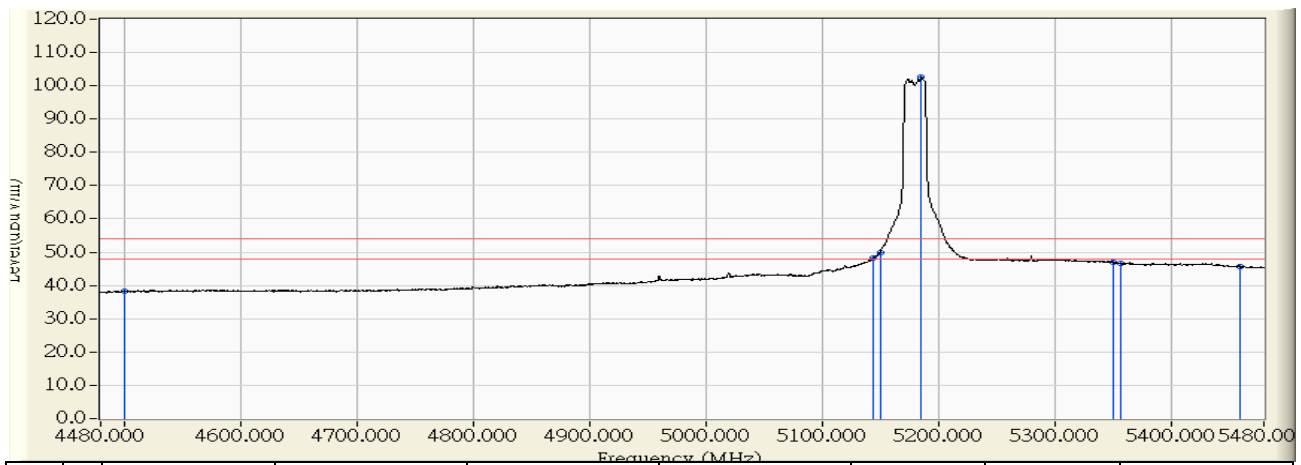


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	52.479	49.051	-24.949	74.000	PEAK
2	5146.000	-0.772	68.102	67.331	-6.669	74.000	PEAK
3	5150.000	-0.737	68.024	67.286	-6.714	74.000	PEAK
4	* 5185.500	-0.440	111.648	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

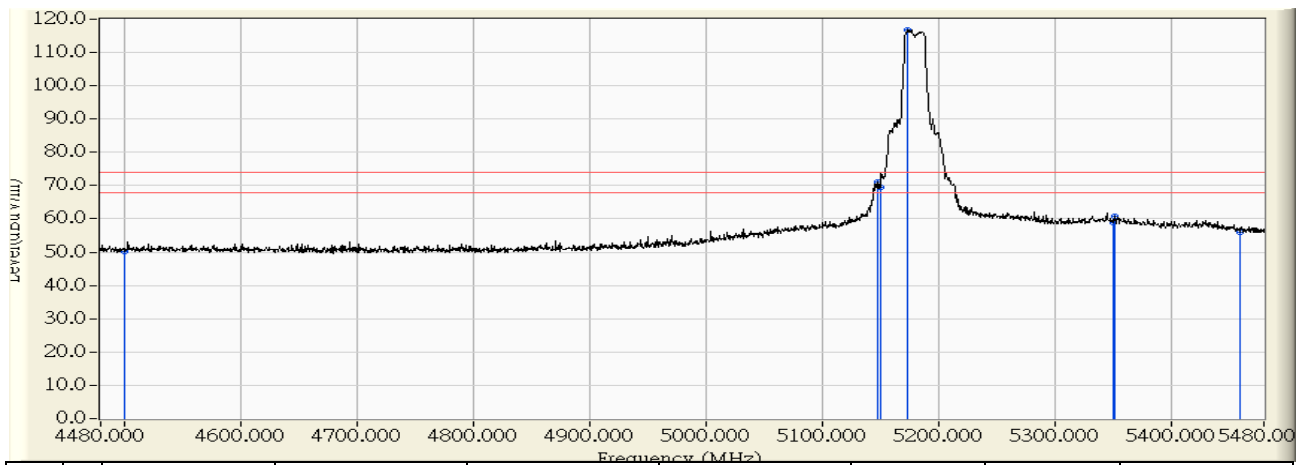


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	41.842	38.414	-15.586	54.000	AVERAGE
2	5144.500	-0.783	49.107	48.323	-5.677	54.000	AVERAGE
3	5150.000	-0.737	50.730	49.992	-4.008	54.000	AVERAGE
4	* 5185.500	-0.440	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

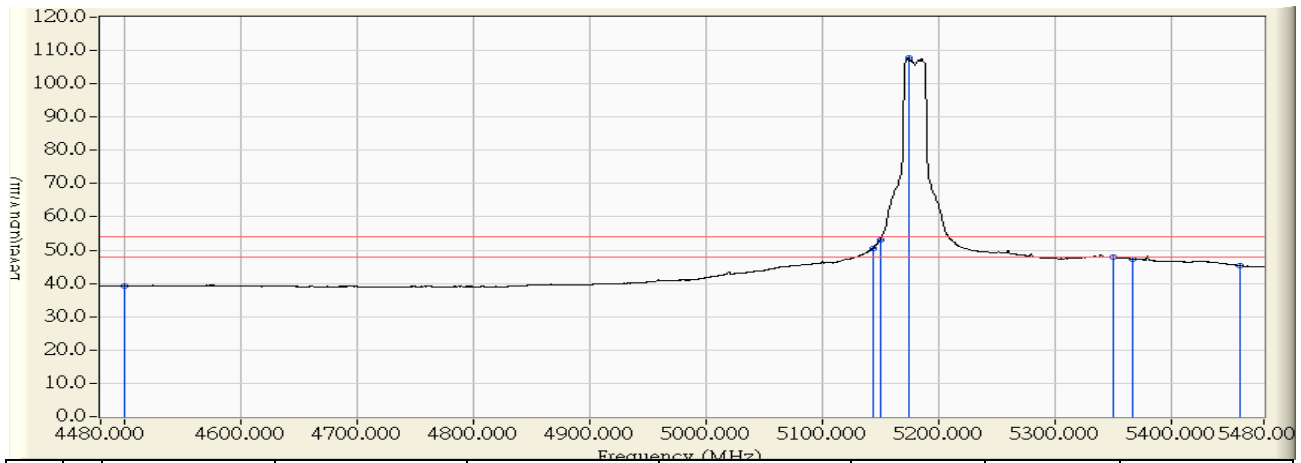


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	51.812	50.091	-23.909	74.000	PEAK
2	5148.500	-0.333	71.593	71.260	-2.740	74.000	PEAK
3	5150.000	-0.321	69.883	69.562	-4.438	74.000	PEAK
4	* 5174.000	-0.132	116.786	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

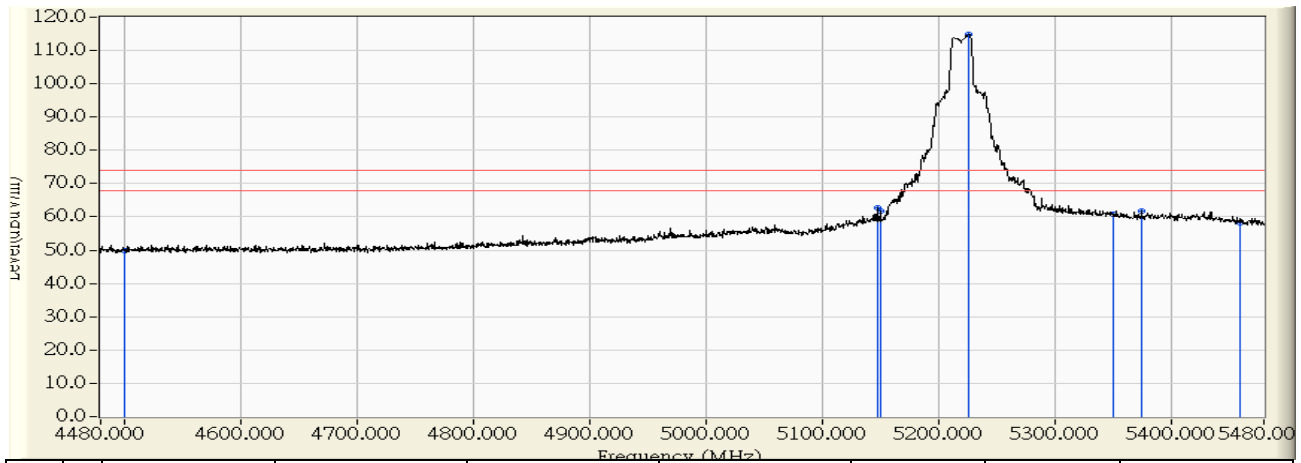


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	41.038	39.317	-14.683	54.000	AVERAGE
2	5143.500	-0.372	50.855	50.483	-3.517	54.000	AVERAGE
3	5150.000	-0.321	53.380	53.059	-0.941	54.000	AVERAGE
4	* 5174.500	-0.128	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

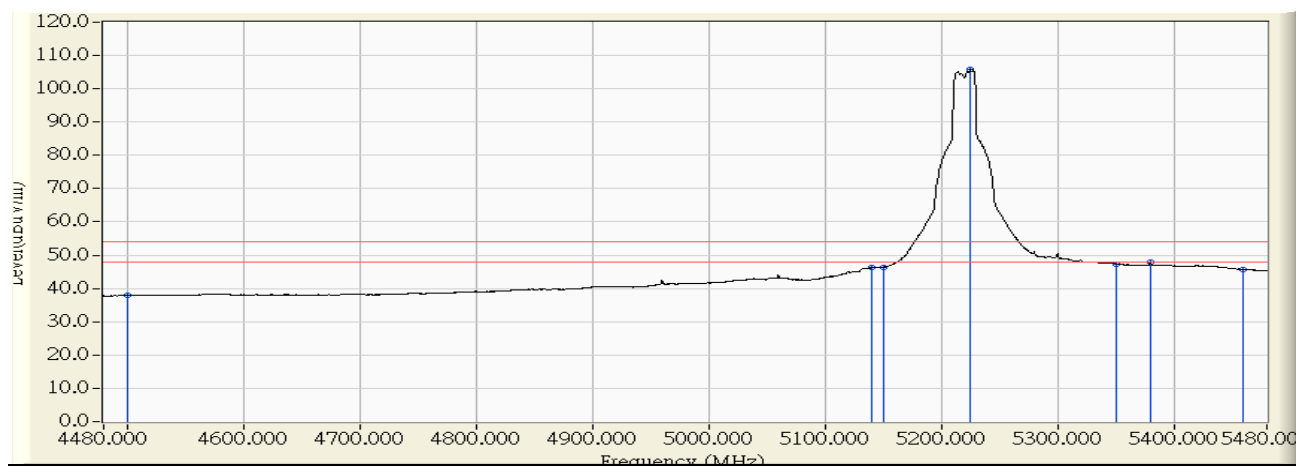


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	53.411	49.983	-24.017	74.000	PEAK
2	5148.000	-0.754	63.647	62.893	-11.107	74.000	PEAK
3	5150.000	-0.737	62.351	61.613	-12.387	74.000	PEAK
4	* 5226.500	-0.099	115.088	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

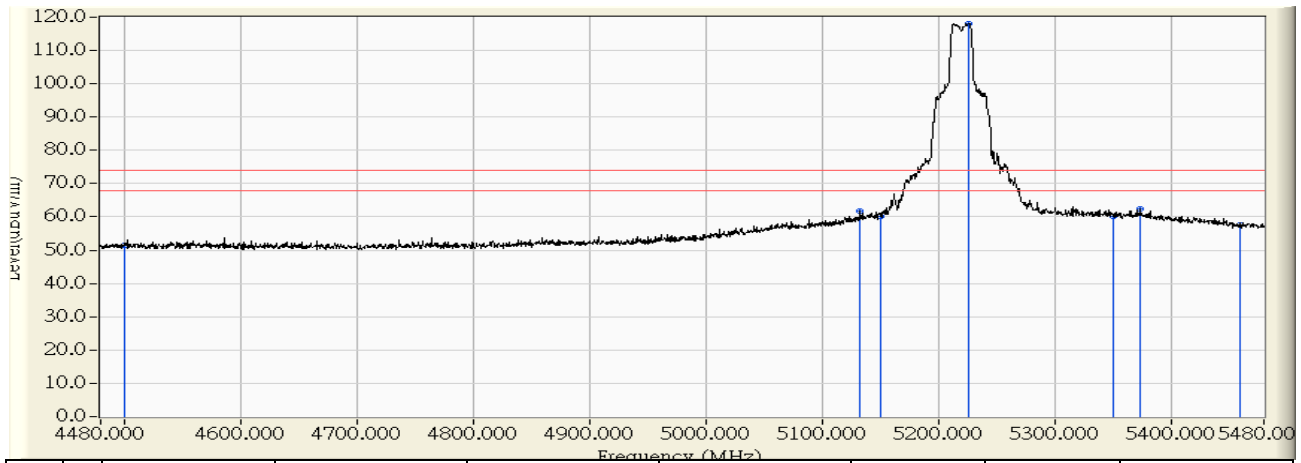


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	41.358	37.930	-16.070	54.000	AVERAGE
2	5140.000	-0.821	47.091	46.270	-7.730	54.000	AVERAGE
3	5150.000	-0.737	46.970	46.232	-7.768	54.000	AVERAGE
4	* 5225.500	-0.106	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

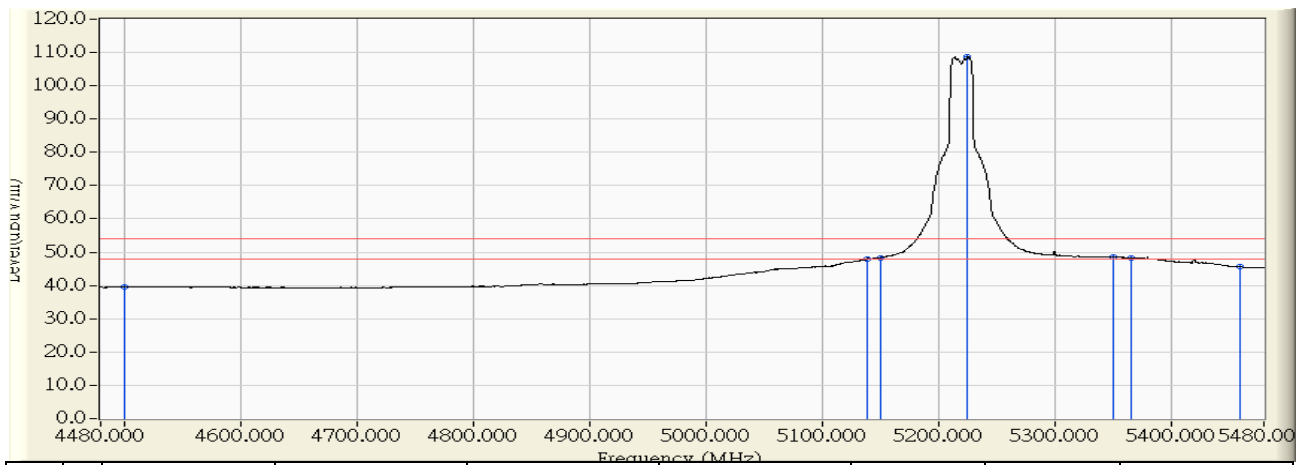


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	53.062	51.341	-22.659	74.000	PEAK
2	5133.000	-0.455	62.165	61.710	-12.290	74.000	PEAK
3	5150.000	-0.321	60.498	60.177	-13.823	74.000	PEAK
4	* 5226.000	0.276	117.751	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

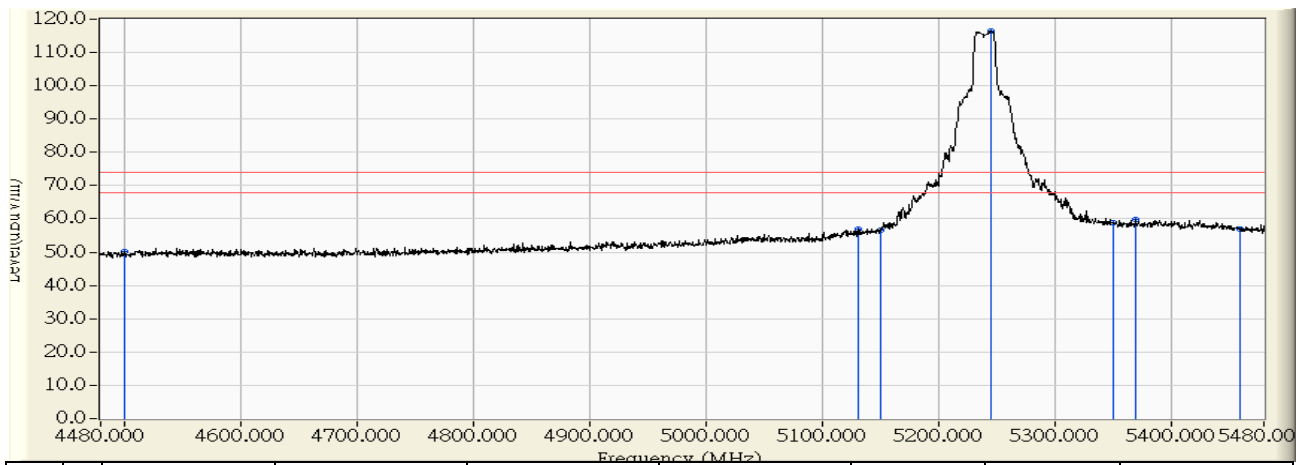


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	41.270	39.549	-14.451	54.000	AVERAGE
2	5138.500	-0.412	48.254	47.843	-6.157	54.000	AVERAGE
3	5150.000	-0.321	48.565	48.244	-5.756	54.000	AVERAGE
4	* 5225.500	0.273	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

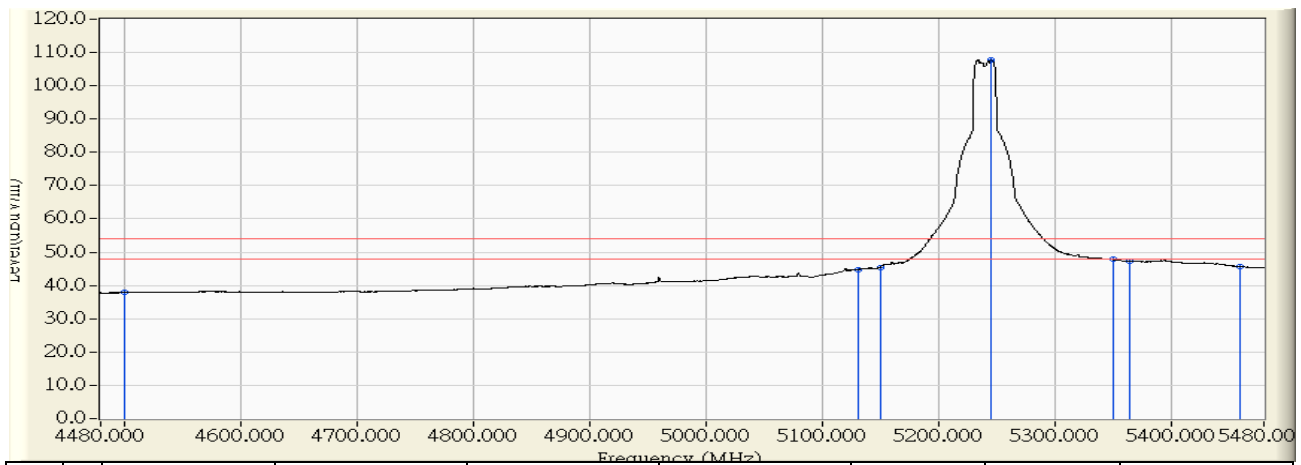


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	53.502	50.074	-23.926	74.000	PEAK
2	5131.000	-0.897	57.824	56.928	-17.072	74.000	PEAK
3	5150.000	-0.737	57.231	56.493	-17.507	74.000	PEAK
4	* 5246.000	0.064	116.434	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

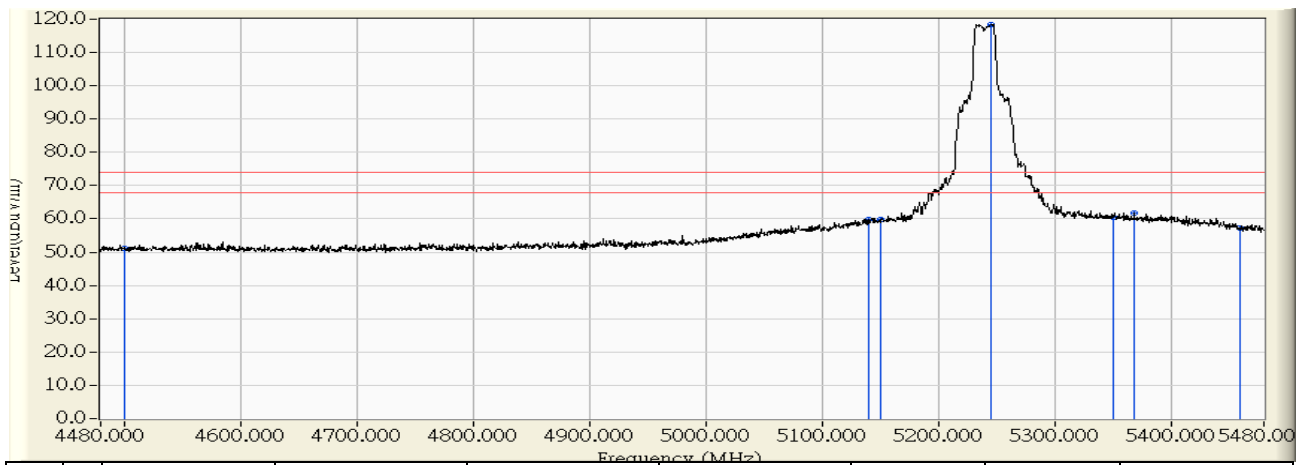


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	41.304	37.876	-16.124	54.000	AVERAGE
2	5131.000	-0.897	45.673	44.777	-9.223	54.000	AVERAGE
3	5150.000	-0.737	46.077	45.339	-8.661	54.000	AVERAGE
4	* 5245.500	0.061	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

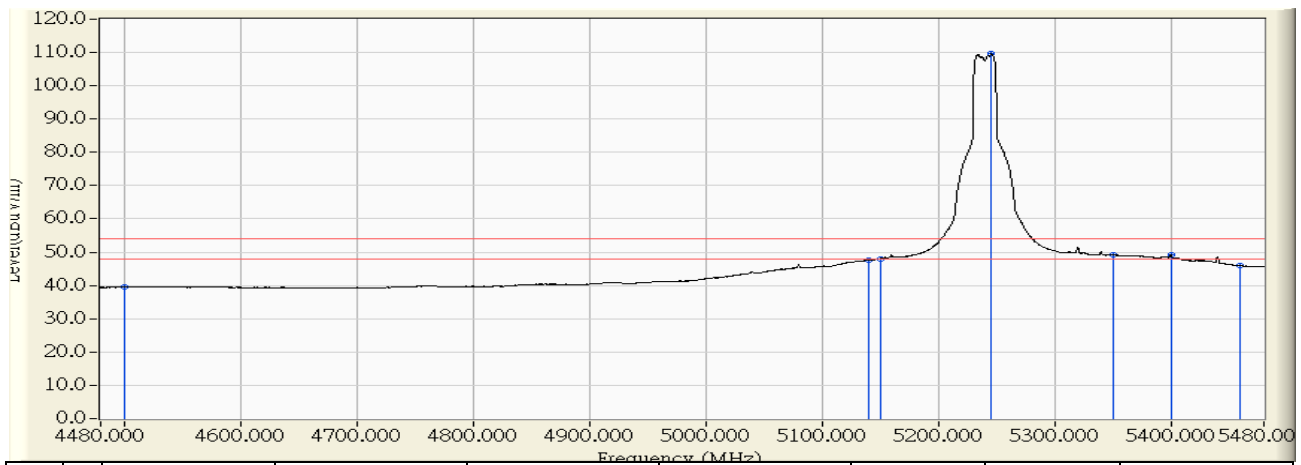


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	52.913	51.192	-22.808	74.000	PEAK
2	5140.000	-0.400	60.322	59.922	-14.078	74.000	PEAK
3	5150.000	-0.321	60.222	59.901	-14.099	74.000	PEAK
4	* 5246.000	0.433	118.063	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

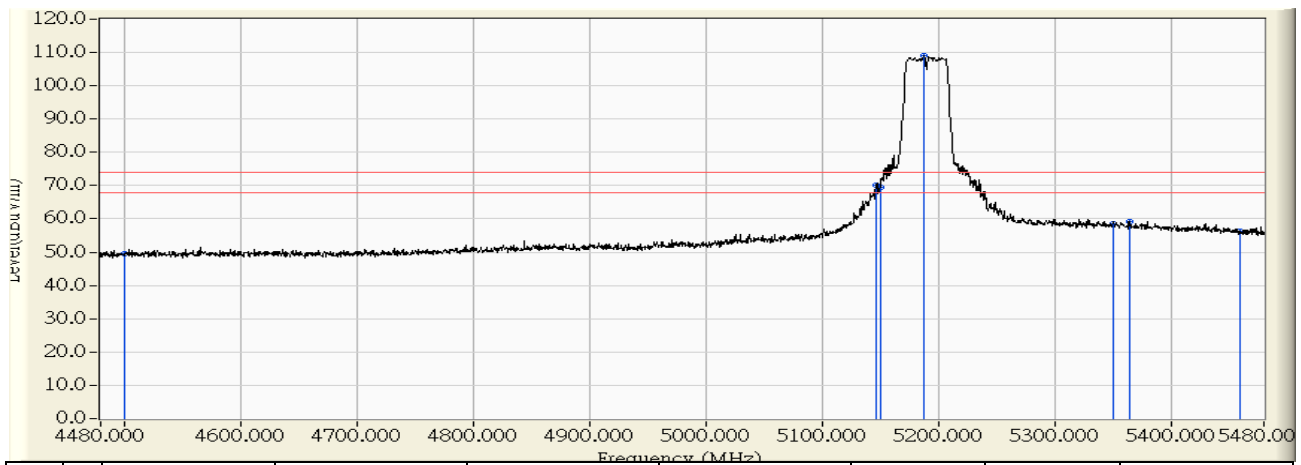


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	41.292	39.571	-14.429	54.000	AVERAGE
2	5140.500	-0.395	48.160	47.764	-6.236	54.000	AVERAGE
3	5150.000	-0.321	48.372	48.051	-5.949	54.000	AVERAGE
4	* 5245.500	0.430	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

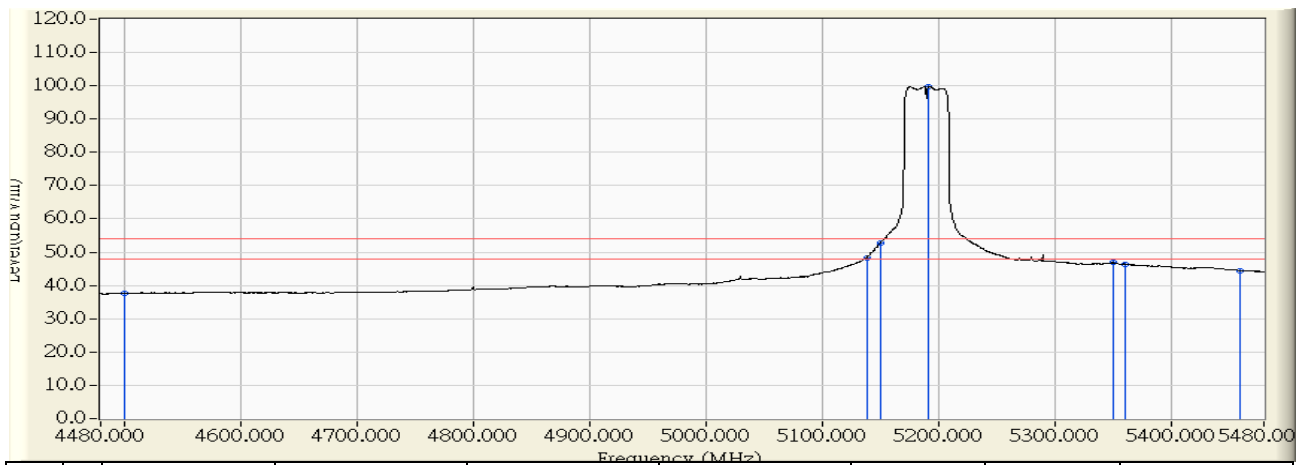


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	52.823	49.395	-24.605	74.000	PEAK
2	5147.000	-0.762	70.868	70.105	-3.895	74.000	PEAK
3	5150.000	-0.737	70.331	69.593	-4.407	74.000	PEAK
4	* 5187.500	-0.424	109.633	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

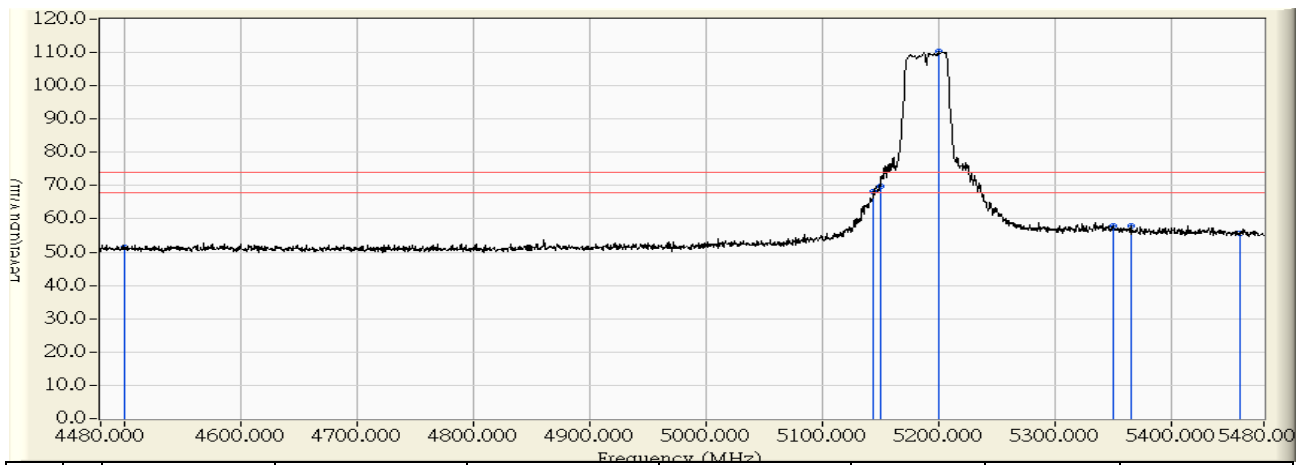


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	41.125	37.697	-16.303	54.000	AVERAGE
2	5138.500	-0.834	49.241	48.407	-5.593	54.000	AVERAGE
3	5150.000	-0.737	53.526	52.788	-1.212	54.000	AVERAGE
4	* 5192.000	-0.386	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

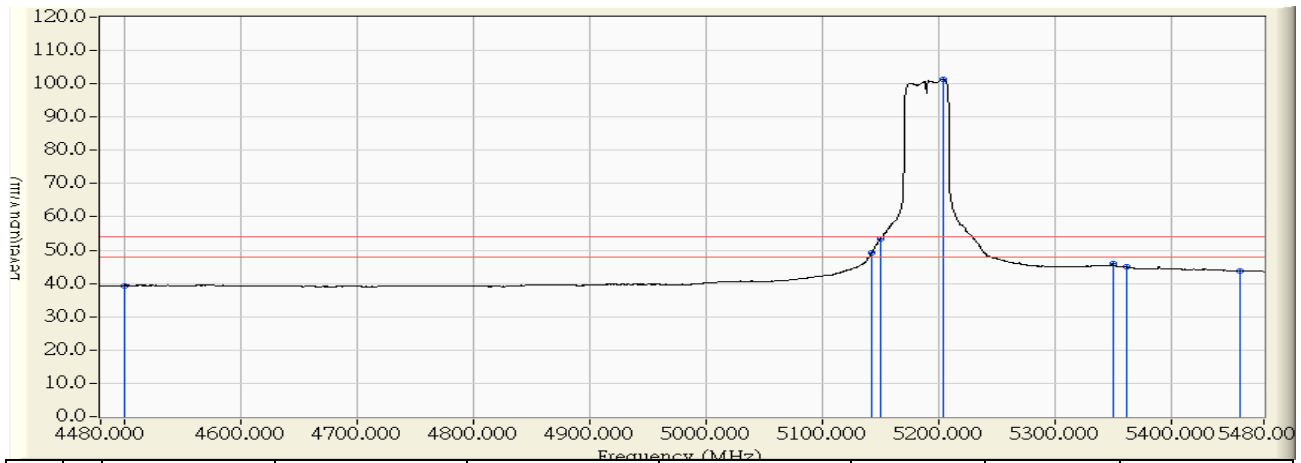


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	53.351	51.630	-22.370	74.000	PEAK
2	5144.000	-0.368	68.600	68.232	-5.768	74.000	PEAK
3	5150.000	-0.321	70.287	69.966	-4.034	74.000	PEAK
4	* 5200.000	0.072	110.216	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

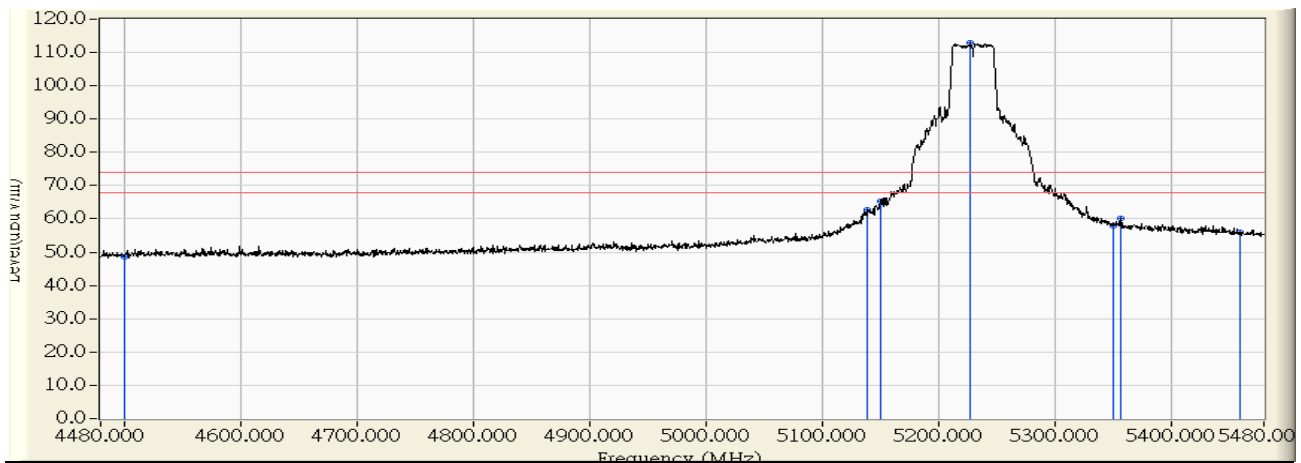


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	41.092	39.371	-14.629	54.000	AVERAGE
2	5142.500	-0.380	49.582	49.202	-4.798	54.000	AVERAGE
3	5150.000	-0.321	53.636	53.315	-0.685	54.000	AVERAGE
4	* 5204.500	0.108	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

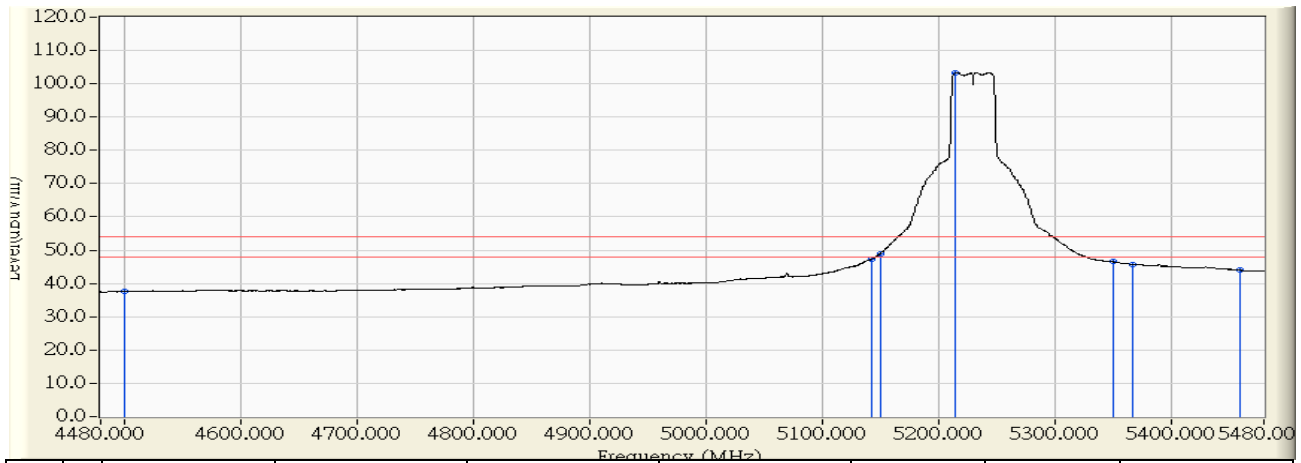


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	51.949	48.521	-25.479	74.000	PEAK
2	5139.500	-0.825	63.429	62.604	-11.396	74.000	PEAK
3	5150.000	-0.737	65.911	65.173	-8.827	74.000	PEAK
4	* 5228.000	-0.086	112.983	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

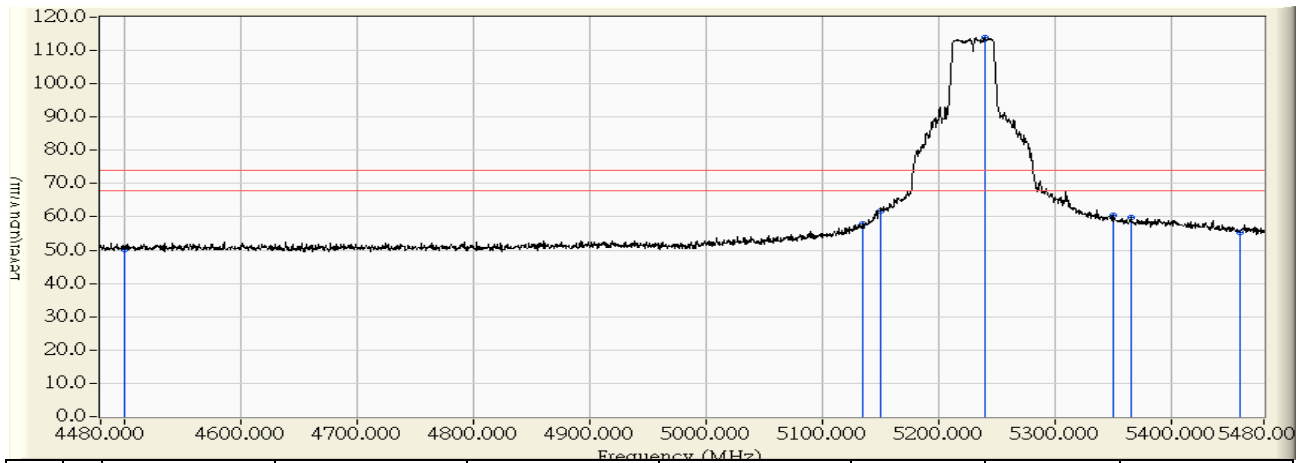


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	41.049	37.621	-16.379	54.000	AVERAGE
2	5142.500	-0.800	48.202	47.402	-6.598	54.000	AVERAGE
3	5150.000	-0.737	49.709	48.971	-5.029	54.000	AVERAGE
4	* 5215.000	-0.194	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

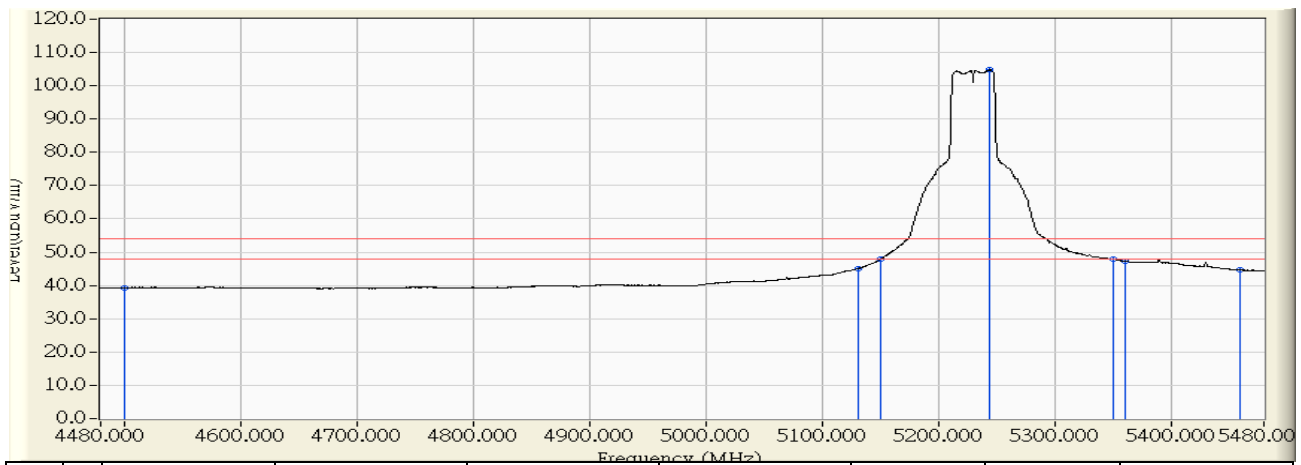


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	51.782	50.061	-23.939	74.000	PEAK
2	5134.500	-0.442	58.323	57.880	-16.120	74.000	PEAK
3	5150.000	-0.321	62.056	61.735	-12.265	74.000	PEAK
4	* 5240.000	0.386	113.380	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

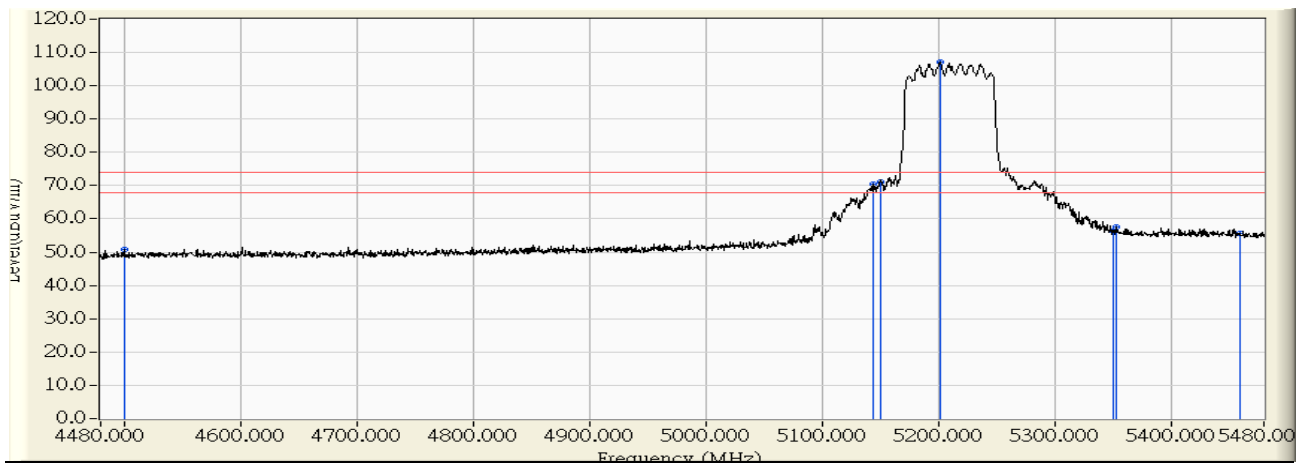


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	41.084	39.363	-14.637	54.000	AVERAGE
2	5131.000	-0.471	45.519	45.049	-8.951	54.000	AVERAGE
3	5150.000	-0.321	48.307	47.986	-6.014	54.000	AVERAGE
4	* 5244.500	0.422	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

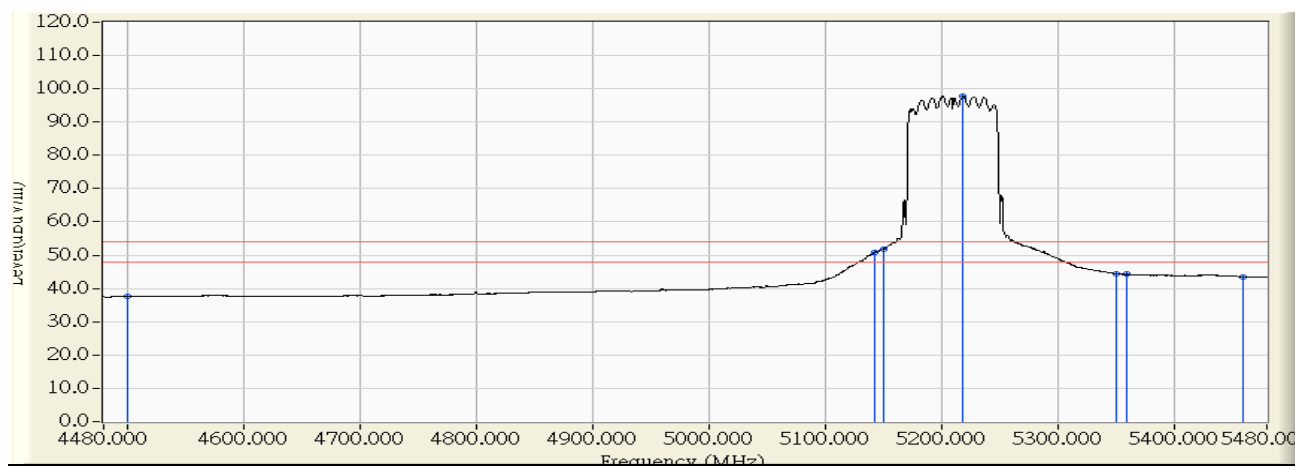


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	54.141	50.713	-23.287	74.000	PEAK
2	5144.500	-0.783	71.181	70.397	-3.603	74.000	PEAK
3	5150.000	-0.737	71.750	71.012	-2.988	74.000	PEAK
4	* 5201.500	-0.308	107.481	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

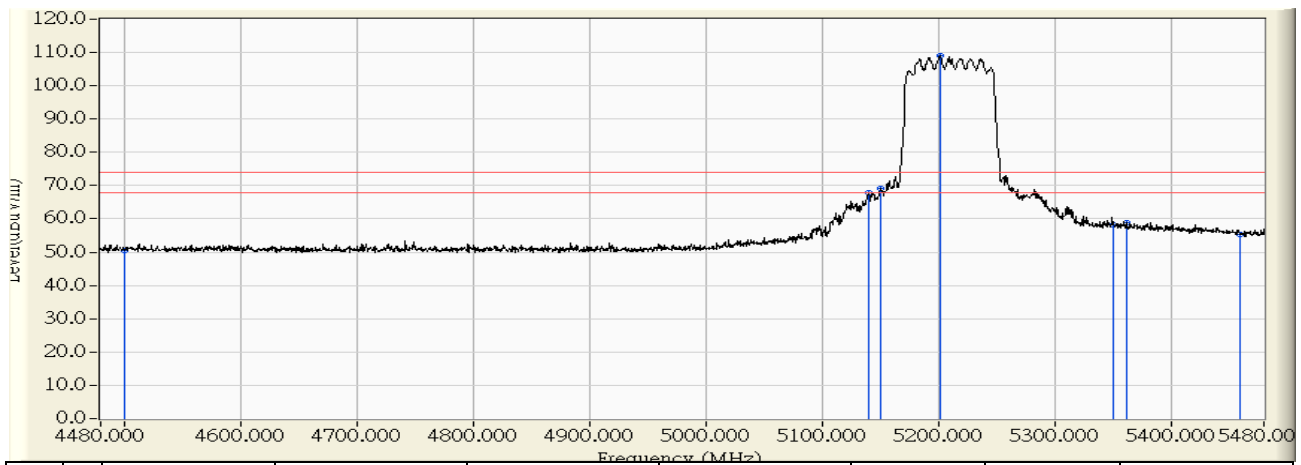


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.428	41.061	37.633	-16.367	54.000	AVERAGE
2	5143.000	-0.796	51.561	50.765	-3.235	54.000	AVERAGE
3	5150.000	-0.737	52.635	51.897	-2.103	54.000	AVERAGE
4	* 5219.000	-0.161	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

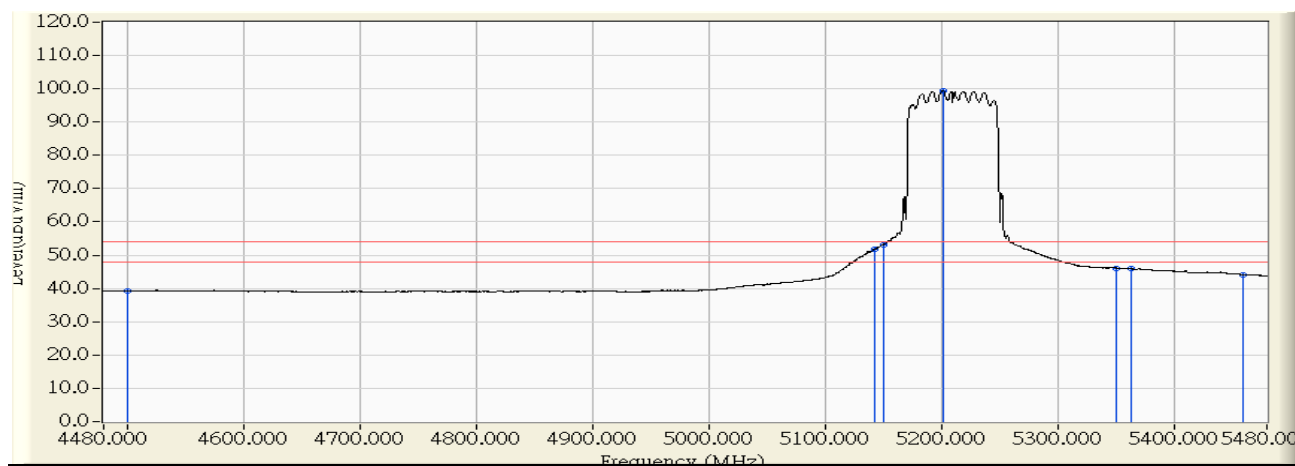


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	52.256	50.535	-23.465	74.000	PEAK
2	5140.000	-0.400	68.194	67.794	-6.206	74.000	PEAK
3	5150.000	-0.321	69.491	69.170	-4.830	74.000	PEAK
4	* 5201.500	0.083	108.939	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

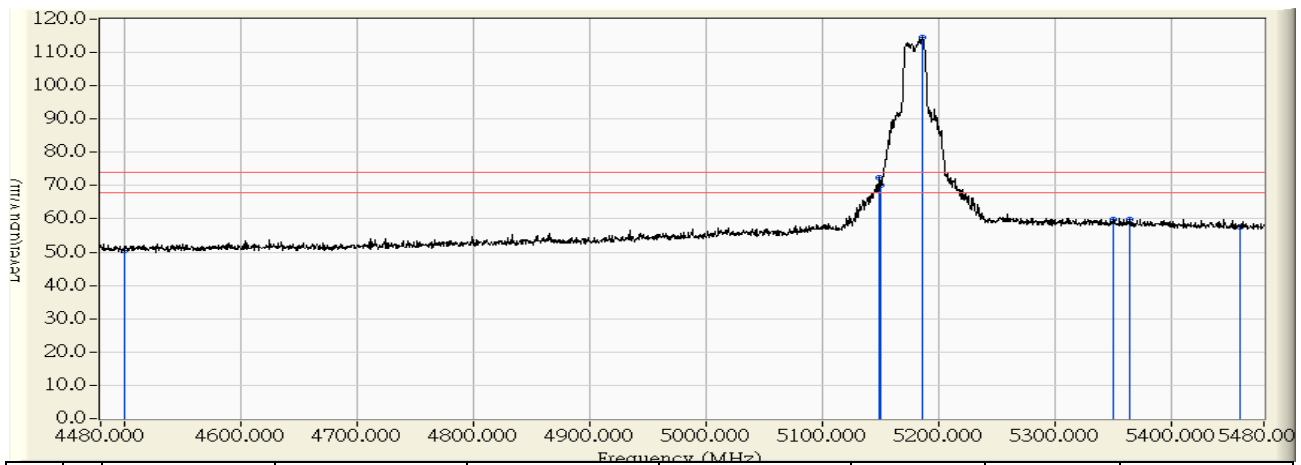


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.721	41.083	39.362	-14.638	54.000	AVERAGE
2	5142.500	-0.380	52.145	51.765	-2.235	54.000	AVERAGE
3	5150.000	-0.321	53.427	53.106	-0.894	54.000	AVERAGE
4	* 5201.500	0.083	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

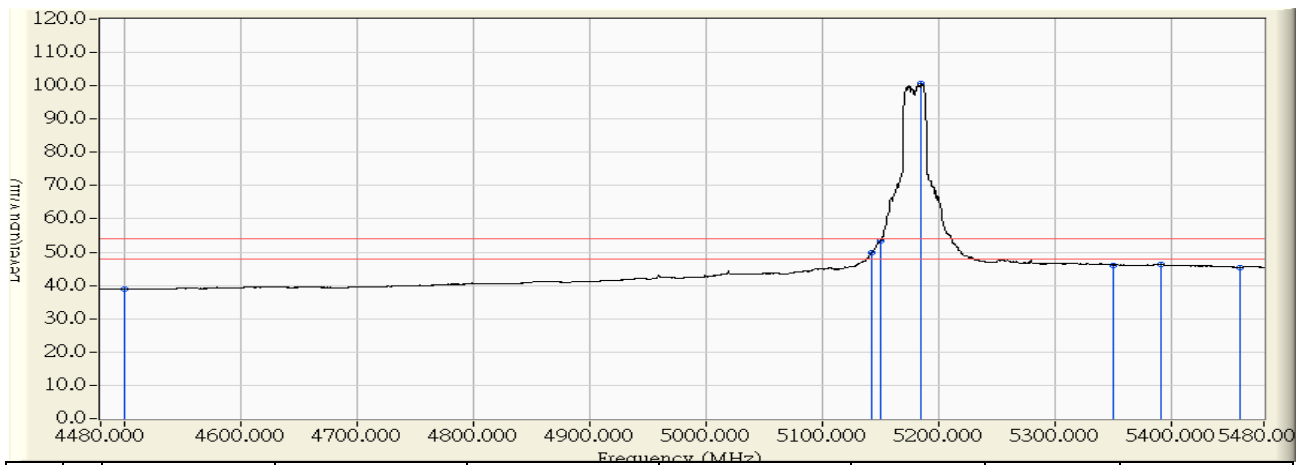


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	53.885	50.360	-23.640	74.000	PEAK
2	5148.666	-0.772	73.267	72.495	-1.505	74.000	PEAK
3	5150.000	-0.760	70.941	70.181	-3.819	74.000	PEAK
4	* 5186.147	-0.441	114.937	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

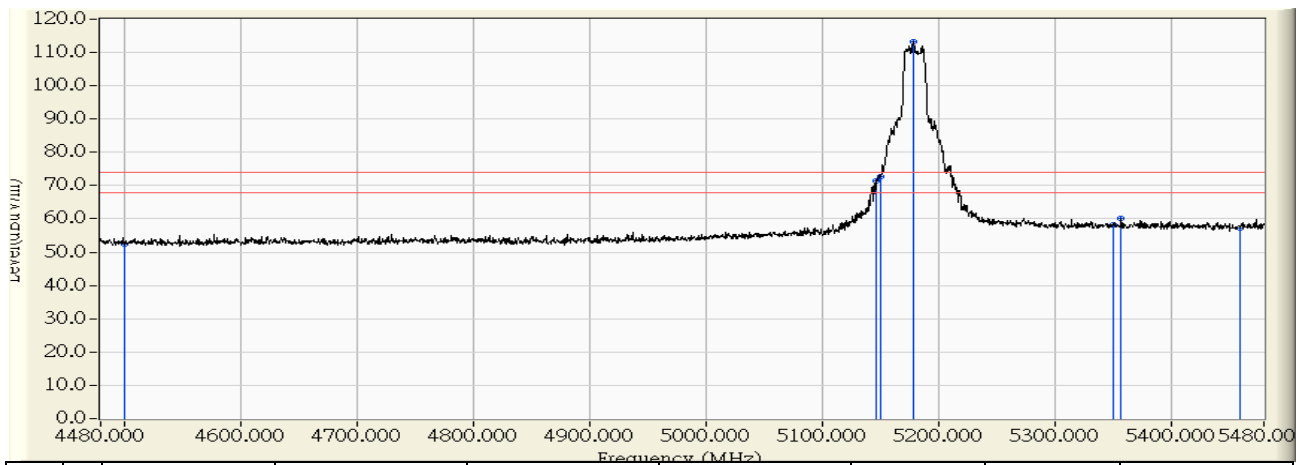


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	42.432	38.907	-15.093	54.000	AVERAGE
2	5142.669	-0.826	50.786	49.961	-4.039	54.000	AVERAGE
3	5150.000	-0.760	54.027	53.267	-0.733	54.000	AVERAGE
4	* 5185.647	-0.445	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

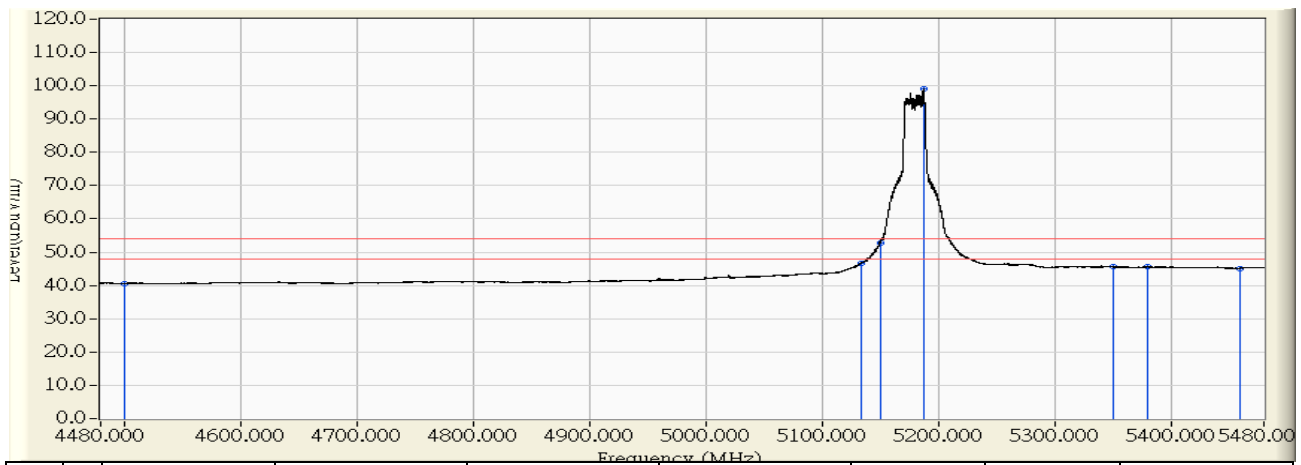


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.818	54.200	52.383	-21.617	74.000	PEAK
2	5147.166	-0.368	71.651	71.283	-2.717	74.000	PEAK
3	5150.000	-0.344	72.999	72.655	-1.345	74.000	PEAK
4	* 5179.150	-0.100	113.274	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

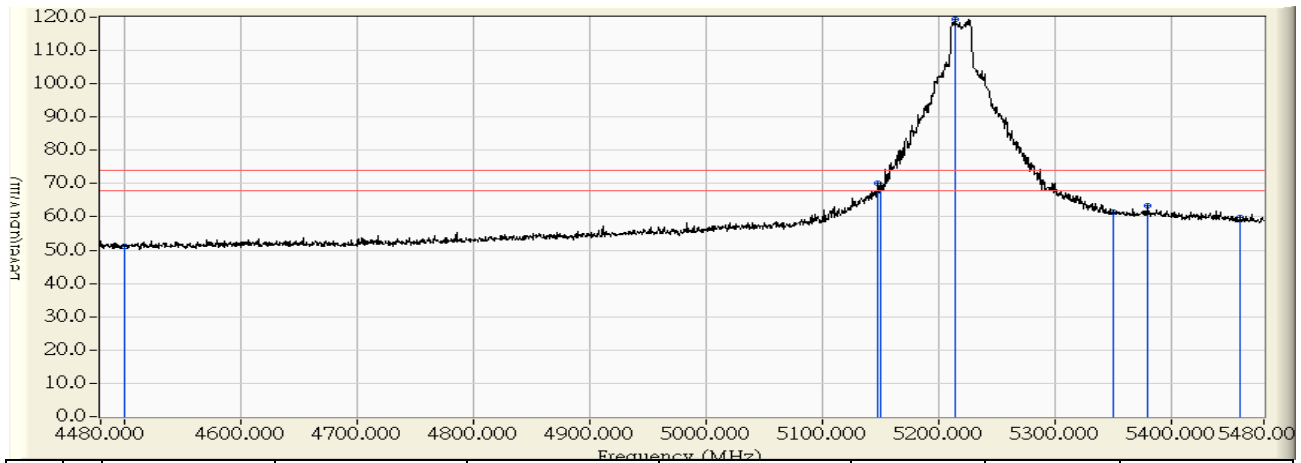


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.818	42.409	40.592	-13.408	54.000	AVERAGE
2	5133.535	-0.482	47.263	46.781	-7.219	54.000	AVERAGE
3	5150.000	-0.344	53.227	52.883	-1.117	54.000	AVERAGE
4	* 5187.129	-0.033	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

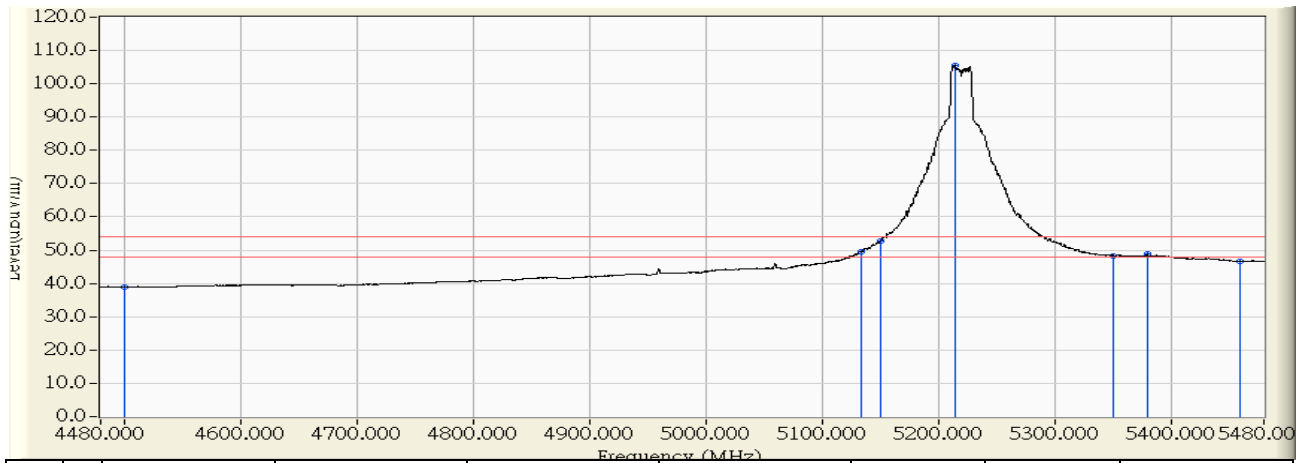


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	54.791	51.266	-22.734	74.000	PEAK
2	5148.166	-0.777	71.032	70.255	-3.745	74.000	PEAK
3	5150.000	-0.760	70.358	69.598	-4.402	74.000	PEAK
4	* 5214.133	-0.191	119.578	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

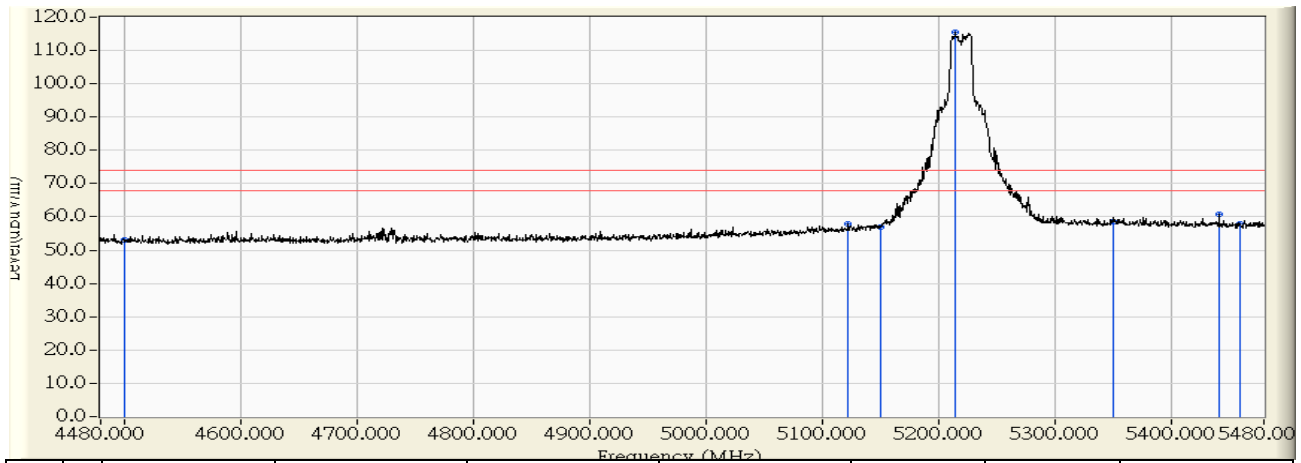


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	42.465	38.940	-15.060	54.000	AVERAGE
2	5133.673	-0.905	50.408	49.503	-4.497	54.000	AVERAGE
3	5150.000	-0.760	53.455	52.695	-1.305	54.000	AVERAGE
4	* 5214.633	-0.187	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

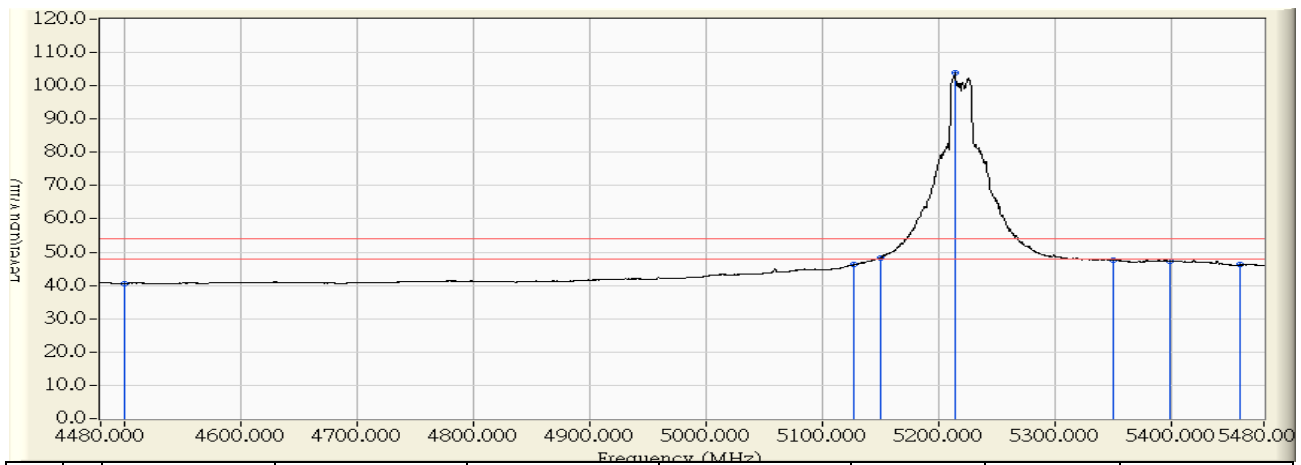


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.818	55.003	53.186	-20.814	74.000	PEAK
2	5122.679	-0.573	58.322	57.750	-16.250	74.000	PEAK
3	5150.000	-0.344	57.137	56.793	-17.207	74.000	PEAK
4	* 5214.633	0.197	115.422	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

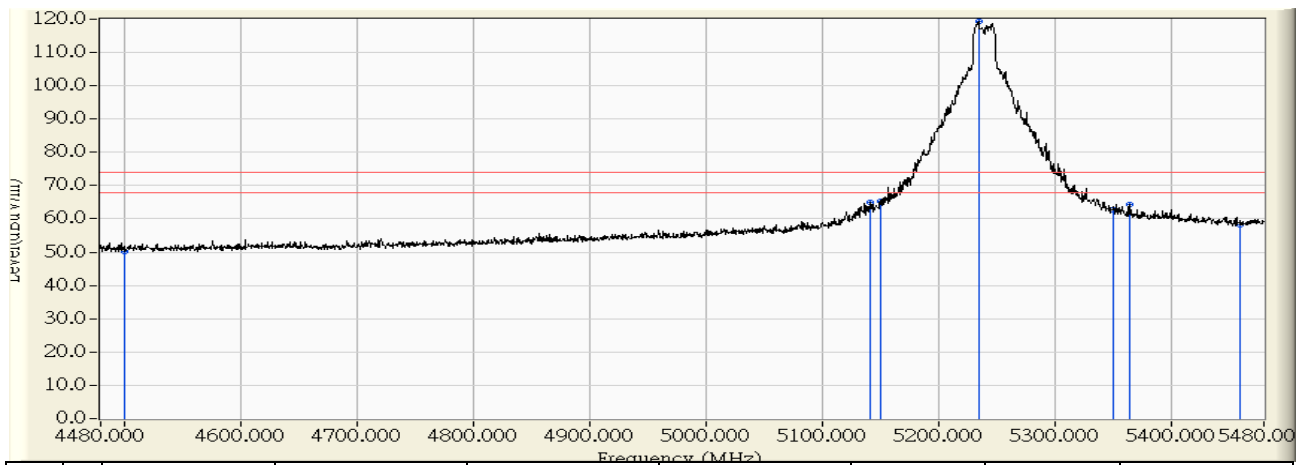


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.818	42.409	40.592	-13.408	54.000	AVERAGE
2	5127.676	-0.530	46.802	46.272	-7.728	54.000	AVERAGE
3	5150.000	-0.344	48.661	48.317	-5.683	54.000	AVERAGE
4	* 5214.633	0.197	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

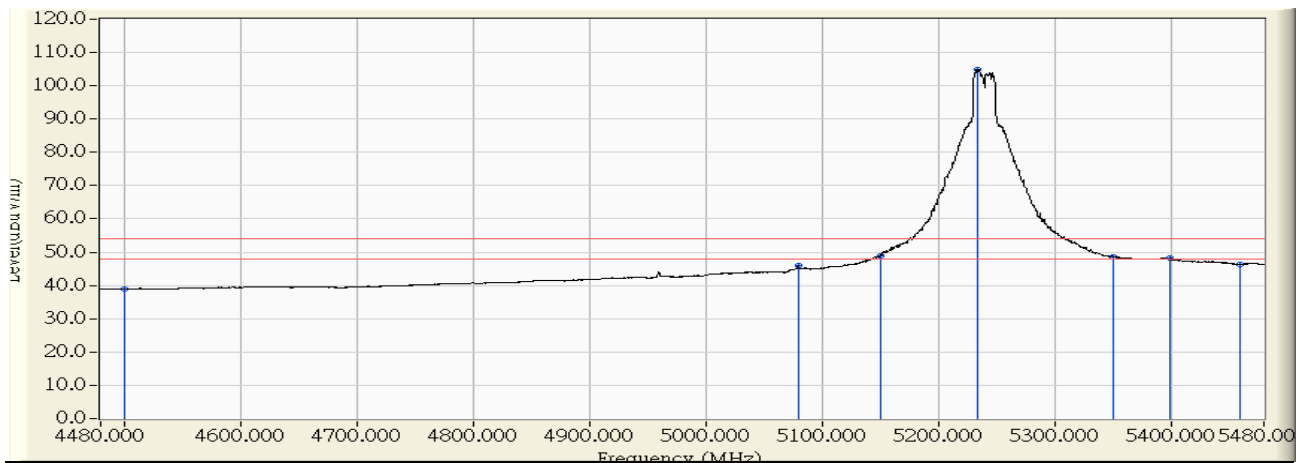


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	53.851	50.326	-23.674	74.000	PEAK
2	5141.169	-0.839	65.827	64.988	-9.012	74.000	PEAK
3	5150.000	-0.760	66.004	65.244	-8.756	74.000	PEAK
4	* 5234.623	-0.010	119.234	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

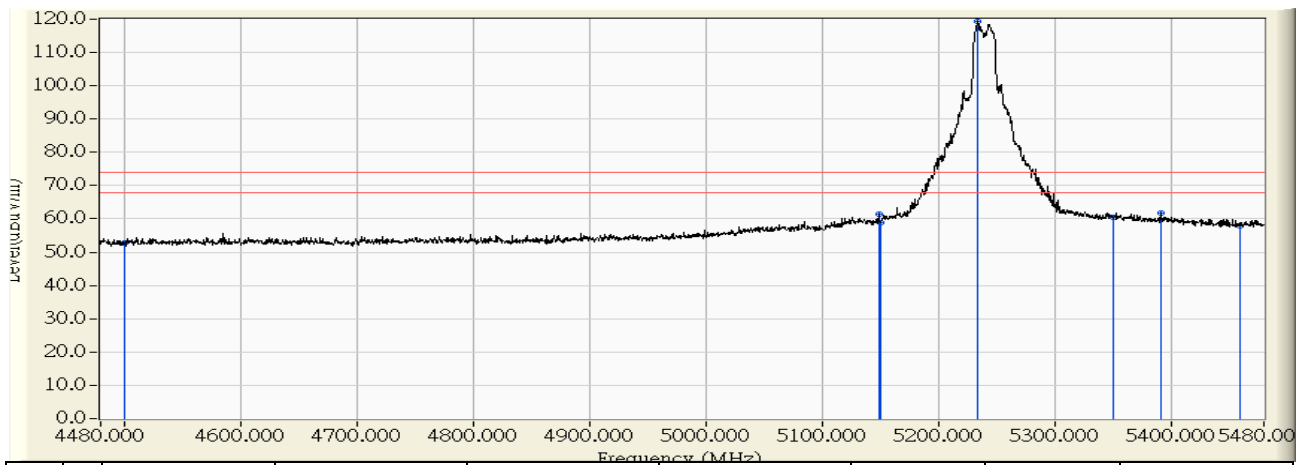


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	42.410	38.885	-15.115	54.000	AVERAGE
2	5079.700	-1.383	47.244	45.861	-8.139	54.000	AVERAGE
3	5150.000	-0.760	49.680	48.920	-5.080	54.000	AVERAGE
4	* 5233.623	-0.020	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

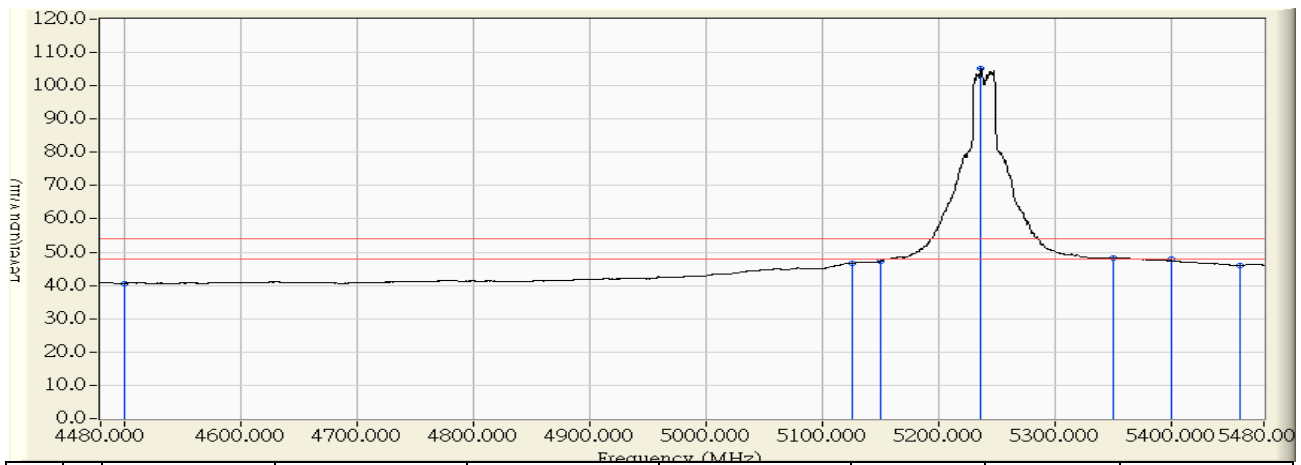


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.818	54.668	52.851	-21.149	74.000	PEAK
2	5148.666	-0.355	61.863	61.508	-12.492	74.000	PEAK
3	5150.000	-0.344	59.295	58.951	-15.049	74.000	PEAK
4	* 5234.123	0.360	118.868	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

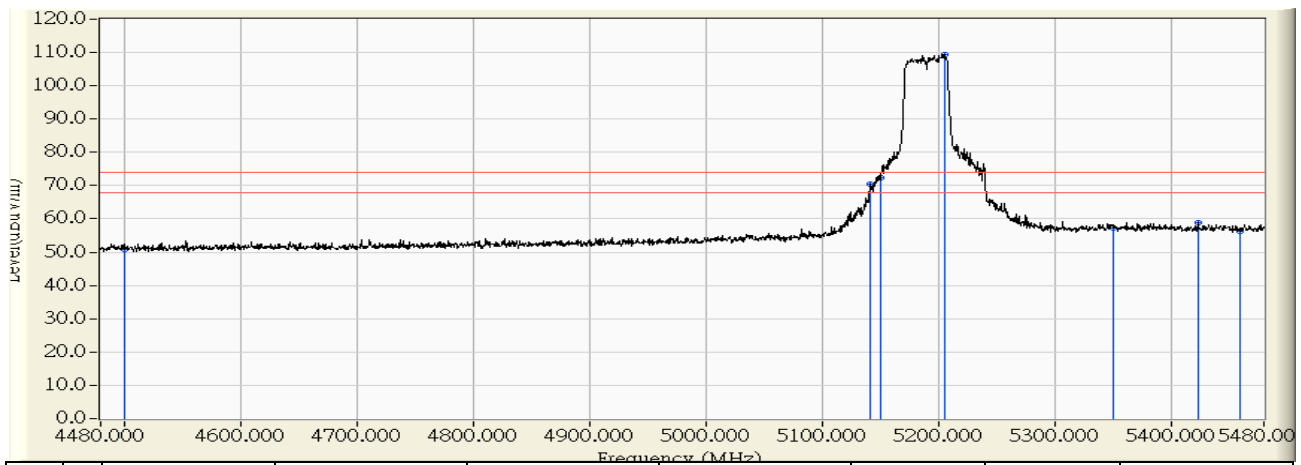


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4500.000	-1.818	42.451	40.634	-13.366	54.000	AVERAGE
2		5126.177	-0.543	47.317	46.774	-7.226	54.000	AVERAGE
3		5150.000	-0.344	47.593	47.249	-6.751	54.000	AVERAGE
4	*	5236.622	0.380	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

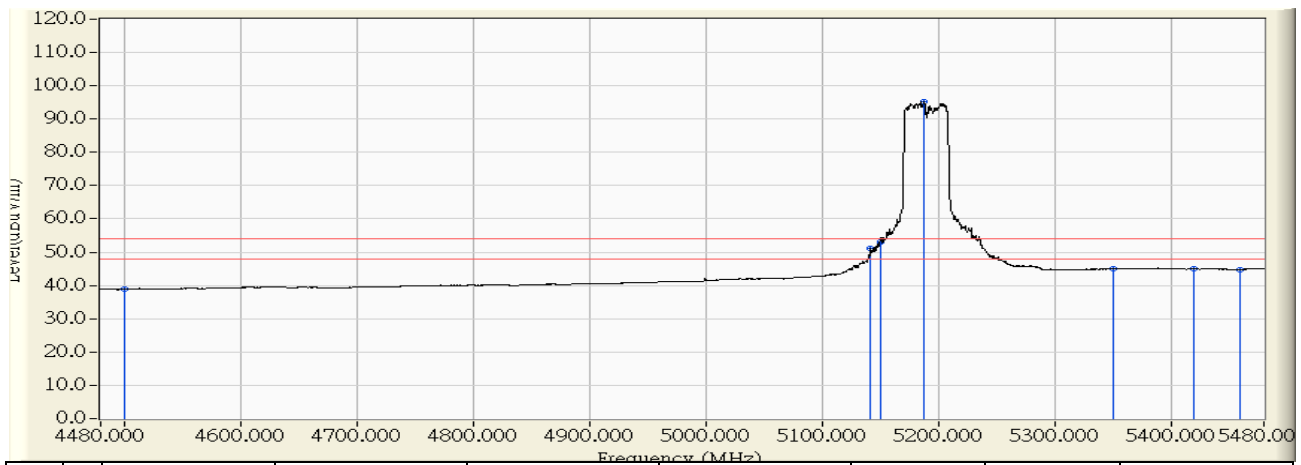


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	54.372	50.847	-23.153	74.000	PEAK
2	5141.169	-0.839	71.216	70.377	-3.623	74.000	PEAK
3	5150.000	-0.760	73.279	72.519	-1.481	74.000	PEAK
4	* 5205.637	-0.268	109.720	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

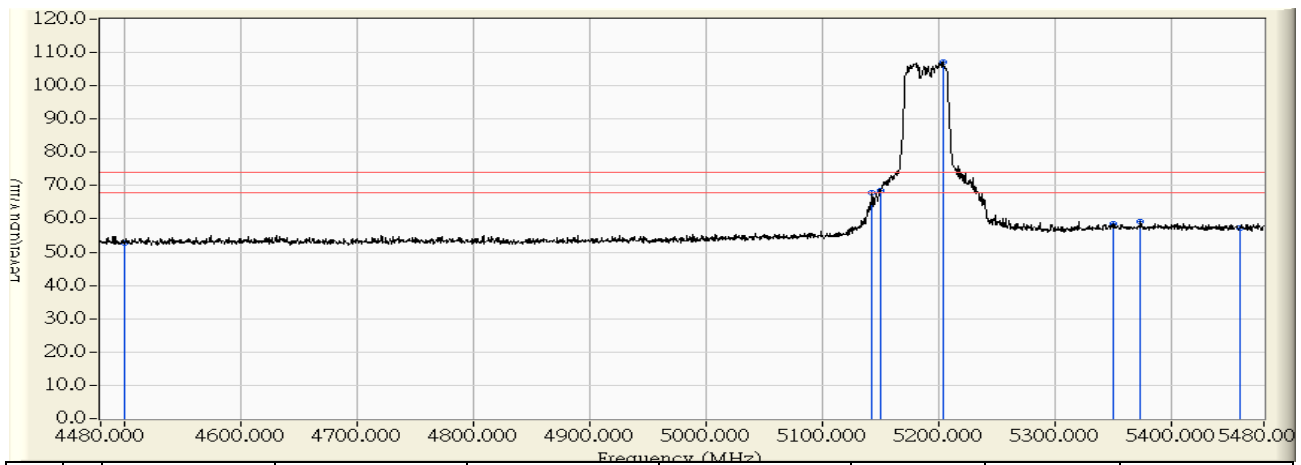


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	42.405	38.880	-15.120	54.000	AVERAGE
2	5142.169	-0.830	51.979	51.149	-2.851	54.000	AVERAGE
3	5150.000	-0.760	53.970	53.210	-0.790	54.000	AVERAGE
4	* 5188.146	-0.423	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

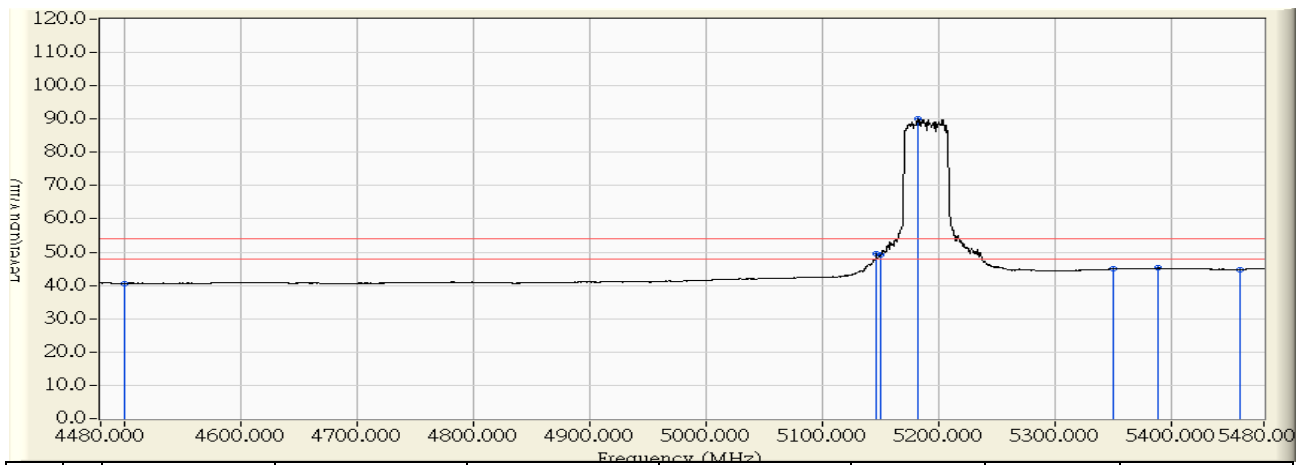


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.818	54.574	52.757	-21.243	74.000	PEAK
2	5143.168	-0.401	68.178	67.777	-6.223	74.000	PEAK
3	5150.000	-0.344	68.997	68.653	-5.347	74.000	PEAK
4	* 5204.138	0.109	106.954	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

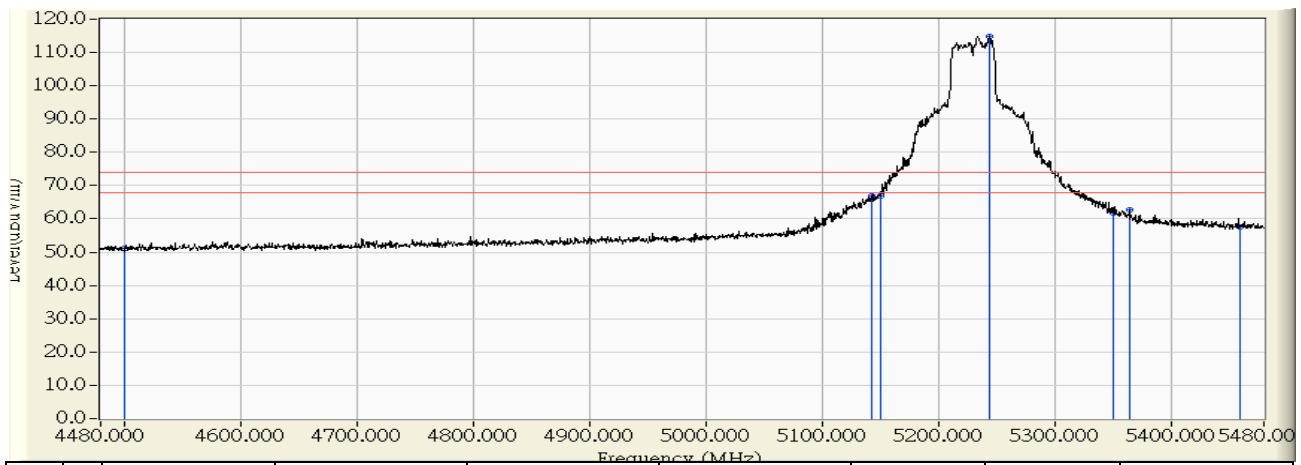


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.818	42.366	40.549	-13.451	54.000	AVERAGE
2	5146.667	-0.372	49.815	49.443	-4.557	54.000	AVERAGE
3	5150.000	-0.344	49.573	49.229	-4.771	54.000	AVERAGE
4	* 5183.148	-0.067	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

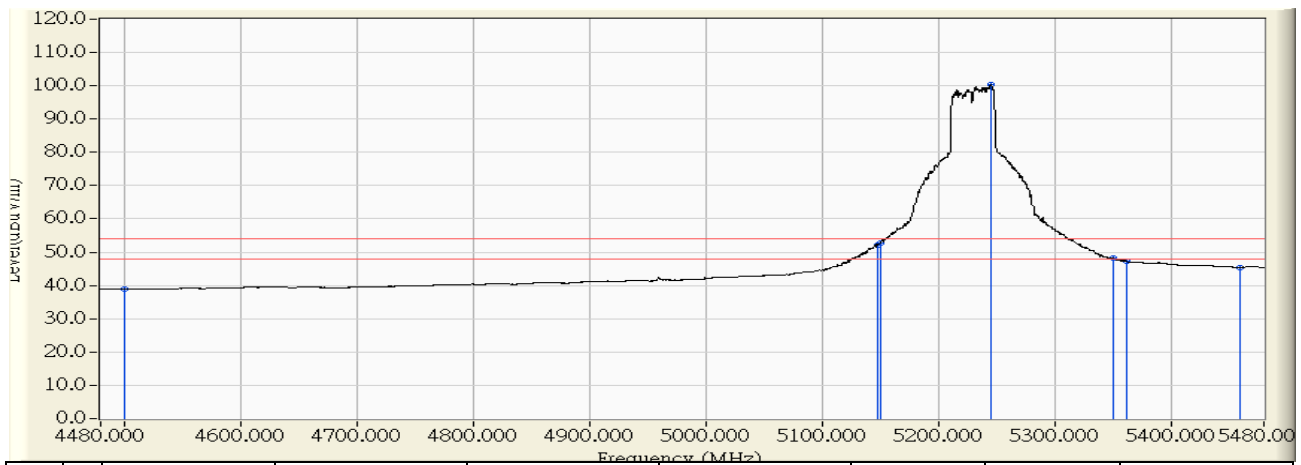


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	54.520	50.995	-23.005	74.000	PEAK
2	5143.168	-0.821	67.636	66.815	-7.185	74.000	PEAK
3	5150.000	-0.760	67.742	66.982	-7.018	74.000	PEAK
4	* 5243.618	0.069	114.822	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

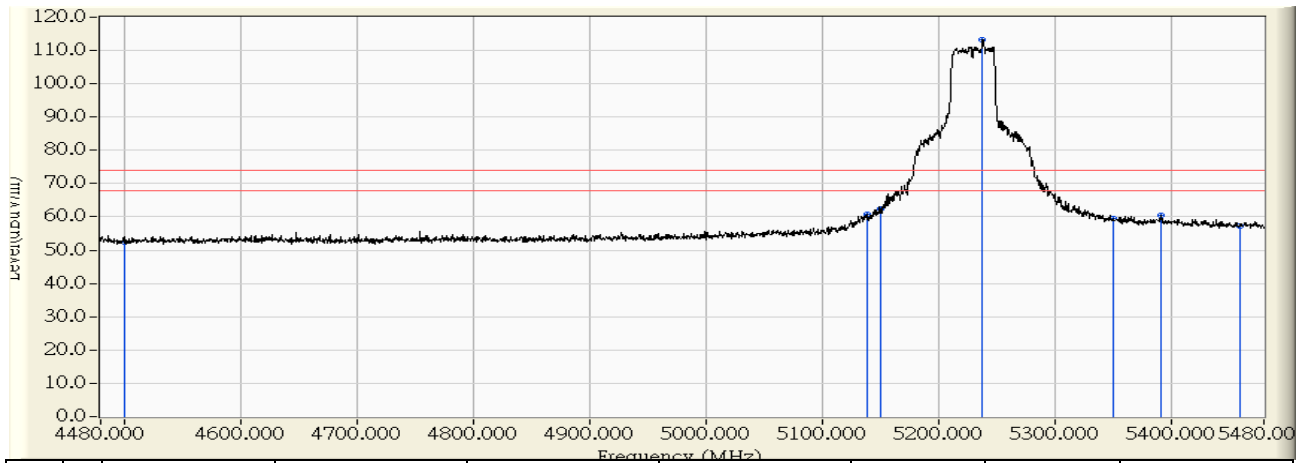


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	42.432	38.907	-15.093	54.000	AVERAGE
2	5147.666	-0.781	53.048	52.267	-1.733	54.000	AVERAGE
3	5150.000	-0.760	53.405	52.645	-1.355	54.000	AVERAGE
4	* 5245.617	0.086	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

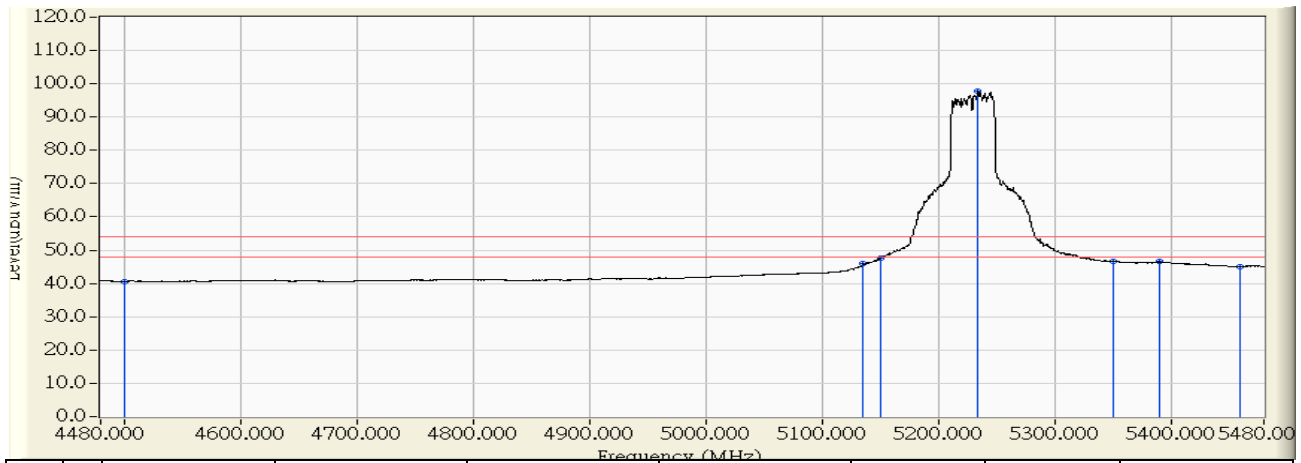


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.818	54.103	52.286	-21.714	74.000	PEAK
2	5138.671	-0.438	61.262	60.823	-13.177	74.000	PEAK
3	5150.000	-0.344	62.657	62.313	-11.687	74.000	PEAK
4	* 5238.121	0.392	113.002	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

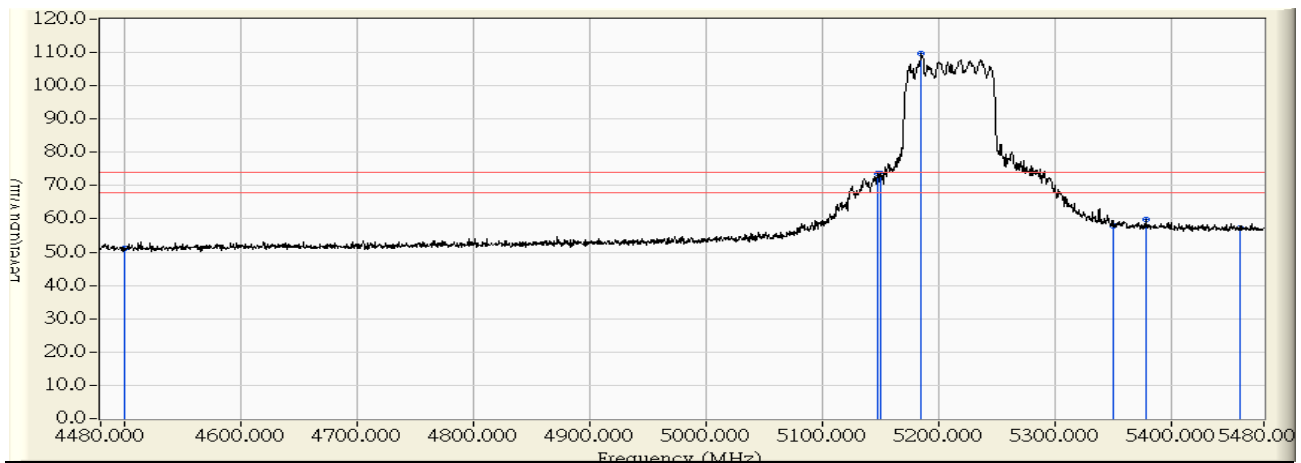


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.818	42.401	40.584	-13.416	54.000	AVERAGE
2	5135.172	-0.468	46.323	45.855	-8.145	54.000	AVERAGE
3	5150.000	-0.344	47.957	47.613	-6.387	54.000	AVERAGE
4	* 5234.123	0.360	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

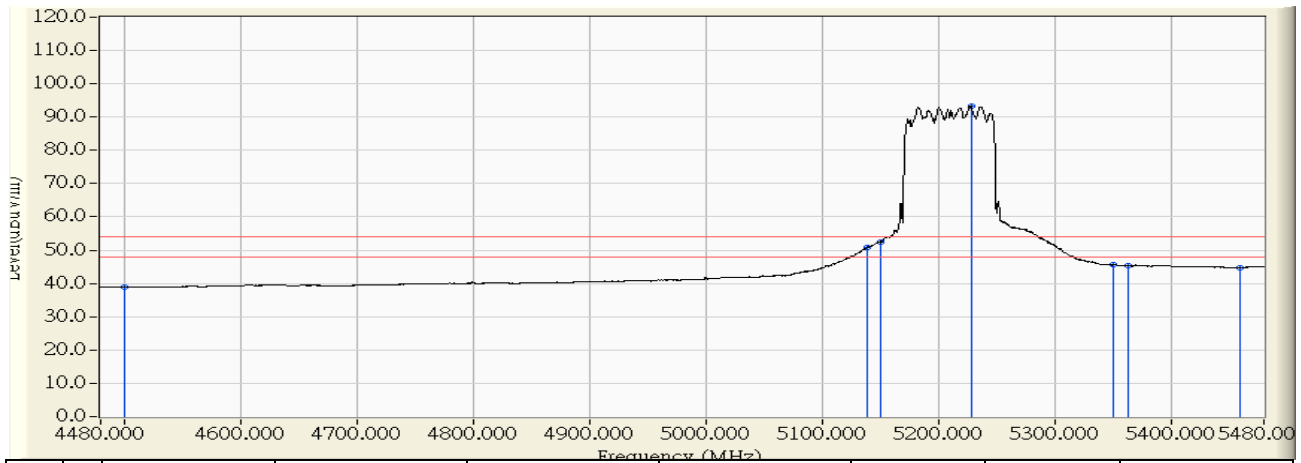


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	54.779	51.254	-22.746	74.000	PEAK
2	5147.666	-0.781	74.384	73.603	-0.397	74.000	PEAK
3	5150.000	-0.760	74.338	73.578	-0.422	74.000	PEAK
4	* 5185.647	-0.445	110.086	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

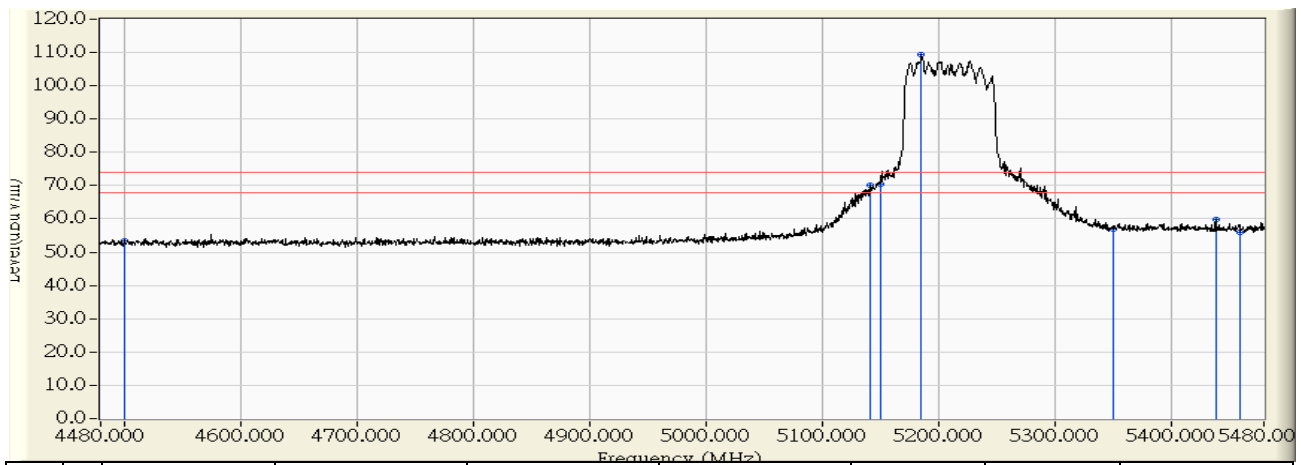


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-3.525	42.364	38.839	-15.161	54.000	AVERAGE
2	5138.671	-0.860	51.615	50.754	-3.246	54.000	AVERAGE
3	5150.000	-0.760	53.040	52.280	-1.720	54.000	AVERAGE
4	* 5228.126	-0.068	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

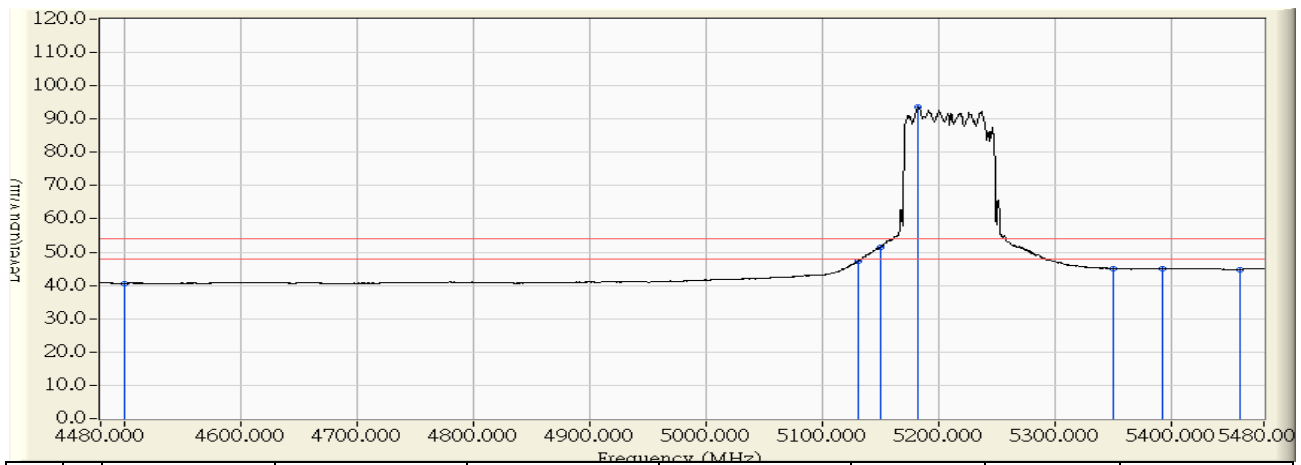


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	4500.000	-1.818	55.064	53.247	-20.753	74.000	PEAK
2	5141.669	-0.414	70.388	69.974	-4.026	74.000	PEAK
3	5150.000	-0.344	70.904	70.560	-3.440	74.000	PEAK
4	* 5185.647	-0.046	109.501	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

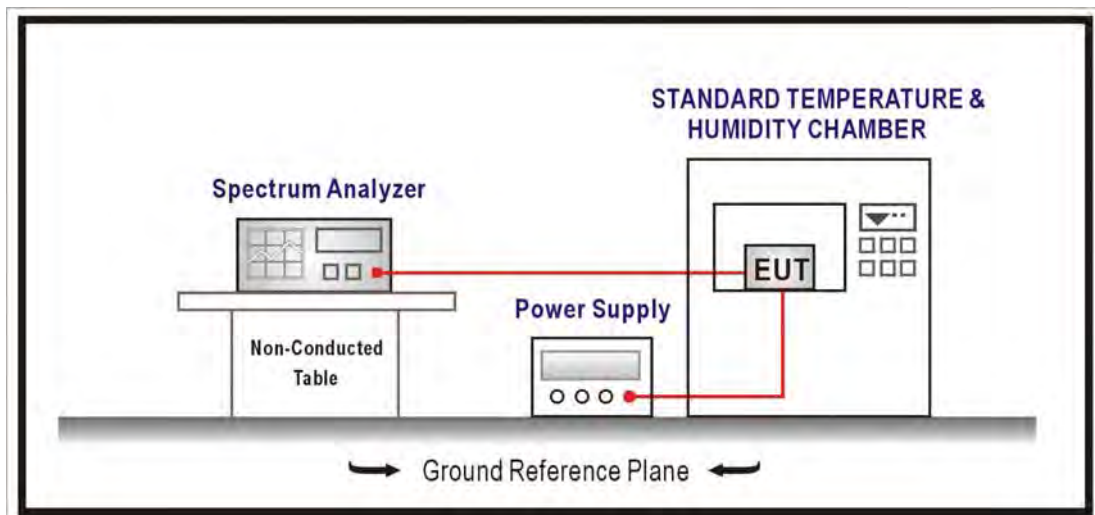
The following test equipments are used during the radiated emission tests:

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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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