

FCC Test Report

Product Name : Wireless-AC2900 Dual Band Gigabit Router

Trade Name : ASUS

Model No. : RT-AC86U, RT-AC68U Extreme, RT-AC86A, RT-AC86P,
RT-AC86R, RT-AC86X, RT-AC2900, AC2900

FCC ID. : MSQ-RTACHN00

Applicant : ASUSTeK COMPUTER INC.

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

Date of Receipt : Feb. 13, 2017

Issued Date : Apr. 14, 2021

Report No. : 1720225R-RFUSP65V00

Report Version : V2.0



The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of DEKRA Testing and Certification Co., Ltd..

Test Report Certification

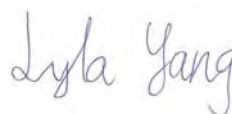
Issued Date : Apr. 14, 2021

Report No. : 1720225R-RFUSP65V00



Product Name : Wireless-AC2900 Dual Band Gigabit Router
Applicant : ASUSTeK COMPUTER INC.
Address : 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan
Manufacturer : ASUSTeK COMPUTER INC.
Model No. : RT-AC86U, RT-AC68U Extreme, RT-AC86A, RT-AC86P,
RT-AC86R, RT-AC86X, RT-AC2900, AC2900
FCC ID. : MSQ-RTACHN00
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: 2015
ANSI C63.10: 2013
KDB 789033.D02 V01r04
KDB 644545 D03 V01/KDB 662911 D01 V02r01
Laboratory Name : Hsin Chu Laboratory
Address : No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township,
Hsinchu County 31061, Taiwan
TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result : Complied

Documented By :



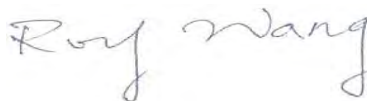
(Lyla Yang / Engineering Adm. Specialist)

Tested By :



(Scott Chang / Engineer)

Approved By :



(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1720225R-RFUSP43V00	V1.0	Initial issue of report	Apr. 11, 2017
1720225R-RFUSP43V00	V2.0	Add LAN Cable (Black flat wire), and verify Radiated Emission(Under 1GHz) tested.	Jun. 23, 2017
1720225R-RFUSP65V00	V1.0	Add WLAN 5G band 2 and band 3 functions. Add all test item for band 2 and band 3 data in test report.	Jun. 26, 2017
1720225R-RFUSP65V00	V2.0	Update test data of Peak Transmit Output	Apr. 14, 2021

Laboratory Information

We, **DEKRA Testing and Certification Co., Ltd.**, 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: 834100
Canada	:	IC, Submission No: 181665
		IC Registration Number: 22397-1 / 22397-2 / 22397-3

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:

<http://www.dekra.com.tw/english/about/certificates.aspx?bval=5>

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site : http://www.dekra.com.tw/index_en.aspx

If you have any comments, Please don't hesitate to contact us. Our test site as below:

- 1 No. 75-2, 3rd Lin, WangYe Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan (R.O.C.)
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : info.tw@dekra.com
- 2 No.372, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan
TEL: +886-3-582-8001 / FAX: +886-3-582-8958 E-Mail : info.tw@dekra.com
- 3 No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 31061, Taiwan
TEL: +886-3-582-8001 / FAX: +886-3-582-8958 E-Mail : info.tw@dekra.com

TABLE OF CONTENTS

Description	Page
1. General Information.....	7
1.1. EUT Description.....	7
1.2. Test Mode	15
1.3. Tested System Details	17
1.4. Configuration of tested System	17
1.5. EUT Exercise Software.....	17
1.6. Test Facility	18
2. Conducted Emission	19
2.1. Test Equipment	19
2.2. Test Setup	19
2.3. Limits.....	20
2.4. Test Procedure.....	20
2.5. Test Specification	20
2.6. Uncertainty.....	20
2.7. Test Result	21
3. 99% & 20dB & DTS Bandwidth	37
3.1. Test Equipment	37
3.2. Test Setup	37
3.3. Limits.....	37
3.4. Test Procedure.....	37
3.5. Uncertainty.....	37
3.6. Test Result	38
4. Peak Transmit Output.....	226
4.1. Test Equipment	226
4.2. Test Setup	226
4.3. Limits.....	227
4.4. Test Procedure.....	227
4.5. Uncertainty.....	227
4.6. Test Result	228
5. Peak Power Spectrum Density	593
5.1. Test Equipment	593
5.2. Test Setup	593
5.3. Limits.....	594
5.4. Test Procedure.....	594
5.5. Uncertainty.....	594
5.6. Test Result	595
6. Radiated Emission.....	711
6.1. Test Equipment	711
6.2. Test Setup	711
6.3. Limits.....	712
6.4. Test Procedure.....	713

6.5.	Uncertainty.....	713
6.6.	Test Result.....	714
7.	Band Edge	938
7.1.	Test Equipment.....	938
7.2.	Test Setup.....	938
7.3.	Limits.....	939
7.4.	Test Procedure.....	941
7.5.	Uncertainty.....	941
7.6.	Test Result.....	942
8.	RF antenna conducted test.....	1198
8.1.	Test Equipment.....	1198
8.2.	Test Setup.....	1198
8.3.	Limits.....	1199
8.4.	Test Procedure.....	1199
8.5.	Uncertainty.....	1199
8.6.	Test Result.....	1200
9.	Frequency Stability.....	1233
9.1.	Test Equipment.....	1233
9.2.	Test Setup.....	1233
9.3.	Limits.....	1233
9.4.	Test Procedure.....	1233
9.5.	Uncertainty.....	1233
9.6.	Test Result.....	1234
Attachment 1		1263
Test Setup Photograph		1263
Attachment 2		1272
EUT External Photograph.....		1272
Attachment 3		1283
EUT Internal Photograph.....		1283

1. General Information

1.1. EUT Description

Product Name	Wireless-AC2900 Dual Band Gigabit Router	
Product Type	WLAN	
Trade Name	ASUS	
Model No.	RT-AC86U, RT-AC68U Extreme, RT-AC86A, RT-AC86P, RT-AC86R, RT-AC86X, RT-AC2900, AC2900	
Frequency Range/ Channel Number	IEEE 802.11a/	5180~5240MHz / 4 Channels
	IEEE 802.11n (20MHz) /	5260~5320MHz / 4 Channels
	IEEE 802.11ac (20MHz)	5500~5700MHz / 11 Channels
		5745~5825MHz / 5 Channels
	IEEE 802.11n (40MHz) /	5190~5230MHz / 2 Channels
	IEEE 802.11ac (40MHz)	5270~5310MHz / 2 Channels
		5510~5670MHz / 5 Channels
		5755~5795MHz / 2 Channels
	IEEE 802.11ac (80MHz)	5210~5210MHz / 1 Channel
		5290~5290MHz / 1 Channel
		5530~5610MHz / 2 Channel
		5775~5775MHz / 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 31 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 Information			
Manufacturer	Model No.	Antenna Type	Effective Gain Per Chain [dBi]
WHA YU	C660-510389-A C660-510397-A (Without ASUS logo)	Dipole antenna	5.2GHz Gain: 1.306 dBi
			5.3GHz Gain: 1.494 dBi
			5.5GHz Gain: 1.474 dBi
			5.8GHz Gain: 1.567 dBi
Walsin	ASC_RFDPA161300SBLB804 ASC_RFDPA161300SBLB805 ASC_RFDPA161300SBLB806 (Without ASUS logo)	Dipole antenna	5.2GHz Gain: 0.88 dBi
			5.3GHz Gain: 1.029 dBi
			5.5GHz Gain: 1.176 dBi
			5.8GHz Gain: 1.339 dBi
WHA YU	C660-510390-A	PCB Antenna	5.2GHz Gain: 1.306 dBi
			5.3GHz Gain: 1.494 dBi
			5.5GHz Gain: 1.474 dBi
			5.8GHz Gain: 1.567 dBi
Walsin	ASC_RFPCA302603IM5B301	PCB Antenna	5.2GHz Gain: 0.88 dBi
			5.3GHz Gain: 1.029 dBi
			5.5GHz Gain: 1.176 dBi
			5.8GHz Gain: 1.339 dBi
Beamforming Gain	4.77 dBi		

Note: All of Dipole antenna with an ASUS logo, except the C660-510397-A and ASC_RFDPA161300SBLB806 antenna. Please find the antenna photograph in attachment.

Accessories Information	
LAN Cable	Non-Shielded, 1.5m
LAN Cable (Mode 5) (Black flat wire)	Non-Shielded, 2m
Power Adatper 1 (Level 6)	ASUS, AD890326010-2LF I/P : 100-240V~ 50/60Hz 0.8A O/P : 19V $\overline{=}$ 1.75A Cable Out: Non-Shielded, 2.4m
Power Adatper 2 (Level 6)	ASUS, AD890M26010-3LF I/P : 100-240V~ 50/60Hz 0.8A O/P : 19V $\overline{=}$ 1.75A Cable Out: Non-Shielded, 2.4m
Power Adatper 3 (Level 6)	ASUS, ADP-33AW I/P : 100-240V~1A 50-60Hz O/P : 19V $\overline{=}$ 1.75A Cable Out: Non-shielded, 2.2m

Note: Adapter 1 and adapter 2 have the same PCB layout, and adapter 1 has been tested and displayed in the report.

ANT-TX / RX & Bandwidth

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

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

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
24	BPSK	1/2	1	208	432	104	216	26.00	54.00	28.80	60.00
25	QPSK	1/2	2	416	864	208	432	52.00	108.00	57.60	120.00
26	QPSK	3/4	2	416	864	312	648	78.00	162.00	86.80	180.00
27	16-QAM	1/2	4	832	1728	416	864	104.00	216.00	115.60	240.00
28	16-QAM	3/4	4	832	1728	624	1296	156.00	324.00	172.20	360.00
29	64-QAM	2/3	6	1248	2592	832	1728	208.00	432.00	231.20	480.00
30	64-QAM	3/4	6	1248	2592	936	1944	234.00	486.00	260.00	540.00
31	64-QAM	5/6	6	1248	2592	1040	2040	260.00	540.00	288.80	600.00

Note 1: Support of 400ns GI is optional on transmit and receive.

Table 4 – MCS parameters for TX Antenna number = 4

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	
				Guard Interval		Guard Interval		Guard Interval	
				800ns	400ns	800ns	400ns	800ns	400ns
1	0	BPSK	1/2	6.5	7.2	13.5	15	29.3	32.5
	1	QPSK	1/2	13	14.4	27	30	58.5	65
	2	QPSK	3/4	19.5	21.7	40.5	45	87.8	97.5
	3	16-QAM	1/2	26	28.9	54	60	117	130
	4	16-QAM	3/4	39	43.3	81	90	175.5	195
	5	64-QAM	2/3	52	57.8	108	120	234	260
	6	64-QAM	3/4	58.5	65	121.5	135	263.3	292.5
	7	64-QAM	5/6	65	72.2	135	150	292.5	325
	8	256-QAM	3/4	78	86.7	162	180	351	390
	9	256-QAM	5/6	N/A	N/A	180	200	390	433.3
2	0	BPSK	1/2	13	14.4	27	30	58.6	65
	1	QPSK	1/2	26	28.8	54	60	117	130
	2	QPSK	3/4	39	43.4	81	90	175.6	195
	3	16-QAM	1/2	52	57.8	108	120	234	260
	4	16-QAM	3/4	78	86.6	162	180	351	390
	5	64-QAM	2/3	104	115.6	216	240	468	520
	6	64-QAM	3/4	117	130	243	270	526.6	585
	7	64-QAM	5/6	130	144.4	270	300	585	650
	8	256-QAM	3/4	156	173.4	324	360	702	780
	9	256-QAM	5/6	N/A	N/A	360	400	780	866.6
3	0	BPSK	1/2	19.5	21.6	40.5	45	87.9	97.5
	1	QPSK	1/2	39	43.2	81	90	175.5	195
	2	QPSK	3/4	58.5	65.1	121.5	135	263.4	292.5
	3	16-QAM	1/2	78	86.7	162	180	351	390
	4	16-QAM	3/4	117	129.9	243	270	526.5	585
	5	64-QAM	2/3	156	173.4	324	360	702	780
	6	64-QAM	3/4	175.5	195	364.5	405	789.9	877.5
	7	64-QAM	5/6	195	216.6	405	450	877.5	975
	8	256-QAM	3/4	234	260.1	486	540	1053	1170
	9	256-QAM	5/6	N/A	N/A	540	600	1170	1299.9

4	0	BPSK	1/2	26.0	28.9	54.0	60.0	117.0	130.0
	1	QPSK	1/2	52.0	57.8	108.0	120.0	234.0	260.0
	2	QPSK	3/4	78.0	86.7	162.0	180.0	351.0	390.0
	3	16-QAM	1/2	104.0	115.6	216.0	240.0	468.0	520.0
	4	16-QAM	3/4	156.0	173.3	342.0	360.0	702.0	780.0
	5	64-QAM	2/3	208.0	231.1	432.0	480.0	936.0	1040.0
	6	64-QAM	3/4	234.0	260.0	486.0	540.0	1053.0	1170.0
	7	64-QAM	5/6	260.0	288.9	540.0	600.0	1170.0	1300.0
	8	256-QAM	3/4	312.0	346.7	648.0	720.0	1404.0	1560.0
	9	256-QAM	5/6	N/A	N/A	720.0	800.0	1560.0	1733.3

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	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz
52	5260 MHz	56	5280 MHz	60	5300 MHz	64	5320 MHz
100	5500 MHz	104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz	140	5700 MHz	149	5745 MHz
153	5765 MHz	157	5785 MHz	161	5805 MHz	165	5825 MHz

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

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270MHz	62	5310 MHz
102	5510 MHz	110	5550 MHz	118	5590MHz	126	5630 MHz
134	5670 MHz	151	5755 MHz	159	5795 MHz		

IEEE 802.11ac (80MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz	106	5530 MHz	122	5610 MHz
155	5775 MHz						

Note:

1. This device is a Wireless-AC2900 Dual Band Gigabit Router including 2.4GHz b/g/n (3x3) and 5GHz a/n/ac (4x4) transmitting and receiving function.
2. The variation of model number is for different strategy of marketing.
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 transmitting is measured and makes a test report of the number: 1720225R-RFUSP28V00.
5. This device is a composite device in accordance with Part 15 regulations. The receiving function was tested and its number is 1720225R-RFUSP01V00.

1.2. Test Mode

DEKRA 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: Tx_ADP: AD890326010-2LF_CDD Mode (802.11 a) Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40) Mode 3: Tx_ADP: AD890326010-2LF_Beamforming Mode (802.11 n20/40) Mode 4: Tx_ADP: ADP-33AW Mode 5: Tx_LAN Cable 2m
----	---

Test Items	Modulation	Channel	Antenna	Result
Conducted Emission	11ac (80MHz)	42/58/106/155	0+1+2+3	Complies
99% & 26dB & DTS Bandwidth	a	36/44/48/52/60/64/ 100/116/140/149/157/165	0/1/2/3	Complies
	11n/ac (20MHz)	36/44/48/52/60/64/ 100/116/140/149/157/165	0/1/2/3	Complies
	11n/ac (40MHz)	38/46/54/62/ 102/134/151/159	0/1/2/3	Complies
	11ac (80MHz)	42/58/106/122/155	0/1/2/3	Complies
Peak Transmit Output	a	36/44/48/52/60/64/ 100/116/140/149/157/165	0+1+2+3	Complies
	11n/ac (20MHz)	36/44/48/52/60/64/ 100/116/140/149/157/165	0+1+2+3	Complies
	11n/ac (40MHz)	38/46/54/62/ 102/134/151/159	0+1+2+3	Complies
	11ac (80MHz)	42/58/106/122/155	0+1+2+3	Complies
Peak Power Spectrum Density	a	36/44/48/52/60/64/ 100/116/140/149/157/165	0+1+2+3	Complies
	11n/ac (20MHz)	36/44/48/52/60/64/ 100/116/140/149/157/165	0+1+2+3	Complies
	11n/ac (40MHz)	38/46/54/62/ 102/134/151/159	0+1+2+3	Complies
	11ac (80MHz)	42/58/106/122/155	0+1+2+3	Complies
Radiated Emission	a	36/44/48/52/60/64/ 100/116/140/149/157/165	0+1+2+3	Complies
	11n/ac (20MHz)	36/44/48/52/60/64/ 100/116/140/149/157/165	0+1+2+3	Complies
	11n/ac (40MHz)	38/46/54/62/ 102/134/151/159	0+1+2+3	Complies
	11ac (80MHz)	42/58/106/122/155	0+1+2+3	Complies

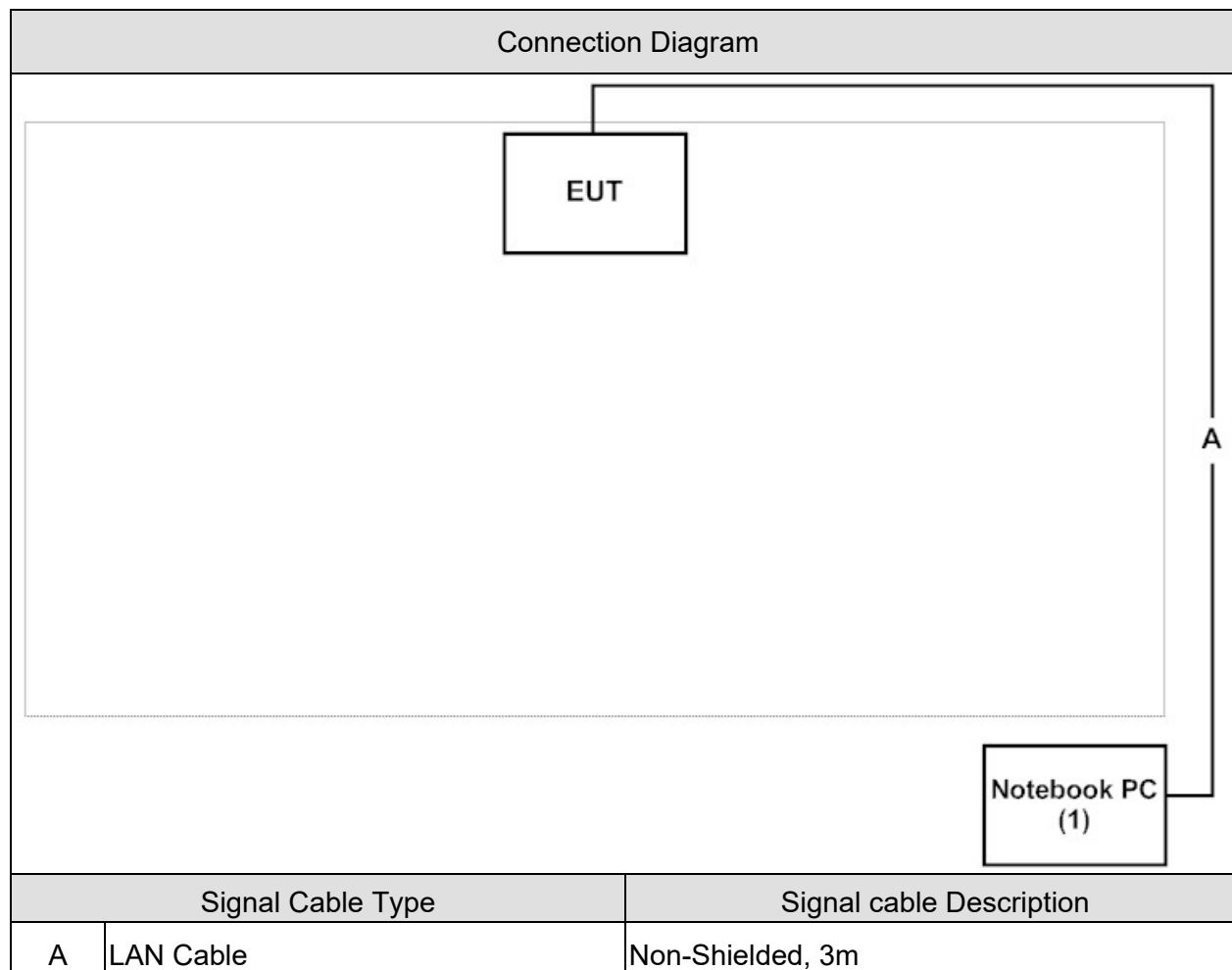
Test Items	Modulation	Channel	Antenna	Result
Band Edge	a	36/44/48/52/60/64/ 100/116/140/149/157/165	0+1+2+3	Complies
	11n/ac (20MHz)	36/44/48/52/60/64/ 100/116/140/149/157/165	0+1+2+3	Complies
	11n/ac (40MHz)	38/46/54/62/ 102/134/151/159	0+1+2+3	Complies
	11ac (80MHz)	42/58/106/122/155	0+1+2+3	Complies
RF antenna conducted test	a	36/44/48/52/60/64/ 100/116/140/149/157/165	0/1/2/3	Complies
	11n/ac (20MHz)	36/44/48/52/60/64/ 100/116/140/149/157/165	0/1/2/3	Complies
	11n/ac (40MHz)	38/46/54/62/ 102/134/151/159	0/1/2/3	Complies
	11ac (80MHz)	42/58/106/122/155	0/1/2/3	Complies
Frequency Stability	a	36/44/48/52/60/64/ 100/116/140/149/157/165	0/1/2/3	Complies
	11n/ac (20MHz)	36/44/48/52/60/64/ 100/116/140/149/157/165	0/1/2/3	Complies
	11n/ac (40MHz)	38/46/54/62/ 102/134/151/159	0/1/2/3	Complies
	11ac (80MHz)	42/58/106/122/155	0/1/2/3	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	Lenovo	B590	WB15330091	DoC	Non-Shielded, 1.8m, one ferrite core bonded

1.4. Configuration of tested System



1.5. EUT Exercise Software

1	Setup the EUT as shown in Section 1.4.
2	Execute the "MTool 2.0.0.7" 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	Test Site
Temperature (°C)	FCC PART 15 E 15.407 Conducted Emission	15 - 35	20°C	3
Humidity (%RH)		25 - 75	50%RH	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 E 15.407 99% & 26dB & DTS Bandwidth	15 - 35	25°C	3
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	3
Humidity (%RH)		25 - 75	65%RH	
Barometric pressure (mbar)		860 - 1060	950-1000	
Temperature (°C)	FCC PART 15 E 15.407 Peak Power Spectrum Density	15 - 35	25°C	3
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	2
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	2
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	3
Humidity (%RH)		25 - 75	45%RH	
Barometric pressure (mbar)		860 - 1060	950-1000	

Note: Test site information refers to Laboratory Information.

2. Conducted Emission

2.1. Test Equipment

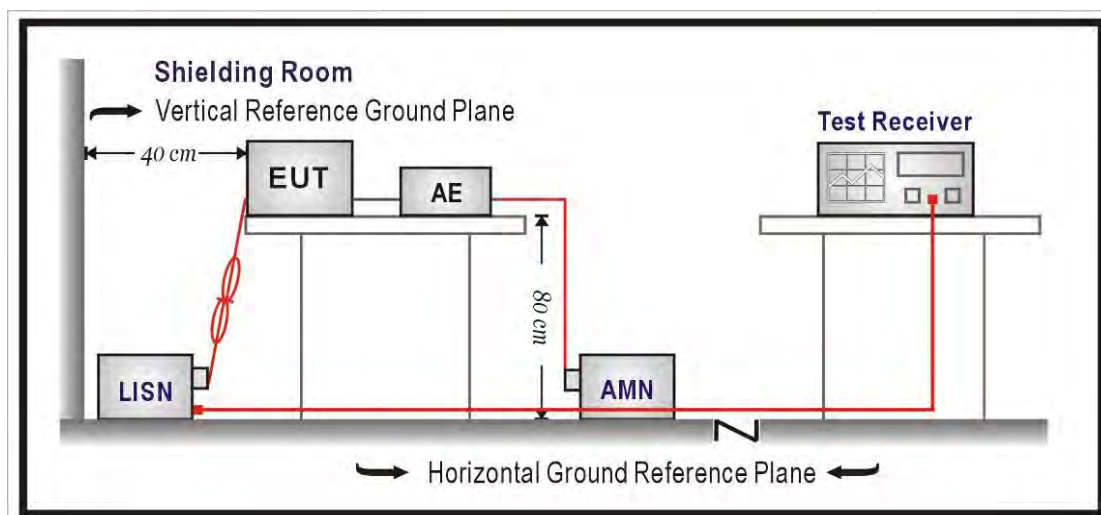
The following test equipments are used during the test:

Conducted Emission / SR2-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2018/02/05
LISN	R&S	ENV216	100092	2017/08/16
Test Receiver	R&S	ESCS 30	836858/022	2018/01/14

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

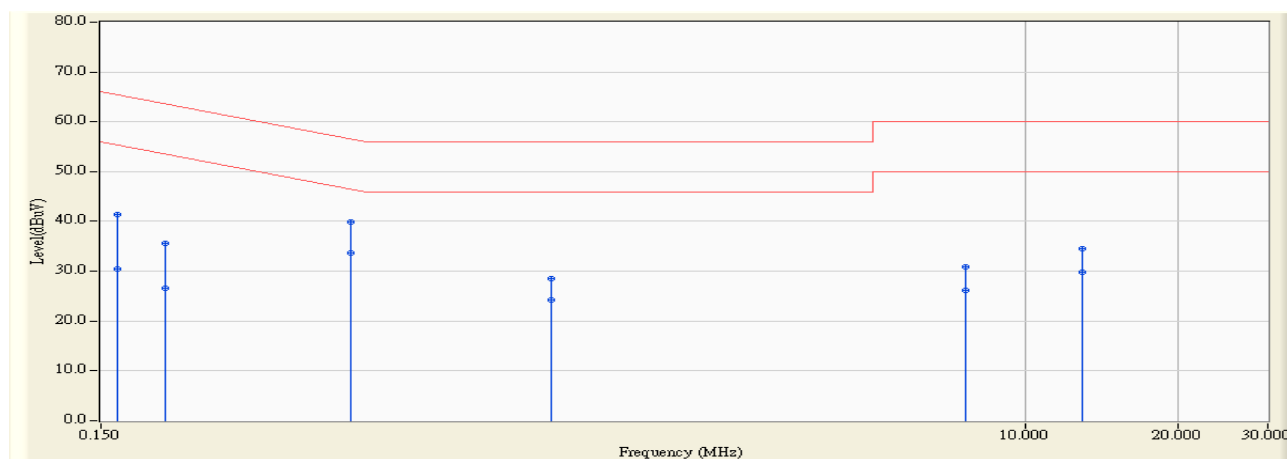
According to FCC Part 15 Subpart C Paragraph 15.207: 2015

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Site : SR2-H	Time : 2017/03/03
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 2: Tx_ADP: AD890326010-2LF_ MIMO Mode (802.11 n20/40)_ 802.11ac(80M)_ 5210MHz

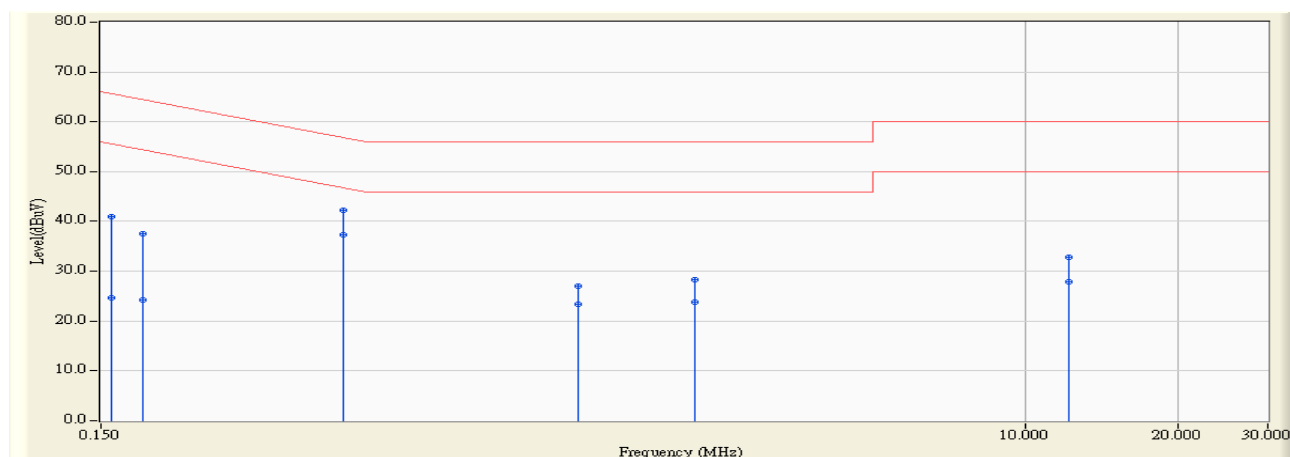


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	9.754	31.620	41.374	-24.001	65.375	QUASIPeAK
2		0.162	9.754	20.690	30.444	-24.931	55.375	AVERAGE
3		0.201	9.750	25.850	35.600	-27.978	63.578	QUASIPeAK
4		0.201	9.750	16.780	26.530	-27.048	53.578	AVERAGE
5		0.466	9.729	30.090	39.819	-16.759	56.578	QUASIPeAK
6	*	0.466	9.729	23.960	33.689	-12.889	46.578	AVERAGE
7		1.158	9.826	18.730	28.556	-27.444	56.000	QUASIPeAK
8		1.158	9.826	14.510	24.336	-21.664	46.000	AVERAGE
9		7.627	10.031	20.960	30.991	-29.009	60.000	QUASIPeAK
10		7.627	10.031	16.240	26.271	-23.729	50.000	AVERAGE
11		12.888	10.182	24.430	34.612	-25.388	60.000	QUASIPeAK
12		12.888	10.182	19.680	29.862	-20.138	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-H	Time : 2017/03/03
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 2: Tx_ADP: AD890326010-2LF_ MIMO Mode (802.11 n20/40)_ 802.11ac(80M)_ 5210MHz

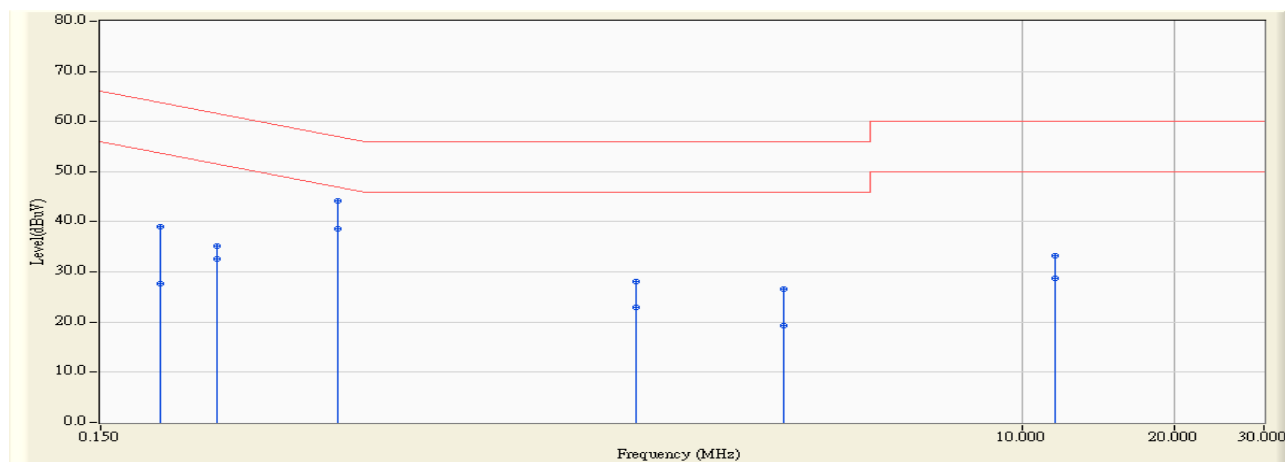


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.751	31.160	40.911	-24.667	65.578	QUASIPeAK
2		0.158	9.751	14.880	24.631	-30.947	55.578	AVERAGE
3		0.181	9.752	27.830	37.582	-26.846	64.428	QUASIPeAK
4		0.181	9.752	14.430	24.182	-30.246	54.428	AVERAGE
5		0.451	9.747	32.500	42.247	-14.613	56.861	QUASIPeAK
6	*	0.451	9.747	27.580	37.327	-9.533	46.861	AVERAGE
7		1.310	9.829	17.190	27.019	-28.981	56.000	QUASIPeAK
8		1.310	9.829	13.480	23.309	-22.691	46.000	AVERAGE
9		2.224	9.849	18.510	28.359	-27.641	56.000	QUASIPeAK
10		2.224	9.849	13.970	23.819	-22.181	46.000	AVERAGE
11		12.142	10.219	22.490	32.709	-27.291	60.000	QUASIPeAK
12		12.142	10.219	17.690	27.909	-22.091	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-H	Time : 2017/06/21
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 2: Tx_ADP: AD890326010-2LF_ MIMO Mode (802.11 n20/40)_ 802.11ac(80M)_ 5290MHz

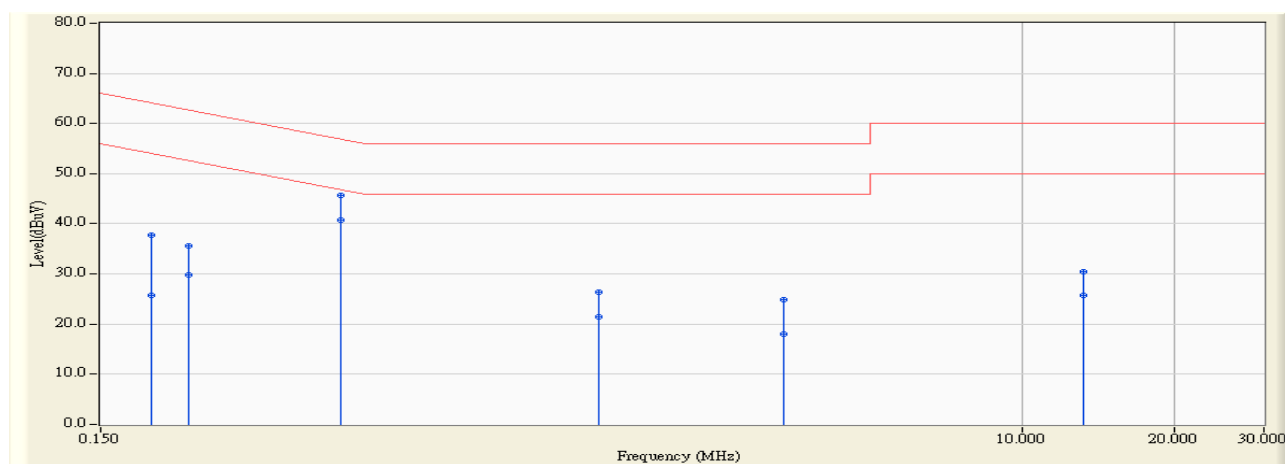


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.197	9.750	29.250	39.000	-24.741	63.741	QUASPEAK
2		0.197	9.750	17.890	27.640	-26.101	53.741	AVERAGE
3		0.255	9.744	25.510	35.254	-26.323	61.577	QUASPEAK
4		0.255	9.744	22.880	32.624	-18.953	51.577	AVERAGE
5		0.443	9.729	34.360	44.089	-12.917	57.006	QUASPEAK
6	*	0.443	9.729	28.860	38.589	-8.417	47.006	AVERAGE
7		1.720	9.849	18.280	28.129	-27.871	56.000	QUASPEAK
8		1.720	9.849	13.030	22.879	-23.121	46.000	AVERAGE
9		3.365	9.901	16.640	26.541	-29.459	56.000	QUASPEAK
10		3.365	9.901	9.440	19.341	-26.659	46.000	AVERAGE
11		11.552	10.158	23.150	33.308	-26.692	60.000	QUASPEAK
12		11.552	10.158	18.550	28.708	-21.292	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-H	Time : 2017/06/21
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 2: Tx_ADP: AD890326010-2LF_ MIMO Mode (802.11 n20/40)_ 802.11ac(80M)_ 5290MHz

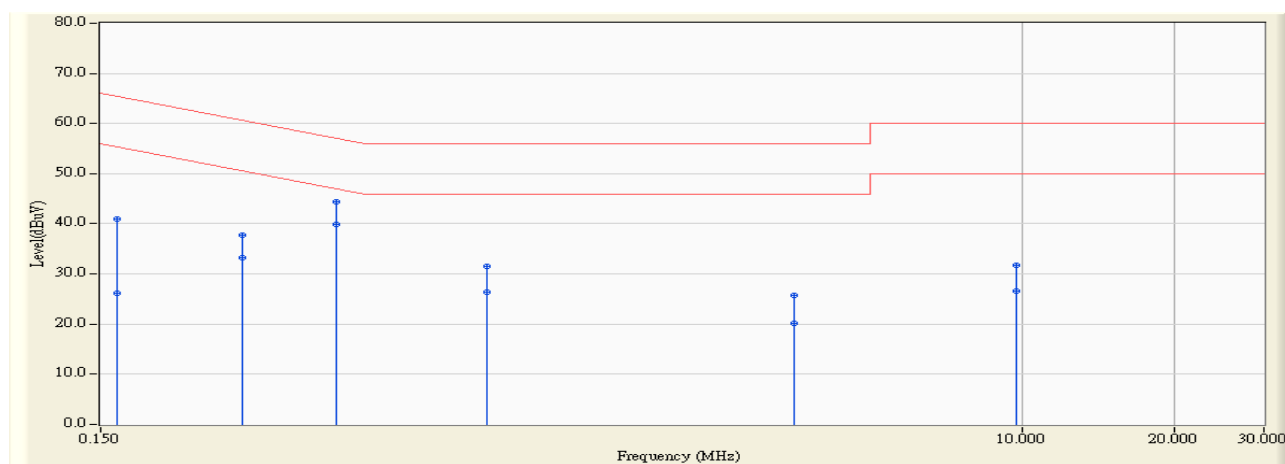


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.189	9.751	28.010	37.761	-26.317	64.078	QUASIPeAK
2		0.189	9.751	16.070	25.821	-28.257	54.078	AVERAGE
3		0.224	9.750	25.820	35.570	-27.091	62.661	QUASIPeAK
4		0.224	9.750	20.110	29.860	-22.801	52.661	AVERAGE
5		0.447	9.748	35.890	45.638	-11.295	56.933	QUASIPeAK
6	*	0.447	9.748	31.050	40.798	-6.135	46.933	AVERAGE
7		1.451	9.834	16.580	26.414	-29.586	56.000	QUASIPeAK
8		1.451	9.834	11.650	21.484	-24.516	46.000	AVERAGE
9		3.361	9.843	14.950	24.793	-31.207	56.000	QUASIPeAK
10		3.361	9.843	8.250	18.093	-27.907	46.000	AVERAGE
11		13.224	10.253	20.210	30.463	-29.537	60.000	QUASIPeAK
12		13.224	10.253	15.460	25.713	-24.287	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-H	Time : 2017/06/21
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 2: Tx_ADP: AD890326010-2LF_ MIMO Mode (802.11 n20/40)_ 802.11ac(80M)_ 5530MHz

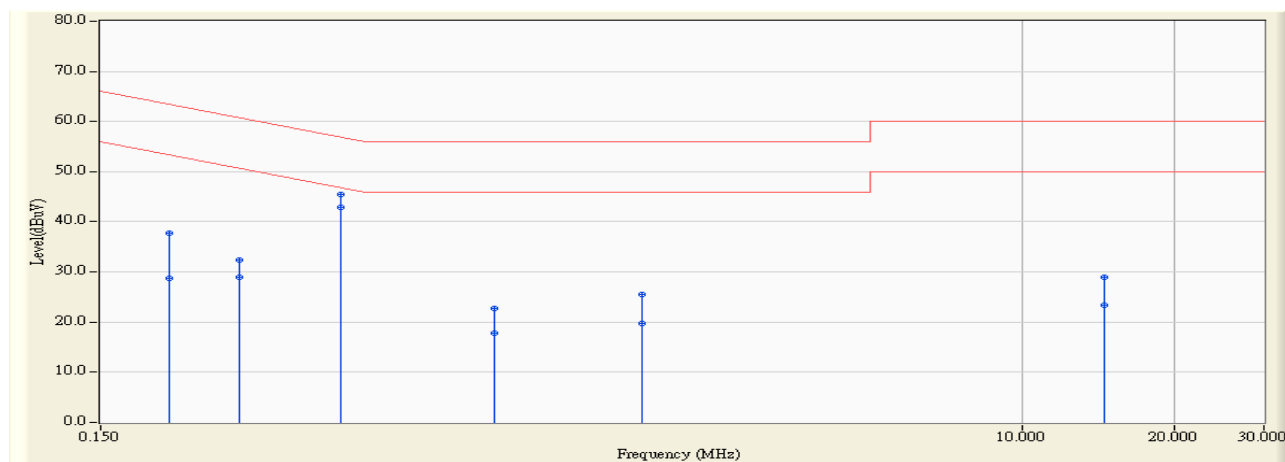


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	9.754	31.110	40.864	-24.511	65.375	QUASPEAK
2		0.162	9.754	16.460	26.214	-29.161	55.375	AVERAGE
3		0.287	9.741	27.940	37.681	-22.938	60.619	QUASPEAK
4		0.287	9.741	23.420	33.161	-17.458	50.619	AVERAGE
5		0.439	9.729	34.610	44.339	-12.740	57.079	QUASPEAK
6	*	0.439	9.729	30.170	39.899	-7.180	47.079	AVERAGE
7		0.873	9.796	21.660	31.456	-24.544	56.000	QUASPEAK
8		0.873	9.796	16.620	26.416	-19.584	46.000	AVERAGE
9		3.529	9.906	15.730	25.636	-30.364	56.000	QUASPEAK
10		3.529	9.906	10.160	20.066	-25.934	46.000	AVERAGE
11		9.701	10.117	21.560	31.677	-28.323	60.000	QUASPEAK
12		9.701	10.117	16.520	26.637	-23.363	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-H	Time : 2017/06/21
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 2: Tx_ADP: AD890326010-2LF_ MIMO Mode (802.11 n20/40)_ 802.11ac(80M)_ 5530MHz

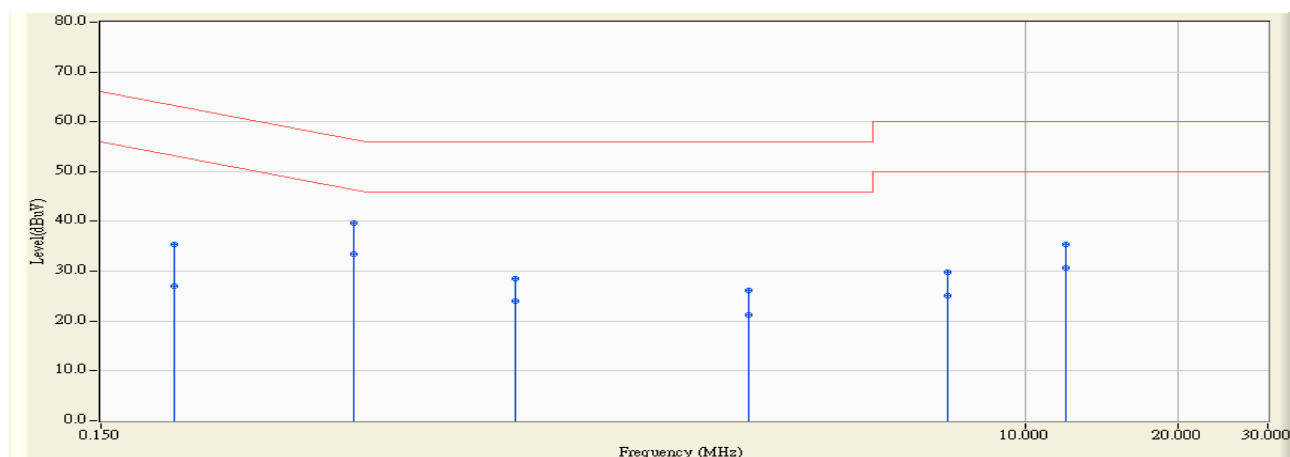


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.205	9.751	28.090	37.841	-25.578	63.418	QUASIPeAK
2		0.205	9.751	19.080	28.831	-24.588	53.418	AVERAGE
3		0.283	9.750	22.740	32.490	-28.243	60.733	QUASIPeAK
4		0.283	9.750	19.180	28.930	-21.803	50.733	AVERAGE
5		0.447	9.748	35.740	45.488	-11.445	56.933	QUASIPeAK
6	*	0.447	9.748	33.070	42.818	-4.115	46.933	AVERAGE
7		0.900	9.805	12.970	22.775	-33.225	56.000	QUASIPeAK
8		0.900	9.805	8.070	17.875	-28.125	46.000	AVERAGE
9		1.767	9.843	15.660	25.503	-30.497	56.000	QUASIPeAK
10		1.767	9.843	9.930	19.773	-26.227	46.000	AVERAGE
11		14.537	10.295	18.640	28.935	-31.065	60.000	QUASIPeAK
12		14.537	10.295	13.010	23.305	-26.695	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-H	Time : 2017/03/03
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 2: Tx_ADP: AD890326010-2LF_ MIMO Mode (802.11 n20/40)_ 802.11ac(80M)_ 5775MHz

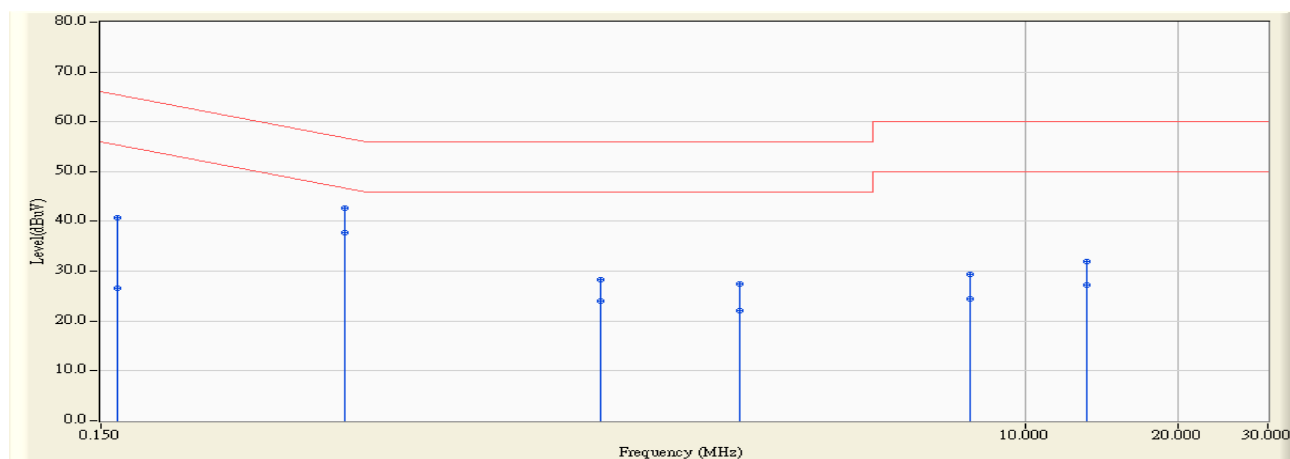


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.209	9.749	25.540	35.289	-27.972	63.261	QUASIPeAK
2		0.209	9.749	17.250	26.999	-26.262	53.261	AVERAGE
3		0.474	9.729	29.970	39.699	-16.741	56.440	QUASIPeAK
4	*	0.474	9.729	23.650	33.379	-13.061	46.440	AVERAGE
5		0.986	9.817	18.720	28.537	-27.463	56.000	QUASIPeAK
6		0.986	9.817	14.270	24.087	-21.913	46.000	AVERAGE
7		2.834	9.885	16.230	26.115	-29.885	56.000	QUASIPeAK
8		2.834	9.885	11.400	21.285	-24.715	46.000	AVERAGE
9		7.005	10.005	19.890	29.895	-30.105	60.000	QUASIPeAK
10		7.005	10.005	15.130	25.135	-24.865	50.000	AVERAGE
11		11.955	10.165	25.210	35.375	-24.625	60.000	QUASIPeAK
12		11.955	10.165	20.470	30.635	-19.365	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-H	Time : 2017/03/03
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 2: Tx_ADP: AD890326010-2LF_ MIMO Mode (802.11 n20/40)_ 802.11ac(80M)_ 5775MHz

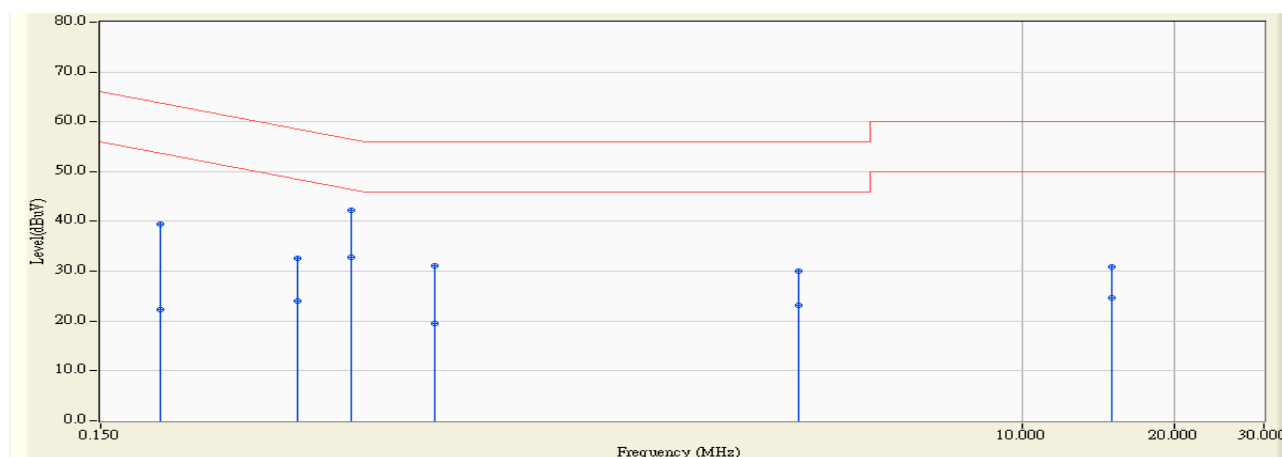


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	9.754	31.020	40.774	-24.601	65.375	QUASIPeAK
2		0.162	9.754	16.740	26.494	-28.881	55.375	AVERAGE
3		0.455	9.747	32.840	42.587	-14.202	56.789	QUASIPeAK
4	*	0.455	9.747	27.910	37.657	-9.132	46.789	AVERAGE
5		1.447	9.833	18.570	28.403	-27.597	56.000	QUASIPeAK
6		1.447	9.833	14.280	24.113	-21.887	46.000	AVERAGE
7		2.724	9.846	17.530	27.376	-28.624	56.000	QUASIPeAK
8		2.724	9.846	12.260	22.106	-23.894	46.000	AVERAGE
9		7.740	10.019	19.450	29.468	-30.532	60.000	QUASIPeAK
10		7.740	10.019	14.530	24.548	-25.452	50.000	AVERAGE
11		13.170	10.251	21.780	32.031	-27.969	60.000	QUASIPeAK
12		13.170	10.251	16.970	27.221	-22.779	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-H	Time : 2017/03/03
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 4: Tx_ADP: ADP-33AW 802.11ac(80M)_5210MHz

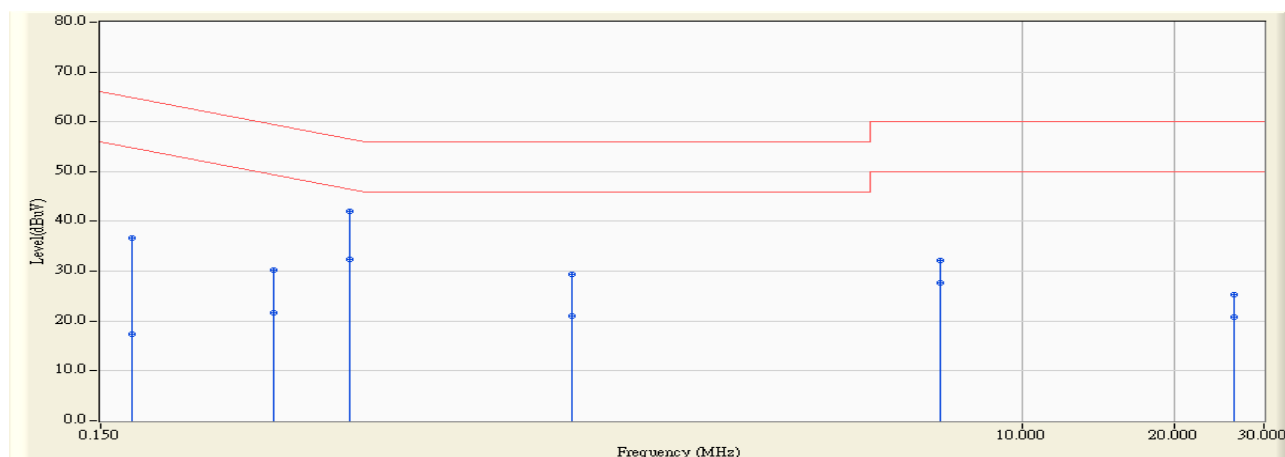


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.197	9.750	29.800	39.550	-24.191	63.741	QUASIPeAK
2		0.197	9.750	12.580	22.330	-31.411	53.741	AVERAGE
3		0.369	9.733	22.890	32.623	-25.906	58.529	QUASIPeAK
4		0.369	9.733	14.260	23.993	-24.536	48.529	AVERAGE
5		0.470	9.729	32.570	42.299	-14.210	56.508	QUASIPeAK
6	*	0.470	9.729	23.170	32.899	-13.610	46.508	AVERAGE
7		0.689	9.763	21.380	31.143	-24.857	56.000	QUASIPeAK
8		0.689	9.763	9.780	19.543	-26.457	46.000	AVERAGE
9		3.595	9.908	20.030	29.938	-26.062	56.000	QUASIPeAK
10		3.595	9.908	13.160	23.068	-22.932	46.000	AVERAGE
11		15.021	10.220	20.560	30.780	-29.220	60.000	QUASIPeAK
12		15.021	10.220	14.350	24.570	-25.430	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-H	Time : 2017/03/03
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 4: Tx_ADP: ADP-33AW 802.11ac(80M)_5210MHz

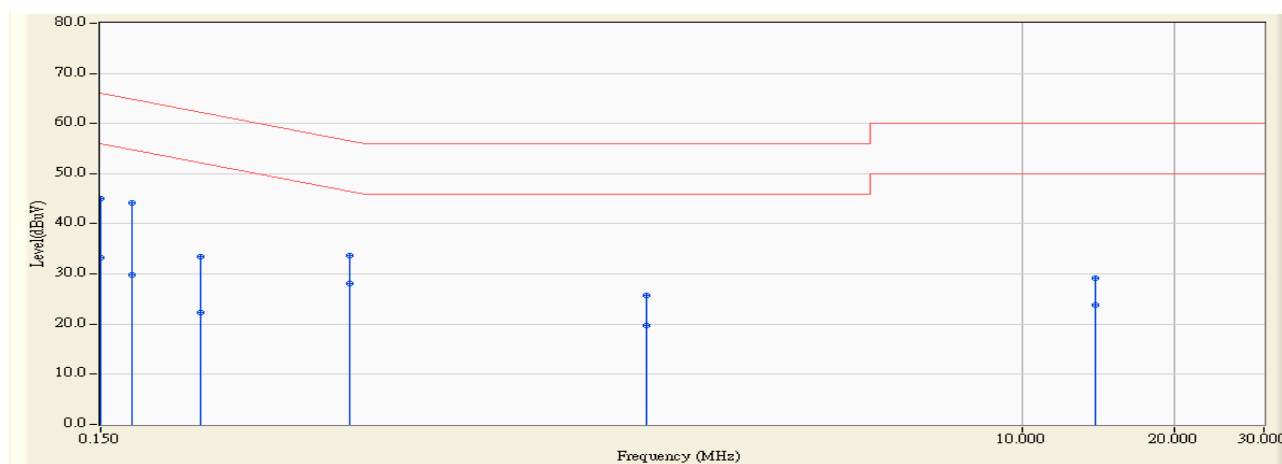


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.173	9.753	26.880	36.633	-28.161	64.794	QUASIPeAK
2		0.173	9.753	7.650	17.403	-37.391	54.794	AVERAGE
3		0.330	9.750	20.420	30.170	-29.289	59.459	QUASIPeAK
4		0.330	9.750	11.860	21.610	-27.849	49.459	AVERAGE
5		0.466	9.747	32.230	41.977	-14.601	56.578	QUASIPeAK
6	*	0.466	9.747	22.550	32.297	-14.281	46.578	AVERAGE
7		1.287	9.829	19.510	29.339	-26.661	56.000	QUASIPeAK
8		1.287	9.829	11.190	21.019	-24.981	46.000	AVERAGE
9		6.853	9.966	22.280	32.246	-27.754	60.000	QUASIPeAK
10		6.853	9.966	17.790	27.756	-22.244	50.000	AVERAGE
11		26.216	10.571	14.730	25.301	-34.699	60.000	QUASIPeAK
12		26.216	10.571	10.140	20.711	-29.289	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-H	Time : 2017/06/21
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 4: Tx_ADP: ADP-33AW 802.11ac(80M)_5290MHz

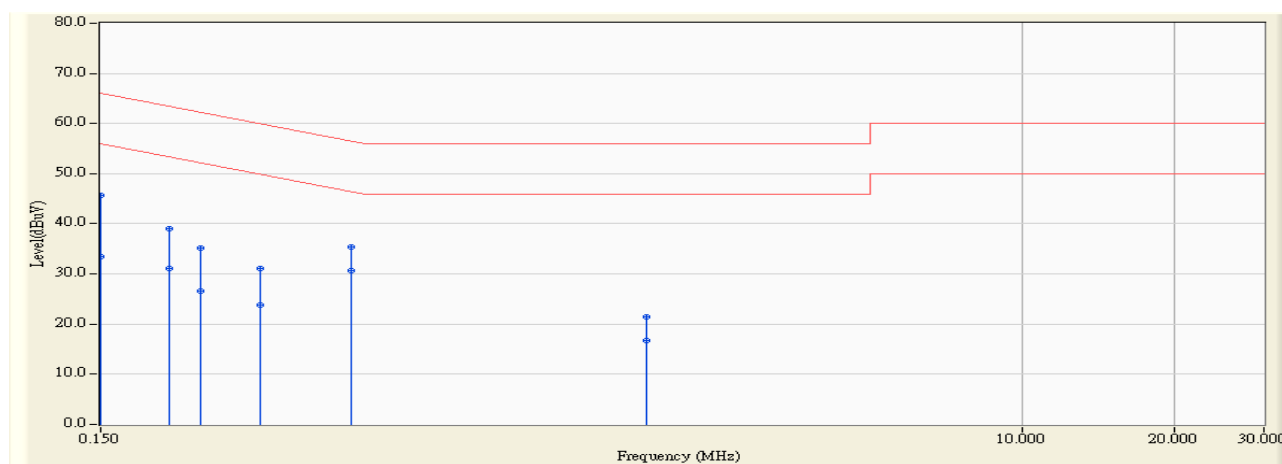


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.150	9.741	35.320	45.061	-20.939	66.000	QUASIPeAK
2		0.150	9.741	23.570	33.311	-22.689	56.000	AVERAGE
3		0.173	9.753	34.410	44.163	-20.631	64.794	QUASIPeAK
4		0.173	9.753	20.070	29.823	-24.971	54.794	AVERAGE
5		0.236	9.746	23.700	33.446	-28.792	62.238	QUASIPeAK
6		0.236	9.746	12.480	22.226	-30.012	52.238	AVERAGE
7		0.466	9.729	24.010	33.739	-22.839	56.578	QUASIPeAK
8	*	0.466	9.729	18.340	28.069	-18.509	46.578	AVERAGE
9		1.806	9.852	15.810	25.662	-30.338	56.000	QUASIPeAK
10		1.806	9.852	9.940	19.792	-26.208	46.000	AVERAGE
11		13.947	10.201	19.060	29.261	-30.739	60.000	QUASIPeAK
12		13.947	10.201	13.660	23.861	-26.139	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-H	Time : 2017/06/21
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 4: Tx_ADP: ADP-33AW 802.11ac(80M)_5290MHz

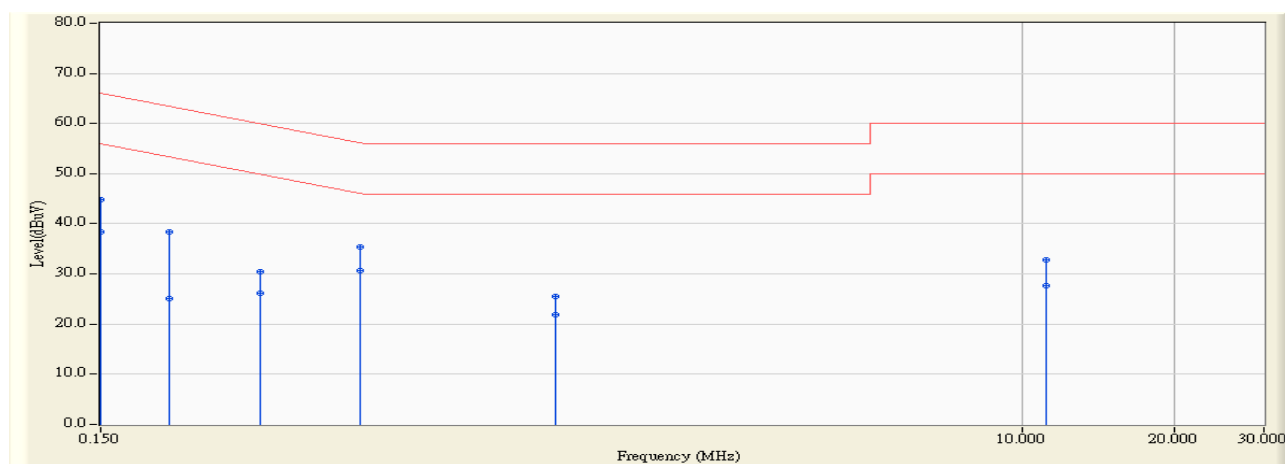


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.150	9.741	35.870	45.611	-20.389	66.000	QUASPEAK
2		0.150	9.741	23.790	33.531	-22.469	56.000	AVERAGE
3		0.205	9.751	29.290	39.041	-24.378	63.418	QUASPEAK
4		0.205	9.751	21.380	31.131	-22.288	53.418	AVERAGE
5		0.236	9.750	25.520	35.270	-26.968	62.238	QUASPEAK
6		0.236	9.750	16.880	26.630	-25.608	52.238	AVERAGE
7		0.310	9.750	21.340	31.090	-28.876	59.966	QUASPEAK
8		0.310	9.750	13.970	23.720	-26.246	49.966	AVERAGE
9		0.470	9.746	25.740	35.486	-21.022	56.508	QUASPEAK
10	*	0.470	9.746	20.890	30.636	-15.872	46.508	AVERAGE
11		1.802	9.844	11.640	21.484	-34.516	56.000	QUASPEAK
12		1.802	9.844	6.810	16.654	-29.346	46.000	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-H	Time : 2017/06/21
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 4: Tx_ADP: ADP-33AW 802.11ac(80M)_5530MHz

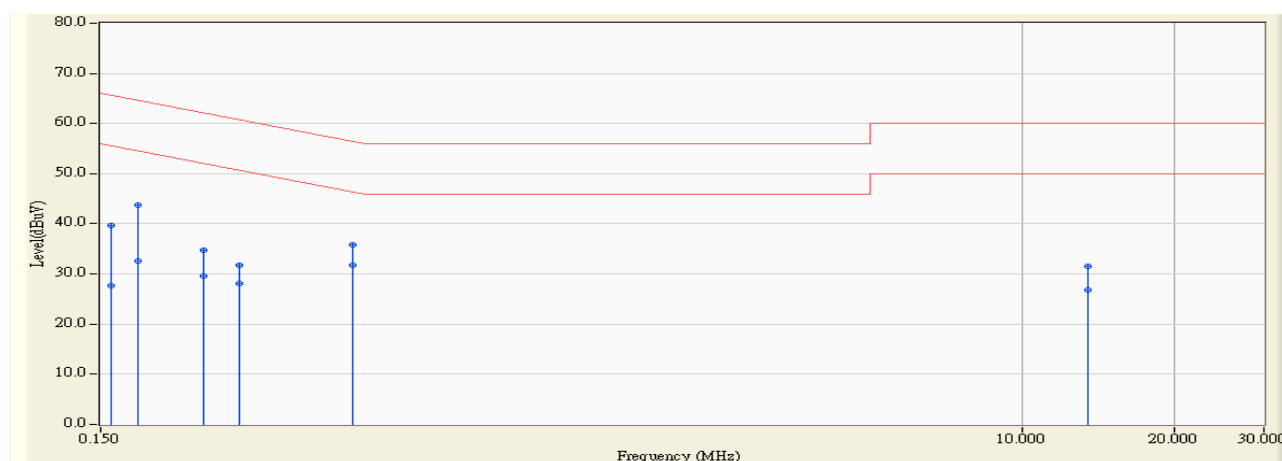


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.150	9.741	35.070	44.811	-21.189	66.000	QUASIPeAK
2		0.150	9.741	28.730	38.471	-17.529	56.000	AVERAGE
3		0.205	9.750	28.640	38.390	-25.029	63.418	QUASIPeAK
4		0.205	9.750	15.330	25.080	-28.339	53.418	AVERAGE
5		0.310	9.739	20.800	30.539	-29.427	59.966	QUASIPeAK
6		0.310	9.739	16.460	26.199	-23.767	49.966	AVERAGE
7		0.490	9.728	25.610	35.339	-20.832	56.170	QUASIPeAK
8	*	0.490	9.728	20.880	30.609	-15.562	46.170	AVERAGE
9		1.193	9.828	15.790	25.618	-30.382	56.000	QUASIPeAK
10		1.193	9.828	12.150	21.978	-24.022	46.000	AVERAGE
11		11.158	10.151	22.750	32.901	-27.099	60.000	QUASIPeAK
12		11.158	10.151	17.600	27.751	-22.249	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-H	Time : 2017/06/21
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 4: Tx_ADP: ADP-33AW 802.11ac(80M)_5530MHz

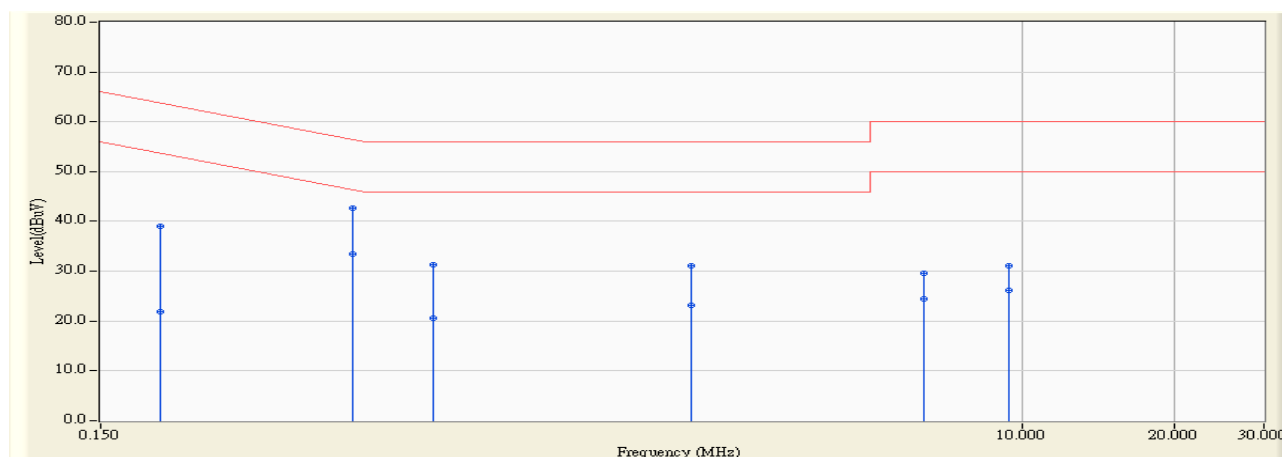


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.751	30.030	39.781	-25.797	65.578	QUASPEAK
2		0.158	9.751	17.900	27.651	-27.927	55.578	AVERAGE
3		0.177	9.752	34.080	43.832	-20.777	64.609	QUASPEAK
4		0.177	9.752	22.900	32.652	-21.957	54.609	AVERAGE
5		0.240	9.750	25.020	34.770	-27.332	62.102	QUASPEAK
6		0.240	9.750	19.820	29.570	-22.532	52.102	AVERAGE
7		0.283	9.750	22.030	31.780	-28.953	60.733	QUASPEAK
8		0.283	9.750	18.310	28.060	-22.673	50.733	AVERAGE
9		0.474	9.746	26.080	35.826	-20.613	56.440	QUASPEAK
10	*	0.474	9.746	21.990	31.736	-14.703	46.440	AVERAGE
11		13.486	10.262	21.340	31.602	-28.398	60.000	QUASPEAK
12		13.486	10.262	16.620	26.882	-23.118	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-H	Time : 2017/03/03
Limit : CISPR B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 4: Tx_ADP: ADP-33AW 802.11ac(80M)_5775MHz

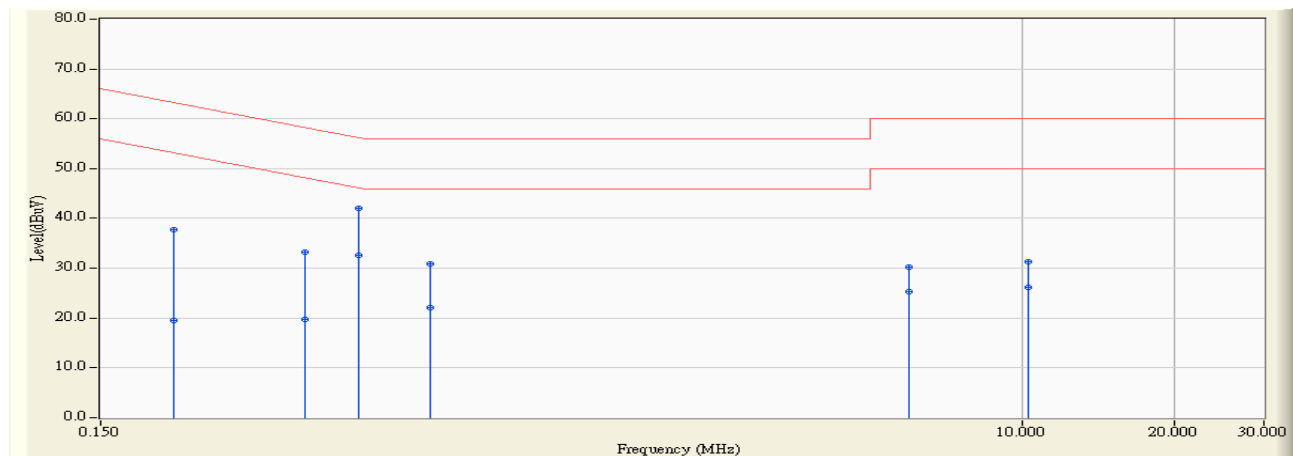


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.197	9.750	29.320	39.070	-24.671	63.741	QUASIPeAK
2		0.197	9.750	12.150	21.900	-31.841	53.741	AVERAGE
3		0.474	9.729	32.990	42.719	-13.721	56.440	QUASIPeAK
4	*	0.474	9.729	23.790	33.519	-12.921	46.440	AVERAGE
5		0.681	9.761	21.580	31.341	-24.659	56.000	QUASIPeAK
6		0.681	9.761	10.830	20.591	-25.409	46.000	AVERAGE
7		2.216	9.867	21.130	30.997	-25.003	56.000	QUASIPeAK
8		2.216	9.867	13.300	23.167	-22.833	46.000	AVERAGE
9		6.388	9.980	19.690	29.669	-30.331	60.000	QUASIPeAK
10		6.388	9.980	14.420	24.399	-25.601	50.000	AVERAGE
11		9.388	10.104	20.910	31.014	-28.986	60.000	QUASIPeAK
12		9.388	10.104	16.040	26.144	-23.856	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-H	Time : 2017/03/03
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H_LISN(16A)-6_0712 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2900 Dual Band Gigabit Router	Note : Mode 4: Tx_ADP: ADP-33AW 802.11ac(80M)_5775MHz



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.209	9.750	28.010	37.760	-25.501	63.261	QUASIPeAK
2		0.209	9.750	9.790	19.540	-33.721	53.261	AVERAGE
3		0.380	9.750	23.570	33.320	-24.949	58.269	QUASIPeAK
4		0.380	9.750	10.030	19.780	-28.489	48.269	AVERAGE
5		0.486	9.746	32.350	42.096	-14.141	56.237	QUASIPeAK
6	*	0.486	9.746	22.850	32.596	-13.641	46.237	AVERAGE
7		0.673	9.771	21.050	30.821	-25.179	56.000	QUASIPeAK
8		0.673	9.771	12.400	22.171	-23.829	46.000	AVERAGE
9		5.966	9.915	20.250	30.165	-29.835	60.000	QUASIPeAK
10		5.966	9.915	15.290	25.205	-24.795	50.000	AVERAGE
11		10.255	10.158	21.230	31.388	-28.612	60.000	QUASIPeAK
12		10.255	10.158	16.060	26.218	-23.782	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% & 20dB & DTS Bandwidth

3.1. Test Equipment

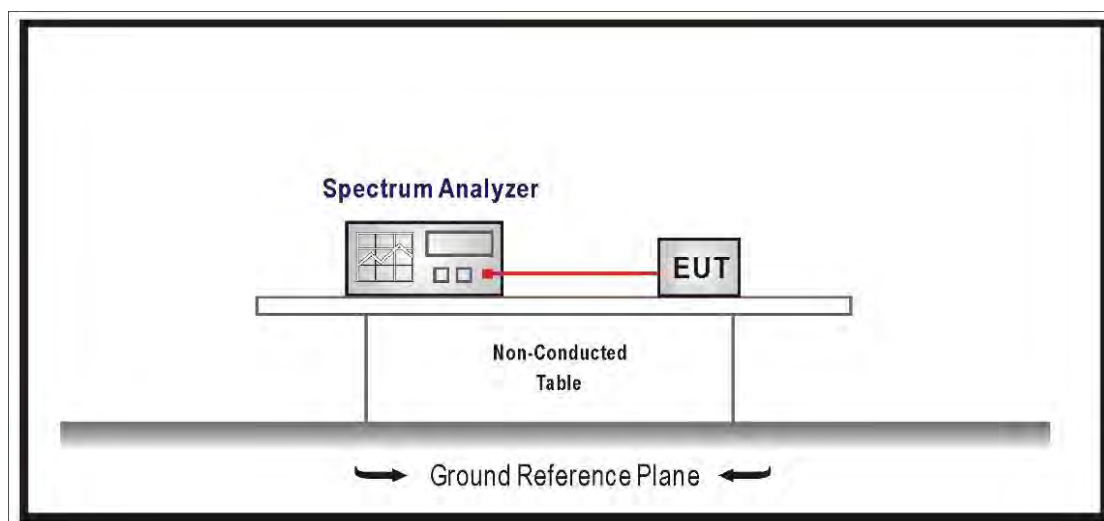
The following test equipments are used during the radiated emission tests:

99%& 26dB & DTS Bandwidth / SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A	US47140172	2017/08/08
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/12

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

6dB Bandwidth $\geq$ 500KHz

3.4. Test Procedure

99% & 26dB Bandwidth :

The EUT was tested according to U-NII test procedure of KDB 789033.D02 V01r04

Set RBW 1% of the emission bandwidth, VBW equal to 3 times the RBW.

DTS Bandwidth :

Set RBW = 100KHz, VBW $\geq$ 3xRBW, Sweep time=Auto, Set Peak detector.

3.5. Uncertainty

The measurement uncertainty is defined as ± 150 Hz

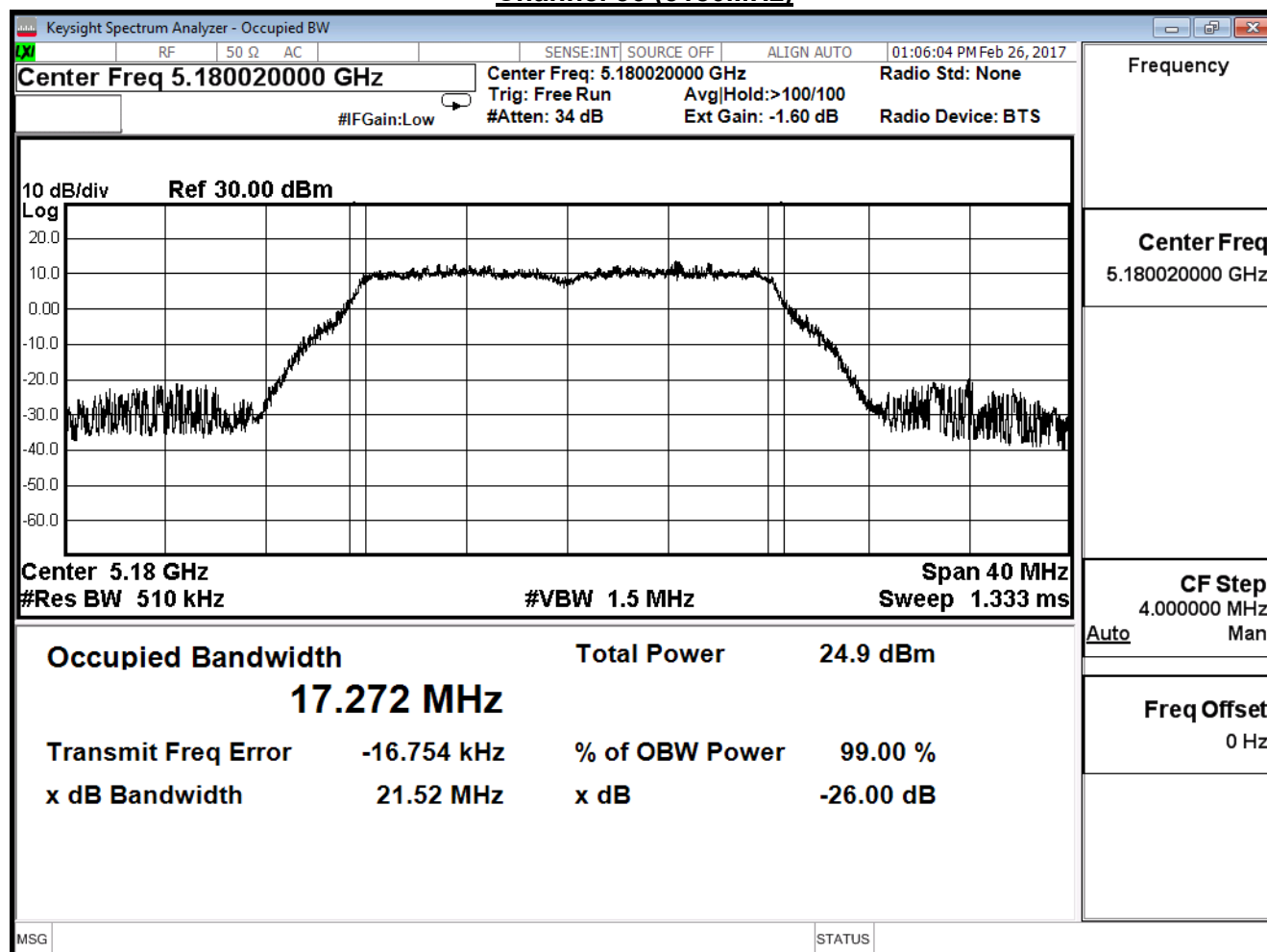
3.6. Test Result

Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx_AD P: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/02/26	Test Site	SR10-H

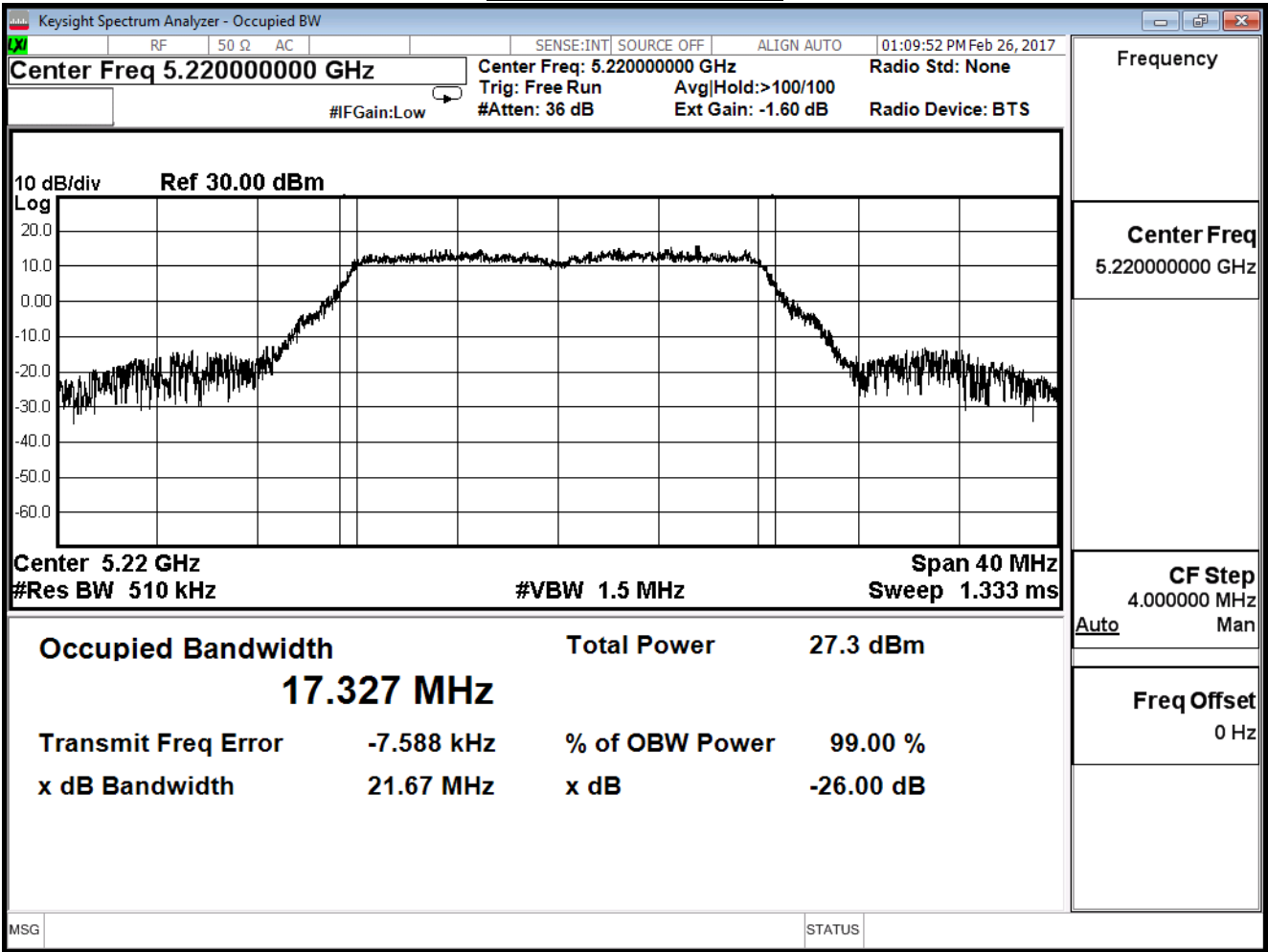
802.11a (ANT 0)

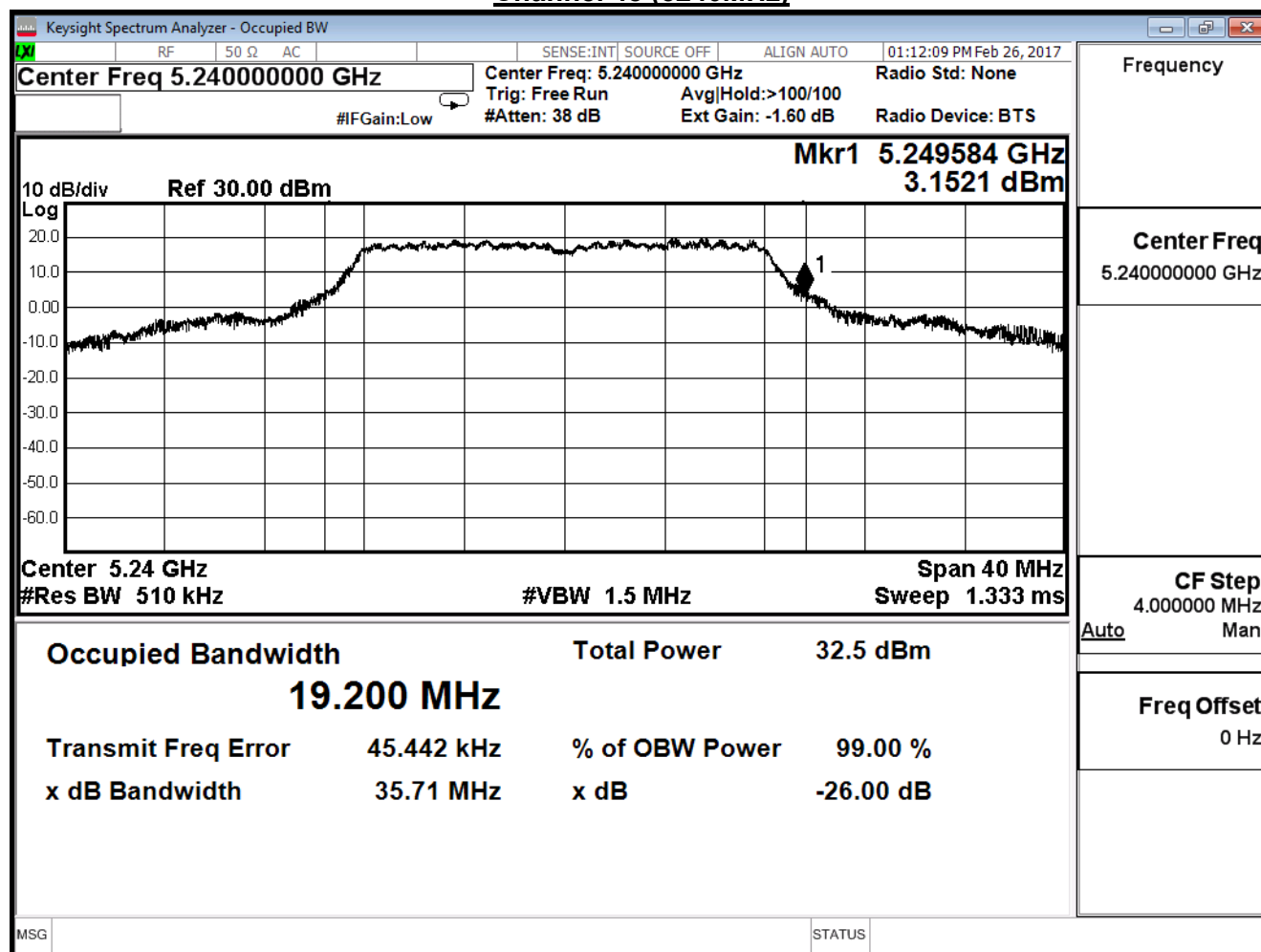
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	21.520	17.272	--	Pass
44	5220	21.670	17.327	--	Pass
48	5240	35.710	19.200	--	Pass

Channel 36 (5180MHz)



Channel 44 (5220MHz)

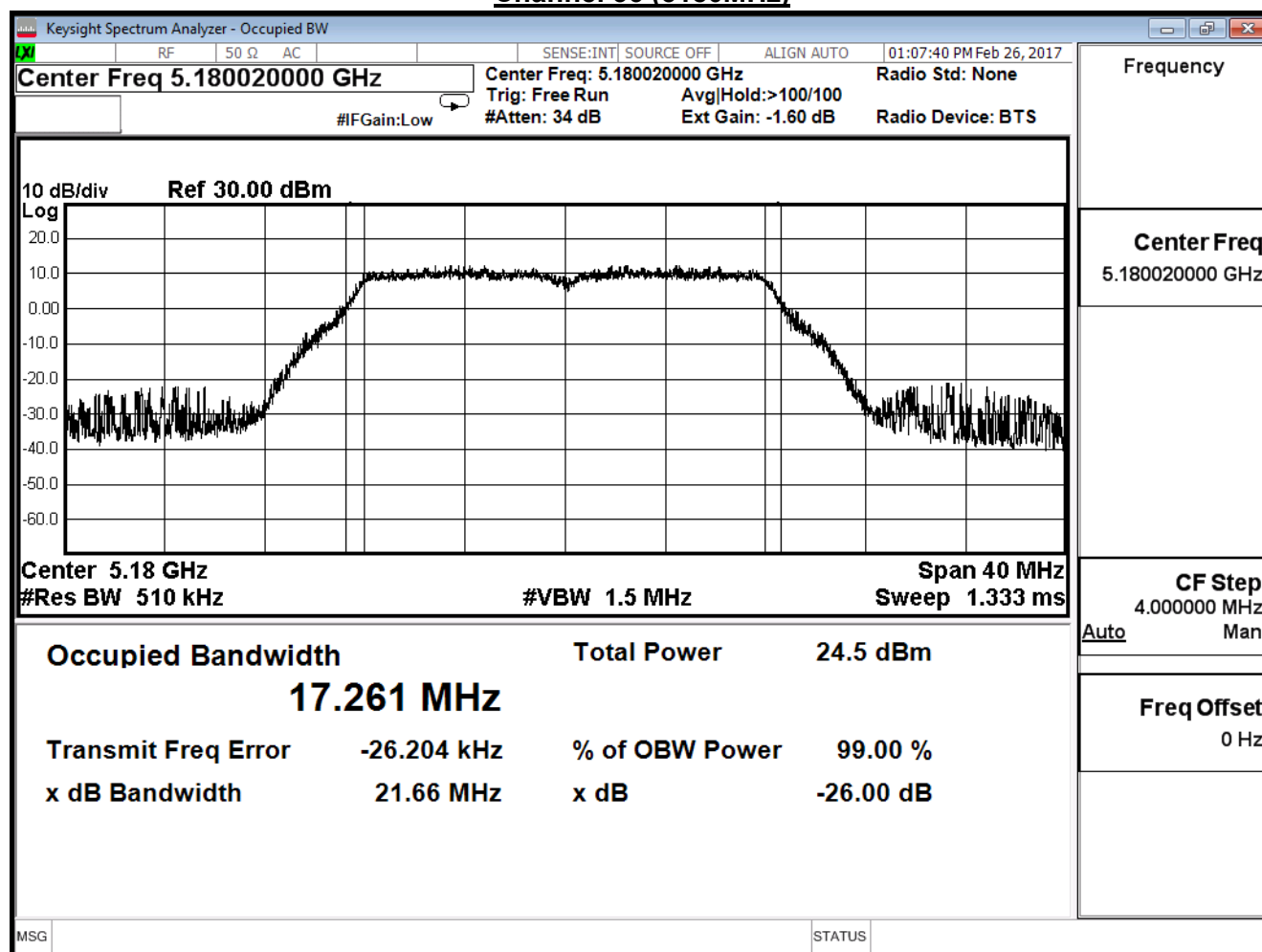


Channel 48 (5240MHz)

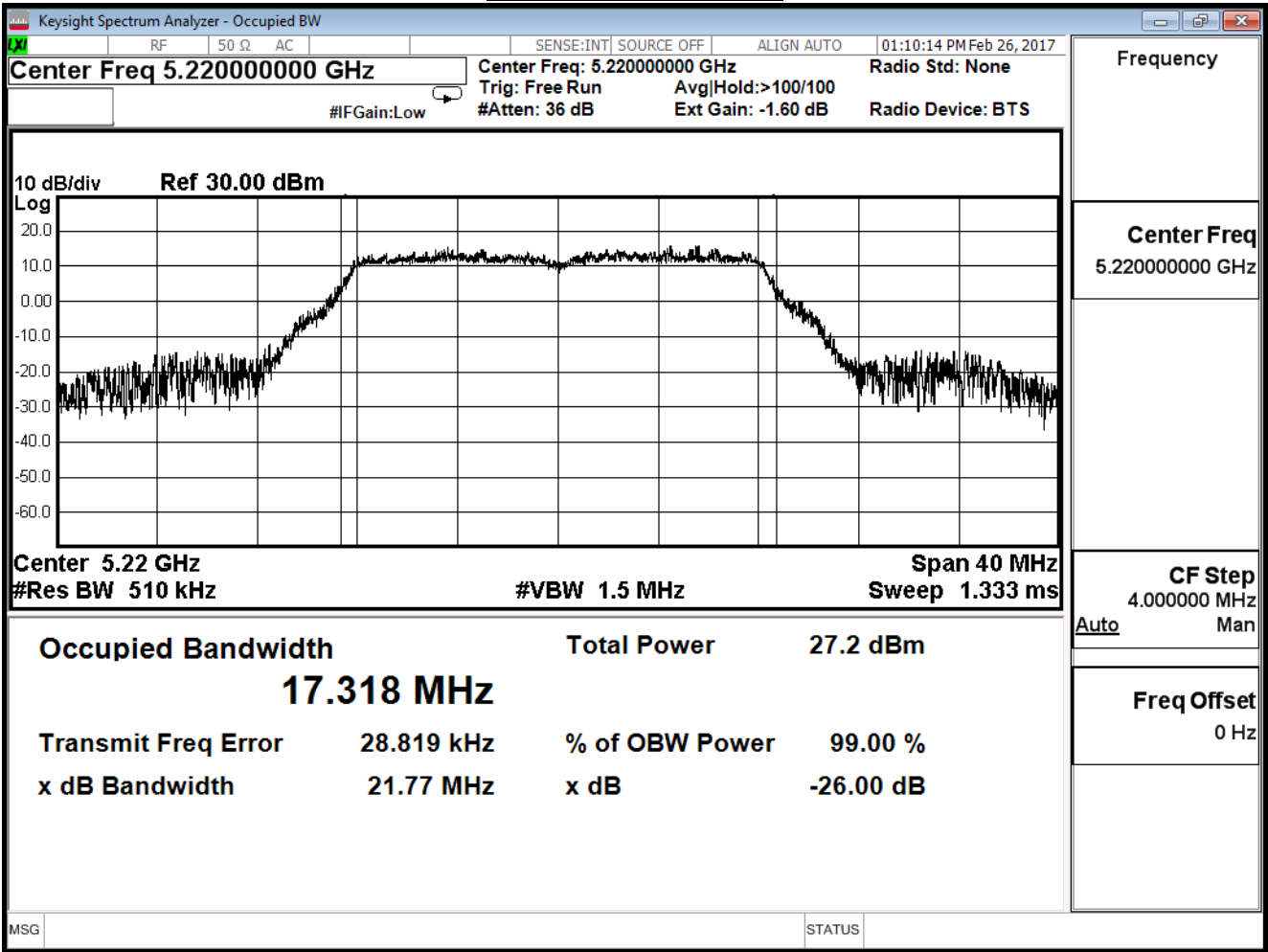
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11a (ANT 1)

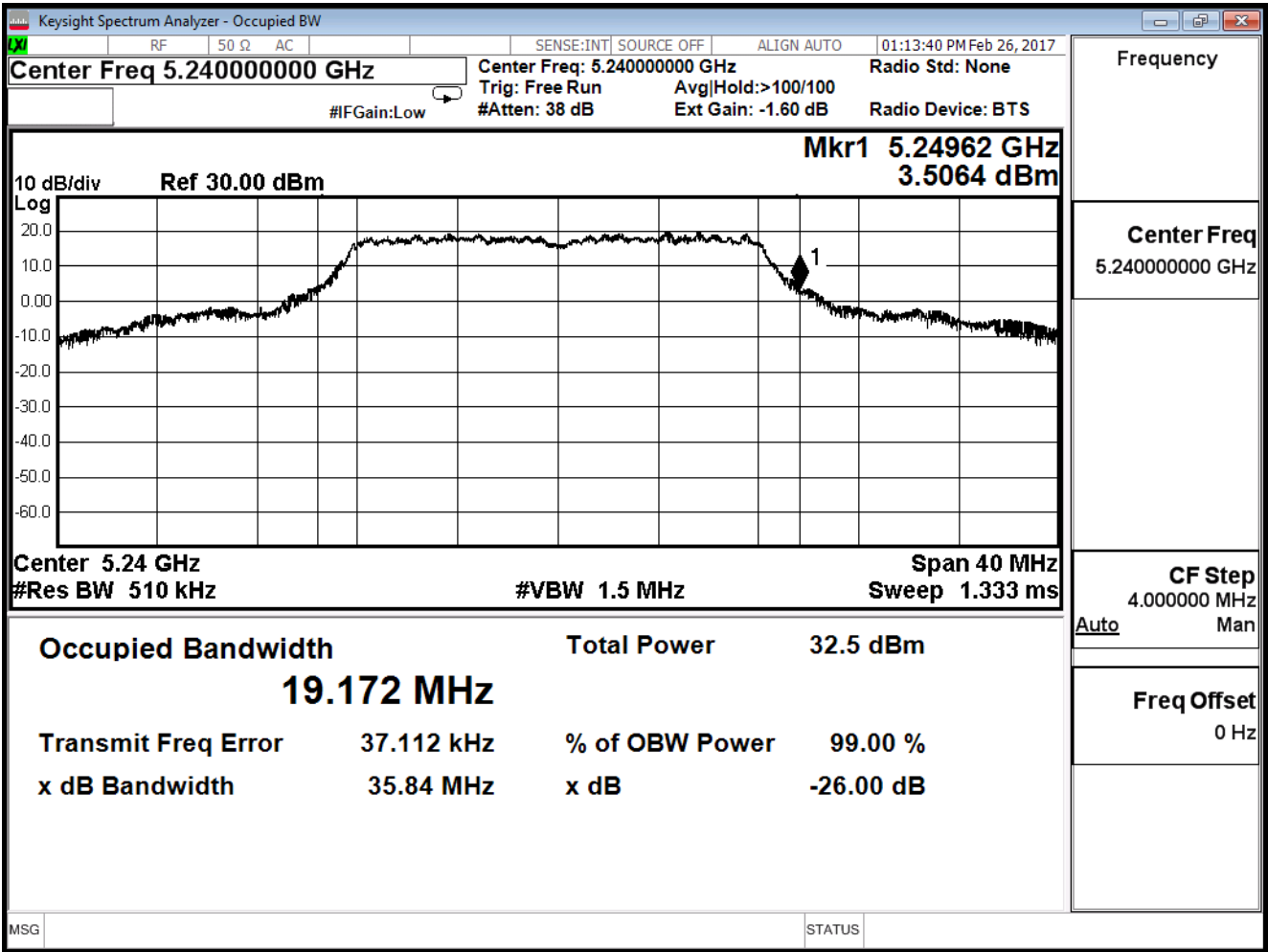
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	21.660	17.261	--	Pass
44	5220	21.770	17.318	--	Pass
48	5240	35.840	19.172	--	Pass

Channel 36 (5180MHz)

Channel 44 (5220MHz)



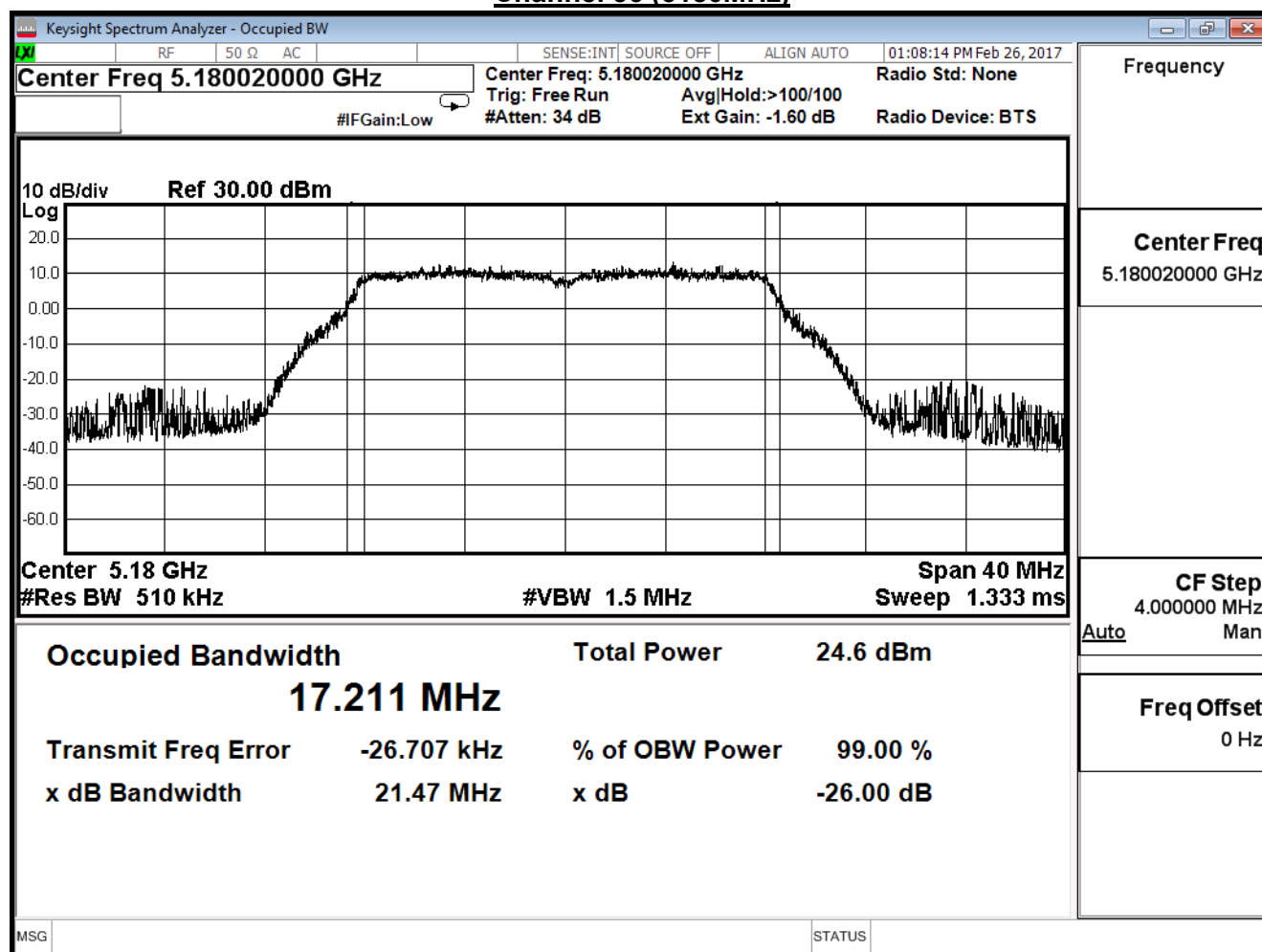
Channel 48 (5240MHz)



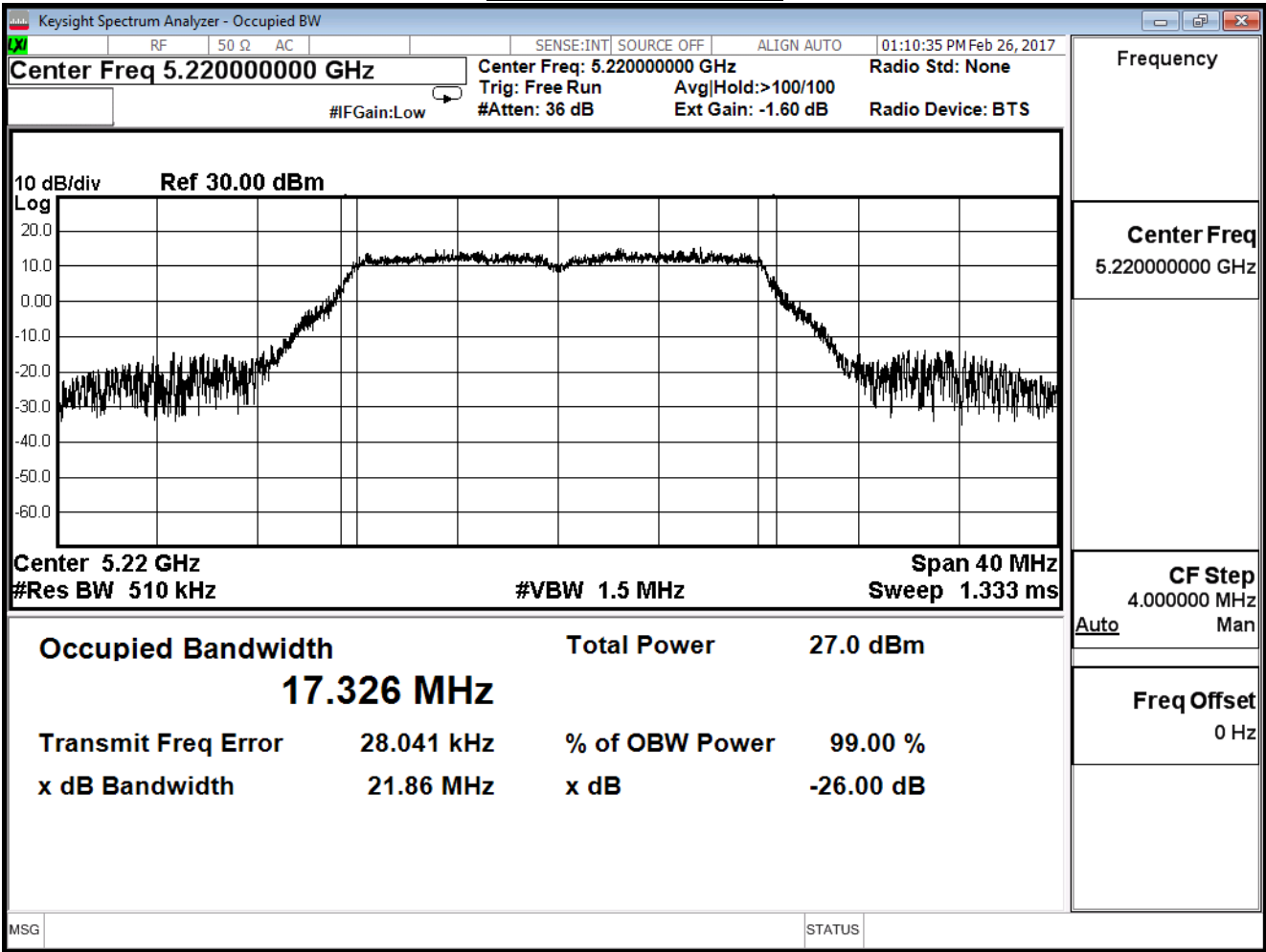
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11a (ANT 2)

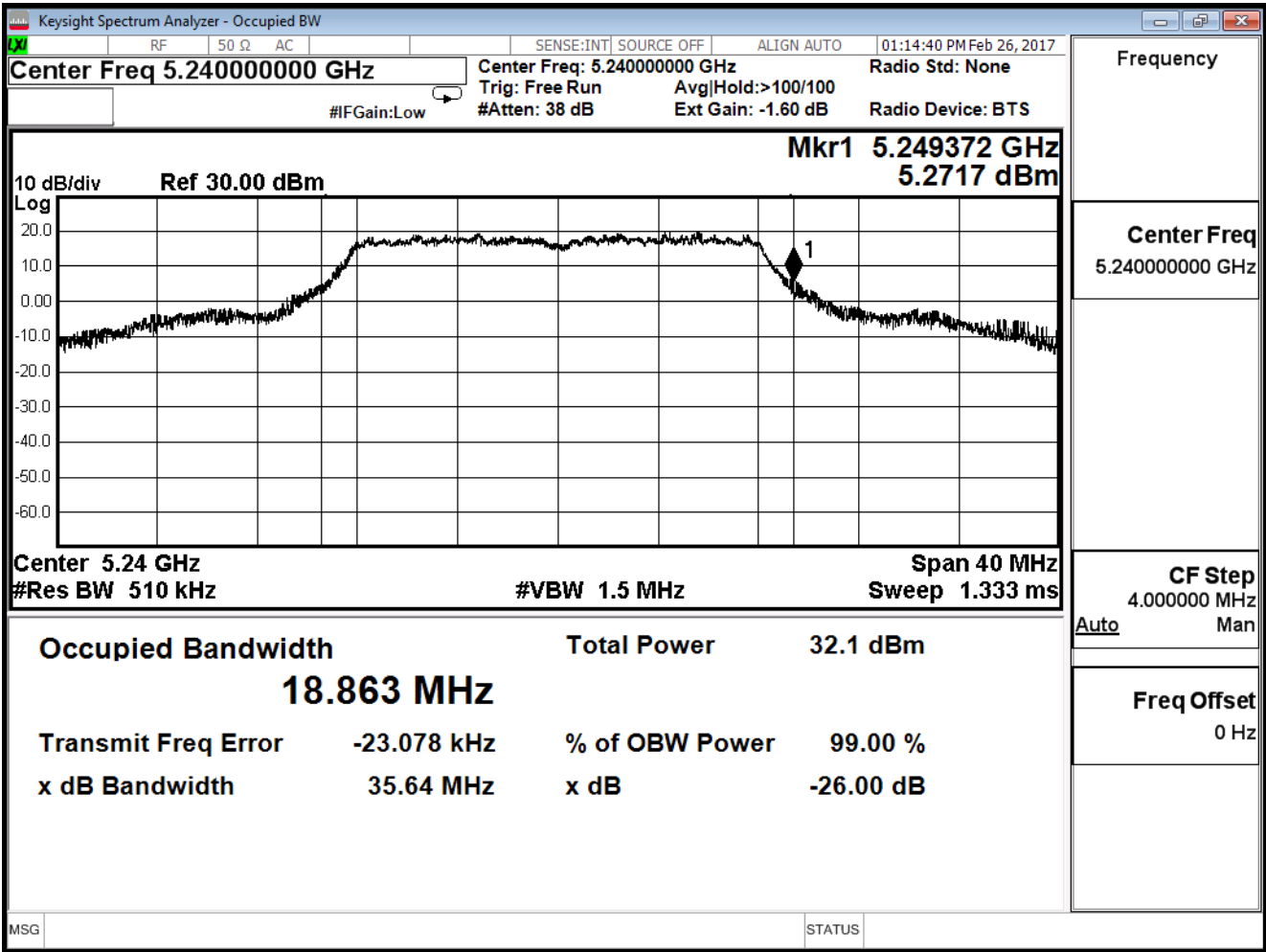
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	21.470	17.211	--	Pass
44	5220	21.860	17.326	--	Pass
48	5240	35.640	18.863	--	Pass

Channel 36 (5180MHz)

Channel 44 (5220MHz)



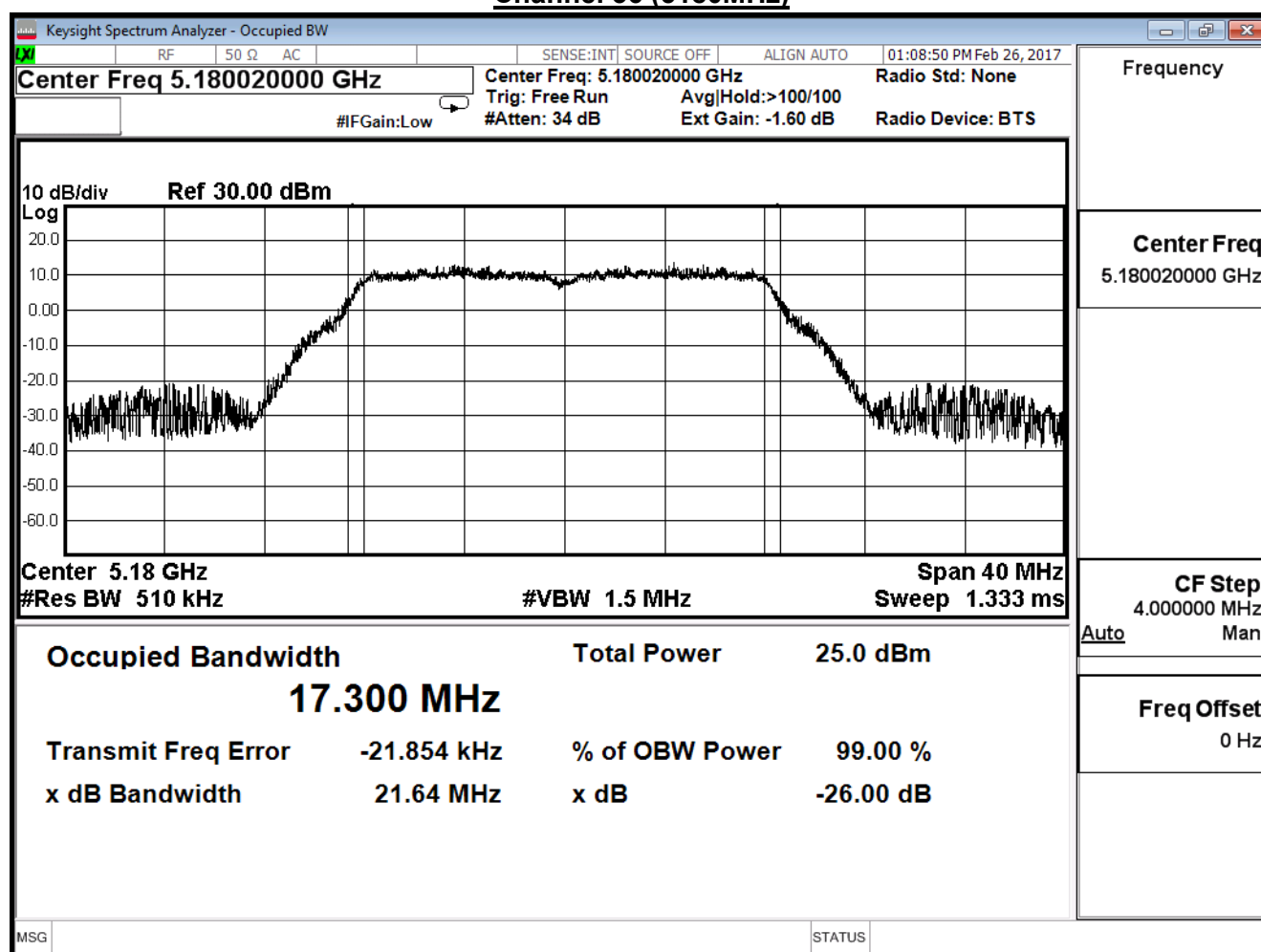
Channel 48 (5240MHz)



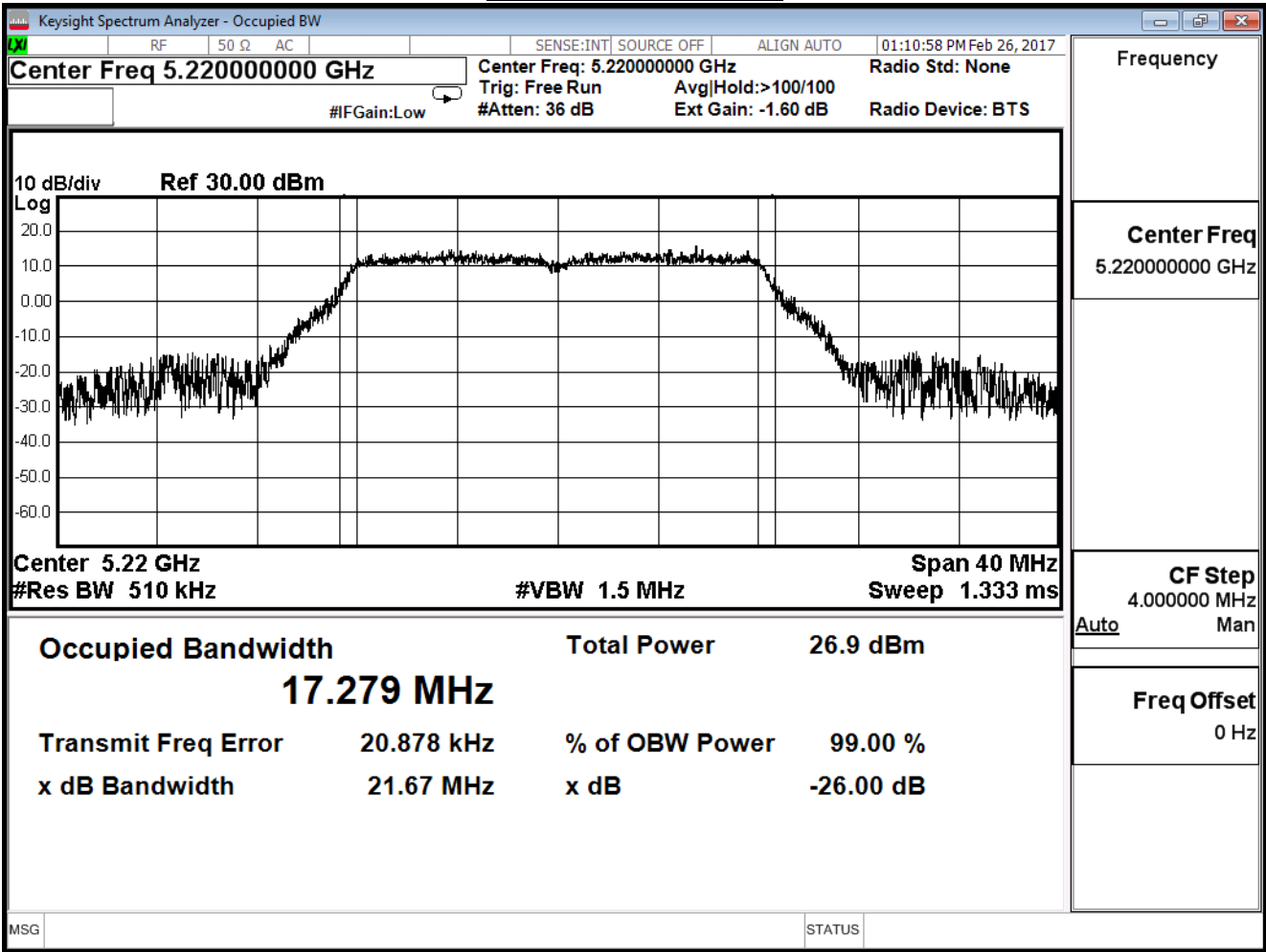
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11a (ANT 3)

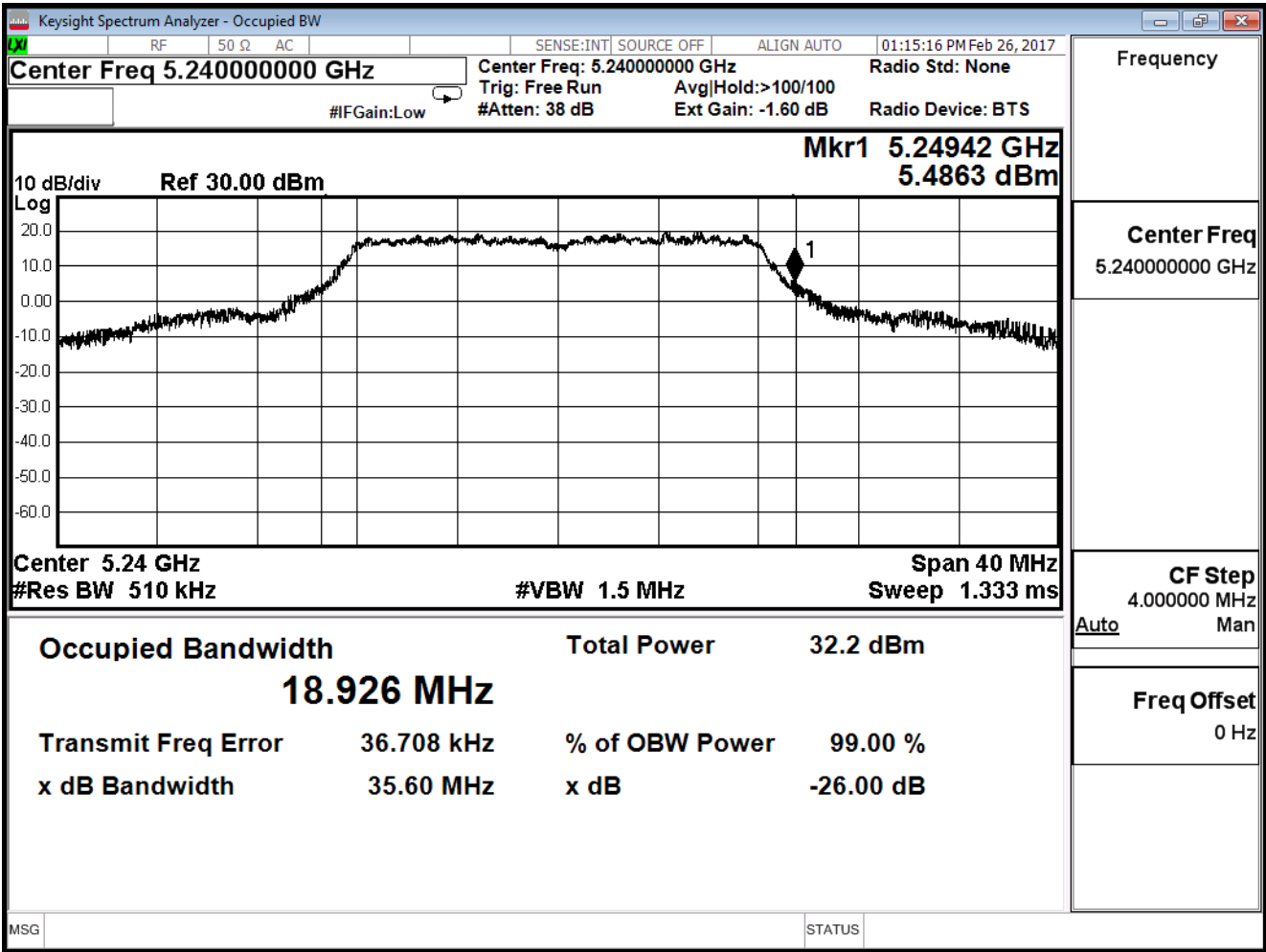
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	21.640	17.300	--	Pass
44	5220	21.670	17.279	--	Pass
48	5240	35.600	18.926	--	Pass

Channel 36 (5180MHz)

Channel 44 (5220MHz)



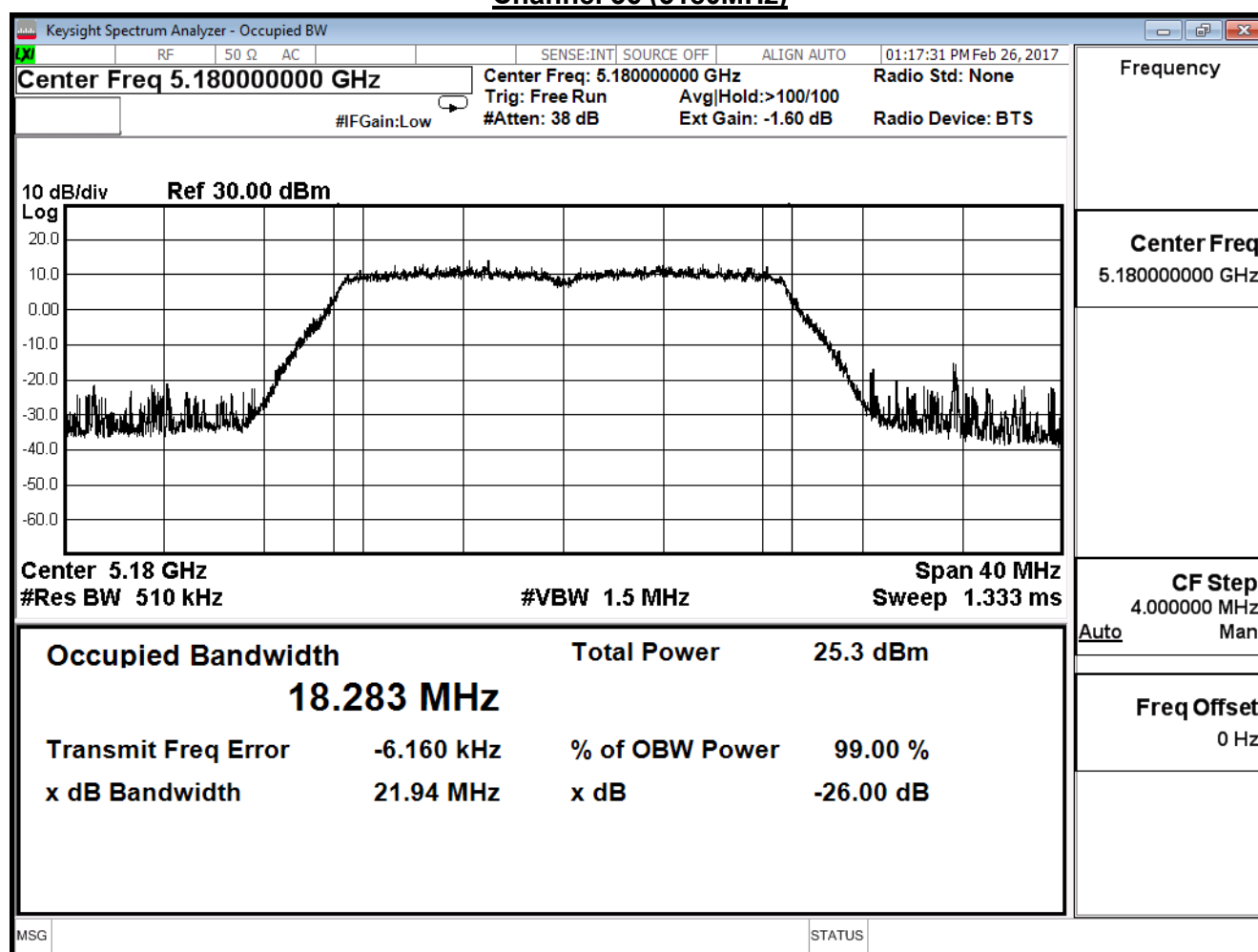
Channel 48 (5240MHz)



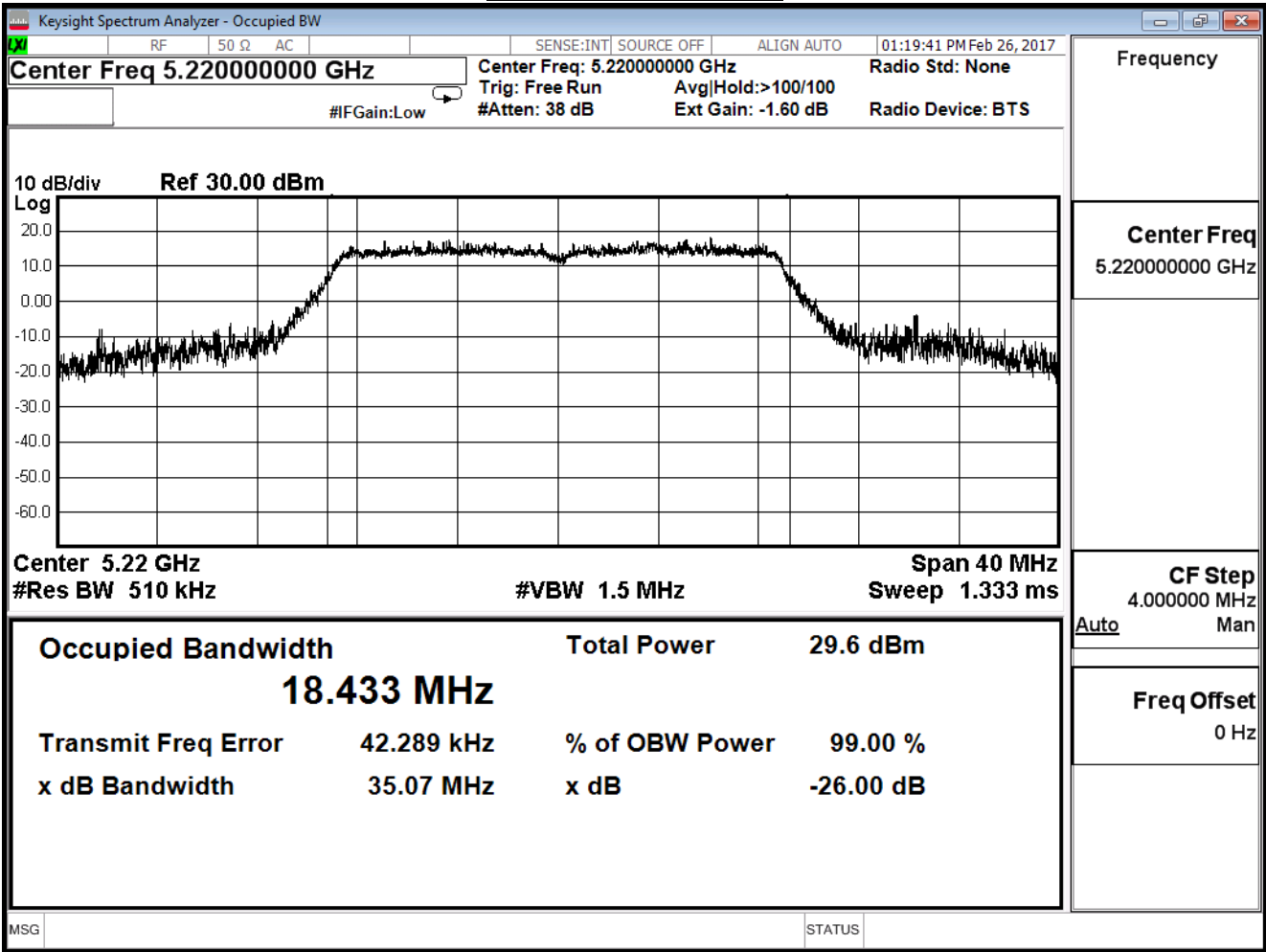
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_ MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

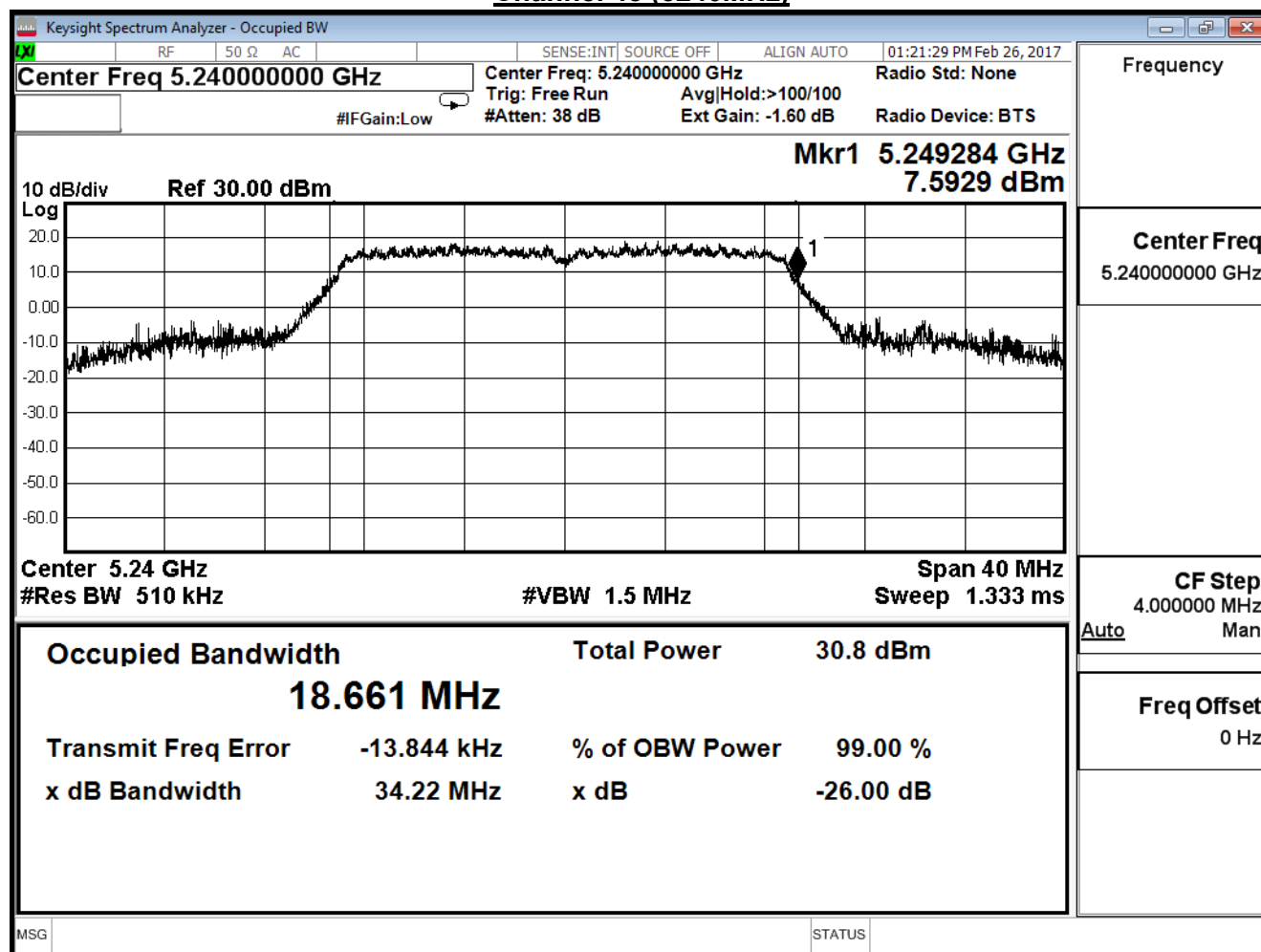
802.11n_20M(ANT 0)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	21.940	18.283	--	Pass
44	5220	35.070	18.433	--	Pass
48	5240	34.220	18.661	--	Pass

Channel 36 (5180MHz)

Channel 44 (5220MHz)

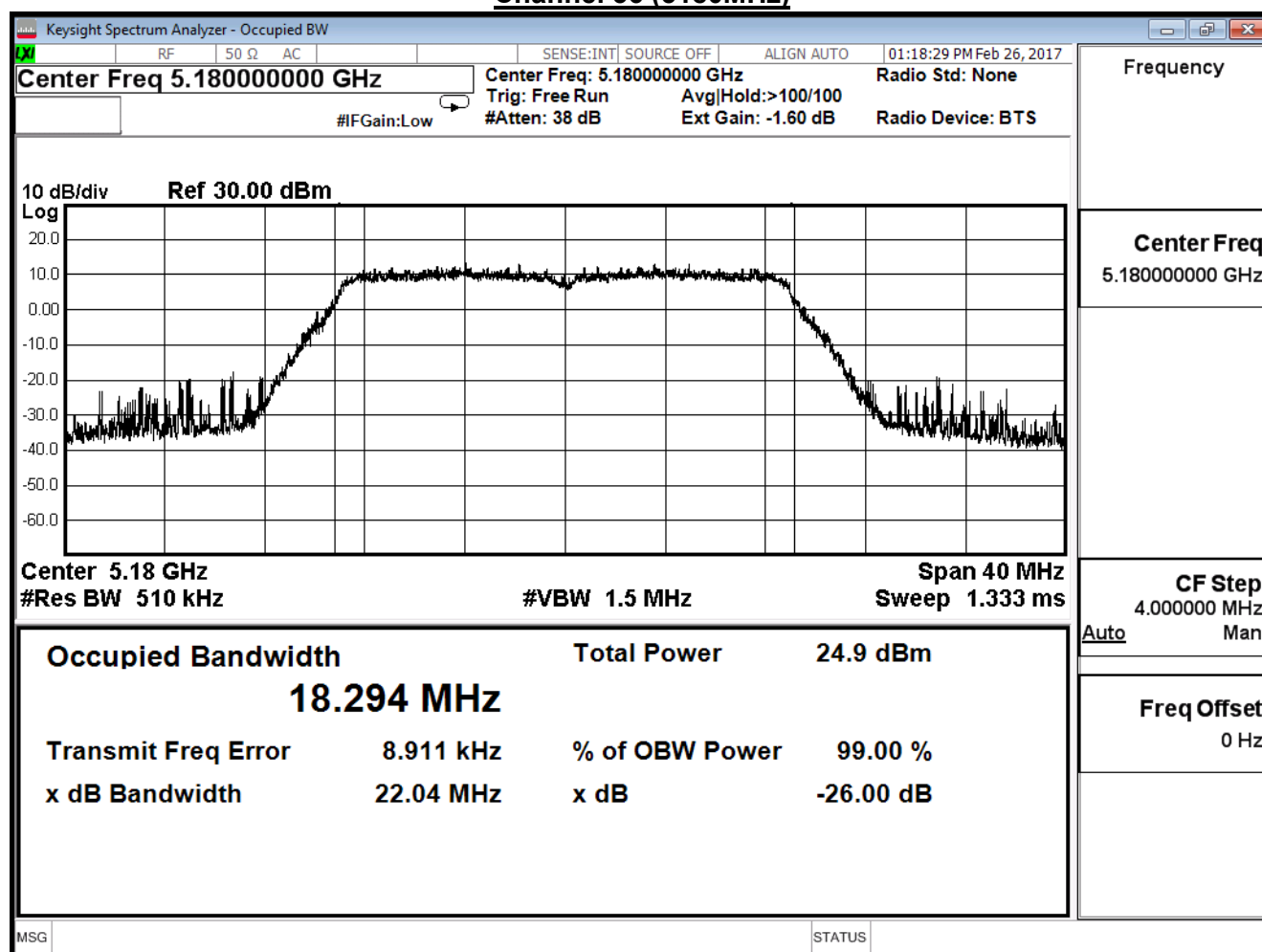


Channel 48 (5240MHz)

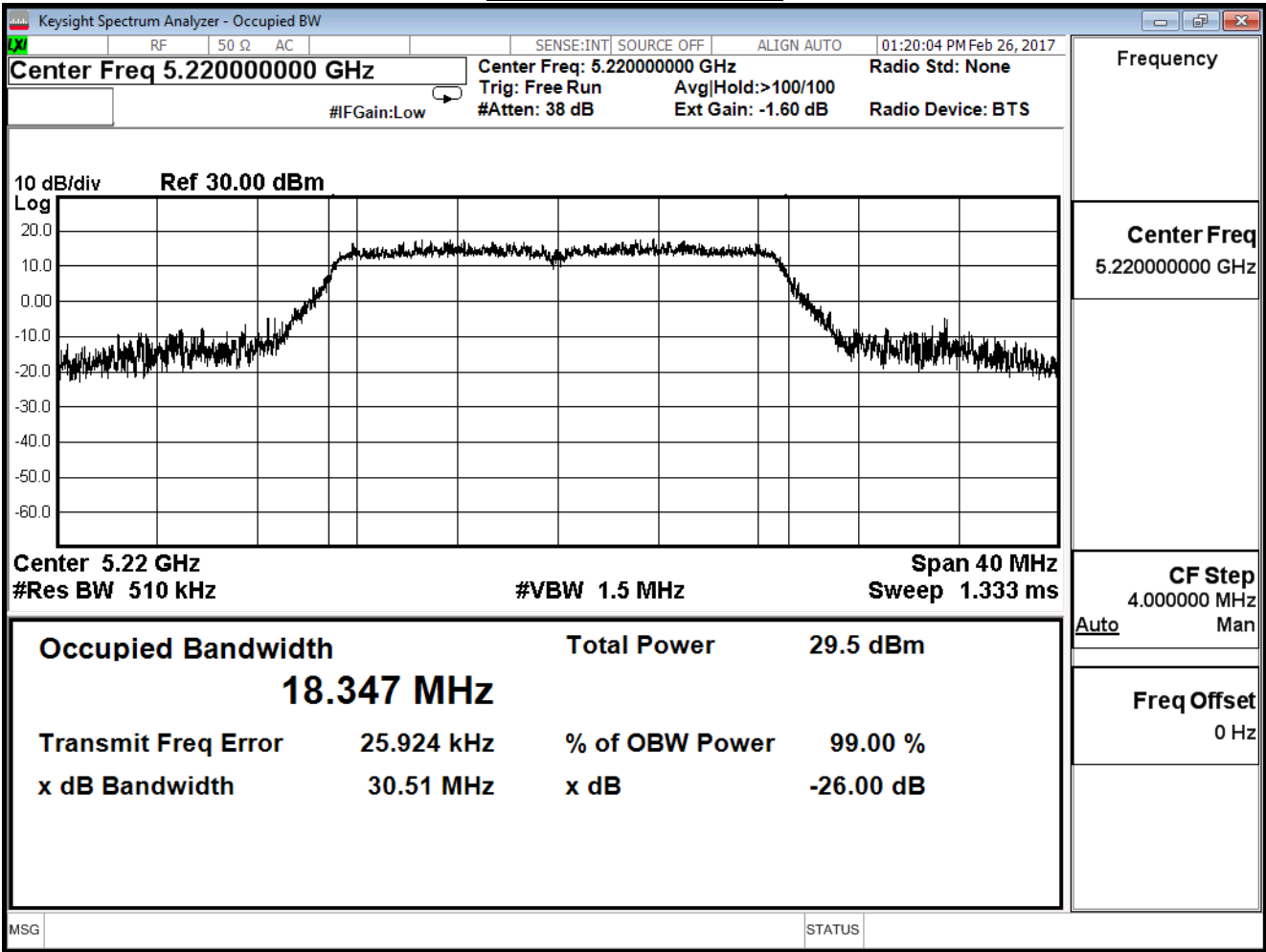
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11n_20M(ANT 1)

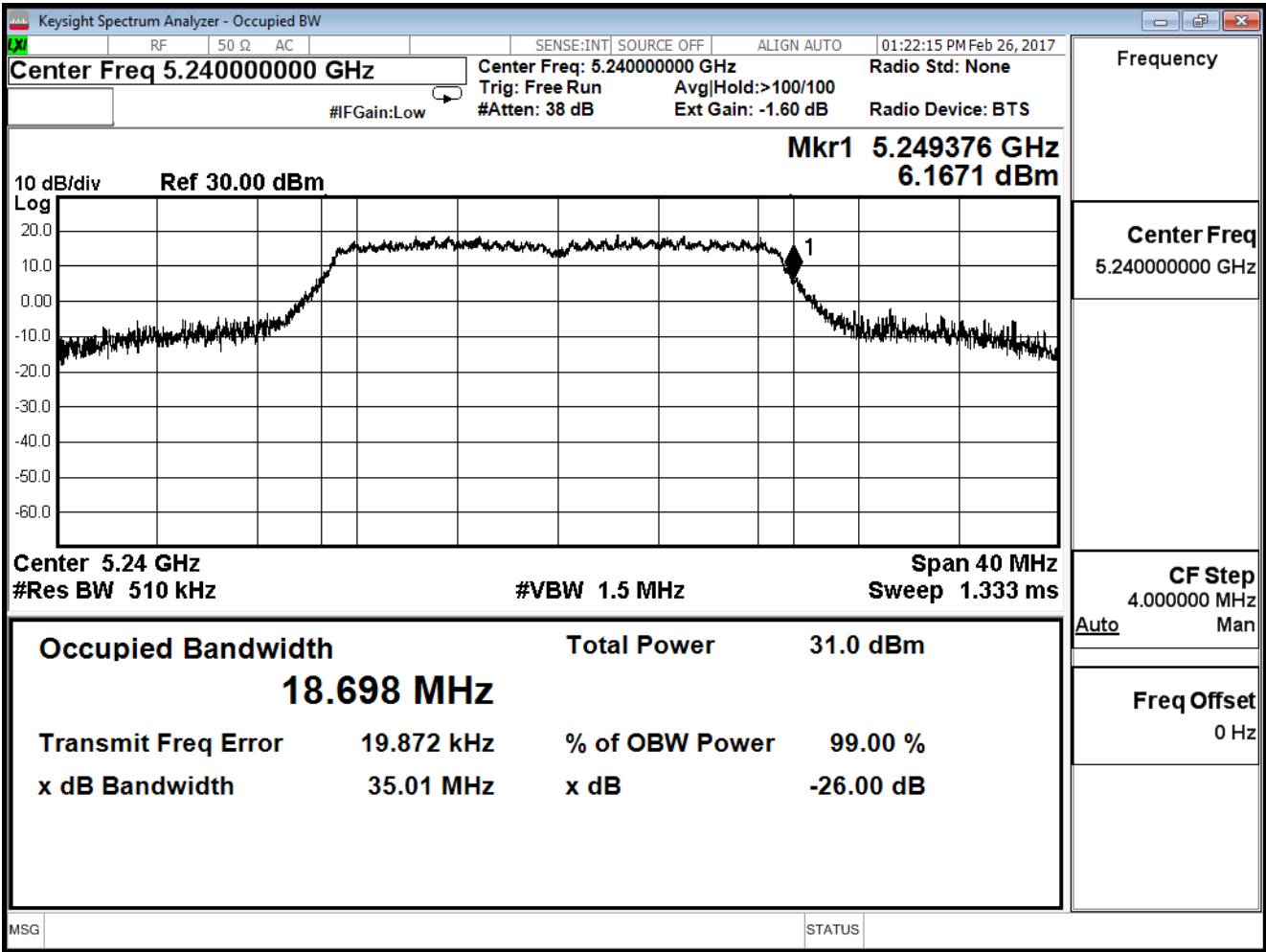
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	22.040	18.294	--	Pass
44	5220	30.510	18.347	--	Pass
48	5240	35.010	18.698	--	Pass

Channel 36 (5180MHz)

Channel 44 (5220MHz)



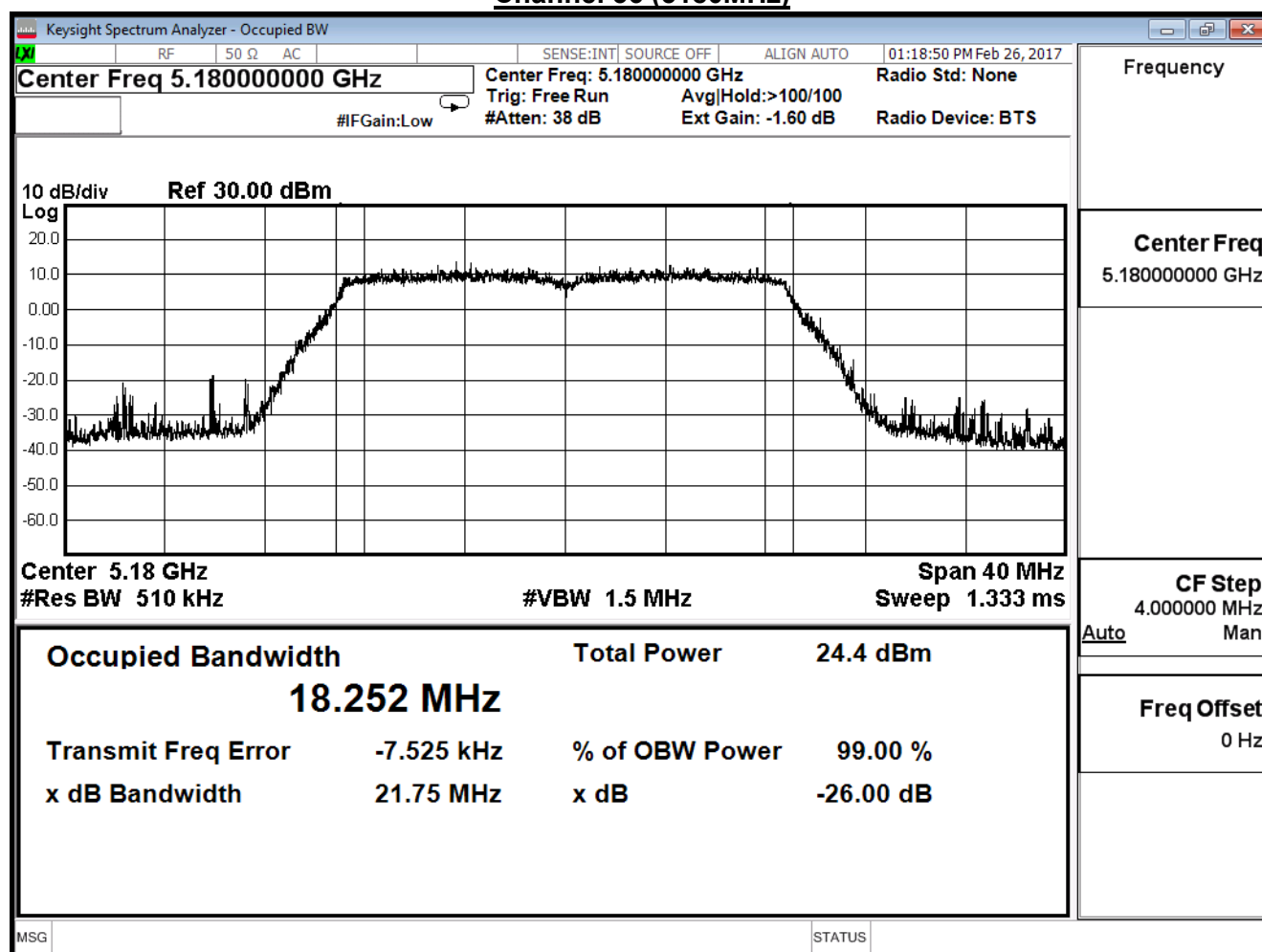
Channel 48 (5240MHz)



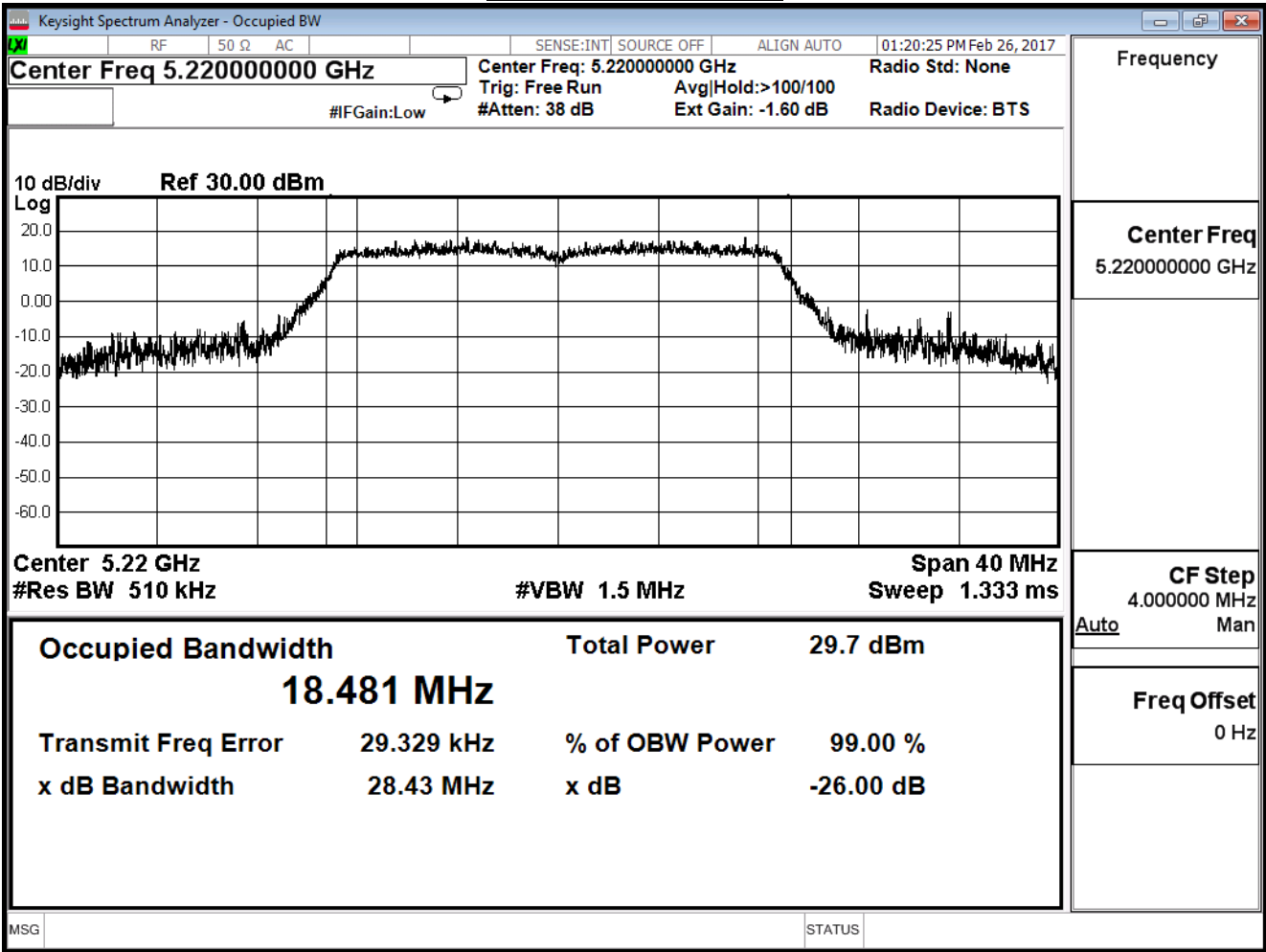
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx ADP: AD890326010-2LF MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11n_20M(ANT 2)

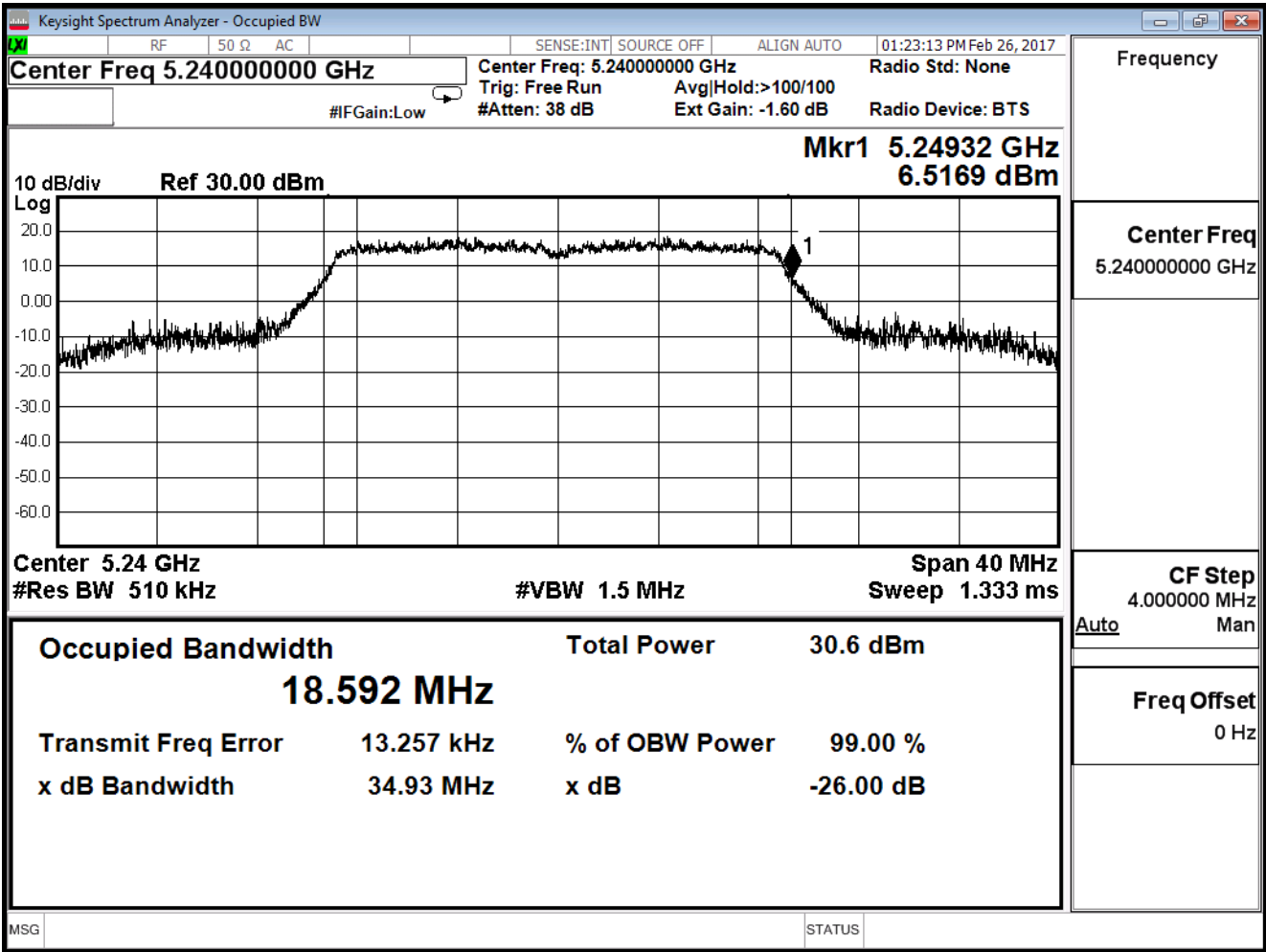
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	21.750	18.252	--	Pass
44	5220	28.430	18.481	--	Pass
48	5240	34.930	18.592	--	Pass

Channel 36 (5180MHz)

Channel 44 (5220MHz)



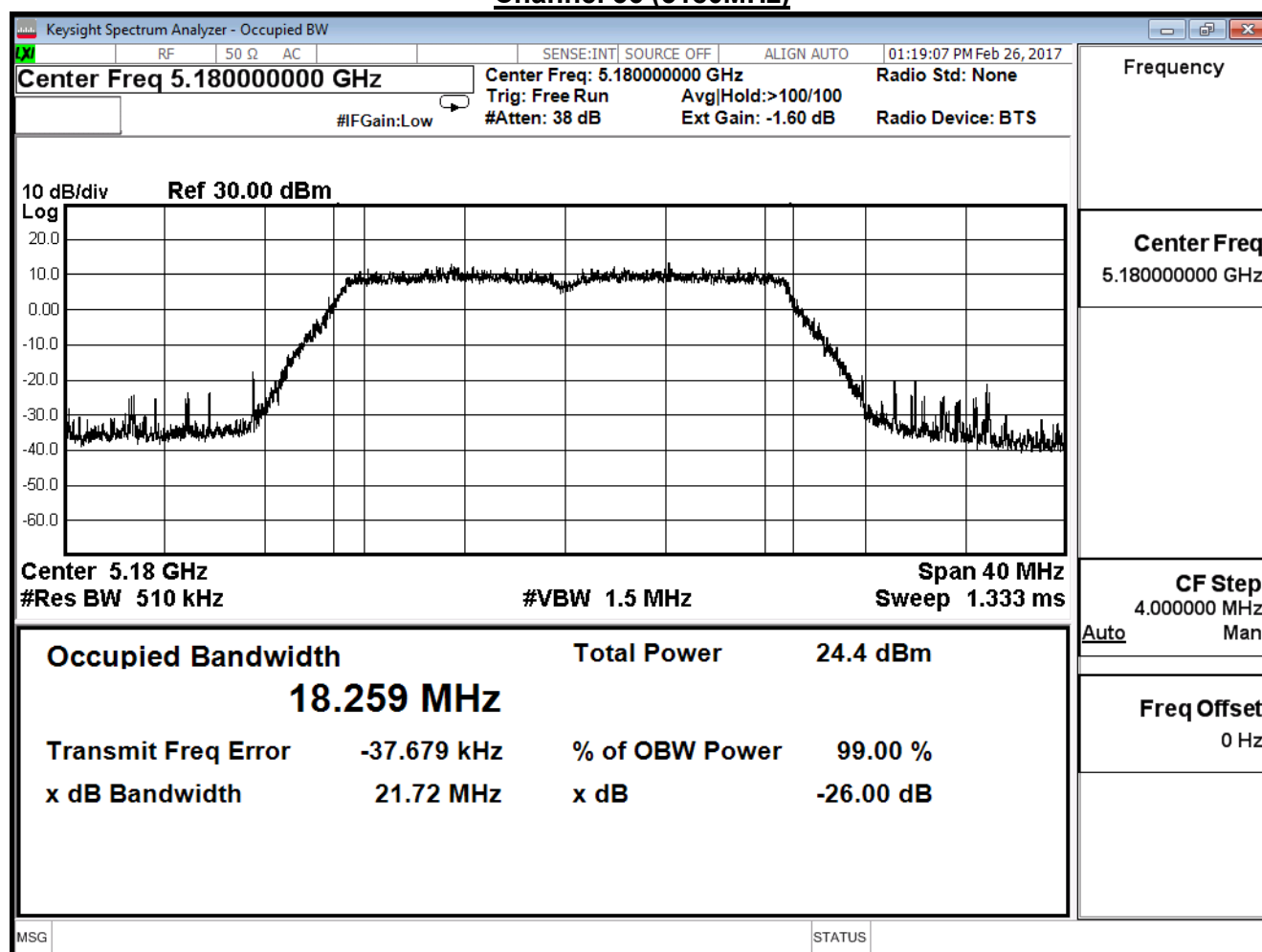
Channel 48 (5240MHz)



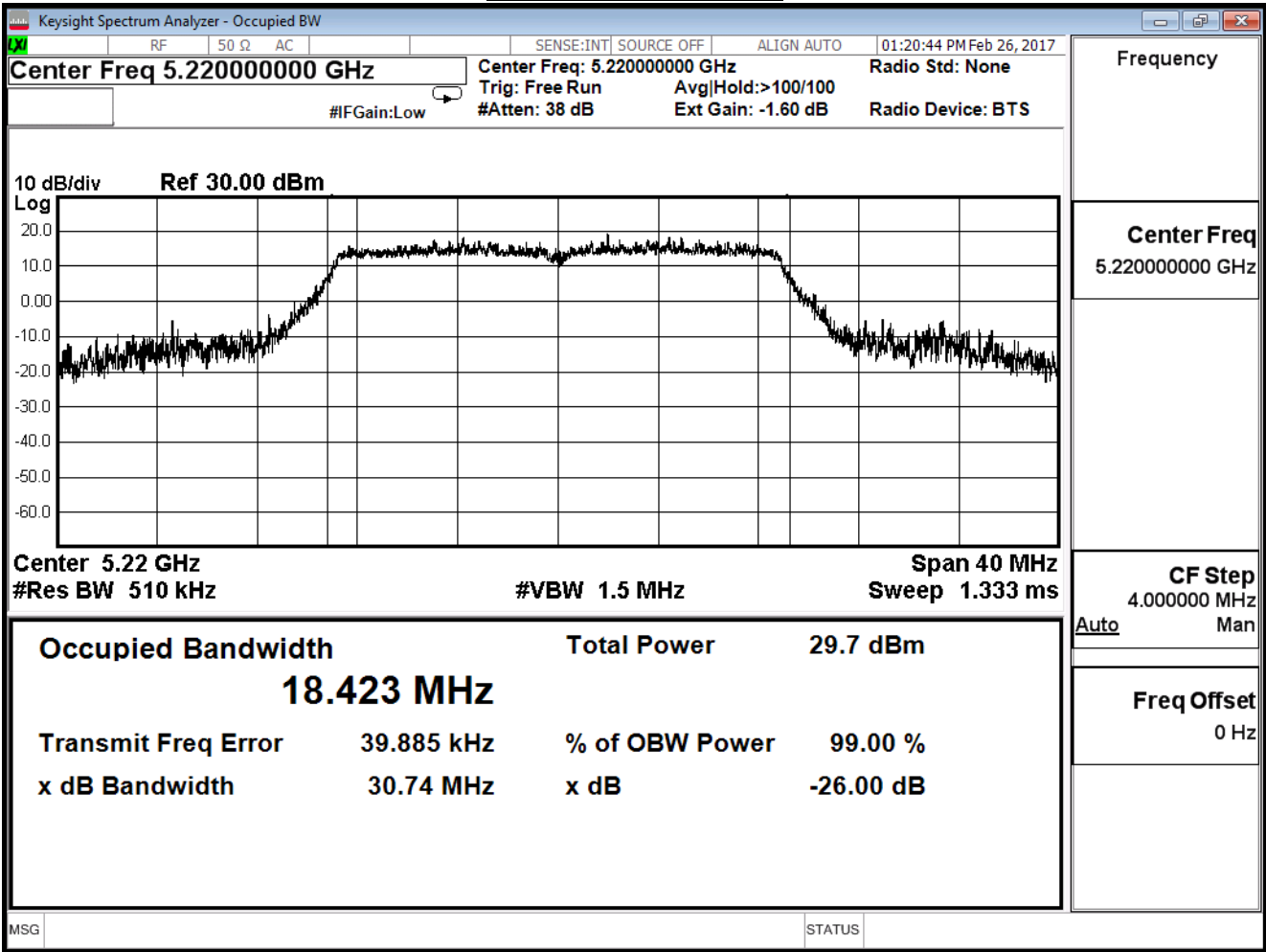
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11n_20M(ANT 3)

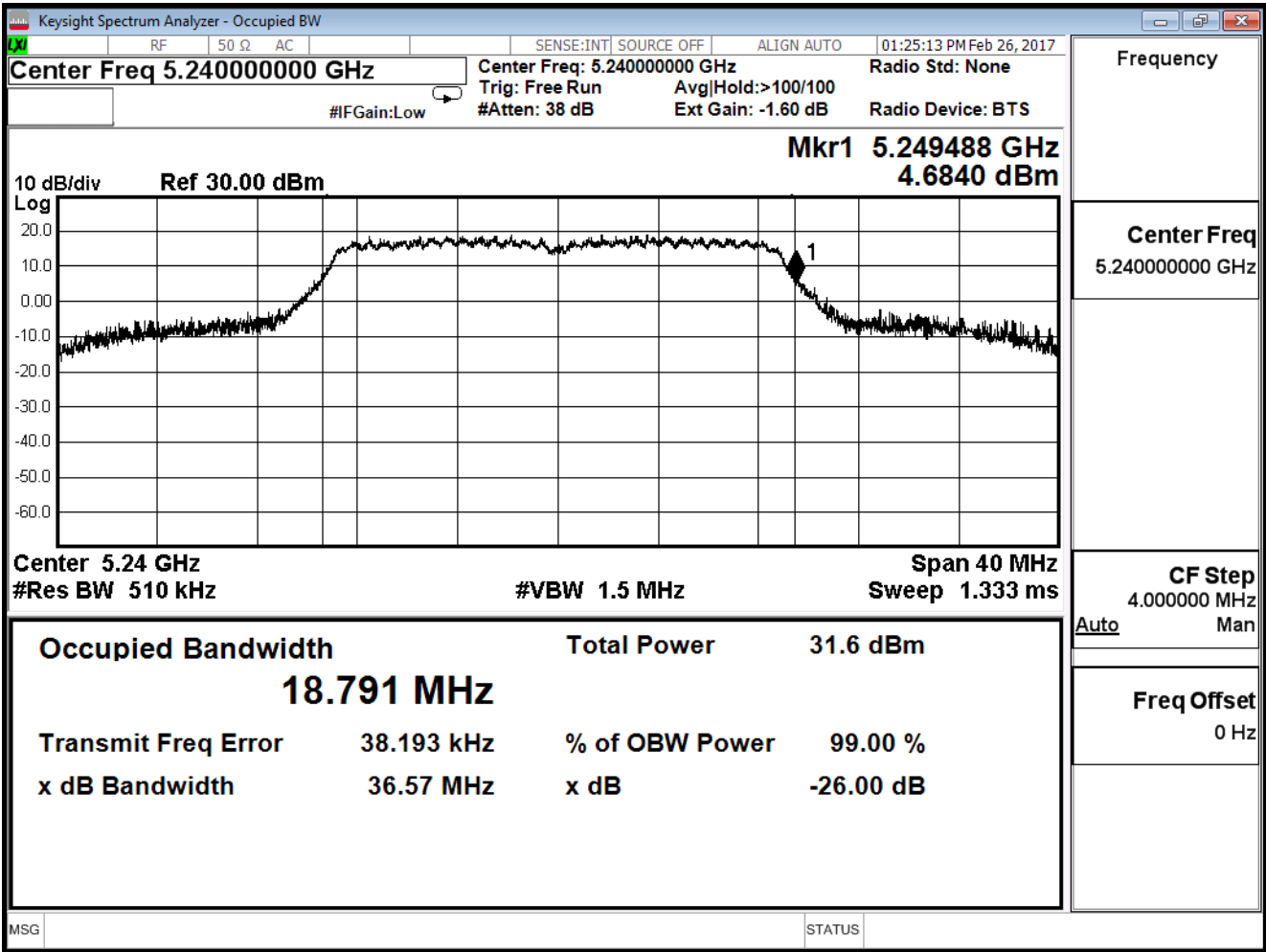
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	21.720	18.259	--	Pass
44	5220	30.740	18.423	--	Pass
48	5240	36.570	18.791	--	Pass

Channel 36 (5180MHz)

Channel 44 (5220MHz)



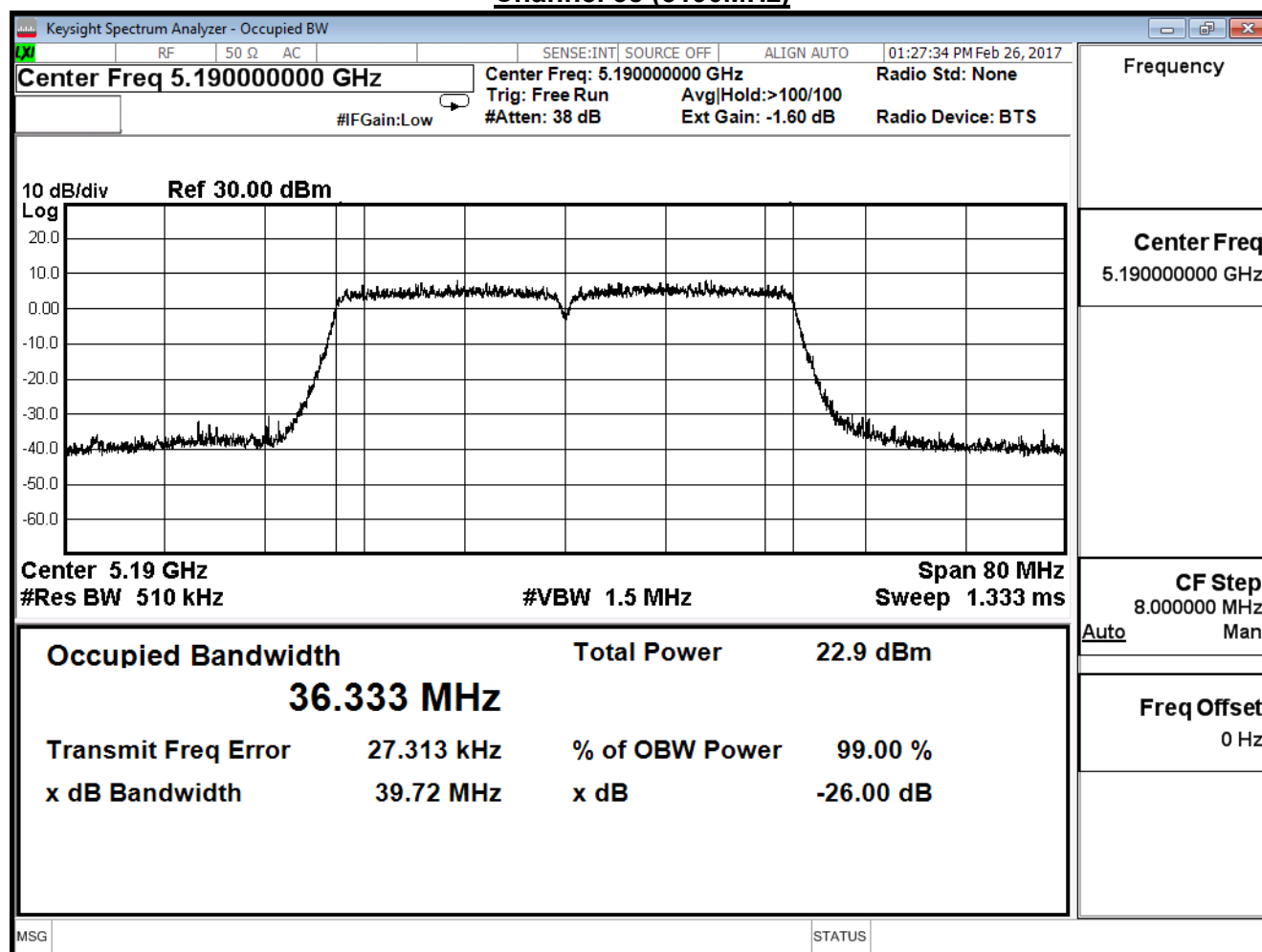
Channel 48 (5240MHz)

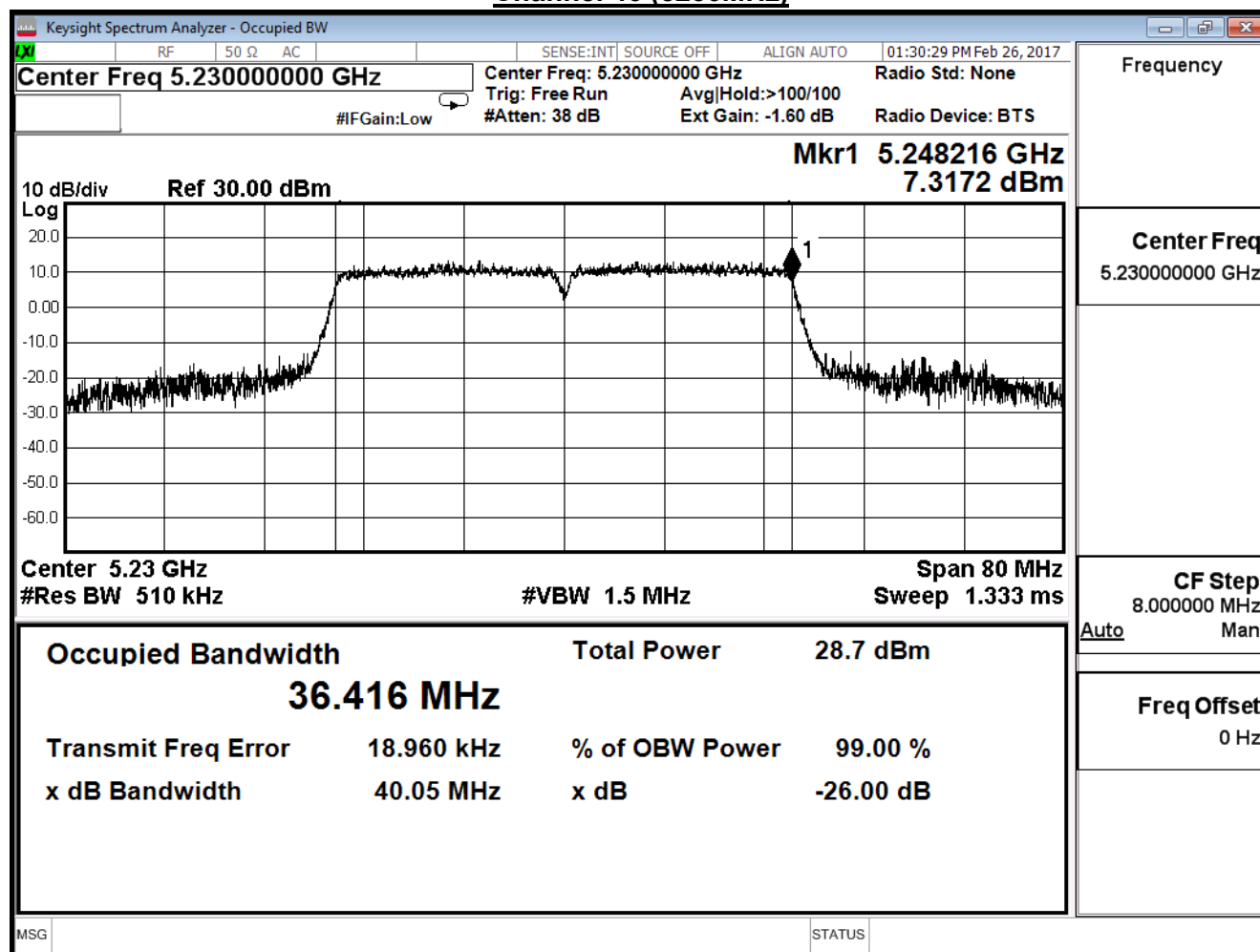


Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11n_40M(ANT 0)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
38	5190	39.720	36.333	--	Pass
46	5230	40.050	36.416	--	Pass

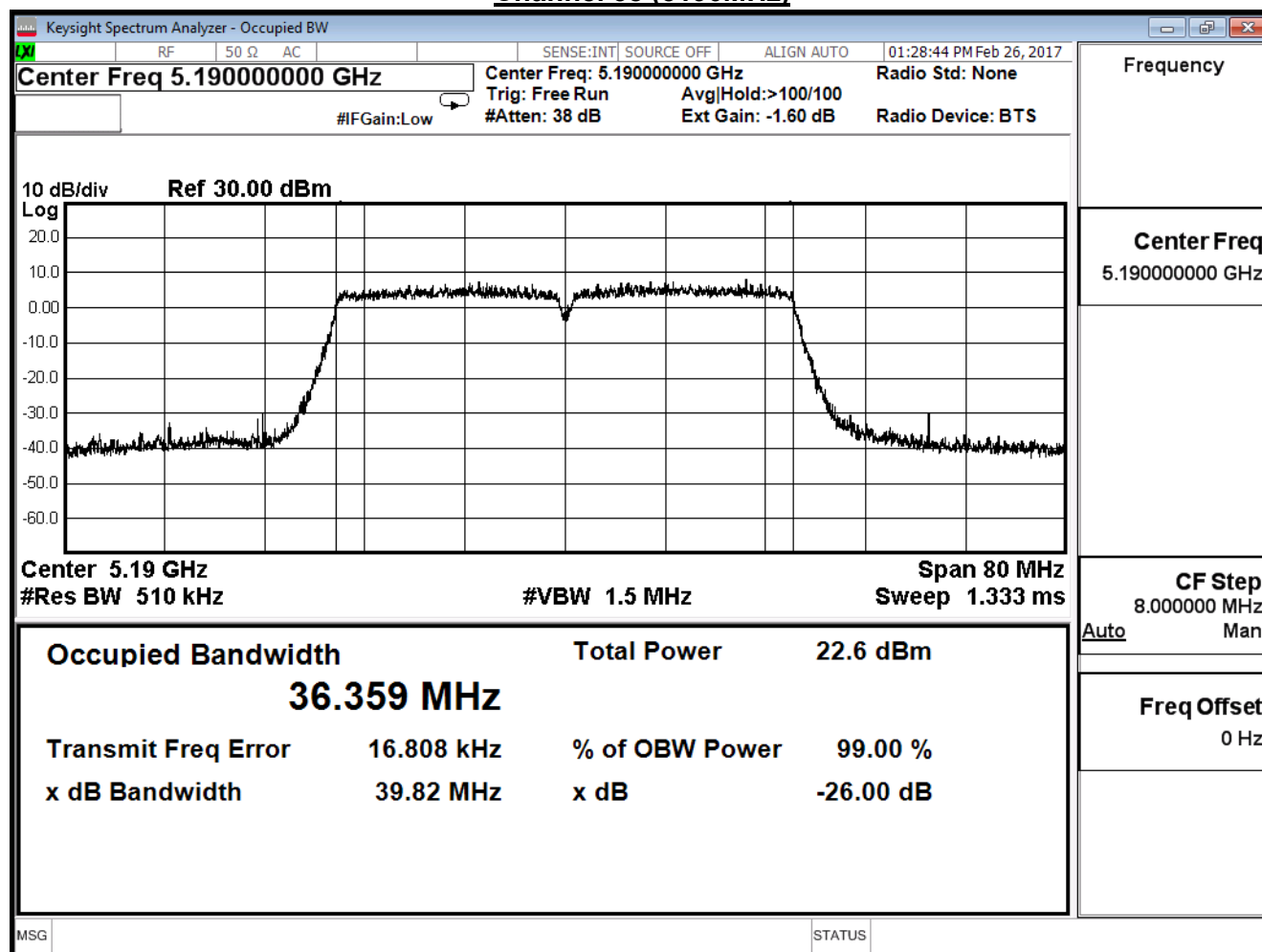
Channel 38 (5190MHz)

Channel 46 (5230MHz)

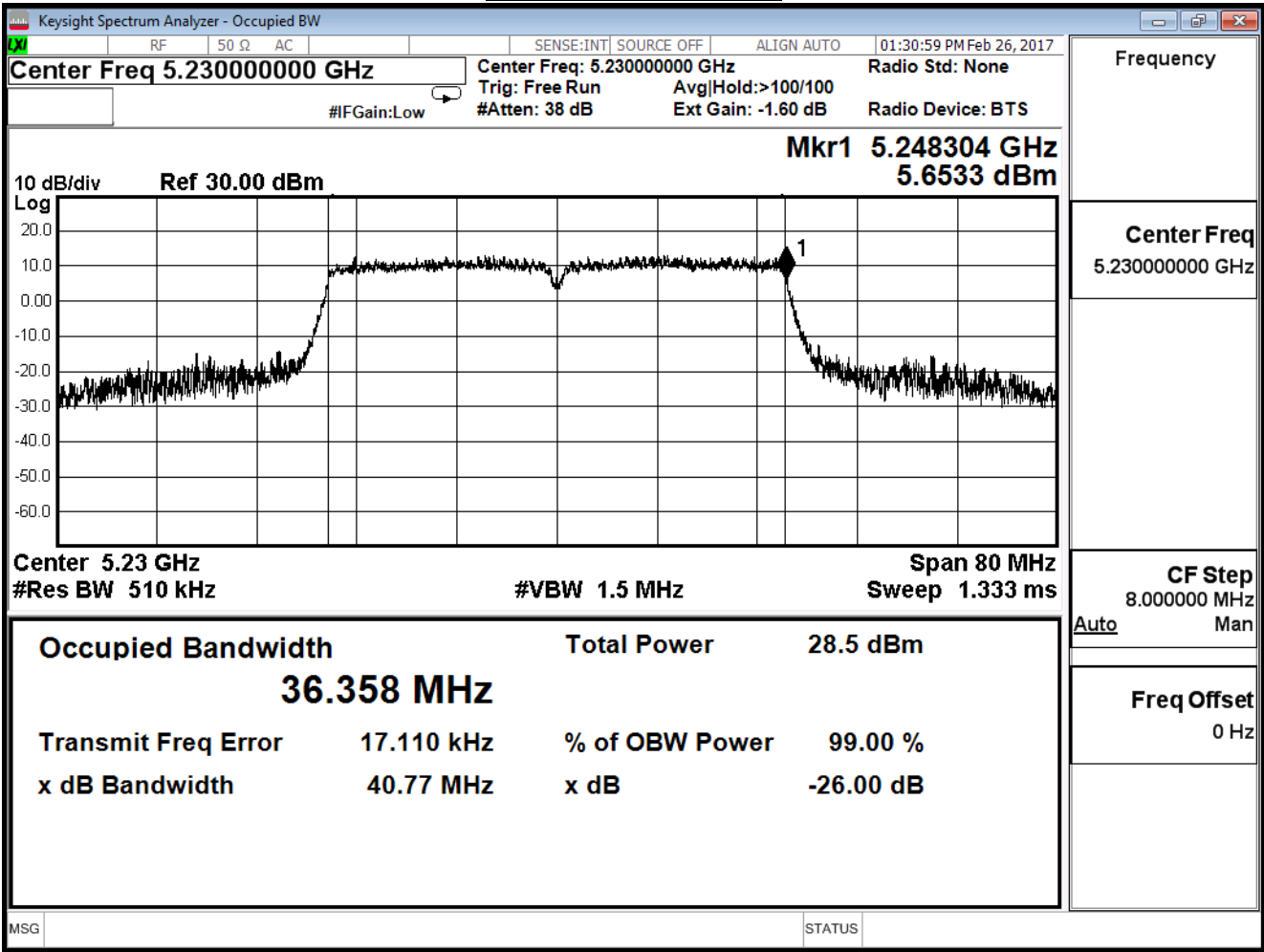
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11n_40M(ANT 1)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
38	5190	39.820	36.359	--	Pass
46	5230	40.770	36.358	--	Pass

Channel 38 (5190MHz)

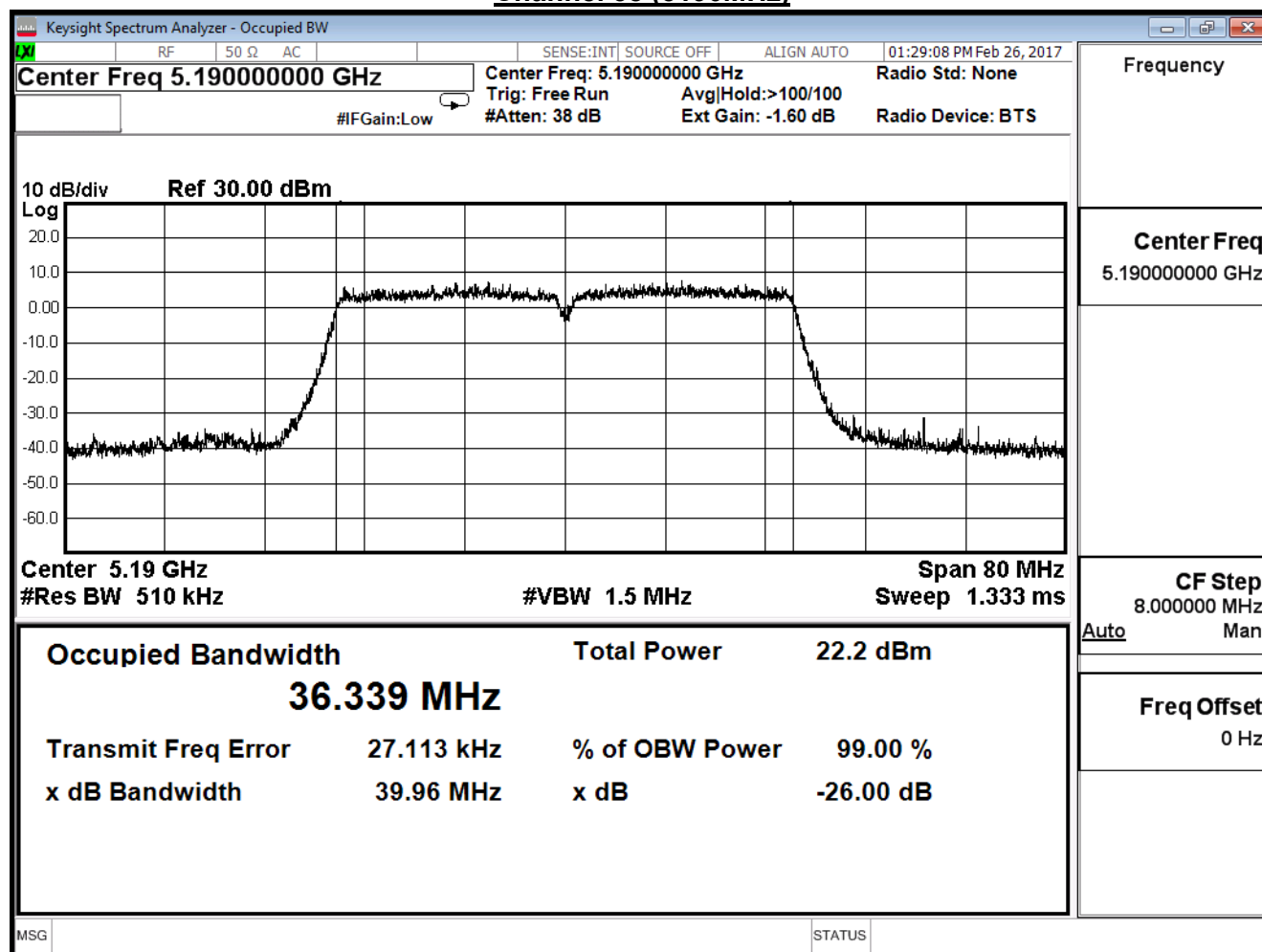
Channel 46 (5230MHz)

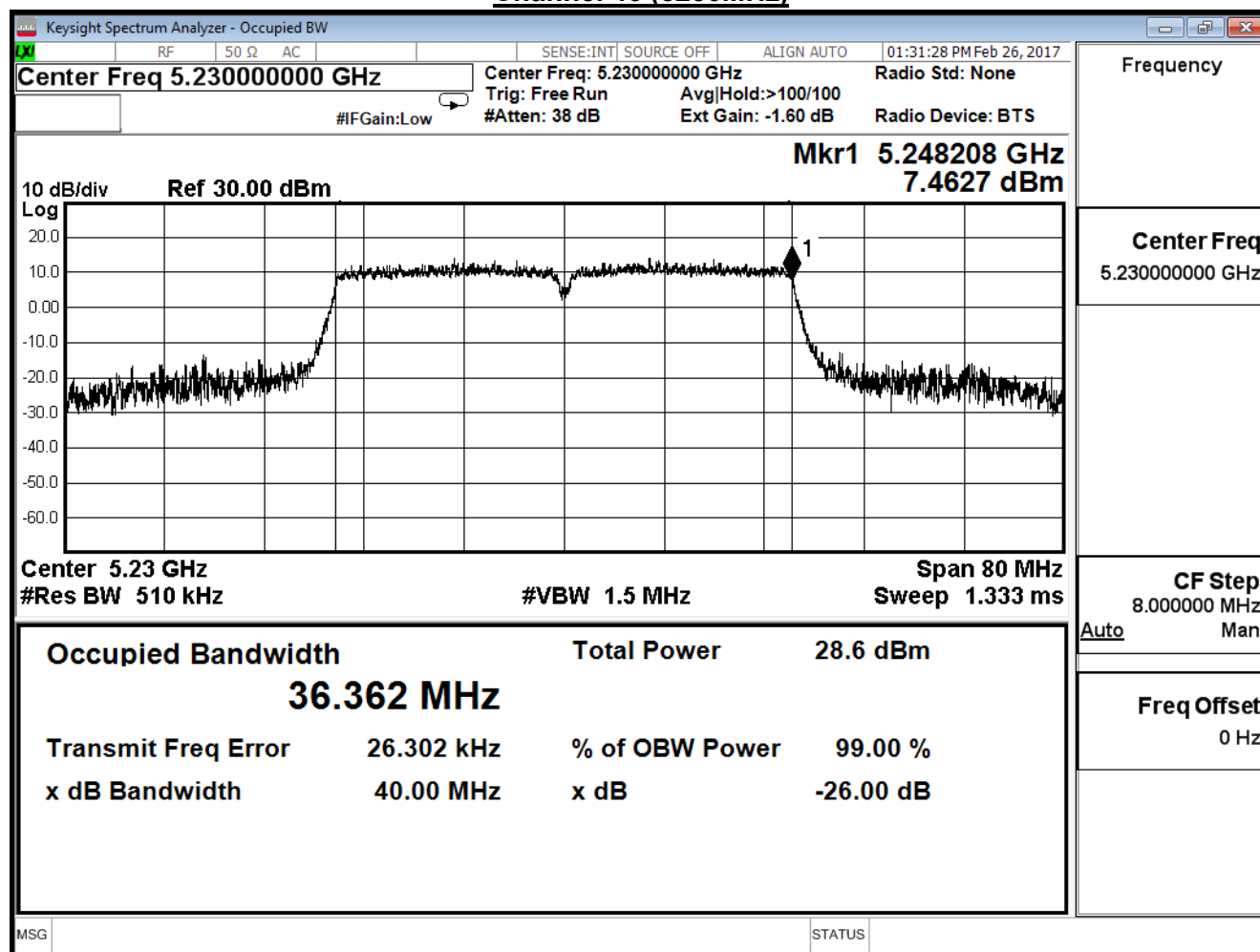


Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11n_40M(ANT 2)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
38	5190	39.960	36.339	--	Pass
46	5230	40.000	36.362	--	Pass

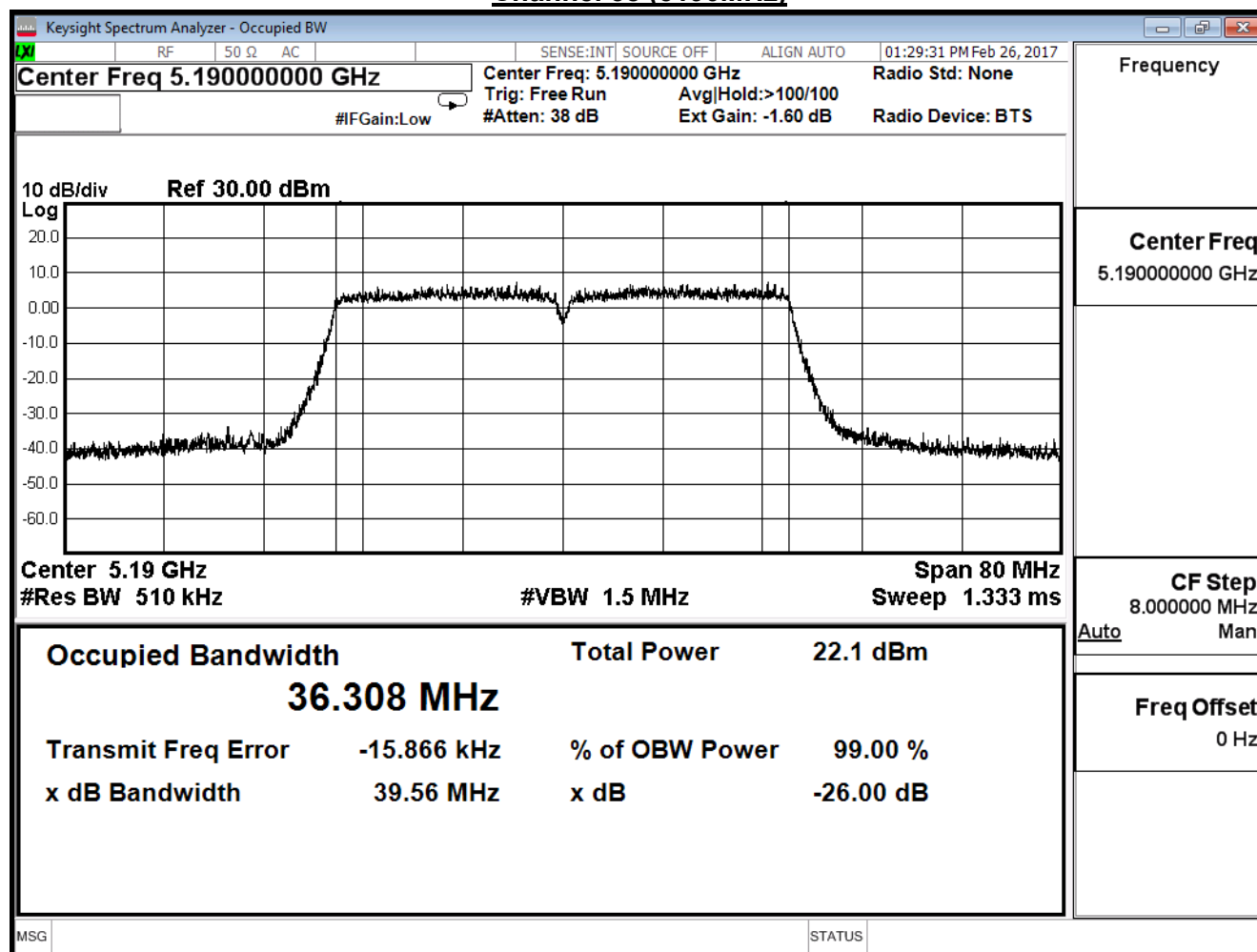
Channel 38 (5190MHz)

Channel 46 (5230MHz)

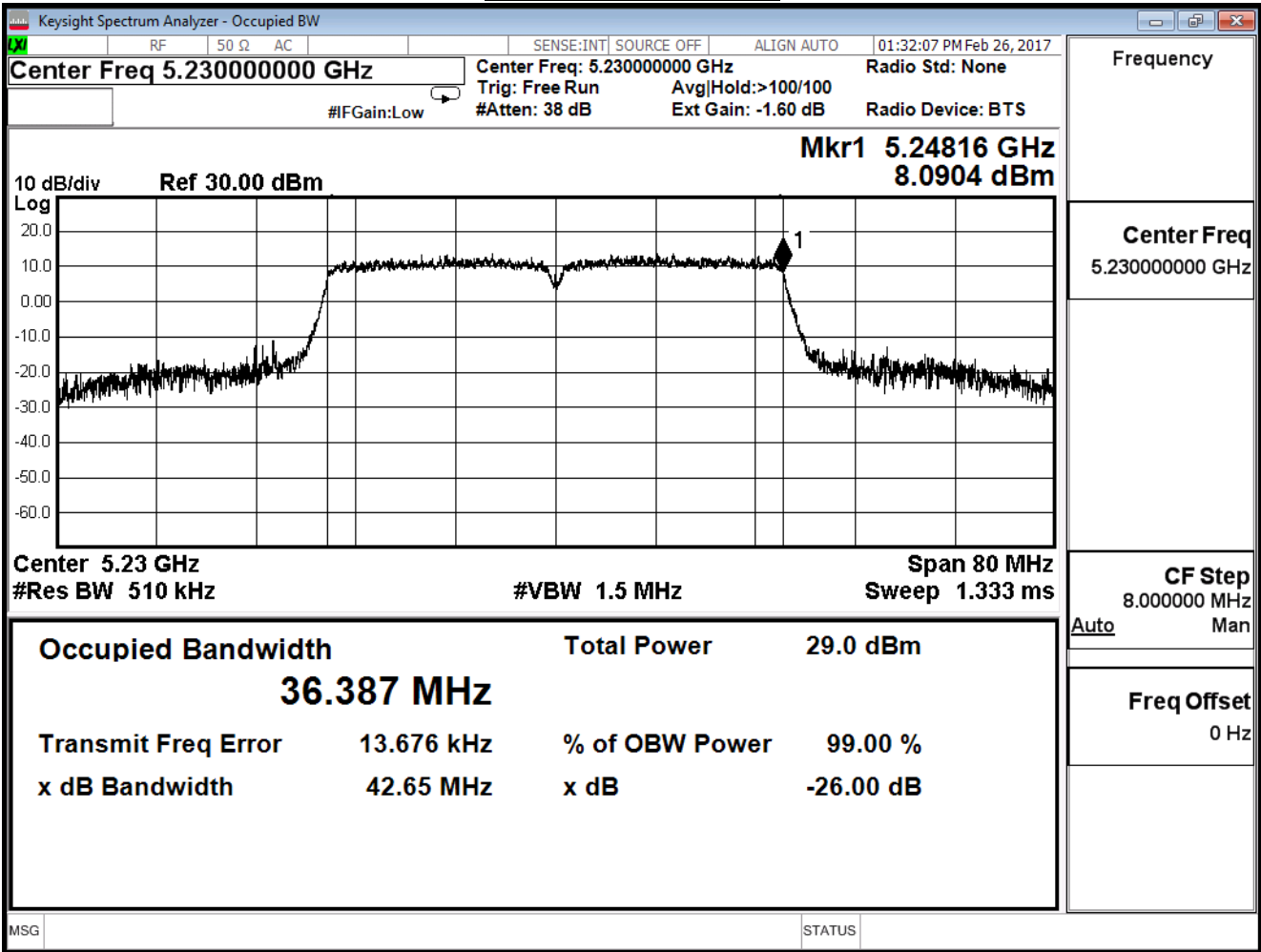
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11n_40M(ANT 3)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
38	5190	39.560	36.308	--	Pass
46	5230	42.650	36.387	--	Pass

Channel 38 (5190MHz)

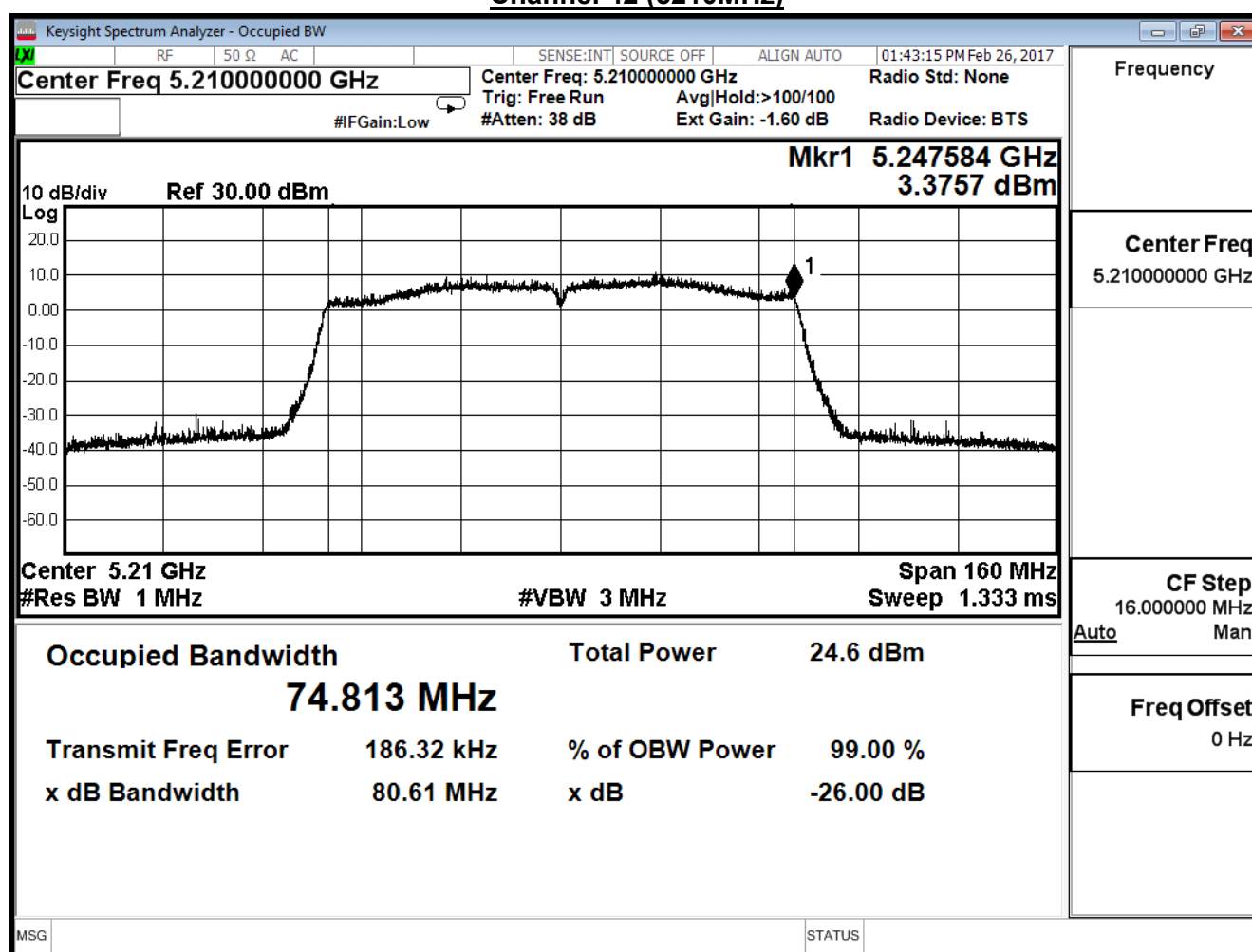
Channel 46 (5230MHz)



Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx ADP: AD890326010-2LF MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11ac_80M(ANT 0)

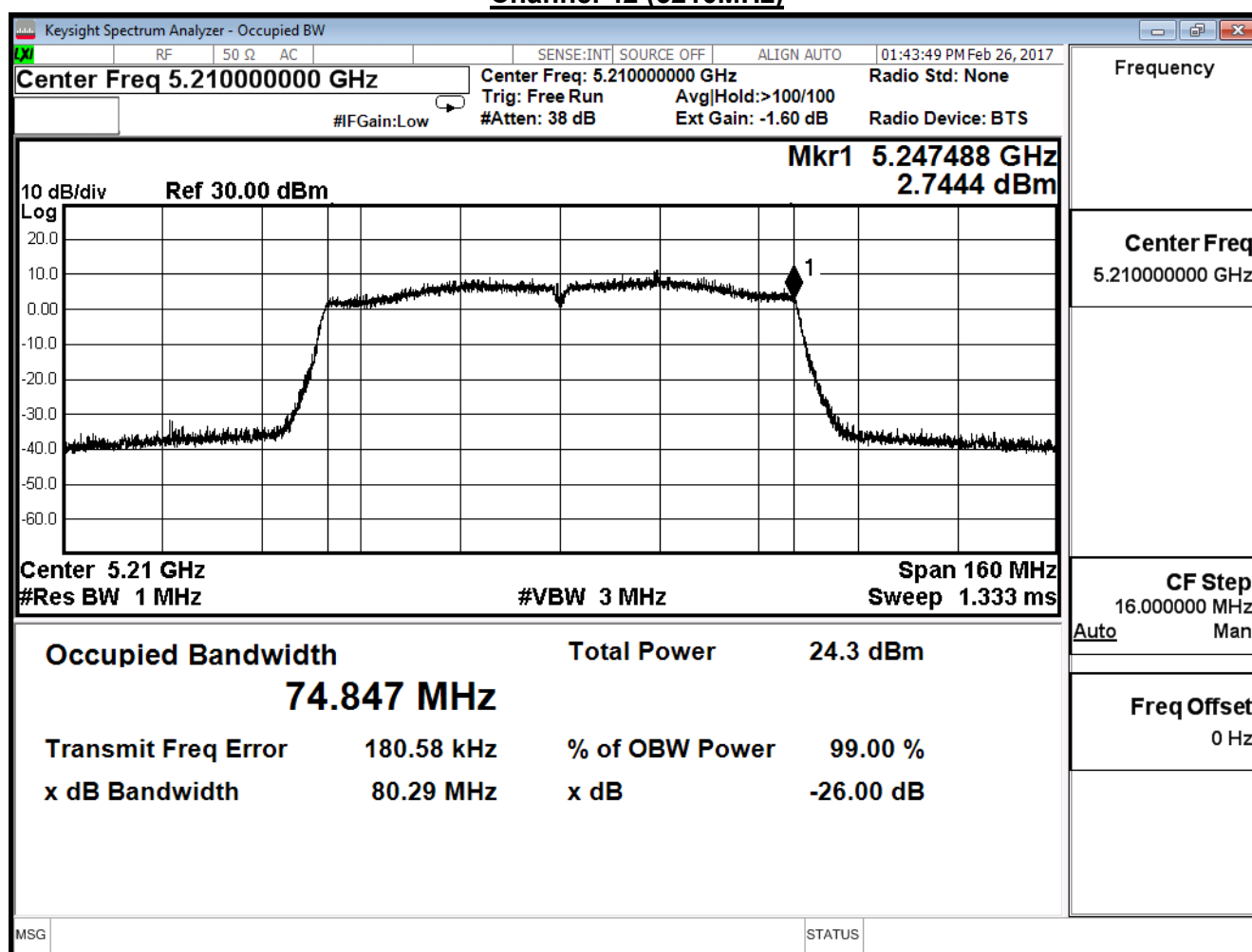
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
42	5210	80.610	74.813	--	Pass

Channel 42 (5210MHz)

Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11ac_80M(ANT 1)

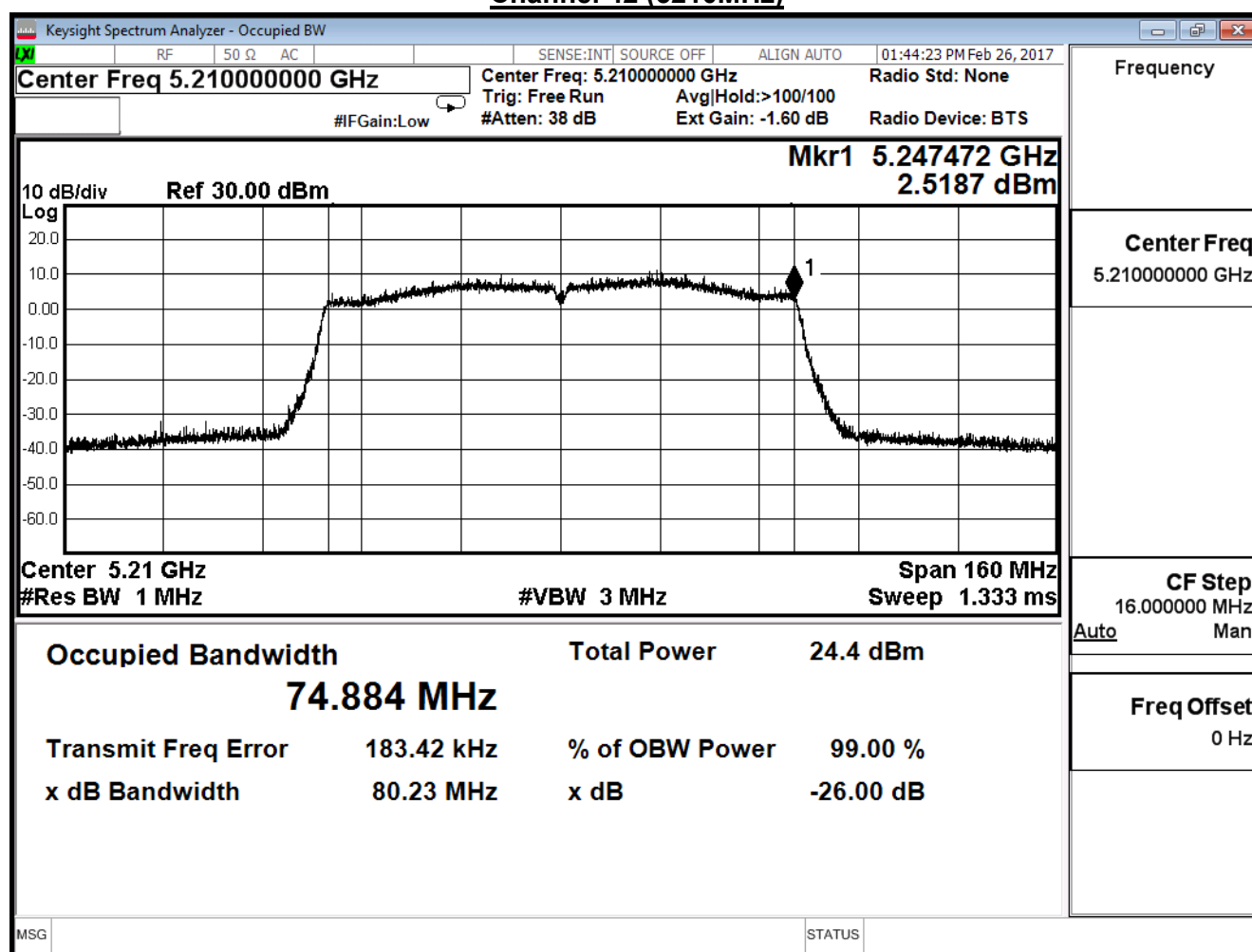
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
42	5210	80.290	74.847	--	Pass

Channel 42 (5210MHz)

Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11ac_80M(ANT 2)

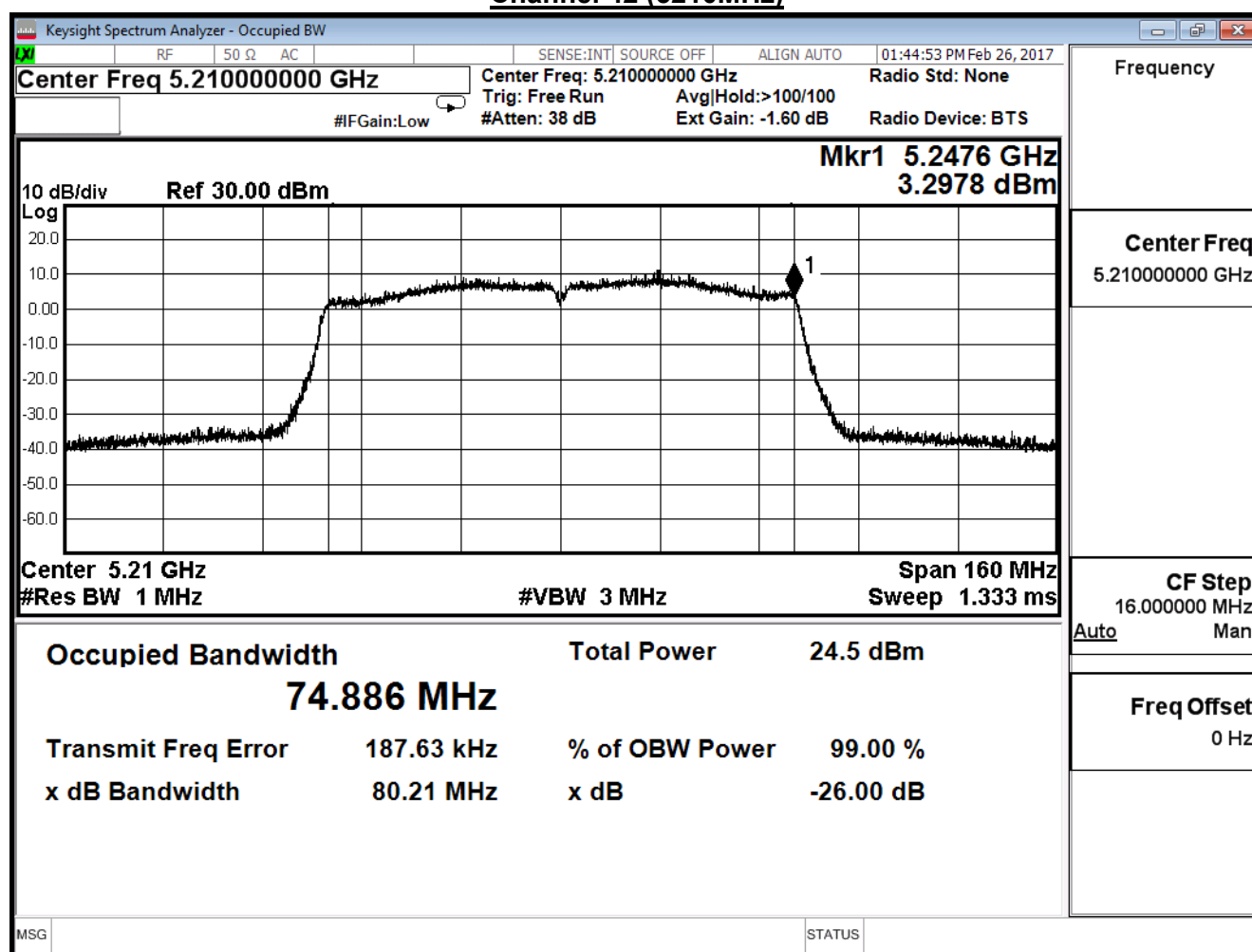
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
42	5210	80.230	74.884	--	Pass

Channel 42 (5210MHz)

Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/02/26	Test Site	SR10-H

802.11ac_80M(ANT 3)

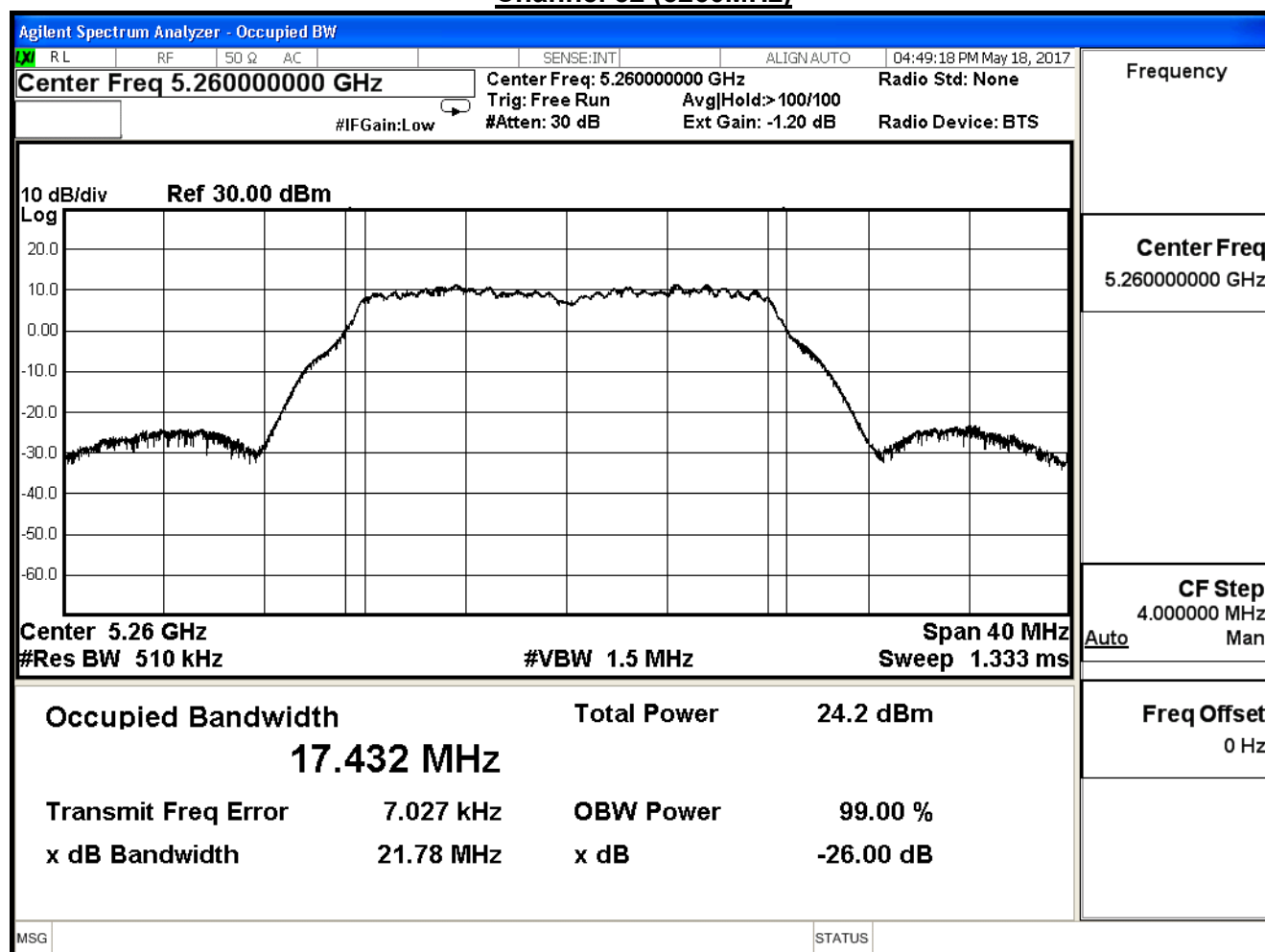
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
42	5210	80.210	74.886	--	Pass

Channel 42 (5210MHz)

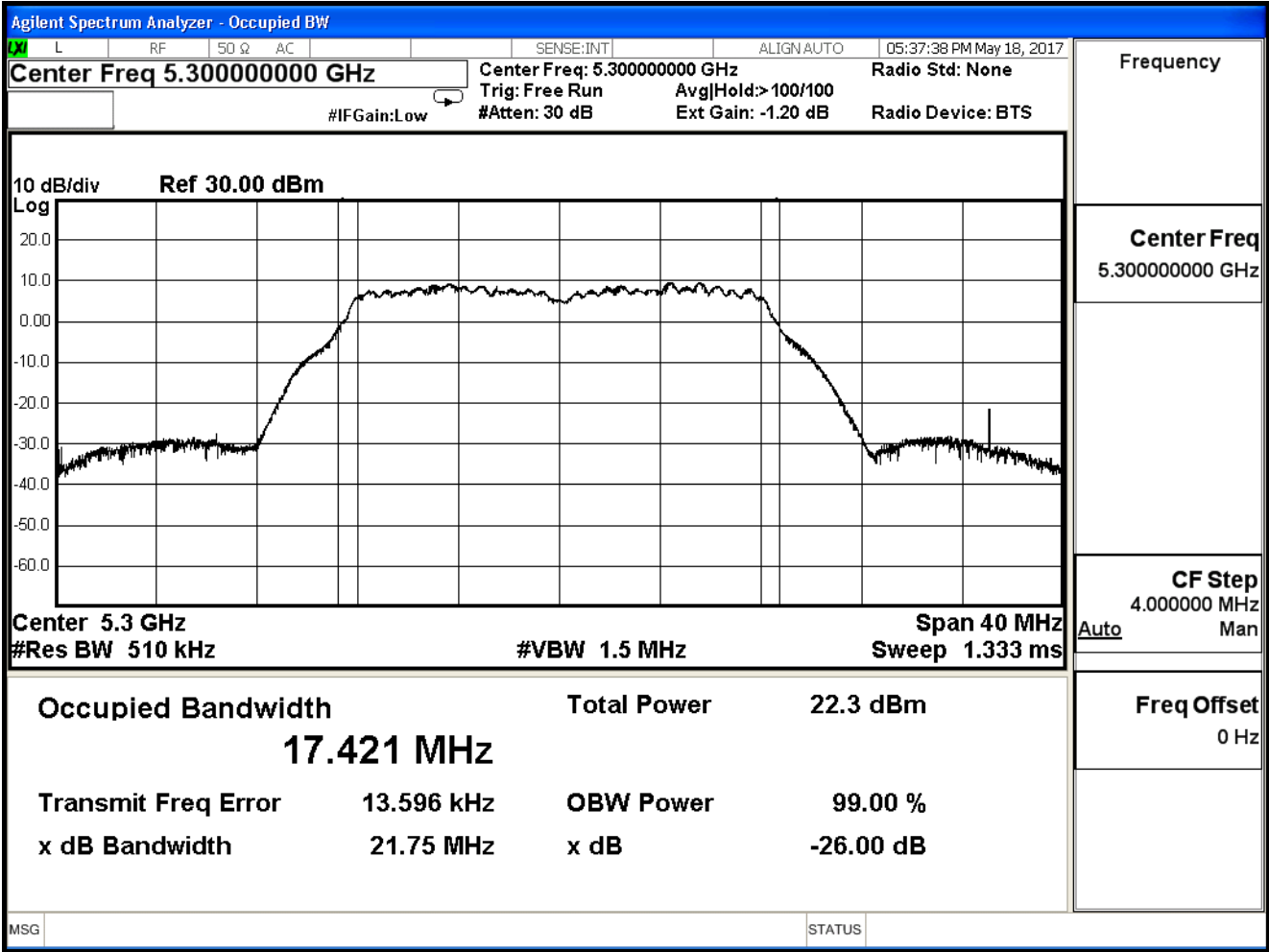
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11a (ANT 0)

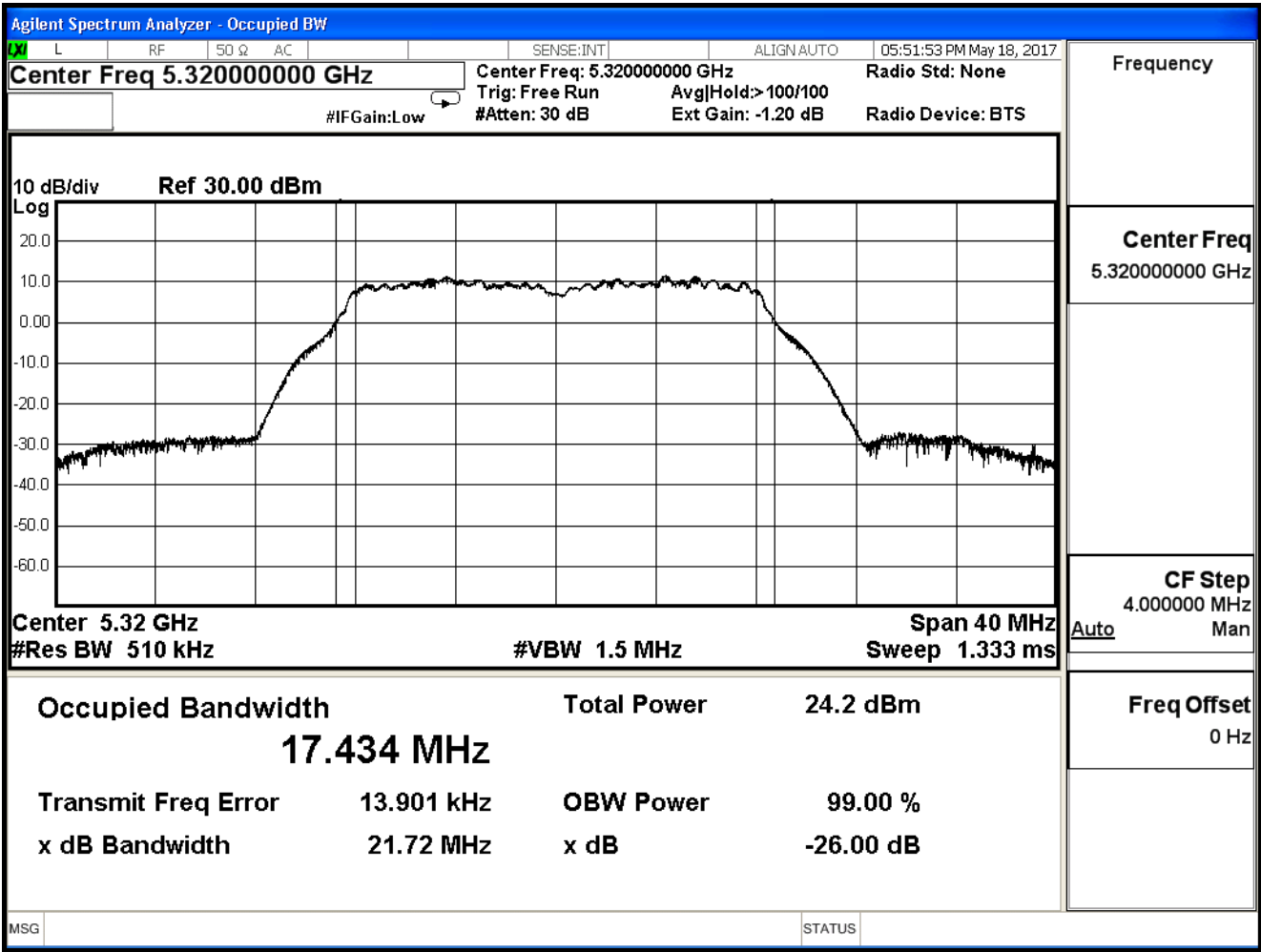
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
52	5260	21.780	17.432	--	Pass
60	5300	21.750	17.421	--	Pass
64	5320	21.720	17.434	--	Pass

Channel 52 (5260MHz)

Channel 60 (5300MHz)



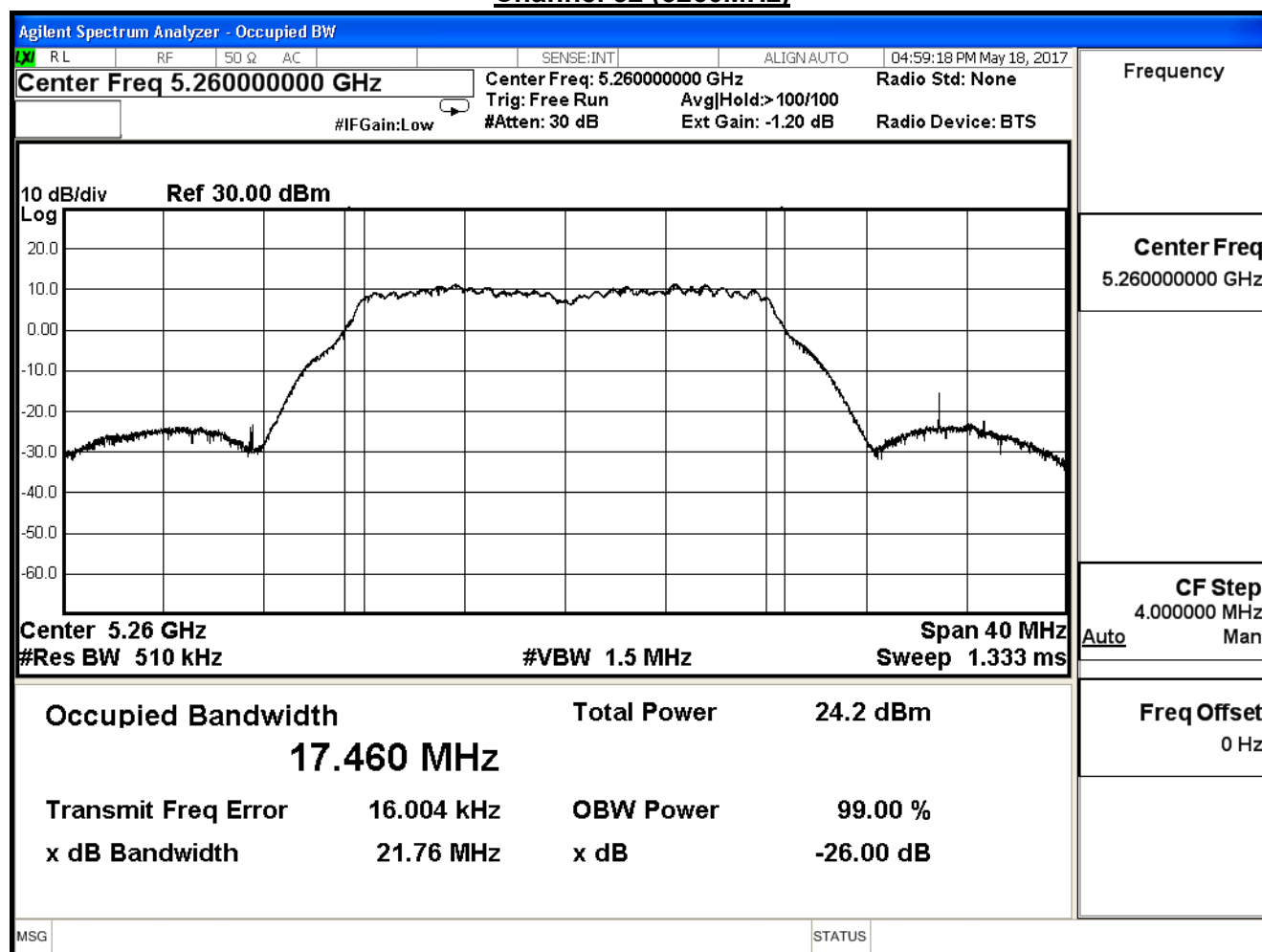
Channel 64 (5320MHz)



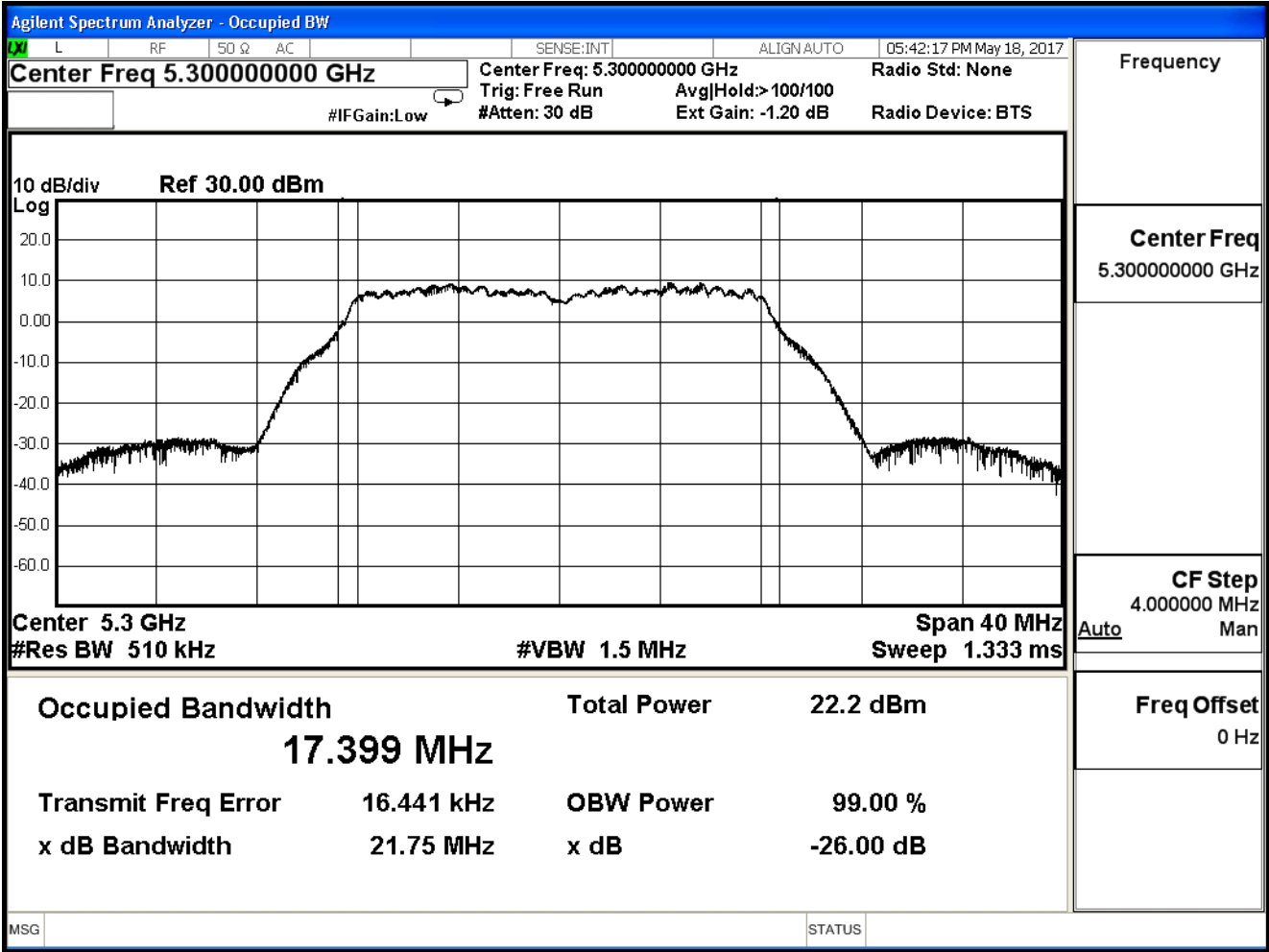
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11a (ANT 1)

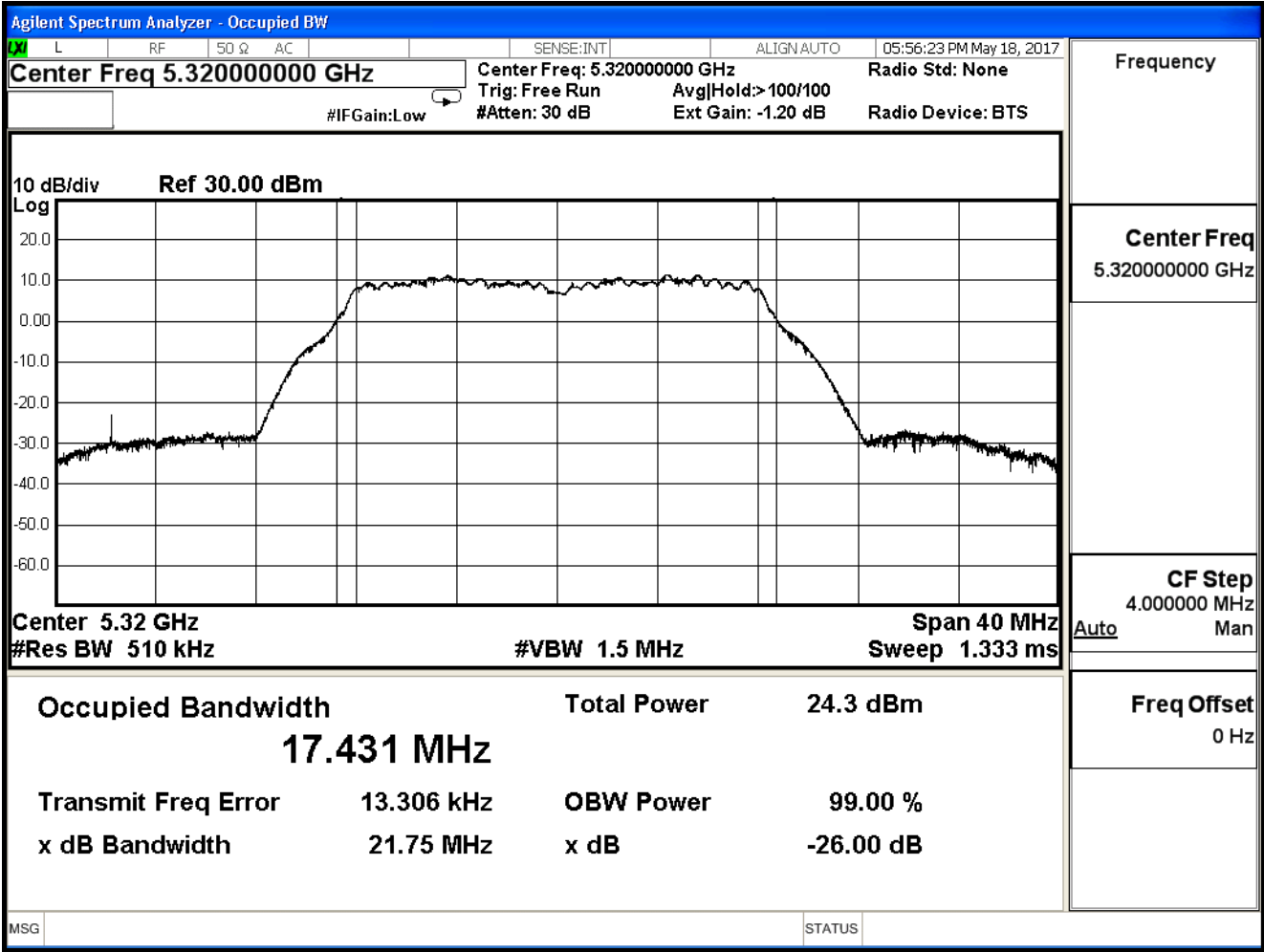
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
52	5260	21.760	17.460	--	Pass
60	5300	21.750	17.399	--	Pass
64	5320	21.750	17.431	--	Pass

Channel 52 (5260MHz)

Channel 60 (5300MHz)



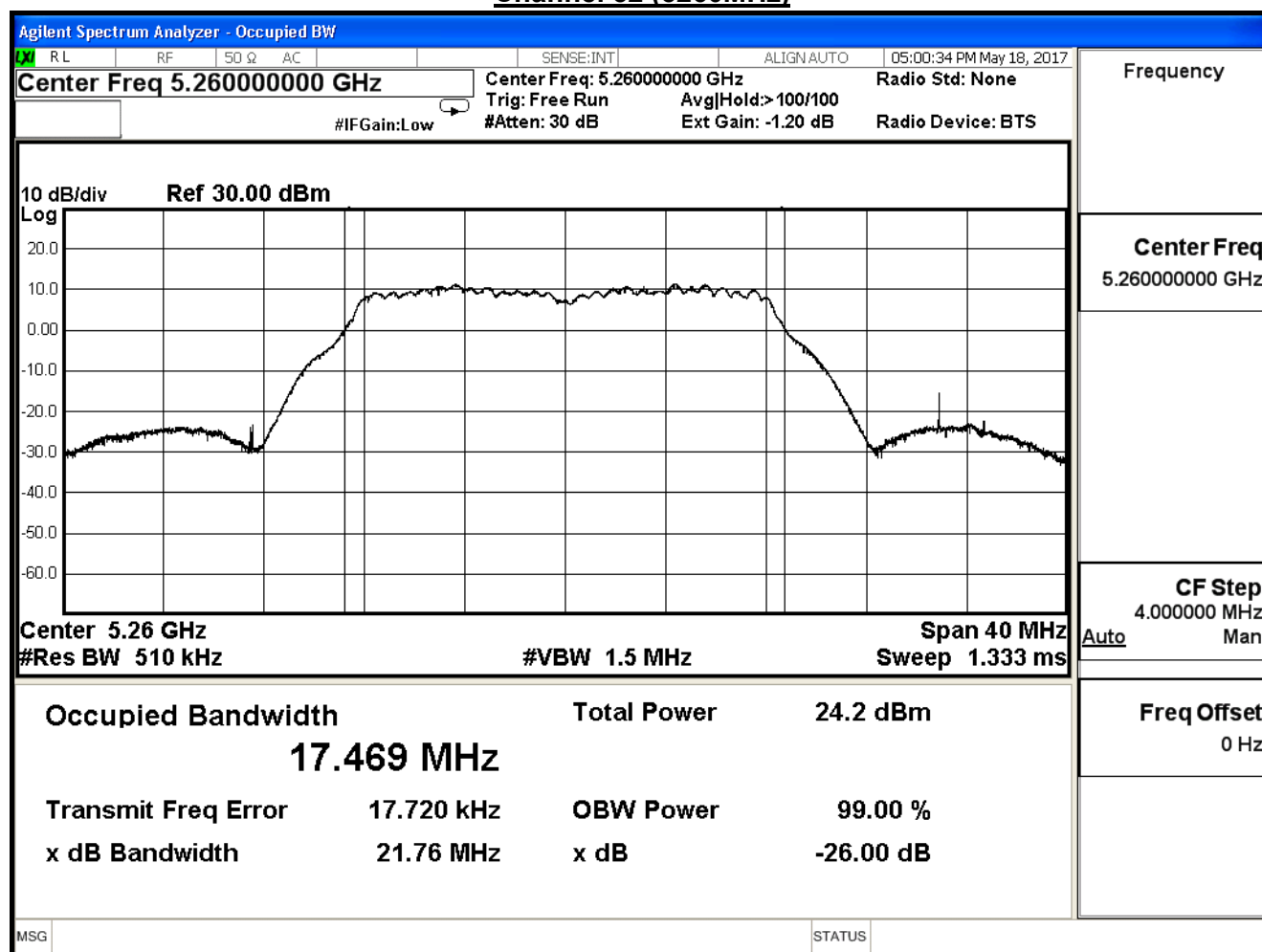
Channel 64 (5320MHz)



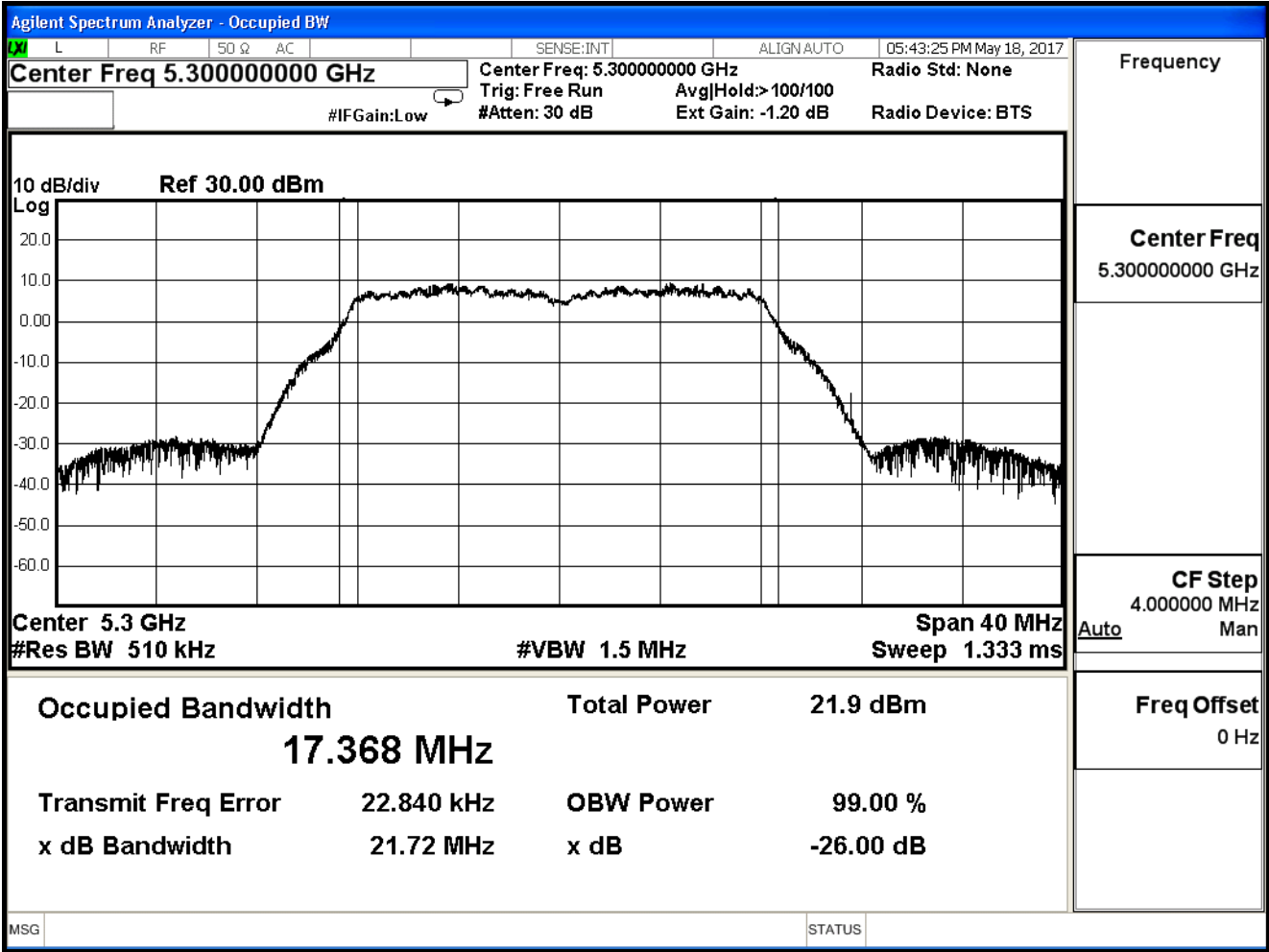
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11a (ANT 2)

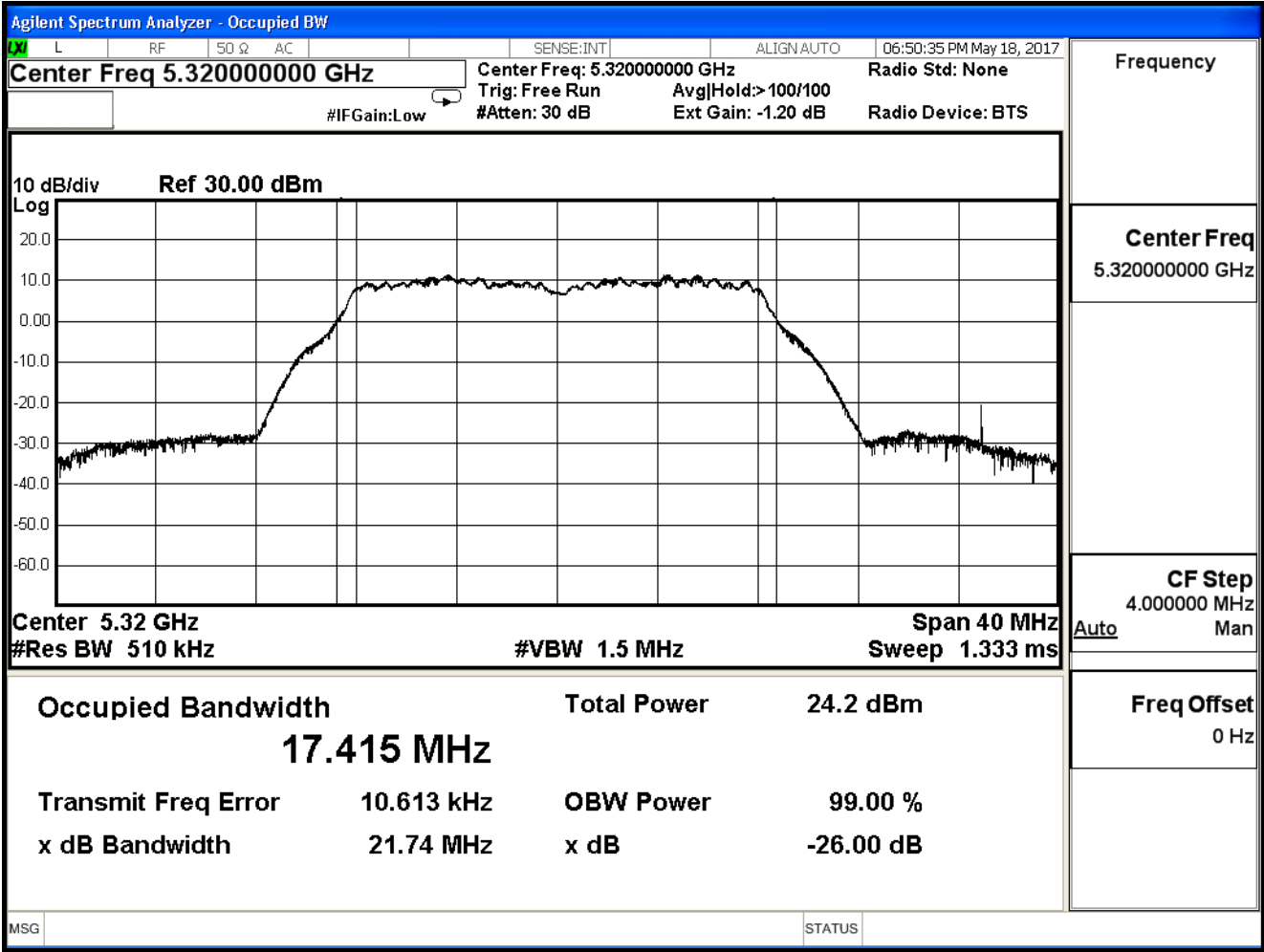
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
52	5260	21.760	17.469	--	Pass
60	5300	21.720	17.368	--	Pass
64	5320	21.740	17.415	--	Pass

Channel 52 (5260MHz)

Channel 60 (5300MHz)



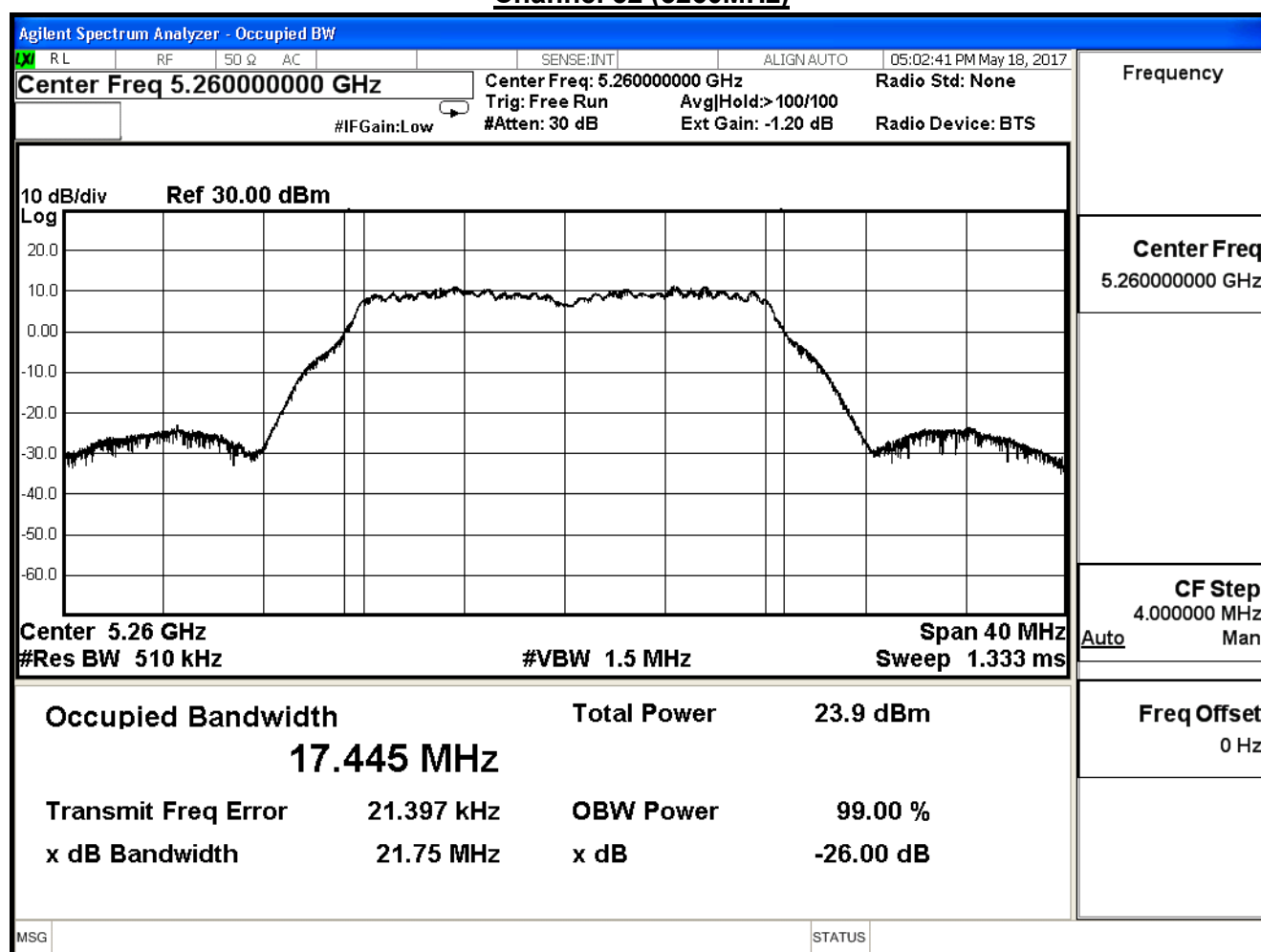
Channel 64 (5320MHz)



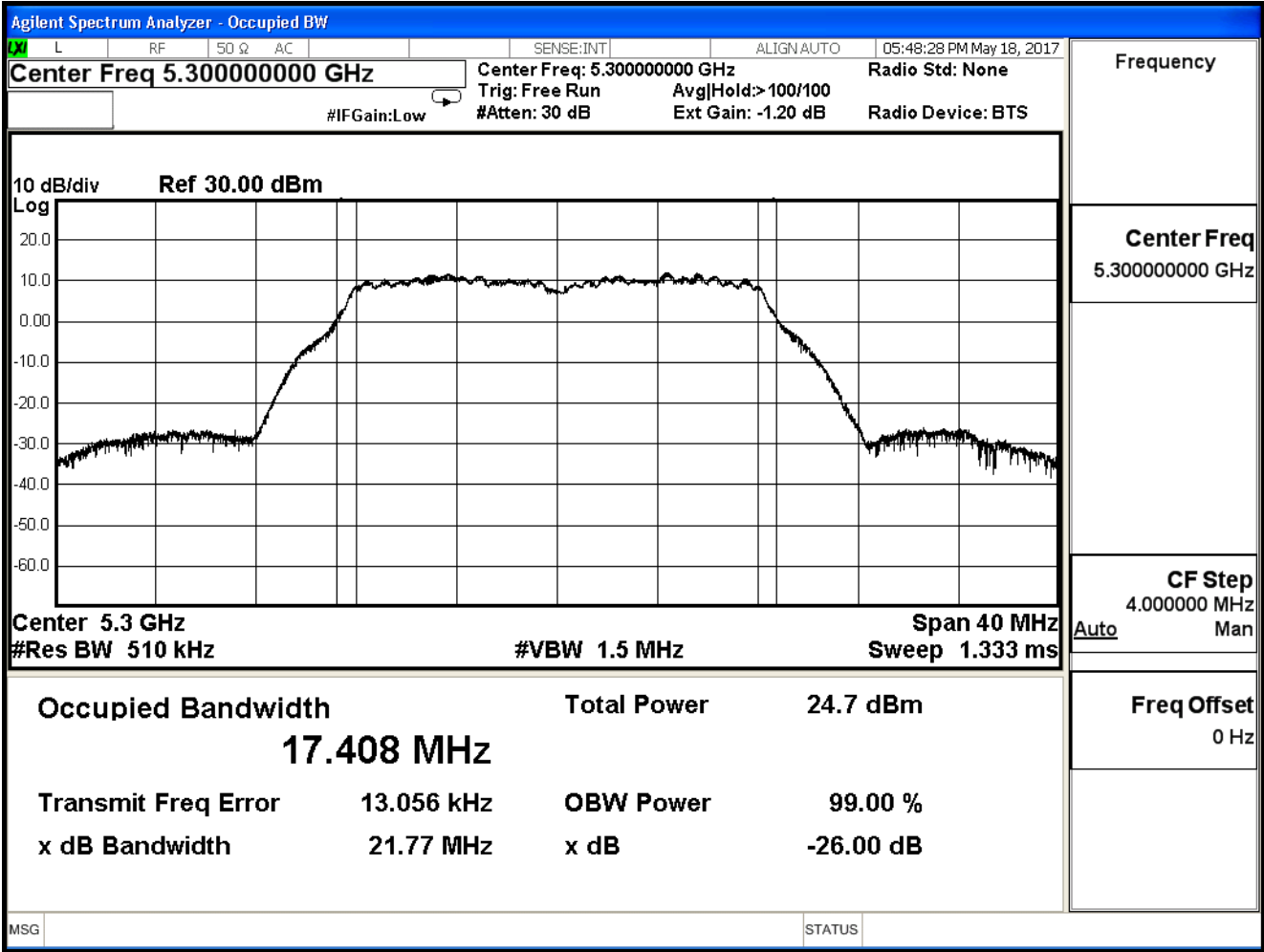
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11a (ANT 3)

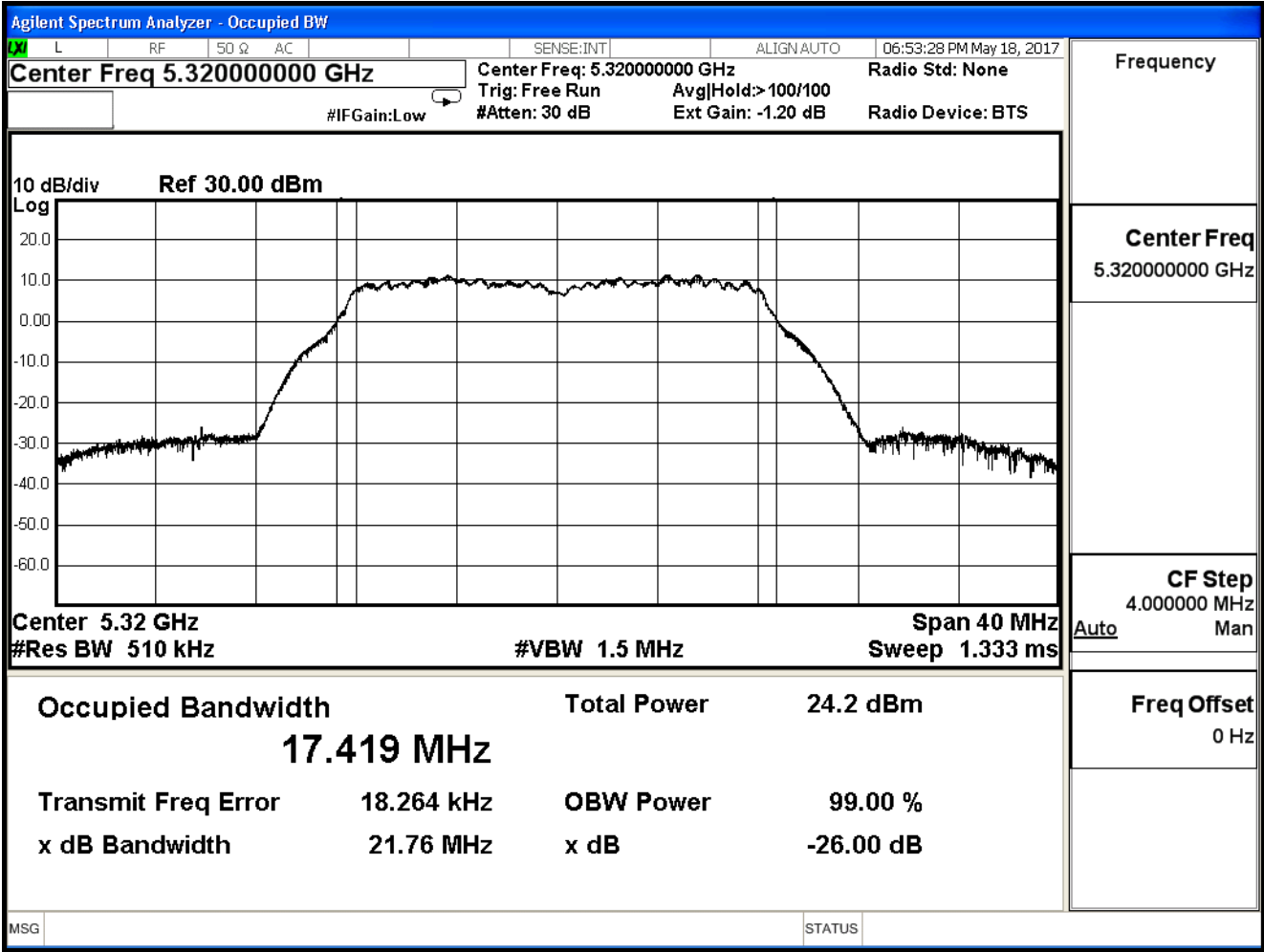
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
52	5260	21.750	17.445	--	Pass
60	5300	21.770	17.408	--	Pass
64	5320	21.760	17.419	--	Pass

Channel 52 (5260MHz)

Channel 60 (5300MHz)



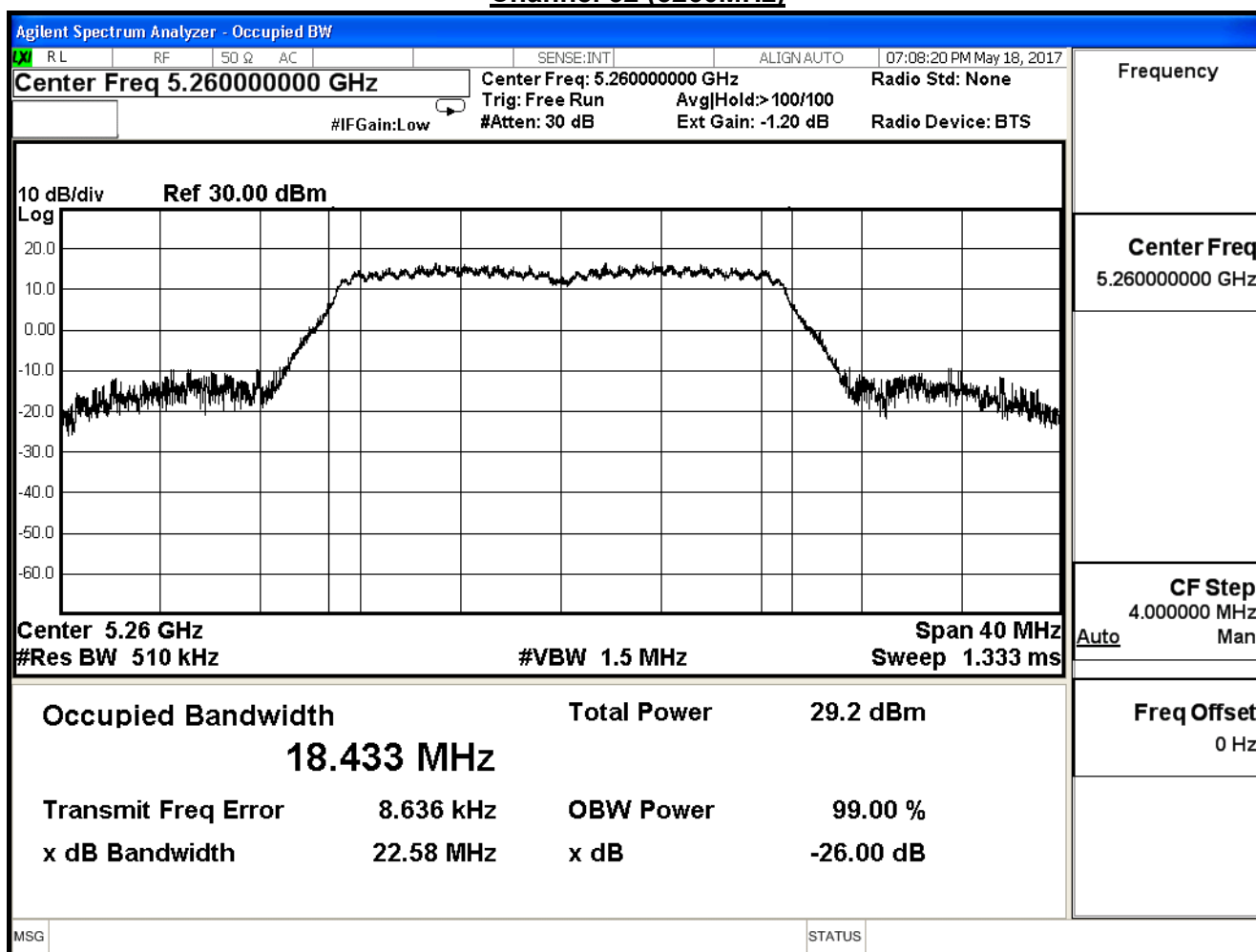
Channel 64 (5320MHz)



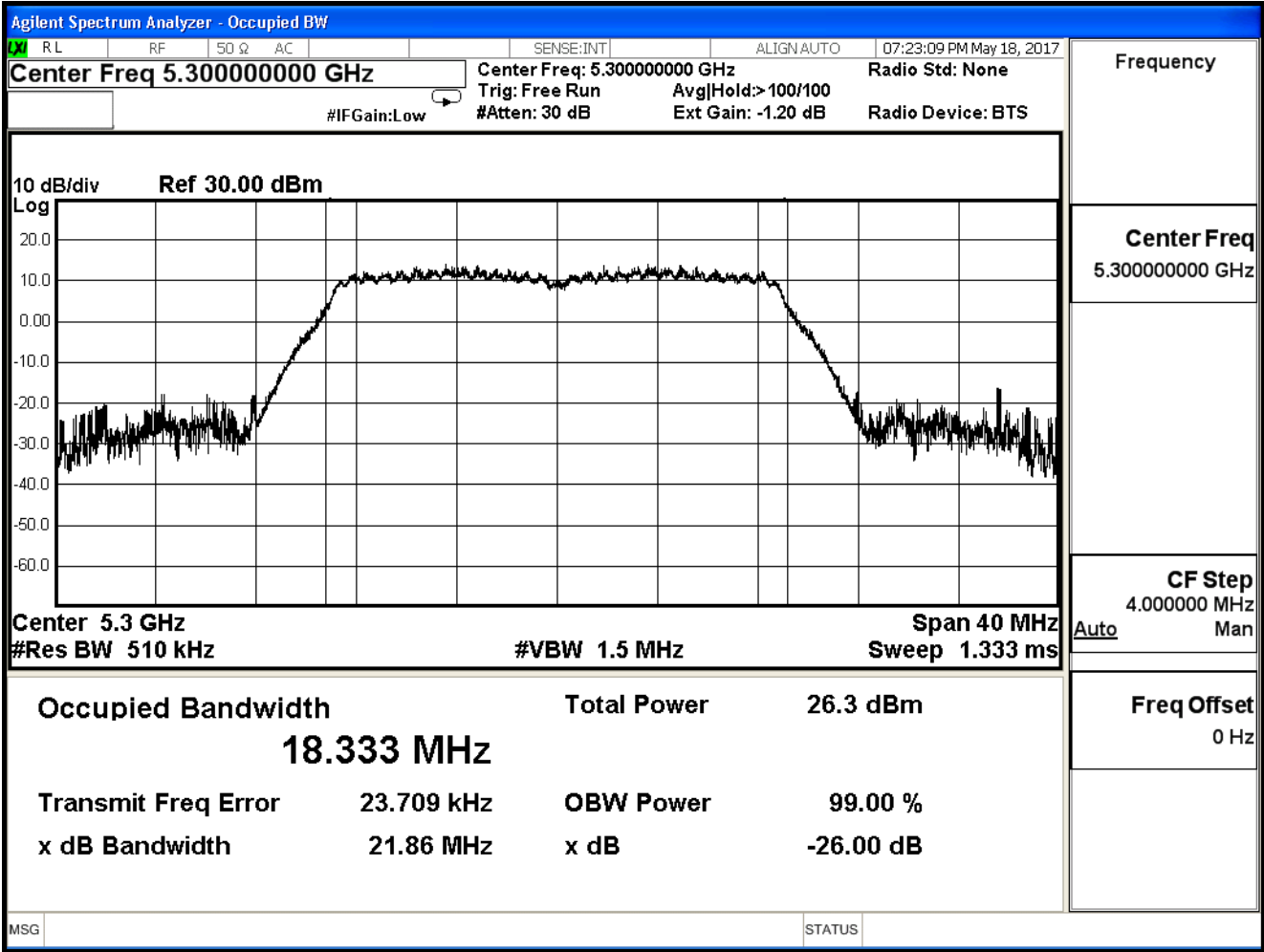
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_ MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11n_20M(ANT 0)

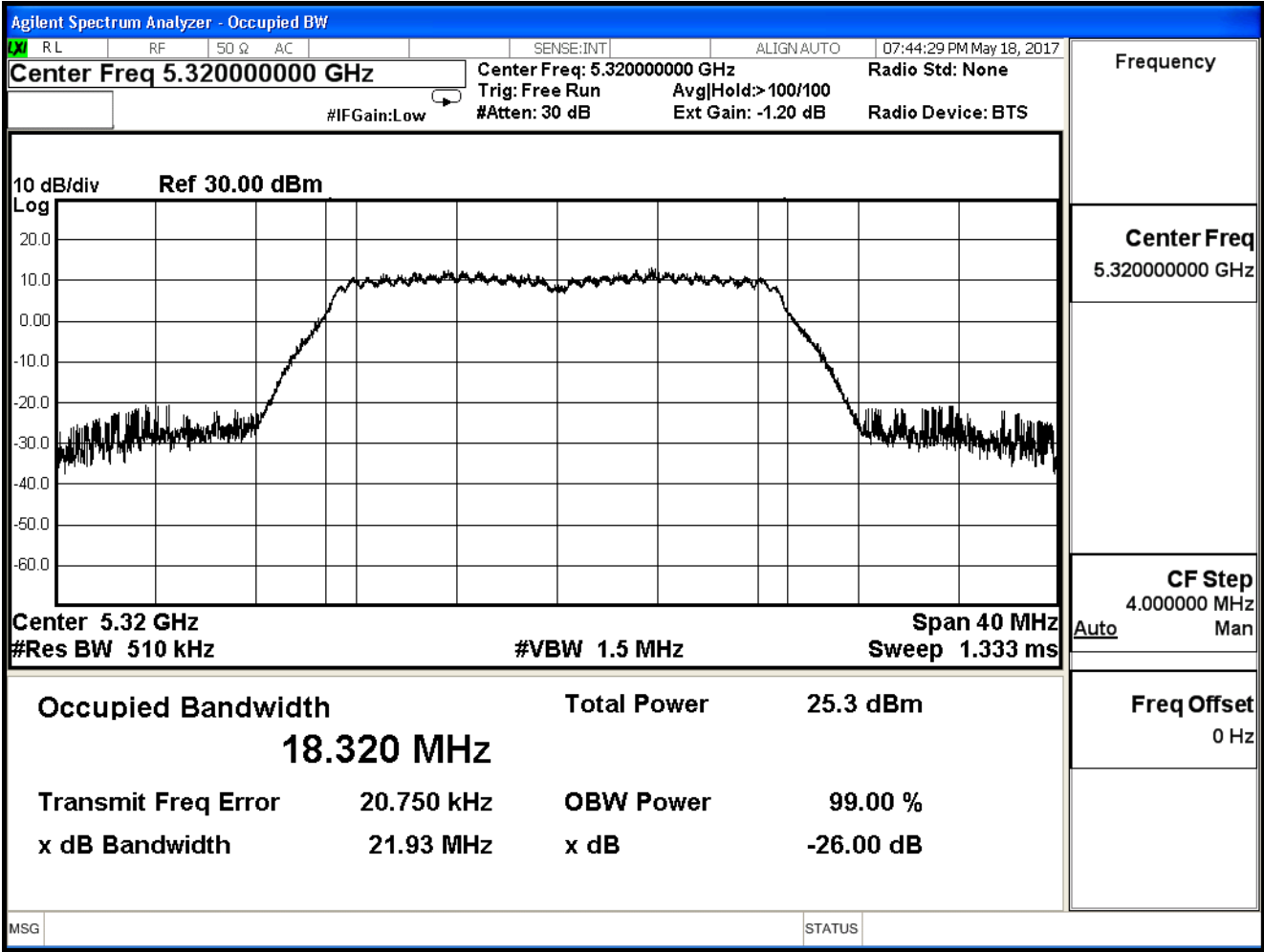
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
52	5260	22.580	18.433	--	Pass
60	5300	21.860	18.333	--	Pass
64	5320	21.930	18.320	--	Pass

Channel 52 (5260MHz)

Channel 60 (5300MHz)



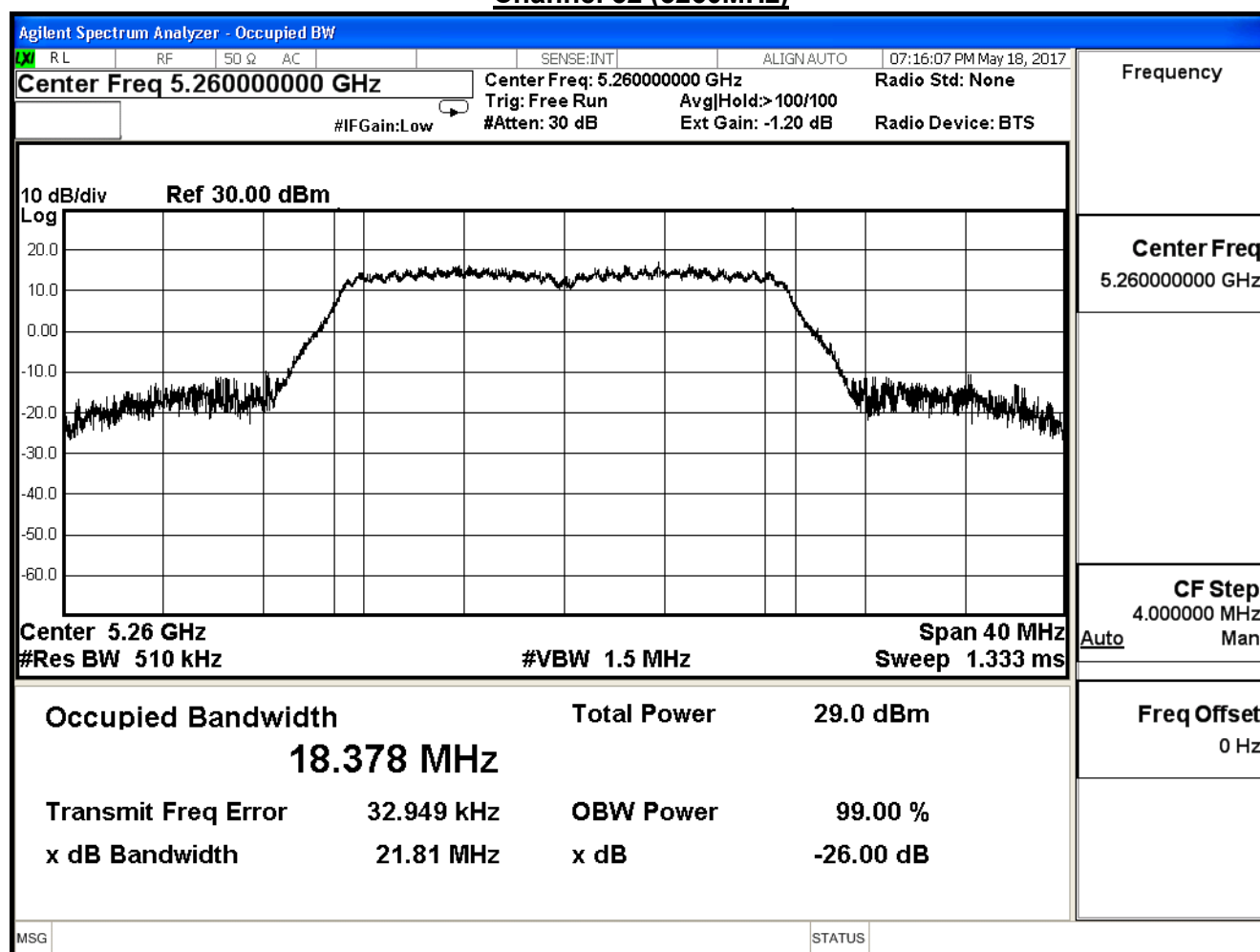
Channel 64 (5320MHz)



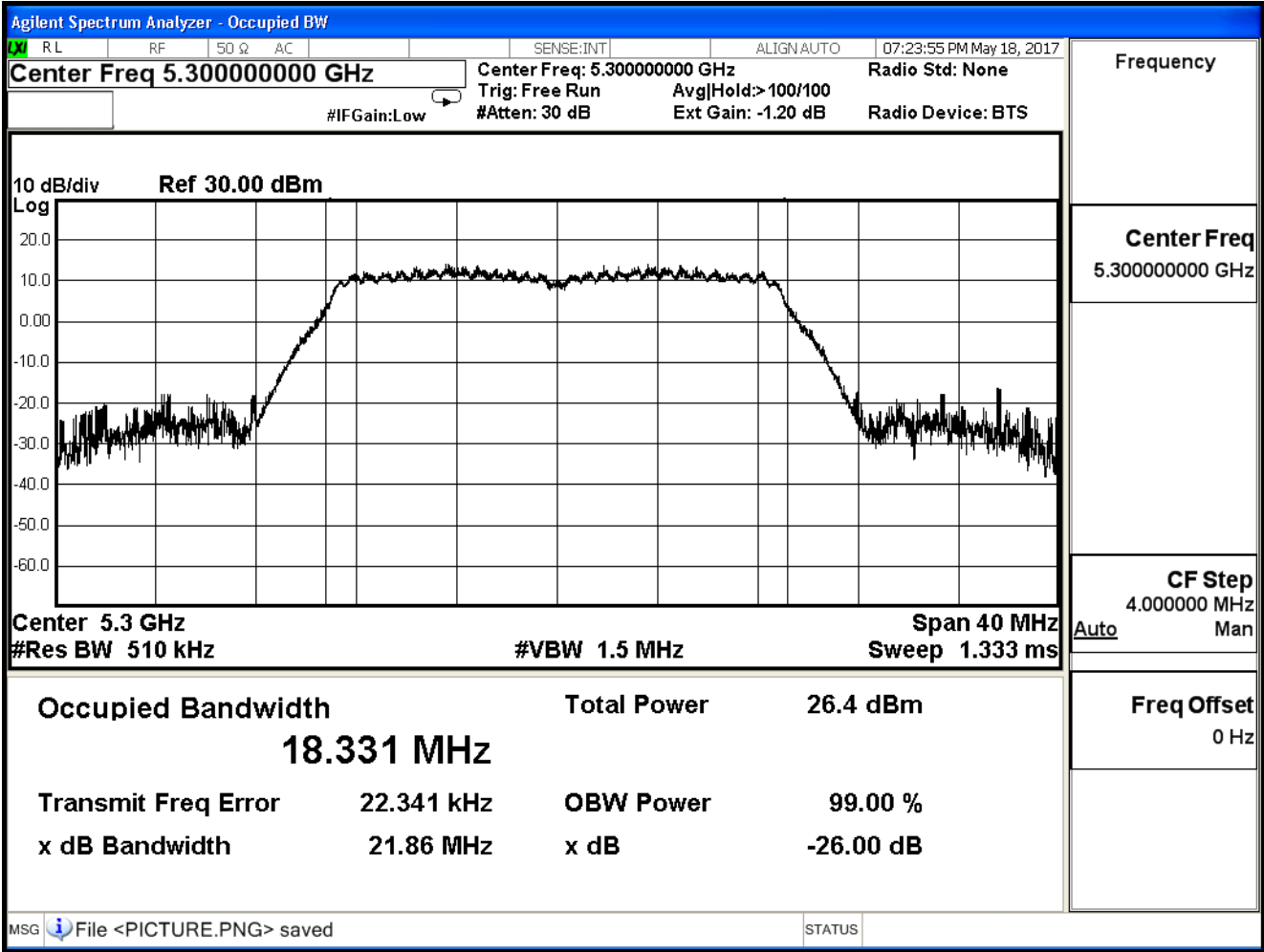
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11n_20M(ANT 1)

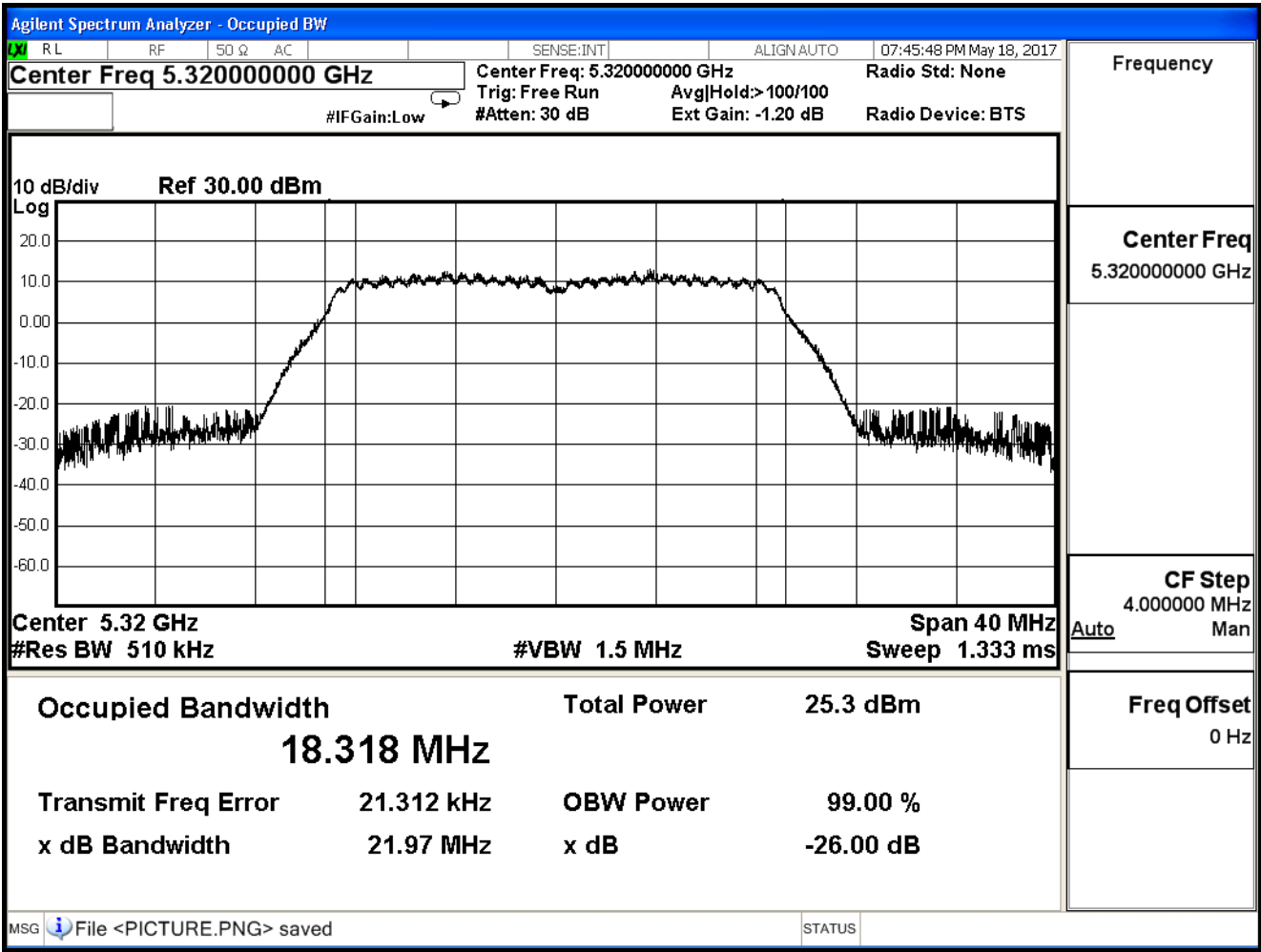
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
52	5260	21.810	18.378	--	Pass
60	5300	21.860	18.331	--	Pass
64	5320	21.970	18.318	--	Pass

Channel 52 (5260MHz)

Channel 60 (5300MHz)



Channel 64 (5320MHz)

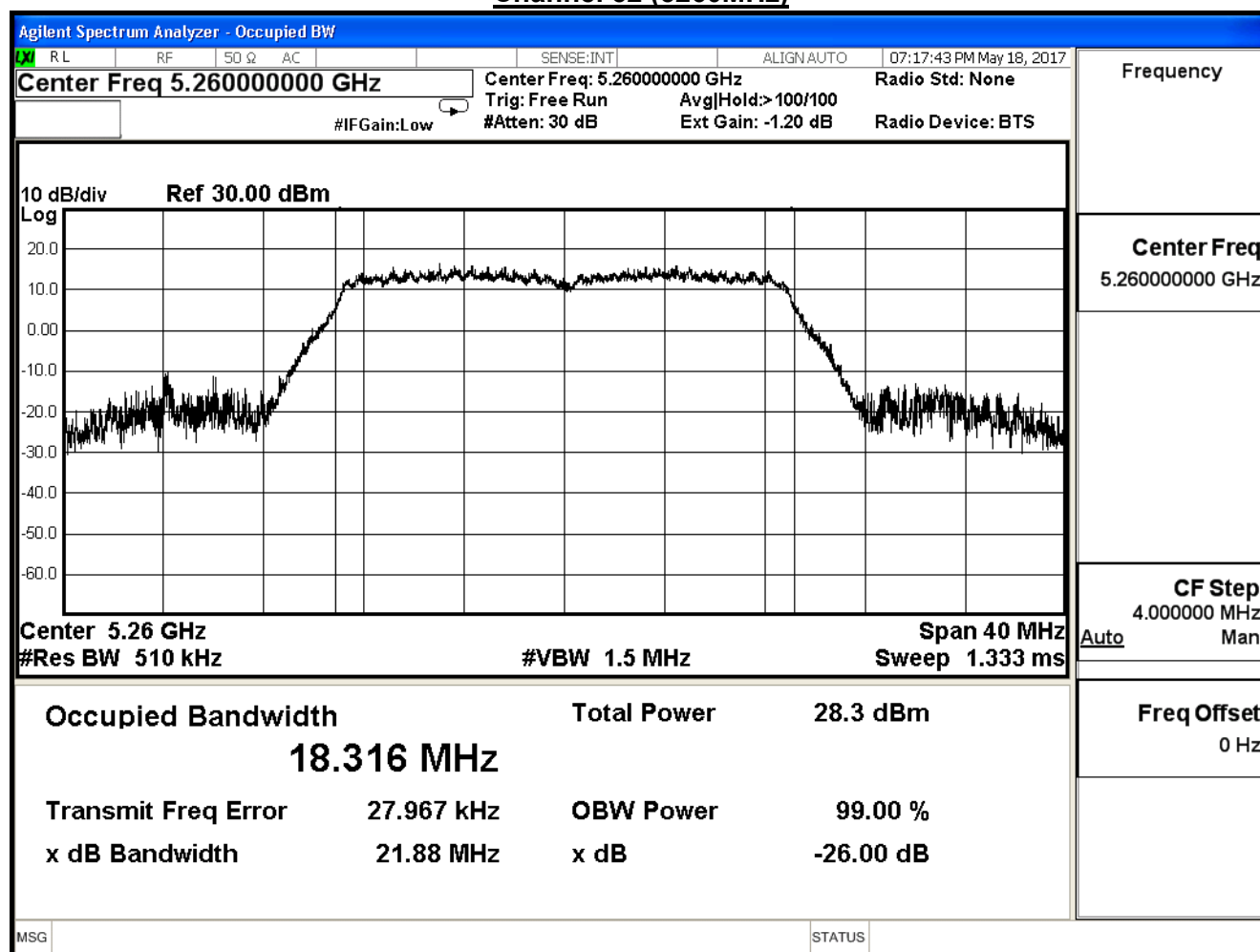


Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

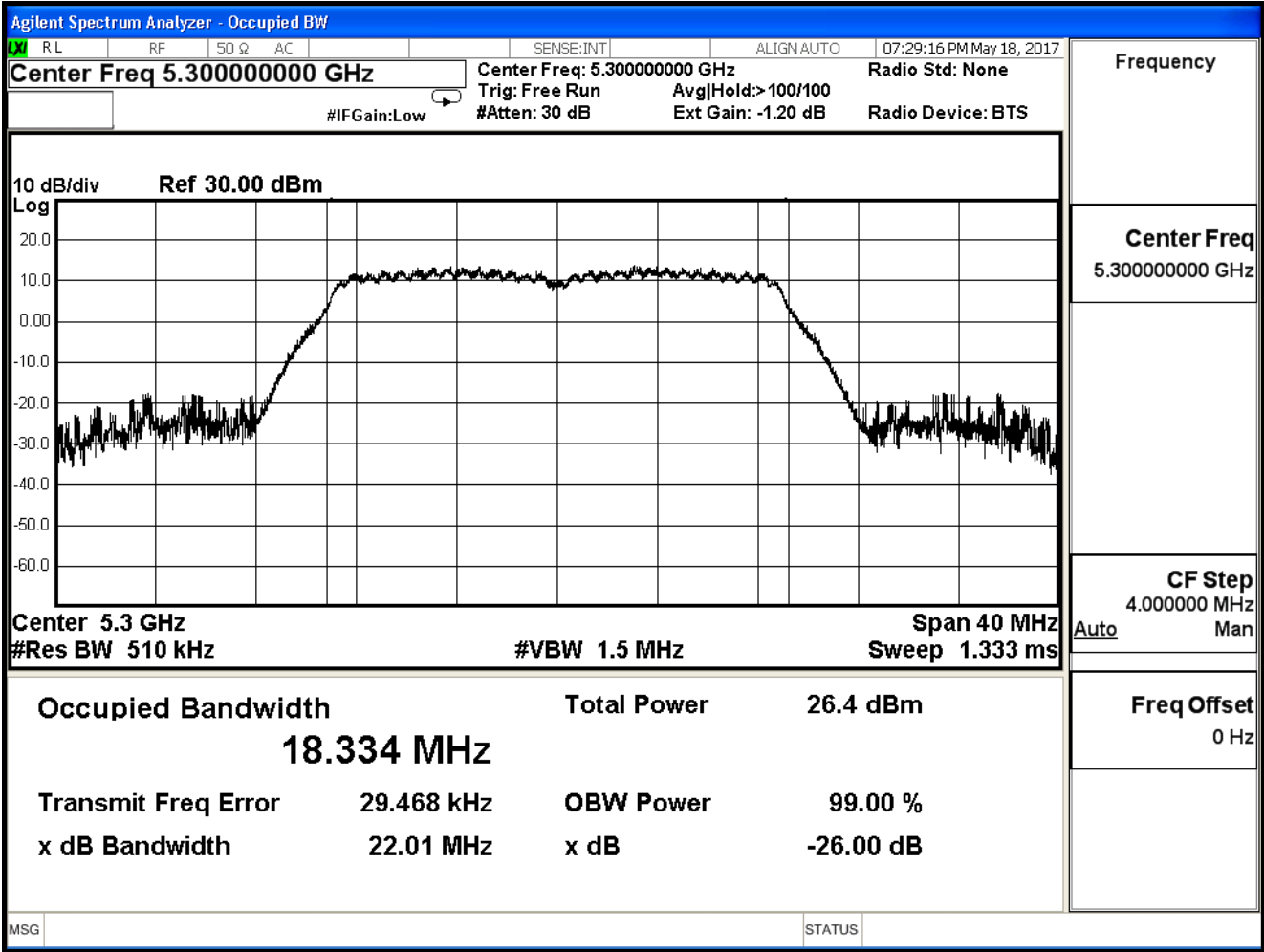
802.11n_20M(ANT 2)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
52	5260	21.880	18.316	--	Pass
60	5300	22.010	18.334	--	Pass
64	5320	21.880	18.297	--	Pass

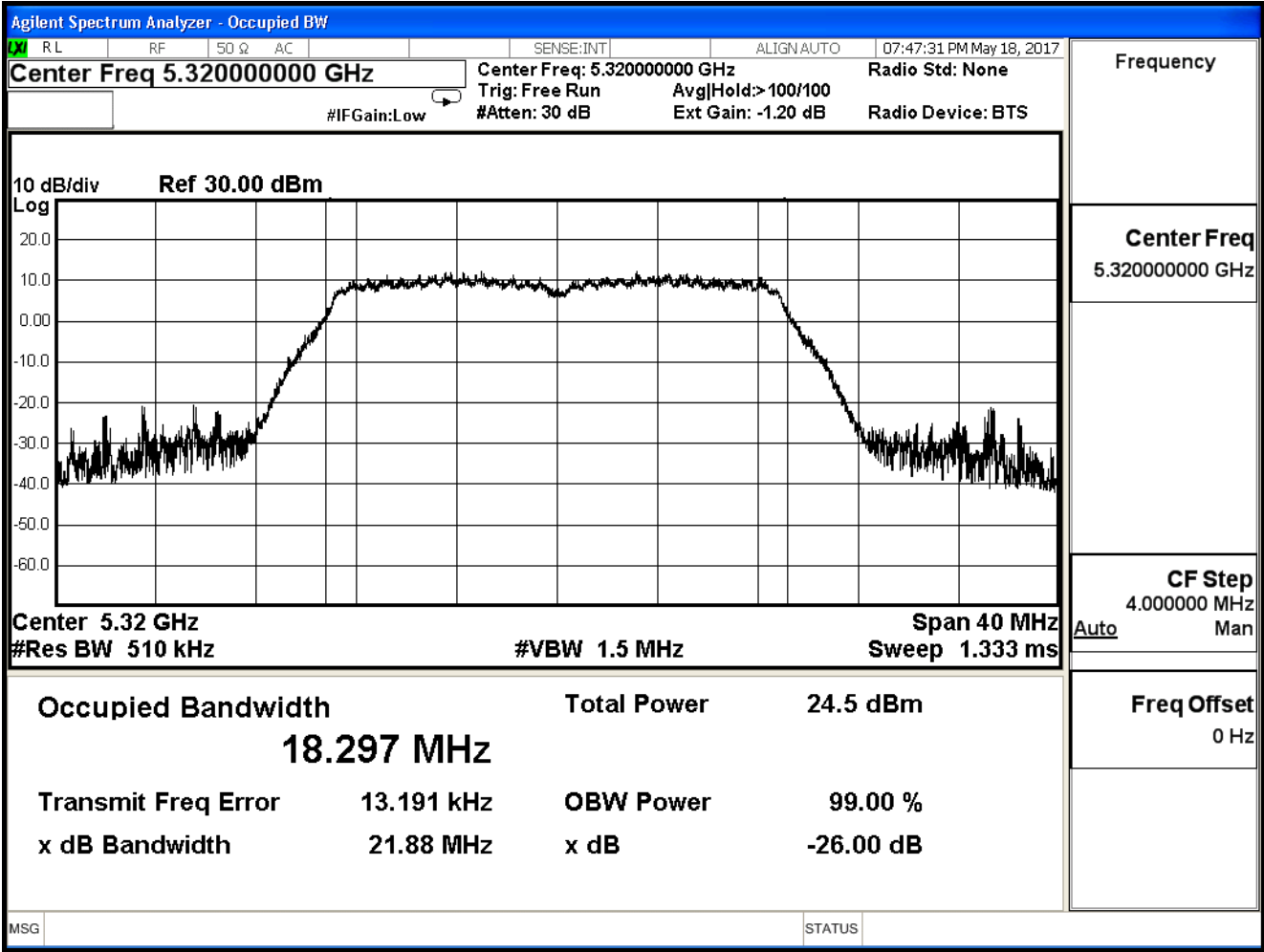
Channel 52 (5260MHz)



Channel 60 (5300MHz)



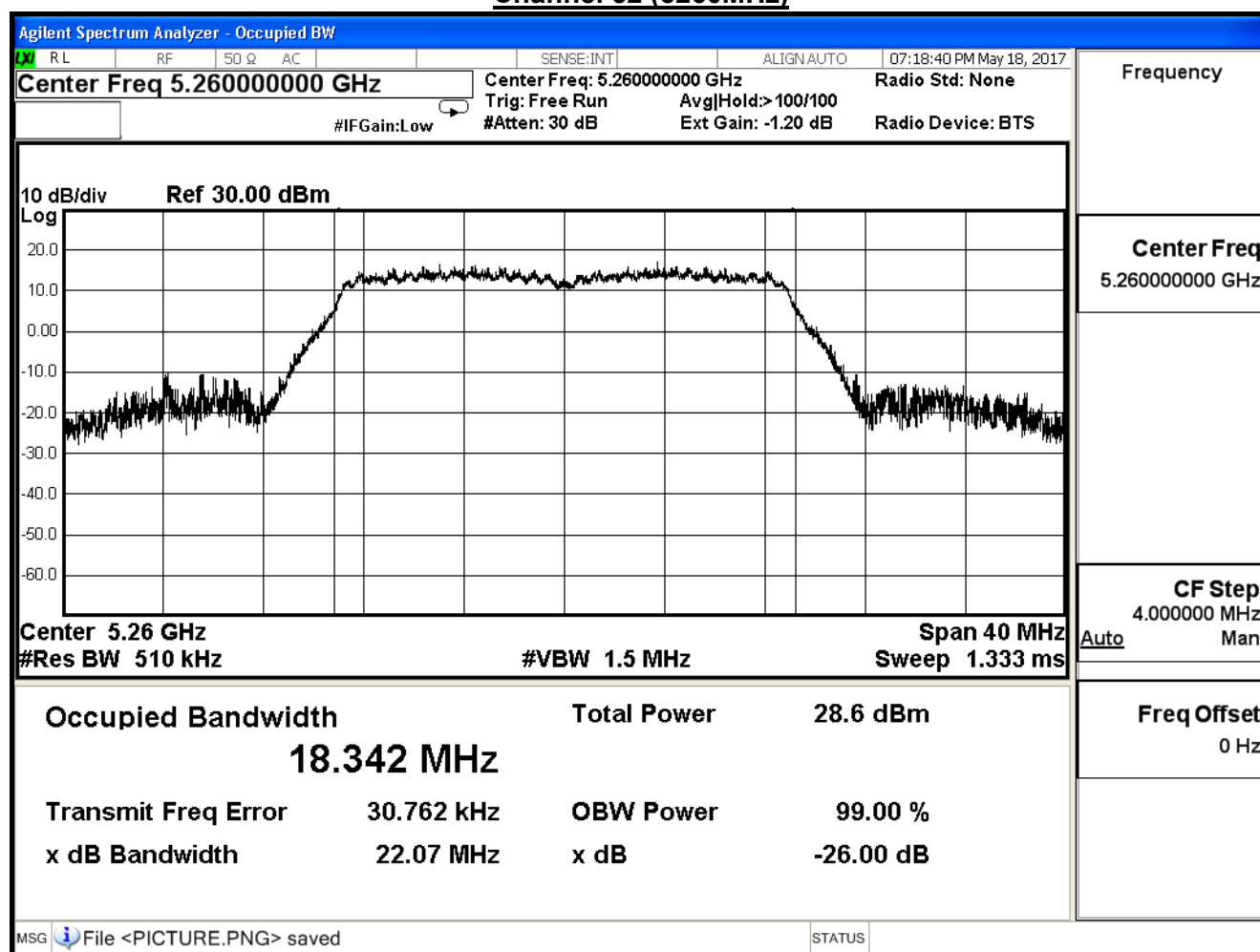
Channel 64 (5320MHz)



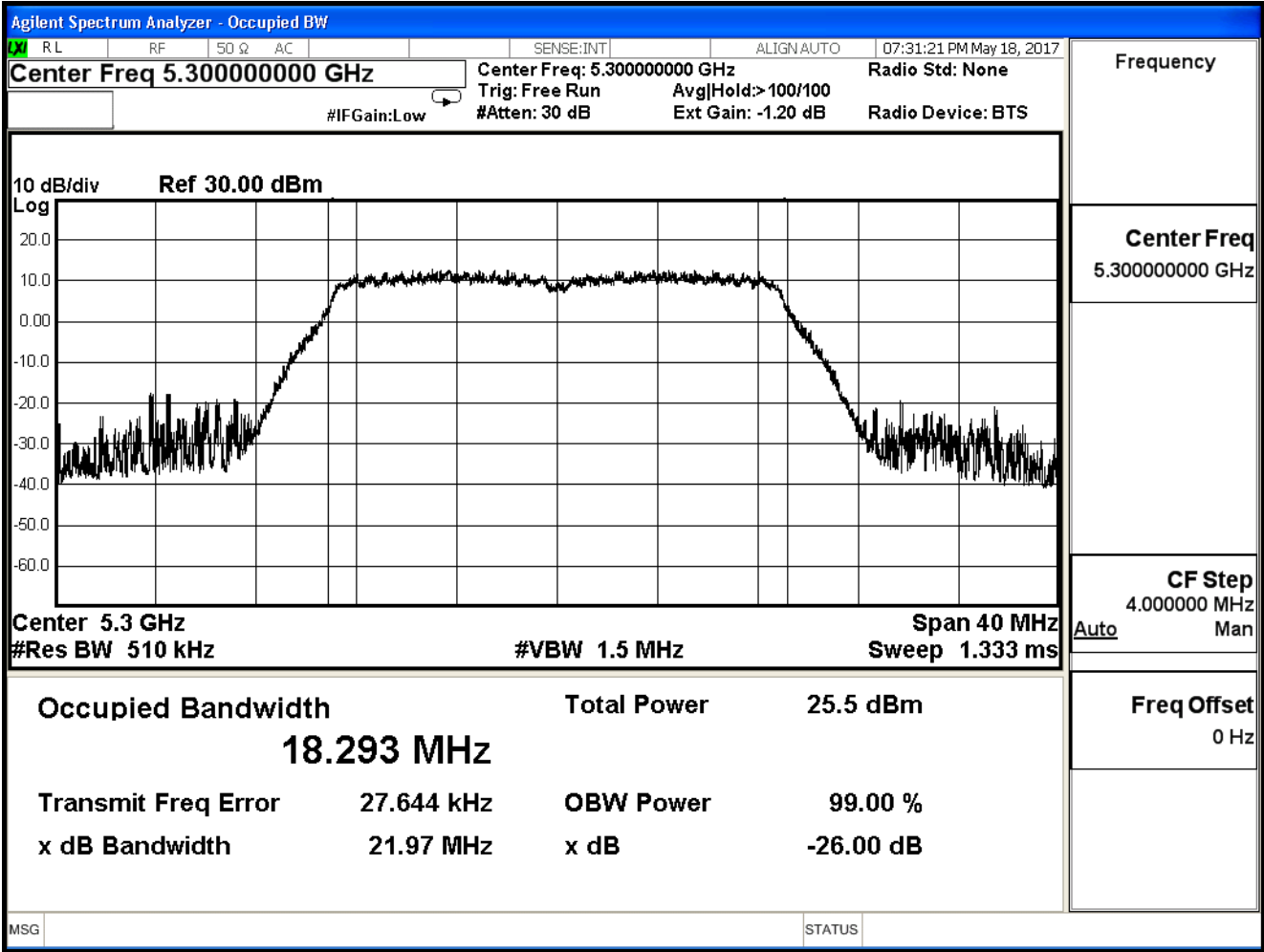
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11n_20M(ANT 3)

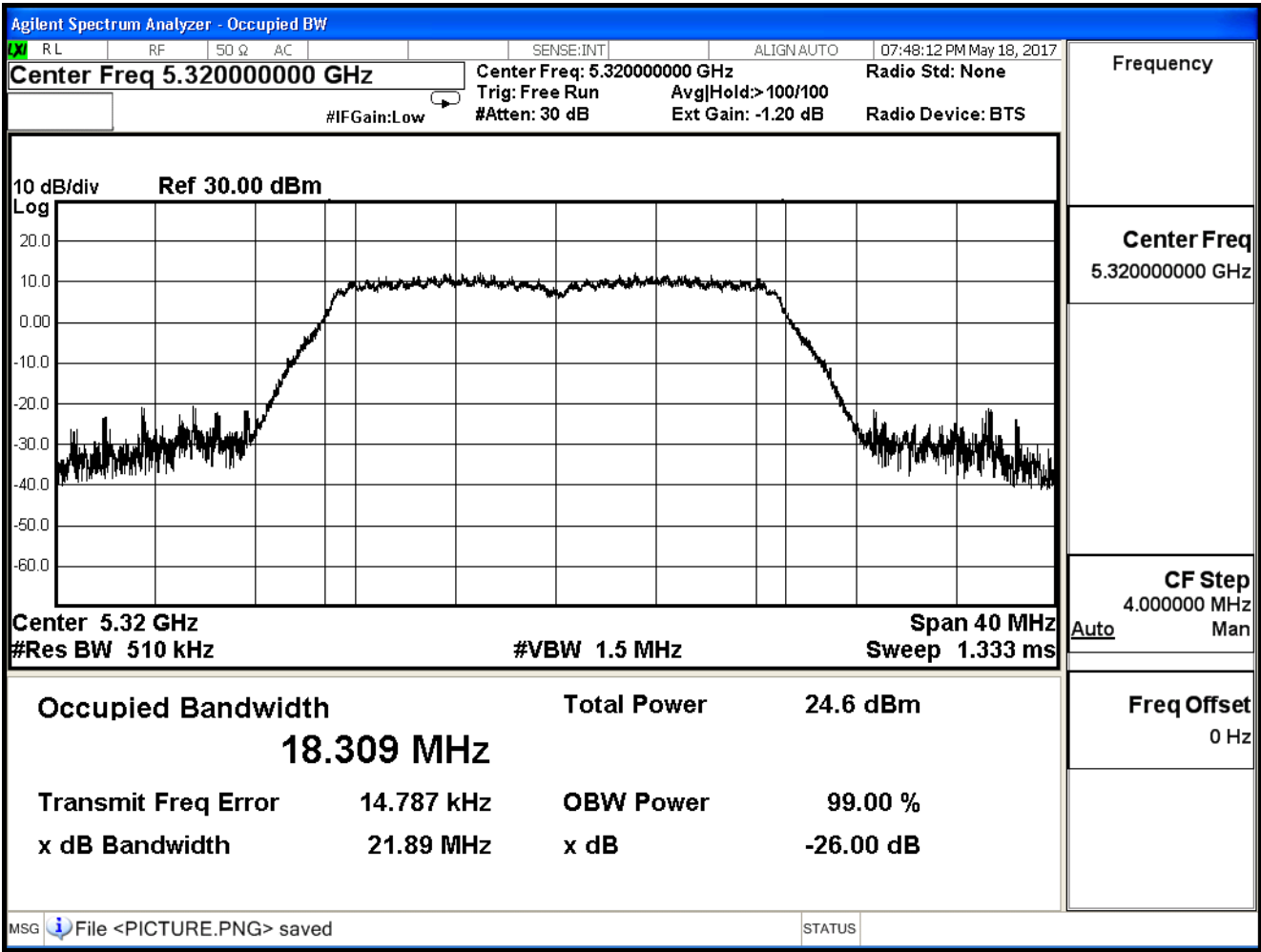
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
52	5260	22.070	18.342	--	Pass
60	5300	21.970	18.293	--	Pass
64	5320	21.890	18.309	--	Pass

Channel 52 (5260MHz)

Channel 60 (5300MHz)



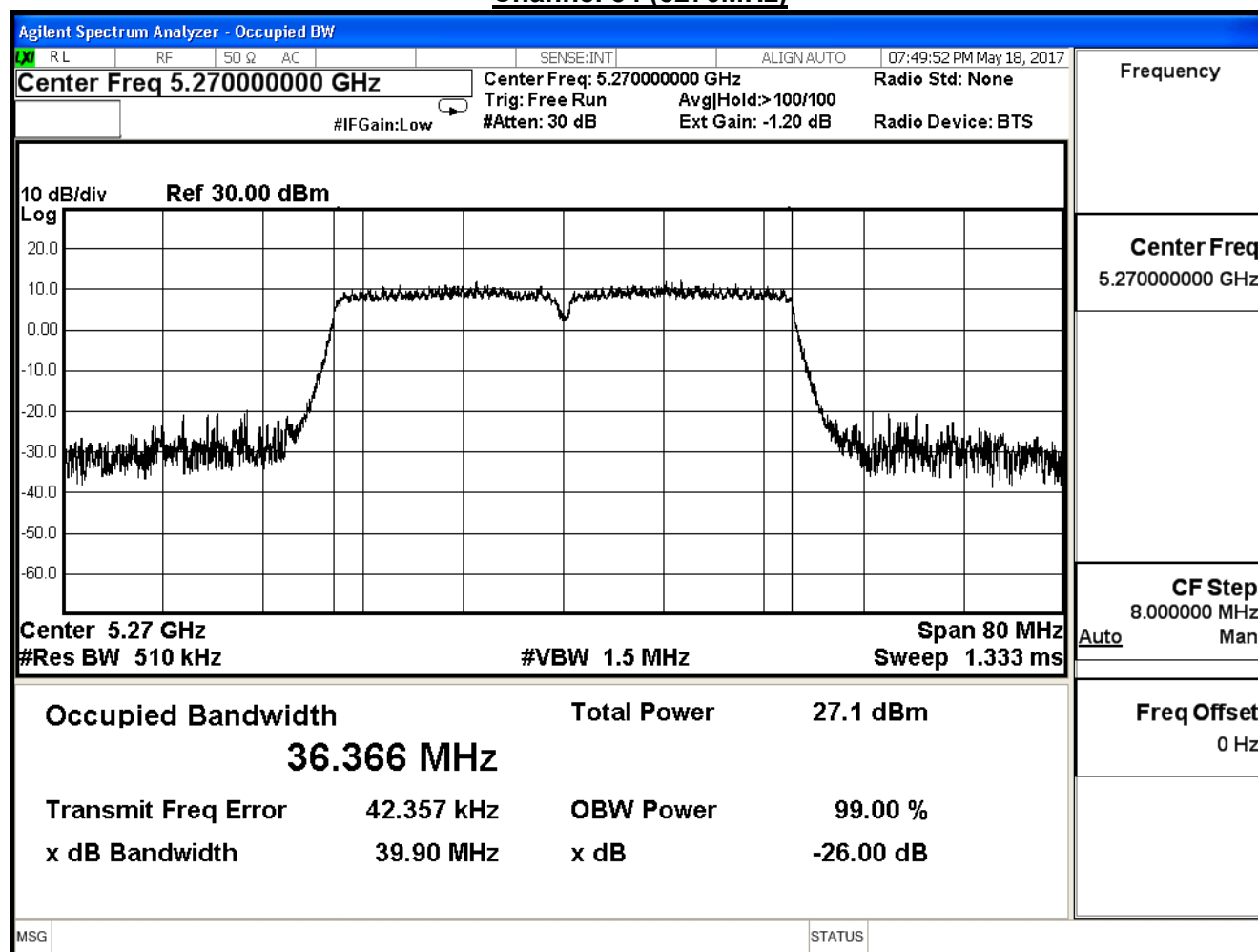
Channel 64 (5320MHz)



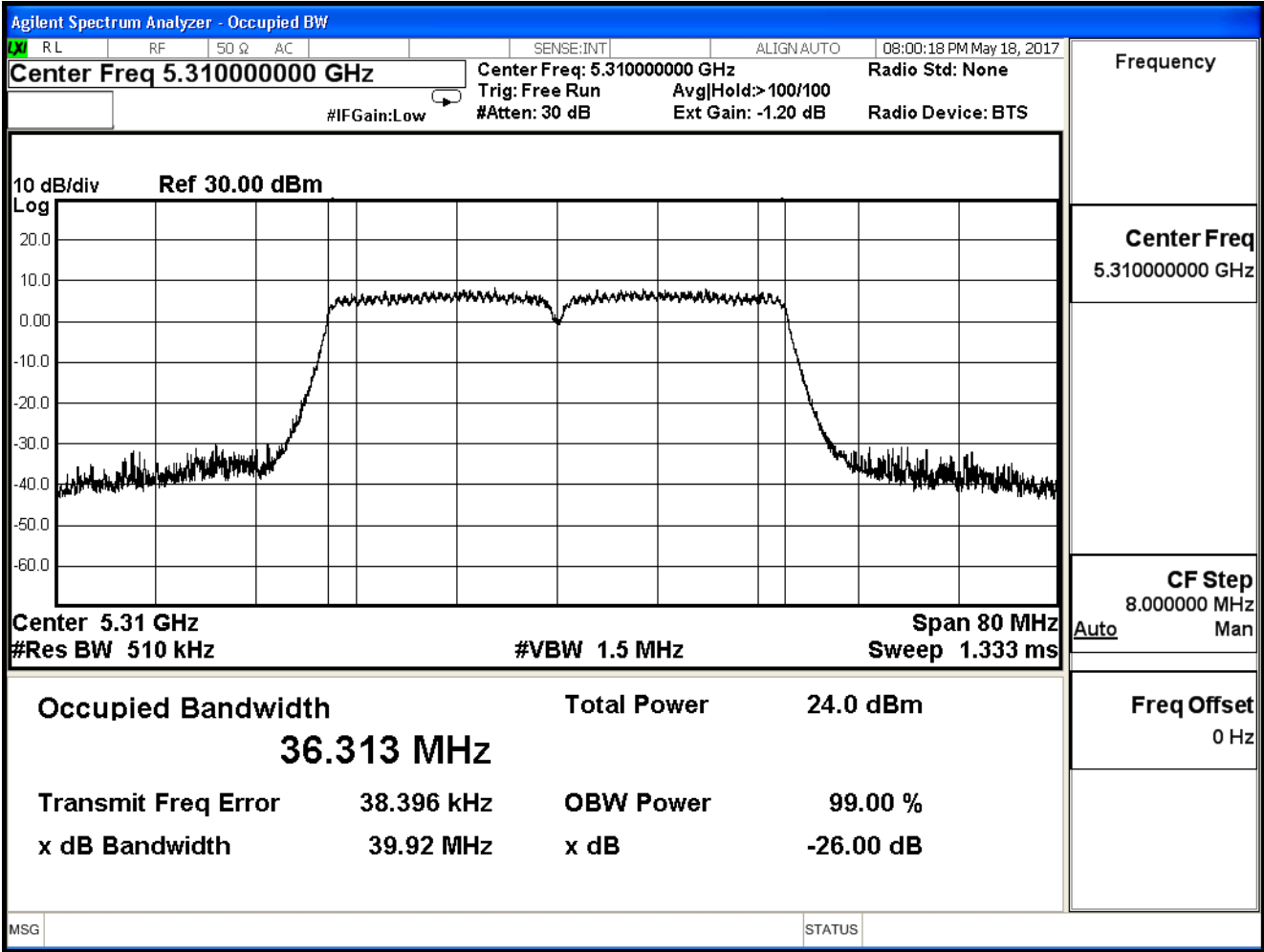
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11n_40M(ANT 0)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
54	5270	39.900	36.366	--	Pass
62	5310	39.920	36.313	--	Pass

Channel 54 (5270MHz)

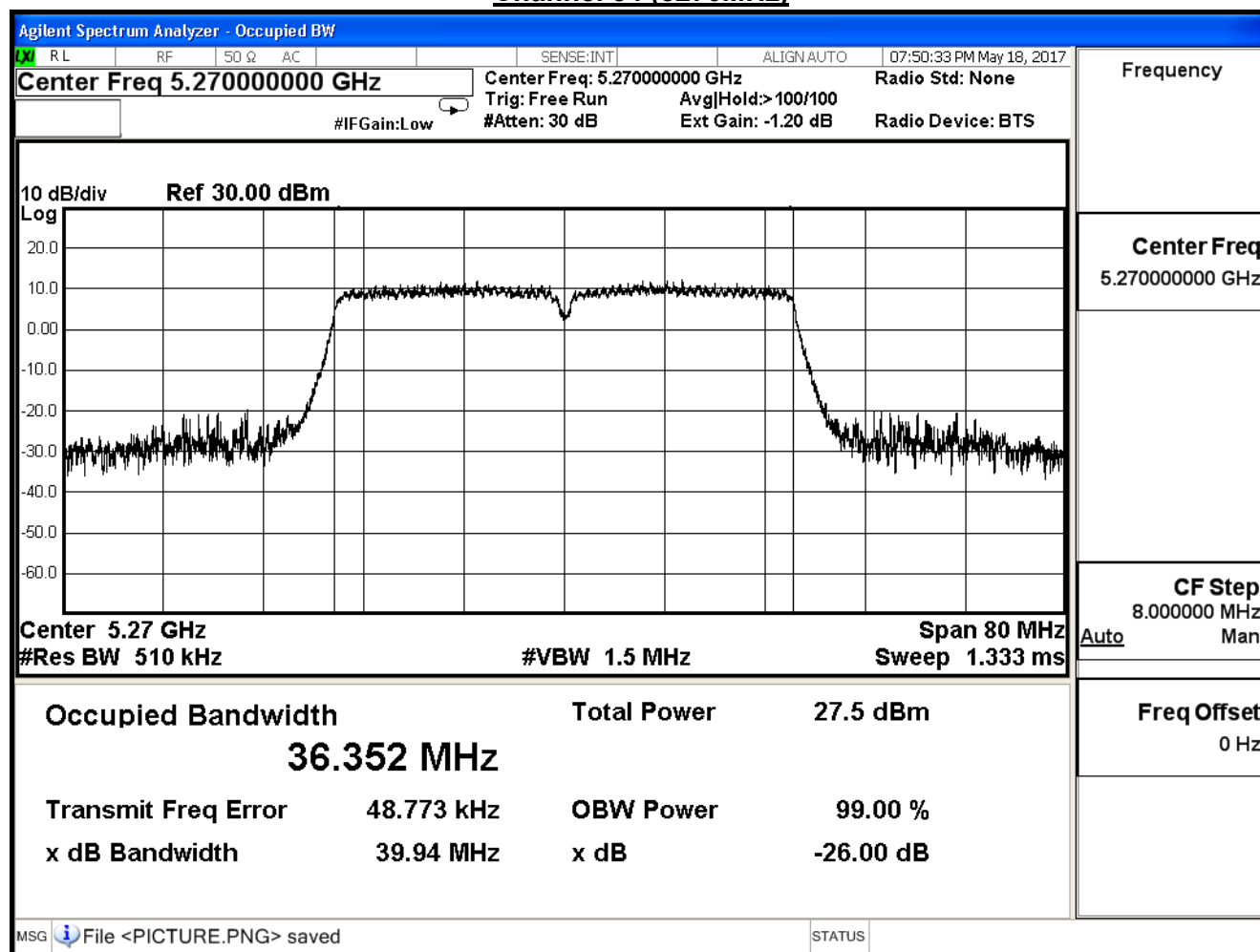
Channel 62 (5310MHz)



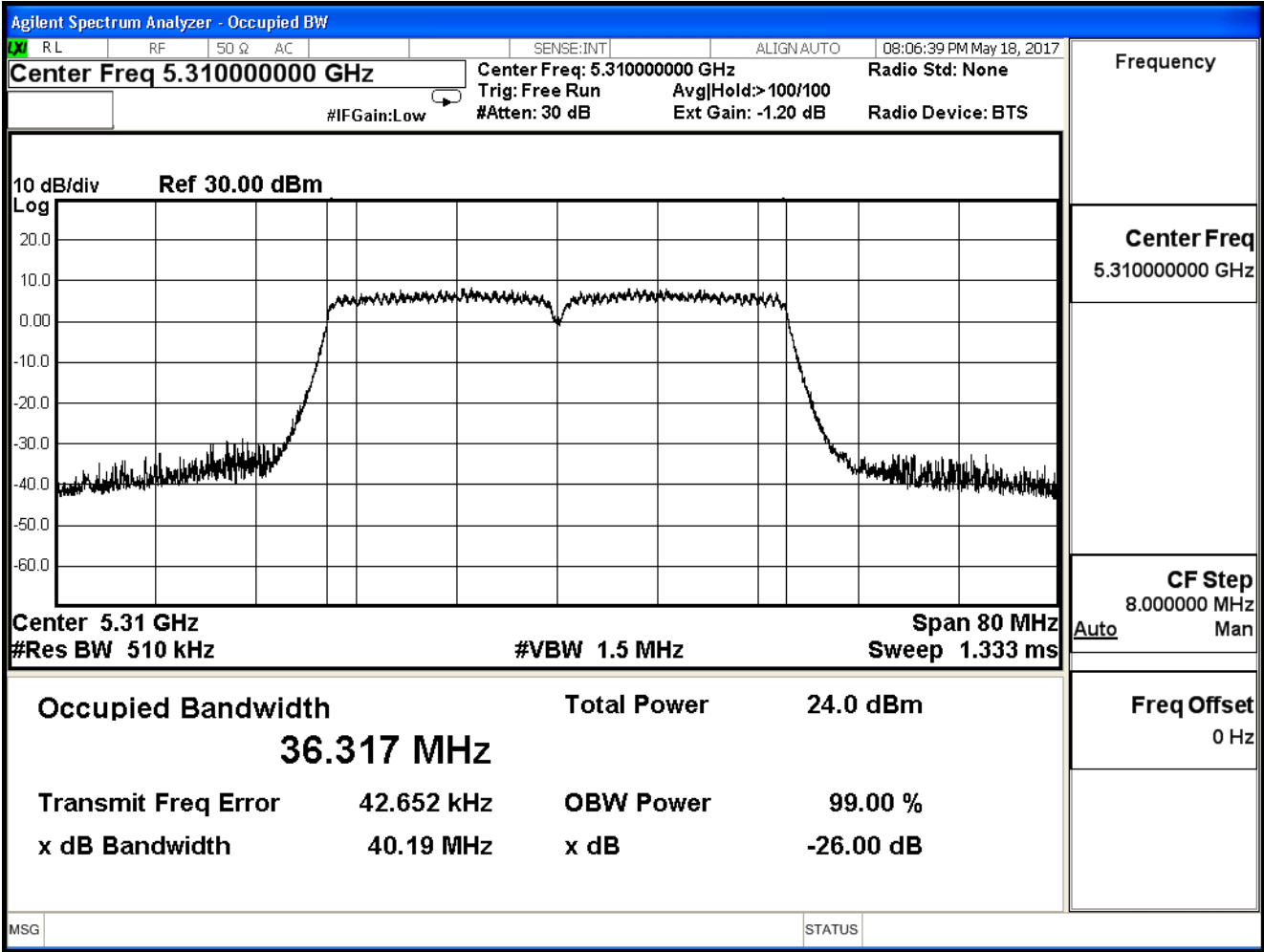
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11n_40M(ANT 1)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
54	5270	39.940	36.352	--	Pass
62	5310	40.190	36.317	--	Pass

Channel 54 (5270MHz)

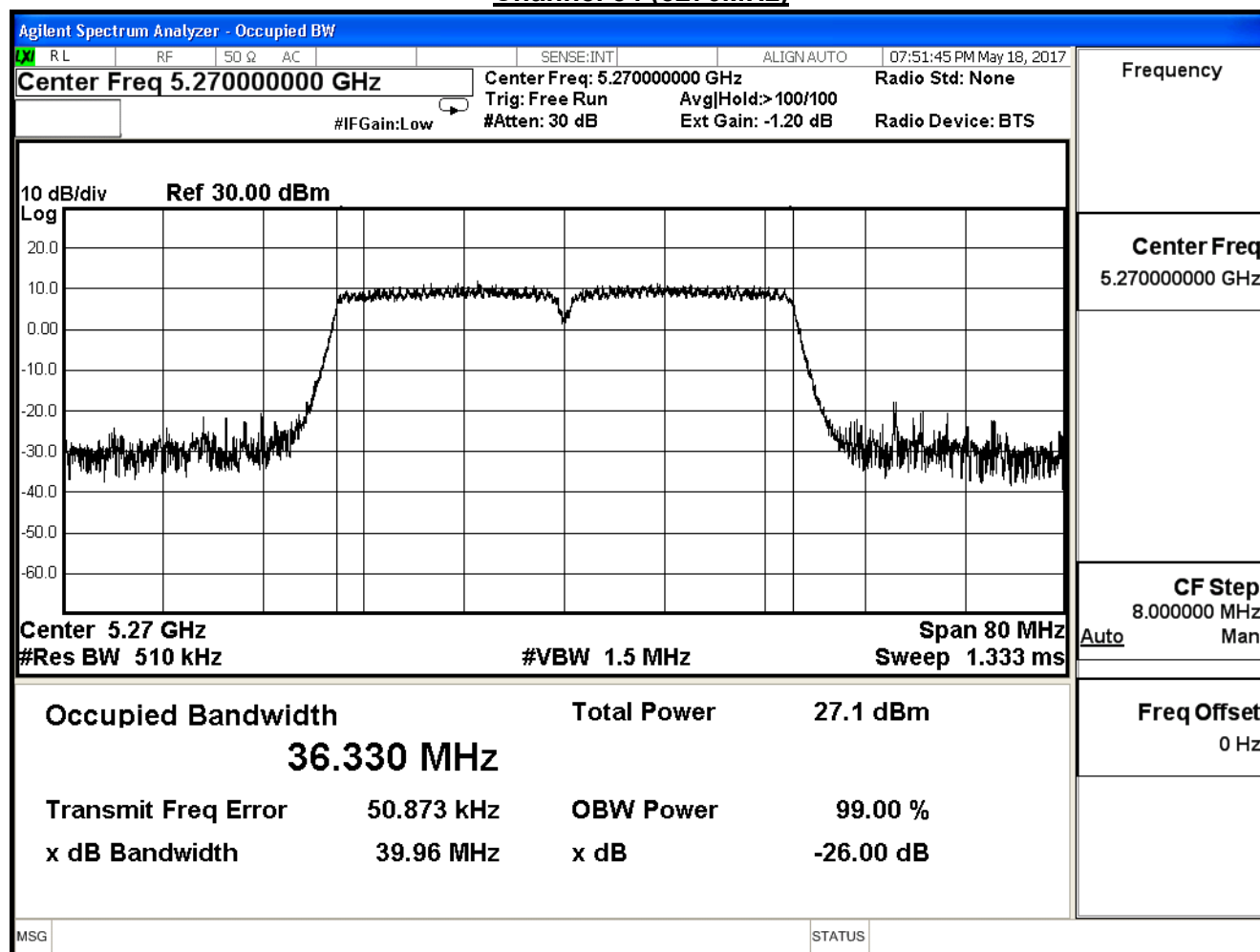
Channel 62 (5310MHz)



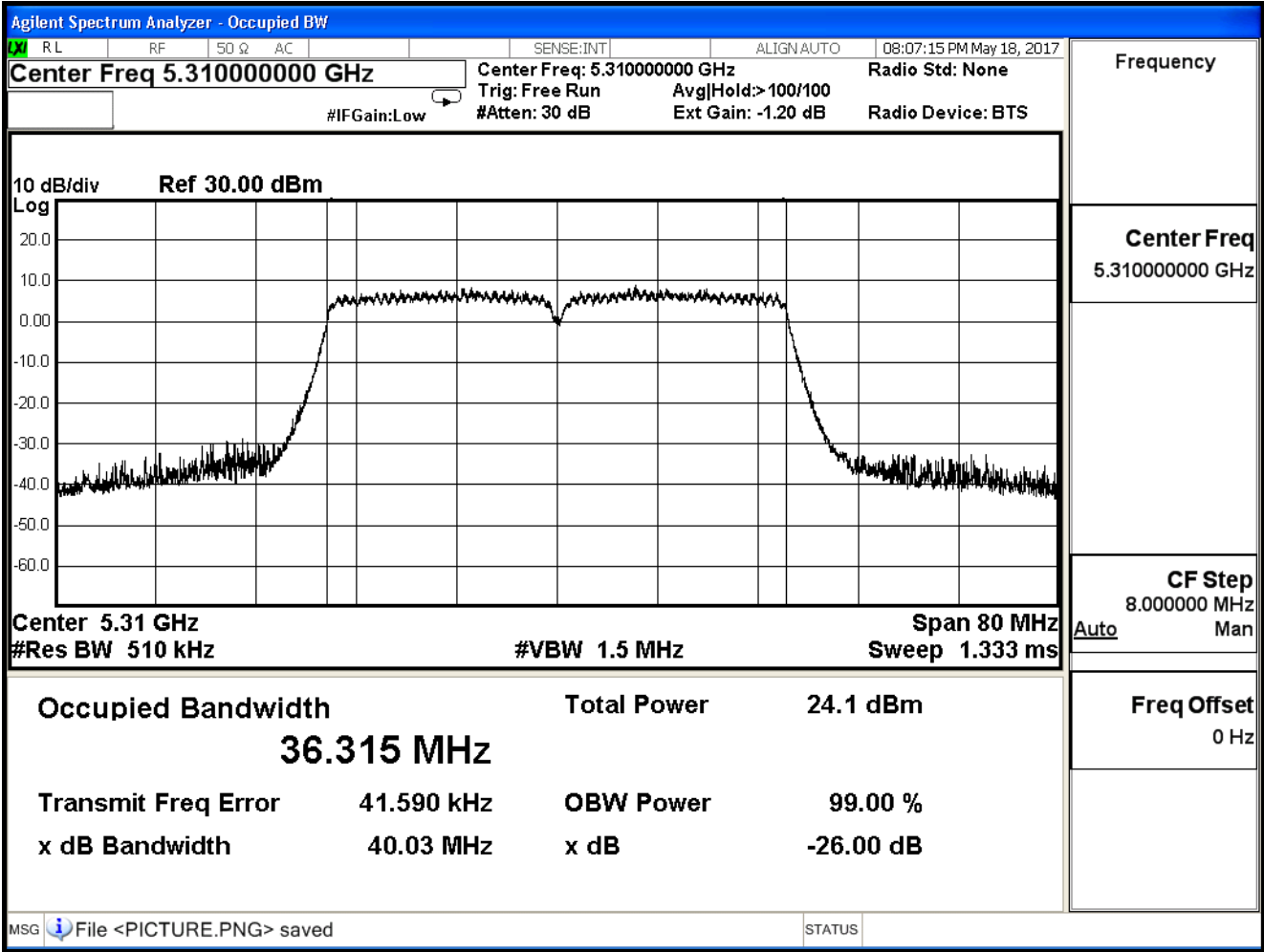
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx ADP: AD890326010-2LF MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11n_40M(ANT 2)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
54	5270	39.960	36.330	--	Pass
62	5310	40.030	36.315	--	Pass

Channel 54 (5270MHz)

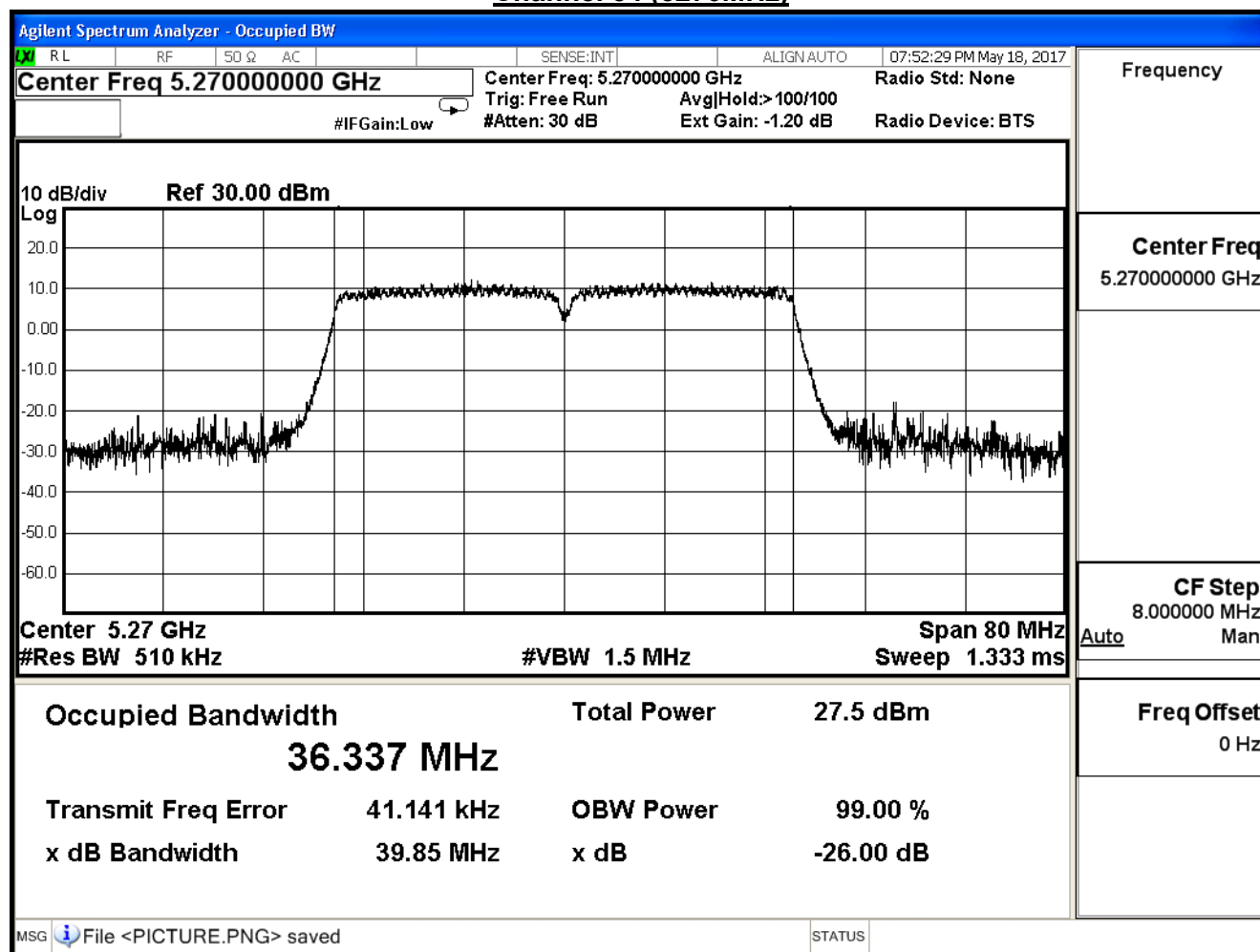
Channel 62 (5310MHz)



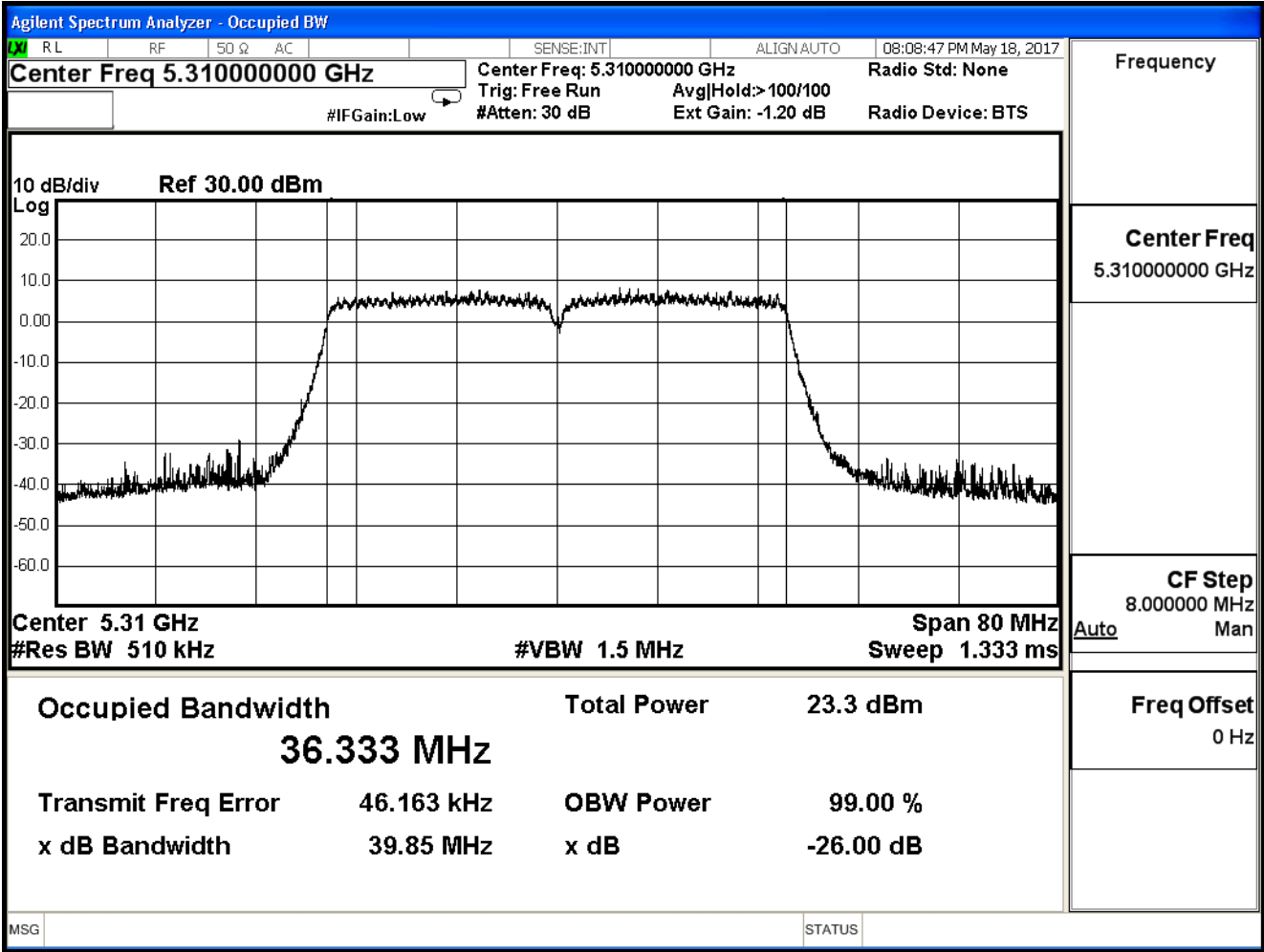
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11n_40M(ANT 3)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
54	5270	39.850	36.337	--	Pass
62	5310	39.850	36.333	--	Pass

Channel 54 (5270MHz)

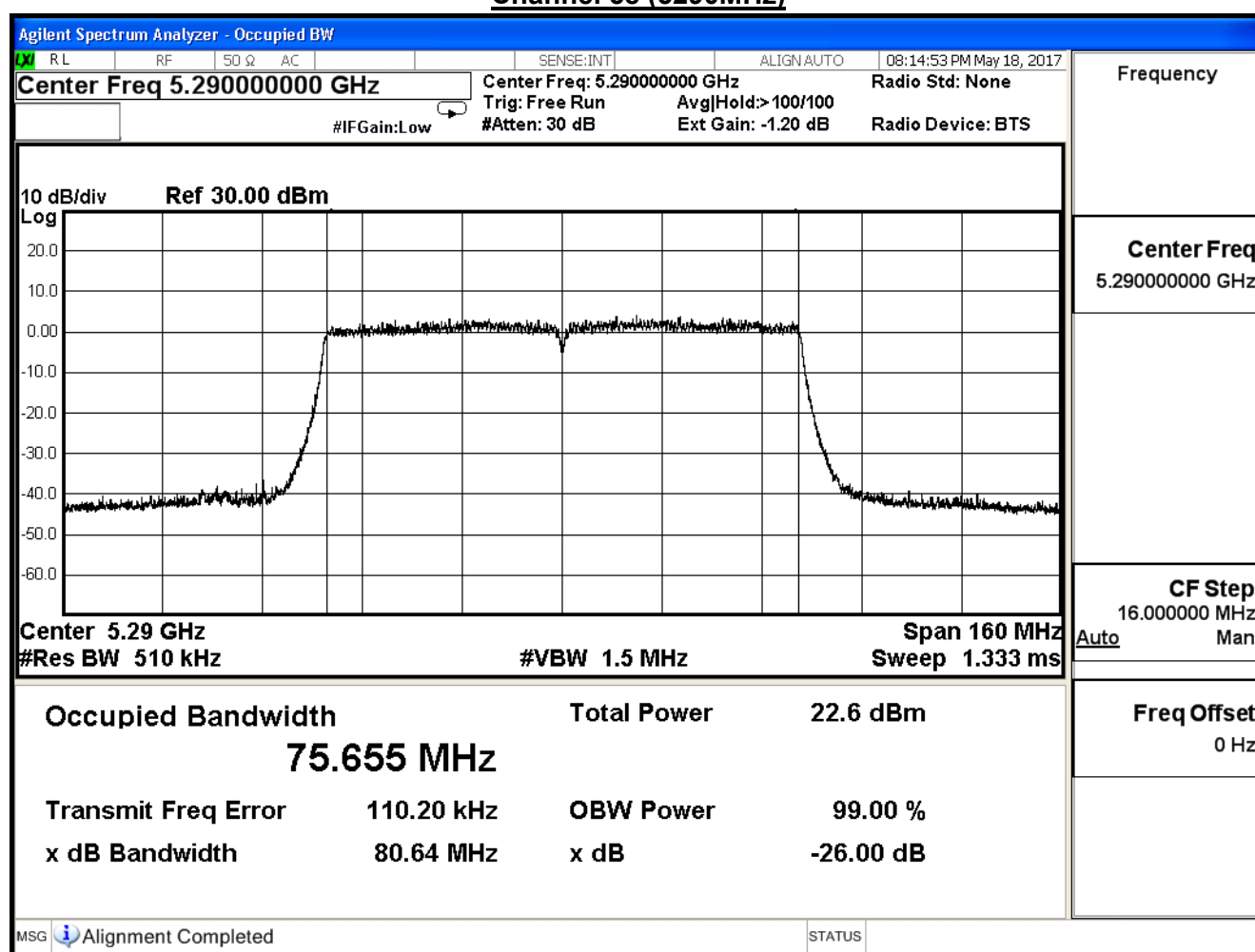
Channel 62 (5310MHz)



Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx ADP: AD890326010-2LF MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11ac_80M(ANT 0)

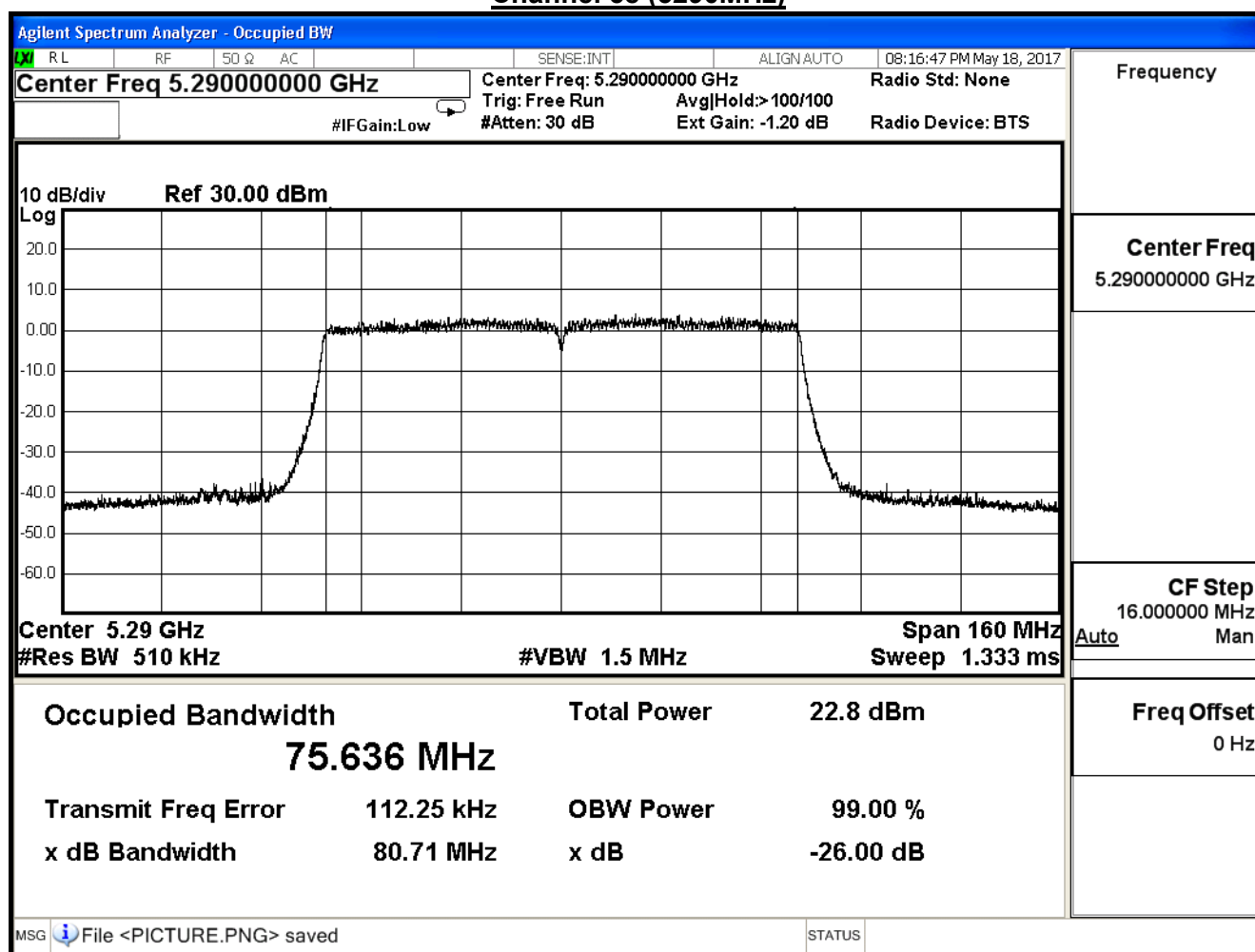
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
58	5290	80.640	75.655	--	Pass

Channel 58 (5290MHz)

Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11ac_80M(ANT 1)

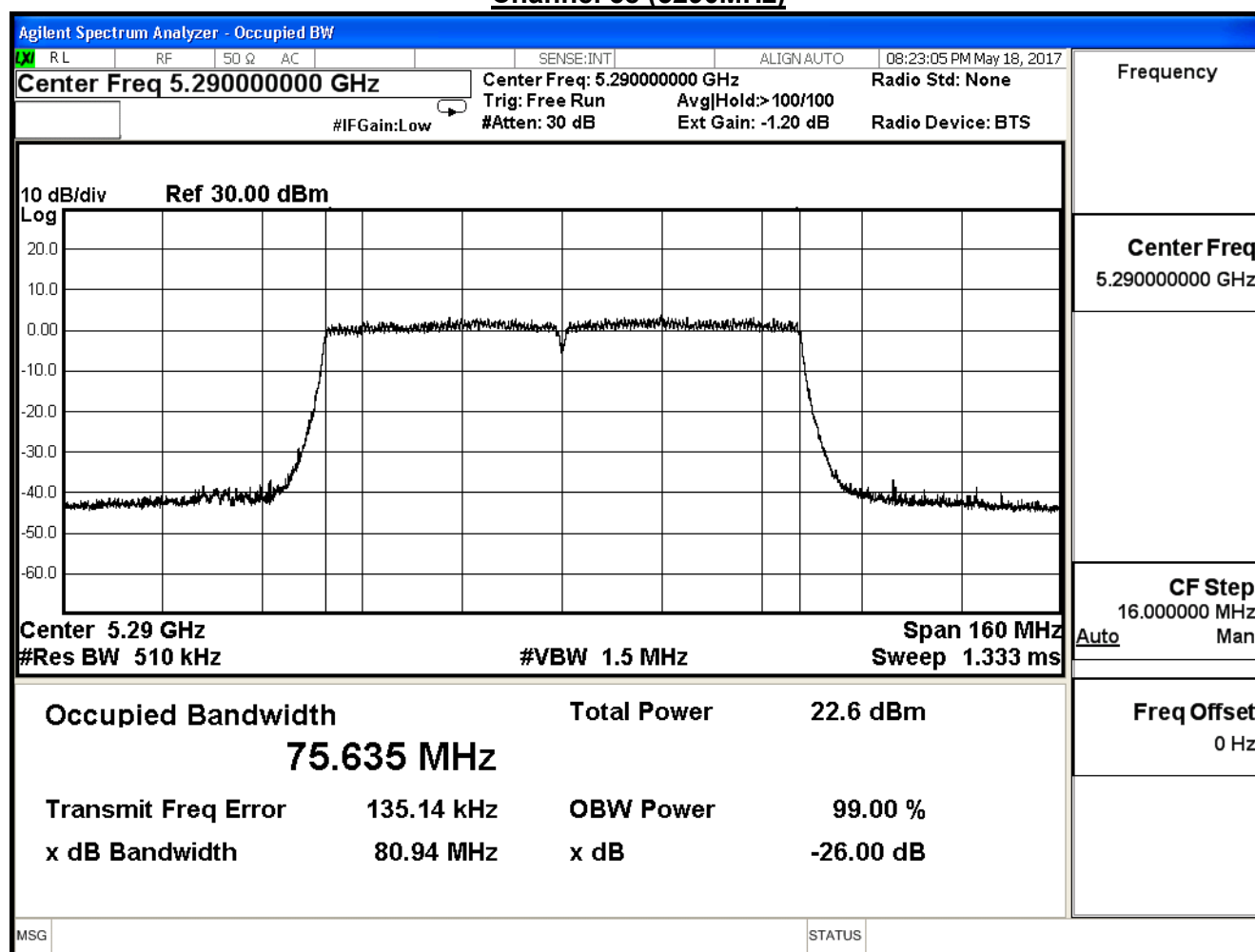
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
58	5290	80.710	75.636	--	Pass

Channel 58 (5290MHz)

Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11ac_80M(ANT 2)

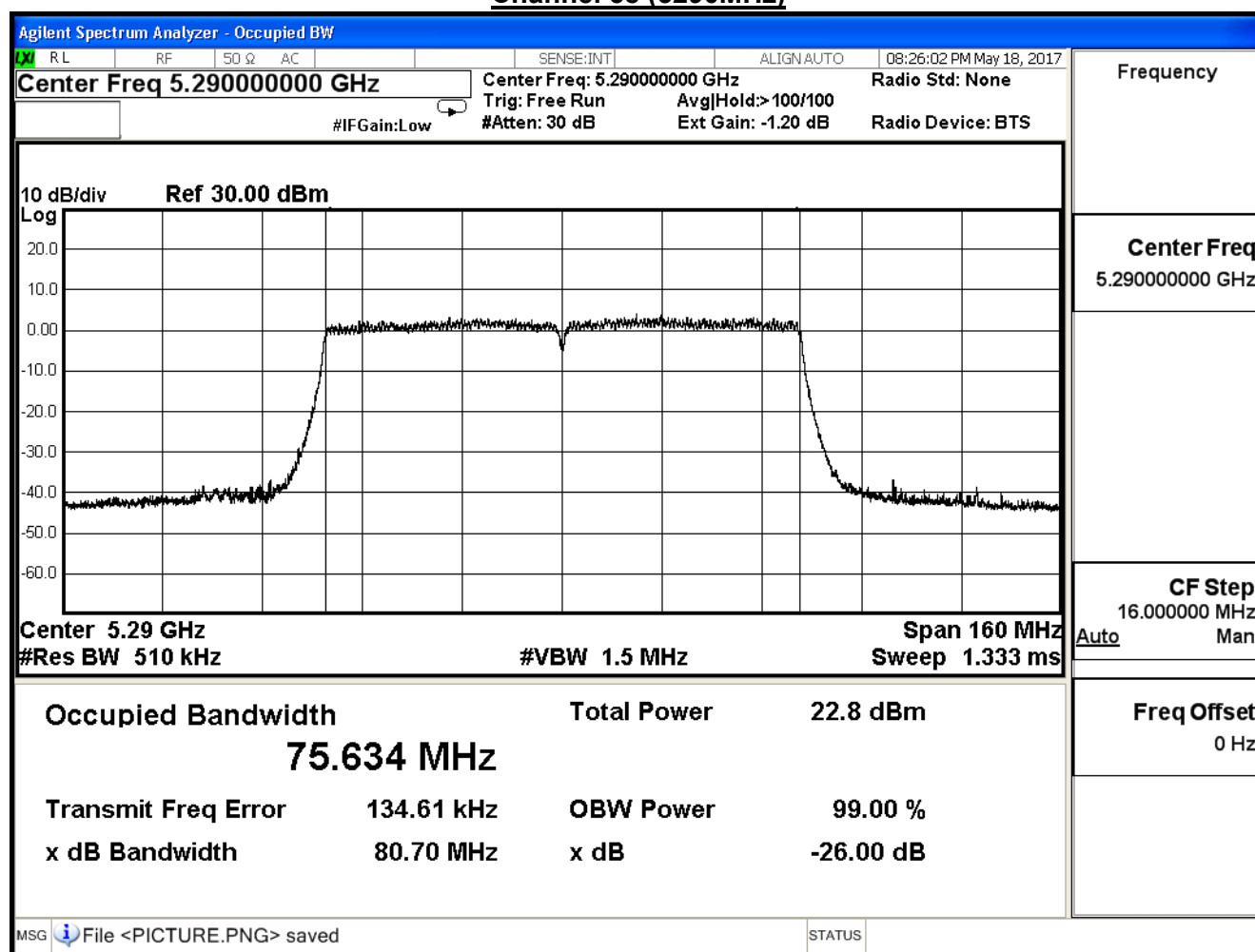
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
58	5290	80.940	75.635	--	Pass

Channel 58 (5290MHz)

Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/18	Test Site	SR10-H

802.11ac_80M(ANT 3)

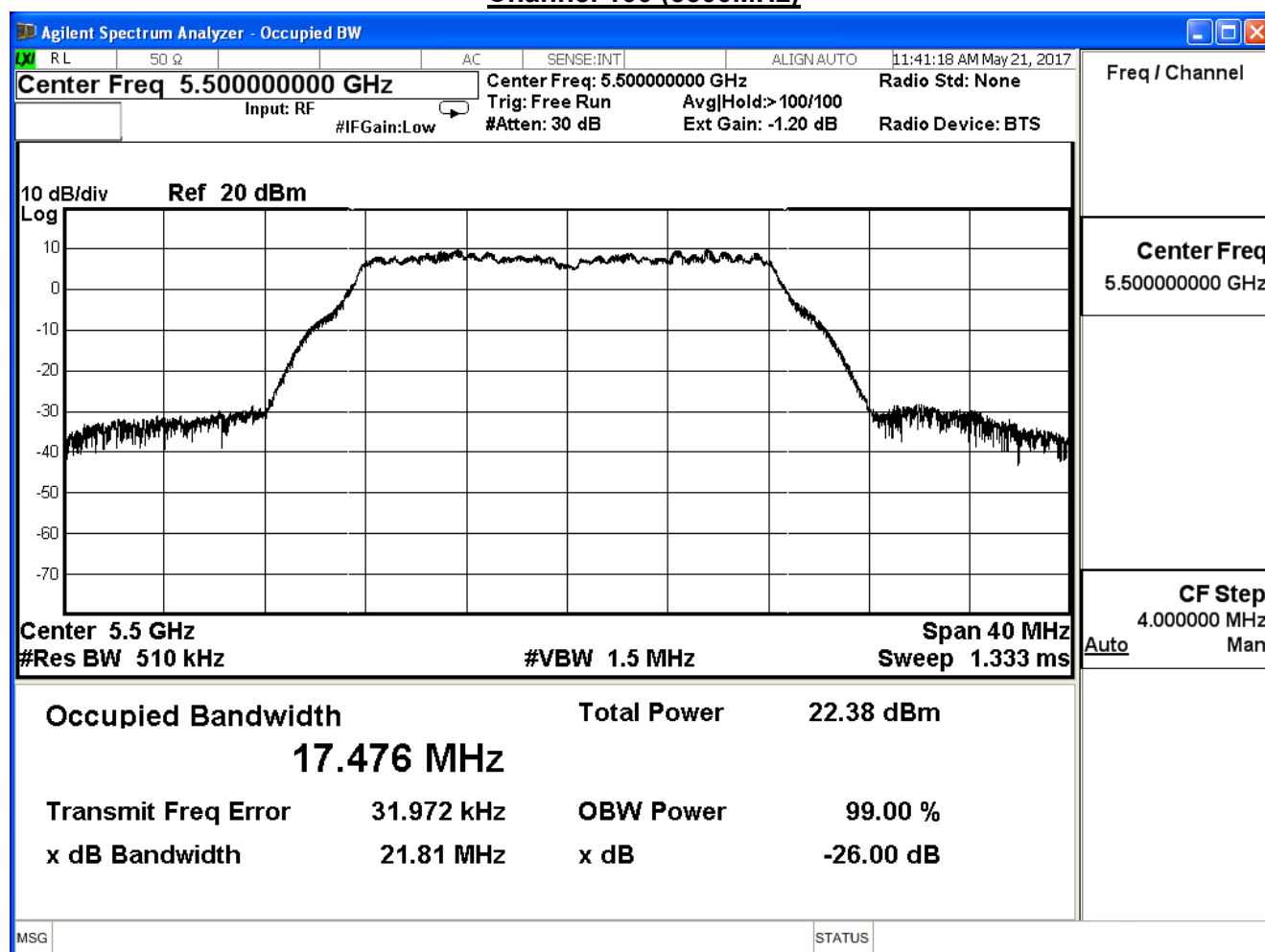
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
58	5290	80.700	75.634	--	Pass

Channel 58 (5290MHz)

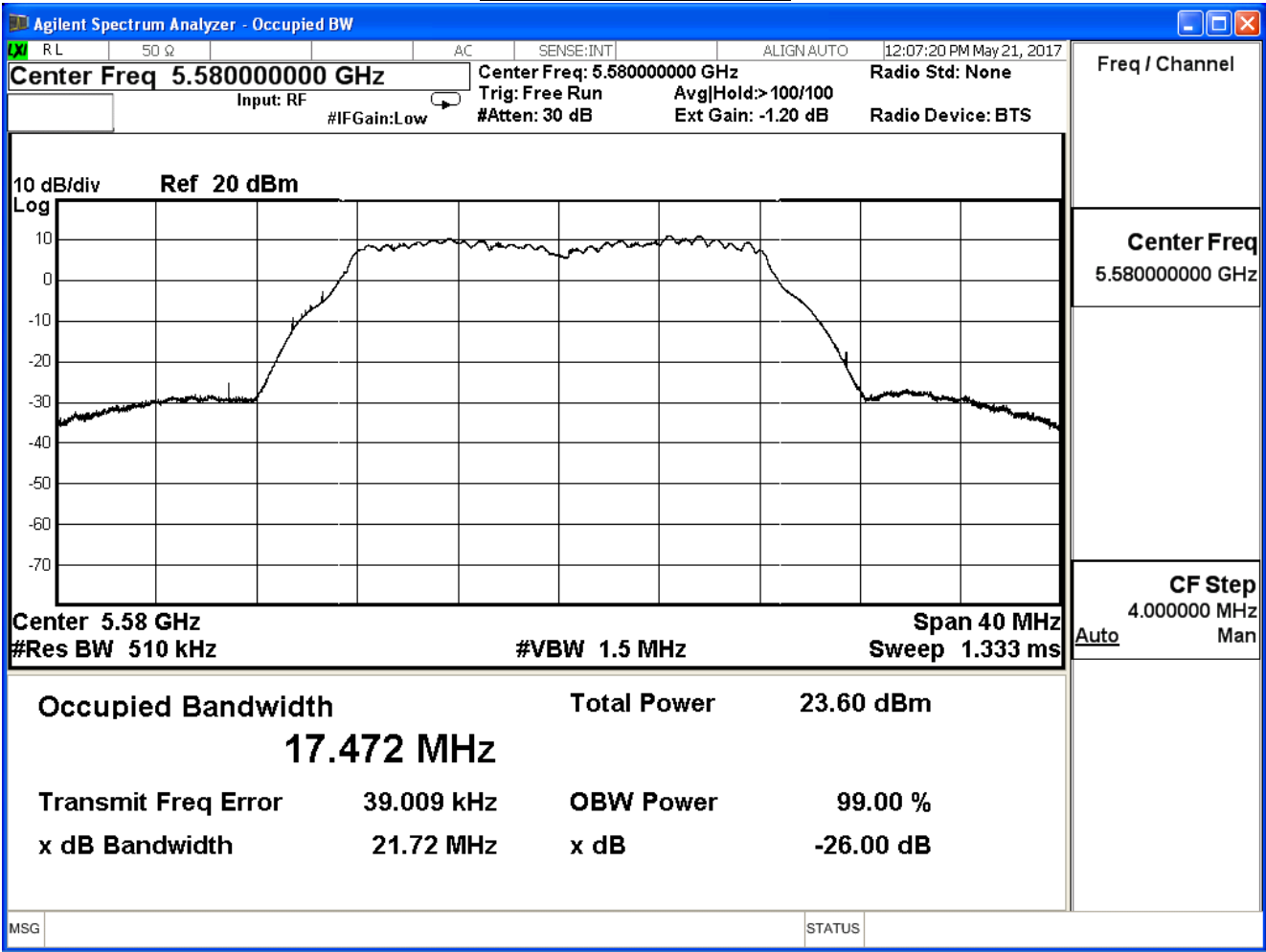
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11a (ANT 0)

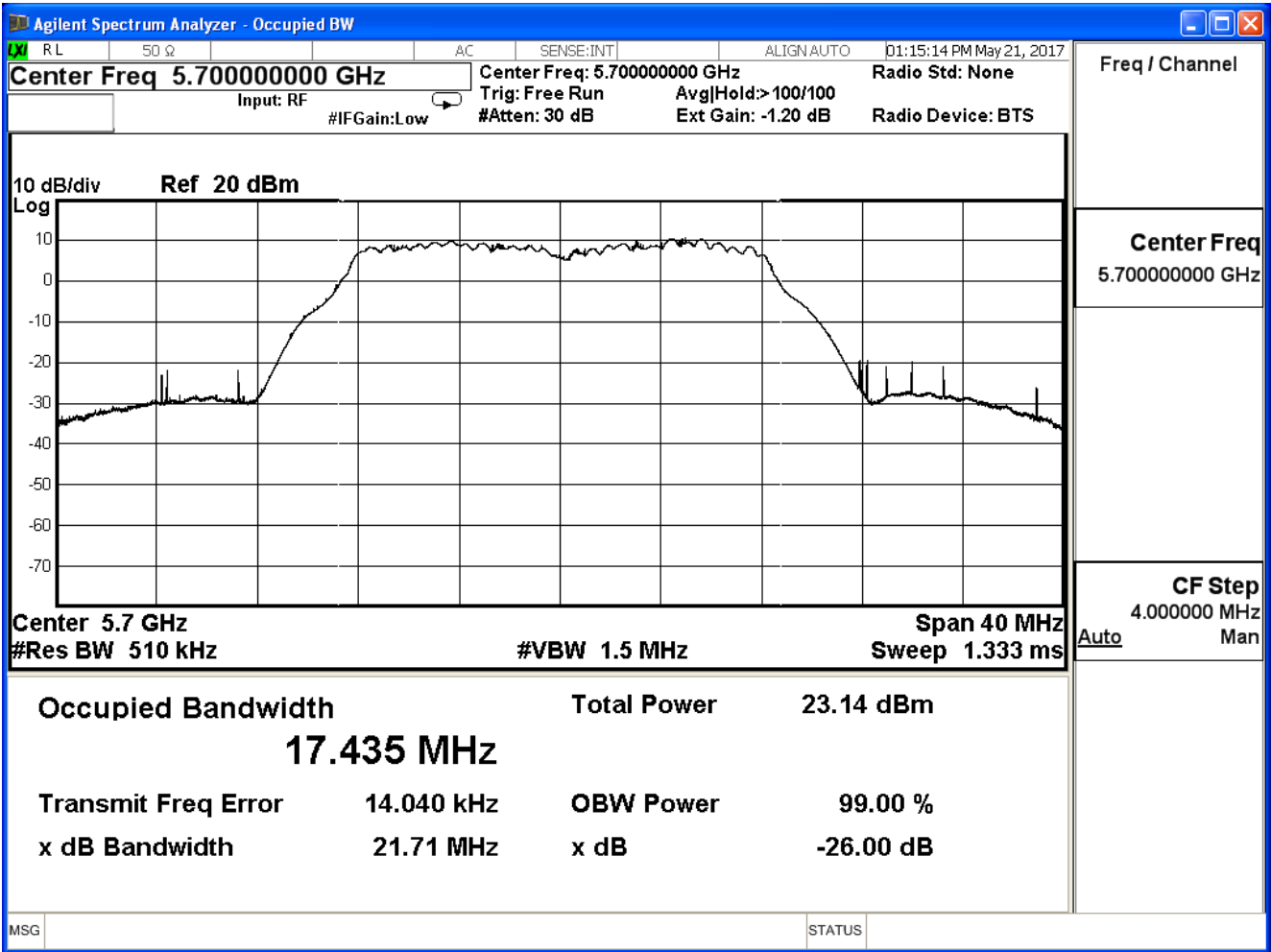
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
100	5500	21.810	17.476	--	Pass
116	5580	21.720	17.472	--	Pass
140	5700	21.710	17.435	--	Pass

Channel 100 (5500MHz)

Channel 116 (5580MHz)



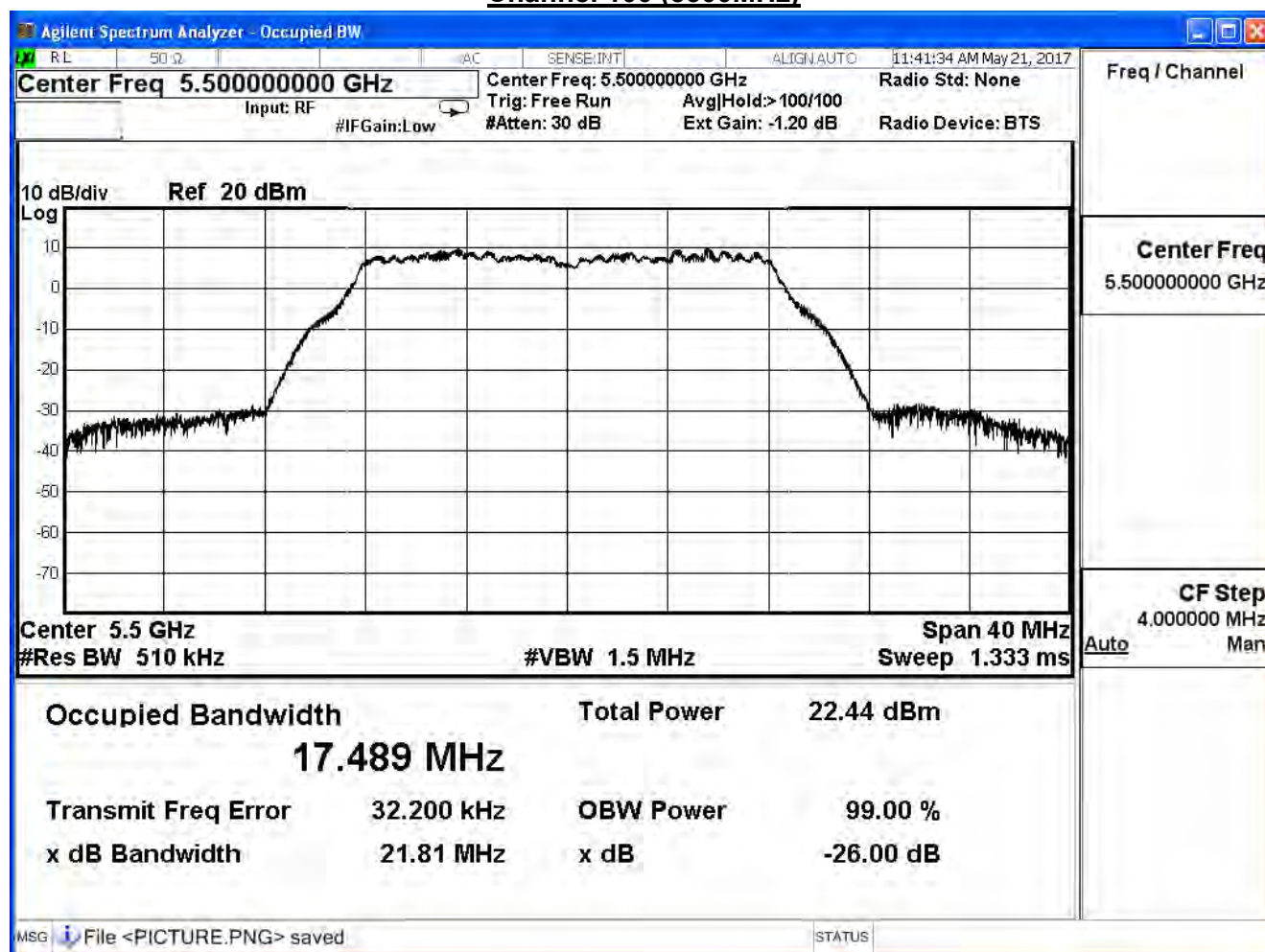
Channel 140 (5700MHz)



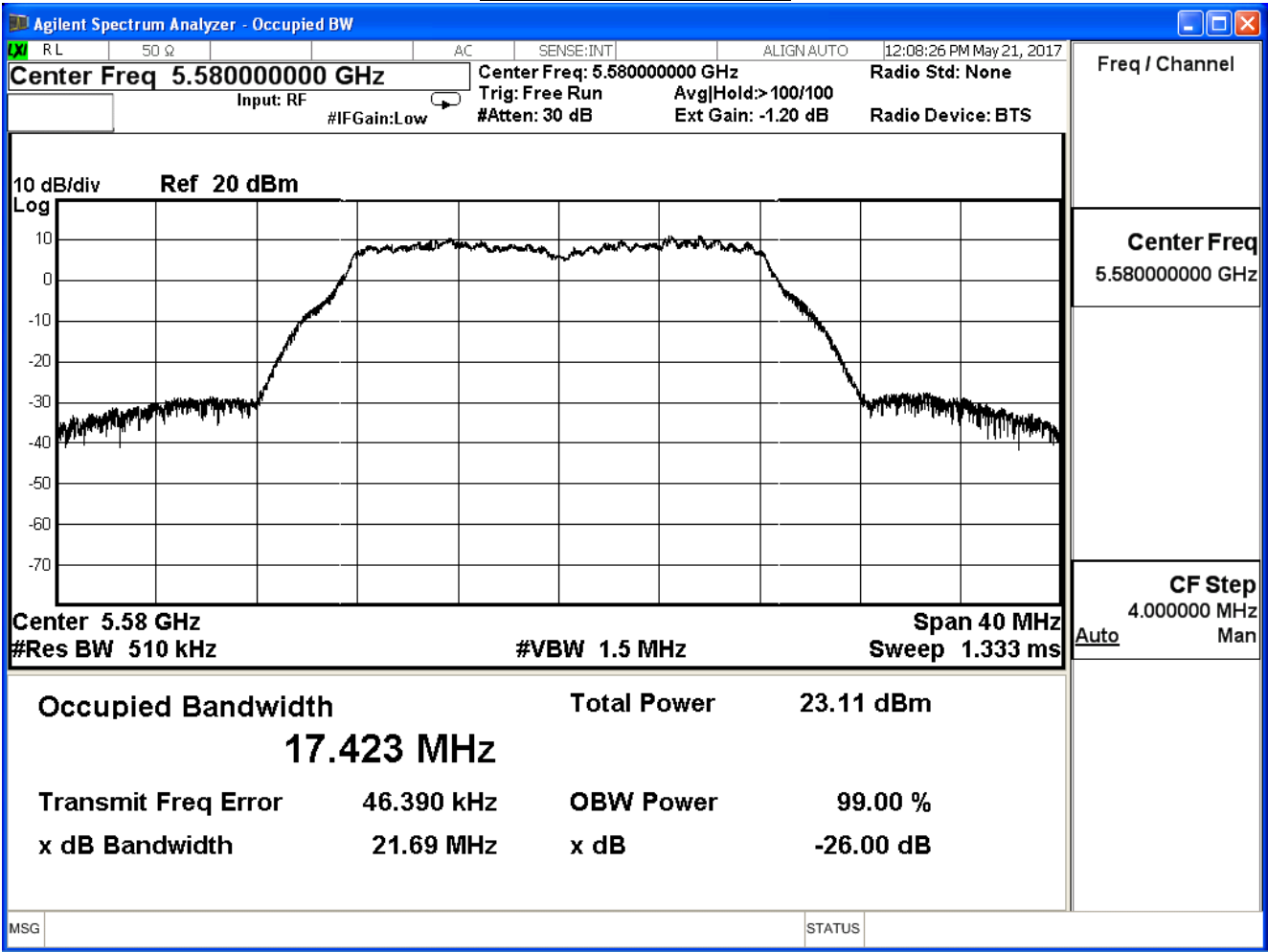
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11a (ANT 1)

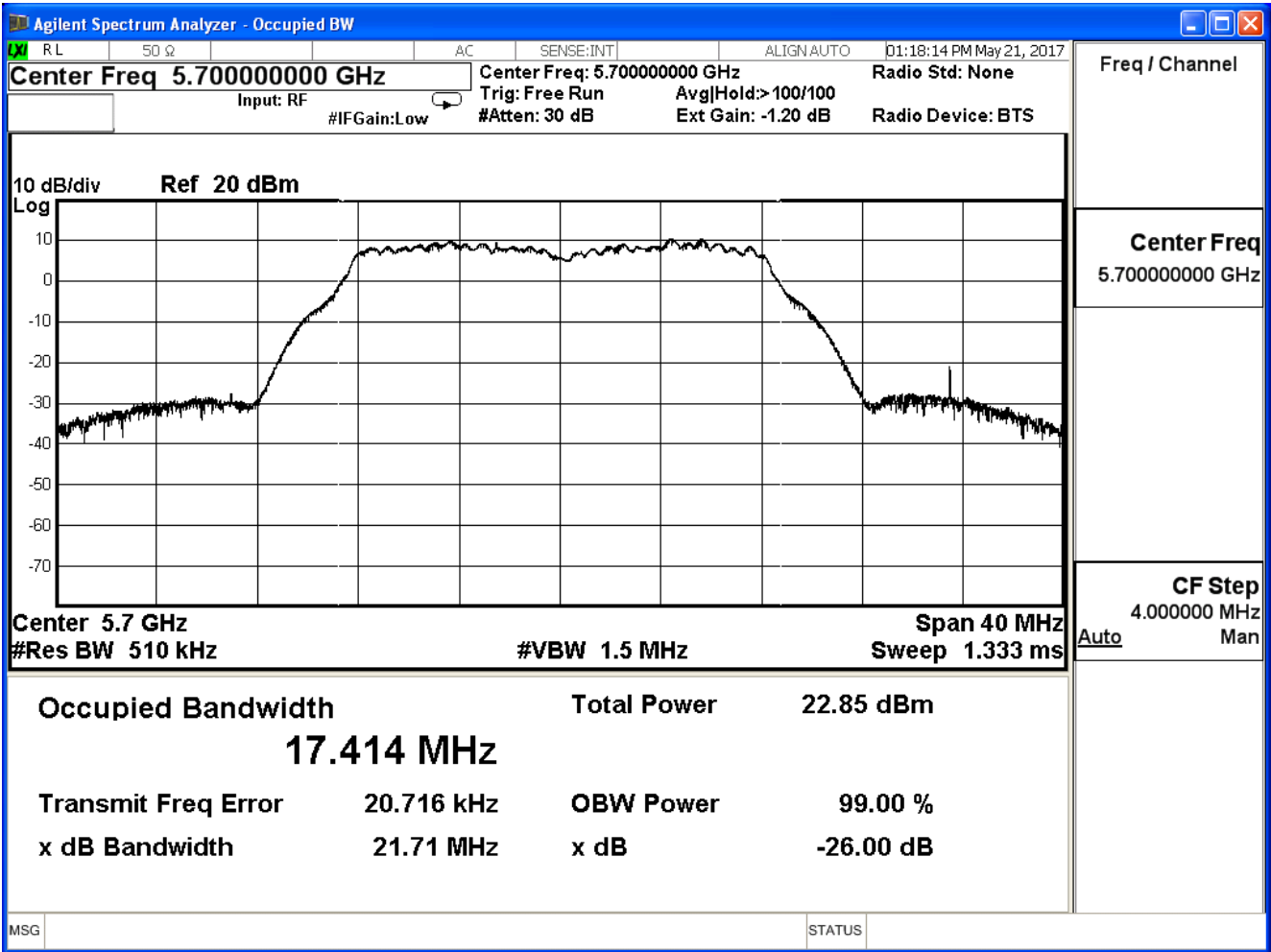
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
100	5500	21.810	17.489	--	Pass
116	5580	21.690	17.423	--	Pass
140	5700	21.710	17.414	--	Pass

Channel 100 (5500MHz)

Channel 116 (5580MHz)



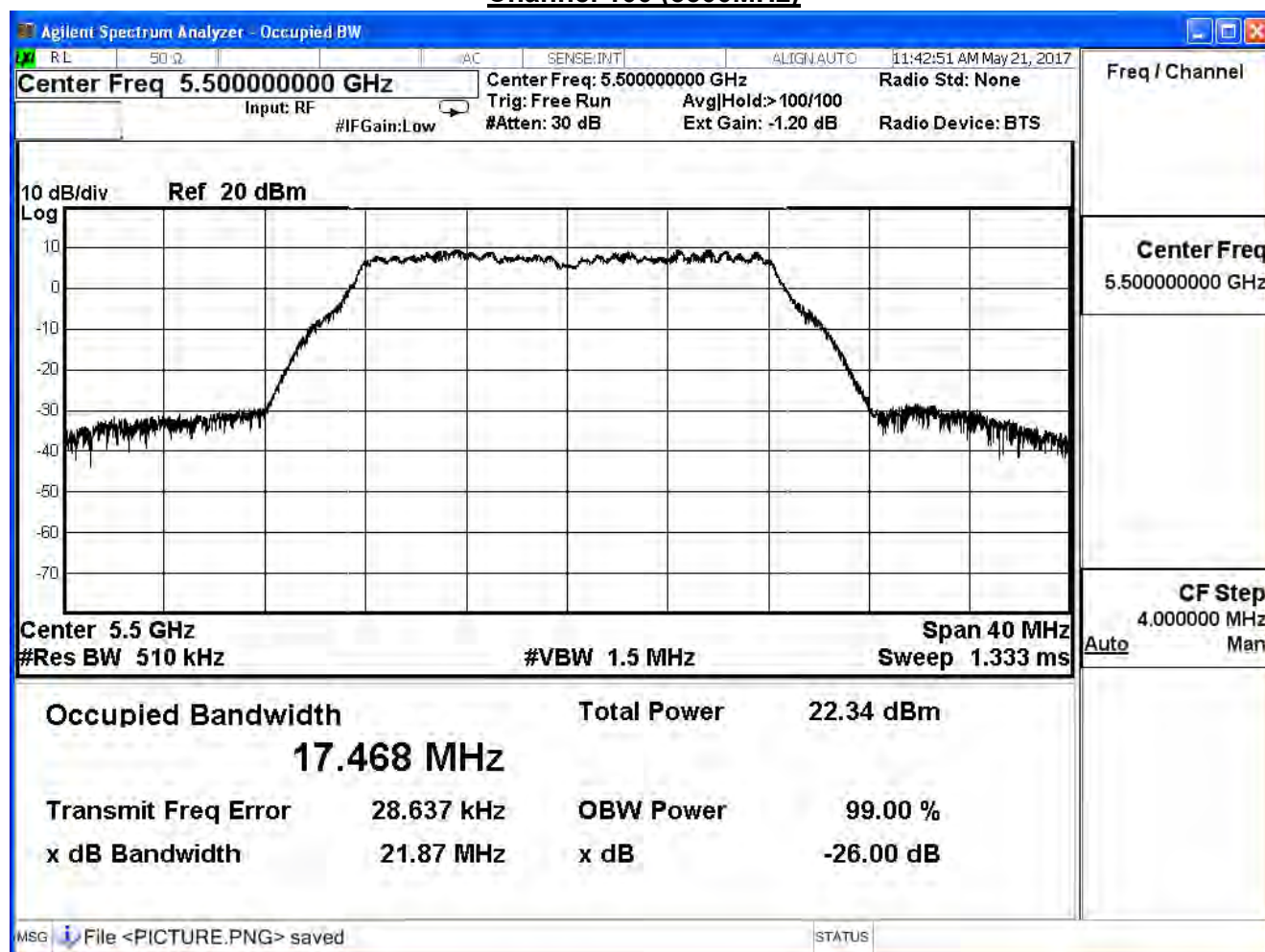
Channel 140 (5700MHz)



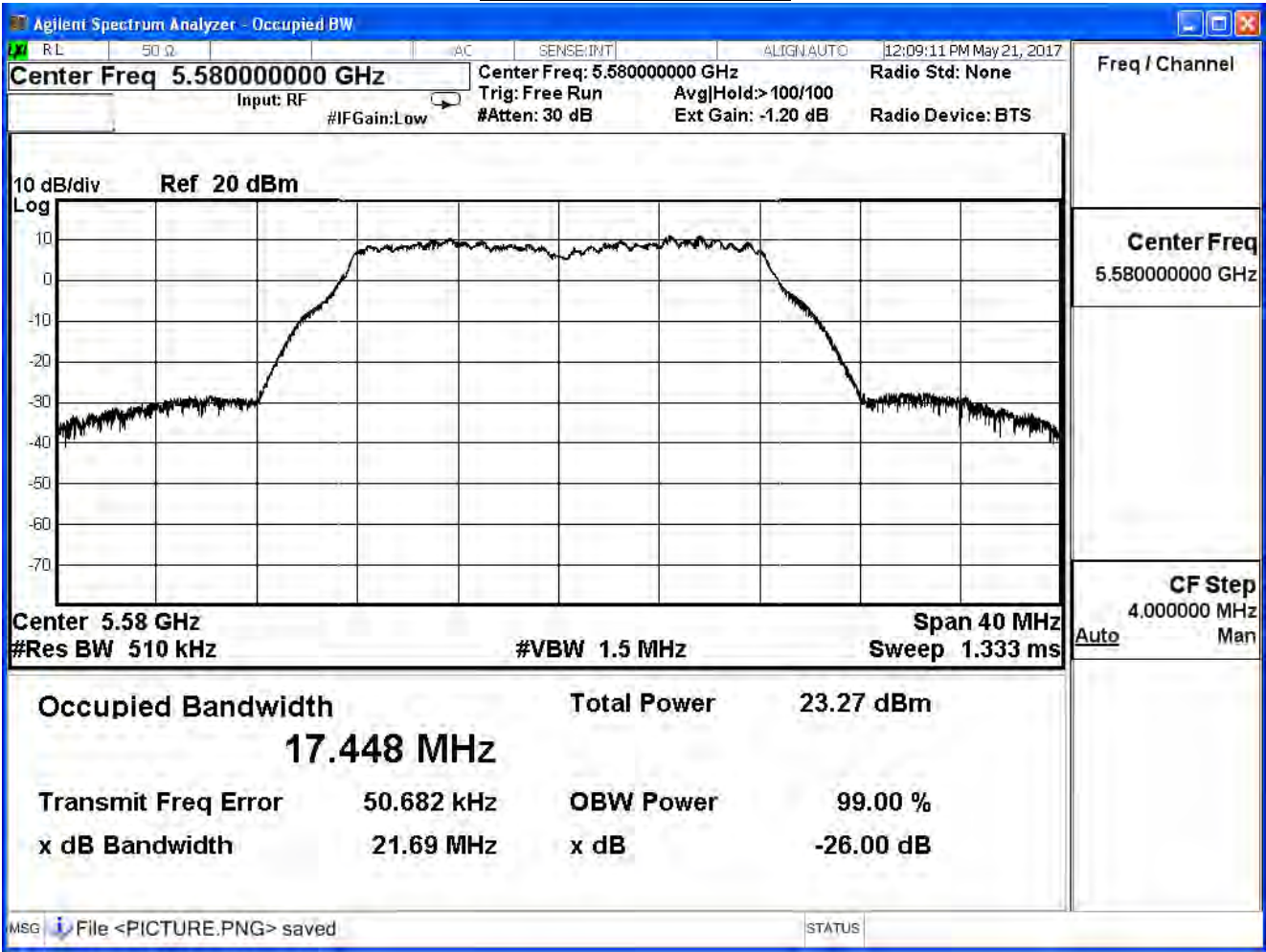
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11a (ANT 2)

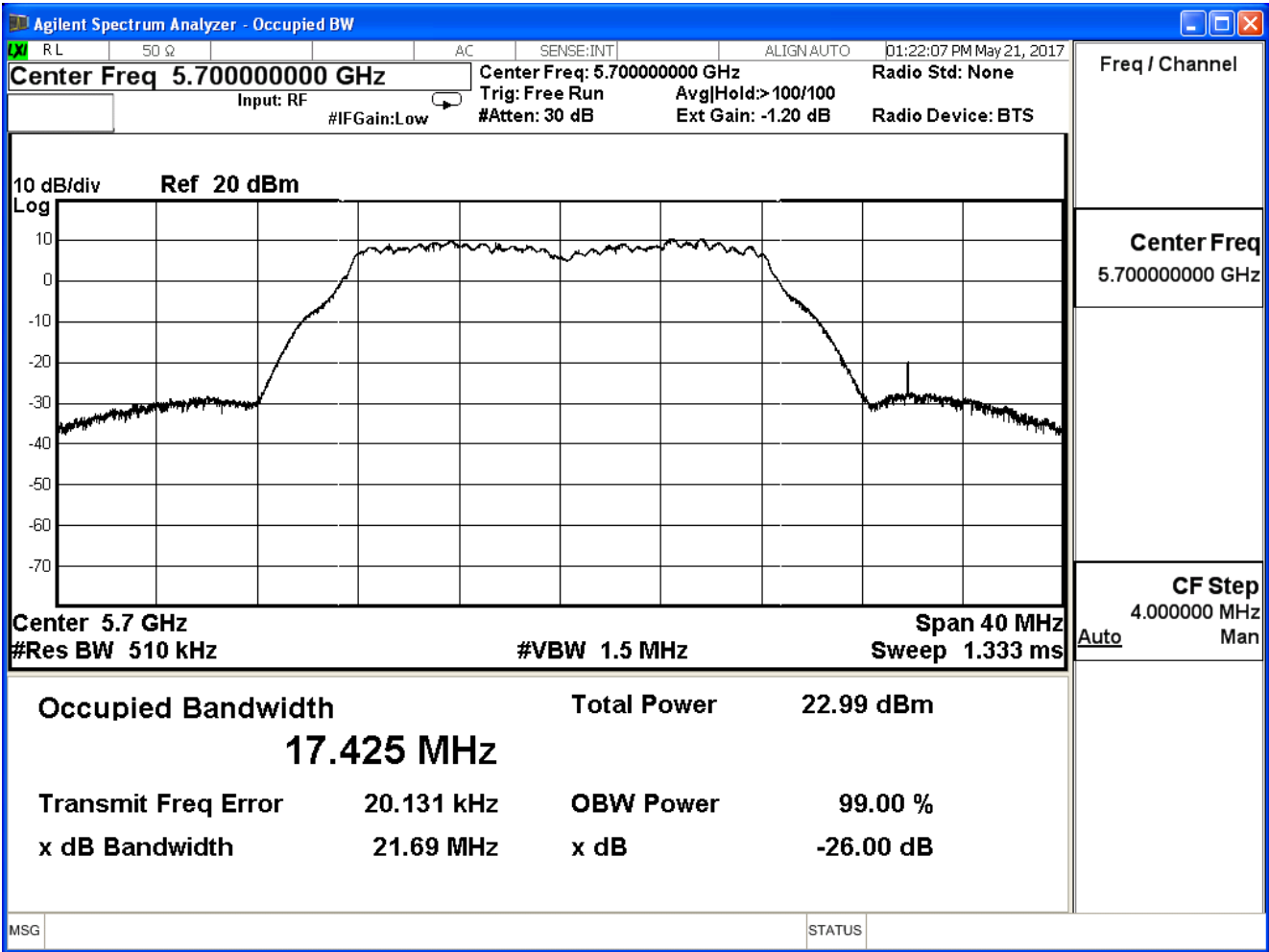
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
100	5500	21.870	17.468	--	Pass
116	5580	21.690	17.448	--	Pass
140	5700	21.690	17.425	--	Pass

Channel 100 (5500MHz)

Channel 116 (5580MHz)



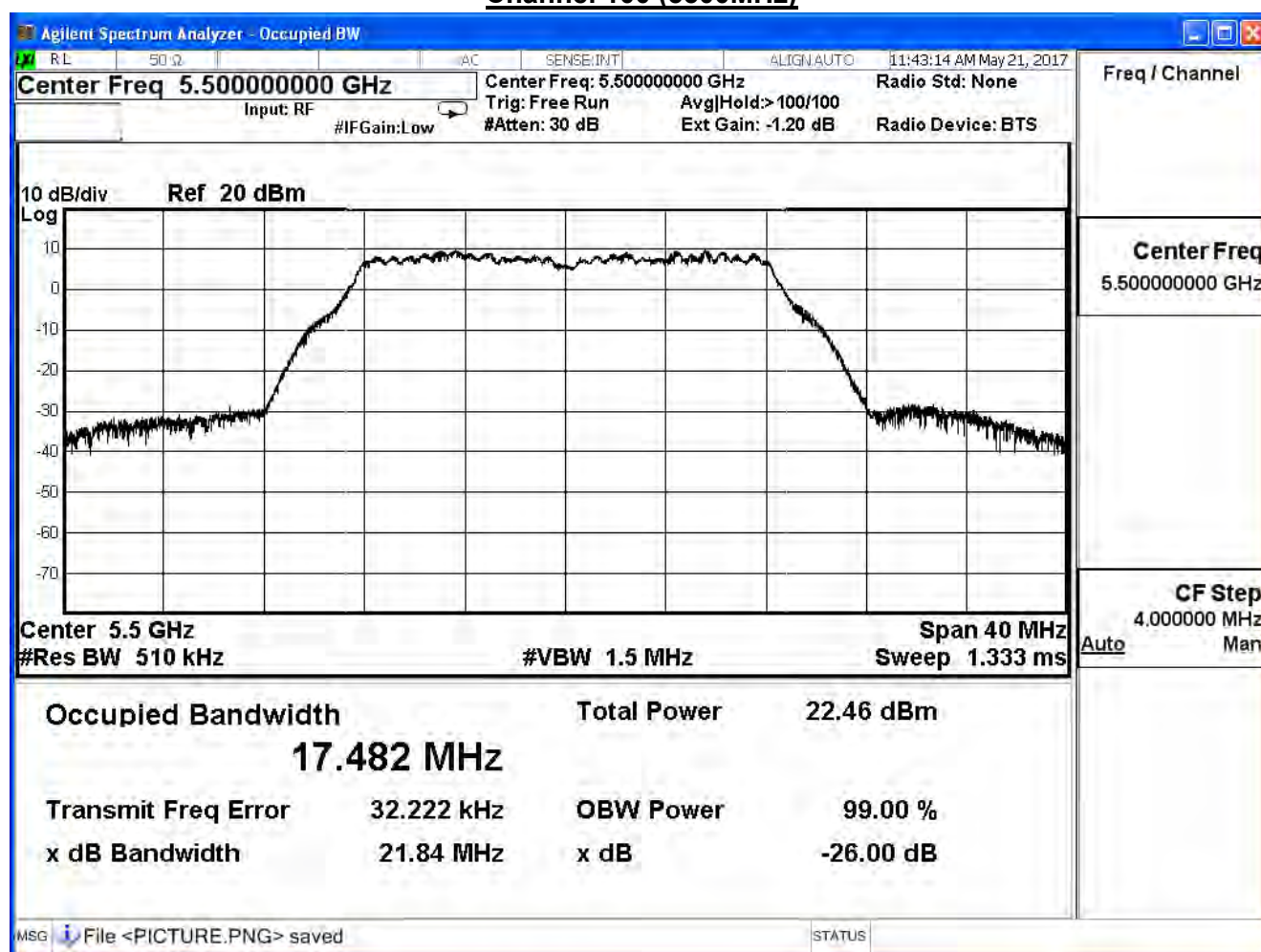
Channel 140 (5700MHz)



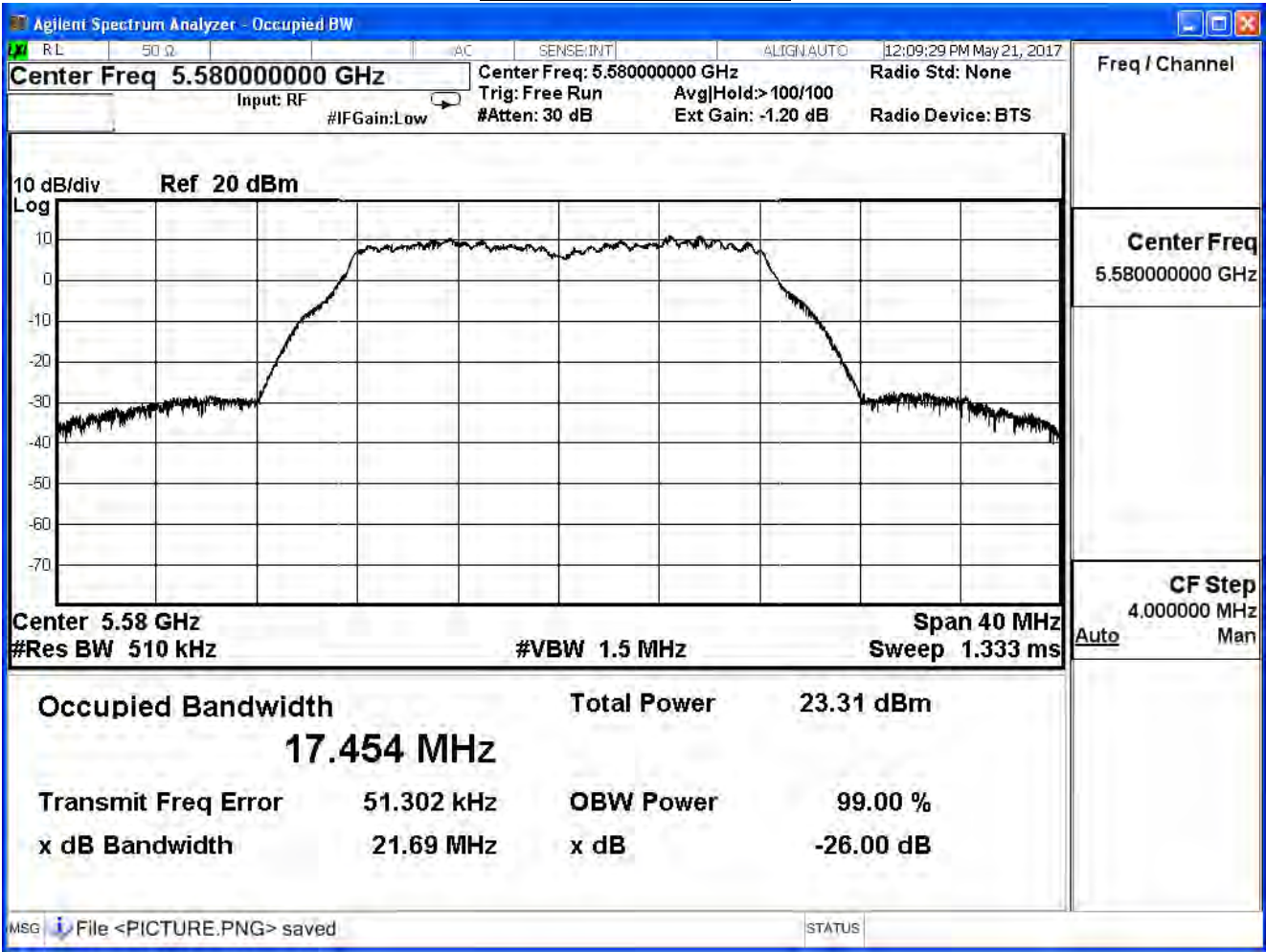
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11a (ANT 3)

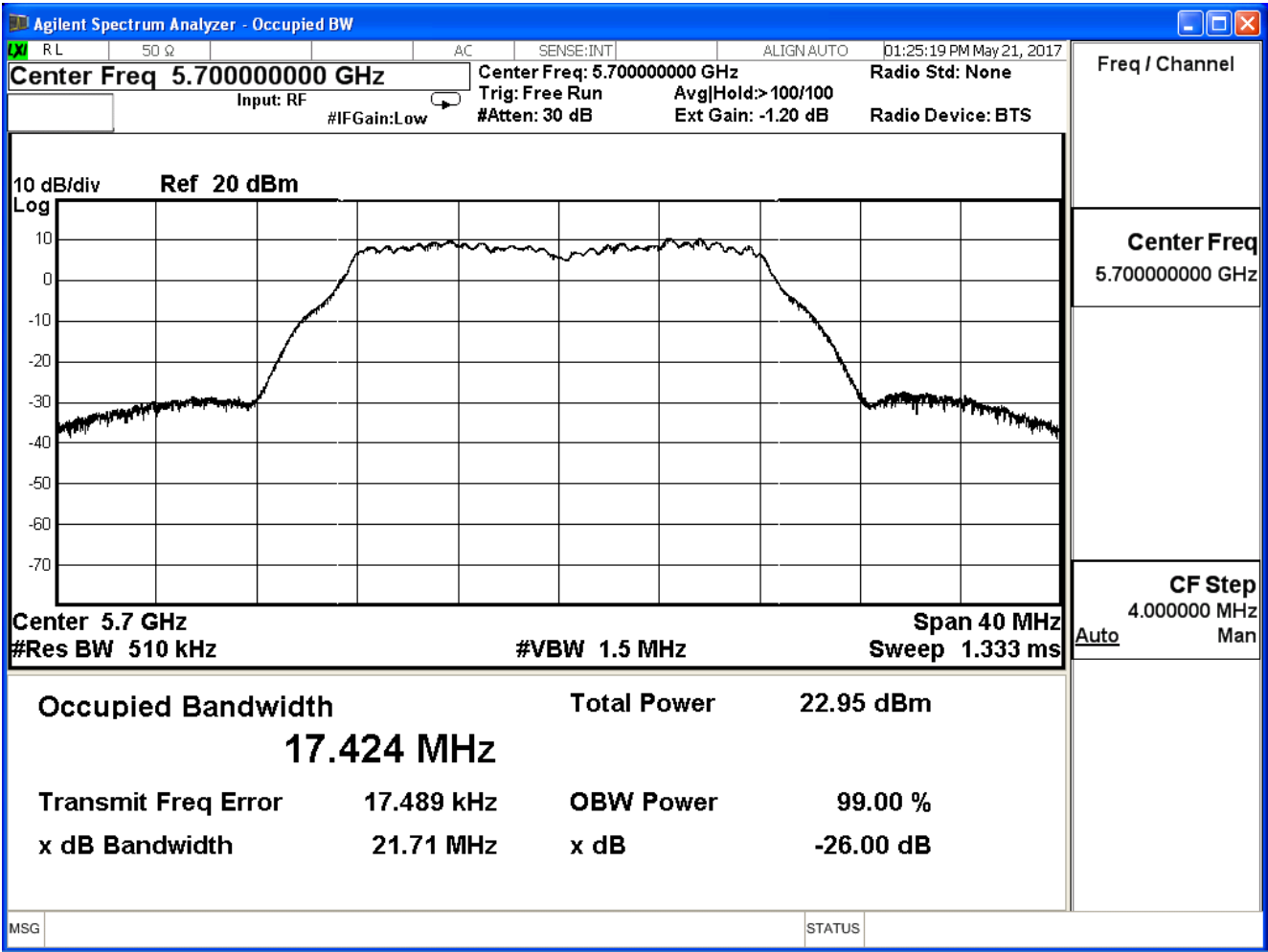
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
100	5500	21.840	17.482	--	Pass
116	5580	21.690	17.454	--	Pass
140	5700	21.710	17.424	--	Pass

Channel 100 (5500MHz)

Channel 116 (5580MHz)



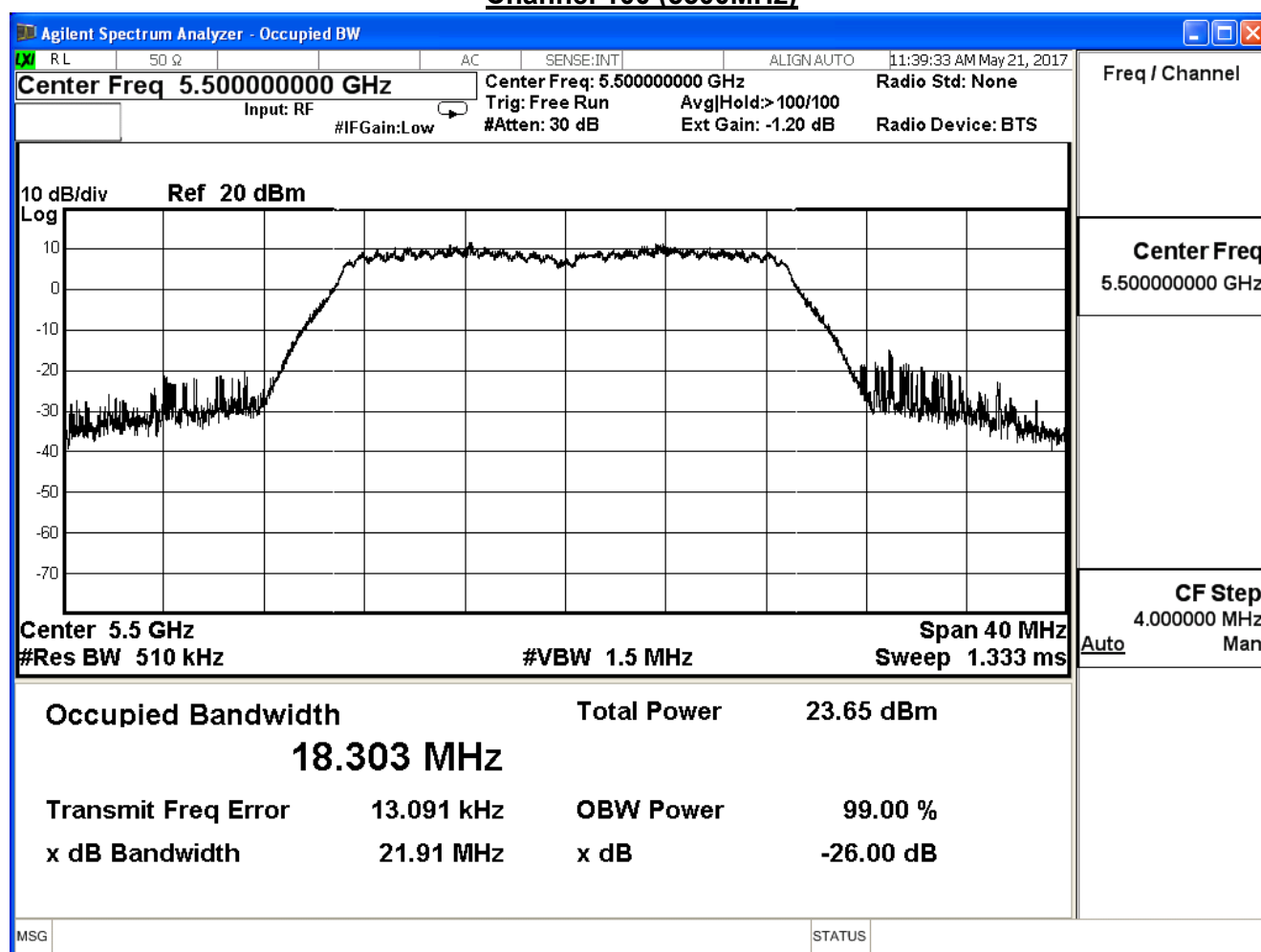
Channel 140 (5700MHz)



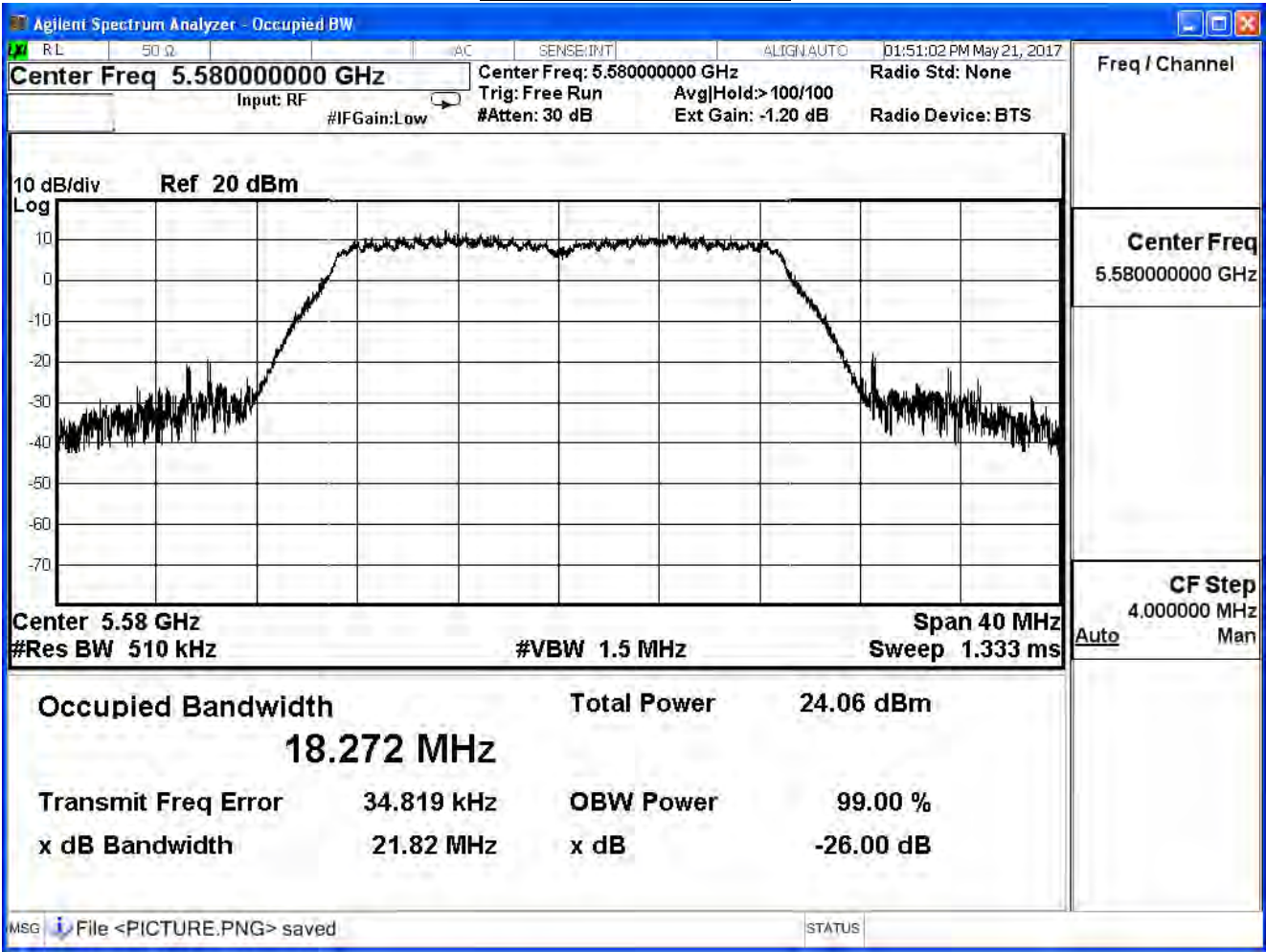
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_AD P: AD890326010-2LF_ MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11n_20M(ANT 0)

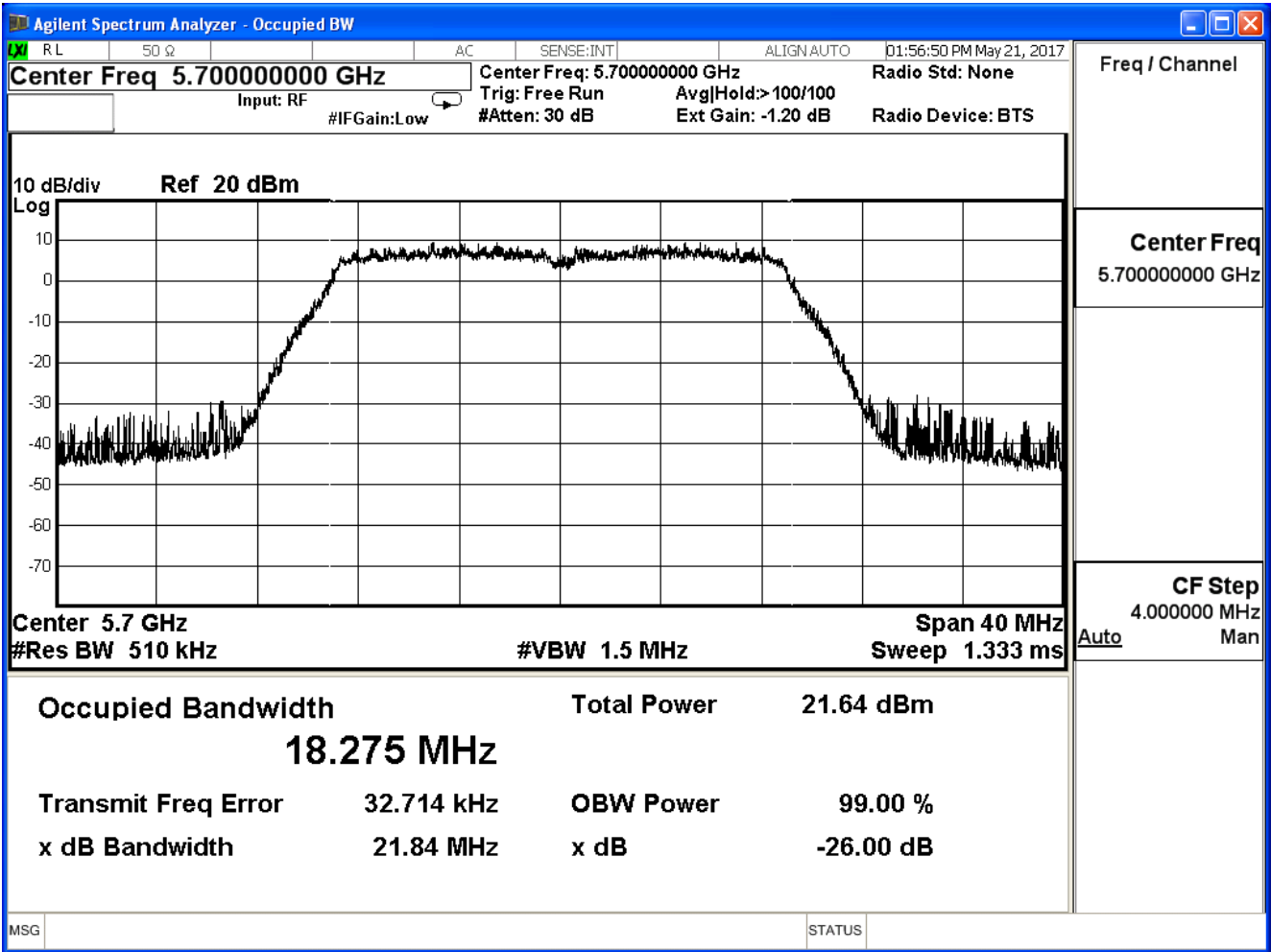
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
100	5500	21.910	18.303	--	Pass
116	5580	21.820	18.272	--	Pass
140	5700	21.840	18.275	--	Pass

Channel 100 (5500MHz)

Channel 116 (5580MHz)



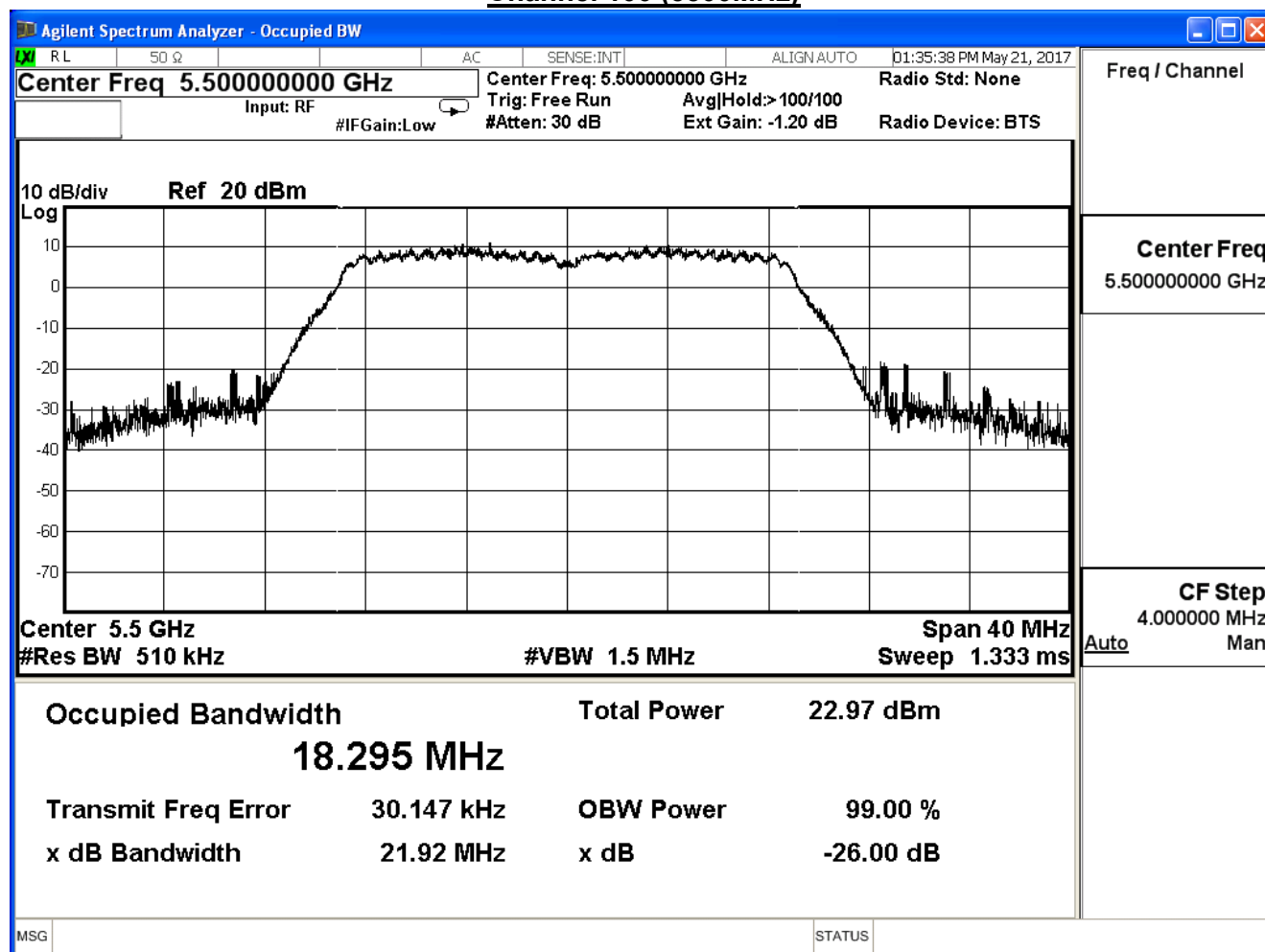
Channel 140 (5700MHz)



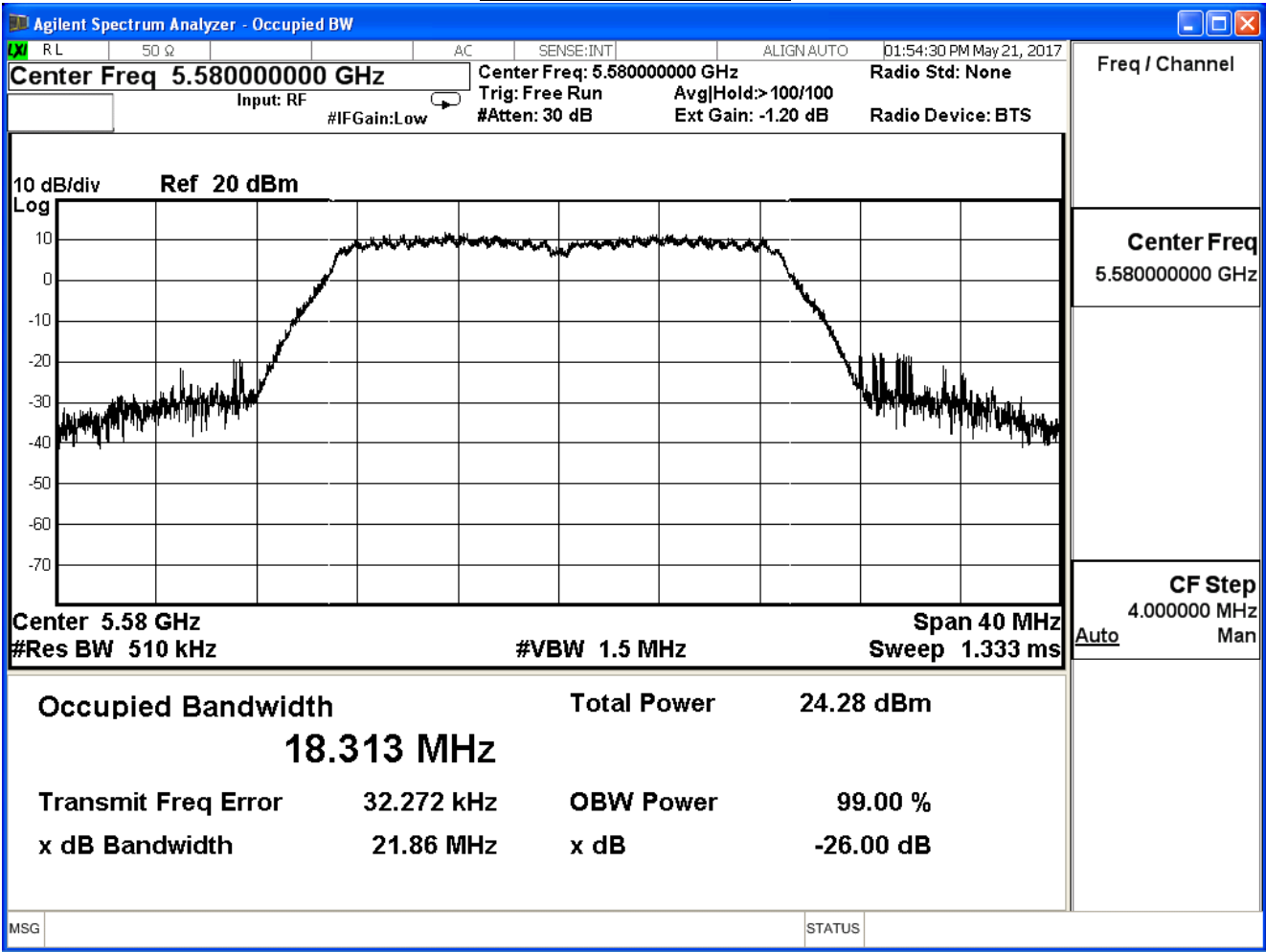
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11n_20M(ANT 1)

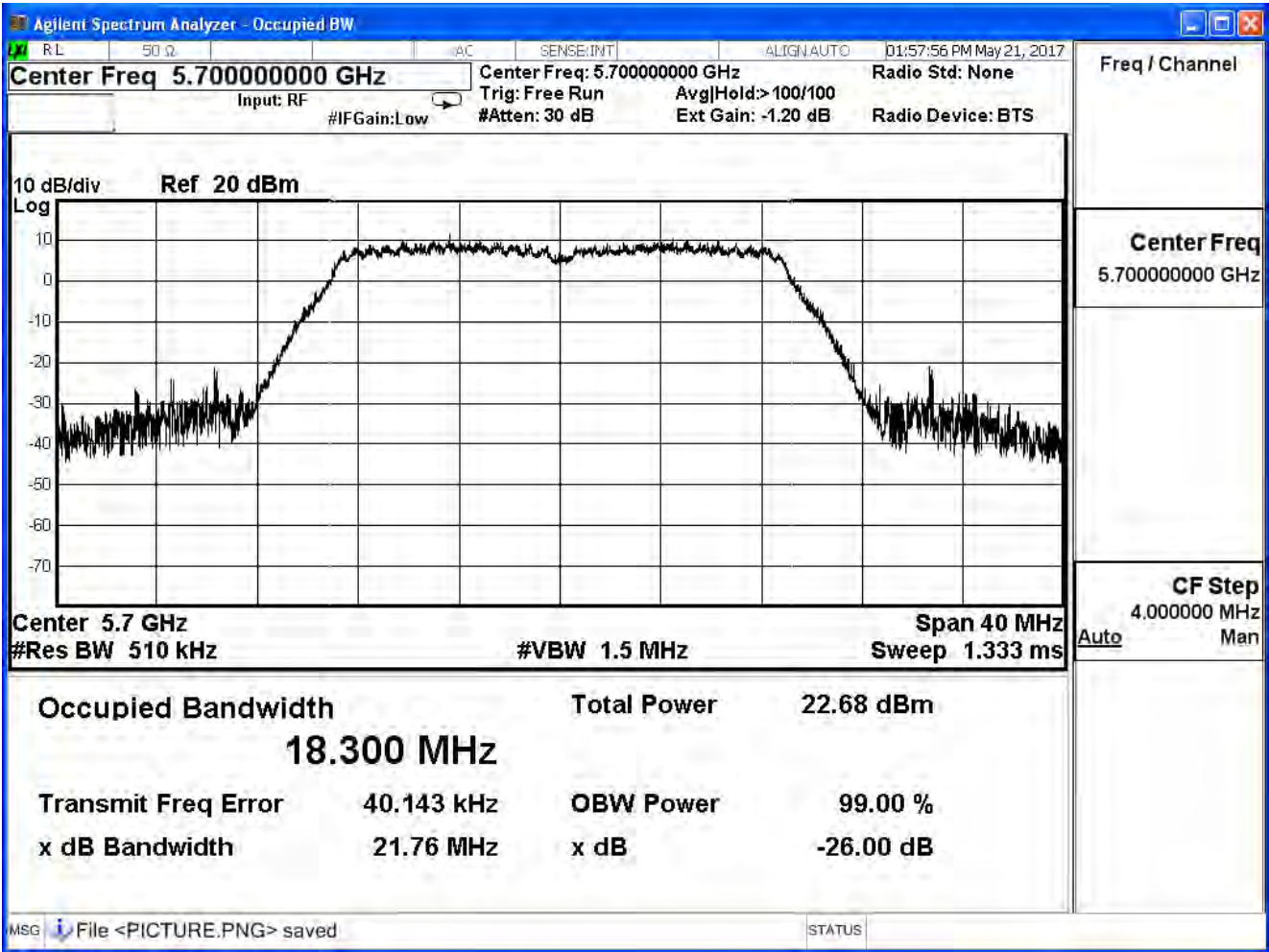
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
100	5500	21.920	18.295	--	Pass
116	5580	21.860	18.313	--	Pass
140	5700	21.760	18.300	--	Pass

Channel 100 (5500MHz)

Channel 116 (5580MHz)



Channel 140 (5700MHz)



802.11n_20M(ANT 2)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
100	5500	21.790	18.283	--	Pass
116	5580	21.790	18.282	--	Pass
140	5700	21.870	18.228	--	Pass

Agilent Spectrum Analyzer - Occupied BW

RL 50 Ω AC SENSE:INT ALIGN AUTO D1:39:24 PM May 21, 2017

Center Freq 5.500000000 GHz Center Freq: 5.500000000 GHz Radio Std: None
Input: RF #IFGain:Low Trig: Free Run Avg|Hold:> 100/100
#Atten: 30 dB Ext Gain: -1.20 dB Radio Device: BTS

10 dB/div Ref 20 dBm

Log

Center 5.5 GHz Span 40 MHz
#Res BW 510 kHz #VBW 1.5 MHz Sweep 1.333 ms

Occupied Bandwidth 18.283 MHz Total Power 22.67 dBm

Transmit Freq Error 49.937 kHz OBW Power 99.00 %
x dB Bandwidth 21.79 MHz x dB -26.00 dB

MSG STATUS

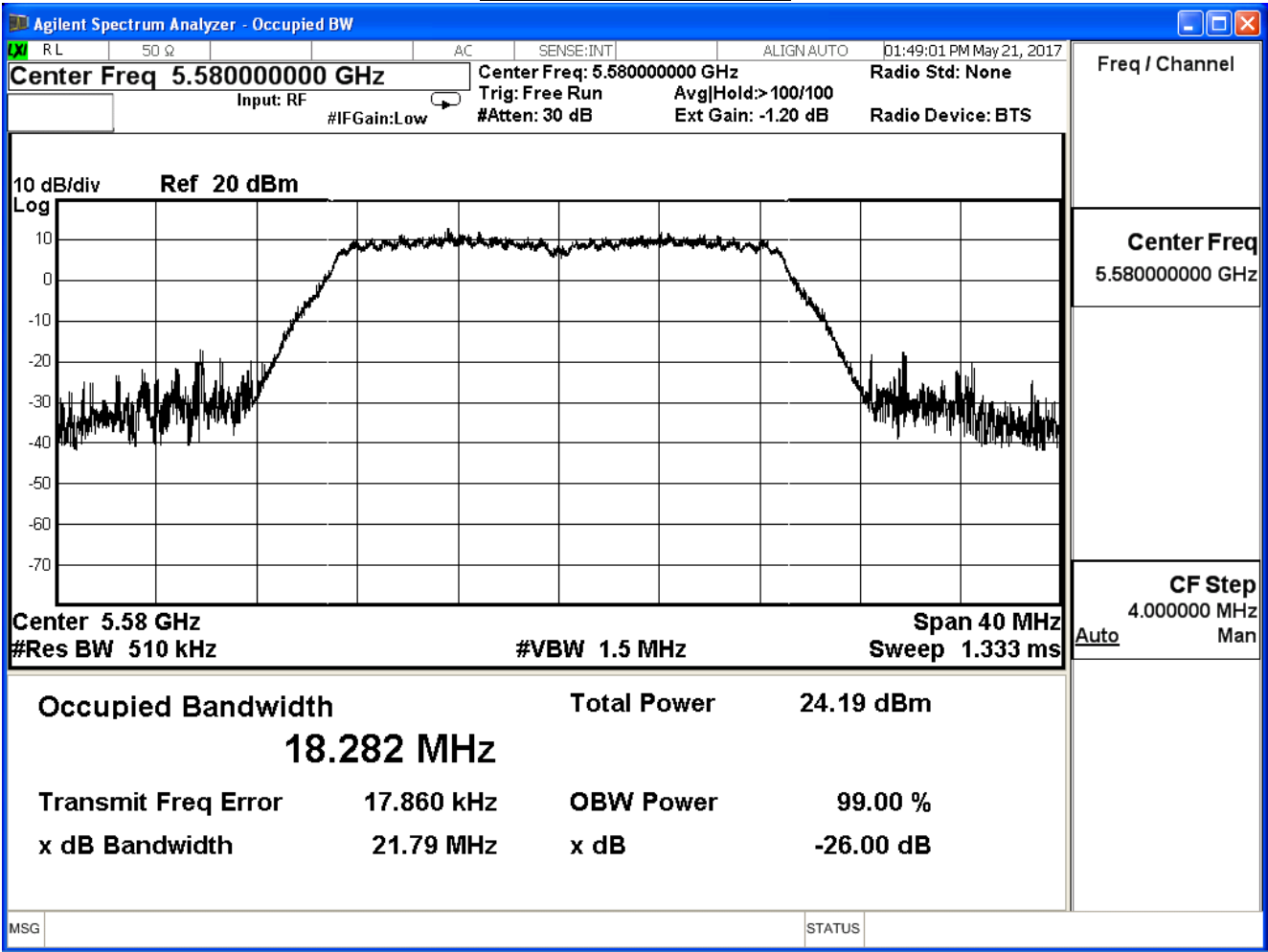
Freq / Channel

Center Freq 5.500000000 GHz

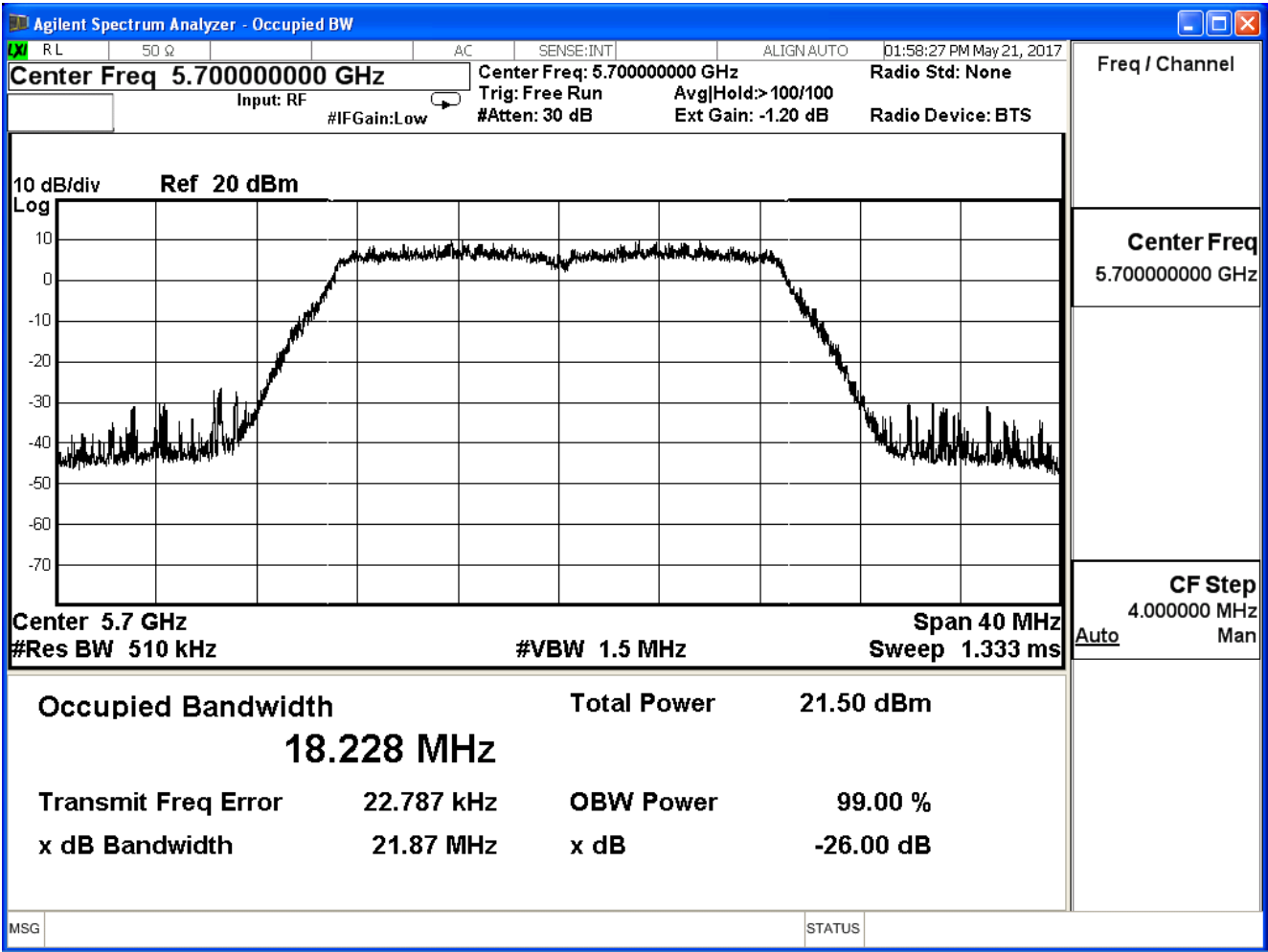
CF Step 4.000000 MHz

Auto Man

Channel 116 (5580MHz)



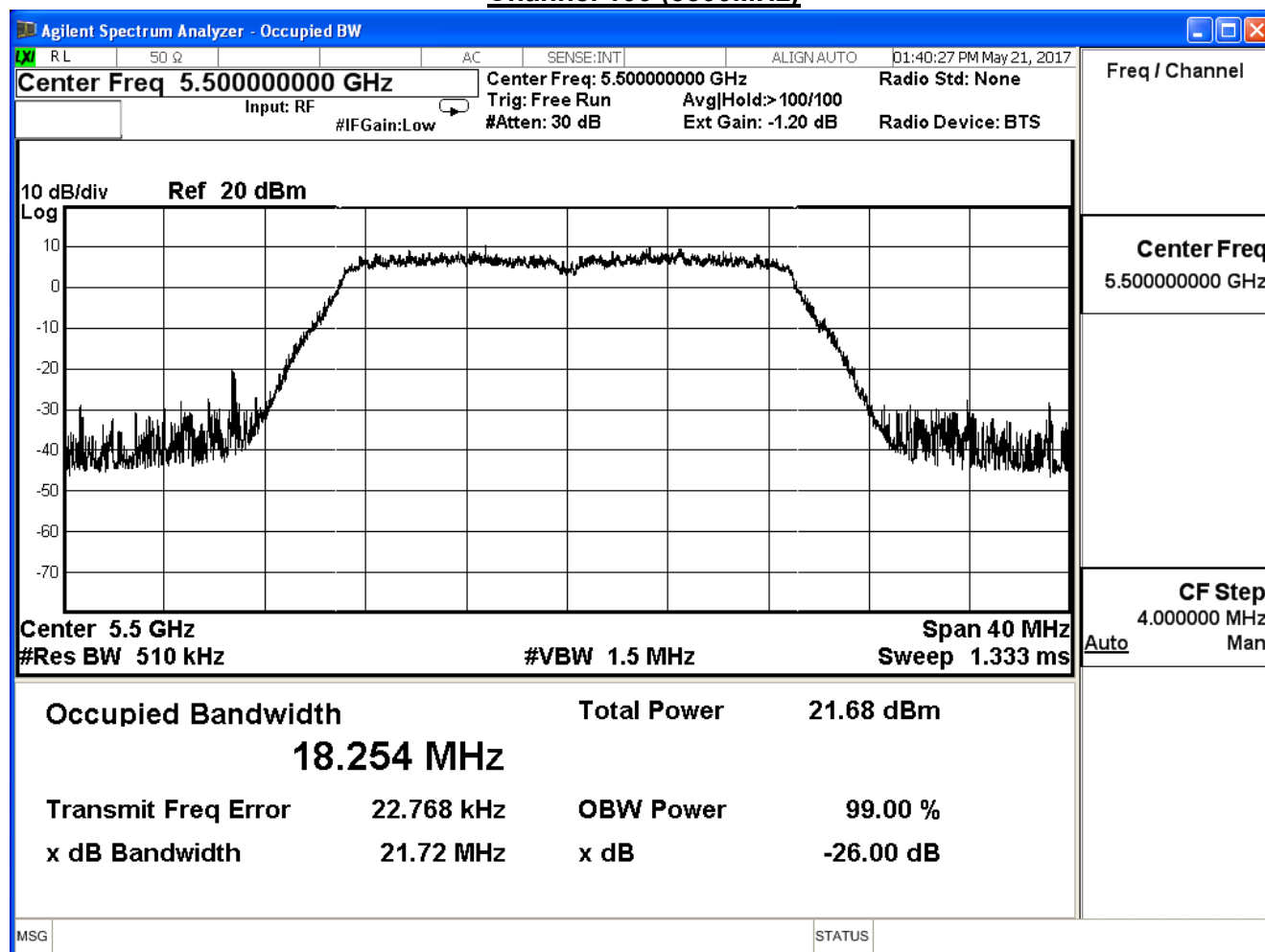
Channel 140 (5700MHz)



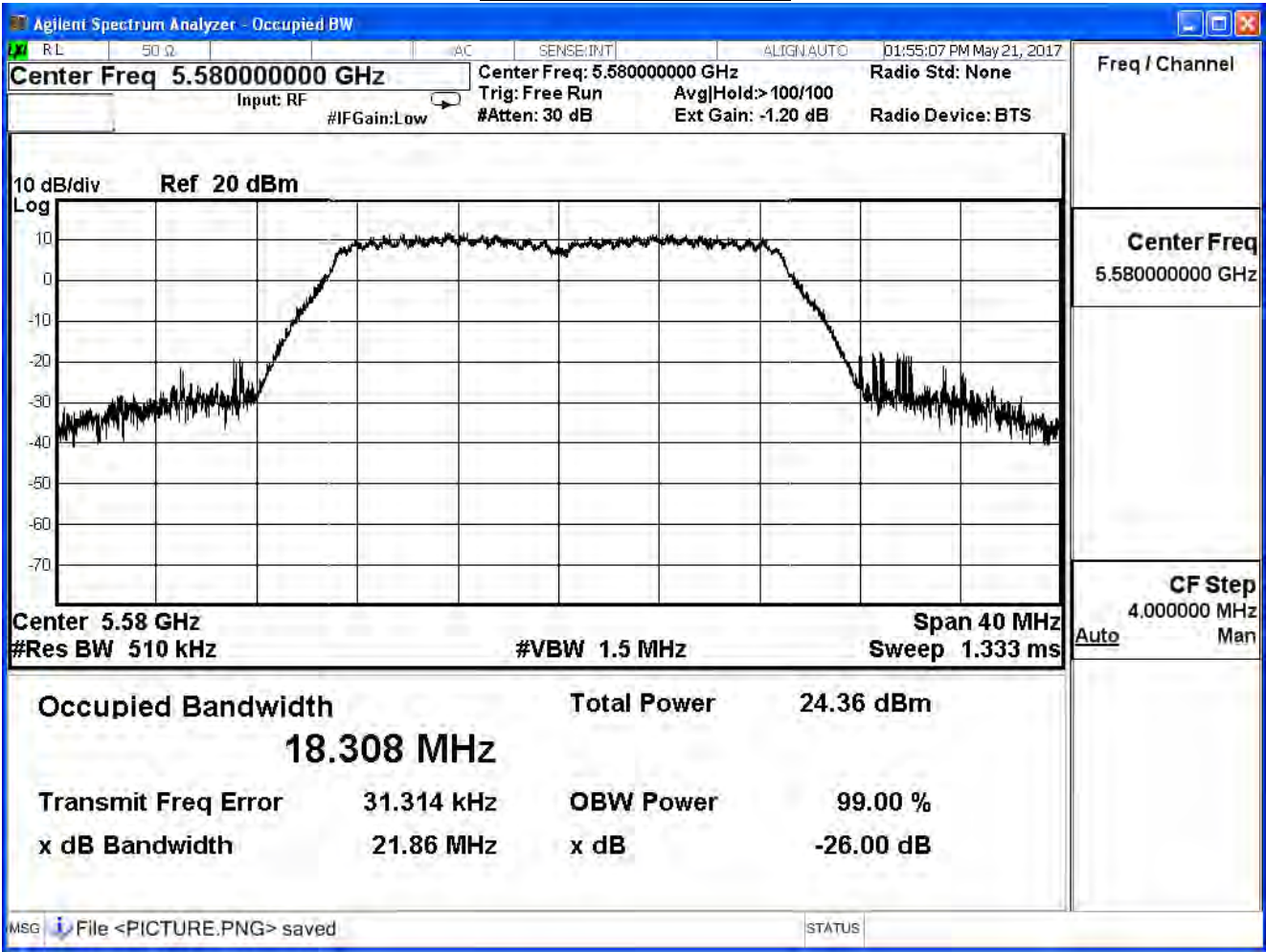
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11n_20M(ANT 3)

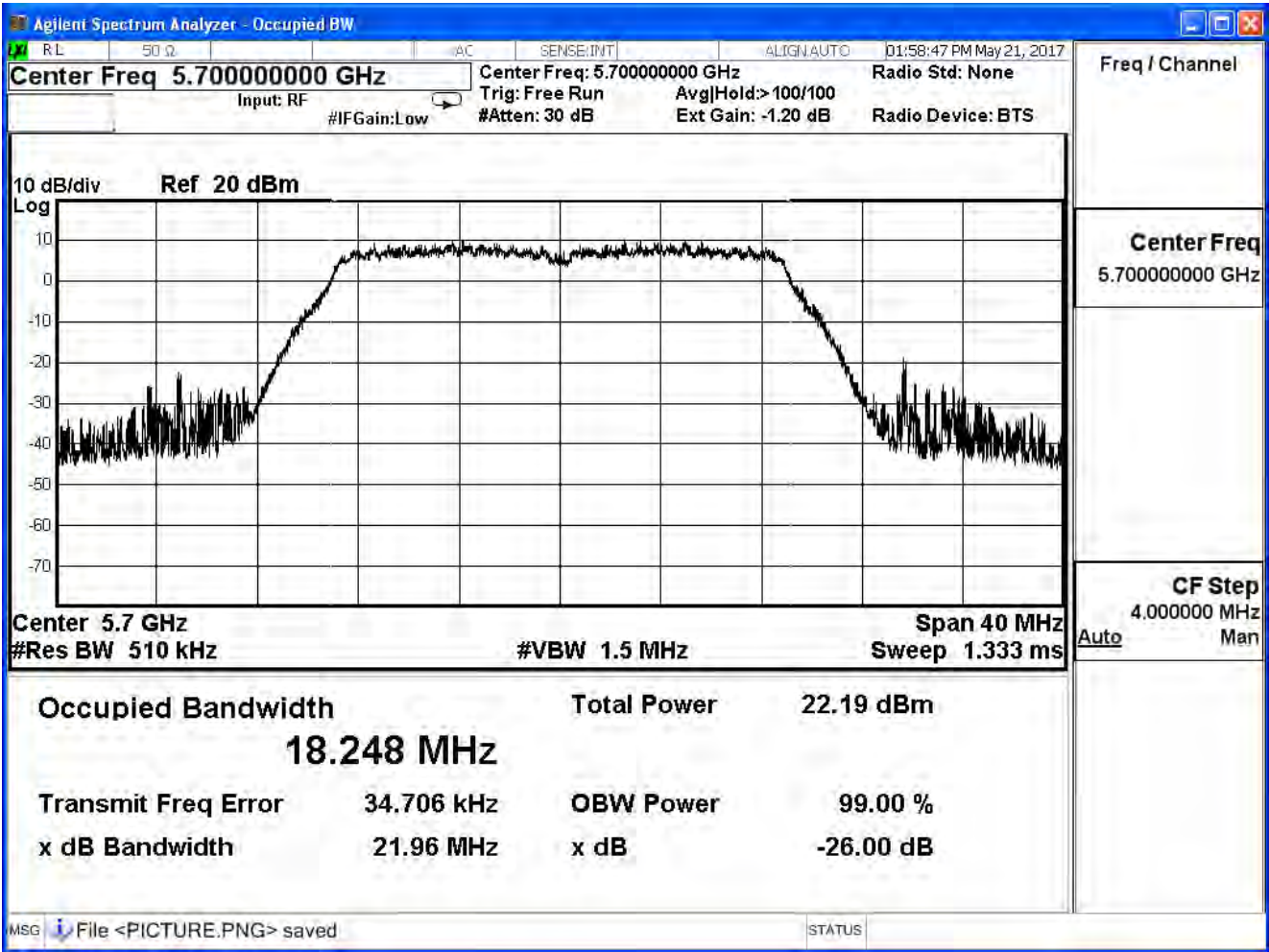
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
100	5500	21.720	18.254	--	Pass
116	5580	21.860	18.308	--	Pass
140	5700	21.960	18.248	--	Pass

Channel 100 (5500MHz)

Channel 116 (5580MHz)



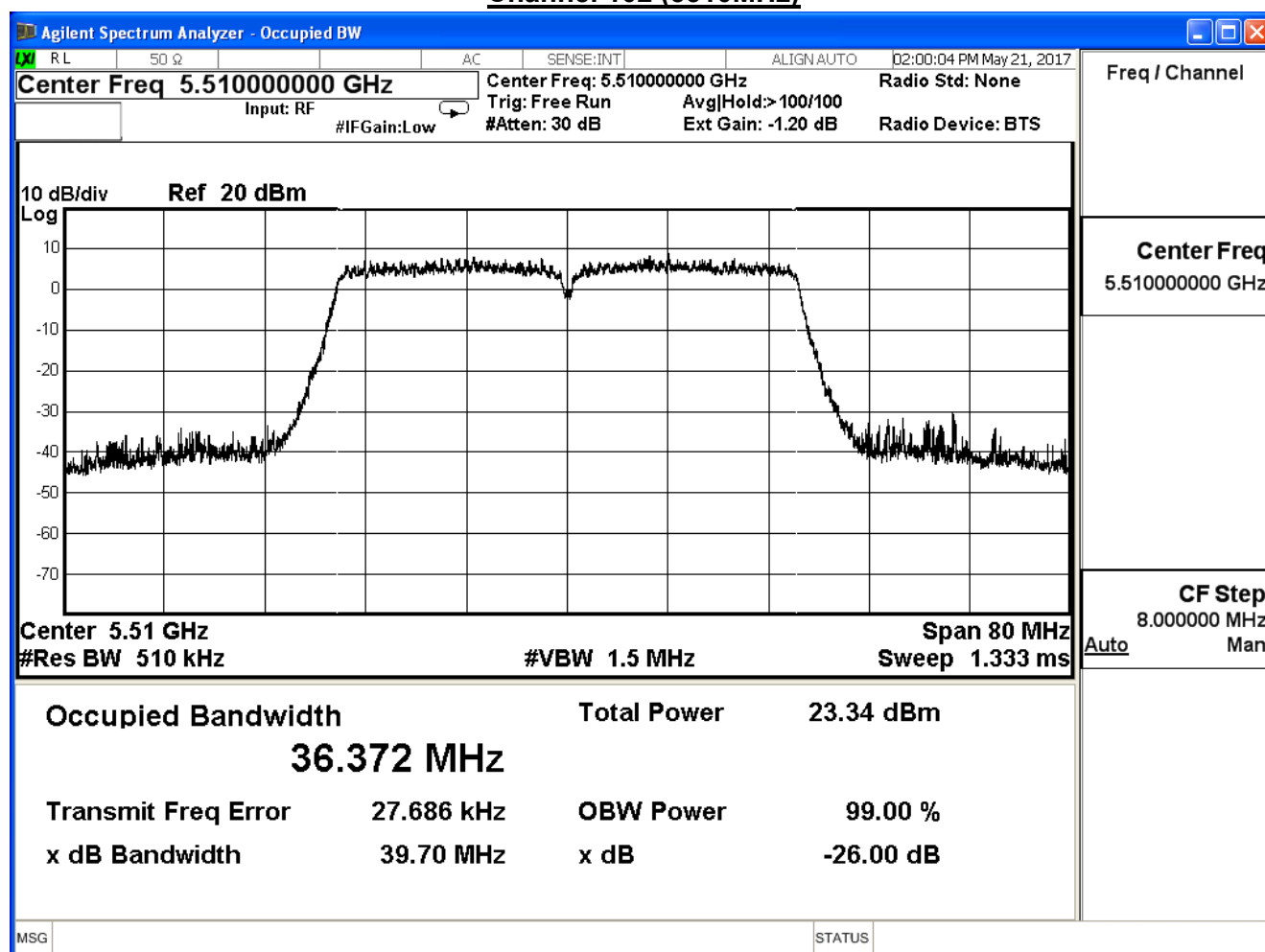
Channel 140 (5700MHz)



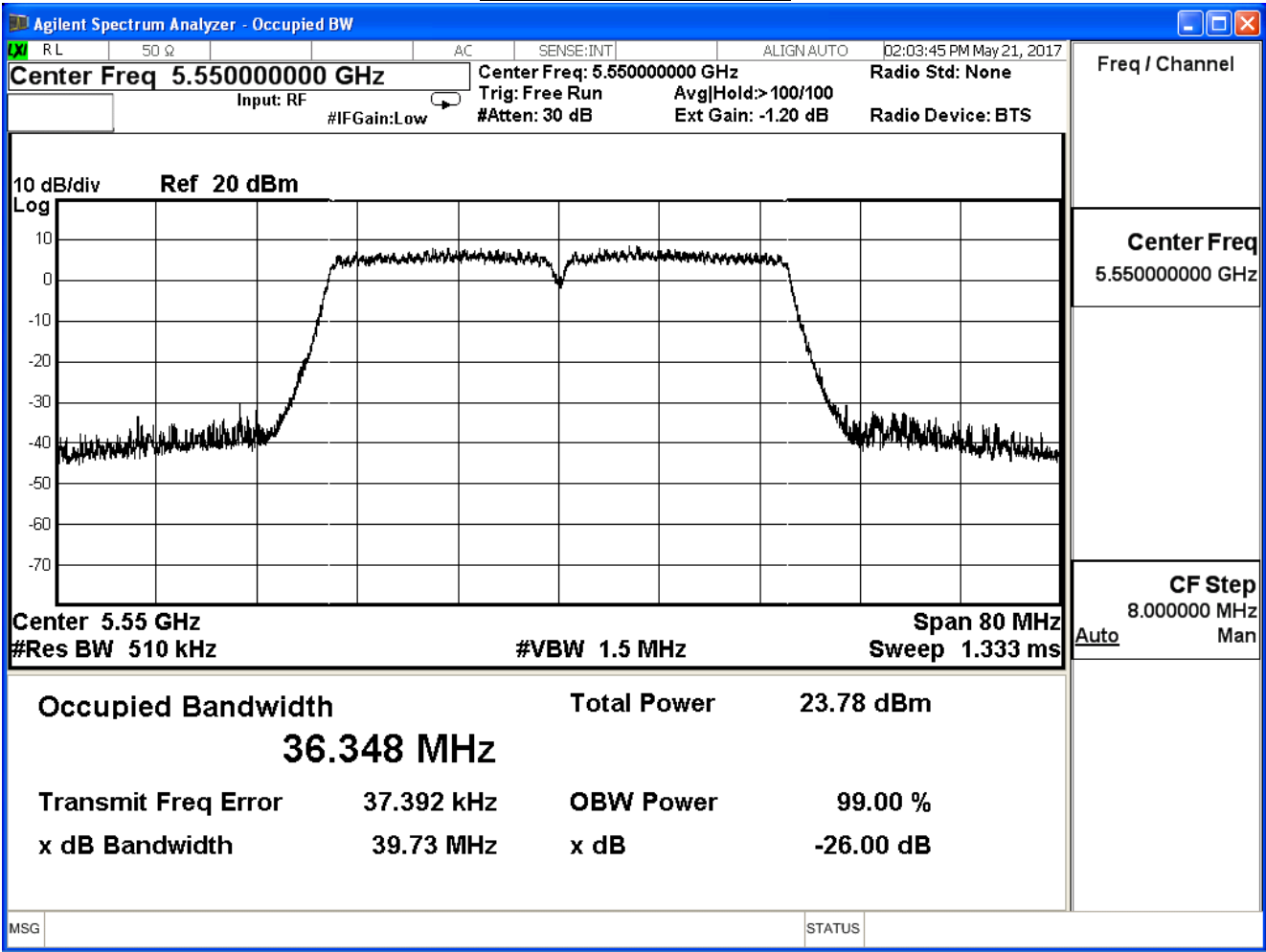
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11n_40M(ANT 0)

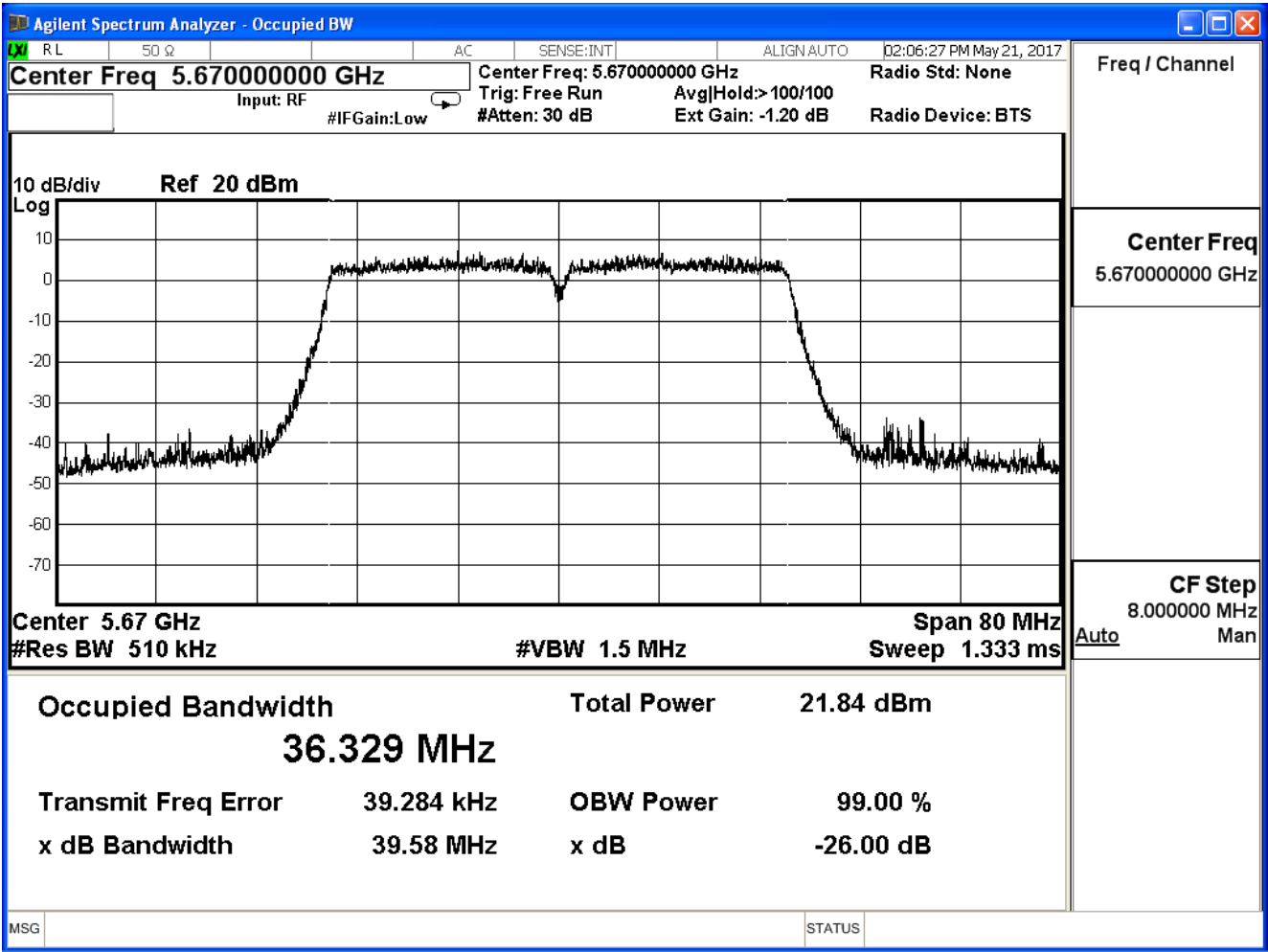
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
102	5510	39.700	36.372	--	Pass
110	5550	39.730	36.348	--	Pass
134	5670	39.580	36.329	--	Pass

Channel 102 (5510MHz)

Channel 110 (5550MHz)



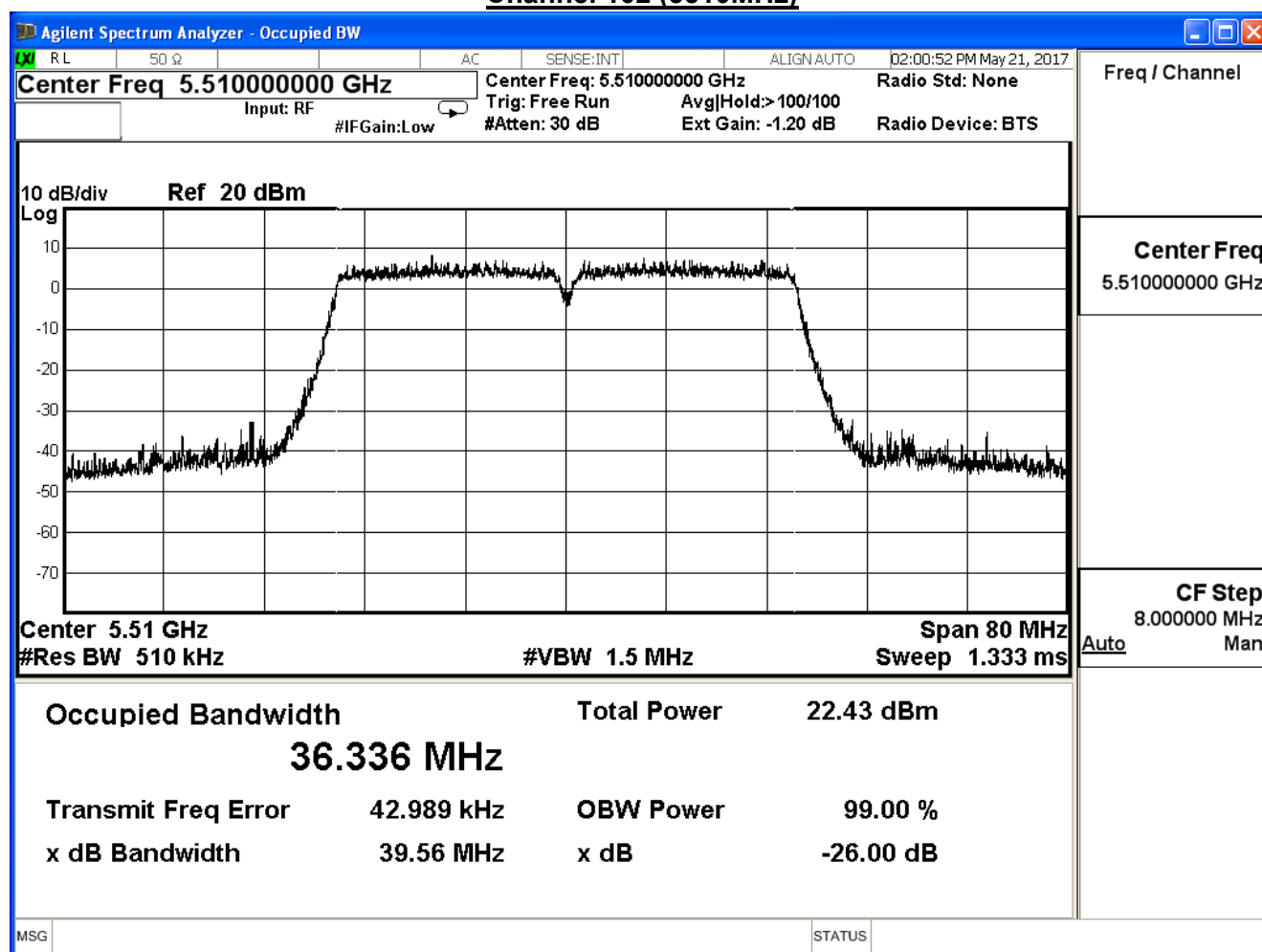
Channel 134 (5670MHz)



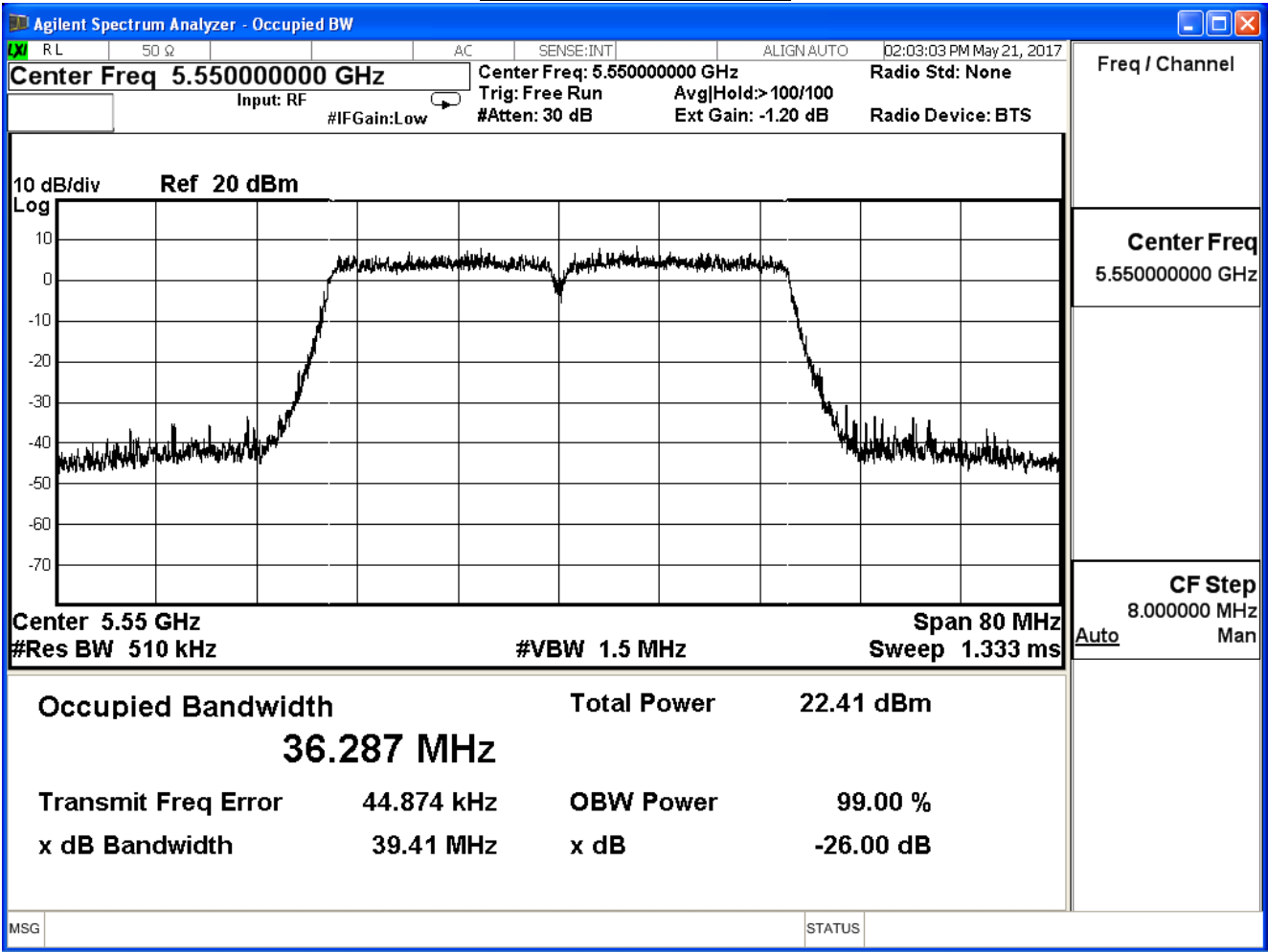
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11n_40M(ANT 1)

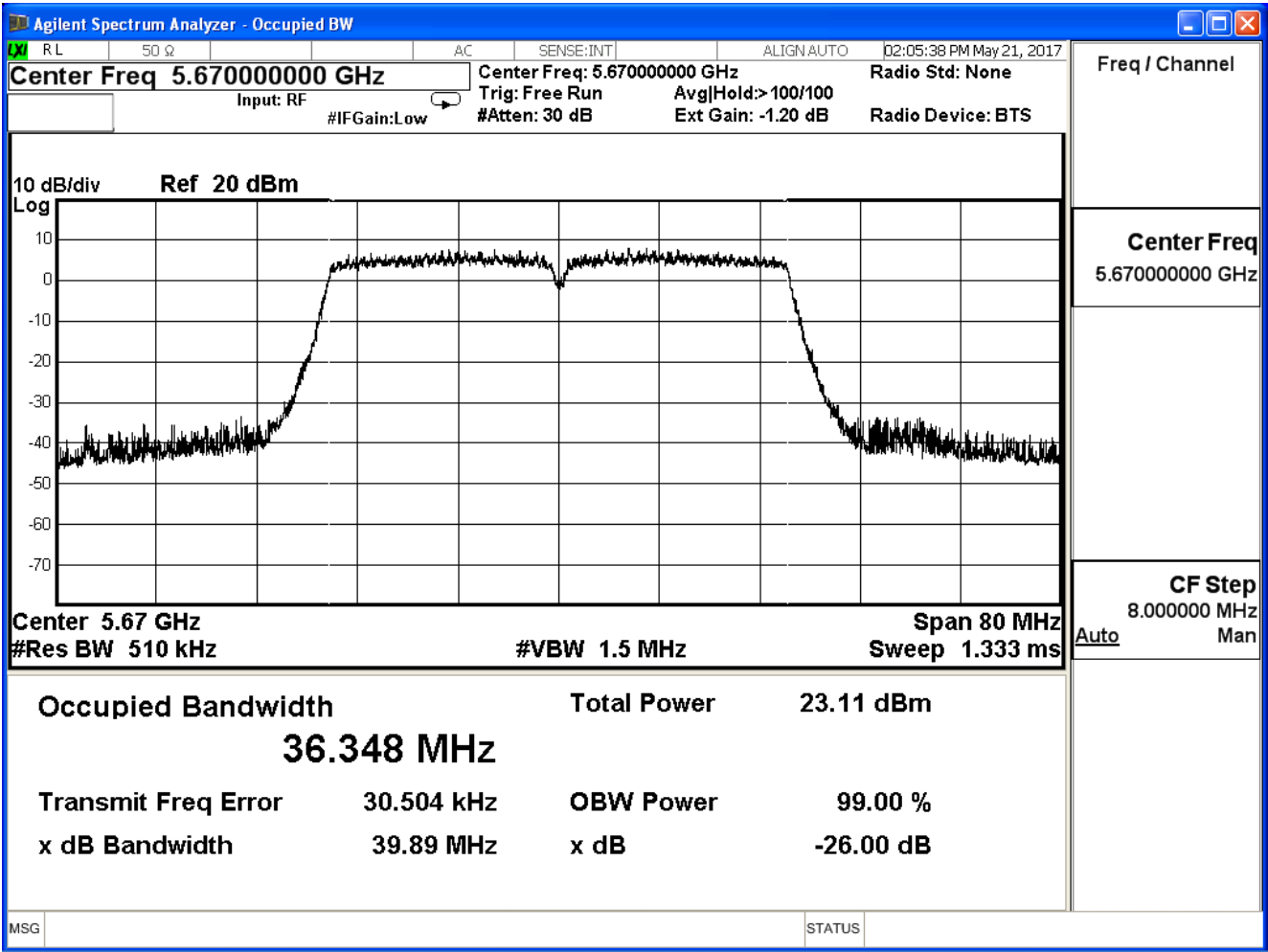
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
102	5510	39.560	36.336	--	Pass
110	5550	39.410	36.287	--	Pass
134	5670	39.890	36.348	--	Pass

Channel 102 (5510MHz)

Channel 110 (5550MHz)



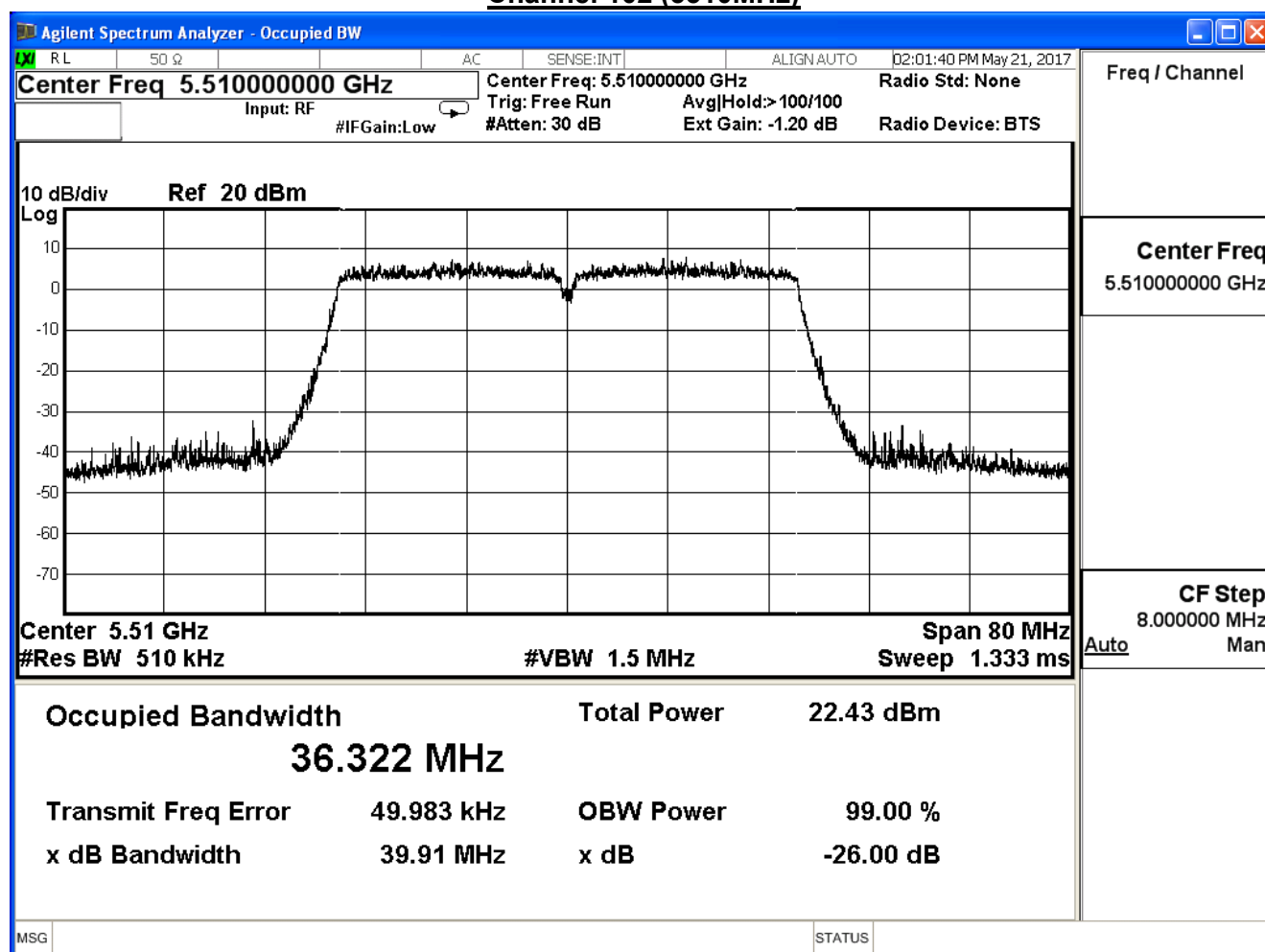
Channel 134 (5670MHz)



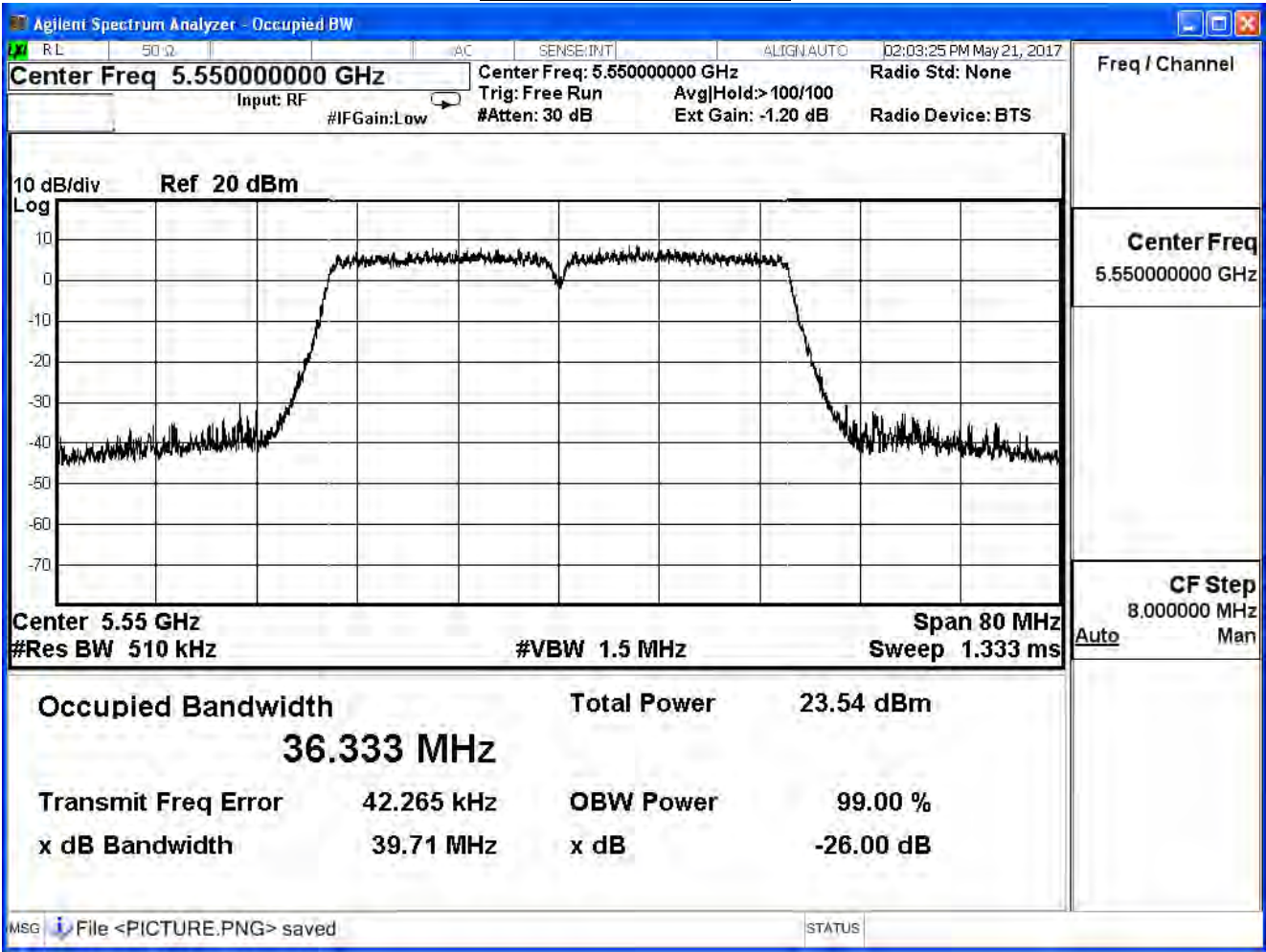
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11n_40M(ANT 2)

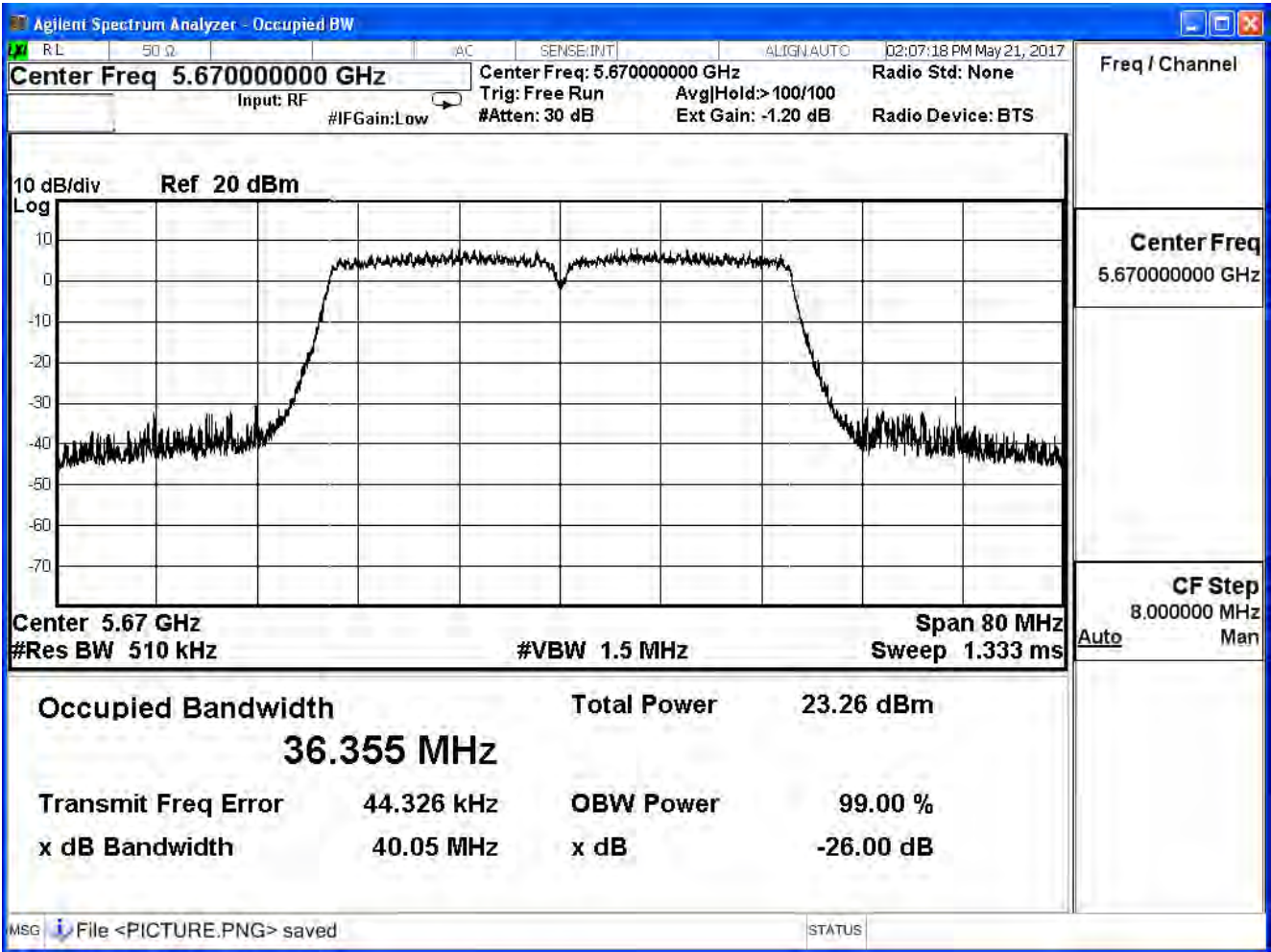
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
102	5510	39.910	36.322	--	Pass
110	5550	39.710	36.333	--	Pass
134	5670	40.050	36.355	--	Pass

Channel 102 (5510MHz)

Channel 110 (5550MHz)



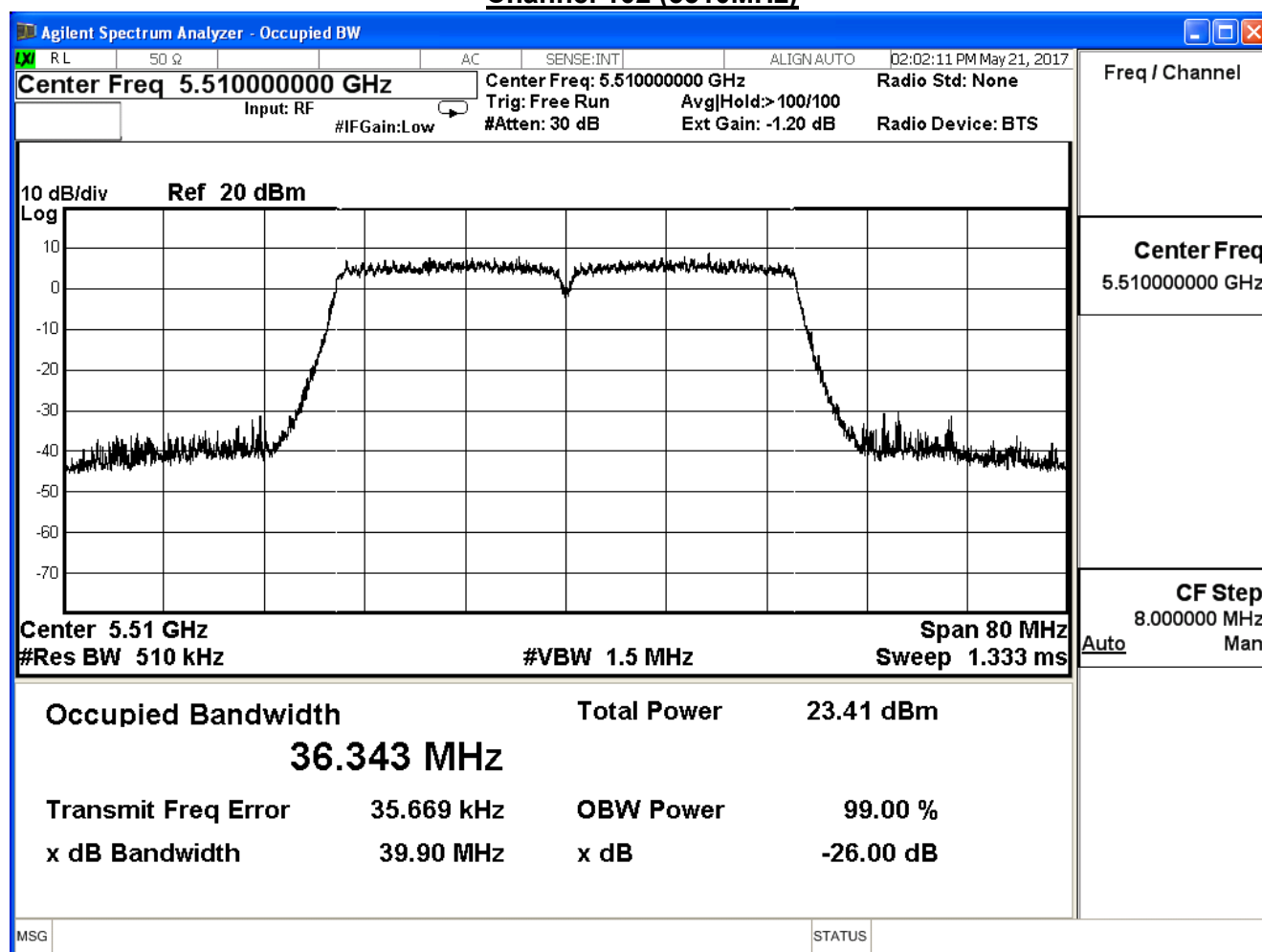
Channel 134 (5670MHz)



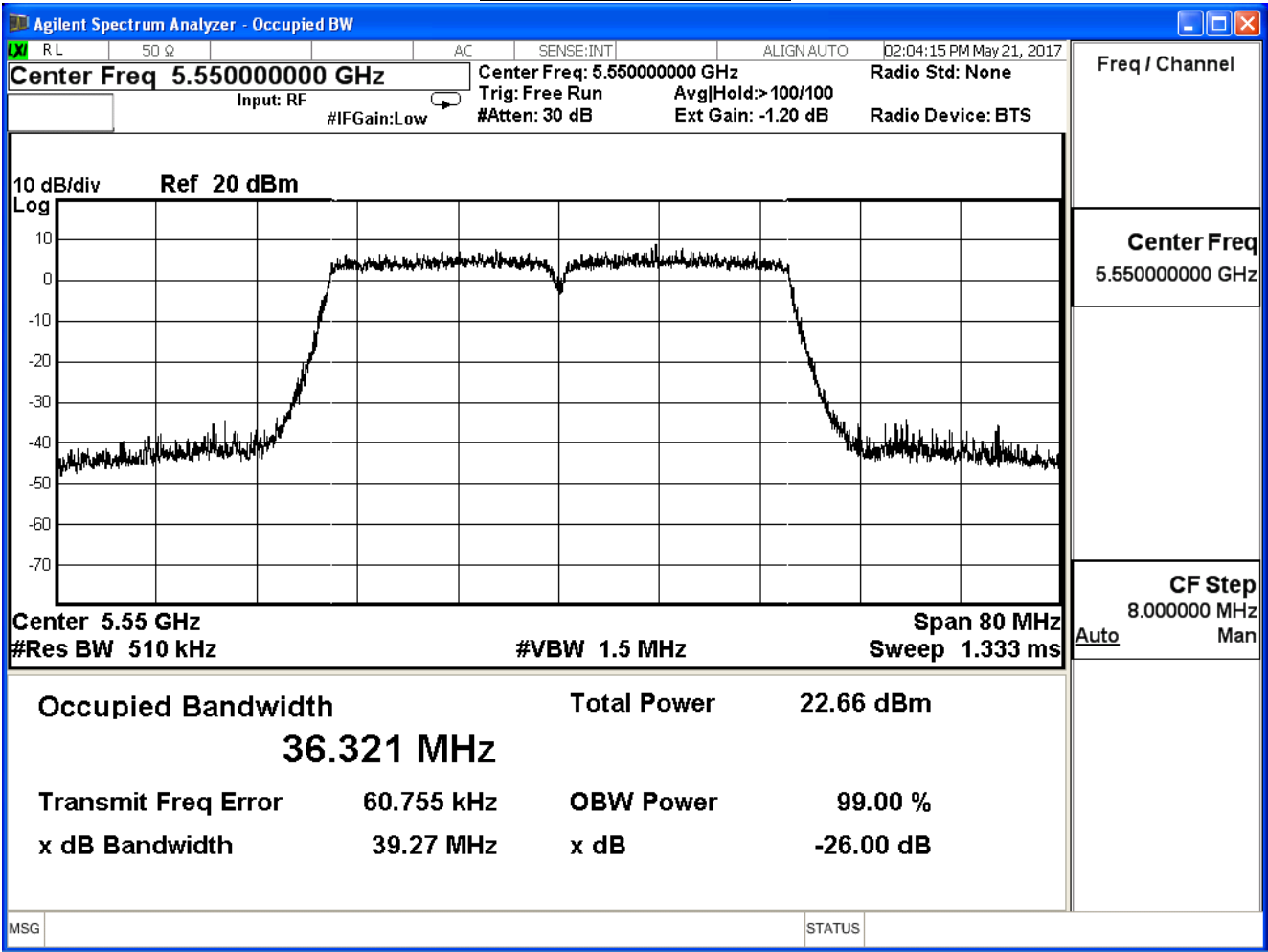
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11n_40M(ANT 3)

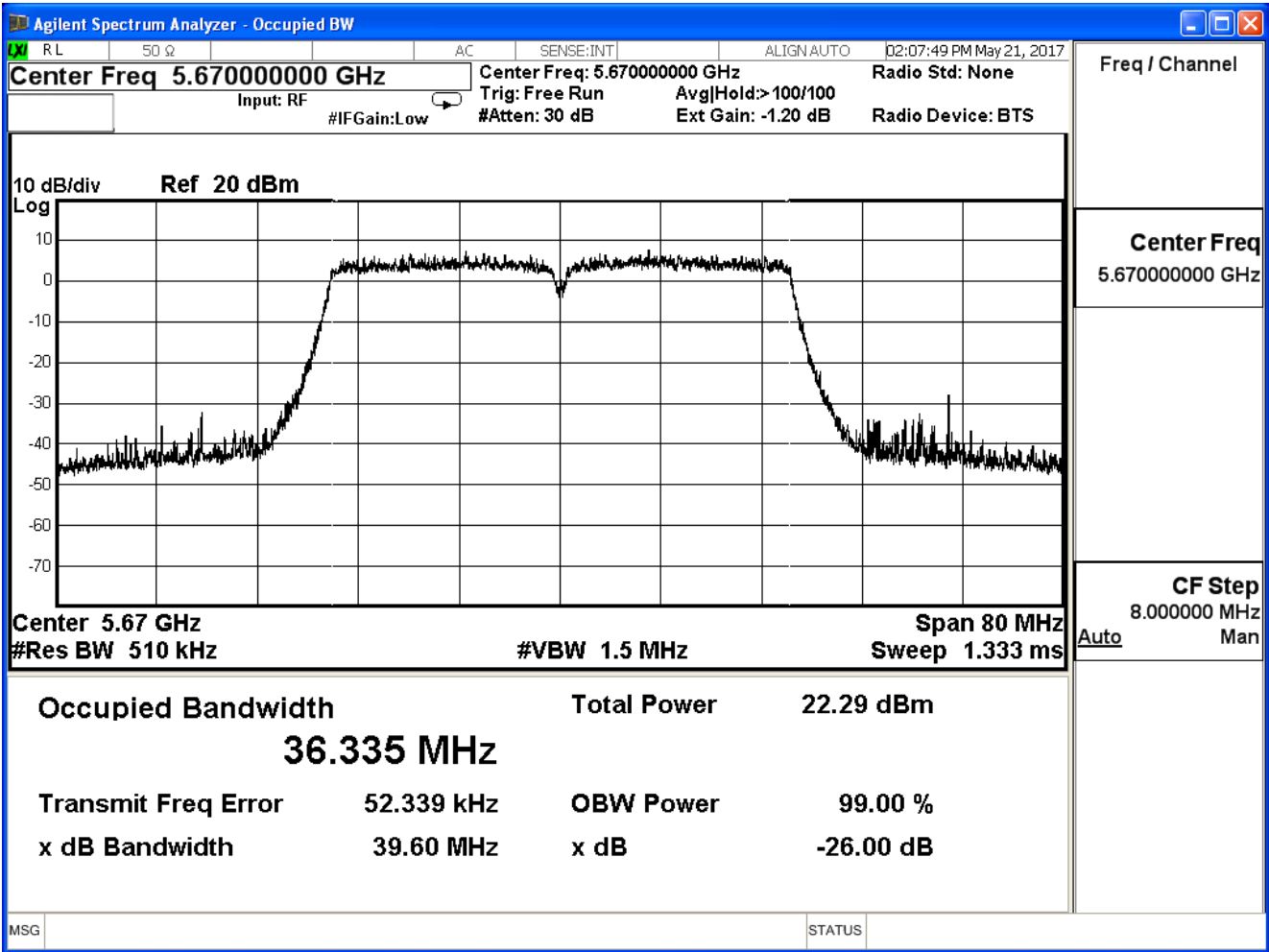
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
102	5510	39.900	36.343	--	Pass
110	5550	39.270	36.321	--	Pass
134	5670	36.600	36.335	--	Pass

Channel 102 (5510MHz)

Channel 110 (5550MHz)



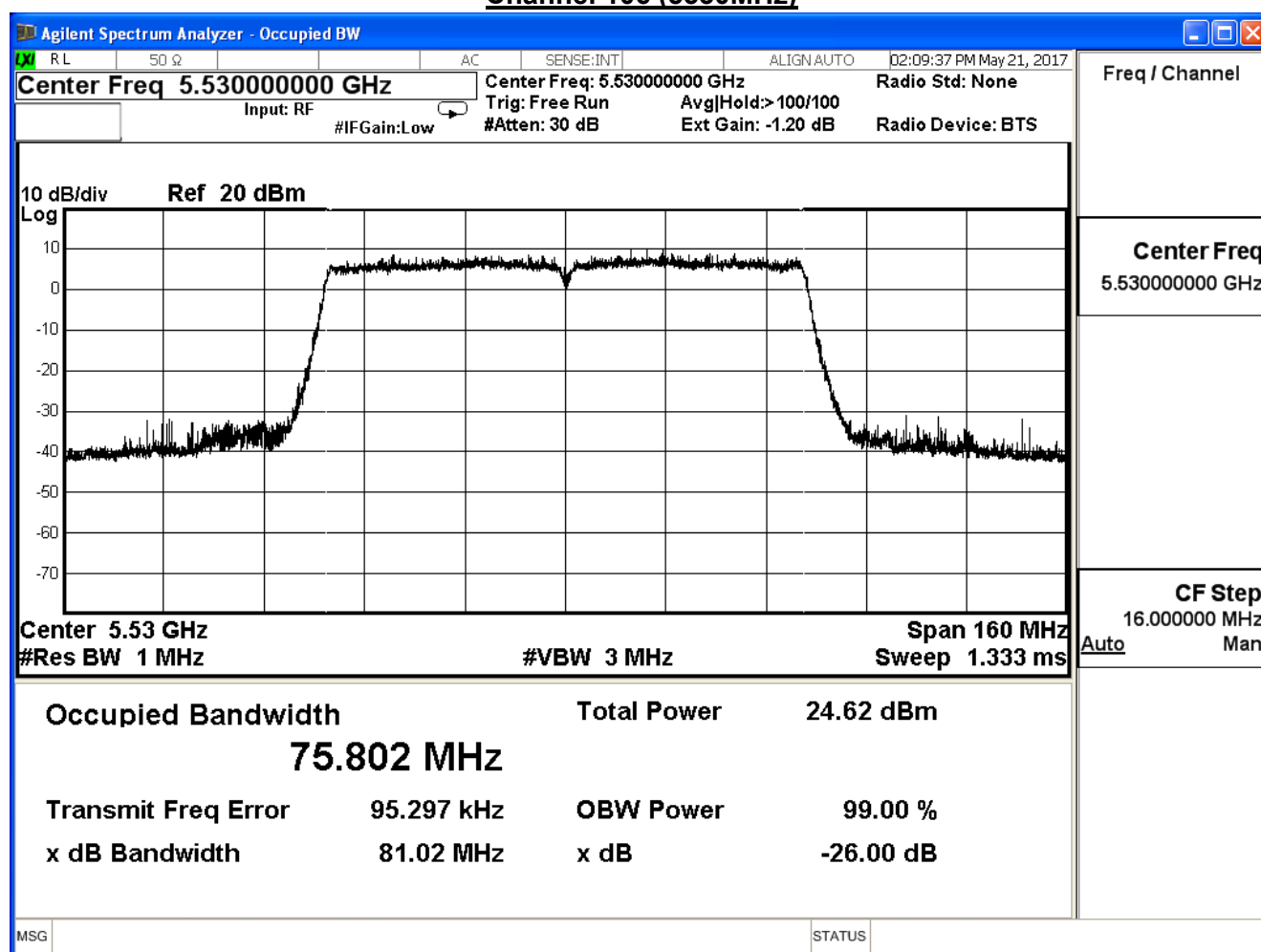
Channel 134 (5670MHz)



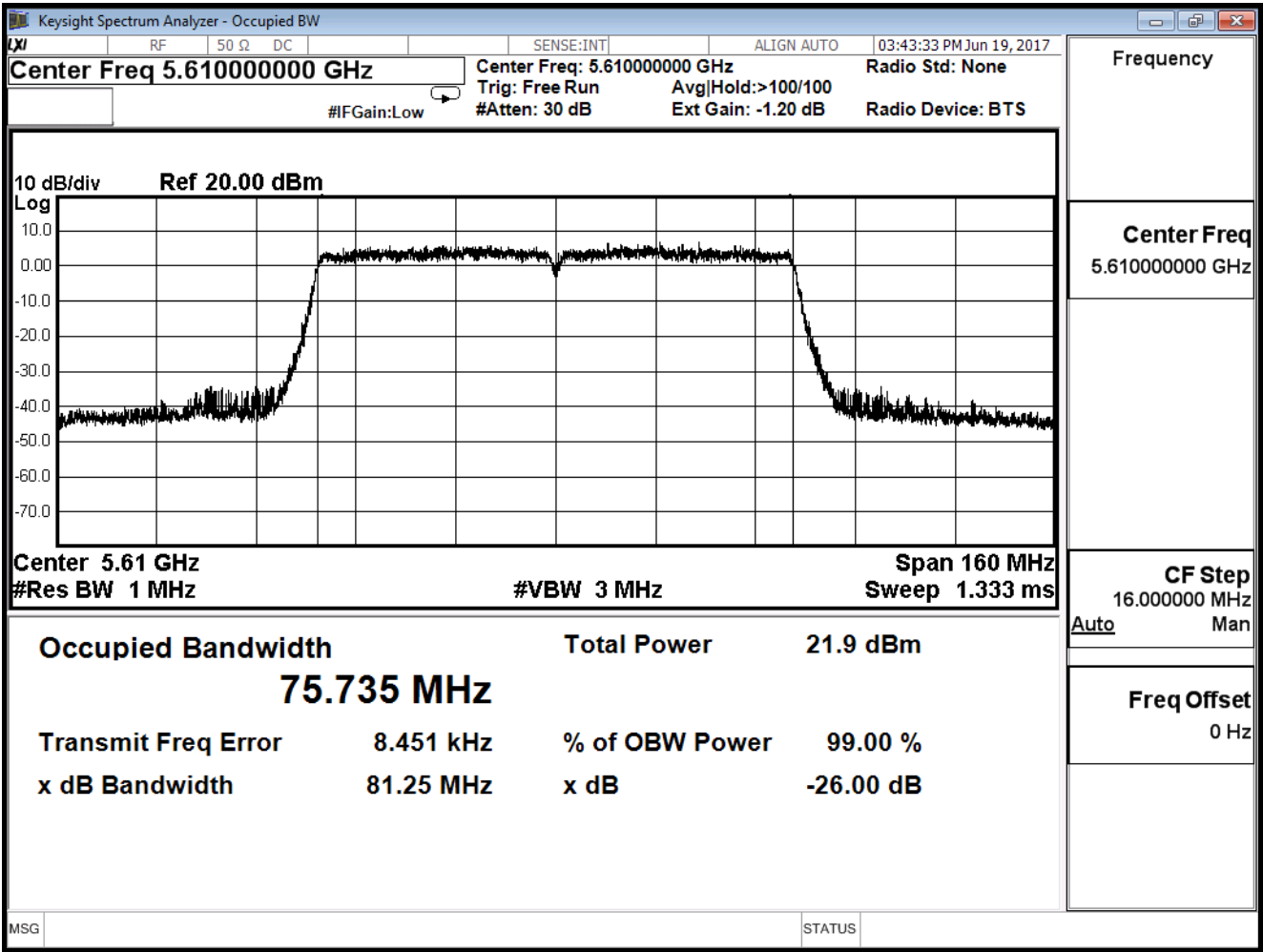
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx ADP: AD890326010-2LF MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11ac_80M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
106	5530	81.020	75.802	--	Pass
122	5610	81.250	75.735	--	Pass

Channel 106 (5530MHz)



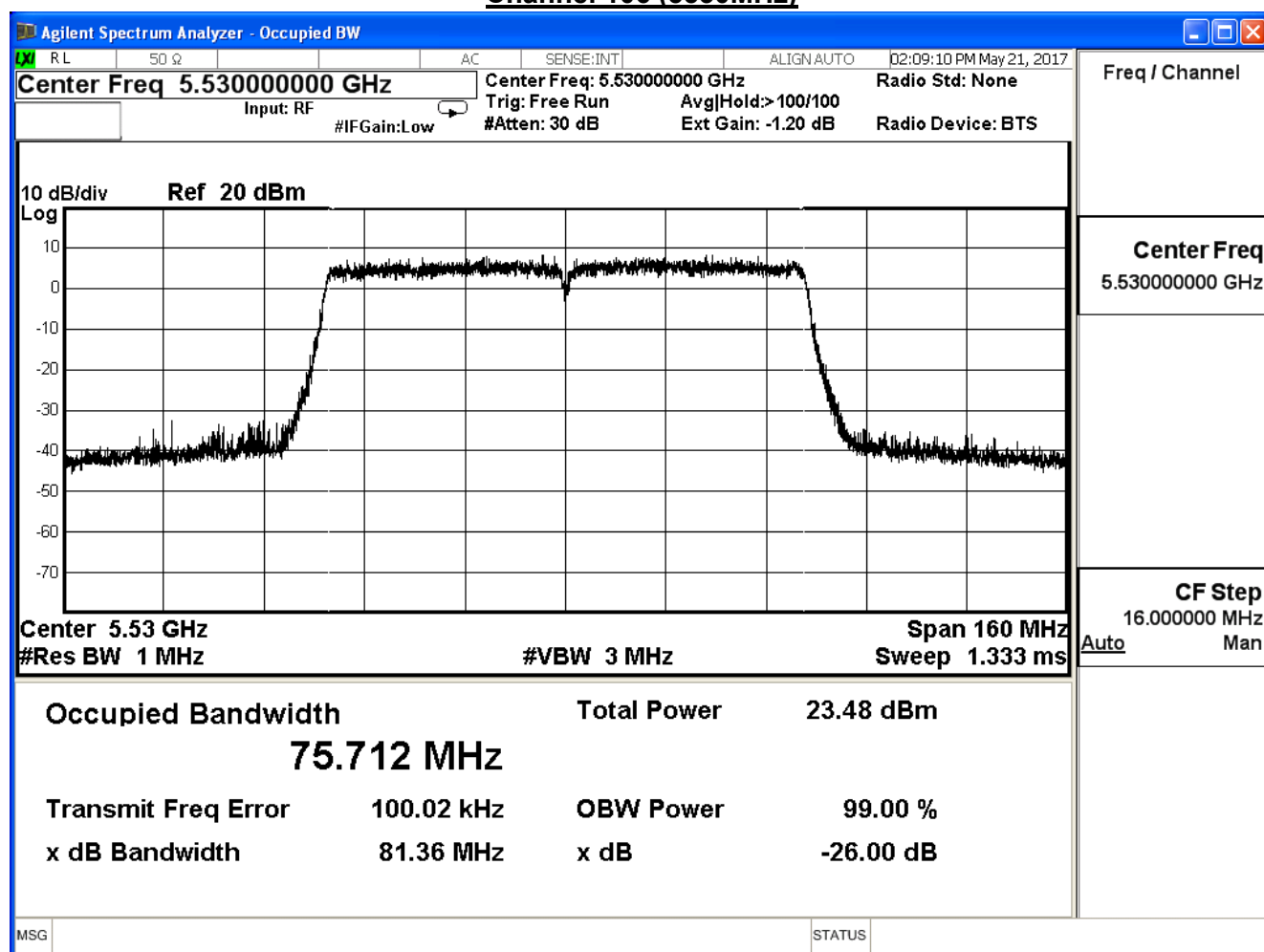
Channel 121 (5610MHz)

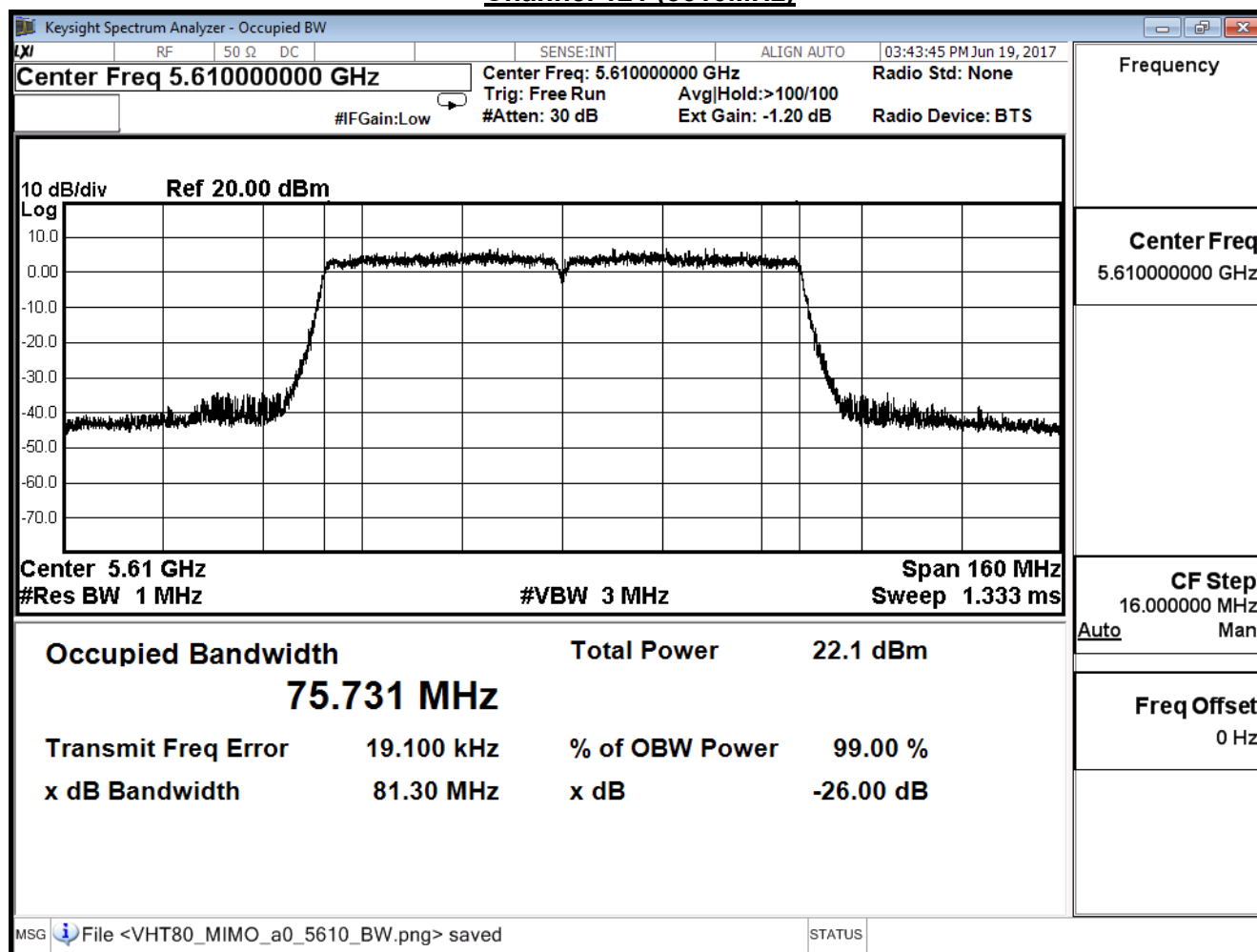


Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11ac_80M(ANT 1)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
106	5530	81.360	75.712	--	Pass
122	5610	81.300	75.731	--	Pass

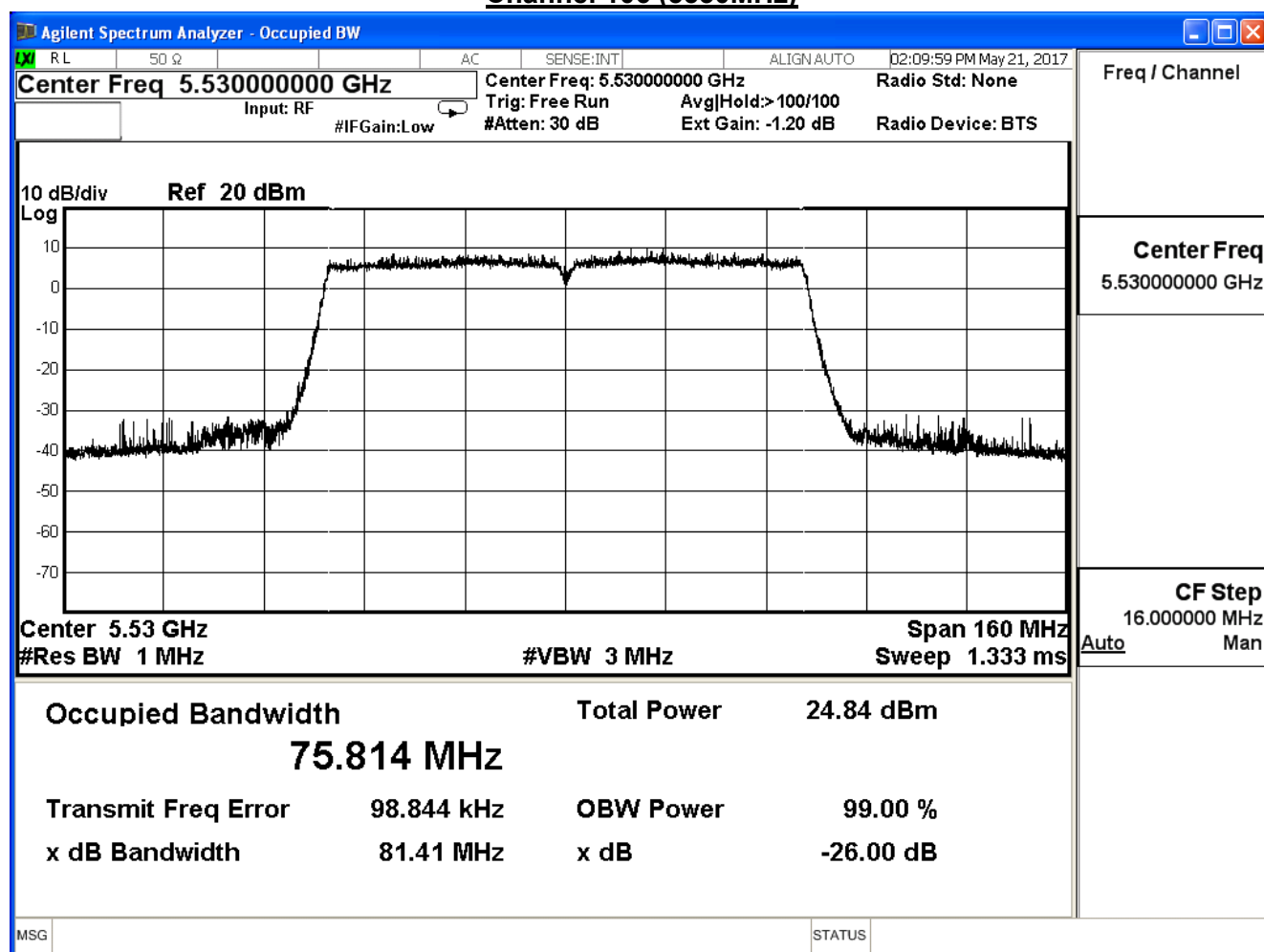
Channel 106 (5530MHz)

Channel 121 (5610MHz)

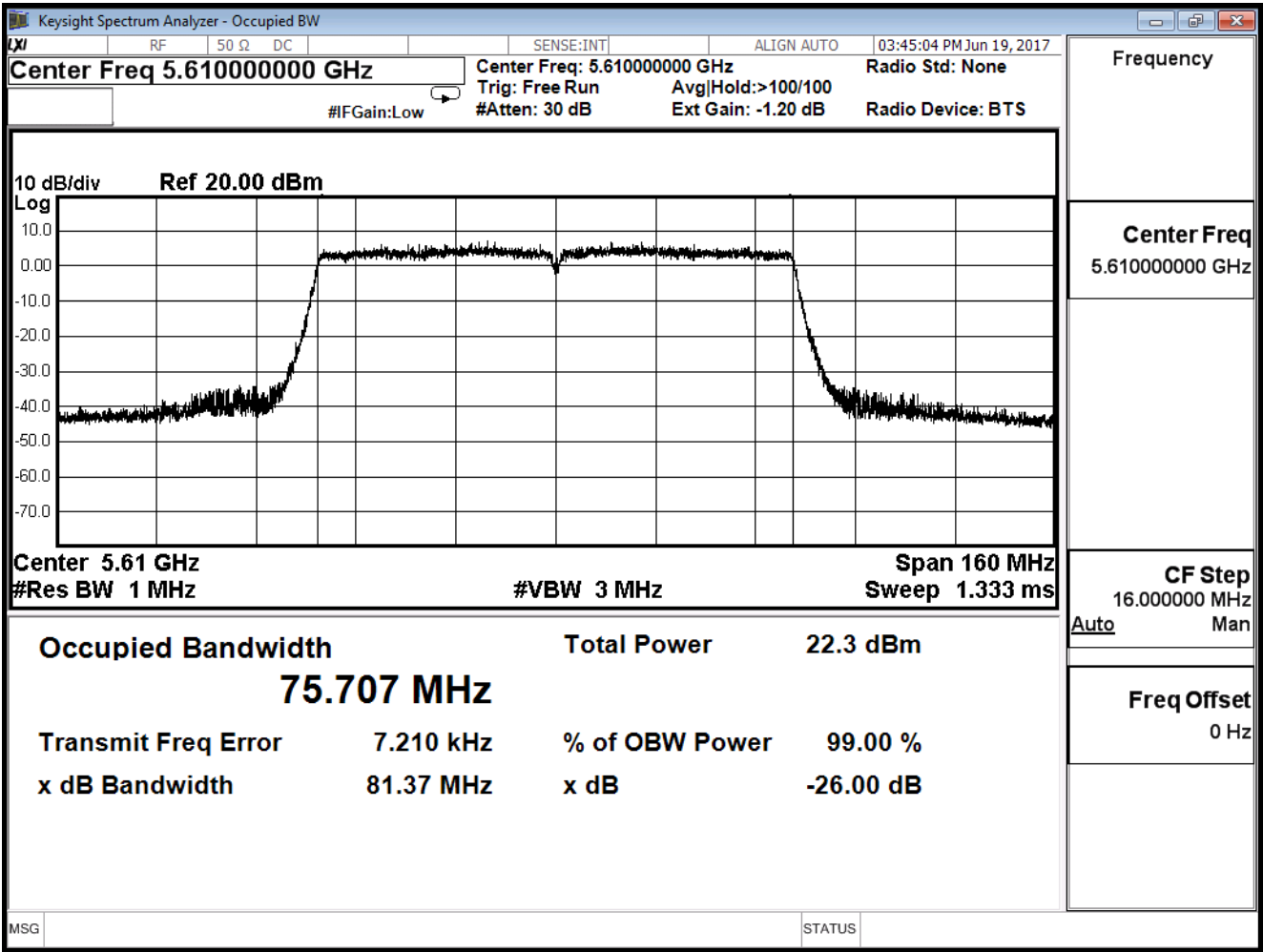
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11ac_80M(ANT 2)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
106	5530	81.410	75.814	--	Pass
122	5610	81.370	75.707	--	Pass

Channel 106 (5530MHz)

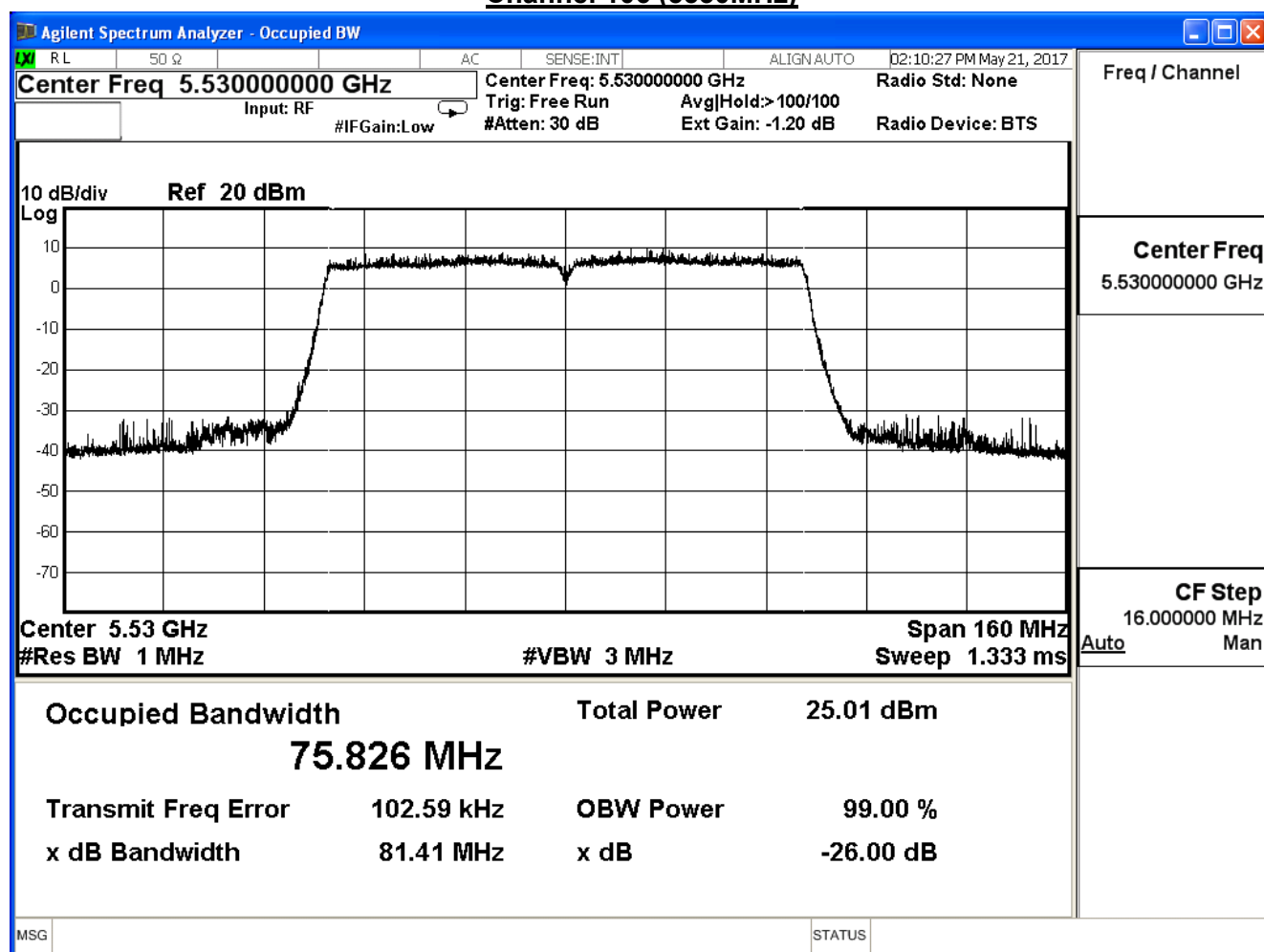
Channel 121 (5610MHz)



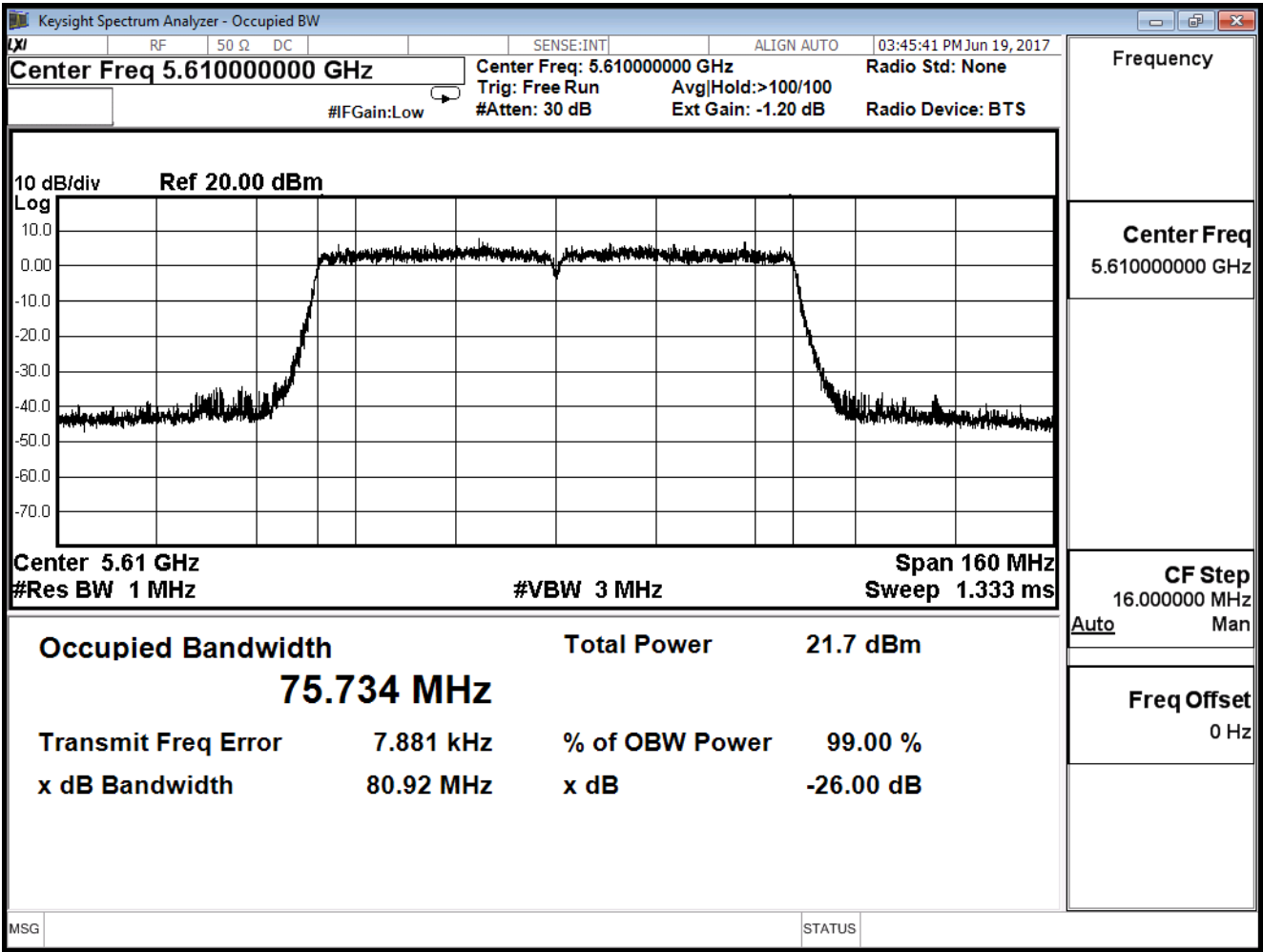
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 2: Tx_ADP: AD890326010-2LF_MIMO Mode (802.11 n20/40)		
Date of Test	2017/05/21	Test Site	SR10-H

802.11ac_80M(ANT 3)

Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
106	5530	81.410	75.826	--	Pass
122	5610	80.920	75.734	--	Pass

Channel 106 (5530MHz)

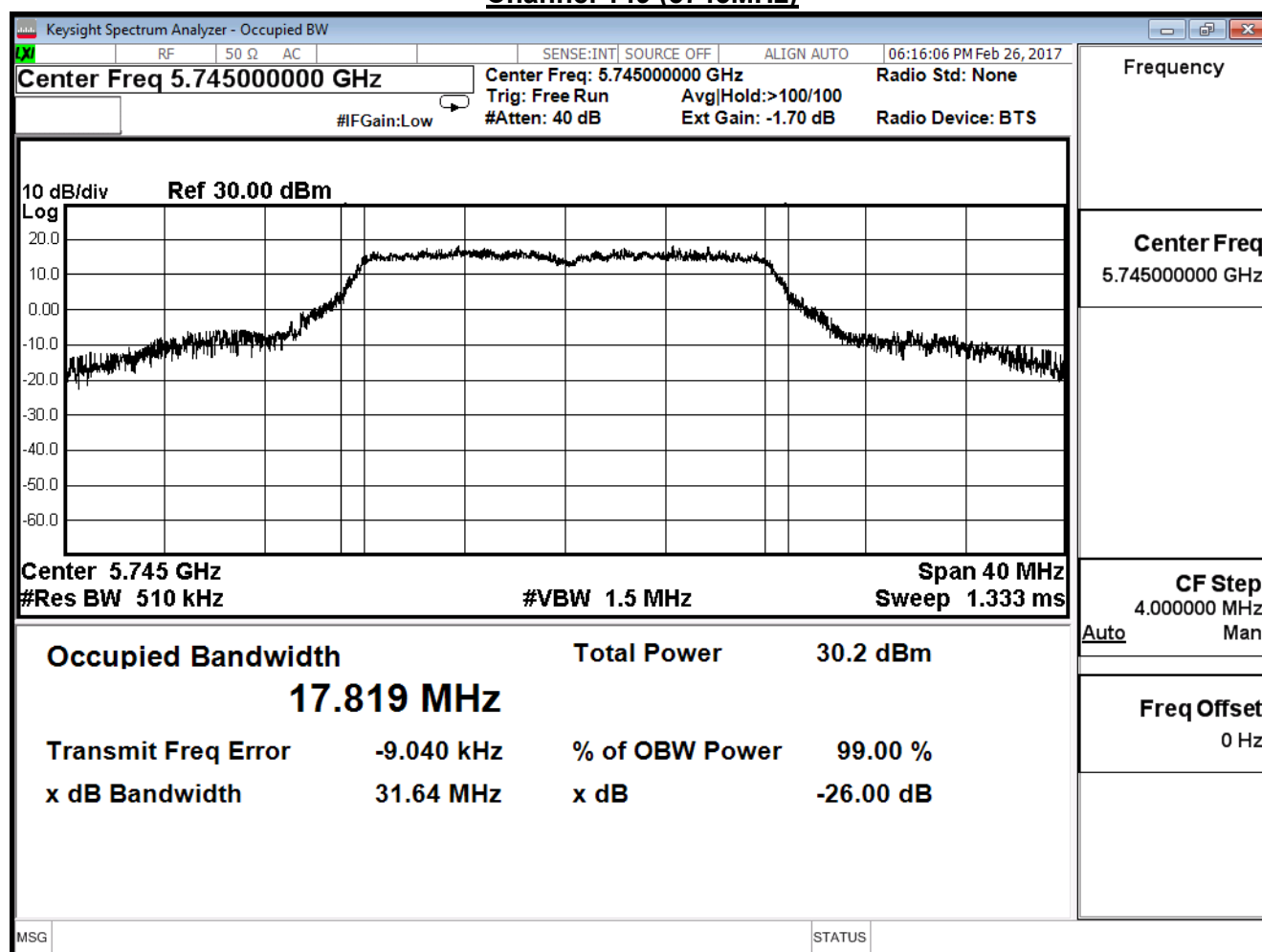
Channel 121 (5610MHz)



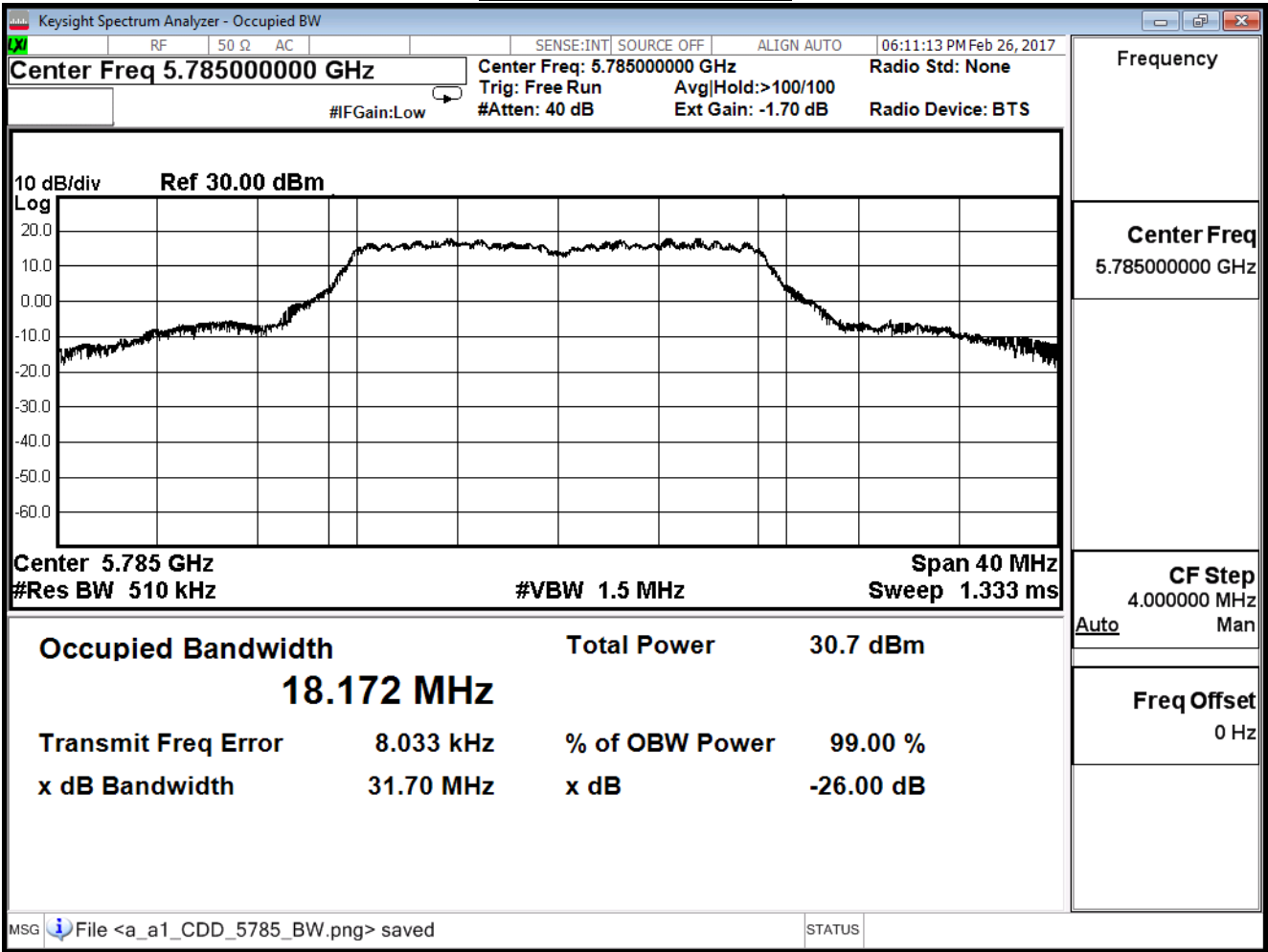
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/02/26	Test Site	SR10-H

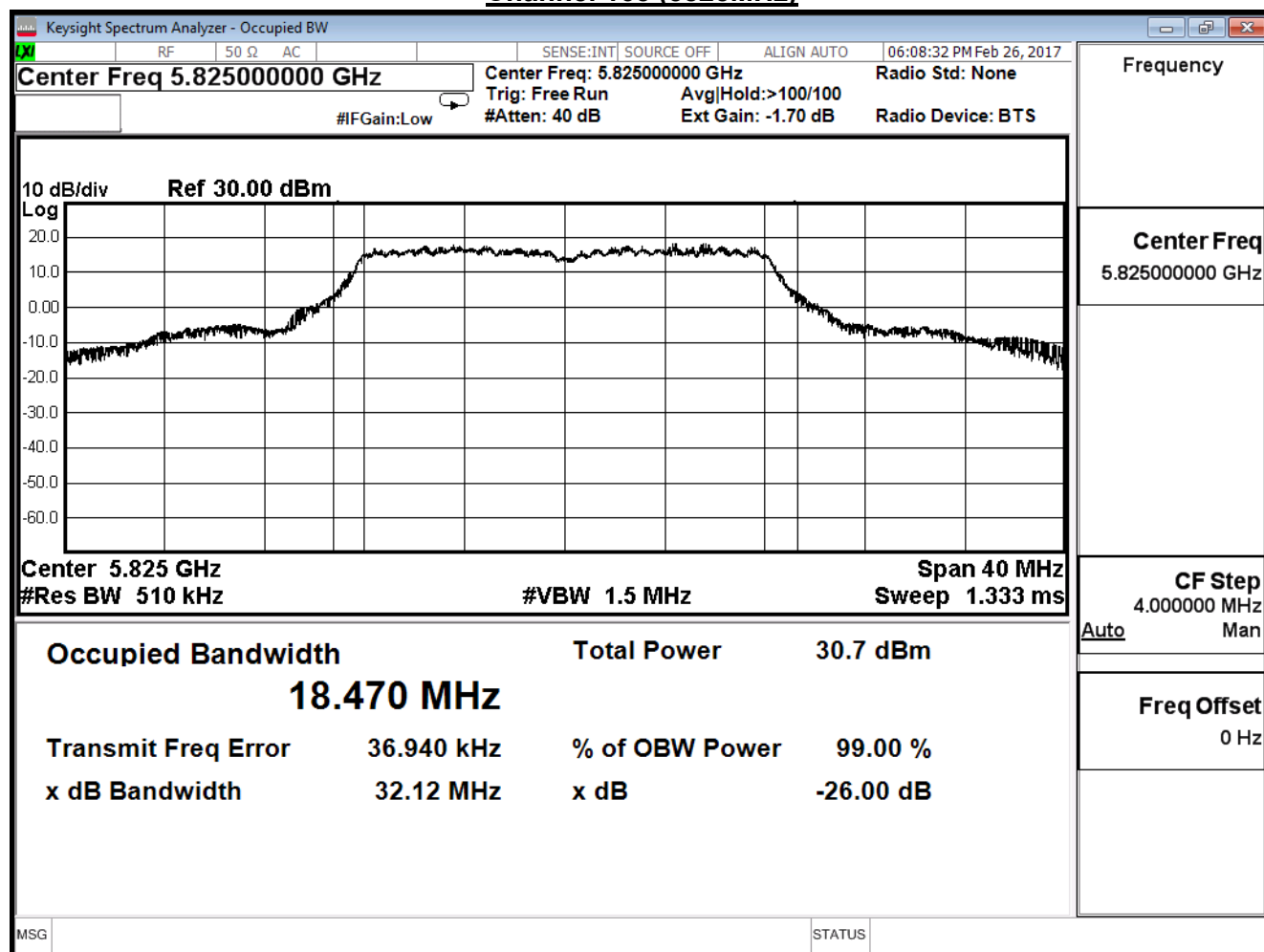
IEEE 802.11a (ANT0)

Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
149	5745	17.819	--
157	5785	18.172	--
165	5825	18.470	--

Channel 149 (5745MHz)

Channel 157 (5785MHz)

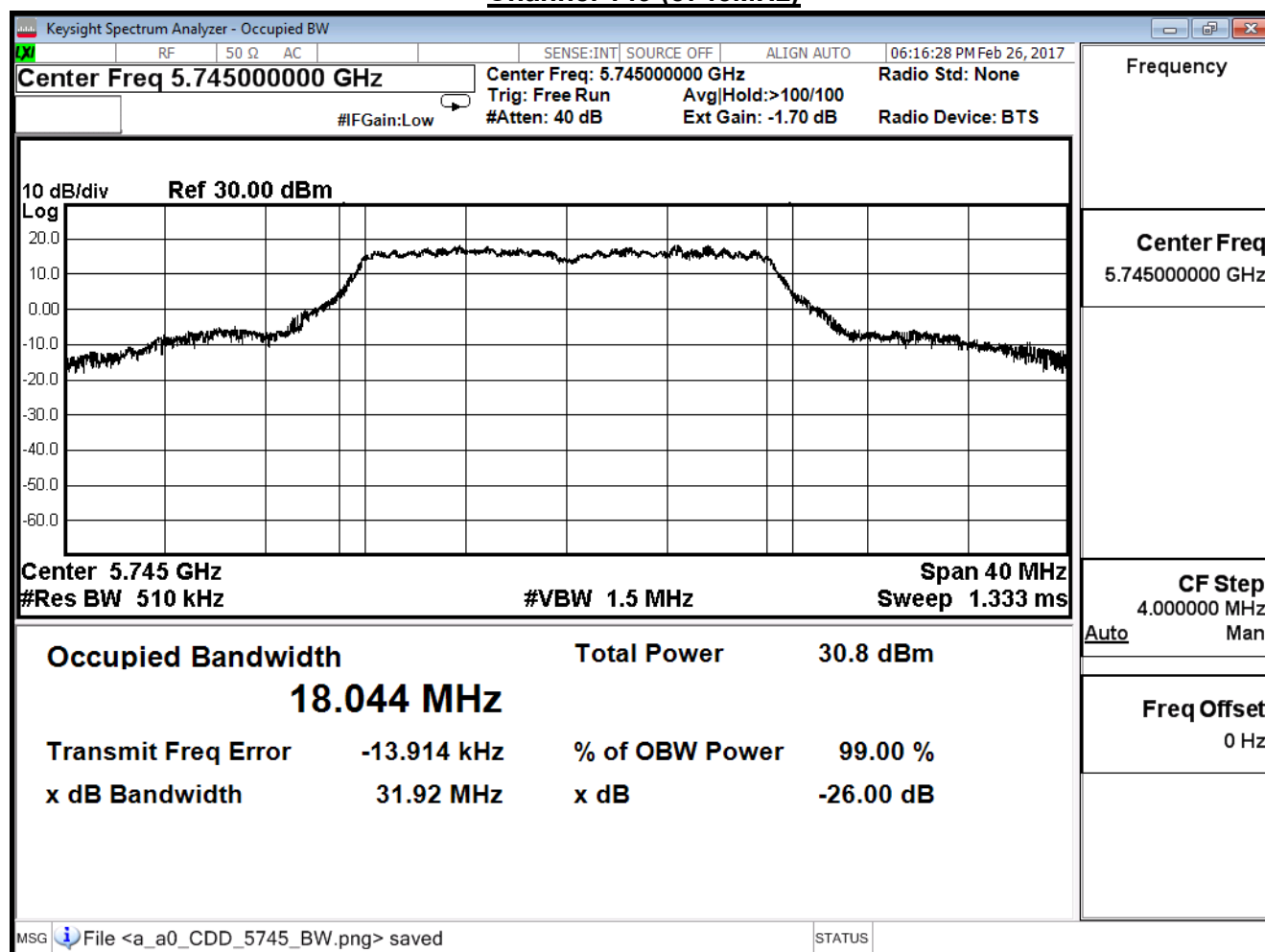


Channel 165 (5825MHz)

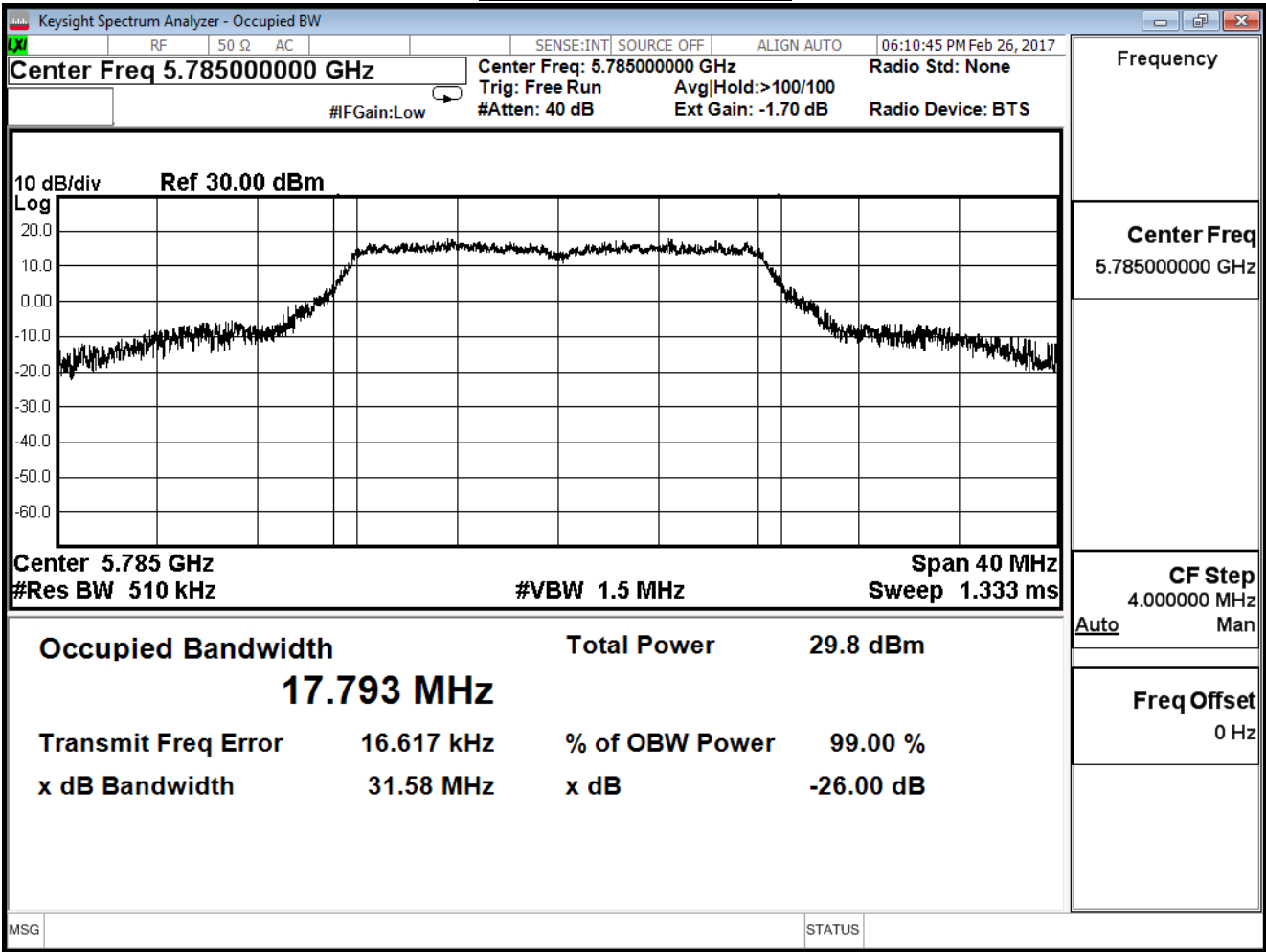
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/02/26	Test Site	SR10-H

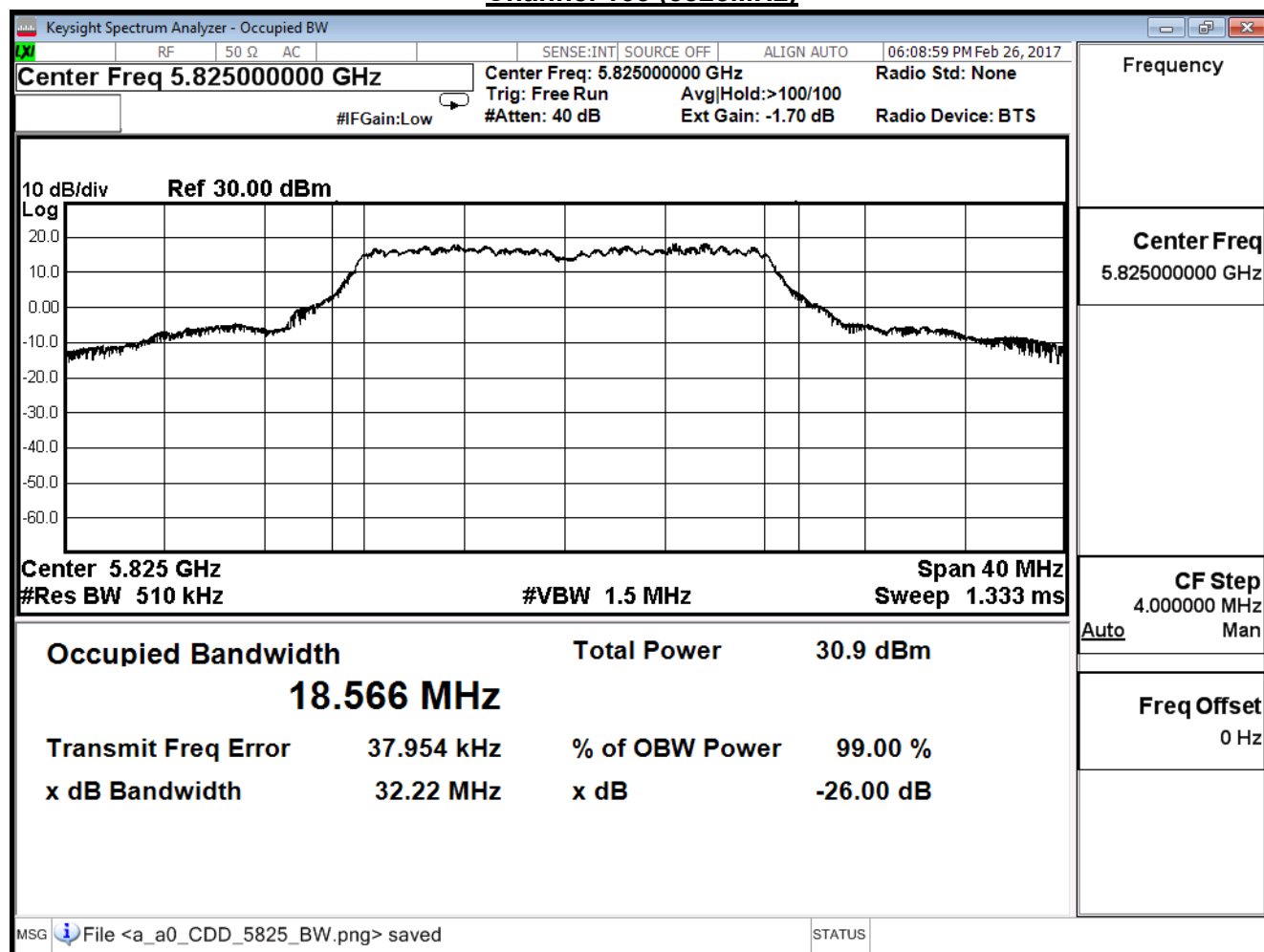
IEEE 802.11a (ANT1)

Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
149	5745	18.044	--
157	5785	17.793	--
165	5825	18.566	--

Channel 149 (5745MHz)

Channel 157 (5785MHz)

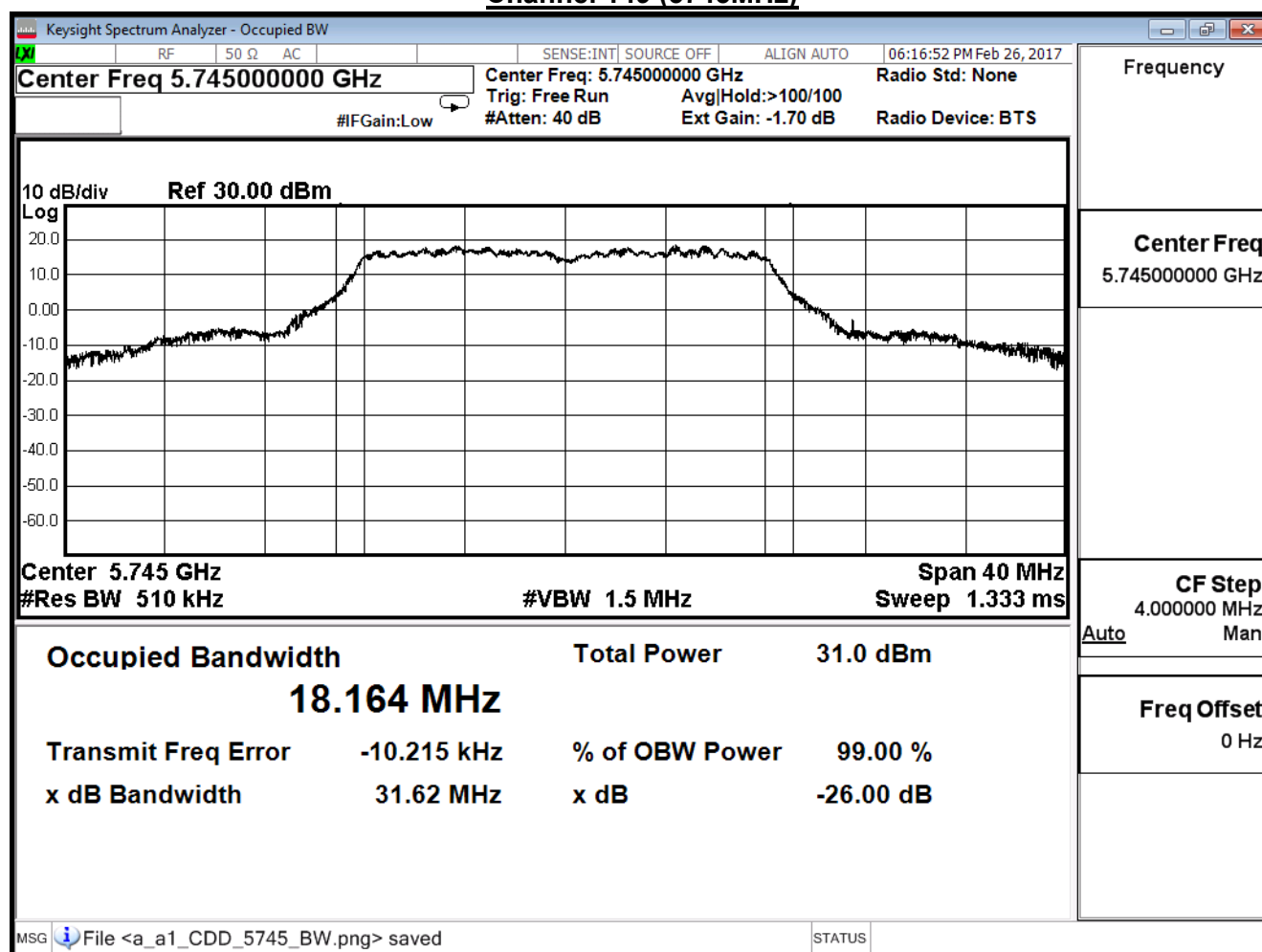


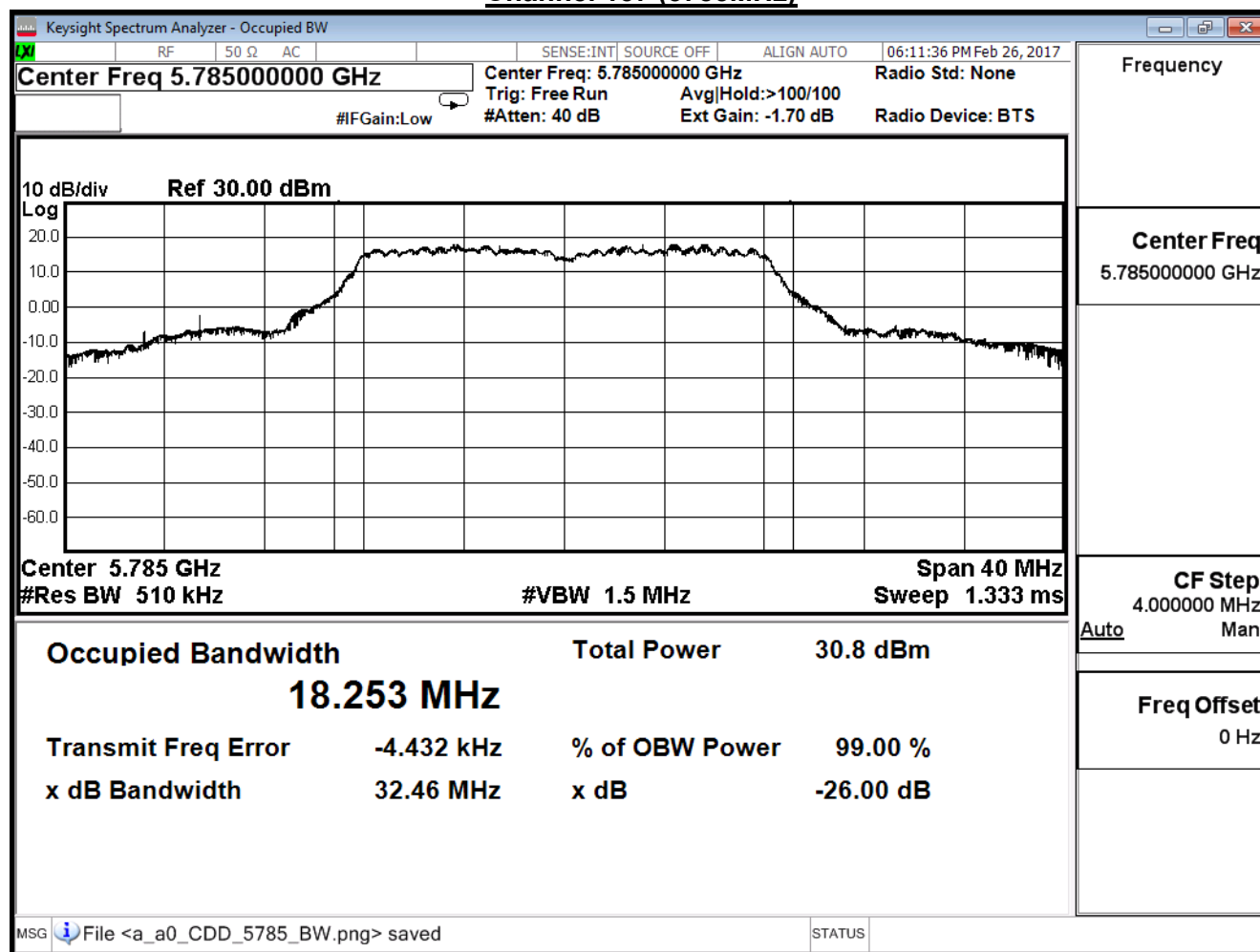
Channel 165 (5825MHz)

Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/02/26	Test Site	SR10-H

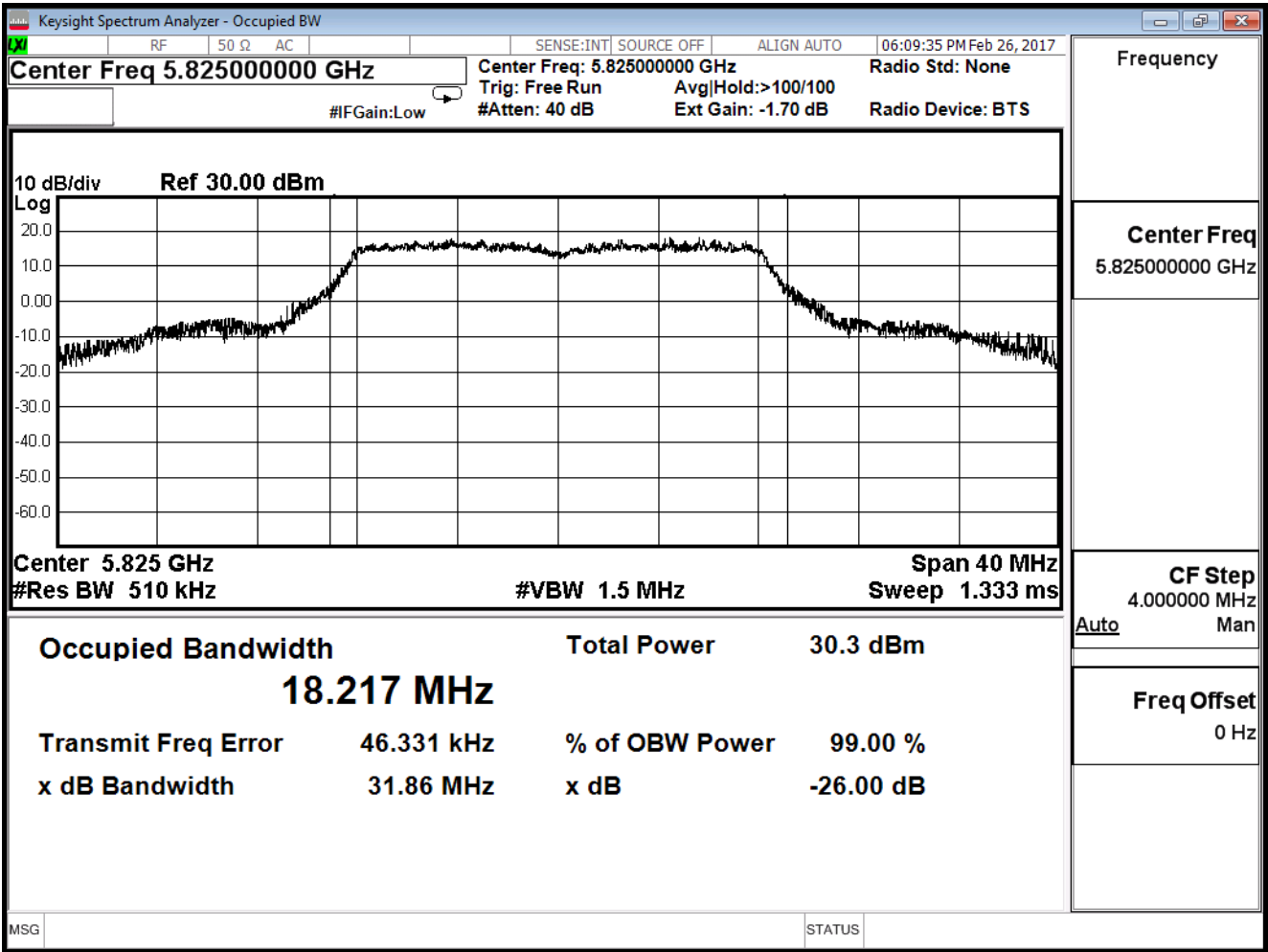
IEEE 802.11a (ANT2)

Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
149	5745	18.164	--
157	5785	18.253	--
165	5825	18.217	--

Channel 149 (5745MHz)

Channel 157 (5785MHz)

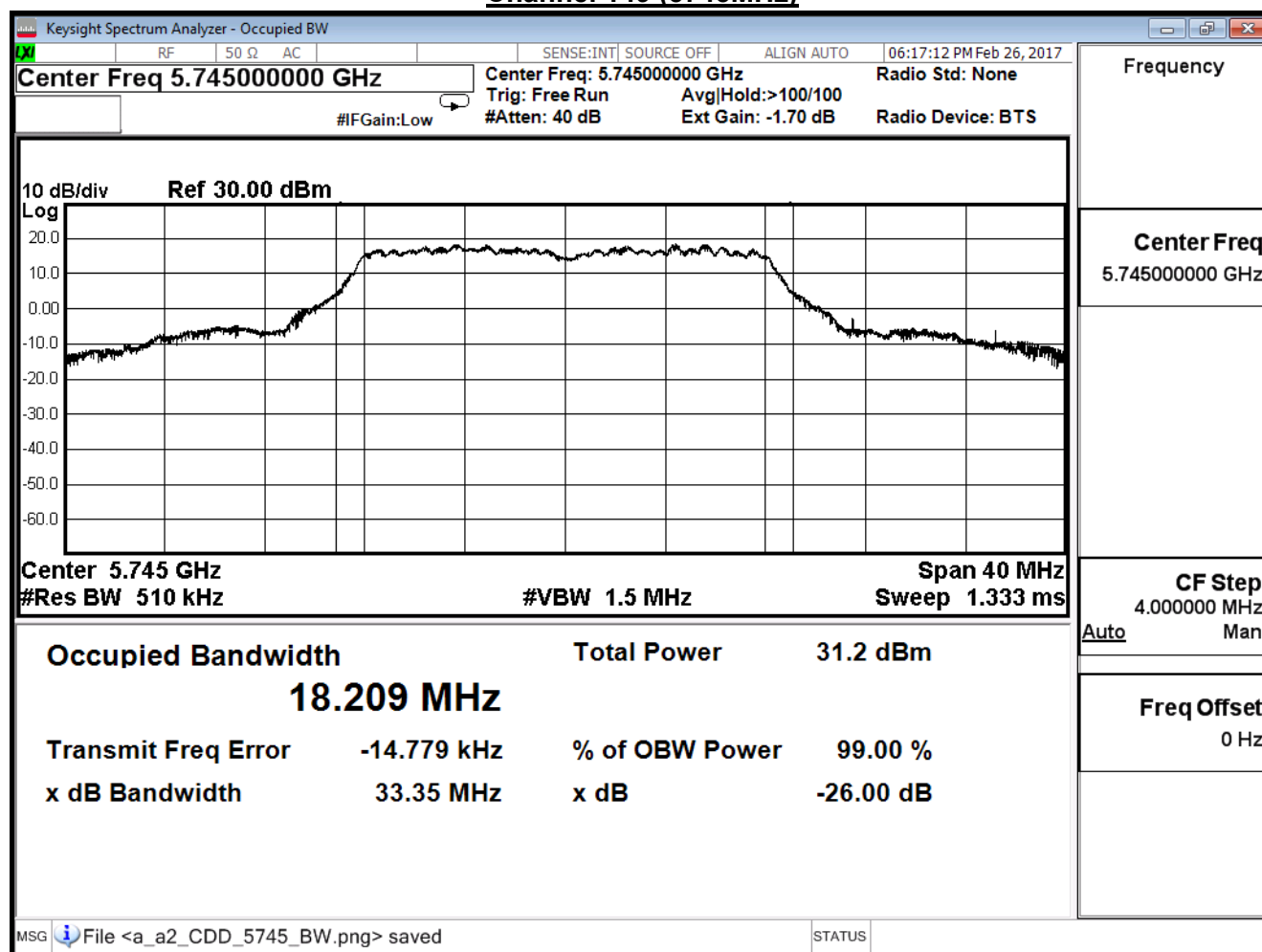
Channel 165 (5825MHz)



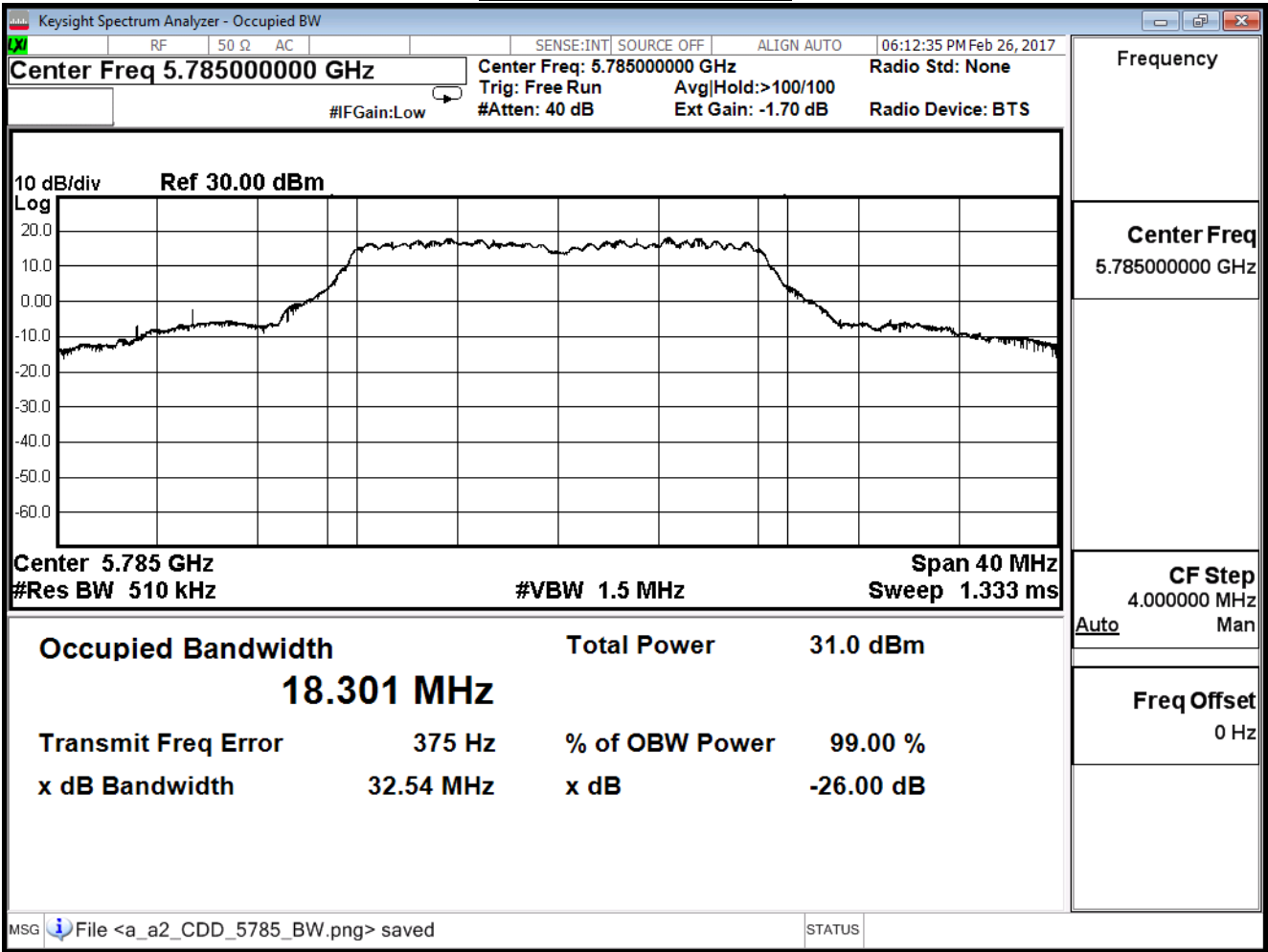
Product	Wireless-AC2900 Dual Band Gigabit Router		
Test Item	99% & 26dB Bandwidth		
Test Mode	Mode 1: Tx ADP: AD890326010-2LF_CDD Mode (802.11 a)		
Date of Test	2017/02/26	Test Site	SR10-H

IEEE 802.11a (ANT3)

Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
149	5745	18.209	--
157	5785	18.301	--
165	5825	18.465	--

Channel 149 (5745MHz)

Channel 157 (5785MHz)



Channel 165 (5825MHz)