FCC Test Report

Product Name ： Wireless-AC2200 Tri Band Gigabit Router

Trade Name ： ASUS

Model No. ： Lyra Voice

FCC ID. ： MSQ-RTHU00

Applicant ： ASUSTeK COMPUTER INC.

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

Date of Receipt ： Jun. 24, 2018

Issued Date ： Oct. 29, 2018

Report No. ： 1860341R-RFUSP57V00

Report Version ： V1.0

Testing Laboratory

3024

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Test Report Certification

Issued Date : Oct. 29, 2018
Report No. : 1860341R-RFUSP57V00

Product Name	:	Wireless-AC2200 Tri Band Gigabit Router
Applicant	:	ASUSTeK COMPUTER INC.
Address	:	4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan
Manufacturer	:	ASUSTeK COMPUTER INC.
Model No.	:	Lyra Voice
FCC ID.	:	MSQ-RTHU00
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: 2017 ANSI C63.10: 2013 KDB 789033 V02r01 KDB 662911 D01 V02r01
Laboratory Name	:	Hsin Chu Laboratory
Address	:	No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan, R.O.C. TEL: +886-3-582-8001 / FAX: +886-3-582-8958
Test Result	:	Complied

Documented By : Carol Tsai

(Carol Tsai / Senior Engineering Adm. Specialist)

Tested By : Elwin Lin

(Elwin Lin / Engineer)

Approved By : Roy Wang

(Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1860341R-RFUSP57V00	V1.0	Initial issue of report	Oct. 29, 2018

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1. General Information

1.1. EUT Description

Product Name	Wireless-AC2200 Tri Band Gigabit Router	
Trade Name	ASUS	
Model No.	Lyra Voice	
Frequency Range/ Channel Number	IEEE 802.11a/ IEEE 802.11n (20MHz) / IEEE 802.11ac (20MHz)	5180~5240MHz / 4 Channels 5745~5825MHz / 5 Channels
	IEEE 802.11n (40MHz) / IEEE 802.11ac (40MHz)	5190~5230MHz / 2 Channels 5755~5795MHz / 2 Channels
	IEEE 802.11ac (80MHz)	5210~5210MHz / 1 Channel 5775~5775MHz / 1 Channel
Type of Modulation	IEEE 802.11a/n/ac	Orthogonal Frequency Division Multiplexing (OFDM)
Data Speed	IEEE 802.11a	6, 12, 18, 24, 36, 48, 54Mbps
	IEEE 802.11n	Support a subset of the combination of GI, MCS 0~MCS15 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	
Antenna Type	Dipole & PCB Dipole antenna
Effecctive Antenna Gain	2.546 dBi (Low band)
	2.721 dBi (High band)
Beamforming Gain	1.02 dBi

Accessories Information	
LAN Cable	Non-Shielded, 1.4m
Power Adapter	DELTA, ADP-45BW B I/P : 100-240V~1.2A 50-60Hz O/P : 19V ⎓ 2.37A Cable Out: Non-Shielded, 2.2m
Power Adapter	DELTA, ADP-45BW Y I/P : 100-240V~50-60Hz 1.2A O/P : 19V ⎓ 2.37A Cable Out: Non-Shielded, 2.2m
Power Adapter	PI, AD2066320 I/P : 100-240V~50/60Hz 1.0A O/P : 19V ⎓ 2.37A Cable Out: Non-Shielded, 2.2m
Power Adapter	PI, AD883J20 I/P : 100-240V 1.0A 50/60Hz O/P : 19V ⎓ 2.37A Cable Out: Non-Shielded, 2.2m

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)			
								800ns GI		400ns GI	
				20MHz	40MHz	20MHz	40MHz	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)			
								800ns GI		400ns GI	
				20MHz	40MHz	20MHz	40MHz	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

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

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
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	151	5755 MHz	159	5795 MHz

IEEE 802.11ac (80MHz)

Working Frequency of Each Channel	
Channel	Frequency
42	5210 MHz
155	5775 MHz

Note:

1. This device is a Wireless-AC2200 Tri Band Gigabit Router supports 2.4GHz b/g/n/ac and 5GHz a/n/ac and BT2.0 / BT 4.0 transmitting and receiving function.
2. 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.
3. This device of filter have two different brand but have the same layout.

Filter	Brand	Product name
Filter 1	CIROCOMM TECHNOLOGY CORP.	MF 5245C / MF 5665C
Filter 2	Xiamen Sunyear Electronic Co., Ltd	DFJ5245C190 / DFJ5665C370

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.

Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B Mode 2: Transmit_Filter 1_CDD_ADP-45BW Y Mode 3: Transmit_Filter 1_CDD_AD-2066320 Mode 4: Transmit_Filter 1_ AD883J20 Mode 5: Transmit_Filter 1_BF_ADP-45BW B Mode 6: Transmit_Filter 2_CDD_ADP-45BW B

Test Items	Modulation	Channel	Antenna	Result
Conducted Emission	11ac (80MHz)	42/155	0+1	Complies
26dB& 99% & DTS Bandwidth	a	36/44/48/149/157/165	0/1	Complies
	11n/ac (20MHz)	36/44/48/149/157/165	0/1	Complies
	11n/ac (40MHz)	38/46/151/159	0/1	Complies
	11ac (80MHz)	42/155	0/1	Complies
Maximum conducted output power	a	36/44/48/149/157/165	0+1	Complies
	11n/ac (20MHz)	36/44/48/149/157/165	0+1	Complies
	11n/ac (40MHz)	38/46/151/159	0+1	Complies
	11ac (80MHz)	42/155	0+1	Complies
Maximum power spectral density	a	36/44/48/149/157/165	0+1	Complies
	11n/ac (20MHz)	36/44/48/149/157/165	0+1	Complies
	11n/ac (40MHz)	38/46/151/159	0+1	Complies
	11ac (80MHz)	42/155	0+1	Complies
Radiated Emission	a	36/44/48/149/157/165	0+1	Complies
	11n/ac (20MHz)	36/44/48/149/157/165	0+1	Complies
	11n/ac (40MHz)	38/46/151/159	0+1	Complies
	11ac (80MHz)	42/155	0+1	Complies
Band Edge	a	36/44/48/149/157/165	0+1	Complies
	11n/ac (20MHz)	36/44/48/149/157/165	0+1	Complies
	11n/ac (40MHz)	38/46/151/159	0+1	Complies
	11ac (80MHz)	42/155	0+1	Complies

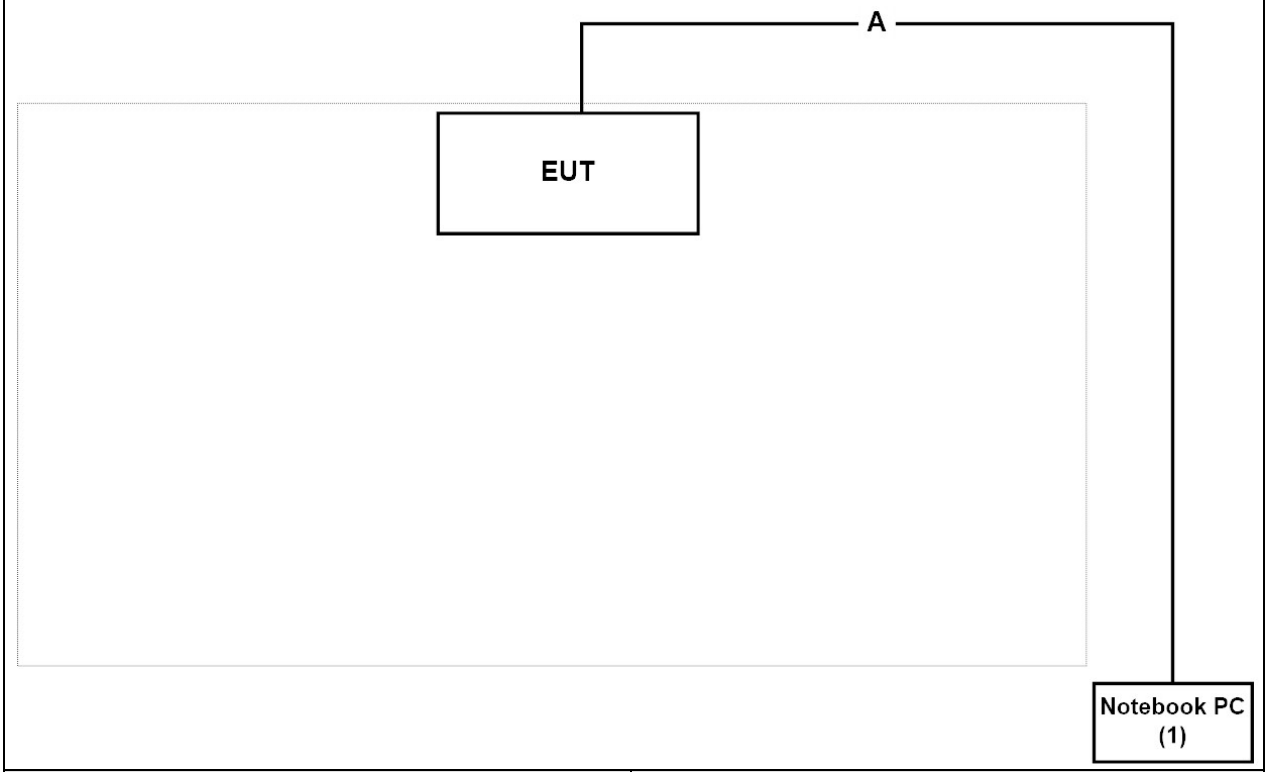
1.3. Tested System Details

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	WB1529782	DoC	Non-Shielded, 1.8m, one ferrite core bonded

1.4. Configuration of tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 4m

1.5. EUT Exercise Software

1	Setup the EUT as shown in Section 1.4.
2	Execute the Control program “QCA Radio Control Toolkit” on the laptop.
3	Configure the test mode, the test channel, and the data rate.
4	Make the EUT 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 26dB& 99% & 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 Maximum conducted output 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 Maximum power spectral 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	

Note: Test Site information refers to Laboratory Information.

Laboratory Information

USA	**:**	**FCC Registration Number: TW3024**
Canada		**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 sites as below:

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1.7. List of Test Equipment

Conducted Emission / SR2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Artificial Mains Network	R&S	ENV4200	848411/010	2018/01/22	2019/01/21
Test Receiver	R&S	ESCS 30	836858/022	2018/03/30	2019/03/29
LISN	R&S	ENV216	100092	2018/07/23	2019/07/22

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

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2018/06/26	2019/06/25
Spectrum Analyzer	Keysight	N9010B	MY57110159	2018/05/25	2019/05/24
Spectrum Analyzer	Agilent	N9010A	US47140172	2018/07/18	2019/07/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/10	2019/01/09

Maximum conducted output power / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2018/06/26	2019/06/25
Spectrum Analyzer	Keysight	N9010B	MY57110159	2018/05/25	2019/05/24
Spectrum Analyzer	Agilent	N9010A	US47140172	2018/07/18	2019/07/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/10	2019/01/09

Maximum power spectral density / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	Keysight	N9030B	MY57140404	2018/06/26	2019/06/25
Spectrum Analyzer	Keysight	N9010B	MY57110159	2018/05/25	2019/05/24
Spectrum Analyzer	Agilent	N9010A	US47140172	2018/07/18	2019/07/17
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/10	2019/01/09

Radiated Emission / CB2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/10	2019/01/09
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04
Bilog Antenna	Teseq	CBL6112D	23191	2018/06/26	2019/06/25
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2018/06/01	2019/05/31
Horn Antenna	Schwarzbeck	BBHA 9170	202	2018/01/31	2019/01/30
Pre-Amplifier	Dekra	AP-025C	201801236	2018/02/26	2019/02/25
Pre-Amplifier	EMCI	EMC11830I	980366	2018/01/08	2019/01/07
Pre-Amplifier	Dekra	AP-400C	201801231	2017/12/13	2018/12/12
Band Reject Filter	Micro-Tronics	BRM50702	G192	2018/04/11	2019/04/10
Band Reject Filter	Micro-Tronics	BRM50716	G089	2018/04/11	2019/04/10
Cable	Suhner	SF104_SF104_ SF104_SF104	A211	2017/08/29 2018/08/28	2018/08/28 2019/08/27
Cable	Suhner	SF104_SF104_ SF104_SF102	A219	2017/08/16 2018/08/15	2018/08/15 2019/08/14
Mangnetic Loop Antenna	Teseq	HLA6121	44287	2017/10/13 2018/09/28	2018/10/12 2019/09/27

Band Edge / CB2-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Signal Analyzer	R&S	FSVA40	101455	2017/11/21	2018/11/20
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/10	2019/01/09
EXA Signal Analyzer	Keysight	N9010A	MY51440132	2018/03/05	2019/03/04
Bilog Antenna	Teseq	CBL6112D	23191	2018/06/26	2019/06/25
Horn Antenna	Schwarzbeck	BBHA 9120D	639	2018/06/01	2019/05/31
Horn Antenna	Schwarzbeck	BBHA 9170	202	2018/01/31	2019/01/30
Pre-Amplifier	Dekra	AP-025C	201801236	2018/02/26	2019/02/25
Pre-Amplifier	EMCI	EMC11830I	980366	2018/01/08	2019/01/07
Pre-Amplifier	Dekra	AP-400C	201801231	2017/12/13	2018/12/12
Cable	Suhner	SF104_SF104_ SF104_SF104	A211	2017/08/29 2018/08/28	2018/08/28 2019/08/27
Cable	Suhner	SF104_SF104_ SF104_SF102	A219	2017/08/16 2018/08/15	2018/08/15 2019/08/14

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

1.8. Duty Cycle

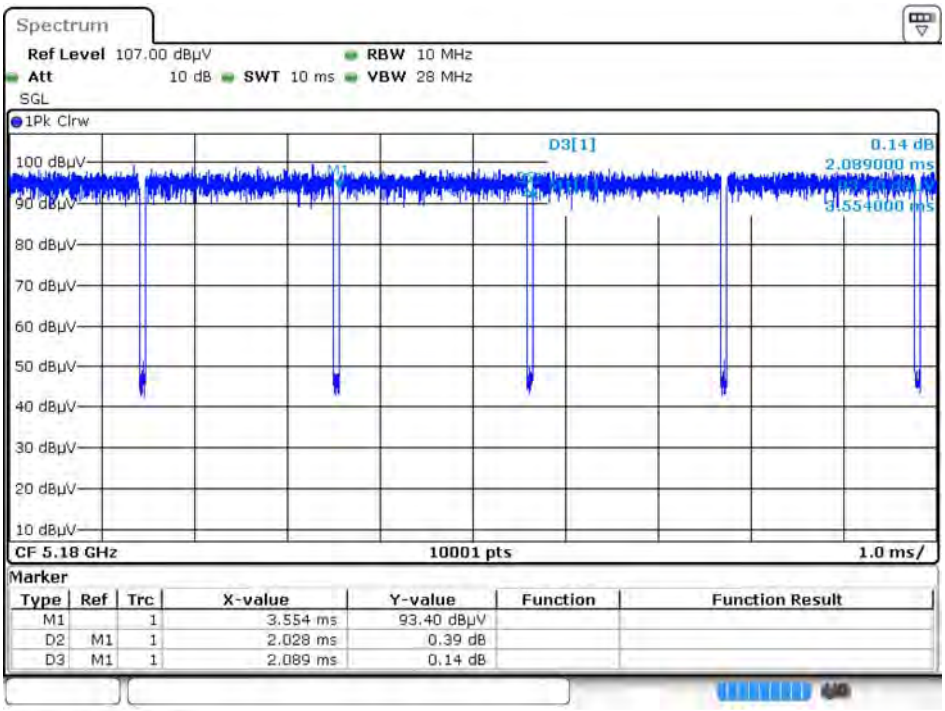
CDD Mode

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor(dB) linear voltage	Power	1/T Minimum VBW (kHz)
802.11a	2.028	2.089	97.08%	0.257	0.129	0.49
802.11ac VHT20	4.972	5.033	98.79%	0.106	0.053	0.01
802.11ac VHT40	2.414	2.480	97.34%	0.234	0.117	0.41
802.11ac VHT80	1.136	1.197	94.86%	0.458	0.229	0.88

Note:
Offset = 20 log(1/duty cycle)
Accotding to KDB 789033
If power averaging (rms) mode was used in step (iv) above, the correction factor is 10 log (1/x), where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB must be added to the measured emission levels.

If linear voltage averaging mode was used in step (iv) above, the correction factor is 20 log (1/x), where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB must be added to the measured emission levels.

802.11a



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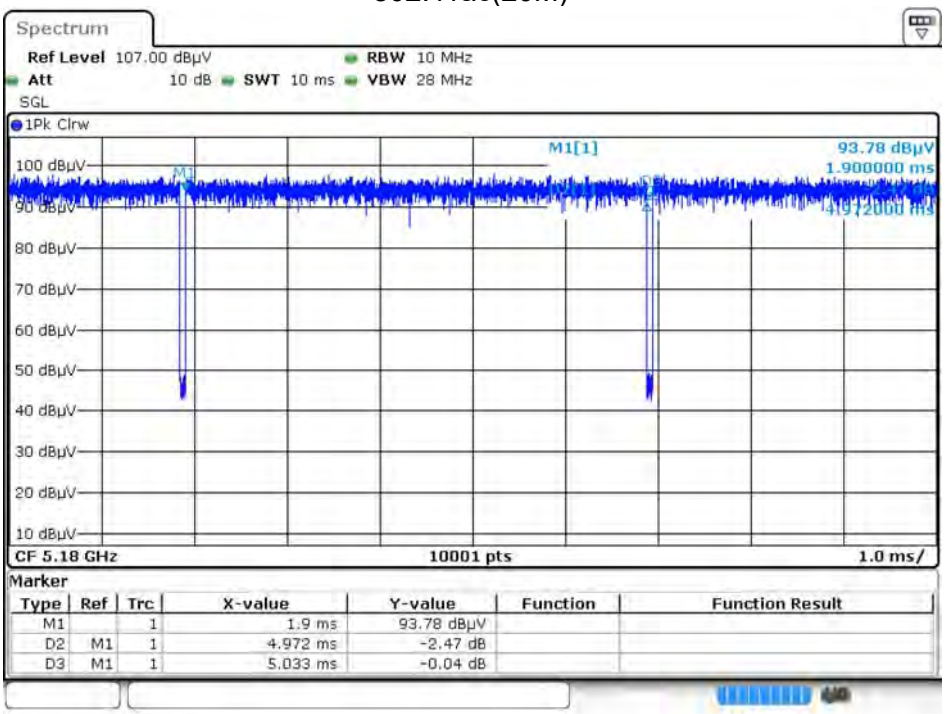

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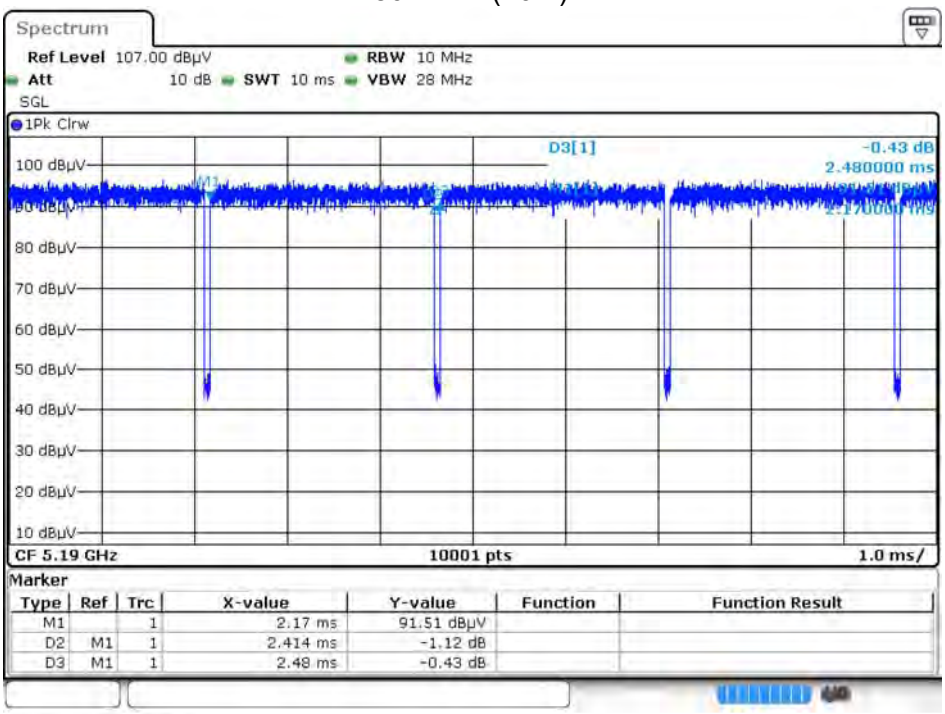
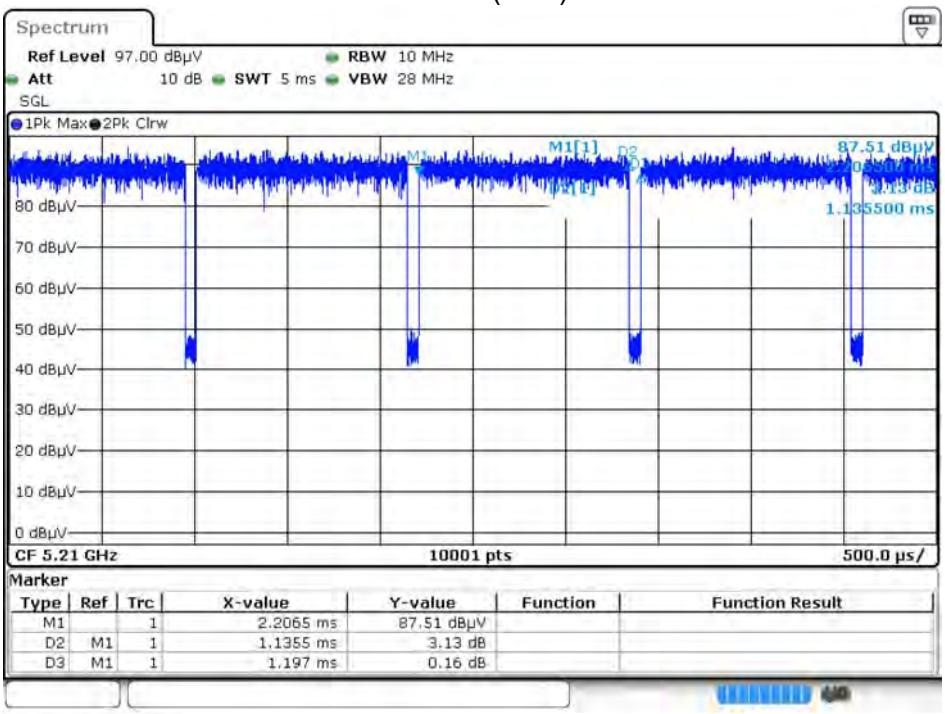


Date: 26.JUN.2018 14:29:49

802.11ac(80M)



Date: 26.JUN.2018 14:28:11

Beamforming Mode

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor(dB) linear voltage	Power	1/T Minimum VBW (kHz)
802.11ac VHT20	1.820	1.988	91.52%	0.769286	0.384643	0.55
802.11ac VHT40	1.690	1.895	89.17%	0.995187	0.497593	0.59
802.11ac VHT80	1.942	2.142	90.65%	0.852216	0.426108	0.51

Note:

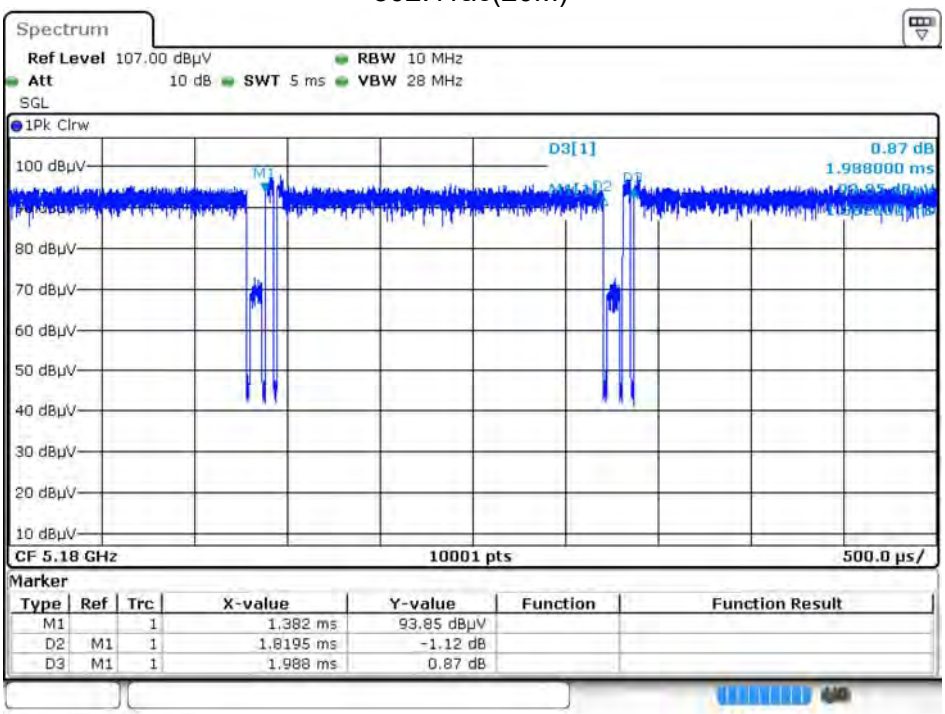
Offset = 20 log(1/duty cycle)

Accotding to KDB 789033

If power averaging (rms) mode was used in step (iv) above, the correction factor is 10 log (1/x), where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB must be added to the measured emission levels.

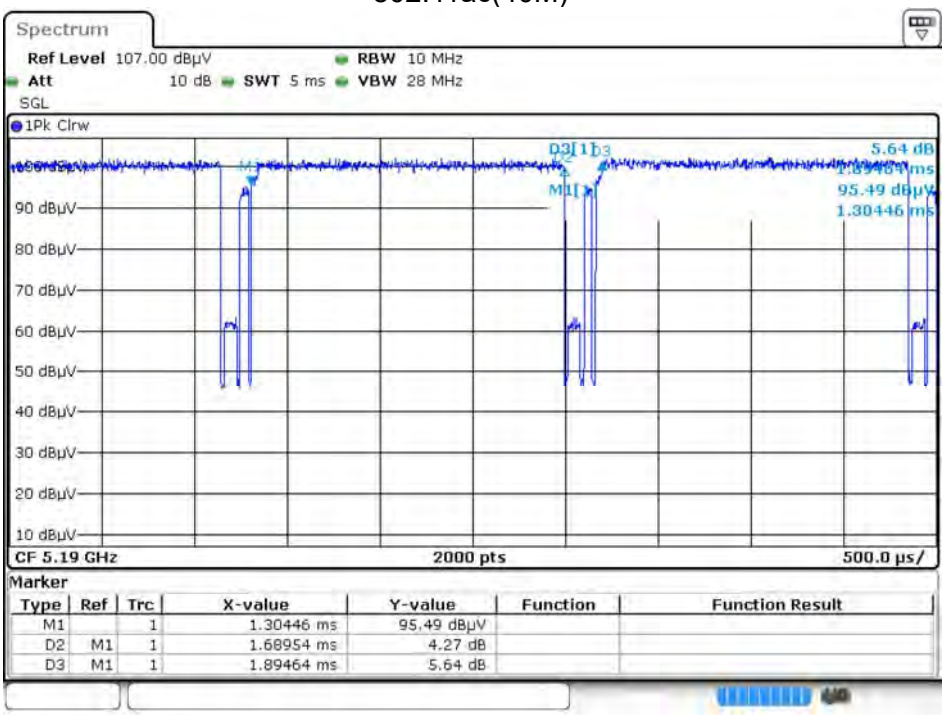
If linear voltage averaging mode was used in step (iv) above, the correction factor is 20 log (1/x), where x is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB must be added to the measured emission levels.

802.11ac(20M)



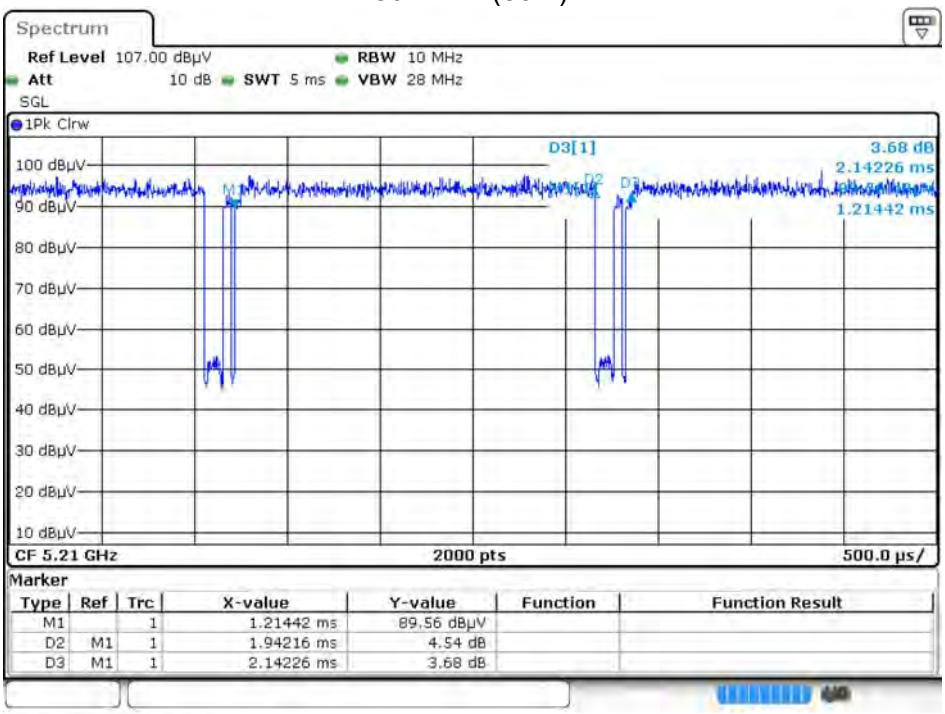
Date: 14.JUL.2018 14:22:04

802.11ac(40M)



Date: 14.JUL.2018 14:48:43

802.11ac(80M)



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.21442 ms	89.56 dBµV		
D2	M1	1	1.94216 ms	4.54 dB		
D3	M1	1	2.14226 ms	3.68 dB		

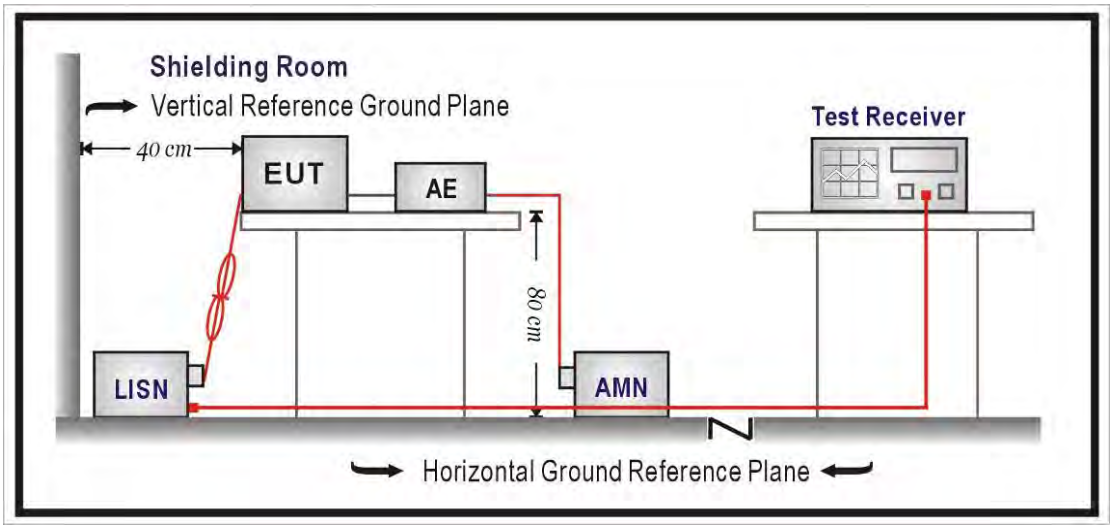
Date: 14.JUL.2018 15:10:08

1.9. Uncertainty

Test item	Uncertainty
Conducted Emission	± 2.26 dB
26dB& 26dB& 99% & DTS Bandwidth	± 50Hz
Maximum conducted output power	± 1.27 dB
Maximum power spectral density	± 1.27 dB
Radiated Emission	30MHz～1GHz as ±3.43dB 1GHz～26.5Ghz as ±3.65dB
Band Edge	± 3.65dB

2. Conducted Emission

2.1. Test Setup



2.2. 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.

2.3. 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.

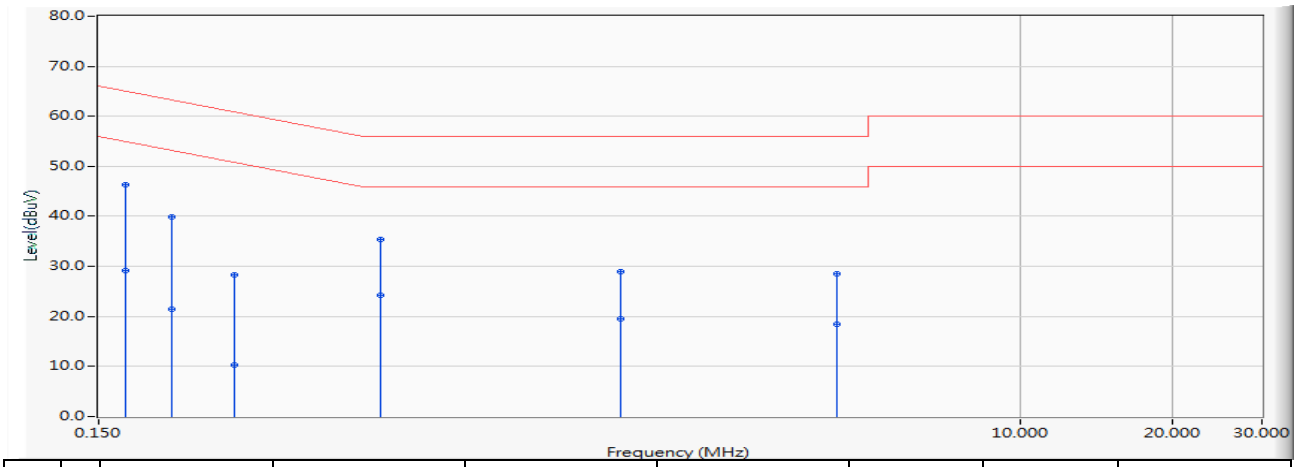
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

2.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.407: 2017

2.5. Test Result

Site : SR2-H	Time : 2018/08/09
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 1: Transmit_Filter 1_CDD_ADP-45BW B 802.11ac(80M)_5210MHz

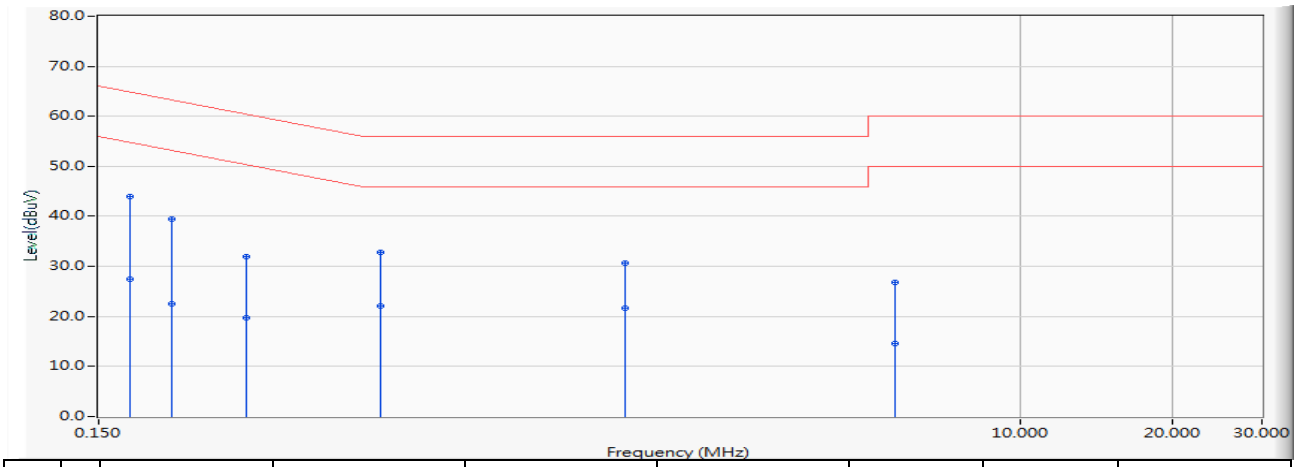


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.170	9.680	36.600	46.280	-18.703	64.983	QUASIPEAK
2		0.170	9.680	19.400	29.080	-25.903	54.983	AVERAGE
3		0.209	9.680	30.220	39.900	-23.361	63.261	QUASIPEAK
4		0.209	9.680	11.800	21.480	-31.781	53.261	AVERAGE
5		0.279	9.680	18.540	28.220	-32.628	60.848	QUASIPEAK
6		0.279	9.680	0.620	10.300	-40.548	50.848	AVERAGE
7		0.541	9.690	25.620	35.310	-20.690	56.000	QUASIPEAK
8		0.541	9.690	14.650	24.340	-21.660	46.000	AVERAGE
9		1.615	9.796	19.160	28.956	-27.044	56.000	QUASIPEAK
10		1.615	9.796	9.740	19.536	-26.464	46.000	AVERAGE
11		4.322	9.814	18.700	28.514	-27.486	56.000	QUASIPEAK
12		4.322	9.814	8.700	18.514	-27.486	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 : 2018/08/09
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 1: Transmit_Filter 1_CDD_ADP-45BW B 802.11ac(80M)_5210MHz

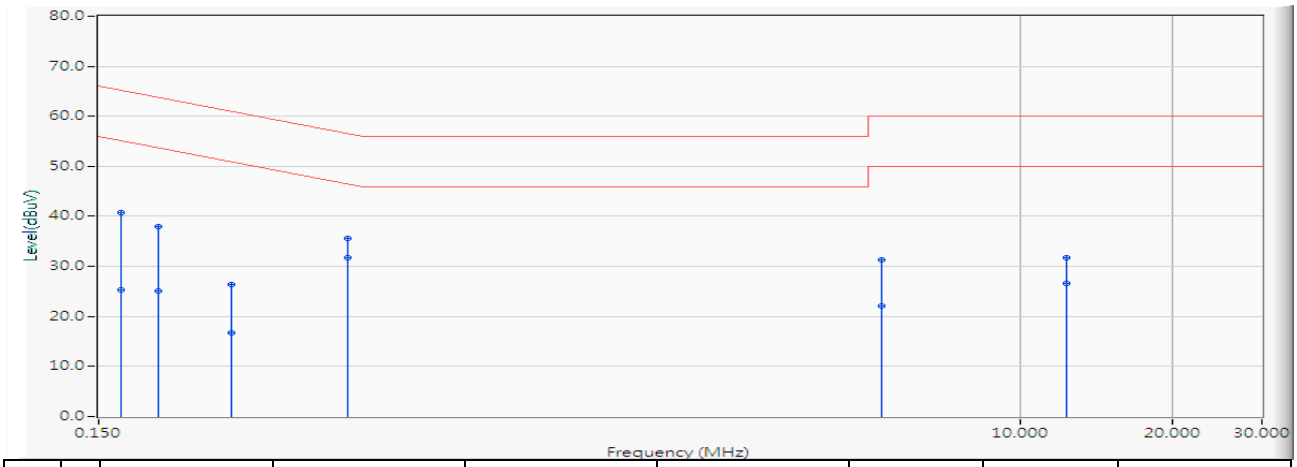


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.173	9.680	34.360	44.040	-20.754	64.794	QUASIPEAK
2		0.173	9.680	17.820	27.500	-27.294	54.794	AVERAGE
3		0.209	9.680	29.860	39.540	-23.721	63.261	QUASIPEAK
4		0.209	9.680	12.750	22.430	-30.831	53.261	AVERAGE
5		0.295	9.680	22.340	32.020	-28.376	60.396	QUASIPEAK
6		0.295	9.680	10.140	19.820	-30.576	50.396	AVERAGE
7		0.541	9.690	23.180	32.870	-23.130	56.000	QUASIPEAK
8		0.541	9.690	12.410	22.100	-23.900	46.000	AVERAGE
9		1.654	9.797	20.940	30.737	-25.263	56.000	QUASIPEAK
10		1.654	9.797	11.840	21.637	-24.363	46.000	AVERAGE
11		5.642	9.862	16.940	26.802	-33.198	60.000	QUASIPEAK
12		5.642	9.862	4.810	14.672	-35.328	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 : 2018/08/14
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 1: Transmit_Filter 1_CDD_ADP-45BW B 802.11ac(80M)_5775MHz

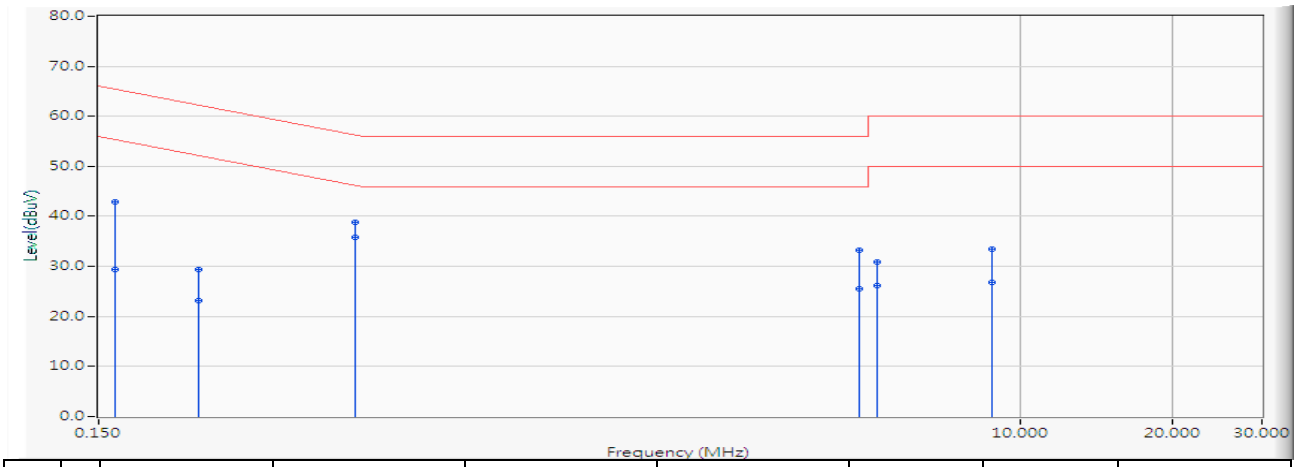


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.680	31.040	40.720	-24.457	65.177	QUASIPEAK
2		0.166	9.680	15.530	25.210	-29.967	55.177	AVERAGE
3		0.197	9.680	28.340	38.020	-25.721	63.741	QUASIPEAK
4		0.197	9.680	15.350	25.030	-28.711	53.741	AVERAGE
5		0.275	9.680	16.780	26.460	-34.506	60.966	QUASIPEAK
6		0.275	9.680	7.040	16.720	-34.246	50.966	AVERAGE
7		0.466	9.681	25.940	35.621	-20.957	56.578	QUASIPEAK
8	*	0.466	9.681	22.070	31.751	-14.827	46.578	AVERAGE
9		5.318	9.841	21.560	31.400	-28.600	60.000	QUASIPEAK
10		5.318	9.841	12.150	21.990	-28.010	50.000	AVERAGE
11		12.298	10.164	21.620	31.784	-28.216	60.000	QUASIPEAK
12		12.298	10.164	16.480	26.644	-23.356	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 : 2018/08/14
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 1: Transmit_Filter 1_CDD_ADP-45BW B 802.11ac(80M)_5775MHz

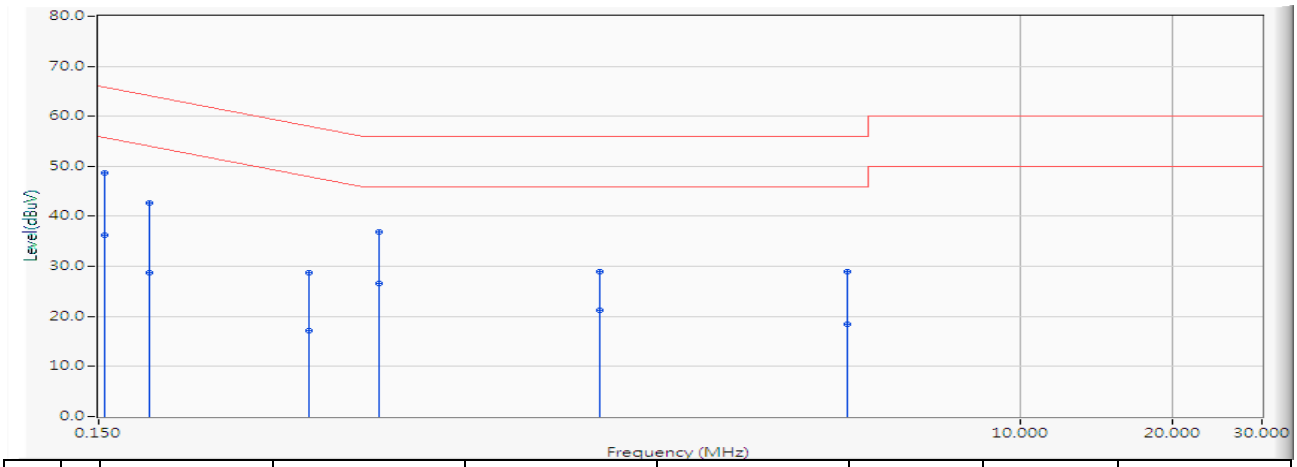


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	9.680	33.320	43.000	-22.375	65.375	QUASIPEAK
2		0.162	9.680	19.770	29.450	-25.925	55.375	AVERAGE
3		0.236	9.680	19.720	29.400	-32.838	62.238	QUASIPEAK
4		0.236	9.680	13.450	23.130	-29.108	52.238	AVERAGE
5		0.482	9.681	29.120	38.801	-17.503	56.304	QUASIPEAK
6	*	0.482	9.681	26.050	35.731	-10.573	46.304	AVERAGE
7		4.791	9.828	23.320	33.148	-22.852	56.000	QUASIPEAK
8		4.791	9.828	15.590	25.418	-20.582	46.000	AVERAGE
9		5.209	9.840	20.960	30.800	-29.200	60.000	QUASIPEAK
10		5.209	9.840	16.310	26.150	-23.850	50.000	AVERAGE
11		8.755	10.018	23.380	33.398	-26.602	60.000	QUASIPEAK
12		8.755	10.018	16.730	26.748	-23.252	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 : 2018/08/10
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 2: Transmit_Filter 1_CDD_ADP-45BW Y 802.11ac(80M)_5210MHz

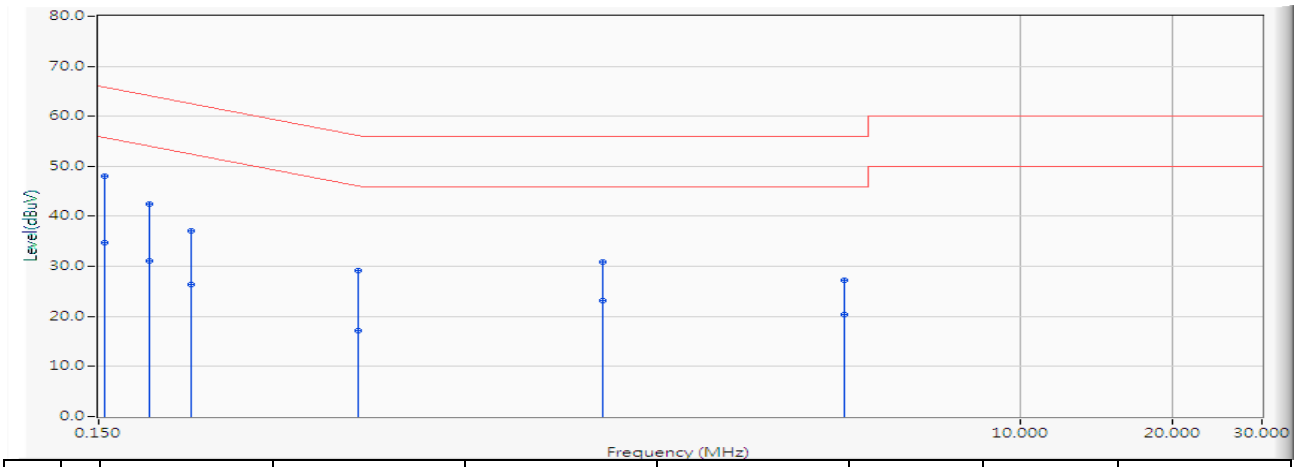


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.154	9.672	38.960	48.632	-17.155	65.786	QUASIPEAK
2		0.154	9.672	26.490	36.162	-19.625	55.786	AVERAGE
3		0.189	9.680	33.100	42.780	-21.298	64.078	QUASIPEAK
4		0.189	9.680	19.140	28.820	-25.258	54.078	AVERAGE
5		0.392	9.680	19.020	28.700	-29.317	58.017	QUASIPEAK
6		0.392	9.680	7.430	17.110	-30.907	48.017	AVERAGE
7		0.537	9.689	27.100	36.789	-19.211	56.000	QUASIPEAK
8		0.537	9.689	16.850	26.539	-19.461	46.000	AVERAGE
9		1.474	9.795	19.180	28.975	-27.025	56.000	QUASIPEAK
10		1.474	9.795	11.410	21.205	-24.795	46.000	AVERAGE
11		4.533	9.817	19.040	28.857	-27.143	56.000	QUASIPEAK
12		4.533	9.817	8.630	18.447	-27.553	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 : 2018/08/10
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 2: Transmit_Filter 1_CDD_ADP-45BW Y 802.11ac(80M)_5210MHz

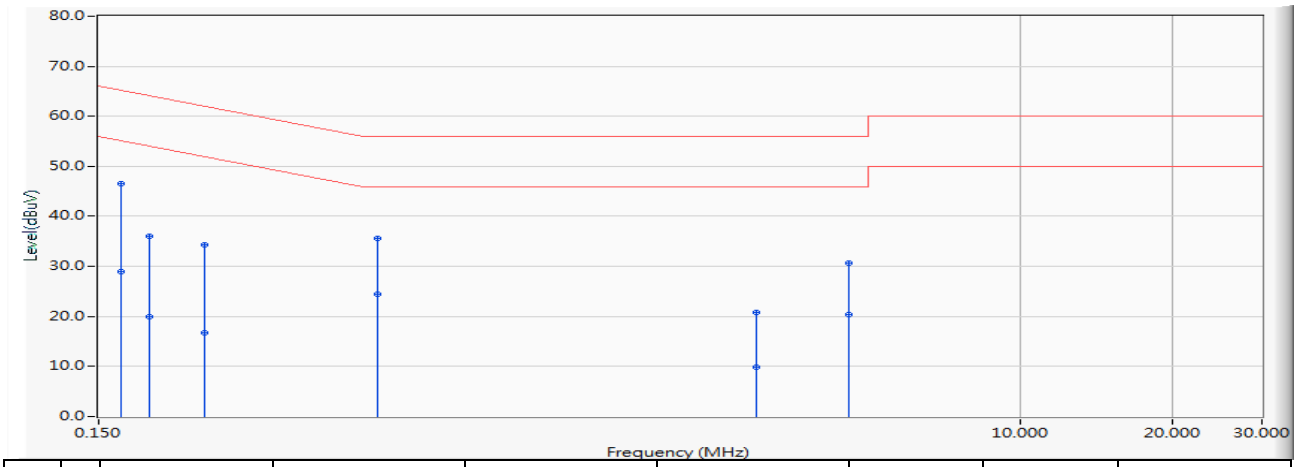


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.154	9.673	38.360	48.032	-17.754	65.786	QUASIPEAK
2		0.154	9.673	25.040	34.712	-21.074	55.786	AVERAGE
3		0.189	9.680	32.740	42.420	-21.658	64.078	QUASIPEAK
4		0.189	9.680	21.330	31.010	-23.068	54.078	AVERAGE
5		0.228	9.680	27.480	37.160	-25.358	62.518	QUASIPEAK
6		0.228	9.680	16.730	26.410	-26.108	52.518	AVERAGE
7		0.490	9.682	19.520	29.202	-26.969	56.170	QUASIPEAK
8		0.490	9.682	7.510	17.192	-28.979	46.170	AVERAGE
9		1.494	9.795	21.080	30.875	-25.125	56.000	QUASIPEAK
10		1.494	9.795	13.300	23.095	-22.905	46.000	AVERAGE
11		4.482	9.825	17.380	27.205	-28.795	56.000	QUASIPEAK
12		4.482	9.825	10.460	20.285	-25.715	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 : 2018/08/09
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 2: Transmit_Filter 1_CDD_ADP-45BW Y 802.11ac(80M)_5775MHz

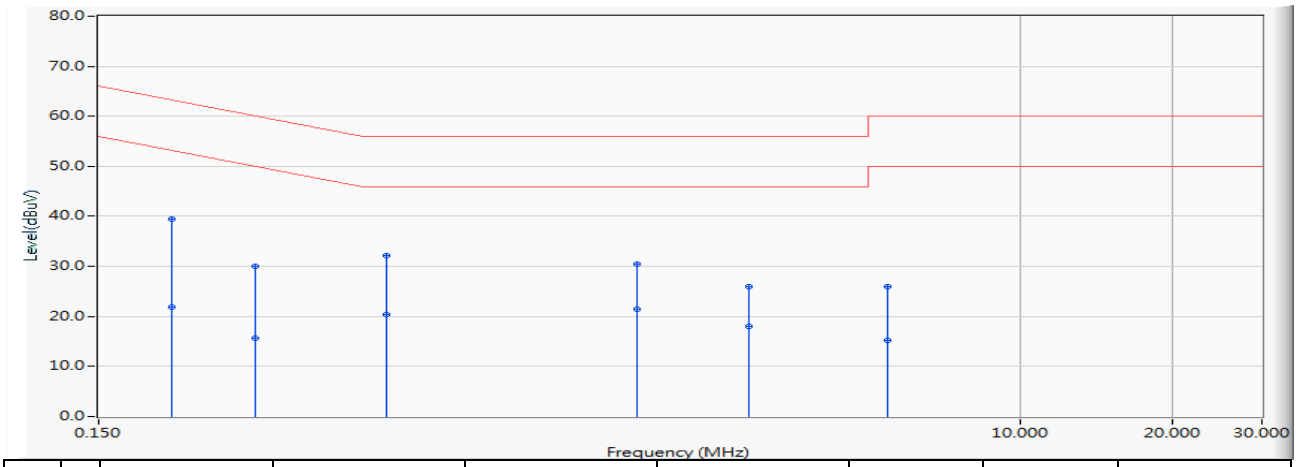


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.166	9.680	36.780	46.460	-18.717	65.177	QUASIPEAK
2		0.166	9.680	19.320	29.000	-26.177	55.177	AVERAGE
3		0.189	9.680	26.340	36.020	-28.058	64.078	QUASIPEAK
4		0.189	9.680	10.300	19.980	-34.098	54.078	AVERAGE
5		0.244	9.680	24.740	34.420	-27.547	61.967	QUASIPEAK
6		0.244	9.680	6.970	16.650	-35.317	51.967	AVERAGE
7		0.533	9.688	25.820	35.509	-20.491	56.000	QUASIPEAK
8		0.533	9.688	14.850	24.539	-21.461	46.000	AVERAGE
9		3.005	9.805	11.040	20.845	-35.155	56.000	QUASIPEAK
10		3.005	9.805	0.110	9.915	-36.085	46.000	AVERAGE
11		4.564	9.818	20.780	30.598	-25.402	56.000	QUASIPEAK
12		4.564	9.818	10.520	20.338	-25.662	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 : 2018/08/09
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 2: Transmit_Filter 1_CDD_ADP-45BW Y 802.11ac(80M)_5775MHz

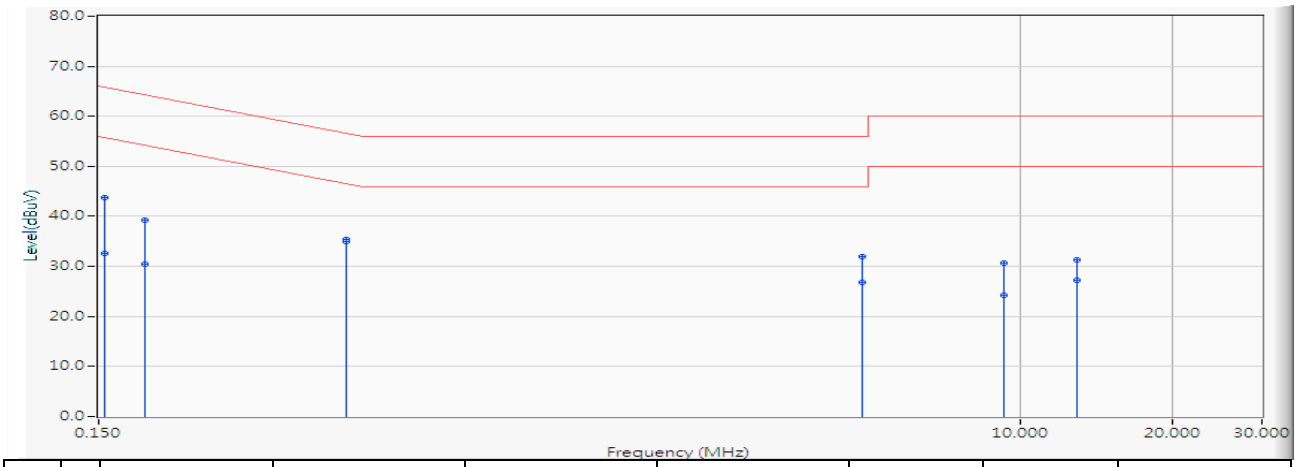


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.209	9.680	29.760	39.440	-23.821	63.261	QUASIPEAK
2		0.209	9.680	12.110	21.790	-31.471	53.261	AVERAGE
3		0.306	9.680	20.400	30.080	-29.992	60.072	QUASIPEAK
4		0.306	9.680	6.050	15.730	-34.342	50.072	AVERAGE
5		0.556	9.694	22.420	32.114	-23.886	56.000	QUASIPEAK
6		0.556	9.694	10.670	20.364	-25.636	46.000	AVERAGE
7		1.740	9.797	20.720	30.517	-25.483	56.000	QUASIPEAK
8		1.740	9.797	11.610	21.407	-24.593	46.000	AVERAGE
9		2.904	9.809	16.180	25.989	-30.011	56.000	QUASIPEAK
10		2.904	9.809	8.300	18.109	-27.891	46.000	AVERAGE
11		5.443	9.852	16.140	25.992	-34.008	60.000	QUASIPEAK
12		5.443	9.852	5.310	15.162	-34.838	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 : 2018/08/14
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 3: Transmit_Filter 1_CDD_AD-2066320 802.11ac(80M)_5220MHz

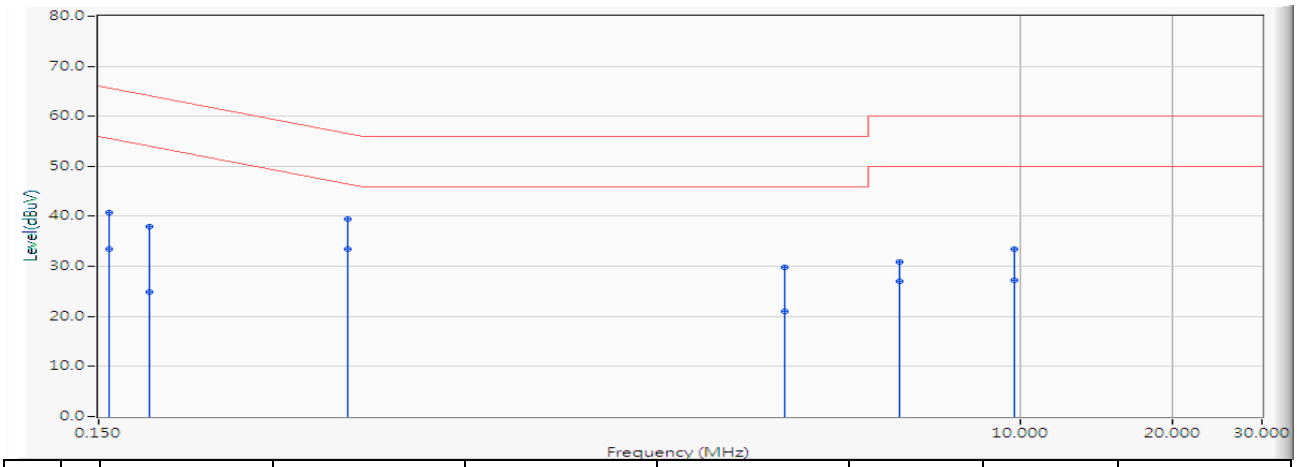


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	9.672	33.980	43.652	-22.135	65.786	QUASIPEAK
2		0.154	9.672	22.870	32.542	-23.245	55.786	AVERAGE
3		0.185	9.680	29.540	39.220	-25.031	64.251	QUASIPEAK
4		0.185	9.680	20.740	30.420	-23.831	54.251	AVERAGE
5		0.463	9.681	25.800	35.481	-21.166	56.648	QUASIPEAK
6	*	0.463	9.681	25.340	35.021	-11.626	46.648	AVERAGE
7		4.873	9.822	22.060	31.882	-24.118	56.000	QUASIPEAK
8		4.873	9.822	17.050	26.872	-19.128	46.000	AVERAGE
9		9.252	10.050	20.540	30.590	-29.410	60.000	QUASIPEAK
10		9.252	10.050	14.110	24.160	-25.840	50.000	AVERAGE
11		12.927	10.184	21.220	31.404	-28.596	60.000	QUASIPEAK
12		12.927	10.184	16.950	27.134	-22.866	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 : 2018/08/14
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 3: Transmit_Filter 1_CDD_AD-2066320 802.11ac(80M)_5220MHz

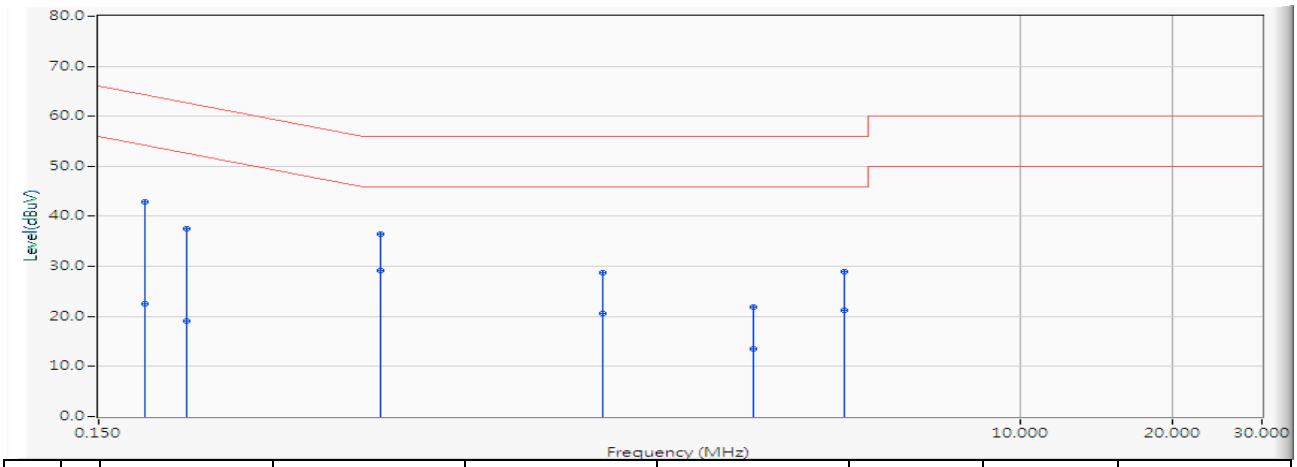


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.677	31.040	40.717	-24.861	65.578	QUASIPEAK
2		0.158	9.677	23.740	33.417	-22.161	55.578	AVERAGE
3		0.189	9.680	28.300	37.980	-26.098	64.078	QUASIPEAK
4		0.189	9.680	15.220	24.900	-29.178	54.078	AVERAGE
5		0.466	9.681	29.680	39.361	-17.217	56.578	QUASIPEAK
6	*	0.466	9.681	23.840	33.521	-13.057	46.578	AVERAGE
7		3.416	9.814	19.920	29.734	-26.266	56.000	QUASIPEAK
8		3.416	9.814	11.260	21.074	-24.926	46.000	AVERAGE
9		5.740	9.867	20.940	30.807	-29.193	60.000	QUASIPEAK
10		5.740	9.867	17.130	26.997	-23.003	50.000	AVERAGE
11		9.744	10.067	23.360	33.427	-26.573	60.000	QUASIPEAK
12		9.744	10.067	17.250	27.317	-22.683	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 : 2018/08/10
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 3: Transmit_Filter 1_CDD_AD-2066320 802.11ac(80M)_5775MHz

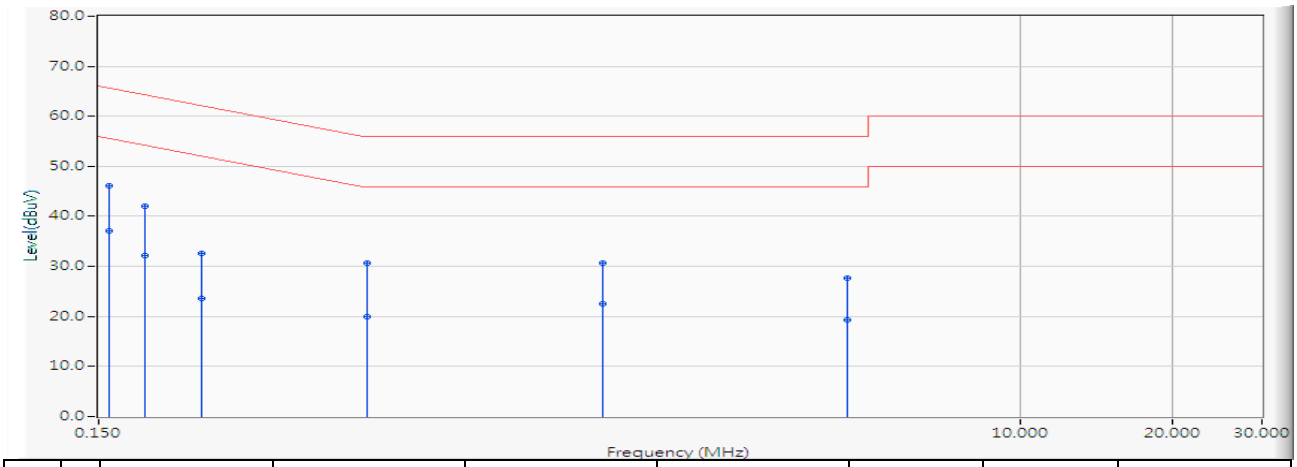


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.185	9.680	33.220	42.900	-21.351	64.251	QUASIPEAK
2		0.185	9.680	12.750	22.430	-31.821	54.251	AVERAGE
3		0.224	9.680	27.860	37.540	-25.121	62.661	QUASIPEAK
4		0.224	9.680	9.330	19.010	-33.651	52.661	AVERAGE
5		0.541	9.690	26.680	36.370	-19.630	56.000	QUASIPEAK
6	*	0.541	9.690	19.510	29.200	-16.800	46.000	AVERAGE
7		1.494	9.795	18.840	28.635	-27.365	56.000	QUASIPEAK
8		1.494	9.795	10.870	20.665	-25.335	46.000	AVERAGE
9		2.962	9.805	11.980	21.785	-34.215	56.000	QUASIPEAK
10		2.962	9.805	3.720	13.525	-32.475	46.000	AVERAGE
11		4.478	9.816	19.100	28.916	-27.084	56.000	QUASIPEAK
12		4.478	9.816	11.490	21.306	-24.694	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 : 2018/08/10
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 3: Transmit_Filter 1_CDD_AD-2066320 802.11ac(80M)_5775MHz

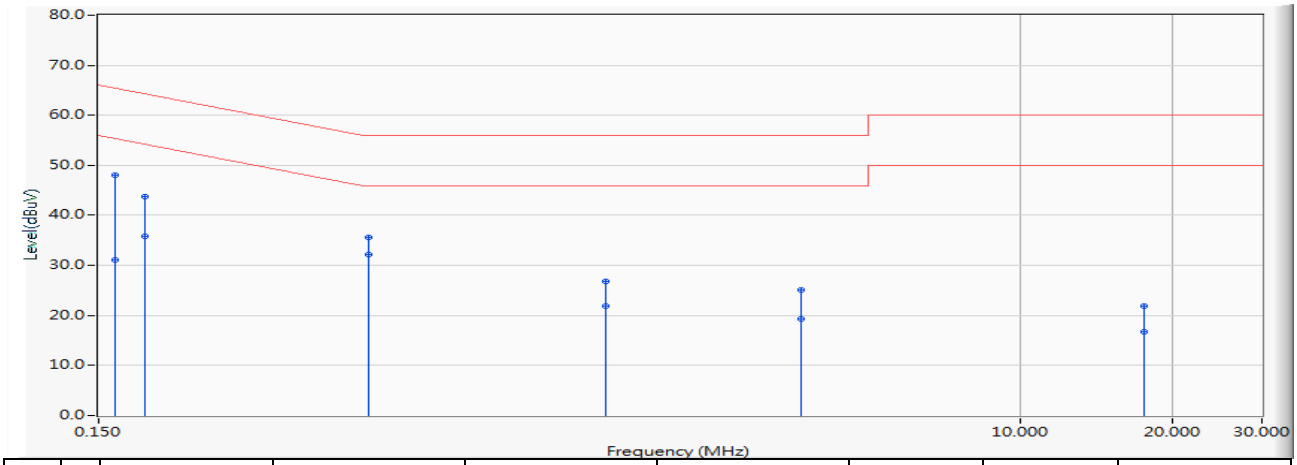


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.677	36.360	46.037	-19.541	65.578	QUASIPEAK
2	*	0.158	9.677	27.390	37.067	-18.511	55.578	AVERAGE
3		0.185	9.680	32.420	42.100	-22.151	64.251	QUASIPEAK
4		0.185	9.680	22.560	32.240	-22.011	54.251	AVERAGE
5		0.240	9.680	22.960	32.640	-29.462	62.102	QUASIPEAK
6		0.240	9.680	14.010	23.690	-28.412	52.102	AVERAGE
7		0.509	9.684	21.000	30.684	-25.316	56.000	QUASIPEAK
8		0.509	9.684	10.190	19.874	-26.126	46.000	AVERAGE
9		1.494	9.795	20.880	30.675	-25.325	56.000	QUASIPEAK
10		1.494	9.795	12.680	22.475	-23.525	46.000	AVERAGE
11		4.537	9.825	17.880	27.705	-28.295	56.000	QUASIPEAK
12		4.537	9.825	9.510	19.335	-26.665	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 : 2018/10/24
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 4: Transmit_Filter 1_ AD883J20 802.11ac(80M)_5210MHz

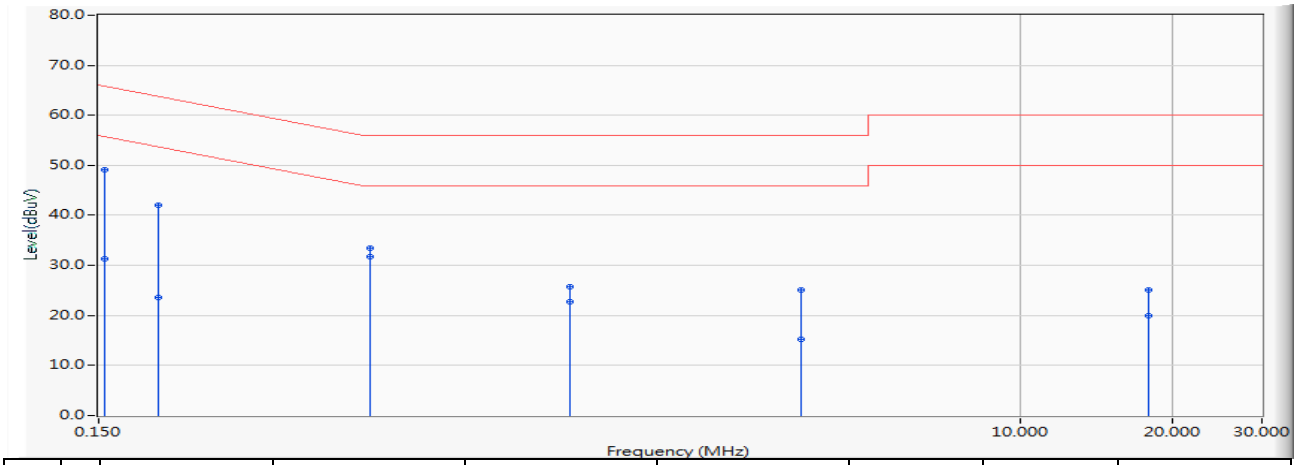


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.162	9.680	38.260	47.940	-17.435	65.375	QUASIPEAK
2		0.162	9.680	21.390	31.070	-24.305	55.375	AVERAGE
3		0.185	9.680	34.080	43.760	-20.491	64.251	QUASIPEAK
4		0.185	9.680	26.180	35.860	-18.391	54.251	AVERAGE
5		0.513	9.685	25.940	35.625	-20.375	56.000	QUASIPEAK
6	*	0.513	9.685	22.400	32.085	-13.915	46.000	AVERAGE
7		1.509	9.795	16.980	26.775	-29.225	56.000	QUASIPEAK
8		1.509	9.795	12.170	21.965	-24.035	46.000	AVERAGE
9		3.689	9.808	15.240	25.048	-30.952	56.000	QUASIPEAK
10		3.689	9.808	9.570	19.378	-26.622	46.000	AVERAGE
11		17.564	10.381	11.510	21.891	-38.109	60.000	QUASIPEAK
12		17.564	10.381	6.340	16.721	-33.279	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 : 2018/10/24
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 4: Transmit_Filter 1_ AD883J20 802.11ac(80M)_5210MHz

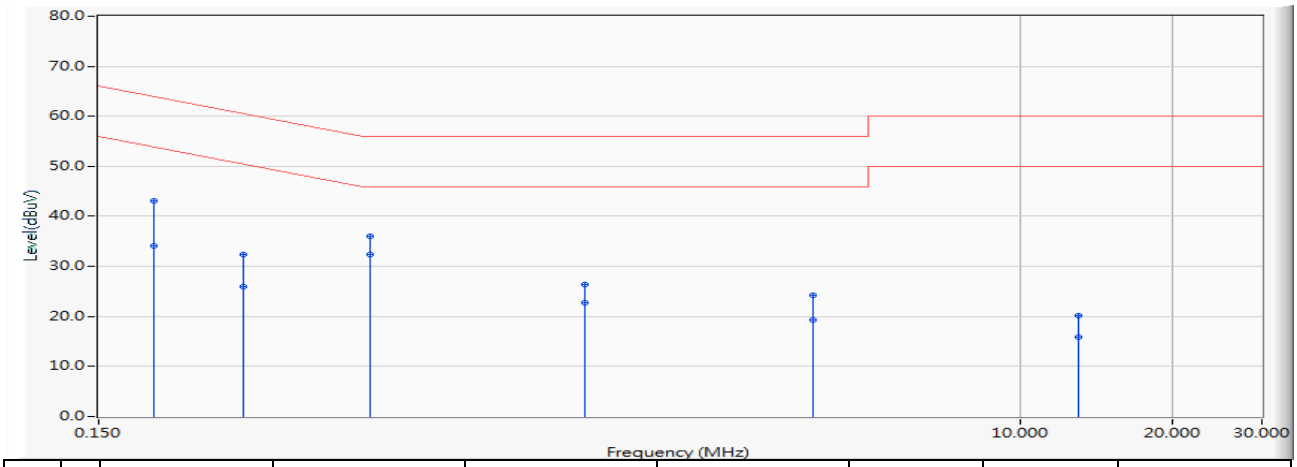


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.154	9.681	39.460	49.141	-16.646	65.786	QUASIPEAK
2		0.154	9.681	21.650	31.331	-24.456	55.786	AVERAGE
3		0.197	9.680	32.400	42.080	-21.661	63.741	QUASIPEAK
4		0.197	9.680	13.900	23.580	-30.161	53.741	AVERAGE
5		0.517	9.685	23.710	33.395	-22.605	56.000	QUASIPEAK
6	*	0.517	9.685	22.070	31.755	-14.245	46.000	AVERAGE
7		1.287	9.793	15.980	25.773	-30.227	56.000	QUASIPEAK
8		1.287	9.793	12.980	22.773	-23.227	46.000	AVERAGE
9		3.677	9.817	15.300	25.117	-30.883	56.000	QUASIPEAK
10		3.677	9.817	5.380	15.197	-30.803	46.000	AVERAGE
11		17.888	10.343	14.790	25.133	-34.867	60.000	QUASIPEAK
12		17.888	10.343	9.590	19.933	-30.067	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 : 2018/10/24
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line1	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 4: Transmit_Filter 1_ AD883J20 802.11ac(80M)_5775MHz

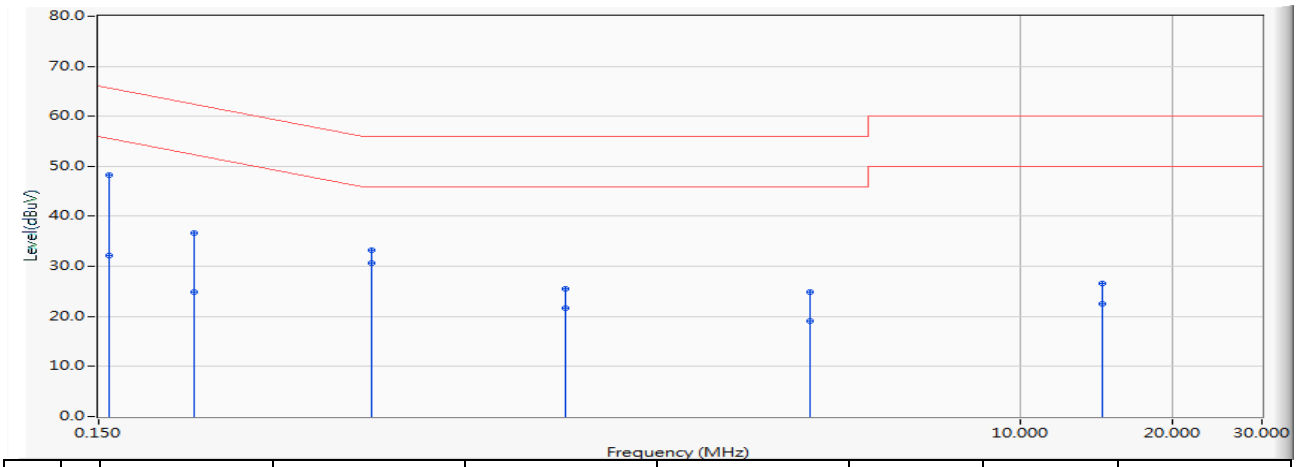


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.193	9.680	33.470	43.150	-20.758	63.908	QUASIPEAK
2		0.193	9.680	24.490	34.170	-19.738	53.908	AVERAGE
3		0.291	9.680	22.730	32.410	-28.097	60.507	QUASIPEAK
4		0.291	9.680	16.360	26.040	-24.467	50.507	AVERAGE
5		0.517	9.685	26.400	36.085	-19.915	56.000	QUASIPEAK
6	*	0.517	9.685	22.710	32.395	-13.605	46.000	AVERAGE
7		1.377	9.794	16.610	26.404	-29.596	56.000	QUASIPEAK
8		1.377	9.794	12.870	22.664	-23.336	46.000	AVERAGE
9		3.896	9.809	14.480	24.289	-31.711	56.000	QUASIPEAK
10		3.896	9.809	9.580	19.389	-26.611	46.000	AVERAGE
11		13.048	10.249	9.820	20.069	-39.931	60.000	QUASIPEAK
12		13.048	10.249	5.690	15.939	-34.061	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 : 2018/10/24
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-H-B127_LISN(16A)-8 - Line2	Power : AC 120V/60Hz
EUT : Wireless-AC2200 Tri Band Gigabit Router	Note : Mode 4: Transmit_Filter 1_ AD883J20 802.11ac(80M)_5775MHz



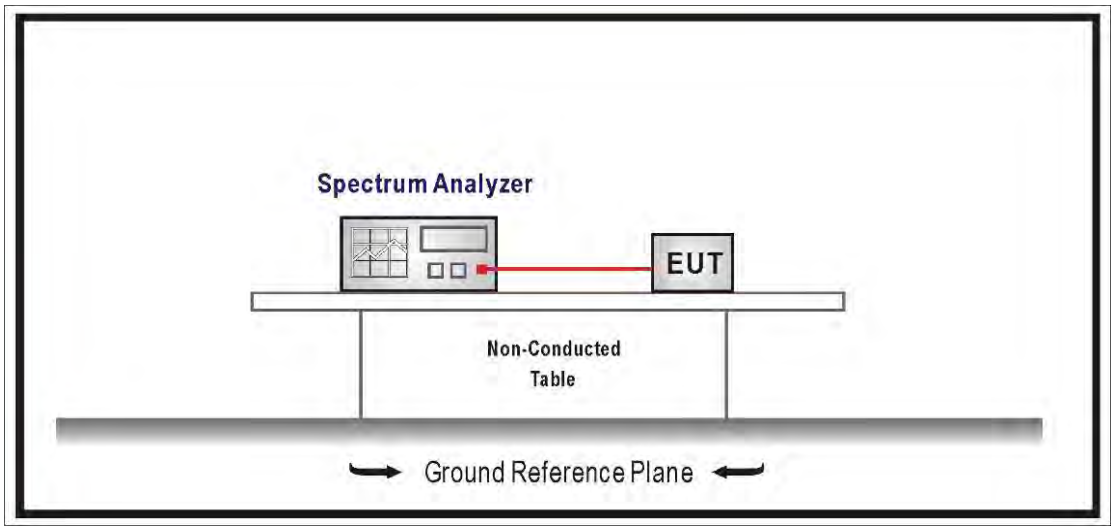
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.158	9.680	38.480	48.160	-17.418	65.578	QUASIPEAK
2		0.158	9.680	22.430	32.110	-23.468	55.578	AVERAGE
3		0.232	9.680	26.950	36.630	-25.747	62.377	QUASIPEAK
4		0.232	9.680	15.180	24.860	-27.517	52.377	AVERAGE
5		0.521	9.686	23.590	33.276	-22.724	56.000	QUASIPEAK
6	*	0.521	9.686	21.060	30.746	-15.254	46.000	AVERAGE
7		1.259	9.793	15.740	25.533	-30.467	56.000	QUASIPEAK
8		1.259	9.793	11.950	21.743	-24.257	46.000	AVERAGE
9		3.830	9.818	15.080	24.898	-31.102	56.000	QUASIPEAK
10		3.830	9.818	9.180	18.998	-27.002	46.000	AVERAGE
11		14.494	10.296	16.340	26.636	-33.364	60.000	QUASIPEAK
12		14.494	10.296	12.190	22.486	-27.514	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. 26dB & 99% & DTS Bandwidth

3.1. Test Setup



3.2. Limits

99% & 26dB Bandwidth : No Required
6dB Bandwidth ≧ 500KHz

3.3. Test Procedure

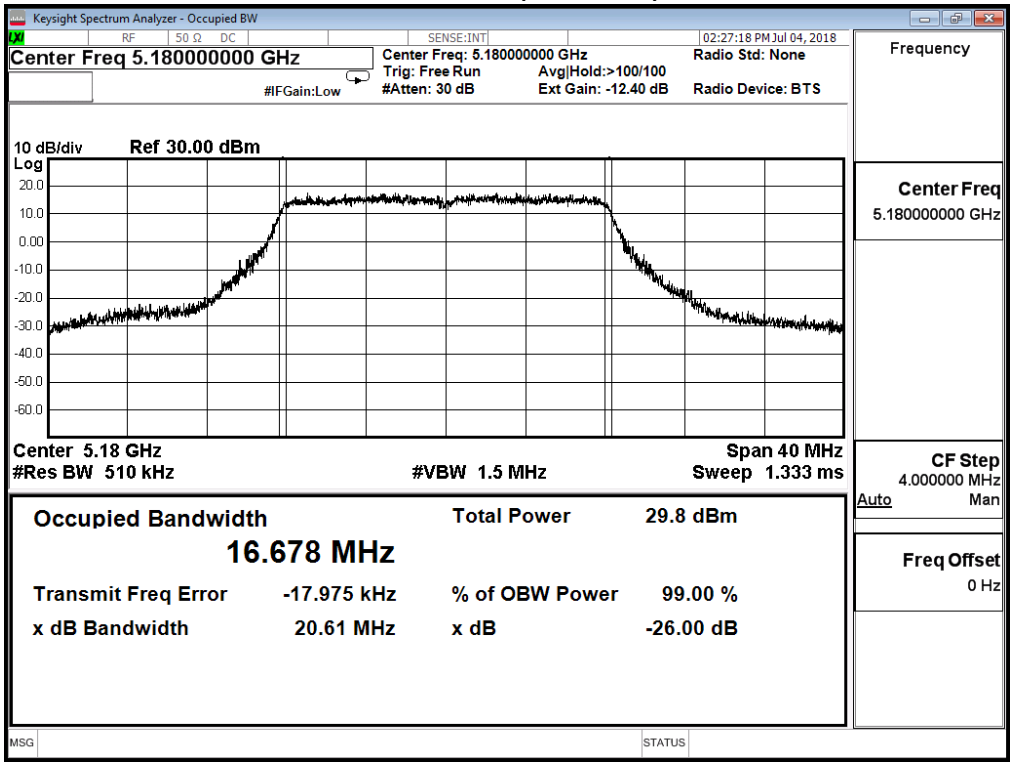
99% & 26dB Bandwidth :
The EUT was tested according to U-NII test procedure of KDB 789033.v01r02
Set RBW 1% of the emission bandwidth, VBW equal to 3 times the RBW.
DTS Bandwidth :
Set RBW = 100KHz, VBW≧3xRBW, Sweep time=Auto, Set Peak detector.

3.4. Test Result

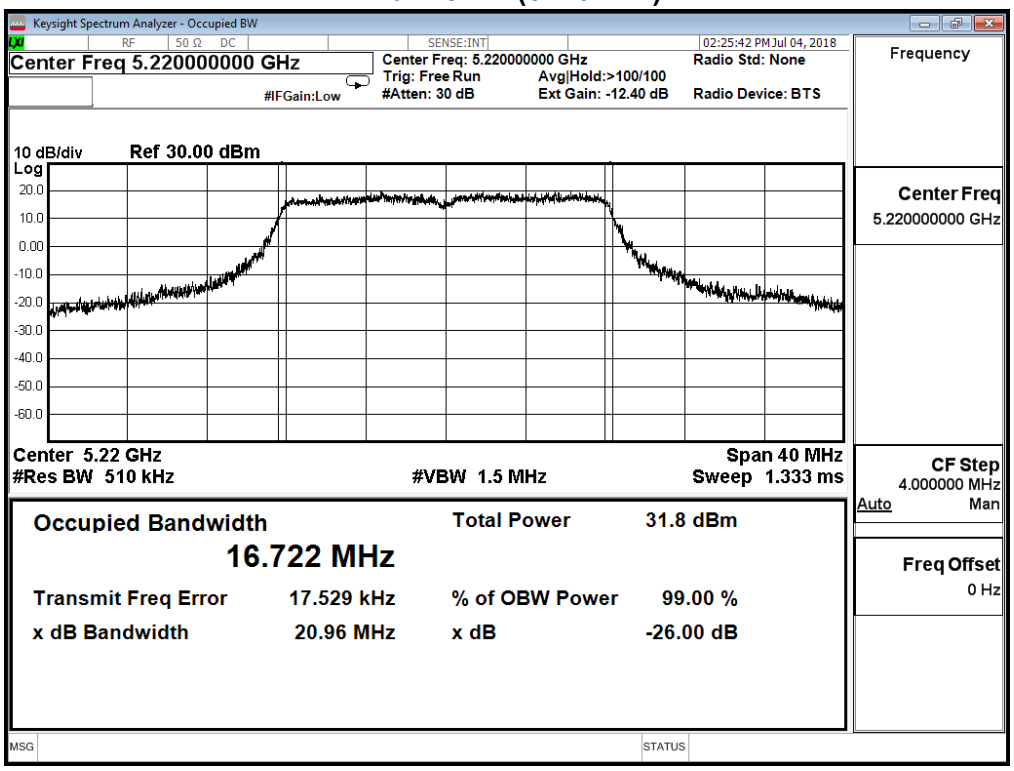
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	26dB & 99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11a (ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	20.610	16.678	--	Pass
44	5220	20.960	16.722	--	Pass
48	5240	20.560	16.673	--	Pass

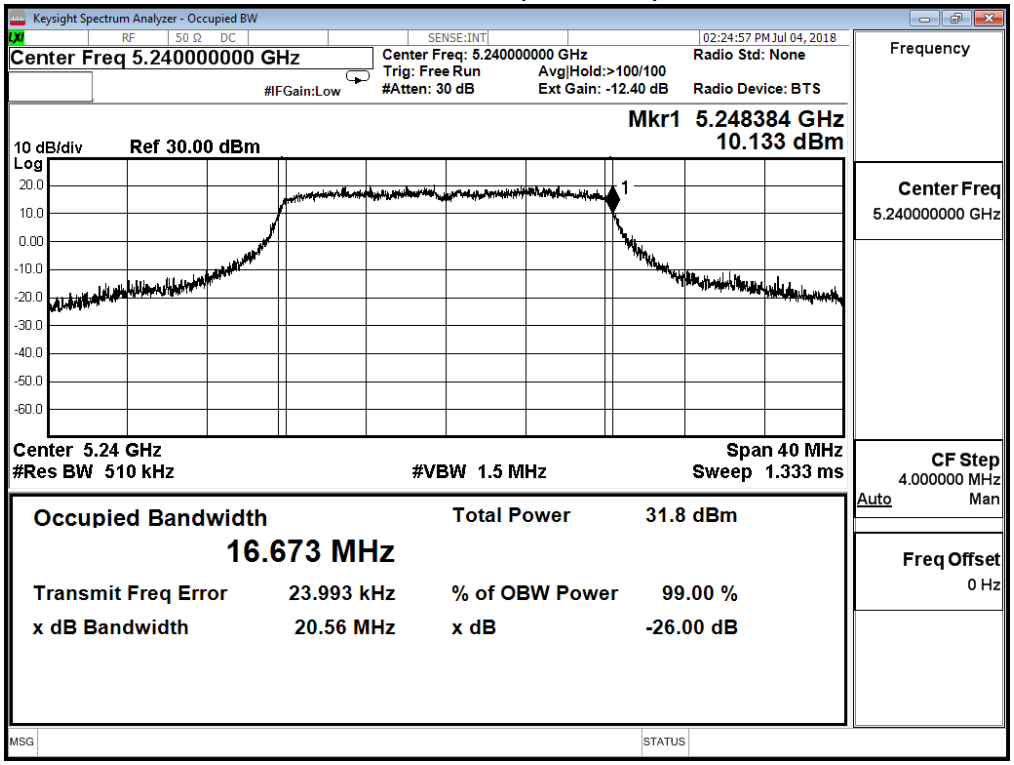
Channel 36 (5180MHz)



Channel 44 (5220MHz)



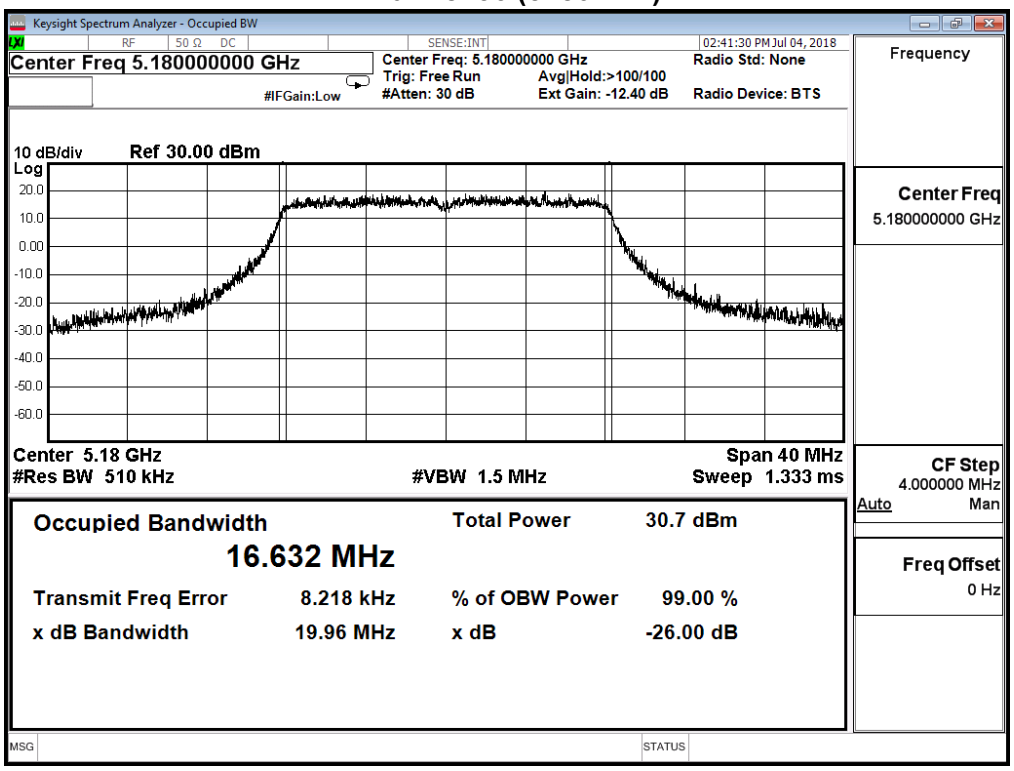
Channel 48 (5240MHz)



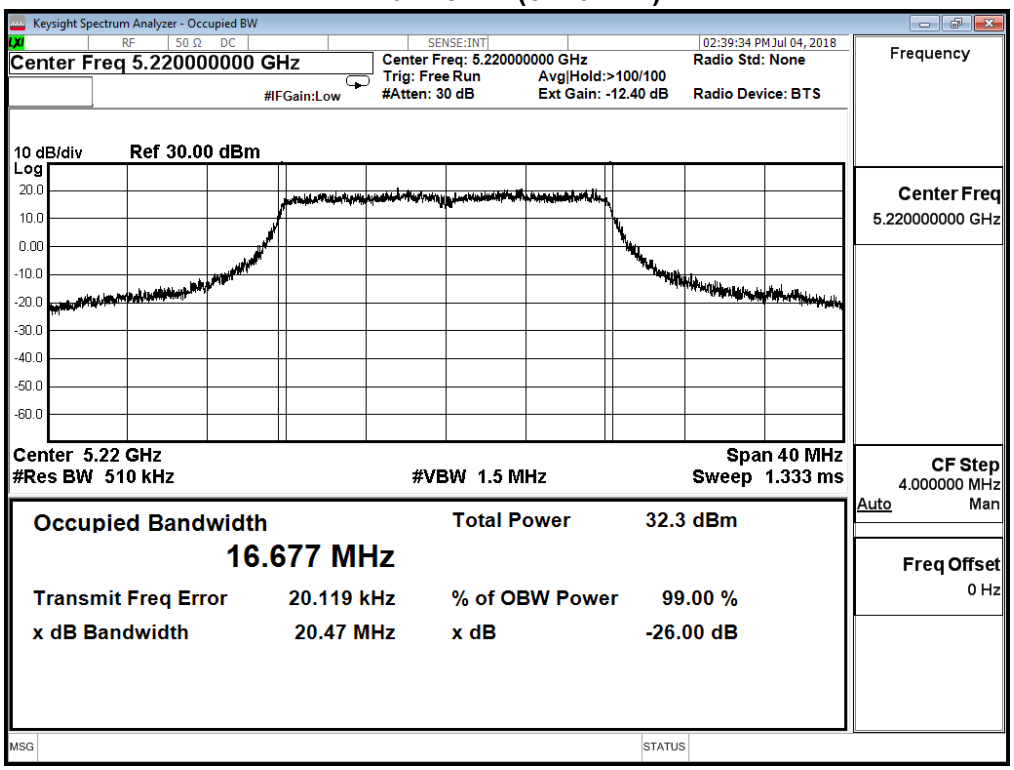
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	26dB & 99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11a (ANT 1)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	19.960	16.632	--	Pass
44	5220	20.470	16.677	--	Pass
48	5240	20.590	16.643	--	Pass

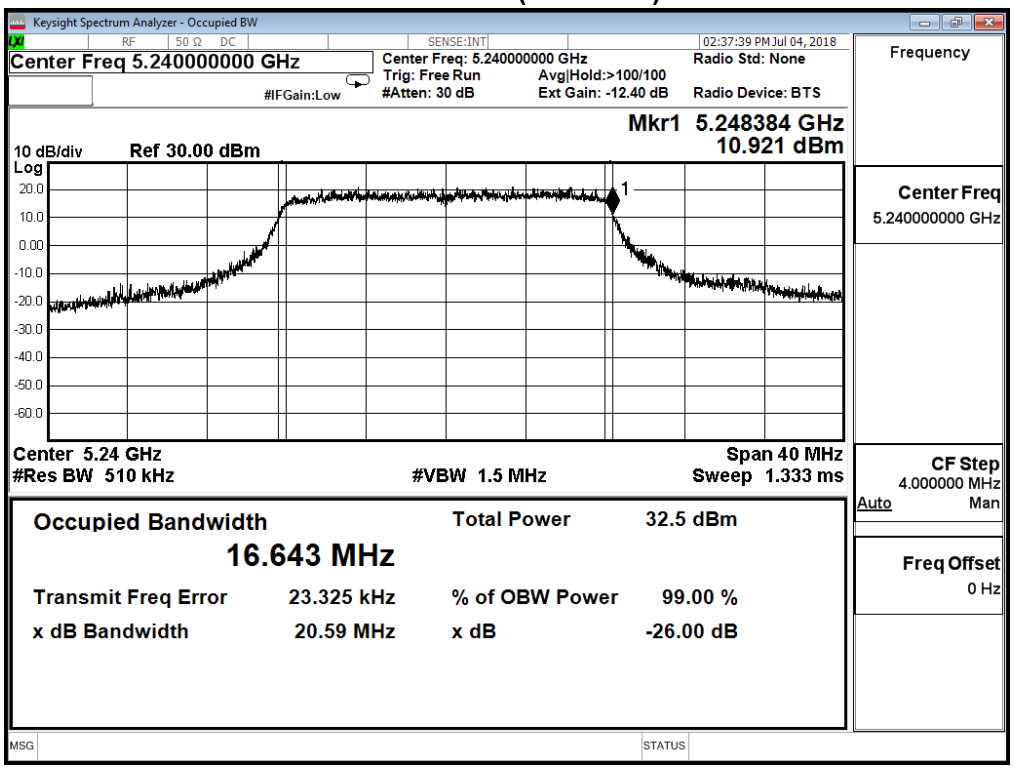
Channel 36 (5180MHz)



Channel 44 (5220MHz)



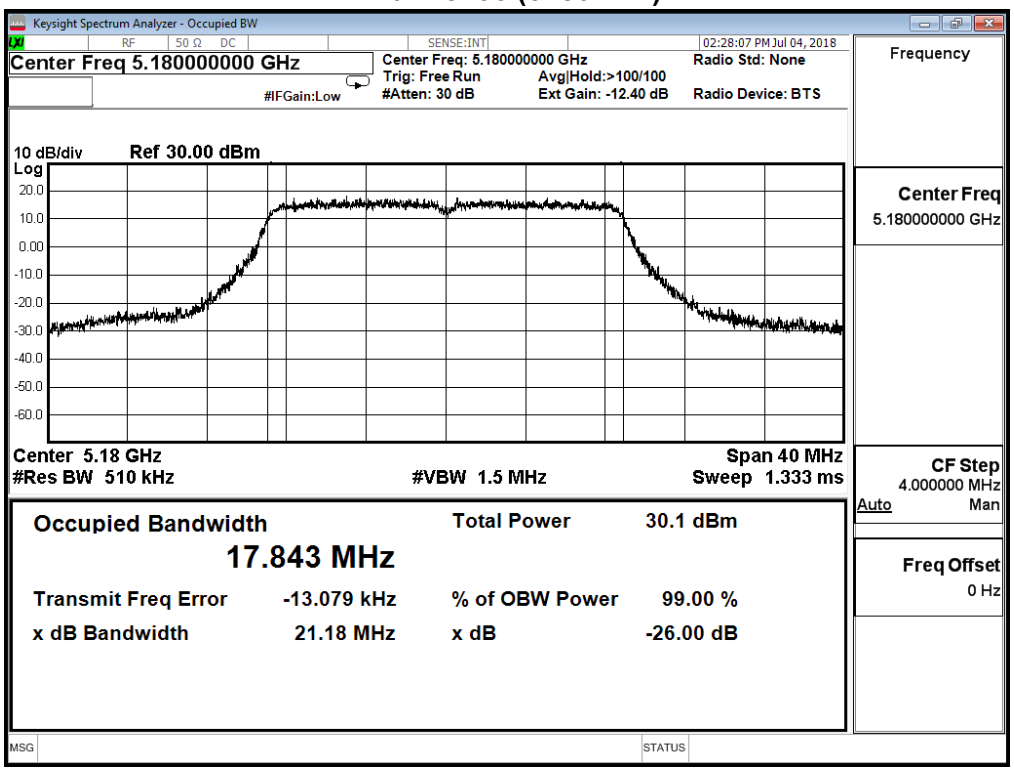
Channel 48 (5240MHz)



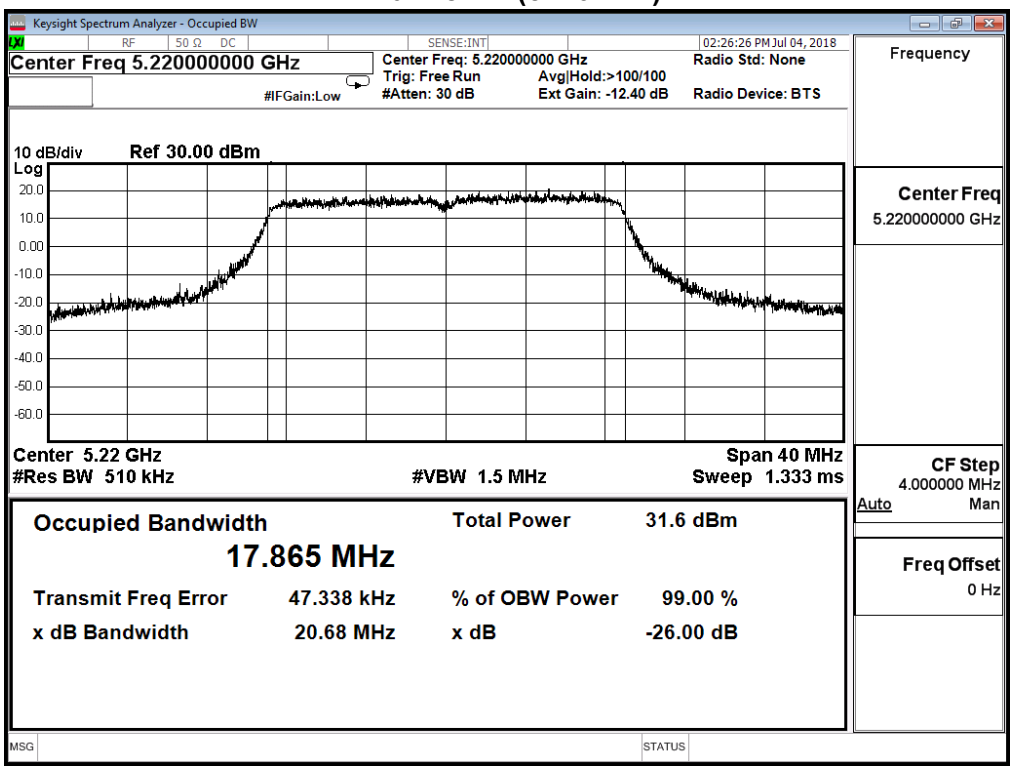
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	26dB & 99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_20M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	21.180	17.843	--	Pass
44	5220	20.680	17.865	--	Pass
48	5240	21.010	17.795	--	Pass

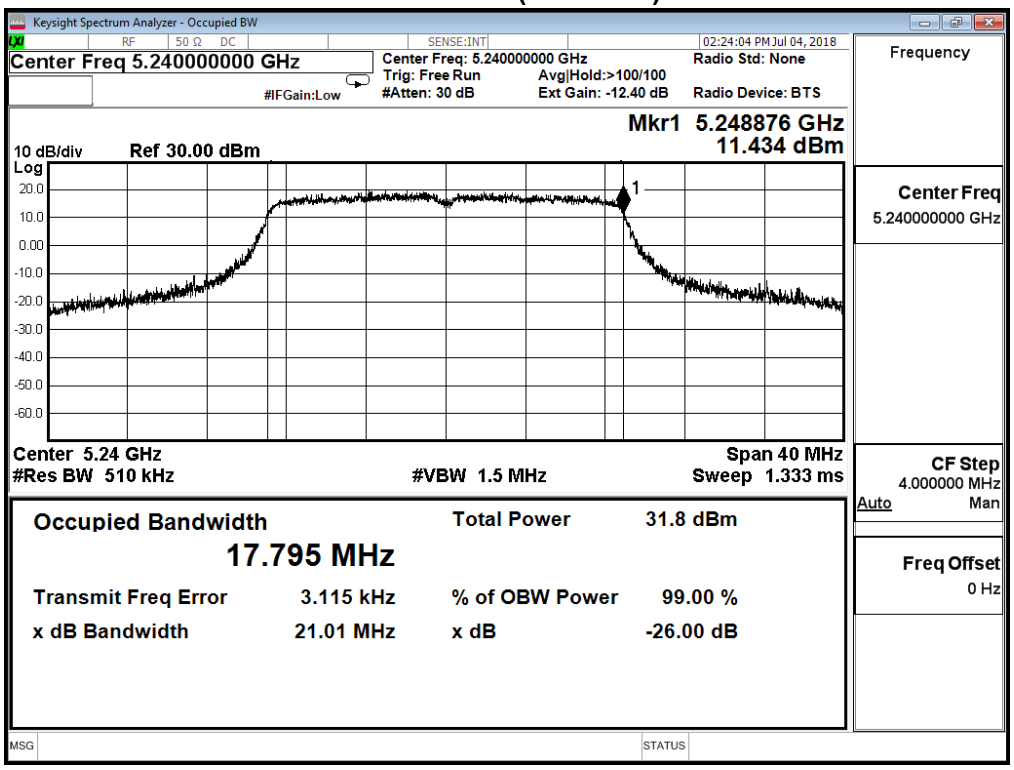
Channel 36 (5180MHz)



Channel 44 (5220MHz)



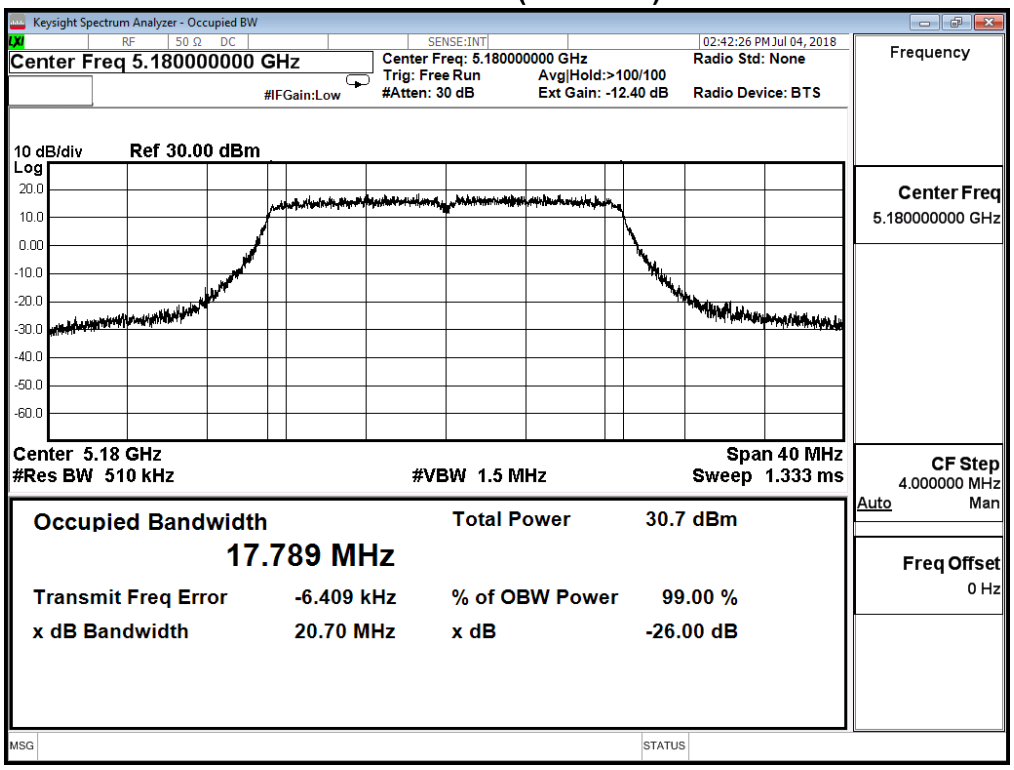
Channel 48 (5240MHz)



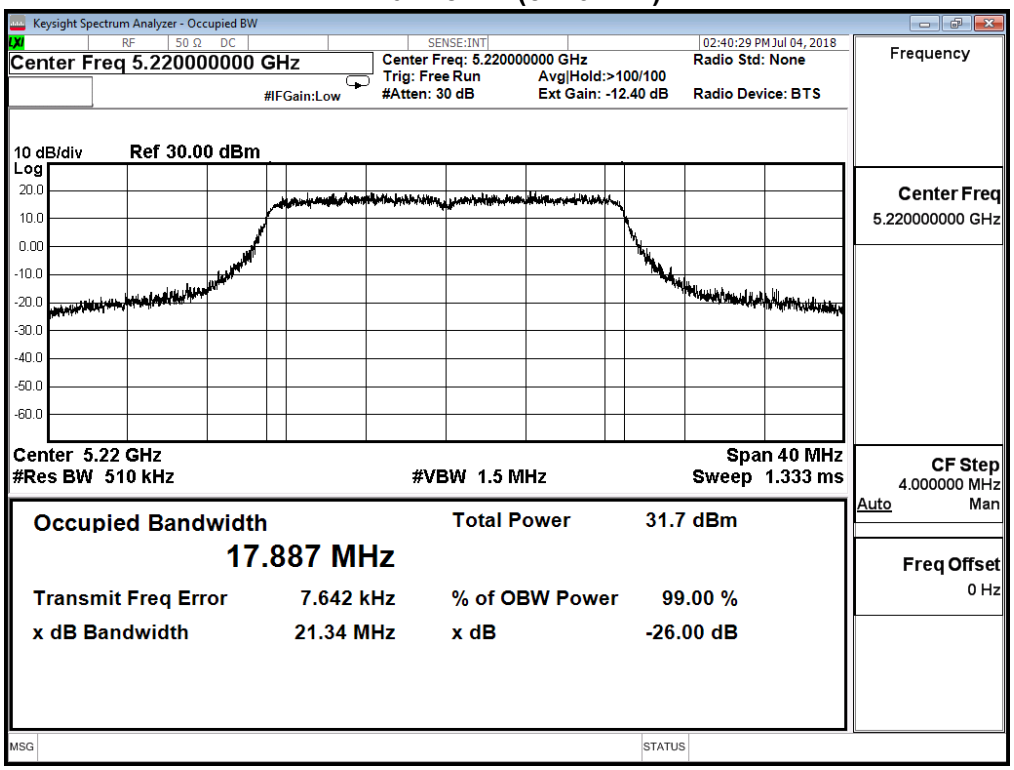
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	26dB & 99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_20M(ANT 1)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
36	5180	20.700	17.789	--	Pass
44	5220	21.340	17.887	--	Pass
48	5240	21.630	17.878	--	Pass

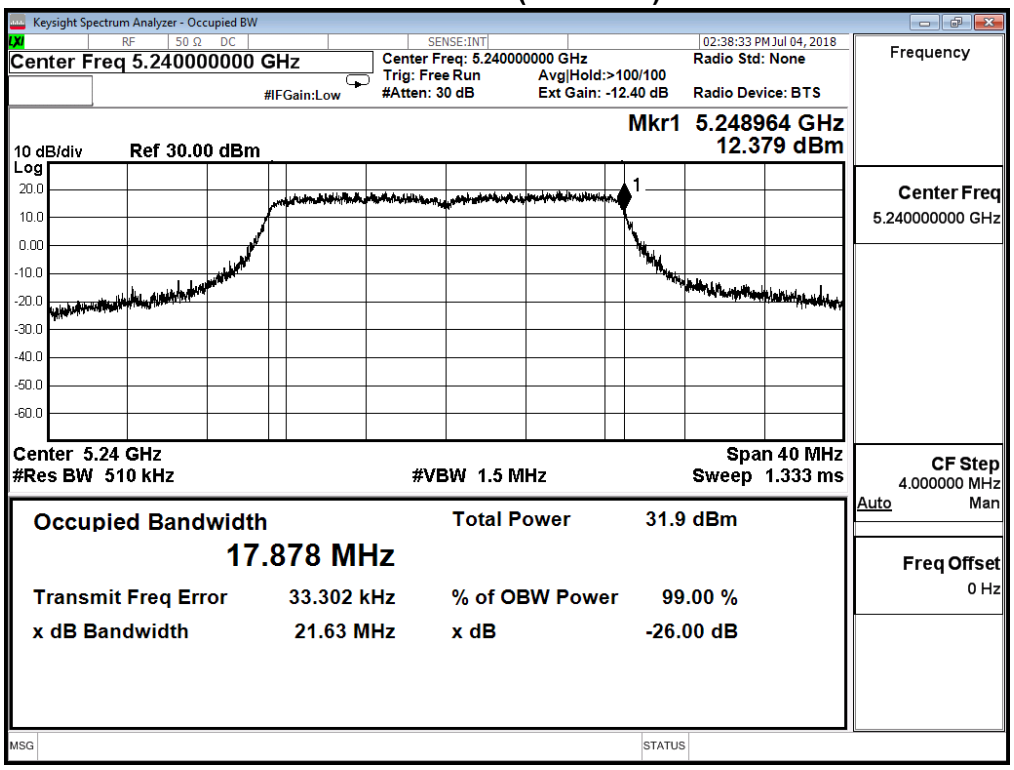
Channel 36 (5180MHz)



Channel 44 (5220MHz)



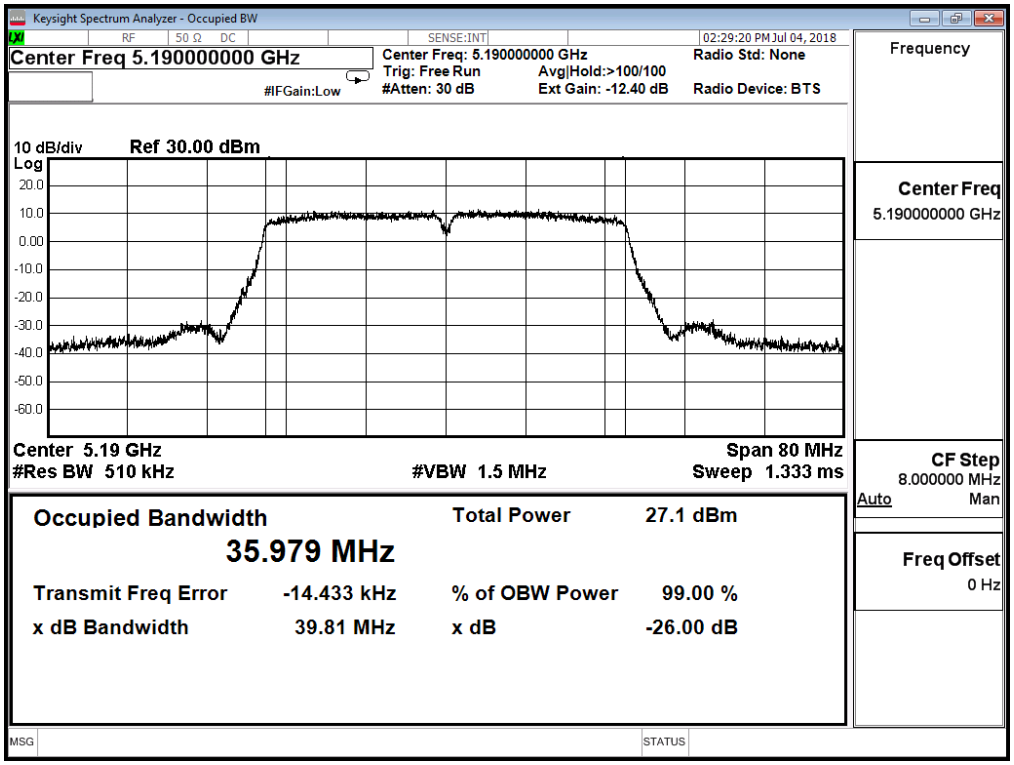
Channel 48 (5240MHz)



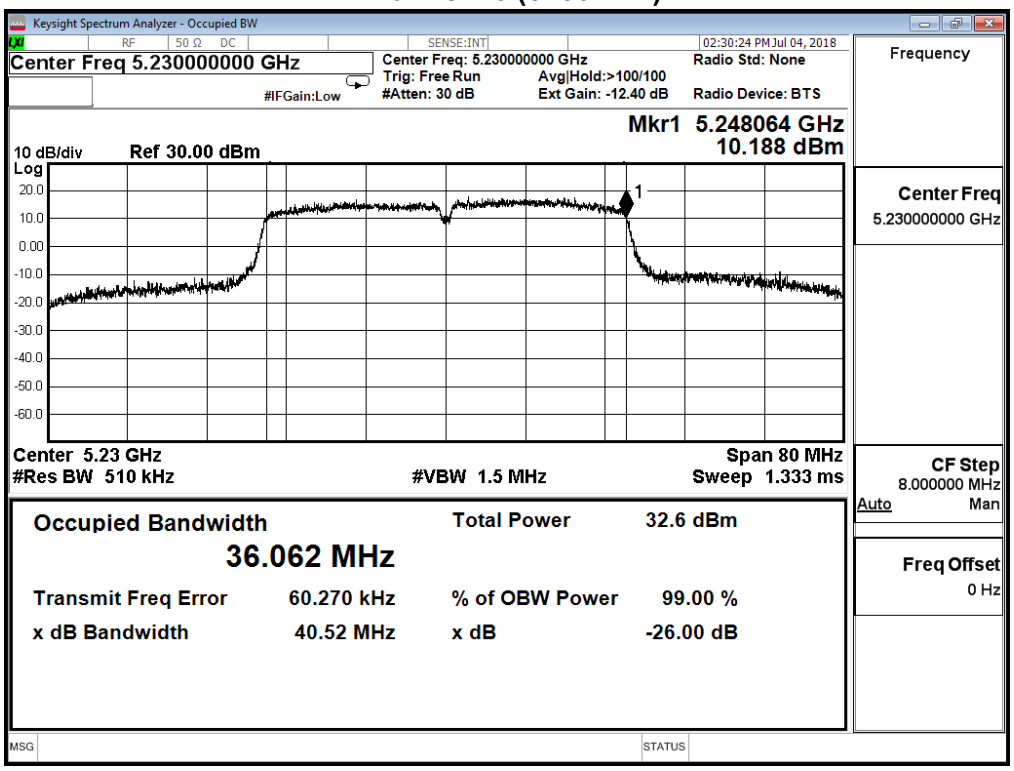
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	26dB & 99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_40M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
38	5190	39.810	35.979	--	Pass
46	5230	40.520	36.062	--	Pass

Channel 38 (5190MHz)



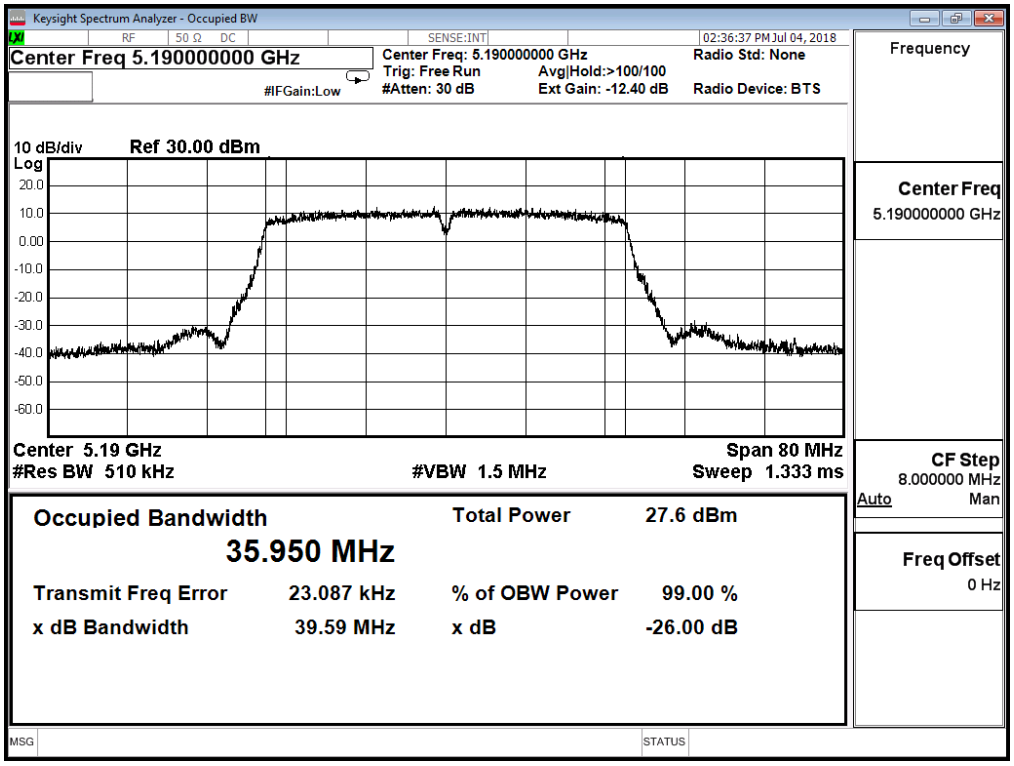
Channel 46 (5230MHz)



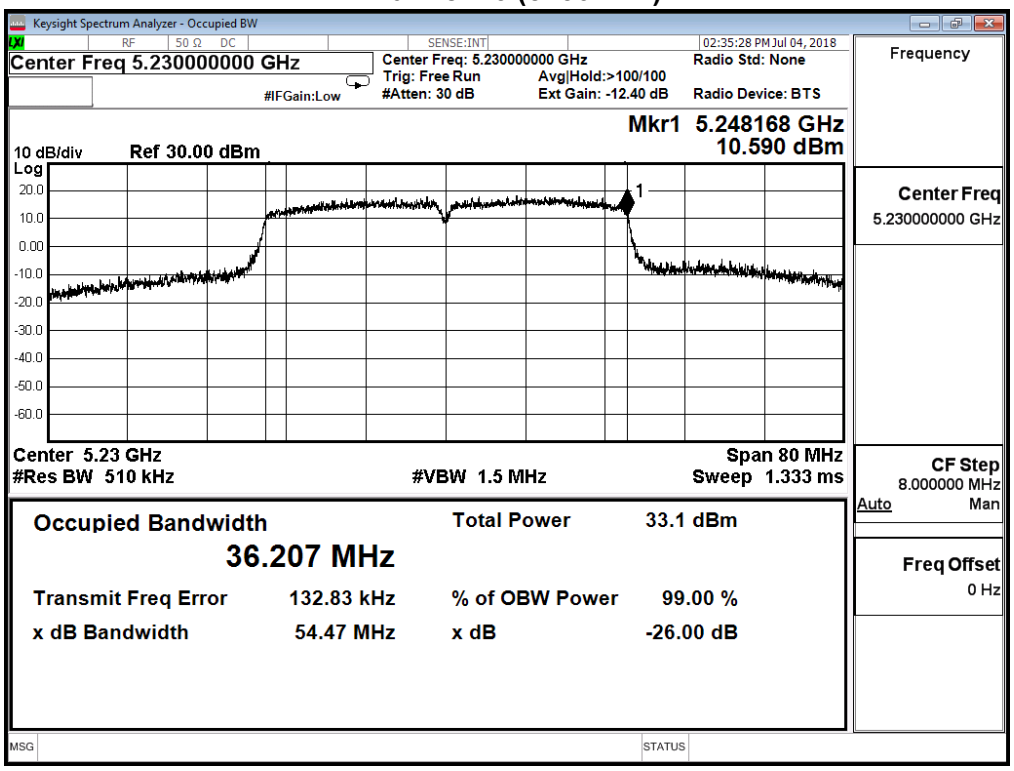
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	26dB & 99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_40M(ANT 1)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
38	5190	39.590	35.950	--	Pass
46	5230	54.470	36.207	--	Pass

Channel 38 (5190MHz)



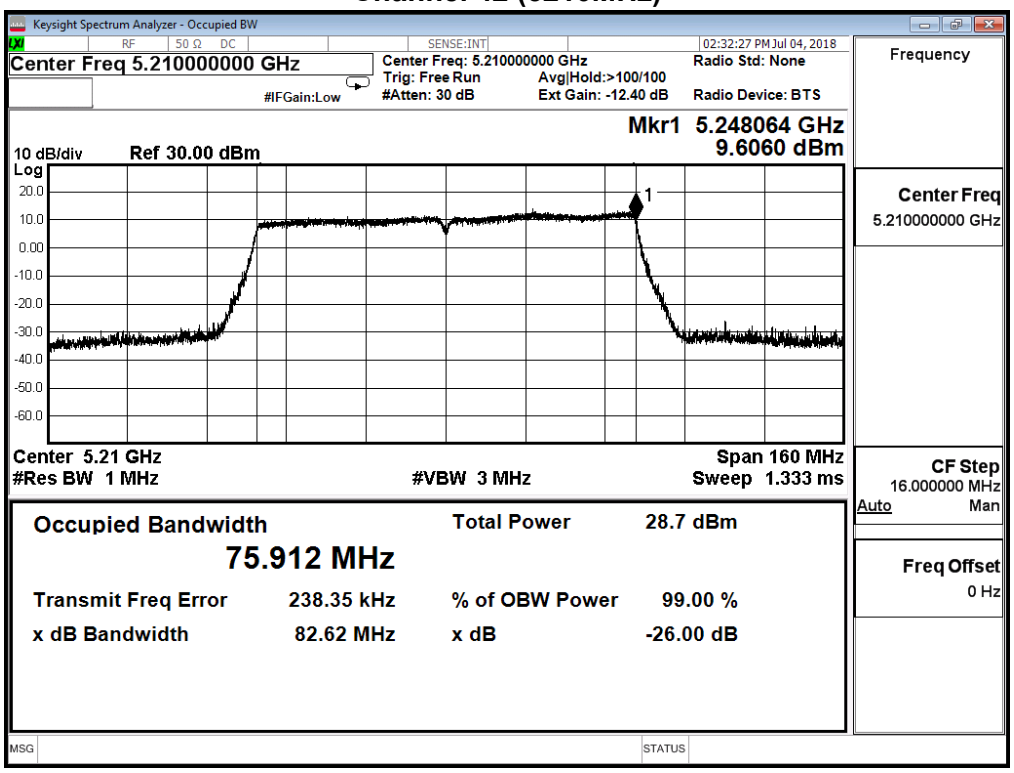
Channel 46 (5230MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	26dB & 99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_80M(ANT 0)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
42	5210	82.620	75.912	--	Pass

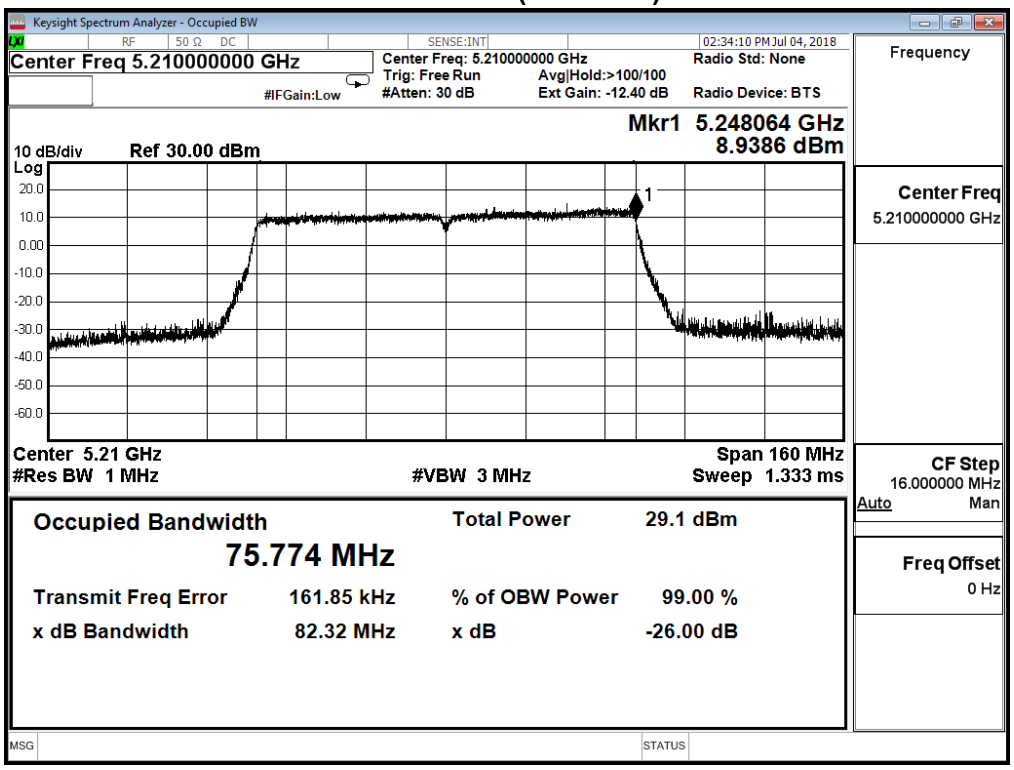
Channel 42 (5210MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	26dB & 99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_80M(ANT 1)					
Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
42	5210	82.320	75.774	--	Pass

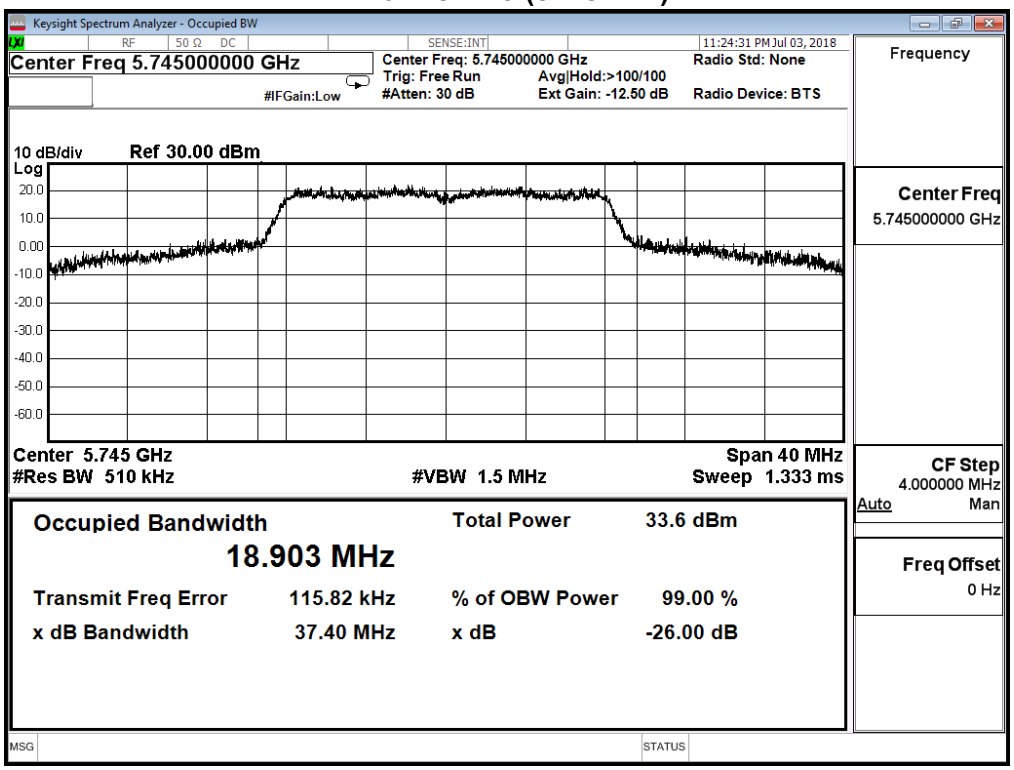
Channel 42 (5210MHz)



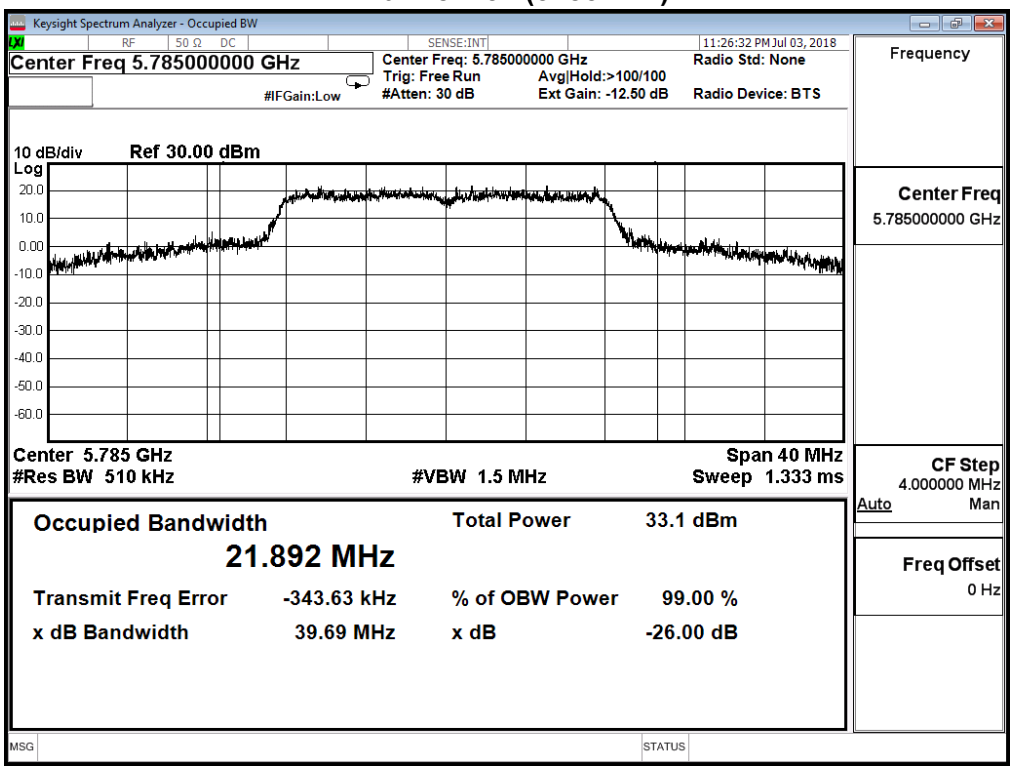
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/03	Test Site	SR10-H

IEEE 802.11a (ANT0)			
Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
149	5745	18.903	---
157	5785	21.892	---
165	5825	21.622	---

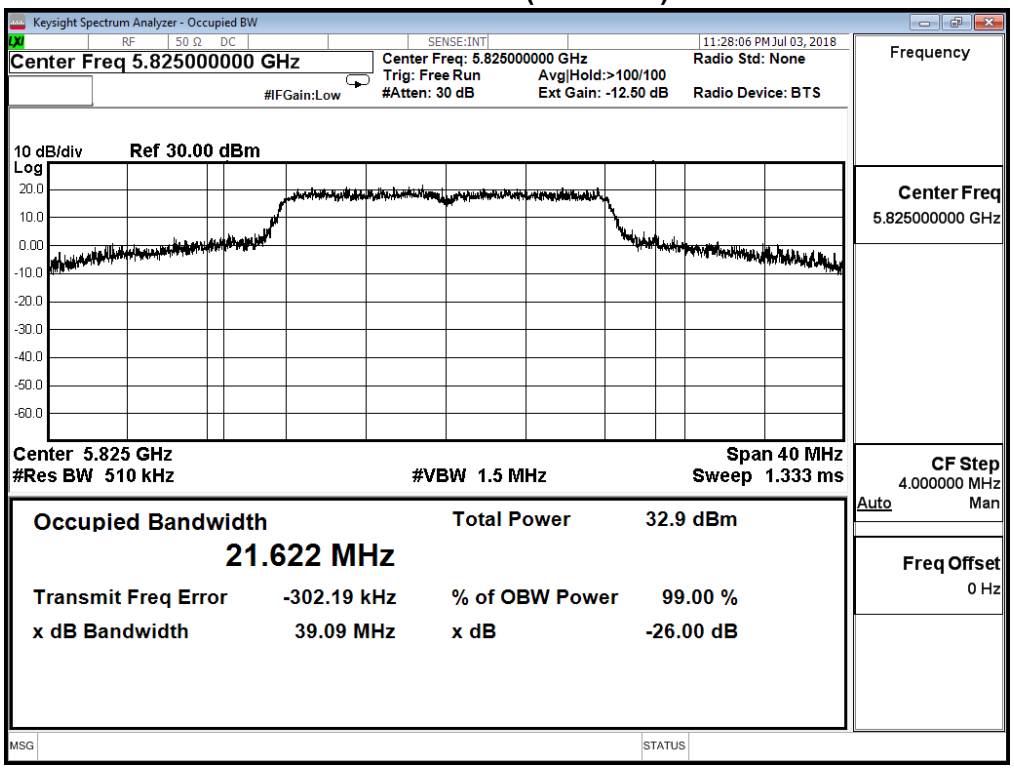
Channel 149 (5745MHz)



Channel 157 (5785MHz)



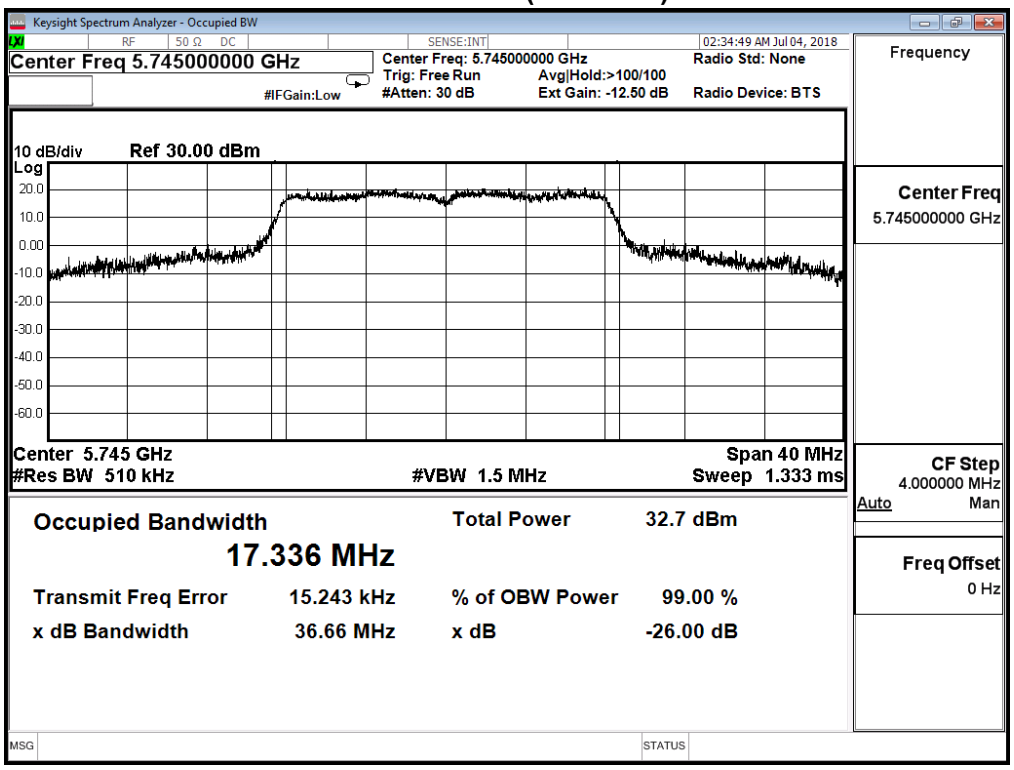
Channel 165 (5825MHz)



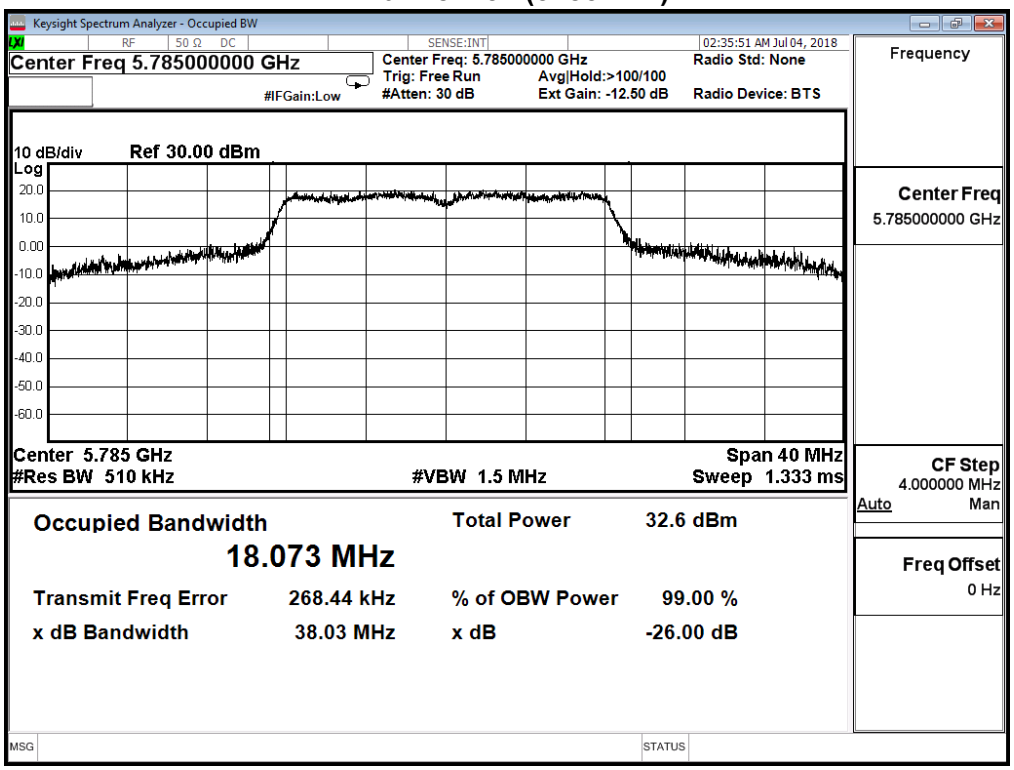
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11a (ANT1)			
Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
149	5745	17.336	---
157	5785	18.073	---
165	5825	21.610	---

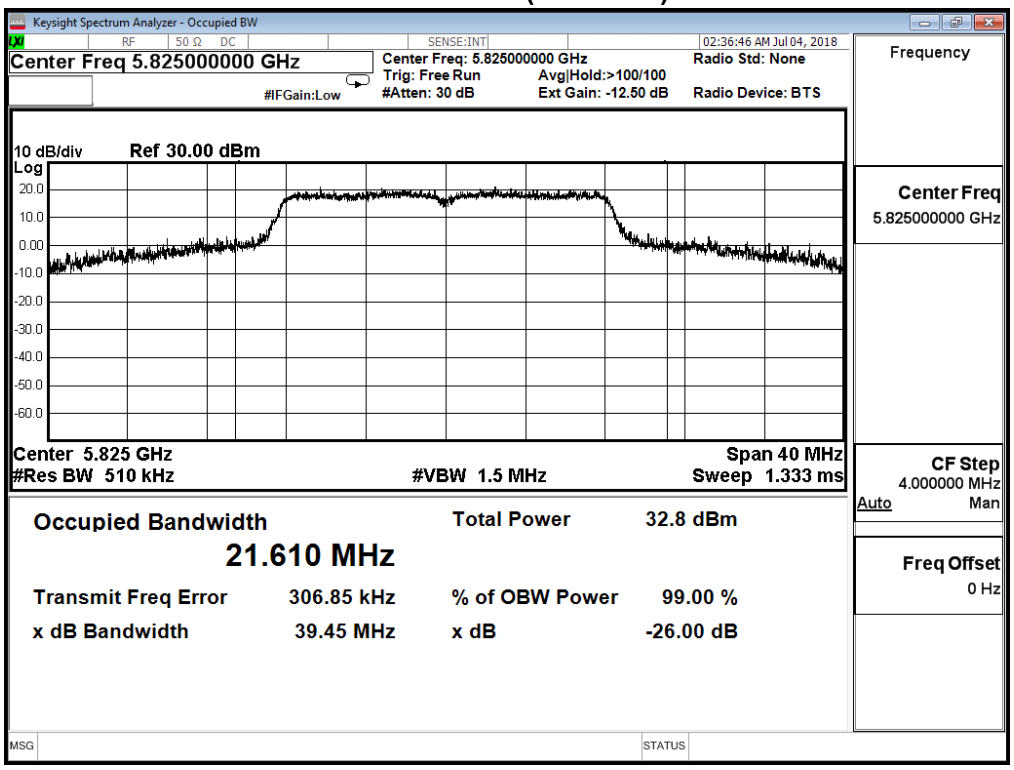
Channel 149 (5745MHz)



Channel 157 (5785MHz)



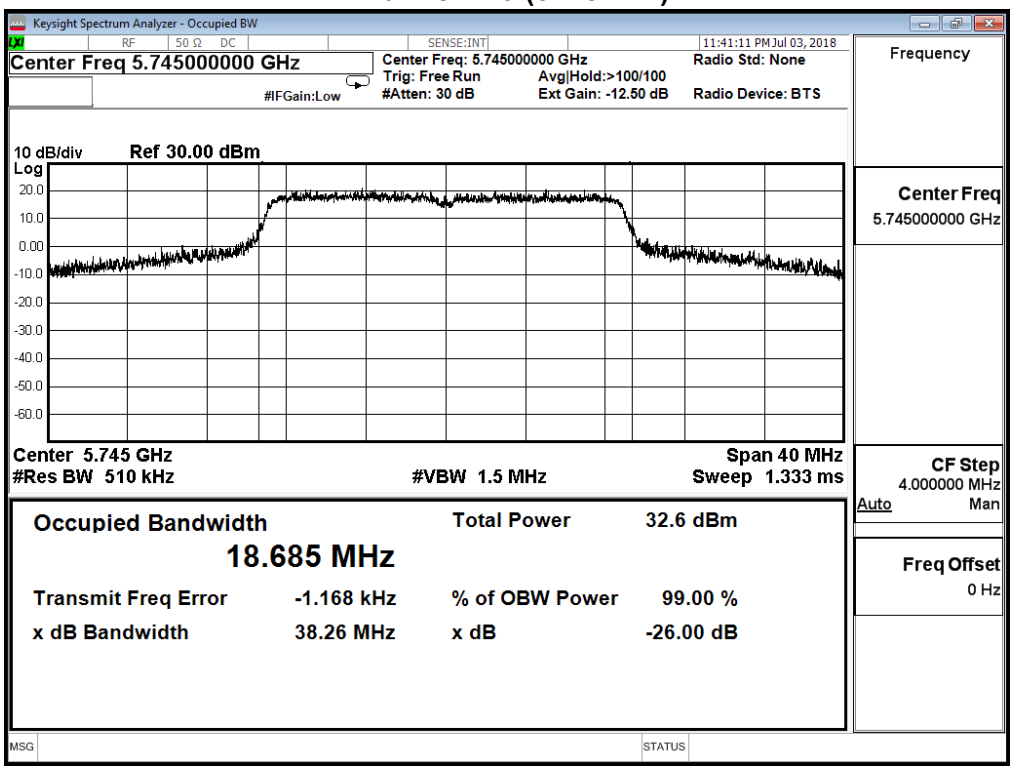
Channel 165 (5825MHz)



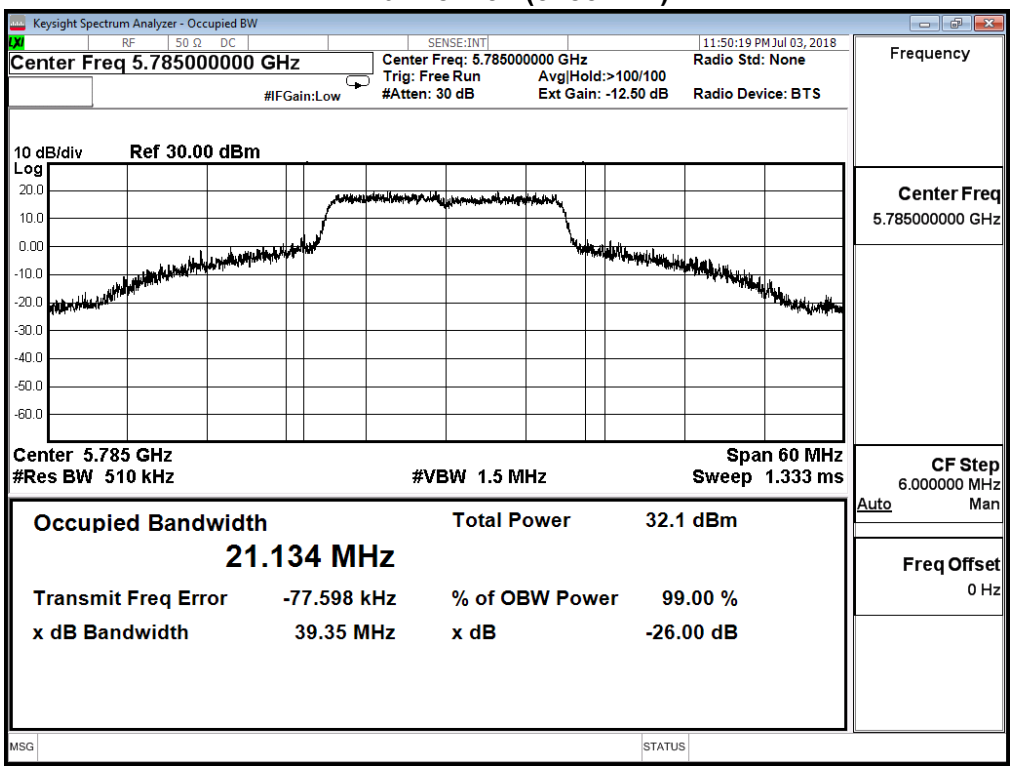
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/03	Test Site	SR10-H

IEEE 802.11ac_20M (ANT0)			
Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
149	5745	18.685	---
157	5785	21.134	---
165	5825	21.082	---

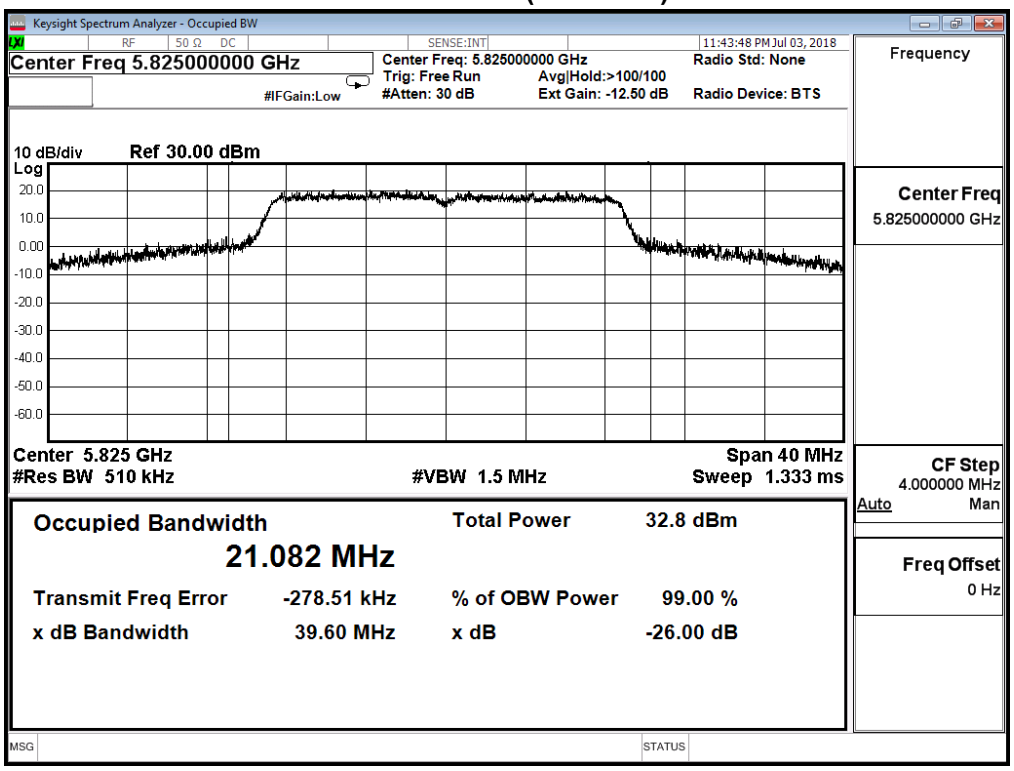
Channel 149 (5745MHz)



Channel 157 (5785MHz)



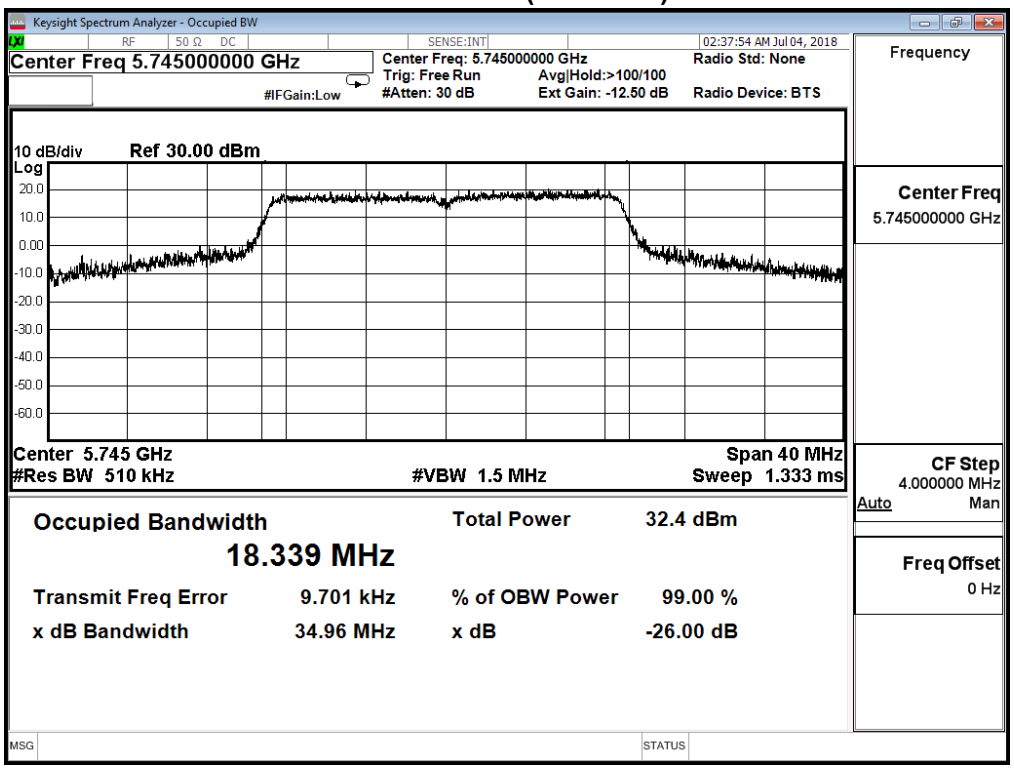
Channel 165 (5825MHz)



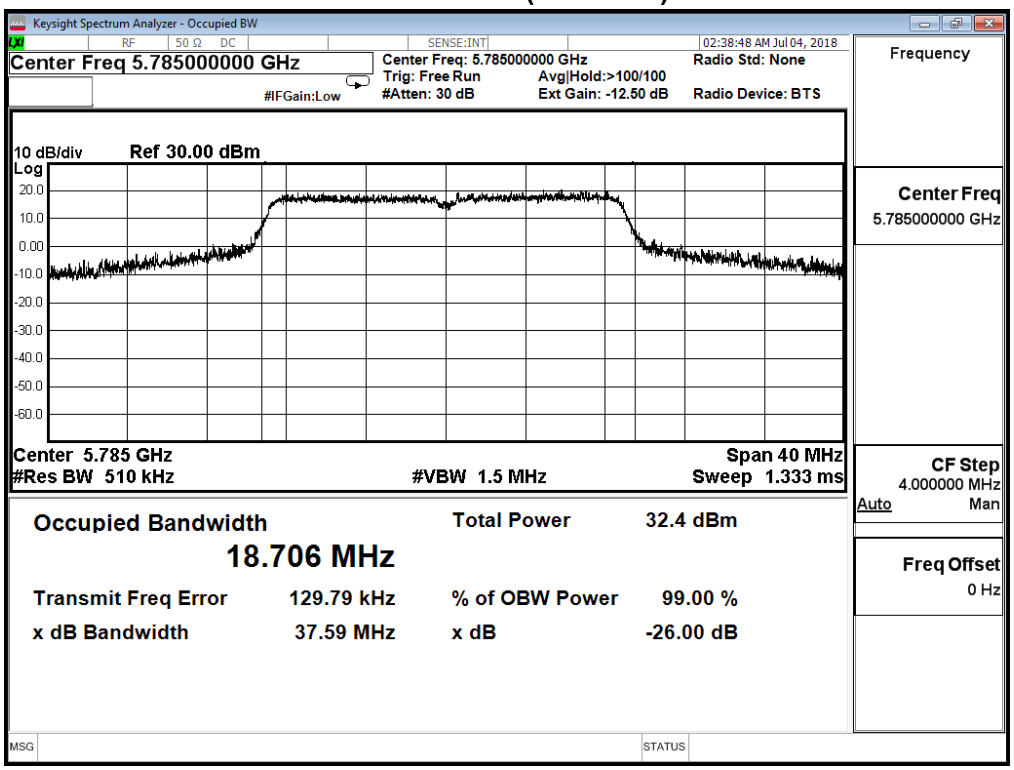
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_20M (ANT1)			
Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
149	5745	18.339	---
157	5785	18.706	---
165	5825	21.251	---

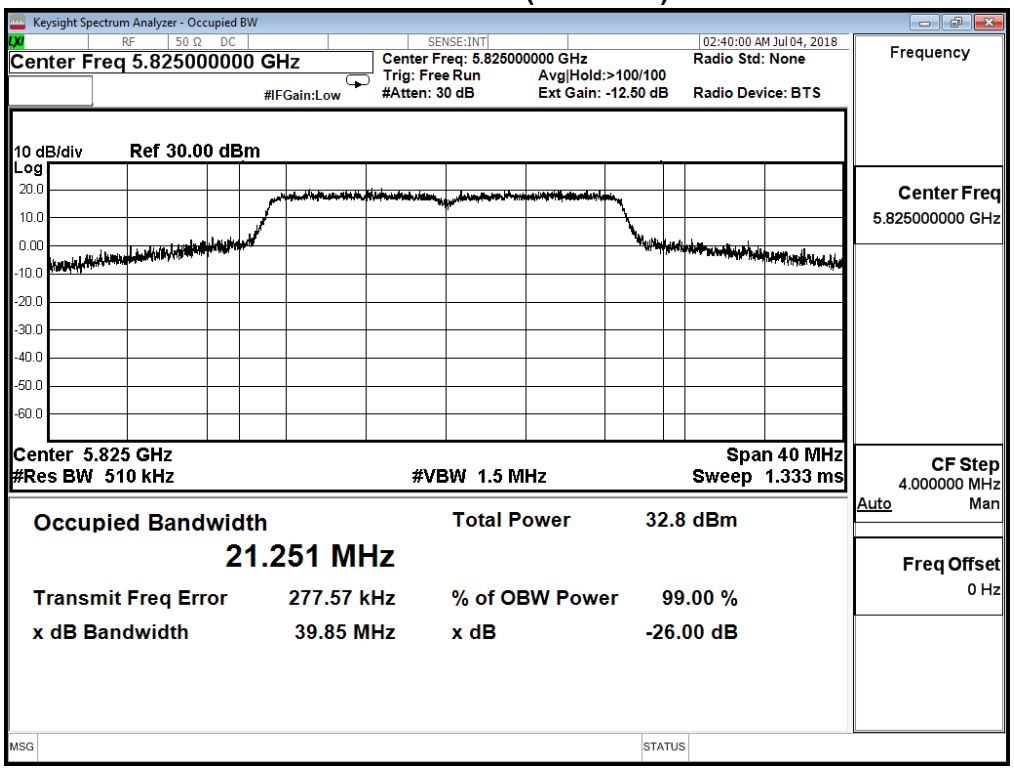
Channel 149 (5745MHz)



Channel 157 (5785MHz)



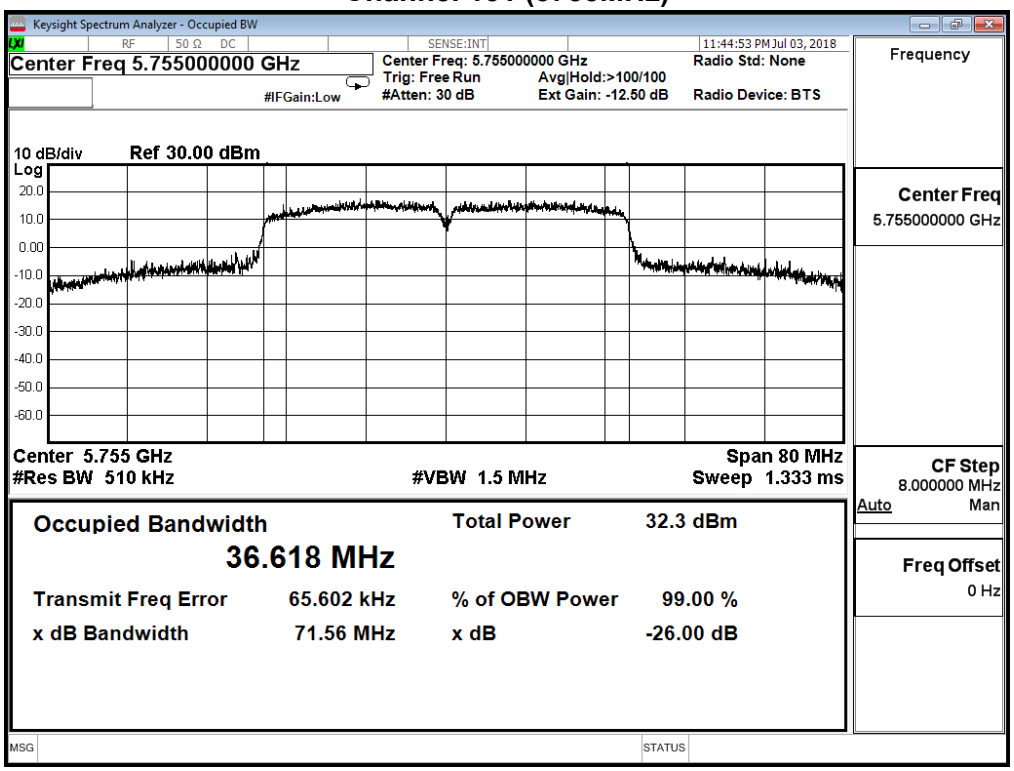
Channel 165 (5825MHz)



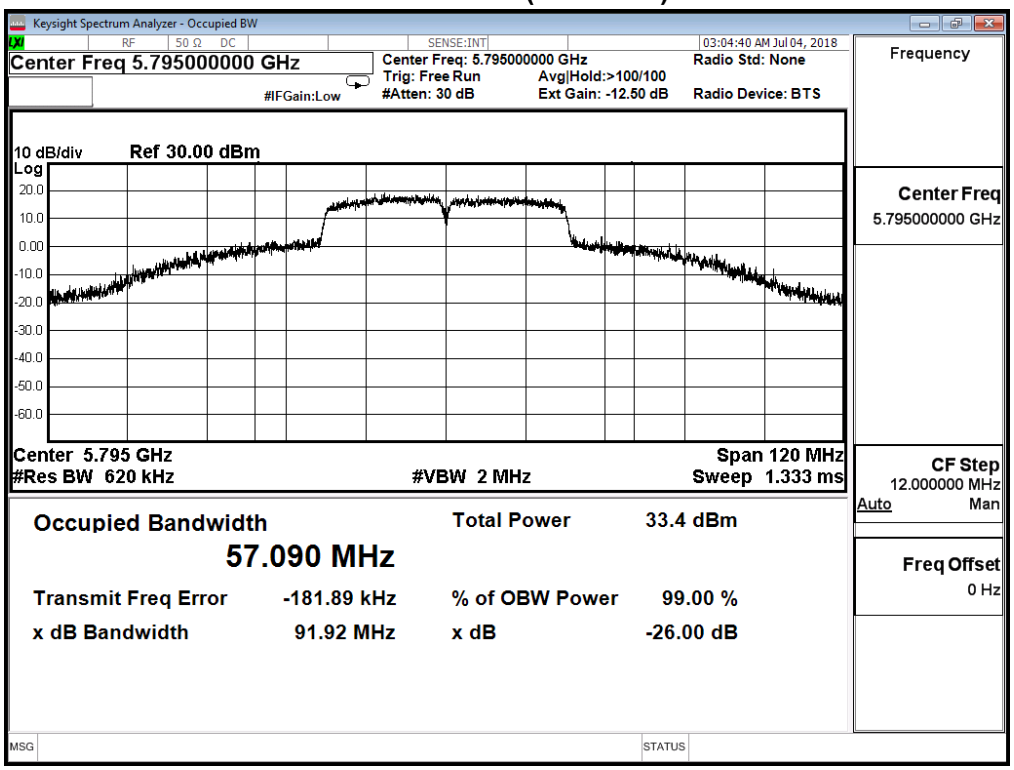
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/03	Test Site	SR10-H

IEEE 802.11ac_40M (ANT0)			
Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
151	5755	36.618	---
159	5795	57.090	---

Channel 151 (5755MHz)



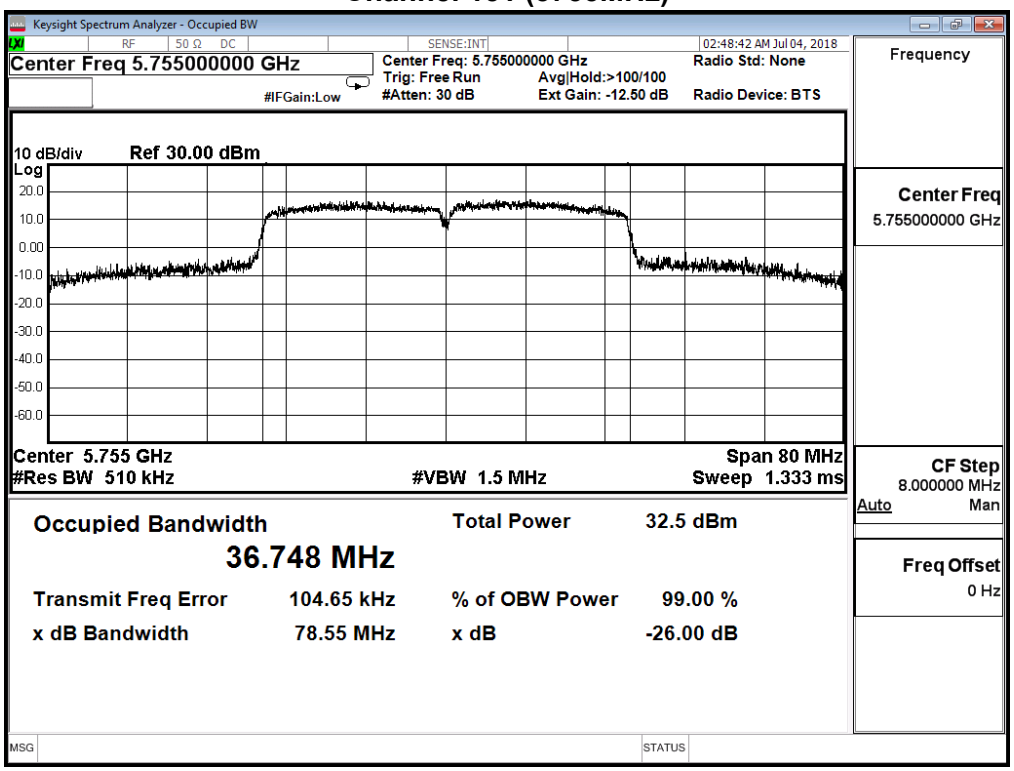
Channel 159 (5795MHz)



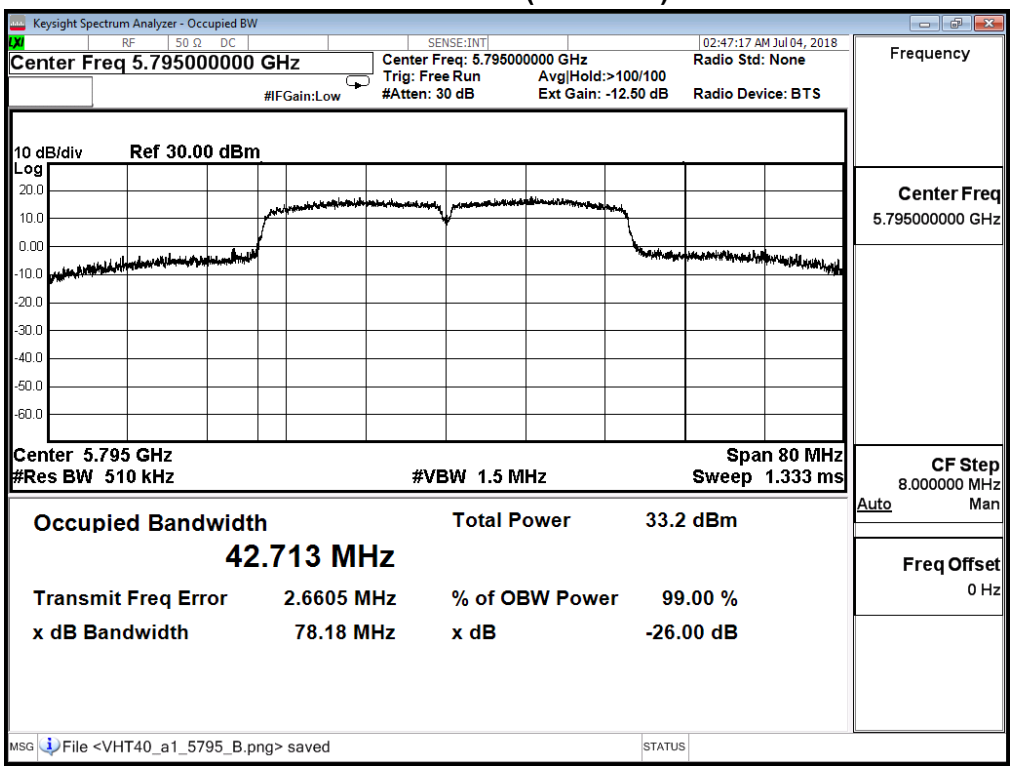
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_40M (ANT1)			
Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
151	5755	36.748	---
159	5795	42.713	---

Channel 151 (5755MHz)



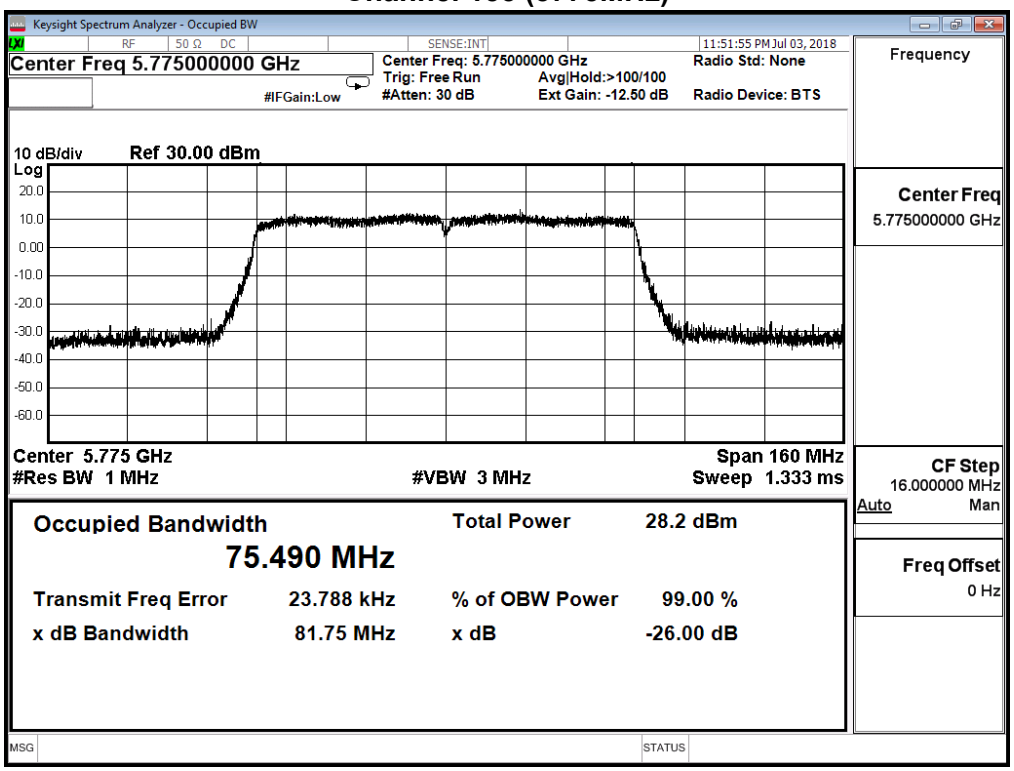
Channel 159 (5795MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/03	Test Site	SR10-H

IEEE 802.11ac_80M (ANT0)			
Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
155	5775	75.490	---

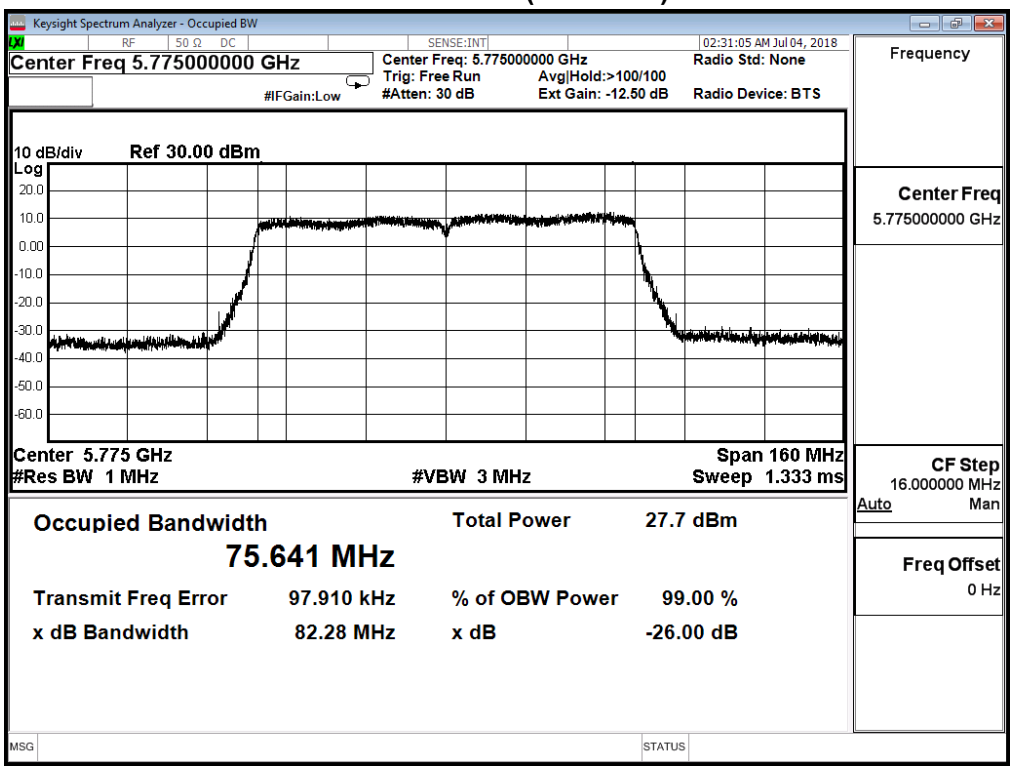
Channel 155 (5775MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	99% Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_80M (ANT1)			
Channel No.	Frequency (MHz)	Measure Value (MHz)	Limit (MHz)
155	5775	75.641	---

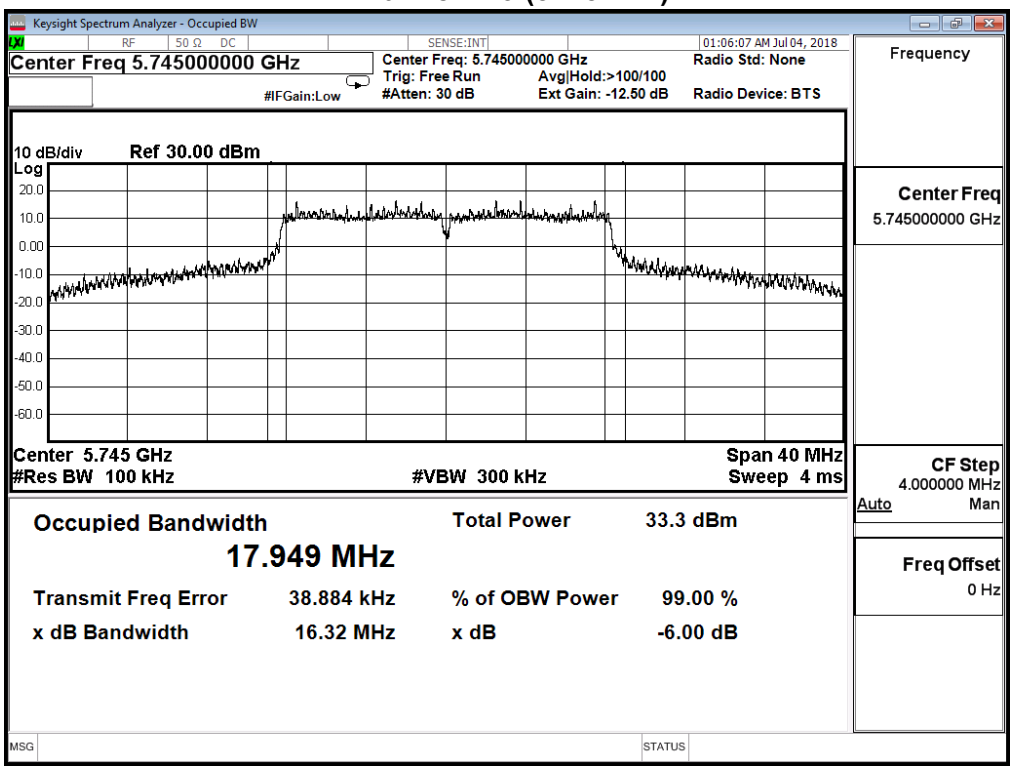
Channel 155 (5775MHz)



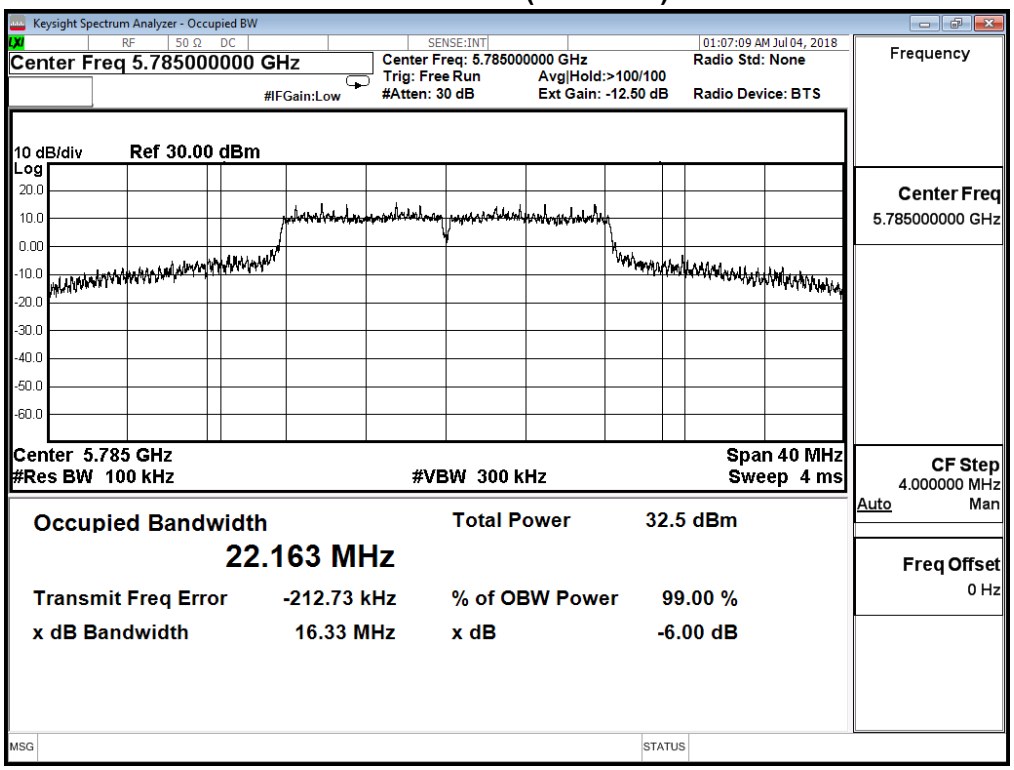
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11a(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
149	5745	16.320	≧0.5	Pass
157	5785	16.330	≧0.5	Pass
165	5825	16.310	≧0.5	Pass

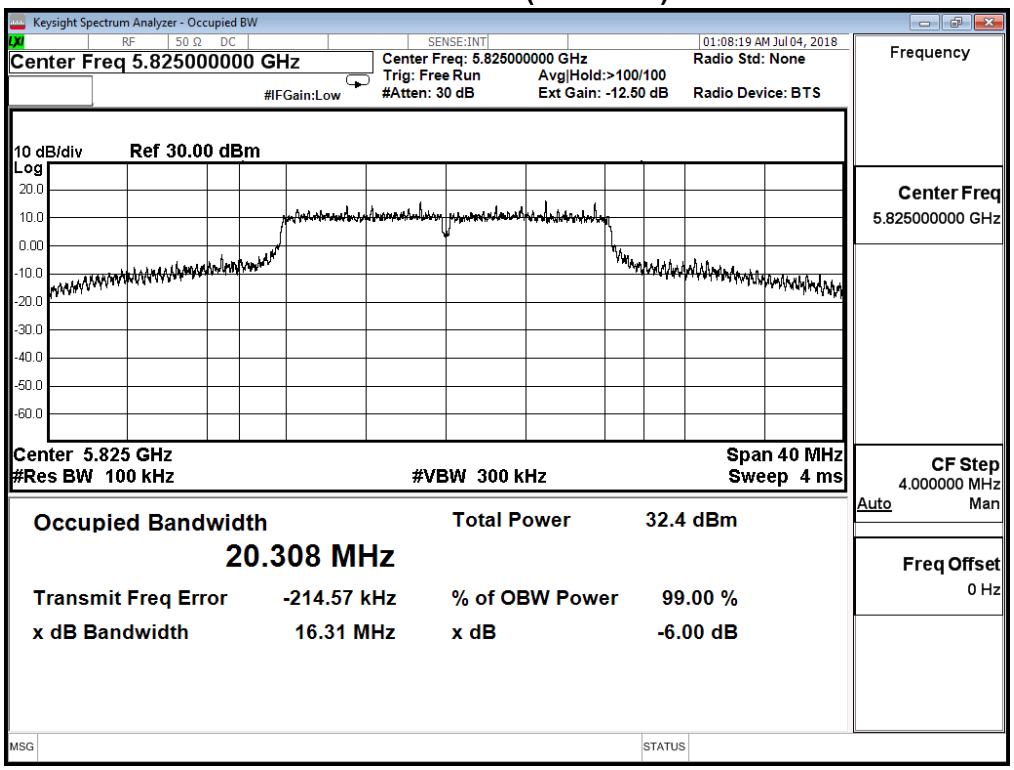
Channel 149 (5745MHz)



Channel 157 (5785MHz)



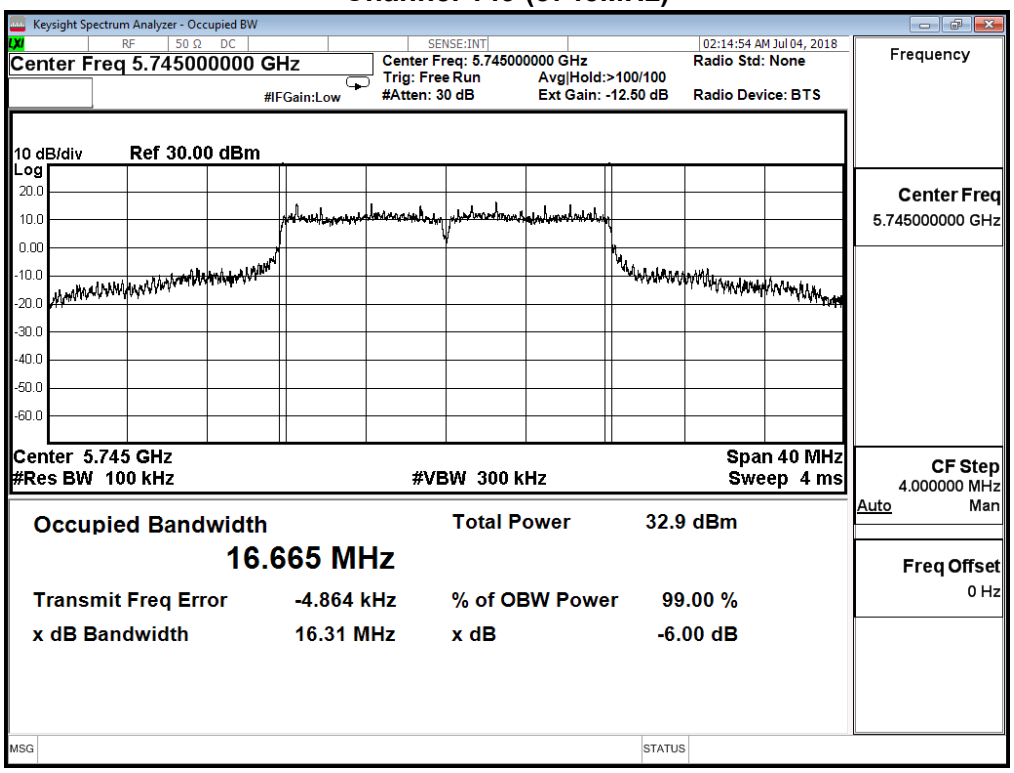
Channel 165 (5825MHz)



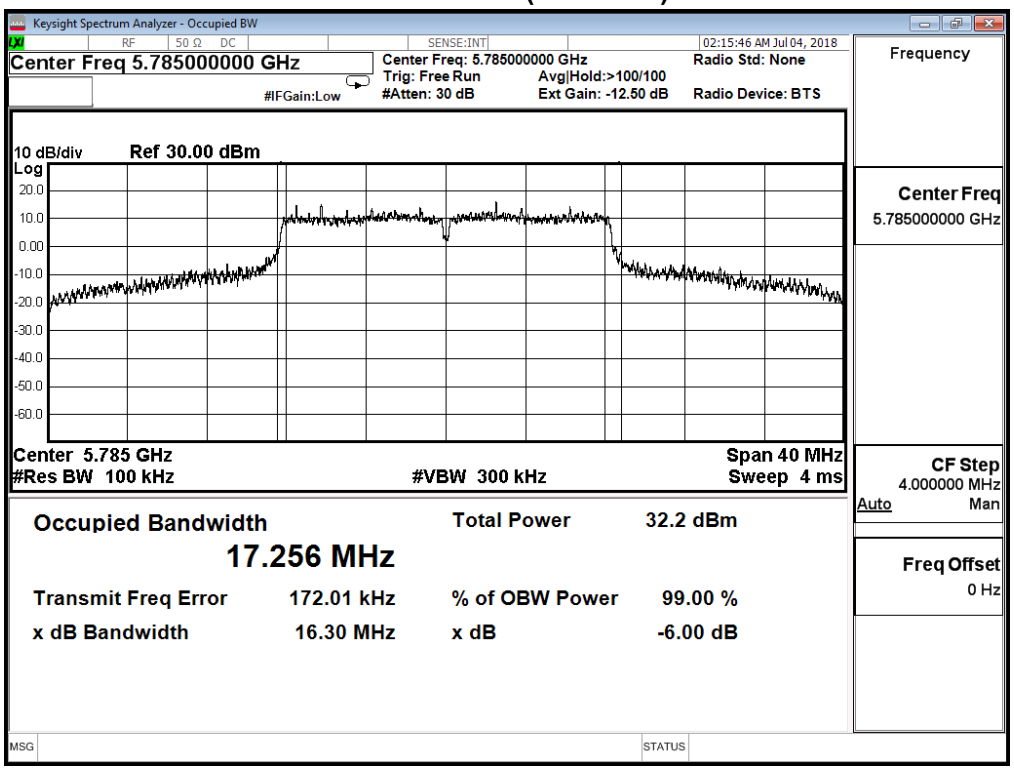
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11a(ANT 1)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
149	5745	16.310	≧0.5	Pass
157	5785	16.300	≧0.5	Pass
165	5825	16.310	≧0.5	Pass

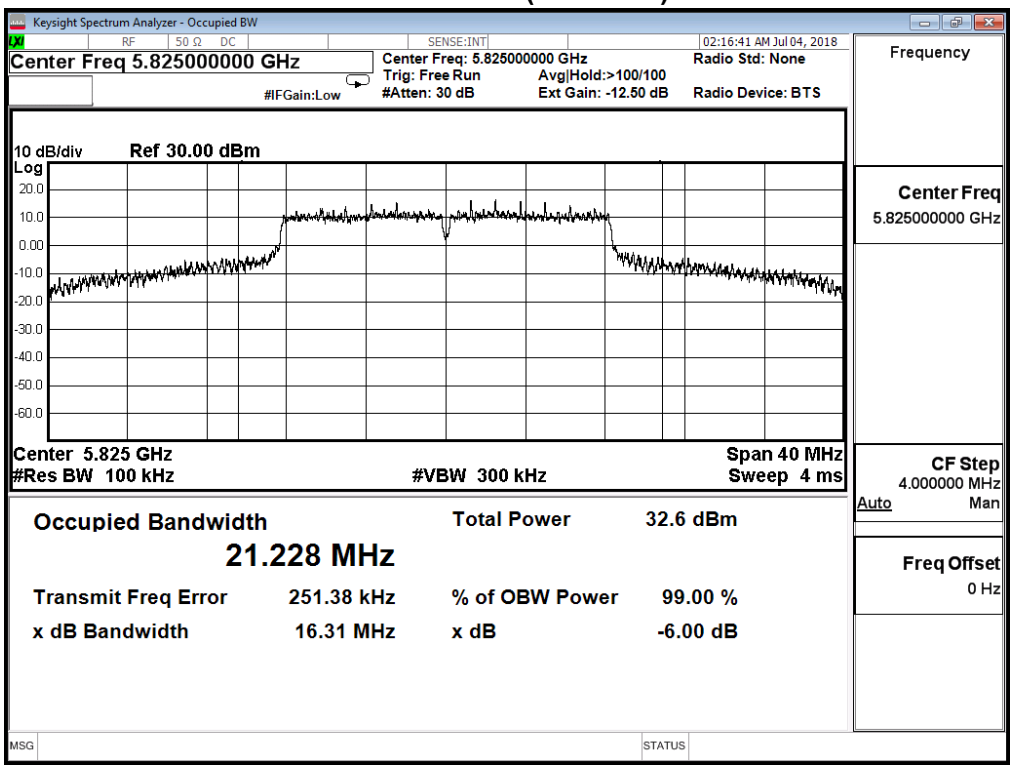
Channel 149 (5745MHz)



Channel 157 (5785MHz)



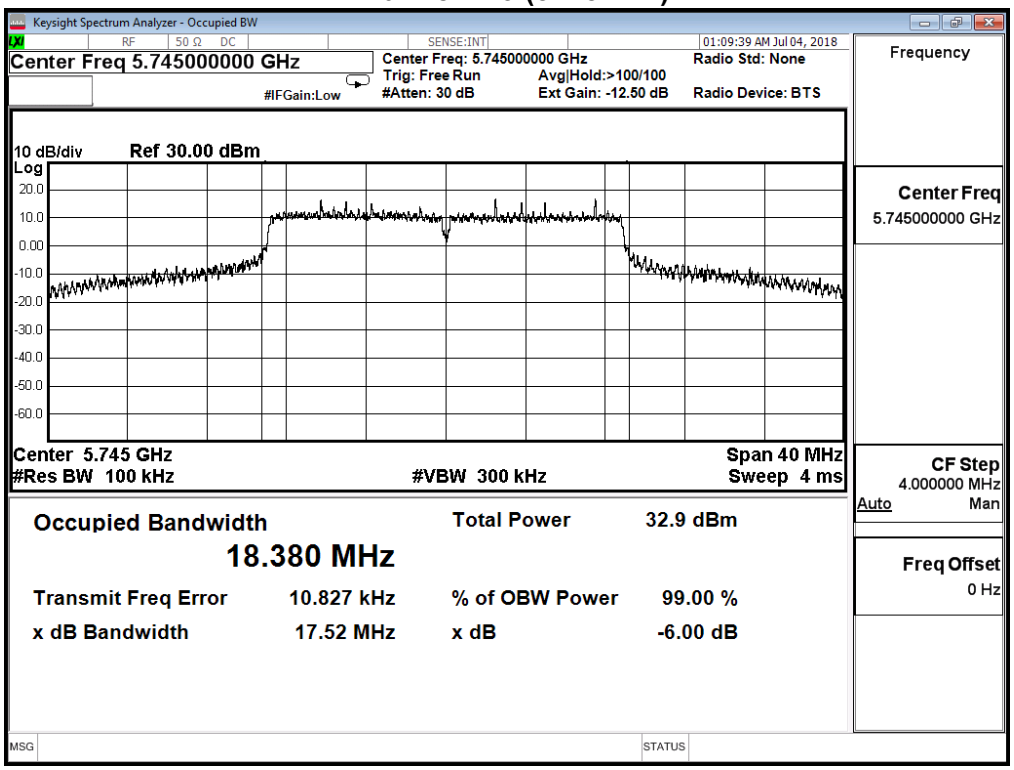
Channel 165 (5825MHz)



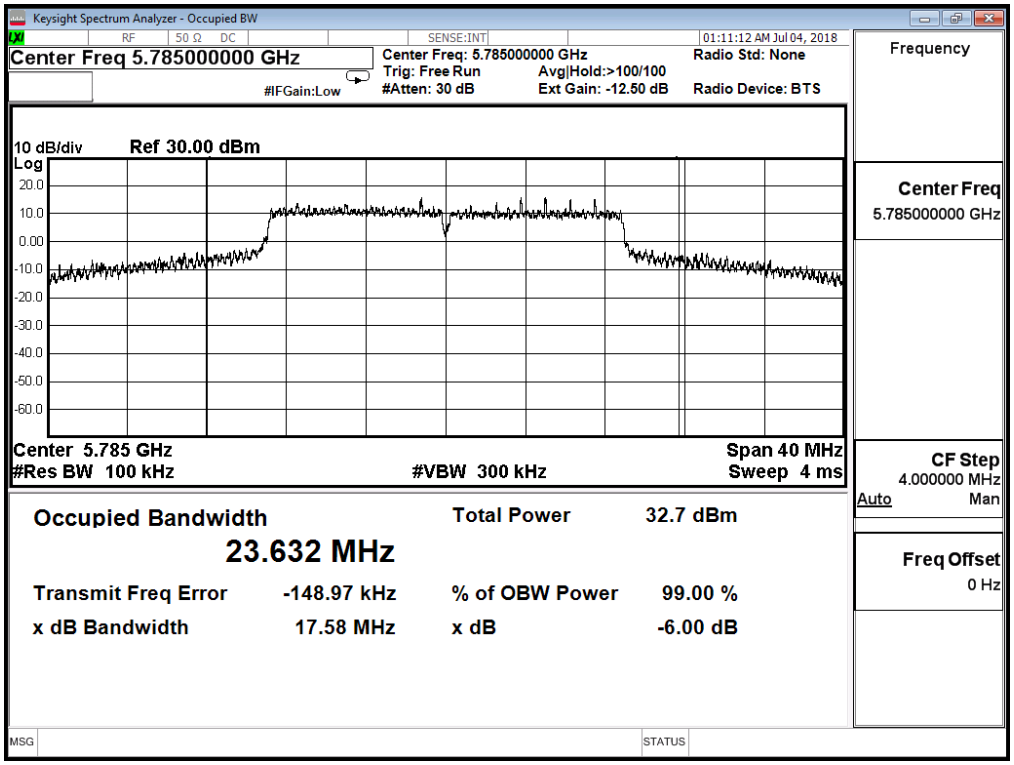
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_20M(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
149	5745	17.520	≧0.5	Pass
157	5785	17.580	≧0.5	Pass
165	5825	17.570	≧0.5	Pass

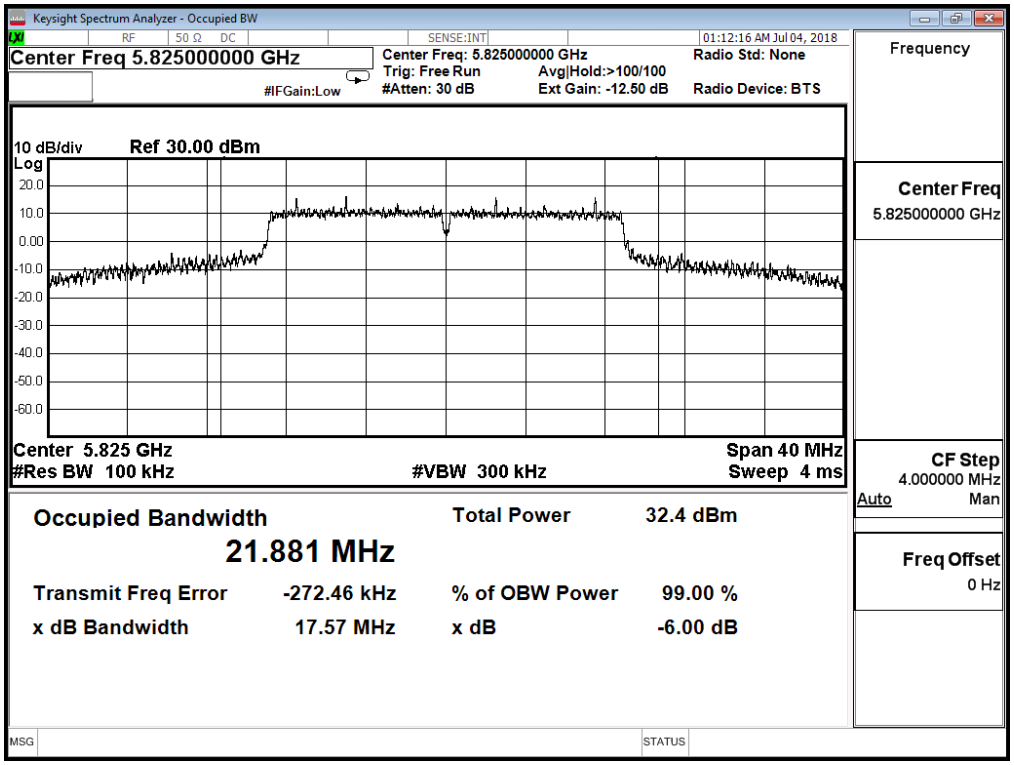
Channel 149 (5745MHz)



Channel 157 (5785MHz)



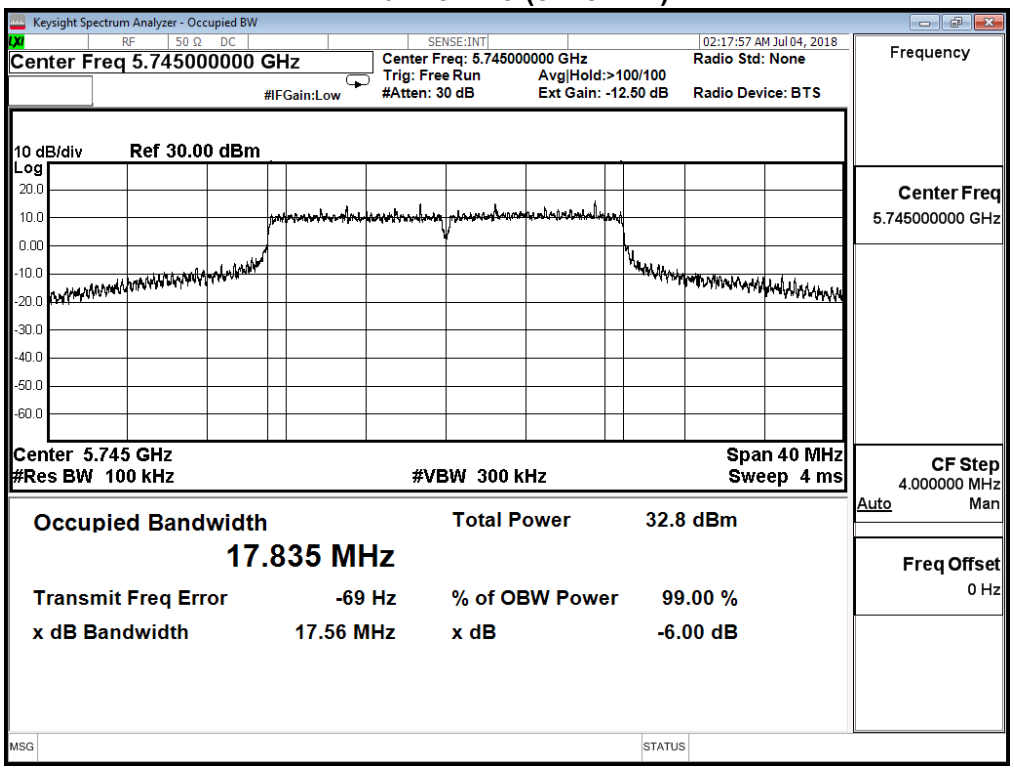
Channel 165 (5825MHz)



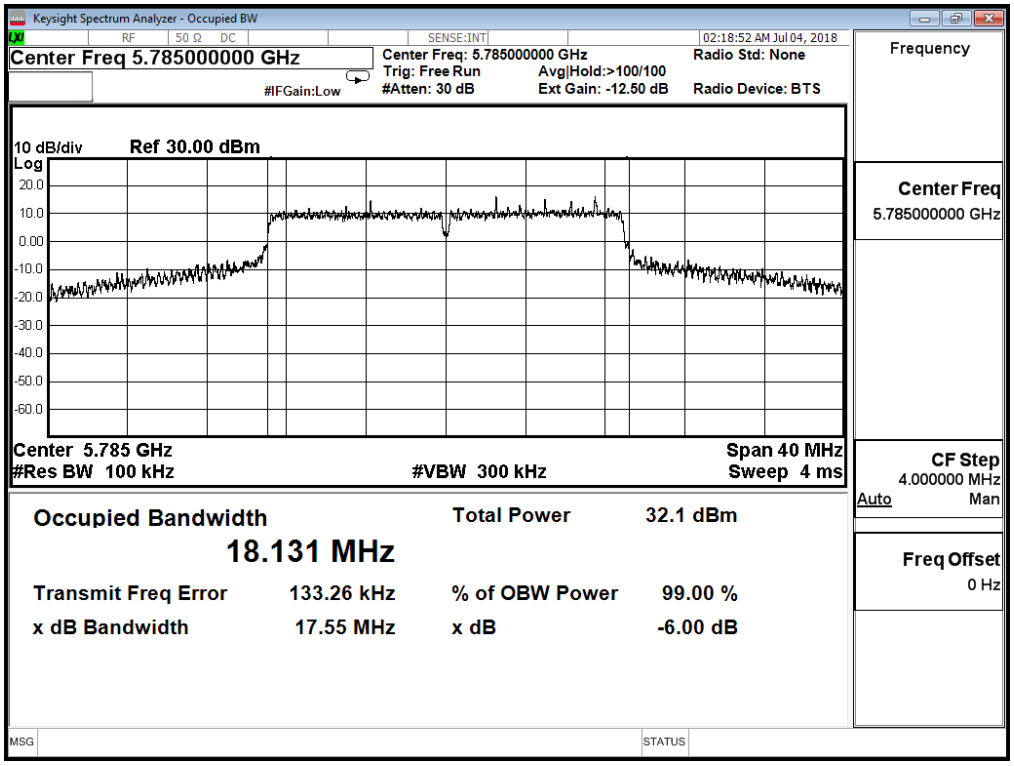
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_20M(ANT 1)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
149	5745	17.560	≧0.5	Pass
157	5785	17.550	≧0.5	Pass
165	5825	17.560	≧0.5	Pass

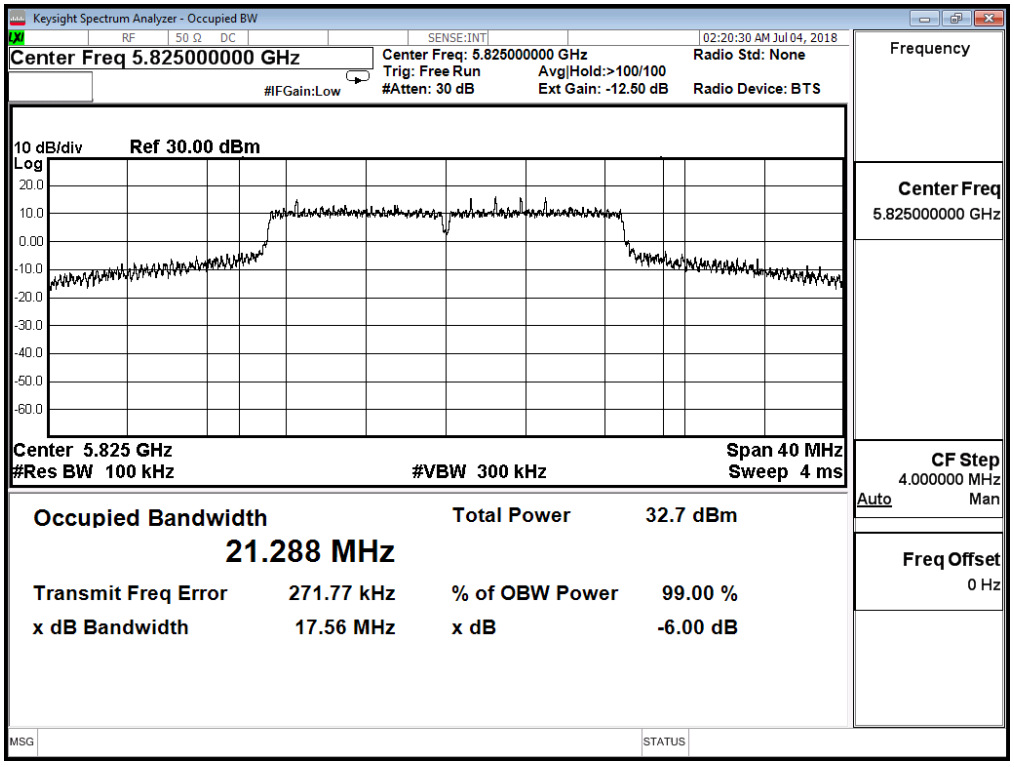
Channel 149 (5745MHz)



Channel 157 (5785MHz)



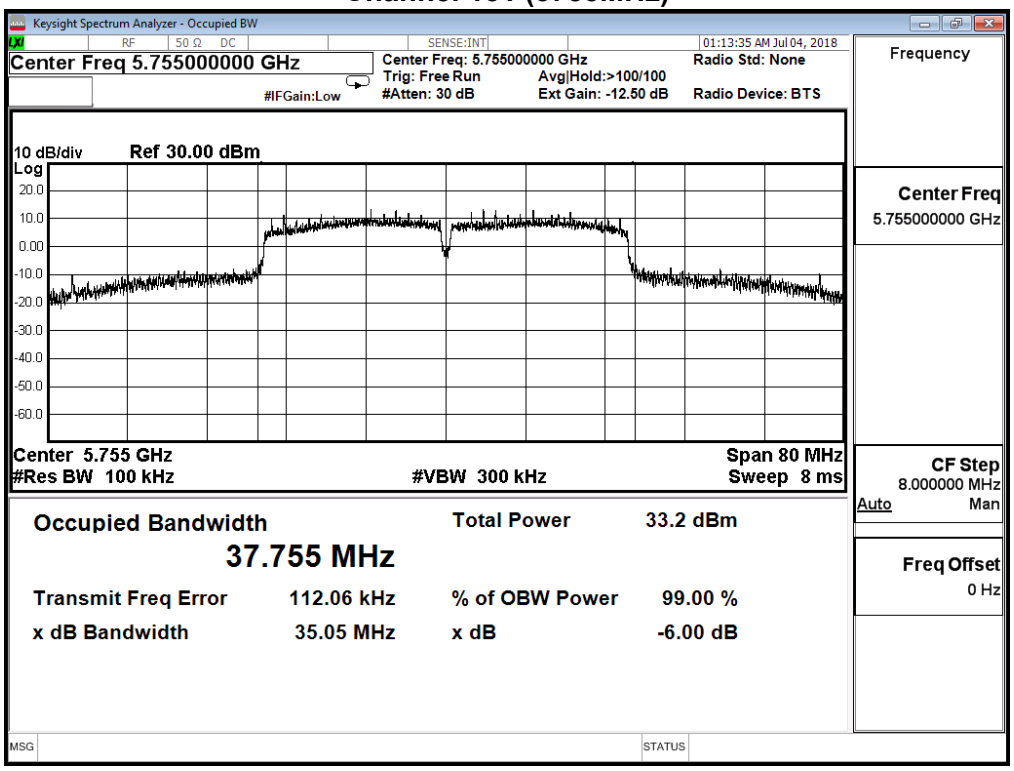
Channel 165 (5825MHz)



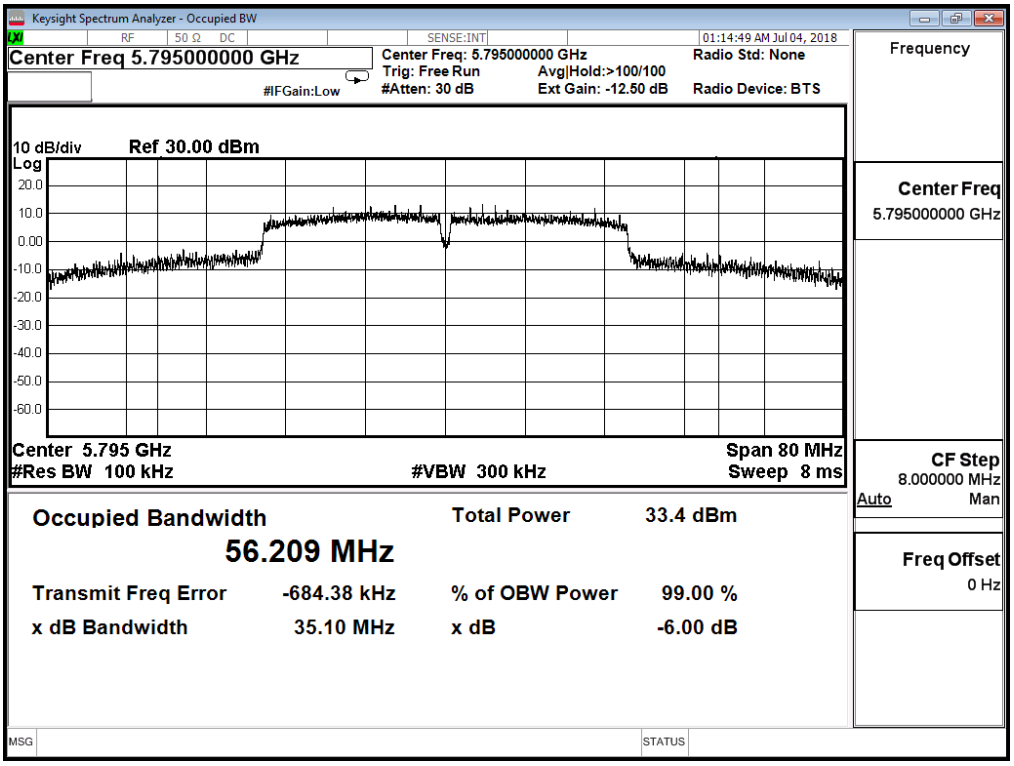
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_40M(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
151	5755	35.050	≧0.5	Pass
159	5795	35.100	≧0.5	Pass

Channel 151 (5755MHz)



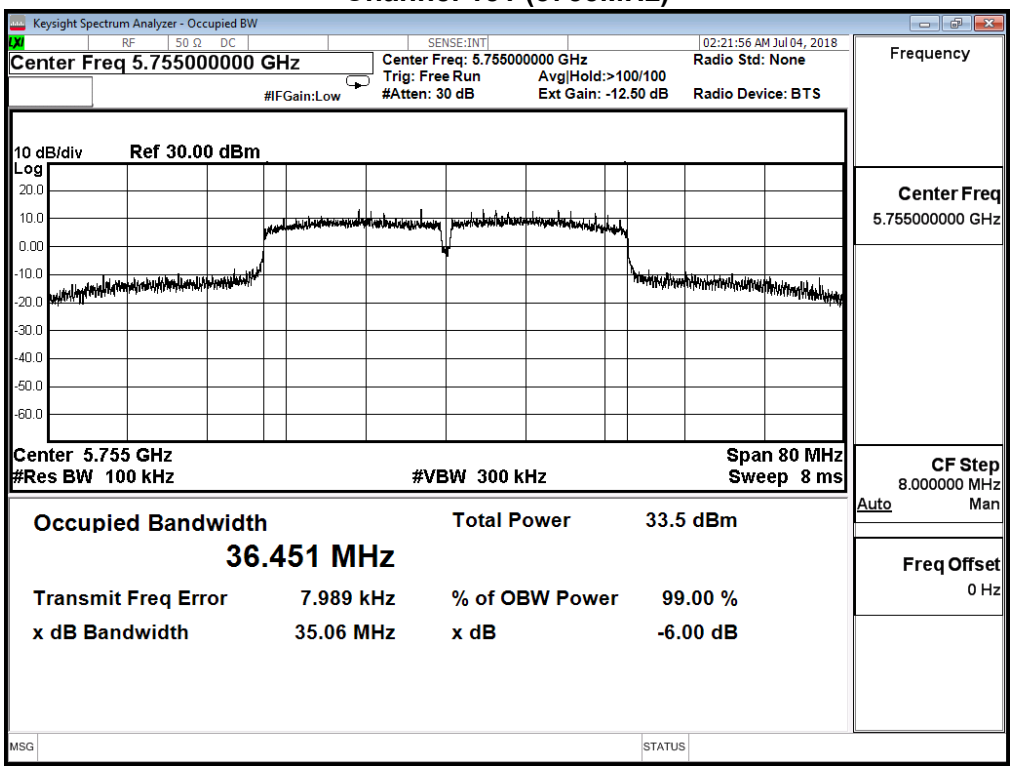
Channel 159 (5795MHz)



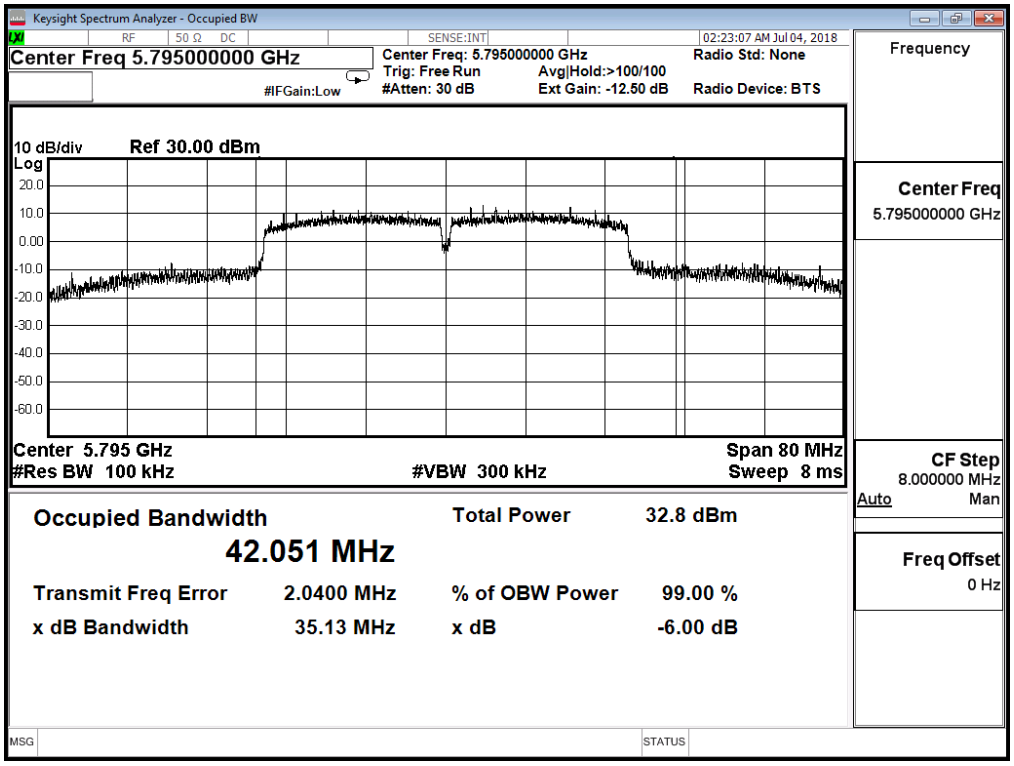
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_40M(ANT 1)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
151	5755	35.060	≧0.5	Pass
159	5795	35.130	≧0.5	Pass

Channel 151 (5755MHz)



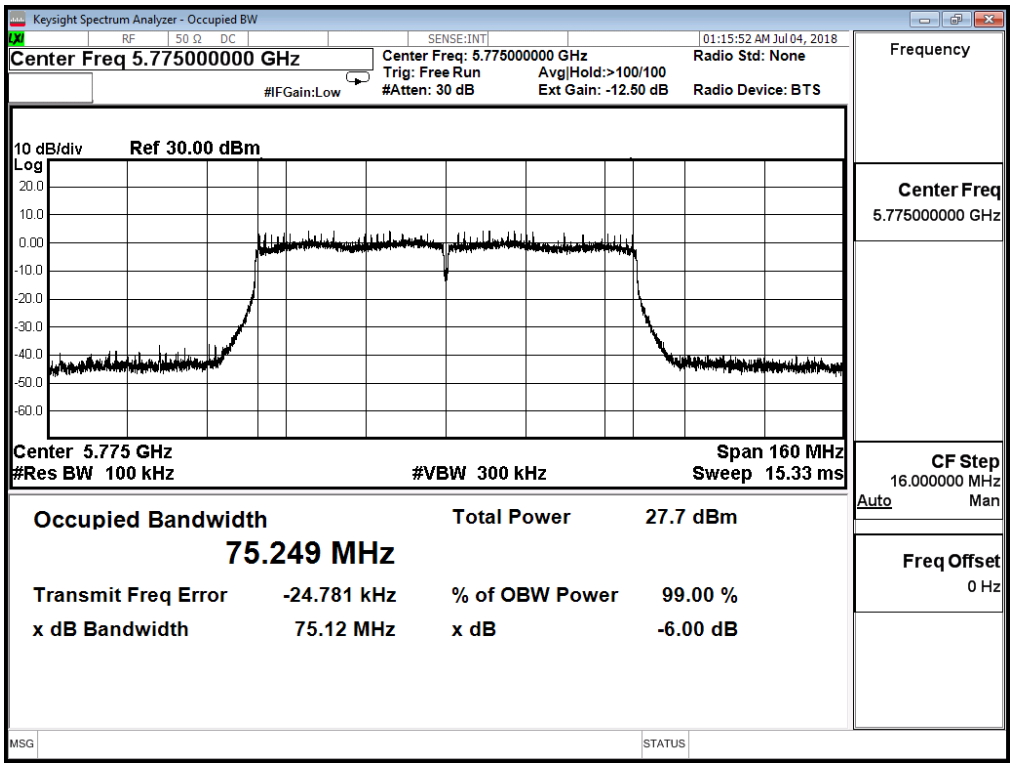
Channel 159 (5795MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac_80M(ANT 0)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
155	5775	75.120	≧0.5	Pass

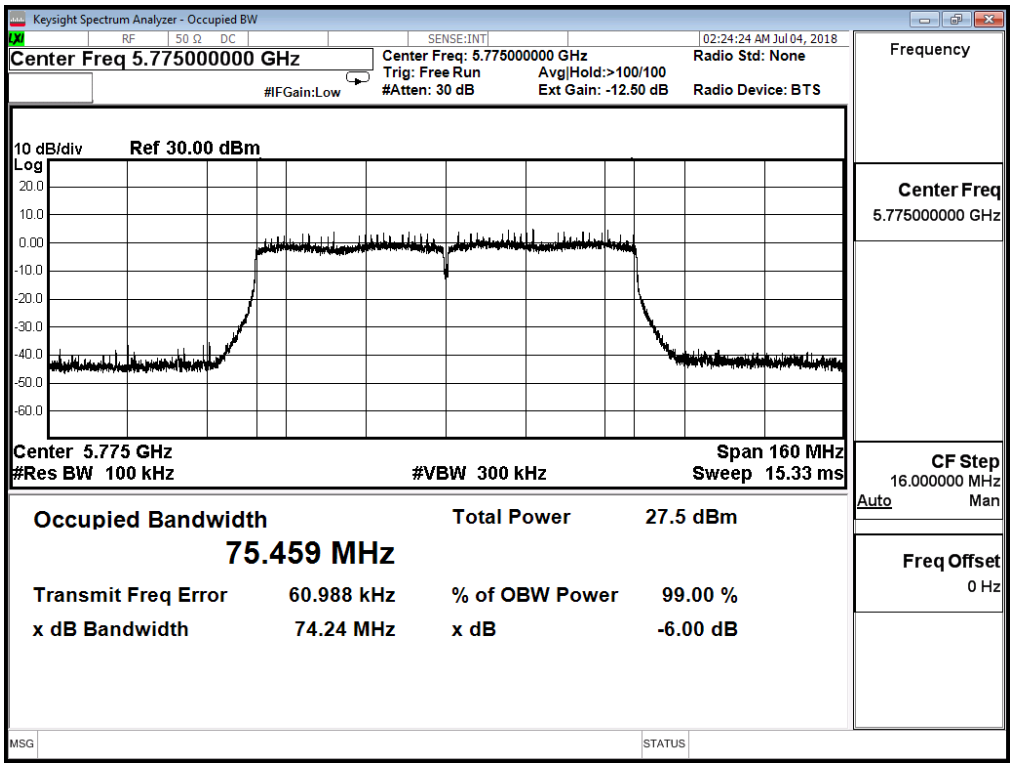
Channel 155 (5775MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	DTS Bandwidth		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

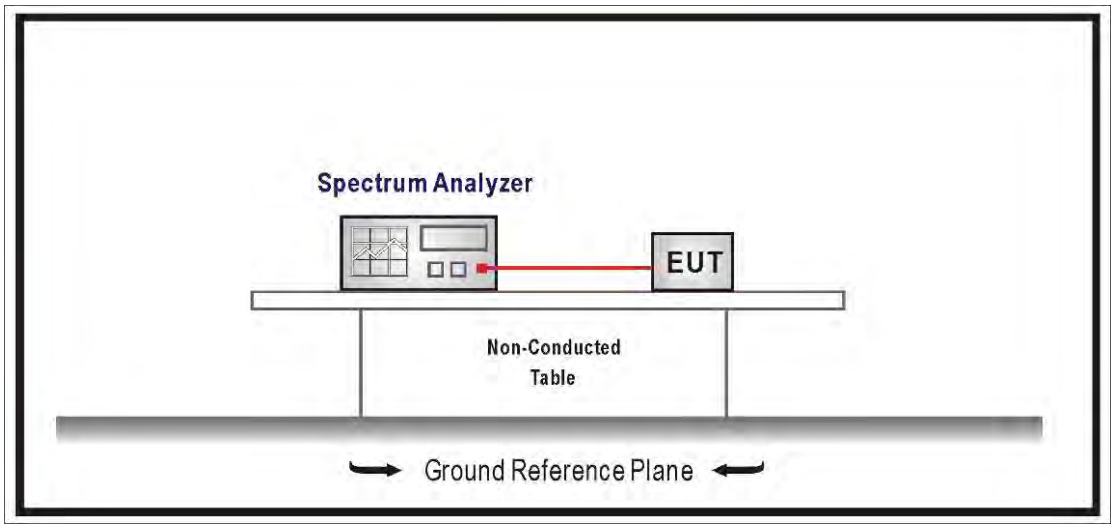
802.11ac_80M(ANT 1)				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
155	5775	74.240	≧0.5	Pass

Channel 155 (5775MHz)



4. Maximum conducted output power

4.1. Test Setup



4.2. Limits

1. For the band 5.15-5.25 GHz, the Maximum conducted output 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 Maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

2. For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. The maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
3. For the band 5.25-5.35 GHz, the Maximum conducted output 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 Maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

4. For the band 5.725-5.850 GHz, the Maximum conducted output 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 Maximum conducted output power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

4.3. Test Procedure

The EUT was setup to ANSI C63.10: 2013; tested to U-NII test procedure of 789033 D01 V01R02 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.

4.4. Test Result

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

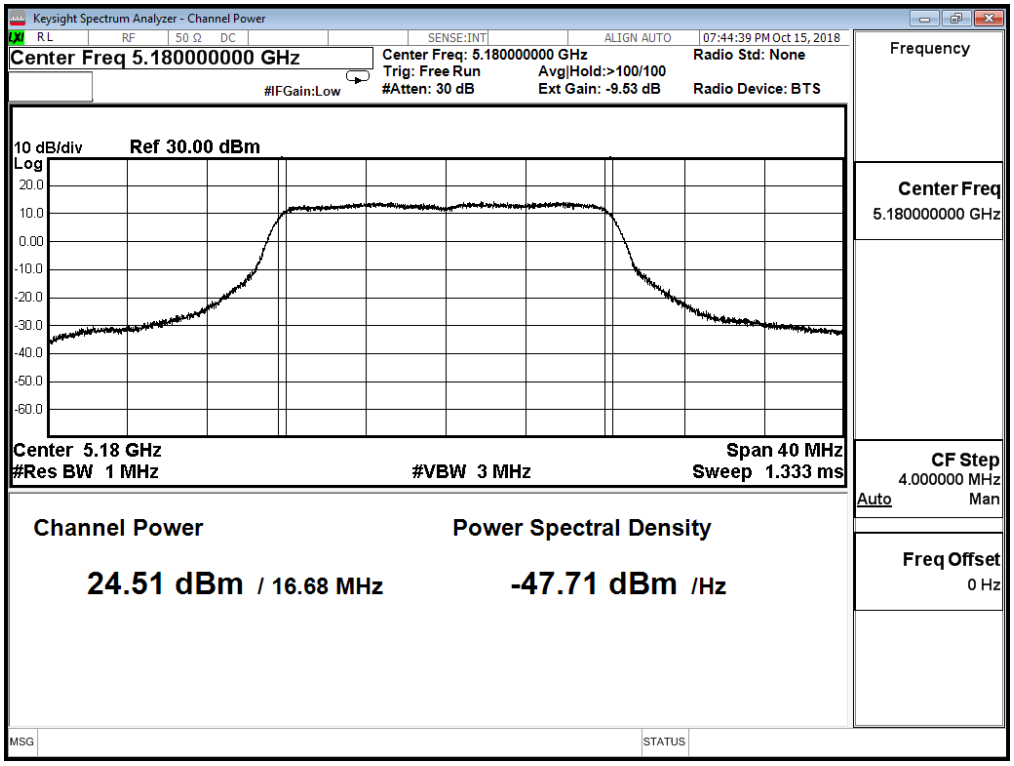
IEEE 802.11a (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	24.510	≦30
44	5220	24.000	≦30
48	5240	24.500	≦30

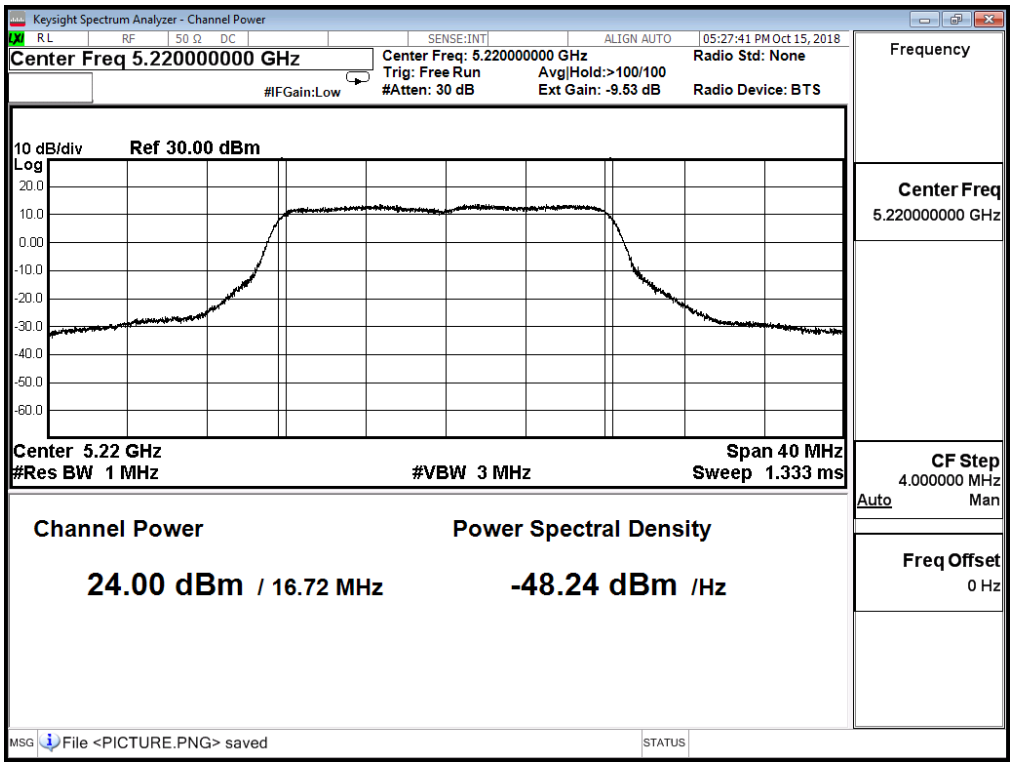
The worst emission of data rate is 6 Mbps.

Maximum conducted output power (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
36	5180	24.510	--	--	--	--	--	--	≦30
44	5220	24.000	23.930	23.860	23.810	23.760	23.720	23.640	
48	5240	24.500	--	--	--	--	--	--	

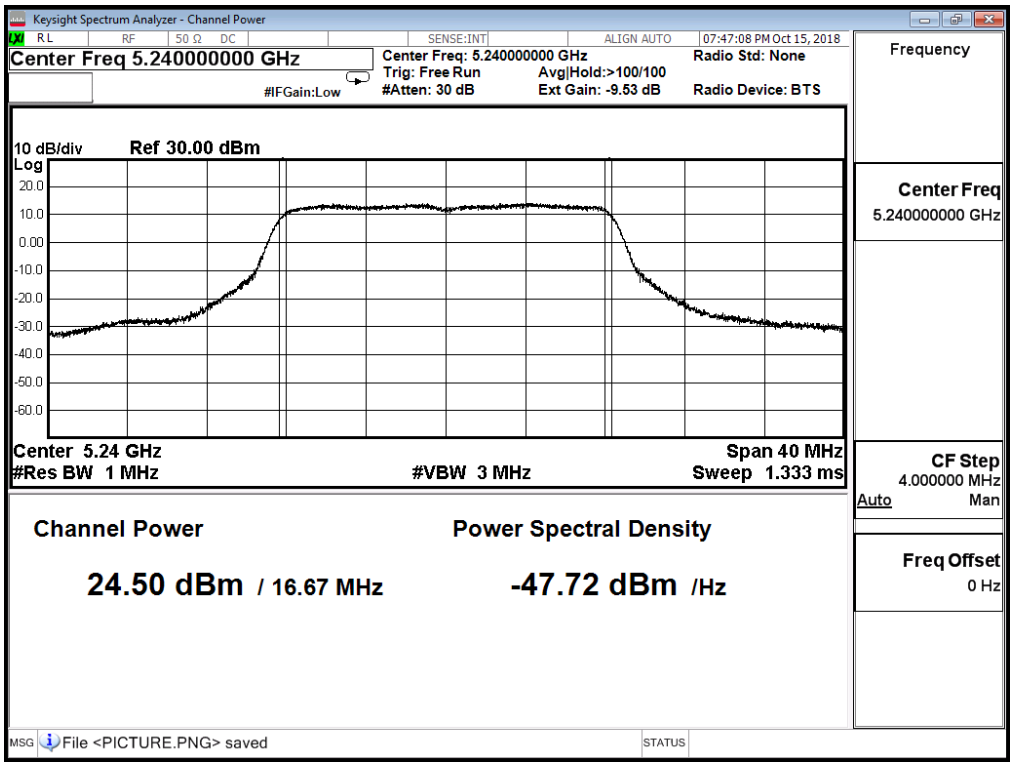
Channel 36



Channel 44



Channel 48



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

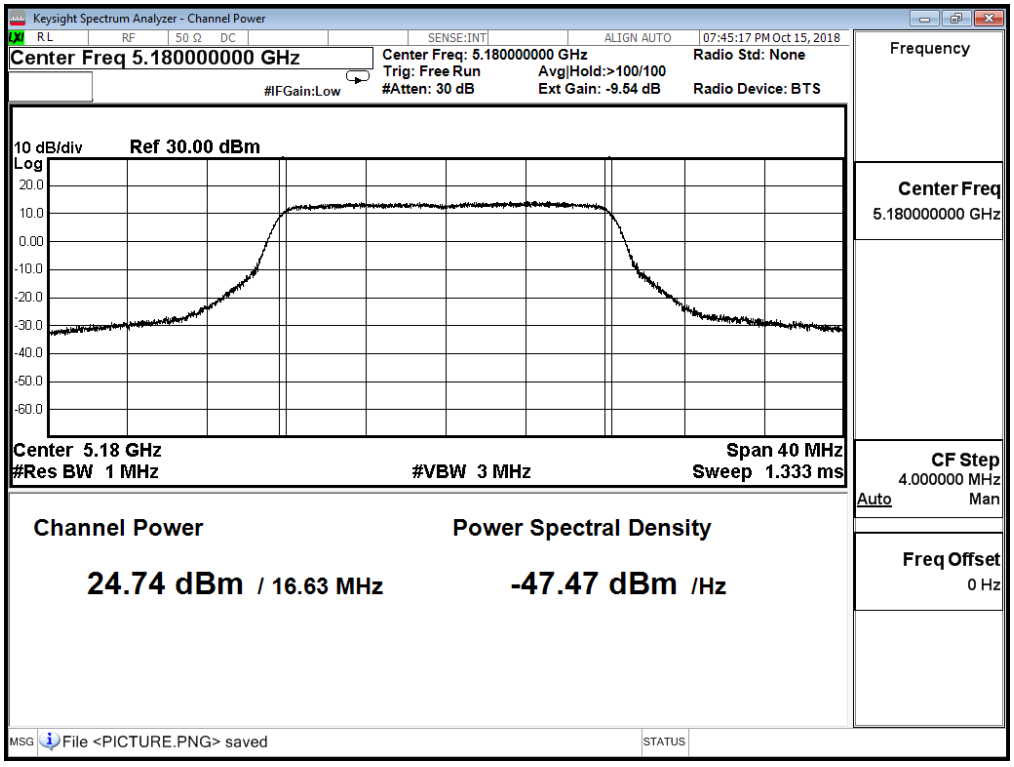
IEEE 802.11a (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	24.740	≦30
44	5220	24.660	≦30
48	5240	24.890	≦30

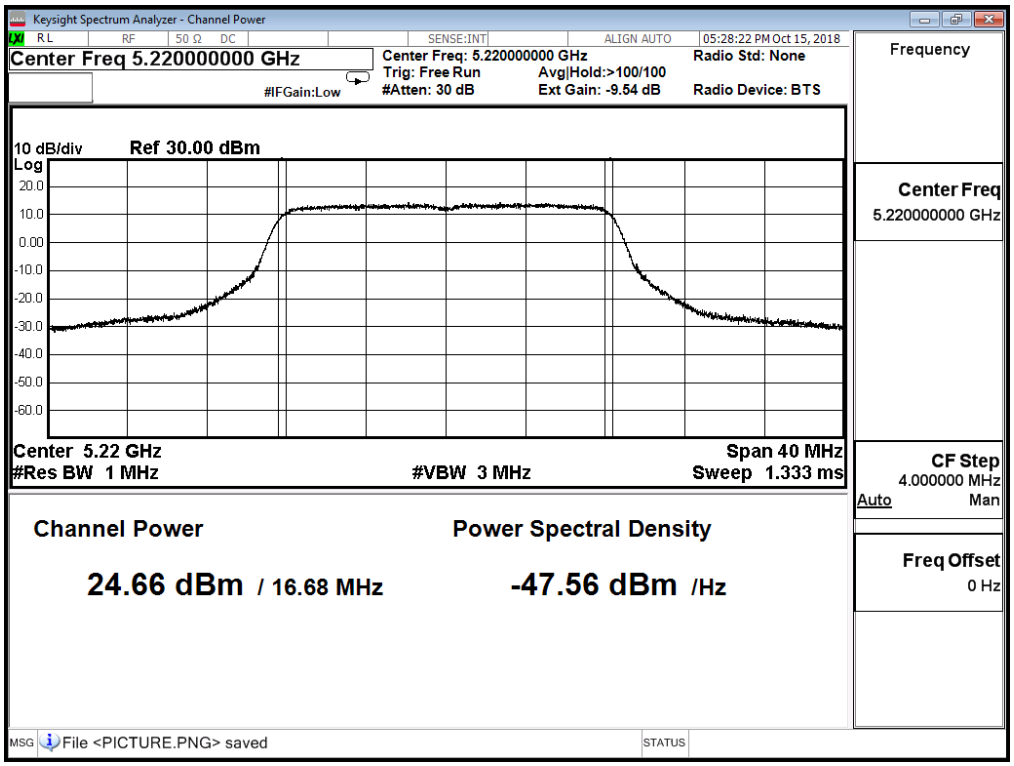
The worst emission of data rate is 6 Mbps.

Maximum conducted output power (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
36	5180	24.740	--	--	--	--	--	--	≦30
44	5220	24.660	24.590	24.520	24.470	24.400	24.360	24.280	
48	5240	24.890	--	--	--	--	--	--	

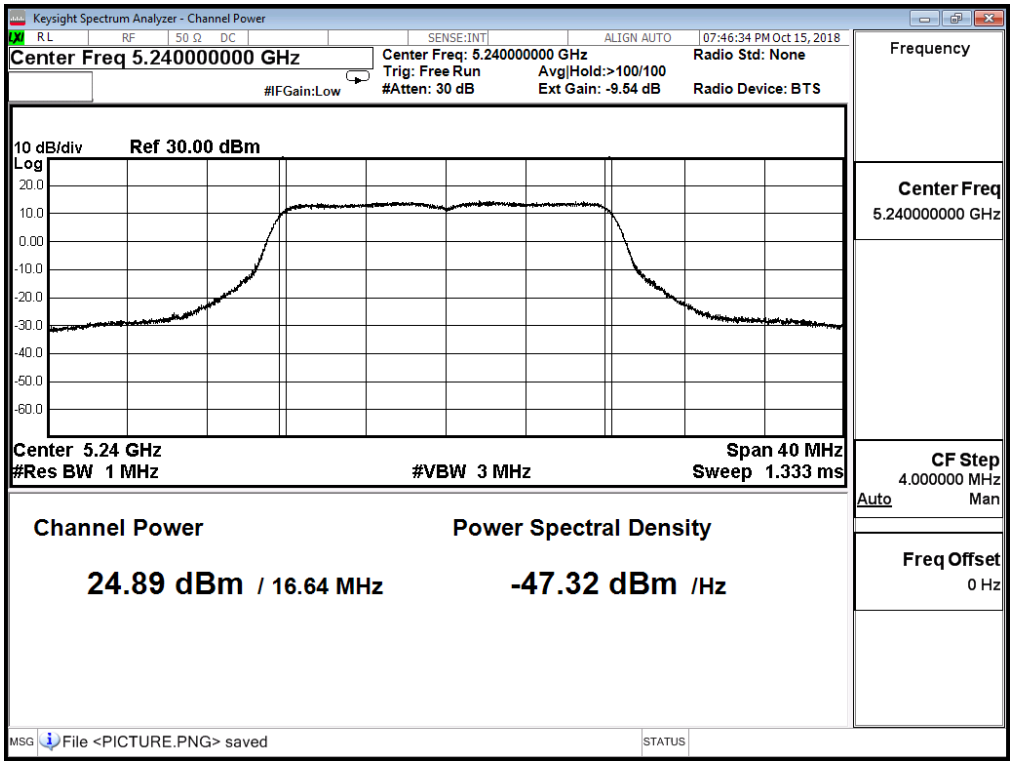
Channel 36



Channel 44



Channel 48



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11a (ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	27.637	≦30
44	5220	27.353	≦30
48	5240	27.710	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

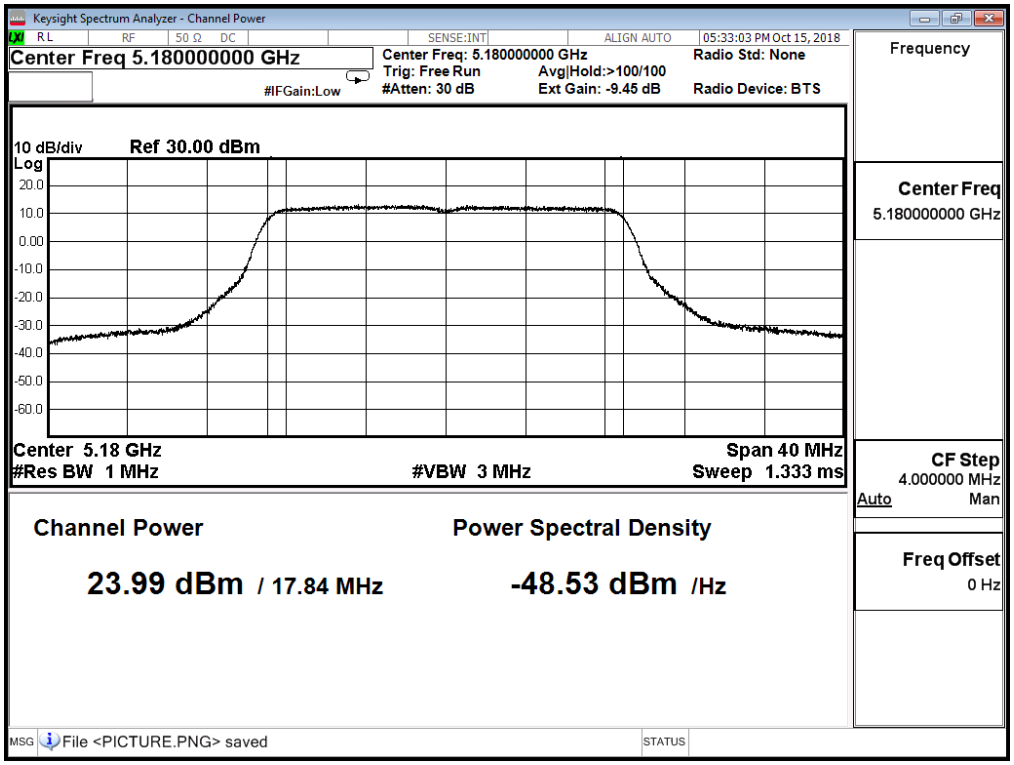
IEEE 802.11ac(20MHz)(ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	23.990	≦30
44	5220	24.120	≦30
48	5240	24.410	≦30

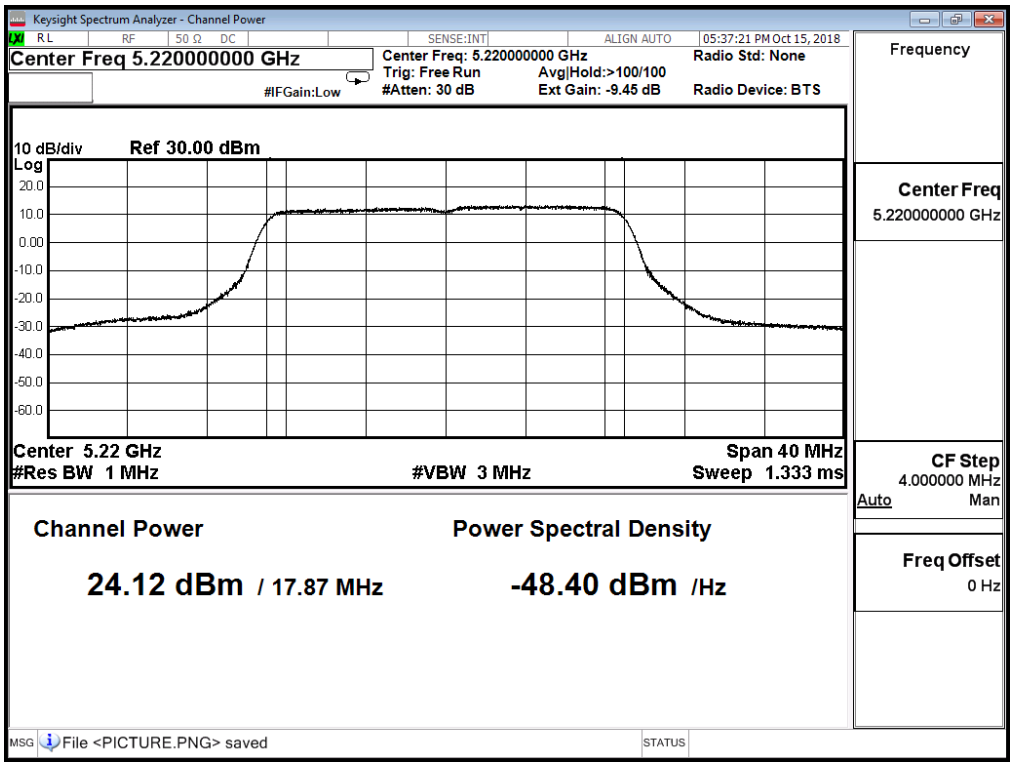
The worst emission of data rate is MCS0

Channel No	Frequency (MHz)	MCS Index									Required Limit
		0	1	2	3	4	5	6	7	8	
36	5180	23.990	--	--	--	--	--	--	--	--	≦30
44	5220	24.120	24.090	24.030	23.990	23.940	23.900	23.830	23.780	23.750	
48	5240	24.410	--	--	--	--	--	--	--	--	

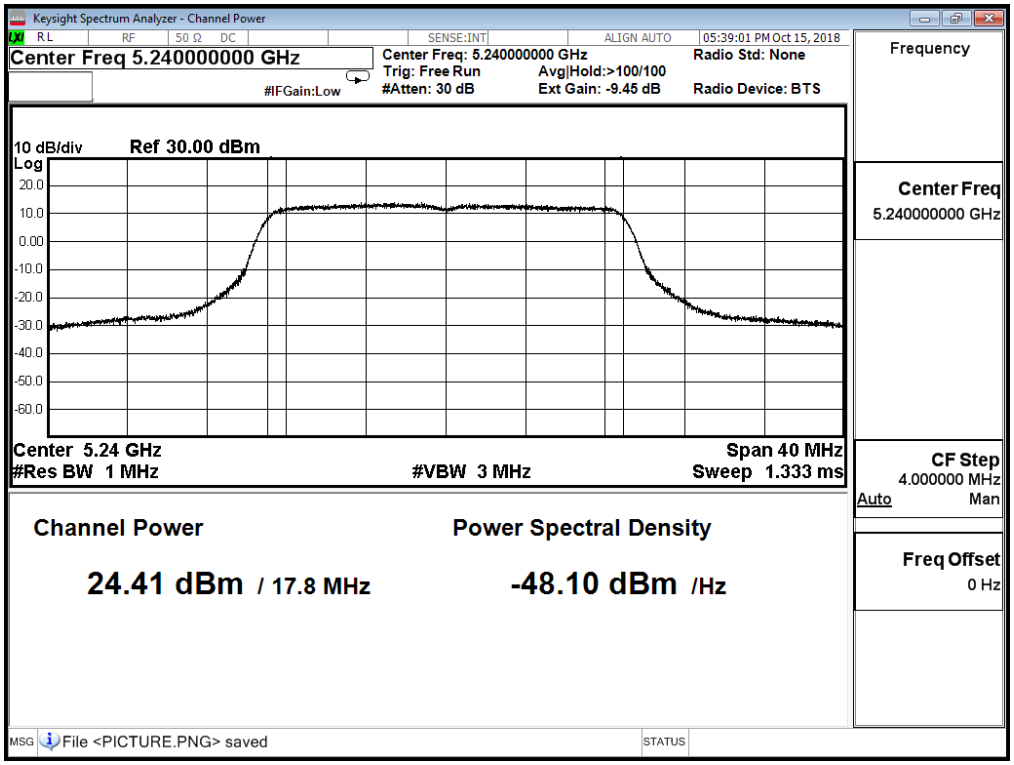
Channel 36



Channel 44



Channel 48



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

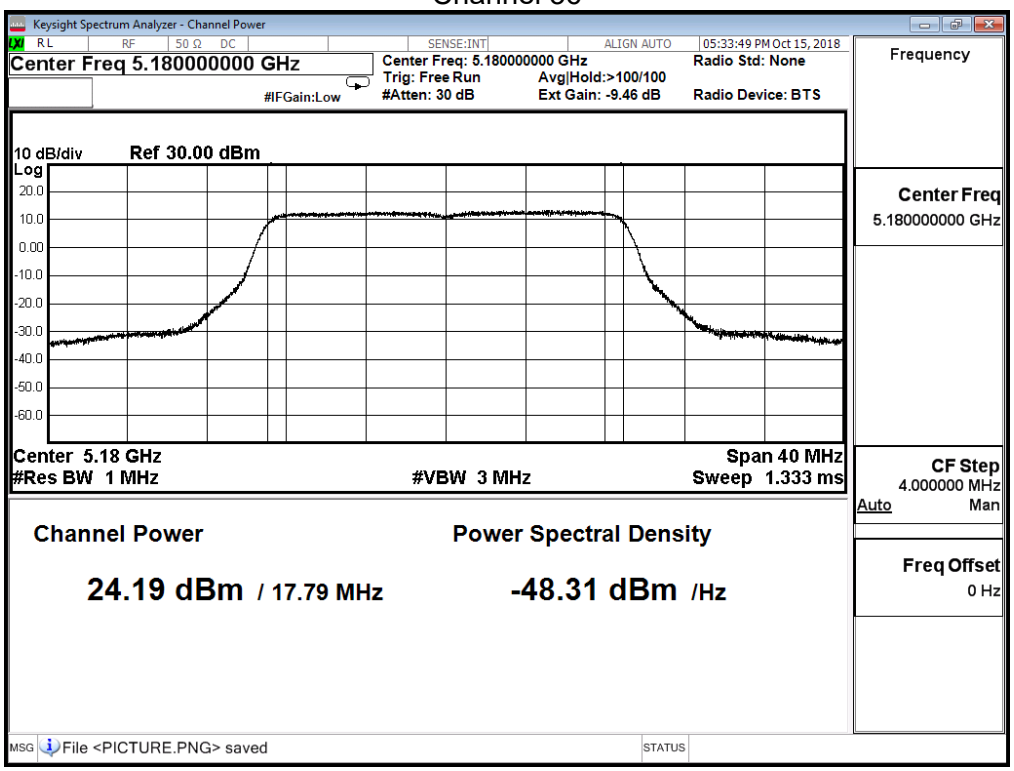
IEEE 802.11ac(20MHz)(ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	24.190	≦30
44	5220	24.810	≦30
48	5240	24.840	≦30

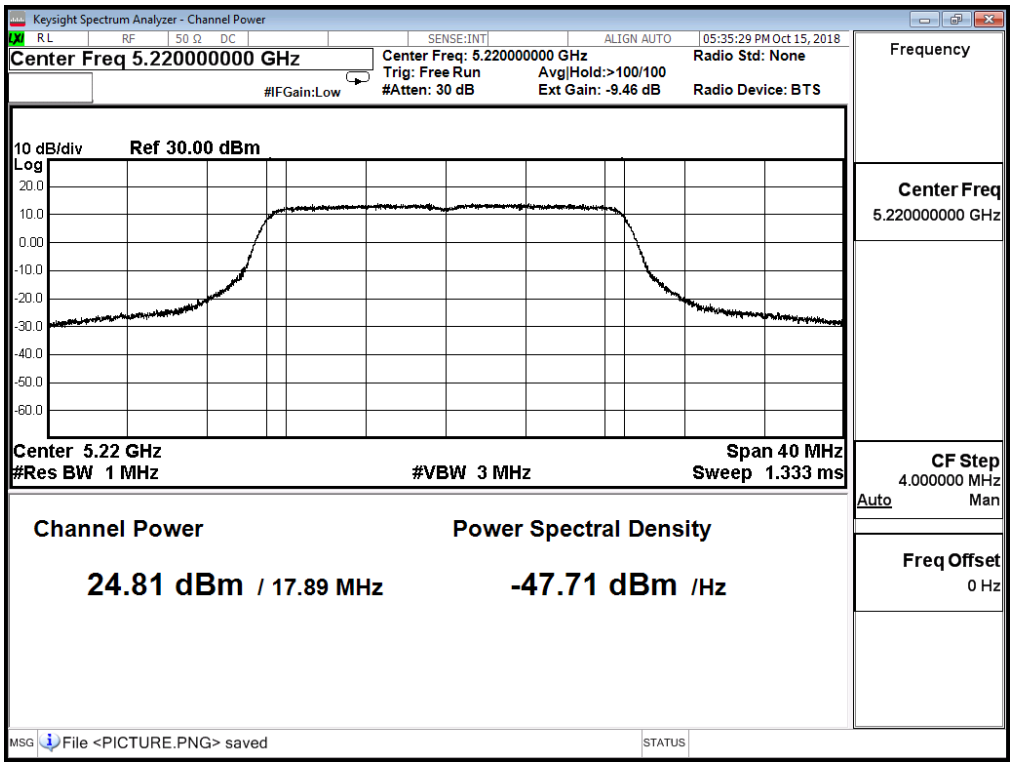
The worst emission of data rate is MCS0

Channel No	Frequency (MHz)	MCS Index									Required Limit
		0	1	2	3	4	5	6	7	8	
36	5180	24.190	--	--	--	--	--	--	--	--	≦30
44	5220	24.810	24.770	24.700	24.670	24.620	24.580	24.500	24.450	24.420	
48	5240	24.840	--	--	--	--	--	--	--	--	

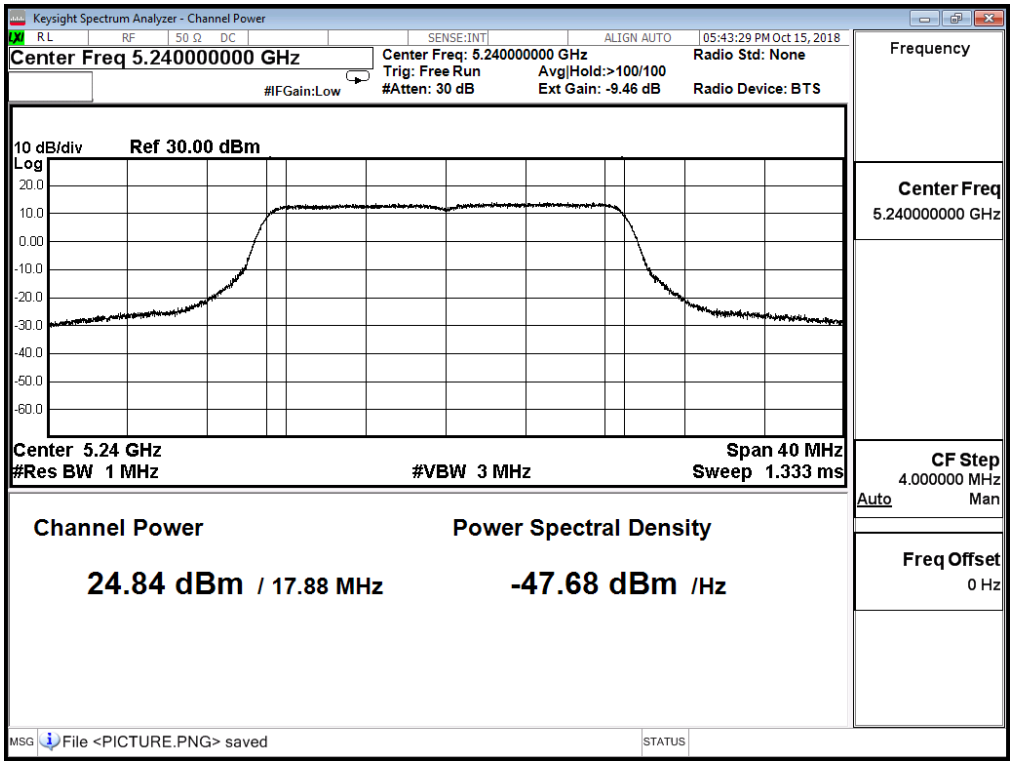
Channel 36



Channel 44



Channel 48



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(20MHz)(ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	27.101	≦30
44	5220	27.489	≦30
48	5240	27.641	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

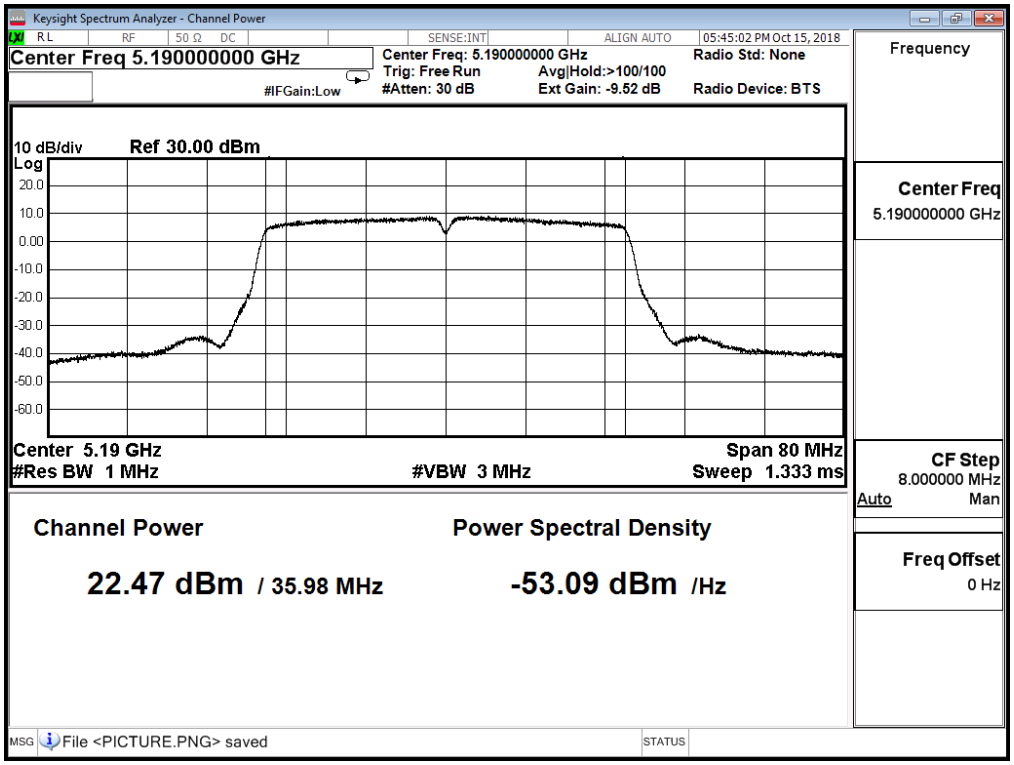
IEEE 802.11ac(40MHz)(ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	22.470	≦30
46	5230	25.830	≦30

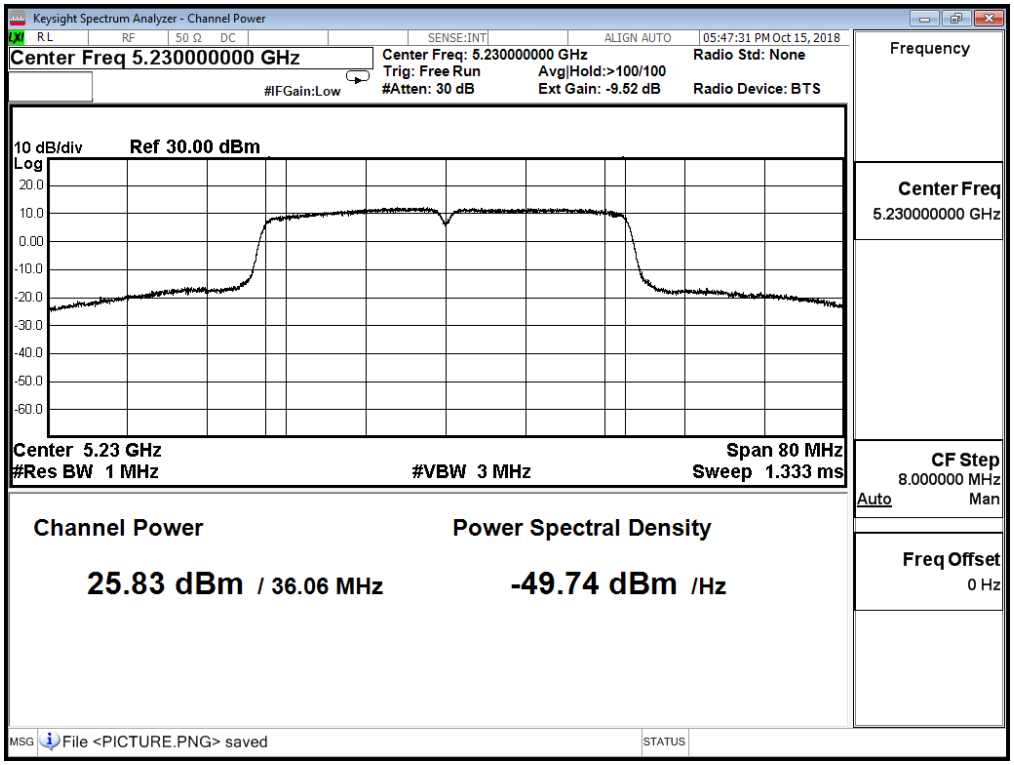
The worst emission of data rate is MCS 0

Channel No	Frequency (MHz)	MCS Index										Required Limit
		0	1	2	3	4	5	6	7	8	9	
38	5190	22.470	--	--	--	--	--	--	--	--	--	≦30
46	5230	25.830	25.800	25.750	25.710	25.670	25.610	25.580	25.520	25.500	25.440	

Channel 38



Channel 46


Keysight Spectrum Analyzer - Channel Power
RL
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
05:47:31 PM Oct 15, 2018
Center Freq 5.230000000 GHz
#IFGain:Low
Center Freq: 5.230000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -9.52 dB
Radio Std: None
Radio Device: BTS
Frequency
10 dB/div
Ref 30.00 dBm
Log
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Center Freq
5.230000000 GHz
Center 5.23 GHz
#Res BW 1 MHz
#VBW 3 MHz
Span 80 MHz
Sweep 1.333 ms
CF Step
8.000000 MHz
Auto
Man
Channel Power
25.83 dBm / 36.06 MHz
Power Spectral Density
-49.74 dBm /Hz
Freq Offset
0 Hz
MSG
File <PICTURE.PNG> saved
STATUS

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

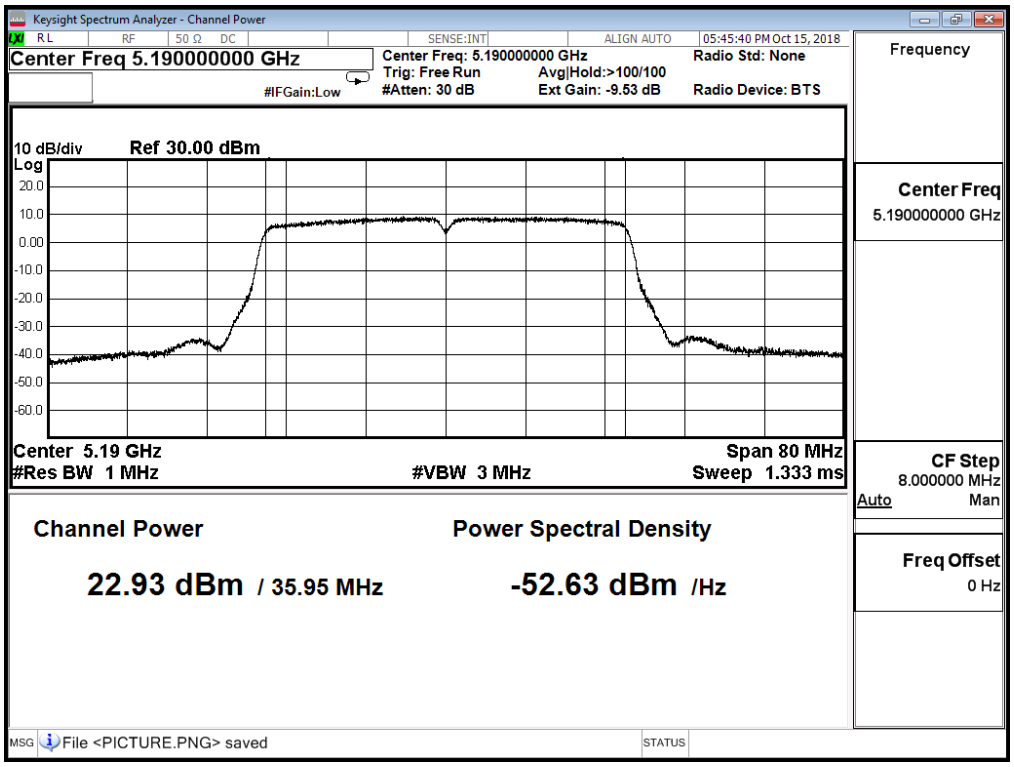
IEEE 802.11ac(40MHz)(ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	22.930	≦30
46	5230	26.220	≦30

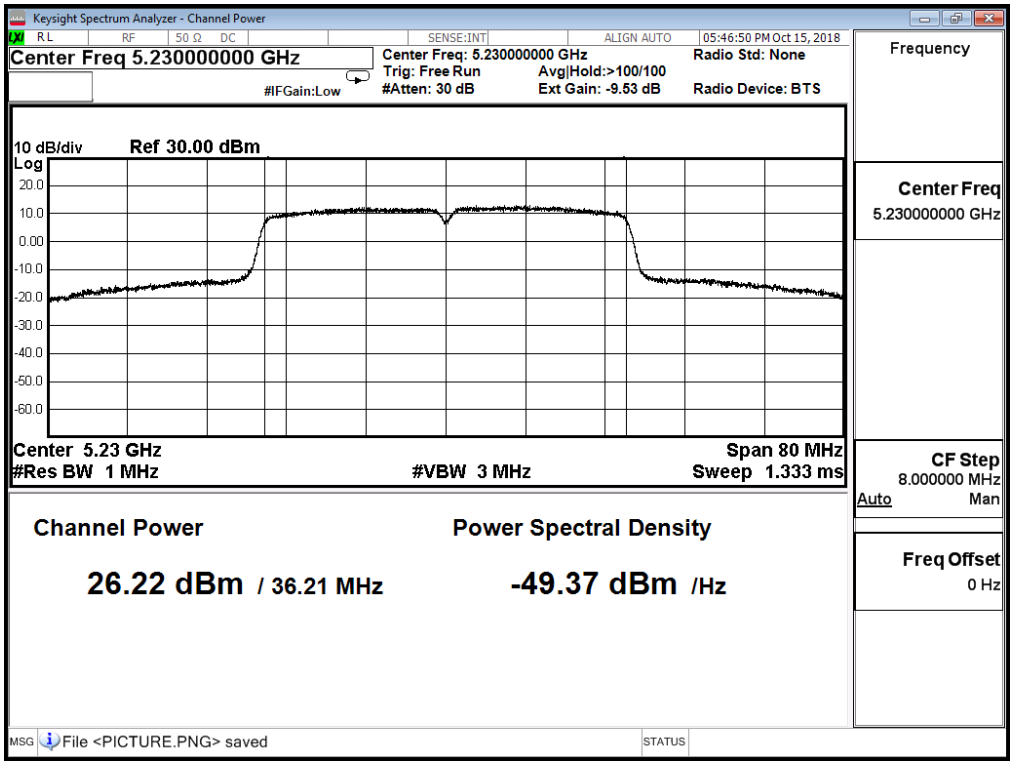
The worst emission of data rate is MCS 0

Channel No	Frequency (MHz)	MCS Index										Required Limit
		0	1	2	3	4	5	6	7	8	9	
38	5190	22.930	--	--	--	--	--	--	--	--	--	≦30
46	5230	26.220	26.200	26.140	26.100	26.040	26.000	25.960	25.920	25.890	25.800	

Channel 38



Channel 46


Keysight Spectrum Analyzer - Channel Power
RL
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
05:46:50 PM Oct 15, 2018
Center Freq 5.230000000 GHz
#IFGain:Low
Center Freq: 5.230000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -9.53 dB
Radio Std: None
Radio Device: BTS
Frequency
10 dB/div
Ref 30.00 dBm
Log
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Center Freq
5.230000000 GHz
Center 5.23 GHz
#Res BW 1 MHz
#VBW 3 MHz
Span 80 MHz
Sweep 1.333 ms
CF Step
8.000000 MHz
Auto
Man
Channel Power
26.22 dBm / 36.21 MHz
Power Spectral Density
-49.37 dBm /Hz
Freq Offset
0 Hz
MSG
File <PICTURE.PNG> saved
STATUS

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(40MHz)(ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	25.716	≦30
46	5230	29.040	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

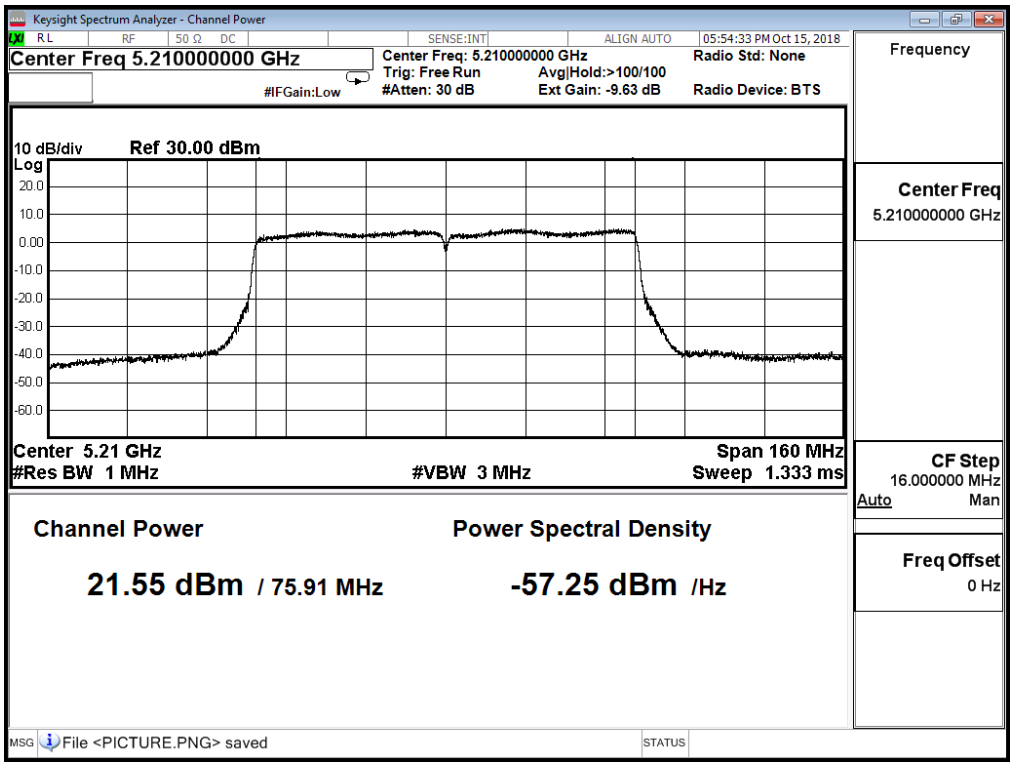
IEEE 802.11ac(80MHz) (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	21.550	≦30

The worst emission of data rate is MCS0

Channel No	Frequency (MHz)	MCS Index										Required Limit
		0	1	2	3	4	5	6	7	8	9	
42	5210	21.550	21.520	21.470	21.430	21.370	21.330	21.300	21.250	21.220	21.160	≦30

Channel 42



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

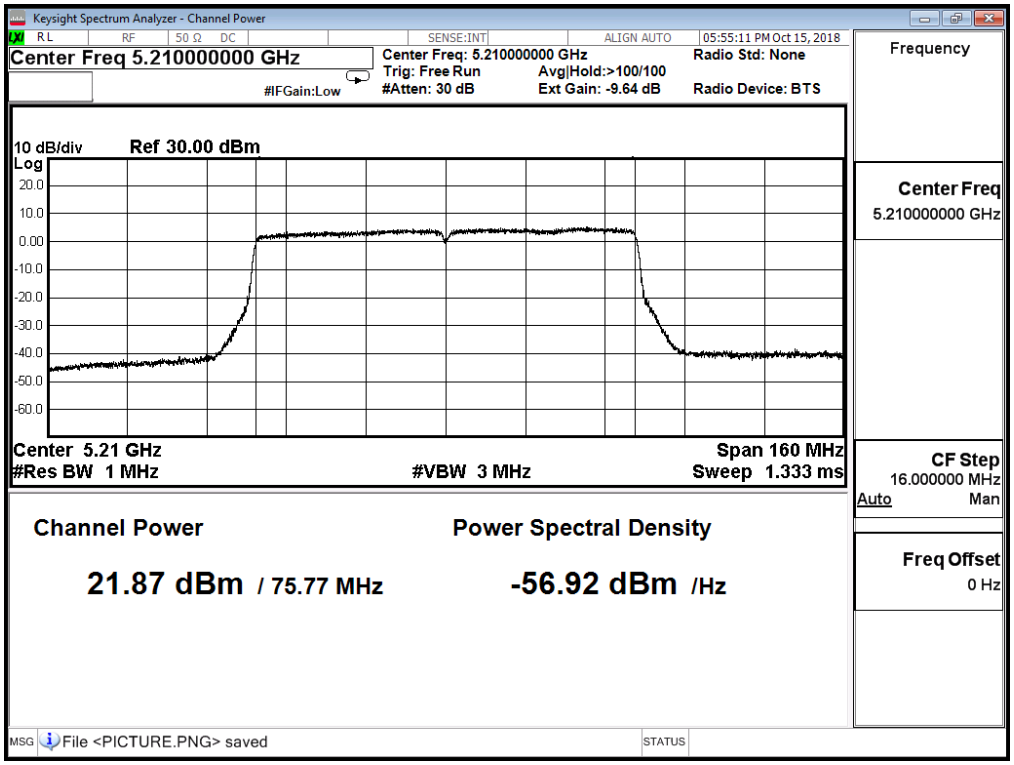
IEEE 802.11ac(80MHz) (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	21.870	≦30

The worst emission of data rate is MCS0

Channel No	Frequency (MHz)	MCS Index										Required Limit
		0	1	2	3	4	5	6	7	8	9	
42	5210	21.870	21.830	21.790	21.750	21.680	21.650	21.620	21.560	21.530	21.450	≦30

Channel 42



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(80MHz)(ANT 0+1)

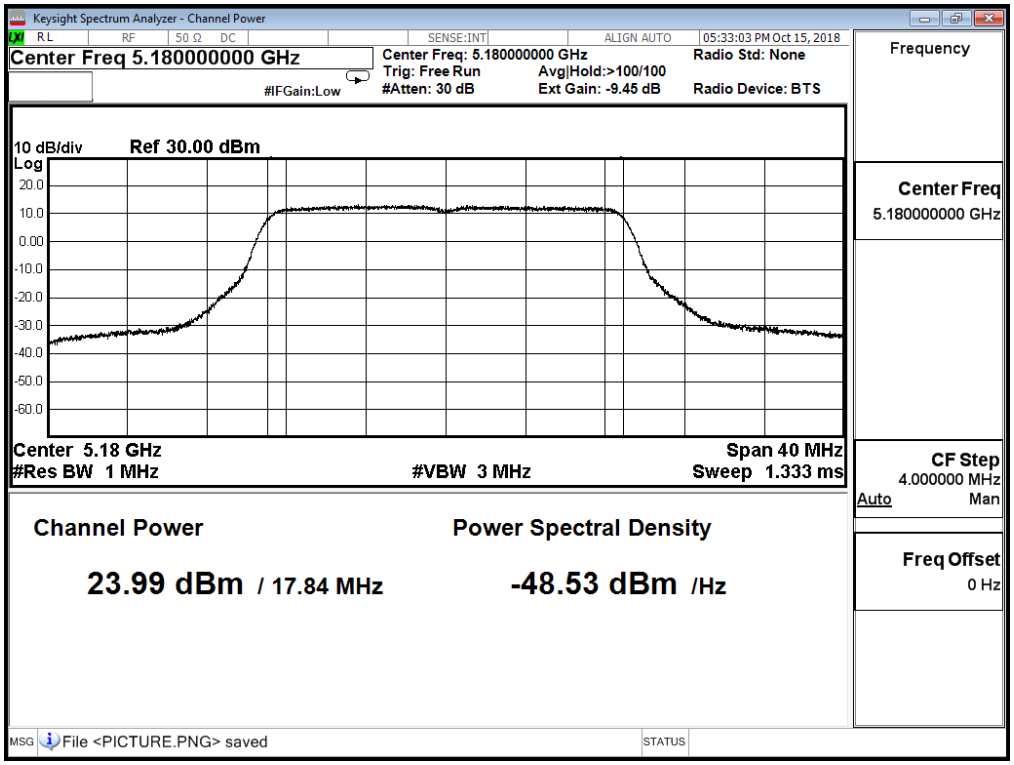
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	24.723	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

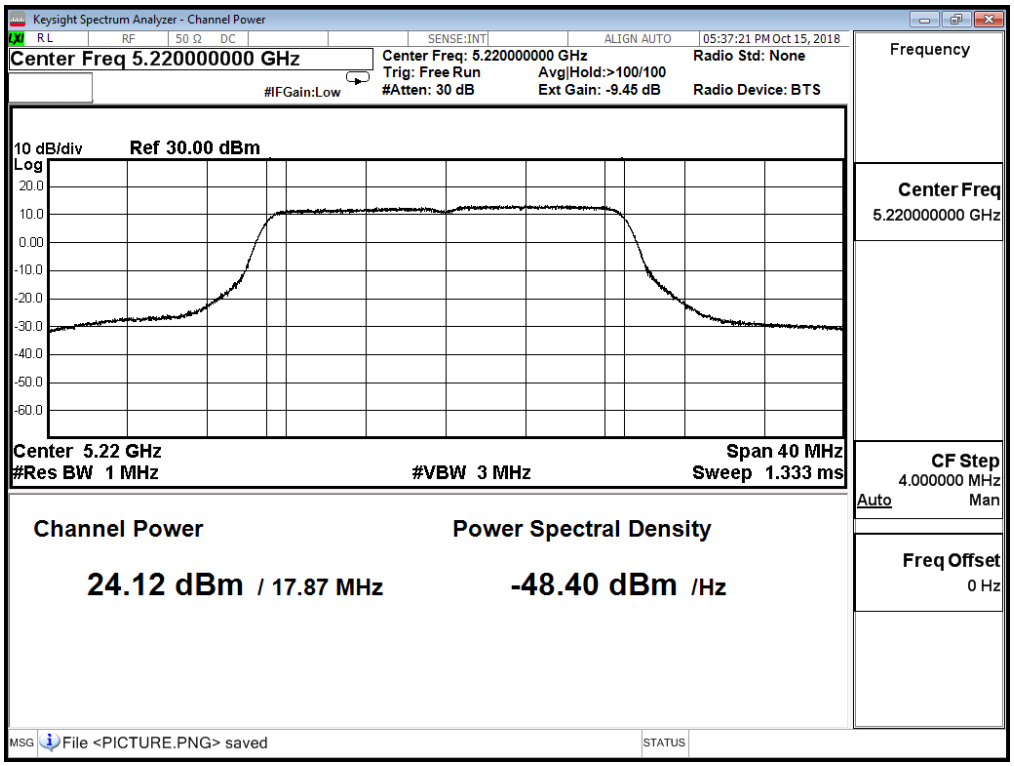
IEEE 802.11ac(20MHz)(ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	23.990	≦30
44	5220	24.120	≦30
48	5240	24.410	≦30

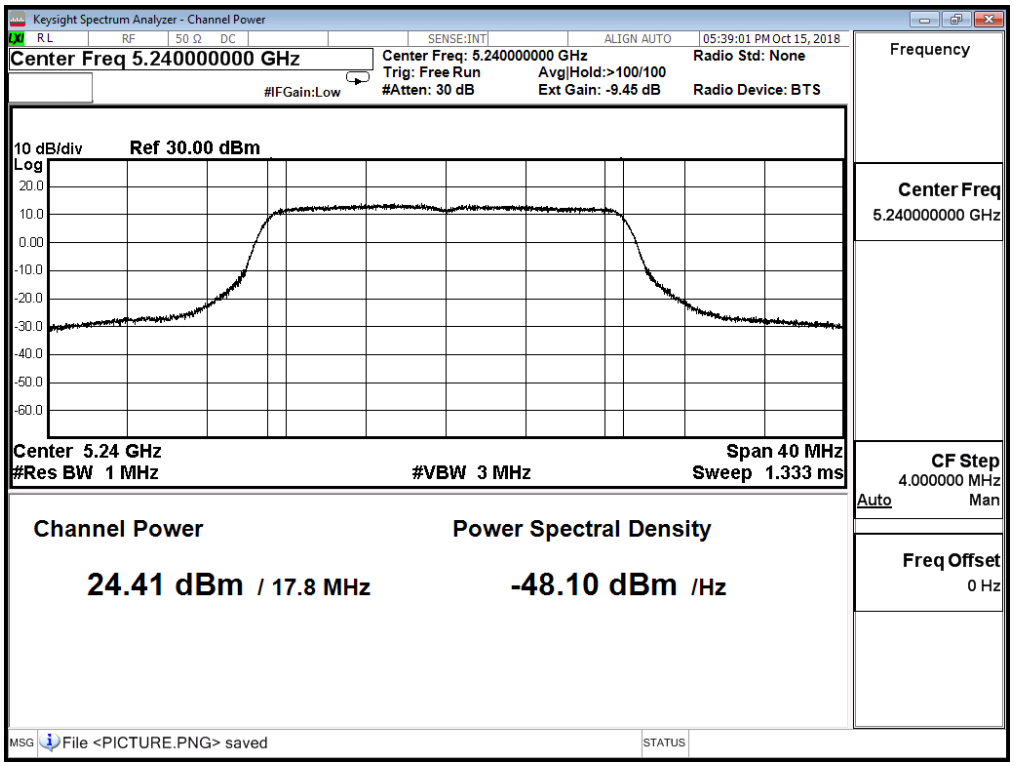
Channel 36



Channel 44



Channel 48

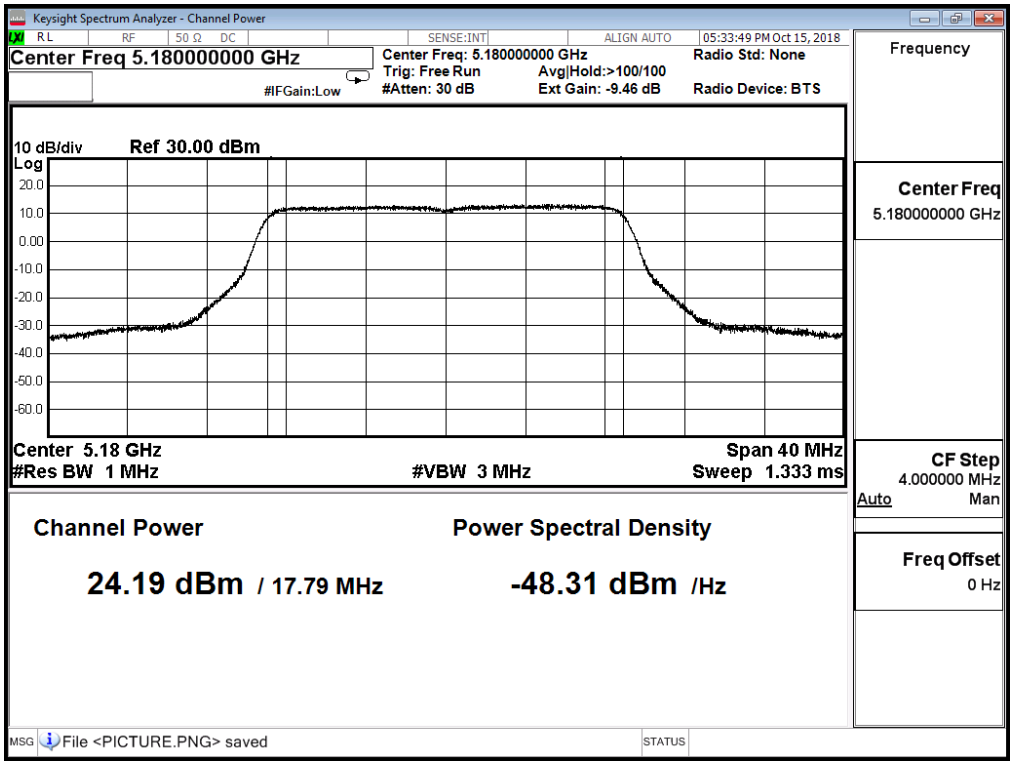


Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

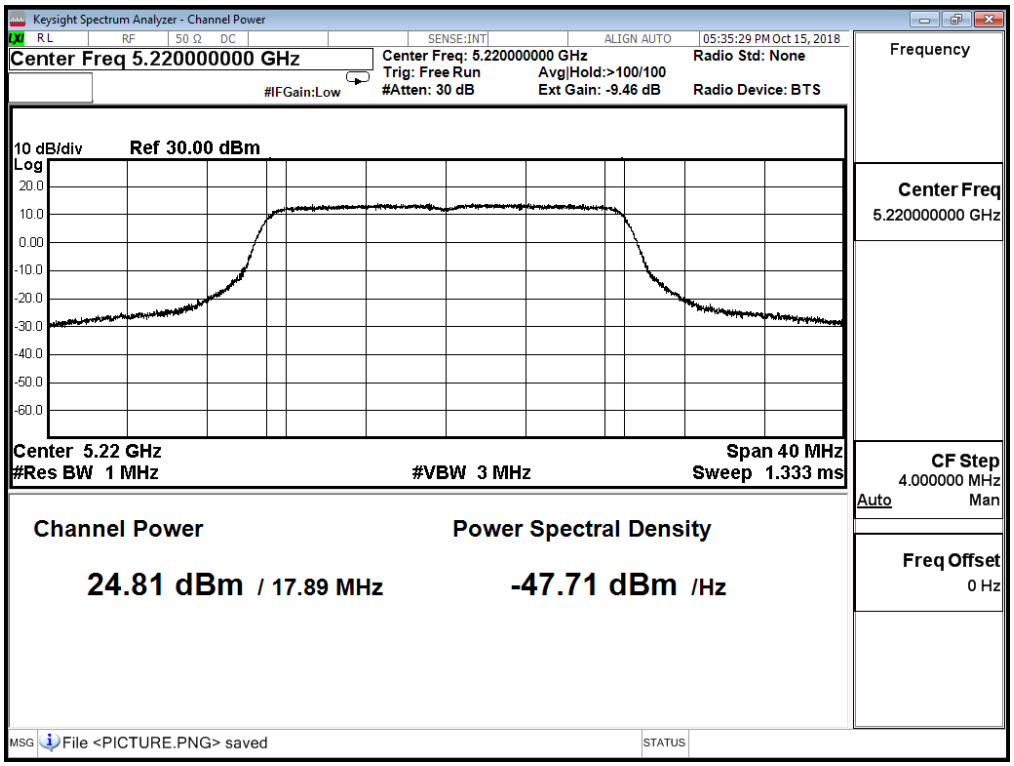
IEEE 802.11ac(20MHz)(ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	24.190	≦30
44	5220	24.810	≦30
48	5240	24.840	≦30

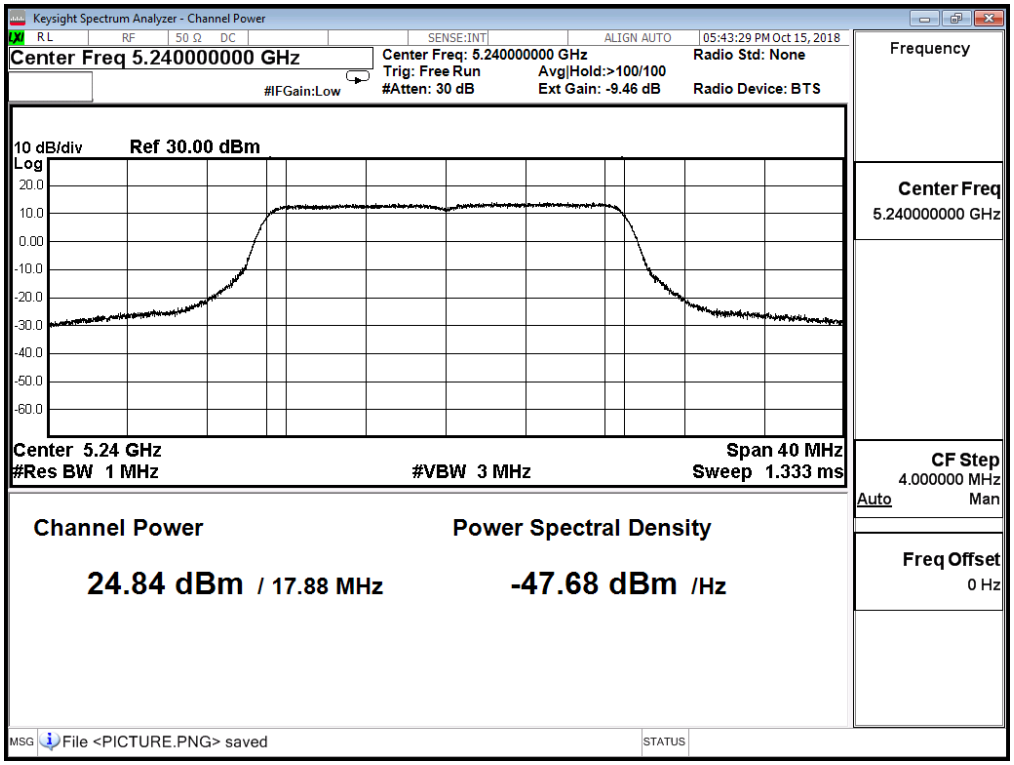
Channel 36



Channel 44



Channel 48



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(20MHz)(ANT 0+1)

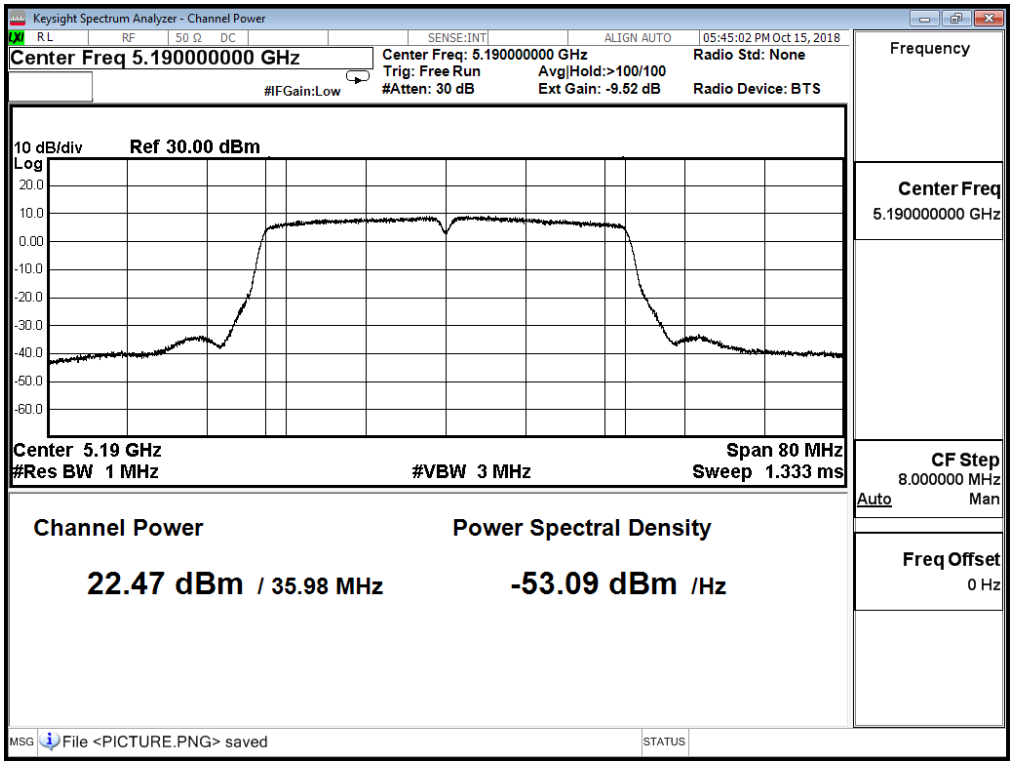
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5180	27.101	≦30
44	5220	27.489	≦30
48	5240	27.641	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

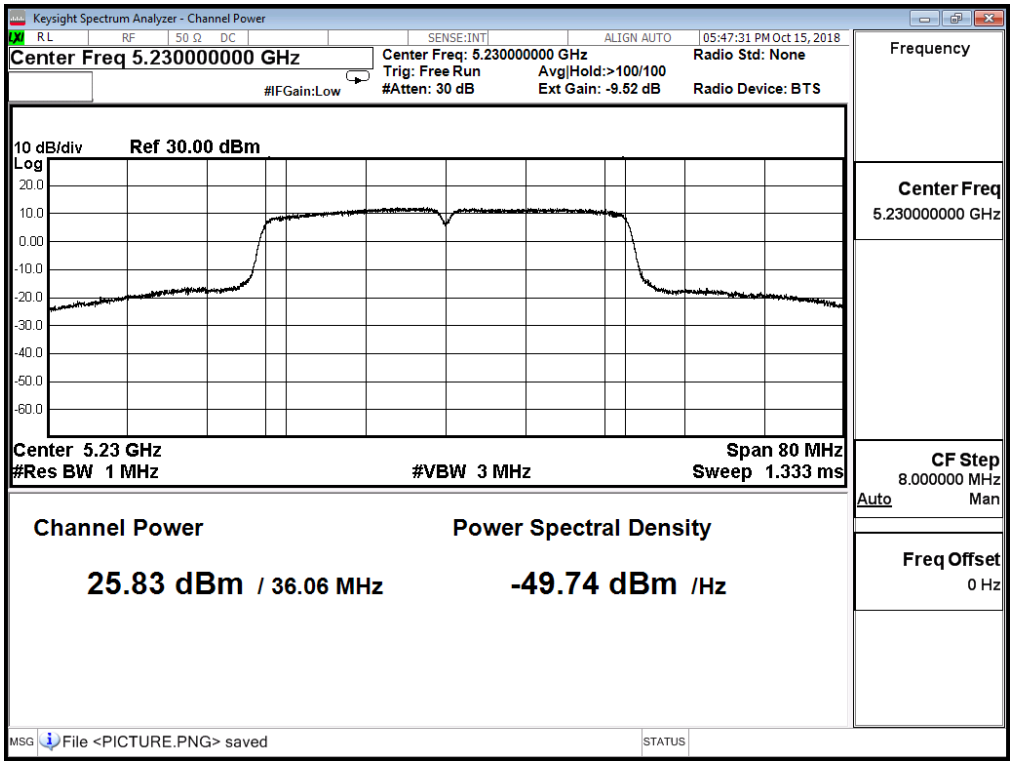
IEEE 802.11ac(40MHz)(ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	22.470	≦30
46	5230	25.830	≦30

Channel 38



Channel 46

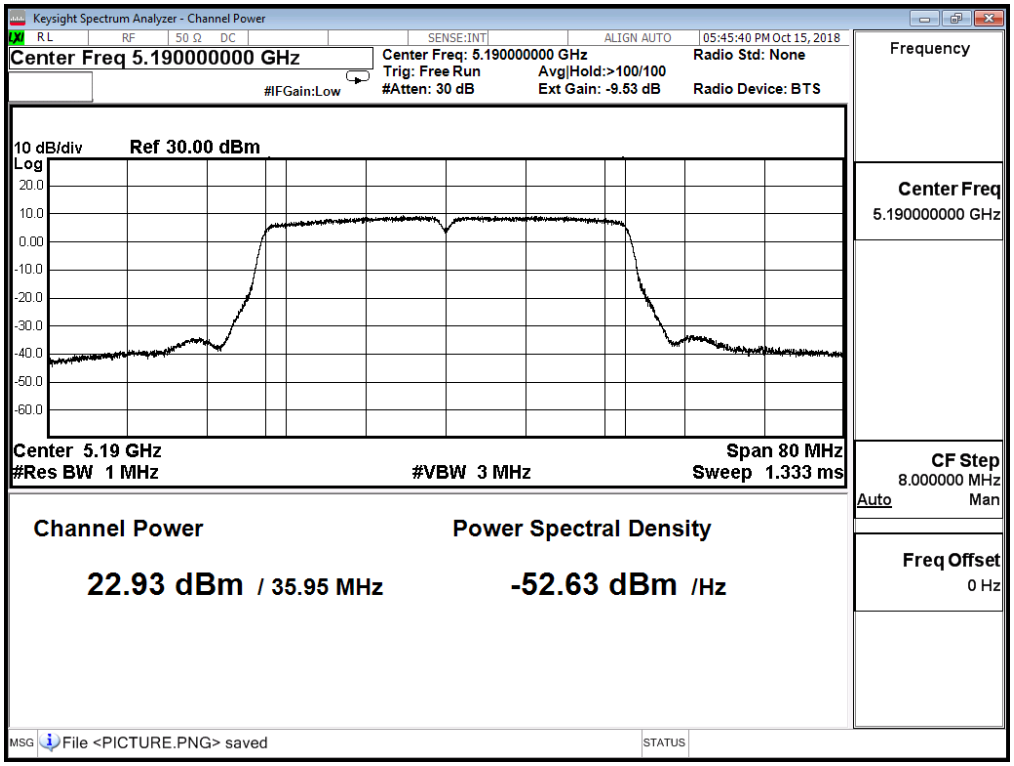

Keysight Spectrum Analyzer - Channel Power
RL
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
05:47:31 PM Oct 15, 2018
Center Freq 5.230000000 GHz
#IFGain:Low
Center Freq: 5.230000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -9.52 dB
Radio Std: None
Radio Device: BTS
Frequency
10 dB/div
Ref 30.00 dBm
Log
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Center Freq
5.230000000 GHz
Center 5.23 GHz
#Res BW 1 MHz
#VBW 3 MHz
Span 80 MHz
Sweep 1.333 ms
CF Step
8.000000 MHz
Auto
Man
Channel Power
25.83 dBm / 36.06 MHz
Power Spectral Density
-49.74 dBm /Hz
Freq Offset
0 Hz
MSG
File <PICTURE.PNG> saved
STATUS

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

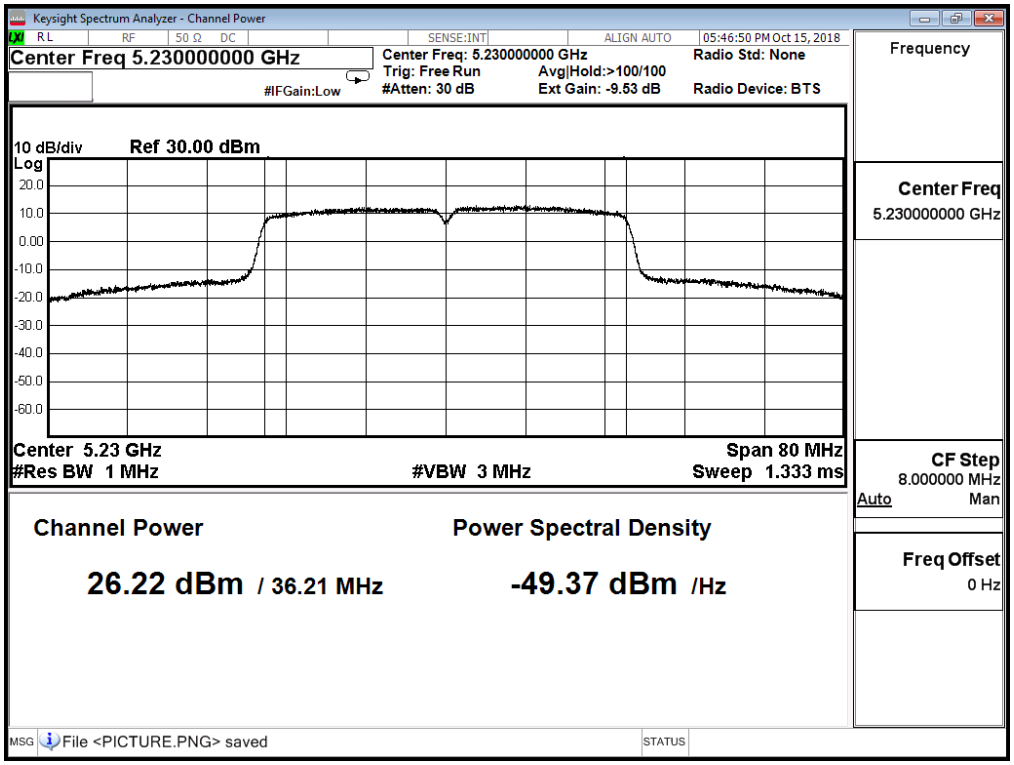
IEEE 802.11ac(40MHz)(ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	22.930	≦30
46	5230	26.220	≦30

Channel 38



Channel 46


Keysight Spectrum Analyzer - Channel Power
RL
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
05:46:50 PM Oct 15, 2018
Center Freq 5.230000000 GHz
#IFGain:Low
Center Freq: 5.230000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -9.53 dB
Radio Std: None
Radio Device: BTS
Frequency
10 dB/div
Ref 30.00 dBm
Log
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Center Freq
5.230000000 GHz
Center 5.23 GHz
#Res BW 1 MHz
#VBW 3 MHz
Span 80 MHz
Sweep 1.333 ms
CF Step
8.000000 MHz
Auto
Man
Channel Power
26.22 dBm / 36.21 MHz
Power Spectral Density
-49.37 dBm /Hz
Freq Offset
0 Hz
MSG
File <PICTURE.PNG> saved
STATUS

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(40MHz)(ANT 0+1)

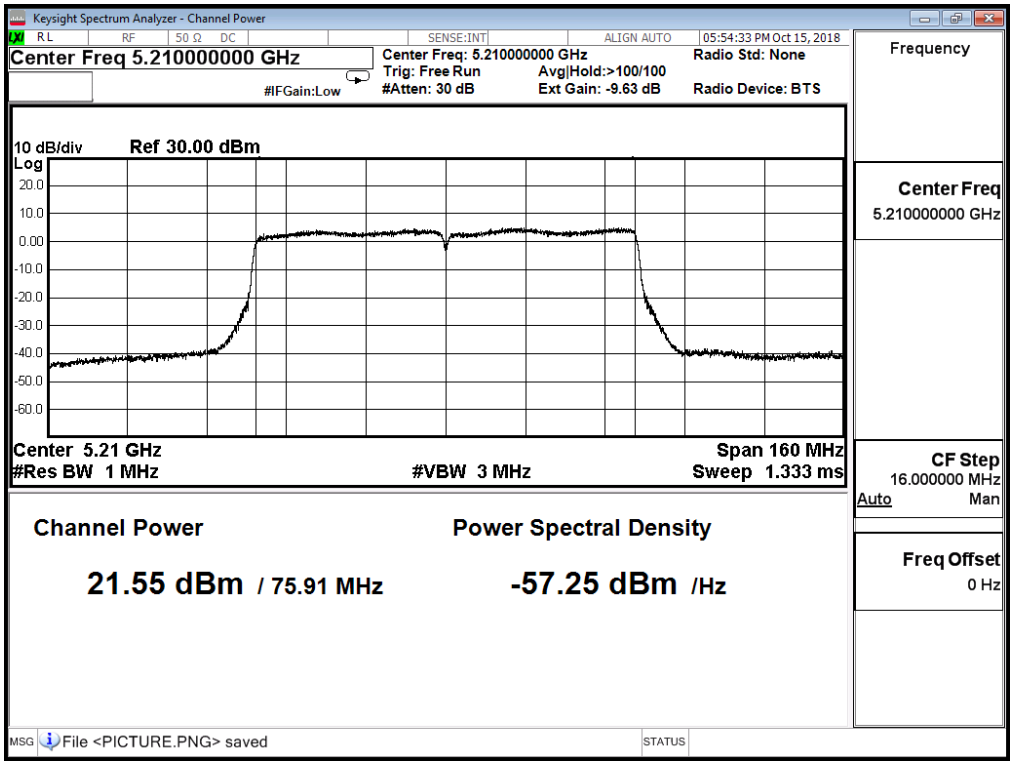
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
38	5190	25.716	≦30
46	5230	29.040	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(80MHz) (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	21.550	≦30

Channel 42

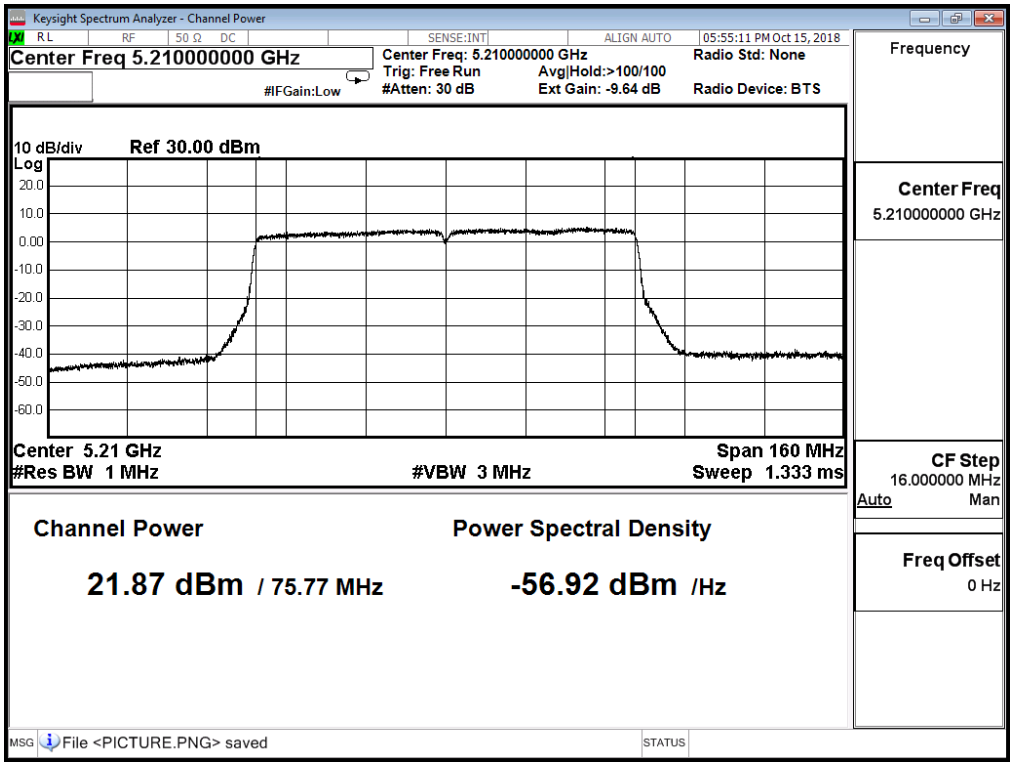


Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(80MHz) (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	21.870	≦30

Channel 42



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(80MHz)(ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
42	5210	24.723	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

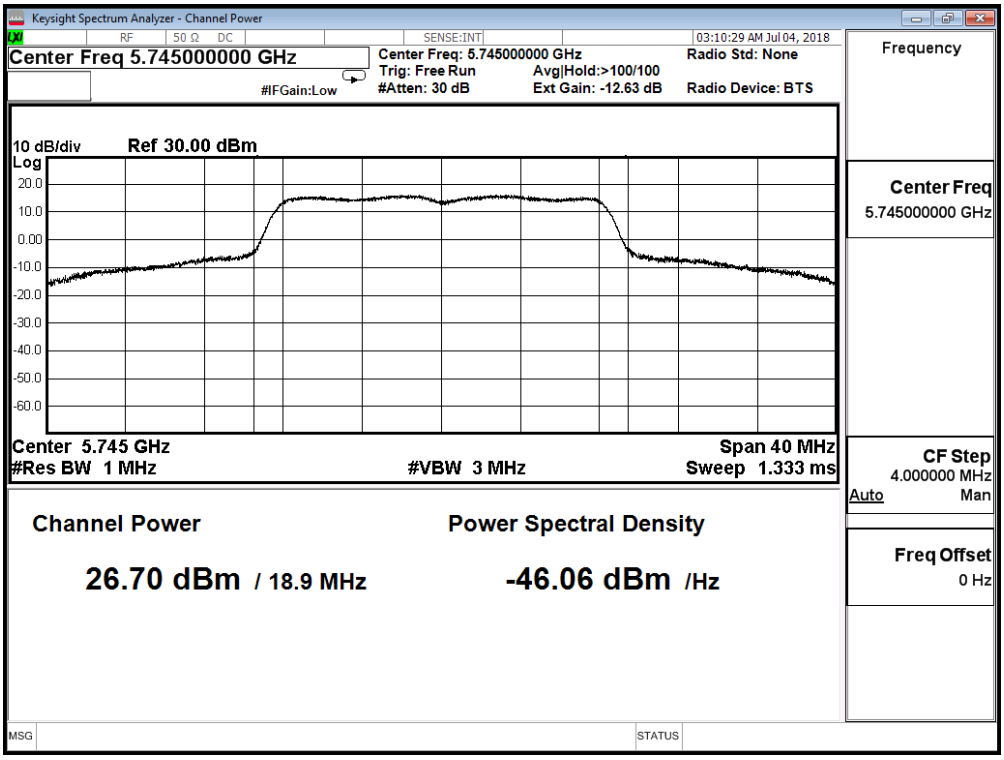
IEEE 802.11a (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	26.700	≦30
157	5785	26.450	≦30
165	5825	26.440	≦30

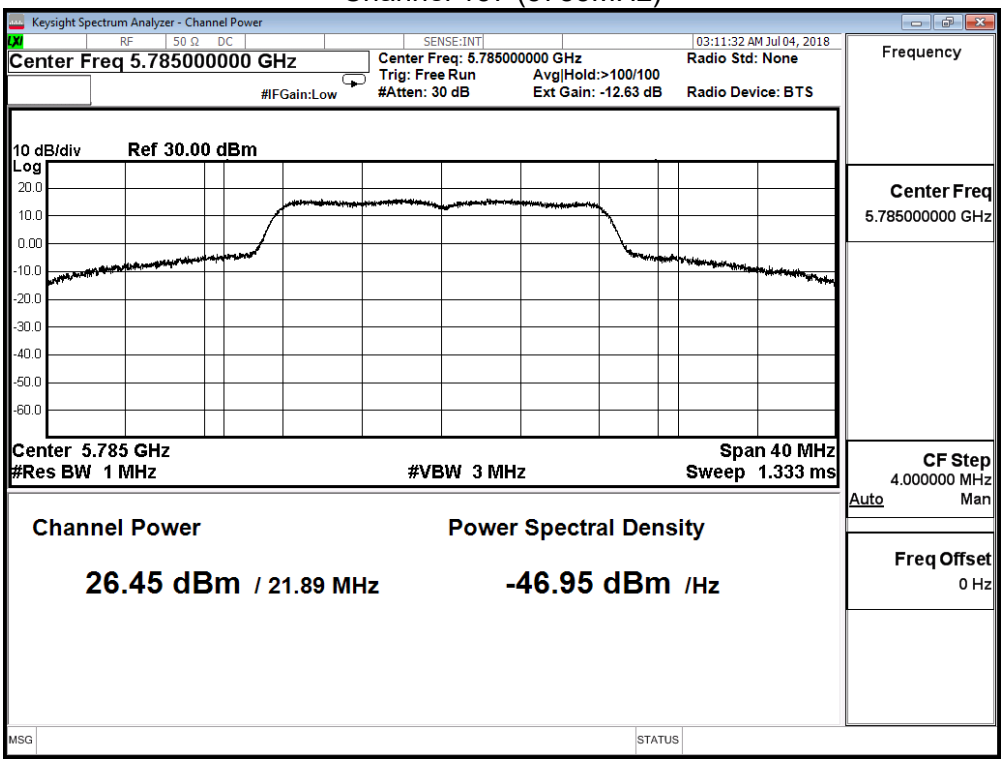
The worst emission of data rate is 6 Mbps.

Maximum conducted output power (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
149	5745	26.700	--	--	--	--	--	--	≤30dBm
157	5785	26.450	26.420	26.370	26.330	26.280	26.250	26.210	
165	5825	26.440	--	--	--	--	--	--	

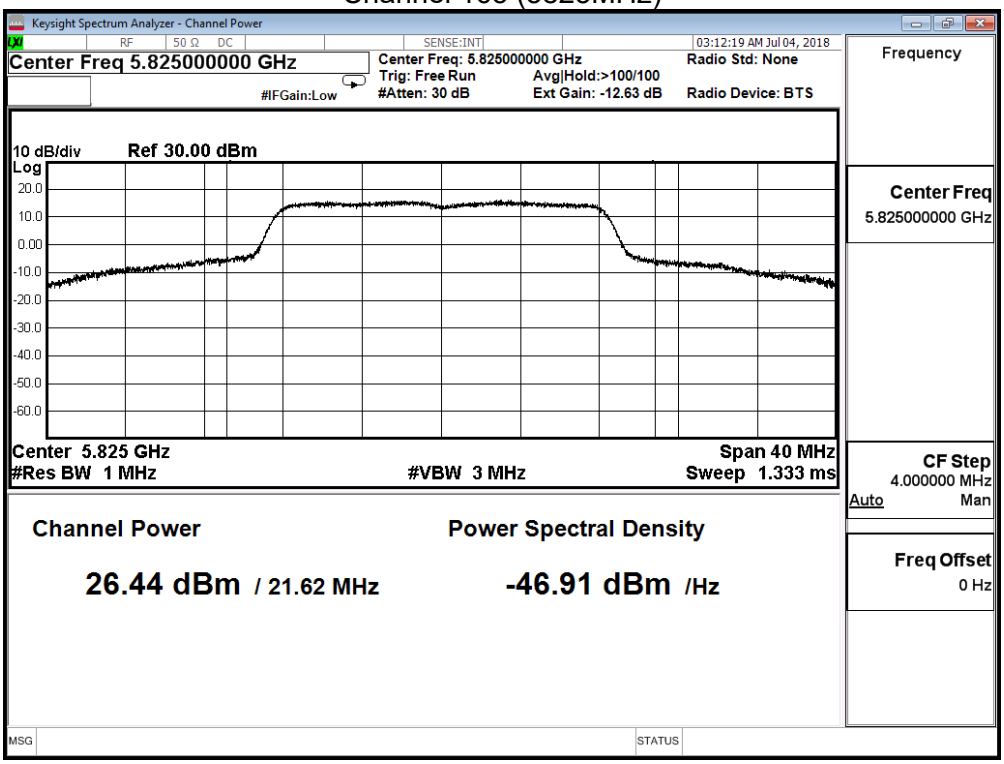
Channel 149



Channel 157 (5785MHz)



Channel 165 (5825MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

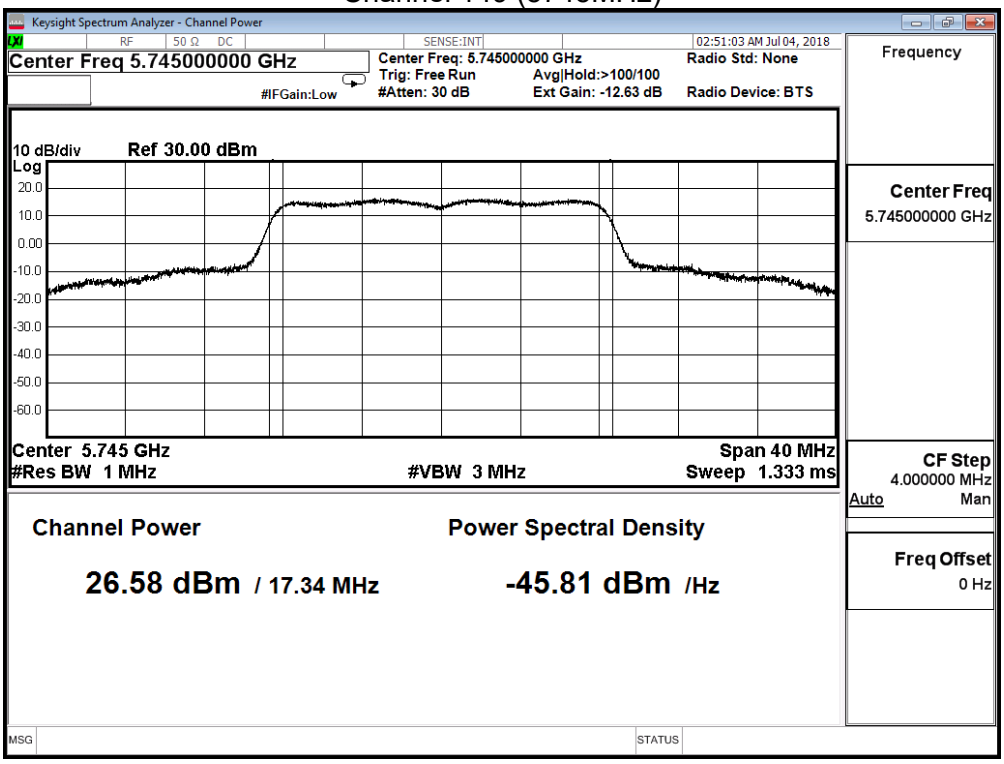
IEEE 802.11a (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	26.580	≦30
157	5785	26.400	≦30
165	5825	26.450	≦30

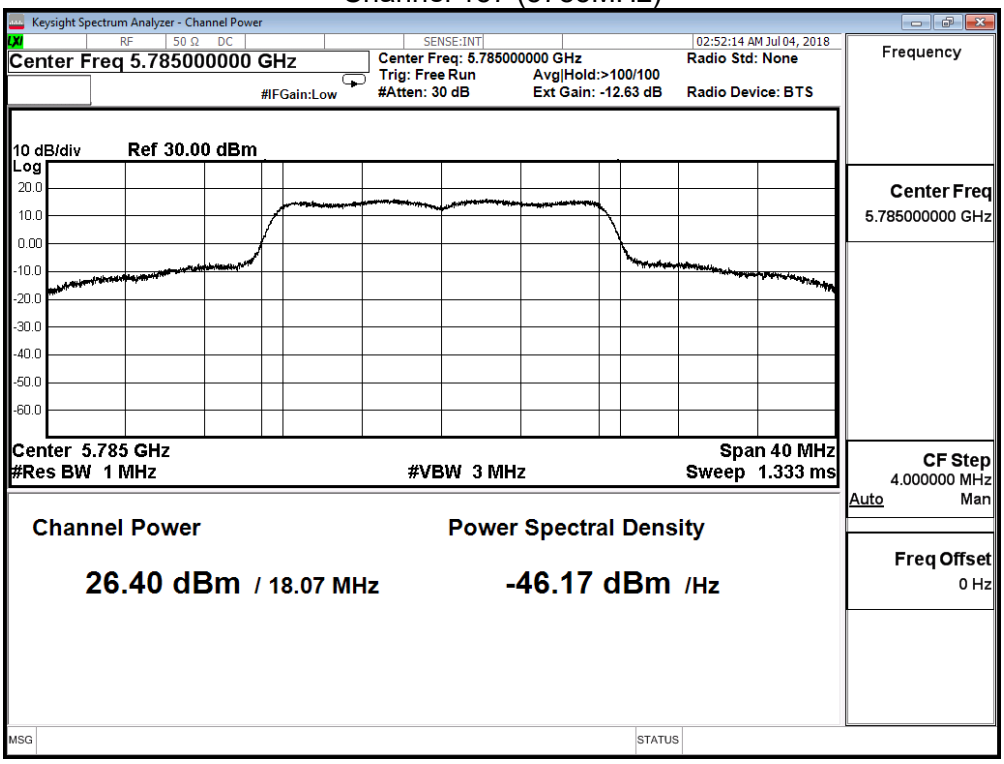
The worst emission of data rate is 6 Mbps.

Maximum conducted output power (dBm)									
Channel No	Frequency (MHz)	Data Rate							Required Limit
		6	12	18	24	36	48	54	
149	5745	26.580	--	--	--	--	--	--	≤30dBm
157	5785	26.400	26.370	26.320	26.280	26.230	26.200	26.160	
165	5825	26.450	--	--	--	--	--	--	

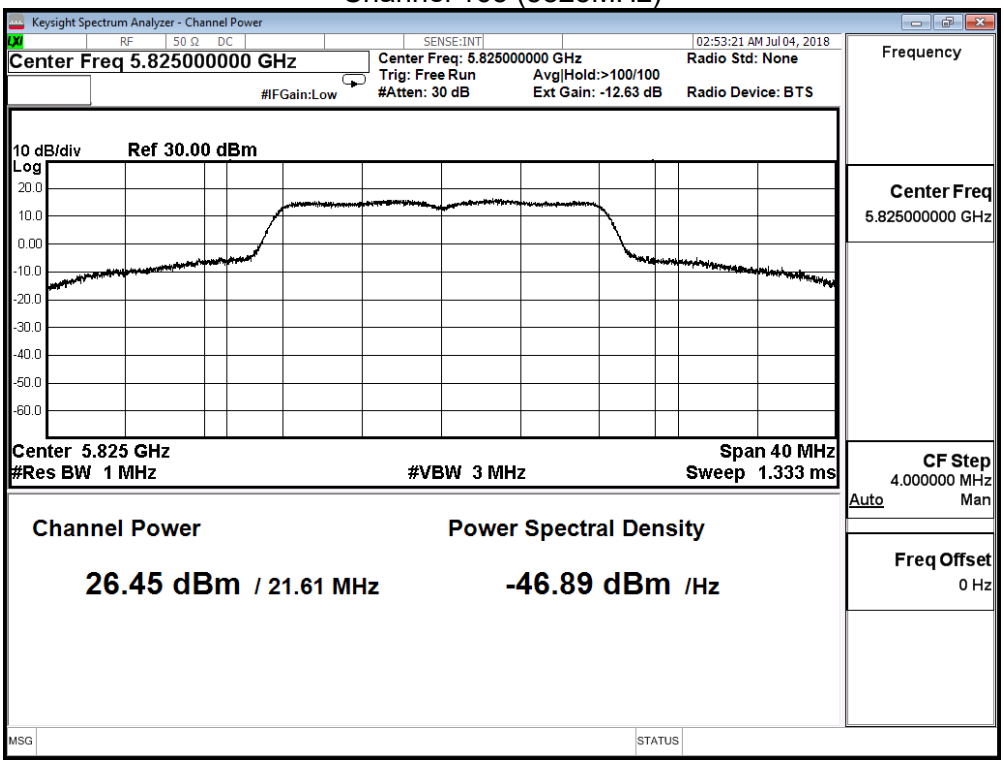
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11a (ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	29.651	≦30
157	5785	29.435	≦30
165	5825	29.455	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

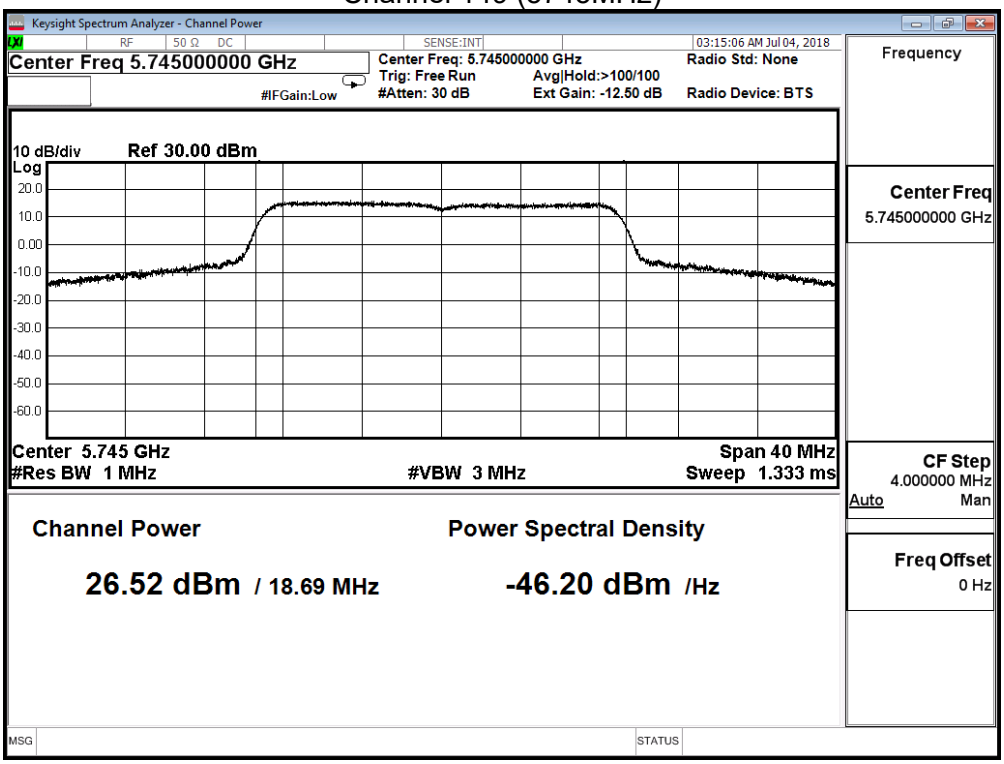
IEEE 802.11ac 20MHz (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	26.520	≦30
157	5785	26.320	≦30
165	5825	26.300	≦30

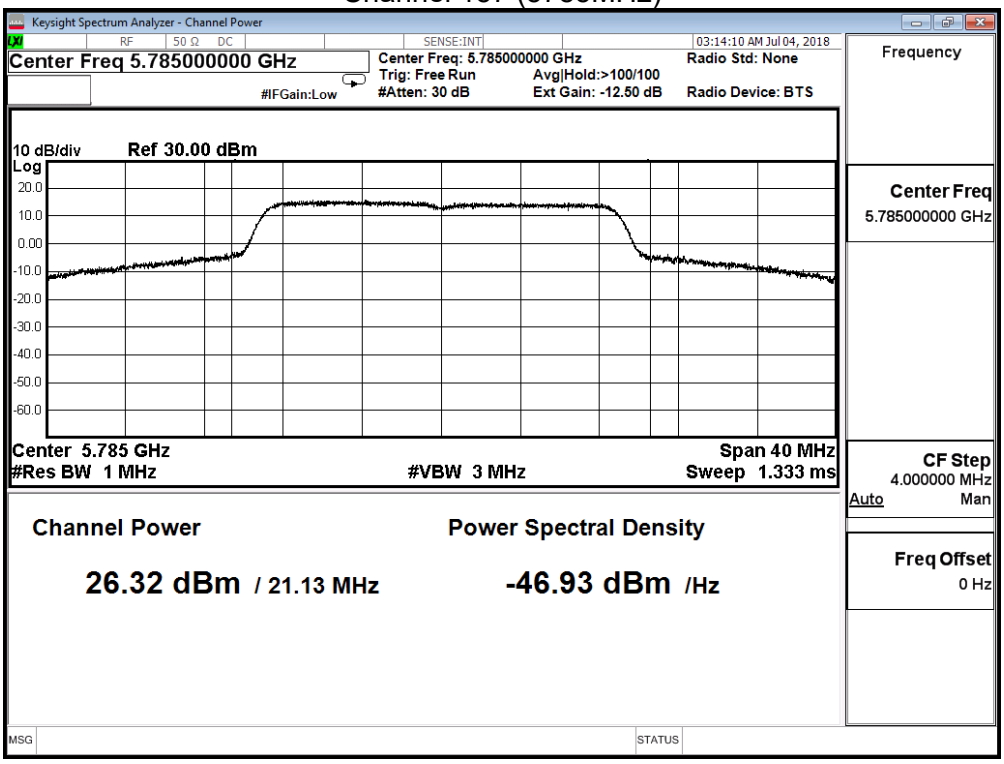
The worst emission of data rate is MCS 0

Channel No	Frequency (MHz)	MCS Index									Required Limit
		0	1	2	3	4	5	6	7	8	
149	5745	26.520	--	--	--	--	--	--	--	--	≦30
157	5785	26.320	26.290	26.240	26.200	26.150	26.120	26.080	26.030	25.970	
165	5825	26.300	--	--	--	--	--	--	--	--	

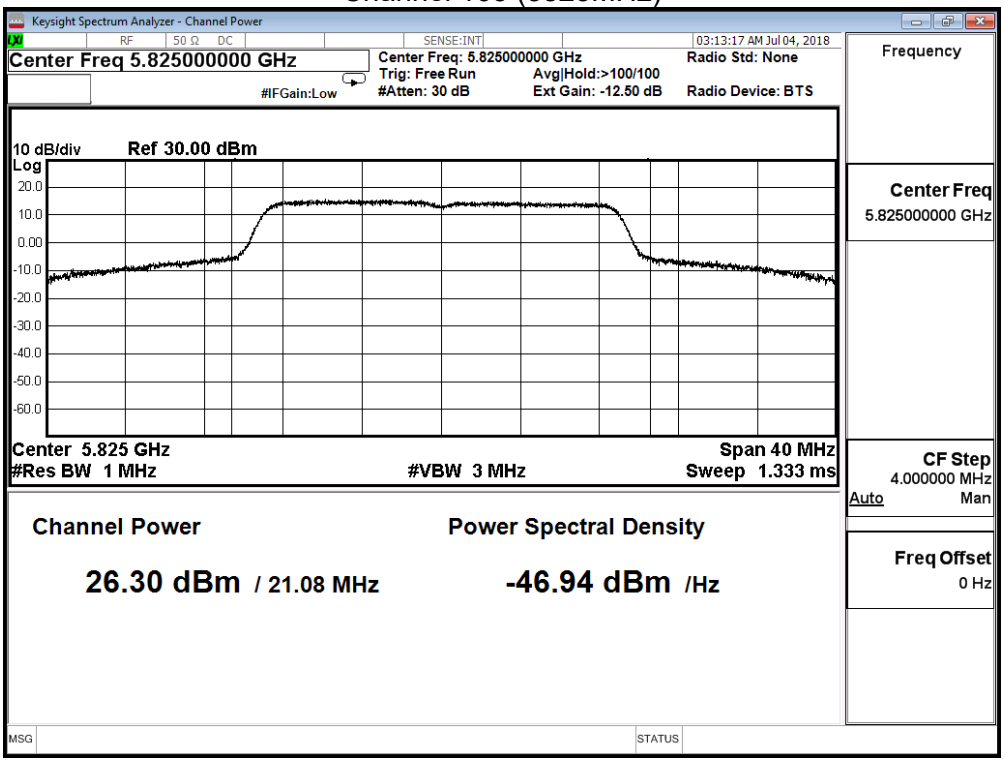
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

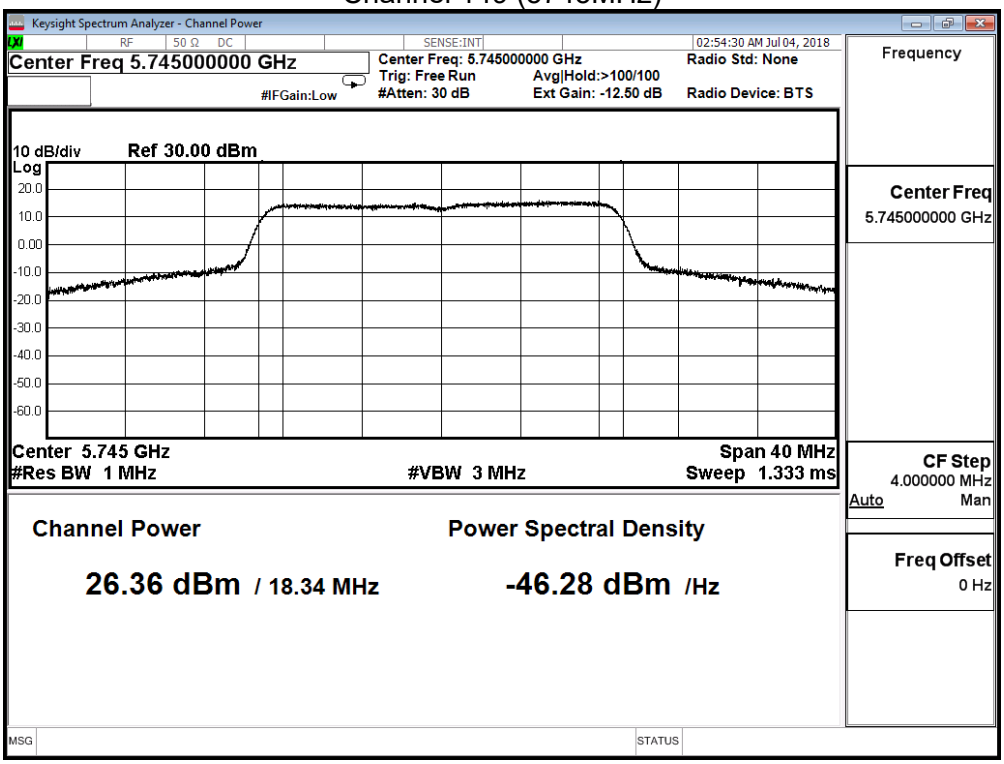
IEEE 802.11ac 20MHz (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5745	26.360	≦30
44	5785	26.190	≦30
48	5825	26.310	≦30

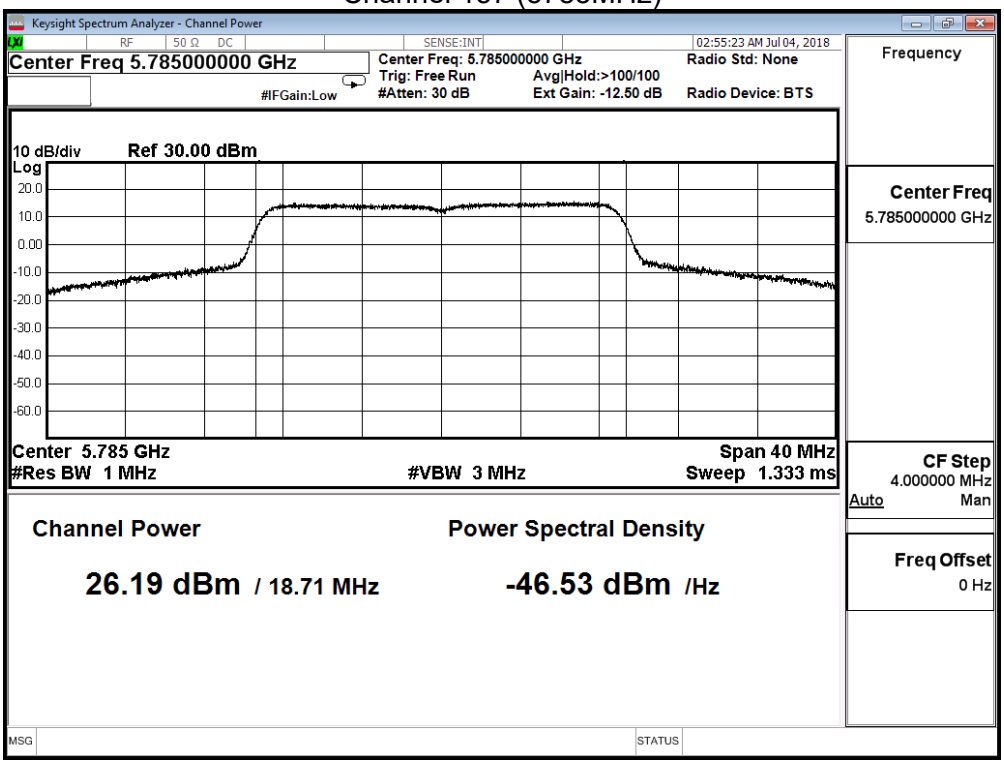
The worst emission of data rate is MCS 0

Channel No	Frequency (MHz)	MCS Index									Required Limit
		0	1	2	3	4	5	6	7	8	
149	5745	26.360	--	--	--	--	--	--	--	--	≦30
157	5785	26.190	26.160	26.110	26.070	26.020	25.990	25.950	25.900	25.840	
165	5825	26.310	--	--	--	--	--	--	--	--	

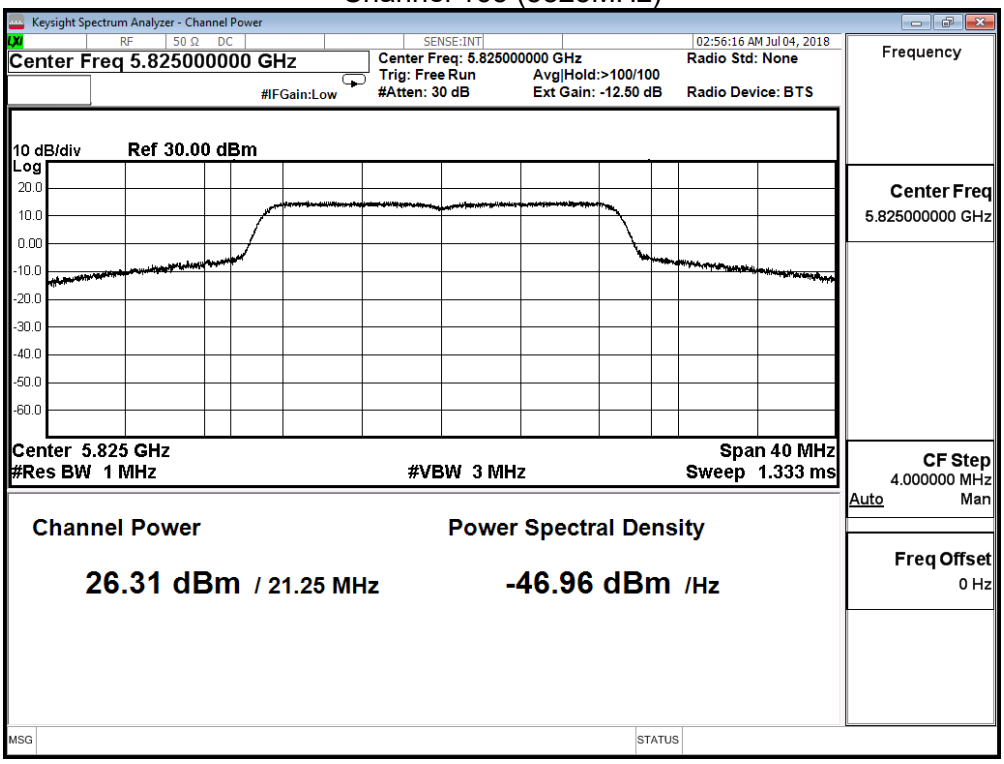
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE 802.11ac 20MHz (ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	29.451	≦30
157	5785	29.266	≦30
165	5825	29.315	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

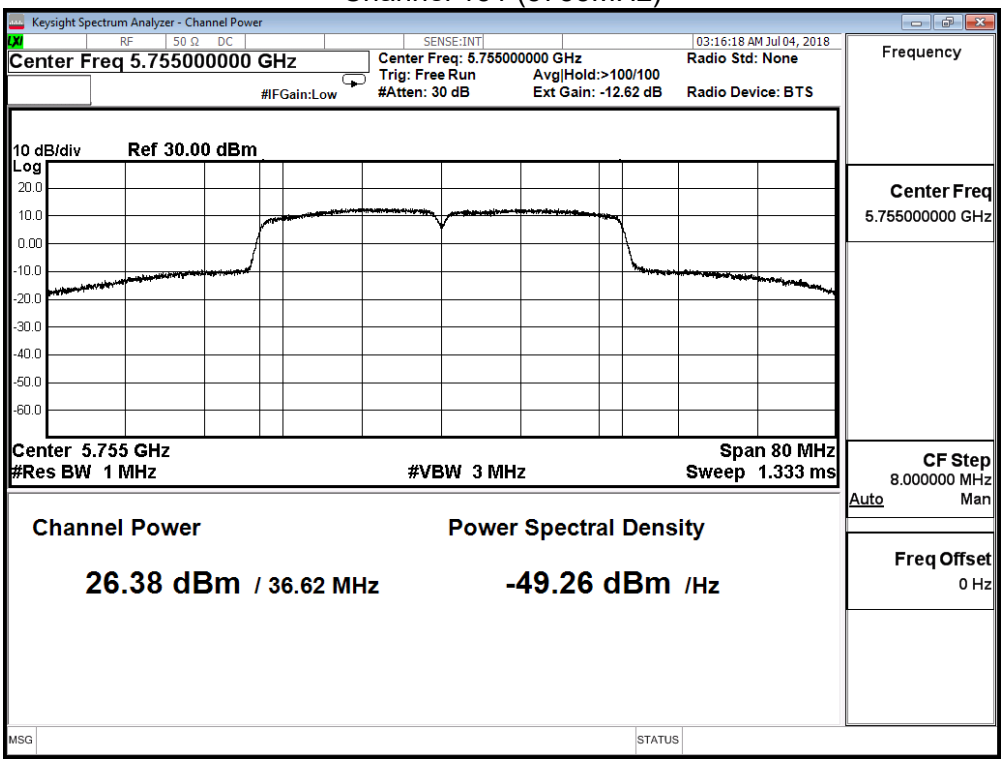
IEEE802.11ac 40MHz(ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	26.380	≦30
159	5795	26.930	≦30

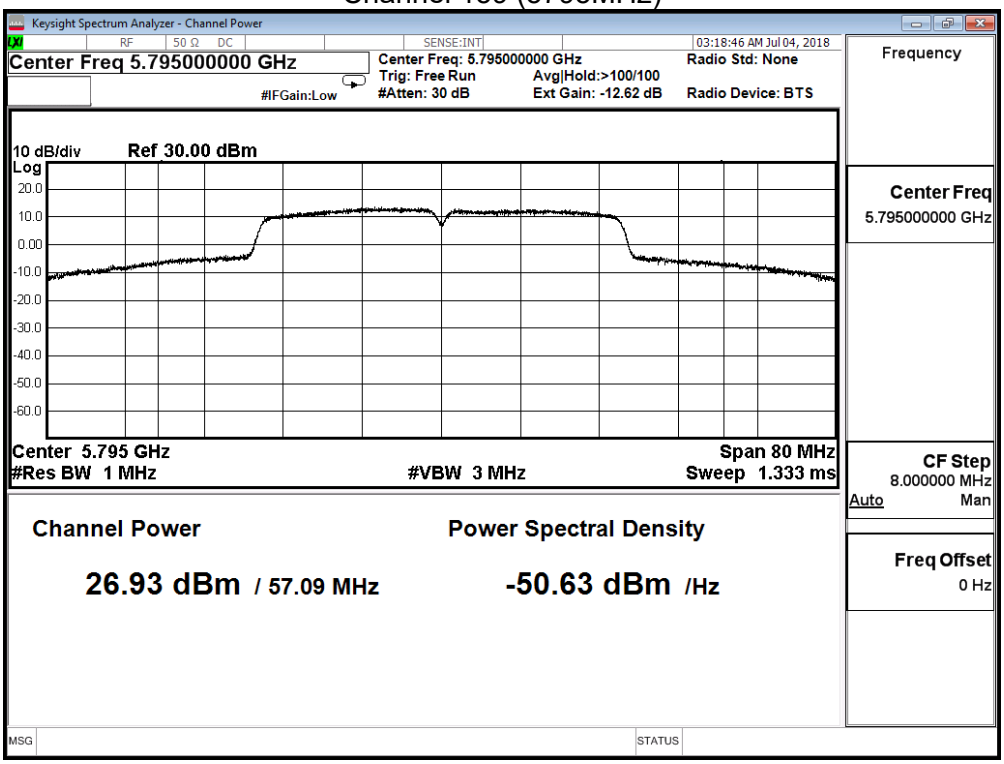
The worst emission of data rate is MCS 0

Channel No	Frequency (MHz)	MCS Index										Required Limit
		0	1	2	3	4	5	6	7	8	9	
151	5755	26.380	--	--	--	--	--	--	--	--	--	≦30
159	5795	26.930	26.900	26.850	26.810	26.760	26.730	26.690	26.640	26.580	26.520	

Channel 151 (5755MHz)



Channel 159 (5795MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

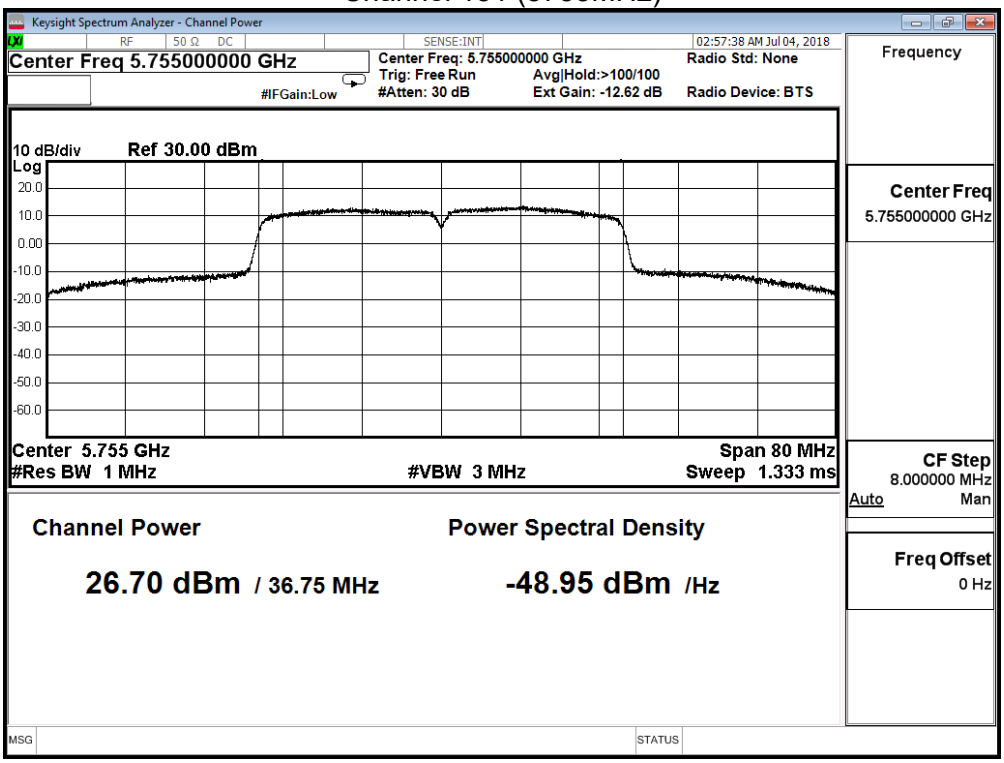
IEEE802.11ac 40MHz(ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	26.700	≦30
159	5795	26.570	≦30

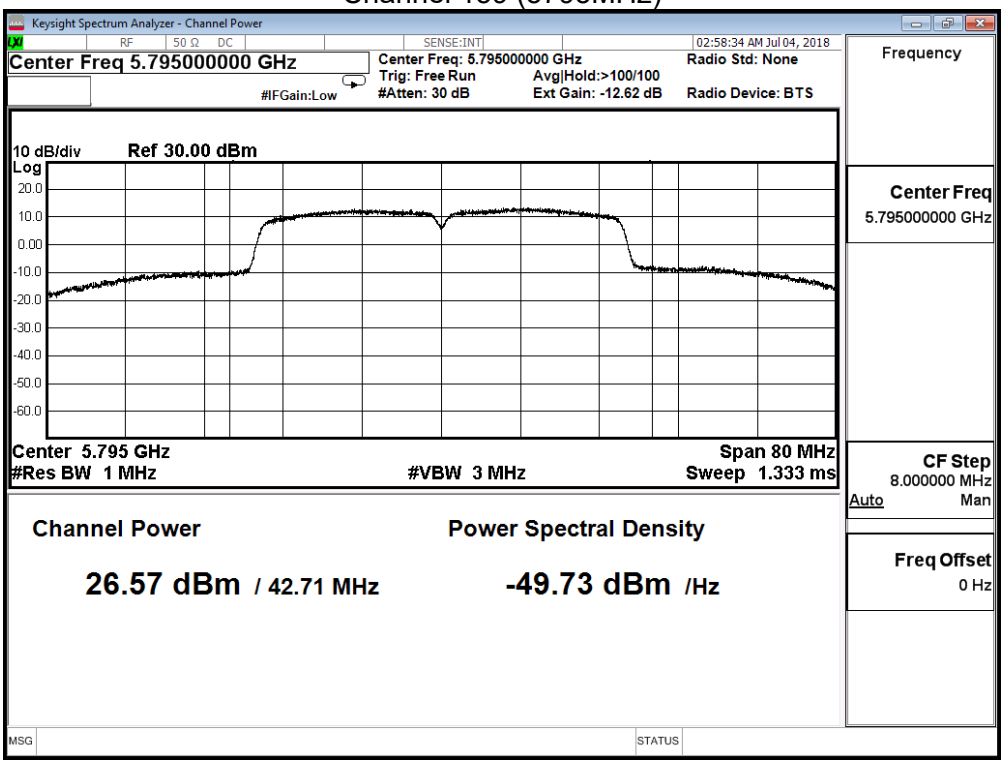
The worst emission of data rate is MCS 0

Channel No	Frequency (MHz)	MCS Index										Required Limit
		0	1	2	3	4	5	6	7	8	9	
151	5755	26.700	--	--	--	--	--	--	--	--	--	≦30
159	5795	26.570	26.540	26.490	26.450	26.400	26.370	26.330	26.280	26.220	26.160	

Channel 151 (5755MHz)



Channel 159 (5795MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/04	Test Site	SR10-H

IEEE802.11ac 40MHz(ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	29.553	≦30
159	5795	29.764	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/18	Test Site	SR10-H

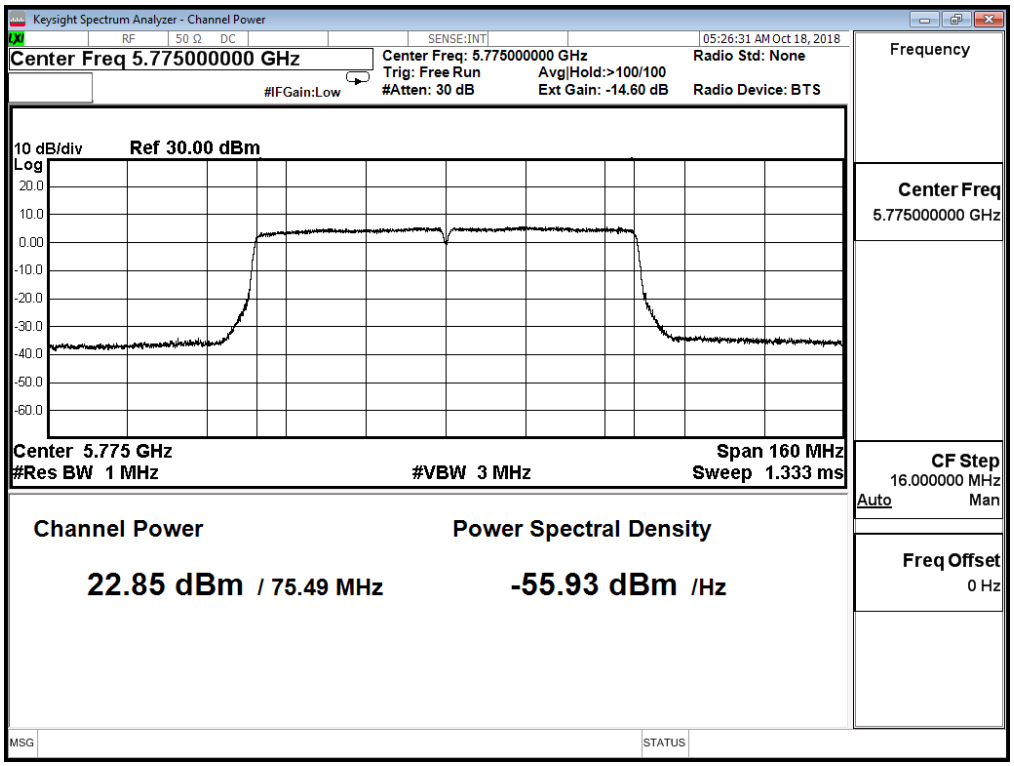
IEEE802.11ac 80MHz (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	22.850	≤30

The worst emission of data rate is MCS0

Channel No	Frequency (MHz)	MCS Index										Required Limit
		0	1	2	3	4	5	6	7	8	9	≤30dBm
155	5775	22.850	22.770	22.730	22.680	22.620	22.580	22.520	22.450	22.370	21.870	

Channel 155



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/18	Test Site	SR10-H

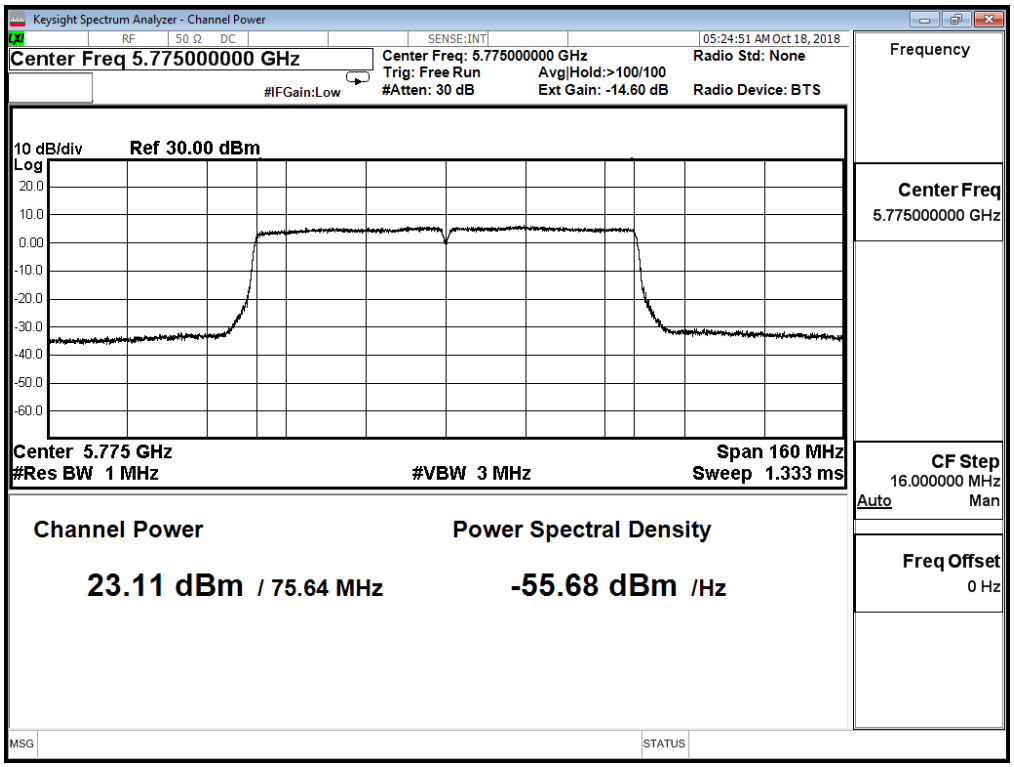
IEEE802.11ac 80MHz (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	23.110	≤30

The worst emission of data rate is MCS0

Channel No	Frequency (MHz)	MCS Index										Required Limit
		0	1	2	3	4	5	6	7	8	9	
155	5775	23.110	23.070	23.010	23.970	23.860	23.710	23.440	23.100	22.720	22.550	≤30dBm

Channel 155



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/18	Test Site	SR10-H

IEEE802.11ac 80MHz (ANT 0+1)

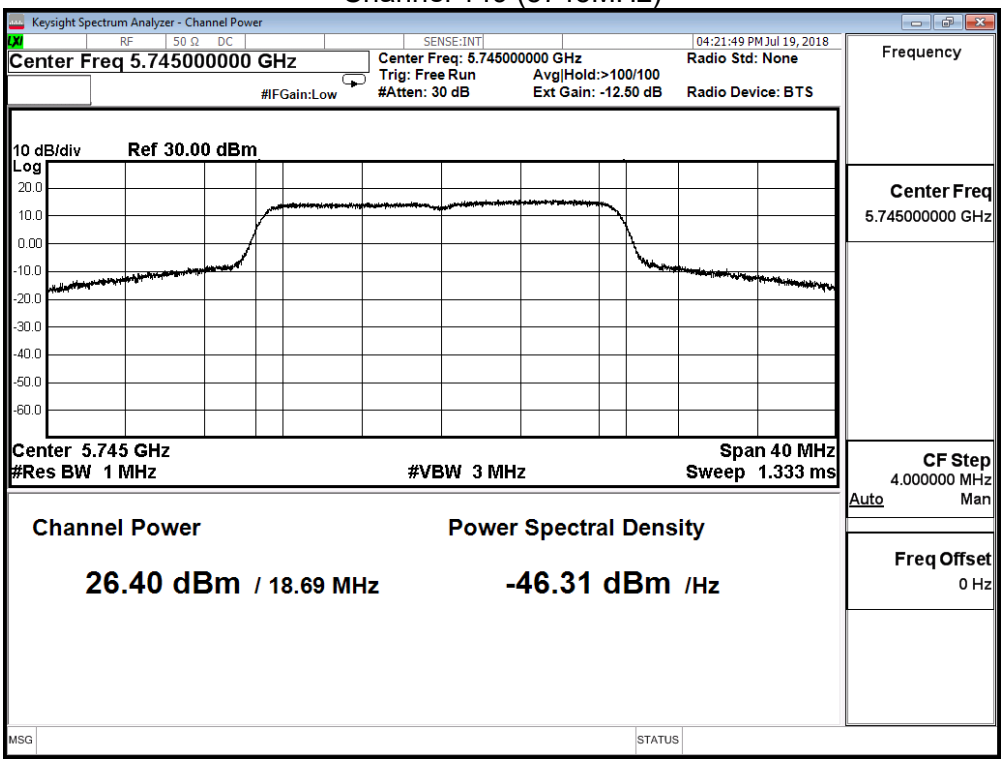
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	25.992	≤30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/07/19	Test Site	SR10-H

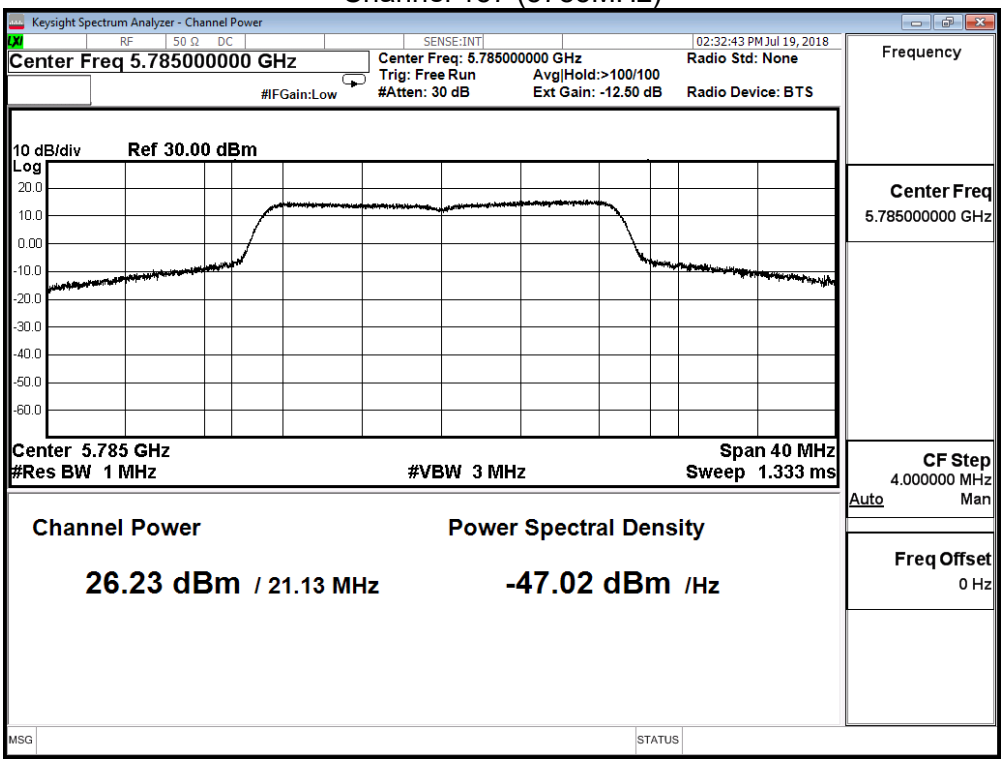
IEEE 802.11ac 20MHz (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	26.400	≦30
157	5785	26.230	≦30
165	5825	26.210	≦30

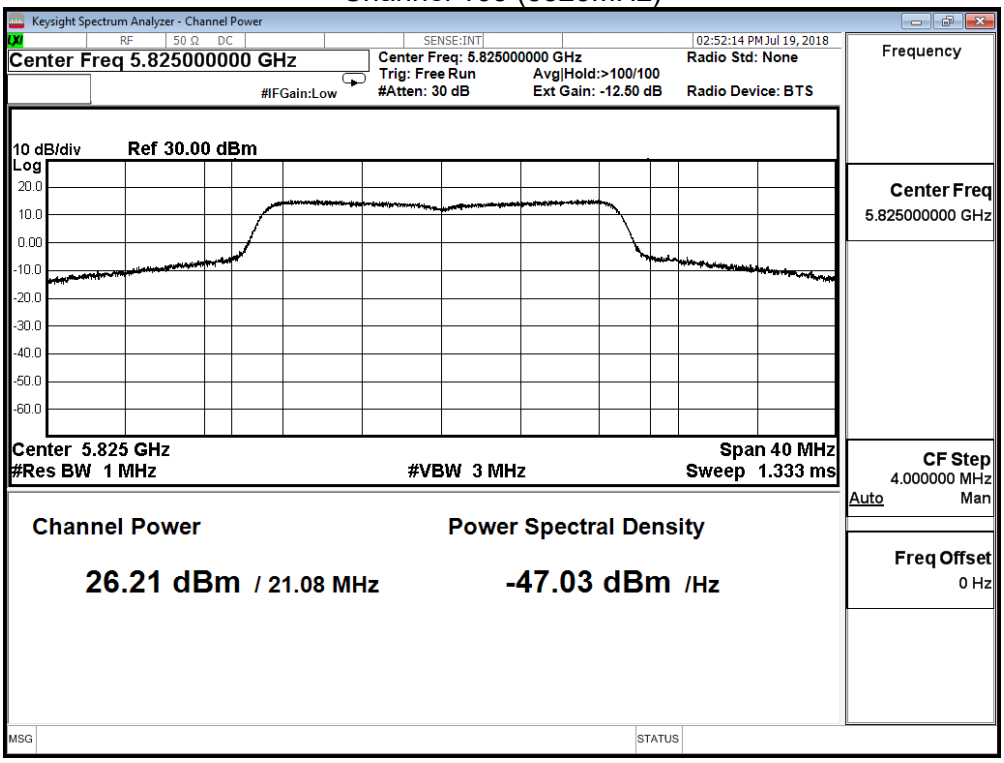
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)

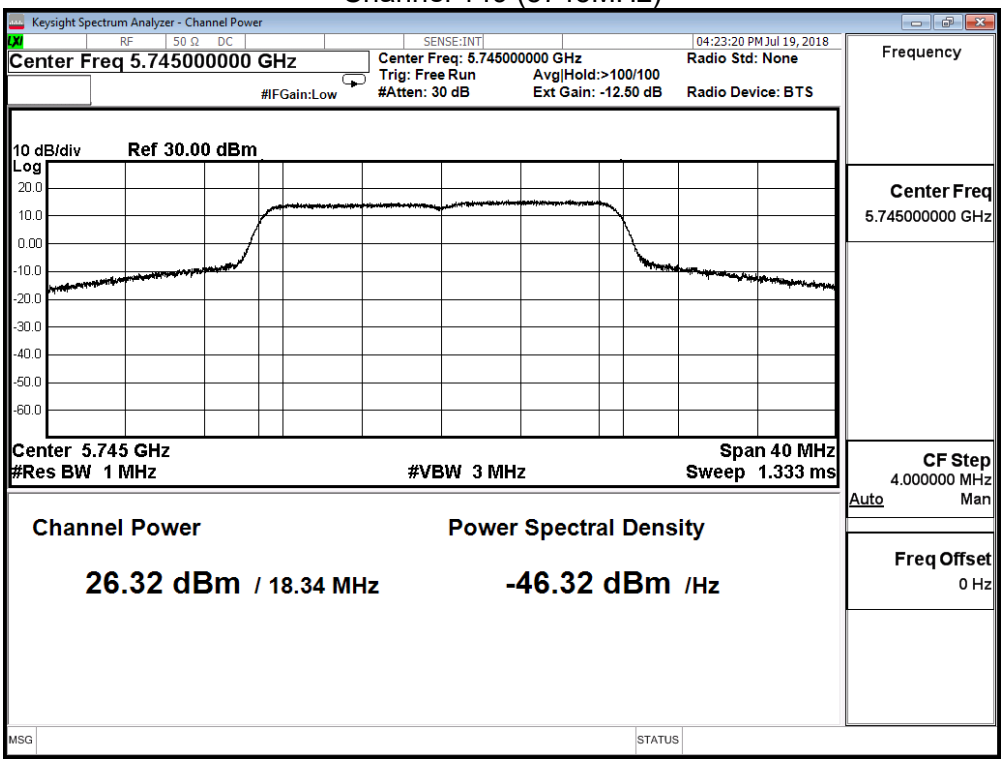


Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/07/19	Test Site	SR10-H

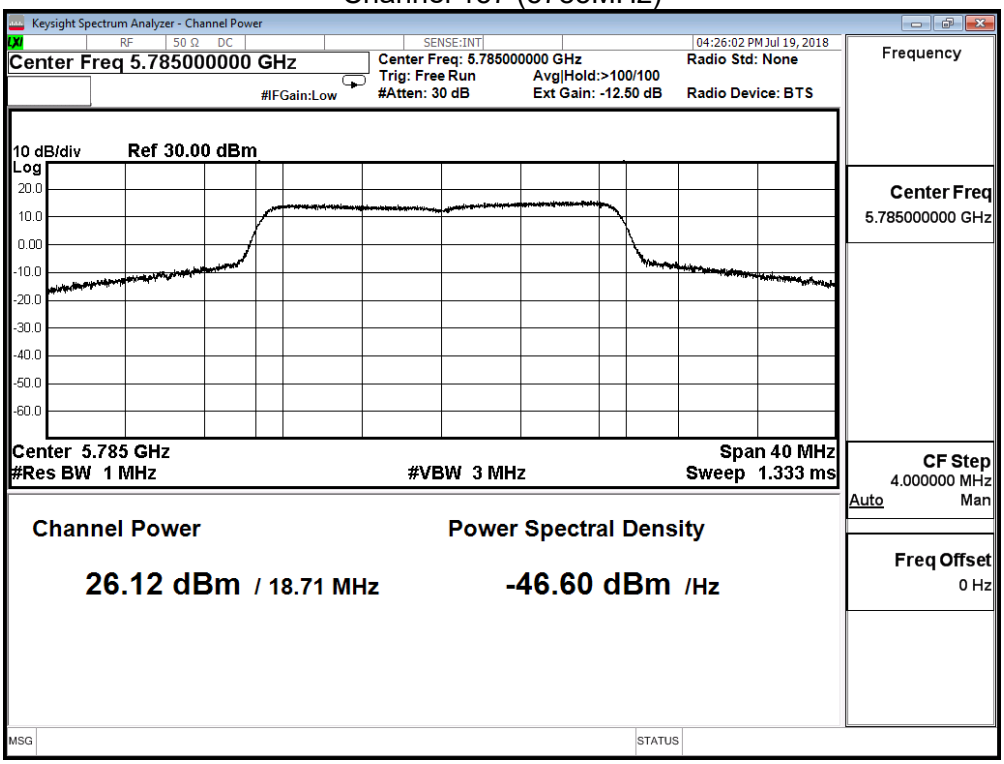
IEEE 802.11ac 20MHz (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
36	5745	26.320	≦30
44	5785	26.120	≦30
48	5825	26.100	≦30

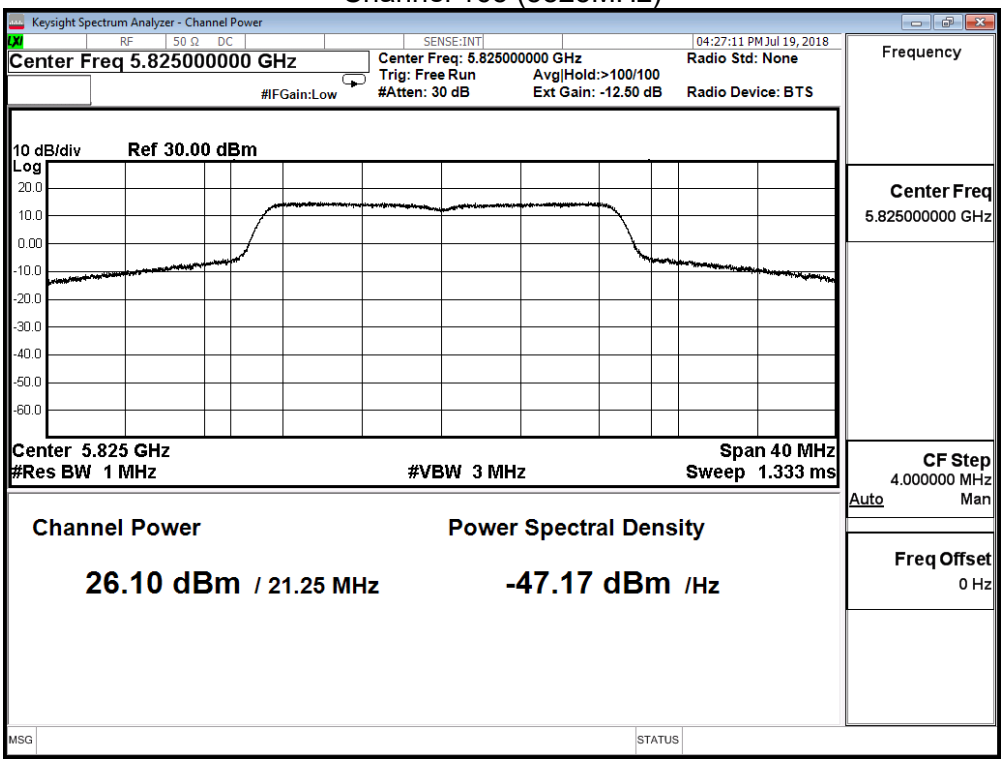
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/07/19	Test Site	SR10-H

IEEE 802.11ac 20MHz (ANT 0+1)

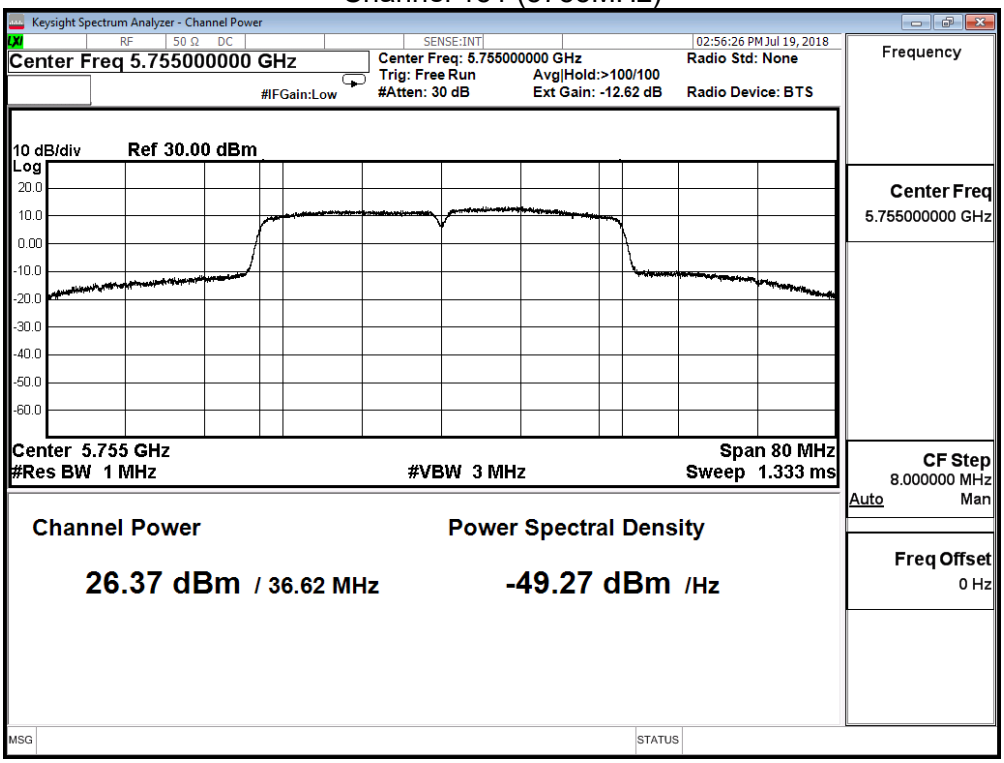
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
149	5745	29.370	≦30
157	5785	29.186	≦30
165	5825	29.166	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/07/19	Test Site	SR10-H

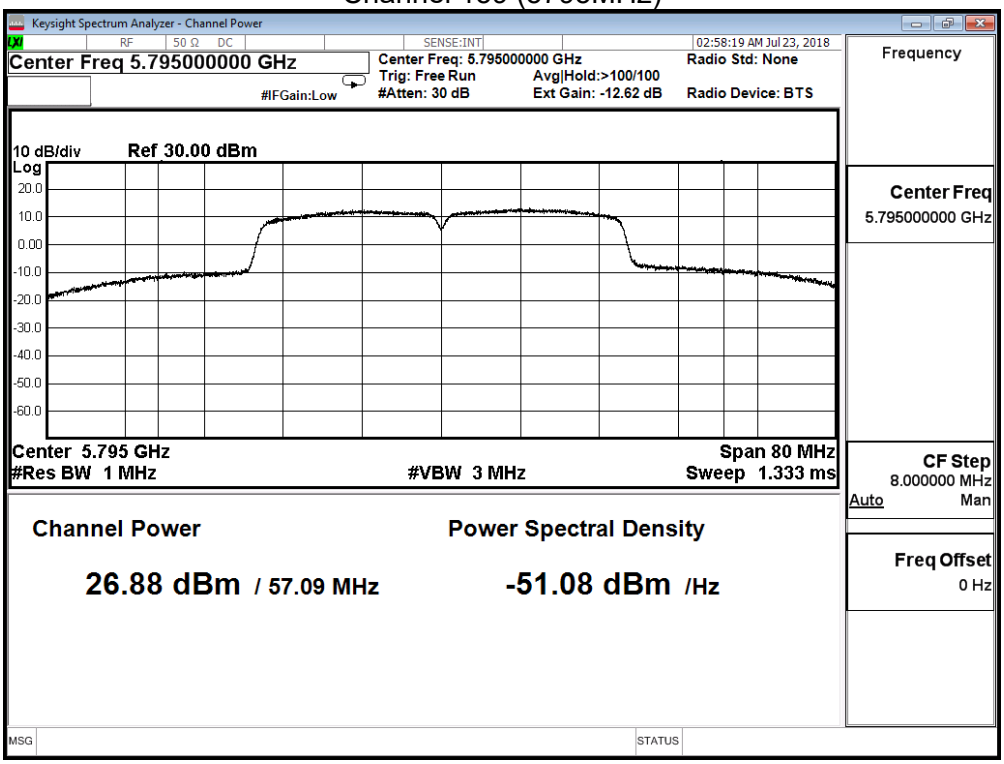
IEEE802.11ac 40MHz(ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	26.370	≦30
159	5795	26.880	≦30

Channel 151 (5755MHz)



Channel 159 (5795MHz)

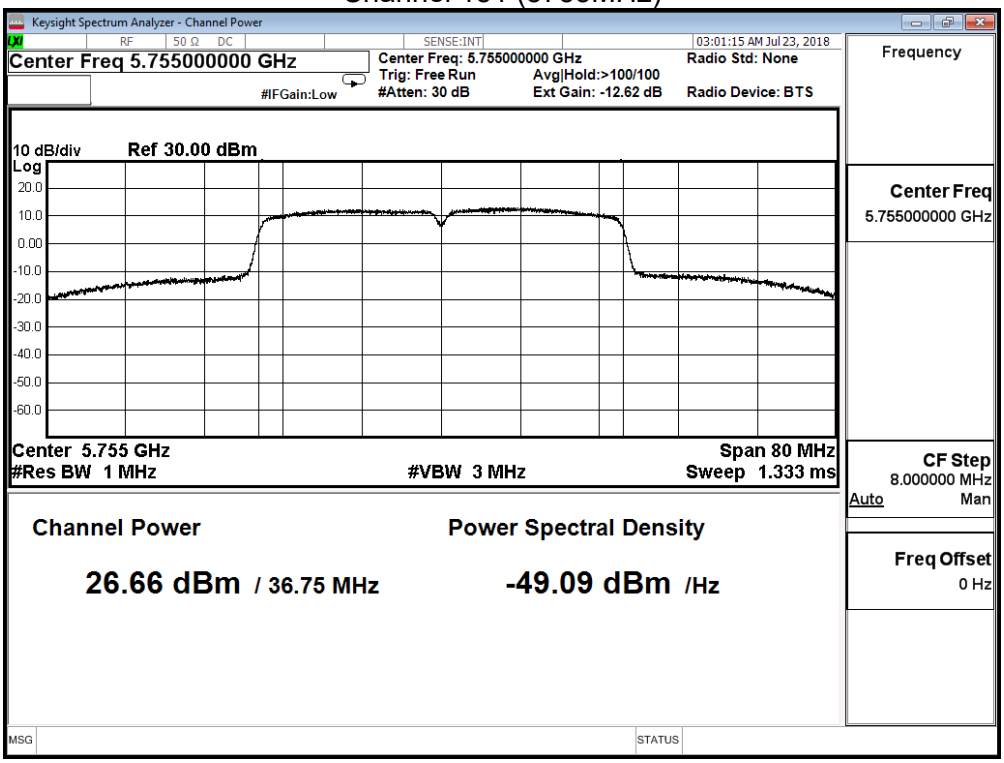


Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/07/23	Test Site	SR10-H

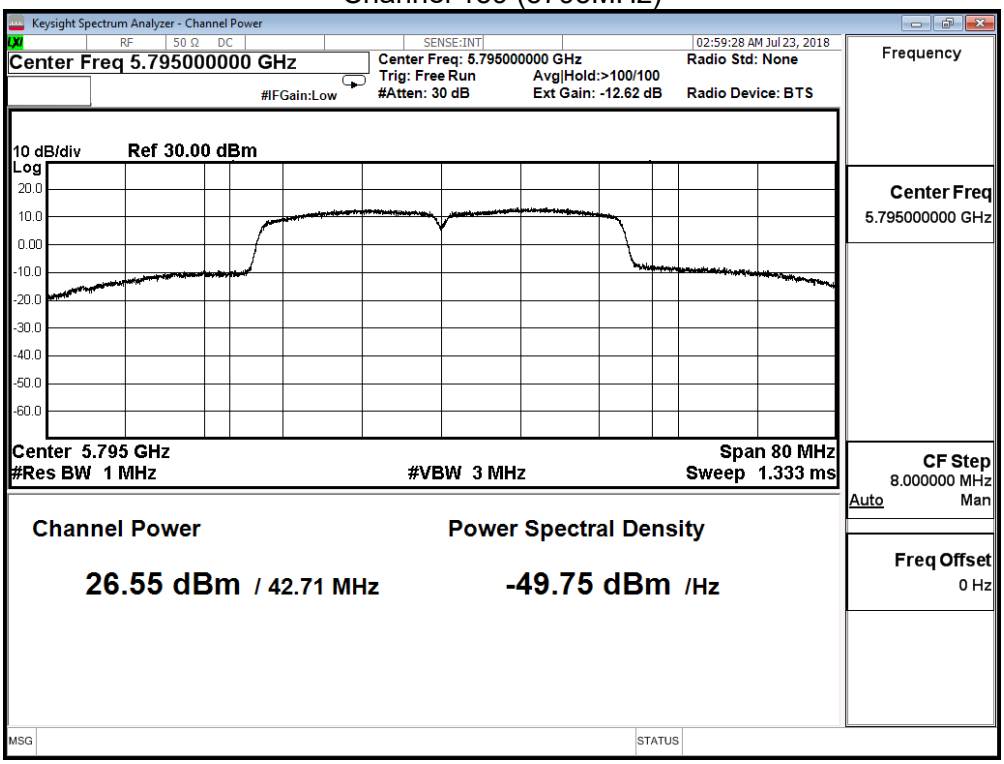
IEEE802.11ac 40MHz(ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	26.660	≦30
159	5795	26.550	≦30

Channel 151 (5755MHz)



Channel 159 (5795MHz)



Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/07/19	Test Site	SR10-H

IEEE802.11ac 40MHz(ANT 0+1)

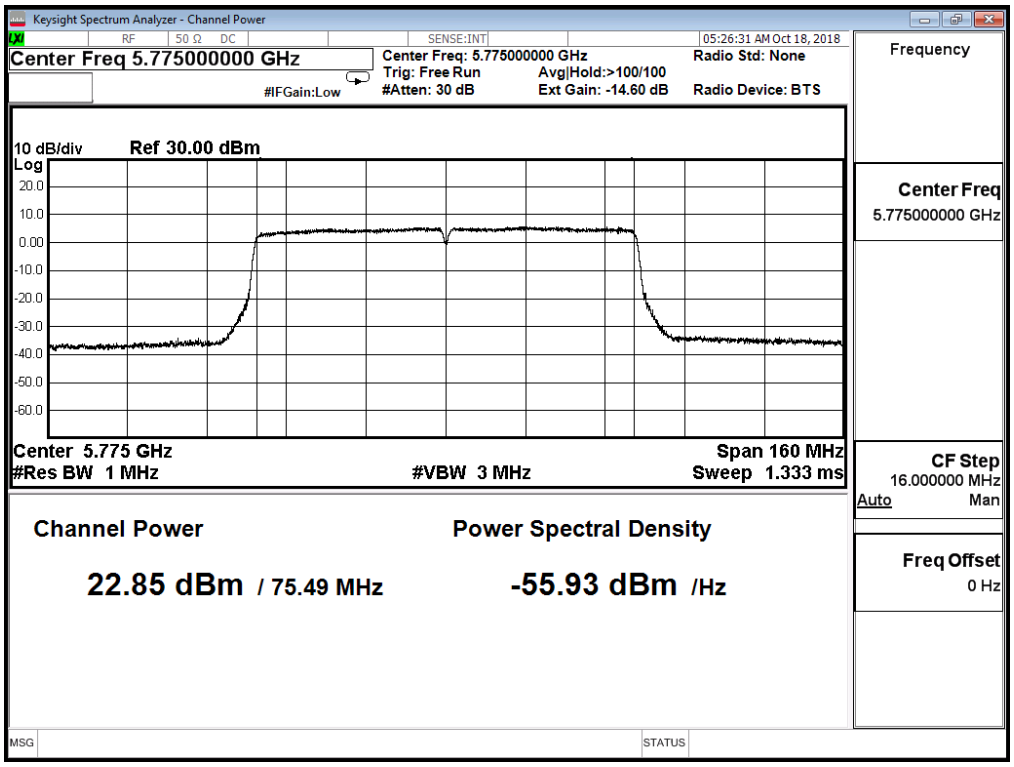
Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
151	5755	29.528	≦30
159	5795	29.728	≦30

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/18	Test Site	SR10-H

IEEE802.11ac 80MHz (ANT 0)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	22.850	≦30

Channel 155

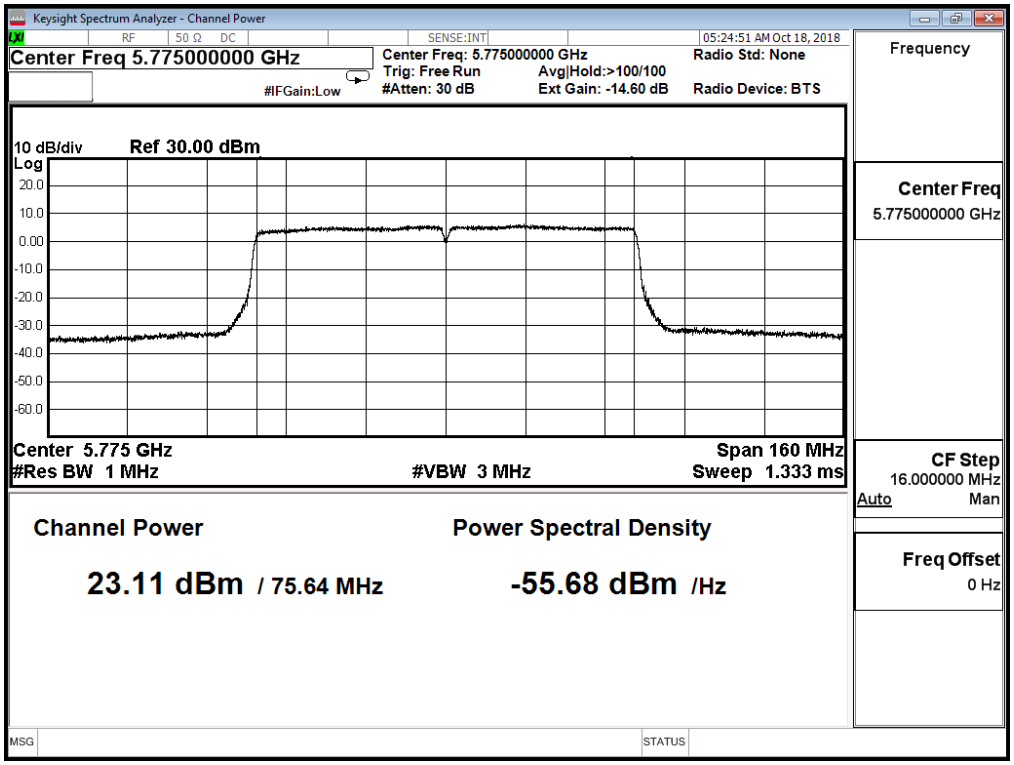


Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/18	Test Site	SR10-H

IEEE802.11ac 80MHz (ANT 1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	23.110	≦30

Channel 155



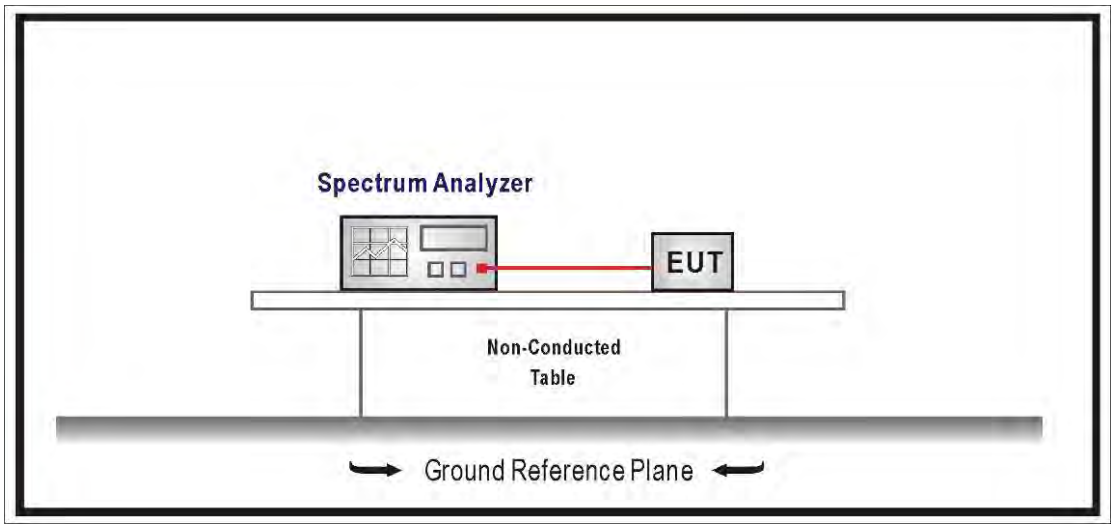
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum conducted output power		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/18	Test Site	SR10-H

IEEE802.11ac 80MHz (ANT 0+1)

Channel No.	Frequency (MHz)	Output Power (dBm)	Required Limit (dBm)
155	5775	25.992	≦30

5. Maximum power spectral density

5.1. Test Setup



5.2. Limits

1. For the band 5.15-5.25 GHz, the Maximum 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 Maximum power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
2. For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi
3. For the band 5.25-5.35 GHz, the Maximum 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 Maximum power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
4. For the band 5.725-5.850 GHz, the Maximum 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 Maximum power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi..

5.3. Test Procedure

The EUT was setup to ANSI C63.10: 2013; tested to U-NII test procedure of KDB 789033.v01r02 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.

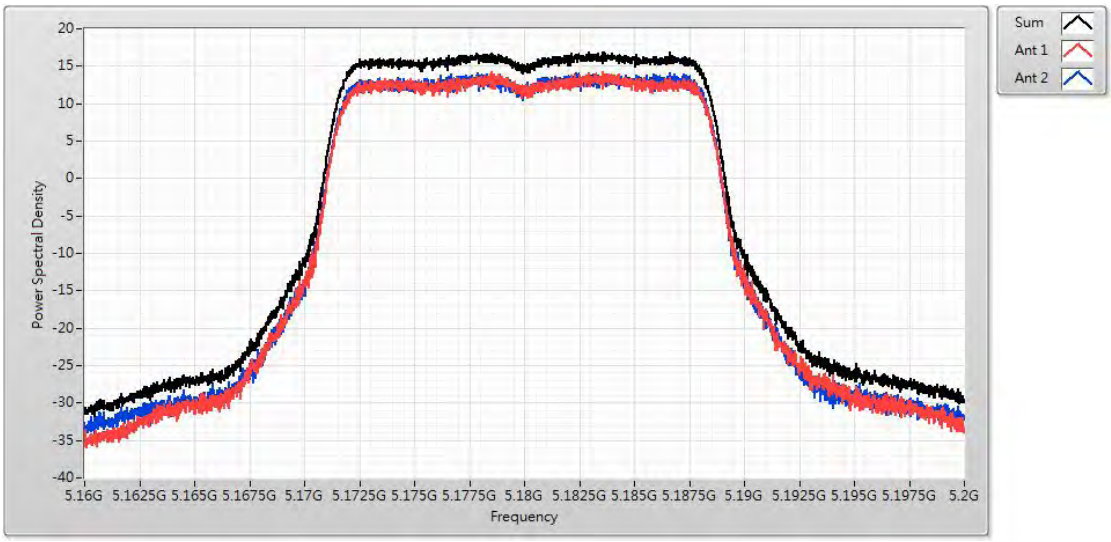
For Band4 : Set RBW=500KHz, VBW=1.5MHz with RMS detector. The PPSD is the highest level found across the emission in any 500KHz band after 100 sweeps of averaging.

5.4. Test Result

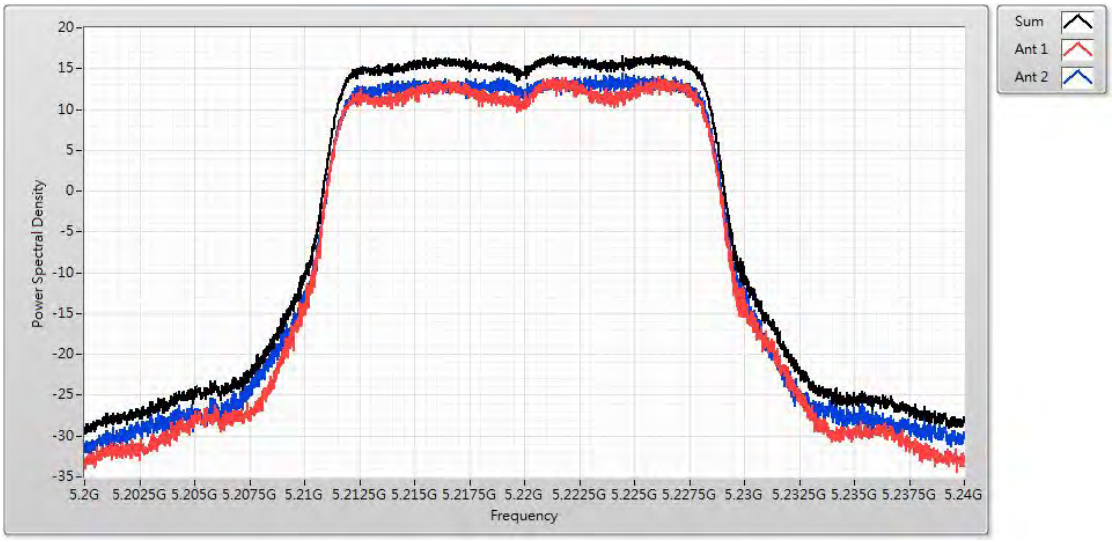
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11a (ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
36	5180	16.910	≦17	Pass
44	5220	16.720	≦17	Pass
48	5240	16.960	≦17	Pass

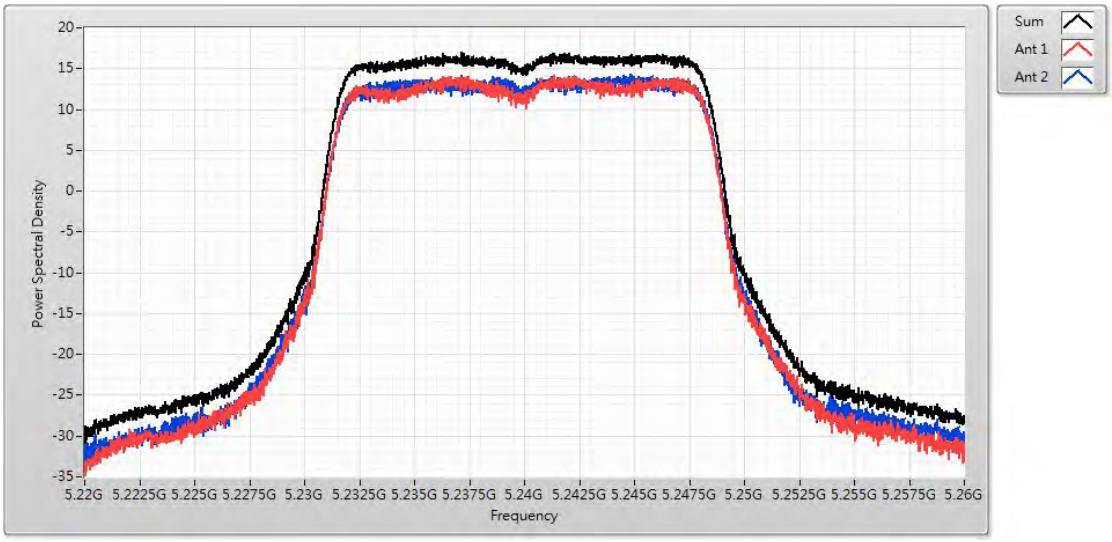
Channel 36



Channel 44



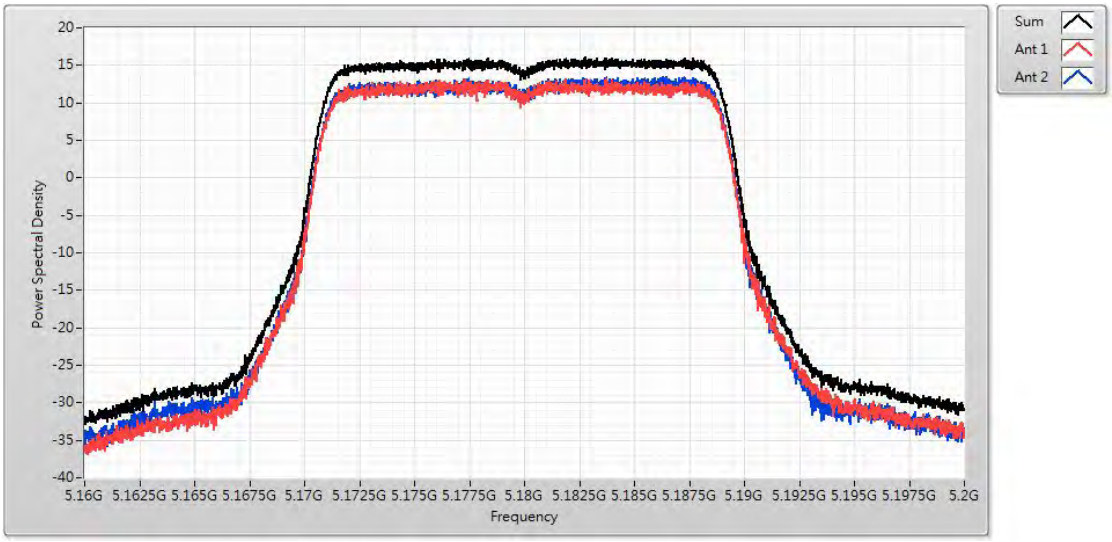
Channel 48



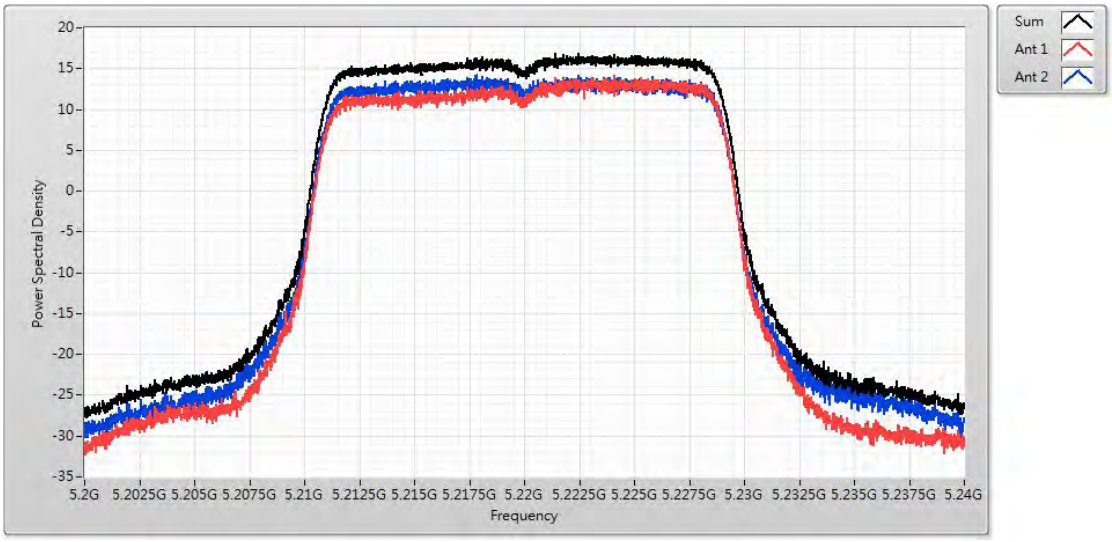
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(20MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
36	5180	16.070	≦17	Pass
44	5220	16.850	≦17	Pass
48	5240	16.590	≦17	Pass

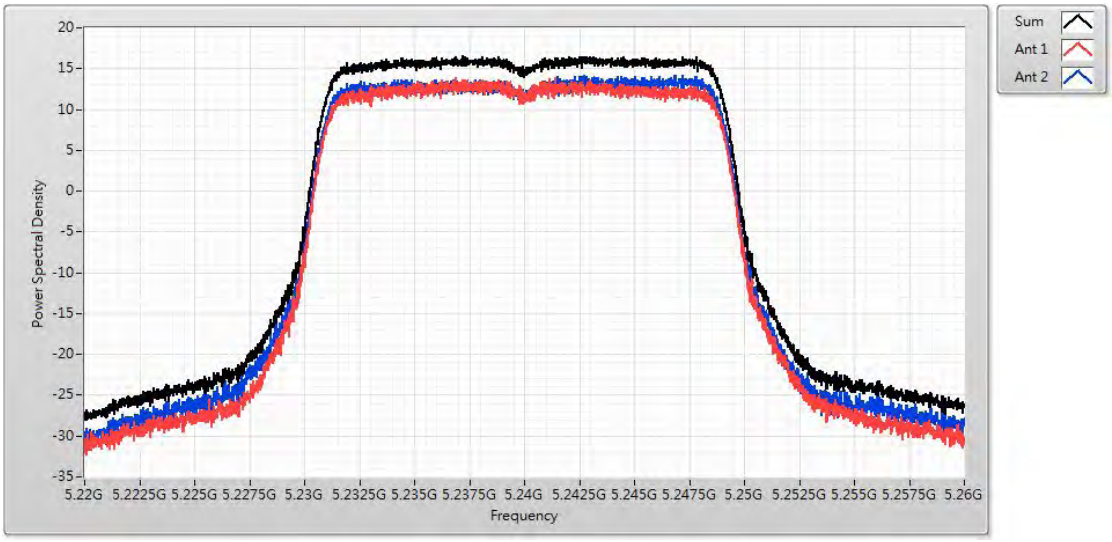
Channel 36



Channel 44



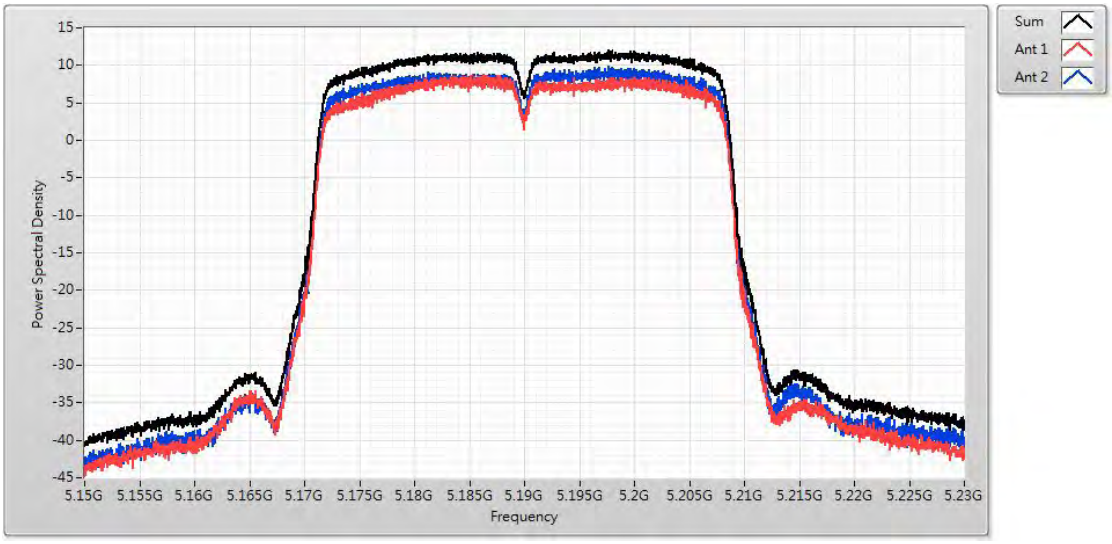
Channel 48



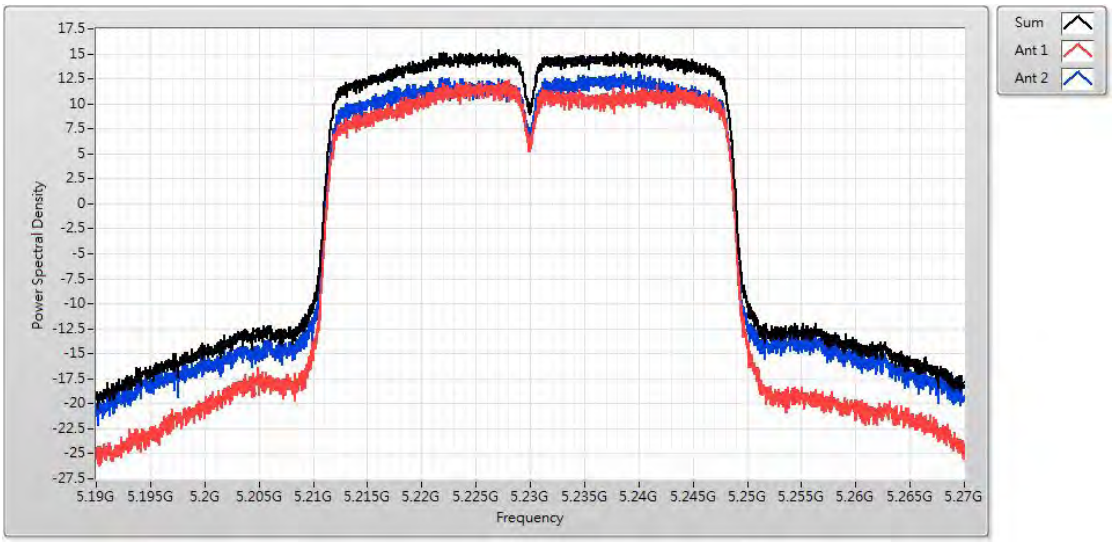
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(40MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
38	5190	12.120	≦17	Pass
46	5230	15.370	≦17	Pass

Channel 38



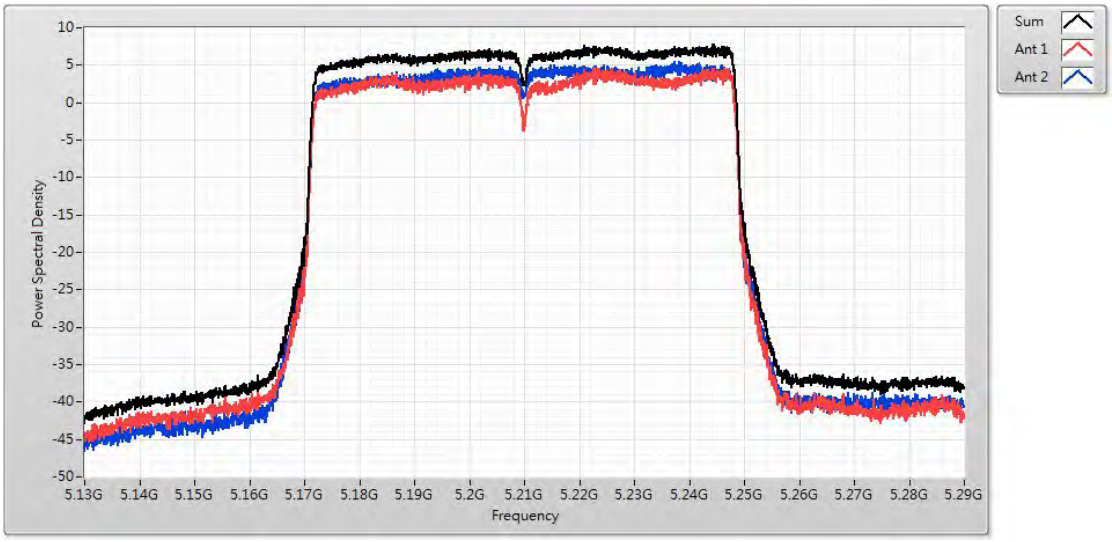
Channel 46


Sum
Ant 1
Ant 2
Power Spectral Density
17.5
15
12.5
10
7.5
5
2.5
0
-2.5
-5
-7.5
-10
-12.5
-15
-17.5
-20
-22.5
-25
-27.5
5.19G 5.195G 5.2G 5.205G 5.21G 5.215G 5.22G 5.225G 5.23G 5.235G 5.24G 5.245G 5.25G 5.255G 5.26G 5.265G 5.27G
Frequency

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(80MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
42	5210	7.78	≦17	Pass

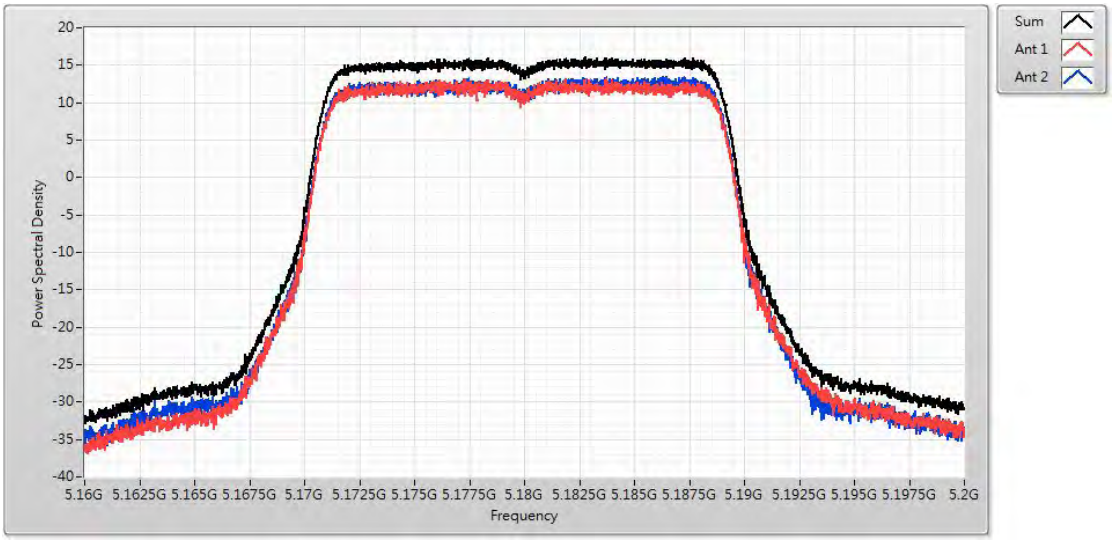
Channel 42



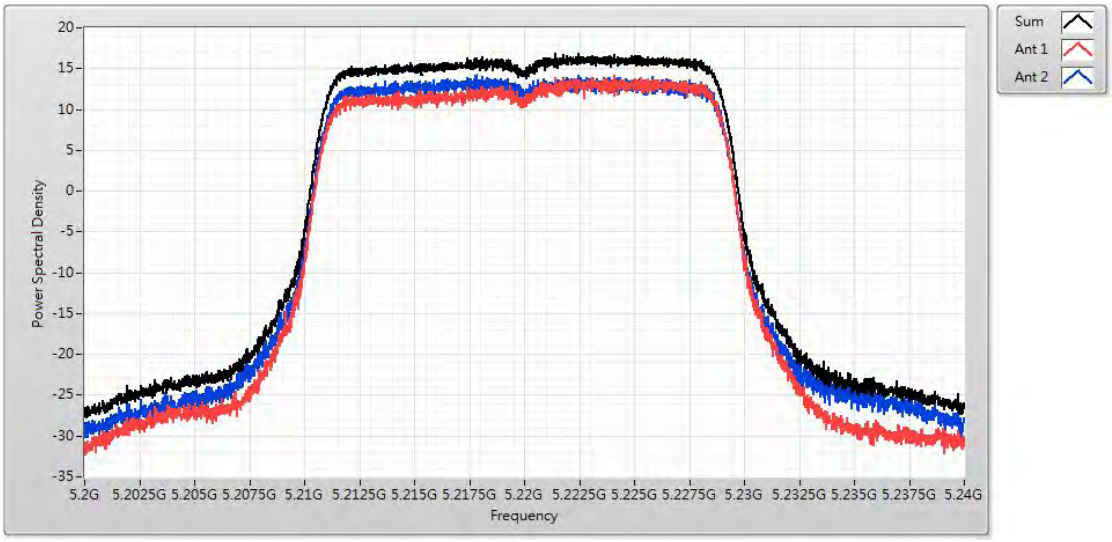
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(20MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
36	5180	16.070	≦17	Pass
44	5220	16.850	≦17	Pass
48	5240	16.590	≦17	Pass

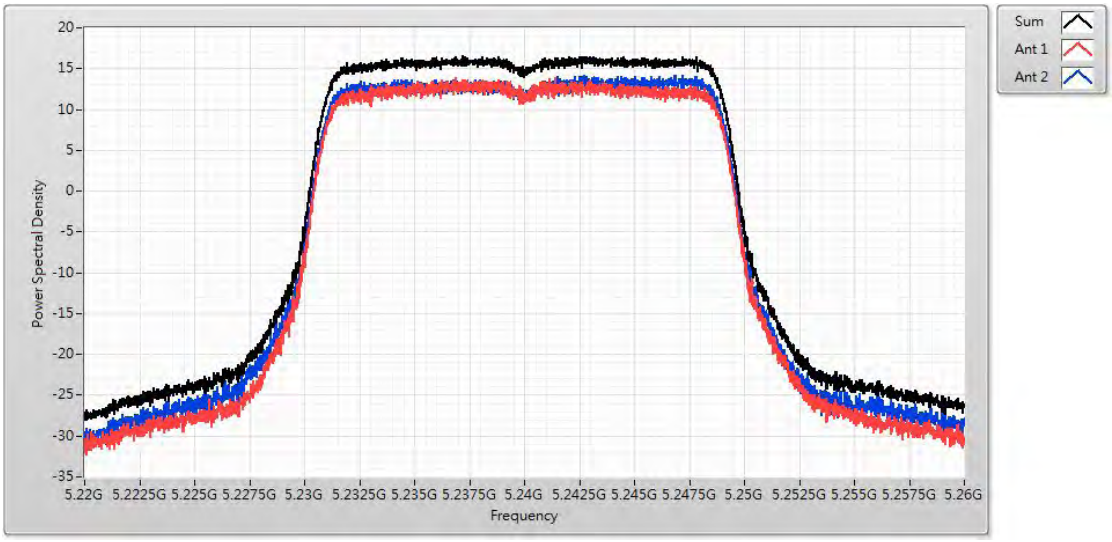
Channel 36



Channel 44



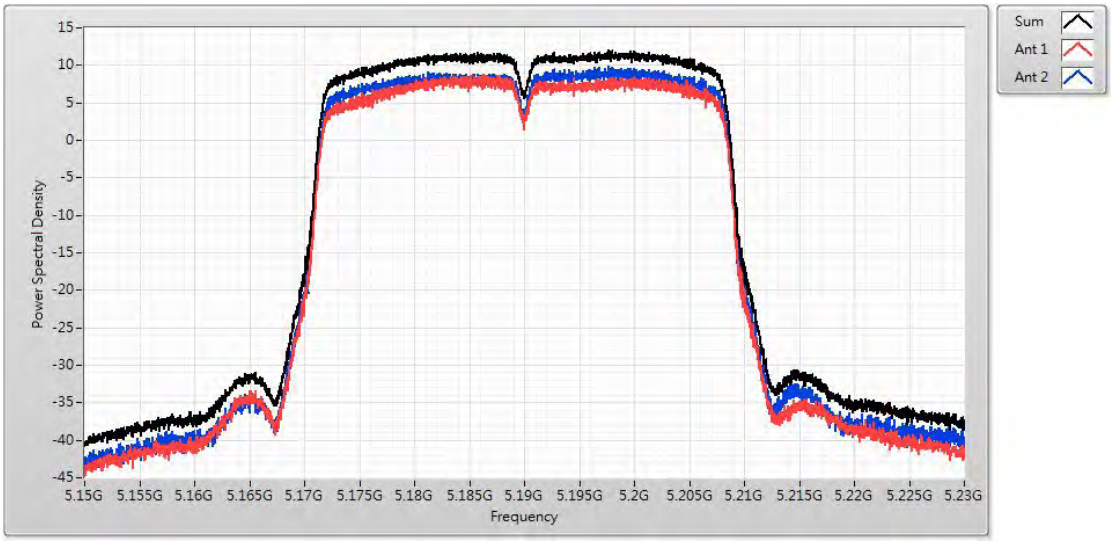
Channel 48



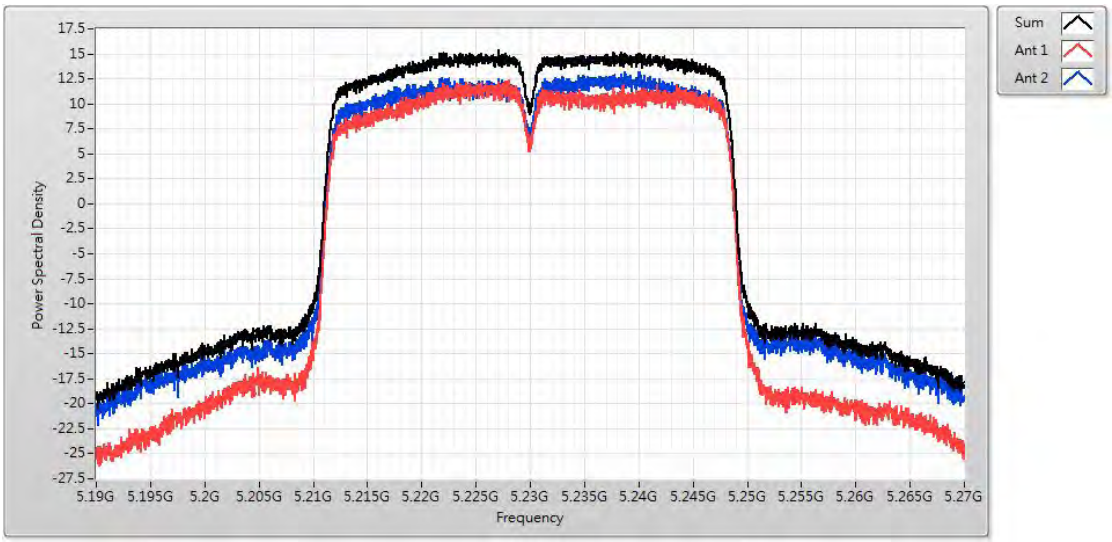
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(40MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
38	5190	12.120	≦17	Pass
46	5230	15.370	≦17	Pass

Channel 38



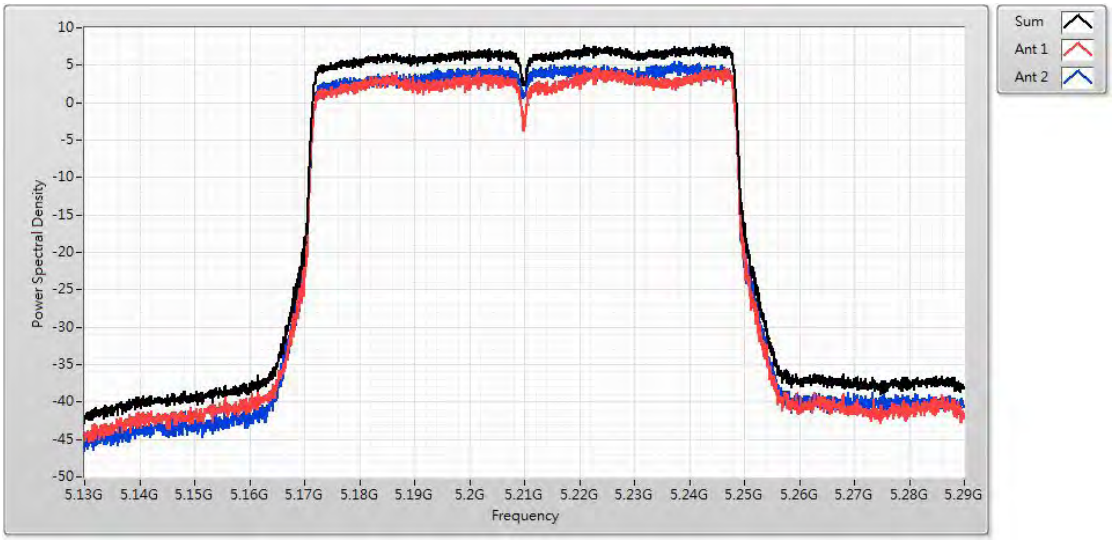
Channel 46


Sum
Ant 1
Ant 2
Power Spectral Density
17.5
15
12.5
10
7.5
5
2.5
0
-2.5
-5
-7.5
-10
-12.5
-15
-17.5
-20
-22.5
-25
-27.5
5.19G 5.195G 5.2G 5.205G 5.21G 5.215G 5.22G 5.225G 5.23G 5.235G 5.24G 5.245G 5.25G 5.255G 5.26G 5.265G 5.27G
Frequency

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/15	Test Site	SR10-H

IEEE 802.11ac(80MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
42	5210	7.780	≦17	Pass

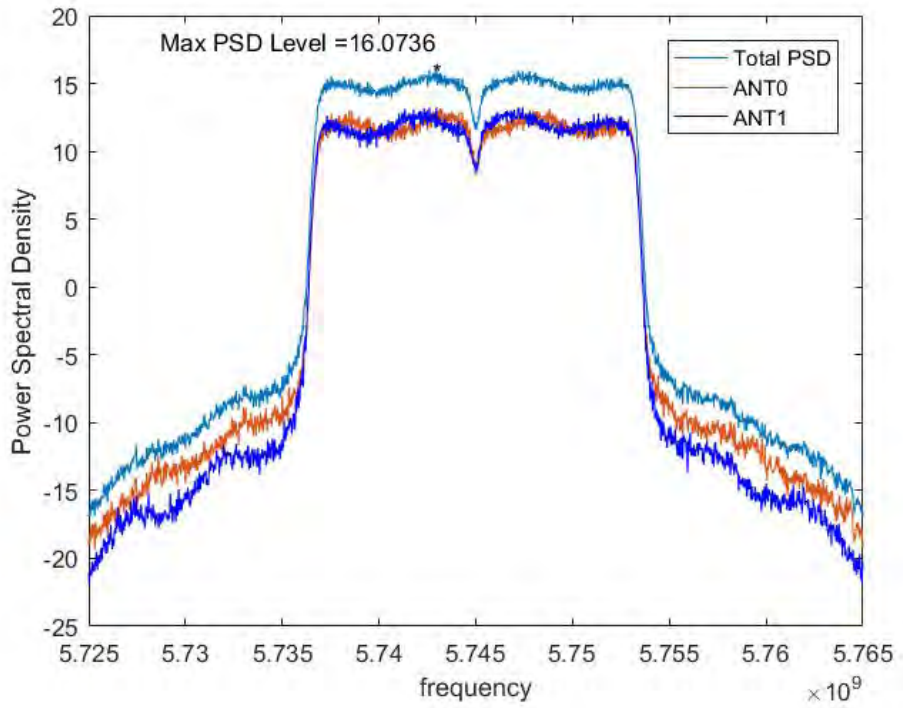
Channel 42



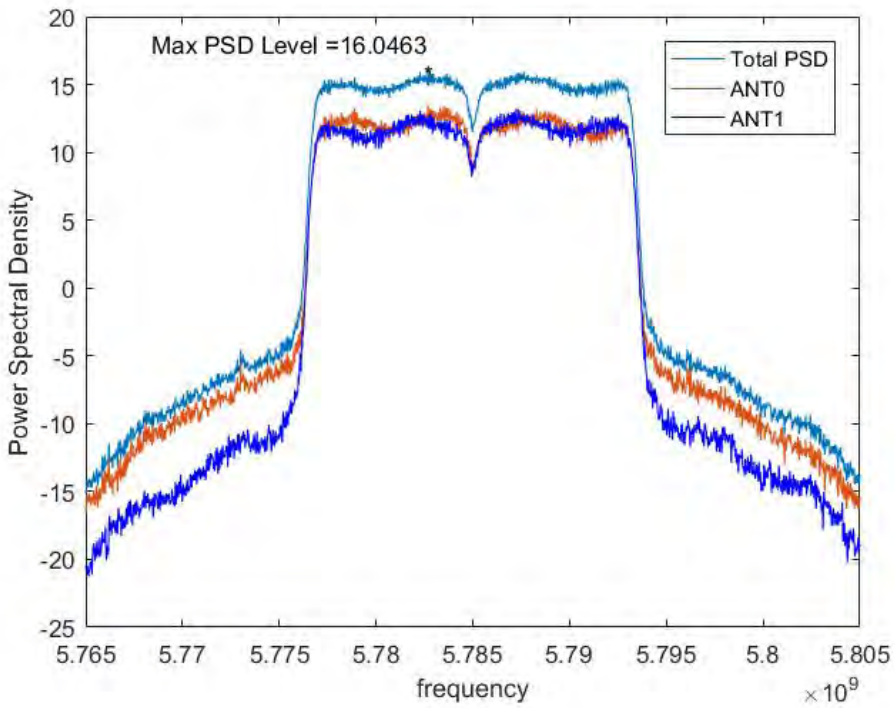
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/10	Test Site	SR10-H

IEEE 802.11a (ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
149	5745	16.074	≦30	Pass
157	5785	16.046	≦30	Pass
165	5825	15.805	≦30	Pass

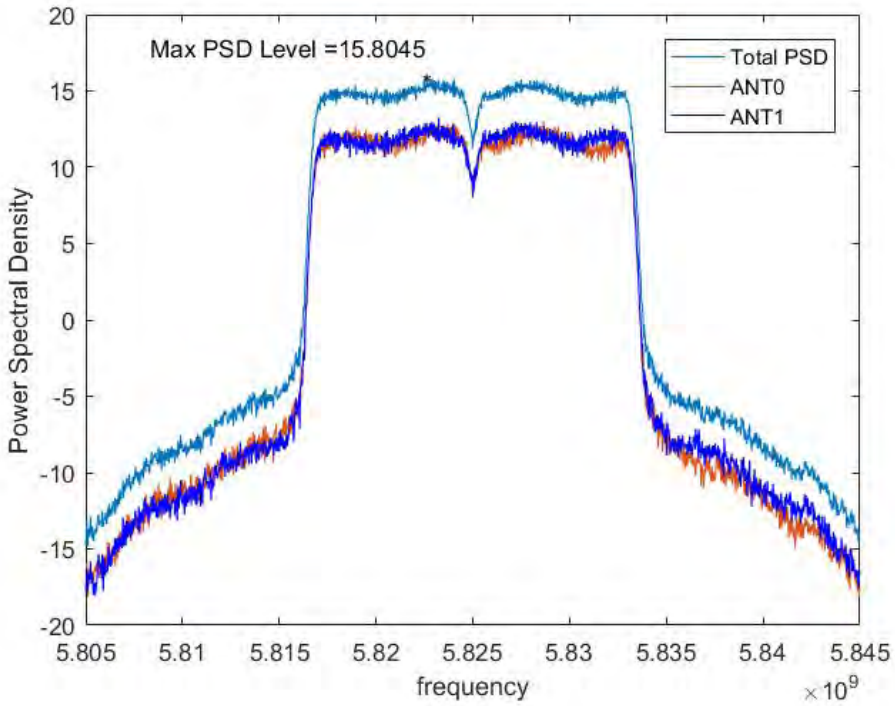
Channel 149



Channel 157



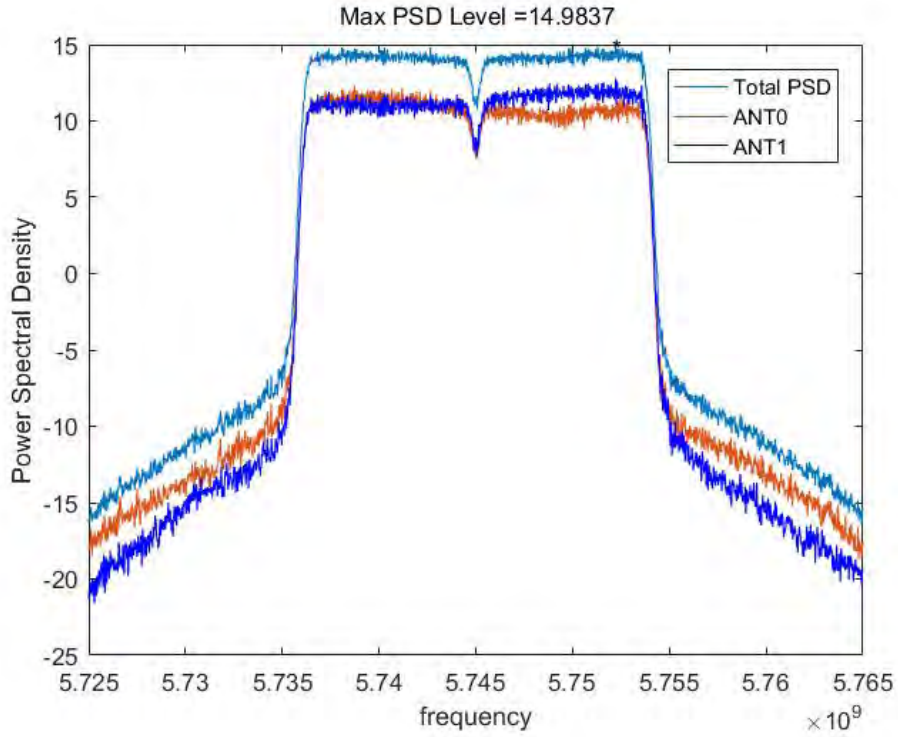
Channel 165



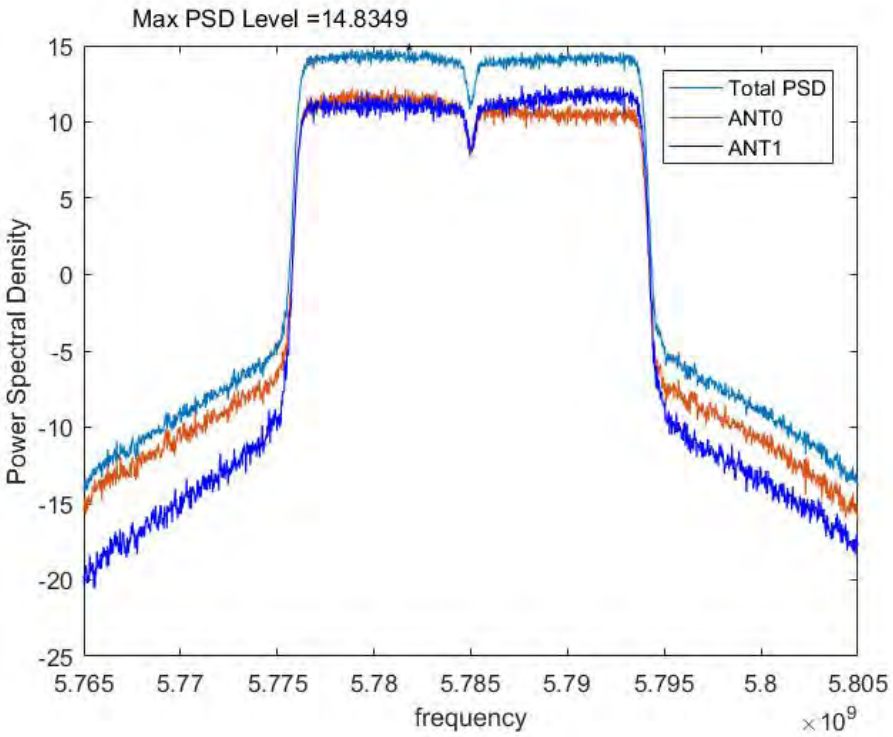
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/10	Test Site	SR10-H

IEEE 802.11ac(20MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
149	5745	14.984	≦30	Pass
157	5785	14.835	≦30	Pass
165	5825	15.050	≦30	Pass

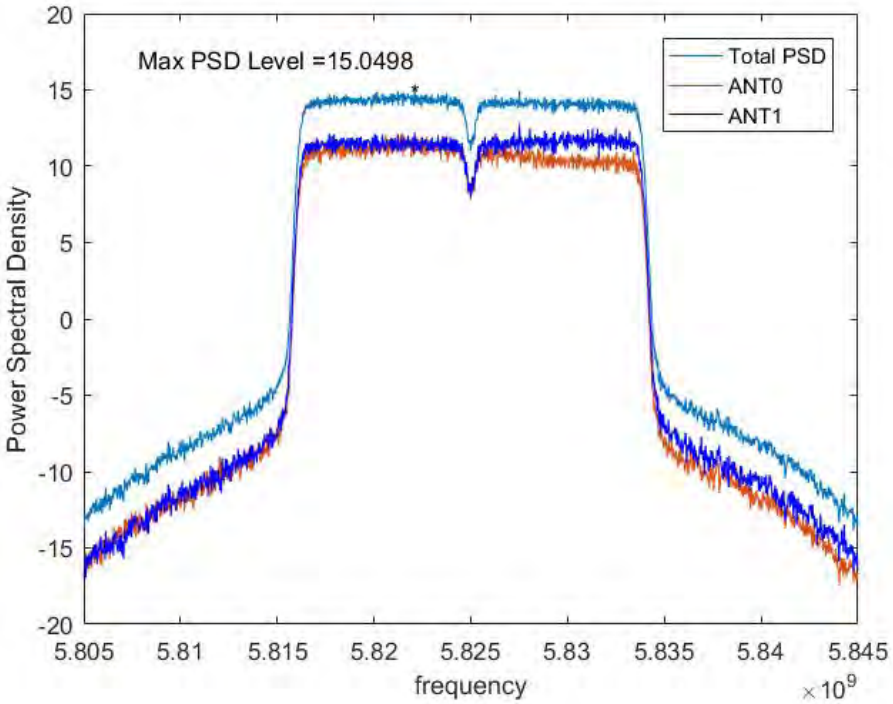
Channel 149



Channel 157



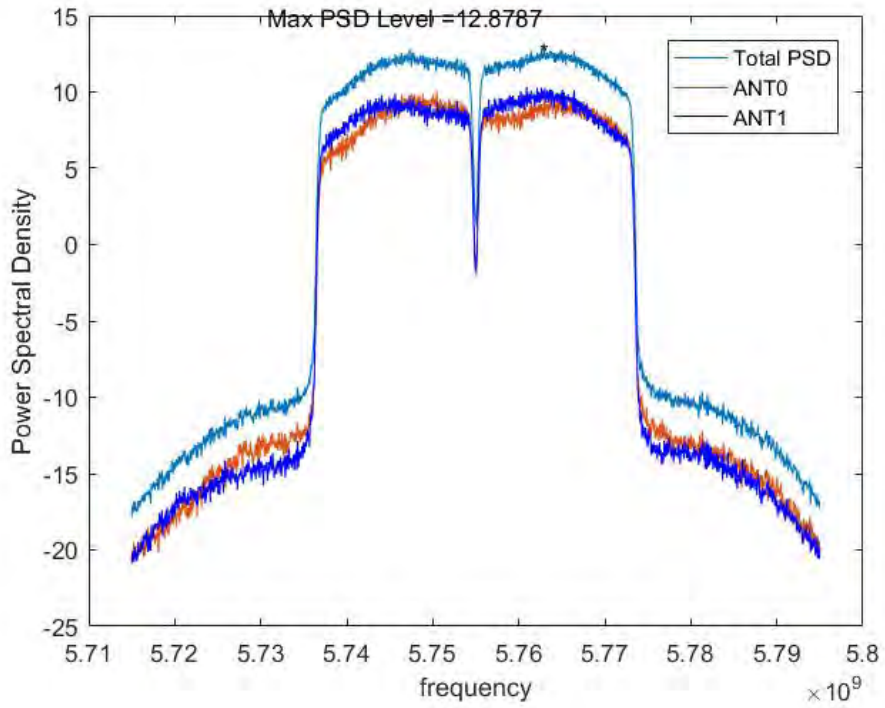
Channel 165



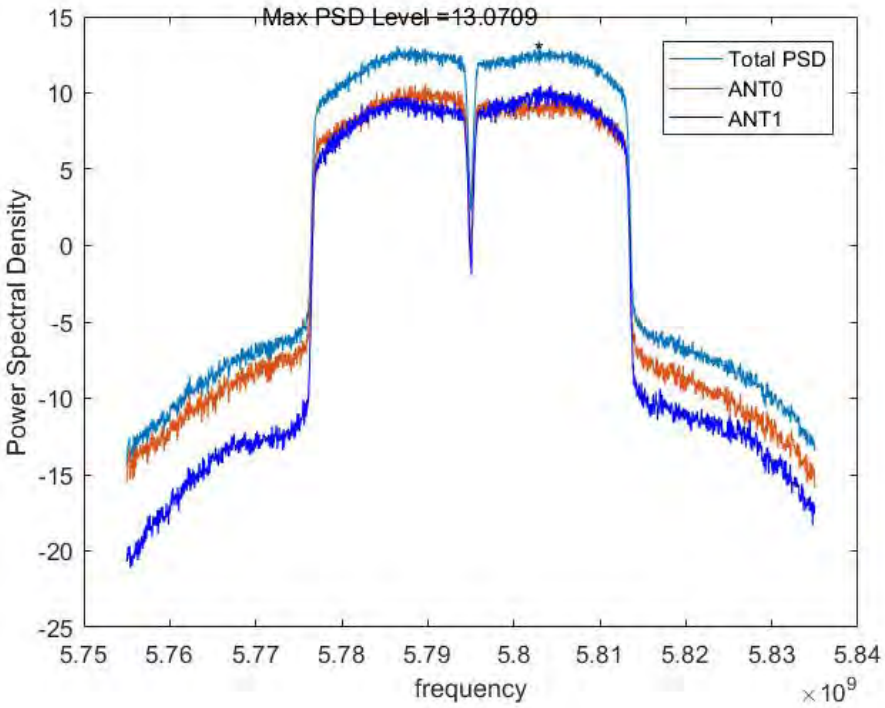
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/07/10	Test Site	SR10-H

IEEE 802.11ac(40MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
151	5755	12.879	≦30	Pass
159	5795	13.071	≦30	Pass

Channel 151



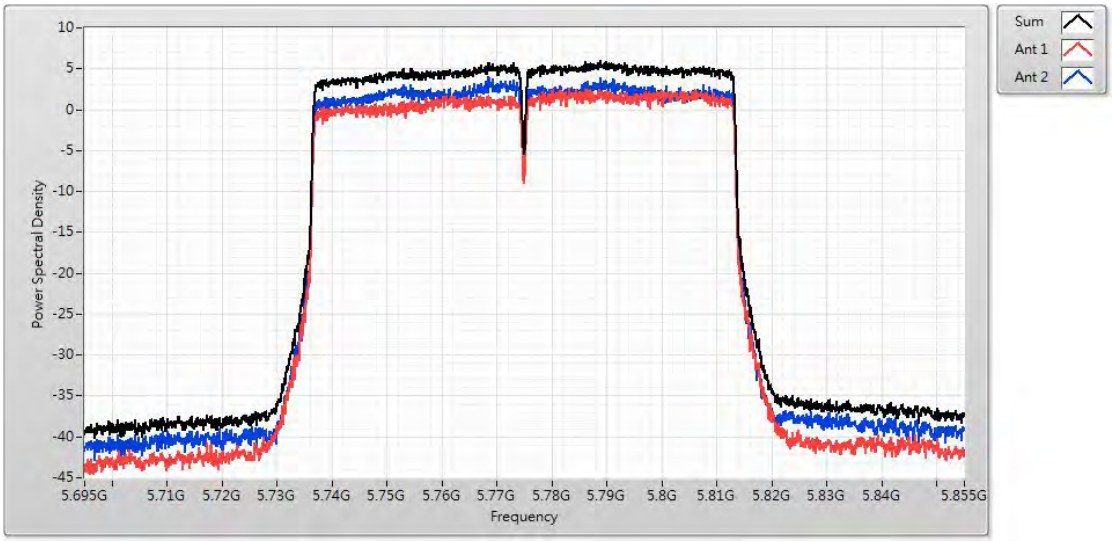
Channel 159


Max PSD Level =13.0709
Total PSD
ANT0
ANT1
Power Spectral Density
15
10
5
0
-5
-10
-15
-20
-25
5.75
5.76
5.77
5.78
5.79
5.8
5.81
5.82
5.83
5.84
frequency
×10^9

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 1: Transmit_Filter 1_CDD_ADP-45BW B		
Date of Test	2018/10/18	Test Site	SR10-H

IEEE 802.11ac(80MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
155	5775	5.960	≦30	Pass

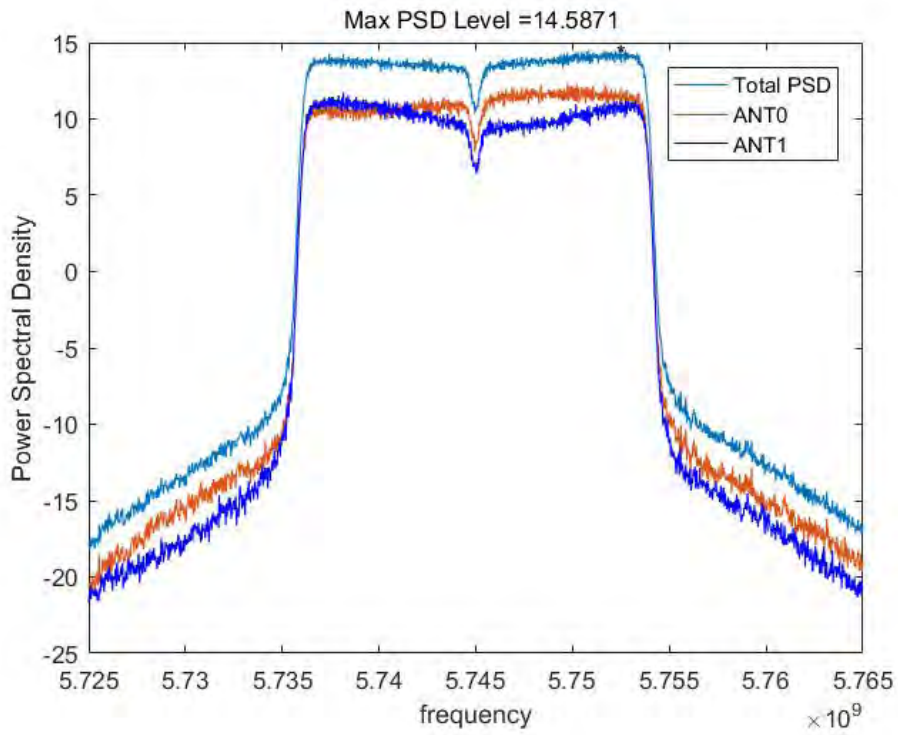
Channel 155



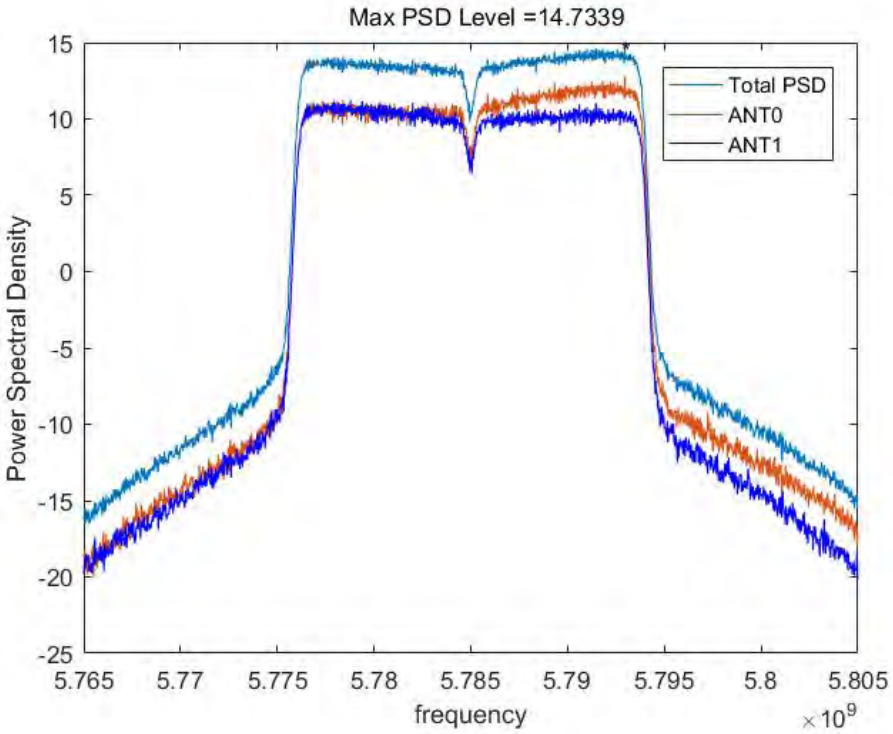
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/07/19	Test Site	SR10-H

IEEE 802.11ac(20MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
149	5745	14.587	≦30	Pass
157	5785	14.734	≦30	Pass
165	5825	14.308	≦30	Pass

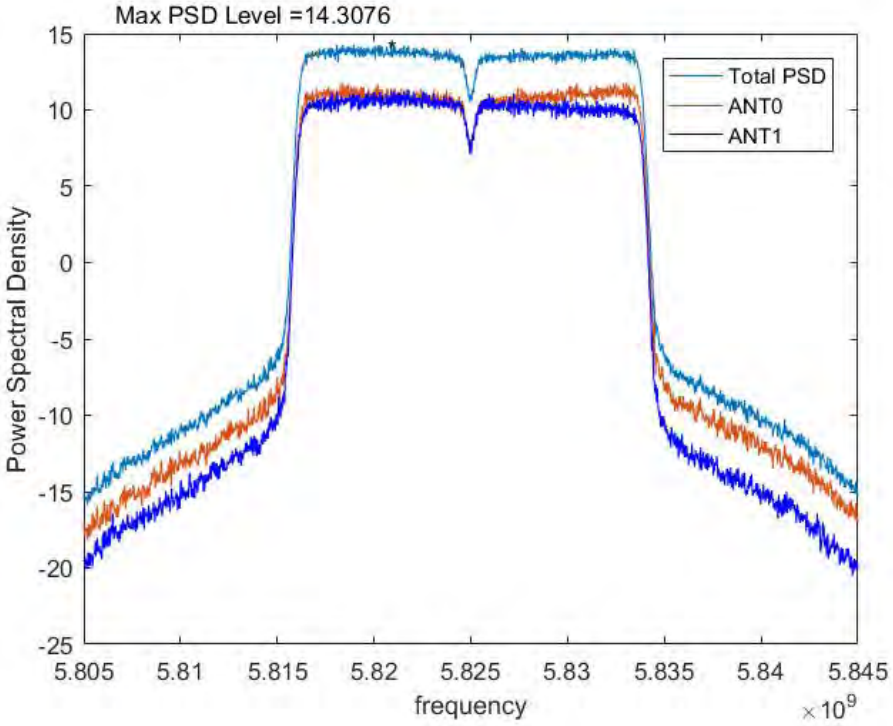
Channel 149



Channel 157



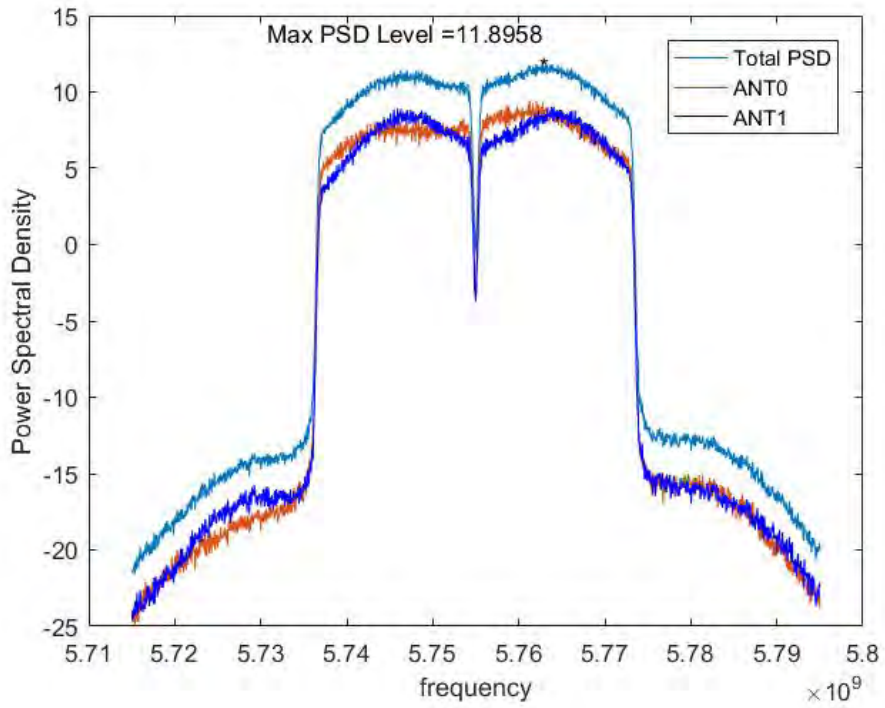
Channel 165



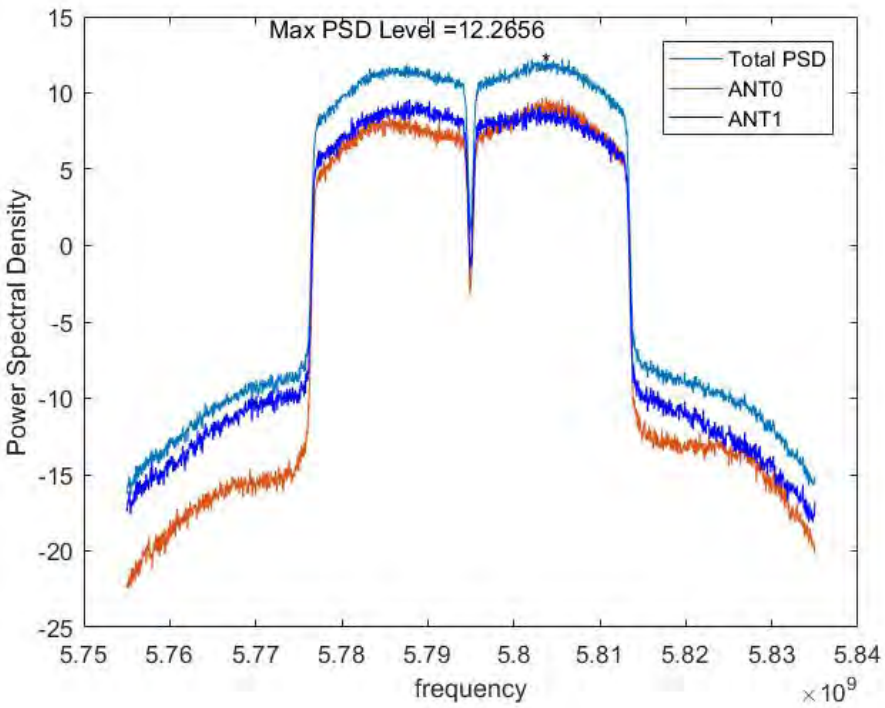
Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/07/19	Test Site	SR10-H

IEEE 802.11ac(40MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
151	5755	11.896	≦30	Pass
159	5795	12.266	≦30	Pass

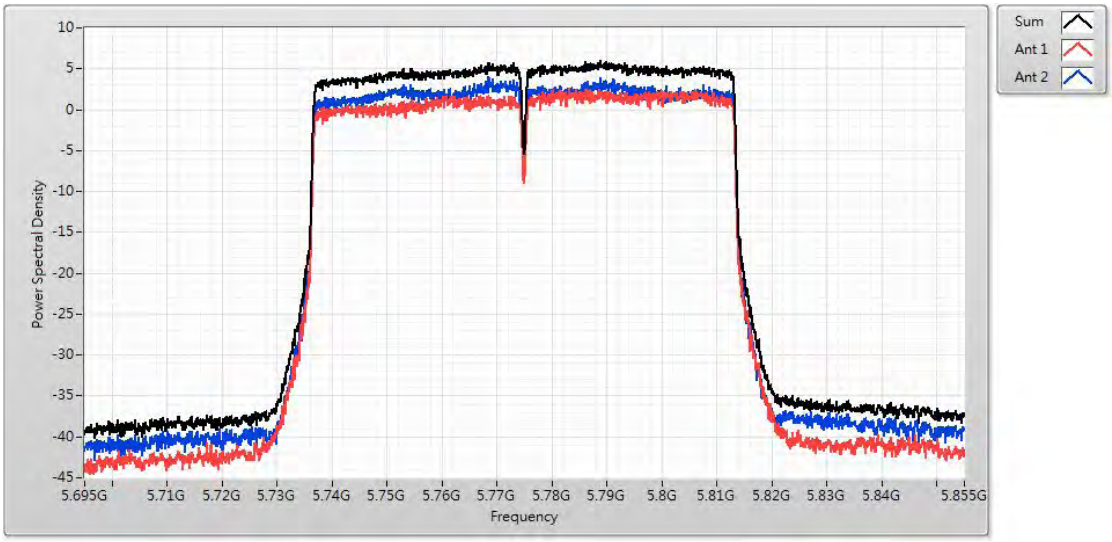
Channel 151



Channel 159


Max PSD Level =12.2656
Total PSD
ANT0
ANT1
Power Spectral Density
frequency
×10^9
15
10
5
0
-5
-10
-15
-20
-25
5.75
5.76
5.77
5.78
5.79
5.8
5.81
5.82
5.83
5.84

Product	Wireless-AC2200 Tri Band Gigabit Router		
Test Item	Maximum power spectral density		
Test Mode	Mode 5: Transmit_Filter 1_BF_ADP-45BW B		
Date of Test	2018/10/18	Test Site	SR10-H

IEEE 802.11ac(80MHz)(ANT0+1)				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
155	5775	5.960	≦30	Pass

Channel 155