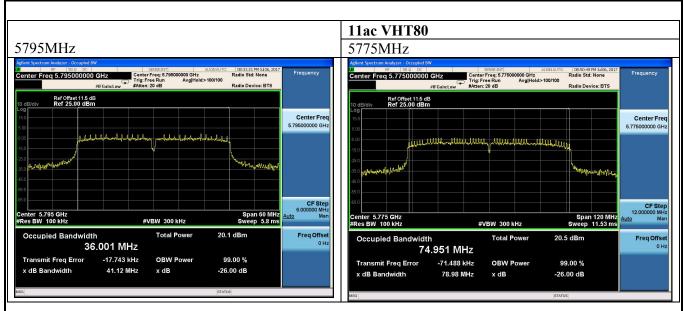
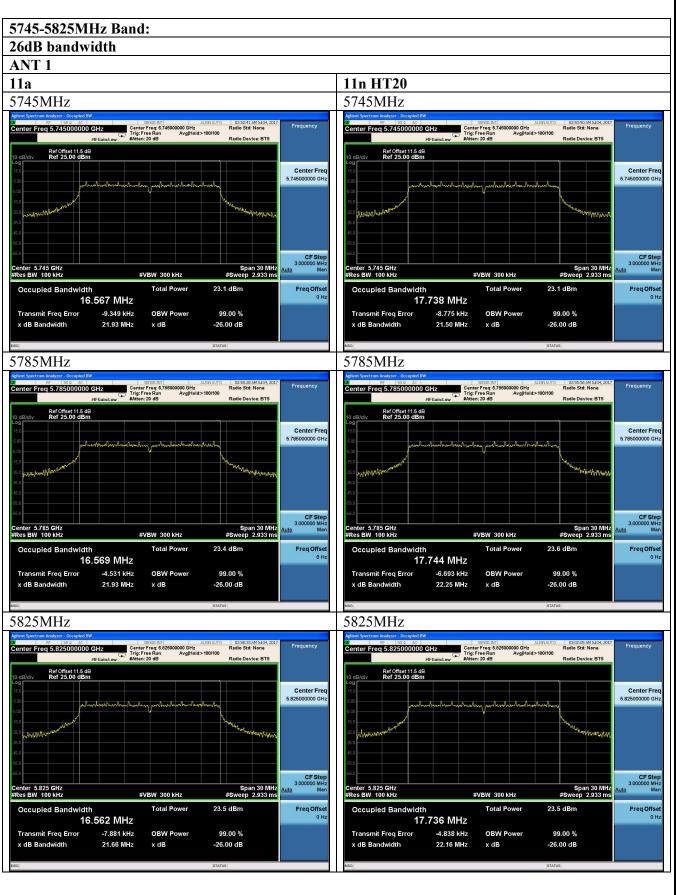
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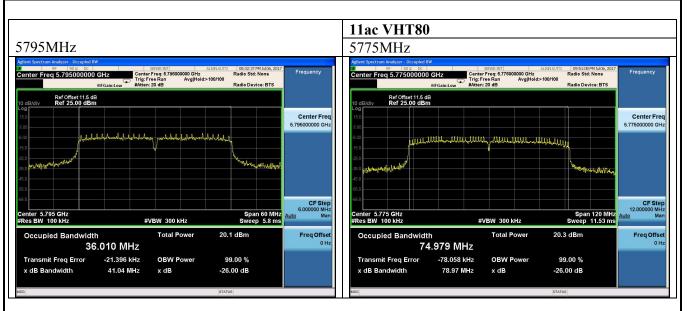
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11n HT40 5755MHz 5785MHz enter Freq 5.755000000 GHz Center Freq 5.785000000 GHz Center Freq: 5.755000000 GHz
Trig: Free Run Avg|Hold:>100/100 Center Freq: 5.785000000 GHz
Trig: Free Run Avg|Hold>100/100 Ref Offset 11.5 dB Ref 25.00 dBm Center Freq Center Freq CF Step 6.000000 MHz CF Step 3.000000 MH Span 30 MHz #Sweep 2.933 ms enter 5.755 GHz Res BW 100 kHz #VBW 300 kHz #VBW 300 kHz Occupied Bandwidth Total Power Freq Offset Total Power 23.5 dBm Freq Offse 36.012 MHz 17.718 MHz Transmit Freq Error -45.007 kHz **OBW Power** 99.00 % Transmit Freq Error -14.139 kHz **OBW Power** 99.00 % x dB Bandwidth 40.00 MHz x dB -26.00 dB x dB Bandwidth 21.14 MHz x dB -26.00 dB 5795MHz 5825MHz Center Freq: 5.795000000 GHz
Trig: Free Run Avg|Hold:>100/100 Center Freq: 5.82500000 GHz
Trig: Free Run Avg|Hold>100/100
#Atten: 20 dB Ref Offset 11.5 dB Ref 25.00 dBm Ref Offset 11.5 dB Ref 25.00 dBm Center Freq 5.795000000 GHz Center Freq 5.825000000 GHz CF Step 6.000000 MH: Mai CF Step 3.000000 MH Span 30 MHz #Sweep 2.933 ms Span 60 MHz Sweep 5.8 ms #VBW 300 kHz #VBW 300 kHz Total Power 20.2 dBm Total Power 23.6 dBm Occupied Bandwidth Freq Offset Occupied Bandwidth Freq Offse 36.005 MHz 17.706 MHz -9.329 kHz -27.977 kHz Transmit Freg Error Transmit Freg Error **OBW Power** 99.00 % **OBW Power** 99.00 % x dB Bandwidth 40.72 MHz -26.00 dB x dB Bandwidth 20.93 MHz -26.00 dB 11ac VHT20 11ac VHT40 5745MHz 5755MHz Center Freq: 5.745000000 GHz
Trig: Free Run Avg|Hold>100/100 SENSEINT ALIGNAUTO
Center Freq: 5.755000000 GHz
Trig: Free Run Avg|Hold>100/100
#Atten: 20 dB 02:54:15 AM 3ul04, 201 Radio Std: None 08:27:21 PM Jul 06, 20 Radio Std: None er Freq 5.745000000 GHz Center Freq CF Ste 3.000000 MH Ma CF Step 6.000000 MHz Man Span 30 MHz #Sweep 2.933 ms #VBW 300 kHz #VBW 300 kHz 23.0 dBm Freq Offse Total Power Total Power 19.8 dBm Freq Offset 17.713 MHz 36.001 MHz Transmit Freq Error -12.502 kHz **OBW Power** 99.00 % Transmit Freq Error -34.560 kHz **OBW Power** 99.00 % 21.08 MHz x dB -26.00 dB 39.45 MHz x dB -26.00 dB

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7. OUTPUT POWER TEST

7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.15,16	1Year
2.	Power meter	Anritsu	ML2487A	6K00002472	Apr.22,17	1Year
3.	Power sensor	Anritsu	MA2491A	0033005	Apr.22,17	1Year
4.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.22,17	1 Year
5.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.15,16	1 Year

7.2.Limit

For the band 5.15–5.25 GHz.

For mobile and portable 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 max-imum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

7.3.Test Procedure

- 1. Connected the EUT's antenna port to measure device by 26dB attenuator.
- 2. For IEEE 802.11a and IEEE802.11n HT20 and 802.11ac VHT20 mode, use a PK power meter which's bandwidth is 20MHz and above 26dB bandwidth of signal to measure out each test modes' PK output power.
- 3. For IEEE802.11n HT40 mode, because the signal's bandwidth is about 40MHz and above 20MHz bandwidth of power sensor ML2491A. So use the test method described in KBD789033 clause E Method SA-1
 - 1) Connect the antenna port to the spectrum analyzer and Set span of the spectrum to encompass the entire emission bandwidth (EBW) of the signal.
 - 2) Set the RBW=1MHz and VBW =3MHz
 - 3) Number of points in sweep ≥ 2 Span / RBW
 - 4) Detector = RMS
 - 5) Sweep time = auto couple
 - 6) Allow the sweep to "free run" and set the Trace average at least 100 traces in power averaging (i.e., RMS) mode.
 - 7) Compute power by integrating the spectrum across the 26 dB EBW of the signal using the instrument's band power measurement function with band limits set equal to the EBW band edges.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.



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7.4. Test Results

5180-5240MHz Band:

EUT: Cash Register		
M/N: SPB1-01		
Test date: 2017-07-05	Pressure: 102.8±1.0 kpa	Humidity:53.2±3.0%
Tested by: zack_zhu	Test site: RF site	Temperature:23.6±0.6 ℃

Test Mode	Frequency (MHz)	Maximum Conducted output power (dBm)		Limit (dBm)	
Wiode	(11112)	ANT0	ANT1	ANT0	ANT1
	5180	14.73	15.44	23.98	23.85
11a	5200	14.38	15.07	23.98	23.85
	5240	14.36	15.23	23.98	23.85
11	5180	14.51	15.35	23.98	23.85
11n HT20	5200	14.30	15.08	23.98	23.85
П120	5240	14.38	15.17	23.98	23.85
11n	5190	16.01	14.60	23.98	23.85
HT40	5230	16.00	14.33	23.98	23.85
1.1	5180	14.60	15.19	23.98	23.85
11ac VHT20	5200	14.37	15.06	23.98	23.85
VII 120	5240	14.38	15.17	23.98	23.85
11ac	5190	15.95	14.56	23.98	23.85
VHT40	5230	16.01	14.26	23.98	23.85
11ac VHT80	5210	14.93	15.00	23.98	23.85
Conclusion: I	PASS				

Note: For ANT0:

Antenna Gain= -2.39dBi<6dBi.

For ANT1:

Antenna Gain= 6.13dBi>6dBi.



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5260-5320MHz Band:

EUT: Cash Register						
M/N: SPB1-01						
Test date: 2017-07-05	Pressure: 102.8±1.0 kpa	Humidity:53.2±3.0%				
Tested by: zack_zhu	Test site: RF site	Temperature:23.6±0.6 ℃				

Test Mode	Frequency (MHz)	Maximum Conducted output power (dBm)		Limit (dBm)	
Wiode	(14112)	ANT0	ANT1	ANT0	ANT1
	5260	14.48	15.31	23.98	23.24
11a	5300	14.65	15.45	23.98	23.24
	5320	14.74	15.50	23.98	23.24
11	5260	14.44	15.29	23.98	23.24
11n HT20	5300	14.52	15.34	23.98	23.24
П120	5320	14.56	15.44	23.98	23.24
11n	5270	16.10	14.44	23.98	23.24
HT40	5310	16.11	14.56	23.98	23.24
11	5260	14.52	15.29	23.98	23.24
11ac VHT20	5300	14.53	15.38	23.98	23.24
VH120	5320	14.61	15.43	23.98	23.24
11ac	5270	16.09	14.28	23.98	23.24
VHT40	5310	16.12	14.57	23.98	23.24
11ac VHT80	5290	14.99	15.03	23.98	23.24
Conclusion: F	PASS				

Note: For ANT0:

Antenna Gain= -1.76dBi<6dBi.

For ANT1:

Antenna Gain= 6.74dBi>6dBi.



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5500-5700MHz Band:

EUT: Cash Register		
M/N: SPB1-01		
Test date: 2017-07-10	Pressure: 102.8±1.0 kpa	Humidity:53.2±3.0%
Tested by: zack_zhu	Test site: RF site	Temperature:23.6±0.6 ℃

Test Mode	Frequency (MHz)	Maximum Conducted output power (dBm)		Limit (dBm)	
5.20 0.0	,	ANT0	ANT1	ANT0	ANT1
	5500	15.19	15.82	23.98	23.06
11a	5600	14.64	15.12	23.98	23.06
	5700	14.67	15.06	23.98	23.06
11	5500	14.87	15.75	23.98	23.06
11n HT20	5600	14.21	15.06	23.98	23.06
11120	5700	14.26	14.99	23.98	23.06
11	5510	16.05	14.86	23.98	23.06
11n HT40	5590	15.74	14.34	23.98	23.06
11140	5670	15.27	13.98	23.98	23.06
11	5500	14.98	15.74	23.98	23.06
11ac VHT20	5600	14.24	15.07	23.98	23.06
VIII 20	5700	14.40	15.01	23.98	23.06
11	5510	16.04	14.84	23.98	23.06
11ac VHT40	5590	15.73	14.37	23.98	23.06
VIII40	5670	15.28	13.98	23.98	23.06
11	5530	15.01	15.34	23.98	23.06
11ac VHT80 -	5610	14.51	14.75	23.98	23.06
V 1100	5690	14.48	14.69	23.98	23.06
Conclusion: P	ASS				

Note: For ANT0:

Antenna Gain= 1.42dBi<6dBi.

For ANT1:

Antenna Gain= 6.92dBi>6dBi.



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5745-5825MHz Band:

EUT: Cash Register		
M/N: SPB1-01		
Test date: 2017-07-10	Pressure: 102.8±1.0 kpa	Humidity:53.2±3.0%
Tested by: zack_zhu	Test site: RF site	Temperature:23.6±0.6 ℃

Test	Frequency	Maximum Conducted output power (dBm)		Limit (dBm)			
Mode	(MHz)	ANT0	ANT1	ANT0	ANT1		
	5745	14.83	15.55	30	29.02		
11a	5785	15.04	15.91	30	29.02		
	5825	14.89	15.71	30	29.02		
11	5745	14.63	15.51	30	29.02		
11n HT20	5785	14.84	15.85	30	29.02		
П120	5825	14.71	15.65	30	29.02		
11n	5755	16.11	14.72	30	29.02		
HT40	5795	16.32	14.88	30	29.02		
11	5745	14.80	15.48	30	29.02		
11ac VHT20	5785	14.92	15.85	30	29.02		
V II 1 2 U	5825	14.72	15.65	30	29.02		
11ac	5755	16.10	14.73	30	29.02		
VHT40	5795	16.35	14.10	30	29.02		
11ac VHT80	5775	14.35	14.56	30	29.02		
Conclusion: PASS							

Note: For ANT0:

Antenna Gain= 0.55dBi<6dBi.

For ANT1:

Antenna Gain= 6.98dBi>6dBi.

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