

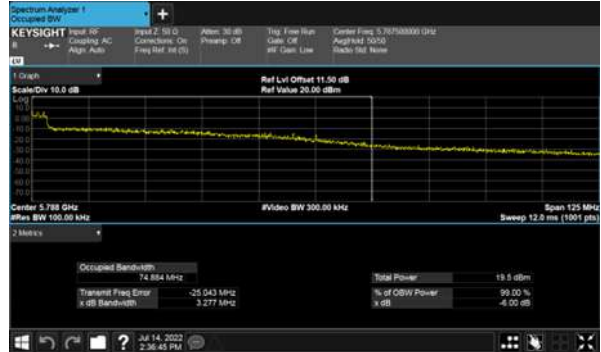
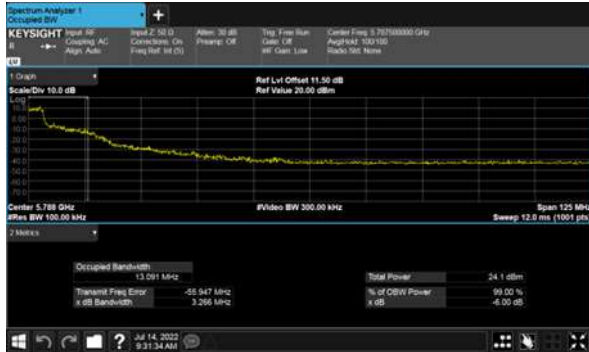


6dB Bandwidth

Extends across 5725MHz Band, Straddle Channel, ANT B

Modulation Type: 802.11a (6Mbps)
CH144

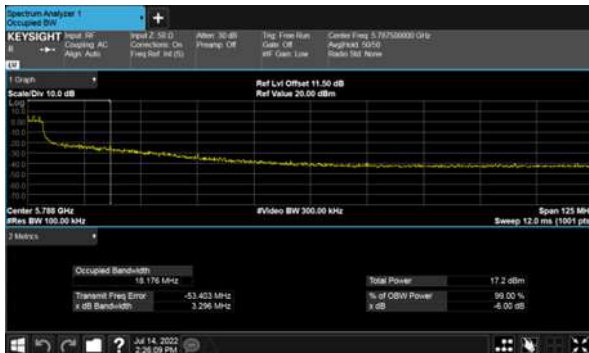
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142



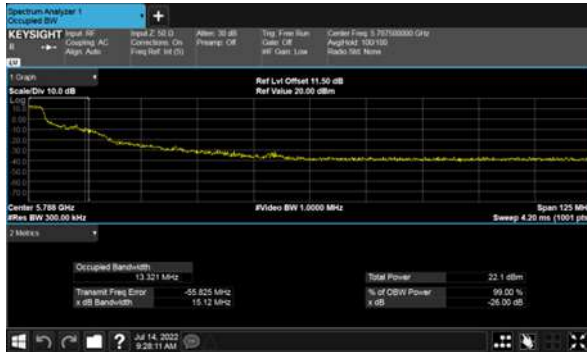


99% Bandwidth

Extends across 5725MHz Band, Straddle Channel, ANT A

Modulation Type: 802.11a (6Mbps)
CH144

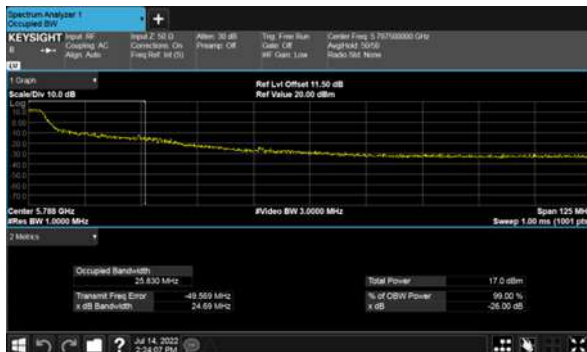
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142



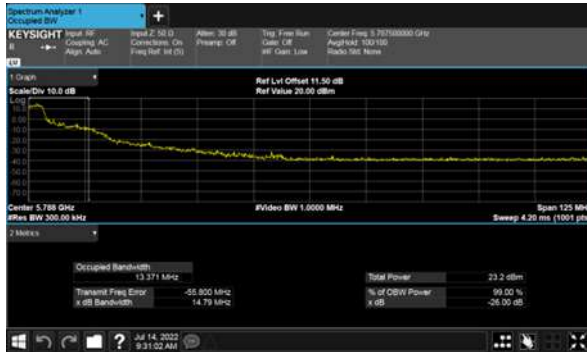


99% Bandwidth

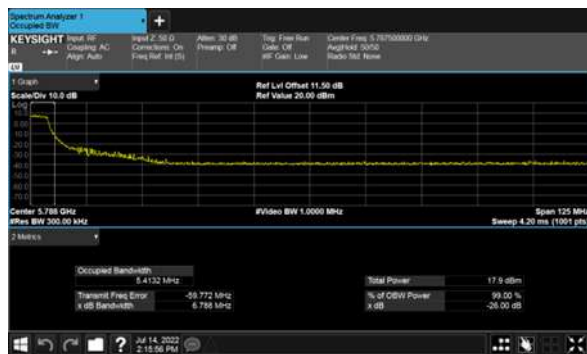
Extends across 5725MHz Band, Straddle Channel, ANT B

Modulation Type: 802.11a (6Mbps)
CH144

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142





9. 26dB Bandwidth & 99% Occupied Bandwidth

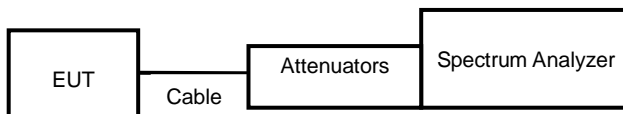
9.1. Test Limit

None; for reporting purposes only.

9.2. Test Procedure

Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW = approximately 1% of the emission bandwidth, the VBW $\geq 3 \times$ RBW, peak detector and max hold.

9.3. Test Setup Layout



**9.4. Test Result and Data**

In the 5.2G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)	
			ANT A	ANT B
11a	36	5180	23.18	22.68
11a	40	5200	22.42	22.32
11a	48	5240	22.46	23.24
11ac VHT20	36	5180	25.1	28.71
11ac VHT20	40	5200	24.49	24.81
11ac VHT20	48	5240	24.42	24.83
11ac VHT40	38	5190	45.6	49.47
11ac VHT40	46	5230	59.66	60
11ac VHT80	42	5210	90.15	89.98

In the 5.3G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)	
			ANT A	ANT B
11a	52	5260	22.32	21.87
11a	60	5300	22.38	21.86
11a	64	5320	22.41	21.76
11ac VHT20	52	5260	24.03	24.14
11ac VHT20	60	5300	23.96	23.93
11ac VHT20	64	5320	23.58	23.84
11ac VHT40	54	5270	59.26	59.95
11ac VHT40	62	5310	47.89	51.29
11ac VHT80	58	5290	96.67	110.3

In the 5.5G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)	
			ANT A	ANT B
11a	100	5500	22.73	22.06
11a	116	5580	22.72	22
11a	140	5700	23.27	22
11ac VHT20	100	5500	23.17	24
11ac VHT20	116	5580	23.98	24.07
11ac VHT20	140	5700	23.83	23.84
11ac VHT40	102	5510	46.43	47.88
11ac VHT40	110	5550	59.98	59.96
11ac VHT40	134	5670	52.57	50.04
11ac VHT80	106	5530	90.34	89.44



In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)	
			ANT A	ANT B
11a	36	5180	16.86	16.80
11a	40	5200	16.86	16.79
11a	48	5240	16.84	16.79
11ac VHT20	36	5180	18.03	18.06
11ac VHT20	40	5200	18.03	18.00
11ac VHT20	48	5240	18.03	17.99
11ac VHT40	38	5190	37.02	37.11
11ac VHT40	46	5230	37.37	37.79
11ac VHT80	42	5210	76.39	76.40

In the 5.3G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)	
			ANT A	ANT B
11a	52	5260	16.83	16.74
11a	60	5300	16.82	16.74
11a	64	5320	16.81	16.72
11ac VHT20	52	5260	17.99	17.95
11ac VHT20	60	5300	17.96	17.92
11ac VHT20	64	5320	17.94	17.91
11ac VHT40	54	5270	37.28	37.65
11ac VHT40	62	5310	37.21	37.31
11ac VHT80	58	5290	76.38	76.59

In the 5.5G Band

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)	
			ANT A	ANT B
11a	100	5500	16.80	16.75
11a	116	5580	16.78	16.74
11a	140	5700	16.80	16.76
11ac VHT20	100	5500	17.90	17.95
11ac VHT20	116	5580	17.93	17.96
11ac VHT20	140	5700	17.95	18.01
11ac VHT40	102	5510	37.14	37.00
11ac VHT40	110	5550	37.47	37.57
11ac VHT40	134	5670	37.24	37.09
11ac VHT80	106	5530	76.36	76.26



UNII Emission Bandwidth Result (Within 5470-5725MHz band)						
Modulation Type	Data Rate / MCS	Frequency (MHz)	26dB Bandwidth(MHz)		99% Bandwidth(MHz)	
			ANT A	ANT B	ANT A	ANT B
11a	6 Mbps	5720	24.47	24.45	17.70	17.64
11ac VHT20	NSS1-MCS0	5720	17.12	16.97	13.95	13.97
11ac VHT40	NSS1-MCS0	5710	51.02	46.00	34.05	33.68
11ac VHT80	NSS1-MCS0	5690	142.60	141.80	106.55	104.49



26dB Bandwidth, ANT A
Modulation Type: 802.11a (6Mbps)
CH36

802.11ac VHT20 (6.5Mbps)
CH36



CH40

CH40



CH48

CH48





26dB Bandwidth, ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



CH46





26dB Bandwidth, ANT A
Modulation Type: 802.11a (6Mbps)
CH52

802.11ac VHT20 (6.5Mbps)
CH52



CH60

CH60



CH64

CH64





26dB Bandwidth, ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58



CH62





26dB Bandwidth, ANT A
Modulation Type: 802.11a (6Mbps)
CH100

802.11ac VHT20 (6.5Mbps)
CH100



CH116

CH116



CH140

CH140





26dB Bandwidth, ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps) CH102



Modulation Type: 802.11ac VHT80 (29.3Mbps) CH106



CH110



CH134





26dB Bandwidth, ANT B
Modulation Type: 802.11a (6Mbps)
CH36

802.11ac VHT20 (6.5Mbps)
CH36



CH40

CH40



CH48

CH48





26dB Bandwidth, ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



CH46





26dB Bandwidth, ANT B
Modulation Type: 802.11a (6Mbps)
CH52

802.11ac VHT20 (6.5Mbps)
CH52



CH60

CH60



CH64

CH64





26dB Bandwidth, ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58



CH62





26dB Bandwidth, ANT B
Modulation Type: 802.11a (6Mbps)
CH100

802.11ac VHT20 (6.5Mbps)
CH100



CH116

CH116



CH140

CH140





26dB Bandwidth, ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps) CH102



Modulation Type: 802.11ac VHT80 (29.3Mbps) CH106



CH110



CH134





99% Bandwidth ANT A
Modulation Type: 802.11a (6Mbps)
CH36

802.11ac VHT20 (6.5Mbps)
CH36



CH40

CH40



CH48

CH48





99% Bandwidth ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



CH46





99% Bandwidth ANT A
Modulation Type: 802.11a (6Mbps)
CH52

802.11ac VHT20 (6.5Mbps)
CH52



CH60

CH60



CH64

CH64





99% Bandwidth ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58



CH62





99% Bandwidth ANT A
Modulation Type: 802.11a (6Mbps)
CH100

802.11ac VHT20 (6.5Mbps)
CH100



CH116

CH116



CH140

CH140





99% Bandwidth ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps) CH102



Modulation Type: 802.11ac VHT80 (29.3Mbps) CH106



CH110



CH134





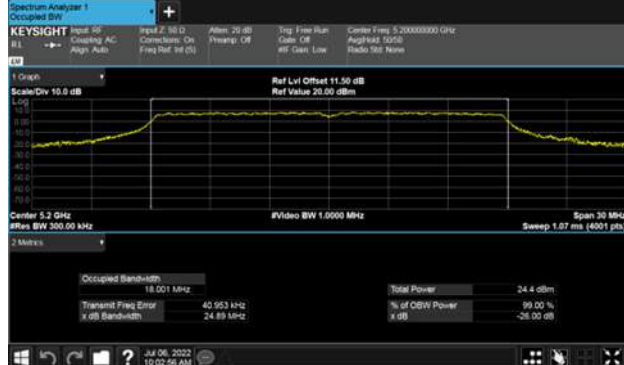
99% Bandwidth ANT B
Modulation Type: 802.11a (6Mbps)
CH36

802.11ac VHT20 (6.5Mbps)
CH36



CH40

CH40



CH48

CH48





99% Bandwidth ANT B
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



CH46





99% Bandwidth ANT B
Modulation Type: 802.11a (6Mbps)
CH52

802.11ac VHT20 (6.5Mbps)
CH52



CH60

CH60



CH64

CH64





99% Bandwidth ANT B
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58



CH62





99% Bandwidth ANT B
Modulation Type: 802.11a (6Mbps)
CH100

802.11ac VHT20 (6.5Mbps)
CH100



CH116

CH116



CH140

CH140





99% Bandwidth ANT B
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106



CH110



CH134

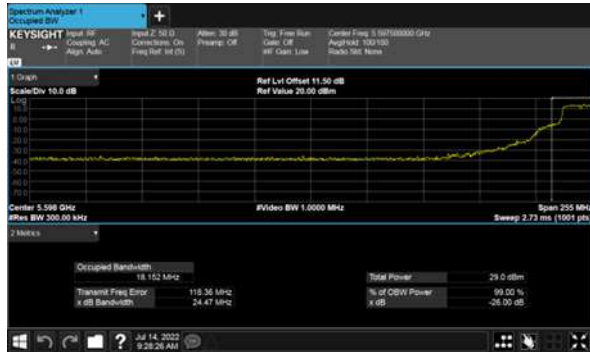




26dB Bandwidth

Within 5470-5725MHz Band, Straddle Channel, ANT A

Modulation Type: 802.11a (6Mbps)
CH144



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142





26dB Bandwidth

Within 5470-5725MHz Band, Straddle Channel, ANT B

Modulation Type: 802.11a (6Mbps)
CH144

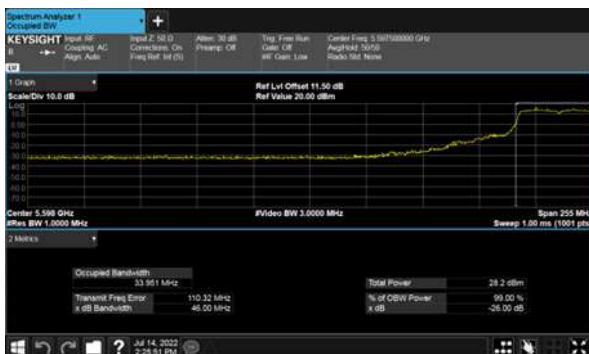
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142



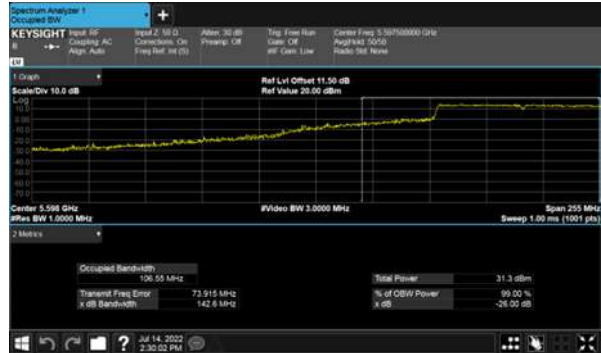


99% Bandwidth

Within 5470-5725MHz Band, Straddle Channel, ANT A

Modulation Type: 802.11a (6Mbps)
CH144

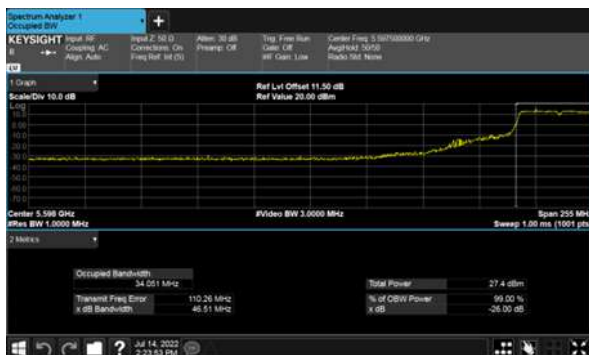
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142





99% Bandwidth

Within 5470-5725MHz Band, Straddle Channel, ANT B

Modulation Type: 802.11a (6Mbps)
CH144



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142





10. Average Power

10.1. Test Limit

Output Power:

Frequency Band	Limit
<input checked="" type="checkbox"/> 5.15~5.25GHz	
Operating Mode	
<input type="checkbox"/> Outdoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. 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. The maximum e.i.r.p. at any elevation angle above 30degrees as measured from the horizon must not exceed 125 mW (21 dBm).
<input checked="" type="checkbox"/> Indoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. 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.
<input type="checkbox"/> Fixed point-to-point access points	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi.
<input type="checkbox"/> client devices	The maximum conducted output power over the frequency band of operation shall not exceed 250 mW (24dBm) provided the maximum antenna gain does not exceed 6 dBi. 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.



Frequency Band	Limit
<input checked="" type="checkbox"/> 5.25-5.35 GHz	The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. 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.
<input checked="" type="checkbox"/> 5.470-5.725 GHz	
<input checked="" type="checkbox"/> 5.725~5.85 GHz	

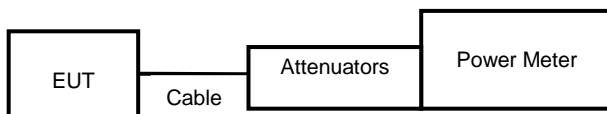
10.2. Test Procedure

According to the methods defined in ANSI C63.10-2013 Section 12.3

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11.5 dB (including 10 dB pad and 1.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

10.3. Test Setup Layout



**10.4. Test Result and Data**

Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11a	6 Mbps	17	36	5180	17.29	17.49	20.40	109.684	24.00
11a	6 Mbps	16.5	40	5200	16.97	17.09	20.04	100.942	24.00
11a	6 Mbps	17	48	5240	17.24	17.41	20.34	108.047	24.00
11n HT20	MCS 0	17	36	5180	17.09	17.38	20.25	105.870	24.00
11n HT20	MCS 0	17	40	5200	16.91	17.35	20.15	103.416	24.00
11n HT20	MCS 0	16.5	48	5240	16.61	17.25	19.95	98.903	24.00
11n HT40	MCS 0	15.5	38	5190	15.26	15.61	18.45	69.965	24.00
11n HT40	MCS 0	19	46	5230	18.55	19.07	21.83	152.338	24.00
11ac VHT20	NSS1-MCS0	17	36	5180	17.11	17.42	20.28	106.612	24.00
11ac VHT20	NSS1-MCS0	17	40	5200	16.92	17.39	20.17	104.032	24.00
11ac VHT20	NSS1-MCS0	16.5	48	5240	16.63	17.28	19.98	99.482	24.00
11ac VHT40	NSS1-MCS0	15.5	38	5190	15.29	15.64	18.48	70.450	24.00
11ac VHT40	NSS1-MCS0	19	46	5230	18.61	19.12	21.88	154.269	24.00
11ac VHT80	NSS1-MCS0	15	42	5210	14.62	15.24	17.95	62.393	24.00



Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11a	6 Mbps	17	52	5260	16.89	17.51	20.22	105.229	24.00
11a	6 Mbps	17	60	5300	17.14	17.49	20.33	107.865	24.00
11a	6 Mbps	17	64	5320	17.16	17.76	20.48	111.703	24.00
11n HT20	MCS 0	17.5	52	5260	17.25	18.00	20.65	116.184	24.00
11n HT20	MCS 0	17	60	5300	16.93	17.57	20.27	106.465	24.00
11n HT20	MCS 0	17	64	5320	17.04	17.77	20.43	110.424	24.00
11n HT40	MCS 0	19	54	5270	19.91	20.34	23.14	206.092	24.00
11n HT40	MCS 0	17.5	62	5310	18.39	18.71	21.56	143.326	24.00
11ac VHT20	NSS1-MCS0	17.5	52	5260	17.27	18.02	20.67	116.720	24.00
11ac VHT20	NSS1-MCS0	17	60	5300	16.96	17.58	20.29	106.939	24.00
11ac VHT20	NSS1-MCS0	17	64	5320	17.07	17.80	20.46	111.189	24.00
11ac VHT40	NSS1-MCS0	19	54	5270	19.93	20.36	23.16	207.044	24.00
11ac VHT40	NSS1-MCS0	17.5	62	5310	18.42	18.75	21.60	144.492	24.00
11ac VHT80	NSS1-MCS0	18.5	58	5290	18.51	19.05	21.80	151.310	24.00



Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11a	6 Mbps	16.5	100	5500	16.74	17.28	20.03	100.663	24.00
11a	6 Mbps	16.5	116	5580	16.46	17.28	19.90	97.715	24.00
11a	6 Mbps	16	140	5700	16.45	16.72	19.60	91.146	24.00
11n HT20	MCS 0	16.5	100	5500	16.66	17.30	20.00	100.048	24.00
11n HT20	MCS 0	17	116	5580	16.81	17.65	20.26	106.184	24.00
11n HT20	MCS 0	15.5	140	5700	15.70	15.96	18.84	76.599	24.00
11n HT40	MCS 0	14.5	102	5510	15.51	16.23	18.90	77.539	24.00
11n HT40	MCS 0	18.5	110	5550	19.33	20.15	22.77	189.218	24.00
11n HT40	MCS 0	17	134	5670	18.32	18.55	21.45	139.535	24.00
11ac VHT20	NSS1-MCS0	16.5	100	5500	16.68	17.33	20.03	100.634	24.00
11ac VHT20	NSS1-MCS0	17	116	5580	16.88	17.70	20.32	107.637	24.00
11ac VHT20	NSS1-MCS0	15.5	140	5700	15.72	16.00	18.87	77.136	24.00
11ac VHT40	NSS1-MCS0	14.5	102	5510	15.55	16.26	18.93	78.159	24.00
11ac VHT40	NSS1-MCS0	18.5	110	5550	19.34	20.18	22.79	190.133	24.00
11ac VHT40	NSS1-MCS0	17	134	5670	18.34	18.62	21.49	141.012	24.00
11ac VHT80	NSS1-MCS0	15	106	5530	15.24	15.92	18.60	72.504	24.00



Modulation Type	Data Rate	Setting	Channel	Frequency (MHz)	Measured value of each antenna port (dBm)		Total power (dBm)	Total power (mW)	FCC Limit (dBm)
					ANT A	ANT B			
11a	6 Mbps	21	149	5745	21.57	22.31	24.97	313.765	30.00
11a	6 Mbps	21	157	5785	20.96	21.94	24.49	281.053	30.00
11a	6 Mbps	21	165	5825	21.48	22.35	24.95	312.396	30.00
11n HT20	MCS 0	20.5	149	5745	21.27	22.03	24.68	293.556	30.00
11n HT20	MCS 0	21	157	5785	21.34	22.10	24.75	298.325	30.00
11n HT20	MCS 0	21	165	5825	21.56	22.22	24.91	309.944	30.00
11n HT40	MCS 0	20	151	5755	21.42	22.09	24.78	300.484	30.00
11n HT40	MCS 0	20	159	5795	21.47	21.91	24.71	295.520	30.00
11ac VHT20	NSS1-MCS0	20.5	149	5745	21.29	22.06	24.70	295.280	30.00
11ac VHT20	NSS1-MCS0	21	157	5785	21.36	22.12	24.77	299.702	30.00
11ac VHT20	NSS1-MCS0	21	165	5825	21.57	22.28	24.95	312.593	30.00
11ac VHT40	NSS1-MCS0	20	151	5755	21.45	22.13	24.81	302.942	30.00
11ac VHT40	NSS1-MCS0	20	159	5795	21.49	21.95	24.74	297.604	30.00
11ac VHT80	NSS1-MCS0	18.5	155	5775	19.05	19.31	22.19	165.663	30.00



FCC Maximum Conducted Output Power (Within 5470-5725MHz band) RF Output Power(dBm)										
Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
				ANT A	ANT B					
16.5	11a	6M	5720	15.61	15.90	18.77	0.17	78.302	18.94	24.00
16.5	11n HT20	MCS0	5720	14.87	14.80	17.85	0.00	60.890	17.85	23.30
18	11n HT40	MCS0	5710	18.02	18.28	21.16	0.17	135.902	21.33	24.00
16.5	11ac VHT20	NSS1-MCS0	5720	15.13	15.04	18.10	0.53	72.871	18.63	23.30
18	11ac VHT40	NSS1-MCS0	5710	18.30	18.55	21.44	1.03	176.486	22.47	24.00
20	11ac VHT80	NSS1-MCS0	5690	20.17	19.95	23.07	0.77	242.197	23.84	24.00

FCC Maximum Conducted Output Power (Extends across 5725MHz band) RF Output Power(dBm)										
Setting	Modulation Type	Data Rate	Frequency (MHz)	W/O Duty Factor Measured value of each antenna port (dBm)		W/O duty factor Total power (dBm)	Duty Factor (dB)	With duty factor Total power (mW)	With duty factor Total power (dBm)	FCC Limit (dBm)
				ANT A	ANT B					
16.5	11a	6M	5720	9.54	9.85	12.71	0.17	19.400	12.88	30.00
16.5	11n HT20	MCS0	5720	9.03	9.23	12.14	0.00	16.374	12.14	30.00
18	11n HT40	MCS0	5710	7.31	7.50	10.42	0.17	11.445	10.59	30.00
16.5	11ac VHT20	NSS1-MCS0	5720	9.52	10.10	12.83	0.53	21.677	13.36	30.00
18	11ac VHT40	NSS1-MCS0	5710	7.76	7.52	10.65	1.03	14.730	11.68	30.00
20	11ac VHT80	NSS1-MCS0	5690	6.42	6.32	9.38	0.77	10.353	10.15	30.00



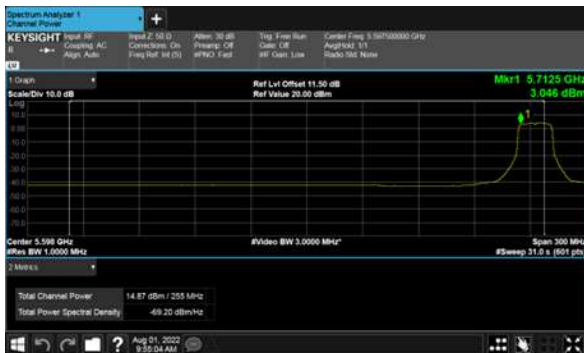
Within 5470-5725MHz Band, Straddle Channel, ANT A
Modulation Type: 802.11a (6Mbps)
CH144



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



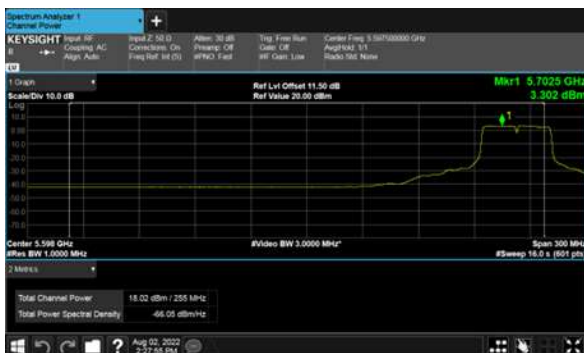
Modulation Type: 802.11n HT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138





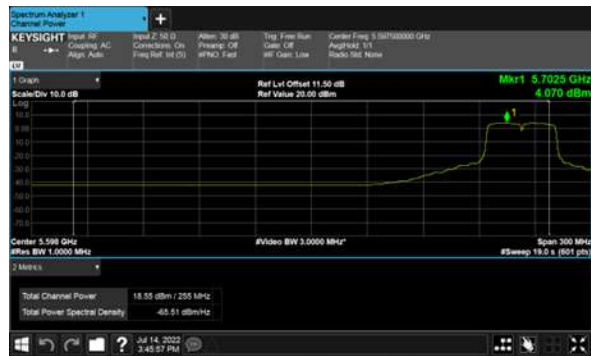
Within 5470-5725MHz Band, Straddle Channel, ANT B
Modulation Type: 802.11a (6Mbps)
CH144

Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

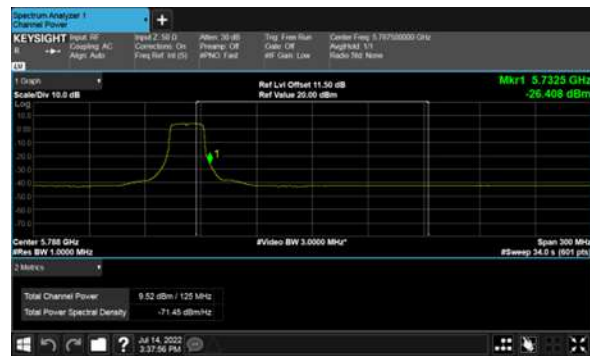
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138





Extends across 5725MHz band, Straddle Channel, ANT A
Modulation Type: 802.11a (6Mbps)
CH144

Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

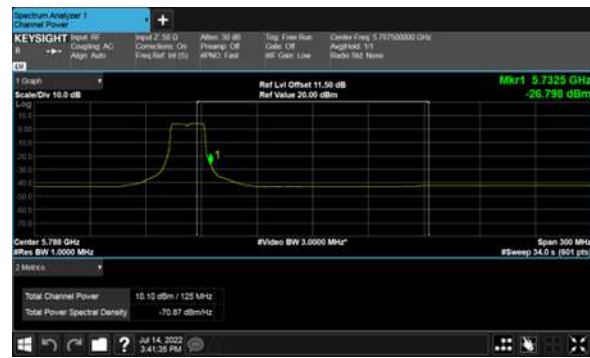
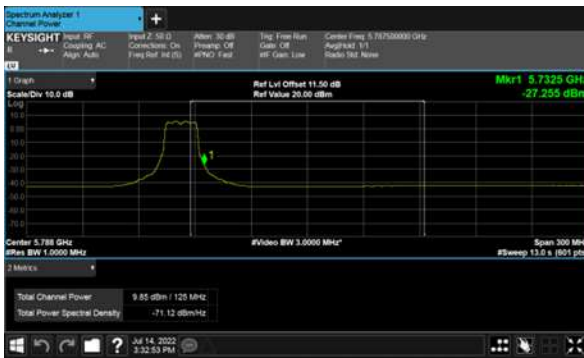
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138





Extends across 5725MHz band, Straddle Channel, ANT B
Modulation Type: 802.11a (6Mbps)
CH144

Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



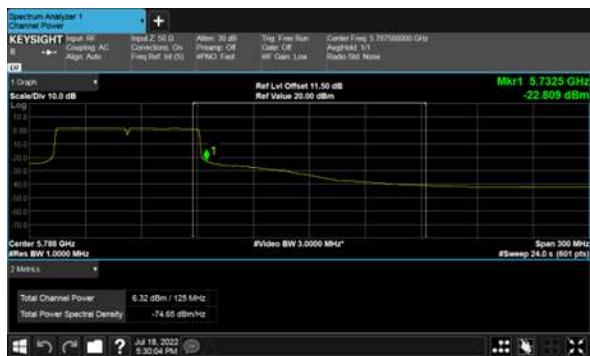
Modulation Type: 802.11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138





11. Power Spectral Density

11.1. Test Limit

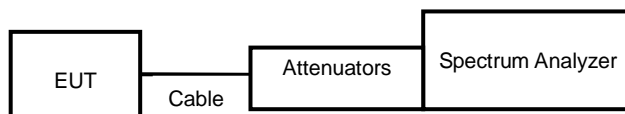
PSD:

Frequency Band		Limit
<input checked="" type="checkbox"/>	5.15~5.25GHz	
	Operating Mode	
<input type="checkbox"/>	Outdoor access point	17 dBm/MHz
<input checked="" type="checkbox"/>	Indoor access point	17 dBm/MHz
<input type="checkbox"/>	Fixed point-to-point access points	17 dBm/MHz
<input type="checkbox"/>	Mobile and portable client devices	11 dBm/MHz
<input checked="" type="checkbox"/>	5.725~5.85 GHz	11 dBm/MHz
<input checked="" type="checkbox"/>	5.470-5.725 GHz	11 dBm/MHz
<input checked="" type="checkbox"/>	5.725~5.85 GHz	30 dBm/500kHz

11.2. Test Procedure

Reference to KDB789033 D02 General UNII Test Procedures New Rules v02r01

11.3. Test Setup Layout





11.4. Test Result and Data

In the 5.2G Band

Modulation Type	Channel	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A	ANT B				
11a	36	5180	5.90	5.72	8.82	0.17	8.99	8.99
11a	40	5200	5.70	5.28	8.50	0.17	8.67	8.99
11a	48	5240	5.81	5.66	8.75	0.17	8.92	8.99
11ac VHT20	36	5180	4.93	5.20	8.08	0.53	8.61	8.99
11ac VHT20	40	5200	4.93	5.19	8.07	0.53	8.60	8.99
11ac VHT20	48	5240	4.69	5.52	8.13	0.53	8.66	8.99
11ac VHT40	38	5190	1.77	1.31	4.56	1.03	5.59	8.99
11ac VHT40	46	5230	4.85	4.55	7.72	1.03	8.75	8.99
11ac VHT80	42	5210	-2.65	-3.27	0.06	0.77	0.83	8.99



In the 5.3G Band

Modulation Type	Channel	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A	ANT B				
11a	52	5260	5.40	5.89	8.66	0.17	8.83	8.99
11a	60	5300	5.60	5.91	8.77	0.17	8.94	8.99
11a	64	5320	5.62	5.95	8.79	0.17	8.96	8.99
11ac VHT20	52	5260	4.94	5.79	8.39	0.53	8.92	8.99
11ac VHT20	60	5300	4.83	5.45	8.16	0.53	8.69	8.99
11ac VHT20	64	5320	4.94	5.54	8.26	0.53	8.79	8.99
11ac VHT40	54	5270	4.74	4.87	7.81	1.03	8.84	8.99
11ac VHT40	62	5310	3.41	3.63	6.53	1.03	7.56	8.99
11ac VHT80	58	5290	0.07	0.48	3.29	0.77	4.06	8.99



In the 5.5G Band

Modulation Type	Channel (MHz)	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	Total Corr'd PSD (dBm/MHz)	PSD Limit (dBm/MHz)
			ANT A	ANT B				
11a	100	5500	5.25	6.09	8.70	0.17	8.87	8.99
11a	116	5580	5.06	5.79	8.45	0.17	8.62	8.99
11a	140	5700	4.92	5.37	8.16	0.17	8.33	8.99
11a	144	5720	5.49	6.07	8.80	0.17	8.97	8.99
11ac VHT20	100	5500	4.71	5.44	8.10	0.53	8.63	8.99
11ac VHT20	116	5580	4.93	5.43	8.20	0.53	8.73	8.99
11ac VHT20	140	5700	3.83	3.61	6.73	0.53	7.26	8.99
11ac VHT20	144	5720	4.84	4.77	7.82	1.03	8.85	8.99
11ac VHT40	102	5510	0.68	1.36	4.05	1.03	5.08	8.99
11ac VHT40	110	5550	4.70	5.03	7.88	1.03	8.91	8.99
11ac VHT40	134	5670	3.47	3.44	6.47	1.03	7.50	8.99
11ac VHT40	142	5710	4.21	4.58	7.40	1.03	8.43	8.99
11ac VHT80	106	5530	-2.99	-2.46	0.30	0.77	1.07	8.99
11ac VHT80	138	5690	2.16	1.81	5.00	0.77	5.77	8.99



In the 5.8G Band

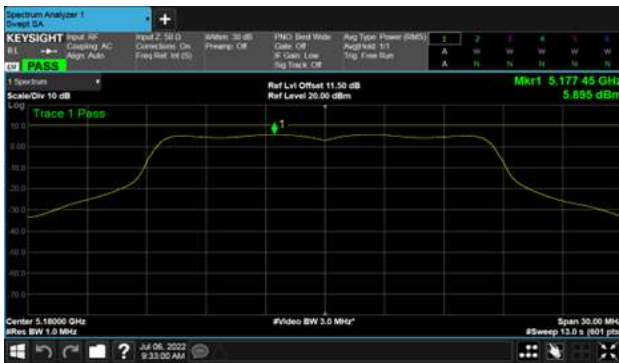
Modulation Type	Channel (MHz)	Frequency (MHz)	Meas PSD (dBm/MHz)		Sum chain (dBm)	Duty Cycle CF(dB)	10log(500KHz/RBW) CF (dB)	Total Corr'd PSD (dBm/500kHz)	PSD Limit (dBm/500kHz)
			ANT A	ANT B					
11a	149	5745	10.10	11.01	13.59	0.17	-3.01	10.75	27.99
11a	157	5785	10.33	10.84	13.60	0.17	-3.01	10.76	27.99
11a	165	5825	10.18	10.88	13.56	0.17	-3.01	10.72	27.99
11ac VHT20	149	5745	9.05	9.79	12.44	0.53	-3.01	9.96	27.99
11ac VHT20	157	5785	9.49	9.92	12.72	0.53	-3.01	10.24	27.99
11ac VHT20	165	5825	9.23	10.09	12.69	0.53	-3.01	10.21	27.99
11ac VHT40	151	5755	6.42	6.97	9.71	1.03	-3.01	7.73	27.99
11ac VHT40	159	5795	6.34	6.55	9.45	1.03	-3.01	7.47	27.99
11ac VHT80	155	5775	0.88	0.98	3.94	0.77	-3.01	1.70	27.99



ANT A

Modulation Type: 802.11a (6Mbps)

CH36

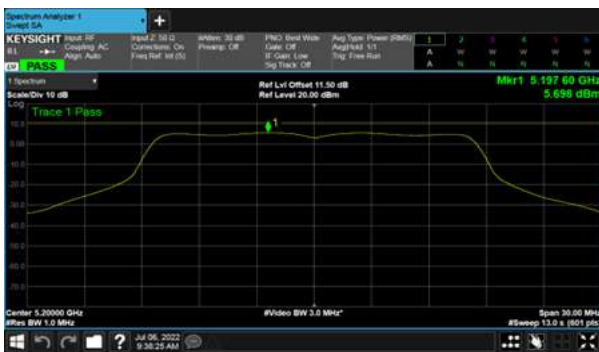


Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH36



CH40



CH40



CH48



CH48





ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)

CH38



Modulation Type: 802.11ac VHT80 (29.3Mbps)

CH42



CH46





ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58



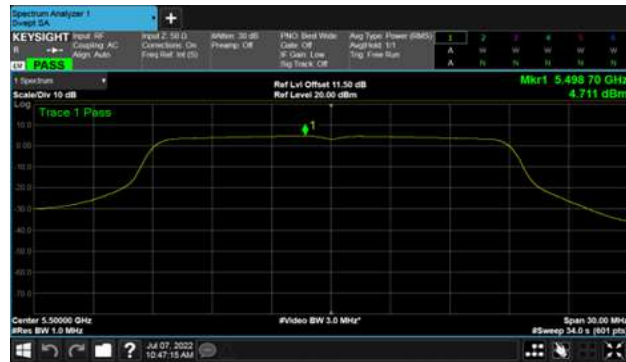
CH62





ANT A
Modulation Type: 802.11a (6Mbps)
CH100

802.11ac VHT20 (6.5Mbps)
CH100



CH116

CH116



CH140

CH140

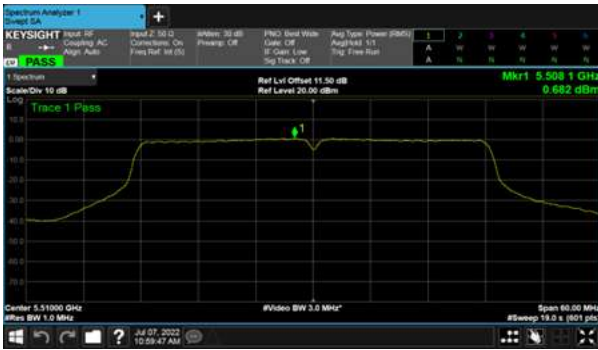




ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106



CH110



CH134





ANT A

Modulation Type: 802.11a (6Mbps)

CH149



Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH149



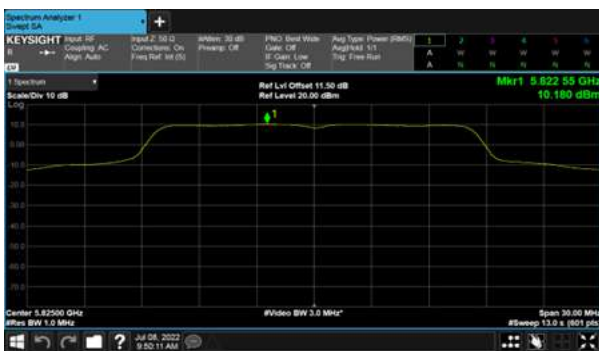
CH157



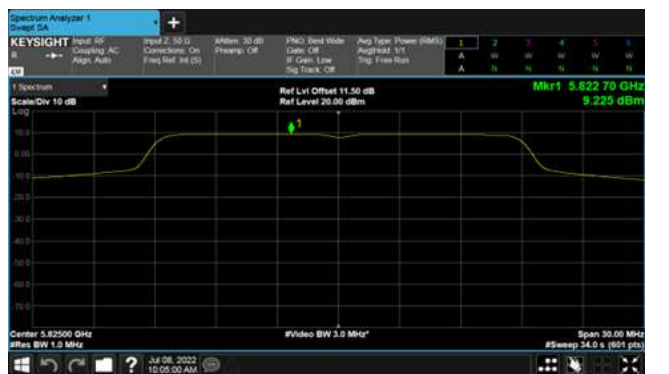
CH157



CH165



CH165





ANT A

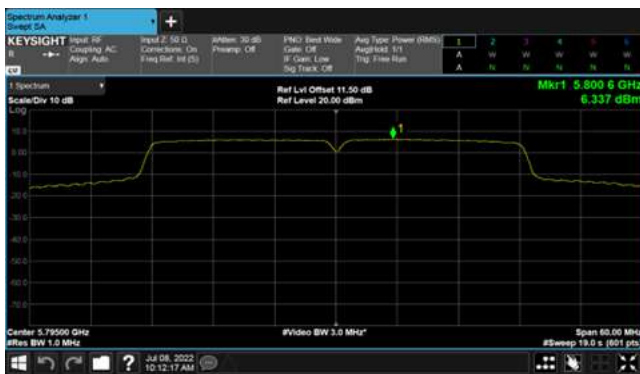
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH151



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH155



CH159





ANT B

Modulation Type: 802.11a (6Mbps)

CH36



Modulation Type: 802.11ac VHT20 (6.5Mbps)

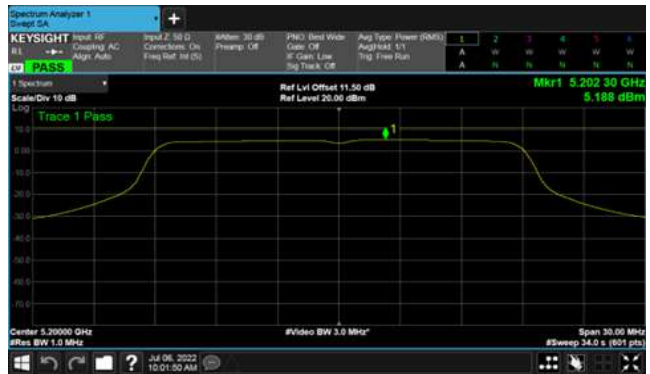
CH36



CH40



CH40



CH48



CH48





ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH38

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42



CH46

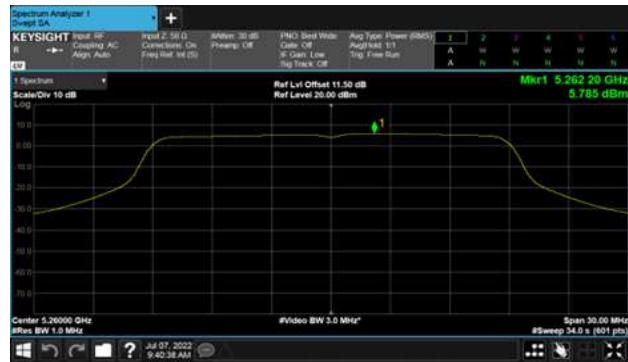




ANT B

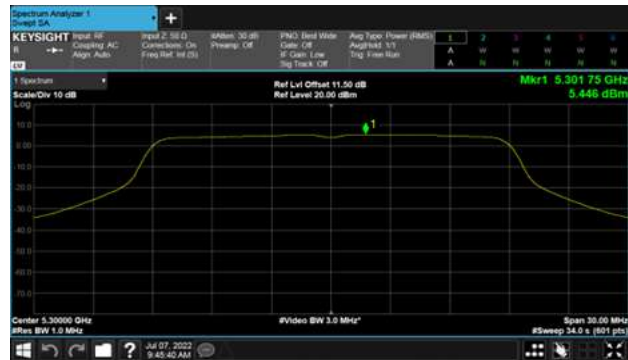
Modulation Type: 802.11a (6Mbps)
CH52

802.11ac VHT20 (6.5Mbps)
CH52



CH60

CH60



CH64

CH64

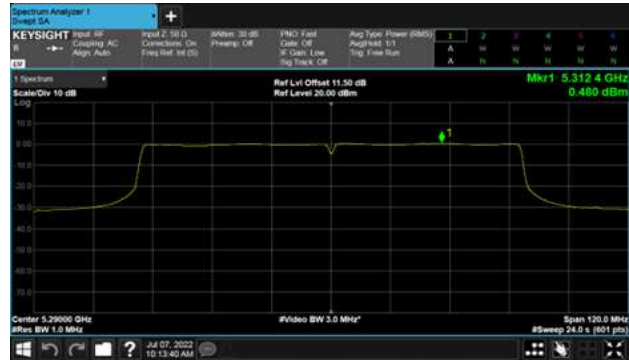




ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58



CH62



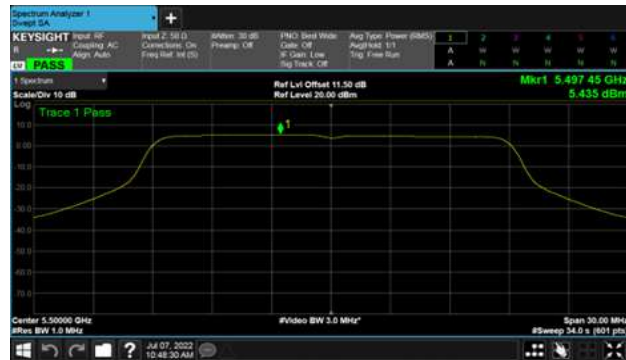


ANT B

Modulation Type: 802.11a (6Mbps)
CH100



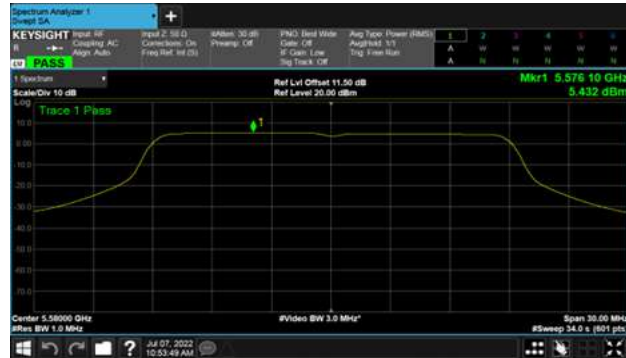
802.11ac VHT20 (6.5Mbps)
CH100



CH116



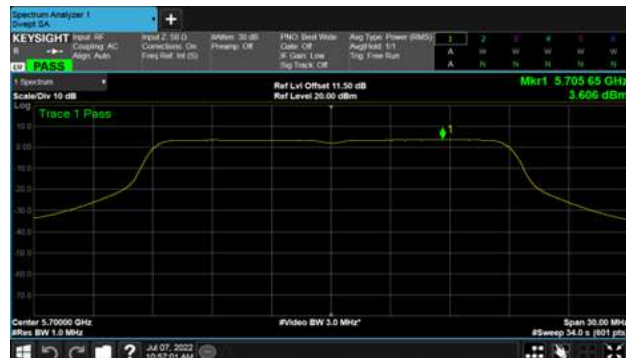
CH116



CH140



CH140





ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH102



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH106



CH110



CH134





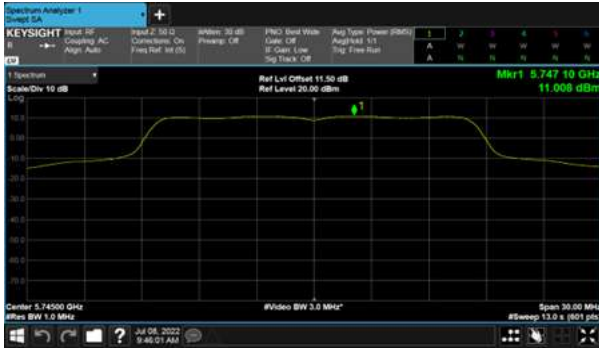
ANT B

Modulation Type: 802.11a (6Mbps)

CH149

Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH149



CH157



CH157



CH165



CH165





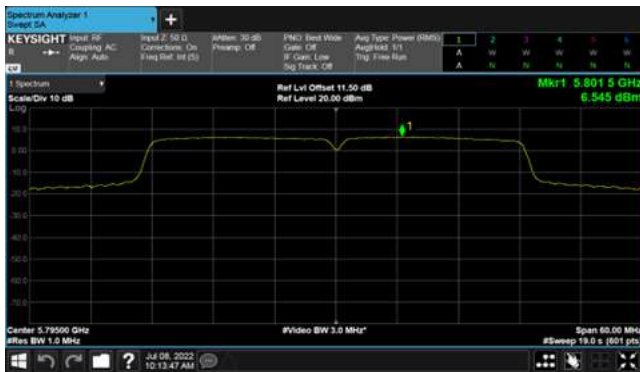
ANT B

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH151

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH155



CH159





Straddle Channel, ANT A
Modulation Type: 802.11a (6Mbps)
CH144

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



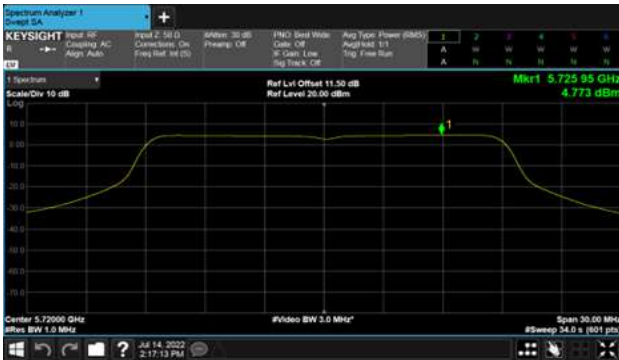


Straddle Channel, ANT B
Modulation Type: 802.11a (6Mbps)
CH144

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142

