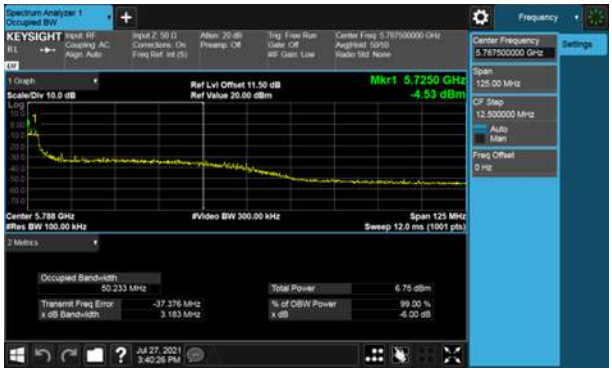
6dB Bandwidth, ANT B
Extends across 5725MHz Band, Straddle Channel

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



802.11ac VHT20 (6.5Mbps)
CH144

99% Occupied Bandwidth, ANT A

Modulation Type: 802.11a (6Mbps)

CH149

Modulation Type: 802.11ac, VHT20 (6.5Mbps)

CH149

CH157

CH157

CH165

CH165

99% Occupied Bandwidth, ANT A

Modulation Type: 802.11ac, VHT40 (13.5Mbps)
CH151

Modulation Type: 802.11ac, VHT80 (29.3Mbps)
CH155

CH159

99% Occupied Bandwidth, ANT B

Modulation Type: 802.11ac, VHT20 (6.5Mbps)

CH149

Modulation Type: 802.11ac, VHT40 (13.5Mbps)

CH151

CH157

CH159

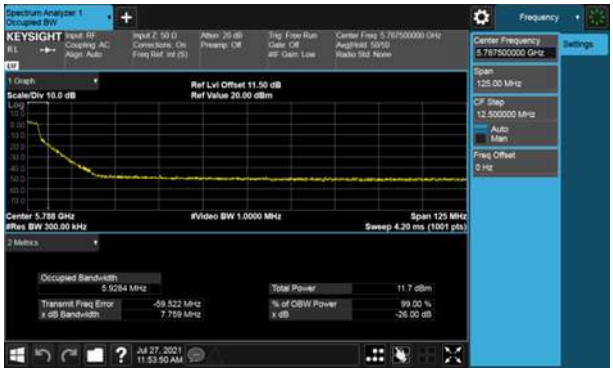
CH165

99% Occupied Bandwidth, ANT B
Modulation Type: 802.11ac, VHT80 (29.3Mbps)
CH155

99% Occupied Bandwidth, ANT A

Extends across 5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144



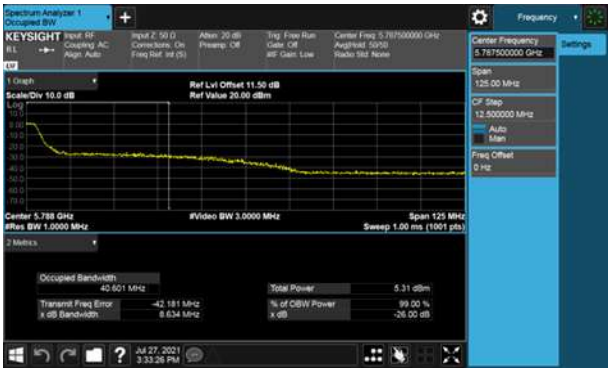
802.11ac VHT20 (6.5Mbps)
CH144

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

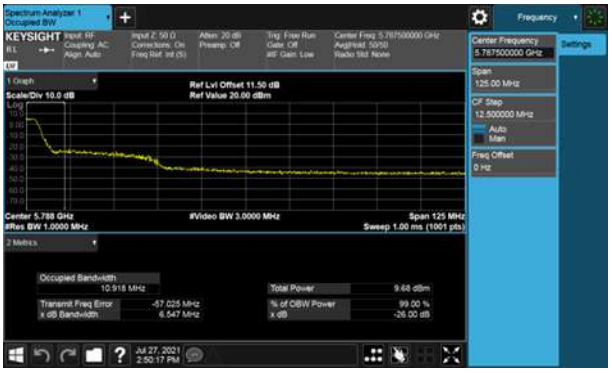


99% Occupied Bandwidth, ANT B

Extends across 5725MHz Band, Straddle Channel

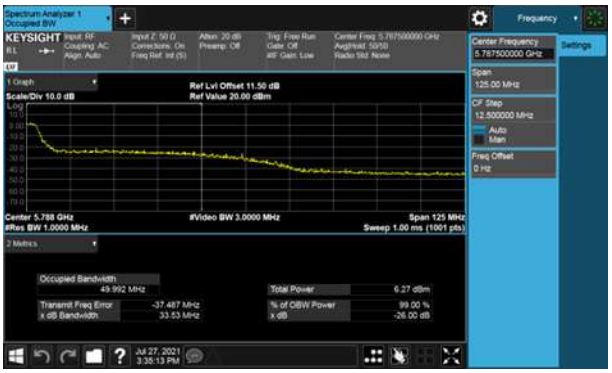
Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



802.11ac VHT20 (6.5Mbps)
CH144

9. 26dB Bandwidth & 99% Occupied Bandwidth

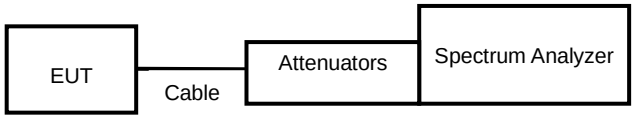
9.1. Test Limit

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 >= 3 x 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	23.31	-
11a	40	5200	24.13	-
11a	48	5240	24.60	-
11ac VHT20	36	5180	26.22	26.68
11ac VHT20	40	5200	25.23	25.29
11ac VHT20	48	5240	26.07	25.69
11ac VHT40	38	5190	42.10	42.28
11ac VHT40	46	5230	42.76	41.91
11ac VHT80	42	5210	83.19	83.01

In the 5.3G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)	
			ANT A	ANT B
11a	52	5260	24.43	-
11a	60	5300	23.64	-
11a	64	5320	23.77	-
11ac VHT20	52	5260	26.19	26.41
11ac VHT20	60	5300	25.80	25.45
11ac VHT20	64	5320	25.10	26.08
11ac VHT40	54	5270	42.16	42.04
11ac VHT40	62	5310	42.05	41.81
11ac VHT80	58	5290	84.42	83.08

In the 5.5G Band

Mode	Channel	Frequency (MHz)	26dB Bandwidth(MHz)	
			ANT A	ANT B
11a	100	5500	24.55	-
11a	116	5580	24.27	-
11a	140	5700	24.99	-
11ac VHT20	100	5500	26.14	26.16
11ac VHT20	116	5580	25.67	26.93
11ac VHT20	140	5700	26.81	28.05
11ac VHT40	102	5510	42.26	41.86
11ac VHT40	110	5550	42.23	42.27
11ac VHT40	134	5670	42.15	42.44
11ac VHT80	106	5530	83.73	83.87
11ac VHT80	122	5610	108.6	145.8

UNII Emission Bandwidth Result (Within 5470-5725MHz band)				
Modulation Type	Data Rate / MCS	Frequency (MHz)	26dB Bandwidth(MHz)	
			ANT A	ANT B
11a	6 Mbps	5720	17.91	-
11n HT20	MCS 0	5720	19.17	18.72
11n HT40	MCS 0	5710	36.36	36.54
11ac VHT20	NSS1-MCS0	5720	19.43	19.17
11ac VHT40	NSS1-MCS0	5710	35.95	35.89
11ac VHT80	NSS1-MCS0	5690	102.40	104.60

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)	
			ANT A	ANT B
11a	36	5180	16.79	-
11a	40	5200	16.83	-
11a	48	5240	16.82	-
11ac VHT20	36	5180	17.95	17.93
11ac VHT20	40	5200	17.97	17.96
11ac VHT20	48	5240	17.97	17.97
11ac VHT40	38	5190	36.52	36.54
11ac VHT40	46	5230	36.51	36.52
11ac VHT80	42	5210	75.60	75.49

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)	
			ANT A	ANT B
11a	52	5260	16.83	-
11a	60	5300	16.83	-
11a	64	5320	16.82	-
11ac VHT20	52	5260	17.95	17.96
11ac VHT20	60	5300	17.94	17.96
11ac VHT20	64	5320	17.97	17.95
11ac VHT40	54	5270	36.57	36.54
11ac VHT40	62	5310	36.52	36.55
11ac VHT80	58	5290	75.54	75.49

Modulation Type	Channel	Frequency (MHz)	99% Bandwidth(MHz)	
			ANT A	ANT B
11a	100	5500	16.84	-
11a	116	5580	16.83	-
11a	140	5700	16.88	-
11ac VHT20	100	5500	17.97	17.99
11ac VHT20	116	5580	17.94	17.94
11ac VHT20	140	5700	18.02	18.03
11ac VHT40	102	5510	36.55	36.54
11ac VHT40	110	5550	36.54	36.58
11ac VHT40	134	5670	36.58	36.61
11ac VHT80	106	5530	75.56	75.60
11ac VHT80	122	5610	75.64	75.90

UNII Emission Bandwidth Result (Within 5470-5725MHz band)				
Modulation Type	Data Rate / MCS	Frequency (MHz)	99% Bandwidth(MHz)	
			ANT A	ANT B
11a	6 Mbps	5720	13.57	
11n HT20	MCS 0	5720	14.12	14.11
11n HT40	MCS 0	5710	33.34	33.17
11ac VHT20	NSS1-MCS0	5720	14.20	14.17
11ac VHT40	NSS1-MCS0	5710	33.33	33.23
11ac VHT80	NSS1-MCS0	5690	72.75	72.62

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

CH122

CH134

26dB Bandwidth, ANT A

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144

802.11ac VHT20 (6.5Mbps)
CH144

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

26dB Bandwidth, ANT B

802.11ac VHT20 (6.5Mbps)

CH36

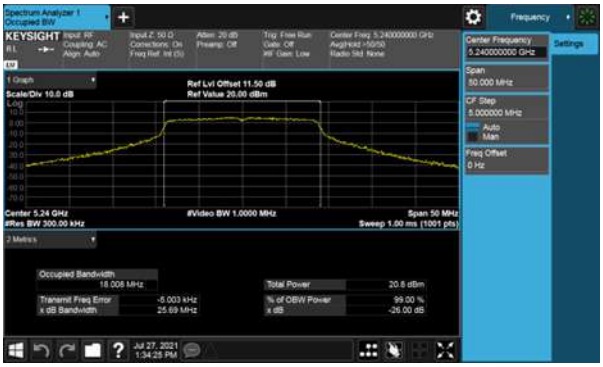
Modulation Type: 802.11ac VHT40 (13.5Mbps)

CH38

CH40

CH46

CH48

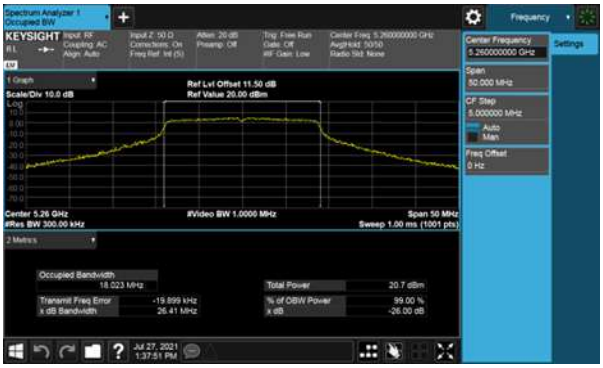


26dB Bandwidth, ANT B
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH42

26dB Bandwidth, ANT B

Modulation 802.11ac VHT20 (6.5Mbps)

CH52



Modulation Type: 802.11ac VHT40 (13.5Mbps)

CH54

CH60

CH62

CH64

26dB Bandwidth, ANT B
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58

26dB Bandwidth, ANT B

Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH100

Modulation Type: 802.11ac VHT40 (13.5Mbps)

CH102

CH116

CH110

CH140

CH134

26dB Bandwidth, ANT B

Modulation Type: 802.11ac VHT80 (29.3Mbps)

CH106

CH122

26dB Bandwidth, ANT B

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

802.11ac VHT20 (6.5Mbps)
CH144

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

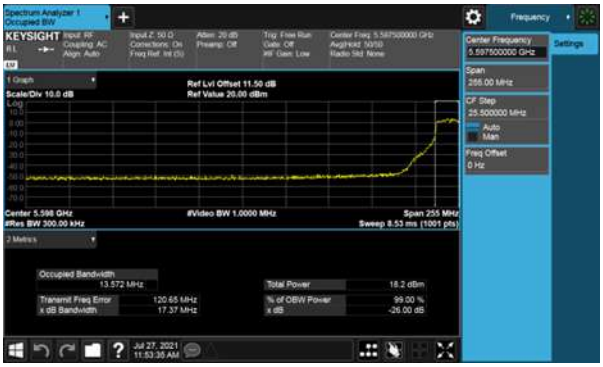
CH122

CH134

99% Bandwidth ANT A

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802.11a (6Mbps)
CH144



802.11ac VHT20 (6.5Mbps)
CH144

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

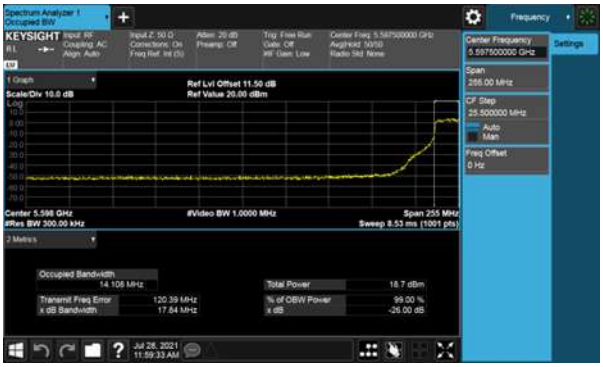
Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

99% Bandwidth ANT B

Within 5470-5725MHz Band, Straddle Channel

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

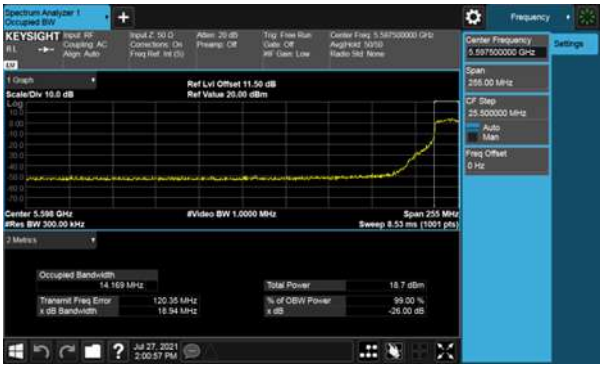


Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

802.11ac VHT20 (6.5Mbps)
CH144



10. Average Power

10.1. Test Limit

Output Power:

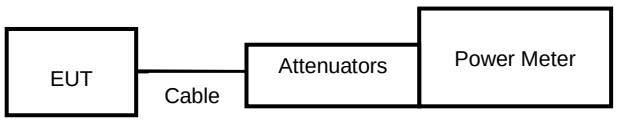
Frequency Band			Limit
☒	5.15~5.25GHz		
	Operating Mode		
	☐	Outdoor access point	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi 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 exceed125 mW (21 dBm).
	☐	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.
	☐	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.
	☒	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
☒	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.
☒	5.470-5.725 GHz	
☒	5.725~5.85 GHz	The maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm). 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. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power.

10.2. Test Procedure

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	12	36	5180	12.03	-	12.03	15.959	24.00
11a	6 Mbps	12.5	40	5200	12.33	-	12.33	17.100	24.00
11a	6 Mbps	13	48	5240	12.13	-	12.13	16.331	24.00
11n HT20	MCS 0	12.5	36	5180	12.18	12.24	15.22	33.269	24.00
11n HT20	MCS 0	12.5	40	5200	12.01	12.35	15.19	33.065	24.00
11n HT20	MCS 0	13.5	48	5240	12.29	12.72	15.52	35.650	24.00
11n HT40	MCS 0	9.5	38	5190	10.05	9.71	12.89	19.470	24.00
11n HT40	MCS 0	12.5	46	5230	12.24	12.90	15.59	36.248	24.00
11ac VHT20	NSS1-MCS0	12.5	36	5180	12.21	12.27	15.25	33.500	24.00
11ac VHT20	NSS1-MCS0	12.5	40	5200	12.03	12.41	15.23	33.377	24.00
11ac VHT20	NSS1-MCS0	13.5	48	5240	12.32	12.74	15.55	35.854	24.00
11ac VHT40	NSS1-MCS0	9.5	38	5190	10.07	9.75	12.92	19.603	24.00
11ac VHT40	NSS1-MCS0	12.5	46	5230	12.27	12.93	15.62	36.499	24.00
11ac VHT80	NSS1-MCS0	8	42	5210	8.27	8.09	11.19	13.156	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	13	52	5260	12.05	-	12.05	16.032	24.00
11a	6 Mbps	13.5	60	5300	12.47	-	12.47	17.660	24.00
11a	6 Mbps	13	64	5320	12.07	-	12.07	16.106	24.00
11n HT20	MCS 0	13.5	52	5260	12.24	12.63	15.45	35.073	24.00
11n HT20	MCS 0	13.5	60	5300	12.21	13.42	15.87	38.613	24.00
11n HT20	MCS 0	13	64	5320	12.03	12.52	15.29	33.824	24.00
11n HT40	MCS 0	13	54	5270	12.35	12.81	15.60	36.278	24.00
11n HT40	MCS 0	12	62	5310	11.66	12.56	15.14	32.686	24.00
11ac VHT20	NSS1-MCS0	13.5	52	5260	12.26	12.68	15.49	35.362	24.00
11ac VHT20	NSS1-MCS0	13.5	60	5300	12.23	13.43	15.88	38.740	24.00
11ac VHT20	NSS1-MCS0	13	64	5320	12.06	12.55	15.32	34.058	24.00
11ac VHT40	NSS1-MCS0	13	54	5270	12.38	12.83	15.62	36.485	24.00
11ac VHT40	NSS1-MCS0	12	62	5310	11.70	12.61	15.19	33.030	24.00
11ac VHT80	NSS1-MCS0	10	58	5290	9.47	9.96	12.73	18.759	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	13.5	100	5500	12.17	-	12.17	16.482	24.00
11a	6 Mbps	13.5	116	5580	12.09	-	12.09	16.181	24.00
11a	6 Mbps	13.5	140	5700	12.06	-	12.06	16.069	24.00
11n HT20	MCS 0	13.5	100	5500	12.15	12.51	15.34	34.230	24.00
11n HT20	MCS 0	13.5	116	5580	12.04	12.32	15.19	33.056	24.00
11n HT20	MCS 0	14	140	5700	12.36	12.78	15.59	36.186	24.00
11n HT40	MCS 0	12	102	5510	10.73	10.74	13.75	23.688	24.00
11n HT40	MCS 0	13	110	5550	12.21	12.55	15.39	34.623	24.00
11n HT40	MCS 0	13	134	5670	12.13	12.44	15.30	33.869	24.00
11ac VHT20	NSS1-MCS0	13.5	100	5500	12.18	12.53	15.37	34.426	24.00
11ac VHT20	NSS1-MCS0	13.5	116	5580	12.06	12.34	15.21	33.209	24.00
11ac VHT20	NSS1-MCS0	14	140	5700	12.41	12.82	15.63	36.561	24.00
11ac VHT40	NSS1-MCS0	12	102	5510	10.75	10.77	13.77	23.825	24.00
11ac VHT40	NSS1-MCS0	13	110	5550	12.24	12.61	15.44	34.988	24.00
11ac VHT40	NSS1-MCS0	13	134	5670	12.17	12.47	15.33	34.142	24.00
11ac VHT80	NSS1-MCS0	10.5	106	5530	9.17	9.06	12.13	16.314	24.00
11ac VHT80	NSS1-MCS0	14	122	5610	12.22	12.53	15.39	34.579	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	13.5	149	5745	12.14	-	12.14	16.368	30.00
11a	6 Mbps	14	157	5785	12.41	-	12.41	17.418	30.00
11a	6 Mbps	14	165	5825	12.48	-	12.48	17.701	30.00
11n HT20	MCS 0	14	149	5745	12.31	13.12	15.74	37.533	30.00
11n HT20	MCS 0	14	157	5785	12.19	12.50	15.36	34.340	30.00
11n HT20	MCS 0	14	165	5825	12.15	12.58	15.38	34.519	30.00
11n HT40	MCS 0	13	151	5755	12.05	12.54	15.31	33.980	30.00
11n HT40	MCS 0	13.5	159	5795	12.36	12.82	15.61	36.361	30.00
11ac VHT20	NSS1-MCS0	14	149	5745	12.33	13.14	15.76	37.706	30.00
11ac VHT20	NSS1-MCS0	14	157	5785	12.22	12.54	15.39	34.620	30.00
11ac VHT20	NSS1-MCS0	14	165	5825	12.18	12.61	15.41	34.759	30.00
11ac VHT40	NSS1-MCS0	13	151	5755	12.09	12.59	15.36	34.336	30.00
11ac VHT40	NSS1-MCS0	13.5	159	5795	12.41	12.84	15.64	36.649	30.00
11ac VHT80	NSS1-MCS0	13.5	155	5775	12.28	12.86	15.59	36.224	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					
13.5	11a	6M	5720	11.71	-	11.71	0.00	14.825	11.71	23.53
14	11n HT20	MCS0	5720	11.81	11.94	14.89	0.00	30.802	14.89	23.72
13	11n HT40	MCS0	5710	11.68	12.50	15.12	0.16	33.726	15.28	24.00
14	11ac VHT20	NSS1-MCS0	5720	11.83	11.99	14.92	0.00	31.053	14.92	23.83
13	11ac VHT40	NSS1-MCS0	5710	12.03	12.43	15.24	0.16	34.713	15.40	24.00
13.5	11ac VHT80	NSS1-MCS0	5690	12.45	12.34	15.41	0.32	37.374	15.73	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					
13.5	11a	6M	5720	4.68	-	4.68	0.00	2.938	4.68	30.00
14	11n HT20	MCS0	5720	5.25	5.51	8.39	0.00	6.906	8.39	30.00
13	11n HT40	MCS0	5710	0.36	1.46	3.96	0.16	2.579	4.12	30.00
14	11ac VHT20	NSS1-MCS0	5720	5.33	5.61	8.48	0.00	7.051	8.48	30.00
13	11ac VHT40	NSS1-MCS0	5710	0.71	1.54	4.16	0.16	2.701	4.32	30.00
13.5	11ac VHT80	NSS1-MCS0	5690	-3.01	-2.08	0.49	0.32	1.205	0.81	30.00

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

Modulation Type: 802.11a (6Mbps)
CH144

802.11ac VHT20 (6.5Mbps)
CH144

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

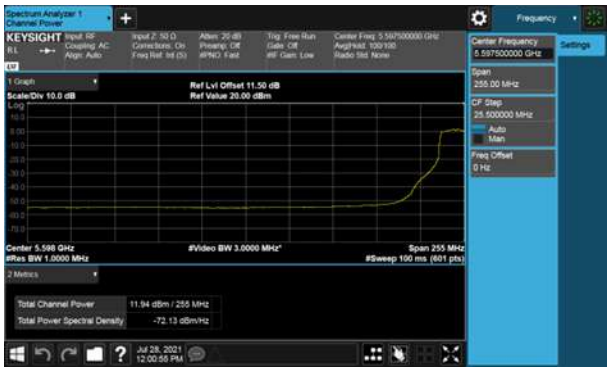
Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

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

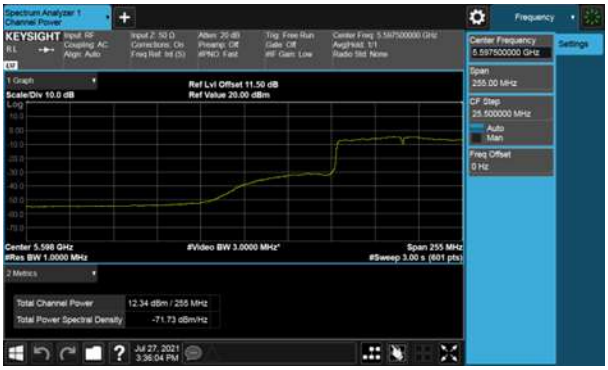
Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144



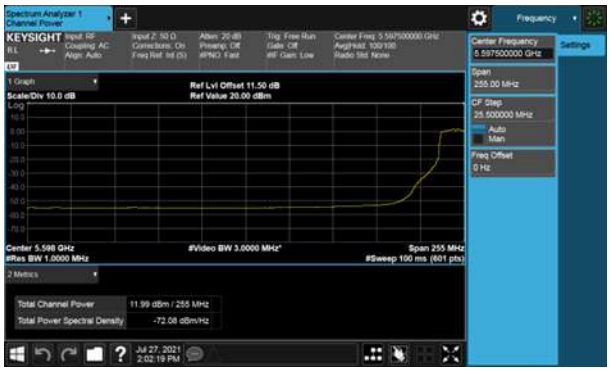
Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142

Modulation Type: 802.11n HT40 (13.5Mbps)
CH142

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144

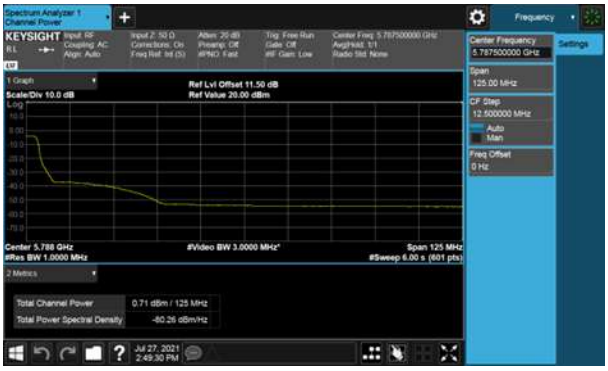


Extends across 5725MHz band, Straddle Channel ANT A
Modulation Type: 802.11a (6Mbps)
CH144

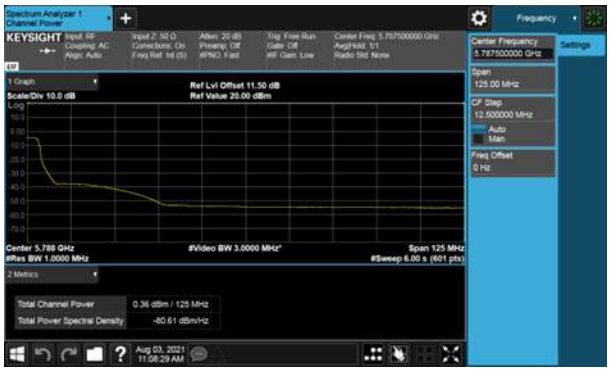
802.11ac VHT20 (6.5Mbps)
CH144

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

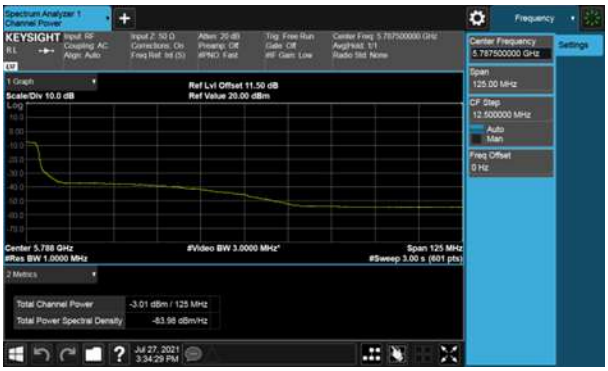
Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142



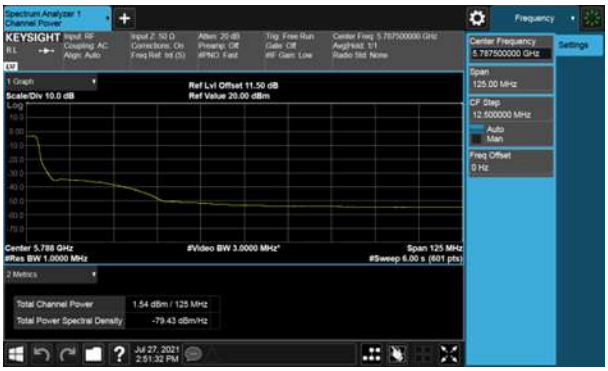
Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



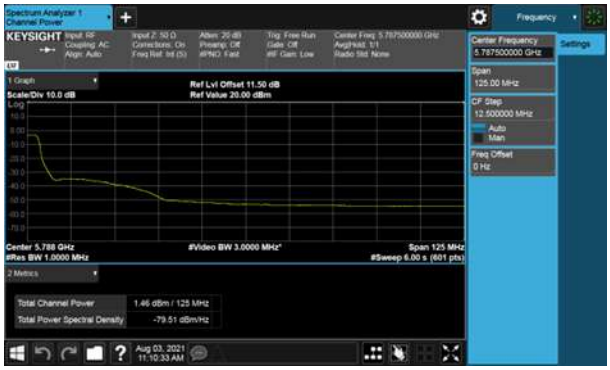
Extends across 5725MHz band, Straddle Channel ,ANT B

Modulation Type: 802. 11n HT20 (6.5Mbps)
CH144

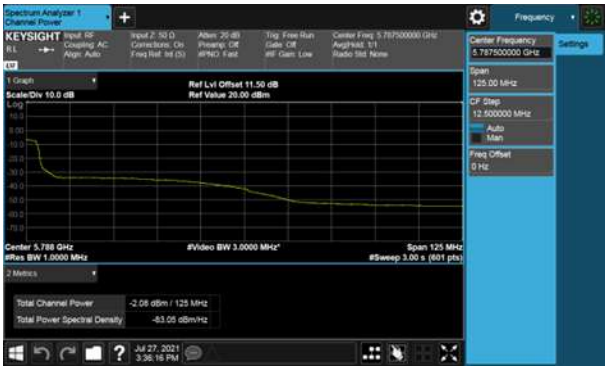
Modulation Type: 802.11ac VHT40 (29.3Mbps)
CH142



Modulation Type: 802.11n HT40 (13.5Mbps)
CH142



Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138



Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144

11. Power Spectral Density

11.1.Test Limit

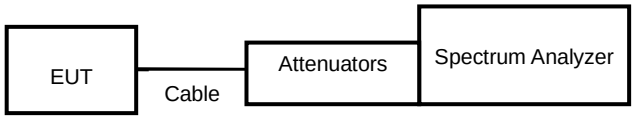
PSD:

Frequency Band			Limit
☒	5.15~5.25GHz		
	Operating Mode		
	☐	Outdoor access point	17 dBm/MHz
	☐	Indoor access point	17 dBm/MHz
	☐	Fixed point-to-point access points	17 dBm/MHz
	☒	client devices	11 dBm/MHz
☒	5.725~5.85 GHz		11 dBm/MHz
☒	5.470-5.725 GHz		11 dBm/MHz
☒	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	1.61	-	1.61	0.00	1.61	11.00
11a	40	5200	1.84	-	1.84	0.00	1.84	11.00
11a	48	5240	1.69	-	1.69	0.00	1.69	11.00
11ac VHT20	36	5180	1.52	1.32	4.43	0.00	4.43	11.00
11ac VHT20	40	5200	1.24	1.43	4.35	0.00	4.35	11.00
11ac VHT20	48	5240	1.57	1.85	4.72	0.00	4.72	11.00
11ac VHT40	38	5190	-3.85	-4.12	-0.98	0.16	-0.82	11.00
11ac VHT40	46	5230	-1.69	-0.98	1.69	0.16	1.85	11.00
11ac VHT80	42	5210	-8.91	-8.64	-5.76	0.32	-5.44	11.00

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	1.55	-	1.55	0.00	1.55	11.00
11a	60	5300	2.02	-	2.02	0.00	2.02	11.00
11a	64	5320	1.64	-	1.64	0.00	1.64	11.00
11ac VHT20	52	5260	1.47	1.81	4.66	0.00	4.66	11.00
11ac VHT20	60	5300	1.45	2.57	5.06	0.00	5.06	11.00
11ac VHT20	64	5320	1.12	1.63	4.39	0.00	4.39	11.00
11ac VHT40	54	5270	-1.30	-1.08	1.82	0.16	1.98	11.00
11ac VHT40	62	5310	-2.27	-1.27	1.27	0.16	1.43	11.00
11ac VHT80	58	5290	-7.57	-5.91	-3.65	0.32	-3.33	11.00

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	2.13	-	2.13	0.00	2.13	11.00
11a	116	5580	1.81	-	1.81	0.00	1.81	11.00
11a	140	5700	1.66	-	1.66	0.00	1.66	11.00
11a	144	5720	1.58	-	1.58	0.00	1.58	11.00
11ac VHT20	100	5500	1.56	1.58	4.58	0.00	4.58	11.00
11ac VHT20	116	5580	1.21	1.17	4.20	0.00	4.20	11.00
11ac VHT20	140	5700	1.66	1.86	4.77	0.00	4.77	11.00
11ac VHT20	144	5720	1.58	1.80	4.70	0.16	4.86	11.00
11ac VHT40	102	5510	-4.28	-4.28	-1.27	0.16	-1.11	11.00
11ac VHT40	110	5550	-1.50	-1.42	1.55	0.16	1.71	11.00
11ac VHT40	134	5670	-1.47	-1.39	1.58	0.16	1.74	11.00
11ac VHT40	142	5710	-1.79	-1.29	1.48	0.16	1.64	11.00
11ac VHT80	106	5530	-9.02	-8.62	-5.80	0.32	-5.48	11.00
11ac VHT80	122	5610	-5.40	-5.52	-2.45	0.32	-2.13	11.00
11ac VHT80	138	5690	-4.49	-4.58	-1.53	0.32	-1.21	11.00

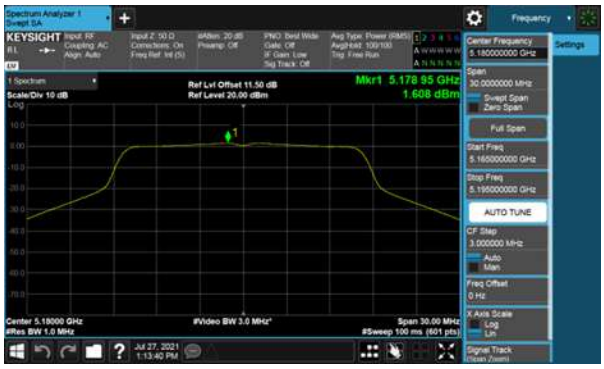
In the 5.8G Band

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	1.57	-	1.57	0.00	-3.01	-1.45	30.00
11a	157	5785	1.73	-	1.73	0.00	-3.01	-1.28	30.00
11a	165	5825	1.84	-	1.84	0.00	-3.01	-1.17	30.00
11ac VHT20	149	5745	1.55	1.99	4.79	0.00	-3.01	1.78	30.00
11ac VHT20	157	5785	1.15	1.31	4.24	0.00	-3.01	1.23	30.00
11ac VHT20	165	5825	1.16	1.38	4.28	0.00	-3.01	1.27	30.00
11ac VHT40	151	5755	-1.81	-1.36	1.43	0.16	-3.01	-1.42	30.00
11ac VHT40	159	5795	-1.67	-1.28	1.54	0.16	-3.01	-1.31	30.00
11ac VHT80	155	5775	-4.91	-4.48	-1.68	0.32	-3.01	-4.37	30.00

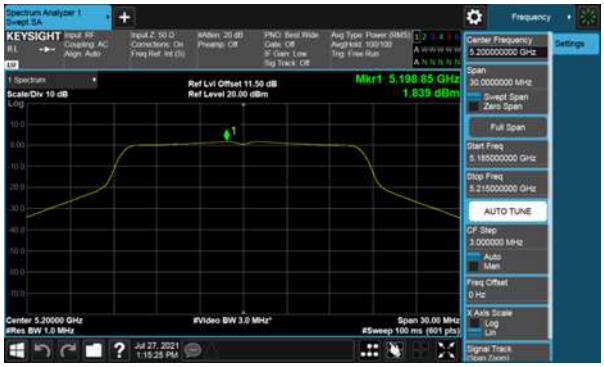
ANT A

Modulation Type: 802.11a (6Mbps)

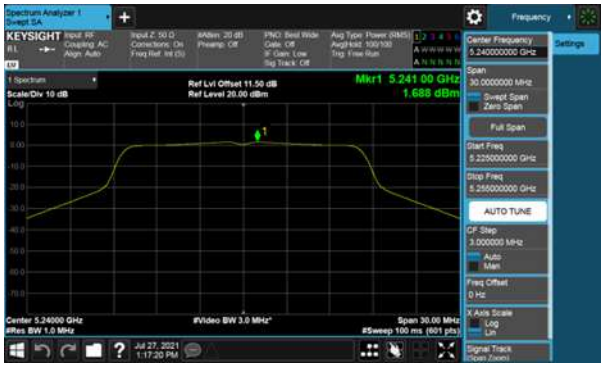
CH36



CH40



CH48



Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH36

CH40

CH48

ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)

CH38

Modulation Type: 802.11ac VHT80 (29.3Mbps)

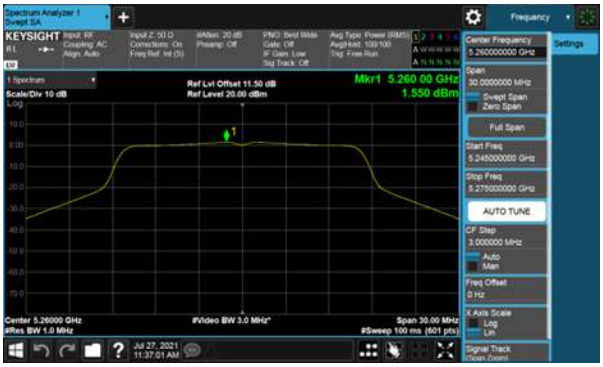
CH42

CH46

ANT A

Modulation Type: 802.11a (6Mbps)

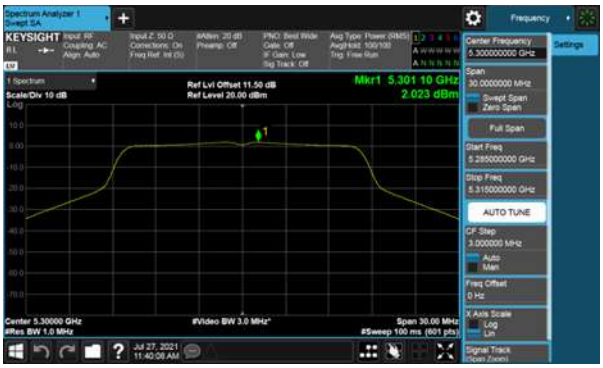
CH52



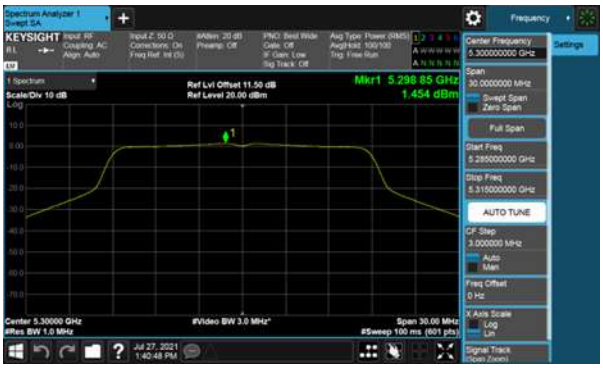
802.11ac VHT20 (6.5Mbps)

CH52

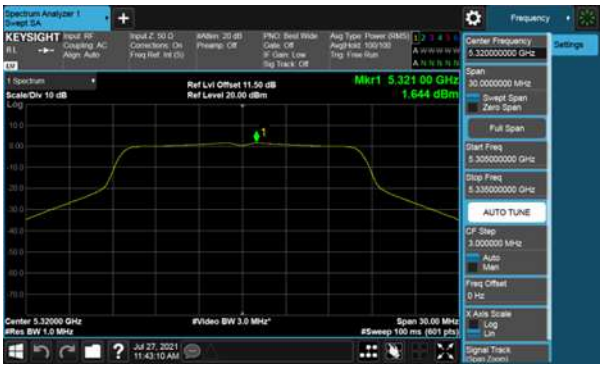
CH60



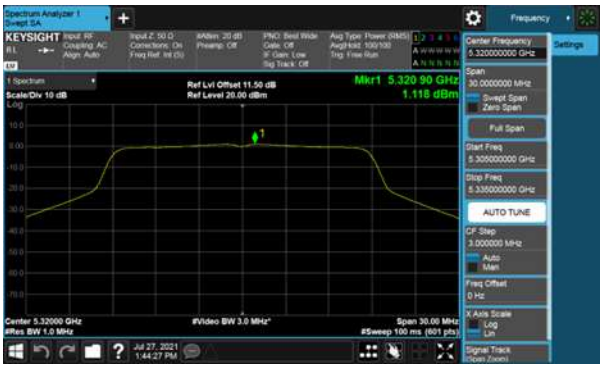
CH60



CH64



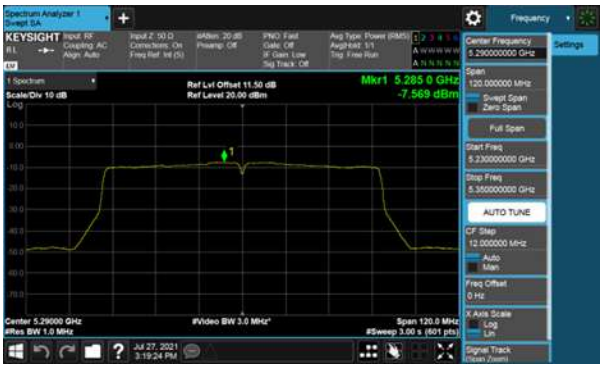
CH64



ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH58

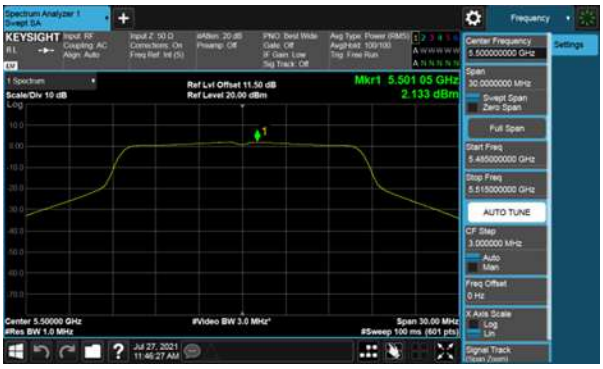


CH62

ANT A

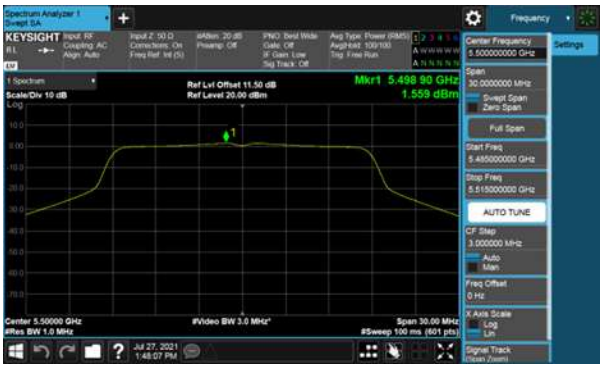
Modulation Type: 802.11a (6Mbps)

CH100

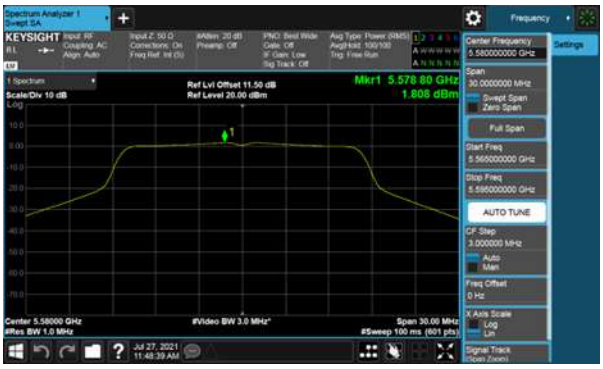


802.11ac VHT20 (6.5Mbps)

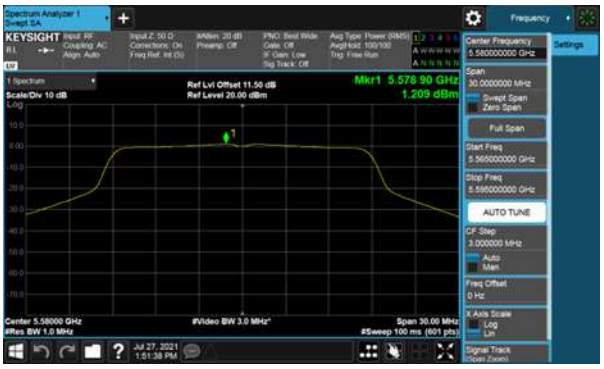
CH100



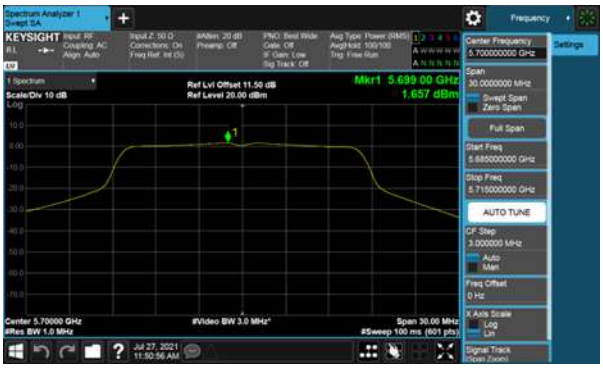
CH116



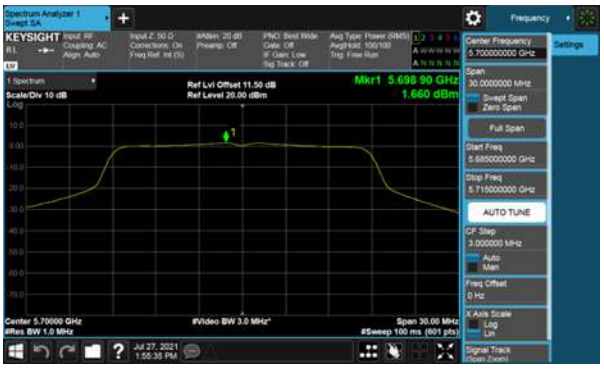
CH116



CH140



CH140



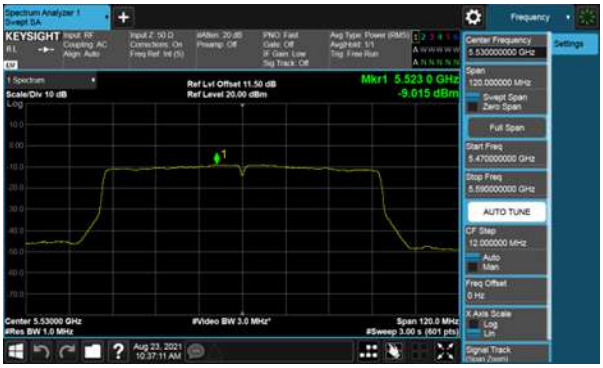
ANT A

Modulation Type: 802.11ac VHT40 (13.5Mbps)

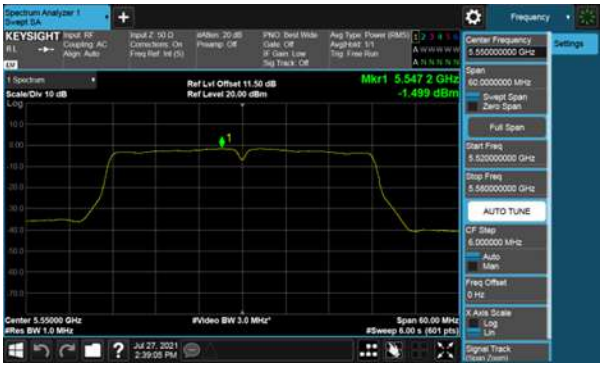
CH102

Modulation Type: 802.11ac VHT80 (29.3Mbps)

CH106

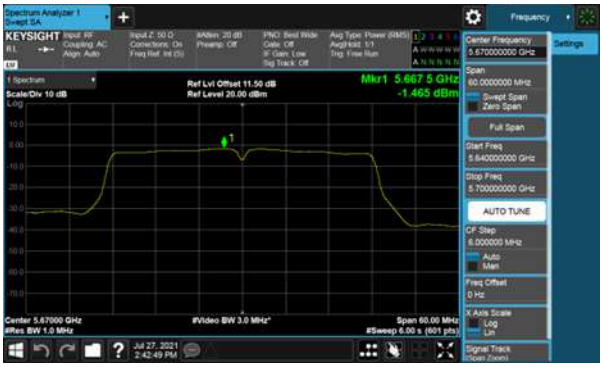


CH110



CH122

CH134



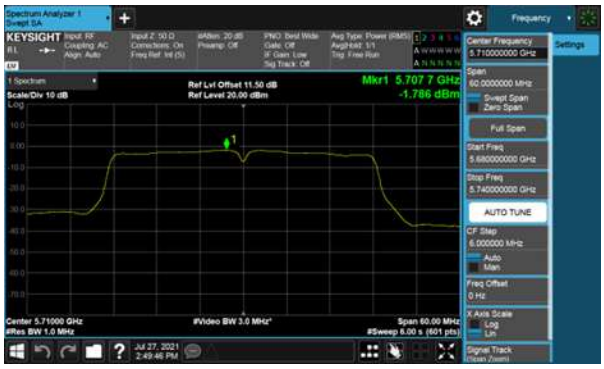
Straddle Channel ,ANT A

Modulation Type: 802.11a (6Mbps)
CH144

Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144

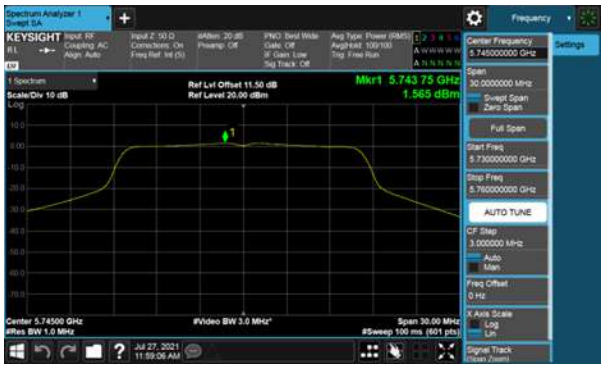
Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142



ANT A

Modulation Type: 802.11a (6Mbps)

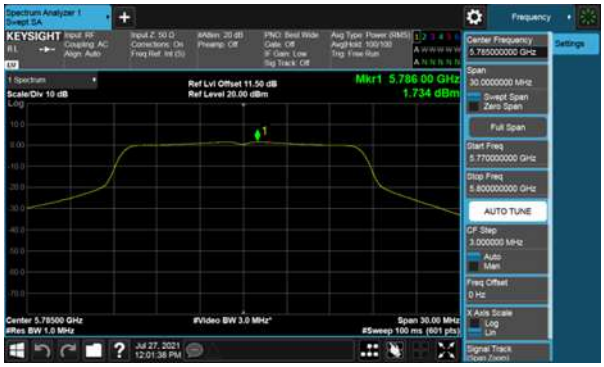
CH149



Modulation Type: 802.11ac VHT20 (6.5Mbps)

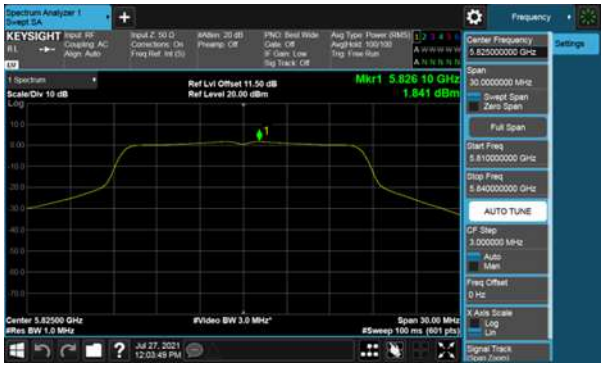
CH149

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

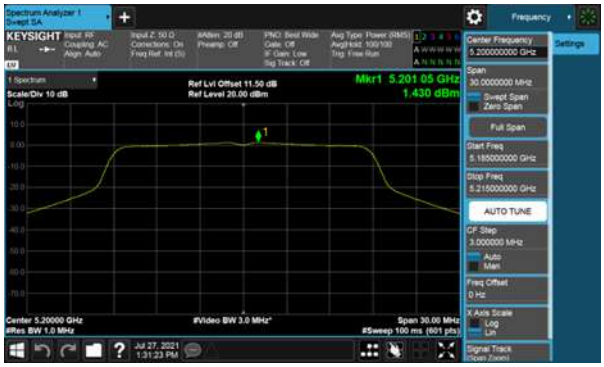
Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH36

Modulation Type: 802.11ac VHT40 (13.5Mbps)

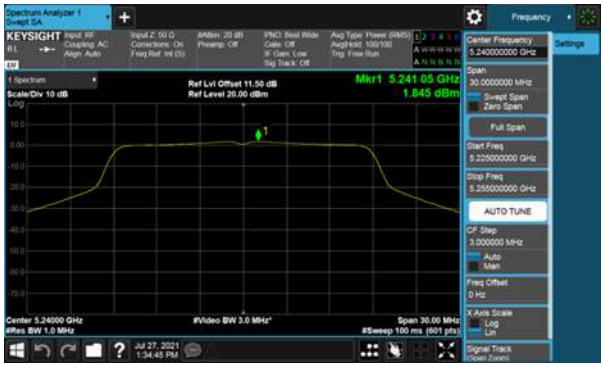
CH38

CH40



CH46

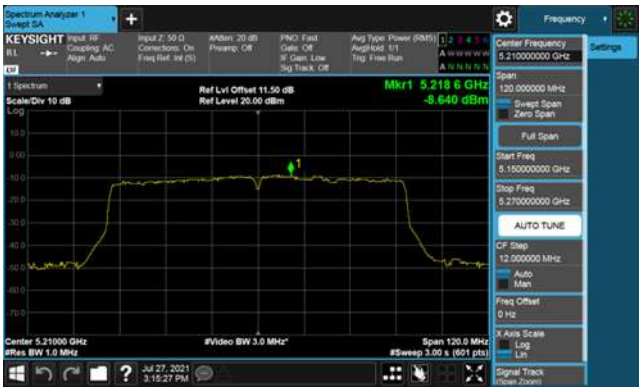
CH48



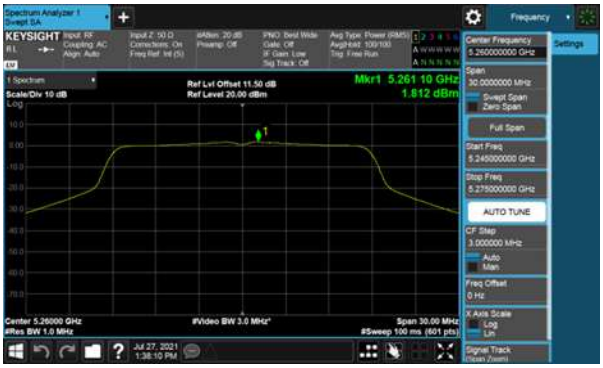
ANT B

Modulation Type: 802.11ac VHT80 (29.3Mbps)

CH42



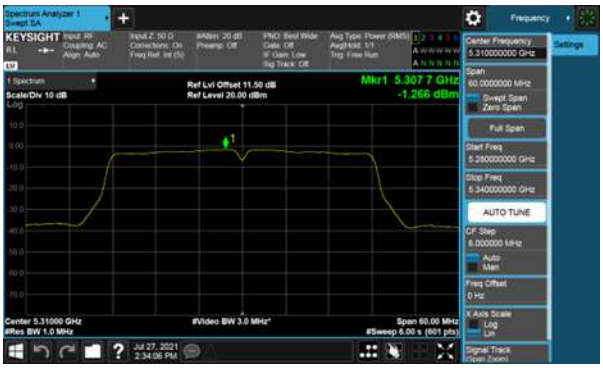
ANT B
802.11ac VHT20 (6.5Mbps)
CH52



Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH54

CH60

CH62



CH64

ANT B

Modulation Type: 802.11ac VHT80 (29.3Mbps)

CH58

ANT B

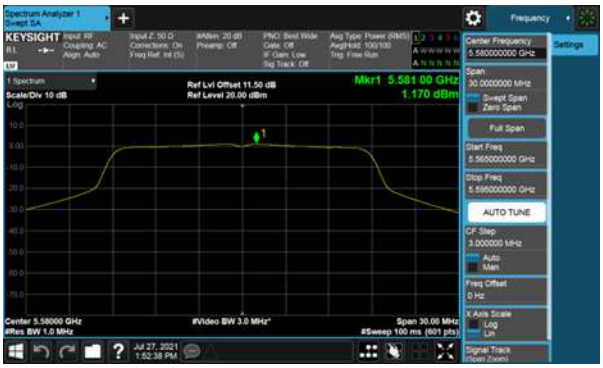
Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH100

Modulation Type: 802.11ac VHT40 (13.5Mbps)

CH102

CH116



CH110

CH140

CH134

ANT B

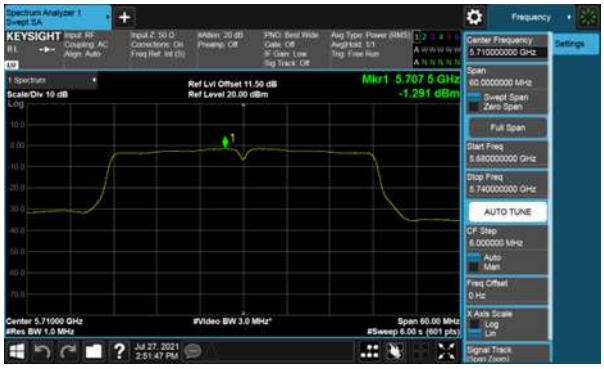
Modulation Type: 802.11ac VHT80 (29.3Mbps)

CH106

CH122

Straddle Channel ,ANT B
Modulation Type: 802.11ac VHT20 (6.5Mbps)
CH144

Modulation Type: 802.11ac VHT40 (13.5Mbps)
CH142

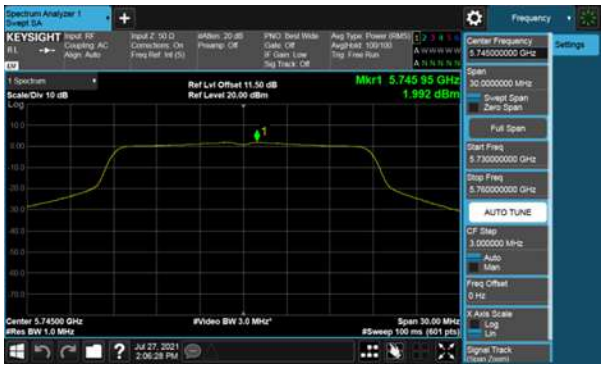


Modulation Type: 802.11ac VHT80 (29.3Mbps)
CH138

ANT B

Modulation Type: 802.11ac VHT20 (6.5Mbps)

CH149



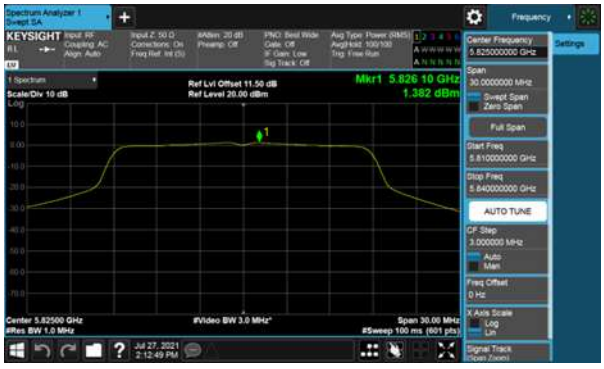
Modulation Type: 802.11ac VHT40 (13.5Mbps)

CH151

CH157

CH159

CH165



ANT B

Modulation Type: 802.11ac VHT80 (29.3Mbps)

CH155