

11ax-HE20	MCS0	120	5600	7.93	7.98	7.67	8.09	13.94	≤ 16.96	--	--	Pass
11ax-HE20	MCS0	140	5700	7.94	8.24	8.01	8.31	14.15	≤ 16.96	--	--	Pass
11ax-HE20	MCS0	144	5720	7.67	8.23	7.96	8.50	14.12	≤ 16.96	--	--	Pass
11ax-HE20	MCS0	149	5745	16.26	15.58	16.34	16.49	22.20	≤ 22.98	--	--	Pass
11ax-HE20	MCS0	157	5785	16.81	15.81	15.89	17.14	22.47	≤ 22.98	--	--	Pass
11ax-HE20	MCS0	165	5825	16.51	15.63	15.98	16.77	22.27	≤ 22.98	--	--	Pass
11ax-HE40	MCS0	38	5190	14.98	14.18	14.71	14.24	20.56	≤ 22.98	20.26	≤ 21.00	Pass
11ax-HE40	MCS0	46	5230	14.94	14.39	14.92	14.83	20.80	≤ 22.98	20.50	≤ 21.00	Pass
11ax-HE40	MCS0	54	5270	10.85	10.19	10.20	10.33	16.42	≤ 16.96	--	--	Pass
11ax-HE40	MCS0	62	5310	10.84	10.82	10.42	10.75	16.73	≤ 16.96	--	--	Pass
11ax-HE40	MCS0	102	5510	10.90	10.02	10.10	10.41	16.39	≤ 16.96	--	--	Pass
11ax-HE40	MCS0	118	5590	10.67	10.07	10.63	10.57	16.51	≤ 16.96	--	--	Pass
11ax-HE40	MCS0	134	5670	10.19	11.16	10.55	10.47	16.63	≤ 16.96	--	--	Pass
11ax-HE40	MCS0	142	5710	9.74	10.63	10.18	10.37	16.26	≤ 16.96	--	--	Pass
11ax-HE40	MCS0	151	5755	16.55	16.03	16.22	16.83	22.44	≤ 22.98	--	--	Pass
11ax-HE40	MCS0	159	5795	16.54	15.99	15.99	16.65	22.32	≤ 22.98	--	--	Pass
11ax-HE80	MCS0	42	5210	14.64	14.44	14.64	14.75	20.64	≤ 22.98	20.34	≤ 21.00	Pass
11ax-HE80	MCS0	58	5290	10.77	10.56	10.05	10.31	16.45	≤ 16.96	--	--	Pass
11ax-HE80	MCS0	106	5530	10.73	9.94	9.73	10.10	16.16	≤ 16.96	--	--	Pass
11ax-HE80	MCS0	122	5610	10.21	9.88	10.11	10.19	16.12	≤ 16.96	--	--	Pass
11ax-HE80	MCS0	138	5690	9.82	10.68	10.58	10.52	16.43	≤ 16.96	--	--	Pass
11ax-HE80	MCS0	155	5775	16.57	16.00	16.14	16.58	22.35	≤ 22.98	--	--	Pass
11ax-HE80 +80	MCS0	42	5210	10.13	10.15	--	--	13.15	≤ 22.98	--	--	Pass
		58	5290	--	--	10.44	10.52	13.49	≤ 16.96	--	--	Pass
11ax-HE80 +80	MCS0	106	5530	10.46	9.71	--	--	16.11	≤ 16.96	--	--	Pass
		122	5610	--	--	10.22	9.95					

Note 1: The Total Average Power (dBm) = $10 \cdot \log\{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$.

Note 2: Max EIRP of 30° Elevation Angle (dBm) = $10 \cdot \log\{10^{(\text{Ant 0 Average Power} + \text{Ant 0 30° Elevation Angle Gain}) / 10} + 10^{(\text{Ant 1 Average Power} + \text{Ant 1 30° Elevation Angle}) / 10} + 10^{(\text{Ant 2 Average Power} + \text{Ant 2 30° Elevation Angle}) / 10} + 10^{(\text{Ant 3 Average Power} + \text{Ant 3 30° Elevation Angle}) / 10}\}$.

Product	無線基地台	Temperature	23 ~ 25°C
Test Engineer	Peter Syu	Relative Humidity	46 ~ 54%
Test Site	SR2	Test Date	2020/03/10 ~ 2020/03/20
Model No.	OAW-AP1362 Scan Antenna		

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	Average Power (dBm)	Average Power Limit (dBm)	Max EIRP of 30° Elevation Angle (dBm)	EIRP Limit of 30° Elevation Angle (dBm)	Result
11a	6	36	5180	10.71	≤ 30.00	13.59	≤ 21.00	Pass
11a	6	44	5220	10.68	≤ 30.00	13.56	≤ 21.00	Pass
11a	6	48	5240	10.82	≤ 30.00	13.70	≤ 21.00	Pass
11a	6	149	5745	10.68	≤ 30.00	--	--	Pass
11a	6	157	5785	10.27	≤ 30.00	--	--	Pass
11a	6	165	5825	10.52	≤ 30.00	--	--	Pass

Note: Max EIRP of 30° Elevation Angle (dBm) = Average Power (dBm) + 30° Elevation Angle Gain (dBi).

5.3. 天線之要求

5.3.1. 適用標準

低功率射頻電機之發射機或收發信機所使用之天線，應為全固定、半固定式或以獨特之耦合(unique coupling)方式連接機體。製造者可設計供使用者因損壞而替換之天線，但不得設計或使用原認證以外之天線或可供引接各類電纜之標準天線插座或電氣連接頭，如：BNC、F type、N type、M type、UG type、RCA、SMA、SMB...等及其他各類工業或通訊標準接頭。

5.3.2. 天線樣式

Model No.: OAW-AP1361 (Antenna : MFR: N/A , M/N: N/A)

Antenna Type	Frequency Band (GHz)	Tx Paths	Bandwidth (MHz)	Max Peak Gain (dBi)				Directional Gain (dBi)	
				Ant 0	Ant 1	Ant 2	Ant 3	CDD	Beamforming
Wi-Fi Internal Antenna List (2.4GHz 2*2 MIMO, 5GHz 4*4 MIMO)									
Omni Antenna	2400 ~ 2483.5	2	20, 40	4.72	4.85	--	--	4.85	7.86
	5150 ~ 5850	4	20, 40, 80	6.48	6.31	6.26	6.12	6.48	12.50
	5150 ~ 5250 30° elevation angle	4	20, 40, 80	-5.46	-4.22	-2.90	-3.84	--	
Bluetooth Internal Antenna									
Antenna Type		Frequency Band (GHz)				Max Peak Gain (dBi)			
Omni Antenna		2400 ~ 2483.5				4.64			
Scan Antenna									
Antenna Type		Frequency Band (GHz)				Max Peak Gain (dBi)			
Omni Antenna		2400 ~ 2483.5				4.58			
		5150 ~ 5850				6.00			
		5150 ~ 5250 30° elevation angle				-5.83			

Model No.: OAW-AP1361D (Antenna: MFR: N/A, M/N: N/A)

Antenna Type	Frequency Band (GHz)	Tx Paths	Bandwidth (MHz)	Max Peak Gain (dBi)				Directional Gain (dBi)	
				Ant 0	Ant 1	Ant 2	Ant 3	CDD	Beamforming
Wi-Fi Internal Antenna List (2.4GHz 2*2 MIMO, 5GHz 4*4 MIMO)									
Directional Antenna	2400 ~ 2483.5	2	20, 40	7.5	7.0	--	--	7.5	10.51
	5150 ~ 5850	4	20, 40, 80	7.4	7.0	6.9	7.2	7.4	13.42
	5150 ~ 5250 30° elevation angle	4	20, 40, 80	3.12	2.98	3.24	3.65	--	
Bluetooth Internal Antenna									
Antenna Type		Frequency Band (GHz)				Max Peak Gain (dBi)			
Omni Antenna		2400 ~ 2483.5				3.30			
Scan Antenna									
Antenna Type		Frequency Band (GHz)				Max Peak Gain (dBi)			
Omni Antenna		2400 ~ 2483.5				7.20			
		5150 ~ 5850				9.40			
		5150 ~ 5250 30° elevation angle				2.88			

Model No.: OAW-AP1362 (Antenna: MFR: N/A, M/N: N/A)

Antenna Type	Frequency Band (GHz)	Tx Paths	Bandwidth (MHz)	Max Peak Gain (dBi)	Directional Gain (dBi)	
					CDD	Beamforming
Wi-Fi Internal Antenna List (2.4GHz 2*2 MIMO, 5GHz 4*4 MIMO)						
Omni Antenna	2400 ~ 2483.5	2	20, 40	5	5	8.01
	5150 ~ 5850	4	20, 40, 80	7	7	13.02
	5150 ~ 5250 30° elevation angle	4	20, 40, 80	-0.3	--	
Bluetooth Internal Antenna						
Antenna Type		Frequency Band (GHz)			Max Peak Gain (dBi)	
Omni Antenna		2400 ~ 2483.5			4.06	
Scan Antenna						
Antenna Type		Frequency Band (GHz)			Max Peak Gain (dBi)	
Omni Antenna		2400 ~ 2483.5			4.58	
		5150 ~ 5850			6.00	
		5150 ~ 5250 30° elevation angle			2.88	

Note 1: The EUT supports Cyclic Delay Diversity (CDD) technology for 802.11a/b/g/n/ac/ax and Beam Forming technology for 802.11n/ac/ax.

Note 2: When the EUT supports Cyclic Delay Diversity (CDD) and it is correlated.

If all antennas have the same gain, G_{ANT} , Directional gain = $G_{ANT} + \text{Array Gain}$, where Array Gain is as follows.

- For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log (N_{ANT} / N_{SS})$ dB = 3.01;

- For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB for $N_{ANT} \leq 4$;

If antenna gains are not equal, Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain.

Note 3: The EUT also supports Beam Forming mode, Directional gain = $G_{ANT} + 10 \log(N_{ANT}/N_{SS})$ dBi,

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain.

5.4. 26dB 佔用頻寬

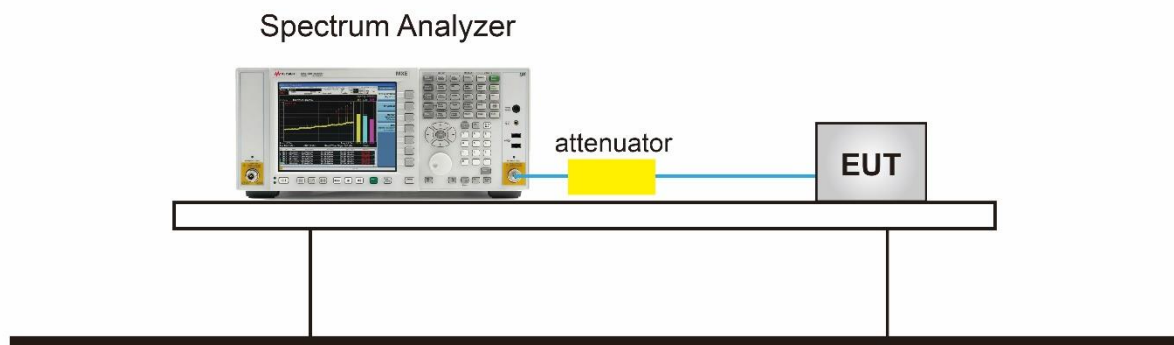
5.4.1.適用標準

N/A

5.4.2.量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀RF輸入端，峰值發射功率必須使用依據均方根等效電壓校準之儀器量測於任何連續傳輸之時段，量測結果須依儀器限制(如偵測器反應時間、相較於發射頻寬有限之解析頻寬能力，靈敏度等)調整得出正確之峰值量測或使用峰值功率表。

5.4.3.測試架構圖



5.4.4.26dB 佔用頻寬測試結果

Product	無線基地台	Temperature	23 ~ 25°C
Test Engineer	Peter Syu	Relative Humidity	53 ~ 57%
Test Site	SR2	Test Date	2020/03/24 ~ 2020/03/25
Model No.	OAW-AP1361D	Test Item	26dB Bandwidth

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)
Ant 0 / Ant 0 + 1 + 2 + 3				
802.11a	6Mbps	36	5180	19.26
802.11a	6Mbps	44	5220	18.84
802.11a	6Mbps	48	5240	19.25
802.11a	6Mbps	52	5260	19.22
802.11a	6Mbps	60	5300	18.89
802.11a	6Mbps	64	5320	18.39
802.11a	6Mbps	100	5500	19.03
802.11a	6Mbps	120	5600	18.64
802.11a	6Mbps	140	5700	18.82
802.11a	6Mbps	144	5720	18.89
802.11a	6Mbps	149	5745	19.01
802.11a	6Mbps	157	5785	18.53
802.11a	6Mbps	165	5825	18.57
802.11n-HT20	MCS0	36	5180	20.41
802.11n-HT20	MCS0	44	5220	19.86
802.11n-HT20	MCS0	48	5240	19.77
802.11n-HT20	MCS0	52	5260	18.90
802.11n-HT20	MCS0	60	5300	20.04
802.11n-HT20	MCS0	64	5320	20.17
802.11n-HT20	MCS0	100	5500	20.16
802.11n-HT20	MCS0	120	5600	20.34
802.11n-HT20	MCS0	140	5700	20.18
802.11n-HT20	MCS0	144	5720	20.20
802.11n-HT20	MCS0	149	5745	19.68
802.11n-HT20	MCS0	157	5785	19.91
802.11n-HT20	MCS0	165	5825	20.29
802.11n-HT40	MCS0	38	5190	39.38
802.11n-HT40	MCS0	46	5230	38.96

802.11n-HT40	MCS0	54	5270	39.96
802.11n-HT40	MCS0	62	5310	39.13
802.11n-HT40	MCS0	102	5510	39.58
802.11n-HT40	MCS0	118	5590	39.79
802.11n-HT40	MCS0	134	5670	40.22
802.11n-HT40	MCS0	142	5710	39.43
802.11n-HT40	MCS0	151	5755	39.30
802.11n-HT40	MCS0	159	5795	39.28
802.11ax-HE20	MCS0	36	5180	20.95
802.11ax-HE20	MCS0	44	5220	20.23
802.11ax-HE20	MCS0	48	5240	20.40
802.11ax-HE20	MCS0	52	5260	20.69
802.11ax-HE20	MCS0	60	5300	20.80
802.11ax-HE20	MCS0	64	5320	20.64
802.11ax-HE20	MCS0	100	5500	20.57
802.11ax-HE20	MCS0	120	5600	20.61
802.11ax-HE20	MCS0	140	5700	20.54
802.11ax-HE20	MCS0	144	5720	20.77
802.11ax-HE20	MCS0	149	5745	20.47
802.11ax-HE20	MCS0	157	5785	21.30
802.11ax-HE20	MCS0	165	5825	20.39
802.11ax-HE40	MCS0	38	5190	40.41
802.11ax-HE40	MCS0	46	5230	40.04
802.11ax-HE40	MCS0	54	5270	40.97
802.11ax-HE40	MCS0	62	5310	40.04
802.11ax-HE40	MCS0	102	5510	40.19
802.11ax-HE40	MCS0	118	5590	39.77
802.11ax-HE40	MCS0	134	5670	40.36
802.11ax-HE40	MCS0	142	5710	40.42
802.11ax-HE40	MCS0	151	5755	39.87
802.11ax-HE40	MCS0	159	5795	39.53
802.11ax-HE80	MCS0	42	5210	81.10
802.11ax-HE80	MCS0	58	5290	80.77
802.11ax-HE80	MCS0	106	5530	80.86
802.11ax-HE80	MCS0	122	5610	80.48
802.11ax-HE80	MCS0	138	5690	80.79
802.11ax-HE80	MCS0	155	5775	80.17

802.11ax-HE80 + 80	MCS0	42	5210	123.9
		58	5290	122.7
802.11ax-HE80 + 80	MCS0	106	5530	86.07
		122	5610	87.01
Scan Antenna				
802.11a	6Mbps	36	5180	24.38
802.11a	6Mbps	44	5220	23.82
802.11a	6Mbps	48	5240	24.01
802.11a	6Mbps	149	5745	23.49
802.11a	6Mbps	157	5785	22.50
802.11a	6Mbps	165	5825	23.20

802.11a 26dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 36 (5180MHz)



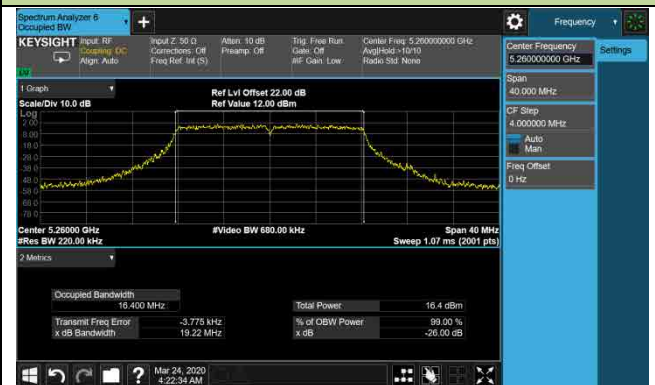
Channel 44 (5220MHz)



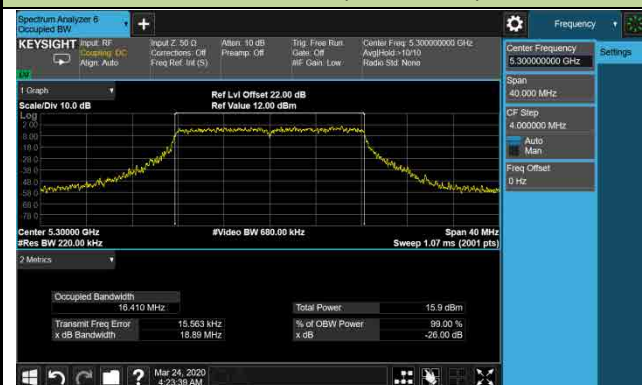
Channel 48 (5240MHz)



Channel 52 (5260MHz)



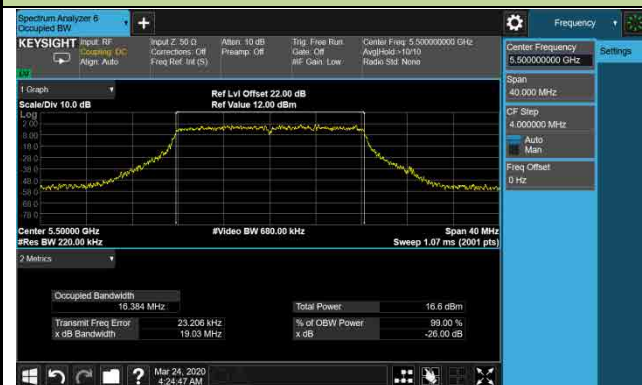
Channel 60 (5300MHz)



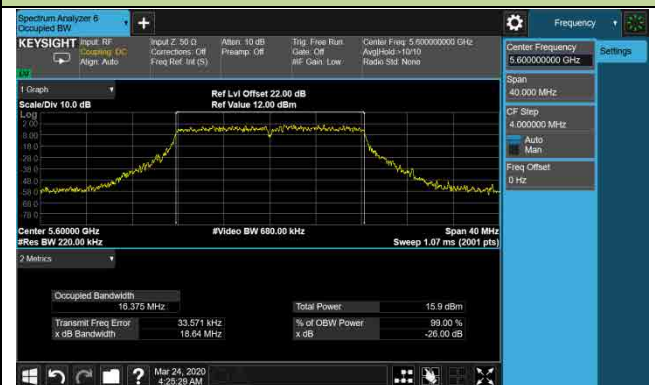
Channel 64 (5320MHz)

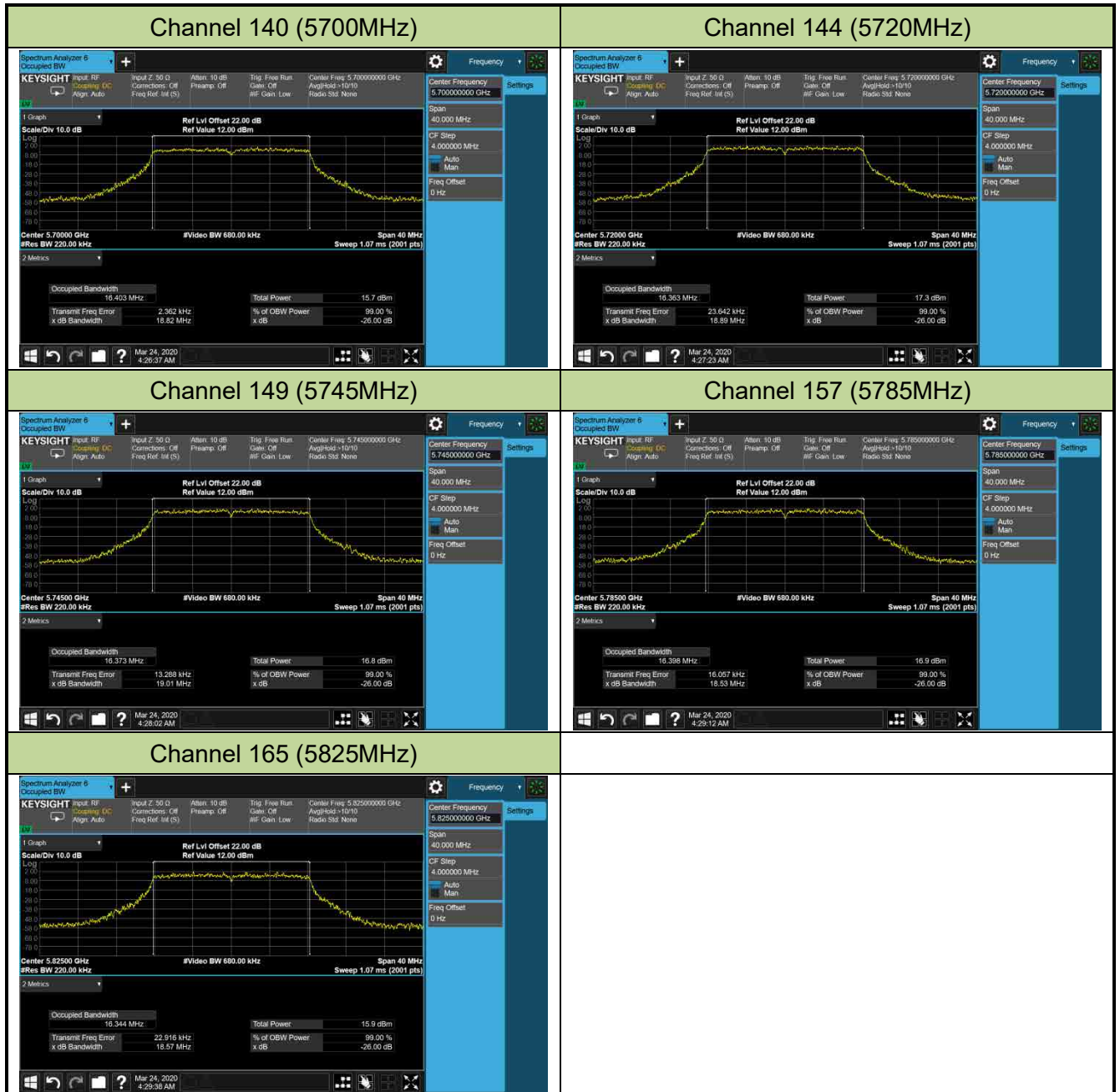


Channel 100 (5500MHz)



Channel 120 (5600MHz)





802.11 n-HT20 26dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



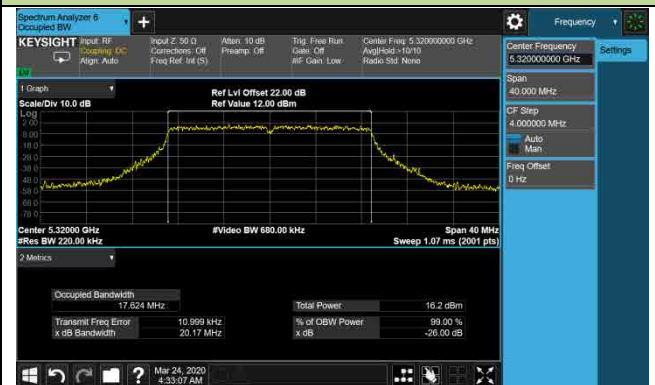
Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)

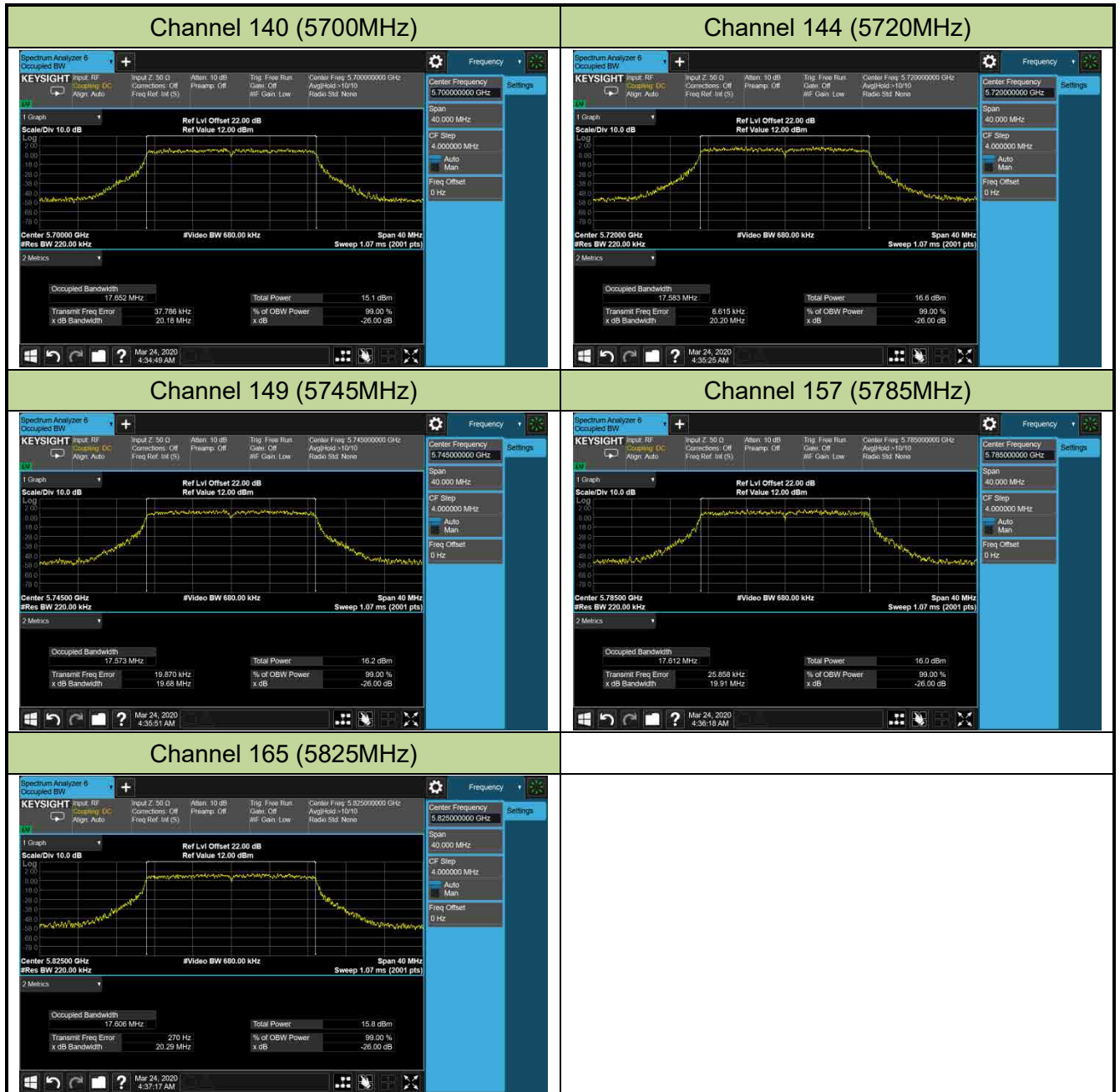


Channel 100 (5500MHz)



Channel 120 (5600MHz)



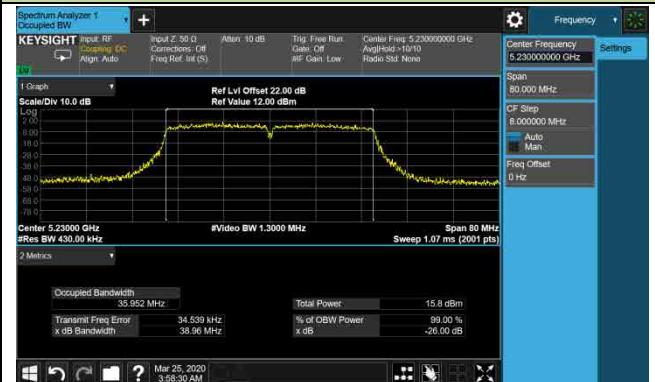


802.11n-HT40 26dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 38 (5190MHz)



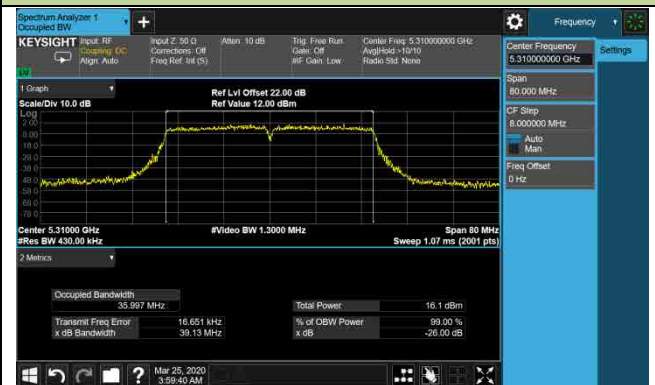
Channel 46 (5230MHz)



Channel 54 (5270MHz)



Channel 62 (5310MHz)



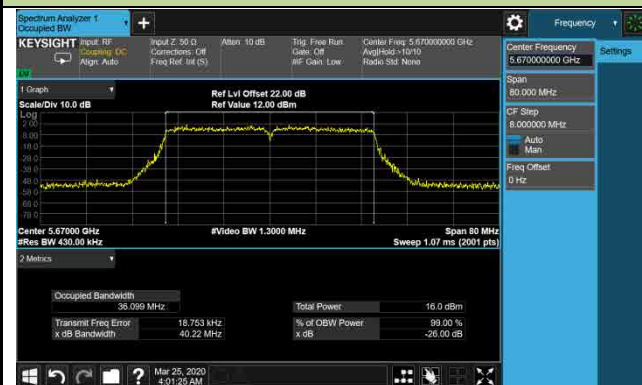
Channel 102 (5510MHz)



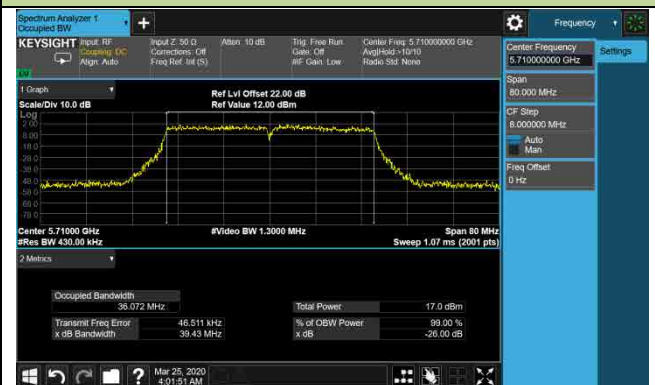
Channel 118 (5590MHz)

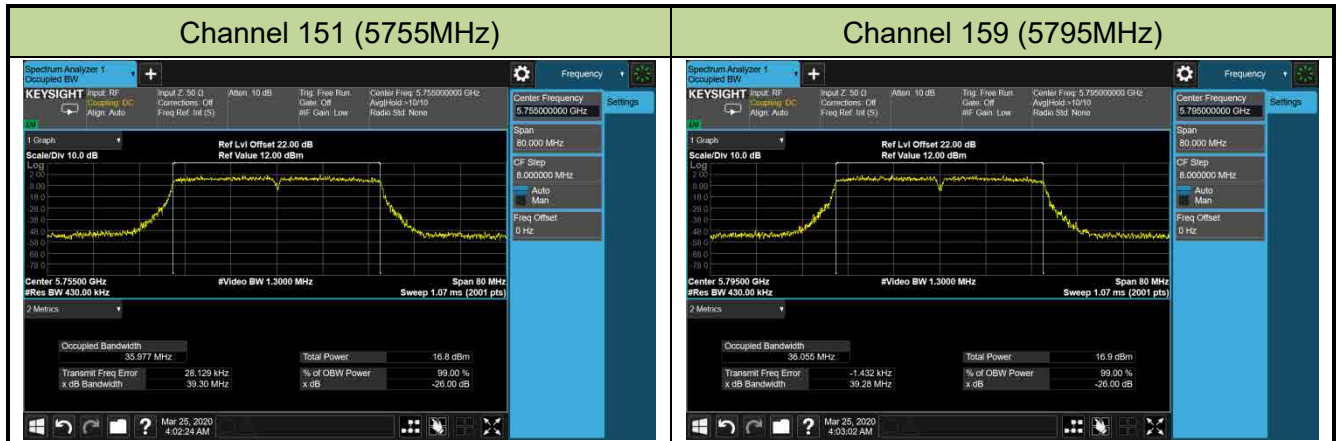


Channel 134 (5670MHz)



Channel 142 (5710MHz)





802.11 ax-HE20 26dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 36 (5180MHz)



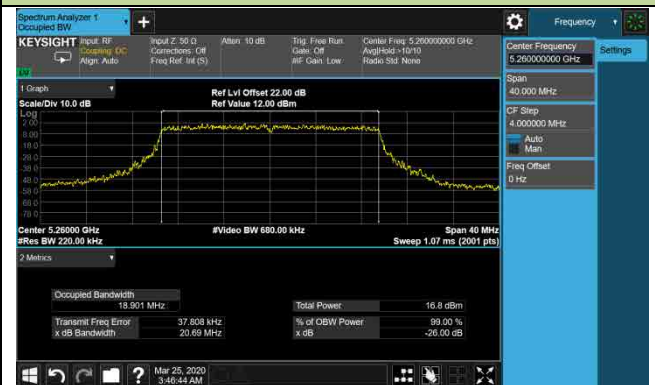
Channel 44 (5220MHz)



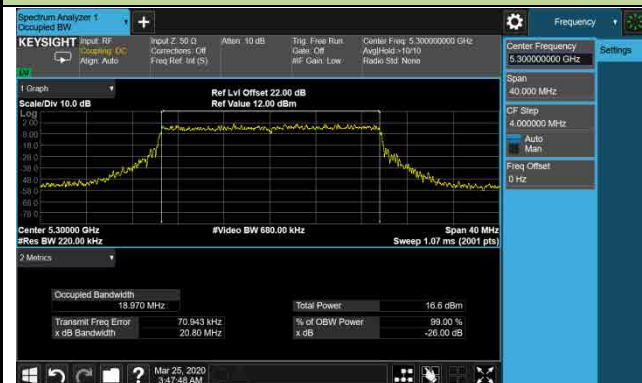
Channel 48 (5240MHz)



Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)

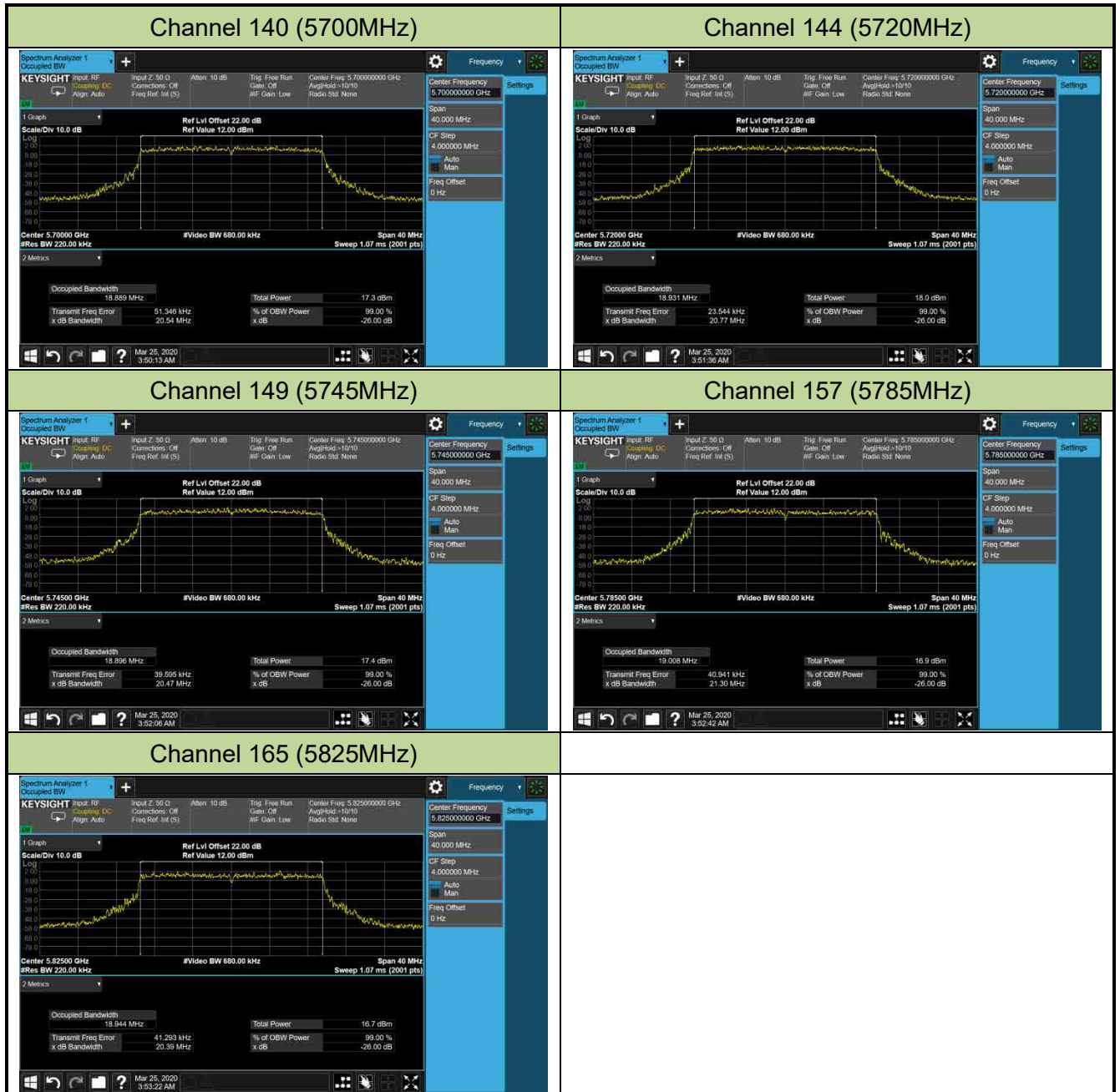


Channel 100 (5500MHz)



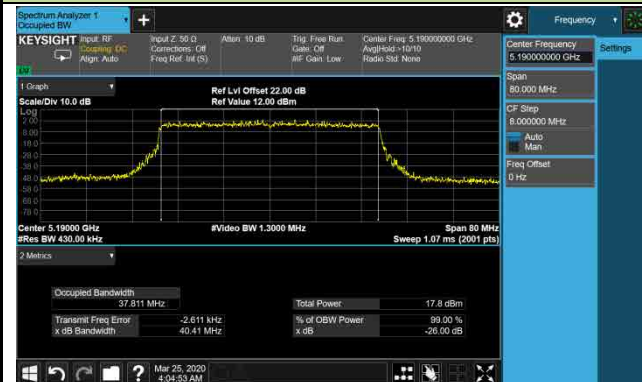
Channel 120 (5600MHz)



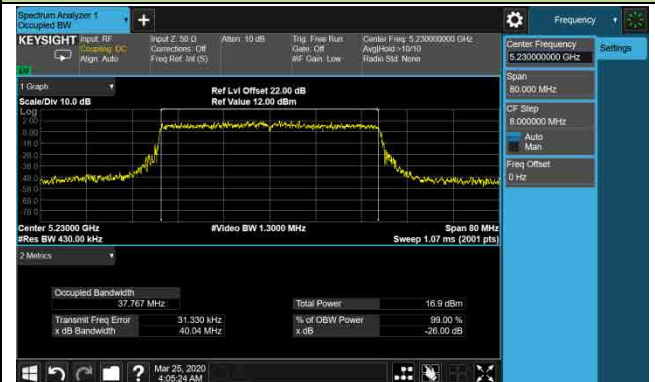


802.11 ax-HE40 26dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 38 (5190MHz)



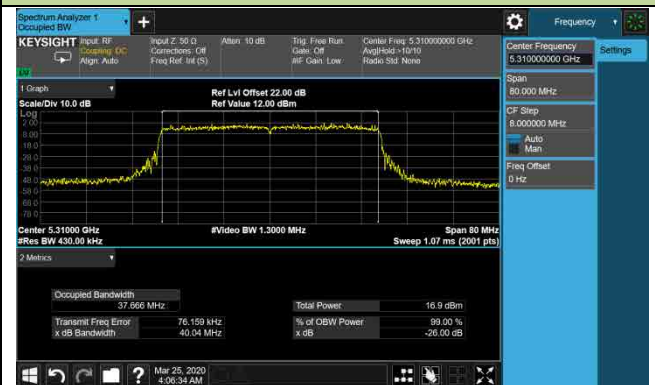
Channel 46 (5230MHz)



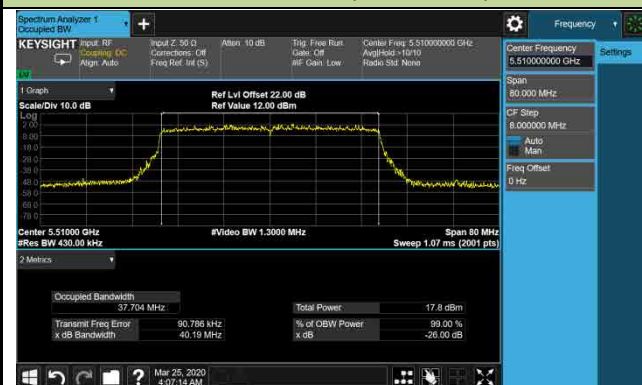
Channel 54 (5270MHz)



Channel 62 (5310MHz)



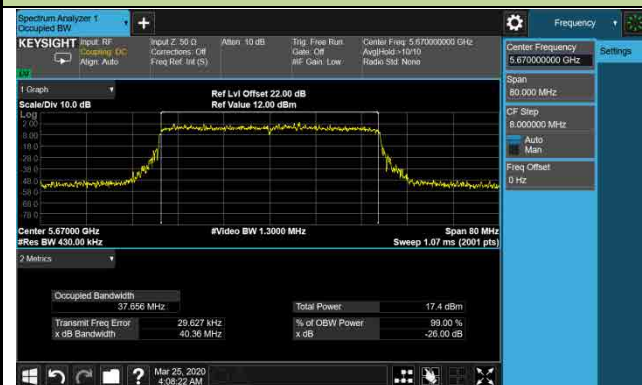
Channel 102 (5510MHz)



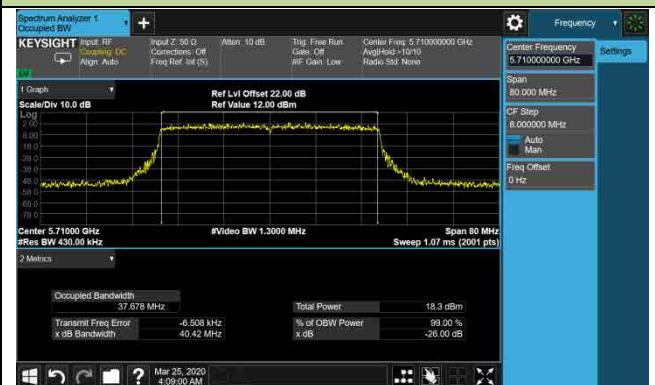
Channel 118 (5590MHz)

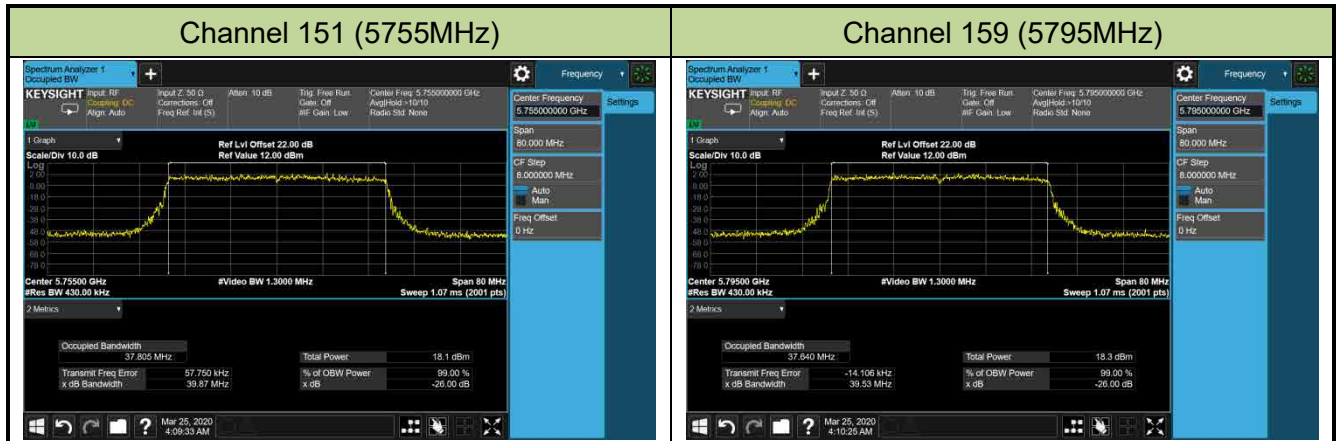


Channel 134 (5670MHz)



Channel 142 (5710MHz)





802.11ax-HE80 26dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

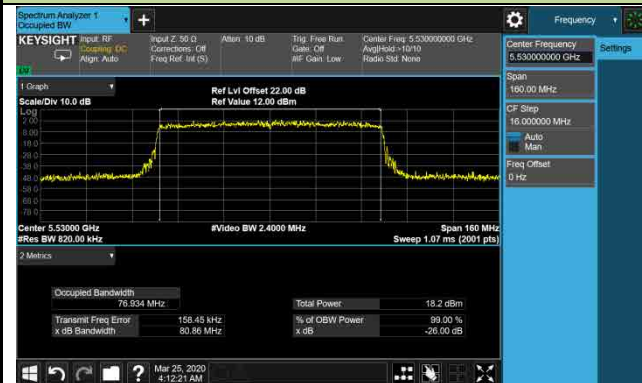
Channel 42 (5210MHz)



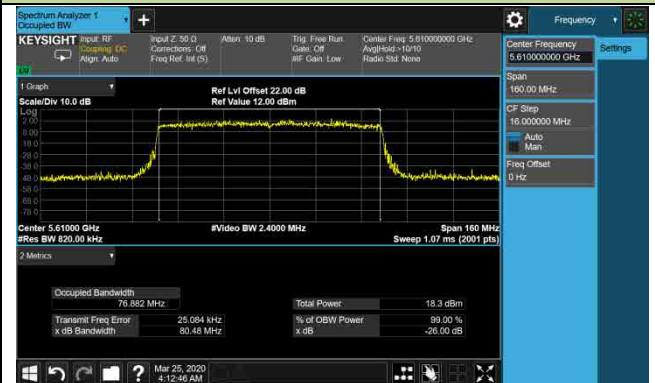
Channel 58 (5290MHz)



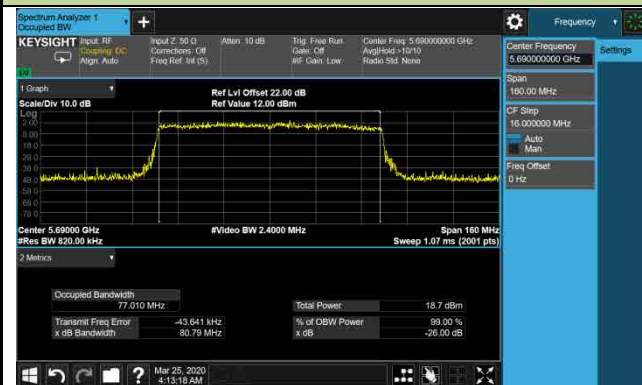
Channel 106 (5530MHz)



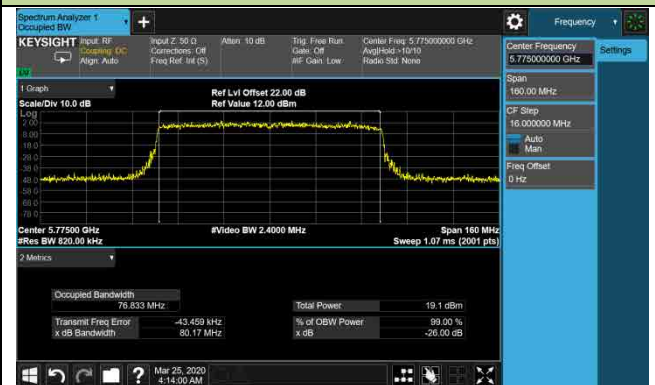
Channel 122 (5610MHz)



Channel 138 (5690MHz)

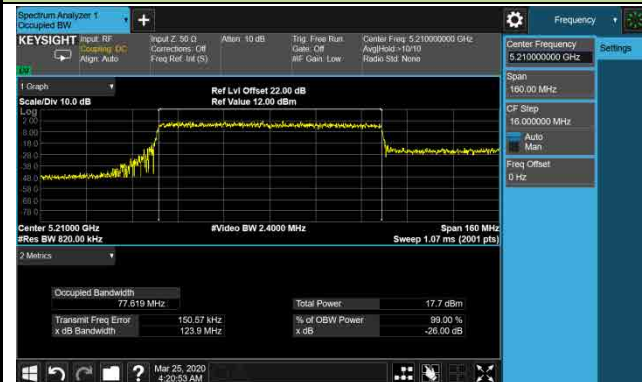


Channel 155 (5775MHz)



802.11ax-HE80+80 26dB Bandwidth - Ant 0 + 1 + 2 + 3

Channel 42 (5210MHz)



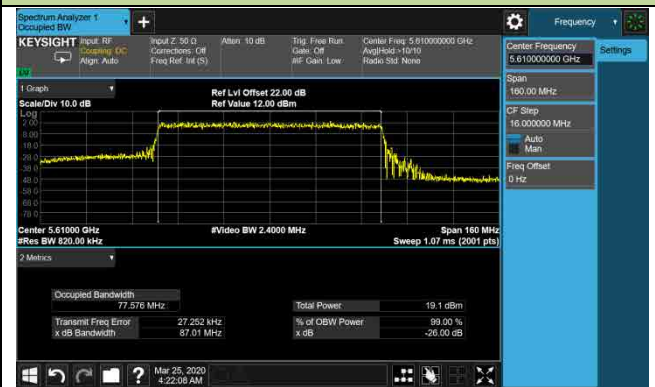
Channel 58 (5290MHz)



Channel 106 (5530MHz)



Channel 122 (5610MHz)



Scan Antenna

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



5.5. 6dB 佔用頻寬

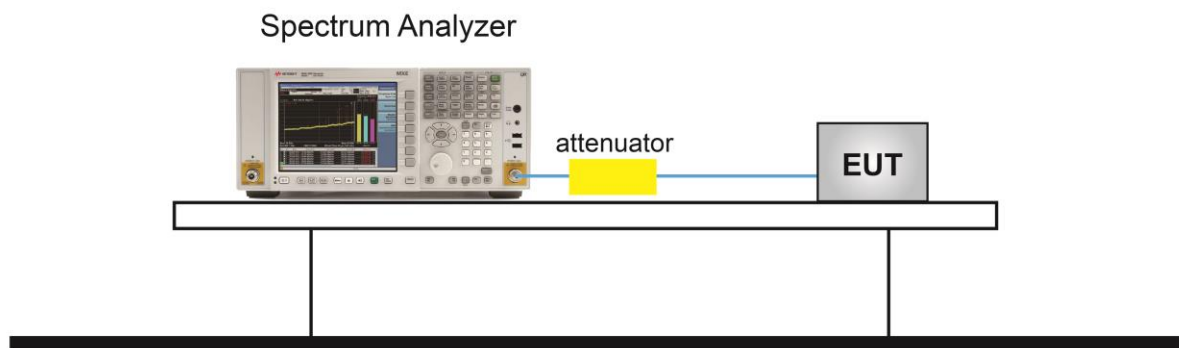
5.5.1.適用標準

在 5.725 GHz~5.850 GHz 頻段操作之設備，其 6 dB 頻寬至少應有 500 kHz。

5.5.2.量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀RF輸入端，峰值發射功率必須使用依據均方根等效電壓校準之儀器量測於任何連續傳輸之時段，量測結果須依儀器限制(如偵測器反應時間、相較於發射頻寬有限之解析頻寬能力，靈敏度等)調整得出正確之峰值量測或使用峰值功率表。

5.5.3.測試架構圖



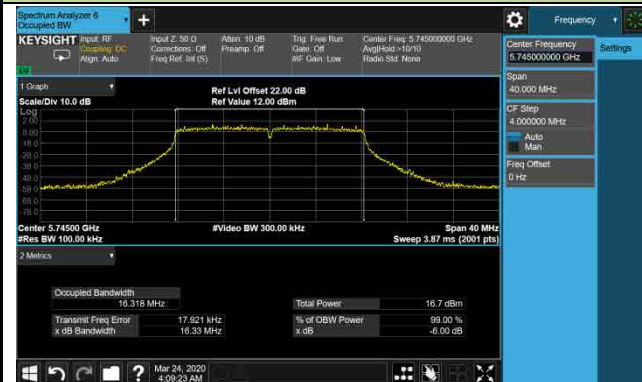
5.5.4.6dB 佔用頻寬測試結果

Product	無線基地台	Temperature	23°C
Test Engineer	Peter Syu	Relative Humidity	57%
Test Site	SR2	Test Date	2020/03/24
Model No.	OAW-AP1361D	Test Item	6dB Bandwidth

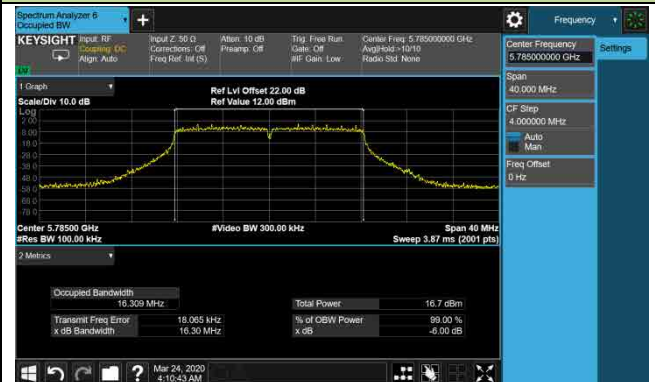
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)
Ant 1 / Ant 0 + 1 + 2 + 3				
802.11a	6Mbps	149	5745	16.33
802.11a	6Mbps	157	5785	16.30
802.11a	6Mbps	165	5825	16.07
802.11n-HT20	MCS0	149	5745	17.63
802.11n-HT20	MCS0	157	5785	17.59
802.11n-HT20	MCS0	165	5825	17.63
802.11n-HT40	MCS0	151	5755	36.06
802.11n-HT40	MCS0	159	5795	36.35
802.11ax-HE20	MCS0	149	5745	16.79
802.11ax-HE20	MCS0	157	5785	18.96
802.11ax-HE20	MCS0	165	5825	18.96
802.11ax-HE40	MCS0	151	5755	38.12
802.11ax-HE40	MCS0	159	5795	37.41
802.11ax-HE80	MCS0	155	5775	77.58
Scan Antenna				
802.11a	6Mbps	149	5745	16.36
802.11a	6Mbps	157	5785	16.02
802.11a	6Mbps	165	5825	16.36

802.11a 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 149 (5745MHz)



Channel 157 (5785MHz)

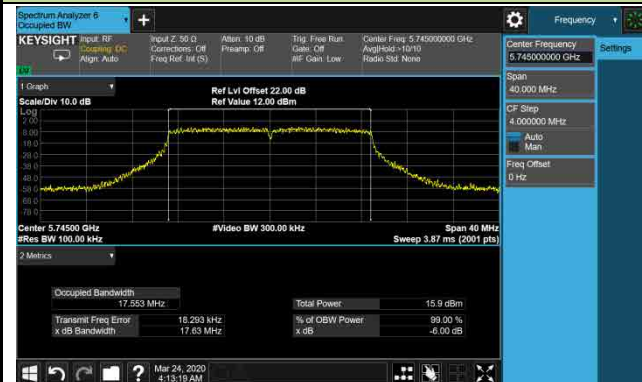


Channel 165 (5825MHz)



802.11n-HT20 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)

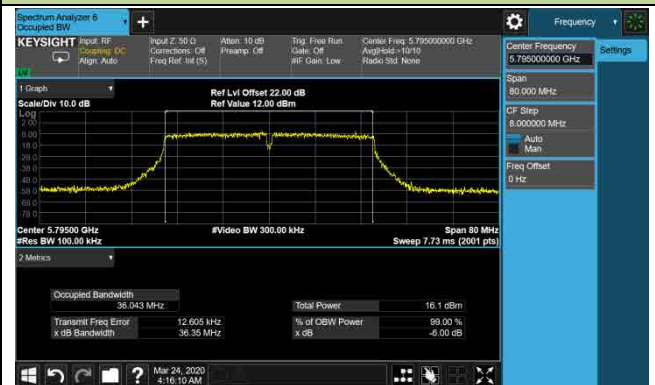


802.11n-HT40 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ax-HE20 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 149 (5745MHz)



Channel 157 (5785MHz)

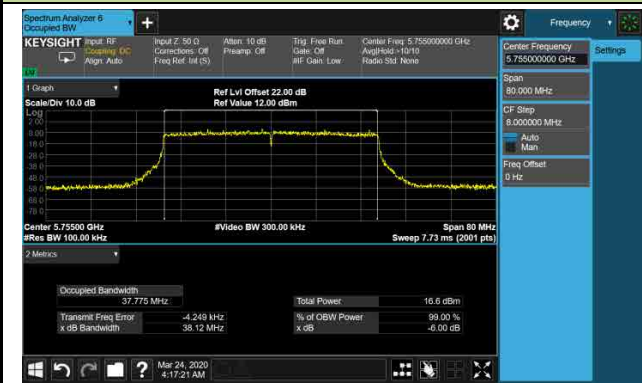


Channel 165 (5825MHz)

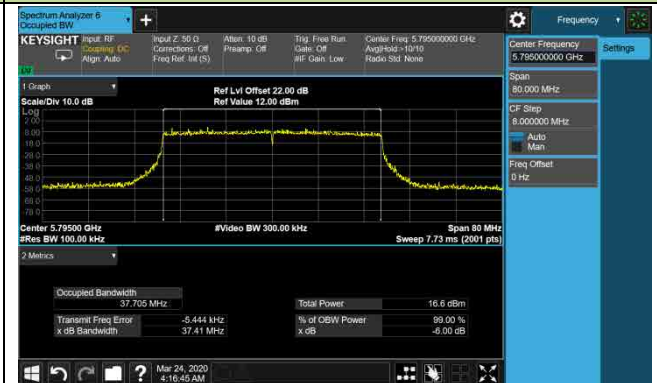


802.11ax-HE40 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ax-HE80 6dB Bandwidth - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 155 (5775MHz)



802.11a 6dB Bandwidth - Scan Antenna

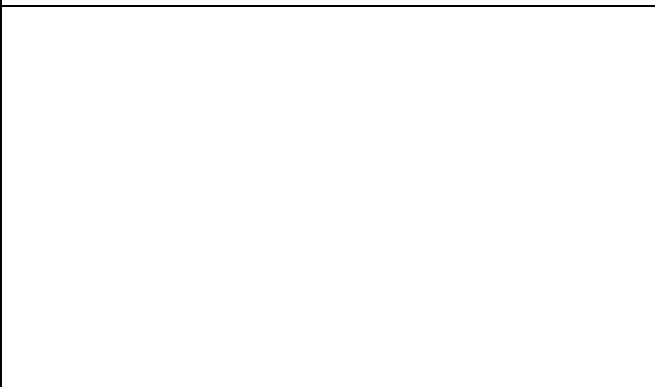
Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



5.6. 最大功率頻譜密度

5.6.1. 適用標準

依據國家通訊傳播委員會低功率射頻電機技術規範之第4.7.2(1)(2)(3)節

使用於5.15 GHz~5.25 GHz 頻段，供室內操作使用，在任何1 MHz 頻帶中最大功率頻譜密度應小於或等於17 dBm。

使用頻率於5.25 GHz~5.35 GHz 與5.470 GHz~5.725 GHz 頻段，最大功率頻譜密度在任何1 MHz 頻帶中應小於或等於11 dBm。

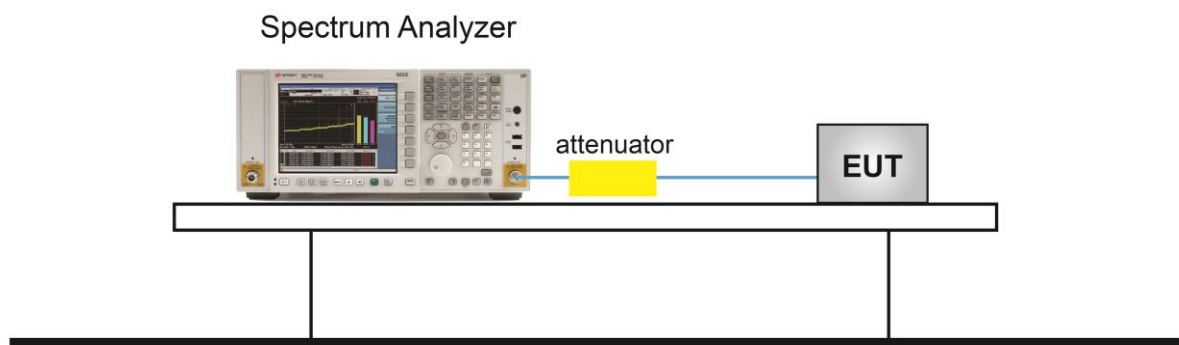
使用頻率於5.725 GHz~5.850 GHz 頻段，在任何500 kHz 頻帶中最大功率頻譜密度應小於或等於30 dBm。

使用超過6 dBi 方向增益之發射天線時，應依超過6 dBi 天線方向增益的dBi 總量，等量減少最大功率頻譜密度。

5.6.2. 量測方法

待測物之天線埠經由適當之衰減直接連至頻譜分析儀RF輸入端，量測定於1MHz/500kHz頻寬。

5.6.3. 測試架構圖



5.6.4.峰值功率頻譜密度測試結果

Product	無線基地台	Temperature	23 ~ 25°C
Test Engineer	Peter Syu	Relative Humidity	52 ~ 57%
Test Site	SR2	Test Date	2020/03/24 ~ 2020/04/19
Model No.	OAW-AP1361		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
Ant 0 + 1 + 2 + 3											
11a	6	36	5180	0.79	0.82	0.74	0.59	91.94	7.12	≤ 10.50	Pass
11a	6	44	5220	3.82	3.78	3.66	3.13	91.94	9.99	≤10.50	Pass
11a	6	48	5240	3.46	3.40	3.45	3.51	91.94	9.84	≤10.50	Pass
11a	6	52	5260	-2.51	-2.46	-2.56	-2.50	91.94	3.88	≤4.50	Pass
11a	6	60	5300	-2.57	-2.62	-2.65	-2.72	91.94	3.75	≤4.50	Pass
11a	6	64	5320	-2.60	-2.31	-2.57	-2.63	91.94	3.86	≤4.50	Pass
11a	6	100	5500	-2.64	-2.07	-2.09	-2.57	91.94	4.06	≤4.50	Pass
11a	6	120	5600	-2.07	-2.10	-2.12	-2.29	91.94	4.24	≤4.50	Pass
11a	6	140	5700	-2.75	-2.28	-2.83	-2.32	91.94	3.85	≤4.50	Pass
11a	6	144	5720	-2.47	-2.48	-2.43	-2.40	91.94	3.94	≤4.50	Pass
11n-HT20	MCS0	36	5180	3.30	3.46	3.47	3.70	95.09	9.72	≤10.50	Pass
11n-HT20	MCS0	44	5220	3.74	3.28	3.34	3.21	95.09	9.64	≤10.50	Pass
11n-HT20	MCS0	48	5240	4.07	3.97	3.91	3.79	95.09	10.18	≤10.50	Pass
11n-HT20	MCS0	52	5260	-2.45	-2.64	-2.47	-2.43	95.09	3.74	≤4.50	Pass
11n-HT20	MCS0	60	5300	-2.19	-2.39	-2.31	-2.26	95.09	3.95	≤4.50	Pass
11n-HT20	MCS0	64	5320	-2.21	-2.47	-2.26	-2.29	95.09	3.93	≤4.50	Pass
11n-HT20	MCS0	100	5500	-2.38	-2.13	-2.18	-2.24	95.09	4.01	≤4.50	Pass
11n-HT20	MCS0	120	5600	-2.15	-2.38	-2.28	-2.10	95.09	4.01	≤4.50	Pass
11n-HT20	MCS0	140	5700	-2.18	-2.73	-2.12	-2.06	95.09	3.97	≤4.50	Pass
11n-HT20	MCS0	144	5720	-2.14	-2.13	-2.18	-2.22	95.09	4.07	≤4.50	Pass
11n-HT40	MCS0	38	5190	1.33	1.24	1.41	1.26	93.92	7.60	≤10.50	Pass
11n-HT40	MCS0	46	5230	3.42	3.67	3.57	3.33	93.92	9.79	≤10.50	Pass
11n-HT40	MCS0	54	5270	-2.69	-2.53	-2.52	-2.53	93.92	3.73	≤4.50	Pass
11n-HT40	MCS0	62	5310	-2.03	-2.65	-2.28	-2.55	93.92	3.92	≤4.50	Pass
11n-HT40	MCS0	102	5510	-2.31	-2.45	-2.42	-2.42	93.92	3.89	≤4.50	Pass
11n-HT40	MCS0	118	5590	-2.34	-2.28	-2.29	-2.24	93.92	4.01	≤4.50	Pass

11n-HT40	MCS0	134	5670	-2.20	-2.37	-2.12	-2.15	93.92	4.08	≤4.50	Pass
11n-HT40	MCS0	142	5710	-2.08	-2.08	-2.11	-1.80	93.92	4.28	≤4.50	Pass
11ax-HE20	MCS0	36	5180	4.09	4.06	3.36	3.28	95.51	9.93	≤10.50	Pass
11ax-HE20	MCS0	44	5220	3.21	3.17	3.51	3.54	95.51	9.58	≤10.50	Pass
11ax-HE20	MCS0	48	5240	3.44	3.70	3.33	3.29	95.51	9.66	≤10.50	Pass
11ax-HE20	MCS0	52	5260	-1.90	-2.37	-2.30	-2.20	95.51	4.03	≤4.50	Pass
11ax-HE20	MCS0	60	5300	-2.70	3.70	-2.53	-2.50	95.51	6.22	≤4.50	Pass
11ax-HE20	MCS0	64	5320	-2.45	-2.26	-2.06	-2.12	95.51	4.00	≤4.50	Pass
11ax-HE20	MCS0	100	5500	-2.28	-2.47	-2.48	-2.47	95.51	3.80	≤4.50	Pass
11ax-HE20	MCS0	120	5600	-1.84	-2.38	-2.28	-2.14	95.51	4.06	≤4.50	Pass
11ax-HE20	MCS0	140	5700	-2.36	-1.98	-2.94	-2.09	95.51	3.89	≤4.50	Pass
11ax-HE20	MCS0	144	5720	-2.53	-2.08	-1.97	-2.06	95.51	4.07	≤4.50	Pass
11ax-HE40	MCS0	38	5190	3.72	3.76	3.58	3.72	94.90	9.94	≤10.50	Pass
11ax-HE40	MCS0	46	5230	3.67	3.70	3.68	3.66	94.90	9.93	≤10.50	Pass
11ax-HE40	MCS0	54	5270	-2.28	-2.00	-2.44	-2.27	94.90	4.00	≤4.50	Pass
11ax-HE40	MCS0	62	5310	-2.20	-2.55	-2.39	-2.53	94.90	3.83	≤4.50	Pass
11ax-HE40	MCS0	102	5510	-2.21	-2.31	-2.15	-2.21	94.90	4.03	≤4.50	Pass
11ax-HE40	MCS0	118	5590	-1.83	-1.97	-2.04	-2.86	94.90	4.09	≤4.50	Pass
11ax-HE40	MCS0	134	5670	-2.11	-2.18	-2.24	-2.21	94.90	4.06	≤4.50	Pass
11ax-HE40	MCS0	142	5710	-2.47	-2.06	-2.22	-2.38	94.90	3.97	≤4.50	Pass
11ax-HE80	MCS0	42	5210	1.86	1.94	1.29	1.56	94.43	7.94	≤10.50	Pass
11ax-HE80	MCS0	58	5290	-2.33	-2.12	-2.61	-2.29	94.43	3.94	≤4.50	Pass
11ax-HE80	MCS0	106	5530	-2.87	-2.76	-2.45	-2.50	94.43	3.63	≤4.50	Pass
11ax-HE80	MCS0	122	5610	-2.15	-2.39	-2.26	-2.10	94.43	4.05	≤4.50	Pass
11ax-HE80	MCS0	138	5690	-2.83	-2.52	-2.56	-2.03	94.43	3.79	≤4.50	Pass
11ax-HE80 + 80	MCS0	42	5210	-3.10	-3.02	--	---	94.43	0.20	≤3.58	Pass
		58	5290	--	--	-1.96	0.96	94.43	3.00	≤3.58	Pass
11ax-HE80 + 80	MCS0	106	5530	-3.76	-3.41	--	--	94.43	-0.32	≤3.58	Pass
		122	5610	--	--	-1.69	0.44	94.43	2.76	≤3.58	Pass

Note 1: When EUT duty cycle ≥ 98%, Total PSD (dBm/MHz) = $10 \cdot \log\{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/MHz).

Note 2: When EUT duty cycle < 98%, Total PSD (dBm/MHz) = $10 \cdot \log\{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/MHz) + $10 \cdot \log(1/\text{Duty Cycle})$.

Product	無線基地台	Temperature	23 ~ 25°C
Test Engineer	Peter Syu	Relative Humidity	52 ~ 57%
Test Site	SR2	Test Date	2020/03/24 ~ 2020/04/19
Model No.	OAW-AP1361		

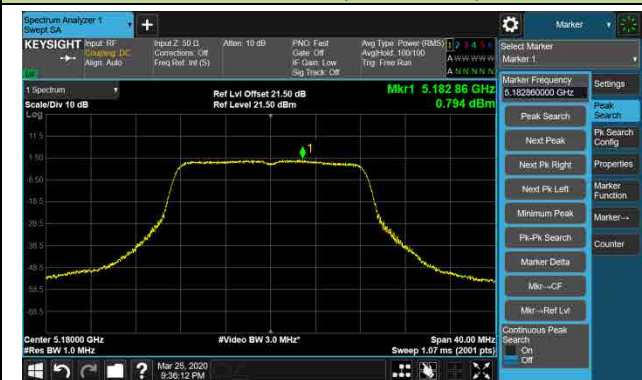
Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 PSD (dBm/100kHz)	Ant 1 PSD (dBm/100kHz)	Ant 2 PSD (dBm/100kHz)	Ant 3 PSD (dBm/100kHz)	Duty Cycle (%)	Constant Factor	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
Ant 0 + 1 + 2 + 3												
11a	6	149	5745	1.76	1.41	1.65	2.29	91.94	6.99	15.17	≤ 23.50	Pass
11a	6	157	5785	1.22	1.46	2.10	1.83	91.94	6.99	15.04	≤ 23.50	Pass
11a	6	165	5825	0.90	1.41	1.79	1.71	91.94	6.99	14.84	≤ 23.50	Pass
11n-HT20	MCS0	149	5745	1.69	1.34	2.45	1.77	95.09	6.99	15.06	≤ 23.50	Pass
11n-HT20	MCS0	157	5785	1.92	1.04	2.16	1.65	95.09	6.99	14.94	≤ 23.50	Pass
11n-HT20	MCS0	165	5825	1.27	1.54	1.68	1.36	95.09	6.99	14.69	≤ 23.50	Pass
11n-HT40	MCS0	151	5755	-1.56	-1.16	-1.19	-1.32	93.92	6.99	11.98	≤ 23.50	Pass
11n-HT40	MCS0	159	5795	-1.70	-1.55	-1.03	-1.52	93.92	6.99	11.84	≤ 23.50	Pass
11ax-HE20	MCS0	149	5745	0.95	0.98	1.21	0.82	95.51	6.99	14.20	≤ 23.50	Pass
11ax-HE20	MCS0	157	5785	0.32	1.30	1.38	0.91	95.51	6.99	14.21	≤ 23.50	Pass
11ax-HE20	MCS0	165	5825	0.60	1.21	1.47	1.39	95.51	6.99	14.39	≤ 23.50	Pass
11ax-HE40	MCS0	151	5755	-2.45	-1.89	-1.70	-1.98	94.90	6.99	11.24	≤ 23.50	Pass
11ax-HE40	MCS0	159	5795	-2.39	-1.92	-2.10	-2.48	94.90	6.99	11.02	≤ 23.50	Pass
11ax-HE80	MCS0	155	5775	-4.94	-4.89	-4.79	-4.91	94.43	6.99	8.38	≤ 23.50	Pass

Note 1: When EUT duty cycle ≥ 98%, Total PSD (dBm/500kHz) = $10 \cdot \log\{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/100kHz) + Constant Factor.

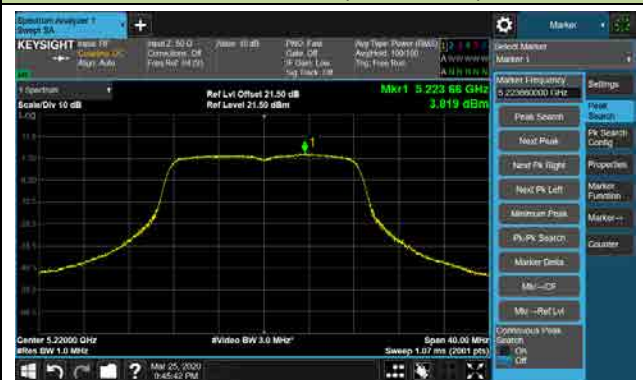
Note 2: When EUT duty cycle < 98%, Total PSD (dBm/500kHz) = $10 \cdot \log\{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/100kHz) + Constant Factor + $10 \cdot \log(1/\text{Duty Cycle})$.

802.11a Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 36 (5180MHz)



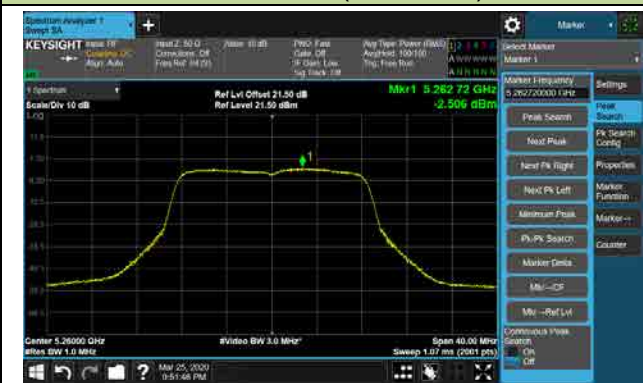
Channel 44 (5220MHz)



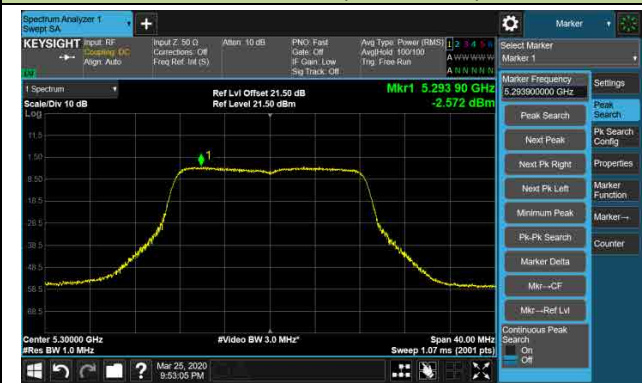
Channel 48 (5240MHz)



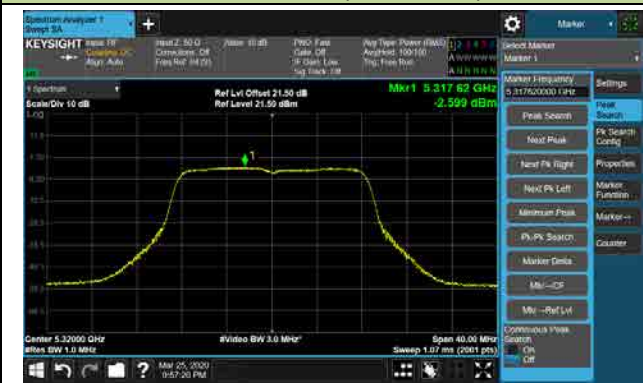
Channel 52 (5260MHz)



Channel 60 (5300MHz)



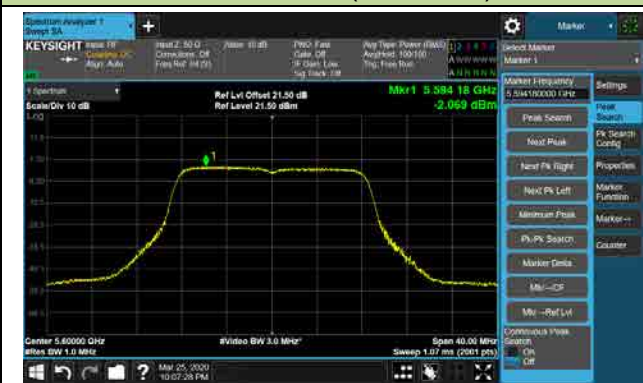
Channel 64 (5320MHz)



Channel 100 (5500MHz)



Channel 120 (5600MHz)

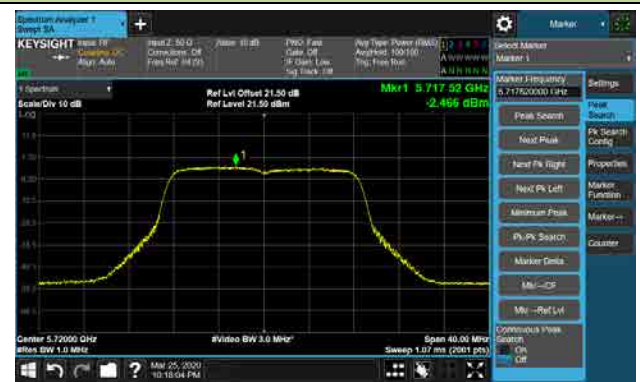


802.11a Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 140 (5700MHz)



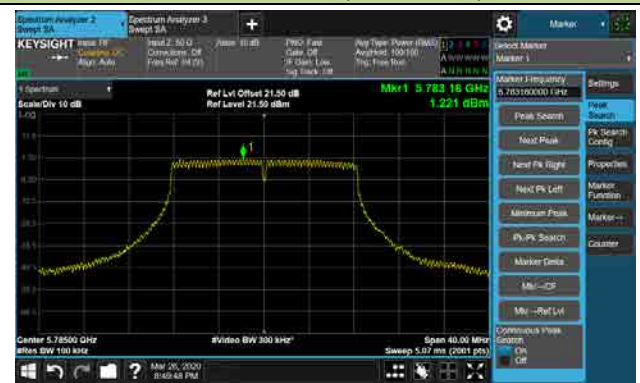
Channel 144 (5720MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)



802.11n-HT20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)



Channel 100 (5500MHz)



Channel 120 (5600MHz)



Channel 144 (5720MHz)



Channel 157 (5785MHz)



The screenshot displays a Keysight Spectrum Analyzer interface. The main display shows a spectrum plot with a peak labeled '1' at 5.82254 GHz. The peak level is 1.269 dBm. The reference level is 21.50 dBm, and the offset is 21.50 dB. The center frequency is 5.82500 GHz, and the span is 40.00 MHz. The resolution bandwidth (RBW) is 500 kHz, and the video bandwidth (VBW) is 300 kHz. The sweep rate is 5.07 ms (2001 pts).

Top Panel:

- Spectrum Analyzer 2:** Sweep SA, Input RF, Calibr: Off, Algn: Auto.
- Spectrum Analyzer 3:** Sweep SA, Input Z: 50 Ω, Corrections: Off, Freq Ref: 100 MHz.
- Buttons:** +, PNO: Fast, Cells: Off, IF Gain: Low, Sig Track: Off.
- Avg Type:** Power (RMS), ARef: 100, ARef: 100, Trg: Free Run.
- Marker:** 1, 2, 3, 4, 5, AWWWWWW, AWWWWWW.

Left Panel:

- KEYSIGHT:** Input RF, Calibr: Off, Algn: Auto.
- 1 Spectrum:** Scale/Div 10 dB, Log.

Right Panel:

- Marker 1:** 5.82254000 GHz, 1.269 dBm.
- Settings:** Peak Search, Next Peak, Next Pk Right, Next Pk Left, Minimum Peak, Pk-Pk Search, Marker Delta, Marker, Counter.
- Continuous Peak Search:** On/Off.

Bottom Panel:

- Center:** 5.82500 GHz, Res BW 100 kHz.
- #Video BW:** 300 kHz.
- Span:** 40.00 MHz.
- Sweep:** 5.07 ms (2001 pts).
- Date/Time:** Mar 26, 2020, 10:50:00 AM.

802.11n-HT40 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 38 (5190MHz)



Channel 46 (5230MHz)



Channel 54 (5270MHz)



Channel 62 (5310MHz)



Channel 102 (5510MHz)



Channel 118 (5590MHz)



802.11n-HT40 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

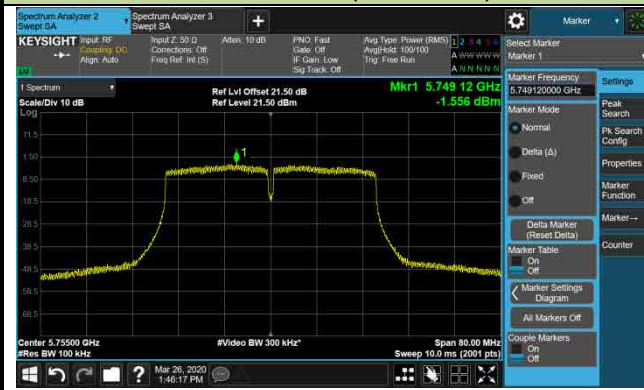
Channel 134 (5670MHz)



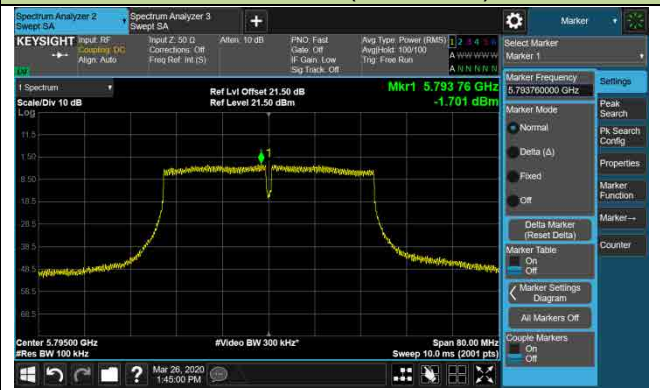
Channel 142 (5710MHz)



Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ax-HE20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 52 (5260MHz)



Channel 60 (5300MHz)



Channel 64 (5320MHz)



Channel 100 (5500MHz)



Channel 120 (5600MHz)



802.11ax-HE20 Power Spectral Density - Ant 0 / Ant 0 + 1 + 2 + 3

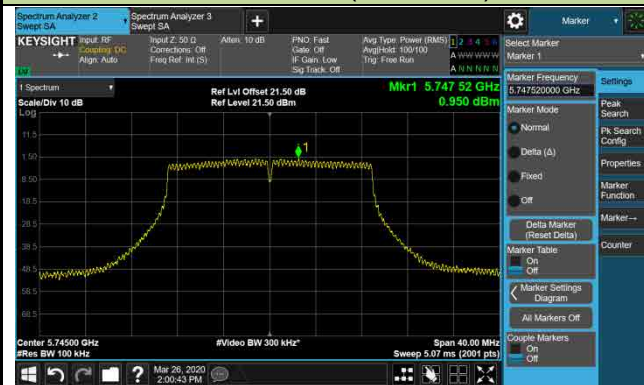
Channel 140 (5700MHz)



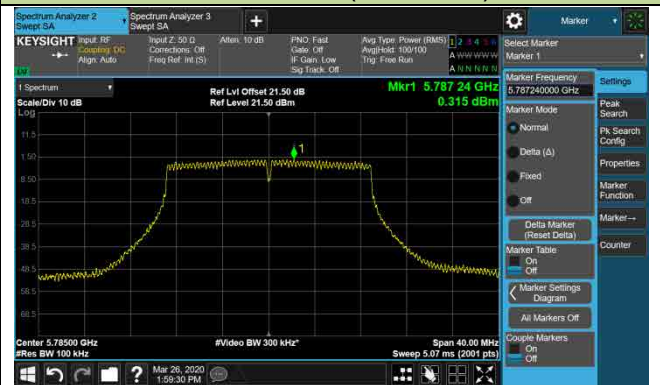
Channel 144 (5720MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)

