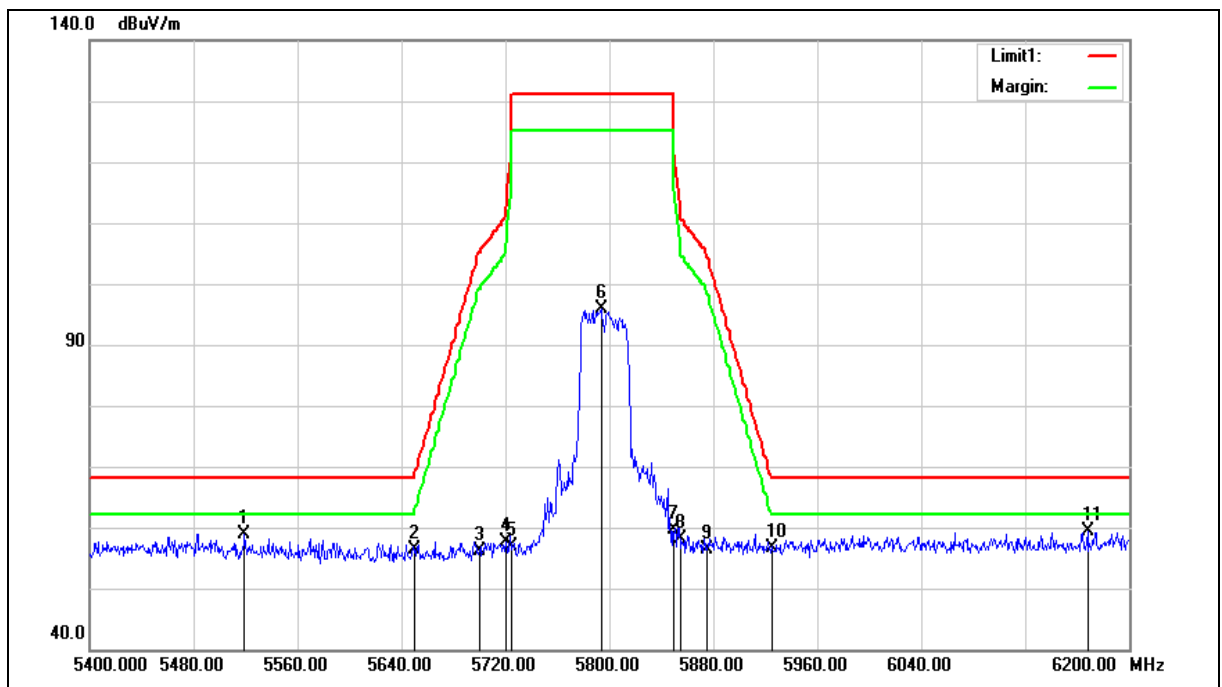


Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5795 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 12		
Ant.Polar.:	Horizontal		



Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5795 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 12		
Ant.Polar.:	Horizontal		

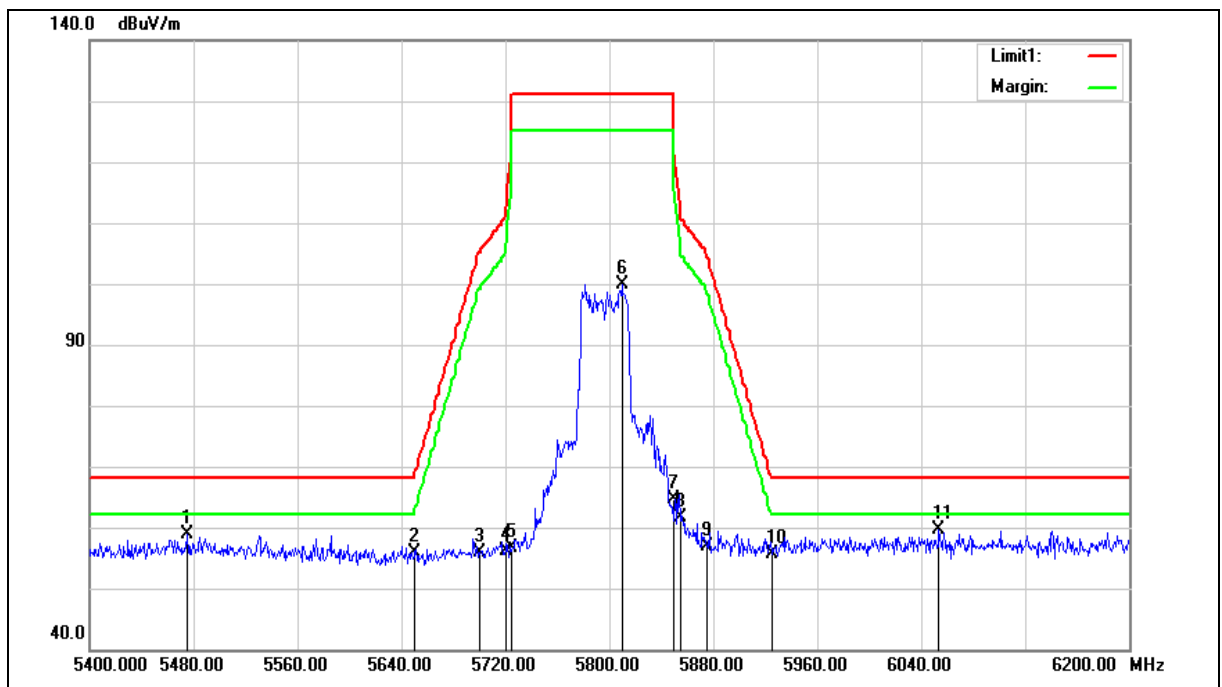
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5519.200	51.10	7.89	58.99	68.20	-9.21	peak
2	5650.000	48.10	8.16	56.26	68.20	-11.94	peak
3	5700.000	47.98	8.26	56.24	105.20	-48.96	peak
4	5720.000	49.37	8.30	57.67	110.80	-53.13	peak
5	5725.000	48.47	8.31	56.78	122.20	-65.42	peak
6	5793.600	87.53	8.44	95.97	--	--	peak
7	5850.000	51.20	8.55	59.75	122.20	-62.45	peak
8	5855.000	49.63	8.56	58.19	110.80	-52.61	peak
9	5875.000	47.76	8.61	56.37	105.20	-48.83	peak
10	5925.000	48.00	8.71	56.71	68.20	-11.49	peak
11	6168.000	50.00	9.42	59.42	68.20	-8.78	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5795 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 12		
Ant.Polar.:	Vertical		



Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5795 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 12		
Ant.Polar.:	Vertical		

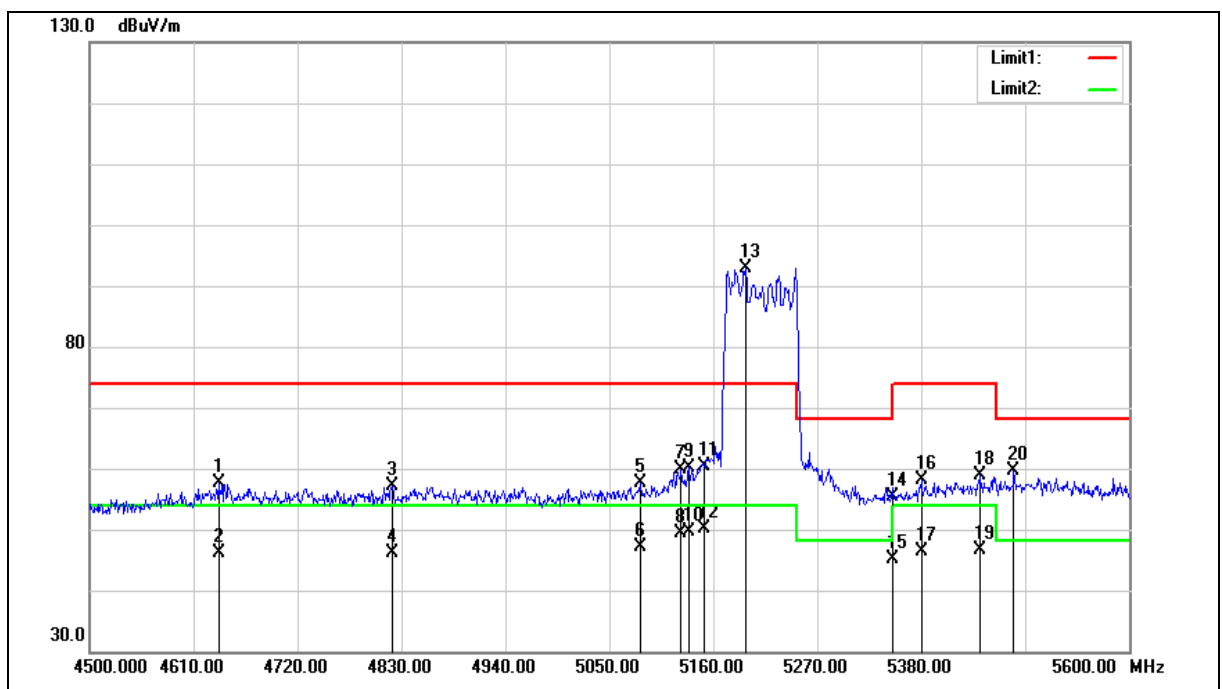
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5475.200	51.06	7.78	58.84	68.20	-9.36	peak
2	5650.000	47.76	8.16	55.92	68.20	-12.28	peak
3	5700.000	47.68	8.26	55.94	105.20	-49.26	peak
4	5720.000	47.89	8.30	56.19	110.80	-54.61	peak
5	5725.000	48.25	8.31	56.56	122.20	-65.64	peak
6	5809.600	91.49	8.47	99.96	--	--	peak
7	5850.000	56.00	8.55	64.55	122.20	-57.65	peak
8	5855.000	53.10	8.56	61.66	110.80	-49.14	peak
9	5875.000	48.25	8.61	56.86	105.20	-48.34	peak
10	5925.000	46.92	8.71	55.63	68.20	-12.57	peak
11	6053.600	50.58	9.04	59.62	68.20	-8.58	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 13		
Ant.Polar.:	Horizontal		



Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 13		
Ant.Polar.:	Horizontal		

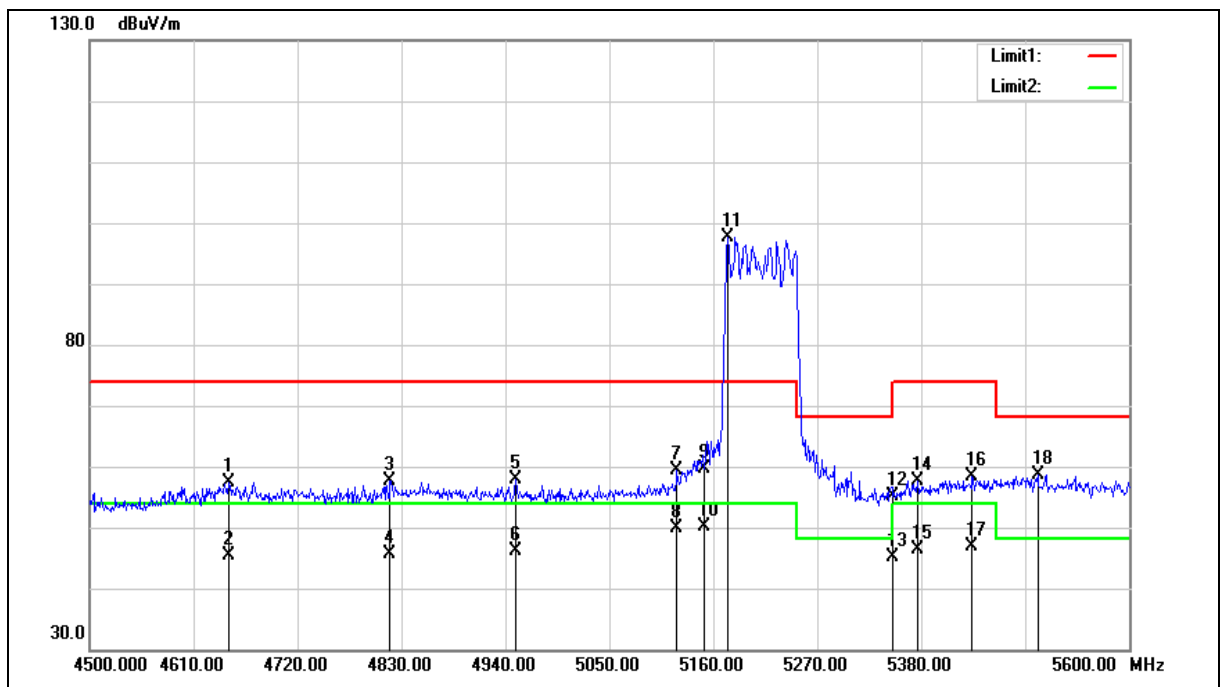
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4636.400	52.22	5.34	57.56	74.00	-16.44	peak
2	4636.400	40.80	5.34	46.14	54.00	-7.86	AVG
3	4820.100	51.19	5.87	57.06	74.00	-16.94	peak
4	4820.100	40.35	5.87	46.22	54.00	-7.78	AVG
5	5083.000	51.04	6.63	57.67	74.00	-16.33	peak
6	5083.000	40.54	6.63	47.17	54.00	-6.83	AVG
7	5125.900	53.10	6.77	59.87	74.00	-14.13	peak
8	5125.900	42.69	6.77	49.46	54.00	-4.54	AVG
9	5133.600	53.46	6.79	60.25	74.00	-13.75	peak
10	5133.600	42.90	6.79	49.69	54.00	-4.31	AVG
11	5150.000	53.54	6.84	60.38	74.00	-13.62	peak
12	5150.000	43.26	6.84	50.10	54.00	-3.90	AVG
13	5194.100	85.91	6.96	92.87	--	--	peak
14	5350.000	47.88	7.41	55.29	74.00	-18.71	peak
15	5350.000	37.74	7.41	45.15	54.00	-8.85	AVG
16	5380.000	50.54	7.51	58.05	74.00	-15.95	peak
17	5380.000	38.89	7.51	46.40	54.00	-7.60	AVG
18	5441.600	51.08	7.68	58.76	74.00	-15.24	peak
19	5441.600	39.01	7.68	46.69	54.00	-7.31	AVG
20	5477.900	51.72	7.79	59.51	68.20	-8.69	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5210 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 13		
Ant.Polar.:	Vertical		



Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5210 MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60 %RH
Mode:	Mode 13		
Ant.Polar.:	Vertical		

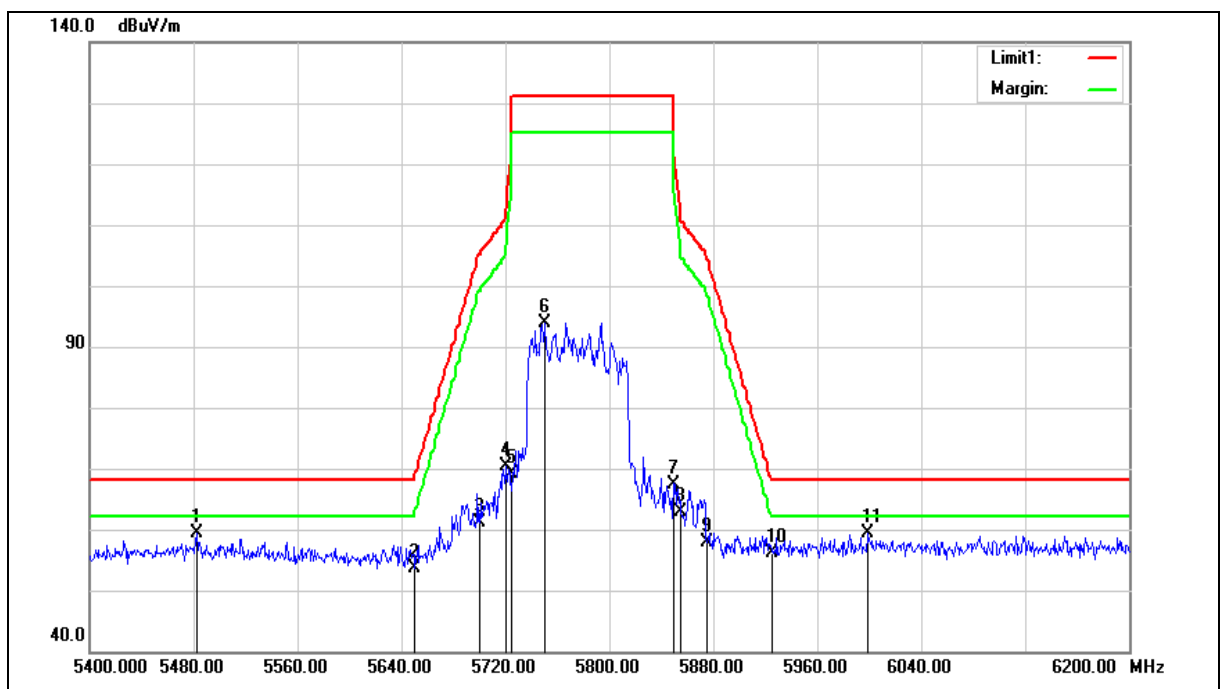
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4647.400	51.93	5.36	57.29	74.00	-16.71	peak
2	4647.400	40.08	5.36	45.44	54.00	-8.56	AVG
3	4817.900	51.74	5.87	57.61	74.00	-16.39	peak
4	4817.900	39.88	5.87	45.75	54.00	-8.25	AVG
5	4951.000	51.56	6.25	57.81	74.00	-16.19	peak
6	4951.000	39.78	6.25	46.03	54.00	-7.97	AVG
7	5121.500	52.66	6.75	59.41	74.00	-14.59	peak
8	5121.500	43.14	6.75	49.89	54.00	-4.11	AVG
9	5150.000	52.68	6.84	59.52	74.00	-14.48	peak
10	5150.000	43.22	6.84	50.06	54.00	-3.94	AVG
11	5175.400	90.81	6.92	97.73	--	--	peak
12	5350.000	47.67	7.41	55.08	74.00	-18.92	peak
13	5350.000	37.76	7.41	45.17	54.00	-8.83	AVG
14	5376.700	50.16	7.50	57.66	74.00	-16.34	peak
15	5376.700	38.80	7.50	46.30	54.00	-7.70	AVG
16	5433.900	50.78	7.66	58.44	74.00	-15.56	peak
17	5433.900	39.17	7.66	46.83	54.00	-7.17	AVG
18	5503.200	50.78	7.85	58.63	68.20	-9.57	peak

Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

2. Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5775 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 13		
Ant.Polar.:	Horizontal		



Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5775 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 13		
Ant.Polar.:	Horizontal		

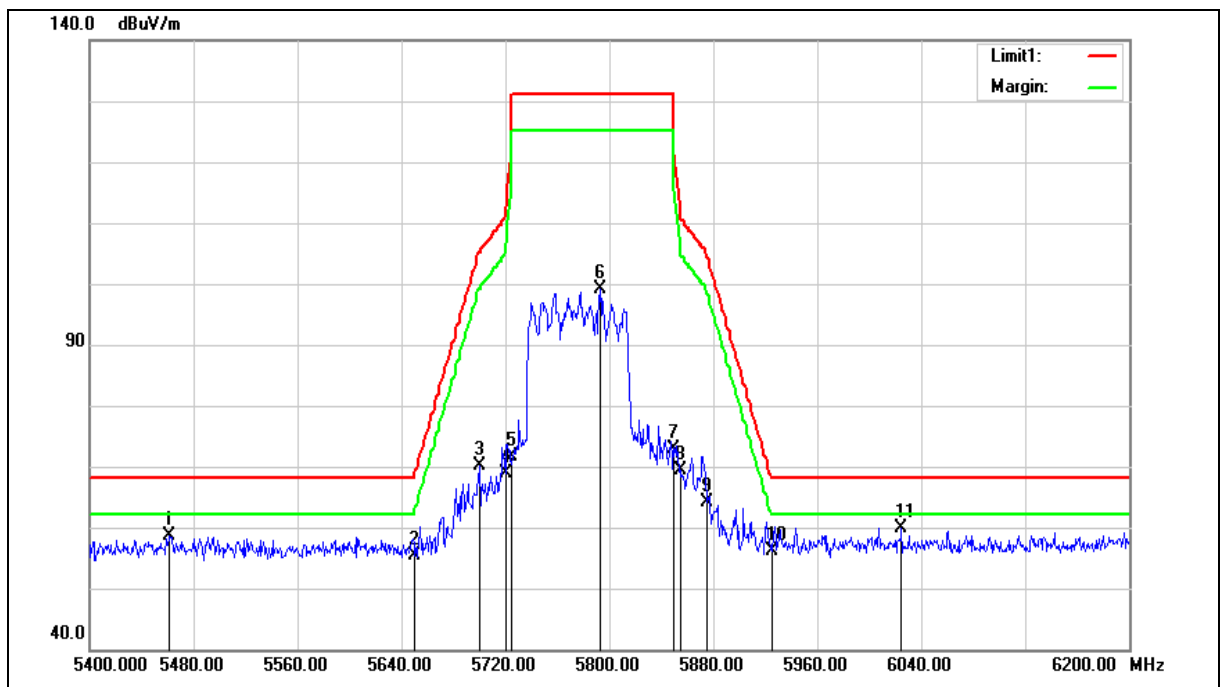
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5482.400	51.68	7.80	59.48	68.20	-8.72	peak
2	5650.000	45.49	8.16	53.65	68.20	-14.55	peak
3	5700.000	52.76	8.26	61.02	105.20	-44.18	peak
4	5720.000	62.14	8.30	70.44	110.80	-40.36	peak
5	5725.000	60.88	8.31	69.19	122.20	-53.01	peak
6	5750.400	85.62	8.36	93.98	--	--	peak
7	5850.000	58.79	8.55	67.34	122.20	-54.86	peak
8	5855.000	54.41	8.56	62.97	110.80	-47.83	peak
9	5875.000	49.39	8.61	58.00	105.20	-47.20	peak
10	5925.000	47.54	8.71	56.25	68.20	-11.95	peak
11	5999.200	50.51	8.86	59.37	68.20	-8.83	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5775 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 13		
Ant.Polar.:	Vertical		



Standard:	LP0002	Test Distance:	3 m
Test item:	Band edge	Power:	AC 110 V/60 Hz
Frequency:	5775 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	Mode 13		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5461.600	50.86	7.74	58.60	68.20	-9.60	peak
2	5650.000	47.33	8.16	55.49	68.20	-12.71	peak
3	5700.000	61.96	8.26	70.22	105.20	-34.98	peak
4	5720.000	60.65	8.30	68.95	110.80	-41.85	peak
5	5725.000	63.32	8.31	71.63	122.20	-50.57	peak
6	5792.800	90.59	8.44	99.03	--	--	peak
7	5850.000	64.36	8.55	72.91	122.20	-49.29	peak
8	5855.000	60.91	8.56	69.47	110.80	-41.33	peak
9	5875.000	55.52	8.61	64.13	105.20	-41.07	peak
10	5925.000	47.46	8.71	56.17	68.20	-12.03	peak
11	6024.800	51.02	8.95	59.97	68.20	-8.23	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

4.3.2 最大傳導輸出功率之量測

合格標準:

依據 NCC 低功率射頻電機技術規範(LP0002)之 4.7.3 節之要求:

1. 5.15-5.25 GHz 頻帶

(1) 供戶外操作使用:

- 最大傳導輸出功率不能超過 1 W。
- 在任何 1MHz 頻帶中最大功率頻譜密度不能超過 17 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，等量減少最大傳導輸出功率及最大功率頻譜密度。
- 在水平面仰角超過 30 度時，其最大 EIRP 不能超過 21dBm。

(2) 供室內操作使用:

- 最大傳導輸出功率不能超過 1 W。
- 在任何 1MHz 頻帶中最大功率頻譜密度不能超過 17 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，等量減少最大傳導輸出功率及最大功率頻譜密度。

(3) 供固定式點對點操作使用:

- 最大傳導輸出功率不能超過 1 W。
- 在任何 1MHz 頻帶中最大功率頻譜密度不能超過 17 dBm。
- 使用超過 23dBi 方向增益之指向性天線時，應依超過 23dBi 天線方向增益的 dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。
- 固定式點對點操作，不包括點對多點系統、全方向性應用及多台共站發射機傳送相同資訊。

(4) 供行動或可攜式裝置操作使用:

- 最大傳導輸出功率不能超過 250 mW。
- 在任何 1MHz 頻帶中最大功率頻譜密度不能超過 11dBm。
- 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，等量減少最大傳導輸出功率及最大功率頻譜密度。

2. 5.25-5.35 GHz 與 5.470-5.725 GHz 頻帶

- (1) 最大傳導輸出功率不能超過 250 mW 或 $11 \text{ dBm} + 10 \log B$ (B 是 26 dB 發射頻寬，單位 MHz)之較小者。
- (2) 最大功率頻譜密度在任何 1 MHz 頻帶中不能超過 11 dBm。
- (3) 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，等量減少最大傳導輸出功率及最大功率頻譜密度。

3. 5.725-5.850 GHz 頻帶

- (1) 最大傳導輸出功率不能超過 1 W。
- (2) 在任何 500 kHz 頻帶中最大功率頻譜密度不能超過 30 dBm。
- (3) 供固定式點對點操作時，使用方向增益超過 6 dBi 之發射天線，可不需對應減少發射器之傳導輸出功率限制值。
- (4) 除(3)外，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，等量減少最大傳導輸出功率及最大功率頻譜密度。

4. 最大傳導輸出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，以符合本段落所提之發射定義。

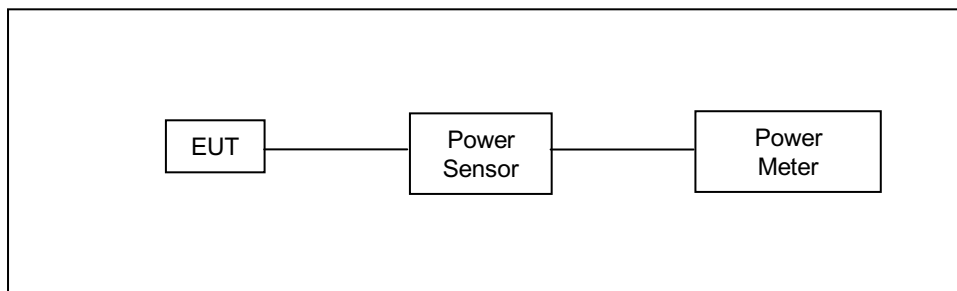
IEEE 802.11a

* Directional = Max. Gain : 1.71 dBi < 6 dBi

MIMO / BF mode :

* Directional Gain = $10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / NANT\} = 3.8 \text{ dBi} < 6 \text{ dBi}$

測試架構圖：



測試結果:

操作模式 : Mode 8 / Mode 9 / Mode 10 / Mode 11 / Mode 12 / Mode 13						
測試結果 : 合格						
操作模式	Data Rate (Mbps)	頻道 CH	頻率 MHz	最大傳導輸出功率(Average)		
				ANT-0		Limit (dBm)
				dBm	W	
Mode 8	6	36	5180.0	14.89	0.031	≤ 24.00
		40	5200.0	14.77	0.030	≤ 24.00
		44	5220.0	14.81	0.030	≤ 24.00
		48	5240.0	14.86	0.031	≤ 24.00
		149	5745.0	16.92	0.049	≤ 30.00
		153	5765.0	16.82	0.048	≤ 30.00
		157	5785.0	16.86	0.049	≤ 30.00
		161	5805.0	16.61	0.046	≤ 30.00
		165	5825.0	16.78	0.048	≤ 30.00
Mode 9	13	36	5180.0	13.69	0.023	≤ 24.00
		40	5200.0	13.73	0.024	≤ 24.00
		44	5220.0	13.73	0.024	≤ 24.00
		48	5240.0	13.56	0.023	≤ 24.00
		149	5260.0	14.81	0.030	≤ 30.00
		153	5280.0	15.50	0.035	≤ 30.00
		157	5300.0	15.28	0.034	≤ 30.00
		161	5320.0	15.40	0.035	≤ 30.00
		165	5500.0	15.44	0.035	≤ 30.00
Mode 10	27	38	5190.0	11.24	0.013	≤ 24.00
		46	5230.0	14.07	0.026	≤ 24.00
		151	5755.0	16.82	0.048	≤ 30.00
		159	5795.0	16.73	0.047	≤ 30.00
Mode 11	13	36	5180.0	13.71	0.023	≤ 24.00
		40	5200.0	13.82	0.024	≤ 24.00
		44	5220.0	13.78	0.024	≤ 24.00
		48	5240.0	13.64	0.023	≤ 24.00
		149	5745.0	14.94	0.031	≤ 30.00
		153	5765.0	15.52	0.036	≤ 30.00
		157	5785.0	15.39	0.035	≤ 30.00
		161	5805.0	15.41	0.035	≤ 30.00
Mode 12	27	38	5190.0	11.36	0.014	≤ 24.00
		46	5230.0	14.21	0.026	≤ 24.00
		151	5755.0	16.85	0.048	≤ 30.00
		159	5795.0	16.81	0.048	≤ 30.00
		42	5210.0	8.99	0.008	≤ 24.00
Mode 13	58.6	155	5775.0	15.14	0.033	≤ 30.00

操作模式 : Mode 9 / Mode 10 / Mode 11 / Mode 12 / Mode 13						
測試結果 : 合格						
操作模式	Data Rate (Mbps)	頻道 CH	頻率 MHz	最大傳導輸出功率(Average)		
				ANT-1		Limit (dBm)
				dBm	W	
Mode 9	13	36	5180.0	13.76	0.024	≤ 24.00
		40	5200.0	15.23	0.033	≤ 24.00
		44	5220.0	15.57	0.036	≤ 24.00
		48	5240.0	15.15	0.033	≤ 24.00
		149	5260.0	14.37	0.027	≤ 30.00
		153	5280.0	14.61	0.029	≤ 30.00
		157	5300.0	14.37	0.027	≤ 30.00
		161	5320.0	14.37	0.027	≤ 30.00
		165	5500.0	13.98	0.025	≤ 30.00
Mode 10	27	38	5190.0	11.20	0.013	≤ 24.00
		46	5230.0	14.08	0.026	≤ 24.00
		151	5755.0	14.61	0.029	≤ 30.00
		159	5795.0	14.28	0.027	≤ 30.00
Mode 11	13	36	5180.0	13.81	0.024	≤ 24.00
		40	5200.0	15.33	0.034	≤ 24.00
		44	5220.0	15.64	0.037	≤ 24.00
		48	5240.0	15.24	0.033	≤ 24.00
		149	5745.0	14.41	0.028	≤ 30.00
		153	5765.0	14.62	0.029	≤ 30.00
		157	5785.0	14.38	0.027	≤ 30.00
		161	5805.0	14.44	0.028	≤ 30.00
Mode 12	27	165	5825.0	14.11	0.026	≤ 30.00
		38	5190.0	11.25	0.013	≤ 24.00
		46	5230.0	14.18	0.026	≤ 24.00
		151	5755.0	14.71	0.030	≤ 30.00
Mode 13	58.6	159	5795.0	14.34	0.027	≤ 30.00
		42	5210.0	9.17	0.008	≤ 24.00
		155	5775.0	14.41	0.028	≤ 30.00

操作模式 : Mode 9 / Mode 10 / Mode 11 / Mode 12 / Mode 13						
測試結果 : 合格						
操作模式	Data Rate (Mbps)	頻道 CH	頻率 MHz	最大傳導輸出功率(Average)		
				ANT-0+1		Limit (dBm)
				dBm	W	
Mode 9	13	36	5180.0	16.74	0.047	≤ 24.00
		40	5200.0	17.55	0.057	≤ 24.00
		44	5220.0	17.76	0.060	≤ 24.00
		48	5240.0	17.44	0.055	≤ 24.00
		149	5260.0	17.61	0.058	≤ 30.00
		153	5280.0	18.09	0.064	≤ 30.00
		157	5300.0	17.86	0.061	≤ 30.00
		161	5320.0	17.93	0.062	≤ 30.00
		165	5500.0	17.78	0.060	≤ 30.00
Mode 10	27	38	5190.0	14.23	0.026	≤ 24.00
		46	5230.0	17.09	0.051	≤ 24.00
		151	5755.0	18.86	0.077	≤ 30.00
		159	5795.0	18.69	0.074	≤ 30.00
Mode 11	13	36	5180.0	16.77	0.048	≤ 24.00
		40	5200.0	17.65	0.058	≤ 24.00
		44	5220.0	17.82	0.061	≤ 24.00
		48	5240.0	17.52	0.057	≤ 24.00
		149	5745.0	17.69	0.059	≤ 30.00
		153	5765.0	18.10	0.065	≤ 30.00
		157	5785.0	17.92	0.062	≤ 30.00
		161	5805.0	17.96	0.063	≤ 30.00
Mode 12	27	165	5825.0	17.91	0.062	≤ 30.00
		38	5190.0	14.32	0.027	≤ 24.00
		46	5230.0	17.21	0.053	≤ 24.00
		151	5755.0	18.92	0.078	≤ 30.00
Mode 13	58.6	159	5795.0	18.76	0.075	≤ 30.00
		42	5210.0	12.09	0.016	≤ 24.00
		155	5775.0	17.80	0.060	≤ 30.00

Beamforming on

操作模式 : Mode 11 / Mode 12 / Mode 13						
測試結果 : 合格						
操作模式	Data Rate (Mbps)	頻道 CH	頻率 MHz	最大傳導輸出功率(Average)		
				ANT-0		Limit (dBm)
				dBm	W	
Mode 11	13	36	5180.0	11.22	0.013	≤ 24.00
		40	5200.0	11.31	0.014	≤ 24.00
		44	5220.0	11.28	0.013	≤ 24.00
		48	5240.0	11.25	0.013	≤ 24.00
		149	5745.0	12.08	0.016	≤ 30.00
		153	5765.0	13.01	0.020	≤ 30.00
		157	5785.0	13.03	0.020	≤ 30.00
		161	5805.0	13.07	0.020	≤ 30.00
		165	5825.0	13.14	0.021	≤ 30.00
Mode 12	27	38	5190.0	8.86	0.008	≤ 24.00
		46	5230.0	11.81	0.015	≤ 24.00
		151	5755.0	14.42	0.028	≤ 30.00
		159	5795.0	14.38	0.027	≤ 30.00
Mode 13	58.6	42	5210.0	6.58	0.005	≤ 24.00
		155	5775.0	12.71	0.019	≤ 30.00
操作模式	Data Rate (Mbps)	頻道 CH	頻率 MHz	最大傳導輸出功率(Average)		
				ANT-1		Limit (dBm)
				dBm	W	
Mode 11	13	36	5180.0	11.39	0.014	≤ 24.00
		40	5200.0	12.92	0.020	≤ 24.00
		44	5220.0	13.02	0.020	≤ 24.00
		48	5240.0	12.82	0.019	≤ 24.00
		149	5745.0	11.89	0.015	≤ 30.00
		153	5765.0	12.08	0.016	≤ 30.00
		157	5785.0	11.96	0.016	≤ 30.00
		161	5805.0	11.98	0.016	≤ 30.00
		165	5825.0	11.69	0.015	≤ 30.00
Mode 12	27	38	5190.0	8.79	0.008	≤ 24.00
		46	5230.0	11.72	0.015	≤ 24.00
		151	5755.0	12.21	0.017	≤ 30.00
		159	5795.0	11.90	0.015	≤ 30.00
Mode 13	58.6	42	5210.0	6.66	0.005	≤ 24.00
		155	5775.0	11.86	0.015	≤ 30.00

操作模式 : Mode 11 / Mode 12 / Mode 13						
測試結果 : 合格						
操作模式	Data Rate (Mbps)	頻道 CH	頻率 MHz	最大傳導輸出功率(Average)		
				ANT-0+1		Limit (dBm)
				dBm	W	
Mode 11	13	36	5180.0	14.32	0.027	≤ 24.00
		40	5200.0	15.20	0.033	≤ 24.00
		44	5220.0	15.25	0.033	≤ 24.00
		48	5240.0	15.12	0.032	≤ 24.00
		149	5745.0	15.00	0.032	≤ 30.00
		153	5765.0	15.58	0.036	≤ 30.00
		157	5785.0	15.54	0.036	≤ 30.00
		161	5805.0	15.57	0.036	≤ 30.00
		165	5825.0	15.49	0.035	≤ 30.00
Mode 12	27	38	5190.0	11.84	0.015	≤ 24.00
		46	5230.0	14.78	0.030	≤ 24.00
		151	5755.0	16.46	0.044	≤ 30.00
		159	5795.0	16.32	0.043	≤ 30.00
Mode 13	58.6	42	5210.0	9.63	0.009	≤ 24.00
		155	5775.0	15.32	0.034	≤ 30.00

4.3.3 最大傳導功率頻譜密度之要求

合格標準：

依據 NCC 低功率射頻電機技術規範(LP0002)之 4.7.3 節之要求：

1. 5.15-5.25 GHz 頻帶

(1) 供戶外操作使用：

- 在任何 1 MHz 頻帶中最大功率頻譜密度不能超過 17 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，等量減少最大傳導輸出功率及最大功率頻譜密度。
- 在水平面仰角超過 30 度時，其最大 EIRP 不能超過 21 dBm。

(2) 供室內操作使用：

- 在任何 1 MHz 頻帶中最大功率頻譜密度不能超過 17 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，等量減少最大傳導輸出功率及最大功率頻譜密度。

(3) 供固定式點對點操作使用：

- 在任何 1 MHz 頻帶中最大功率頻譜密度不能超過 17 dBm。
- 使用超過 23 dBi 方向增益之指向性天線時，應依超過 23 dBi 天線方向增益的 dBi 總量，等量減少最大傳導輸出功率及最大功率頻譜密度。
- 固定式點對點操作，不包括點對多點系統、全方向性應用及多台共站發射機傳送相同資訊。

(4) 供行動或可攜式裝置操作使用：

- 在任何 1 MHz 頻帶中最大功率頻譜密度不能超過 11 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，等量減少最大傳導輸出功率及最大功率頻譜密度。

2. 5.25-5.35 GHz 與 5.470-5.725 GHz 頻帶

(1) 最大功率頻譜密度在任何 1 MHz 頻帶中不能超過 11 dBm。

(2) 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，等量減少最大傳導輸出功率及最大功率頻譜密度。

3. 5.725-5.850 GHz 頻帶

(1) 在任何 500 kHz 頻帶中最大功率頻譜密度不能超過 30 dBm。

(2) 供固定式點對點操作時，使用方向增益超過 6 dBi 之發射天線，可不需對應減少發射器之傳導輸出功率限制值。

(3) 除(2)外，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，等量減少最大傳導輸出功率及最大功率頻譜密度。

4. 最大功率頻譜密度量測規定：

(1) 應將量測儀器直接連接待測物，以傳導方式執行。

(2) 5.15 GHz~5.25 GHz、5.25 GHz~5.35 GHz 及 5.47 GHz~5.725 GHz 頻帶，量測儀器之頻寬應設定為 1 MHz 頻寬或待測物之 26 dB 發射頻寬，兩者取較小者。

(3) 5.725 GHz~5.850 GHz 頻帶，量測器之頻寬應設定為 500 kHz 或待測物之 26 dB 發射頻寬，兩者取較小者。

(4) 解析頻寬小於(2)或(3)時，應以補償方式計算總功率頻譜密度。

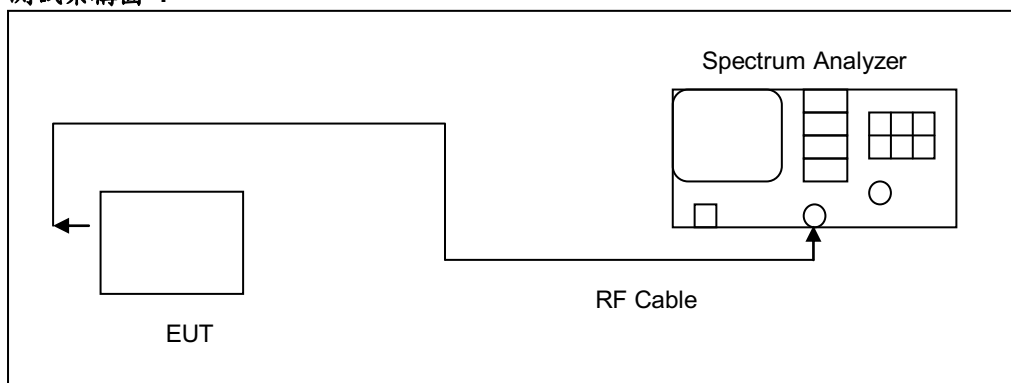
IEEE 802.11a

* Directional = Max. Gain : 1.71 dBi < 6 dBi

MIMO / BF mode :

* Directional Gain = $10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / NANT\} = 3.8 \text{ dBi} < 6 \text{ dBi}$

測試架構圖：



測試結果:

操作模式	: Mode 8 / Mode 11 / Mode 12 / Mode 13
測試結果	: 合格

ANT-0						
操作模式	頻道 (CH)	頻率 (MHz)	量測值 (dBm/MHz)	Duty Factor (dB)	轉換值 (dBm/MHz)	限制值 (dBm/MHz)
Mode 8	36	5180.0	0.469	0.140	0.609	11.00
	40	5200.0	0.727	0.140	0.867	11.00
	48	5240.0	1.090	0.140	1.230	11.00
Mode 11	36	5180.0	-0.099	0.149	0.050	11.00
	40	5200.0	-0.669	0.149	-0.520	11.00
	48	5240.0	-0.325	0.149	-0.176	11.00
Mode 12	38	5190.0	-9.207	0.294	-8.913	11.00
	46	5230.0	-5.138	0.294	-4.844	11.00
Mode 13	42	5210.0	-11.521	0.580	-10.941	11.00

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + dutNote: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Conversion ratio = 10*Log(500 k/100 k)

ANT-0						
操作模式	頻道 (CH)	頻率 (MHz)	量測值 (dBm/100 kHz)	Duty Factor (dB)	轉換值 (dBm/500 kHz)	限制值 (dBm/500 kHz)
Mode 8	149	5745.0	-6.458	0.140	0.672	30.00
	157	5785.0	-6.551	0.140	0.579	30.00
	165	5825.0	-6.876	0.140	0.254	30.00
Mode 11	149	5745.0	-9.420	0.149	-2.281	30.00
	157	5785.0	-8.378	0.149	-1.239	30.00
	165	5825.0	-8.749	0.149	-1.610	30.00
Mode 12	151	5755.0	-9.781	0.294	-2.497	30.00
	159	5795.0	-10.257	0.294	-2.973	30.00
Mode 13	155	5775.0	-12.651	0.580	-5.081	30.00

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Conversion ratio = 10*Log(500 k/100 k)

操作模式	: Mode 11 / Mode 12 / Mode 13
測試結果	: 合格

ANT-1						
操作模式	頻道 (CH)	頻率 (MHz)	量測值 (dBm/MHz)	Duty Factor (dB)	轉換值 (dBm/MHz)	限制值 (dBm/MHz)
Mode 11	36	5180.0	-0.294	0.149	-0.145	11.00
	40	5200.0	1.593	0.149	1.742	11.00
	48	5240.0	1.717	0.149	1.866	11.00
Mode 12	38	5190.0	-8.597	0.294	-8.303	11.00
	46	5230.0	-5.118	0.294	-4.824	11.00
Mode 13	42	5210.0	-11.387	0.580	-10.807	11.00

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + dutNote: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Conversion ration = 10*Log(500 k/100 k)

ANT-1						
操作模式	頻道 (CH)	頻率 (MHz)	量測值 (dBm/100 kHz)	Duty Factor (dB)	轉換值 (dBm/500 kHz)	限制值 (dBm/500 kHz)
Mode 11	149	5745.0	-9.231	0.149	-2.092	30.00
	157	5785.0	-8.948	0.149	-1.809	30.00
	165	5825.0	-9.097	0.149	-1.958	30.00
Mode 12	151	5755.0	-11.648	0.294	-4.364	30.00
	159	5795.0	-11.933	0.294	-4.649	30.00
Mode 13	155	5775.0	-13.796	0.580	-6.226	30.00

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Conversion ration = 10*Log(500 k/100 k)

操作模式	: Mode 11 / Mode 12 / Mode 13
測試結果	: 合格

ANT-0+1				
操作模式	頻道 (CH)	頻率 (MHz)	轉換值(dBm/MHz)	限制值 (dBm/MHz)
Mode 11	36	5180.0	2.964	11.00
	40	5200.0	3.767	11.00
	48	5240.0	3.975	11.00
Mode 12	38	5190.0	-5.587	11.00
	46	5230.0	-1.823	11.00
Mode 13	42	5210.0	-7.863	11.00

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + dutyNote: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Conversion ration = 10*Log(500 k/100 k)

ANT-0+1				
操作模式	頻道 (CH)	頻率 (MHz)	轉換值(dBm/500 kHz)	限制值 (dBm/500 kHz)
Mode 11	149	5745.0	0.825	30.00
	157	5785.0	1.496	30.00
	165	5825.0	1.230	30.00
Mode 12	151	5755.0	-0.321	30.00
	159	5795.0	-0.720	30.00
Mode 13	155	5775.0	-2.606	30.00

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Conversion ration = 10*Log(500 k/100 k)

Beamforming on

操作模式 : Mode 11 / Mode 12 / Mode 13

測試結果 : 合格

ANT-0						
操作模式	頻道 (CH)	頻率 (MHz)	量測值 (dBm/MHz)	Duty Factor (dB)	轉換值 (dBm/MHz)	限制值 (dBm/MHz)
Mode 11	36	5180.0	-3.402	0.159	-3.243	11.00
	40	5200.0	-3.524	0.159	-3.365	11.00
	48	5240.0	-3.498	0.159	-3.339	11.00
Mode 12	38	5190.0	-12.033	0.294	-11.739	11.00
	46	5230.0	-7.451	0.294	-7.157	11.00
Mode 13	42	5210.0	-14.246	0.580	-13.666	11.00

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + dutNote: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Conversion ratio = 10*Log(500 k/100 k)

ANT-0						
操作模式	頻道 (CH)	頻率 (MHz)	量測值 (dBm/100 kHz)	Duty Factor (dB)	轉換值 (dBm/500 kHz)	限制值 (dBm/500 kHz)
Mode 11	149	5745.0	-11.730	0.159	-4.581	30.00
	157	5785.0	-10.474	0.159	-3.325	30.00
	165	5825.0	-10.421	0.159	-3.272	30.00
Mode 12	151	5755.0	-11.689	0.294	-4.405	30.00
	159	5795.0	-12.124	0.294	-4.840	30.00
Mode 13	155	5775.0	-16.731	0.580	-9.161	30.00

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Conversion ratio = 10*Log(500 k/100 k)

操作模式	: Mode 11 / Mode 12 / Mode 13
測試結果	: 合格

ANT-1						
操作模式	頻道 (CH)	頻率 (MHz)	量測值 (dBm/MHz)	Duty Factor (dB)	轉換值 (dBm/MHz)	限制值 (dBm/MHz)
Mode 11	36	5180.0	-3.137	0.159	-2.978	11.00
	40	5200.0	-1.801	0.159	-1.642	11.00
	48	5240.0	-1.650	0.159	-1.491	11.00
Mode 12	38	5190.0	-11.619	0.294	-11.325	11.00
	46	5230.0	-7.359	0.294	-7.065	11.00
Mode 13	42	5210.0	-14.627	0.580	-14.047	11.00

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + dutyNote: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Conversion ration = 10*Log(500 k/100 k)

ANT-1						
操作模式	頻道 (CH)	頻率 (MHz)	量測值 (dBm/100 kHz)	Duty Factor (dB)	轉換值 (dBm/500 kHz)	限制值 (dBm/500 kHz)
Mode 11	149	5745.0	-11.770	0.159	-4.621	30.00
	157	5785.0	-12.048	0.159	-4.899	30.00
	165	5825.0	-11.847	0.159	-4.698	30.00
Mode 12	151	5755.0	-13.360	0.294	-6.076	30.00
	159	5795.0	-13.228	0.294	-5.944	30.00
Mode 13	155	5775.0	-17.337	0.580	-9.767	30.00

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Conversion ration = 10*Log(500 k/100 k)

操作模式	: Mode 11 / Mode 12 / Mode 13
測試結果	: 合格

ANT-0+1				
操作模式	頻道 (CH)	頻率 (MHz)	轉換值(dBm/MHz)	限制值 (dBm/MHz)
Mode 11	36	5180.0	-0.108	11.00
	40	5200.0	0.582	11.00
	48	5240.0	0.683	11.00
Mode 12	38	5190.0	-8.517	11.00
	46	5230.0	-4.100	11.00
Mode 13	42	5210.0	-10.842	11.00

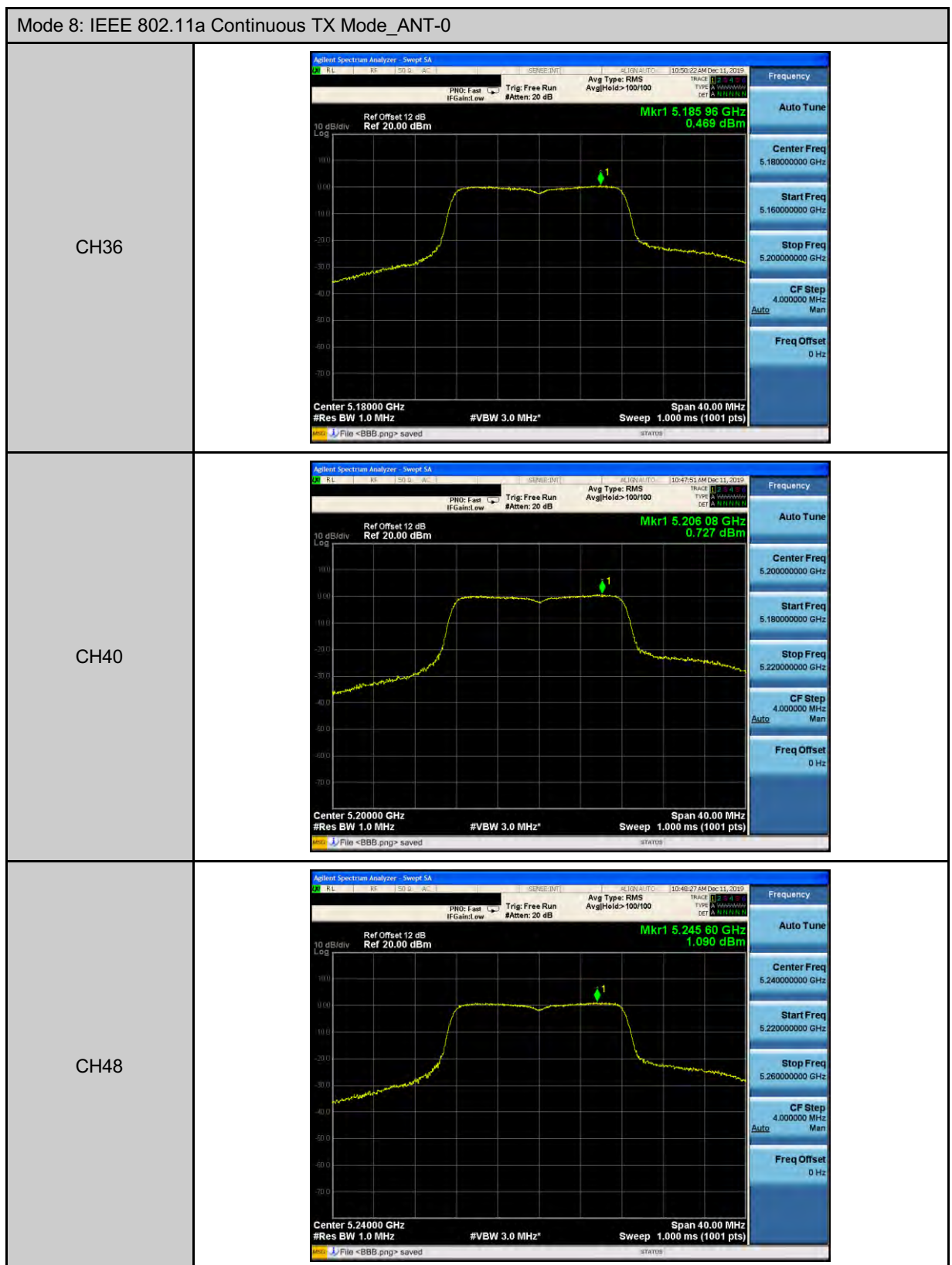
Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty
 Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

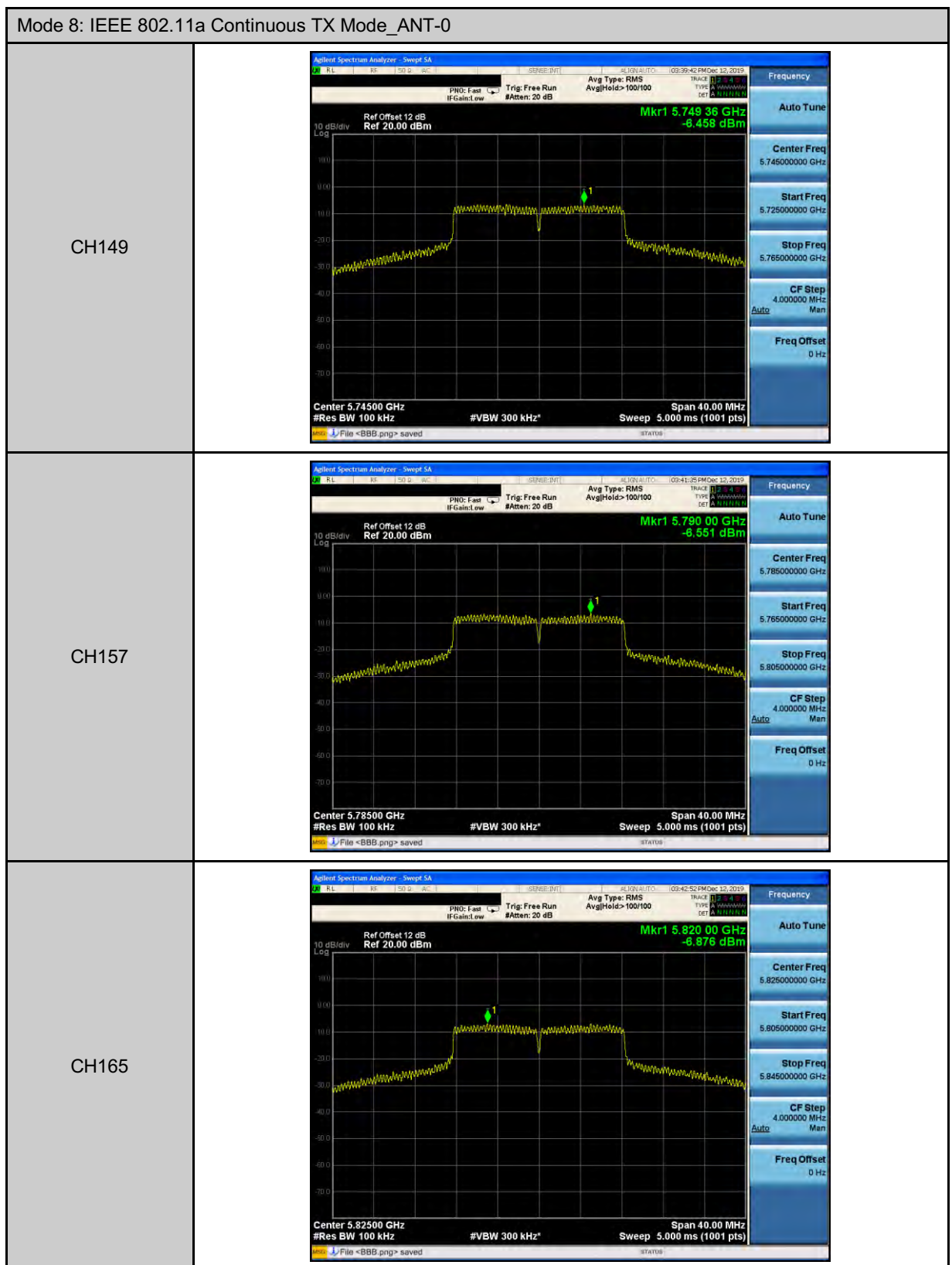
Conversion ration = 10*Log(500 k/100 k)

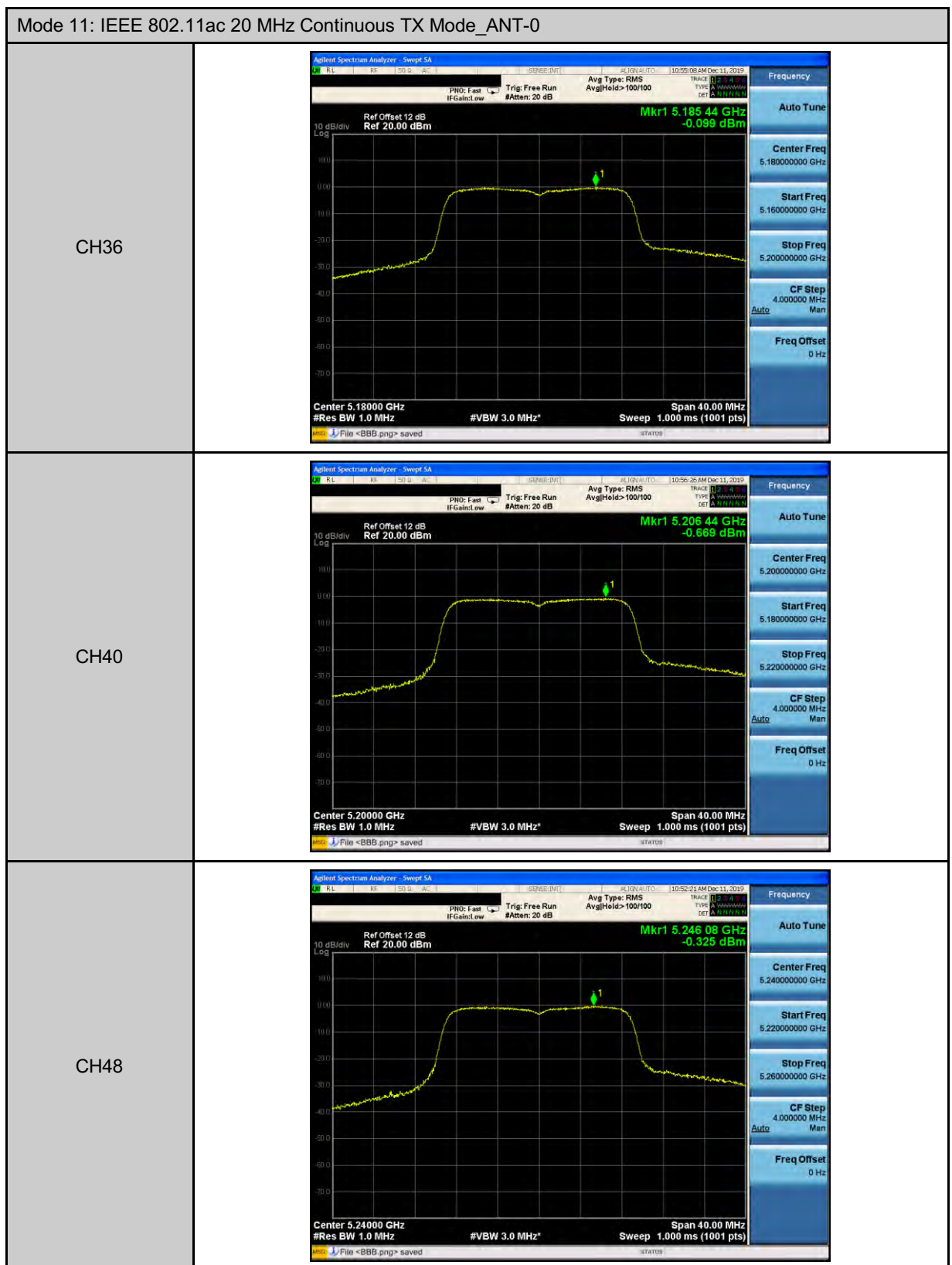
ANT-0+1				
操作模式	頻道 (CH)	頻率 (MHz)	轉換值(dBm/500 kHz)	限制值 (dBm/500 kHz)
Mode 11	149	5745.0	-1.600	30.00
	157	5785.0	-1.041	30.00
	165	5825.0	-0.926	30.00
Mode 12	151	5755.0	-2.150	30.00
	159	5795.0	-2.347	30.00
Mode 13	155	5775.0	-6.444	30.00

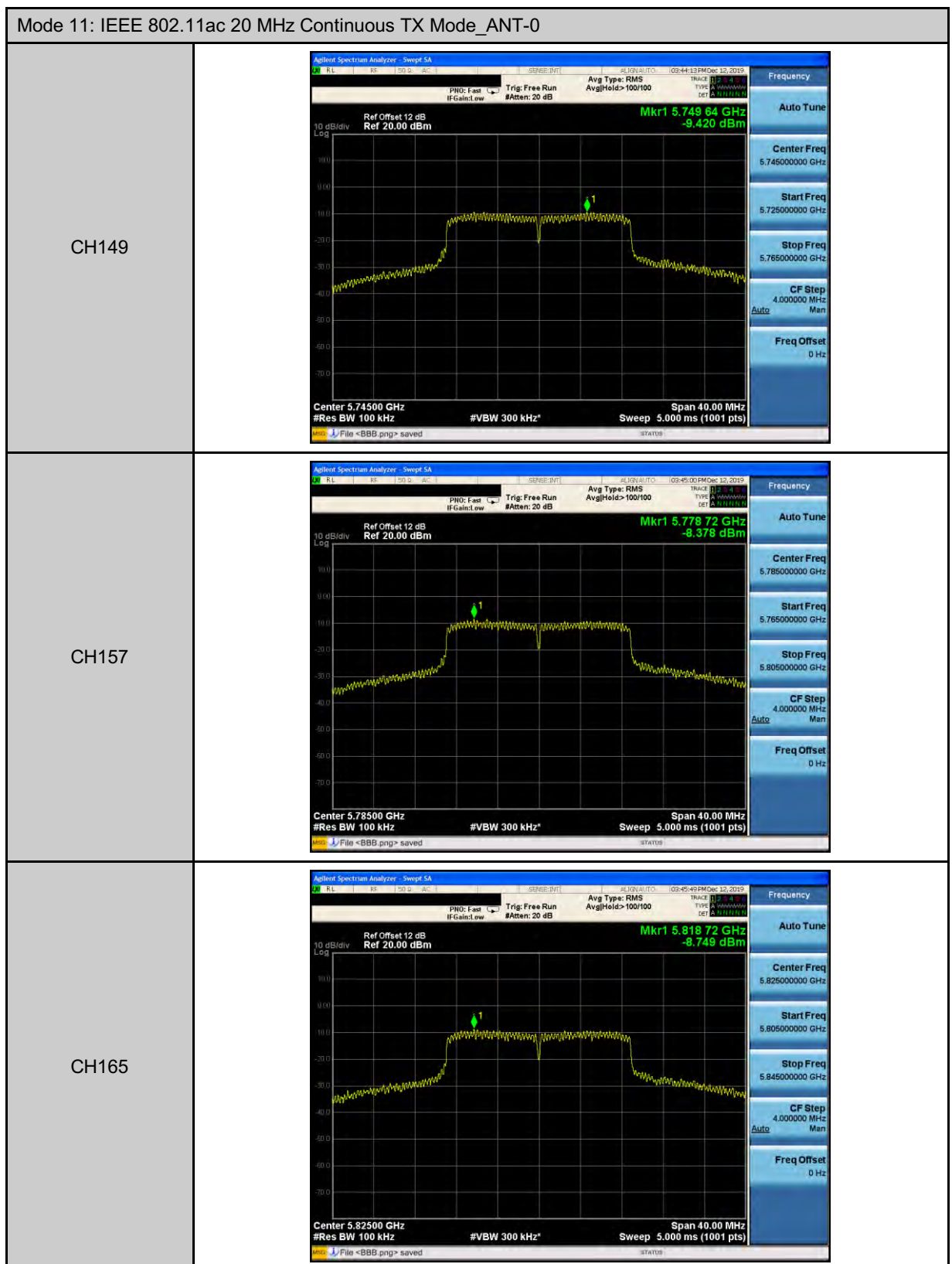
Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

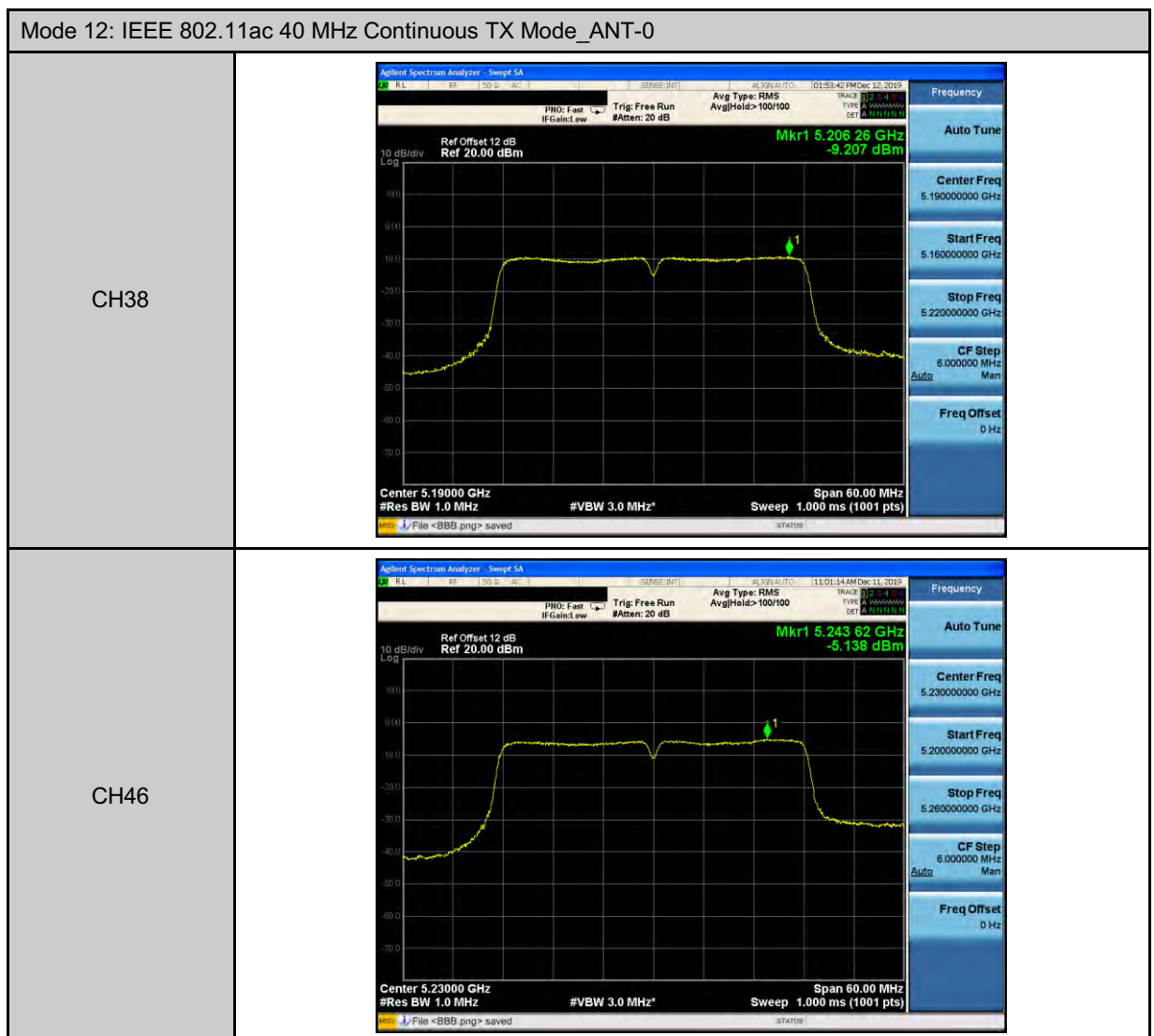
Conversion ration = 10*Log(500 k/100 k)

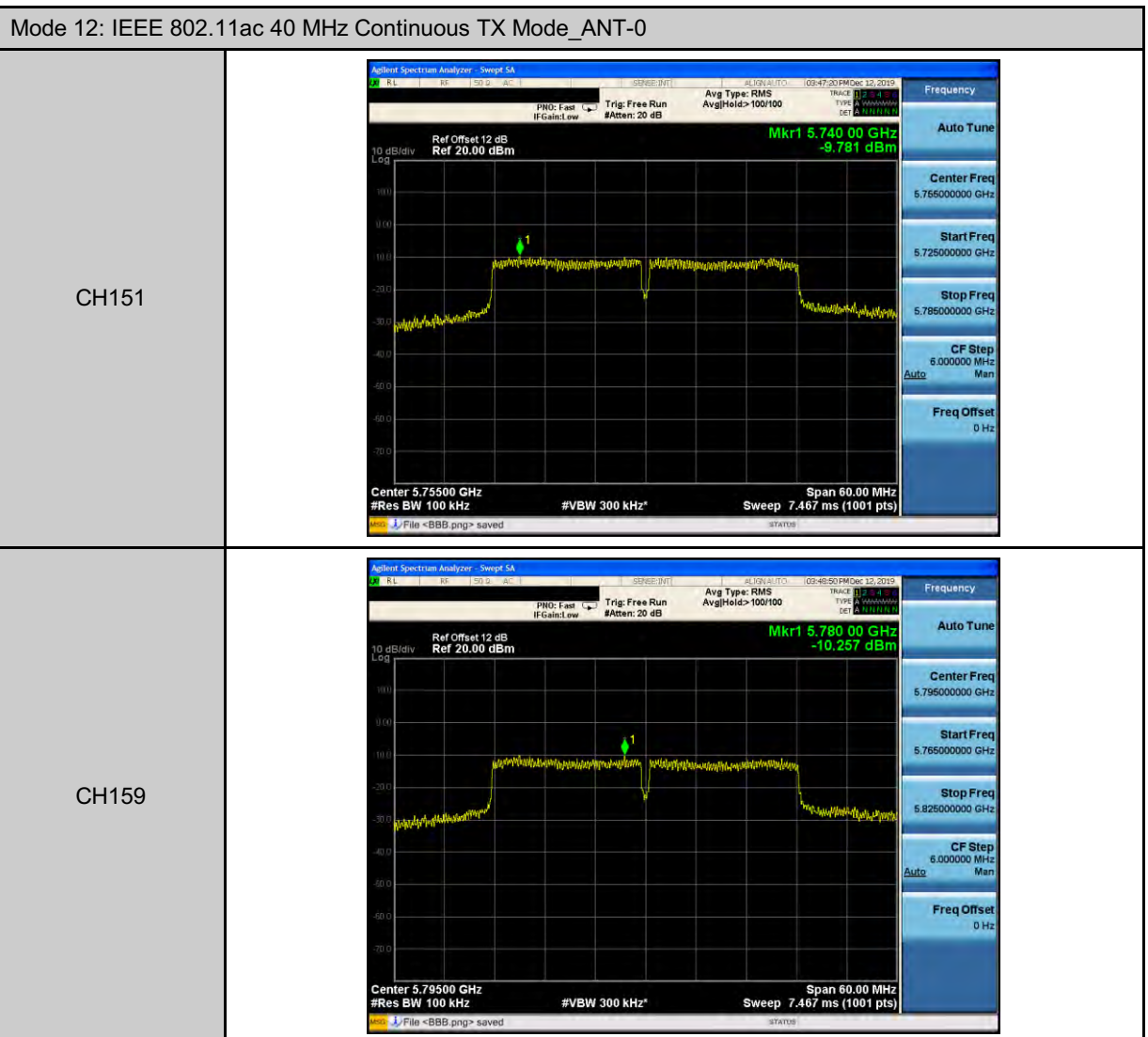












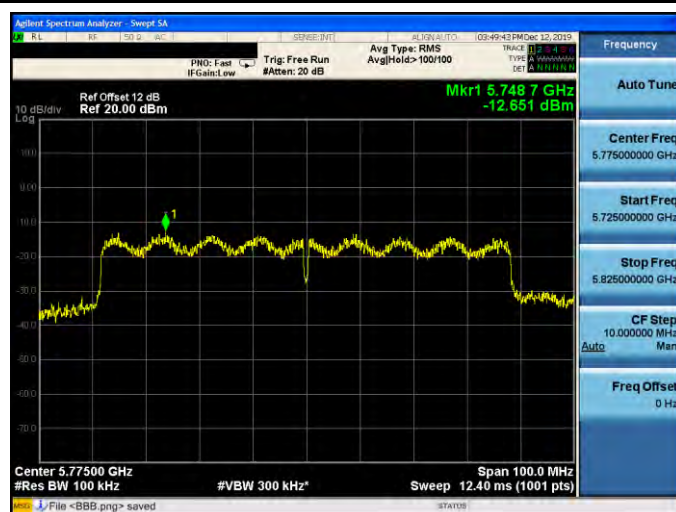
Mode 13: IEEE 802.11ac 80 MHz Continuous TX Mode_ANT-0

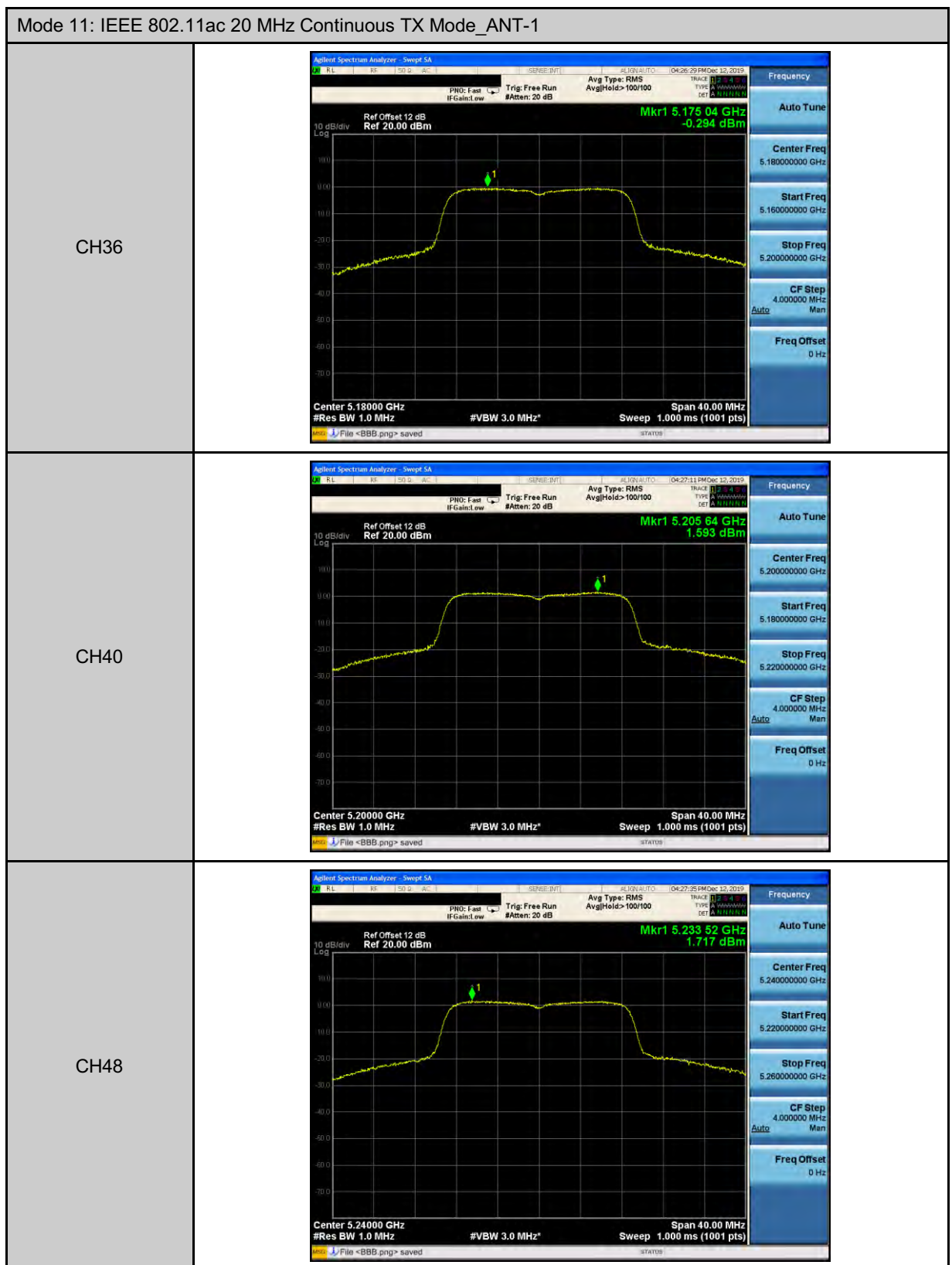
CH42

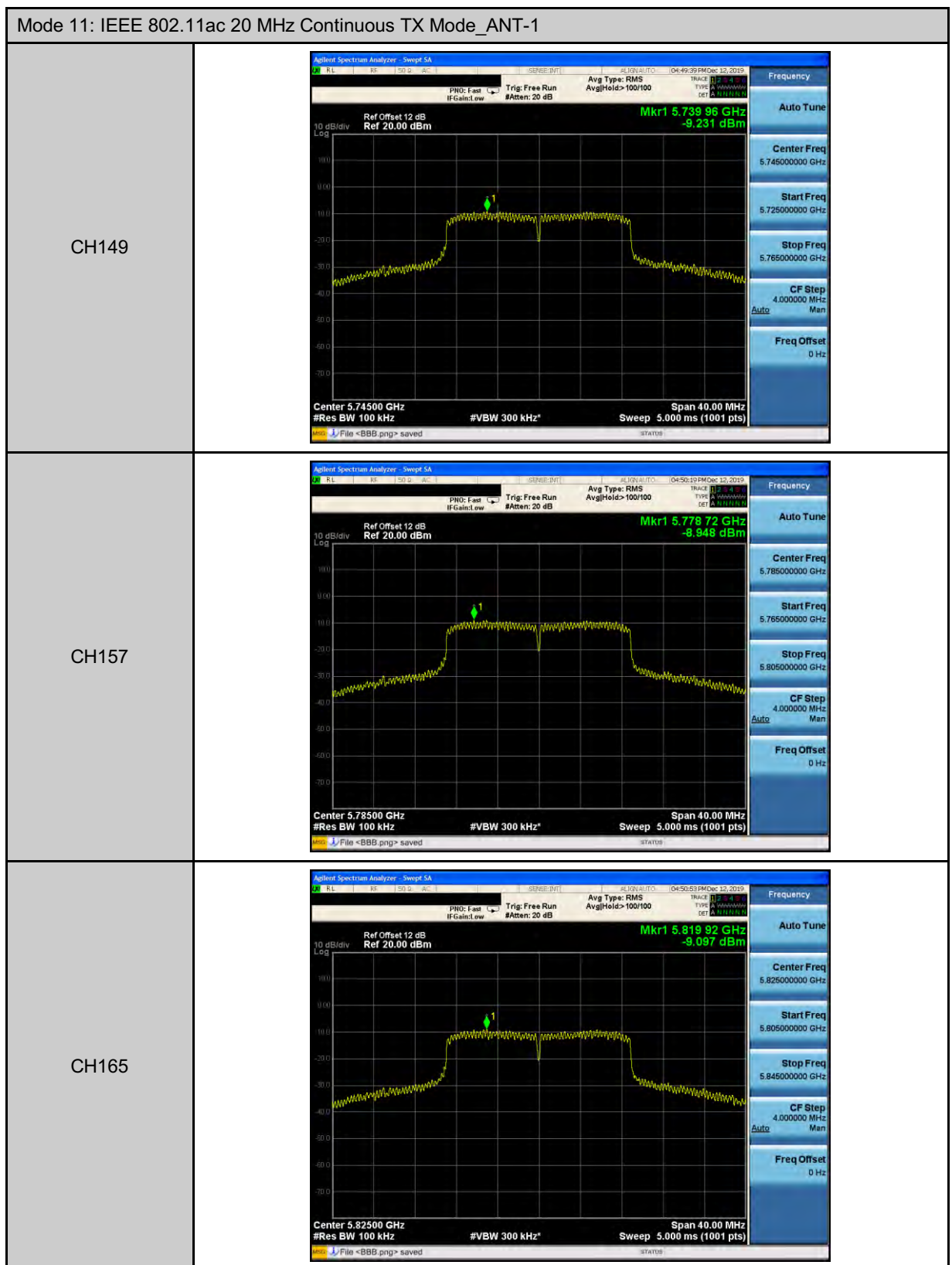


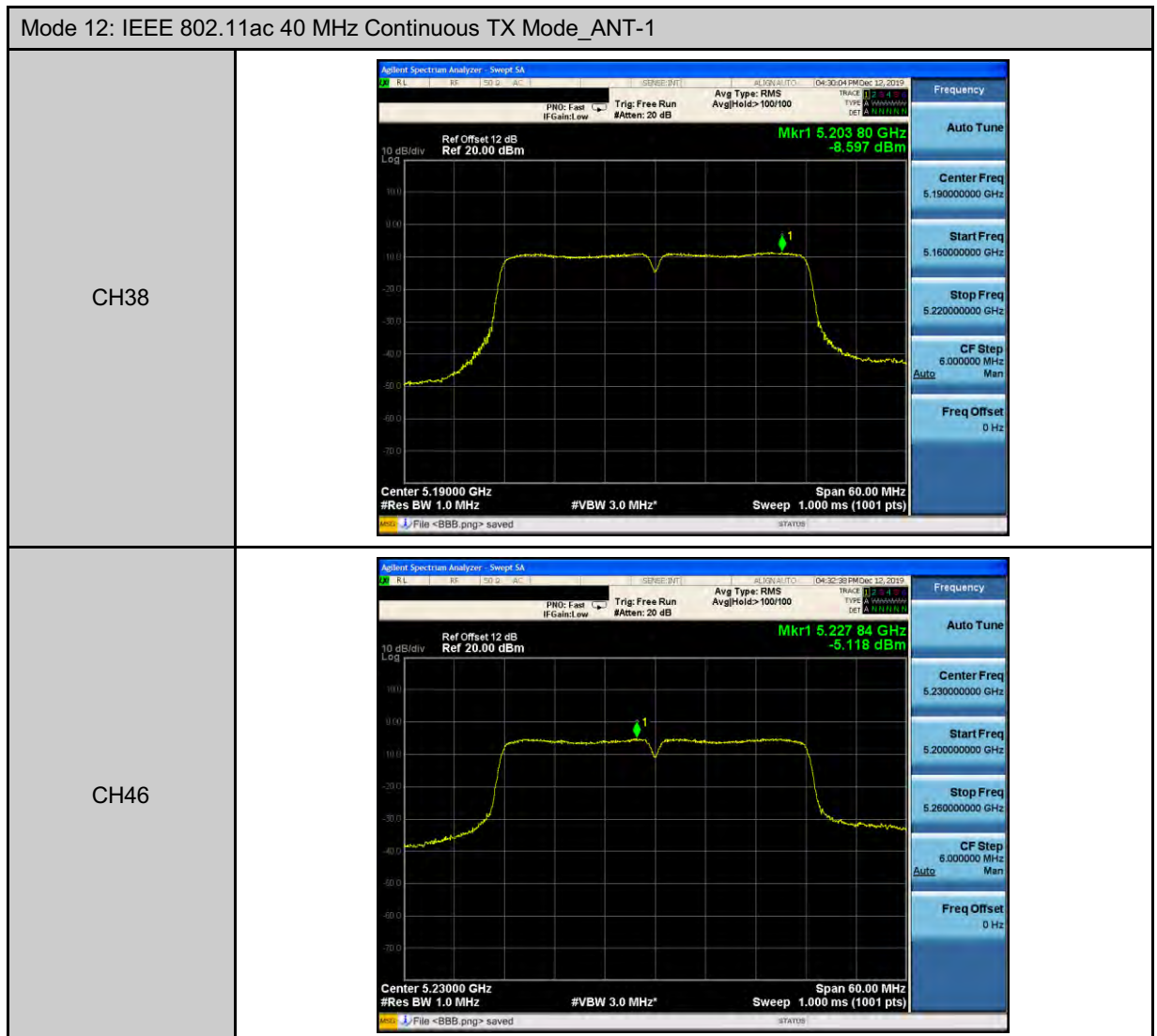
Mode 13: IEEE 802.11ac 80 MHz Continuous TX Mode_ANT-0

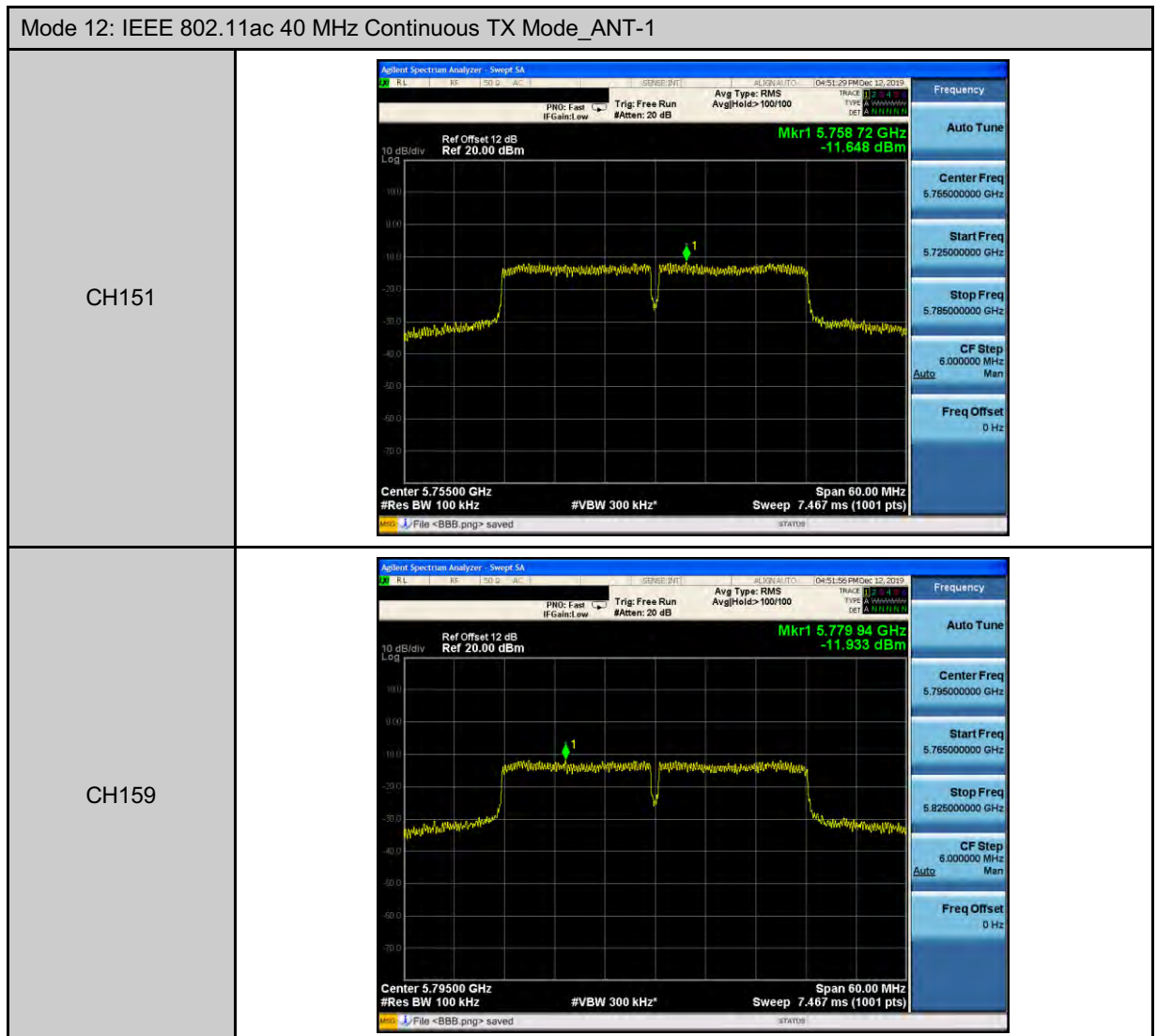
CH155











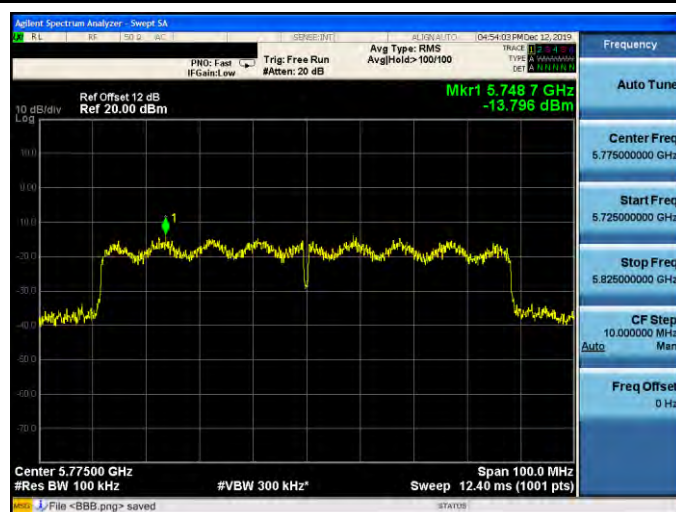
Mode 13: IEEE 802.11ac 80 MHz Continuous TX Mode_ANT-1

CH42



Mode 13: IEEE 802.11ac 80 MHz Continuous TX Mode_ANT-1

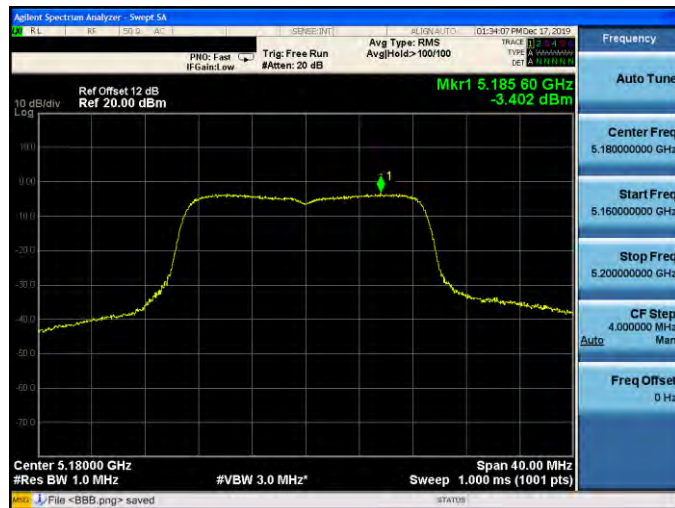
CH155



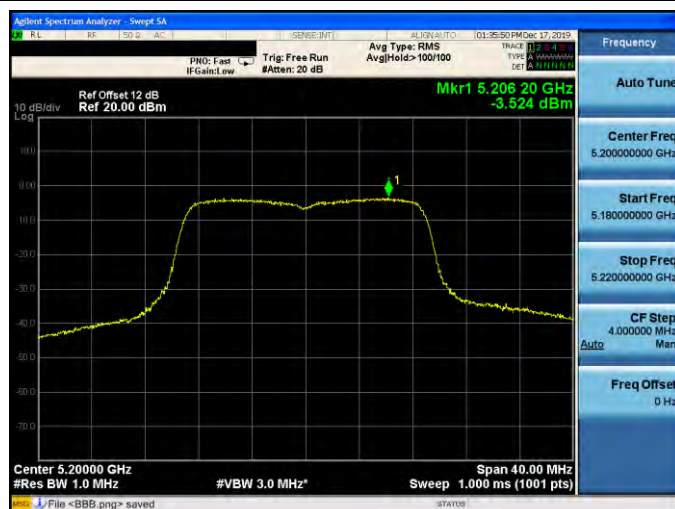
Beamforming on

Mode 11: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-0

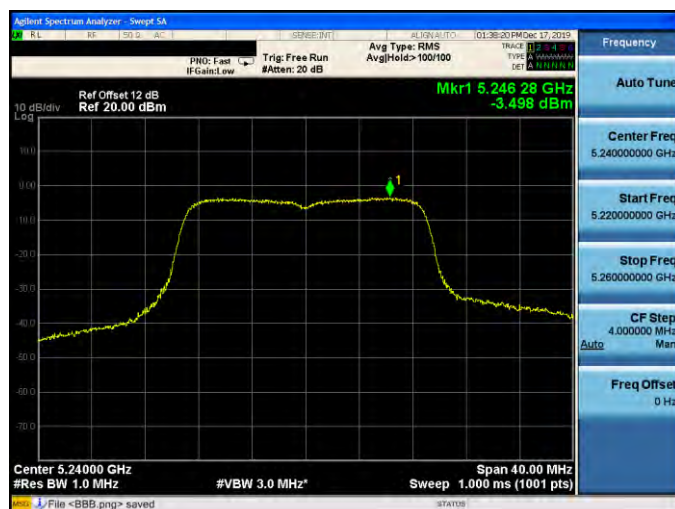
CH36

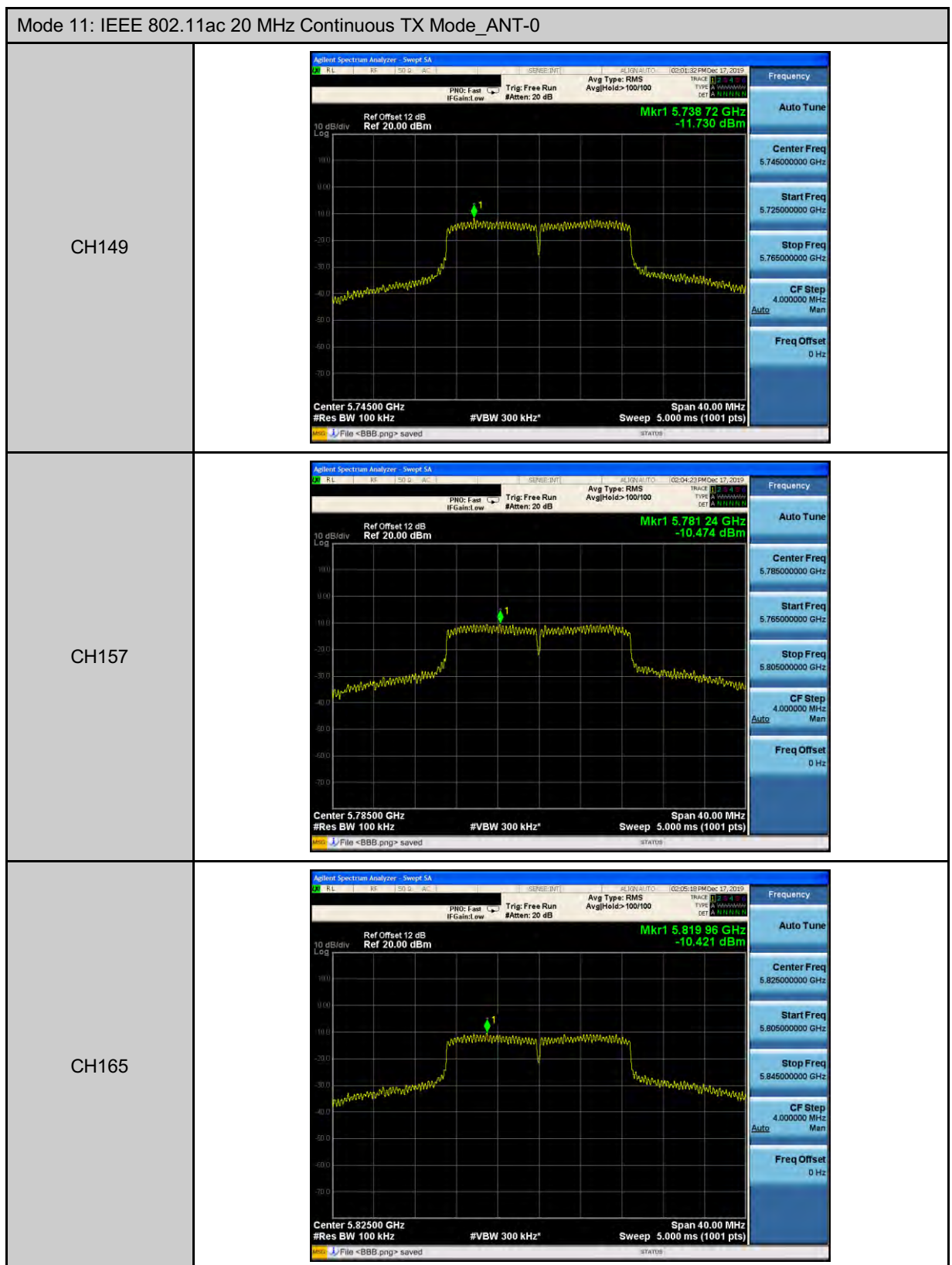


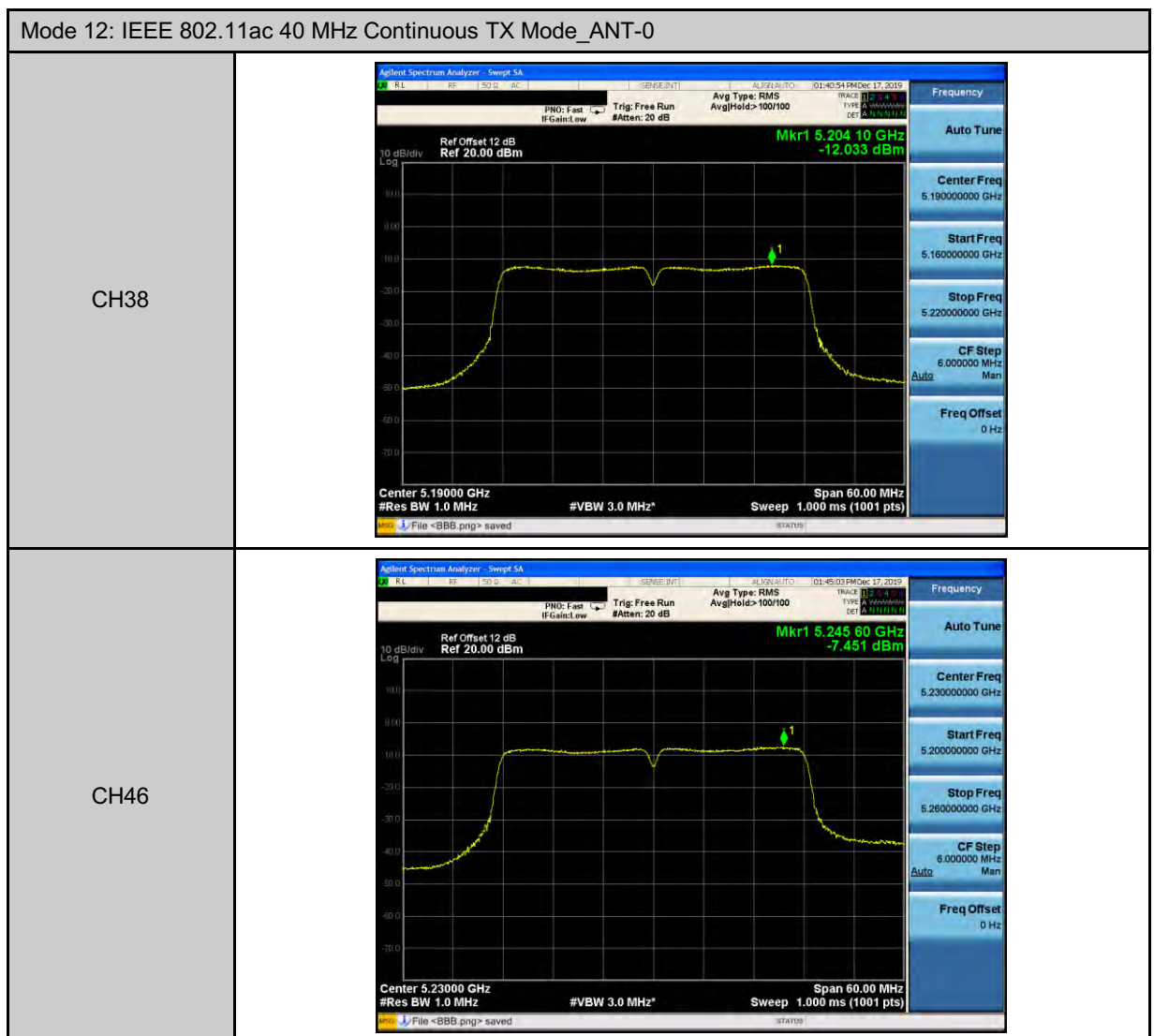
CH40

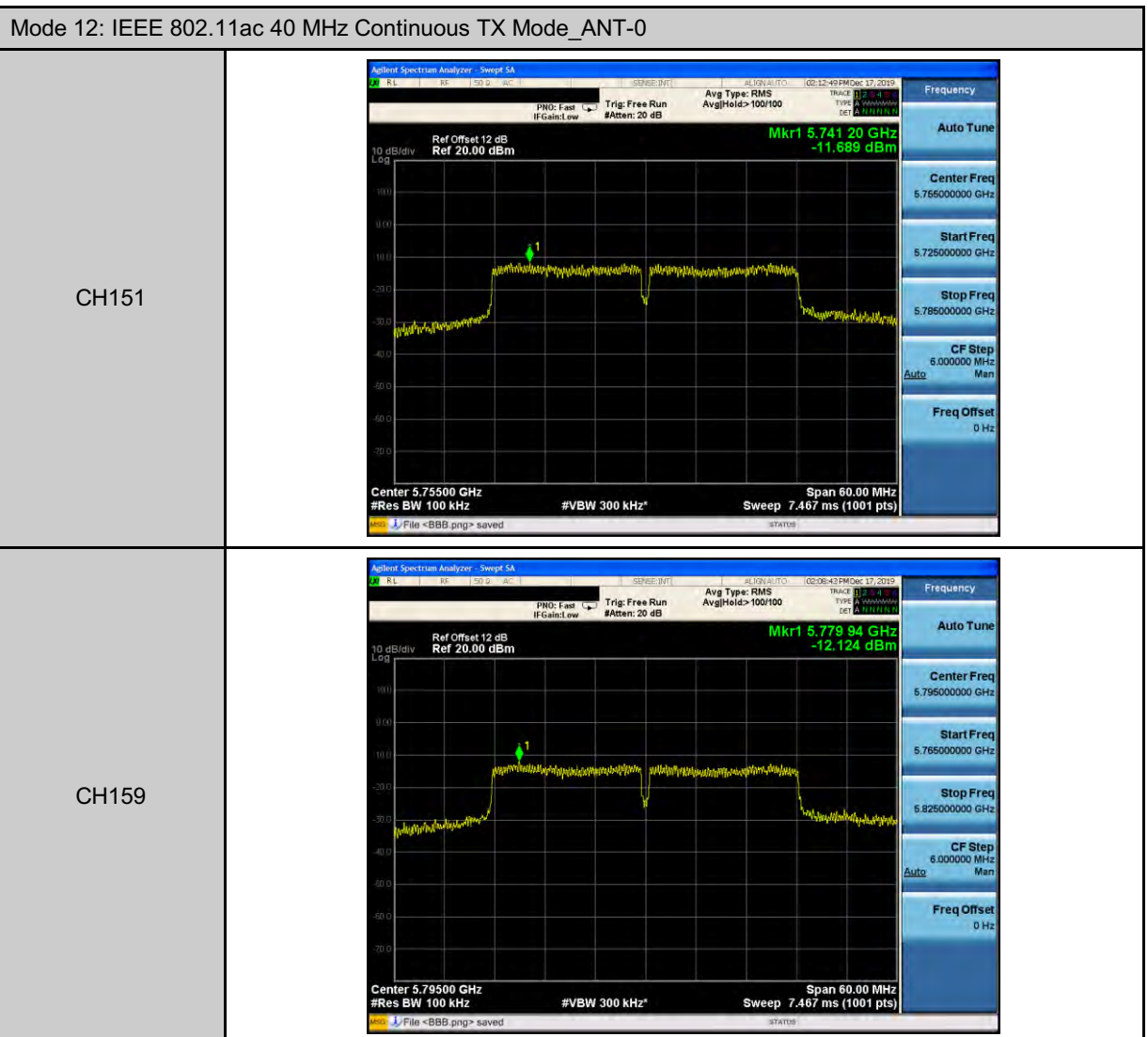


CH48









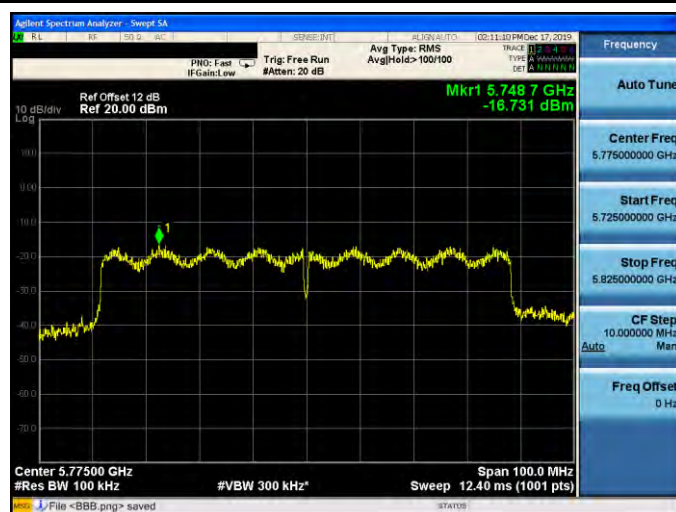
Mode 13: IEEE 802.11ac 80 MHz Continuous TX Mode_ANT-0

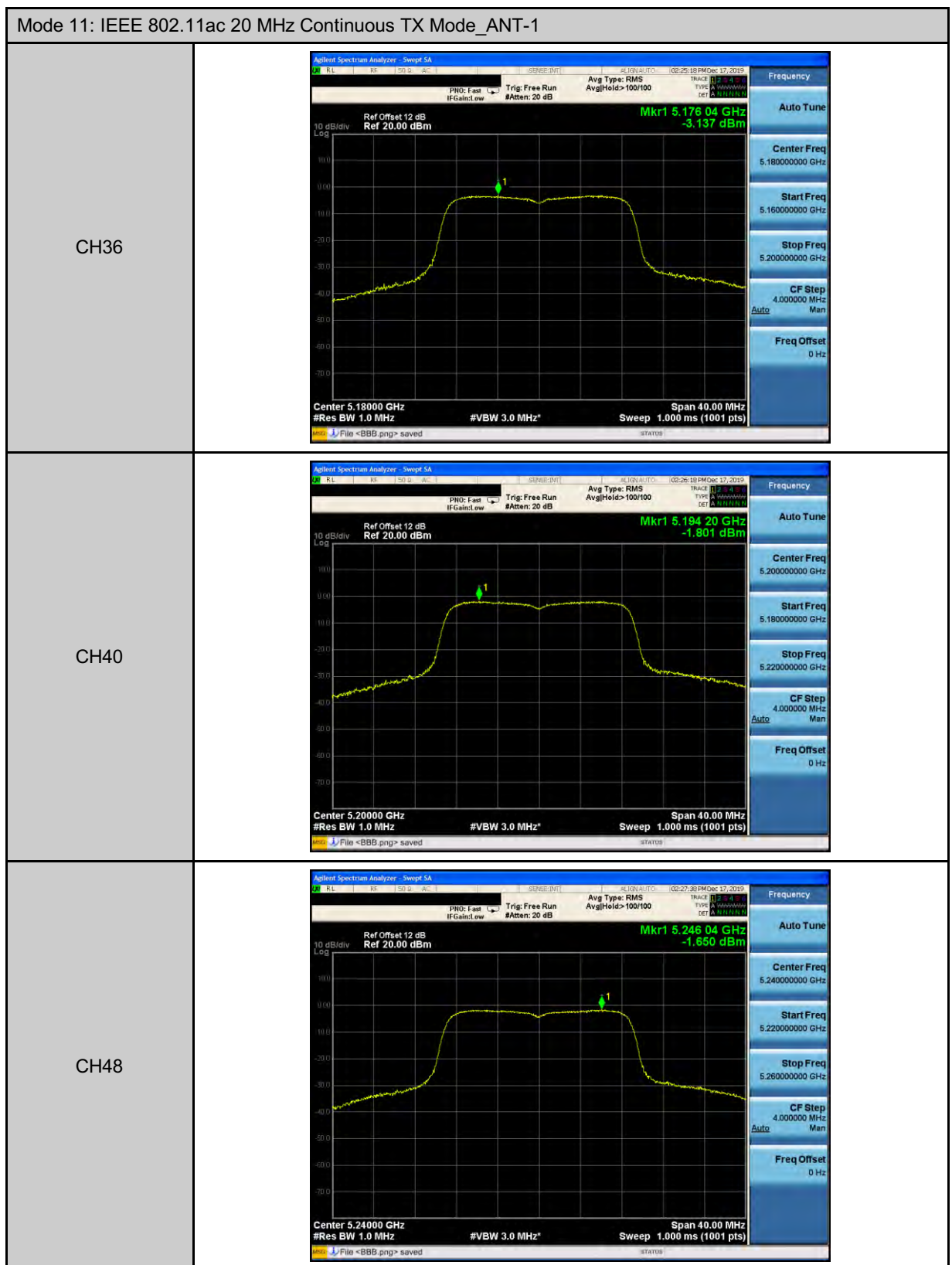
CH42

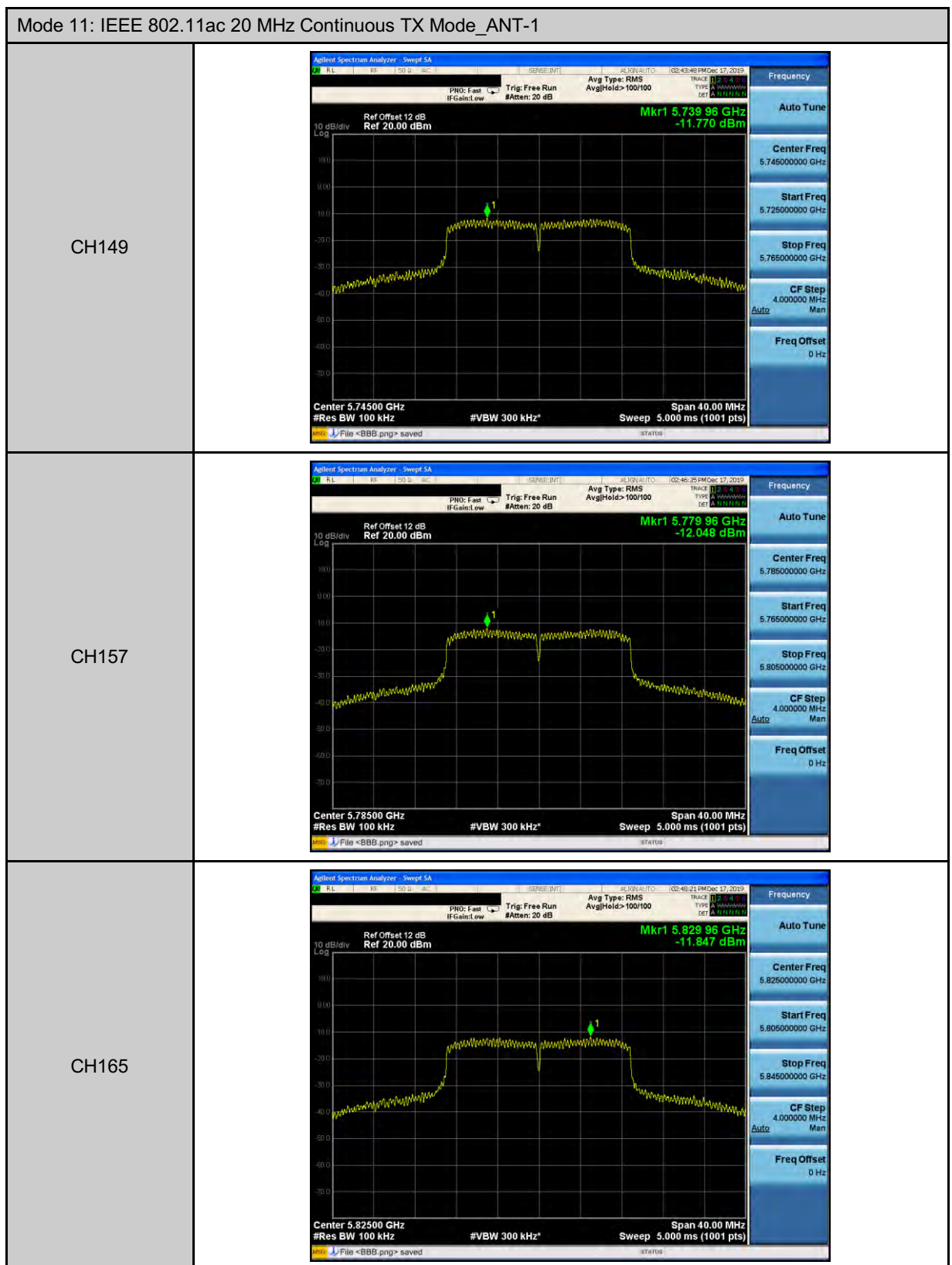


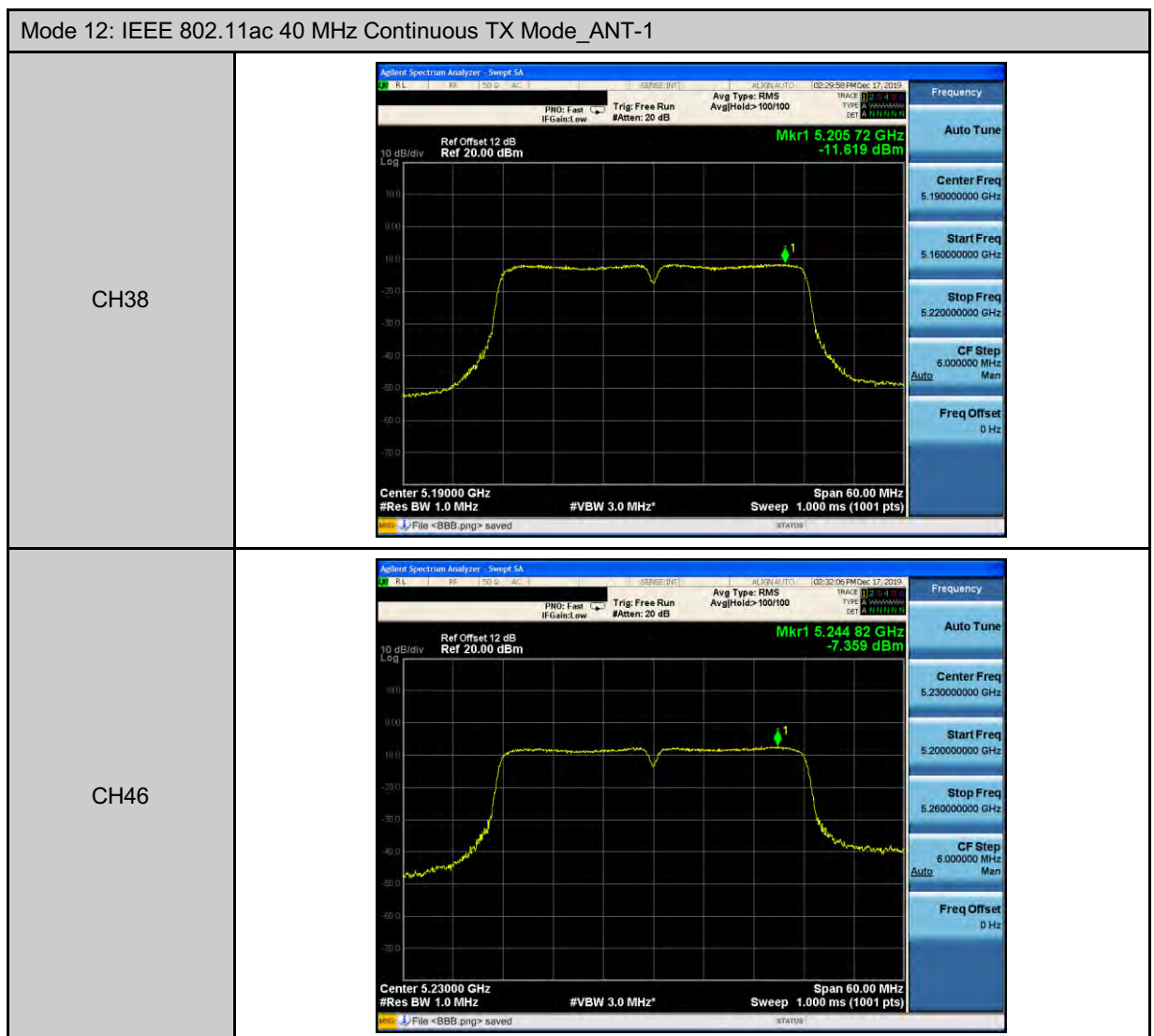
Mode 13: IEEE 802.11ac 80 MHz Continuous TX Mode_ANT-0

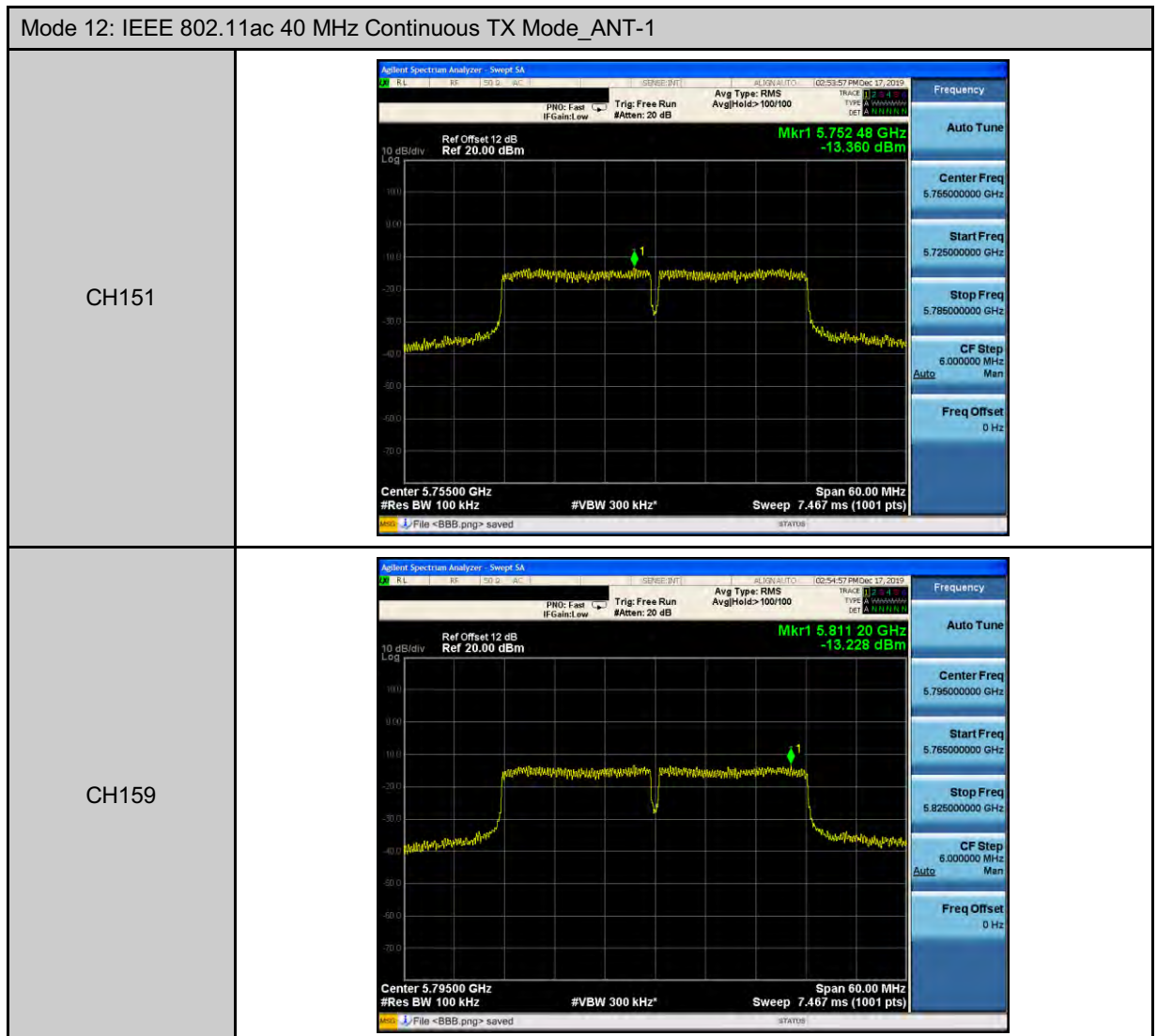
CH155











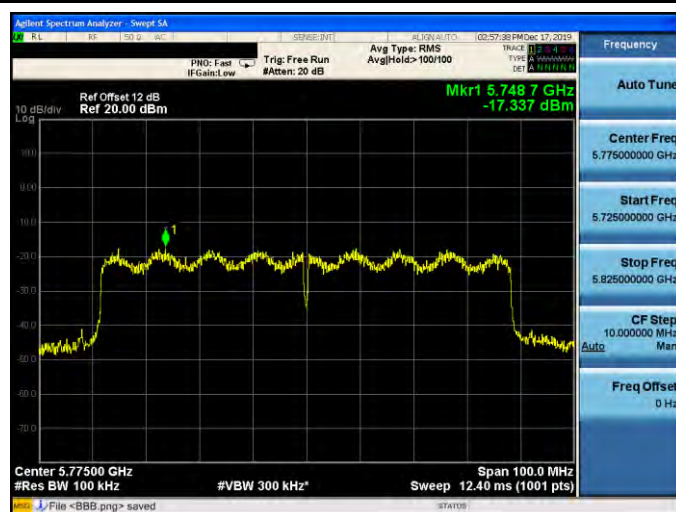
Mode 13: IEEE 802.11ac 80 MHz Continuous TX Mode_ANT-1

CH42



Mode 13: IEEE 802.11ac 80 MHz Continuous TX Mode_ANT-1

CH155

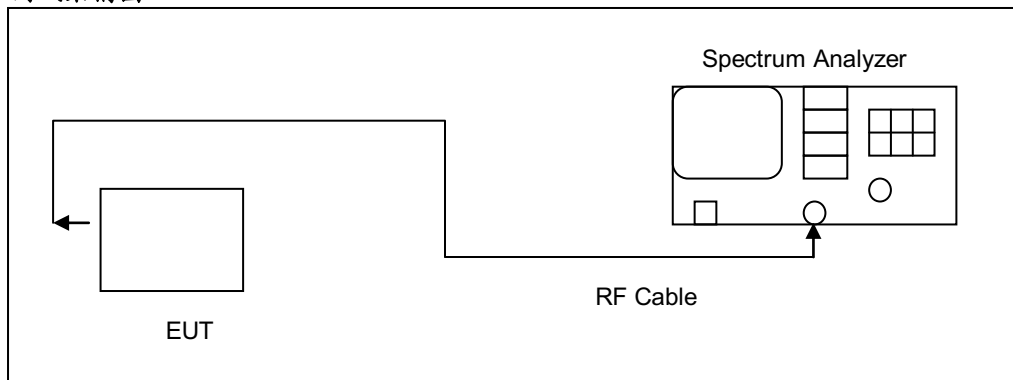


4.3.4 26 dB頻寬之要求

合格標準:

N/A

測試架構圖：



測試結果:

操作模式	: Mode 8 / Mode 11 / Mode 12 / Mode 13
測試結果	: 合格

操作模式	頻道 (CH)	頻率 (MHz)	26 dB 頻寬量測值 (MHz)
			ANT-0
Mode 8	36	5180.0	28.970
	40	5200.0	27.600
	48	5240.0	28.140
Mode 11	36	5180.0	27.020
	40	5200.0	26.510
	48	5240.0	28.750
Mode 12	38	5190.0	55.470
	46	5230.0	61.950
Mode 13	42	5210.0	83.380
操作模式	頻道 (CH)	頻率 (MHz)	26 dB 頻寬量測值 (MHz)
			ANT-1
Mode 11	36	5180.0	30.650
	40	5200.0	32.150
	48	5240.0	28.140
Mode 12	38	5190.0	60.330
	46	5230.0	71.190
Mode 13	42	5210.0	81.750

Beamforming on

操作模式 : Mode 11 / Mode 12 / Mode 13

測試結果 : 合格

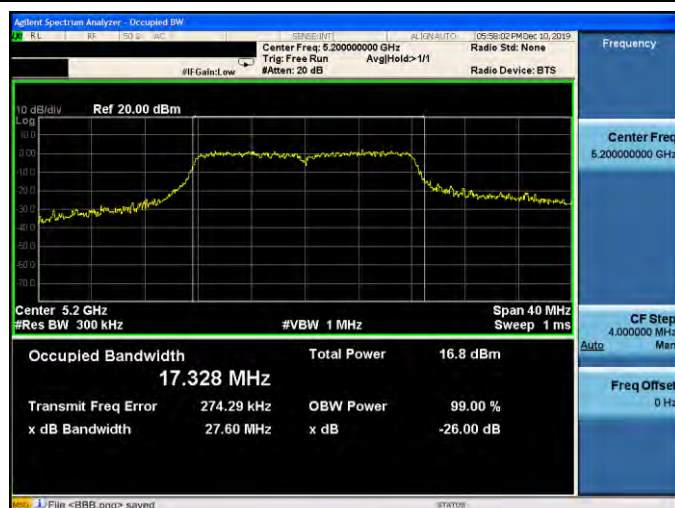
操作模式	頻道 (CH)	頻率 (MHz)	26 dB 頻寬量測值 (MHz)
			ANT-0
Mode 11	36	5180.0	22.080
	40	5200.0	23.310
	48	5240.0	23.270
Mode 12	38	5190.0	44.530
	46	5230.0	59.720
Mode 13	42	5210.0	83.570
操作模式	頻道 (CH)	頻率 (MHz)	26 dB 頻寬量測值 (MHz)
			ANT-1
Mode 11	36	5180.0	21.390
	40	5200.0	21.850
	48	5240.0	21.680
Mode 12	38	5190.0	44.800
	46	5230.0	56.750
Mode 13	42	5210.0	81.970

Mode 8: IEEE 802.11a Continuous TX Mode_ANT-0

CH36

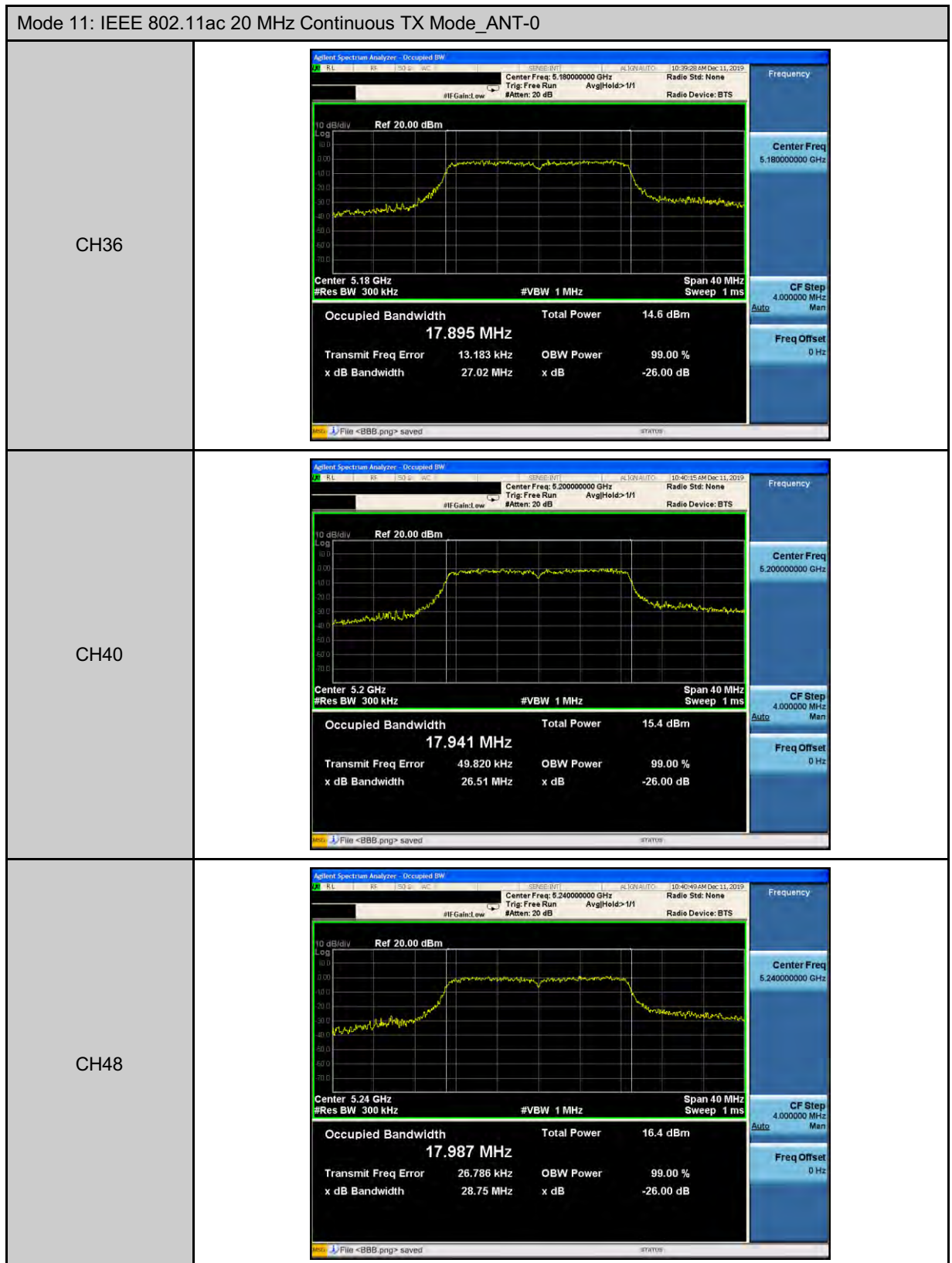


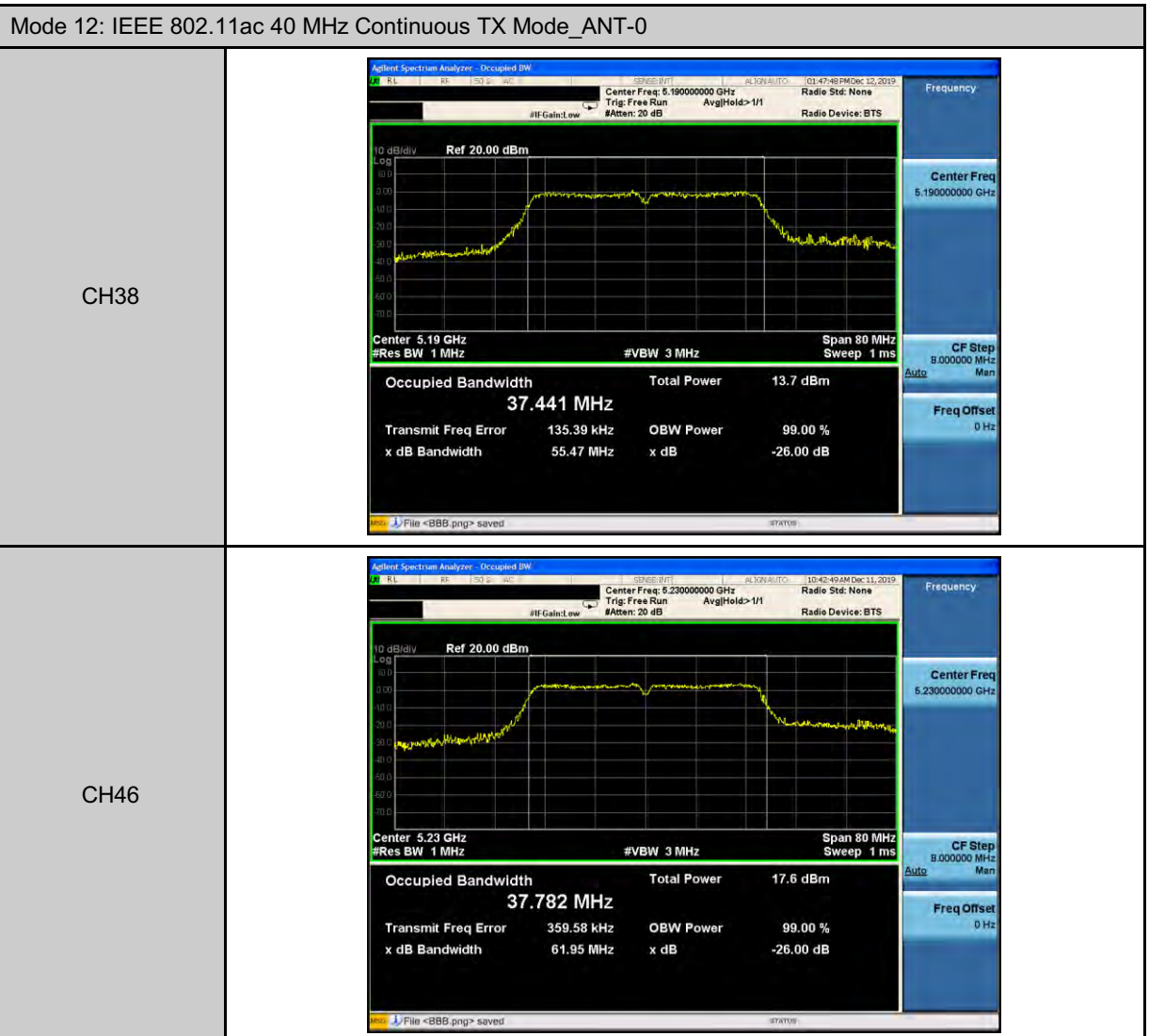
CH40

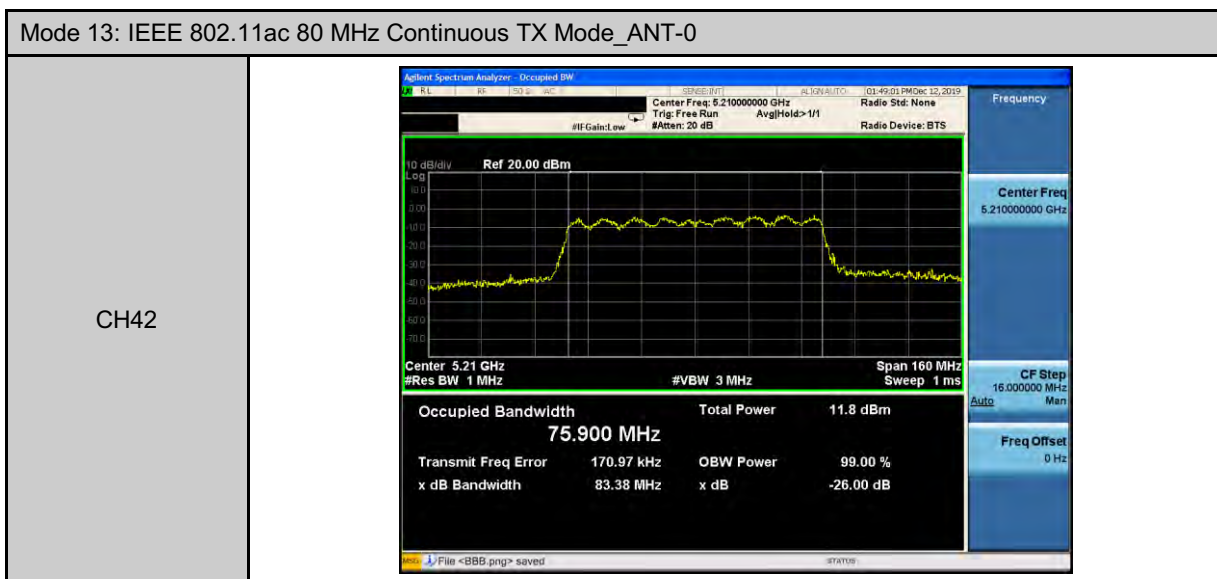


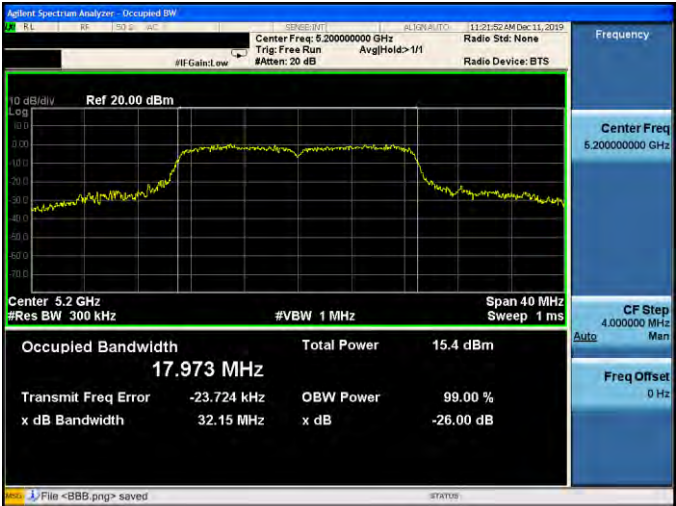
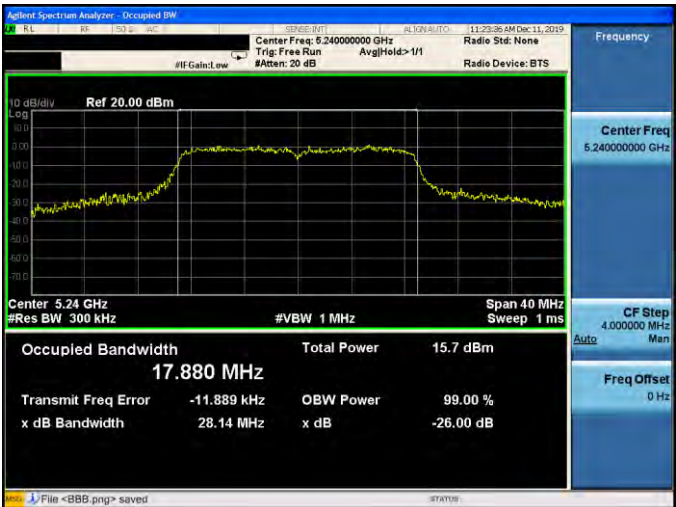
CH48

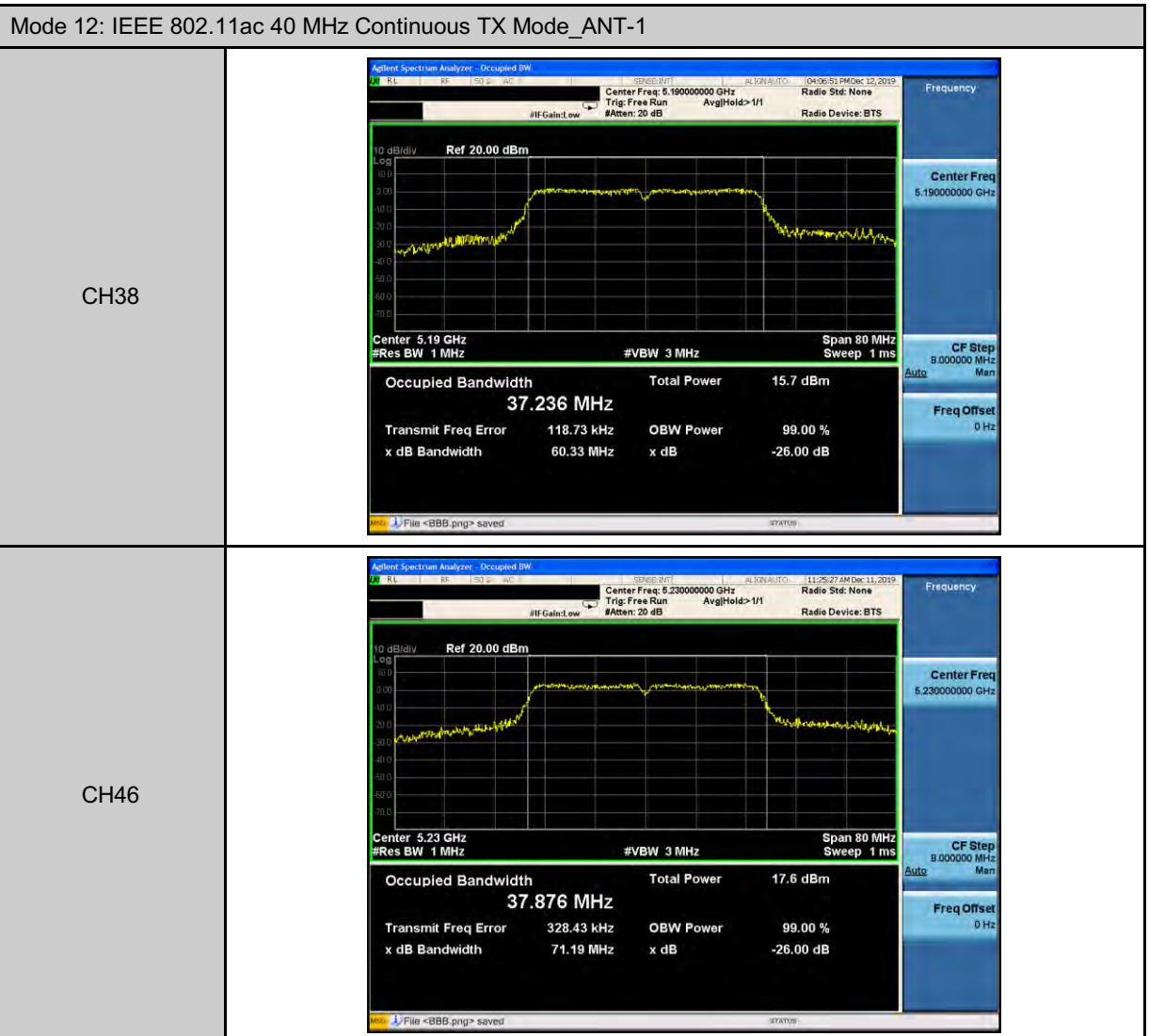


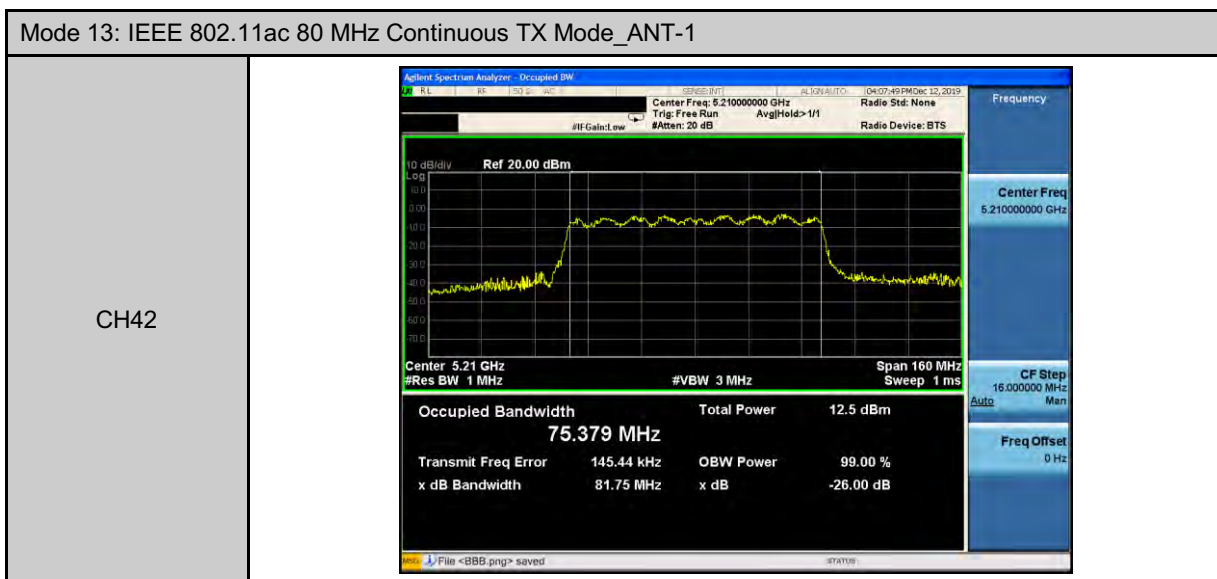






Mode 11: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-1	
CH36	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run #Atten: 20 dB Avg/Hold: 1/1 Radio Device: BTS Ref 20.00 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 17.898 MHz Total Power 14.6 dBm Transmit Freq Error -5.648 kHz OBW Power 99.00 % x dB Bandwidth 30.65 MHz x dB -26.00 dB Center Freq 5.18000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz
CH40	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run #Atten: 20 dB Avg/Hold: 1/1 Radio Device: BTS Ref 20.00 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 17.973 MHz Total Power 15.4 dBm Transmit Freq Error -23.724 kHz OBW Power 99.00 % x dB Bandwidth 32.15 MHz x dB -26.00 dB Center Freq 5.20000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz
CH48	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run #Atten: 20 dB Avg/Hold: 1/1 Radio Device: BTS Ref 20.00 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms Occupied Bandwidth 17.880 MHz Total Power 15.7 dBm Transmit Freq Error -11.889 kHz OBW Power 99.00 % x dB Bandwidth 28.14 MHz x dB -26.00 dB Center Freq 5.24000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz





Beamforming on

Mode 11: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-0

CH36



CH40



CH48

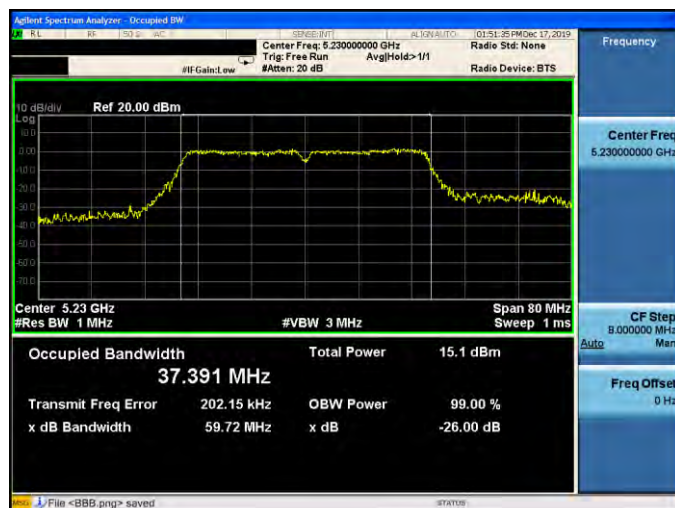


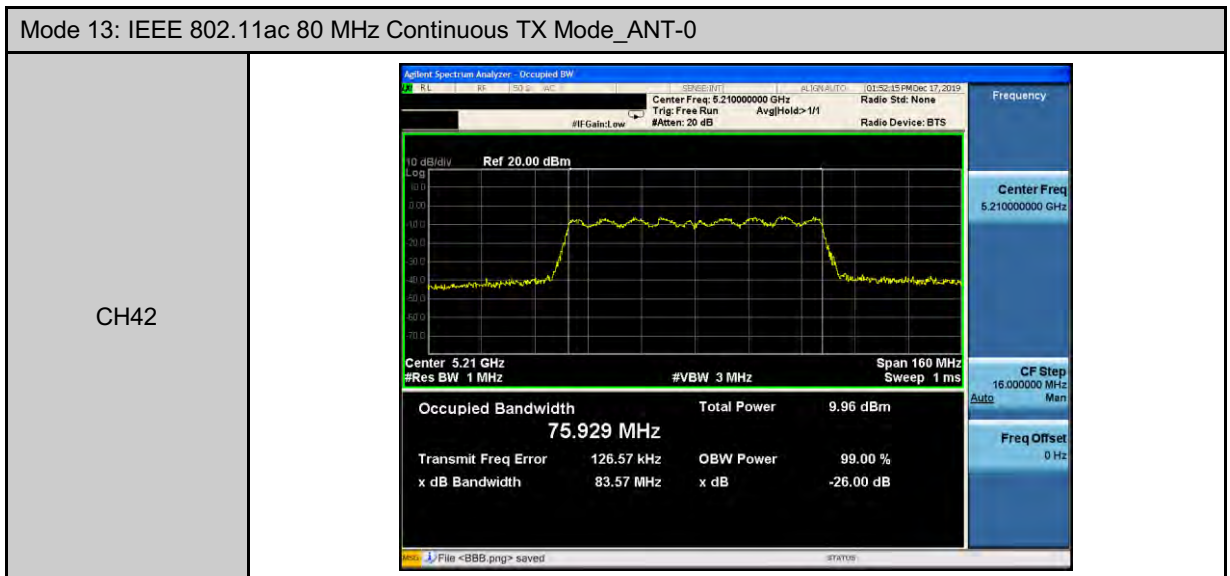
Mode 12: IEEE 802.11ac 40 MHz Continuous TX Mode_ANT-0

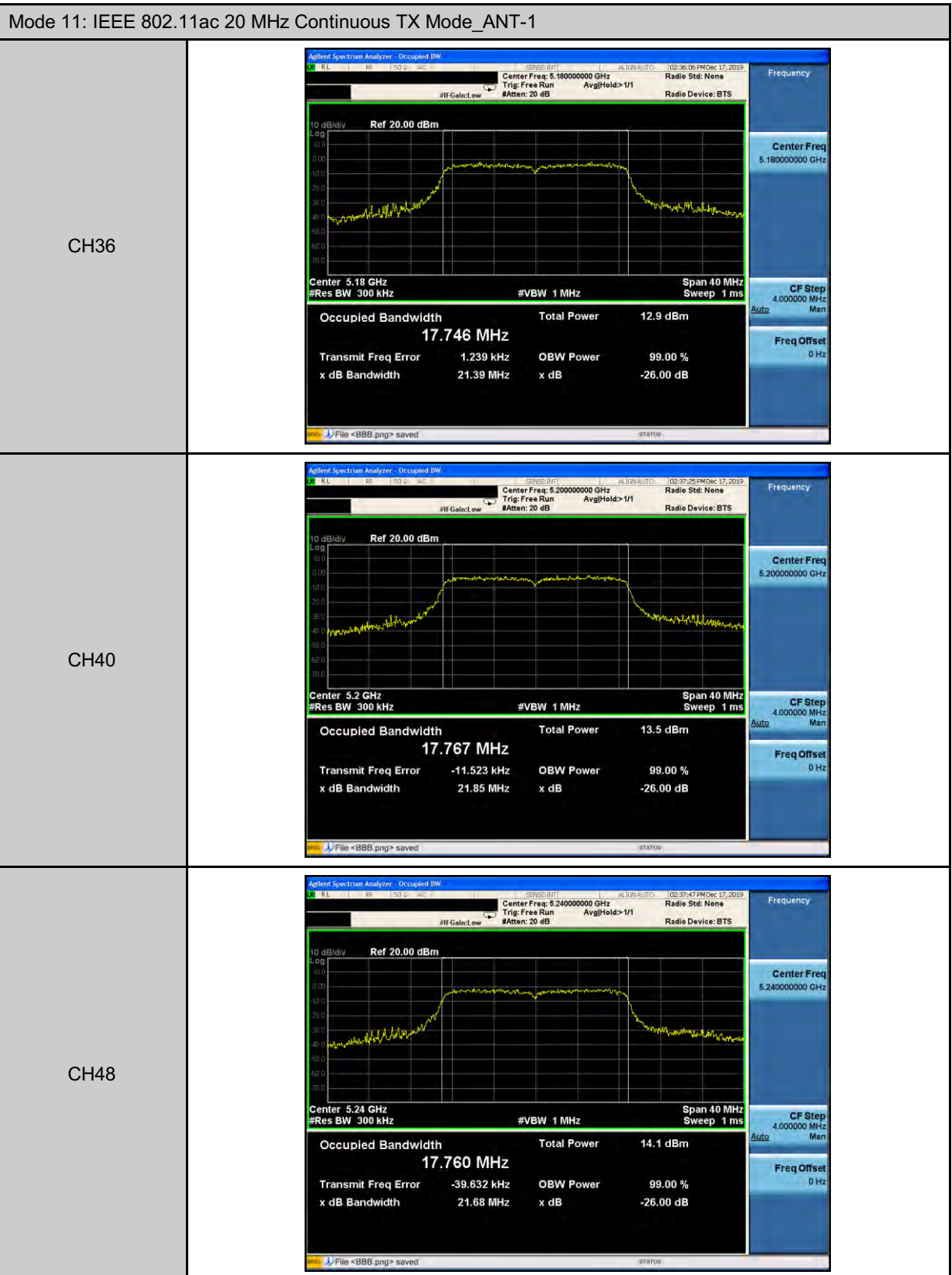
CH38

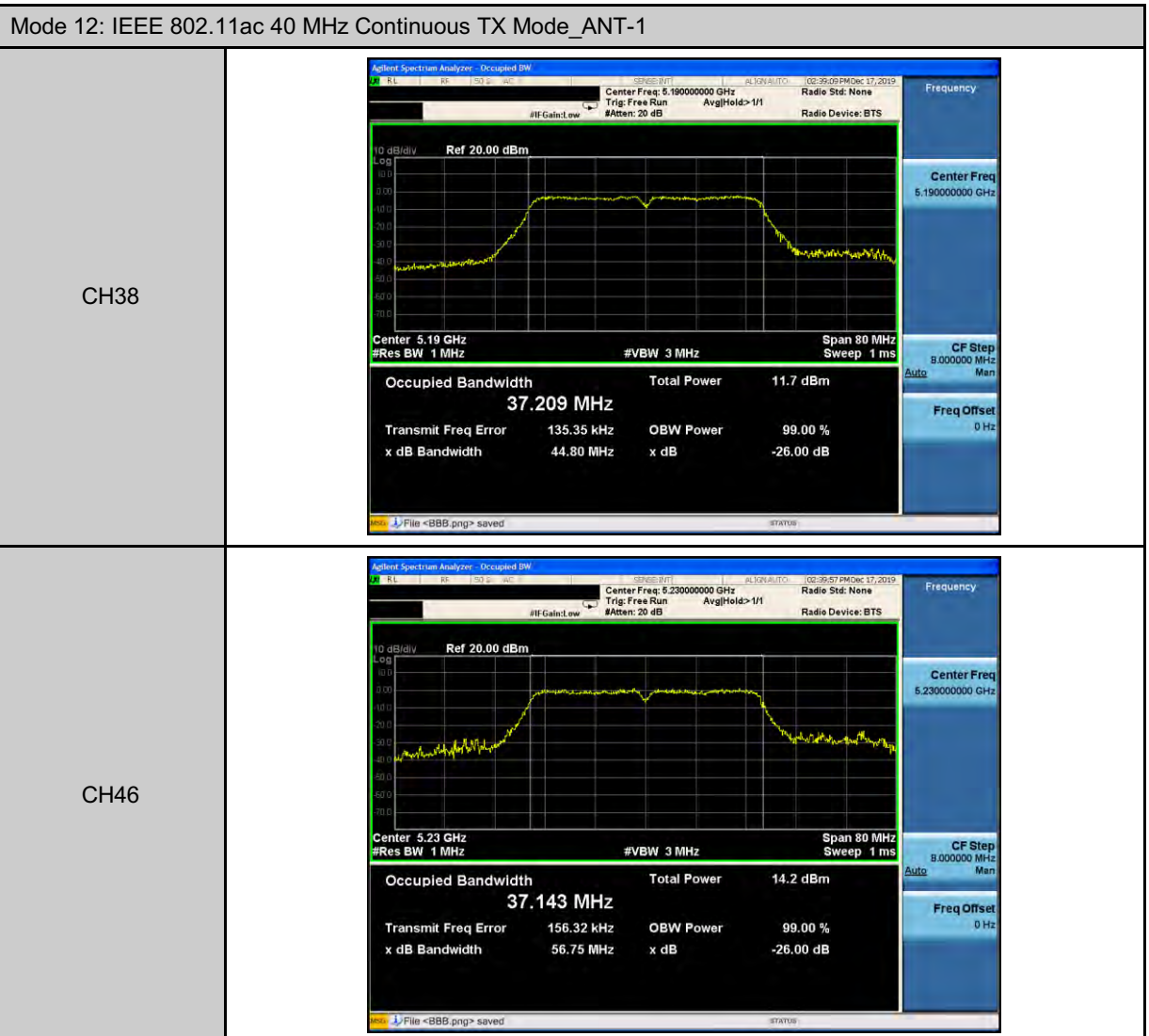


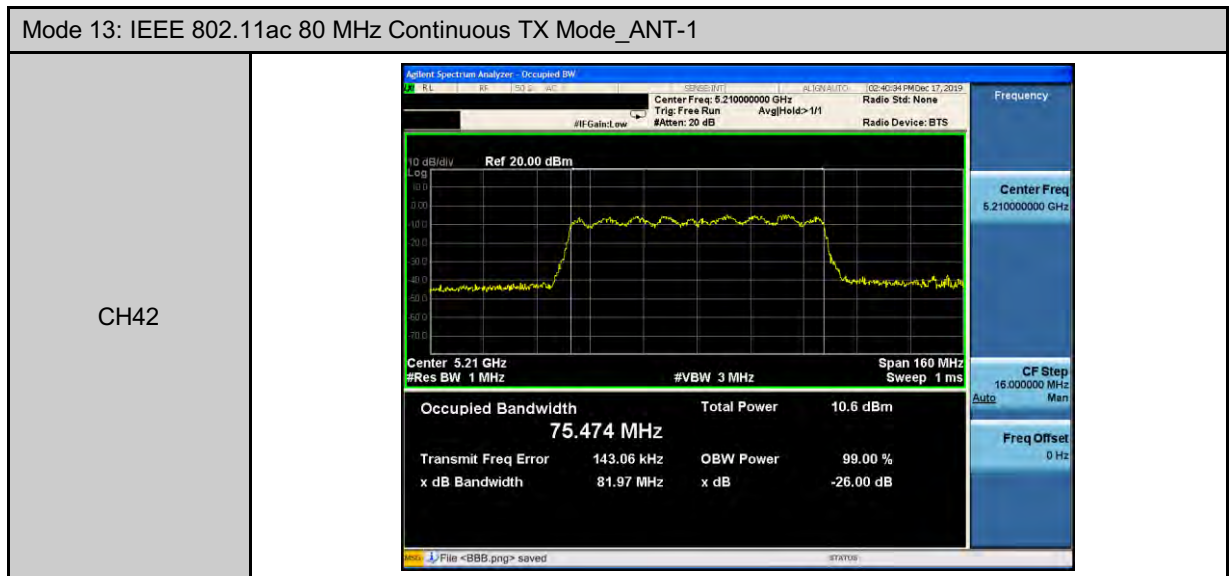
CH46









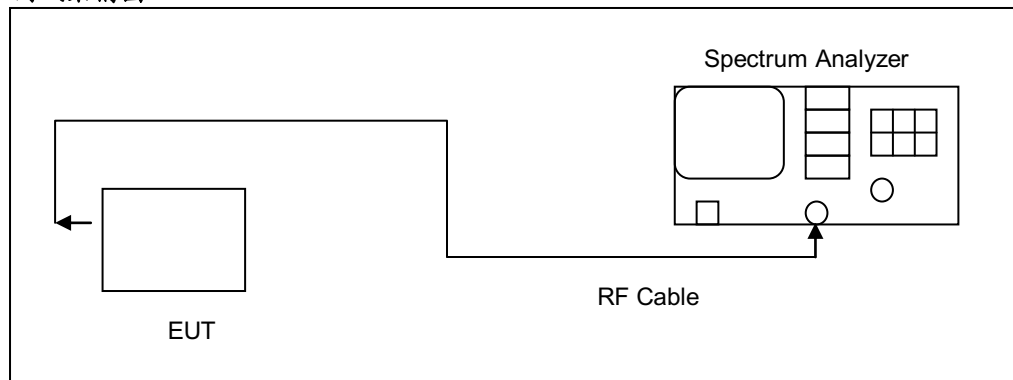


4.3.5 6 dB頻寬之要求

合格標準：

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

測試架構圖：



測試結果:

操作模式	: Mode 8 / Mode 11 / Mode 12 / Mode 13
測試結果	: 合格

操作模式	頻道 (CH)	頻率 (MHz)	6 dB 頻寬量測值 (kHz)	限制值 (kHz)
			ANT-0	
Mode 8	149	5745.0	16350	≥ 500
	157	5785.0	16130	≥ 500
	165	5825.0	16350	≥ 500
Mode 11	149	5745.0	16780	≥ 500
	157	5785.0	16010	≥ 500
	165	5825.0	16810	≥ 500
Mode 12	151	5755.0	36380	≥ 500
	159	5795.0	36290	≥ 500
Mode 13	155	5775.0	75370	≥ 500
操作模式	頻道 (CH)	頻率 (MHz)	6 dB 頻寬量測值 (kHz)	限制值 (kHz)
			ANT-1	
Mode 11	149	5745.0	16220	≥ 500
	157	5785.0	16520	≥ 500
	165	5825.0	16910	≥ 500
Mode 12	151	5755.0	35660	≥ 500
	159	5795.0	36390	≥ 500
Mode 13	155	5775.0	75200	≥ 500

Beamforming on

操作模式 : Mode 11 / Mode 12 / Mode 13

測試結果 : 合格

操作模式	頻道 (CH)	頻率 (MHz)	6 dB 頻寬量測值 (kHz)	限制值 (kHz)
			ANT-0	
Mode 11	149	5745.0	17550	≥ 500
	157	5785.0	16720	≥ 500
	165	5825.0	16400	≥ 500
Mode 12	151	5755.0	36140	≥ 500
	159	5795.0	36100	≥ 500
Mode 13	155	5775.0	75380	≥ 500
操作模式	頻道 (CH)	頻率 (MHz)	6 dB 頻寬量測值 (kHz)	限制值 (kHz)
			ANT-1	
Mode 11	149	5745.0	16530	≥ 500
	157	5785.0	16550	≥ 500
	165	5825.0	16790	≥ 500
Mode 12	151	5755.0	36110	≥ 500
	159	5795.0	36060	≥ 500
Mode 13	155	5775.0	75150	≥ 500

Mode 8: IEEE 802.11a Continuous TX Mode_ANT-0

CH149



CH157

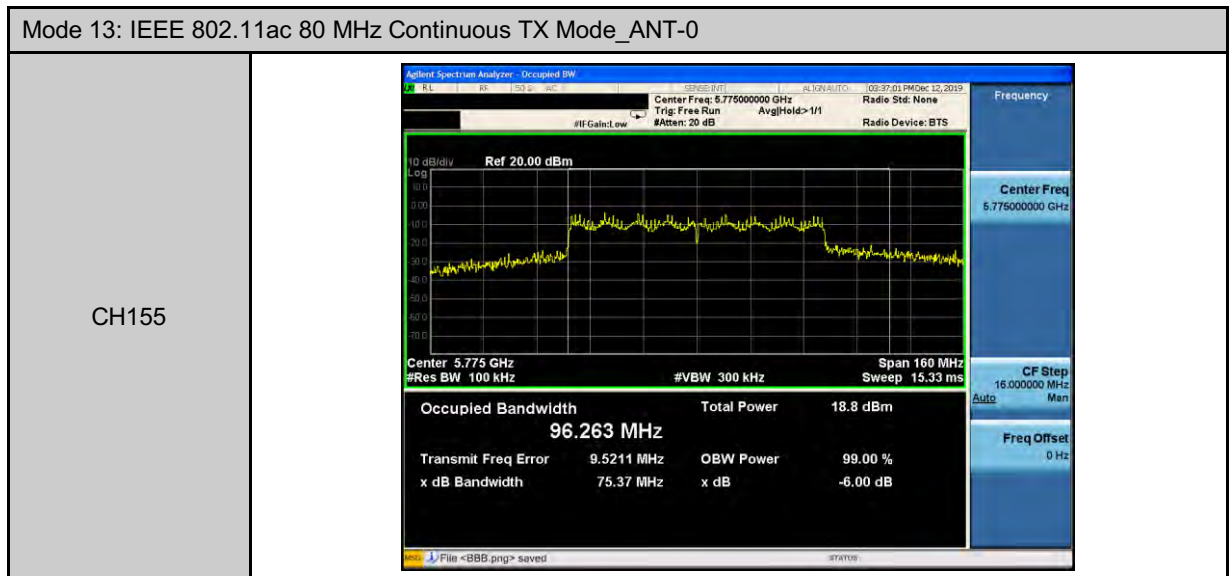


CH165



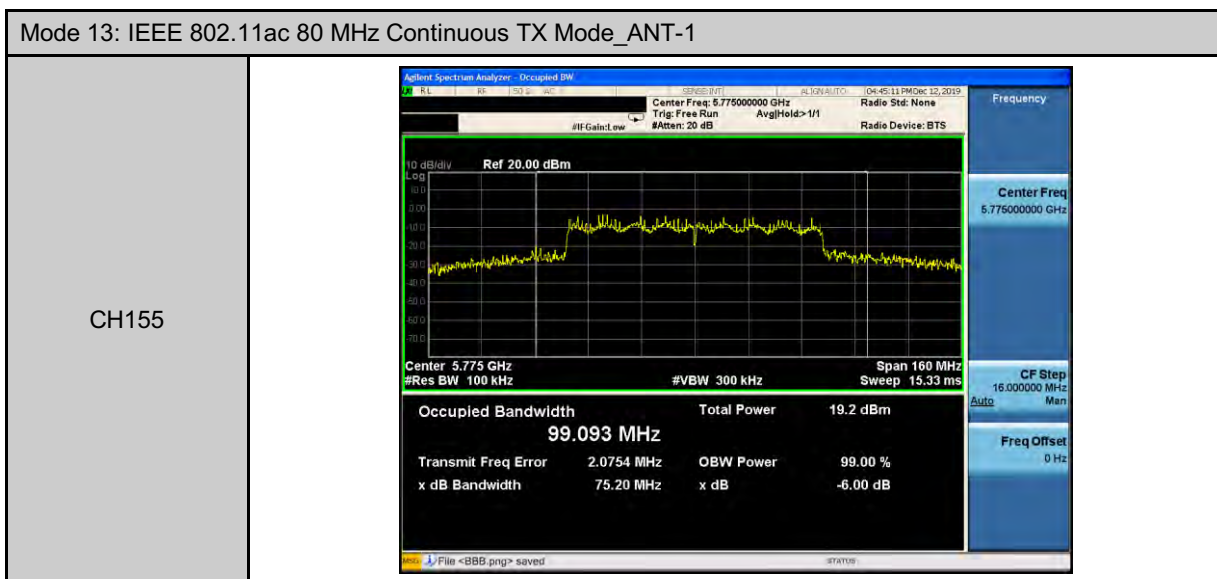
Mode 11: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-0	
CH149	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.745000000 GHz Trig: Free Run #Att: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 27.258 MHz Total Power 18.5 dBm Transmit Freq Error 1.1895 MHz OBW Power 99.00 % x dB Bandwidth 16.78 MHz x dB -6.00 dB Frequency Center Freq 5.745000000 GHz CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz File <BBB.png> saved
CH157	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz Trig: Free Run #Att: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 29.680 MHz Total Power 19.4 dBm Transmit Freq Error 780.65 kHz OBW Power 99.00 % x dB Bandwidth 16.01 MHz x dB -6.00 dB Frequency Center Freq 5.785000000 GHz CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz File <BBB.png> saved
CH165	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Trig: Free Run #Att: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 28.461 MHz Total Power 18.1 dBm Transmit Freq Error 780.31 kHz OBW Power 99.00 % x dB Bandwidth 16.81 MHz x dB -6.00 dB Frequency Center Freq 5.825000000 GHz CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz File <BBB.png> saved





Mode 11: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-1	
CH149	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.745000000 GHz Trig: Free Run #Att: 20 dB Avg/Hold: 1/1 Radio Device: BTS Ref 20.00 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 25.619 MHz Total Power 17.7 dBm Transmit Freq Error 203.62 kHz OBW Power 99.00 % x dB Bandwidth 16.22 MHz x dB -6.00 dB Center Freq 5.745000000 GHz CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz
CH157	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz Trig: Free Run #Att: 20 dB Avg/Hold: 1/1 Radio Device: BTS Ref 20.00 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 23.205 MHz Total Power 17.5 dBm Transmit Freq Error 277.15 kHz OBW Power 99.00 % x dB Bandwidth 16.52 MHz x dB -6.00 dB Center Freq 5.785000000 GHz CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz
CH165	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Trig: Free Run #Att: 20 dB Avg/Hold: 1/1 Radio Device: BTS Ref 20.00 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 24.979 MHz Total Power 18.1 dBm Transmit Freq Error 221.86 kHz OBW Power 99.00 % x dB Bandwidth 16.91 MHz x dB -6.00 dB Center Freq 5.825000000 GHz CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz





Beamforming on

Mode 11: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-0

CH149



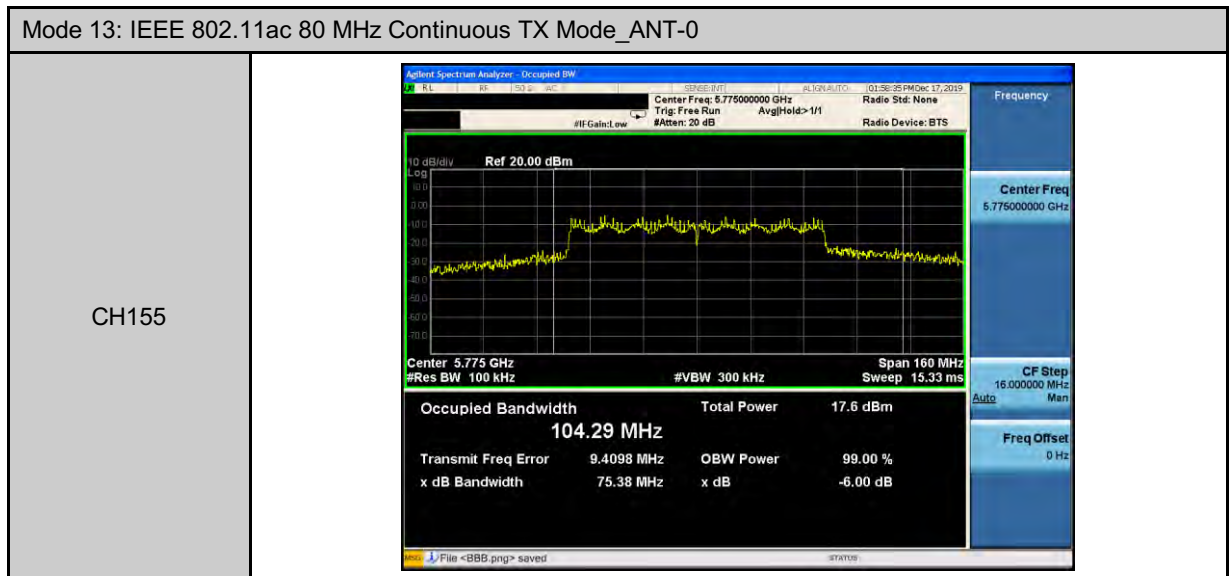
CH157

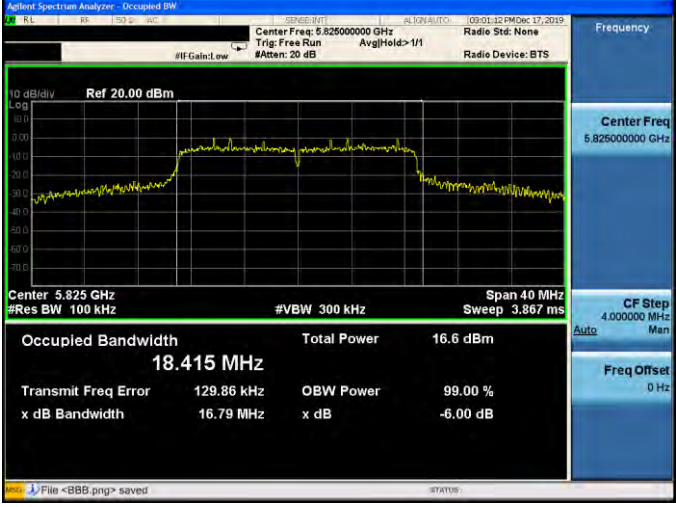


CH165

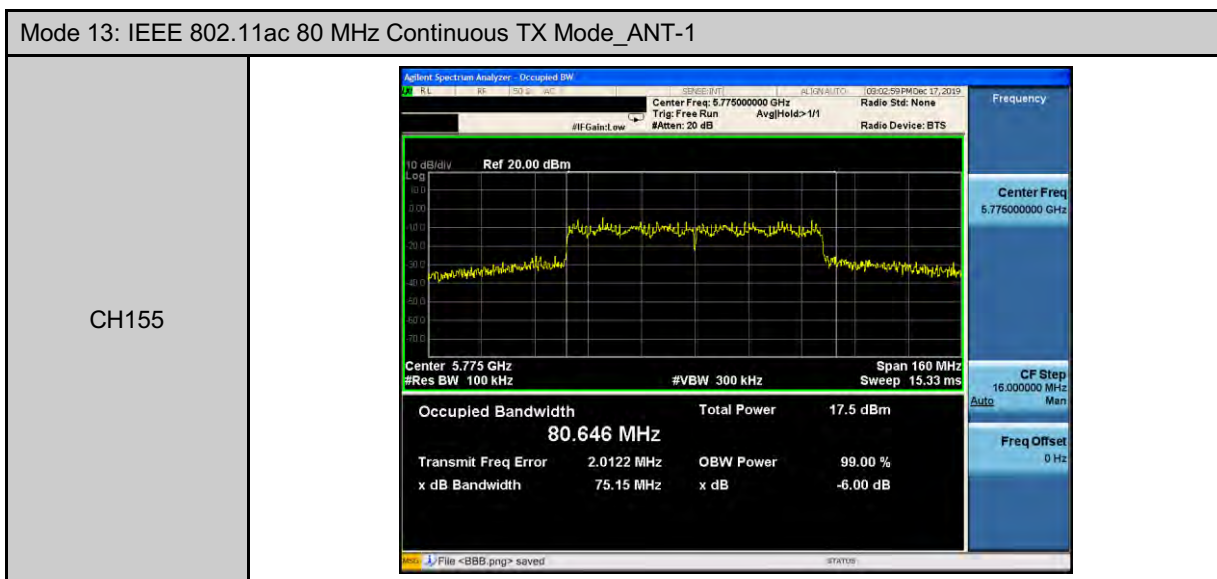






Mode 11: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-1	
CH149	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.745000000 GHz Trig: Free Run #Attenu: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 18.783 MHz Total Power 15.9 dBm Transmit Freq Error 13.915 kHz OBW Power 99.00 % x dB Bandwidth 16.53 MHz x dB -6.00 dB Frequency Center Freq 5.745000000 GHz CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz File <BBB.png> saved
CH157	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz Trig: Free Run #Attenu: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 20.044 MHz Total Power 16.4 dBm Transmit Freq Error 253.87 kHz OBW Power 99.00 % x dB Bandwidth 16.55 MHz x dB -6.00 dB Frequency Center Freq 5.785000000 GHz CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz File <BBB.png> saved
CH165	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Trig: Free Run #Attenu: 20 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref 20.00 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 18.415 MHz Total Power 16.6 dBm Transmit Freq Error 129.86 kHz OBW Power 99.00 % x dB Bandwidth 16.79 MHz x dB -6.00 dB Frequency Center Freq 5.825000000 GHz CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz File <BBB.png> saved





4.3.6 天線規格之要求

合格標準：

據 NCC 低功率射頻電機技術規範(LP0002)之 4.7.8 節之要求，天線之規格不受第 2.2 節規定之限制

判定結果：

符合。

Antenna	製造商	型號	型態	增益值(dBi)
				5 GHz
ANT-0	WIESON	GY197HT632-003	Monopole Antenna	1.71
ANT-1	WIESON	GY197HT632-003	Monopole Antenna	-0.23

4.3.7 電波暴露量之評估

合格標準:

若受測物於正常操作模式下，其發射機距離人體 20 公分以上者，可測試最大暴露允許值(Maximum Permissible Exposure, MPE)以證明其符合電波暴露量之要求。限制值如下：

5.20.2.1 職業性/可控制之暴露

頻率範圍 (MHz)	電場強度 (V/m)	磁場強度 (A/m)	功率密度 (mW/cm ²)	平均時間 (minutes)
0.3~3.0	614	1.63	*100	6
3~30	1842/f	4.89/f	*900/f ²	6
30~300	61.4	0.163	1.0	6
300~1,500	-----	-----	f/300	6
1,500~100,000	-----	-----	5.0	6

註 1：標記*表平面波等效功率密度。

註 2：f 表測試頻率，單位：MHz。

5.20.2.2 一般人/不可控制之暴露

頻率範圍 (MHz)	電場強度 (V/m)	磁場強度 (A/m)	功率密度 (mW/cm ²)	平均時間 (minutes)
0.3~1.34	614	1.63	*100	30
1.34~30	824/f	2.19/f	*180/f ²	30
30~300	27.5	0.073	0.2	30
300~1,500	-----	-----	f/1500	30
1,500~100,000	-----	-----	1.0	30

註 1：標記*表平面波等效功率密度。

註 2：f 表測試頻率，單位：MHz。

判定結果:

Band	Frequency (MHz)	Limit (mW/cm ²)	Distance [R] (cm)	Power [P] (dBm)	ANT Gain (dBi)	Numeric Gain [G] (dBi)	Duty Cycle	Power Density [S] (mW/cm ²)
WLAN 2.4 GHz	2402~2462	1	20	18.71	4.13	2.59	1	0.0383
WLAN 5 GHz	5180~5825	1	20	18.92	3.80	2.4	1	0.0372

--- END---