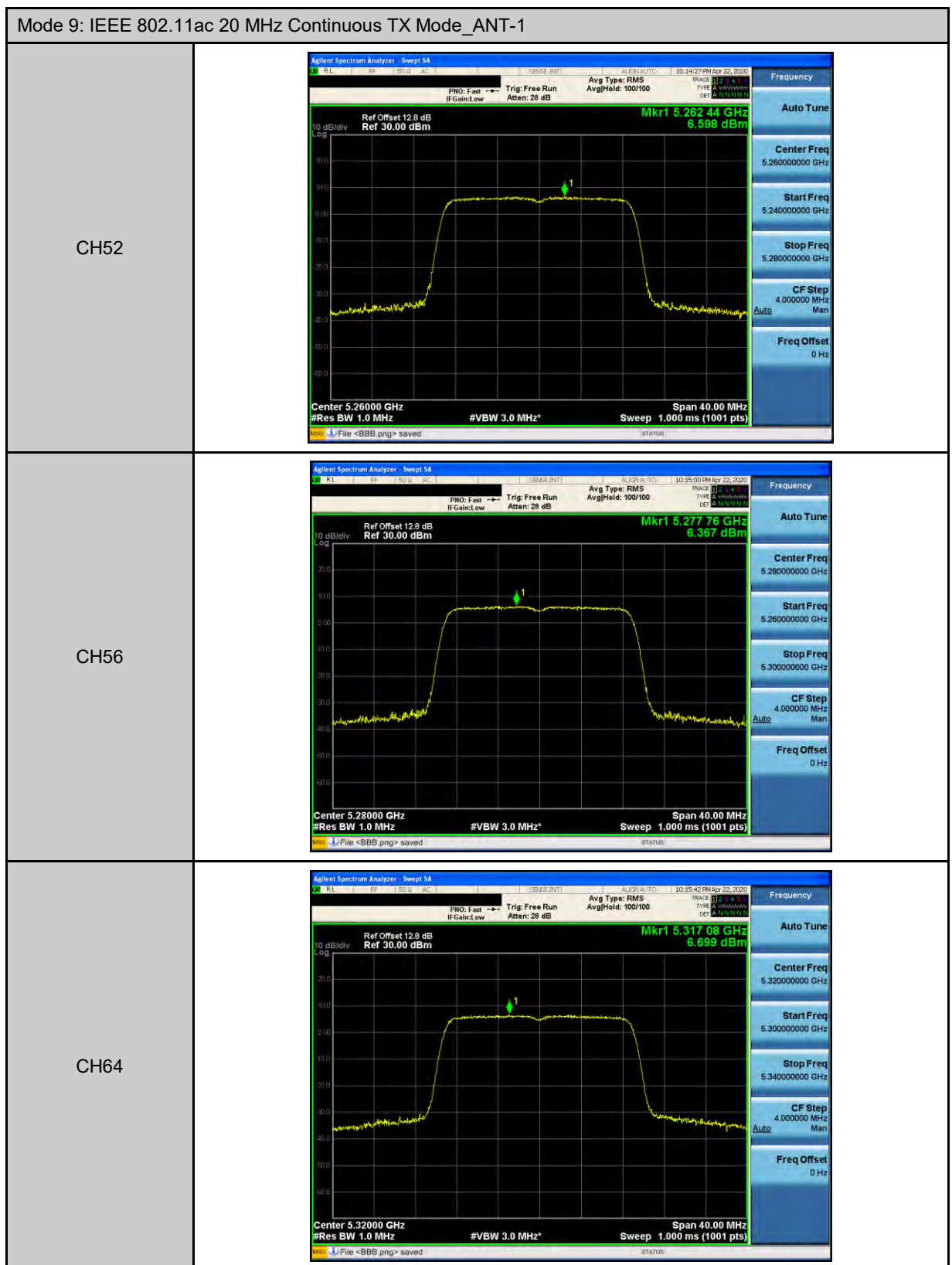
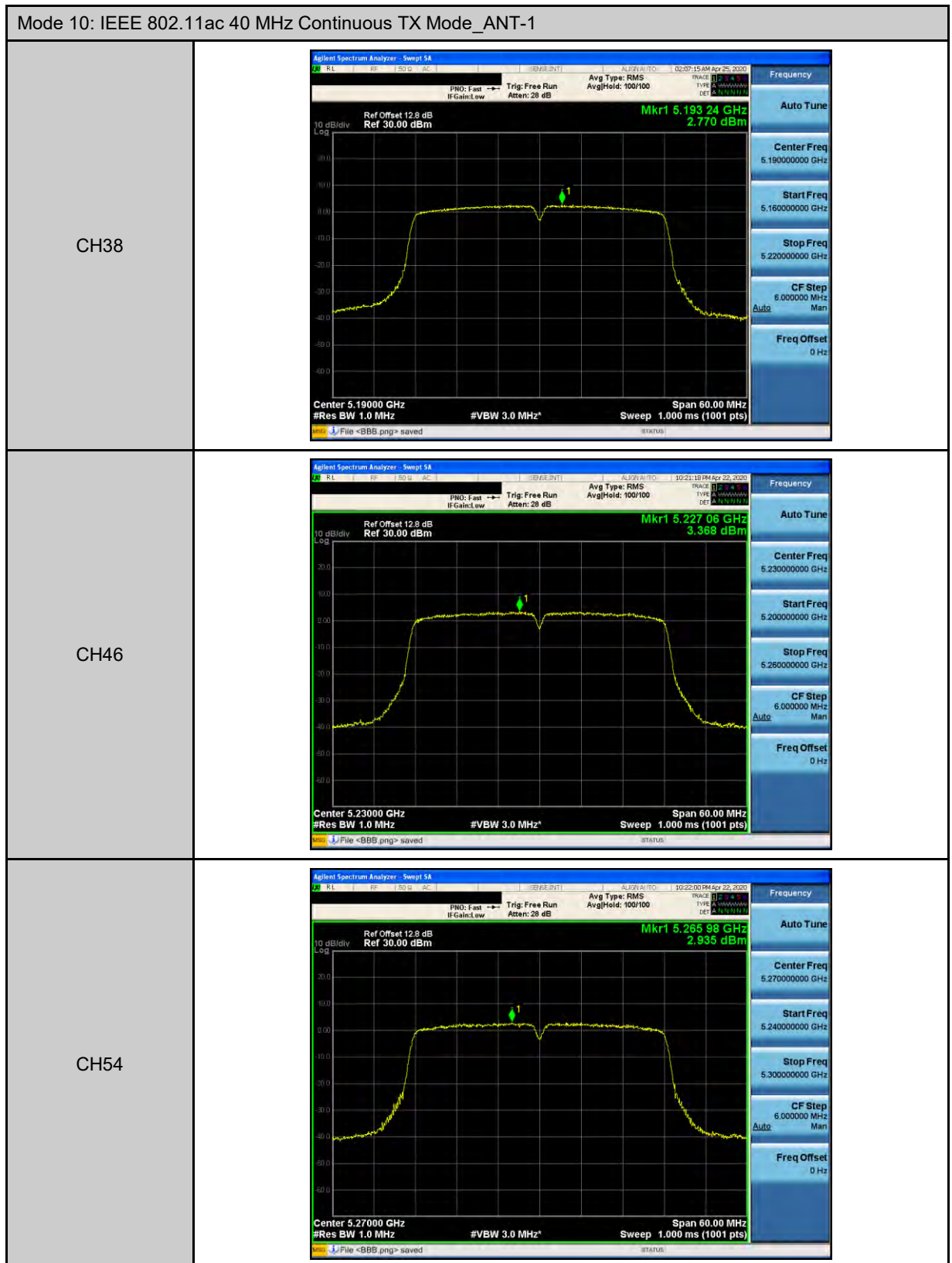
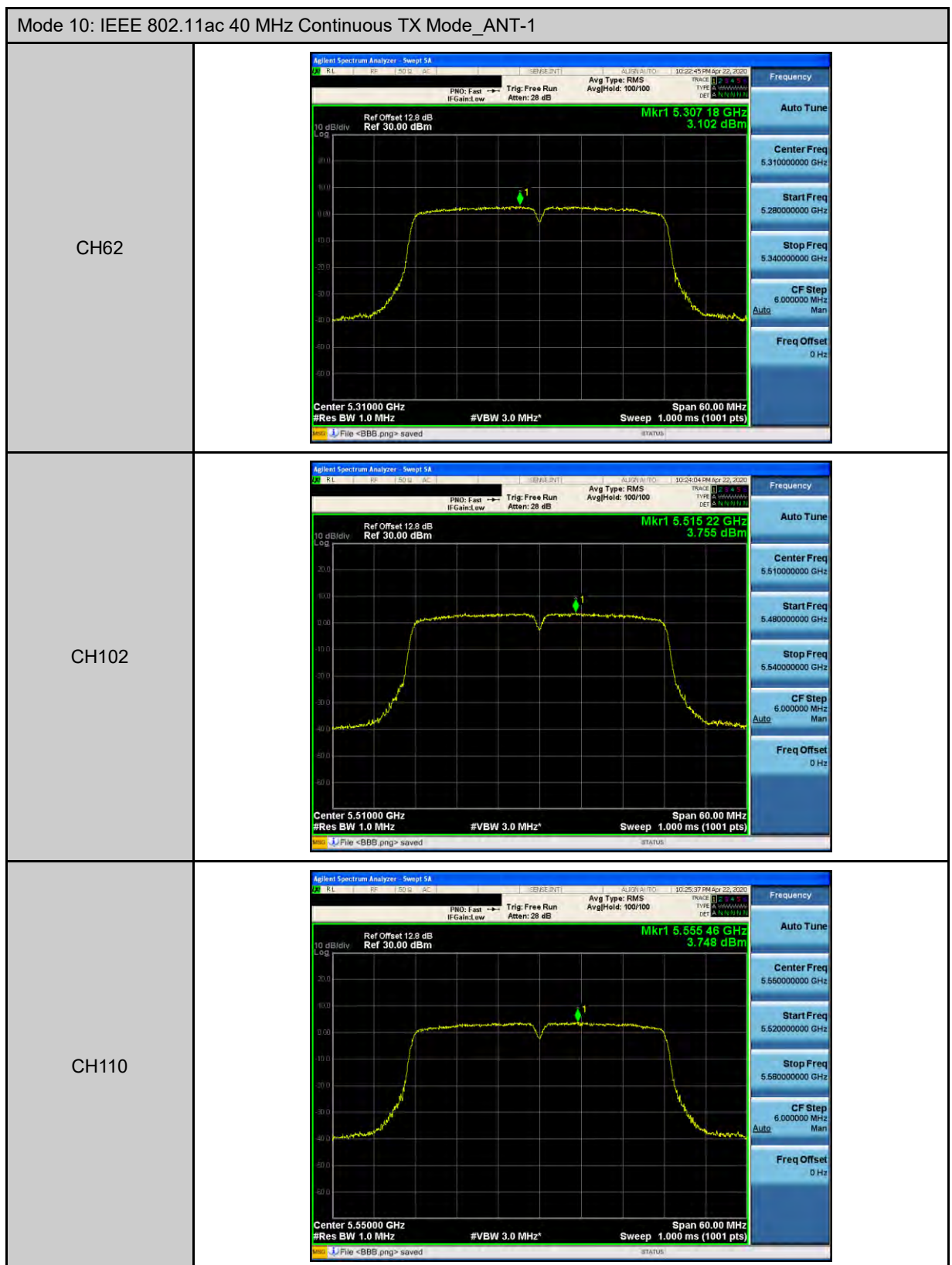


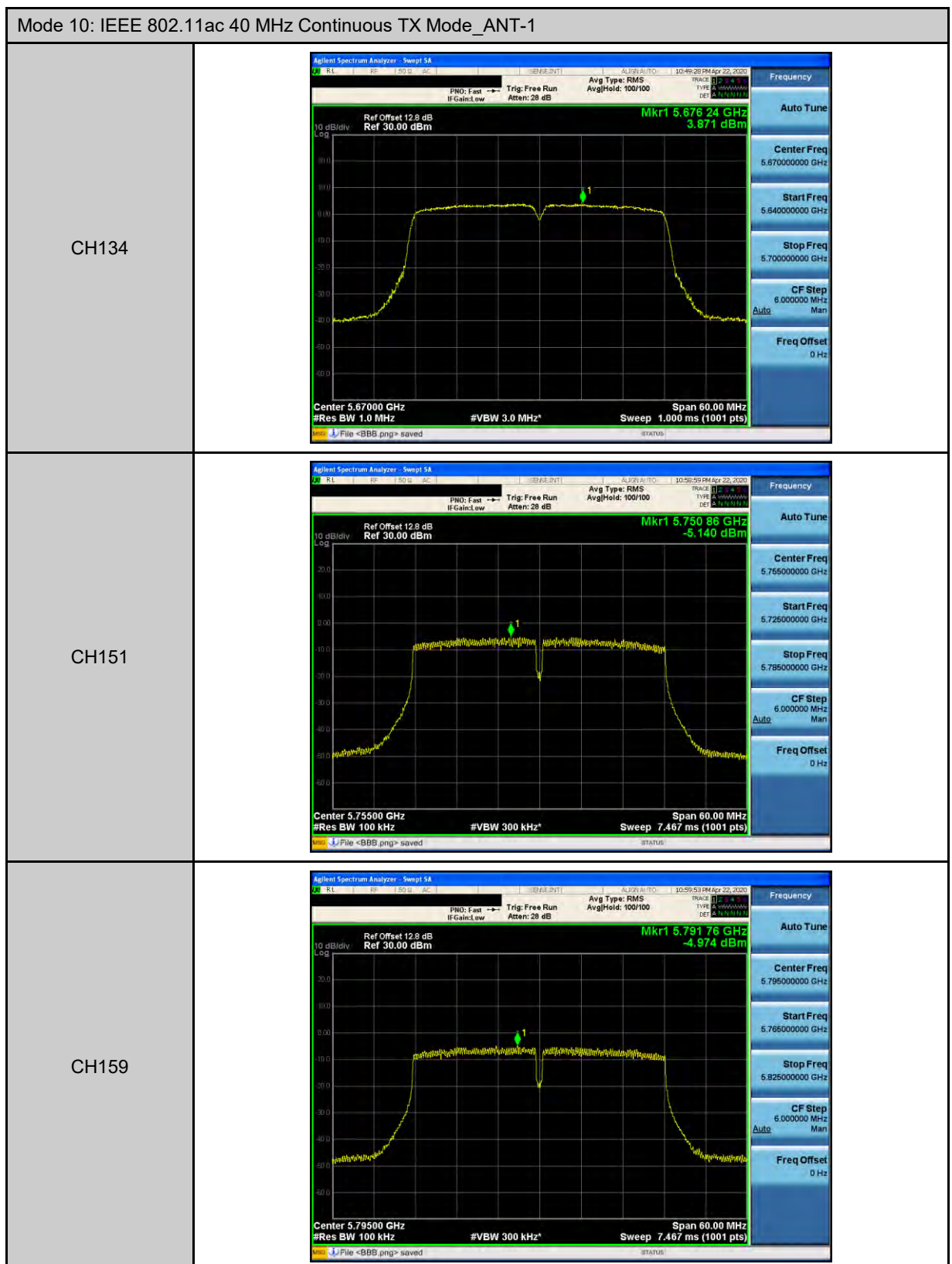


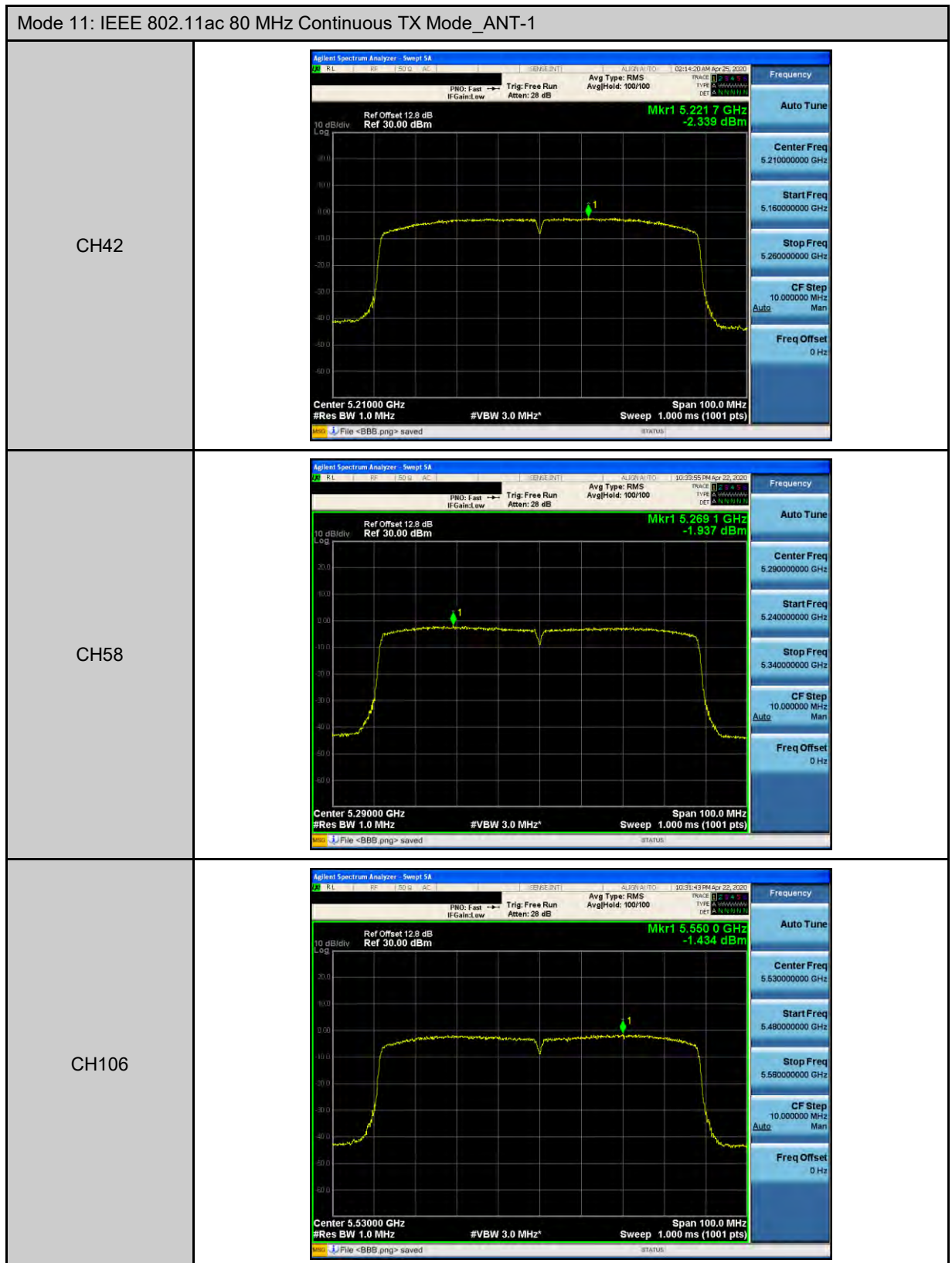


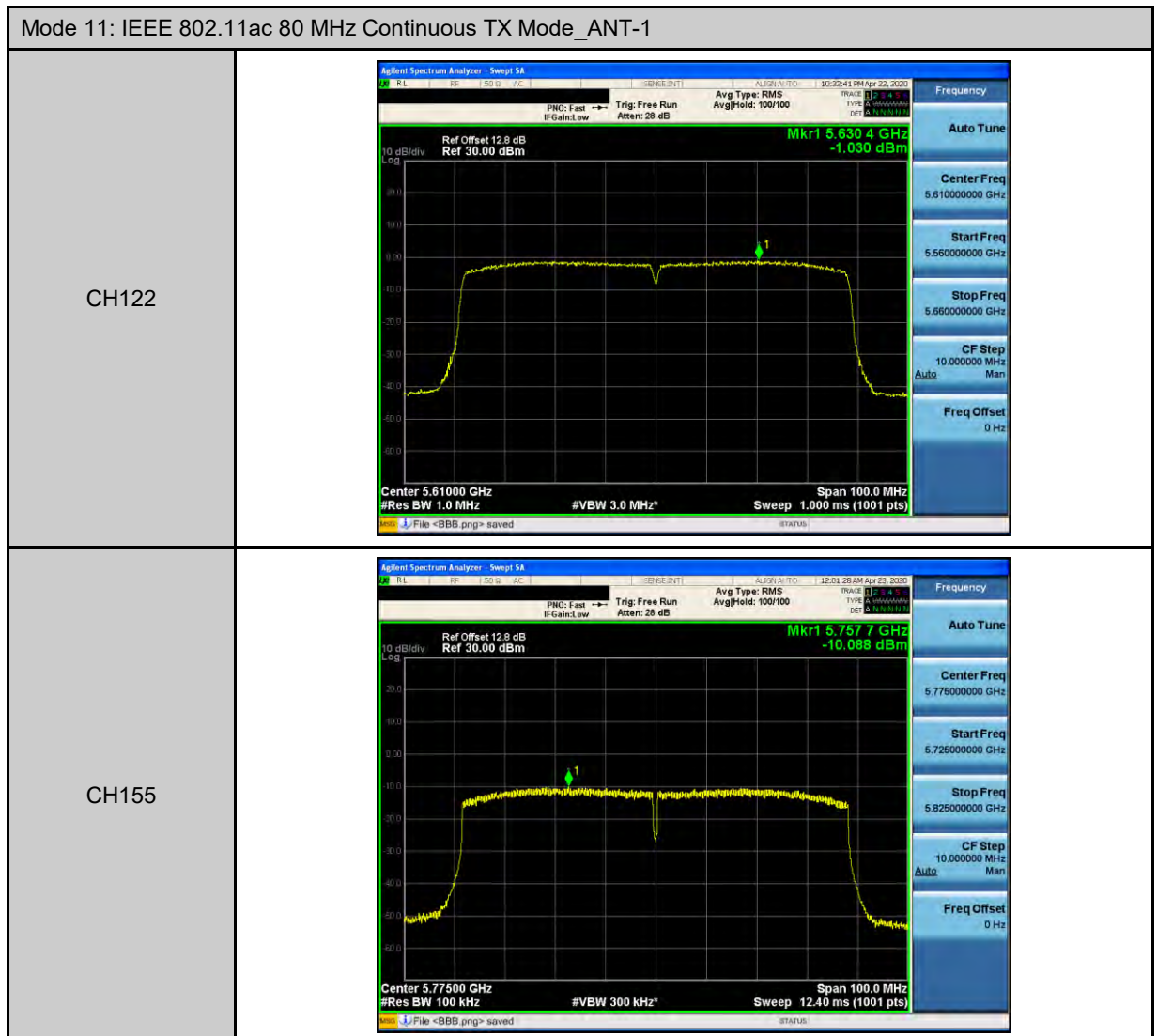










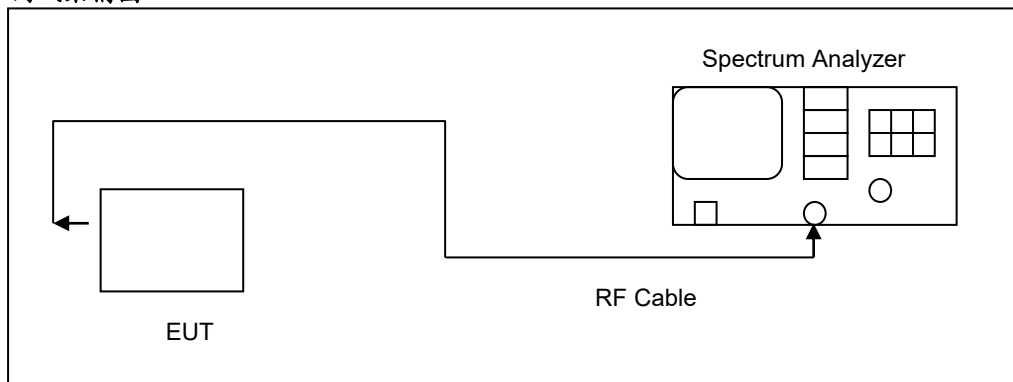


4.3.4 26 dB頻寬之要求

合格標準:

N/A

測試架構圖：



測試結果:

操作模式	: Mode 6 / Mode 7 / Mode 8 / Mode 9 / Mode 10 / Mode 11
------	---

操作模式	頻道 (CH)	頻率 (MHz)	26 dB 頻寬量測值 (MHz)	
			ANT-0	ANT-1
Mode 6	36	5180.0	18.740	18.550
	40	5200.0	18.770	18.490
	48	5240.0	18.730	20.840
	52	5260.0	18.720	20.900
	56	5280.0	18.730	18.510
	64	5320.0	18.750	19.900
	100	5500.0	18.740	21.040
	112	5560.0	18.680	21.130
	140	5700.0	18.740	21.300
Mode 7	52	5260.0	24.480	29.910
	56	5280.0	25.580	29.130
	64	5320.0	25.540	22.340
	100	5500.0	25.680	29.170
	112	5560.0	24.380	28.570
	140	5700.0	25.310	35.300
Mode 8	54	5270.0	43.660	42.160
	62	5310.0	44.100	42.570
	102	5510.0	44.500	46.100
	110	5550.0	48.110	46.960
	134	5670.0	51.790	43.420
Mode 9	36	5180.0	19.530	19.600
	40	5200.0	19.550	19.600
	48	5240.0	19.600	19.610
	52	5260.0	19.650	19.610
	56	5280.0	19.610	19.600
	64	5320.0	19.600	19.620
	100	5500.0	19.580	19.610
	112	5560.0	19.540	19.510
	140	5700.0	19.630	19.580

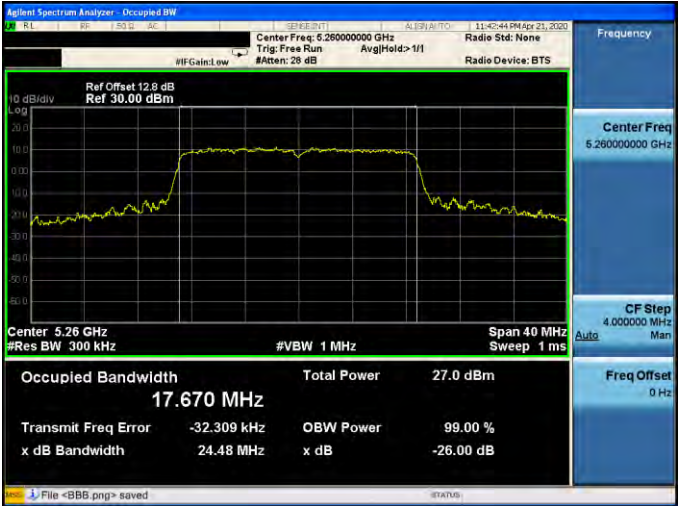
操作模式	: Mode 6 / Mode 7 / Mode 8 / Mode 9 / Mode 10 / Mode 11
------	---

操作模式	頻道 (CH)	頻率 (MHz)	26 dB 頻寬量測值 (MHz)	
			ANT-0	ANT-1
Mode 10	38	5190.0	42.080	42.260
	46	5230.0	42.110	42.460
	54	5270.0	42.060	42.190
	62	5310.0	42.370	42.230
	102	5510.0	42.110	42.090
	110	5550.0	42.230	42.190
	134	5670.0	42.000	42.280
Mode 11	42	5210.0	81.970	82.070
	58	5290.0	81.300	81.400
	106	5530.0	81.270	82.010
	122	5610.0	81.970	81.220

Mode 6: IEEE 802.11a Continuous TX Mode_ANT-0	
CH36	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz, Span: 40 MHz, Sweep: 1 ms Occupied Bandwidth: 16.406 MHz, Total Power: 23.9 dBm Transmit Freq Error: -71.187 kHz, OBW Power: 99.00 % x dB Bandwidth: 18.74 MHz, x dB: -26.00 dB
CH40	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz, Span: 40 MHz, Sweep: 1 ms Occupied Bandwidth: 16.417 MHz, Total Power: 24.1 dBm Transmit Freq Error: -69.006 kHz, OBW Power: 99.00 % x dB Bandwidth: 18.77 MHz, x dB: -26.00 dB
CH48	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz, Span: 40 MHz, Sweep: 1 ms Occupied Bandwidth: 16.420 MHz, Total Power: 24.1 dBm Transmit Freq Error: -72.330 kHz, OBW Power: 99.00 % x dB Bandwidth: 18.73 MHz, x dB: -26.00 dB

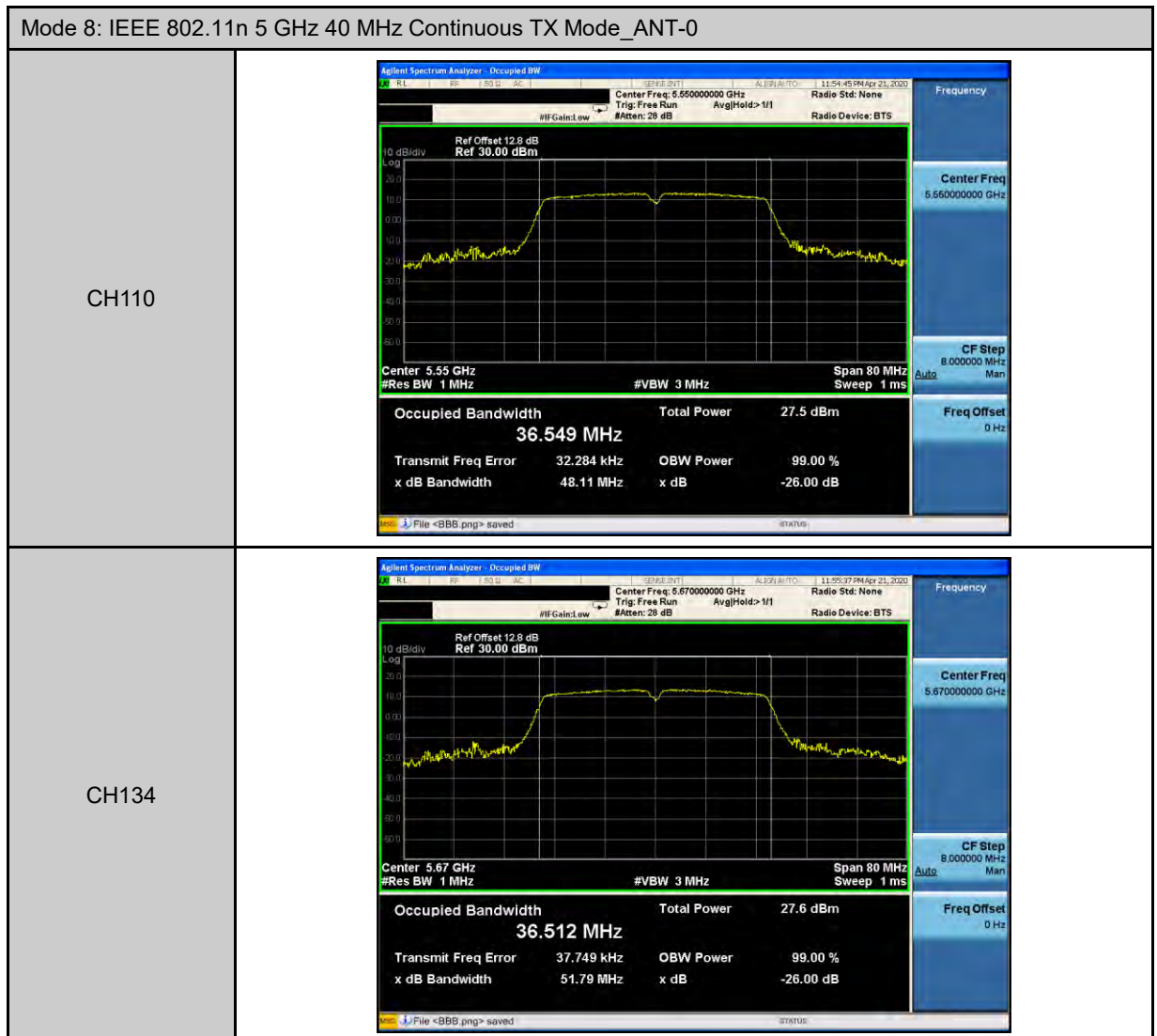
Mode 6: IEEE 802.11a Continuous TX Mode_ANT-0	
CH52	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.260000000 GHz, Span: 40 MHz, Sweep: 1 ms Occupied Bandwidth: 16.419 MHz, Total Power: 23.9 dBm Transmit Freq Error: -71.948 kHz, OBW Power: 99.00 % x dB Bandwidth: 18.72 MHz, x dB: -26.00 dB
CH56	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.280000000 GHz, Span: 40 MHz, Sweep: 1 ms Occupied Bandwidth: 16.421 MHz, Total Power: 23.8 dBm Transmit Freq Error: -76.220 kHz, OBW Power: 99.00 % x dB Bandwidth: 18.73 MHz, x dB: -26.00 dB
CH64	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.320000000 GHz, Span: 40 MHz, Sweep: 1 ms Occupied Bandwidth: 16.421 MHz, Total Power: 23.7 dBm Transmit Freq Error: -67.604 kHz, OBW Power: 99.00 % x dB Bandwidth: 18.75 MHz, x dB: -26.00 dB

Mode 6: IEEE 802.11a Continuous TX Mode_ANT-0	
CH100	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.50000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 20.00 dBm Center: 5.5 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 16.421 MHz Total Power: 24.0 dBm Transmit Freq Error: -64.375 kHz OBW Power: 99.00 % x dB Bandwidth: 18.74 MHz x dB: -26.00 dB Center Freq: 5.50000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz File <BBB.png> saved
CH112	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.56000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 20.00 dBm Center: 5.56 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 16.427 MHz Total Power: 24.7 dBm Transmit Freq Error: -71.151 kHz OBW Power: 99.00 % x dB Bandwidth: 18.68 MHz x dB: -26.00 dB Center Freq: 5.56000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz File <BBB.png> saved
CH140	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.70000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 20.00 dBm Center: 5.7 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 16.429 MHz Total Power: 24.9 dBm Transmit Freq Error: -83.514 kHz OBW Power: 99.00 % x dB Bandwidth: 18.74 MHz x dB: -26.00 dB Center Freq: 5.70000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz File <BBB.png> saved

Mode 7: IEEE 802.11n 5 GHz 20 MHz Continuous TX Mode_ANT-0	
CH52	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.260000000 GHz Trig: Free Run #Atten: 28 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.26 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.670 MHz Total Power: 27.0 dBm Transmit Freq Error: -32.309 kHz OBW Power: 99.00 % x dB Bandwidth: 24.48 MHz x dB: -26.00 dB Center Freq: 5.260000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz File <BBB.png> saved
CH56	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.280000000 GHz Trig: Free Run #Atten: 28 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.28 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.645 MHz Total Power: 26.6 dBm Transmit Freq Error: -40.139 kHz OBW Power: 99.00 % x dB Bandwidth: 25.58 MHz x dB: -26.00 dB Center Freq: 5.280000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz File <BBB.png> saved
CH64	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.320000000 GHz Trig: Free Run #Atten: 28 dB Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.32 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.642 MHz Total Power: 26.2 dBm Transmit Freq Error: -33.253 kHz OBW Power: 99.00 % x dB Bandwidth: 25.54 MHz x dB: -26.00 dB Center Freq: 5.320000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz File <BBB.png> saved

Mode 7: IEEE 802.11n 5 GHz 20 MHz Continuous TX Mode_ANT-0	
CH100	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.50000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.5 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.653 MHz Total Power: 26.8 dBm Transmit Freq Error: -22.849 kHz OBW Power: 99.00 % x dB Bandwidth: 25.68 MHz x dB: -26.00 dB Frequency: Center Freq: 5.50000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz
CH112	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.56000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.56 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.659 MHz Total Power: 27.1 dBm Transmit Freq Error: -35.751 kHz OBW Power: 99.00 % x dB Bandwidth: 24.38 MHz x dB: -26.00 dB Frequency: Center Freq: 5.56000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz
CH140	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.70000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.7 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.672 MHz Total Power: 27.6 dBm Transmit Freq Error: -35.976 kHz OBW Power: 99.00 % x dB Bandwidth: 25.31 MHz x dB: -26.00 dB Frequency: Center Freq: 5.70000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz

Mode 8: IEEE 802.11n 5 GHz 40 MHz Continuous TX Mode_ANT-0	
CH54	
CH62	
CH102	



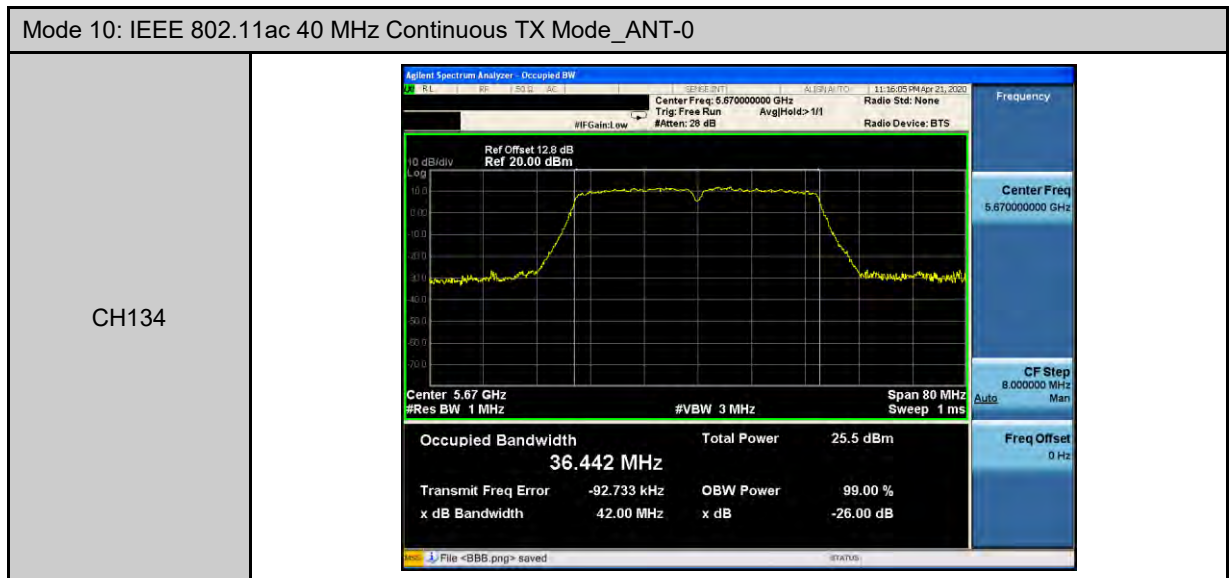
Mode 9: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-0	
CH36	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.180000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 20.00 dBm Center: 5.18 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.691 MHz Total Power: 25.3 dBm Transmit Freq Error: -14.805 kHz OBW Power: 99.00 % x dB Bandwidth: 19.53 MHz x dB: -26.00 dB Center Freq: 5.180000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz
CH40	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.200000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 20.00 dBm Center: 5.2 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.692 MHz Total Power: 24.6 dBm Transmit Freq Error: -26.478 kHz OBW Power: 99.00 % x dB Bandwidth: 19.55 MHz x dB: -26.00 dB Center Freq: 5.200000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz
CH48	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.240000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 20.00 dBm Center: 5.24 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.680 MHz Total Power: 24.8 dBm Transmit Freq Error: -16.027 kHz OBW Power: 99.00 % x dB Bandwidth: 19.60 MHz x dB: -26.00 dB Center Freq: 5.240000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz

Mode 9: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-0	
CH52	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.260000000 GHz, Span: 40 MHz, Sweep: 1 ms Ref Offset: 12.8 dB, Ref: 20.00 dBm Occupied Bandwidth: 17.678 MHz Total Power: 24.6 dBm Transmit Freq Error: -31.042 kHz x dB Bandwidth: 19.65 MHz
CH56	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.280000000 GHz, Span: 40 MHz, Sweep: 1 ms Ref Offset: 12.8 dB, Ref: 20.00 dBm Occupied Bandwidth: 17.668 MHz Total Power: 24.5 dBm Transmit Freq Error: -29.530 kHz x dB Bandwidth: 19.61 MHz
CH64	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.320000000 GHz, Span: 40 MHz, Sweep: 1 ms Ref Offset: 12.8 dB, Ref: 20.00 dBm Occupied Bandwidth: 17.682 MHz Total Power: 24.0 dBm Transmit Freq Error: -28.191 kHz x dB Bandwidth: 19.60 MHz

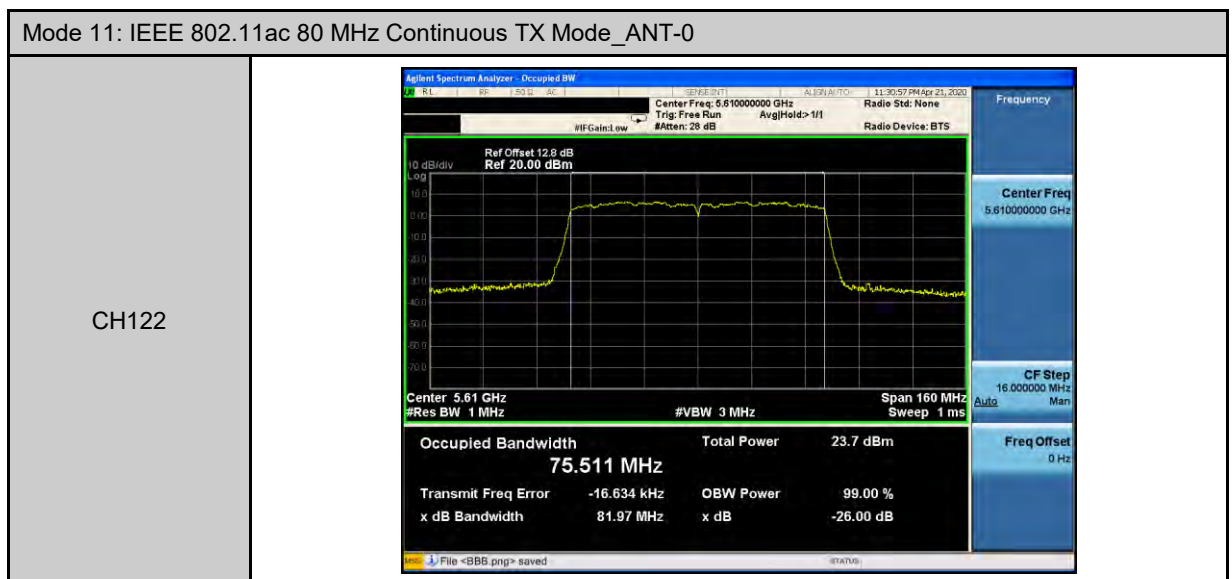
Mode 9: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-0	
CH100	
CH112	
CH140	

Mode 10: IEEE 802.11ac 40 MHz Continuous TX Mode_ANT-0	
CH38	
CH46	
CH54	

Mode 10: IEEE 802.11ac 40 MHz Continuous TX Mode_ANT-0	
CH62	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.31000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 20.00 dBm Center 5.31 GHz #Res BW 1 MHz #VBW 3 MHz Span 80 MHz Sweep 1 ms Occupied Bandwidth 36.469 MHz Total Power 24.3 dBm Transmit Freq Error -101.60 kHz OBW Power 99.00 % x dB Bandwidth 42.37 MHz x dB -26.00 dB File <BBB.png> saved STATUS
CH102	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.51000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 20.00 dBm Center 5.51 GHz #Res BW 1 MHz #VBW 3 MHz Span 80 MHz Sweep 1 ms Occupied Bandwidth 36.457 MHz Total Power 24.7 dBm Transmit Freq Error -52.978 kHz OBW Power 99.00 % x dB Bandwidth 42.11 MHz x dB -26.00 dB File <BBB.png> saved STATUS
CH110	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.55000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 20.00 dBm Center 5.55 GHz #Res BW 1 MHz #VBW 3 MHz Span 80 MHz Sweep 1 ms Occupied Bandwidth 36.431 MHz Total Power 25.4 dBm Transmit Freq Error -34.197 kHz OBW Power 99.00 % x dB Bandwidth 42.23 MHz x dB -26.00 dB File <BBB.png> saved STATUS



Mode 11: IEEE 802.11ac 80 MHz Continuous TX Mode_ANT-0	
CH42	
CH58	
CH106	



Mode 6: IEEE 802.11a Continuous TX Mode_ANT-1	
CH36	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.180000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.18 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 16.411 MHz Total Power: 25.6 dBm Transmit Freq Error: -65.738 kHz OBW Power: 99.00 % x dB Bandwidth: 18.55 MHz x dB: -26.00 dB Frequency: Center Freq: 5.180000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz
CH40	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.200000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.2 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 16.420 MHz Total Power: 25.3 dBm Transmit Freq Error: -63.581 kHz OBW Power: 99.00 % x dB Bandwidth: 18.49 MHz x dB: -26.00 dB Frequency: Center Freq: 5.200000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz
CH48	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.240000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.24 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 16.422 MHz Total Power: 25.5 dBm Transmit Freq Error: -55.332 kHz OBW Power: 99.00 % x dB Bandwidth: 20.84 MHz x dB: -26.00 dB Frequency: Center Freq: 5.240000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz

Mode 6: IEEE 802.11a Continuous TX Mode_ANT-1	
CH52	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.260000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.26 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 16.427 MHz Total Power: 25.4 dBm Transmit Freq Error: -53.917 kHz OBW Power: 99.00 % x dB Bandwidth: 20.90 MHz x dB: -26.00 dB Frequency: Center Freq: 5.260000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz
CH56	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.280000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.28 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 16.425 MHz Total Power: 25.2 dBm Transmit Freq Error: -64.817 kHz OBW Power: 99.00 % x dB Bandwidth: 18.51 MHz x dB: -26.00 dB Frequency: Center Freq: 5.280000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz
CH64	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.320000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.32 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 16.423 MHz Total Power: 25.3 dBm Transmit Freq Error: -60.738 kHz OBW Power: 99.00 % x dB Bandwidth: 19.90 MHz x dB: -26.00 dB Frequency: Center Freq: 5.320000000 GHz CF Step: 4.000000 MHz Freq Offset: 0 Hz

Mode 6: IEEE 802.11a Continuous TX Mode_ANT-1	
CH100	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.50000000 GHz, Span: 40 MHz, Res BW: 300 kHz, #VBW: 1 MHz, Sweep: 1 ms Occupied Bandwidth: 16.437 MHz, Total Power: 25.7 dBm, Transmit Freq Error: -61.207 kHz, x dB Bandwidth: 21.04 MHz, OBW Power: 99.00 %, x dB: -26.00 dB
CH112	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.56000000 GHz, Span: 40 MHz, Res BW: 300 kHz, #VBW: 1 MHz, Sweep: 1 ms Occupied Bandwidth: 16.428 MHz, Total Power: 26.0 dBm, Transmit Freq Error: -56.055 kHz, x dB Bandwidth: 21.13 MHz, OBW Power: 99.00 %, x dB: -26.00 dB
CH140	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.70000000 GHz, Span: 40 MHz, Res BW: 300 kHz, #VBW: 1 MHz, Sweep: 1 ms Occupied Bandwidth: 16.433 MHz, Total Power: 26.4 dBm, Transmit Freq Error: -61.913 kHz, x dB Bandwidth: 21.30 MHz, OBW Power: 99.00 %, x dB: -26.00 dB

Mode 7: IEEE 802.11n 5 GHz 20 MHz Continuous TX Mode_ANT-0	
CH52	
CH56	
CH64	

Mode 7: IEEE 802.11n 5 GHz 20 MHz Continuous TX Mode_ANT-0	
CH100	
CH112	
CH140	

Mode 8: IEEE 802.11n 5 GHz 40 MHz Continuous TX Mode_ANT-0	
CH54	
CH62	
CH102	



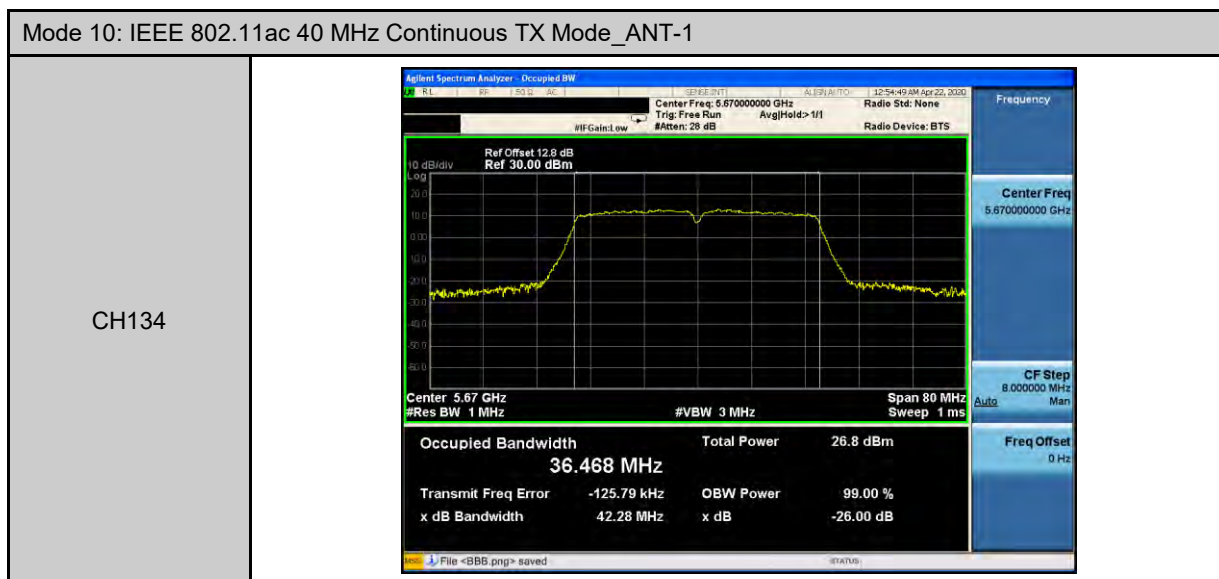
Mode 9: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-1	
CH36	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.180000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.18 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.685 MHz Total Power: 26.1 dBm Transmit Freq Error: -35.969 kHz OBW Power: 99.00 % x dB Bandwidth: 19.60 MHz x dB: -26.00 dB File <BBB.png> saved
CH40	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.200000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.2 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.712 MHz Total Power: 26.0 dBm Transmit Freq Error: -35.050 kHz OBW Power: 99.00 % x dB Bandwidth: 19.60 MHz x dB: -26.00 dB File <BBB.png> saved
CH48	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.240000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.24 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.689 MHz Total Power: 25.7 dBm Transmit Freq Error: -26.593 kHz OBW Power: 99.00 % x dB Bandwidth: 19.61 MHz x dB: -26.00 dB File <BBB.png> saved

Mode 9: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-1	
CH52	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.260000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.26 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.687 MHz Total Power: 26.0 dBm Transmit Freq Error: -26.217 kHz OBW Power: 99.00 % x dB Bandwidth: 19.61 MHz x dB: -26.00 dB File <BBB.png> saved
CH56	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.280000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.28 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.697 MHz Total Power: 26.0 dBm Transmit Freq Error: -22.874 kHz OBW Power: 99.00 % x dB Bandwidth: 19.60 MHz x dB: -26.00 dB File <BBB.png> saved
CH64	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.320000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.32 GHz #Res BW: 300 kHz #VBW: 1 MHz Span: 40 MHz Sweep: 1 ms Occupied Bandwidth: 17.667 MHz Total Power: 25.6 dBm Transmit Freq Error: -40.777 kHz OBW Power: 99.00 % x dB Bandwidth: 19.62 MHz x dB: -26.00 dB File <BBB.png> saved

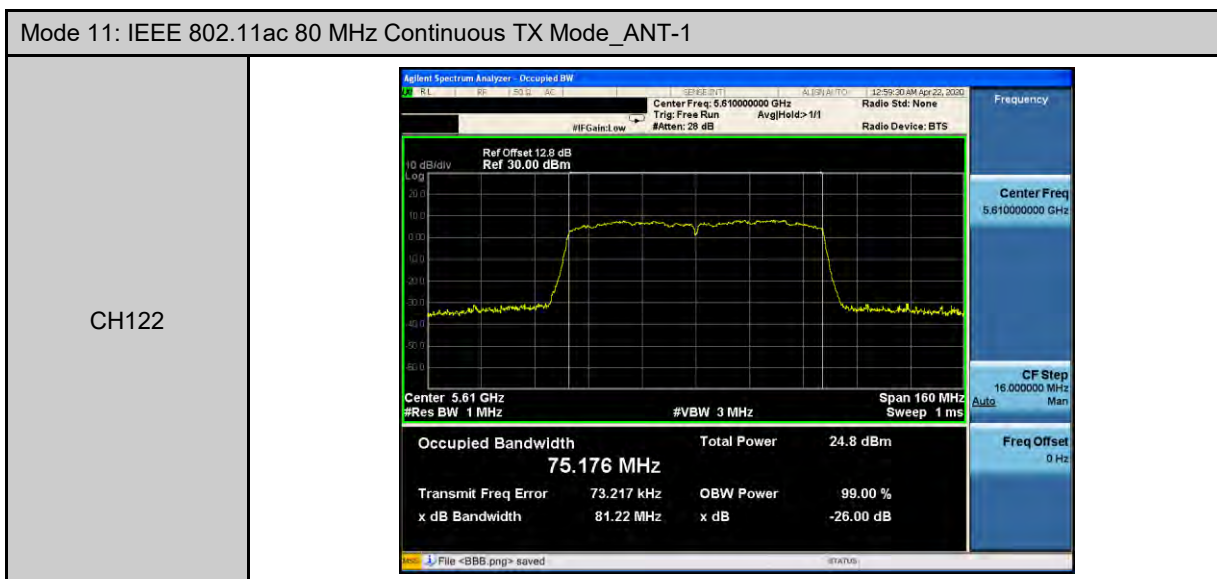
Mode 9: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-1	
CH100	
CH112	
CH140	

Mode 10: IEEE 802.11ac 40 MHz Continuous TX Mode_ANT-1	
CH38	
CH46	
CH54	

Mode 10: IEEE 802.11ac 40 MHz Continuous TX Mode_ANT-1	
CH62	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.31000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.31 GHz #Res BW: 1 MHz #VBW: 3 MHz Span: 80 MHz Sweep: 1 ms Occupied Bandwidth: 36.436 MHz Total Power: 25.7 dBm Transmit Freq Error: -51.413 kHz OBW Power: 99.00 % x dB Bandwidth: 42.23 MHz x dB: -26.00 dB File <BBB.png> saved
CH102	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.51000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.51 GHz #Res BW: 1 MHz #VBW: 3 MHz Span: 80 MHz Sweep: 1 ms Occupied Bandwidth: 36.449 MHz Total Power: 26.2 dBm Transmit Freq Error: -78.378 kHz OBW Power: 99.00 % x dB Bandwidth: 42.09 MHz x dB: -26.00 dB File <BBB.png> saved
CH110	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.55000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm Center: 5.55 GHz #Res BW: 1 MHz #VBW: 3 MHz Span: 80 MHz Sweep: 1 ms Occupied Bandwidth: 36.484 MHz Total Power: 26.5 dBm Transmit Freq Error: -67.801 kHz OBW Power: 99.00 % x dB Bandwidth: 42.19 MHz x dB: -26.00 dB File <BBB.png> saved



Mode 11: IEEE 802.11ac 80 MHz Continuous TX Mode_ANT-1	
CH42	
CH58	
CH106	

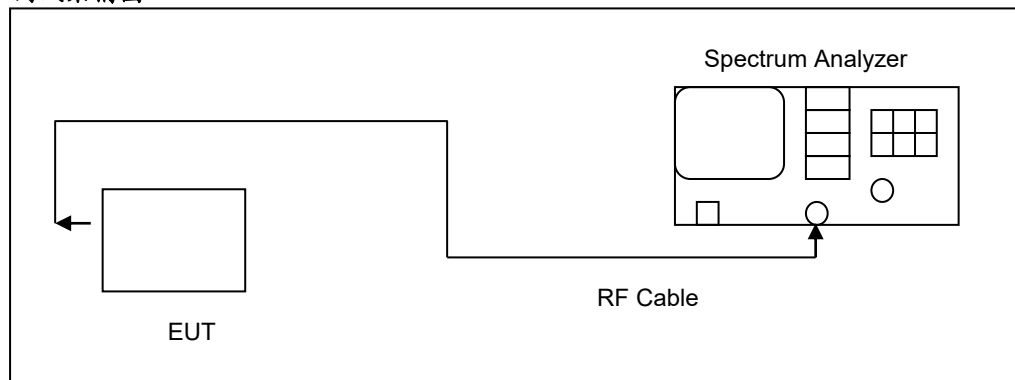


4.3.5 6 dB頻寬之要求

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：

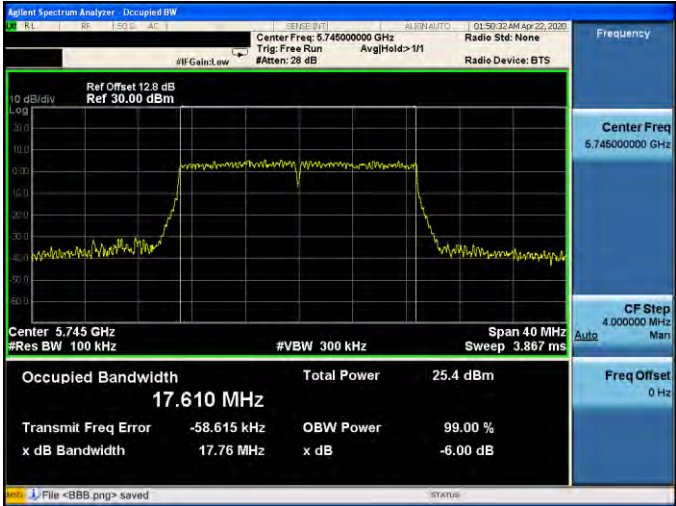
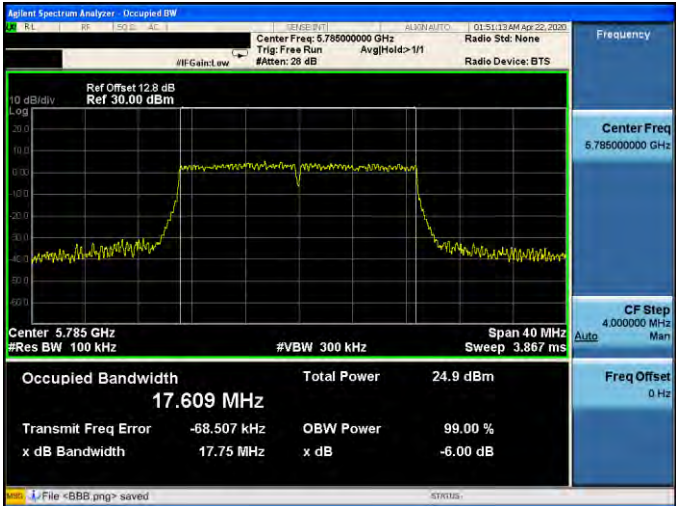
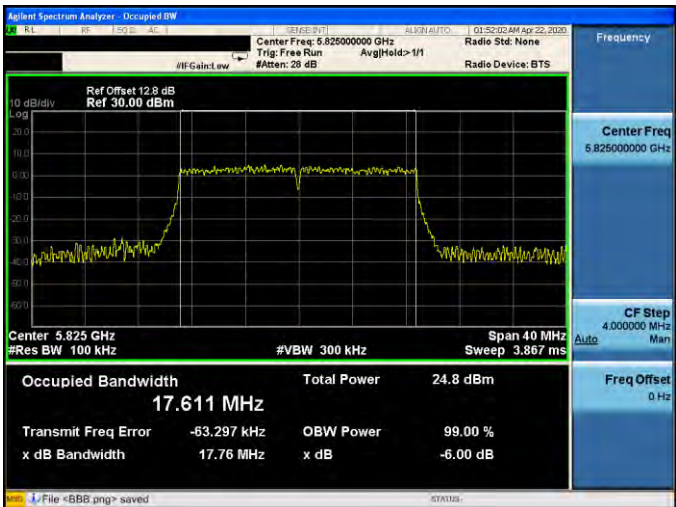


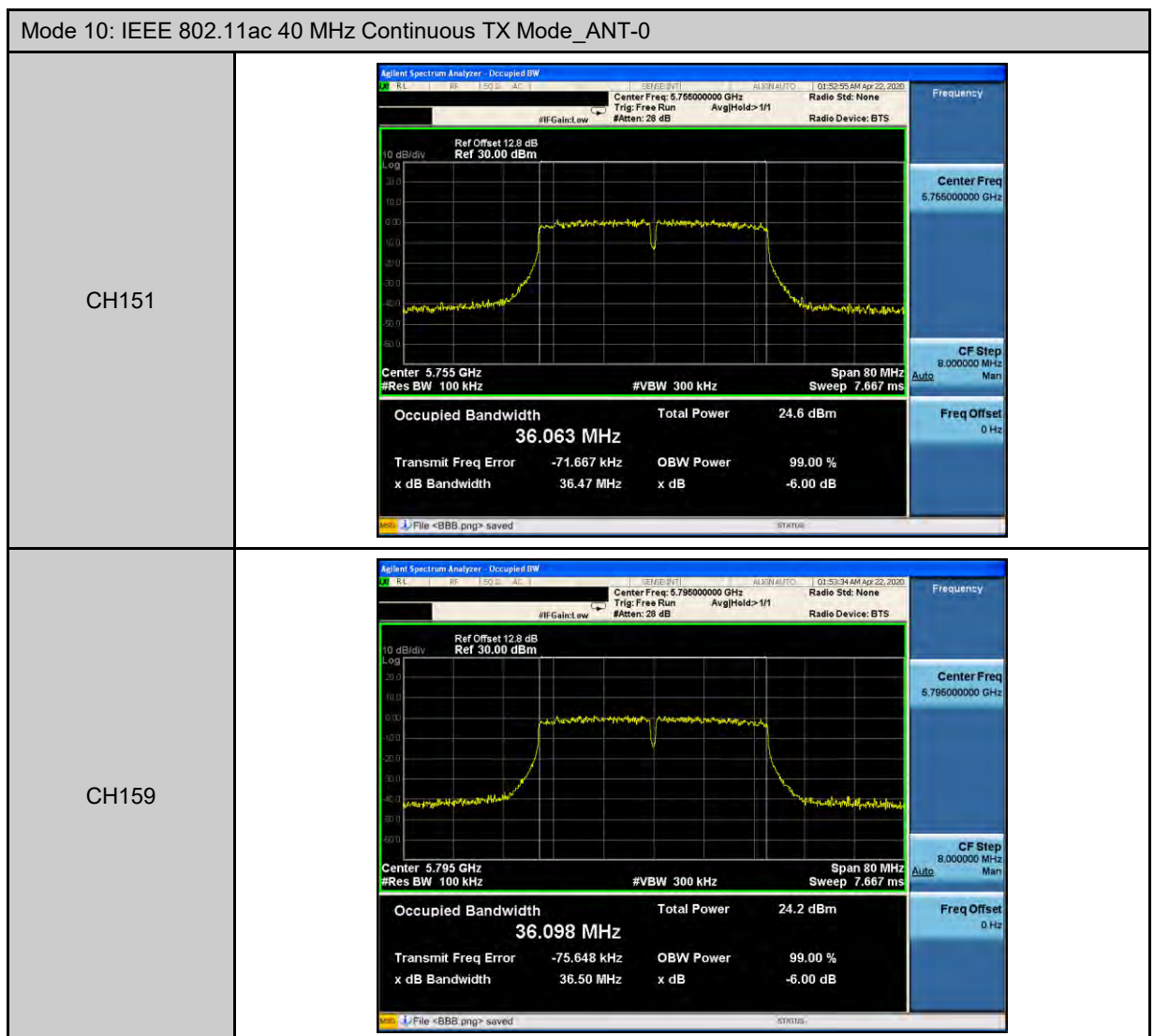
測試結果:

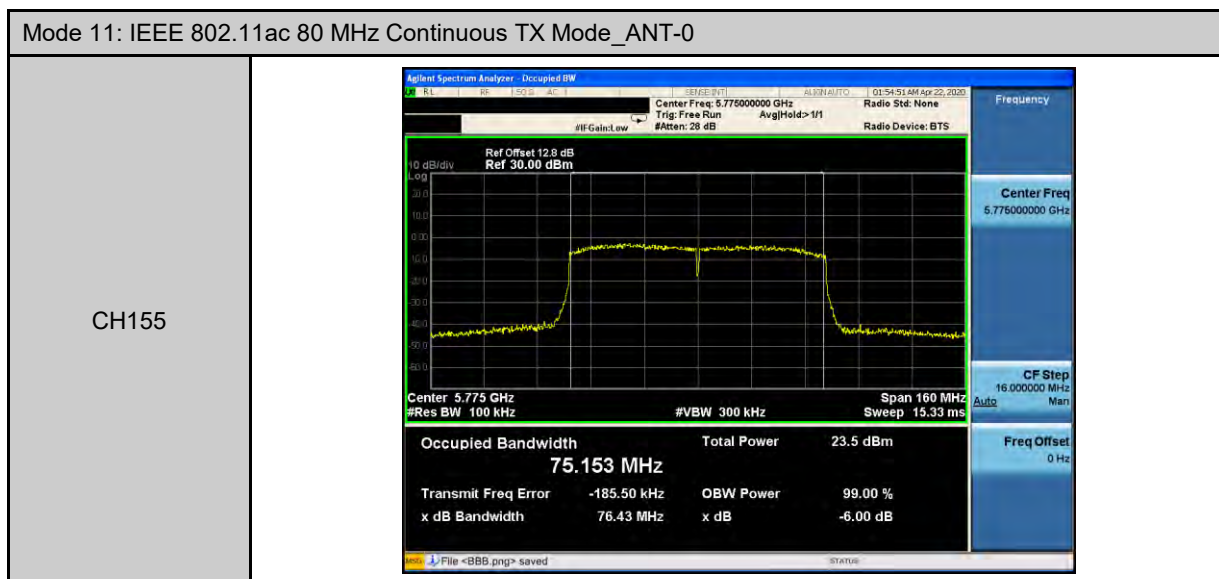
操作模式	: Mode 6 / Mode 9 / Mode 10 / Mode 11
------	---------------------------------------

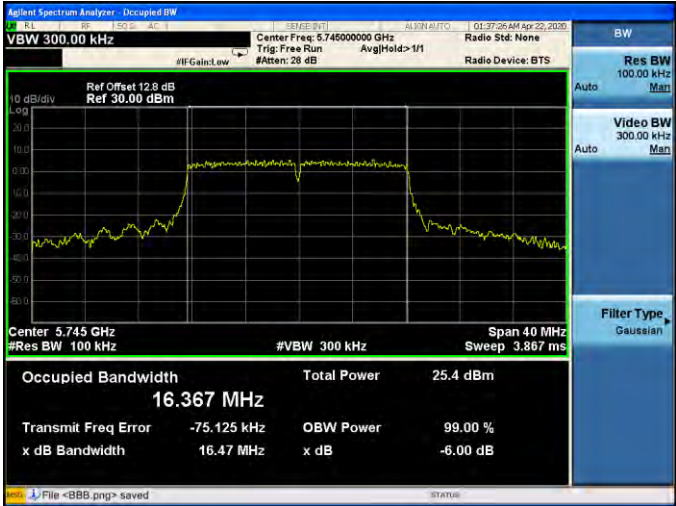
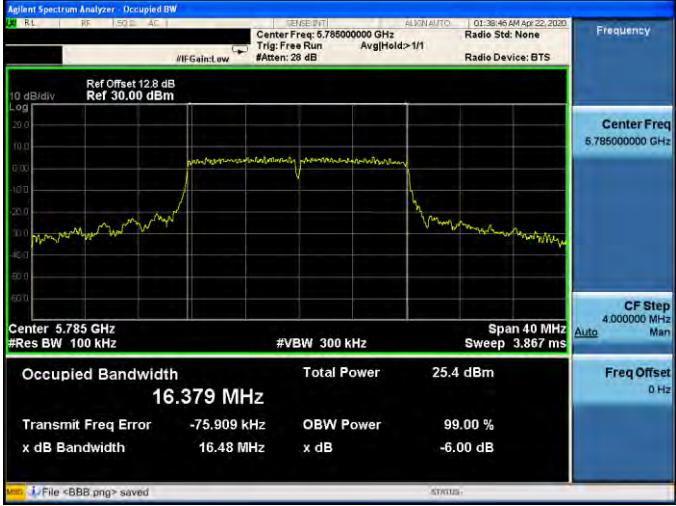
操作模式	頻道 (CH)	頻率 (MHz)	6 dB 頻寬量測值 (kHz)	限制值 (kHz)
			ANT-0	
Mode 6	149	5745.0	16520	≥ 500
	157	5785.0	16520	≥ 500
	165	5825.0	16510	≥ 500
Mode 9	149	5745.0	17760	≥ 500
	157	5785.0	17750	≥ 500
	165	5825.0	17760	≥ 500
Mode 10	151	5755.0	36470	≥ 500
	159	5795.0	36500	≥ 500
Mode 11	155	5775.0	76430	≥ 500
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 6	149	5745.0	16470	≥ 500
	157	5785.0	16480	≥ 500
	165	5825.0	16470	≥ 500
Mode 9	149	5745.0	17760	≥ 500
	157	5785.0	17760	≥ 500
	165	5825.0	17750	≥ 500
Mode 10	151	5755.0	36480	≥ 500
	159	5795.0	36470	≥ 500
Mode 11	155	5775.0	76400	≥ 500

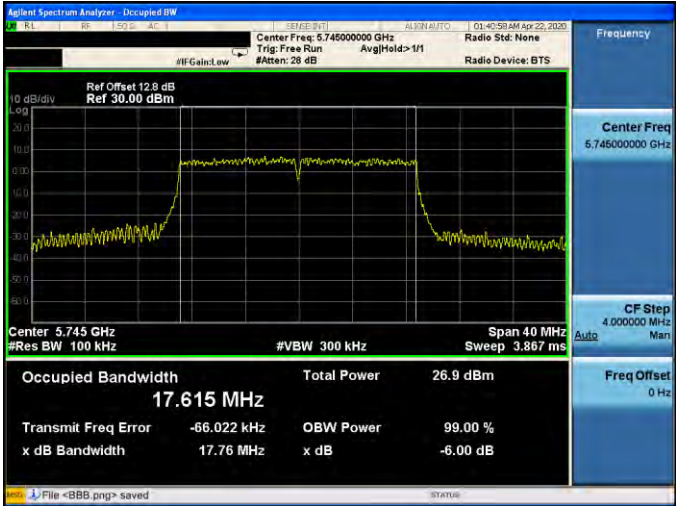
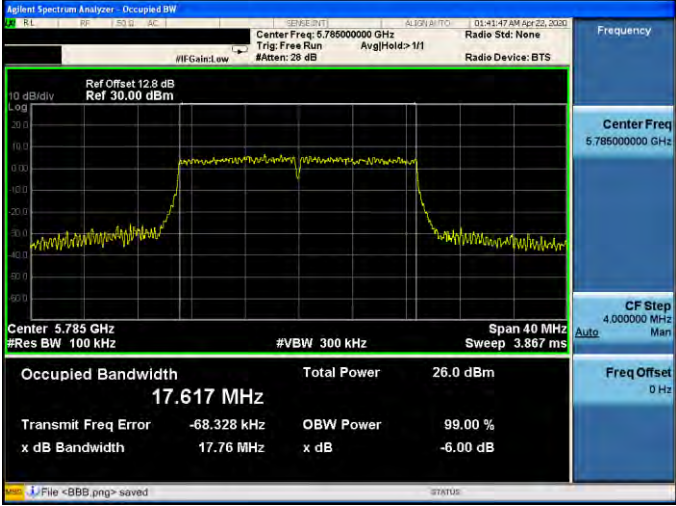
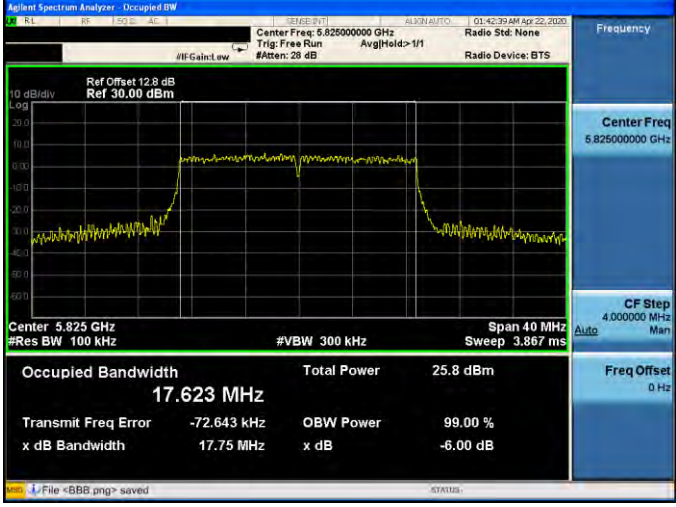
Mode 6: IEEE 802.11a Continuous TX Mode_ANT-0	
CH149	
CH157	
CH165	

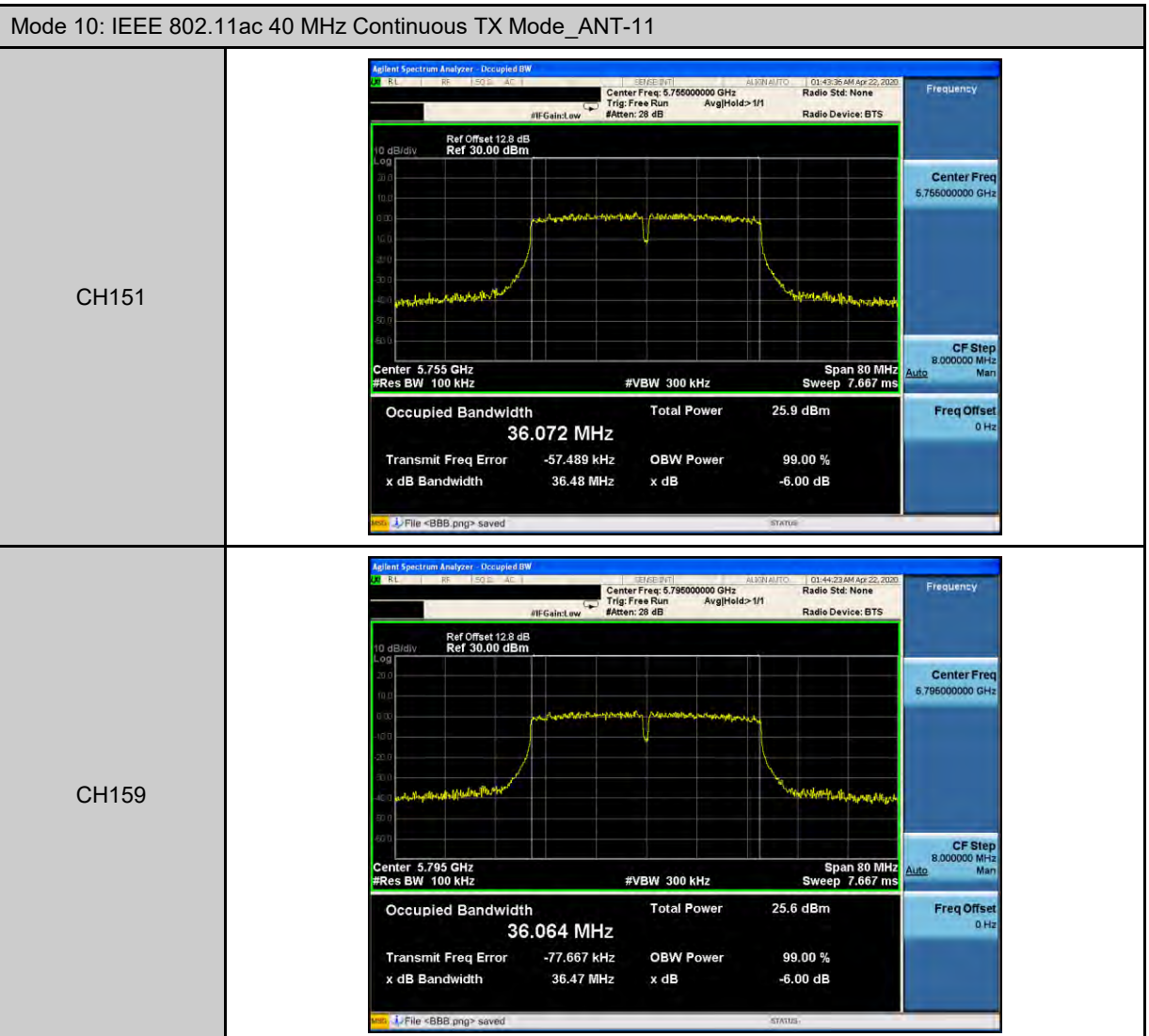
Mode 9: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-0	
CH149	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.745000000 GHz Trig: Free Run Avg/Hold: > 1/1 Radio Std: None Radio Device: BTS Ref Offset 12.8 dB Ref 30.00 dBm Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.610 MHz Total Power 25.4 dBm Transmit Freq Error -58.615 kHz OBW Power 99.00 % x dB Bandwidth 17.76 MHz x dB -6.00 dB File <BBB.png> saved Frequency Center Freq 5.745000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz
CH157	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz Trig: Free Run Avg/Hold: > 1/1 Radio Std: None Radio Device: BTS Ref Offset 12.8 dB Ref 30.00 dBm Center 5.785 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.609 MHz Total Power 24.9 dBm Transmit Freq Error -68.507 kHz OBW Power 99.00 % x dB Bandwidth 17.75 MHz x dB -6.00 dB File <BBB.png> saved Frequency Center Freq 5.785000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz
CH165	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Trig: Free Run Avg/Hold: > 1/1 Radio Std: None Radio Device: BTS Ref Offset 12.8 dB Ref 30.00 dBm Center 5.825 GHz #Res BW 100 kHz #VBW 300 kHz Span 40 MHz Sweep 3.867 ms Occupied Bandwidth 17.611 MHz Total Power 24.8 dBm Transmit Freq Error -63.297 kHz OBW Power 99.00 % x dB Bandwidth 17.76 MHz x dB -6.00 dB File <BBB.png> saved Frequency Center Freq 5.825000000 GHz CF Step 4.000000 MHz Freq Offset 0 Hz

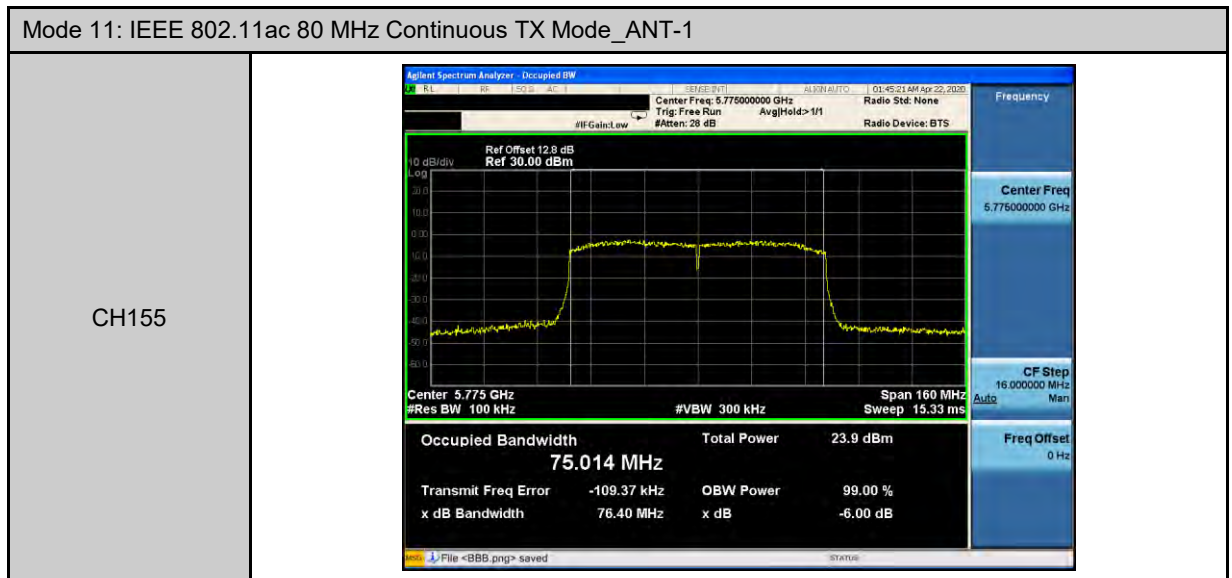




Mode 6: IEEE 802.11a Continuous TX Mode_ANT-1	
CH149	 Agilent Spectrum Analyzer - Occupied BW VBW 300.00 kHz Center Freq: 5.745000000 GHz Ref Offset 12.8 dB Ref 30.00 dBm Span 40 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 3.867 ms Occupied Bandwidth 16.367 MHz Total Power 25.4 dBm Transmit Freq Error -75.125 kHz OBW Power 99.00 % x dB Bandwidth 16.47 MHz x dB -6.00 dB Filter Type Gaussian File <BBB.png> saved
CH157	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz Ref Offset 12.8 dB Ref 30.00 dBm Span 40 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 3.867 ms Occupied Bandwidth 16.379 MHz Total Power 25.4 dBm Transmit Freq Error -75.909 kHz OBW Power 99.00 % x dB Bandwidth 16.48 MHz x dB -6.00 dB File <BBB.png> saved
CH165	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Ref Offset 12.8 dB Ref 30.00 dBm Span 40 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 3.867 ms Occupied Bandwidth 16.384 MHz Total Power 25.1 dBm Transmit Freq Error -73.505 kHz OBW Power 99.00 % x dB Bandwidth 16.47 MHz x dB -6.00 dB File <BBB.png> saved

Mode 9: IEEE 802.11ac 20 MHz Continuous TX Mode_ANT-1	
CH149	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.745000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm 10 dB/div Log Center: 5.745 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 40 MHz Sweep: 3.867 ms Occupied Bandwidth: 17.615 MHz Total Power: 26.9 dBm Transmit Freq Error: -66.022 kHz OBW Power: 99.00 % x dB Bandwidth: 17.76 MHz x dB: -6.00 dB File <BBB.png> saved STATUS
CH157	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.785000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm 10 dB/div Log Center: 5.785 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 40 MHz Sweep: 3.867 ms Occupied Bandwidth: 17.617 MHz Total Power: 26.0 dBm Transmit Freq Error: -68.328 kHz OBW Power: 99.00 % x dB Bandwidth: 17.76 MHz x dB: -6.00 dB File <BBB.png> saved STATUS
CH165	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.825000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None Radio Device: BTS Ref Offset: 12.8 dB Ref: 30.00 dBm 10 dB/div Log Center: 5.825 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 40 MHz Sweep: 3.867 ms Occupied Bandwidth: 17.623 MHz Total Power: 25.8 dBm Transmit Freq Error: -72.643 kHz OBW Power: 99.00 % x dB Bandwidth: 17.75 MHz x dB: -6.00 dB File <BBB.png> saved STATUS



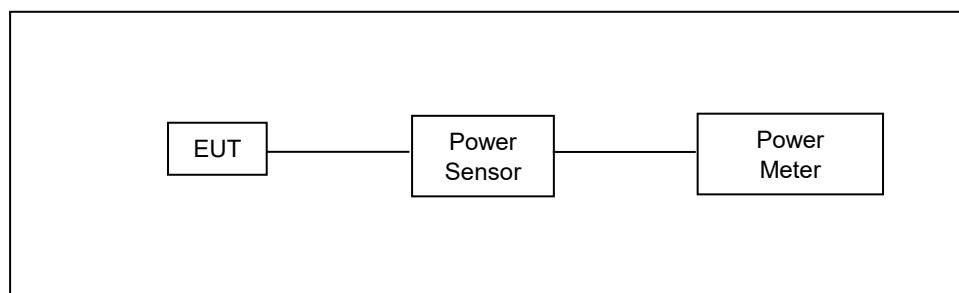


4.3.6 發射功率控制(TPC)之量測

合格標準:

依據 NCC 低功率射頻電機技術規範(LP0002)4.7.7.1 節之要求, 發射功率控制(TPC)操作於 5.25 GHz~5.35 GHz 與 5.470 GHz~5.725 GHz 頻帶的設備, 應具備發射功率控制功能。設備必須至少具有 6 dB 低於平均 EIRP 值 30 dBm 的能力。EIRP 值低於 500 mW 之系統不須具備 TPC 功能。

測試架構圖：



測試結果:

操作模式	: Mode 6 / Mode 7 / Mode 8 / Mode 9 / Mode 10 / Mode 11		
測試結果	Mode 6: EIRP =	214.551 mW	< 500 mW , 故不需評估發射功率控制(TPC)。
	Mode 7: EIRP =	432.049 mW	< 500 mW , 故不需評估發射功率控制(TPC)。
	Mode 8: EIRP =	339.269 mW	< 500 mW , 故不需評估發射功率控制(TPC)。
	Mode 9: EIRP =	436.046 mW	< 500 mW , 故不需評估發射功率控制(TPC)。
	Mode 10: EIRP =	343.582 mW	< 500 mW , 故不需評估發射功率控制(TPC)。
	Mode 11: EIRP =	343.205 mW	< 500 mW , 故不需評估發射功率控制(TPC)。

4.3.7 動態頻率選擇(DFS)之量測

合格標準:

依據 NCC 低功率射頻電機技術規範(LP0002)4.7.7.2 節之要求, 操作於 5.25 GHz~5.35 GHz 與 5.470 GHz~5.725 GHz 頻帶之設備應具備動態頻率選擇雷達偵測功能並啟動之, 以完整偵測使用頻帶內之雷達訊號, 避免與雷達系統

同頻道操作。相關規定如下:

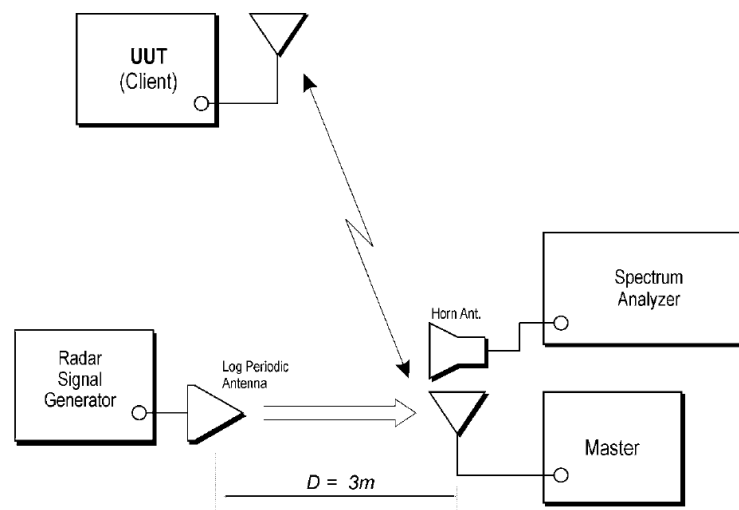
最低動態頻率選擇的偵測門檻

- 最大 EIRP 為 200 mW 至 1 W 之設備, 其最低動態頻率選擇的偵測門檻值為-64 dBm。
- 最大 EIRP 低於 200 mW, 且功率頻譜密度小於 10 dBm/MHz 之設備, 其最低動態頻率選擇的偵測門檻值為-62 dBm。
- 最大 EIRP 低於 200 mW, 且功率頻譜密度大於或等於 10 dBm/MHz 之設備, 其最低動態頻率選擇的偵測門檻值為-64dBm。
- 此偵測門檻值為 1 微秒內之平均接收功率, 並以 0 dBi 天線為參考基準。頻道初始設定得由系統隨機選取或使用用戶手動選取。

操作模式: 動態頻率選擇之規定適用於以下之操作模式:

- 頻道可用性檢查時間之規定, 適用於主控運作模式。
- 頻道移動時間之規定, 適用於主控及受控運作模式。

測試架構圖:



測試結果:

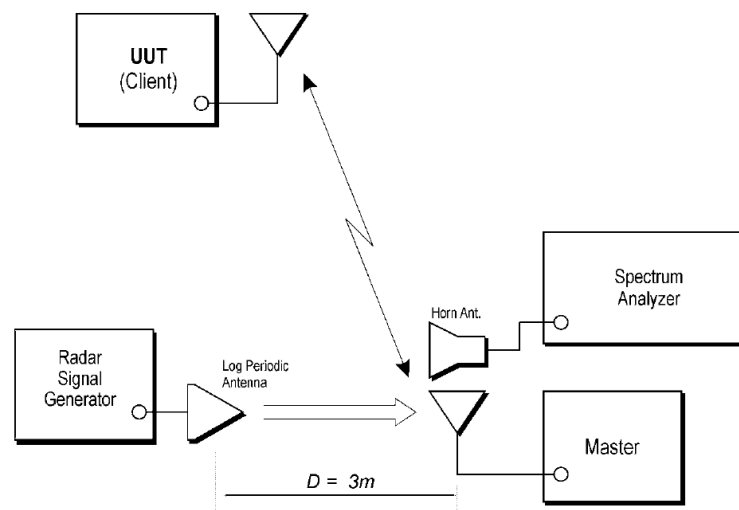
操作模式	: Mode 11
測試結果	: 不適用, 此產品為受控裝置, 因此不須評估動態頻率選擇(DFS)

4.3.8 頻道可用性檢查時間之量測

合格標準:

依據 NCC 低功率射頻電機技術規範(LP0002)之 4.7.7.2(3)節之要求, 設備必須檢查其可在某一頻道上起始傳送之前是否有雷達系統已經操作在該頻道上, 以及何時其必須移動到另一新的頻道, 在 60 秒內若沒有偵測到功率位準大過上述之干擾門檻值的雷達信號時, 設備才可開始使用該頻道。

測試架構圖:



測試結果:

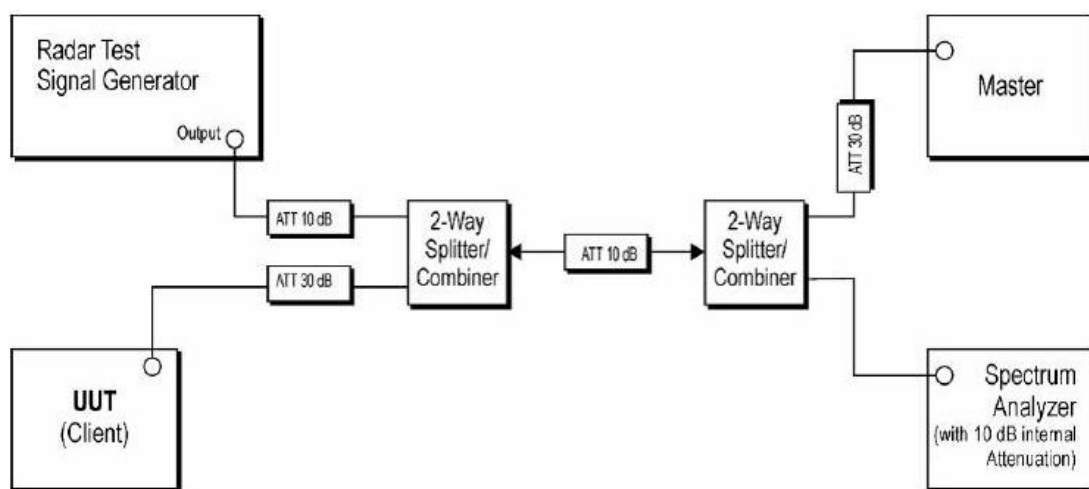
操作模式	: Mode 11
測試結果	: 不適用; 此產品為受控裝置, 因此不須評估頻道可用性檢查時間

4.3.9 頻道移動時間之量測

合格標準:

依據 NCC 低功率射頻電機技術規範(LP0002)之 4.7.7.2(4)節節之要求，在偵測到雷達的存在後，所有在該操作頻道上的所有傳輸須在 10 秒內停止，在偵測到雷達信號後，該期間內的傳輸應維持最多 200 毫秒的正常通訊。另外，間歇性的管理與控制信號可在剩餘的時間中傳送，以便撤離該操作頻道。

測試架構圖：



Product		Manufacturer	Model No.	ID
1	Netgear Access Point	Netgear	R7800	FCC : PY35100319

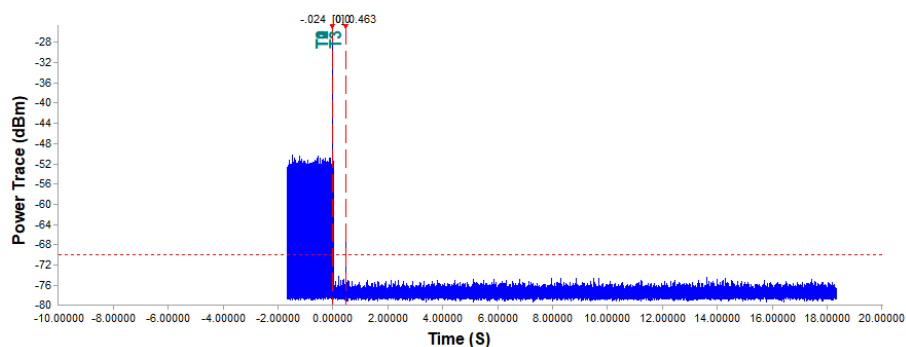
測試結果:

操作模式 : Mode 11

Frequency (MHz)	Radar Type	Channel Move Time (sec)	Limit (sec)
5610	Type 0	0.4630	10

Frequency (MHz)	Radar Type	Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
5610	Type 0	1.5000	200

Mode 11: IEEE 802.11ac 80 MHz Continuous TX Mode

Channel Move Time
/
Channel Closing
Transmission Time

Time Index Info

T0 : -0.0240 S
T1 : 0.0000 S
T2 : 0.0000 S
T3 : 0.4630 S

Time Per Bin: 0.4999875 ms
T2~T3 Bins Over Threshold:
= 3 Bins

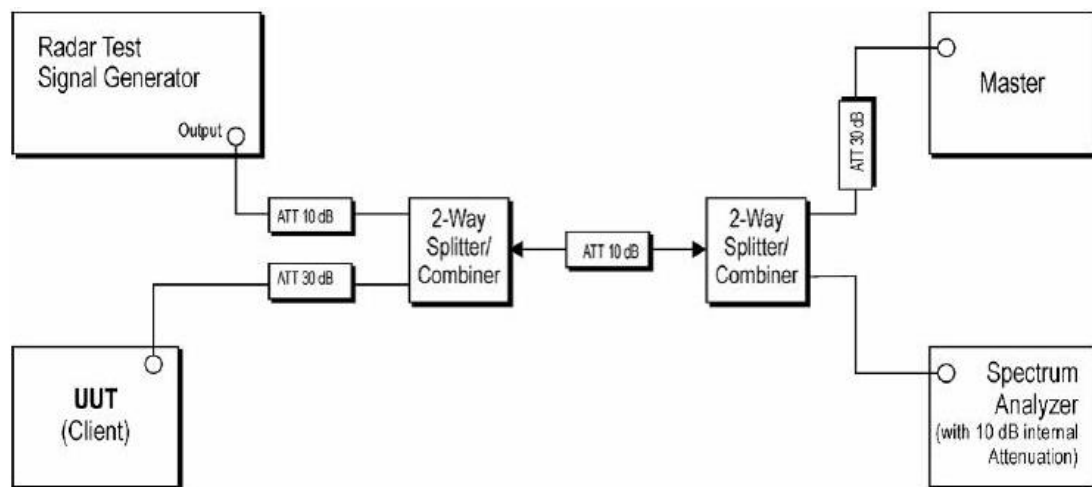
Channel Move Time: 0.4629884 S
Channel Close Time: 0.0015 S

4.3.10 不可佔用時間之量測

合格標準:

依據 NCC 低功率射頻電機技術規範(LP0002)之 4.7.7.2(5)節節之要求，某一頻道已被頻道可用性檢查或”服務中”監視顯示含有雷達系統，至少須有 30 分鐘的不可佔用期間。不可佔用期間起始於偵測到雷達系統的當時。

測試架構圖：



測試結果:

操作模式	: Mode 11
測試結果	: 不適用，此產品為受控裝置，因此不須評估不可佔用時間

4.3.11 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。

4.3.12 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	With Duty cycle [P] x [G] (mW)	Power Density [S] (mW/cm ²)
WLAN 2.4 GHz	2412-2462	1	20	22.47	4.01	2.52	1	445.190	0.0886
WLAN 5 GHz	5150-5850	1	20	22.39	4.01	2.52	1	436.449	0.0868

Simultaneous MPE = BT MPE + WLAN 2.4 GHz MPE = 0.0025 + 0.0886 = 0.0911

---END---