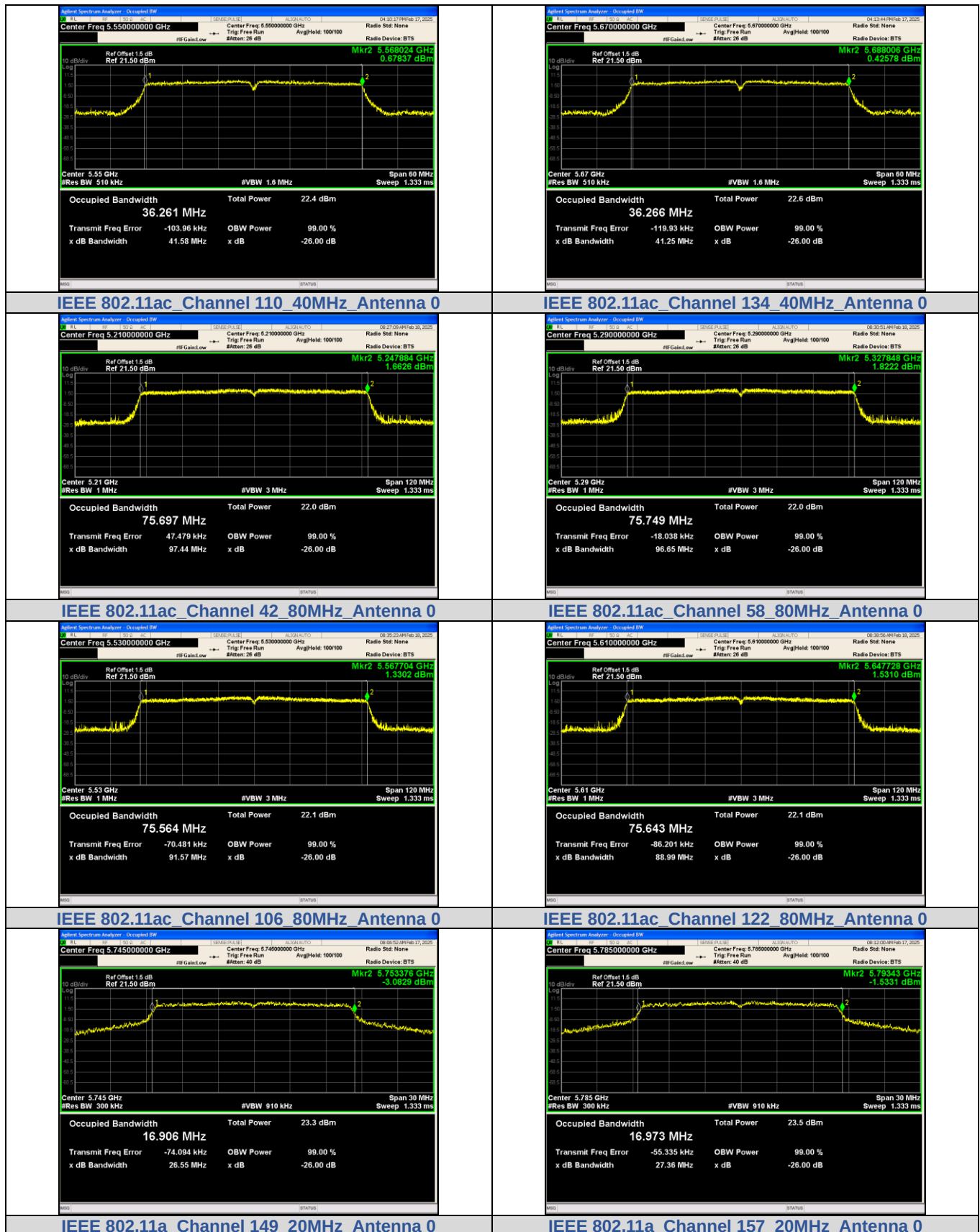
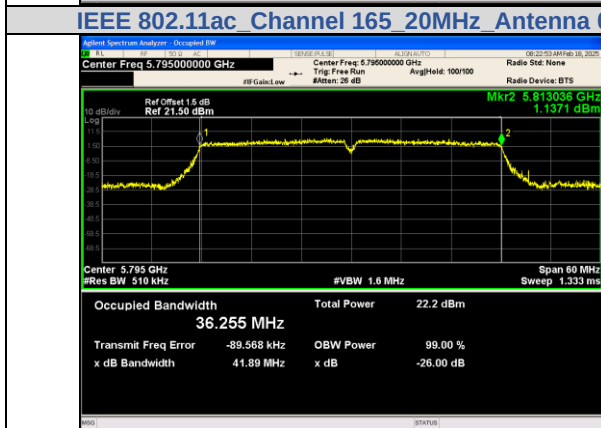
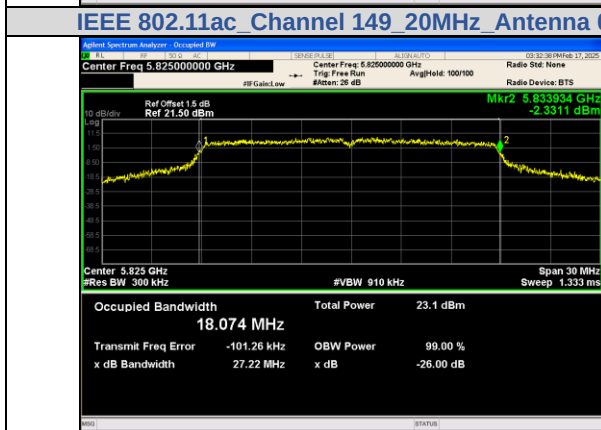
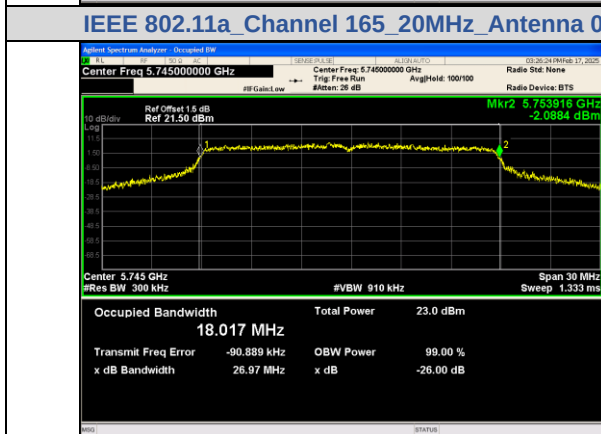
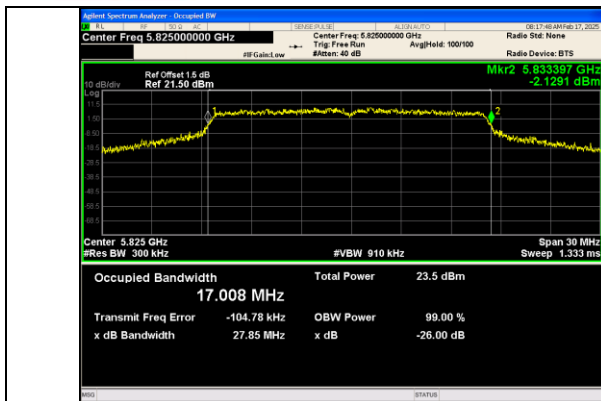
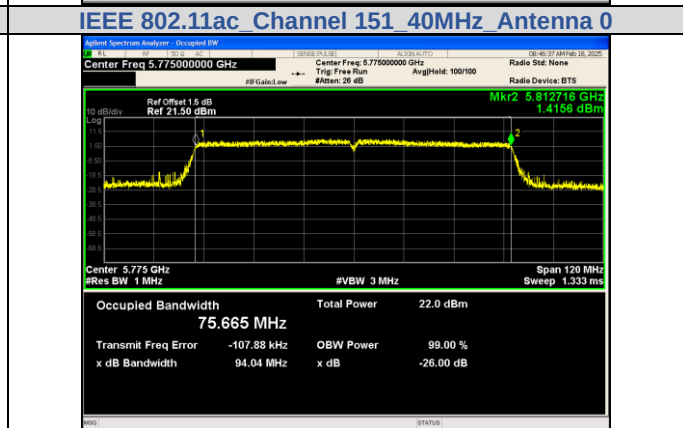
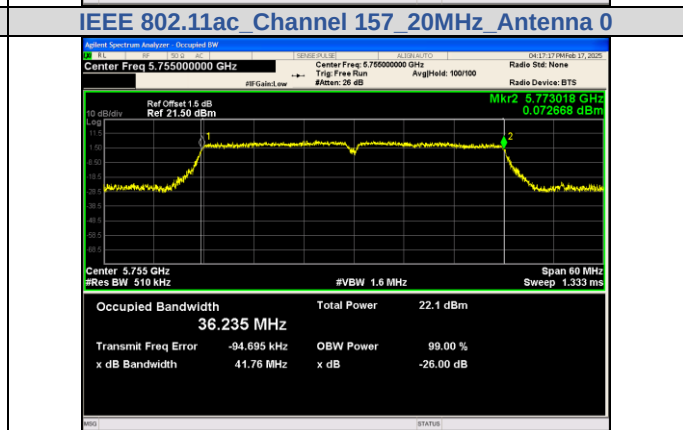
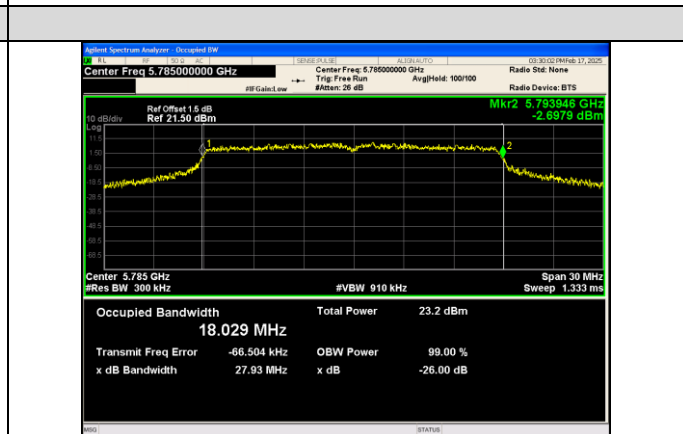






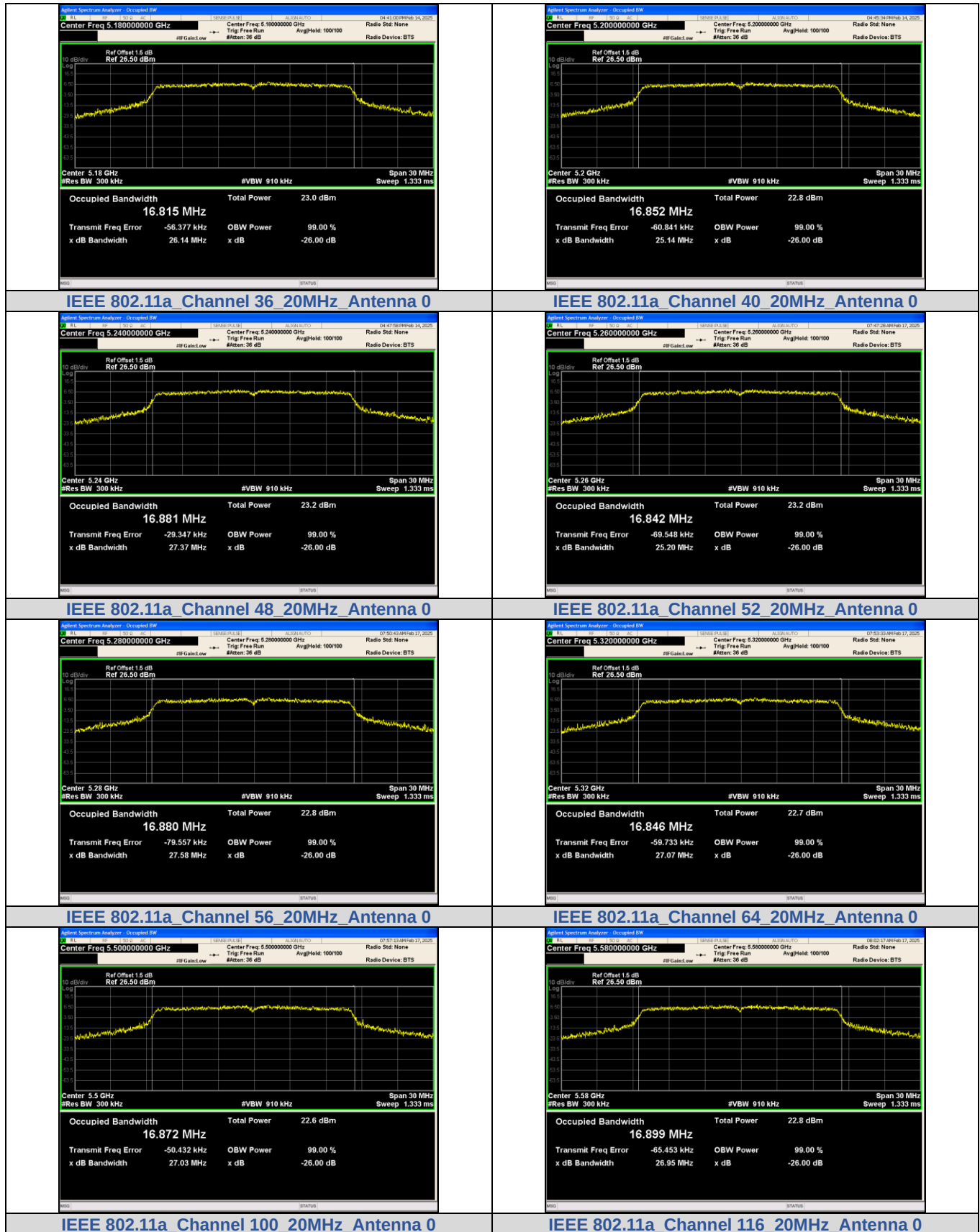
IEEE 802.11ac Channel 159 40MHz Antenna 0

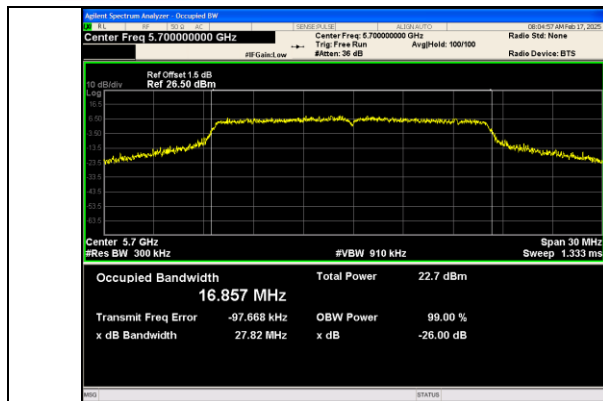


IEEE 802.11ac Channel 155 80MHz Antenna 0

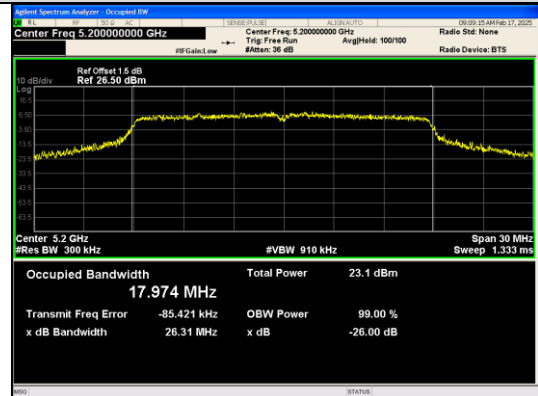
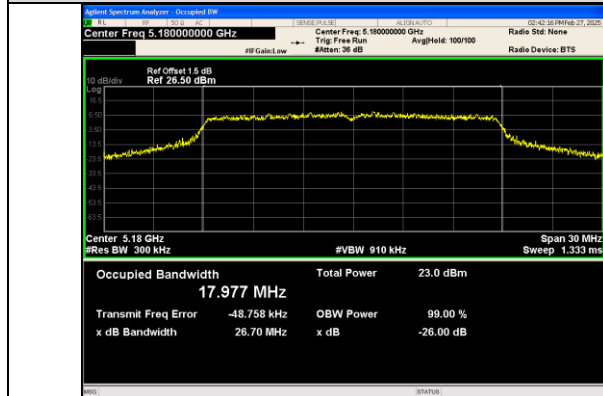


26dB Bandwidth:

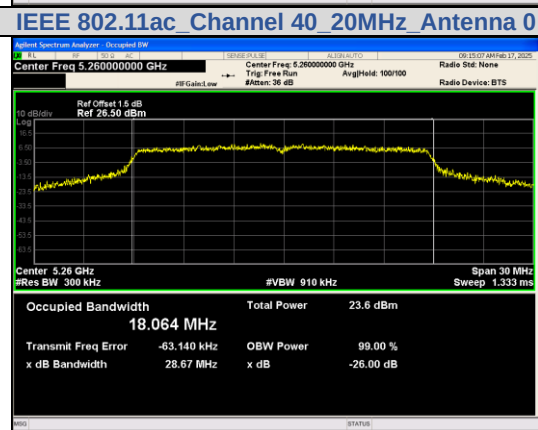
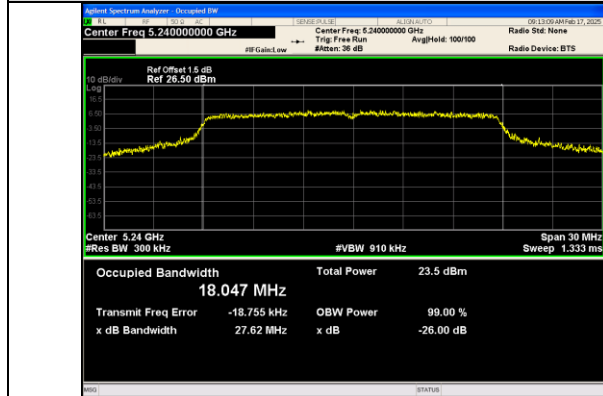




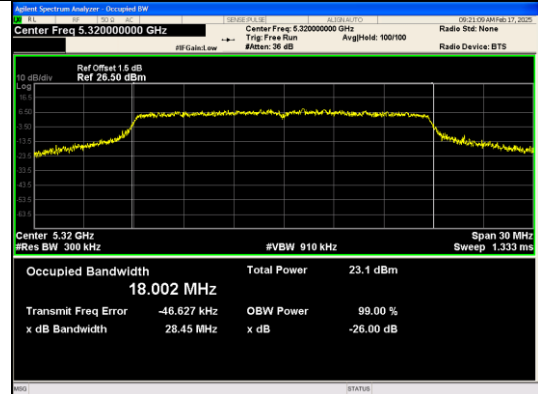
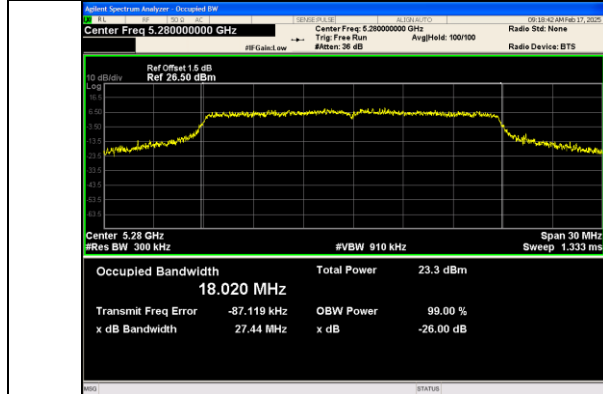
IEEE 802.11a Channel 140 20MHz Antenna 0



IEEE 802.11ac Channel 36 20MHz Antenna 0

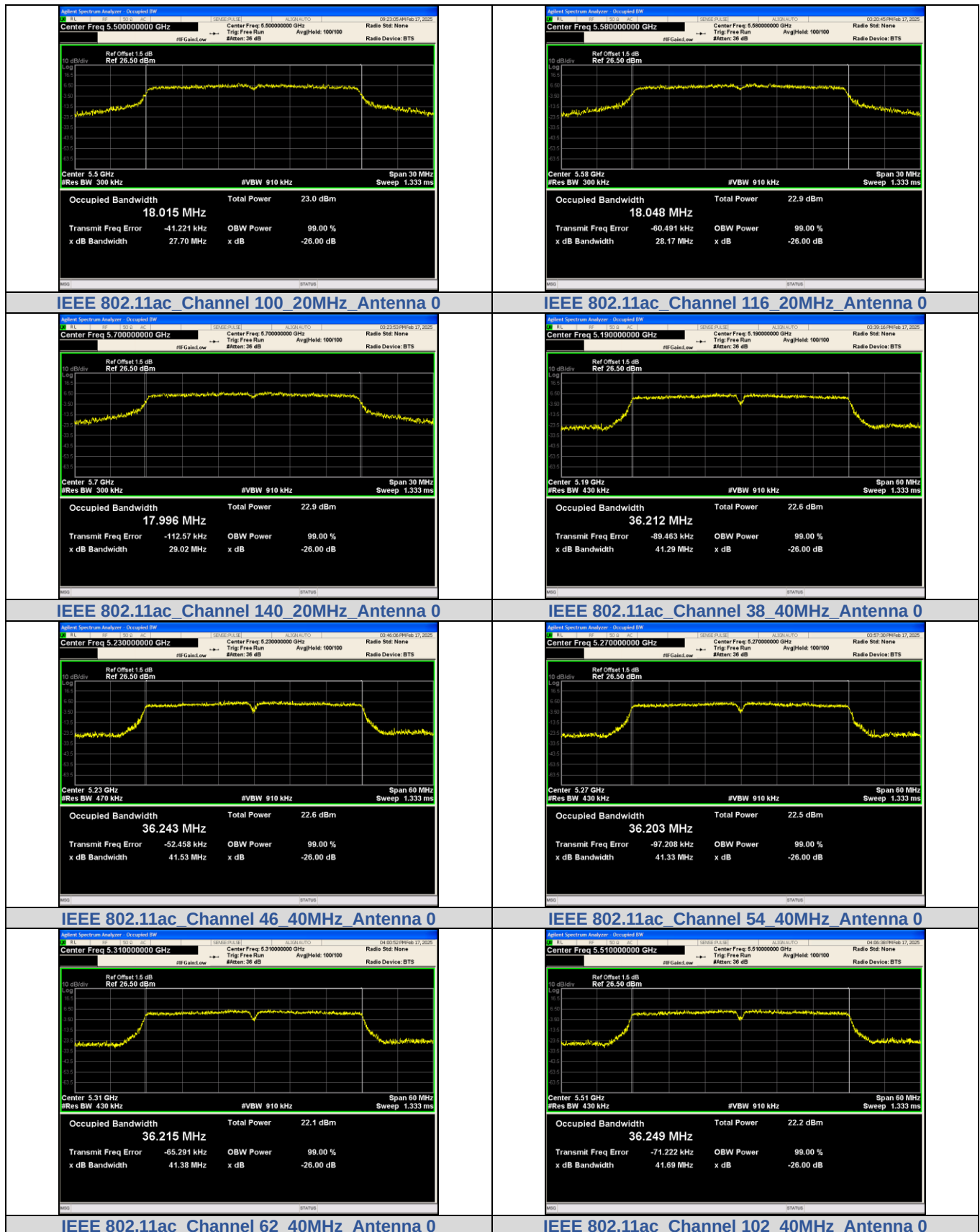


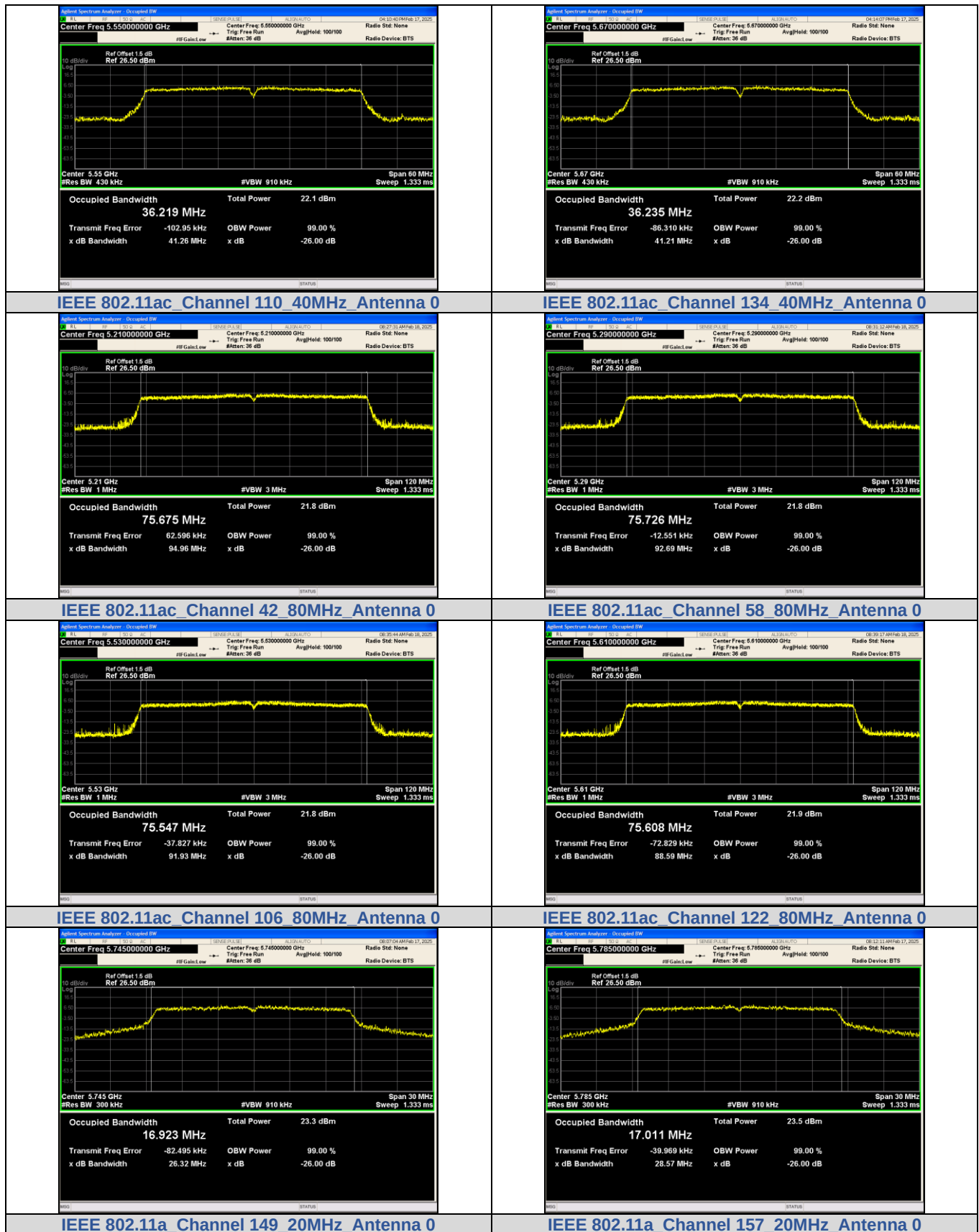
IEEE 802.11ac Channel 40 20MHz Antenna 0



IEEE 802.11ac Channel 52 20MHz Antenna 0

IEEE 802.11ac Channel 56 20MHz Antenna 0



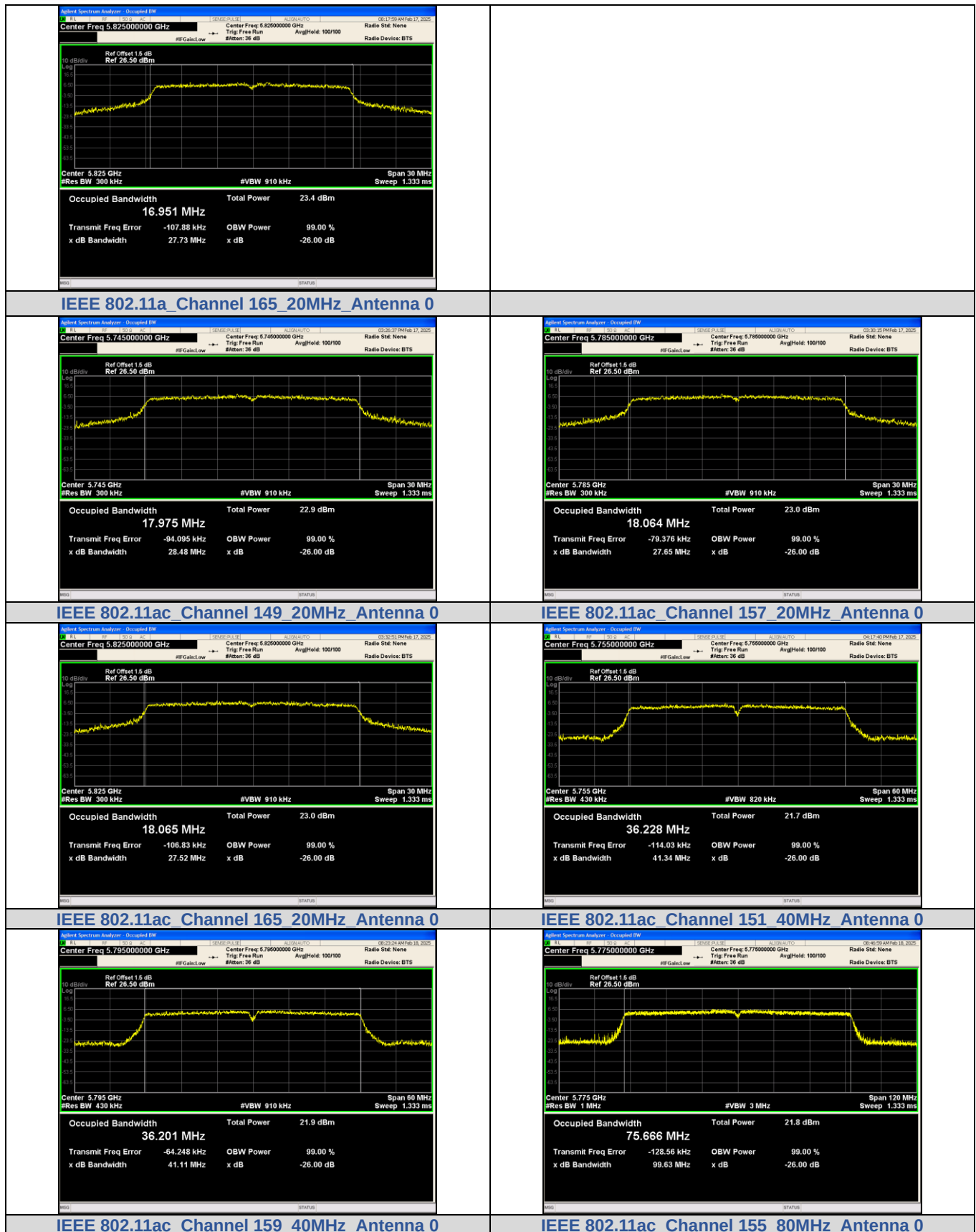


CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

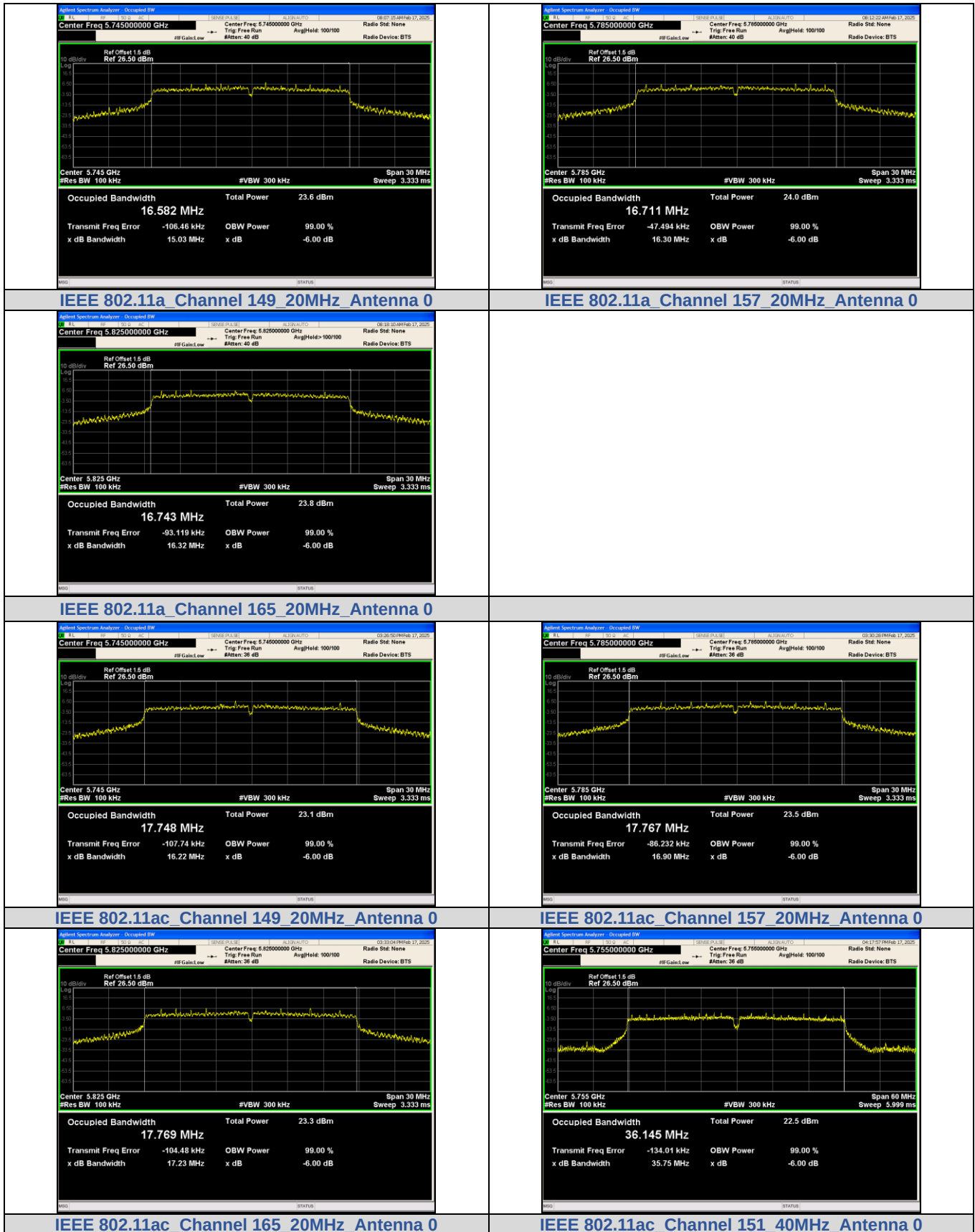
TRF No: CTC-TR-062_A1

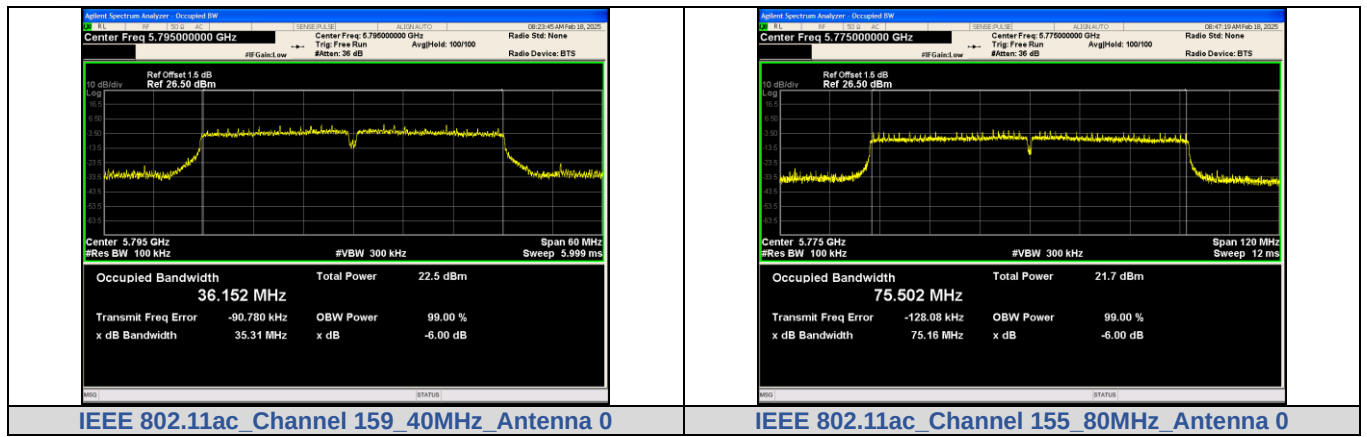
For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cnca.cn





6dB Bandwidth:







3.5. Peak Output Power

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(a)

Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	Fixed: 1 Watt (30dBm) Mobile and Portable: 250mW (24dBm)	5150~5250
	250mW (24dBm)	5250~5350
	250mW (24dBm)	5500~5700
	1 Watt (30dBm)	5725~5850

RSS-247 6.2

IC Power&PSD Limit					
Frequency	Type of devices	Maximum Conducted Output Power	EIRP Output Power	Conducted Power Spectral Density	EIRP Power Spectral Density
5150MHz-5250MHz	in vehicles		30mW or $1.76 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)		
	Other Devices		200mW or $10 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)		10dBm/MHz
5250MHz-5350MHz	in vehicles		30mW or $1.76 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)		
	Other Devices	250mW or $11 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)	1W or $17 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)	11dBm/MHz	
5470MHz-5600MHz 5650MHz-5725MHz	ALL Devices	250mW or $11 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)	1W or $17 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)	11dBm/MHz	
5725MHz-5850MHz	ALL Devices	1W		30dBm/500KHz	

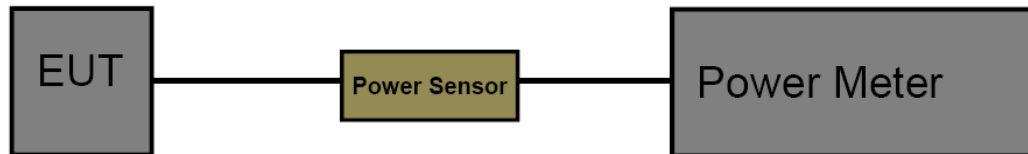
Test Configuration

CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

TRF No: CTC-TR-062_A1

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cnca.cn



Test Procedure

The measurement is according to section 3 of KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

Test Mode

Please refer to the clause 2.4.

Test Result

Test Mode	Freq(MHz)	Conducted Output Power [dBm]	Limit [dBm]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11A	5180	17.42	≤24	17.62	≤23	PASS
	5200	17.07	≤24	17.27	≤23	PASS
	5240	17.51	≤24	17.71	≤23	PASS
	5260	17.35	≤24	17.55	≤30	PASS
	5280	16.98	≤24	17.18	≤30	PASS
	5320	17.01	≤24	17.21	≤30	PASS
	5500	16.76	≤24	16.96	≤30	PASS
	5580	17.07	≤24	17.27	≤30	PASS
	5700	16.96	≤24	17.16	≤30	PASS
	5745	17.50	≤30	/	/	PASS
11N20SISO	5785	17.88	≤30	/	/	PASS
	5825	17.70	≤30	/	/	PASS
	5180	16.83	≤24	17.03	≤23	PASS
	5200	16.64	≤24	16.84	≤23	PASS
	5240	16.70	≤24	16.90	≤23	PASS
	5260	16.83	≤24	17.03	≤30	PASS
	5280	15.98	≤24	16.18	≤30	PASS
	5320	16.36	≤24	16.56	≤30	PASS
	5500	16.13	≤24	16.33	≤30	PASS
	5580	16.06	≤24	16.26	≤30	PASS
11N40SISO	5700	16.82	≤24	17.02	≤30	PASS
	5745	15.97	≤30	/	/	PASS
	5785	16.16	≤30	/	/	PASS
	5825	16.13	≤30	/	/	PASS
	5190	15.52	≤24	15.72	≤23	PASS
	5230	15.14	≤24	15.34	≤23	PASS
	5270	16.00	≤24	16.20	≤30	PASS
	5310	15.08	≤24	15.28	≤30	PASS
	5510	15.63	≤24	15.83	≤30	PASS
11AC20SISO	5550	15.27	≤24	15.47	≤30	PASS
	5670	15.49	≤24	15.69	≤30	PASS
	5755	15.73	≤30	/	/	PASS
	5795	16.00	≤30	/	/	PASS
	5180	17.32	≤24	17.52	≤23	PASS
	5200	17.18	≤24	17.38	≤23	PASS

CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

TRF No: CTC-TR-062_A1

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cnca.cn



	5240	17.73	≤24	17.93	≤23	PASS
	5260	17.83	≤24	18.03	≤30	PASS
	5280	17.48	≤24	17.68	≤30	PASS
	5320	17.36	≤24	17.56	≤30	PASS
	5500	17.12	≤24	17.32	≤30	PASS
	5580	17.14	≤24	17.34	≤30	PASS
	5700	17.02	≤24	17.22	≤30	PASS
	5745	17.05	≤30	/	/	PASS
	5785	17.21	≤30	/	/	PASS
11AC40SISO	5825	17.26	≤30	/	/	PASS
	5190	16.85	≤24	17.05	≤23	PASS
	5230	16.71	≤24	16.91	≤23	PASS
	5270	16.68	≤24	16.88	≤30	PASS
	5310	16.52	≤24	16.72	≤30	PASS
	5510	16.36	≤24	16.56	≤30	PASS
	5550	16.26	≤24	16.46	≤30	PASS
	5670	16.50	≤24	16.70	≤30	PASS
	5755	16.02	≤30	/	/	PASS
11AC80SISO	5795	16.24	≤30	/	/	PASS
	5210	15.33	≤24	15.53	≤23	PASS
	5290	15.49	≤24	15.69	≤30	PASS
	5530	15.28	≤24	15.48	≤30	PASS
	5610	15.49	≤24	15.69	≤30	PASS
	5775	15.34	≤30	/	/	PASS



3.6. Power Spectral Density

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(a)

For the 5.15~5.25GHz band:

- Outdoor AP
The peak power spectral density (PSD) shall not exceed the lesser of 17dBm/MHz.
If $G_{TX} > 6\text{dBi}$, then $\text{PSD} = 17 - (G_{TX} - 6)$.
- Indoor AP
The peak power spectral density (PSD) shall not exceed the lesser of 17dBm/MHz.
If $G_{TX} > 6\text{dBi}$, then $\text{PSD} = 17 - (G_{TX} - 6)$.
- Point-to-point AP
The peak power spectral density (PSD) shall not exceed the lesser of 17dBm/MHz.
If $G_{TX} > 23\text{dBi}$, then $\text{PSD} = 17 - (G_{TX} - 23)$.
- Client devices
The peak power spectral density (PSD) shall not exceed the lesser of 11dBm/MHz.
If $G_{TX} > 6\text{dBi}$, then $\text{PSD} = 11 - (G_{TX} - 6)$.

For the 5.25~5.35GHz band:

The peak power spectral density (PSD) shall not exceed the lesser of 11dBm/MHz.
If $G_{TX} > 6\text{dBi}$, then $\text{PSD} = 11 - (G_{TX} - 6)$.

For the 5.47~5.725GHz band:

The peak power spectral density (PSD) shall not exceed the lesser of 11dBm/MHz.
If $G_{TX} > 6\text{dBi}$, then $\text{PSD} = 11 - (G_{TX} - 6)$.

For the 5.725~5.85GHz band:

- Point-to-multipoint systems (P2M)
The peak power spectral density (PSD) shall not exceed the lesser of 30dBm/500kHz.
If $G_{TX} > 6\text{dBi}$, then $\text{PSD} = 30 - (G_{TX} - 6)$.
- Point-to-point systems (P2P)
The peak power spectral density (PSD) shall not exceed the lesser of 30dBm/500kHz.

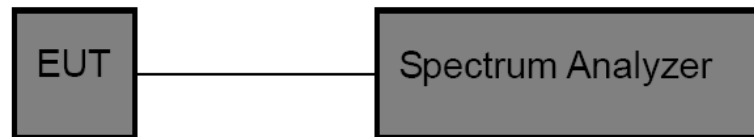
Note: G_{TX} : EUT Antenna gain.

RSS-247 6.2



IC Power&PSD Limit					
Frequency	Type of devices	Maximum Conducted Output Power	EIRP Output Power	Conducted Power Spectral Density	EIRP Power Spectral Density
5150MHz-5250MHz	in vehicles		30mW or $1.76 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)		
	Other Devices		200mW or $10 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)		10dBm/MHz
5250MHz-5350MHz	in vehicles		30mW or $1.76 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)		
	Other Devices	250mW or $11 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)	1W or $17 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)	11dBm/MHz	
5470MHz-5600MHz 5650MHz-5725MHz	ALL Devices	250mW or $11 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)	1W or $17 + 10 \times \log_{10} B$ dBm, whichever is less (B=99% OBW in MHz)	11dBm/MHz	
5725MHz-5850MHz	ALL Devices	1W		30dBm/500KHz	

Test Configuration



Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement is according to KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyzer center frequency to transmitting frequency.
- (3) Set the span to encompass the entire emissions bandwidth (EBW) (alternatively, the entire 99% OBW) of the signal.
- (4) RBW=1MHz for devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz
RBW=500kHz for devices operating in the band 5.725-5.85 GHz.
- (5) Set the VBW to: ≥ 3 RBW
- (6) Detector: AVG
- (7) Trace: Max Hold and View
- (7) Sweep time: auto
- (8) Trace average at least 100 traces in power averaging.
- (9) User the peak marker function to determine the maximum amplitude level within the RBW. Apply correction to the result if different RBW is used.

NOTE: The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

Test Mode

Please refer to the clause 2.4.

**Test Result**

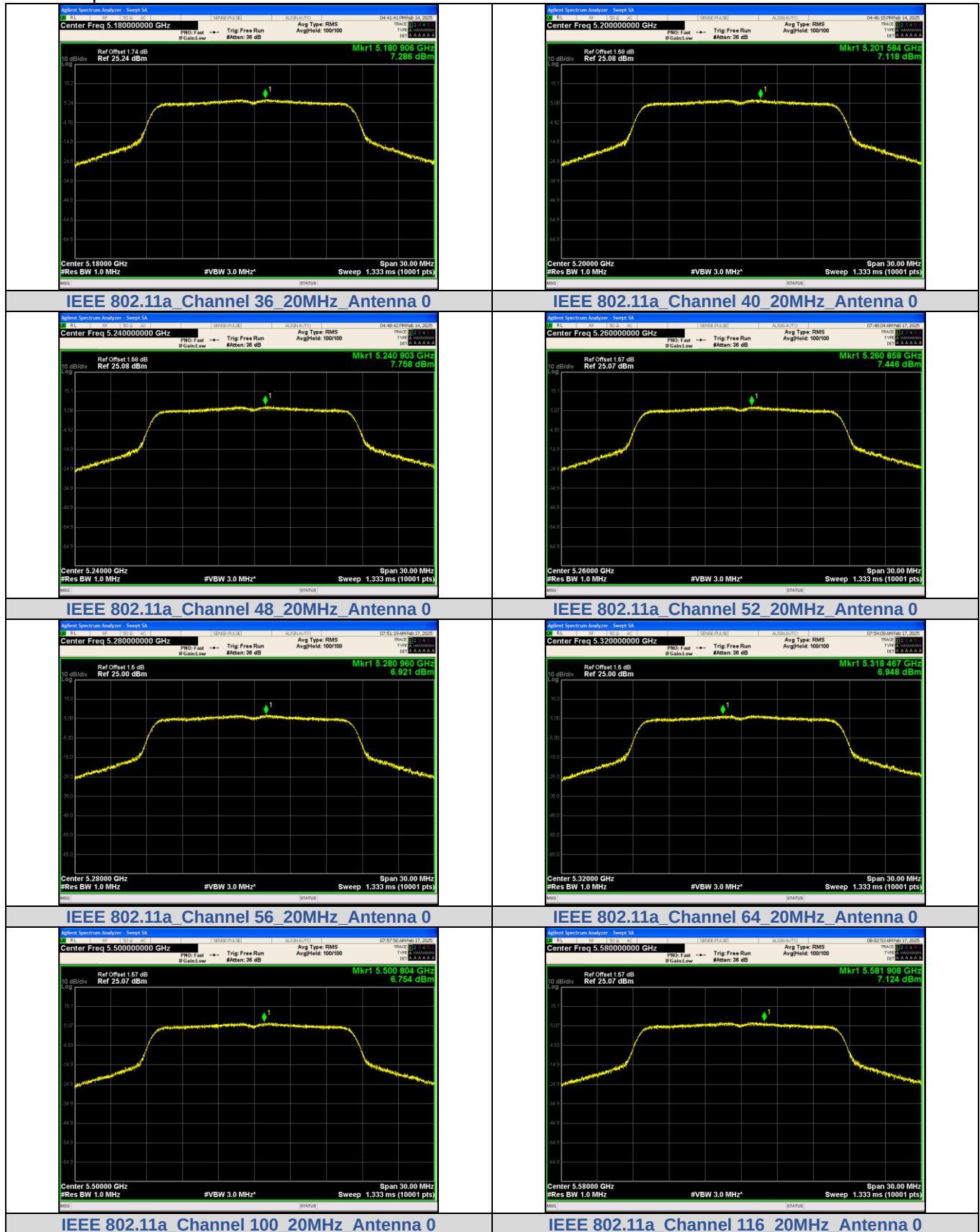
Test Mode	Freq(MHz)	Conducted PSD [dBm/MHz]	Conducted PSD Limit [dBm/MHz]	Conducted PSD Limit [dBm/500kHz]	EIRP PSD [dBm/MHz]	EIRP PSD Limit [dBm/MHz]	Verdict
11A	5180	7.286	≤11	/	7.486	≤10	PASS
	5200	7.118	≤11	/	7.318	≤10	PASS
	5240	7.758	≤11	/	7.958	≤10	PASS
	5260	7.446	≤11	/	/	/	PASS
	5280	6.921	≤11	/	/	/	PASS
	5320	7.022	≤11	/	/	/	PASS
	5500	6.754	≤11	/	/	/	PASS
	5580	7.124	≤11	/	/	/	PASS
	5700	6.927	≤11	/	/	/	PASS
	5745	4.511	/	≤30	/	/	PASS
	5785	4.979	/	≤30	/	/	PASS
	5825	4.862	/	≤30	/	/	PASS
11AC20SISO	5180	7.109	≤11	/	7.309	≤10	PASS
	5200	7.183	≤11	/	7.383	≤10	PASS
	5240	7.355	≤11	/	7.555	≤10	PASS
	5260	7.780	≤11	/	/	/	PASS
	5280	7.508	≤11	/	/	/	PASS
	5320	6.910	≤11	/	/	/	PASS
	5500	6.933	≤11	/	/	/	PASS
	5580	6.789	≤11	/	/	/	PASS
	5700	6.906	≤11	/	/	/	PASS
	5745	4.022	/	≤30	/	/	PASS
	5785	4.057	/	≤30	/	/	PASS
	5825	4.164	/	≤30	/	/	PASS
11AC40SISO	5190	3.935	≤11	/	4.135	≤10	PASS
	5230	3.425	≤11	/	3.625	≤10	PASS
	5270	3.613	≤11	/	/	/	PASS
	5310	3.396	≤11	/	/	/	PASS
	5510	3.101	≤11	/	/	/	PASS
	5550	3.099	≤11	/	/	/	PASS
	5670	3.370	≤11	/	/	/	PASS
	5755	-0.278	/	≤30	/	/	PASS
	5795	-0.156	/	≤30	/	/	PASS
11AC80SISO	5210	-1.091	≤11	/	-0.891	≤10	PASS
	5290	-1.179	≤11	/	/	/	PASS
	5530	-0.558	≤11	/	/	/	PASS
	5610	-0.287	≤11	/	/	/	PASS
	5775	-3.863	/	≤30	/	/	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2.The Duty Cycle Factor and RBW Factor is compensated in the graph.



Test Graphs

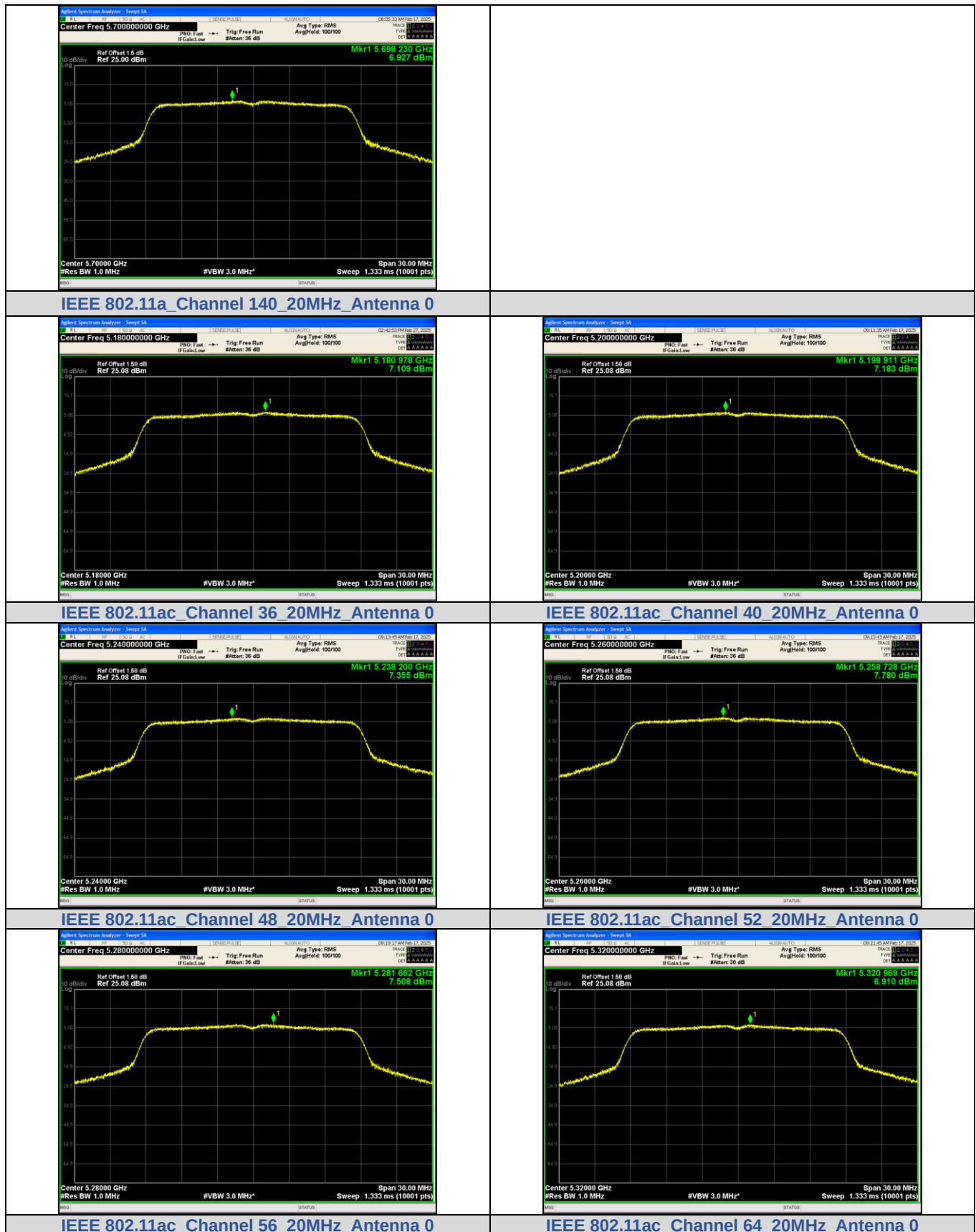


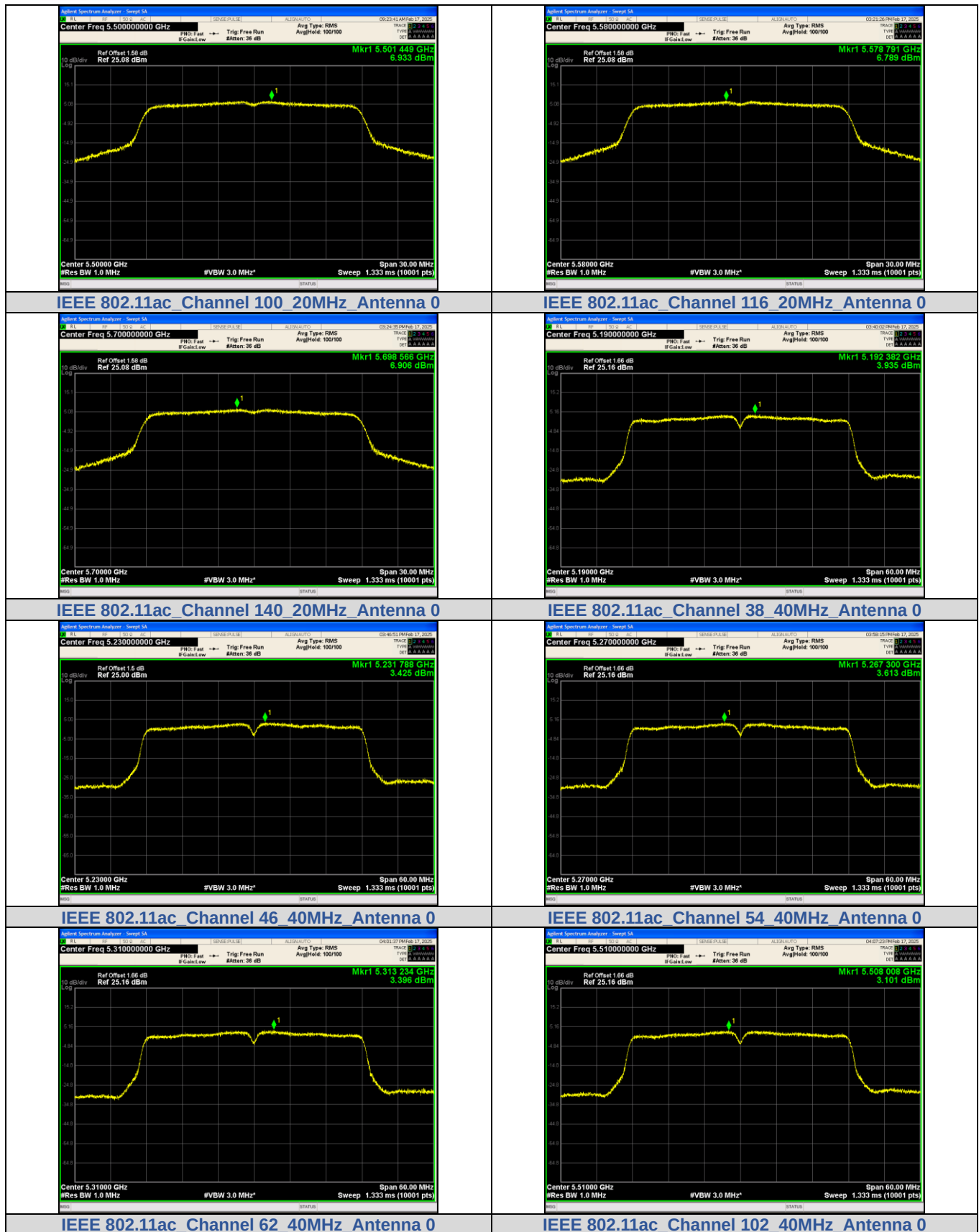
CTC Laboratories, Inc.

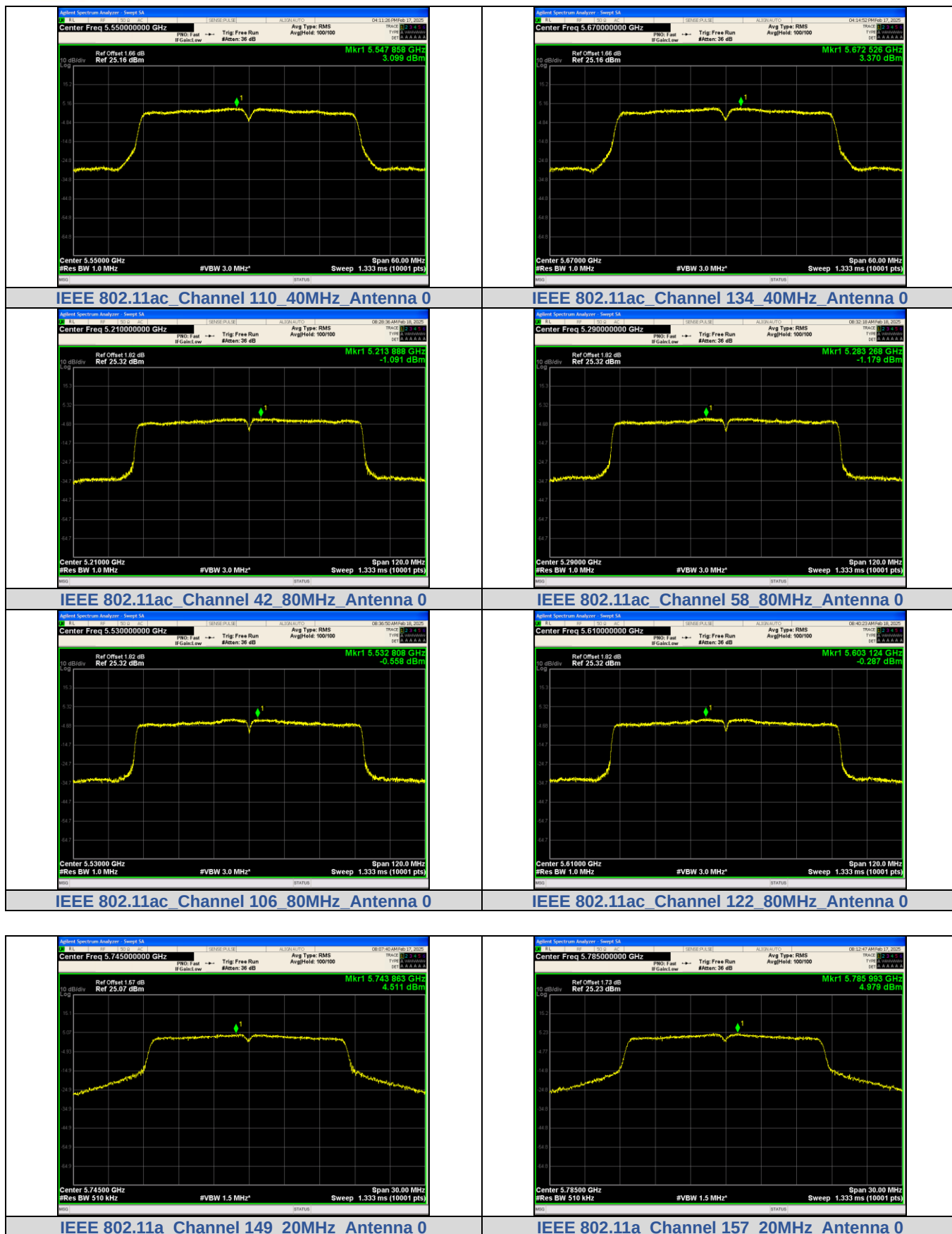
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

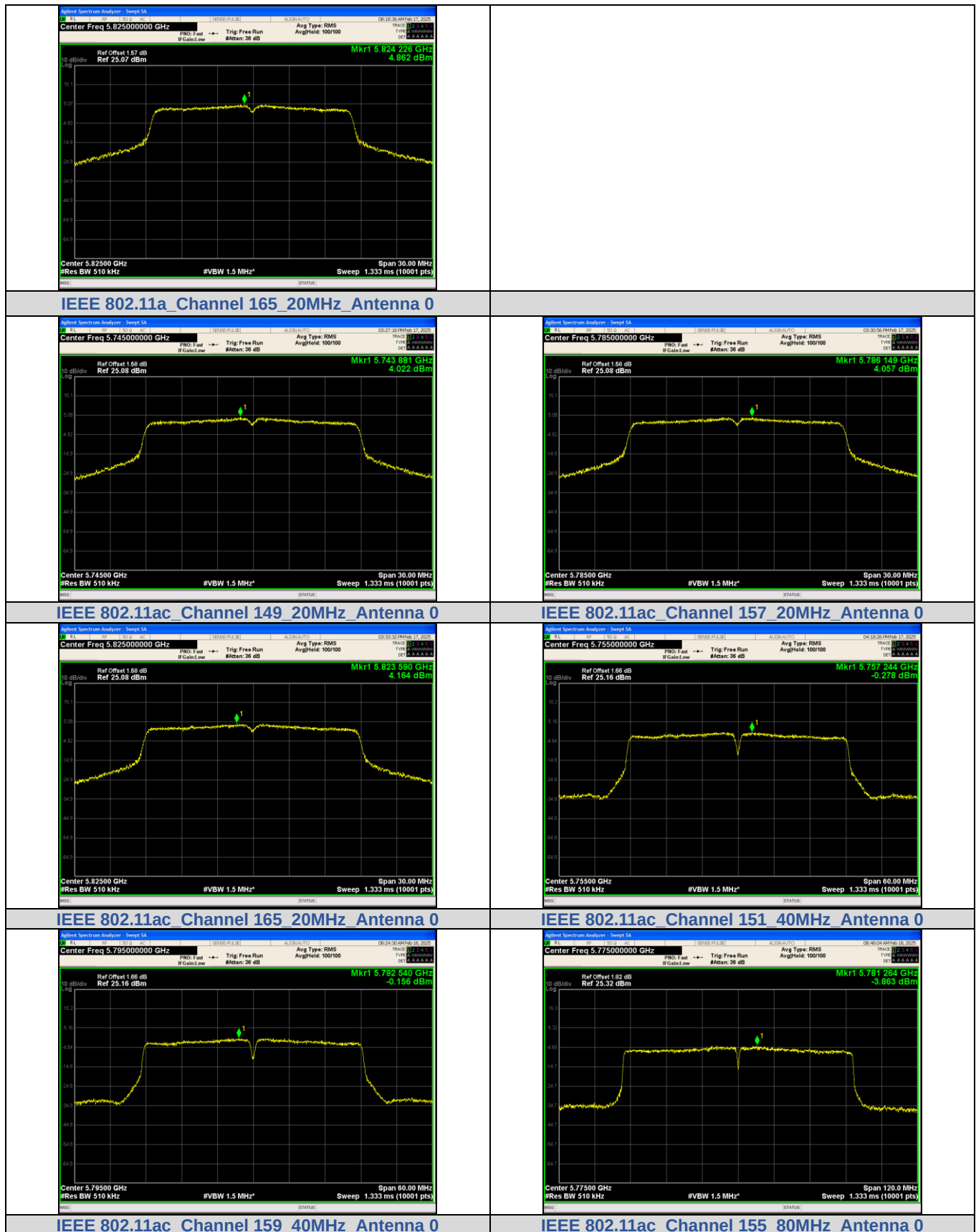
TRF No: CTC-TR-062_A1

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cnca.cn











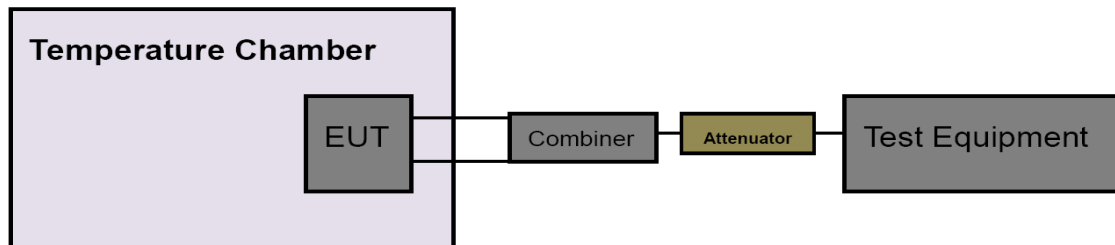
3.7. Frequency Stability

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(g) / RSS-Gen 6.11

Test Item	Limit	Frequency Range (MHz)
Frequency Stability	Specified in the user's manual, the transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band (IEEE 802.11n specification)	5150~5250
		5250~5350
		5500~5700
		5725~5850

Test Configuration



Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyzer center frequency to transmitting frequency.
- (3) Set the span to encompass the entire emissions bandwidth (EBW) of the signal.
- (4) Set the RBW to: 8MHz, VBW=8MHz with peak detector and max hold settings.
- (5) The test extreme voltage is to change the primary supply voltage from 3.85Vdc percent of the nominal value.
- (6) Extreme temperature is 0°C~40°C

NOTE: The EUT was set to continuously transmitting in continuously un-modulation transmitting mode.

Test Mode

Please refer to the clause 2.4.

**Test Result**

Condition	Mode	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	State
NT/NV	20M Bandwidth	36	5180.0	5179.914279	-16.55	±20	PASS
		40	5200.0	5199.905954	-18.09	±20	PASS
		48	5240.0	5239.904716	-18.18	±20	PASS
		52	5260.0	5259.904379	-18.18	±20	PASS
		56	5280.0	5279.913904	-16.31	±20	PASS
		64	5320.0	5319.906966	-17.49	±20	PASS
		100	5500.0	5499.900191	-18.15	±20	PASS
		116	5580.0	5579.898254	-18.23	±20	PASS
		140	5700.0	5699.896116	-18.23	±20	PASS
		149	5745.0	5744.895141	-18.25	±20	PASS
		157	5785.0	5784.894604	-18.22	±20	PASS
		165	5825.0	5824.894979	-18.03	±20	PASS
	40M Bandwidth	38	5190.0	5189.908141	-17.70	±20	PASS
		46	5230.0	5229.904904	-18.18	±20	PASS
		54	5270.0	5269.902898	18.43	±20	PASS
		62	5310.0	5309.903621	18.15	±20	PASS
		102	5510.0	5509.901355	17.90	±20	PASS
		110	5550.0	5549.899258	18.15	±20	PASS
		134	5670.0	5669.900322	17.58	±20	PASS
		151	5755.0	5754.899241	17.51	±20	PASS
	80M Bandwidth	159	5795.0	5794.896353	17.89	±20	PASS
		42	5210.0	5209.905735	18.09	±20	PASS
		58	5290.0	5289.902434	18.44	±20	PASS
		106	5530.0	5529.903553	17.44	±20	PASS
		122	5610.0	5609.901435	17.57	±20	PASS
LT/NV	20M Bandwidth	155	5775.0	5774.893614	18.42	±20	PASS
		36	5180.0	5179.910704	-17.24	±20	PASS
		40	5200.0	5199.905604	-18.15	±20	PASS
		48	5240.0	5239.904666	-18.19	±20	PASS
		52	5260.0	5259.904116	-18.23	±20	PASS
		56	5280.0	5279.908529	-17.32	±20	PASS
		64	5320.0	5319.905504	-17.76	±20	PASS
		100	5500.0	5499.899929	-18.19	±20	PASS
		116	5580.0	5579.898104	-18.26	±20	PASS
		140	5700.0	5699.895854	-18.27	±20	PASS
		149	5745.0	5744.895091	-18.26	±20	PASS
		157	5785.0	5784.894466	-18.24	±20	PASS
	40M Bandwidth	165	5825.0	5824.894629	-18.09	±20	PASS
		38	5190.0	5189.907041	-17.91	±20	PASS
		46	5230.0	5229.904779	-18.21	±20	PASS
		54	5270.0	5269.903525	18.31	±20	PASS
		62	5310.0	5309.902714	18.32	±20	PASS
		102	5510.0	5509.901215	17.93	±20	PASS
		110	5550.0	5549.899587	18.09	±20	PASS
		134	5670.0	5669.899321	17.76	±20	PASS
	80M Bandwidth	151	5755.0	5754.899012	17.55	±20	PASS
		159	5795.0	5794.895274	18.07	±20	PASS
		42	5210.0	5209.905113	18.21	±20	PASS
		58	5290.0	5289.902889	18.36	±20	PASS
		106	5530.0	5529.903147	17.51	±20	PASS
HT/NV	20M	122	5610.0	5609.901125	17.62	±20	PASS
		155	5775.0	5774.898670	17.55	±20	PASS
		36	5180.0	5179.909391	-17.49	±20	PASS

CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

TRF No: CTC-TR-062_A1

For anti-fake verification, please visit the official website of China Inspection And Testing Society : yz.cnca.cn



	Bandwidth	40	5200.0	5199.905604	-18.15	±20	PASS
		48	5240.0	5239.904579	-18.21	±20	PASS
		52	5260.0	5259.904054	-18.24	±20	PASS
		56	5280.0	5279.907604	-17.50	±20	PASS
		64	5320.0	5319.904616	-17.93	±20	PASS
		100	5500.0	5499.899816	-18.22	±20	PASS
		116	5580.0	5579.898129	-18.26	±20	PASS
		140	5700.0	5699.896054	-18.24	±20	PASS
		149	5745.0	5744.895029	-18.27	±20	PASS
		157	5785.0	5784.894579	-18.22	±20	PASS
		165	5825.0	5824.894341	-18.14	±20	PASS
	40M Bandwidth	38	5190.0	5189.906654	-17.99	±20	PASS
		46	5230.0	5229.904641	-18.23	±20	PASS
		54	5270.0	5269.902945	18.42	±20	PASS
		62	5310.0	5309.906854	17.54	±20	PASS
		102	5510.0	5509.901148	17.94	±20	PASS
		110	5550.0	5549.898695	18.25	±20	PASS
		134	5670.0	5669.898574	17.89	±20	PASS
		151	5755.0	5754.898053	17.71	±20	PASS
		159	5795.0	5794.894210	18.26	±20	PASS
	80M Bandwidth	42	5210.0	5209.904127	18.40	±20	PASS
		58	5290.0	5289.904867	17.98	±20	PASS
		106	5530.0	5529.901215	17.86	±20	PASS
		122	5610.0	5609.901652	17.53	±20	PASS
		155	5775.0	5774.898971	17.49	±20	PASS
0°C/NV	20M Bandwidth	36	5180.0	5179.908416	-17.68	±20	PASS
		40	5200.0	5199.905466	-18.18	±20	PASS
		48	5240.0	5239.904654	-18.20	±20	PASS
		52	5260.0	5259.904154	-18.22	±20	PASS
		56	5280.0	5279.906679	-17.67	±20	PASS
		64	5320.0	5319.904291	-17.99	±20	PASS
		100	5500.0	5499.899779	-18.22	±20	PASS
		116	5580.0	5579.898004	-18.28	±20	PASS
		140	5700.0	5699.895979	-18.25	±20	PASS
		149	5745.0	5744.895066	-18.27	±20	PASS
		157	5785.0	5784.894566	-18.23	±20	PASS
		165	5825.0	5824.894154	-18.17	±20	PASS
	40M Bandwidth	38	5190.0	5189.906316	-18.05	±20	PASS
		46	5230.0	5229.904729	-18.22	±20	PASS
		54	5270.0	5269.905521	17.93	±20	PASS
		62	5310.0	5309.907524	17.42	±20	PASS
		102	5510.0	5509.902965	17.61	±20	PASS
		110	5550.0	5549.898032	18.37	±20	PASS
		134	5670.0	5669.899041	17.81	±20	PASS
		151	5755.0	5754.898139	17.70	±20	PASS
		159	5795.0	5794.895624	18.01	±20	PASS
	80M Bandwidth	42	5210.0	5209.903958	18.43	±20	PASS
		58	5290.0	5289.904277	18.10	±20	PASS
		106	5530.0	5529.901699	17.78	±20	PASS
		122	5610.0	5609.901742	17.51	±20	PASS
		155	5775.0	5774.899035	17.48	±20	PASS
10°C/NV	20M Bandwidth	36	5180.0	5179.907691	-17.82	±20	PASS
		40	5200.0	5199.905329	-18.21	±20	PASS
		48	5240.0	5239.904416	-18.24	±20	PASS
		52	5260.0	5259.904141	-18.22	±20	PASS
		56	5280.0	5279.905729	-17.85	±20	PASS
		64	5320.0	5319.903954	-18.05	±20	PASS
		100	5500.0	5499.899766	-18.22	±20	PASS

CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

TRF No: CTC-TR-062_A1

For anti-fake verification, please visit the official website of China Inspection And Testing
Society : yz.cnca.cn



		116	5580.0	5579.898054	-18.27	±20	PASS
		140	5700.0	5699.895891	-18.26	±20	PASS
		149	5745.0	5744.895129	-18.25	±20	PASS
		157	5785.0	5784.894391	-18.26	±20	PASS
		165	5825.0	5824.893841	-18.22	±20	PASS
	40M Bandwidth	38	5190.0	5189.905891	-18.13	±20	PASS
		46	5230.0	5229.904704	-18.22	±20	PASS
		54	5270.0	5269.905864	17.86	±20	PASS
		62	5310.0	5309.903243	18.22	±20	PASS
		102	5510.0	5509.903947	17.43	±20	PASS
		110	5550.0	5549.898357	18.31	±20	PASS
		134	5670.0	5669.899014	17.81	±20	PASS
		151	5755.0	5754.896074	18.06	±20	PASS
		159	5795.0	5794.896958	17.78	±20	PASS
	80M Bandwidth	42	5210.0	5209.904145	18.40	±20	PASS
		58	5290.0	5289.905697	17.83	±20	PASS
		106	5530.0	5529.902367	17.66	±20	PASS
		122	5610.0	5609.902059	17.46	±20	PASS
		155	5775.0	5774.895022	18.18	±20	PASS
20°C/NV	20M Bandwidth	36	5180.0	5179.907229	-17.91	±20	PASS
		40	5200.0	5199.905329	-18.21	±20	PASS
		48	5240.0	5239.904291	-18.27	±20	PASS
		52	5260.0	5259.904091	-18.23	±20	PASS
		56	5280.0	5279.905341	-17.93	±20	PASS
		64	5320.0	5319.903804	-18.08	±20	PASS
		100	5500.0	5499.899654	-18.24	±20	PASS
		116	5580.0	5579.897929	-18.29	±20	PASS
		140	5700.0	5699.895916	-18.26	±20	PASS
		149	5745.0	5744.895166	-18.25	±20	PASS
		157	5785.0	5784.894491	-18.24	±20	PASS
		165	5825.0	5824.893891	-18.22	±20	PASS
	40M Bandwidth	38	5190.0	5189.905691	-18.17	±20	PASS
		46	5230.0	5229.904666	-18.23	±20	PASS
		54	5270.0	5269.903215	18.37	±20	PASS
		62	5310.0	5309.903967	18.09	±20	PASS
		102	5510.0	5509.901758	17.83	±20	PASS
		110	5550.0	5549.899036	18.19	±20	PASS
		134	5670.0	5669.899652	17.70	±20	PASS
		151	5755.0	5754.896125	18.05	±20	PASS
	80M Bandwidth	159	5795.0	5794.897582	17.67	±20	PASS
		42	5210.0	5209.904463	18.34	±20	PASS
		58	5290.0	5289.905993	17.77	±20	PASS
		106	5530.0	5529.899564	18.16	±20	PASS
		122	5610.0	5609.902286	17.42	±20	PASS
30°C/NV	20M Bandwidth	155	5775.0	5774.896354	17.95	±20	PASS
		36	5180.0	5179.906854	-17.98	±20	PASS
		40	5200.0	5199.905279	-18.22	±20	PASS
		48	5240.0	5239.904329	-18.26	±20	PASS
		52	5260.0	5259.904079	-18.24	±20	PASS
		56	5280.0	5279.905004	-17.99	±20	PASS
		64	5320.0	5319.903616	-18.12	±20	PASS
		100	5500.0	5499.899704	-18.24	±20	PASS
		116	5580.0	5579.898041	-18.27	±20	PASS
		140	5700.0	5699.895791	-18.28	±20	PASS
		149	5745.0	5744.895104	-18.26	±20	PASS
		157	5785.0	5784.894416	-18.25	±20	PASS
		165	5825.0	5824.893754	-18.24	±20	PASS
	40M	38	5190.0	5189.905529	-18.20	±20	PASS

CTC Laboratories, Inc.

Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn

TRF No: CTC-TR-062_A1

For anti-fake verification, please visit the official website of China Inspection And Testing
Society : yz.cnca.cn



	Bandwidth	46	5230.0	5229.904604	-18.24	±20	PASS
		54	5270.0	5269.906413	17.76	±20	PASS
		62	5310.0	5309.902697	18.32	±20	PASS
		102	5510.0	5509.903687	17.48	±20	PASS
		110	5550.0	5549.899785	18.06	±20	PASS
		134	5670.0	5669.899714	17.69	±20	PASS
		151	5755.0	5754.897854	17.75	±20	PASS
		159	5795.0	5794.899032	17.42	±20	PASS
	80M Bandwidth	42	5210.0	5209.905965	18.05	±20	PASS
		58	5290.0	5289.904915	17.97	±20	PASS
		106	5530.0	5529.899029	18.26	±20	PASS
		122	5610.0	5609.902397	17.40	±20	PASS
		155	5775.0	5774.894520	18.26	±20	PASS
40°C/NV	20M Bandwidth	36	5180.0	5179.906591	-18.03	±20	PASS
		40	5200.0	5199.905516	-18.17	±20	PASS
		48	5240.0	5239.904441	-18.24	±20	PASS
		52	5260.0	5259.904016	-18.25	±20	PASS
		56	5280.0	5279.904716	-18.05	±20	PASS
		64	5320.0	5319.903366	-18.16	±20	PASS
		100	5500.0	5499.899691	-18.24	±20	PASS
		116	5580.0	5579.897941	-18.29	±20	PASS
		140	5700.0	5699.895841	-18.27	±20	PASS
		149	5745.0	5744.895054	-18.27	±20	PASS
		157	5785.0	5784.894391	-18.26	±20	PASS
		165	5825.0	5824.893666	-18.25	±20	PASS
	40M Bandwidth	38	5190.0	5189.905491	-18.21	±20	PASS
		46	5230.0	5229.904604	-18.24	±20	PASS
		54	5270.0	5269.903143	18.38	±20	PASS
		62	5310.0	5309.903627	18.15	±20	PASS
		102	5510.0	5509.904524	17.33	±20	PASS
		110	5550.0	5549.899143	18.17	±20	PASS
		134	5670.0	5669.899529	17.72	±20	PASS
		151	5755.0	5754.898278	17.68	±20	PASS
		159	5795.0	5794.895035	18.11	±20	PASS
	80M Bandwidth	42	5210.0	5209.905957	18.05	±20	PASS
		58	5290.0	5289.903251	18.29	±20	PASS
		106	5530.0	5529.899250	18.22	±20	PASS
		122	5610.0	5609.901524	17.55	±20	PASS
		155	5775.0	5774.895845	18.04	±20	PASS



3.8. Antenna Requirement

Requirement

FCC CFR Title 47 Part 15 Subpart C Section 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Test Result

The directional gain of the antenna is less than 6dBi, please refer to the EUT internal photographs antenna photo.

RSS-Gen Issue 5 Section 6.8

The applicant for equipment certification, as per RSP-100, must provide a list of all antenna types that may be used with the licence-exempt transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. Licence-exempt transmitters that have received equipment certification may operate with different types of antennas. However, it is not permissible to exceed the maximum equivalent isotropically radiated power(e.i.r.p.) limits specified in the applicable standard (RSS) for licence-exempt apparatus.

Result

PASS.

The EUT has 1 antenna: a Chip Antenna for 5G WIFI.

Note: ☒ Antenna use a permanently attached antenna which is not replaceable.
☐ Not using a standard antenna jack or electrical connector for antenna replacement.
☐ The antenna has to be professionally installed (please provide method of installation).
Which in accordance to RSS-Gen 6.8, please refer to the internal photos.