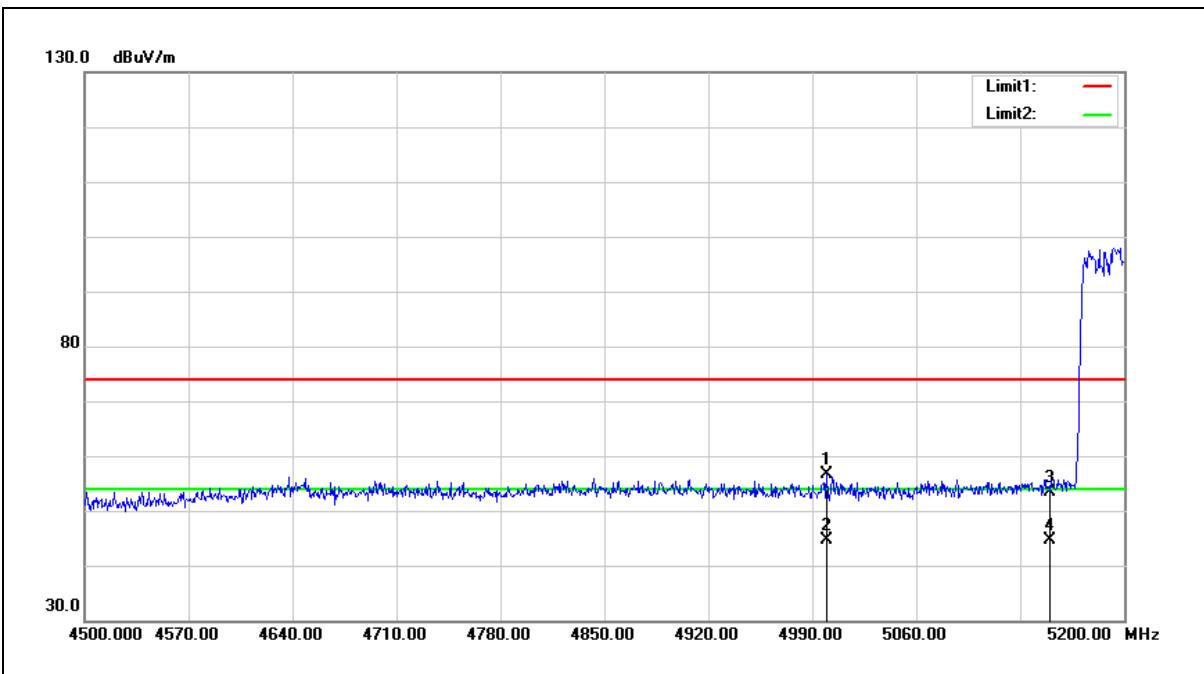


Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5190MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



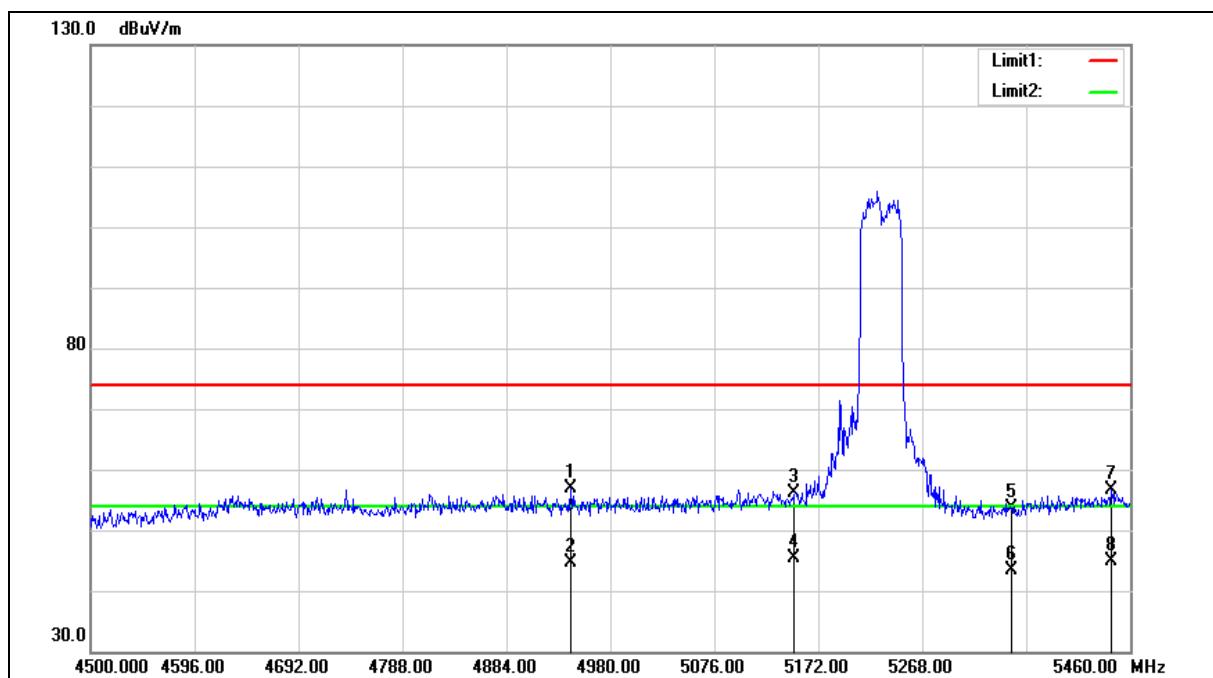
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4999.800	51.09	5.55	56.64	74.00	-17.36	peak
2	4999.800	39.08	5.55	44.63	54.00	-9.37	Avg
3	5150.000	47.69	5.78	53.47	74.00	-20.53	peak
4	5150.000	38.85	5.78	44.63	54.00	-9.37	Avg

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:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5230MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5230MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		

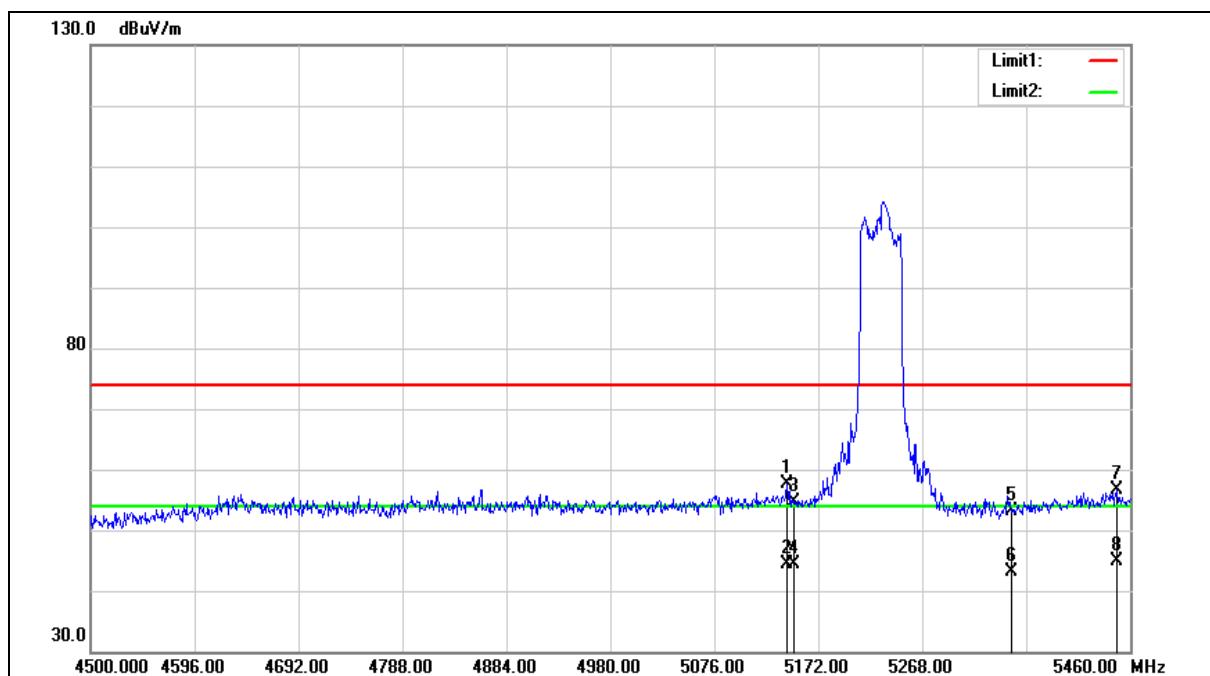
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4943.520	51.51	5.38	56.89	74.00	-17.11	peak
2	4943.520	39.30	5.38	44.68	54.00	-9.32	AVG
3	5150.000	50.34	5.78	56.12	74.00	-17.88	peak
4	5150.000	39.64	5.78	45.42	54.00	-8.58	AVG
5	5350.000	47.51	6.07	53.58	74.00	-20.42	peak
6	5350.000	37.19	6.07	43.26	54.00	-10.74	AVG
7	5442.720	50.34	6.21	56.55	74.00	-17.45	peak
8	5442.720	38.68	6.21	44.89	54.00	-9.11	AVG

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:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5230MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5230MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		

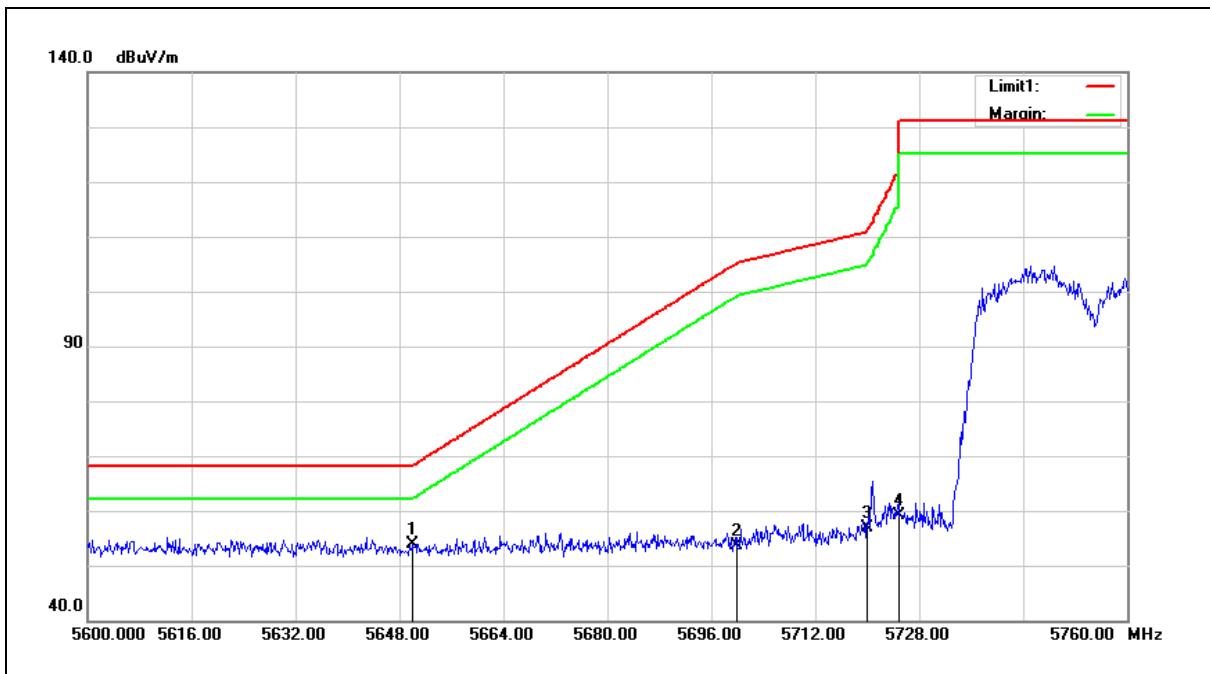
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5143.200	51.91	5.77	57.68	74.00	-16.32	peak
2	5143.200	38.66	5.77	44.43	54.00	-9.57	AVG
3	5150.000	48.90	5.78	54.68	74.00	-19.32	peak
4	5150.000	38.56	5.78	44.34	54.00	-9.66	AVG
5	5350.000	47.12	6.07	53.19	74.00	-20.81	peak
6	5350.000	37.11	6.07	43.18	54.00	-10.82	AVG
7	5447.520	50.44	6.22	56.66	74.00	-17.34	peak
8	5447.520	38.57	6.22	44.79	54.00	-9.21	AVG

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:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5755MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



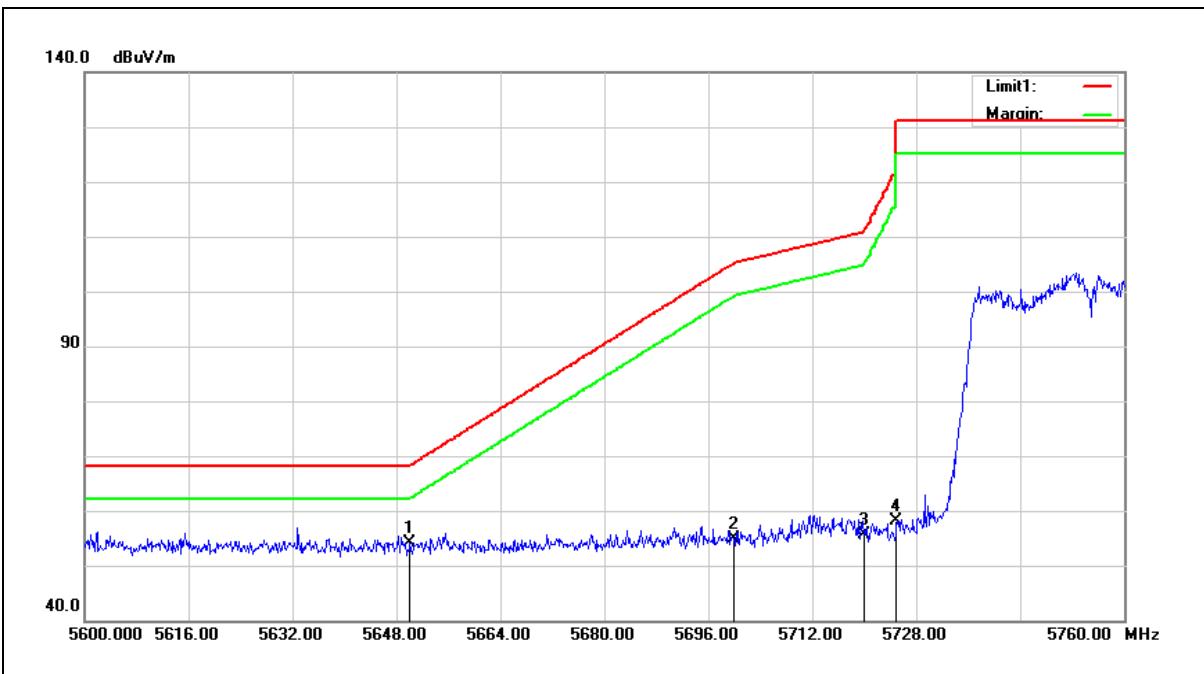
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.28	6.61	53.89	68.20	-14.31	peak
2	5700.000	46.89	6.71	53.60	105.20	-51.60	peak
3	5720.000	50.10	6.77	56.87	110.80	-53.93	peak
4	5725.000	52.30	6.78	59.08	122.20	-63.12	peak

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:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5755MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



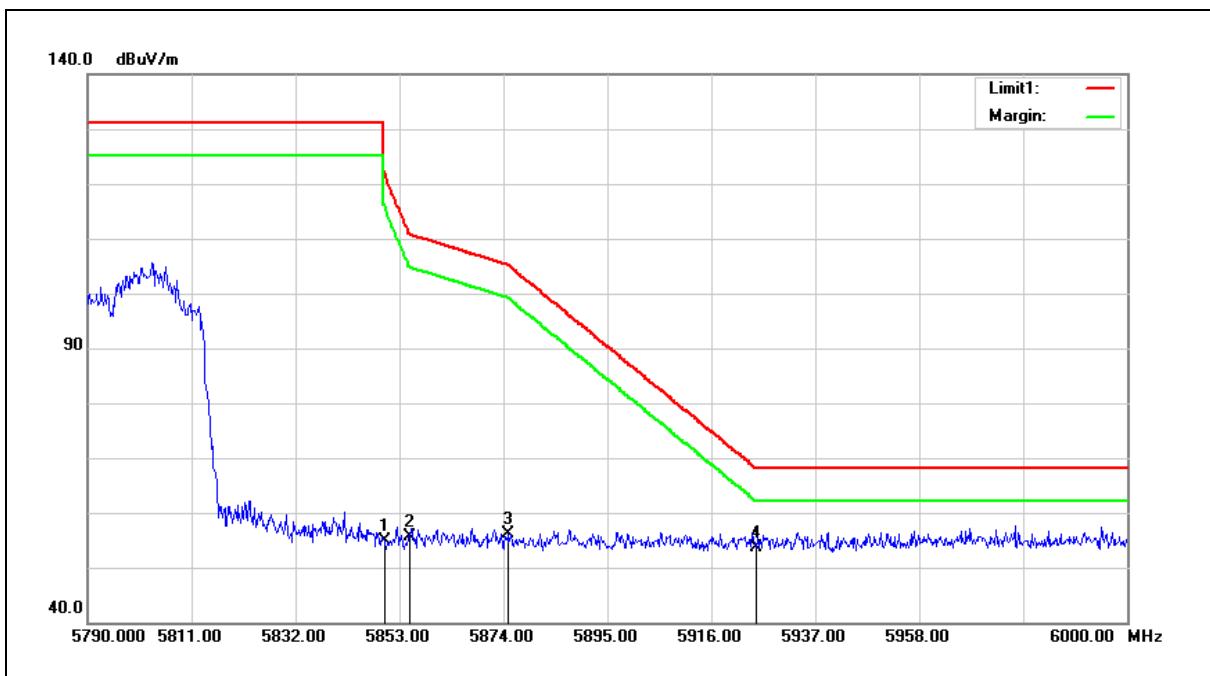
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.59	6.61	54.20	68.20	-14.00	peak
2	5700.000	48.18	6.71	54.89	105.20	-50.31	peak
3	5720.000	48.86	6.77	55.63	110.80	-55.17	peak
4	5725.000	51.26	6.78	58.04	122.20	-64.16	peak

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:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5795MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Horizontal		



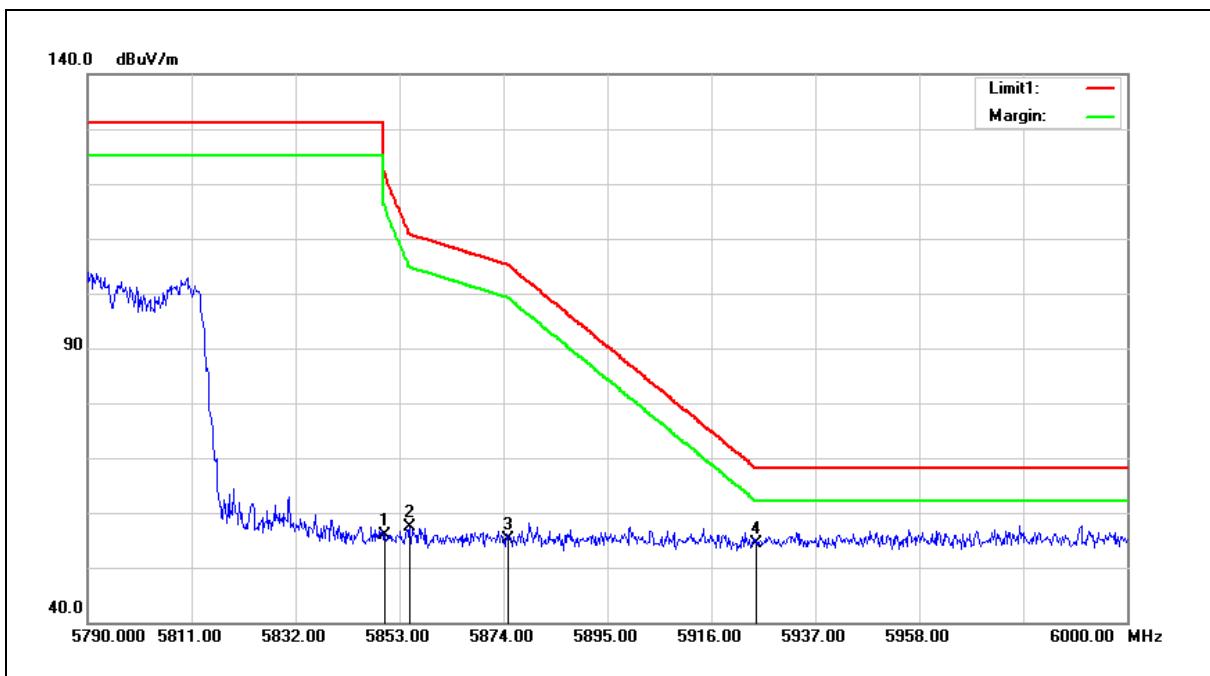
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	47.82	7.03	54.85	122.20	-67.35	peak
2	5855.000	48.50	7.04	55.54	110.80	-55.26	peak
3	5875.000	49.10	7.09	56.19	105.20	-49.01	peak
4	5925.000	46.32	7.20	53.52	68.20	-14.68	peak

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:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5795MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



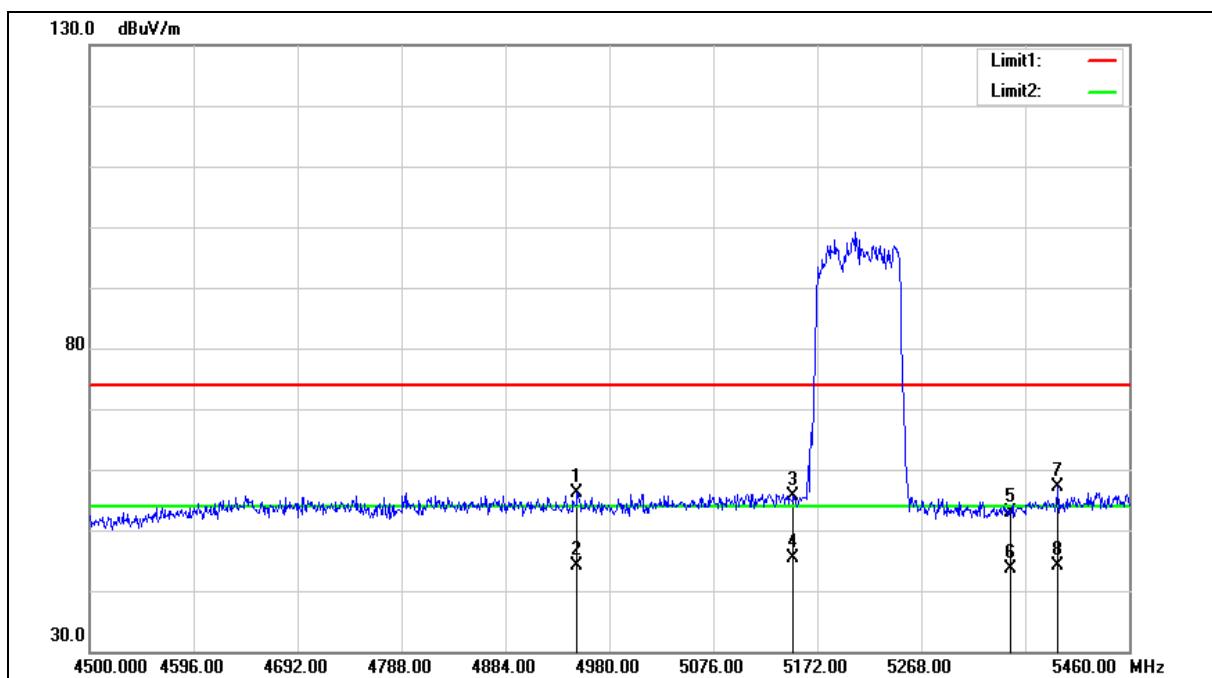
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	48.97	7.03	56.00	122.20	-66.20	peak
2	5855.000	50.37	7.04	57.41	110.80	-53.39	peak
3	5875.000	48.11	7.09	55.20	105.20	-50.00	peak
4	5925.000	47.22	7.20	54.42	68.20	-13.78	peak

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:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5210MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5210MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		

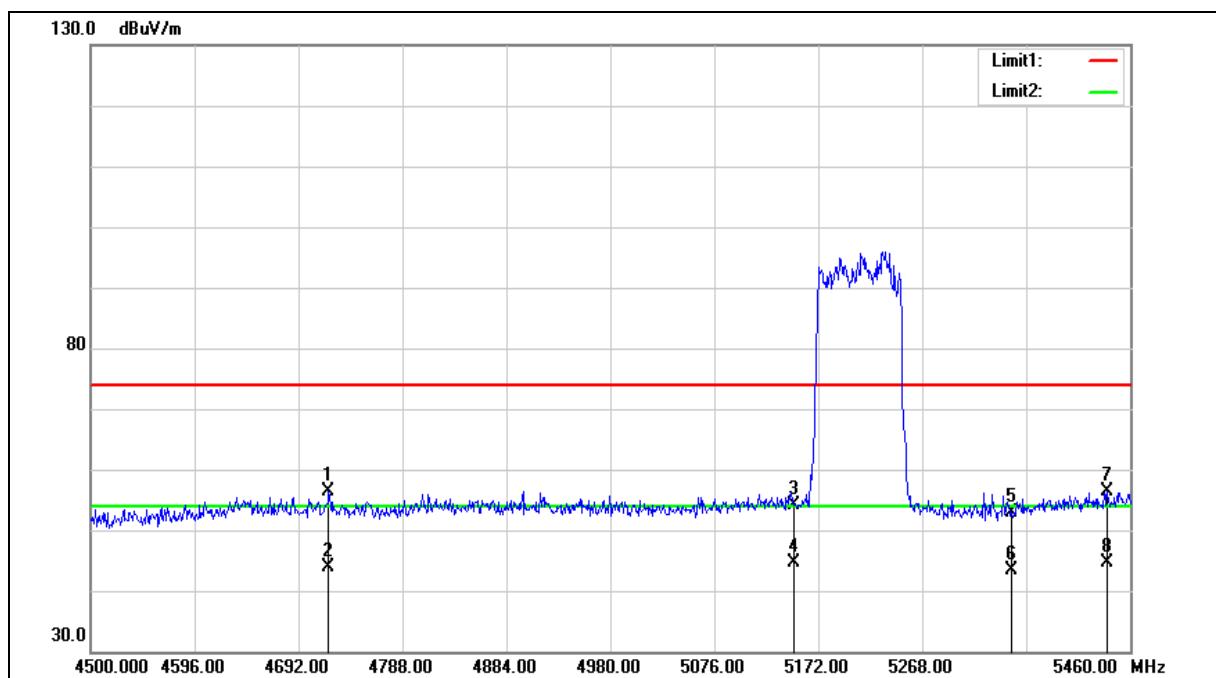
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4950.240	50.84	5.39	56.23	74.00	-17.77	peak
2	4950.240	38.73	5.39	44.12	54.00	-9.88	AVG
3	5150.000	49.92	5.78	55.70	74.00	-18.30	peak
4	5150.000	39.57	5.78	45.35	54.00	-8.65	AVG
5	5350.000	46.89	6.07	52.96	74.00	-21.04	peak
6	5350.000	37.66	6.07	43.73	54.00	-10.27	AVG
7	5393.760	51.09	6.14	57.23	74.00	-16.77	peak
8	5393.760	37.96	6.14	44.10	54.00	-9.90	AVG

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:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5210MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5210MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

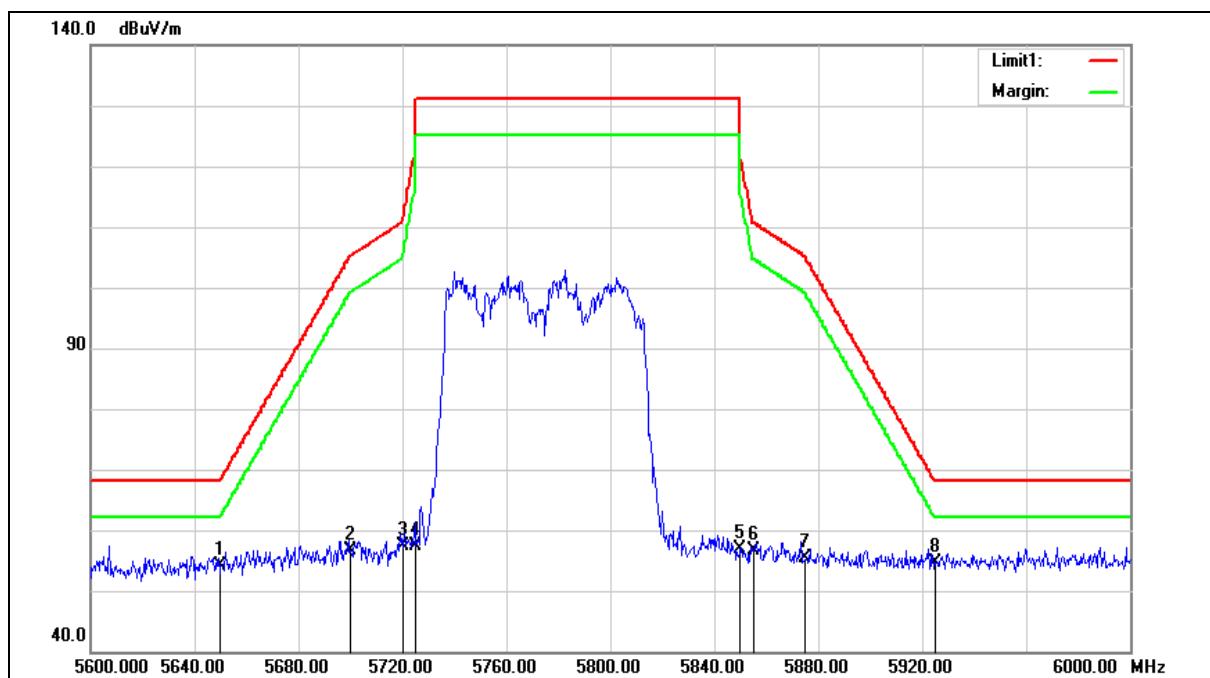
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4719.840	51.68	4.66	56.34	74.00	-17.66	peak
2	4719.840	39.29	4.66	43.95	54.00	-10.05	AVG
3	5150.000	48.24	5.78	54.02	74.00	-19.98	peak
4	5150.000	38.84	5.78	44.62	54.00	-9.38	AVG
5	5350.000	46.88	6.07	52.95	74.00	-21.05	peak
6	5350.000	37.19	6.07	43.26	54.00	-10.74	AVG
7	5438.880	50.16	6.20	56.36	74.00	-17.64	peak
8	5438.880	38.51	6.20	44.71	54.00	-9.29	AVG

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:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Horizontal		

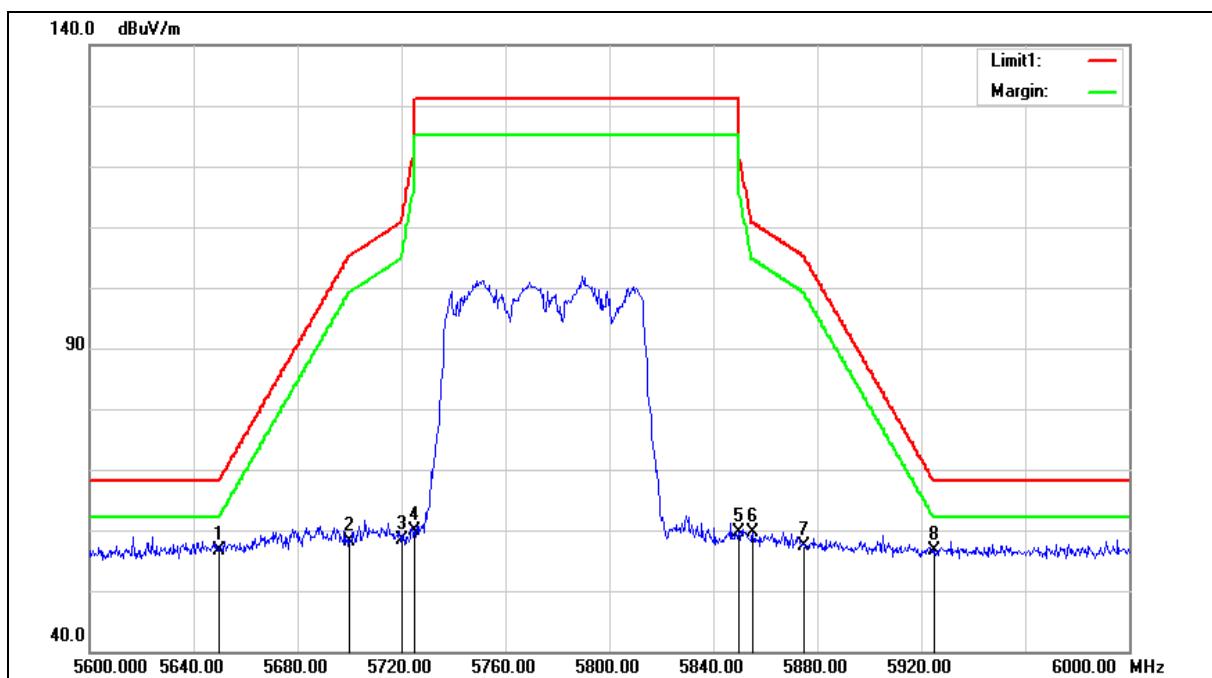
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	47.63	6.61	54.24	68.20	-13.96	peak
2	5700.000	49.90	6.71	56.61	105.20	-48.59	peak
3	5720.000	50.61	6.77	57.38	110.80	-53.42	peak
4	5725.000	50.55	6.78	57.33	122.20	-64.87	peak
5	5850.000	49.87	7.03	56.90	122.20	-65.30	peak
6	5855.000	49.64	7.04	56.68	110.80	-54.12	peak
7	5875.000	48.29	7.09	55.38	105.20	-49.82	peak
8	5925.000	47.47	7.20	54.67	68.20	-13.53	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:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	50.06	6.61	56.67	68.20	-11.53	peak
2	5700.000	51.33	6.71	58.04	105.20	-47.16	peak
3	5720.000	51.49	6.77	58.26	110.80	-52.54	peak
4	5725.000	53.01	6.78	59.79	122.20	-62.41	peak
5	5850.000	52.49	7.03	59.52	122.20	-62.68	peak
6	5855.000	52.51	7.04	59.55	110.80	-51.25	peak
7	5875.000	50.25	7.09	57.34	105.20	-47.86	peak
8	5925.000	49.32	7.20	56.52	68.20	-11.68	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.

5.3. Maximum Conducted Output Power Measurement

Test Mode		Mode 2: IEEE 802.11a Continuous TX mode							
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)	
		Max. Output Power							
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5180	6M	20.46	0.111	20.41	0.110	23.45	0.221	≤ 30	
5200		21.55	0.143	21.80	0.151	24.69	0.294		
5220		21.71	0.148	22.09	0.162	24.91	0.310		
5240		21.60	0.145	21.81	0.152	24.72	0.296		
5745		22.07	0.161	21.79	0.151	24.94	0.312		
5765		21.81	0.152	21.66	0.147	24.75	0.298		
5785		21.82	0.152	21.47	0.140	24.66	0.292		
5805		21.61	0.145	21.43	0.139	24.53	0.284		
5825		21.58	0.144	21.52	0.142	24.56	0.286		
5180	54M	20.40	0.110	20.27	0.106	23.35	0.216	≤ 30	
5200		21.48	0.141	21.69	0.148	24.60	0.288		
5220		21.61	0.145	21.93	0.156	24.78	0.301		
5240		21.47	0.140	21.65	0.146	24.57	0.286		
5745		22.00	0.158	21.71	0.148	24.87	0.307		
5765		21.68	0.147	21.55	0.143	24.63	0.290		
5785		21.70	0.148	21.39	0.138	24.56	0.286		
5805		21.52	0.142	21.37	0.137	24.46	0.279		
5825		21.53	0.142	21.44	0.139	24.50	0.282		

Note: The relevant measured result has the offset with cable loss already.

Test Mode		Mode 3: IEEE 802.11ac 20MHz Continuous TX mode							
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)	
		Max. Output Power							
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5180	13M	20.30	0.107	19.96	0.099	23.14	0.206	≤ 30	
5200		21.68	0.147	21.79	0.151	24.75	0.298		
5220		21.55	0.143	21.62	0.145	24.60	0.288		
5240		21.14	0.130	20.89	0.123	24.03	0.253		
5745		22.61	0.182	22.13	0.163	25.39	0.346	≤ 30	
5765		22.54	0.179	22.02	0.159	25.30	0.339		
5785		22.36	0.172	22.02	0.159	25.20	0.331		
5805		22.31	0.170	22.39	0.173	25.36	0.344		
5825		21.97	0.157	22.44	0.175	25.22	0.333		
5180	173.4M	20.21	0.105	19.82	0.096	23.03	0.201	≤ 30	
5200		21.54	0.143	21.65	0.146	24.61	0.289		
5220		21.46	0.140	21.53	0.142	24.51	0.282		
5240		21.02	0.126	20.77	0.119	23.91	0.246		
5745		22.53	0.179	22.06	0.161	25.31	0.340	≤ 30	
5765		22.42	0.175	21.96	0.157	25.21	0.332		
5785		22.30	0.170	21.95	0.157	25.14	0.326		
5805		22.19	0.166	22.27	0.169	25.24	0.334		
5825		21.85	0.153	22.32	0.171	25.10	0.324		

Note: The relevant measured result has the offset with cable loss already.

Test Mode		Mode 4: IEEE 802.11ac 40MHz Continuous TX mode							
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)	
		Max. Output Power							
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5190	27M	17.40	0.055	17.31	0.054	20.37	0.109	≤ 30	
5230		21.10	0.129	20.89	0.123	24.01	0.252		
5755		21.27	0.134	20.70	0.117	24.00	0.251	≤ 30	
5795		20.76	0.119	20.33	0.108	23.56	0.227		
5190	400M	17.29	0.054	17.20	0.052	20.26	0.106	≤ 30	
5230		20.97	0.125	20.80	0.120	23.90	0.245		
5755		21.21	0.132	20.62	0.115	23.94	0.247	≤ 30	
5755		20.70	0.117	20.26	0.106	23.50	0.224		

Test Mode		Mode 5: IEEE 802.11ac 80MHz Continuous TX mode							
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)	
		Max. Output Power							
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5210	58.6M	17.41	0.055	17.60	0.058	20.52	0.113	≤ 30	
5775		20.60	0.115	20.46	0.111	23.54	0.226		
5210	866.6M	17.33	0.054	17.52	0.056	20.44	0.111	≤ 30	
5775		20.53	0.113	20.40	0.110	23.48	0.223		

Note: The relevant measured result has the offset with cable loss already.

Beamforming on

Test Mode		Mode 3: IEEE 802.11ac 20MHz Continuous TX mode							
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)	
		Max. Output Power							
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5180	13M	16.79	0.048	17.10	0.051	19.96	0.099	≤ 28.05	
5200		18.54	0.071	18.62	0.073	21.59	0.144		
5220		18.42	0.070	18.61	0.073	21.53	0.142		
5240		17.74	0.059	17.80	0.060	20.78	0.120		
5745		19.21	0.083	19.16	0.082	22.20	0.166	≤ 27.74	
5765		19.25	0.084	19.11	0.081	22.19	0.166		
5785		19.14	0.082	19.05	0.080	22.11	0.162		
5805		19.29	0.085	19.23	0.084	22.27	0.169		
5825		18.92	0.078	19.09	0.081	22.02	0.159		
5180	173.4M	16.71	0.047	17.00	0.050	19.87	0.097	≤ 28.05	
5200		18.47	0.070	18.57	0.072	21.53	0.142		
5220		18.35	0.068	18.54	0.071	21.46	0.140		
5240		17.70	0.059	17.73	0.059	20.73	0.118		
5745		19.16	0.082	19.10	0.081	22.14	0.164	≤ 27.74	
5765		19.18	0.083	19.03	0.080	22.12	0.163		
5785		19.10	0.081	18.96	0.079	22.04	0.160		
5805		19.20	0.083	19.15	0.082	22.19	0.165		
5825		18.84	0.077	19.02	0.080	21.94	0.156		

Note: The relevant measured result has the offset with cable loss already.

Test Mode		Mode 4: IEEE 802.11ac 40MHz Continuous TX mode							
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)	
		Max. Output Power							
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5190	27M	14.31	0.027	14.25	0.027	17.29	0.054	≤ 28.05	
5230		17.92	0.062	17.83	0.061	20.89	0.123		
5755		17.63	0.058	17.75	0.060	20.70	0.118	≤ 27.74	
5795		17.42	0.055	17.31	0.054	20.38	0.109		
5190	400M	14.23	0.026	14.20	0.026	17.23	0.053	≤ 28.05	
5230		17.88	0.061	17.77	0.060	20.84	0.121		
5755		17.55	0.057	17.69	0.059	20.63	0.116	≤ 27.74	
5755		17.35	0.054	17.27	0.053	20.32	0.108		

Test Mode		Mode 5: IEEE 802.11ac 80MHz Continuous TX mode							
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)	
		Max. Output Power							
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)		
5210	58.6M	14.10	0.026	14.23	0.026	17.18	0.052	≤ 28.05	
5775		17.41	0.055	17.38	0.055	20.41	0.110		
5210	866.6M	13.95	0.025	14.00	0.025	16.99	0.050	≤ 28.05	
5775		17.33	0.054	17.30	0.054	20.33	0.108		

Note: The relevant measured result has the offset with cable loss already.

5.4. 26dB RF Bandwidth Measurement & 99 % Occupied Bandwidth Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26dB Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	22.530	21.190	16.478	16.595
5200	32.350	31.430	17.348	17.041
5240	32.320	31.200	17.301	16.866

Test Mode	Mode 3: IEEE 802.11ac 20MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26dB Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	23.040	22.610	17.623	17.878
5200	40.650	36.740	18.985	18.608
5240	37.860	36.230	18.587	18.980

Test Mode	Mode 4: IEEE 802.11ac 40MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26dB Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	40.010	39.390	36.012	35.762
5230	63.010	63.410	36.572	36.533

Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26dB Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5210	82.440	83.020	75.524	75.263

Note: The 99% occupied bandwidth not crossed 5250MHz.

Beamforming on

Test Mode	Mode 3: IEEE 802.11ac 20MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26dB Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	19.840	20.610	17.523	17.791
5200	19.740	19.920	17.455	17.729
5240	20.080	19.940	17.584	17.586

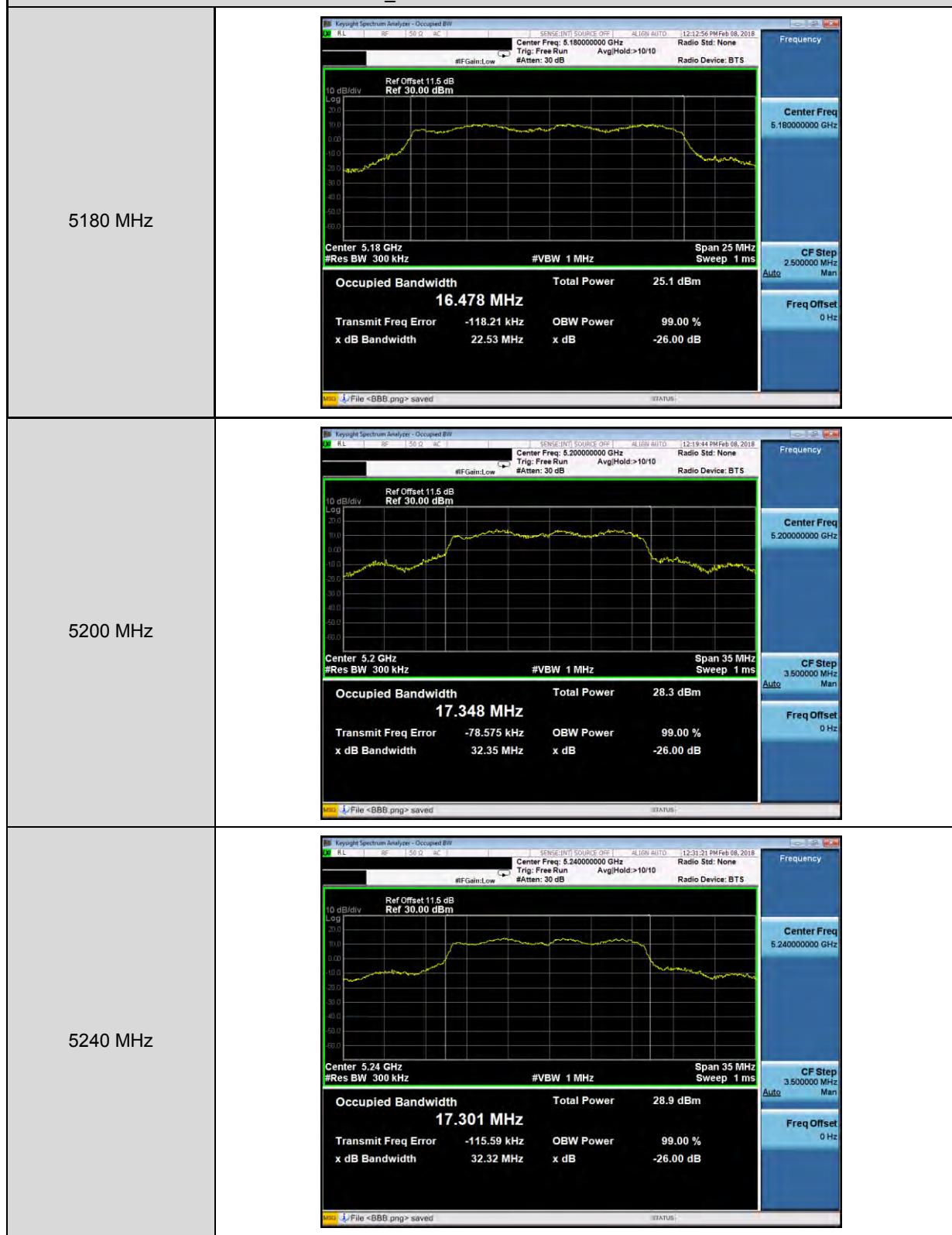
Test Mode	Mode 4: IEEE 802.11ac 40MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26dB Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	39.610	39.460	35.743	35.779
5230	39.770	39.780	36.029	35.915

Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26dB Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5210	82.560	81.160	75.487	75.242

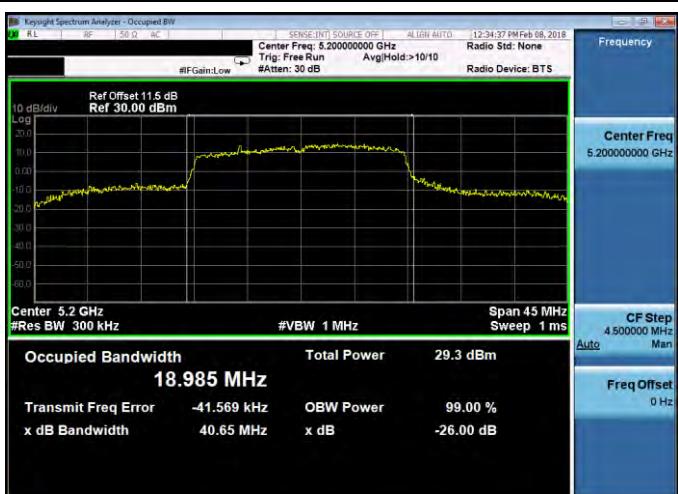
Note: The 99% occupied bandwidth not crossed 5250MHz.

■ Test Graphs

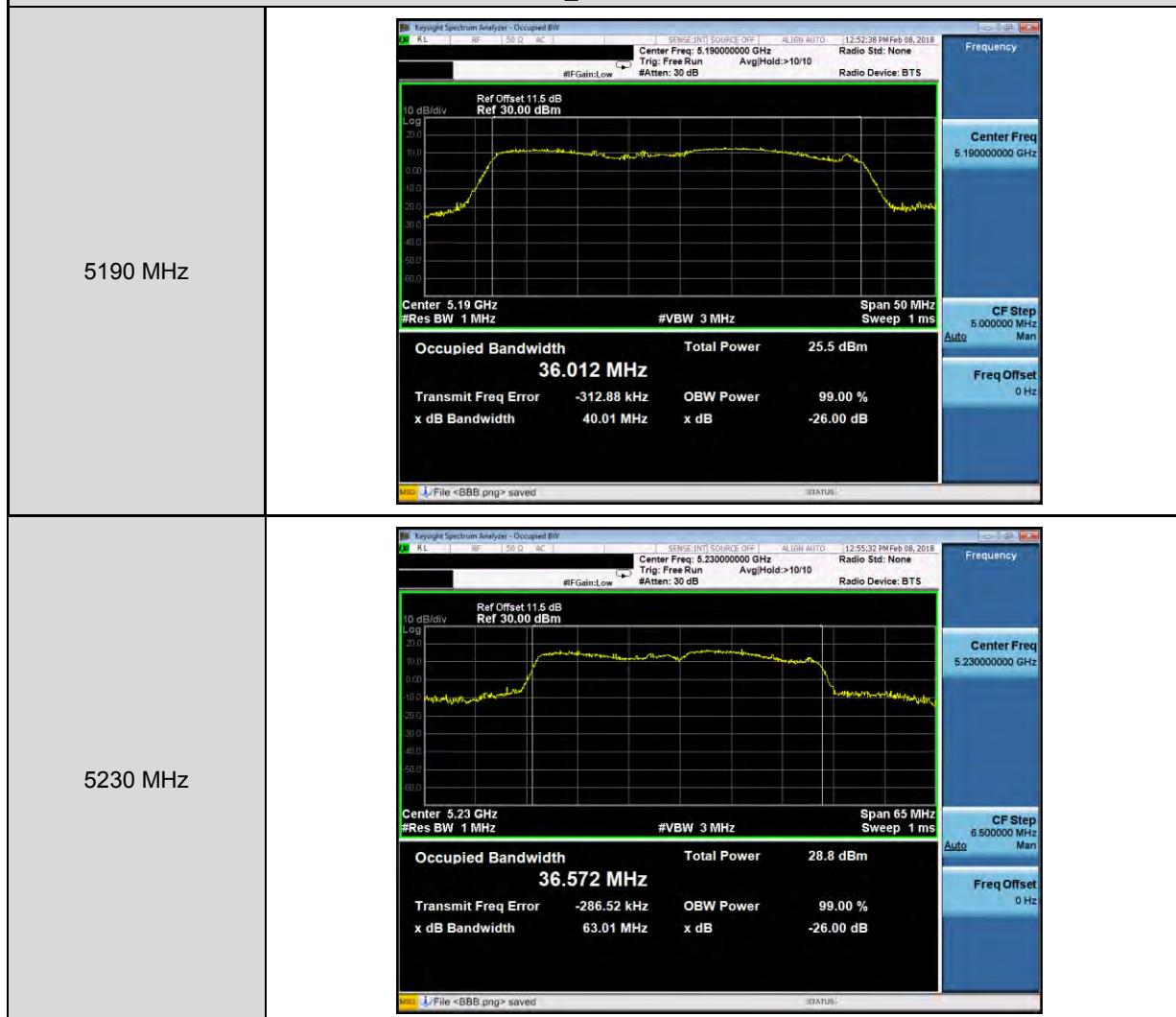
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0



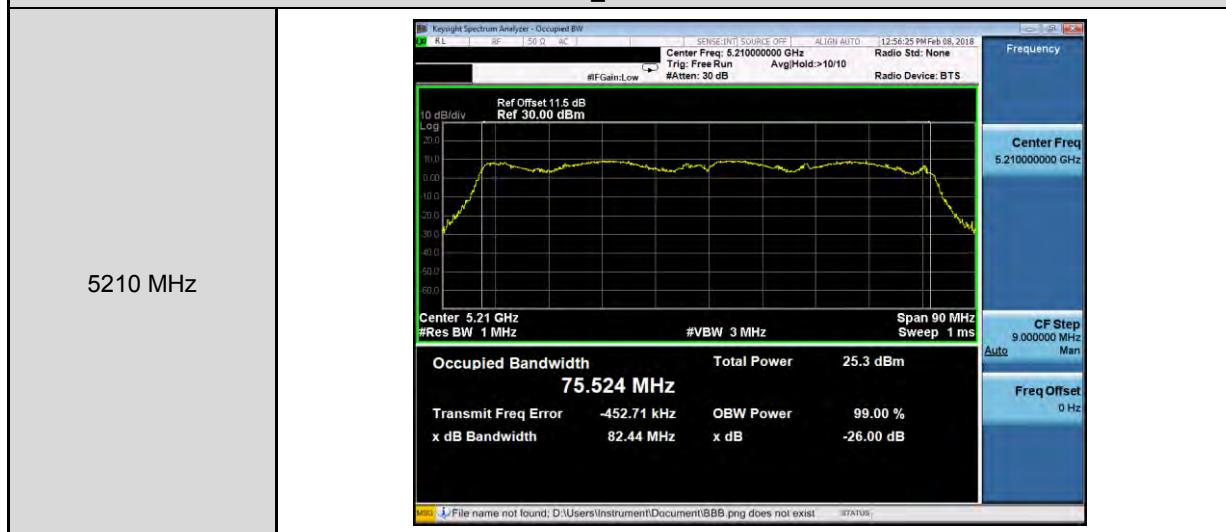
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode_ANT-0

5180 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.180000000 GHz SENSE:INT SOURCE: OFF ALIGN: AUTO 12:33:34 PM Feb 08, 2018 Radio Std: None</p> <p>Trig: Free Run Avg/Hold:>10/10 #Atten: 30 dB Radio Device: BTS</p> <p>Frequency</p> <p>Center Freq 5.180000000 GHz</p> <p>CF Step 2.500000 MHz Man</p> <p>Freq Offset 0 Hz</p> <p>Occupied Bandwidth 17.623 MHz</p> <p>Total Power 26.9 dBm</p> <p>Transmit Freq Error -7.823 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 23.04 MHz x dB -26.00 dB</p> <p>Status: J:\File <BBB.png> saved</p>
5200 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.200000000 GHz SENSE:INT SOURCE: OFF ALIGN: AUTO 12:34:27 PM Feb 08, 2018 Radio Std: None</p> <p>Trig: Free Run Avg/Hold:>10/10 #Atten: 30 dB Radio Device: BTS</p> <p>Frequency</p> <p>Center Freq 5.200000000 GHz</p> <p>CF Step 4.500000 MHz Man</p> <p>Freq Offset 0 Hz</p> <p>Occupied Bandwidth 18.985 MHz</p> <p>Total Power 29.3 dBm</p> <p>Transmit Freq Error -41.569 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 40.65 MHz x dB -26.00 dB</p> <p>Status: J:\File <BBB.png> saved</p>
5240 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.240000000 GHz SENSE:INT SOURCE: OFF ALIGN: AUTO 12:47:59 PM Feb 08, 2018 Radio Std: None</p> <p>Trig: Free Run Avg/Hold:>10/10 #Atten: 30 dB Radio Device: BTS</p> <p>Frequency</p> <p>Center Freq 5.240000000 GHz</p> <p>CF Step 4.000000 MHz Man</p> <p>Freq Offset 0 Hz</p> <p>Occupied Bandwidth 18.587 MHz</p> <p>Total Power 29.0 dBm</p> <p>Transmit Freq Error 711 Hz OBW Power 99.00 %</p> <p>x dB Bandwidth 37.86 MHz x dB -26.00 dB</p> <p>Status: J:\File <BBB.png> saved</p>

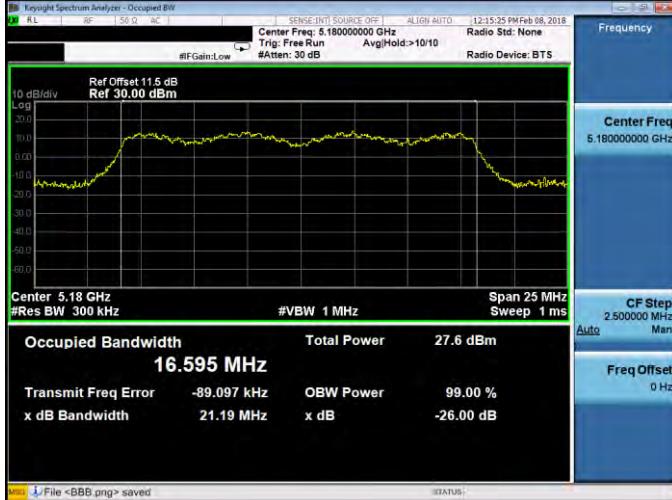
Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-0



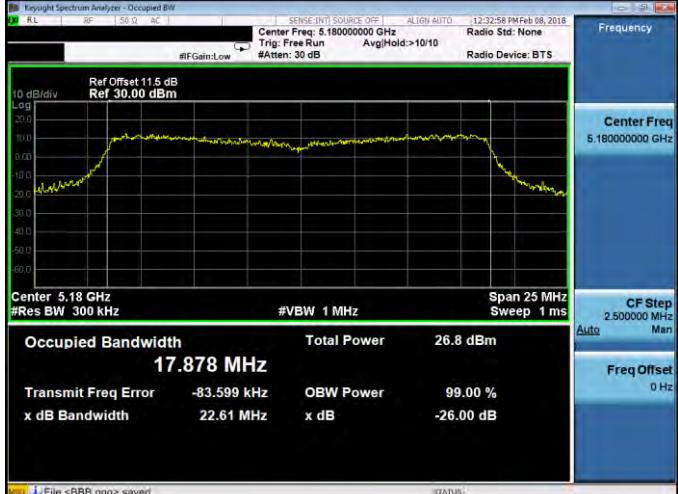
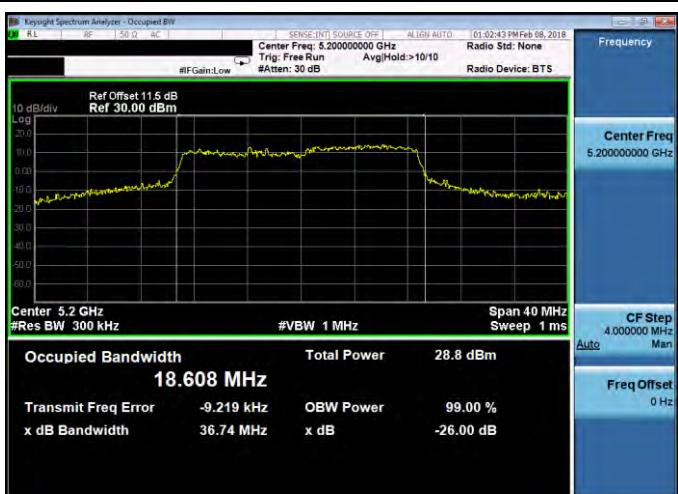
Mode 5: IEEE 802.11ac 80MHz Continuous TX mode_ANT-0



Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1

5180 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.180000000 GHz SENSE:INT SOURCE: OFF ALIGN: AUTO 12:15:25 PM Feb 08, 2018</p> <p>Trig: Free Run Avg:Hold:>10/10 Radio Std: None Radio Device: BTS</p> <p>#IFGain:Low #Atten: 30 dB</p> <p>Frequency</p> <p>Center Freq 5.180000000 GHz</p> <p>CF Step 2.500000 MHz Man</p> <p>Auto</p> <p>Freq Offset 0 Hz</p> <p>Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 16.595 MHz</p> <p>Total Power 27.6 dBm</p> <p>Transmit Freq Error -89.097 kHz</p> <p>x dB Bandwidth 21.19 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB 26.00 dB</p> <p>Status: J:\File <BBB.png> saved</p>
5200 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.200000000 GHz SENSE:INT SOURCE: OFF ALIGN: AUTO 12:18:55 PM Feb 08, 2018</p> <p>Trig: Free Run Avg:Hold:>10/10 Radio Std: None Radio Device: BTS</p> <p>#IFGain:Low #Atten: 30 dB</p> <p>Frequency</p> <p>Center Freq 5.200000000 GHz</p> <p>CF Step 3.500000 MHz Man</p> <p>Auto</p> <p>Freq Offset 0 Hz</p> <p>Span 35 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 17.041 MHz</p> <p>Total Power 29.2 dBm</p> <p>Transmit Freq Error -89.288 kHz</p> <p>x dB Bandwidth 31.43 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB 26.00 dB</p> <p>Status: J:\File <BBB.png> saved</p>
5240 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.240000000 GHz SENSE:INT SOURCE: OFF ALIGN: AUTO 12:32:00 PM Feb 08, 2018</p> <p>Trig: Free Run Avg:Hold:>10/10 Radio Std: None Radio Device: BTS</p> <p>#IFGain:Low #Atten: 30 dB</p> <p>Frequency</p> <p>Center Freq 5.240000000 GHz</p> <p>CF Step 3.500000 MHz Man</p> <p>Auto</p> <p>Freq Offset 0 Hz</p> <p>Span 35 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 16.866 MHz</p> <p>Total Power 28.5 dBm</p> <p>Transmit Freq Error -127.56 kHz</p> <p>x dB Bandwidth 31.20 MHz</p> <p>OBW Power 99.00 %</p> <p>x dB 26.00 dB</p> <p>Status: J:\File <BBB.png> saved</p>

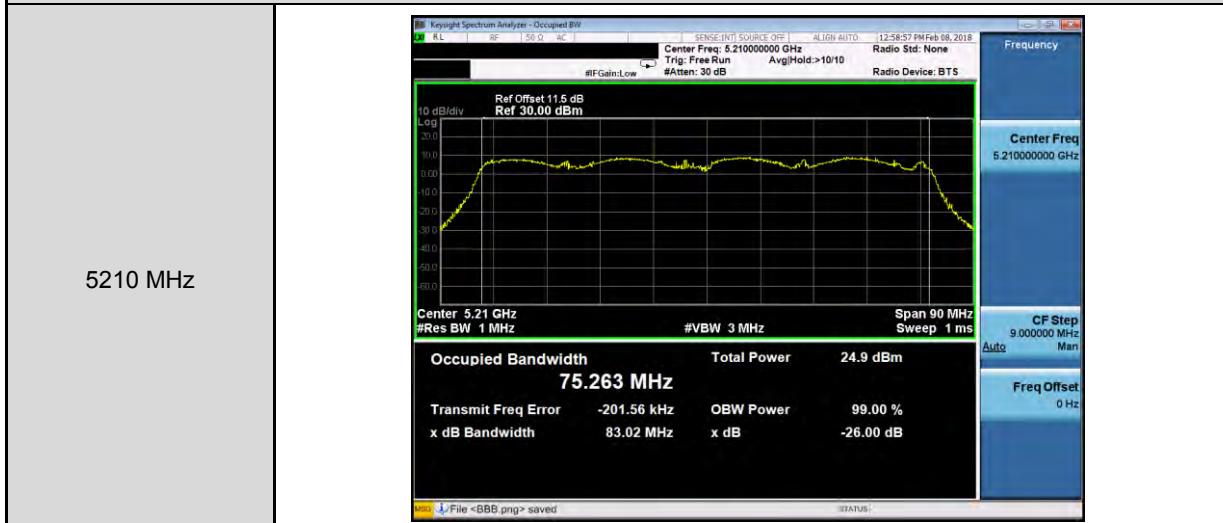
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode_ANT-1

5180 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.180000000 GHz SENSE:INT SOURCE: OFF ALIGN: AUTO 12:32:58 PM Feb 08, 2018</p> <p>Trig: Free Run Avg/Hold:>10/10 Radio Std: None Radio Device: BTS</p> <p>#IGain:Low #Atten: 30 dB</p> <p>Frequency</p> <p>Center Freq 5.180000000 GHz</p> <p>CF Step 2.500000 MHz Man</p> <p>Auto</p> <p>Freq Offset 0 Hz</p> <p>Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 17.878 MHz</p> <p>Total Power 26.8 dBm</p> <p>Transmit Freq Error -83.599 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 22.61 MHz x dB -26.00 dB</p> <p>Status: L-File <BBB.png> saved</p>
5200 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.200000000 GHz SENSE:INT SOURCE: OFF ALIGN: AUTO 01:02:45 PM Feb 08, 2018</p> <p>Trig: Free Run Avg/Hold:>10/10 Radio Std: None Radio Device: BTS</p> <p>#IGain:Low #Atten: 30 dB</p> <p>Frequency</p> <p>Center Freq 5.200000000 GHz</p> <p>CF Step 4.000000 MHz Man</p> <p>Auto</p> <p>Freq Offset 0 Hz</p> <p>Span 40 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 18.608 MHz</p> <p>Total Power 28.8 dBm</p> <p>Transmit Freq Error -9.219 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 36.74 MHz x dB -26.00 dB</p> <p>Status: L-File <BBB.png> saved</p>
5240 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.240000000 GHz SENSE:INT SOURCE: OFF ALIGN: AUTO 12:48:56 PM Feb 08, 2018</p> <p>Trig: Free Run Avg/Hold:>10/10 Radio Std: None Radio Device: BTS</p> <p>#IGain:Low #Atten: 30 dB</p> <p>Frequency</p> <p>Center Freq 5.240000000 GHz</p> <p>CF Step 4.000000 MHz Man</p> <p>Auto</p> <p>Freq Offset 0 Hz</p> <p>Span 40 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 18.980 MHz</p> <p>Total Power 30.2 dBm</p> <p>Transmit Freq Error 288.05 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 36.23 MHz x dB -26.00 dB</p> <p>Status: L-File <BBB.png> saved</p>

Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ ANT-1



Mode 5: IEEE 802.11ac 80MHz Continuous TX mode_ ANT-1



Beamforming on

Mode 3: IEEE 802.11ac 20MHz Continuous TX mode _ANT-0

5180 MHz



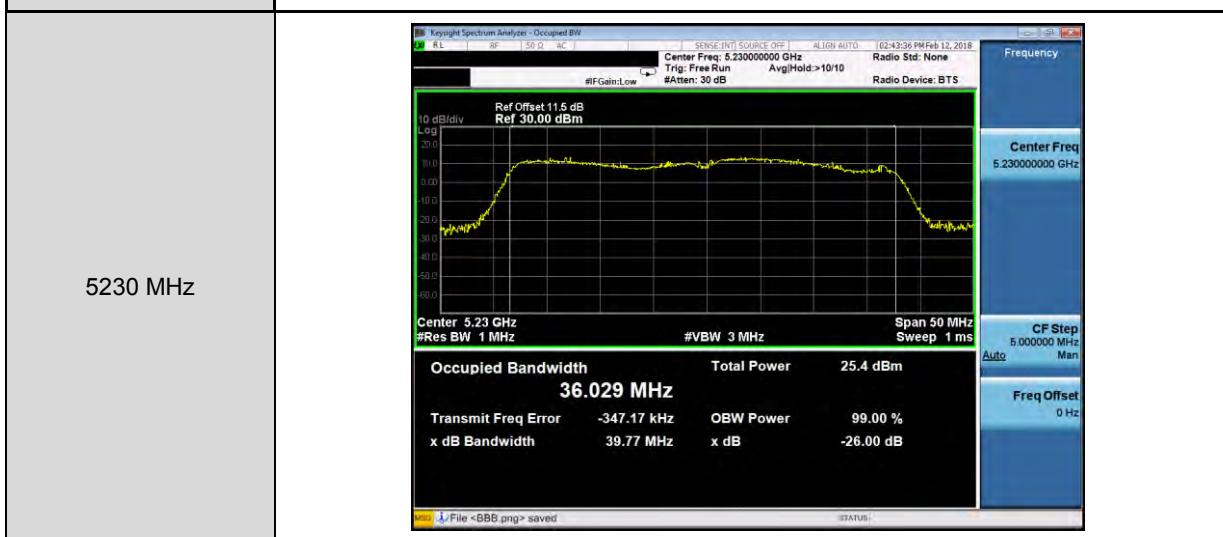
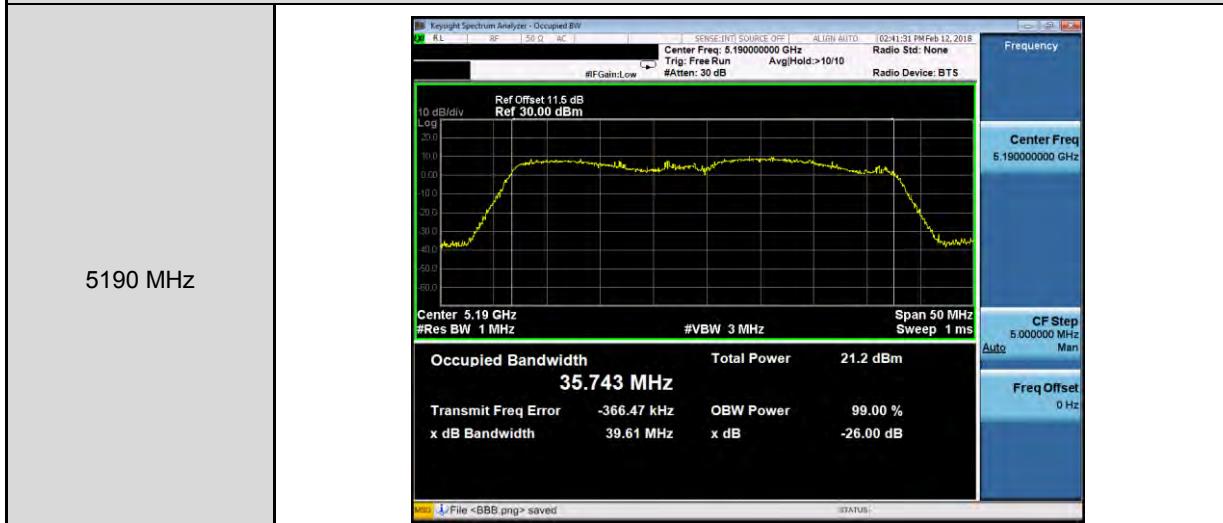
5200 MHz



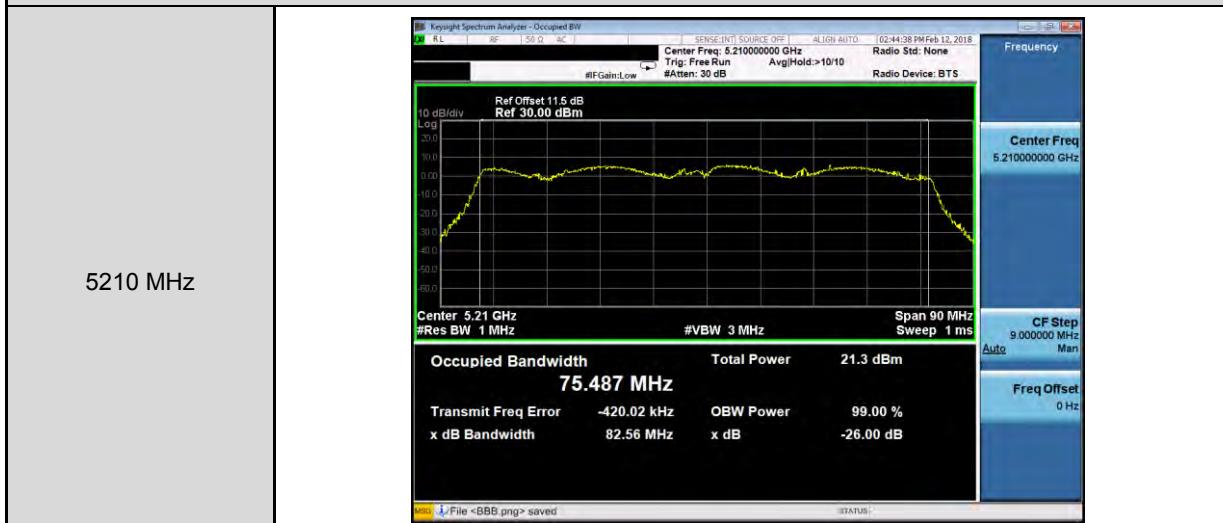
5240 MHz



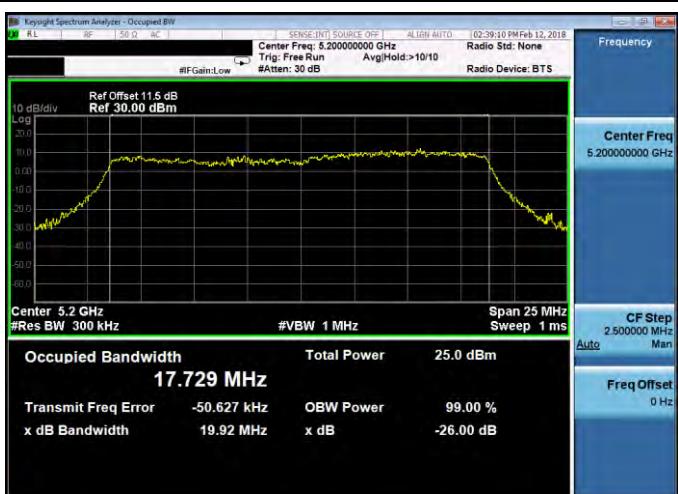
Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-0



Mode 5: IEEE 802.11ac 80MHz Continuous TX mode_ANT-0



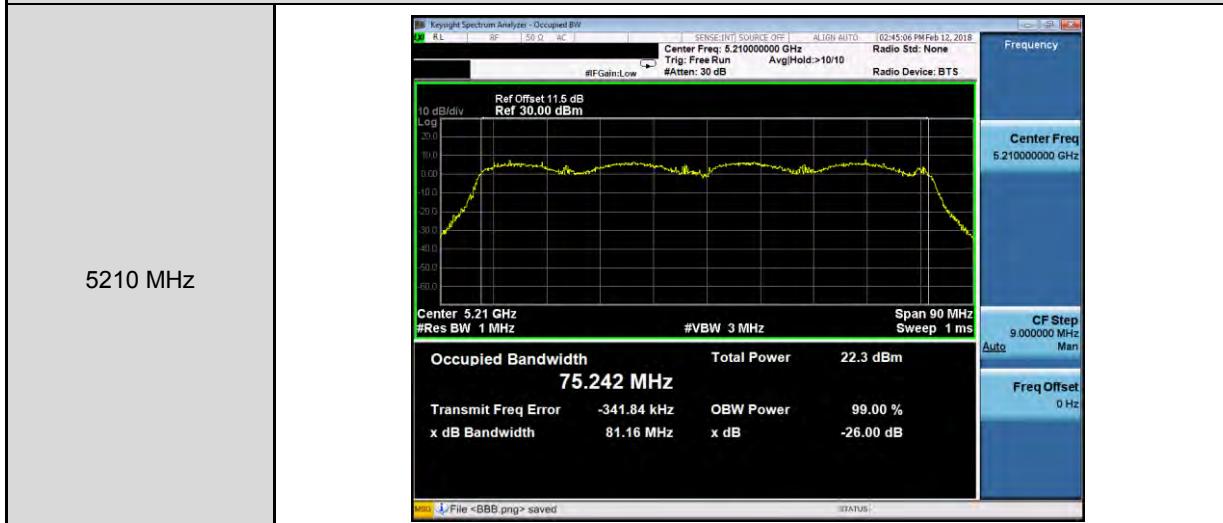
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode_ANT-1

5180 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.180000000 GHz SENSE: INT SOURCE: OFF ALIGN: AUTO 02:26:49 PM Feb 12, 2018</p> <p>Trig: Free Run Avg/Hold:>10/10 Radio Std: None Radio Device: BTS</p> <p>#IFGain:Low #Atten: 30 dB</p> <p>Frequency</p> <p>Center Freq 5.180000000 GHz</p> <p>CF Step 2.500000 MHz Man</p> <p>Auto</p> <p>Freq Offset 0 Hz</p> <p>Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 17.791 MHz</p> <p>Total Power 24.6 dBm</p> <p>Transmit Freq Error -82.868 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 20.61 MHz x dB -26.00 dB</p> <p>Status: J:\File <BBB.png> saved</p>
5200 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.200000000 GHz SENSE: INT SOURCE: OFF ALIGN: AUTO 02:39:10 PM Feb 12, 2018</p> <p>Trig: Free Run Avg/Hold:>10/10 Radio Std: None Radio Device: BTS</p> <p>#IFGain:Low #Atten: 30 dB</p> <p>Frequency</p> <p>Center Freq 5.200000000 GHz</p> <p>CF Step 2.500000 MHz Man</p> <p>Auto</p> <p>Freq Offset 0 Hz</p> <p>Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 17.729 MHz</p> <p>Total Power 25.0 dBm</p> <p>Transmit Freq Error -50.627 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 19.92 MHz x dB -26.00 dB</p> <p>Status: J:\File <BBB.png> saved</p>
5240 MHz	 <p>Keysight Spectrum Analyzer - Occupied BW</p> <p>Ref Offset 11.5 dB Ref 30.00 dBm</p> <p>Center Freq: 5.240000000 GHz SENSE: INT SOURCE: OFF ALIGN: AUTO 02:39:49 PM Feb 12, 2018</p> <p>Trig: Free Run Avg/Hold:>10/10 Radio Std: None Radio Device: BTS</p> <p>#IFGain:Low #Atten: 30 dB</p> <p>Frequency</p> <p>Center Freq 5.240000000 GHz</p> <p>CF Step 2.500000 MHz Man</p> <p>Auto</p> <p>Freq Offset 0 Hz</p> <p>Span 25 MHz Sweep 1 ms</p> <p>Occupied Bandwidth 17.586 MHz</p> <p>Total Power 25.4 dBm</p> <p>Transmit Freq Error -46.466 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 19.94 MHz x dB -26.00 dB</p> <p>Status: J:\File <BBB.png> saved</p>

Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ ANT-1



Mode 5: IEEE 802.11ac 80MHz Continuous TX mode_ ANT-1



5.5. 6dB RF Bandwidth Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5745	16320	16370	> 500
5785	15720	16340	> 500
5825	16320	15730	> 500

Test Mode	Mode 3: IEEE 802.11ac 20MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5745	17160	17610	> 500
5785	17140	16940	> 500
5825	17580	16340	> 500

Test Mode	Mode 4: IEEE 802.11ac 40MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5755	35740	35170	> 500
5795	35720	35670	> 500

Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5775	75820	75790	> 500

Beamforming on

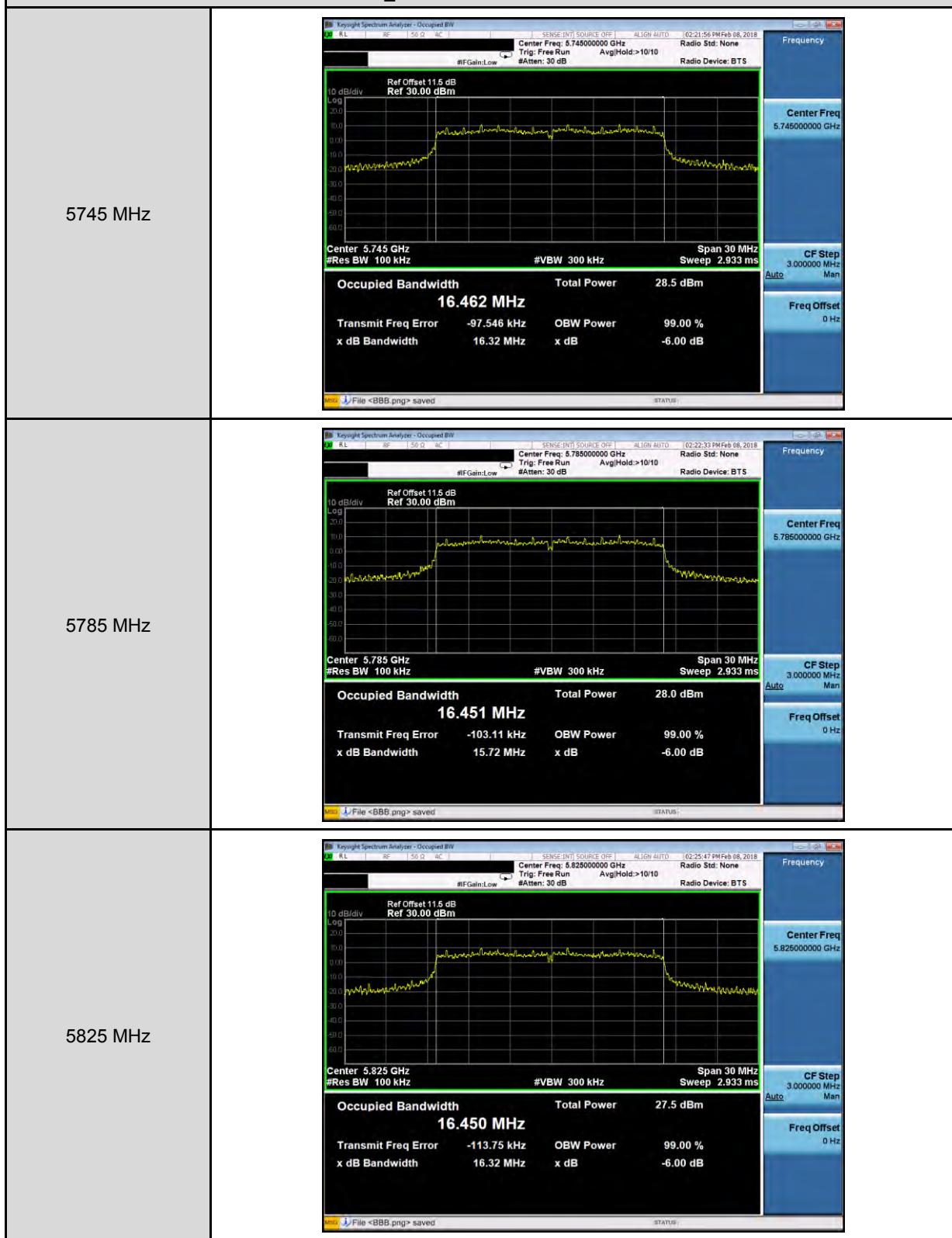
Test Mode	Mode 3: IEEE 802.11ac 20MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5745	17180	17640	> 500
5785	17290	16900	> 500
5825	17600	17550	> 500

Test Mode	Mode 4: IEEE 802.11ac 40MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5755	35690	33890	> 500
5795	35460	35740	> 500

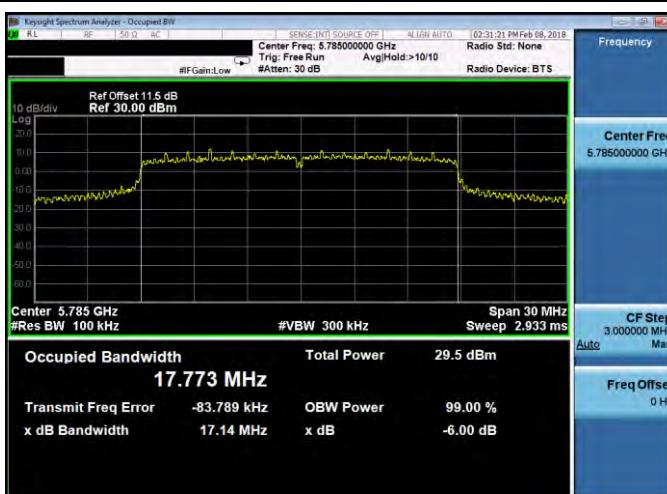
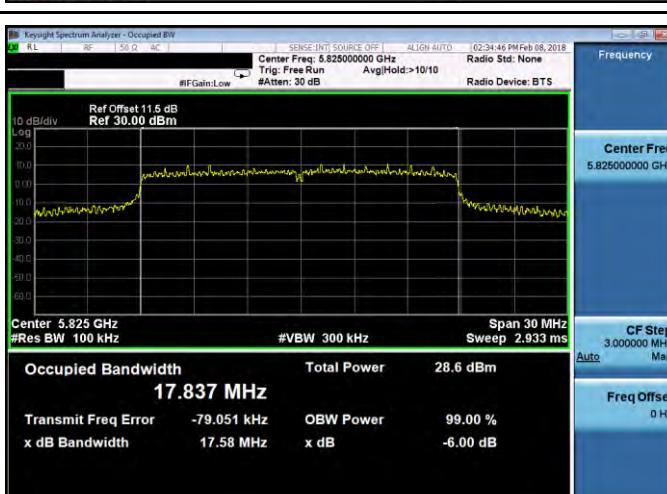
Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5775	75770	75500	> 500

■ Test Graphs

Mode 2: IEEE 802.11a Continuous TX mode_ANT-0



Mode 3: IEEE 802.11ac 20MHz Continuous TX mode_ANT-0

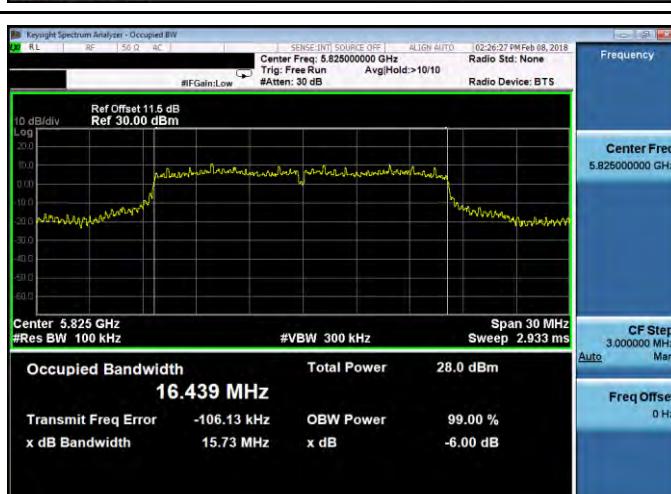
5745 MHz	 <p>Occupied Bandwidth 17.790 MHz Total Power 29.4 dBm Transmit Freq Error -55.609 kHz x dB Bandwidth 17.16 MHz OBW Power 99.00 % -6.00 dB</p>
5785 MHz	 <p>Occupied Bandwidth 17.773 MHz Total Power 29.5 dBm Transmit Freq Error -83.789 kHz x dB Bandwidth 17.14 MHz OBW Power 99.00 % -6.00 dB</p>
5825 MHz	 <p>Occupied Bandwidth 17.837 MHz Total Power 28.6 dBm Transmit Freq Error -79.051 kHz x dB Bandwidth 17.58 MHz OBW Power 99.00 % -6.00 dB</p>

Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-0

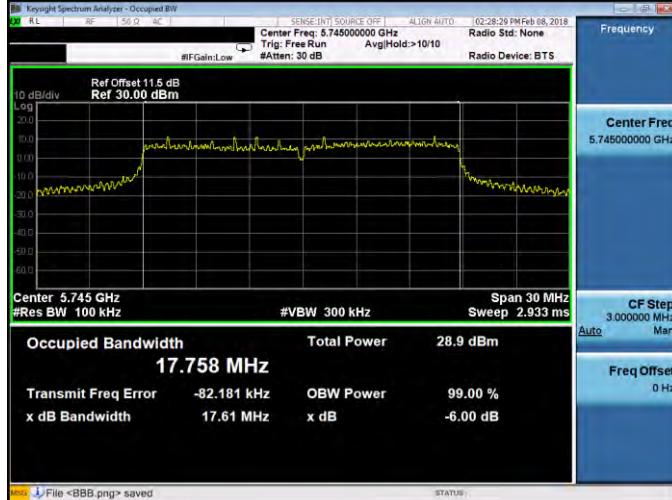
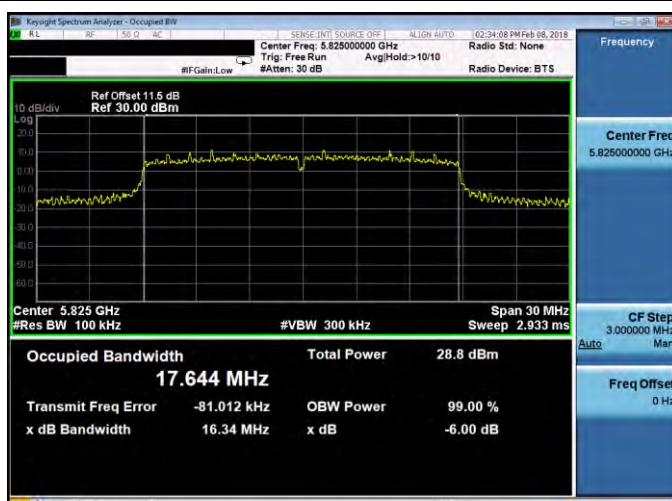
Frequency (MHz)	Occupied Bandwidth (MHz)	Total Power (dBm)
5755 MHz	35.986 MHz	27.9 dBm
5795 MHz	36.057 MHz	27.7 dBm

The screenshot shows a Keysight Spectrum Analyzer interface. The main display shows a signal spectrum centered at 5.775 GHz with a 100 MHz span and a 300 kHz resolution bandwidth. The signal power is 29.0 dBm. The x-axis is labeled "Center Freq: 5.775000000 GHz" and "Span 100 MHz Sweep 9.6 ms". The y-axis is labeled "Ref Offset 11.5 dB Ref 30.00 dBm". The bottom status bar indicates "File <BBB.png> saved". A vertical sidebar on the right displays "Frequency" and "Center Freq 5.775000000 GHz" along with other parameters like "CF Step 10.000000 MHz" and "Freq Offset 0 Hz".

Mode 2: IEEE 802.11a Continuous TX mode_ANT-1

5745 MHz	 <p>Center Freq: 5.745000000 GHz #VBW 300 kHz Span 30 MHz #Res BW 100 kHz Occupied Bandwidth 16.440 MHz Transmit Freq Error -94.399 kHz x dB Bandwidth 16.37 MHz Total Power 28.2 dBm OBW Power 99.00 % x dB 6.00 dB</p>
5785 MHz	 <p>Center Freq: 5.785000000 GHz #VBW 300 kHz Span 30 MHz #Res BW 100 kHz Occupied Bandwidth 16.425 MHz Transmit Freq Error -116.38 kHz x dB Bandwidth 16.34 MHz Total Power 28.2 dBm OBW Power 99.00 % x dB 6.00 dB</p>
5825 MHz	 <p>Center Freq: 5.825000000 GHz #VBW 300 kHz Span 30 MHz #Res BW 100 kHz Occupied Bandwidth 16.439 MHz Transmit Freq Error -106.13 kHz x dB Bandwidth 15.73 MHz Total Power 28.0 dBm OBW Power 99.00 % x dB 6.00 dB</p>

Mode 3: IEEE 802.11ac 20MHz Continuous TX mode_ANT-1

5745 MHz	 <p>Center Freq: 5.745000000 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <p>Occupied Bandwidth: 17.758 MHz Transmit Freq Error: -82.181 kHz OBW Power: 99.00 % x dB Bandwidth: 17.61 MHz x dB: -6.00 dB</p>
5785 MHz	 <p>Center Freq: 5.785000000 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <p>Occupied Bandwidth: 17.643 MHz Transmit Freq Error: -72.920 kHz OBW Power: 99.00 % x dB Bandwidth: 16.94 MHz x dB: -6.00 dB</p>
5825 MHz	 <p>Center Freq: 5.825000000 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms</p> <p>Occupied Bandwidth: 17.644 MHz Transmit Freq Error: -81.012 kHz OBW Power: 99.00 % x dB Bandwidth: 16.34 MHz x dB: -6.00 dB</p>

5755 MHz Results:

- Center Freq: 5.755000000 GHz
- Occupied Bandwidth: 35.773 MHz
- Total Power: 27.5 dBm
- Transmit Freq Error: -125.70 kHz
- x dB Bandwidth: 35.17 MHz
- OBW Power: 99.00 %
- x dB: -6.00 dB

5795 MHz Results:

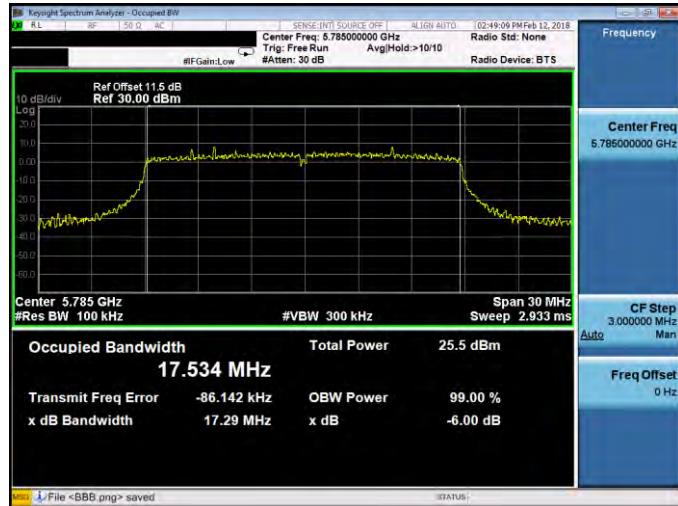
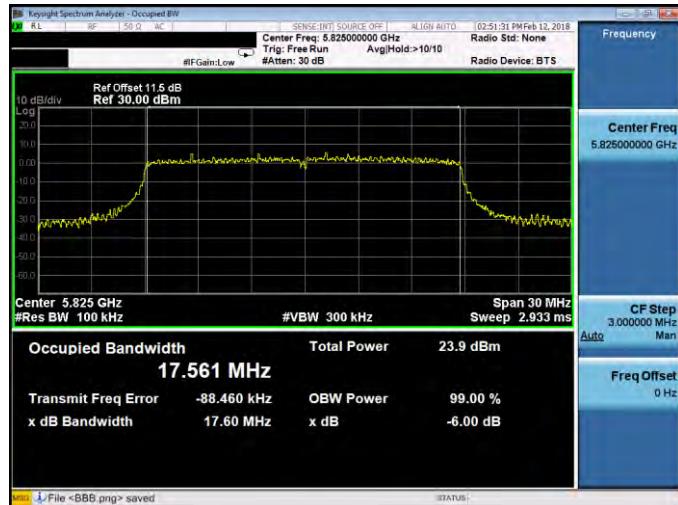
- Center Freq: 5.795000000 GHz
- Occupied Bandwidth: 36.055 MHz
- Total Power: 27.7 dBm
- Transmit Freq Error: -149.54 kHz
- x dB Bandwidth: 35.67 MHz
- OBW Power: 99.00 %
- x dB: -6.00 dB

The screenshot shows a Keysight Spectrum Analyzer interface. The main display shows a signal spectrum from -60 dB to 10 dB. The center frequency is set to 5.77500000 GHz. The occupied bandwidth is 75.623 MHz, and the total power is 29.0 dBm. The transmit frequency error is -149.28 kHz, and the OBW power is 99.00%. The x-axis bandwidth is 75.79 MHz, and the x-axis offset is -6.00 dB.

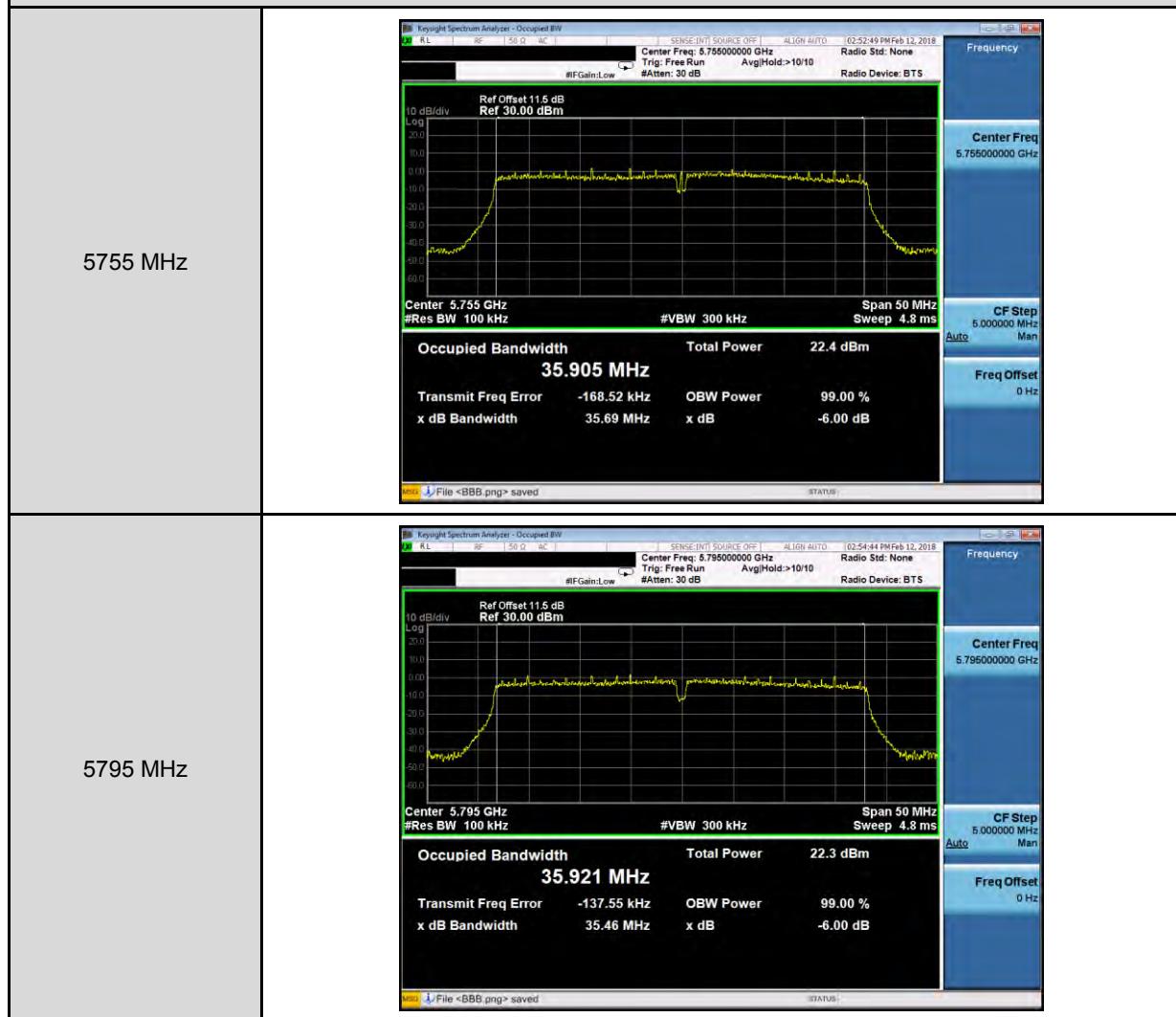
Parameter	Value
Center Frequency	5.77500000 GHz
Occupied Bandwidth	75.623 MHz
Total Power	29.0 dBm
Transmit Freq Error	-149.28 kHz
OBW Power	99.00 %
x dB Bandwidth	75.79 MHz
x dB	-6.00 dB

Beamforming on

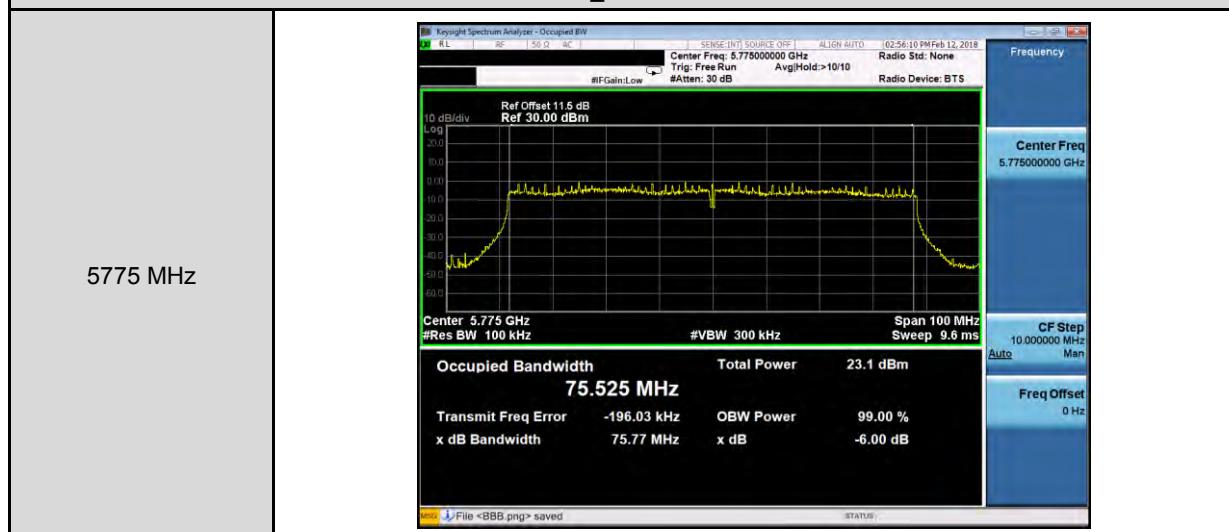
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode_ANT-0

<p>5745 MHz</p>	 <p>Occupied Bandwidth Total Power 17.546 MHz 25.7 dBm</p> <p>Transmit Freq Error OBW Power x dB Bandwidth x dB -75.312 kHz 99.00 % 17.18 MHz -6.00 dB</p>
<p>5785 MHz</p>	 <p>Occupied Bandwidth Total Power 17.534 MHz 25.5 dBm</p> <p>Transmit Freq Error OBW Power x dB Bandwidth x dB -86.142 kHz 99.00 % 17.29 MHz -6.00 dB</p>
<p>5825 MHz</p>	 <p>Occupied Bandwidth Total Power 17.561 MHz 23.9 dBm</p> <p>Transmit Freq Error OBW Power x dB Bandwidth x dB -88.460 kHz 99.00 % 17.60 MHz -6.00 dB</p>

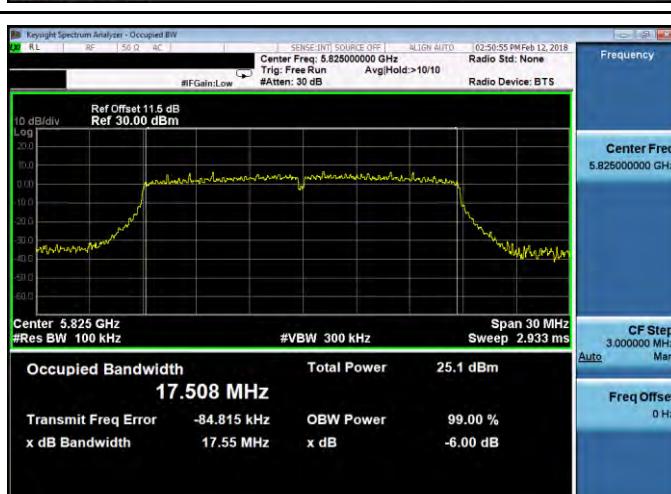
Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-0



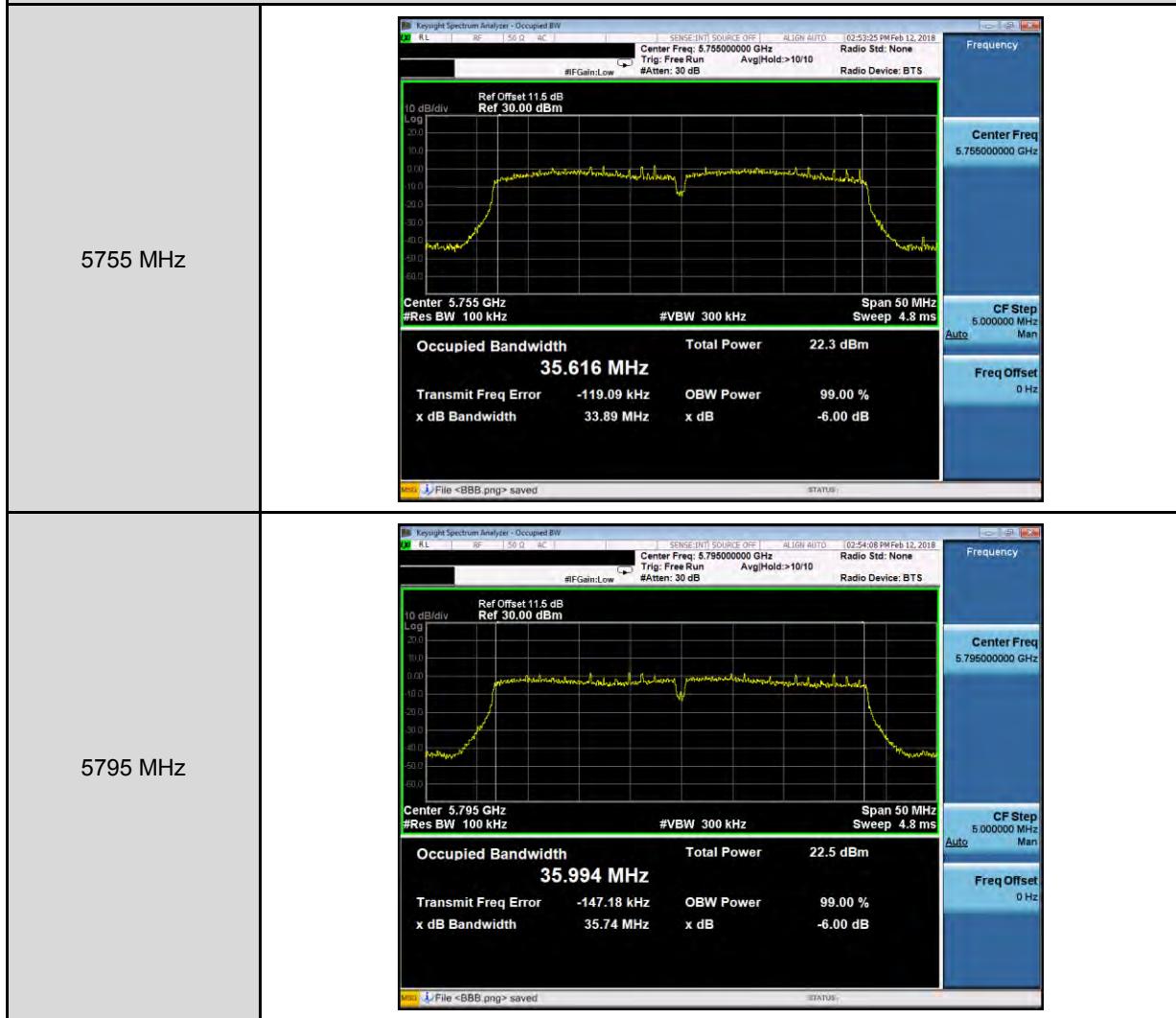
Mode 5: IEEE 802.11ac 80MHz Continuous TX mode_ANT-0



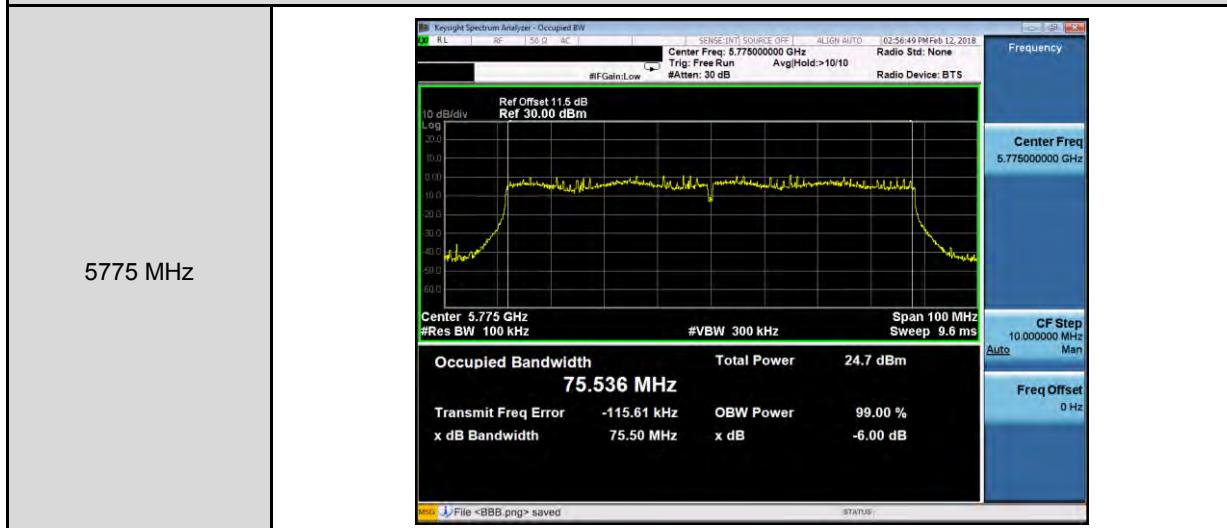
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode_ANT-1

5745 MHz	 <p>Center Freq: 5.745000000 GHz Occupied Bandwidth: 17.629 MHz Total Power: 25.4 dBm Transmit Freq Error: -80.997 kHz x dB Bandwidth: 17.64 MHz</p>
5785 MHz	 <p>Center Freq: 5.785000000 GHz Occupied Bandwidth: 17.521 MHz Total Power: 25.4 dBm Transmit Freq Error: -75.381 kHz x dB Bandwidth: 16.90 MHz</p>
5825 MHz	 <p>Center Freq: 5.825000000 GHz Occupied Bandwidth: 17.508 MHz Total Power: 25.1 dBm Transmit Freq Error: -84.815 kHz x dB Bandwidth: 17.55 MHz</p>

Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-1



Mode 5: IEEE 802.11ac 80MHz Continuous TX mode_ANT-1



5.6. Maximum Power Spectral Density Measurement

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode				
Frequency (MHz)	ANT-0				
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)	
5180	10.281	0.105	10.386	< 15.05	
5200	11.434	0.105	11.539		
5240	10.894	0.105	10.999		
Frequency (MHz)	ANT-1				
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)	
5180	10.677	0.105	10.782	< 15.05	
5200	11.620	0.105	11.725		
5240	11.785	0.105	11.890		
Frequency (MHz)	ANT-0+1				
	Calculated (dBm/MHz)			Limit (dBm/MHz)	
5180	13.598			< 15.05	
5200	14.643				
5240	14.477				

Note: Method SA-2, Power density = measured result + $10\log(1/\text{duty cycle})$ + Conversion ratio = measured result + duty factor.

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode				
Frequency (MHz)	ANT-0				
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)	
5745	2.38	0.105	9.47	< 27.74	
5785	1.81	0.105	8.91		
5825	1.78	0.105	8.88		
Frequency (MHz)	ANT-1				
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)	
5745	2.04	0.105	9.14	< 27.74	
5785	2.22	0.105	9.32		
5825	1.94	0.105	9.04		
Frequency (MHz)	ANT-0+1				
	Calculated (dBm/500KHz)			Limit (dBm/500KHz)	
5745	12.32			< 27.74	
5785	12.13				
5825	11.97				

Note: Method SA-2, Power density = measured result + $10\log(1/\text{duty cycle})$ + Conversion ratio = measured result + duty factor.

Conversion ratio = $10^{\log(500k/100k)}$

Test Mode	Mode 3: IEEE 802.11ac 20MHz Continuous TX mode				
Frequency (MHz)	ANT-0				
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)	
5180	10.366	0.039	10.405	< 15.05	
5200	11.507	0.039	11.546		
5240	10.601	0.039	10.640		
Frequency (MHz)	ANT-1				
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)	
5180	9.832	0.039	9.871	< 15.05	
5200	11.813	0.039	11.852		
5240	11.567	0.039	11.606		
Frequency (MHz)	ANT-0+1				
	Calculated (dBm/MHz)			Limit (dBm/MHz)	
5180	13.156			< 15.05	
5200	14.712				
5240	14.160				

Note: Method SA-2, Power density = measured result + $10\log(1/\text{duty cycle})$ + Conversion ratio = measured result + duty factor.

Test Mode	Mode 3: IEEE 802.11ac 20MHz Continuous TX mode				
Frequency (MHz)	ANT-0				
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)	
5745	2.69	0.039	9.72	< 27.74	
5785	2.61	0.039	9.64		
5825	1.90	0.039	8.93		
Frequency (MHz)	ANT-1				
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)	
5745	2.66	0.039	9.69	< 27.74	
5785	2.64	0.039	9.67		
5825	2.49	0.039	9.52		
Frequency (MHz)	ANT-0+1				
	Calculated (dBm/500KHz)			Limit (dBm/500KHz)	
5745	12.71			< 27.74	
5785	12.67				
5825	12.25				

Note: Method SA-2, Power density = measured result + $10\log(1/\text{duty cycle})$ + Conversion ratio = measured result + duty factor.

Conversion ratio = $10^{\log(500k/100k)}$

Test Mode	Mode 4: IEEE 802.11ac 40MHz Continuous TX mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	4.973	0.106	5.079	< 15.05
5230	8.255	0.106	8.361	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	5.355	0.106	5.461	< 15.05
5230	8.856	0.106	8.962	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5190	8.284			< 15.05
5230	11.682			

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 4: IEEE 802.11ac 40MHz Continuous TX mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)
5755	-1.39	0.106	5.71	< 27.74
5795	-1.59	0.106	5.51	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)
5755	-1.70	0.106	5.39	< 27.74
5795	-1.56	0.106	5.54	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500KHz)			Limit (dBm/500KHz)
5755	8.56			< 27.74
5795	8.53			

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = $10 \cdot \log(500k/100k)$

Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	1.527	0.240	1.767	< 15.05
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	1.678	0.240	1.918	< 15.05
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5210	4.853			< 15.05

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)
5775	-4.45	0.240	2.78	< 27.74
Frequency (MHz)	ANT-1			
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)
5775	-4.46	0.240	2.77	< 27.74
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500KHz)			Limit (dBm/500KHz)
5775	5.79			< 27.74

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = $10 \cdot \log(500k/100k)$

Beamforming on

Test Mode					
Frequency (MHz)	ANT-0				
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)	
5180	6.709	0.039	6.748	< 15.05	
5200	7.790	0.039	7.829		
5240	7.187	0.039	7.226		
Frequency (MHz)	ANT-1				
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)	
5180	6.752	0.039	6.791	< 15.05	
5200	8.159	0.039	8.198		
5240	8.269	0.039	8.308		
Frequency (MHz)	ANT-0+1				
	Calculated (dBm/MHz)			Limit (dBm/MHz)	
5180	9.780			< 15.05	
5200	11.028				
5240	10.811				

Note: Method SA-2, Power density = measured result + $10\log(1/\text{duty cycle})$ + Conversion ratio = measured result + duty factor.

Test Mode	Mode 3: IEEE 802.11ac 20MHz Continuous TX mode				
Frequency (MHz)	ANT-0				
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)	
5745	-1.12	0.039	5.91	< 27.74	
5785	-1.15	0.039	5.88		
5825	-1.49	0.039	5.54		
Frequency (MHz)	ANT-1				
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)	
5745	-0.86	0.039	6.17	< 27.74	
5785	-0.57	0.039	6.46		
5825	-1.06	0.039	5.97		
Frequency (MHz)	ANT-0+1				
	Calculated (dBm/500KHz)			Limit (dBm/500KHz)	
5745	9.05			< 27.74	
5785	9.19				
5825	8.77				

Note: Method SA-2, Power density = measured result + $10\log(1/\text{duty cycle})$ + Conversion ratio = measured result + duty factor.

Conversion ratio = $10^{\log(500k/100k)}$

Test Mode	Mode 4: IEEE 802.11ac 40MHz Continuous TX mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	1.737	0.106	1.843	< 15.05
5230	4.620	0.106	4.726	
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5190	2.279	0.106	2.385	< 15.05
5230	5.529	0.106	5.635	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5190	5.133			< 15.05
5230	8.214			

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Test Mode	Mode 4: IEEE 802.11ac 40MHz Continuous TX mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)
5755	-4.26	0.106	2.84	< 27.74
5795	-4.51	0.106	2.59	
Frequency (MHz)	ANT-1			
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)
5755	-4.61	0.106	2.49	< 27.74
5795	-4.76	0.106	2.34	
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500KHz)			Limit (dBm/500KHz)
5755	5.68			< 27.74
5795	5.48			

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

Conversion ratio = $10 \cdot \log(500k/100k)$

Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-2.180	0.240	-1.940	< 15.05
Frequency (MHz)	ANT-1			
	Measurement (dBm/MHz)	Duty Factor (dB)	Calculated (dBm/MHz)	Limit (dBm/MHz)
5210	-1.842	0.240	-1.602	< 15.05
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/MHz)			Limit (dBm/MHz)
5210	-3.482			< 15.05

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

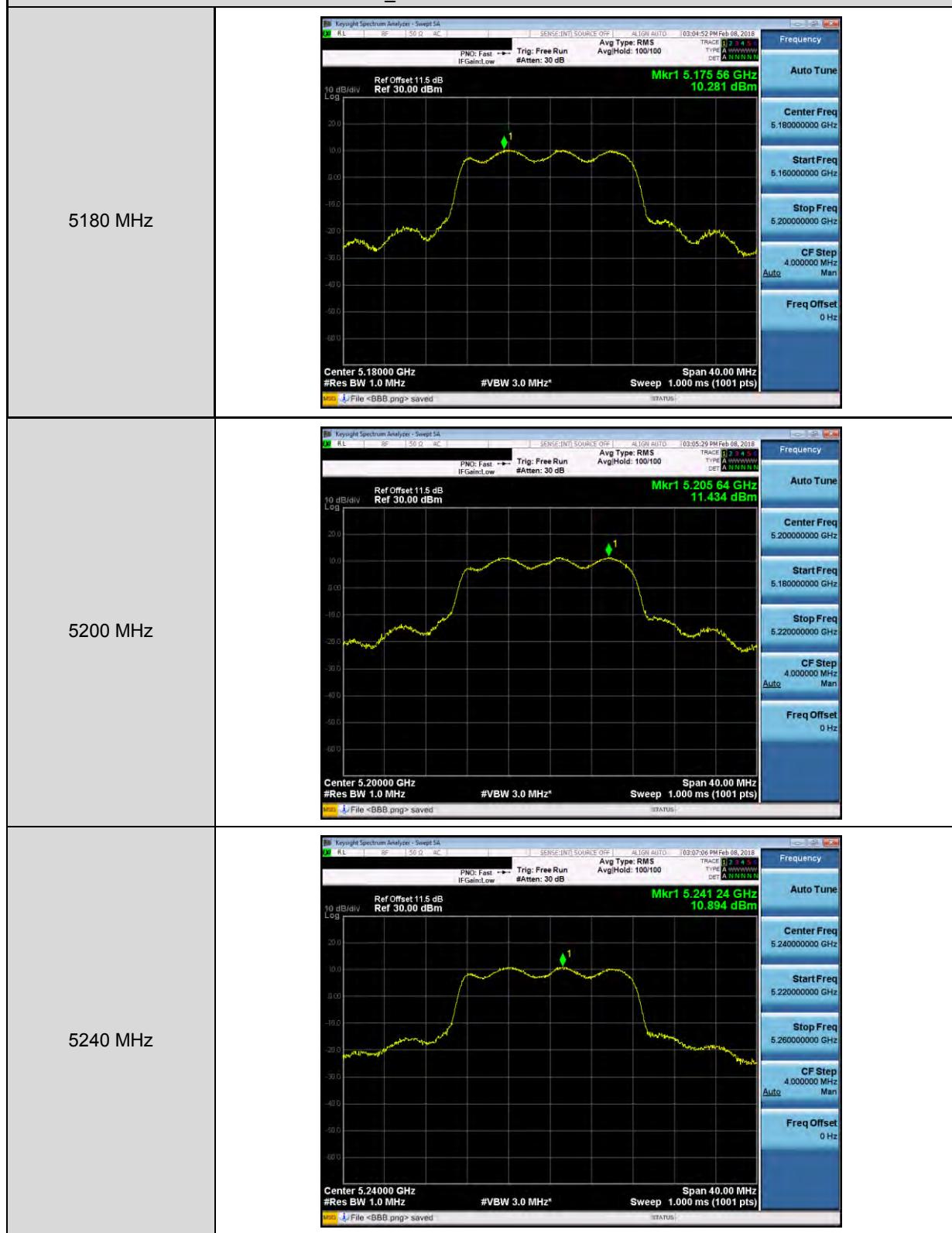
Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode			
Frequency (MHz)	ANT-0			
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)
5775	-7.65	0.240	-0.42	< 27.74
Frequency (MHz)	ANT-1			
	Measurement (dBm/100KHz)	Duty Factor (dB)	Calculated (dBm/500KHz)	Limit (dBm/500KHz)
5775	-7.58	0.240	-0.35	< 27.74
Frequency (MHz)	ANT-0+1			
	Calculated (dBm/500KHz)			Limit (dBm/500KHz)
5775	2.62			< 27.74

Note: Method SA-2, Power density = measured result + 10log(1/duty cycle) + Conversion ratio = measured result + duty factor.

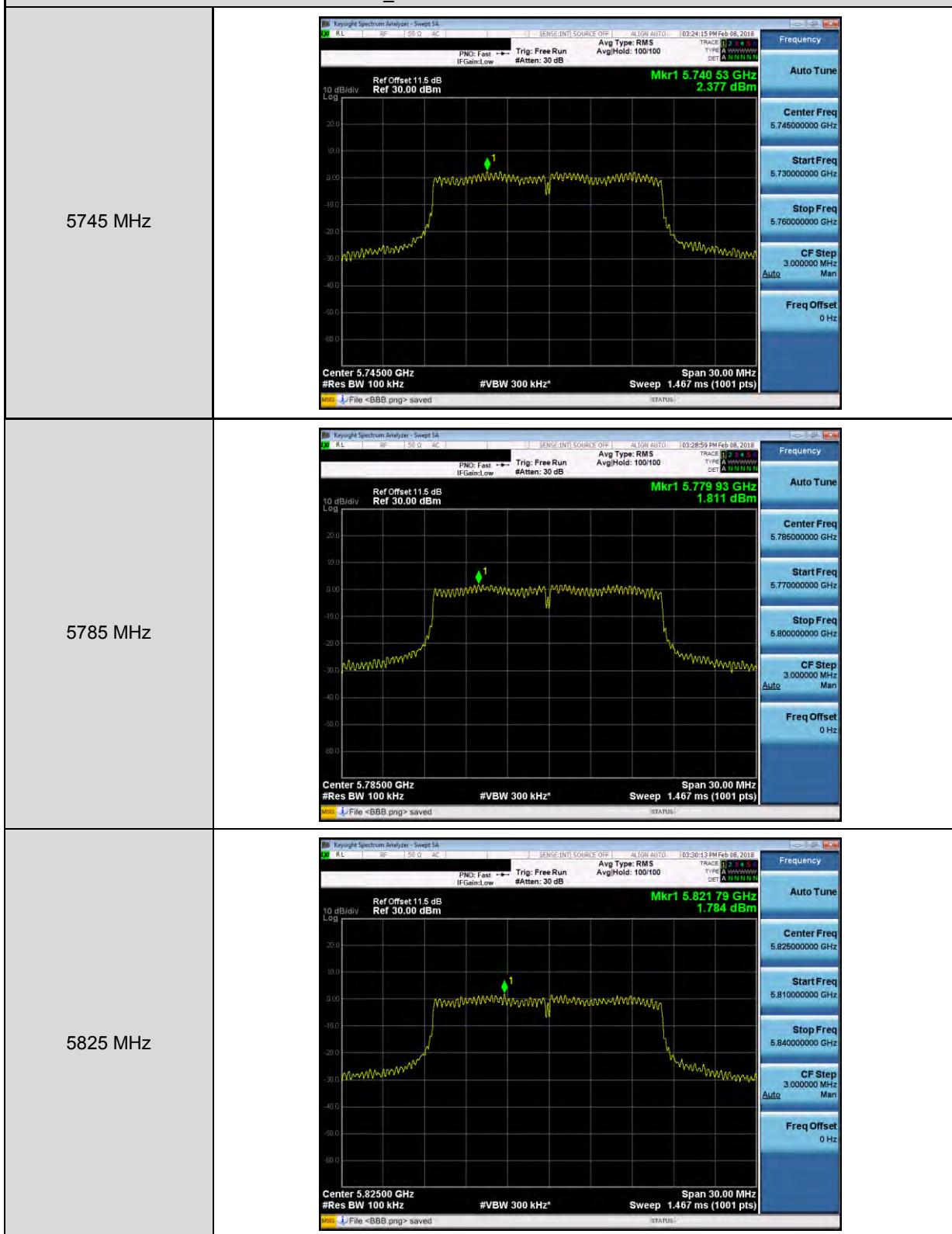
Conversion ratio = $10 \times \log(500k/100k)$

■ Test Graphs

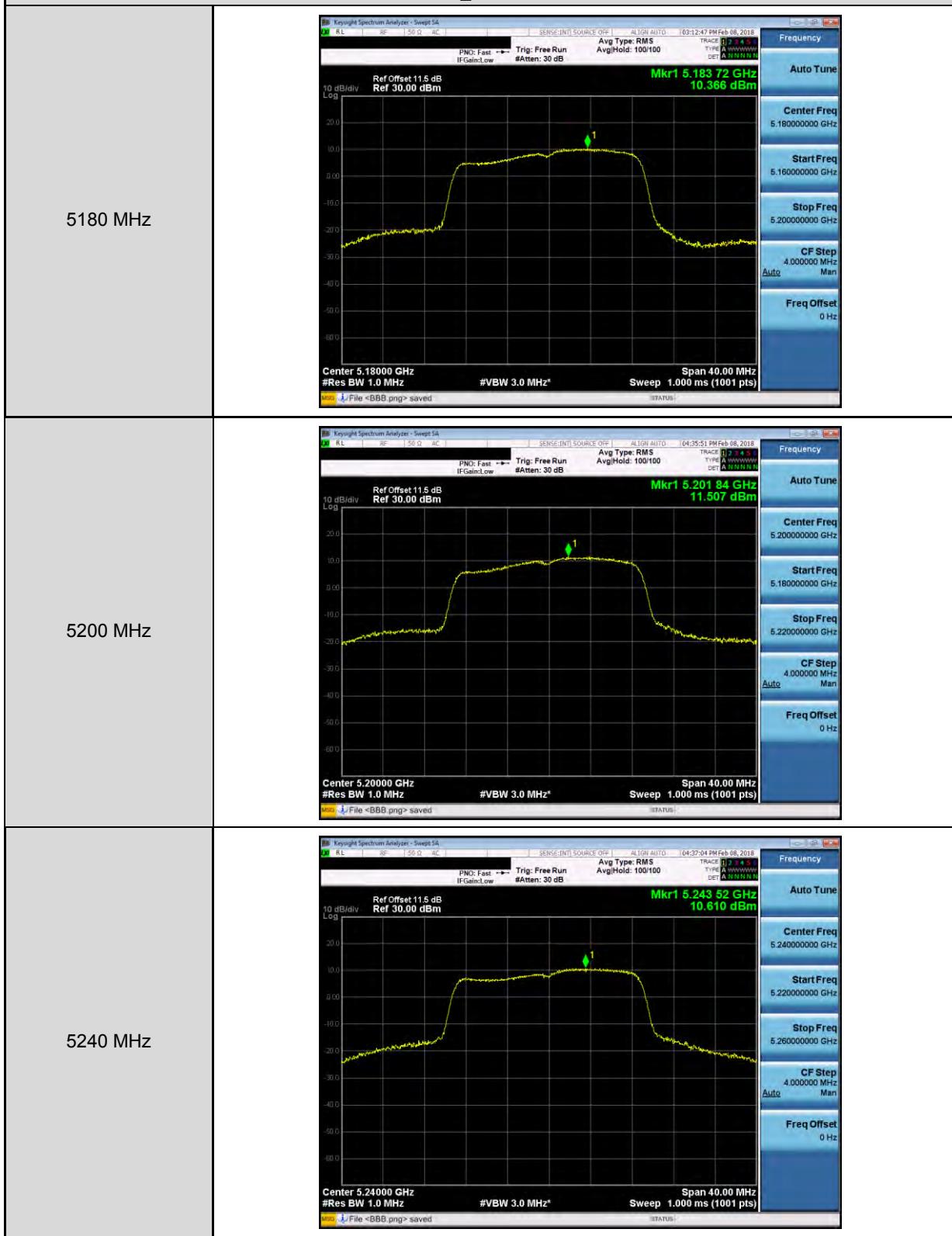
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0



Mode 2: IEEE 802.11a Continuous TX mode_ ANT-0



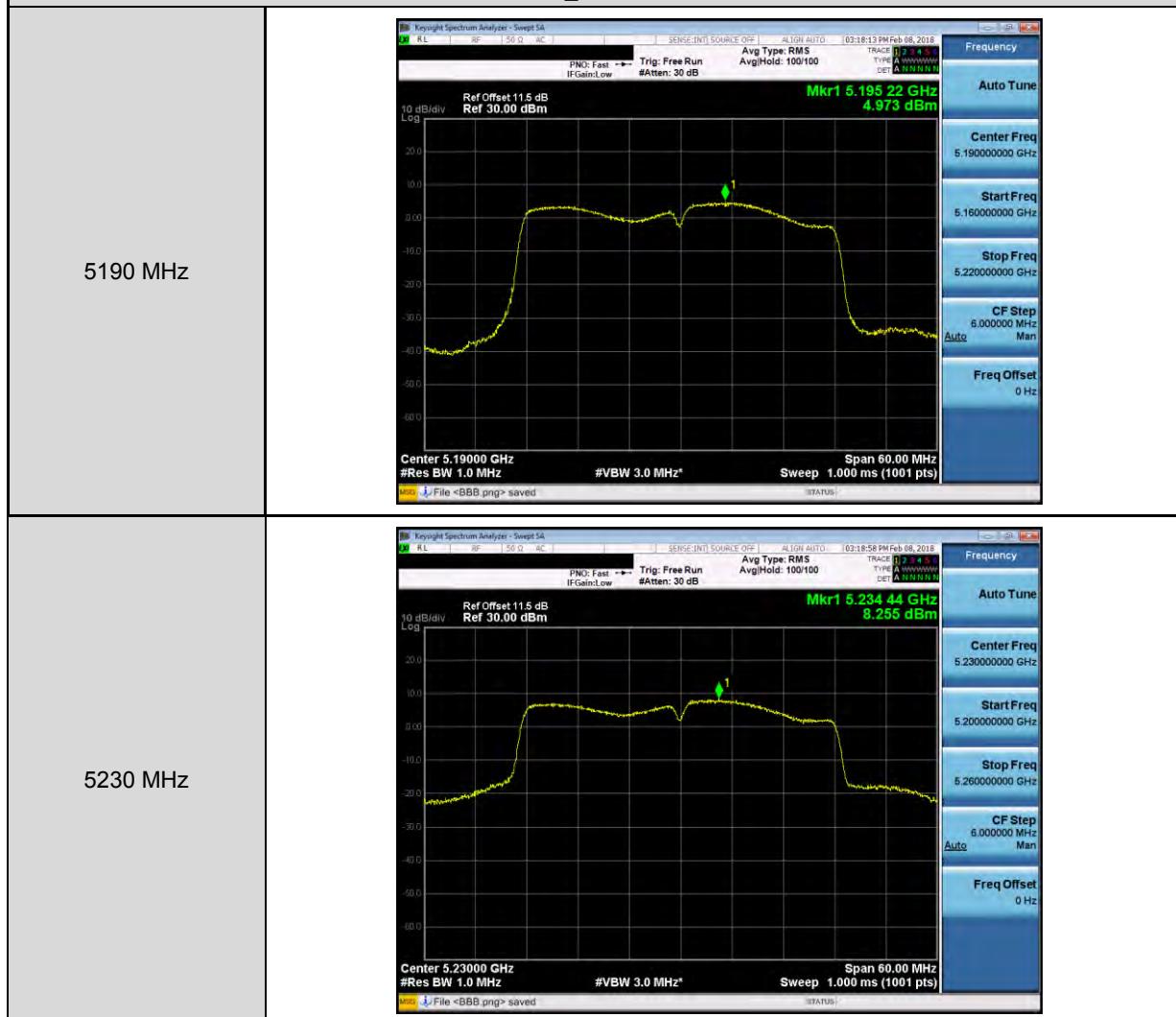
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode _ ANT-0



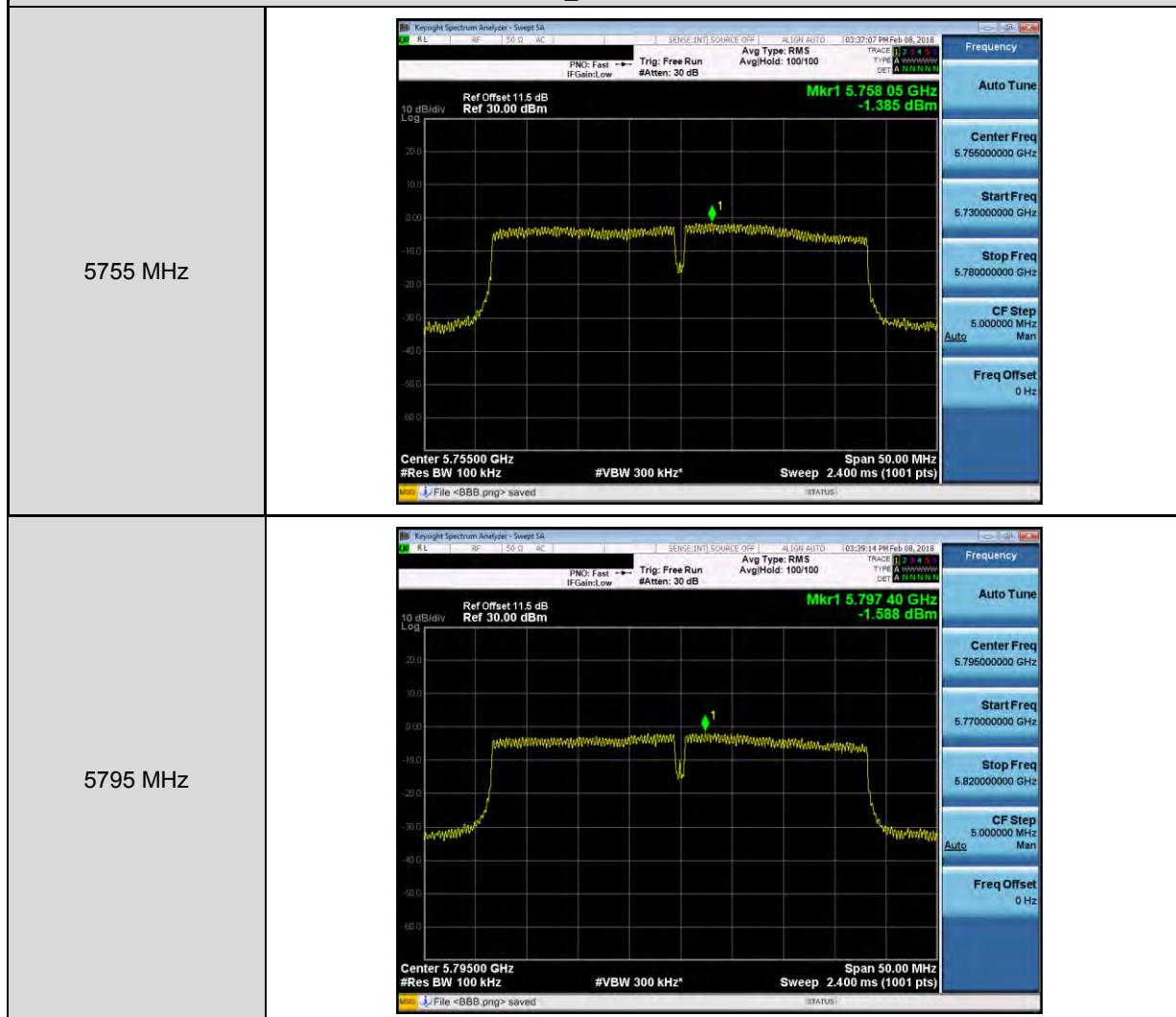
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode _ ANT-0



Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-0



Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-0



Mode 5: IEEE 802.11ac 80MHz Continuous TX mode _ ANT-0

5210 MHz

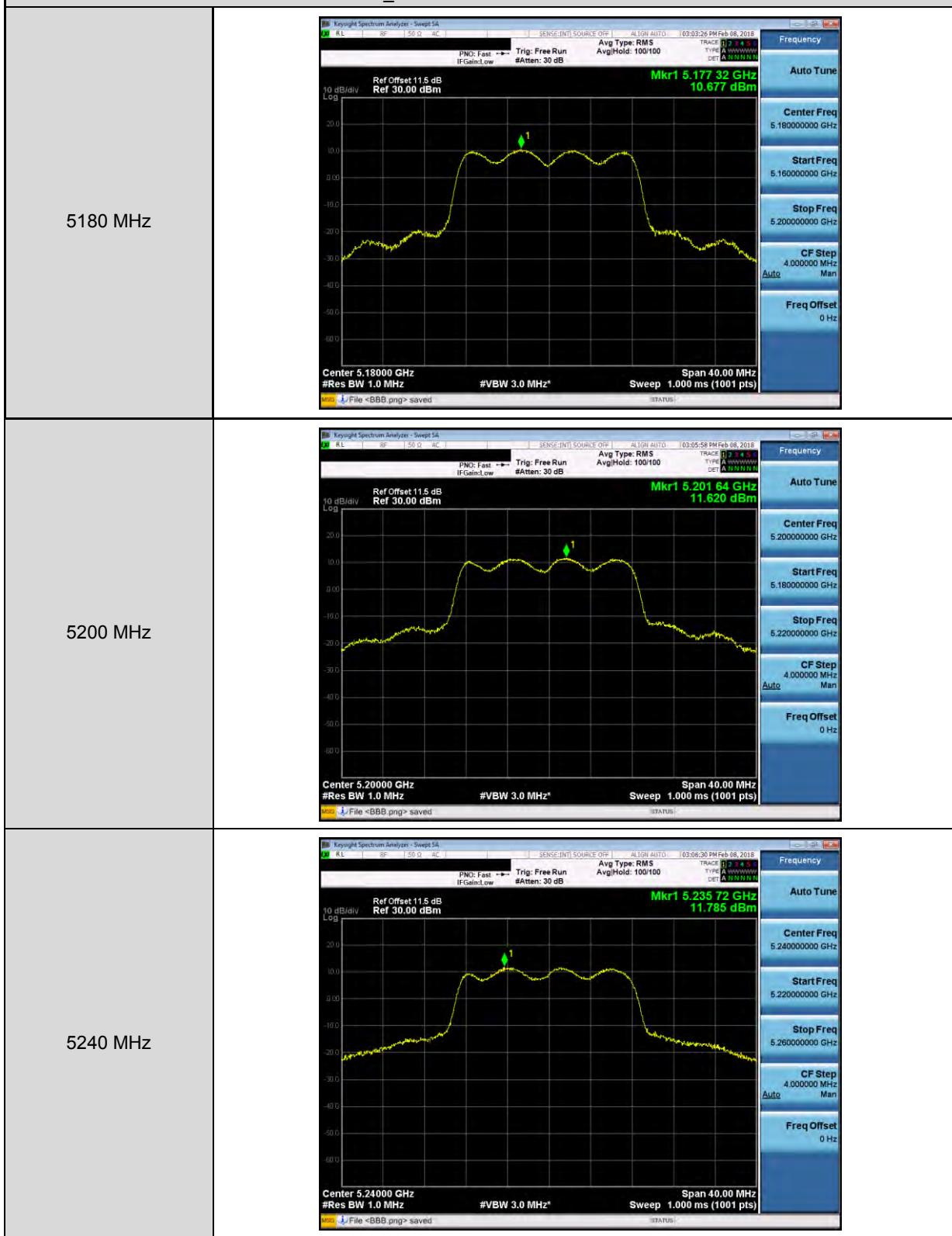


Mode 5: IEEE 802.11ac 80MHz Continuous TX mode _ ANT-0

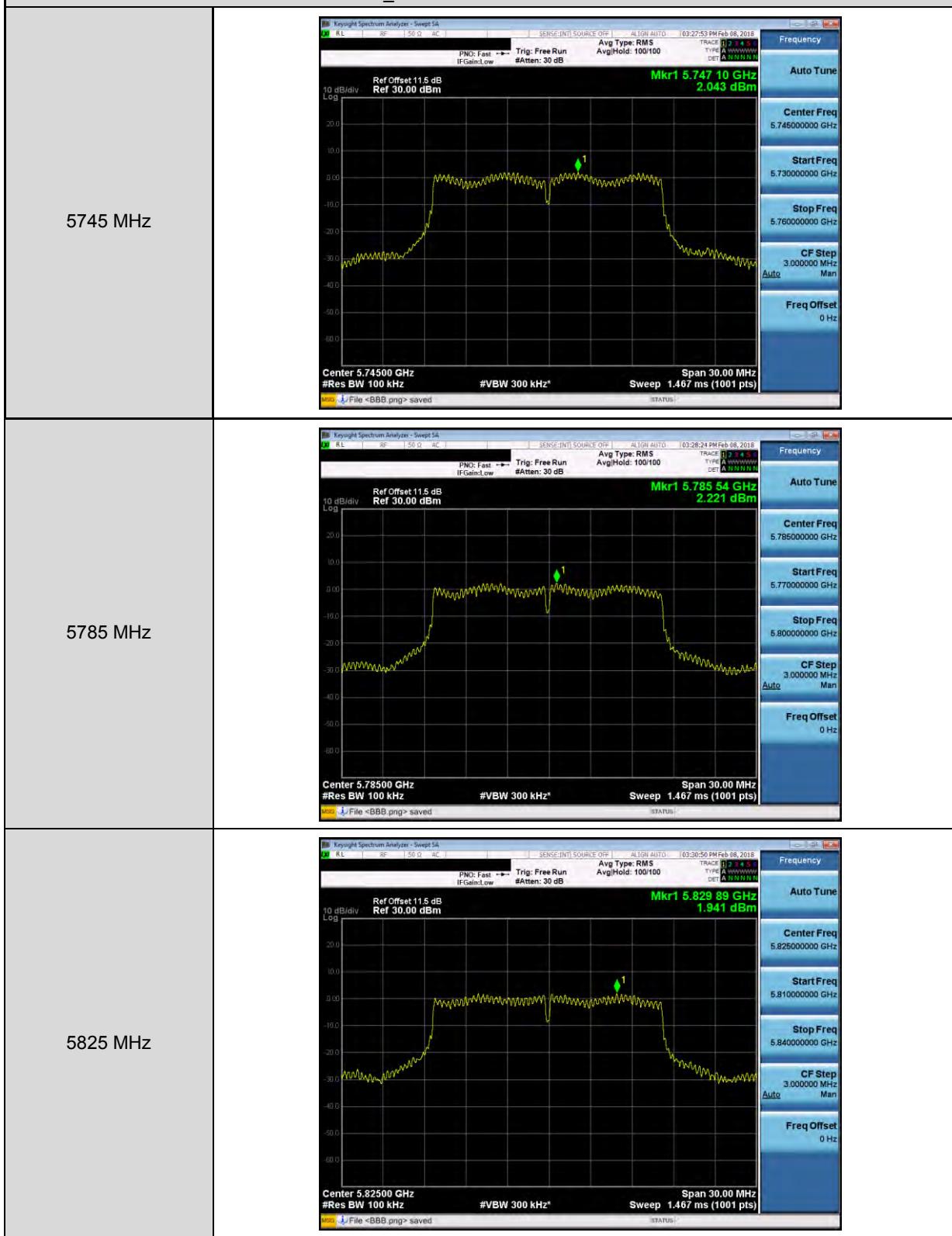
5775 MHz



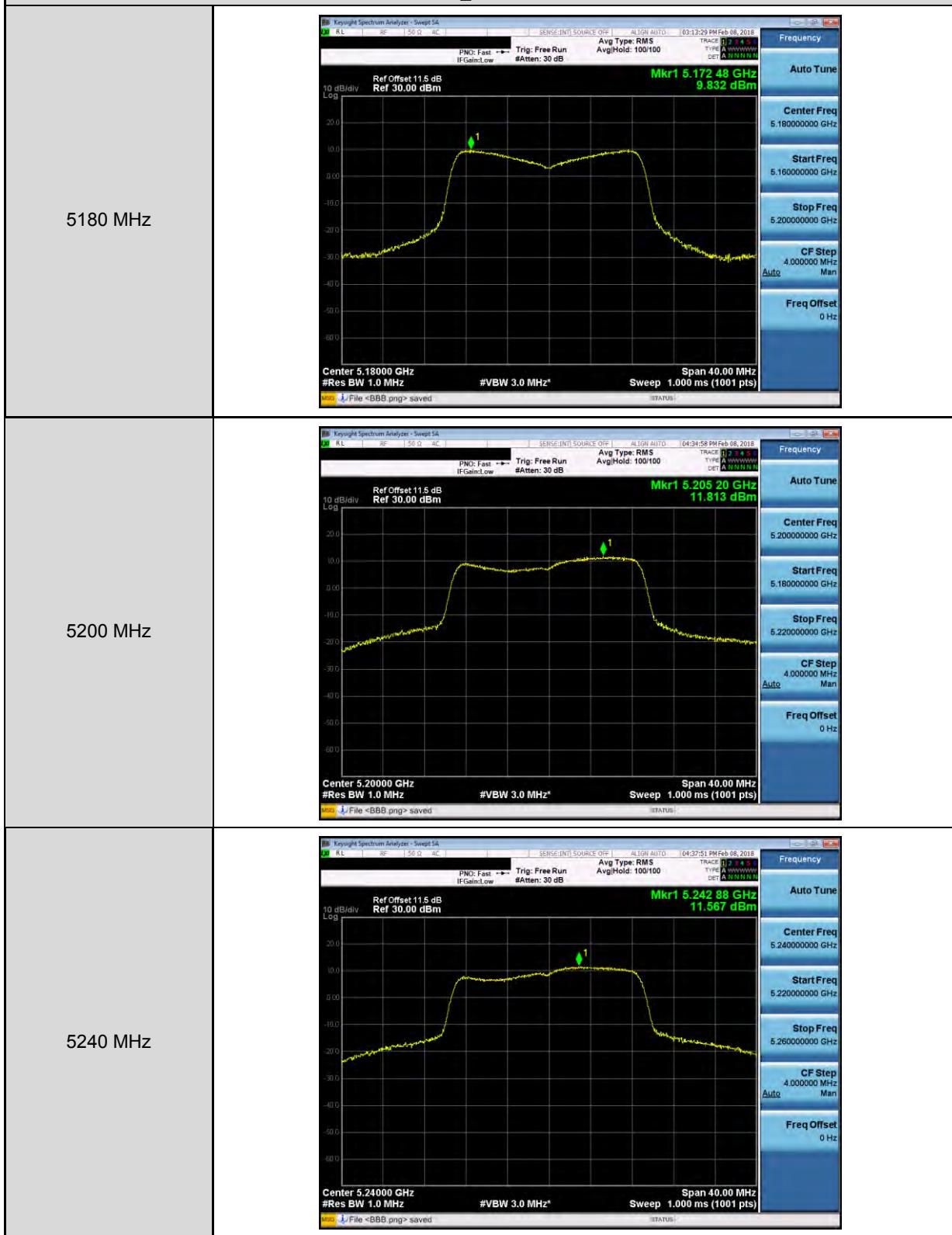
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1



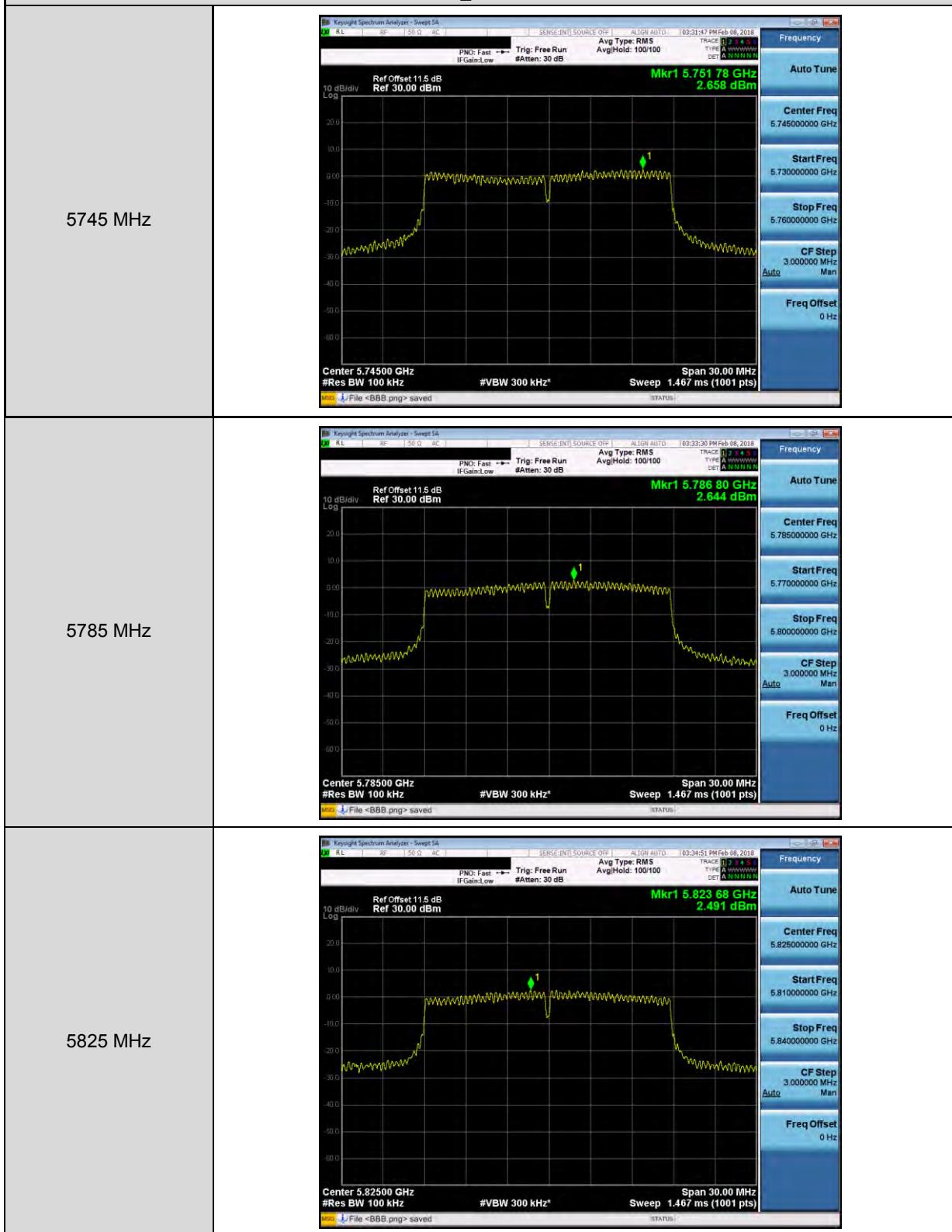
Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1



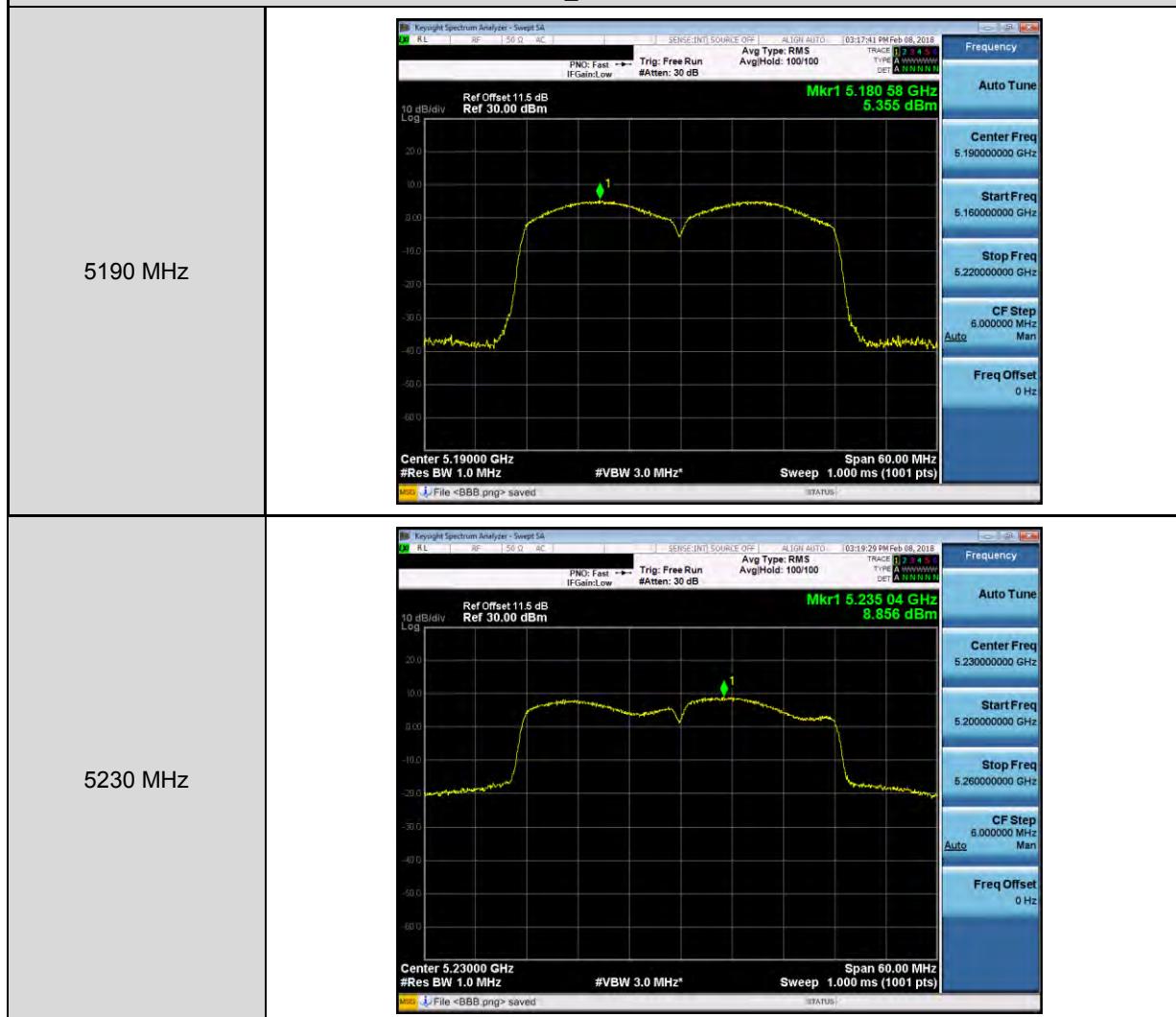
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode _ ANT-1



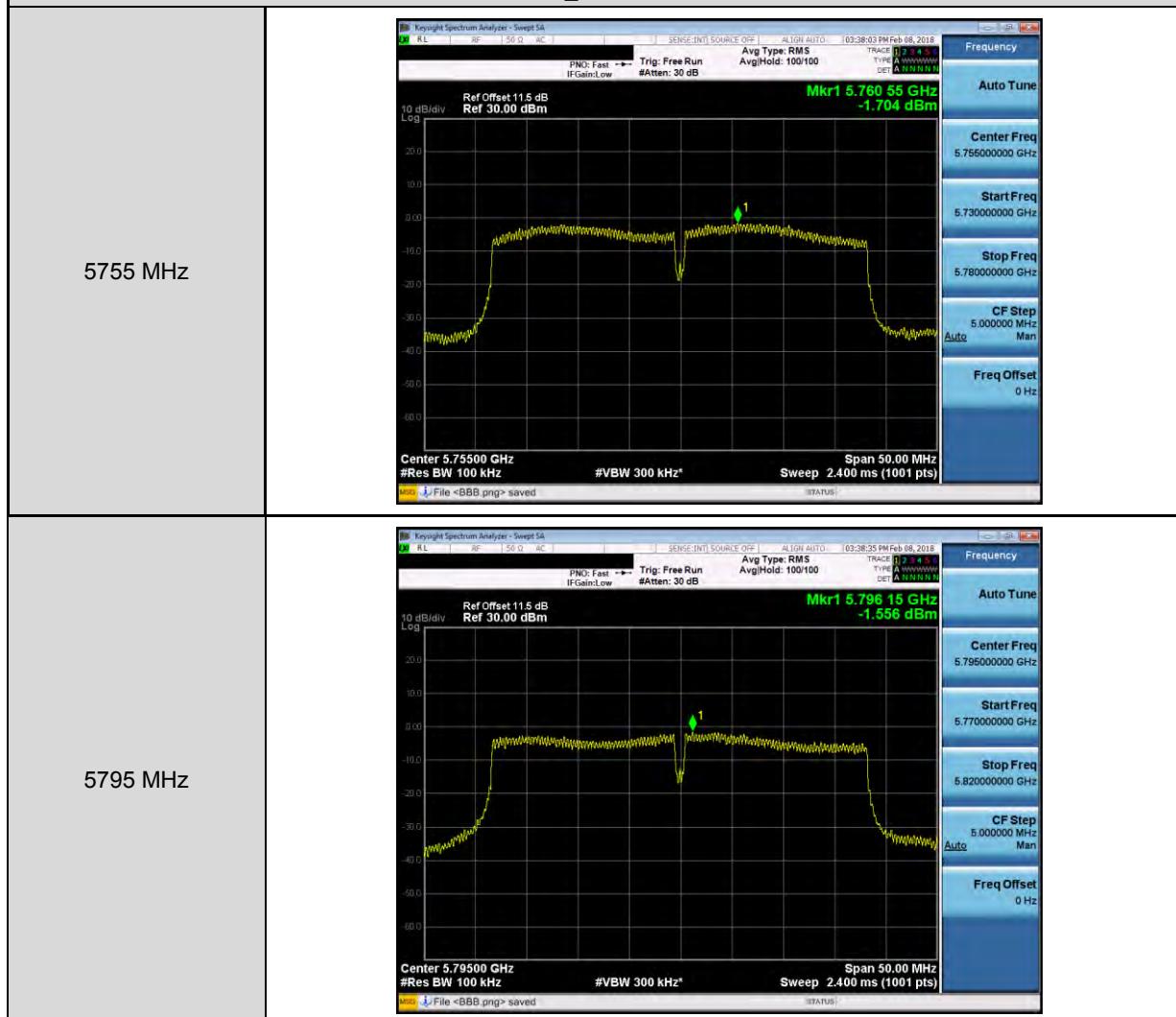
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode _ ANT-1



Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-1



Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-1



Mode 5: IEEE 802.11ac 80MHz Continuous TX mode _ ANT-1

5210 MHz



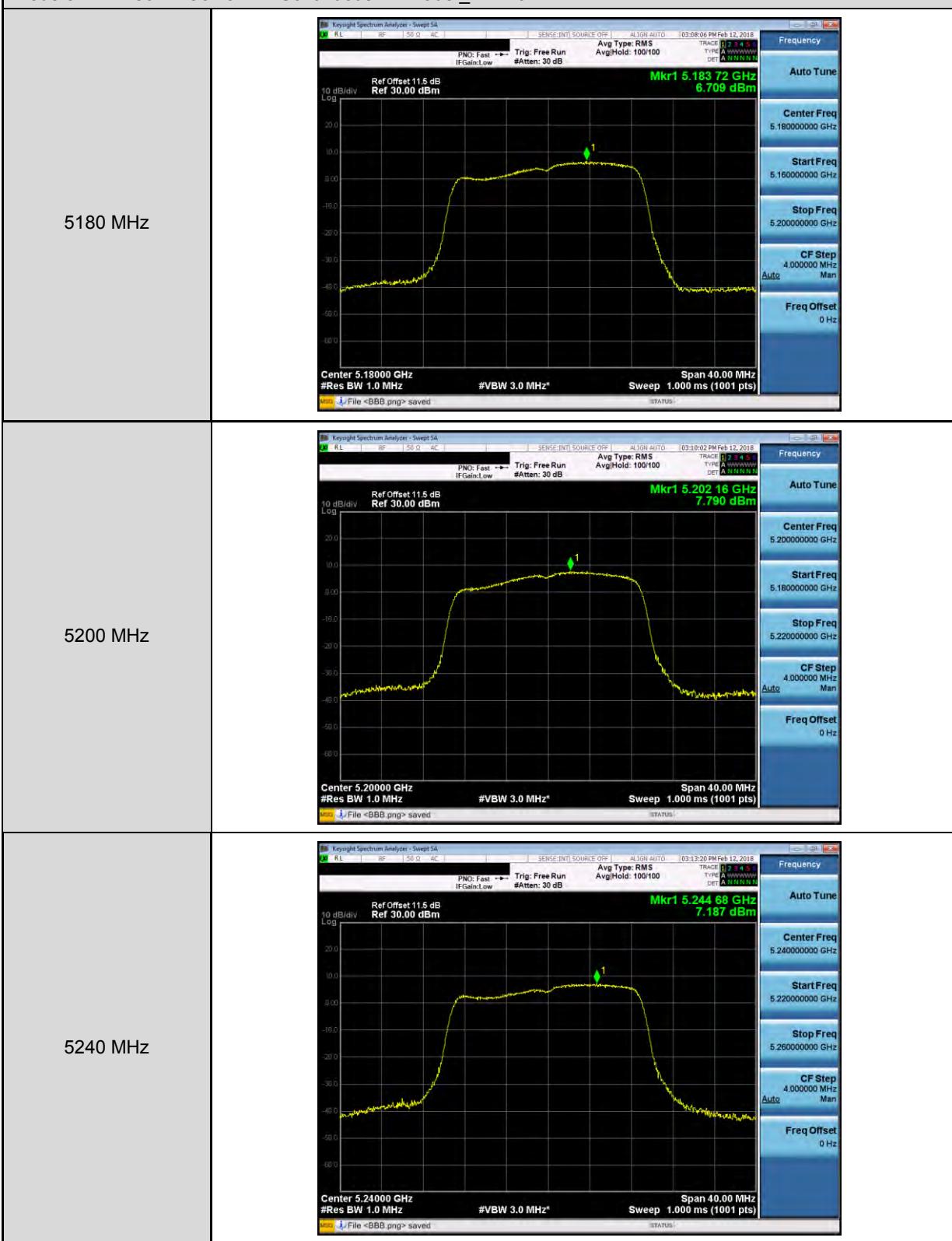
Mode 5: IEEE 802.11ac 80MHz Continuous TX mode _ ANT-1

5775 MHz

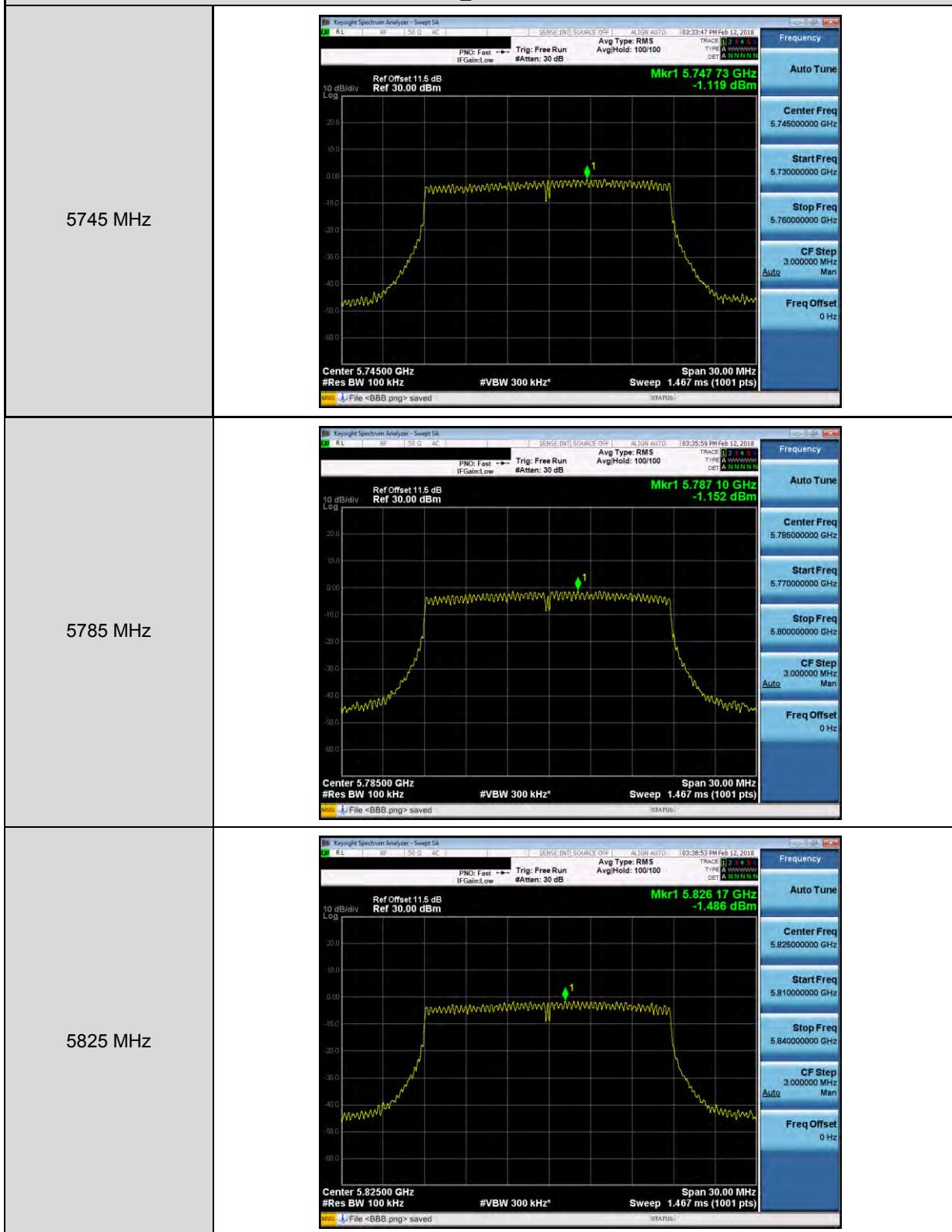


Beamforming on

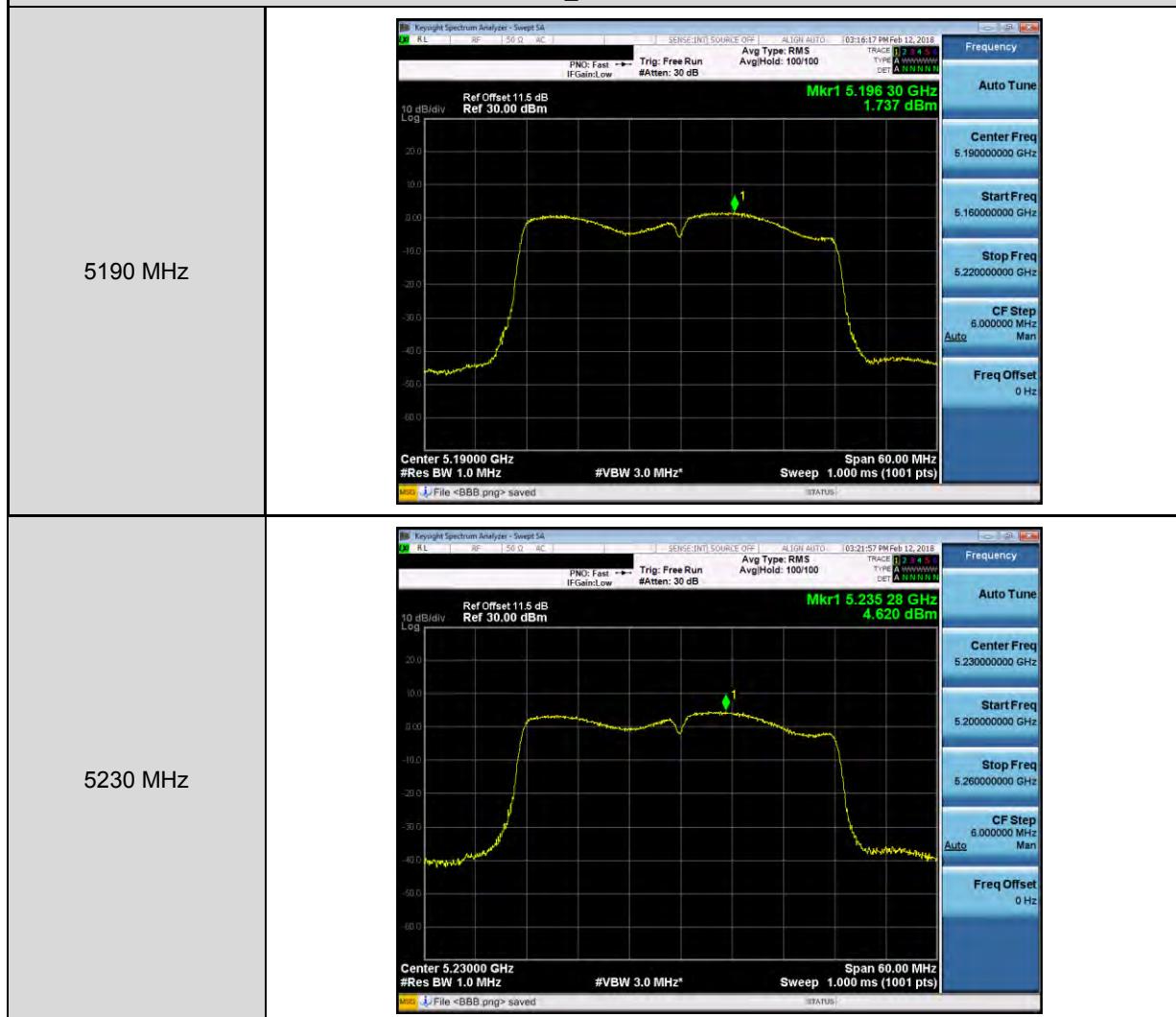
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode _ ANT-0



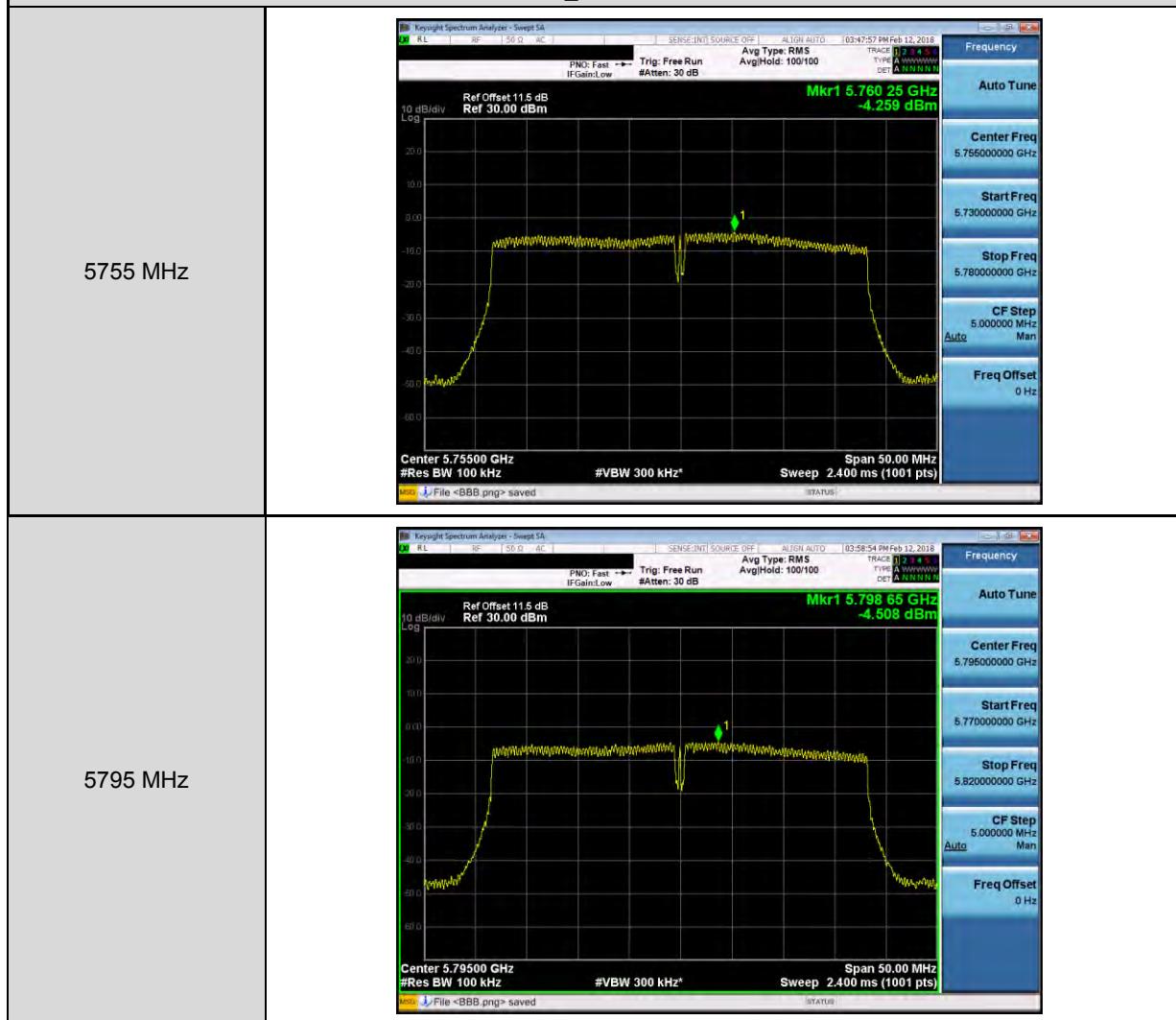
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode _ ANT-0



Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-0



Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-0



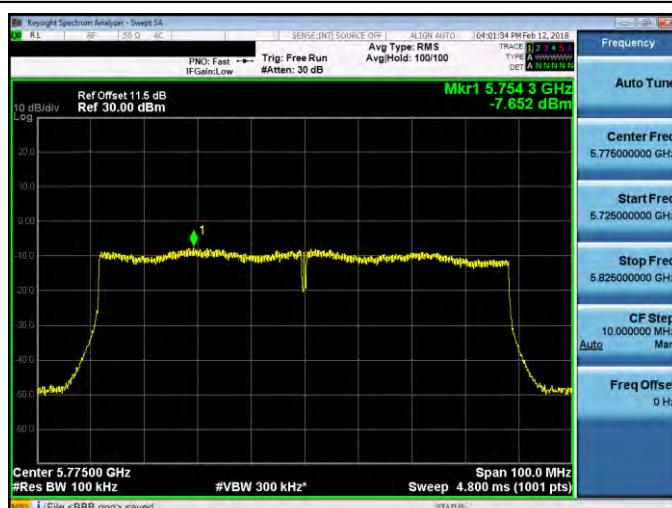
Mode 5: IEEE 802.11ac 80MHz Continuous TX mode _ ANT-0

5210 MHz

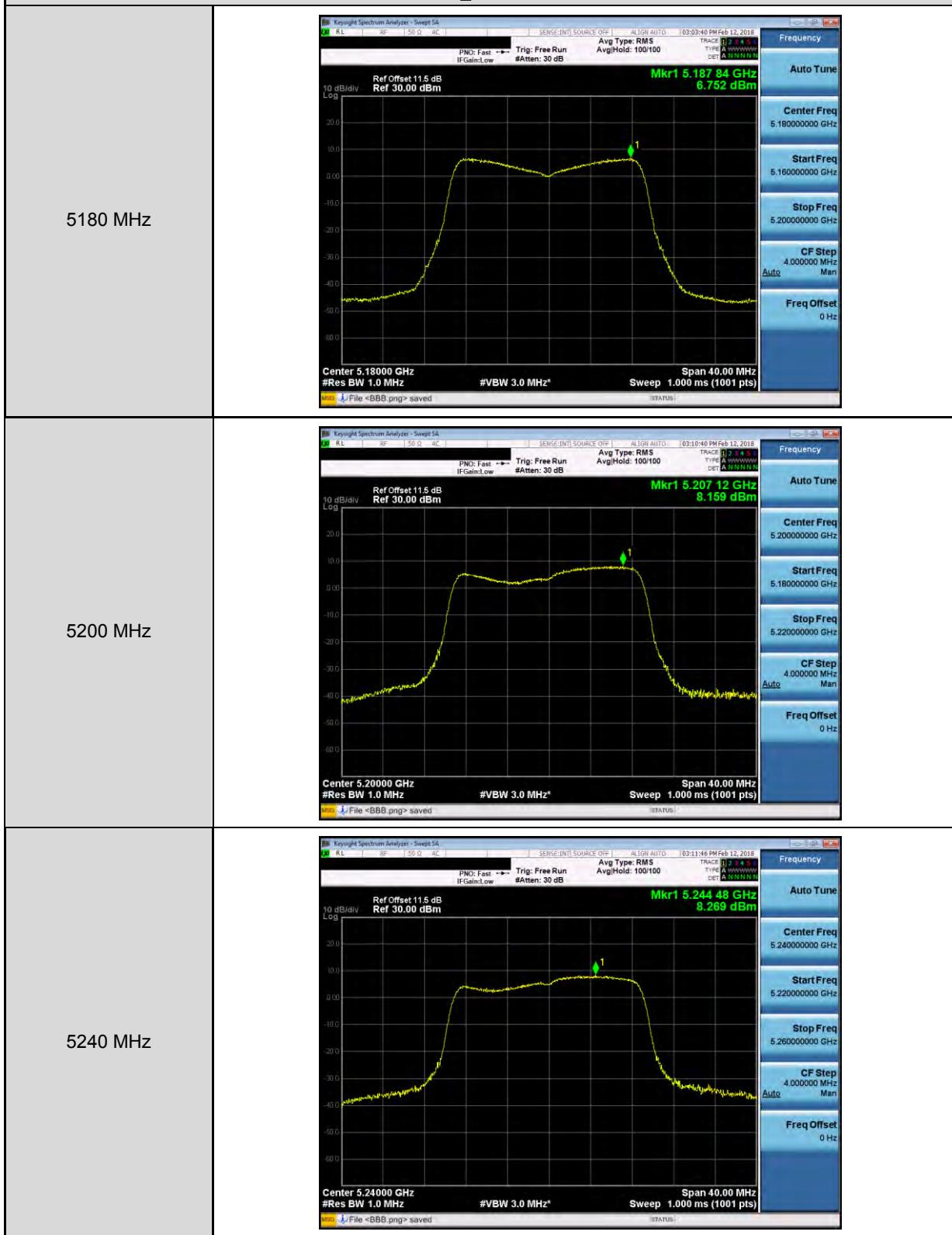


Mode 5: IEEE 802.11ac 80MHz Continuous TX mode _ ANT-0

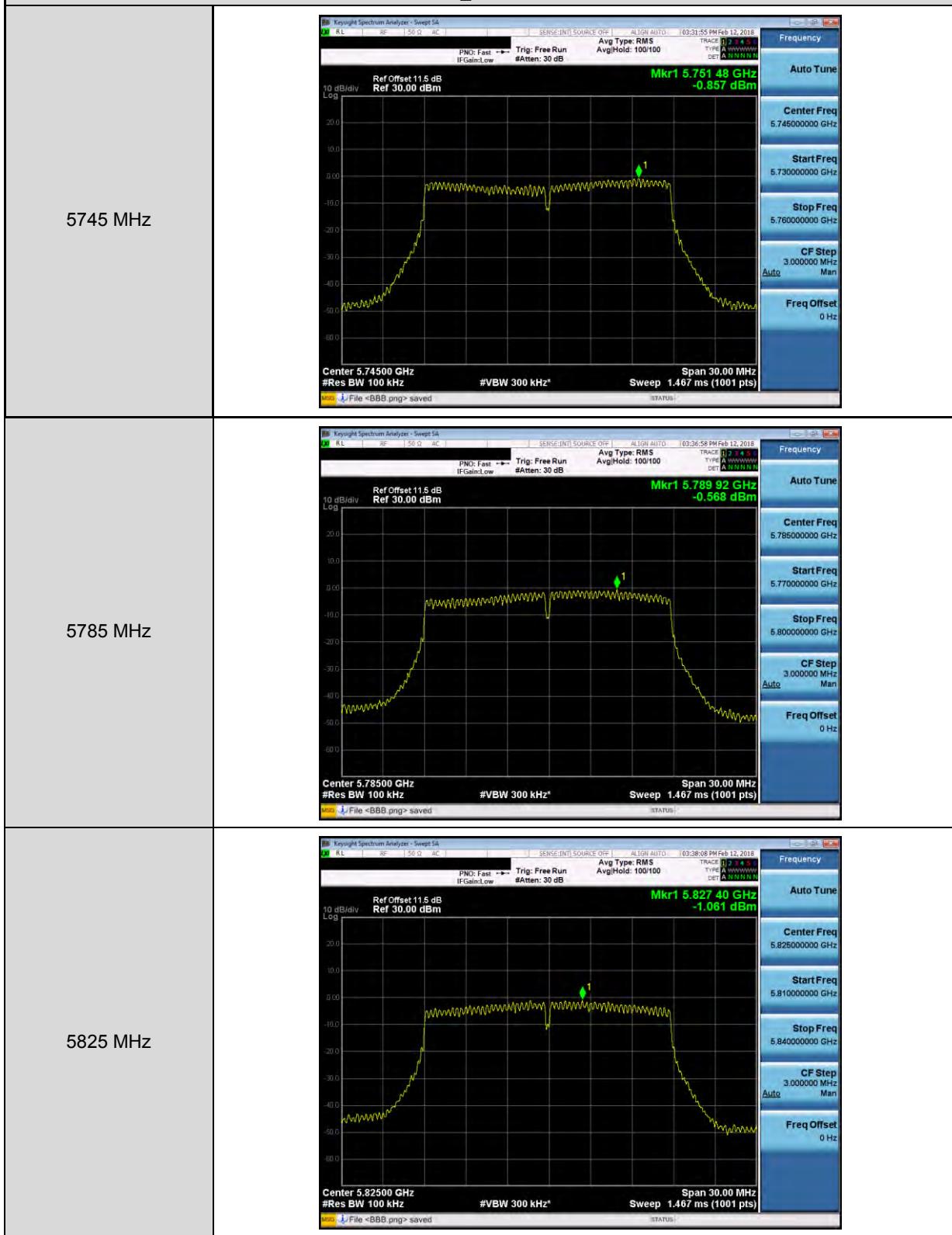
5775 MHz



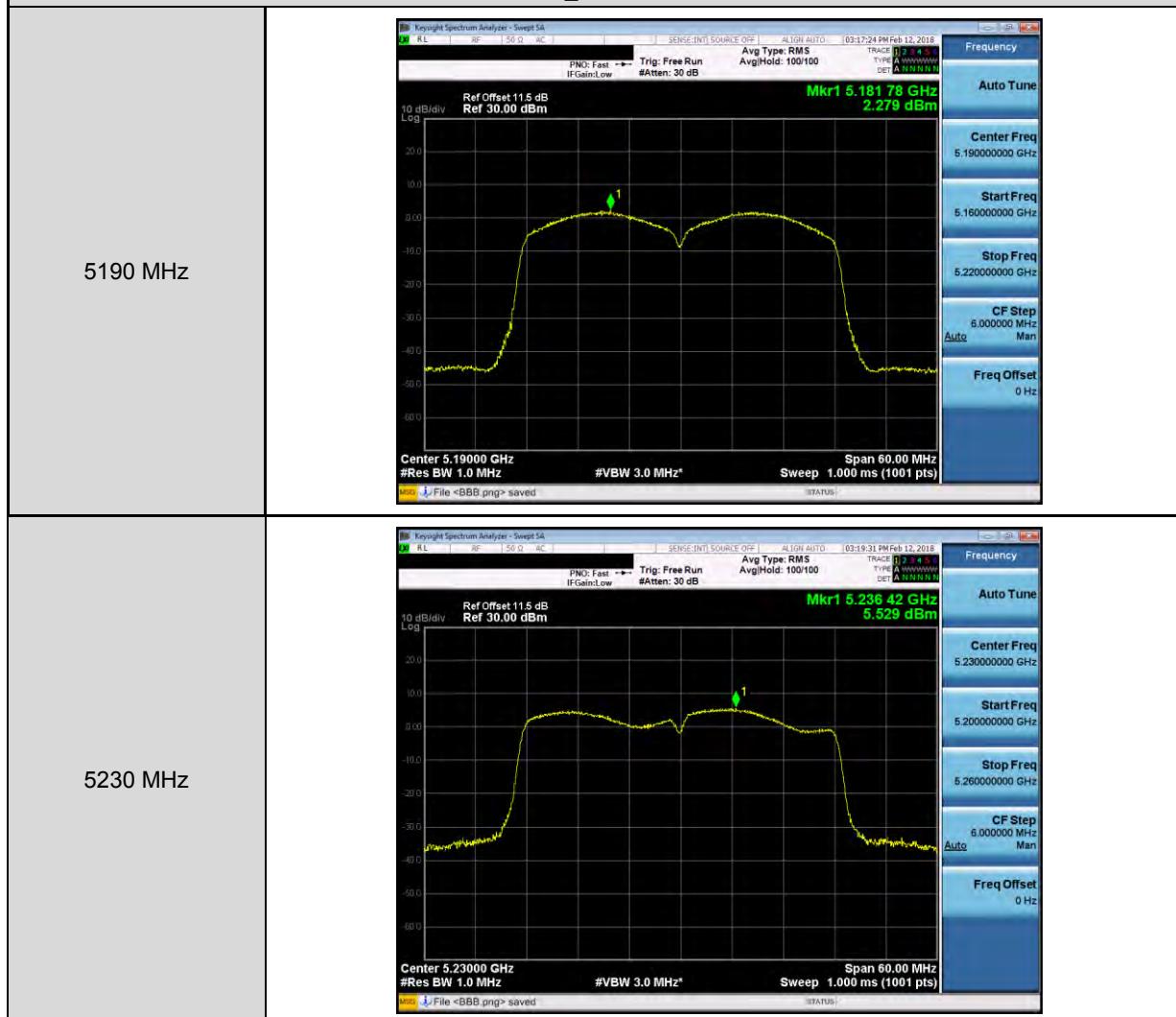
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode _ ANT-1



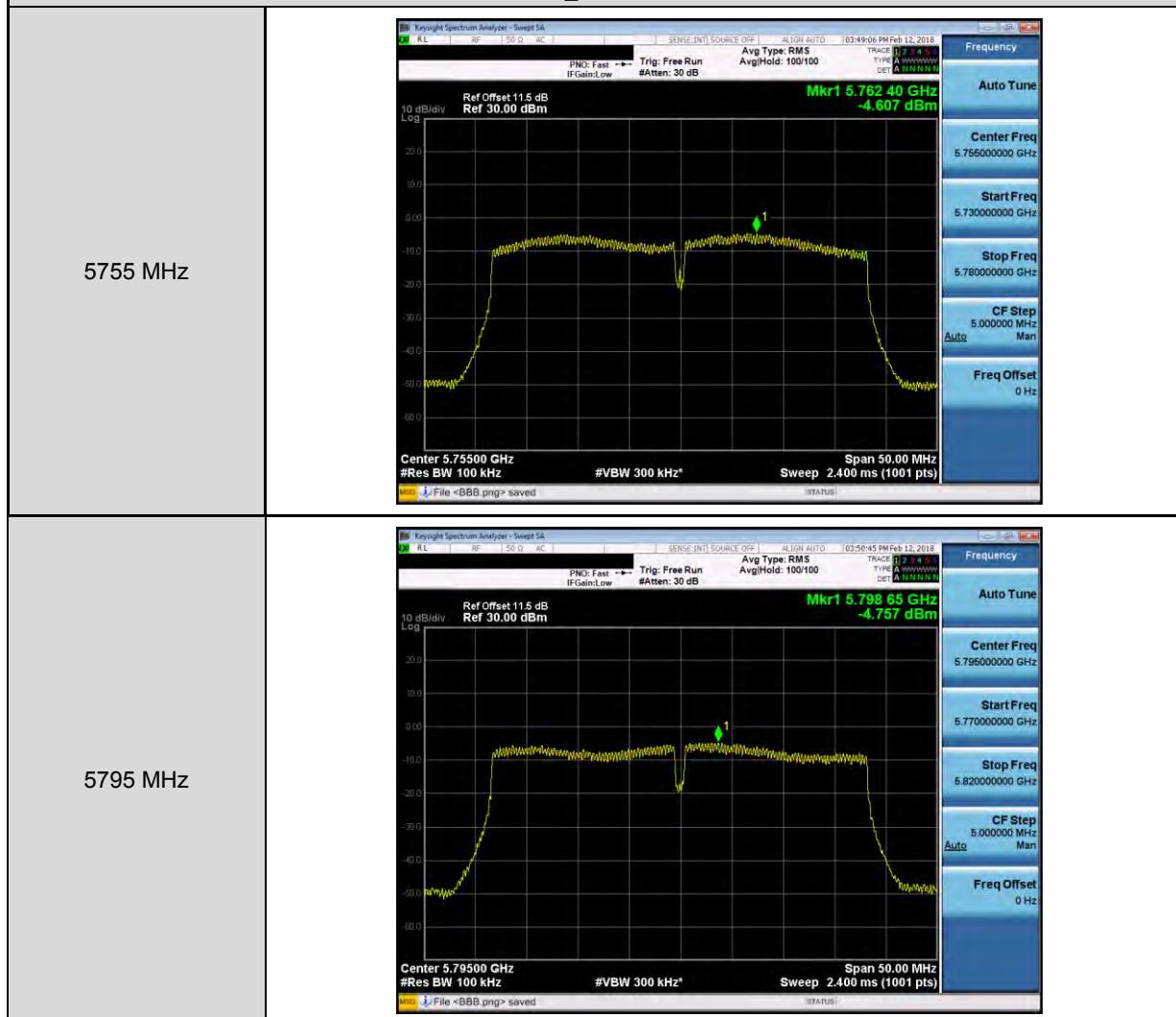
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode _ ANT-1



Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-1



Mode 4: IEEE 802.11ac 40MHz Continuous TX mode_ANT-1



Mode 5: IEEE 802.11ac 80MHz Continuous TX mode _ ANT-1

5210 MHz



Mode 5: IEEE 802.11ac 80MHz Continuous TX mode _ ANT-1

5775 MHz



5.7. Frequency Stability Measurement

Temperature Variations

Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	0	120	5200.0367	36700	7.058	Pass
	10		5200.0128	12800	2.462	Pass
	20		5199.935	-65000	-12.500	Pass
	30		5199.9196	-80400	-15.462	Pass
	40		5199.9005	-99500	-19.135	Pass
5785 MHz	0	120	5785.0397	39700	6.863	Pass
	10		5785.0138	13800	2.385	Pass
	20		5784.9522	-47800	-8.263	Pass
	30		5784.9166	-83400	-14.417	Pass
	40		5784.9011	-98900	-17.096	Pass

Voltage Variations

Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	20	138.00	5199.9023	-97700	-18.788	Pass
		120.00	5199.9196	-80400	-15.462	Pass
		102.00	5199.9309	-69100	-13.288	Pass
5785 MHz	20	138.00	5784.9017	-98300	-16.992	Pass
		120.00	5784.9166	-83400	-14.417	Pass
		102.00	5784.9315	-68500	-11.841	Pass

Note: The manufacturer's frequency stability specification is better than 20ppm.

Beamforming on

Temperature Variations

Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	0	120	5200.0367	36700	7.058	Pass
	10		5200.0128	12800	2.462	Pass
	20		5199.935	-65000	-12.500	Pass
	30		5199.9196	-80400	-15.462	Pass
	40		5199.9005	-99500	-19.135	Pass
5785 MHz	0	120	5785.0397	39700	6.863	Pass
	10		5785.0138	13800	2.385	Pass
	20		5784.9522	-47800	-8.263	Pass
	30		5784.9166	-83400	-14.417	Pass
	40		5784.9011	-98900	-17.096	Pass

Voltage Variations

Frequency	Temp. (°C)	Voltage (Vac)	Measured Freq. (MHz)	Delta Freq. (Hz)	Tolerance (ppm)	Result (Pass/Fail)
5200 MHz	20	138.00	5199.9023	-97700	-18.788	Pass
		120.00	5199.9196	-80400	-15.462	Pass
		102.00	5199.9309	-69100	-13.288	Pass
5785 MHz	20	138.00	5784.9017	-98300	-16.992	Pass
		120.00	5784.9166	-83400	-14.417	Pass
		102.00	5784.9315	-68500	-11.841	Pass

Note: The manufacturer's frequency stability specification is better than 20ppm.

5.8. Automatically discontinue transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving.

5.9. Antenna Requirement

■ Antenna Connector Construction

See section 2 – antenna information.

■ Directional Gain Calculated

For Maximum Conducted Output Power

$$\text{Directional Gain} = 10 \times \log \{ [10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / \text{NANT} \}$$

Operate Freq. Band		Directional Gain (dBi)	
		MIMO/Beamforming	
IEEE 802.11ac 20MHz	U-NII Band I	7.95	
	U-NII Band III	8.26	
IEEE 802.11ac 40MHz	U-NII Band I	7.95	
	U-NII Band III	8.26	
IEEE 802.11ac 80MHz	U-NII Band I	7.95	
	U-NII Band III	8.26	

For Maximum Power Spectral Density

$$\text{Directional Gain} = 10 \times \log \{ [10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / \text{NANT} \}$$

Operate Freq. Band		Directional Gain (dBi)	
		CDD	MIMO/Beamforming on
IEEE 802.11a	U-NII Band I	7.95	---
	U-NII Band III	8.26	---
IEEE 802.11ac 20MHz	U-NII Band I	7.95	7.95
	U-NII Band III	8.26	8.26
IEEE 802.11ac 40MHz	U-NII Band I	7.95	7.95
	U-NII Band III	8.26	8.26
IEEE 802.11ac 80MHz	U-NII Band I	7.95	7.95
	U-NII Band III	8.26	8.26