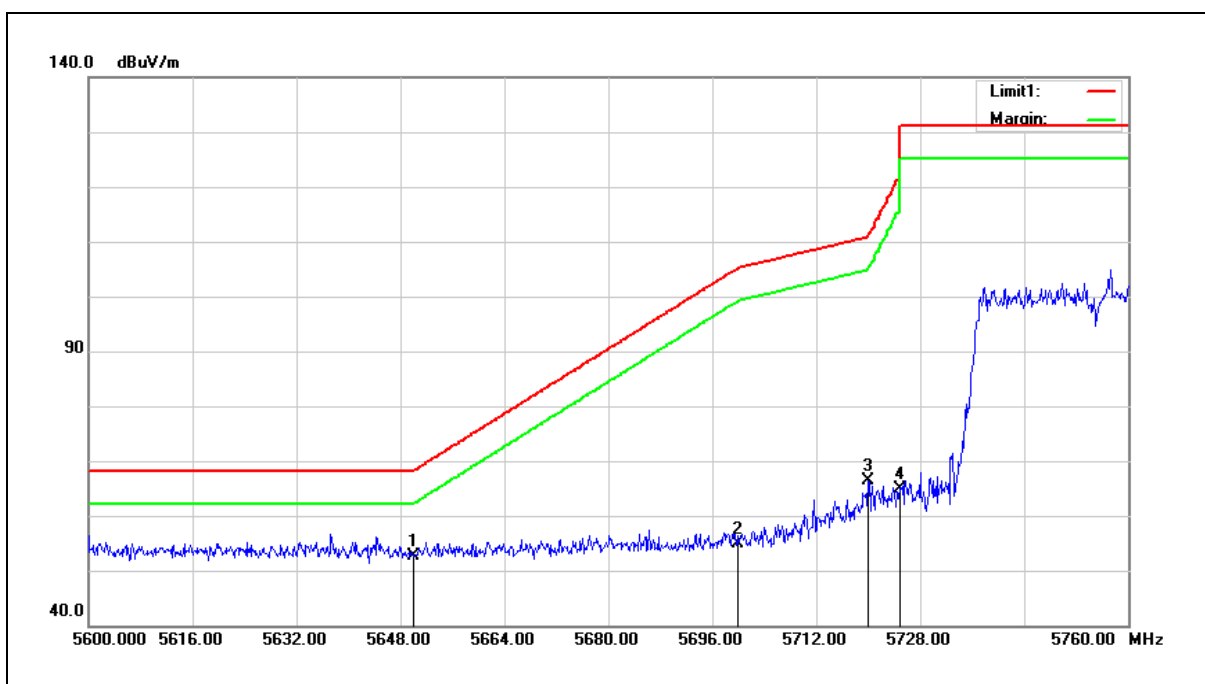


Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5755MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4		
Ant.Polar.:	Vertical		



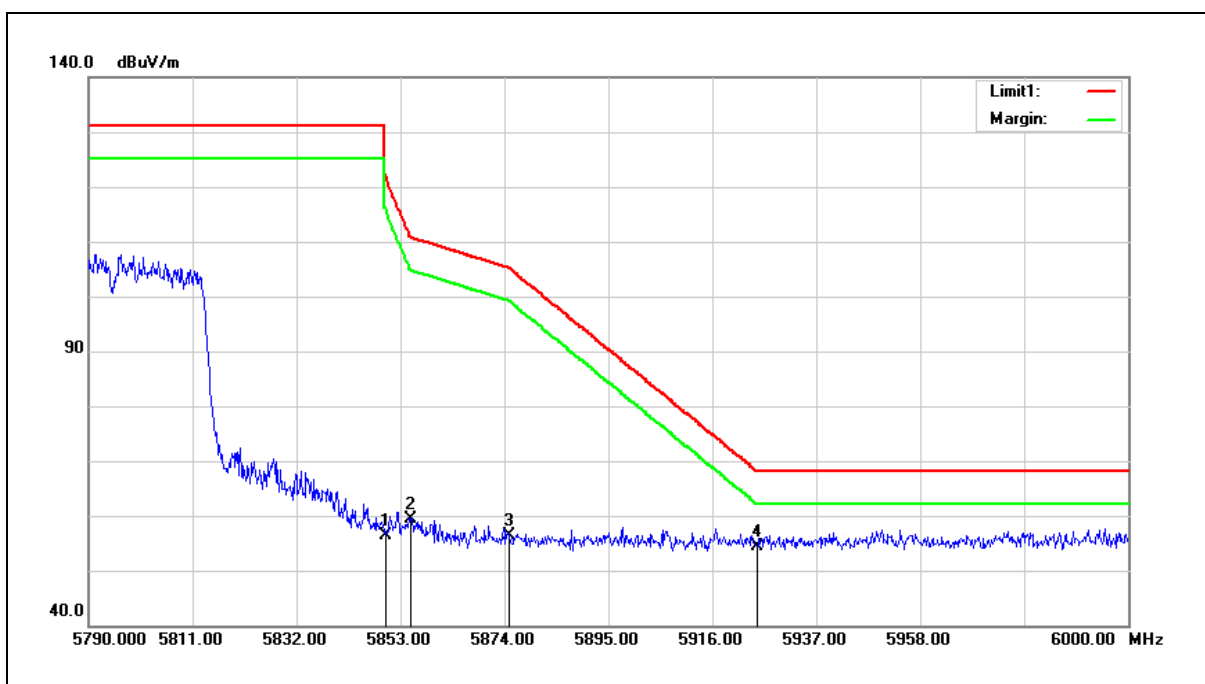
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	46.00	6.61	52.61	68.20	-15.59	peak
2	5700.000	48.23	6.71	54.94	105.20	-50.26	peak
3	5720.000	59.50	6.77	66.27	110.80	-44.53	peak
4	5725.000	58.16	6.78	64.94	122.20	-57.26	peak

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		



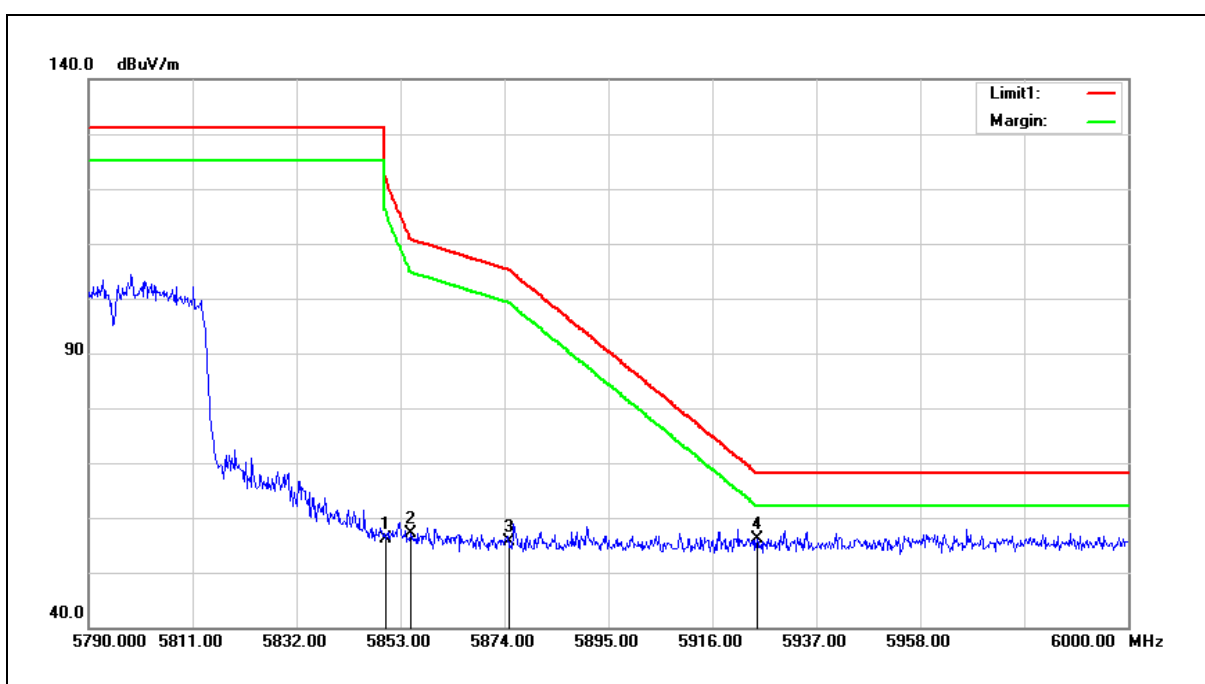
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	49.47	7.03	56.50	122.20	-65.70	peak
2	5855.000	52.37	7.04	59.41	110.80	-51.39	peak
3	5875.000	49.35	7.09	56.44	105.20	-48.76	peak
4	5925.000	47.18	7.20	54.38	68.20	-13.82	peak

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	49.07	7.03	56.10	122.20	-66.10	peak
2	5855.000	50.03	7.04	57.07	110.80	-53.73	peak
3	5875.000	48.44	7.09	55.53	105.20	-49.67	peak
4	5925.000	49.03	7.20	56.23	68.20	-11.97	peak

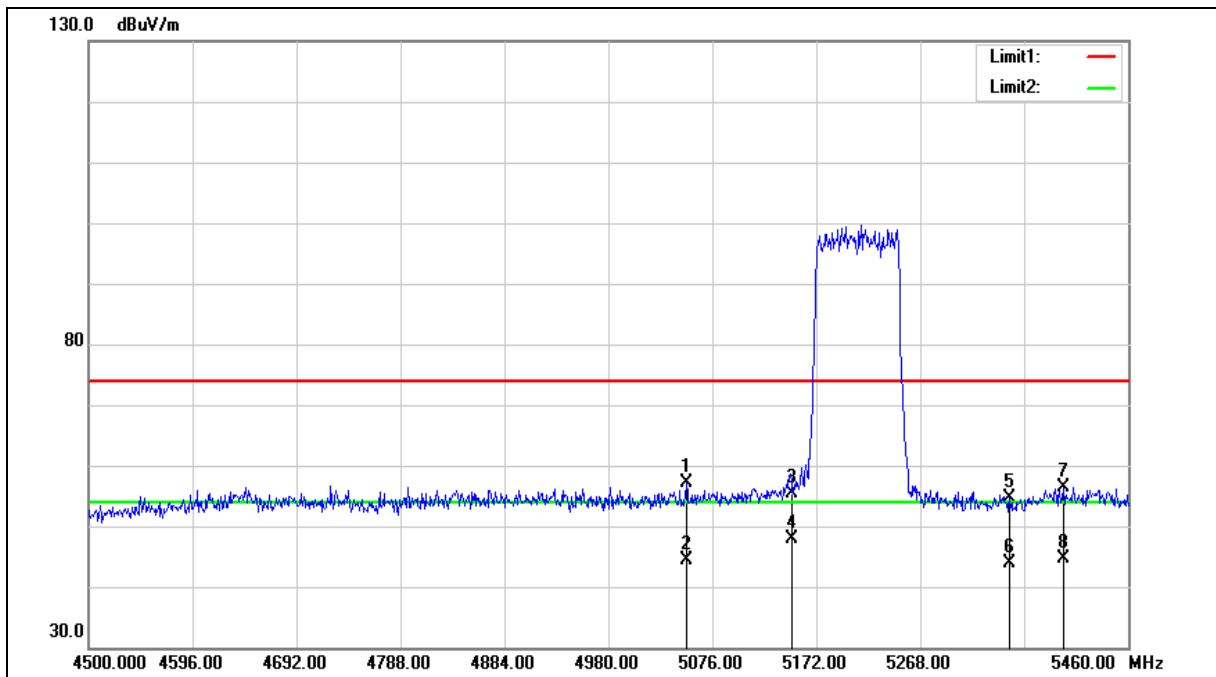
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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	5052.000	51.41	5.62	57.03	74.00	-16.97	peak
2	5052.000	38.72	5.62	44.34	54.00	-9.66	AVG
3	5150.000	49.59	5.78	55.37	74.00	-18.63	peak
4	5150.000	42.01	5.78	47.79	54.00	-6.21	AVG
5	5350.000	48.52	6.07	54.59	74.00	-19.41	peak
6	5350.000	37.77	6.07	43.84	54.00	-10.16	AVG
7	5400.480	50.25	6.15	56.40	74.00	-17.60	peak
8	5400.480	38.57	6.15	44.72	54.00	-9.28	AVG

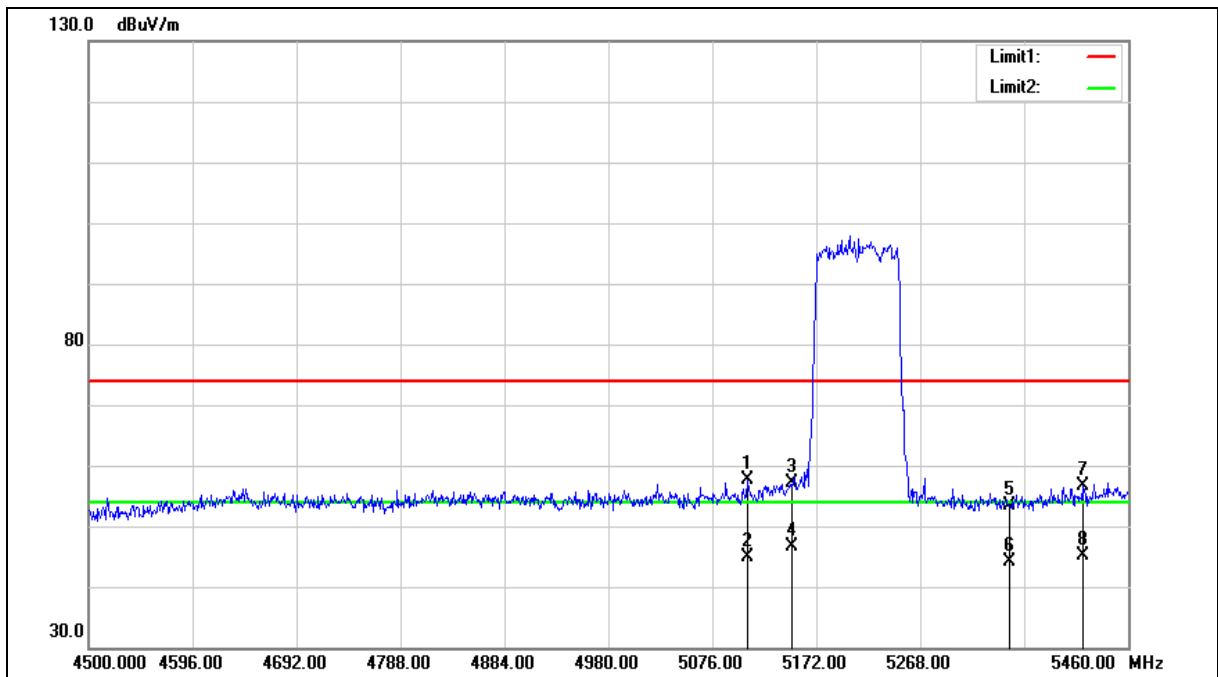
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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	5108.640	51.79	5.72	57.51	74.00	-16.49	peak
2	5108.640	39.17	5.72	44.89	54.00	-9.11	AVG
3	5150.000	51.35	5.78	57.13	74.00	-16.87	peak
4	5150.000	40.81	5.78	46.59	54.00	-7.41	AVG
5	5350.000	47.30	6.07	53.37	74.00	-20.63	peak
6	5350.000	38.12	6.07	44.19	54.00	-9.81	AVG
7	5417.760	50.39	6.17	56.56	74.00	-17.44	peak
8	5417.760	38.84	6.17	45.01	54.00	-8.99	AVG

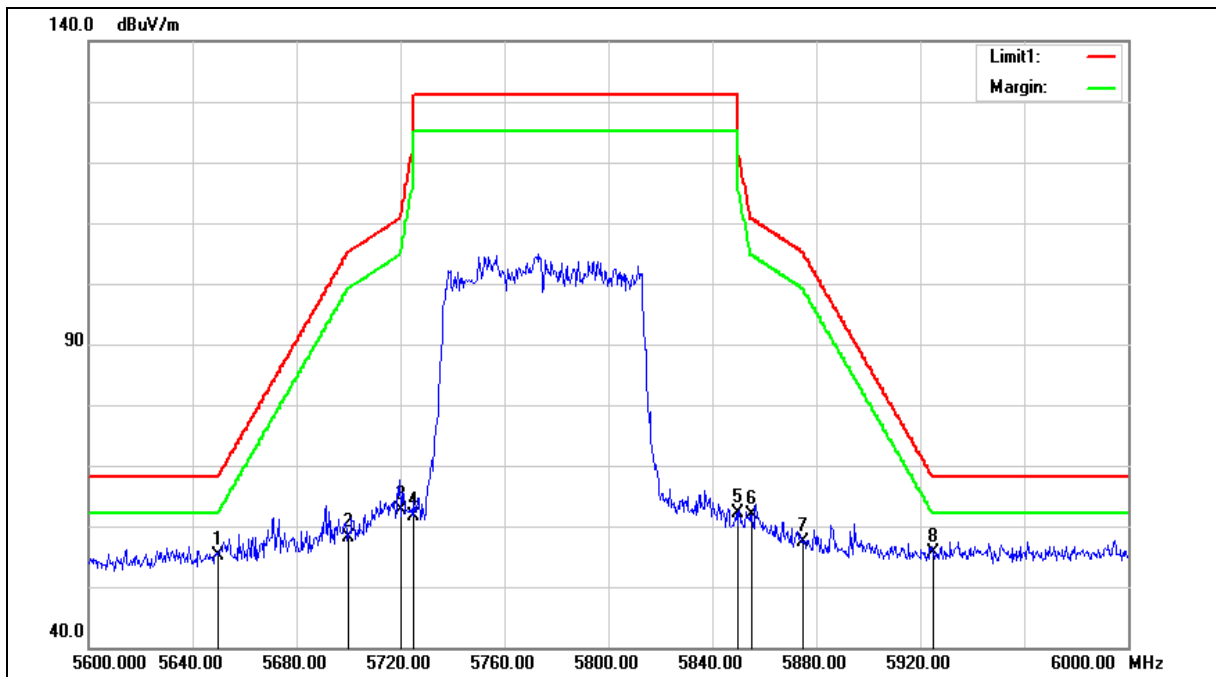
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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	48.48	6.61	55.09	68.20	-13.11	peak
2	5700.000	51.37	6.71	58.08	105.20	-47.12	peak
3	5720.000	55.87	6.77	62.64	110.80	-48.16	peak
4	5725.000	54.85	6.78	61.63	122.20	-60.57	peak
5	5850.000	55.07	7.03	62.10	122.20	-60.10	peak
6	5855.000	54.76	7.04	61.80	110.80	-49.00	peak
7	5875.000	50.34	7.09	57.43	105.20	-47.77	peak
8	5925.000	48.39	7.20	55.59	68.20	-12.61	peak

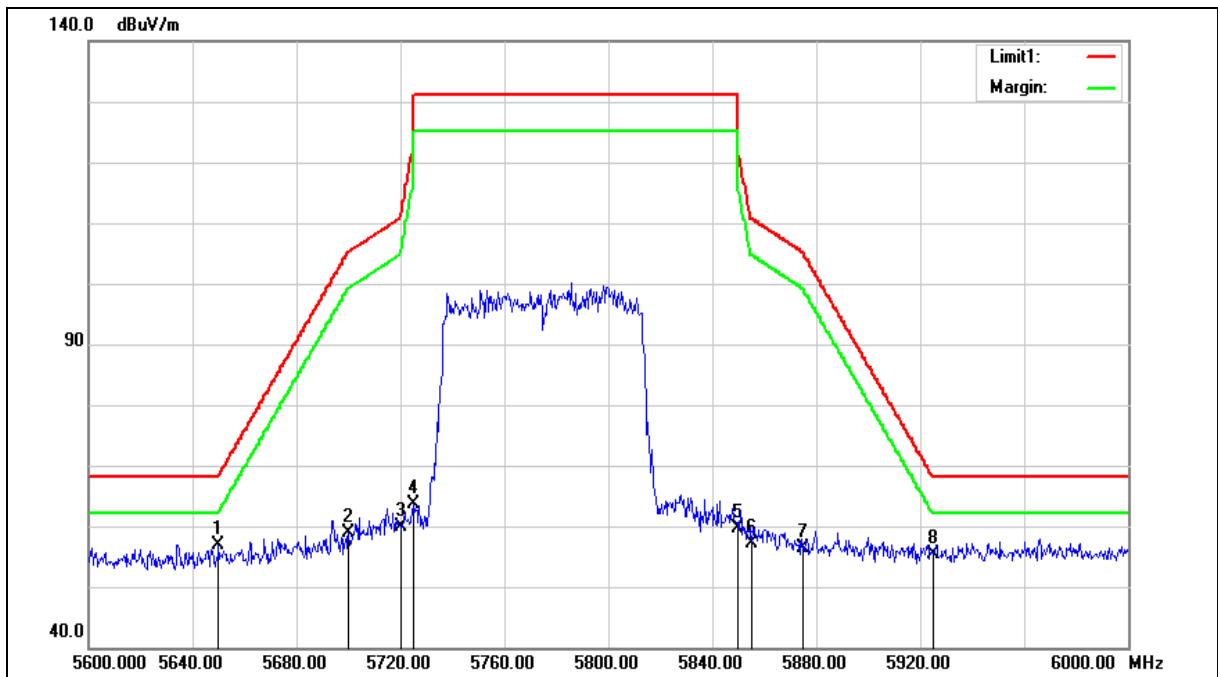
Note: 1. Result (dBuV/m) = Correct Factor (dB/m) + Reading (dBuV).

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	50.29	6.61	56.90	68.20	-11.30	peak
2	5700.000	52.14	6.71	58.85	105.20	-46.35	peak
3	5720.000	53.10	6.77	59.87	110.80	-50.93	peak
4	5725.000	56.87	6.78	63.65	122.20	-58.55	peak
5	5850.000	52.57	7.03	59.60	122.20	-62.60	peak
6	5855.000	50.08	7.04	57.12	110.80	-53.68	peak
7	5875.000	49.38	7.09	56.47	105.20	-48.73	peak
8	5925.000	48.11	7.20	55.31	68.20	-12.89	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	19.50	0.089	20.60	0.115	23.10	0.204	≤ 28.98
5200		19.75	0.094	20.65	0.116	23.23	0.211	
5220		20.55	0.114	19.81	0.096	23.21	0.209	
5240		20.53	0.113	19.53	0.090	23.07	0.203	
5745		19.74	0.094	19.99	0.100	22.88	0.194	≤ 28.84
5765		19.61	0.091	20.00	0.100	22.82	0.191	
5785		19.60	0.091	20.06	0.101	22.85	0.193	
5805		19.62	0.092	20.03	0.101	22.84	0.192	
5825		19.77	0.095	19.90	0.098	22.85	0.193	
5180		54M	19.37	0.086	20.40	0.110	22.93	
5200	19.55		0.090	20.52	0.113	23.07	0.203	
5220	20.28		0.107	19.61	0.091	22.97	0.198	
5240	20.28		0.107	19.22	0.084	22.79	0.190	
5745	19.53		0.090	19.62	0.092	22.59	0.181	≤ 28.84
5765	19.43		0.088	19.75	0.094	22.60	0.182	
5785	19.35		0.086	19.81	0.096	22.60	0.182	
5805	19.36		0.086	19.74	0.094	22.56	0.180	
5825	19.50		0.089	19.62	0.092	22.57	0.181	

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	19.77	0.095	20.60	0.115	23.22	0.210	≤ 28.98
5200		19.89	0.097	20.75	0.119	23.35	0.216	
5220		20.75	0.119	20.03	0.101	23.42	0.220	
5240		20.43	0.110	19.63	0.092	23.06	0.202	
5745		18.87	0.077	19.85	0.097	22.40	0.174	≤ 28.84
5765		18.68	0.074	19.80	0.095	22.29	0.169	
5785		19.50	0.089	19.90	0.098	22.71	0.187	
5805		19.55	0.090	19.88	0.097	22.73	0.187	
5825		19.50	0.089	19.78	0.095	22.65	0.184	
5180	173.4M	19.50	0.089	20.26	0.106	22.91	0.195	≤ 28.98
5200		19.61	0.091	20.53	0.113	23.10	0.204	
5220		20.53	0.113	19.78	0.095	23.18	0.208	
5240		20.17	0.104	19.45	0.088	22.84	0.192	
5745		18.56	0.072	19.63	0.092	22.14	0.164	≤ 28.84
5765		18.50	0.071	19.58	0.091	22.08	0.162	
5785		19.16	0.082	19.64	0.092	22.42	0.174	
5805		19.29	0.085	19.60	0.091	22.46	0.176	
5825		19.28	0.085	19.57	0.091	22.44	0.175	

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	18.55	0.072	18.45	0.070	21.51	0.142	≤ 28.98
5230		20.54	0.113	19.74	0.094	23.17	0.207	
5755		19.90	0.098	20.28	0.107	23.10	0.204	≤ 28.84
5795		20.01	0.100	20.30	0.107	23.17	0.207	
5190	400M	18.33	0.068	18.22	0.066	21.29	0.134	≤ 28.98
5230		20.27	0.106	19.50	0.089	22.91	0.196	
5755		19.69	0.093	20.00	0.100	22.86	0.193	≤ 28.84
5755		19.83	0.096	19.99	0.100	22.92	0.196	

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	17.05	0.051	16.93	0.049	20.00	0.100	≤ 28.98
5775		19.63	0.092	19.87	0.097	22.76	0.189	≤ 28.84
5210	866.6M	16.87	0.049	16.77	0.048	19.83	0.096	≤ 28.98
5775		19.41	0.087	19.60	0.091	22.52	0.178	≤ 28.84

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

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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	16.51	0.045	16.67	0.046	19.60	0.091	≤ 28.98
5200		16.71	0.047	16.73	0.047	19.73	0.094	
5220		17.20	0.052	17.12	0.052	20.17	0.104	
5240		16.83	0.048	16.79	0.048	19.82	0.096	
5745		16.46	0.044	16.60	0.046	19.54	0.090	≤ 28.84
5765		16.35	0.043	16.62	0.046	19.50	0.089	
5785		16.42	0.044	16.66	0.046	19.55	0.090	
5805		16.49	0.045	16.67	0.046	19.59	0.091	
5825	16.52	0.045	16.88	0.049	19.71	0.094		
5180	54M	16.28	0.042	16.40	0.044	19.35	0.086	≤ 28.98
5200		16.53	0.045	16.50	0.045	19.53	0.090	
5220		16.94	0.049	16.83	0.048	19.90	0.098	
5240		16.62	0.046	16.58	0.045	19.61	0.091	
5745		16.25	0.042	16.33	0.043	19.30	0.085	≤ 28.84
5765		16.12	0.041	16.36	0.043	19.25	0.084	
5785		16.21	0.042	16.33	0.043	19.28	0.085	
5805		16.21	0.042	16.41	0.044	19.32	0.086	
5825		16.32	0.043	16.67	0.046	19.51	0.089	

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	16.93	0.049	17.01	0.050	19.98	0.100	≤ 28.98	
5200		17.14	0.052	17.14	0.052	20.15	0.104		
5220		17.18	0.052	16.93	0.049	20.07	0.102		
5240		16.74	0.047	16.72	0.047	19.74	0.094		
5745		15.96	0.039	16.03	0.040	19.01	0.080	≤ 28.84	
5765		15.83	0.038	16.02	0.040	18.94	0.078		
5785		16.32	0.043	16.62	0.046	19.48	0.089		
5805		16.30	0.043	16.65	0.046	19.49	0.089		
5825		16.32	0.043	16.76	0.047	19.56	0.090		
5180	173.4M	16.62	0.046	16.69	0.047	19.67	0.093	≤ 28.98	
5200		16.87	0.049	16.88	0.049	19.89	0.097		
5220		16.86	0.049	16.69	0.047	19.79	0.095		
5240		16.50	0.045	16.41	0.044	19.47	0.088		
5745		15.67	0.037	15.71	0.037	18.70	0.074	≤ 28.84	
5765		15.55	0.036	15.68	0.037	18.63	0.073		
5785		15.99	0.040	16.37	0.043	19.19	0.083		
5805		16.08	0.041	16.43	0.044	19.27	0.085		
5825		16.12	0.041	16.53	0.045	19.34	0.086		

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	15.11	0.032	14.96	0.031	18.05	0.064	≤ 28.98
5230		16.78	0.048	16.67	0.046	19.74	0.094	
5755		16.46	0.044	16.70	0.047	19.59	0.091	≤ 28.84
5795		16.58	0.045	16.75	0.047	19.68	0.093	
5190	400M	14.88	0.031	14.66	0.029	17.78	0.060	≤ 28.98
5230		16.54	0.045	16.39	0.044	19.48	0.089	
5755		16.21	0.042	16.48	0.044	19.36	0.086	≤ 28.84
5755		16.32	0.043	16.45	0.044	19.40	0.087	

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	13.95	0.025	13.86	0.024	16.92	0.049	≤ 28.98
5775		16.21	0.042	16.38	0.043	19.31	0.085	≤ 28.84
5210	866.6M	13.68	0.023	13.58	0.023	16.64	0.046	≤ 28.98
5775		15.98	0.040	16.12	0.041	19.06	0.081	≤ 28.84

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	20.600	19.910	16.508	16.463
5200	19.930	19.700	16.483	16.463
5240	19.940	19.410	16.536	16.451

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	20.680	20.740	17.614	17.656
5200	20.360	20.260	17.680	17.654
5240	20.650	20.460	17.688	17.644

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	40.110	40.160	36.040	36.060
5230	41.350	40.230	36.144	36.120

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	82.850	82.980	75.723	75.775

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

Beamforming on

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	19.400	19.100	16.462	16.425
5200	19.780	19.090	16.465	16.427
5240	19.500	19.190	16.471	16.438

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	20.270	20.330	17.651	17.623
5200	20.490	20.480	17.646	17.617
5240	20.280	20.340	17.620	17.631

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	40.330	39.970	36.050	36.050
5230	39.880	40.200	36.037	36.034

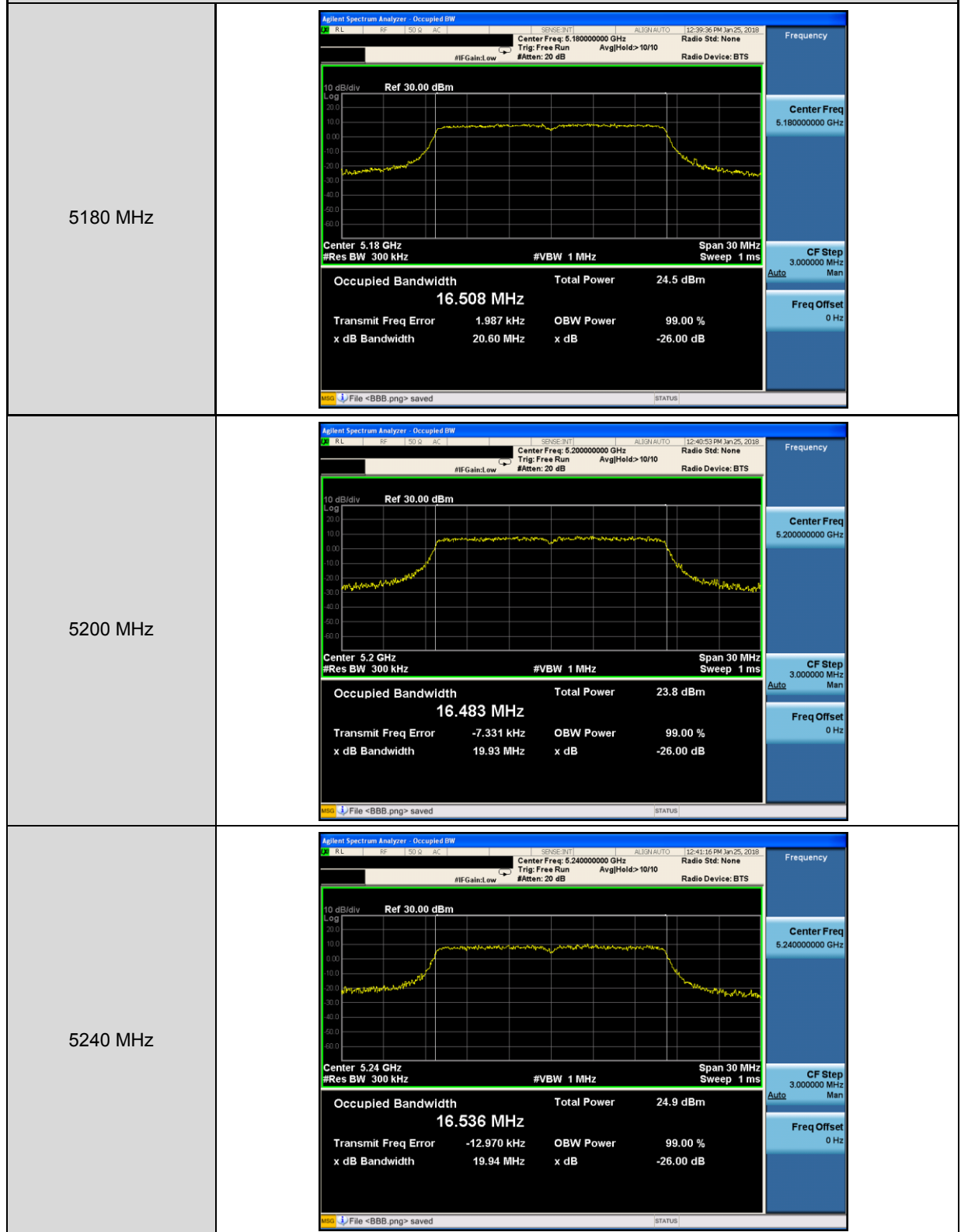
Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode			
Frequency (MHz)	ANT-0	ANT-1	ANT-0	ANT-1
	26dB Bandwidth (MHz)	26dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5210	83.270	83.110	75.687	75.724

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



■ Test Graphs

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





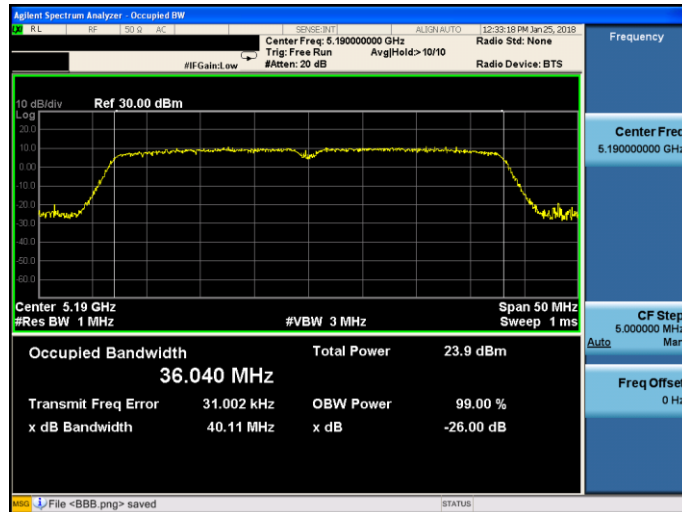
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode_ ANT-0

5180 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run #Asten: 20 dB Ref 30.00 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.614 MHz Total Power 24.4 dBm Transmit Freq Error -3.068 kHz OBW Power 99.00 % x dB Bandwidth 20.68 MHz x dB -26.00 dB File <BBB.png> saved
5200 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run #Asten: 20 dB Ref 30.00 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.680 MHz Total Power 24.0 dBm Transmit Freq Error -9.935 kHz OBW Power 99.00 % x dB Bandwidth 20.36 MHz x dB -26.00 dB File <BBB.png> saved
5240 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run #Asten: 20 dB Ref 30.00 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.688 MHz Total Power 25.1 dBm Transmit Freq Error -18.470 kHz OBW Power 99.00 % x dB Bandwidth 20.65 MHz x dB -26.00 dB File <BBB.png> saved

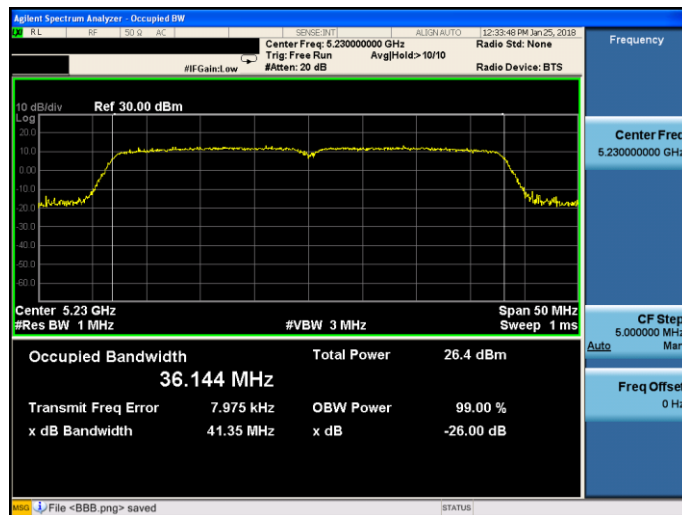


Mode 4: IEEE 802.11ac 40MHz Continuous TX mode _ANT-0

5190 MHz

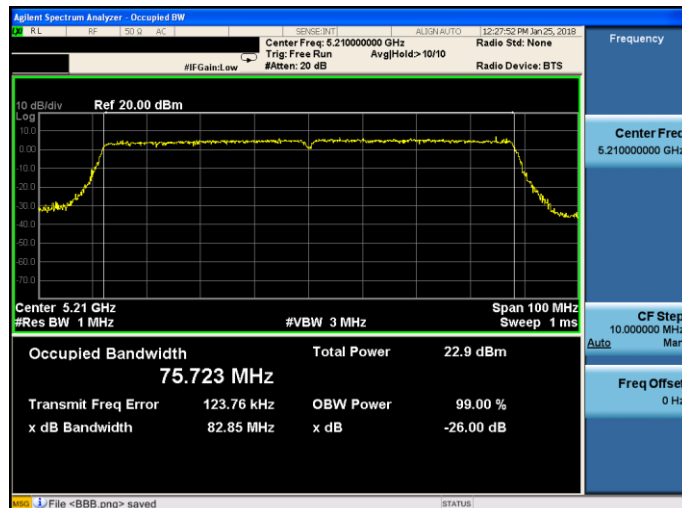


5230 MHz



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

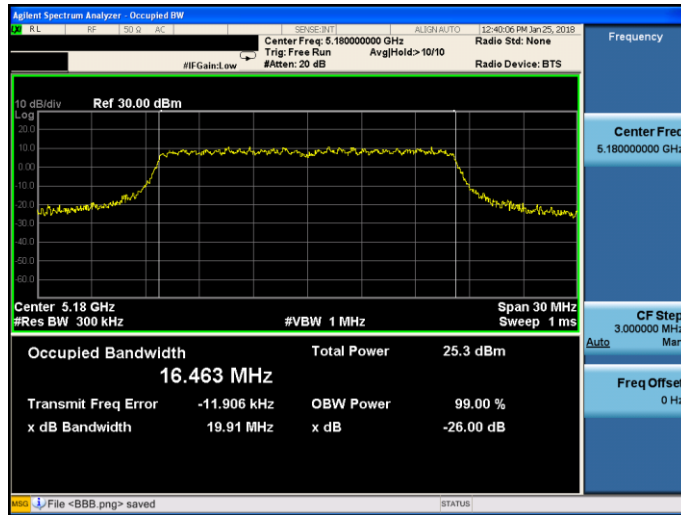
5210 MHz



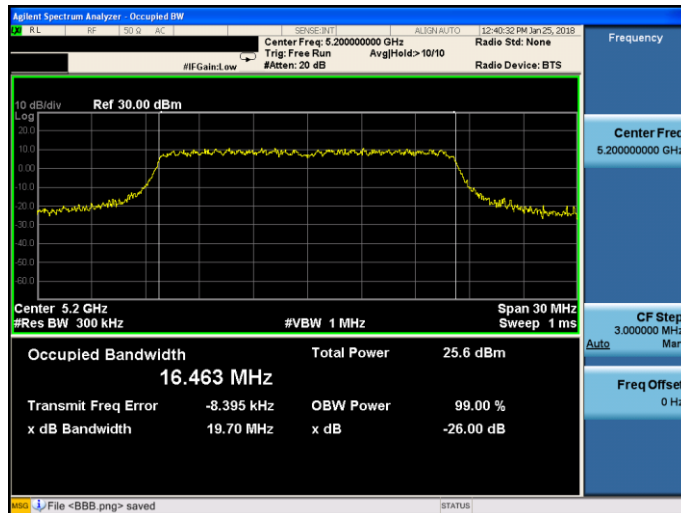


Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1

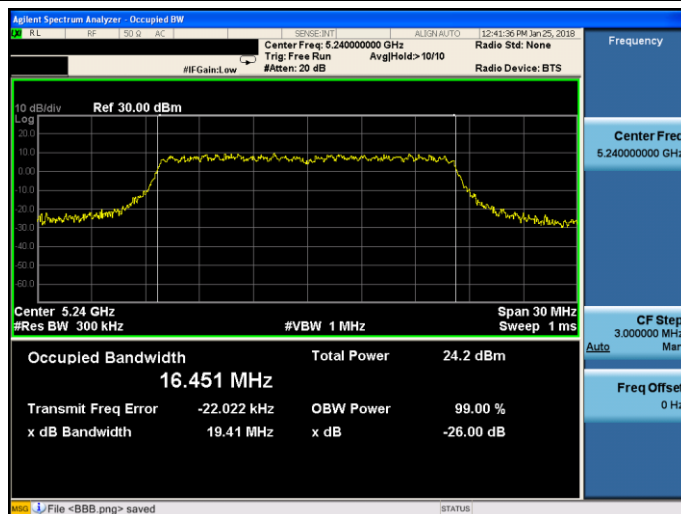
5180 MHz



5200 MHz

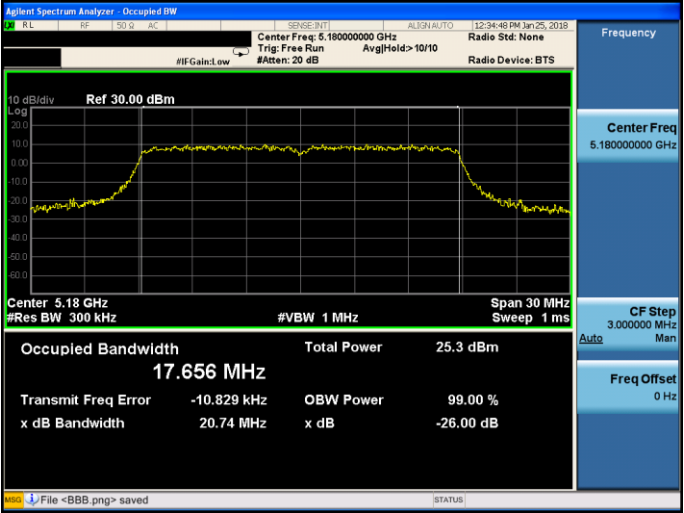
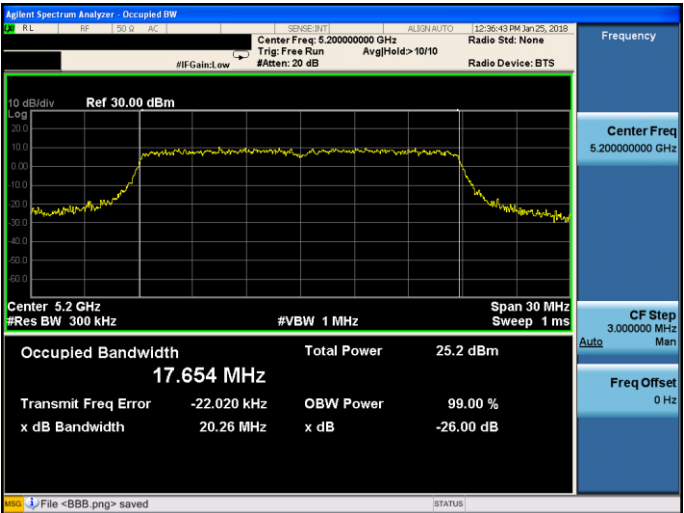
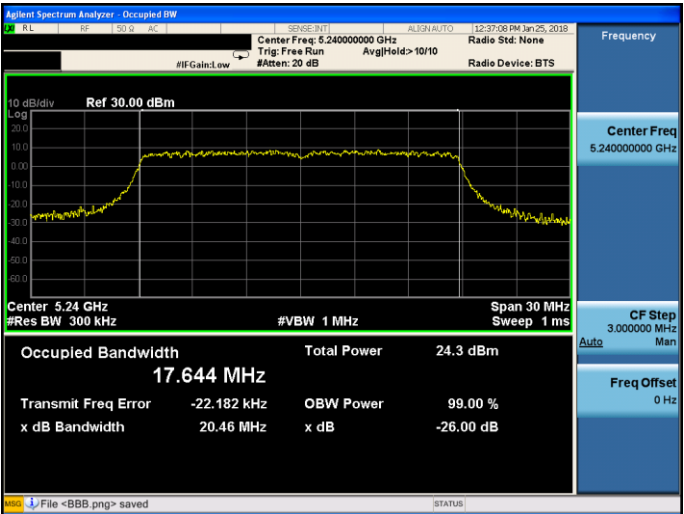


5240 MHz





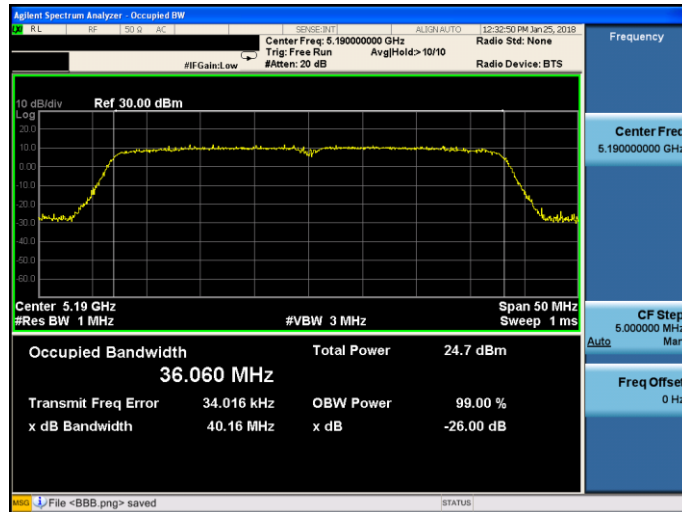
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode_ ANT-1

5180 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Frequency Center Freq 5.18000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz Occupied Bandwidth 17.656 MHz Total Power 25.3 dBm Transmit Freq Error -10.829 kHz OBW Power 99.00 % x dB Bandwidth 20.74 MHz x dB -26.00 dB Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Ref 30.00 dBm Log 10 dB/div 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 #IF Gain: Low File <BBB.png> saved STATUS
5200 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Frequency Center Freq 5.20000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz Occupied Bandwidth 17.654 MHz Total Power 25.2 dBm Transmit Freq Error -22.020 kHz OBW Power 99.00 % x dB Bandwidth 20.26 MHz x dB -26.00 dB Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Ref 30.00 dBm Log 10 dB/div 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 #IF Gain: Low File <BBB.png> saved STATUS
5240 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Frequency Center Freq 5.24000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz Occupied Bandwidth 17.644 MHz Total Power 24.3 dBm Transmit Freq Error -22.182 kHz OBW Power 99.00 % x dB Bandwidth 20.46 MHz x dB -26.00 dB Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Ref 30.00 dBm Log 10 dB/div 20.0 10.0 0.00 -10.0 -20.0 -30.0 -40.0 -50.0 -60.0 #IF Gain: Low File <BBB.png> saved STATUS

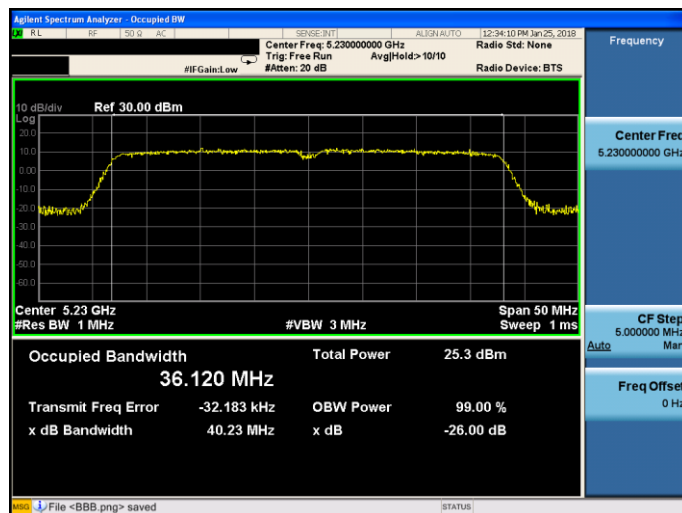


Mode 4: IEEE 802.11ac 40MHz Continuous TX mode _ANT-1

5190 MHz

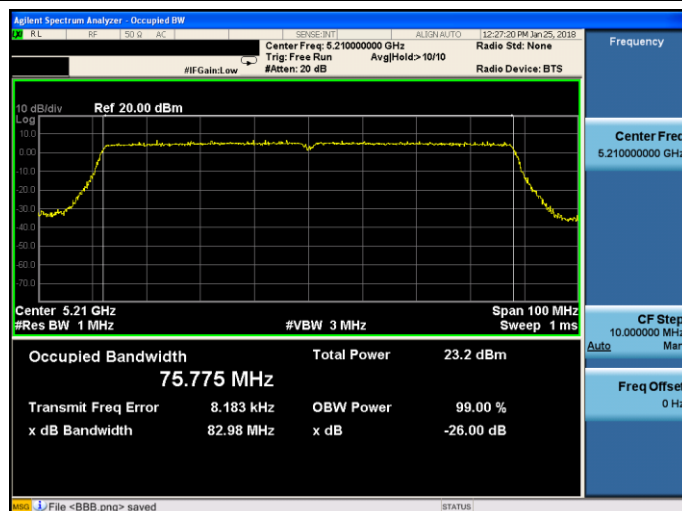


5230 MHz



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

5210 MHz



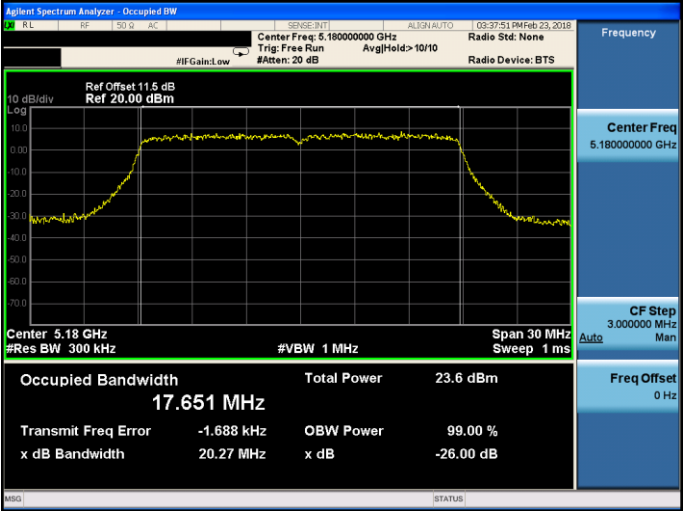
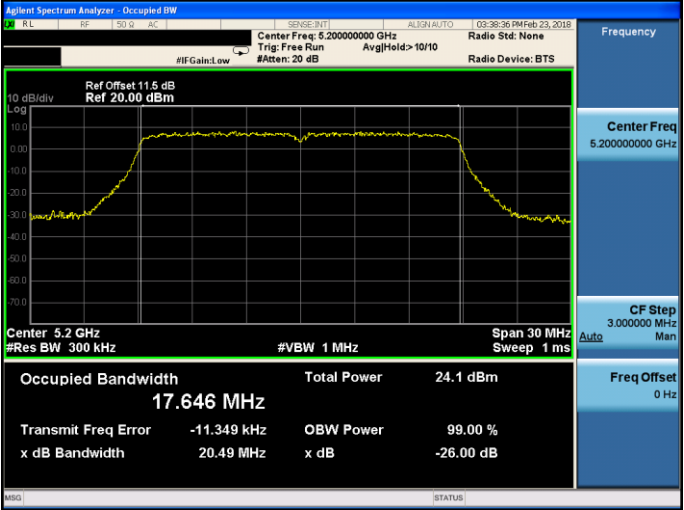


Beamforming on

Mode 2: IEEE 802.11a Continuous TX mode _ANT-0

5180 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run Ave/Hold: 10/10 Radio Std: None Radio Device: BTS Ref Offset 11.5 dB Ref 20.00 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 16.462 MHz Total Power 23.2 dBm Transmit Freq Error 2.672 kHz OBW Power 99.00 % x dB Bandwidth 19.40 MHz x dB -26.00 dB
5200 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run Ave/Hold: 10/10 Radio Std: None Radio Device: BTS Ref Offset 11.5 dB Ref 20.00 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 16.465 MHz Total Power 23.6 dBm Transmit Freq Error -12.071 kHz OBW Power 99.00 % x dB Bandwidth 19.78 MHz x dB -26.00 dB
5240 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run Ave/Hold: 10/10 Radio Std: None Radio Device: BTS Ref Offset 11.5 dB Ref 20.00 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 16.471 MHz Total Power 23.3 dBm Transmit Freq Error -10.774 kHz OBW Power 99.00 % x dB Bandwidth 19.50 MHz x dB -26.00 dB

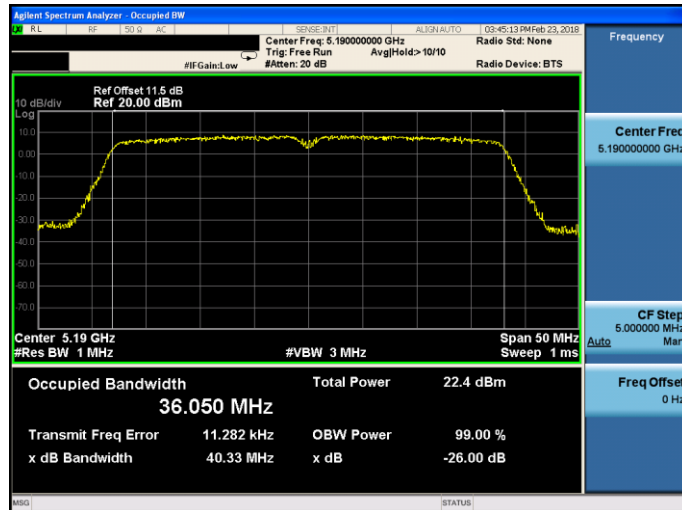


Mode 3: IEEE 802.11ac 20MHz Continuous TX mode _ ANT-0	
5180 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run #Atten: 20 dB Ref Offset 11.5 dB Ref 20.00 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.651 MHz Total Power 23.6 dBm Transmit Freq Error -1.688 kHz OBW Power 99.00 % x dB Bandwidth 20.27 MHz x dB -26.00 dB Frequency Center Freq 5.18000000 GHz CF Step 3.000000 MHz Auto Freq Offset 0 Hz
5200 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run #Atten: 20 dB Ref Offset 11.5 dB Ref 20.00 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.646 MHz Total Power 24.1 dBm Transmit Freq Error -11.349 kHz OBW Power 99.00 % x dB Bandwidth 20.49 MHz x dB -26.00 dB Frequency Center Freq 5.20000000 GHz CF Step 3.000000 MHz Auto Freq Offset 0 Hz
5240 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run #Atten: 20 dB Ref Offset 11.5 dB Ref 20.00 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.620 MHz Total Power 23.3 dBm Transmit Freq Error -12.680 kHz OBW Power 99.00 % x dB Bandwidth 20.28 MHz x dB -26.00 dB Frequency Center Freq 5.24000000 GHz CF Step 3.000000 MHz Auto Freq Offset 0 Hz

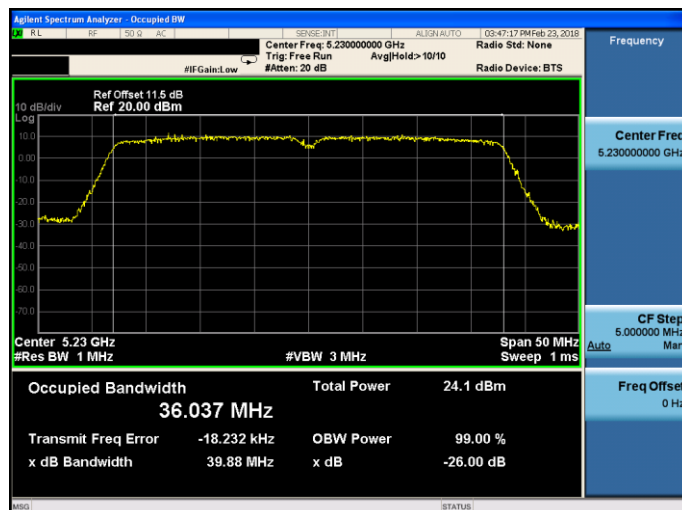


Mode 4: IEEE 802.11ac 40MHz Continuous TX mode _ANT-0

5190 MHz

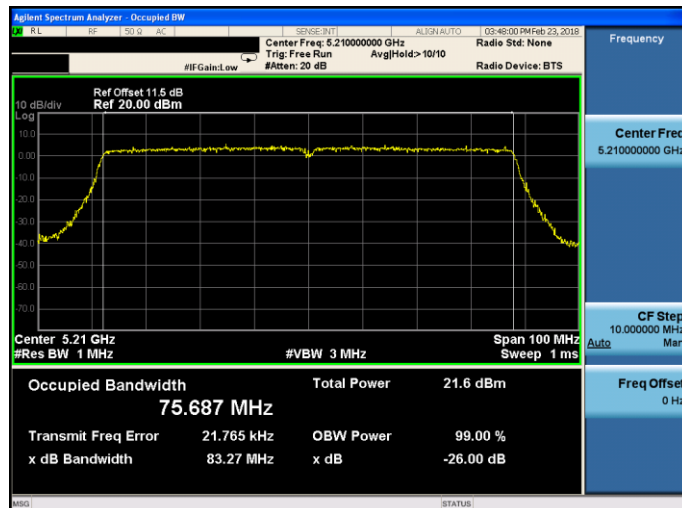


5230 MHz



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

5210 MHz



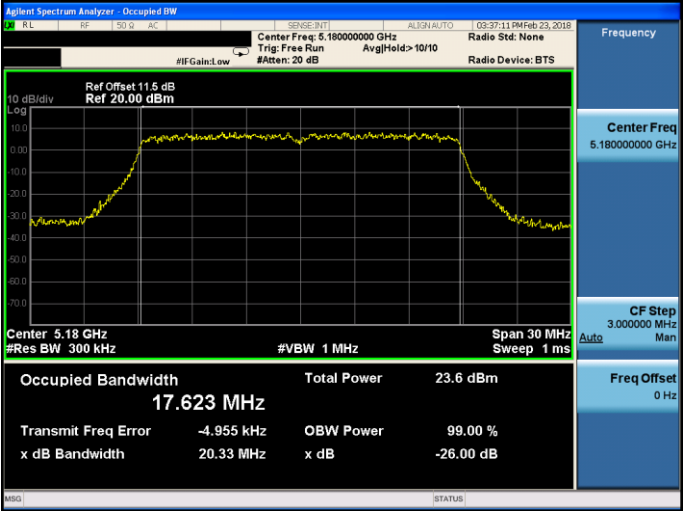
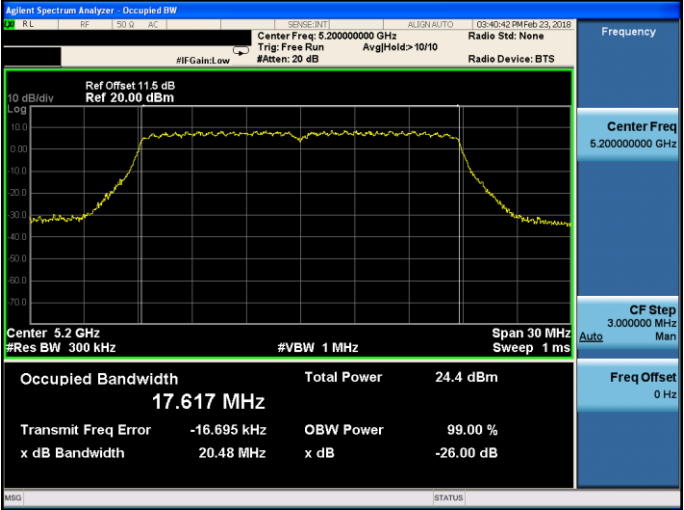
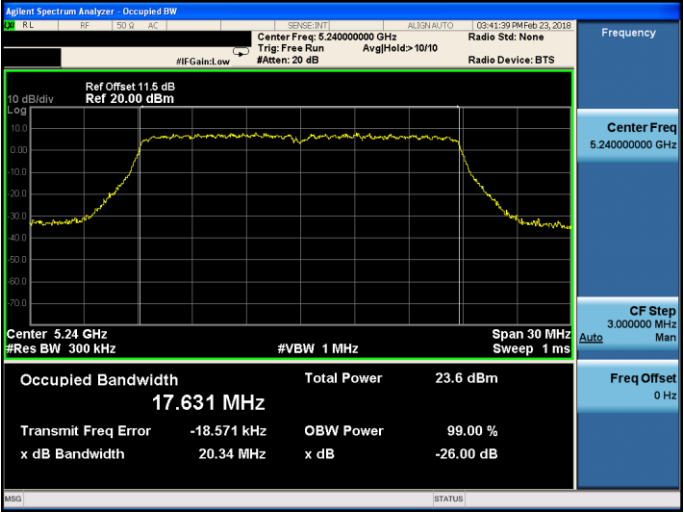


Mode 2: IEEE 802.11a Continuous TX mode_ ANT-1

5180 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.18000000 GHz Trig: Free Run #Atten: 20 dB Ref Offset 11.5 dB Ref 20.00 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 16.425 MHz Total Power 23.7 dBm Transmit Freq Error -8.099 kHz OBW Power 99.00 % x dB Bandwidth 19.10 MHz x dB -26.00 dB Frequency Center Freq 5.18000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
5200 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.20000000 GHz Trig: Free Run #Atten: 20 dB Ref Offset 11.5 dB Ref 20.00 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 16.427 MHz Total Power 23.7 dBm Transmit Freq Error -15.905 kHz OBW Power 99.00 % x dB Bandwidth 19.09 MHz x dB -26.00 dB Frequency Center Freq 5.20000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz
5240 MHz	Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.24000000 GHz Trig: Free Run #Atten: 20 dB Ref Offset 11.5 dB Ref 20.00 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 16.438 MHz Total Power 22.9 dBm Transmit Freq Error -15.710 kHz OBW Power 99.00 % x dB Bandwidth 19.19 MHz x dB -26.00 dB Frequency Center Freq 5.24000000 GHz CF Step 3.000000 MHz Auto Man Freq Offset 0 Hz



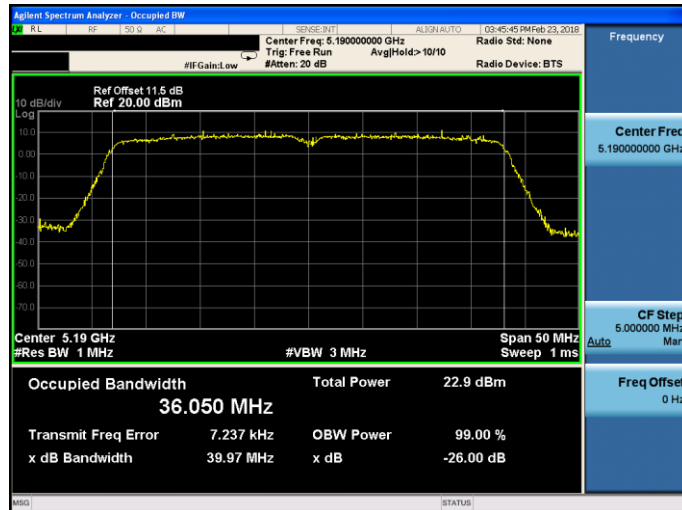
Mode 3: IEEE 802.11ac 20MHz Continuous TX mode_ ANT-1

5180 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.180000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Ref Offset 11.5 dB Ref 20.00 dBm Center 5.18 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.623 MHz Total Power 23.6 dBm Transmit Freq Error -4.955 kHz OBW Power 99.00 % x dB Bandwidth 20.33 MHz x dB -26.00 dB Frequency Center Freq 5.180000000 GHz CF Step 3.000000 MHz Auto Freq Offset 0 Hz
5200 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.200000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Ref Offset 11.5 dB Ref 20.00 dBm Center 5.2 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.617 MHz Total Power 24.4 dBm Transmit Freq Error -16.695 kHz OBW Power 99.00 % x dB Bandwidth 20.48 MHz x dB -26.00 dB Frequency Center Freq 5.200000000 GHz CF Step 3.000000 MHz Auto Freq Offset 0 Hz
5240 MHz	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 5.240000000 GHz Trig: Free Run #Atten: 20 dB Radio Std: None Radio Device: BTS Ref Offset 11.5 dB Ref 20.00 dBm Center 5.24 GHz #Res BW 300 kHz #VBW 1 MHz Span 30 MHz Sweep 1 ms Occupied Bandwidth 17.631 MHz Total Power 23.6 dBm Transmit Freq Error -18.571 kHz OBW Power 99.00 % x dB Bandwidth 20.34 MHz x dB -26.00 dB Frequency Center Freq 5.240000000 GHz CF Step 3.000000 MHz Auto Freq Offset 0 Hz

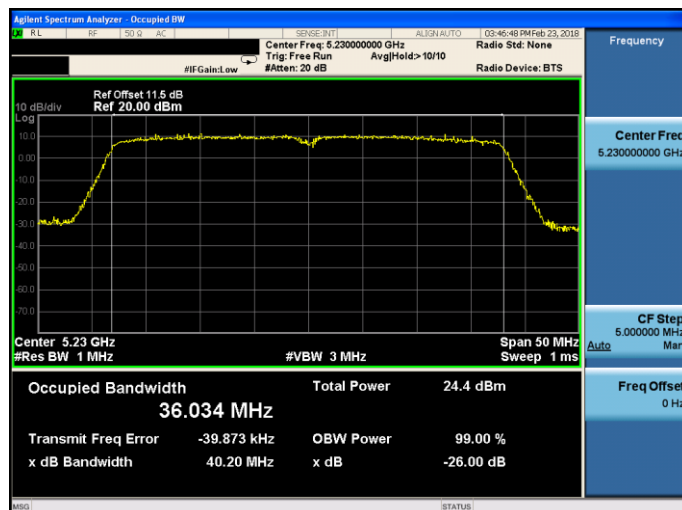


Mode 4: IEEE 802.11ac 40MHz Continuous TX mode _ANT-1

5190 MHz

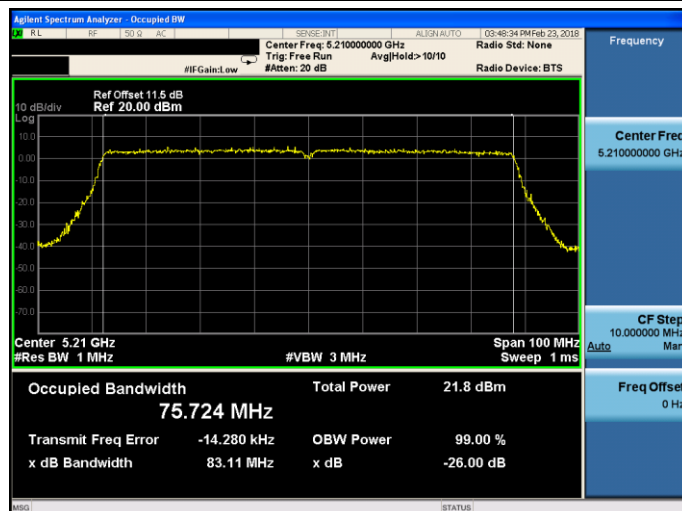


5230 MHz



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

5210 MHz



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	16370.00	16390	> 500
5785	16360.00	16390	> 500
5825	16400.00	16380	> 500

Test Mode	Mode 3: IEEE 802.11ac 20MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5745	17590.00	17620	> 500
5785	17600.00	17590	> 500
5825	17630.00	17610	> 500

Test Mode	Mode 4: IEEE 802.11ac 40MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5755	35150.00	35180	> 500
5795	35120.00	35180	> 500

Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5775	75270.00	75820	> 500

Beamforming on

Test Mode	Mode 2: IEEE 802.11a Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5745	16380.00	16430	> 500
5785	16390.00	16400	> 500
5825	16390.00	16400	> 500

Test Mode	Mode 3: IEEE 802.11ac 20MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5745	17600.00	17640	> 500
5785	17630.00	17620	> 500
5825	17610.00	17630	> 500

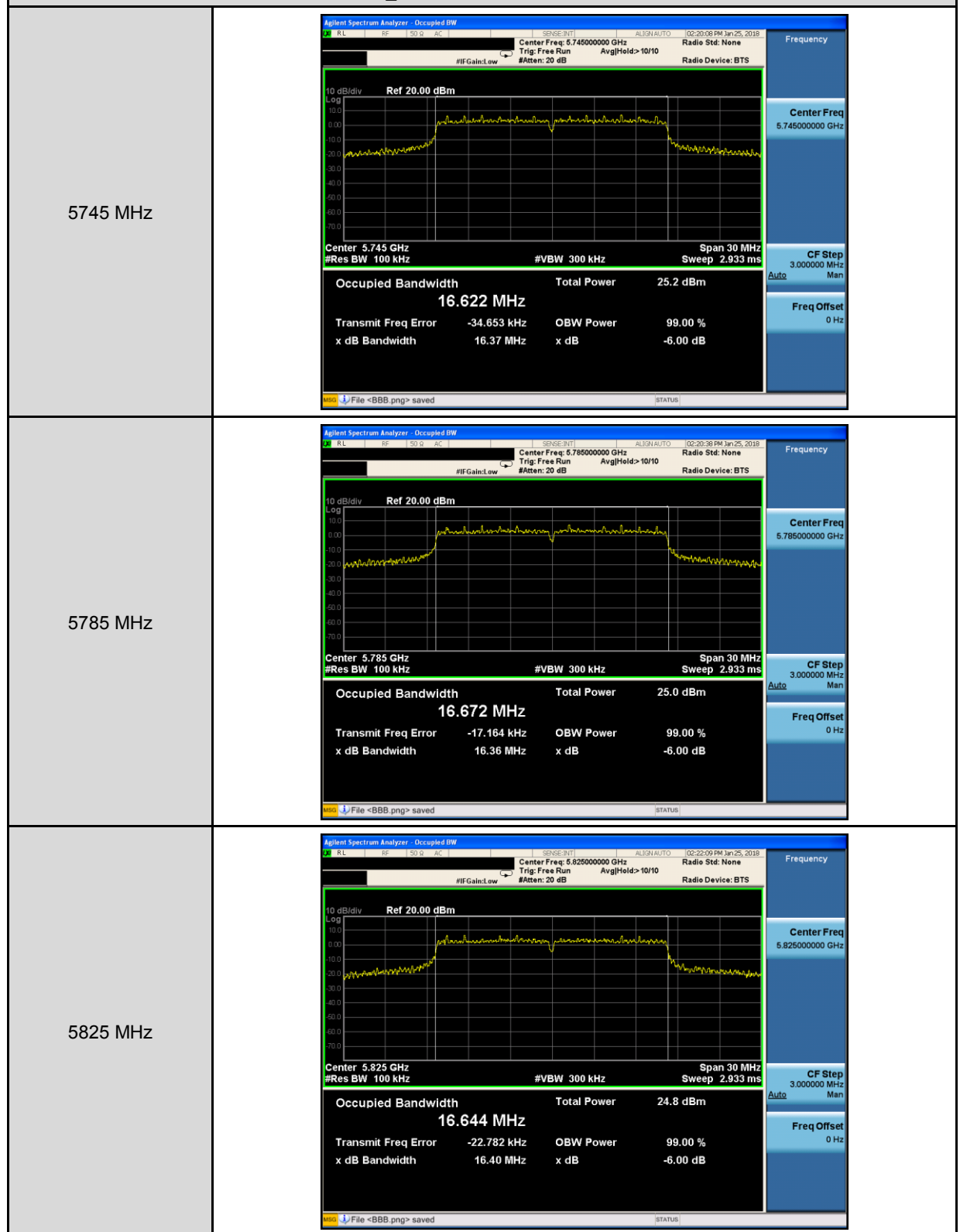
Test Mode	Mode 4: IEEE 802.11ac 40MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5755	35130.00	35890	> 500
5795	35530.00	35320	> 500

Test Mode	Mode 5: IEEE 802.11ac 80MHz Continuous TX mode		
Frequency (MHz)	6dB Bandwidth (kHz)		Limit (kHz)
	ANT-0	ANT-1	
5775	76320.00	76340	> 500



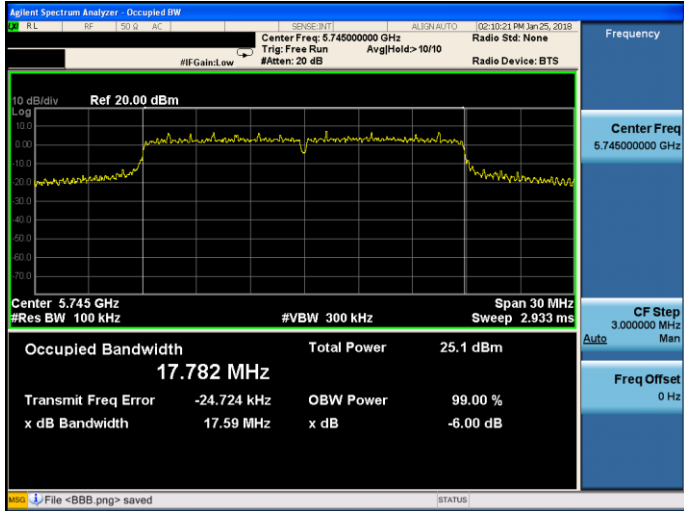
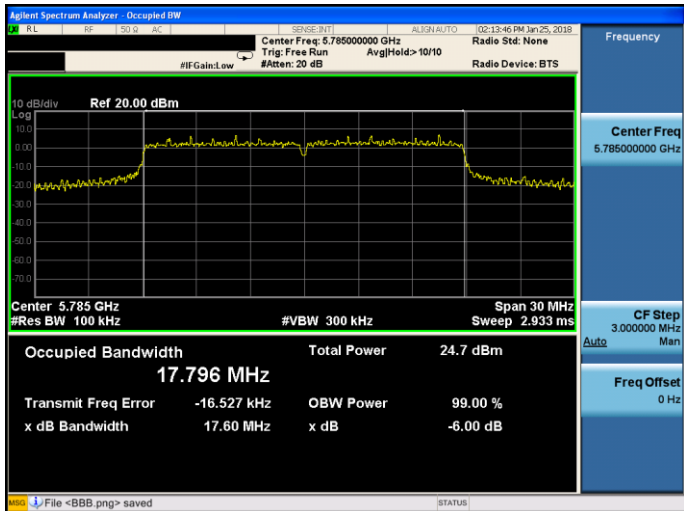
■ Test Graphs

Mode 2: IEEE 802.11a Continuous TX mode_ANT-0





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

5745 MHz	
5785 MHz	
5825 MHz	