

09:09:16 AM Nov 01 Radio Std: None Center Freq 5.180000000 GHz Avg|Hold: 10/10 Frequency Center Freq: 5.180 Trig: Free Run Radio Device: BTS 5.17692 GH: 6.5704 dBn Ref Offset 24.96 dB Ref 20.00 dBm Center Free CF Step 4.000000 MH Span 40 MHz Sweep 1 ms enter 5.18 GHz Res BW 430 kHz #VBW 1.3 MHz **Total Power** 18.5 dBm **Occupied Bandwidth** 16.638 MHz Freq Offse Transmit Freq Error -32.989 kHz % of OBW Pov 99.00 % -26.00 dB x dB Bandwidth 19.96 MHz x dB 11A Ant1 5180 Rt Rt Spactnum Ahappen Rt RC Store DC DC Center Freq 5.1800000000 GHz 09:45:22 AM Nov 01 Radio Std: None 000 GHz Avg[Hold: 10/10 Frequency Center Freq: 5.18 Trig: Free Run Radio Device: BTS 5.18072 GHz 5.9661 dBm Ref Offset 24.82 dB Ref 20.00 dBm Mkr1 ٥ Center Fre Span 40 MHz Sweep 1 ms Center 5.18 GHz #Res BW 430 kHz CF Step 4.000000 MH-#VBW 1.3 MHz Occupied Bandwidth Total Power 18.2 dBm 16.538 MHz Freq Offse Transmit Freq Error -18.961 kHz 0 H % of OBW Power 99.00 % x dB Bandwidth 19.87 MHz x dB -26.00 dB 11A Ant2 5180 Center Freq 5.200000000 GHz Center Freq: 5.2 09:11:18 AM Nov 01 Radio Std: None Frequency 000 GHz Avg|Hold: 10/10 Radio Device: BTS 5.19892 GHz 5.8426 dBm Ref Offset 25.18 dB Ref 20.00 dBm ٠ Center Fred Span 40 MHz Sweep 1 ms enter 5.2 GHz Res BW 430 kHz CF Step 4.000000 MHz Man #VBW 1.3 MHz Total Power 18.5 dBm Occupied Bandwidth 16.616 MHz Freq Offse 33.228 kHz OH Transmit Freq Error % of OBW Power 99.00 % x dB Bandwidth 20.21 MHz x dB -26.00 dB 11A_Ant1_5200

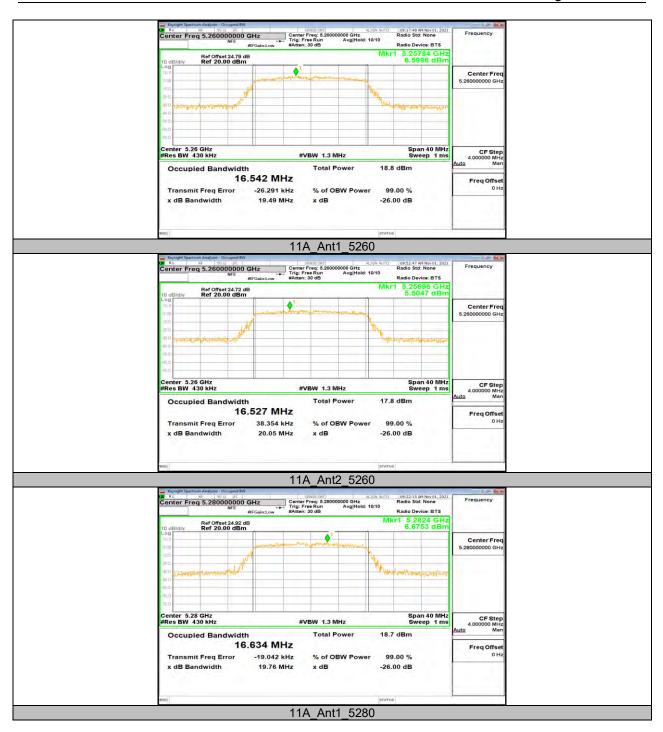
12.2.2. Test Graphs

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.









































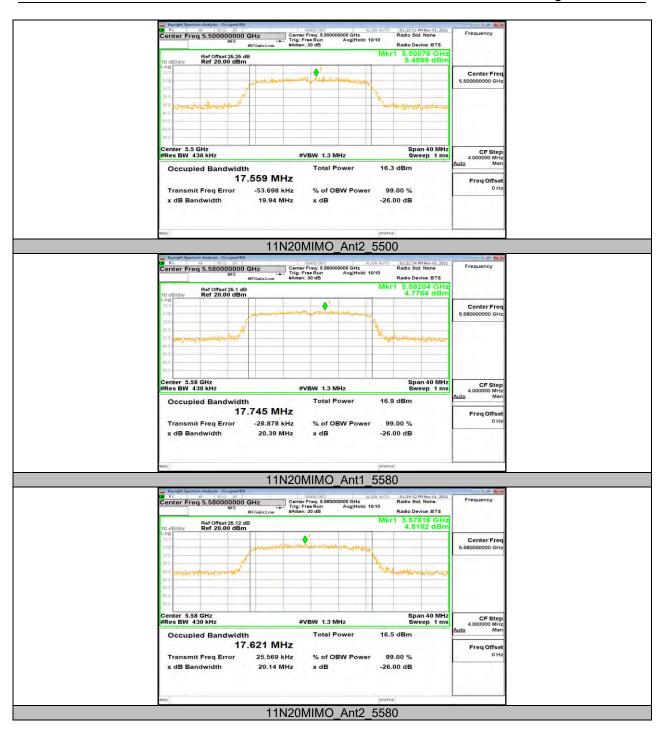
















































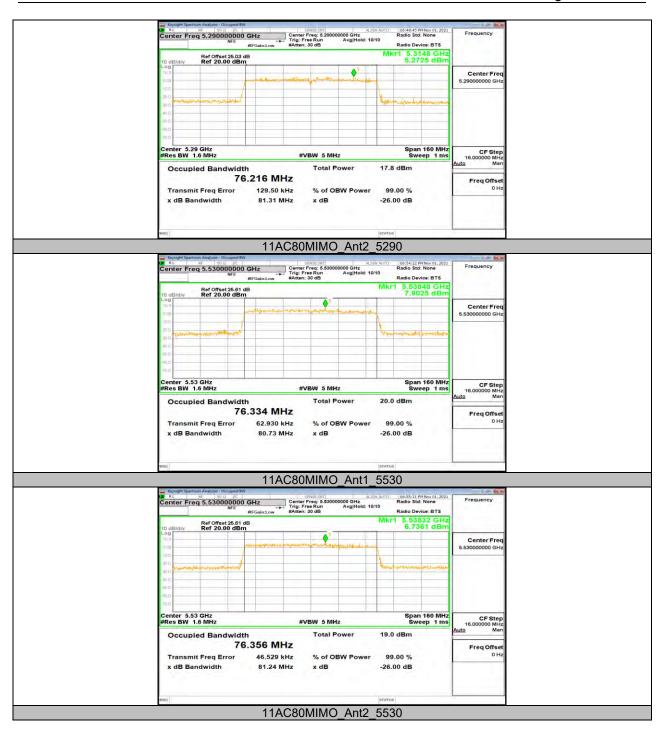




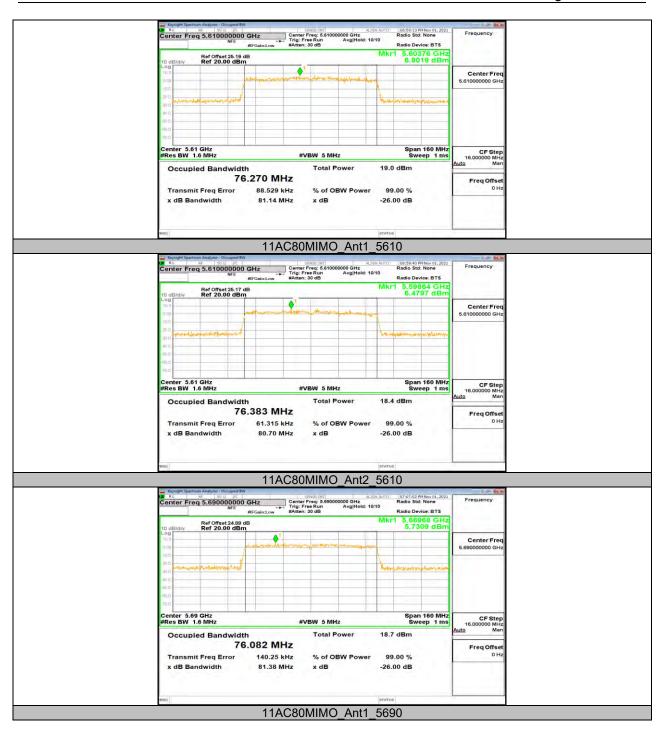


















Test Mode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5720_UNII- 3	3.16	5725	5728.160	0.5	PASS
	Ant2	5720_UNII- 3	3.16	5725	5728.160	0.5	PASS
	Ant1	5745	16.280	5736.840	5753.120	0.5	PASS
	Ant2	5745	16.320	5736.840	5753.160	0.5	PASS
	Ant1	5785	15.800	5777.080	5792.880	0.5	PASS
	Ant2	5785	15.800	5776.840	5792.640	0.5	PASS
	Ant1	5825	16.320	5816.840	5833.160	0.5	PASS
	Ant2	5825	16.320	5816.840	5833.160	0.5	PASS
11N20MIMO	Ant1	5720_UNII- 3	3.8	5725	5728.800	0.5	PASS
	Ant2	5720_UNII- 3	3.8	5725	5728.800	0.5	PASS
	Ant1	5745	16.640	5736.240	5752.880	0.5	PASS
	Ant2	5745	17.160	5736.600	5753.760	0.5	PASS
	Ant1	5785	17.160	5776.240	5793.400	0.5	PASS
	Ant2	5785	17.280	5776.240	5793.520	0.5	PASS
	Ant1	5825	17.560	5816.240	5833.800	0.5	PASS
	Ant2	5825	11.960	5818.120	5830.080	0.5	PASS
11N40MIMO	Ant1	5710_UNII- 3	2.52	5725	5727.520	0.5	PASS
	Ant2	5710_UNII- 3	2.52	5725	5727.520	0.5	PASS
	Ant1	5755	36.240	5736.920	5773.160	0.5	PASS
	Ant2	5755	35.680	5737.240	5772.920	0.5	PASS
	Ant1	5795	36.000	5776.840	5812.840	0.5	PASS
	Ant2	5795	36.320	5776.840	5813.160	0.5	PASS
11AC80MIMO	Ant1	5690_UNII- 3	2.6	5725	5727.600	0.5	PASS
	Ant2	5690_UNII- 3	3.08	5725	5728.080	0.5	PASS
	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS
	Ant2	5775	75.360	5737.240	5812.600	0.5	PASS

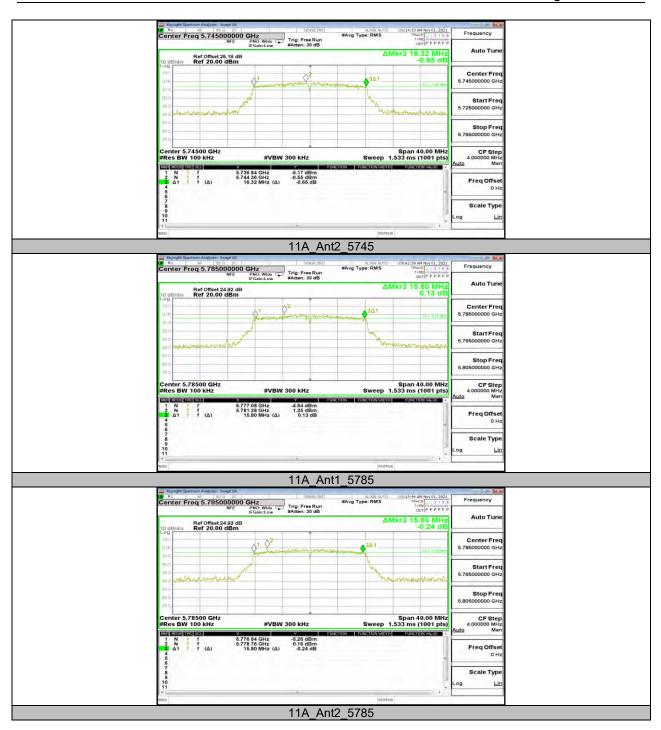
12.3. Appendix A3: Min Emission Bandwidth 12.3.1. Test Result





12.3.2. Test Graphs

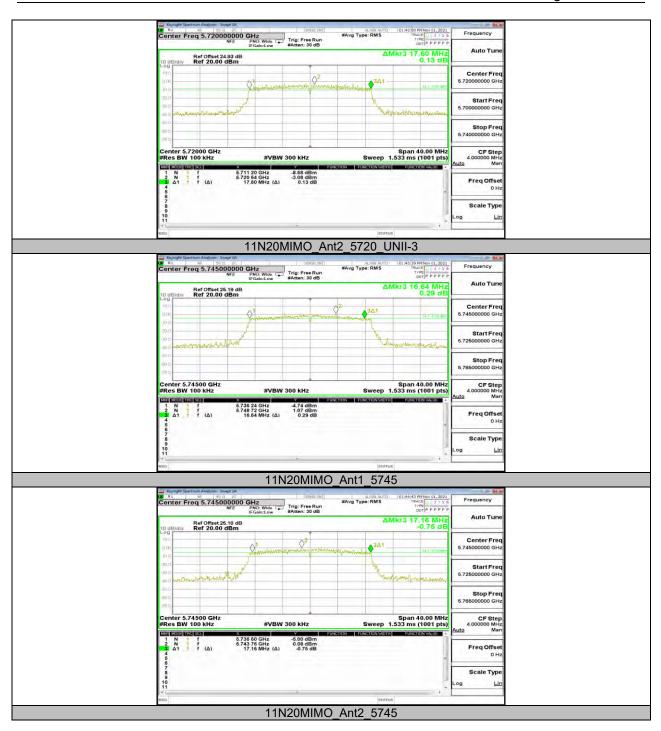




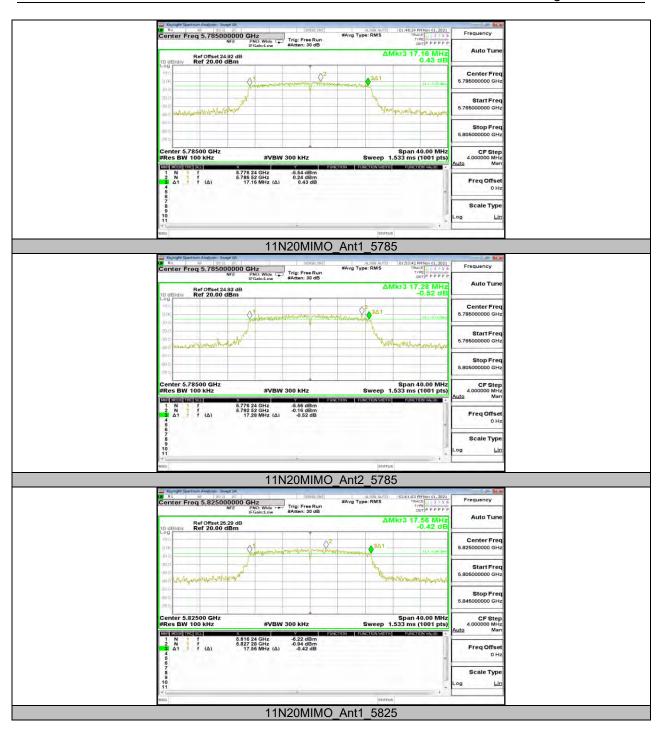
















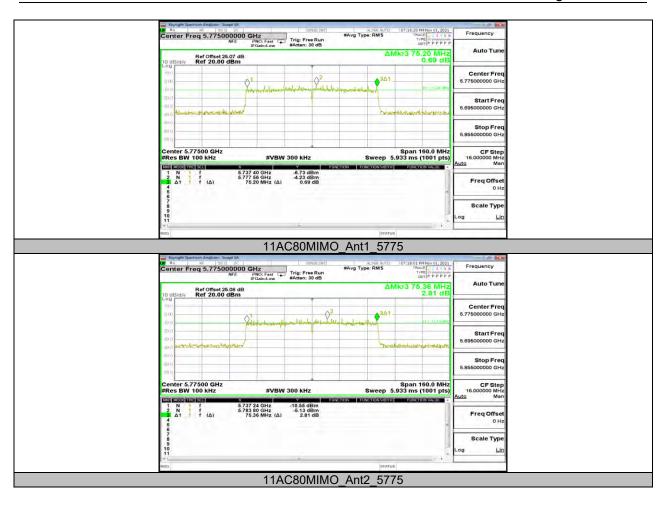














12.4. Appendix B: Maximum Average Conducted Output Power 12.4.1. Test Result

Mode		Average Power (dBm)			Directional	FCC				
	Frequency (MHz)	ANT1 (dBm)	ANT2 (dBm)	Total	gain (dBi)	Limit (dBm)	ANT1 (dBm)	ANT2 (dBm)	Total	ISED EIRP Limit (dBm)
	5180	14.25	13.77	/	0.00	24.00	16.98	16.5	/	22.21
	5200	14.22	13.54	/	0.00	24.00	16.95	16.27	/	22.21
	5240	14.23	13.66	/	0.00	24.00	16.96	16.39	/	22.21
	5260	14.55	13.27	/	0.00	24.00	17.28	16.00	/	23.21
	5280	14.15	13.03	/	0.00	24.00	16.88	15.76	/	23.21
	5320	14.16	13.28	/	0.00	24.00	16.89	16.01	/	23.21
802.11a	5500	15.16	14.37	/	0.00	24.00	17.89	17.10	/	23.21
002.11a	5580	15.29	14.16	/	0.00	24.00	18.02	16.89	/	23.21
	5700	14.32	13.72	/	0.00	24.00	17.08	16.45	/	23.21
	5720-2C	12.97	12.40	/	0.00	24.00	15.70	15.13	/	23.21
	5720-3	5.03	4.84	/	0.00	30.00	7.76	7.57	/	29.00
	5745	14.20	13.40	1	0.00	30.00	16.93	16.13	/	30.00
	5785	14.01	13.36	/	0.00	30.00	16.74	16.09	/	30.00
	5825	13.54	13.10	/	0.00	30.00	16.27	15.83	/	30.00
	5180	11.48	10.37	13.97	2.73	24.00	/	/	16.70	22.50
	5200	11.23	10.15	13.73	2.73	24.00	/	/	16.46	22.50
	5240	11.31	10.06	13.74	2.73	24.00	/	/	16.47	22.50
	5260	14.84	14.01	17.46	2.73	24.00	/	/	20.19	23.50
	5280	14.78	13.92	17.38	2.73	24.00	/	/	20.11	23.50
	5320	14.83	14.01	17.45	2.73	24.00	/	/	20.18	23.50
802.11n 20M	5500	12.02	11.25	14.66	2.73	24.00	/	/	17.39	23.50
002.111120101	5580	12.38	11.36	14.91	2.73	24.00	/	/	17.64	23.50
	5700	11.09	10.73	13.92	2.73	24.00	/	/	16.65	23.50
	5720-2C	10.05	9.63	12.86	2.73	25.00	/	/	15.59	23.50
	5720-3	2.93	2.43	5.70	2.73	29.00	/	/	8.43	29.00
	5745	14.23	14.10	17.18	2.73	30.00	/	/	19.91	30.00
	5785	14.10	13.60	16.87	2.73	30.00	/	/	19.60	30.00
	5825	13.95	13.58	16.78	2.73	30.00	/	/	19.51	30.00
802.11n 40M	5190	14.59	13.26	16.99	2.73	24.00	/	/	19.72	23.00
	5230	14.27	12.90	16.65	2.73	24.00	/	/	19.38	23.00
	5270	15.17	14.00	17.63	2.73	24.00	/	/	20.36	24.00
	5310	15.25	13.98	17.67	2.73	24.00	/	/	20.40	24.00
	5510	12.23	11.17	14.74	2.73	24.00	/	/	17.47	24.00



	5550	12.20	11.10	14.70	2.73	24.00	/	/	17.43	24.00
	5670	11.29	9.72	13.59	2.73	24.00	/	/	16.32	24.00
	5710-2C	10.95	10.27	13.63	2.73	25.00	/	/	16.36	24.00
	5710-3	-1.26	-1.93	1.43	2.73	29.00	/	/	4.16	29.00
	5755	14.85	14.01	17.46	2.73	30.00	/	/	20.19	30.00
	5795	14.43	13.88	17.17	2.73	30.00	/	/	19.90	30.00
	5210	12.93	11.16	15.14	2.73	24.00	/	/	17.87	23.00
	5290	12.40	10.85	14.70	2.73	24.00	/	/	17.43	24.00
	5530	9.40	8.61	12.03	2.73	24.00	/	/	14.76	24.00
802.11ac 80M	5610	8.73	7.49	11.16	2.73	24.00	/	/	13.89	24.00
	5690-2C	7.56	6.07	9.89	2.73	25.00	/	/	12.62	24.00
	5690-3	-7.12	-8.71	-4.83	2.73	29.00	/	/	-2.10	24.00
	5775	11.83	11.29	14.58	2.73	30.00	1	/	17.31	30.00

Note: 1. Conducted Power=Meas. Level+ Correction Factor

2. The Duty Cycle Factor (refer to section 7.1) had already compensated to the test data.



12.5. Appendix C: Maximum Power Spectral Density 12.5.1. Test Result

Mode	Frequency (MHz)	PSD 5150-5725MHz (dBm/MHz) 5725-5850MHz (dBm/500kHz)			Directional gain (dBi)	FCC Limit 5150- 5725MHz (dBm/MHz) 5725-	EIRP			ISED EIRP Limit 5150- 5725MHz (dBm/MHz) 5725-
		ANT1	ANT2	Total		5850MHz (dBm/500kHz)	ANT1	ANT2	Total	5850MHz (dBm/500kHz)
	5180	4.25	3.69	/	0.00	11.00	6.98	6.42	/	10.00
	5200	4.04	3.28	/	0.00	11.00	6.77	6.01	/	10.00
	5240	4.10	3.55	/	0.00	11.00	6.83	6.28	/	10.00
	5260	4.77	3.08	/	0.00	11.00	7.50	5.81	/	11.00
	5280	3.96	3.08	/	0.00	11.00	6.69	5.81	/	11.00
	5320	4.05	3.02	/	0.00	11.00	6.78	5.75	/	11.00
802.11a 20	5500	5.19	4.25	/	0.00	11.00	7.92	6.98	/	11.00
002.118 20	5580	5.36	4.00	/	0.00	11.00	8.09	6.73	/	11.00
	5700	4.20	3.42	/	0.00	11.00	6.93	6.15	/	11.00
	5720-2C	3.82	3.33	/	0.00	11.00	6.55	6.06	/	12.00
	5720-3	-1.27	-1.48	/	0.00	30.00	1.46	1.25	/	29.00
	5745	1.04	0.45	/	0.00	30.00	3.77	3.18	/	30.00
	5785	0.84	0.23	/	0.00	30.00	3.57	2.96	/	30.00
	5825	0.56	0.25	/	0.00	30.00	3.29	2.98	/	30.00
	5180	1.14	0.52	3.85	5.74	11.00	/	/	9.59	10.00
	5200	1.21	-0.03	3.64	5.74	11.00	/	/	9.38	10.00
	5240	0.86	-0.14	3.40	5.74	11.00	/	/	9.14	10.00
	5260	4.69	4.11	7.42	5.74	11.00	/	/	13.16	11.00
	5280	4.55	3.86	7.23	5.74	11.00	/	/	12.97	11.00
	5320	4.77	3.67	7.27	5.74	11.00	/	/	13.01	11.00
802.11n HT20	5500	1.73	1.52	4.64	5.74	11.00	/	/	10.38	11.00
002.11111120	5580	2.19	1.28	4.77	5.74	11.00	/	/	10.51	11.00
	5700	0.86	0.31	3.60	5.74	11.00	/	/	9.34	11.00
	5720-2C	0.76	0.26	3.53	5.74	12.00	/	/	9.27	12.00
	5720-3	-4.04	-4.37	-1.19	5.74	29.00	/	/	4.55	29.00
	5745	0.79	0.74	3.78	5.74	30.00	/	/	9.52	30.00
	5785	1.24	0.65	3.97	5.74	30.00	/	/	9.71	30.00
	5825	0.75	0.44	3.61	5.74	30.00	/	/	9.35	30.00
802.11n HT40	5190	0.80	-0.17	3.35	5.74	11.00	/	/	9.09	10.00
	5230	0.53	-0.80	2.93	5.74	11.00	/	/	8.67	10.00
	5270	1.35	0.44	3.93	5.74	11.00	/	/	9.67	11.00
	5310	1.73	0.12	4.01	5.74	11.00	/	/	9.75	11.00
	5510	-1.63	-2.53	0.95	5.74	11.00	/	/	6.69	11.00
	5550	-1.63	-2.61	0.92	5.74	11.00	/	/	6.66	11.00

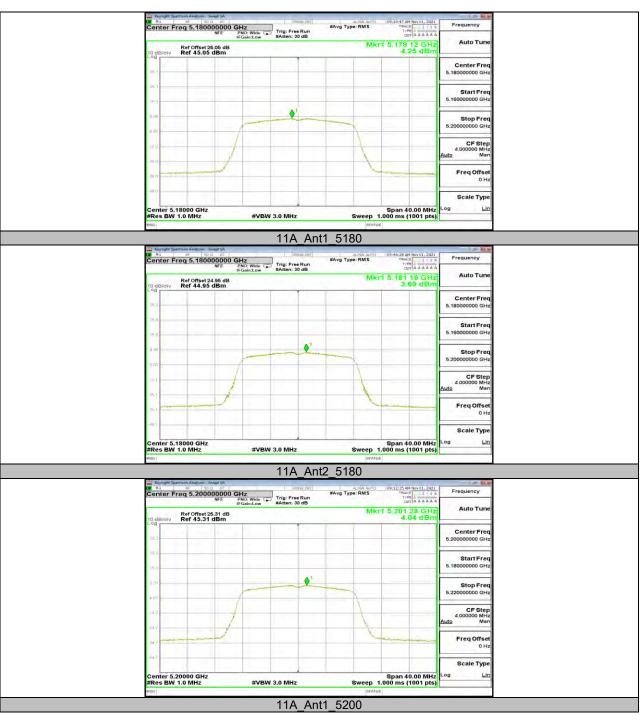


	5670	-2.57	-3.81	-0.14	5.74	11.00	1	1	5.6	11.00
	5070	-2.57	-3.01	-0.14	5.74	11.00	/	/	5.0	11.00
	5710-2C	-2.46	-3.21	0.19	5.74	12.00	/	/	5.93	12.00
	5710-3	-7.89	-8.79	-5.31	5.74	29.00	/	/	0.43	29.00
	5755	-1.96	-2.70	0.70	5.74	30.00	/	/	6.44	30.00
	5795	-1.83	-2.79	0.73	5.74	30.00	/	/	6.47	30.00
802.11ac VHT80	5210	-4.18	-5.39	-1.73	5.74	11.00	/	/	4.01	10.00
	5290	-3.88	-5.97	-1.79	5.74	11.00	/	/	3.95	11.00
	5530	-8.03	-3.06	-1.86	5.74	11.00	/	/	3.88	11.00
	5610	-8.14	-9.41	-5.72	5.74	11.00	/	/	0.02	11.00
	5690-2C	-3.95	-10.36	-3.06	5.74	12.00	/	/	2.68	12.00
	5690-3	-9.62	-15.17	-8.55	5.74	29.00	/	/	-2.81	29.00
	5775	-7.31	-7.49	-4.39	5.74	30.00	/	/	1.35	30.00

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

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





12.5.2. Test Graphs



