





Scale Type



## 13.4. Appendix B: Maximum conducted output power 13.4.1. Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
	Ant1	5180	16.09	<=23.98	PASS
	Ant2	5180	15.16	<=23.98	PASS
	Ant1	5200	16.05	<=23.98	PASS
	Ant2	5200	15.11	<=23.98	PASS
	Ant1	5240	15.98	<=23.98	PASS
	Ant2	5240	15.10	<=23.98	PASS
	Ant1	5260	15.60	<=23.98	PASS
	Ant2	5260	15.28	<=23.95	PASS
	Ant1	5280	15.36	<=23.90	PASS
	Ant2	5280	15.14	<=23.91	PASS
	Ant1	5320	15.26	<=23.91	PASS
	Ant2	5320	15.14	<=23.94	PASS
	Ant1	5500	15.68	<=23.90	PASS
11A	Ant2	5500	15.47	<=23.97	PASS
ПА	Ant1	5580	16.14	<=23.98	PASS
	Ant2	5580	15.36	<=23.98	PASS
	Ant1	5700	15.59	<=23.98	PASS
	Ant2	5700	15.22	<=23.97	PASS
	Ant1	5720_UNII-2C	14.48	<=22.63	PASS
	Ant2	5720_UNII-2C	14.13	<=22.70	PASS
	Ant1	5720_UNII-3	7.01	<=30	PASS
	Ant2	5720_UNII-3	6.46	<=30	PASS
	Ant1	5745	14.59	<=30	PASS
	Ant2	5745	14.82	<=30	PASS
	Ant1	5785	14.64	<=30	PASS
	Ant2	5785	14.93	<=30	PASS
	Ant1	5825	14.70	<=30	PASS
	Ant2	5825	14.82	<=30	PASS
	Ant1	5180	15.30	<=23.98	PASS
	Ant2	5180	16.10	<=23.98	PASS
	total	5180	18.73	<=23.98	PASS
	Ant1	5200	15.26	<=23.98	PASS
	Ant2	5200	16.16	<=23.98	PASS
	total	5200	18.74	<=23.98	PASS
	Ant1	5240	15.26	<=23.98	PASS
	Ant2	5240	16.14	<=23.98	PASS
	total	5240	18.73	<=23.98	PASS
	Ant1	5260	15.18	<=23.98	PASS
	Ant2	5260	16.08	<=23.98	PASS
11N20MIMO	total	5260	18.66	<=23.98	PASS
	Ant1	5280	14.96	<=23.98	PASS
	Ant2	5280	15.95	<=23.98	PASS
	total	5280	18.49	<=23.98	PASS
	Ant1	5320	15.04	<=23.98	PASS
	Ant2	5320	16.08	<=23.94	PASS
	total	5320	18.60	<=23.94	PASS
	Ant1	5500	16.08	<=23.98	PASS
	Ant2	5500	16.99	<=23.98	PASS
	total	5500	19.57	<=23.98	PASS
	Ant1	5580	15.59	<=23.98	PASS
	Ant2	5580	16.47	<=23.98	PASS
	total	5580	19.06	<=23.98	PASS



	Ant1	5700	14.45	<=23.96	PASS
	Ant2	5700	16.20	<=23.98	PASS
	total	5700	18.42	<=23.98	PASS
	Ant1	5720 UNII-2C	13.45	<=22.70	PASS
	Ant2	5720 UNII-2C	14.69	<=22.62	PASS
	total	5720 UNII-2C	17.12	<=22.62	PASS
-	Ant1	5720 UNII-3	7.02	<=30	PASS
-	Ant2	5720 UNII-3	8.26	<=30	PASS
-	total	5720 UNII-3	10.69	<=30	PASS
-	Ant1	5745	14.23	<=30	PASS
-	Ant2	5745	15.75	<=30	PASS
-	total	5745	18.07	<=30	PASS
-	Ant1	5785	14.37	<=30	PASS
-	Ant2	5785	15.75	<=30	PASS
-					
-	total	5785	18.12	<=30	PASS
-	Ant1	5825	14.36	<=30	PASS
-	Ant2	5825	15.32	<=30	PASS
	total	5825	17.88	<=30	PASS
_	Ant1	5190	15.11	<=23.98	PASS
_	Ant2	5190	16.76	<=23.98	PASS
	total	5190	19.02	<=23.98	PASS
_	Ant1	5230	15.59	<=23.98	PASS
	Ant2	5230	16.91	<=23.98	PASS
	total	5230	19.31	<=23.98	PASS
	Ant1	5270	15.03	<=23.98	PASS
	Ant2	5270	16.39	<=23.98	PASS
	total	5270	18.77	<=23.98	PASS
	Ant1	5310	14.96	<=23.98	PASS
	Ant2	5310	16.22	<=23.98	PASS
	total	5310	18.65	<=23.98	PASS
	Ant1	5510	15.55	<=23.98	PASS
	Ant2	5510	15.71	<=23.98	PASS
	total	5510	18.64	<=23.98	PASS
_	Ant1	5550	15.60	<=23.98	PASS
11N40MIMO	Ant2	5550	16.31	<=23.98	PASS
	total	5550	18.98	<=23.98	PASS
-	Ant1	5670	15.38	<=23.98	PASS
-	Ant2	5670	16.34	<=23.98	PASS
-	total	5670	18.90	<=23.98	PASS
-	Ant1	5710 UNII-2C	15.38	<=23.98	PASS
-	Ant2	5710_UNII-2C	16.39	<=23.98	PASS
-	total	5710_UNII-2C	18.92	<=23.98	PASS
-	Ant1	5710_0NII-2C	2.93	<=30	PASS
-	Ant2	5710_UNII-3	3.97	<=30	PASS
-					
<u> </u>	total	5710_UNII-3	6.49	<=30	PASS
_	Ant1	5755	14.92	<=30	PASS
<u> </u>	Ant2	5755	15.83	<=30	PASS
_	total	5755	18.41	<=30	PASS
<u> </u>	Ant1	5795	14.88	<=30	PASS
<u> </u>	Ant2	5795	15.87	<=30	PASS
	total	5795	18.41	<=30	PASS
	Ant1	5180	16.59	<=23.98	PASS
	Ant2	5180	17.15	<=23.98	PASS
	total	5180	19.89	<=23.98	PASS
	Ant1	5200	16.55	<=23.98	PASS
11AC20MIMO	Ant2	5200	17.16	<=23.98	PASS
TACZOWIIWO	total	5200	19.88	<=23.98	PASS
-	Ant1	5240	16.43	<=23.98	PASS
		5240 5240	16.43 16.95	<=23.98 <=23.98	PASS



	Ant1	5260	15.84	<=23.98	PASS
	Ant2	5260	16.33	<=23.98	PASS
	total	5260	19.10	<=23.98	PASS
	Ant1	5280	15.60	<=23.91	PASS
	Ant2	5280	16.12	<=23.98	PASS
	total	5280	18.88	<=23.98	PASS
	Ant1	5320	15.72	<=23.97	PASS
	Ant2	5320	16.26	<=23.96	PASS
	total	5320	19.01	<=23.96	PASS
	Ant1	5500	16.04	<=23.98	PASS
	Ant2	5500	16.54	<=23.88	PASS
	total	5500	19.31	<=23.88	PASS
	Ant1	5580	16.33	<=23.98	PASS
	Ant2	5580	17.14	<=23.95	PASS
	total	5580	19.76	<=23.95	PASS
	Ant1	5700	15.74	<=23.98	PASS
	Ant2	5700	16.69	<=23.98	PASS
	total	5700	19.25	<=23.98	PASS
	Ant1	5720 UNII-2C	14.53	<=22.64	PASS
	Ant2	5720_UNII-2C	15.45	<=22.61	PASS
	total	5720_UNII-2C	18.02	<=22.61	PASS
	Ant1	5720_UNII-3	8.01	<=30	PASS
	Ant2	5720_UNII-3	9.09	<=30	PASS
	total	5720_UNII-3	11.59	<=30	PASS
	Ant1	5745	14.71	<=30	PASS
	Ant2	5745	15.67	<=30	PASS
	total	5745	18.23	<=30	PASS
	Ant1	5785	14.72	<=30	PASS
	Ant2	5785	15.73	<=30	PASS
	total	5785	18.26	<=30	PASS
	Ant1	5825	14.71	<=30	PASS
	Ant2	5825	15.70	<=30	PASS
	total	5825	18.24	<=30	PASS
	Ant1	5190	16.69	<=23.98	PASS
	Ant2	5190	17.33	<=23.98	PASS
	total	5190	20.03	<=23.98	PASS
		5230		<=23.98	PASS
	Ant1		16.72		
	Ant2	5230	17.31	<=23.98	PASS
	total	5230	20.04	<=23.98	PASS
	Ant1	5270	16.06	<=23.98	PASS
	Ant2	5270	16.58	<=23.98	PASS
	total	5270	19.34	<=23.98	PASS
	Ant1	5310	15.75	<=23.98	PASS
	Ant2	5310	16.34	<=23.98	PASS
	total	5310	19.07	<=23.98	PASS
	Ant1	5510	16.13	<=23.98	PASS
11AC40MIMO	Ant2	5510	16.81	<=23.98	PASS
	total	5510	19.49	<=23.98	PASS
	Ant1	5550	16.56	<=23.98	PASS
	Ant2	5550	17.33	<=23.98	PASS
	total	5550	19.97	<=23.98	PASS
	Ant1	5670	16.03	<=23.98	PASS
	Ant2	5670	16.95	<=23.98	PASS
	total	5670	19.52	<=23.98	PASS
	Ant1	5710_UNII-2C	15.83	<=23.98	PASS
	Ant2	5710_UNII-2C	16.75	<=23.98	PASS
			19.32	<=23.98	PASS
	total	5710_UNII-2C			
	total Ant1	5710_UNII-3	3.65	<=30	PASS



	Ant1	5755	14.09	<=30	PASS
	Ant2	5755	14.39	<=30	PASS
	total	5755	17.25	<=30	PASS
	Ant1	5795	14.06	<=30	PASS
	Ant2	5795	14.29	<=30	PASS
	total	5795	17.19	<=30	PASS
	Ant1	5210	12.71	<=23.98	PASS
	Ant2	5210	12.05	<=23.98	PASS
	total	5210	15.40	<=23.98	PASS
	Ant1	5290	12.44	<=23.98	PASS
	Ant2	5290	11.73	<=23.98	PASS
	total	5290	15.11	<=23.98	PASS
	Ant1	5530	13.39	<=23.98	PASS
	Ant2	5530	13.07	<=23.98	PASS
	total	5530	16.24	<=23.98	PASS
	Ant1	5610	12.89	<=23.98	PASS
11AC80MIMO	Ant2	5610	12.96	<=23.98	PASS
	total	5610	15.94	<=23.98	PASS
	Ant1	5690 UNII-2C	12.48	<=23.98	PASS
	Ant2	5690 UNII-2C	12.52	<=23.98	PASS
	total	5690 UNII-2C	15.51	<=23.98	PASS
	Ant1	5690 UNII-3	-2.63	<=30	PASS
	Ant2	5690 UNII-3	-2.79	<=30	PASS
	total	5690 UNII-3	0.30	<=30	PASS
	Ant1	5775	11.92	<=30	PASS
	Ant2	5775	11.87	<=30	PASS
	total	5775	14.91	<=30	PASS

Note: The Duty Cycle Factor is compensated in the graph.



## 13.5. Appendix C: Maximum power spectral density 13.5.1. Test Result

Test Mode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
	Ant1	5180	5.95	<=11	PASS
	Ant2	5180	4.9	<=11	PASS
	Ant1	5200	5.75	<=11	PASS
	Ant2	5200	5.09	<=11	PASS
	Ant1	5240	6	<=11	PASS
	Ant2	5240	5.2	<=11	PASS
	Ant1	5260	5.61	<=11	PASS
	Ant2	5260	5.25	<=11	PASS
	Ant1	5280	5.44	<=11	PASS
	Ant2	5280	5.03	<=11	PASS
	Ant1	5320	5.3	<=11	PASS
	Ant2	5320	4.99	<=11	PASS
	Ant1	5500	5.7	<=11	PASS
11A	Ant2	5500	5.19	<=11	PASS
HA	Ant1	5580	6.1	<=11	PASS
	Ant2	5580	5.39	<=11	PASS
	Ant1	5700	5.32	<=11	PASS
	Ant2	5700	4.99	<=11	PASS
	Ant1	5720_UNII-2C	5.48	<=11	PASS
	Ant2	5720_UNII-2C	4.93	<=11	PASS
	Ant1	5720_UNII-3	0.03	<=11	PASS
	Ant2	5720_UNII-3	0.16	<=11	PASS
	Ant1	5745	1.74	<=30	PASS
	Ant2	5745	2.21	<=30	PASS
	Ant1	5785	1.76	<=30	PASS
	Ant2	5785	2.41	<=30	PASS
	Ant1	5825	1.9	<=30	PASS
	Ant2	5825	2.08	<=30	PASS
	Ant1	5180	4.95	<=11	PASS
	Ant2	5180	5.86	<=11	PASS
	total	5180	8.44	<=11	PASS
	Ant1	5200	5.03	<=11	PASS
	Ant2	5200	5.97	<=11	PASS
	total	5200	8.54	<=11	PASS
	Ant1	5240	4.88	<=11	PASS
	Ant2	5240	6	<=11	PASS
	total	5240	8.49	<=11	PASS
	Ant1	5260	4.8	<=11	PASS
	Ant2	5260	5.72	<=11	PASS
	total	5260	8.29	<=11	PASS
11N20MIMO	Ant1	5280	4.63	<=11	PASS
	Ant2	5280	5.57	<=11	PASS
	total	5280	8.14	<=11	PASS
	Ant1	5320	4.62	<=11	PASS
	Ant2	5320	5.58	<=11	PASS
	total	5320	8.14	<=11	PASS
	Ant1	5500	5.72	<=11	PASS
	Ant2	5500	6.76	<=11	PASS
	total	5500	9.28	<=11	PASS
	Ant1	5580	4.48	<=11	PASS
	Ant2	5580	6.17	<=11	PASS
	total	5580	8.42	<=11	PASS
	Ant1	5700	4.11	<=11	PASS



5.79 <=11 PASS Ant2 5700 total 5700 8.04 <=11 **PASS** Ant1 5720 UNII-2C 4.37 <=11 **PASS** 5.41 Ant2 5720 UNII-2C <=11 **PASS** total 5720\_UNII-2C 7.93 <=11 **PASS** Ant1 5720\_UNII-3 -0.21 <=11 **PASS** Ant2 5720 UNII-3 <=11 PASS 1.3 5720\_UNII-3 3.62 <=11 **PASS** total 5745 1.51 <=30 **PASS** Ant1 5745 2.5 Ant2 <=30 **PASS** total 5745 5.04 <=30 **PASS** 5785 1.42 <=30 **PASS** Ant1 Ant2 5785 2.7 <=30 **PASS** total 5785 5.12 <=30 **PASS** 5825 0.99 <=30 **PASS** Ant1 5825 2.44 <=30 PASS Ant2 5825 4.79 <=30 **PASS** total 2.08 <=11 **PASS** Ant1 5190 Ant2 5190 3.62 <=11 **PASS** total 5190 5.93 <=11 **PASS** Ant1 5230 2.62 <=11 **PASS** Ant2 5230 3.64 <=11 **PASS** total 5230 6.17 <=11 **PASS** Ant1 5270 1.72 <=11 **PASS** Ant2 5270 3.5 <=11 **PASS** 5270 5.71 <=11 **PASS** total <=11 Ant1 5310 1.8 **PASS** Ant2 5310 3.08 <=11 **PASS** total 5310 5.50 <=11 **PASS** 5510 2.47 <=11 **PASS** Ant1 2.4 **PASS** Ant2 5510 <=11 5510 5.45 <=11 **PASS** total Ant1 5550 2.26 <=11 **PASS** 11N40MIMO <=11 **PASS** Ant2 5550 3.1 5550 5.71 <=11 **PASS** total 2.21 5670 <=11 **PASS** Ant1 2.86 5670 <=11 **PASS** Ant2 5.56 <=11 **PASS** total 5670 Ant1 5710 UNII-2C 2.63 <=11 **PASS** Ant2 5710\_UNII-2C 3.39 <=11 **PASS** total 5710\_UNII-2C 6.04 <=11 **PASS** Ant1 5710\_UNII-3 -3.61 <=11 **PASS** Ant2 5710 UNII-3 <=11 PASS -2.625710 UNII-3 -0.08 <=11 **PASS** total 5755 -0.97<=30 **PASS** Ant1 5755 Ant2 -0.13<=30 **PASS** 5755 2.48 <=30 **PASS** total 5795 -1.27<=30 **PASS** Ant1 5795 **PASS** Ant2 -0.35<=30 total 5795 2.22 <=30 **PASS** Ant1 5180 6.42 <=11 **PASS** Ant2 5180 6.87 <=11 PASS 5180 <=11 PASS total 9.66 5200 **PASS** Ant1 6.13 <=11 <=11 Ant2 5200 6.72 **PASS** 11AC20MIMO total 5200 9.45 <=11 **PASS** Ant1 5240 6.25 <=11 **PASS** 5240 **PASS** Ant2 6.82 <=11 total 5240 9.55 <=11 **PASS** Ant1 5260 5.64 <=11 **PASS** 



5260 5.98 <=11 PASS Ant2 total 5260 8.82 <=11 **PASS** Ant1 5280 5.61 <=11 **PASS** 5.99 Ant2 5280 <=11 **PASS** total 5280 8.81 <=11 **PASS** Ant1 5320 5.48 <=11 **PASS** Ant2 6.08 <=11 PASS 5320 8.80 5320 <=11 **PASS** total 5500 5.65 <=11 **PASS** Ant1 5500 6.27 Ant2 <=11 **PASS** total 5500 8.98 <=11 **PASS** 5580 6.23 <=11 **PASS** Ant1 Ant2 5580 7.19 <=11 **PASS** 9.75 total 5580 <=11 **PASS** 5700 5.29 <=11 **PASS** Ant1 6.31 <=11 PASS Ant2 5700 8.84 <=11 **PASS** 5700 total 5720\_UNII-2C <=11 **PASS** Ant1 5.19 Ant2 5720 UNII-2C 6.35 <=11 **PASS** total 5720 UNII-2C 8.82 <=11 **PASS** Ant1 5720\_UNII-3 0.55 <=11 **PASS** Ant2 5720 UNII-3 1.53 <=11 **PASS** 5720\_UNII-3 total 4.08 <=11 **PASS** Ant1 5745 1.71 <=30 **PASS** Ant2 5745 2.41 <=30 **PASS** total 5745 5.08 <=30 **PASS** Ant1 5785 1.87 <=30 **PASS** Ant2 5785 2.81 <=30 **PASS** total 5785 5.38 <=30 **PASS** 5825 1.88 <=30 **PASS** Ant1 5825 2.75 **PASS** Ant2 <=30 5825 5.35 <=30 **PASS** total Ant1 5190 3.41 <=11 **PASS** Ant2 4.12 <=11 **PASS** 5190 5190 6.79 <=11 **PASS** total 5230 3.8 <=11 **PASS** Ant1 5230 4.08 <=11 **PASS** Ant2 6.95 <=11 **PASS** total 5230 Ant1 5270 2.96 <=11 **PASS** Ant2 5270 3.28 <=11 **PASS** total 5270 6.13 <=11 **PASS** Ant1 5310 2.65 <=11 **PASS** Ant2 3.33 <=11 PASS 5310 5310 6.01 **PASS** total <=11 5510 2.87 <=11 **PASS** Ant1 PASS 5510 3.55 Ant2 <=11 11AC40MIMO total 5510 6.23 <=11 **PASS** 5550 3.47 <=11 **PASS** Ant1 3.96 **PASS** Ant2 5550 <=11 total 5550 6.73 <=11 **PASS** 2.58 Ant1 5670 <=11 **PASS** Ant2 5670 3.85 <=11 PASS 6.27 PASS total 5670 <=11 5710 UNII-2C 2.99 <=11 **PASS** Ant1 5710 UNII-2C <=11 **PASS** Ant2 3.75 total 5710 UNII-2C 6.40 <=11 **PASS** Ant1 5710 UNII-3 -3.13<=11 **PASS** Ant2 5710 UNII-3 -1.84 <=11 **PASS** total 5710 UNII-3 0.57 <=11 **PASS** Ant1 5755 -1.95 <=30 **PASS** 



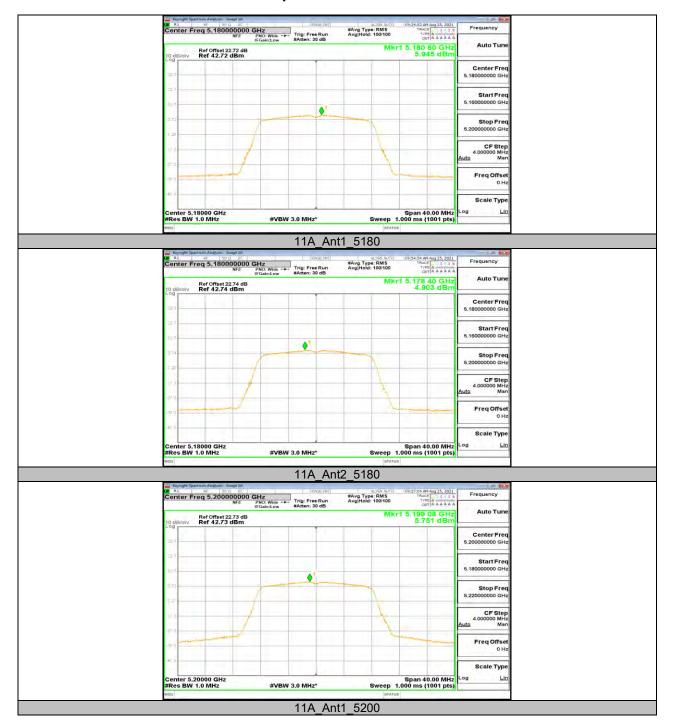
	Ant2	5755	-1.58	<=30	PASS
	total	5755	1.25	<=30	PASS
	Ant1	5795	-2.06	<=30	PASS
	Ant2	5795	-1.64	<=30	PASS
	total	5795	1.17	<=30	PASS
	Ant1	5210	-2.98	<=11	PASS
	Ant2	5210	-4.14	<=11	PASS
	total	5210	-0.51	<=11	PASS
	Ant1	5290	-3.57	<=11	PASS
	Ant2	5290	-4.82	<=11	PASS
	total	5290	-1.14	<=11	PASS
	Ant1	5530	-2.6	<=11	PASS
	Ant2	5530	-3.14	<=11	PASS
	total	5530	0.15	<=11	PASS
	Ant1	5610	-3.28	<=11	PASS
11AC80MIMO	Ant2	5610	-3.49	<=11	PASS
	total	5610	-0.37	<=11	PASS
	Ant1	5690_UNII-2C	-4.03	<=11	PASS
	Ant2	5690 UNII-2C	-3.6	<=11	PASS
	total	5690_UNII-2C	-0.80	<=11	PASS
	Ant1	5690_UNII-3	-10.29	<=11	PASS
	Ant2	5690_UNII-3	-9.61	<=11	PASS
	total	5690 UNII-3	-6.93	<=11	PASS
	Ant1	5775	-7.08	<=30	PASS
	Ant2	5775	-6.89	<=30	PASS
	total	5775	-3.97	<=30	PASS

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

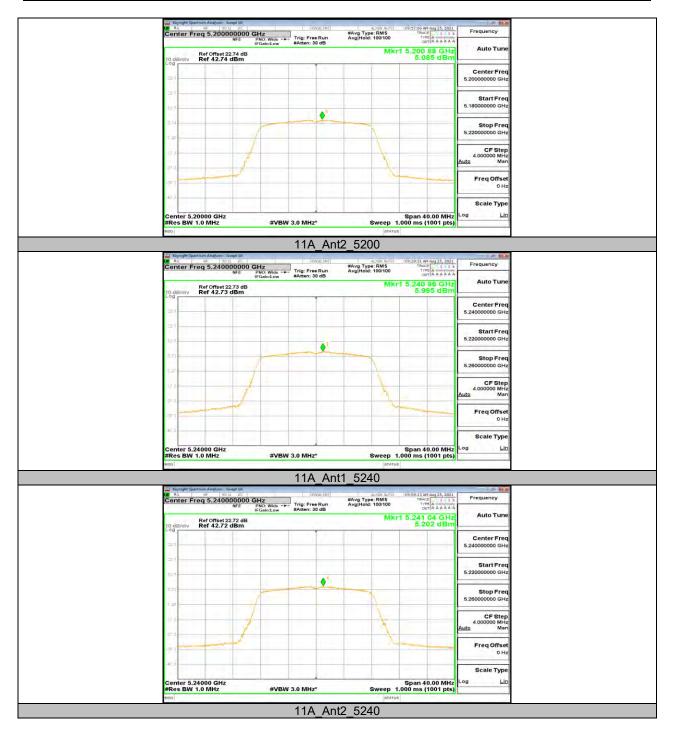
<sup>2.</sup> The Duty Cycle Factor (refer to section 7.1) had already compensated to the test data.



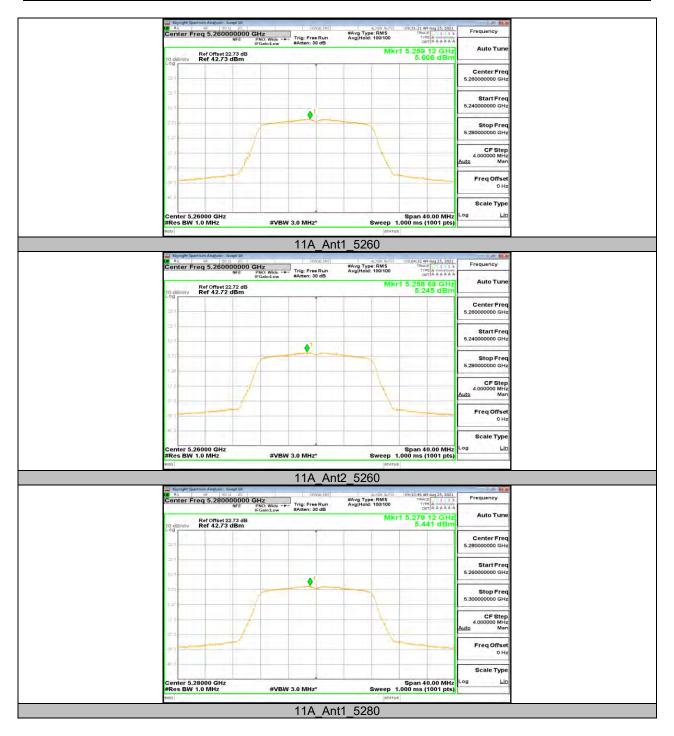
## 13.5.1. Test Graphs



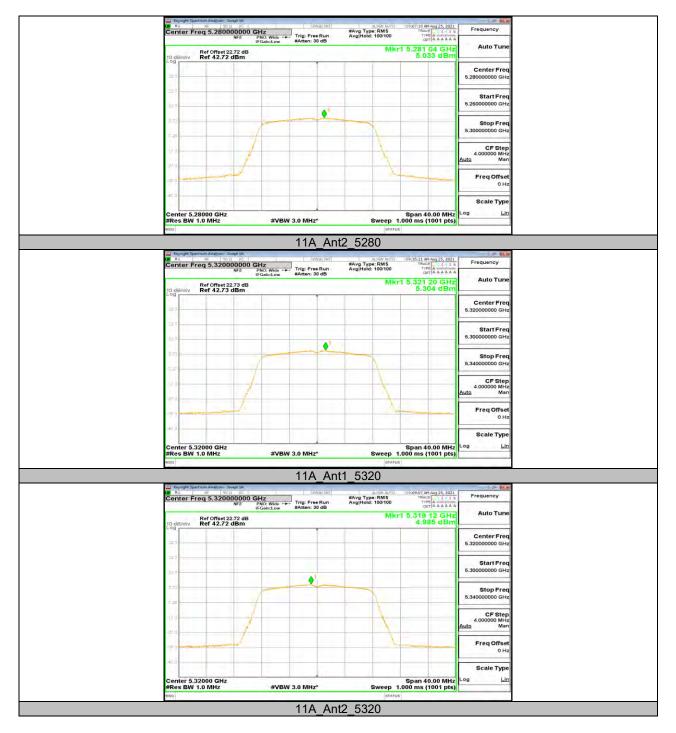








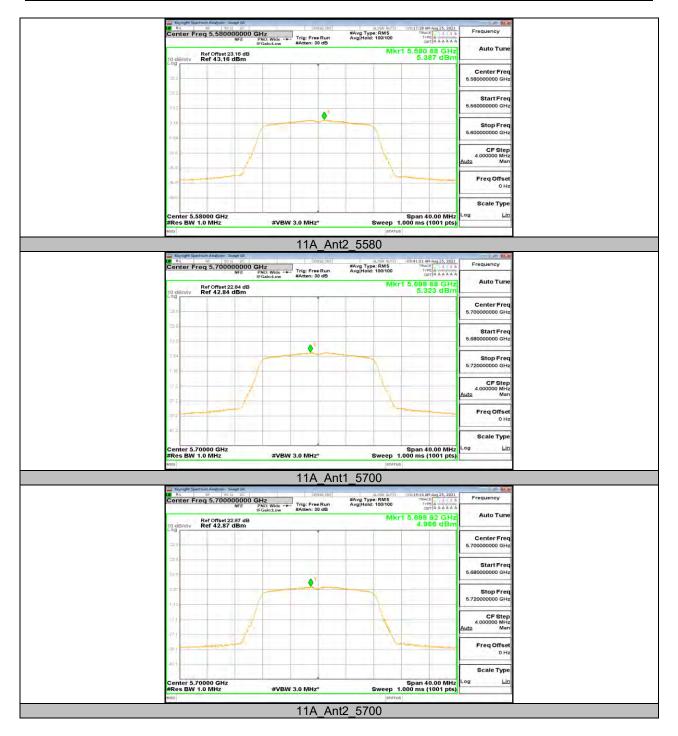




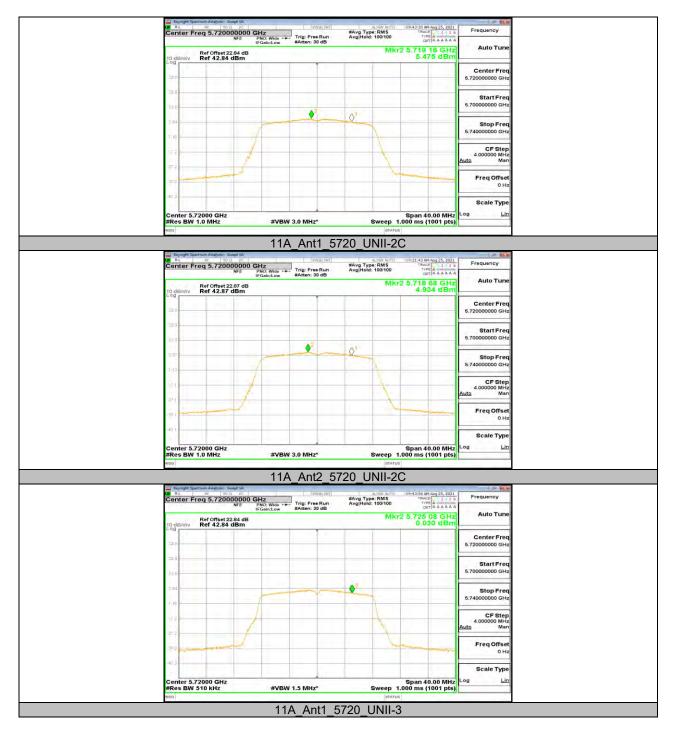




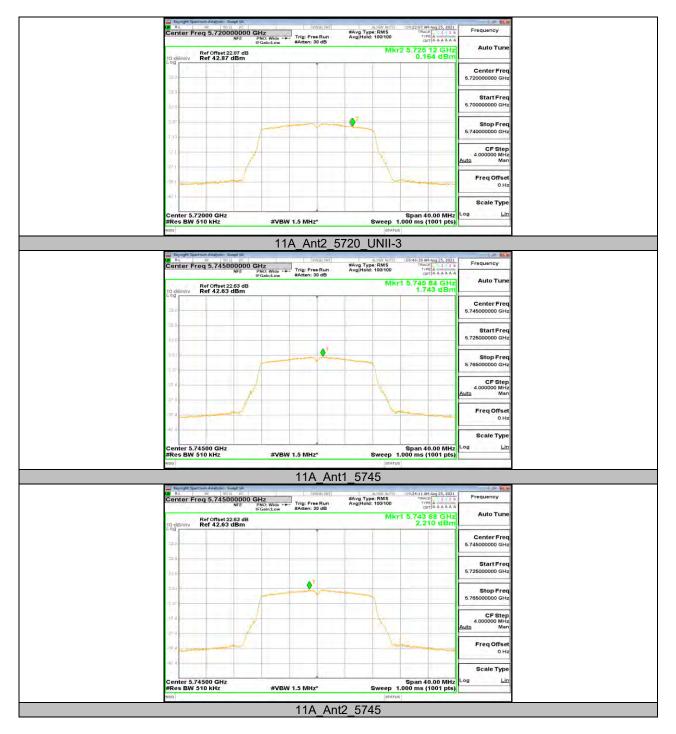




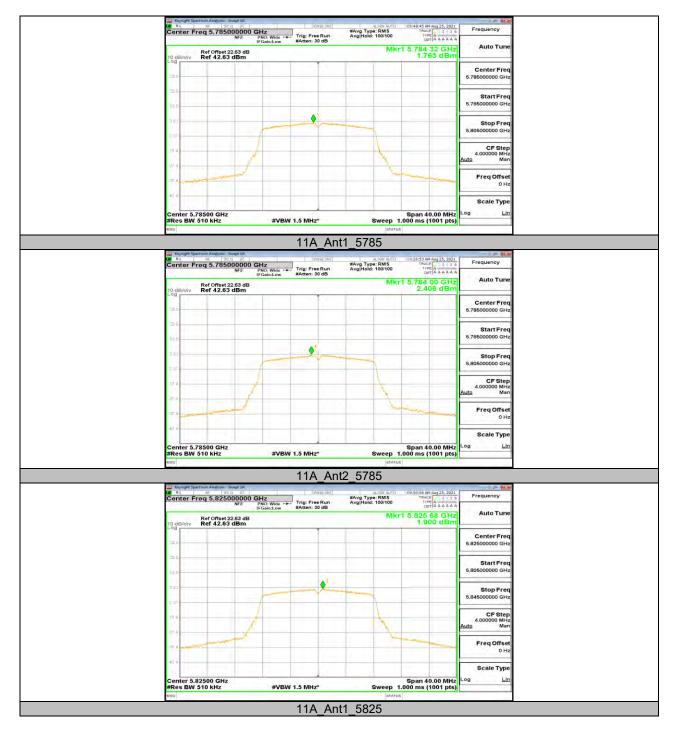




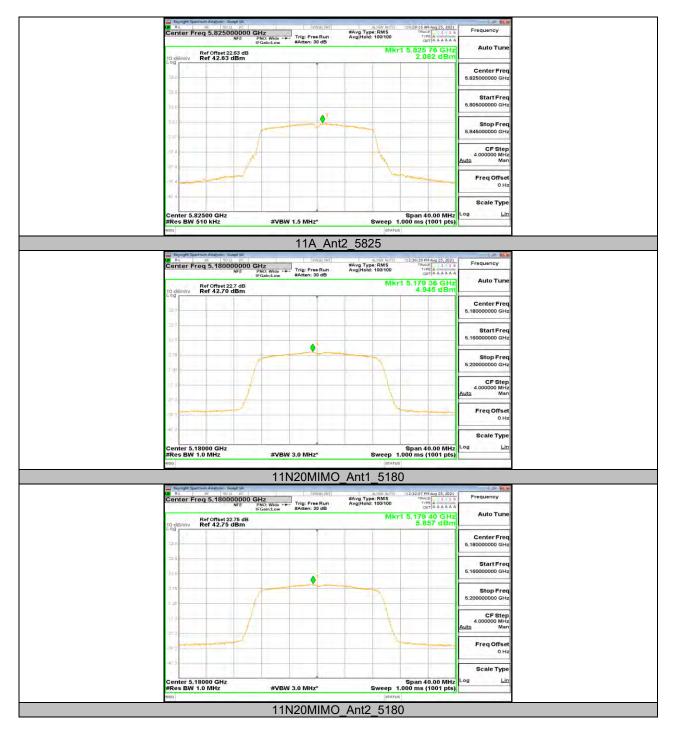




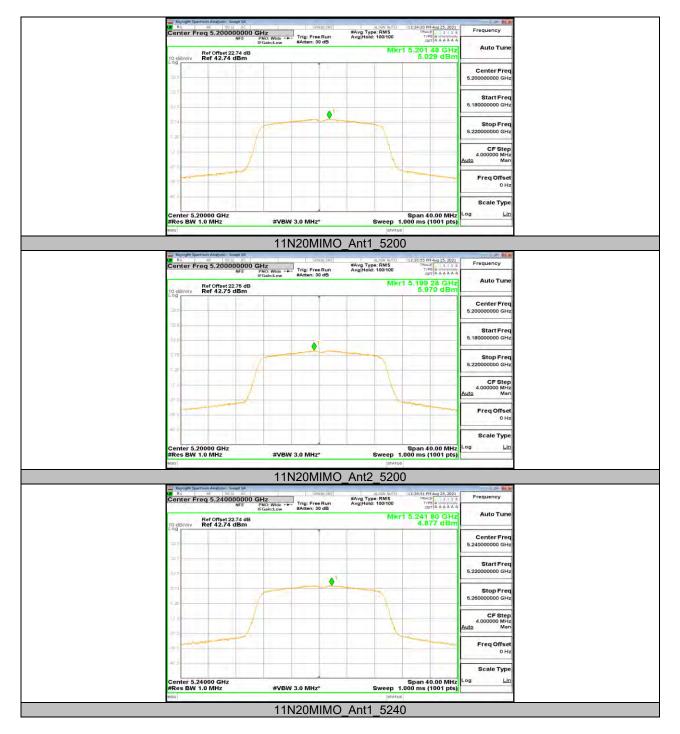




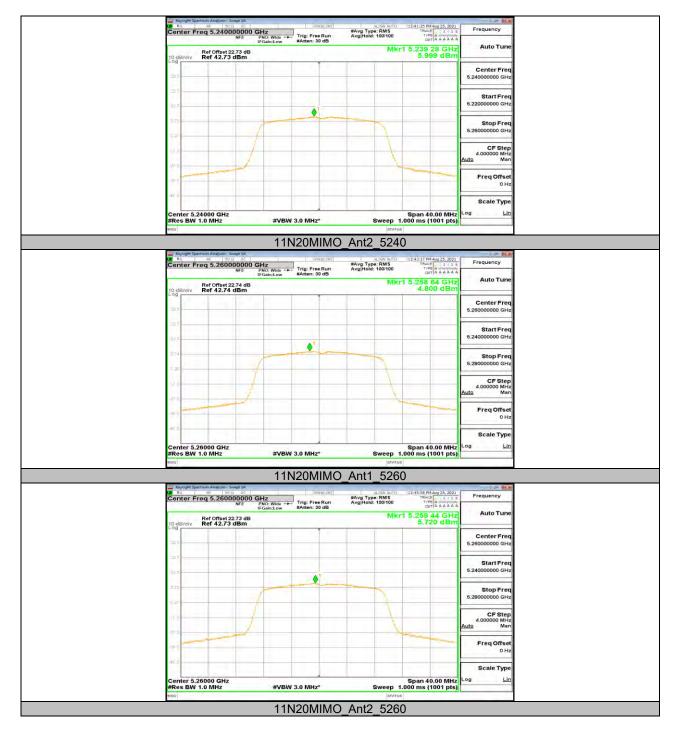




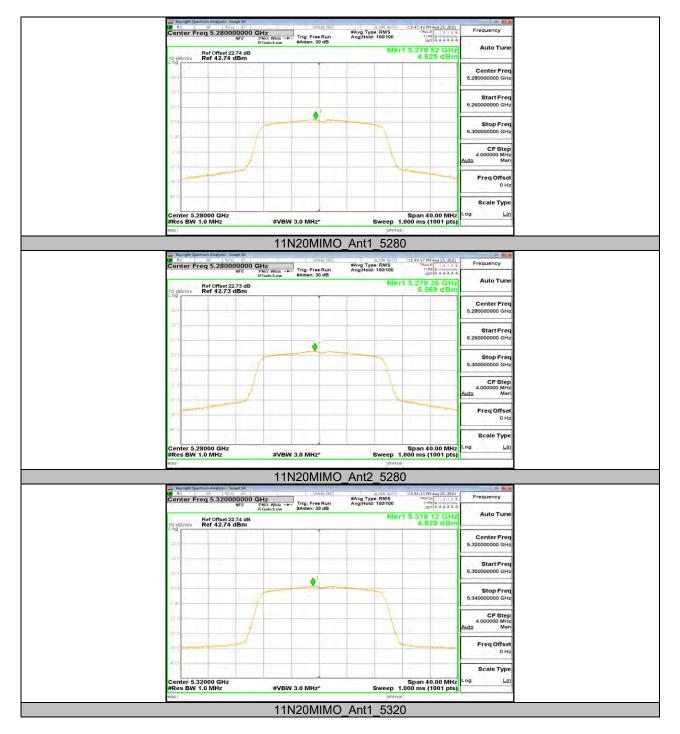




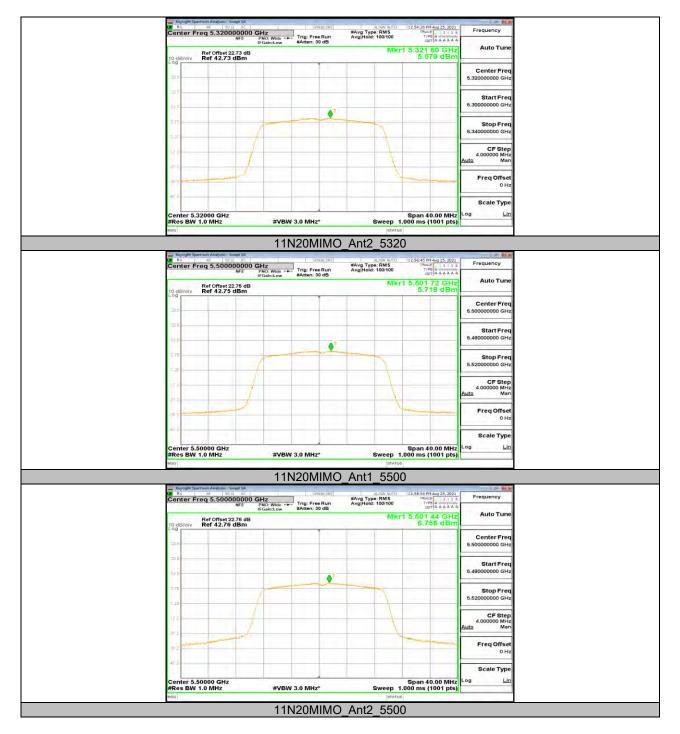




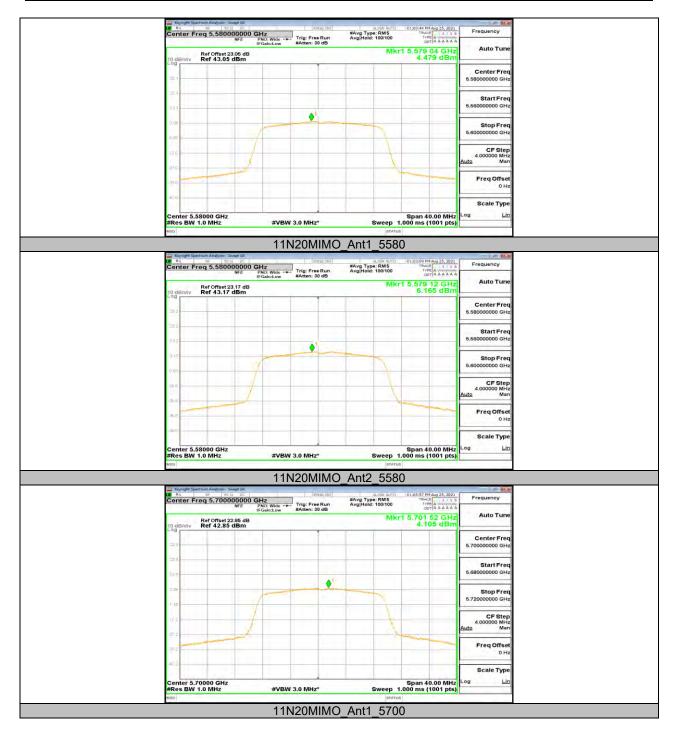




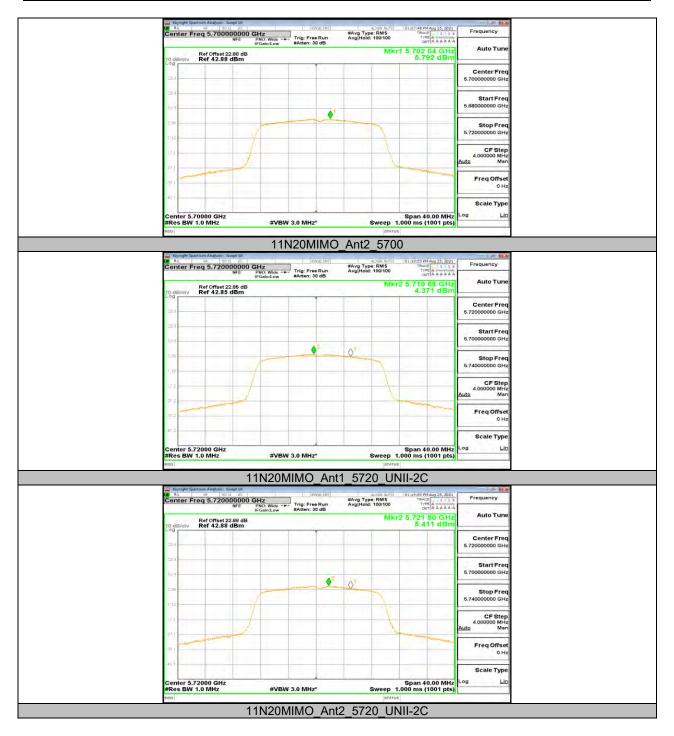




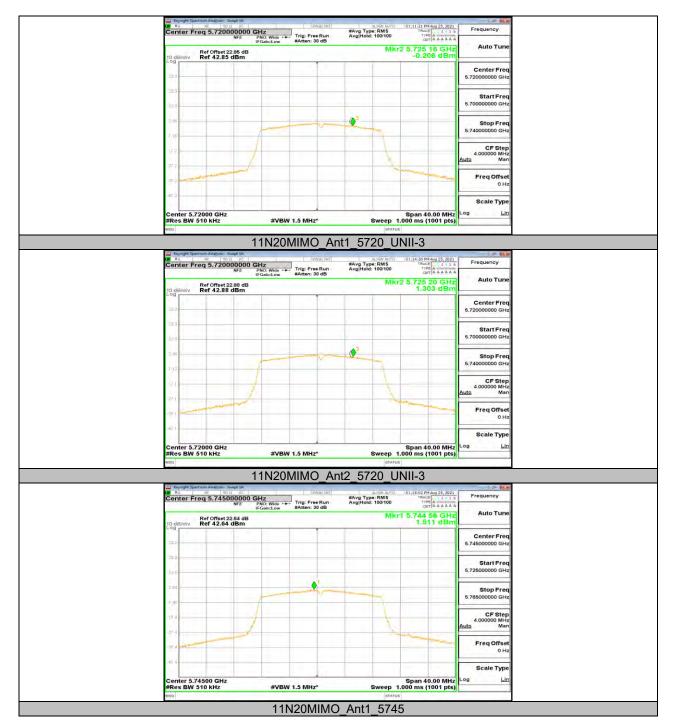




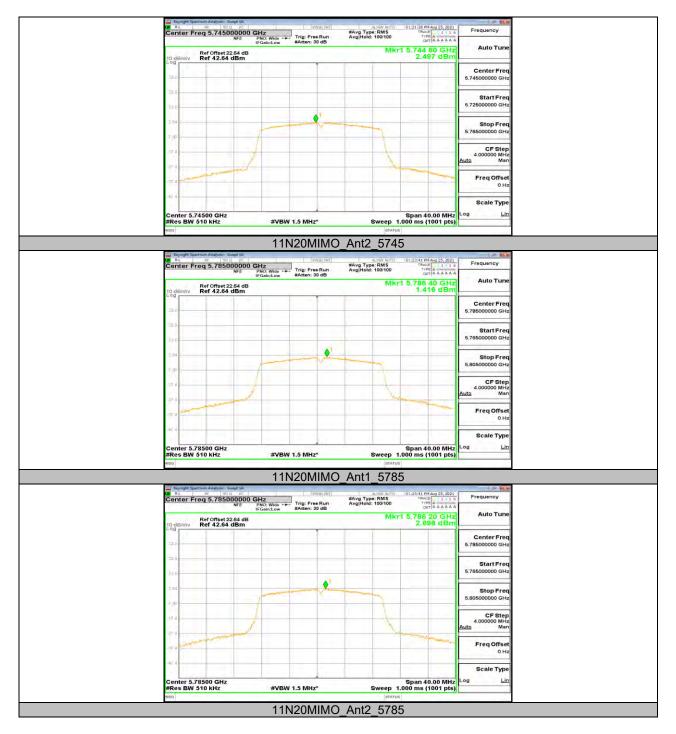




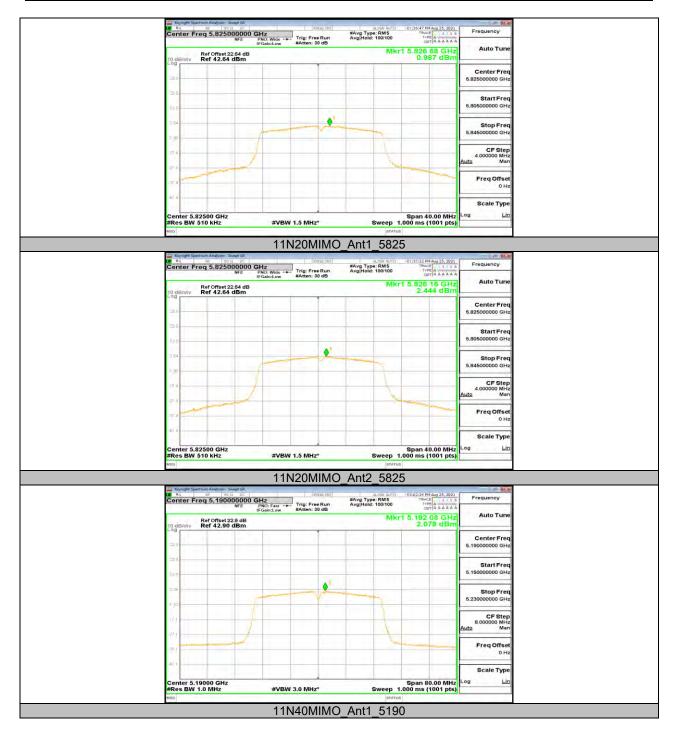




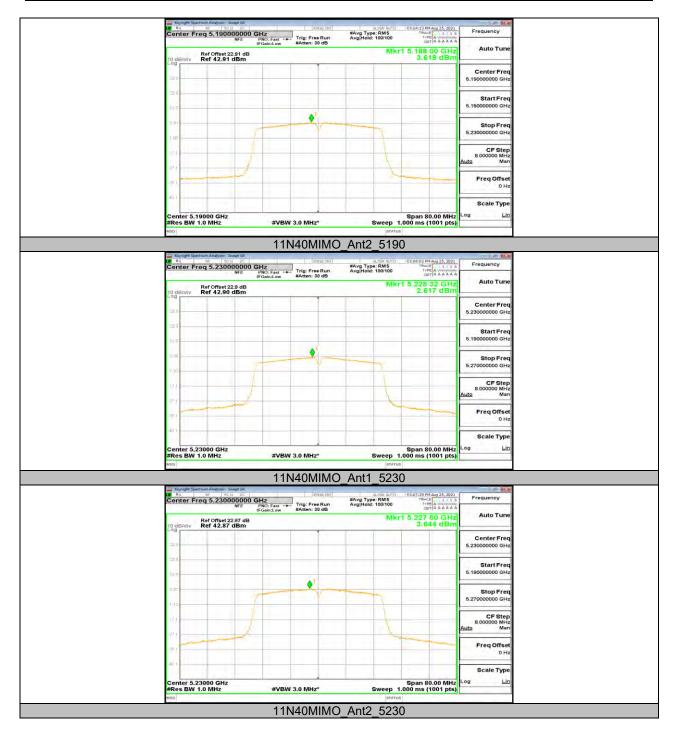




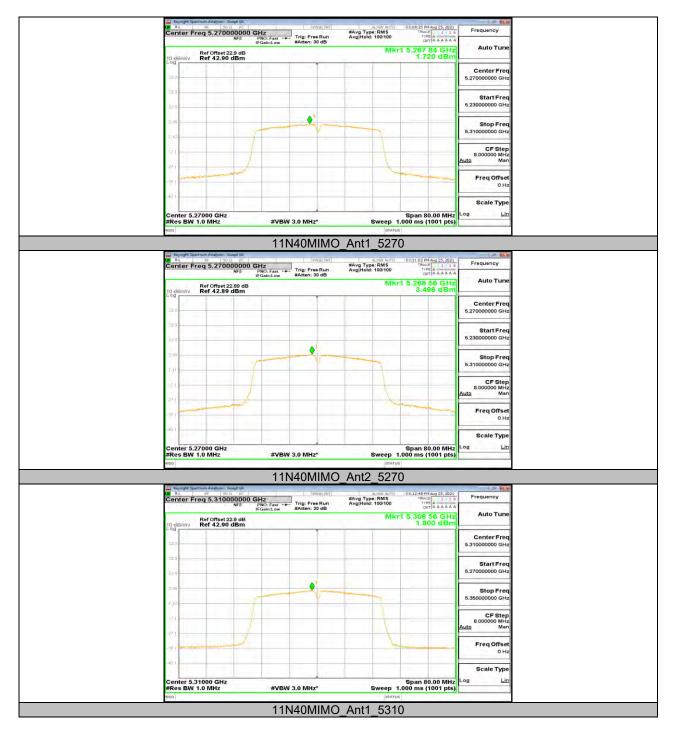




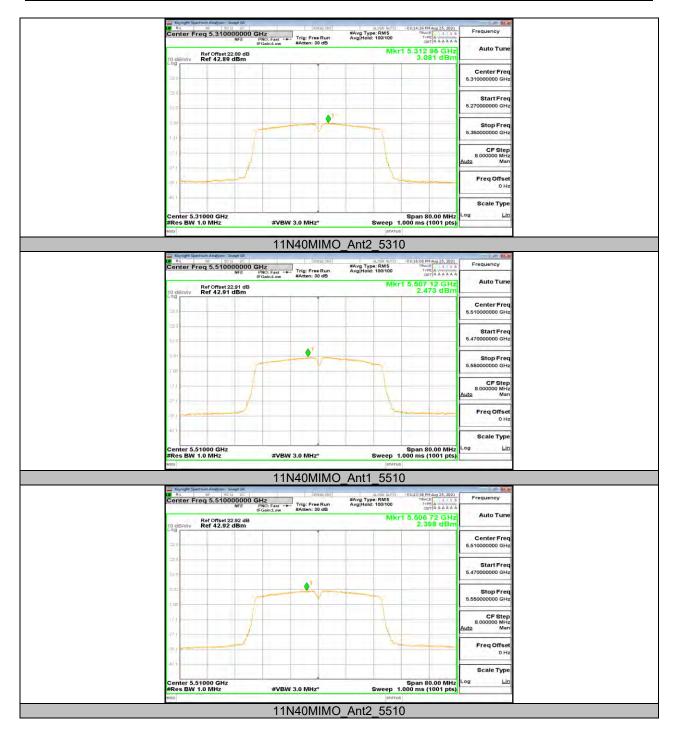




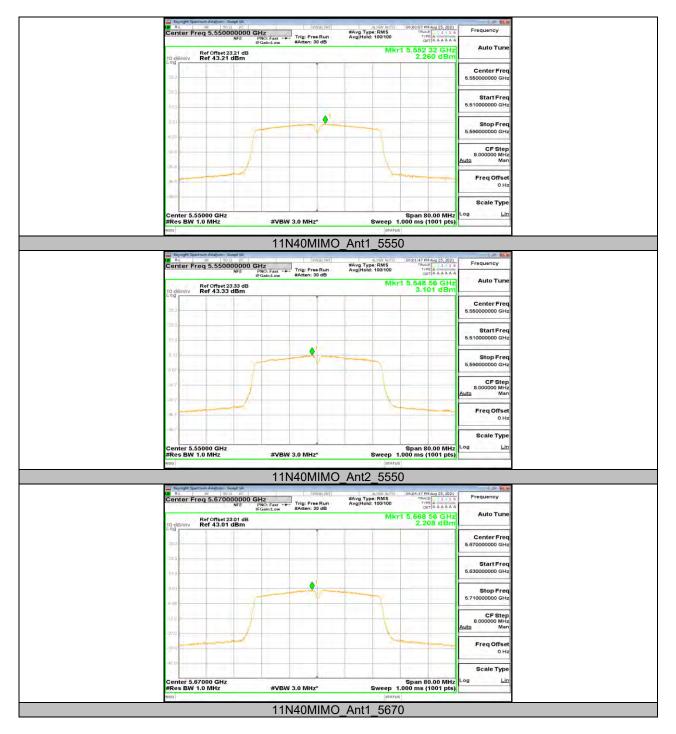




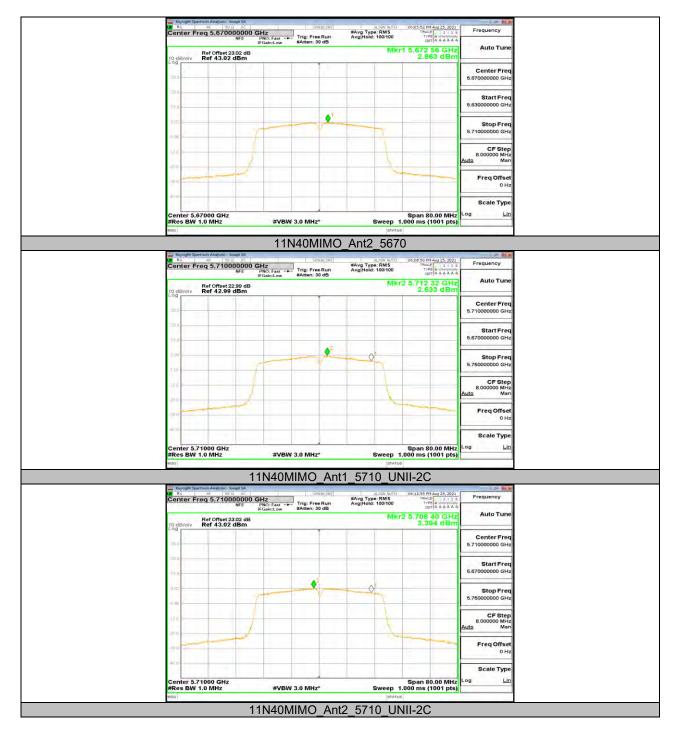




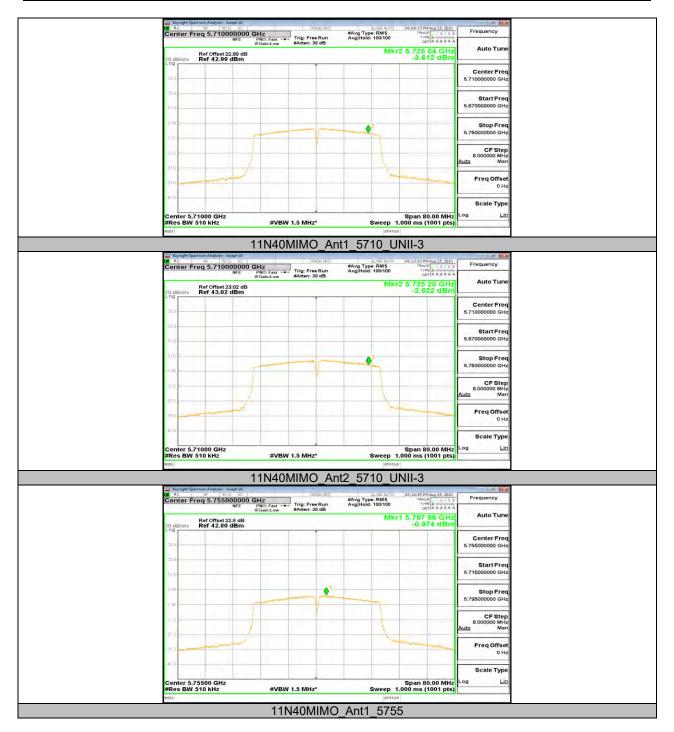




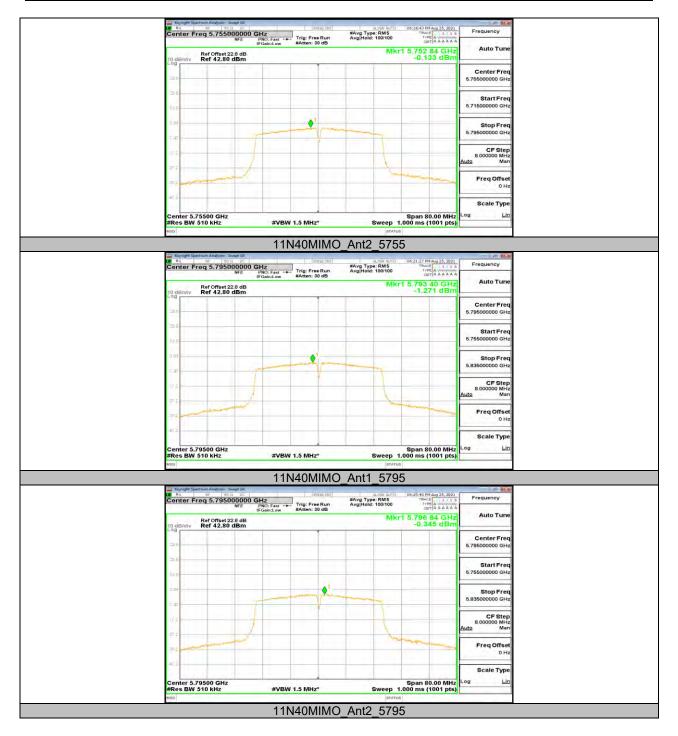




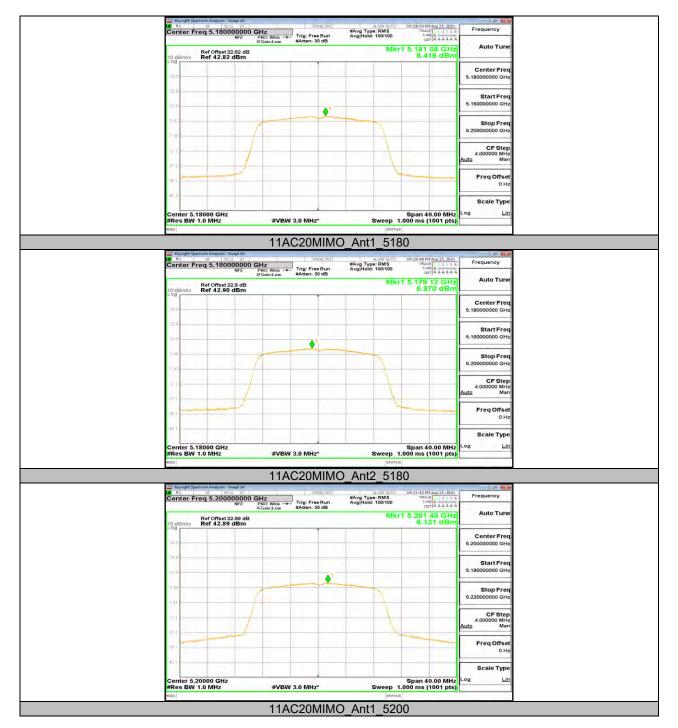




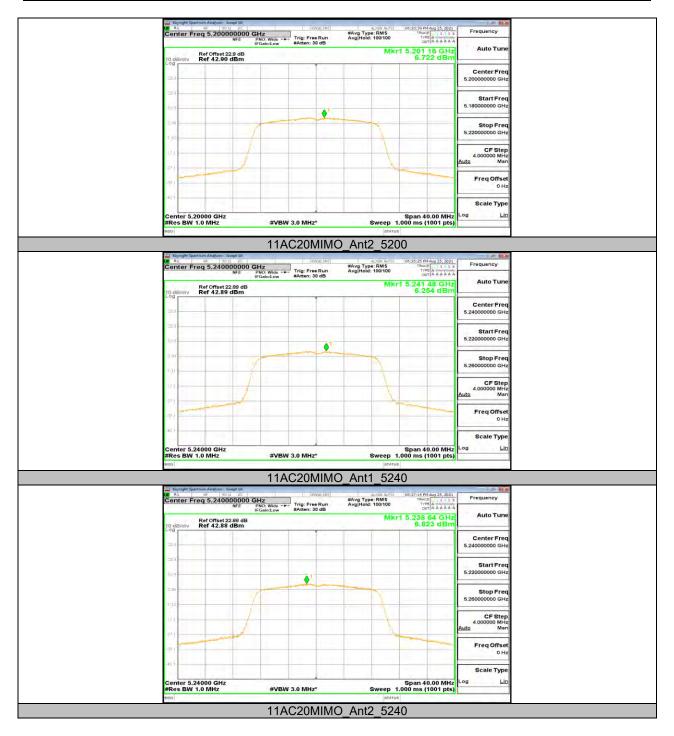




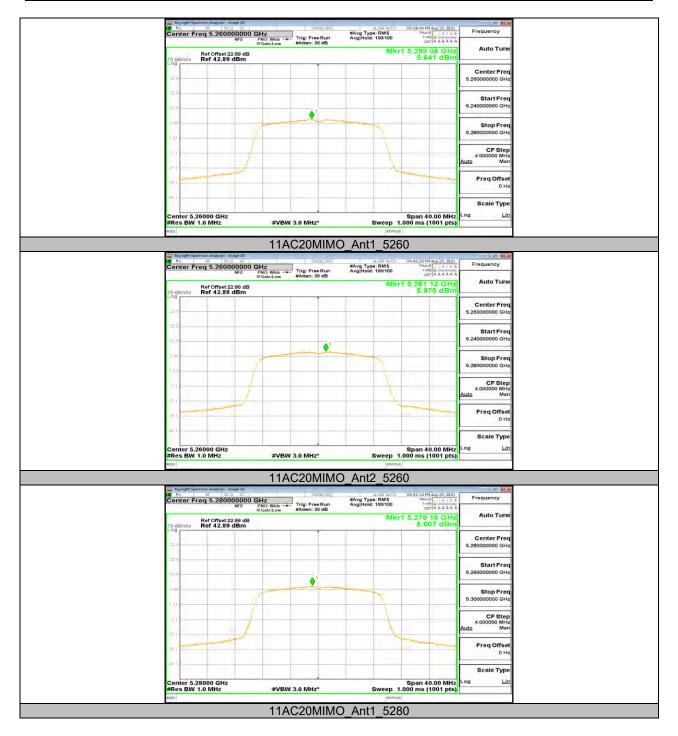




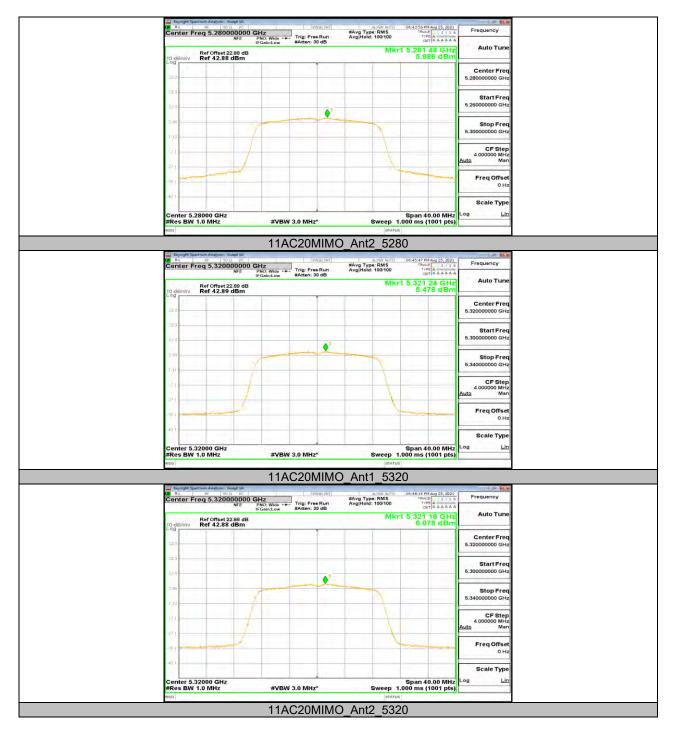




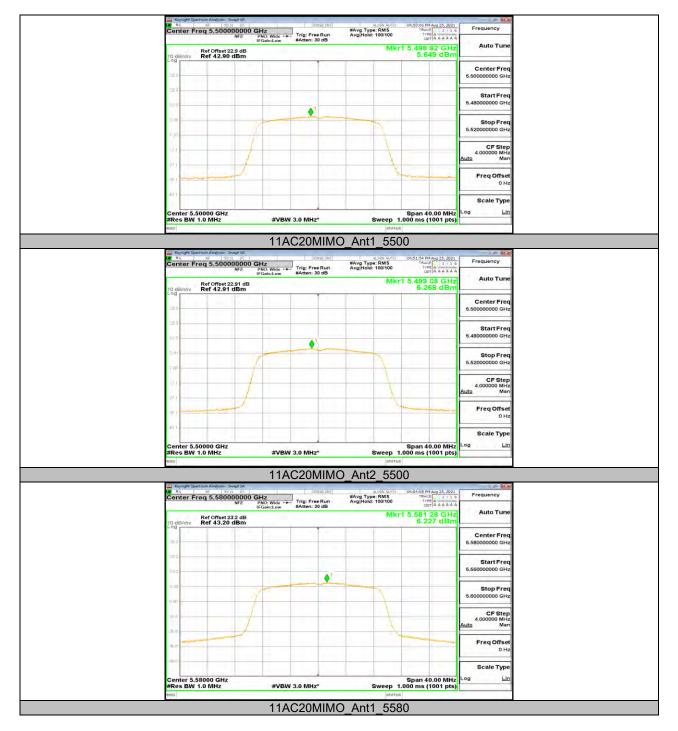




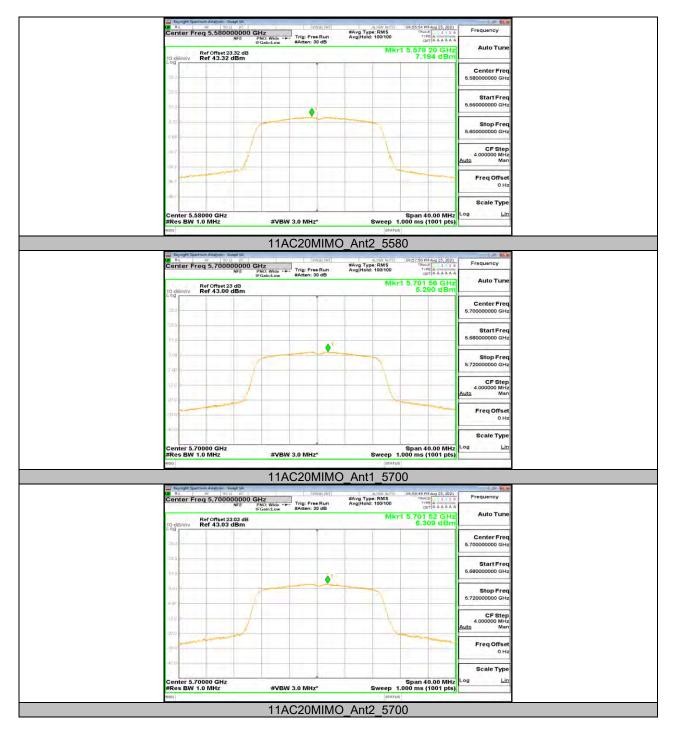




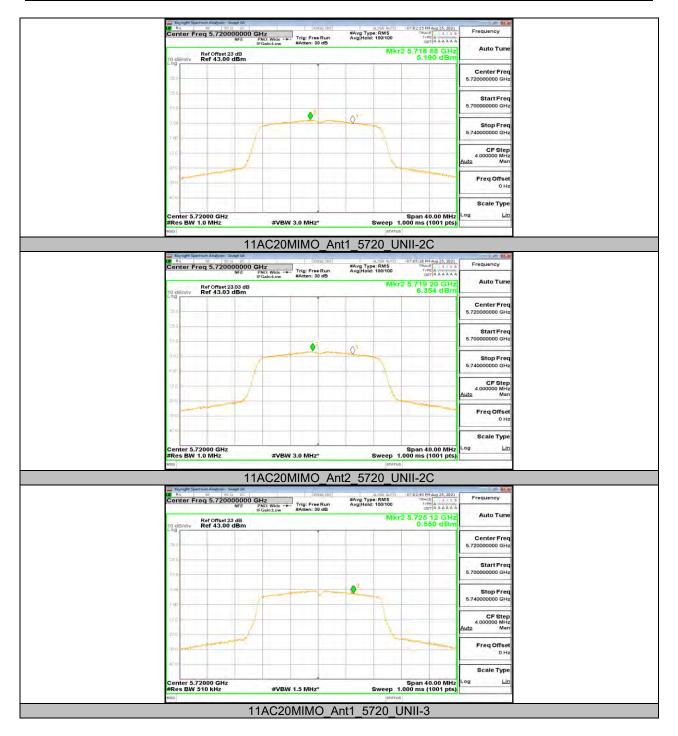




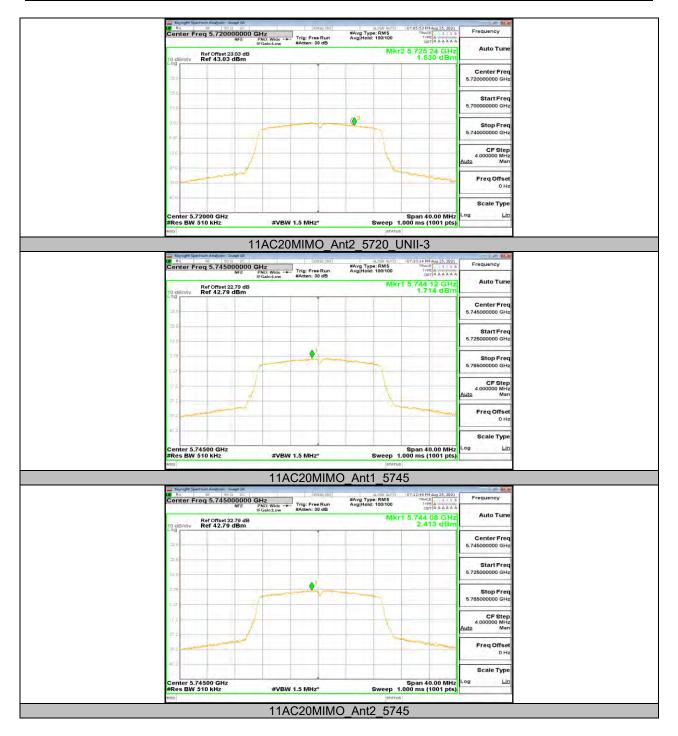




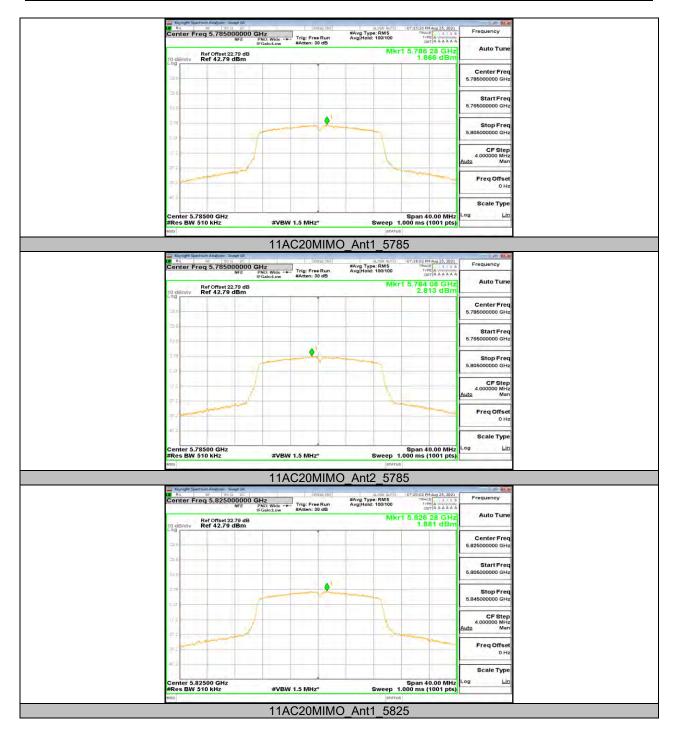




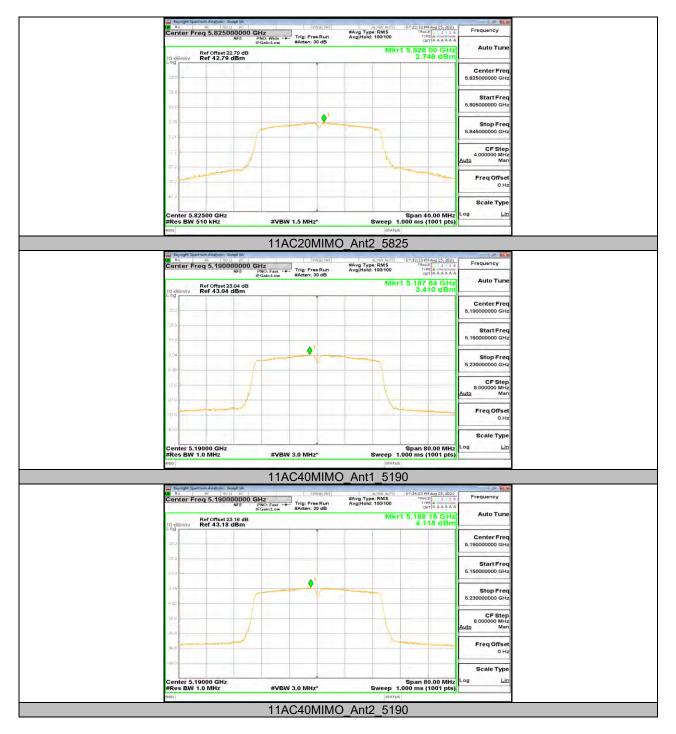




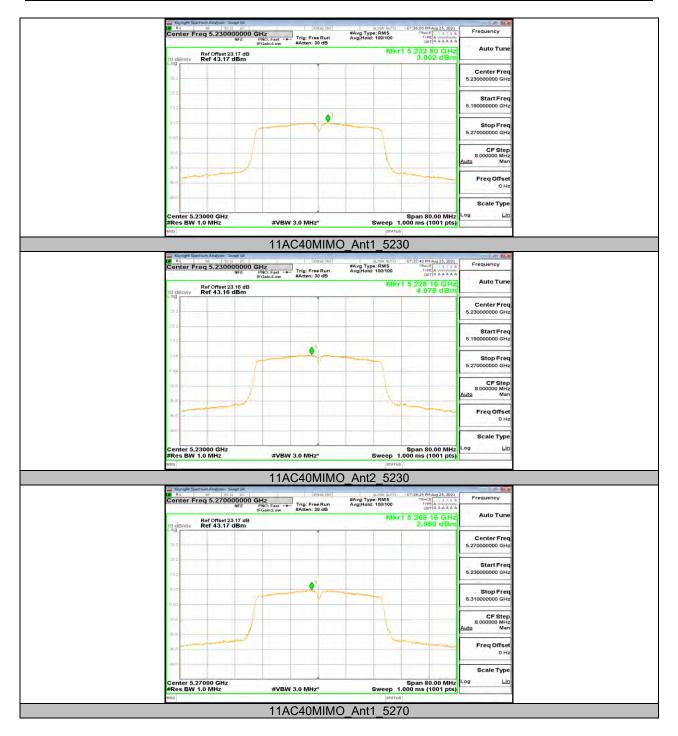




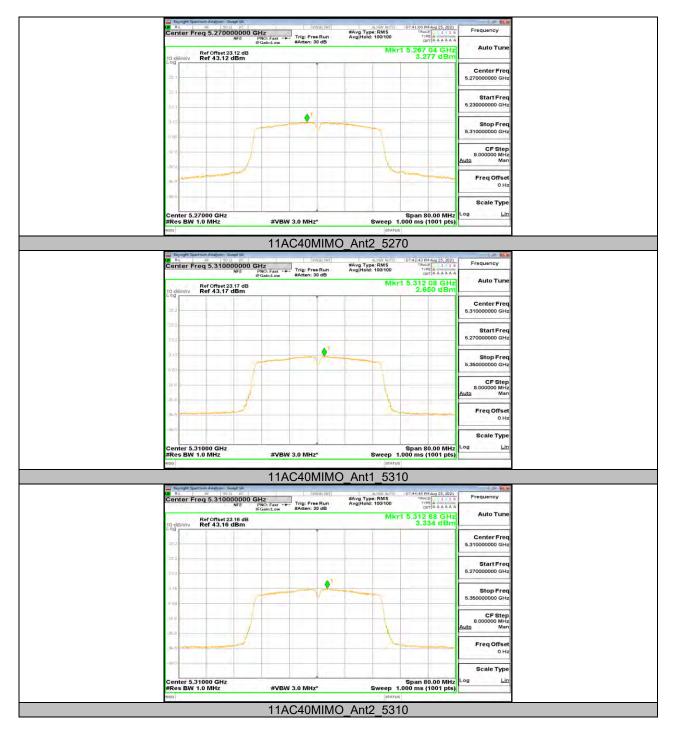




















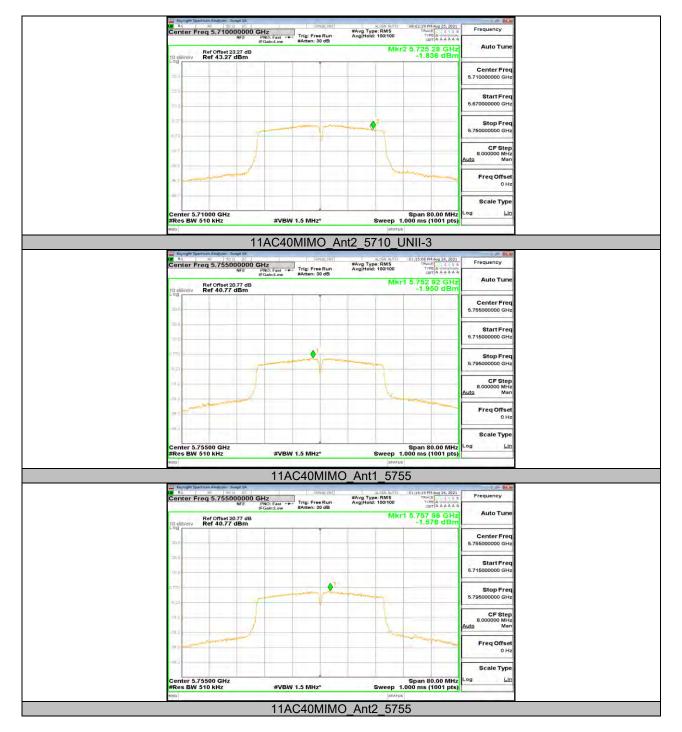


RESERVED.

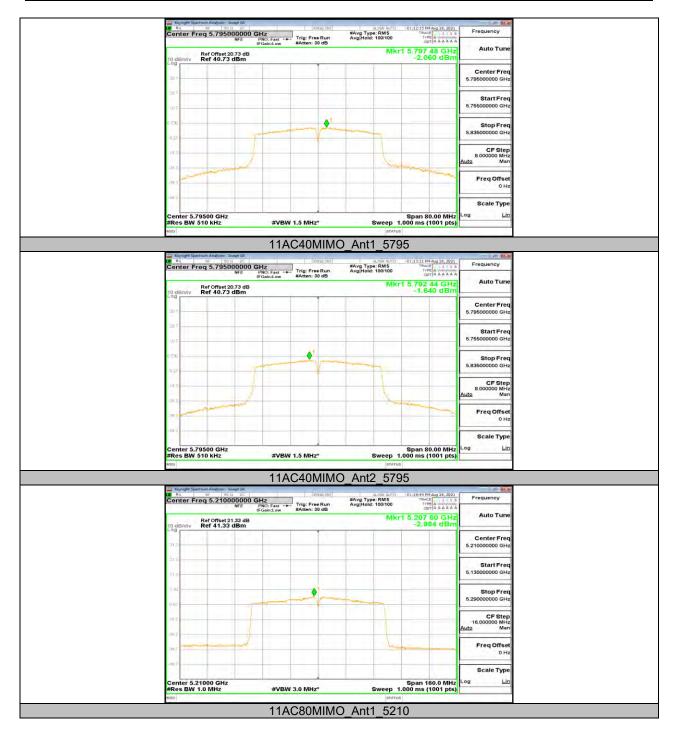
RESERVED. #Avg Type: RMS Avg[Hold: 100/100 Auto Tun Ref Offset 23.28 dB Ref 43.28 dBm Start Free **♦**<sup>2</sup> Freq Offse Scale Typ #VBW 3.0 MHz\* 11AC40MIMO Ant1 5710 UNII-2C Report Serious Agents Serious DC Center Freq 5.710000000 GHz

RE PRO: Fast Free Run Serious Own Seriou #Avg Type: RMS Avg|Hold: 100/100 Frequency Auto Tun Mkr2 5,708 00 GH: 3,749 dBn Ref Offset 23.27 dB Ref 43.27 dBm Start Free Freq Offse Scale Type Center 5.71000 GHz #Res BW 1.0 MHz Span 80.00 MHz Sweep 1.000 ms (1001 pts) #VBW 3.0 MHz\* 11AC40MIMO\_Ant2\_5710\_UNII-2C R to get South of the Research TRACE 3 4 3 1 TYPE A A A A A A A #Avg Type: RMS Avg|Hold: 100/100 Mkr2 5,725 20 GHz -3,132 dBm Ref Offset 23.28 dB Ref 43.28 dBm Center Free 5.710000000 GH Scale Typ Center 5.71000 GHz #Res BW 510 kHz #VBW 1.5 MHz\* 11AC40MIMO\_Ant1\_5710\_UNII-3

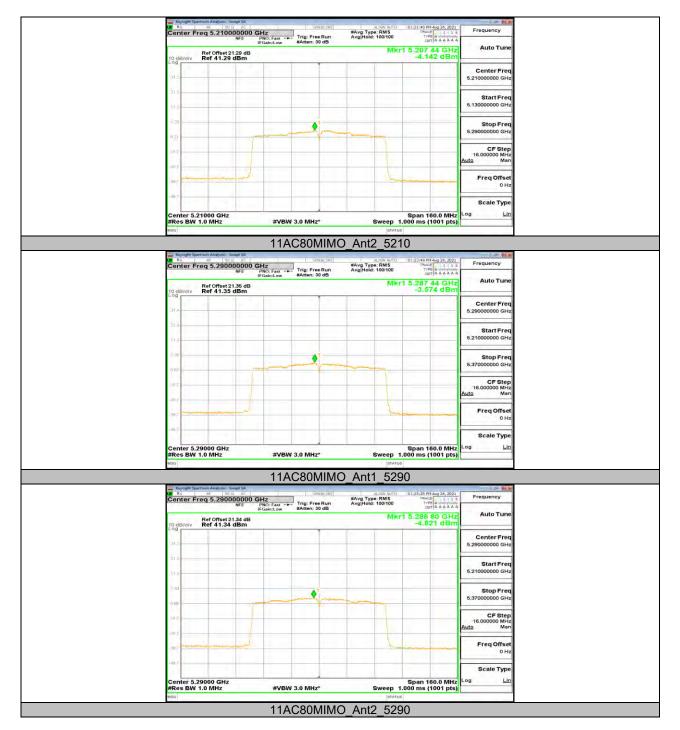




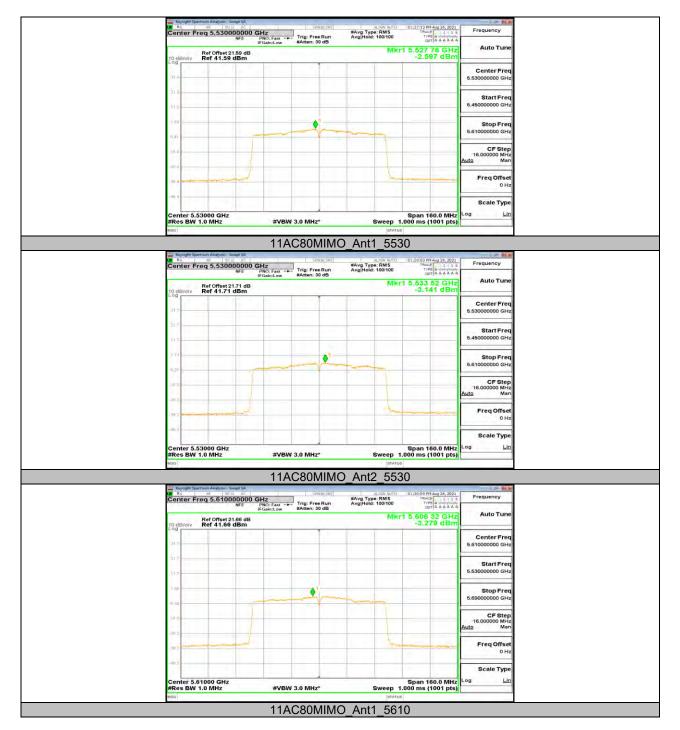




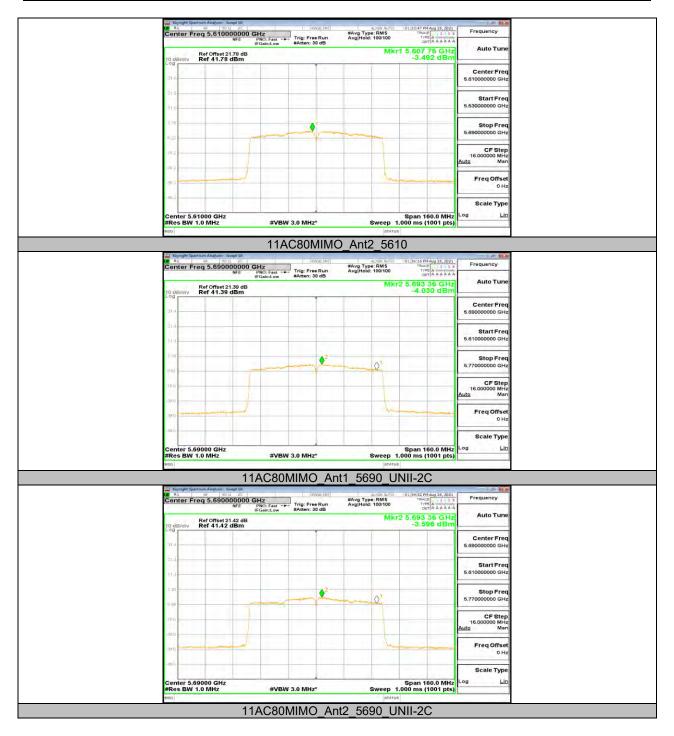


















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13.6. Appendix D: Duty Cycle 13.6.1. Test Result

Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A	1.39	1.44	0.9653	96.53	0.15	0.72	1
11N20MIMO	1.30	1.34	0.9701	97.01	0.13	0.77	1
11N40MIMO	0.64	0.69	0.9275	92.75	0.33	1.56	1
11AC20MIMO	0.68	0.72	0.9444	94.44	0.25	1.47	2
11AC40MIMO	0.35	0.39	0.8974	89.74	0.47	2.86	3
11AC80MIMO	0.18	0.23	0.7826	78.26	1.06	5.56	6

Note:

Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be

used.



## 13.6.2. Test Graphs









Temp.

TN

TN

ΤN

Volt.

VL

VN

VΗ

Tolerance

(ppm)

-1.83

3.75

3.81

# 13.7. Appendix E: Frequency Stability 13.7.1. Test Result

0 Minute

Freq.Error (MHz)

5199.9905

5200.0195

5200.0198

Frequency Error vs. Voltage									
802.11a:5200MHz									
2 Min	ute	5 Min	ute	10 Minute					
Freq.Error Tolerance (MHz) (ppm)		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)				
5199.9774	-4.34	5199.9942	-1.11	5200.0242	4.65				

0.62

1.67

5199.9945

5199.9840

-1.06

-3.08

5200.0032

5200.0087

#### Frequency Error vs. Temperature

-1.85

-2.37

5199.9904

5199.9877

#### 802.11a:5200MHz

Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
40	VN	5200.0213	4.09	5199.9853	-2.82	5200.0139	2.67	5199.9850	-2.89
30	VN	5199.9926	-1.42	5199.9864	-2.61	5200.0139	2.67	5199.9821	-3.44
20	VN	5199.9864	-2.62	5200.0142	2.73	5200.0004	0.08	5200.0194	3.74
10	VN	5199.9787	-4.09	5200.0161	3.10	5200.0063	1.22	5199.9851	-2.87
0	VN	5199.9840	-3.08	5199.9983	-0.33	5199.9791	-4.01	5200.0202	3.88



Frequency Error vs. Voltage 802.11a:5825MHz 0 Minute 2 Minute 5 Minute 10 Minute Temp. Volt. Freq.Error Tolerance Freq.Error Freq.Error Tolerance Freq.Error Tolerance Tolerance (MHz) (ppm) (MHz) (ppm) (MHz) (ppm) (MHz) (ppm) TN VL5824.9783 -3.72 5825.0093 1.60 5824.9773 -3.89 5825.0144 2.47 ΤN VN 5824.9849 -2.59 5824.9990 5825.0130 2.24 5824.9840 -0.17 -2.75 TN VΗ 5825.0214 3.67 5824.9775 -3.87 5825.0098 1.68 5825.0088 1.51

#### Frequency Error vs. Temperature

#### 802.11a:5825MHz

Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
40	VN	5824.9918	-1.41	5825.0086	1.47	5824.9940	-1.04	5825.0033	0.57
30	VN	5825.0193	3.32	5824.9753	-4.23	5825.0198	3.40	5825.0165	2.83
20	VN	5825.0194	3.33	5824.9980	-0.35	5825.0032	0.54	5825.0033	0.56
10	VN	5824.9928	-1.24	5825.0051	0.88	5824.9830	-2.92	5825.0236	4.05
0	VN	5825.0069	1.19	5825.0027	0.46	5825.0064	1.09	5825.0034	0.58

Note: All antennas and test modes have been tested, only the worst data record in the report.



## 13.8. Appendix F: DYNAMIC FREQUENCY SELECTION

#### 13.8.1. Test Result

## 802.11ac VHT80 Mode

BW/Channel	//Channel Test Item		Limit	Results
	Channel Move Time	0.492	<10 s	pass
	Channel Closing Transmission Time	0.044	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.	pass
80MHz / 5530MHz	Non-Occupancy Period	Nothing appears	If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear.	pass





Channel Move Time first 200ms 20 0 Level in dBm -40-50 100 150 200 250 Time in ms Channel Move Time first 200ms Threshold Start of Radar Trigger at end of Radar First 200ms of Channel Closing Tx Time Non-Occupancy Period Non-occupancy period 10-0. Level in dBm -10 -20· -30 500 1000 1500 1860 Time in s Non-occupancy period Threshold

## **END OF REPORT**