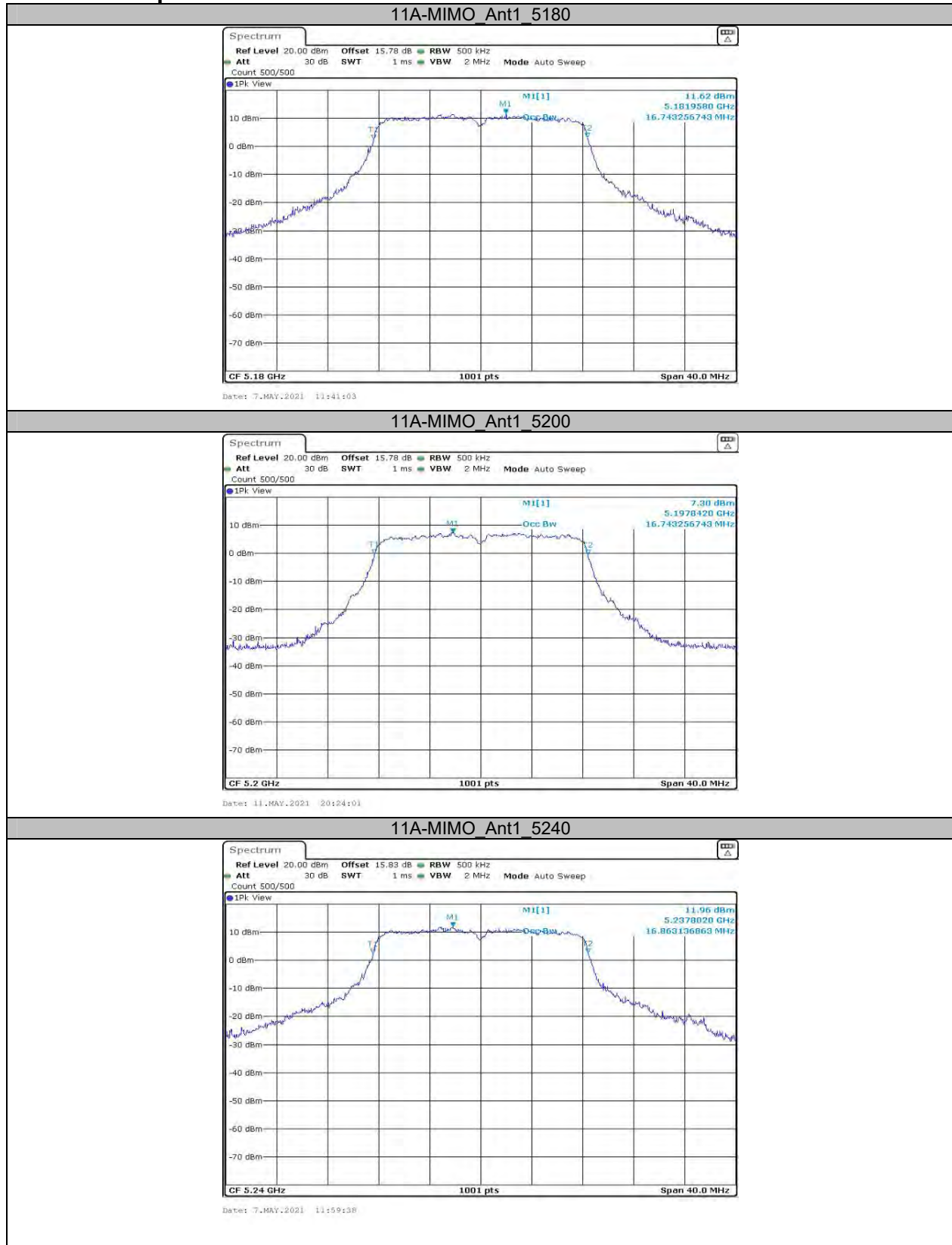
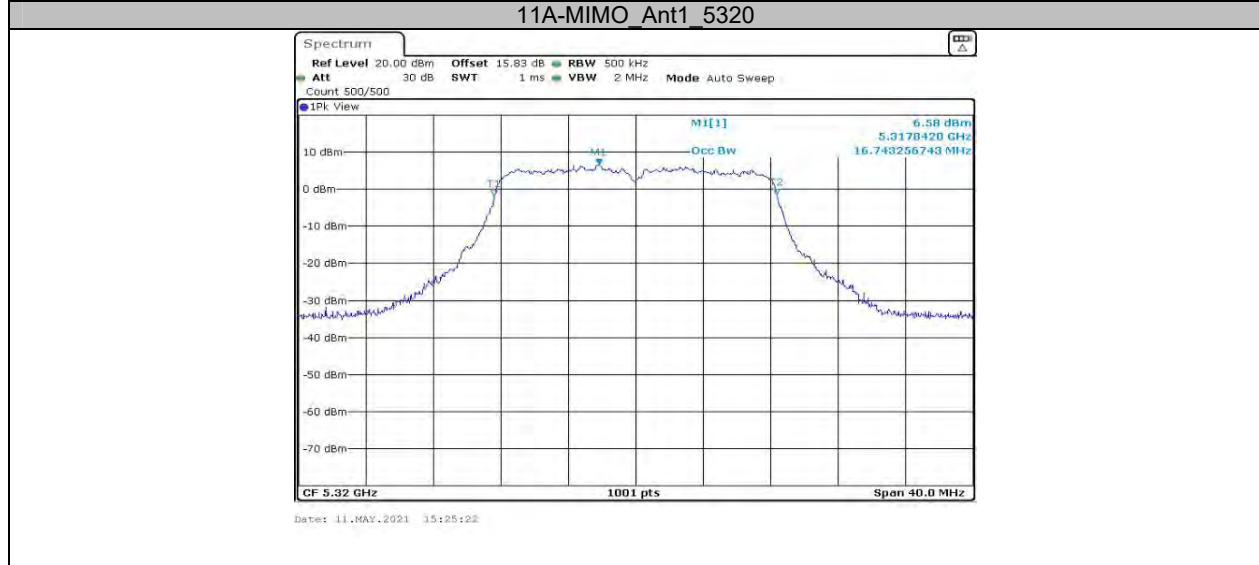
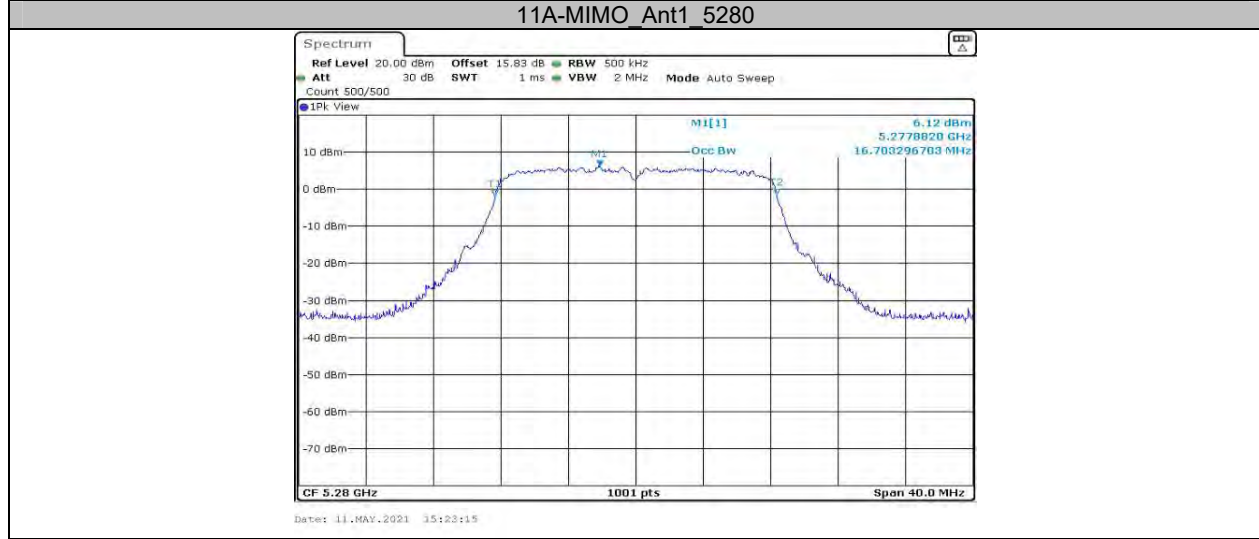
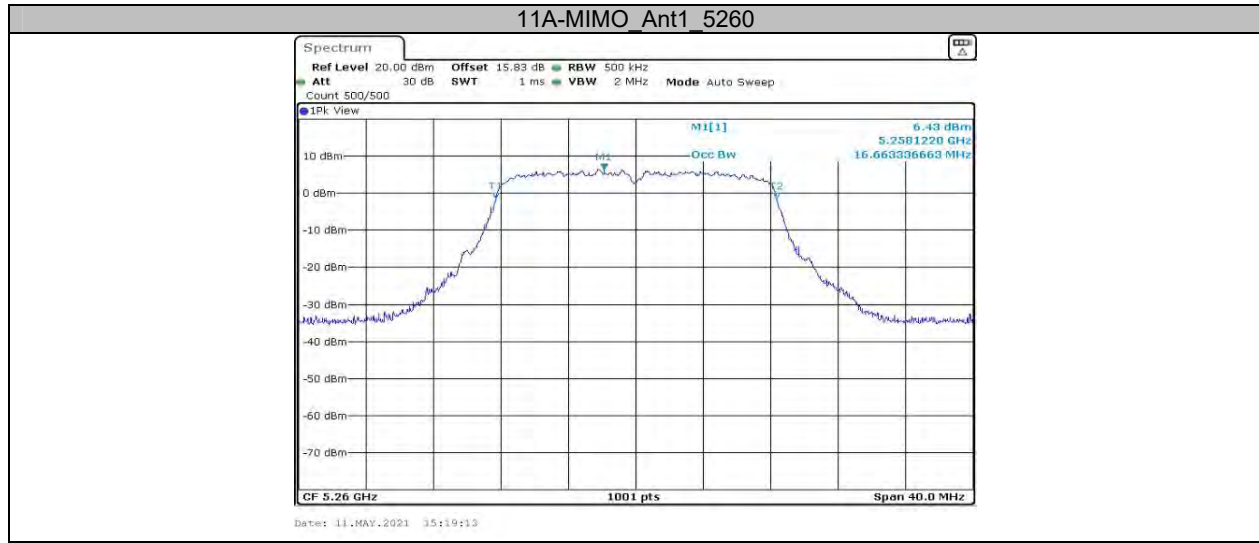


	Ant1	5530	75.604	---	PASS
	Ant1	5610	75.285	---	PASS
	Ant1	5775	75.445	---	PASS
11AX20MIMO	Ant1	5180	19.021	---	PASS
	Ant1	5200	18.981	---	PASS
	Ant1	5240	19.021	---	PASS
	Ant1	5260	18.941	---	PASS
	Ant1	5280	18.981	---	PASS
	Ant1	5320	19.061	---	PASS
	Ant1	5500	19.021	---	PASS
	Ant1	5580	18.981	---	PASS
	Ant1	5700	18.981	---	PASS
	Ant1	5745	18.981	---	PASS
	Ant1	5785	19.061	---	PASS
	Ant1	5825	19.101	---	PASS
11AX40MIMO	Ant1	5190	38.042	---	PASS
	Ant1	5230	38.282	---	PASS
	Ant1	5270	37.882	---	PASS
	Ant1	5310	37.882	---	PASS
	Ant1	5510	37.962	---	PASS
	Ant1	5550	37.962	---	PASS
	Ant1	5670	37.882	---	PASS
	Ant1	5755	38.042	---	PASS
11AX80MIMO	Ant1	5795	37.962	---	PASS
	Ant1	5210	77.842	---	PASS
	Ant1	5290	77.203	---	PASS
	Ant1	5530	77.363	---	PASS
	Ant1	5610	77.043	---	PASS
	Ant1	5775	77.522	---	PASS

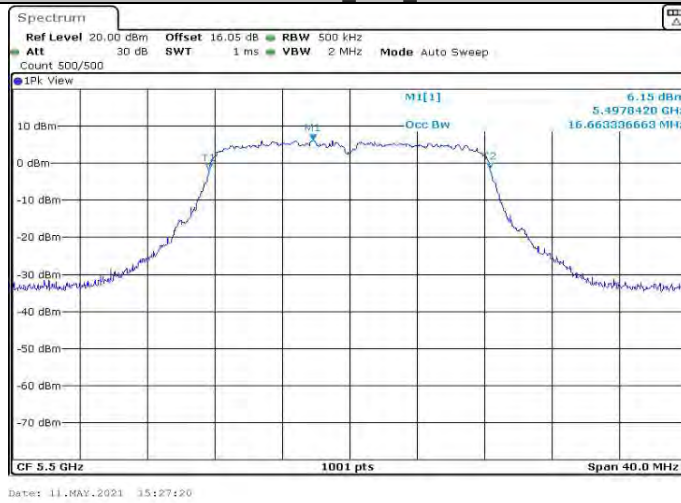
Note: OBWfor U-NII-1 and U-NII-3 bands will not within frequency range for U-NII-2A and U-NII-2C bands.

Test Graphs





11A-MIMO_Ant1_5500



11A-MIMO_Ant1_5580



11A-MIMO_Ant1_5700



11A-MIMO_Ant1_5745



11A-MIMO_Ant1_5785



11A-MIMO_Ant1_5825



11N20MIMO_Ant1_5180



11N20MIMO_Ant1_5200



11N20MIMO_Ant1_5240



11N20MIMO_Ant1_5260



11N20MIMO_Ant1_5280



11N20MIMO_Ant1_5320



11N20MIMO_Ant1_5500



11N20MIMO_Ant1_5580



11N20MIMO_Ant1_5700



11N20MIMO_Ant1_5745



11N20MIMO_Ant1_5785



11N20MIMO_Ant1_5825



11N40MIMO_Ant1_5190



Date: 7.MAY.2021 14:50:18

11N40MIMO_Ant1_5230



Date: 7.MAY.2021 13:56:32

11N40MIMO_Ant1_5270



Date: 11.MAY.2021 16:29:00

11N40MIMO_Ant1_5310



11N40MIMO_Ant1_5510



11N40MIMO_Ant1_5550



11N40MIMO_Ant1_5670



11N40MIMO_Ant1_5755



11N40MIMO_Ant1_5795



11AC20MIMO_Ant1_5180



11AC20MIMO_Ant1_5200



11AC20MIMO_Ant1_5240



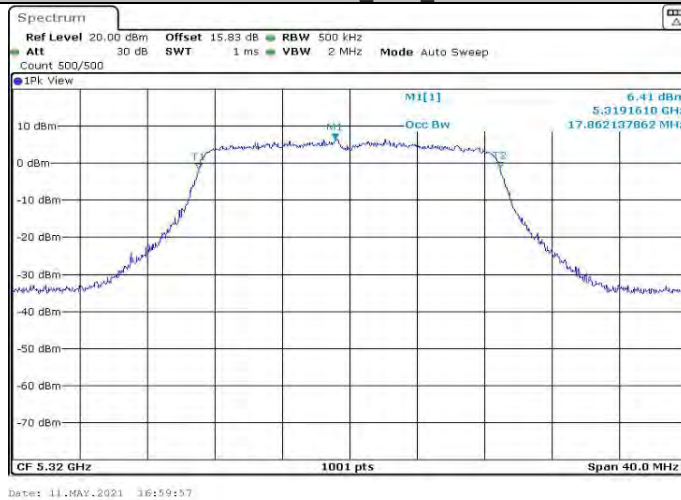
11AC20MIMO_Ant1_5260



11AC20MIMO_Ant1_5280



11AC20MIMO_Ant1_5320



11AC20MIMO_Ant1_5500



11AC20MIMO_Ant1_5580



11AC20MIMO_Ant1_5700



11AC20MIMO_Ant1_5745



11AC20MIMO_Ant1_5785



11AC20MIMO_Ant1_5825



11AC40MIMO_Ant1_5190



Date: 7.MAY.2021 14:46:17

11AC40MIMO_Ant1_5230



Date: 7.MAY.2021 14:25:12

11AC40MIMO_Ant1_5270



Date: 11.MAY.2021 17:11:40

11AC40MIMO_Ant1_5310



11AC40MIMO_Ant1_5510



11AC40MIMO_Ant1_5550



11AC40MIMO_Ant1_5670



11AC40MIMO_Ant1_5755



11AC40MIMO_Ant1_5795



11AC80MIMO_Ant1_5210



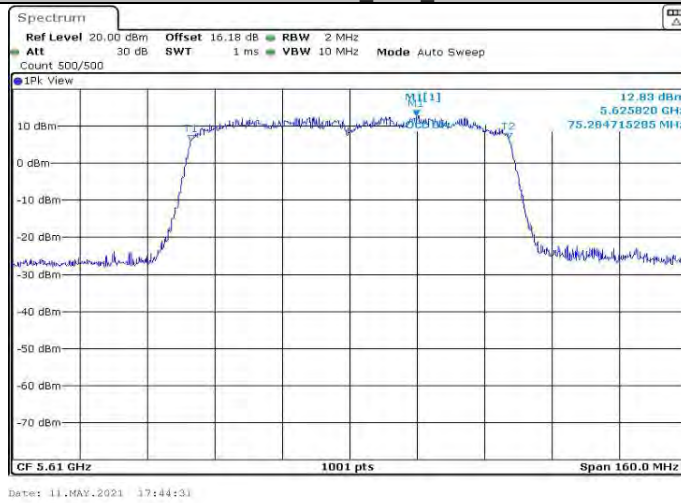
11AC80MIMO_Ant1_5290



11AC80MIMO_Ant1_5530



11AC80MIMO_Ant1_5610



11AC80MIMO_Ant1_5775



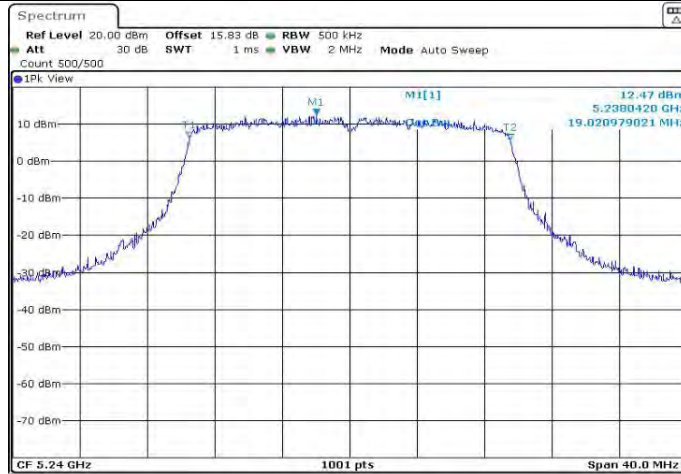
11AX20MIMO_Ant1_5180



11AX20MIMO_Ant1_5200



11AX20MIMO_Ant1_5240



11AX20MIMO_Ant1_5260



11AX20MIMO_Ant1_5280



11AX20MIMO_Ant1_5320



11AX20MIMO_Ant1_5500



11AX20MIMO_Ant1_5580



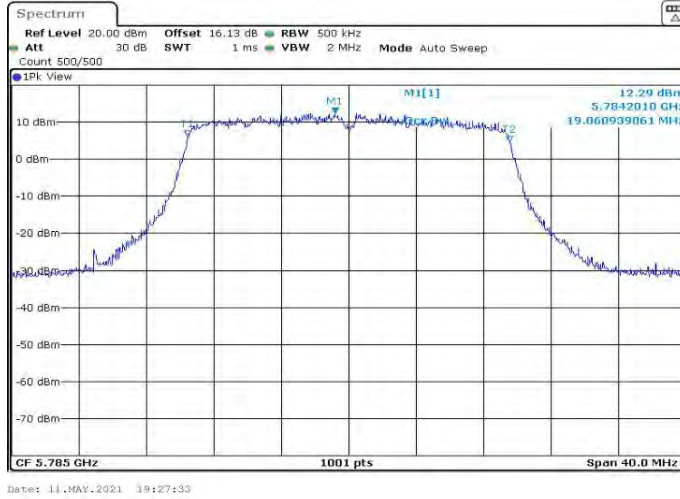
11AX20MIMO_Ant1_5700



11AX20MIMO_Ant1_5745



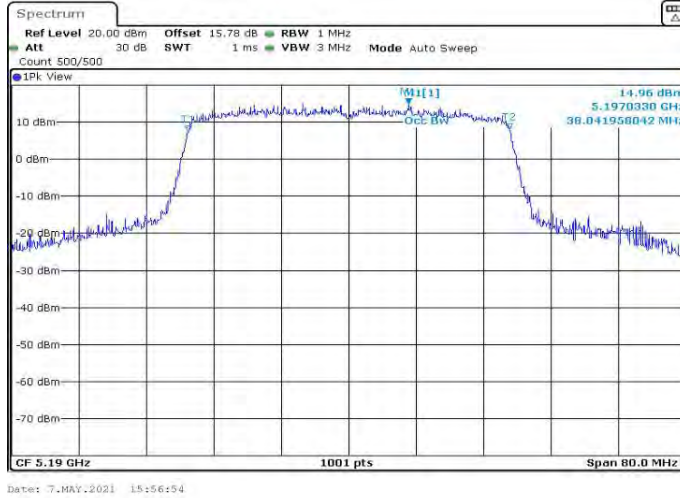
11AX20MIMO_Ant1_5785



11AX20MIMO_Ant1_5825



11AX40MIMO_Ant1_5190



11AX40MIMO_Ant1_5230



Date: 7.MAY.2021 16:03:45

11AX40MIMO_Ant1_5270



Date: 11.MAY.2021 18:07:32

11AX40MIMO_Ant1_5310



Date: 11.MAY.2021 18:09:57

11AX40MIMO_Ant1_5510



11AX40MIMO_Ant1_5550



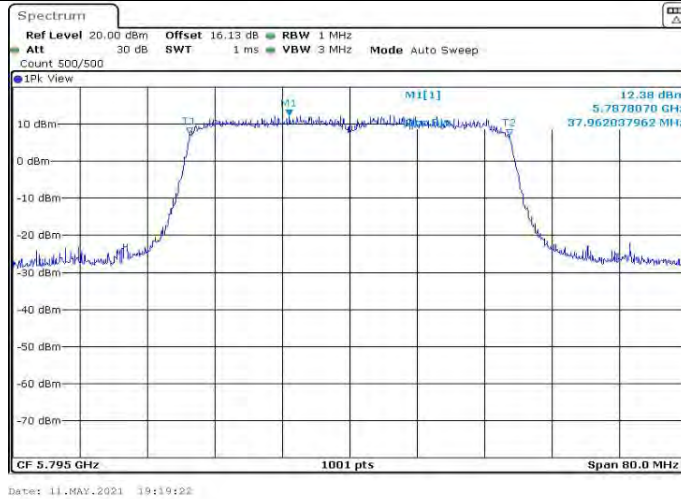
11AX40MIMO_Ant1_5670



11AX40MIMO_Ant1_5755



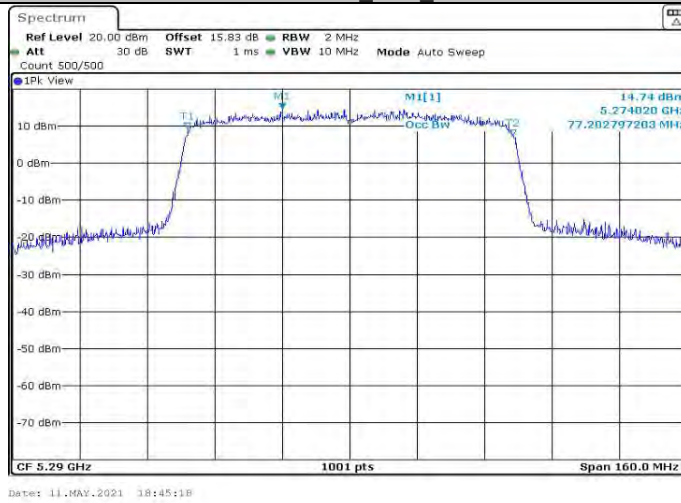
11AX40MIMO_Ant1_5795



11AX80MIMO_Ant1_5210

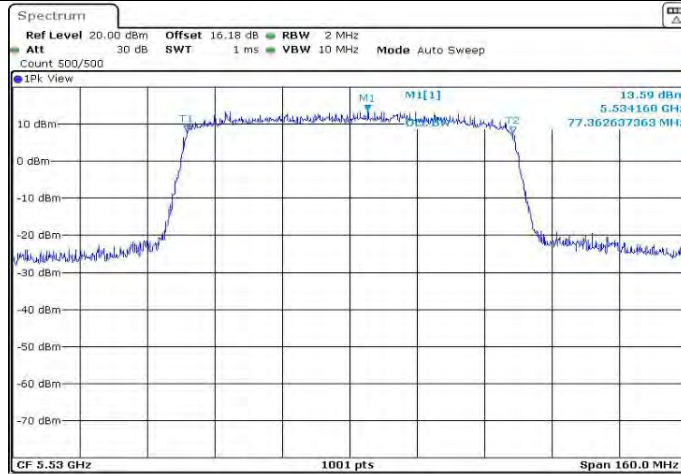


11AX80MIMO_Ant1_5290



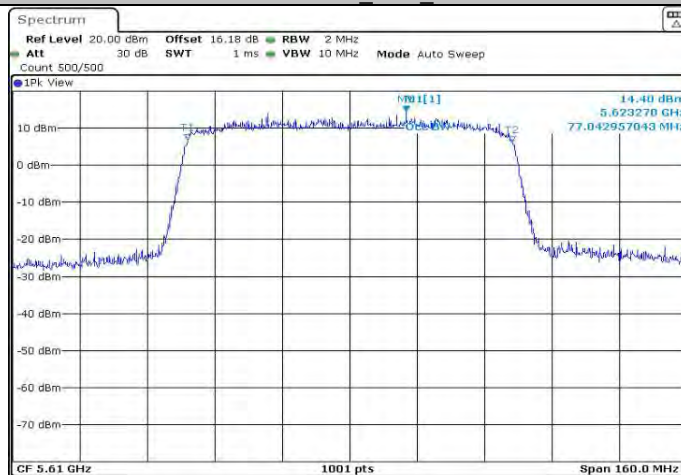
Date: 11.MAY.2021 18:45:18

11AX80MIMO_Ant1_5530



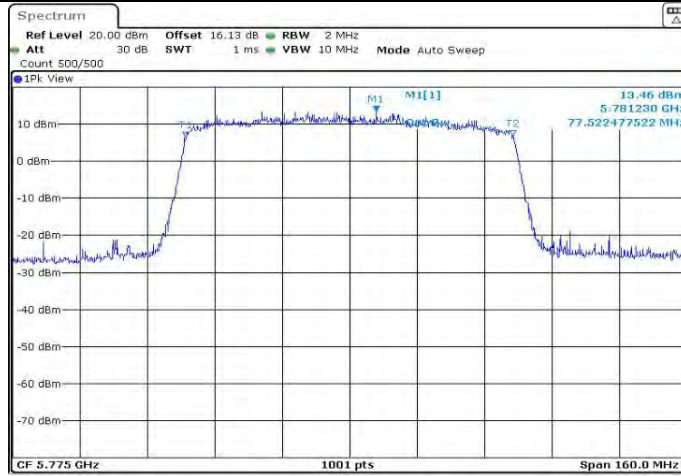
Date: 11.MAY.2021 18:39:51

11AX80MIMO_Ant1_5610



Date: 11.MAY.2021 18:42:33

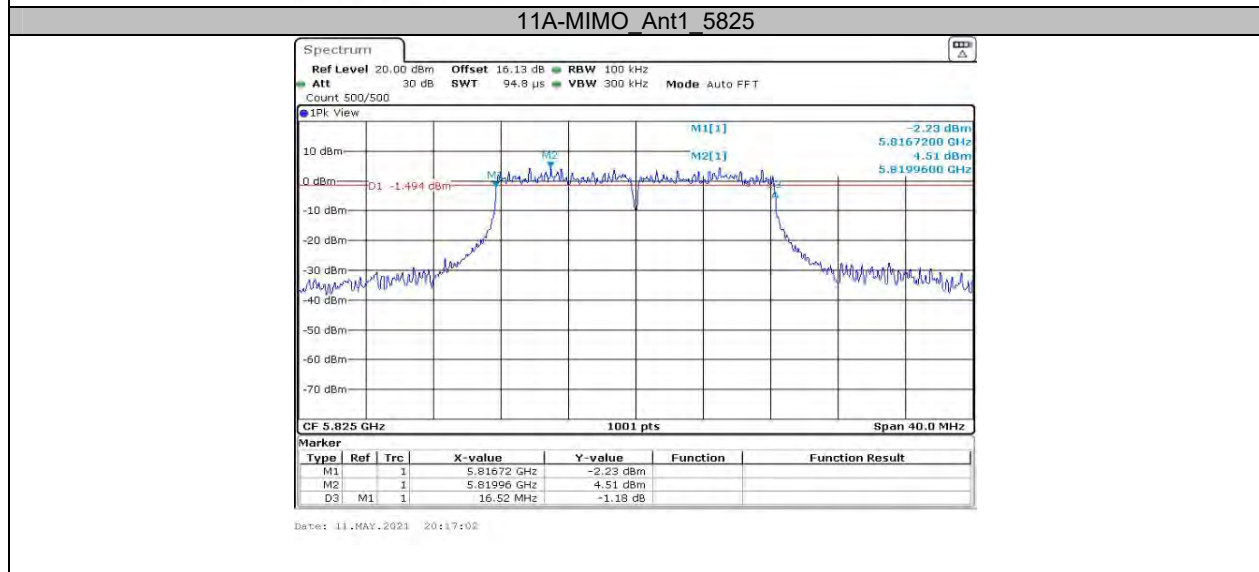
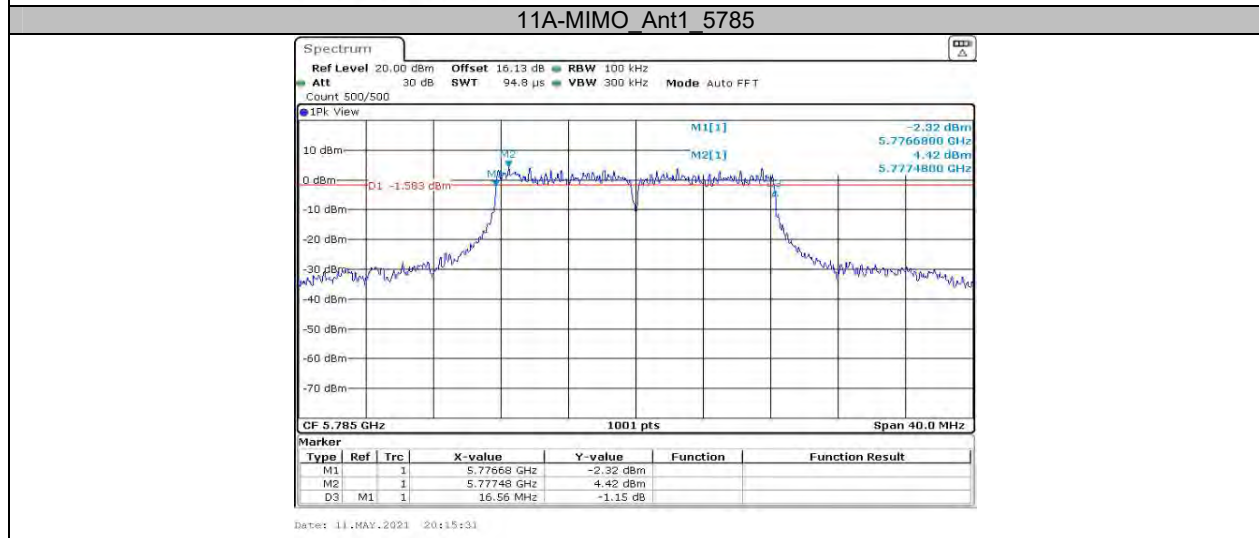
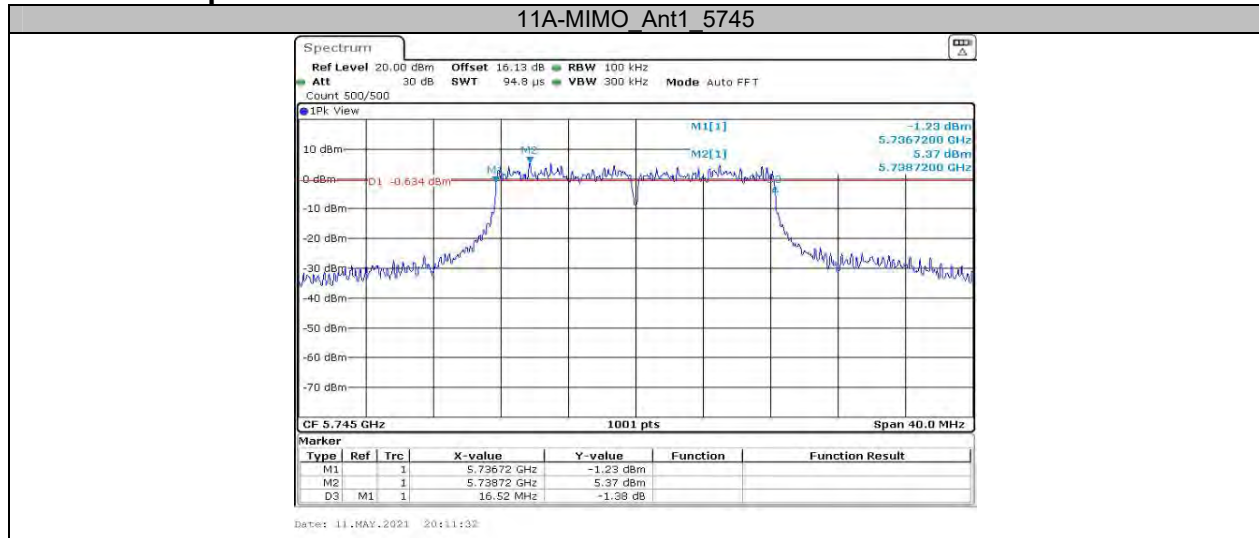
11AX80MIMO_Ant1_5775

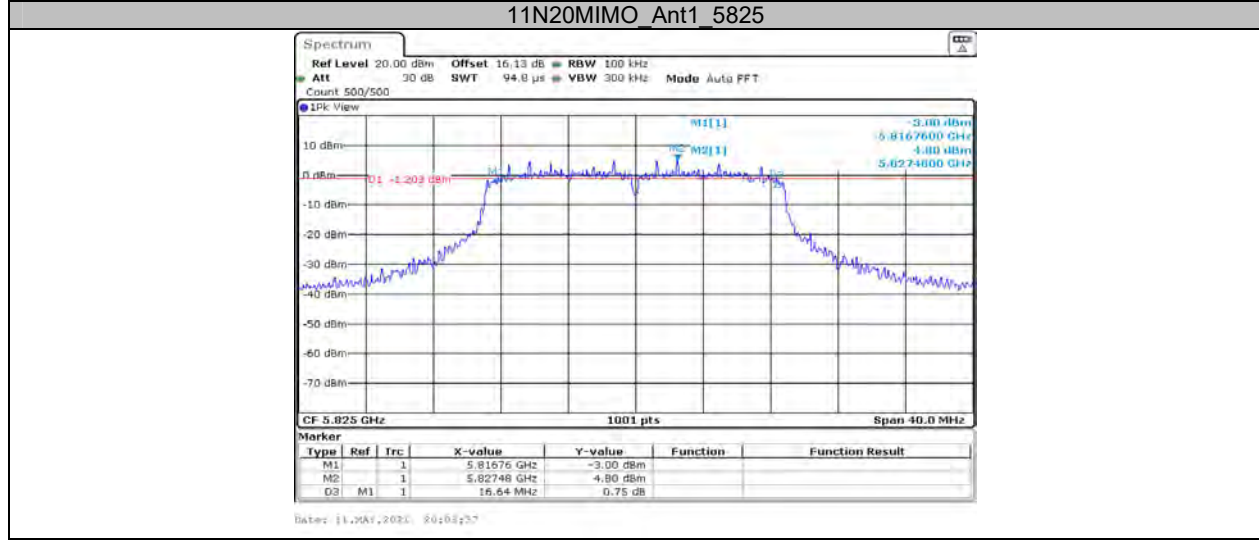


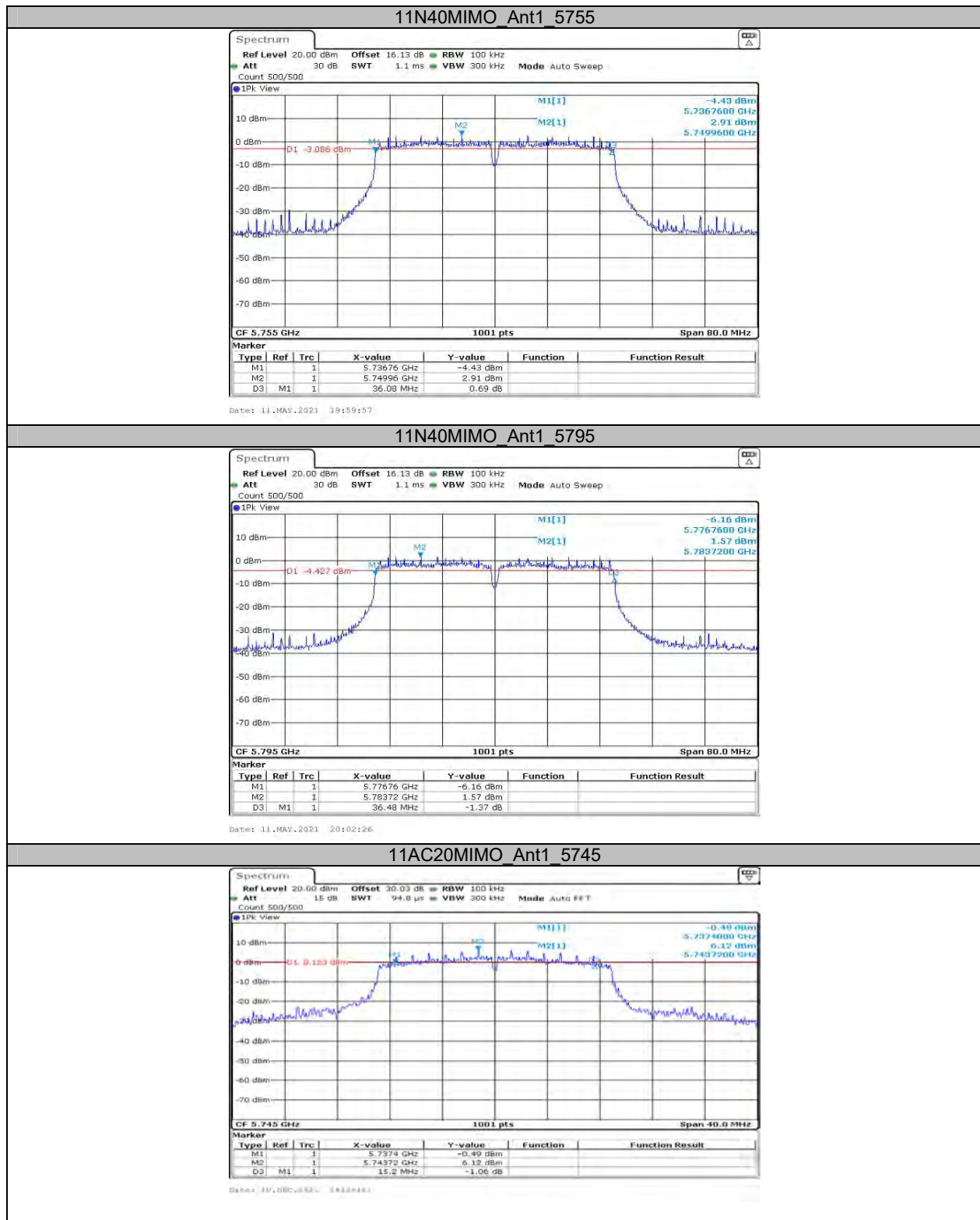
Appendix A3: Min emission bandwidth Test Result

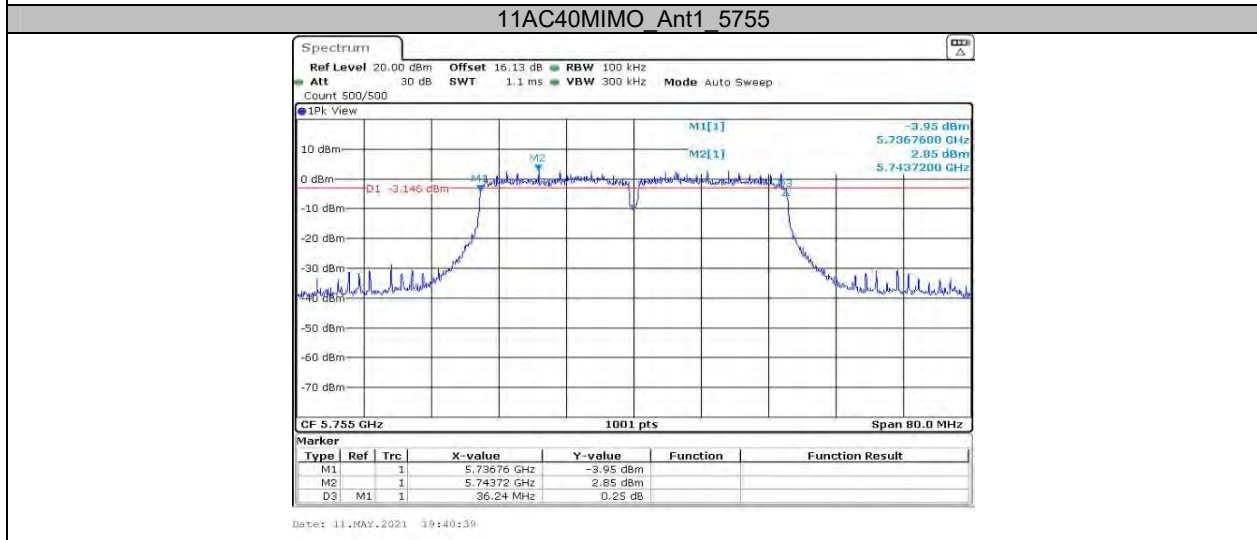
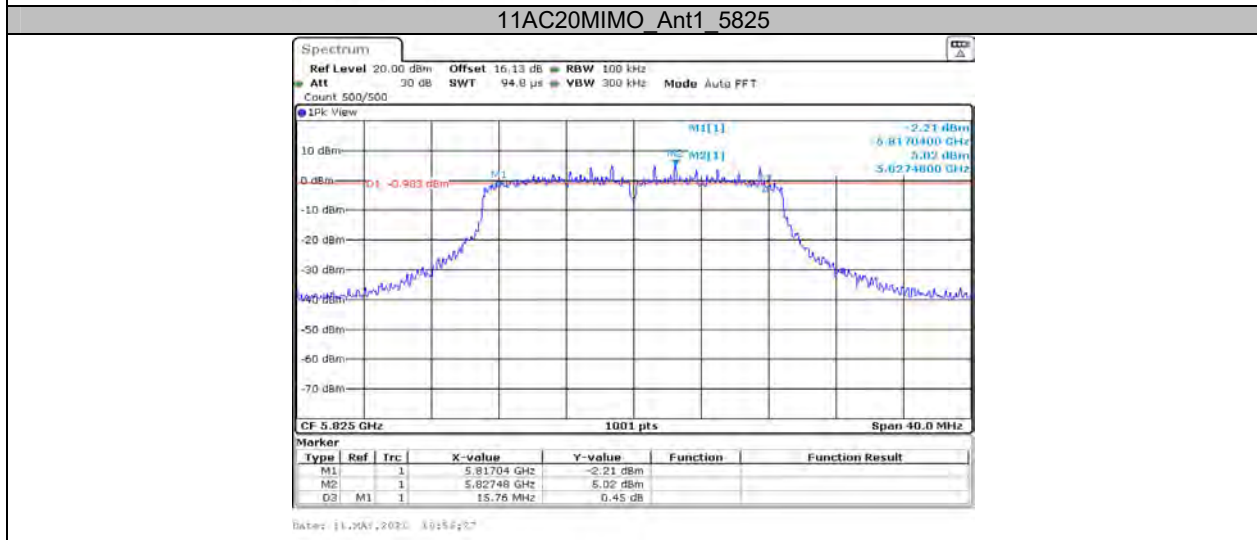
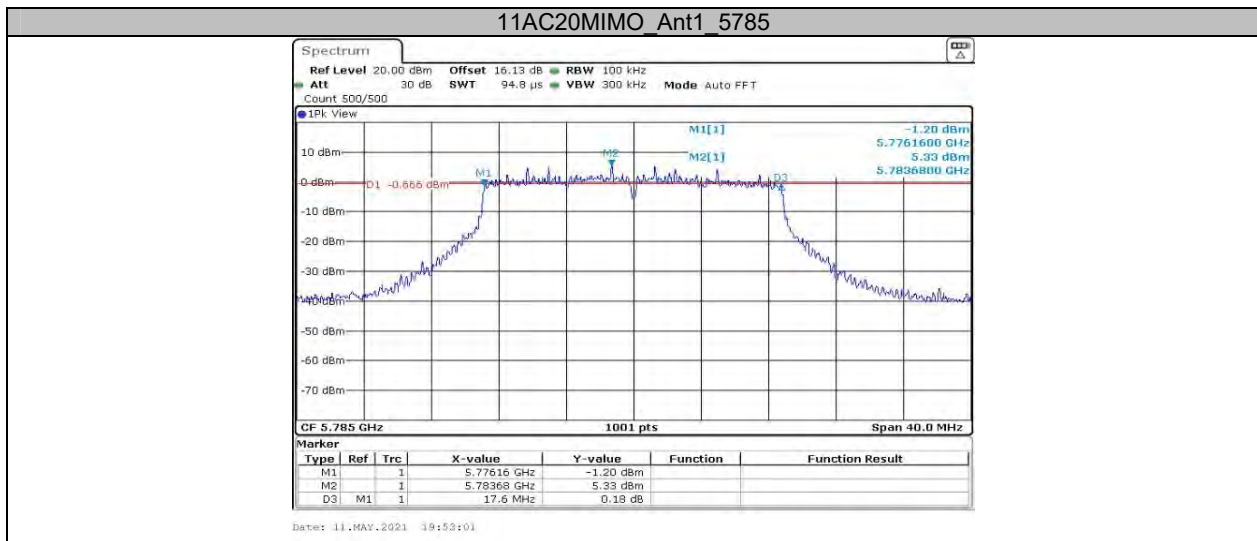
TestMode	Antenna	Channel	6db EBW [MHz]	Limit[MHz]	Verdict
11A-MIMO	Ant1	5745	16.520	0.5	PASS
	Ant1	5785	16.560	0.5	PASS
	Ant1	5825	16.520	0.5	PASS
11N20MIMO	Ant1	5745	17.240	0.5	PASS
	Ant1	5785	17.240	0.5	PASS
	Ant1	5825	16.640	0.5	PASS
11N40MIMO	Ant1	5755	36.080	0.5	PASS
	Ant1	5795	36.480	0.5	PASS
11AC20MIMO	Ant1	5745	15.200	0.5	PASS
	Ant1	5785	17.600	0.5	PASS
	Ant1	5825	15.760	0.5	PASS
11AC40MIMO	Ant1	5755	36.240	0.5	PASS
	Ant1	5795	36.240	0.5	PASS
11AC80MIMO	Ant1	5775	71.360	0.5	PASS
11AX20MIMO	Ant1	5745	18.800	0.5	PASS
	Ant1	5785	16.880	0.5	PASS
	Ant1	5825	18.440	0.5	PASS
11AX40MIMO	Ant1	5755	38.240	0.5	PASS
	Ant1	5795	38.080	0.5	PASS
11AX80MIMO	Ant1	5775	76.800	0.5	PASS

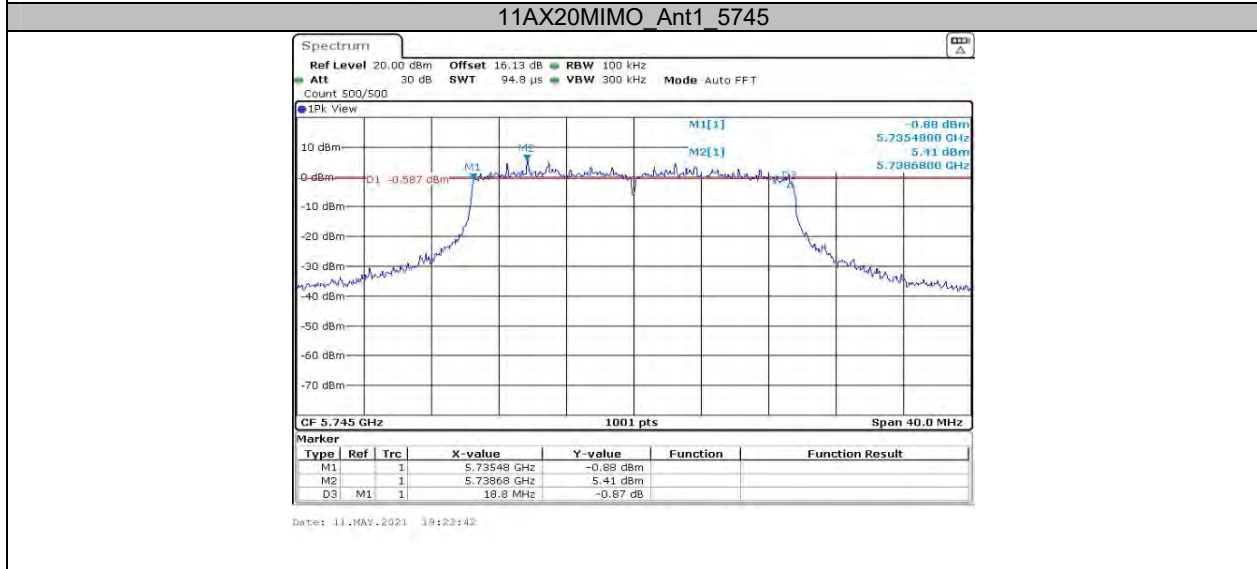
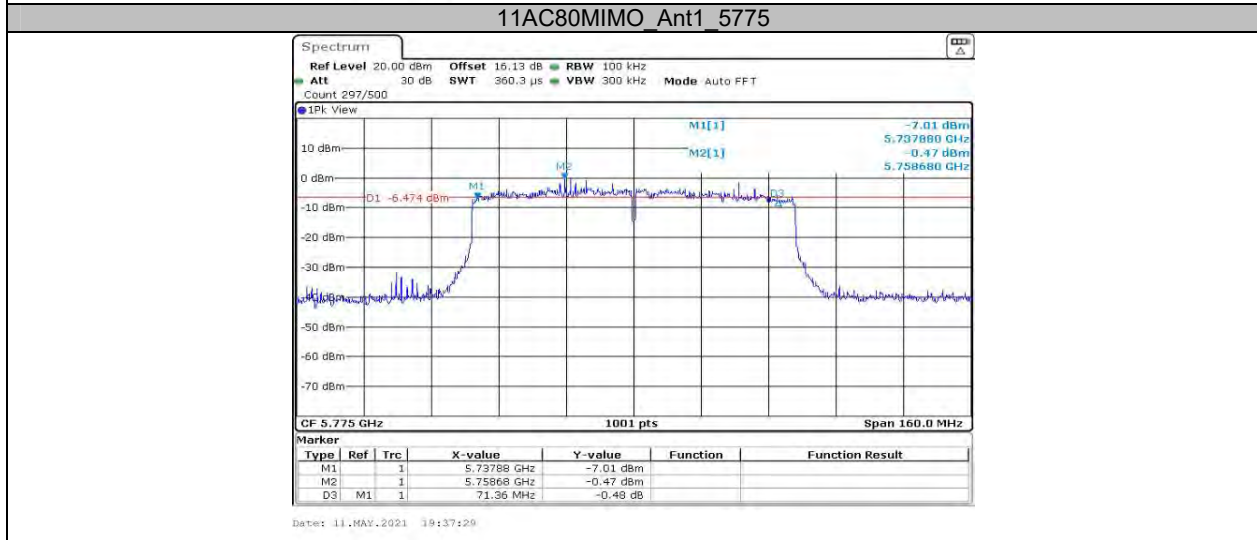
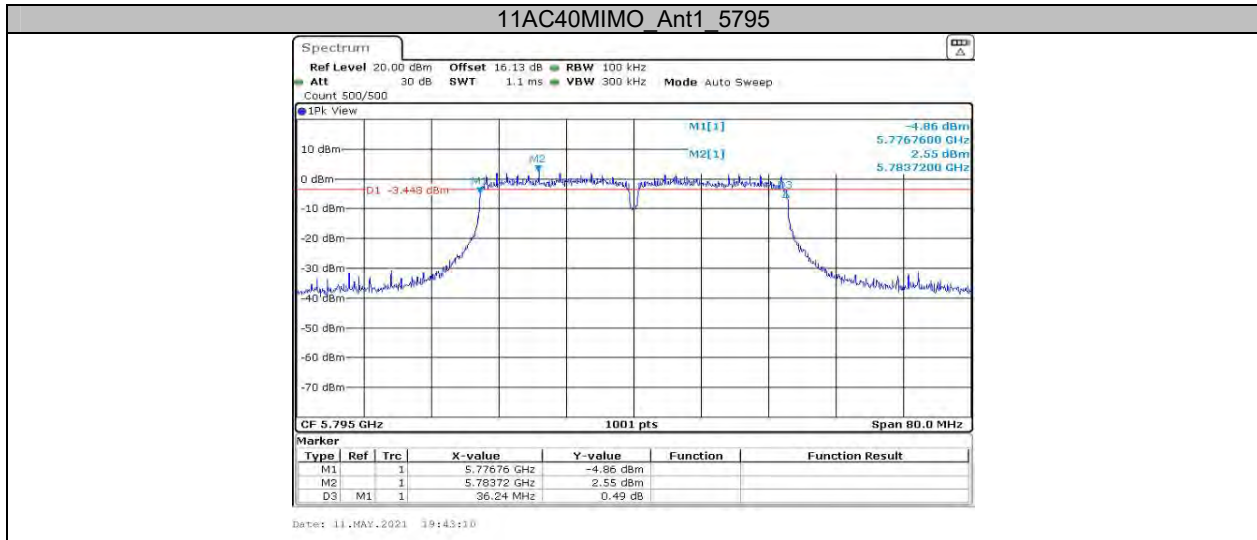
Test Graphs

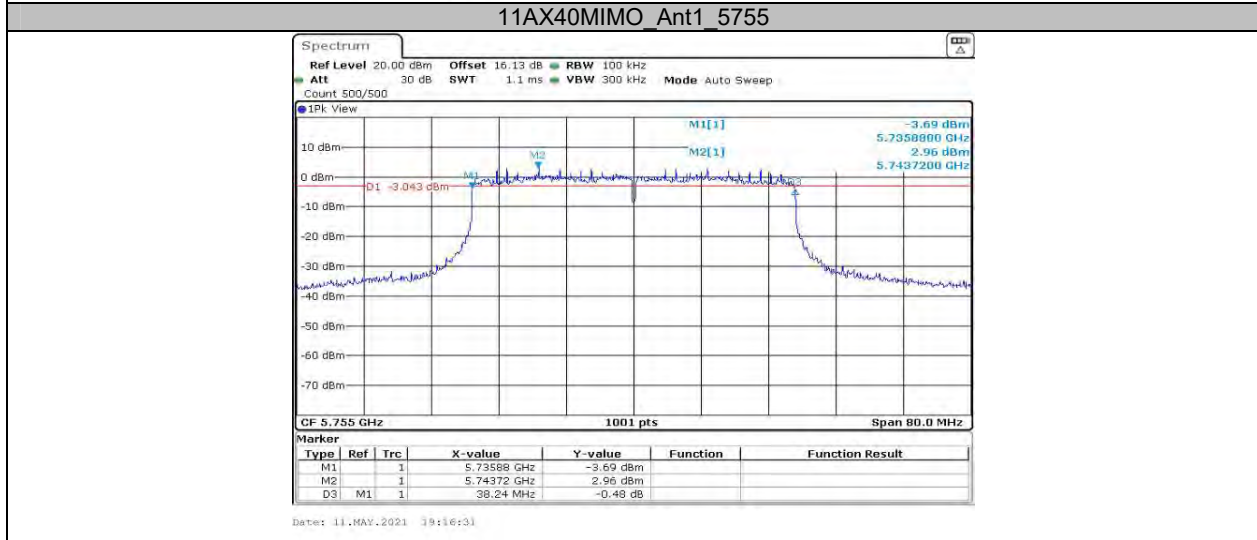
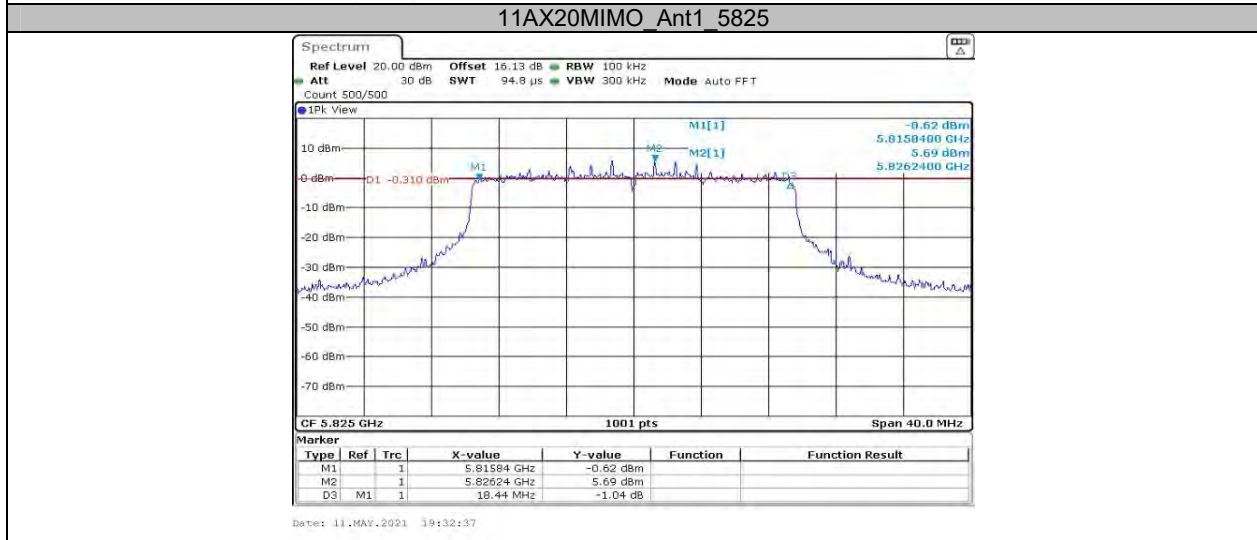
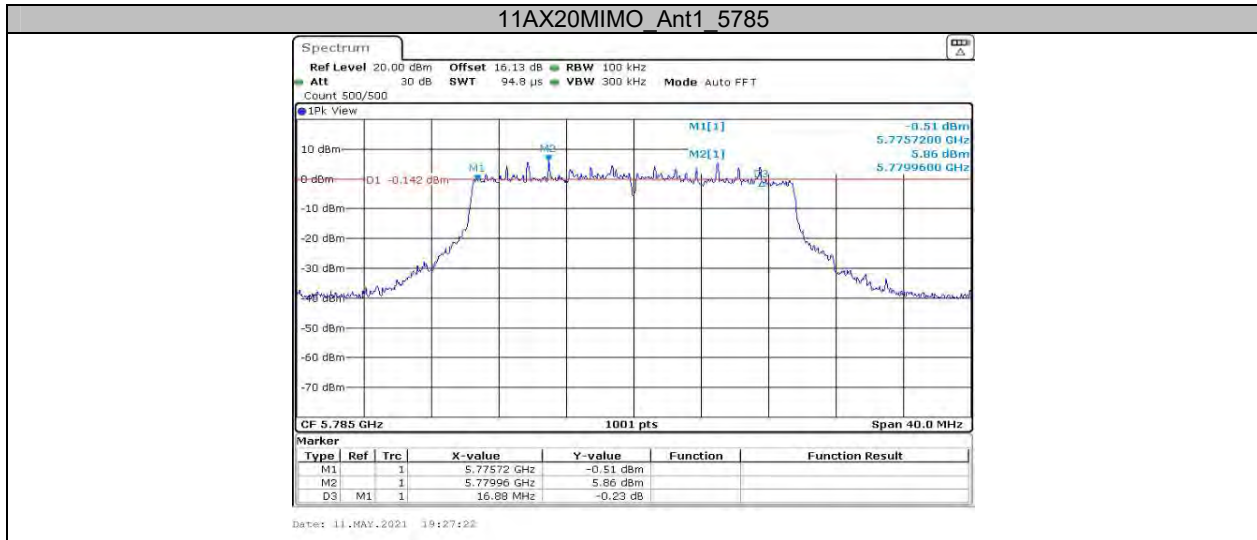


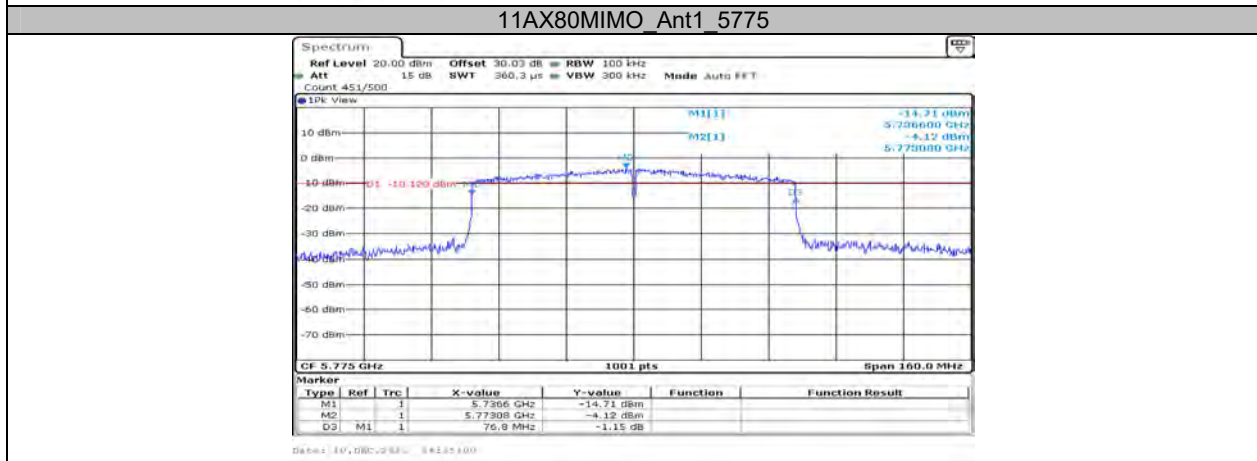
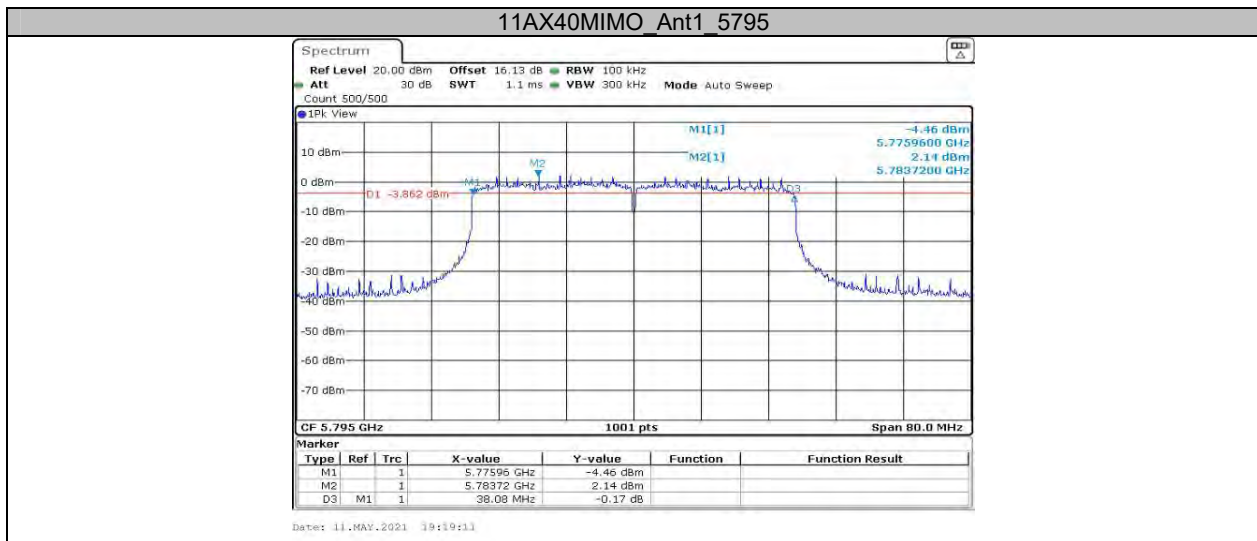












Appendix B: Maximum conducted output power and EIRP**Test Result**

TestMode	Antenna	Channel	Result [dBm]	Limit [dBm]	Elevation angle above 30° Max Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11A-MIMO	Ant1	5180	16.99	<=29.5	-2.2	17.79	<=21	PASS
	Ant2	5180	17.01	<=29.5	-2.2	17.81	<=21	PASS
	total	5180	20	<=29.5	-2.2	20.8	<=21	PASS
	Ant1	5200	16.49	<=29.5	-2.2	17.29	<=21	PASS
	Ant2	5200	16.61	<=29.5	-2.2	17.41	<=21	PASS
	total	5200	19.6	<=29.5	-2.2	20.4	<=21	PASS
	Ant1	5240	17.11	<=29.5	-2.2	17.91	<=21	PASS
	Ant2	5240	17.22	<=29.5	-2.2	18.02	<=21	PASS
	total	5240	20.2	<=29.5	-2.2	21	<=21	PASS
11N20MIMO	Ant1	5180	16.94	<=29.5	-2.2	17.74	<=21	PASS
	Ant2	5180	17.28	<=29.5	-2.2	18.08	<=21	PASS
	total	5180	20.1	<=29.5	-2.2	20.9	<=21	PASS
	Ant1	5200	16.56	<=29.5	-2.2	17.36	<=21	PASS
	Ant2	5200	16.56	<=29.5	-2.2	17.36	<=21	PASS
	total	5200	19.6	<=29.5	-2.2	20.4	<=21	PASS
	Ant1	5240	16.67	<=29.5	-2.2	17.47	<=21	PASS
	Ant2	5240	16.57	<=29.5	-2.2	17.37	<=21	PASS
	total	5240	19.6	<=29.5	-2.2	20.4	<=21	PASS
11N40MIMO	Ant1	5190	15.96	<=29.5	-2.2	16.76	<=21	PASS
	Ant2	5190	15.99	<=29.5	-2.2	16.79	<=21	PASS
	total	5190	19.0	<=29.5	-2.2	19.8	<=21	PASS
	Ant1	5230	15.90	<=29.5	-2.2	16.7	<=21	PASS
	Ant2	5230	15.93	<=29.5	-2.2	16.73	<=21	PASS
	total	5230	18.9	<=29.5	-2.2	19.7	<=21	PASS
11AC20MIMO	Ant1	5180	16.45	<=29.5	-2.2	17.25	<=21	PASS
	Ant2	5180	16.95	<=29.5	-2.2	17.75	<=21	PASS
	total	5180	19.7	<=29.5	-2.2	20.5	<=21	PASS
	Ant1	5200	16.58	<=29.5	-2.2	17.38	<=21	PASS
	Ant2	5200	16.14	<=29.5	-2.2	16.94	<=21	PASS
	total	5200	19.4	<=29.5	-2.2	20.2	<=21	PASS
	Ant1	5240	16.7	<=29.5	-2.2	17.5	<=21	PASS
	Ant2	5240	16.75	<=29.5	-2.2	17.55	<=21	PASS
	total	5240	19.7	<=29.5	-2.2	20.5	<=21	PASS
11AC40MIMO	Ant1	5190	17.16	<=29.5	-2.2	17.96	<=21	PASS
	Ant2	5190	16.80	<=29.5	-2.2	17.6	<=21	PASS
	total	5190	20.0	<=29.5	-2.2	20.8	<=21	PASS
	Ant1	5230	15.92	<=29.5	-2.2	16.72	<=21	PASS
	Ant2	5230	15.84	<=29.5	-2.2	16.64	<=21	PASS
	total	5230	18.9	<=29.5	-2.2	19.7	<=21	PASS
11AC80MIMO	Ant1	5210	16.35	<=29.5	-2.2	17.15	<=21	PASS
	Ant2	5210	16.57	<=29.5	-2.2	17.37	<=21	PASS
	total	5210	19.5	<=29.5	-2.2	20.3	<=21	PASS
11AX20MIMO	Ant1	5180	16.76	<=29.5	-2.2	17.56	<=21	PASS
	Ant2	5180	16.72	<=29.5	-2.2	17.52	<=21	PASS
	total	5180	19.8	<=29.5	-2.2	20.6	<=21	PASS
	Ant1	5200	15.97	<=29.5	-2.2	16.77	<=21	PASS
	Ant2	5200	17.45	<=29.5	-2.2	18.25	<=21	PASS
	total	5200	19.8	<=29.5	-2.2	20.6	<=21	PASS

	Ant1	5240	16.26	<=29.5	-2.2	17.06	<=21	PASS
	Ant2	5240	17.85	<=29.5	-2.2	18.65	<=21	PASS
	total	5240	20.1	<=29.5	-2.2	20.9	<=21	PASS
11AX40MIMO	Ant1	5190	16.92	<=29.5	-2.2	17.72	<=21	PASS
	Ant2	5190	17.01	<=29.5	-2.2	17.81	<=21	PASS
	total	5190	20	<=29.5	-2.2	20.8	<=21	PASS
	Ant1	5230	16.91	<=29.5	-2.2	17.71	<=21	PASS
	Ant2	5230	16.77	<=29.5	-2.2	17.57	<=21	PASS
	total	5230	19.9	<=29.5	-2.2	20.7	<=21	PASS
11AX80MIMO	Ant1	5210	16.29	<=29.5	-2.2	17.09	<=21	PASS
	Ant2	5210	16.56	<=29.5	-2.2	17.36	<=21	PASS
	total	5210	19.4	<=29.5	-2.2	20.2	<=21	PASS

Note: The maximum antenna gain is 3.5dBi. EUT is an outdoor AP and support beamforming, the worst case for the limit as below:

Directional gain = $G_{ANT} + \text{Array Gain}$

Array Gain = $10 * \log(N_{ant}/N_{ss})$ dB

For the worst case, $N_{ss}=1$, so:

For conducted power limit:

Directional gain = $3.5\text{dBi} + 10 * \log(2/1)\text{dB} = 6.5\text{dBi} > 6\text{dBi}$, so the limit should reduce 0.5dB.

For Elevation angle above 30° of EIRP limit:

Directional gain = $-2.2\text{dBi} + 10 * \log(2/1)\text{dB} = 0.8\text{dBi} < 6\text{dBi}$.

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A-MIMO	Ant1	5260	12.57	<=23.5	PASS
	Ant2	5260	11.48	<=23.5	PASS
	total	5260	15.1	<=23.5	PASS
	Ant1	5280	12.56	<=23.42	PASS
	Ant2	5280	11.81	<=23.42	PASS
	total	5280	15.2	<=23.42	PASS
	Ant1	5320	12.58	<=23.5	PASS
	Ant2	5320	11.23	<=23.5	PASS
	total	5320	15.0	<=23.5	PASS
	Ant1	5500	11.87	<=23.5	PASS
	Ant2	5500	11.27	<=23.5	PASS
	total	5500	14.6	<=23.5	PASS
	Ant1	5580	11.91	<=23.5	PASS
	Ant2	5580	11.30	<=23.5	PASS
	total	5580	14.6	<=23.5	PASS
	Ant1	5700	12.12	<=23.48	PASS
	Ant2	5700	11.53	<=23.48	PASS
	total	5700	14.8	<=23.48	PASS
	Ant1	5745	14.72	<=29.5	PASS
	Ant2	5745	14.81	<=29.5	PASS
	total	5745	17.8	<=29.5	PASS
Ant1	5785	13.85	<=29.5	PASS	
Ant2	5785	14.49	<=29.5	PASS	
total	5785	17.2	<=29.5	PASS	
Ant1	5825	13.70	<=29.5	PASS	
Ant2	5825	14.67	<=29.5	PASS	
total	5825	17.2	<=29.5	PASS	
11N20MIMO	Ant1	5260	12.89	<=23.5	PASS
	Ant2	5260	12.15	<=23.5	PASS
	total	5260	15.5	<=23.5	PASS
	Ant1	5280	12.06	<=23.5	PASS
	Ant2	5280	11.16	<=23.5	PASS
	total	5280	14.6	<=23.5	PASS
	Ant1	5320	11.99	<=23.5	PASS
	Ant2	5320	11.15	<=23.5	PASS
	total	5320	14.6	<=23.5	PASS
	Ant1	5500	12.44	<=23.5	PASS
	Ant2	5500	11.87	<=23.5	PASS
	total	5500	15.2	<=23.5	PASS
	Ant1	5580	11.52	<=23.5	PASS
	Ant2	5580	10.64	<=23.5	PASS
	total	5580	14.1	<=23.5	PASS
	Ant1	5700	12.88	<=23.5	PASS
	Ant2	5700	11.98	<=23.5	PASS
	total	5700	15.5	<=23.5	PASS
	Ant1	5745	16.41	<=29.5	PASS
	Ant2	5745	16.19	<=29.5	PASS
	total	5745	19.3	<=29.5	PASS
Ant1	5785	15.41	<=29.5	PASS	
Ant2	5785	15.74	<=29.5	PASS	
total	5785	18.6	<=29.5	PASS	
Ant1	5825	15.26	<=29.5	PASS	
Ant2	5825	16.01	<=29.5	PASS	
total	5825	18.7	<=29.5	PASS	

11N40MIMO	Ant1	5270	15.71	<=23.5	PASS
	Ant2	5270	15.22	<=23.5	PASS
	total	5270	18.5	<=23.5	PASS
	Ant1	5310	15.64	<=23.5	PASS
	Ant2	5310	15.21	<=23.5	PASS
	total	5310	18.4	<=23.5	PASS
	Ant1	5510	15.28	<=23.5	PASS
	Ant2	5510	14.79	<=23.5	PASS
	total	5510	18.1	<=23.5	PASS
	Ant1	5550	15.37	<=23.5	PASS
	Ant2	5550	14.64	<=23.5	PASS
	total	5550	18.0	<=23.5	PASS
	Ant1	5670	15.13	<=23.5	PASS
	Ant2	5670	14.49	<=23.5	PASS
	total	5670	17.8	<=23.5	PASS
	Ant1	5755	16.99	<=29.5	PASS
	Ant2	5755	17.17	<=29.5	PASS
	total	5755	20.1	<=29.5	PASS
Ant1	5795	16.09	<=29.5	PASS	
Ant2	5795	16.92	<=29.5	PASS	
total	5795	19.5	<=29.5	PASS	
11AC20MIMO	Ant1	5260	12.10	<=23.5	PASS
	Ant2	5260	11.22	<=23.5	PASS
	total	5260	14.7	<=23.5	PASS
	Ant1	5280	12.26	<=23.5	PASS
	Ant2	5280	11.79	<=23.5	PASS
	total	5280	15.0	<=23.5	PASS
	Ant1	5320	12.27	<=23.5	PASS
	Ant2	5320	11.77	<=23.5	PASS
	total	5320	15.0	<=23.5	PASS
	Ant1	5500	11.07	<=23.5	PASS
	Ant2	5500	10.44	<=23.5	PASS
	total	5500	13.8	<=23.5	PASS
	Ant1	5580	11.79	<=23.5	PASS
	Ant2	5580	10.90	<=23.5	PASS
	total	5580	14.4	<=23.5	PASS
	Ant1	5700	11.84	<=23.5	PASS
	Ant2	5700	11.37	<=23.5	PASS
	total	5700	14.6	<=23.5	PASS
	Ant1	5745	16.90	<=29.5	PASS
	Ant2	5745	16.38	<=29.5	PASS
	total	5745	19.7	<=29.5	PASS
	Ant1	5785	16.03	<=29.5	PASS
	Ant2	5785	15.60	<=29.5	PASS
	total	5785	18.8	<=29.5	PASS
Ant1	5825	15.14	<=29.5	PASS	
Ant2	5825	16.07	<=29.5	PASS	
total	5825	18.6	<=29.5	PASS	
11AC40MIMO	Ant1	5270	15.98	<=23.5	PASS
	Ant2	5270	15.26	<=23.5	PASS
	total	5270	18.6	<=23.5	PASS
	Ant1	5310	16.15	<=23.5	PASS
	Ant2	5310	15.57	<=23.5	PASS
	total	5310	18.9	<=23.5	PASS
	Ant1	5510	15.44	<=23.5	PASS
	Ant2	5510	14.91	<=23.5	PASS
	total	5510	18.2	<=23.5	PASS
Ant1	5550	12.84	<=23.5	PASS	

	Ant2	5550	11.52	<=23.5	PASS
	total	5550	15.2	<=23.5	PASS
	Ant1	5670	15.18	<=23.5	PASS
	Ant2	5670	14.66	<=23.5	PASS
	total	5670	17.9	<=23.5	PASS
	Ant1	5755	17.52	<=29.5	PASS
	Ant2	5755	17.37	<=29.5	PASS
	total	5755	20.5	<=29.5	PASS
	Ant1	5795	17.10	<=29.5	PASS
	Ant2	5795	16.89	<=29.5	PASS
total	5795	20.0	<=29.5	PASS	
11AC80MIMO	Ant1	5290	17.50	<=23.5	PASS
	Ant2	5290	17.13	<=23.5	PASS
	total	5290	20.3	<=23.5	PASS
	Ant1	5530	16.74	<=23.5	PASS
	Ant2	5530	16.17	<=23.5	PASS
	total	5530	19.5	<=23.5	PASS
	Ant1	5610	16.13	<=23.5	PASS
	Ant2	5610	16.10	<=23.5	PASS
	total	5610	19.1	<=23.5	PASS
	Ant1	5775	16.45	<=29.5	PASS
Ant2	5775	16.44	<=29.5	PASS	
total	5775	19.5	<=29.5	PASS	
11AX20MIMO	Ant1	5260	10.21	<=23.5	PASS
	Ant2	5260	10.00	<=23.5	PASS
	total	5260	13.1	<=23.5	PASS
	Ant1	5280	10.59	<=23.5	PASS
	Ant2	5280	10.51	<=23.5	PASS
	total	5280	13.6	<=23.5	PASS
	Ant1	5320	10.80	<=23.5	PASS
	Ant2	5320	10.56	<=23.5	PASS
	total	5320	13.7	<=23.5	PASS
	Ant1	5500	9.87	<=23.5	PASS
	Ant2	5500	9.26	<=23.5	PASS
	total	5500	12.6	<=23.5	PASS
	Ant1	5580	10.42	<=23.5	PASS
	Ant2	5580	9.52	<=23.5	PASS
	total	5580	13.0	<=23.5	PASS
	Ant1	5700	10.43	<=23.5	PASS
	Ant2	5700	10.27	<=23.5	PASS
	total	5700	13.4	<=23.5	PASS
	Ant1	5745	17.51	<=29.5	PASS
	Ant2	5745	16.31	<=29.5	PASS
	total	5745	20.0	<=29.5	PASS
	Ant1	5785	15.82	<=29.5	PASS
	Ant2	5785	15.62	<=29.5	PASS
	total	5785	18.7	<=29.5	PASS
Ant1	5825	15.79	<=29.5	PASS	
Ant2	5825	15.71	<=29.5	PASS	
total	5825	18.8	<=29.5	PASS	
11AX40MIMO	Ant1	5270	13.30	<=23.5	PASS
	Ant2	5270	12.77	<=23.5	PASS
	total	5270	16.1	<=23.5	PASS
	Ant1	5310	13.47	<=23.5	PASS
	Ant2	5310	13.30	<=23.5	PASS
	total	5310	16.4	<=23.5	PASS
	Ant1	5510	12.54	<=23.5	PASS
	Ant2	5510	12.17	<=23.5	PASS

	total	5510	15.4	<=23.5	PASS
	Ant1	5550	13.80	<=23.5	PASS
	Ant2	5550	13.16	<=23.5	PASS
	total	5550	16.5	<=23.5	PASS
	Ant1	5670	12.61	<=23.5	PASS
	Ant2	5670	12.32	<=23.5	PASS
	total	5670	15.5	<=23.5	PASS
	Ant1	5755	17.10	<=29.5	PASS
	Ant2	5755	16.71	<=29.5	PASS
	total	5755	19.9	<=29.5	PASS
	Ant1	5795	16.13	<=29.5	PASS
	Ant2	5795	16.28	<=29.5	PASS
	total	5795	19.2	<=29.5	PASS
	11AX80MIMO	Ant1	5290	17.35	<=23.5
Ant2		5290	16.96	<=23.5	PASS
total		5290	20.2	<=23.5	PASS
Ant1		5530	16.60	<=23.5	PASS
Ant2		5530	15.94	<=23.5	PASS
total		5530	19.3	<=23.5	PASS
Ant1		5610	16.48	<=23.5	PASS
Ant2		5610	15.73	<=23.5	PASS
total		5610	19.1	<=23.5	PASS
Ant1		5775	16.41	<=29.5	PASS
Ant2		5775	16.36	<=29.5	PASS
total		5775	19.4	<=29.5	PASS

Note: The maximum antenna gain is 3.5dBi. EUT is an outdoor AP and support beamforming, the worst case for the limit as below:

Directional gain = $G_{ANT} + \text{Array Gain}$

Array Gain = $10 * \log(N_{ant}/N_{ss})$ dB

For the worst case, $N_{ss}=1$, so:

Directional gain = $3.5\text{dBi} + 10 * \log(2/1)\text{dB} = 6.5\text{dBi} > 6\text{dBi}$, so the limit should reduce 0.5dB.

AppendixC: Maximum power spectral density Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A-MIMO	Ant1	5180	11.84	<=16.5	PASS
	Ant2	5180	12.11	<=16.5	PASS
	total	5180	14.99	<=16.5	PASS
	Ant1	5200	13.17	<=16.5	PASS
	Ant2	5200	14.24	<=16.5	PASS
	total	5200	16.75	<=16.5	PASS
	Ant1	5240	12.35	<=16.5	PASS
	Ant2	5240	14.28	<=16.5	PASS
	total	5240	16.43	<=16.5	PASS
	Ant1	5260	7.14	<=10.5	PASS
	Ant2	5260	7.16	<=10.5	PASS
	total	5260	10.16	<=10.5	PASS
	Ant1	5280	6.73	<=10.5	PASS
	Ant2	5280	6.65	<=10.5	PASS
	total	5280	9.70	<=10.5	PASS
	Ant1	5320	7.13	<=10.5	PASS
	Ant2	5320	7.53	<=10.5	PASS
	total	5320	10.34	<=10.5	PASS
	Ant1	5500	6.85	<=10.5	PASS
	Ant2	5500	6.37	<=10.5	PASS
	total	5500	9.63	<=10.5	PASS
	Ant1	5580	6.63	<=10.5	PASS
	Ant2	5580	6.55	<=10.5	PASS
	total	5580	9.60	<=10.5	PASS
	Ant1	5700	6.49	<=10.5	PASS
	Ant2	5700	6.57	<=10.5	PASS
	total	5700	9.54	<=10.5	PASS
	Ant1	5745	11.07	<=29.5	PASS
	Ant2	5745	12.35	<=29.5	PASS
	total	5745	14.77	<=29.5	PASS
	Ant1	5785	9.83	<=29.5	PASS
	Ant2	5785	8.69	<=29.5	PASS
	total	5785	12.31	<=29.5	PASS
Ant1	5825	9.22	<=29.5	PASS	
Ant2	5825	9.11	<=29.5	PASS	
total	5825	12.18	<=29.5	PASS	
11N20MIMO	Ant1	5180	12.84	<=16.5	PASS
	Ant2	5180	14.04	<=16.5	PASS
	total	5180	16.49	<=16.5	PASS
	Ant1	5200	11.81	<=16.5	PASS
	Ant2	5200	12.74	<=16.5	PASS
	total	5200	15.31	<=16.5	PASS
	Ant1	5240	11.69	<=16.5	PASS
	Ant2	5240	12.56	<=16.5	PASS
	total	5240	15.16	<=16.5	PASS
	Ant1	5260	7.64	<=10.5	PASS
	Ant2	5260	7.13	<=10.5	PASS
	total	5260	10.40	<=10.5	PASS
	Ant1	5280	6.83	<=10.5	PASS
	Ant2	5280	6.21	<=10.5	PASS
	total	5280	9.54	<=10.5	PASS
	Ant1	5320	6.62	<=10.5	PASS
	Ant2	5320	5.75	<=10.5	PASS

	total	5320	9.22	<=10.5	PASS
	Ant1	5500	7.6	<=10.5	PASS
	Ant2	5500	6.71	<=10.5	PASS
	total	5500	10.19	<=10.5	PASS
	Ant1	5580	6.45	<=10.5	PASS
	Ant2	5580	5.19	<=10.5	PASS
	total	5580	8.88	<=10.5	PASS
	Ant1	5700	7.25	<=10.5	PASS
	Ant2	5700	6.69	<=10.5	PASS
	total	5700	9.99	<=10.5	PASS
	Ant1	5745	9.22	<=29.5	PASS
	Ant2	5745	8.7	<=29.5	PASS
	total	5745	11.98	<=29.5	PASS
	Ant1	5785	9.38	<=29.5	PASS
	Ant2	5785	8.57	<=29.5	PASS
	total	5785	12.00	<=29.5	PASS
	Ant1	5825	8.76	<=29.5	PASS
	Ant2	5825	8.62	<=29.5	PASS
total	5825	11.70	<=29.5	PASS	
11N40MIMO	Ant1	5190	7.55	<=16.5	PASS
	Ant2	5190	7.09	<=16.5	PASS
	total	5190	10.34	<=16.5	PASS
	Ant1	5230	6.67	<=16.5	PASS
	Ant2	5230	7.66	<=16.5	PASS
	total	5230	10.20	<=16.5	PASS
	Ant1	5270	7.34	<=10.5	PASS
	Ant2	5270	6.18	<=10.5	PASS
	total	5270	9.81	<=10.5	PASS
	Ant1	5310	7.16	<=10.5	PASS
	Ant2	5310	7.21	<=10.5	PASS
	total	5310	10.20	<=10.5	PASS
	Ant1	5510	7.12	<=10.5	PASS
	Ant2	5510	6.02	<=10.5	PASS
	total	5510	9.62	<=10.5	PASS
	Ant1	5550	6.85	<=10.5	PASS
	Ant2	5550	5.43	<=10.5	PASS
	total	5550	9.21	<=10.5	PASS
	Ant1	5670	7.32	<=10.5	PASS
	Ant2	5670	6.4	<=10.5	PASS
	total	5670	9.89	<=10.5	PASS
	Ant1	5755	7.00	<=29.5	PASS
	Ant2	5755	6.14	<=29.5	PASS
	total	5755	9.60	<=29.5	PASS
Ant1	5795	5.98	<=29.5	PASS	
Ant2	5795	5.30	<=29.5	PASS	
total	5795	8.66	<=29.5	PASS	
11AC20MIMO	Ant1	5180	12.59	<=16.5	PASS
	Ant2	5180	13.70	<=16.5	PASS
	total	5180	16.19	<=16.5	PASS
	Ant1	5200	12.63	<=16.5	PASS
	Ant2	5200	13.17	<=16.5	PASS
	total	5200	15.92	<=16.5	PASS
	Ant1	5240	12.25	<=16.5	PASS
	Ant2	5240	13.75	<=16.5	PASS
	total	5240	16.07	<=16.5	PASS
	Ant1	5260	6.74	<=10.5	PASS
	Ant2	5260	6.13	<=10.5	PASS
	total	5260	9.46	<=10.5	PASS

	Ant1	5280	6.68	<=10.5	PASS
	Ant2	5280	6.26	<=10.5	PASS
	total	5280	9.49	<=10.5	PASS
	Ant1	5320	7.12	<=10.5	PASS
	Ant2	5320	5.62	<=10.5	PASS
	total	5320	9.44	<=10.5	PASS
	Ant1	5500	6.71	<=10.5	PASS
	Ant2	5500	5.78	<=10.5	PASS
	total	5500	9.28	<=10.5	PASS
	Ant1	5580	6.77	<=10.5	PASS
	Ant2	5580	5.62	<=10.5	PASS
	total	5580	9.24	<=10.5	PASS
	Ant1	5700	7.02	<=10.5	PASS
	Ant2	5700	6.06	<=10.5	PASS
	total	5700	9.58	<=10.5	PASS
	Ant1	5745	9.58	<=29.5	PASS
	Ant2	5745	8.37	<=29.5	PASS
	total	5745	12.03	<=29.5	PASS
	Ant1	5785	9.65	<=29.5	PASS
	Ant2	5785	8.97	<=29.5	PASS
	total	5785	12.33	<=29.5	PASS
	Ant1	5825	8.08	<=29.5	PASS
	Ant2	5825	8.48	<=29.5	PASS
	total	5825	11.29	<=29.5	PASS
	Ant1	5190	10.04	<=16.5	PASS
	Ant2	5190	11.08	<=16.5	PASS
	total	5190	13.60	<=16.5	PASS
	Ant1	5230	7.18	<=16.5	PASS
	Ant2	5230	7.42	<=16.5	PASS
	total	5230	10.31	<=16.5	PASS
	Ant1	5270	7.79	<=10.5	PASS
	Ant2	5270	6.05	<=10.5	PASS
	total	5270	10.02	<=10.5	PASS
	Ant1	5310	7.63	<=10.5	PASS
	Ant2	5310	7.08	<=10.5	PASS
	total	5310	10.37	<=10.5	PASS
	Ant1	5510	6.92	<=10.5	PASS
	Ant2	5510	5.76	<=10.5	PASS
	total	5510	9.39	<=10.5	PASS
	Ant1	5550	7.24	<=10.5	PASS
	Ant2	5550	7.27	<=10.5	PASS
	total	5550	10.27	<=10.5	PASS
	Ant1	5670	7.48	<=10.5	PASS
	Ant2	5670	5.97	<=10.5	PASS
	total	5670	9.80	<=10.5	PASS
	Ant1	5755	7.41	<=29.5	PASS
	Ant2	5755	5.68	<=29.5	PASS
	total	5755	9.64	<=29.5	PASS
	Ant1	5795	6.6	<=29.5	PASS
	Ant2	5795	5.94	<=29.5	PASS
	total	5795	9.29	<=29.5	PASS
	Ant1	5210	6.9	<=16.5	PASS
	Ant2	5210	7.99	<=16.5	PASS
	total	5210	10.49	<=16.5	PASS
	Ant1	5290	6.18	<=10.5	PASS
	Ant2	5290	5.42	<=10.5	PASS
	total	5290	8.83	<=10.5	PASS
	Ant1	5530	5.59	<=10.5	PASS

	Ant2	5530	4.74	<=10.5	PASS
	total	5530	8.20	<=10.5	PASS
	Ant1	5610	4.28	<=10.5	PASS
	Ant2	5610	3.97	<=10.5	PASS
	total	5610	7.14	<=10.5	PASS
	Ant1	5775	5.35	<=29.5	PASS
	Ant2	5775	5.45	<=29.5	PASS
	total	5775	8.41	<=29.5	PASS
11AX20MIMO	Ant1	5180	12.94	<=16.5	PASS
	Ant2	5180	13.68	<=16.5	PASS
	total	5180	16.34	<=16.5	PASS
	Ant1	5200	12.82	<=16.5	PASS
	Ant2	5200	12.91	<=16.5	PASS
	total	5200	15.88	<=16.5	PASS
	Ant1	5240	12.48	<=16.5	PASS
	Ant2	5240	13.22	<=16.5	PASS
	total	5240	15.88	<=16.5	PASS
	Ant1	5260	7.74	<=10.5	PASS
	Ant2	5260	6.25	<=10.5	PASS
	total	5260	10.07	<=10.5	PASS
	Ant1	5280	7.69	<=10.5	PASS
	Ant2	5280	6.43	<=10.5	PASS
	total	5280	10.12	<=10.5	PASS
	Ant1	5320	7.08	<=10.5	PASS
	Ant2	5320	6.03	<=10.5	PASS
	total	5320	9.60	<=10.5	PASS
	Ant1	5500	7.99	<=10.5	PASS
	Ant2	5500	6.51	<=10.5	PASS
	total	5500	10.32	<=10.5	PASS
	Ant1	5580	7.8	<=10.5	PASS
	Ant2	5580	5.89	<=10.5	PASS
	total	5580	9.96	<=10.5	PASS
	Ant1	5700	6.92	<=10.5	PASS
	Ant2	5700	5.78	<=10.5	PASS
	total	5700	9.40	<=10.5	PASS
	Ant1	5745	11.58	<=29.5	PASS
	Ant2	5745	12.73	<=29.5	PASS
	total	5745	15.20	<=29.5	PASS
	Ant1	5785	10.6	<=29.5	PASS
	Ant2	5785	9.59	<=29.5	PASS
	total	5785	13.13	<=29.5	PASS
Ant1	5825	11.19	<=29.5	PASS	
Ant2	5825	10.4	<=29.5	PASS	
total	5825	13.82	<=29.5	PASS	
11AX40MIMO	Ant1	5190	12.1	<=16.5	PASS
	Ant2	5190	12.85	<=16.5	PASS
	total	5190	15.50	<=16.5	PASS
	Ant1	5230	12.24	<=16.5	PASS
	Ant2	5230	13.33	<=16.5	PASS
	total	5230	15.83	<=16.5	PASS
	Ant1	5270	7.63	<=10.5	PASS
	Ant2	5270	5.83	<=10.5	PASS
	total	5270	9.83	<=10.5	PASS
	Ant1	5310	6.16	<=10.5	PASS
	Ant2	5310	6.55	<=10.5	PASS
	total	5310	9.37	<=10.5	PASS
	Ant1	5510	5.84	<=10.5	PASS
	Ant2	5510	3.95	<=10.5	PASS

	total	5510	8.01	<=10.5	PASS
	Ant1	5550	7.66	<=10.5	PASS
	Ant2	5550	6.85	<=10.5	PASS
	total	5550	10.28	<=10.5	PASS
	Ant1	5670	6.17	<=10.5	PASS
	Ant2	5670	5.01	<=10.5	PASS
	total	5670	8.64	<=10.5	PASS
	Ant1	5755	8.57	<=30	PASS
	Ant2	5755	6.86	<=30	PASS
	total	5755	10.81	<=30	PASS
	Ant1	5795	8.3	<=30	PASS
	Ant2	5795	6.79	<=30	PASS
	total	5795	10.62	<=30	PASS
11AX80MIMO	Ant1	5210	8.59	<=16.5	PASS
	Ant2	5210	9.64	<=16.5	PASS
	total	5210	12.16	<=16.5	PASS
	Ant1	5290	7.88	<=10.5	PASS
	Ant2	5290	6.46	<=10.5	PASS
	total	5290	10.24	<=10.5	PASS
	Ant1	5530	6.9	<=10.5	PASS
	Ant2	5530	6.09	<=10.5	PASS
	total	5530	9.52	<=10.5	PASS
	Ant1	5610	6.67	<=10.5	PASS
	Ant2	5610	6.01	<=10.5	PASS
	total	5610	9.36	<=10.5	PASS
	Ant1	5775	5.39	<=29.5	PASS
	Ant2	5775	3.08	<=29.5	PASS
	total	5775	7.40	<=29.5	PASS

Note 1: 1.TheResult and LimitUnit is dBm/500 kHz in the band 5.725–5.85 GHz.

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

Note 2: EUT is an outdoor AP and support beamforming

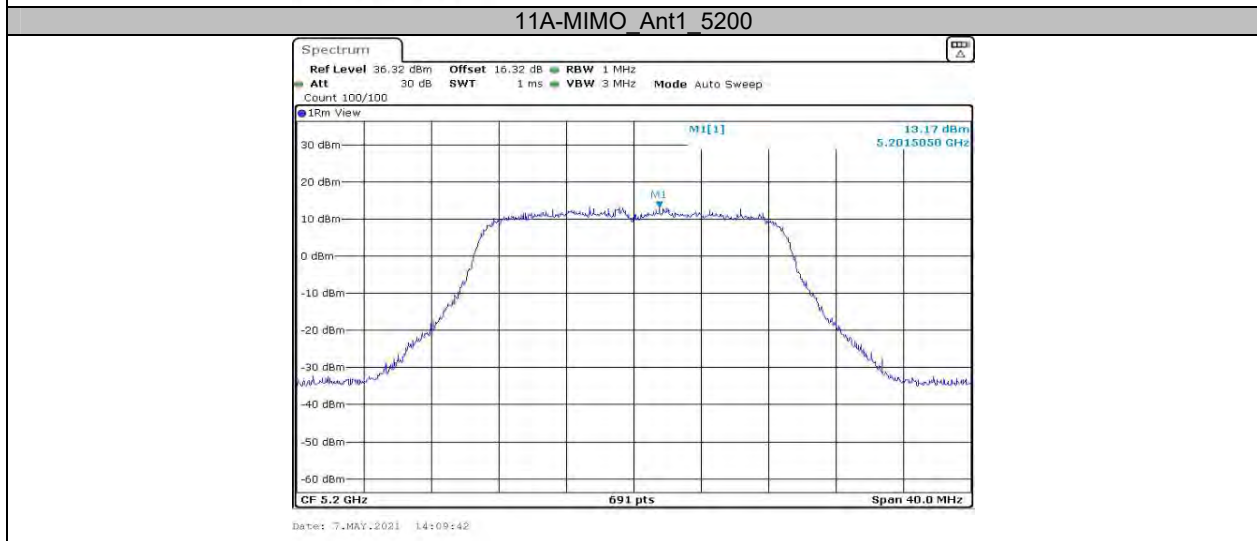
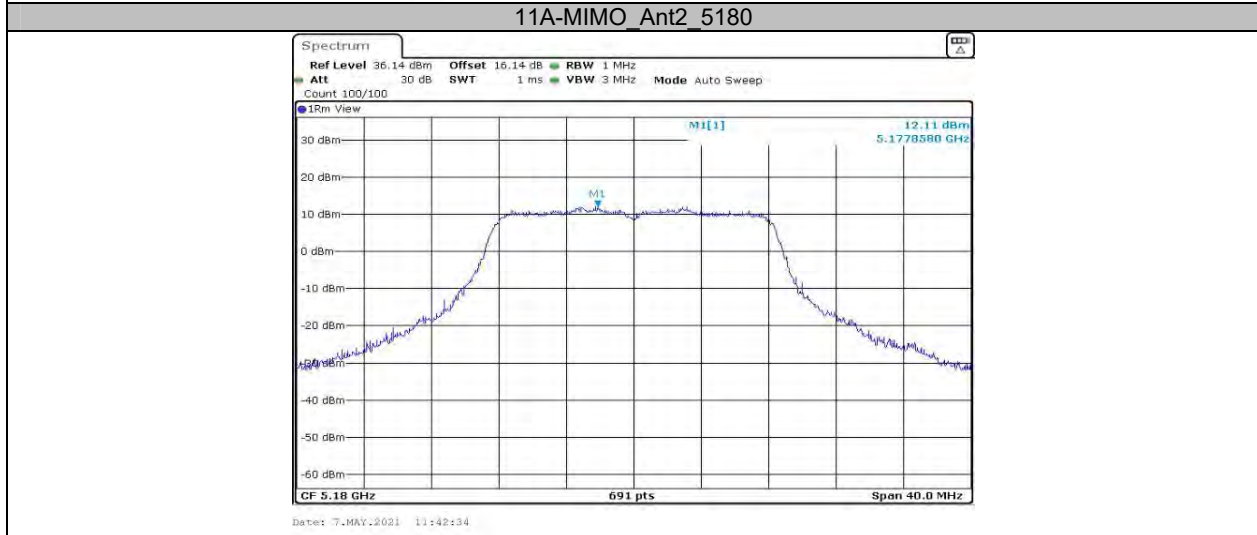
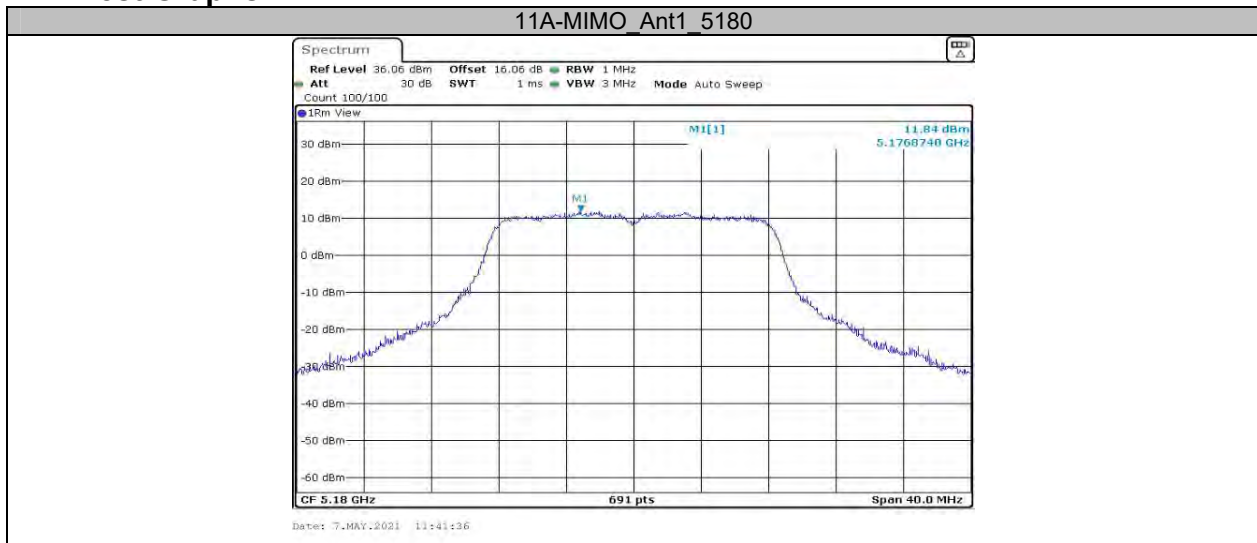
Directional gain = $G_{ANT} + \text{Array Gain}$

Array Gain= $10 \cdot \log(N_{ant}/N_{ss})$ dB

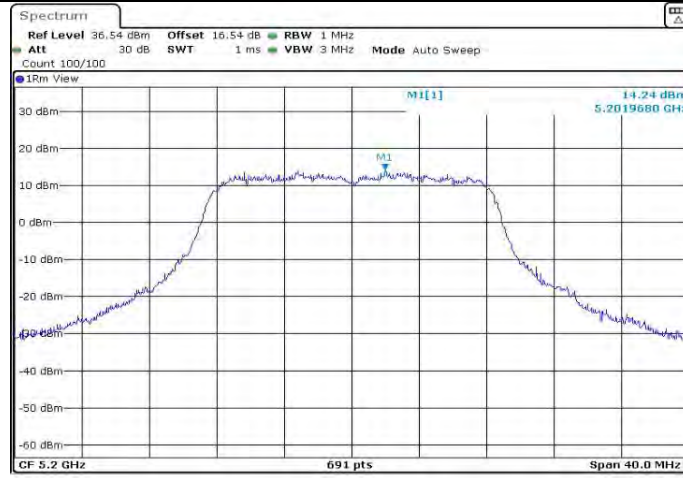
For the worst case, $N_{ss}=1$, so:

Directional gain= $3.5\text{dBi} + 10 \cdot \log(2/1)\text{dB} = 6.5\text{dBi} > 6\text{dBi}$, so the limit should reduce 0.5dB.

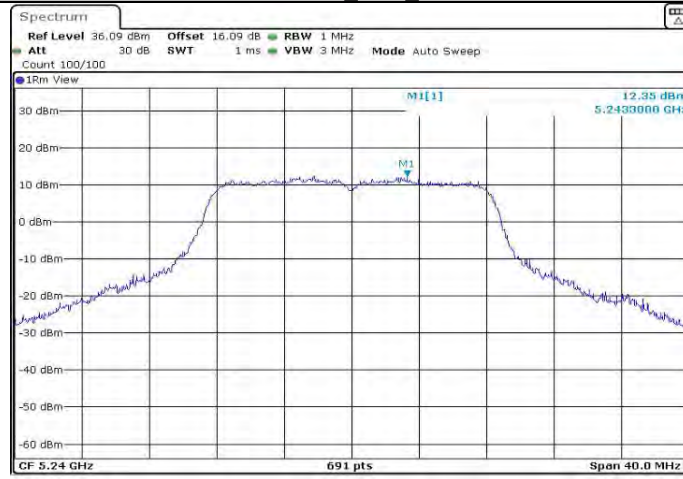
Test Graphs



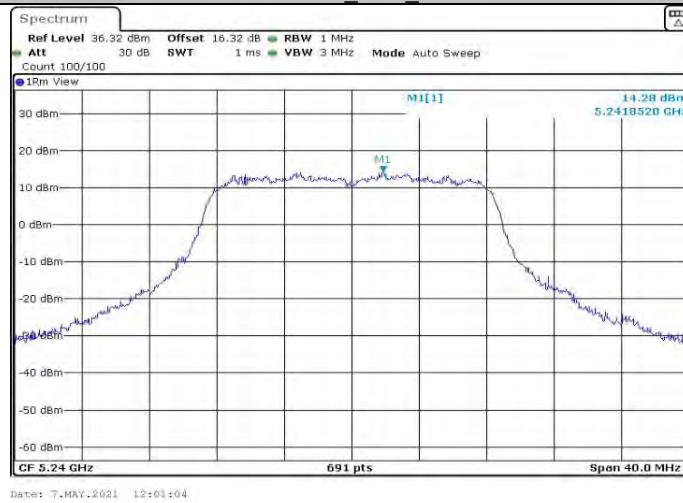
11A-MIMO_Ant2_5200



11A-MIMO_Ant1_5240



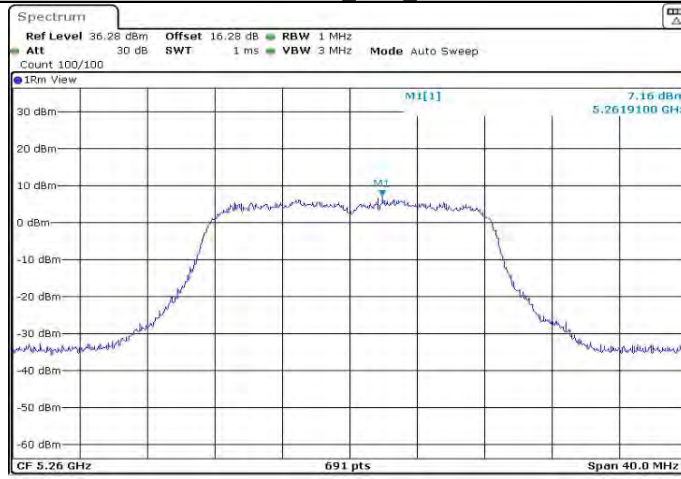
11A-MIMO_Ant2_5240



11A-MIMO_Ant1_5260



11A-MIMO_Ant2_5260



11A-MIMO_Ant1_5280



11A-MIMO_Ant2_5280



11A-MIMO_Ant1_5320



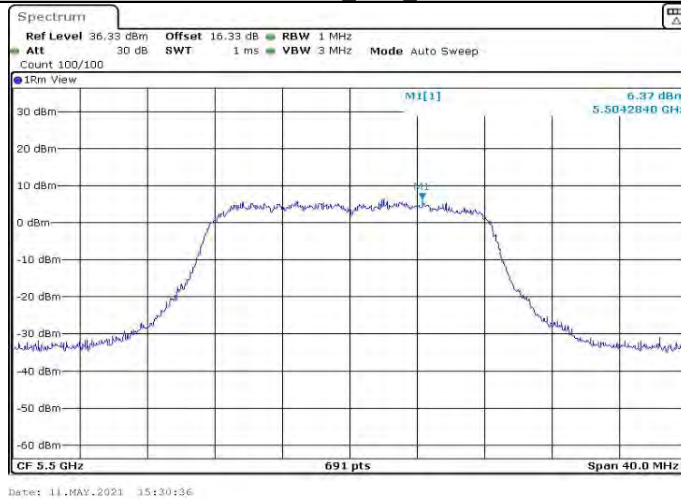
11A-MIMO_Ant2_5320



11A-MIMO_Ant1_5500



11A-MIMO_Ant2_5500



11A-MIMO_Ant1_5580



11A-MIMO_Ant2_5580



11A-MIMO_Ant1_5700



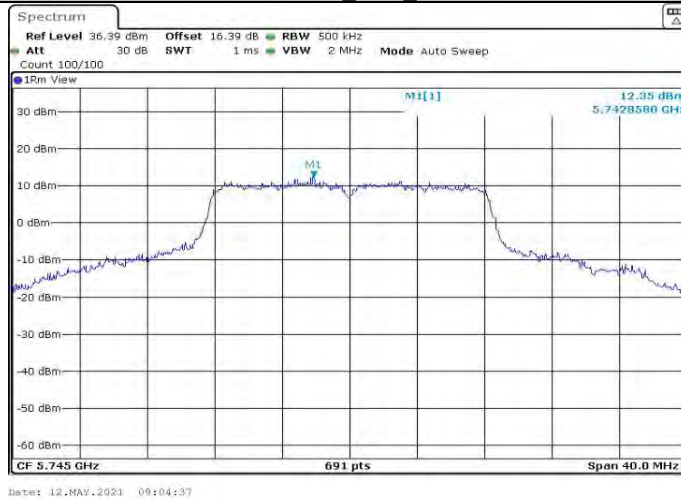
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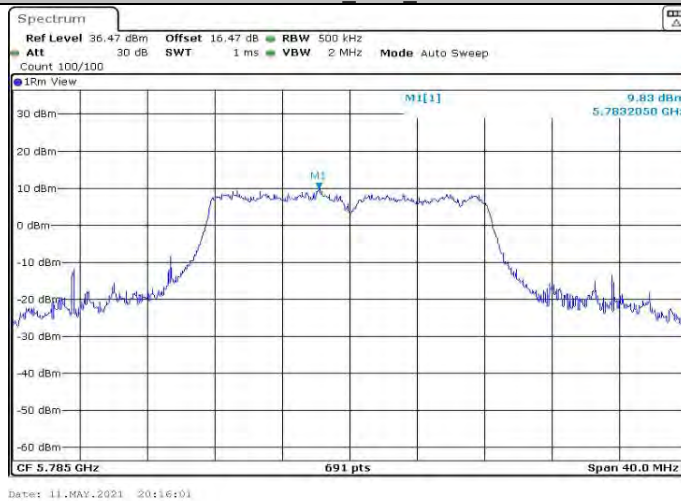
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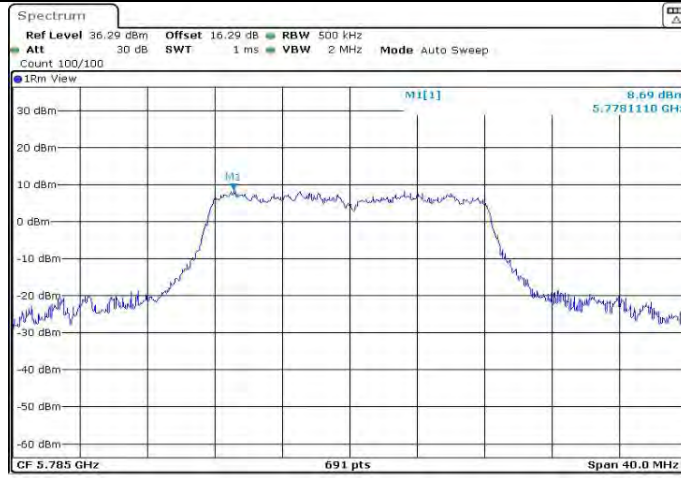
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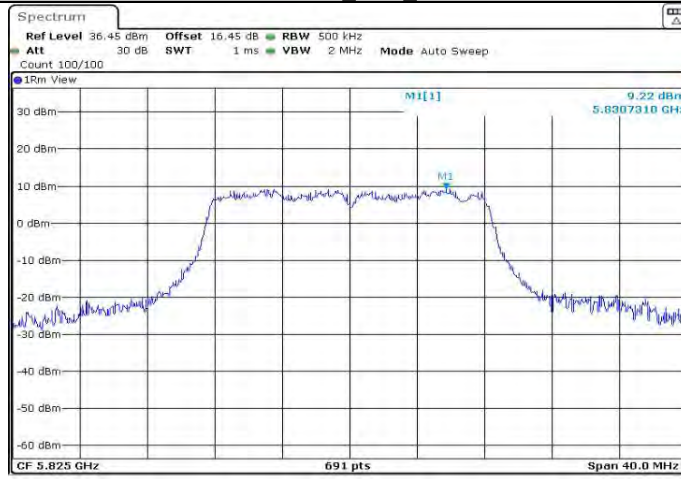
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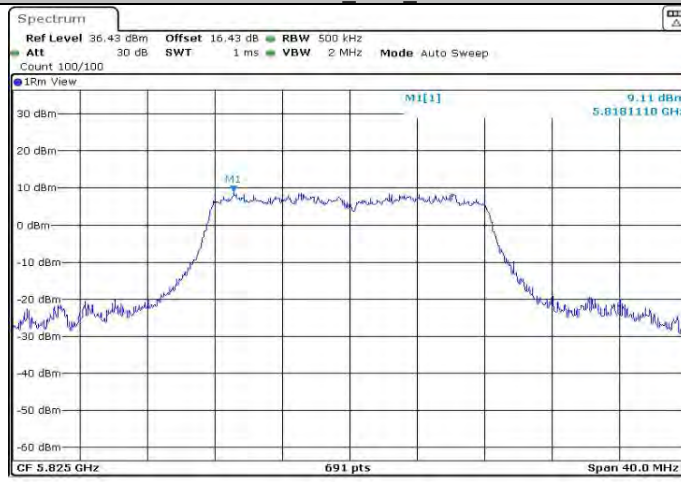
11A-MIMO_Ant2_5785



11A-MIMO_Ant1_5825



11A-MIMO_Ant2_5825



11N20MIMO_Ant1_5180



11N20MIMO_Ant2_5180



11N20MIMO_Ant1_5200



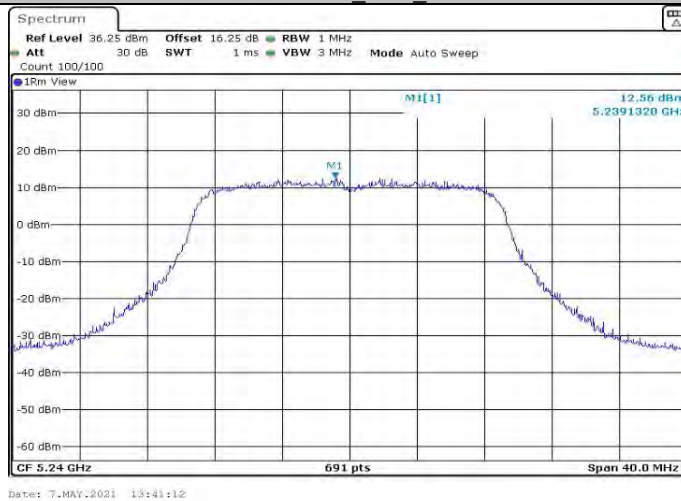
11N20MIMO_Ant2_5200



11N20MIMO_Ant1_5240



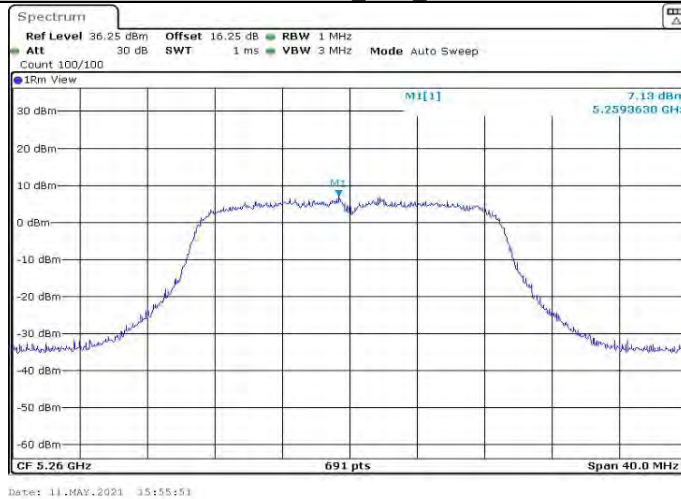
11N20MIMO_Ant2_5240



11N20MIMO_Ant1_5260



11N20MIMO_Ant2_5260



11N20MIMO_Ant1_5280

