5GAppendix Report

Project No.:	CISR250322191
Test Engineer:	James Wang
Supervised by:	Rory Huang

1) Frequency Stability

Test Result

Condition	Mode	Ch.	Antenna	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	State
NT/NV	IEEE 802.11a	36	0	5180.0	5180.000058	0.01	Within authorized band	PASS
		52		5260.0	5259.999975	-0.0		PASS
		100		5500.0	5500.000008	0.0		PASS
	IEEE 802.11n_20	36		5180.0	5180.000058	0.01		PASS
		52		5260.0	5260.000008	0.0		PASS
		100		5500.0	5500.000008	0.0		PASS
	IEEE 802.11n_40	38		5190.0	5189.999975	-0.0		PASS
		54		5270.0	5269.999975	-0.0		PASS
		110		5550.0	5549.999942	-0.01		PASS
	IEEE 802.11ac_20	36		5180.0	5180.000042	0.01		PASS
		52		5260.0	5260.000008	0.0		PASS
		100		5500.0	5500.000058	0.01		PASS
	IEEE 802.11ac_40	38		5190.0	5190.000008	0.0		PASS
		54		5270.0	5269.999975	-0.0		PASS
		110		5550.0	5550.000092	0.02		PASS
	IEEE 802.11ac_80	42		5210.0	5210.000008	0.0		PASS
		58		5290.0	5290.000008	0.0		PASS
		106		5530.0	5530.000008	0.0		PASS
-10° /NV	IEEE 802.11a	36	0	5180.0	5180.000513	0.10	Within authorized band	PASS
		52		5260.0	5260.000142	0.03		PASS
		100		5500.0	5500.000377	0.07		PASS
	IEEE 802.11n_20	36		5180.0	5180.000499	0.10		PASS
		52		5260.0	5260.000233	0.04		PASS
		100		5500.0	5500.000488	0.09		PASS
	IEEE 802.11n_40	38		5190.0	5190.00034	0.07		PASS
		54		5270.0	5269.999982	0.00		PASS
		110		5550.0	5550.000197	0.04		PASS
	IEEE 802.11ac_20	36		5180.0	5180.000469	0.09		PASS
		52		5260.0	5260.000489	0.09		PASS
		100		5500.0	5500.000212	0.04		PASS
	IEEE 802.11ac_40	38		5190.0	5190.000381	0.07		PASS
		54		5270.0	5270.000158	0.03		PASS
		110		5550.0	5550.000539	0.10		PASS
	IEEE	42		5210.0	5210.000469	0.09		PASS

	802.11ac_80	58		5290.0	5290.000139	0.03		PASS
		106		5530.0	5530.000192	0.03		PASS
0° /NV	IEEE 802.11a	36	0	5180.0	5180.000513	0.10	Within authorized band	PASS
		52		5260.0	5260.000302	0.06		PASS
		100		5500.0	5500.000081	0.01		PASS
	IEEE 802.11n_20	36		5180.0	5180.000356	0.07		PASS
		52		5260.0	5260.000151	0.03		PASS
		100		5500.0	5500.000272	0.05		PASS
	IEEE 802.11n_40	38		5190.0	5189.99999	0.00		PASS
		54		5270.0	5270.000464	0.09		PASS
		110		5550.0	5550.000027	0.00		PASS
	IEEE 802.11ac_20	36		5180.0	5180.000429	0.08		PASS
		52		5260.0	5260.000444	0.08		PASS
		100		5500.0	5500.000319	0.06		PASS
	IEEE 802.11ac_40	38		5190.0	5190.000139	0.03		PASS
		54		5270.0	5270.000235	0.04		PASS
		110		5550.0	5550.000313	0.06		PASS
	IEEE 802.11ac_80	42		5210.0	5210.000023	0.00		PASS
		58		5290.0	5290.000202	0.04		PASS
		106		5530.0	5530.000029	0.01		PASS
10° /NV	IEEE 802.11a	36	0	5180.0	5180.00047	0.09	Within authorized band	PASS
		52		5260.0	5260.000226	0.04		PASS
		100		5500.0	5500.000021	0.00		PASS
	IEEE 802.11n_20	36		5180.0	5180.00021	0.04		PASS
		52		5260.0	5260.000194	0.04		PASS
		100		5500.0	5500.000217	0.04		PASS
	IEEE 802.11n_40	38		5190.0	5190.000214	0.04		PASS
		54		5270.0	5270.000177	0.03		PASS
		110		5550.0	5550.000312	0.06		PASS
	IEEE 802.11ac_20	36		5180.0	5180.000054	0.01		PASS
		52		5260.0	5260.000147	0.03		PASS
		100		5500.0	5500.000105	0.02		PASS
	IEEE 802.11ac_40	38		5190.0	5190.0002	0.04		PASS
		54		5270.0	5270.000126	0.02		PASS
		110		5550.0	5550.00035	0.06		PASS
	IEEE 802.11ac_80	42		5210.0	5210.00045	0.09		PASS
		58		5290.0	5290.000493	0.09		PASS
		106		5530.0	5530.000068	0.01		PASS
20° /NV	IEEE 802.11a	36	0	5180.0	5180.000543	0.10	Within authorized band	PASS
		52		5260.0	5260.000458	0.09		PASS
		100		5500.0	5500.000331	0.06		PASS
	IEEE 802.11n_20	36		5180.0	5180.000419	0.08		PASS
		52		5260.0	5260.000198	0.04		PASS
		100		5500.0	5500.000493	0.09		PASS

	IEEE 802.11n_40	38		5190.0	5190.00007	0.01		PASS
		54		5270.0	5270.00031	0.06		PASS
		110		5550.0	5550.000142	0.03		PASS
	IEEE 802.11ac_20	36		5180.0	5180.00027	0.05		PASS
		52		5260.0	5260.000111	0.02		PASS
		100		5500.0	5500.000447	0.08		PASS
	IEEE 802.11ac_40	38		5190.0	5190.000193	0.04		PASS
		54		5270.0	5270.000081	0.02		PASS
		110		5550.0	5550.000586	0.11		PASS
	IEEE 802.11ac_80	42		5210.0	5210.000311	0.06		PASS
		58		5290.0	5290.000205	0.04		PASS
		106		5530.0	5530.000094	0.02		PASS
30° /NV	IEEE 802.11a	36	0	5180.0	5180.000162	0.03	Within authorized band	PASS
		52		5260.0	5260.000159	0.03		PASS
		100		5500.0	5500.000419	0.08		PASS
	IEEE 802.11n_20	36		5180.0	5180.000394	0.08		PASS
		52		5260.0	5260.000021	0.00		PASS
		100		5500.0	5500.000354	0.06		PASS
	IEEE 802.11n_40	38		5190.0	5190.000206	0.04		PASS
		54		5270.0	5270.000378	0.07		PASS
		110		5550.0	5550.000354	0.06		PASS
	IEEE 802.11ac_20	36		5180.0	5180.000127	0.02		PASS
		52		5260.0	5260.000289	0.05		PASS
		100		5500.0	5500.000124	0.02		PASS
	IEEE 802.11ac_40	38		5190.0	5190.000066	0.01		PASS
		54		5270.0	5270.000045	0.01		PASS
		110		5550.0	5550.000396	0.07		PASS
	IEEE 802.11ac_80	42		5210.0	5210.000467	0.09		PASS
		58		5290.0	5290.000413	0.08		PASS
		106		5530.0	5530.000331	0.06		PASS
40° /NV	IEEE 802.11a	36	0	5180.0	5180.00013	0.03	Within authorized band	PASS
		52		5260.0	5260.000153	0.03		PASS
		100		5500.0	5500.000336	0.06		PASS
	IEEE 802.11n_20	36		5180.0	5180.000077	0.01		PASS
		52		5260.0	5260.0004	0.08		PASS
		100		5500.0	5500.000172	0.03		PASS
	IEEE 802.11n_40	38		5190.0	5189.999979	0.00		PASS
		54		5270.0	5270.000363	0.07		PASS
		110		5550.0	5550.000284	0.05		PASS
	IEEE 802.11ac_20	36		5180.0	5180.000512	0.10		PASS
		52		5260.0	5260.000014	0.00		PASS
		100		5500.0	5500.000482	0.09		PASS
	IEEE 802.11ac_40	38		5190.0	5190.000178	0.03		PASS
		54		5270.0	5270.000236	0.04		PASS

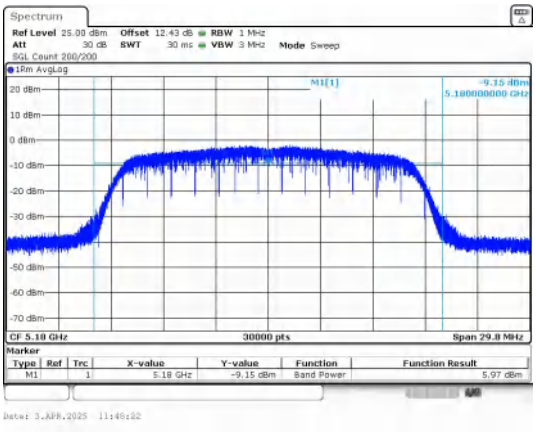
		110		5550.0	5550.000092	0.02		PASS
	IEEE 802.11ac_80	42		5210.0	5210.000008	0.0		PASS
		58		5290.0	5290.000008	0.0		PASS
		106		5530.0	5530.000008	0.0		PASS
NT/LV	IEEE 802.11a	36	0	5180.0	5180.000428	0.08	Within authorized band	PASS
		52		5260.0	5260.000448	0.09		PASS
		100		5500.0	5500.000392	0.07		PASS
	IEEE 802.11n_20	36		5180.0	5180.000315	0.06		PASS
		52		5260.0	5260.000046	0.01		PASS
		100		5500.0	5500.000178	0.03		PASS
	IEEE 802.11n_40	38		5190.0	5190.000271	0.05		PASS
		54		5270.0	5270.000182	0.03		PASS
		110		5550.0	5549.999974	0.00		PASS
	IEEE 802.11ac_20	36		5180.0	5180.000473	0.09		PASS
		52		5260.0	5260.000298	0.06		PASS
		100		5500.0	5500.000261	0.05		PASS
	IEEE 802.11ac_40	38		5190.0	5190.000271	0.05		PASS
		54		5270.0	5270.000148	0.03		PASS
		110		5550.0	5550.000392	0.07		PASS
	IEEE 802.11ac_80	42		5210.0	5210.000128	0.02		PASS
		58		5290.0	5290.000223	0.04		PASS
		106		5530.0	5530.000398	0.07		PASS
NT/HV	IEEE 802.11a	36	0	5180.0	5180.000542	0.10	Within authorized band	PASS
		52		5260.0	5260.000211	0.04		PASS
		100		5500.0	5500.000166	0.03		PASS
	IEEE 802.11n_20	36		5180.0	5180.000365	0.07		PASS
		52		5260.0	5260.000181	0.03		PASS
		100		5500.0	5500.000254	0.05		PASS
	IEEE 802.11n_40	38		5190.0	5190.000041	0.01		PASS
		54		5270.0	5270.000176	0.03		PASS
		110		5550.0	5550.000163	0.03		PASS
	IEEE 802.11ac_20	36		5180.0	5180.000459	0.09		PASS
		52		5260.0	5260.000056	0.01		PASS
		100		5500.0	5500.000095	0.02		PASS
	IEEE 802.11ac_40	38		5190.0	5190.00045	0.09		PASS
		54		5270.0	5270.000123	0.02		PASS
		110		5550.0	5550.000361	0.07		PASS
	IEEE 802.11ac_80	42		5210.0	5210.000047	0.01		PASS
		58		5290.0	5290.000092	0.02		PASS
		106		5530.0	5530.000281	0.05		PASS

2) Conducted Output Power

Conducted output power

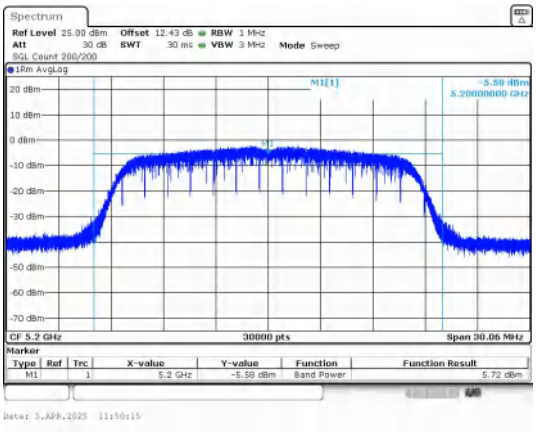
Mode	Channel	Ant. 0 (dBm)	Duty Cycle Factor (dB)	Result (dBm)	Limit (dBm)	Result
IEEE 802.11a	36	5.97	0.10	6.07	≤24	PASS
	40	5.72	0.10	5.82	≤24	PASS
	48	6.11	0.10	6.22	≤24	PASS
	52	5.58	0.10	5.68	≤24	PASS
	60	5.39	0.10	5.50	≤24	PASS
	64	5.21	0.10	5.31	≤24	PASS
	100	6.02	0.10	6.12	≤24	PASS
	116	4.75	0.10	4.85	≤24	PASS
	140	5.07	0.10	5.17	≤24	PASS
IEEE 802.11n_20	36	5.62	0.11	5.73	≤24	PASS
	40	5.37	0.11	5.48	≤24	PASS
	48	5.63	0.11	5.74	≤24	PASS
	52	5.12	0.11	5.23	≤24	PASS
	60	5.00	0.11	5.11	≤24	PASS
	64	4.82	0.11	4.93	≤24	PASS
	100	5.62	0.11	5.72	≤24	PASS
	116	4.38	0.11	4.49	≤24	PASS
	140	4.76	0.11	4.87	≤24	PASS
IEEE 802.11n_40	38	5.06	0.23	5.29	≤24	PASS
	46	4.97	0.23	5.19	≤24	PASS
	54	4.60	0.22	4.82	≤24	PASS
	62	4.48	0.22	4.70	≤24	PASS
	110	4.83	0.23	5.05	≤24	PASS
	134	4.57	0.23	4.80	≤24	PASS
IEEE 802.11ac_20	36	5.66	0.11	5.77	≤24	PASS
	40	5.33	0.11	5.44	≤24	PASS
	48	4.62	0.11	4.72	≤24	PASS
	52	5.08	0.11	5.19	≤24	PASS
	60	4.88	0.11	4.98	≤24	PASS
	64	4.88	0.11	4.98	≤24	PASS
	100	5.63	0.11	5.73	≤24	PASS
	116	4.46	0.11	4.57	≤24	PASS
	140	4.81	0.11	4.92	≤24	PASS
IEEE 802.11ac_40	38	5.12	0.22	5.34	≤24	PASS
	46	4.93	0.22	5.16	≤24	PASS
	54	4.73	0.22	4.95	≤24	PASS
	62	4.79	0.22	5.02	≤24	PASS
	110	4.89	0.22	5.11	≤24	PASS

	134	4.57	0.22	4.79	≤24	PASS
IEEE 802.11ac_80	42	4.16	0.44	4.60	≤24	PASS
	58	3.82	0.44	4.26	≤24	PASS
	106	3.92	0.44	4.37	≤24	PASS
	122	3.44	0.45	3.89	≤24	PASS



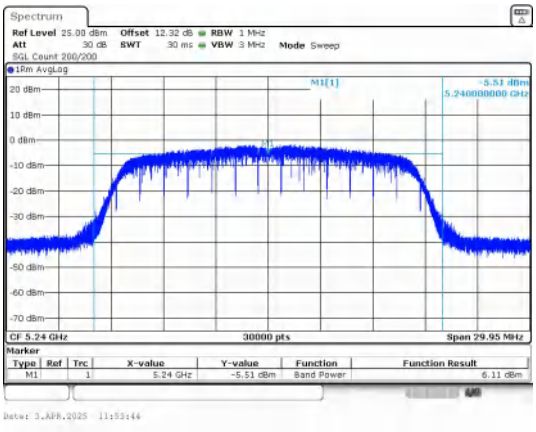
Conducted AVG output power

IEEE 802.11a_Channel 36_Antenna 0



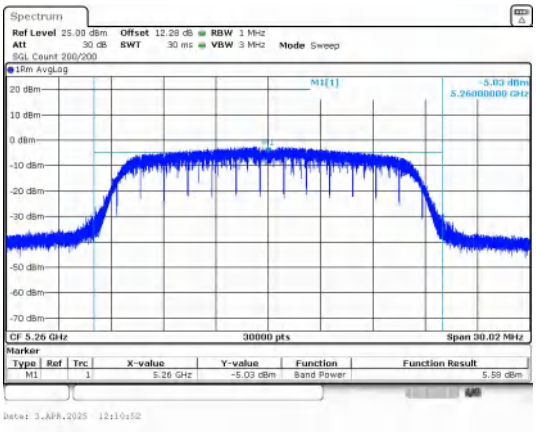
Conducted AVG output power

IEEE 802.11a_Channel 40_Antenna 0



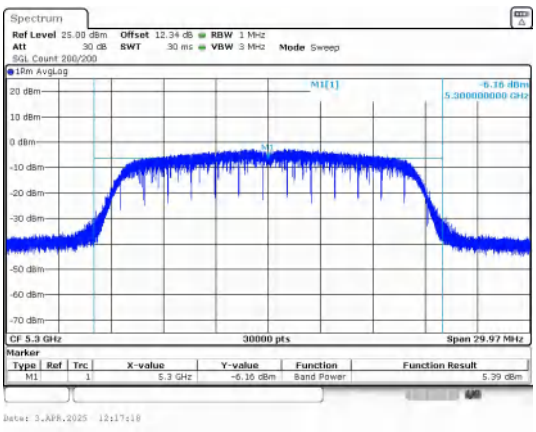
Conducted AVG output power

IEEE 802.11a_Channel 48_Antenna 0

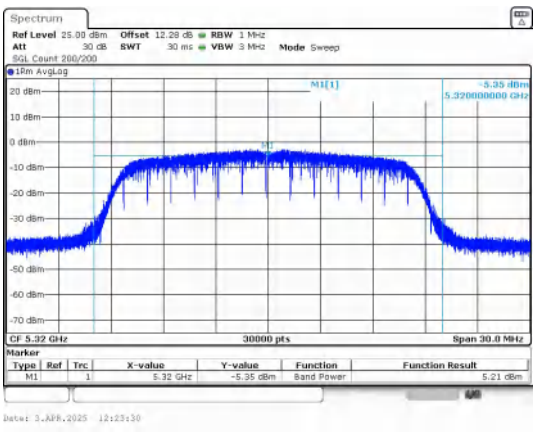


Conducted AVG output power

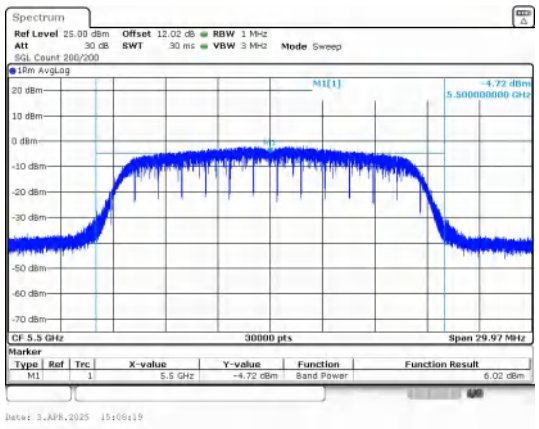
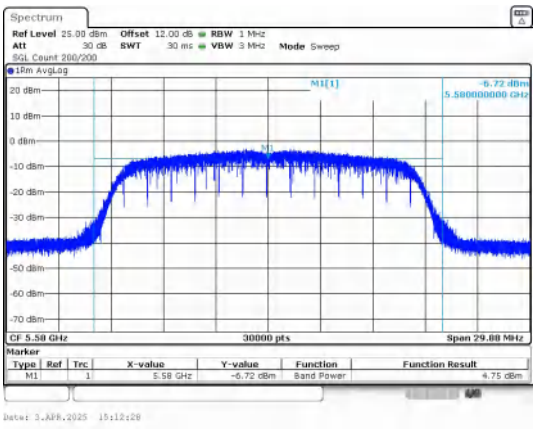
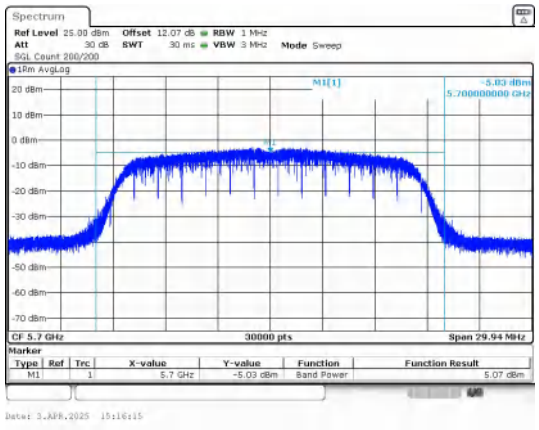
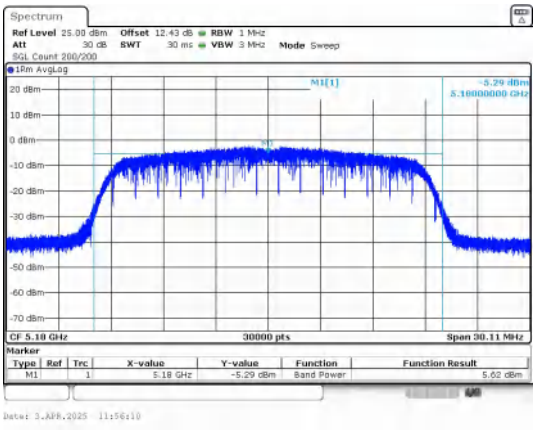
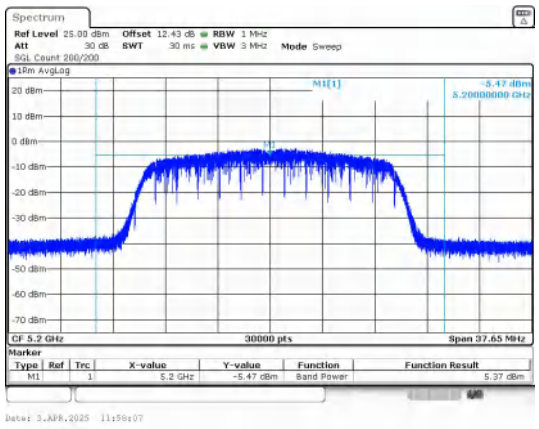
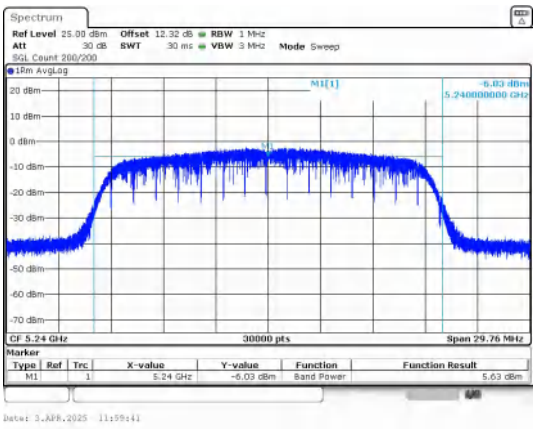
IEEE 802.11a_Channel 52_Antenna 0

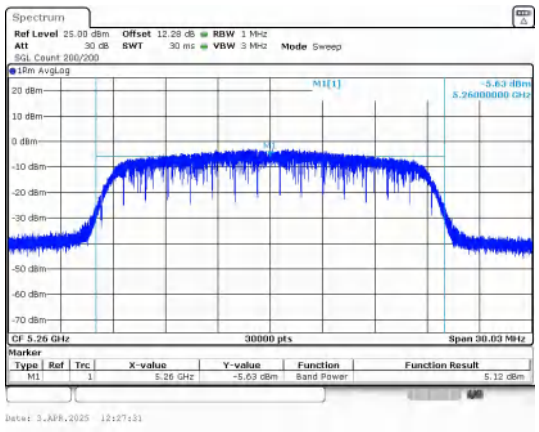


Conducted AVG output power



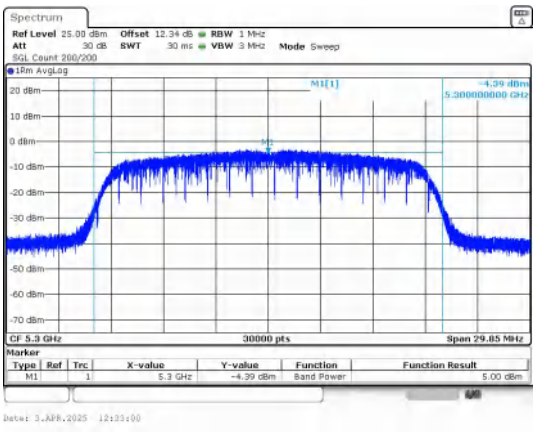
Conducted AVG output power

IEEE 802.11a_Channel 60_Antenna 0	IEEE 802.11a_Channel 64_Antenna 0
	
Conducted AVG output power **IEEE 802.11a_Channel 100_Antenna 0**	**Conducted AVG output power** **IEEE 802.11a_Channel 116_Antenna 0**
	
Conducted AVG output power **IEEE 802.11a_Channel 140_Antenna 0**	**Conducted AVG output power** **IEEE 802.11n_20_Channel 36_Antenna 0**
	
Conducted AVG output power **IEEE 802.11n_20_Channel 40_Antenna 0**	**Conducted AVG output power** **IEEE 802.11n_20_Channel 48_Antenna 0**



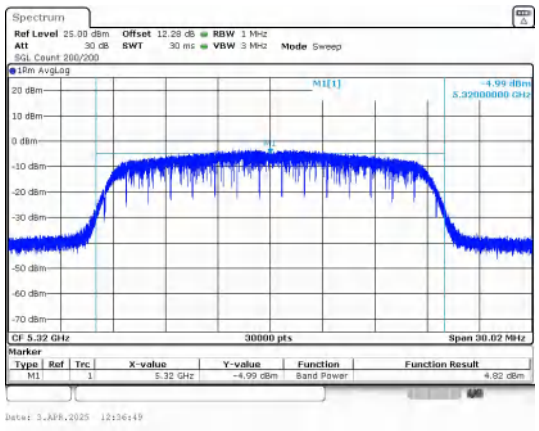
Conducted AVG output power

IEEE 802.11n_20_Channel 52_Antenna 0



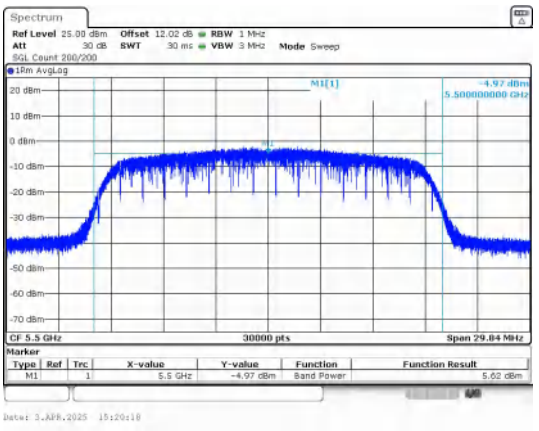
Conducted AVG output power

IEEE 802.11n_20_Channel 60_Antenna 0



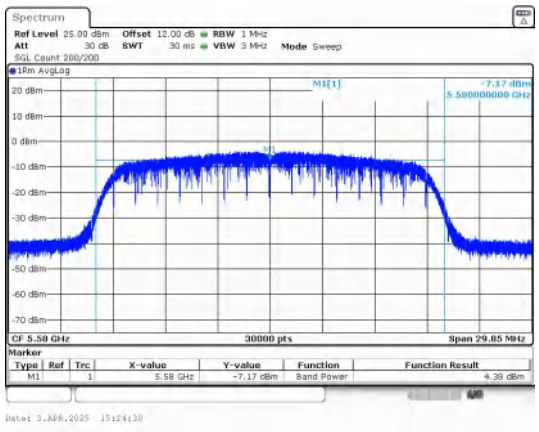
Conducted AVG output power

IEEE 802.11n_20_Channel 64_Antenna 0



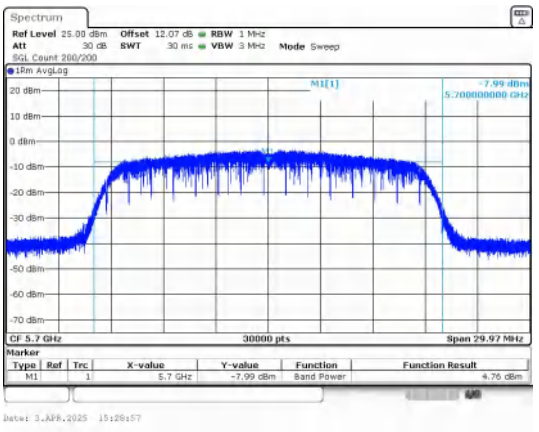
Conducted AVG output power

IEEE 802.11n_20_Channel 100_Antenna 0



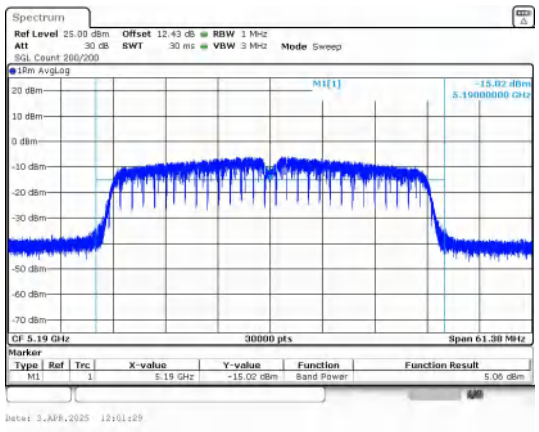
Conducted AVG output power

IEEE 802.11n_20_Channel 116_Antenna 0



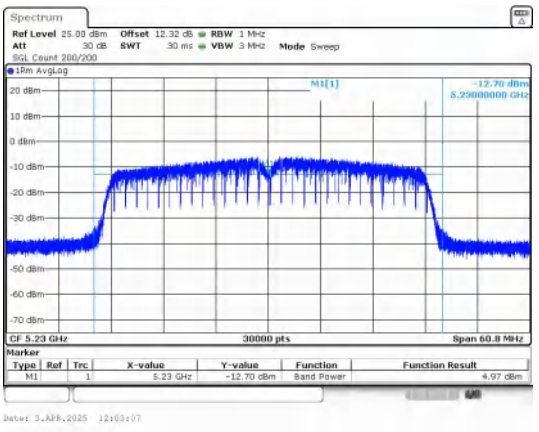
Conducted AVG output power

IEEE 802.11n_20_Channel 140_Antenna 0



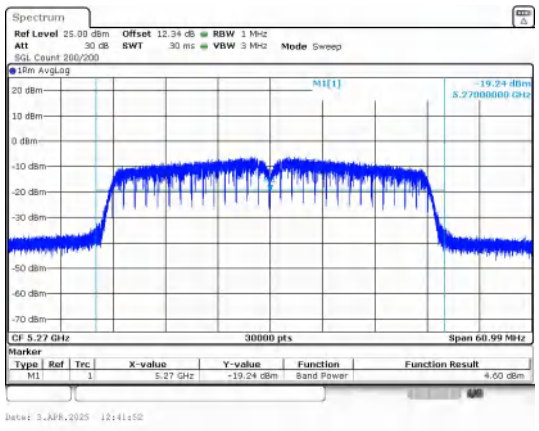
Conducted AVG output power

IEEE 802.11n_40_Channel 38_Antenna 0



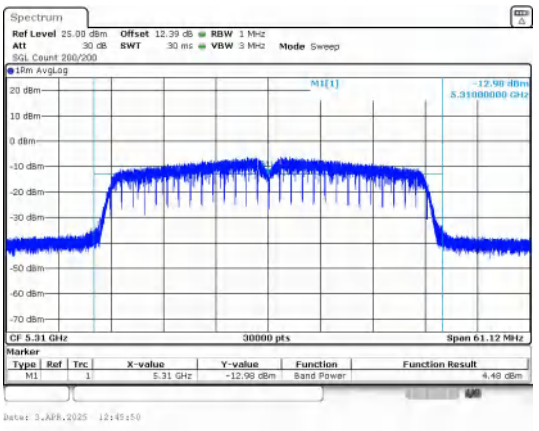
Conducted AVG output power

IEEE 802.11n_40_Channel 46_Antenna 0



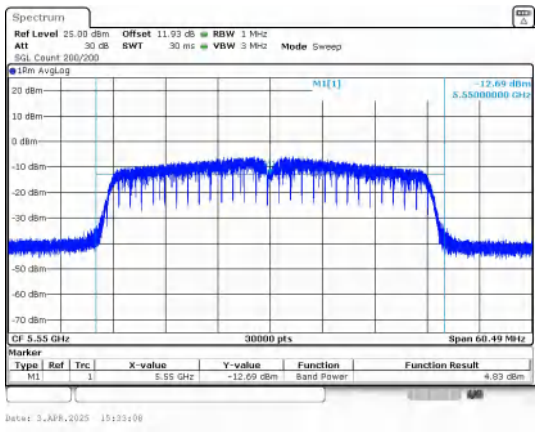
Conducted AVG output power

IEEE 802.11n_40_Channel 54_Antenna 0



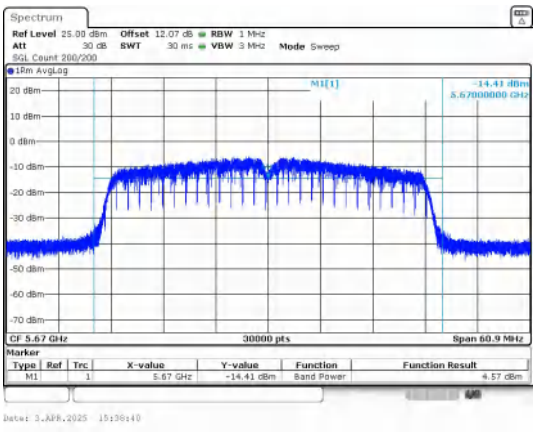
Conducted AVG output power

IEEE 802.11n_40_Channel 62_Antenna 0



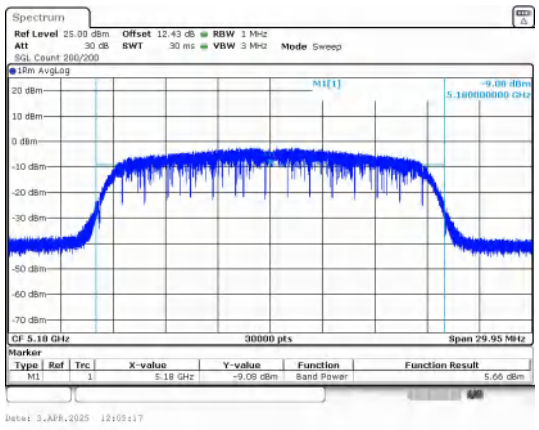
Conducted AVG output power

IEEE 802.11n_40_Channel 110_Antenna 0



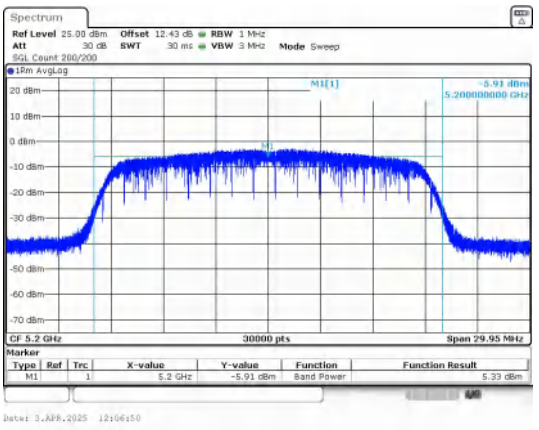
Conducted AVG output power

IEEE 802.11n_40_Channel 134_Antenna 0



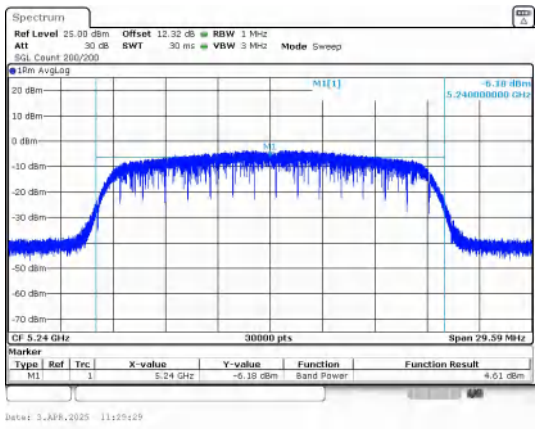
Conducted AVG output power

IEEE 802.11ac_20_Channel 36_Antenna 0



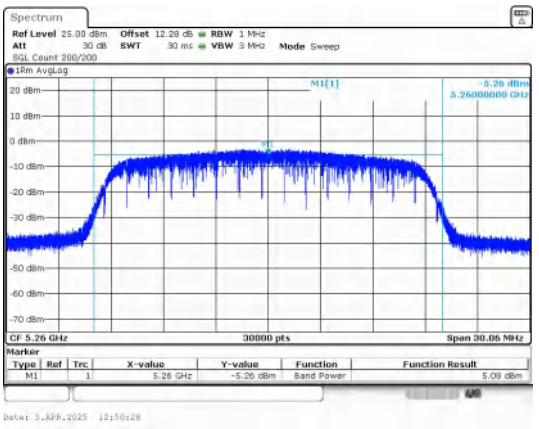
Conducted AVG output power

IEEE 802.11ac_20_Channel 40_Antenna 0



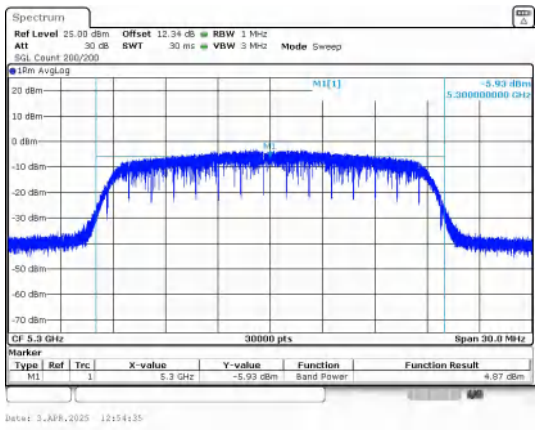
Conducted AVG output power

IEEE 802.11ac_20_Channel 48_Antenna 0



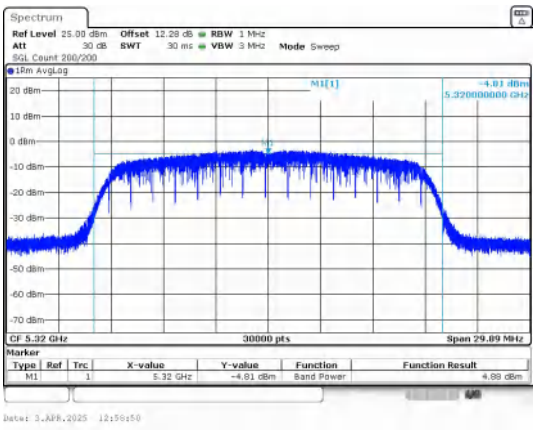
Conducted AVG output power

IEEE 802.11ac_20_Channel 52_Antenna 0



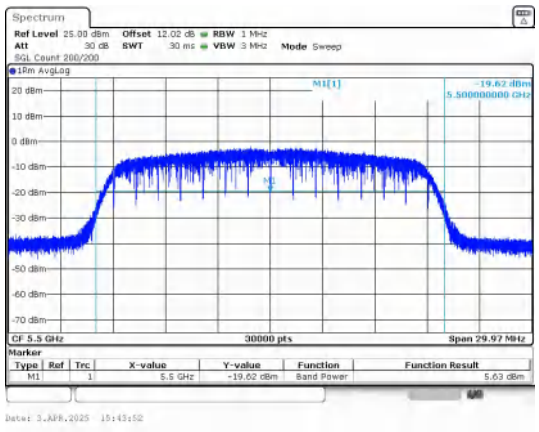
Conducted AVG output power

IEEE 802.11ac_20_Channel 60_Antenna 0



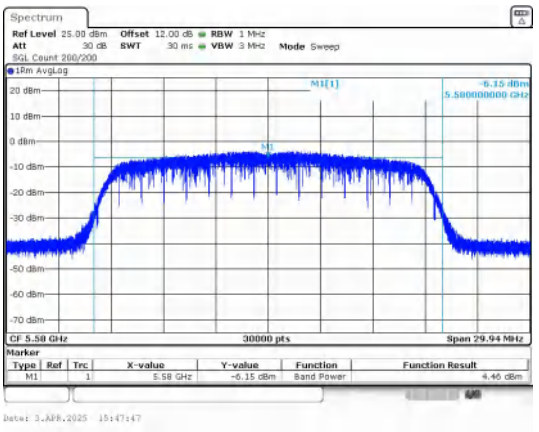
Conducted AVG output power

IEEE 802.11ac_20_Channel 64_Antenna 0



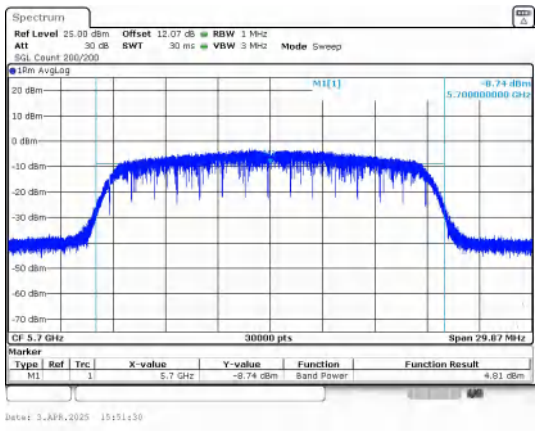
Conducted AVG output power

IEEE 802.11ac_20_Channel 100_Antenna 0



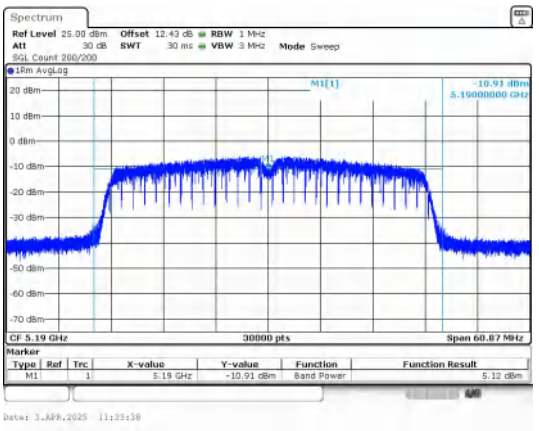
Conducted AVG output power

IEEE 802.11ac_20_Channel 116_Antenna 0



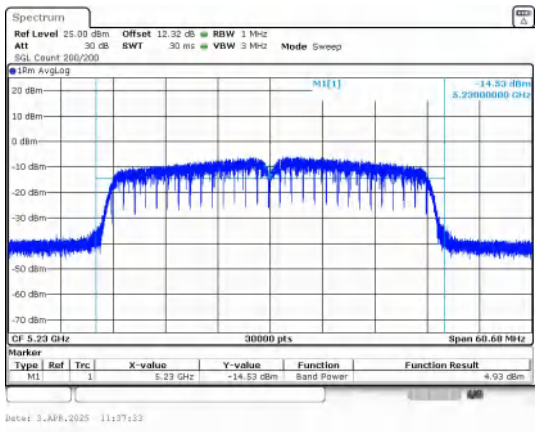
Conducted AVG output power

IEEE 802.11ac_20_Channel 140_Antenna 0



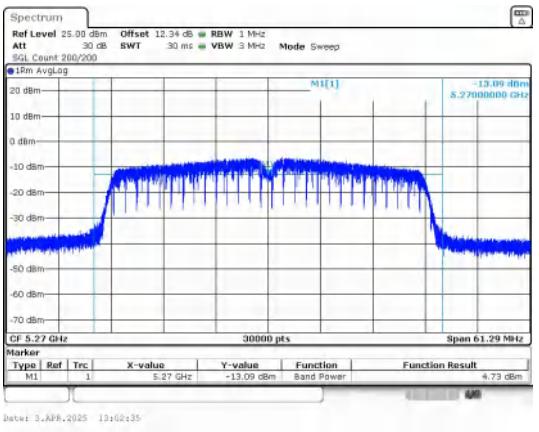
Conducted AVG output power

IEEE 802.11ac_40_Channel 38_Antenna 0



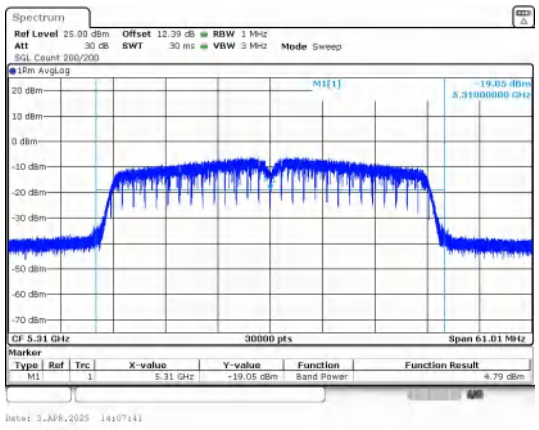
Conducted AVG output power

IEEE 802.11ac_40_Channel 46_Antenna 0



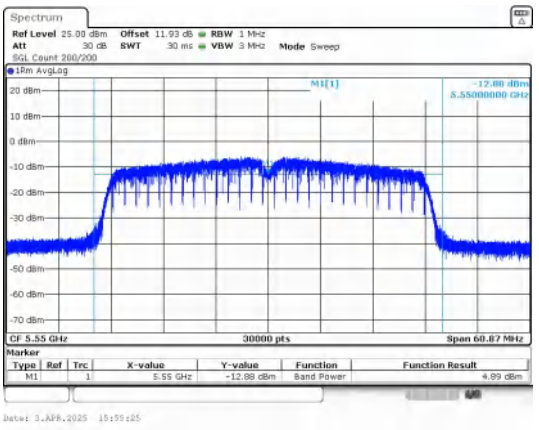
Conducted AVG output power

IEEE 802.11ac_40_Channel 54_Antenna 0



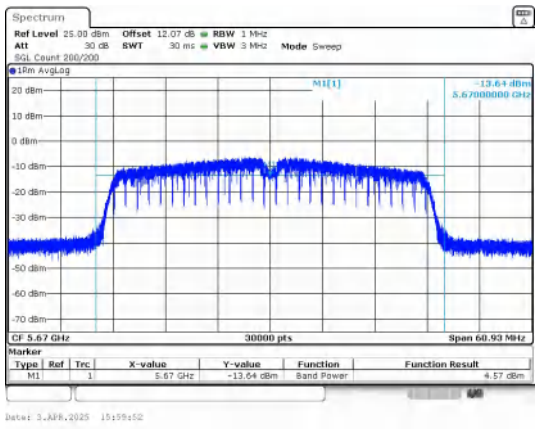
Conducted AVG output power

IEEE 802.11ac_40_Channel 62_Antenna 0



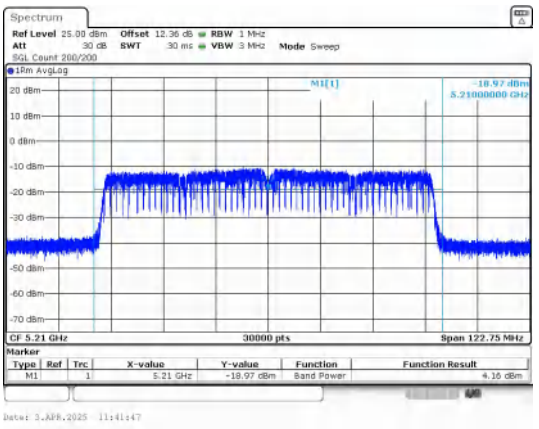
Conducted AVG output power

IEEE 802.11ac_40_Channel 110_Antenna 0



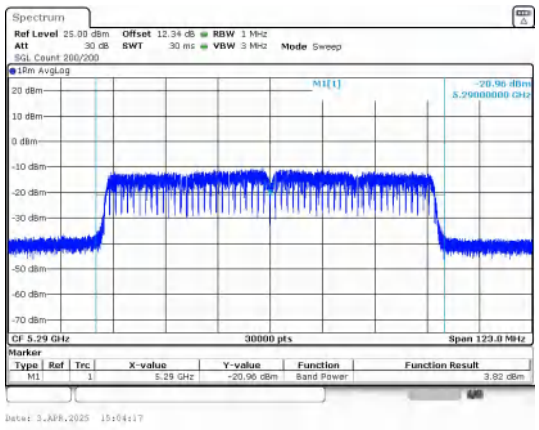
Conducted AVG output power

IEEE 802.11ac_40_Channel 134_Antenna 0



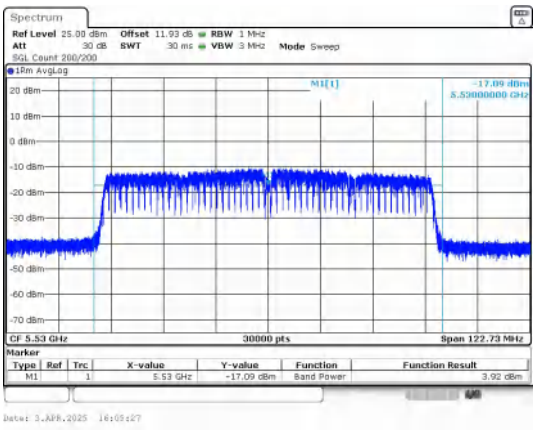
Conducted AVG output power

IEEE 802.11ac_80_Channel 42_Antenna 0



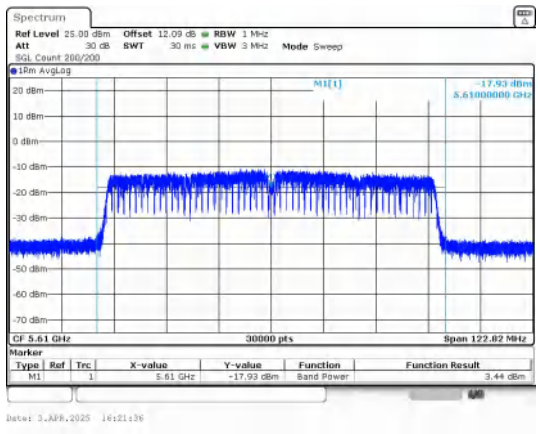
Conducted AVG output power

IEEE 802.11ac_80_Channel 58_Antenna 0



Conducted AVG output power

IEEE 802.11ac_80_Channel 106_Antenna 0



Conducted AVG output power

IEEE 802.11ac_80_Channel 122_Antenna 0

NOTE:The BW set in the band power is the 99% occupied bandwidth.

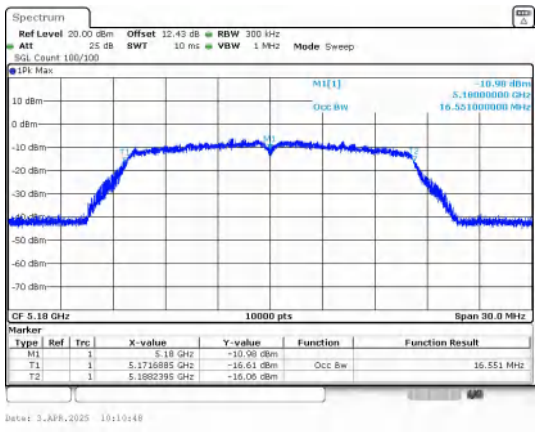
3) 99% Bandwidth

Test Result

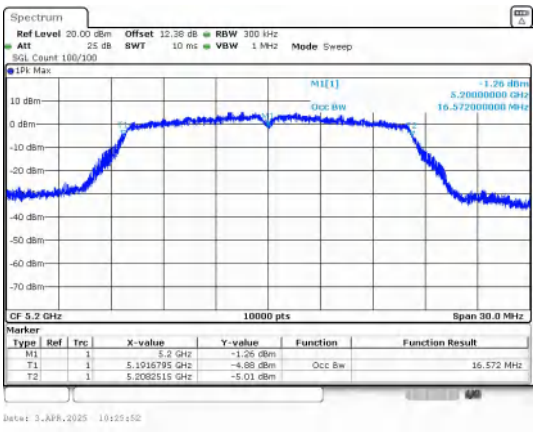
Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	36	0	5180	16.551
	40		5200	16.572
	48		5240	16.530
	52		5260	16.590
	60		5300	16.581
	64		5320	16.560
	100		5500	16.575
	116		5580	16.554
	140		5700	16.563
IEEE 802.11n_20	36		5180	17.580
	40		5200	17.703
	48		5240	17.568
	52		5260	17.601
	60		5300	17.586
	64		5320	17.565
	100		5500	17.568
	116		5580	17.571
	140		5700	17.574
IEEE 802.11n_40	38		5190	36.042
	46		5230	35.982
	54		5270	36.024
	62		5310	35.958
	110		5550	35.916
	134		5670	35.910
IEEE 802.11ac_20	36		5180	17.592
	40		5200	17.604
	48		5240	17.535
	52		5260	17.607
	60		5300	17.586
	64		5320	17.571
	100		5500	17.574
	116		5580	17.577
	140		5700	17.565
IEEE 802.11ac_40	38		5190	35.946
	46		5230	35.940
	54		5270	36.018
	62		5310	35.928
	110		5550	35.916
	134		5670	35.886

IEEE 802.11ac_80	42		5210	75.792
	58		5290	75.804
	106		5530	75.612
	122		5610	75.648

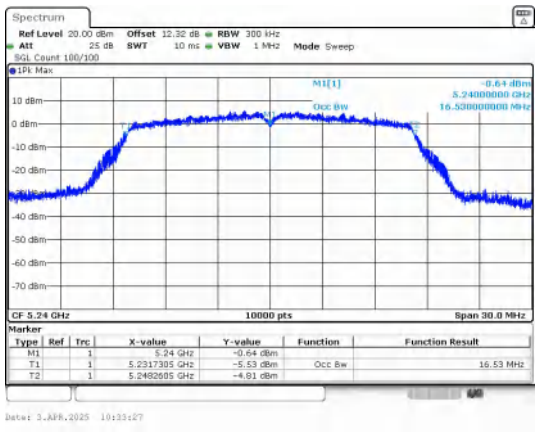
Test Graphs



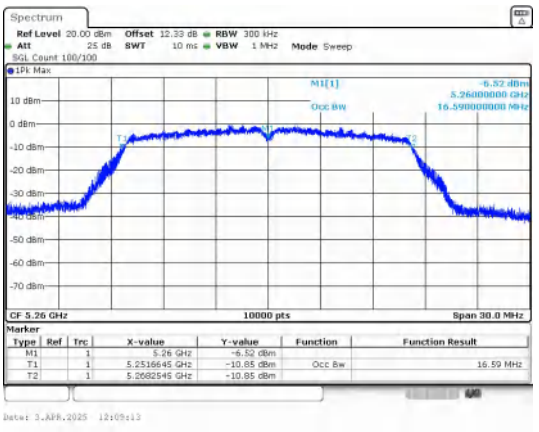
IEEE 802.11a_Channel 36_20MHz_Antenna 0



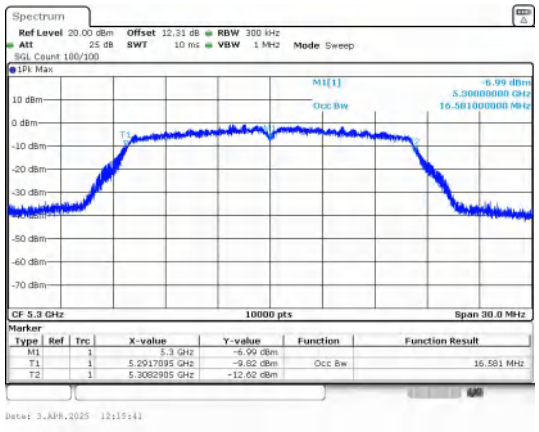
IEEE 802.11a_Channel 40_20MHz_Antenna 0



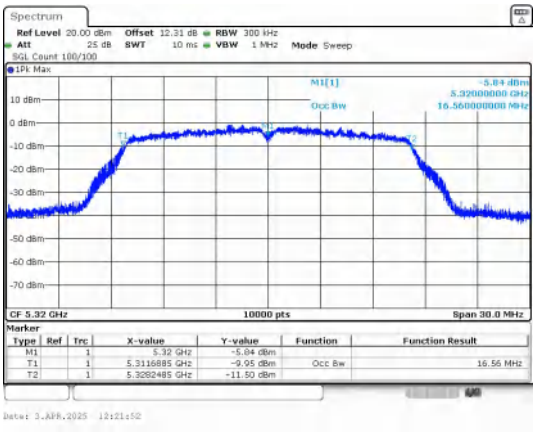
IEEE 802.11a_Channel 48_20MHz_Antenna 0



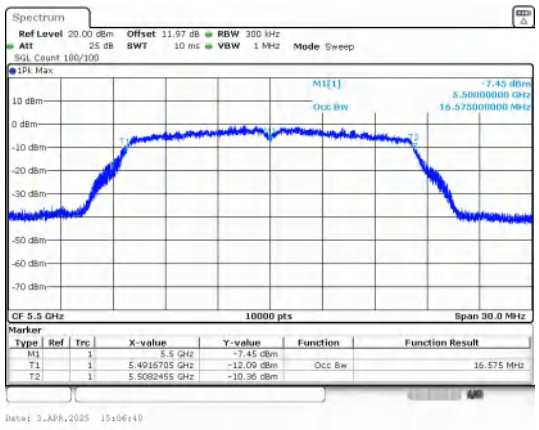
IEEE 802.11a_Channel 52_20MHz_Antenna 0



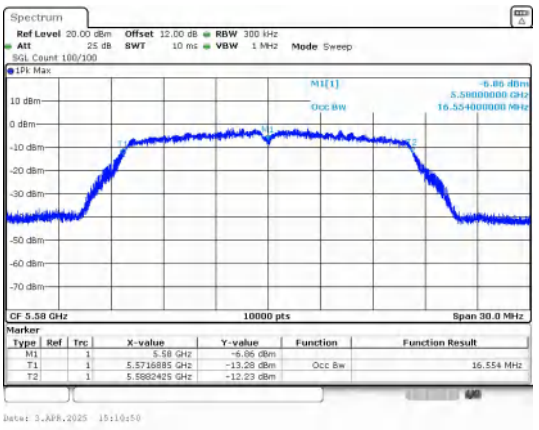
IEEE 802.11a_Channel 60_20MHz_Antenna 0



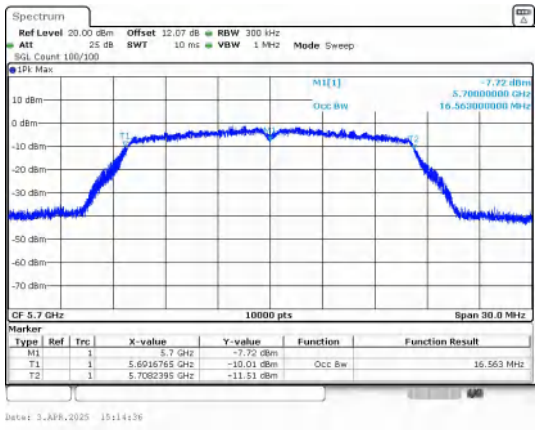
IEEE 802.11a_Channel 64_20MHz_Antenna 0



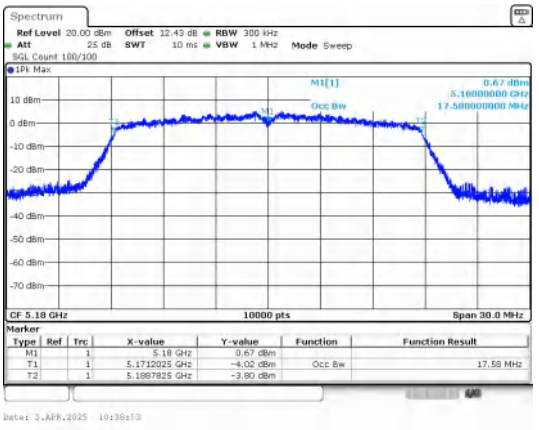
IEEE 802.11a_Channel 100_20MHz_Antenna 0



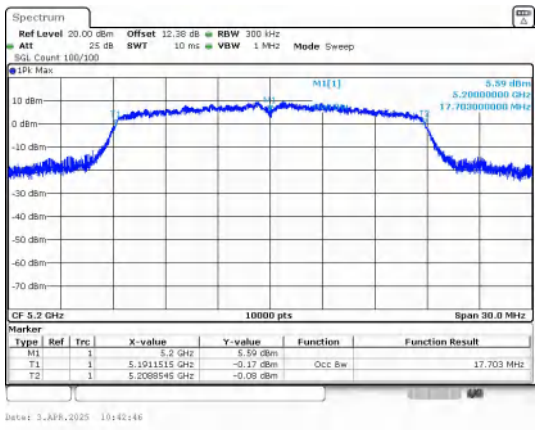
IEEE 802.11a_Channel 116_20MHz_Antenna 0



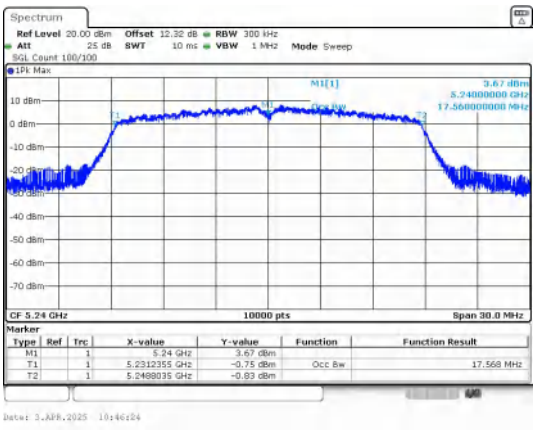
IEEE 802.11a_Channel 140_20MHz_Antenna 0



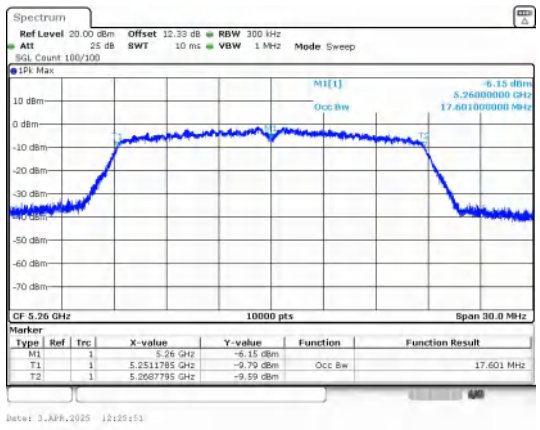
IEEE 802.11n_Channel 36_20MHz_Antenna 0



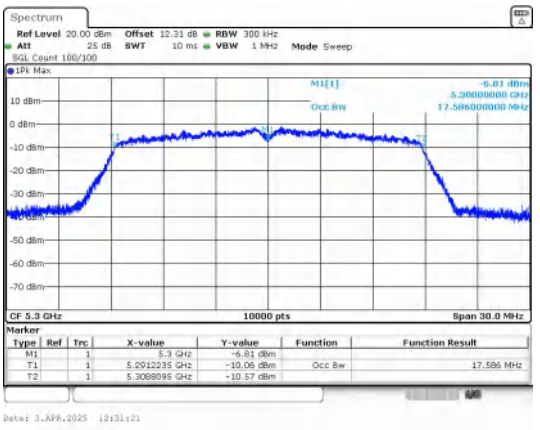
IEEE 802.11n_Channel 40_20MHz_Antenna 0



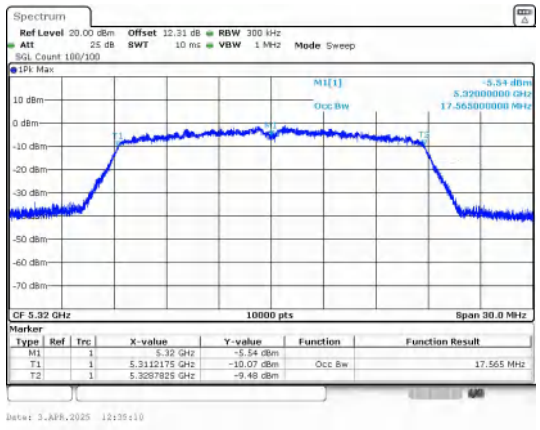
IEEE 802.11n_Channel 48_20MHz_Antenna 0



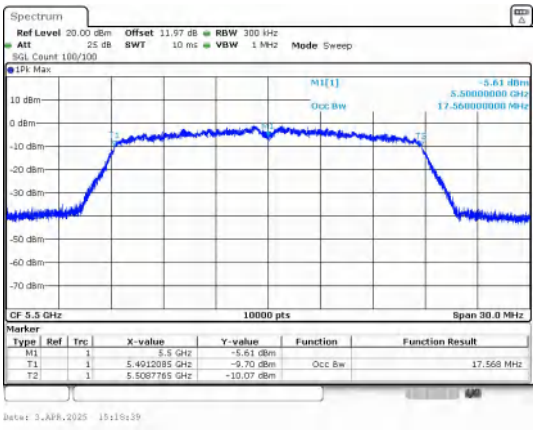
IEEE 802.11n_Channel 52_20MHz_Antenna 0



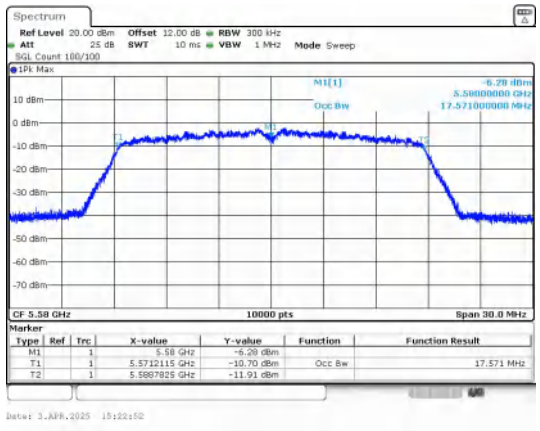
IEEE 802.11n_Channel 60_20MHz_Antenna 0



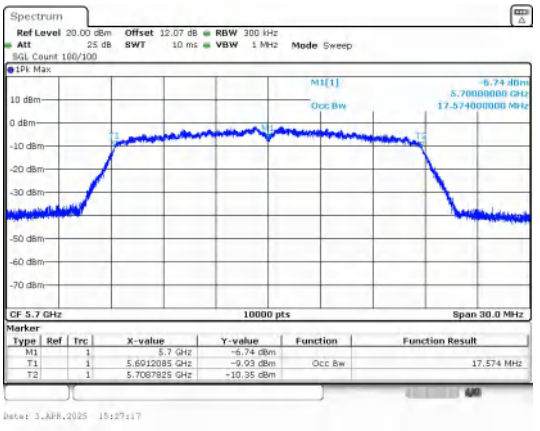
IEEE 802.11n_Channel 64_20MHz_Antenna 0



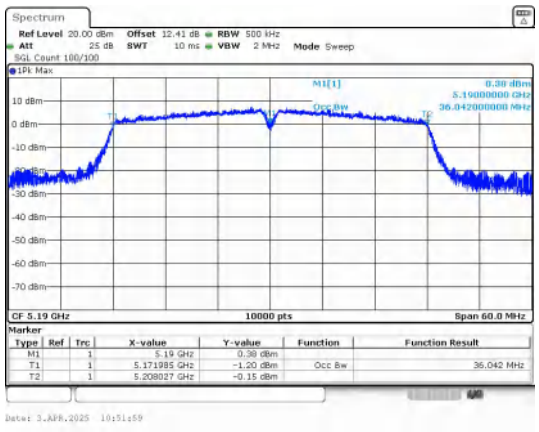
IEEE 802.11n_Channel 100_20MHz_Antenna 0



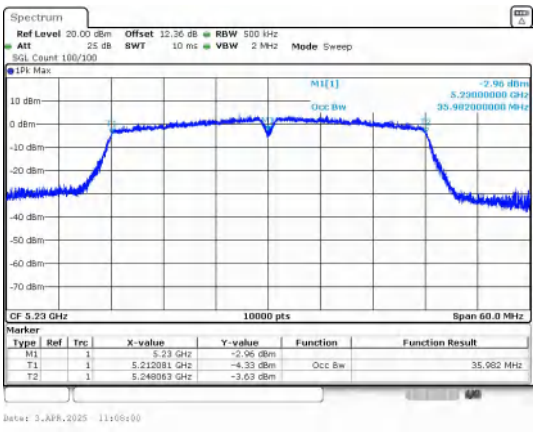
IEEE 802.11n_Channel 116_20MHz_Antenna 0



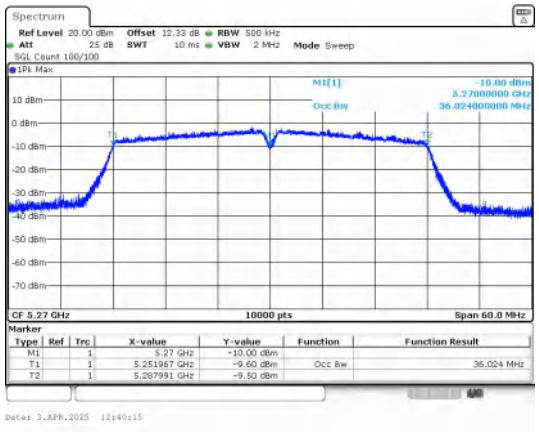
IEEE 802.11n_Channel 140_20MHz_Antenna 0



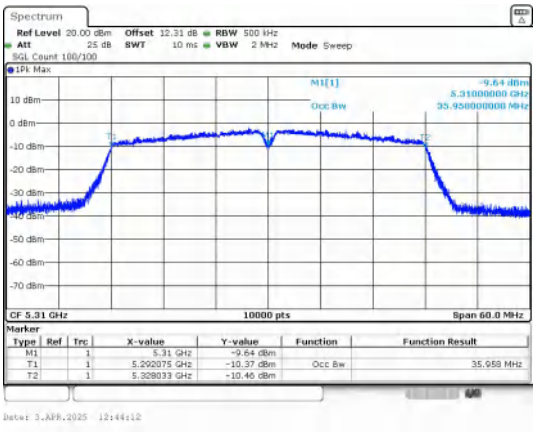
IEEE 802.11n_Channel 38_40MHz_Antenna 0



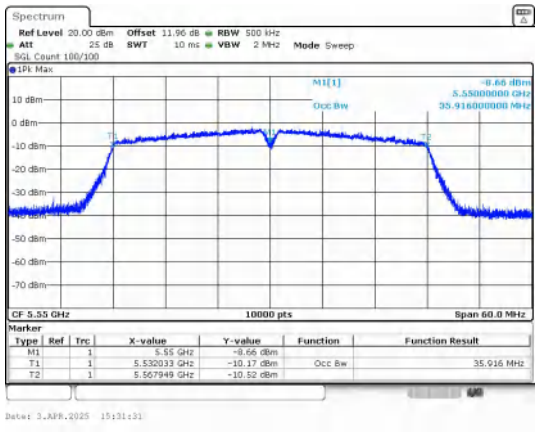
IEEE 802.11n_Channel 46_40MHz_Antenna 0



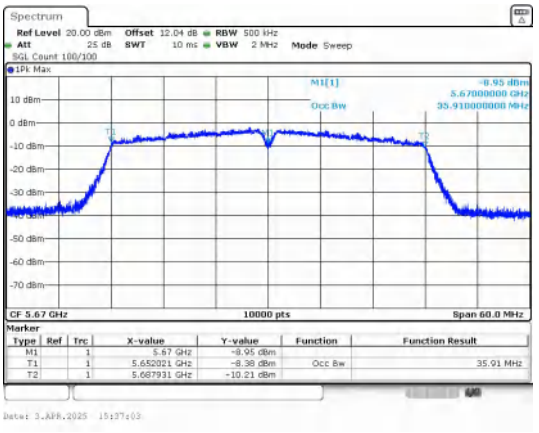
IEEE 802.11n_Channel 54_40MHz_Antenna 0



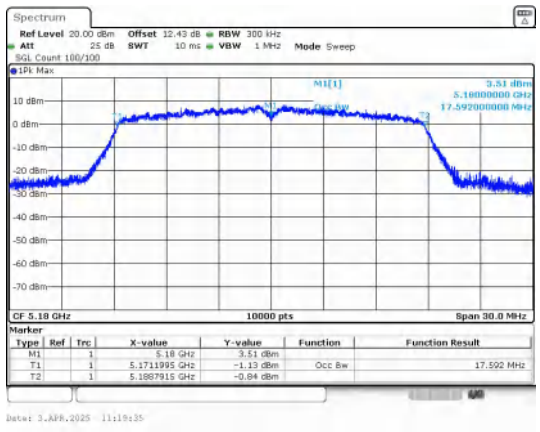
IEEE 802.11n_Channel 62_40MHz_Antenna 0



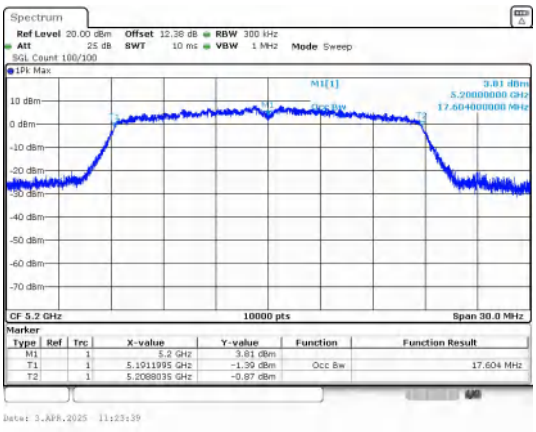
IEEE 802.11n_Channel 110_40MHz_Antenna 0



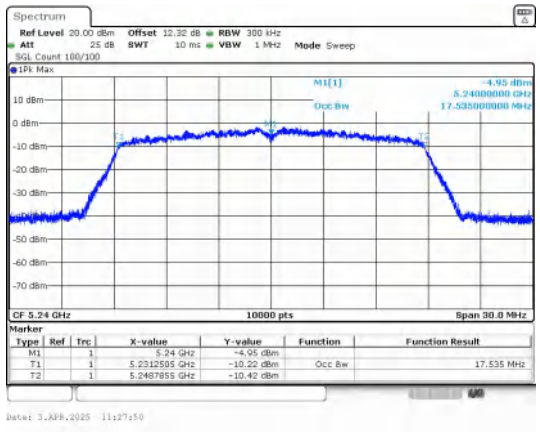
IEEE 802.11n_Channel 134_40MHz_Antenna 0



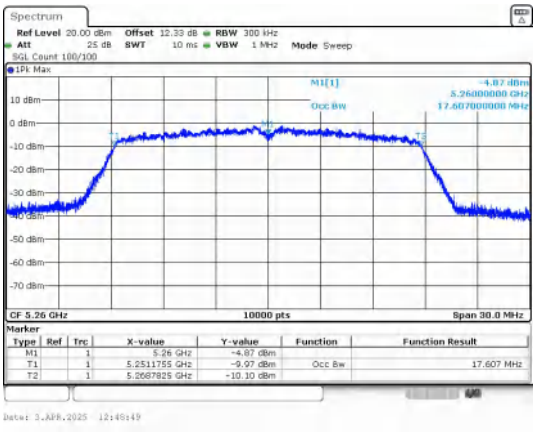
IEEE 802.11ac_Channel 36_20MHz_Antenna 0



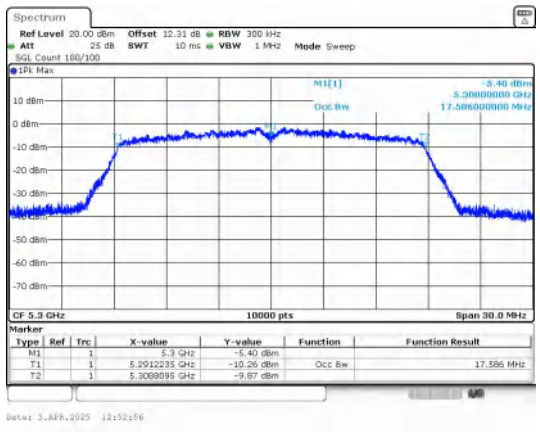
IEEE 802.11ac_Channel 40_20MHz_Antenna 0



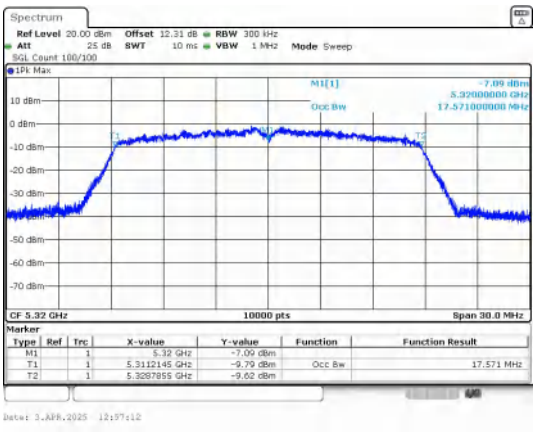
IEEE 802.11ac_Channel 48_20MHz_Antenna 0



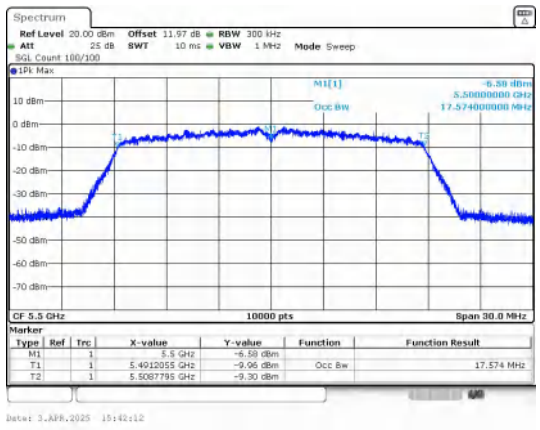
IEEE 802.11ac_Channel 52_20MHz_Antenna 0



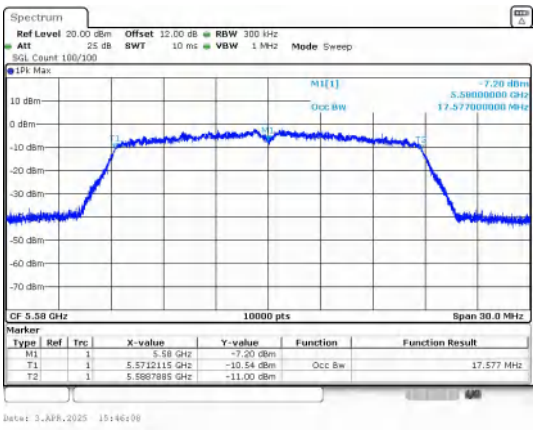
IEEE 802.11ac_Channel 60_20MHz_Antenna 0



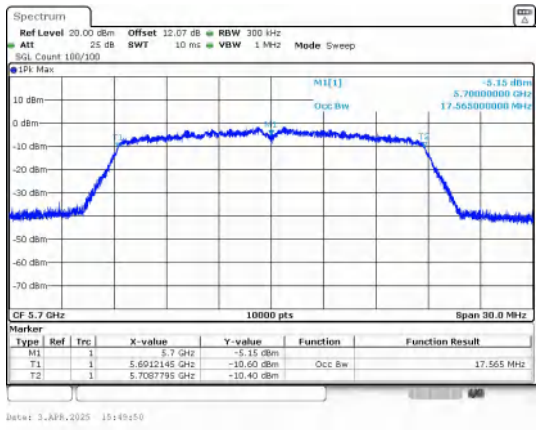
IEEE 802.11ac_Channel 64_20MHz_Antenna 0



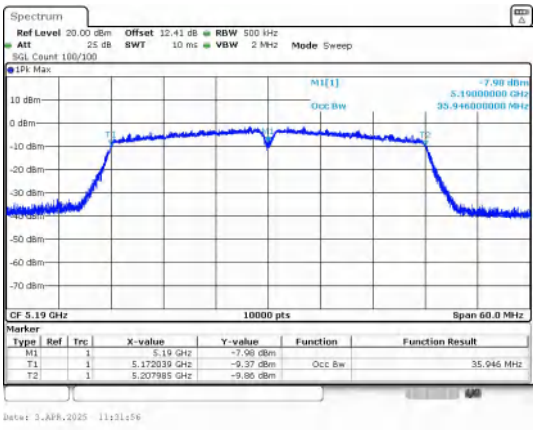
IEEE 802.11ac_Channel 100_20MHz_Antenna 0



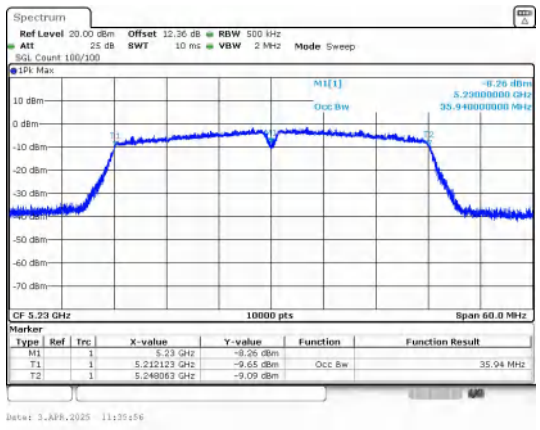
IEEE 802.11ac_Channel 116_20MHz_Antenna 0



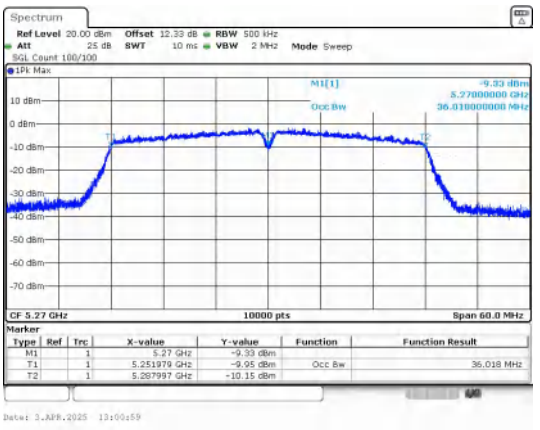
IEEE 802.11ac_Channel 140_20MHz_Antenna 0



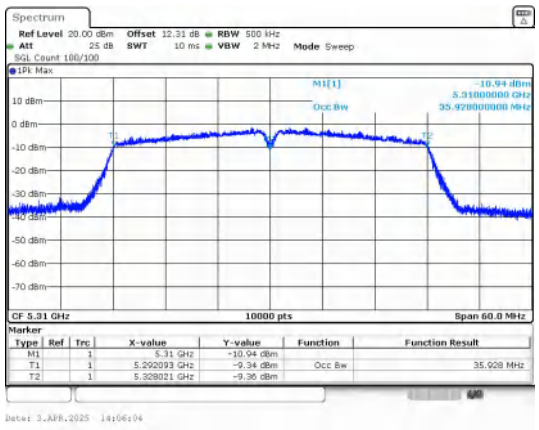
IEEE 802.11ac_Channel 38_40MHz_Antenna 0



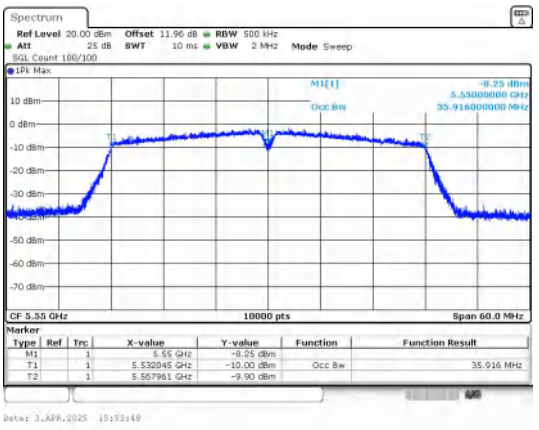
IEEE 802.11ac_Channel 46_40MHz_Antenna 0



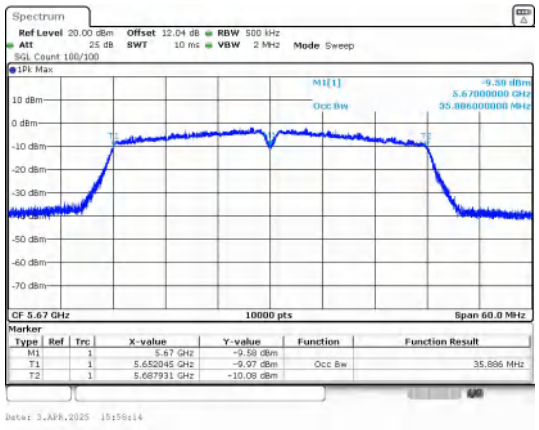
IEEE 802.11ac_Channel 54_40MHz_Antenna 0



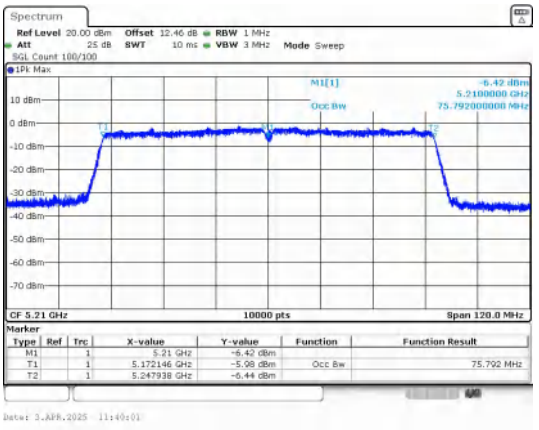
IEEE 802.11ac_Channel 62_40MHz_Antenna 0



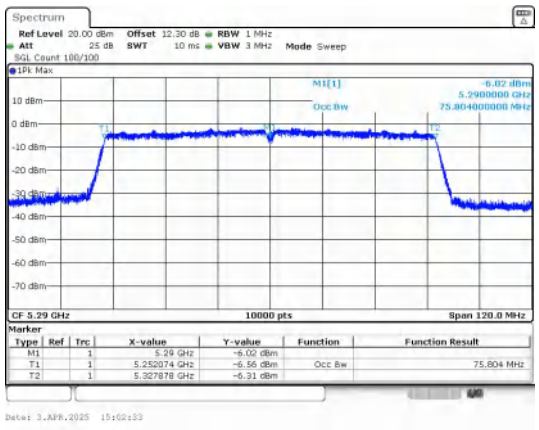
IEEE 802.11ac_Channel 110_40MHz_Antenna 0



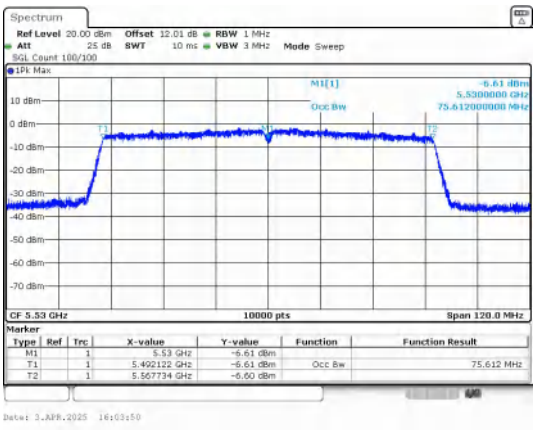
IEEE 802.11ac_Channel 134_40MHz_Antenna 0



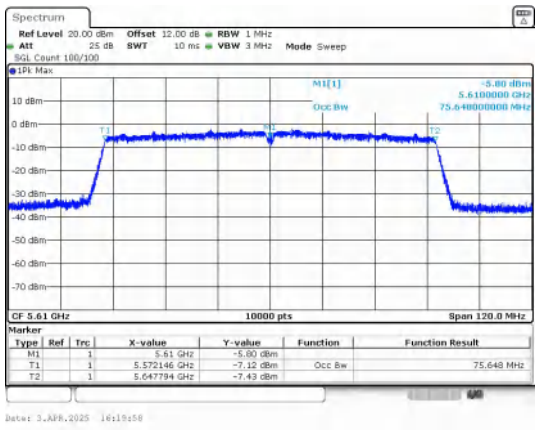
IEEE 802.11ac_Channel 42_80MHz_Antenna 0



IEEE 802.11ac_Channel 58_80MHz_Antenna 0



IEEE 802.11ac_Channel 106_80MHz_Antenna 0



IEEE 802.11ac_Channel 122_80MHz_Antenna 0

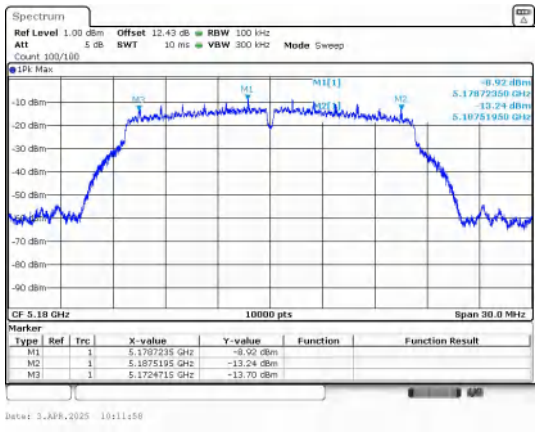
4) 6dB Bandwidth

Test Result

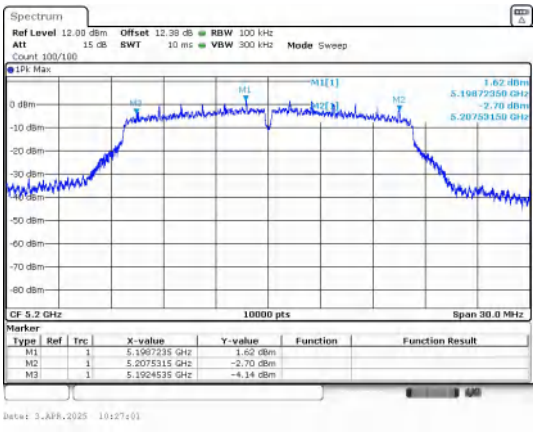
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a	36	0	5180	15.05	≥0.5	PASS
	40		5200	15.08		PASS
	48		5240	15.07		PASS
	52		5260	15.07		PASS
	60		5300	15.02		PASS
	64		5320	15.06		PASS
	100		5500	15.07		PASS
	116		5580	15.06		PASS
	140		5700	15.02		PASS
IEEE 802.11n_20	36		5180	15.02		PASS
	40		5200	15.02		PASS
	48		5240	15.02		PASS
	52		5260	15.06		PASS
	60		5300	15.09		PASS
	64		5320	15.07		PASS
	100		5500	15.10		PASS
	116		5580	15.07		PASS
	140		5700	15.08		PASS
IEEE 802.11n_40	38		5190	35.04		PASS
	46		5230	35.07		PASS
	54		5270	35.05		PASS
	62		5310	35.05		PASS
	110		5550	35.02		PASS
	134		5670	35.04		PASS
IEEE 802.11ac_20	36		5180	15.07		PASS
	40		5200	15.03		PASS
	48		5240	15.06		PASS
	52		5260	15.02		PASS
	60		5300	15.06		PASS
	64		5320	15.07		PASS
	100		5500	15.04		PASS
	116		5580	15.04		PASS
	140		5700	15.08		PASS
IEEE 802.11ac_40	38		5190	35.04		PASS
	46		5230	35.05		PASS
	54		5270	35.04		PASS
	62		5310	35.05		PASS
	110		5550	35.05		PASS

	134		5670	35.03		PASS
IEEE 802.11ac_80	42		5210	75.86		PASS
	58		5290	75.33		PASS
	106		5530	75.10		PASS
	122		5610	75.09		PASS

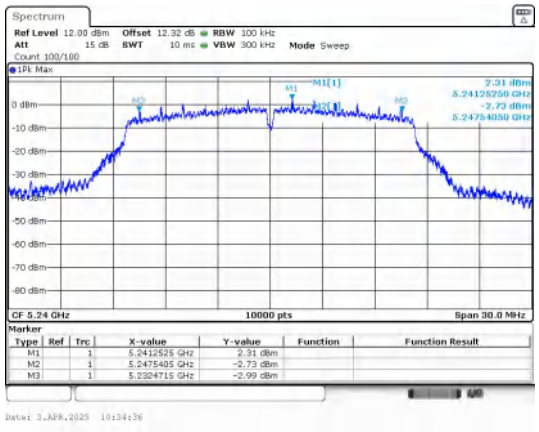
Test Graphs



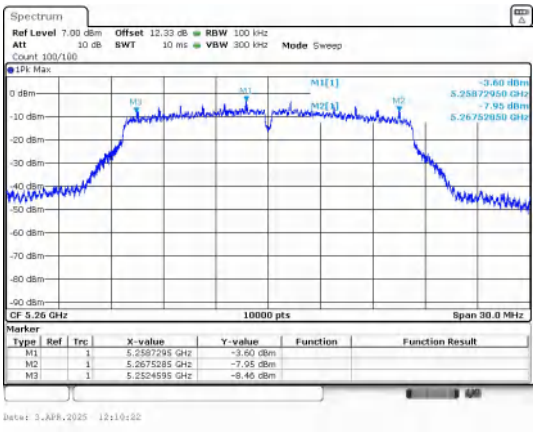
IEEE 802.11a_Channel 36_20MHz_Antenna 0



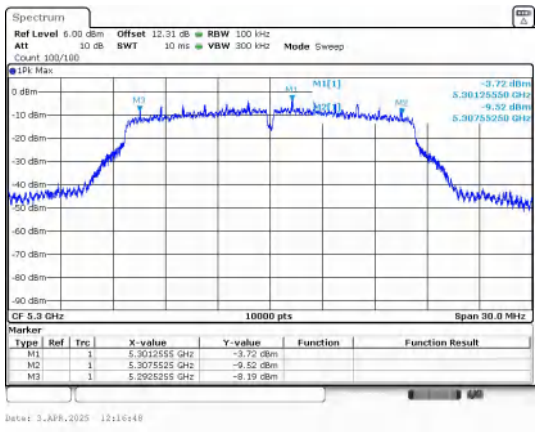
IEEE 802.11a_Channel 40_20MHz_Antenna 0



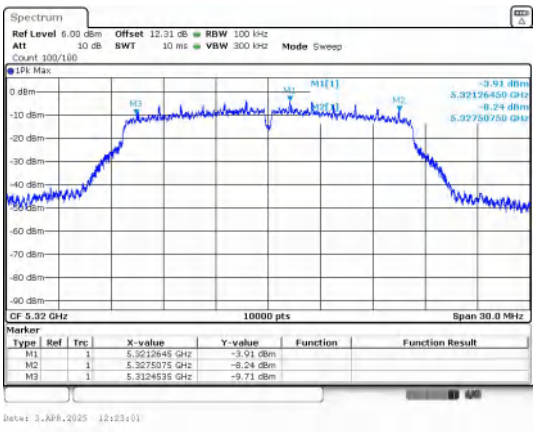
IEEE 802.11a_Channel 48_20MHz_Antenna 0



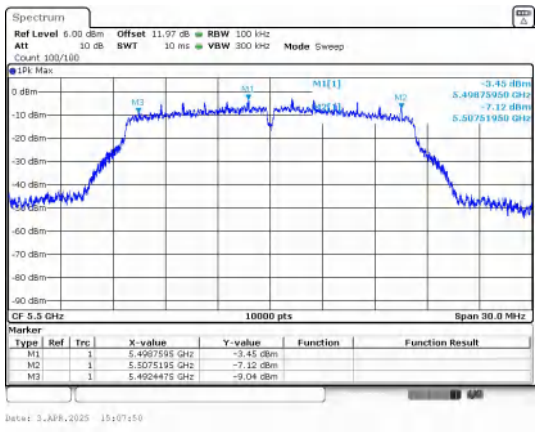
IEEE 802.11a_Channel 52_20MHz_Antenna 0



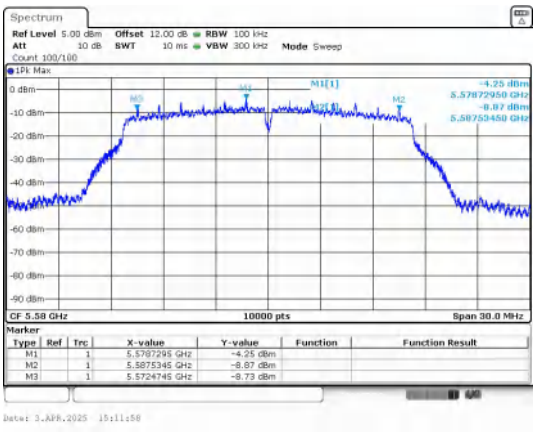
IEEE 802.11a_Channel 60_20MHz_Antenna 0



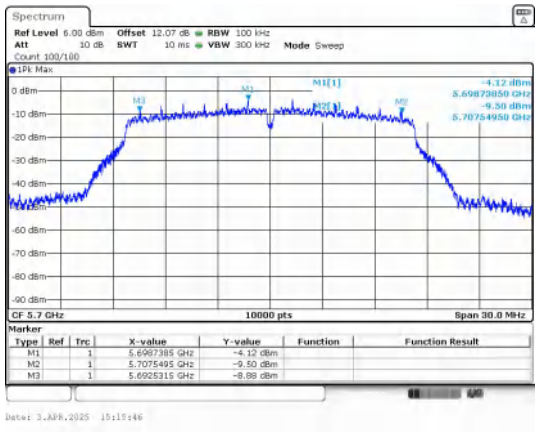
IEEE 802.11a_Channel 64_20MHz_Antenna 0



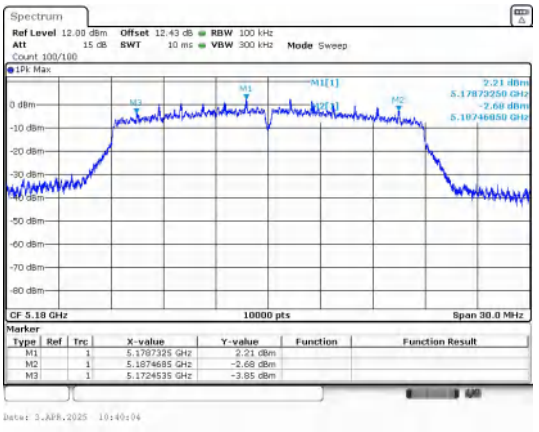
IEEE 802.11a_Channel 100_20MHz_Antenna 0



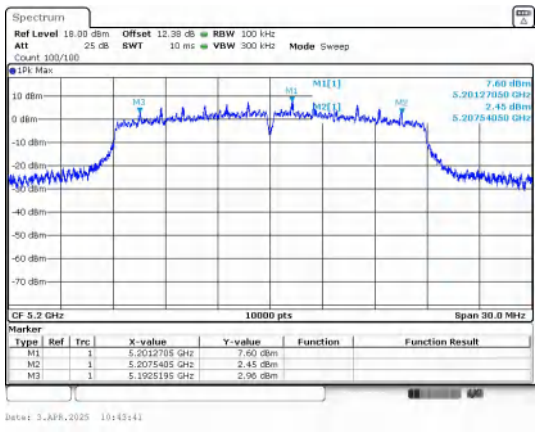
IEEE 802.11a_Channel 116_20MHz_Antenna 0



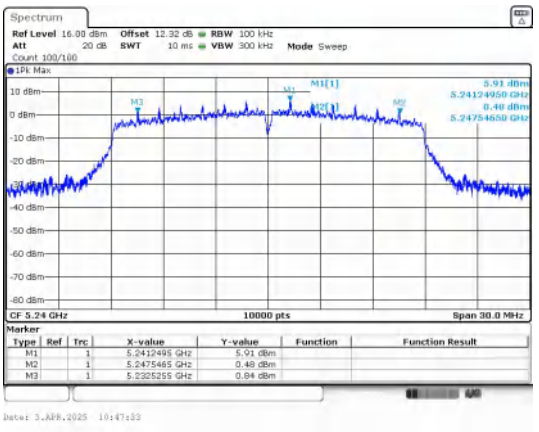
IEEE 802.11a_Channel 140_20MHz_Antenna 0



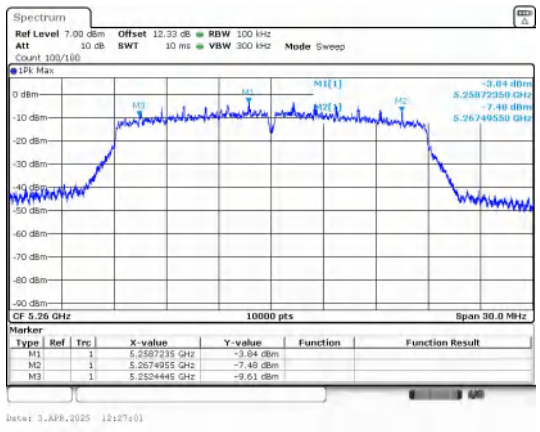
IEEE 802.11n_Channel 36_20MHz_Antenna 0



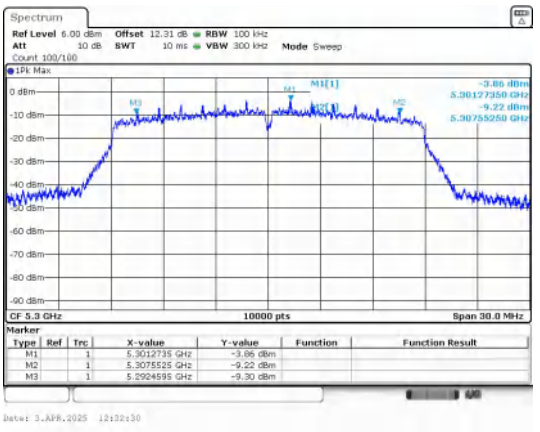
IEEE 802.11n_Channel 40_20MHz_Antenna 0



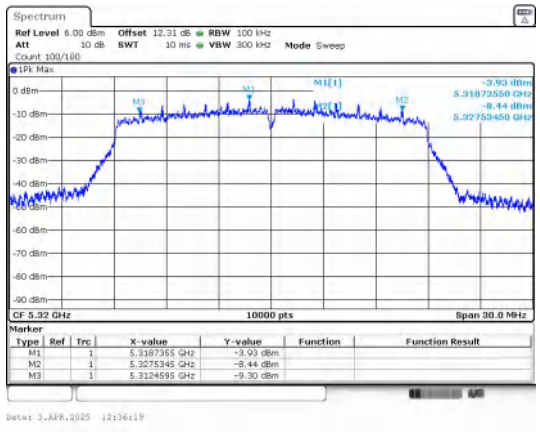
IEEE 802.11n_Channel 48_20MHz_Antenna 0



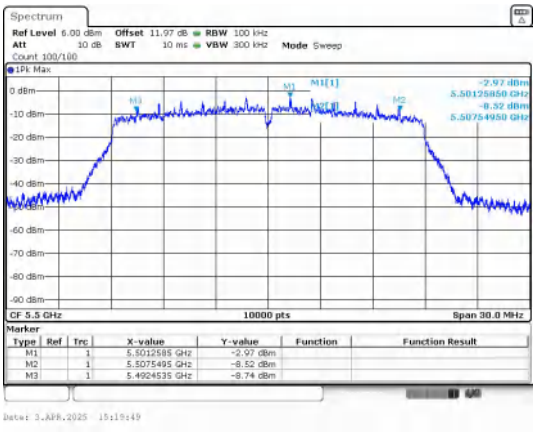
IEEE 802.11n_Channel 52_20MHz_Antenna 0



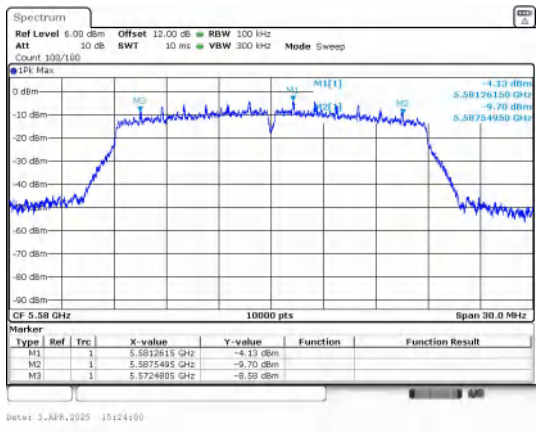
IEEE 802.11n_Channel 60_20MHz_Antenna 0



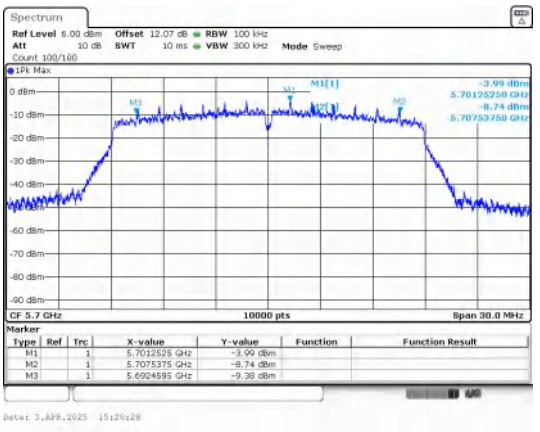
IEEE 802.11n_Channel 64_20MHz_Antenna 0



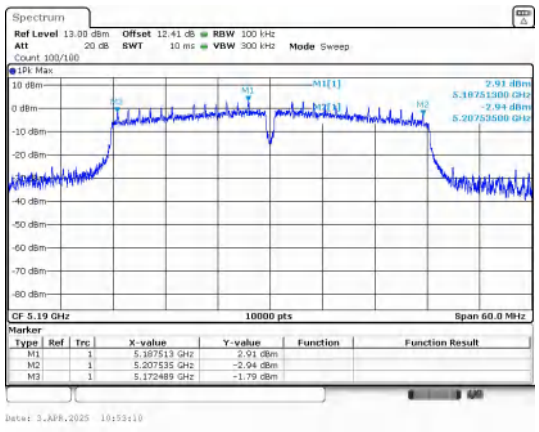
IEEE 802.11n_Channel 100_20MHz_Antenna 0



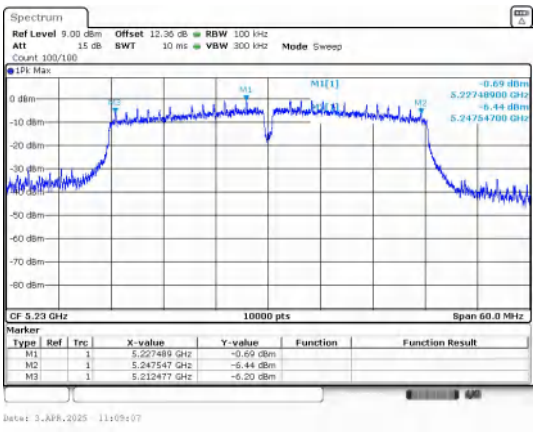
IEEE 802.11n_Channel 116_20MHz_Antenna 0



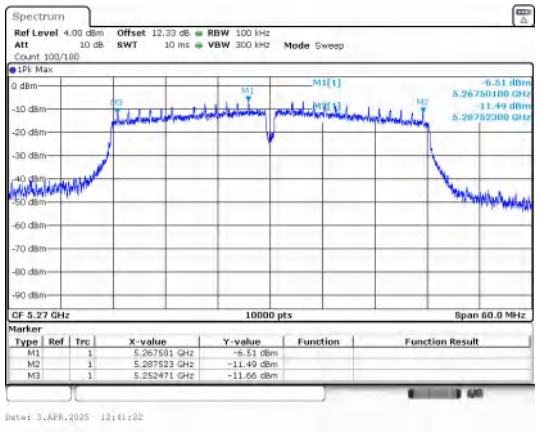
IEEE 802.11n_Channel 140_20MHz_Antenna 0



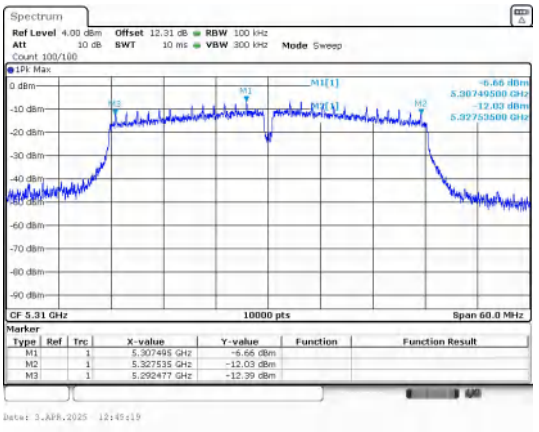
IEEE 802.11n_Channel 38_40MHz_Antenna 0



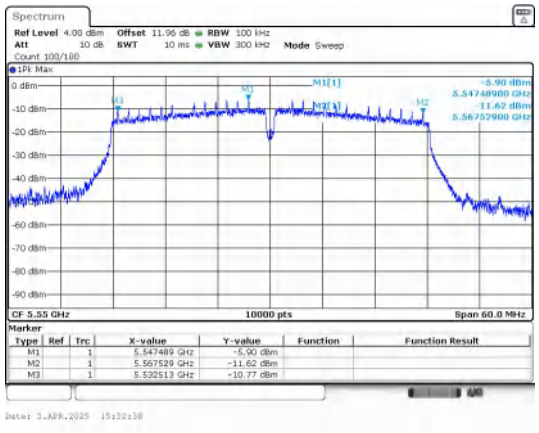
IEEE 802.11n_Channel 46_40MHz_Antenna 0



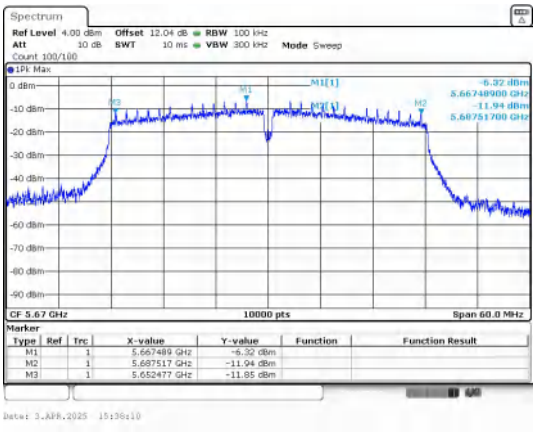
IEEE 802.11n_Channel 54_40MHz_Antenna 0



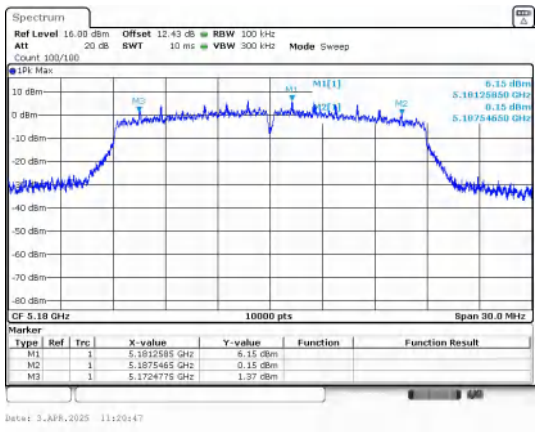
IEEE 802.11n_Channel 62_40MHz_Antenna 0



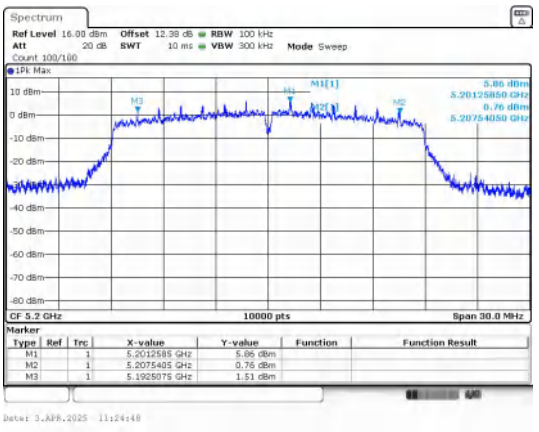
IEEE 802.11n_Channel 110_40MHz_Antenna 0



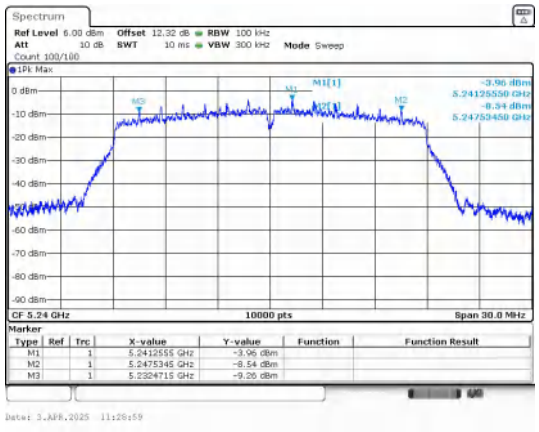
IEEE 802.11n_Channel 134_40MHz_Antenna 0



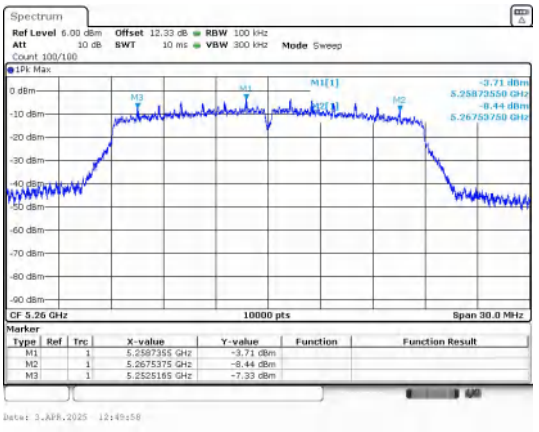
IEEE 802.11ac_Channel 36_20MHz_Antenna 0



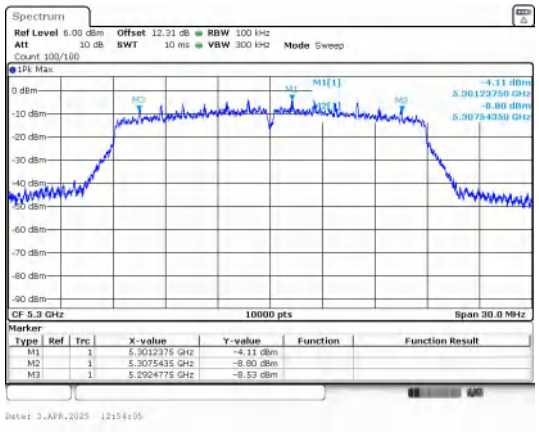
IEEE 802.11ac_Channel 40_20MHz_Antenna 0



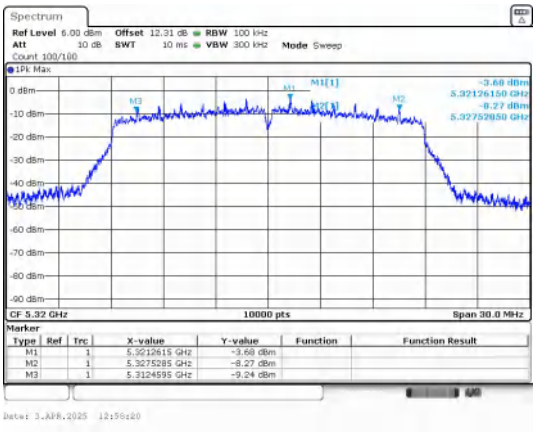
IEEE 802.11ac_Channel 48_20MHz_Antenna 0



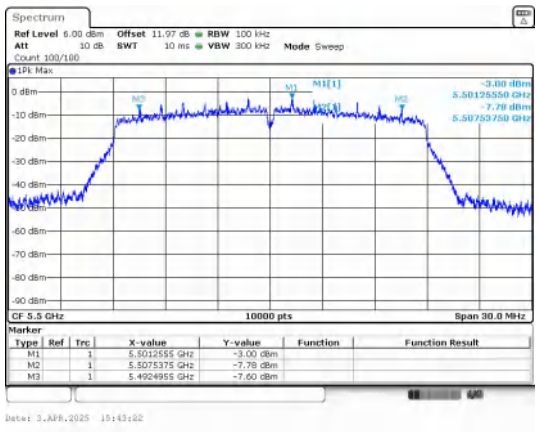
IEEE 802.11ac_Channel 52_20MHz_Antenna 0



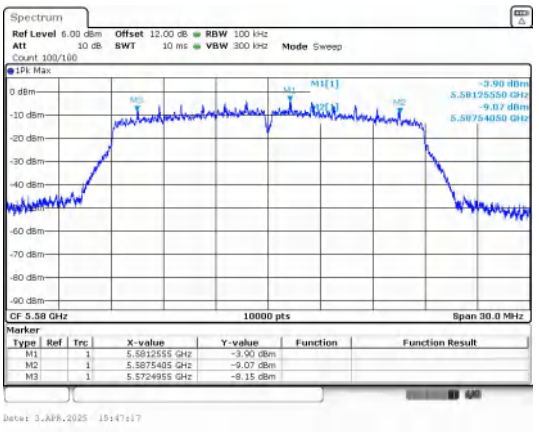
IEEE 802.11ac_Channel 60_20MHz_Antenna 0



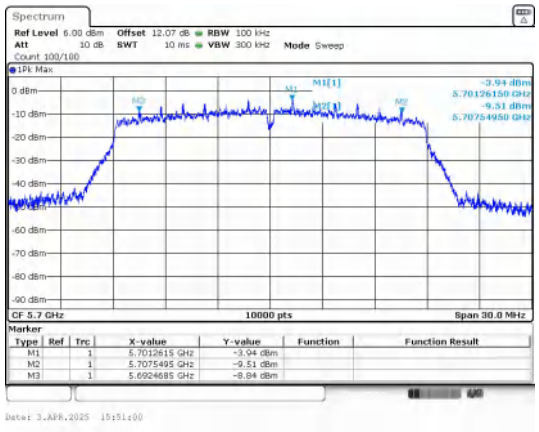
IEEE 802.11ac_Channel 64_20MHz_Antenna 0



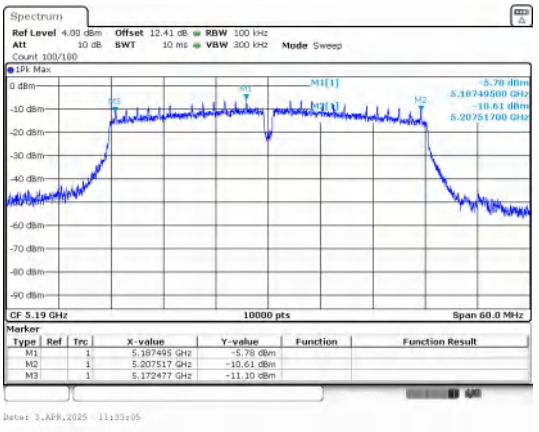
IEEE 802.11ac_Channel 100_20MHz_Antenna 0



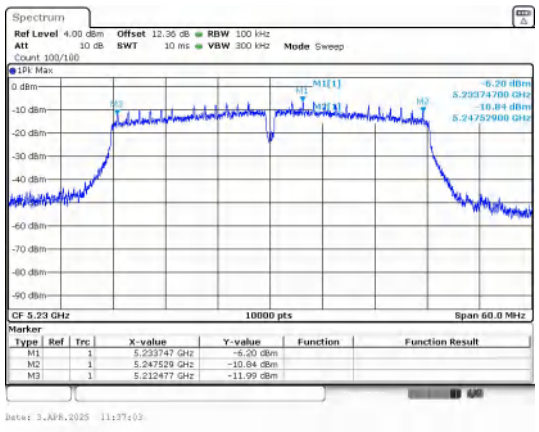
IEEE 802.11ac_Channel 116_20MHz_Antenna 0



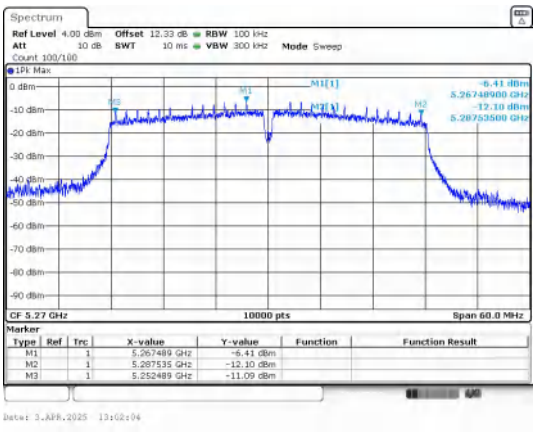
IEEE 802.11ac_Channel 140_20MHz_Antenna 0



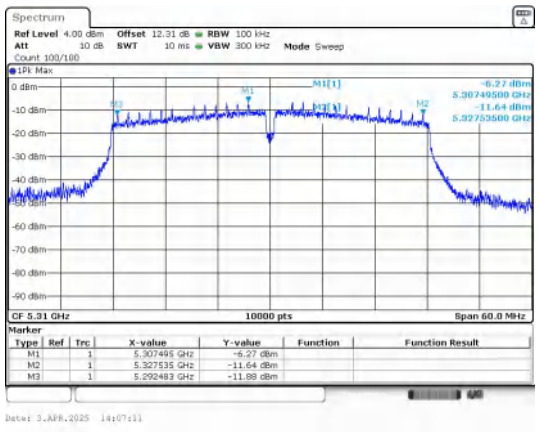
IEEE 802.11ac_Channel 38_40MHz_Antenna 0



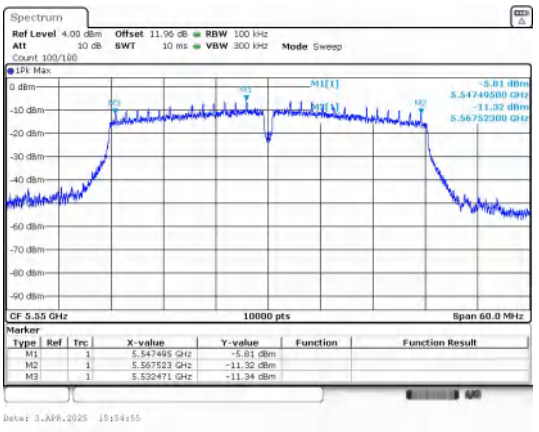
IEEE 802.11ac_Channel 46_40MHz_Antenna 0



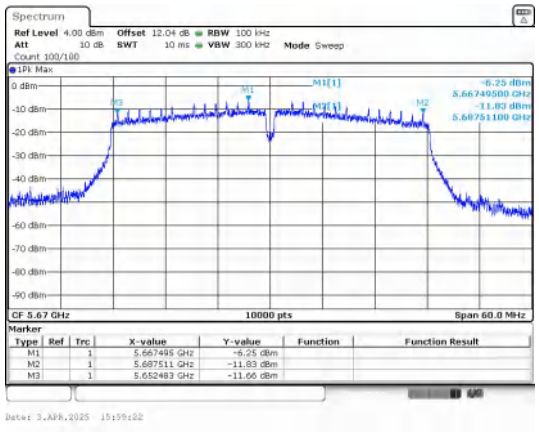
IEEE 802.11ac_Channel 54_40MHz_Antenna 0



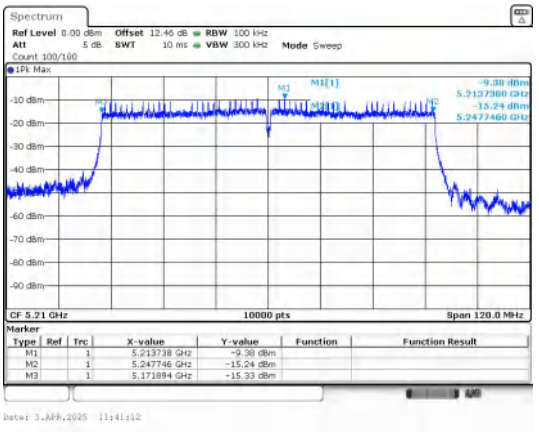
IEEE 802.11ac_Channel 62_40MHz_Antenna 0



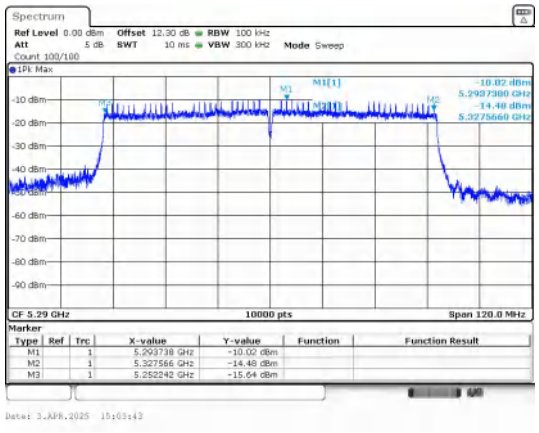
IEEE 802.11ac_Channel 110_40MHz_Antenna 0



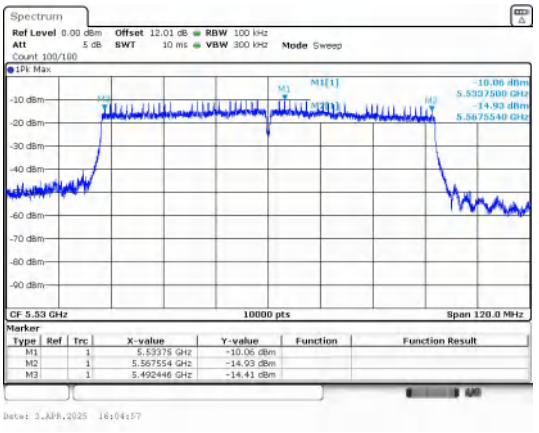
IEEE 802.11ac_Channel 134_40MHz_Antenna 0



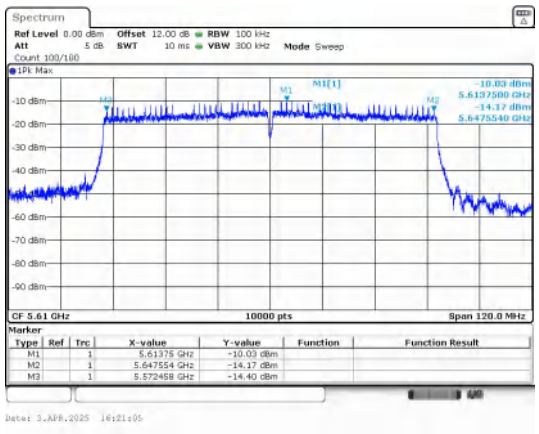
IEEE 802.11ac_Channel 42_80MHz_Antenna 0



IEEE 802.11ac_Channel 58_80MHz_Antenna 0



IEEE 802.11ac_Channel 106_80MHz_Antenna 0



IEEE 802.11ac_Channel 122_80MHz_Antenna 0

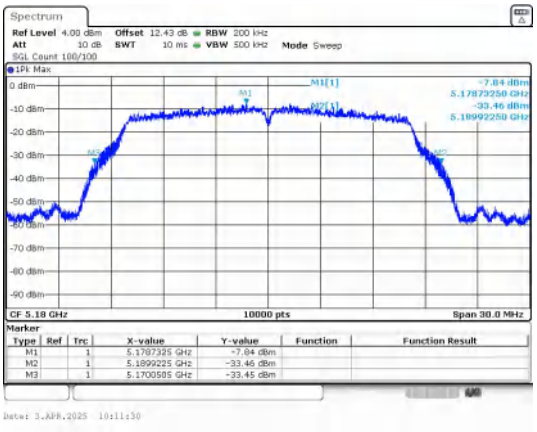
5) 26dB Bandwidth

Test Result

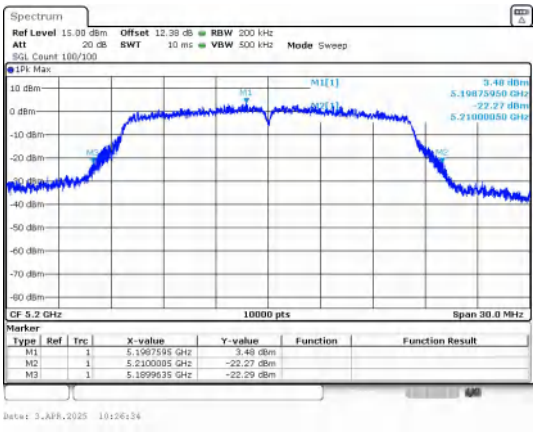
Mode	Channel	Ant.	Center Frequency (MHz)	26 dB Bandwidth (MHz)	RBW/EBW
IEEE 802.11a	36	0	5180	19.87	1.12
	40		5200	20.04	1.11
	48		5240	19.97	1.11
	52		5260	20.01	1.12
	60		5300	19.98	1.11
	64		5320	20.00	1.11
	100		5500	19.98	1.11
	116		5580	19.92	1.12
	140		5700	19.96	1.11
IEEE 802.11n_20	36		5180	20.07	1.12
	40		5200	25.10	1.2
	48		5240	19.84	1.19
	52		5260	20.02	1.12
	60		5300	19.90	1.12
	64		5320	20.01	1.11
	100		5500	19.89	1.12
	116		5580	19.90	1.12
	140		5700	19.98	1.12
IEEE 802.11n_40	38		5190	40.92	1.05
	46		5230	40.53	1.05
	54		5270	40.66	1.05
	62		5310	40.75	1.04
	110		5550	40.33	1.05
	134		5670	40.60	1.05
IEEE 802.11ac_20	36		5180	19.97	1.12
	40		5200	19.97	1.14
	48		5240	19.73	1.12
	52		5260	20.04	1.12
	60		5300	20.00	1.12
	64		5320	19.93	1.12
	100		5500	19.98	1.11
	116		5580	19.96	1.12
	140		5700	19.91	1.12
IEEE 802.11ac_40	38		5190	40.58	1.05
	46		5230	40.45	1.05
	54		5270	40.86	1.04
	62		5310	40.67	1.04
	110		5550	40.58	1.05

	134		5670	40.62	1.05
IEEE 802.11ac_80	42		5210	81.83	1.03
	58		5290	82.00	1.02
	106		5530	81.82	1.02
	122		5610	81.88	1.03

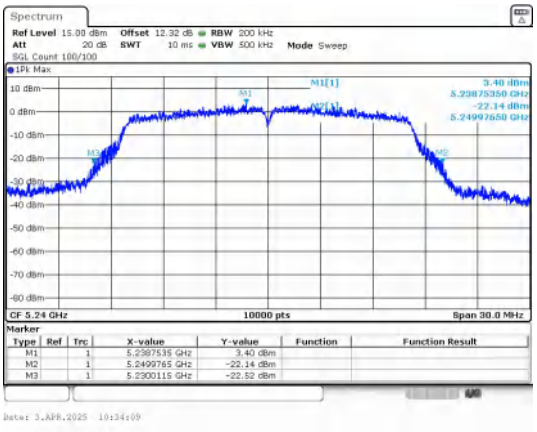
Test Graphs



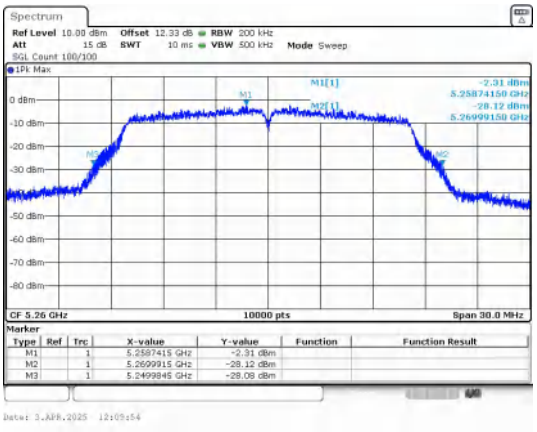
IEEE 802.11a_Channel 36_20MHz_Antenna 0



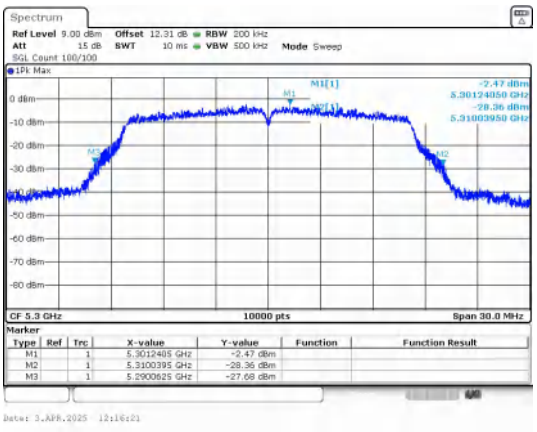
IEEE 802.11a_Channel 40_20MHz_Antenna 0



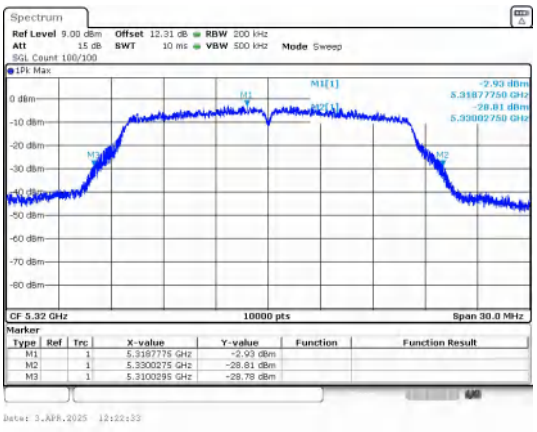
IEEE 802.11a_Channel 48_20MHz_Antenna 0



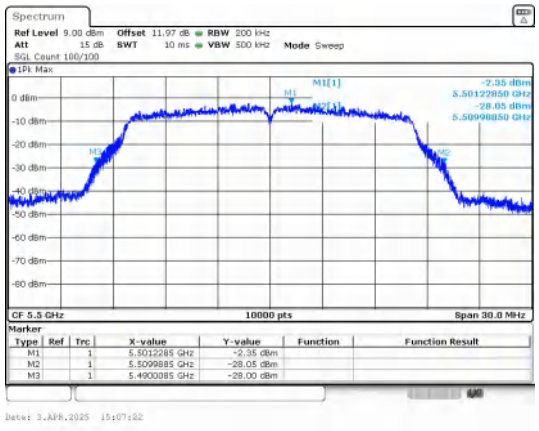
IEEE 802.11a_Channel 52_20MHz_Antenna 0



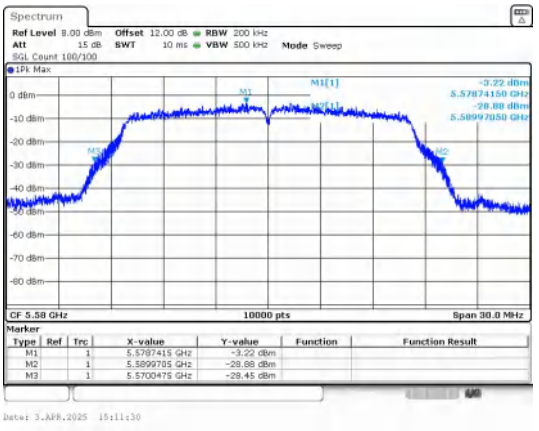
IEEE 802.11a_Channel 60_20MHz_Antenna 0



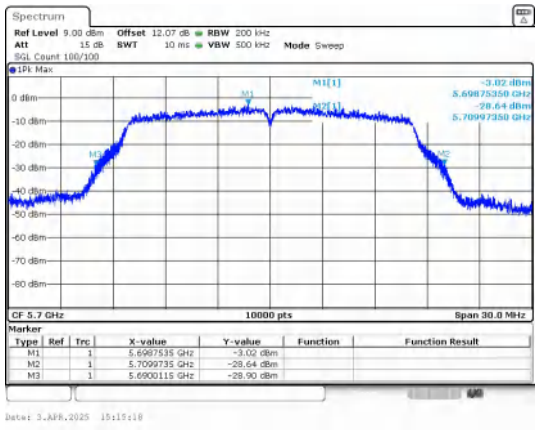
IEEE 802.11a_Channel 64_20MHz_Antenna 0



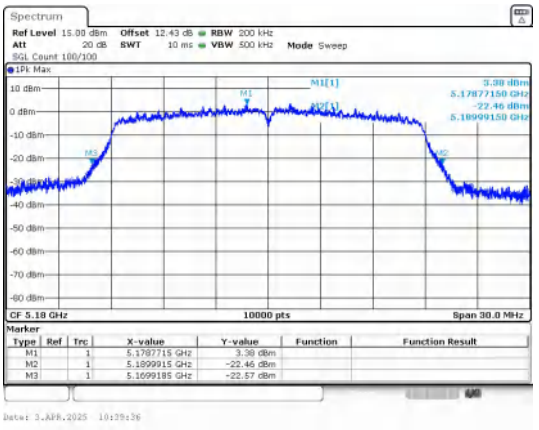
IEEE 802.11a_Channel 100_20MHz_Antenna 0



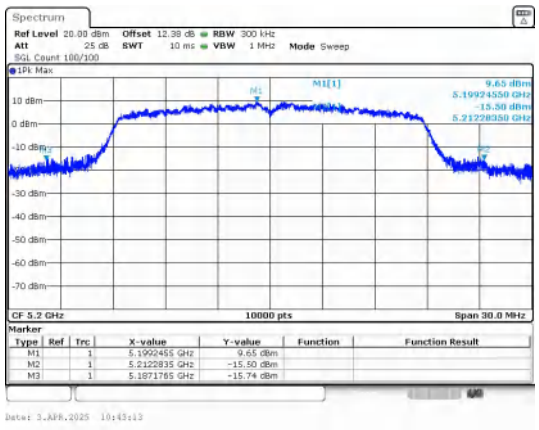
IEEE 802.11a_Channel 116_20MHz_Antenna 0



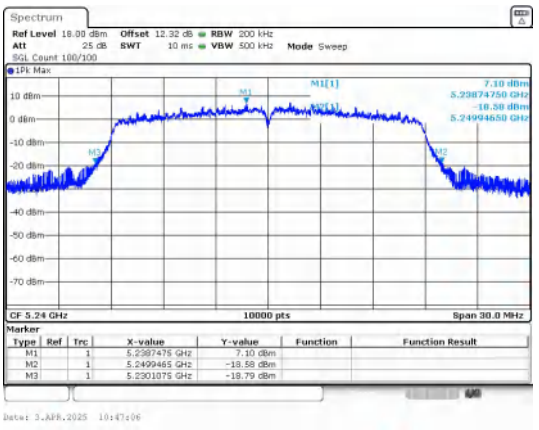
IEEE 802.11a_Channel 140_20MHz_Antenna 0



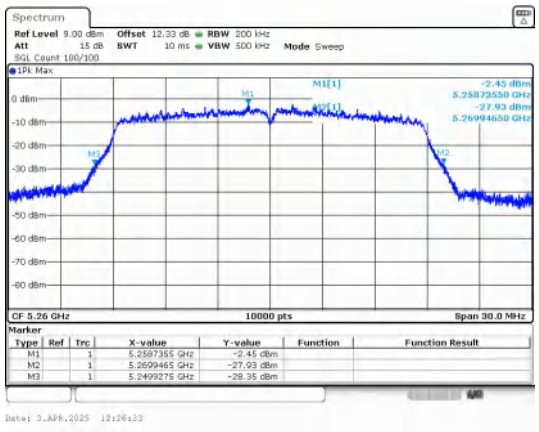
IEEE 802.11n_Channel 36_20MHz_Antenna 0



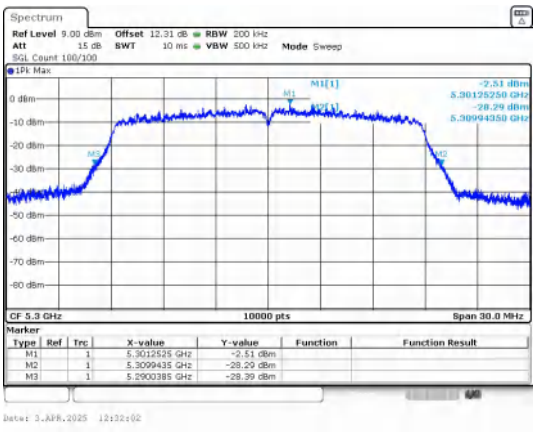
IEEE 802.11n_Channel 40_20MHz_Antenna 0



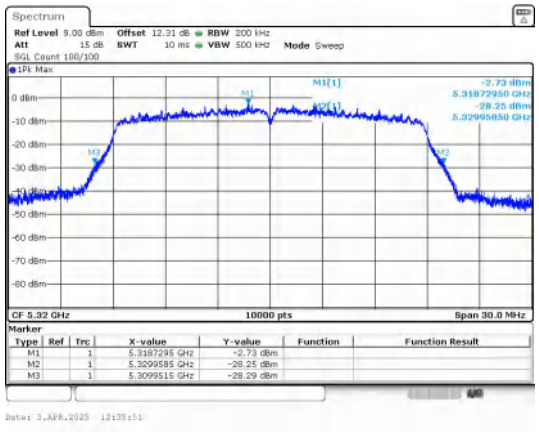
IEEE 802.11n_Channel 48_20MHz_Antenna 0



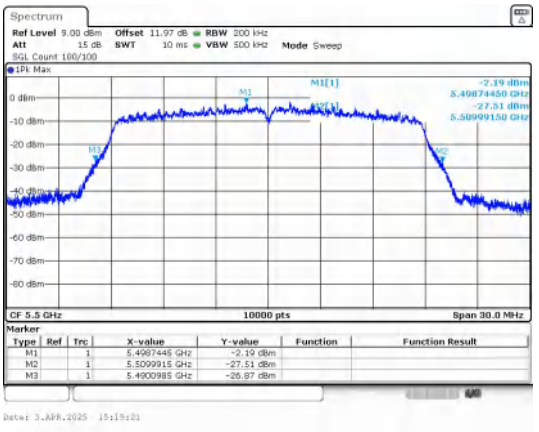
IEEE 802.11n_Channel 52_20MHz_Antenna 0



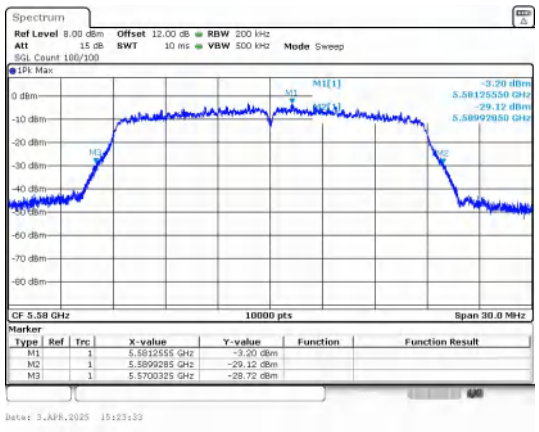
IEEE 802.11n_Channel 60_20MHz_Antenna 0



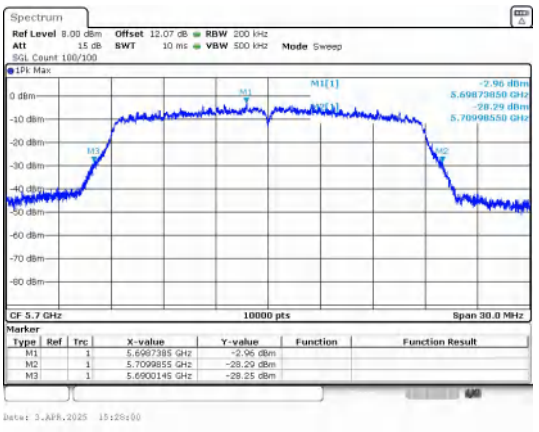
IEEE 802.11n_Channel 64_20MHz_Antenna 0



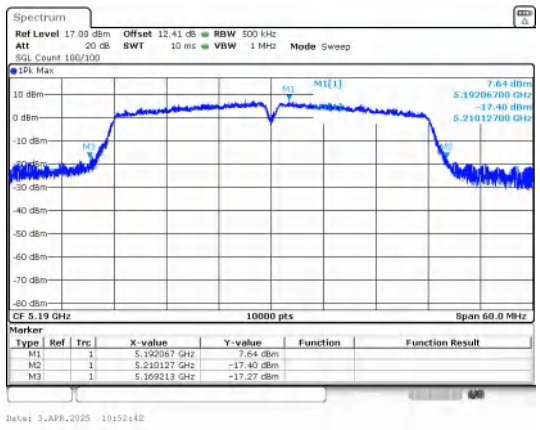
IEEE 802.11n_Channel 100_20MHz_Antenna 0



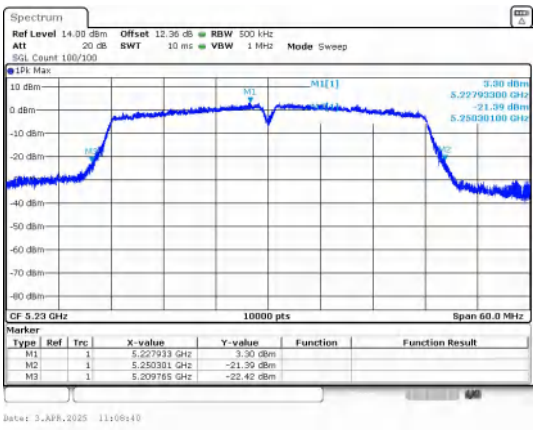
IEEE 802.11n_Channel 116_20MHz_Antenna 0



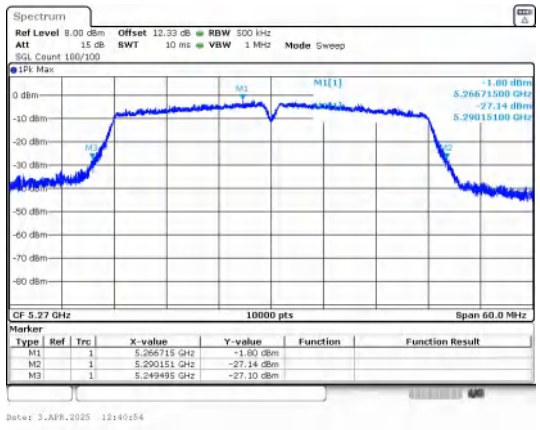
IEEE 802.11n_Channel 140_20MHz_Antenna 0



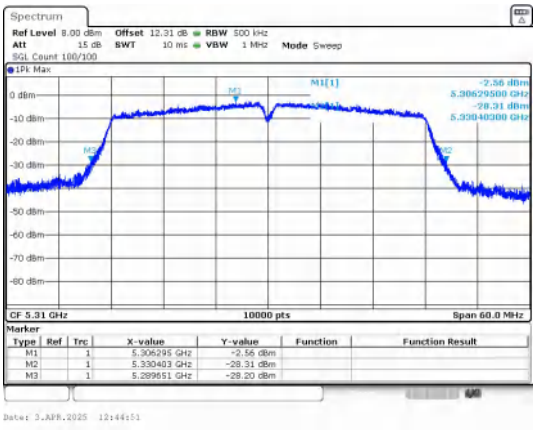
IEEE 802.11n_Channel 38_40MHz_Antenna 0



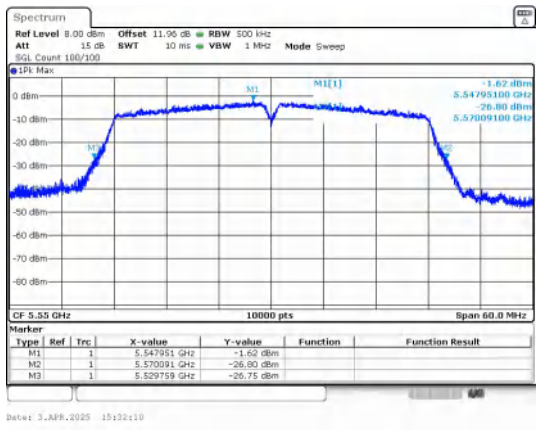
IEEE 802.11n_Channel 46_40MHz_Antenna 0



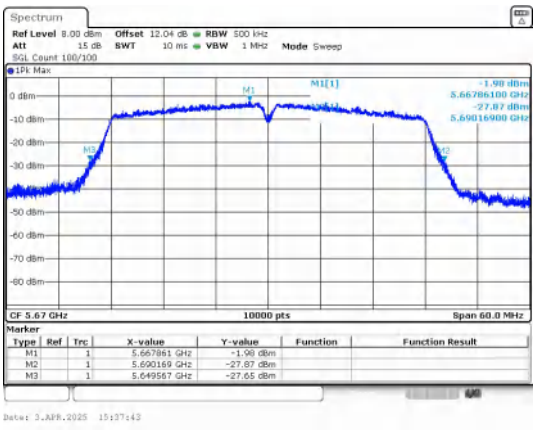
IEEE 802.11n_Channel 54_40MHz_Antenna 0



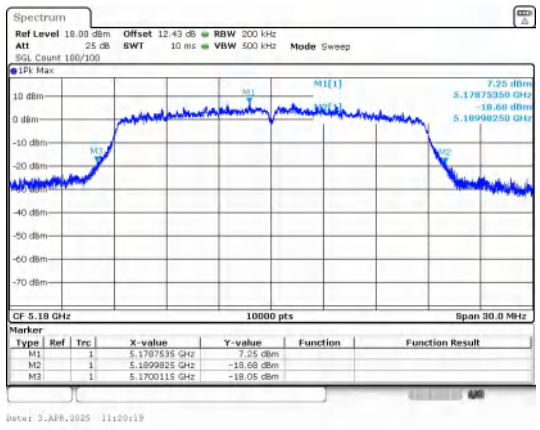
IEEE 802.11n_Channel 62_40MHz_Antenna 0



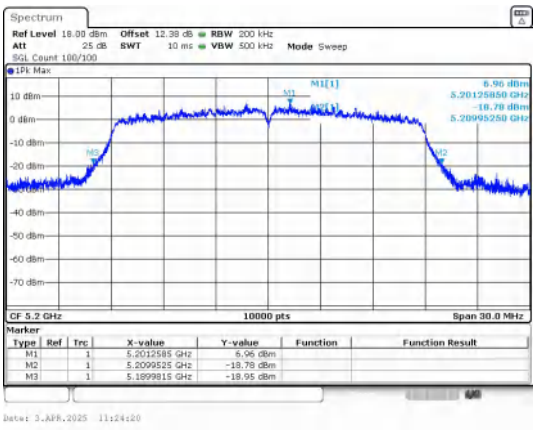
IEEE 802.11n_Channel 110_40MHz_Antenna 0



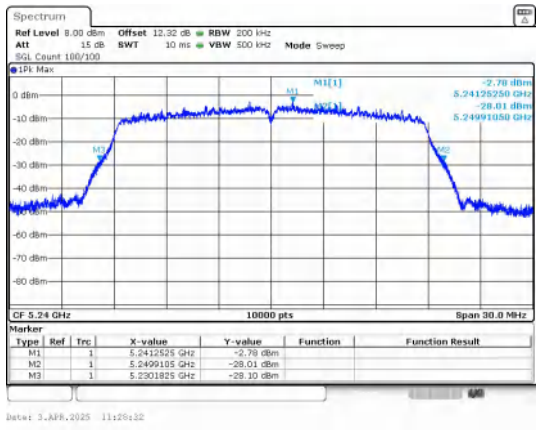
IEEE 802.11n_Channel 134_40MHz_Antenna 0



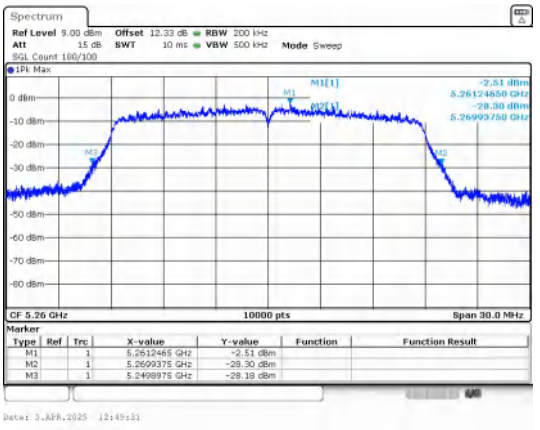
IEEE 802.11ac_Channel 36_20MHz_Antenna 0



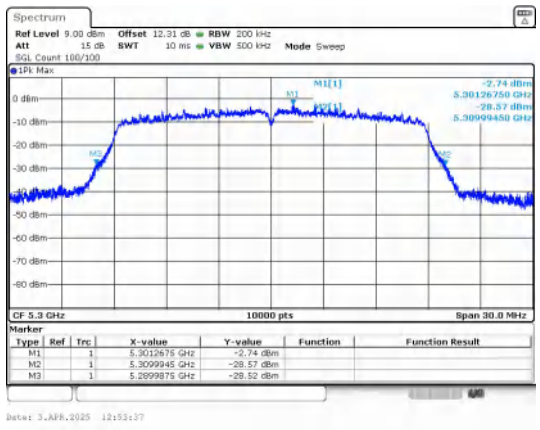
IEEE 802.11ac_Channel 40_20MHz_Antenna 0



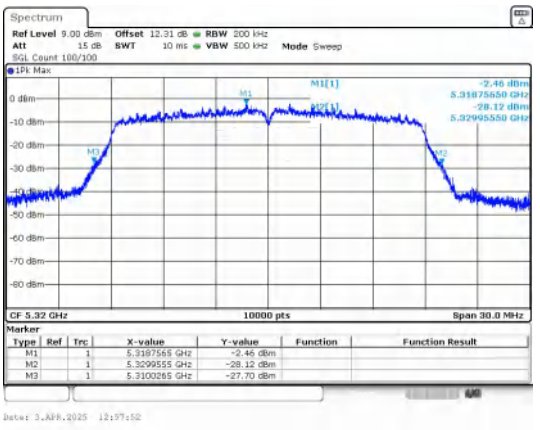
IEEE 802.11ac_Channel 48_20MHz_Antenna 0



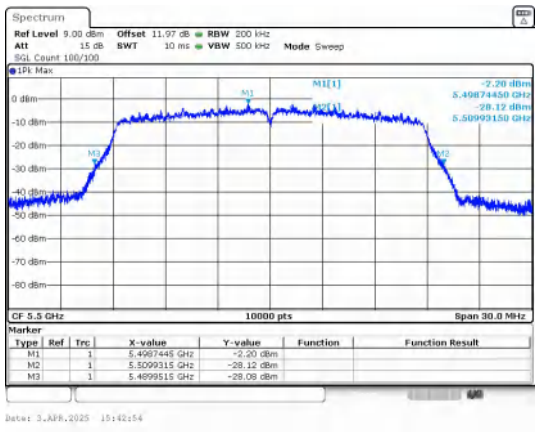
IEEE 802.11ac_Channel 52_20MHz_Antenna 0



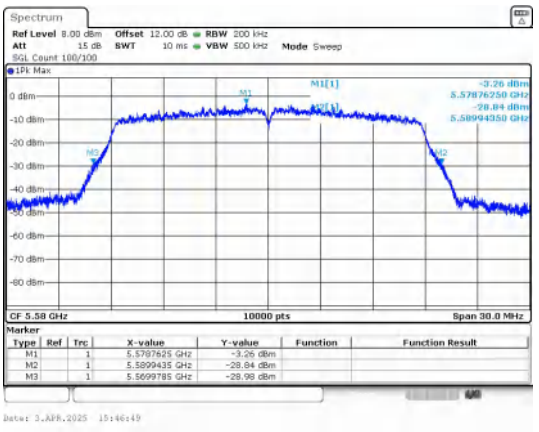
IEEE 802.11ac_Channel 60_20MHz_Antenna 0



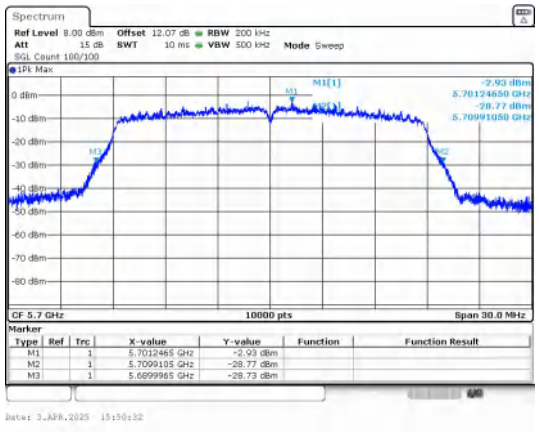
IEEE 802.11ac_Channel 64_20MHz_Antenna 0



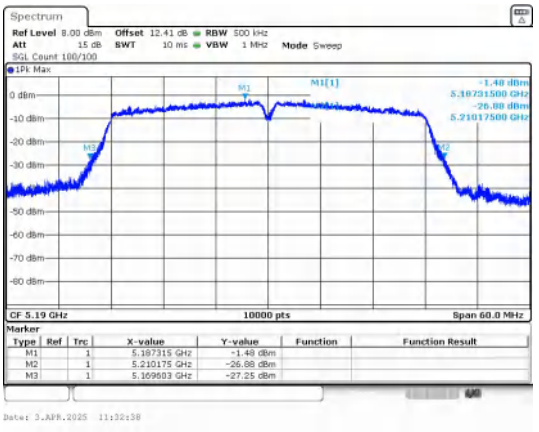
IEEE 802.11ac_Channel 100_20MHz_Antenna 0



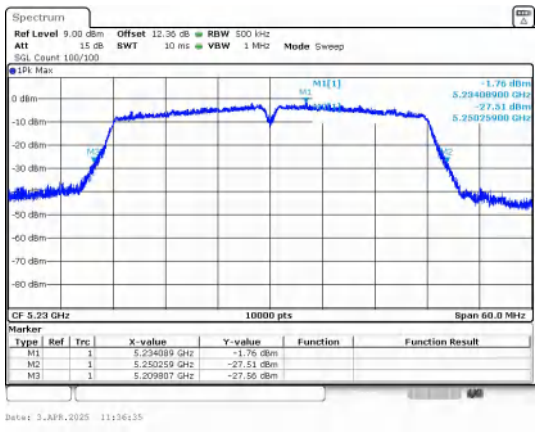
IEEE 802.11ac_Channel 116_20MHz_Antenna 0



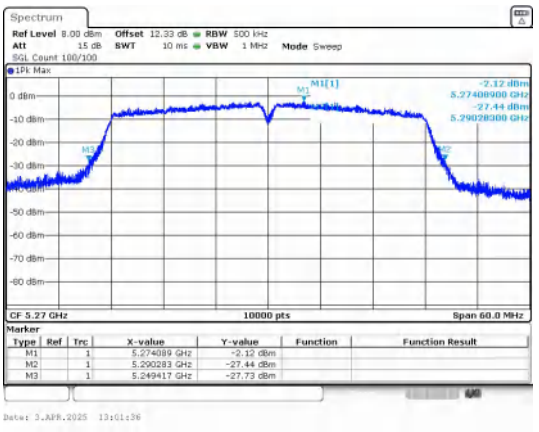
IEEE 802.11ac_Channel 140_20MHz_Antenna 0



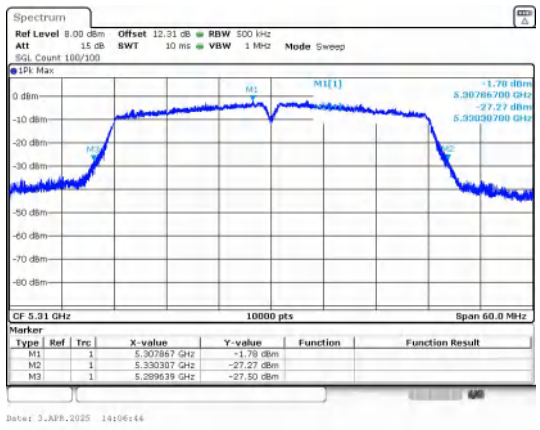
IEEE 802.11ac_Channel 38_40MHz_Antenna 0



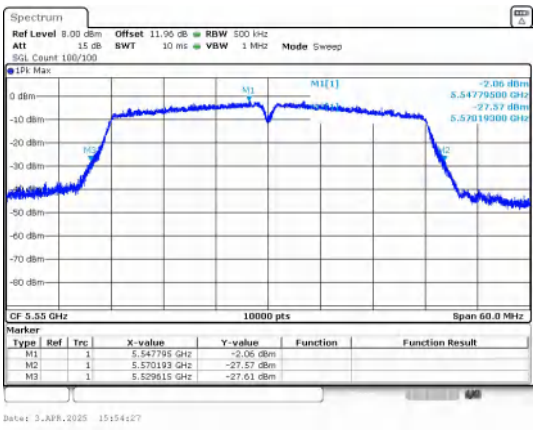
IEEE 802.11ac_Channel 46_40MHz_Antenna 0



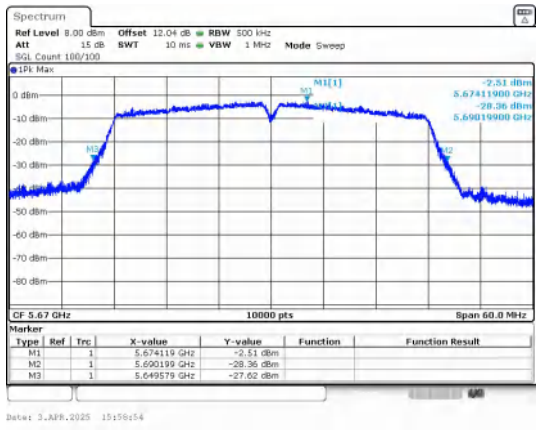
IEEE 802.11ac_Channel 54_40MHz_Antenna 0



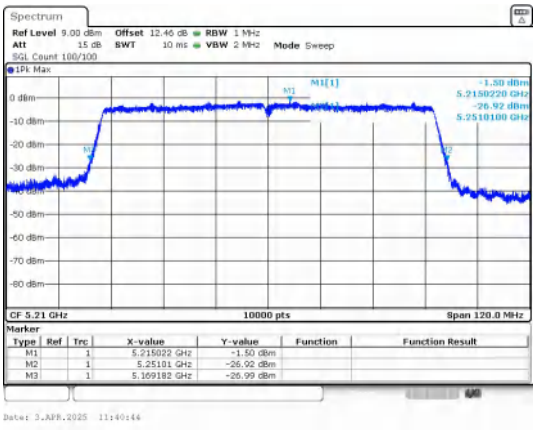
IEEE 802.11ac_Channel 62_40MHz_Antenna 0



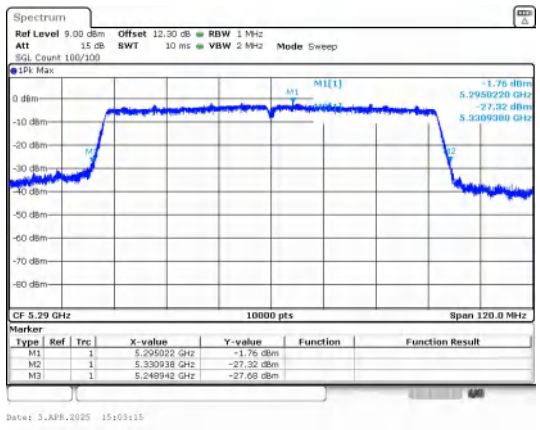
IEEE 802.11ac_Channel 110_40MHz_Antenna 0



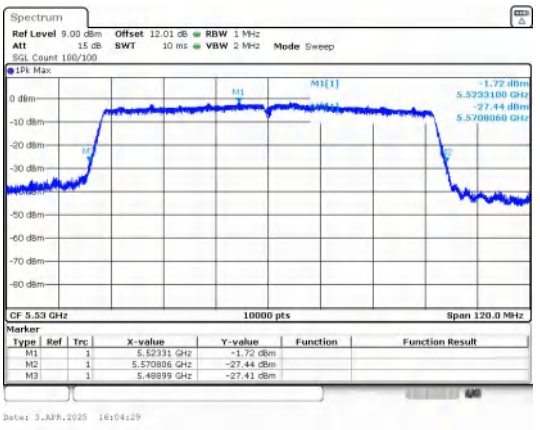
IEEE 802.11ac_Channel 134_40MHz_Antenna 0



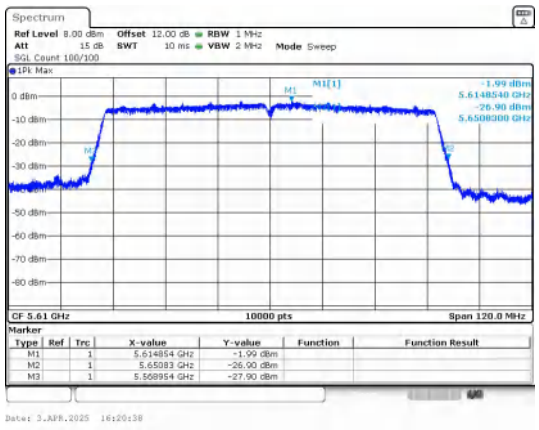
IEEE 802.11ac_Channel 42_80MHz_Antenna 0



IEEE 802.11ac_Channel 58_80MHz_Antenna 0



IEEE 802.11ac_Channel 106_80MHz_Antenna 0



IEEE 802.11ac_Channel 122_80MHz_Antenna 0

6) Conducted Out Of Band Emission

Test Result

Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11a	36	0	30.09	-42.990	-27	-15.990	PASS
			5146.71	-32.127	-27	-5.000	PASS
			5150.00	-32.600	-27	-6.000	PASS
			5350.00	-32.270	-27	-5.000	PASS
			5459.31	-31.318	-27	-4.000	PASS
			8288.00	-42.330	-27	-15.330	PASS
	40		5127.56	-44.020	-27	-17.020	PASS
			5149.49	-33.238	-27	-6.000	PASS
			5150.00	-33.240	-27	-6.000	PASS
			5350.00	-31.900	-27	-5.000	PASS
			5459.31	-31.485	-27	-4.000	PASS
			8320.10	-41.900	-27	-14.900	PASS
	48		30.09	-43.070	-27	-16.070	PASS
			5146.71	-31.335	-27	-4.000	PASS
			5150.00	-32.170	-27	-5.000	PASS
			5350.00	-32.430	-27	-5.000	PASS
			5459.31	-31.043	-27	-4.000	PASS
			22041.0	-42.920	-27	-15.920	PASS
	52		30.09	-41.980	-27	-14.980	PASS
			5148.10	-32.136	-27	-5.000	PASS
			5150.00	-32.600	-27	-6.000	PASS
			5350.00	-31.830	-27	-5.000	PASS
			5459.31	-29.617	-27	-3.000	PASS
			18243.3	-43.410	-27	-16.410	PASS
	60		30.26	-43.380	-27	-16.380	PASS
			5123.10	-29.208	-27	-2.000	PASS
			5150.00	-30.260	-27	-3.000	PASS
			5350.00	-32.130	-27	-5.000	PASS
			5459.31	-30.433	-27	-3.000	PASS
			20062.9	-42.440	-27	-15.440	PASS
	64		30.09	-42.280	-27	-15.280	PASS
			5148.10	-31.847	-27	-5.000	PASS
			5150.00	-32.810	-27	-6.000	PASS
			5350.00	-31.880	-27	-5.000	PASS
			5457.92	-30.734	-27	-4.000	PASS
			16761.7	-42.980	-27	-15.980	PASS
	100		5460.84	-42.150	-27	-15.150	PASS

			5468.55	-30.369	-27	-3.000	PASS
			5470.00	-30.740	-27	-4.000	PASS
			5725.00	-31.040	-27	-4.000	PASS
			5747.81	-42.270	-27	-15.270	PASS
			6220.46	-30.135	-27	-3.000	PASS
	116		5463.10	-30.021	-27	-3.000	PASS
			5469.73	-43.380	-27	-16.380	PASS
			5470.00	-30.500	-27	-4.000	PASS
			5725.00	-31.500	-27	-4.000	PASS
			6224.09	-31.376	-27	-4.000	PASS
			17705.4	-43.310	-27	-16.310	PASS
	140		2467.75	-43.890	-27	-16.890	PASS
			5466.73	-30.035	-27	-3.000	PASS
			5470.00	-30.250	-27	-3.000	PASS
			5725.00	-30.500	-27	-4.000	PASS
			6222.28	-29.564	-27	-3.000	PASS
			16271.3	-43.120	-27	-16.120	PASS
IEEE 802.11n_20	36		5132.68	-43.830	-27	-16.830	PASS
			5146.71	-32.584	-27	-6.000	PASS
			5150.00	-32.750	-27	-6.000	PASS
			5350.00	-32.360	-27	-5.000	PASS
			5459.31	-31.622	-27	-5.000	PASS
			8288.00	-41.770	-27	-14.770	PASS
	40		30.09	-42.390	-27	-15.390	PASS
			5145.33	-32.147	-27	-5.000	PASS
			5150.00	-32.380	-27	-5.000	PASS
			5350.00	-32.630	-27	-6.000	PASS
			5459.31	-32.240	-27	-5.000	PASS
			15835.6	-42.400	-27	-15.400	PASS
	48		30.09	-42.860	-27	-15.860	PASS
			5149.49	-33.706	-27	-7.000	PASS
			5150.00	-33.710	-27	-7.000	PASS
			5350.00	-32.740	-27	-6.000	PASS
			5459.31	-31.130	-27	-4.000	PASS
			22001.7	-42.530	-27	-15.530	PASS
	52		30.26	-44.330	-27	-17.330	PASS
			5149.49	-33.336	-27	-6.000	PASS
			5150.00	-33.340	-27	-6.000	PASS
			5350.00	-33.000	-27	-6.000	PASS
			5459.31	-32.205	-27	-5.000	PASS
			18262.3	-42.620	-27	-15.620	PASS
	60		5131.14	-44.560	-27	-17.560	PASS
			5142.55	-31.218	-27	-4.000	PASS
			5150.00	-31.270	-27	-4.000	PASS