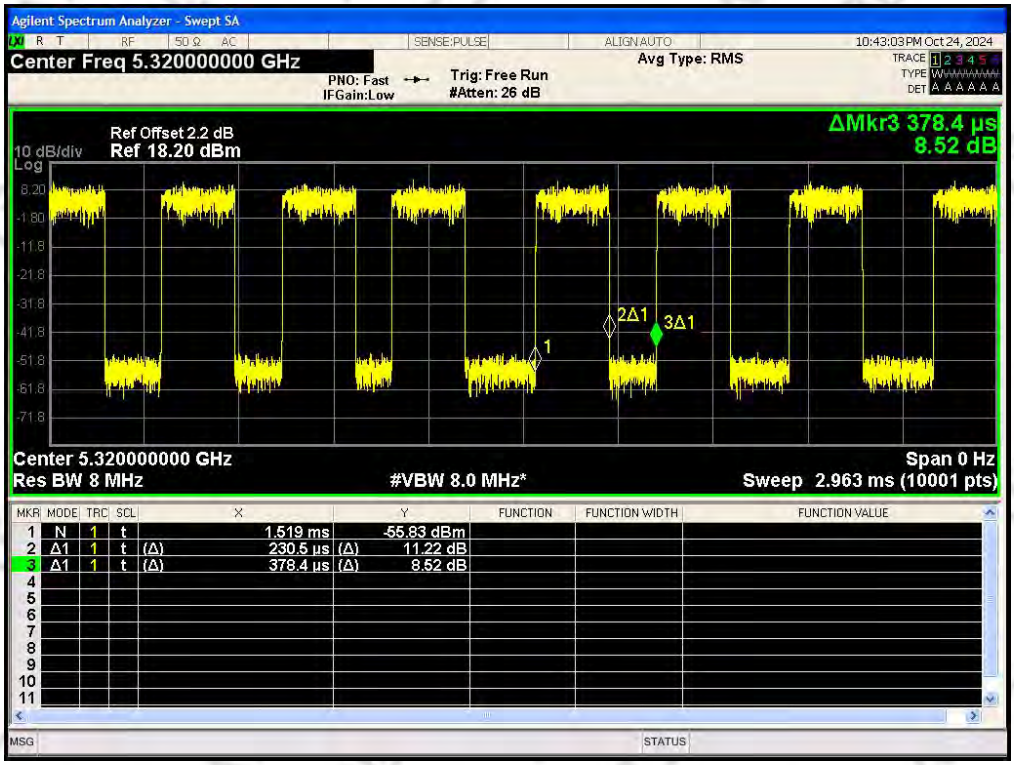
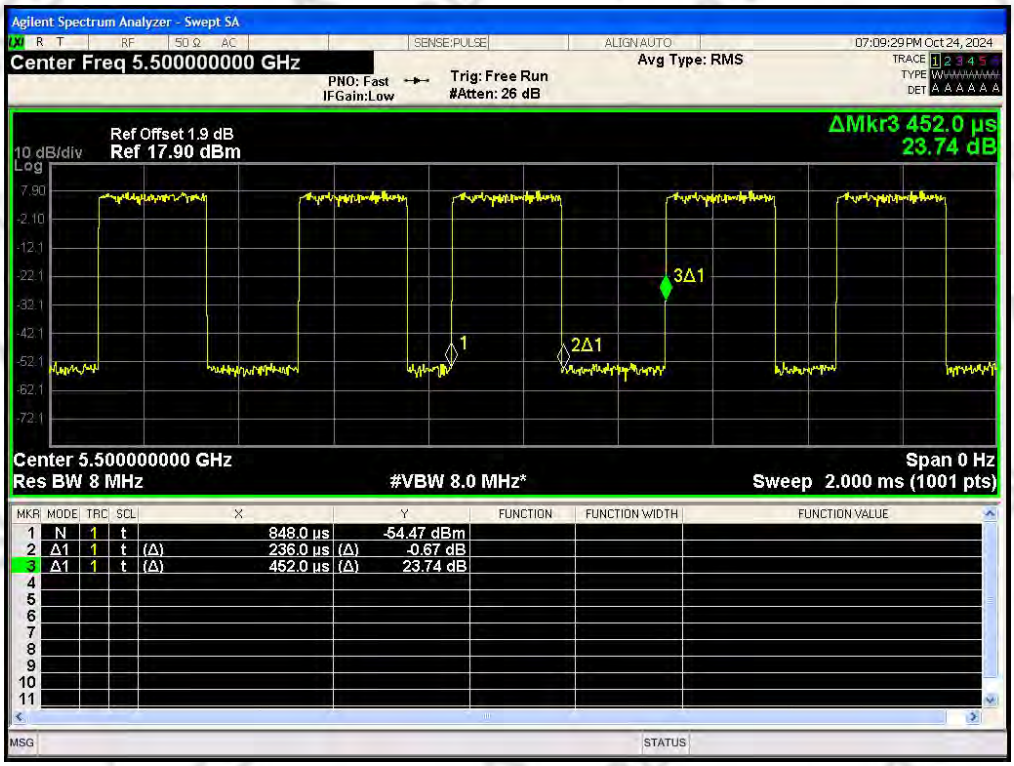
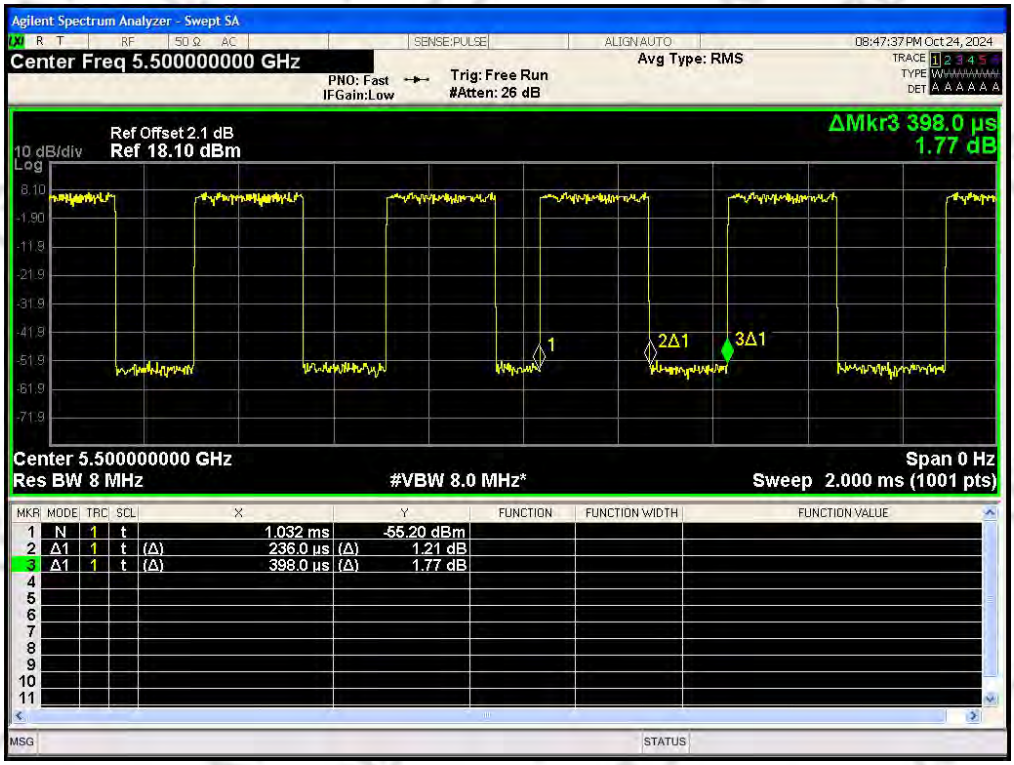


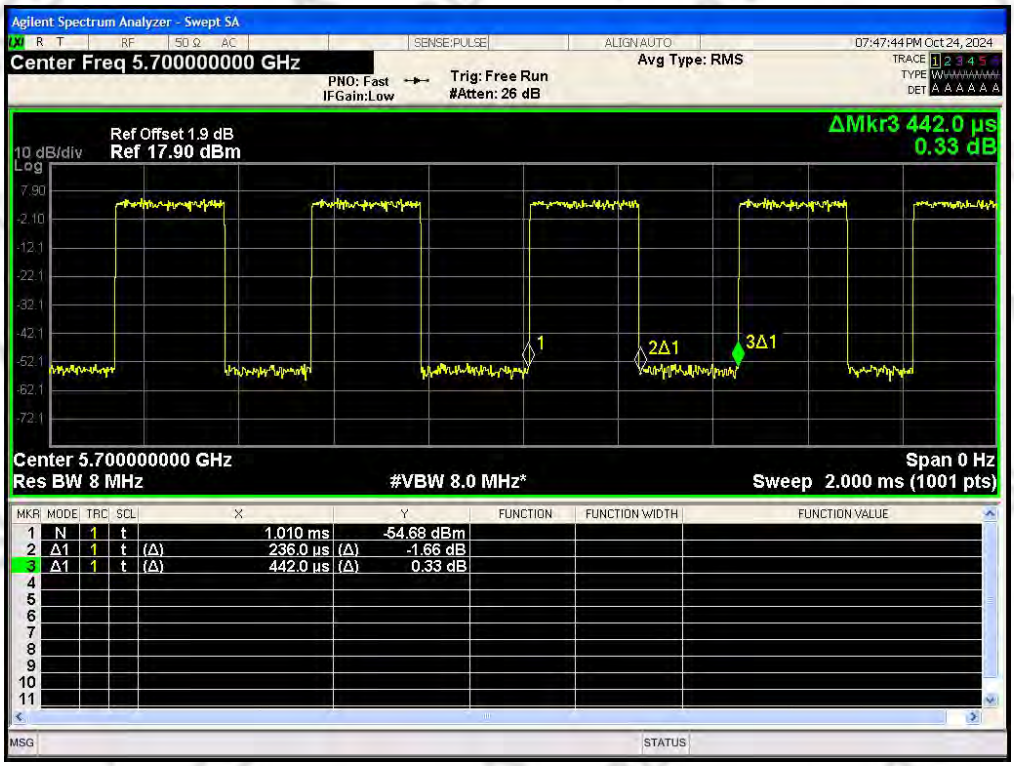
IEEE 802.11n_20MHz_Channel 64



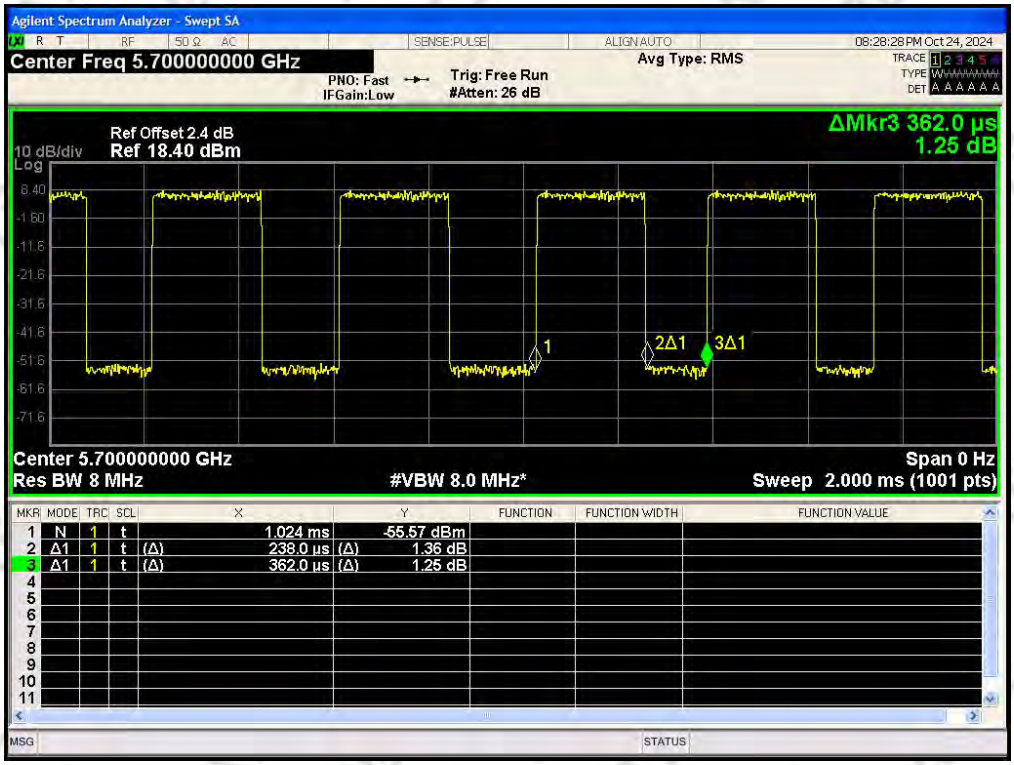
IEEE 802.11n_20MHz_Channel 100



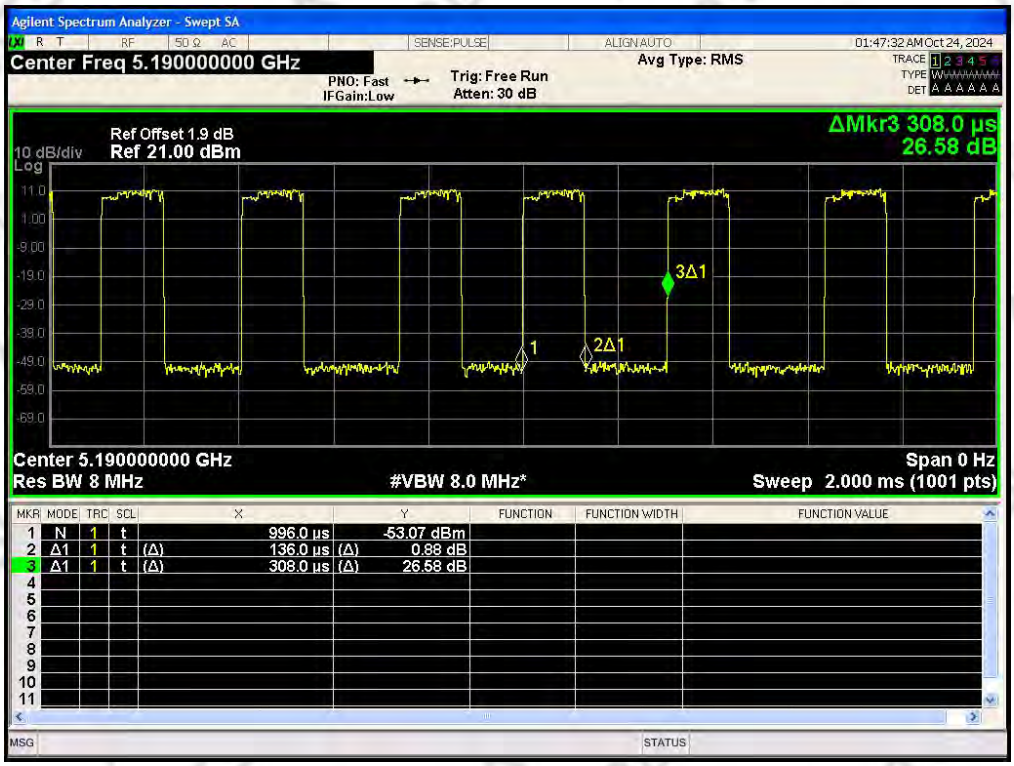
IEEE 802.11n_20MHz_Channel 100



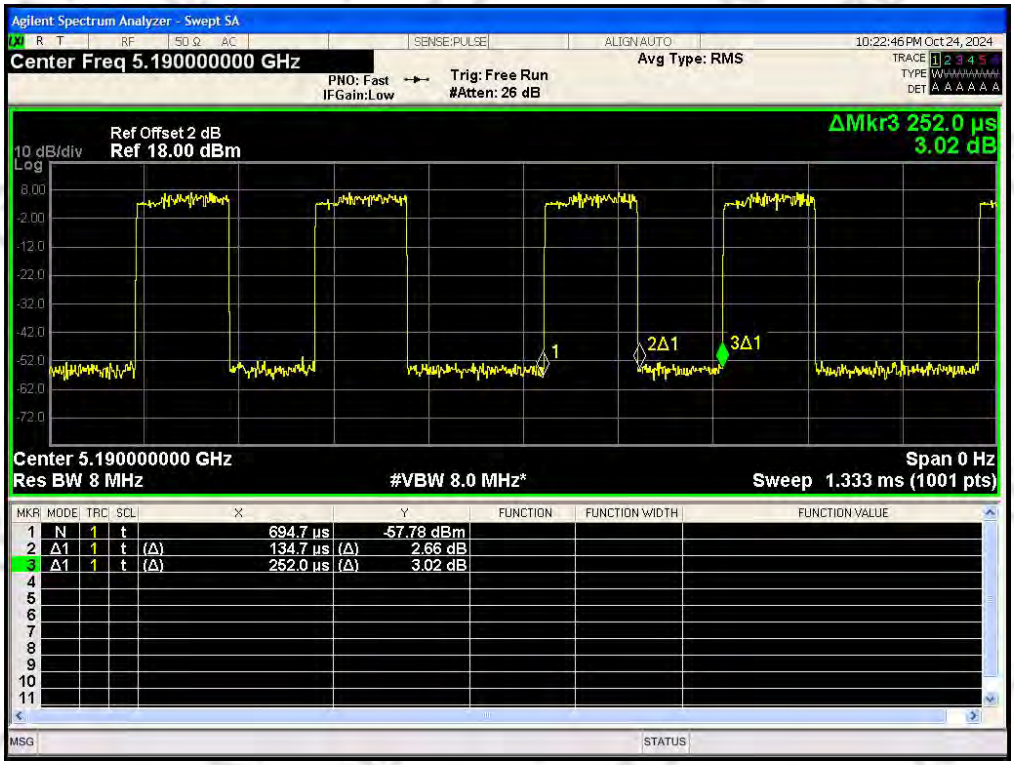
IEEE 802.11n_20MHz_Channel 140



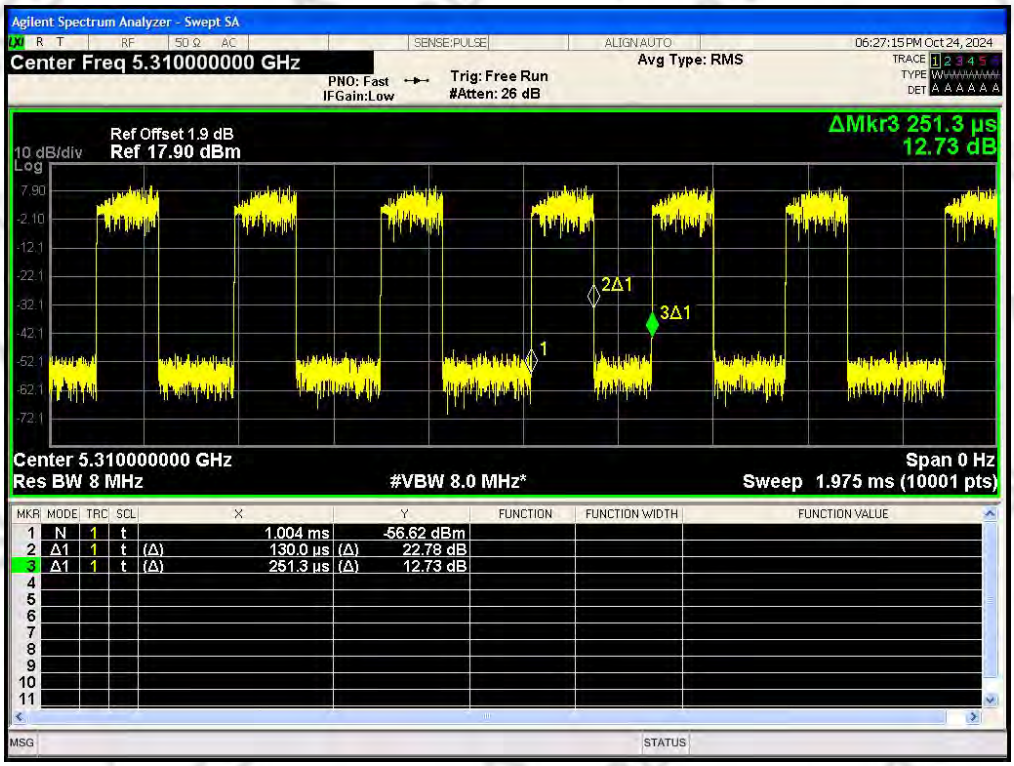
IEEE 802.11n_20MHz_Channel 140



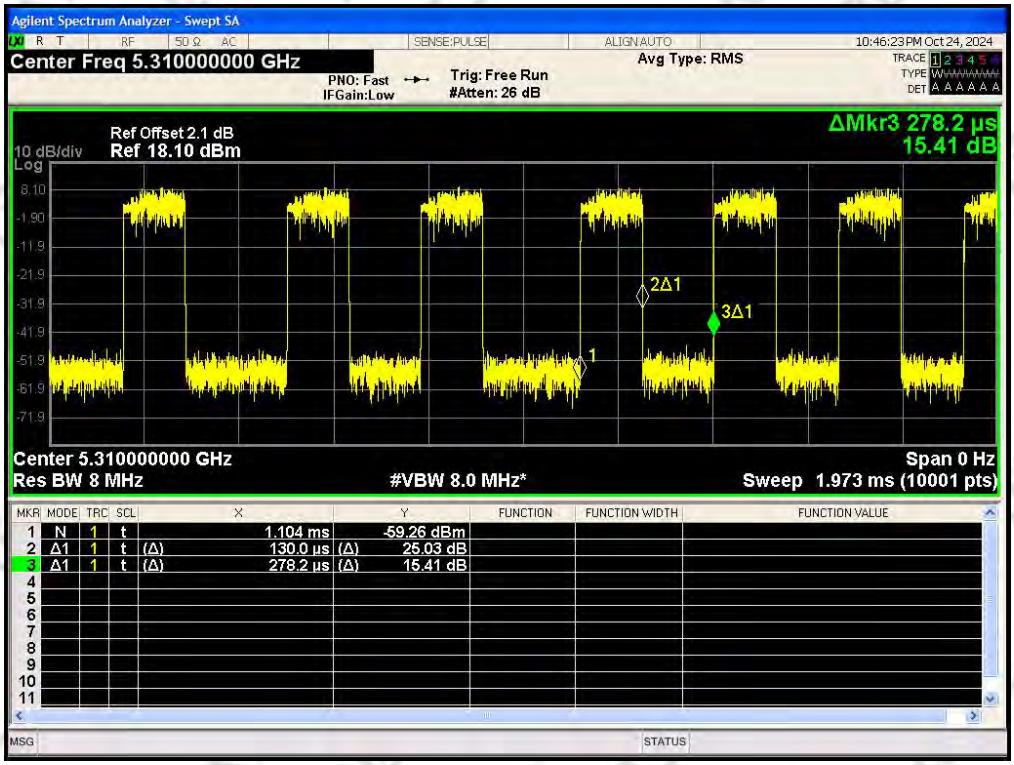
IEEE 802.11n_40MHz_Channel 38



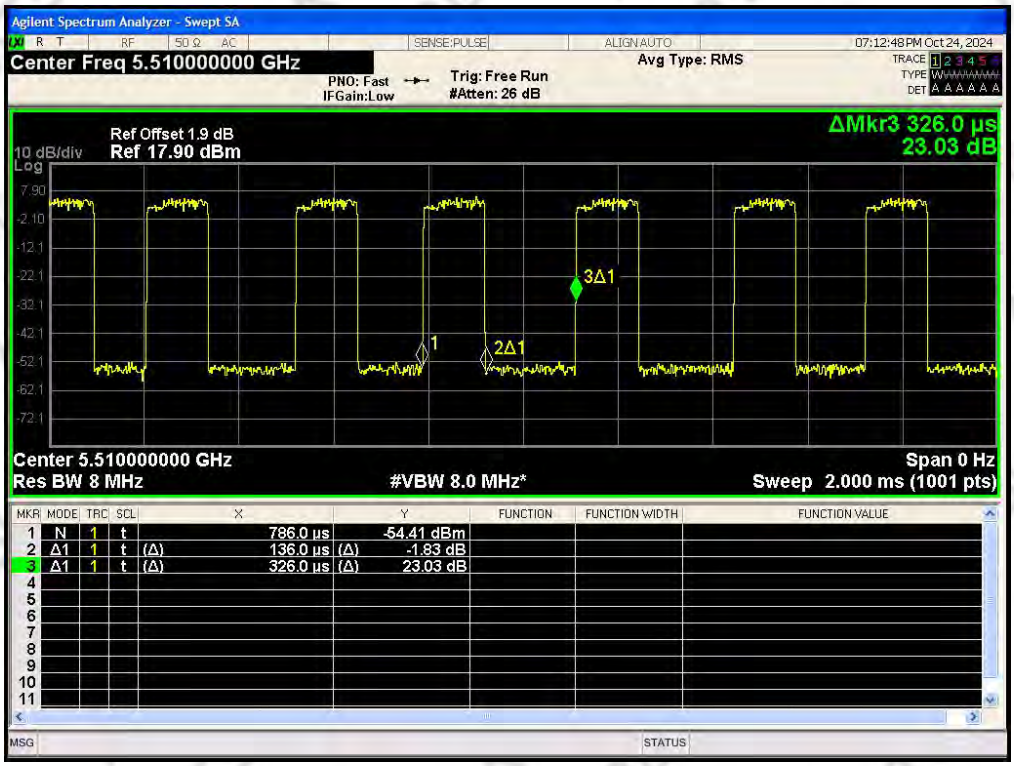
IEEE 802.11n_40MHz_Channel 38



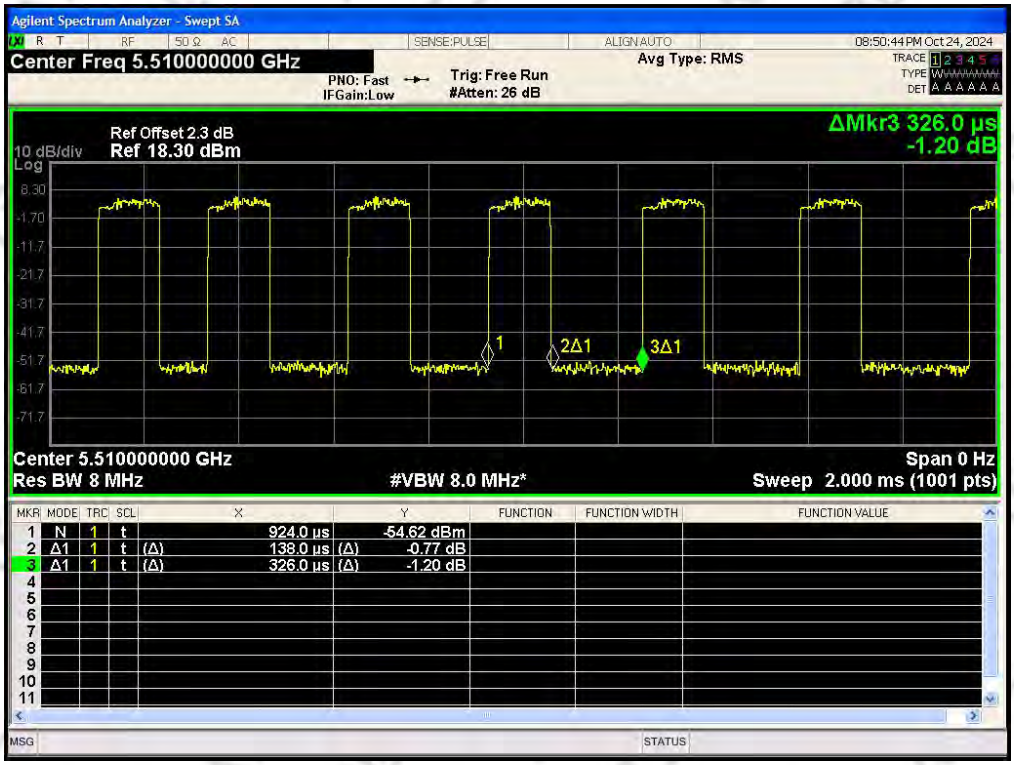
IEEE 802.11n_40MHz_Channel 62



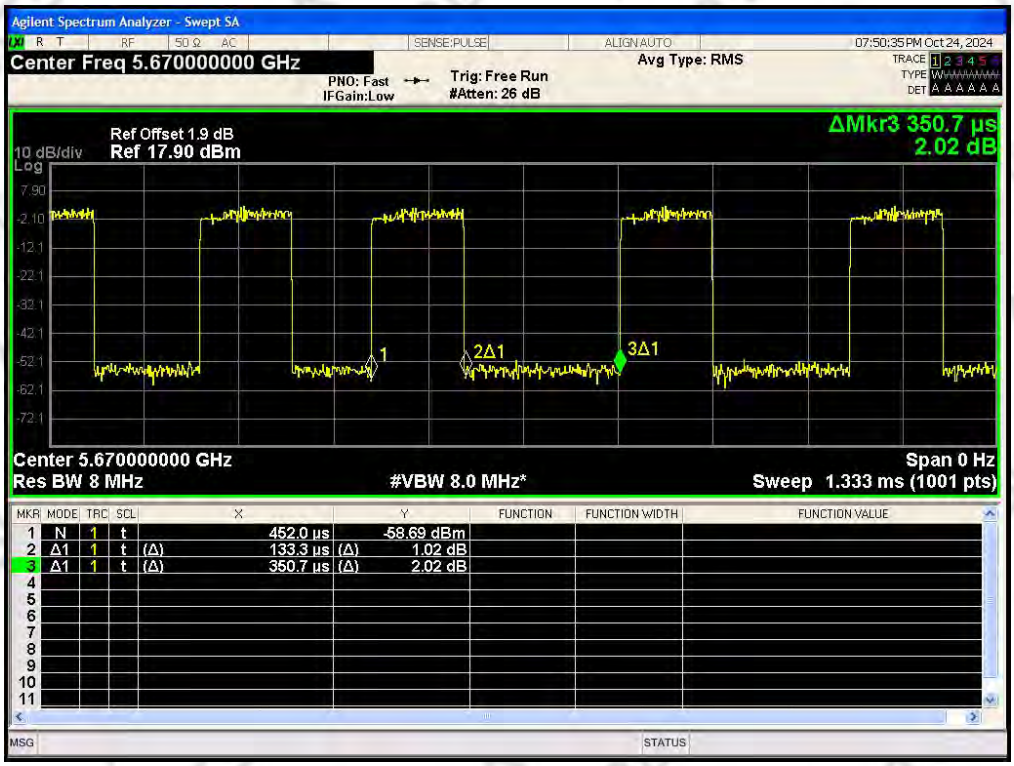
IEEE 802.11n_40MHz_Channel 62



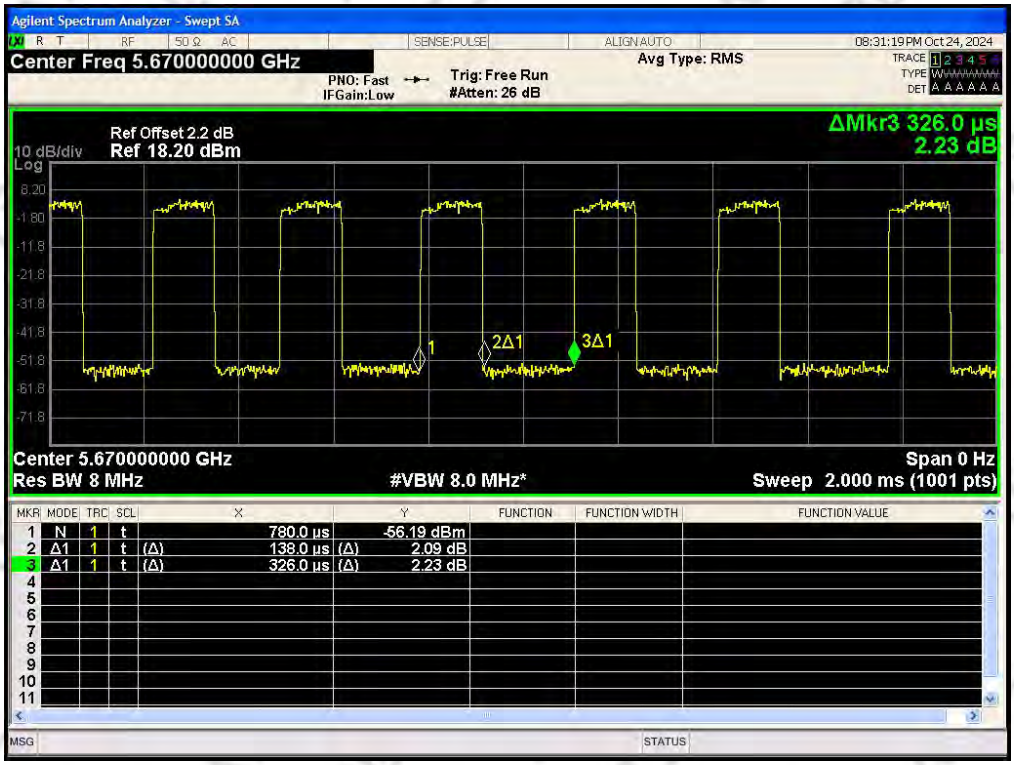
IEEE 802.11n_40MHz_Channel 102



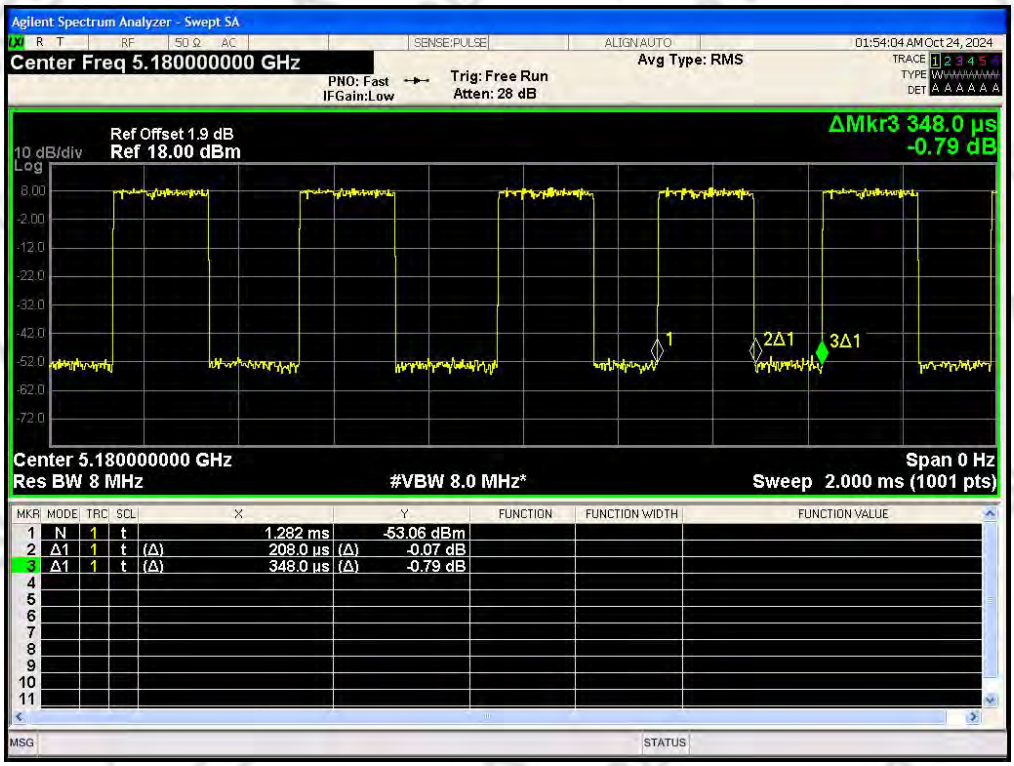
IEEE 802.11n_40MHz_Channel 102



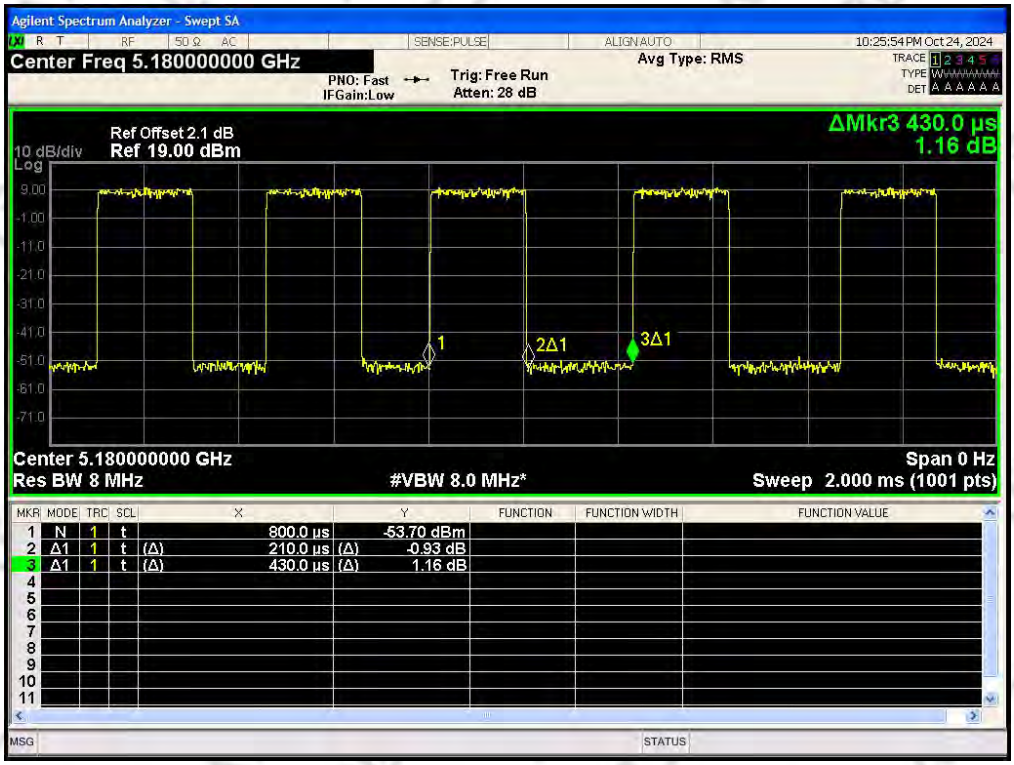
IEEE 802.11n_40MHz_Channel 134



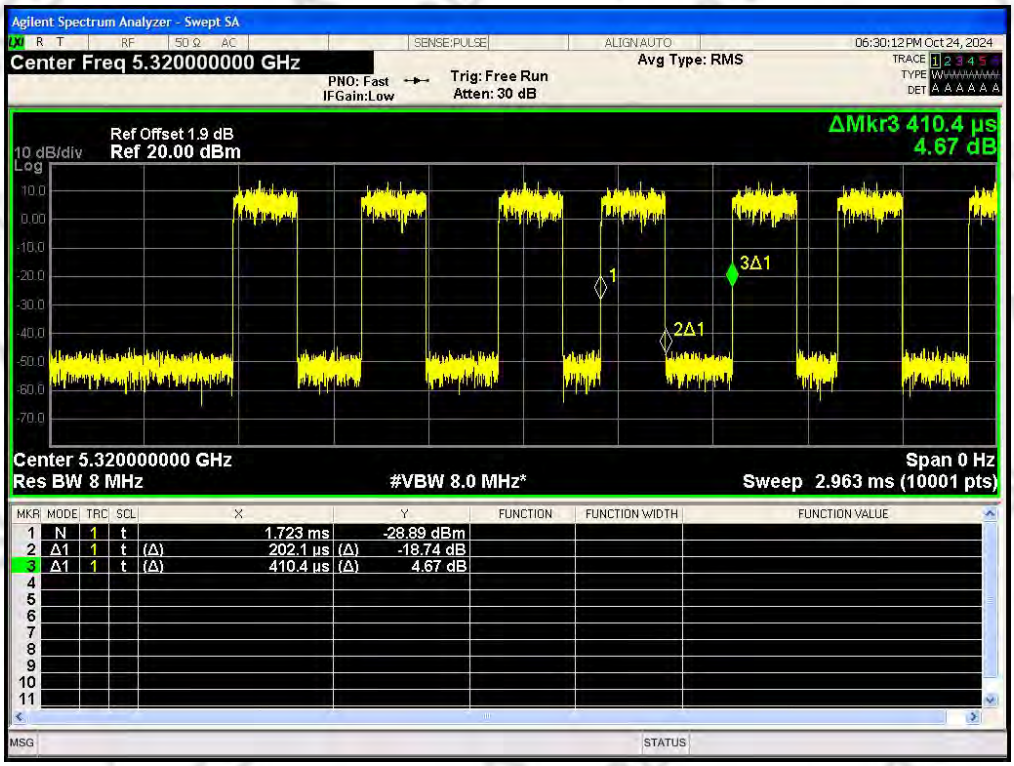
IEEE 802.11n_40MHz_Channel 134



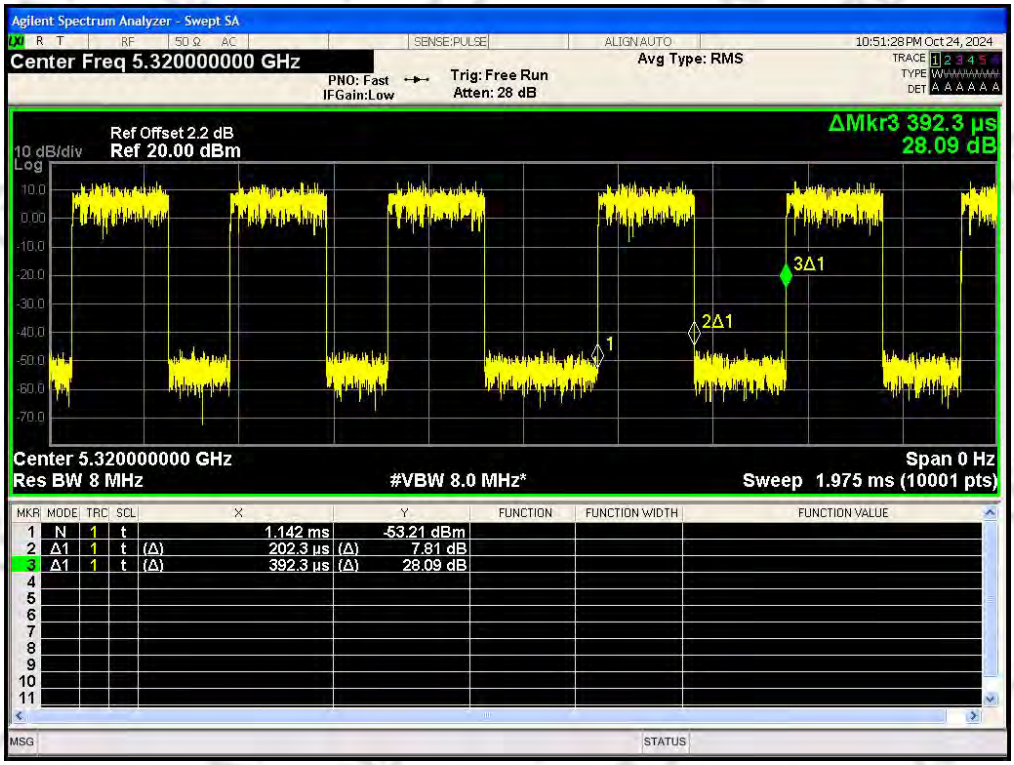
IEEE 802.11ac_20MHz_Channel 36



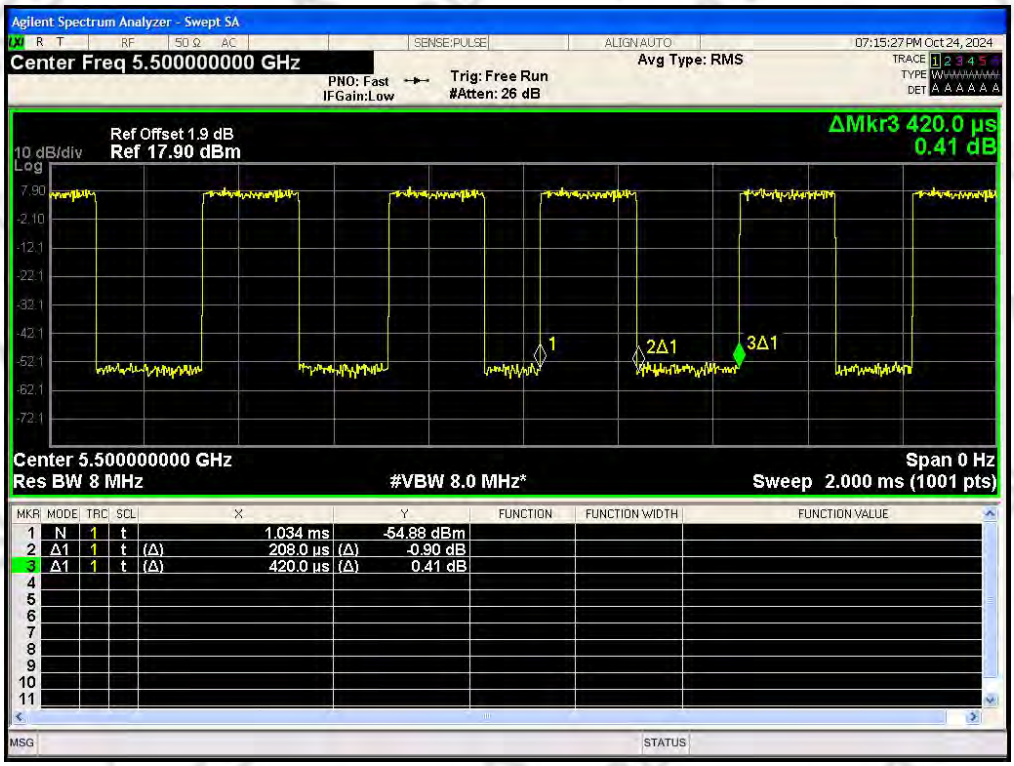
IEEE 802.11ac_20MHz_Channel 36



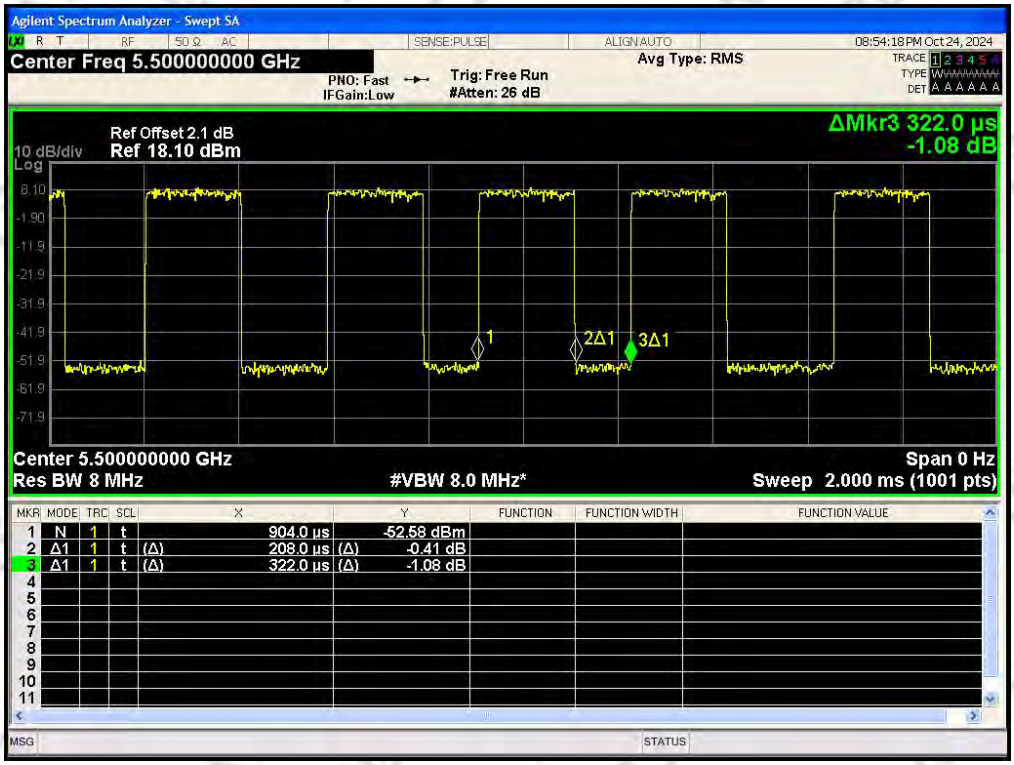
IEEE 802.11ac_20MHz_Channel 64



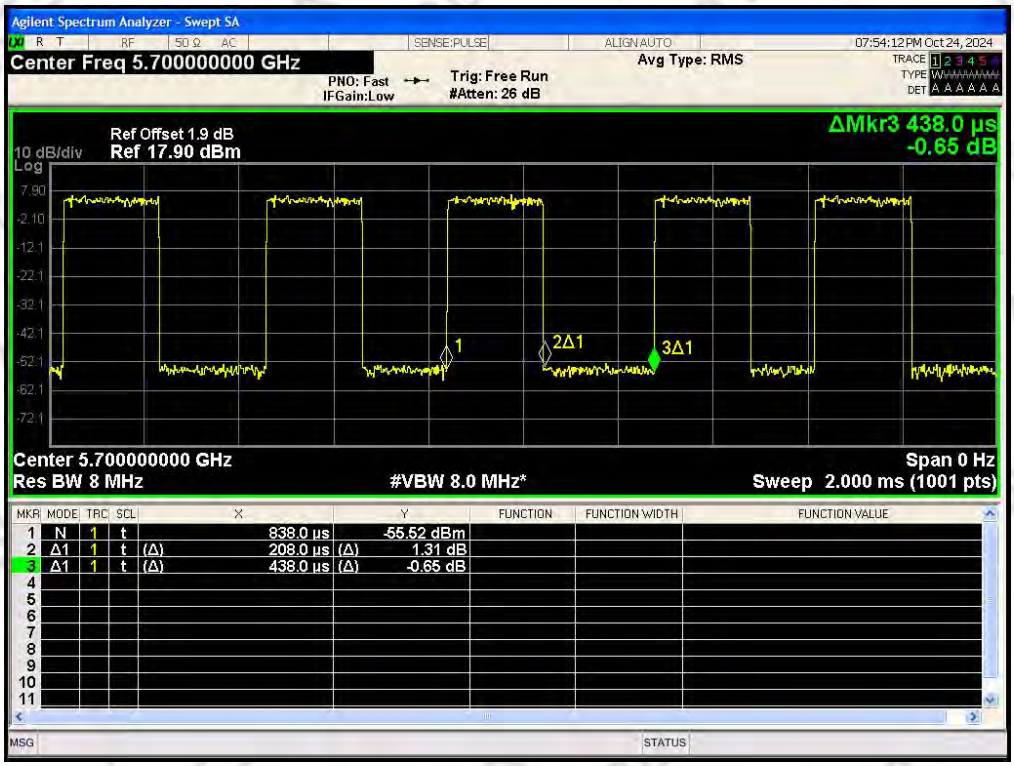
IEEE 802.11ac_20MHz_Channel 64



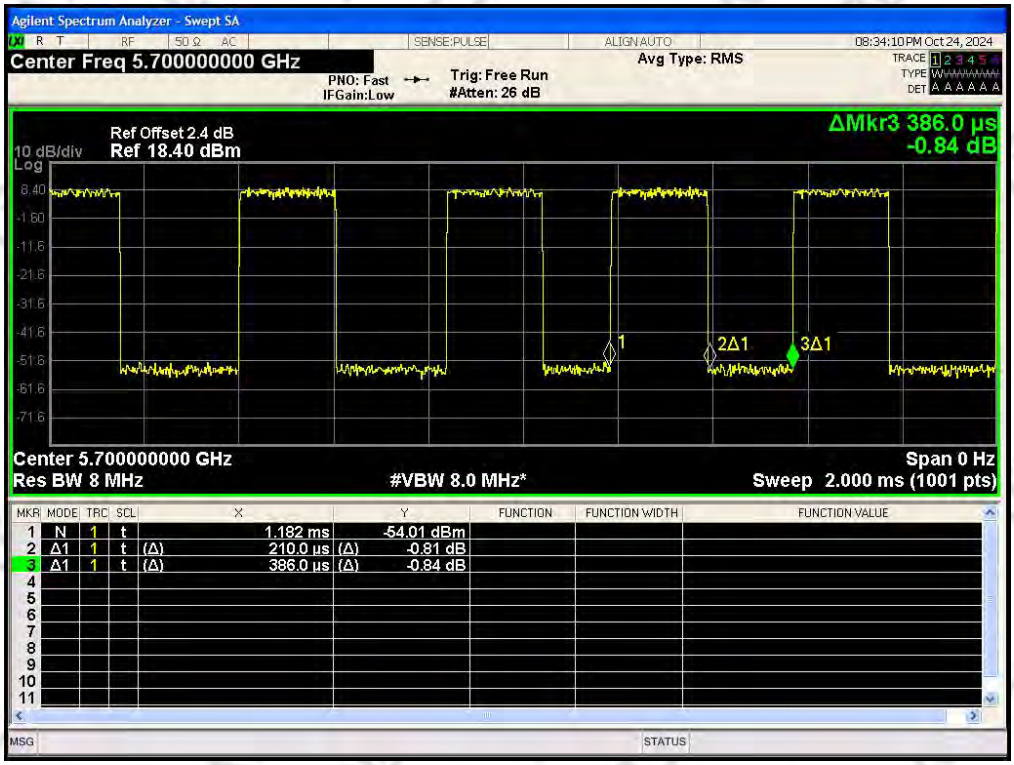
IEEE 802.11ac_20MHz_Channel 100



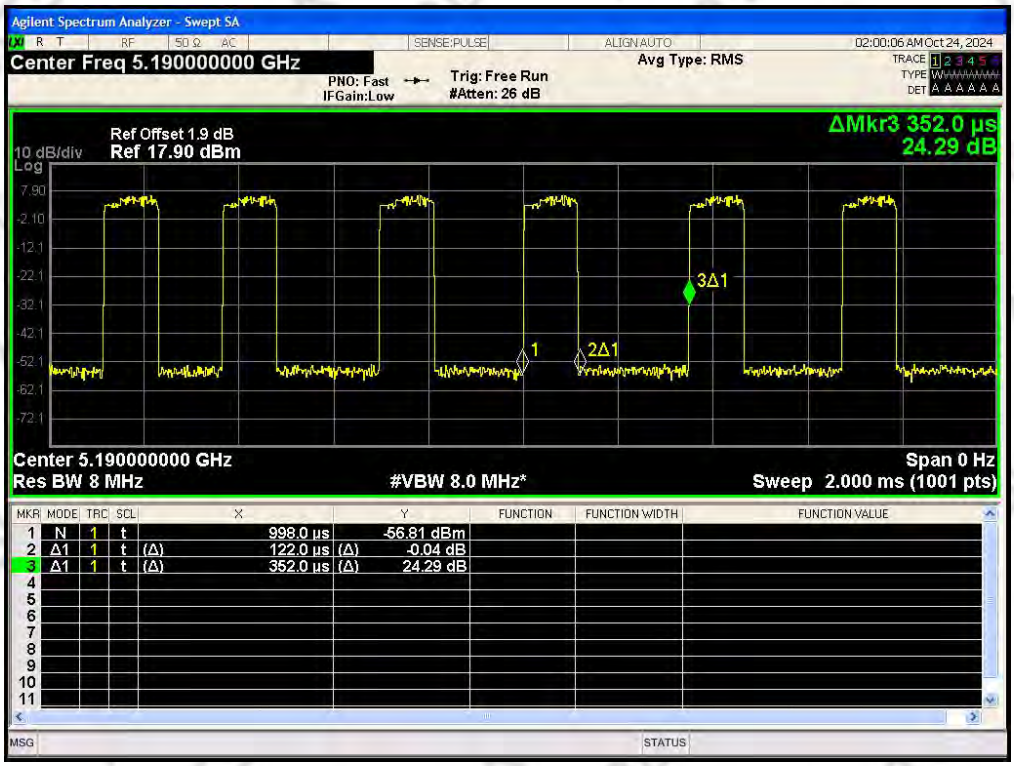
IEEE 802.11ac_20MHz_Channel 100



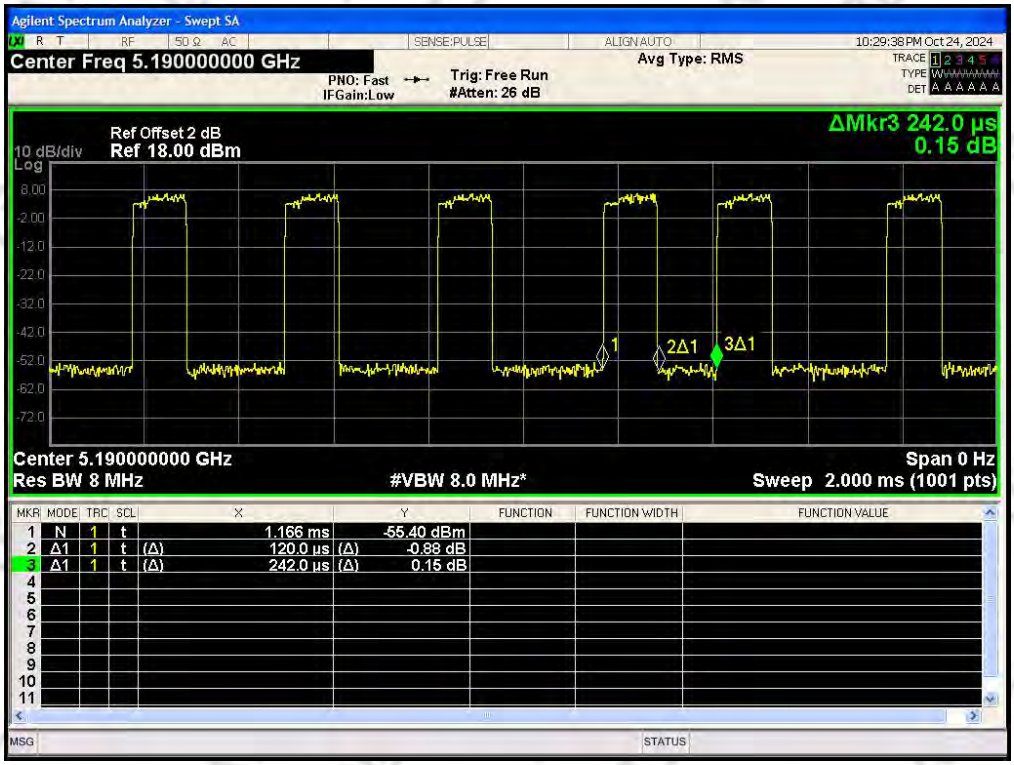
IEEE 802.11ac_20MHz_Channel 140



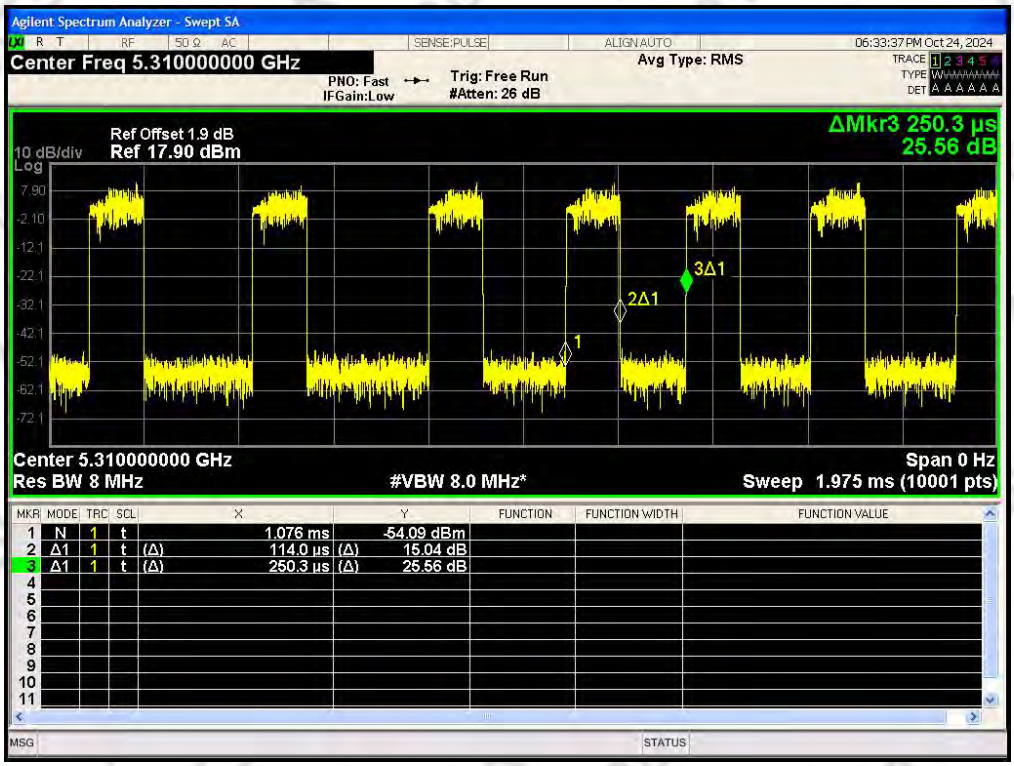
IEEE 802.11ac_20MHz_Channel 140



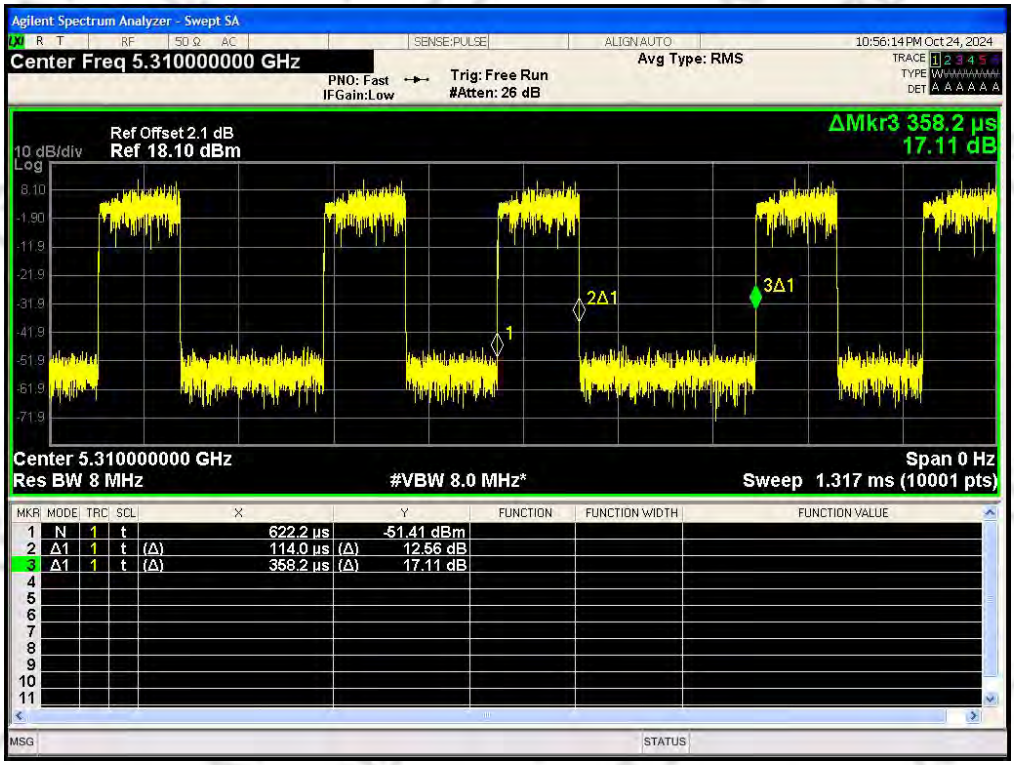
IEEE 802.11ac_40MHz_Channel 38



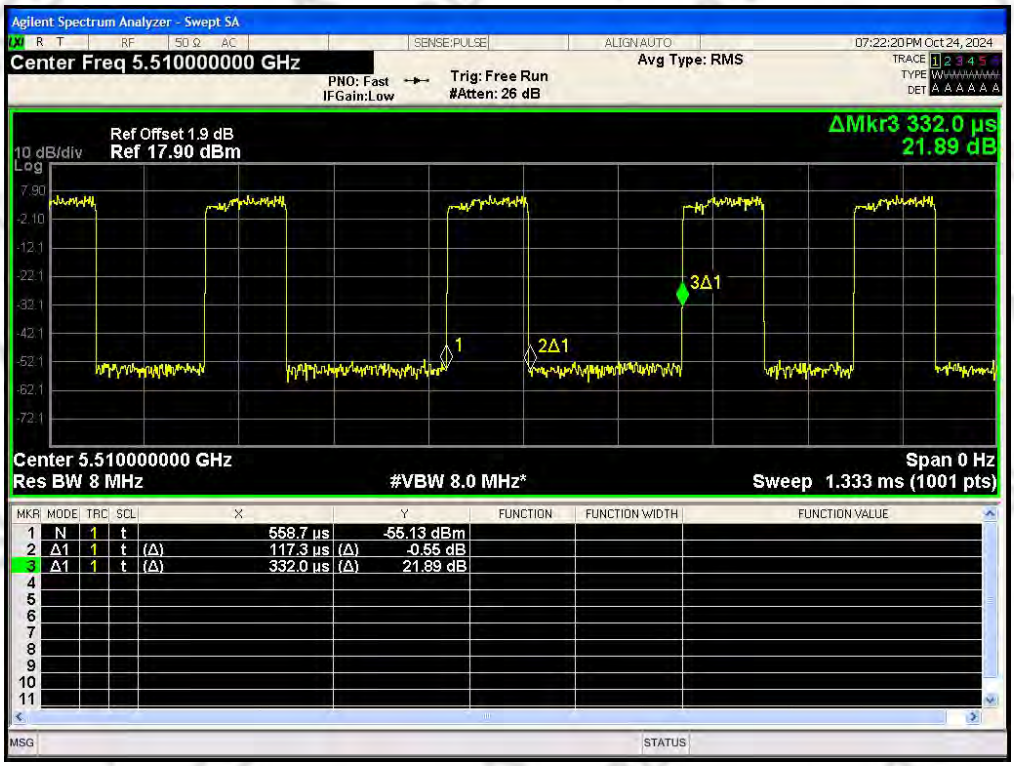
IEEE 802.11ac_40MHz_Channel 38



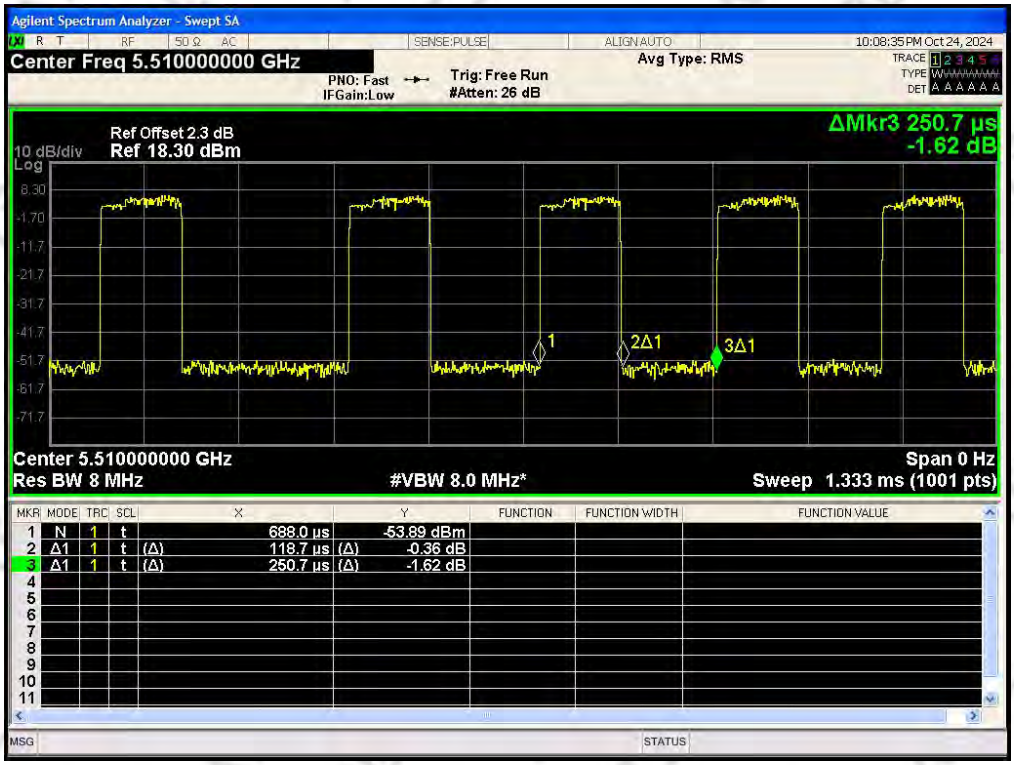
IEEE 802.11ac_40MHz_Channel 62



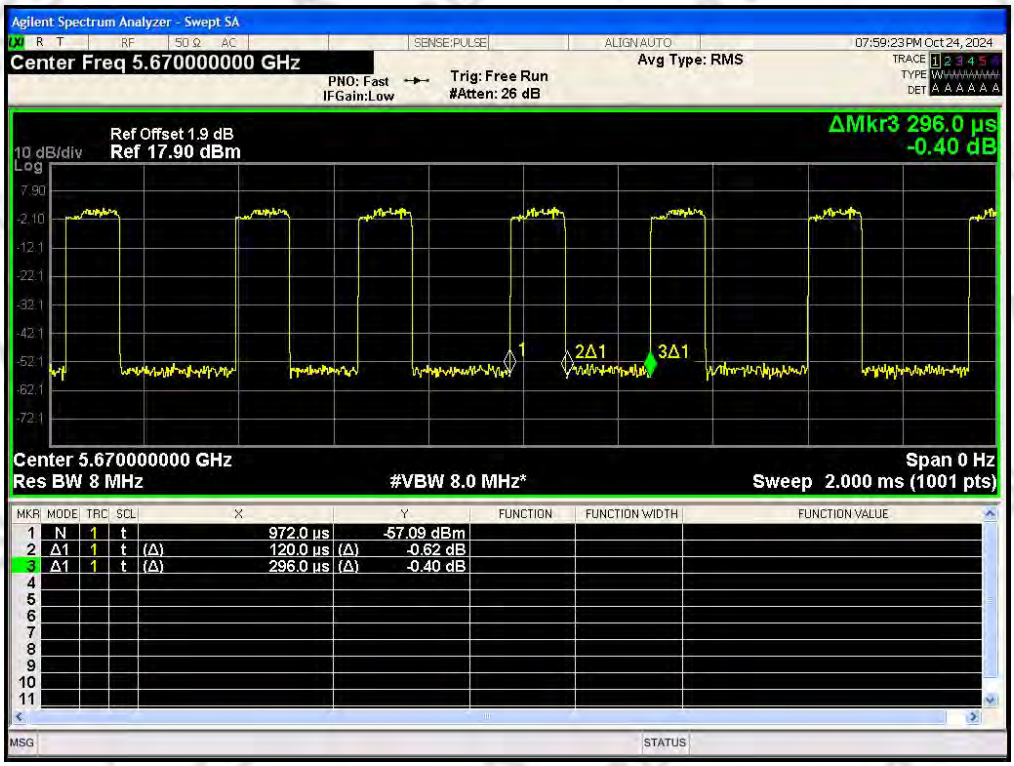
IEEE 802.11ac_40MHz_Channel 62



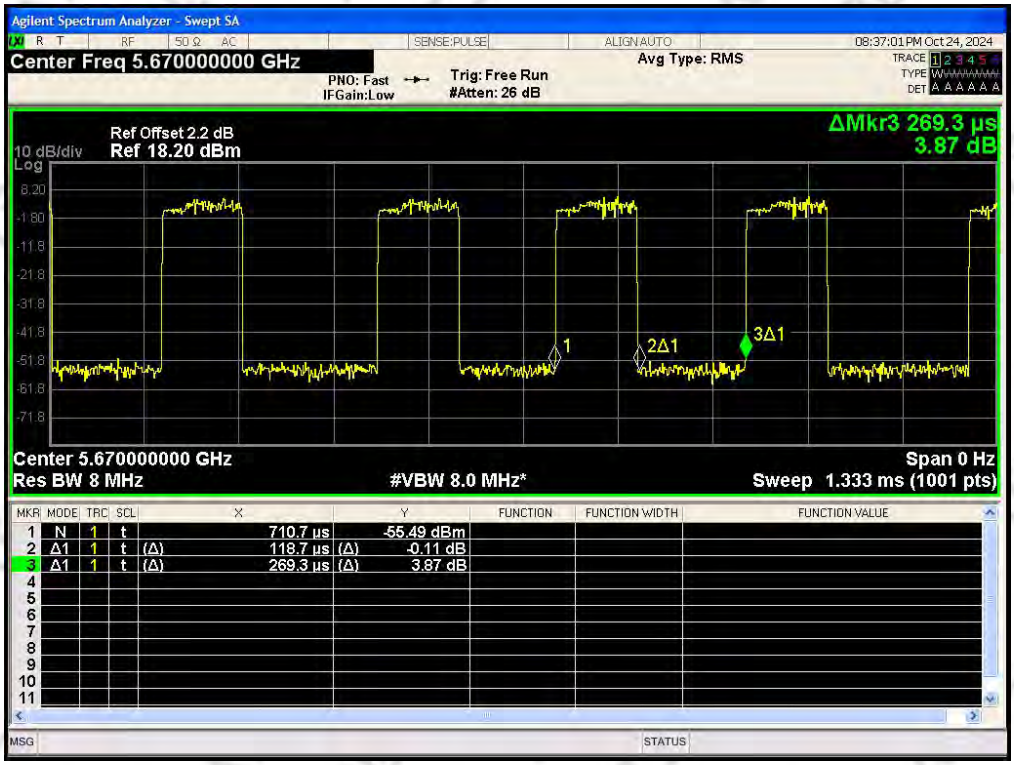
IEEE 802.11ac_40MHz_Channel 102



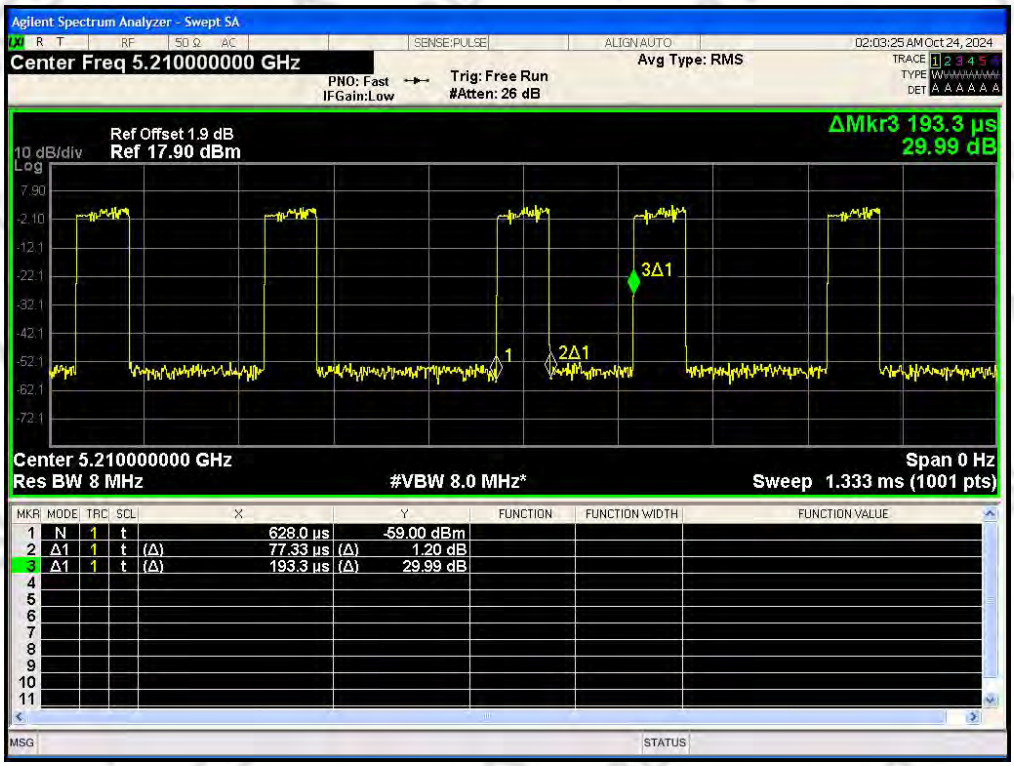
IEEE 802.11ac_40MHz_Channel 102



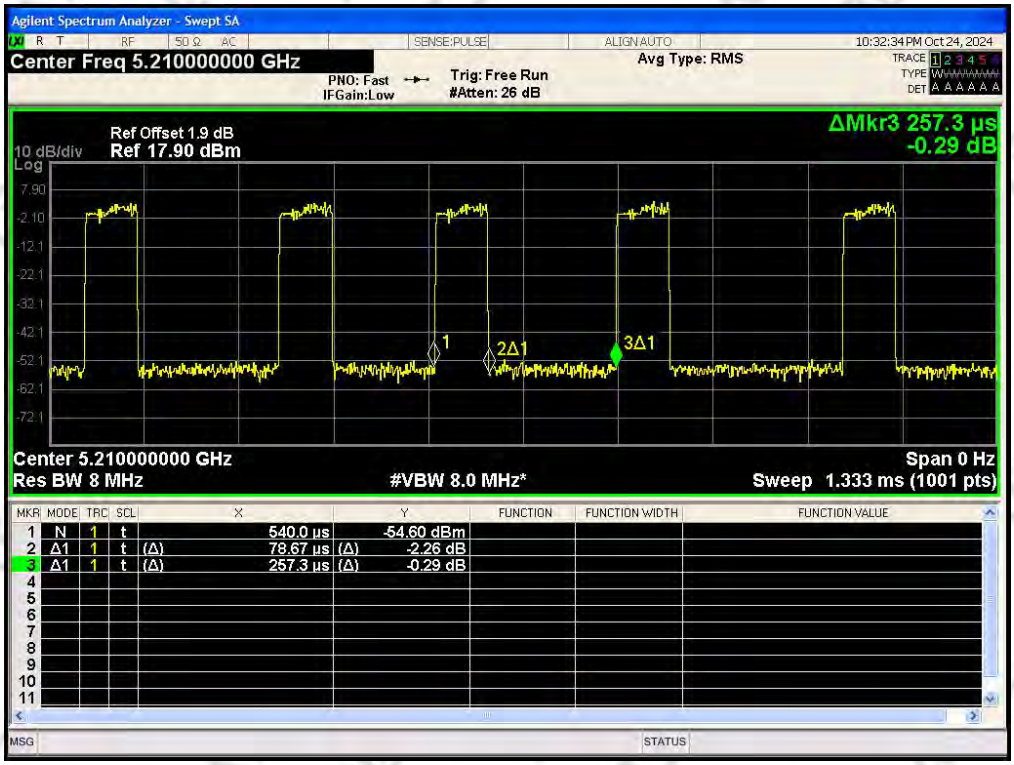
IEEE 802.11ac_40MHz_Channel 134



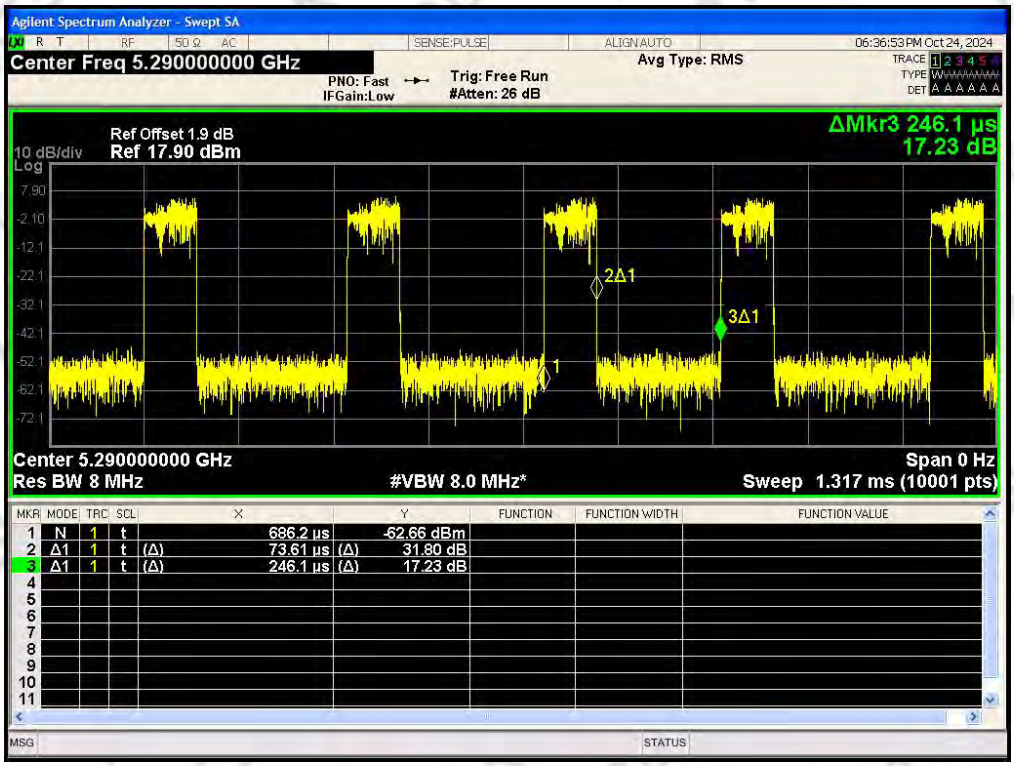
IEEE 802.11ac_40MHz_Channel 134



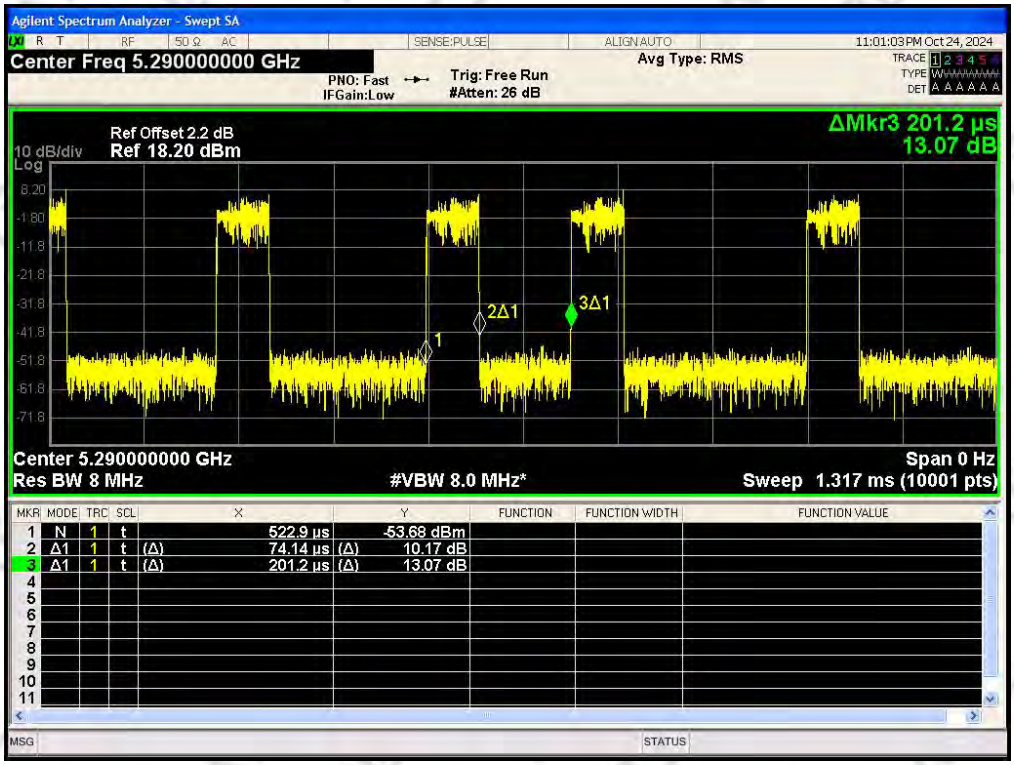
IEEE 802.11ac_80MHz_Channel 42



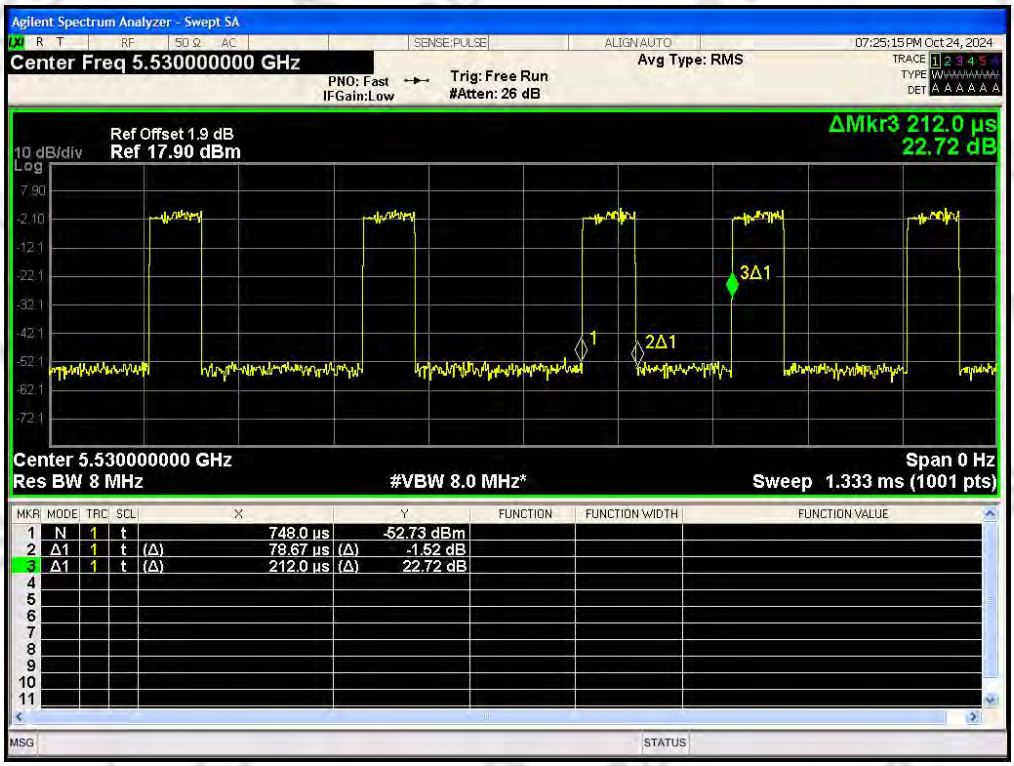
IEEE 802.11ac_80MHz_Channel 42



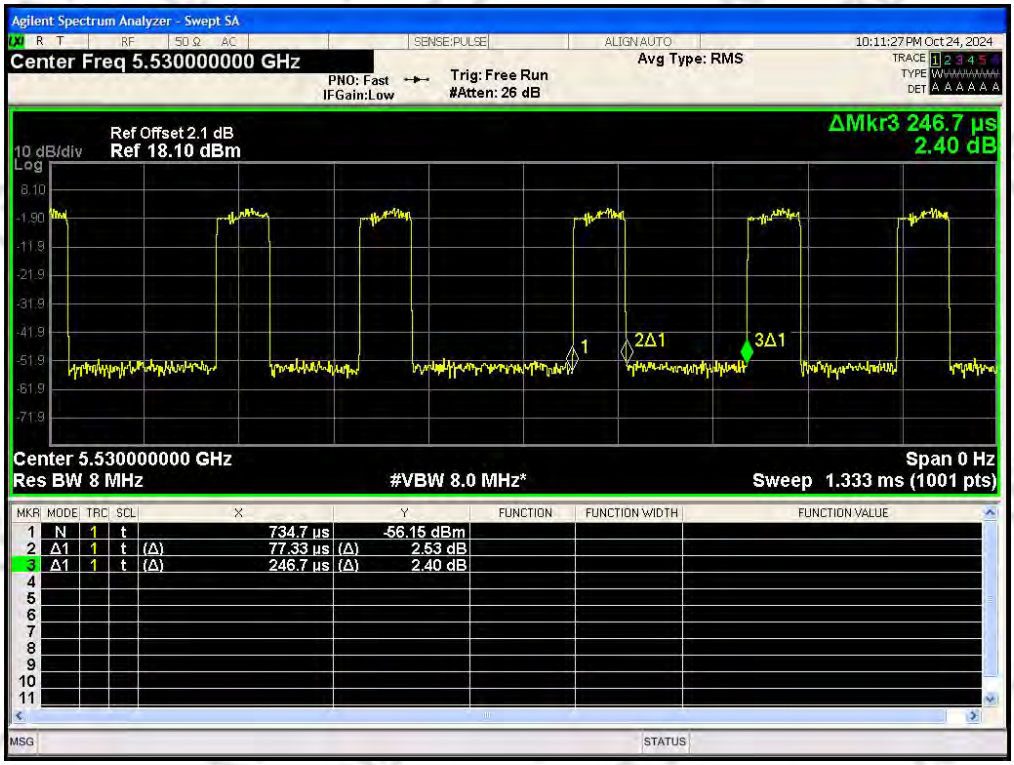
IEEE 802.11ac_80MHz_Channel 58



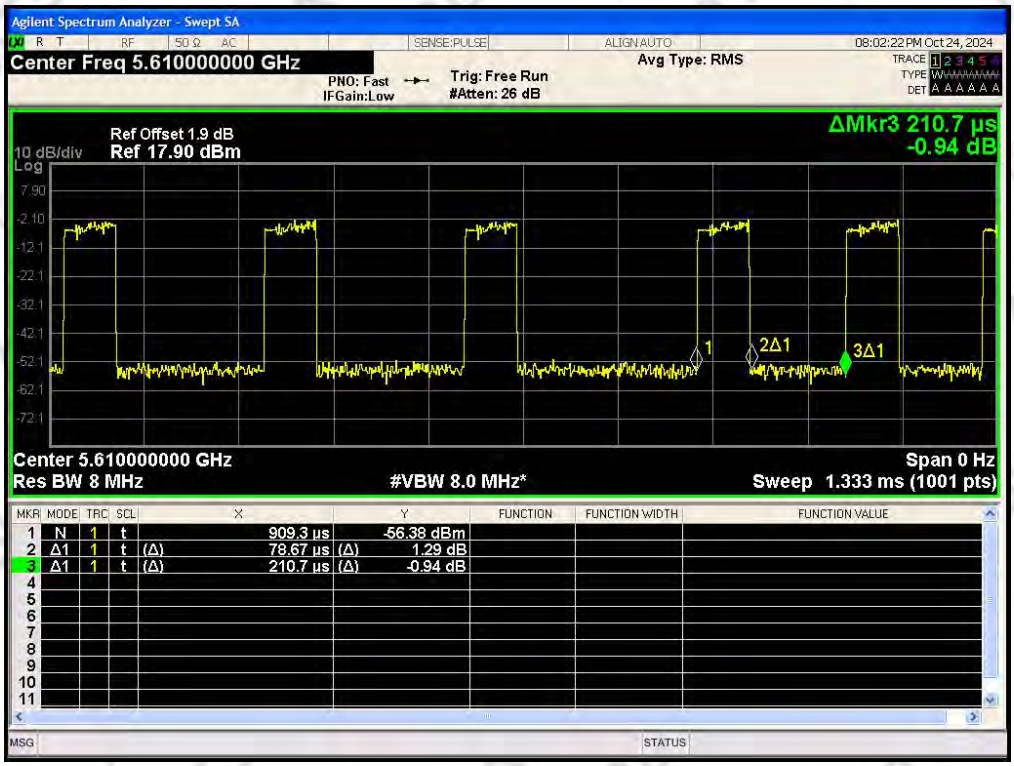
IEEE 802.11ac_80MHz_Channel 58



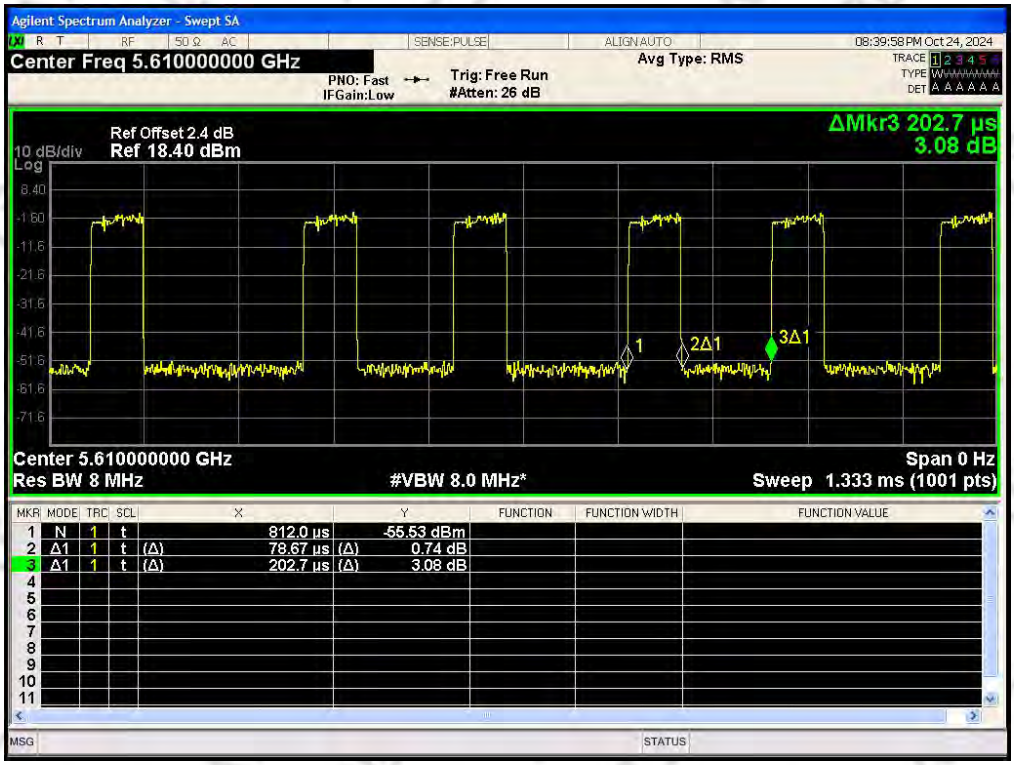
IEEE 802.11ac_80MHz_Channel 106



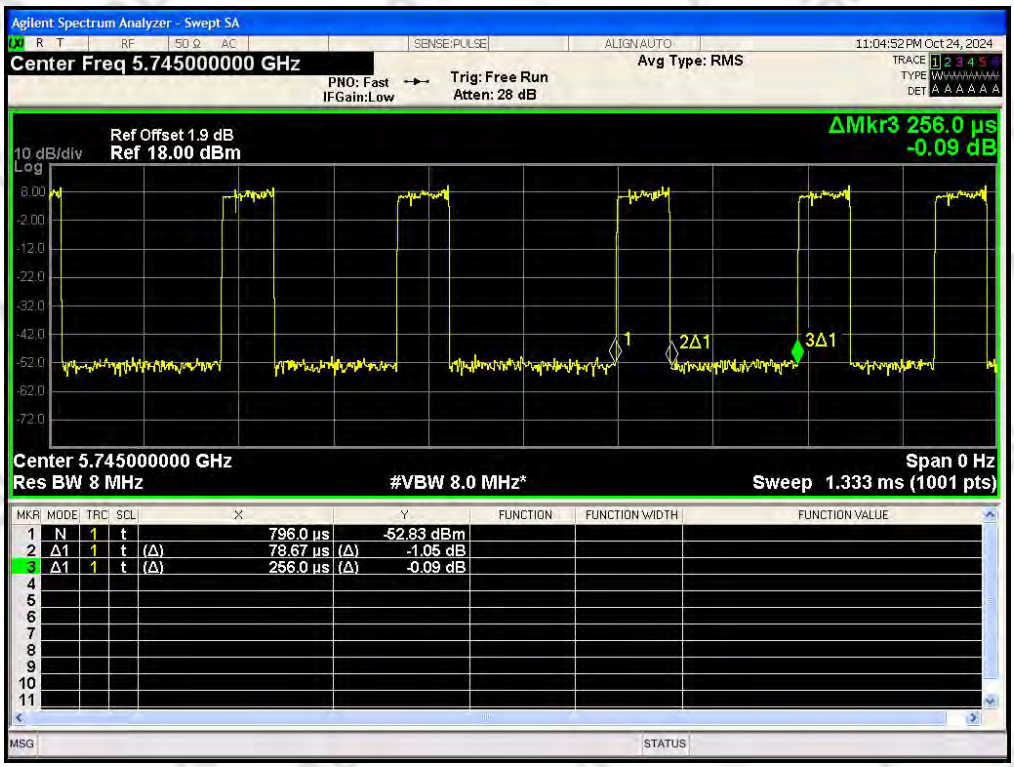
IEEE 802.11ac_80MHz_Channel 106



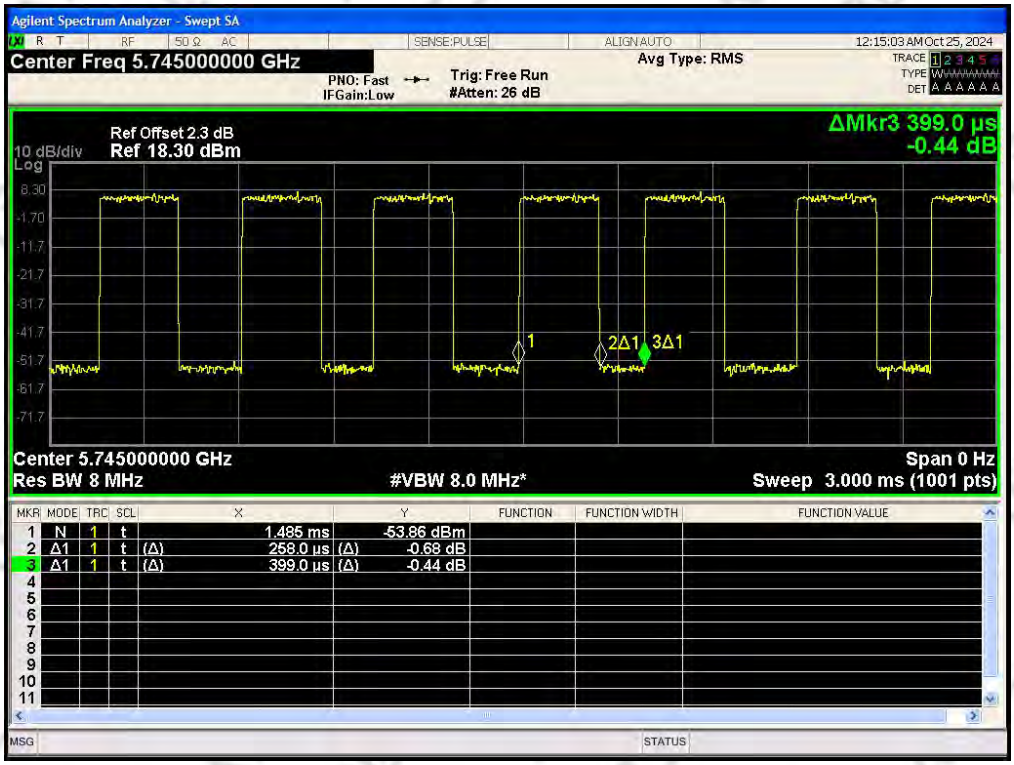
IEEE 802.11ac_80MHz_Channel 122



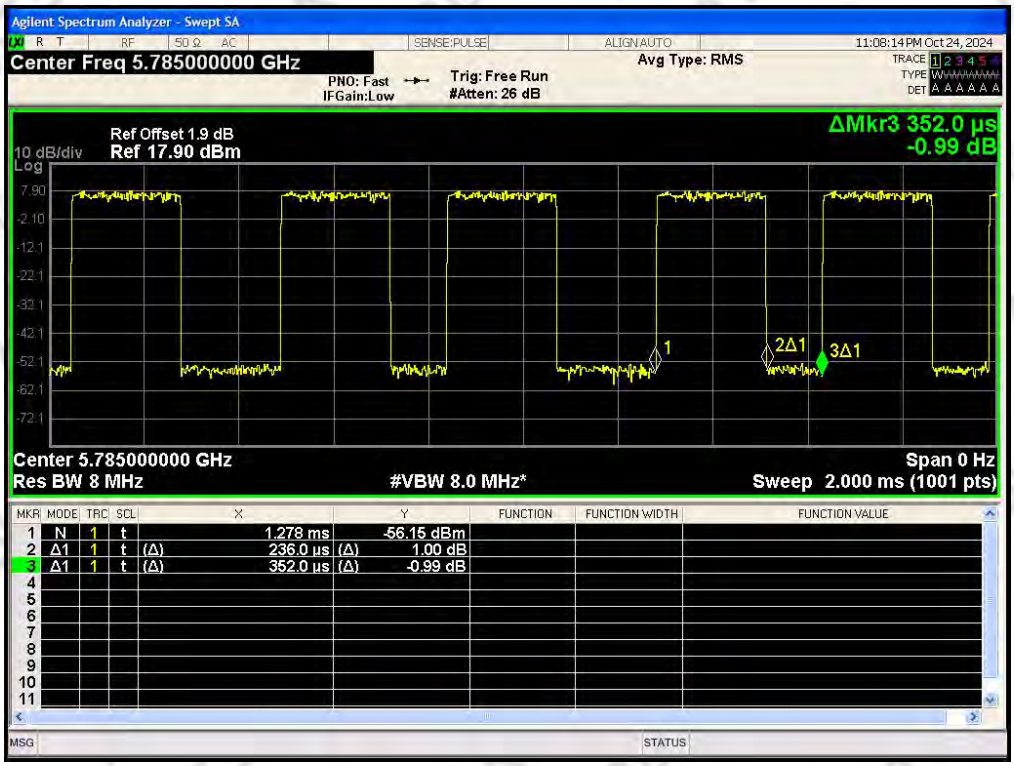
IEEE 802.11ac_80MHz_Channel 122



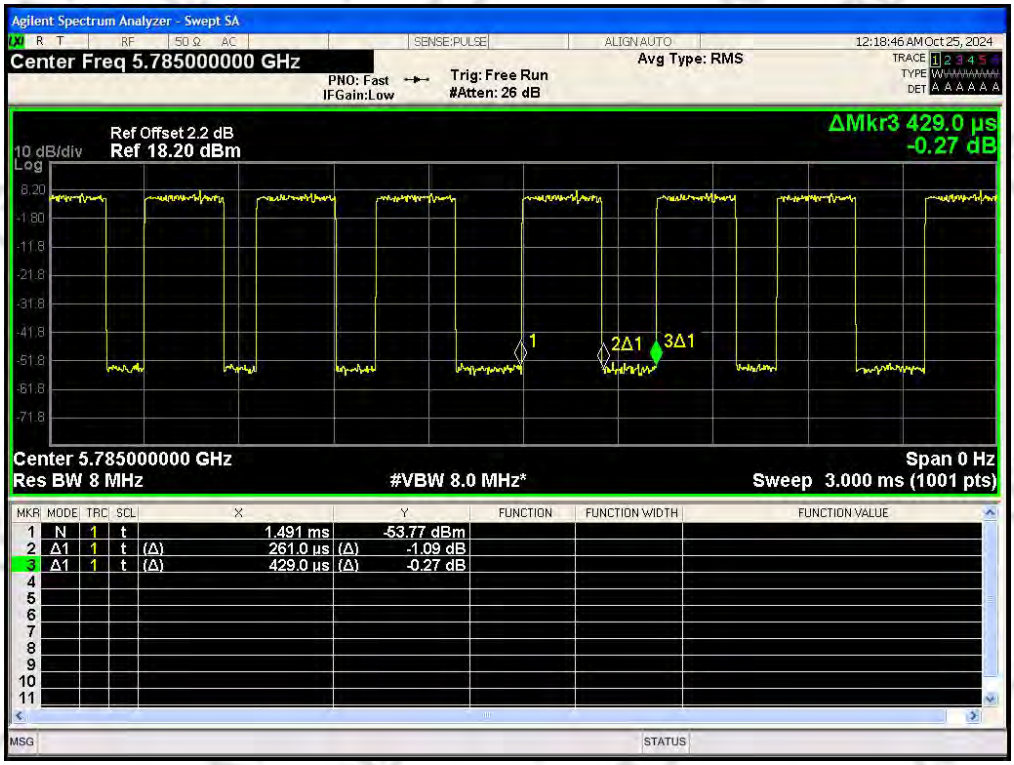
IEEE 802.11a_20MHz_Channel 149



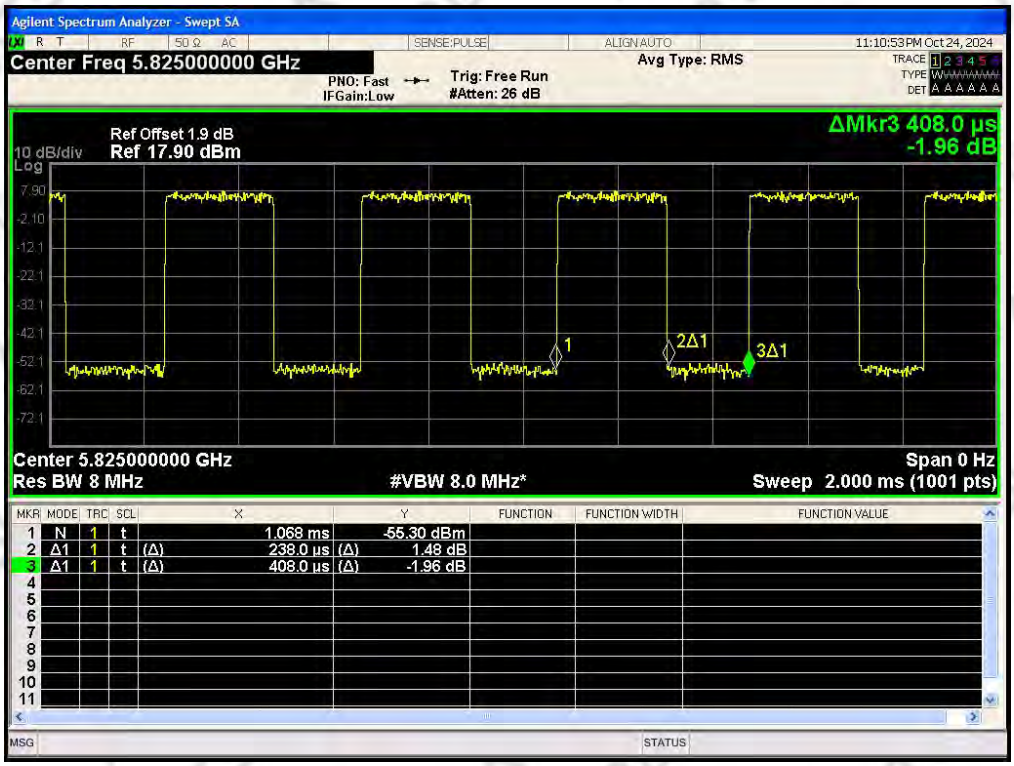
IEEE 802.11a_20MHz_Channel 149



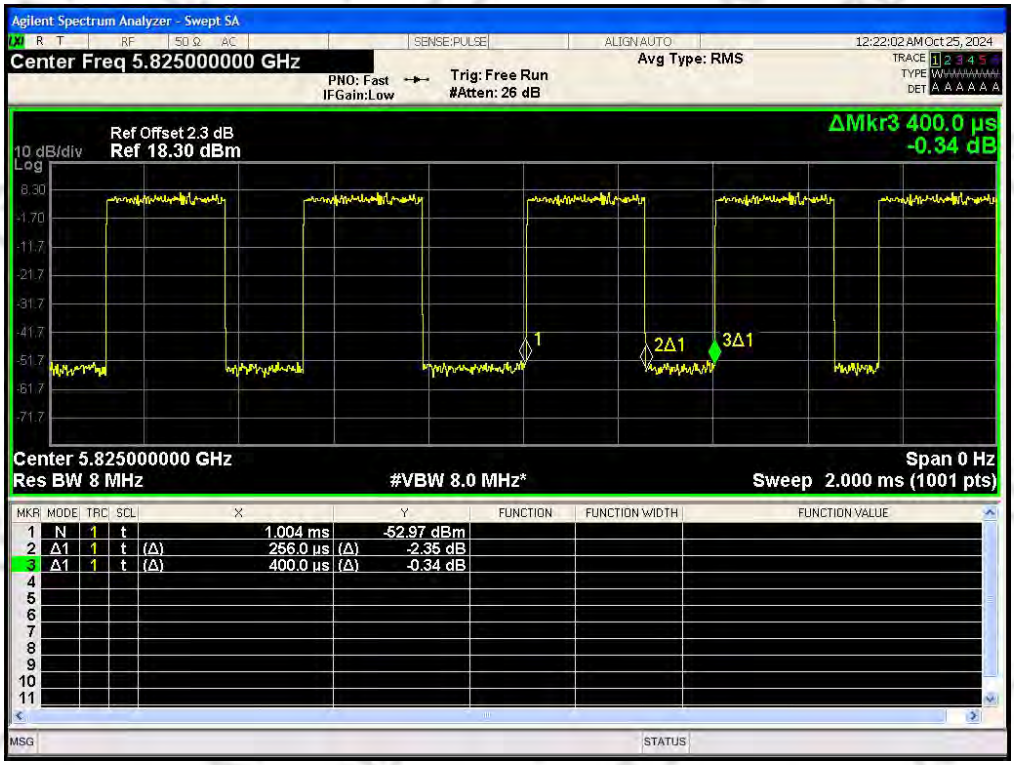
IEEE 802.11a_20MHz_Channel 157



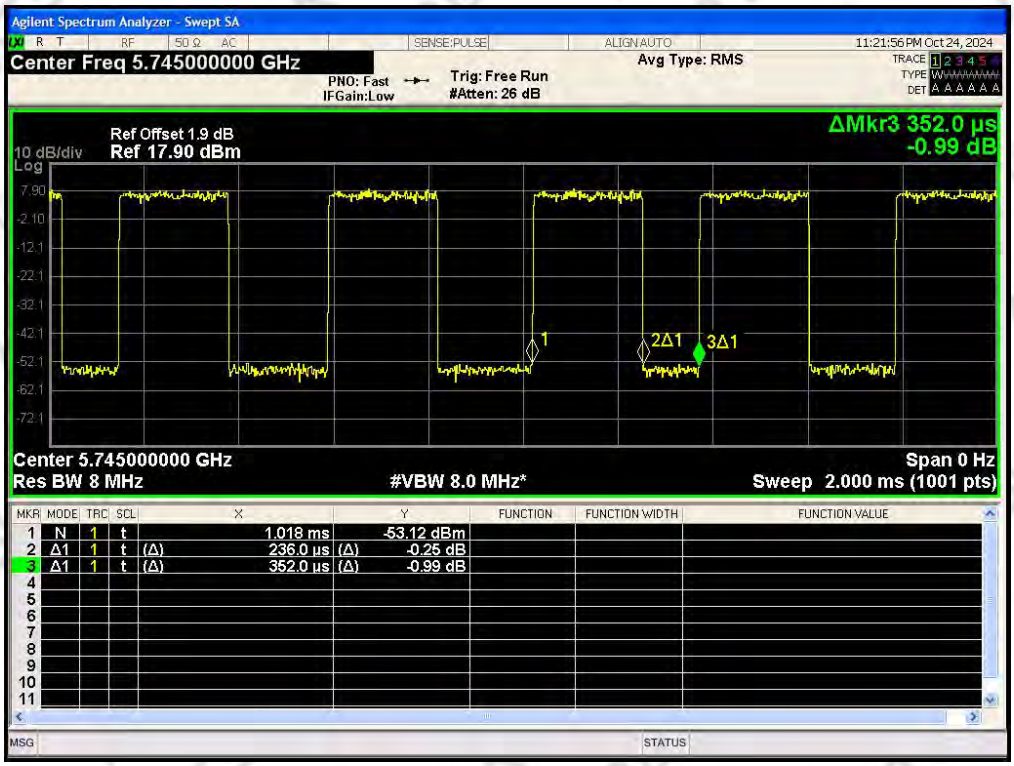
IEEE 802.11a_20MHz_Channel 157



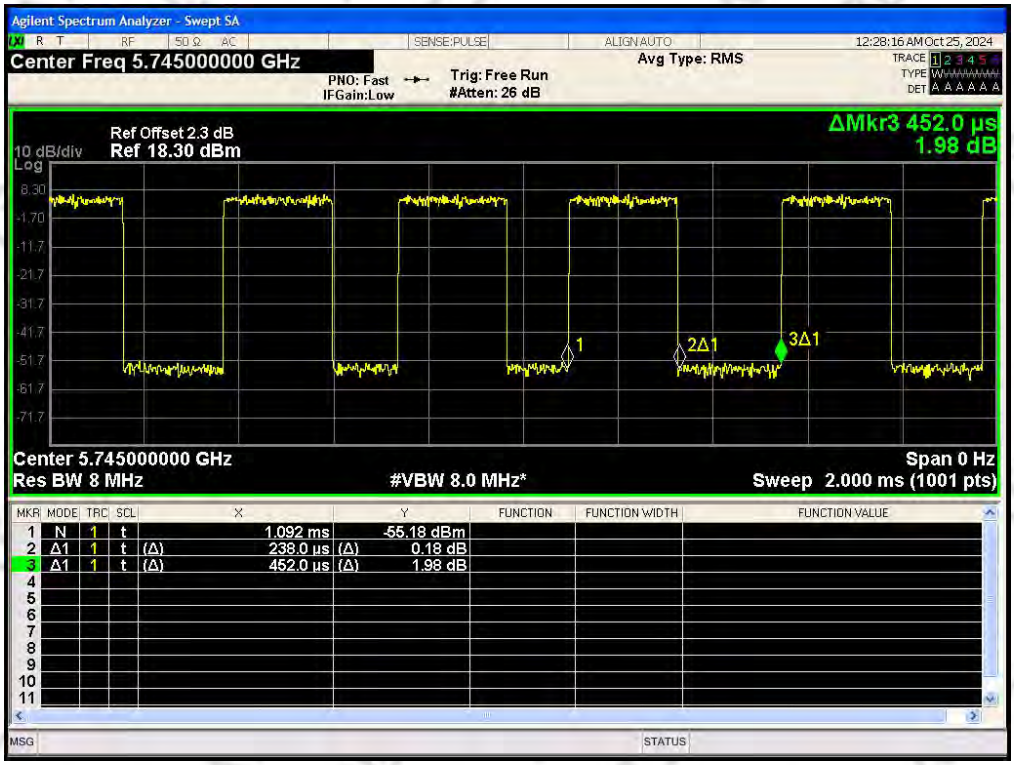
IEEE 802.11a_20MHz_Channel 165



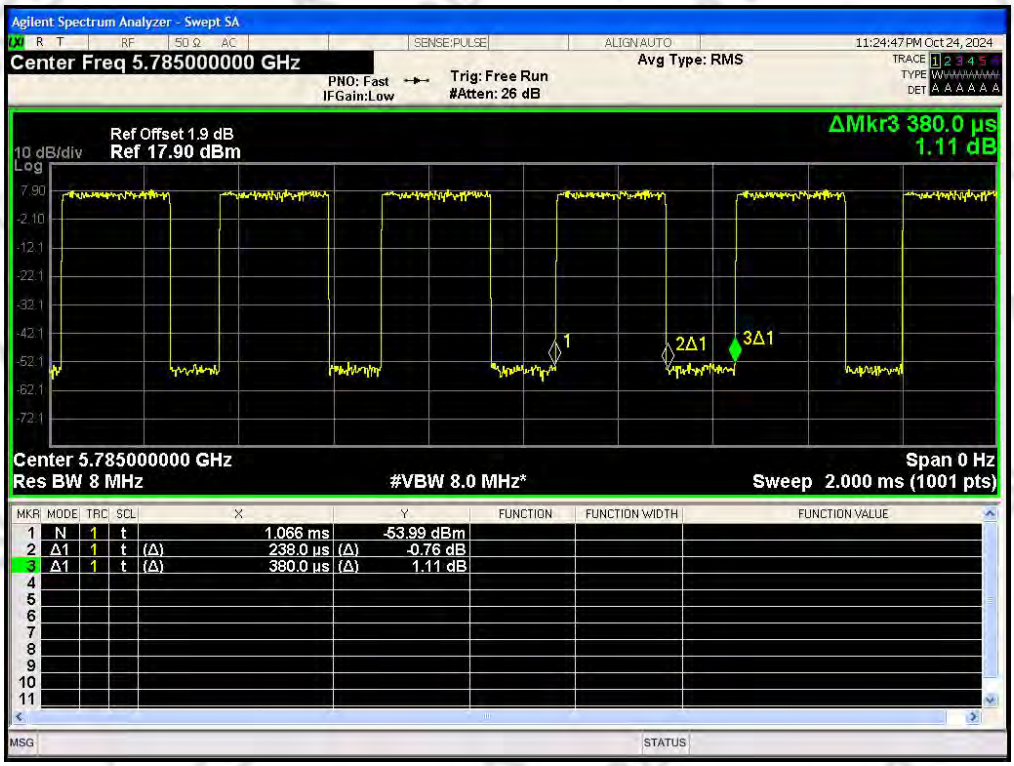
IEEE 802.11a_20MHz_Channel 165



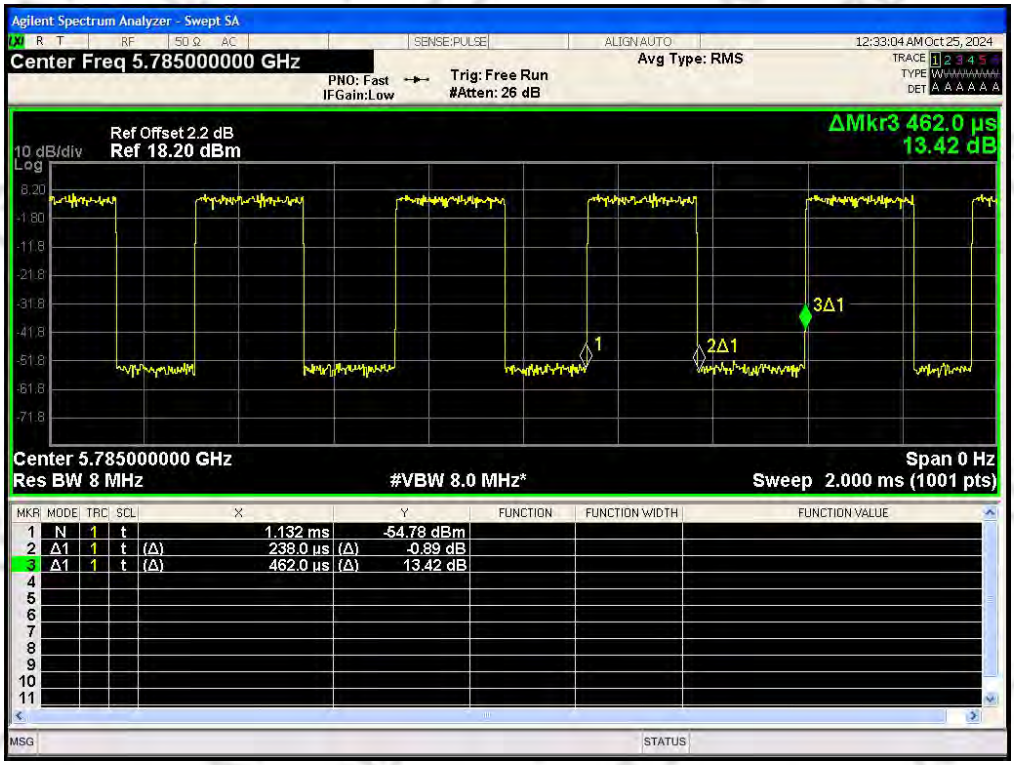
IEEE 802.11n_20MHz_Channel 149



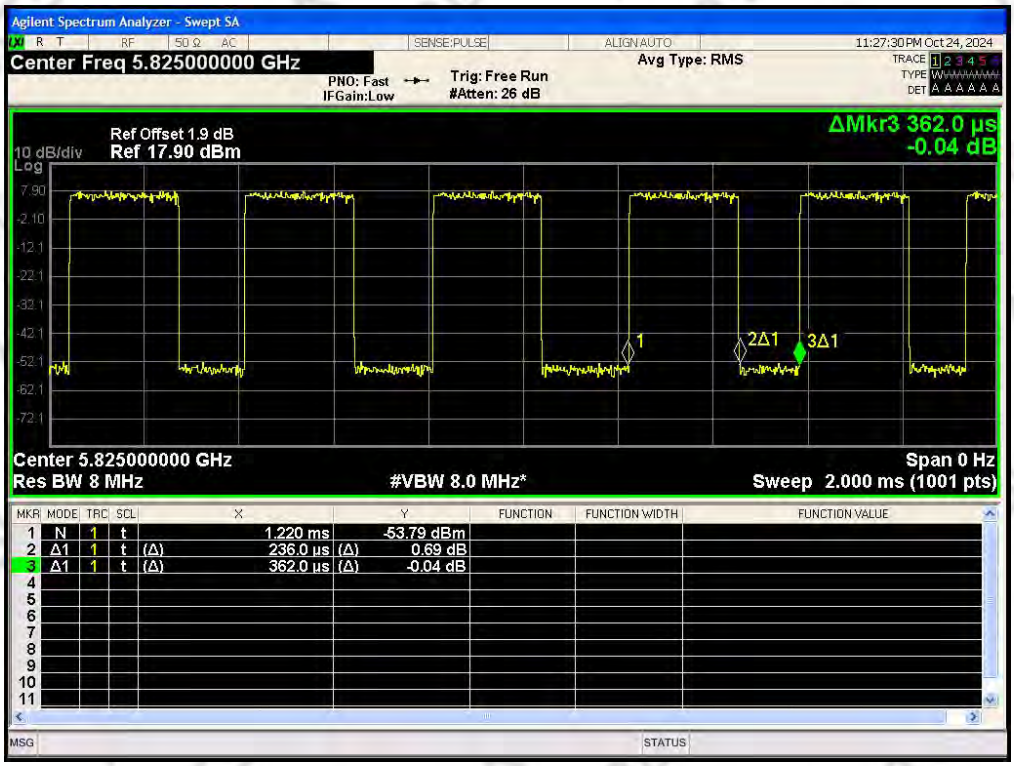
IEEE 802.11n_20MHz_Channel 149



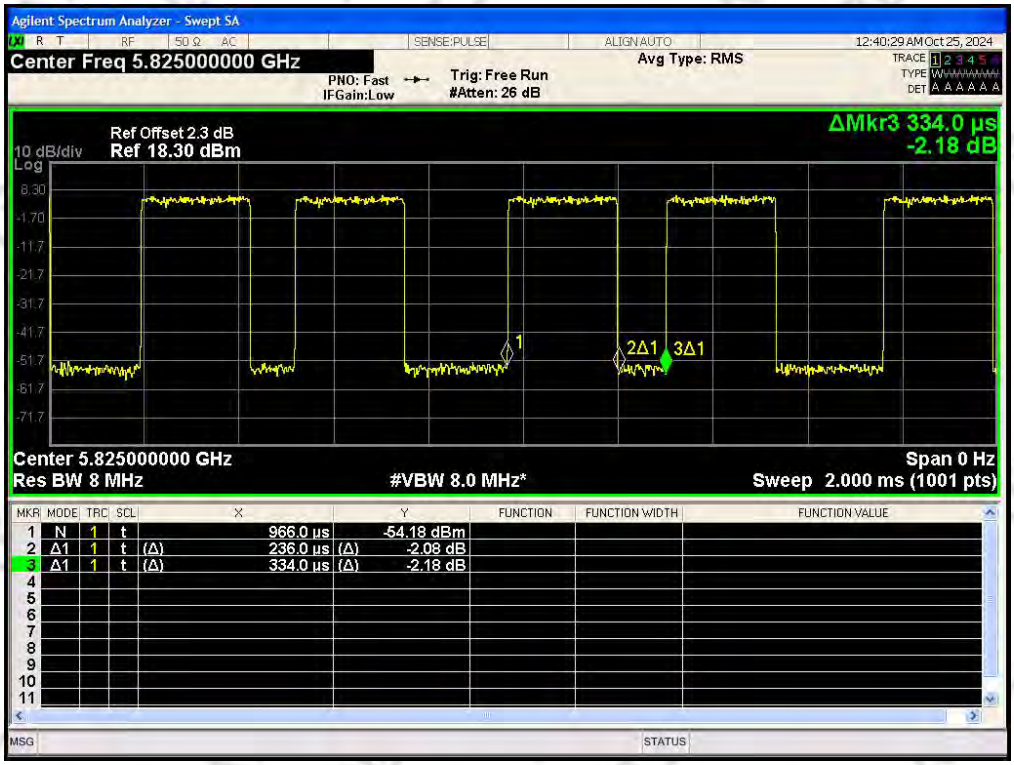
IEEE 802.11n_20MHz_Channel 157



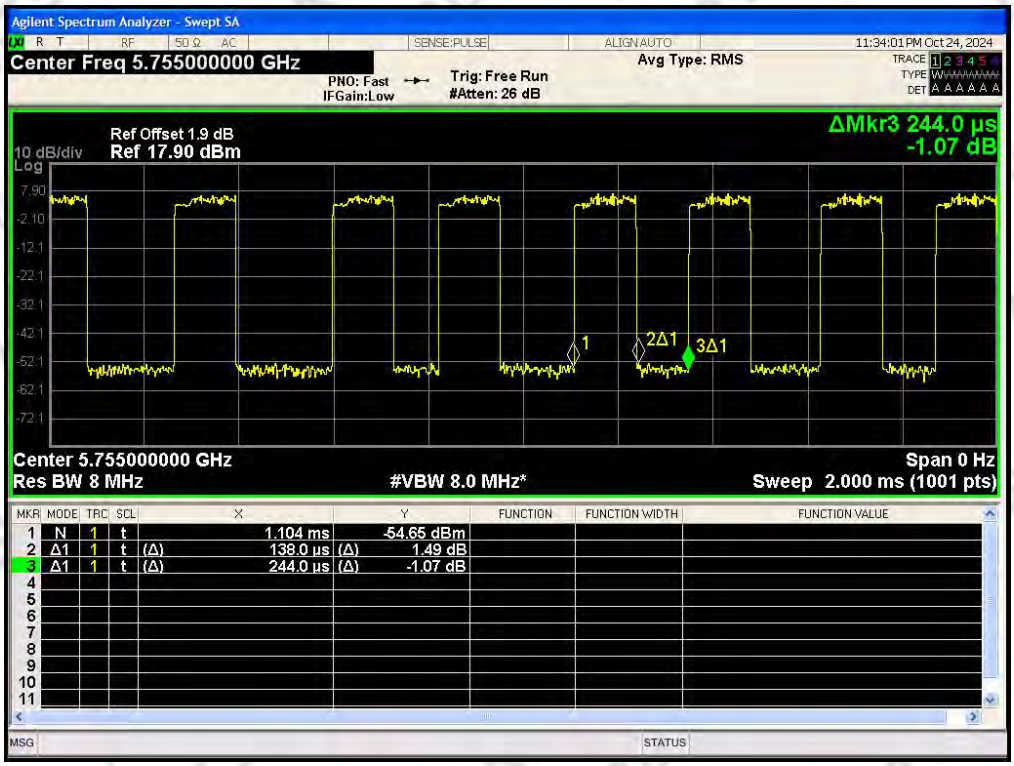
IEEE 802.11n_20MHz_Channel 157



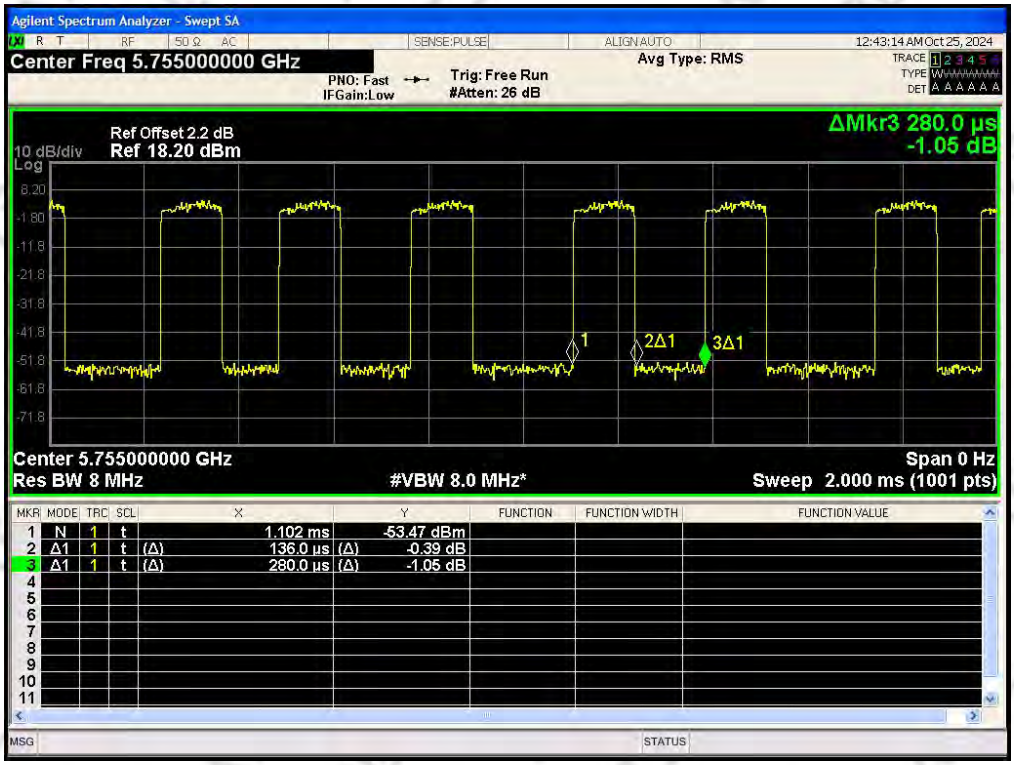
IEEE 802.11n_20MHz_Channel 165



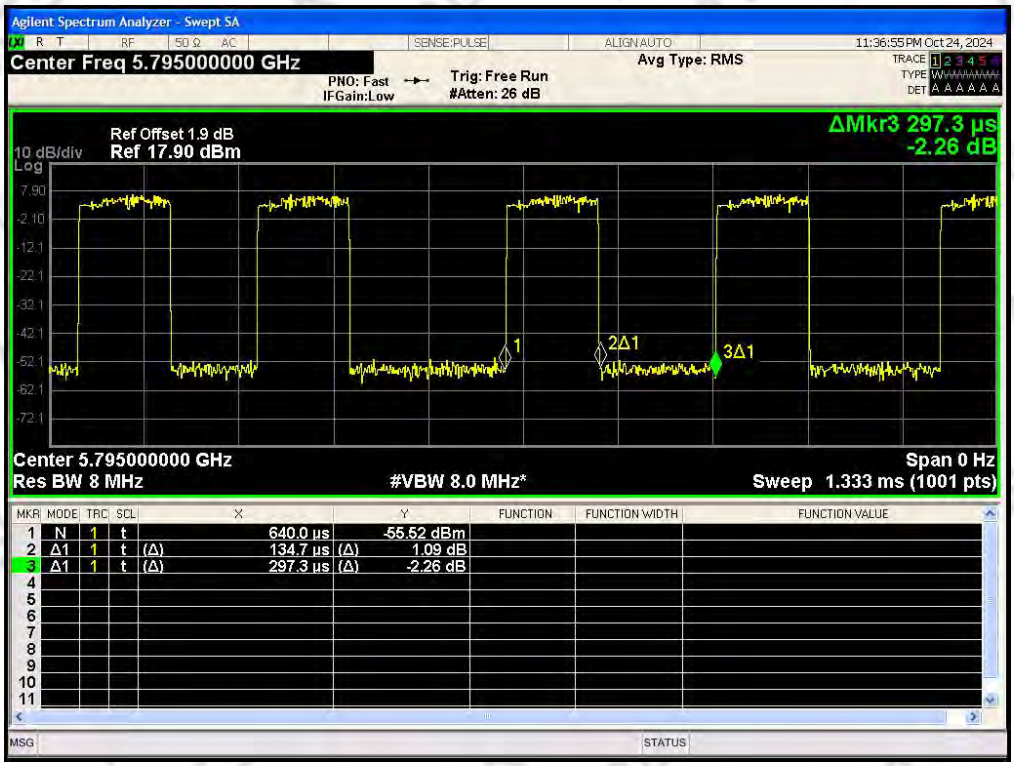
IEEE 802.11n_20MHz_Channel 165



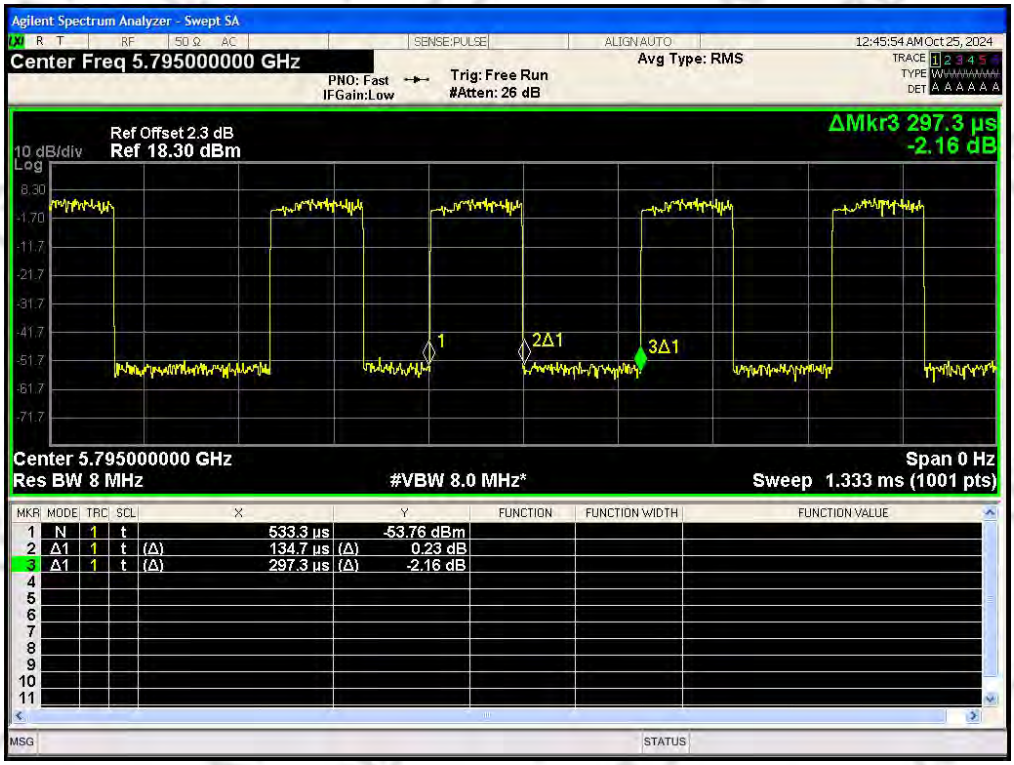
IEEE 802.11n_40MHz_Channel 151



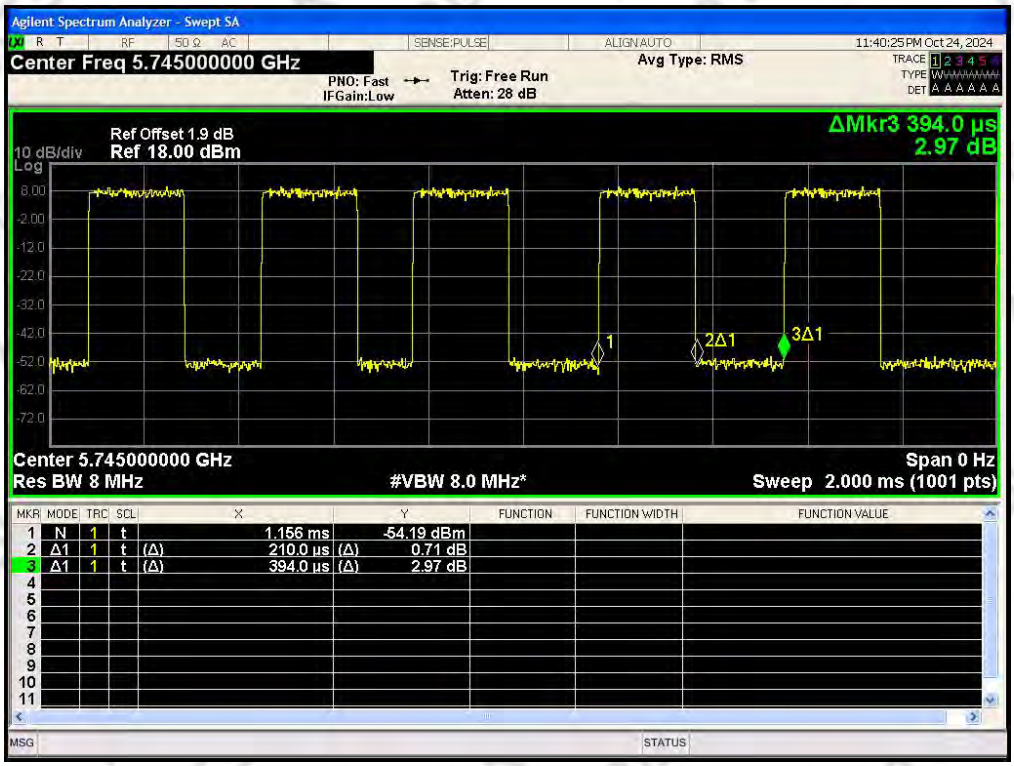
IEEE 802.11n_40MHz_Channel 151



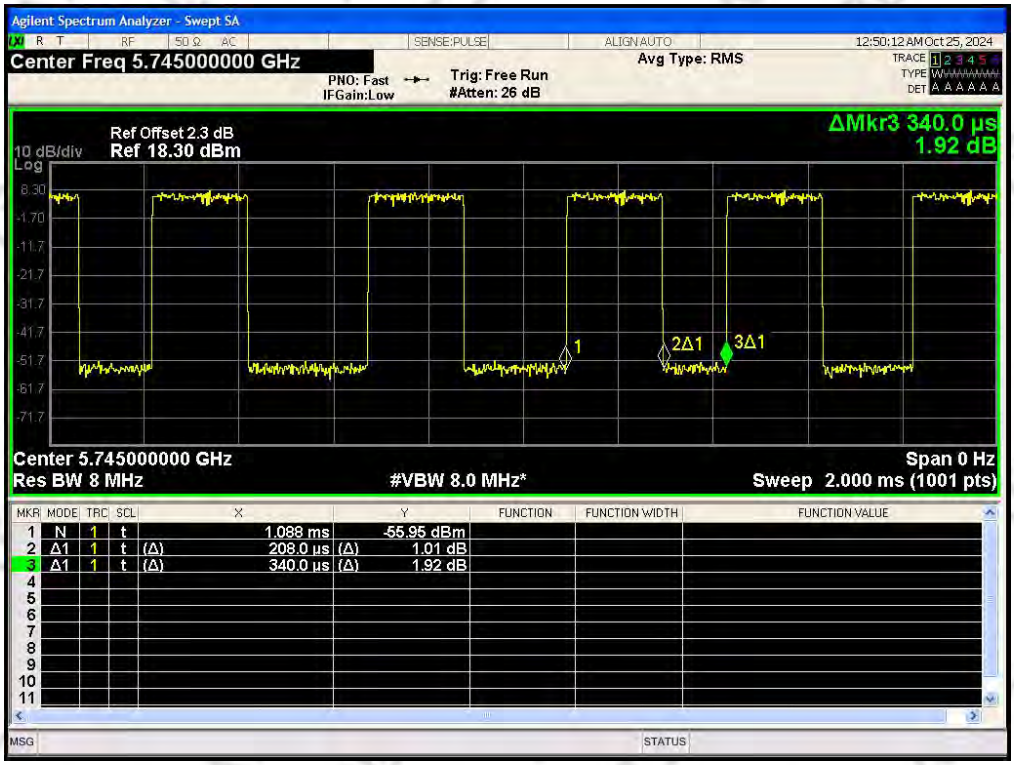
IEEE 802.11n_40MHz_Channel 159



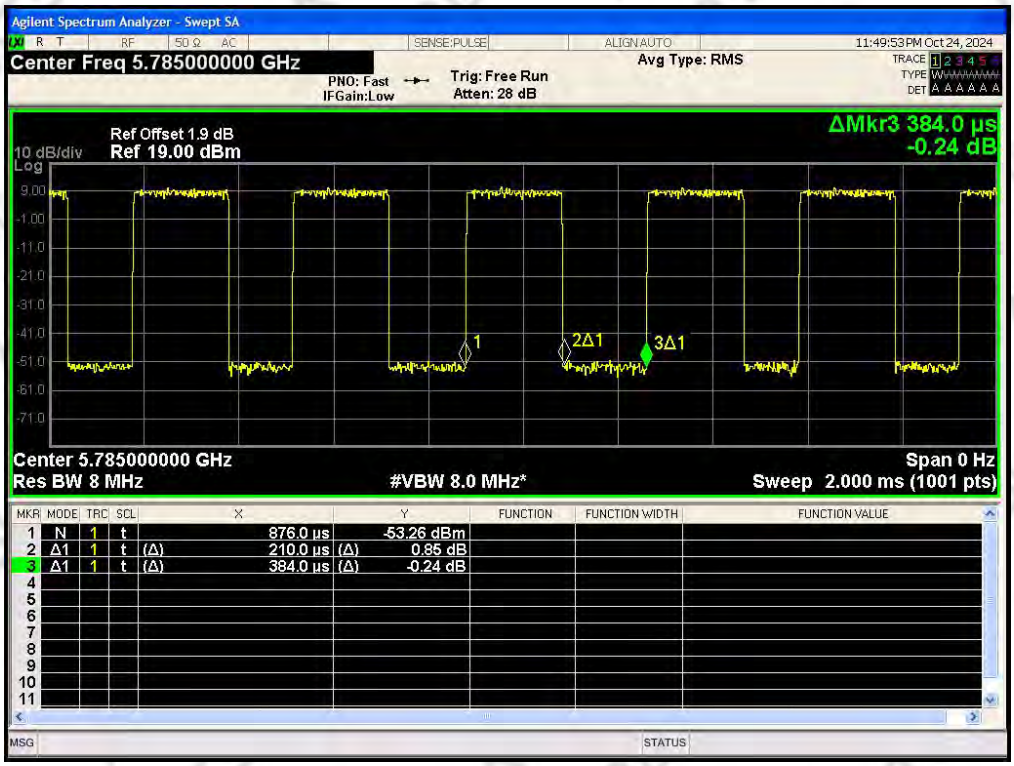
IEEE 802.11n_40MHz_Channel 159



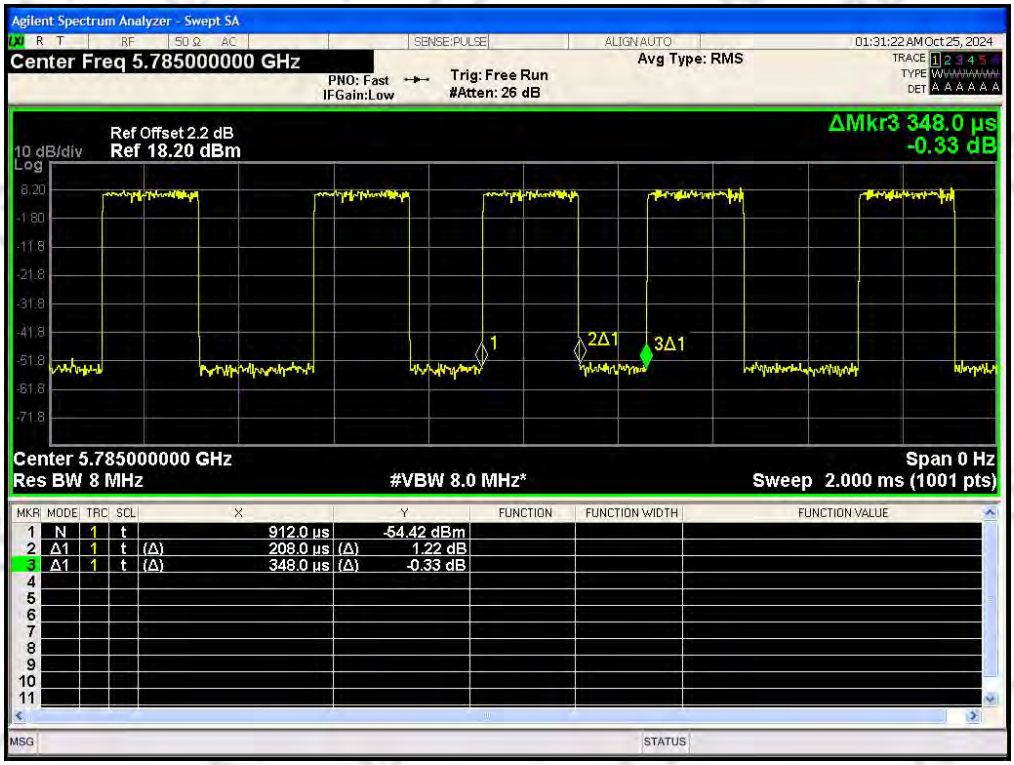
IEEE 802.11ac_20MHz_Channel 149



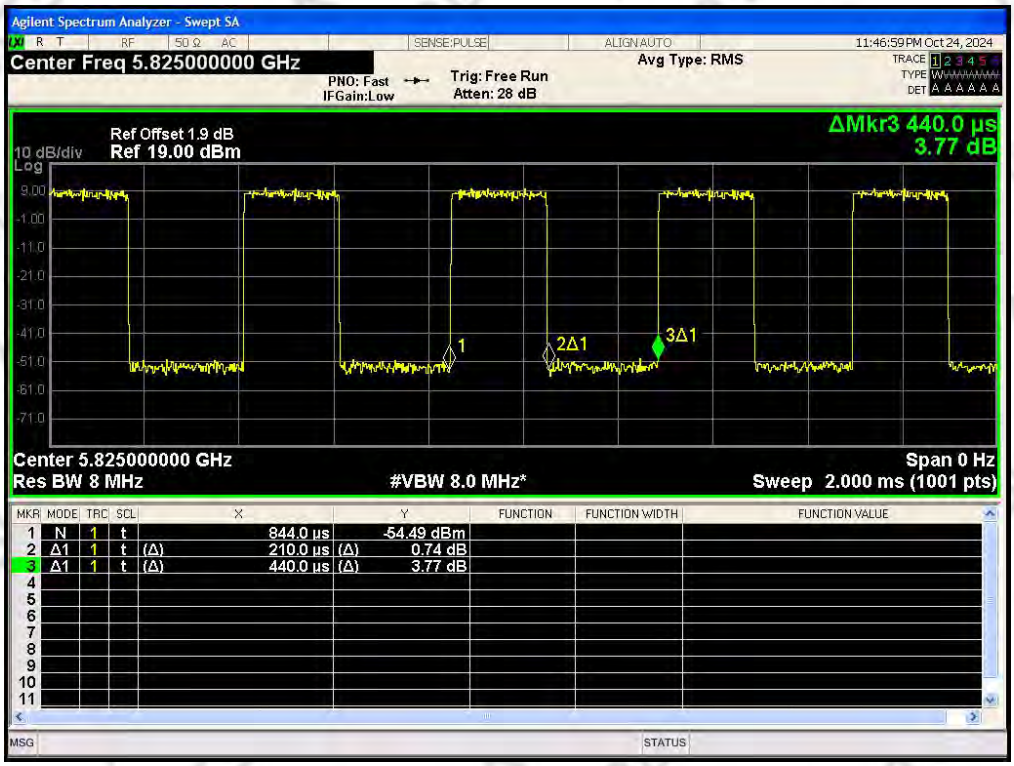
IEEE 802.11ac_20MHz_Channel 149



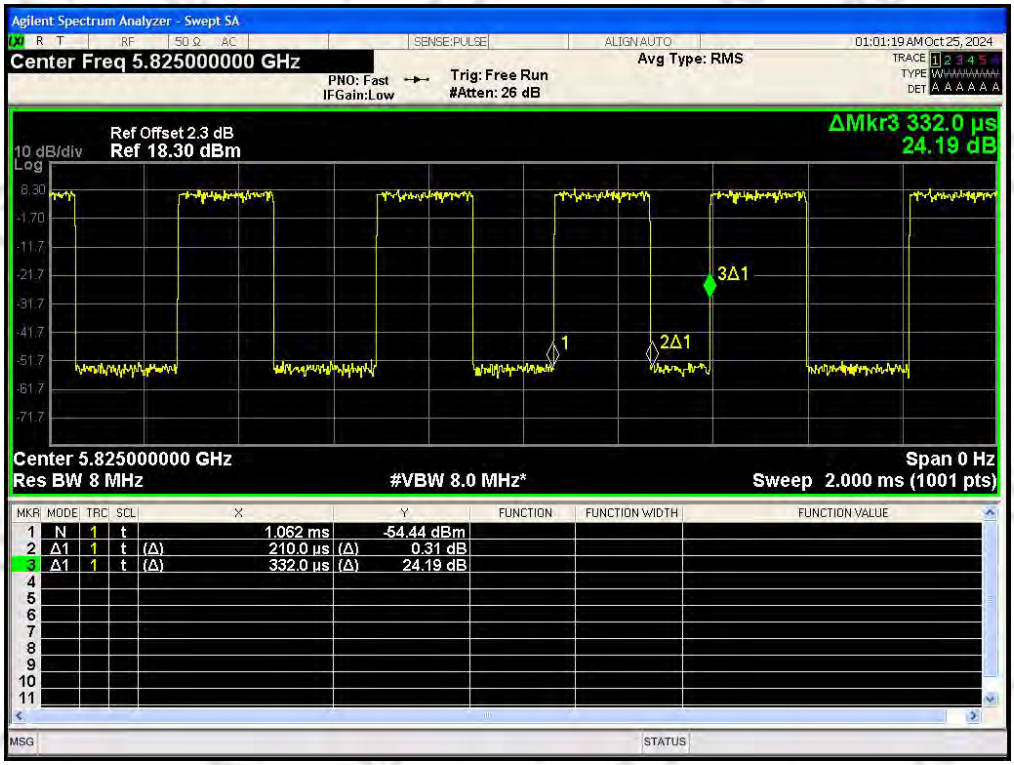
IEEE 802.11ac_20MHz_Channel 157



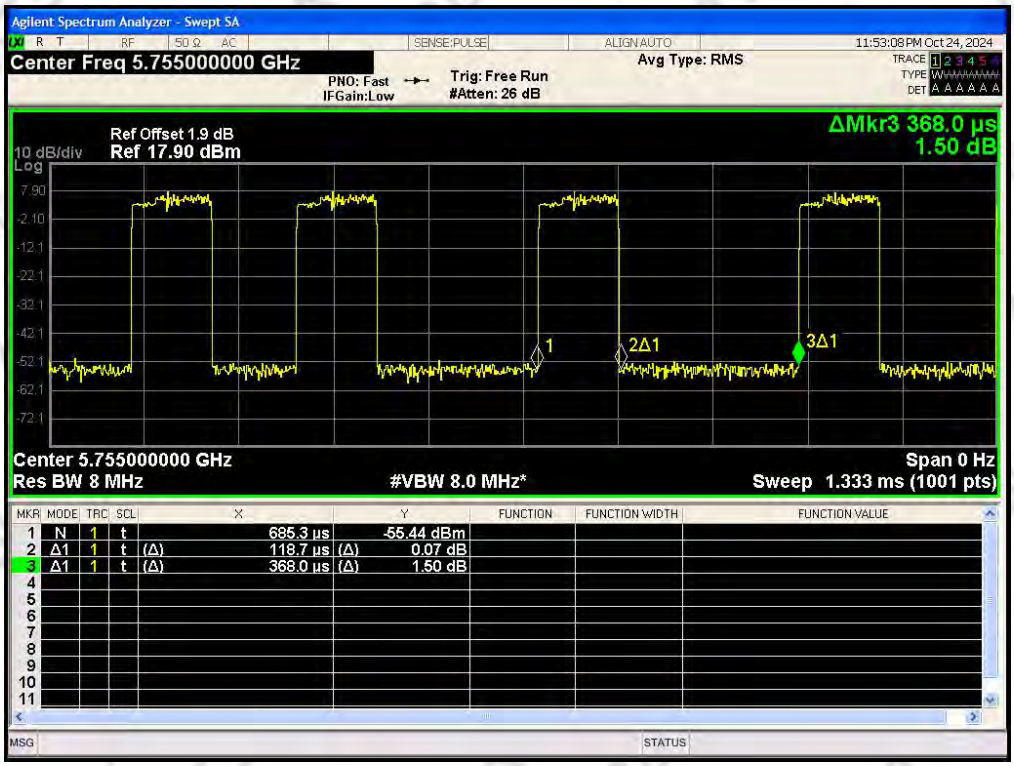
IEEE 802.11ac_20MHz_Channel 157



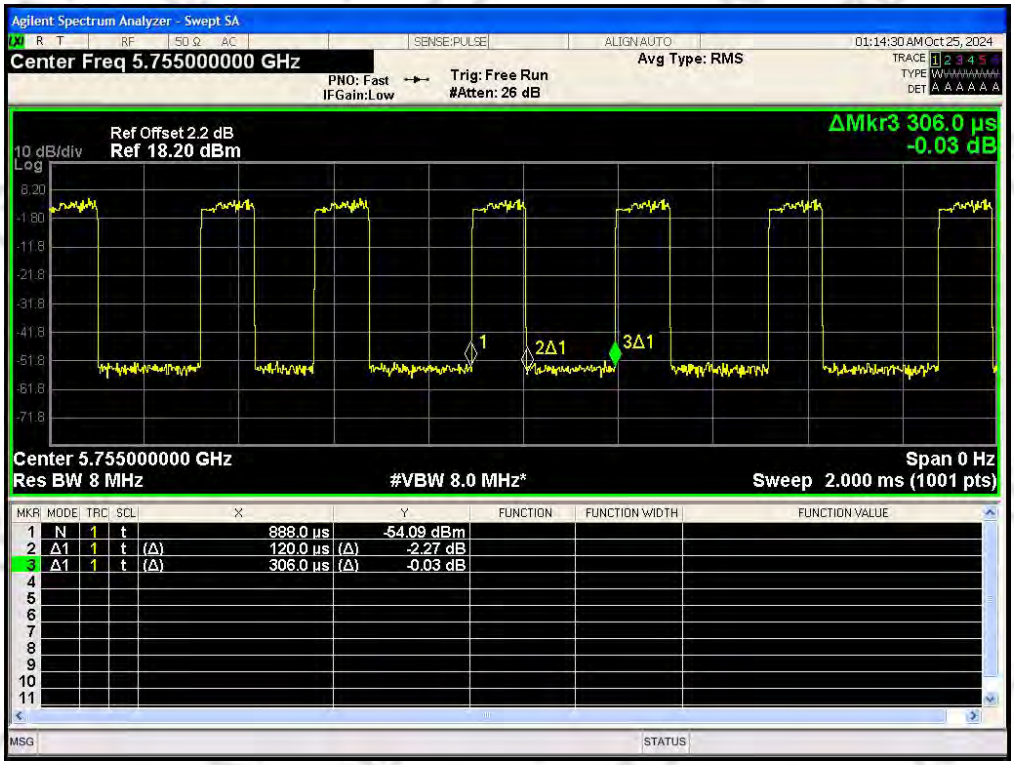
IEEE 802.11ac_20MHz_Channel 165



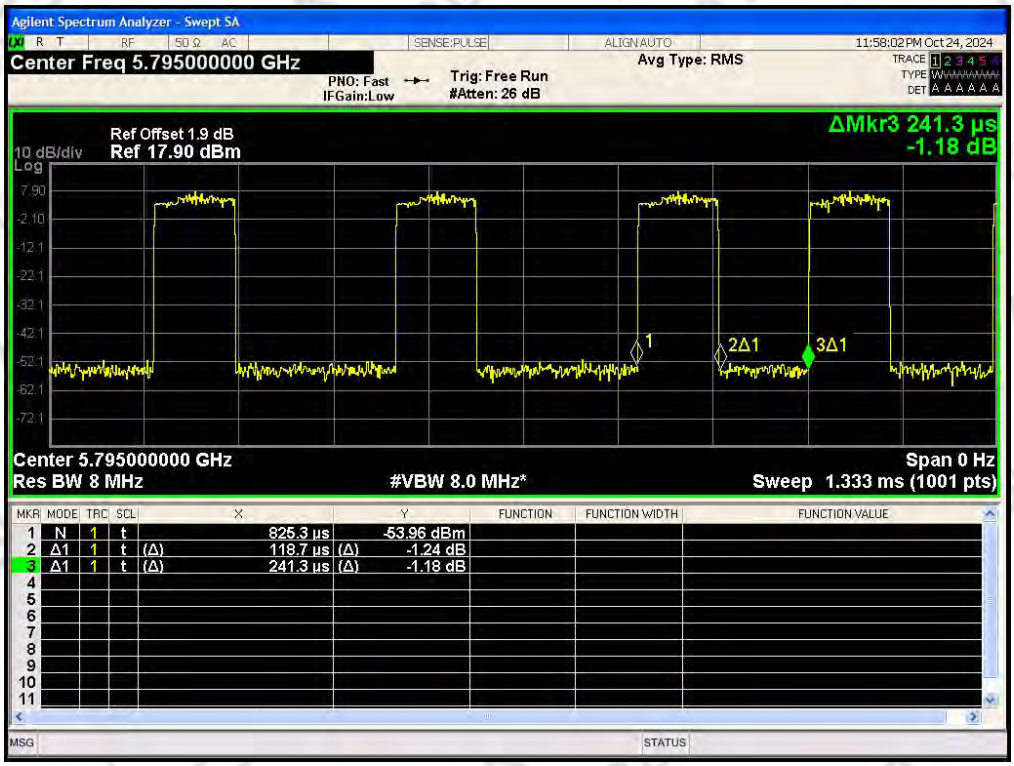
IEEE 802.11ac_20MHz_Channel 165



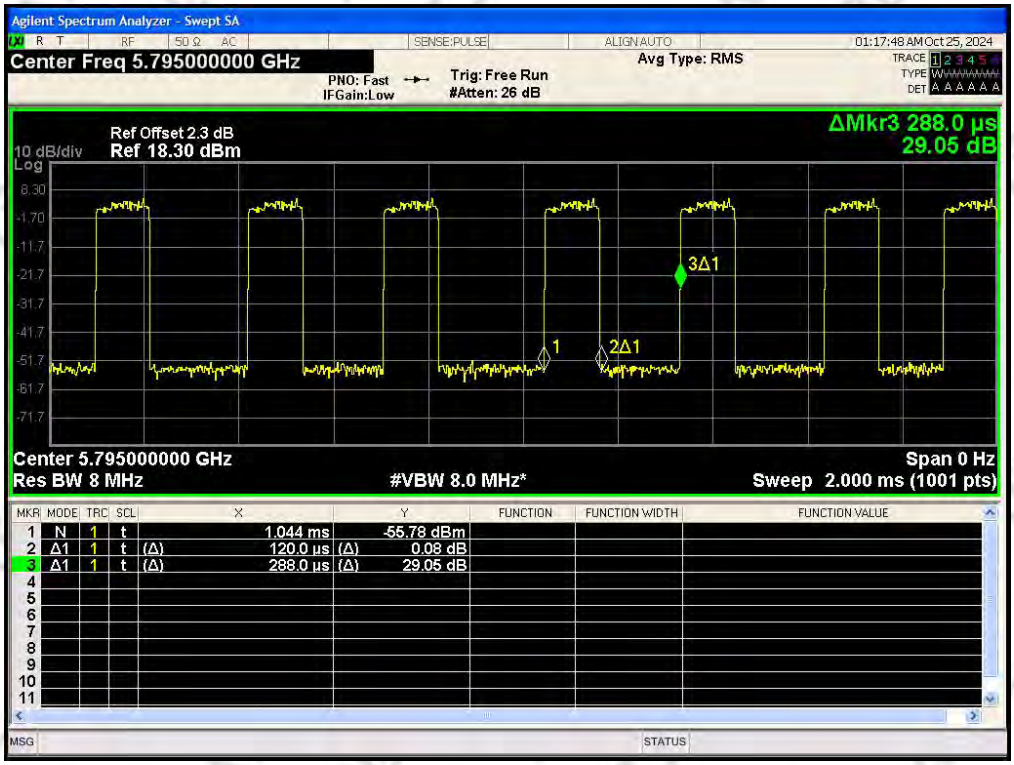
IEEE 802.11ac_40MHz_Channel 151



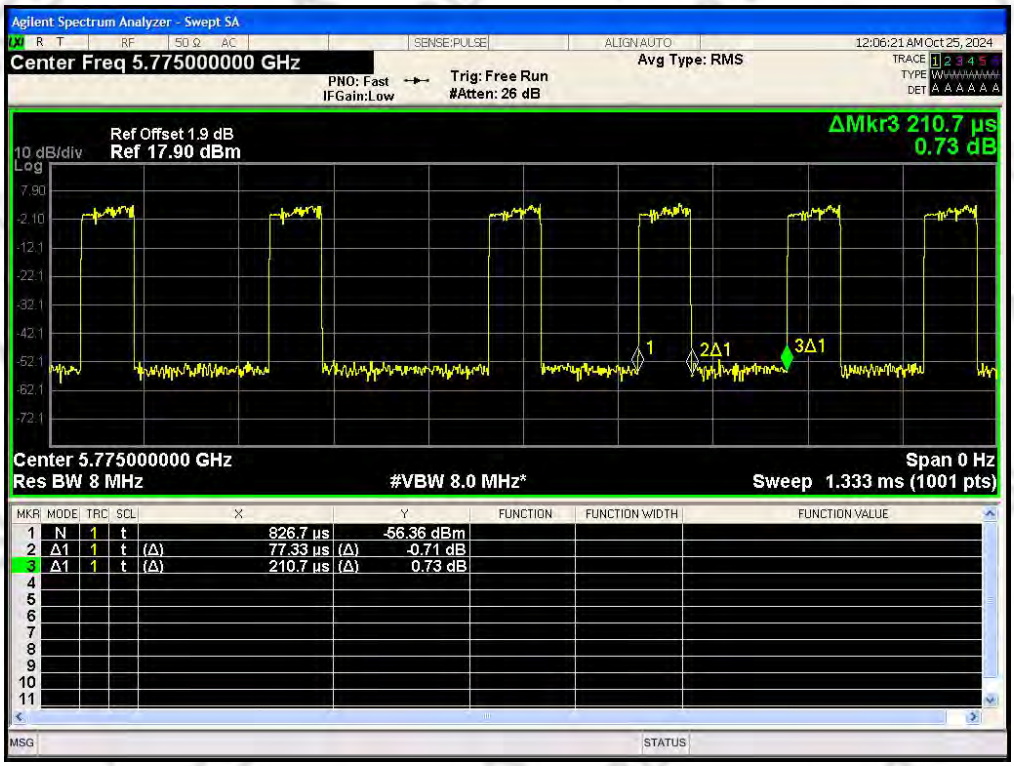
IEEE 802.11ac_40MHz_Channel 151



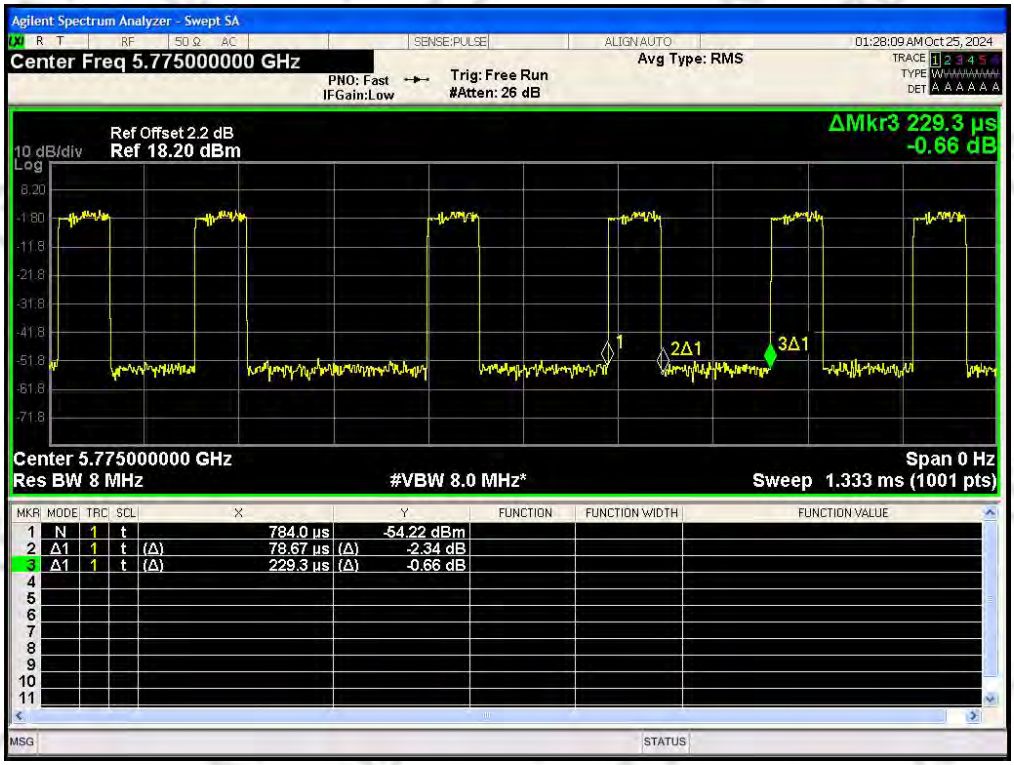
IEEE 802.11ac_40MHz_Channel 159



IEEE 802.11ac_40MHz_Channel 159



IEEE 802.11ac_80MHz_Channel 155



IEEE 802.11ac_80MHz_Channel 155

Peak Power Spectral Density

Test Result

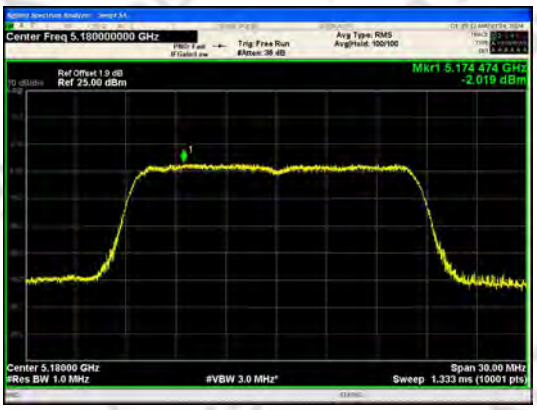
Mode	Channel	Ant. 0 Meas PSD (dBm/MHz or dBm/0.5MHz)	Ant. 1 Meas PSD (dBm/MHz or dBm/0.5MHz)	Total PSD (dBm/MHz or dBm/0.5MHz)	Limit (dBm/MHz or dBm/0.5MHz)	Result
IEEE 802.11a	36	-0.298	-0.5	N/A	17	PASS
	64	-1.345	-1.652	N/A	11	PASS
	100	-0.731	-1.768	N/A		PASS
	140	-3.321	0.328	N/A		PASS
IEEE 802.11n_20	36	0.183	0.097	3.151	14.99	PASS
	64	-1.485	-1.512	1.512	8.99	PASS
	100	-1.308	-1.334	1.689		PASS
	140	-3.31	-0.308	1.456		PASS
IEEE 802.11n_40	38	-1.52	-0.708	1.915	14.99	PASS
	62	-2.511	-1.783	0.879	8.99	PASS
	102	-2.446	-1.764	0.919		PASS
	134	-5.353	-2.315	-0.563		PASS
IEEE 802.11ac_20	36	1.109	1.878	4.521	14.99	PASS
	64	-0.304	0.325	3.032	8.99	PASS
	100	0.569	0.907	3.752		PASS
	140	-1.711	0.978	2.849		PASS
IEEE 802.11ac_40	38	0.082	0.703	3.414	14.99	PASS
	62	-1.83	-1.035	1.596	8.99	PASS
	102	-0.859	-0.253	2.465		PASS
	134	-3.941	-1.258	0.615		PASS
IEEE 802.11ac_80	42	-4.117	-3.33	-0.695	14.99	PASS
	58	-4.629	-4.143	-1.369	8.99	PASS
	106	-5.383	-5.286	-2.324		PASS
	122	-8.944	-5.864	-4.126		PASS
IEEE 802.11a	149	-3.057	-4.116	N/A	30	PASS
	157	-3.282	-4.19	N/A		PASS
	165	-3.688	-3.973	N/A		PASS
IEEE 802.11n_20	149	-3.534	-4.848	-1.131	27.99	PASS
	157	-3.552	-4.696	-1.076		PASS
	165	-3.583	-4.559	-1.033		PASS
IEEE 802.11n_40	151	-3.15	-5.323	-1.092		PASS
	159	-3.657	-5.114	-1.314		PASS
IEEE 802.11ac_20	149	-0.635	-3.011	1.348		PASS
	157	-1.015	-3.245	1.022		PASS
	165	-1.434	-2.897	0.906		PASS
IEEE	151	-3.297	-4.665	-0.917		PASS

802.11ac_40	159	-2.991	-5.541	-1.071		PASS
IEEE 802.11ac_80	155	-6.202	-7.811	-3.922		PASS

Note:

1. The power density of antenna 0 and antenna 1 is converted into milliwatt units, and the added power density is taken logarithmically and multiplied by 10.
2. Refer to the main report Section 1.5 for calculation of power limits.

Test Graphs

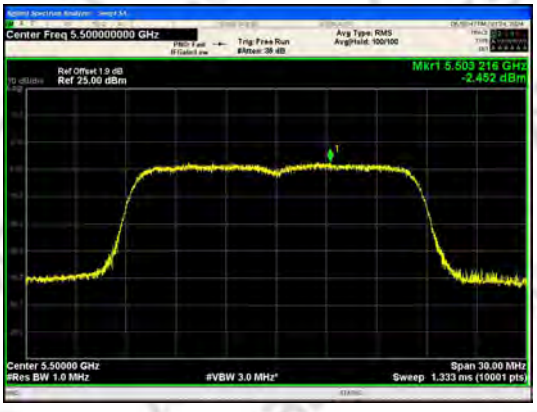


IEEE 802.11a_Channel 36_20MHz_Antenna 0

IEEE 802.11a_Channel 36_20MHz_Antenna 1

IEEE 802.11a_Channel 64_20MHz_Antenna 0

IEEE 802.11a_Channel 64_20MHz_Antenna 1



IEEE 802.11a_Channel 100_20MHz_Antenna 0

IEEE 802.11a_Channel 100_20MHz_Antenna 1

IEEE 802.11a_Channel 140_20MHz_Antenna 0

IEEE 802.11a_Channel 140_20MHz_Antenna 1

IEEE 802.11n_Channel 36_20MHz_Antenna 1

IEEE 802.11n_Channel 36_20MHz_Antenna 0

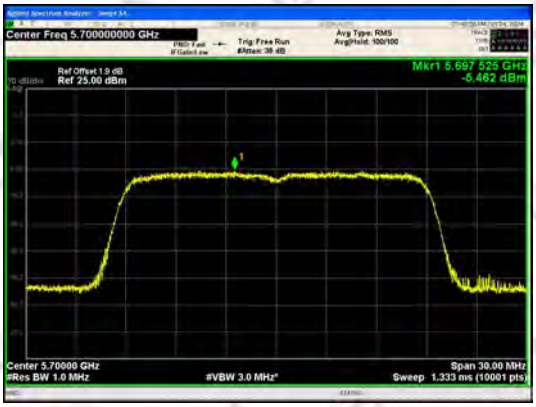
IEEE 802.11n_Channel 64_20MHz_Antenna 1

IEEE 802.11n_Channel 64_20MHz_Antenna 0

IEEE 802.11n_Channel 100_20MHz_Antenna 1

IEEE 802.11n_Channel 100_20MHz_Antenna 0

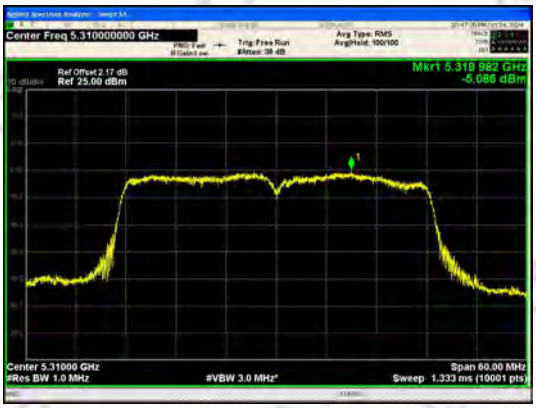
IEEE 802.11n_Channel 140_20MHz_Antenna 1



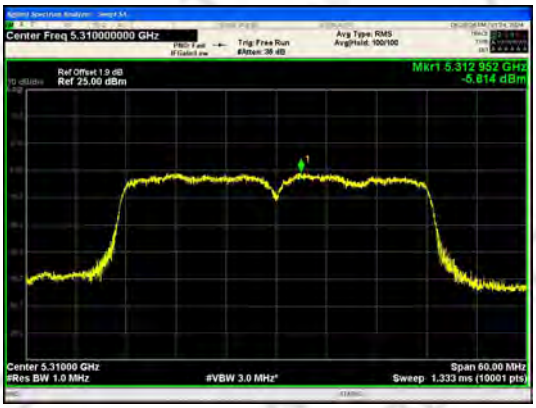
IEEE 802.11n_Channel 140_20MHz_Antenna 0

IEEE 802.11n_Channel 38_40MHz_Antenna 1

IEEE 802.11n_Channel 38_40MHz_Antenna 0



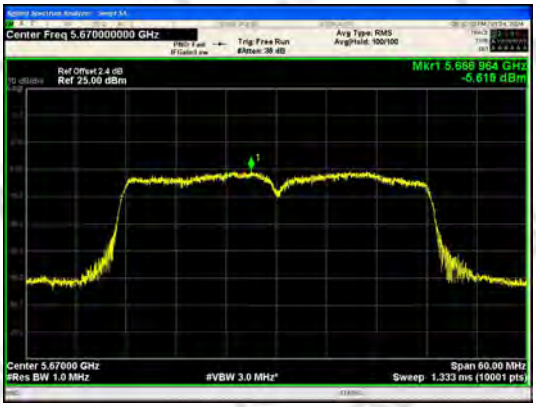
IEEE 802.11n_Channel 62_40MHz_Antenna 1



IEEE 802.11n_Channel 62_40MHz_Antenna 0

IEEE 802.11n_Channel 102_40MHz_Antenna 1

IEEE 802.11n_Channel 102_40MHz_Antenna 0



IEEE 802.11n_Channel 134_40MHz_Antenna 1

IEEE 802.11n_Channel 134_40MHz_Antenna 0

IEEE 802.11ac_Channel 36_20MHz_Antenna 1

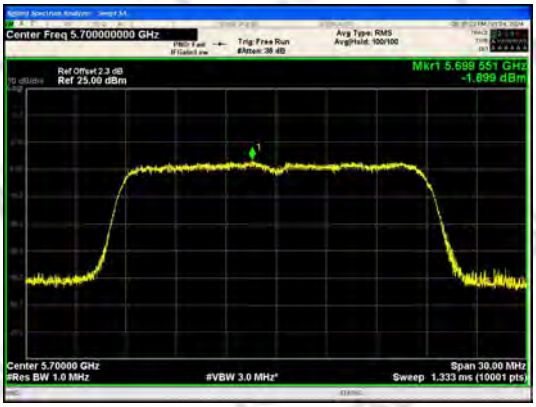
IEEE 802.11ac_Channel 36_20MHz_Antenna 0

IEEE 802.11ac_Channel 64_20MHz_Antenna 1

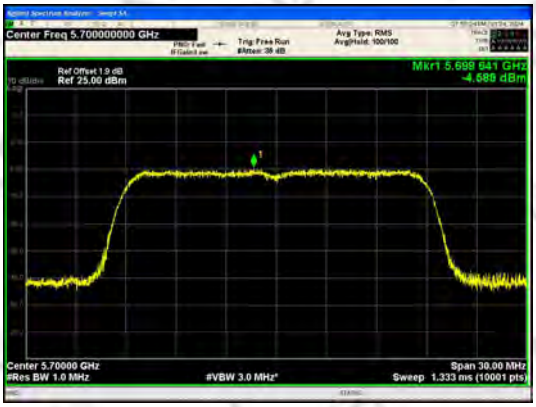
IEEE 802.11ac_Channel 64_20MHz_Antenna 0

IEEE 802.11ac_Channel 100_20MHz_Antenna 1

IEEE 802.11ac_Channel 100_20MHz_Antenna 0



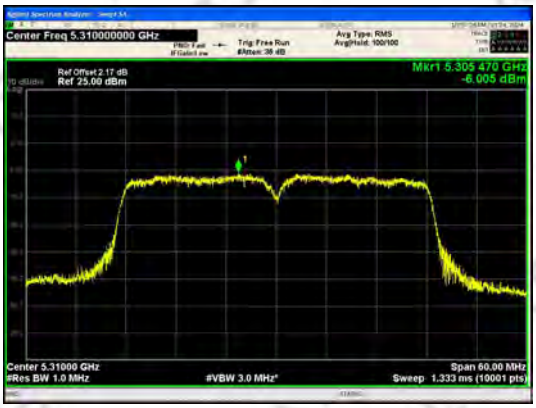
IEEE 802.11ac_Channel 140_20MHz_Antenna 1



IEEE 802.11ac_Channel 140_20MHz_Antenna 0

IEEE 802.11ac_Channel 38_40MHz_Antenna 1

IEEE 802.11ac_Channel 38_40MHz_Antenna 0

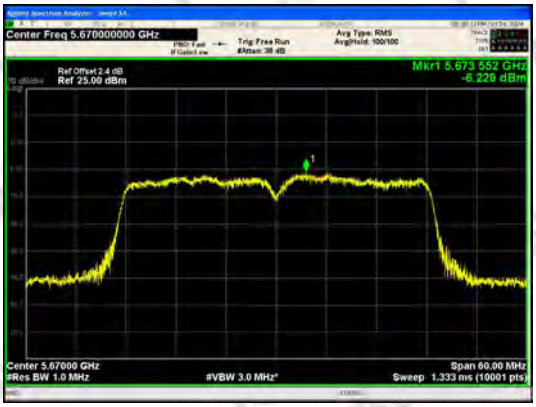


IEEE 802.11ac_Channel 62_40MHz_Antenna 1

IEEE 802.11ac_Channel 62_40MHz_Antenna 0

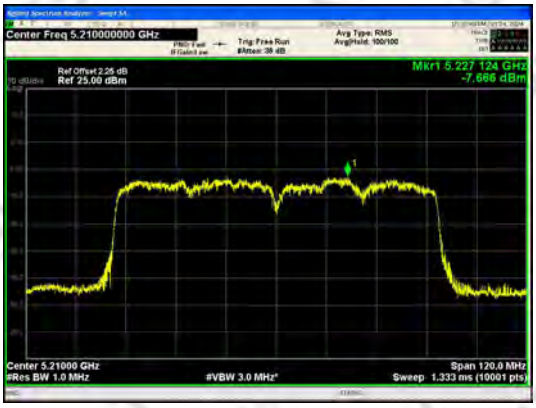
IEEE 802.11ac_Channel 102_40MHz_Antenna 1

IEEE 802.11ac_Channel 102_40MHz_Antenna 0



IEEE 802.11ac_Channel 134_40MHz_Antenna 1

IEEE 802.11ac_Channel 134_40MHz_Antenna 0



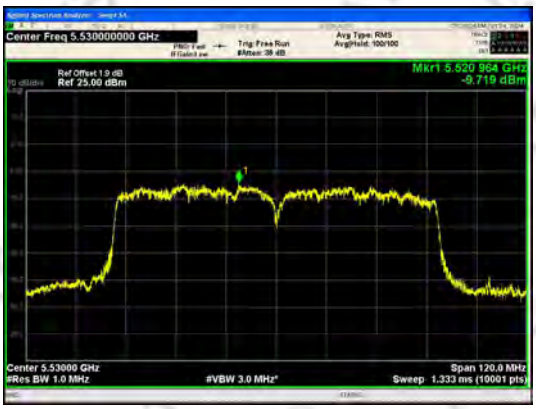
IEEE 802.11ac_Channel 42_80MHz_Antenna 1

IEEE 802.11ac_Channel 42_80MHz_Antenna 0

IEEE 802.11ac_Channel 58_80MHz_Antenna 1

IEEE 802.11ac_Channel 58_80MHz_Antenna 0

IEEE 802.11ac_Channel 106_80MHz_Antenna 1



IEEE 802.11ac_Channel 106_80MHz_Antenna 0

IEEE 802.11ac_Channel 122_80MHz_Antenna 1

IEEE 802.11ac_Channel 122_80MHz_Antenna 0

IEEE 802.11a_Channel 149_20MHz_Antenna 0

IEEE 802.11a_Channel 157_20MHz_Antenna 0

IEEE 802.11a_Channel 149_20MHz_Antenna 1

IEEE 802.11a_Channel 165_20MHz_Antenna 0

IEEE 802.11a_Channel 157_20MHz_Antenna 1

IEEE 802.11n_Channel 149_20MHz_Antenna 0

IEEE 802.11a_Channel 165_20MHz_Antenna 1

IEEE 802.11n_Channel 157_20MHz_Antenna 0

IEEE 802.11n_Channel 149_20MHz_Antenna 1

IEEE 802.11n_Channel 165_20MHz_Antenna 0

IEEE 802.11n_Channel 157_20MHz_Antenna 1

IEEE 802.11n_Channel 151_40MHz_Antenna 0

IEEE 802.11n_Channel 165_20MHz_Antenna 1

IEEE 802.11n_Channel 159_40MHz_Antenna 0

IEEE 802.11n_Channel 151_40MHz_Antenna 1

IEEE 802.11ac_Channel 149_20MHz_Antenna 0

IEEE 802.11n_Channel 159_40MHz_Antenna 1

IEEE 802.11ac_Channel 157_20MHz_Antenna 0

IEEE 802.11ac_Channel 149_20MHz_Antenna 1

IEEE 802.11ac_Channel 165_20MHz_Antenna 0

IEEE 802.11ac_Channel 157_20MHz_Antenna 1

IEEE 802.11ac_Channel 151_40MHz_Antenna 0

IEEE 802.11ac_Channel 165_20MHz_Antenna 1

IEEE 802.11ac_Channel 159_40MHz_Antenna 0

IEEE 802.11ac_Channel 151_40MHz_Antenna 1

IEEE 802.11ac_Channel 155_80MHz_Antenna 0

IEEE 802.11ac_Channel 159_40MHz_Antenna 1

IEEE 802.11ac_Channel 155_80MHz_Antenna 1

Frequency Stability

TEST RESULT

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
50	120	5179.9789	-0.00041	5179.9818	-0.00035	5179.9786	-0.00041	5179.9815	-0.00036
40	120	5179.9856	-0.00028	5179.9886	-0.00022	5179.9873	-0.00025	5179.9901	-0.00019
30	120	5180.0048	0.00009	5180.0028	0.00005	5180.0044	0.00008	5180.0047	0.00009
20	120	5179.9898	-0.00020	5179.9947	-0.00010	5179.9925	-0.00014	5179.9915	-0.00016
10	120	5179.9898	-0.00020	5179.9899	-0.00019	5179.9873	-0.00025	5179.9916	-0.00016
0	120	5180.0095	0.00018	5180.0129	0.00025	5180.0114	0.00022	5180.0111	0.00021
-10	120	5179.9775	-0.00043	5179.9766	-0.00045	5179.9762	-0.00046	5179.9791	-0.00040
-20	120	5180.0206	0.00040	5180.0216	0.00042	5180.0221	0.00043	5180.0189	0.00036
-30	120	5180.0186	0.00036	5180.0207	0.00040	5180.0222	0.00043	5180.0202	0.00039

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5180MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift	Measured Frequency (MHz)	Frequency Drift
20	138	5179.9895	-0.00020	5179.9941	-0.00011	5179.9923	-0.00015	5179.9909	-0.00018
	120	5179.9898	-0.00020	5179.9947	-0.00010	5179.9925	-0.00014	5179.9915	-0.00016
	102	5179.9905	-0.00018	5179.9944	-0.00011	5179.9921	-0.00015	5179.9915	-0.00016