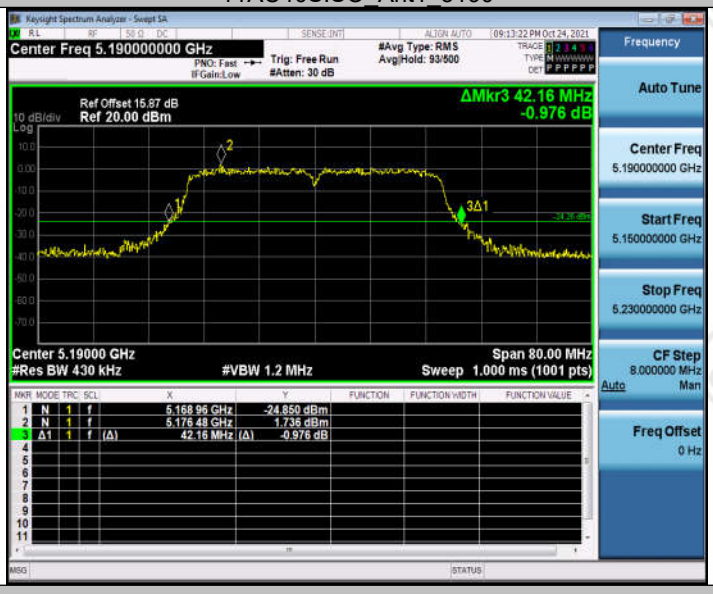
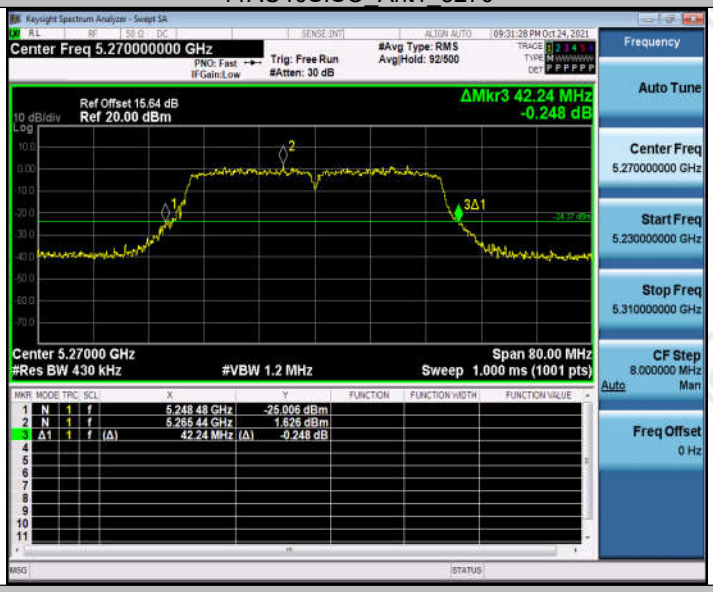
11AC40SISO_Ant1_5190



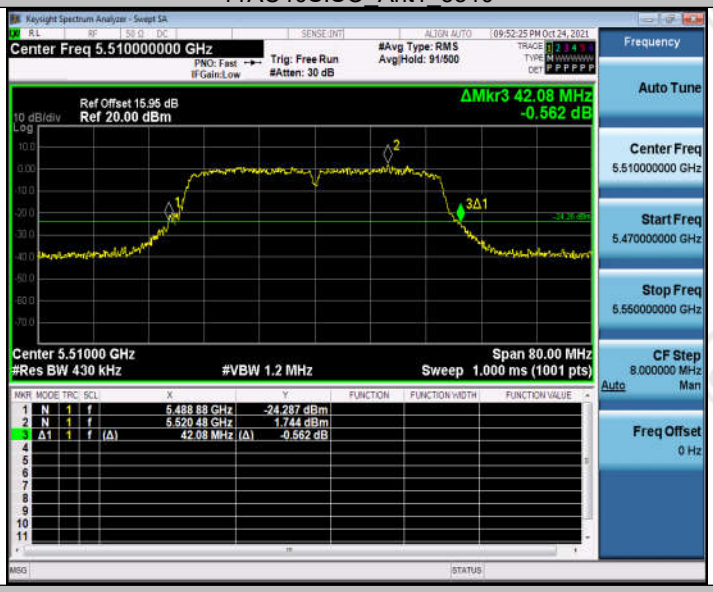
11AC40SISO_Ant1_5230

11AC40SISO_Ant1_5270



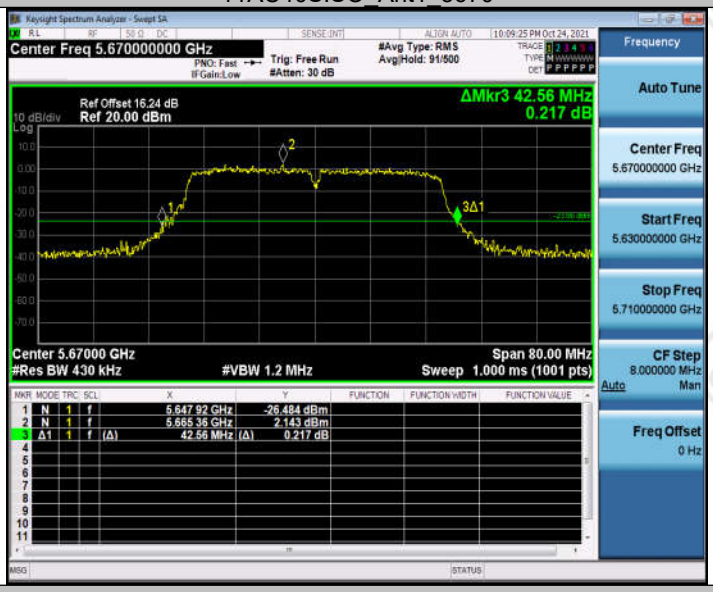
11AC40SISO_Ant1_5310

11AC40SISO_Ant1_5510



11AC40SISO_Ant1_5550

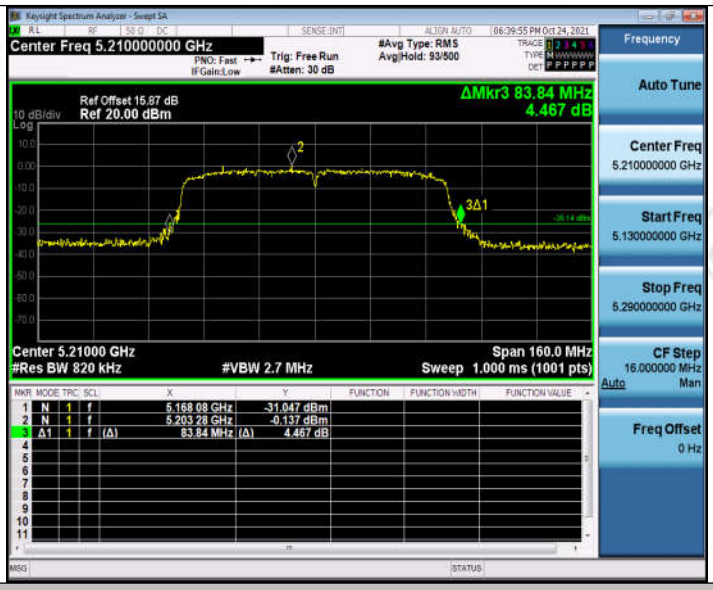
11AC40SISO_Ant1_5670



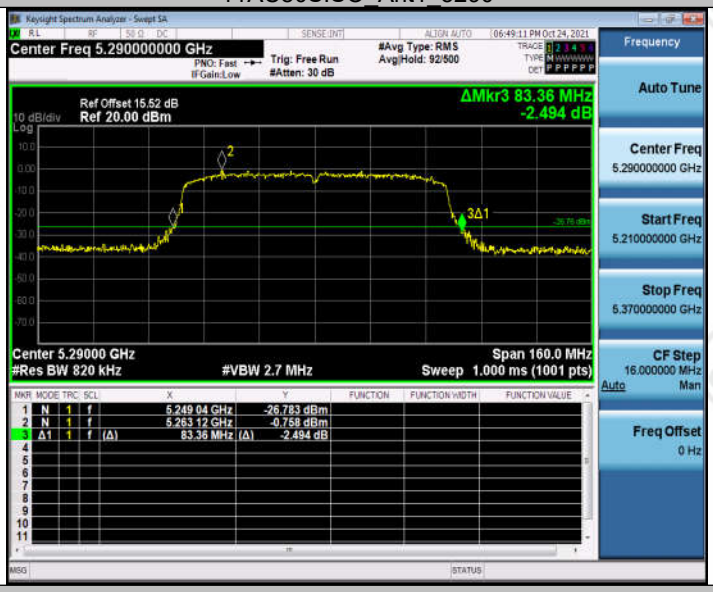
11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5210

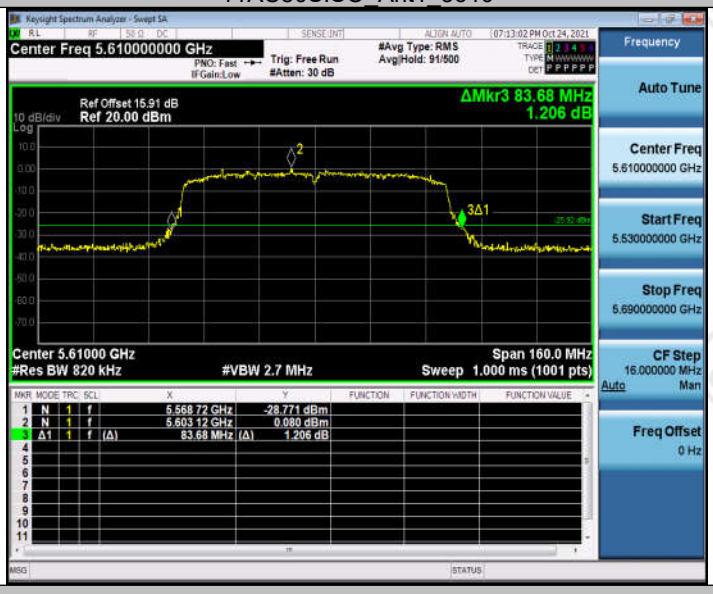


11AC80SISO_Ant1_5290



11AC80SISO_Ant1_5530

11AC80SISO_Ant1_5610



11AC80SISO_Ant1_5775

Keysight Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 90/500
07:25:03 PM Oct 24, 2021
Ref Offset 16.48 dB
10 dB/div
Ref 20.00 dBm
ΔMkr3 82.88 MHz
0.417 dB
Center 5.77500 GHz
#Res BW 820 kHz
#VBW 2.7 MHz
Span 160.0 MHz
Sweep 1.000 ms (1001 pts)
1 N 1 f 5.734 20 GHz -27.392 dBm
2 N 1 f 5.768 12 GHz -0.320 dBm
3 Δ1 1 f (Δ) 82.88 MHz (Δ) 0.417 dB
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.695000000 GHz
Stop Freq
5.855000000 GHz
CF Step
16.000000 MHz
Auto
Man
Freq Offset
0 Hz

Occupied channel bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.935	5171.538	5188.473	---	PASS
		5200	16.925	5191.543	5208.468	---	PASS
		5240	16.946	5231.568	5248.514	---	PASS
		5260	16.848	5251.585	5268.433	---	PASS
		5280	16.950	5271.533	5288.483	---	PASS
		5320	16.936	5311.549	5328.485	---	PASS
		5500	16.885	5491.556	5508.441	---	PASS
		5580	16.946	5571.568	5588.514	---	PASS
		5700	16.915	5691.567	5708.482	---	PASS
		5745	16.867	5736.603	5753.470	---	PASS
		5785	16.931	5776.527	5793.458	---	PASS
		5825	16.965	5816.501	5833.466	---	PASS
11N20SISO	Ant1	5180	17.832	5171.129	5188.961	---	PASS
		5200	17.835	5191.110	5208.945	---	PASS
		5240	17.883	5231.069	5248.952	---	PASS
		5260	17.823	5251.11	5268.939	---	PASS

				6			
		5280	17.822	5271.113	5288.935	---	PASS
		5320	17.832	5311.123	5328.955	---	PASS
		5500	17.824	5491.116	5508.940	---	PASS
		5580	17.876	5571.082	5588.958	---	PASS
		5700	17.842	5691.111	5708.953	---	PASS
		5745	17.851	5736.097	5753.948	---	PASS
		5785	17.813	5776.109	5793.922	---	PASS
		5825	17.823	5816.066	5833.889	---	PASS
11N40SISO	Ant1	5190	36.740	5171.670	5208.410	---	PASS
		5230	36.587	5211.734	5248.321	---	PASS
		5270	36.569	5251.717	5288.286	---	PASS
		5310	36.572	5291.735	5328.307	---	PASS
		5510	36.465	5491.790	5528.255	---	PASS
		5550	36.569	5531.739	5568.308	---	PASS
		5670	36.601	5651.668	5688.269	---	PASS
		5755	36.613	5736.767	5773.380	---	PASS
		5795	36.664	5776.669	5813.333	---	PASS
11AC20S	Ant1	5180	17.843	5171.08	5188.929	---	PASS

ISO				6			
		5200	17.854	5191.077	5208.931	---	PASS
		5240	17.843	5231.078	5248.921	---	PASS
		5260	17.837	5251.077	5268.914	---	PASS
		5280	17.822	5271.085	5288.907	---	PASS
		5320	17.841	5311.085	5328.926	---	PASS
		5500	17.841	5491.083	5508.924	---	PASS
		5580	17.872	5571.057	5588.929	---	PASS
		5700	17.847	5691.079	5708.926	---	PASS
		5745	17.803	5736.116	5753.919	---	PASS
		5785	17.834	5776.062	5793.896	---	PASS
		5825	17.834	5816.060	5833.894	---	PASS
11AC40S ISO	Ant1	5190	36.801	5171.628	5208.429	---	PASS
		5230	36.675	5211.609	5248.284	---	PASS
		5270	36.643	5251.620	5288.263	---	PASS
		5310	36.672	5291.581	5328.253	---	PASS
		5510	36.560	5491.646	5528.206	---	PASS
		5550	36.624	5531.642	5568.266	---	PASS
		5670	36.672	5651.52	5688.200	---	PASS

				8			
		5755	36.605	5736.649	5773.254	---	PASS
		5795	36.750	5776.545	5813.295	---	PASS
11AC80S ISO	Ant1	5210	74.893	5172.738	5247.631	---	PASS
		5290	74.933	5252.664	5327.597	---	PASS
		5530	74.877	5492.668	5567.545	---	PASS
		5610	74.926	5572.686	5647.612	---	PASS
		5775	74.813	5737.762	5812.575	---	PASS

Test Graphs

11A_Ant1_5180

11A_Ant1_5200

11A_Ant1_5240

11A_Ant1_5260

11A_Ant1_5280

11A_Ant1_5320

11A_Ant1_5500

11A_Ant1_5580

11A_Ant1_5700

11A_Ant1_5745

11A_Ant1_5785

11A_Ant1_5825

11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

11N20SISO_Ant1_5240

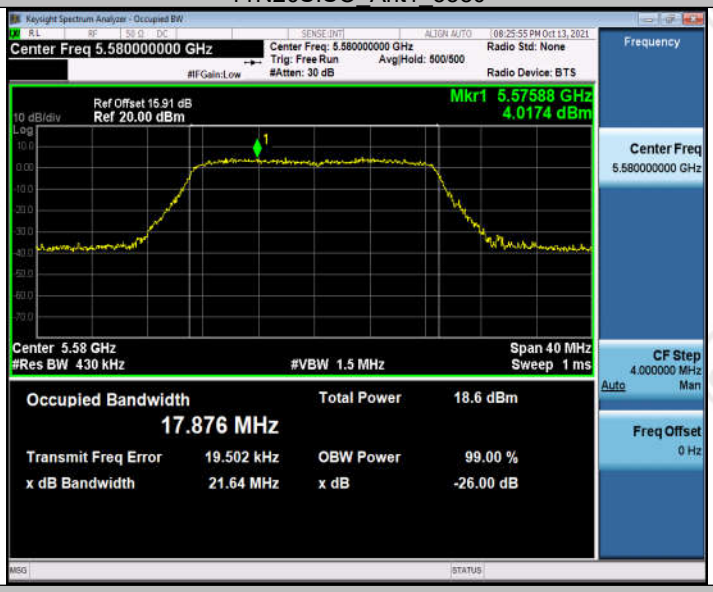
11N20SISO_Ant1_5260

11N20SISO_Ant1_5280

11N20SISO_Ant1_5320

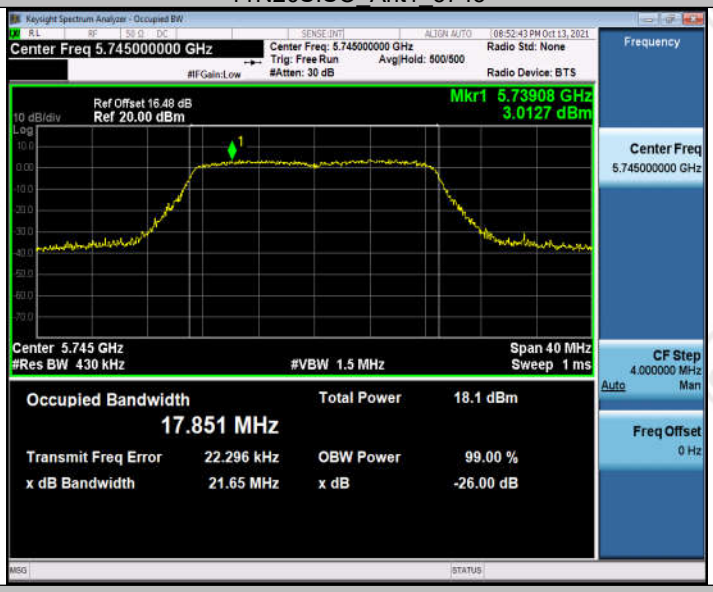
11N20SISO_Ant1_5500

11N20SISO_Ant1_5580



11N20SISO_Ant1_5700

11N20SISO_Ant1_5745



11N20SISO_Ant1_5785

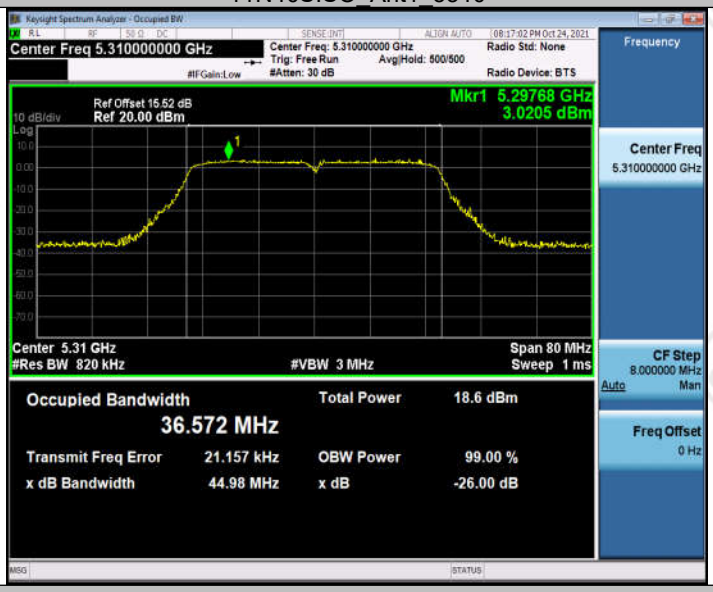
11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

11N40SISO_Ant1_5270

11N40SISO_Ant1_5310

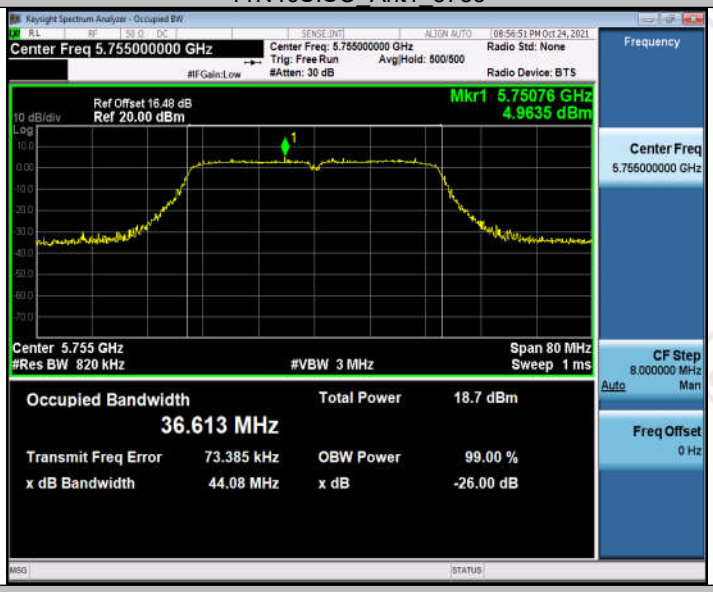


11N40SISO_Ant1_5510

11N40SISO_Ant1_5550

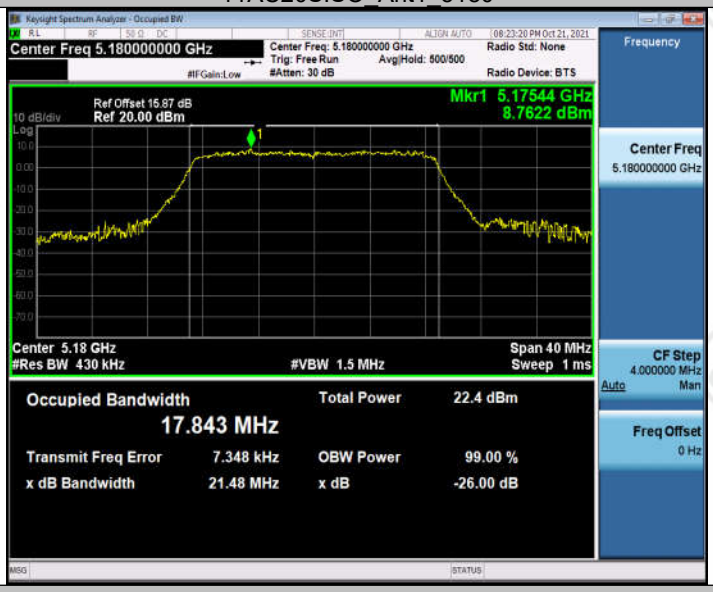
11N40SISO_Ant1_5670

11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240

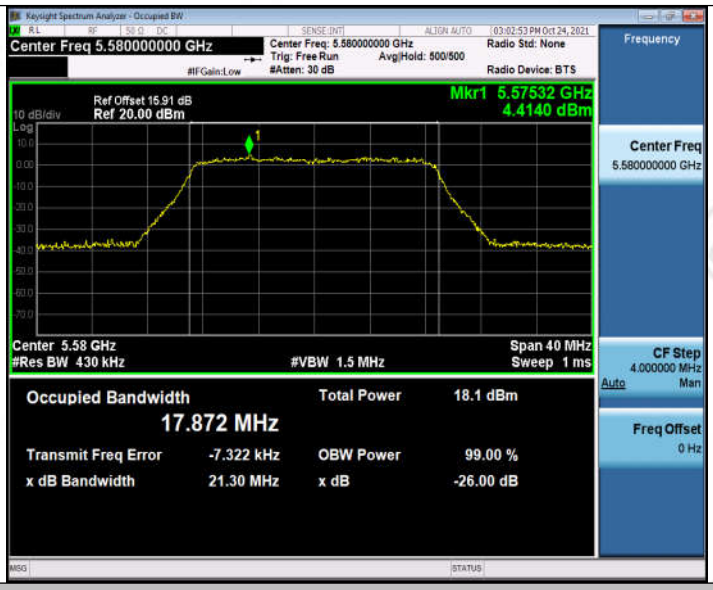
11AC20SISO_Ant1_5260

11AC20SISO_Ant1_5280

11AC20SISO_Ant1_5320

11AC20SISO_Ant1_5500

11AC20SISO_Ant1_5580



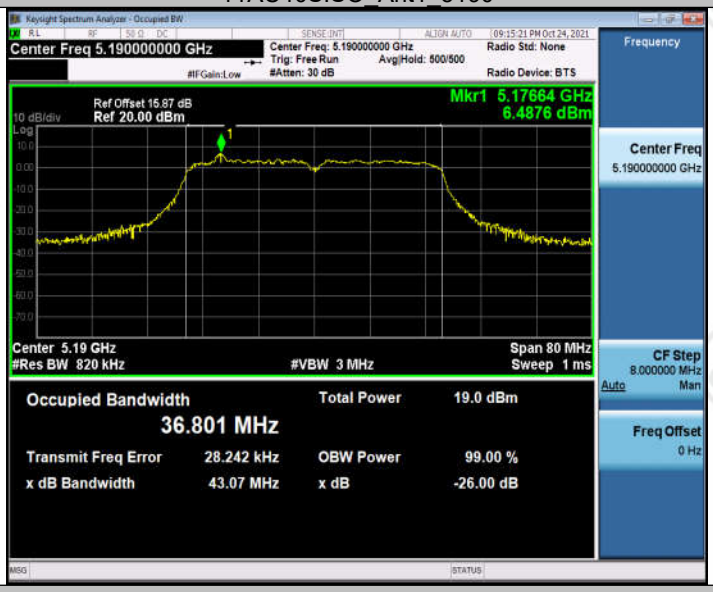
11AC20SISO_Ant1_5700

11AC20SISO_Ant1_5745

11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825

11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230

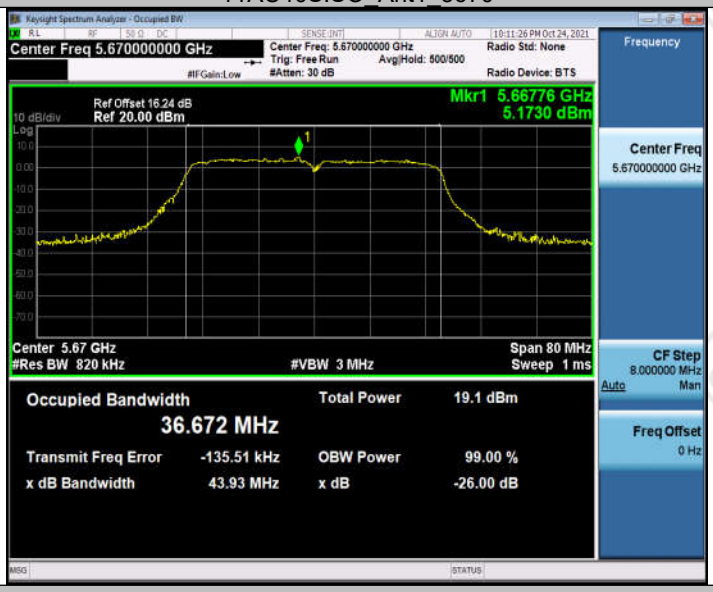
11AC40SISO_Ant1_5270

11AC40SISO_Ant1_5310

11AC40SISO_Ant1_5510

11AC40SISO_Ant1_5550

11AC40SISO_Ant1_5670

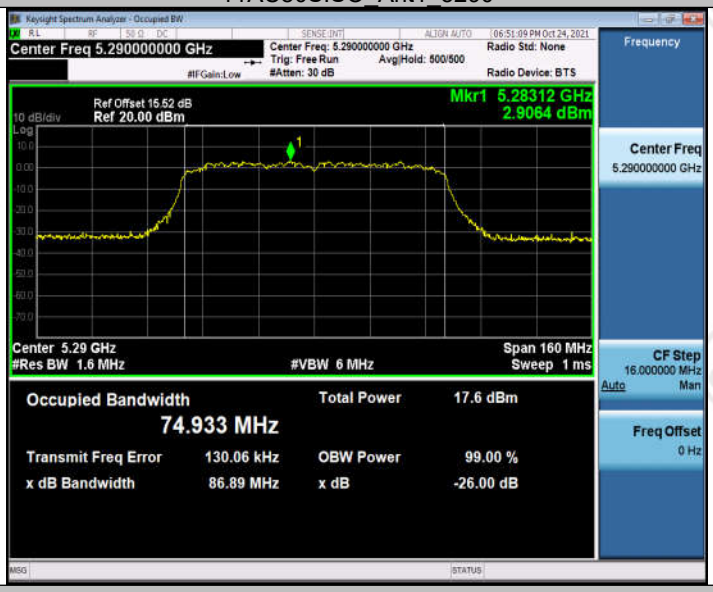


11AC40SISO_Ant1_5755

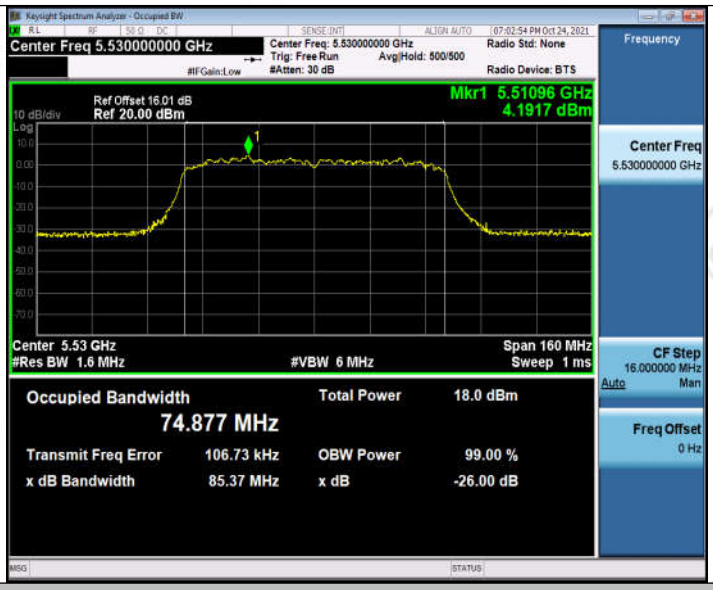
11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5210

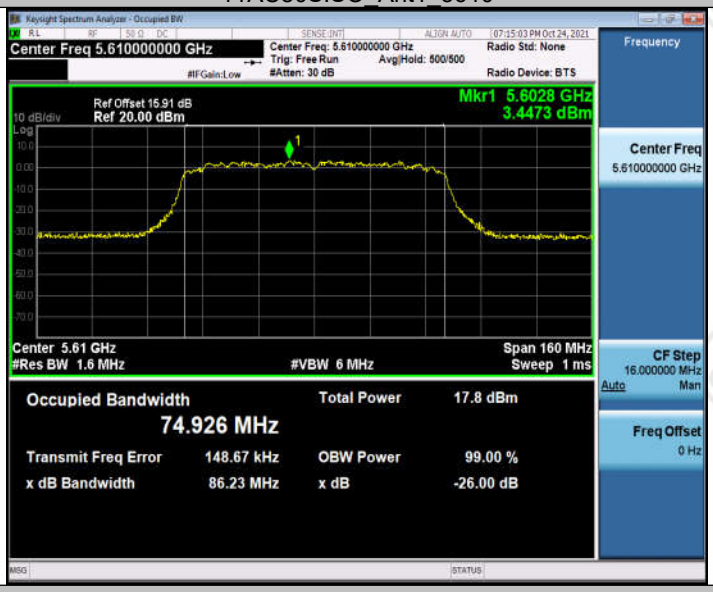
11AC80SISO_Ant1_5290



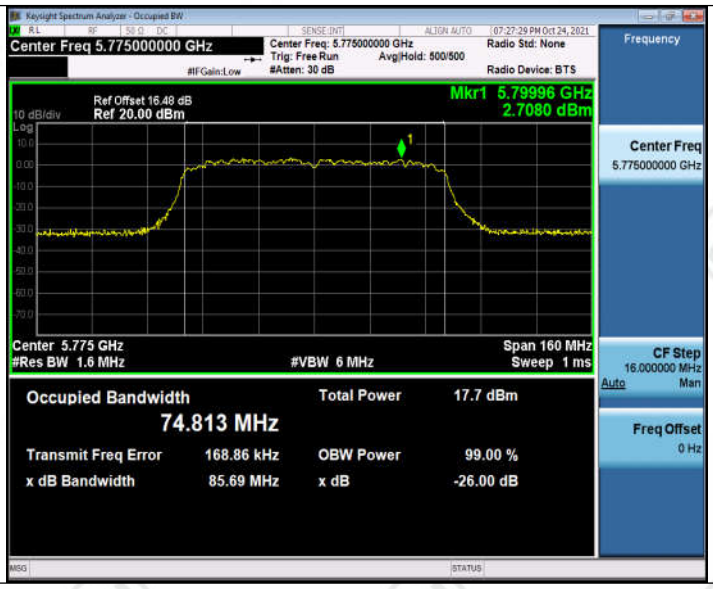
11AC80SISO_Ant1_5530



11AC80SISO_Ant1_5610



11AC80SISO_Ant1_5775


Keysight Spectrum Analyzer - Occupied BW
Center Freq 5.775000000 GHz
Center Freq: 5.775000000 GHz
Trig: Free Run
Avg|Hold: 500/500
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
07:27:29 PM Oct 24, 2021
Frequency
Ref Offset 16.48 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.79996 GHz
2.7080 dBm
Center Freq
5.775000000 GHz
Center 5.775 GHz
#Res BW 1.6 MHz
#VBW 6 MHz
Span 160 MHz
Sweep 1 ms
CF Step
16.000000 MHz
Auto
Man
Occupied Bandwidth
74.813 MHz
Total Power
17.7 dBm
Transmit Freq Error
168.86 kHz
OBW Power
99.00 %
x dB Bandwidth
85.69 MHz
x dB
-26.00 dB
Freq Offset
0 Hz

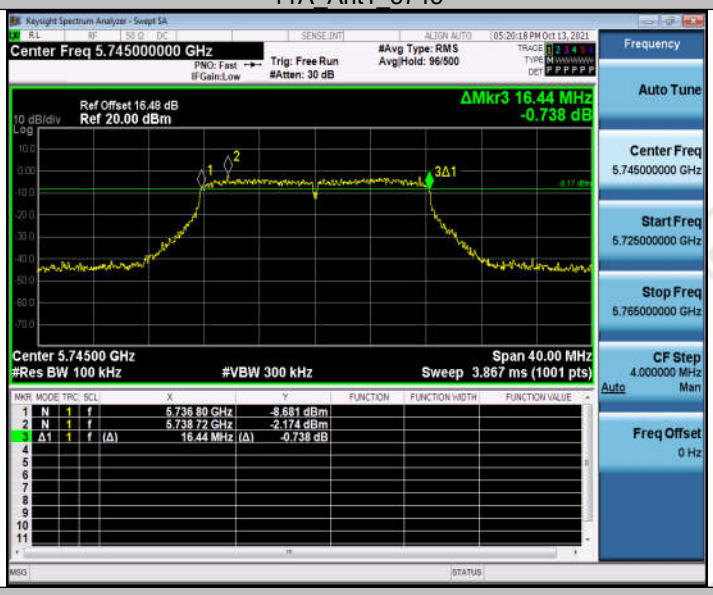
Min emission bandwidTest Result

Test Result

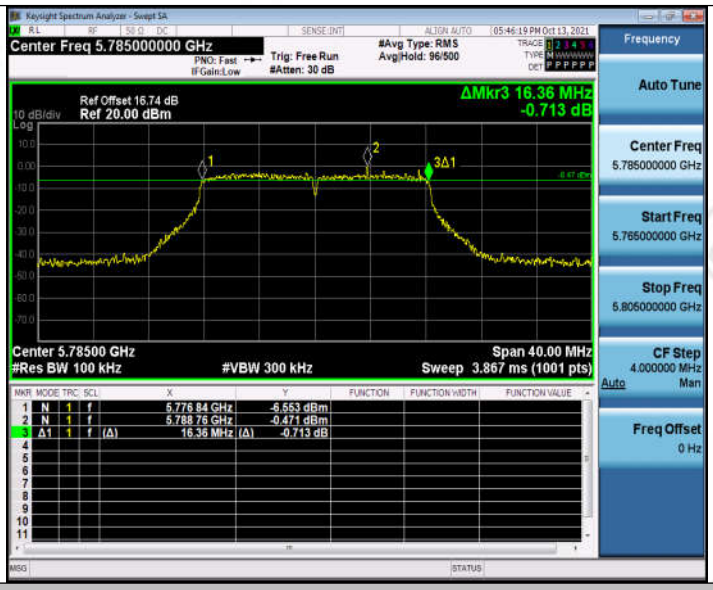
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.440	5736.800	5753.240	0.5	PASS
		5785	16.360	5776.840	5793.200	0.5	PASS
		5825	16.160	5816.840	5833.000	0.5	PASS
11N20SISO	Ant1	5745	17.480	5736.360	5753.840	0.5	PASS
		5785	17.680	5776.160	5793.840	0.5	PASS
		5825	17.680	5816.160	5833.840	0.5	PASS
11N40SISO	Ant1	5755	35.520	5737.320	5772.840	0.5	PASS
		5795	35.200	5777.400	5812.600	0.5	PASS
11AC20SISO	Ant1	5745	16.360	5736.840	5753.200	0.5	PASS
		5785	16.360	5776.480	5792.840	0.5	PASS
		5825	16.360	5816.480	5832.840	0.5	PASS
11AC40SISO	Ant1	5755	35.200	5737.400	5772.600	0.5	PASS
		5795	35.280	5777.400	5812.680	0.5	PASS
11AC80SISO	Ant1	5775	75.360	5737.400	5812.760	0.5	PASS

Test Graphs

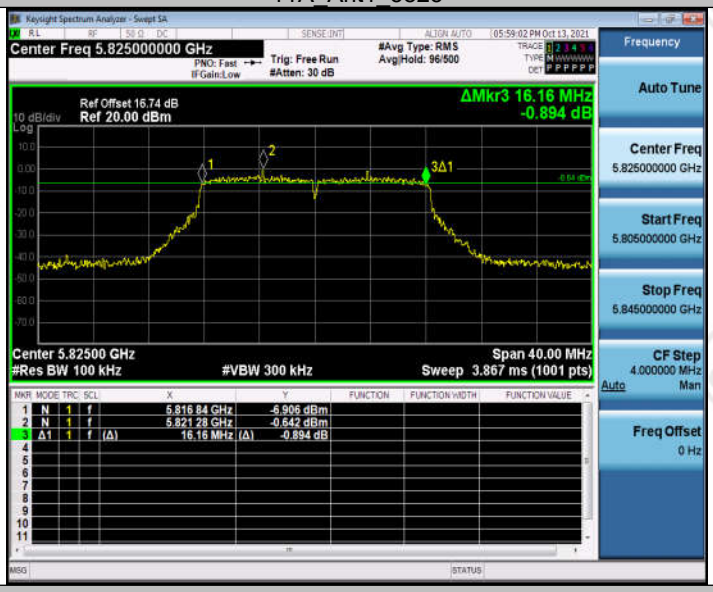
11A_Ant1_5745



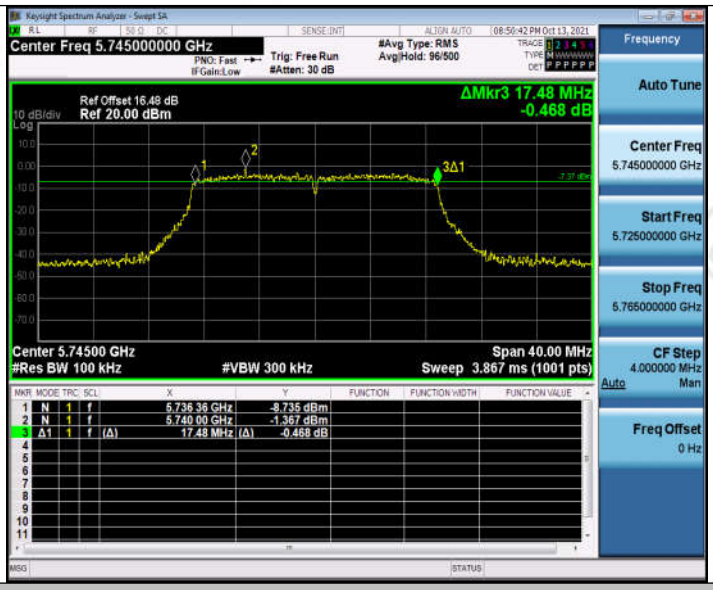
11A_Ant1_5785



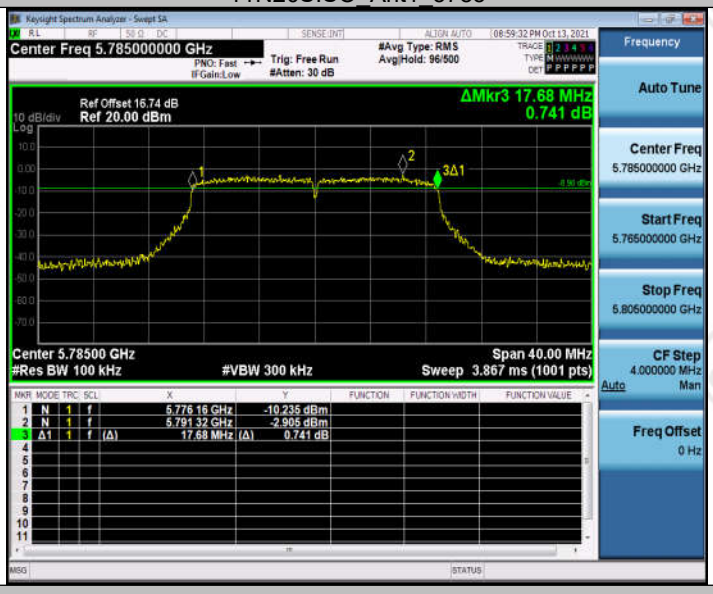
11A_Ant1_5825



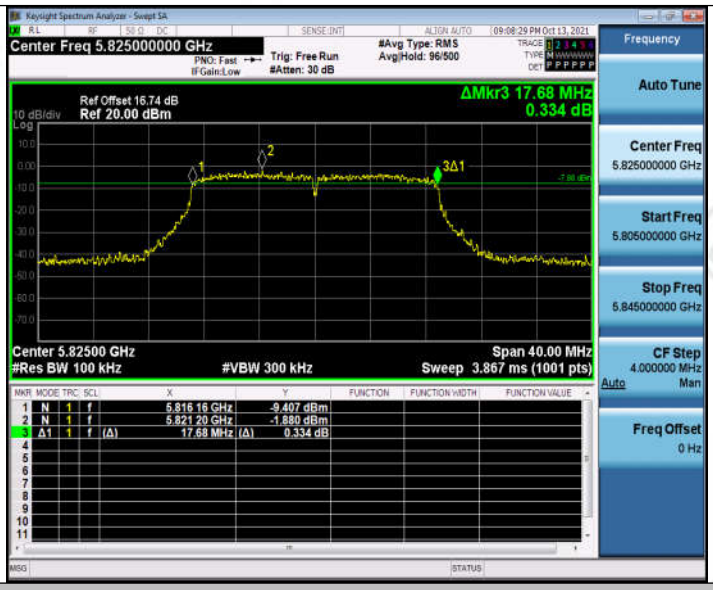
11N20SISO_Ant1_5745



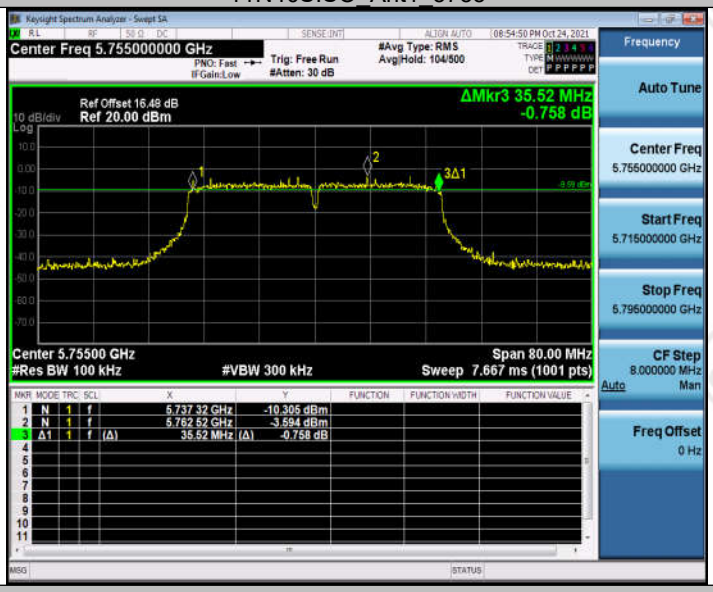
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825

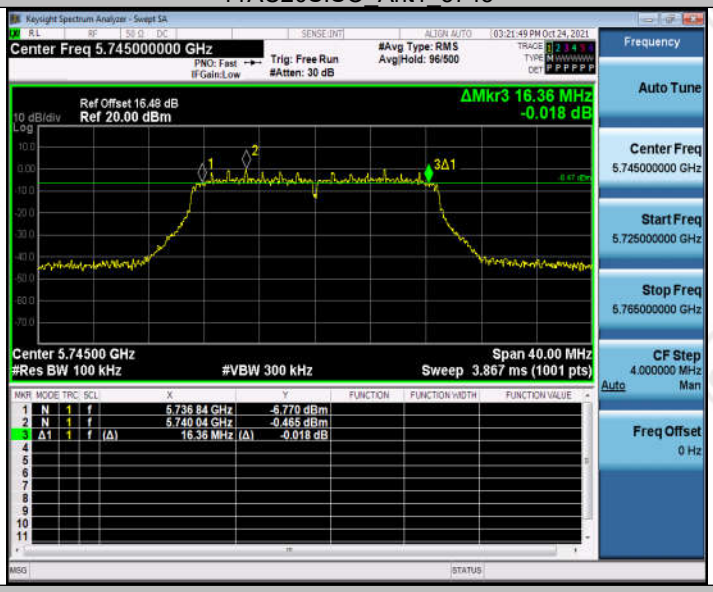


11N40SISO_Ant1_5755

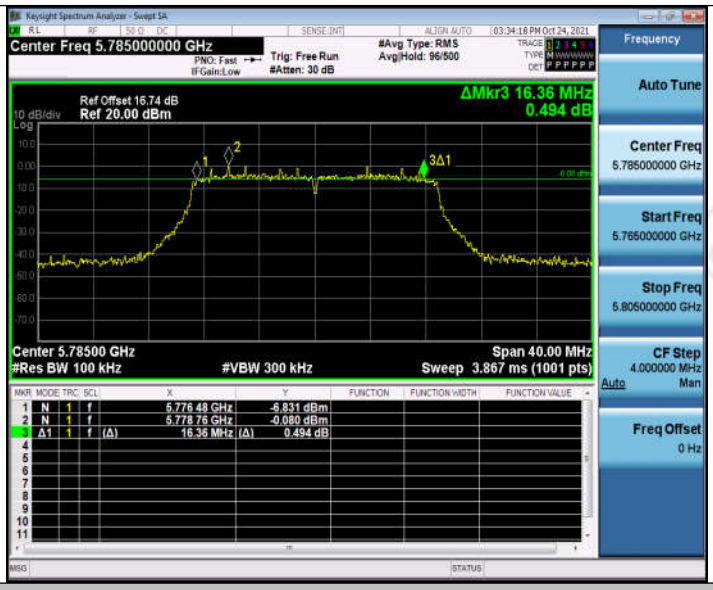


11N40SISO_Ant1_5795

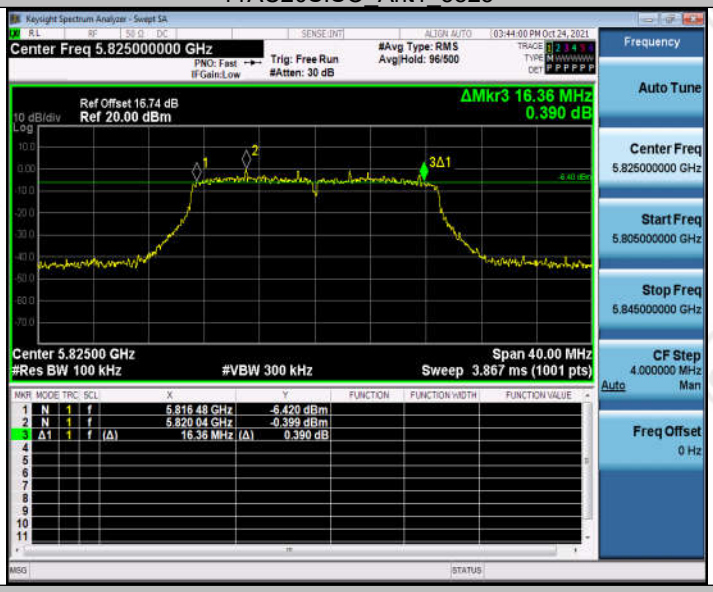
11AC20SISO_Ant1_5745



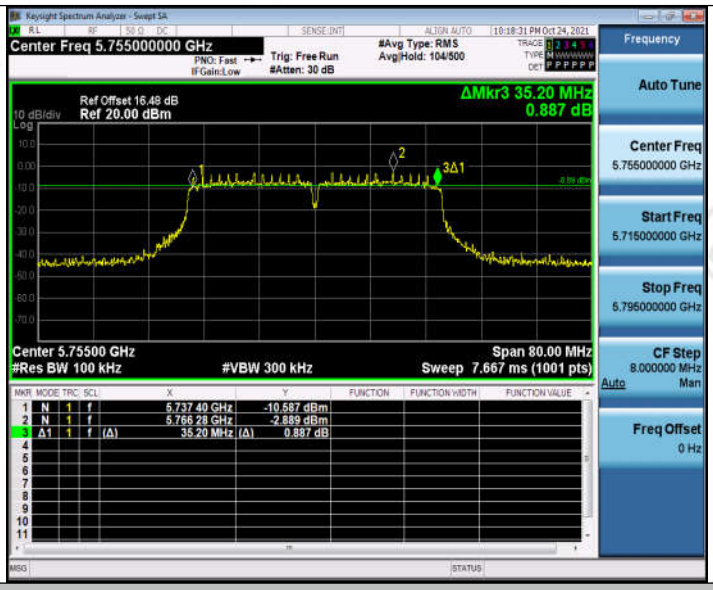
11AC20SISO_Ant1_5785



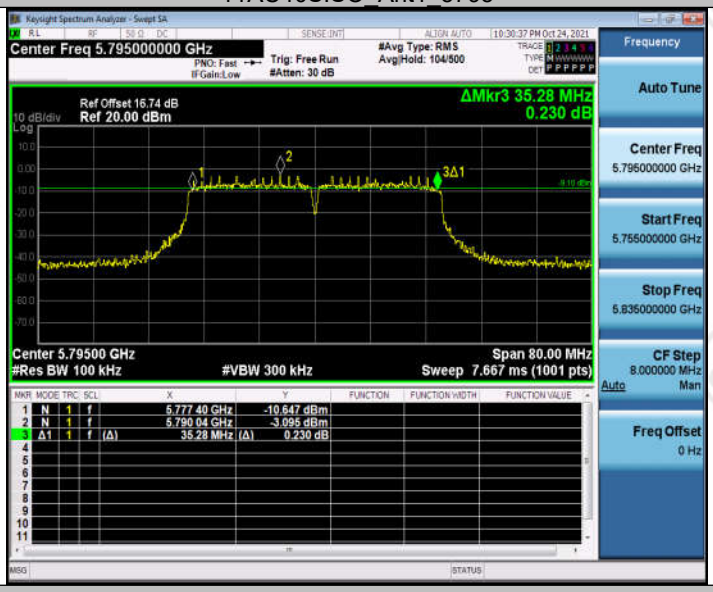
11AC20SISO_Ant1_5825



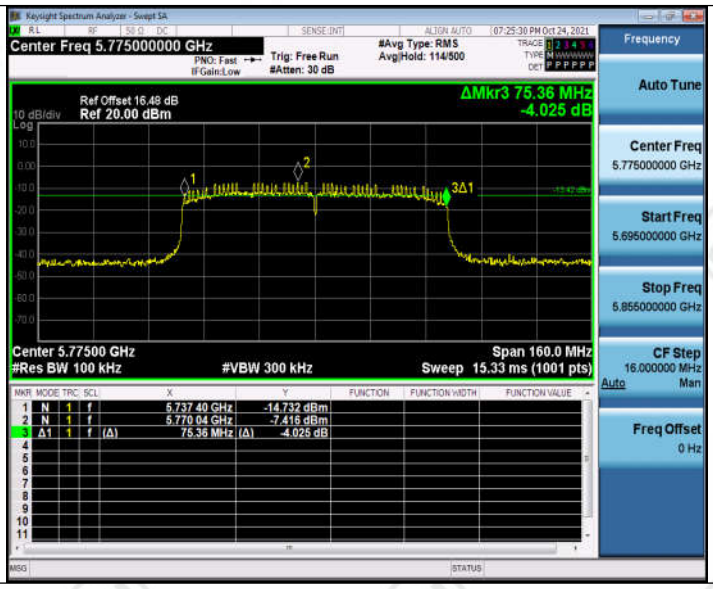
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775


Keysight Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 114/500
07:25:30 PM Oct 24, 2021
Ref Offset 16.48 dB
10 dB/div
Ref 20.00 dBm
ΔMkr3 75.36 MHz
-4.025 dB
Center 5.77500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 160.0 MHz
Sweep 15.33 ms (1001 pts)
1 N 1 f 5.737 40 GHz -14.732 dBm
2 N 1 f 5.770 04 GHz -7.416 dBm
3 Δ1 1 f (Δ) 75.36 MHz (Δ) -4.025 dB
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.695000000 GHz
Stop Freq
5.855000000 GHz
CF Step
16.000000 MHz
Auto Man
Freq Offset
0 Hz

Appendix B): Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	11.85	<=23.98	PASS
		5200	11.90	<=23.98	PASS
		5240	11.66	<=23.98	PASS
		5260	10.70	<=23.98	PASS
		5280	10.62	<=23.98	PASS
		5320	11.22	<=23.98	PASS
		5500	12.19	<=23.98	PASS
		5580	11.50	<=23.98	PASS
		5700	11.13	<=23.98	PASS
		5745	11.05	<=30	PASS
		5785	11.36	<=30	PASS
		5825	10.89	<=30	PASS
11N20SISO	Ant1	5180	11.66	<=23.98	PASS
		5200	11.87	<=23.98	PASS
		5240	11.68	<=23.98	PASS
		5260	11.36	<=23.98	PASS
		5280	11.44	<=23.98	PASS
		5320	11.33	<=23.98	PASS
		5500	11.90	<=23.98	PASS
		5580	11.64	<=23.98	PASS
		5700	11.03	<=23.98	PASS
		5745	11.30	<=30	PASS
		5785	11.29	<=30	PASS
		5825	11.28	<=30	PASS
11N40SISO	Ant1	5190	17.75	<=23.98	PASS
		5230	11.34	<=23.98	PASS
		5270	11.44	<=23.98	PASS
		5310	11.23	<=23.98	PASS
		5510	11.83	<=23.98	PASS
		5550	11.60	<=23.98	PASS
		5670	11.83	<=23.98	PASS

		5755	11.47	<=30	PASS
		5795	11.64	<=30	PASS
11AC20SISO	Ant1	5180	15.70	<=23.98	PASS
		5200	15.68	<=23.98	PASS
		5240	11.40	<=23.98	PASS
		5260	11.35	<=23.98	PASS
		5280	11.28	<=23.98	PASS
		5320	11.15	<=23.98	PASS
		5500	11.72	<=23.98	PASS
		5580	11.37	<=23.98	PASS
		5700	10.88	<=23.98	PASS
		5745	10.99	<=30	PASS
		5785	11.44	<=30	PASS
		5825	11.16	<=30	PASS
11AC40SISO	Ant1	5190	11.75	<=23.98	PASS
		5230	11.35	<=23.98	PASS
		5270	11.40	<=23.98	PASS
		5310	11.31	<=23.98	PASS
		5510	11.89	<=23.98	PASS
		5550	11.77	<=23.98	PASS
		5670	11.83	<=23.98	PASS
		5755	11.46	<=30	PASS
		5795	11.76	<=30	PASS
11AC80SISO	Ant1	5210	9.54	<=23.98	PASS
		5290	9.35	<=23.98	PASS
		5530	9.69	<=23.98	PASS
		5610	9.48	<=23.98	PASS
		5775	9.51	<=30	PASS

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

Appendix C): Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	5.77	<=11	PASS
		5200	5.94	<=11	PASS
		5240	5.42	<=11	PASS
		5260	4.42	<=11	PASS
		5280	4.6	<=11	PASS
		5320	5.21	<=11	PASS
		5500	5.96	<=11	PASS
		5580	5.74	<=11	PASS
		5700	5.74	<=11	PASS
		5745	0.49	<=30	PASS
		5785	1.93	<=30	PASS
		5825	0.58	<=30	PASS
11N20SISO	Ant1	5180	5.66	<=11	PASS
		5200	6.5	<=11	PASS
		5240	5.47	<=11	PASS
		5260	5.43	<=11	PASS
		5280	5.65	<=11	PASS
		5320	5.17	<=11	PASS
		5500	6.14	<=11	PASS
		5580	5.55	<=11	PASS
		5700	5.33	<=11	PASS
		5745	0.37	<=30	PASS
		5785	0.54	<=30	PASS
		5825	0.93	<=30	PASS
11N40SISO	Ant1	5190	7.96	<=11	PASS
		5230	1.52	<=11	PASS
		5270	2.45	<=11	PASS
		5310	1.85	<=11	PASS
		5510	2.51	<=11	PASS
		5550	2.21	<=11	PASS
		5670	3.04	<=11	PASS

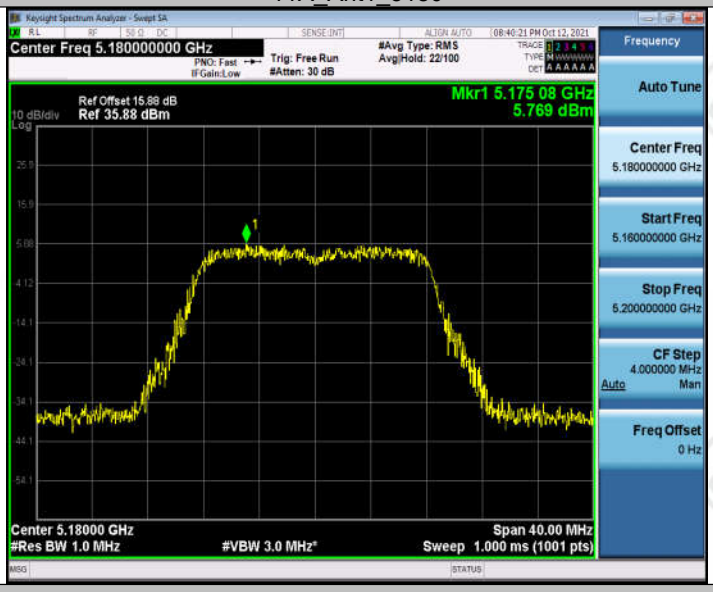
		5755	-2.27	<=30	PASS
		5795	-1.89	<=30	PASS
11AC20SISO	Ant1	5180	9.29	<=11	PASS
		5200	8.86	<=11	PASS
		5240	5.15	<=11	PASS
		5260	5.44	<=11	PASS
		5280	4.86	<=11	PASS
		5320	4.85	<=11	PASS
		5500	5.51	<=11	PASS
		5580	6	<=11	PASS
		5700	4.8	<=11	PASS
		5745	0.56	<=30	PASS
		5785	0.58	<=30	PASS
		5825	0.39	<=30	PASS
11AC40SISO	Ant1	5190	2.06	<=11	PASS
		5230	1.98	<=11	PASS
		5270	2.09	<=11	PASS
		5310	2.41	<=11	PASS
		5510	3.1	<=11	PASS
		5550	2.37	<=11	PASS
		5670	2.94	<=11	PASS
		5755	-0.75	<=30	PASS
		5795	-0.97	<=30	PASS
11AC80SISO	Ant1	5210	-1.57	<=11	PASS
		5290	-2.83	<=11	PASS
		5530	-2.37	<=11	PASS
		5610	-1.02	<=11	PASS
		5775	-7.07	<=30	PASS

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

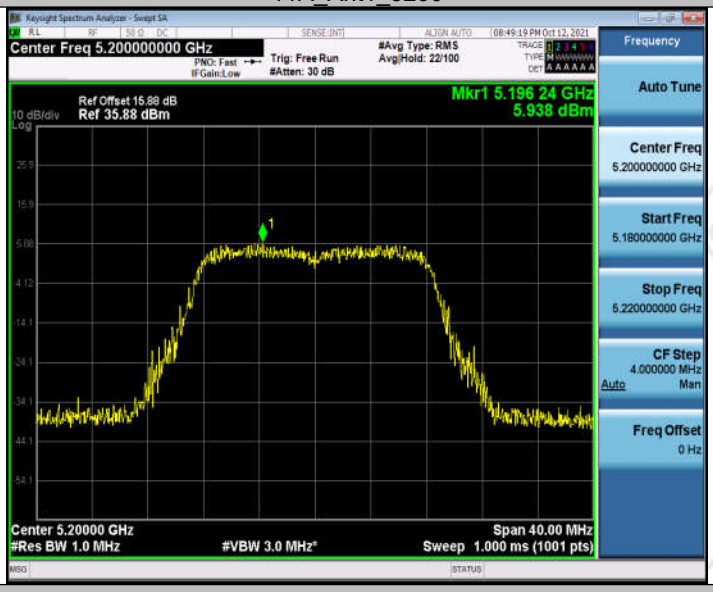
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

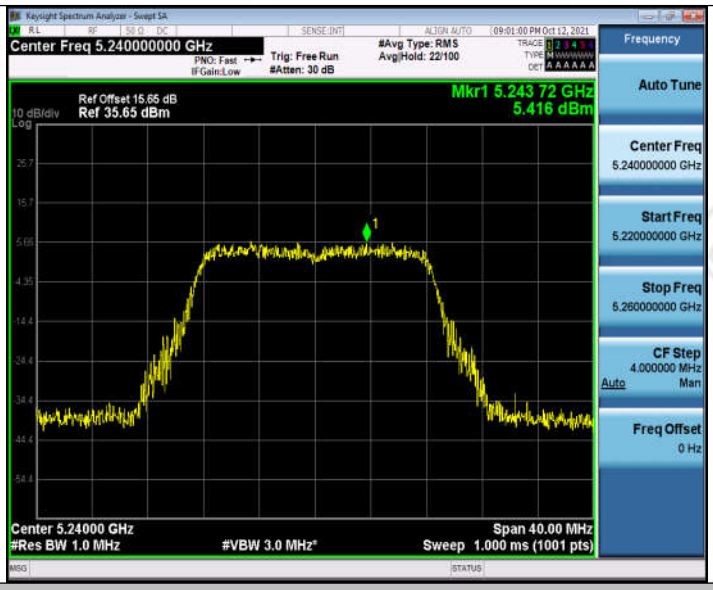
11A_Ant1_5180



11A_Ant1_5200

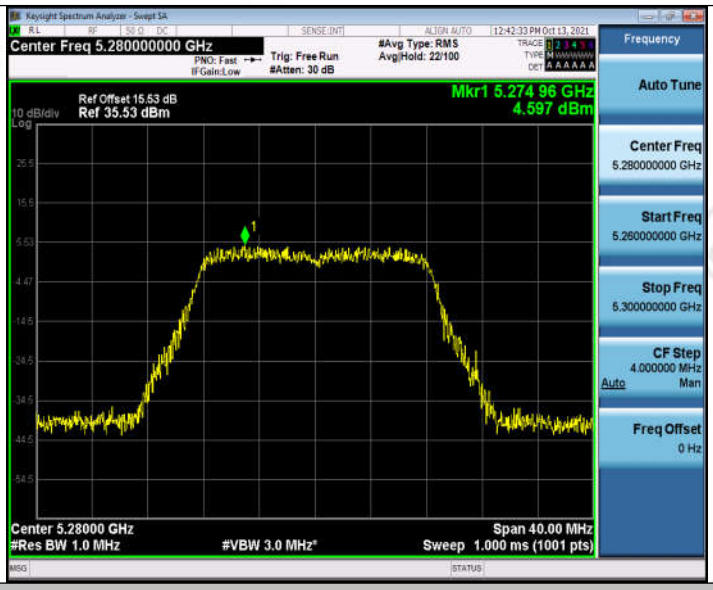


11A_Ant1_5240



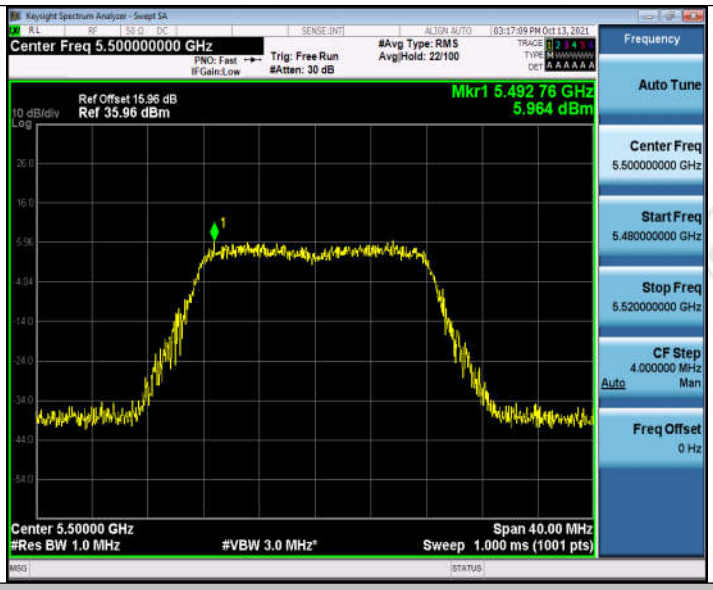
11A_Ant1_5260

11A_Ant1_5280



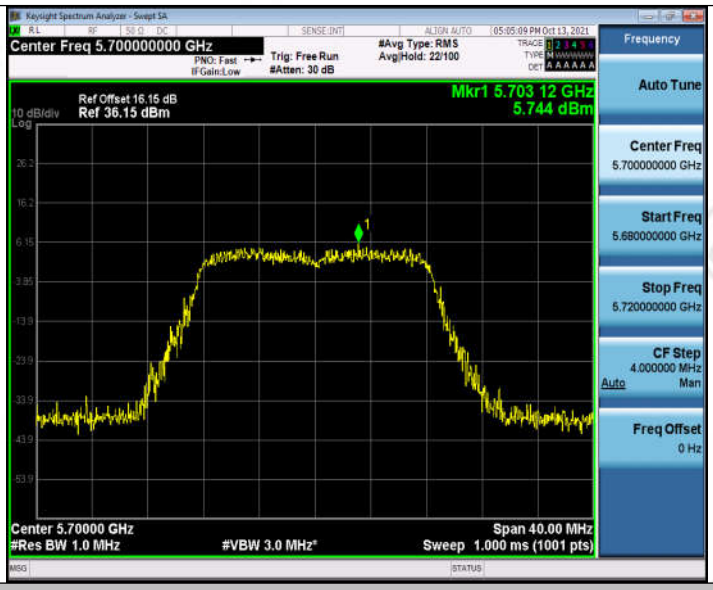
11A_Ant1_5320

11A_Ant1_5500

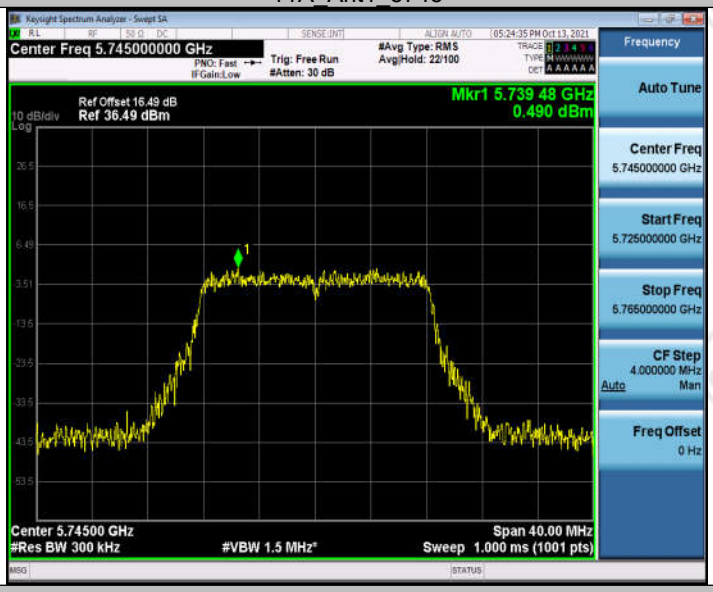


11A_Ant1_5580

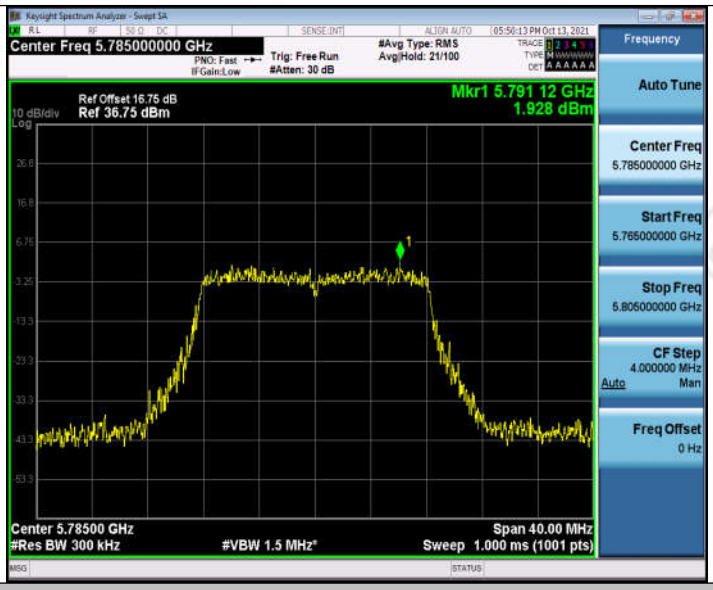
11A_Ant1_5700



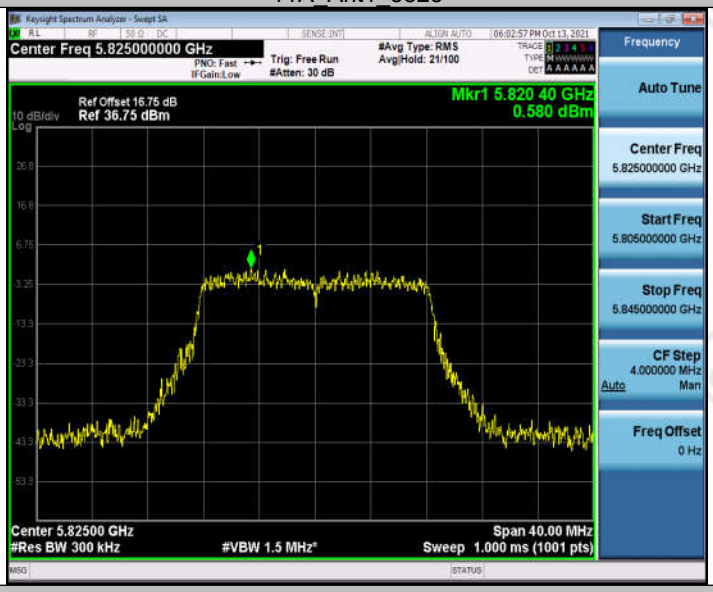
11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

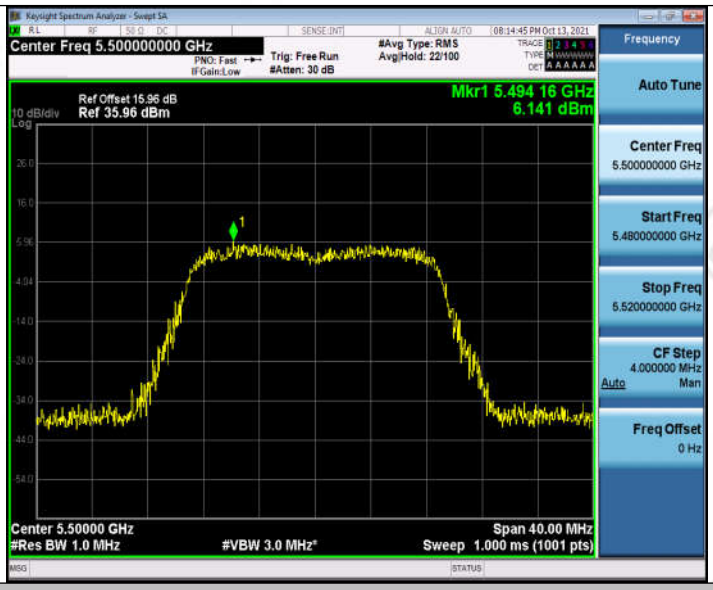
11N20SISO_Ant1_5240

11N20SISO_Ant1_5260

11N20SISO_Ant1_5280

11N20SISO_Ant1_5320

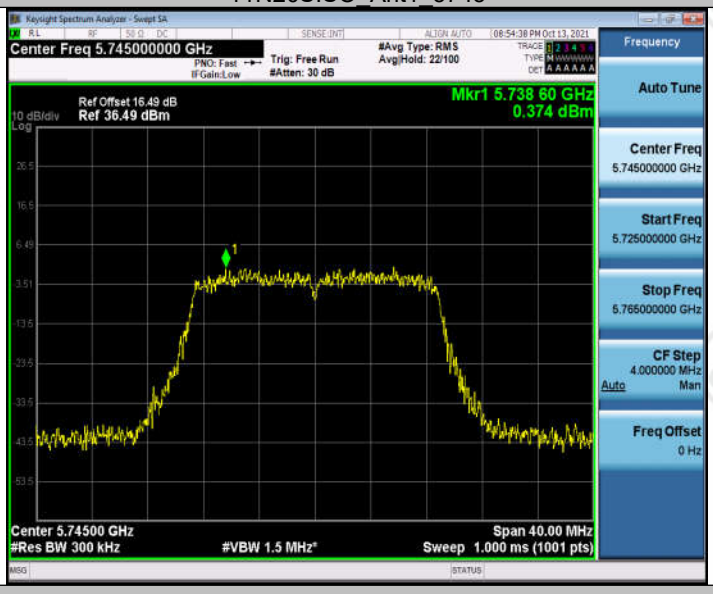
11N20SISO_Ant1_5500



11N20SISO_Ant1_5580

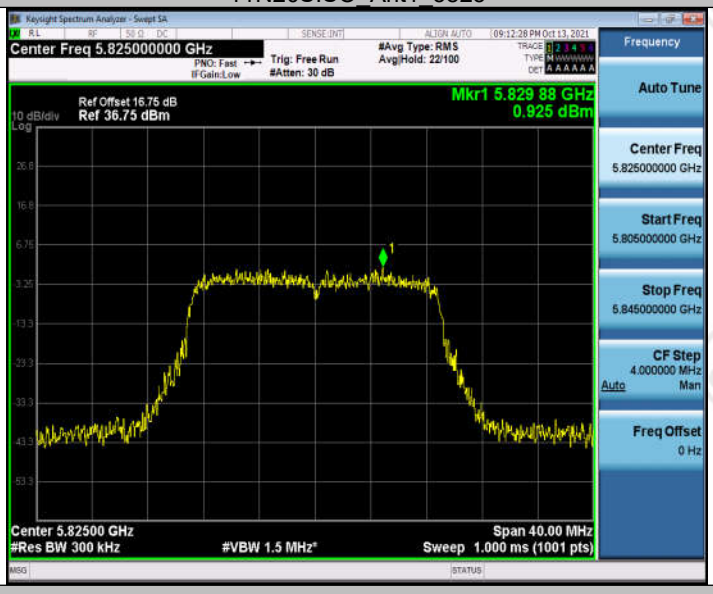
11N20SISO_Ant1_5700

11N20SISO_Ant1_5745

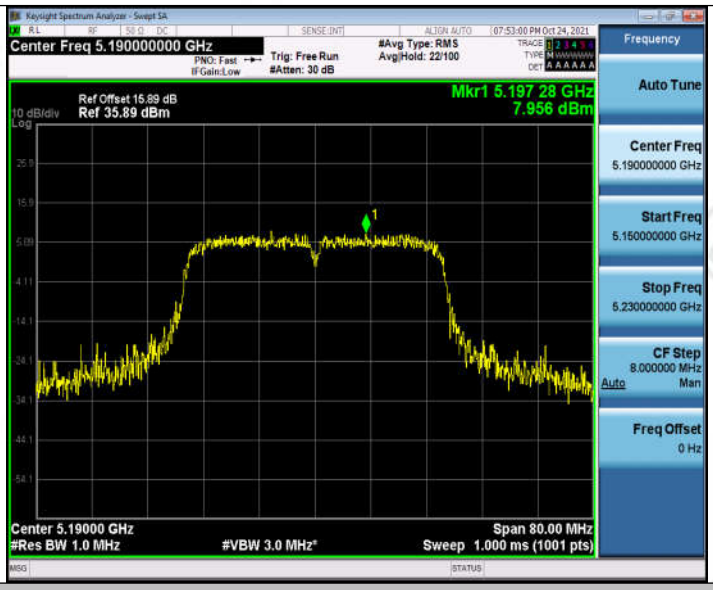


11N20SISO_Ant1_5785

11N20SISO_Ant1_5825



11N40SISO_Ant1_5190



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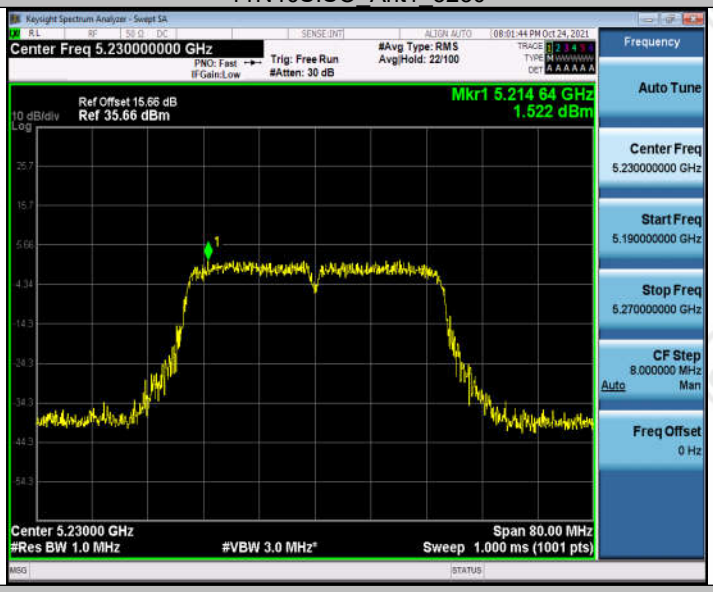

11N40SISO_Ant1_5270