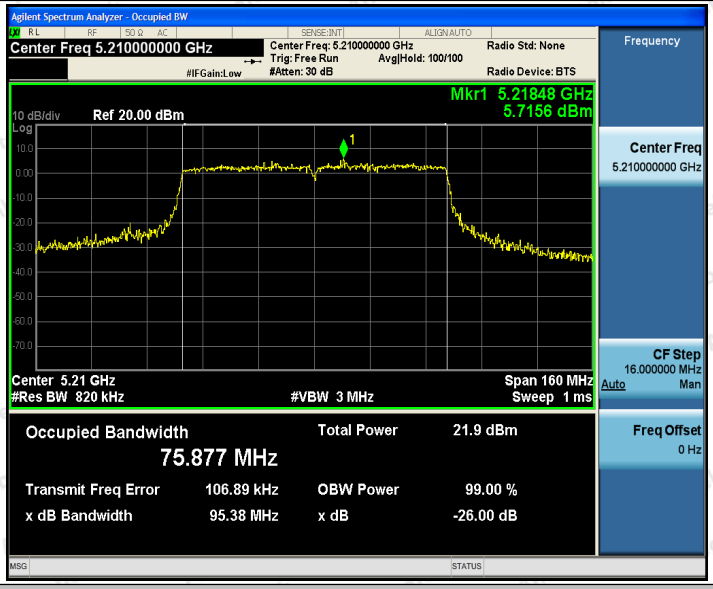
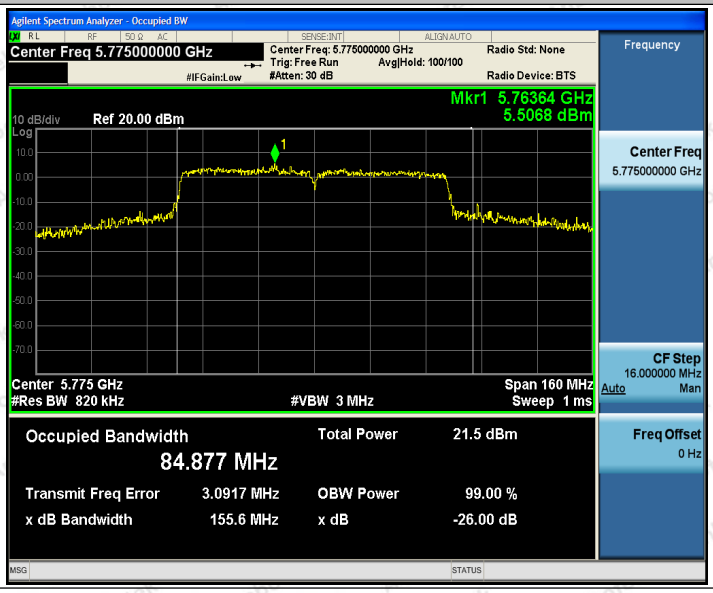
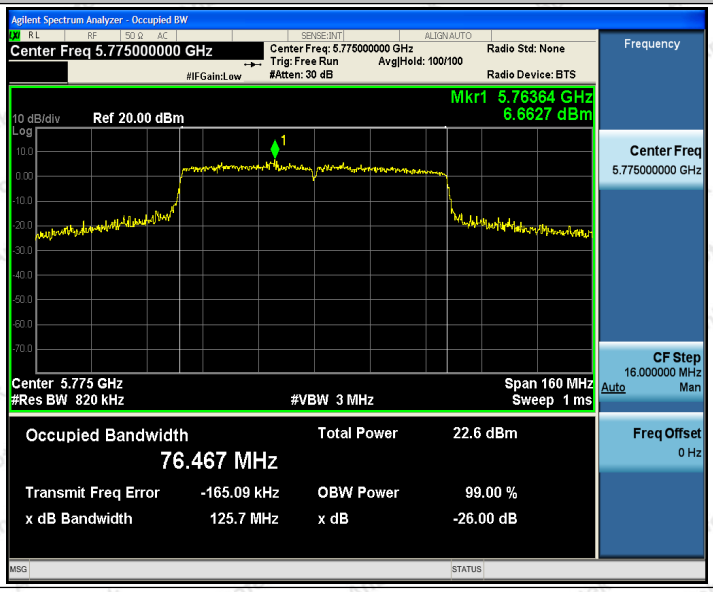
11AC80SISO_Ant2_5210



11AC80SISO_Ant1_5775



11AC80SISO_Ant2_5775



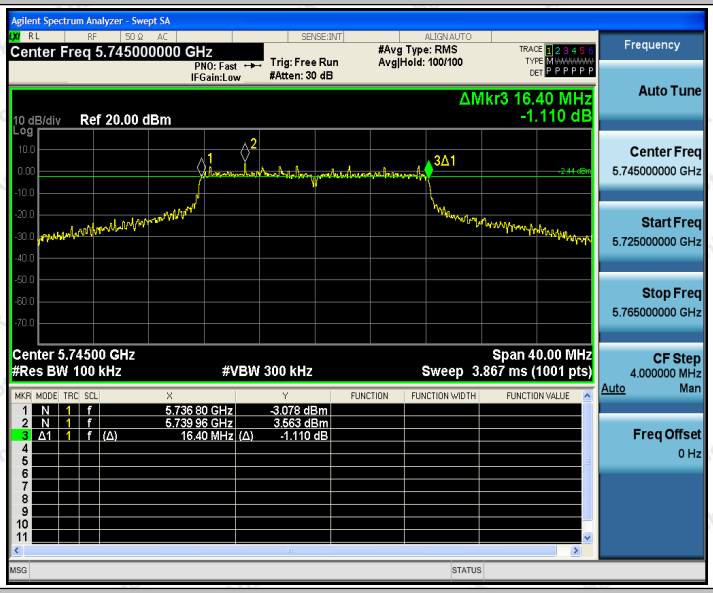
Appendix A3: Min emission bandwidth

Test Result

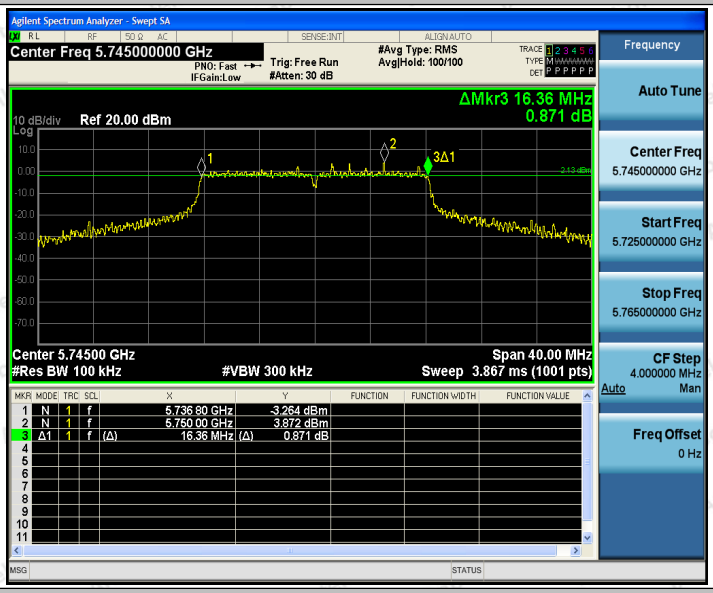
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.400	5736.800	5753.200	0.5	PASS
	Ant2	5745	16.360	5736.800	5753.160	0.5	PASS
	Ant1	5785	16.400	5776.760	5793.160	0.5	PASS
	Ant2	5785	16.400	5776.800	5793.200	0.5	PASS
	Ant1	5825	16.440	5816.760	5833.200	0.5	PASS
	Ant2	5825	16.440	5816.760	5833.200	0.5	PASS
11N20SISO	Ant1	5745	17.640	5736.160	5753.800	0.5	PASS
	Ant2	5745	17.600	5736.200	5753.800	0.5	PASS
	Ant1	5785	17.600	5776.200	5793.800	0.5	PASS
	Ant2	5785	17.640	5776.160	5793.800	0.5	PASS
	Ant1	5825	17.200	5816.600	5833.800	0.5	PASS
	Ant2	5825	17.240	5816.160	5833.400	0.5	PASS
11N40SISO	Ant1	5755	35.840	5736.760	5772.600	0.5	PASS
	Ant2	5755	36.480	5736.760	5773.240	0.5	PASS
	Ant1	5795	36.480	5776.760	5813.240	0.5	PASS
	Ant2	5795	35.840	5776.760	5812.600	0.5	PASS
11AC20SISO	Ant1	5745	17.640	5736.160	5753.800	0.5	PASS
	Ant2	5745	17.640	5736.160	5753.800	0.5	PASS
	Ant1	5785	17.240	5776.200	5793.440	0.5	PASS
	Ant2	5785	17.640	5776.160	5793.800	0.5	PASS
	Ant1	5825	17.240	5816.560	5833.800	0.5	PASS
	Ant2	5825	17.640	5816.160	5833.800	0.5	PASS
11AC40SISO	Ant1	5755	35.840	5736.760	5772.600	0.5	PASS
	Ant2	5755	35.760	5737.080	5772.840	0.5	PASS
	Ant1	5795	36.480	5776.760	5813.240	0.5	PASS
	Ant2	5795	35.600	5777.000	5812.600	0.5	PASS
11AC80SISO	Ant1	5775	73.440	5736.760	5810.200	0.5	PASS
	Ant2	5775	69.440	5737.080	5806.520	0.5	PASS

Test Graphs

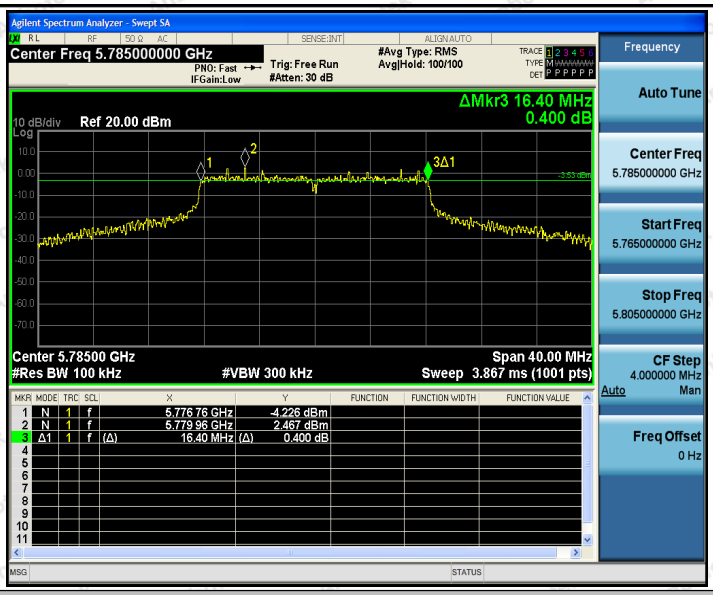
11A_Ant1_5745



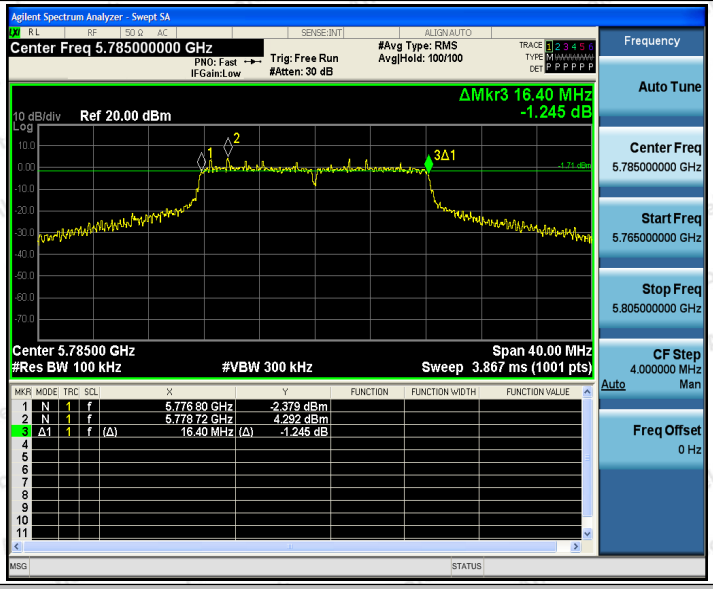
11A_Ant2_5745



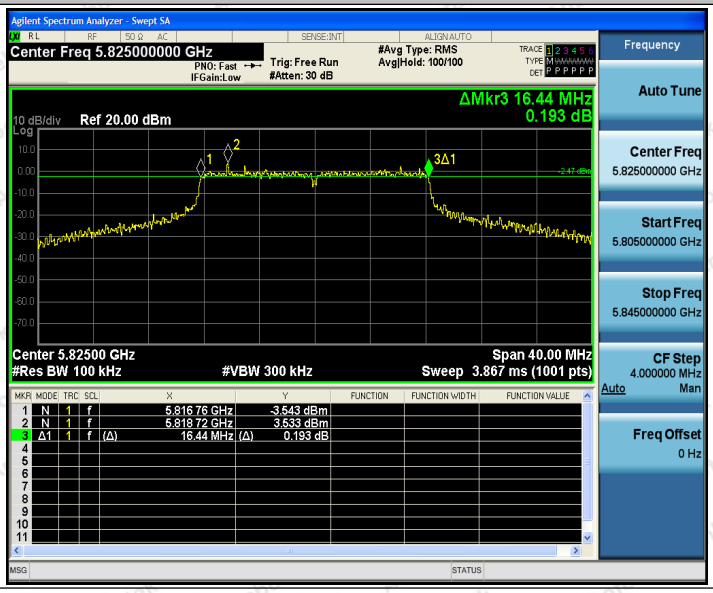
11A_Ant1_5785



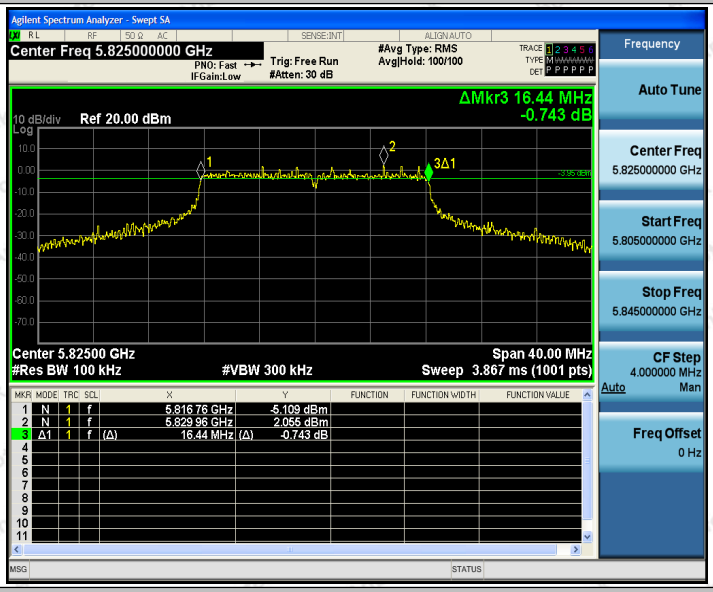
11A_Ant2_5785



11A_Ant1_5825

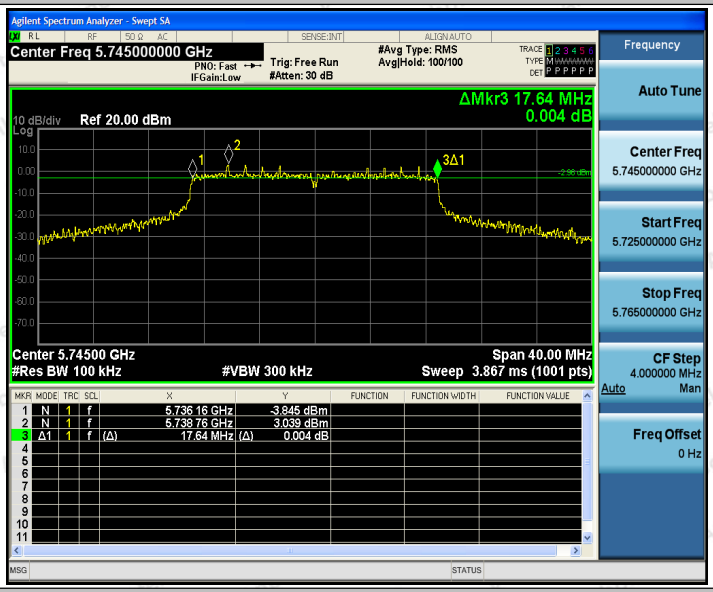


11A_Ant2_5825

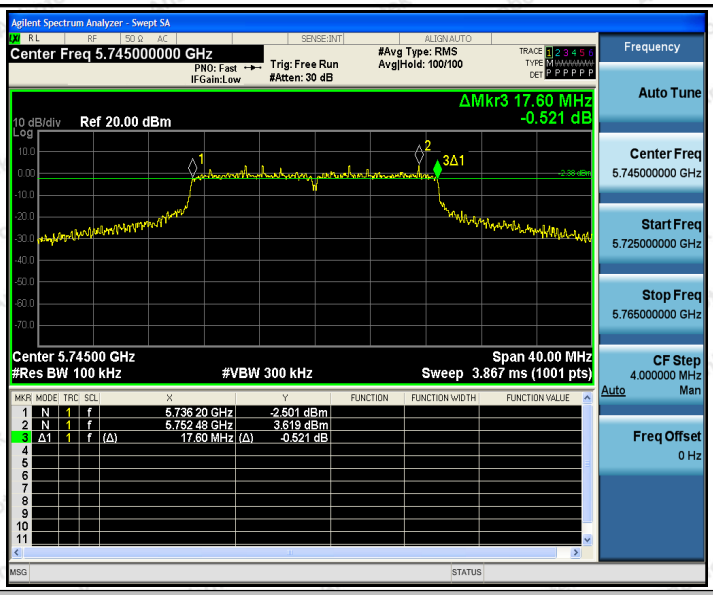


11N20SISO_Ant1_5180

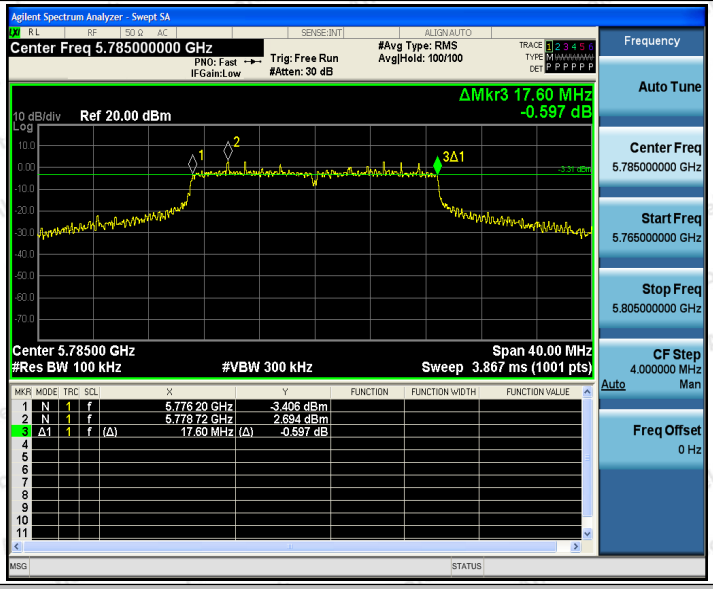
11N20SISO_Ant1_5745



11N20SISO_Ant2_5745



11N20SISO_Ant1_5785



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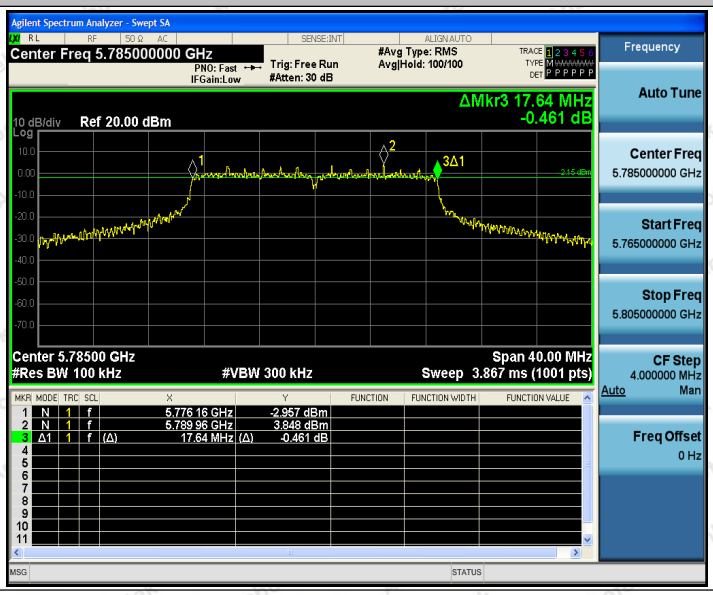
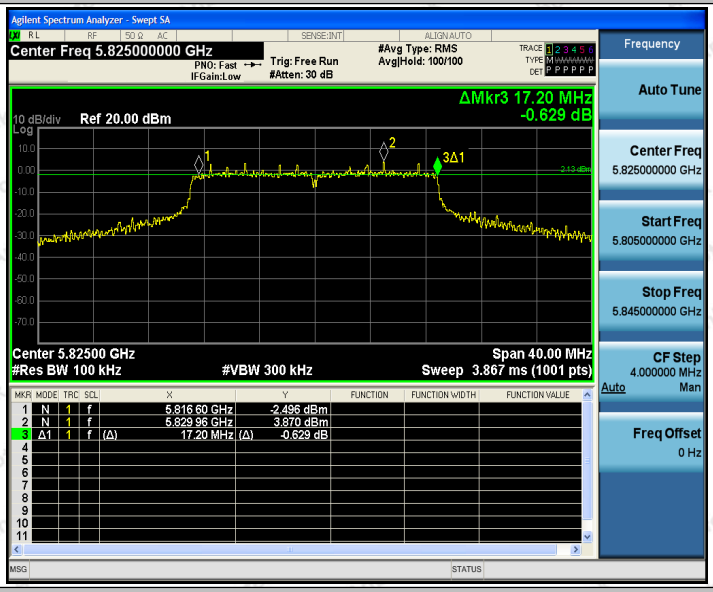
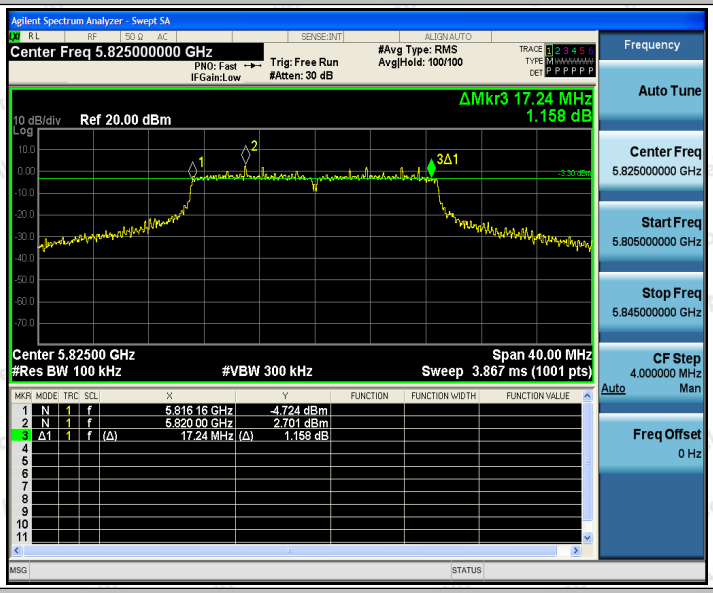


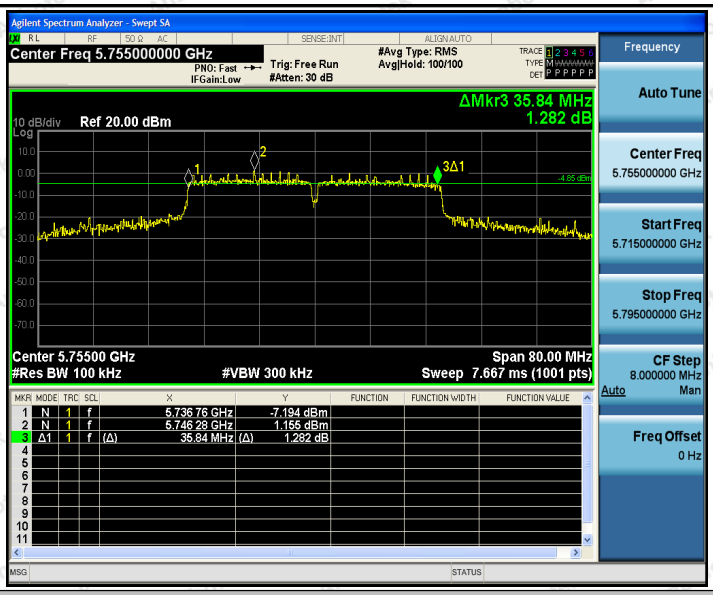
11N20SISO_Ant1_5825



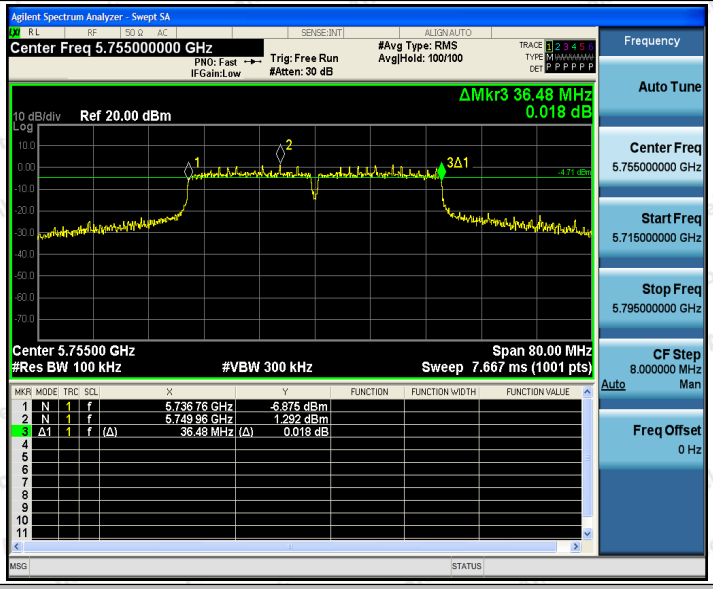
11N20SISO_Ant2_5825



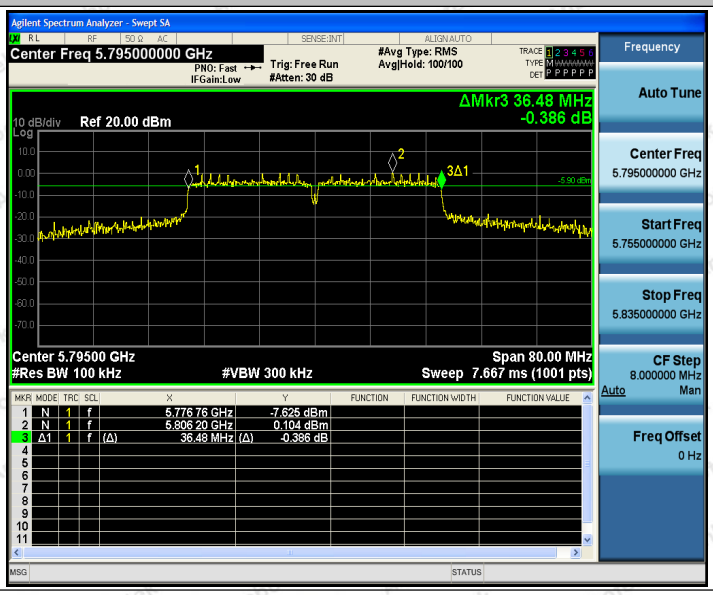
11N40SISO_Ant1_5755



11N40SISO_Ant2_5755



11N40SISO_Ant1_5795



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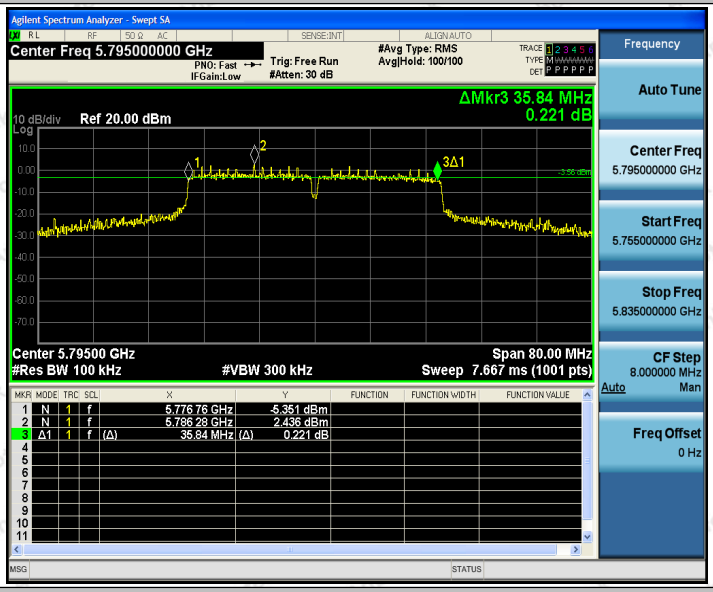
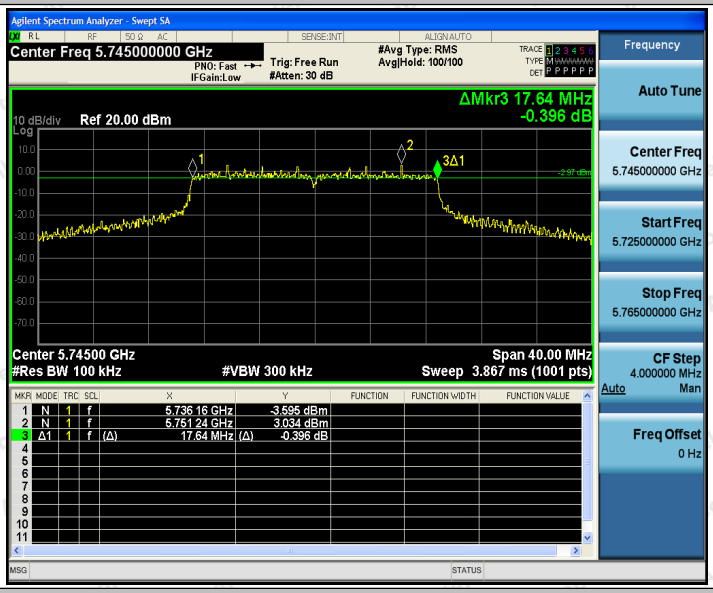
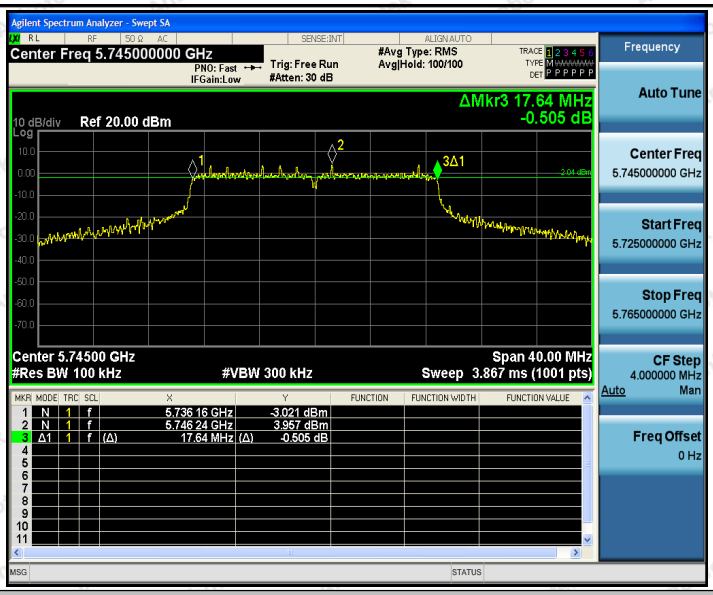


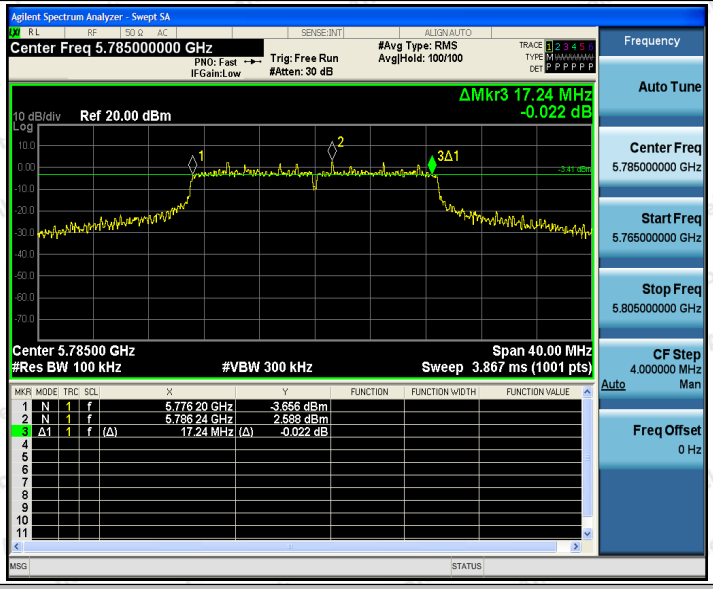
11AC20SISO_Ant1_5745



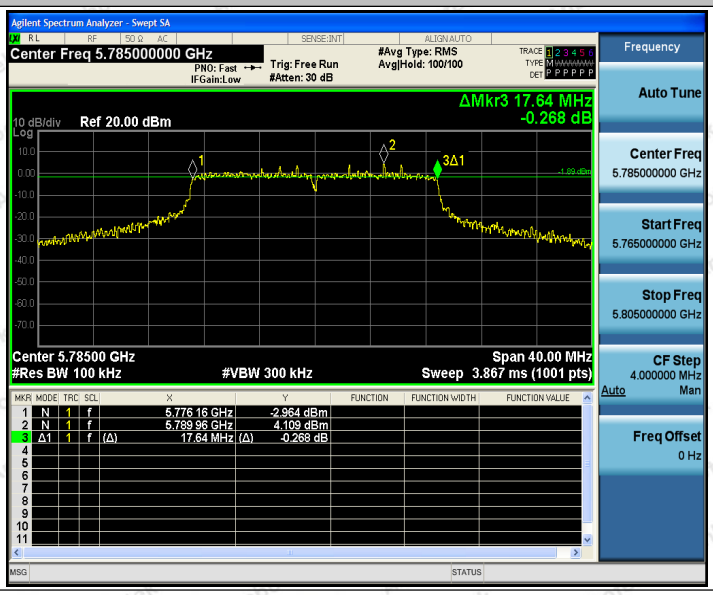
11AC20SISO_Ant2_5745



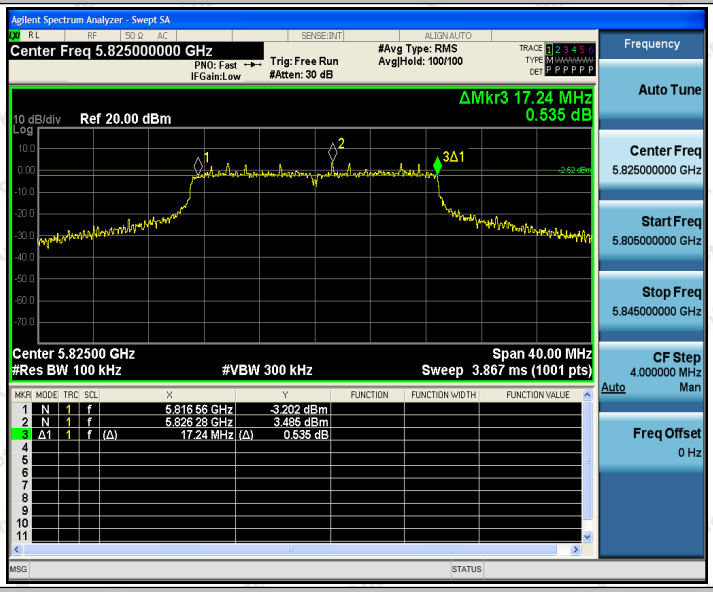
11AC20SISO_Ant1_5785



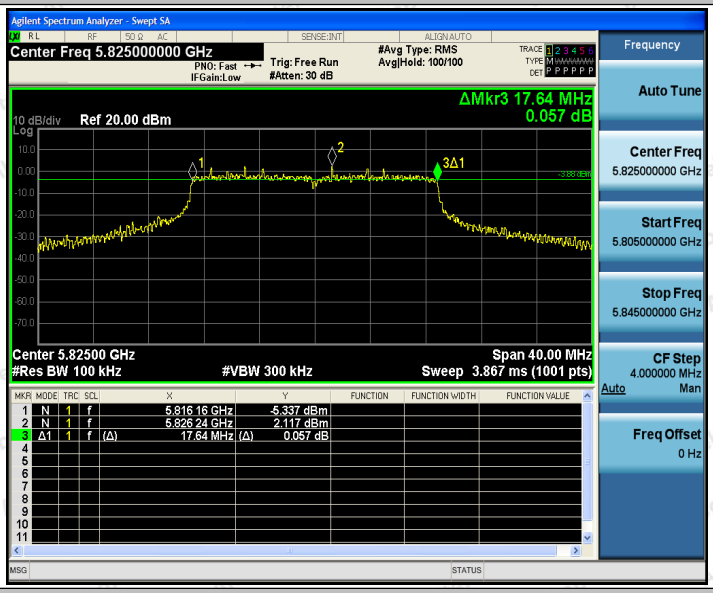
11AC20SISO_Ant2_5785



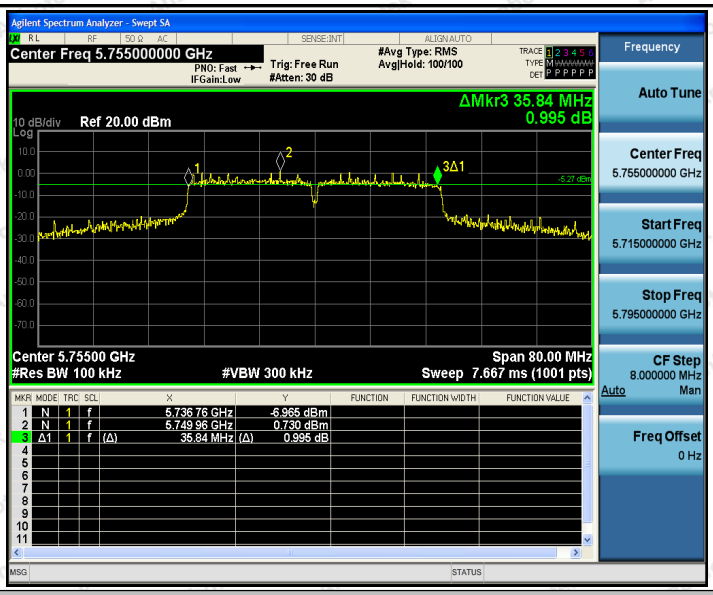
11AC20SISO_Ant1_5825



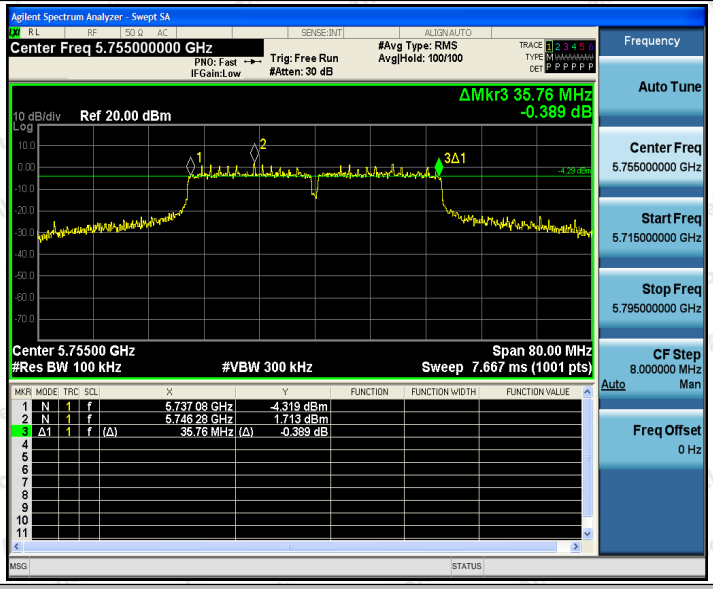
11AC20SISO_Ant2_5825



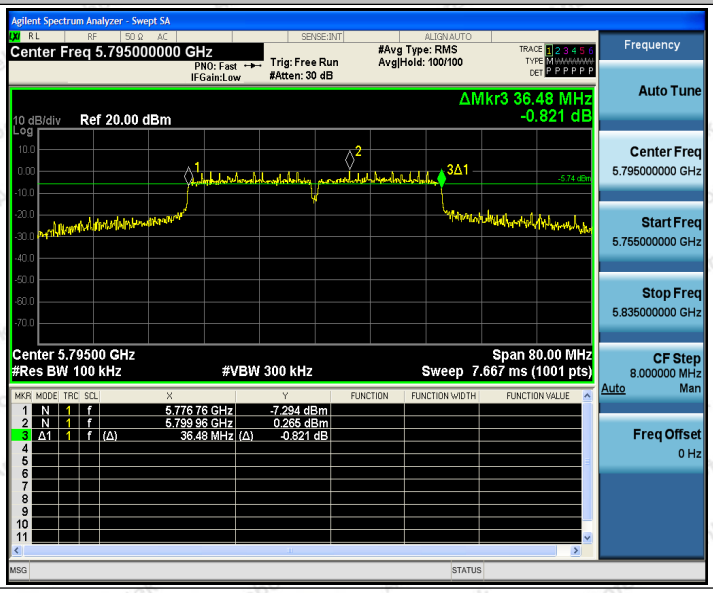
11AC40SISO_Ant1_5755



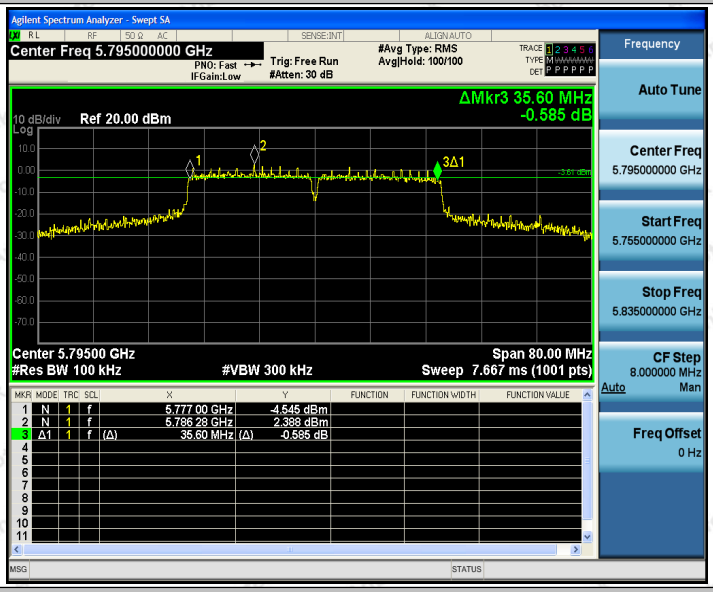
11AC40SISO_Ant2_5755



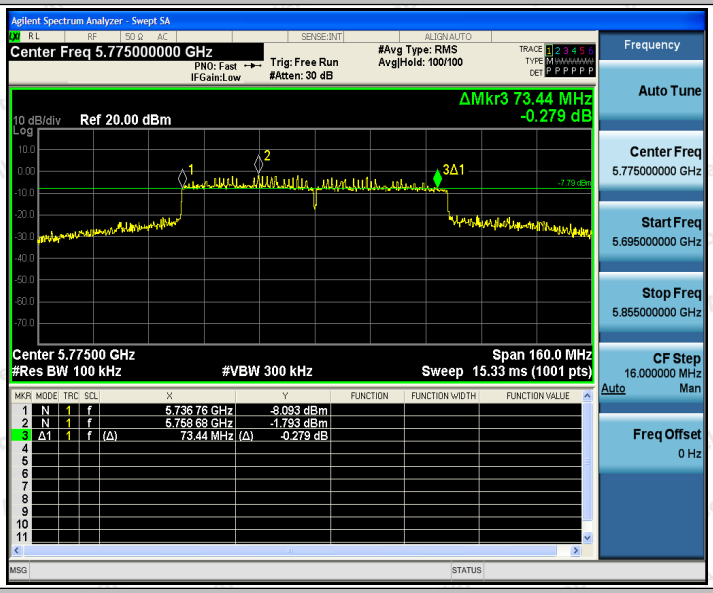
11AC40SISO_Ant1_5795



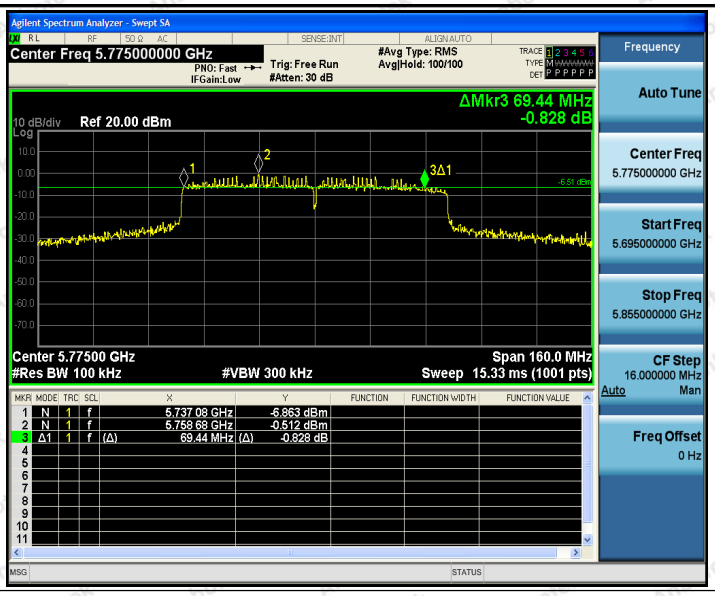
11AC40SISO_Ant2_5795



11AC80SISO_Ant1_5775



11AC80SISO_Ant2_5775


Agilent Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
ΔMkr3 69.44 MHz
-0.828 dB
10 dB/div
Ref 20.00 dBm
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 08 GHz -6.863 dBm
2 N 1 f 5.758 68 GHz -0.512 dBm
3 Δ1 1 f (Δ) 69.44 MHz (Δ) -0.828 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	16.66	≤23.98	PASS
	Ant2	5180	15.91	≤23.98	PASS
	Ant1	5200	15.83	≤23.98	PASS
	Ant2	5200	16.38	≤23.98	PASS
	Ant1	5240	15.94	≤23.98	PASS
	Ant2	5240	16.95	≤23.98	PASS
	Ant1	5745	13.85	≤30	PASS
	Ant2	5745	14.63	≤30	PASS
	Ant1	5785	13.02	≤30	PASS
	Ant2	5785	15.14	≤30	PASS
	Ant1	5825	14.37	≤30	PASS
	Ant2	5825	13.18	≤30	PASS
11N20SISO	Ant1	5180	16.47	≤23.98	PASS
	Ant2	5180	16.80	≤23.98	PASS
	Ant1	5200	15.81	≤23.98	PASS
	Ant2	5200	16.28	≤23.98	PASS
	Ant1	5240	15.91	≤23.98	PASS
	Ant2	5240	17.08	≤23.98	PASS
	Ant1	5745	13.77	≤30	PASS
	Ant2	5745	14.87	≤30	PASS
	Ant1	5785	13.23	≤30	PASS
	Ant2	5785	14.86	≤30	PASS
	Ant1	5825	14.22	≤30	PASS
	Ant2	5825	13.19	≤30	PASS
11N40SISO	Ant1	5190	15.24	≤23.98	PASS
	Ant2	5190	16.57	≤23.98	PASS
	Ant1	5230	14.47	≤23.98	PASS
	Ant2	5230	16.69	≤23.98	PASS
	Ant1	5755	14.57	≤30	PASS
	Ant2	5755	15.25	≤30	PASS
	Ant1	5795	14.81	≤30	PASS
	Ant2	5795	15.65	≤30	PASS
11AC20SISO	Ant1	5180	16.63	≤23.98	PASS
	Ant2	5180	16.97	≤23.98	PASS
	Ant1	5200	16.11	≤23.98	PASS
	Ant2	5200	16.31	≤23.98	PASS
	Ant1	5240	15.99	≤23.98	PASS

	Ant2	5240	16.98	≤23.98	PASS
	Ant1	5745	14.20	≤30	PASS
	Ant2	5745	14.93	≤30	PASS
	Ant1	5785	13.60	≤30	PASS
	Ant2	5785	15.14	≤30	PASS
	Ant1	5825	14.28	≤30	PASS
	Ant2	5825	13.11	≤30	PASS
11AC40SISO	Ant1	5190	17.33	≤23.98	PASS
	Ant2	5190	17.05	≤23.98	PASS
	Ant1	5230	14.54	≤23.98	PASS
	Ant2	5230	14.95	≤23.98	PASS
	Ant1	5755	16.53	≤30	PASS
	Ant2	5755	17.45	≤30	PASS
	Ant1	5795	14.04	≤30	PASS
	Ant2	5795	15.65	≤30	PASS
11AC80SISO	Ant1	5210	14.70	≤23.98	PASS
	Ant2	5210	14.95	≤23.98	PASS
	Ant1	5775	14.13	≤30	PASS
	Ant2	5775	15.37	≤30	PASS

MIMO

TestMode	Channel	Result[dBm]	Limit[dBm]	Verdict
11N20SISO	5180	19.648	≤23.98	PASS
	5200	19.062	≤23.98	PASS
	5240	19.545	≤23.98	PASS
	5745	17.365	≤30	PASS
	5785	17.131	≤30	PASS
	5825	16.746	≤30	PASS
11N40SISO	5190	18.966	≤23.98	PASS
	5230	18.731	≤23.98	PASS
	5755	17.934	≤30	PASS
	5795	18.261	≤30	PASS
11AC20SISO	5180	19.814	≤23.98	PASS
	5200	19.221	≤23.98	PASS
	5240	19.523	≤23.98	PASS
	5745	17.591	≤30	PASS
	5785	17.448	≤30	PASS
	5825	16.745	≤30	PASS
11AC40SISO	5190	20.203	≤23.98	PASS
	5230	17.760	≤23.98	PASS
	5755	20.025	≤30	PASS

	5795	17.929	≤30	PASS
11AC80SISO	5210	17.837	≤23.98	PASS
	5775	17.804	≤30	PASS

Appendix C: Maximum power spectral density

Test Result(For wifi 5.2G)

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	6.78	≤11	PASS
	Ant2	5180	7.77	≤11	PASS
	Ant1	5200	6.7	≤11	PASS
	Ant2	5200	7.35	≤11	PASS
	Ant1	5240	6.21	≤11	PASS
	Ant2	5240	6.41	≤11	PASS
11N20SISO	Ant1	5180	6.69	≤11	PASS
	Ant2	5180	7.31	≤11	PASS
	Ant1	5200	8.53	≤11	PASS
	Ant2	5200	7.35	≤11	PASS
	Ant1	5240	7.66	≤11	PASS
	Ant2	5240	5.52	≤11	PASS
11N40SISO	Ant1	5190	4.51	≤11	PASS
	Ant2	5190	3.76	≤11	PASS
	Ant1	5230	3.4	≤11	PASS
	Ant2	5230	2.87	≤11	PASS
11AC20SISO	Ant1	5180	6.5	≤11	PASS
	Ant2	5180	7.66	≤11	PASS
	Ant1	5200	6.01	≤11	PASS
	Ant2	5200	6.54	≤11	PASS
	Ant1	5240	6.44	≤11	PASS
	Ant2	5240	5.37	≤11	PASS
11AC40SISO	Ant1	5190	4.67	≤11	PASS
	Ant2	5190	3.76	≤11	PASS
	Ant1	5230	1.97	≤11	PASS
	Ant2	5230	2.82	≤11	PASS
11AC80SISO	Ant1	5210	-0.13	≤11	PASS
	Ant2	5210	-0.22	≤11	PASS

Test Result(For wifi 5.8G)

TestMode	Antenna	Channel	Result [dBm/500kHz]	Limit[dBm/500kHz]	Verdict
11A	Ant1	5745	4.73	≤30	PASS
	Ant2	5745	4.01	≤30	PASS
	Ant1	5785	3.83	≤30	PASS
	Ant2	5785	4.51	≤30	PASS
	Ant1	5825	4.4	≤30	PASS

	Ant2	5825	3.63	≤30	PASS
11N20SISO	Ant1	5745	4.49	≤30	PASS
	Ant2	5745	4.85	≤30	PASS
	Ant1	5785	3.08	≤30	PASS
	Ant2	5785	4.12	≤30	PASS
	Ant1	5825	4.45	≤30	PASS
	Ant2	5825	5.47	≤30	PASS
11N40SISO	Ant1	5755	0.58	≤30	PASS
	Ant2	5755	0.93	≤30	PASS
	Ant1	5795	1.13	≤30	PASS
	Ant2	5795	0.09	≤30	PASS
11AC20SISO	Ant1	5745	4.75	≤30	PASS
	Ant2	5745	4.43	≤30	PASS
	Ant1	5785	3.68	≤30	PASS
	Ant2	5785	3.88	≤30	PASS
	Ant1	5825	4.1	≤30	PASS
	Ant2	5825	3.87	≤30	PASS
11AC40SISO	Ant1	5755	0.81	≤30	PASS
	Ant2	5755	1.9	≤30	PASS
	Ant1	5795	0	≤30	PASS
	Ant2	5795	0.93	≤30	PASS
11AC80SISO	Ant1	5775	-2.33	≤30	PASS
	Ant2	5775	-2.09	≤30	PASS

MIMO

Test Result(For wifi 5.2G)

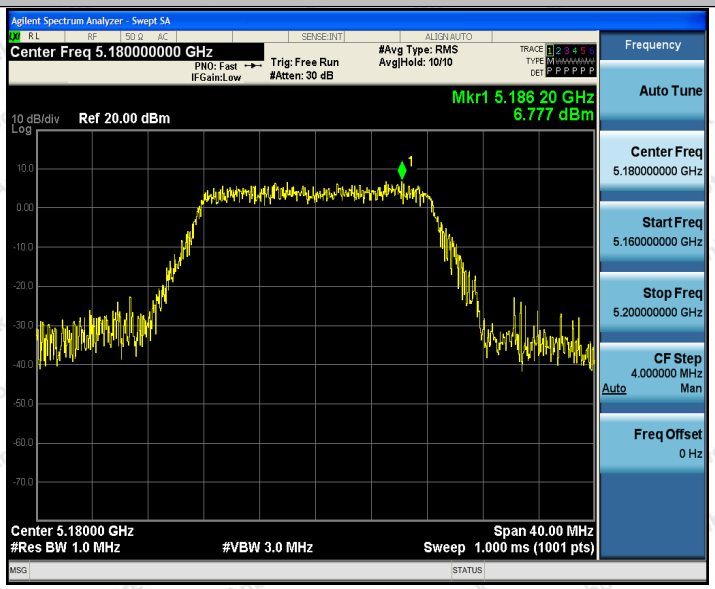
TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11N20SISO	Ant1	5180	10.021	≤11	PASS
	Ant2	5200	10.990	≤11	PASS
	Ant1	5240	9.731	≤11	PASS
11N40SISO	Ant1	5190	7.161	≤11	PASS
	Ant2	5230	6.153	≤11	PASS
11AC20SISO	Ant1	5180	10.129	≤11	PASS
	Ant2	5200	9.293	≤11	PASS
	Ant1	5240	8.948	≤11	PASS
11AC40SISO	Ant1	5190	7.249	≤11	PASS
	Ant2	5230	5.426	≤11	PASS
11AC80SISO	Ant1	5210	2.836	≤11	PASS

Test Result(For wifi 5.8G)

TestMode	Antenna	Channel	Result[dBm/500kHz]	Limit[dBm/MHz]	Verdict
11N20SISO	Ant1	5745	7.684	≤30	PASS
	Ant2	5745	6.641	≤30	PASS
	Ant1	5785	8.000	≤30	PASS
11N40SISO	Ant1	5755	3.769	≤30	PASS
	Ant2	5755	3.651	≤30	PASS
11AC20SISO	Ant1	5745	7.603	≤30	PASS
	Ant2	5745	6.791	≤30	PASS
	Ant1	5785	6.997	≤30	PASS
11AC40SISO	Ant1	5755	4.399	≤30	PASS
	Ant2	5755	3.500	≤30	PASS
11AC80SISO	Ant1	5775	0.802	≤30	PASS

Test Graphs

11A_Ant1_5180



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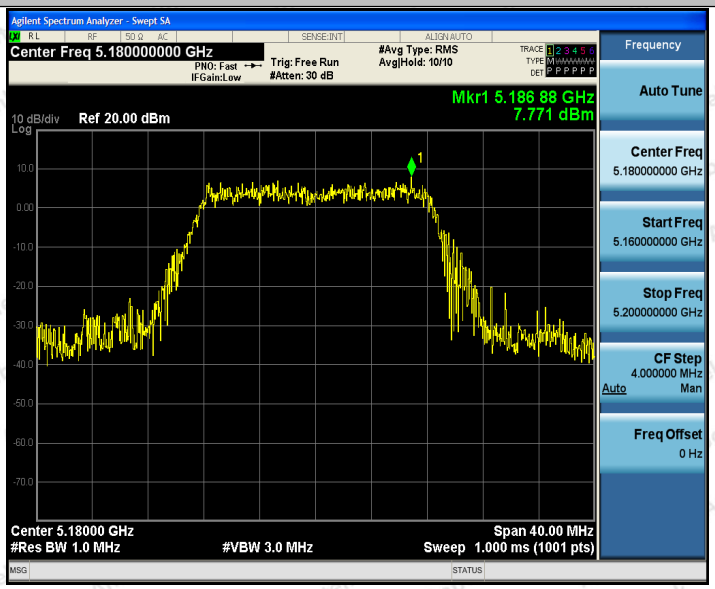

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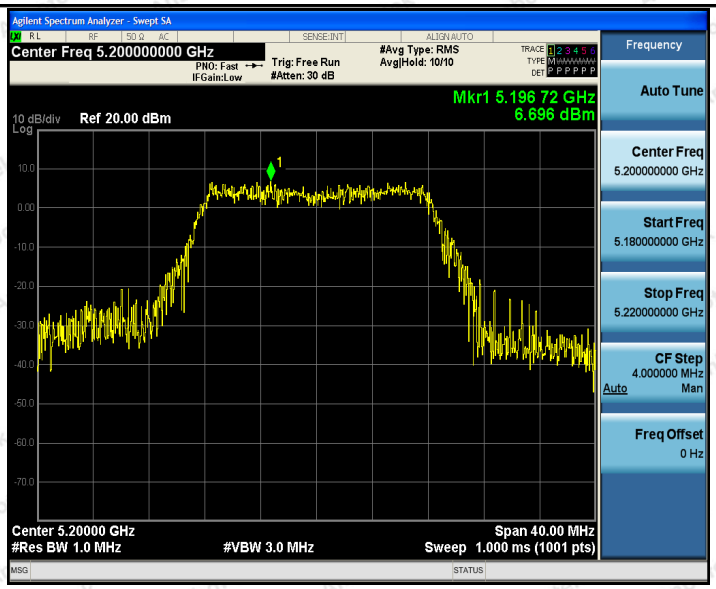

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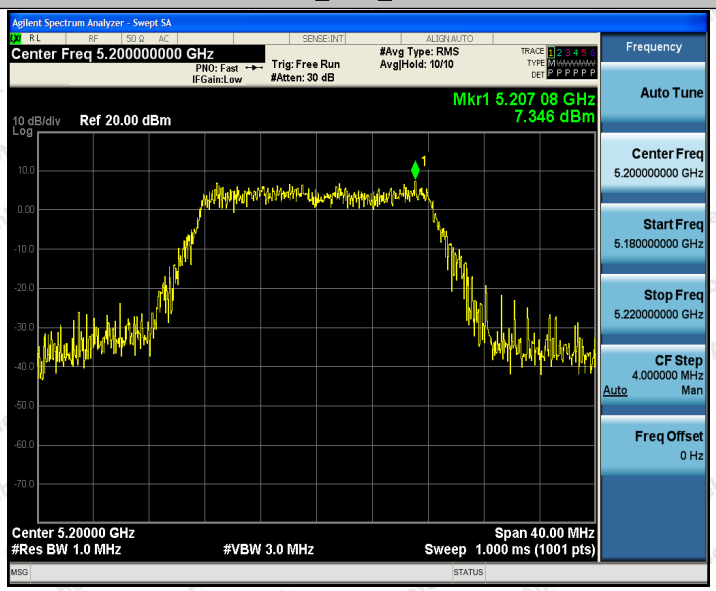

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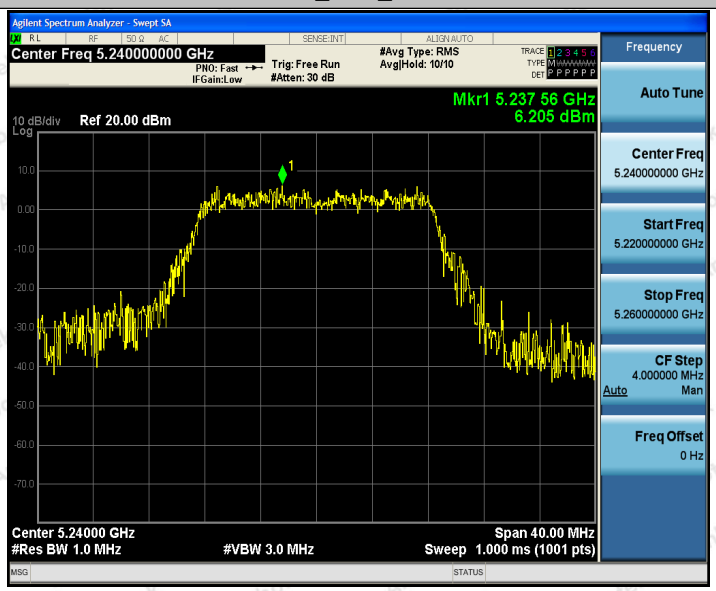

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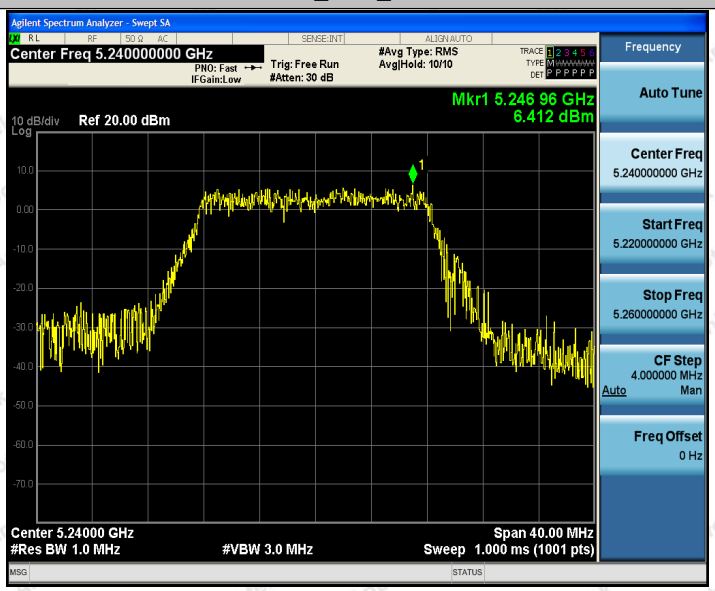

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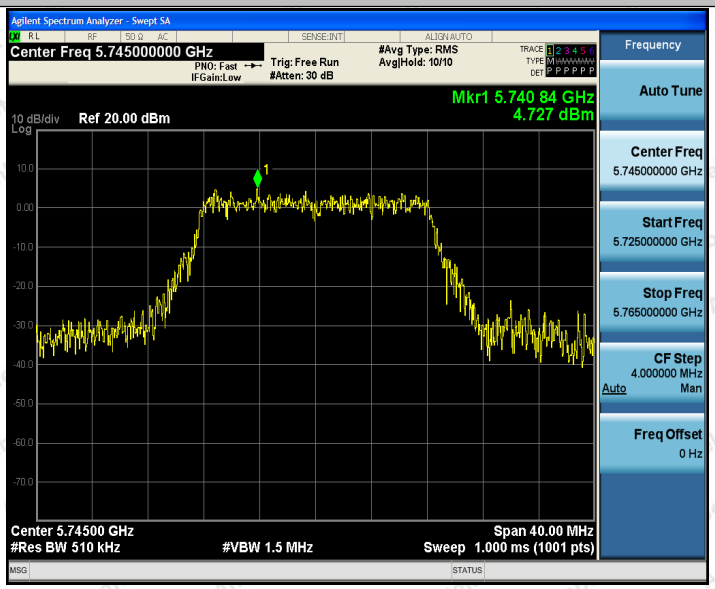

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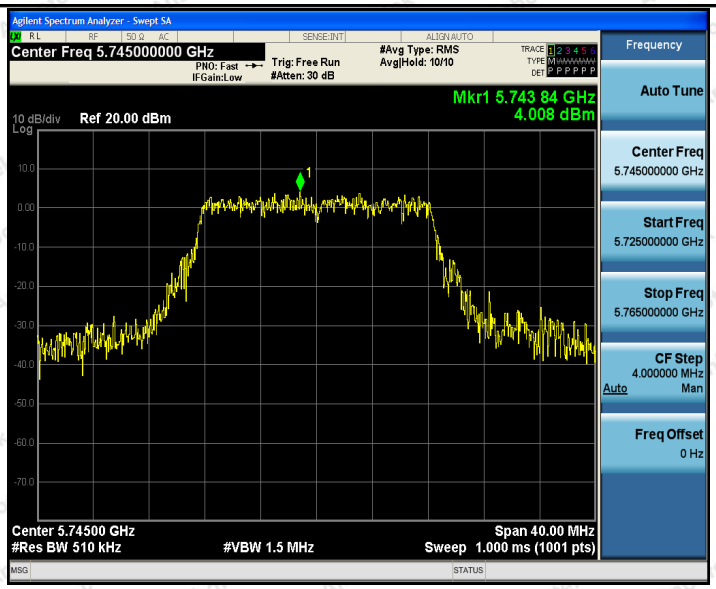

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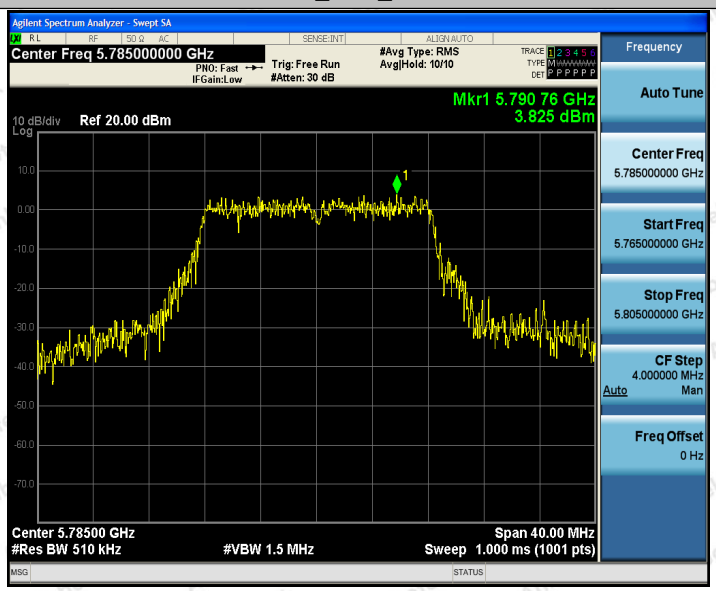

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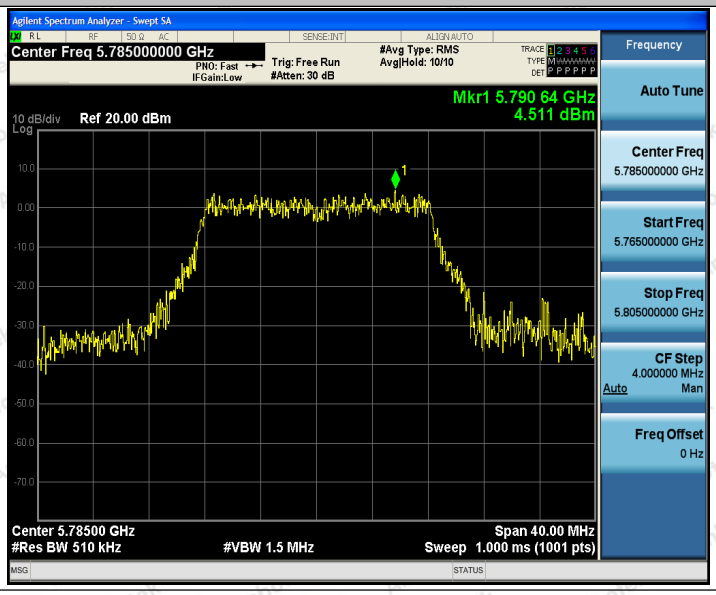

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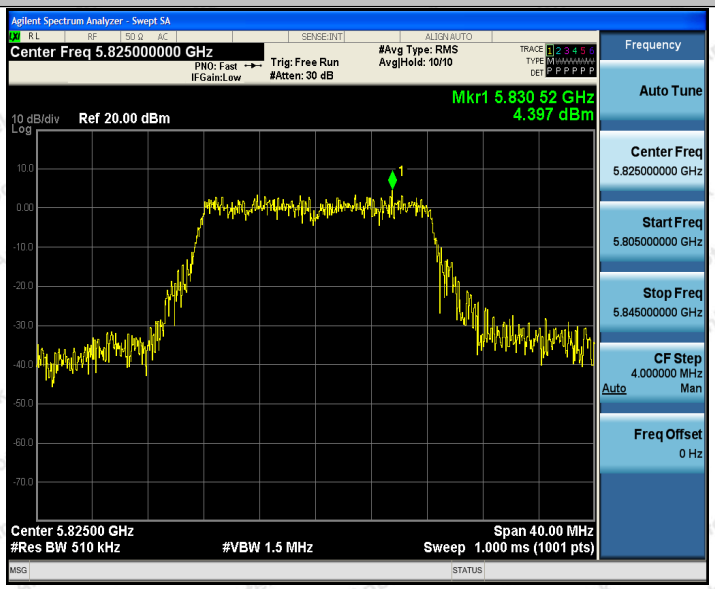

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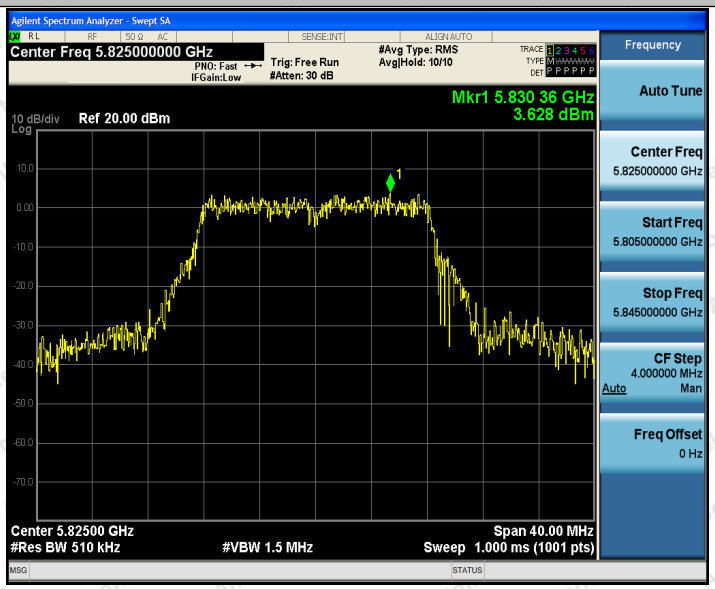

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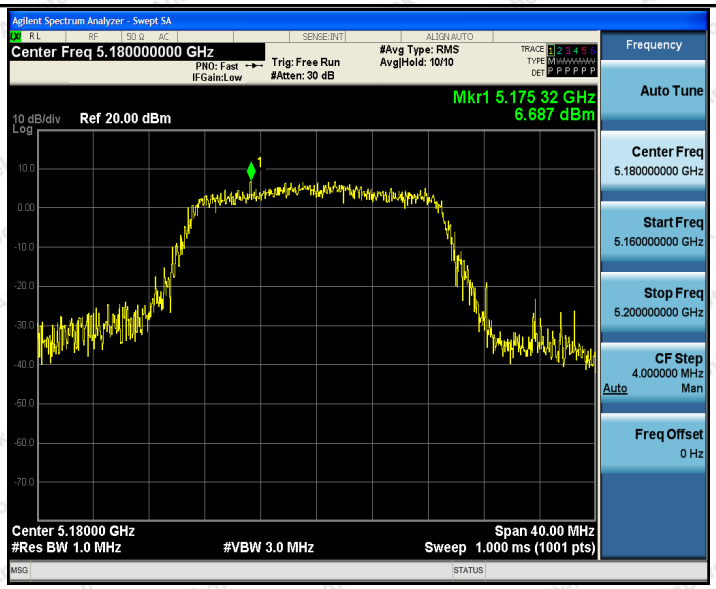

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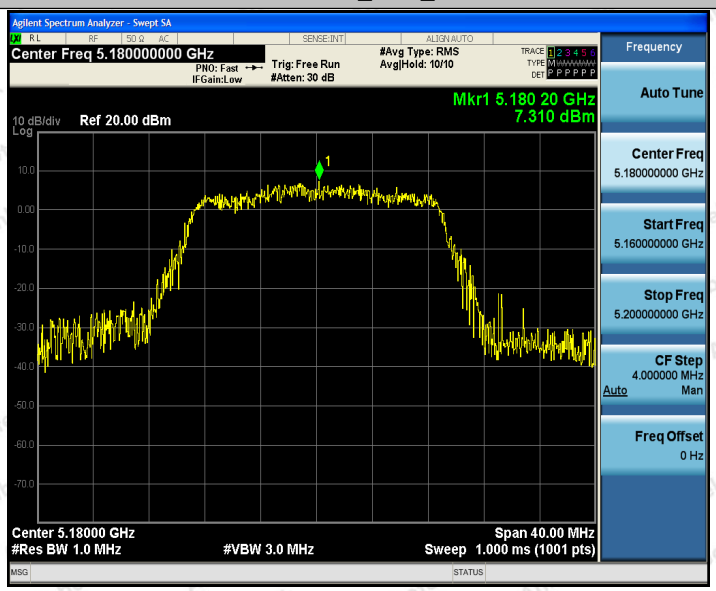

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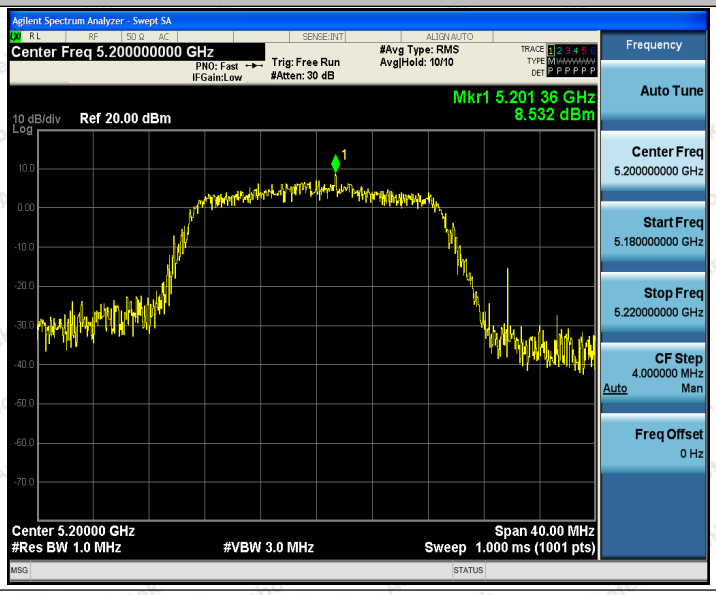

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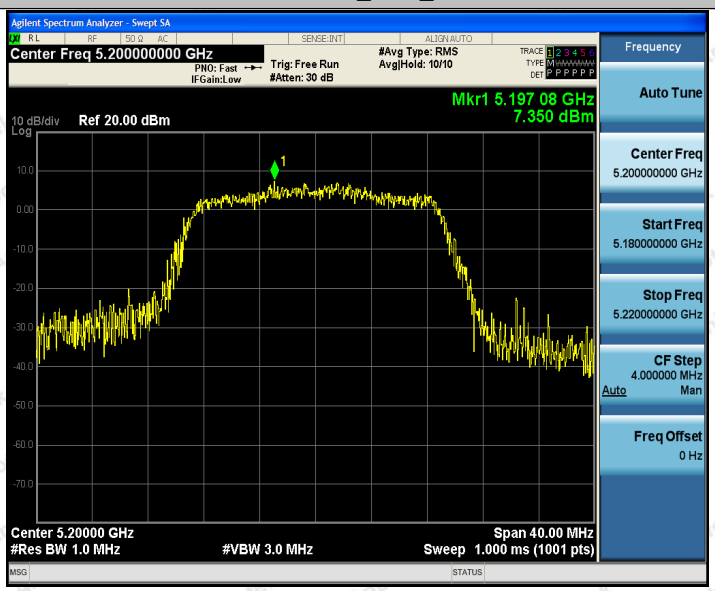

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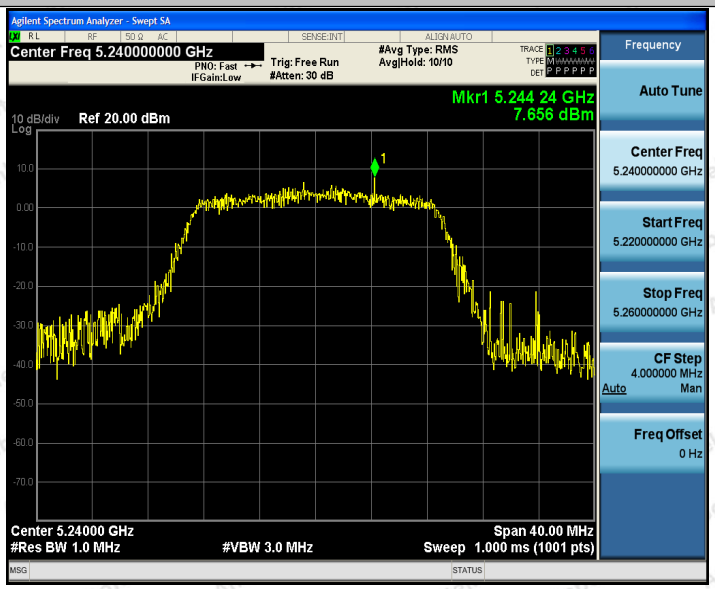

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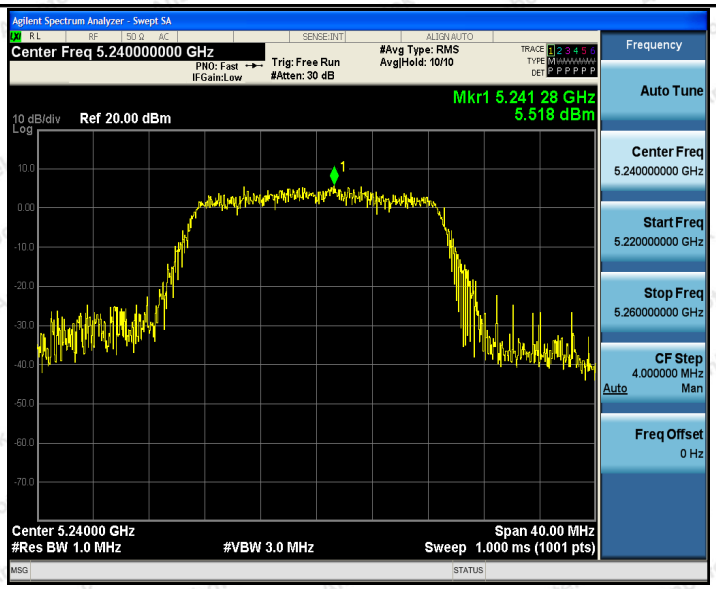

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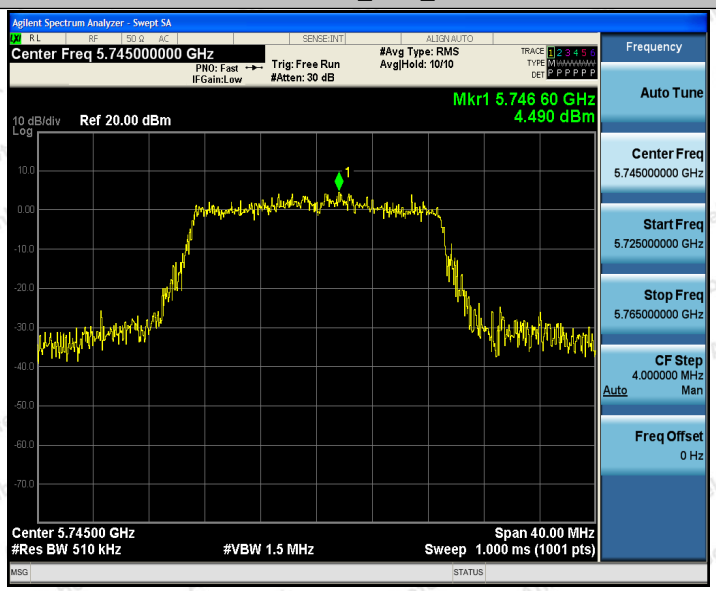

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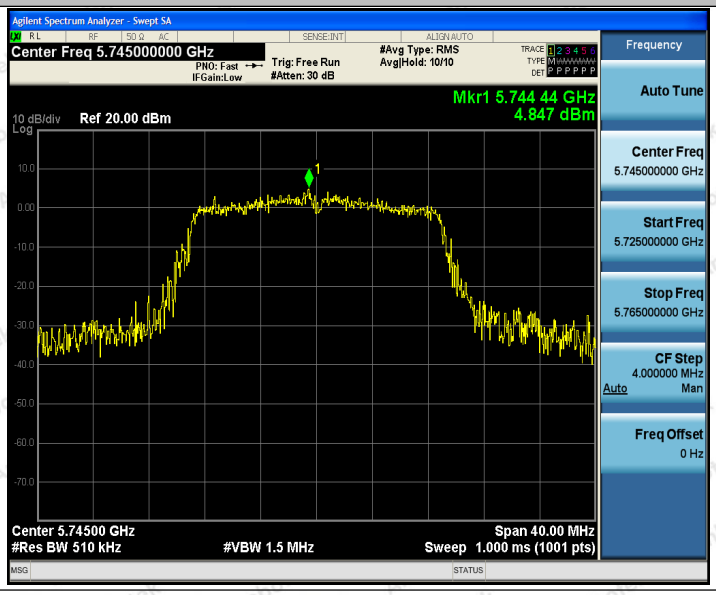

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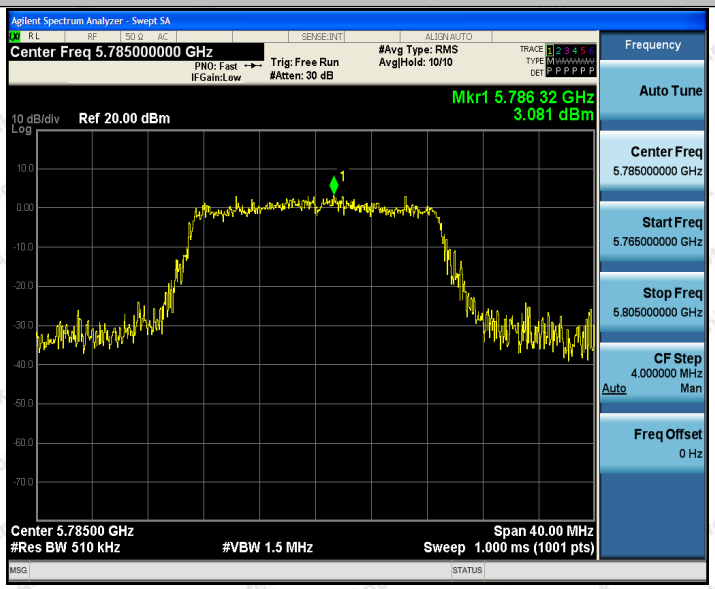

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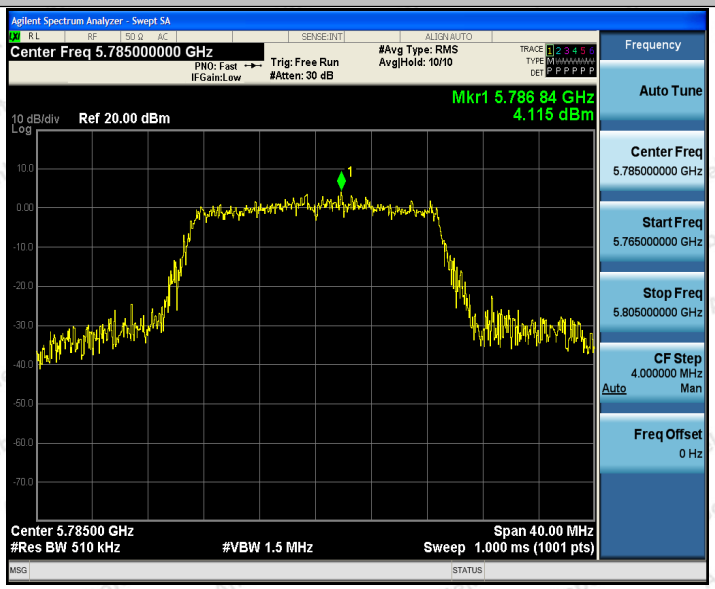

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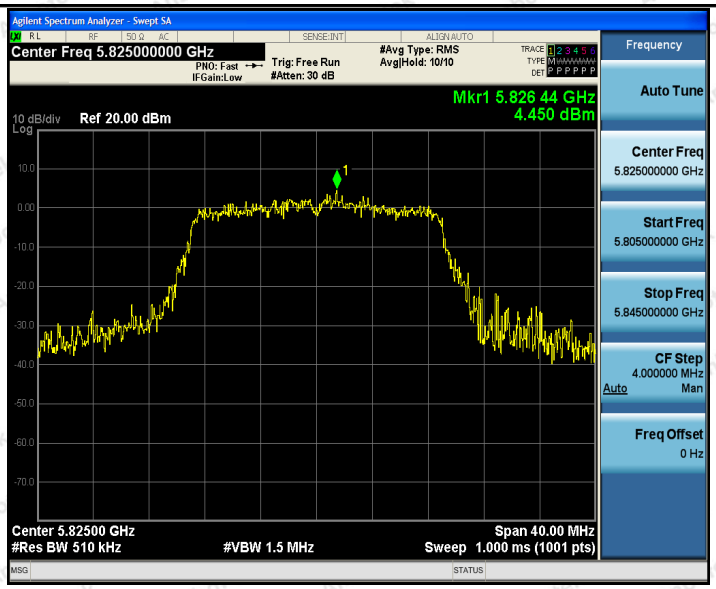

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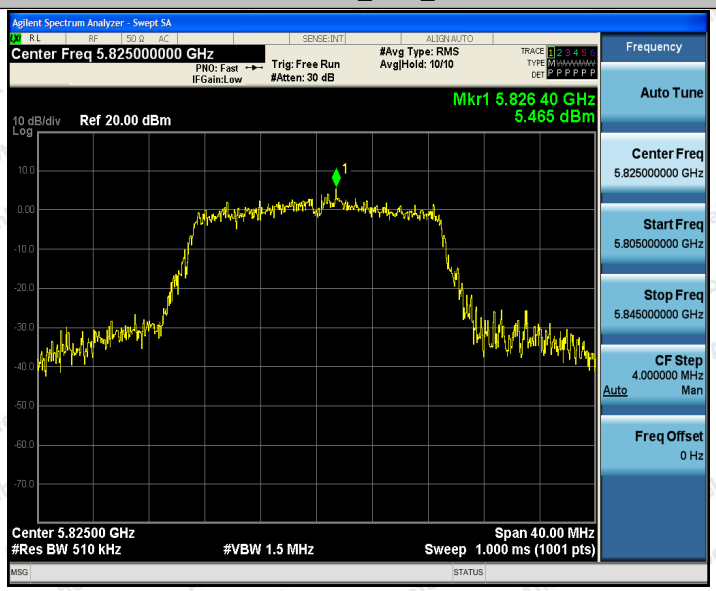

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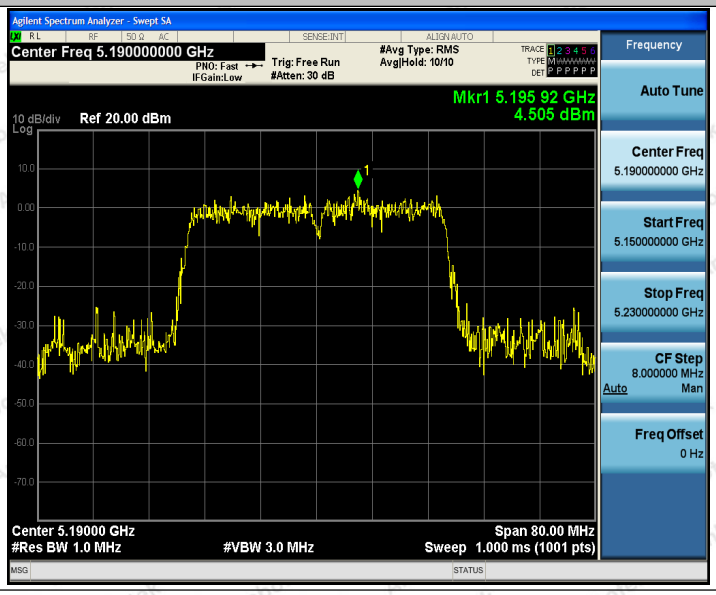

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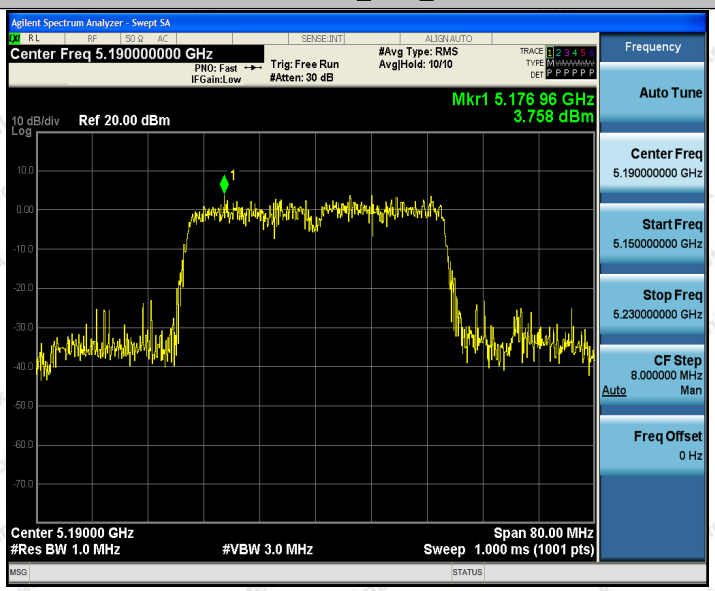

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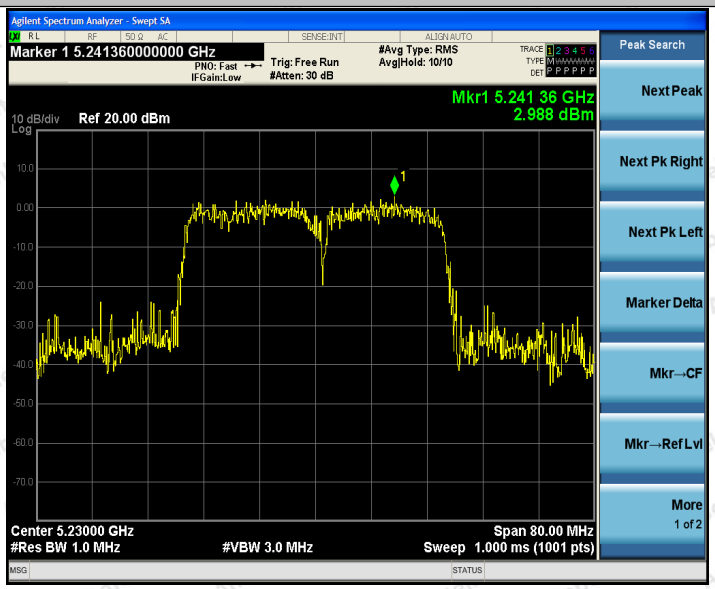

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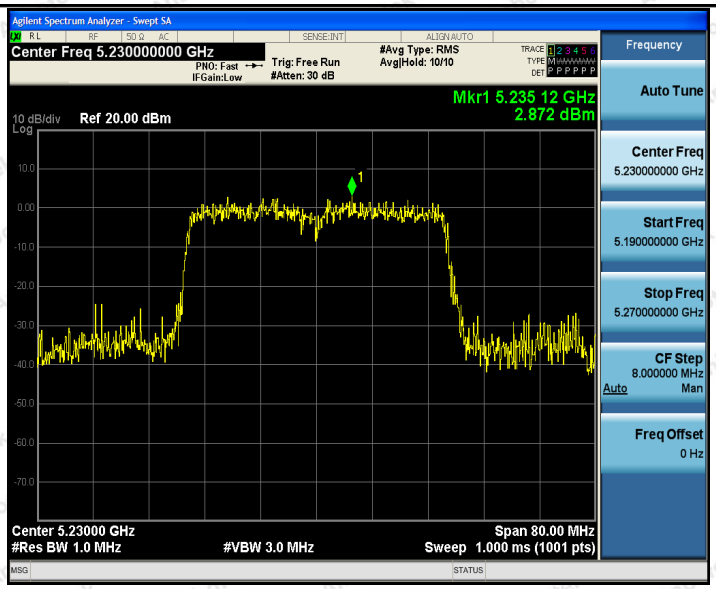

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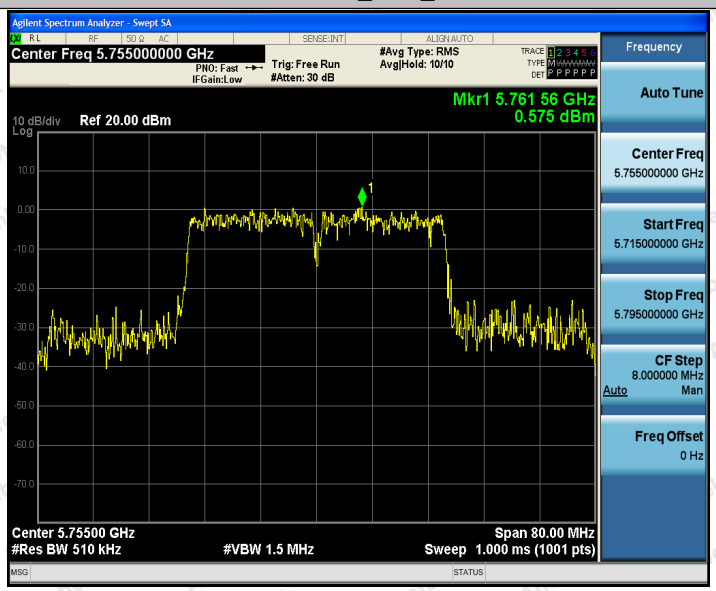

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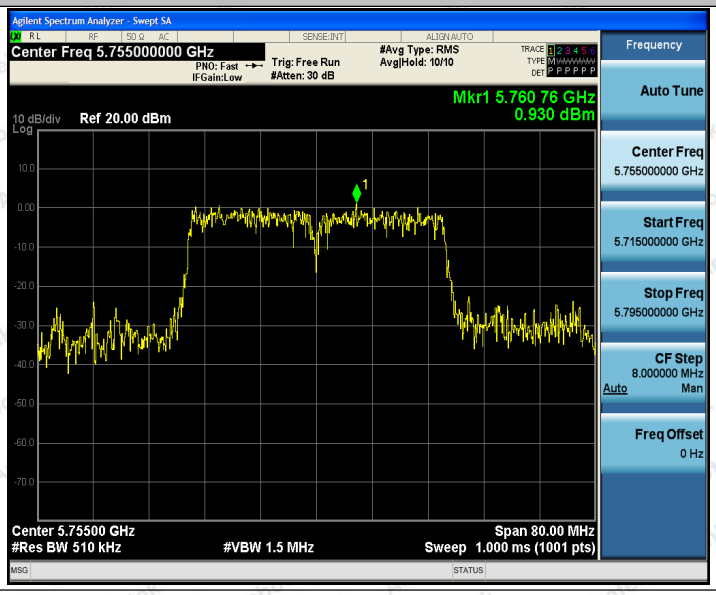

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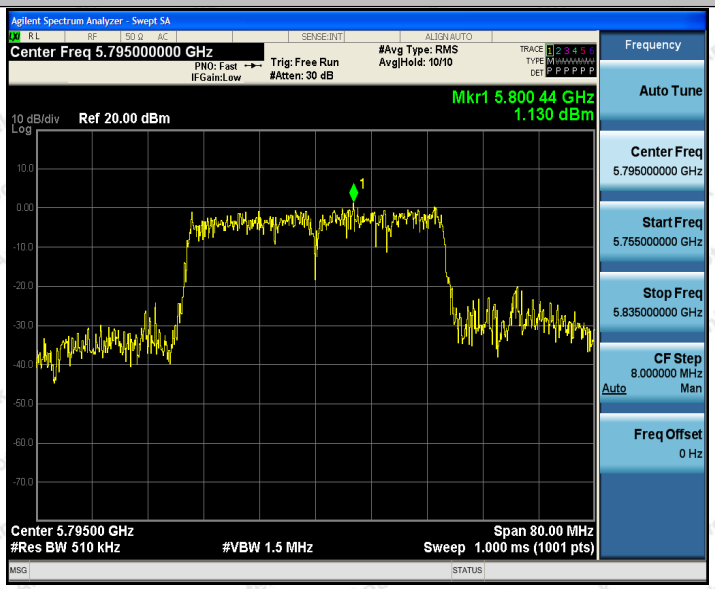

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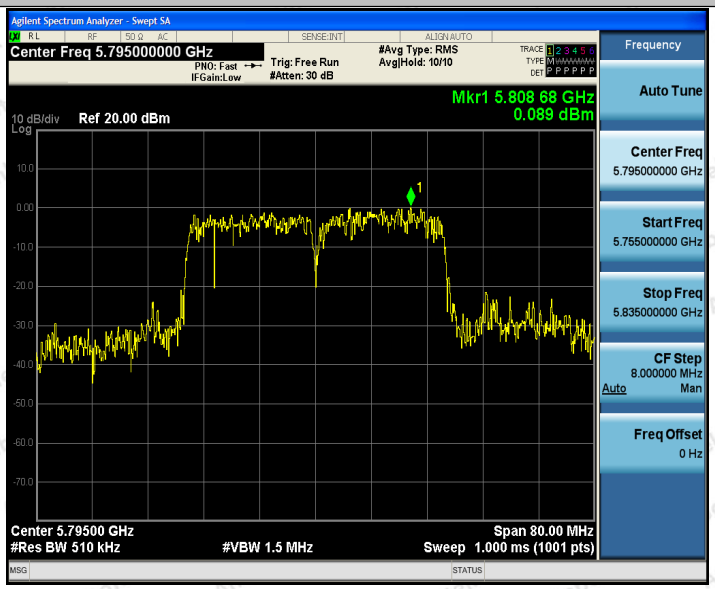

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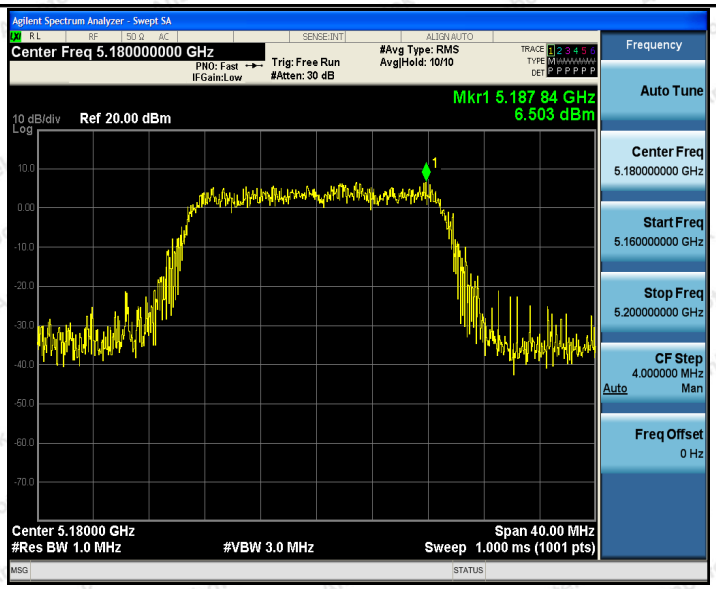

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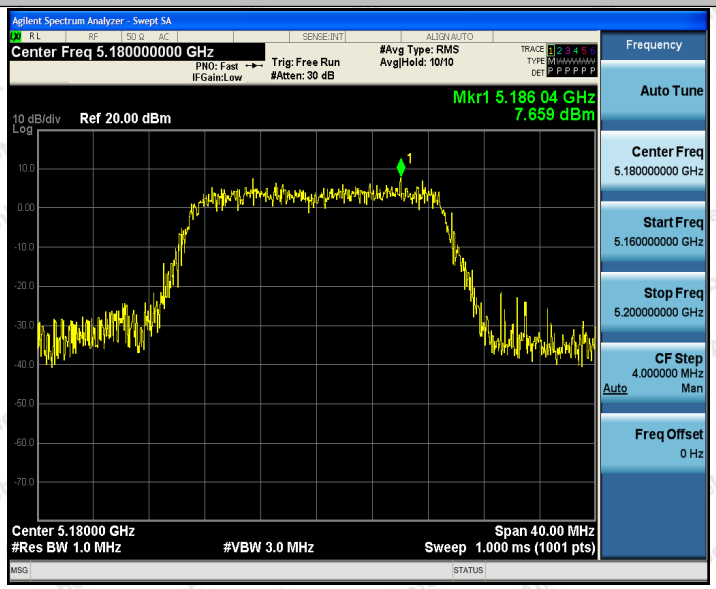

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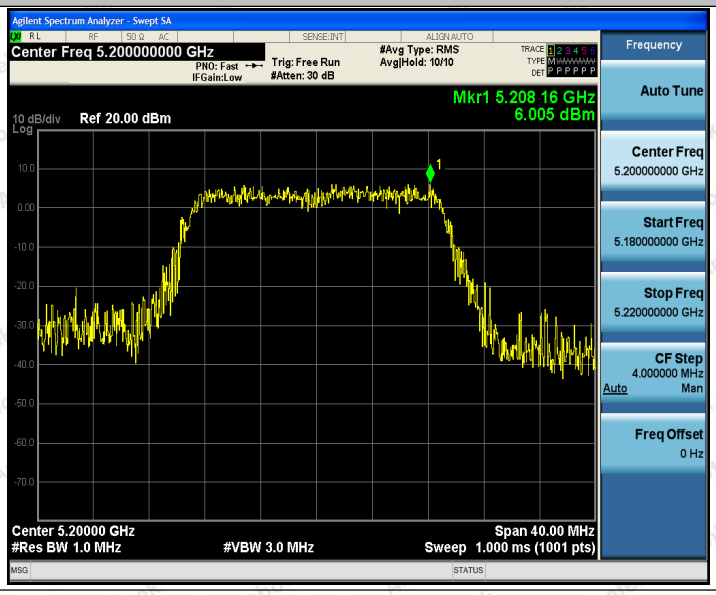

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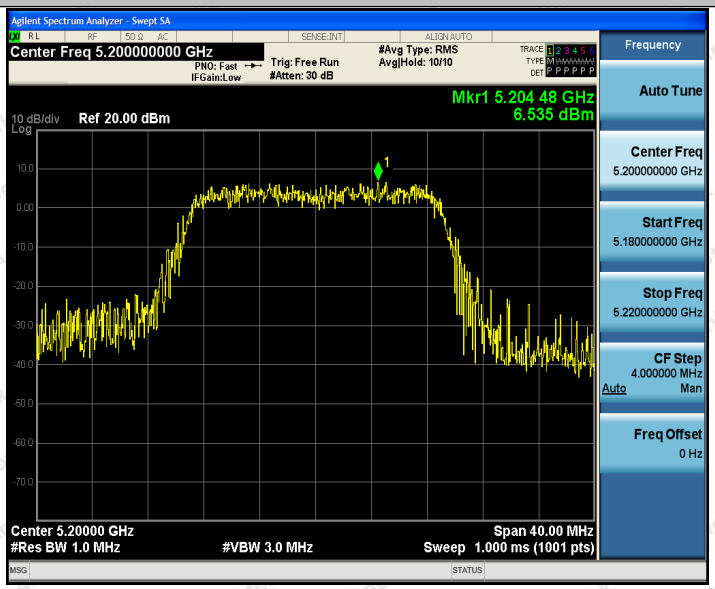

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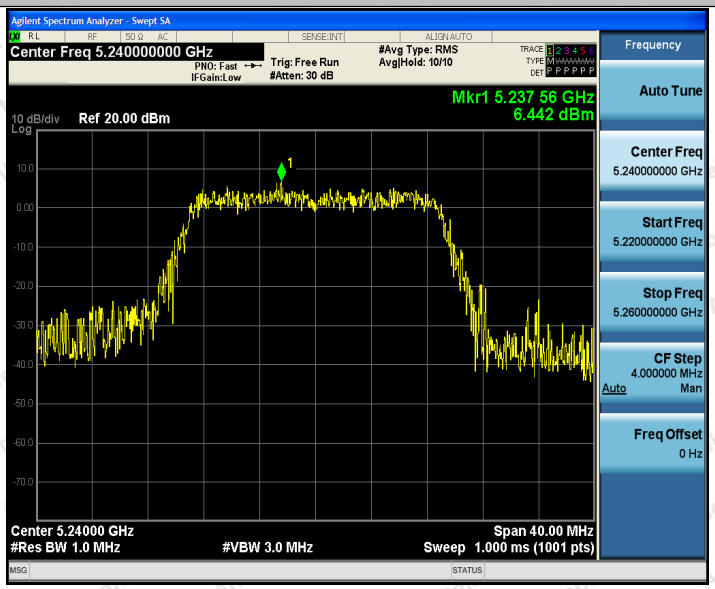

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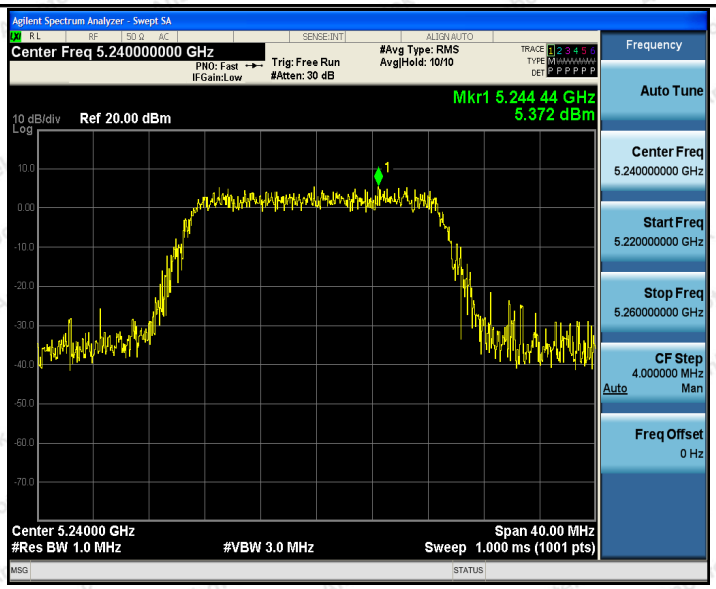

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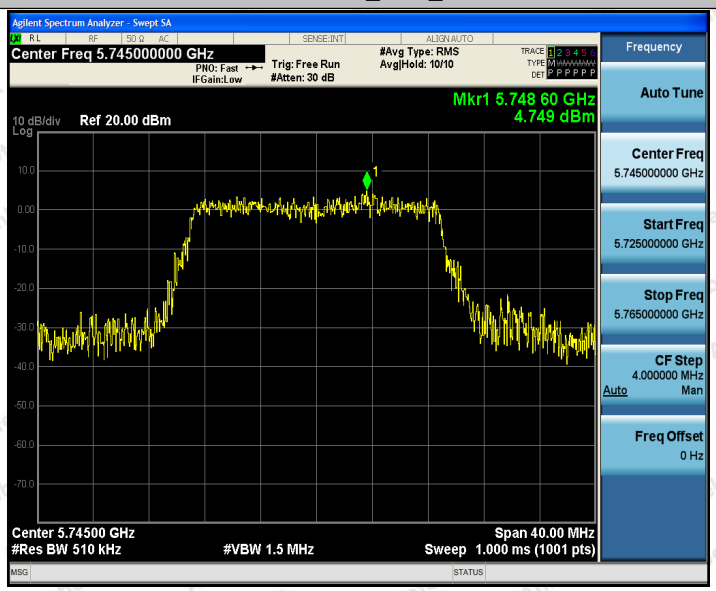

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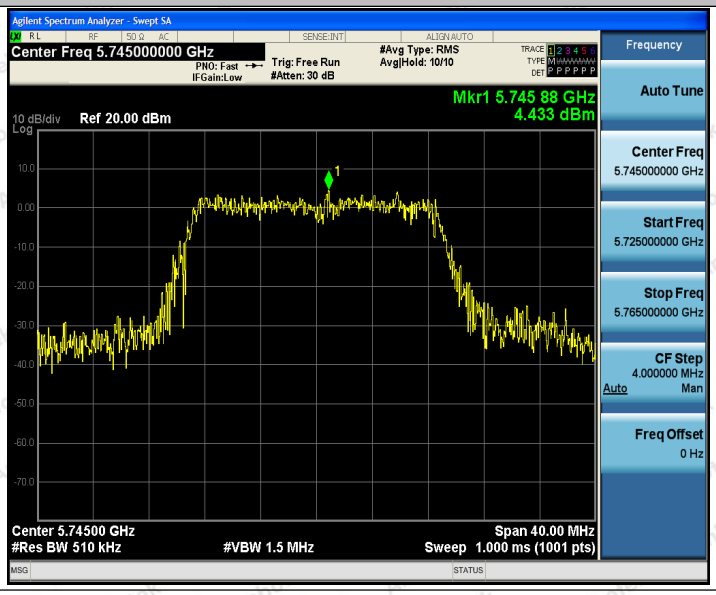

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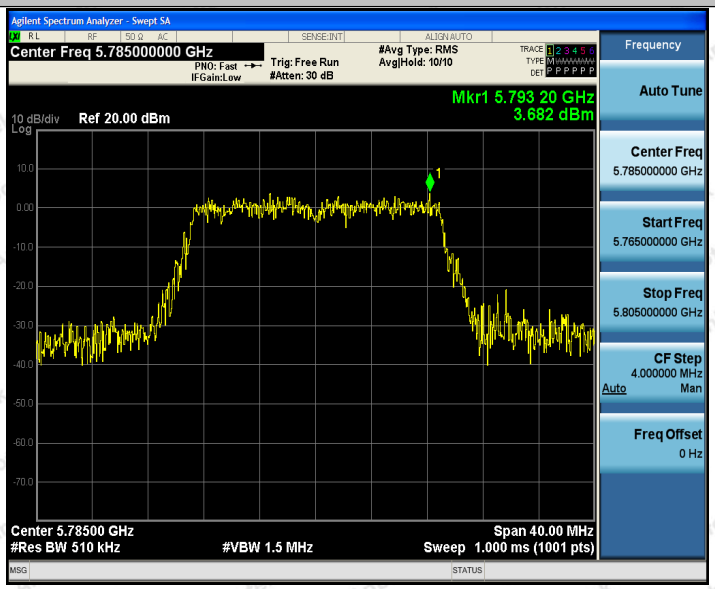

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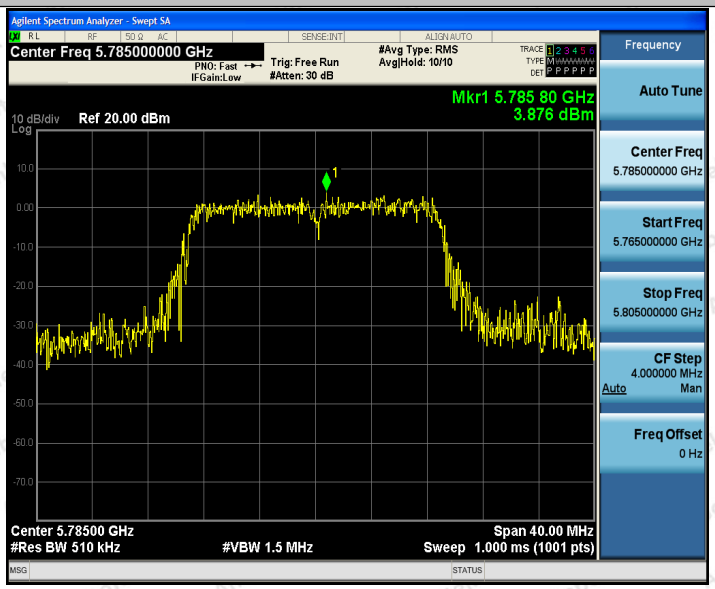

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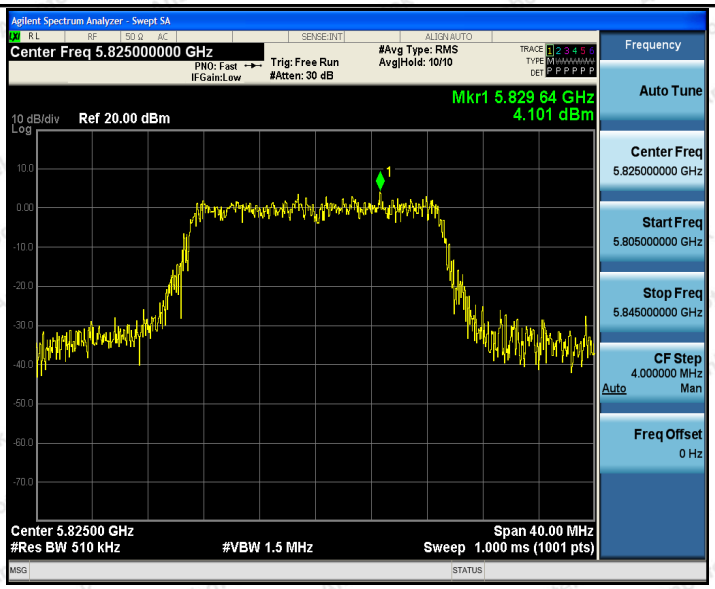

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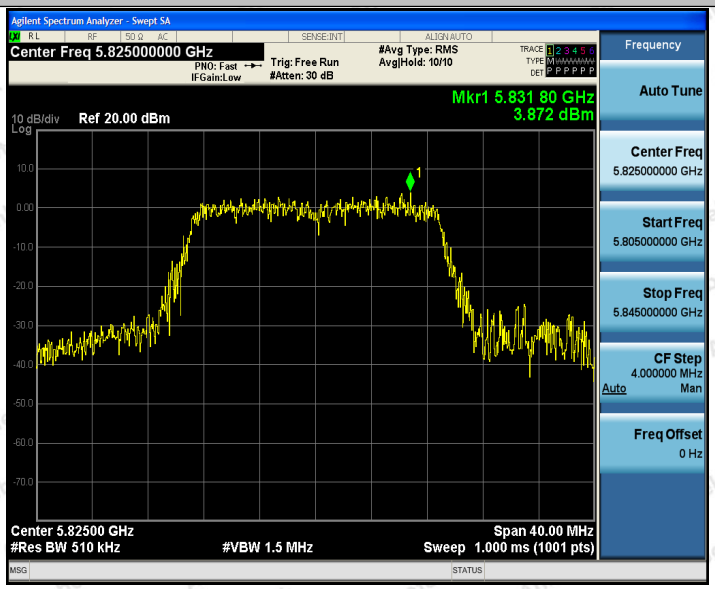

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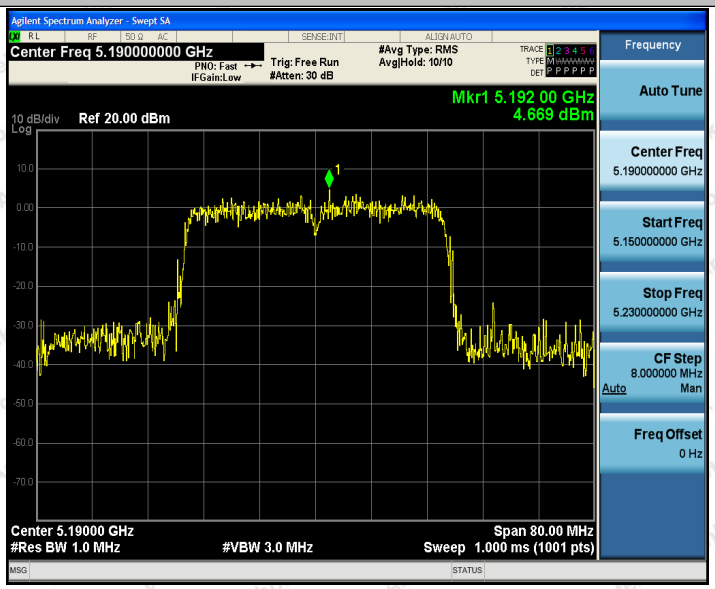

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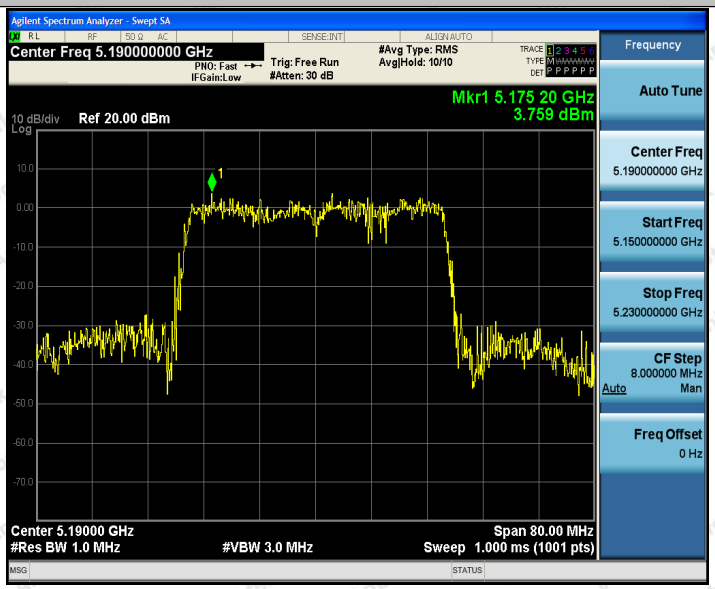

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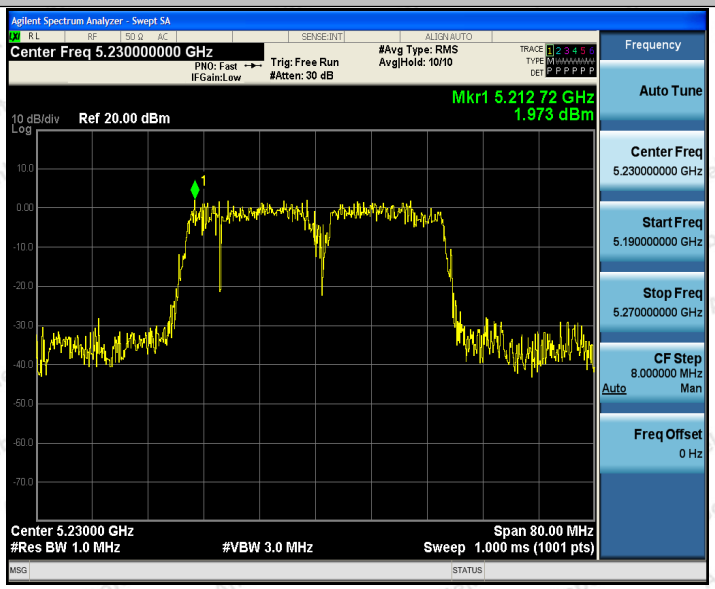

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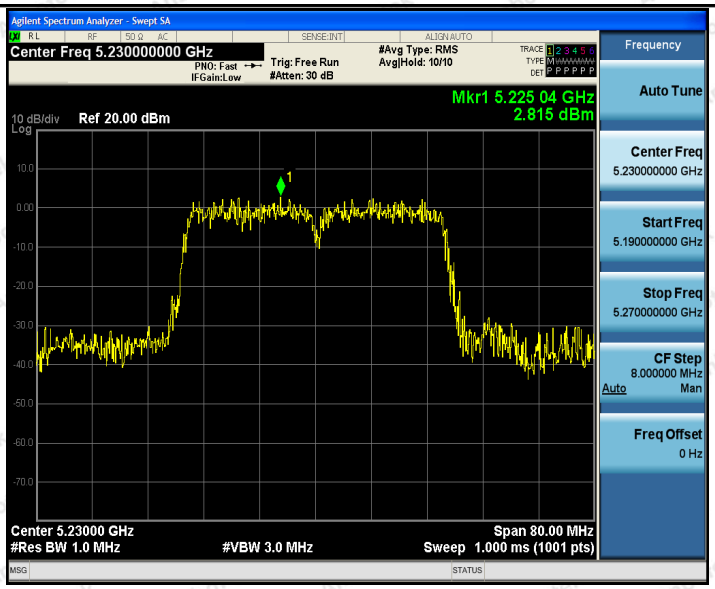
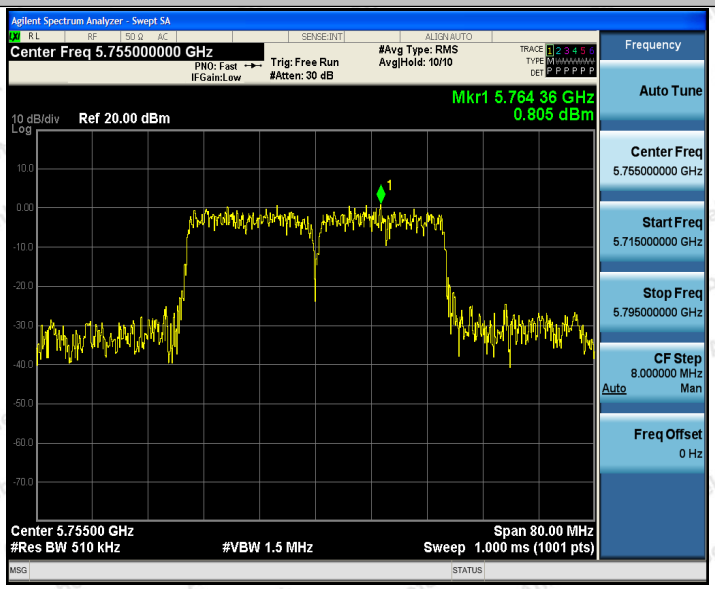


11AC40SISO_Ant1_5755



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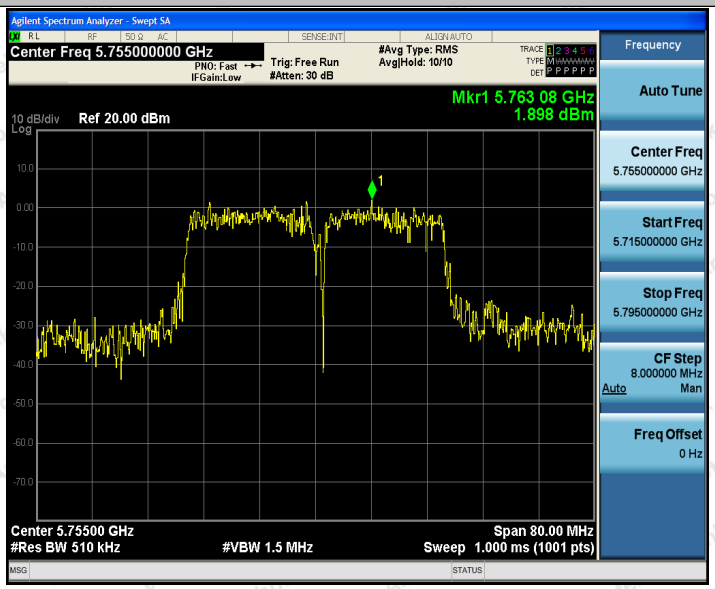
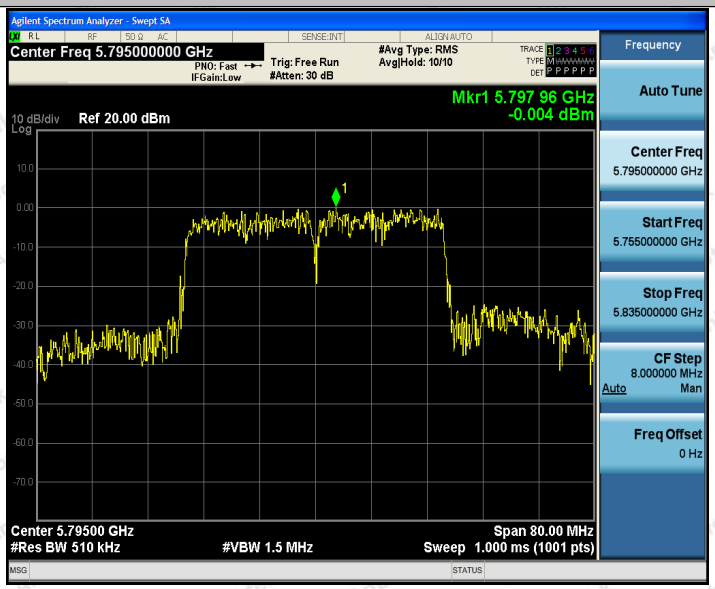


11AC40SISO_Ant1_5795



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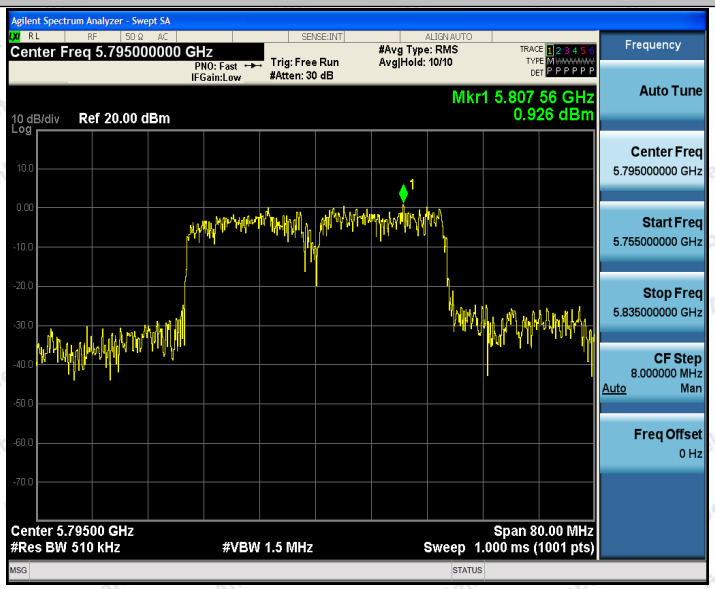
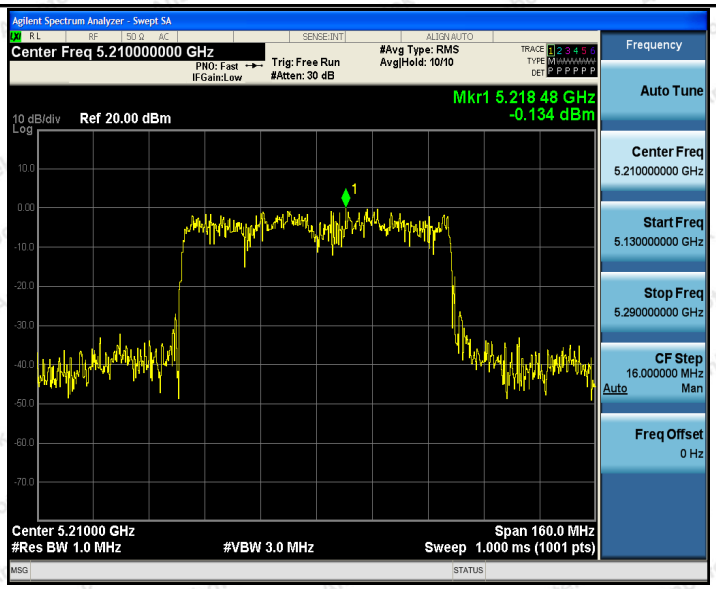


11AC80SISO_Ant1_5210



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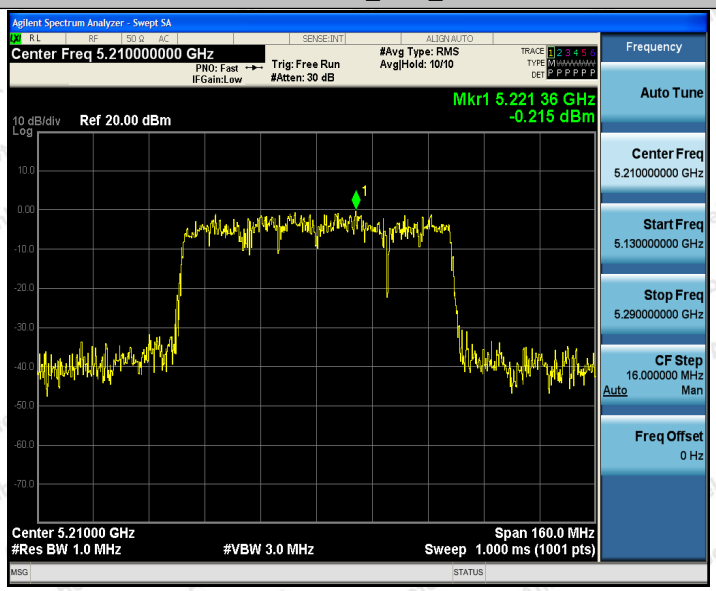
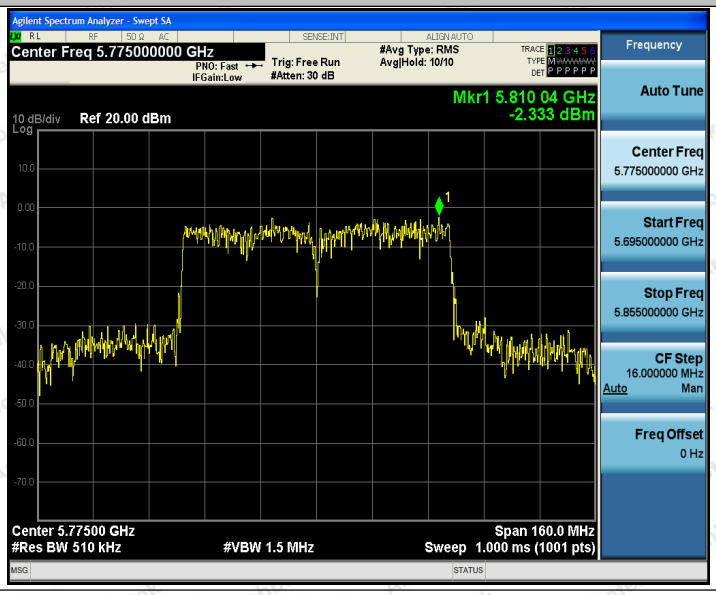


11AC80SISO_Ant1_5775



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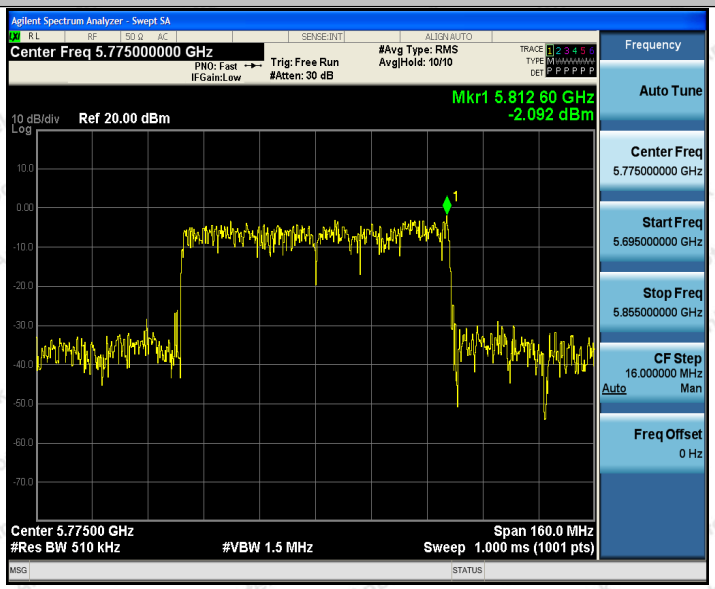

Appendix D: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-32.45	≤-27	PASS
	Ant2	Low	5180	-32.68	≤-27	PASS
	Ant1	High	5240	-40.32	≤-27	PASS
	Ant2	High	5240	-42.09	≤-27	PASS
11N20SISO	Ant1	Low	5180	-31.91	≤-27	PASS
	Ant2	Low	5180	-30.7	≤-27	PASS
	Ant1	High	5240	-40.18	≤-27	PASS
	Ant2	High	5240	-39.9	≤-27	PASS
11N40SISO	Ant1	Low	5190	-27.89	≤-27	PASS
	Ant2	Low	5190	-32.49	≤-27	PASS
	Ant1	High	5230	-39.84	≤-27	PASS
	Ant2	High	5230	-40.19	≤-27	PASS
11AC20SISO	Ant1	Low	5180	-32.2	≤-27	PASS
	Ant2	Low	5180	-31.42	≤-27	PASS
	Ant1	High	5240	-40.56	≤-27	PASS
	Ant2	High	5240	-40.12	≤-27	PASS
11AC40SISO	Ant1	Low	5190	-27.62	≤-27	PASS
	Ant2	Low	5190	-35.55	≤-27	PASS
	Ant1	High	5230	-39.06	≤-27	PASS
	Ant2	High	5230	-41.49	≤-27	PASS
11AC80SISO	Ant1	Low	5210	-27.51	≤-27	PASS
	Ant2	Low	5210	-32.39	≤-27	PASS
	Ant1	High	5210	-42.54	≤-27	PASS
	Ant2	High	5210	-42.86	≤-27	PASS

TestMode	Antenna	ChName	Channel	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-41.04	≤9.06	PASS
				5700~5720	-31.69	≤15.29	PASS
				5720~5725	-16.48	≤24.37	PASS
				5755~5650	-41.43	≤-27	PASS
	Ant2	Low	5745	5650~5700	-39	≤9.64	PASS
				5700~5720	-31.04	≤15.59	PASS
				5720~5725	-15.71	≤26.49	PASS
				5755~5650	-41.03	≤-27	PASS
	Ant1	High	5825	5850~5855	-34.08	≤16.17	PASS

				5855~5875	-35.96	≤10.10	PASS
				5875~5925	-42	≤-5.91	PASS
				5925~5950	-42.69	≤-27	PASS
	Ant2	High	5825	5850~5855	-35.68	≤17.20	PASS
				5855~5875	-36.31	≤10.18	PASS
				5875~5925	-42.13	≤-22.67	PASS
				5925~5950	-42.87	≤-27	PASS
11N20SISO	Ant1	Low	5745	5650~5700	-41.34	≤7.23	PASS
				5700~5720	-28.05	≤15.46	PASS
				5720~5725	-16.08	≤22.95	PASS
				5755~5650	-41.93	≤-27	PASS
	Ant2	Low	5745	5650~5700	-37.72	≤9.29	PASS
				5700~5720	-27.54	≤15.59	PASS
				5720~5725	-17	≤26.84	PASS
				5755~5650	-40.66	≤-27	PASS
	Ant1	High	5825	5850~5855	-26.68	≤15.83	PASS
				5855~5875	-36.43	≤10.14	PASS
				5875~5925	-41.96	≤-23.89	PASS
				5925~5950	-43.01	≤-27	PASS
	Ant2	High	5825	5850~5855	-29.17	≤16.51	PASS
				5855~5875	-37.41	≤11.86	PASS
				5875~5925	-42.58	≤-25.78	PASS
				5925~5950	-41.4	≤-27	PASS
11N40SISO	Ant1	Low	5755	5650~5700	-32.63	≤7.87	PASS
				5700~5720	-14.02	≤14.80	PASS
				5720~5725	-12.26	≤20.89	PASS
				5745~5650	-41.29	≤-27	PASS
	Ant2	Low	5755	5650~5700	-32.92	≤9.29	PASS
				5700~5720	-15.82	≤15.41	PASS
				5720~5725	-15.11	≤18.43	PASS
				5745~5650	-41.42	≤-27	PASS
	Ant1	High	5795	5850~5855	-28.93	≤18.13	PASS
				5855~5875	-31.13	≤10.29	PASS
				5875~5925	-39.45	≤-24.61	PASS
				5925~5950	-43.1	≤-27	PASS
	Ant2	High	5795	5850~5855	-32.81	≤17.14	PASS
				5855~5875	-32.54	≤10.05	PASS
				5875~5925	-39.95	≤-26.33	PASS
				5925~5950	-42.14	≤-27	PASS
11AC20SISO	Ant1	Low	5745	5650~5700	-39.71	≤9.64	PASS
				5700~5720	-28.45	≤15.37	PASS
				5720~5725	-18.02	≤22.25	PASS

				5755~5650	-42.29	≤-27	PASS
	Ant2	Low	5745	5650~5700	-38.96	≤9.87	PASS
				5700~5720	-28.16	≤15.55	PASS
				5720~5725	-17.6	≤24.01	PASS
				5755~5650	-41.08	≤-27	PASS
	Ant1	High	5825	5850~5855	-24.37	≤15.83	PASS
				5855~5875	-36.22	≤10.22	PASS
				5875~5925	-41.25	≤-20.23	PASS
				5925~5950	-42.57	≤-27	PASS
	Ant2	High	5825	5850~5855	-30.46	≤15.83	PASS
				5855~5875	-34.72	≤11.36	PASS
				5875~5925	-41.78	≤-1.25	PASS
				5925~5950	-42.3	≤-27	PASS
11AC40S ISO	Ant1	Low	5755	5650~5700	-32.59	≤9.64	PASS
				5700~5720	-14.6	≤14.91	PASS
				5720~5725	-11.8	≤25.81	PASS
				5745~5650	-42.17	≤-27	PASS
	Ant2	Low	5755	5650~5700	-34.16	≤9.38	PASS
				5700~5720	-15.45	≤15.28	PASS
				5720~5725	-15.48	≤25.27	PASS
				5745~5650	-41.57	≤-27	PASS
	Ant1	High	5795	5850~5855	-27.68	≤18.13	PASS
				5855~5875	-31.03	≤10.98	PASS
				5875~5925	-37.93	≤-26.12	PASS
				5925~5950	-42.92	≤-27	PASS
	Ant2	High	5795	5850~5855	-33.16	≤19.78	PASS
				5855~5875	-35.01	≤10.21	PASS
				5875~5925	-39.63	≤-25.36	PASS
				5925~5950	-42.05	≤-27	PASS
11AC80S ISO	Ant1	Low	5775	5650~5700	-19.62	≤9.38	PASS
				5700~5720	-14.77	≤14.76	PASS
				5720~5725	-14.24	≤24.53	PASS
				5765~5650	-38.02	≤-27	PASS
		High	5775	5850~5855	-16.45	≤18.79	PASS
				5855~5875	-16.8	≤10.09	PASS
				5875~5925	-23.6	≤-25.79	PASS
				5925~5950	-39.36	≤-27	PASS
	Ant2	Low	5775	5650~5700	-19.74	≤9.38	PASS
				5700~5720	-16.58	≤15.59	PASS
				5720~5725	-14.6	≤16.63	PASS
				5765~5650	-36.53	≤-27	PASS
		High	5775	5850~5855	-20.04	≤20.45	PASS

				5855~5875	-17.88	≤10.25	PASS
				5875~5925	-24.22	≤-26.76	PASS
				5925~5950	-39.23	≤-27	PASS