Appendix Test Data

Report No.:	18220WC30053602	Test Sample No.:	1-2-2
Start Test Date:	2023.03.31	Finish Test Date:	2023.04.07
Test Engineer:	Tony.He	Auditor:	Edward.Pan
Temperature:	24.5℃	Relative Humidity:	44%
Pressure:	1012 hPa		

Appendix A1: Emission Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]
11A	Ant1	5180	19.800	5170.160	5189.960
		5200	19.680	5190.160	5209.840
		5240	19.760	5230.000	5249.760
		5745	19.880	5735.160	5755.040
		5785	19.800	5775.120	5794.920
		5825	19.880	5815.120	5835.000
11N20SISO	Ant1	5180	20.280	5169.880	5190.160
		5200	19.920	5190.040	5209.960
		5240	20.120	5230.040	5250.160
		5745	20.000	5735.000	5755.000
		5785	20.120	5775.040	5795.160
		5825	20.000	5815.000	5835.000
11N40SISO	Ant1	5190	40.080	5170.240	5210.320
		5230	40.160	5209.840	5250.000
		5755	40.400	5735.160	5775.560
		5795	40.080	5775.160	5815.240
11AC20SISO	Ant1	5180	20.120	5170.080	5190.200
		5200	20.280	5190.040	5210.320
		5240	20.080	5230.040	5250.120
		5745	20.000	5735.080	5755.080
		5785	20.120	5775.040	5795.160
		5825	20.160	5814.880	5835.040
11AC40SISO	Ant1	5190	39.840	5170.080	5209.920
		5230	40.160	5210.080	5250.240
		5755	40.240	5735.080	5775.320

		5795	40.080	5775.160	5815.240
11AC80SISO	Ant1	5210	79.840	5170.320	5250.160
		5775	80.800	5734.680	5815.480

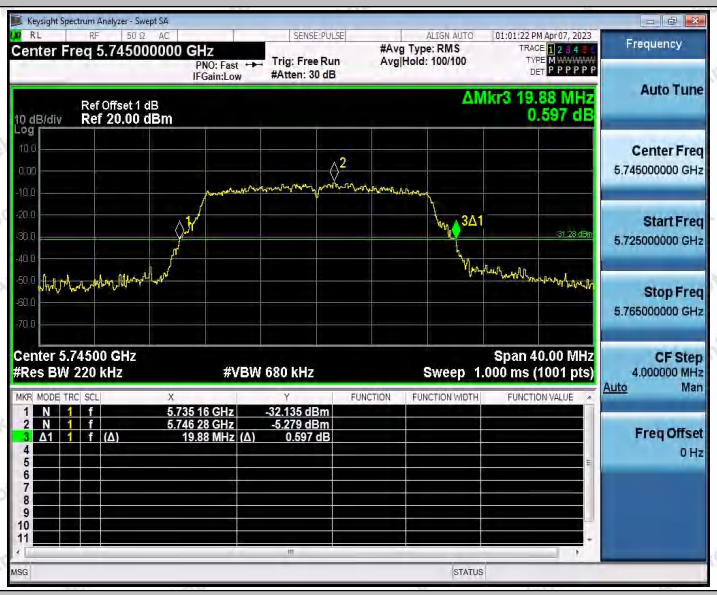
Test Graphs

11A_Ant1_5180

11A_Ant1_5200

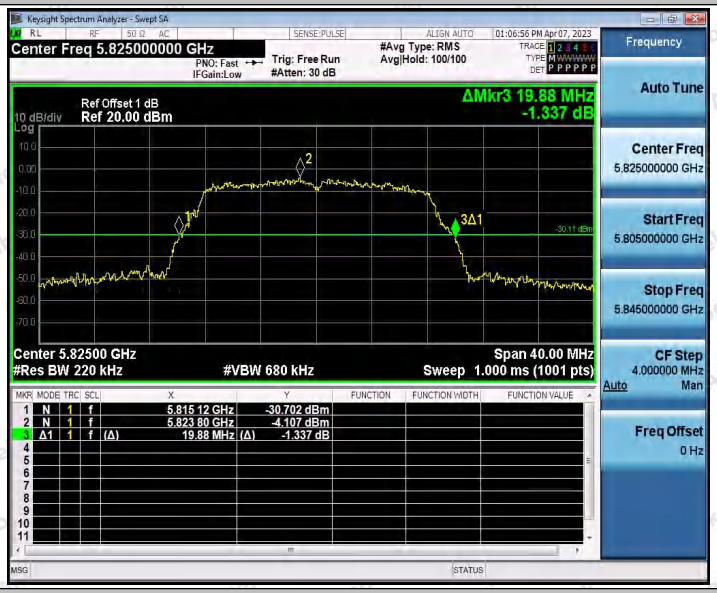
11A_Ant1_5240

11A_Ant1_5745

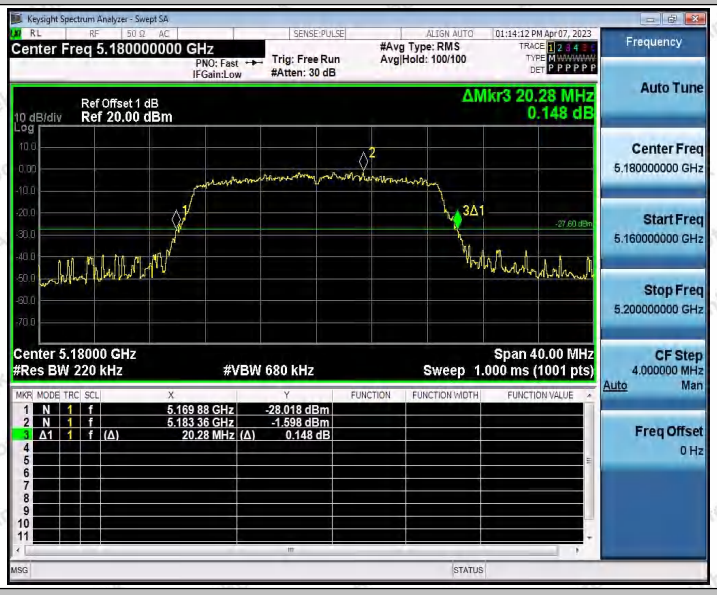


11A_Ant1_5785

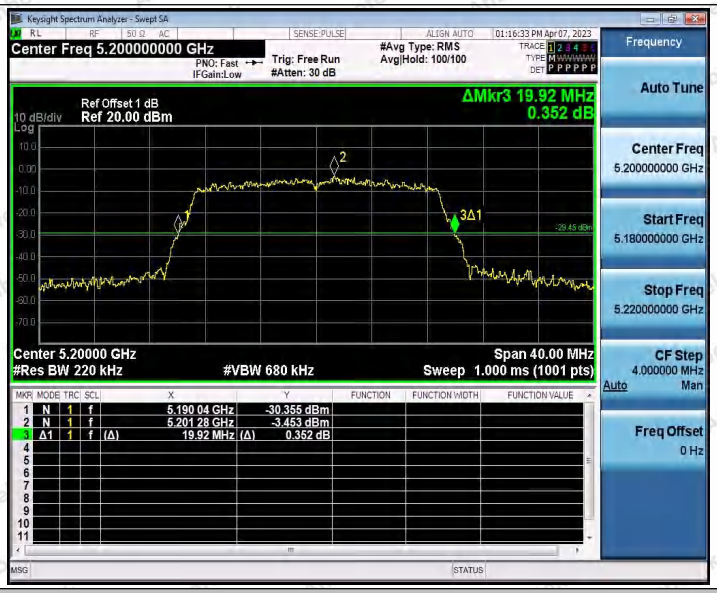
11A_Ant1_5825



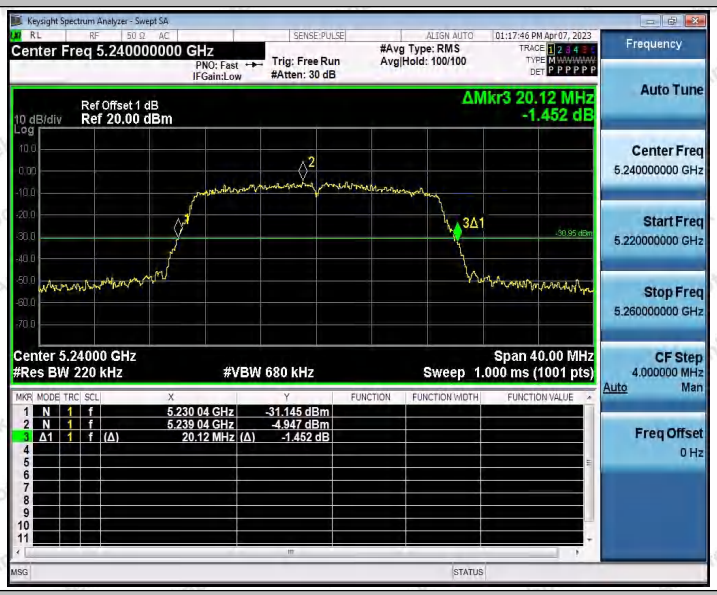
11N20SISO_Ant1_5180



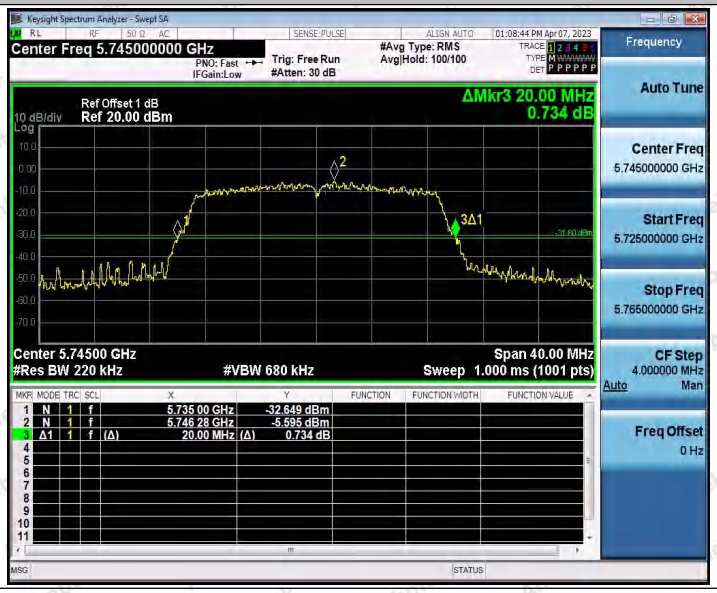
11N20SISO_Ant1_5200



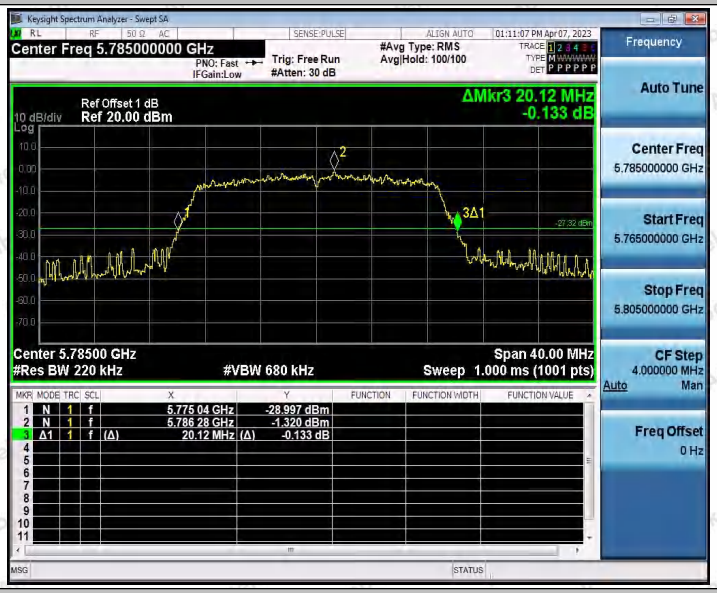
11N20SISO_Ant1_5240



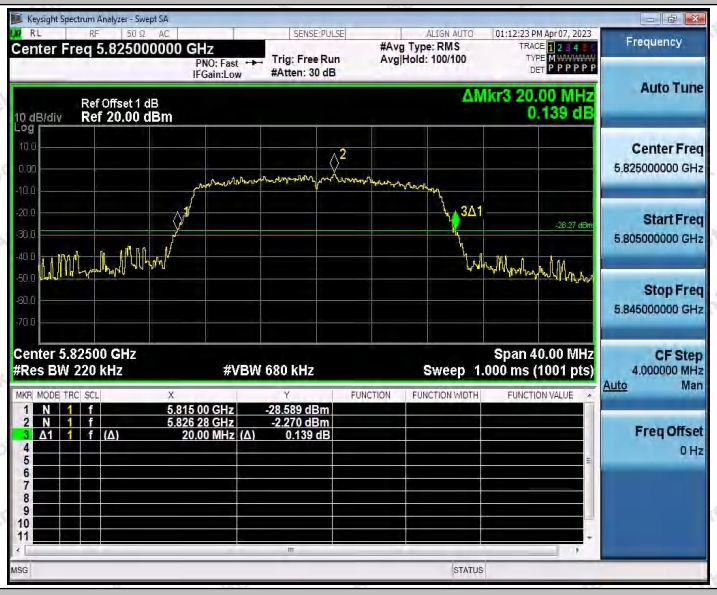
11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



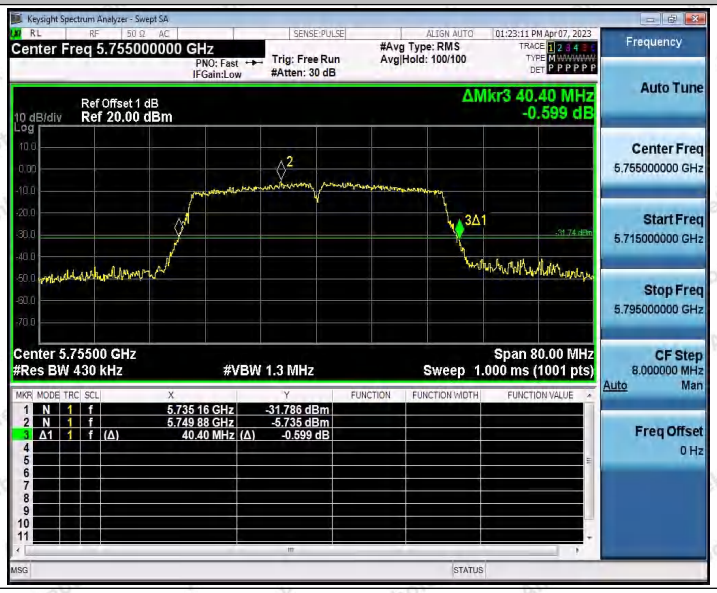
11N20SISO_Ant1_5825



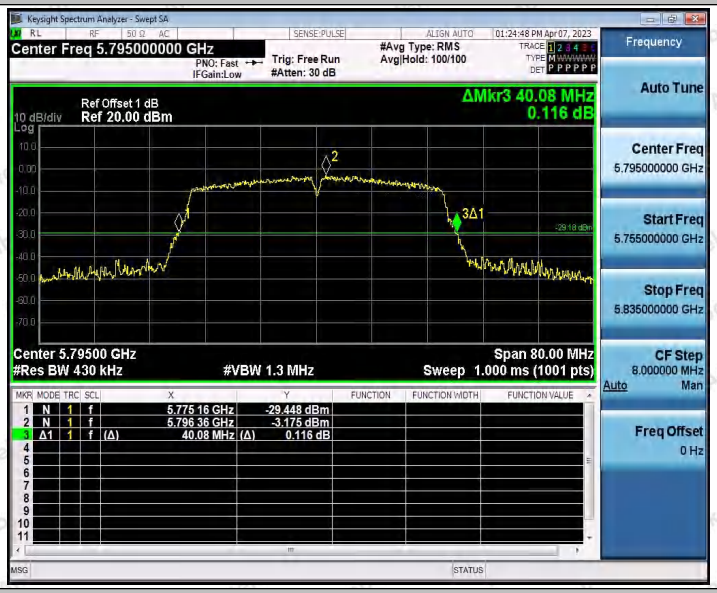
11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

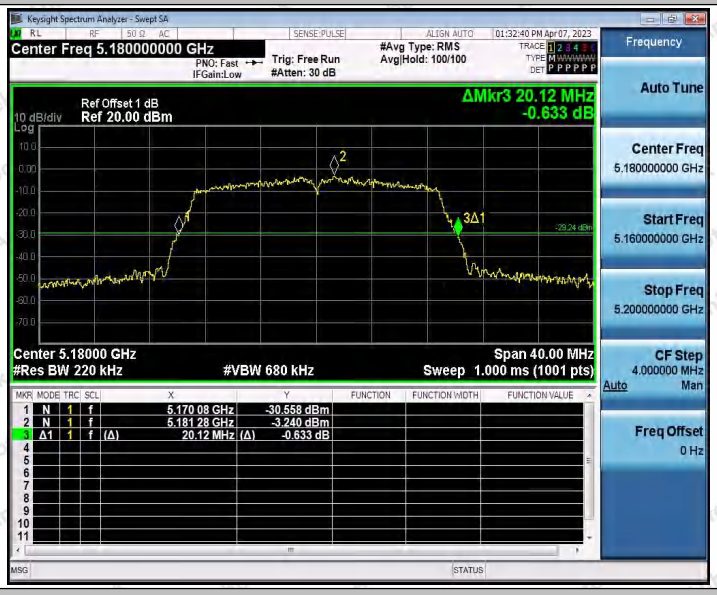
11N40SISO_Ant1_5755



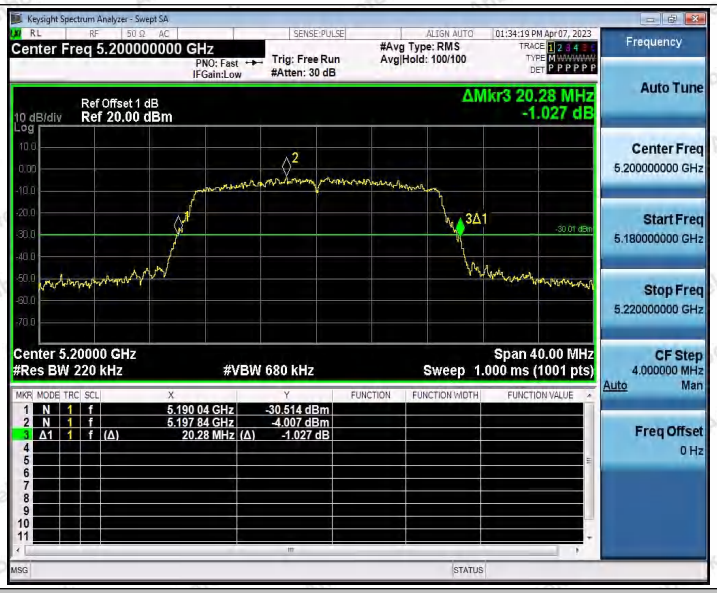
11N40SISO_Ant1_5795



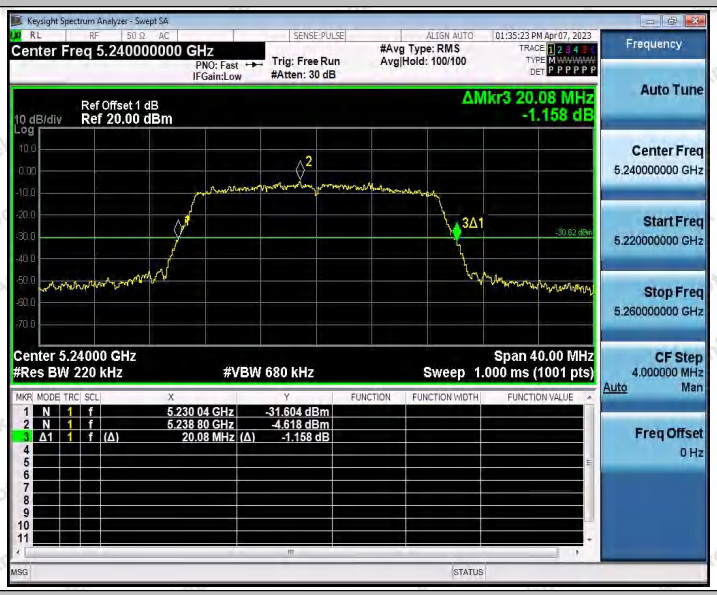
11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



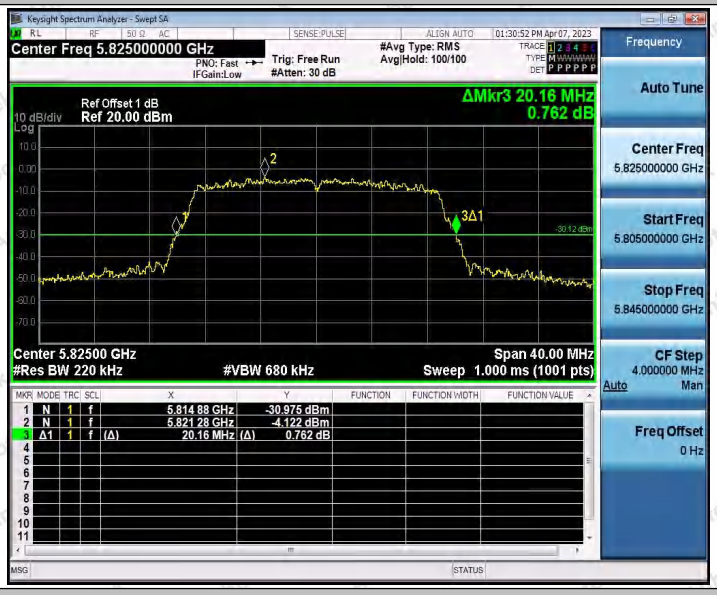
11AC20SISO_Ant1_5240



11AC20SISO_Ant1_5745

11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825



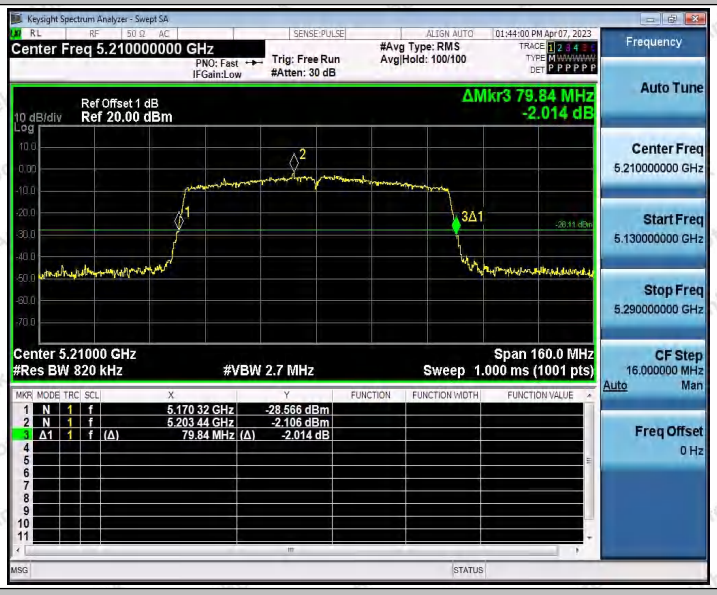
11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230

11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5210



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: 100/100
04:08:13 PM Apr 07, 2023
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
ΔMkr3 80.80 MHz
3.527 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 68 GHz -34.925 dBm
2 N 1 f 5.792 92 GHz -4.031 dBm
3 Δ1 1 f (Δ) 80.80 MHz (Δ) 3.527 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 A2: Occupied channel bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
11A	Ant1	5180	16.883	5171.6290	5188.5120
		5200	16.791	5191.6517	5208.4427
		5240	16.944	5231.5299	5248.4739
		5745	16.918	5736.5823	5753.5003
		5785	16.850	5776.6801	5793.5301
		5825	16.890	5816.5099	5833.3999
11N20SISO	Ant1	5180	17.889	5171.1343	5189.0233
		5200	17.781	5191.1590	5208.9400
		5240	17.814	5231.1024	5248.9164
		5745	17.886	5736.0810	5753.9670
		5785	17.866	5776.1393	5794.0053
		5825	17.891	5816.0413	5833.9323
11N40SISO	Ant1	5190	36.189	5172.0517	5208.2407
		5230	36.194	5211.8686	5248.0626
		5755	36.315	5736.9874	5773.3024
		5795	36.047	5777.1090	5813.1560
11AC20SISO	Ant1	5180	17.828	5171.1401	5188.9681
		5200	17.828	5191.1357	5208.9637
		5240	17.875	5231.0879	5248.9629
		5745	17.842	5736.1087	5753.9507
		5785	17.803	5776.1813	5793.9843
		5825	17.818	5816.0650	5833.8830
11AC40SISO	Ant1	5190	36.110	5172.1014	5208.2114
		5230	36.211	5211.8769	5248.0879
		5755	36.314	5736.9972	5773.3112
		5795	36.093	5777.0586	5813.1516
11AC80SISO	Ant1	5210	74.821	5172.7852	5247.6062
		5775	75.045	5737.7303	5812.7753

Test Graphs

11A_Ant1_5180

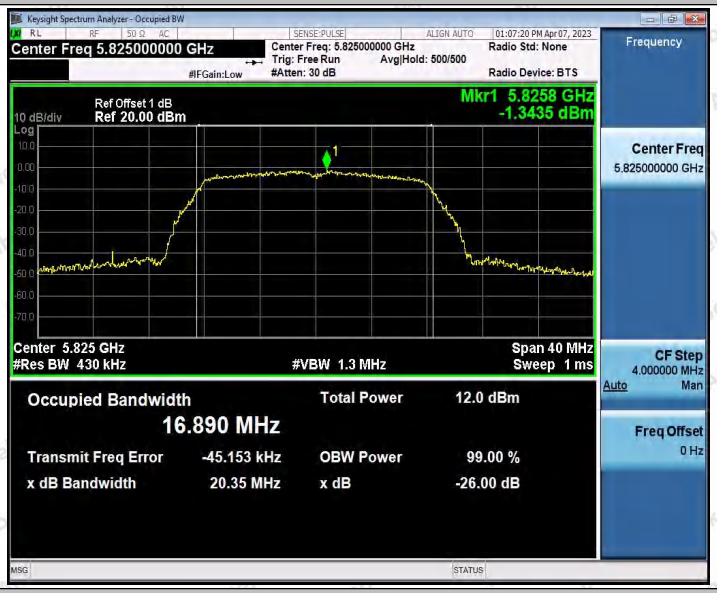
11A_Ant1_5200

11A_Ant1_5240

11A_Ant1_5745

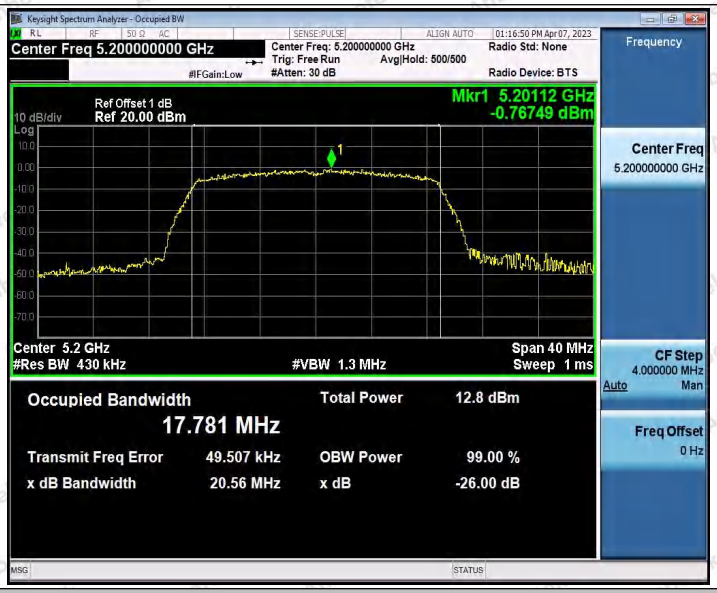
11A_Ant1_5785

11A_Ant1_5825



11N20SISO_Ant1_5180

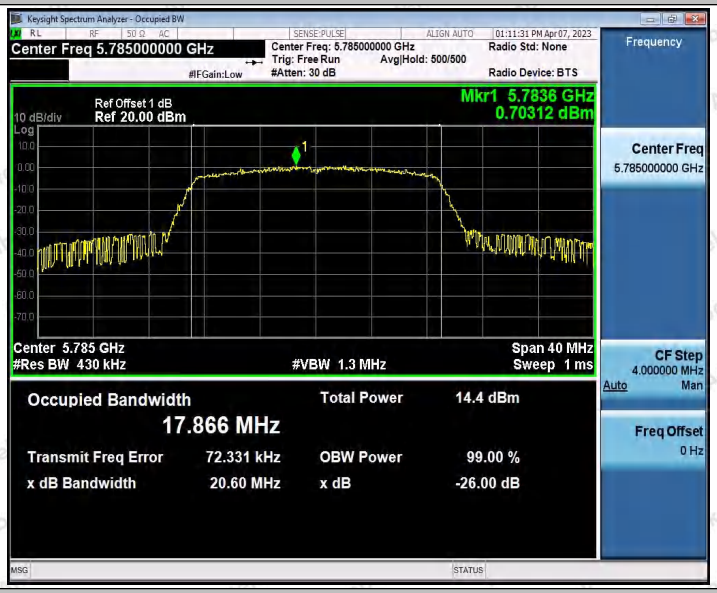
11N20SISO_Ant1_5200



11N20SISO_Ant1_5240

11N20SISO_Ant1_5745

11N20SISO_Ant1_5785



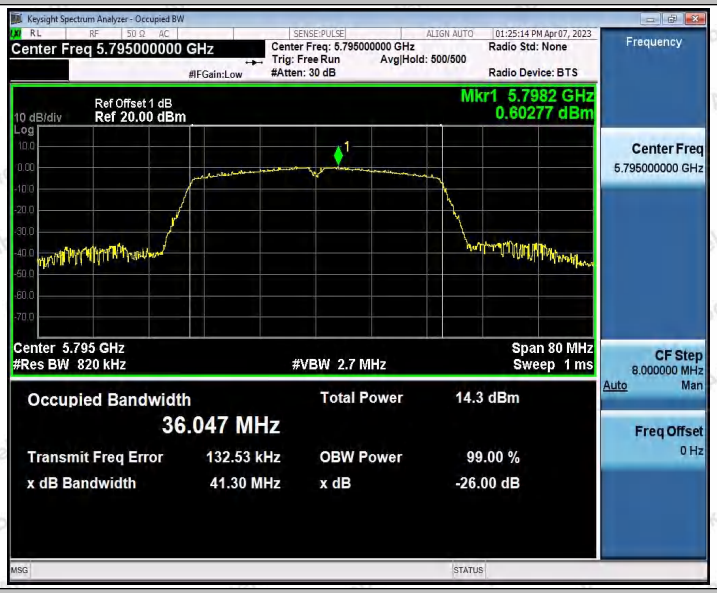
11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

11N40SISO_Ant1_5755

11N40SISO_Ant1_5795



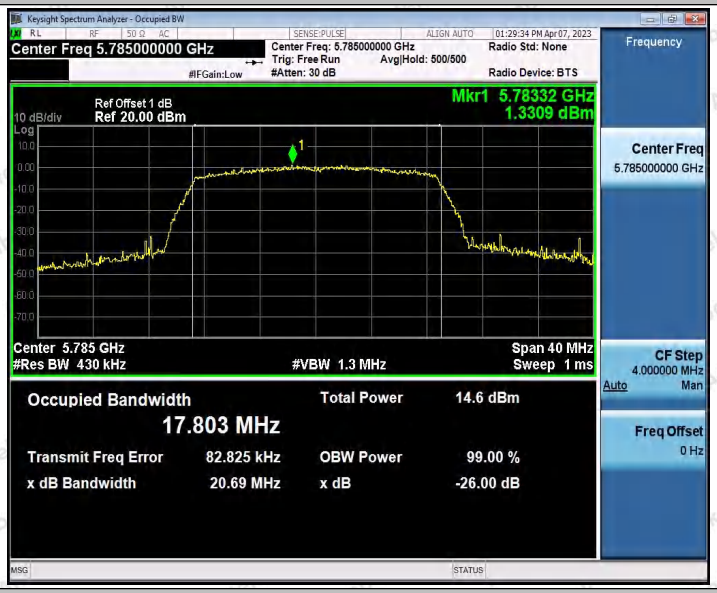
11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240

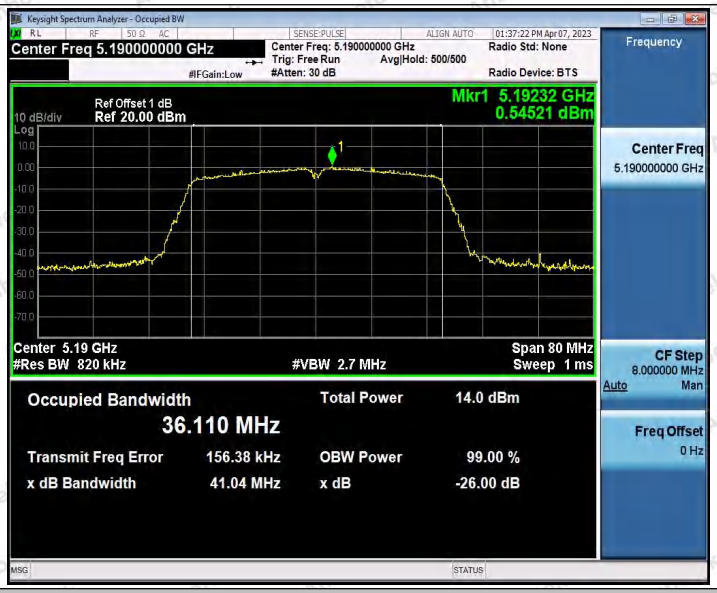
11AC20SISO_Ant1_5745

11AC20SISO_Ant1_5785



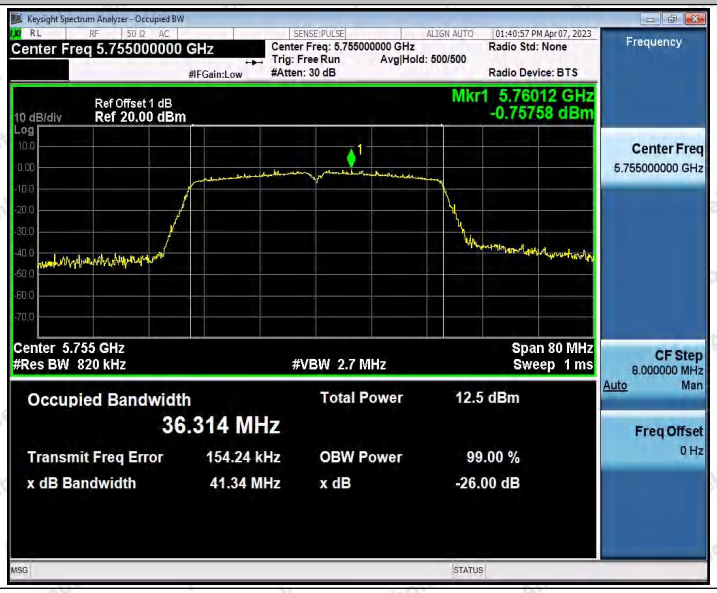
11AC20SISO_Ant1_5825

11AC40SISO_Ant1_5190



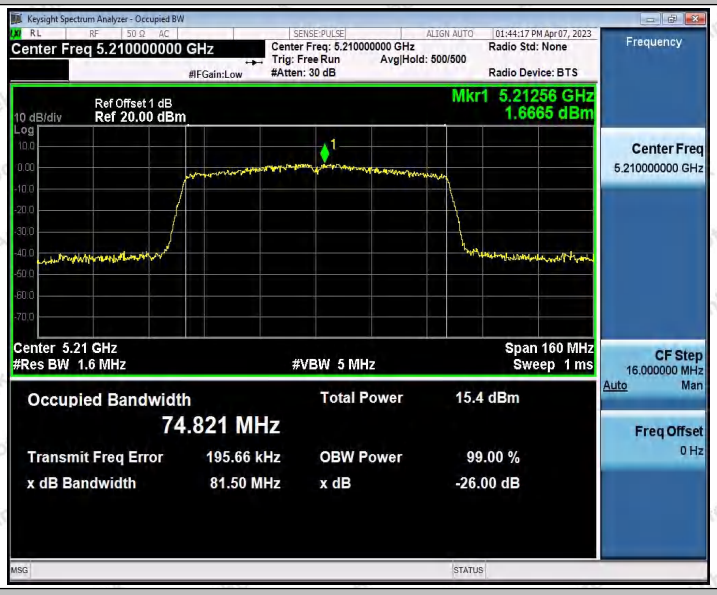
11AC40SISO_Ant1_5230

11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5210



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
#IFGain:Low
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.7814 GHz
0.80448 dBm
Center 5.775 GHz
#Res BW 1.6 MHz
#VBW 5 MHz
Span 160 MHz
Sweep 1 ms
Occupied Bandwidth
75.045 MHz
Total Power 14.5 dBm
Transmit Freq Error 252.76 kHz
OBW Power 99.00 %
x dB Bandwidth 81.55 MHz
x dB -26.00 dB
Frequency
Center Freq
5.775000000 GHz
CF Step
16.000000 MHz
Auto Man
Freq Offset
0 Hz

Appendix A3: Min emission bandwidth

Test Result B4

Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.000	5737.520	5752.520	0.5	PASS
		5785	14.920	5777.560	5792.480	0.5	PASS
		5825	15.680	5816.880	5832.560	0.5	PASS
11N20SISO	Ant1	5745	13.800	5738.720	5752.520	0.5	PASS
		5785	15.320	5777.480	5792.800	0.5	PASS
		5825	15.120	5817.440	5832.560	0.5	PASS
11N40SISO	Ant1	5755	35.040	5737.480	5772.520	0.5	PASS
		5795	35.040	5777.480	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	15.280	5737.280	5752.560	0.5	PASS
		5785	15.920	5777.520	5793.440	0.5	PASS
		5825	15.640	5816.880	5832.520	0.5	PASS
11AC40SISO	Ant1	5755	35.040	5737.560	5772.600	0.5	PASS
		5795	34.960	5777.560	5812.520	0.5	PASS
11AC80SISO	Ant1	5775	75.040	5737.560	5812.600	0.5	PASS

Test Graphs B4

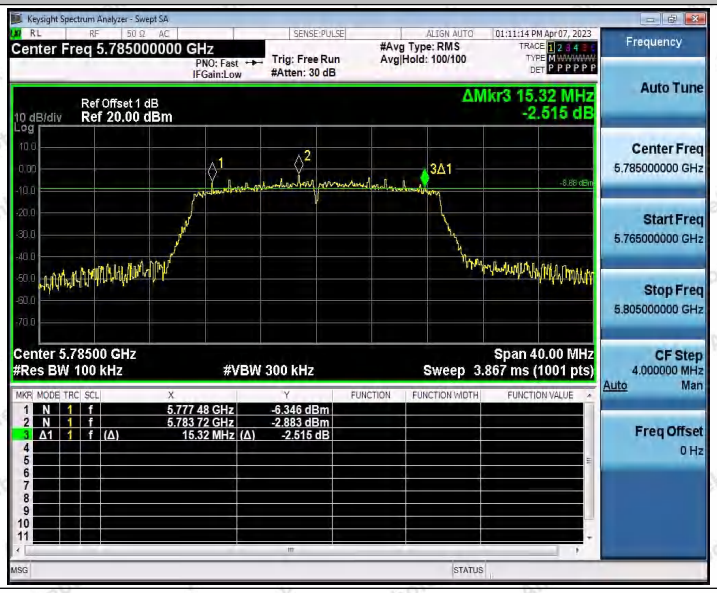
11A_Ant1_5745

11A_Ant1_5785

11A_Ant1_5825

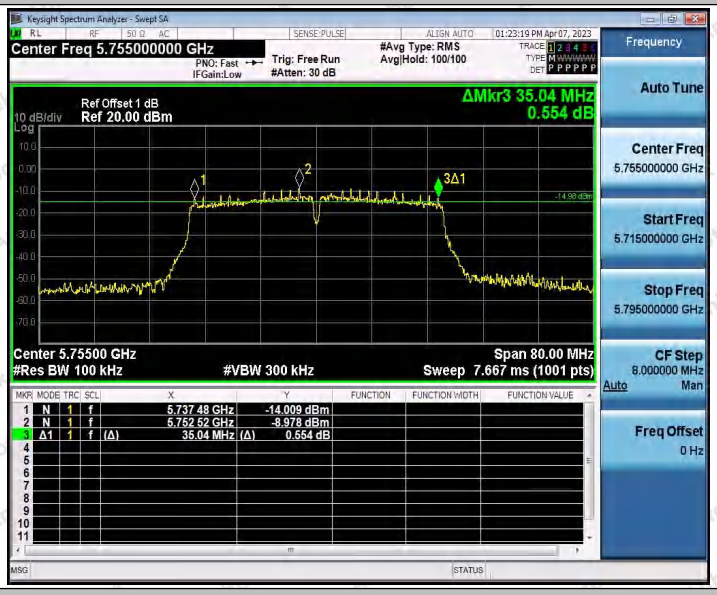
11N20SISO_Ant1_5745

11N20SISO_Ant1_5785

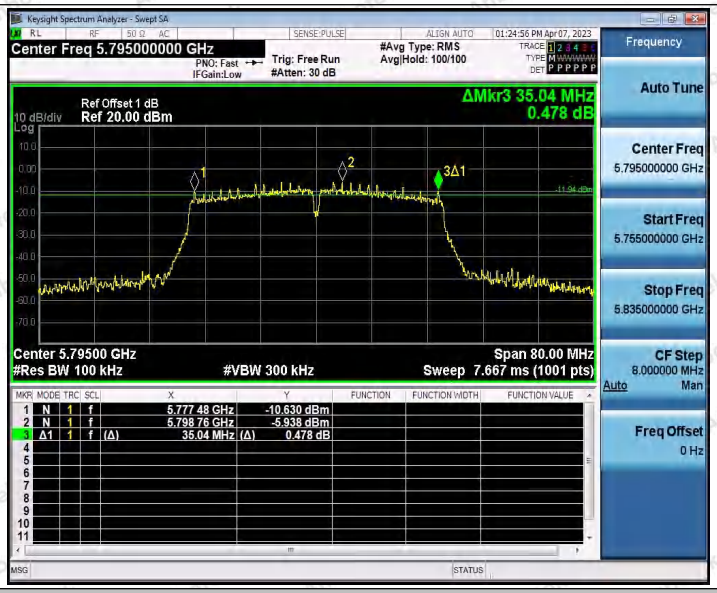


11N20SISO_Ant1_5825

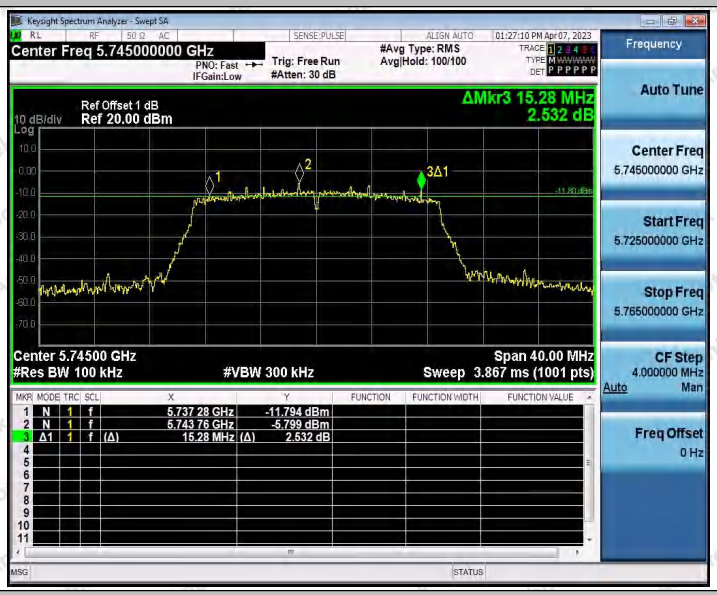
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

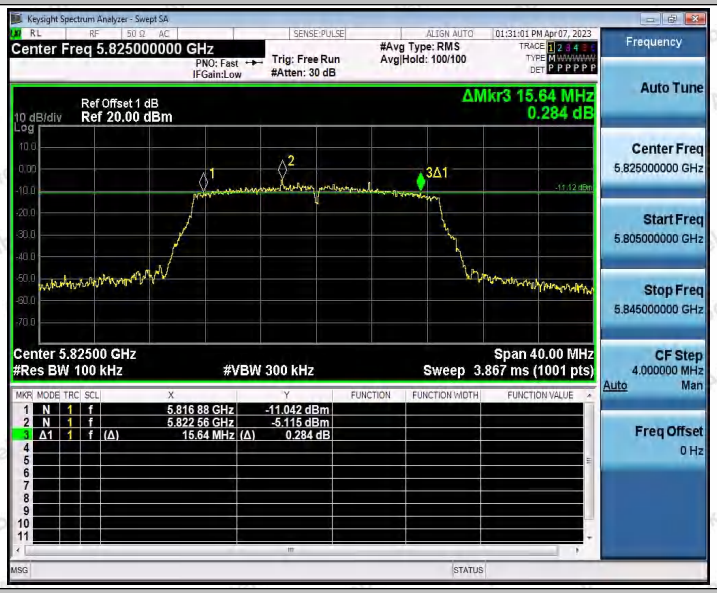


11AC20SISO_Ant1_5745

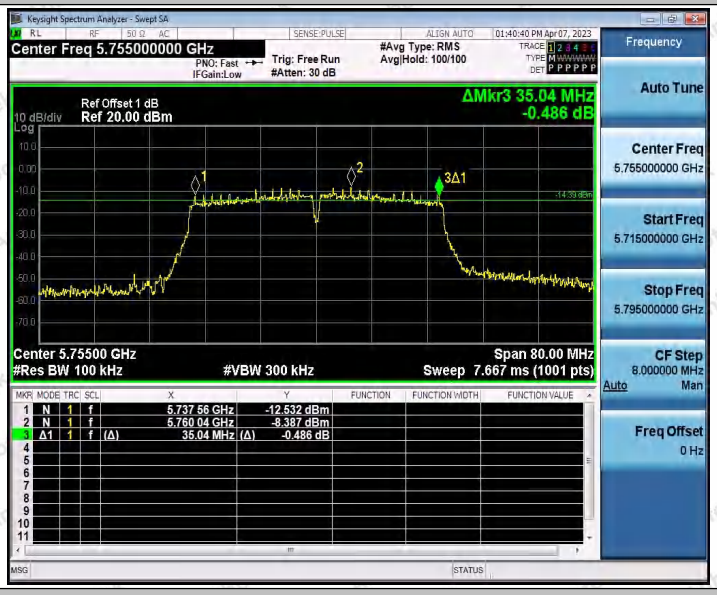


11AC20SISO_Ant1_5785

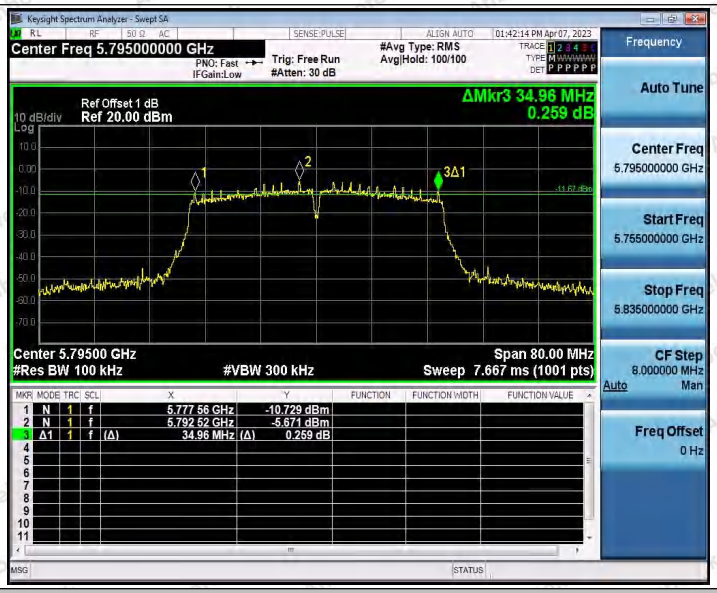
11AC20SISO_Ant1_5825



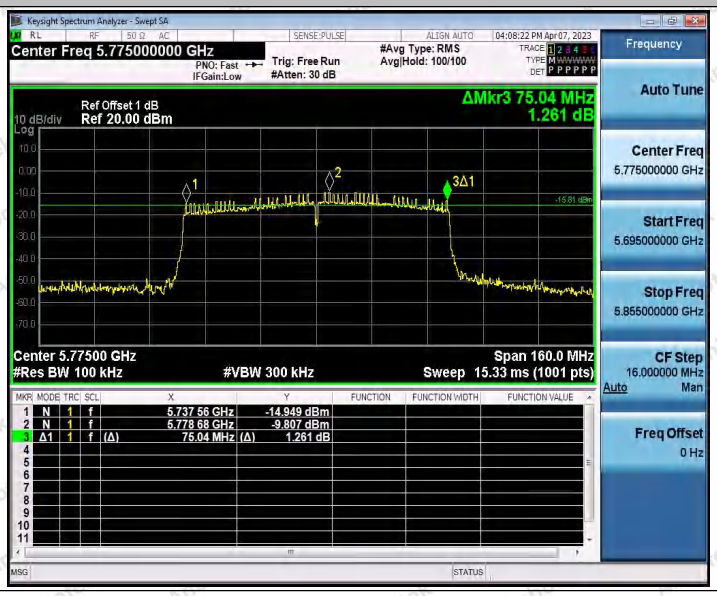
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775



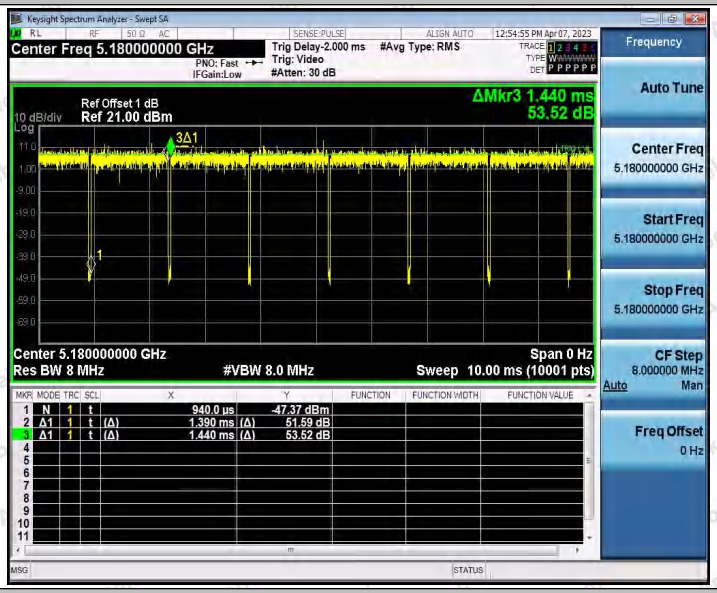
Appendix B: Duty Cycle

Test Result

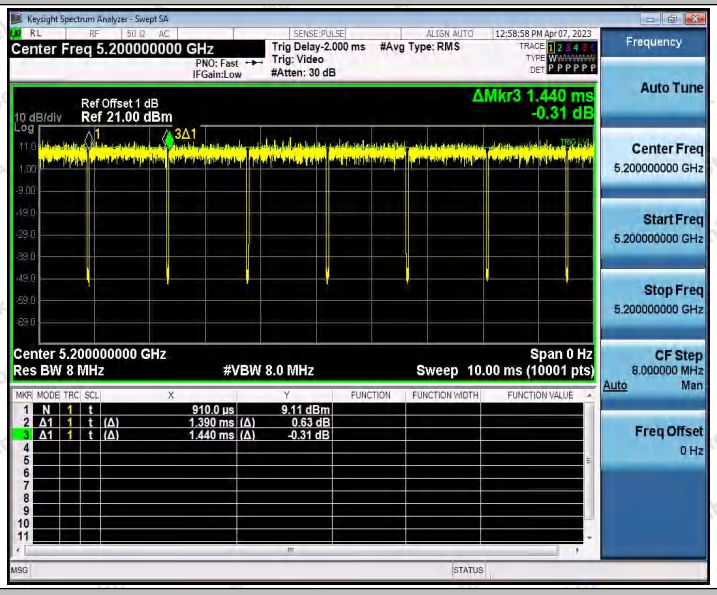
Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	1.39	1.44	96.53
		5200	1.39	1.44	96.53
		5240	1.40	1.44	97.22
		5745	1.39	1.44	96.53
		5785	1.40	1.44	97.22
		5825	1.39	1.44	96.53
11N20SISO	Ant1	5180	1.30	1.34	97.01
		5200	1.30	1.34	97.01
		5240	1.30	1.35	96.30
		5745	1.30	1.35	96.30
		5785	1.30	1.34	97.01
		5825	1.30	1.35	96.30
11N40SISO	Ant1	5190	0.65	0.69	94.20
		5230	0.65	0.70	92.86
		5755	0.65	0.69	94.20
		5795	0.65	0.70	92.86
11AC20SISO	Ant1	5180	1.32	1.36	97.06
		5200	1.32	1.36	97.06
		5240	1.32	1.36	97.06
		5745	1.31	1.36	96.32
		5785	1.31	1.36	96.32
		5825	1.31	1.36	96.32
11AC40SISO	Ant1	5190	0.66	0.70	94.29
		5230	0.65	0.70	92.86
		5755	0.66	0.70	94.29
		5795	0.65	0.70	92.86
11AC80SISO	Ant1	5210	0.33	0.37	89.19
		5775	0.32	0.37	86.49

Test Graphs

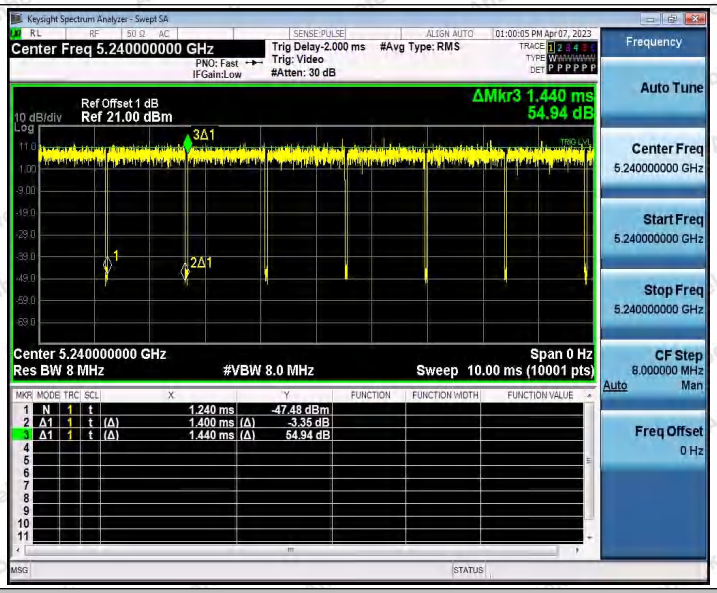
11A_Ant1_5180



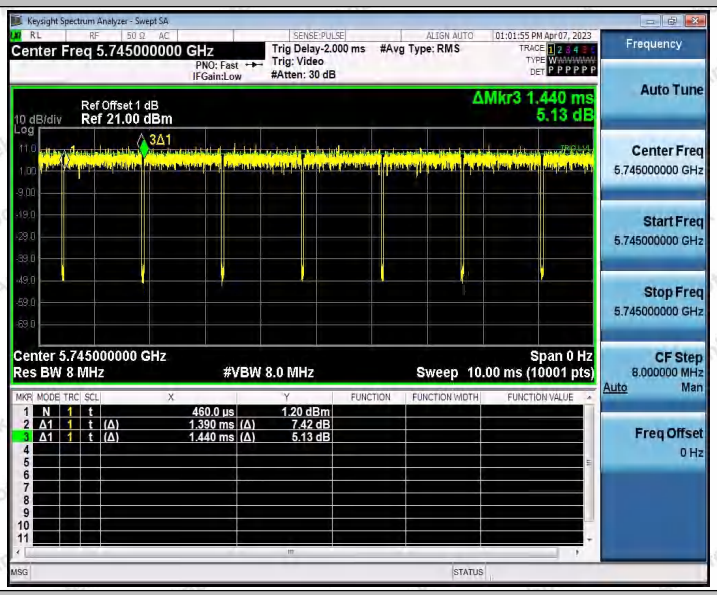
11A_Ant1_5200



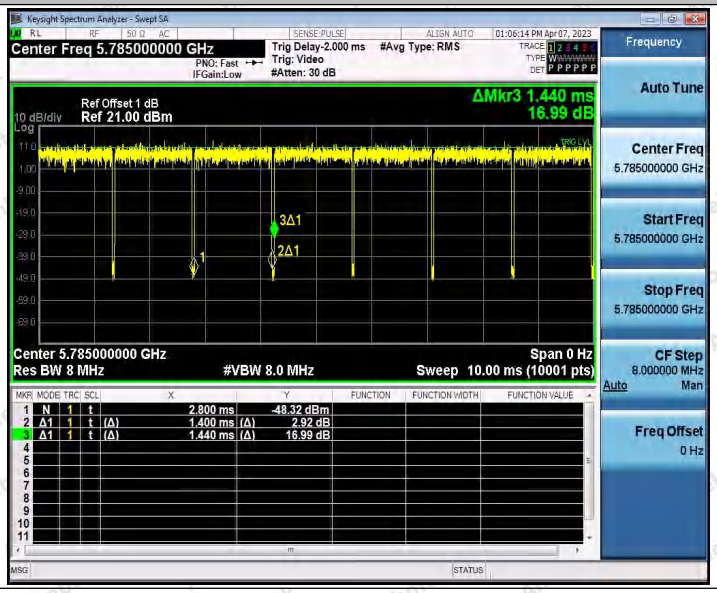
11A_Ant1_5240



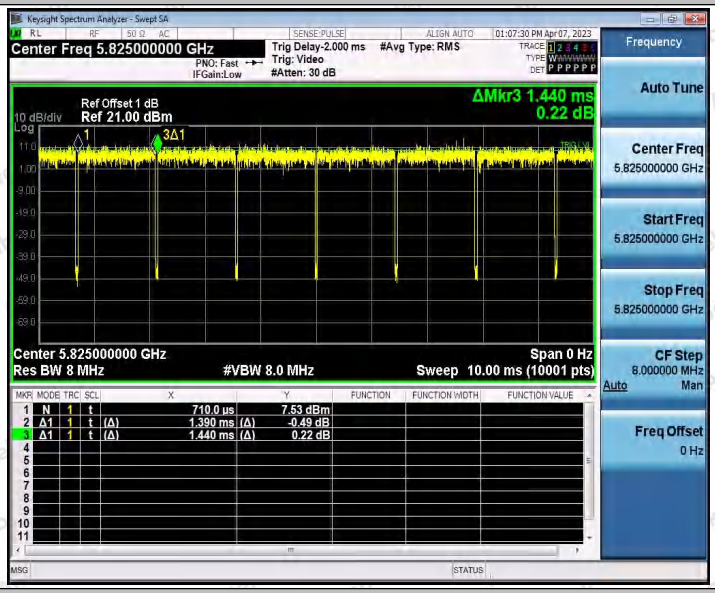
11A_Ant1_5745



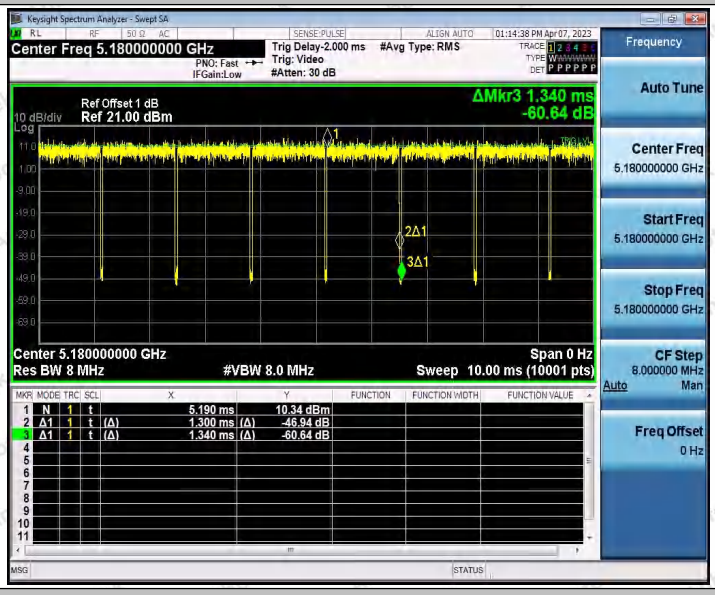
11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200