Appendix Test Data

Report No.:	18220WC30237402	Test Sample No.:	1-2-2
Start Test Date:	2023.11.16	Finish Test Date:	2023.11.20
Test Engineer:	Hayman Chen	Auditor:	Rick Luo
Temperature:	25.5℃	Relative Humidity:	43%
Pressure:	101kPa		

Appendix A1: Emission Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.640	5170.200	5189.840	---	---
		5200	19.680	5190.040	5209.720	---	---
		5240	19.680	5230.120	5249.800	---	---
		5260	19.360	5250.240	5269.600	---	---
		5300	19.520	5290.200	5309.720	---	---
		5320	19.840	5310.120	5329.960	---	---
		5500	19.800	5489.960	5509.760	---	---
		5600	19.480	5590.280	5609.760	---	---
		5700	19.800	5689.880	5709.680	---	---
		5745	19.600	5735.080	5754.680	---	---
		5785	19.760	5775.000	5794.760	---	---
		5825	19.600	5815.120	5834.720	---	---
11N20SISO	Ant1	5180	20.000	5169.880	5189.880	---	---
		5200	20.080	5189.840	5209.920	---	---
		5240	20.240	5229.800	5250.040	---	---
		5260	19.920	5249.960	5269.880	---	---
		5300	20.000	5289.920	5309.920	---	---
		5320	19.880	5310.080	5329.960	---	---
		5500	20.000	5490.000	5510.000	---	---
		5600	20.160	5589.960	5610.120	---	---
		5700	20.040	5689.800	5709.840	---	---
		5745	20.000	5734.960	5754.960	---	---
		5785	19.960	5774.960	5794.920	---	---

		5825	19.960	5814.960	5834.920	---	---
11N40SISO	Ant1	5190	39.920	5170.000	5209.920	---	---
		5230	39.040	5210.480	5249.520	---	---
		5270	39.680	5250.240	5289.920	---	---
		5310	39.280	5290.240	5329.520	---	---
		5510	40.320	5490.080	5530.400	---	---
		5590	39.280	5570.240	5609.520	---	---
		5670	39.120	5650.400	5689.520	---	---
		5755	40.000	5734.920	5774.920	---	---
		5795	40.240	5774.840	5815.080	---	---
11AC20SISO	Ant1	5180	20.080	5169.880	5189.960	---	---
		5200	19.880	5190.000	5209.880	---	---
		5240	20.200	5229.880	5250.080	---	---
		5260	20.000	5250.000	5270.000	---	---
		5300	19.760	5290.160	5309.920	---	---
		5320	19.920	5310.000	5329.920	---	---
		5500	19.960	5489.880	5509.840	---	---
		5600	19.760	5590.080	5609.840	---	---
		5700	20.200	5689.920	5710.120	---	---
		5745	20.000	5735.000	5755.000	---	---
		5785	19.960	5775.040	5795.000	---	---
		5825	19.840	5815.040	5834.880	---	---
11AC40SISO	Ant1	5190	39.680	5170.240	5209.920	---	---
		5230	40.240	5209.840	5250.080	---	---
		5270	39.760	5250.240	5290.000	---	---
		5310	40.080	5290.160	5330.240	---	---
		5510	39.840	5490.160	5530.000	---	---
		5590	39.920	5570.000	5609.920	---	---
		5670	39.760	5650.080	5689.840	---	---
		5755	39.600	5735.240	5774.840	---	---
		5795	40.160	5775.000	5815.160	---	---
11AC80SISO	Ant1	5210	79.520	5170.320	5249.840	---	---
		5290	78.880	5250.480	5329.360	---	---
		5530	79.040	5490.640	5569.680	---	---
		5610	79.520	5570.320	5649.840	---	---
		5775	79.680	5735.160	5814.840	---	---

Test Graphs

11A_Ant1_5180

11A_Ant1_5200

11A_Ant1_5240

11A_Ant1_5260

11A_Ant1_5300

11A_Ant1_5320

11A_Ant1_5500

11A_Ant1_5600

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_5300

11N20SISO_Ant1_5320

11N20SISO_Ant1_5500

11N20SISO_Ant1_5600

11N20SISO_Ant1_5700

11N20SISO_Ant1_5745

11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

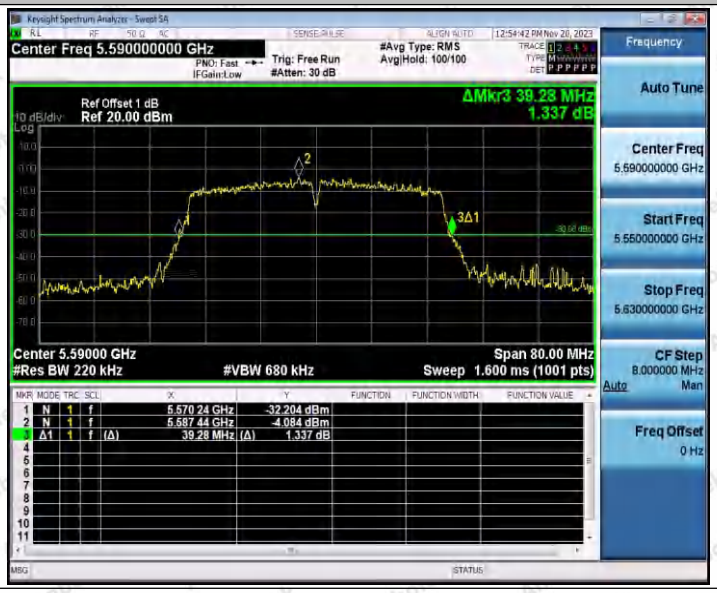
11N40SISO_Ant1_5230

11N40SISO_Ant1_5270

11N40SISO_Ant1_5310

11N40SISO_Ant1_5510

11N40SISO_Ant1_5590



11N40SISO_Ant1_5670

11N40SISO_Ant1_5755

11N40SISO_Ant1_5795

11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240

11AC20SISO_Ant1_5260

11AC20SISO_Ant1_5300

11AC20SISO_Ant1_5320

11AC20SISO_Ant1_5500

11AC20SISO_Ant1_5600

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

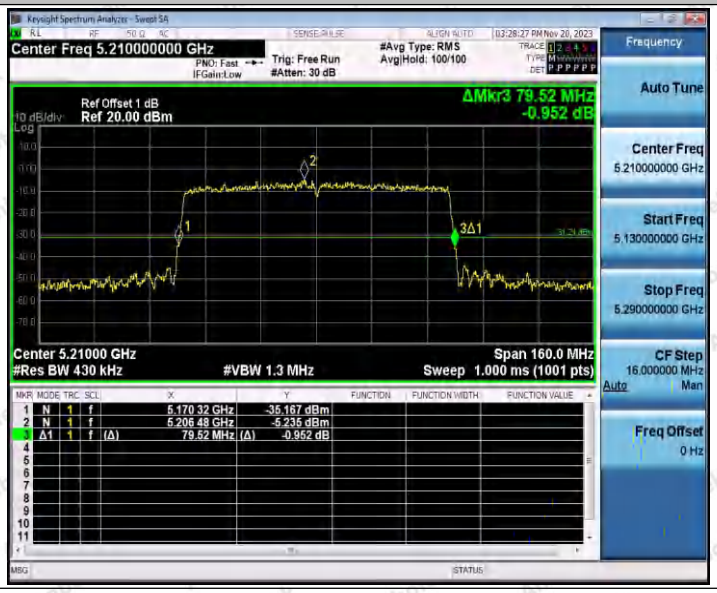
11AC40SISO_Ant1_5590

11AC40SISO_Ant1_5670

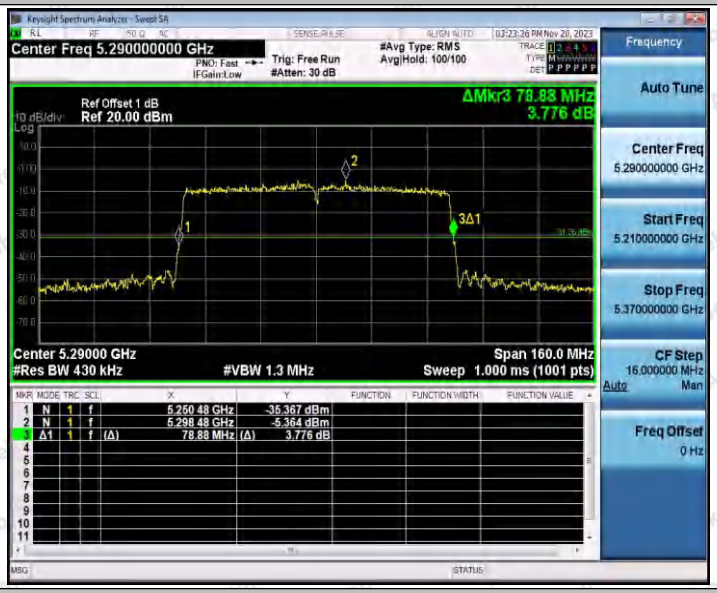
11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

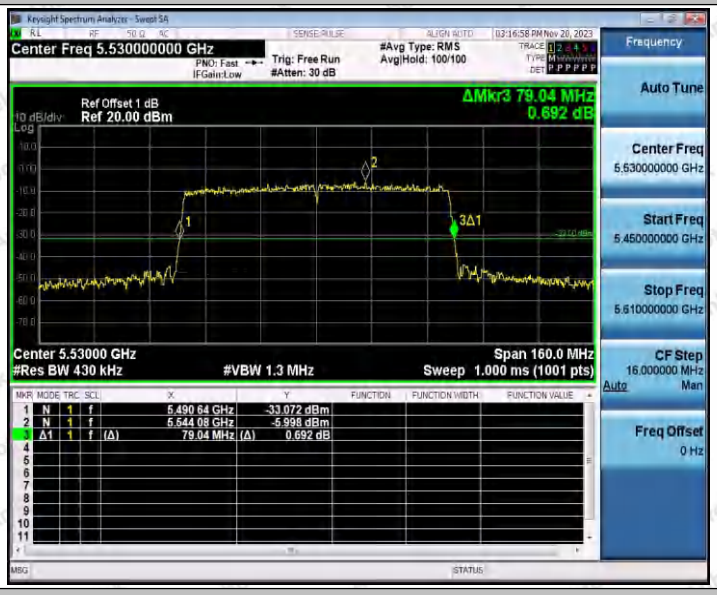
11AC80SISO_Ant1_5210



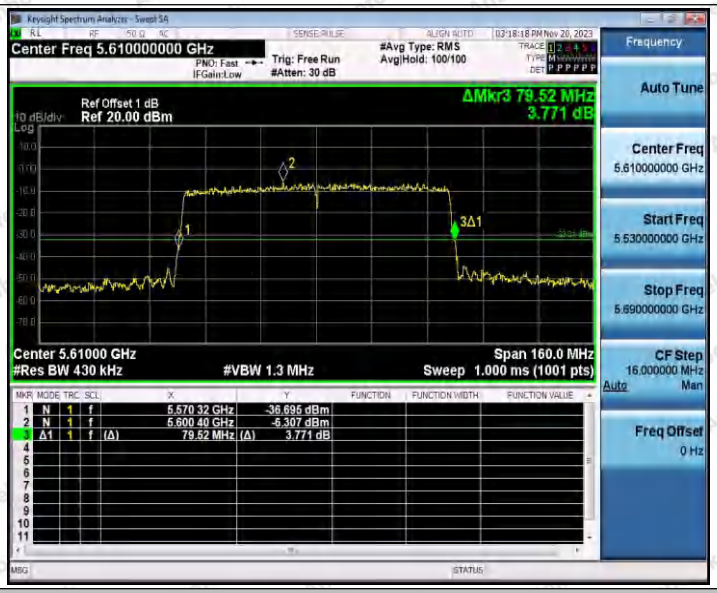
11AC80SISO_Ant1_5290



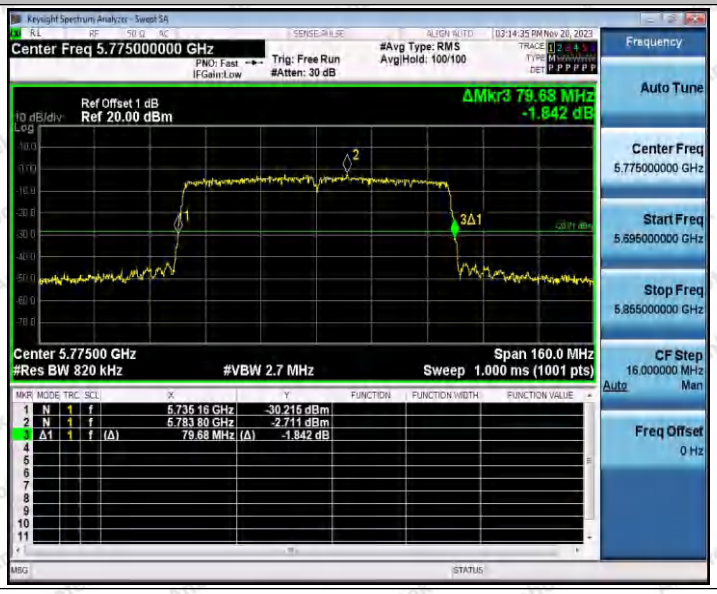
11AC80SISO_Ant1_5530



11AC80SISO_Ant1_5610



11AC80SISO_Ant1_5775



Appendix A2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5200	16.809	5191.5278	5208.3368	---	---
		5240	16.734	5231.5851	5248.3191	---	---
		5260	16.744	5251.6039	5268.3479	---	---
		5300	16.753	5291.5748	5308.3278	---	---
		5320	16.788	5311.5333	5328.3213	---	---
		5500	16.765	5491.5608	5508.3258	---	---
		5600	16.724	5591.5990	5608.3230	---	---
		5700	16.730	5691.5746	5708.3046	---	---
		5745	16.764	5736.5473	5753.3113	---	---
		5785	16.741	5776.5600	5793.3010	---	---
		5825	16.720	5816.5454	5833.2654	---	---
11N20SISO	Ant1	5180	17.707	5171.1141	5188.8211	---	---
		5200	17.729	5191.0877	5208.8167	---	---
		5240	17.696	5231.1253	5248.8213	---	---
		5260	17.669	5251.1055	5268.7745	---	---
		5300	17.678	5291.0886	5308.7666	---	---
		5320	17.714	5311.0763	5328.7903	---	---
		5500	17.712	5491.0654	5508.7774	---	---
		5600	17.750	5591.0747	5608.8247	---	---
		5700	17.729	5691.0910	5708.8200	---	---
		5745	17.695	5736.0957	5753.7907	---	---
		5785	17.728	5776.0747	5793.8027	---	---
		5825	17.746	5816.0172	5833.7632	---	---
11N40SISO	Ant1	5190	36.073	5171.9785	5208.0515	---	---
		5230	36.123	5211.9428	5248.0658	---	---
		5270	36.151	5251.9658	5288.1168	---	---
		5310	36.020	5291.9896	5328.0096	---	---
		5510	36.142	5491.8905	5528.0325	---	---
		5590	36.106	5571.9605	5608.0665	---	---
		5670	36.061	5651.9589	5688.0199	---	---
		5755	36.066	5736.9507	5773.0167	---	---
		5795	36.030	5776.9580	5812.9880	---	---
11AC20SISO	Ant1	5180	17.758	5171.1048	5188.8628	---	---
		5200	17.682	5191.1145	5208.7965	---	---
		5240	17.662	5231.1326	5248.7946	---	---
		5260	17.688	5251.1051	5268.7931	---	---
		5300	17.671	5291.1341	5308.8051	---	---

		5320	17.717	5311.1060	5328.8230	---	---
		5500	17.700	5491.0746	5508.7746	---	---
		5600	17.721	5591.0675	5608.7885	---	---
		5700	17.715	5691.0957	5708.8107	---	---
		5745	17.710	5736.0944	5753.8044	---	---
		5785	17.675	5776.0964	5793.7714	---	---
		5825	17.678	5816.0751	5833.7531	---	---
11AC40SISO	Ant1	5190	36.130	5171.9278	5208.0578	---	---
		5230	36.017	5212.0183	5248.0353	---	---
		5270	36.173	5251.9262	5288.0992	---	---
		5310	36.035	5291.9450	5327.9800	---	---
		5510	36.216	5491.8754	5528.0914	---	---
		5590	36.139	5571.9458	5608.0848	---	---
		5670	36.082	5651.9699	5688.0519	---	---
		5755	36.036	5736.9779	5773.0139	---	---
		5795	36.040	5776.9449	5812.9849	---	---
11AC80SISO	Ant1	5210	75.466	5172.4256	5247.8916	---	---
		5290	75.379	5252.3664	5327.7454	---	---
		5530	75.508	5492.4738	5567.9818	---	---
		5610	75.501	5572.4416	5647.9426	---	---
		5775	75.355	5737.3644	5812.7194	---	---

Test Graphs

11A_Ant1_5200

11A_Ant1_5240

11A_Ant1_5260

11A_Ant1_5300

11A_Ant1_5320

11A_Ant1_5500

11A_Ant1_5600

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_5300

11N20SISO_Ant1_5320

11N20SISO_Ant1_5500

11N20SISO_Ant1_5600

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_5590

11N40SISO_Ant1_5670

11N40SISO_Ant1_5755

11N40SISO_Ant1_5795

11AC20SISO_Ant1_5180

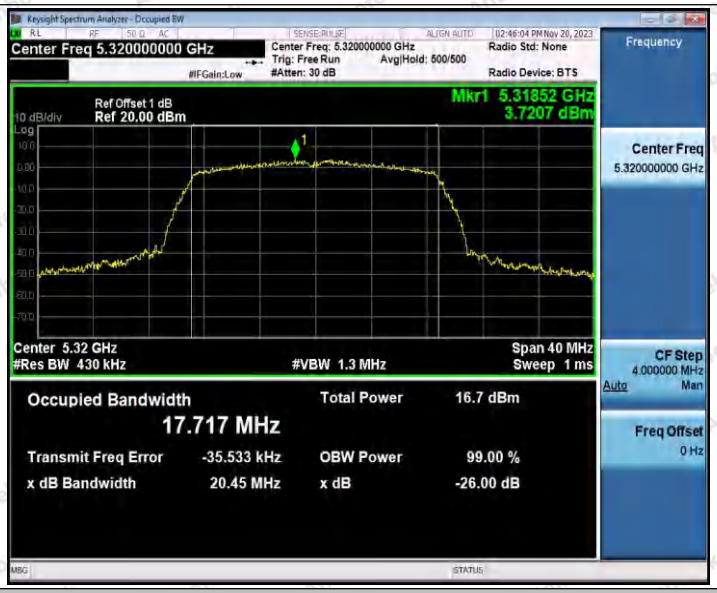
11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240

11AC20SISO_Ant1_5260

11AC20SISO_Ant1_5300

11AC20SISO_Ant1_5320



11AC20SISO_Ant1_5500

11AC20SISO_Ant1_5600

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_5590

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
Frequency
Ref Offset 1 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.77196 GHz
1.8710 dBm
Center Freq
5.775000000 GHz
Center 5.775 GHz
#Res BW 1.6 MHz
#VBW 5 MHz
Span 160 MHz
Sweep 1 ms
CF Step
16.000000 MHz
Auto
Man
Occupied Bandwidth
75.355 MHz
Total Power
16.1 dBm
Transmit Freq Error
41.918 kHz
OBW Power
99.00 %
x dB Bandwidth
80.61 MHz
x dB
-26.00 dB
Freq Offset
0 Hz

Appendix A3: Min emission bandwidth

Test Result B4

TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.080	5737.360	5752.440	0.5	PASS
		5785	14.680	5777.360	5792.040	0.5	PASS
		5825	14.960	5817.400	5832.360	0.5	PASS
11N20SISO	Ant1	5745	15.120	5737.320	5752.440	0.5	PASS
		5785	14.760	5777.400	5792.160	0.5	PASS
		5825	15.880	5816.520	5832.400	0.5	PASS
11N40SISO	Ant1	5755	33.840	5737.400	5771.240	0.5	PASS
		5795	31.360	5779.880	5811.240	0.5	PASS
11AC20SISO	Ant1	5745	11.400	5739.840	5751.240	0.5	PASS
		5785	15.120	5777.360	5792.480	0.5	PASS
		5825	14.680	5817.760	5832.440	0.5	PASS
11AC40SISO	Ant1	5755	35.040	5737.400	5772.440	0.5	PASS
		5795	31.360	5781.080	5812.440	0.5	PASS
11AC80SISO	Ant1	5775	75.040	5737.400	5812.440	0.5	PASS

Test Graphs B4

11A_Ant1_5745

11A_Ant1_5785

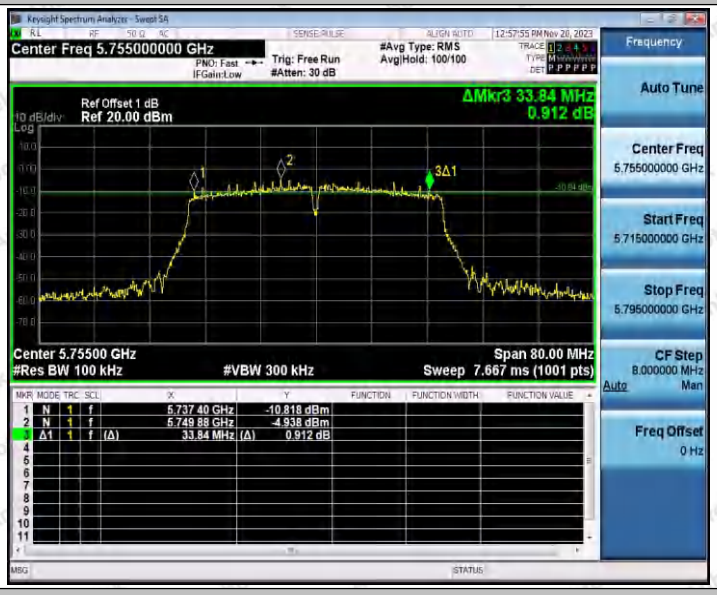
11A_Ant1_5825

11N20SISO_Ant1_5745

11N20SISO_Ant1_5785

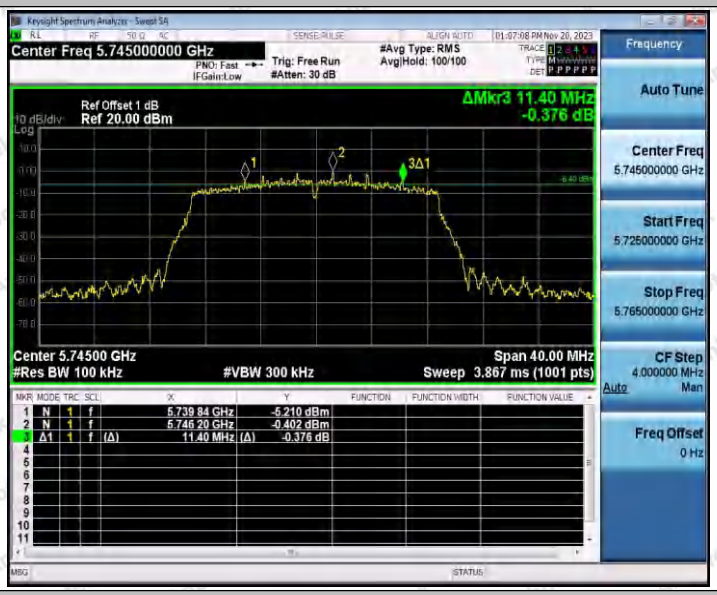
11N20SISO_Ant1_5825

11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

11AC20SISO_Ant1_5745



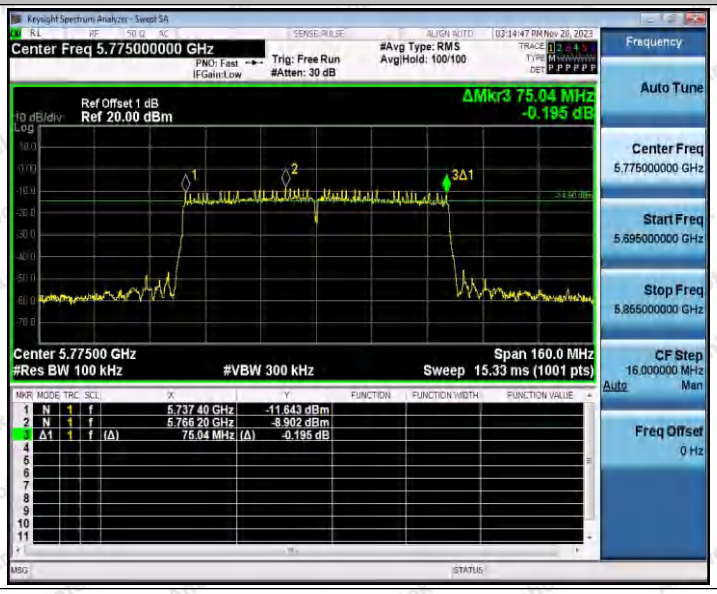
11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825

11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5775



Appendix B: Duty Cycle

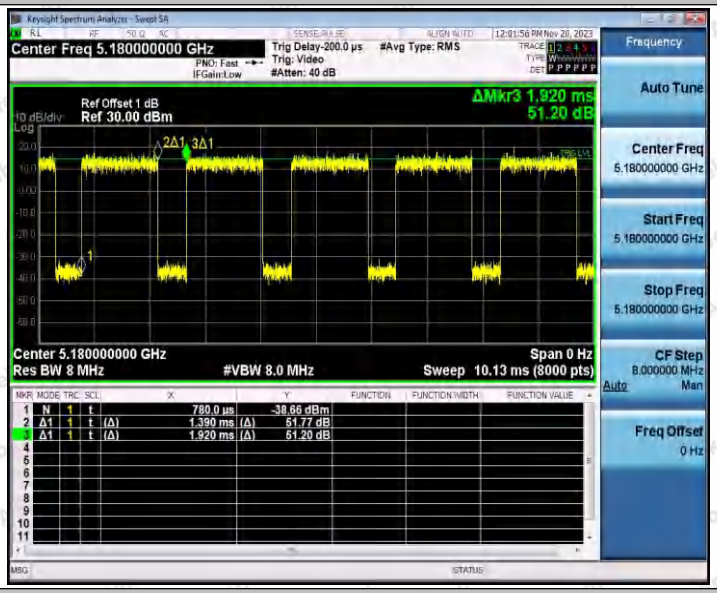
Test Result

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	1.39	1.92	72.40
		5200	1.39	1.91	72.77
		5240	1.39	1.91	72.77
		5260	1.39	1.92	72.40
		5300	1.40	1.92	72.92
		5320	1.39	1.91	72.77
		5500	1.39	1.91	72.77
		5600	1.39	1.92	72.40
		5700	1.39	1.92	72.40
		5745	1.39	1.91	72.77
		5785	1.39	1.93	72.02
		5825	1.40	1.92	72.92
11N20SISO	Ant1	5180	1.30	1.85	70.27
		5200	1.30	1.83	71.04
		5240	1.30	1.83	71.04
		5260	1.30	1.82	71.43
		5300	1.30	1.84	70.65
		5320	1.30	1.83	71.04
		5500	1.30	1.85	70.27
		5600	1.30	1.77	73.45
		5700	1.30	1.85	70.27
		5745	1.30	1.82	71.43
		5785	1.30	1.82	71.43
		5825	1.30	1.83	71.04
11N40SISO	Ant1	5190	0.64	1.18	54.24
		5230	0.64	1.16	55.17
		5270	0.64	1.18	54.24
		5310	0.64	1.18	54.24
		5510	0.65	1.17	55.56
		5590	0.64	1.17	54.70
		5670	0.64	1.18	54.24
		5755	0.65	1.19	54.62
		5795	0.64	1.18	54.24
11AC20SISO	Ant1	5180	1.31	1.83	71.58
		5200	1.31	1.83	71.58
		5240	1.31	1.86	70.43
		5260	1.30	1.83	71.04

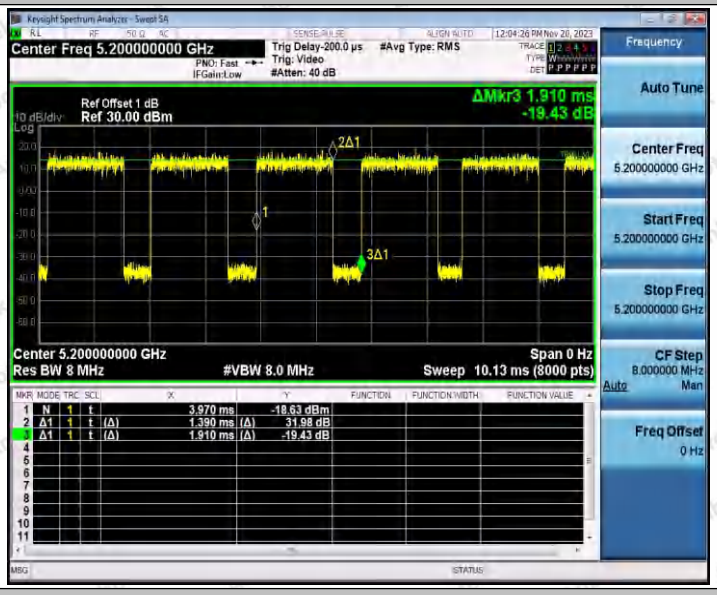
		5300	1.31	1.85	70.81
		5320	1.30	1.84	70.65
		5500	1.31	2.26	57.96
		5600	1.31	1.85	70.81
		5700	1.31	1.85	70.81
		5745	1.31	1.85	70.81
		5785	1.31	1.85	70.81
		5825	1.31	1.83	71.58
11AC40SISO	Ant1	5190	0.66	1.20	55.00
		5230	0.65	1.17	55.56
		5270	0.65	1.19	54.62
		5310	0.66	1.18	55.93
		5510	0.65	1.22	53.28
		5590	0.65	1.19	54.62
		5670	0.65	1.19	54.62
		5755	0.65	1.19	54.62
		5795	0.65	1.18	55.08
11AC80SISO	Ant1	5210	0.33	0.75	44.00
		5290	0.32	0.73	43.84
		5530	0.32	0.74	43.24
		5610	0.32	0.74	43.24
		5775	0.32	0.74	43.24

Test Graphs

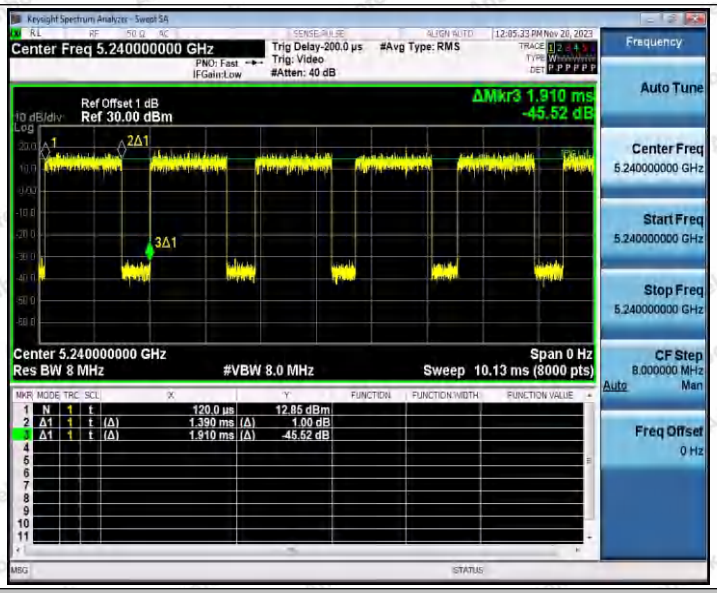
11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



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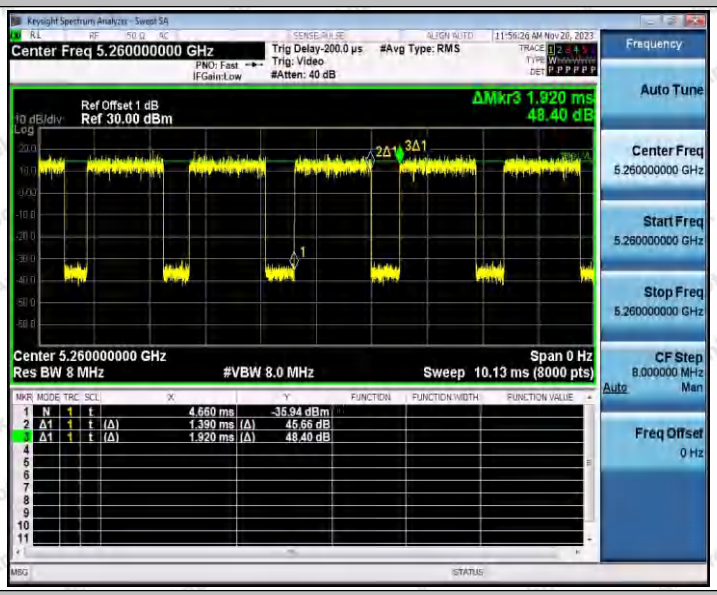

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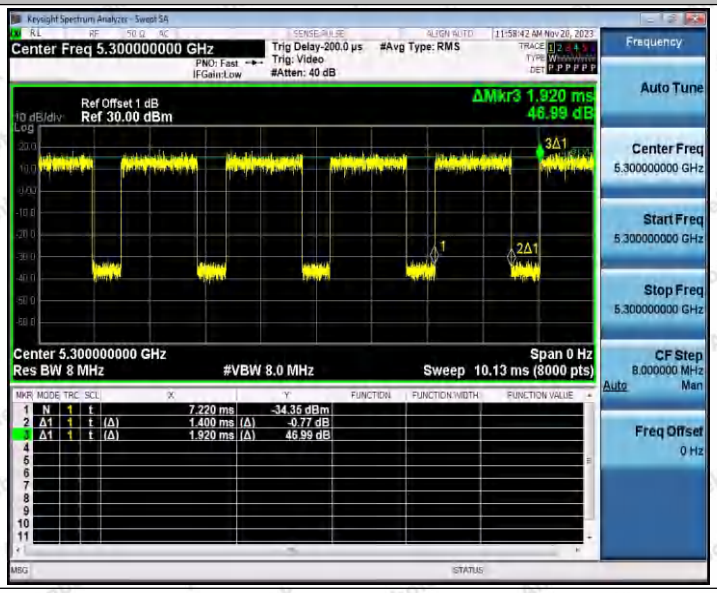

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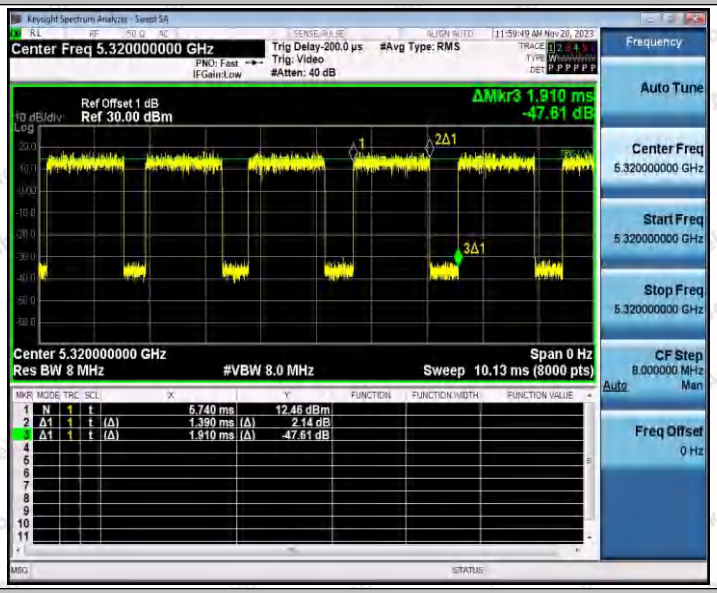

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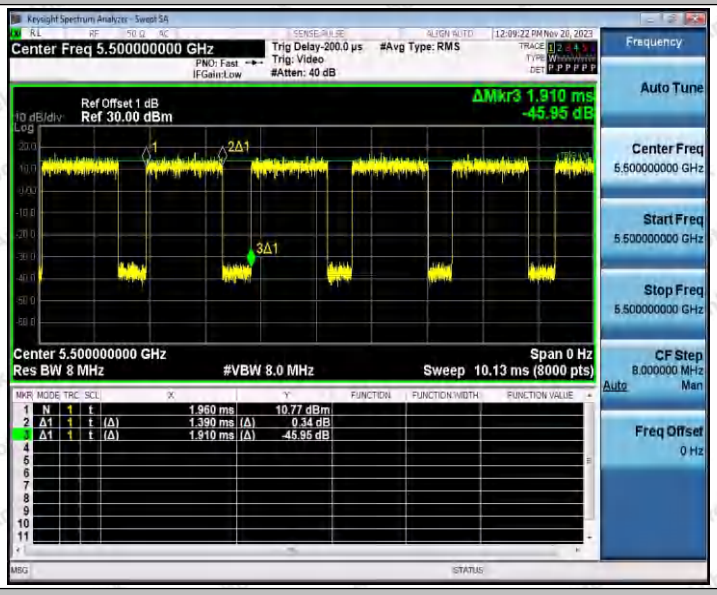

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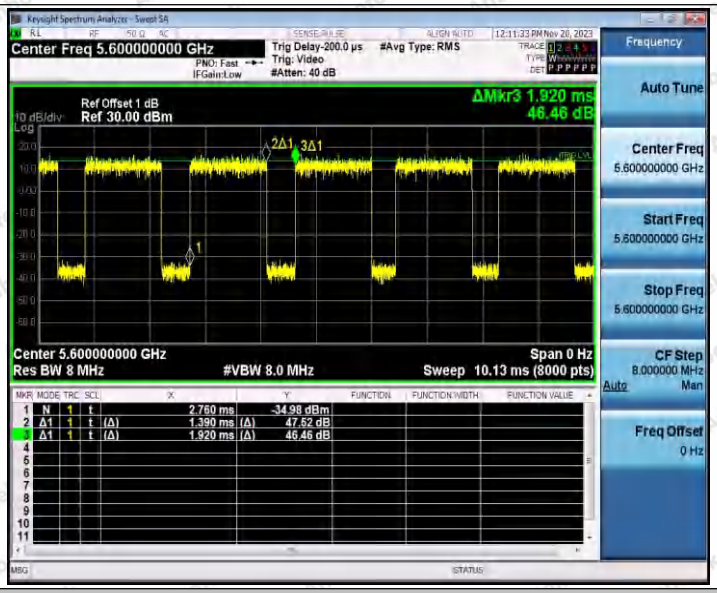

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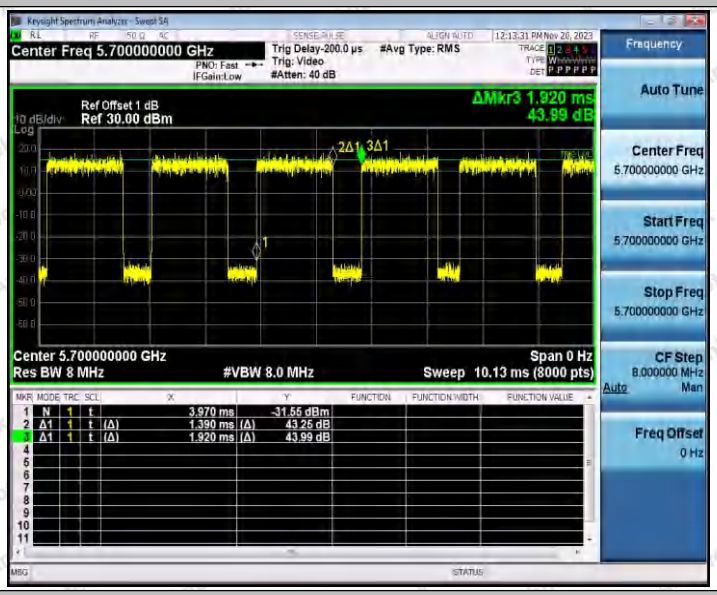

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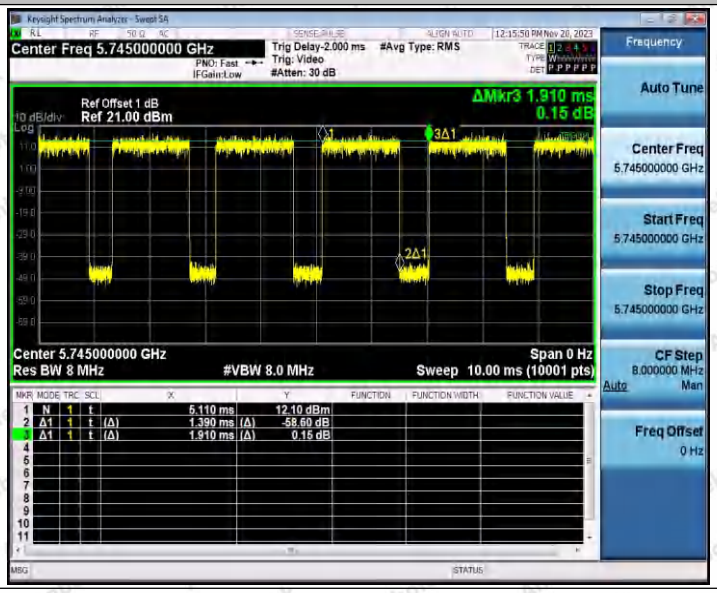

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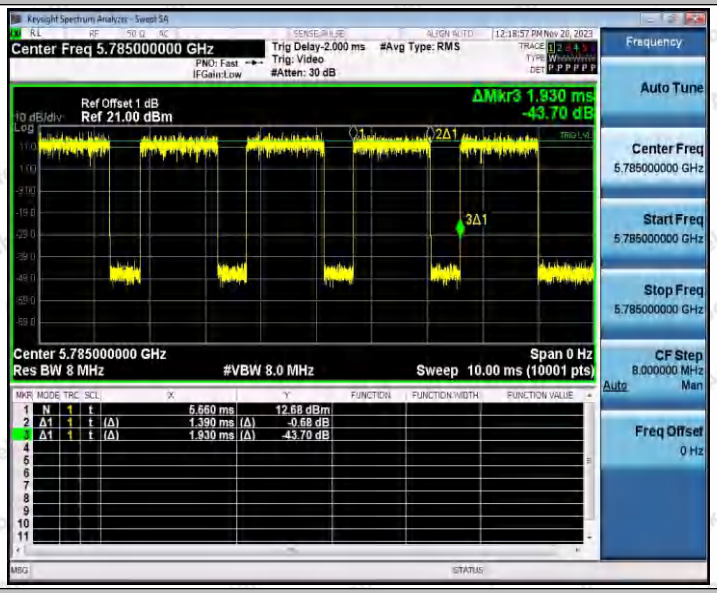

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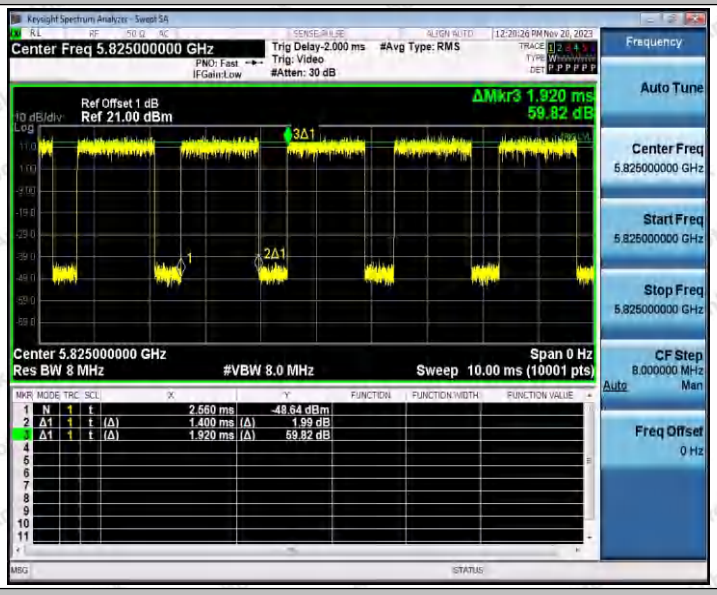
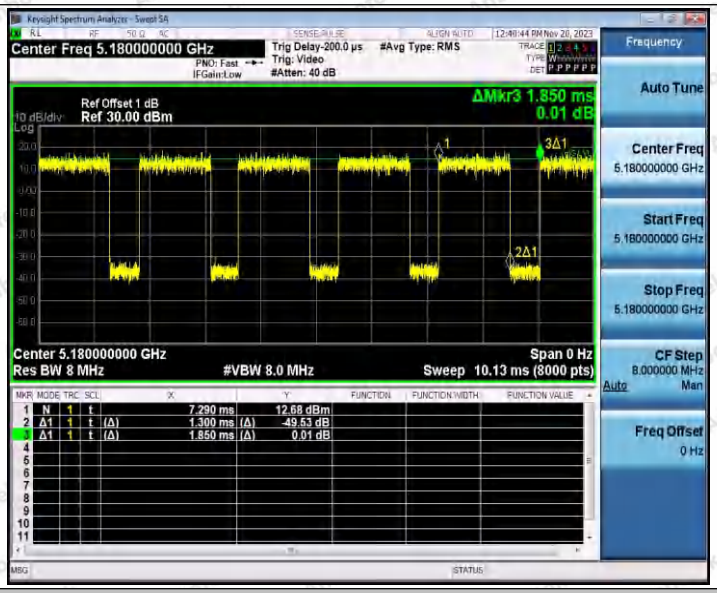


11N20SISO_Ant1_5180



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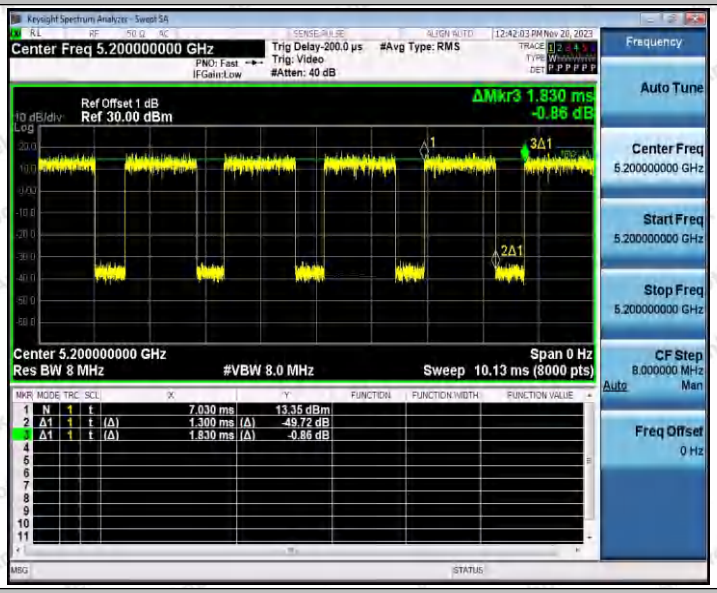

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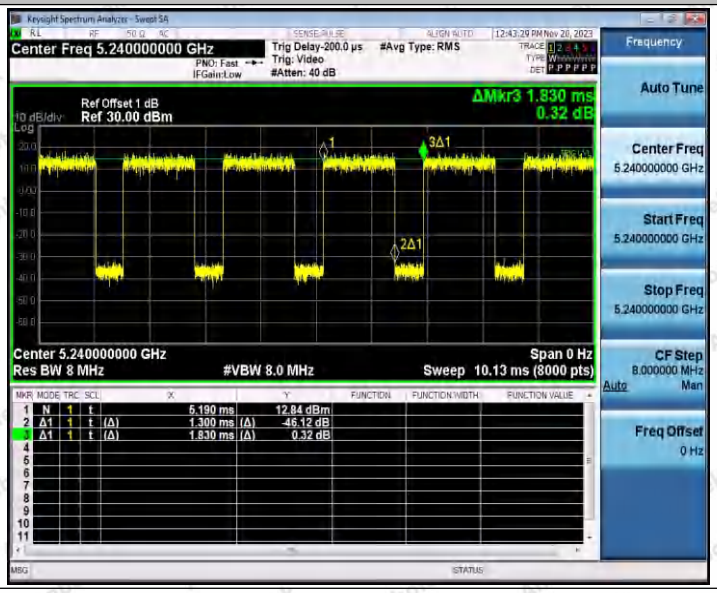

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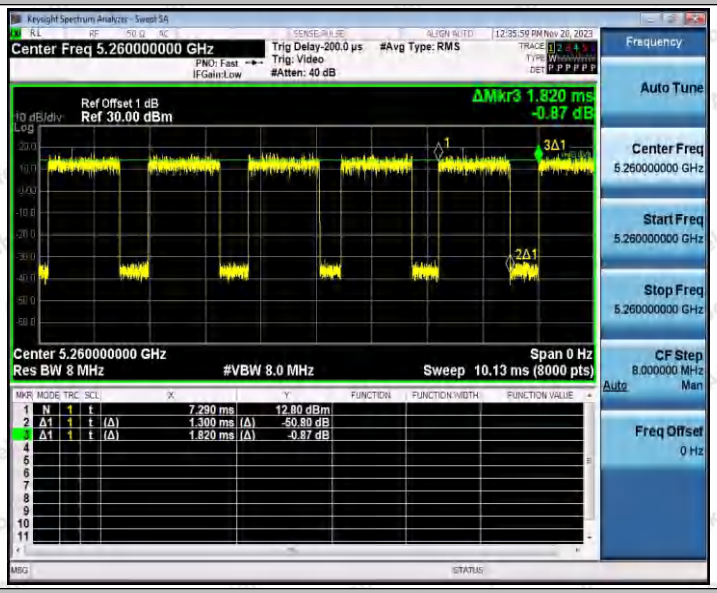

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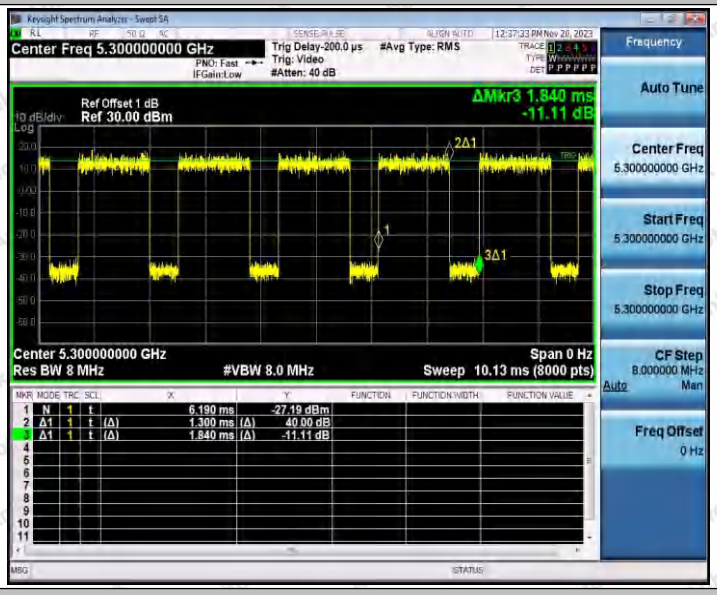

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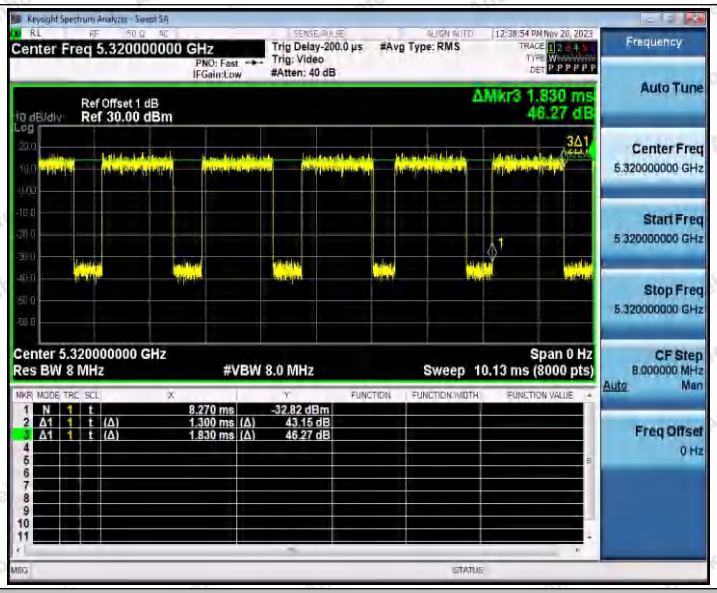

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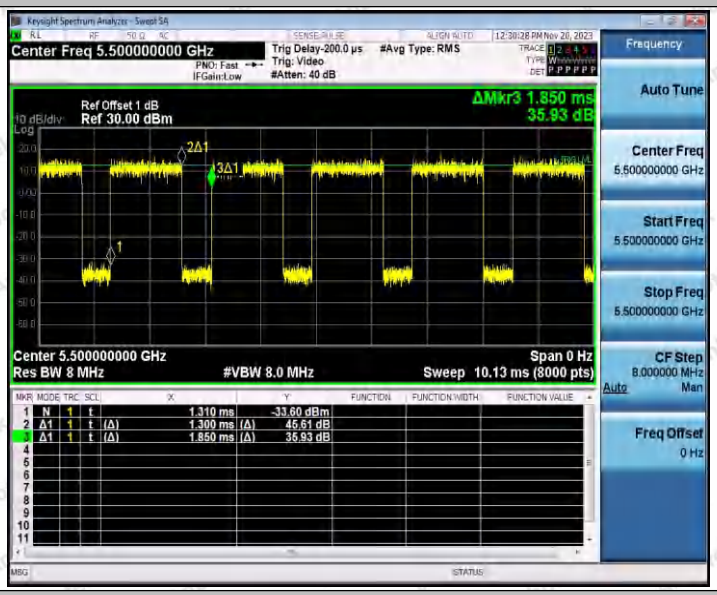

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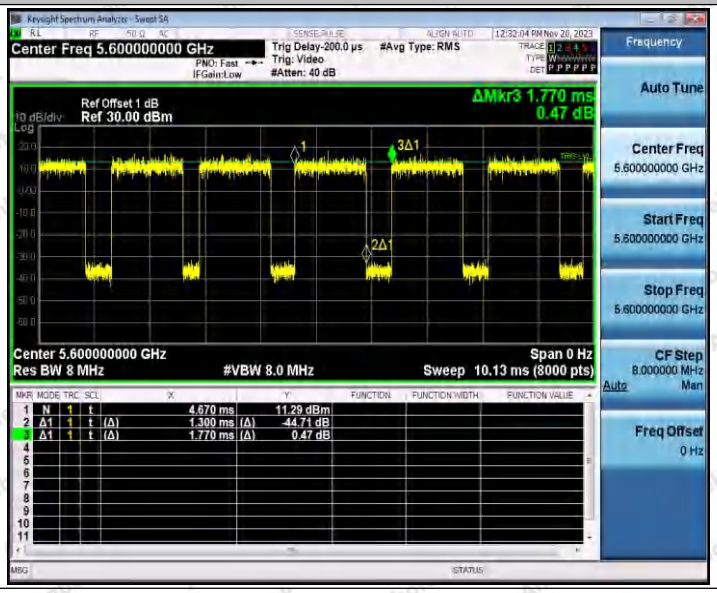

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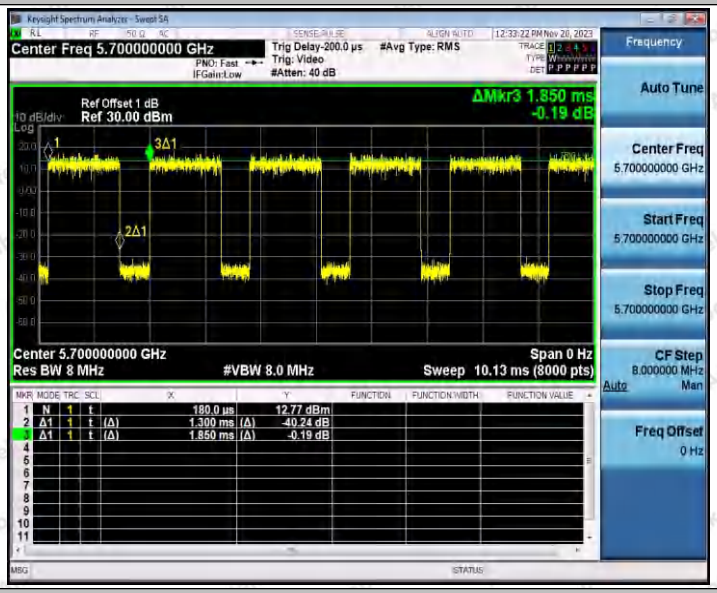

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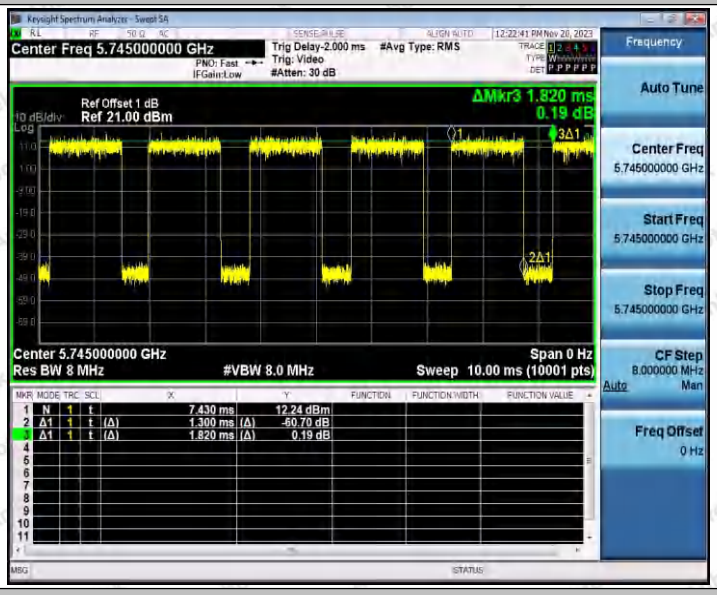

11N20SISO_Ant1_5785