Appendix Test Data

Report No.:	18220WC30253102	Test Sample No.:	1-2-2
Start Test Date:	2023.12.04	Finish Test Date:	2023.12.05
Test Engineer:	Hayman Chen	Auditor:	Rick Luo
Temperature:	25.3℃	Relative Humidity:	46%
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	21.120	5169.360	5190.480	---	---
		5200	20.920	5189.360	5210.280	---	---
		5240	20.960	5229.440	5250.400	---	---
		5745	20.840	5734.520	5755.360	---	---
		5785	20.840	5774.560	5795.400	---	---
		5825	20.760	5814.400	5835.160	---	---
11N20SISO	Ant1	5180	21.320	5169.280	5190.600	---	---
		5200	21.600	5189.160	5210.760	---	---
		5240	21.440	5229.200	5250.640	---	---
		5745	21.120	5734.400	5755.520	---	---
		5785	21.360	5774.320	5795.680	---	---
		5825	21.200	5814.360	5835.560	---	---
11N40SISO	Ant1	5190	39.920	5169.920	5209.840	---	---
		5230	39.520	5210.320	5249.840	---	---
		5755	39.840	5734.920	5774.760	---	---
		5795	40.000	5775.000	5815.000	---	---

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

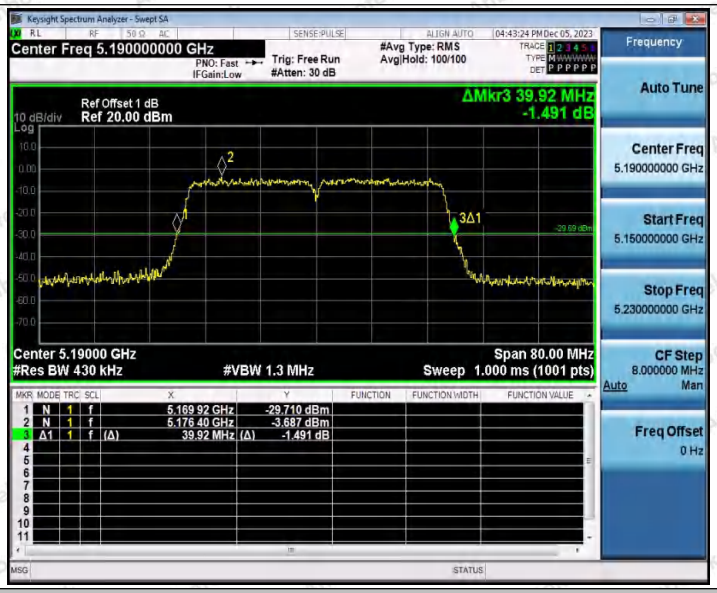
11N20SISO_Ant1_5240

11N20SISO_Ant1_5745

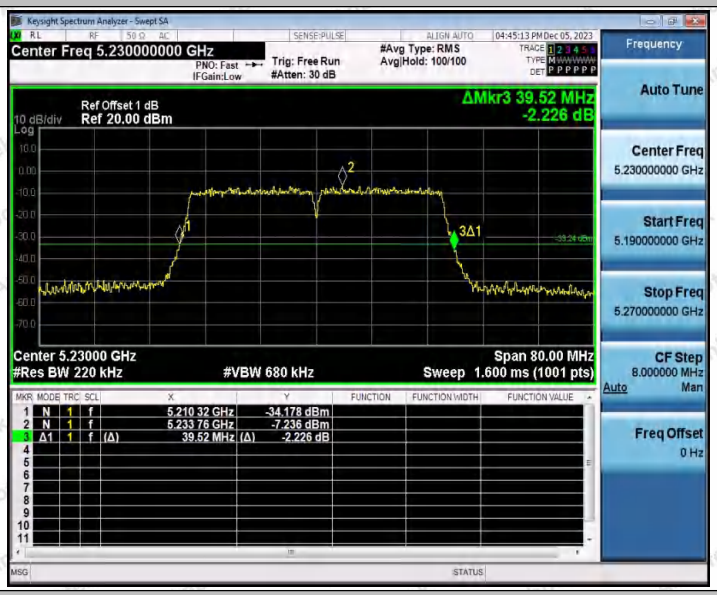
11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11N40SISO_Ant1_5755

11N40SISO_Ant1_5795

Appendix A2: Occupied channel bandwidth

Test Result

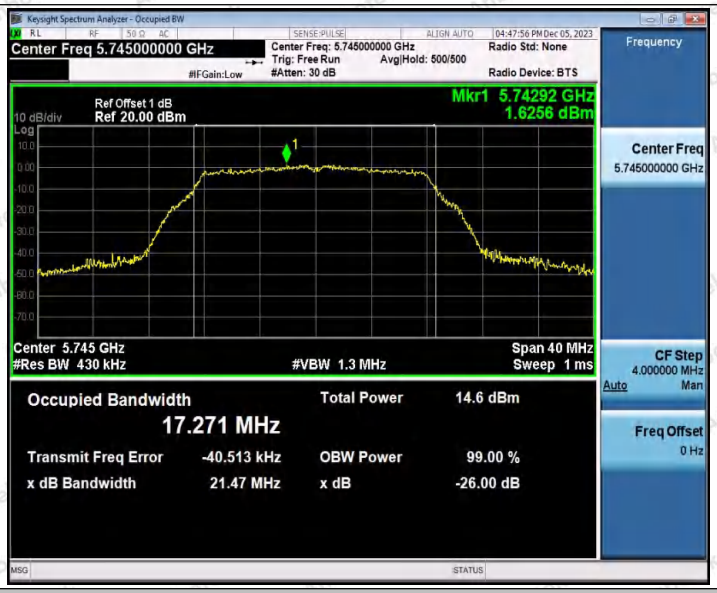
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5200	17.265	5191.3230	5208.5880	---	---
		5240	17.252	5231.3205	5248.5725	---	---
		5745	17.271	5736.3240	5753.5950	---	---
		5785	17.157	5776.3728	5793.5298	---	---
		5825	17.230	5816.3421	5833.5721	---	---
11N20SISO	Ant1	5180	18.267	5170.8254	5189.0924	---	---
		5200	18.238	5190.8457	5209.0837	---	---
		5240	18.279	5230.8137	5249.0927	---	---
		5745	18.321	5735.8182	5754.1392	---	---
		5785	18.306	5775.7898	5794.0958	---	---
		5825	18.223	5815.8307	5834.0537	---	---
11N40SISO	Ant1	5190	36.690	5171.6765	5208.3665	---	---
		5230	36.708	5211.6498	5248.3578	---	---
		5755	36.660	5736.6528	5773.3128	---	---
		5795	36.613	5776.6455	5813.2585	---	---

Test Graphs

11A_Ant1_5200

11A_Ant1_5240

11A_Ant1_5745



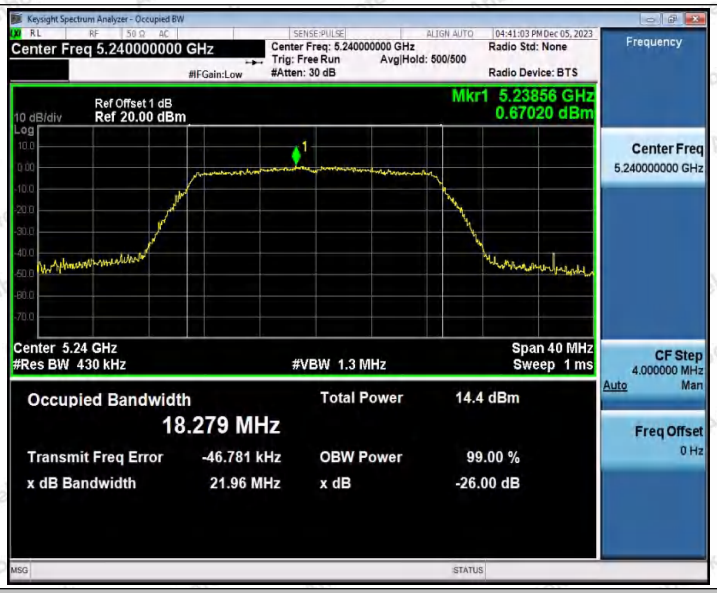
11A_Ant1_5785

11A_Ant1_5825

11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

11N20SISO_Ant1_5240



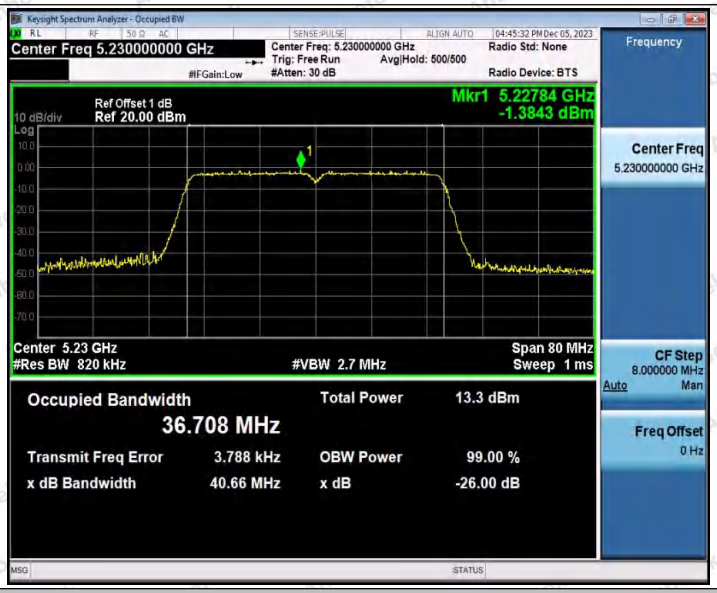
11N20SISO_Ant1_5745

11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

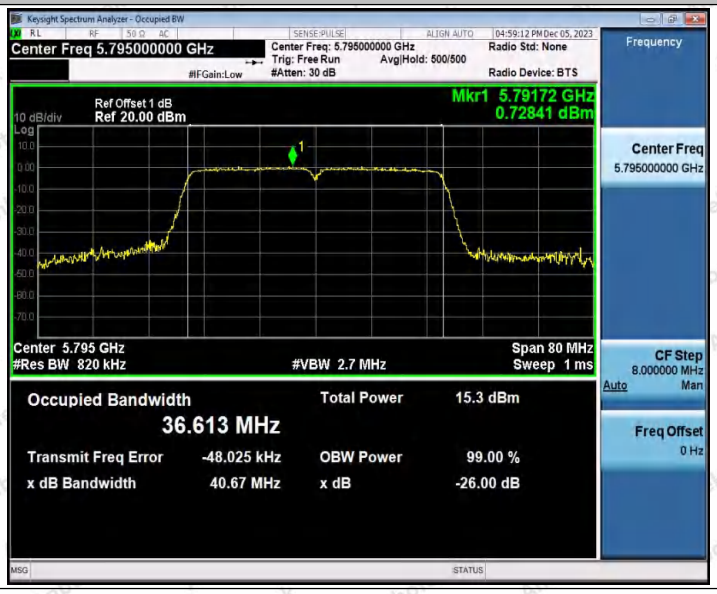
11N40SISO_Ant1_5190

11N40SISO_Ant1_5230



11N40SISO_Ant1_5755

11N40SISO_Ant1_5795



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	16.280	5736.760	5753.040	0.5	PASS
		5785	16.280	5776.760	5793.040	0.5	PASS
		5825	16.280	5816.760	5833.040	0.5	PASS
11N20SISO	Ant1	5745	17.520	5736.160	5753.680	0.5	PASS
		5785	16.880	5776.400	5793.280	0.5	PASS
		5825	17.520	5816.160	5833.680	0.5	PASS
11N40SISO	Ant1	5755	36.320	5736.760	5773.080	0.5	PASS
		5795	35.920	5776.760	5812.680	0.5	PASS

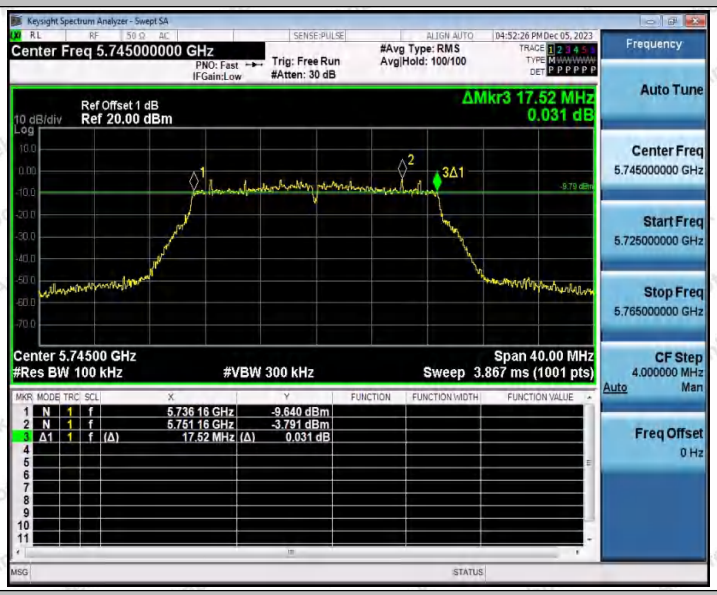
Test Graphs B4

11A_Ant1_5745

11A_Ant1_5785

11A_Ant1_5825

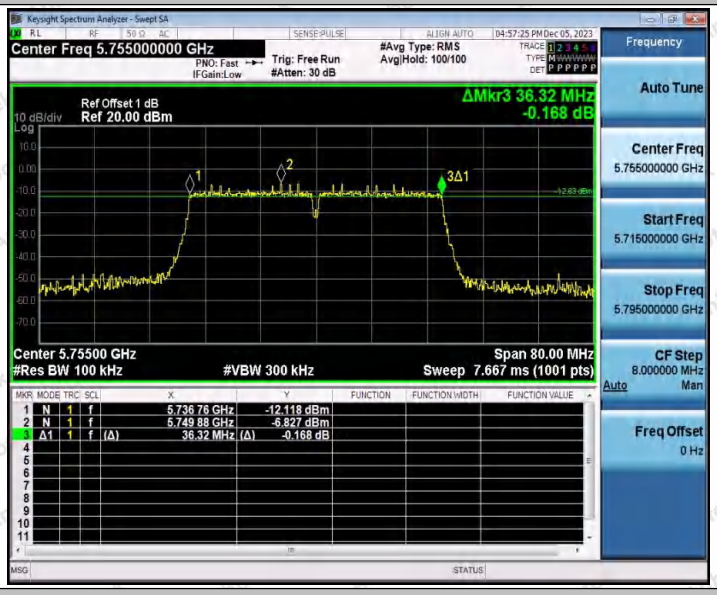
11N20SISO_Ant1_5745



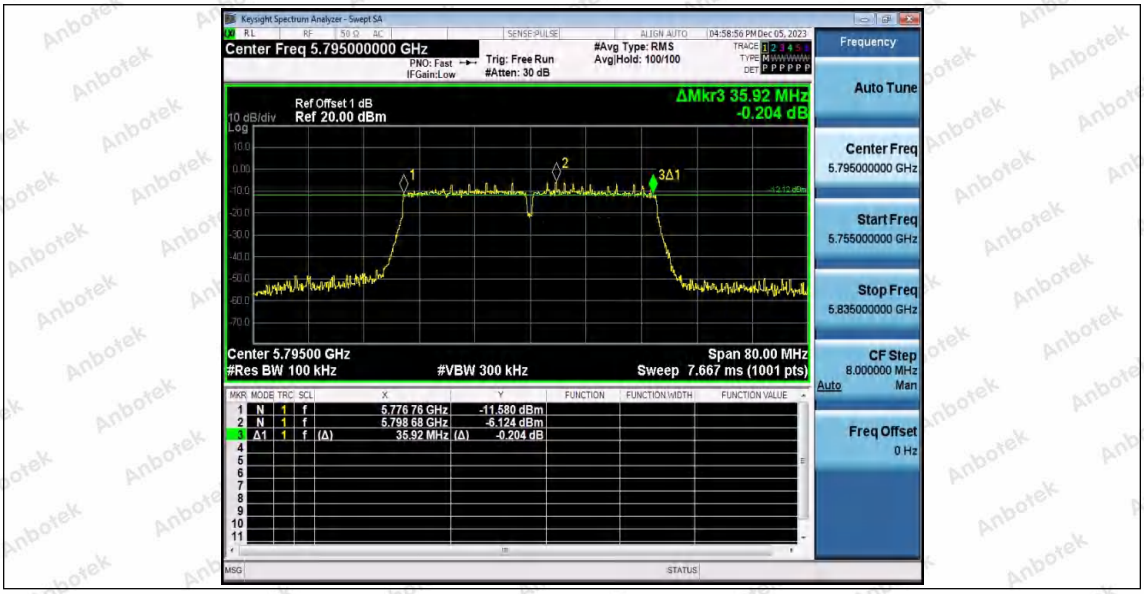
11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

11N40SISO_Ant1_5755



11N40SISO_Ant1_5795


Keysight Spectrum Analyzer - Swept SA
Center Freq 5.795000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
Ref Offset 1 dB
10 dB/div Ref 20.00 dBm
ΔMkr3 35.92 MHz
-0.204 dB
Center 5.79500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 80.00 MHz
Sweep 7.667 ms (1001 pts)
1 N 1 f 5.776 76 GHz -11.580 dBm
2 N 1 f 5.798 68 GHz -6.124 dBm
3 Δ1 1 f (Δ) 35.92 MHz (Δ) -0.204 dB
Frequency
Auto Tune
Center Freq 5.795000000 GHz
Start Freq 5.755000000 GHz
Stop Freq 5.835000000 GHz
CF Step 8.000000 MHz
Auto Man
Freq Offset 0 Hz

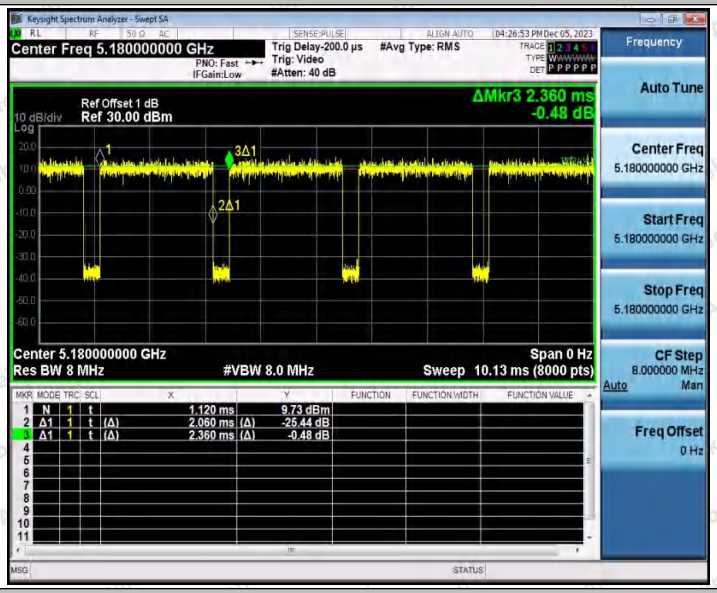
Appendix B: Duty Cycle

Test Result

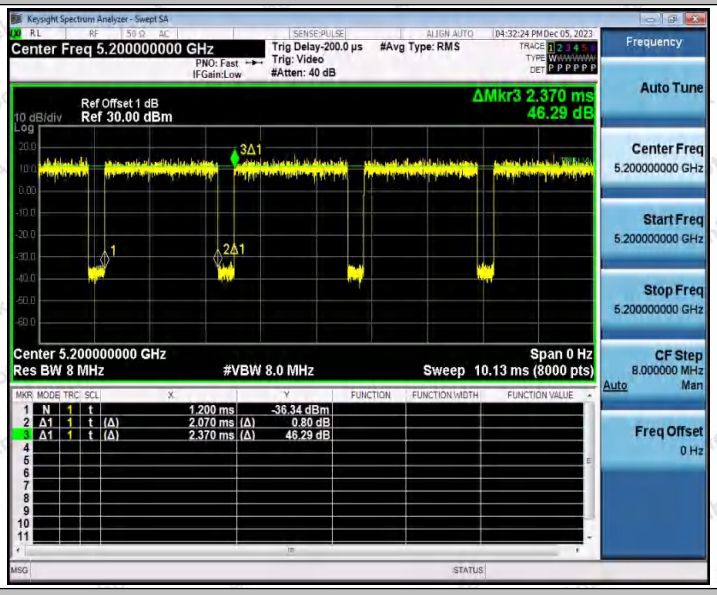
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	2.06	2.36	87.29
		5200	2.07	2.37	87.34
		5240	2.07	2.37	87.34
		5745	2.06	2.36	87.29
		5785	2.06	2.36	87.29
		5825	2.07	2.37	87.34
11N20SISO	Ant1	5180	1.92	2.22	86.49
		5200	1.92	2.22	86.49
		5240	1.92	2.22	86.49
		5745	1.92	2.22	86.49
		5785	1.92	2.22	86.49
		5825	1.92	2.22	86.49
11N40SISO	Ant1	5190	0.94	1.24	75.81
		5230	0.94	1.24	75.81
		5755	0.94	1.24	75.81
		5795	0.94	1.24	75.81

Test Graphs

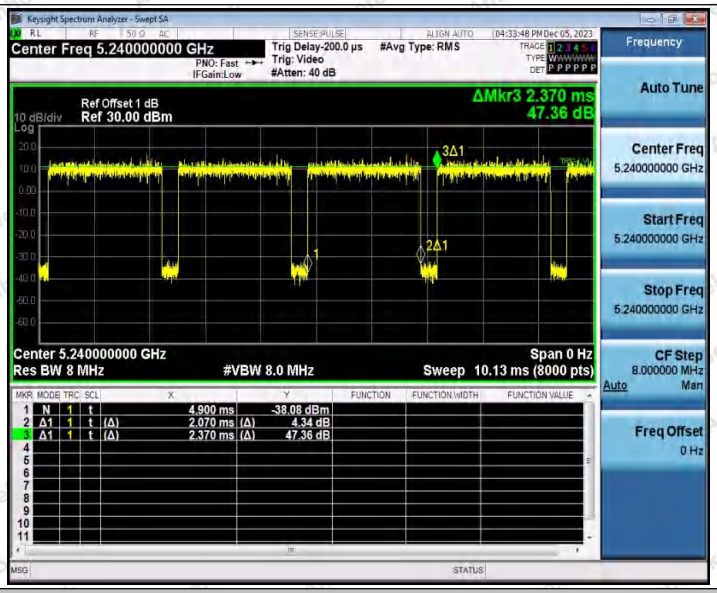
11A_Ant1_5180



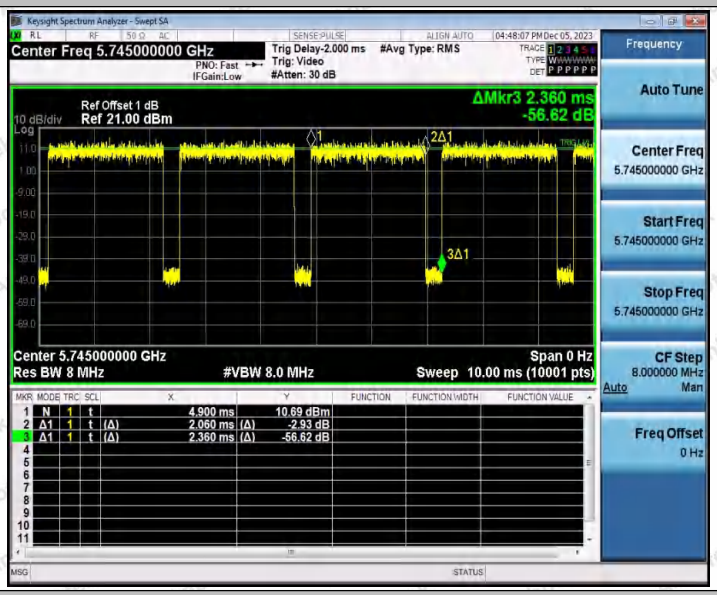
11A_Ant1_5200



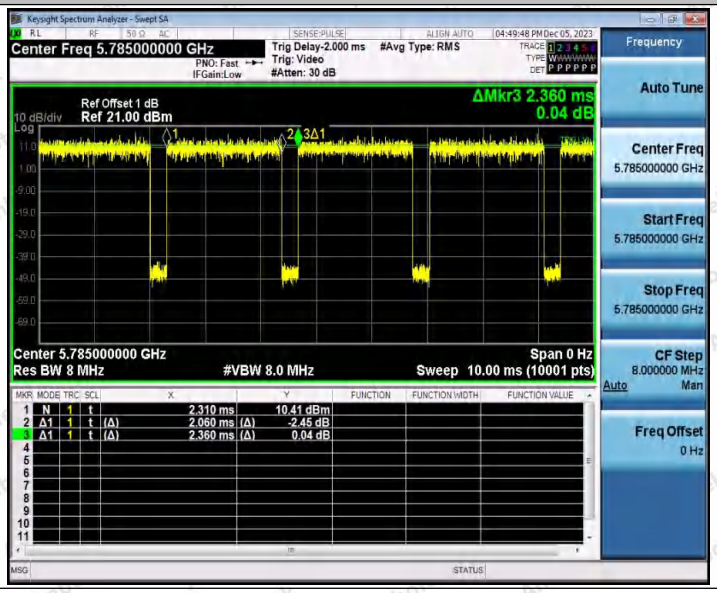
11A_Ant1_5240



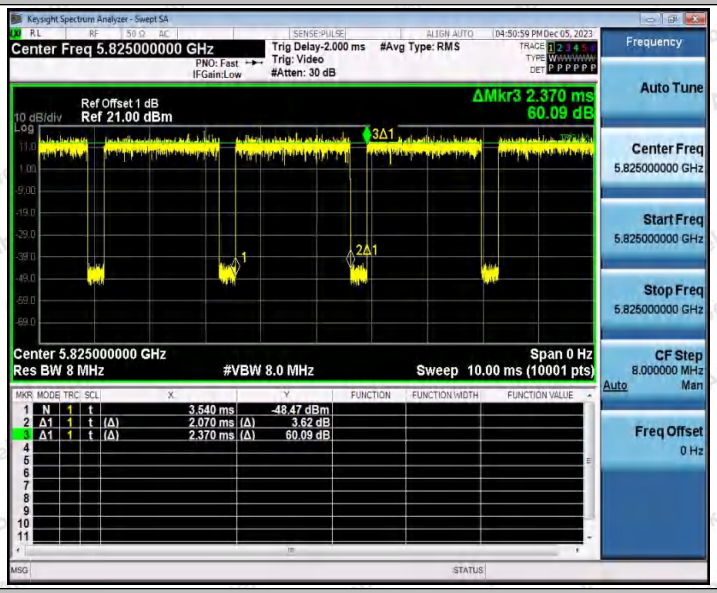
11A_Ant1_5745



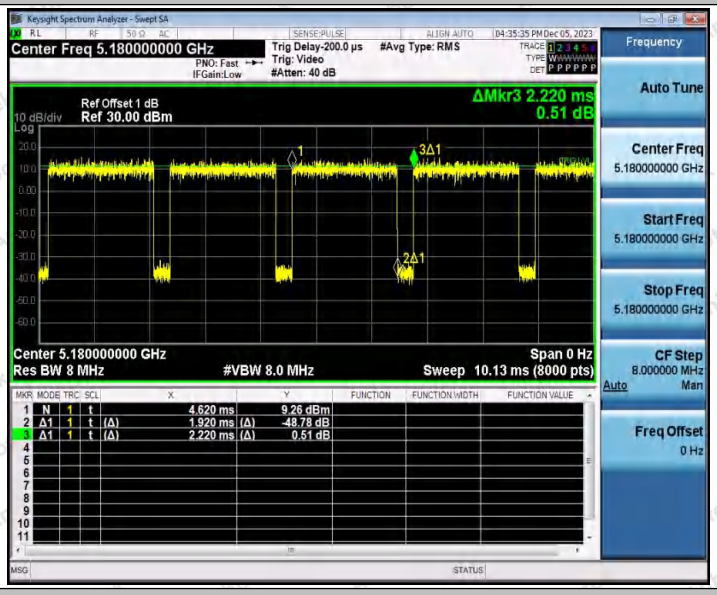
11A_Ant1_5785



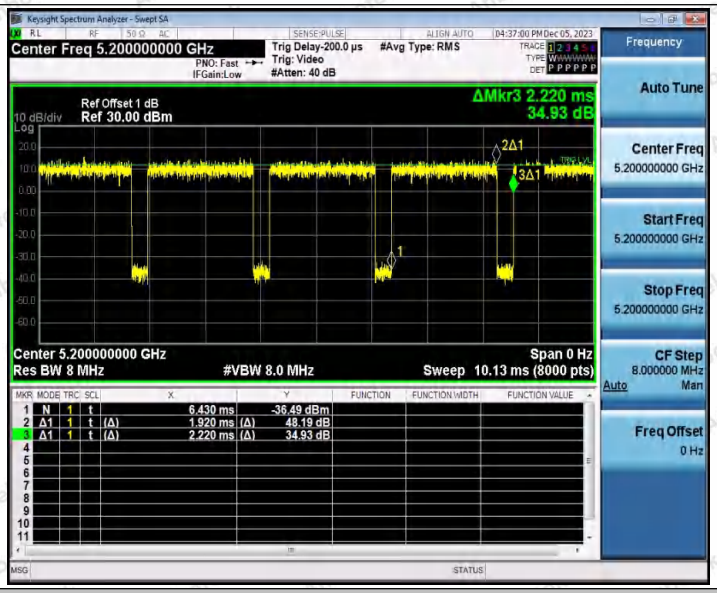
11A_Ant1_5825



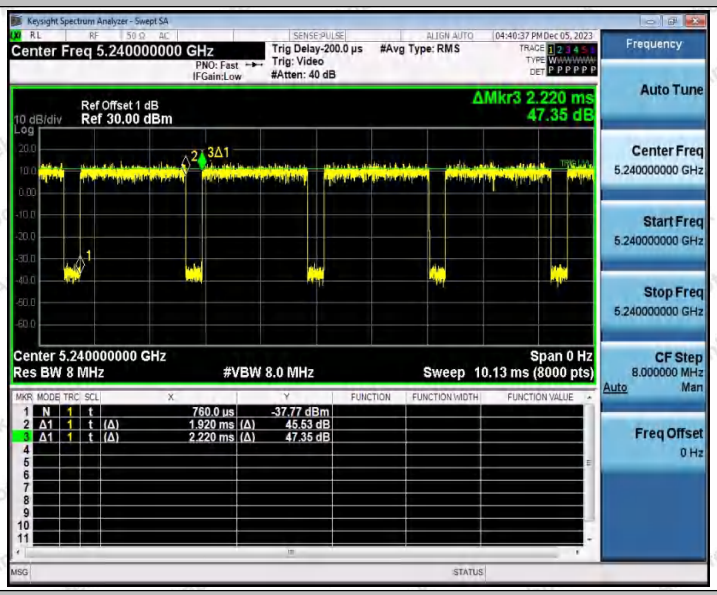
11N20SISO_Ant1_5180



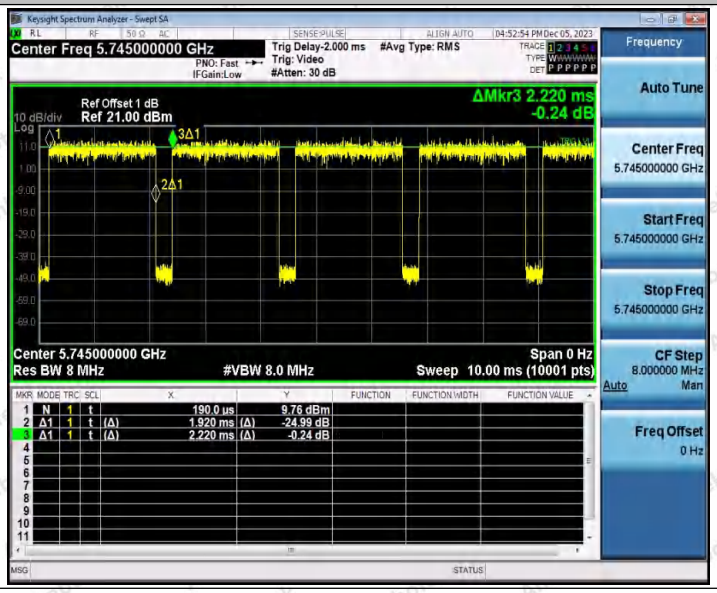
11N20SISO_Ant1_5200



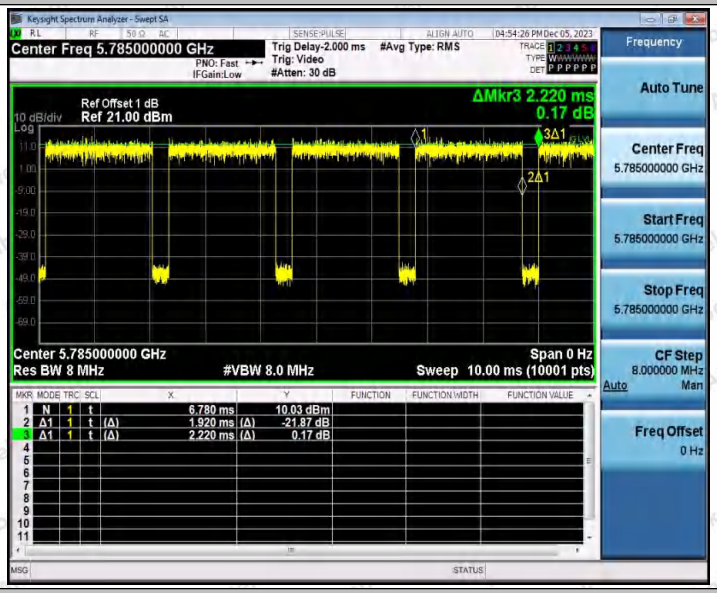
11N20SISO_Ant1_5240



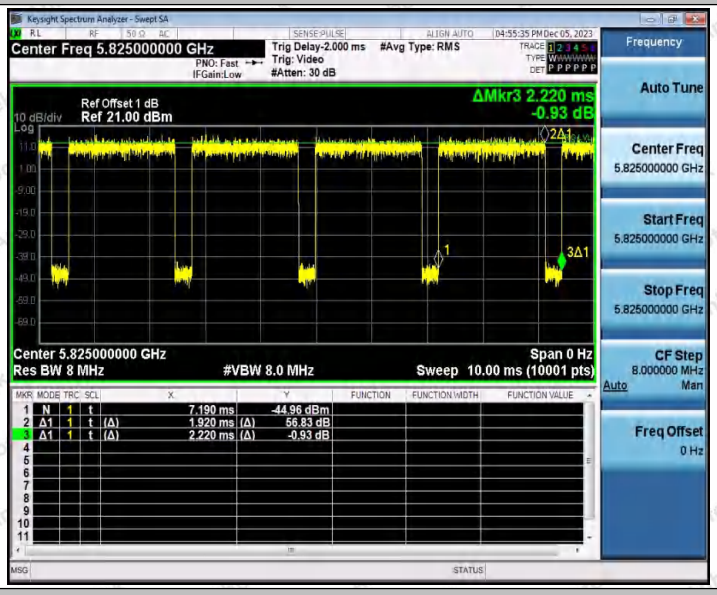
11N20SISO_Ant1_5745



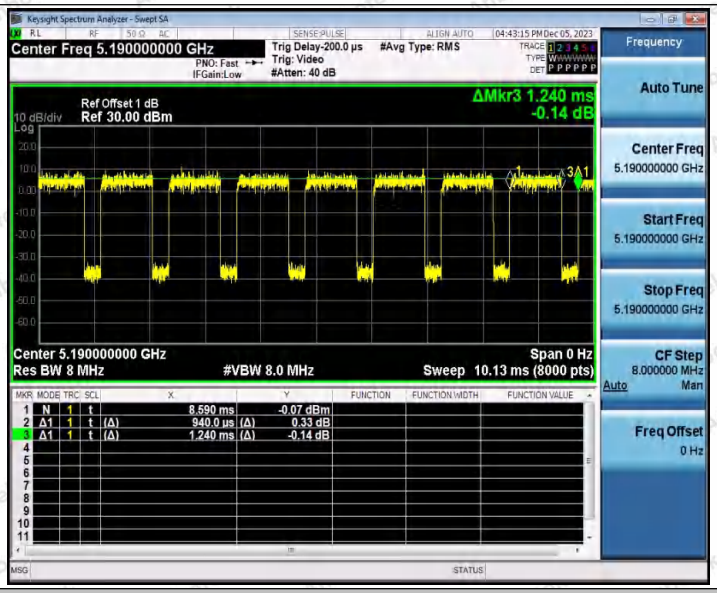
11N20SISO_Ant1_5785



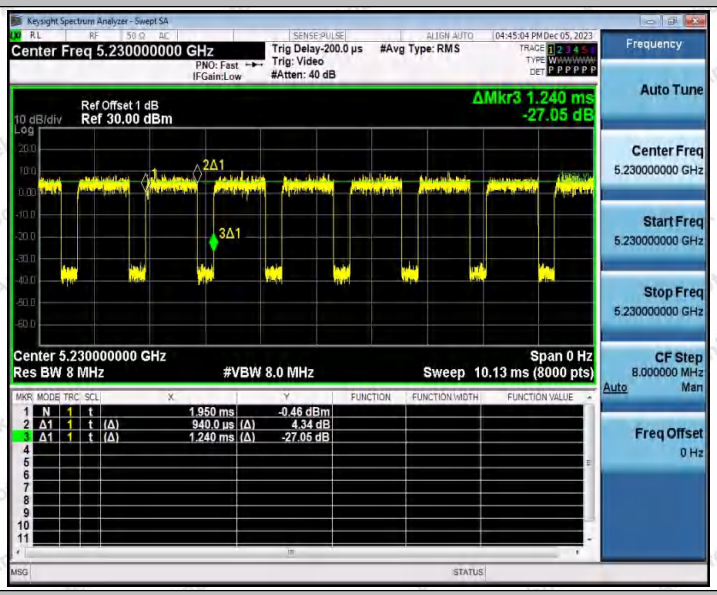
11N20SISO_Ant1_5825



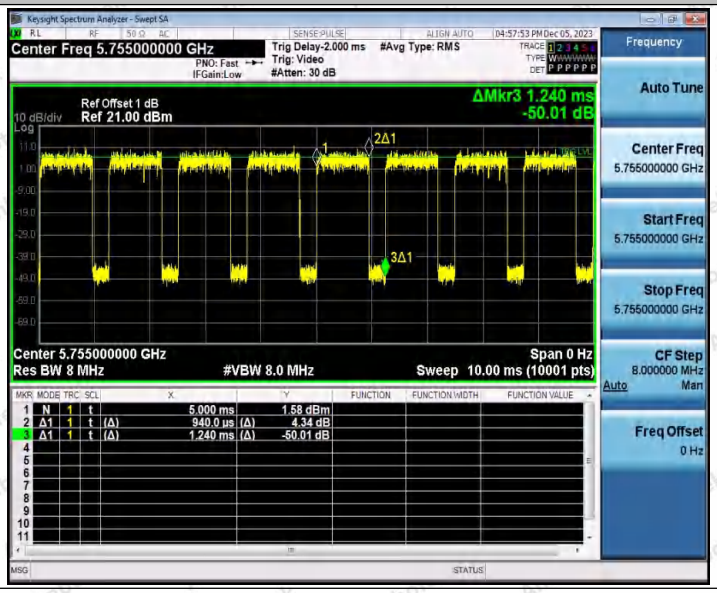
11N40SISO_Ant1_5190



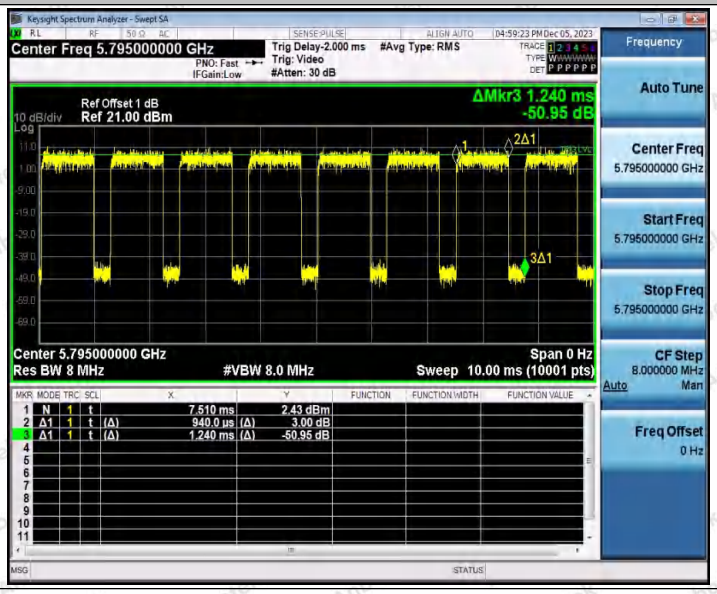
11N40SISO_Ant1_5230



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



Appendix C: Maximum conducted output power

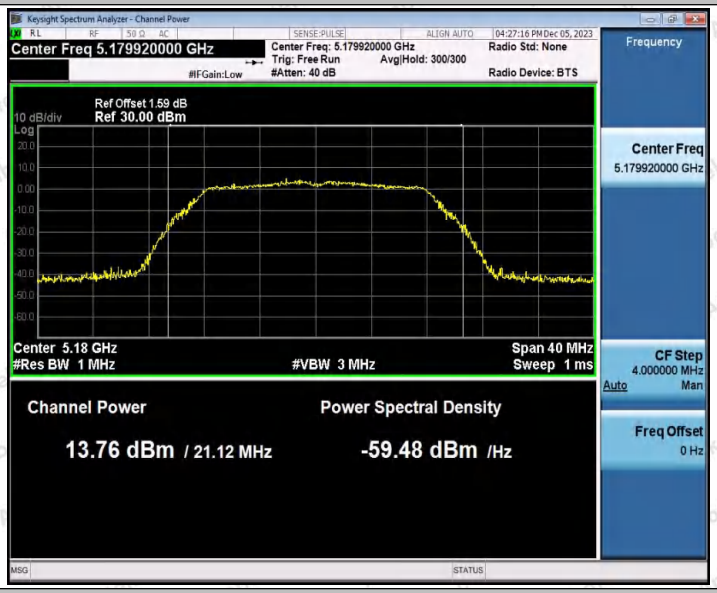
Test Result Channel Power

Test Mode	Antenna	Frequency[MHz]	Set Power	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]
11A	Ant1	5180	---	13.17	87.29	0.59	13.76	≤23.98
		5200	---	13.27	87.34	0.59	13.86	≤23.98
		5240	---	12.51	87.34	0.59	13.10	≤23.98
		5745	---	12.73	87.29	0.59	13.32	≤30.00
		5785	---	13.24	87.29	0.59	13.83	≤30.00
		5825	---	14.19	87.34	0.59	14.78	≤30.00
11N20 SISO	Ant1	5180	---	13.17	86.49	0.63	13.80	≤23.98
		5200	---	13.13	86.49	0.63	13.76	≤23.98
		5240	---	12.46	86.49	0.63	13.09	≤23.98
		5745	---	12.72	86.49	0.63	13.35	≤30.00
		5785	---	13.09	86.49	0.63	13.72	≤30.00
		5825	---	14.24	86.49	0.63	**14.87**	≤30.00
11N40 SISO	Ant1	5190	---	11.84	75.81	1.20	13.04	≤23.98
		5230	---	10.95	75.81	1.20	12.15	≤23.98
		5755	---	12.34	75.81	1.20	13.54	≤30.00
		5795	---	12.94	75.81	1.20	14.14	≤30.00

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

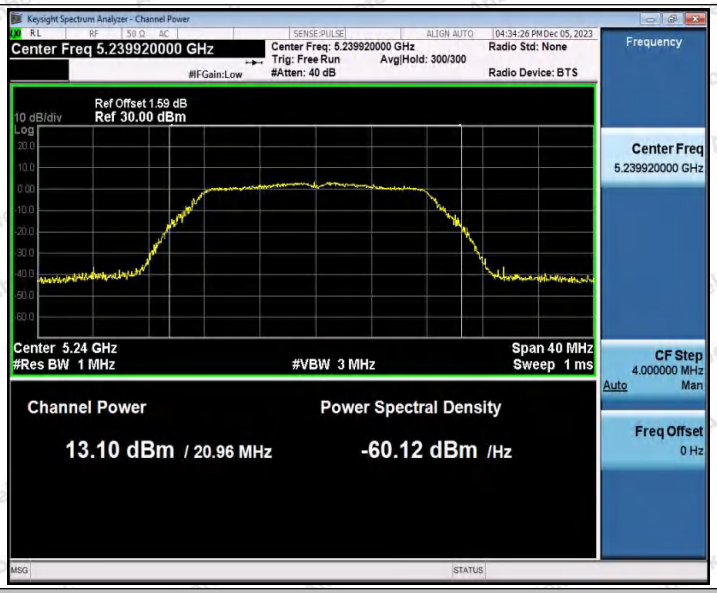
Test Graphs Channel Power

11A_Ant1_5180



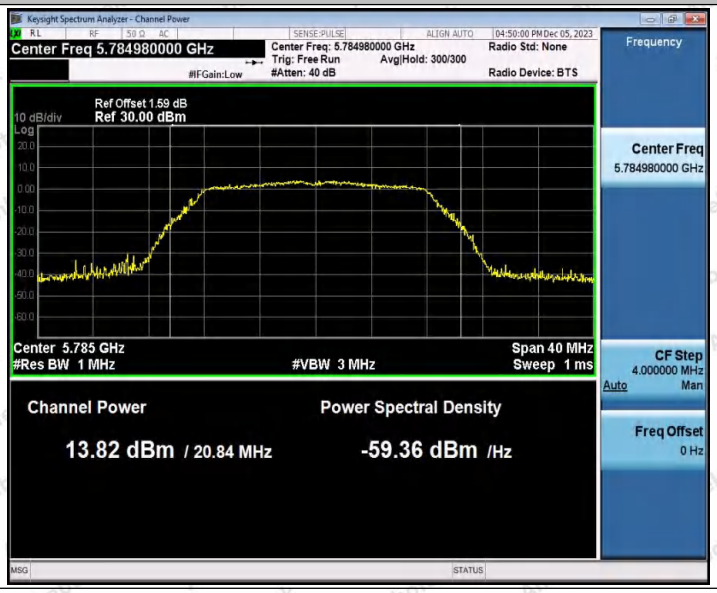
11A_Ant1_5200

11A_Ant1_5240

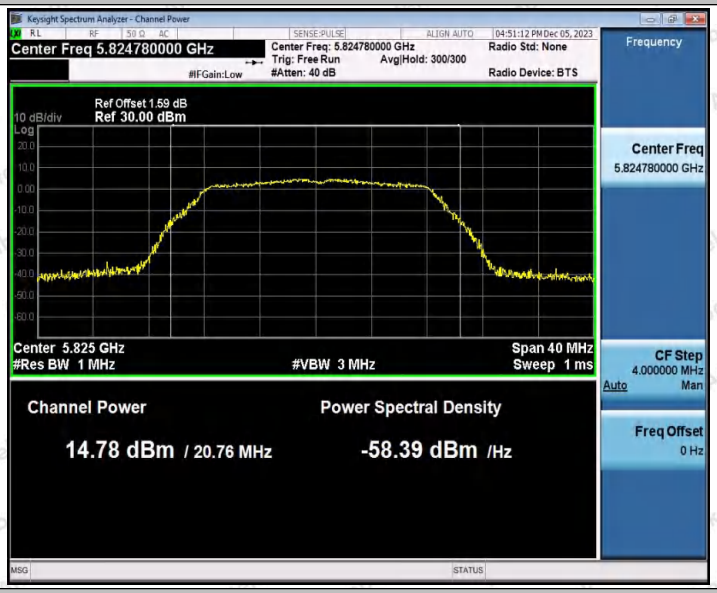


11A_Ant1_5745

11A_Ant1_5785



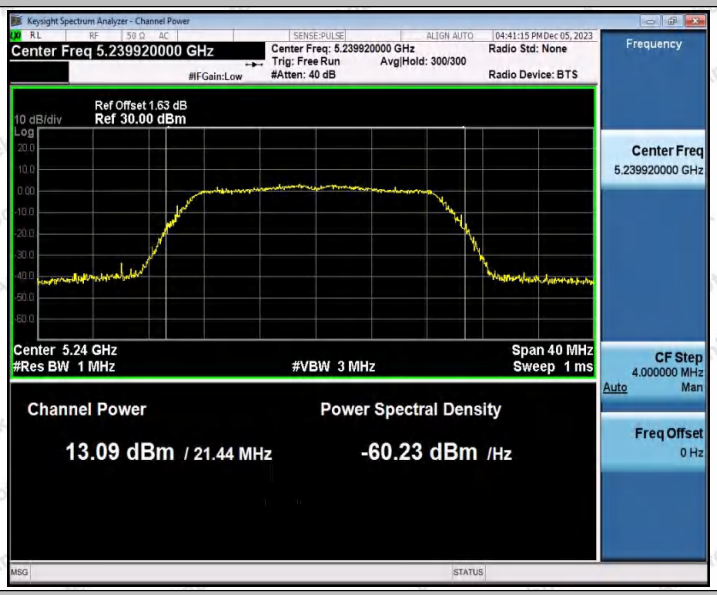
11A_Ant1_5825



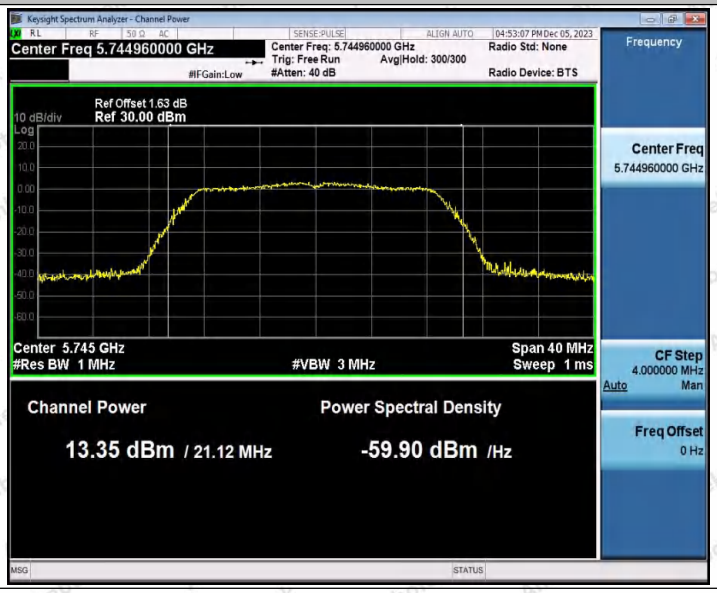
11N20SISO_Ant1_5180

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

Appendix D: Maximum power spectral density

Test Result B1

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	6.51	≤11.00	PASS
		5200	5.82	≤11.00	PASS
		5240	5.19	≤11.00	PASS
11N20SISO	Ant1	5180	5.41	≤11.00	PASS
		5200	5.38	≤11.00	PASS
		5240	4.94	≤11.00	PASS
11N40SISO	Ant1	5190	-0.07	≤11.00	PASS
		5230	-0.61	≤11.00	PASS

Note：1.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Result B4

TestMode	Antenna	Frequency[MHz]	Result [dBm/500KHz]	Limit[dBm/500KHz]	Verdict
11A	Ant1	5745	2.05	≤30.00	PASS
		5785	2.51	≤30.00	PASS
		5825	4.03	≤30.00	PASS
11N20SISO	Ant1	5745	1.55	≤30.00	PASS
		5785	2.11	≤30.00	PASS
		5825	3.01	≤30.00	PASS
11N40SISO	Ant1	5755	-2.31	≤30.00	PASS
		5795	-2.04	≤30.00	PASS

Note：1.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs B1

11A_Ant1_5180

11A_Ant1_5200

11A_Ant1_5240

11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

11N20SISO_Ant1_5240

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

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

Appendix E: Band edge measurements

Test Result B1

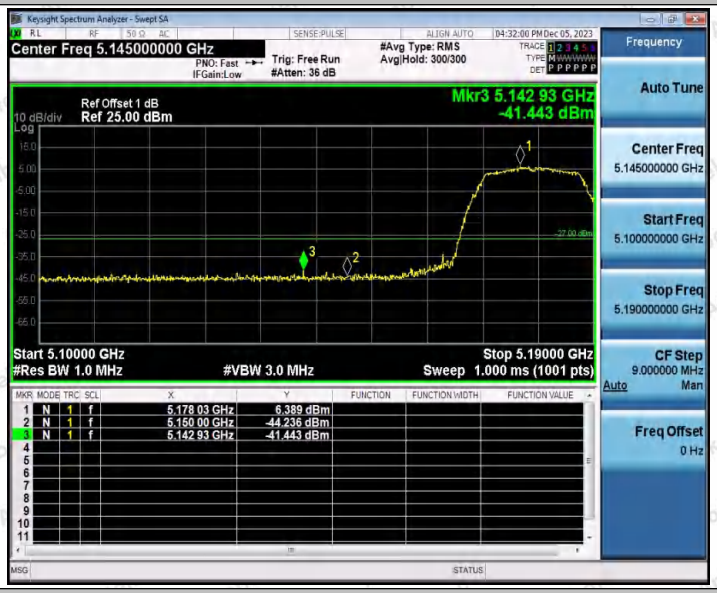
TestMode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-41.44	≤-27	PASS
		High	5240	-43.33	≤-27	PASS
11N20SISO	Ant1	Low	5180	-42.44	≤-27	PASS
		High	5240	-42.56	≤-27	PASS
11N40SISO	Ant1	Low	5190	-41.6	≤-27	PASS
		High	5230	-42.74	≤-27	PASS

Test Result B4

TestMode	Antenna	ChName	Frequency[MHz]	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-55.05	≤7.77	PASS
				5700~5720	-54.53	≤15.30	PASS
				5720~5725	-53.77	≤26.57	PASS
				5760~5650	-57.73	≤-27	PASS
		High	5825	5850~5855	-55.07	≤16.72	PASS
				5855~5875	-54.5	≤10.85	PASS
				5875~5925	-55.69	≤-24.16	PASS
				5925~5935	-56.95	≤-27	PASS
11N20SISO	Ant1	Low	5745	5650~5700	-55.78	≤-1.00	PASS
				5700~5720	-54.61	≤14.53	PASS
				5720~5725	-54.09	≤26.83	PASS
				5760~5650	-58.22	≤-27	PASS
		High	5825	5850~5855	-54.88	≤22.57	PASS
				5855~5875	-54.88	≤10.44	PASS
				5875~5925	-55.29	≤-26.16	PASS
				5925~5935	-56.79	≤-27	PASS
11N40SISO	Ant1	Low	5755	5650~5700	-55.57	≤9.06	PASS
				5700~5720	-47.49	≤15.58	PASS
				5720~5725	-46.53	≤24.97	PASS
				5780~5650	-56.97	≤-27	PASS
		High	5795	5850~5855	-56.55	≤24.69	PASS
				5855~5875	-56.72	≤10.78	PASS
				5875~5925	-57.61	≤-23.87	PASS
				5925~5935	-57.3	≤-27	PASS

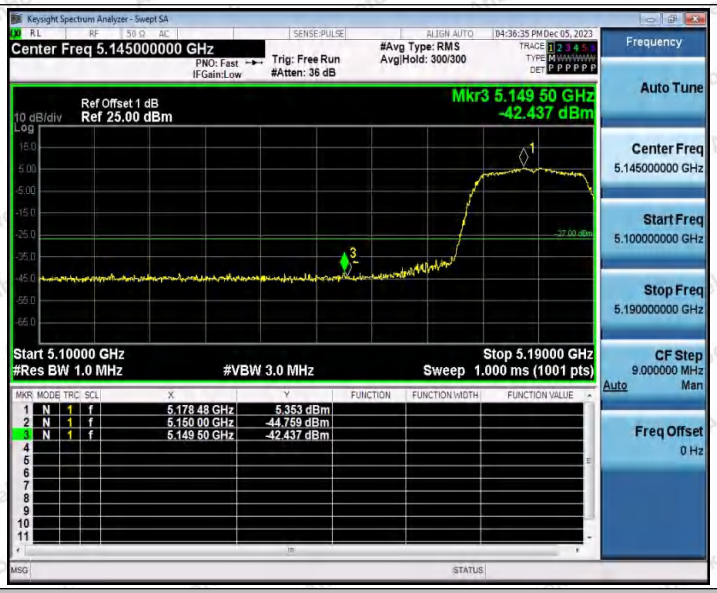
Test Graphs B1

11A_Ant1_Low_5180



11A_Ant1_High_5240

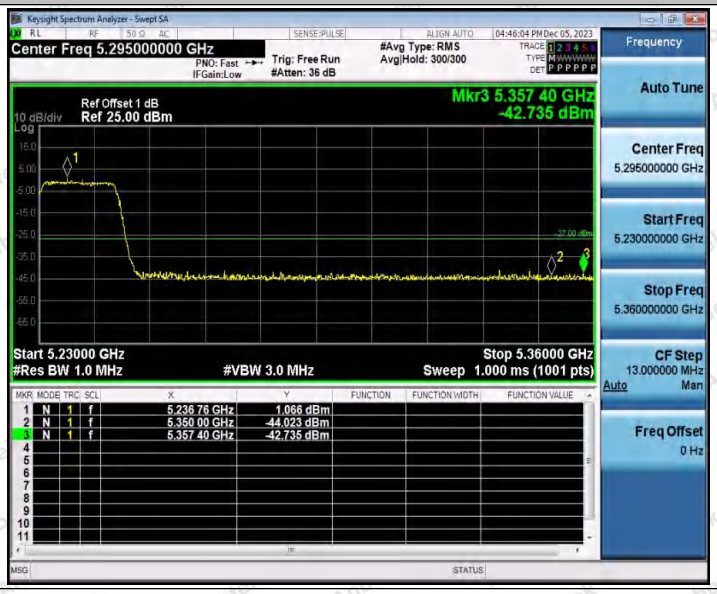
11N20SISO_Ant1_Low_5180



11N20SISO_Ant1_High_5240

11N40SISO_Ant1_Low_5190

11N40SISO_Ant1_High_5230



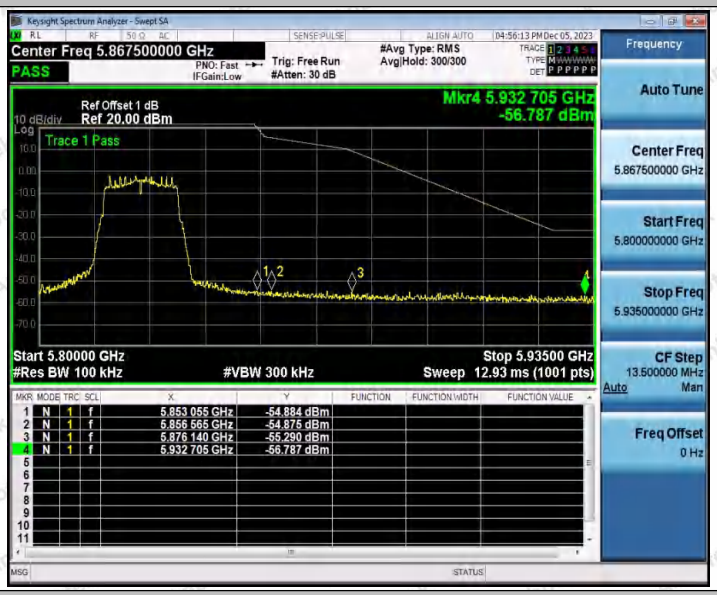
Test Graphs B4

11A_Ant1_Low_5745

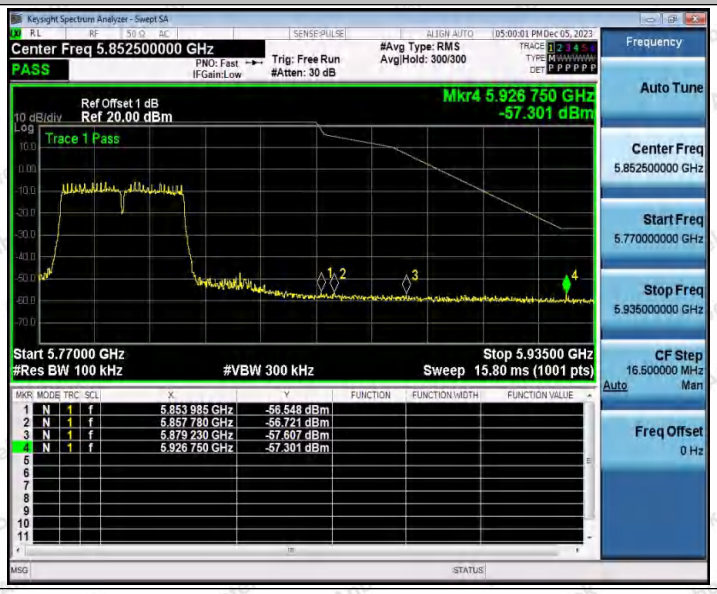
11A_Ant1_High_5825

11N20SISO_Ant1_Low_5745

11N20SISO_Ant1_High_5825



11N40SISO_Ant1_Low_5755

11N40SISO_Ant1_High_5795


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