Case No. : CTA24061300304	
Ambient Condition: 24 ℃, 49 %RH	
According Standard: ■Part15E	
Test Date: 2024.6.18	**Test Engineer:** Evan ouyang

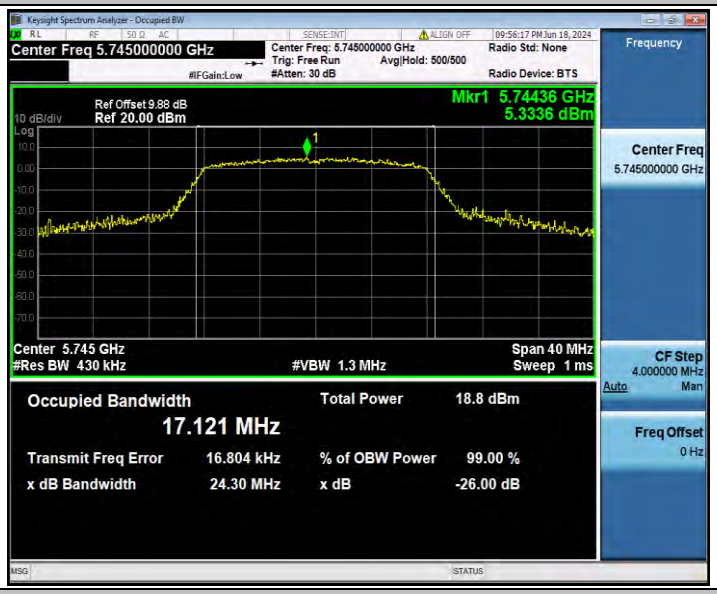
Appendix E.1: Occupied channel bandwidth

Test Result

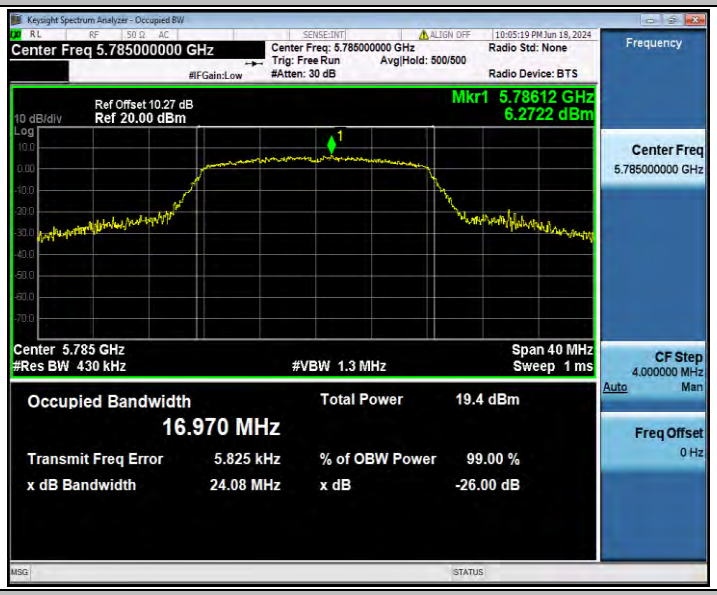
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]
11A	Ant1	5745	17.121	5736.4563	5753.5773
		5785	16.970	5776.5208	5793.4908
		5825	17.017	5816.4547	5833.4717
11N20SISO	Ant1	5745	18.249	5735.8395	5754.0885
		5785	18.240	5775.8692	5794.1092
		5825	18.257	5815.8194	5834.0764
11N40SISO	Ant1	5755	36.618	5736.6773	5773.2953
		5795	36.528	5776.7888	5813.3168
11AC20SISO	Ant1	5745	17.996	5735.9942	5753.9902
		5785	17.943	5776.0453	5793.9883
		5825	17.945	5816.0152	5833.9602
11AC40SISO	Ant1	5755	36.325	5736.8768	5773.2018
		5795	36.342	5776.8788	5813.2208
11AC80SISO	Ant1	5775	75.375	5737.3689	5812.7439

Test Graphs

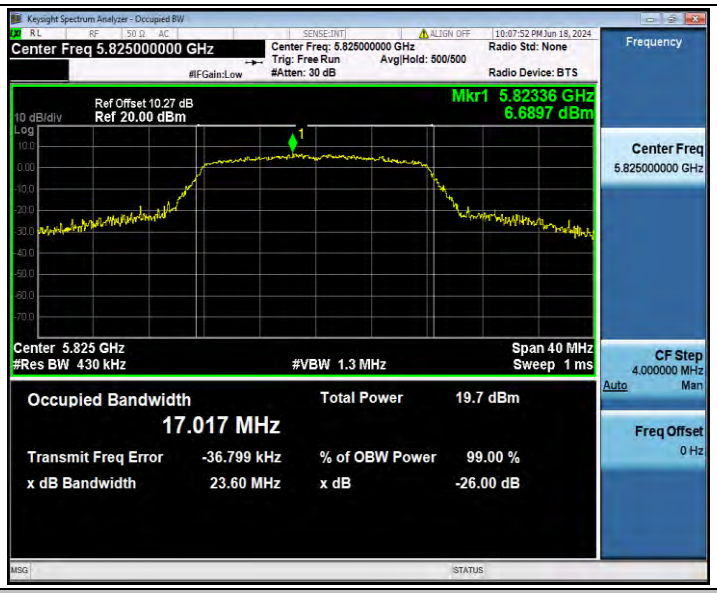
11A_Ant1_5745



11A_Ant1_5785



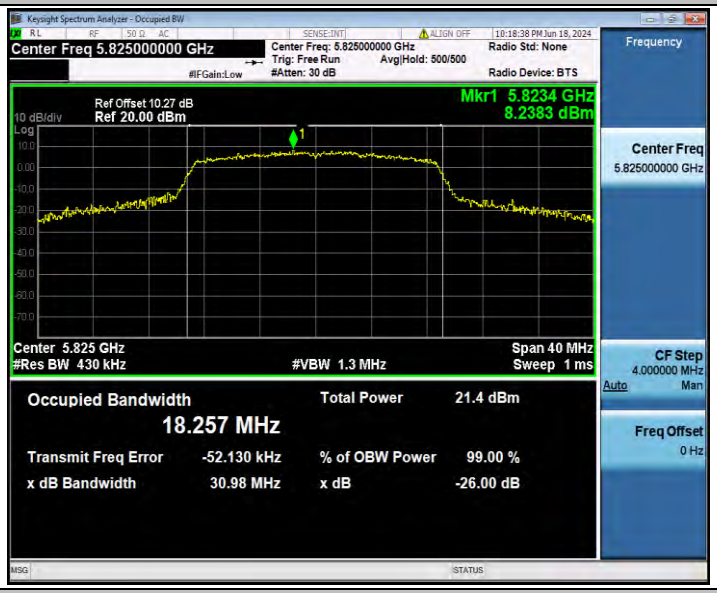
11A_Ant1_5825



11N20SISO_Ant1_5745

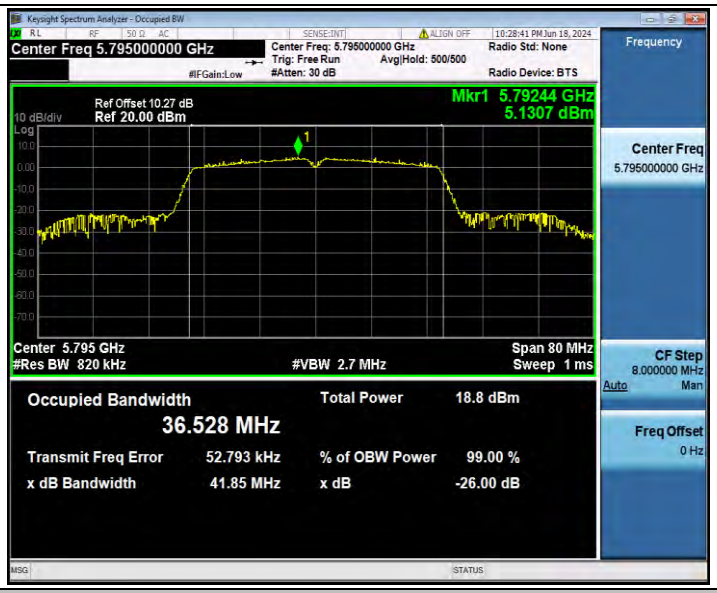
11N20SISO_Ant1_5785

11N20SISO_Ant1_5825



11N40SISO_Ant1_5755

11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745

11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825

11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5775

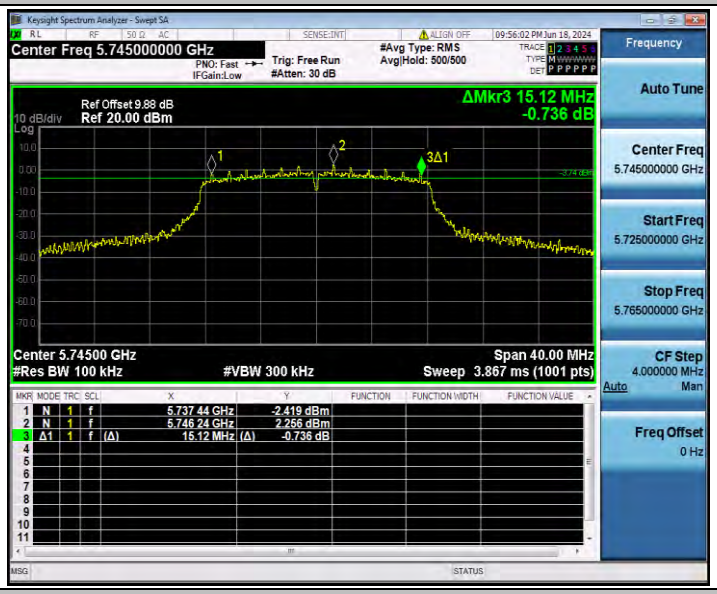
Appendix E.2: Min emission bandwidth

Test Result B4

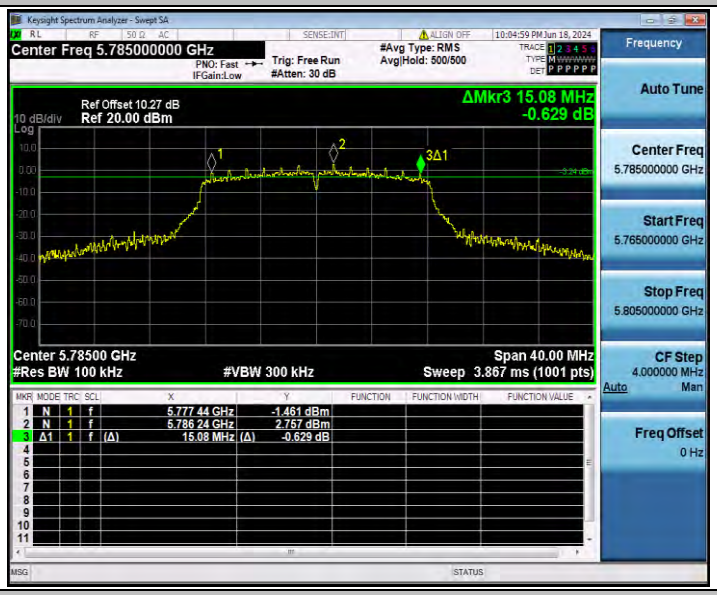
TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.120	5737.440	5752.560	0.5	PASS
		5785	15.080	5777.440	5792.520	0.5	PASS
		5825	15.120	5817.440	5832.560	0.5	PASS
11N20SISO	Ant1	5745	15.120	5737.440	5752.560	0.5	PASS
		5785	15.080	5777.440	5792.520	0.5	PASS
		5825	15.120	5817.440	5832.560	0.5	PASS
11N40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	15.080	5737.440	5752.520	0.5	PASS
		5785	15.080	5777.440	5792.520	0.5	PASS
		5825	15.120	5817.440	5832.560	0.5	PASS
11AC40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

Test Graphs B4

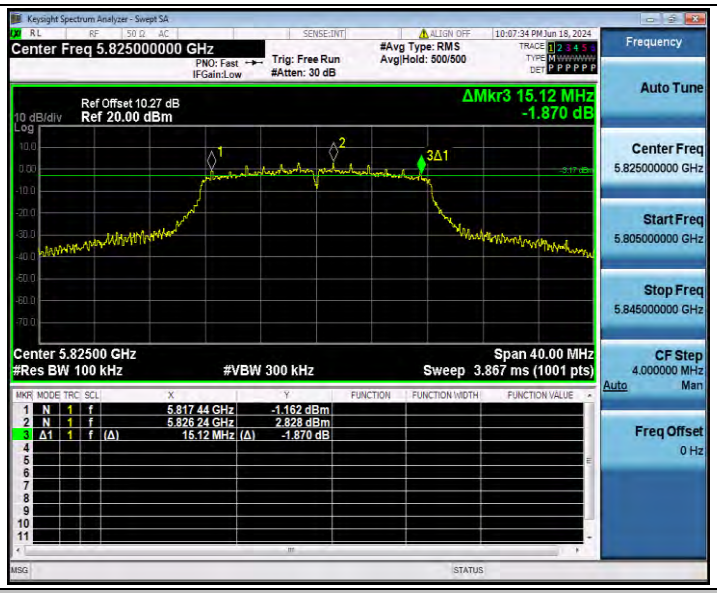
11A_Ant1_5745



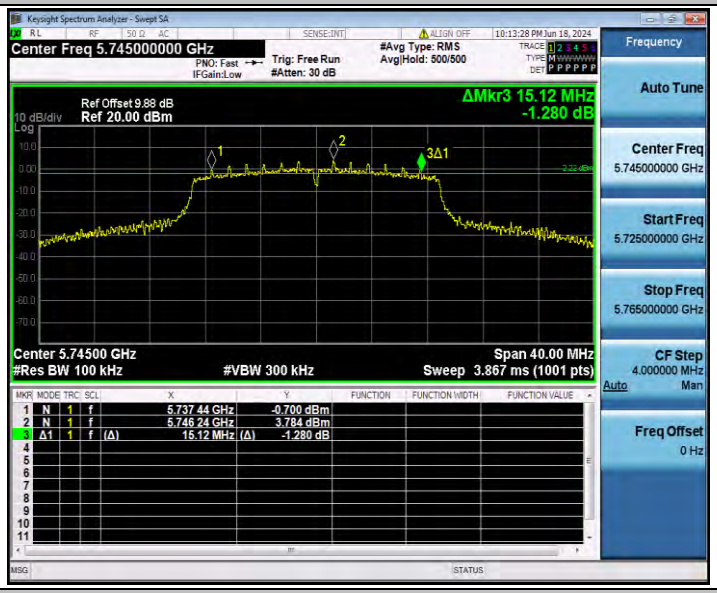
11A_Ant1_5785



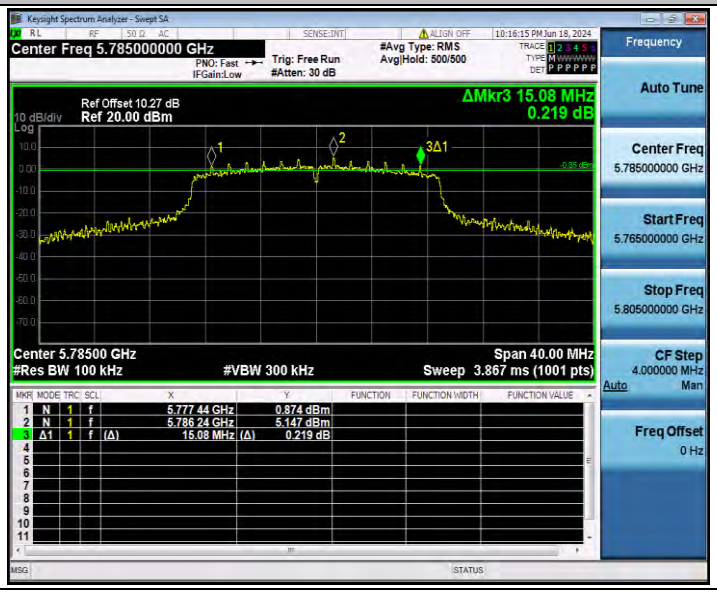
11A_Ant1_5825

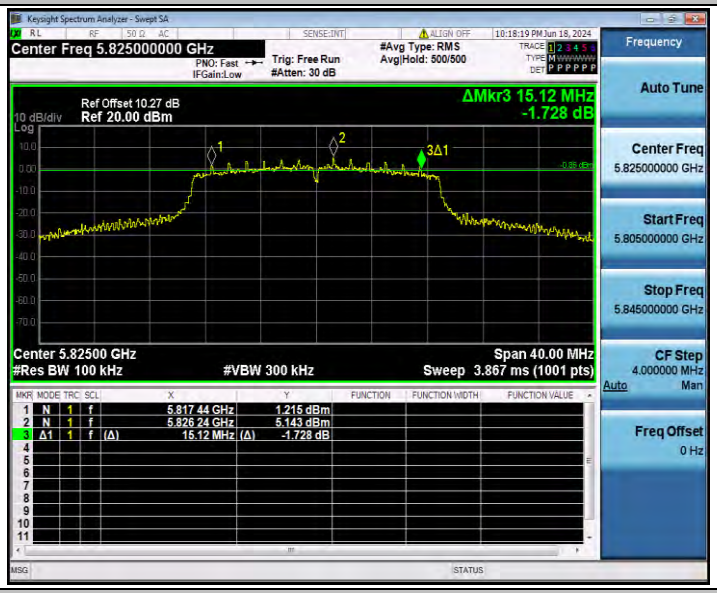


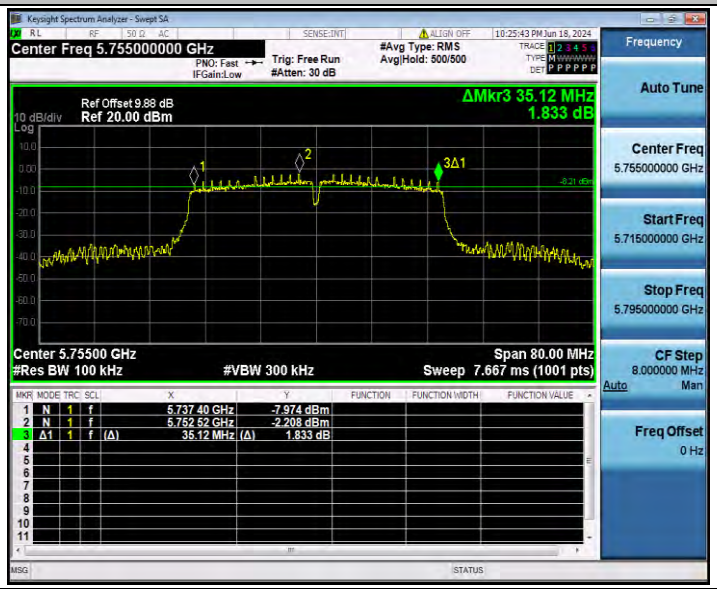
11N20SISO_Ant1_5745



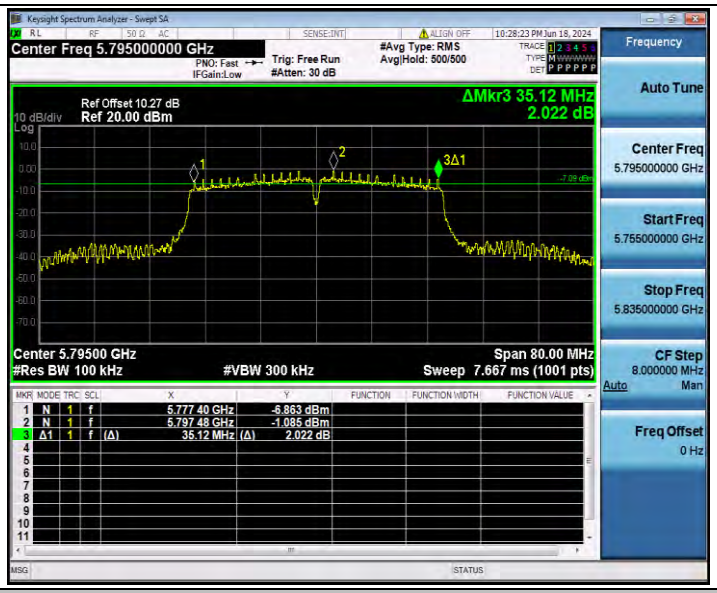
11N20SISO_Ant1_5785



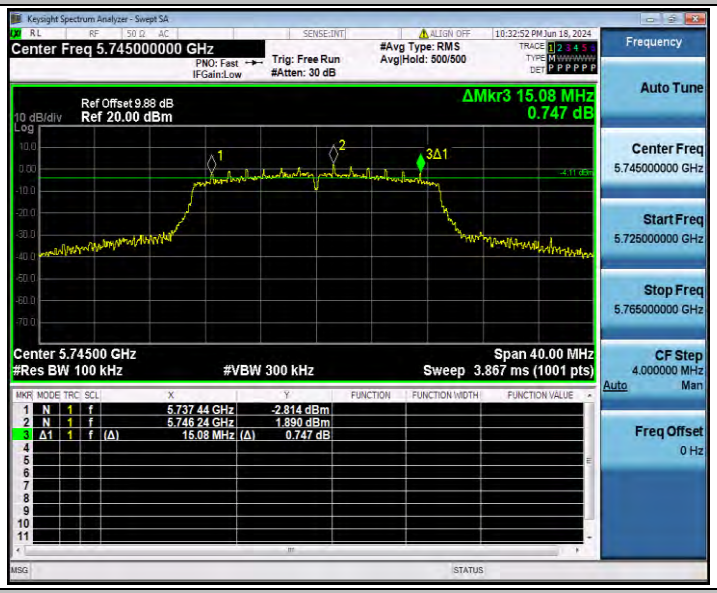
11N20SISO_Ant1_5825


11N40SISO_Ant1_5755


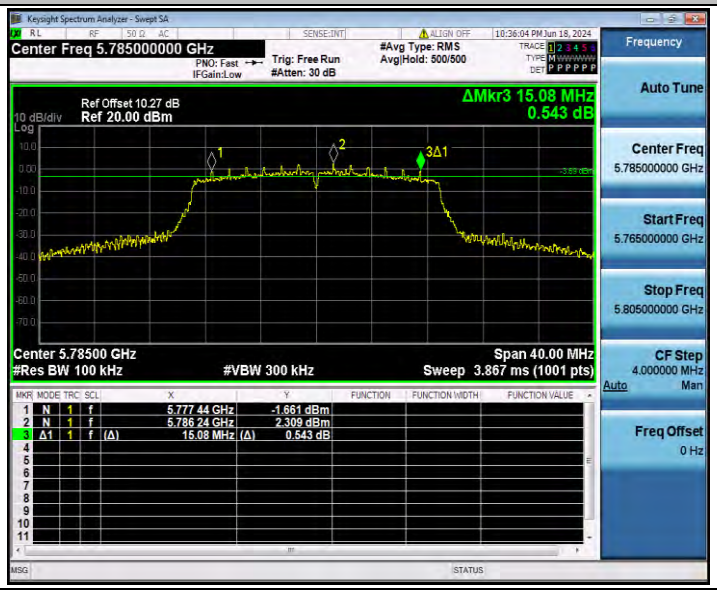
11N40SISO_Ant1_5795

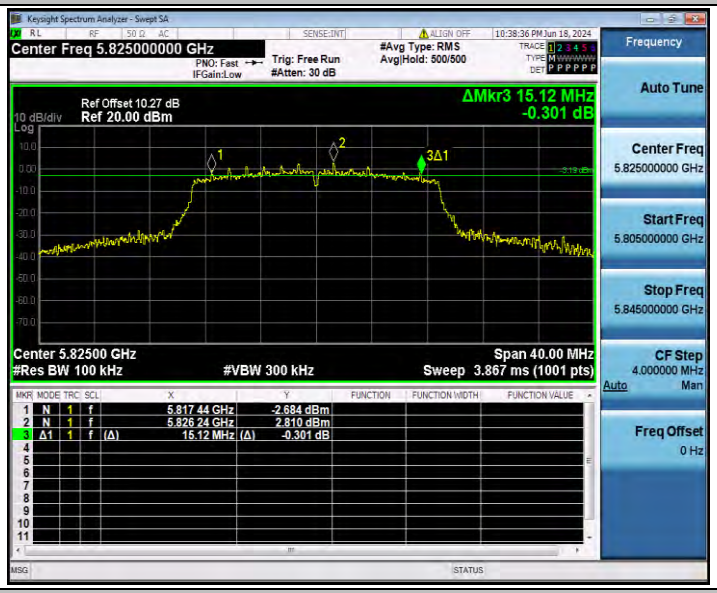


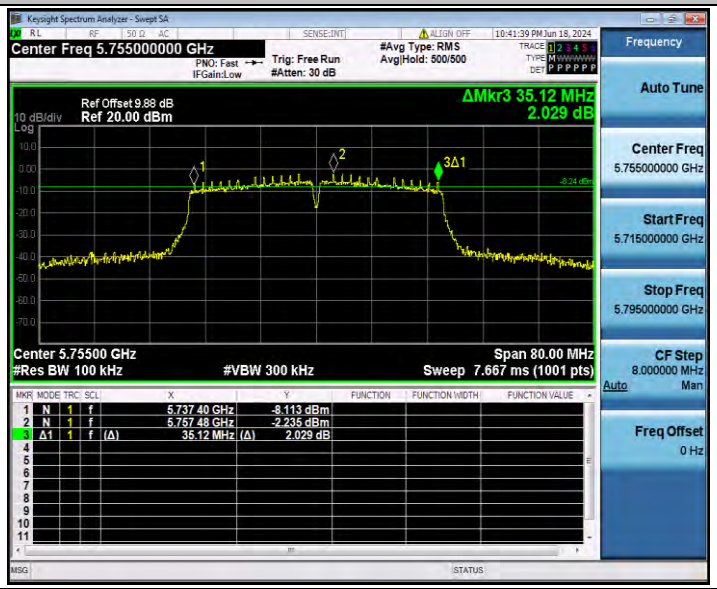
11AC20SISO_Ant1_5745



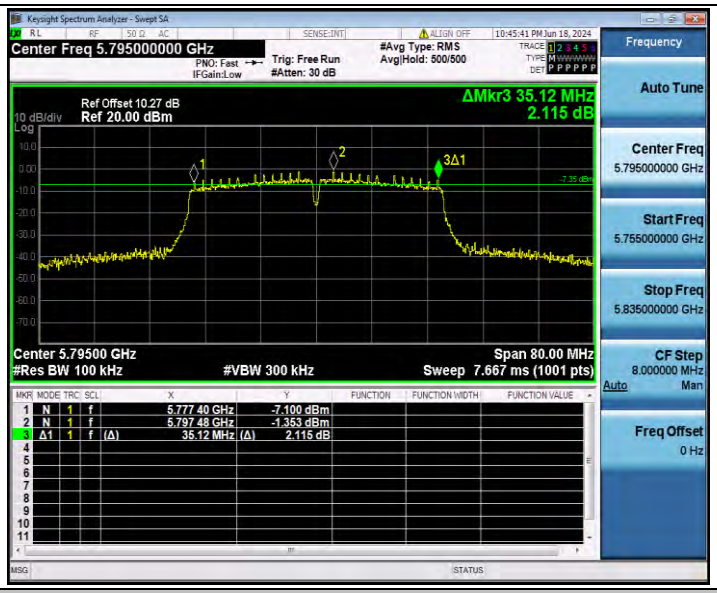
11AC20SISO_Ant1_5785



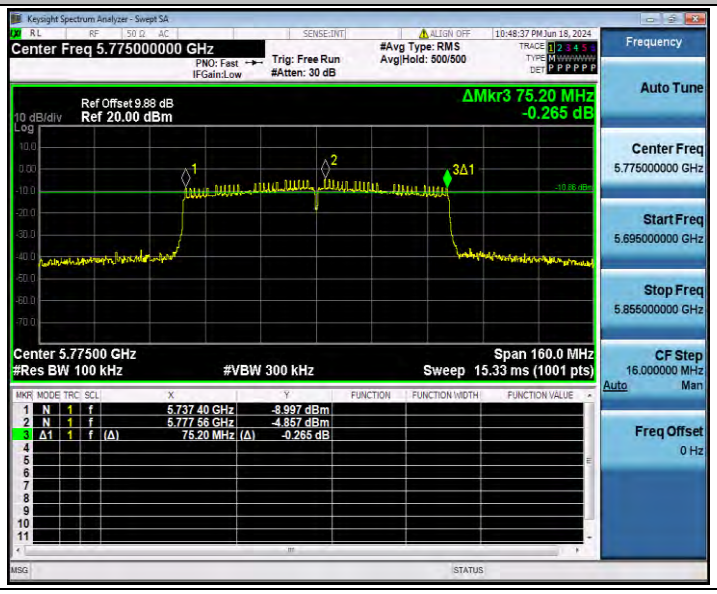
11AC20SISO_Ant1_5825


11AC40SISO_Ant1_5755


11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775



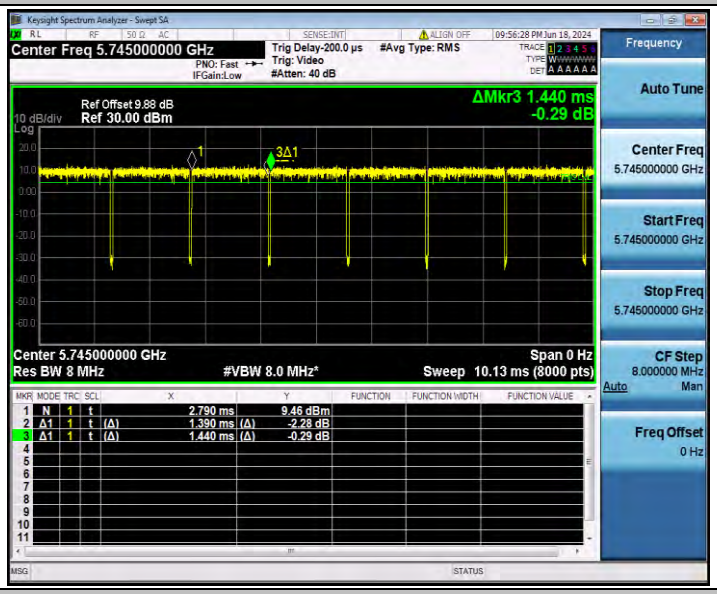
Appendix E.3: Duty Cycle

Test Result

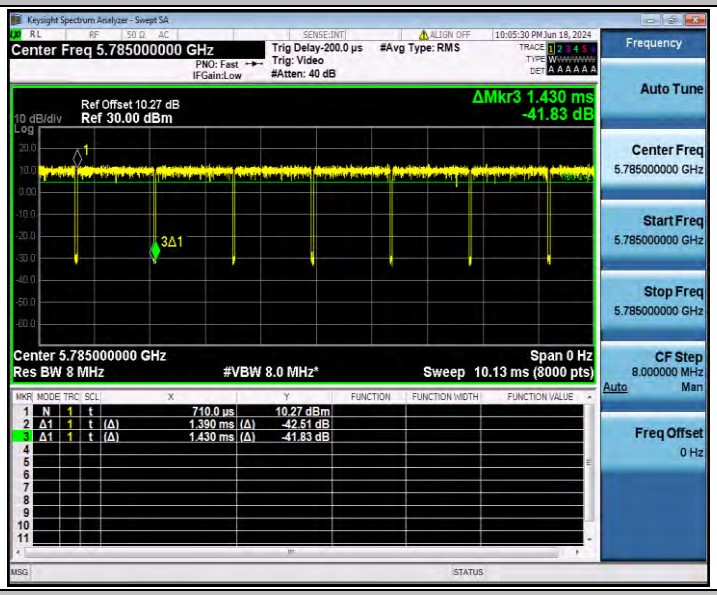
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5745	1.39	1.44	96.53	0.15	0.72
		5785	1.39	1.43	97.20	0.12	0.72
		5825	1.40	1.44	97.22	0.12	0.71
11N20SISO	Ant1	5745	1.30	1.35	96.30	0.16	0.77
		5785	1.30	1.34	97.01	0.13	0.77
		5825	1.30	1.35	96.30	0.16	0.77
11N40SISO	Ant1	5755	0.65	0.70	92.86	0.32	1.54
		5795	0.65	0.69	94.20	0.26	1.54
11AC20SISO	Ant1	5745	1.31	1.36	96.32	0.16	0.76
		5785	1.31	1.35	97.04	0.13	0.76
		5825	1.31	1.36	96.32	0.16	0.76
11AC40SISO	Ant1	5755	0.65	0.69	94.20	0.26	1.54
		5795	0.65	0.69	94.20	0.26	1.54
11AC80SISO	Ant1	5775	0.32	0.36	88.89	0.51	3.13

Test Graphs

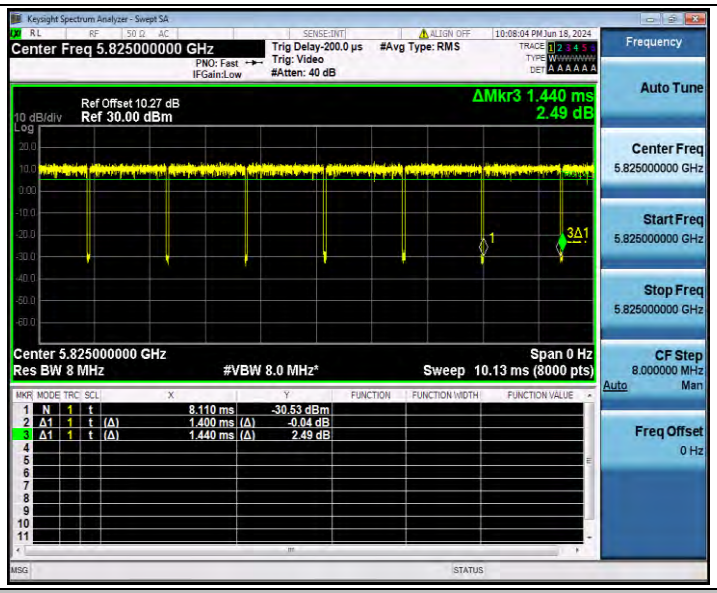
11A_Ant1_5745



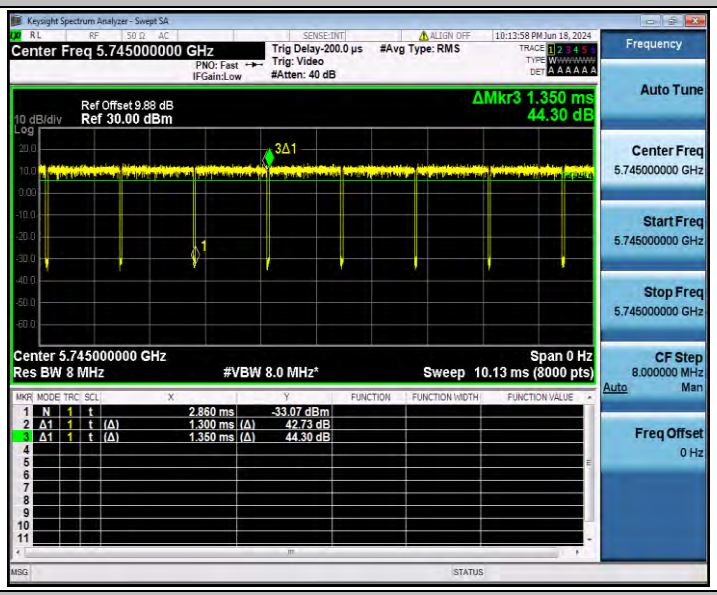
11A_Ant1_5785



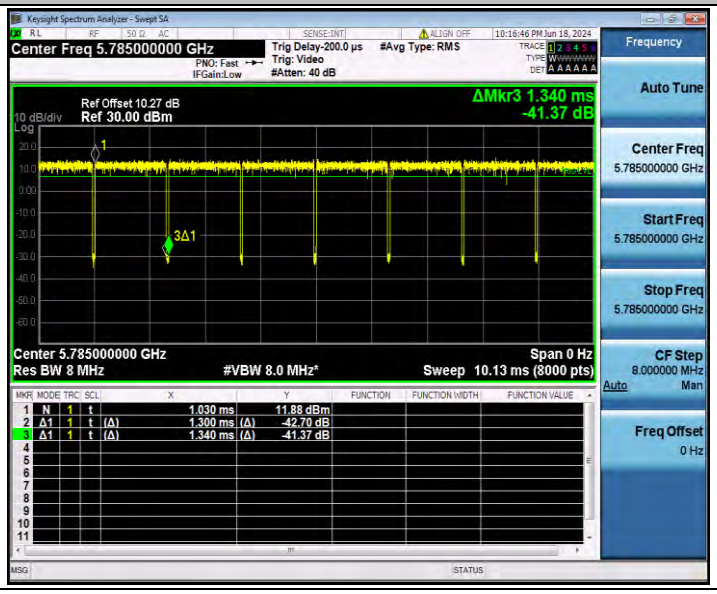
11A_Ant1_5825

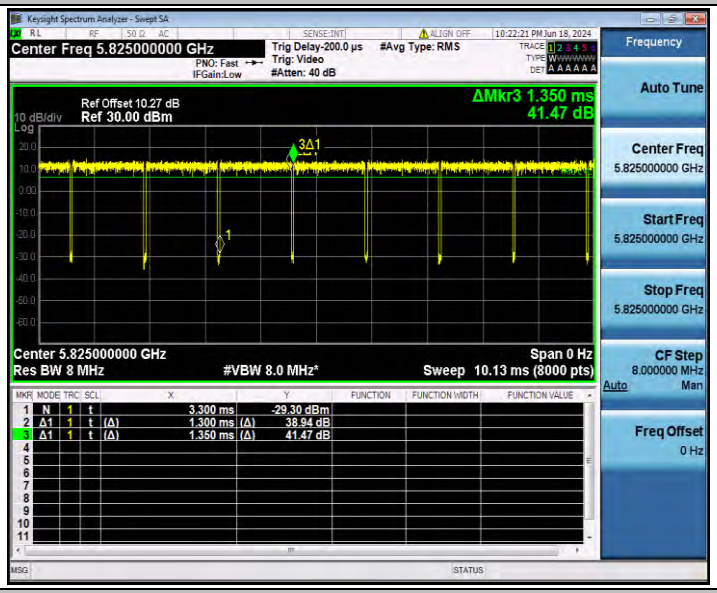
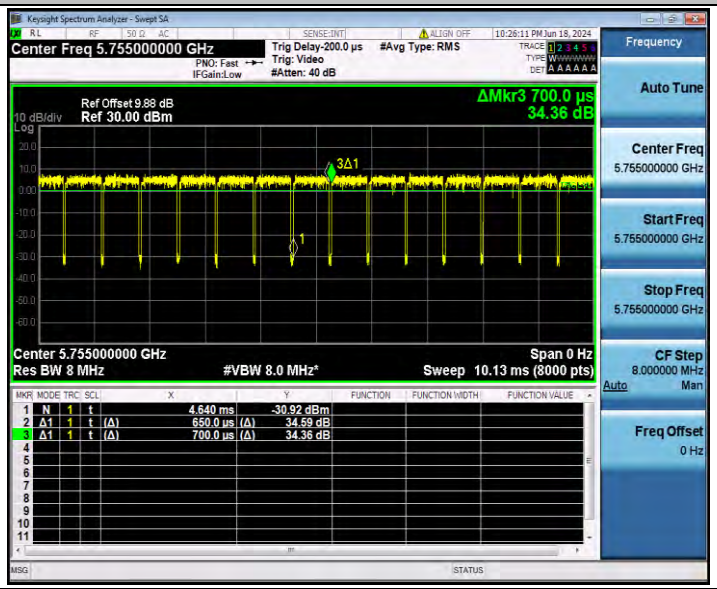


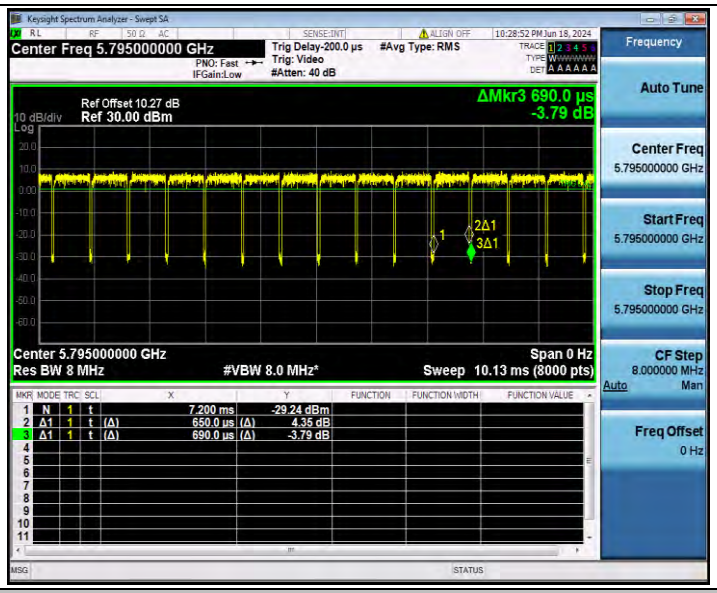
11N20SISO_Ant1_5745



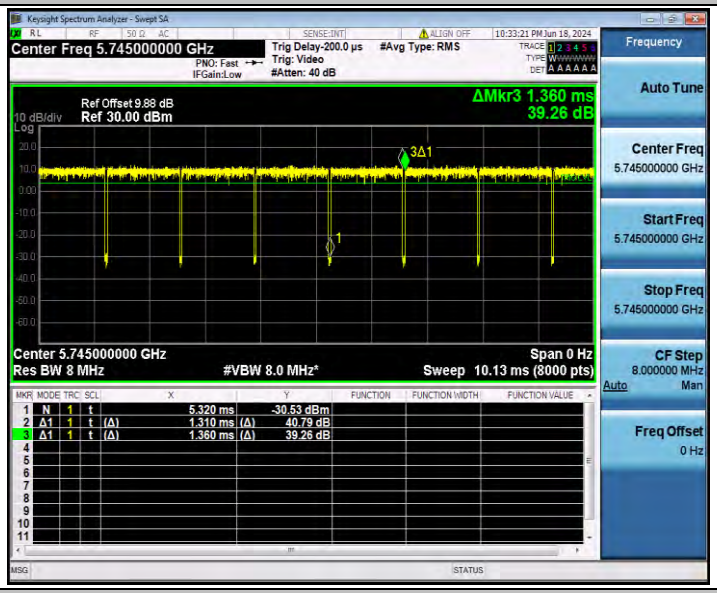
11N20SISO_Ant1_5785



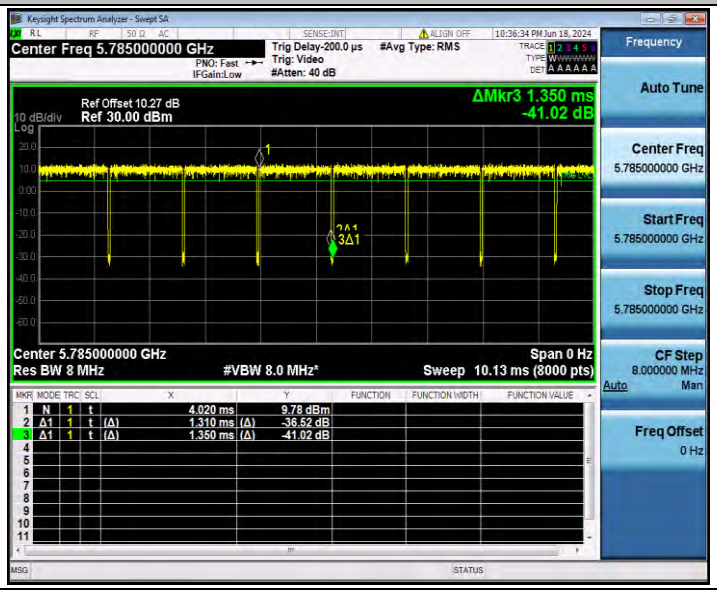
11N20SISO_Ant1_5825

11N40SISO_Ant1_5755

11N40SISO_Ant1_5795



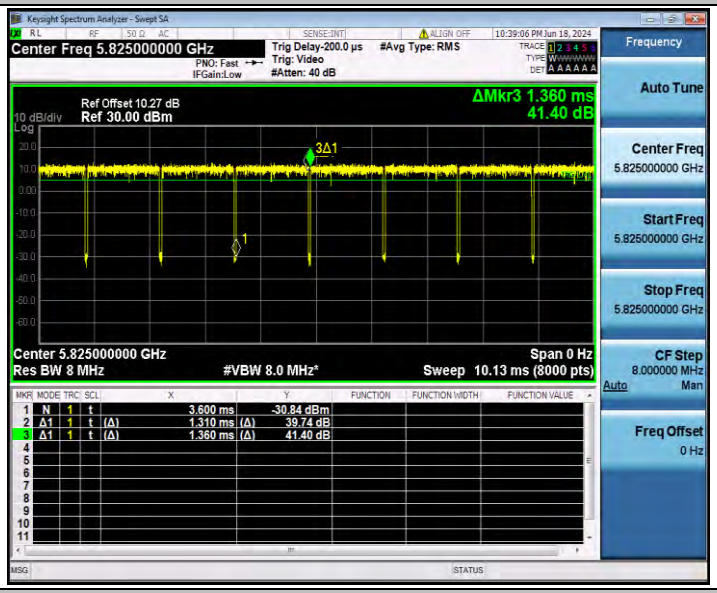
11AC20SISO_Ant1_5745



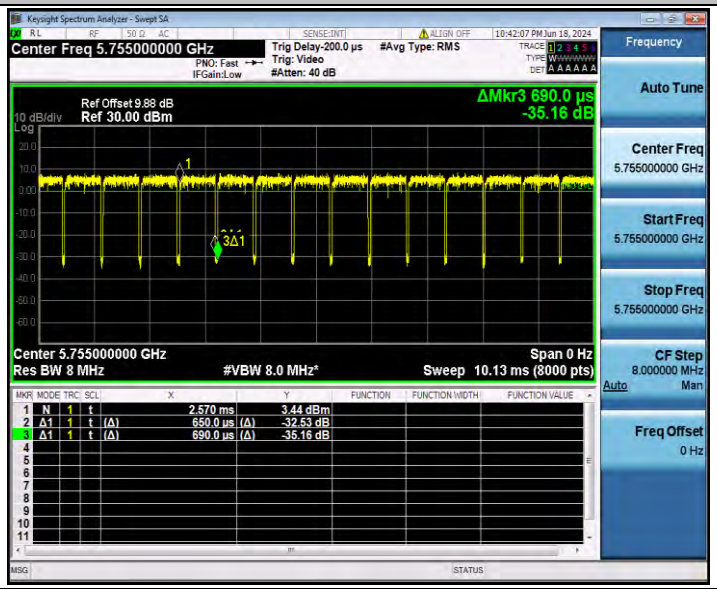
11AC20SISO_Ant1_5785



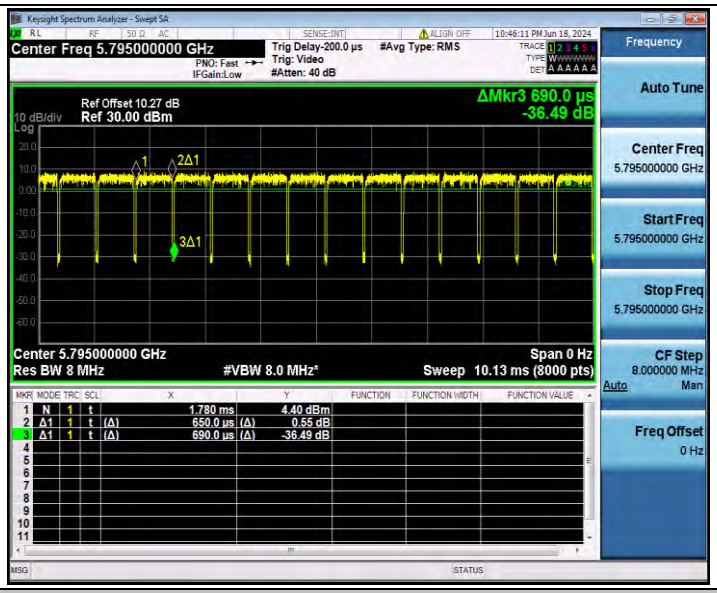
11AC20SISO_Ant1_5825



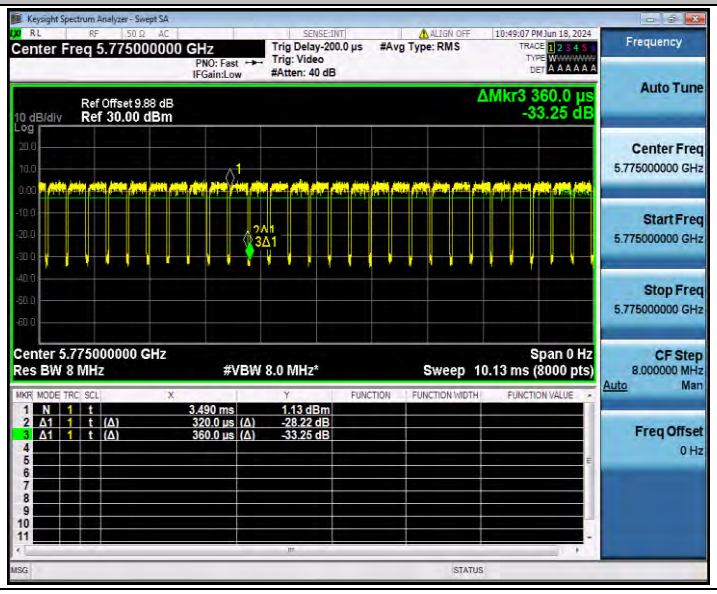
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775



Appendix E.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Freq(MHz)	Channel Powert [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	11.88	96.53	0.15	12.03	≤30.00	PASS
		5785	12.44	97.20	0.12	12.56	≤30.00	PASS
		5825	12.84	97.22	0.12	12.96	≤30.00	PASS
11N20SISO	Ant1	5745	13.31	96.30	0.16	13.47	≤30.00	PASS
		5785	14.37	97.01	0.13	14.50	≤30.00	PASS
		5825	14.16	96.30	0.16	14.32	≤30.00	PASS
11N40SISO	Ant1	5755	10.31	92.86	0.32	10.63	≤30.00	PASS
		5795	11.17	94.20	0.26	11.43	≤30.00	PASS
11AC20SISO	Ant1	5745	11.40	96.32	0.16	11.56	≤30.00	PASS
		5785	12.39	97.04	0.13	12.52	≤30.00	PASS
		5825	12.58	96.32	0.16	12.74	≤30.00	PASS
11AC40SISO	Ant1	5755	10.32	94.20	0.26	10.58	≤30.00	PASS
		5795	11.21	94.20	0.26	11.47	≤30.00	PASS
11AC80SISO	Ant1	5775	10.35	88.89	0.51	10.86	≤30.00	PASS

Note：

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

Appendix E.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-1.35	≤30.00	PASS
		5785	-0.55	≤30.00	PASS
		5825	-0.03	≤30.00	PASS
11N20SISO	Ant1	5745	-0.04	≤30.00	PASS
		5785	0.93	≤30.00	PASS
		5825	0.89	≤30.00	PASS
11N40SISO	Ant1	5755	-5.65	≤30.00	PASS
		5795	-4.84	≤30.00	PASS
11AC20SISO	Ant1	5745	-1.94	≤30.00	PASS
		5785	-0.83	≤30.00	PASS
		5825	-0.51	≤30.00	PASS
11AC40SISO	Ant1	5755	-5.87	≤30.00	PASS
		5795	-4.89	≤30.00	PASS
11AC80SISO	Ant1	5775	-8.39	≤30.00	PASS

Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

11A_Ant1_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 E.6: Band edge measurements

Test Result B4

TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-40.02	≤-26.45	PASS
				5700~5720	-28.23	≤14.95	PASS
				5720~5725	-23.34	≤22.90	PASS
				5760~5650	-37.79	≤-27	PASS
		High	5825	5850~5855	-35.83	≤15.73	PASS
				5855~5875	-36.3	≤10.21	PASS
				5875~5925	-37.87	≤-25.71	PASS
				5925~5935	-38.3	≤-27	PASS
11N20SISO	Ant1	Low	5745	5650~5700	-39.85	≤-26.53	PASS
				5700~5720	-24.99	≤15.50	PASS
				5720~5725	-23.31	≤16.60	PASS
				5760~5650	-39.32	≤-27	PASS
		High	5825	5850~5855	-31.03	≤17.88	PASS
				5855~5875	-30.49	≤15.46	PASS
				5875~5925	-39.7	≤-26.81	PASS
				5925~5935	-38.43	≤-27	PASS
11N40SISO	Ant1	Low	5755	5650~5700	-39.45	≤-25.90	PASS
				5700~5720	-23.41	≤15.31	PASS
				5720~5725	-21.39	≤18.20	PASS
				5780~5650	-39.33	≤-27	PASS
		High	5795	5850~5855	-38.48	≤15.66	PASS
				5855~5875	-36.47	≤11.22	PASS
				5875~5925	-38.07	≤-26.71	PASS
				5925~5935	-38.21	≤-27	PASS
11AC20SISO	Ant1	Low	5745	5650~5700	-40.83	≤-26.96	PASS
				5700~5720	-30.1	≤15.34	PASS
				5720~5725	-29.63	≤17.65	PASS
				5760~5650	-39.02	≤-27	PASS
		High	5825	5850~5855	-35.52	≤16.34	PASS
				5855~5875	-38.16	≤10.32	PASS
				5875~5925	-37.99	≤-26.01	PASS
				5925~5935	-38.36	≤-27	PASS
11AC40SISO	Ant1	Low	5755	5650~5700	-39.98	≤-26.90	PASS
				5700~5720	-26.05	≤15.01	PASS
				5720~5725	-28.45	≤15.74	PASS
				5780~5650	-38.6	≤-27	PASS

		High	5795	5850~5855	-39.27	≤15.66	PASS
				5855~5875	-38.35	≤10.02	PASS
				5875~5925	-38.5	≤-26.59	PASS
				5925~5935	-38.24	≤-27	PASS
11AC80S ISO	Ant1	Low	5775	5650~5700	-36.92	≤-24.62	PASS
				5700~5720	-25.57	≤13.61	PASS
				5720~5725	-27.75	≤15.65	PASS
				5800~5650	-38.26	≤-27	PASS
		High	5775	5850~5855	-32.51	≤15.84	PASS
				5855~5875	-31.68	≤11.59	PASS
				5875~5925	-38.91	≤-26.32	PASS
				5925~5935	-38.27	≤-27	PASS

Test Graphs B4

11A_Ant1_Low_5745

11A_Ant1_High_5825

11N20SISO_Ant1_Low_5745

11N20SISO_Ant1_High_5825

11N40SISO_Ant1_Low_5755

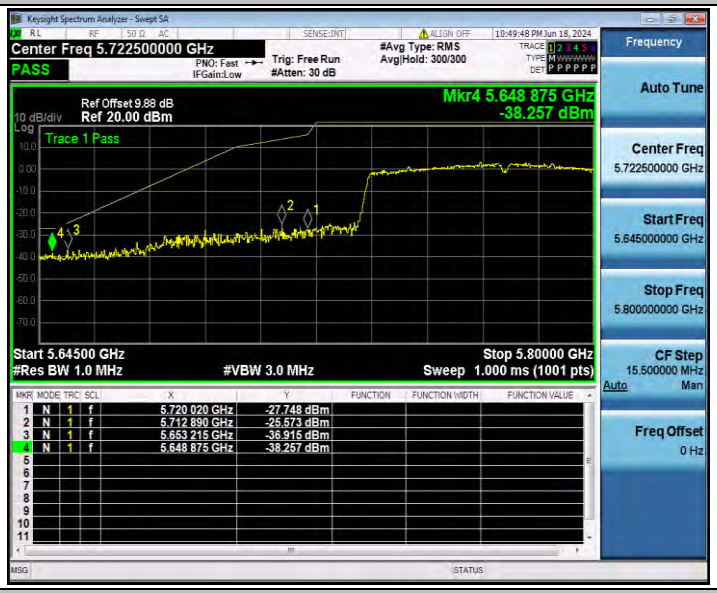
11N40SISO_Ant1_High_5795

11AC20SISO_Ant1_Low_5745

11AC20SISO_Ant1_High_5825

11AC40SISO_Ant1_Low_5755

11AC40SISO_Ant1_High_5795

11AC80SISO_Ant1_Low_5775


11AC80SISO_Ant1_High_5775

Appendix E.7: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	5351.77	-40.68	≤-27	PASS
			5925~27000	24191.41	-31.72	≤-27	PASS
		5785	30~5650	5392.6	-39.44	≤-27	PASS
			5925~27000	26723.92	-31.75	≤-27	PASS
		5825	30~5650	2687.51	-39.85	≤-27	PASS
			5925~27000	24241.99	-31.01	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	1737.54	-32.58	≤-27	PASS
			5925~27000	25260.61	-32.19	≤-27	PASS
		5785	30~5650	4972.23	-40.45	≤-27	PASS
			5925~27000	23534.57	-31.39	≤-27	PASS
		5825	30~5650	3158.47	-39.78	≤-27	PASS
			5925~27000	26830.7	-31.9	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	5394.85	-39.55	≤-27	PASS
			5925~27000	25058.29	-30.66	≤-27	PASS
		5795	30~5650	5352.7	-40.5	≤-27	PASS
			5925~27000	24981.02	-31.55	≤-27	PASS
11AC20SISO	Ant1	5745	30~5650	5362.44	-40.81	≤-27	PASS
			5925~27000	24877.05	-31.5	≤-27	PASS
		5785	30~5650	5064.58	-40.16	≤-27	PASS
			5925~27000	26616.44	-31.87	≤-27	PASS
		5825	30~5650	5523.18	-39.07	≤-27	PASS
			5925~27000	24941.68	-31.41	≤-27	PASS
11AC40SISO	Ant1	5755	30~5650	5368.06	-40.57	≤-27	PASS
			5925~27000	26793.47	-31.8	≤-27	PASS
		5795	30~5650	5454.8	-40.34	≤-27	PASS
			5925~27000	26048.82	-31.83	≤-27	PASS
11AC80SISO	Ant1	5775	30~5650	5621.71	-40.2	≤-27	PASS
			5925~27000	26642.43	-32.66	≤-27	PASS

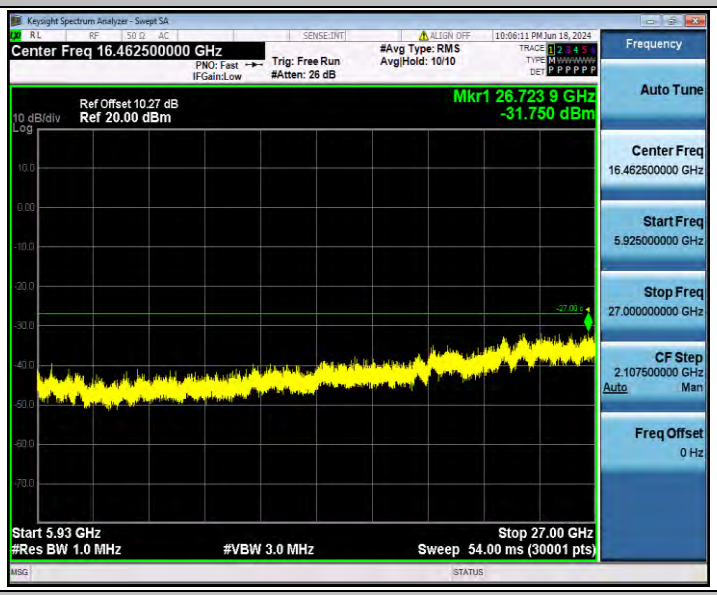
Test Graphs

11A_Ant1_5745_30~5650

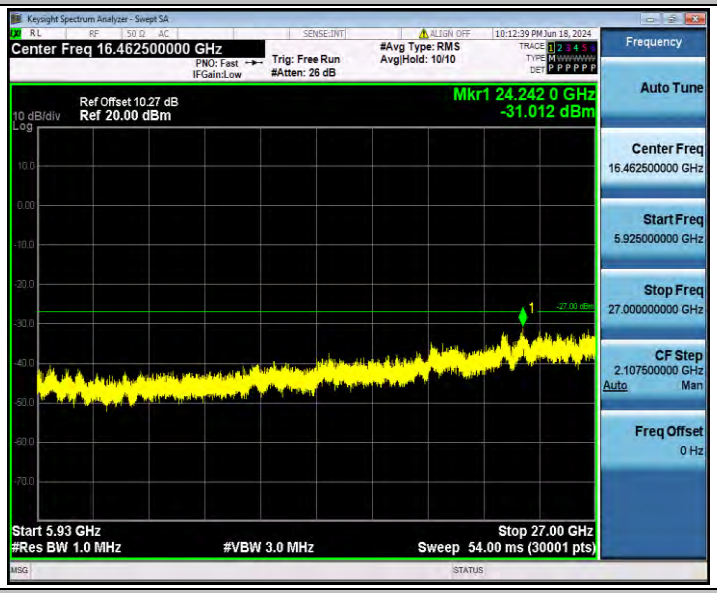
11A_Ant1_5745_5925~27000

11A_Ant1_5785_30~5650

11A_Ant1_5785_5925~27000

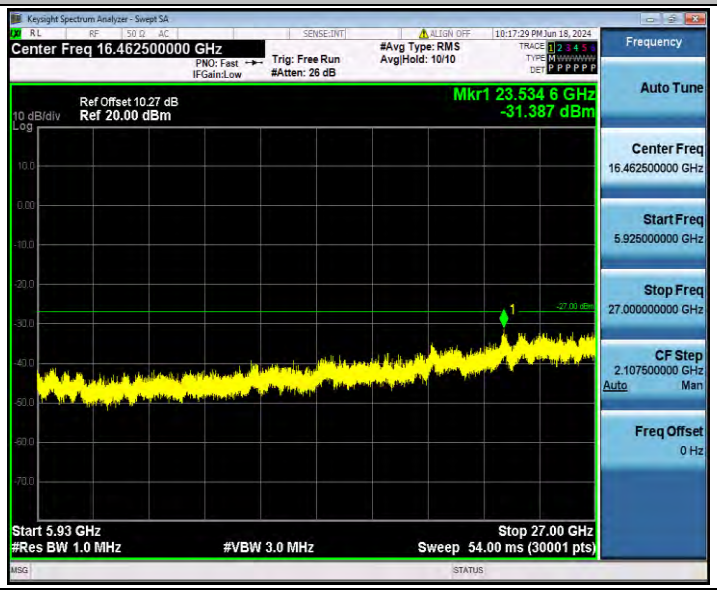


11A_Ant1_5825_30~5650

11A_Ant1_5825_5925~27000

11N20SISO_Ant1_5745_30~5650
11N20SISO_Ant1_5745_5925~27000

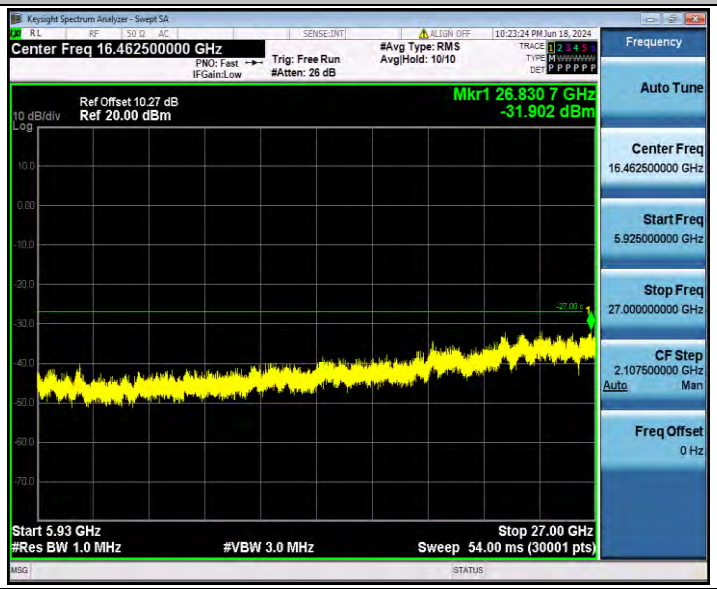
11N20SISO_Ant1_5785_30~5650

11N20SISO_Ant1_5785_5925~27000



11N20SISO_Ant1_5825_30~5650

11N20SISO_Ant1_5825_5925~27000

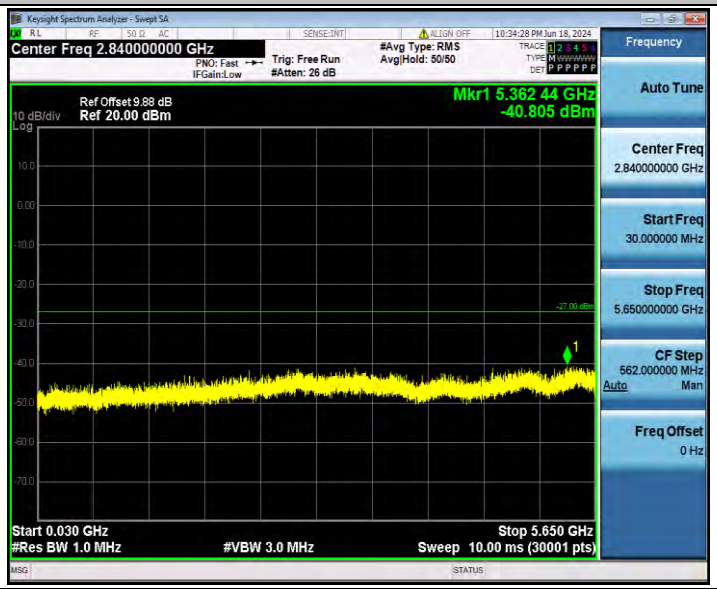


11N40SISO_Ant1_5755_30~5650

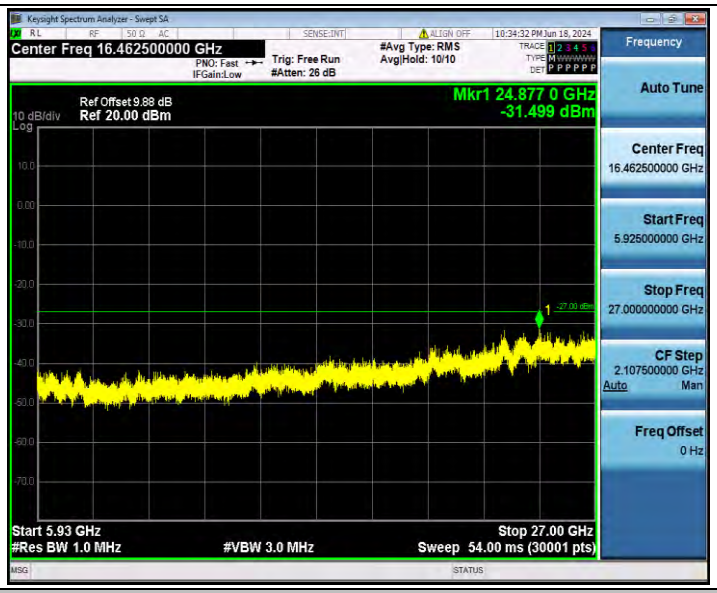
11N40SISO_Ant1_5755_5925~27000

11N40SISO_Ant1_5795_30~5650

11N40SISO_Ant1_5795_5925~27000

11AC20SISO_Ant1_5745_30~5650


11AC20SISO_Ant1_5745_5925~27000



11AC20SISO_Ant1_5785_30~5650

11AC20SISO_Ant1_5785_5925~27000

11AC20SISO_Ant1_5825_30~5650

11AC20SISO_Ant1_5825_5925~27000

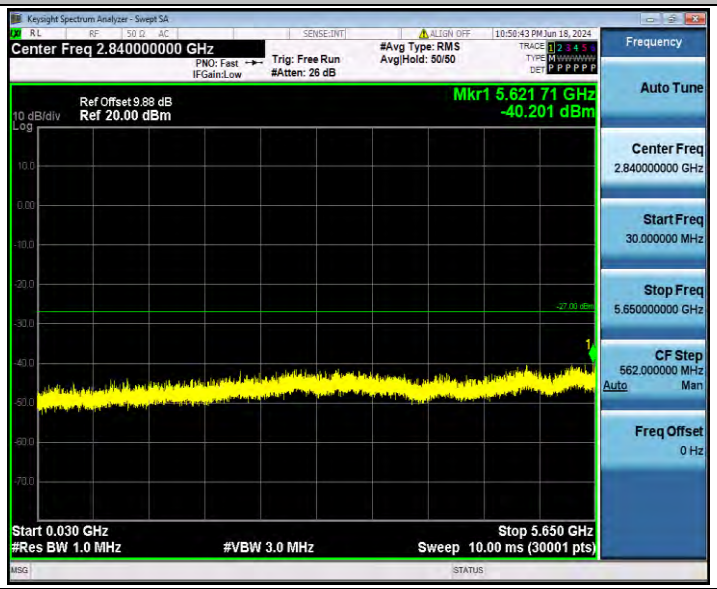
11AC40SISO_Ant1_5755_30~5650

11AC40SISO_Ant1_5755_5925~27000

11AC40SISO_Ant1_5795_30~5650

11AC40SISO_Ant1_5795_5925~27000

11AC80SISO_Ant1_5775_30~5650



11AC80SISO_Ant1_5775_5925~27000

Keysight Spectrum Analyzer - Swept SA
Center Freq 16.462500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 26 dB
#Avg Type: RMS
Avg|Hold: 10/10
Ref Offset 9.88 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 26.642 4 GHz
-32.664 dBm
Start 5.93 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 27.00 GHz
Sweep 54.00 ms (30001 pts)
Frequency
Auto Tune
Center Freq
16.462500000 GHz
Start Freq
5.925000000 GHz
Stop Freq
27.000000000 GHz
CF Step
2.107500000 GHz
Auto
Man
Freq Offset
0 Hz

Appendix E.8: Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-40.15	≤-27.00	PASS
				Peak	5700.000	-38.4	≤10.00	PASS
				Peak	5720.000	-28.63	≤15.60	PASS
				Peak	5725.000	-26.98	≤27.00	PASS
		High	5825	Peak	5850.000	-32.492	≤27.00	PASS
				Peak	5855.000	-32.25	≤15.60	PASS
				Peak	5875.000	-38.69	≤10.00	PASS
				Peak	5925.000	-38.81	≤-27.00	PASS
11N20SISO	Ant1	Low	5745	Peak	5650.000	-40.026	≤-27.00	PASS
				Peak	5700.000	-37.71	≤10.00	PASS
				Peak	5720.000	-30.68	≤15.60	PASS
				Peak	5725.000	-24.28	≤27.00	PASS
		High	5825	Peak	5850.000	-28.591	≤27.00	PASS
				Peak	5855.000	-31.66	≤15.60	PASS
				Peak	5875.000	-38.43	≤10.00	PASS
				Peak	5925.000	-39.22	≤-27.00	PASS
11N40SISO	Ant1	Low	5755	Peak	5650.000	-38.316	≤-27.00	PASS
				Peak	5700.000	-38.32	≤10.00	PASS
				Peak	5720.000	-32.37	≤15.60	PASS
				Peak	5725.000	-23.66	≤27.00	PASS
		High	5795	Peak	5850.000	-37.396	≤27.00	PASS
				Peak	5855.000	-37.73	≤15.60	PASS
				Peak	5875.000	-38.39	≤10.00	PASS
				Peak	5925.000	-38.89	≤-27.00	PASS
11AC20SISO	Ant1	Low	5745	Peak	5650.000	-39.644	≤-27.00	PASS
				Peak	5700.000	-36.72	≤10.00	PASS
				Peak	5720.000	-33.04	≤15.60	PASS
				Peak	5725.000	-28.63	≤27.00	PASS
		High	5825	Peak	5850.000	-33.279	≤27.00	PASS
				Peak	5855.000	-36.69	≤15.60	PASS
				Peak	5875.000	-39.01	≤10.00	PASS
				Peak	5925.000	-38.02	≤-27.00	PASS
11AC40SISO	Ant1	Low	5755	Peak	5650.000	-39.946	≤-27.00	PASS
				Peak	5700.000	-39.3	≤10.00	PASS
				Peak	5720.000	-29.86	≤15.60	PASS
				Peak	5725.000	-29.03	≤27.00	PASS

		High	5795	Peak	5850.000	-36.518	≤27.00	PASS
				Peak	5855.000	-36.68	≤15.60	PASS
				Peak	5875.000	-36.8	≤10.00	PASS
				Peak	5925.000	-40.2	≤-27.00	PASS
11AC80SISO	Ant1	Low	5775	Peak	5650.000	-40.213	≤-27.00	PASS
				Peak	5700.000	-29.5	≤10.00	PASS
				Peak	5720.000	-27.08	≤15.60	PASS
				Peak	5725.000	-28.43	≤27.00	PASS
		High	5775	Peak	5850.000	-32.01	≤27.00	PASS
				Peak	5855.000	-29.77	≤15.60	PASS
				Peak	5875.000	-39.16	≤10.00	PASS
				Peak	5925.000	-40.32	≤-27.00	PASS

Note：

1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

11A_Ant1_Low_5745_Peak

11A_Ant1_High_5825_Peak

11N20SISO_Ant1_Low_5745_Peak

11N20SISO_Ant1_High_5825_Peak

11N40SISO_Ant1_Low_5755_Peak

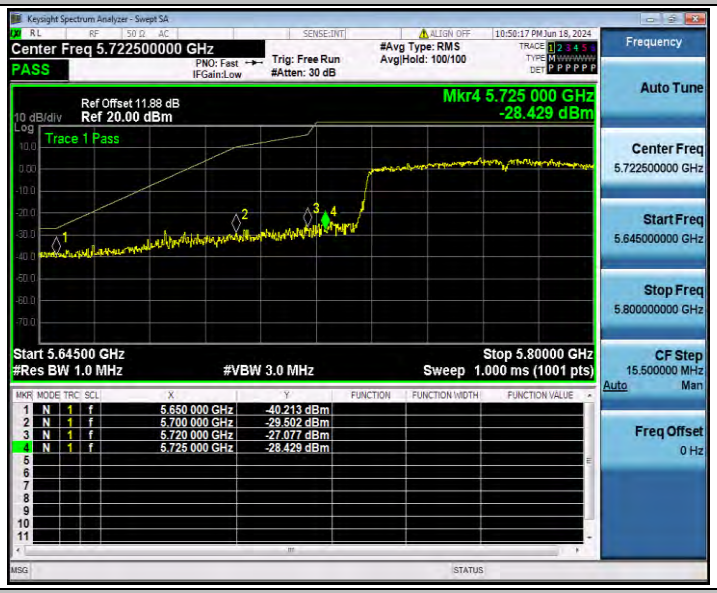
11N40SISO_Ant1_High_5795_Peak

11AC20SISO_Ant1_Low_5745_Peak

11AC20SISO_Ant1_High_5825_Peak

11AC40SISO_Ant1_Low_5755_Peak

11AC40SISO_Ant1_High_5795_Peak

11AC80SISO_Ant1_Low_5775_Peak


11AC80SISO_Ant1_High_5775_Peak