

Case No. : <u>GTS20231020001-1-84</u>	
Ambient Condition: <u>23</u> °C, <u>48</u> %RH	
According Standard: ■Part15E	
Test Date: <u>2024.1.15</u>	Test Engineer: <u>Evan ouyang</u>

Appendix D.1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5260	19.760	5249.960	5269.720	---	---
		5280	19.840	5269.920	5289.760	---	---
		5320	19.960	5309.880	5329.840	---	---
11N20SISO	Ant1	5260	20.560	5249.680	5270.240	---	---
		5280	20.560	5269.600	5290.160	---	---
		5320	24.640	5309.080	5333.720	---	---

Test Graphs

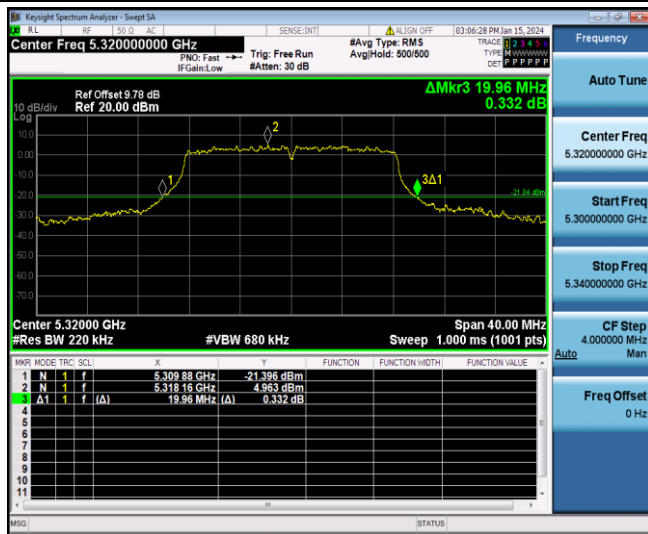
11A_Ant1_5260



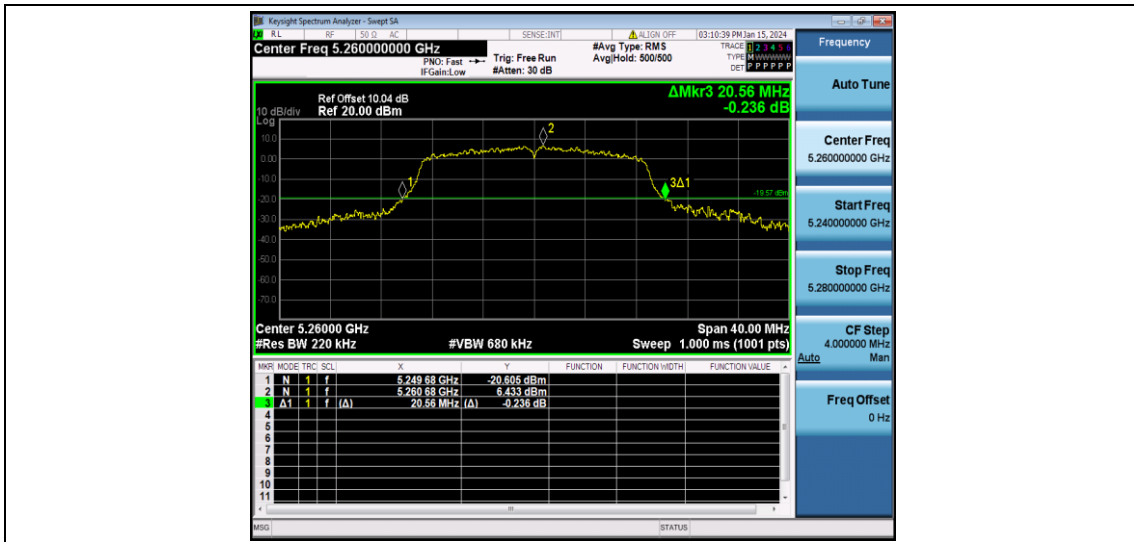
11A_Ant1_5280



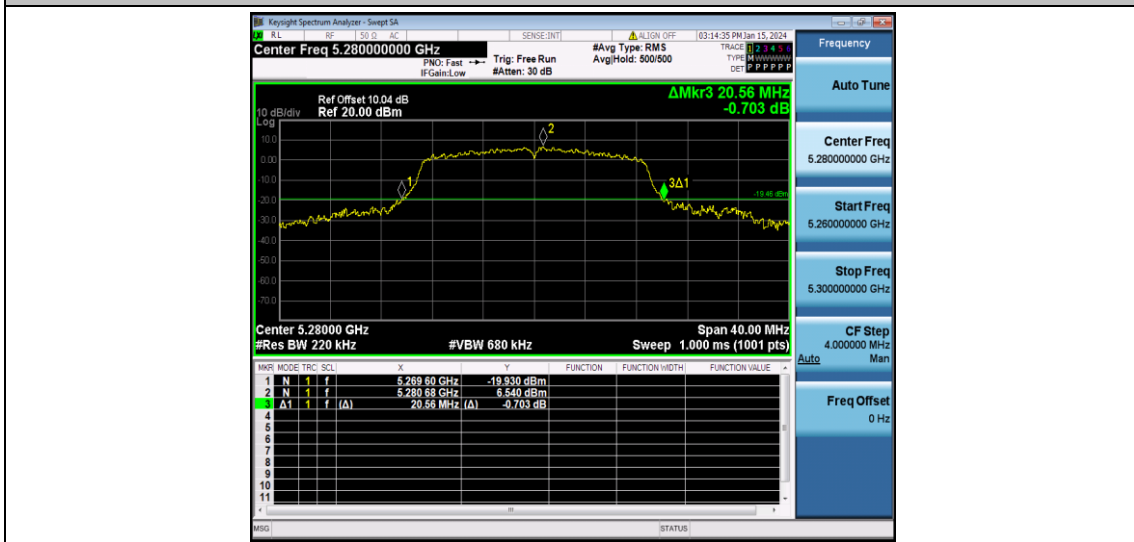
11A_Ant1_5320



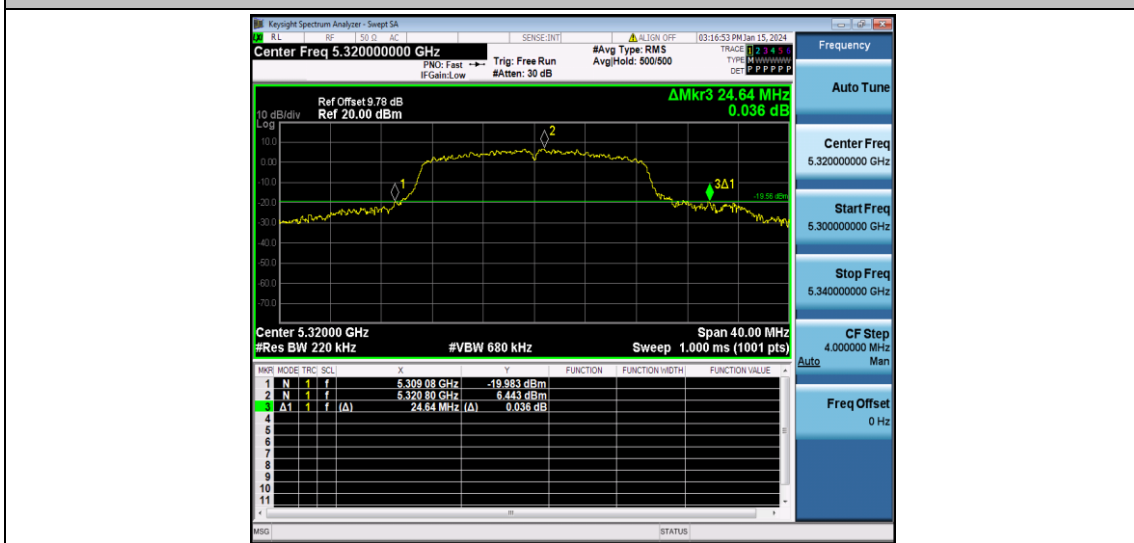
11N20SISO_Ant1_5260



11N20SISO_Ant1_5280



11N20SISO_Ant1_5320



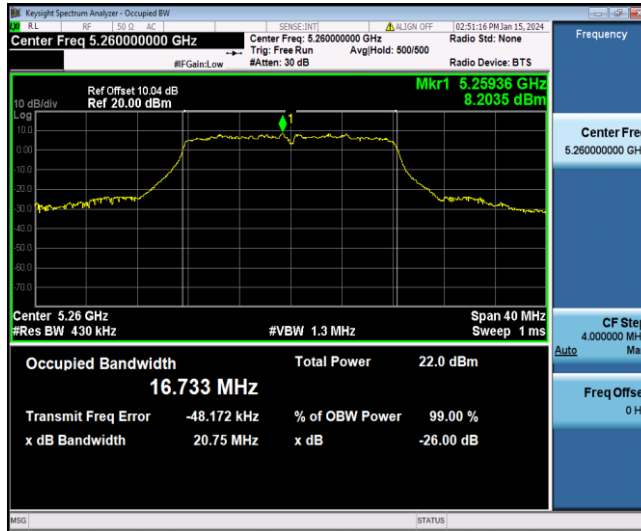
Appendix D.2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5260	16.733	5251.5853	5268.3183	---	---
		5280	16.732	5271.5830	5288.3150	---	---
		5320	16.756	5311.5857	5328.3417	---	---
11N20SISO	Ant1	5260	17.566	5251.1798	5268.7458	---	---
		5280	17.628	5271.1494	5288.7774	---	---
		5320	17.732	5311.1583	5328.8903	---	---

Test Graphs

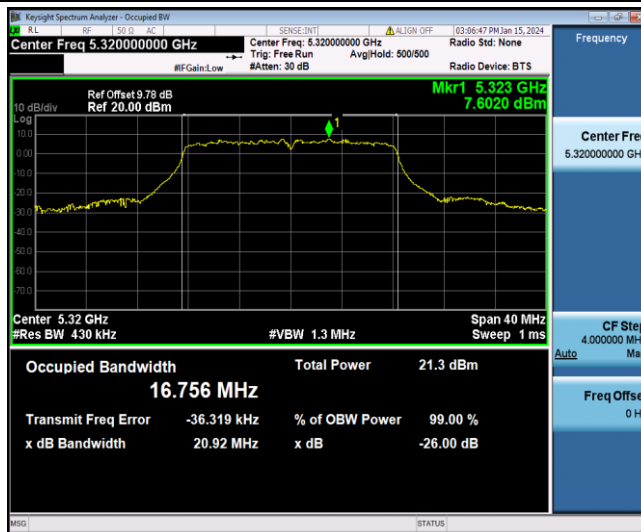
11A_Ant1_5260



11A_Ant1_5280



11A_Ant1_5320



11N20SISO_Ant1_5260



11N20SISO_Ant1_5280



11N20SISO_Ant1_5320



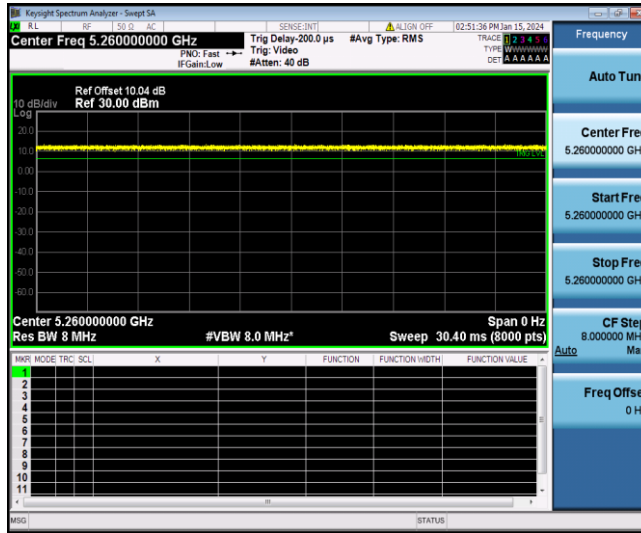
Appendix D.3: Duty Cycle

Test Result

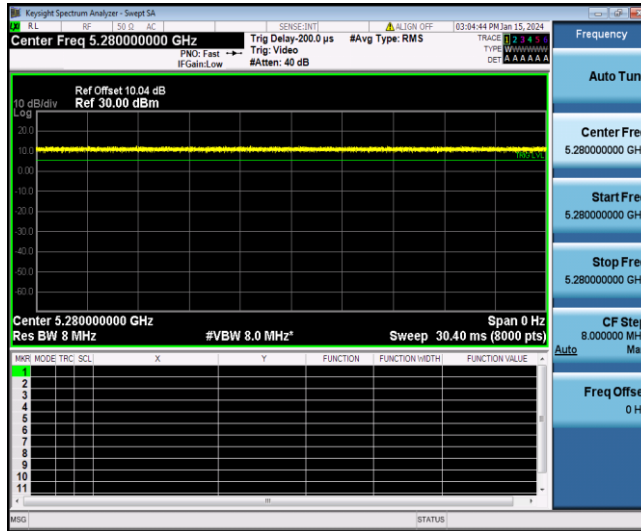
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5260	30.00	30.00	100.00	0.00	0.03
		5280	30.00	30.00	100.00	0.00	0.03
		5320	30.00	30.00	100.00	0.00	0.03
11N20SISO	Ant1	5260	30.00	30.00	100.00	0.00	0.03
		5280	30.00	30.00	100.00	0.00	0.03
		5320	30.00	30.00	100.00	0.00	0.03

Test Graphs

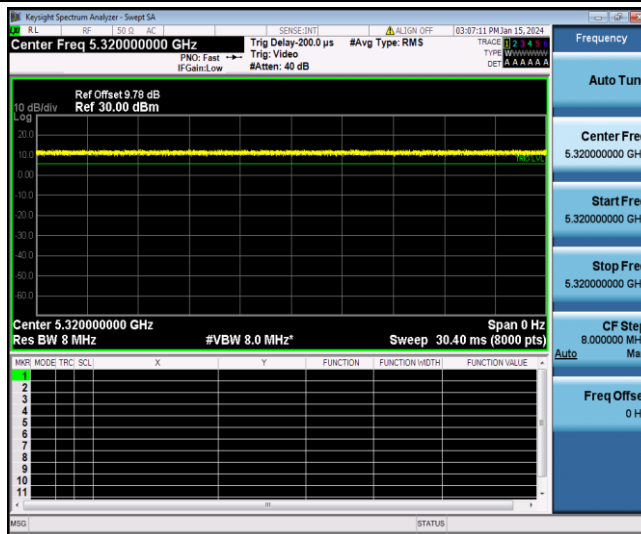
11A_Ant1_5260



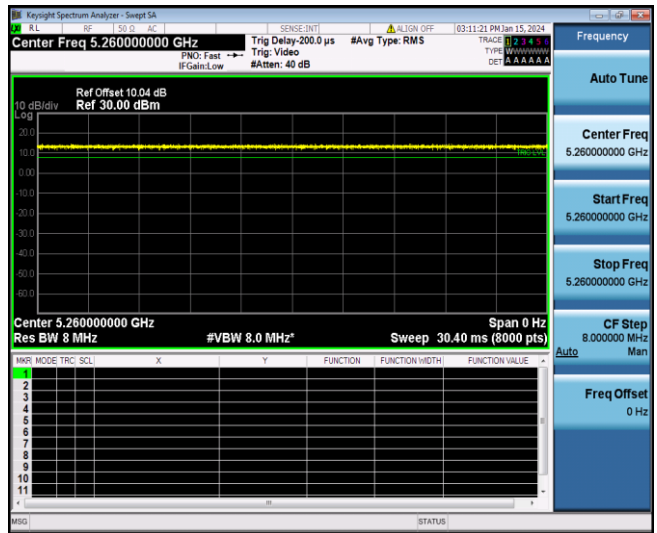
11A_Ant1_5280



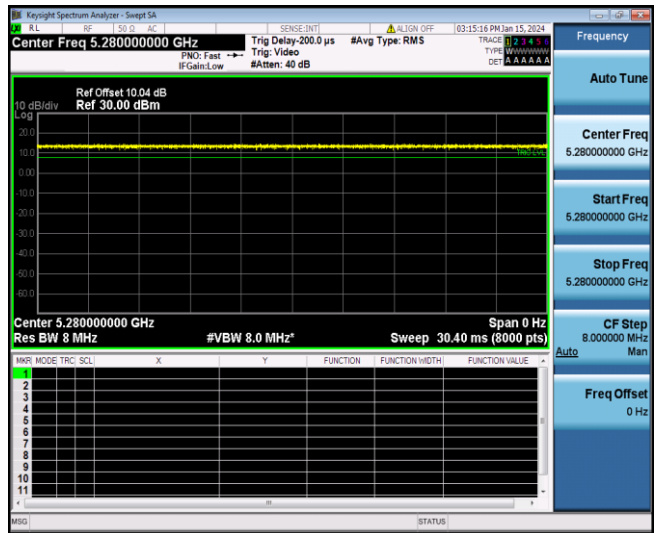
11A_Ant1_5320



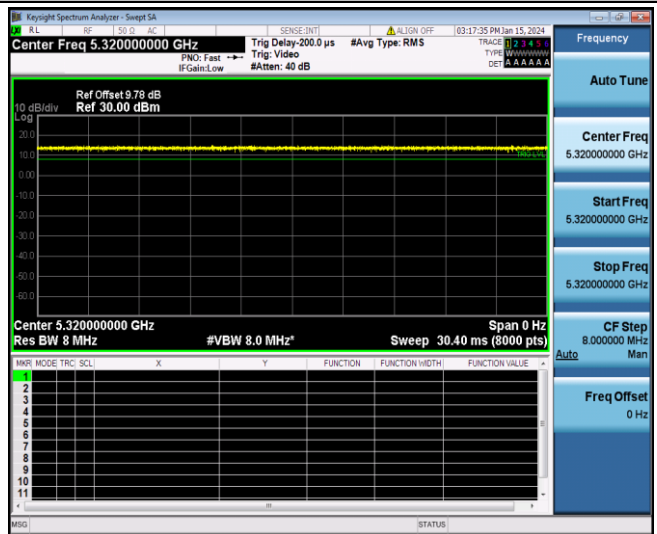
11N20SISO_Ant1_5260



11N20SISO_Ant1_5280



11N20SISO_Ant1_5320



Appendix D.4: Maximum conducted output power

Test Result Channel Power

Omni Antenna:

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5260	17.97	100.00	0.00	17.97	≤23.98	PASS
		5280	17.03	100.00	0.00	17.03	≤23.98	PASS
		5320	17.26	100.00	0.00	17.26	≤23.98	PASS
11N20SISO	Ant1	5260	17.58	100.00	0.00	17.58	≤23.98	PASS
		5280	16.80	100.00	0.00	16.80	≤23.98	PASS
		5320	17.02	100.00	0.00	17.02	≤23.98	PASS

FPC Antenna:

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5260	17.97	100.00	0.00	17.97	≤23.98	PASS
		5280	17.03	100.00	0.00	17.03	≤23.98	PASS
		5320	17.26	100.00	0.00	17.26	≤23.98	PASS
11N20SISO	Ant1	5260	17.58	100.00	0.00	17.58	≤23.98	PASS
		5280	16.80	100.00	0.00	16.80	≤23.98	PASS
		5320	17.02	100.00	0.00	17.02	≤23.98	PASS

Note:

- The Duty Cycle Factor and RBW Factor is compensated in the data.

Appendix D.5: Maximum power spectral density

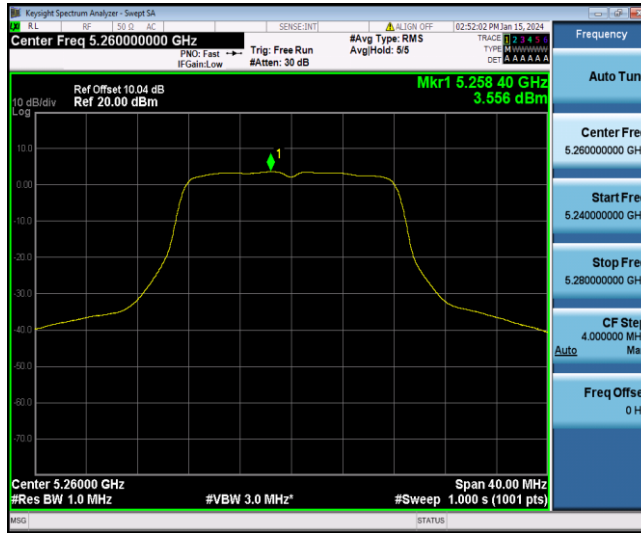
Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5260	3.56	≤10.00	PASS
		5280	2.59	≤10.00	PASS
		5320	2.79	≤10.00	PASS
11N20SISO	Ant1	5260	5.15	≤10.00	PASS
		5280	5.33	≤10.00	PASS
		5320	5.51	≤10.00	PASS

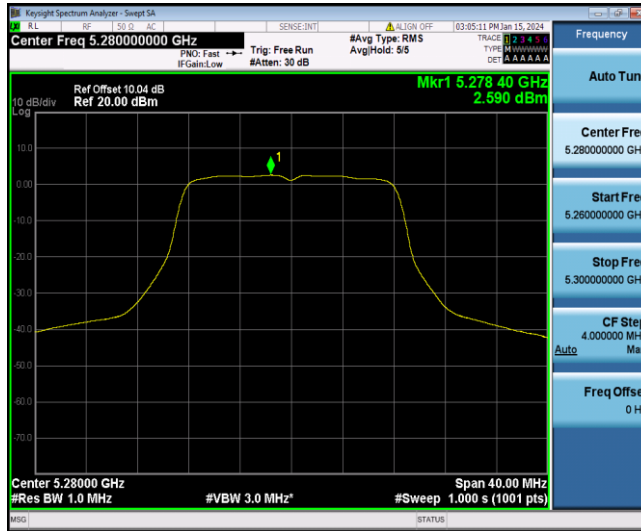
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

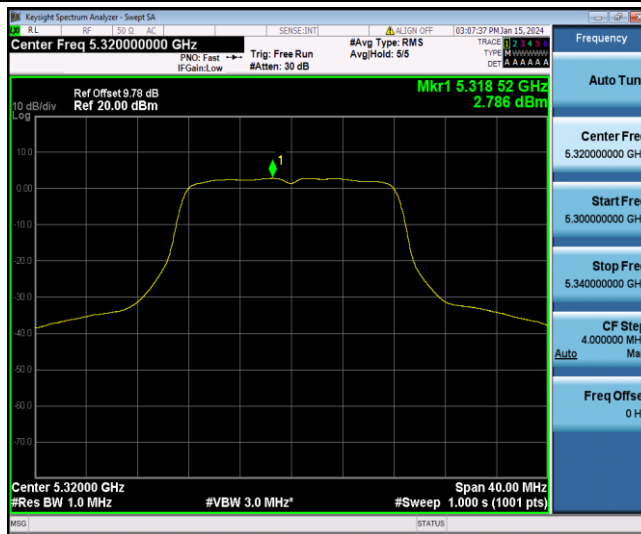
11A_Ant1_5260



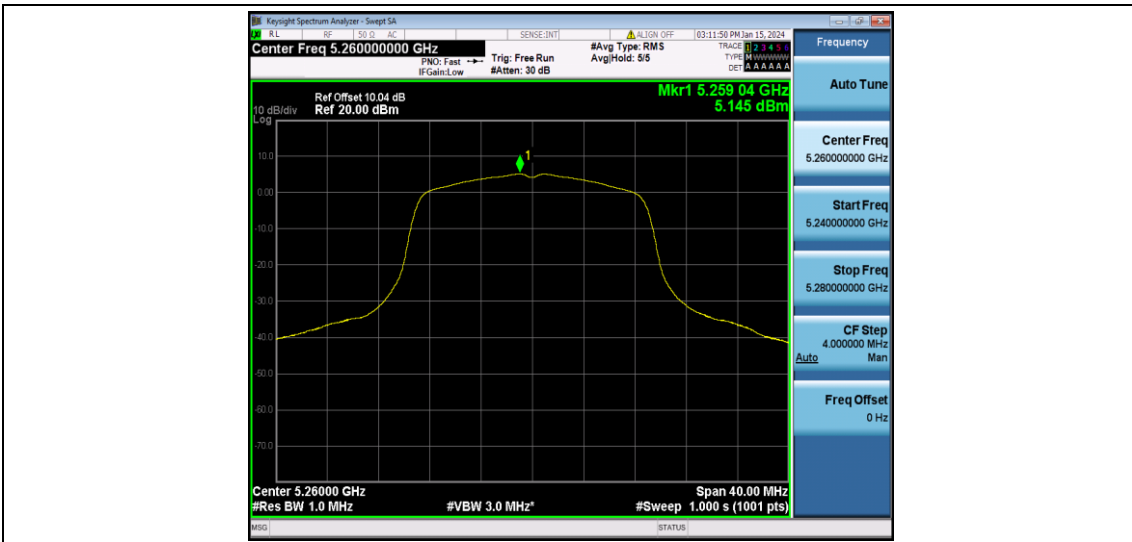
11A_Ant1_5280



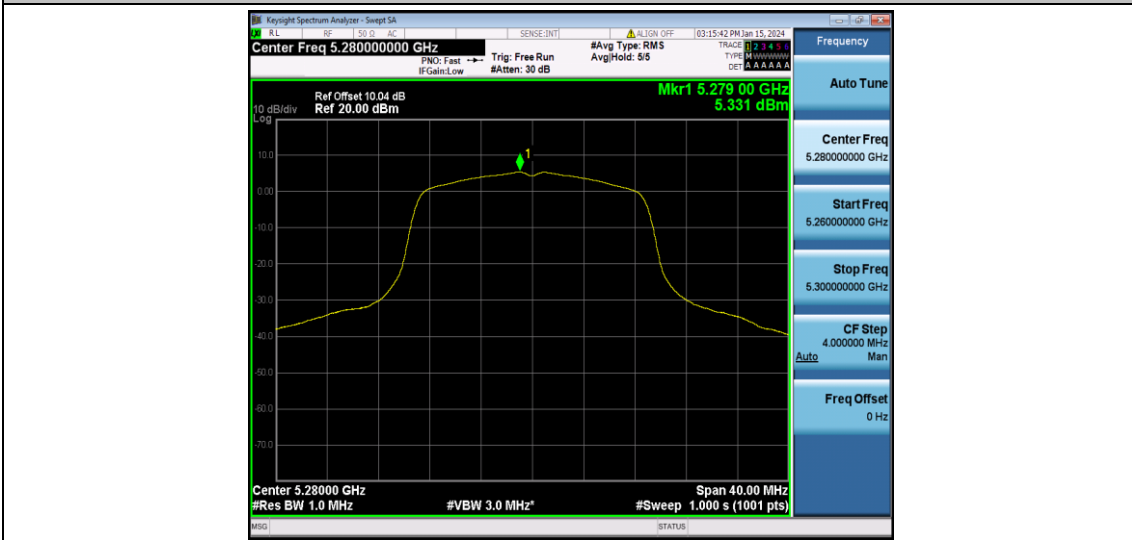
11A_Ant1_5320



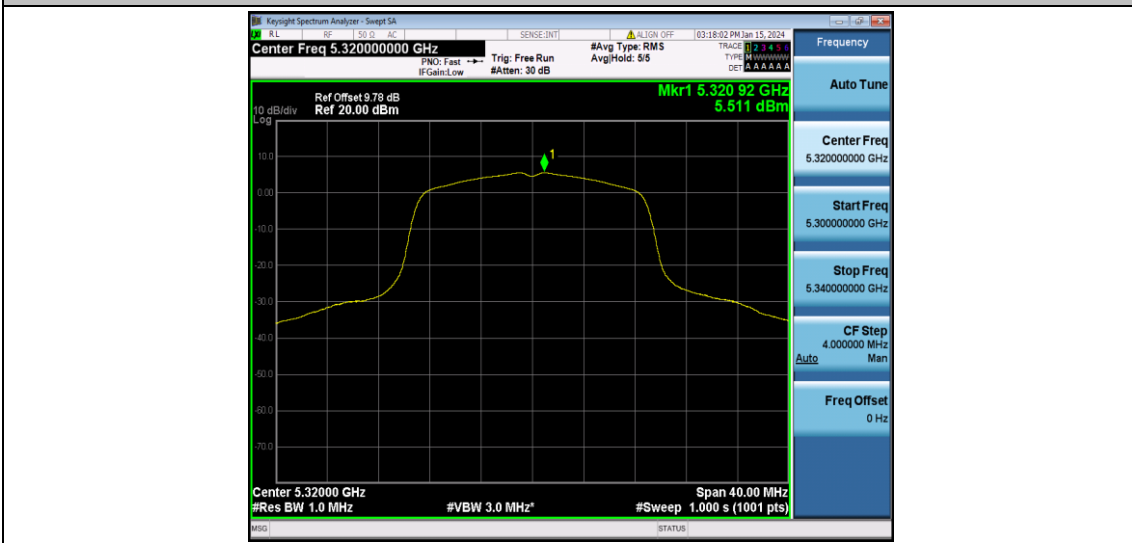
11N20SISO_Ant1_5260



11N20SISO_Ant1_5280



11N20SISO_Ant1_5320



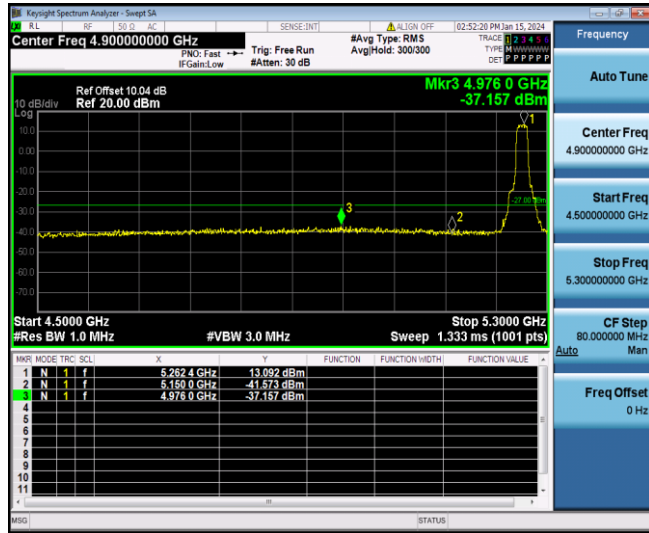
Appendix D.6: Band edge measurements

Test Result B2

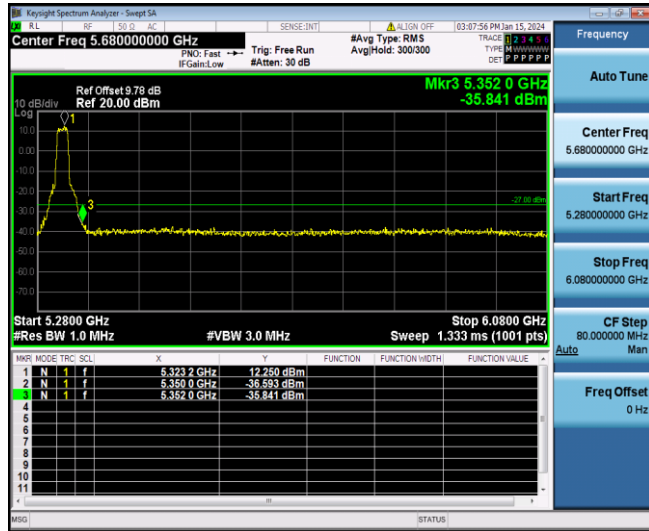
TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5260	-37.16	≤ -27	PASS
		High	5320	-35.84	≤ -27	PASS
11N20SISO	Ant1	Low	5260	-37.09	≤ -27	PASS
		High	5320	-28.78	≤ -27	PASS

Test Graphs B2

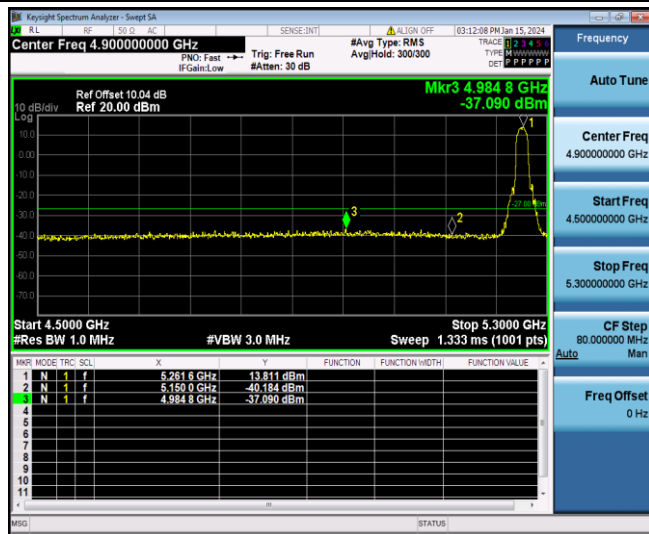
11A_Ant1_Low_5260



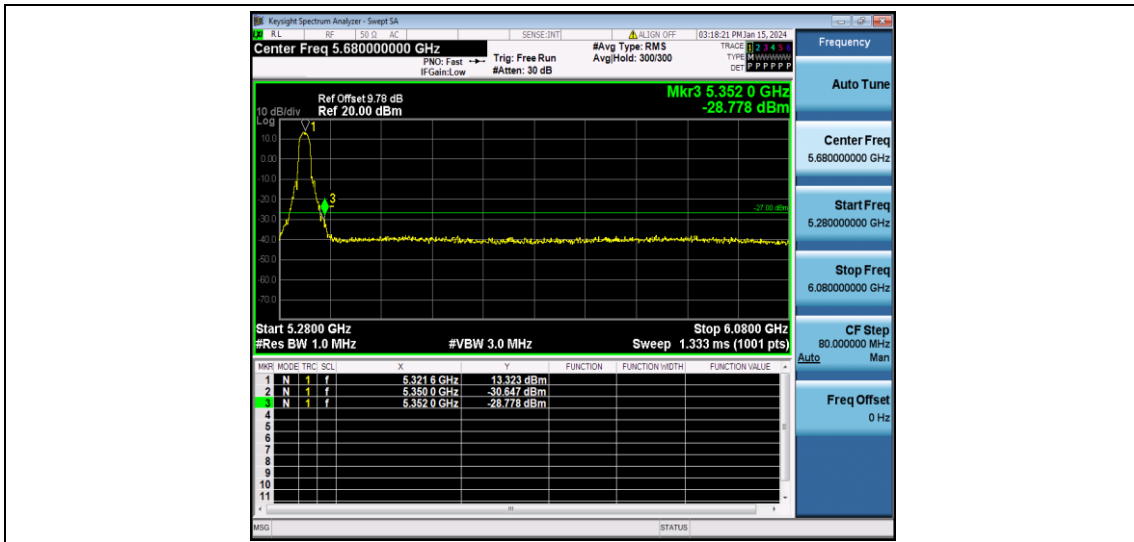
11A_Ant1_High_5320



11N20SISO_Ant1_Low_5260



11N20SISO_Ant1_High_5320



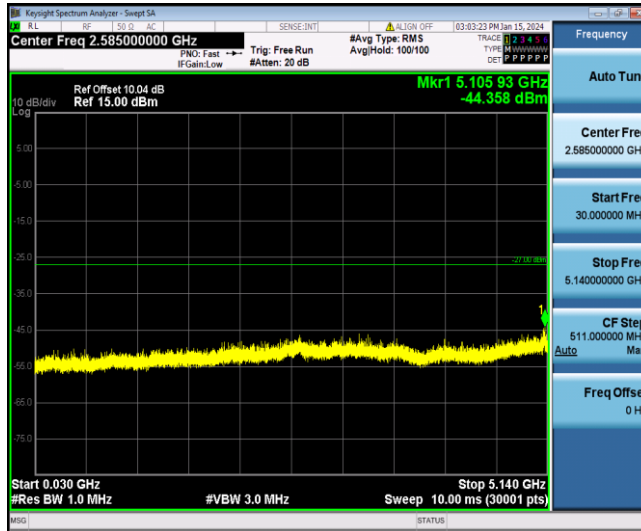
Appendix D.7: Conducted Spurious Emission

Test Result

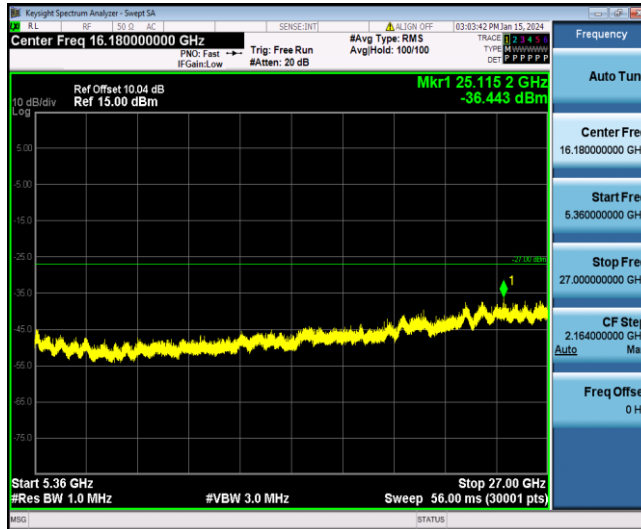
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5260	30~5140	5105.93	-44.36	≤-27	PASS
			5360~40000	25115.16	-36.44	≤-27	PASS
		5280	30~5140	5114.62	-44.71	≤-27	PASS
			5360~40000	25616.48	-37.21	≤-27	PASS
		5320	30~5140	5084.47	-45.53	≤-27	PASS
			5360~40000	24322.41	-37.12	≤-27	PASS
11N20SISO	Ant1	5260	30~5140	1762.63	-35.81	≤-27	PASS
			5360~40000	26506.61	-37.68	≤-27	PASS
		5280	30~5140	5119.56	-43.97	≤-27	PASS
			5360~40000	24276.97	-36.7	≤-27	PASS
		5320	30~5140	5136.59	-45.05	≤-27	PASS
			5360~40000	24266.87	-36.97	≤-27	PASS

Test Graphs

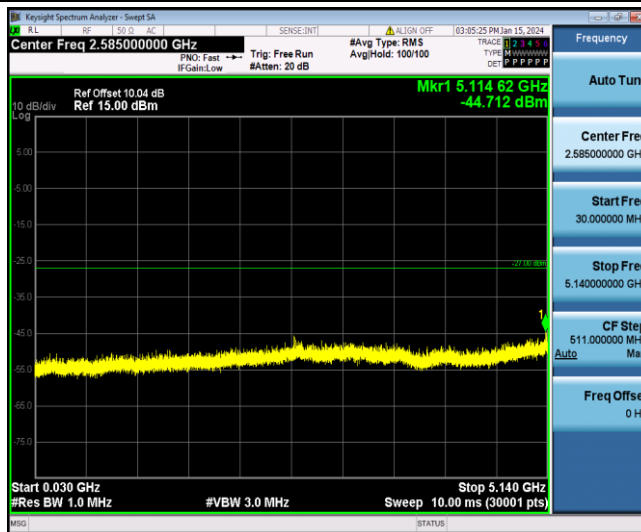
11A_Ant1_5260_30~5140



11A_Ant1_5260_5360~40000



11A_Ant1_5280_30~5140



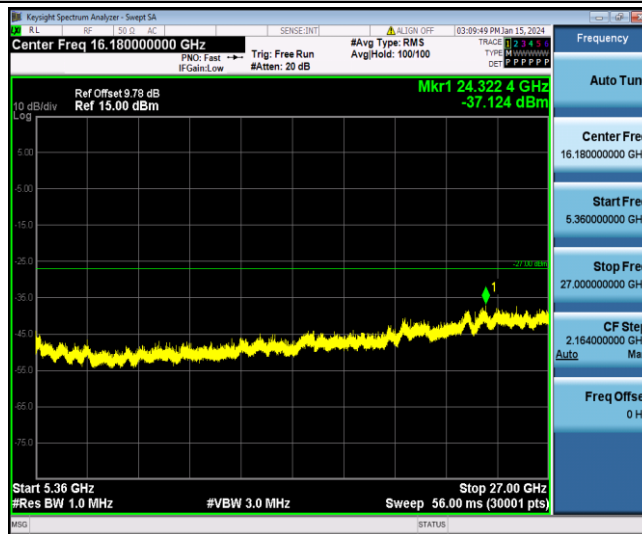
11A_Ant1_5280_5360~40000



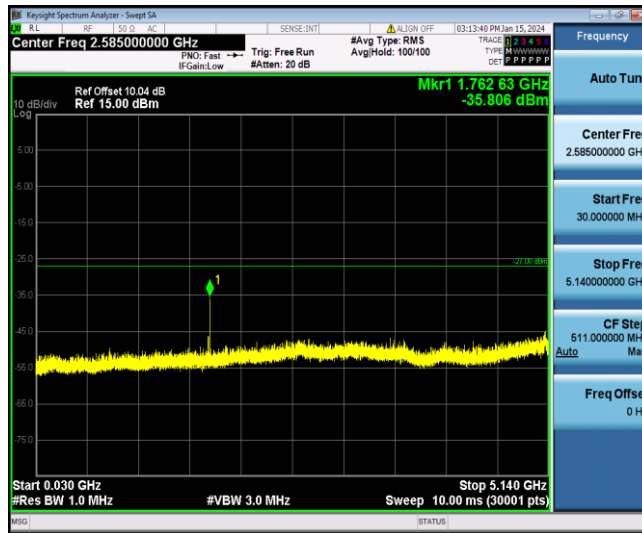
11A_Ant1_5320_30~5140



11A_Ant1_5320_5360~40000



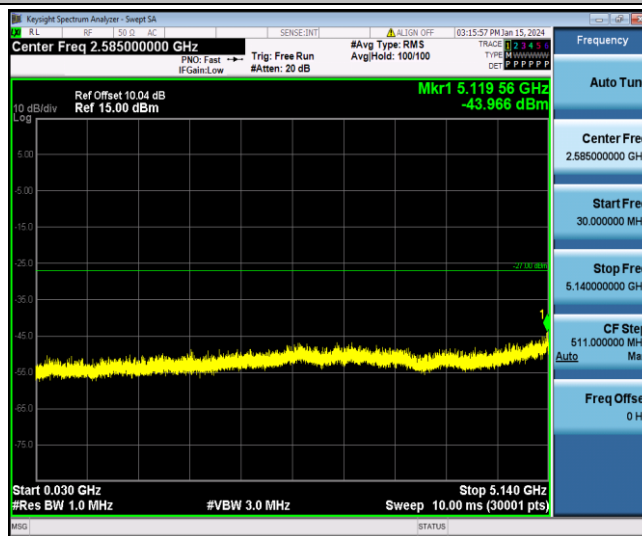
11N20SISO_Ant1_5260_30~5140



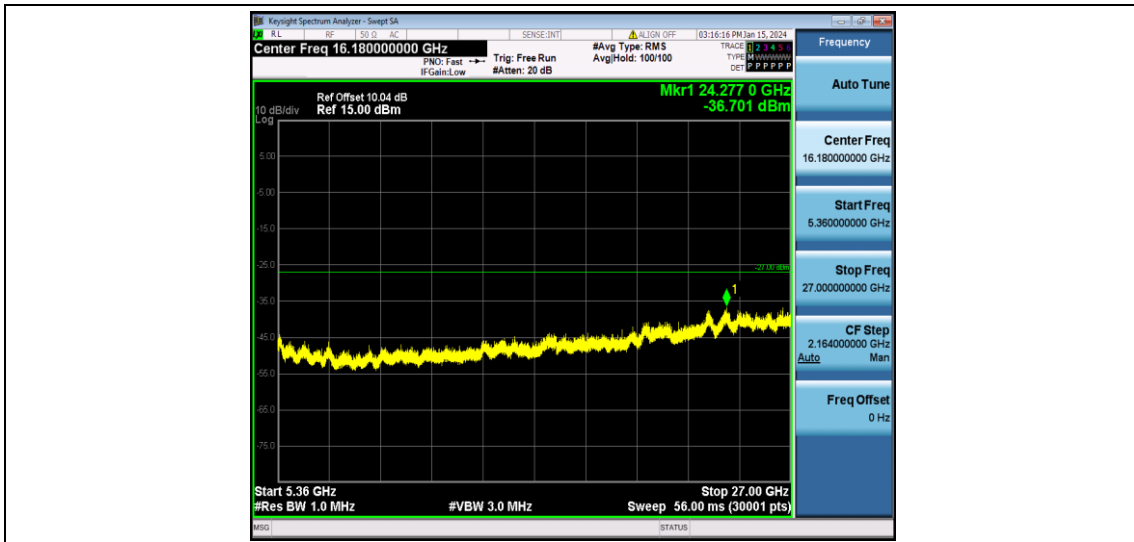
11N20SISO_Ant1_5260_5360~40000



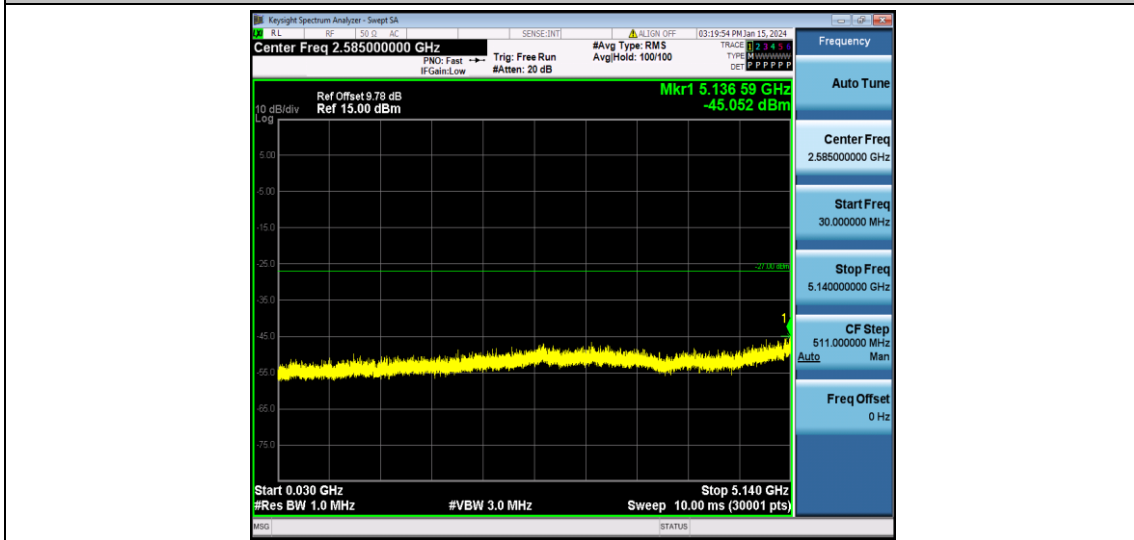
11N20SISO_Ant1_5280_30~5140



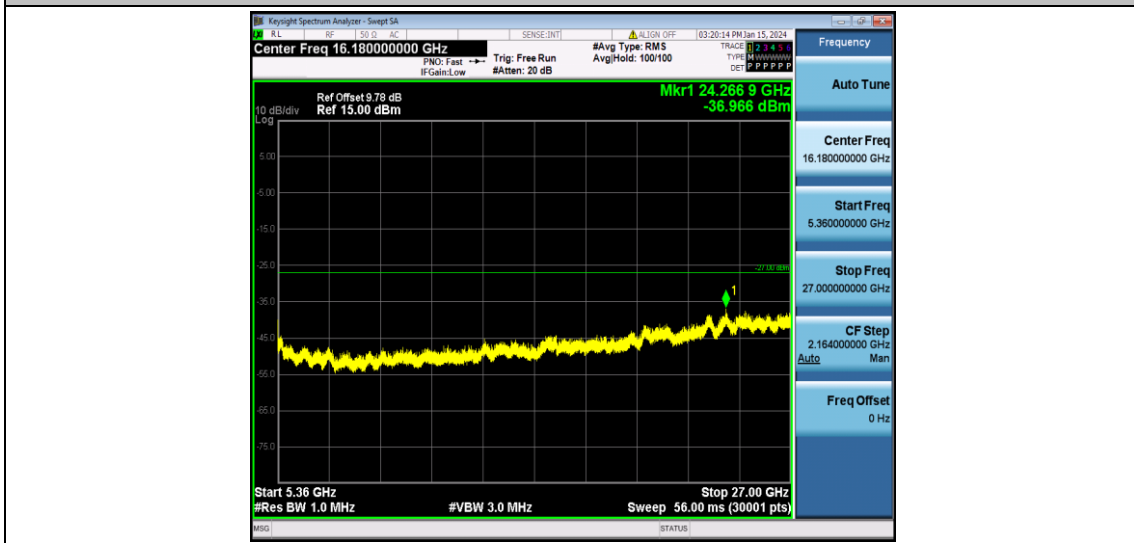
11N20SISO_Ant1_5280_5360~40000



11N20SISO_Ant1_5320_30~5140



11N20SISO_Ant1_5320_5360~40000



Appendix D.8: Emissions in Restricted Bands

Test Result

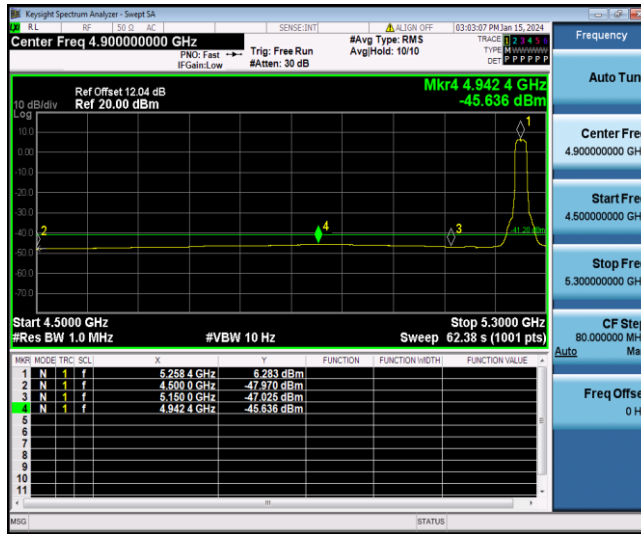
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5260	AV	4500.000	-47.97	≤-41.20	47.23	≤54	PASS
				AV	4942.400	-45.64	≤-41.20	49.56	≤54	PASS
				AV	5150.000	-47.03	≤-41.20	48.17	≤54	PASS
				Peak	4500.000	-42.76	≤-21.20	52.44	≤74	PASS
				Peak	4700.800	-37.14	≤-21.20	58.06	≤74	PASS
				Peak	5150.000	-42.84	≤-21.20	52.36	≤74	PASS
		High	5320	AV	5350.000	-44.94	≤-41.20	50.26	≤54	PASS
				AV	5350.400	-44.94	≤-41.20	50.26	≤54	PASS
				AV	5460.000	-46.36	≤-41.20	48.84	≤54	PASS
				Peak	5350.000	-36.39	≤-21.20	58.81	≤74	PASS
				Peak	5350.400	-36.38	≤-21.20	58.82	≤74	PASS
				Peak	5460.000	-42.9	≤-21.20	52.30	≤74	PASS
11N20SIS O	Ant1	Low	5260	AV	4500.000	-47.95	≤-41.20	47.25	≤54	PASS
				AV	4945.600	-45.64	≤-41.20	49.56	≤54	PASS
				AV	5150.000	-47.05	≤-41.20	48.15	≤54	PASS
				Peak	4500.000	-44.05	≤-21.20	51.15	≤74	PASS
				Peak	4819.200	-37.65	≤-21.20	57.55	≤74	PASS
				Peak	5150.000	-42.83	≤-21.20	52.37	≤74	PASS
		High	5320	AV	5350.000	-43.14	≤-41.20	52.06	≤54	PASS
				AV	5350.400	-43.14	≤-41.20	52.06	≤54	PASS
				AV	5460.000	-46.23	≤-41.20	48.97	≤54	PASS
				Peak	5350.000	-41.93	≤-21.20	53.27	≤74	PASS
				Peak	5450.400	-37.92	≤-21.20	57.28	≤74	PASS
				Peak	5460.000	-41.52	≤-21.20	53.68	≤74	PASS

Note:

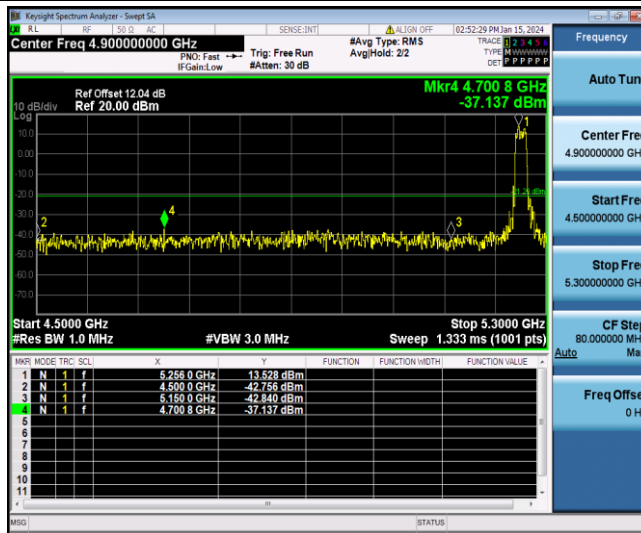
- The Antenna Gain is compensated in the graph.
- The Duty Cycle Factor and RBW Factor is compensated in the graph.
- For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for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

Test Graphs

11A_Ant1_Low_5260_AV



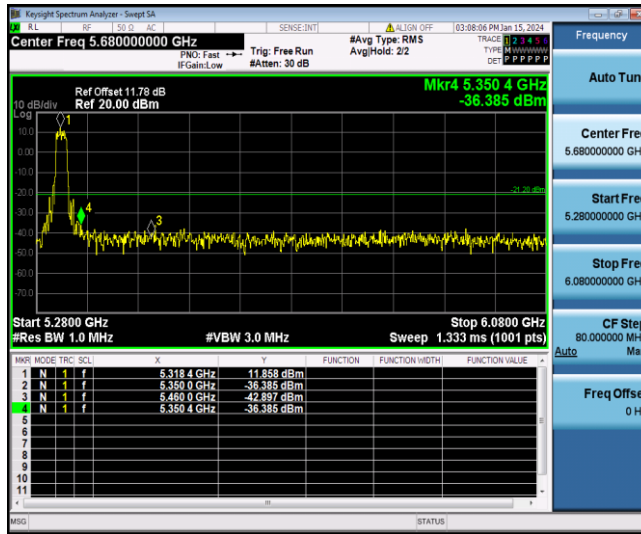
11A_Ant1_Low_5260_Peak



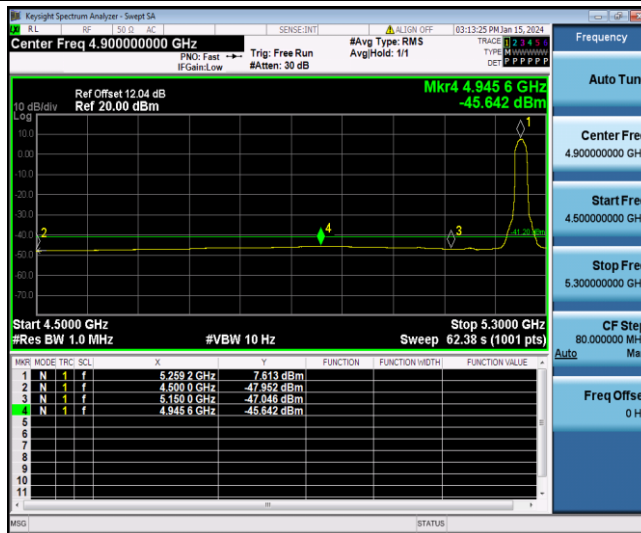
11A_Ant1_High_5320_AV



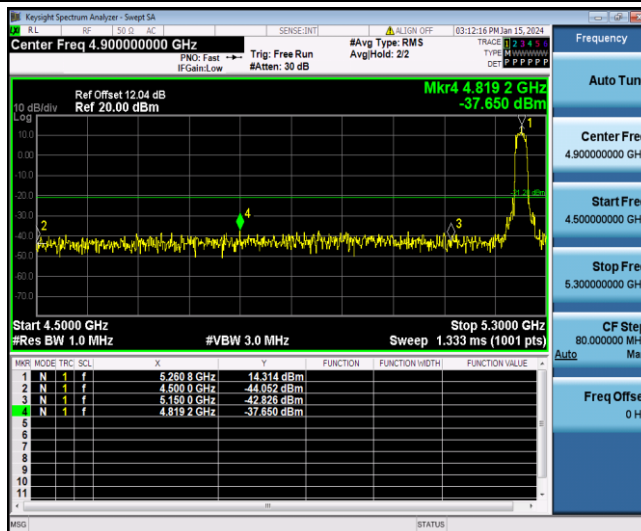
11A_Ant1_High_5320_Peak



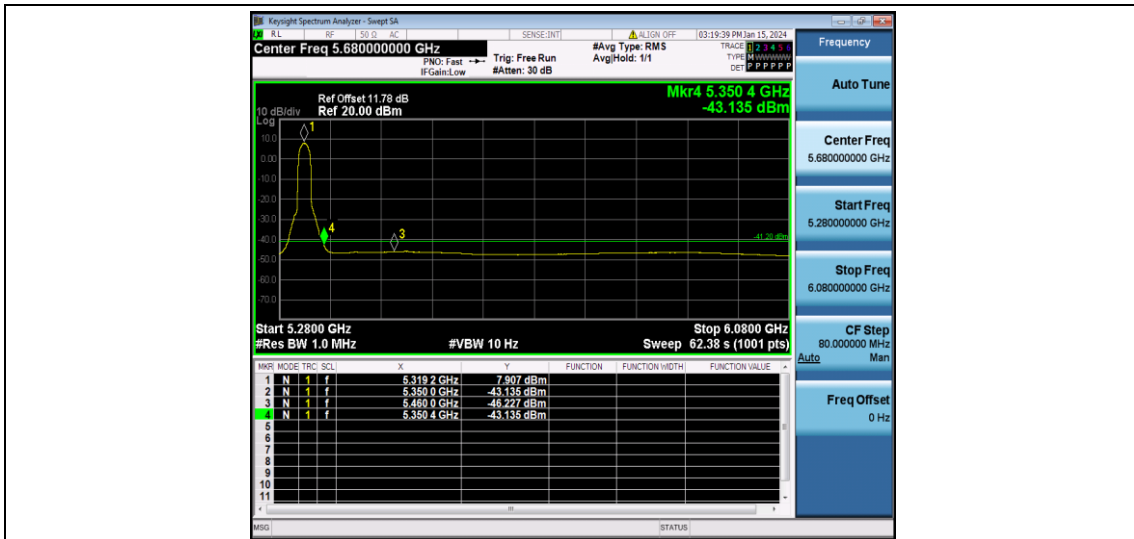
11N20SISO_Ant1_Low_5260_AV



11N20SISO_Ant1_Low_5260_Peak



11N20SISO_Ant1_High_5320_AV



11N20SISO_Ant1_High_5320_Peak

