

Case No. : <u>GTS20231020001-1-80</u>
Ambient Condition: <u>22 °C, 50 %RH</u>
According Standard: <u>■Part15E</u>
Test Date: <u>2024.2.1</u> Test Engineer: <u>Evan ouyang</u>

Appendix B.1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.080	5169.960	5190.040	---	---
		5200	19.960	5189.960	5209.920	---	---
		5240	19.960	5230.080	5250.040	---	---
11N20SISO	Ant1	5180	20.360	5169.840	5190.200	---	---
		5200	20.400	5189.880	5210.280	---	---
		5240	20.240	5229.880	5250.120	---	---

Test Graphs

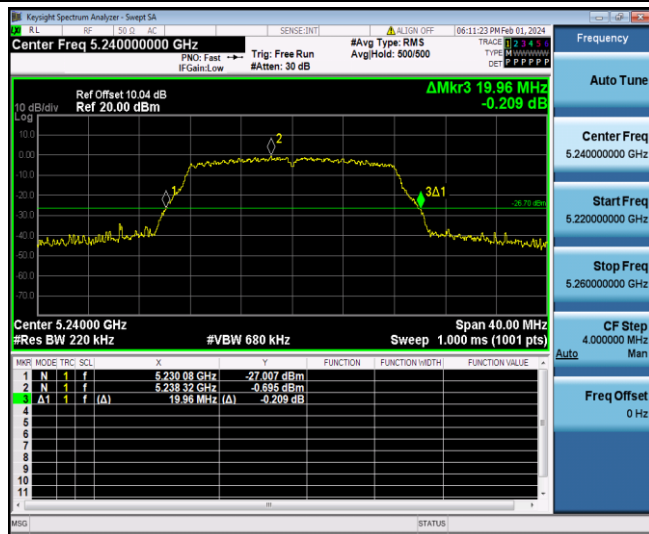
11A_Ant1_5180



11A_Ant1_5200



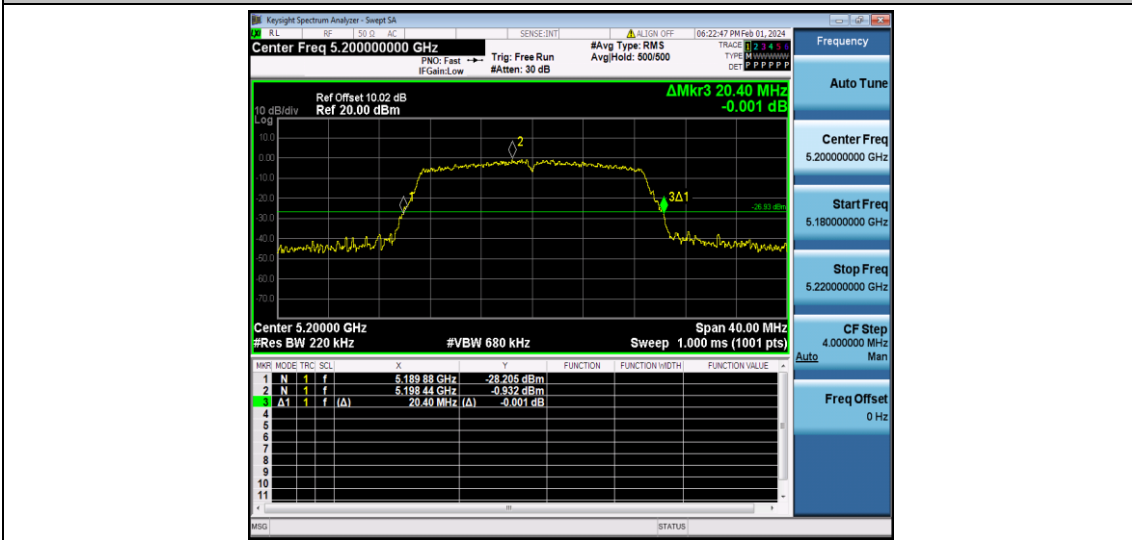
11A_Ant1_5240



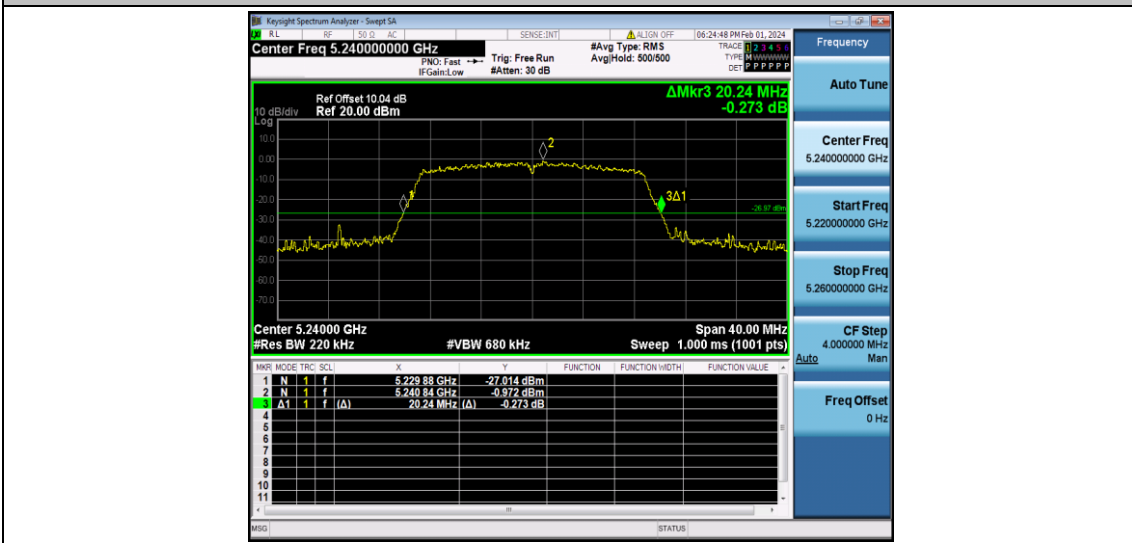
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



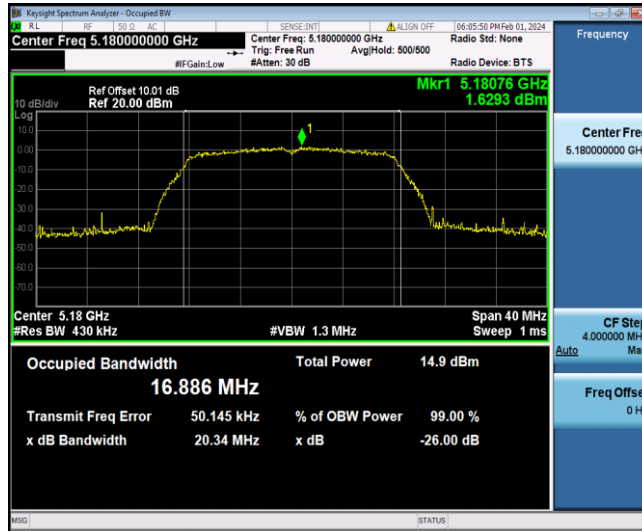
Appendix B.2: Occupied channel bandwidth

Test Result

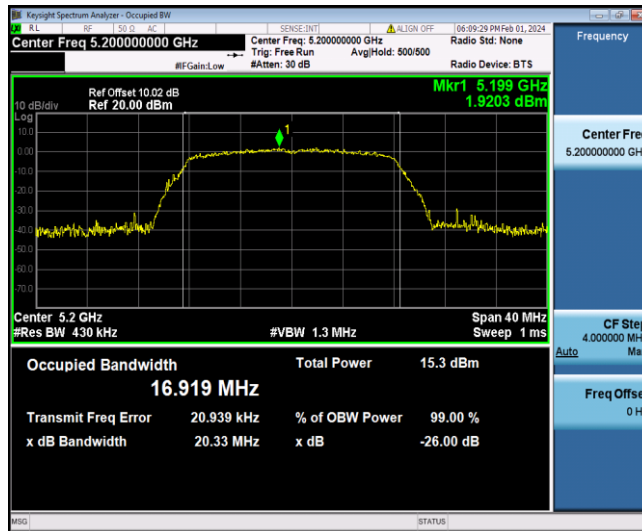
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.886	5171.6072	5188.4932	---	---
		5200	16.919	5191.5614	5208.4804	---	---
		5240	16.841	5231.5541	5248.3951	---	---
11N20SISO	Ant1	5180	17.869	5171.0698	5188.9388	---	---
		5200	17.823	5191.1081	5208.9311	---	---
		5240	17.868	5231.0764	5248.9444	---	---

Test Graphs

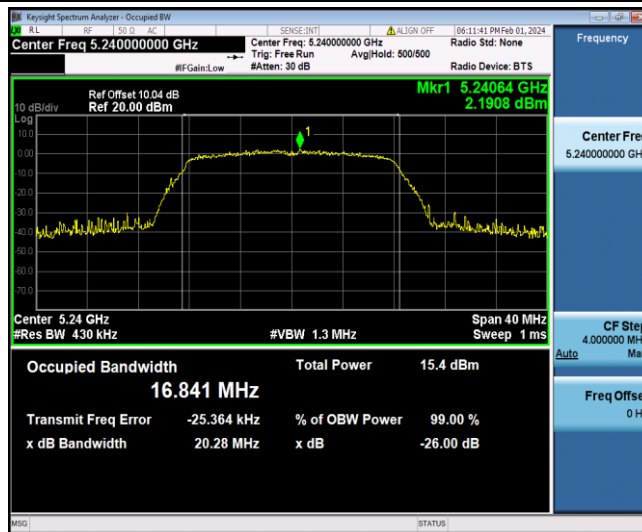
11A_Ant1_5180



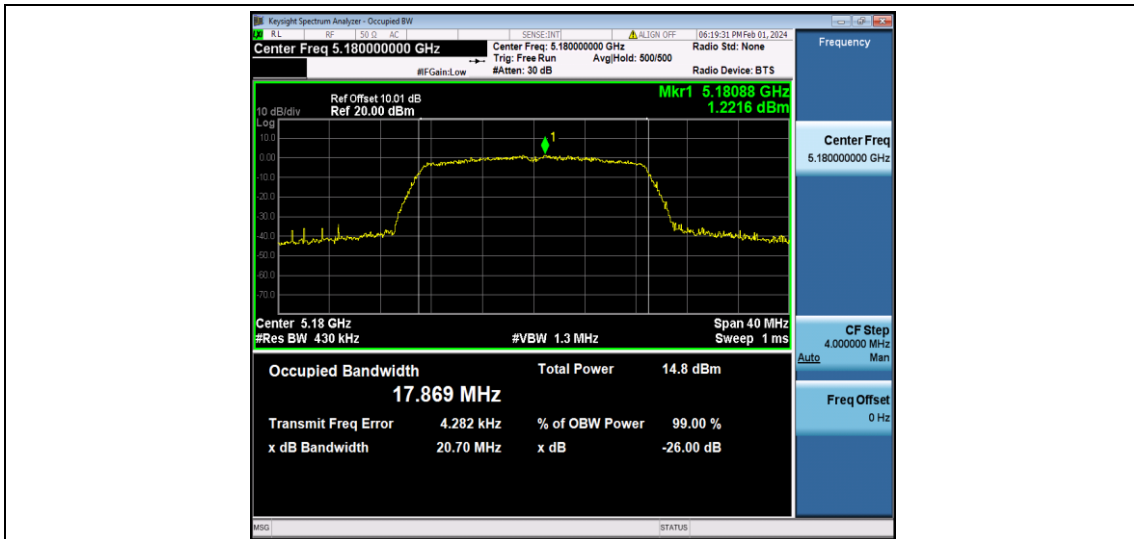
11A_Ant1_5200



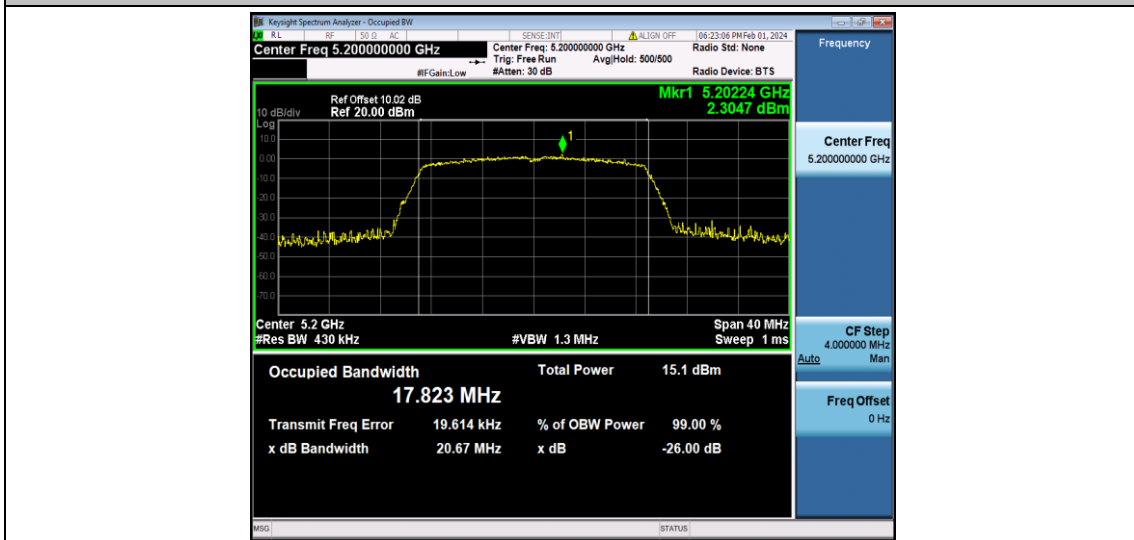
11A_Ant1_5240



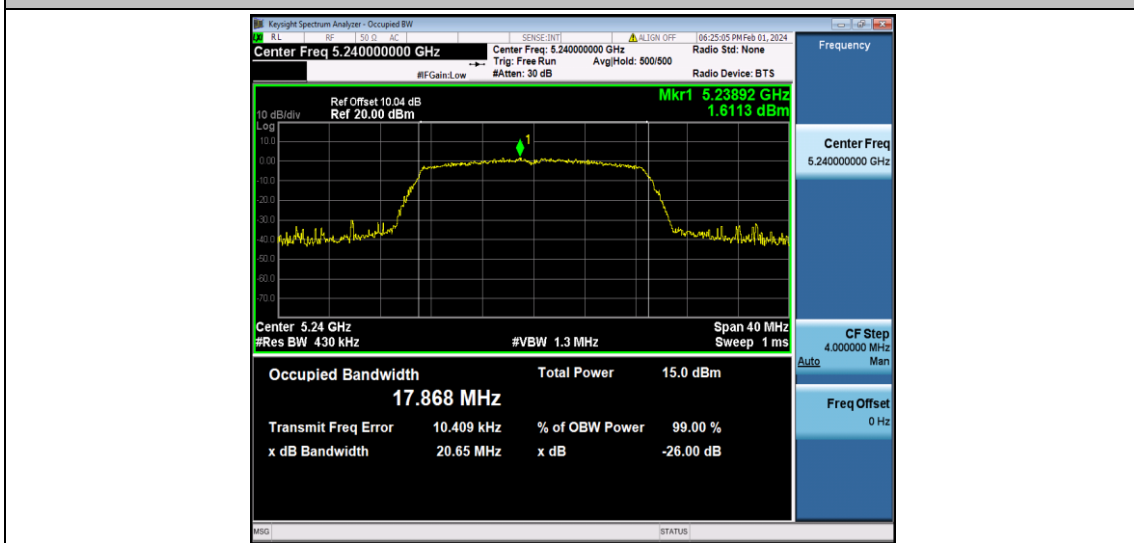
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



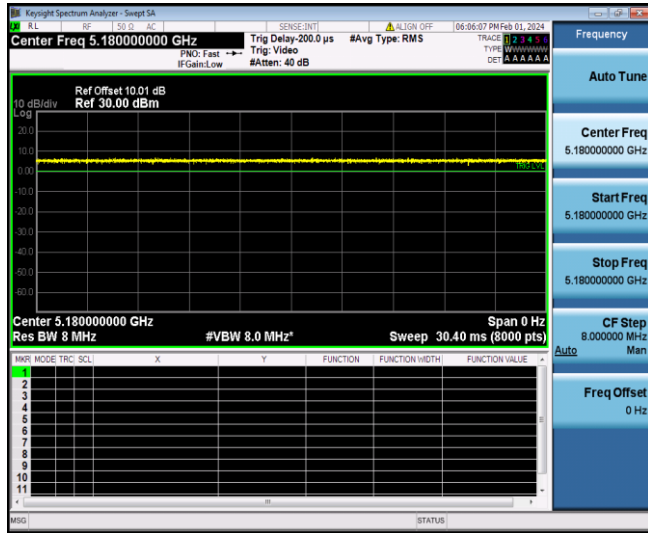
Appendix B.3: Duty Cycle

Test Result

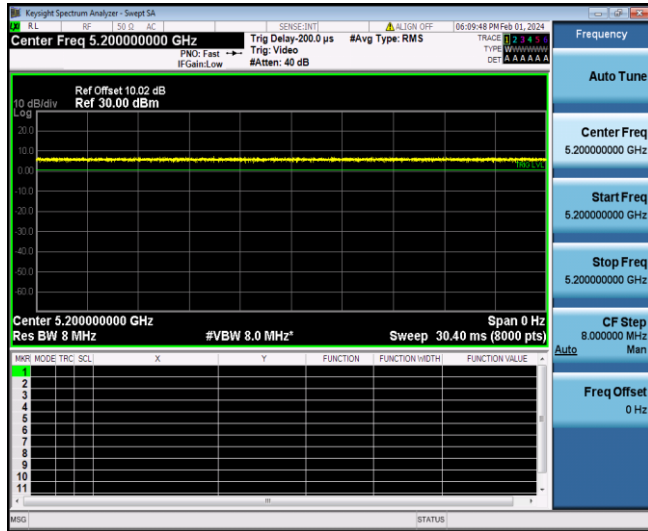
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5180	30.00	30.00	100.00	0.00	0.03
		5200	30.00	30.00	100.00	0.00	0.03
		5240	30.00	30.00	100.00	0.00	0.03
11N20SISO	Ant1	5180	30.00	30.00	100.00	0.00	0.03
		5200	30.00	30.00	100.00	0.00	0.03
		5240	30.00	30.00	100.00	0.00	0.03

Test Graphs

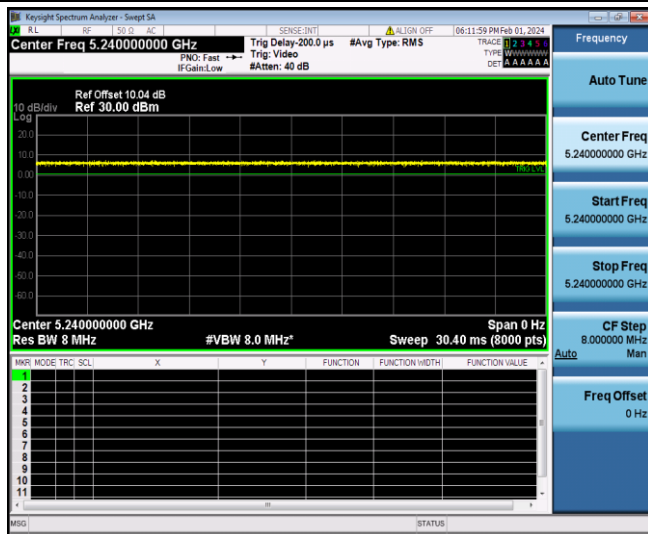
11A_Ant1_5180



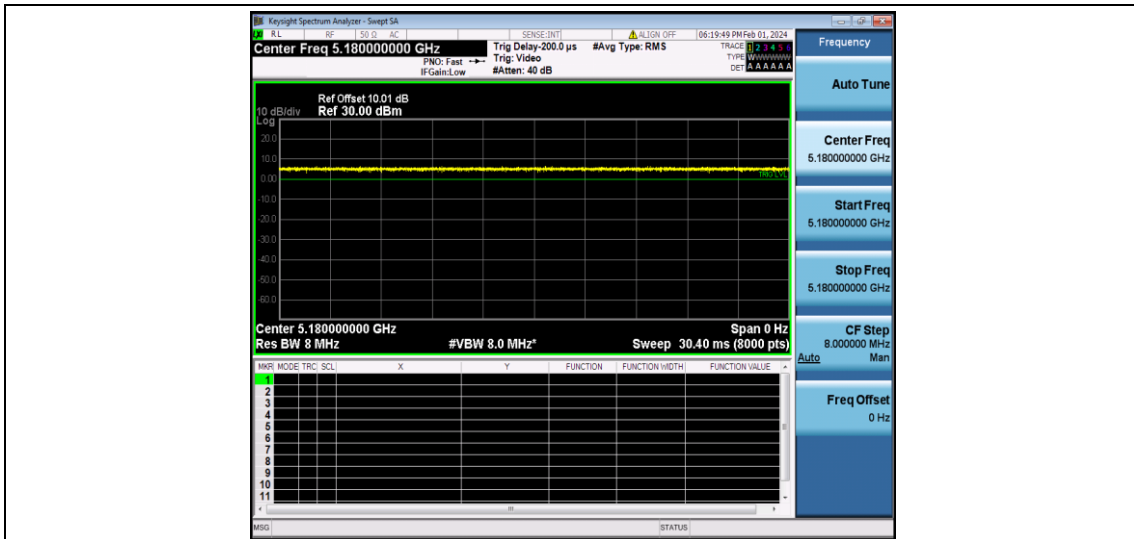
11A_Ant1_5200



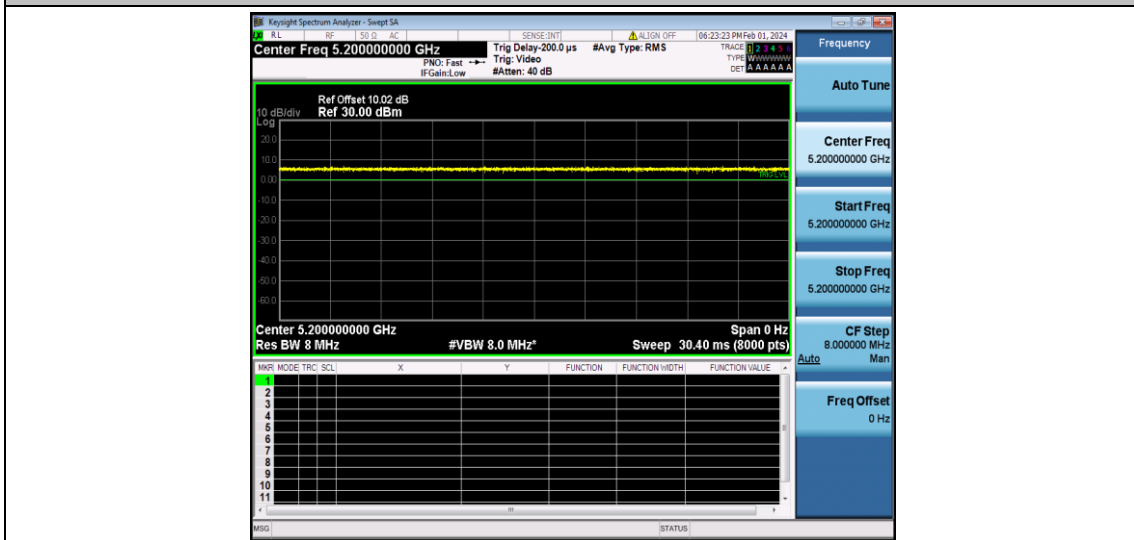
11A_Ant1_5240



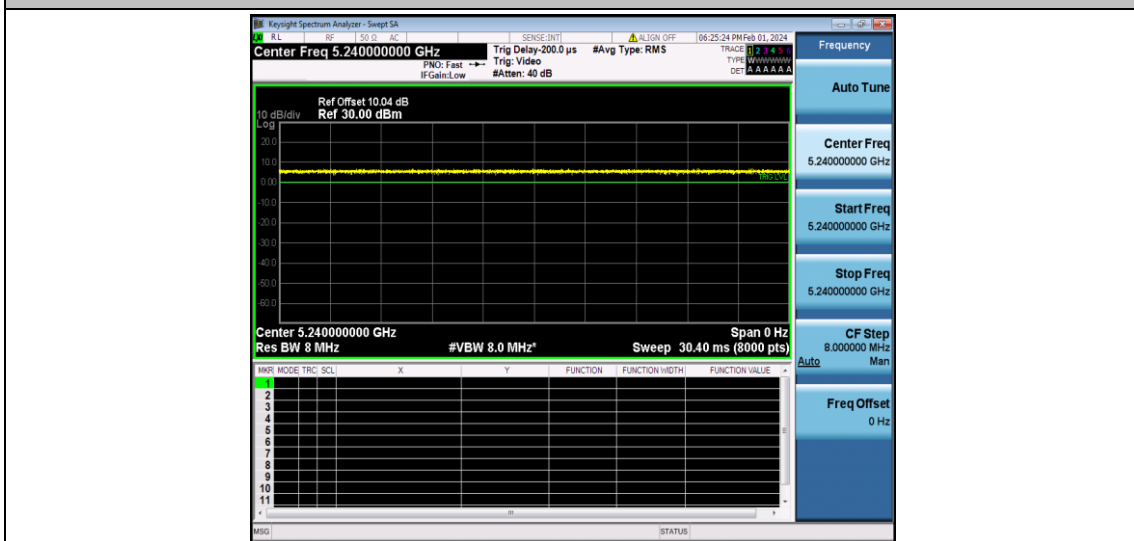
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



Appendix B.4: Maximum conducted output power

Test Result

Test Mode	Antenna	Freq (MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Gain [dBi]	Verdict
11A	Ant1	5180	16.06	100.00	0.00	16.06	≤23.98	0.00	PASS
		5200	16.52	100.00	0.00	16.52	≤23.98	0.00	PASS
		5240	16.57	100.00	0.00	16.57	≤23.98	0.00	PASS
11N20S ISO	Ant1	5180	16.02	100.00	0.00	16.02	≤23.98	0.00	PASS
		5200	16.39	100.00	0.00	16.39	≤23.98	0.00	PASS
		5240	16.24	100.00	0.00	16.24	≤23.98	0.00	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 B.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-2.67	≤11.00	PASS
		5200	-2.23	≤11.00	PASS
		5240	-2.08	≤11.00	PASS
11N20SISO	Ant1	5180	-2.97	≤11.00	PASS
		5200	-2.55	≤11.00	PASS
		5240	-2.62	≤11.00	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_5180



11A_Ant1_5200



11A_Ant1_5240



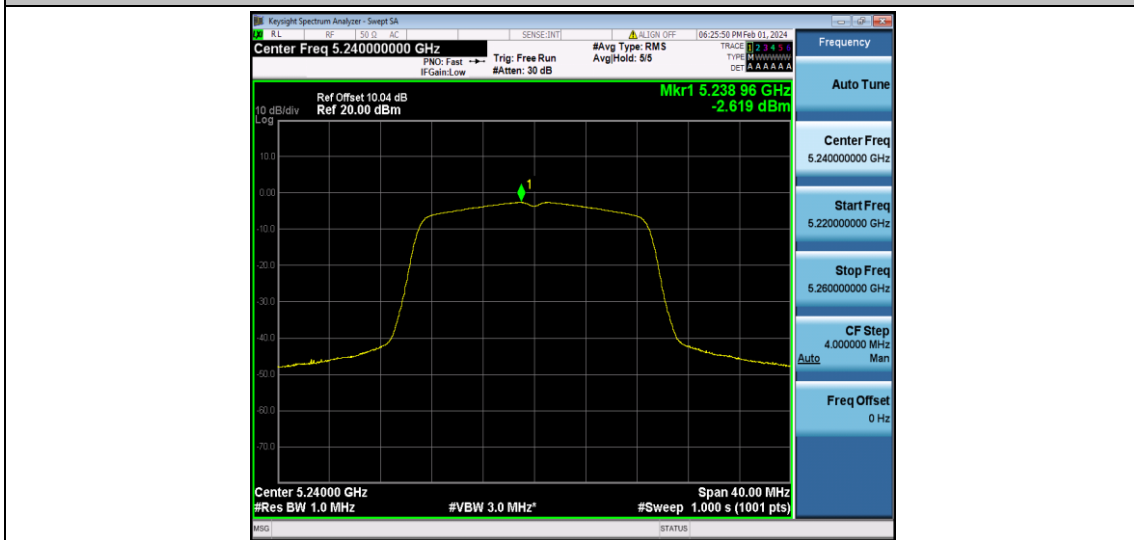
11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



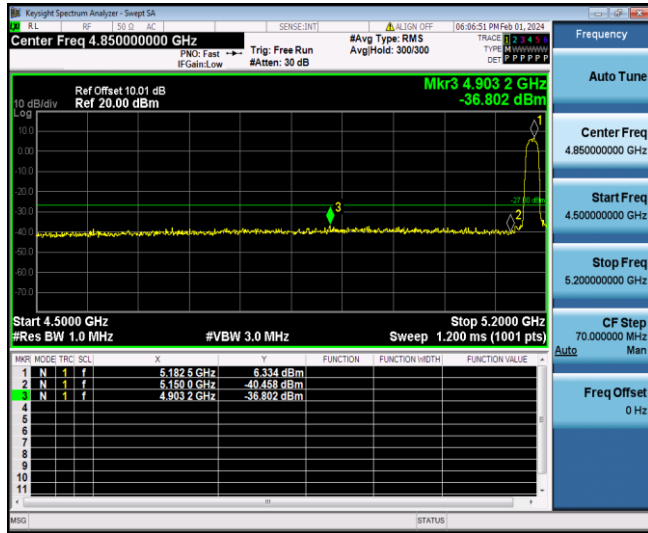
Appendix B.6: Band edge measurements

Test Result B1

TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-36.8	≤ -27	PASS
		High	5240	-36.95	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-37.1	≤ -27	PASS
		High	5240	-37.9	≤ -27	PASS

Test Graphs B1

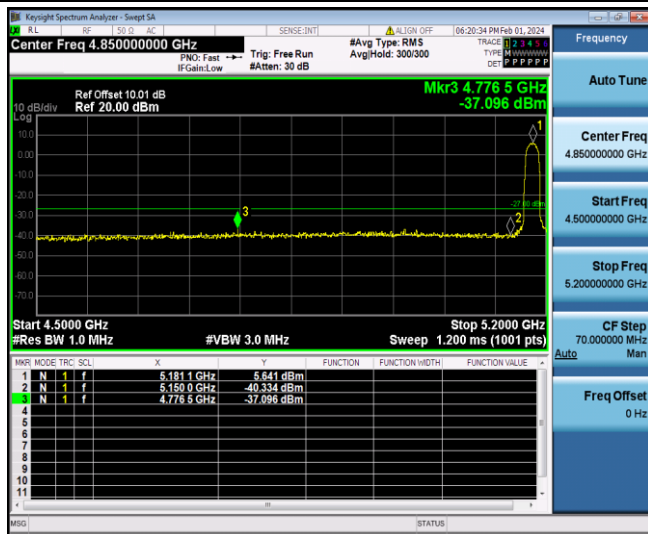
11A_Ant1_Low_5180



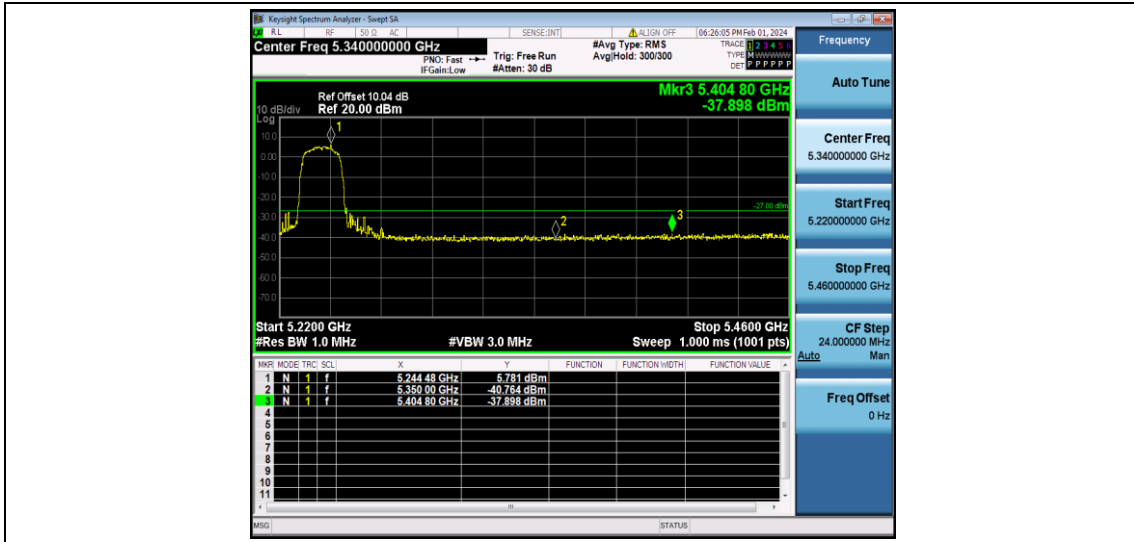
11A_Ant1_High_5240



11N20SISO_Ant1_Low_5180



11N20SISO_Ant1_High_5240



Appendix B.7: Conducted Spurious Emission

Test Result

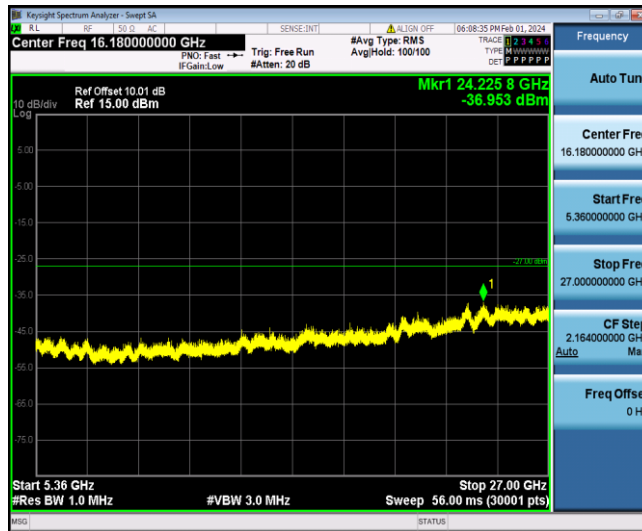
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	4892.68	-46.36	≤-27	PASS
			5360~40000	24225.75	-36.95	≤-27	PASS
		5200	30~5140	4822.67	-45.94	≤-27	PASS
			5360~40000	24142.08	-37.58	≤-27	PASS
		5240	30~5140	5047.17	-46.28	≤-27	PASS
			5360~40000	24180.31	-36.6	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	5004.07	-45.89	≤-27	PASS
			5360~40000	26055.77	-37.65	≤-27	PASS
		5200	30~5140	4943.44	-46.36	≤-27	PASS
			5360~40000	26812.45	-37.53	≤-27	PASS
		5240	30~5140	2698.27	-46.41	≤-27	PASS
			5360~40000	26485.69	-37.05	≤-27	PASS

Test Graphs

11A_Ant1_5180_30~5140



11A_Ant1_5180_5360~40000



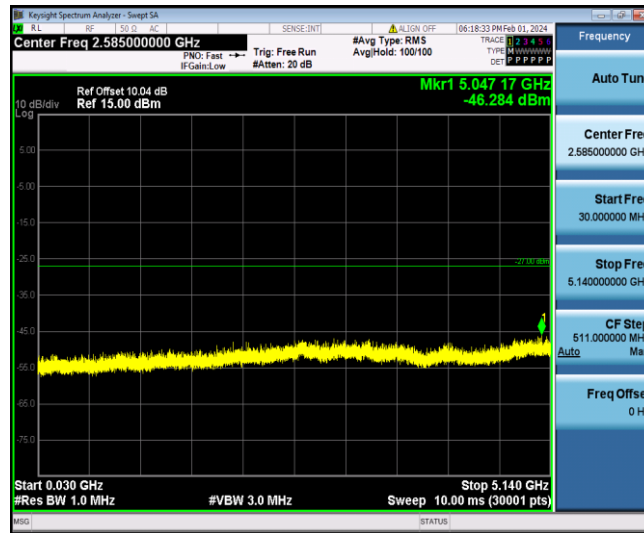
11A_Ant1_5200_30~5140



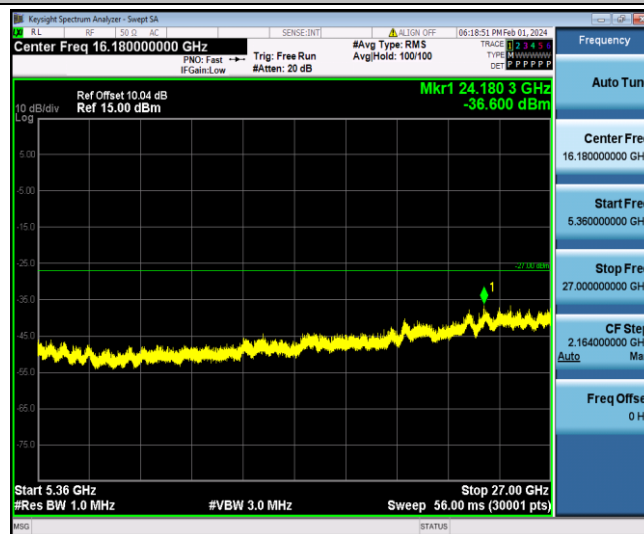
11A_Ant1_5200_5360~40000



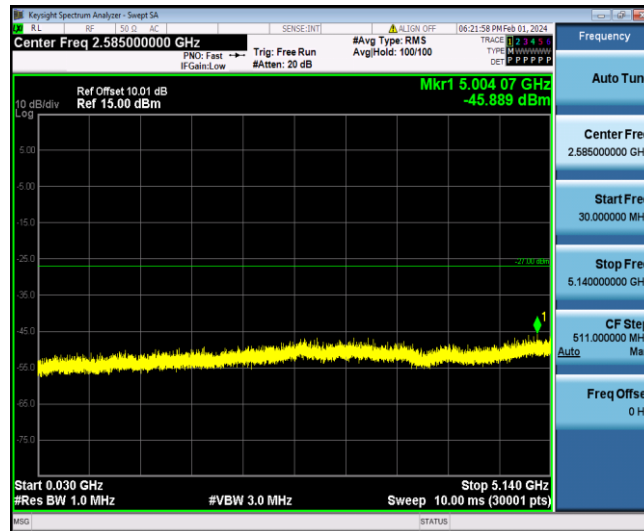
11A_Ant1_5240_30~5140



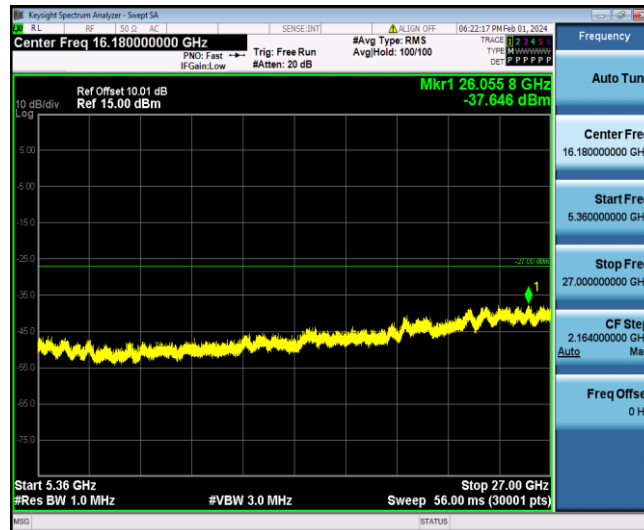
11A_Ant1_5240_5360~40000



11N20SISO_Ant1_5180_30~5140



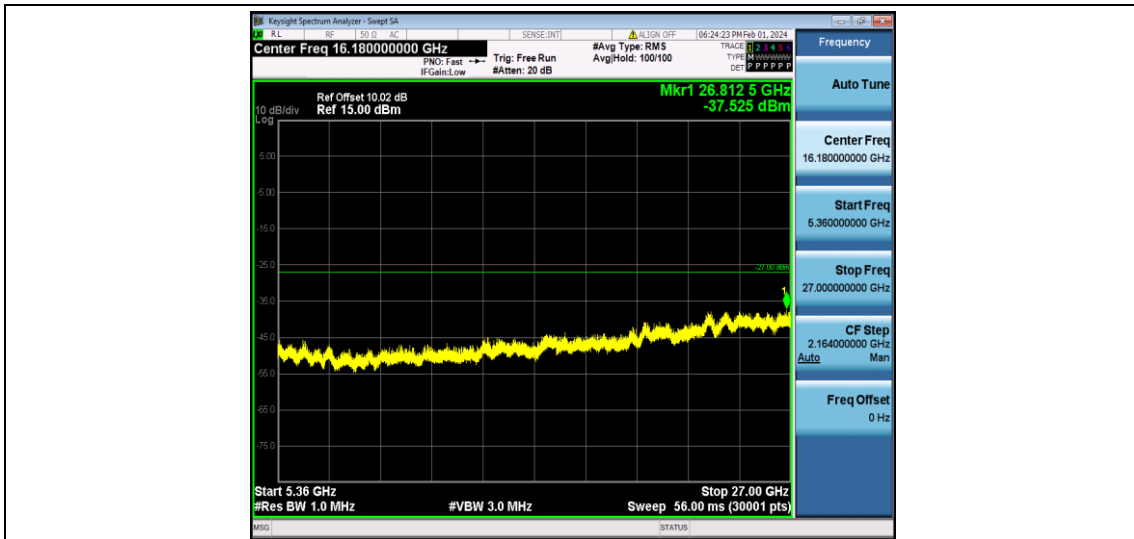
11N20SISO_Ant1_5180_5360~40000



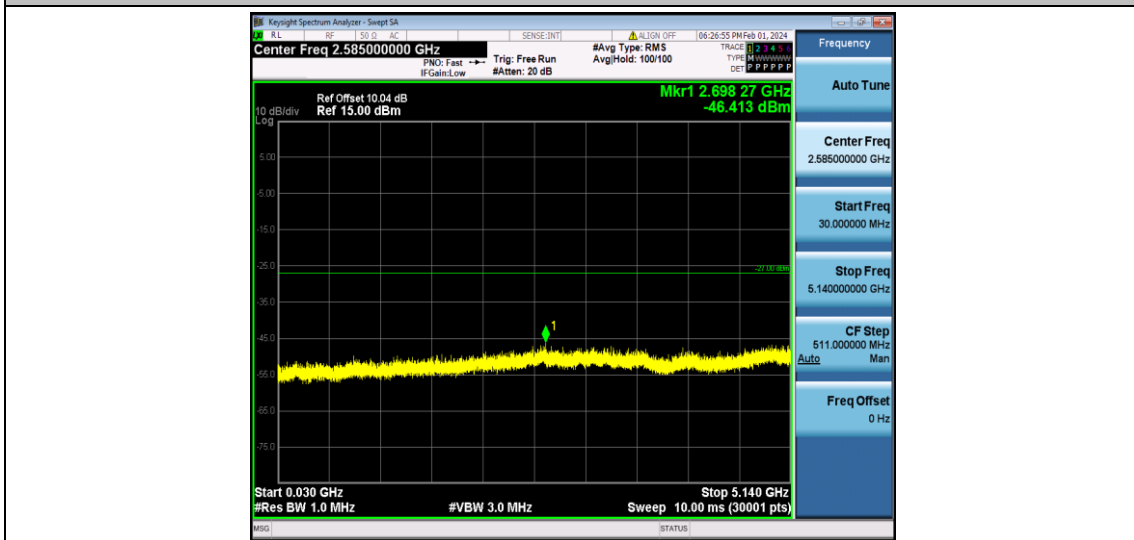
11N20SISO_Ant1_5200_30~5140



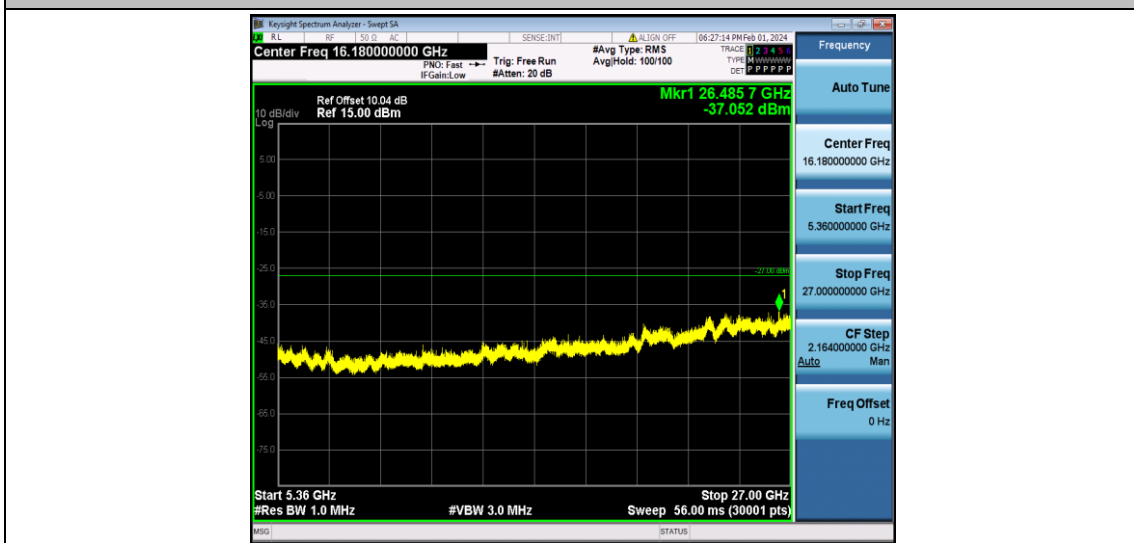
11N20SISO_Ant1_5200_5360~40000



11N20SISO_Ant1_5240_30~5140



11N20SISO_Ant1_5240_5360~40000



Appendix B.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	5180	AV	4500.000	-47.91	≤-41.20	47.29	≤54	PASS
				AV	4947.300	-45.59	≤-41.20	49.61	≤54	PASS
				AV	5150.000	-46.66	≤-41.20	48.54	≤54	PASS
				Peak	4500.000	-44	≤-21.20	51.20	≤74	PASS
				Peak	4877.300	-37.22	≤-21.20	57.98	≤74	PASS
				Peak	5150.000	-47.03	≤-21.20	48.17	≤74	PASS
		High	5240	AV	5350.000	-46.67	≤-41.20	48.53	≤54	PASS
				AV	5454.000	-45.85	≤-41.20	49.35	≤54	PASS
				AV	5460.000	-45.96	≤-41.20	49.24	≤54	PASS
				Peak	5350.000	-39.87	≤-21.20	55.33	≤74	PASS
				Peak	5399.280	-36.97	≤-21.20	58.23	≤74	PASS
				Peak	5460.000	-50.4	≤-21.20	44.80	≤74	PASS
11N20SIS O	Ant1	Low	5180	AV	4500.000	-47.97	≤-41.20	47.23	≤54	PASS
				AV	4943.800	-45.68	≤-41.20	49.52	≤54	PASS
				AV	5150.000	-46.75	≤-41.20	48.45	≤54	PASS
				Peak	4500.000	-46.03	≤-21.20	49.17	≤74	PASS
				Peak	4782.800	-38.03	≤-21.20	57.17	≤74	PASS
				Peak	5150.000	-41.07	≤-21.20	54.13	≤74	PASS
		High	5240	AV	5350.000	-46.79	≤-41.20	48.41	≤54	PASS
				AV	5454.960	-45.94	≤-41.20	49.26	≤54	PASS
				AV	5460.000	-46.02	≤-41.20	49.18	≤54	PASS
				Peak	5350.000	-39.64	≤-21.20	55.56	≤74	PASS
				Peak	5457.120	-38.05	≤-21.20	57.15	≤74	PASS
				Peak	5460.000	-44.59	≤-21.20	50.61	≤74	PASS

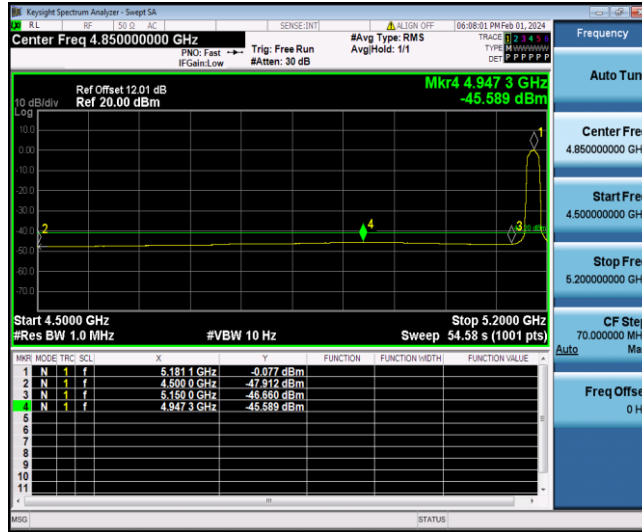
Note:

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

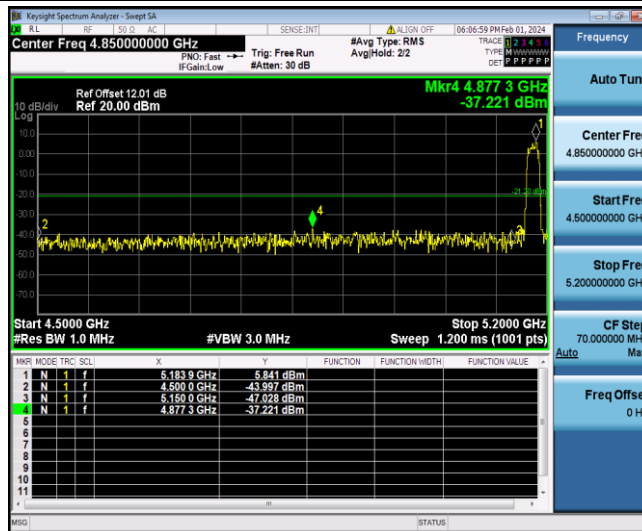
For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

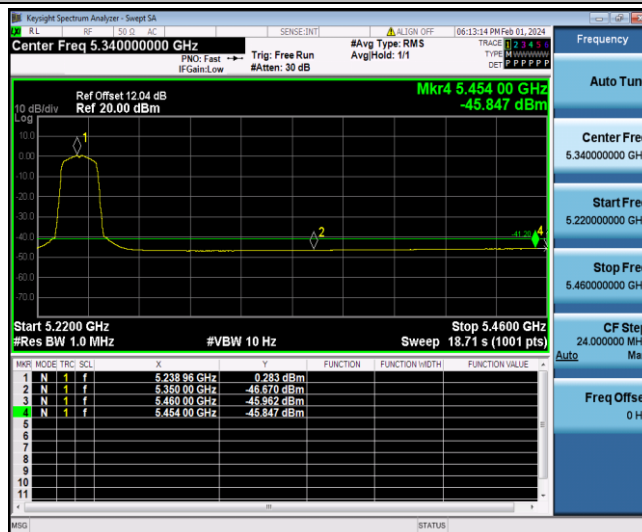
11A_Ant1_Low_5180_AV



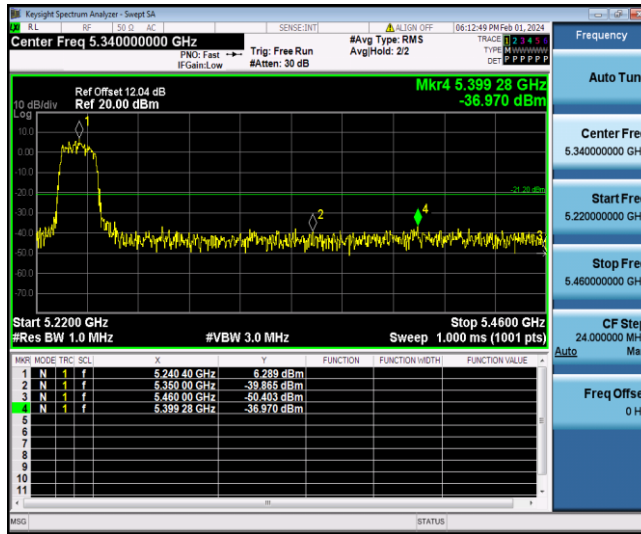
11A_Ant1_Low_5180_Peak



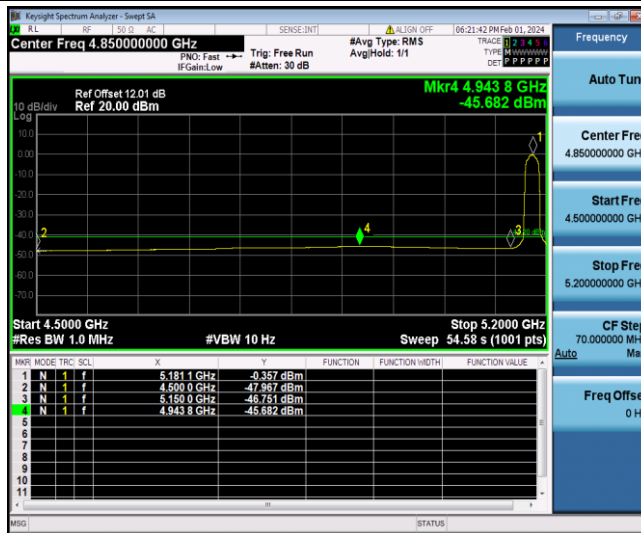
11A_Ant1_High_5240_AV



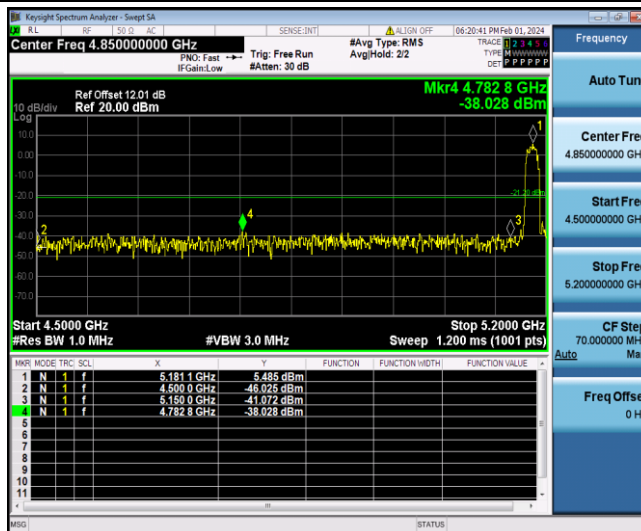
11A_Ant1_High_5240_Peak



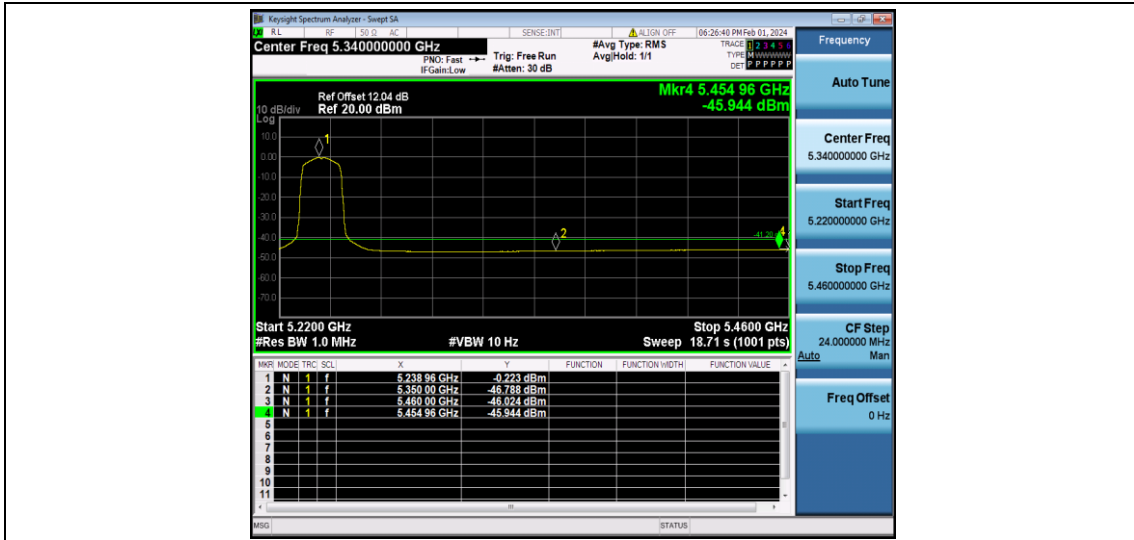
11N20SISO_Ant1_Low_5180_AV



11N20SISO_Ant1_Low_5180_Peak



11N20SISO_Ant1_High_5240_AV



11N20SISO_Ant1_High_5240_Peak

