

FCC Appendix RF Test Data for 5GWIFI

FCC ID : 2BXD2-HHKCSS160YB

Company : Honghui Kuaicang Technology (Shenzhen) Co., Ltd

EUT : inductive intelligent shelf-mobile(customized)

Model Number : HHKCSS160YB

Report No. : CTA26070700902

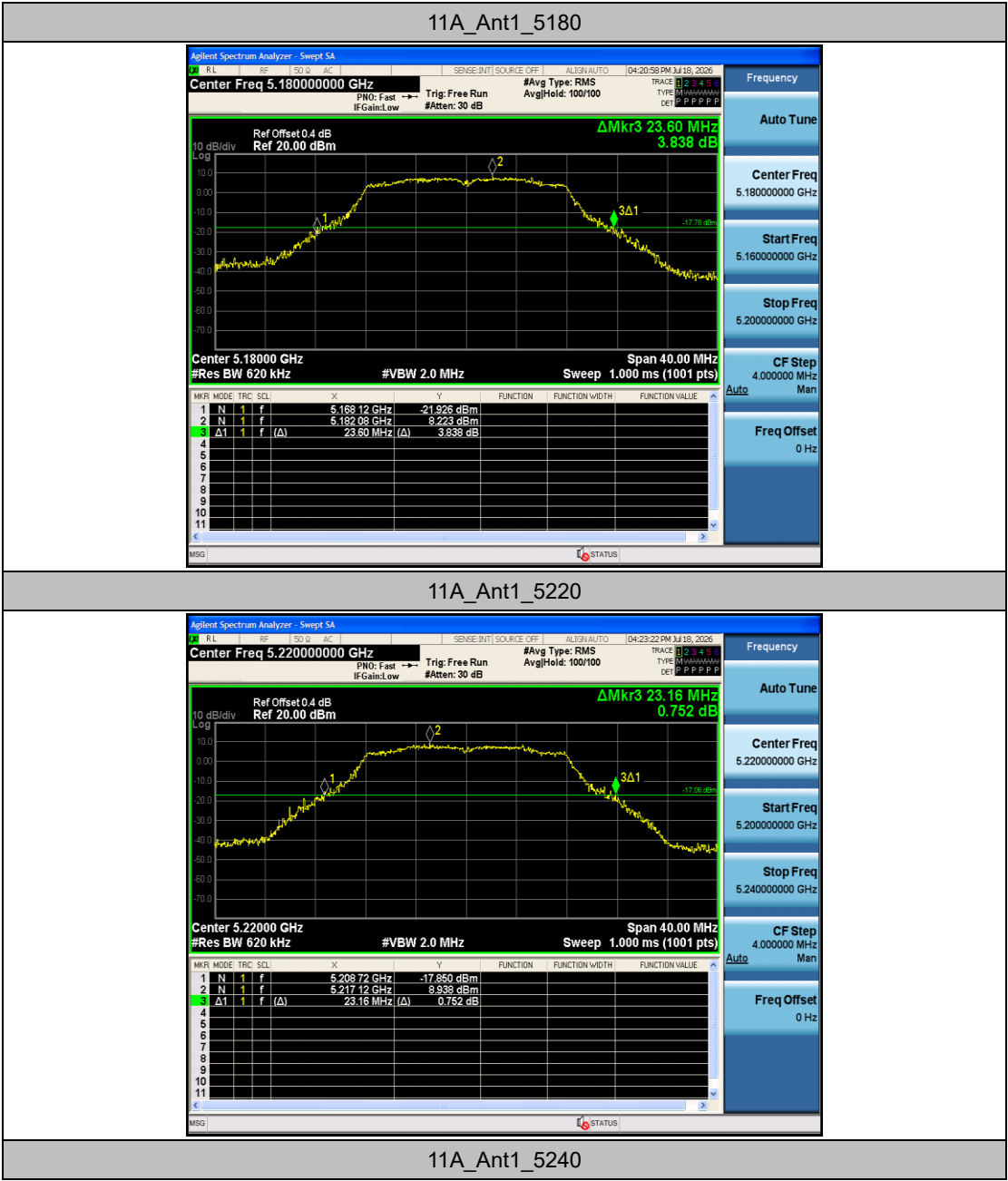
Reviewed By : Eric Wang

Appendix A1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	23.600	5168.120	5191.720	---	---
		5220	23.160	5208.720	5231.880	---	---
		5240	23.400	5228.560	5251.960	---	---
11N20SISO	Ant1	5180	24.920	5167.720	5192.640	---	---
		5220	23.360	5208.280	5231.640	---	---
		5240	23.360	5228.400	5251.760	---	---

Test Graphs





11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240

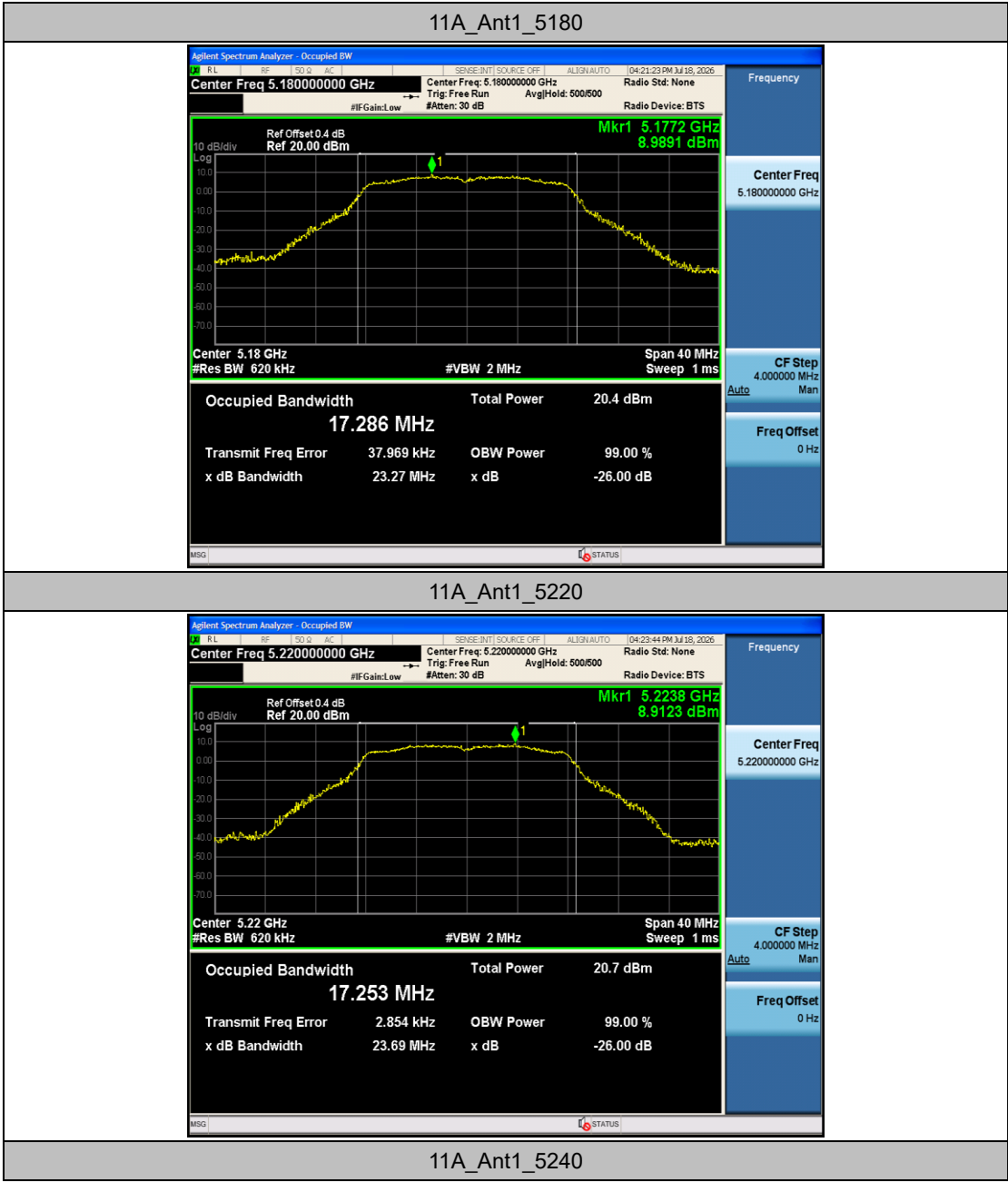


Appendix A2: Occupied channel bandwidth

Test Result

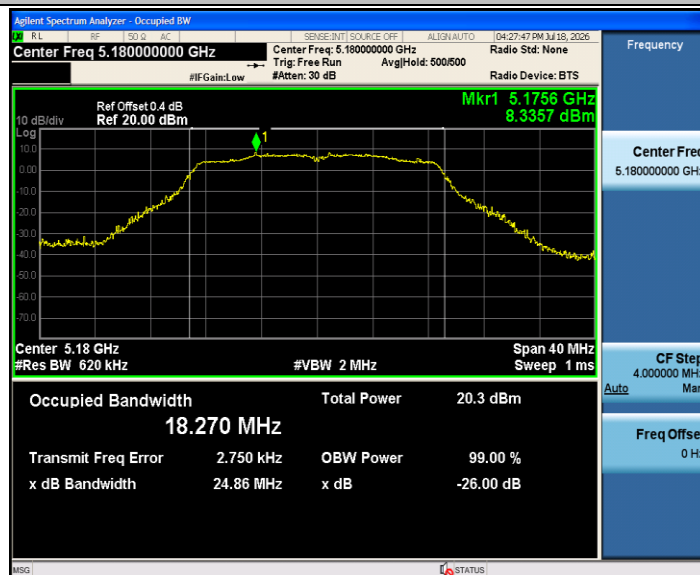
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.286	5171.3950	5188.6810	---	---
		5220	17.253	5211.3764	5228.6294	---	---
		5240	17.232	5231.4464	5248.6784	---	---
11N20SISO	Ant1	5180	18.270	5170.8678	5189.1378	---	---
		5220	18.223	5210.8841	5229.1071	---	---
		5240	18.287	5230.8239	5249.1109	---	---

Test Graphs

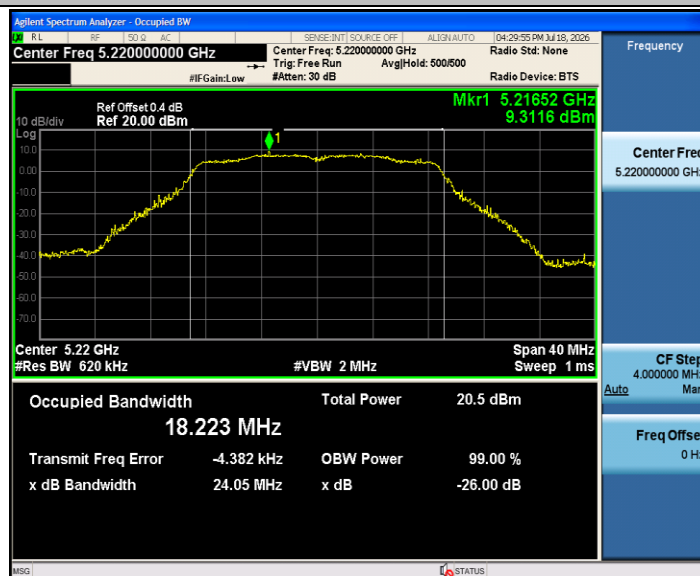




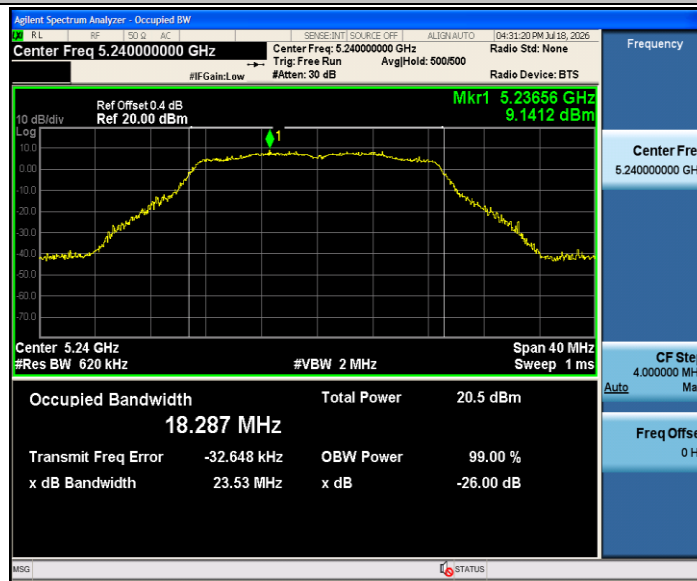
11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240

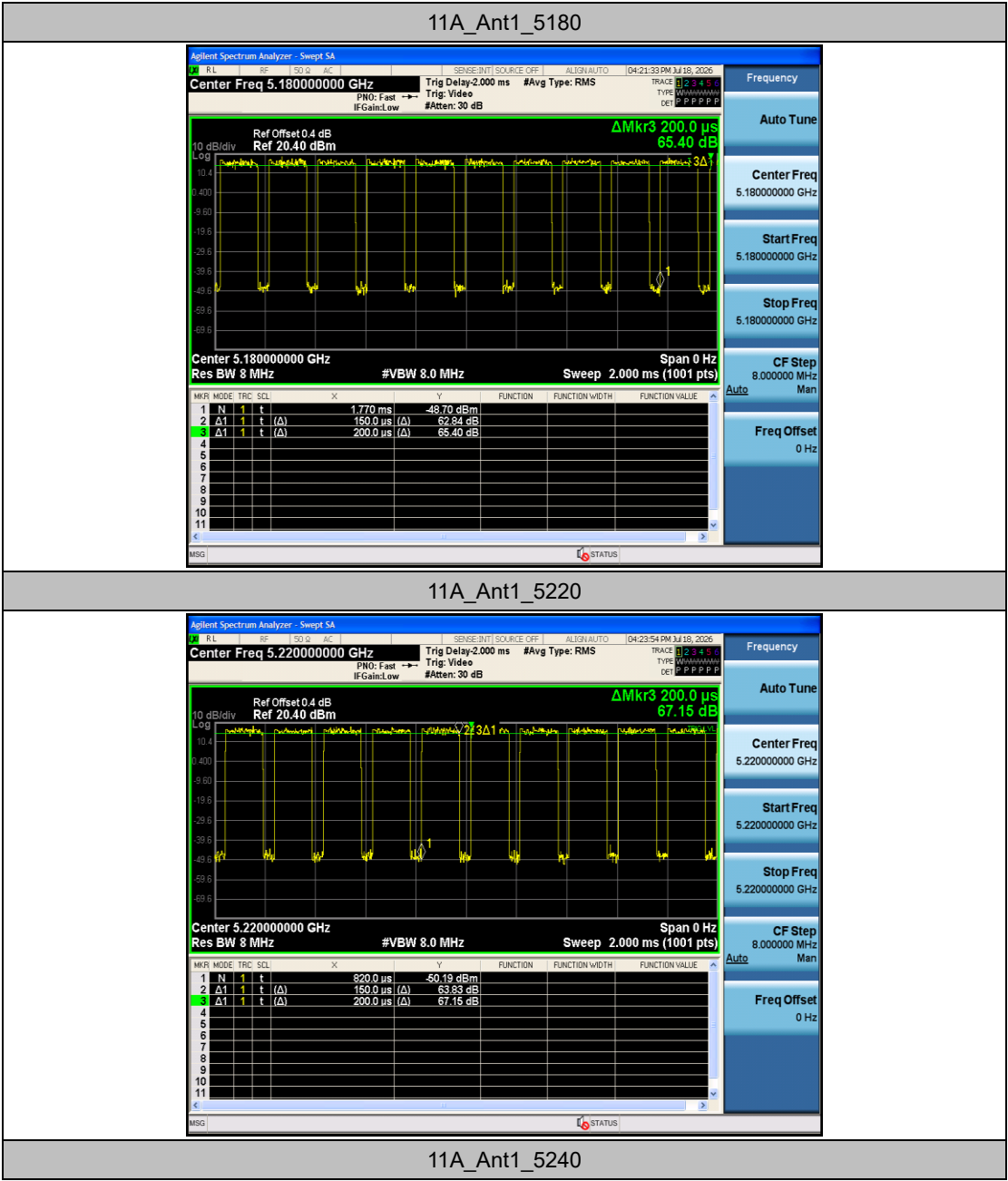


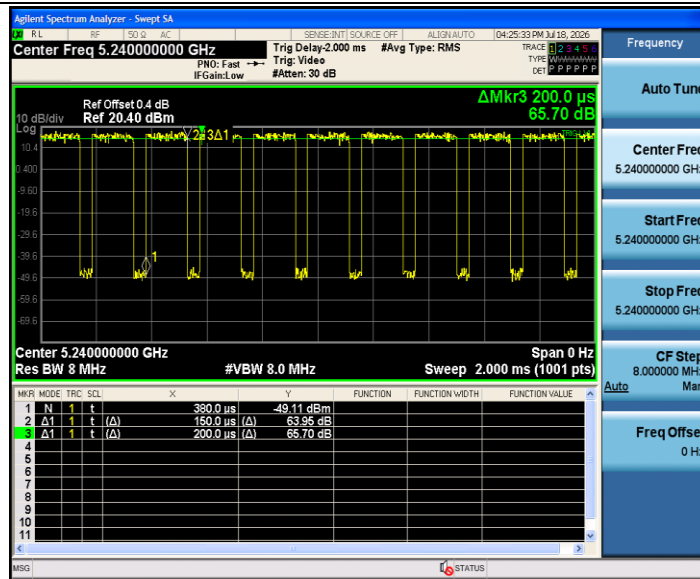
Appendix B: Duty Cycle

Test Result

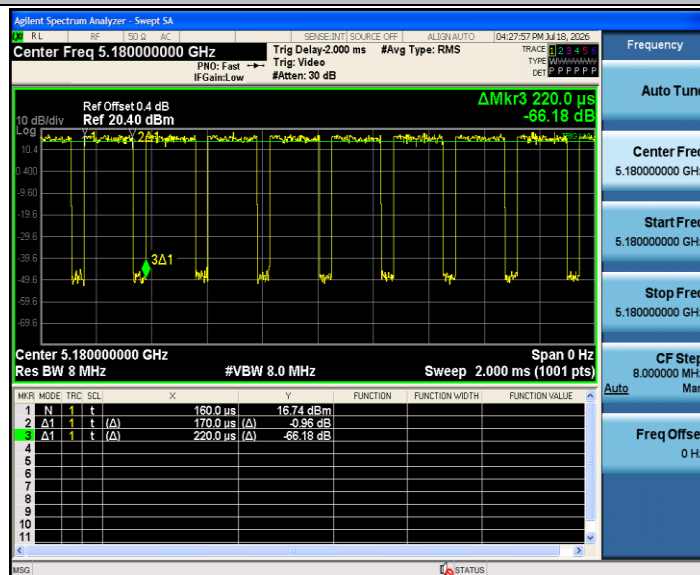
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dB]	Limit	Verdict
11A	Ant1	5180	0.15	0.20	75.00	1.25	---	---
		5220	0.15	0.20	75.00	1.25	---	---
		5240	0.15	0.20	75.00	1.25	---	---
11N20SISO	Ant1	5180	0.17	0.22	77.27	1.12	---	---
		5220	0.18	0.23	78.26	1.06	---	---
		5240	0.18	0.23	78.26	1.06	---	---

Test Graphs

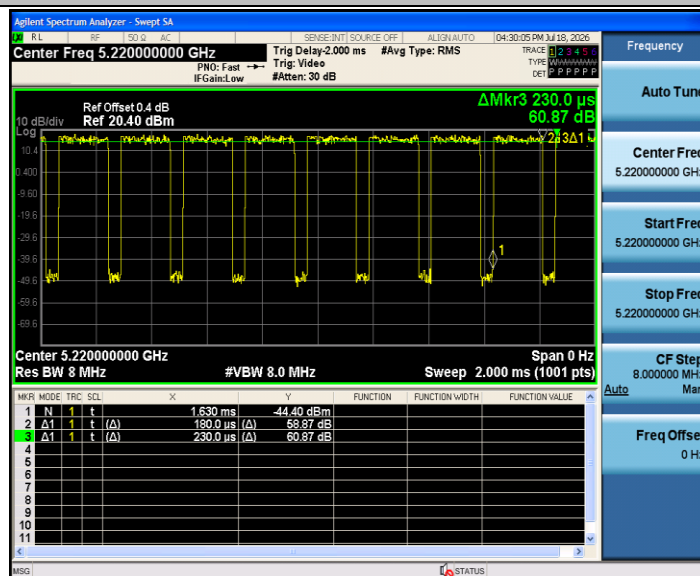




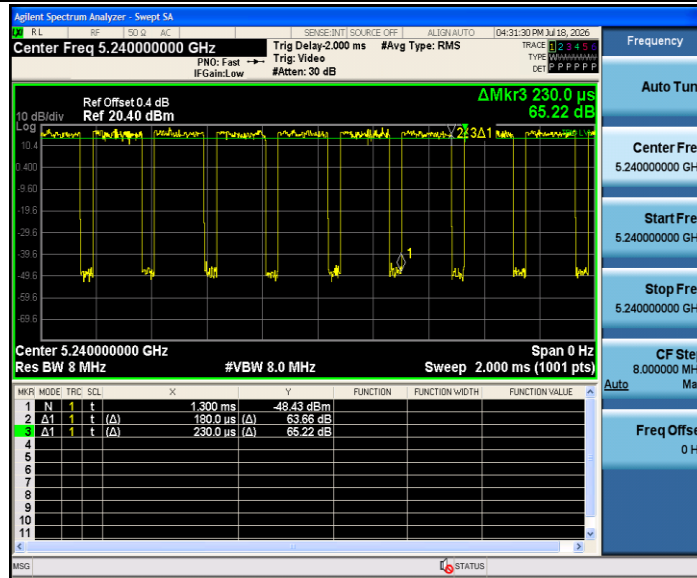
11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240



Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	12.44	75.00	1.25	13.69	≤23.98	PASS
		5220	12.70	75.00	1.25	13.95	≤23.98	PASS
		5240	12.62	75.00	1.25	13.87	≤23.98	PASS
11N20SIS O	Ant1	5180	12.49	77.27	1.12	13.61	≤23.98	PASS
		5220	12.78	78.26	1.06	13.84	≤23.98	PASS
		5240	12.70	78.26	1.06	13.76	≤23.98	PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	RawData [dBm/MHz]	DC Factor [dBm]	Result [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	2.16	1.25	3.41	≤11.00	PASS
		5220	2.67	1.25	3.92	≤11.00	PASS
		5240	2.58	1.25	3.83	≤11.00	PASS
11N20SISO	Ant1	5180	2.37	1.12	3.49	≤11.00	PASS
		5220	2.71	1.06	3.77	≤11.00	PASS
		5240	2.63	1.06	3.69	≤11.00	PASS

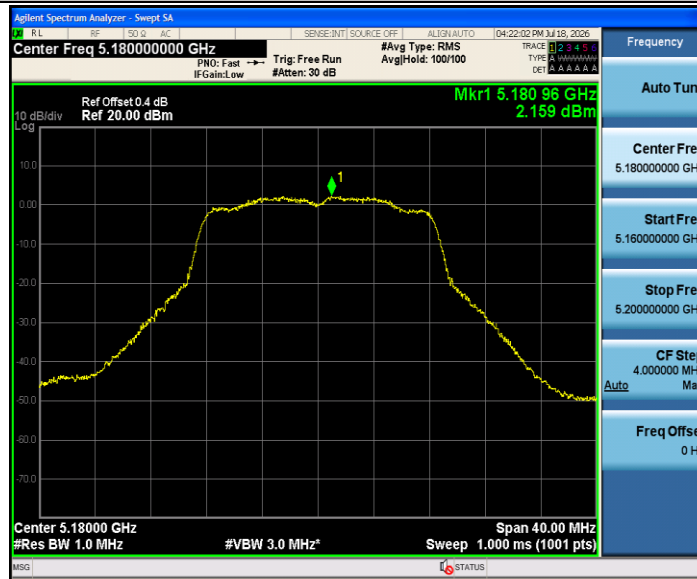
Note: $1P.S.D(dBm/500KHz) = P.S.D(dBm/300KHz) + 10 \log(500 \text{ kHz}/300KHz) + \text{Duty factor}$.

2. $RBW \text{ factor} = 10 \log(500 \text{ KHz} / 300 \text{ KHz}) = 2.22 \text{ dB}$

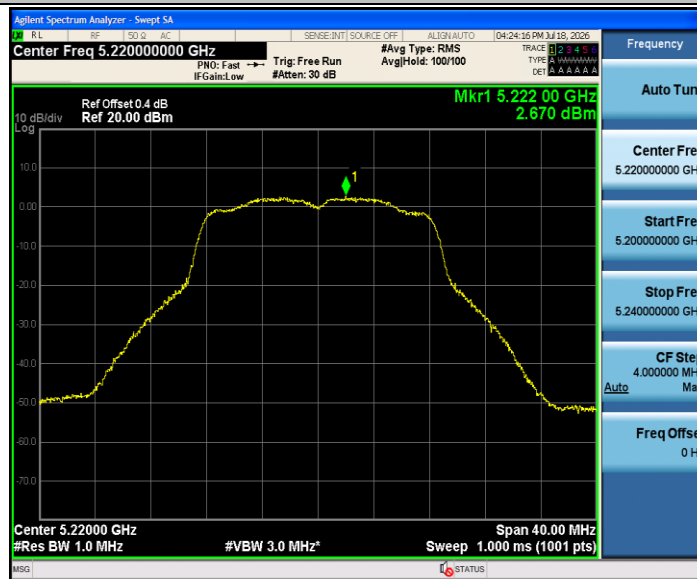
3. Note: Offset=cable loss

Test Graphs

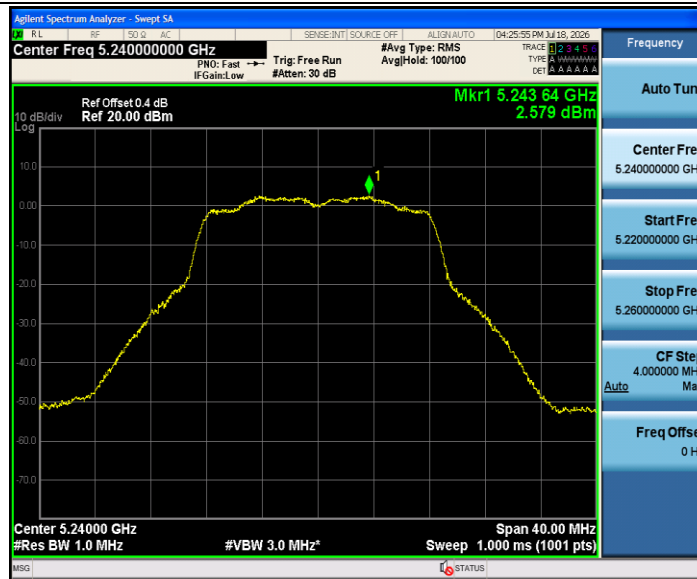
11A_Ant1_5180



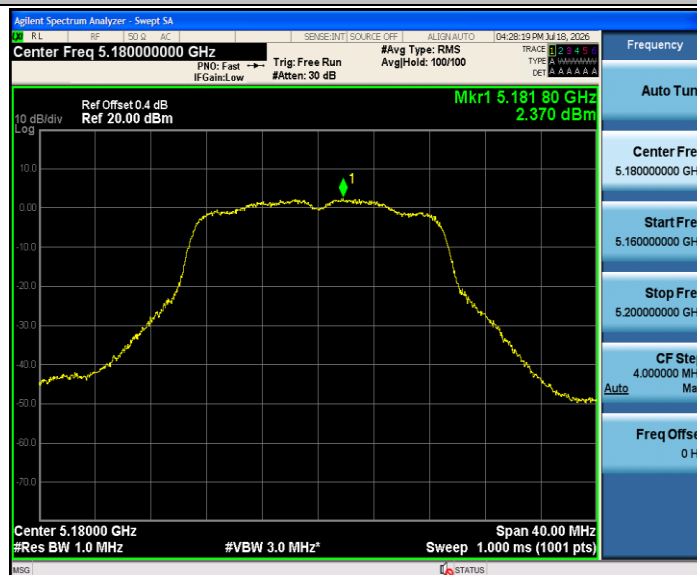
11A_Ant1_5220



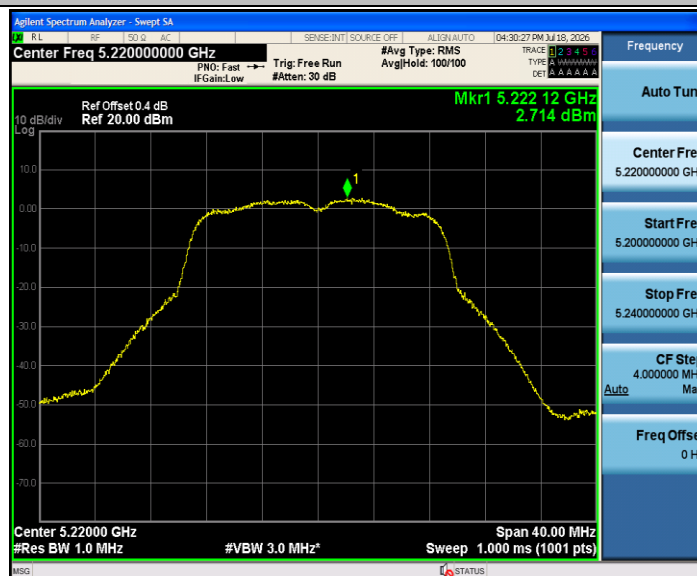
11A_Ant1_5240



11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240

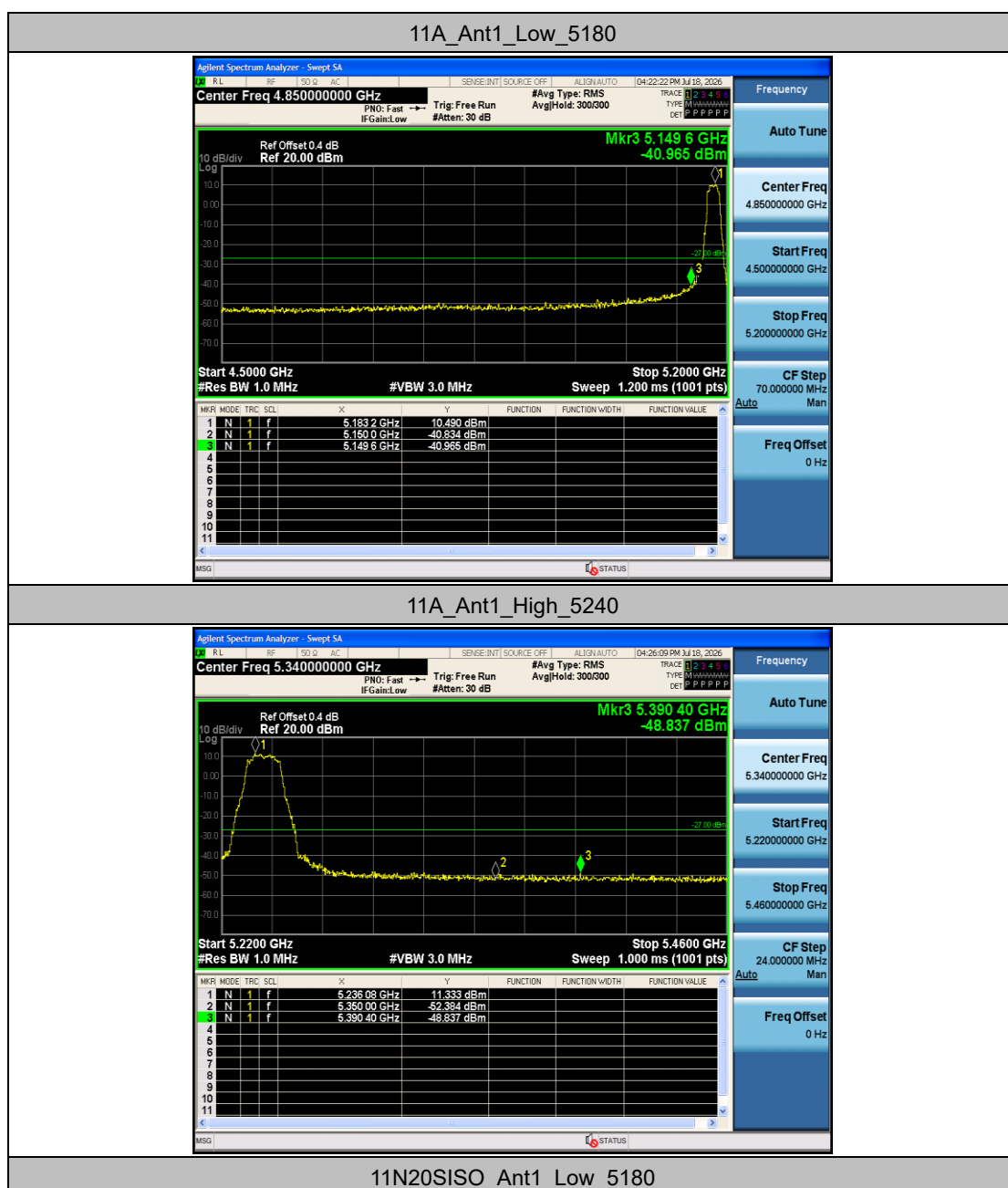


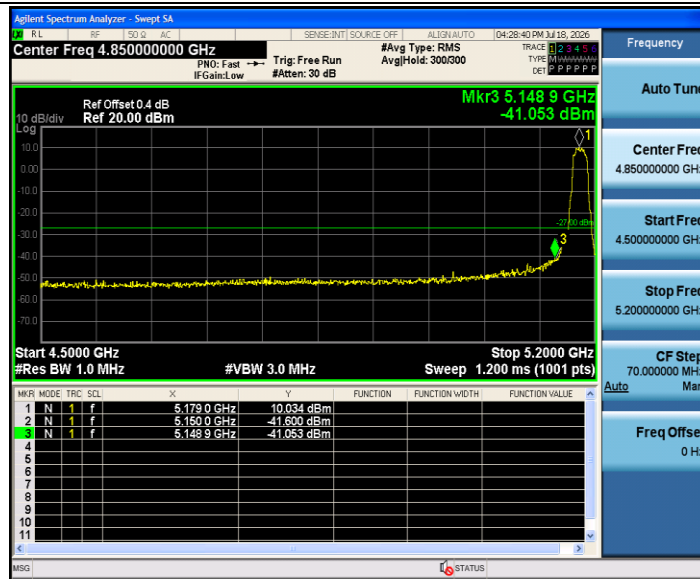
Appendix E: Band edge measurements

Test Result B1

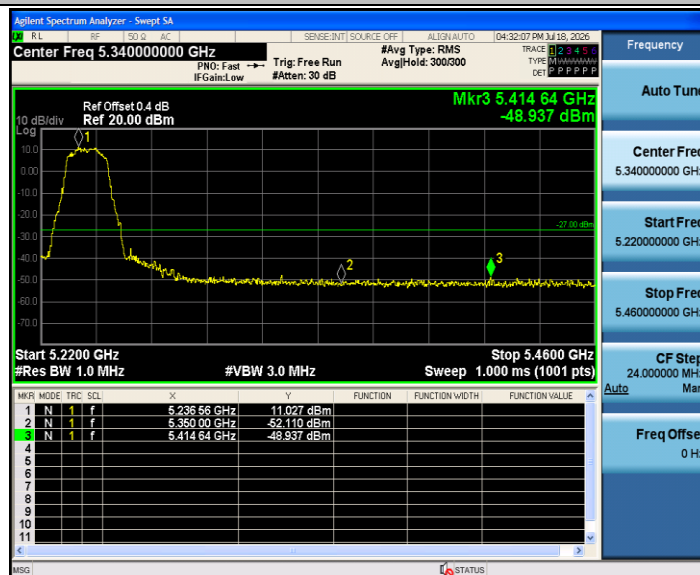
TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-40.97	≤ -27	PASS
		High	5240	-48.84	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-41.05	≤ -27	PASS
		High	5240	-48.94	≤ -27	PASS

Test Graphs B1





11N20SISO_Ant1_High_5240



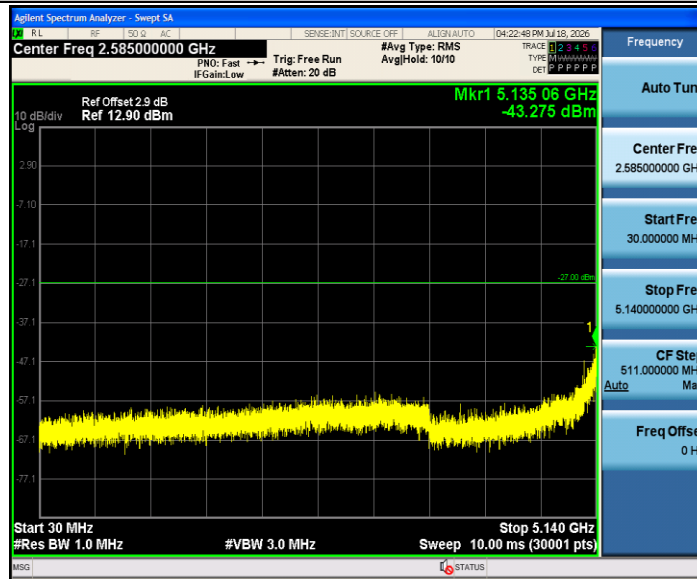
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	5135.06	-43.28	≤-27	PASS
			5360~40000	6475.18	-47.25	≤-27	PASS
		5220	30~5140	5113.26	-50.23	≤-27	PASS
			5360~40000	25646.06	-47.16	≤-27	PASS
		5240	30~5140	5123.99	-49.61	≤-27	PASS
			5360~40000	26109.87	-47.42	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	5135.91	-41.34	≤-27	PASS
			5360~40000	25604.22	-47.62	≤-27	PASS
		5220	30~5140	5135.74	-49.78	≤-27	PASS
			5360~40000	26151.71	-46.79	≤-27	PASS
		5240	30~5140	5134.38	-50.86	≤-27	PASS
			5360~40000	25555.89	-47.13	≤-27	PASS

Test Graphs

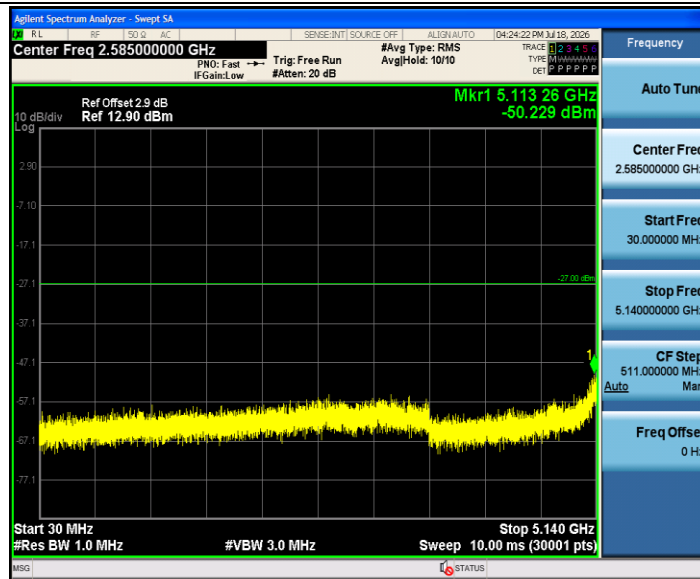
11A_Ant1_5180_30~5140



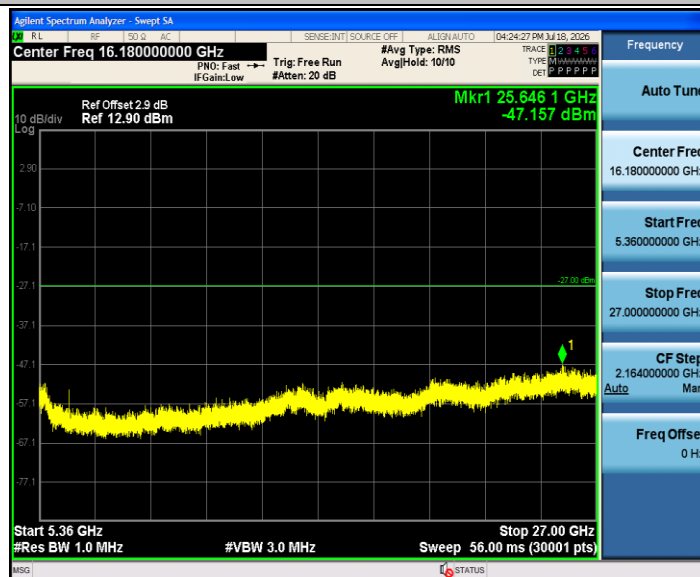
11A_Ant1_5180_5360~40000



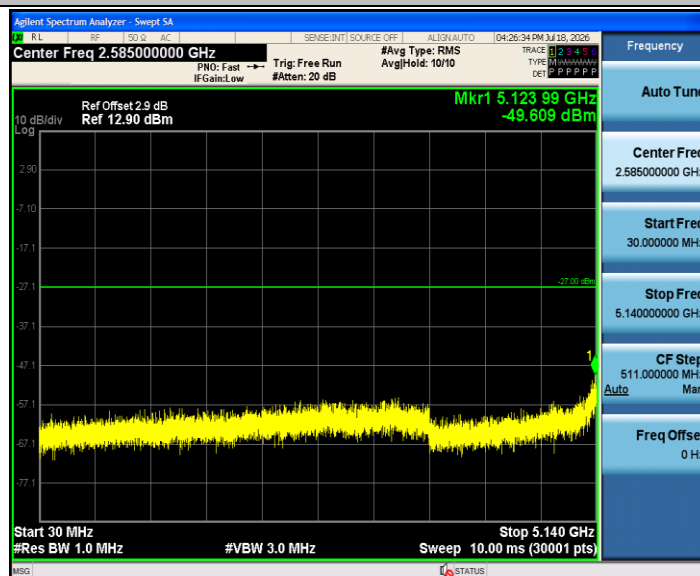
11A_Ant1_5220_30~5140



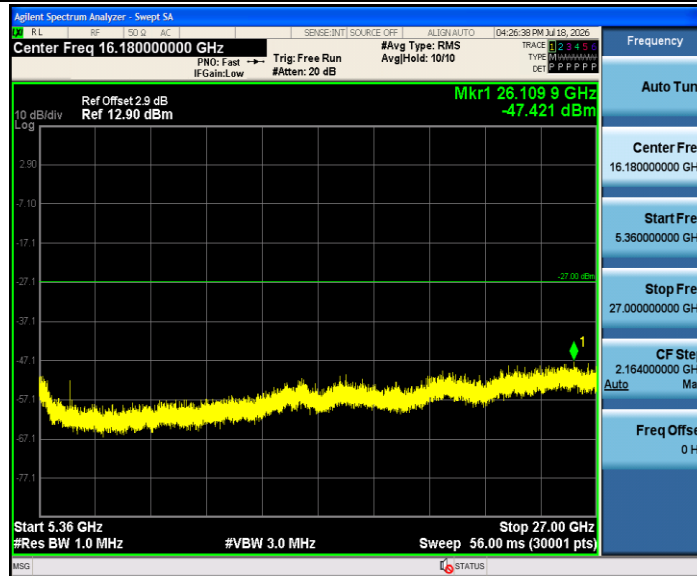
11A_Ant1_5220_5360~40000



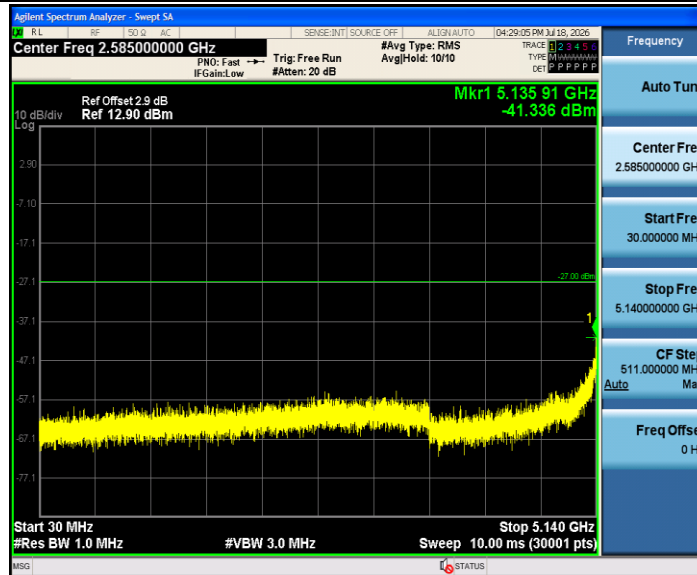
11A_Ant1_5240_30~5140



11A_Ant1_5240_5360~40000



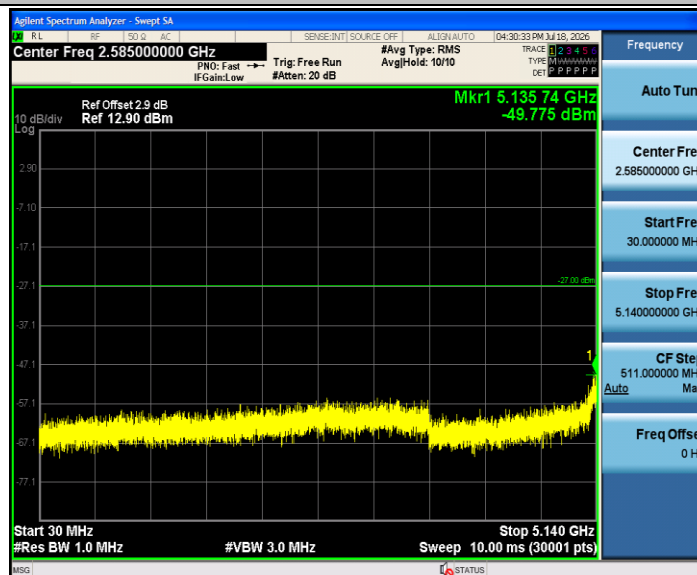
11N20SISO_Ant1_5180_30~5140



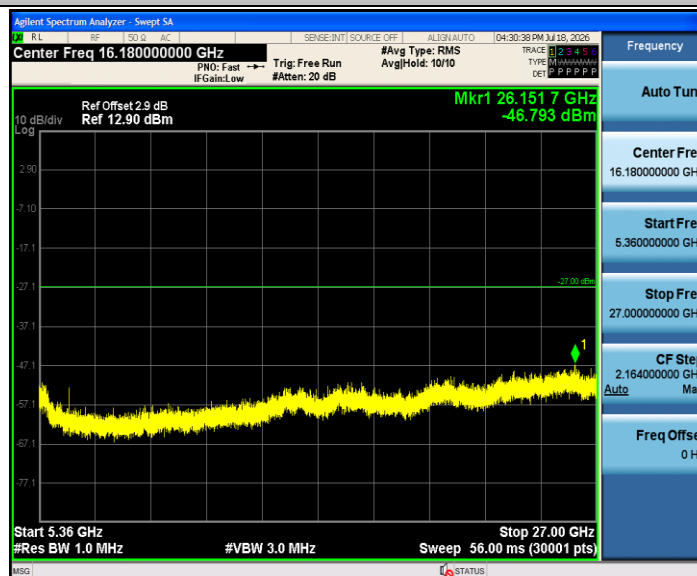
11N20SISO_Ant1_5180_5360~40000



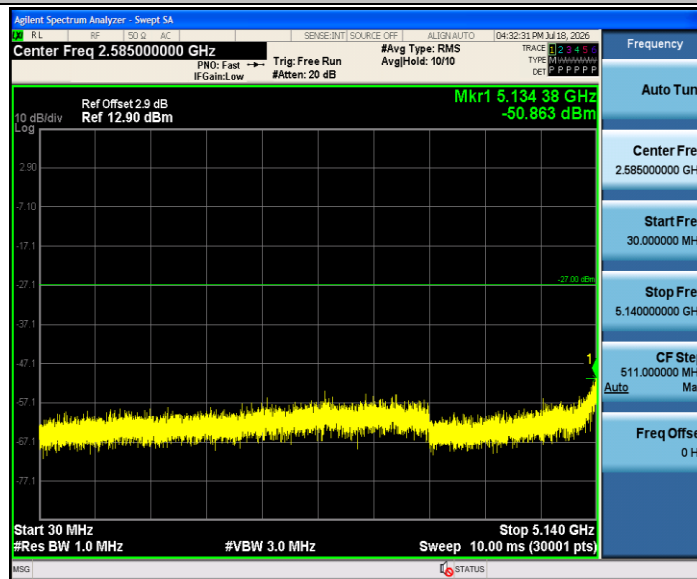
11N20SISO_Ant1_5220_30~5140



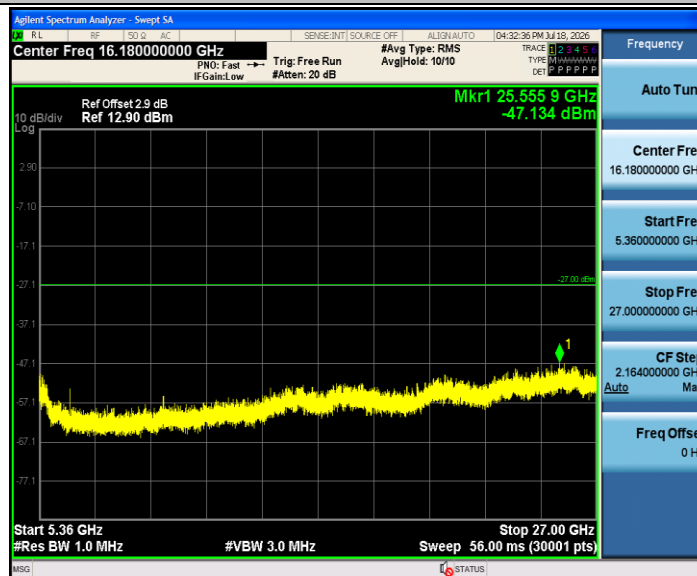
11N20SISO_Ant1_5220_5360~40000



11N20SISO_Ant1_5240_30~5140



11N20SISO_Ant1_5240_5360~40000



Appendix G: Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	EIRP [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5180	AV	4500.000	-62.37	2.00	1.25	-59.12	≤-41.20	PASS
				AV	5148.200	-51.49	2.00	1.25	-48.24	≤-41.20	PASS
				AV	5150.000	-51.41	2.00	1.25	-48.16	≤-41.20	PASS
				Peak	4500.000	-54.36	2.00	0.00	-52.36	≤-27.00	PASS
				Peak	5142.600	-41.86	2.00	0.00	-39.86	≤-27.00	PASS
				Peak	5150.000	-42.16	2.00	0.00	-40.16	≤-27.00	PASS
		High	5240	AV	5350.000	-60.35	2.00	1.25	-57.1	≤-41.20	PASS
				AV	5353.200	-59.74	2.00	1.25	-56.49	≤-41.20	PASS
				AV	5460.000	-60.85	2.00	1.25	-57.6	≤-41.20	PASS
				Peak	5350.000	-51.7	2.00	0.00	-49.7	≤-27.00	PASS
				Peak	5358.240	-48.3	2.00	0.00	-46.3	≤-27.00	PASS
				Peak	5460.000	-53.58	2.00	0.00	-51.58	≤-27.00	PASS
11N20SI SO	Ant1	Low	5180	AV	4500.000	-61.87	2.00	1.12	-58.75	≤-41.20	PASS
				AV	5149.600	-51.96	2.00	1.12	-48.84	≤-41.20	PASS
				AV	5150.000	-52.46	2.00	1.12	-49.34	≤-41.20	PASS
				Peak	4500.000	-54.24	2.00	0.00	-52.24	≤-27.00	PASS
				Peak	5146.800	-41.74	2.00	0.00	-39.74	≤-27.00	PASS
				Peak	5150.000	-43.84	2.00	0.00	-41.84	≤-27.00	PASS
		High	5240	AV	5350.000	-60.18	2.00	1.06	-57.12	≤-41.20	PASS
				AV	5363.520	-59.92	2.00	1.06	-56.86	≤-41.20	PASS
				AV	5460.000	-61.11	2.00	1.06	-58.05	≤-41.20	PASS
				Peak	5350.000	-53.46	2.00	0.00	-51.46	≤-27.00	PASS
				Peak	5370.000	-48.72	2.00	0.00	-46.72	≤-27.00	PASS
				Peak	5460.000	-52.27	2.00	0.00	-50.27	≤-27.00	PASS

Note:

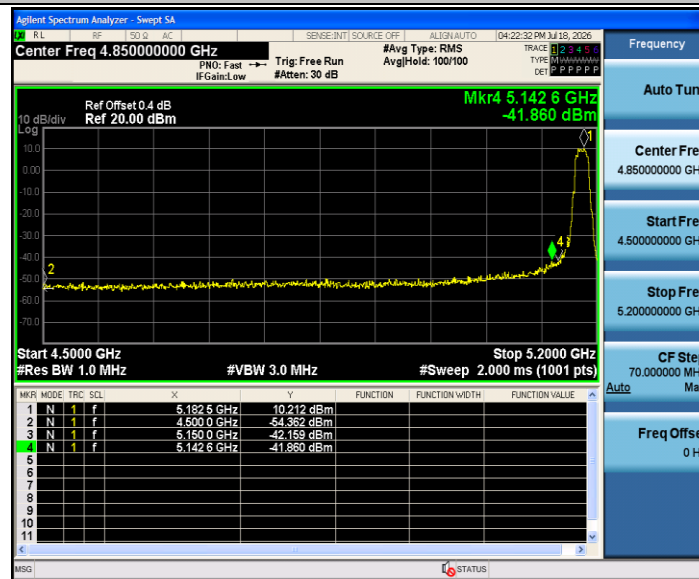
- For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

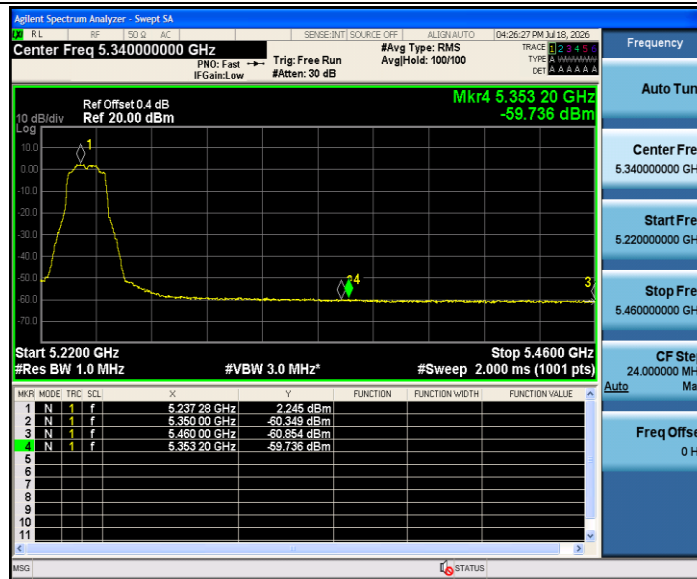
11A_Ant1_Low_5180_AV



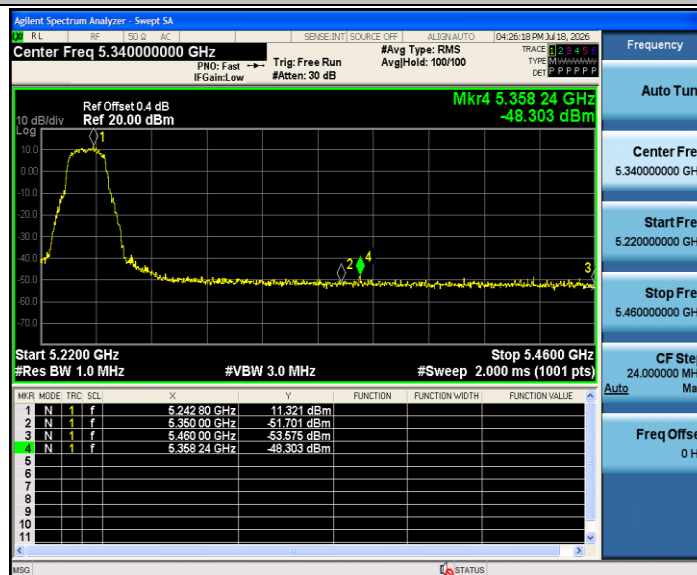
11A_Ant1_Low_5180_Peak



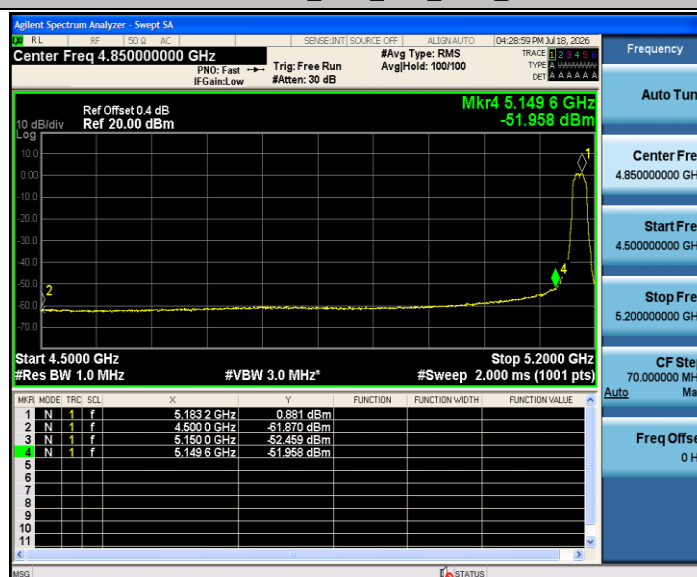
11A_Ant1_High_5240_AV



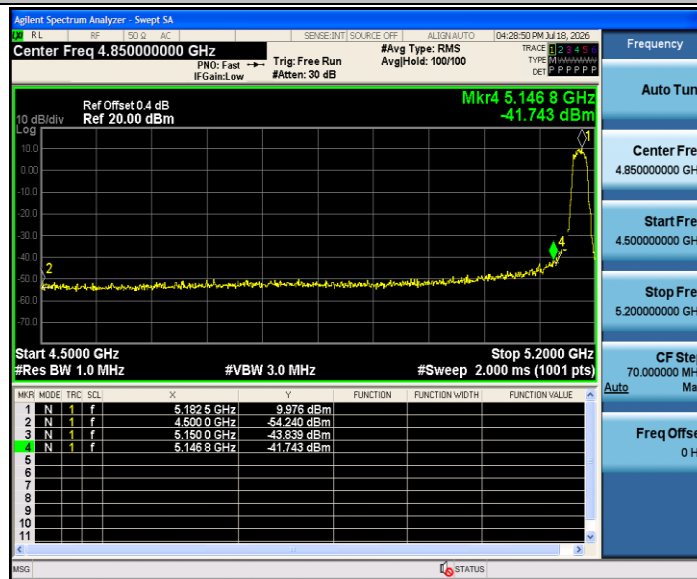
11A_Ant1_High_5240_Peak



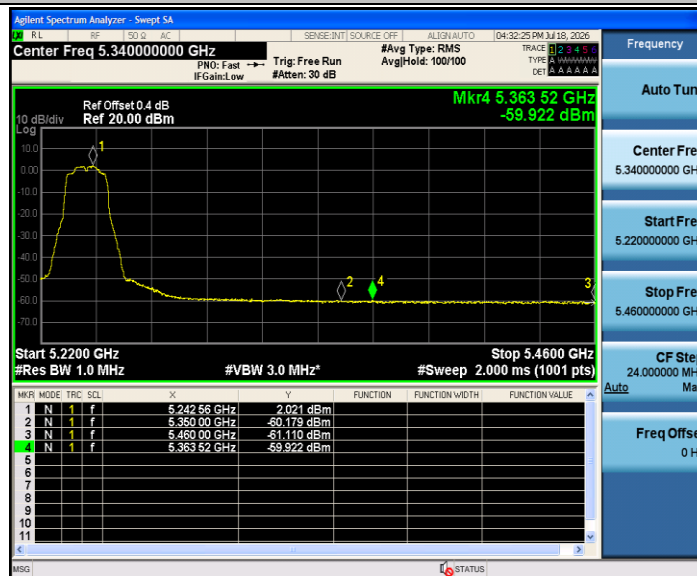
11N20SISO_Ant1_Low_5180_AV



11N20SISO_Ant1_Low_5180_Peak



11N20SISO_Ant1_High_5240_AV



11N20SISO_Ant1_High_5240_Peak

