

FCC Appendix RF Test Data for 5GWIFI

FCC ID : 2BXD2-HHKCSS360YB

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

EUT : inductive intelligent shelf-mobile(customized)

Model Number : HHKCSS360YB

Report No. : CTA26070701002

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	24.000	5167.840	5191.840	---	---
		5220	24.000	5207.640	5231.640	---	---
		5240	23.240	5228.320	5251.560	---	---
11N20SISO	Ant1	5180	24.120	5167.840	5191.960	---	---
		5220	24.040	5207.720	5231.760	---	---
		5240	22.920	5228.480	5251.400	---	---

Test Graphs

11A_Ant1_5180



11A_Ant1_5220



11A_Ant1_5240



11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240

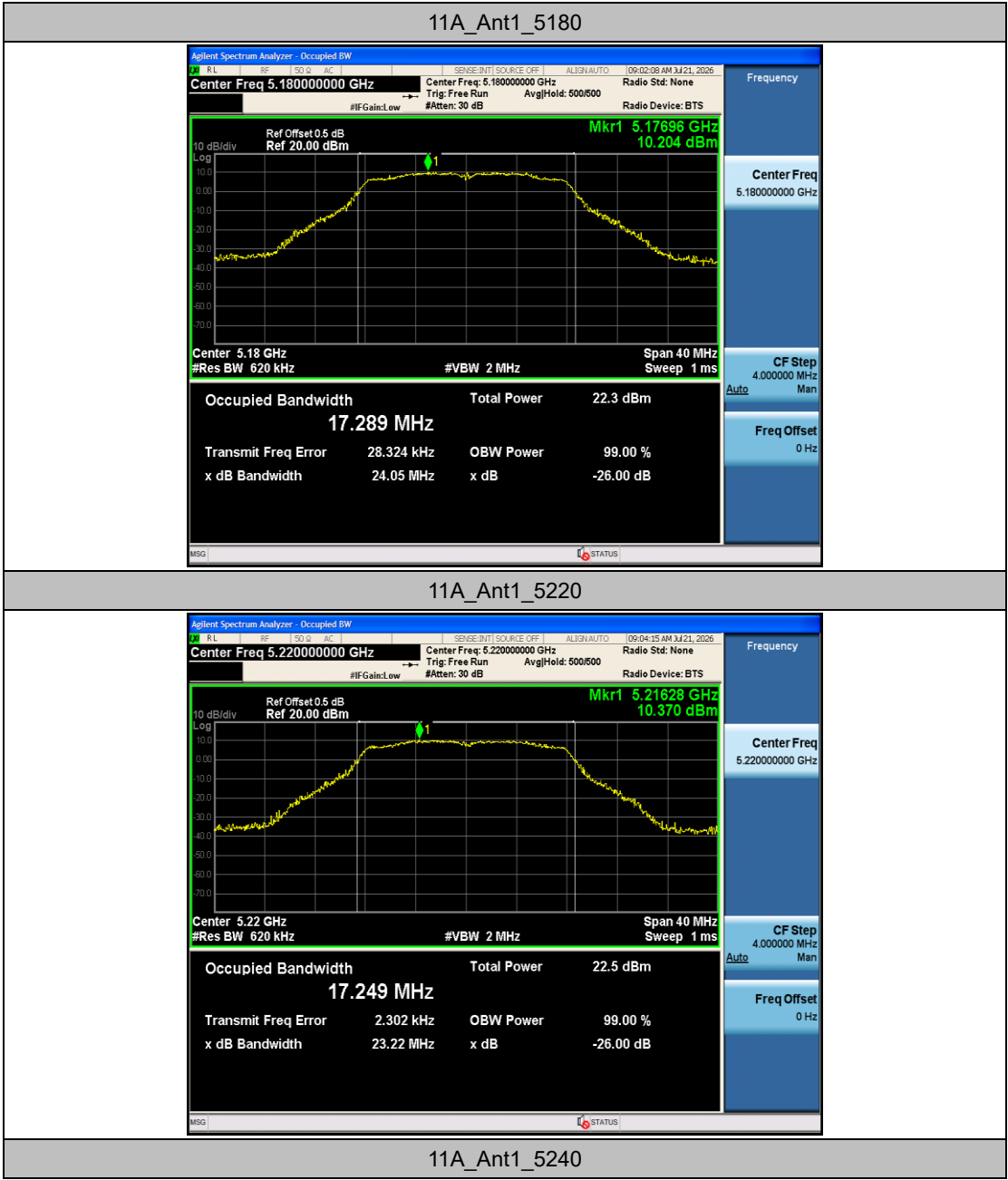


Appendix A2: Occupied channel bandwidth

Test Result

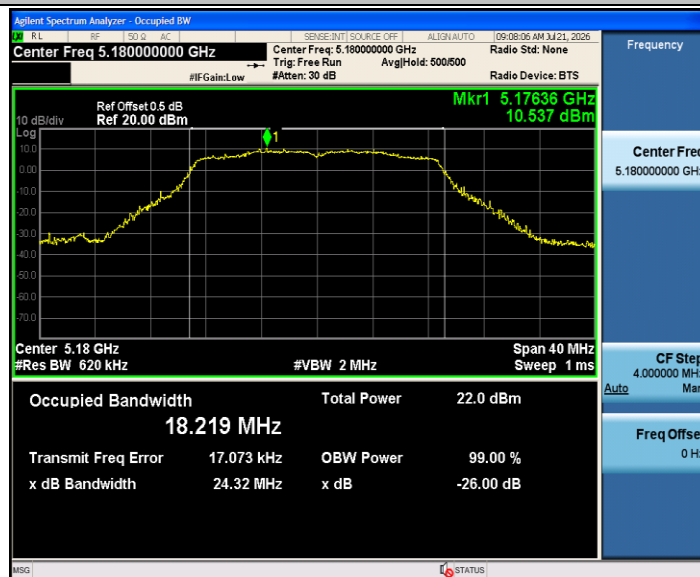
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.289	5171.3838	5188.6728	---	---
		5220	17.249	5211.3778	5228.6268	---	---
		5240	17.282	5231.3713	5248.6533	---	---
11N20SISO	Ant1	5180	18.219	5170.9076	5189.1266	---	---
		5220	18.242	5210.8815	5229.1235	---	---
		5240	18.295	5230.8405	5249.1355	---	---

Test Graphs

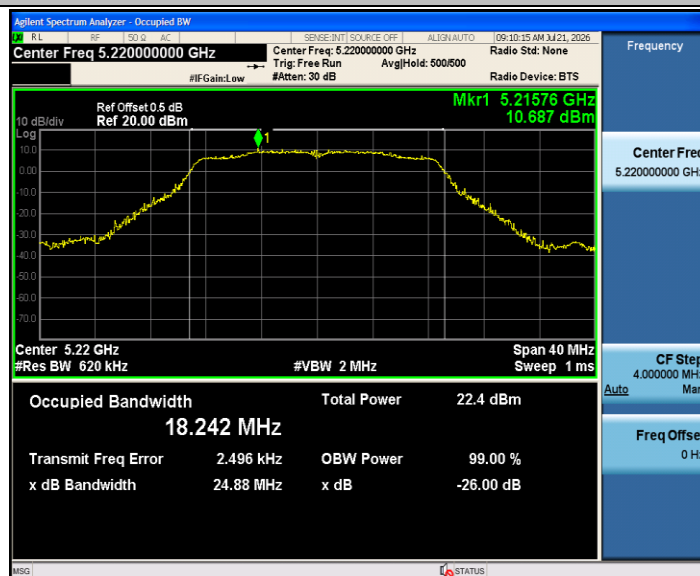




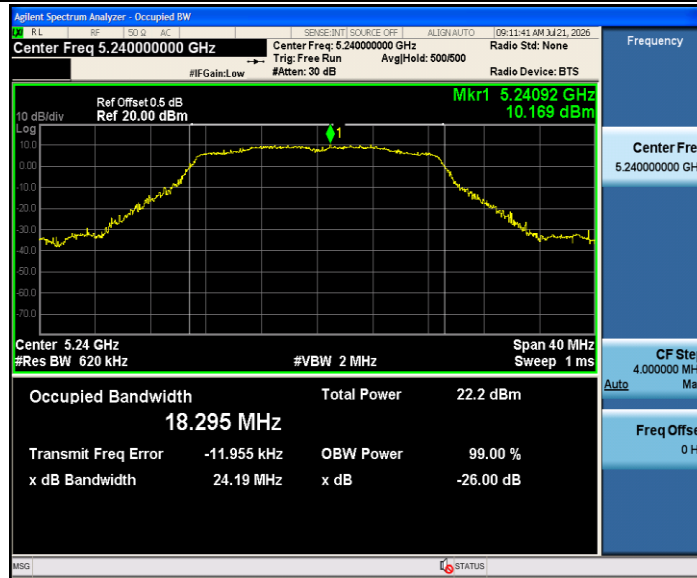
11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240

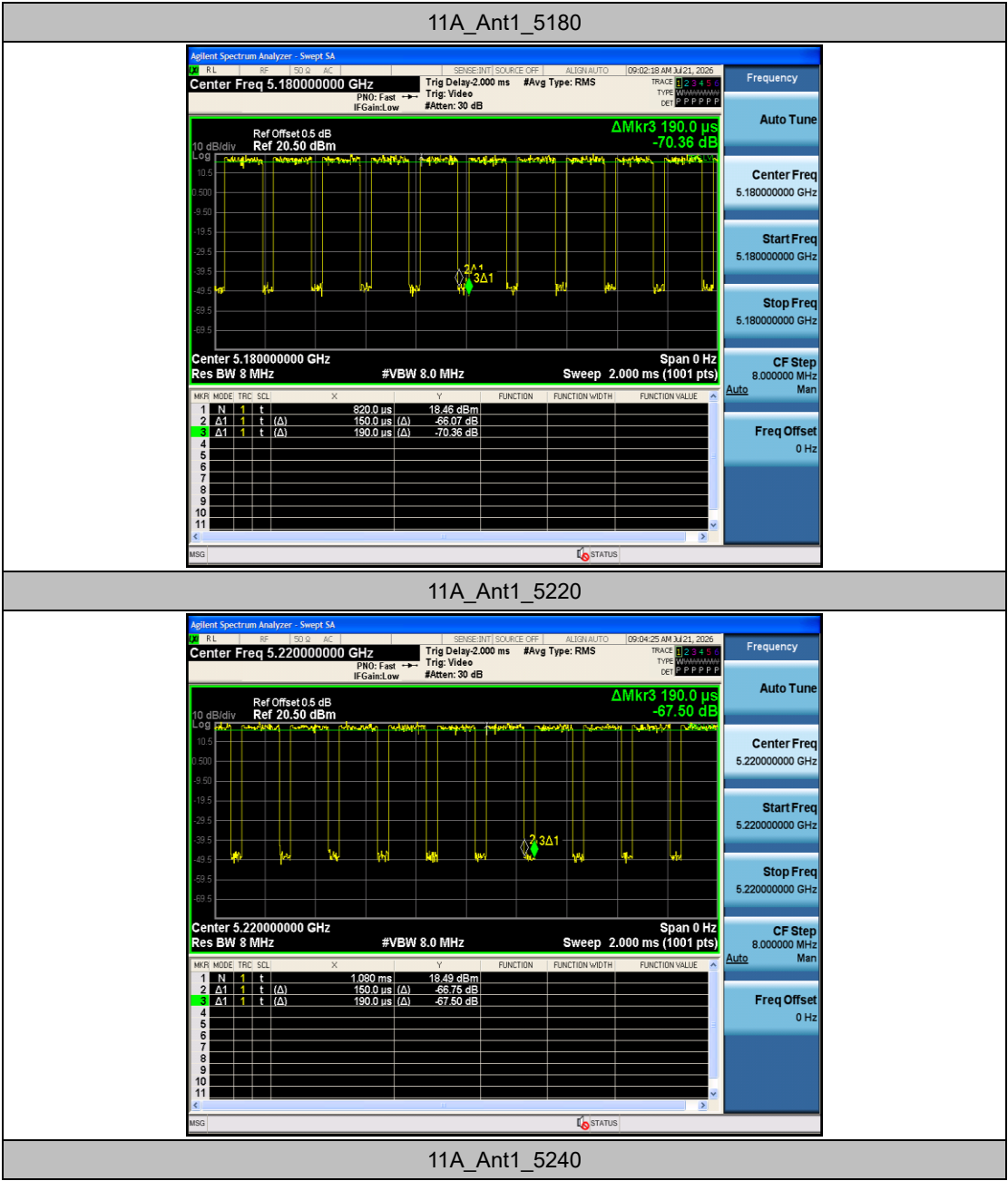


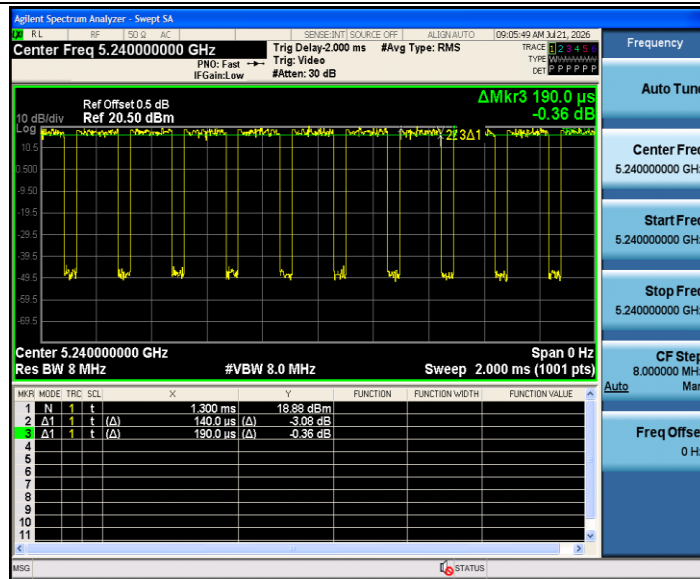
Appendix B: Duty Cycle

Test Result

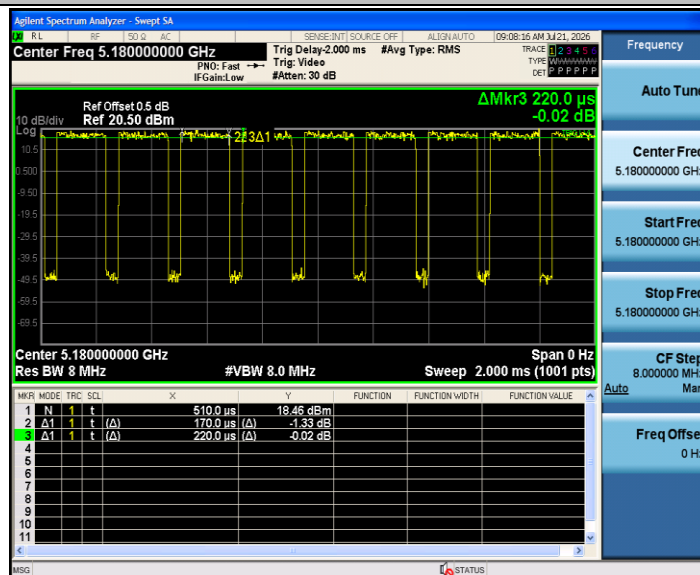
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dB]	Limit	Verdict
11A	Ant1	5180	0.15	0.19	78.95	1.03	---	---
		5220	0.15	0.19	78.95	1.03	---	---
		5240	0.14	0.19	73.68	1.33	---	---
11N20SISO	Ant1	5180	0.17	0.22	77.27	1.12	---	---
		5220	0.17	0.22	77.27	1.12	---	---
		5240	0.18	0.23	78.26	1.06	---	---

Test Graphs

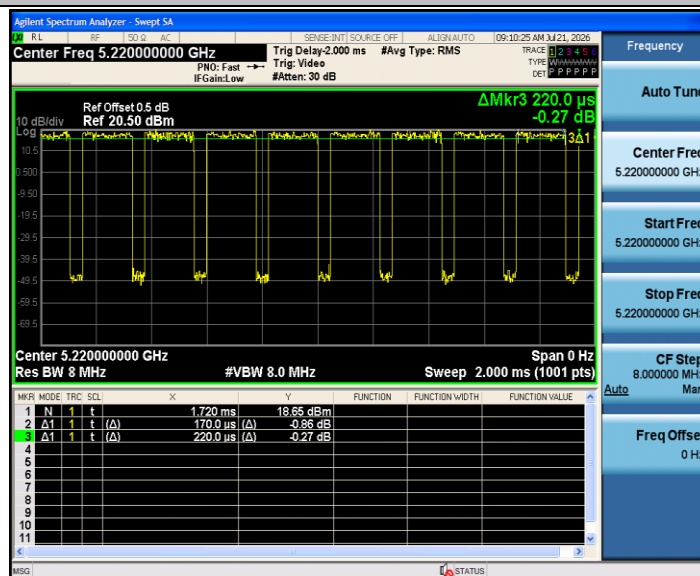




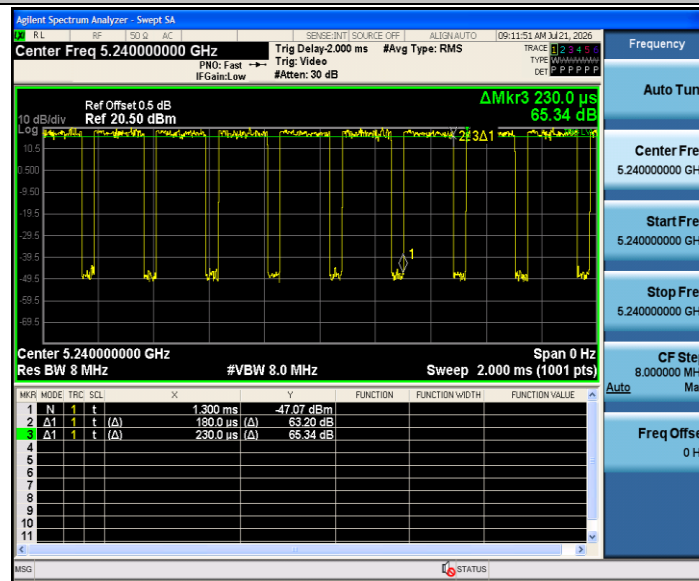
11N20SISO_Ant1_5180



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	14.23	78.95	1.03	15.26	≤23.98	PASS
		5220	14.54	78.95	1.03	15.57	≤23.98	PASS
		5240	14.41	73.68	1.33	15.74	≤23.98	PASS
11N20SIS O	Ant1	5180	14.27	77.27	1.12	15.39	≤23.98	PASS
		5220	14.52	77.27	1.12	15.64	≤23.98	PASS
		5240	14.49	78.26	1.06	15.55	≤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	4.07	1.03	5.10	≤11.00	PASS
		5220	4.2	1.03	5.23	≤11.00	PASS
		5240	4.35	1.33	5.68	≤11.00	PASS
11N20SISO	Ant1	5180	3.87	1.12	4.99	≤11.00	PASS
		5220	4.23	1.12	5.35	≤11.00	PASS
		5240	4.32	1.06	5.38	≤11.00	PASS

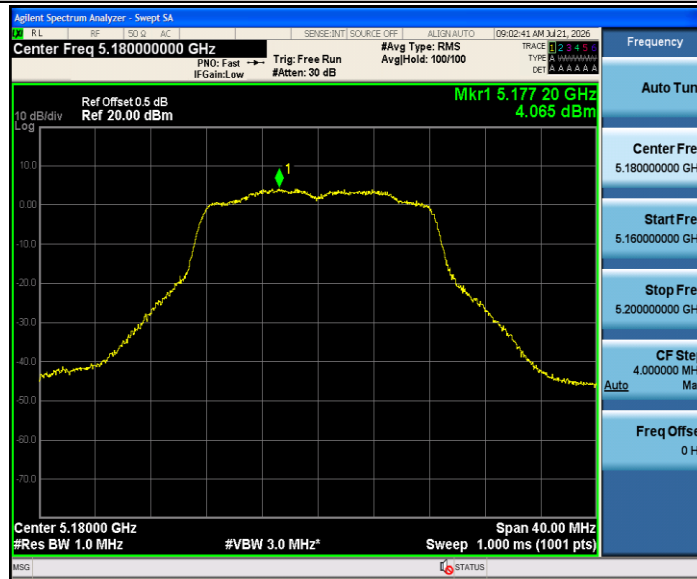
Note:1P.S.D(dBm/500KHz)= P.S.D(dBm/300KHz)+10 log (500 kHz/300KHz) +Duty factor.

2. RBW factor= 10 log (500 KHz /300 KHz) = 2.22 dB

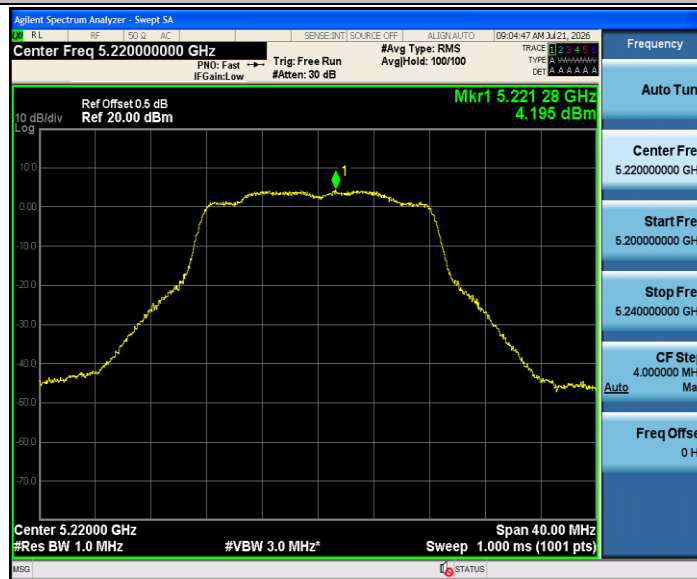
3. Note:Offset=cable loss

Test Graphs

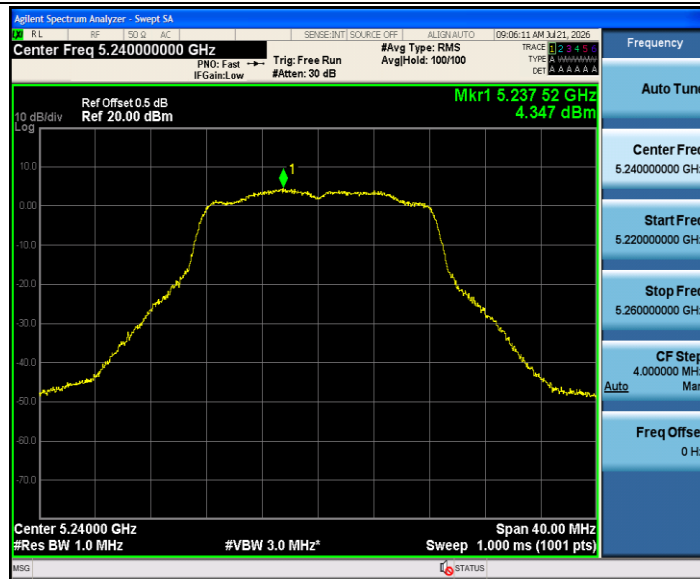
11A_Ant1_5180



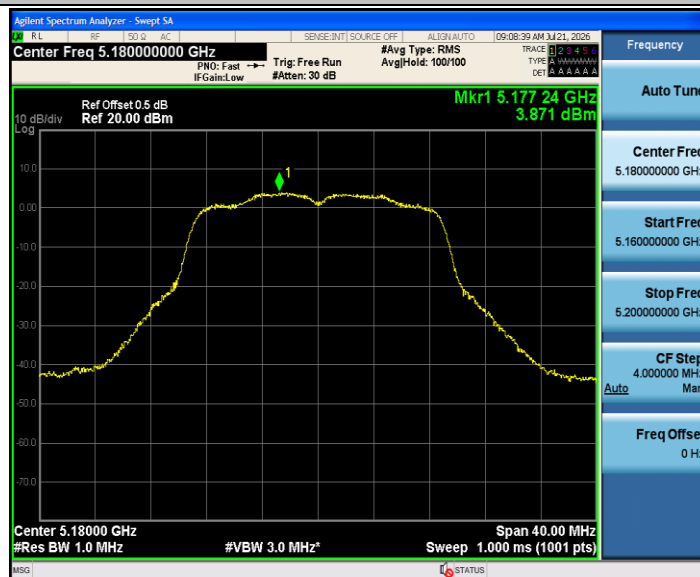
11A_Ant1_5220



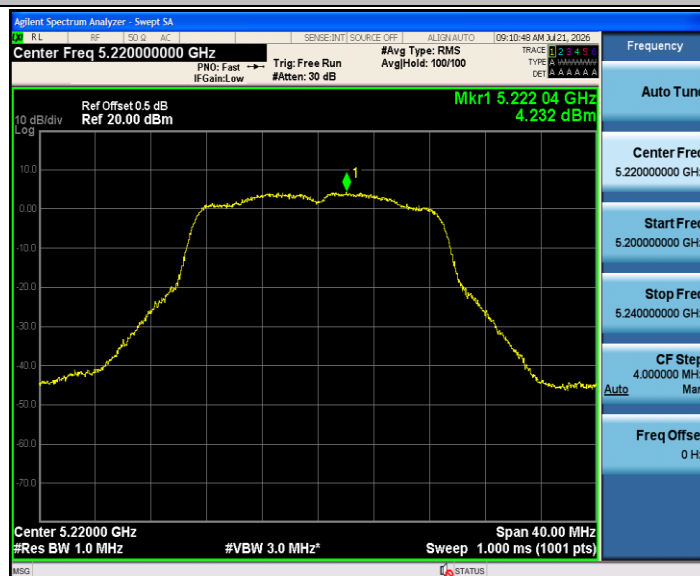
11A_Ant1_5240



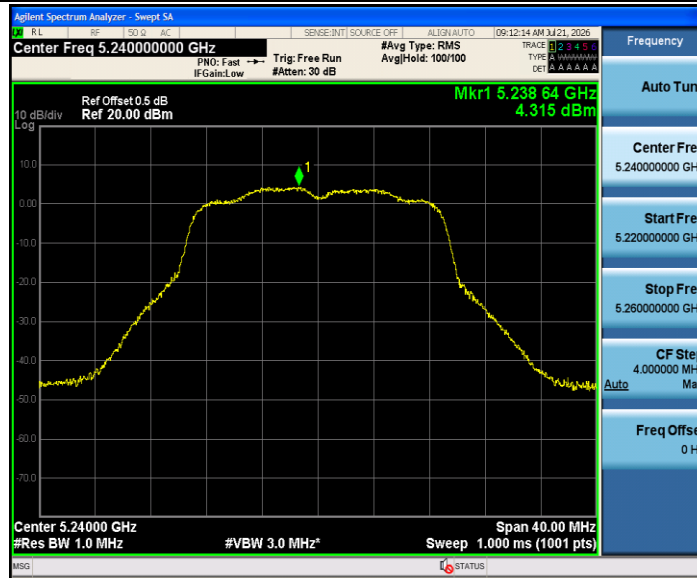
11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240

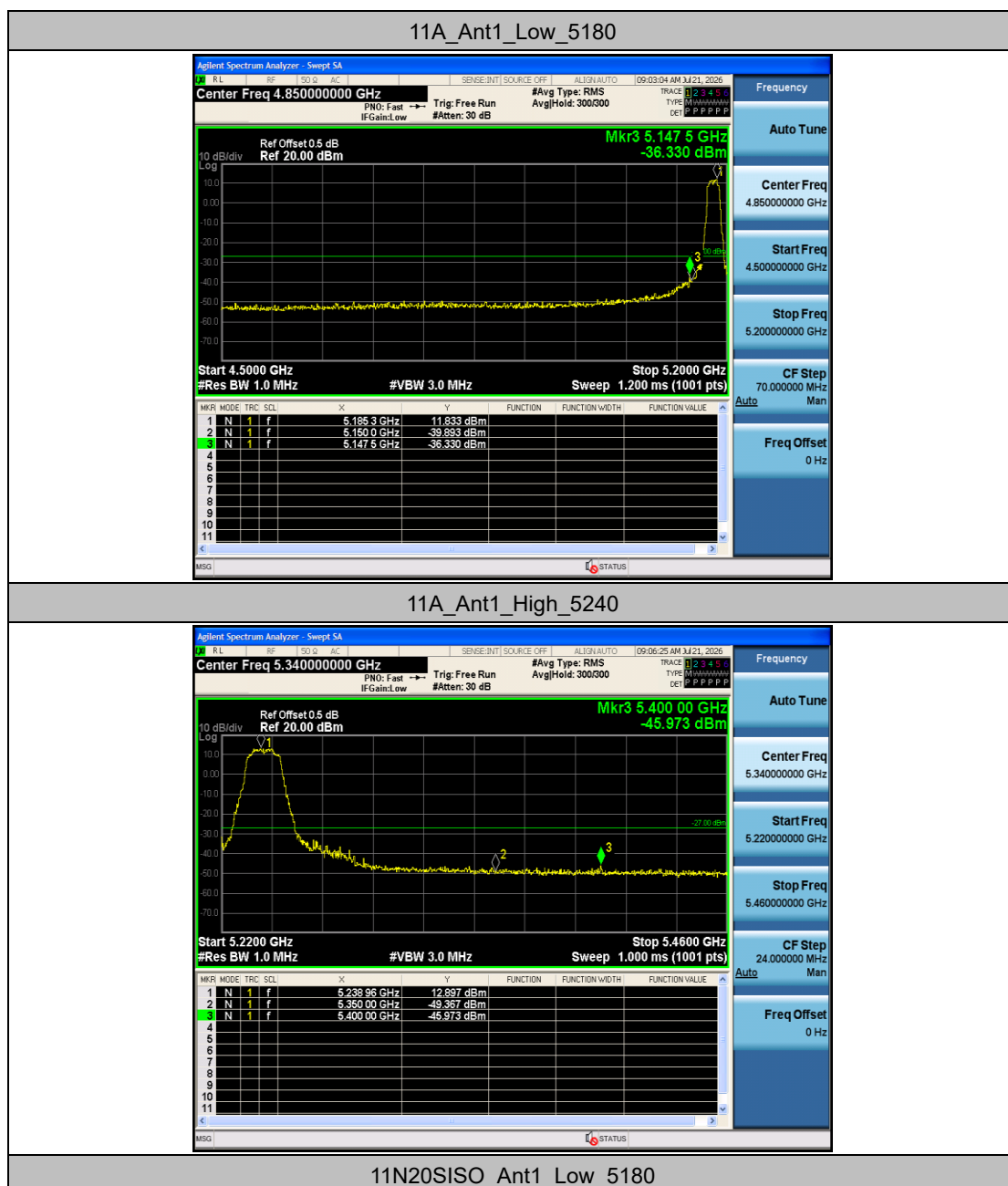


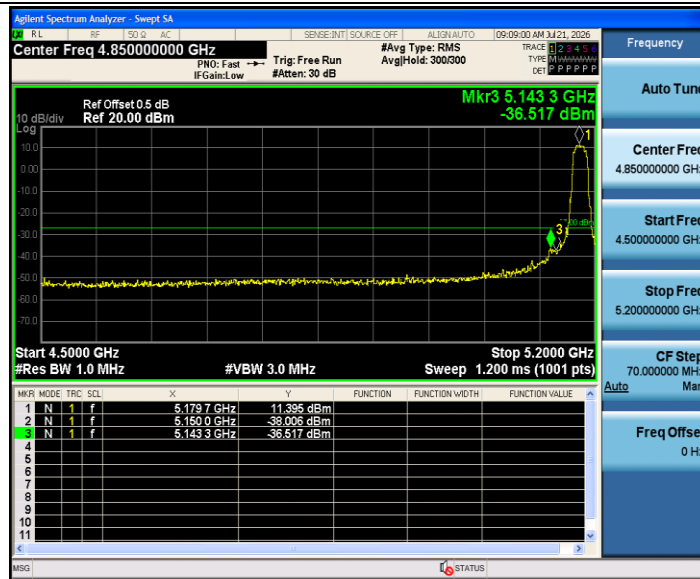
Appendix E: Band edge measurements

Test Result B1

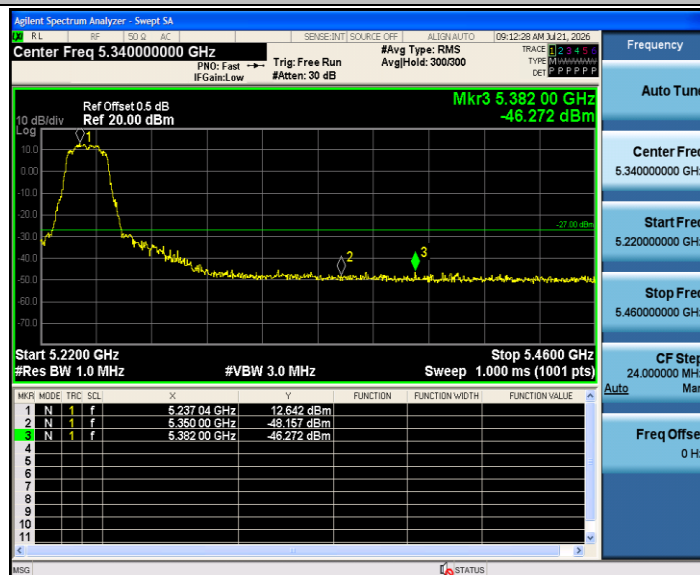
TestMode	Antenna	ChName	Freq(MHz)	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-36.33	≤ -27	PASS
		High	5240	-45.97	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-36.52	≤ -27	PASS
		High	5240	-46.27	≤ -27	PASS

Test Graphs B1





11N20SISO_Ant1_High_5240



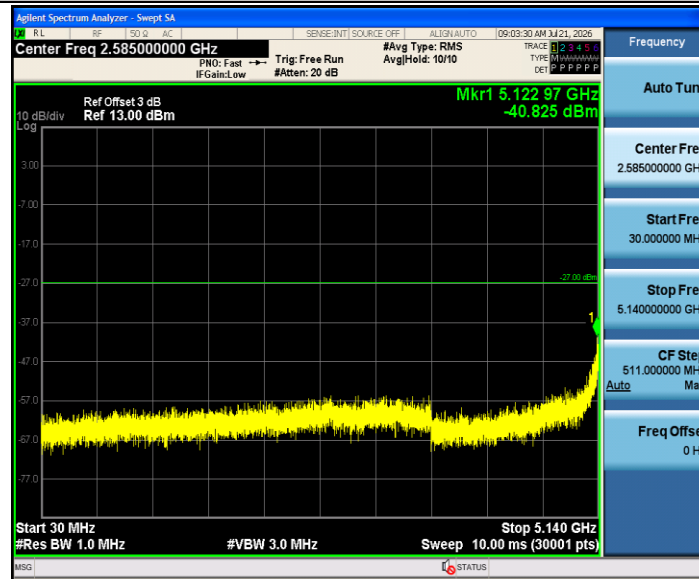
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	5122.97	-40.83	≤-27	PASS
			5360~40000	25736.95	-47.28	≤-27	PASS
		5220	30~5140	5135.91	-45.08	≤-27	PASS
			5360~40000	26003.84	-47.46	≤-27	PASS
		5240	30~5140	5111.38	-46.92	≤-27	PASS
			5360~40000	25530.64	-46.88	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	5138.98	-38.77	≤-27	PASS
			5360~40000	25275.29	-47	≤-27	PASS
		5220	30~5140	5138.81	-44.95	≤-27	PASS
			5360~40000	25586.91	-46.75	≤-27	PASS
		5240	30~5140	5112.92	-46.26	≤-27	PASS
			5360~40000	25884.82	-46.69	≤-27	PASS

Test Graphs

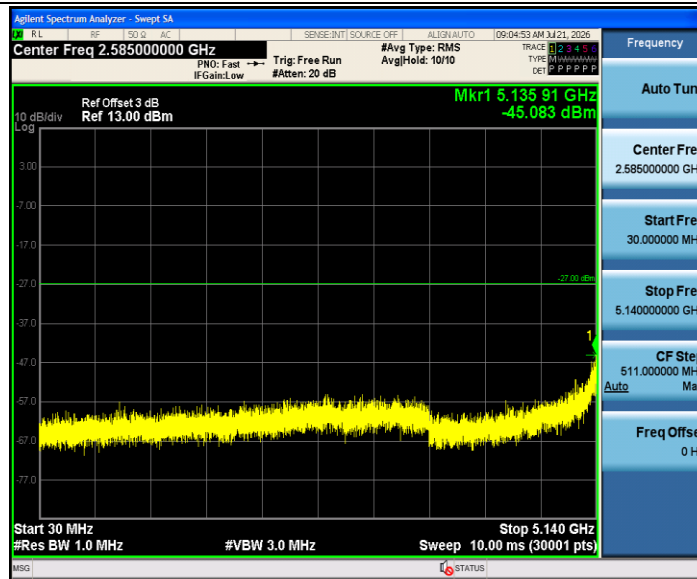
11A_Ant1_5180_30~5140



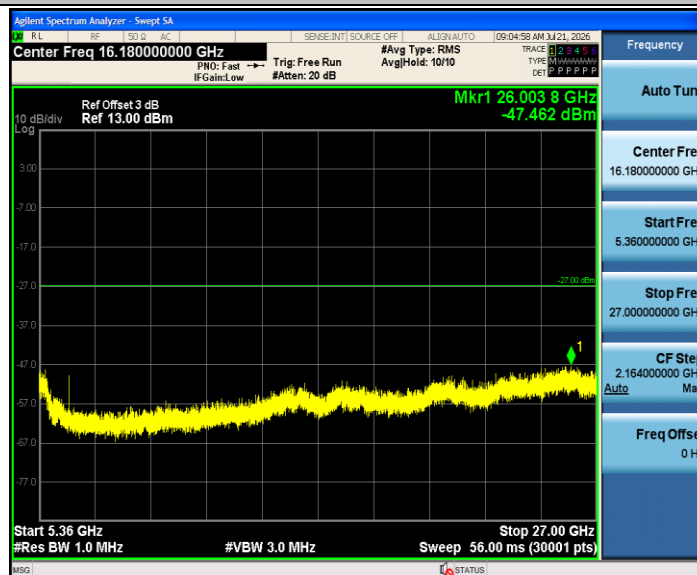
11A_Ant1_5180_5360~40000



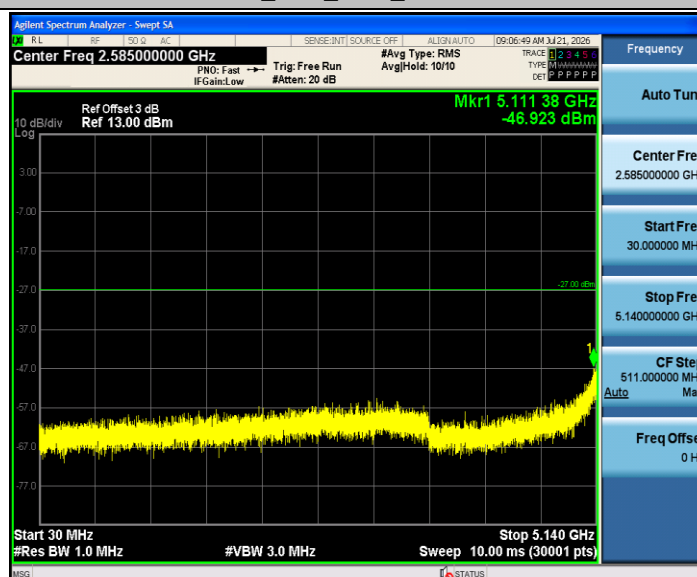
11A_Ant1_5220_30~5140



11A_Ant1_5220_5360~40000



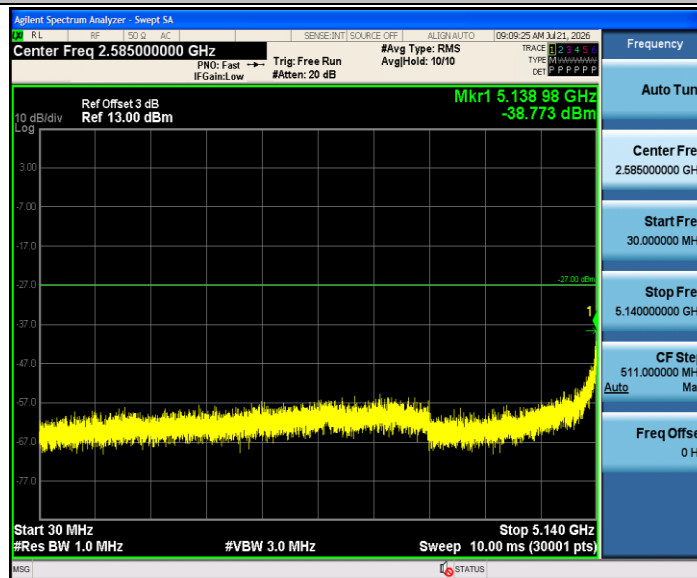
11A_Ant1_5240_30~5140



11A_Ant1_5240_5360~40000



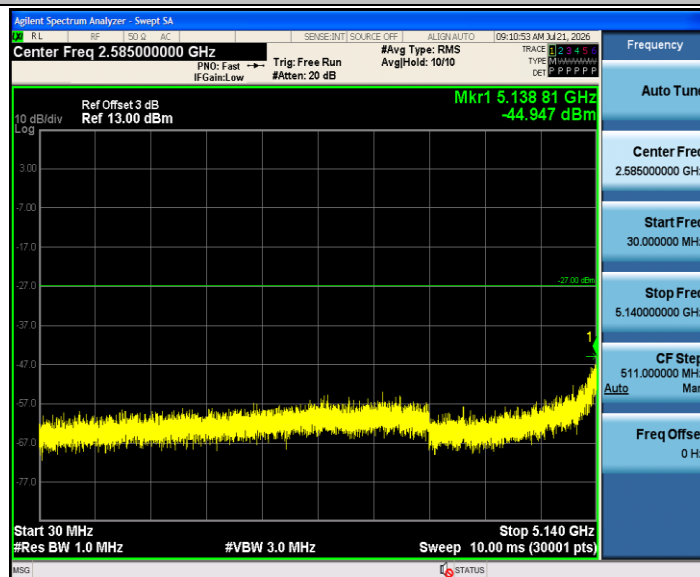
11N20SISO_Ant1_5180_30~5140



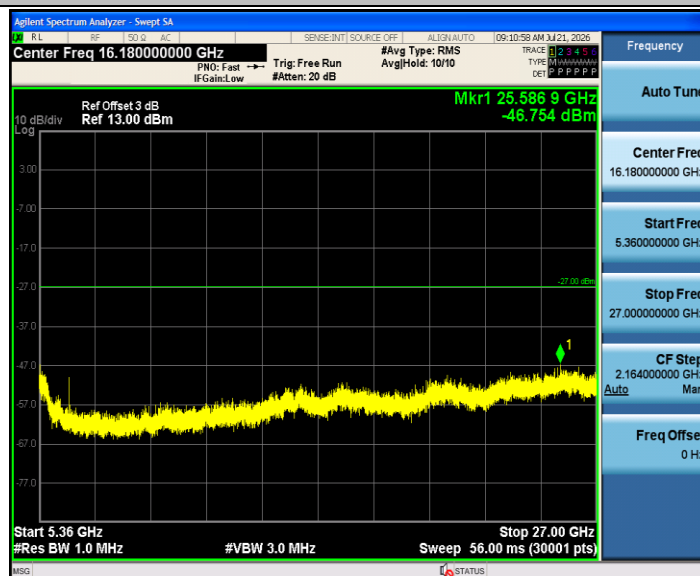
11N20SISO_Ant1_5180_5360~40000



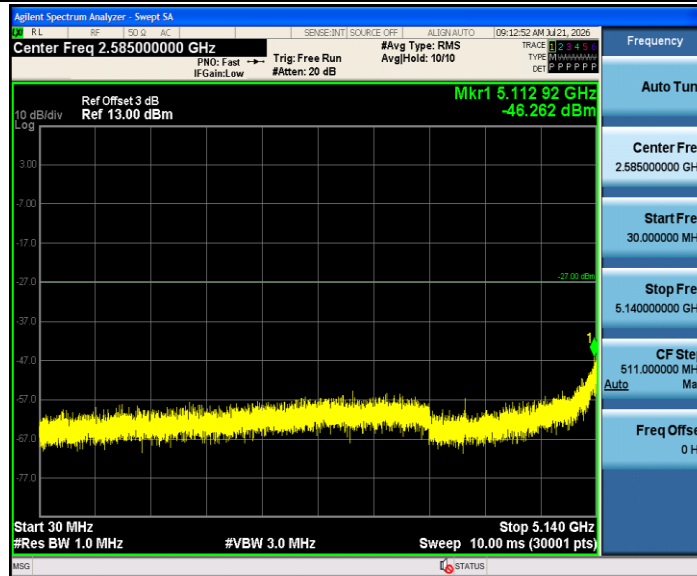
11N20SISO_Ant1_5220_30~5140



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	-61.64	2.00	1.03	-58.61	≤-41.20	PASS
				AV	5149.600	-49.08	2.00	1.03	-46.05	≤-41.20	PASS
				AV	5150.000	-49.05	2.00	1.03	-46.02	≤-41.20	PASS
				Peak	4500.000	-53.62	2.00	0.00	-51.62	≤-27.00	PASS
				Peak	5146.800	-36.32	2.00	0.00	-34.32	≤-27.00	PASS
				Peak	5150.000	-40.6	2.00	0.00	-38.6	≤-27.00	PASS
		High	5240	AV	5350.000	-58.47	2.00	1.33	-55.14	≤-41.20	PASS
				AV	5352.480	-57.73	2.00	1.33	-54.4	≤-41.20	PASS
				AV	5460.000	-59.75	2.00	1.33	-56.42	≤-41.20	PASS
				Peak	5350.000	-48.94	2.00	0.00	-46.94	≤-27.00	PASS
				Peak	5389.680	-47.28	2.00	0.00	-45.28	≤-27.00	PASS
				Peak	5460.000	-50.72	2.00	0.00	-48.72	≤-27.00	PASS
11N20SI SO	Ant1	Low	5180	AV	4500.000	-62.32	2.00	1.12	-59.2	≤-41.20	PASS
				AV	5149.600	-48.8	2.00	1.12	-45.68	≤-41.20	PASS
				AV	5150.000	-48.5	2.00	1.12	-45.38	≤-41.20	PASS
				Peak	4500.000	-54.68	2.00	0.00	-52.68	≤-27.00	PASS
				Peak	5143.300	-37.39	2.00	0.00	-35.39	≤-27.00	PASS
				Peak	5150.000	-40.08	2.00	0.00	-38.08	≤-27.00	PASS
		High	5240	AV	5350.000	-57.61	2.00	1.06	-54.55	≤-41.20	PASS
				AV	5351.280	-57.46	2.00	1.06	-54.4	≤-41.20	PASS
				AV	5460.000	-59.18	2.00	1.06	-56.12	≤-41.20	PASS
				Peak	5350.000	-49.61	2.00	0.00	-47.61	≤-27.00	PASS
				Peak	5399.760	-45.88	2.00	0.00	-43.88	≤-27.00	PASS
				Peak	5460.000	-50.06	2.00	0.00	-48.06	≤-27.00	PASS

Note:

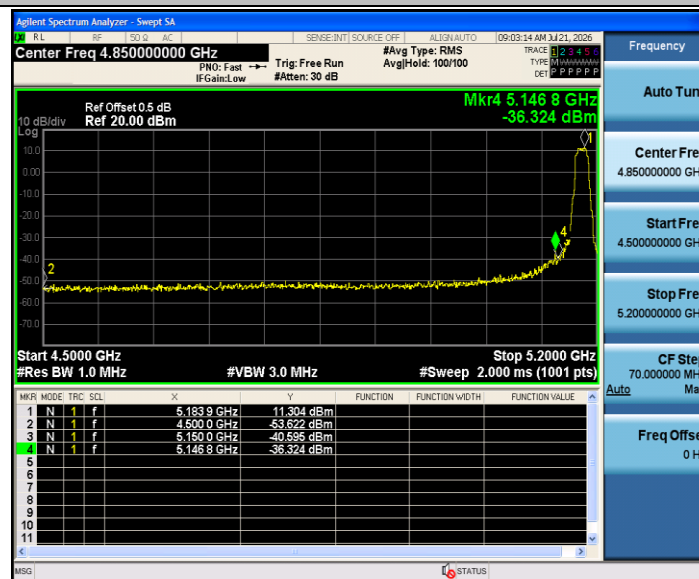
- For transmitters operating in 5150-5350 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

11A_Ant1_Low_5180_AV



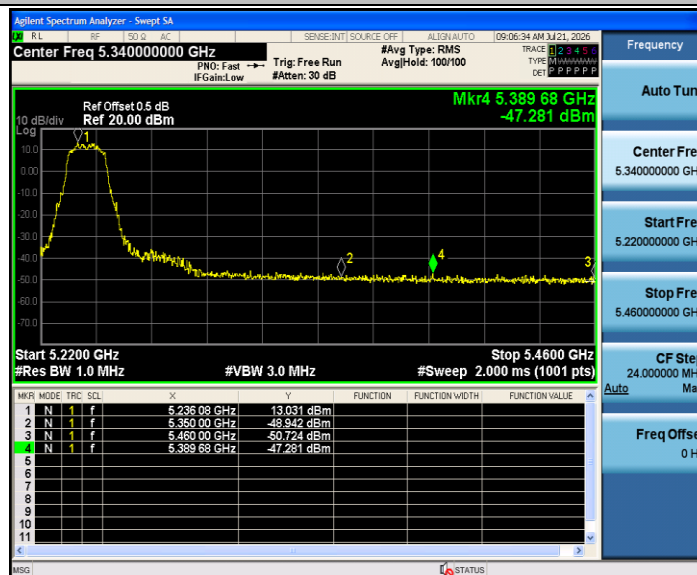
11A_Ant1_Low_5180_Peak



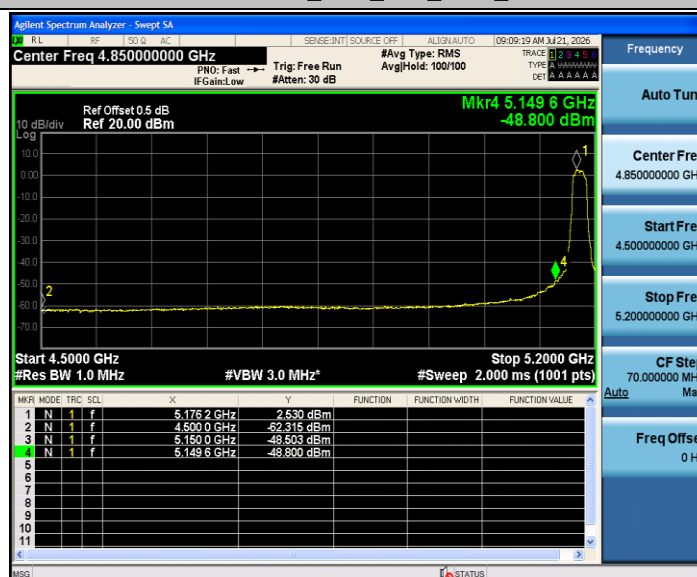
11A_Ant1_High_5240_AV



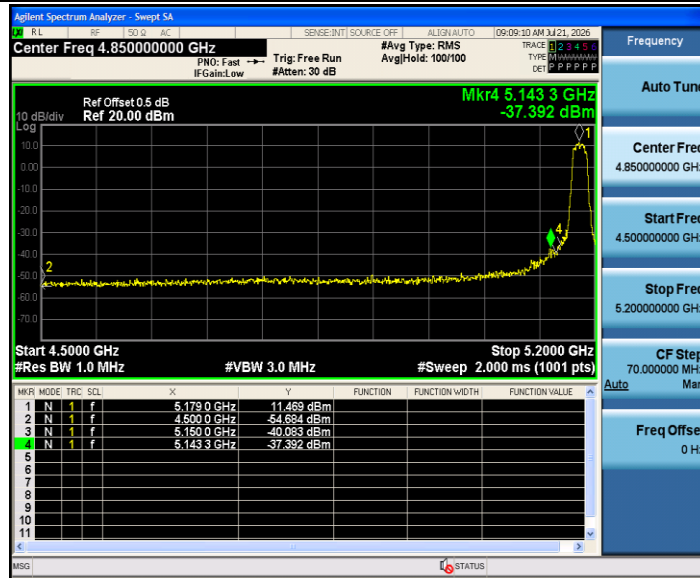
11A_Ant1_High_5240_Peak



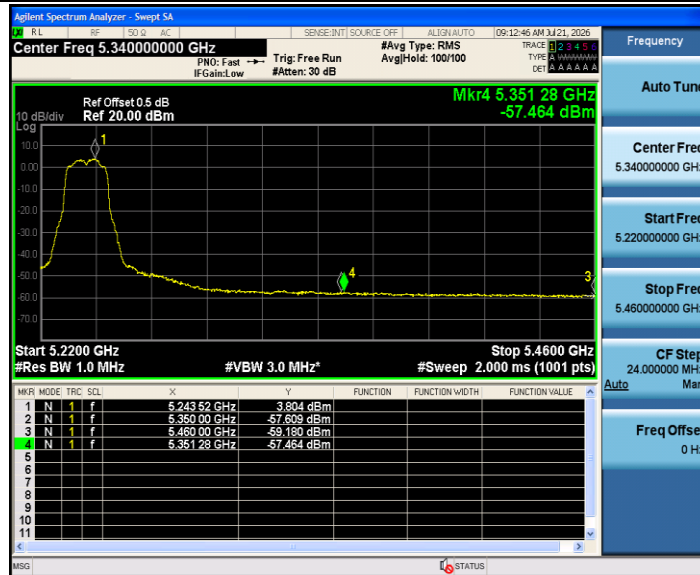
11N20SISO_Ant1_Low_5180_AV



11N20SISO_Ant1_Low_5180_Peak



11N20SISO_Ant1_High_5240_AV



11N20SISO_Ant1_High_5240_Peak

