

Case No. : <u>GTS20250902002-3-03</u>	
Ambient Condition: <u>23</u> °C, <u>56</u> %RH,	
Test Date: <u>2025.9.12</u>	Test Engineer: <u>Evan ouyang</u>

Appendix B.1: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.000	2406.960	2416.960	0.5	PASS
		2437	9.600	2432.400	2442.000	0.5	PASS
		2462	8.960	2457.240	2466.200	0.5	PASS
11G	Ant1	2412	16.080	2403.840	2419.920	0.5	PASS
		2437	16.320	2428.800	2445.120	0.5	PASS
		2462	16.320	2453.800	2470.120	0.5	PASS
11N20SISO	Ant1	2412	16.560	2403.560	2420.120	0.5	PASS
		2437	16.960	2428.440	2445.400	0.5	PASS
		2462	16.560	2453.560	2470.120	0.5	PASS
11N40SISO	Ant1	2422	30.080	2406.880	2436.960	0.5	PASS
		2437	29.920	2422.040	2451.960	0.5	PASS
		2452	30.000	2436.960	2466.960	0.5	PASS
11AX20SISO	Ant1	2412	17.120	2403.400	2420.520	0.5	PASS
		2437	17.240	2428.440	2445.680	0.5	PASS
		2462	17.480	2453.240	2470.720	0.5	PASS

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412

11G_Ant1_2437



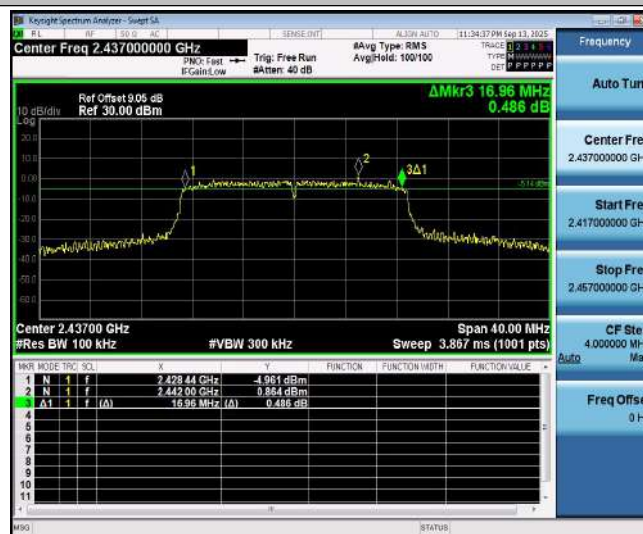
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



11AX20SISO_Ant1_2462



Appendix B.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.208	2405.2594	2418.4674	---	---
		2437	12.971	2430.4207	2443.3917	---	---
		2462	12.925	2455.4124	2468.3374	---	---
11G	Ant1	2412	16.846	2403.5665	2420.4125	---	---
		2437	16.974	2428.5306	2445.5046	---	---
		2462	16.890	2453.5369	2470.4269	---	---
11N20SISO	Ant1	2412	17.599	2403.1708	2420.7698	---	---
		2437	17.711	2428.1543	2445.8653	---	---
		2462	17.707	2453.1337	2470.8407	---	---
11N40SISO	Ant1	2422	33.600	2405.1562	2438.7562	---	---
		2437	33.655	2420.1785	2453.8335	---	---
		2452	33.458	2435.2785	2468.7365	---	---
11AX20SISO	Ant1	2412	18.599	2402.6752	2421.2742	---	---
		2437	18.610	2427.6811	2446.2911	---	---
		2462	18.530	2452.7103	2471.2403	---	---

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



11AX20SISO_Ant1_2462



Appendix B.3: Maximum conducted output power

Test Mode	Antenna	Frequency[MHz]	Peak power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	21.45	≤30.00	PASS
		2437	21.43	≤30.00	PASS
		2462	21.62	≤30.00	PASS
11G	Ant1	2412	21.02	≤30.00	PASS
		2437	21.02	≤30.00	PASS
		2462	21.07	≤30.00	PASS
11N20SISO	Ant1	2412	20.18	≤30.00	PASS
		2437	20.22	≤30.00	PASS
		2462	20.25	≤30.00	PASS
11N40SISO	Ant1	2422	19.34	≤30.00	PASS
		2437	19.69	≤30.00	PASS
		2452	19.51	≤30.00	PASS
11AX20SISO	Ant1	2412	20.74	≤30.00	PASS
		2437	20.91	≤30.00	PASS
		2462	20.83	≤30.00	PASS

Appendix B.4: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-7.99	≤8.00	PASS
		2437	-8.69	≤8.00	PASS
		2462	-8.59	≤8.00	PASS
11G	Ant1	2412	-10.98	≤8.00	PASS
		2437	-11.72	≤8.00	PASS
		2462	-12.04	≤8.00	PASS
11N20SISO	Ant1	2412	-11.71	≤8.00	PASS
		2437	-12.34	≤8.00	PASS
		2462	-12.11	≤8.00	PASS
11N40SISO	Ant1	2422	-15.24	≤8.00	PASS
		2437	-15.34	≤8.00	PASS
		2452	-15.27	≤8.00	PASS
11AX20SISO	Ant1	2412	-9.09	≤8.00	PASS
		2437	-9.49	≤8.00	PASS
		2462	-8.86	≤8.00	PASS

Test Graphs

11B_Ant1_2412



11B_Ant1_2437



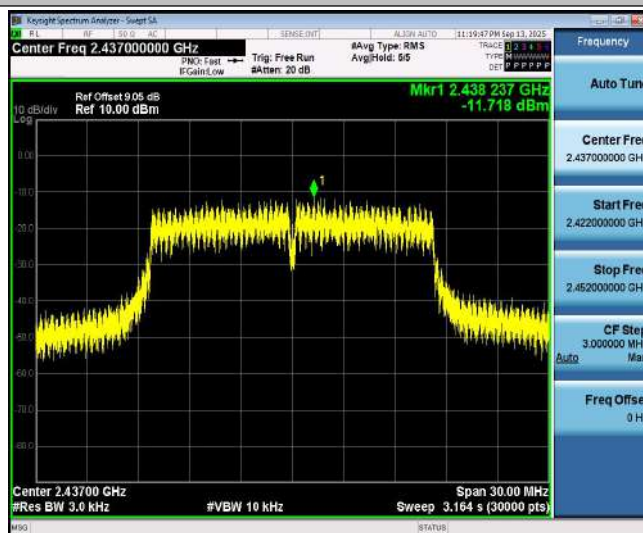
11B_Ant1_2462



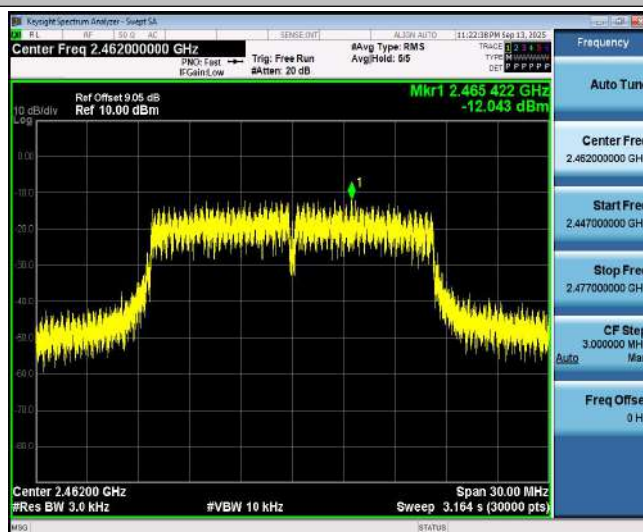
11G_Ant1_2412



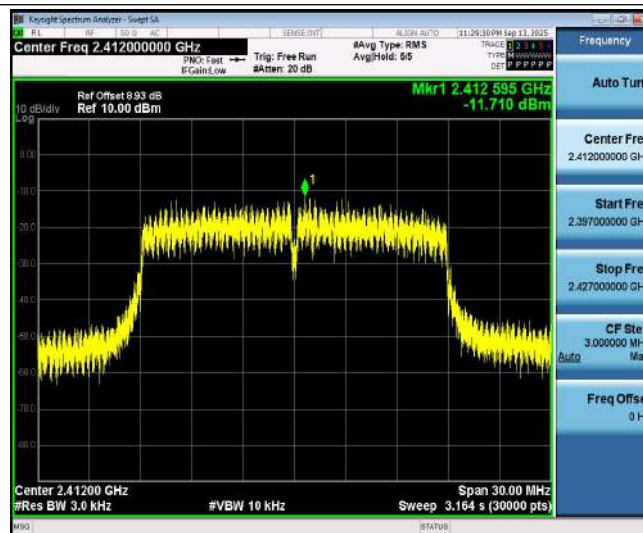
11G_Ant1_2437



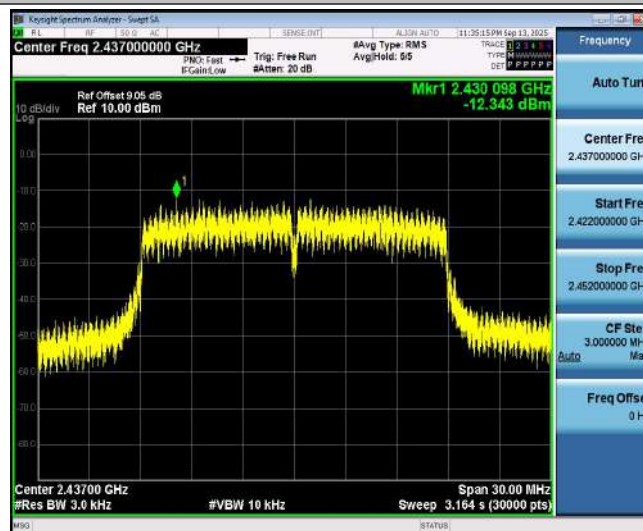
11G_Ant1_2462



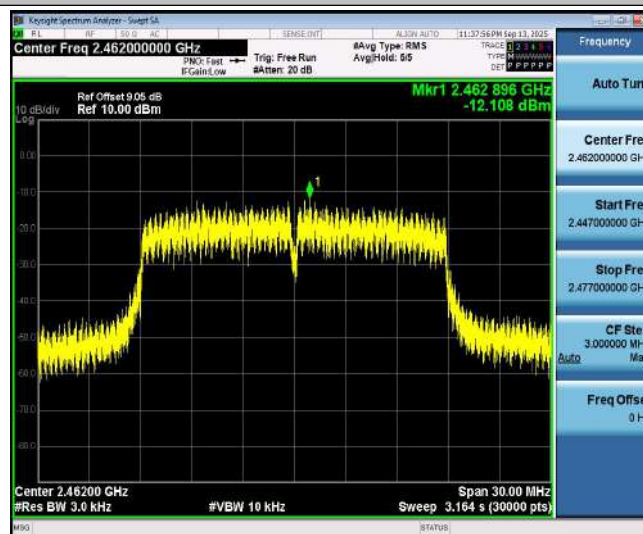
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



11AX20SISO_Ant1_2462



Appendix B.5:Band edge measurements

Test Result

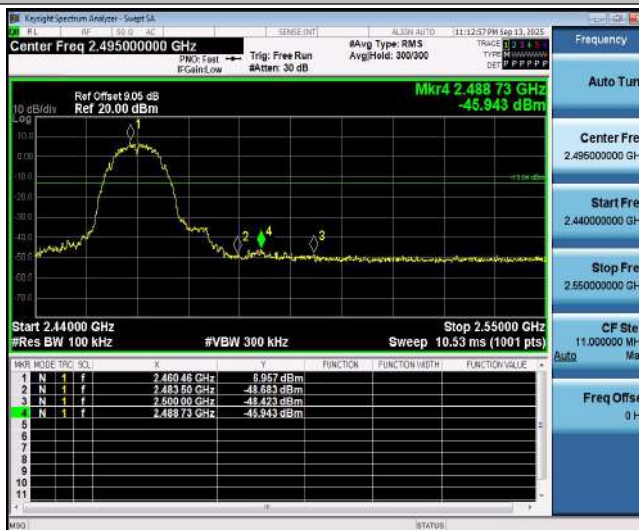
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	6.43	-41.20	≤-13.57	PASS
		High	2462	6.96	-45.94	≤-13.04	PASS
11G	Ant1	Low	2412	2.55	-25.78	≤-17.45	PASS
		High	2462	2.76	-36.66	≤-17.24	PASS
11N20SISO	Ant1	Low	2412	1.42	-28.95	≤-18.58	PASS
		High	2462	2.53	-37.02	≤-17.47	PASS
11N40SISO	Ant1	Low	2422	-0.92	-34.28	≤-20.92	PASS
		High	2452	-0.74	-34.42	≤-20.74	PASS
11AX20SISO	Ant1	Low	2412	1.32	-29.44	≤-18.68	PASS
		High	2462	1.81	-36.23	≤-18.19	PASS

Test Graphs

11B_Ant1_Low_2412



11B_Ant1_High_2462



11G_Ant1_Low_2412



11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



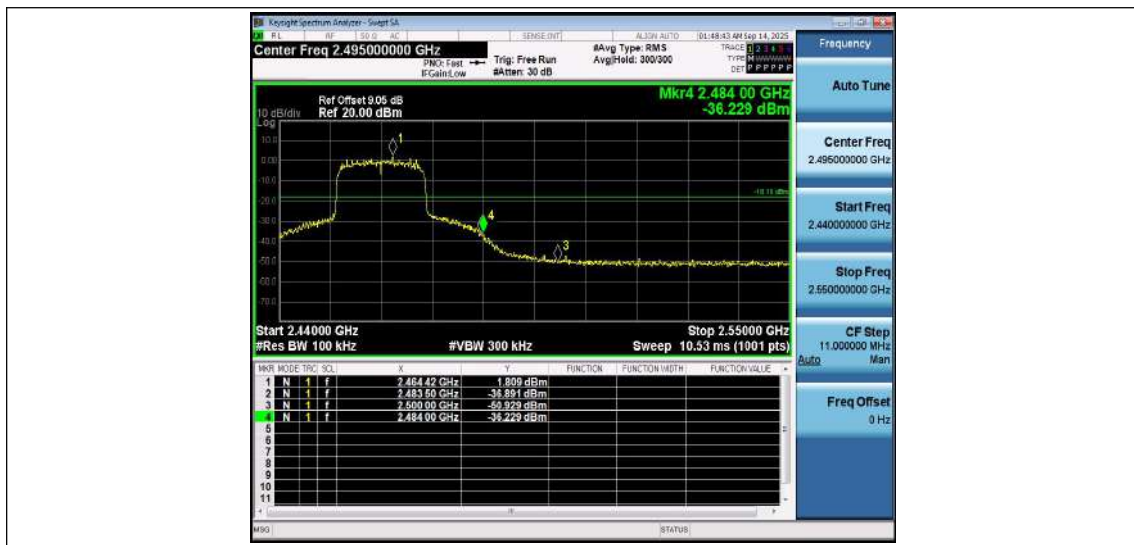
11N40SISO_Ant1_High_2452



11AX20SISO_Ant1_Low_2412



11AX20SISO_Ant1_High_2462



Appendix B.6:Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	6.01	6.01	---	PASS
			30~1000	6.01	-60.32	≤-13.99	PASS
			1000~26500	6.01	-33.33	≤-13.99	PASS
		2437	Reference	6.26	6.26	---	PASS
			30~1000	6.26	-58.72	≤-13.74	PASS
			1000~26500	6.26	-34.17	≤-13.74	PASS
		2462	Reference	5.98	5.98	---	PASS
			30~1000	5.98	-59.12	≤-14.02	PASS
			1000~26500	5.98	-29.41	≤-14.02	PASS
11G	Ant1	2412	Reference	1.95	1.95	---	PASS
			30~1000	1.95	-58.92	≤-18.05	PASS
			1000~26500	1.95	-44.38	≤-18.05	PASS
		2437	Reference	1.30	1.30	---	PASS
			30~1000	1.30	-59.09	≤-18.7	PASS
			1000~26500	1.30	-44.49	≤-18.7	PASS
		2462	Reference	-0.35	-0.35	---	PASS
			30~1000	-0.35	-59.37	≤-20.35	PASS
			1000~26500	-0.35	-44.69	≤-20.35	PASS
11N20SISO	Ant1	2412	Reference	-1.80	-1.80	---	PASS
			30~1000	-1.80	-60.09	≤-21.8	PASS
			1000~26500	-1.80	-44.28	≤-21.8	PASS
		2437	Reference	-1.56	-1.56	---	PASS
			30~1000	-1.56	-60.24	≤-21.56	PASS
			1000~26500	-1.56	-27.59	≤-21.56	PASS
		2462	Reference	-1.63	-1.63	---	PASS
			30~1000	-1.63	-59.55	≤-21.63	PASS
			1000~26500	-1.63	-45.01	≤-21.63	PASS
11N40SISO	Ant1	2422	Reference	-4.78	-4.78	---	PASS
			30~1000	-4.78	-54.86	≤-24.78	PASS
			1000~26500	-4.78	-33.15	≤-24.78	PASS
		2437	Reference	-2.02	-2.02	---	PASS
			30~1000	-2.02	-55.49	≤-22.02	PASS
			1000~26500	-2.02	-45.34	≤-22.02	PASS
		2452	Reference	-3.02	-3.02	---	PASS
			30~1000	-3.02	-53.07	≤-23.02	PASS
			1000~26500	-3.02	-44.46	≤-23.02	PASS

11AX20SISO	Ant1	2412	Reference	-0.45	-0.45	---	PASS
			30~1000	-0.45	-59.72	≤ -20.45	PASS
			1000~26500	-0.45	-44.66	≤ -20.45	PASS
		2437	Reference	-0.88	-0.88	---	PASS
			30~1000	-0.88	-60.02	≤ -20.88	PASS
			1000~26500	-0.88	-28.29	≤ -20.88	PASS
		2462	Reference	2.27	2.27	---	PASS
			30~1000	2.27	-59.68	≤ -17.73	PASS
			1000~26500	2.27	-44.67	≤ -17.73	PASS

Test Graphs

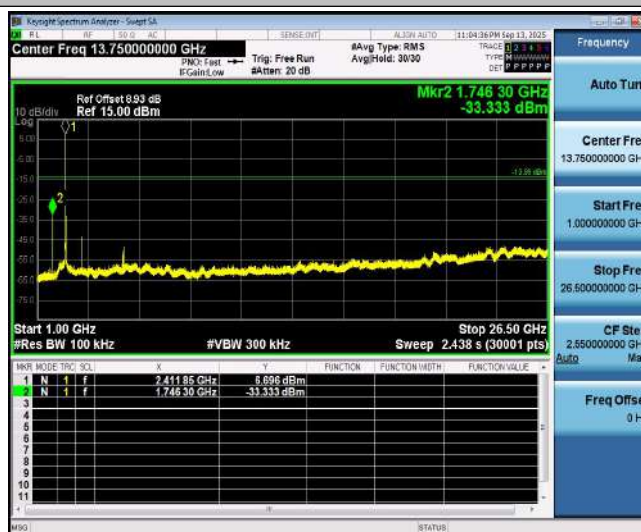
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



11B_Ant1_2412_1000~26500



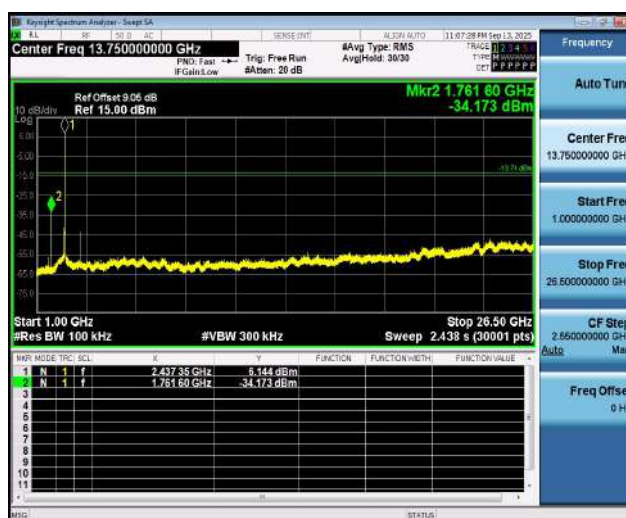
11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



11G_Ant1_2437_30~1000



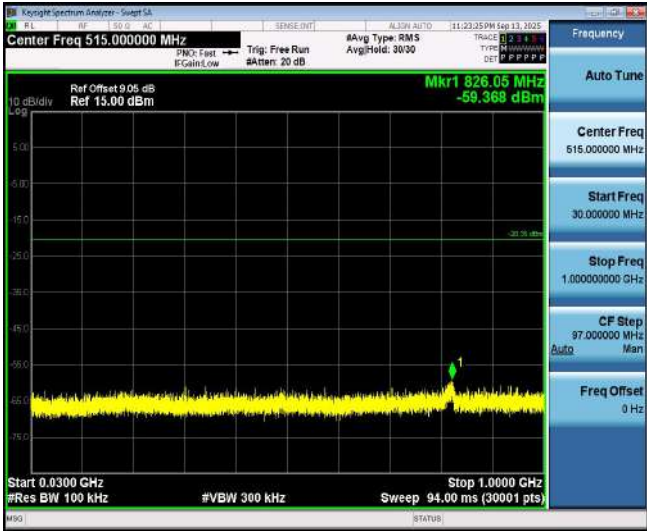
11G_Ant1_2437_1000~26500



11G_Ant1_2462_0~Reference



11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference

[illegible]

The screenshot displays a Keysight Spectrum Analyzer interface. The main display shows a frequency spectrum with a peak at 3.21595 GHz. The y-axis is labeled '10 dB/div' and 'Log'. The x-axis is labeled 'Start 1.00 GHz' and 'Stop 26.50 GHz'. The peak is labeled 'Mkr2 3.215 95 GHz -44.279 dBm'. The interface includes various control panels and a data table.

Top Panel:

- Keysight Spectrum Analyzer - Sweet SA
- SENSE: ON
- ALPHA: AUTO
- 11/26/2019 10:11:32

Center Freq 13.750000000 GHz

Trig: Free Run

#Avg Type: RMS

Avg/Hold: 30/30

Trace 1

Type: M

DET: P P P P P

Ref Offset 893 dB

Ref 15.00 dBm

PMW: Fast

E Gain: Low

#Att: 20 dB

Auto Tune

Center Freq 13.750000000 GHz

Start Freq 1.000000000 GHz

Stop Freq 26.500000000 GHz

CF Step 2.550000000 GHz

Auto Man

Freq Offset 0 Hz

Start 1.00 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 2.438 s (30001 pts)

ROW	MODE	TRIG	SOL	F	FUNCTION	FUNCTION UNIT	FUNCTION VALUE
1	N	1	f	2.40590 GHz	0.448 dBm		
2	N	1	f	3.21595 GHz	-44.279 dBm		



11N20SISO_Ant1_2437_30~1000



11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000



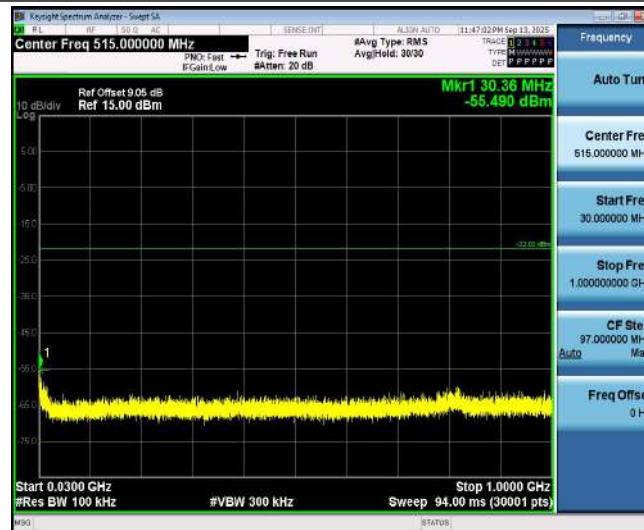
11N40SISO_Ant1_2422_1000~26500



11N40SISO_Ant1_2437_0~Reference



11N40SISO_Ant1_2437_30~1000



11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



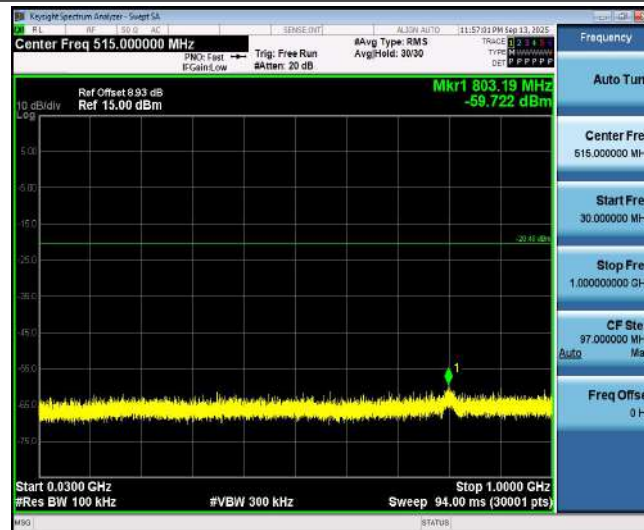
11N40SISO_Ant1_2452_1000~26500



11AX20SISO_Ant1_2412_0~Reference



11AX20SISO_Ant1_2412_30~1000



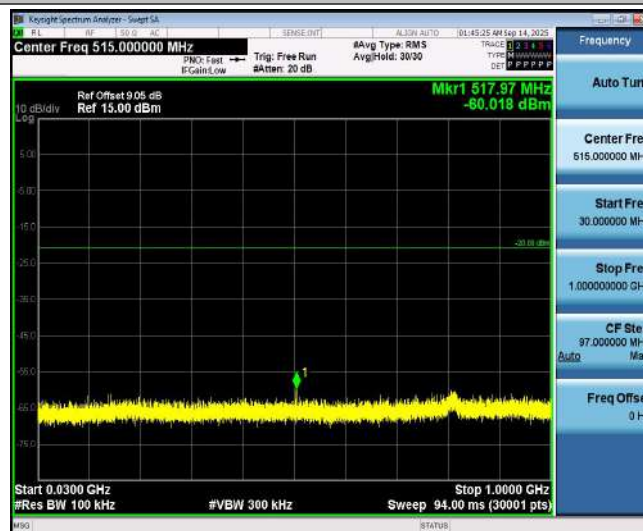
11AX20SISO_Ant1_2412_1000~26500



11AX20SISO_Ant1_2437_0~Reference



11AX20SISO_Ant1_2437_30~1000



11AX20SISO_Ant1_2437_1000~26500



11AX20SISO_Ant1_2462_0~Reference



11AX20SISO_Ant1_2462_30~1000



11AX20SISO_Ant1_2462_1000~26500



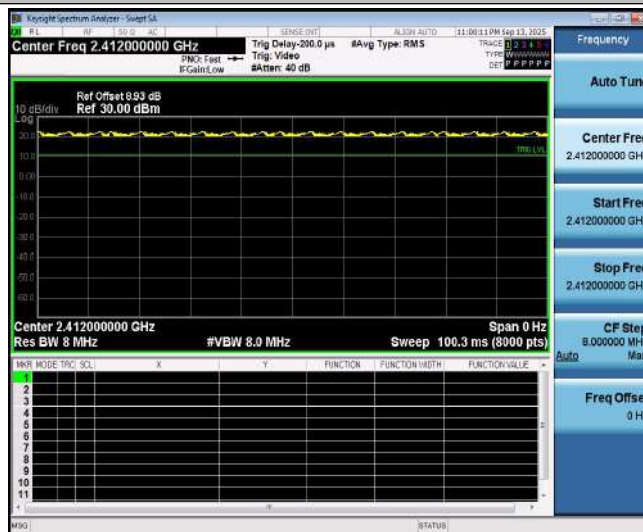
Appendix B.7: Duty Cycle

Test Result

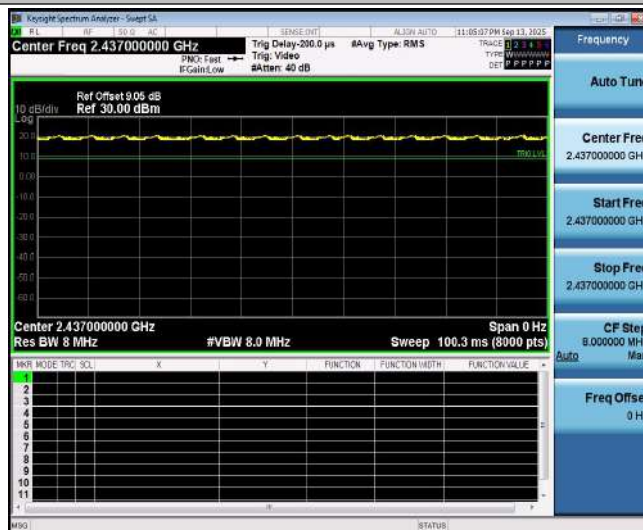
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11B	Ant1	2412	100.00	100.00	100.00	0.00	0.01
		2437	100.00	100.00	100.00	0.00	0.01
		2462	32.19	32.21	99.94	0.00	0.03
11G	Ant1	2412	5.36	5.39	99.44	0.02	0.19
		2437	5.36	5.38	99.63	0.02	0.19
		2462	5.36	5.38	99.63	0.02	0.19
11N20SISO	Ant1	2412	4.96	4.98	99.60	0.02	0.20
		2437	4.96	4.99	99.40	0.03	0.20
		2462	4.96	4.98	99.60	0.02	0.20
11N40SISO	Ant1	2422	2.41	2.43	99.18	0.04	0.41
		2437	2.40	2.43	98.77	0.05	0.42
		2452	2.40	2.43	98.77	0.05	0.42
11AX20SISO	Ant1	2412	7.57	7.59	99.74	0.01	0.13
		2437	7.56	7.59	99.60	0.02	0.13
		2462	7.57	7.59	99.74	0.01	0.13

Test Graphs

11B_Ant1_2412



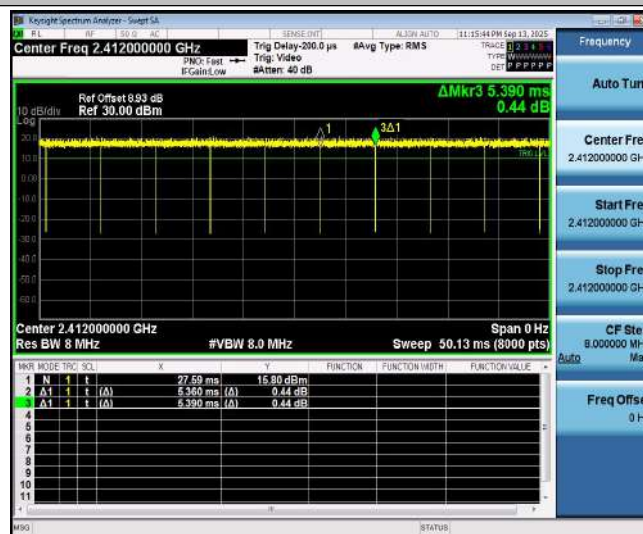
11B_Ant1_2437



11B_Ant1_2462



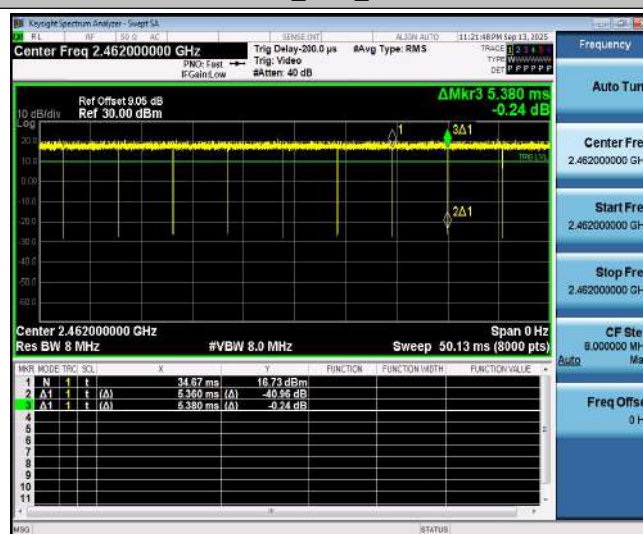
11G_Ant1_2412



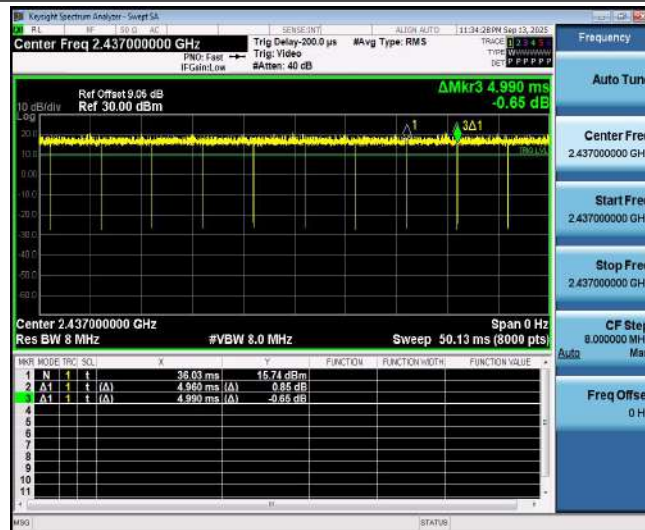
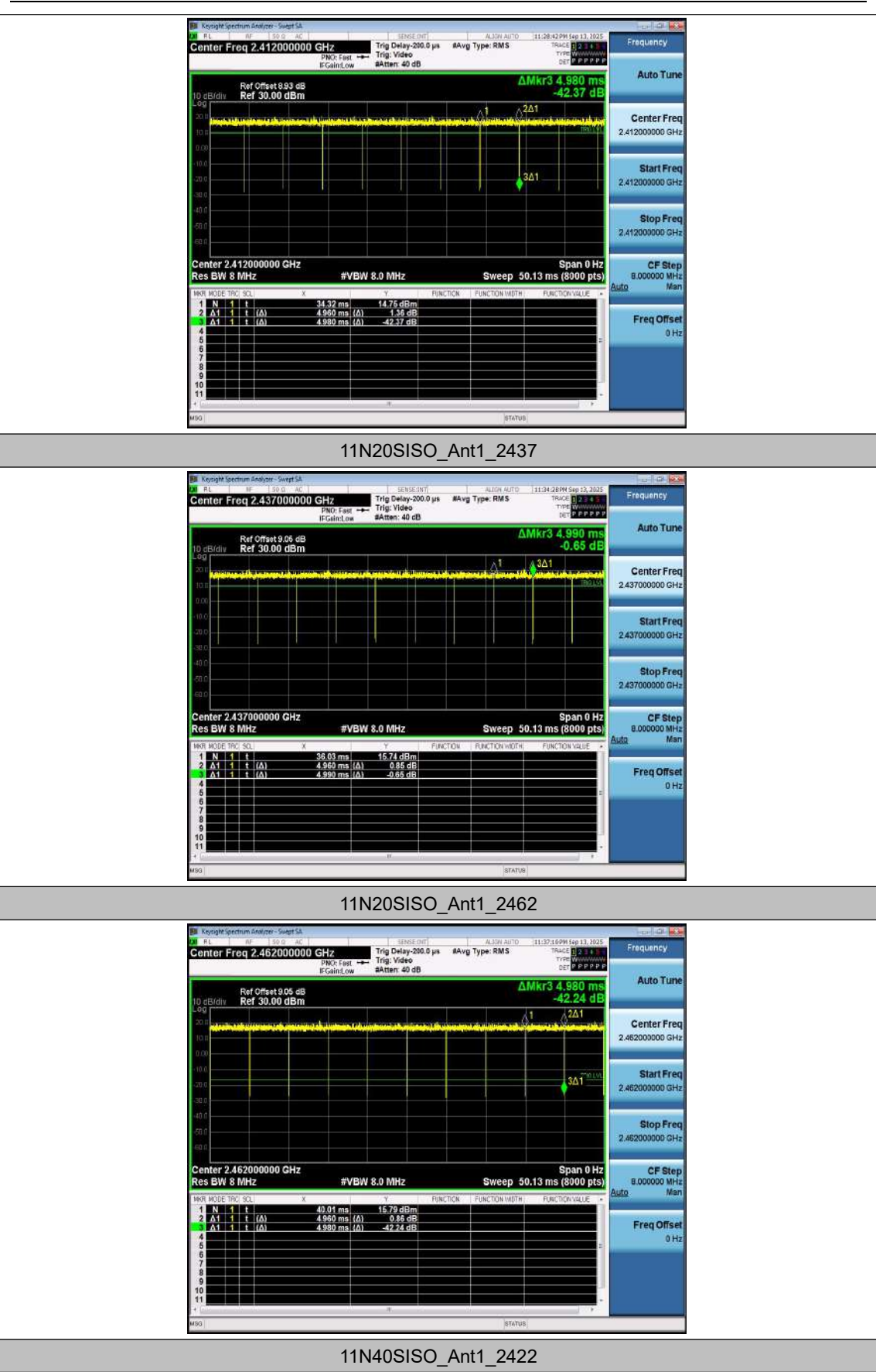
11G_Ant1_2437

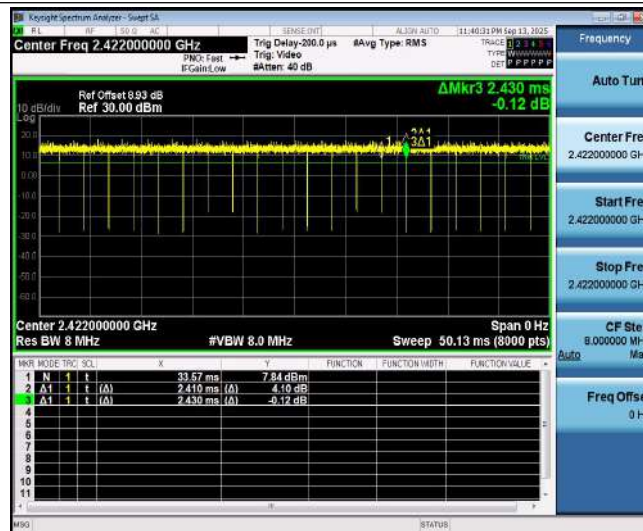


11G_Ant1_2462

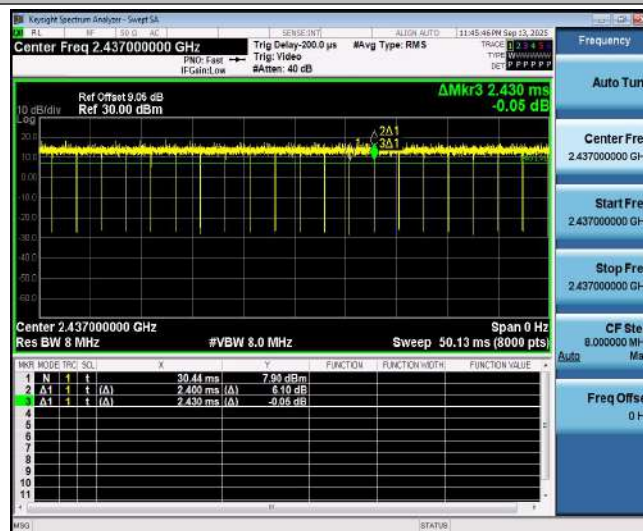


11N20SISO_Ant1_2412

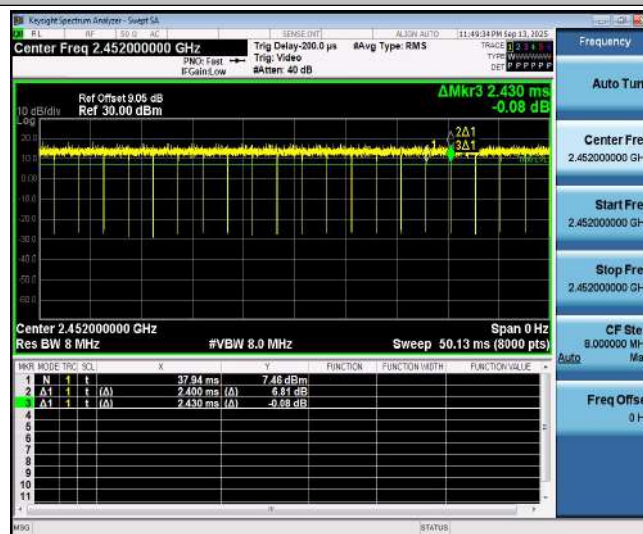




11N40SISO_Ant1_2437



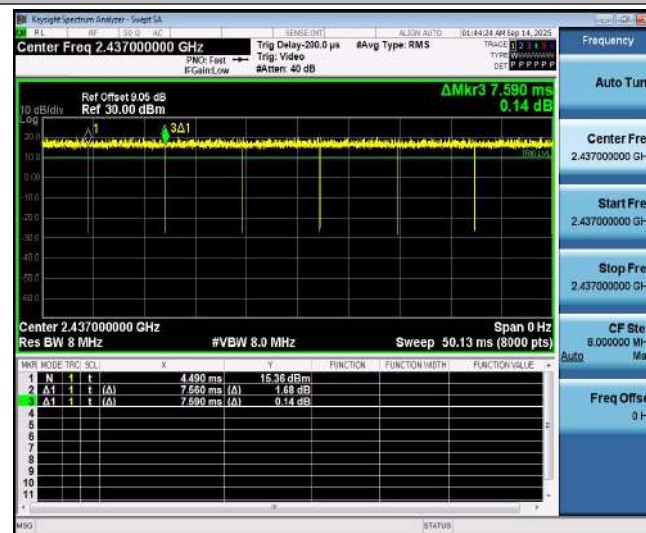
11N40SISO_Ant1_2452



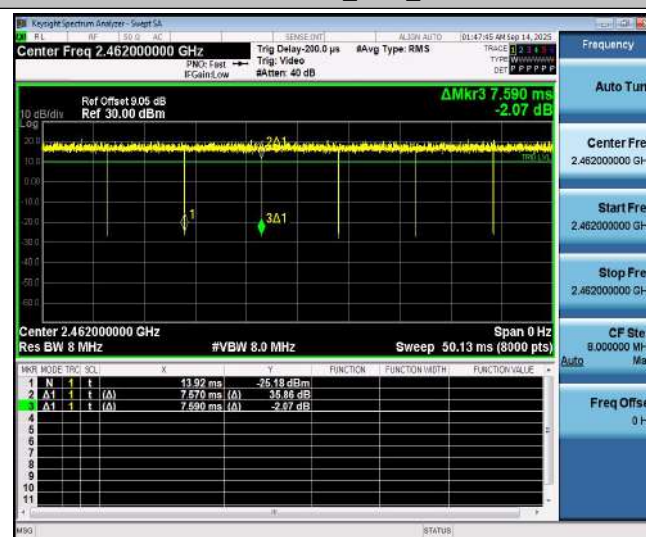
11AX20SISO_Ant1_2412



11AX20SISO_Ant1_2437



11AX20SISO_Ant1_2462



Appendix B.8:Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Frequenc y[MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11B	Ant1	Low	2412	AV	2310.000	-49.46	≤-41.20	45.74	≤54	PASS
				AV	2389.960	-48.65	≤-41.20	46.55	≤54	PASS
				AV	2390.000	-48.65	≤-41.20	46.55	≤54	PASS
				Peak	2310.000	-42.8	≤-21.20	52.40	≤74	PASS
				Peak	2387.360	-35.88	≤-21.20	59.32	≤74	PASS
				Peak	2390.000	-41.45	≤-21.20	53.75	≤74	PASS
		High	2462	AV	2483.500	-46.19	≤-41.20	49.01	≤54	PASS
				AV	2488.620	-44.16	≤-41.20	51.04	≤54	PASS
				AV	2500.000	-46.69	≤-41.20	48.51	≤54	PASS
				Peak	2483.500	-43.41	≤-21.20	51.79	≤74	PASS
				Peak	2497.200	-38.28	≤-21.20	56.92	≤74	PASS
				Peak	2500.000	-46.11	≤-21.20	49.09	≤74	PASS
11G	Ant1	Low	2412	AV	2310.000	-48.93	≤-41.20	46.27	≤54	PASS
				AV	2389.960	-41.74	≤-41.20	53.46	≤54	PASS
				AV	2390.000	-41.74	≤-41.20	53.46	≤54	PASS
				Peak	2310.000	-47.47	≤-21.20	47.73	≤74	PASS
				Peak	2389.960	-34.32	≤-21.20	60.88	≤74	PASS
				Peak	2390.000	-34.32	≤-21.20	60.88	≤74	PASS
		High	2462	AV	2483.500	-41.94	≤-41.20	53.26	≤54	PASS
				AV	2483.560	-42.06	≤-41.20	53.14	≤54	PASS
				AV	2500.000	-47.99	≤-41.20	47.21	≤54	PASS
				Peak	2483.500	-39.45	≤-21.20	55.75	≤74	PASS
				Peak	2486.640	-36.81	≤-21.20	58.39	≤74	PASS
				Peak	2500.000	-43.73	≤-21.20	51.47	≤74	PASS
11N20SIS O	Ant1	Low	2412	AV	2310.000	-49.07	≤-41.20	46.13	≤54	PASS
				AV	2389.960	-43.12	≤-41.20	52.08	≤54	PASS
				AV	2390.000	-43.13	≤-41.20	52.07	≤54	PASS
				Peak	2310.000	-42.72	≤-21.20	52.48	≤74	PASS
				Peak	2383.200	-34.89	≤-21.20	60.31	≤74	PASS
				Peak	2390.000	-41.27	≤-21.20	53.93	≤74	PASS
		High	2462	AV	2483.500	-44.07	≤-41.20	51.13	≤54	PASS
				AV	2483.560	-44.14	≤-41.20	51.06	≤54	PASS
				AV	2500.000	-48.29	≤-41.20	46.91	≤54	PASS
				Peak	2483.500	-43.66	≤-21.20	51.54	≤74	PASS
				Peak	2485.980	-36.49	≤-21.20	58.71	≤74	PASS
				Peak	2500.000	-41.52	≤-21.20	53.68	≤74	PASS
11N40SIS	Ant1	Low	2422	AV	2310.000	-49.06	≤-41.20	46.14	≤54	PASS

O				AV	2389.960	-43.76	≤ -41.20	51.44	≤ 54	PASS
				AV	2390.000	-43.76	≤ -41.20	51.44	≤ 54	PASS
				Peak	2310.000	-47.4	≤ -21.20	47.80	≤ 74	PASS
				Peak	2389.310	-37.27	≤ -21.20	57.93	≤ 74	PASS
				Peak	2390.000	-42.12	≤ -21.20	53.08	≤ 74	PASS
		High	2452	AV	2483.500	-45.46	≤ -41.20	49.74	≤ 54	PASS
				AV	2483.560	-45.48	≤ -41.20	49.72	≤ 54	PASS
				AV	2500.000	-47.86	≤ -41.20	47.34	≤ 54	PASS
				Peak	2483.500	-43.22	≤ -21.20	51.98	≤ 74	PASS
				Peak	2484.220	-37.73	≤ -21.20	57.47	≤ 74	PASS
				Peak	2500.000	-46.18	≤ -21.20	49.02	≤ 74	PASS
11AX20SI SO	Ant1	Low	2412	AV	2310.000	-49.06	≤ -41.20	46.14	≤ 54	PASS
				AV	2389.960	-42.97	≤ -41.20	52.23	≤ 54	PASS
				AV	2390.000	-42.97	≤ -41.20	52.23	≤ 54	PASS
				Peak	2310.000	-45.24	≤ -21.20	49.96	≤ 74	PASS
				Peak	2388.660	-36.96	≤ -21.20	58.24	≤ 74	PASS
				Peak	2390.000	-38.66	≤ -21.20	56.54	≤ 74	PASS
		High	2462	AV	2483.500	-43.57	≤ -41.20	51.63	≤ 54	PASS
				AV	2483.560	-43.67	≤ -41.20	51.53	≤ 54	PASS
				AV	2500.000	-48.2	≤ -41.20	47.00	≤ 54	PASS
				Peak	2483.500	-40.54	≤ -21.20	54.66	≤ 74	PASS
				Peak	2484.000	-36.09	≤ -21.20	59.11	≤ 74	PASS
				Peak	2500.000	-40.57	≤ -21.20	54.63	≤ 74	PASS

Note:

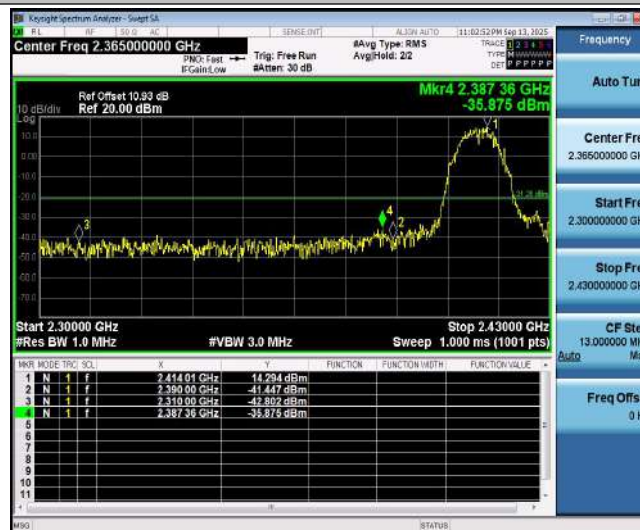
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

11B_Ant1_Low_2412_AV



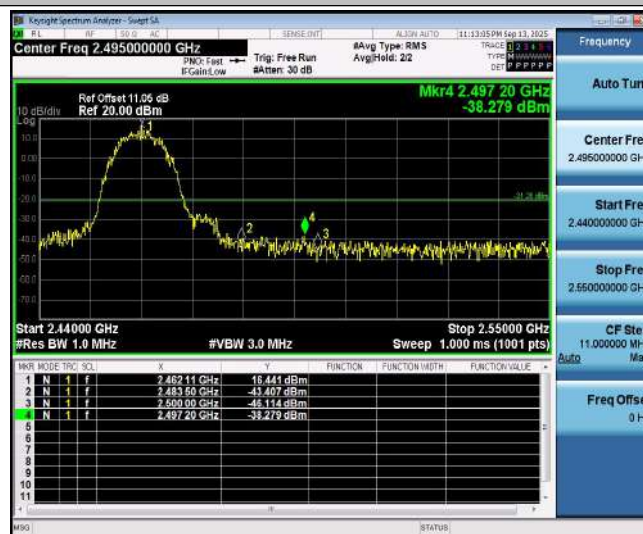
11B_Ant1_Low_2412_Peak



11B_Ant1_High_2462_AV



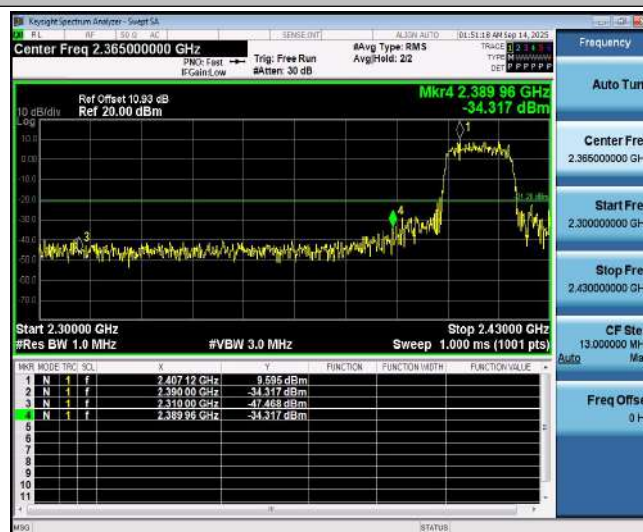
11B_Ant1_High_2462_Peak



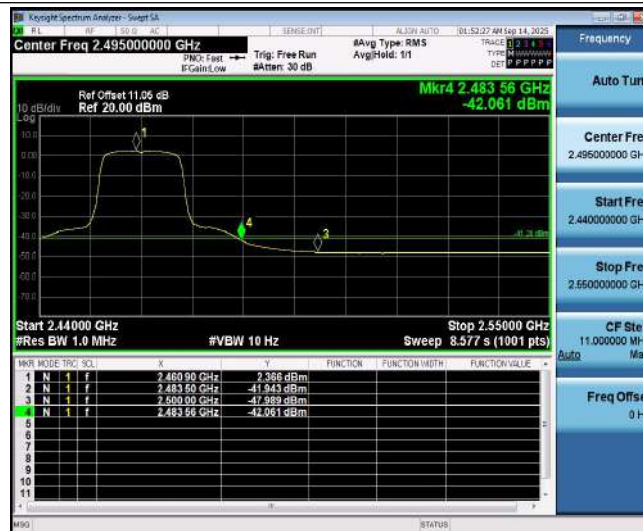
11G_Ant1_Low_2412_AV



11G_Ant1_Low_2412_Peak



11G_Ant1_High_2462_AV



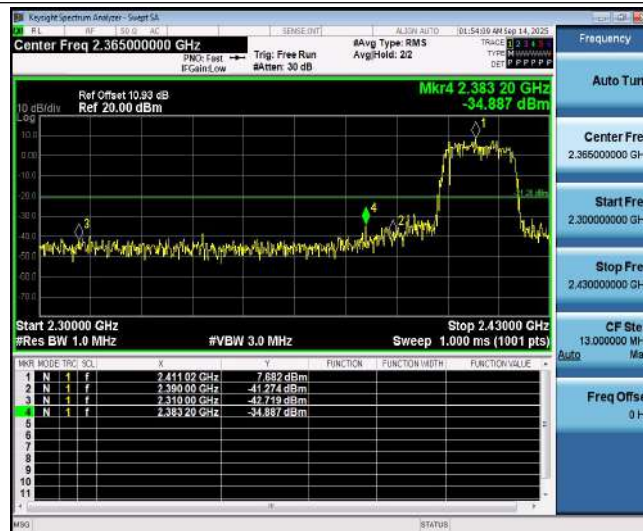
11G_Ant1_High_2462_Peak



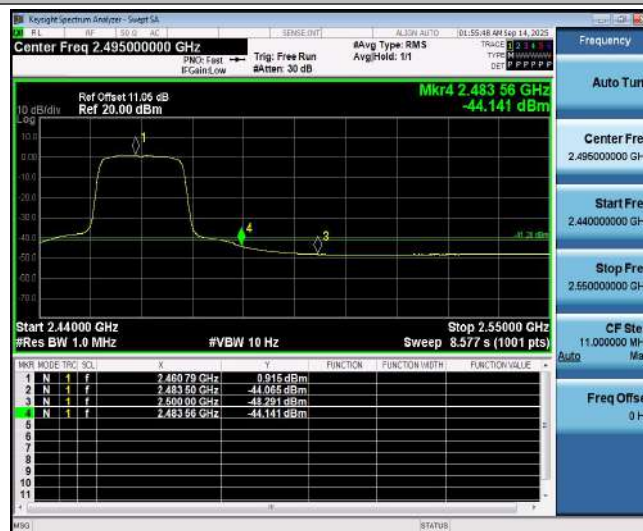
11N20SISO_Ant1_Low_2412_AV



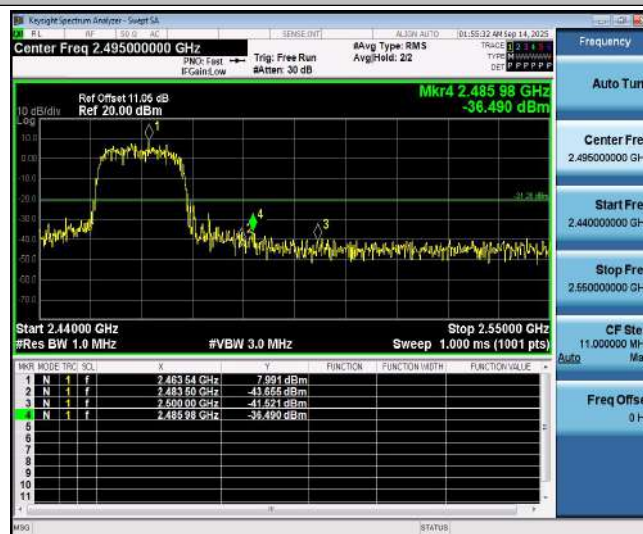
11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



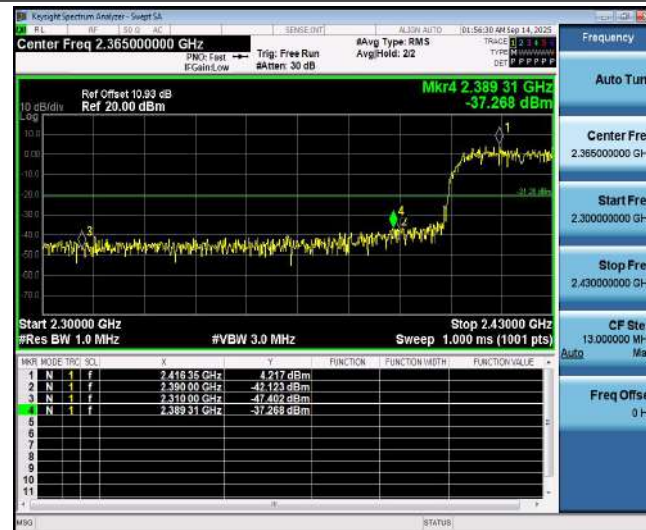
11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV



11N40SISO_Ant1_High_2452_Peak



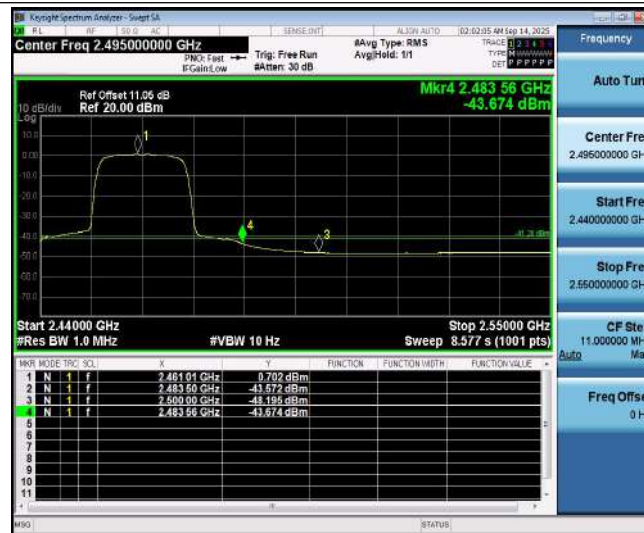
11AX20SISO_Ant1_Low_2412_AV



11AX20SISO_Ant1_Low_2412_Peak



11AX20SISO_Ant1_High_2462_AV



11AX20SISO_Ant1_High_2462_Peak

