

Case No. : <u>GTS20240620005-3-04</u>	
Ambient Condition: <u>22</u> °C, <u>53</u> %RH	
According Standard: ■Part15E	
Test Date: <u>2024.11.5</u>	Test Engineer: <u>Evan ouyang</u>

Appendix E.1: Min emission bandwidth

Test Result B4

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.520	5736.680	5753.200	0.5	PASS
		5785	16.600	5776.640	5793.240	0.5	PASS
		5825	16.520	5816.680	5833.200	0.5	PASS
11N20SISO	Ant1	5745	17.800	5736.040	5753.840	0.5	PASS
		5785	17.760	5776.080	5793.840	0.5	PASS
		5825	17.760	5816.080	5833.840	0.5	PASS
11N40SISO	Ant1	5755	36.480	5736.760	5773.240	0.5	PASS
		5795	36.560	5776.680	5813.240	0.5	PASS
11AC20SISO	Ant1	5745	17.800	5736.040	5753.840	0.5	PASS
		5785	17.800	5776.040	5793.840	0.5	PASS
		5825	17.760	5816.080	5833.840	0.5	PASS
11AC40SISO	Ant1	5755	36.480	5736.760	5773.240	0.5	PASS
		5795	36.560	5776.680	5813.240	0.5	PASS
11AC80SISO	Ant1	5775	76.320	5736.760	5813.080	0.5	PASS

Test Graphs B4





11N20SISO_Ant1_5745



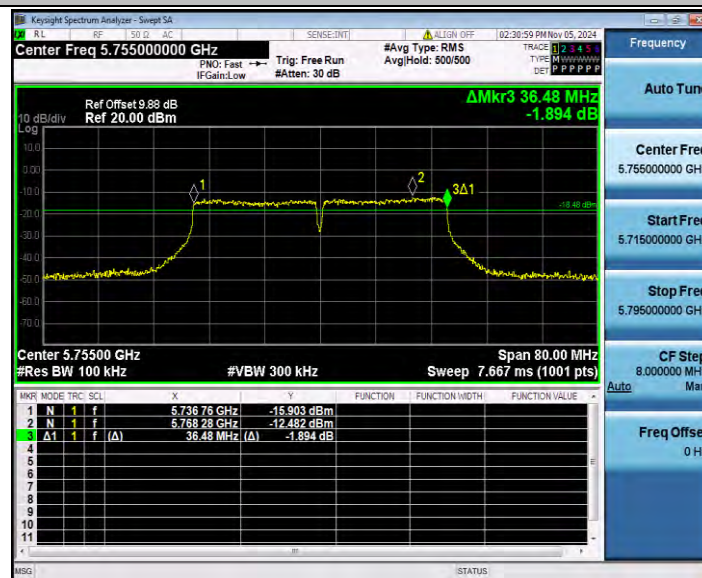
11N20SISO_Ant1_5785



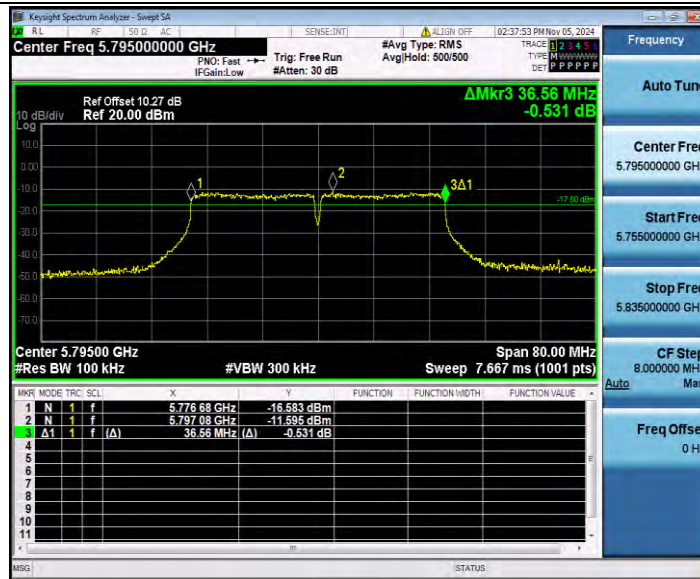
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



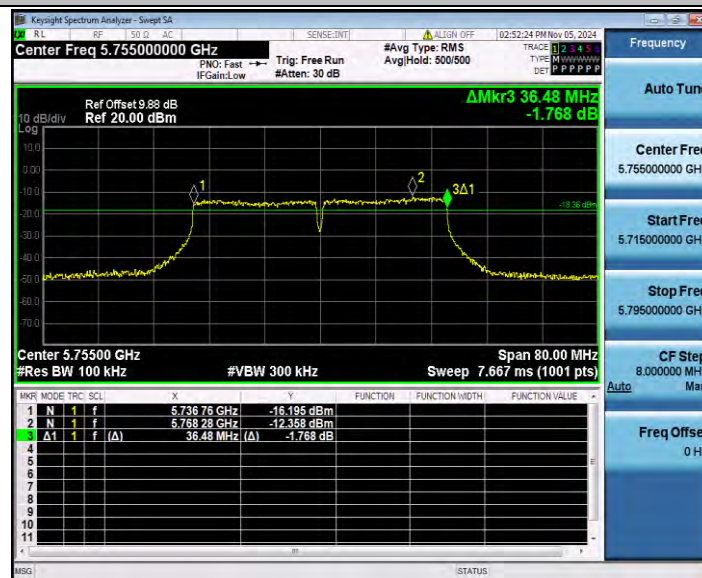
11AC20SISO_Ant1_5785



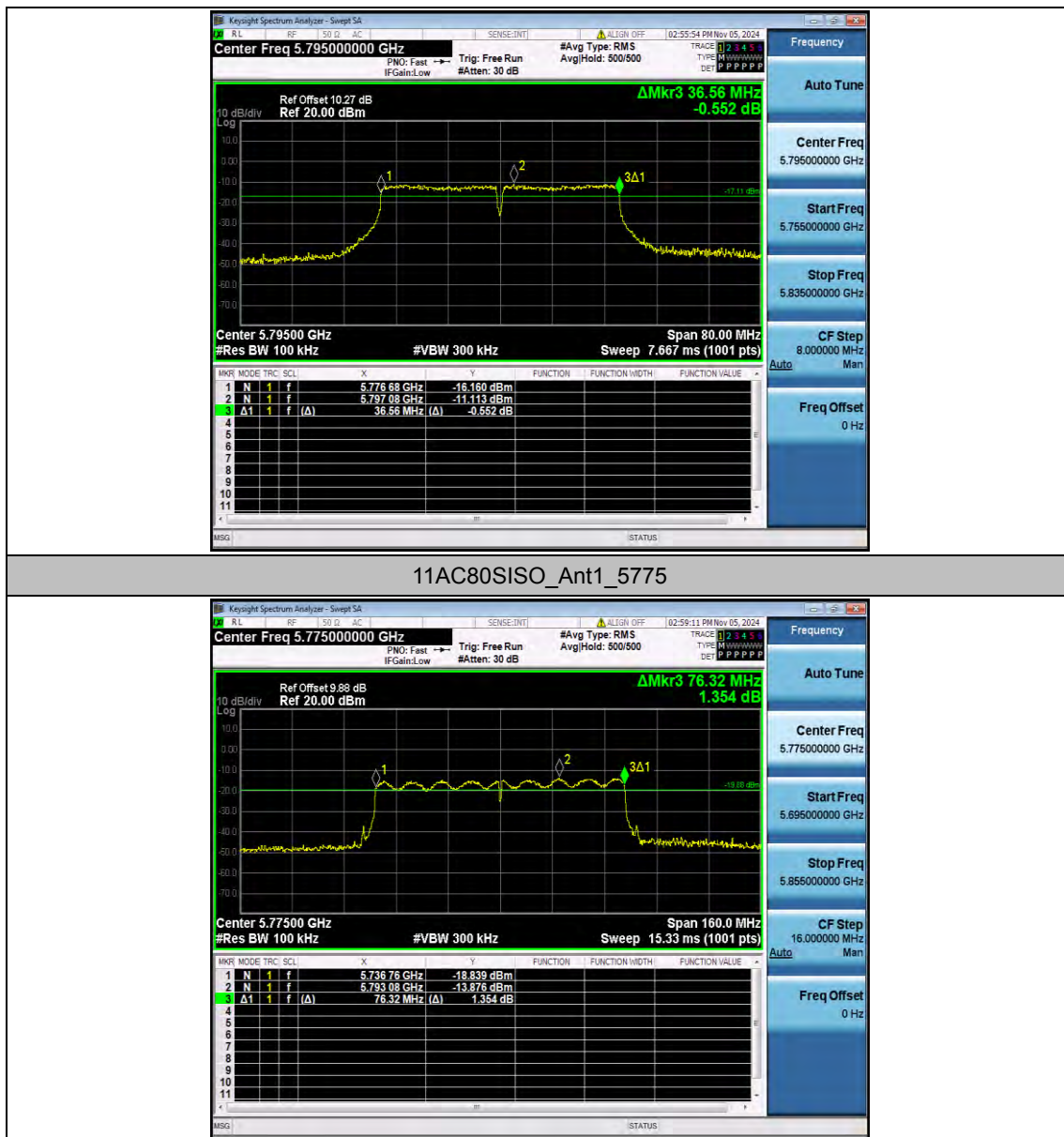
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



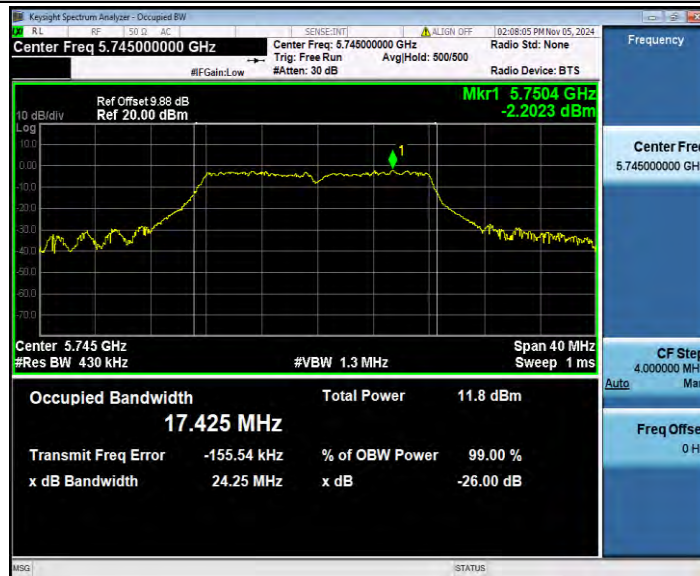
Appendix E.2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	17.425	5736.1320	5753.5570	---	---
		5785	17.506	5776.0574	5793.5634	---	---
		5825	17.557	5816.1286	5833.6856	---	---
11N20SISO	Ant1	5745	18.366	5735.7074	5754.0734	---	---
		5785	18.346	5775.7134	5794.0594	---	---
		5825	18.411	5815.7365	5834.1475	---	---
11N40SISO	Ant1	5755	37.363	5736.3551	5773.7181	---	---
		5795	37.377	5776.2928	5813.6698	---	---
11AC20SISO	Ant1	5745	18.387	5735.7181	5754.1051	---	---
		5785	18.382	5775.6977	5794.0797	---	---
		5825	18.408	5815.7632	5834.1712	---	---
11AC40SISO	Ant1	5755	37.435	5736.2938	5773.7288	---	---
		5795	37.422	5776.2477	5813.6697	---	---
11AC80SISO	Ant1	5775	76.253	5736.9957	5813.2487	---	---

Test Graphs

11A_Ant1_5745



11A_Ant1_5785



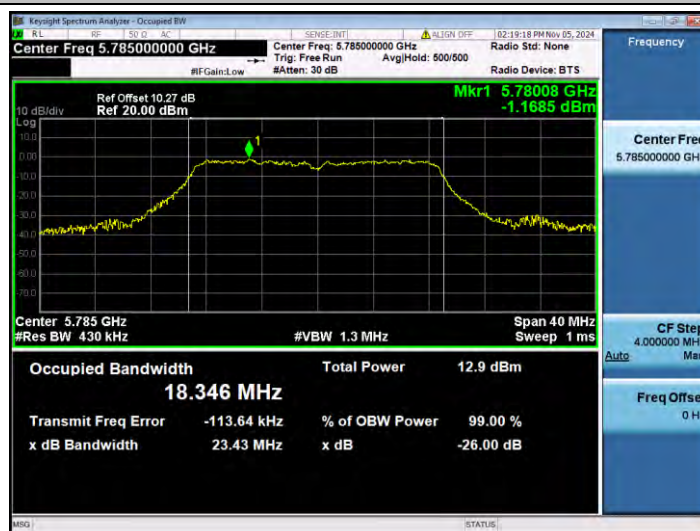
11A_Ant1_5825



11N20SISO_Ant1_5745



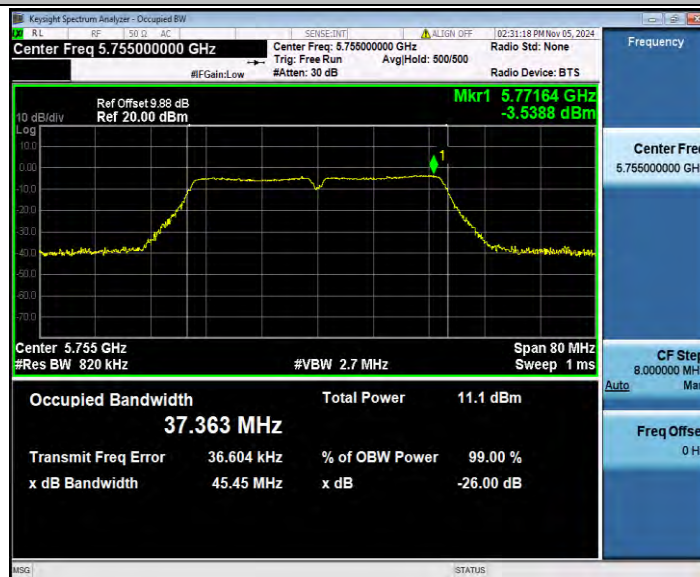
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



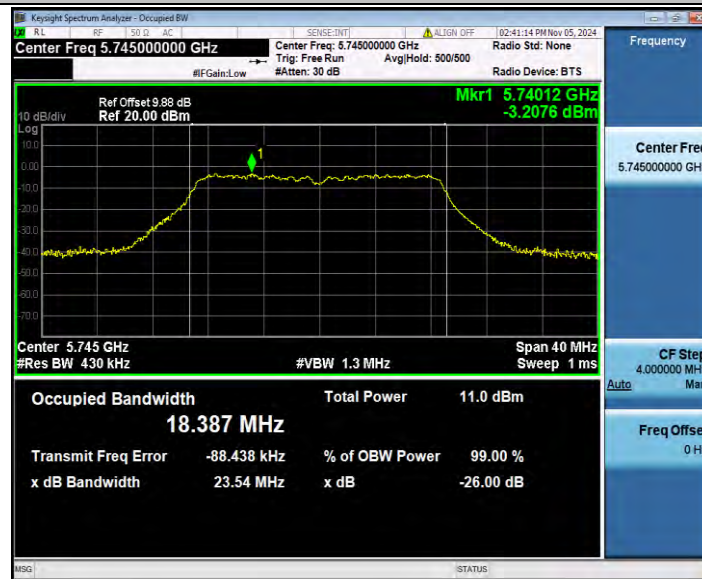
11N40SISO_Ant1_5755



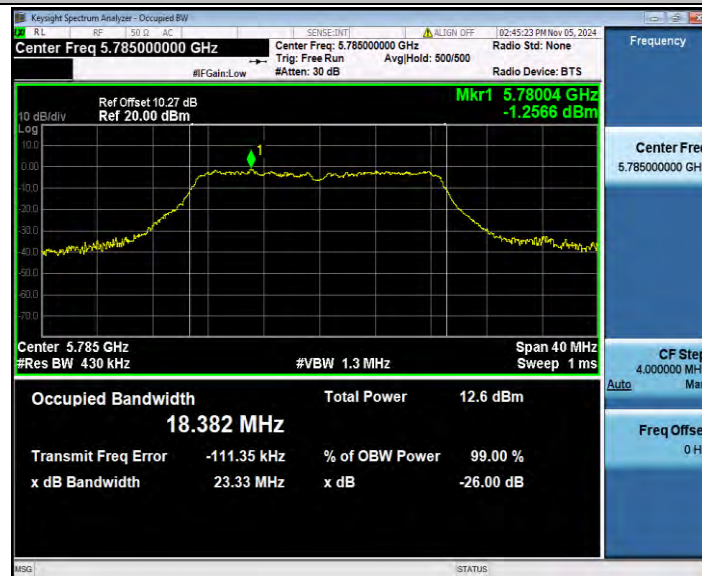
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



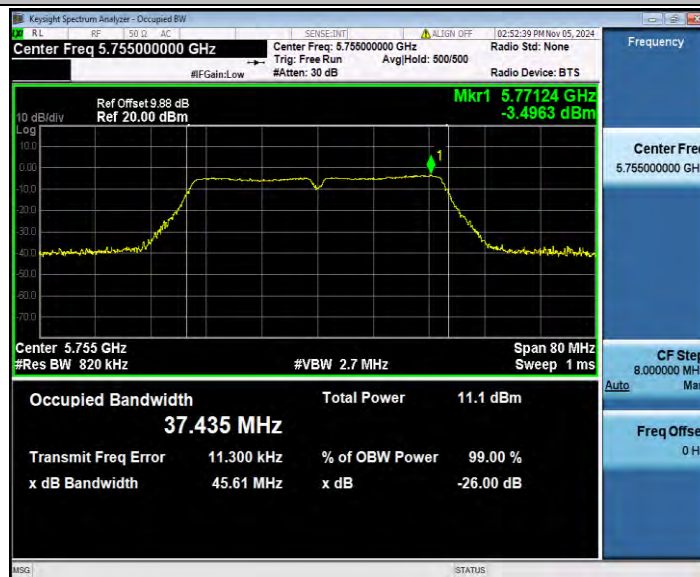
11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



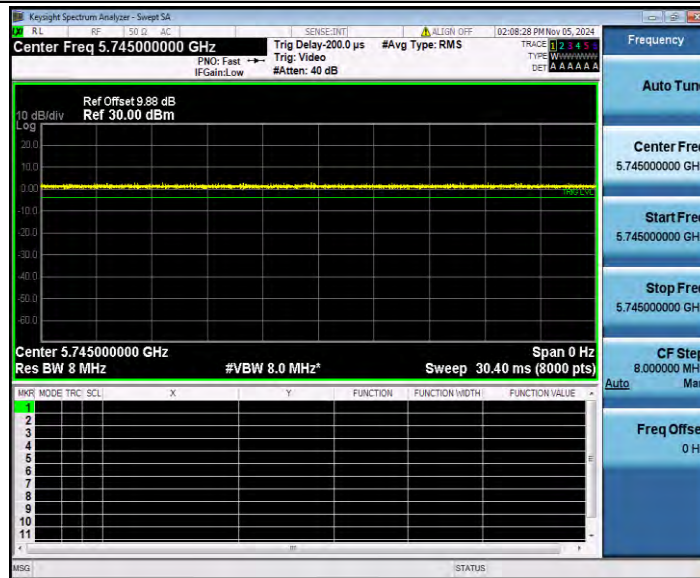
Appendix E.3: Duty Cycle

Test Result

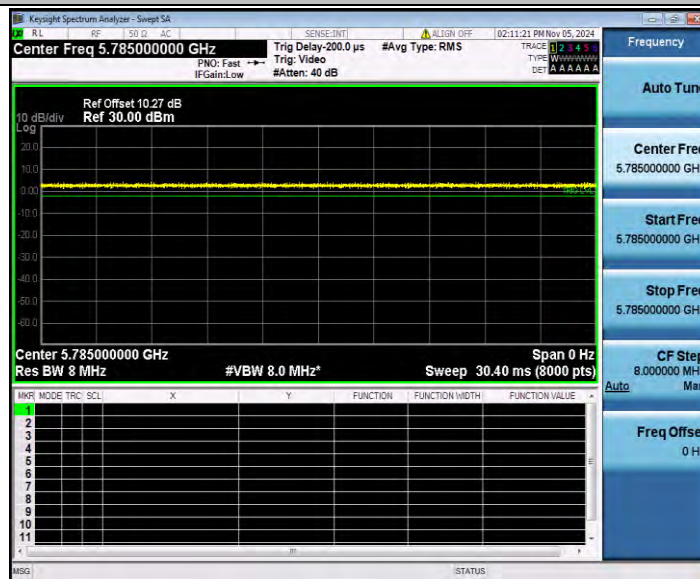
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5745	30.00	30.00	100.00	0.00	0.03
		5785	30.00	30.00	100.00	0.00	0.03
		5825	30.00	30.00	100.00	0.00	0.03
11N20SISO	Ant1	5745	30.00	30.00	100.00	0.00	0.03
		5785	30.00	30.00	100.00	0.00	0.03
		5825	30.00	30.00	100.00	0.00	0.03
11N40SISO	Ant1	5755	30.00	30.00	100.00	0.00	0.03
		5795	30.00	30.00	100.00	0.00	0.03
11AC20SISO	Ant1	5745	30.00	30.00	100.00	0.00	0.03
		5785	30.00	30.00	100.00	0.00	0.03
		5825	30.00	30.00	100.00	0.00	0.03
11AC40SISO	Ant1	5755	30.00	30.00	100.00	0.00	0.03
		5795	30.00	30.00	100.00	0.00	0.03
11AC80SISO	Ant1	5775	30.00	30.00	100.00	0.00	0.03

Test Graphs

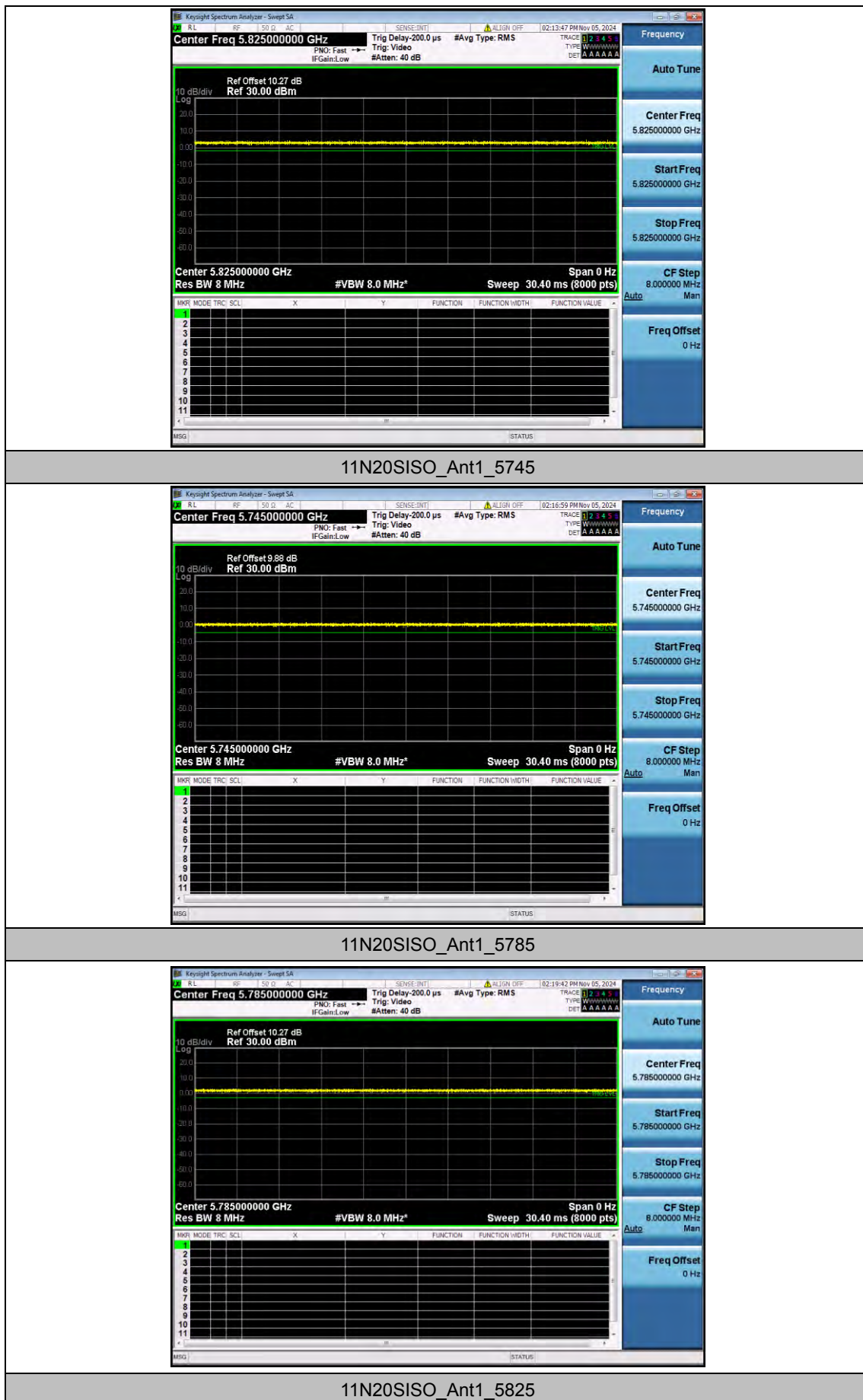
11A_Ant1_5745

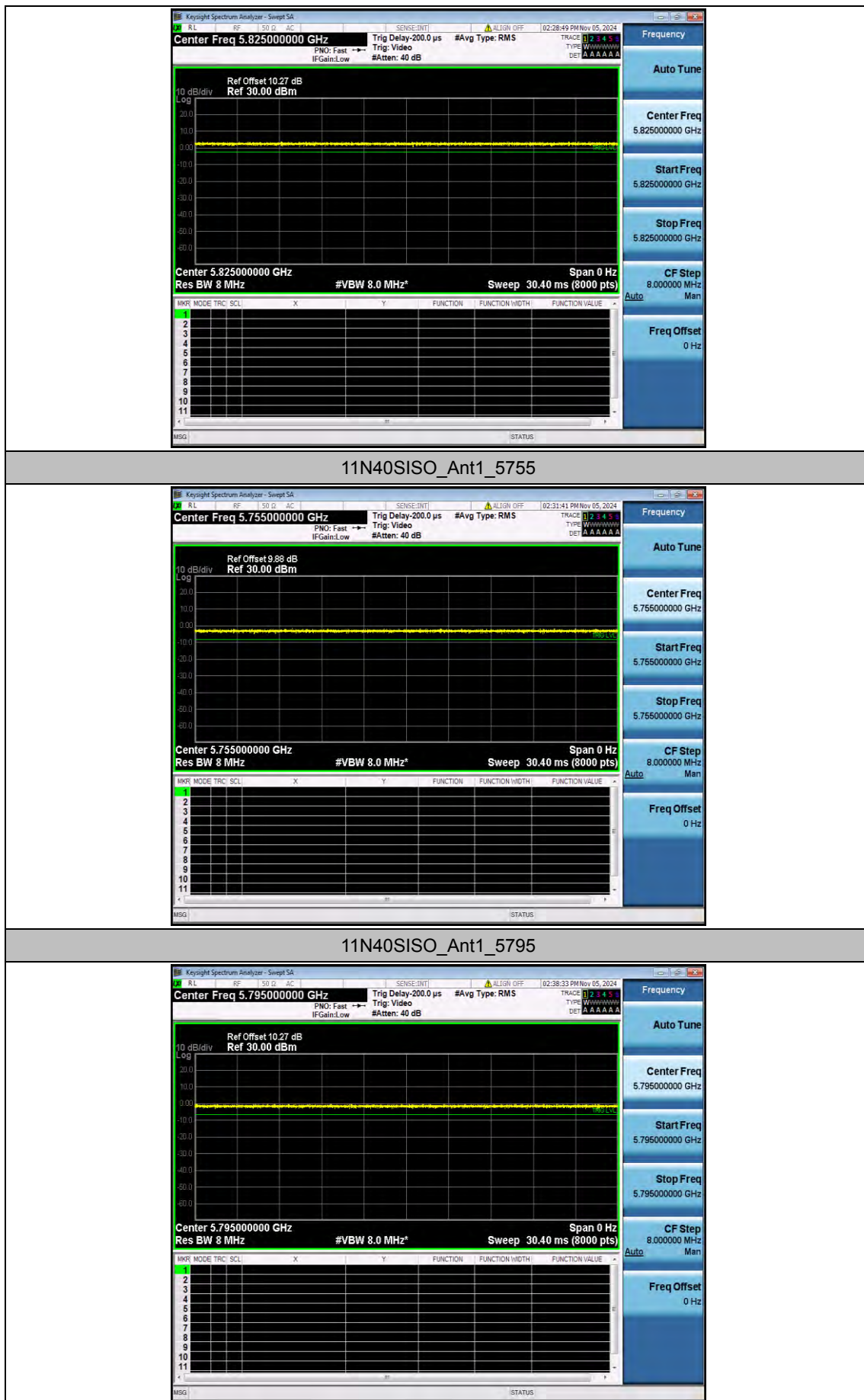


11A_Ant1_5785

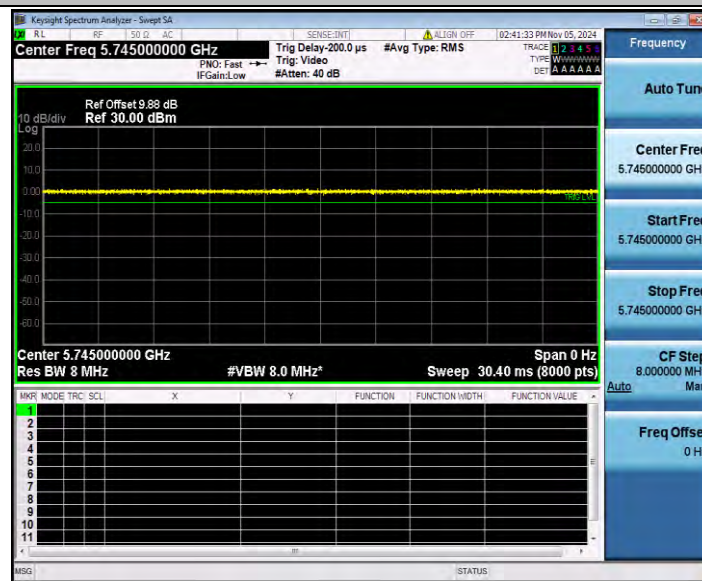


11A_Ant1_5825

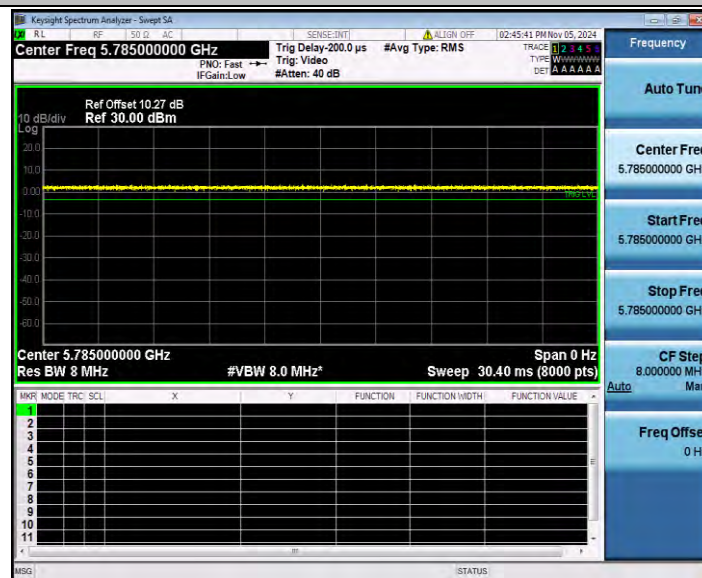




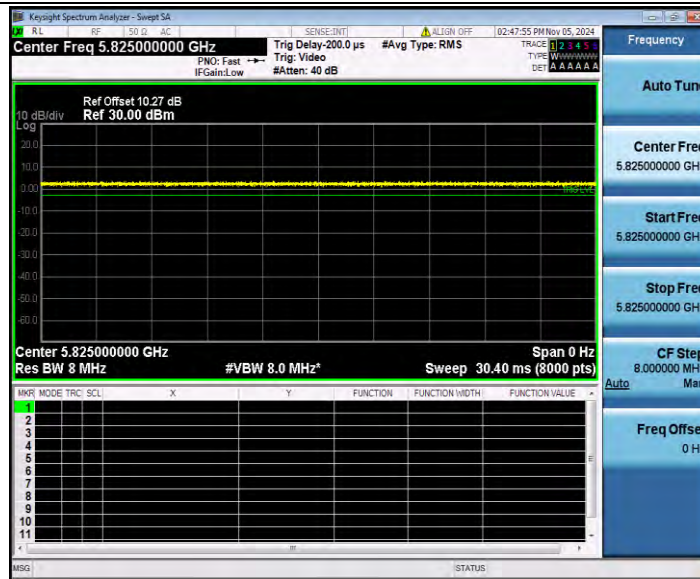
11AC20SISO_Ant1_5745



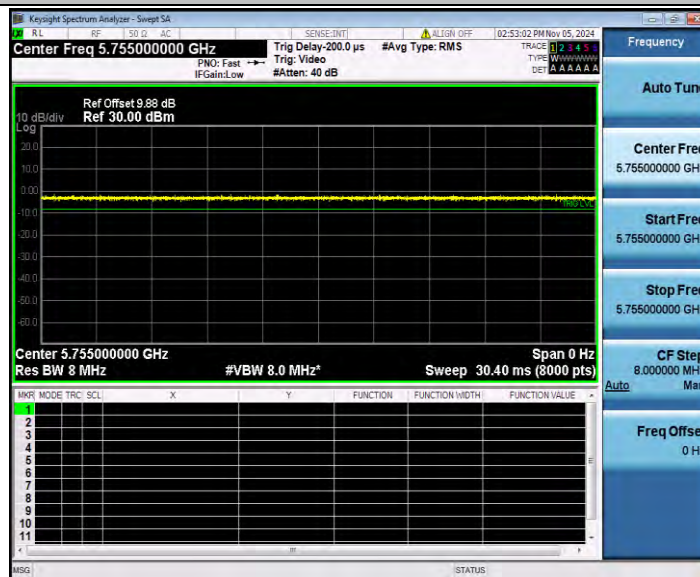
11AC20SISO_Ant1_5785



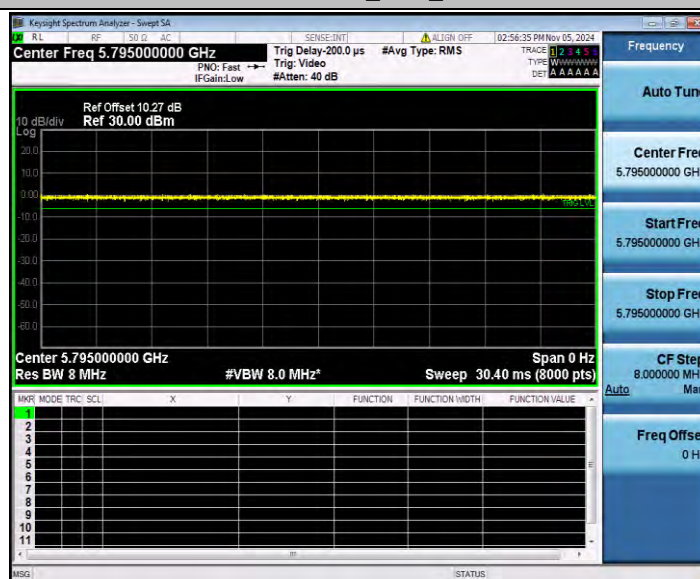
11AC20SISO_Ant1_5825

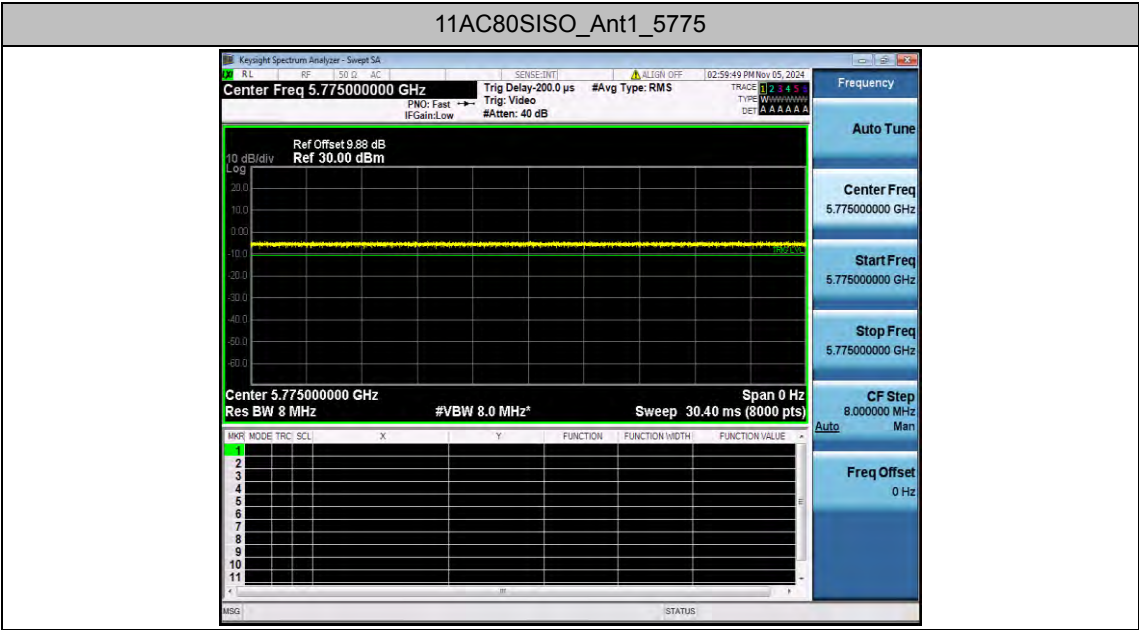


11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795





Appendix E.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Freq(MHz)	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	5.25	100.00	0.00	5.25	≤30.00	PASS
		5785	6.79	100.00	0.00	6.79	≤30.00	PASS
		5825	6.95	100.00	0.00	6.95	≤30.00	PASS
11N20SISO	Ant1	5745	4.68	100.00	0.00	4.68	≤30.00	PASS
		5785	6.15	100.00	0.00	6.15	≤30.00	PASS
		5825	6.58	100.00	0.00	6.58	≤30.00	PASS
11N40SISO	Ant1	5755	3.93	100.00	0.00	3.93	≤30.00	PASS
		5795	5.35	100.00	0.00	5.35	≤30.00	PASS
11AC20SISO	Ant1	5745	4.35	100.00	0.00	4.35	≤30.00	PASS
		5785	6.03	100.00	0.00	6.03	≤30.00	PASS
		5825	6.56	100.00	0.00	6.56	≤30.00	PASS
11AC40SISO	Ant1	5755	3.96	100.00	0.00	3.96	≤30.00	PASS
		5795	5.84	100.00	0.00	5.84	≤30.00	PASS
11AC80SISO	Ant1	5775	4.97	100.00	0.00	4.97	≤30.00	PASS

Appendix E.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-9.25	≤30.00	PASS
		5785	-7.87	≤30.00	PASS
		5825	-7.21	≤30.00	PASS
11N20SISO	Ant1	5745	-10.22	≤30.00	PASS
		5785	-8.69	≤30.00	PASS
		5825	-7.91	≤30.00	PASS
11N40SISO	Ant1	5755	-13.13	≤30.00	PASS
		5795	-12.19	≤30.00	PASS
11AC20SISO	Ant1	5745	-10.32	≤30.00	PASS
		5785	-8.52	≤30.00	PASS
		5825	-7.73	≤30.00	PASS
11AC40SISO	Ant1	5755	-13.05	≤30.00	PASS
		5795	-11.64	≤30.00	PASS
11AC80SISO	Ant1	5775	-14.32	≤30.00	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_5745



11A_Ant1_5785



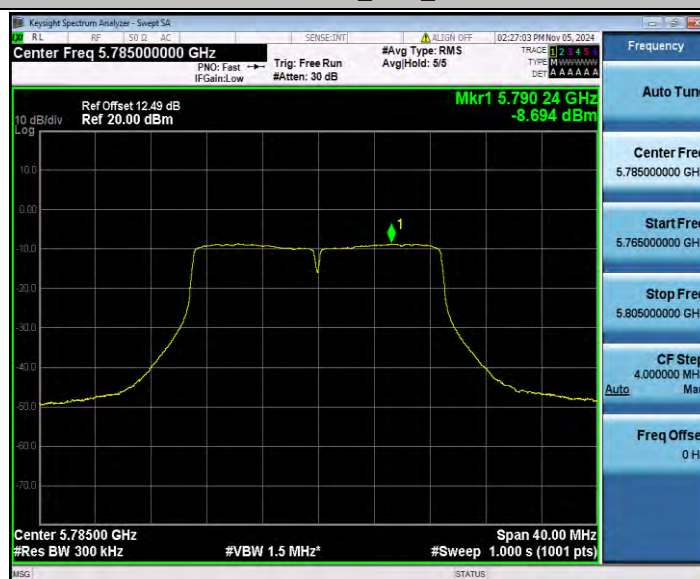
11A_Ant1_5825



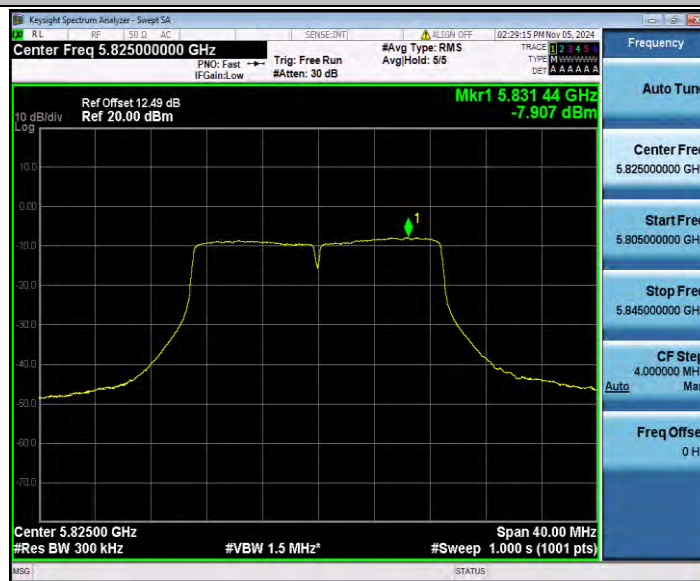
11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



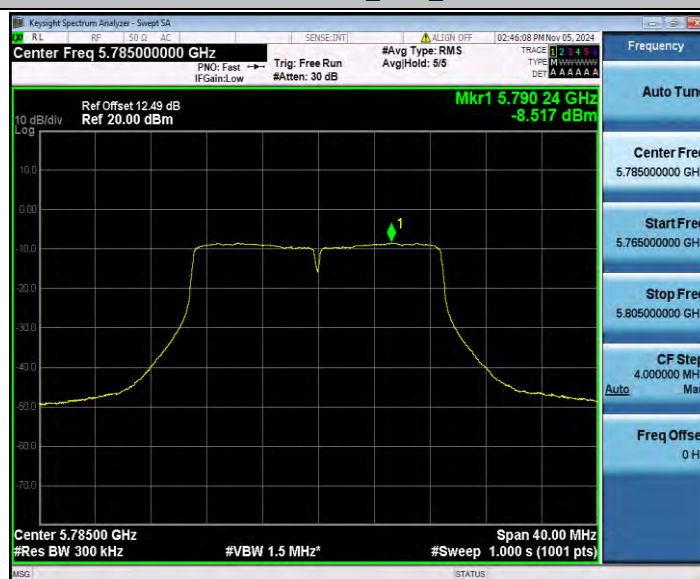
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

The screenshot displays a Keysight Spectrum Analyzer interface. The main display area shows a signal trace with a prominent peak at 5.81034 GHz, labeled 'Mkr1 5.81034 GHz -14.320 dBm'. The trace is yellow and shows a signal that rises from a noise floor of approximately -50 dBm to a peak level of about -14.32 dBm. The frequency range is set from 5.775 GHz to 5.810 GHz, with a span of 160.0 MHz. The resolution bandwidth (RBW) is 300 kHz, and the video bandwidth (VBW) is 1.5 MHz. The center frequency is 5.775000000 GHz. The display is in dBm, with a reference level of 20.00 dBm. The trace is labeled 'Mkr1' and 'Mkr2'. The peak is labeled '1'.

Key parameters visible on the screen include:

- Center Freq: 5.775000000 GHz
- Start Freq: 5.695000000 GHz
- Stop Freq: 5.855000000 GHz
- CF Step: 16.000000 MHz
- Freq Offset: 0 Hz
- Center Freq: 5.775000000 GHz
- Start Freq: 5.695000000 GHz
- Stop Freq: 5.855000000 GHz
- CF Step: 16.000000 MHz
- Freq Offset: 0 Hz
- Center Freq: 5.775000000 GHz
- Start Freq: 5.695000000 GHz
- Stop Freq: 5.855000000 GHz
- CF Step: 16.000000 MHz
- Freq Offset: 0 Hz

Appendix E.6: Band edge measurements

Test Result B4

TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-41.52	≤-26.62	PASS
				5700~5720	-39.37	≤10.02	PASS
				5720~5725	-31.38	≤20.27	PASS
				5760~5650	-39.89	≤-27	PASS
		High	5825	5850~5855	-36.82	≤18.50	PASS
				5855~5875	-38.77	≤10.25	PASS
				5875~5925	-40.16	≤-26.81	PASS
				5925~5935	-38.96	≤-27	PASS
11N20SI SO	Ant1	Low	5745	5650~5700	-38.74	≤-25.85	PASS
				5700~5720	-40.24	≤10.15	PASS
				5720~5725	-36.58	≤18.70	PASS
				5760~5650	-40.44	≤-27	PASS
		High	5825	5850~5855	-37.65	≤15.73	PASS
				5855~5875	-38.18	≤10.63	PASS
				5875~5925	-39.03	≤-26.01	PASS
				5925~5935	-38.15	≤-27	PASS
11N40SI SO	Ant1	Low	5755	5650~5700	-40.45	≤-26.90	PASS
				5700~5720	-39.73	≤10.36	PASS
				5720~5725	-38.35	≤16.35	PASS
				5780~5650	-39.97	≤-27	PASS
		High	5795	5850~5855	-39.03	≤16.41	PASS
				5855~5875	-38.81	≤10.02	PASS
				5875~5925	-38.05	≤-26.95	PASS
				5925~5935	-38.53	≤-27	PASS
11AC20S ISO	Ant1	Low	5745	5650~5700	-40.11	≤-26.70	PASS
				5700~5720	-39.7	≤10.02	PASS
				5720~5725	-37.05	≤17.91	PASS
				5760~5650	-39.95	≤-27	PASS
		High	5825	5850~5855	-38.43	≤16.65	PASS
				5855~5875	-38.62	≤10.17	PASS
				5875~5925	-39.01	≤-26.91	PASS
				5925~5935	-38.72	≤-27	PASS
11AC40S ISO	Ant1	Low	5755	5650~5700	-39.52	≤-26.70	PASS
				5700~5720	-39.77	≤10.10	PASS
				5720~5725	-38.77	≤15.74	PASS
				5780~5650	-40.03	≤-27	PASS

		High	5795	5850~5855	-39.15	≤ 16.41	PASS
				5855~5875	-38.27	≤ 10.99	PASS
				5875~5925	-38.57	≤ -26.46	PASS
				5925~5935	-37.63	≤ -27	PASS
11AC80S ISO	Ant1	Low	5775	5650~5700	-40.07	≤ -26.91	PASS
				5700~5720	-36.74	≤ 11.01	PASS
				5720~5725	-36.38	≤ 18.12	PASS
				5800~5650	-39.98	≤ -27	PASS
		High	5775	5850~5855	-37.32	≤ 16.68	PASS
				5855~5875	-37.49	≤ 10.40	PASS
				5875~5925	-39.7	≤ -26.87	PASS
				5925~5935	-39.01	≤ -27	PASS

Test Graphs B4

11A_Ant1_Low_5745



11A_Ant1_High_5825



11N20SISO_Ant1_Low_5745



11N20SISO_Ant1_High_5825



11N40SISO_Ant1_Low_5755



11N40SISO_Ant1_High_5795



11AC20SISO_Ant1_Low_5745



11AC20SISO_Ant1_High_5825



11AC40SISO_Ant1_Low_5755



11AC40SISO_Ant1_High_5795



11AC80SISO_Ant1_Low_5775



11AC80SISO_Ant1_High_5775



Appendix E.7: Conducted Spurious Emission

Test Result

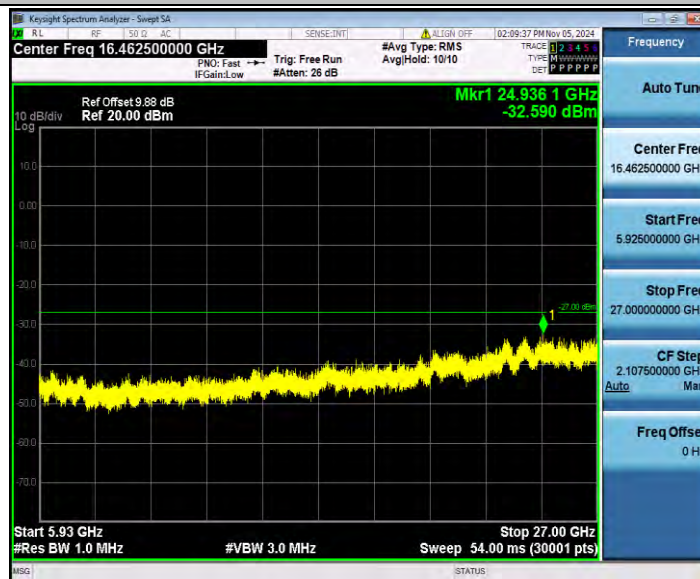
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	5398.6	-40.45	≤-27	PASS
			5925~27000	24936.06	-32.59	≤-27	PASS
		5785	30~5650	5452.74	-39.6	≤-27	PASS
			5925~27000	24258.14	-31.89	≤-27	PASS
		5825	30~5650	5441.87	-39.74	≤-27	PASS
			5925~27000	25653.31	-31.52	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	2667.09	-40.1	≤-27	PASS
			5925~27000	26074.81	-32.5	≤-27	PASS
		5785	30~5650	5460.61	-39.42	≤-27	PASS
			5925~27000	25266.93	-31.22	≤-27	PASS
		5825	30~5650	5434.57	-40	≤-27	PASS
			5925~27000	26828.59	-30.99	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	4961.36	-39.82	≤-27	PASS
			5925~27000	24132.4	-32.27	≤-27	PASS
		5795	30~5650	2913.06	-40.33	≤-27	PASS
			5925~27000	26021.42	-31.17	≤-27	PASS
11AC20SISO	Ant1	5745	30~5650	5360.94	-39.9	≤-27	PASS
			5925~27000	24221.61	-31.62	≤-27	PASS
		5785	30~5650	5419.02	-39.4	≤-27	PASS
			5925~27000	26665.61	-31.8	≤-27	PASS
		5825	30~5650	4934.57	-39.86	≤-27	PASS
			5925~27000	23514.2	-31.04	≤-27	PASS
11AC40SISO	Ant1	5755	30~5650	5471.1	-39.66	≤-27	PASS
			5925~27000	24973.29	-31.56	≤-27	PASS
		5795	30~5650	5537.23	-40.44	≤-27	PASS
			5925~27000	24851.76	-31.71	≤-27	PASS
11AC80SISO	Ant1	5775	30~5650	5479.15	-40.27	≤-27	PASS
			5925~27000	26577.1	-30.16	≤-27	PASS

Test Graphs

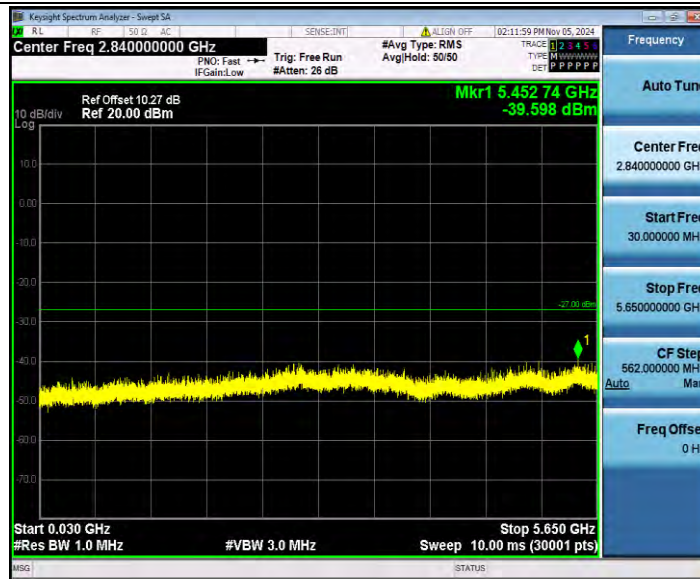
11A_Ant1_5745_30~5650



11A_Ant1_5745_5925~27000



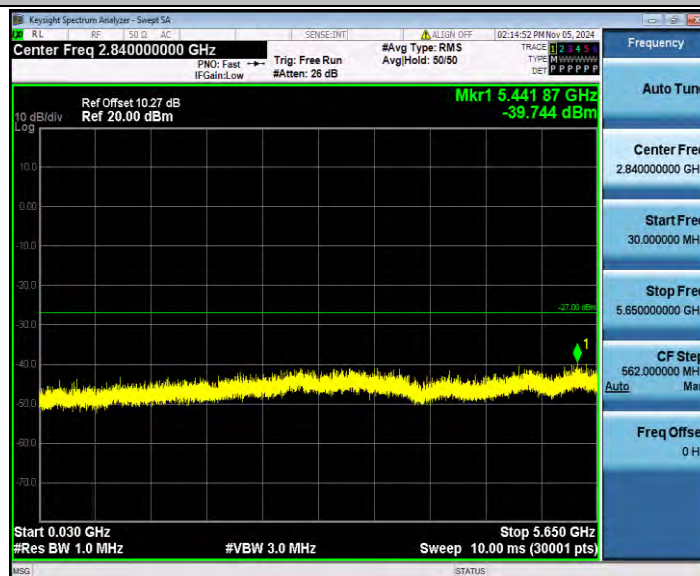
11A_Ant1_5785_30~5650



11A_Ant1_5785_5925~27000



11A_Ant1_5825_30~5650



11A_Ant1_5825_5925~27000



11N20SISO_Ant1_5745_30~5650



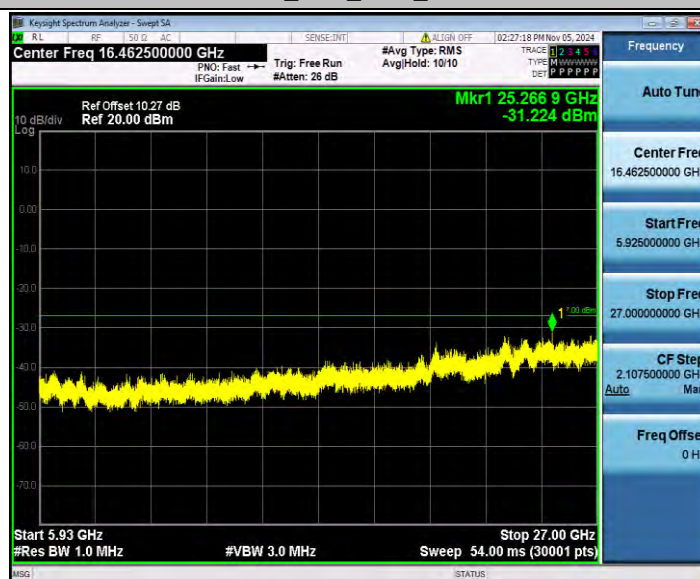
11N20SISO_Ant1_5745_5925~27000



11N20SISO_Ant1_5785_30~5650



11N20SISO_Ant1_5785_5925~27000



11N20SISO_Ant1_5825_30~5650



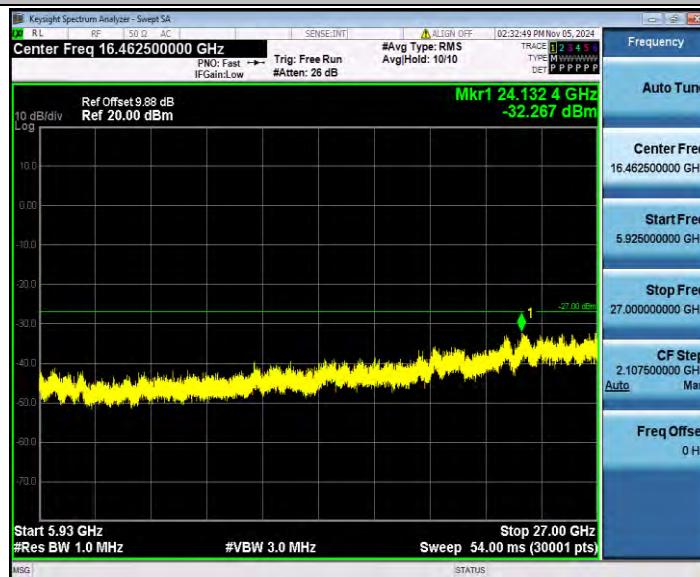
11N20SISO_Ant1_5825_5925~27000



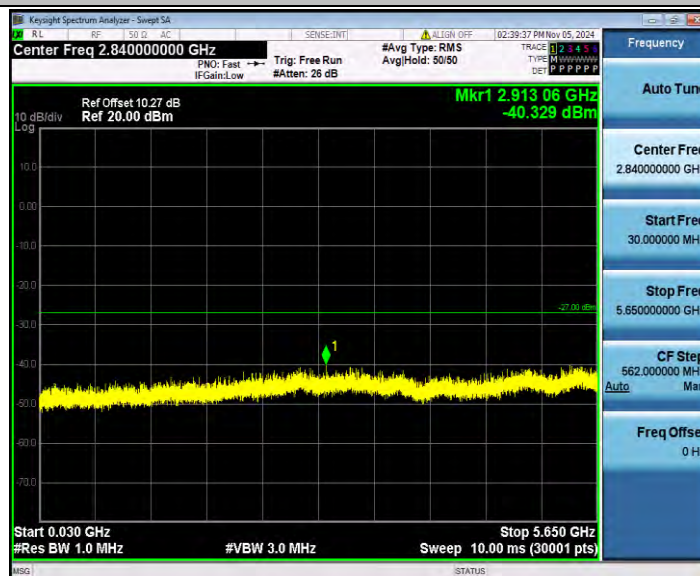
11N40SISO_Ant1_5755_30~5650



11N40SISO_Ant1_5755_5925~27000



11N40SISO_Ant1_5795_30~5650



11N40SISO_Ant1_5795_5925~27000



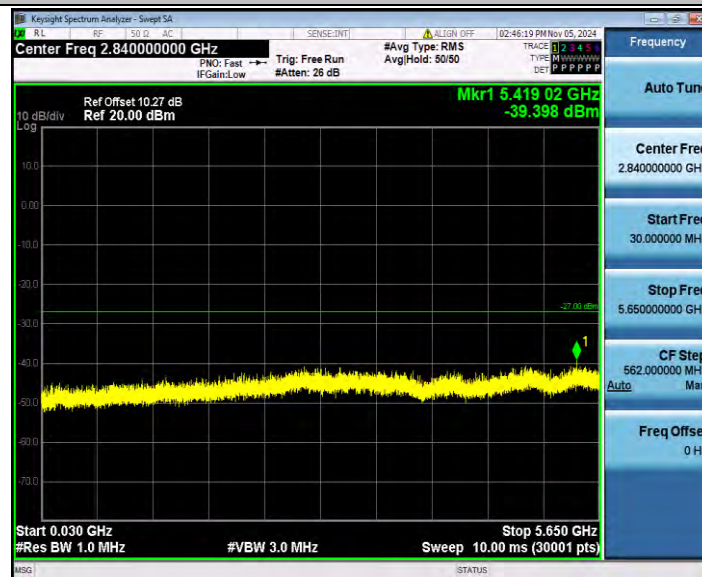
11AC20SISO_Ant1_5745_30~5650



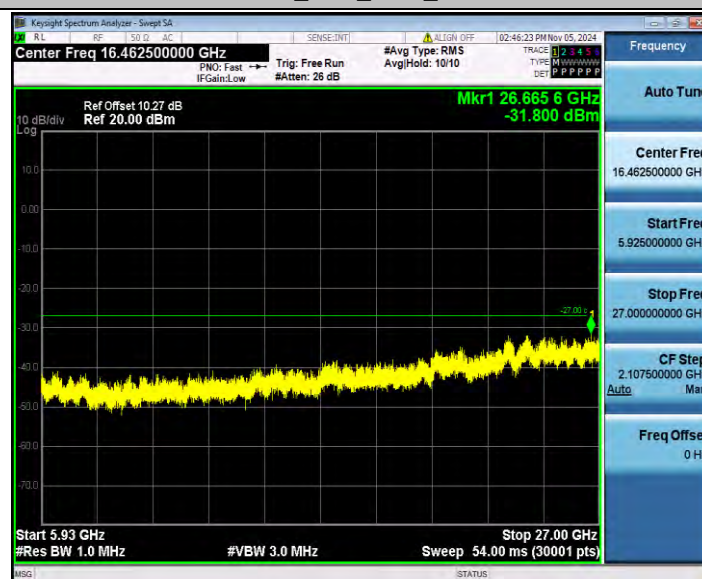
11AC20SISO_Ant1_5745_5925~27000



11AC20SISO_Ant1_5785_30~5650



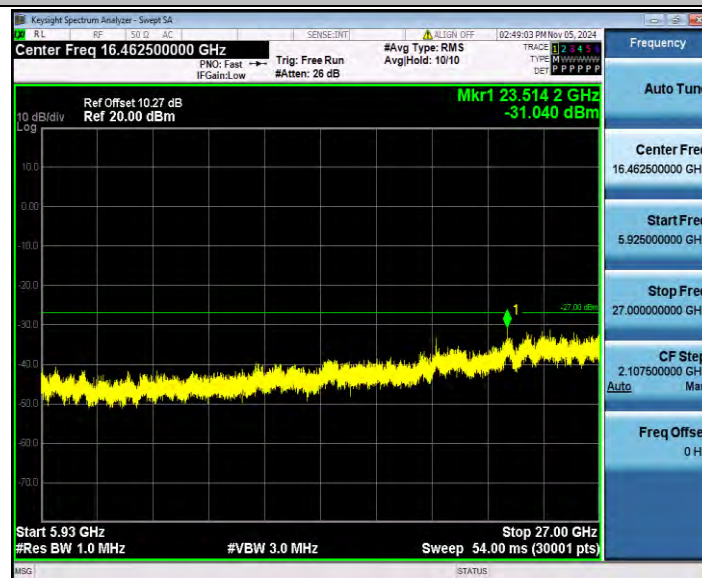
11AC20SISO_Ant1_5785_5925~27000



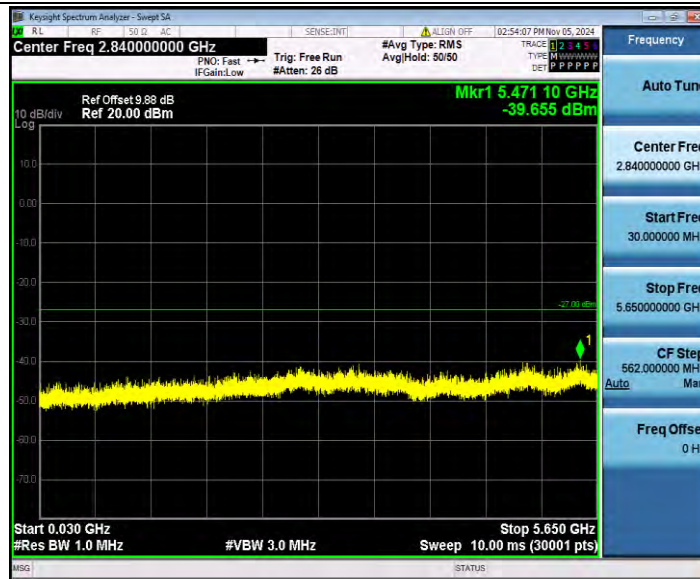
11AC20SISO_Ant1_5825_30~5650



11AC20SISO_Ant1_5825_5925~27000



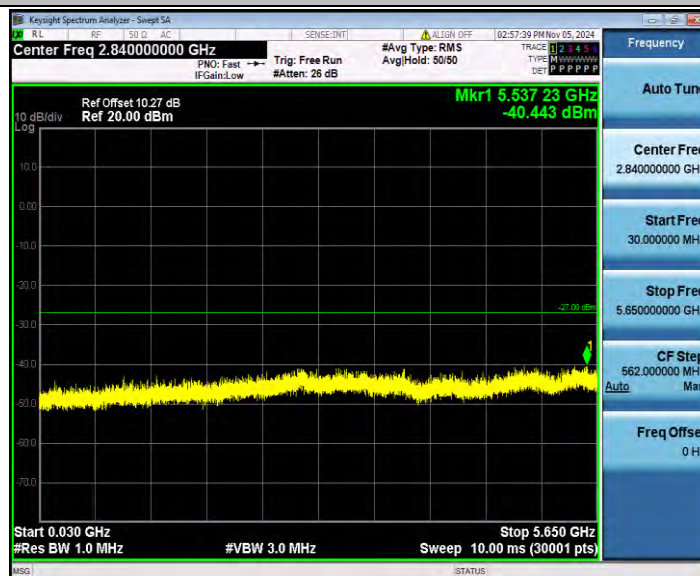
11AC40SISO_Ant1_5755_30~5650



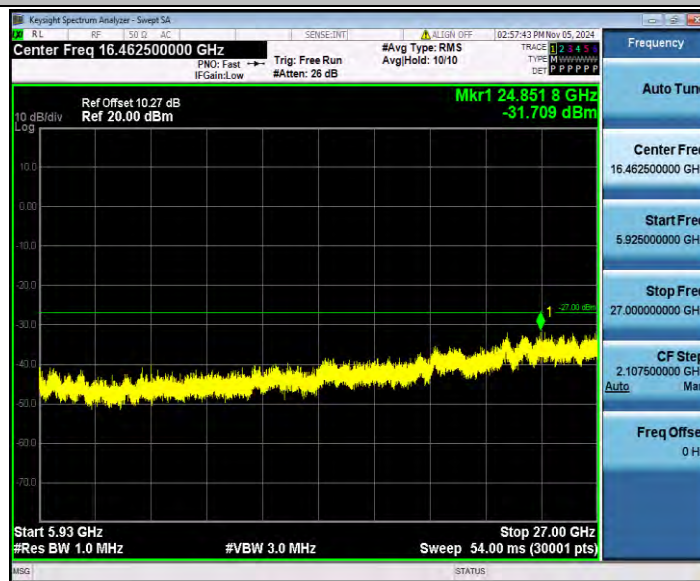
11AC40SISO_Ant1_5755_5925~27000



11AC40SISO_Ant1_5795_30~5650



11AC40SISO_Ant1_5795_5925~27000



11AC80SISO_Ant1_5775_30~5650



11AC80SISO_Ant1_5775_5925~27000



Appendix E.8: Emissions in Restricted Bands

Test Result

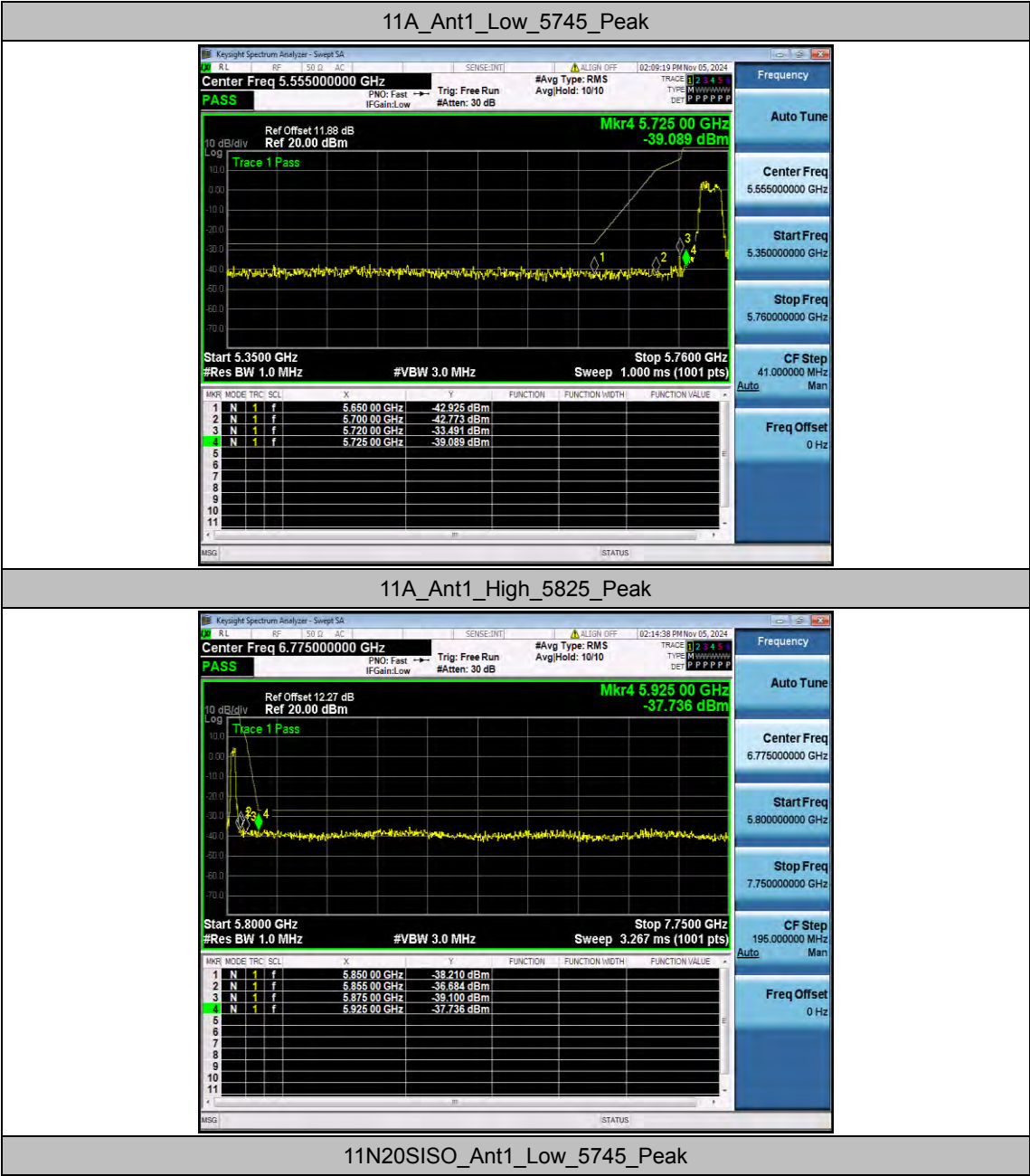
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-42.925	≤-27.00	PASS
				Peak	5700.000	-42.77	≤10.00	PASS
				Peak	5720.000	-33.49	≤15.60	PASS
				Peak	5725.000	-39.09	≤27.00	PASS
		High	5825	Peak	5850.000	-38.21	≤27.00	PASS
				Peak	5855.000	-36.68	≤15.60	PASS
				Peak	5875.000	-39.1	≤10.00	PASS
				Peak	5925.000	-37.74	≤-27.00	PASS
11N20SISO	Ant1	Low	5745	Peak	5650.000	-42.976	≤-27.00	PASS
				Peak	5700.000	-41.43	≤10.00	PASS
				Peak	5720.000	-42.2	≤15.60	PASS
				Peak	5725.000	-35.48	≤27.00	PASS
		High	5825	Peak	5850.000	-38.987	≤27.00	PASS
				Peak	5855.000	-36.41	≤15.60	PASS
				Peak	5875.000	-38.17	≤10.00	PASS
				Peak	5925.000	-38.53	≤-27.00	PASS
11N40SISO	Ant1	Low	5755	Peak	5650.000	-42.273	≤-27.00	PASS
				Peak	5700.000	-40.21	≤10.00	PASS
				Peak	5720.000	-39.77	≤15.60	PASS
				Peak	5725.000	-37.9	≤27.00	PASS
		High	5795	Peak	5850.000	-38.254	≤27.00	PASS
				Peak	5855.000	-36.06	≤15.60	PASS
				Peak	5875.000	-38.02	≤10.00	PASS
				Peak	5925.000	-37.98	≤-27.00	PASS
11AC20SISO	Ant1	Low	5745	Peak	5650.000	-43.389	≤-27.00	PASS
				Peak	5700.000	-42.11	≤10.00	PASS
				Peak	5720.000	-42.9	≤15.60	PASS
				Peak	5725.000	-38.61	≤27.00	PASS
		High	5825	Peak	5850.000	-38.234	≤27.00	PASS
				Peak	5855.000	-40.18	≤15.60	PASS
				Peak	5875.000	-39.2	≤10.00	PASS
				Peak	5925.000	-38.46	≤-27.00	PASS
11AC40SISO	Ant1	Low	5755	Peak	5650.000	-40.687	≤-27.00	PASS
				Peak	5700.000	-41.08	≤10.00	PASS
				Peak	5720.000	-38.88	≤15.60	PASS
				Peak	5725.000	-40.8	≤27.00	PASS

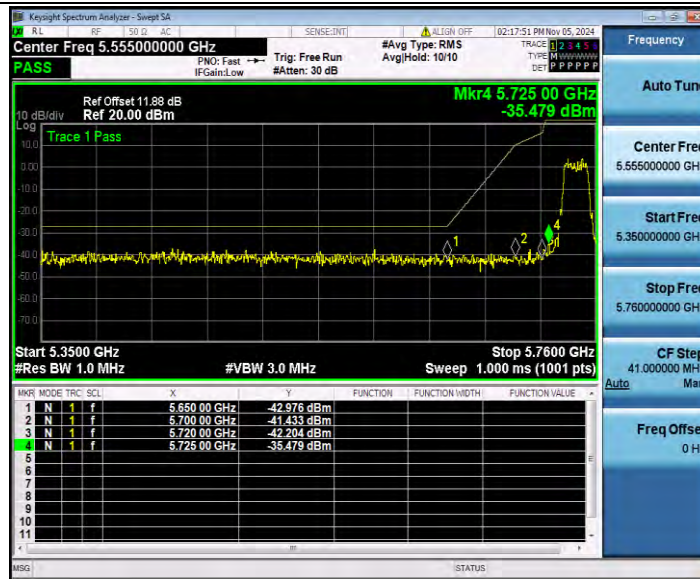
		High	5795	Peak	5850.000	-37.812	≤ 27.00	PASS
				Peak	5855.000	-38.55	≤ 15.60	PASS
				Peak	5875.000	-38.52	≤ 10.00	PASS
				Peak	5925.000	-39.83	≤ -27.00	PASS
11AC80SISO	Ant1	Low	5775	Peak	5650.000	-40.273	≤ -27.00	PASS
				Peak	5700.000	-41.39	≤ 10.00	PASS
				Peak	5720.000	-41.34	≤ 15.60	PASS
				Peak	5725.000	-40.52	≤ 27.00	PASS
		High	5775	Peak	5850.000	-36.385	≤ 27.00	PASS
				Peak	5855.000	-36.5	≤ 15.60	PASS
				Peak	5875.000	-37.77	≤ 10.00	PASS
				Peak	5925.000	-36.97	≤ -27.00	PASS

Note:

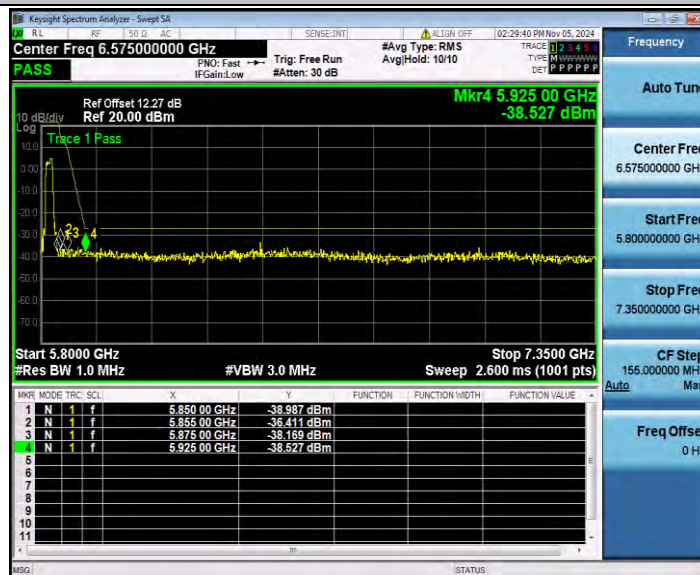
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. For transmitters operating in 5150-5350 GHz band and 5470-5725 GHz band: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm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

Test Graphs

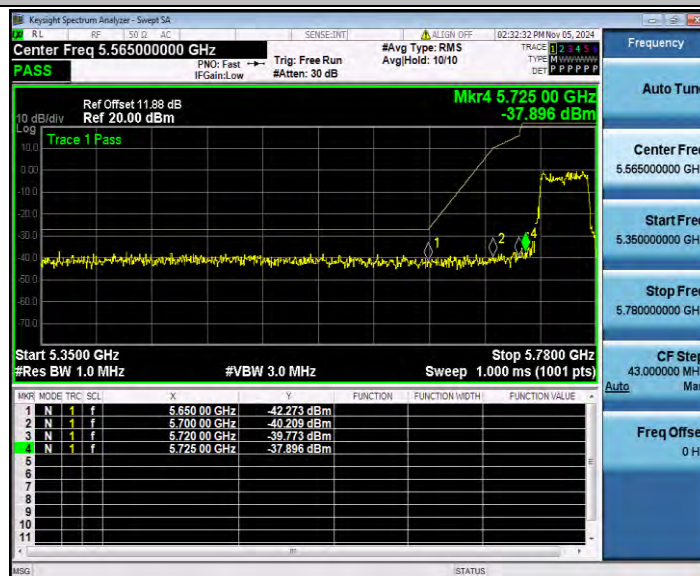




11N20SISO_Ant1_High_5825_Peak



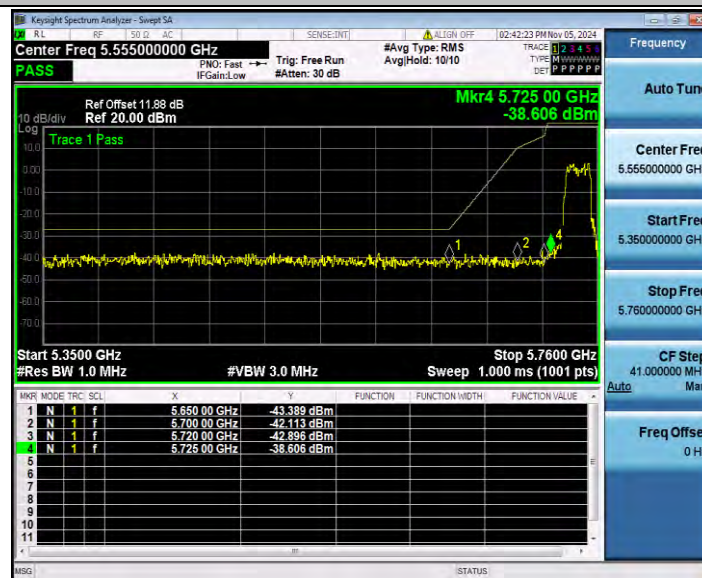
11N40SISO_Ant1_Low_5755_Peak



11N40SISO_Ant1_High_5795_Peak



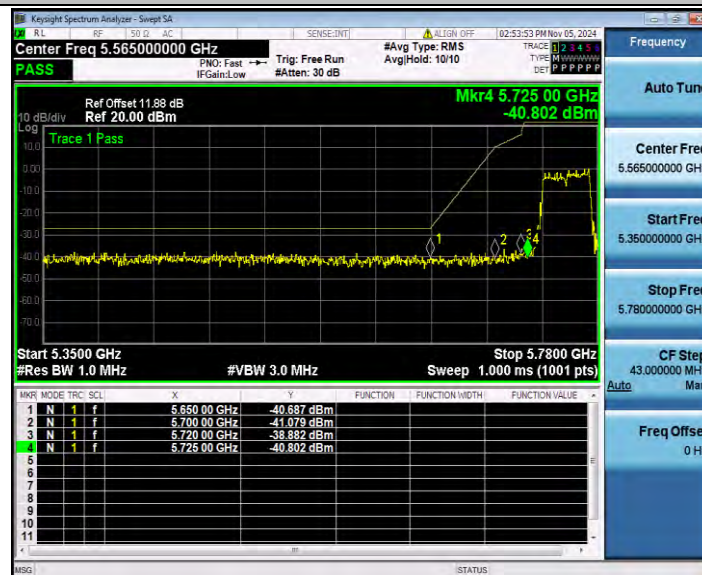
11AC20SISO_Ant1_Low_5745_Peak



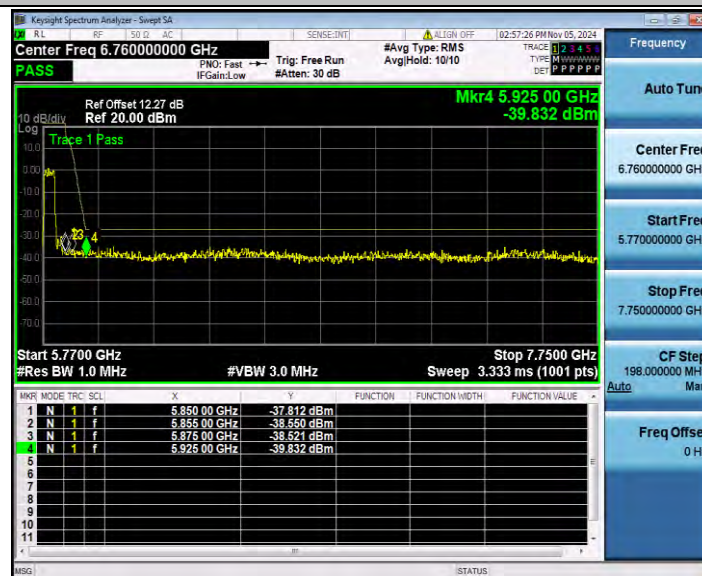
11AC20SISO_Ant1_High_5825_Peak



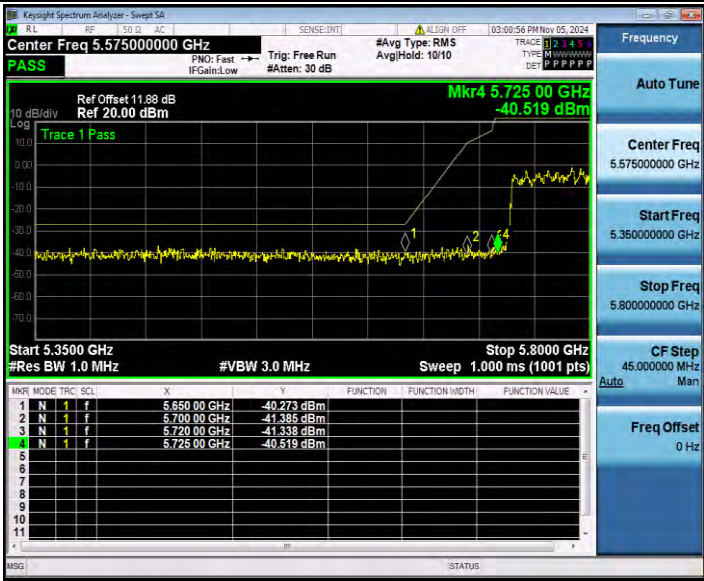
11AC40SISO_Ant1_Low_5755_Peak



11AC40SISO_Ant1_High_5795_Peak



11AC80SISO_Ant1_Low_5775_Peak



11AC80SISO_Ant1_High_5775_Peak

