

Case No. : <u>CTA24061300704</u>	
Ambient Condition: <u>23</u> °C, <u>49</u> %RH	
According Standard: ■Part15E	
Test Date: <u>2024.6.21</u>	Test Engineer: <u>Evan ouyang</u>

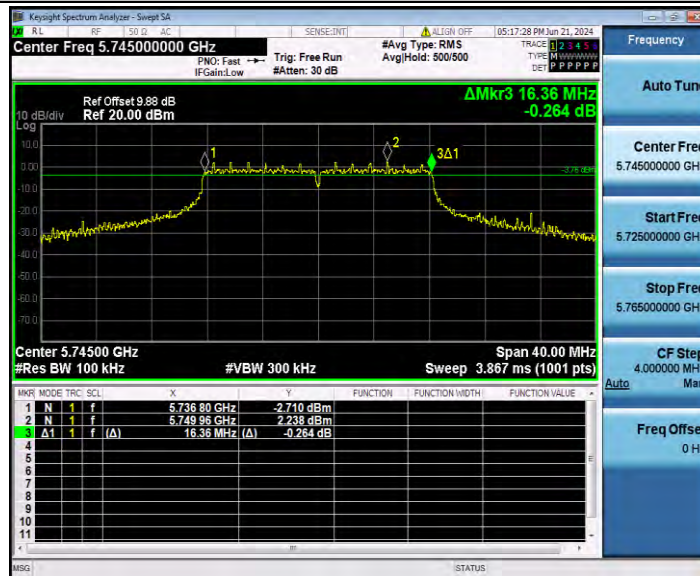
Appendix E.1: Min emission bandwidth

Test Result B4

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.360	5736.800	5753.160	0.5	PASS
		5785	16.360	5776.800	5793.160	0.5	PASS
		5825	16.360	5816.800	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.720	5736.120	5753.840	0.5	PASS
		5785	17.720	5776.120	5793.840	0.5	PASS
		5825	15.040	5817.480	5832.520	0.5	PASS
11N40SISO	Ant1	5755	36.480	5736.760	5773.240	0.5	PASS
		5795	36.480	5776.760	5813.240	0.5	PASS
11AC20SISO	Ant1	5745	17.680	5736.160	5753.840	0.5	PASS
		5785	17.720	5776.120	5793.840	0.5	PASS
		5825	17.720	5816.120	5833.840	0.5	PASS
11AC40SISO	Ant1	5755	36.480	5736.760	5773.240	0.5	PASS
		5795	36.480	5776.760	5813.240	0.5	PASS

Test Graphs B4

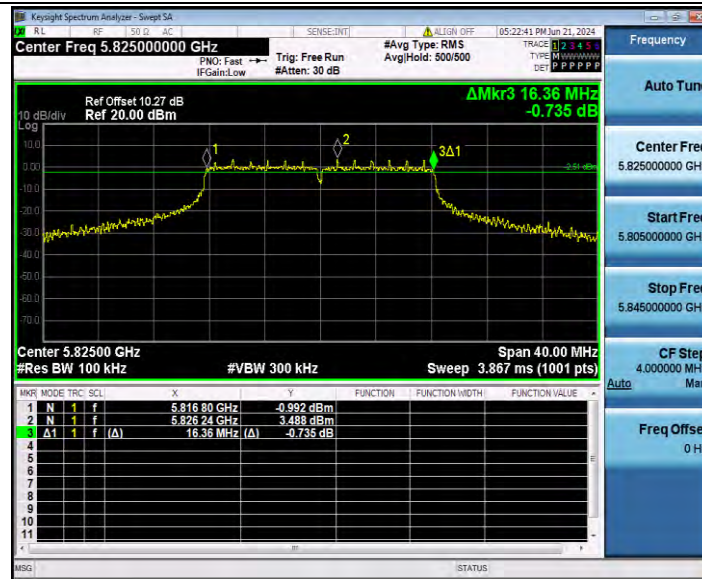
11A_Ant1_5745



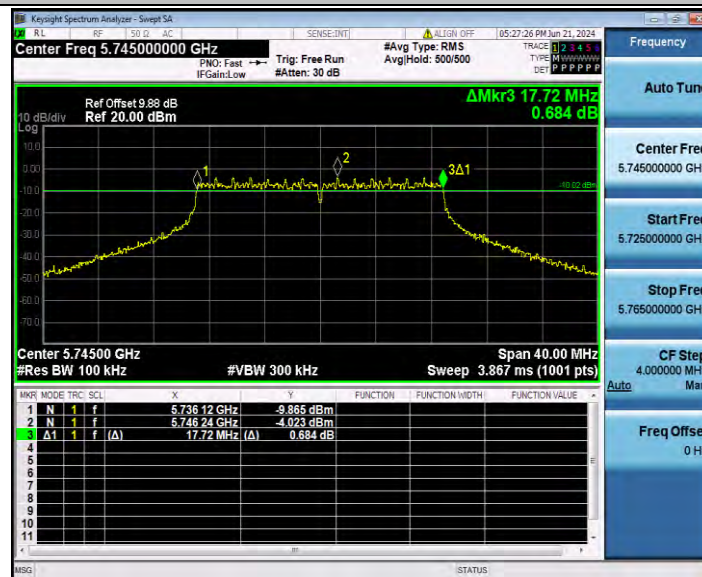
11A_Ant1_5785



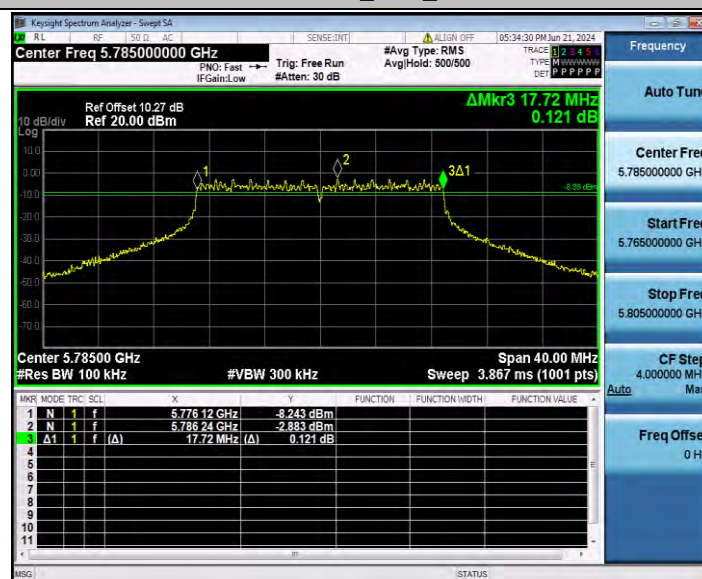
11A_Ant1_5825



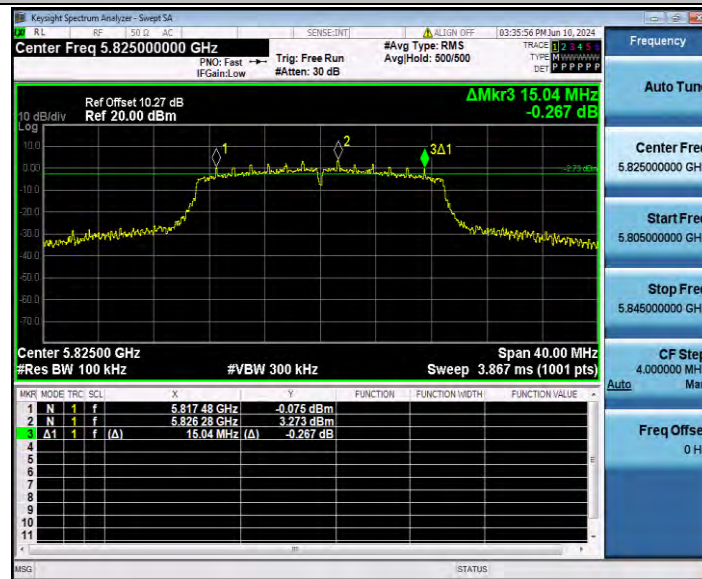
11N20SISO_Ant1_5745



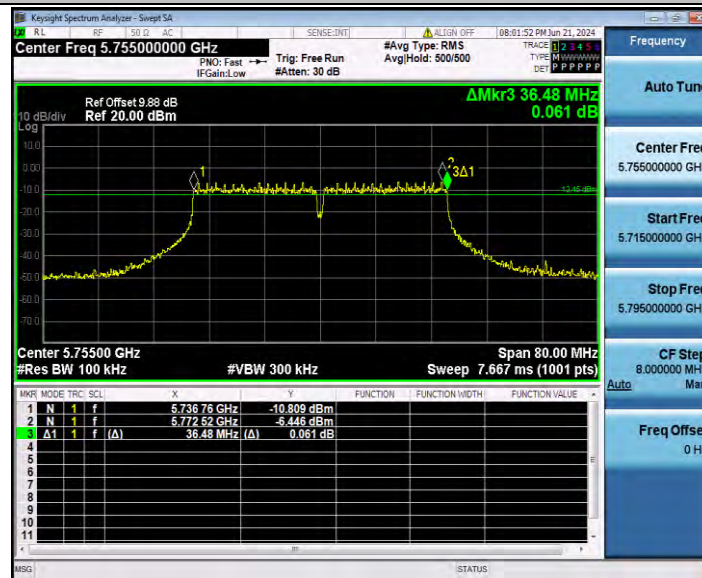
11N20SISO_Ant1_5785



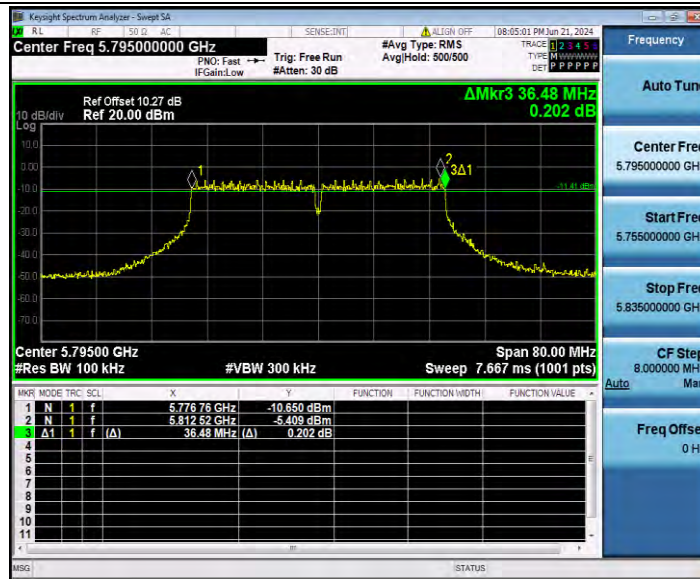
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



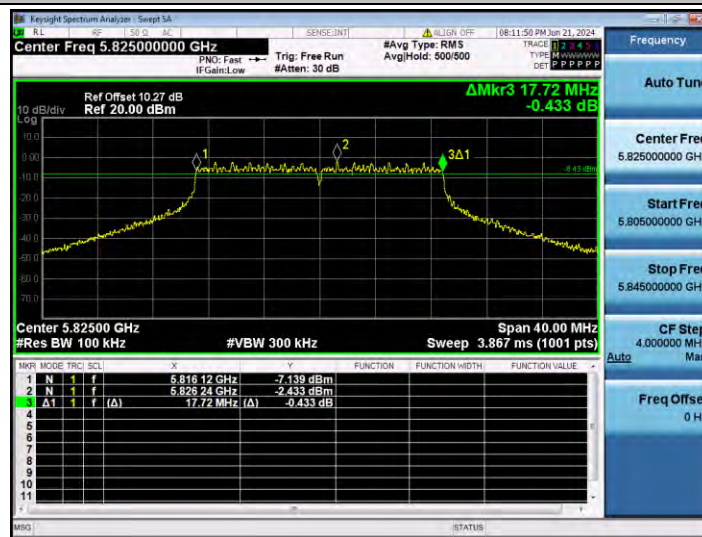
11AC20SISO_Ant1_5745



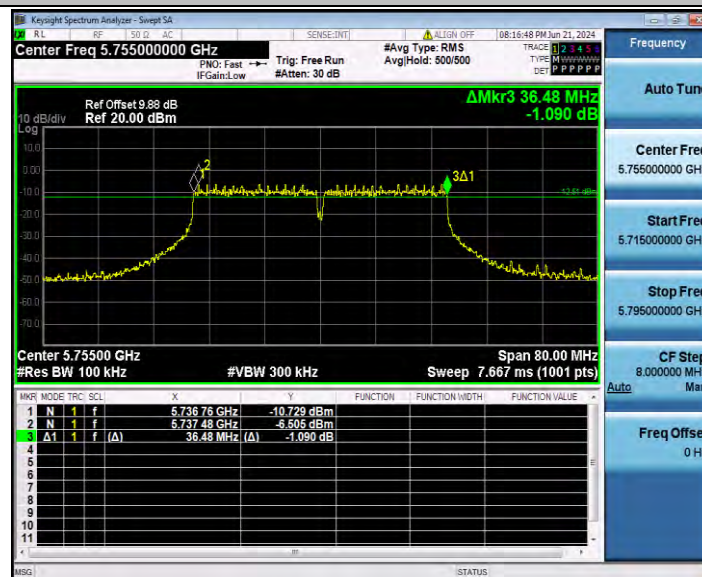
11AC20SISO_Ant1_5785



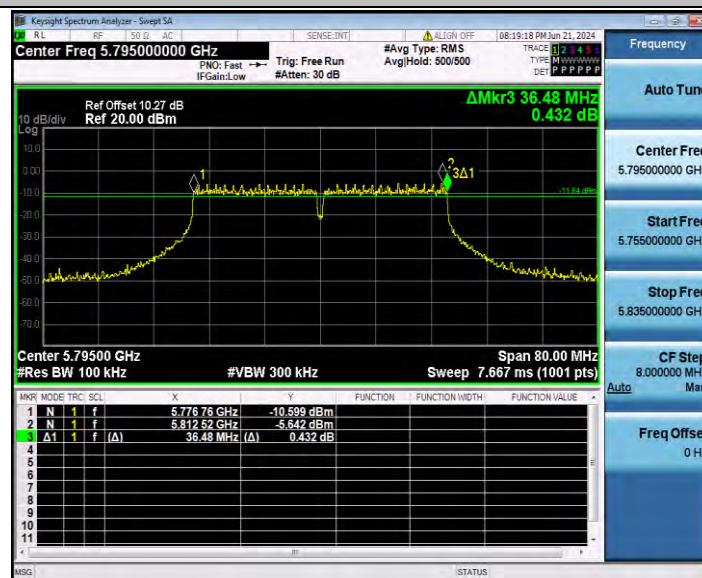
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

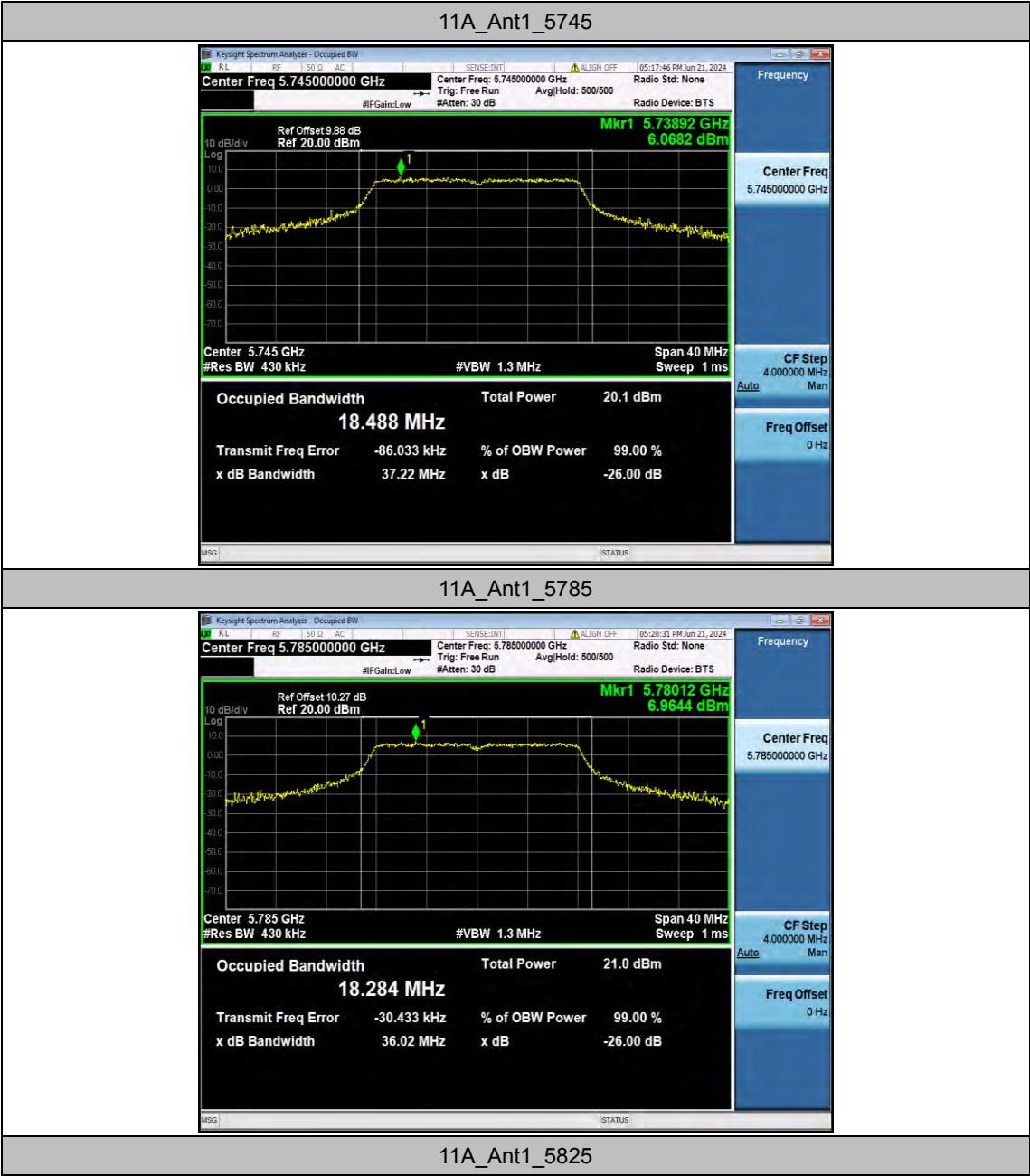


Appendix E.2: Occupied channel bandwidth

Test Result

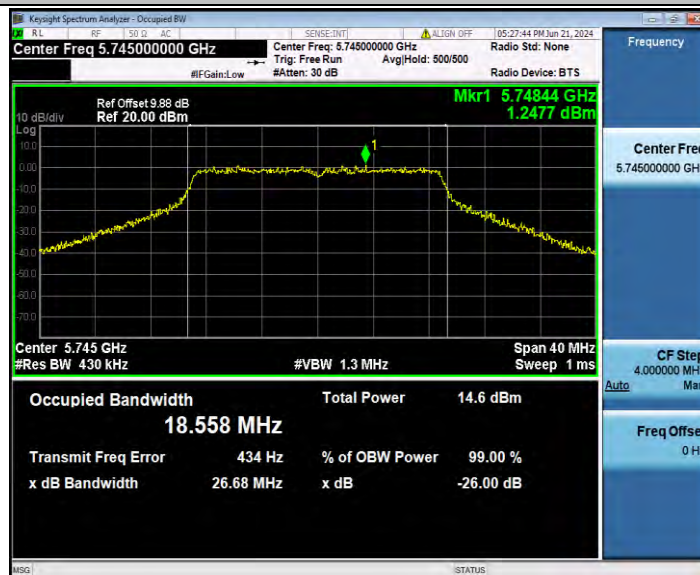
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	18.488	5735.6700	5754.1580	---	---
		5785	18.284	5775.8276	5794.1116	---	---
		5825	18.181	5815.7860	5833.9670	---	---
11N20SISO	Ant1	5745	18.558	5735.7214	5754.2794	---	---
		5785	18.640	5775.6921	5794.3321	---	---
		5825	18.051	5815.9504	5834.0014	---	---
11N40SISO	Ant1	5755	37.295	5736.4499	5773.7449	---	---
		5795	37.488	5776.4237	5813.9117	---	---
11AC20SISO	Ant1	5745	18.658	5735.6184	5754.2764	---	---
		5785	18.583	5775.7024	5794.2854	---	---
		5825	18.588	5815.6934	5834.2814	---	---
11AC40SISO	Ant1	5755	37.178	5736.4108	5773.5888	---	---
		5795	37.190	5776.4051	5813.5951	---	---

Test Graphs





11N20SISO_Ant1_5745



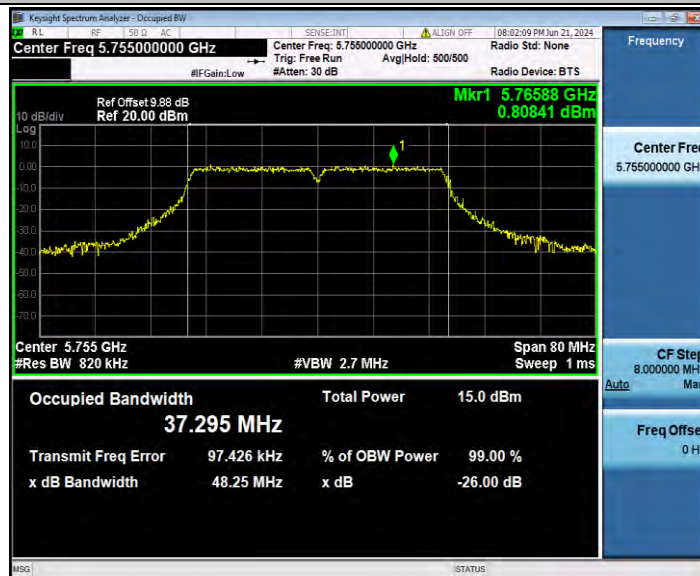
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



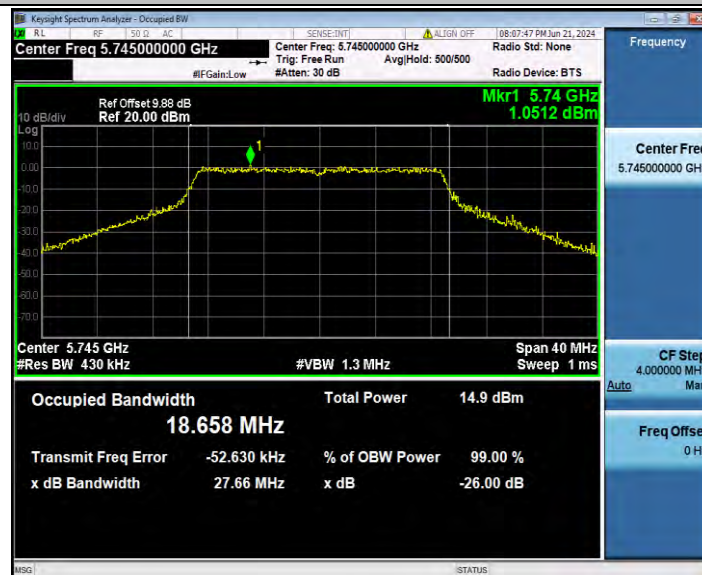
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



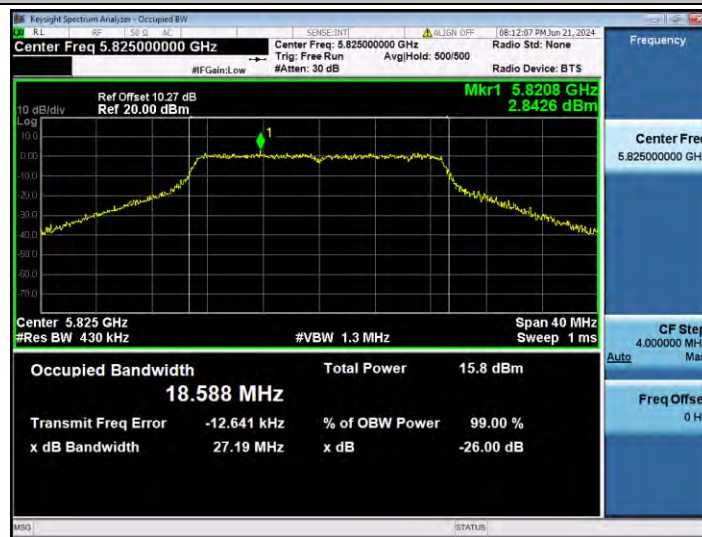
11AC20SISO_Ant1_5745



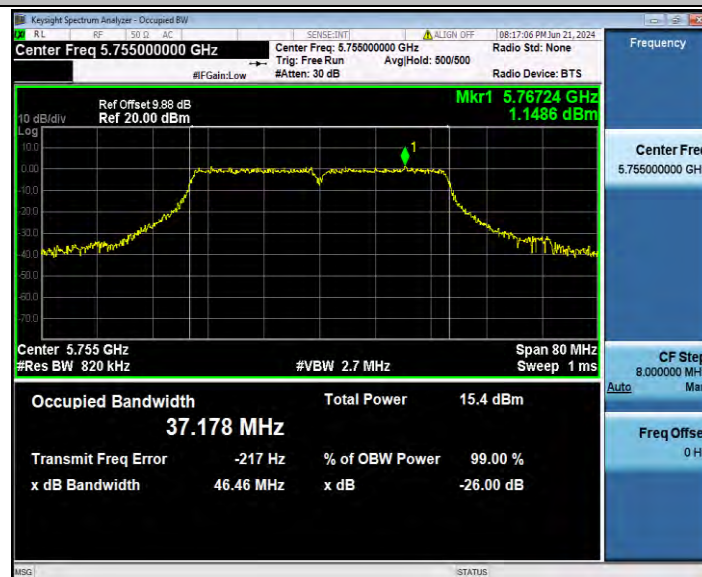
11AC20SISO_Ant1_5785



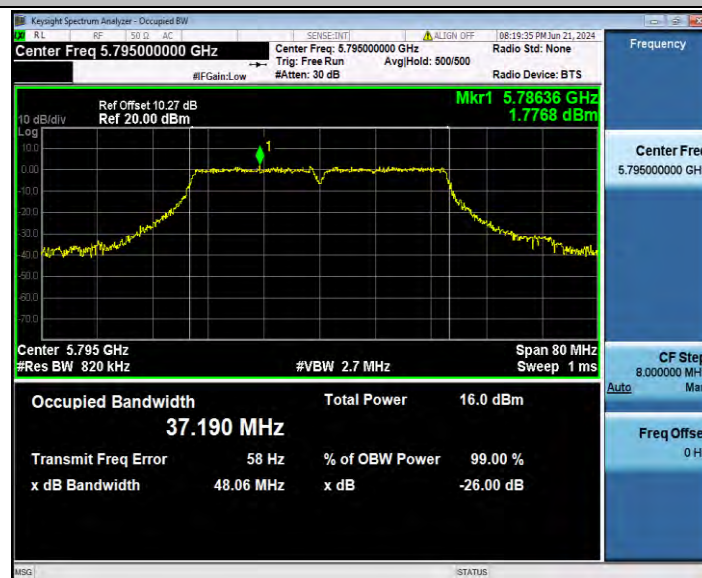
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



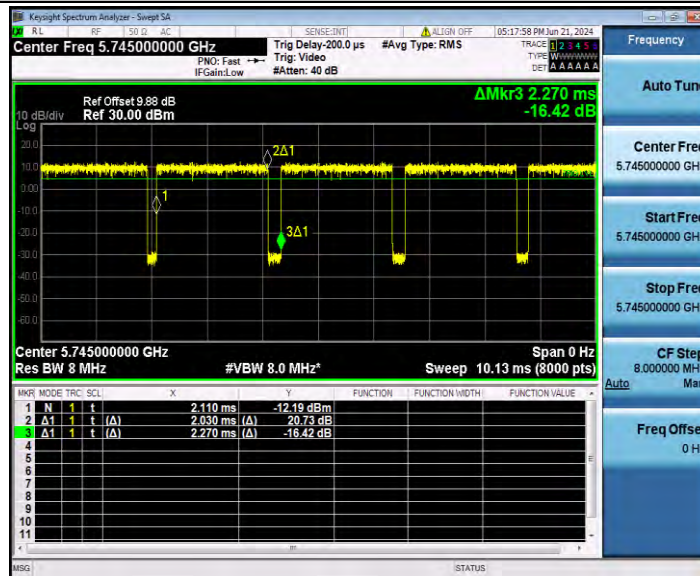
Appendix E.3: Duty Cycle

Test Result

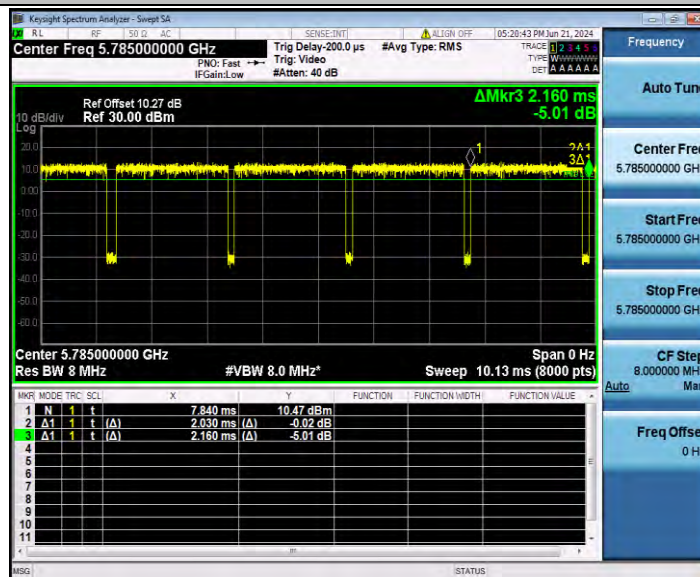
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5745	2.03	2.27	89.43	0.49	0.49
		5785	2.03	2.16	93.98	0.27	0.49
		5825	2.03	2.27	89.43	0.49	0.49
11N20SISO	Ant1	5745	0.23	0.46	50.00	3.01	4.35
		5785	0.22	0.45	48.89	3.11	4.55
		5825	1.30	1.35	96.30	0.16	0.77
11N40SISO	Ant1	5755	0.13	0.36	36.11	4.42	7.69
		5795	0.13	0.35	37.14	4.30	7.69
11AC20SISO	Ant1	5745	0.20	0.44	45.45	3.42	5.00
		5785	0.20	0.44	45.45	3.42	5.00
		5825	0.20	0.83	24.10	6.18	5.00
11AC40SISO	Ant1	5755	0.11	0.34	32.35	4.90	9.09
		5795	0.11	0.34	32.35	4.90	9.09

Test Graphs

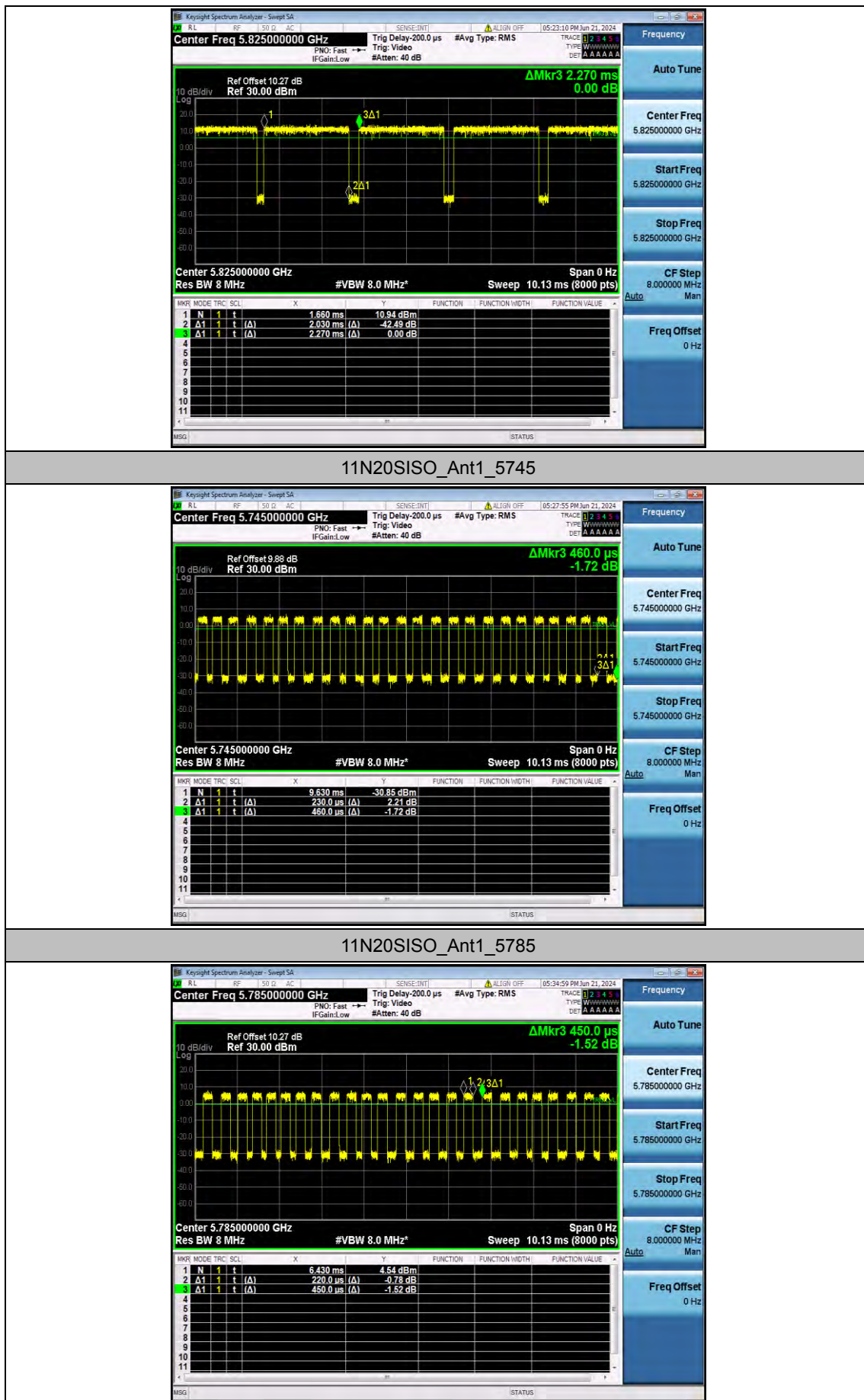
11A_Ant1_5745

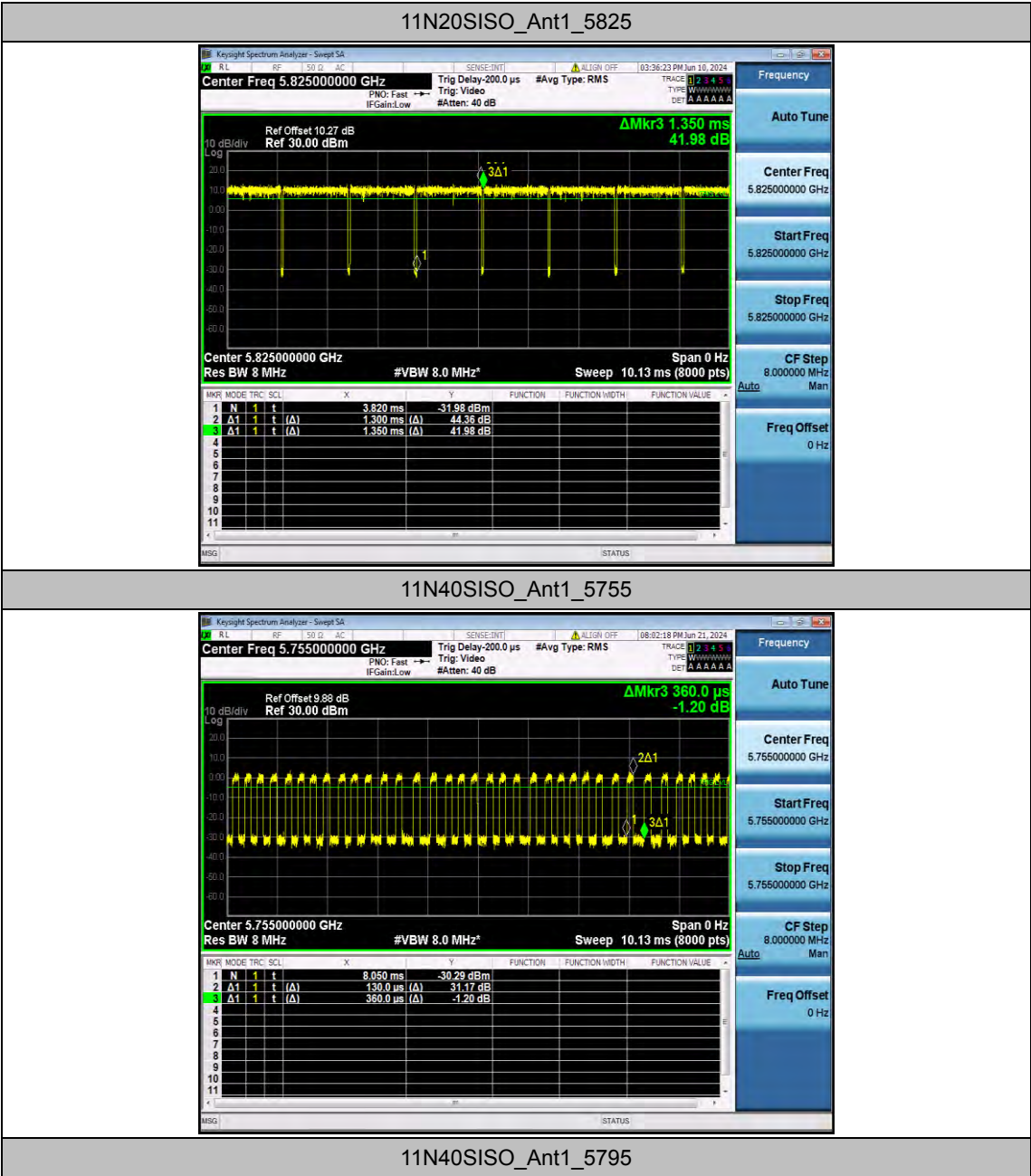


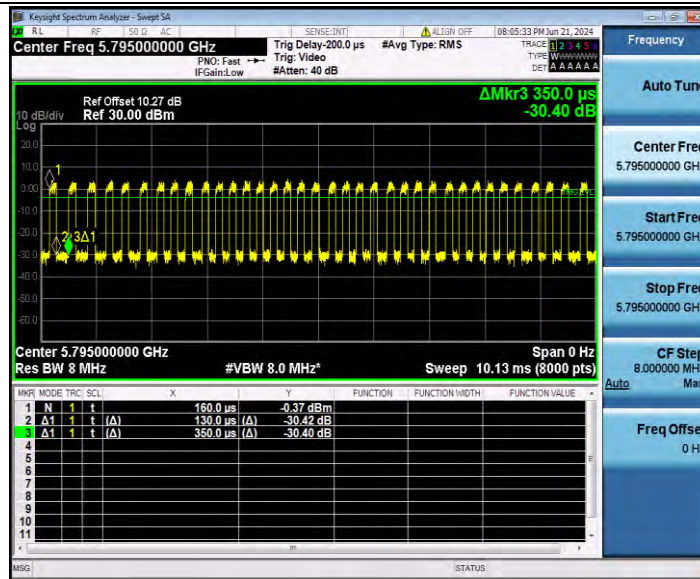
11A_Ant1_5785



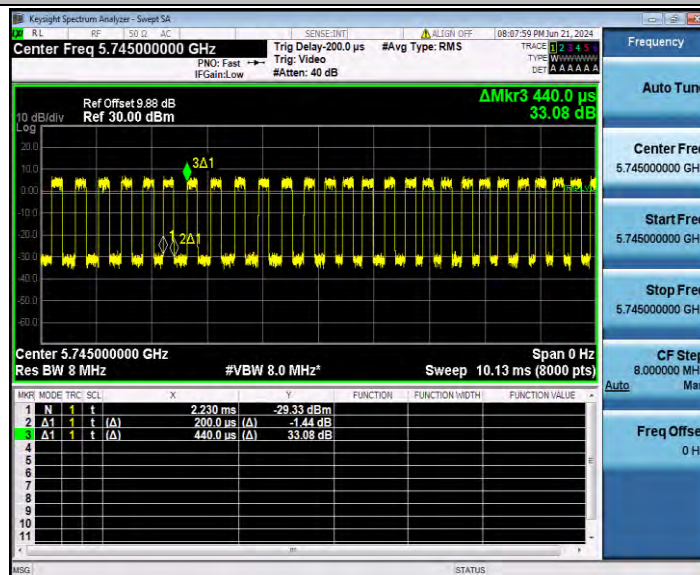
11A_Ant1_5825



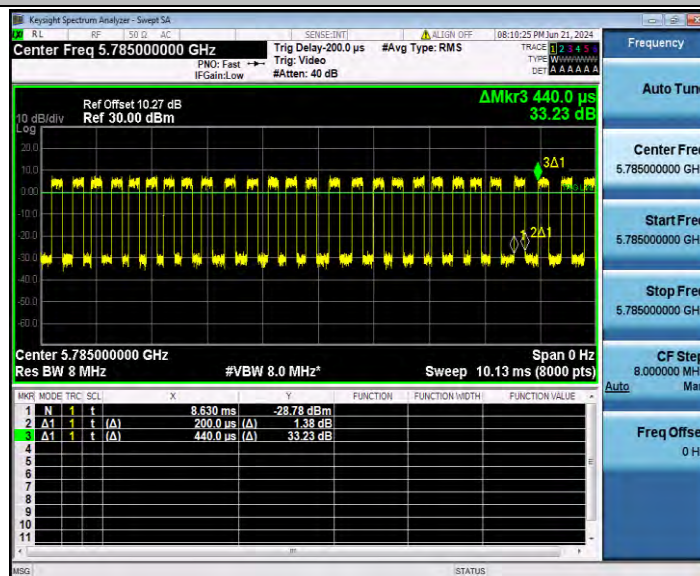




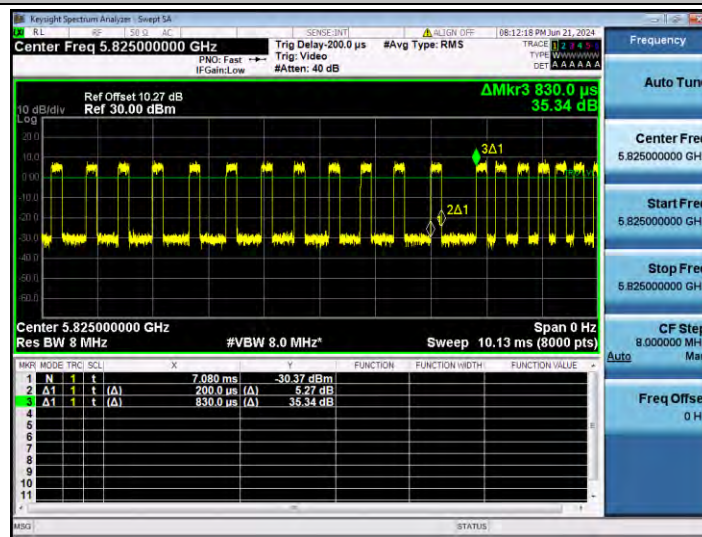
11AC20SISO_Ant1_5745



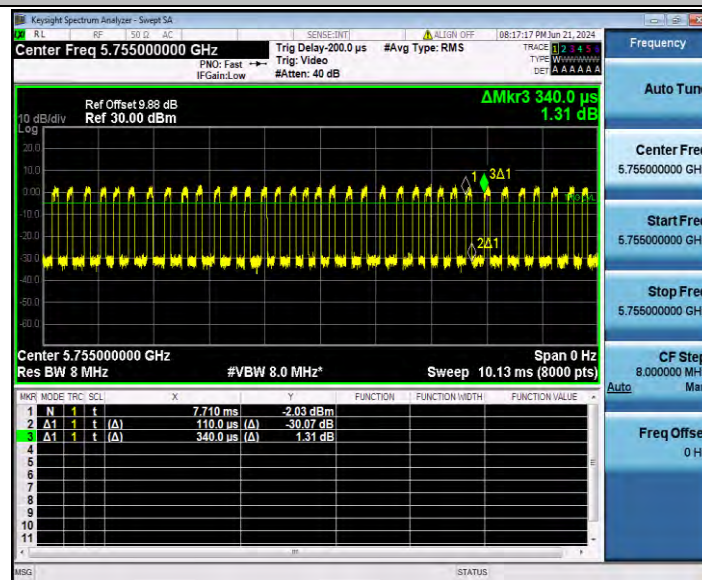
11AC20SISO_Ant1_5785



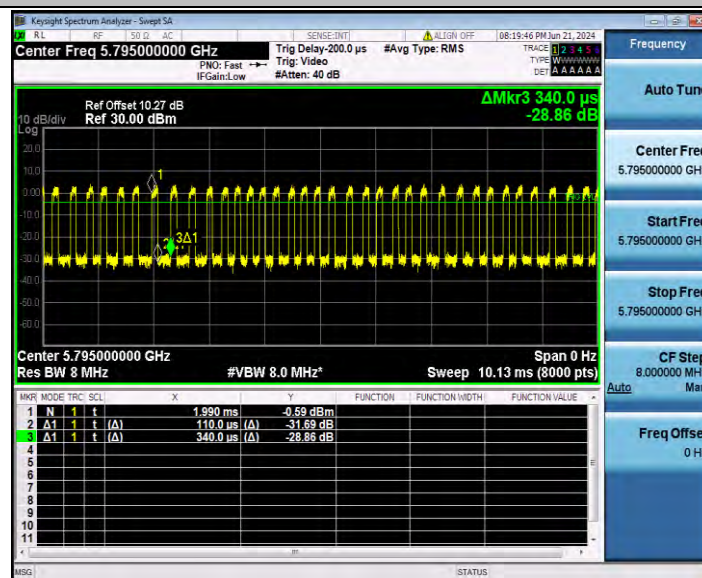
11AC20SISO_Ant1_5825



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	12.85	89.43	0.49	13.34	≤30.00	PASS
		5785	13.89	93.98	0.27	14.16	≤30.00	PASS
		5825	14.23	89.43	0.49	14.72	≤30.00	PASS
11N20SISO	Ant1	5745	4.37	50.00	3.01	7.38	≤30.00	PASS
		5785	6.33	48.89	3.11	9.44	≤30.00	PASS
		5825	5.88	96.30	0.16	6.04	≤30.00	PASS
11N40SISO	Ant1	5755	3.71	36.11	4.42	8.13	≤30.00	PASS
		5795	4.80	37.14	4.30	9.10	≤30.00	PASS
11AC20SISO	Ant1	5745	4.59	45.45	3.42	8.01	≤30.00	PASS
		5785	5.80	45.45	3.42	9.22	≤30.00	PASS
		5825	5.96	24.10	6.18	12.14	≤30.00	PASS
11AC40SISO	Ant1	5755	3.65	32.35	4.90	8.55	≤30.00	PASS
		5795	4.52	32.35	4.90	9.42	≤30.00	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 E.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-1.02	≤30.00	PASS
		5785	-0.42	≤30.00	PASS
		5825	0.64	≤30.00	PASS
11N20SISO	Ant1	5745	-5.59	≤30.00	PASS
		5785	-4.36	≤30.00	PASS
		5825	-0.60	≤30.00	PASS
11N40SISO	Ant1	5755	-7.63	≤30.00	PASS
		5795	-6.73	≤30.00	PASS
11AC20SISO	Ant1	5745	-5.04	≤30.00	PASS
		5785	-4.39	≤30.00	PASS
		5825	-1.16	≤30.00	PASS
11AC40SISO	Ant1	5755	-6.90	≤30.00	PASS
		5795	-6.18	≤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



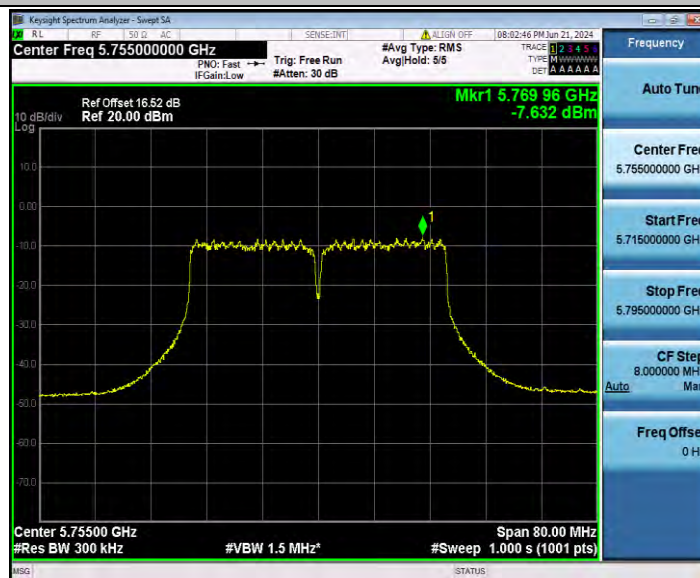
11N20SISO_Ant1_5785



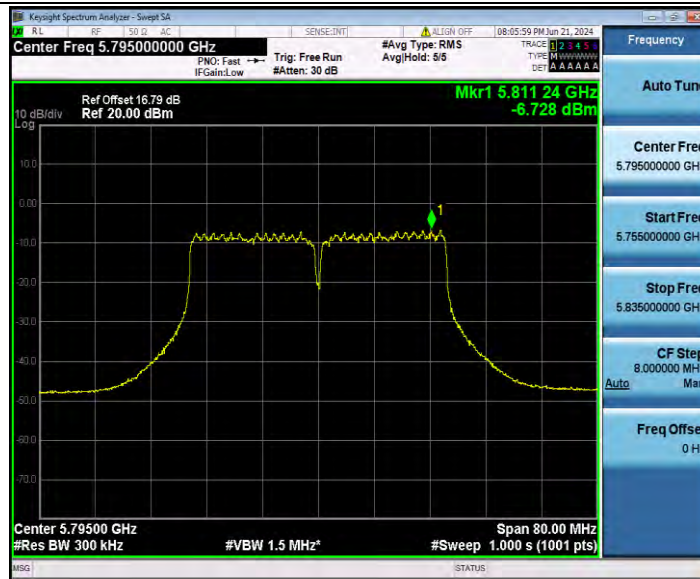
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



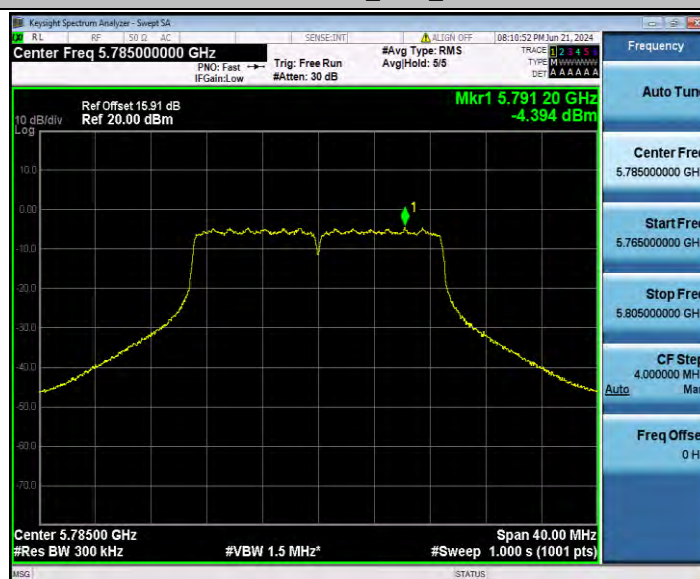
11N40SISO_Ant1_5795



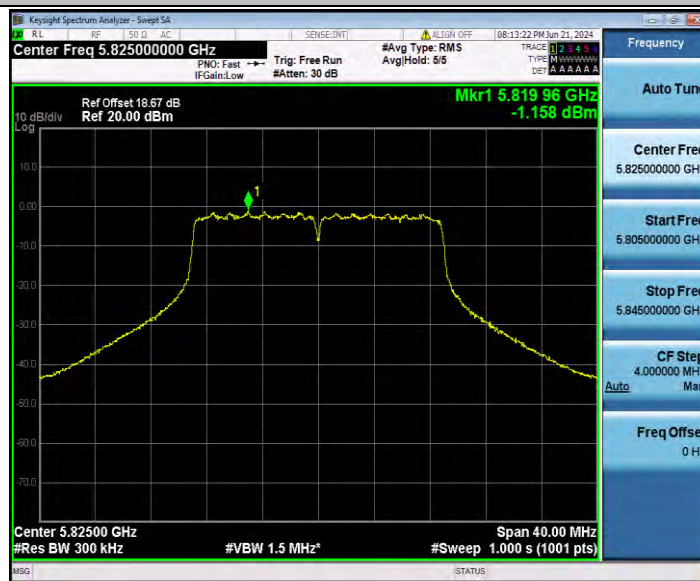
11AC20SISO_Ant1_5745



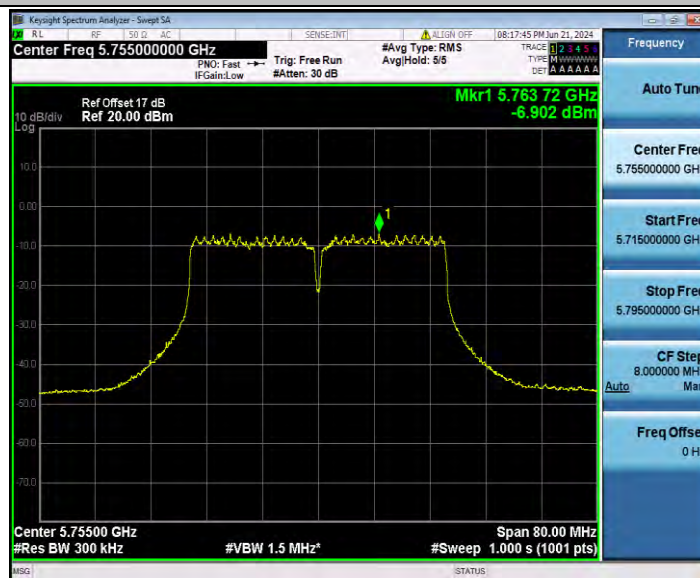
11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

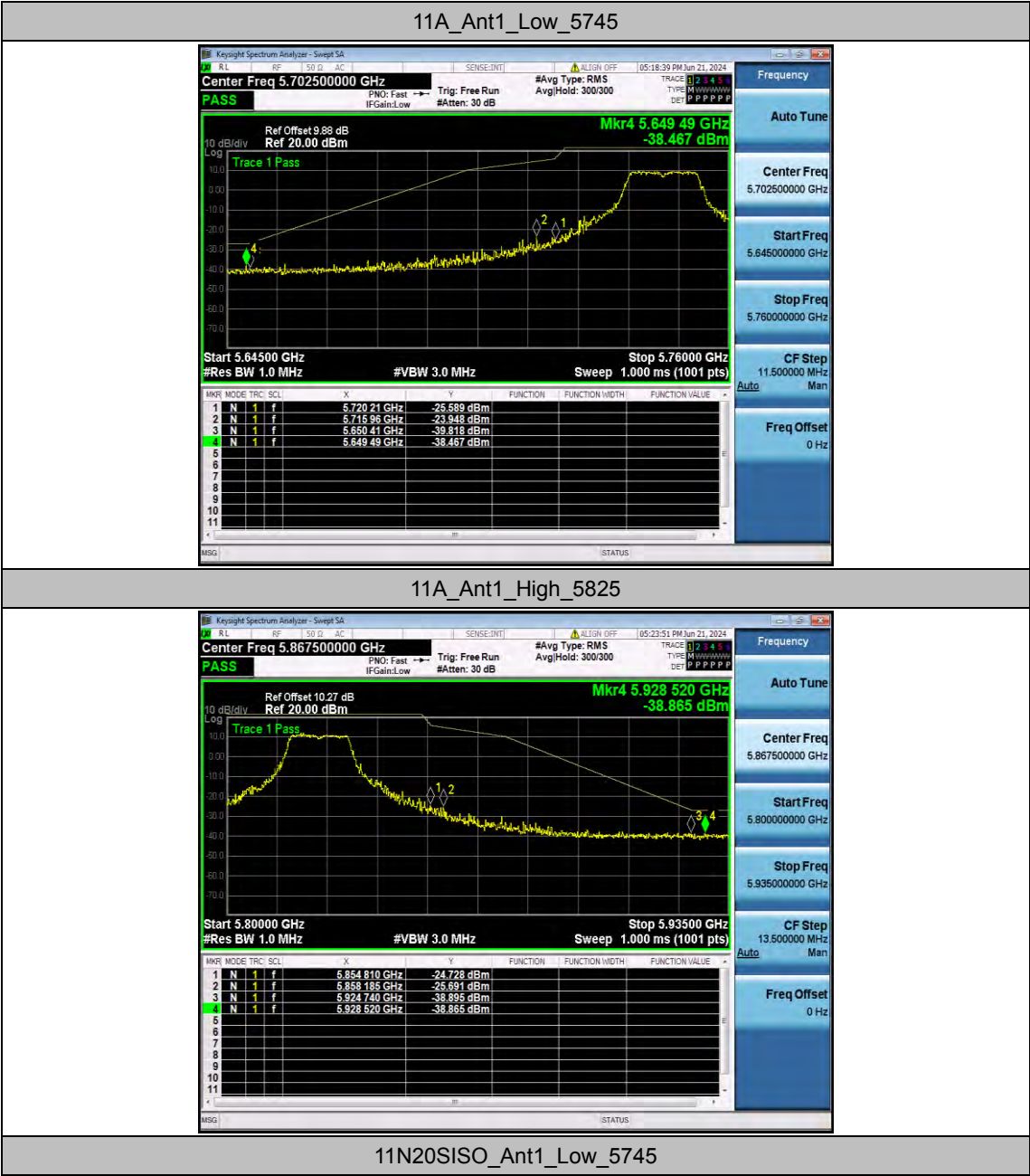
Appendix E.6: Band edge measurements

Test Result B4

TestMode	Antenna	ChName	Freq(MHz)	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-39.82	≤-26.70	PASS
				5700~5720	-23.95	≤14.47	PASS
				5720~5725	-25.59	≤16.08	PASS
				5760~5650	-38.47	≤-27	PASS
		High	5825	5850~5855	-24.73	≤16.03	PASS
				5855~5875	-25.69	≤14.71	PASS
				5875~5925	-38.9	≤-26.81	PASS
				5925~5935	-38.87	≤-27	PASS
11N20SISO	Ant1	Low	5745	5650~5700	-39.33	≤-26.96	PASS
				5700~5720	-39.76	≤10.12	PASS
				5720~5725	-36.17	≤18.96	PASS
				5760~5650	-39.67	≤-27	PASS
		High	5825	5850~5855	-33.83	≤16.03	PASS
				5855~5875	-32.46	≤14.25	PASS
				5875~5925	-38.65	≤-26.31	PASS
				5925~5935	-37.01	≤-27	PASS
11N40SISO	Ant1	Low	5755	5650~5700	-40.75	≤-26.70	PASS
				5700~5720	-36.75	≤10.89	PASS
				5720~5725	-34.36	≤17.28	PASS
				5780~5650	-38.58	≤-27	PASS
		High	5795	5850~5855	-39.01	≤15.66	PASS
				5855~5875	-38.87	≤10.57	PASS
				5875~5925	-39.12	≤-26.95	PASS
				5925~5935	-38.34	≤-27	PASS
11AC20SISO	Ant1	Low	5745	5650~5700	-38.75	≤-25.08	PASS
				5700~5720	-38.9	≤10.54	PASS
				5720~5725	-39.47	≤15.82	PASS
				5760~5650	-39.19	≤-27	PASS
		High	5825	5850~5855	-39.71	≤16.34	PASS
				5855~5875	-38.74	≤10.06	PASS
				5875~5925	-39.36	≤-26.71	PASS
				5925~5935	-38.22	≤-27	PASS
11AC40SISO	Ant1	Low	5755	5650~5700	-39.26	≤-26.90	PASS
				5700~5720	-37.45	≤10.89	PASS
				5720~5725	-35.04	≤15.74	PASS
				5780~5650	-39.86	≤-27	PASS

		High	5795	5850~5855	-39.53	≤ 16.03	PASS
				5855~5875	-38.92	≤ 10.06	PASS
				5875~5925	-38.93	≤ 26.34	PASS
				5925~5935	-38.04	≤ 27	PASS

Test Graphs B4





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



Appendix E.7: Conducted Spurious Emission

Test Result

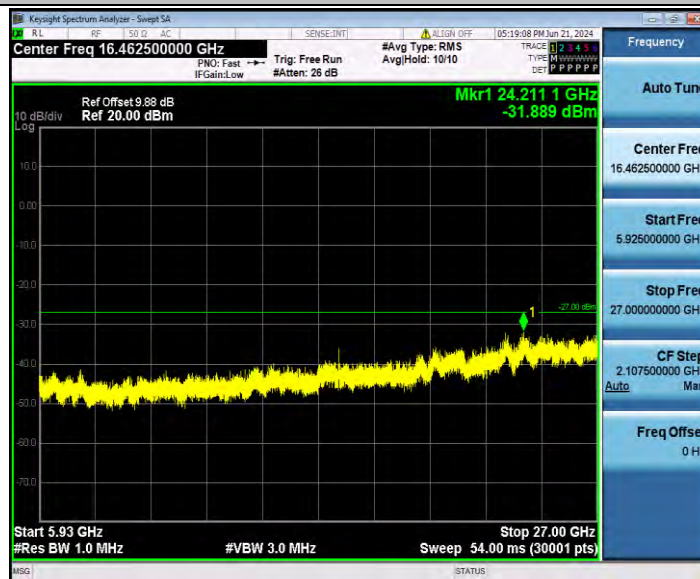
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	30~5650	5473.91	-40.22	≤-27	PASS
			5925~27000	24211.08	-31.89	≤-27	PASS
		5785	30~5650	5418.46	-38.77	≤-27	PASS
			5925~27000	26806.81	-32.05	≤-27	PASS
		5825	30~5650	5512.87	-39.11	≤-27	PASS
			5925~27000	24237.77	-32.11	≤-27	PASS
11N20SISO	Ant1	5745	30~5650	5451.99	-39.37	≤-27	PASS
			5925~27000	24253.23	-31.54	≤-27	PASS
		5785	30~5650	5448.24	-39.68	≤-27	PASS
			5925~27000	24939.57	-31.48	≤-27	PASS
		5825	30~5650	3120.81	-39.42	≤-27	PASS
			5925~27000	24229.34	-31.61	≤-27	PASS
11N40SISO	Ant1	5755	30~5650	5406.84	-39.6	≤-27	PASS
			5925~27000	24247.61	-32.09	≤-27	PASS
		5795	30~5650	5460.61	-40.14	≤-27	PASS
			5925~27000	24253.23	-31.33	≤-27	PASS
11AC20SISO	Ant1	5745	30~5650	5549.59	-40.59	≤-27	PASS
			5925~27000	26004.56	-31.87	≤-27	PASS
		5785	30~5650	5484.77	-40.18	≤-27	PASS
			5925~27000	25492.44	-31.8	≤-27	PASS
		5825	30~5650	5634.26	-38.49	≤-27	PASS
			5925~27000	24204.05	-31.5	≤-27	PASS
11AC40SISO	Ant1	5755	30~5650	5502.38	-40.2	≤-27	PASS
			5925~27000	23597.09	-32.04	≤-27	PASS
		5795	30~5650	5467.91	-39.73	≤-27	PASS
			5925~27000	24187.89	-30.56	≤-27	PASS

Test Graphs

11A_Ant1_5745_30~5650



11A_Ant1_5745_5925~27000



11A_Ant1_5785_30~5650



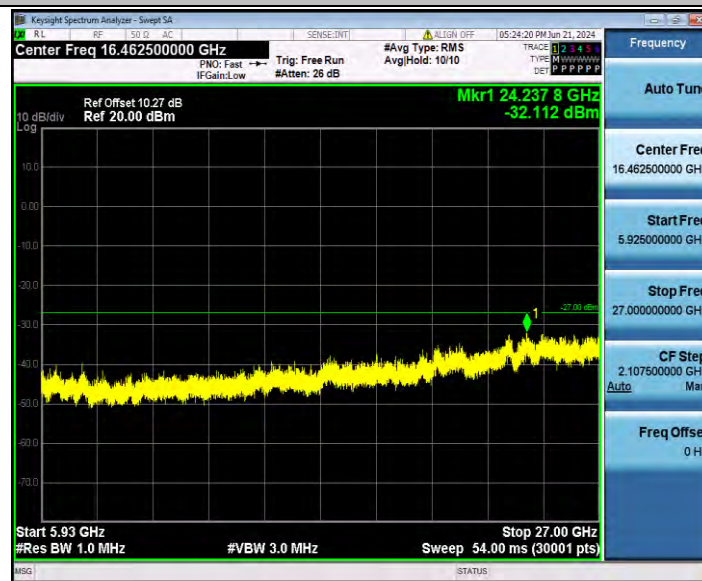
11A_Ant1_5785_5925~27000



11A_Ant1_5825_30~5650



11A_Ant1_5825_5925~27000



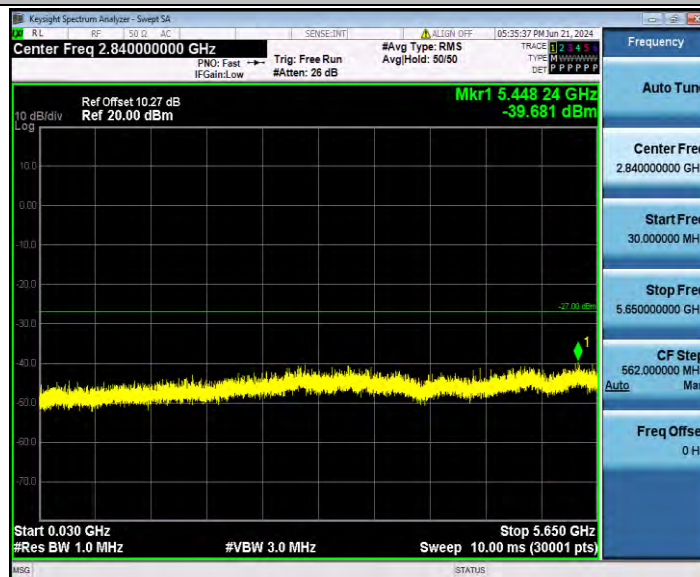
11N20SISO_Ant1_5745_30~5650



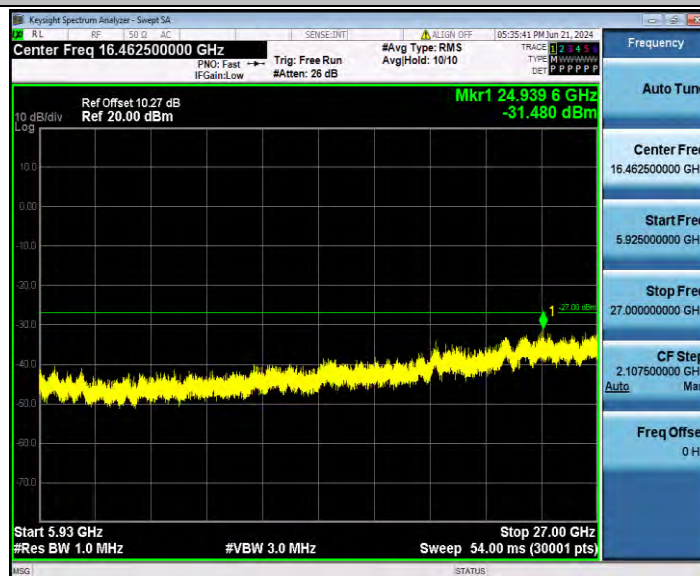
11N20SISO_Ant1_5745_5925~27000



11N20SISO_Ant1_5785_30~5650



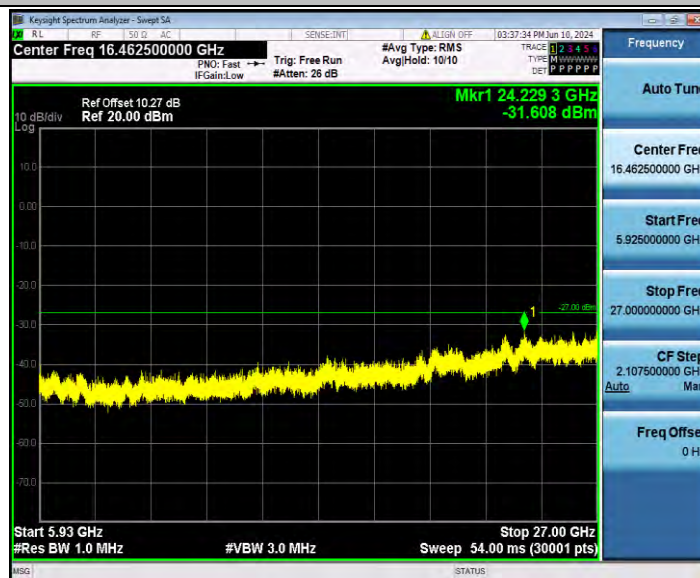
11N20SISO_Ant1_5785_5925~27000



11N20SISO_Ant1_5825_30~5650



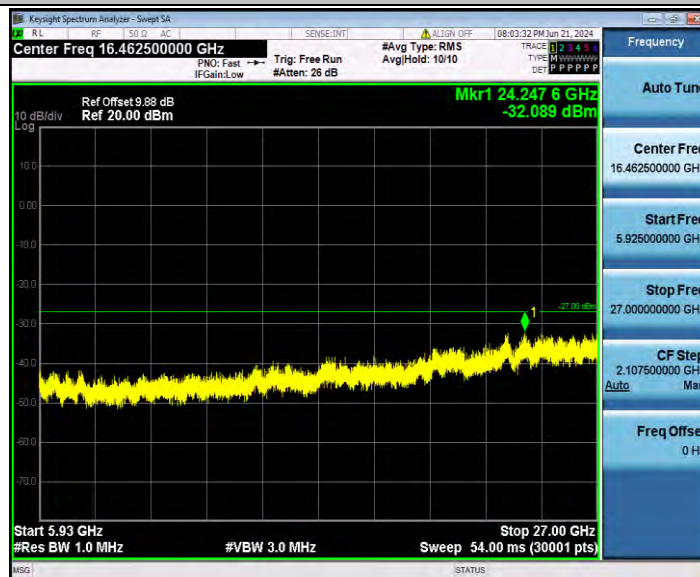
11N20SISO_Ant1_5825_5925~27000



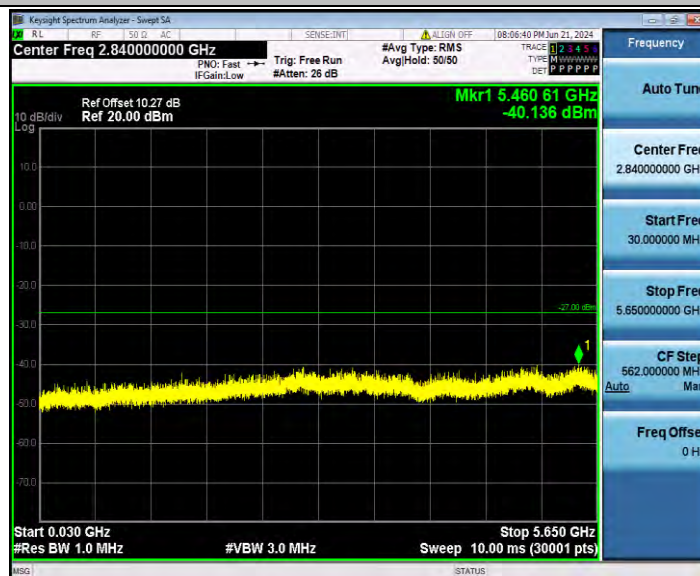
11N40SISO_Ant1_5755_30~5650



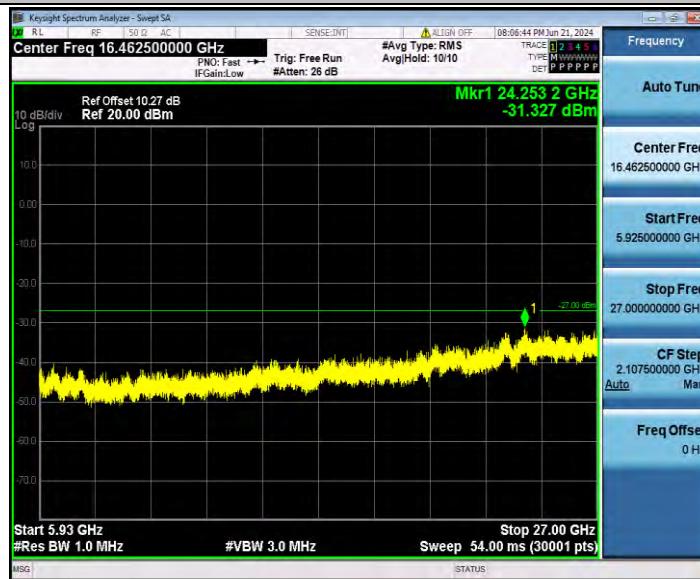
11N40SISO_Ant1_5755_5925~27000



11N40SISO_Ant1_5795_30~5650



11N40SISO_Ant1_5795_5925~27000



11AC20SISO_Ant1_5745_30~5650



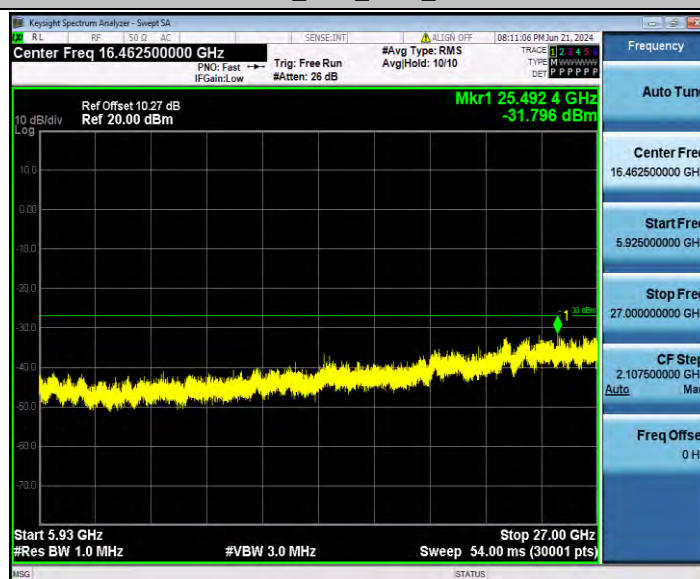
11AC20SISO_Ant1_5745_5925~27000



11AC20SISO_Ant1_5785_30~5650



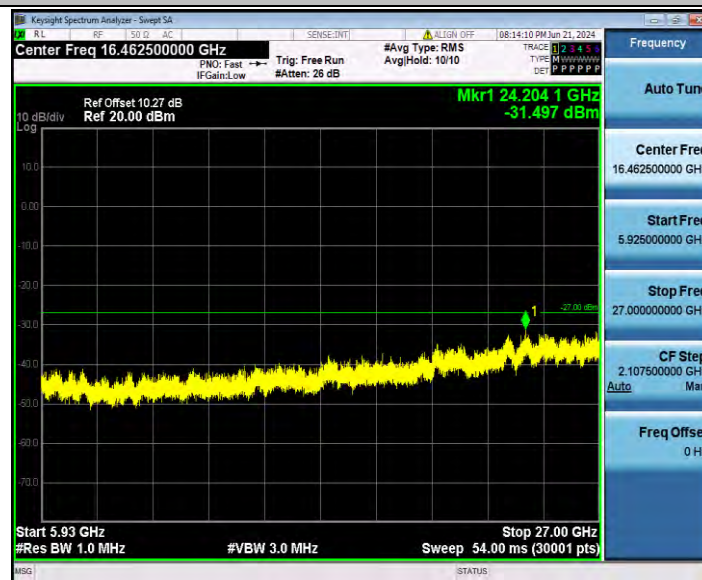
11AC20SISO_Ant1_5785_5925~27000



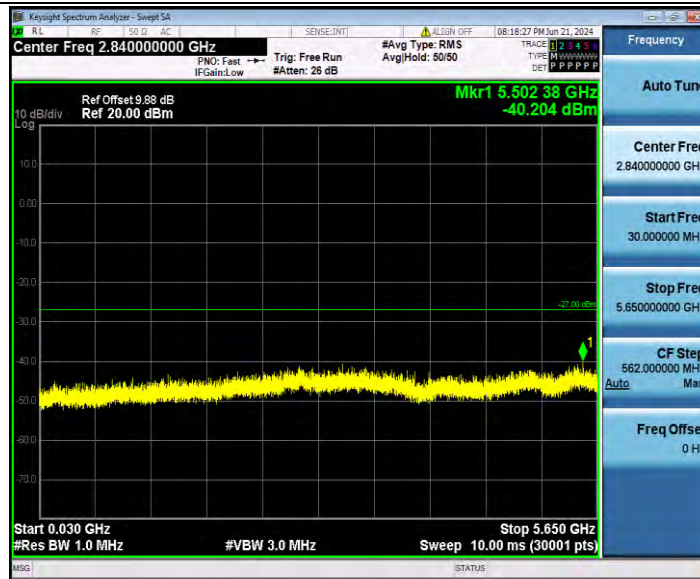
11AC20SISO_Ant1_5825_30~5650



11AC20SISO_Ant1_5825_5925~27000



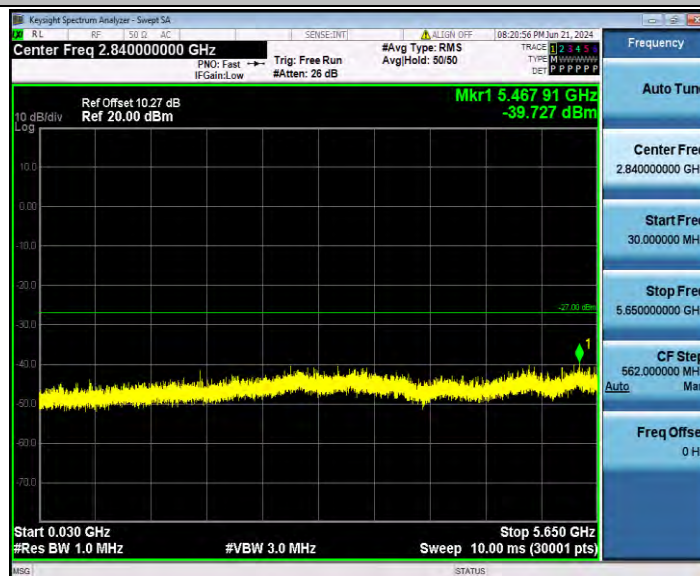
11AC40SISO_Ant1_5755_30~5650

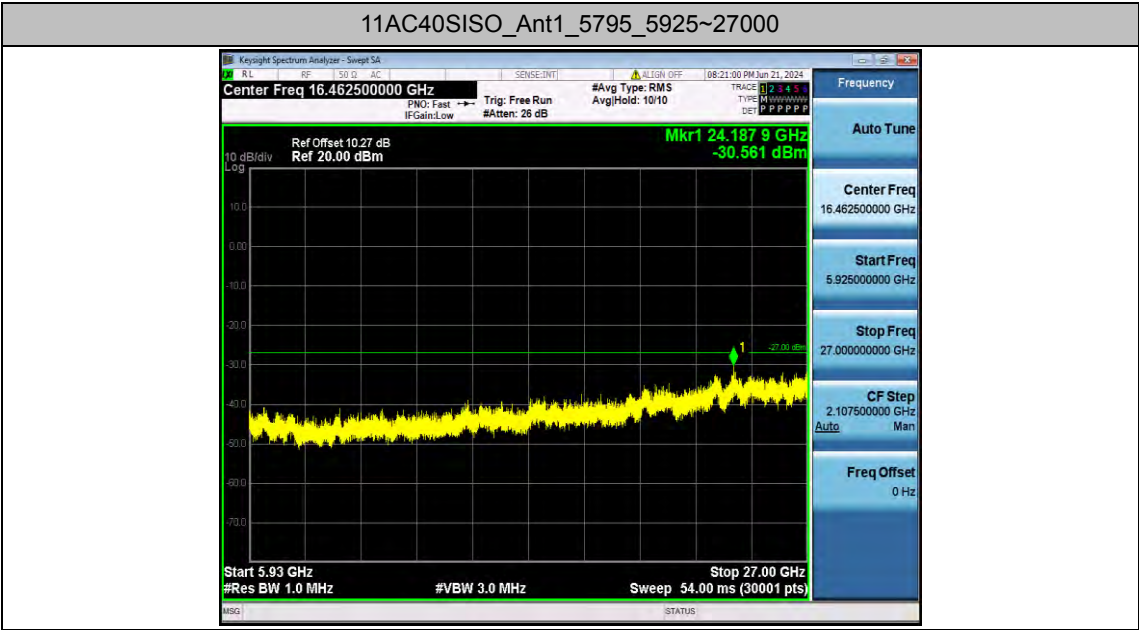


11AC40SISO_Ant1_5755_5925~27000



11AC40SISO_Ant1_5795_30~5650





Appendix E.8: Emissions in Restricted Bands

Test Result

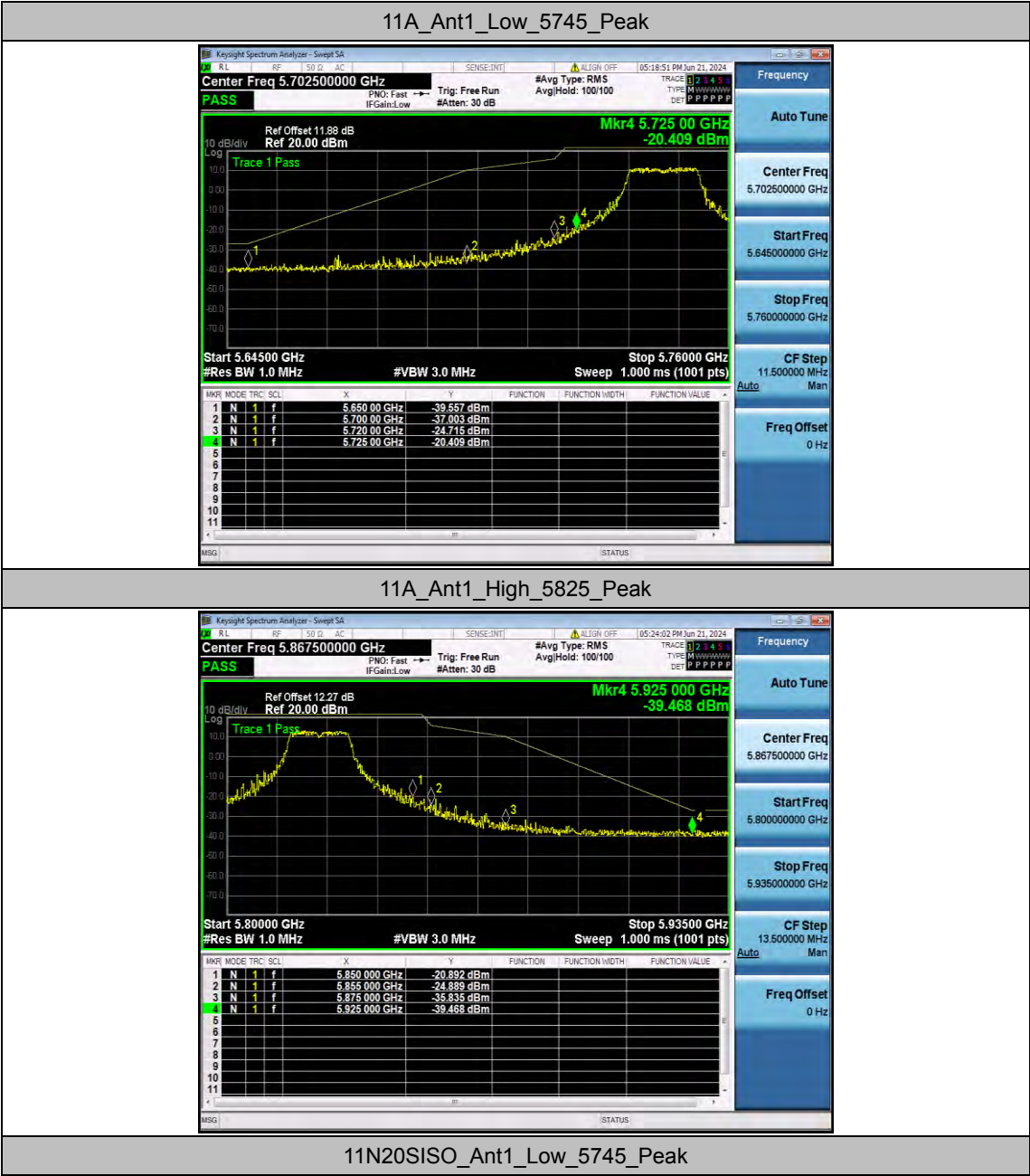
Test Result estMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
11A	Ant1	Low	5745	Peak	5650.000	-39.55 7	≤-27.00	---	---	PASS
				Peak	5700.000	-37	≤10.00	---	---	PASS
				Peak	5720.000	-24.72	≤15.60	---	---	PASS
				Peak	5725.000	-20.41	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-20.89 2	≤27.00	---	---	PASS
				Peak	5855.000	-24.89	≤15.60	---	---	PASS
				Peak	5875.000	-35.84	≤10.00	---	---	PASS
				Peak	5925.000	-39.47	≤-27.00	---	---	PASS
11N20SIS O	Ant1	Low	5745	Peak	5650.000	-39.83 5	≤-27.00	---	---	PASS
				Peak	5700.000	-41.13	≤10.00	---	---	PASS
				Peak	5720.000	-38.84	≤15.60	---	---	PASS
				Peak	5725.000	-32.03	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-30.48 3	≤27.00	---	---	PASS
				Peak	5855.000	-34.33	≤15.60	---	---	PASS
				Peak	5875.000	-37.55	≤10.00	---	---	PASS
				Peak	5925.000	-38.75	≤-27.00	---	---	PASS
11N40SIS O	Ant1	Low	5755	Peak	5650.000	-39.88 1	≤-27.00	---	---	PASS
				Peak	5700.000	-39.76	≤10.00	---	---	PASS
				Peak	5720.000	-37.84	≤15.60	---	---	PASS
				Peak	5725.000	-33.75	≤27.00	---	---	PASS
		High	5795	Peak	5850.000	-38.67 4	≤27.00	---	---	PASS
				Peak	5855.000	-37.94	≤15.60	---	---	PASS
				Peak	5875.000	-38.01	≤10.00	---	---	PASS
				Peak	5925.000	-39.27	≤-27.00	---	---	PASS
11AC20SI SO	Ant1	Low	5745	Peak	5650.000	-40.28 1	≤-27.00	---	---	PASS
				Peak	5700.000	-38.62	≤10.00	---	---	PASS
				Peak	5720.000	-39.47	≤15.60	---	---	PASS
				Peak	5725.000	-29.68	≤27.00	---	---	PASS
		High	5825	Peak	5850.000	-37.37	≤27.00	---	---	PASS

11AC40SI SO	Ant1	Low	5755	Peak	5855.000	-37.4	≤ 15.60	---	---	PASS
				Peak	5875.000	-37.73	≤ 10.00	---	---	PASS
				Peak	5925.000	-39.6	≤ -27.00	- - -	- - -	PASS
				Peak	5650.000	-38.97	≤ -27.00	---	---	PASS
		High	5795	Peak	5700.000	-38.52	≤ 10.00	---	---	PASS
				Peak	5720.000	-37.68	≤ 15.60	---	---	PASS
				Peak	5725.000	-31.72	≤ 27.00	- - -	- - -	PASS
				Peak	5850.000	-38.07 5	≤ 27.00	---	---	PASS
				Peak	5855.000	-37.95	≤ 15.60	---	---	PASS
				Peak	5875.000	-38.79	≤ 10.00	---	---	PASS
				Peak	5925.000	-38.63	≤ -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



11A_Ant1_High_5825_Peak

11N20SISO_Ant1_Low_5745_Peak



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

