

Appendix: 5G WIFI

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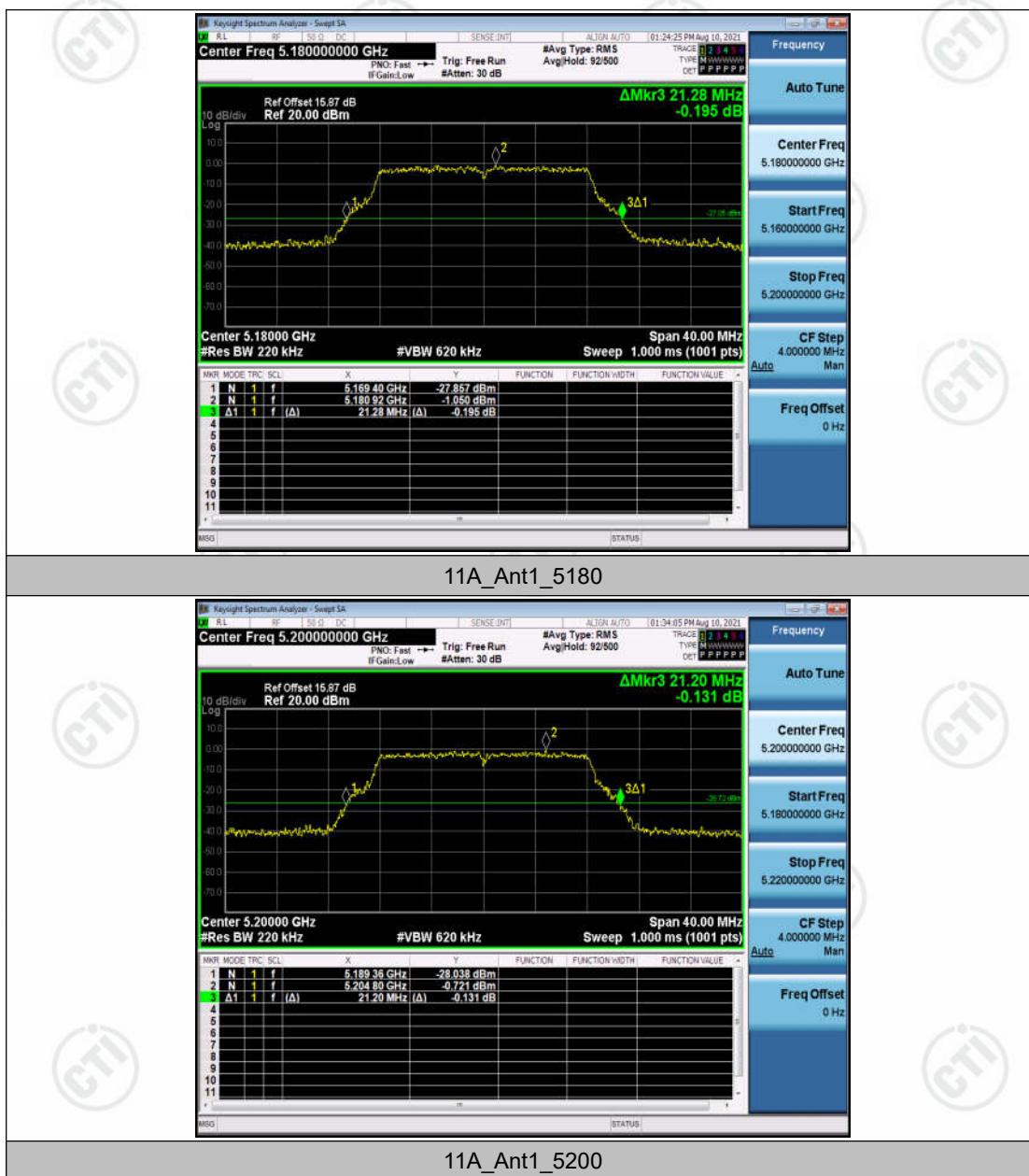
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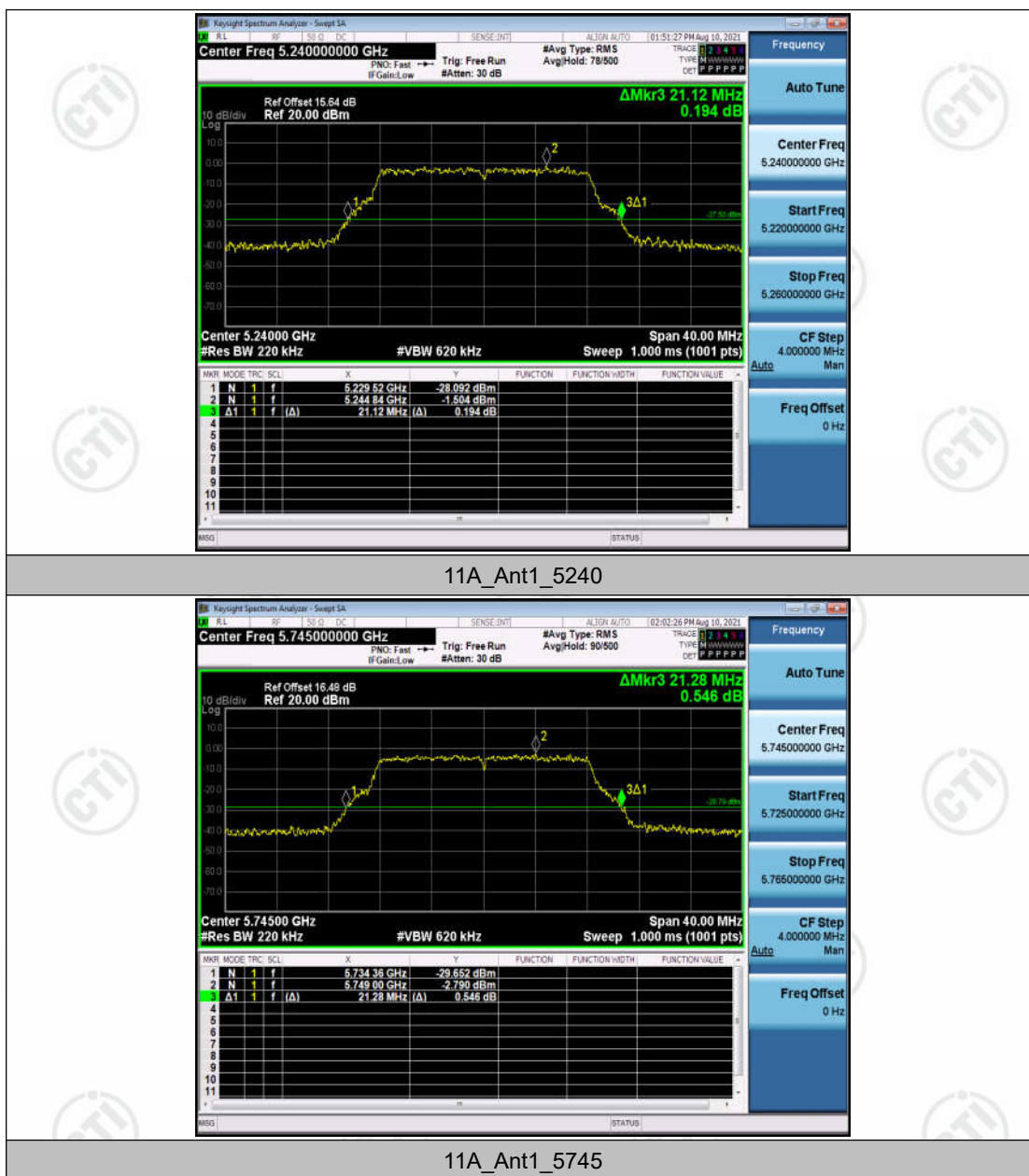
Appendix A1: Emission Bandwidth

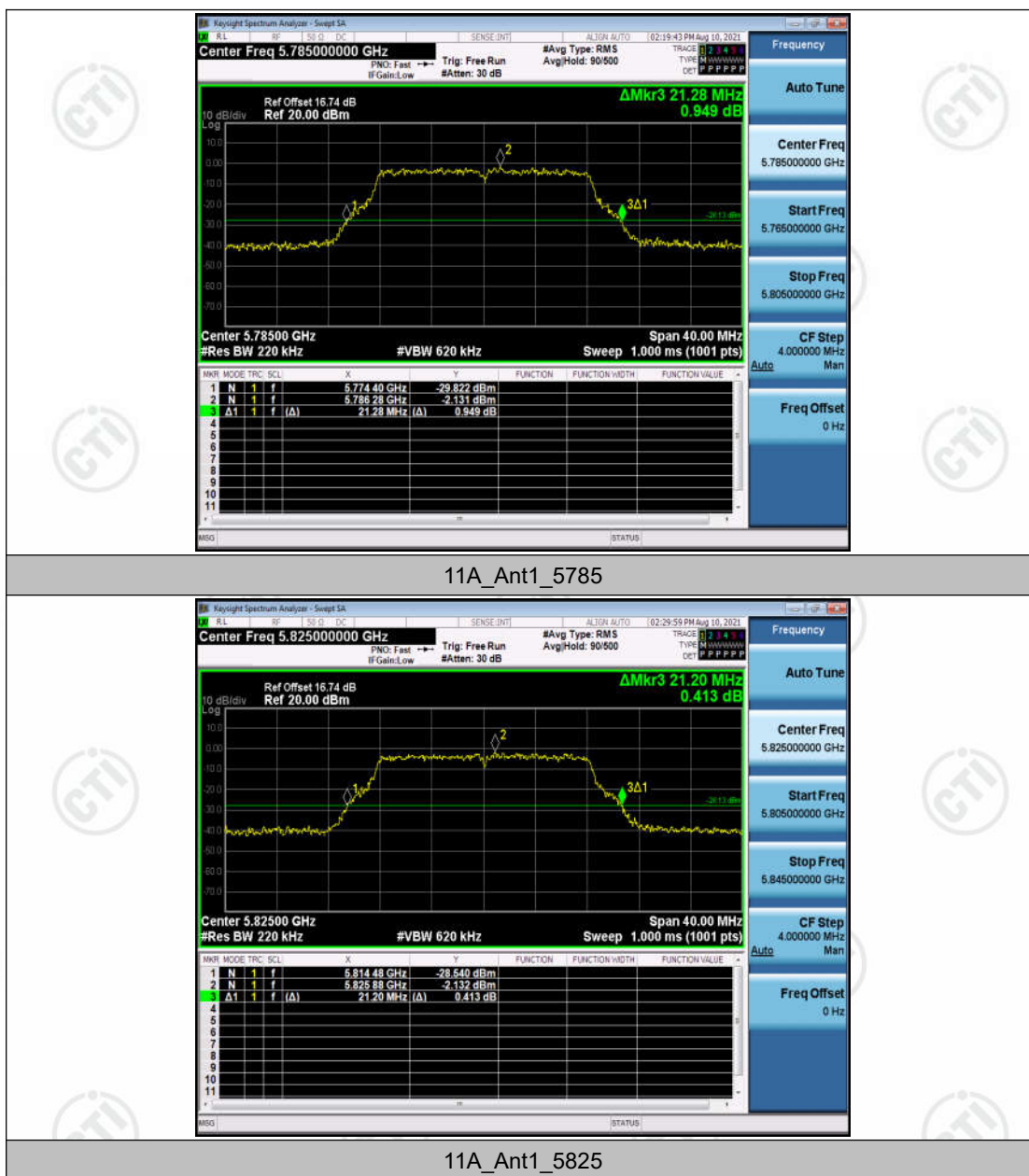
Test Result

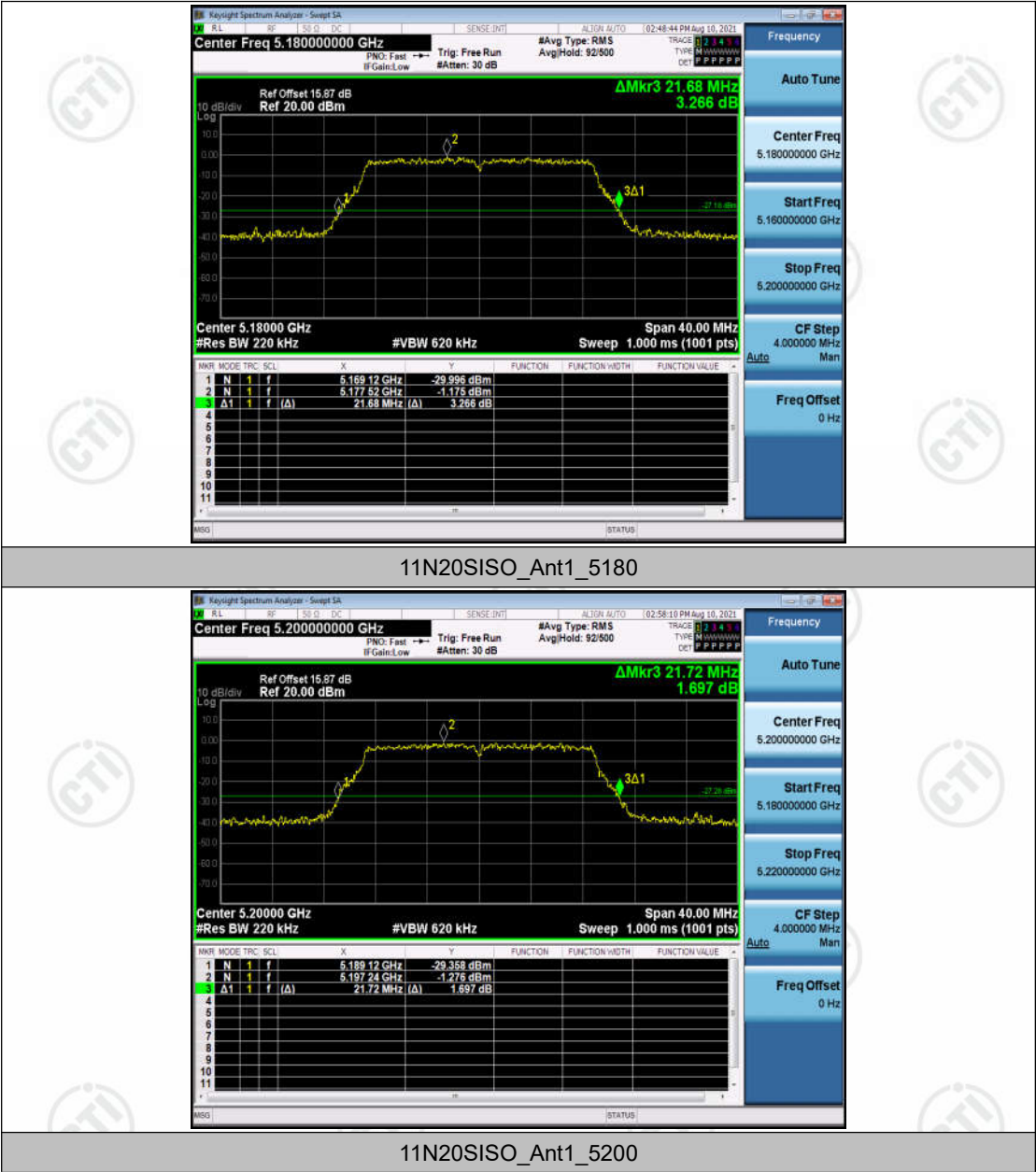
Test Mode	Antenna	Channel	26db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	21.280	5169.400	5190.680	---	PASS
		5200	21.200	5189.360	5210.560	---	PASS
		5240	21.120	5229.520	5250.640	---	PASS
		5745	21.280	5734.360	5755.640	---	PASS
		5785	21.280	5774.400	5795.680	---	PASS
		5825	21.200	5814.480	5835.680	---	PASS
11N20SISO	Ant1	5180	21.680	5169.120	5190.800	---	PASS
		5200	21.720	5189.120	5210.840	---	PASS
		5240	21.640	5229.280	5250.920	---	PASS
		5745	21.520	5734.360	5755.880	---	PASS
		5785	21.800	5774.200	5796.000	---	PASS
		5825	21.640	5814.240	5835.880	---	PASS

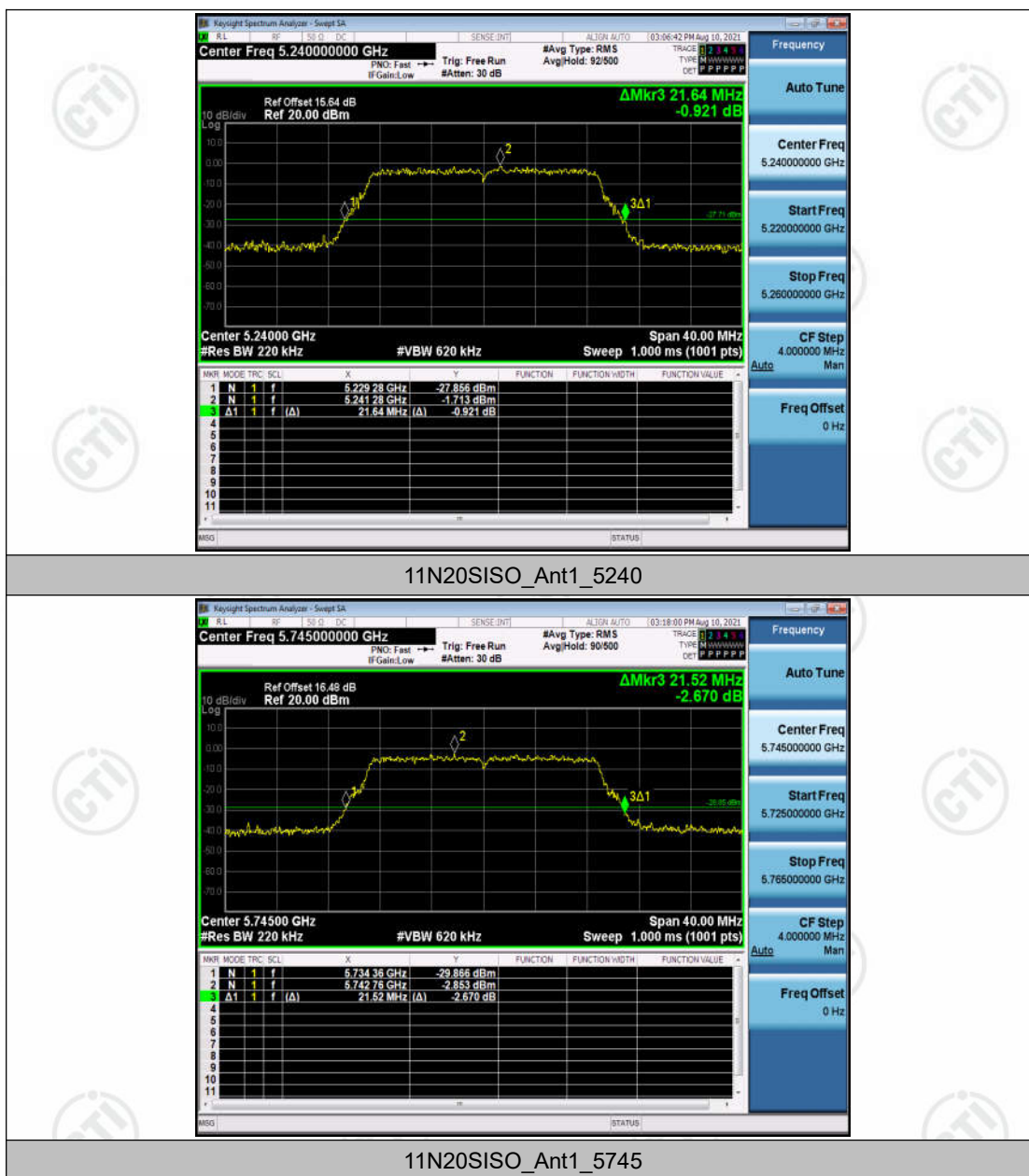
Test Graphs

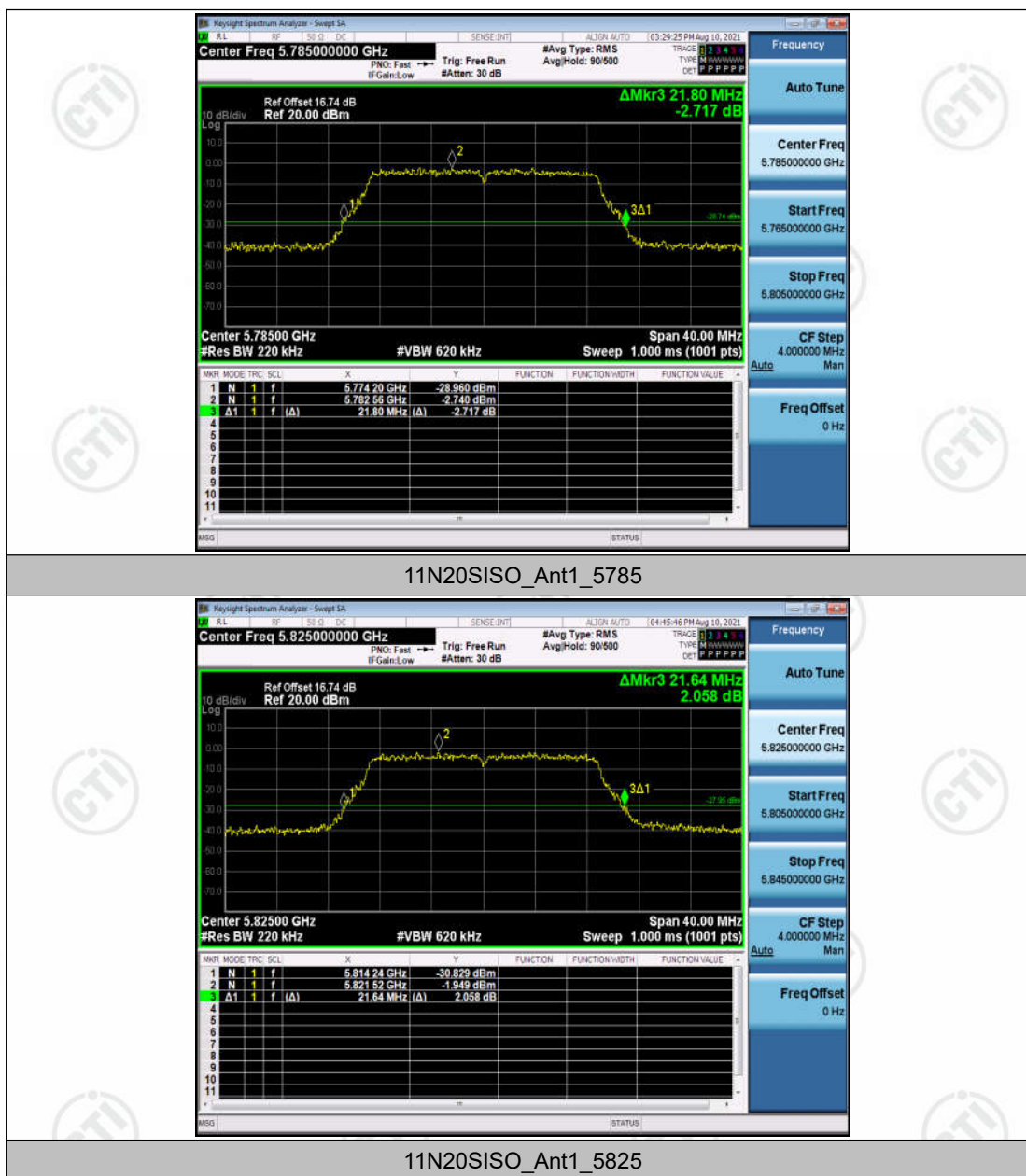










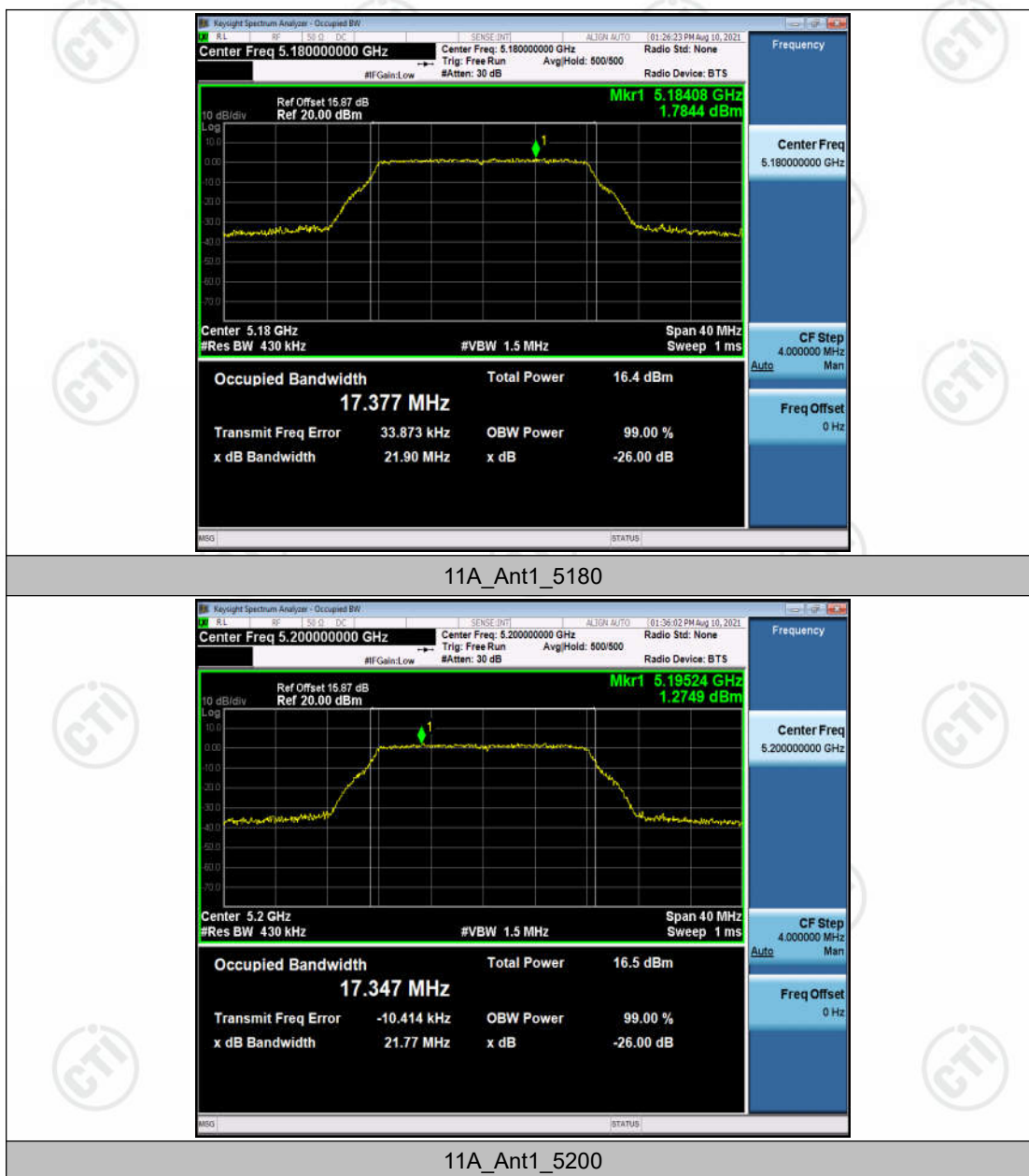


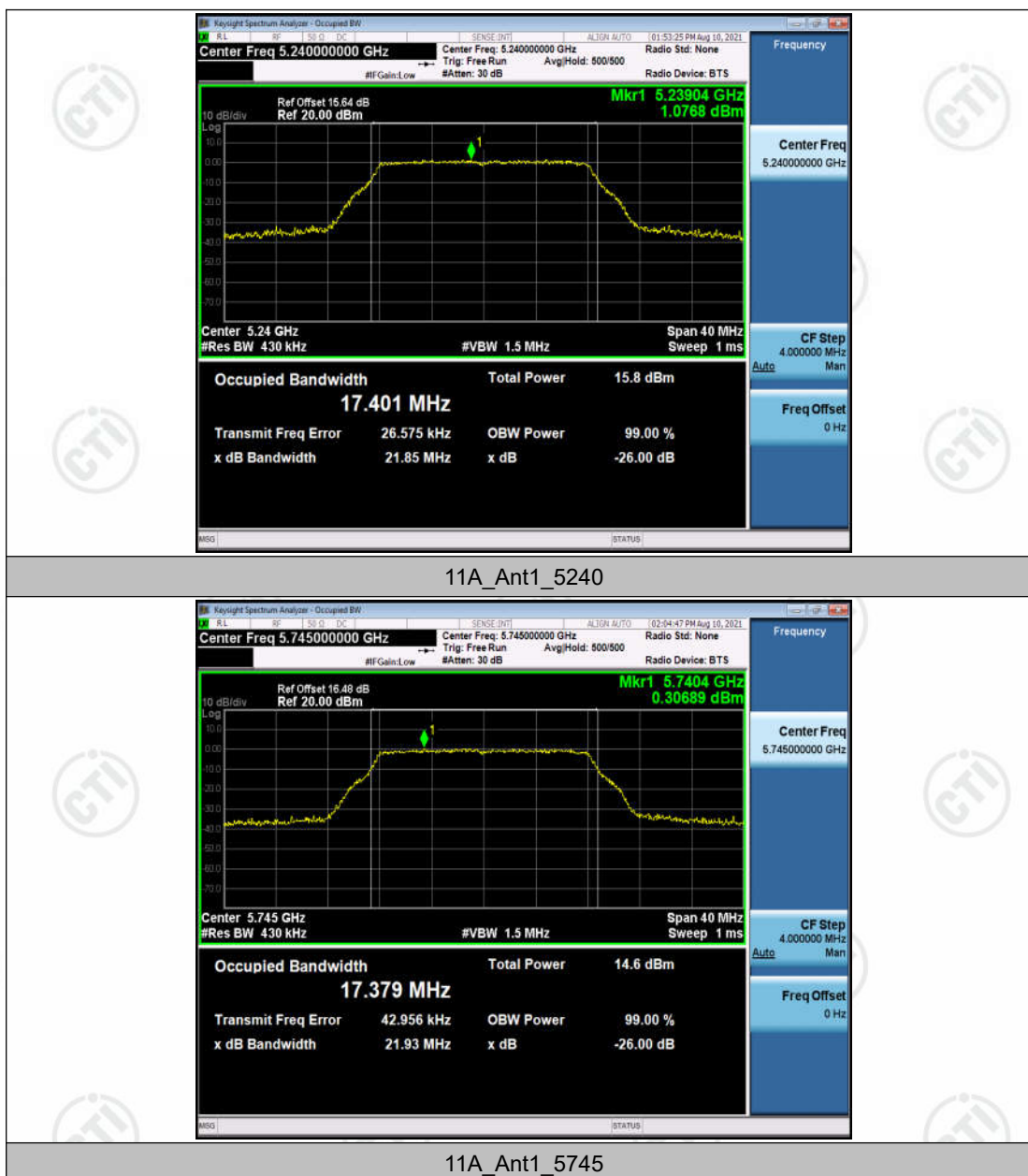
Appendix A2: Occupied channel bandwidth

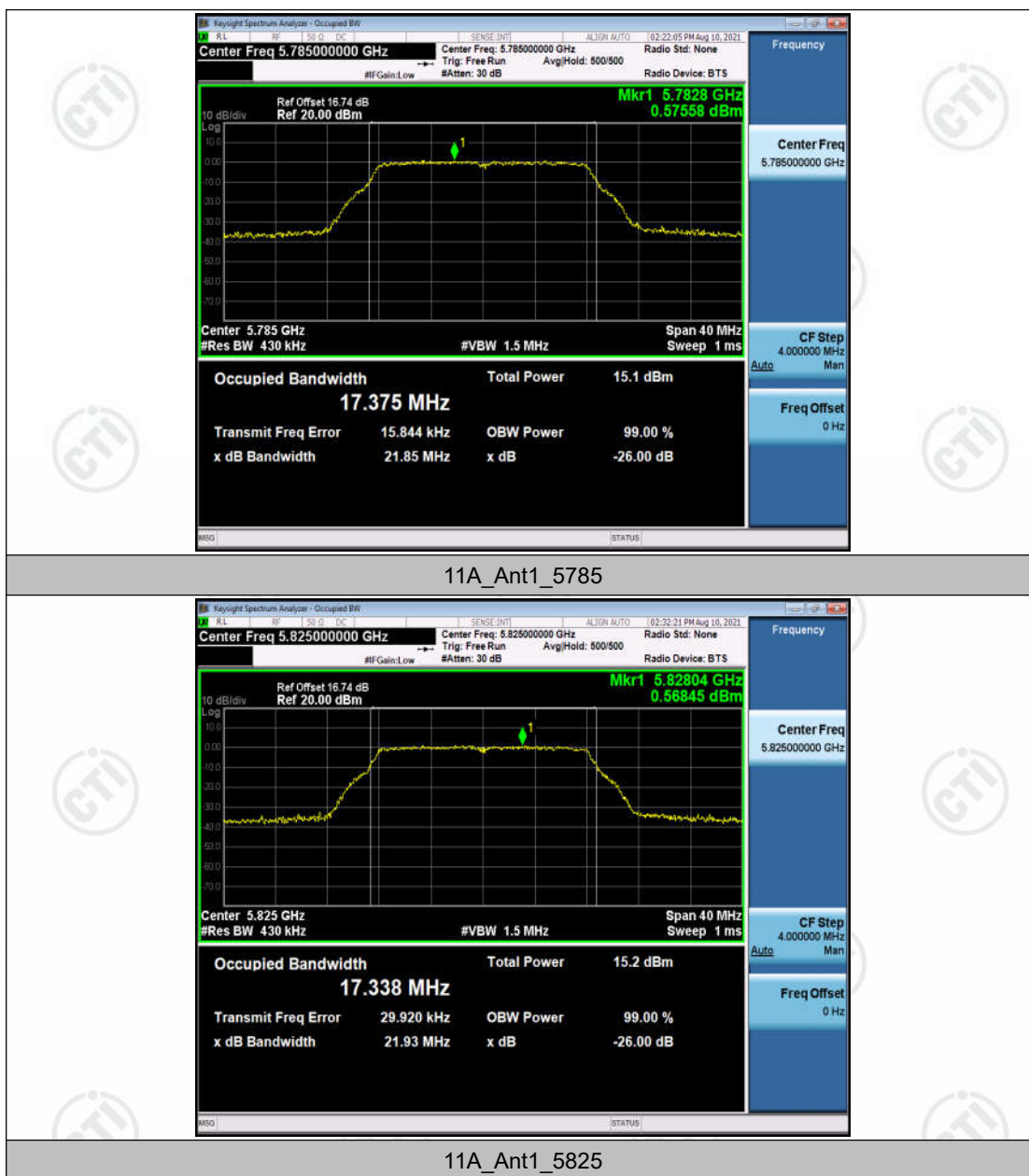
Test Result

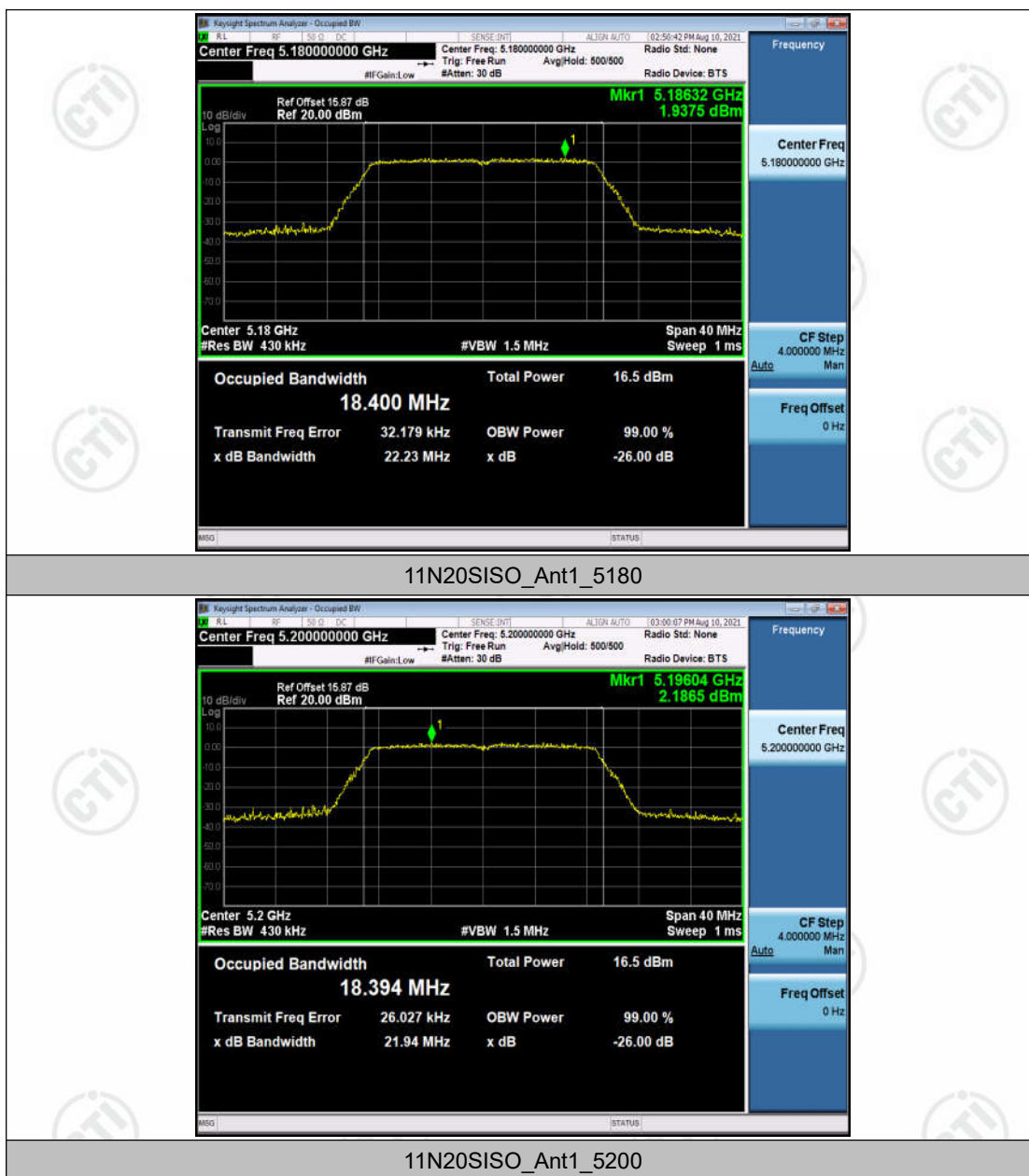
Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.377	5171.345	5188.722	---	PASS
		5200	17.347	5191.316	5208.663	---	PASS
		5240	17.401	5231.326	5248.727	---	PASS
		5745	17.379	5736.353	5753.732	---	PASS
		5785	17.375	5776.328	5793.703	---	PASS
		5825	17.338	5816.361	5833.699	---	PASS
11N20SISO	Ant1	5180	18.400	5170.832	5189.232	---	PASS
		5200	18.394	5190.829	5209.223	---	PASS
		5240	18.400	5230.839	5249.239	---	PASS
		5745	18.426	5735.818	5754.244	---	PASS
		5785	18.399	5775.824	5794.223	---	PASS
		5825	18.454	5815.780	5834.234	---	PASS

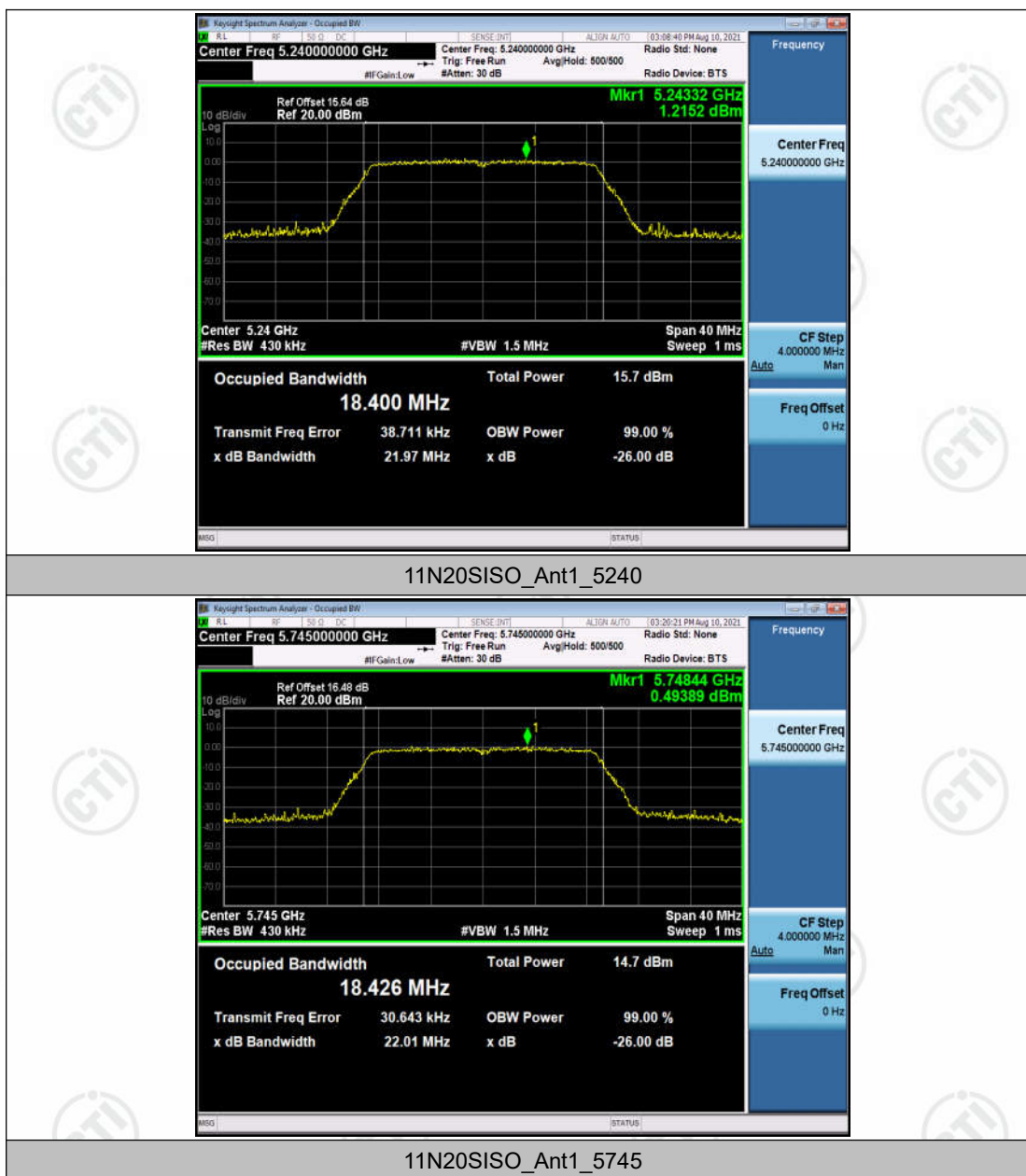
Test Graphs

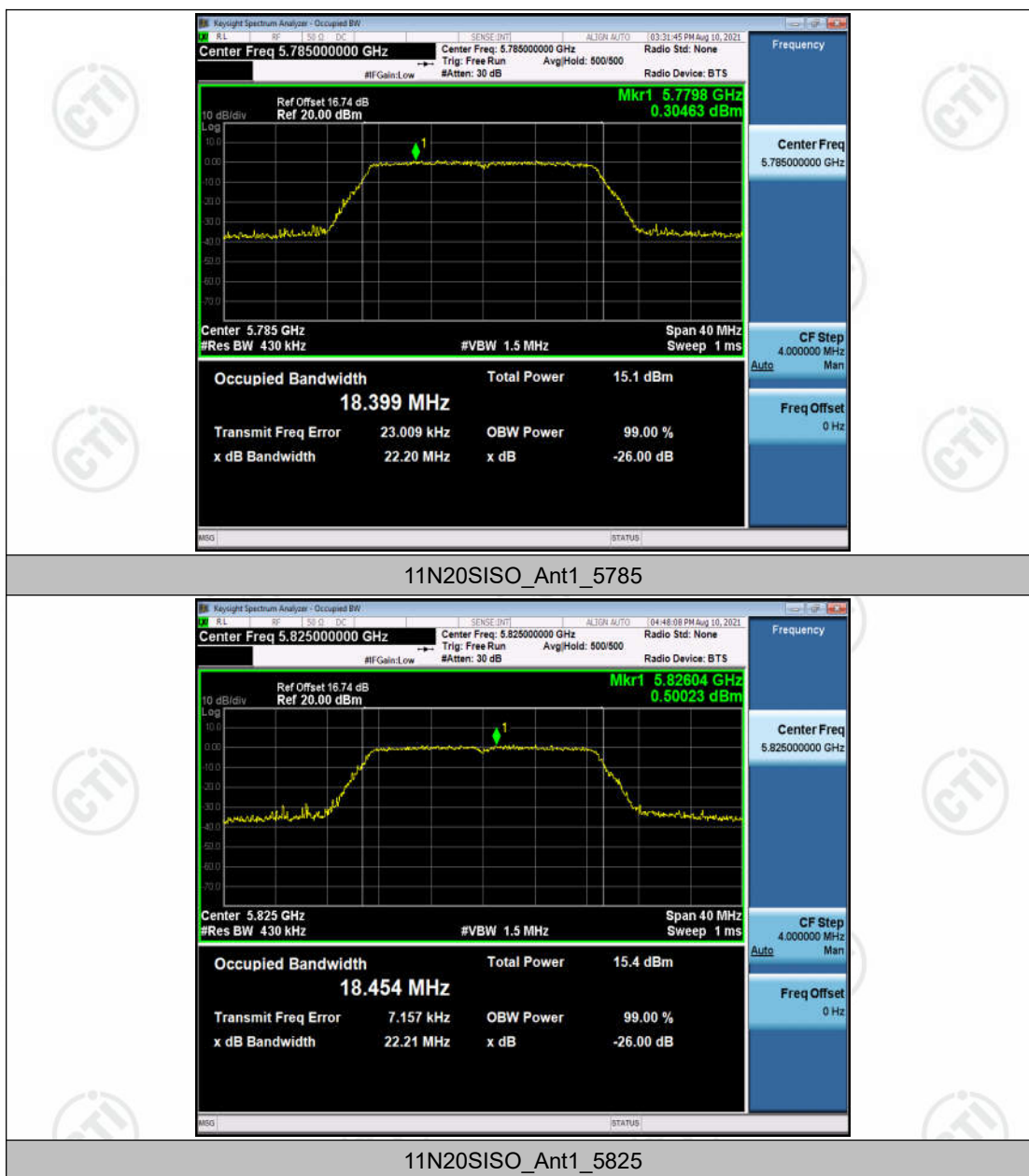








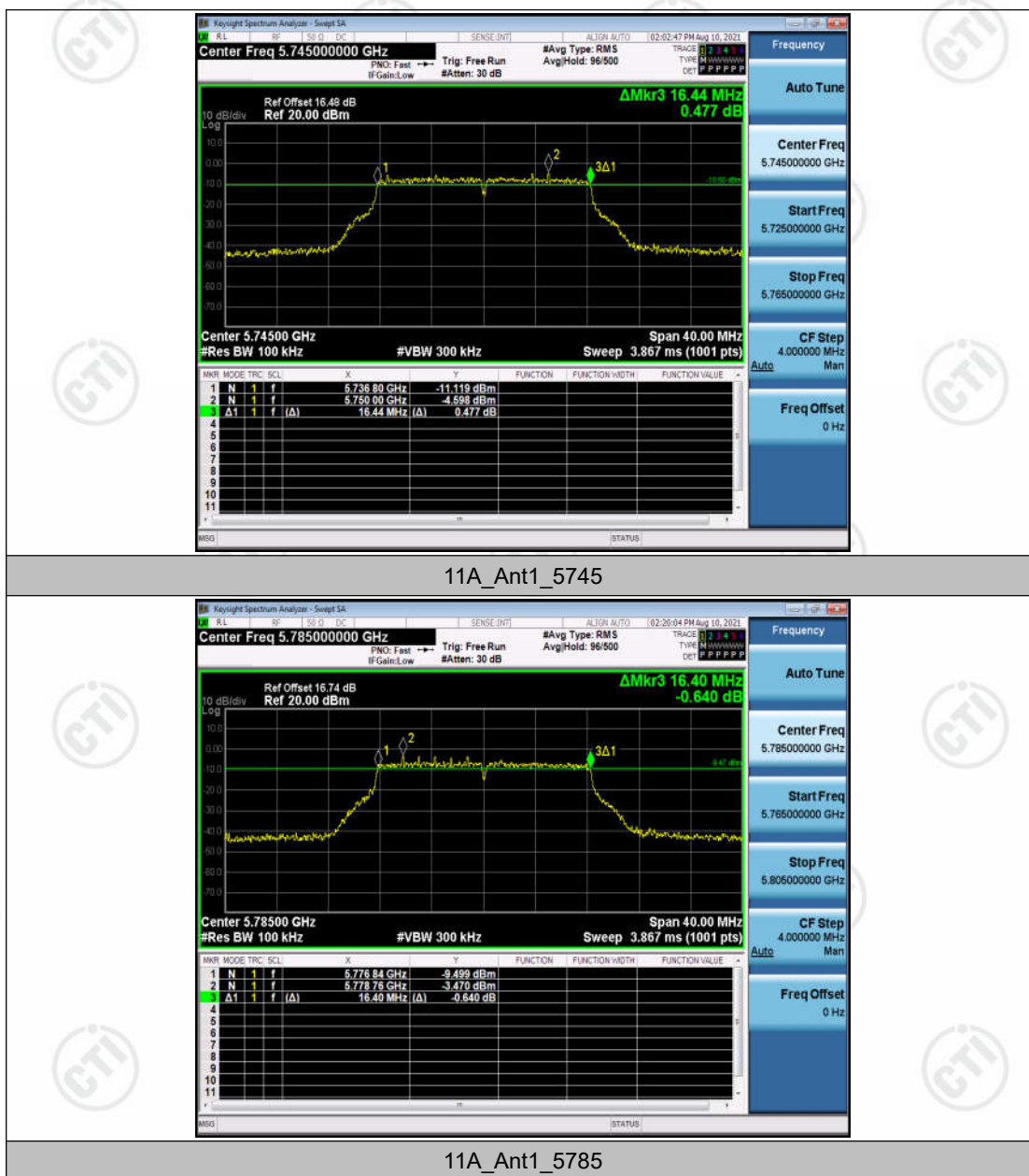


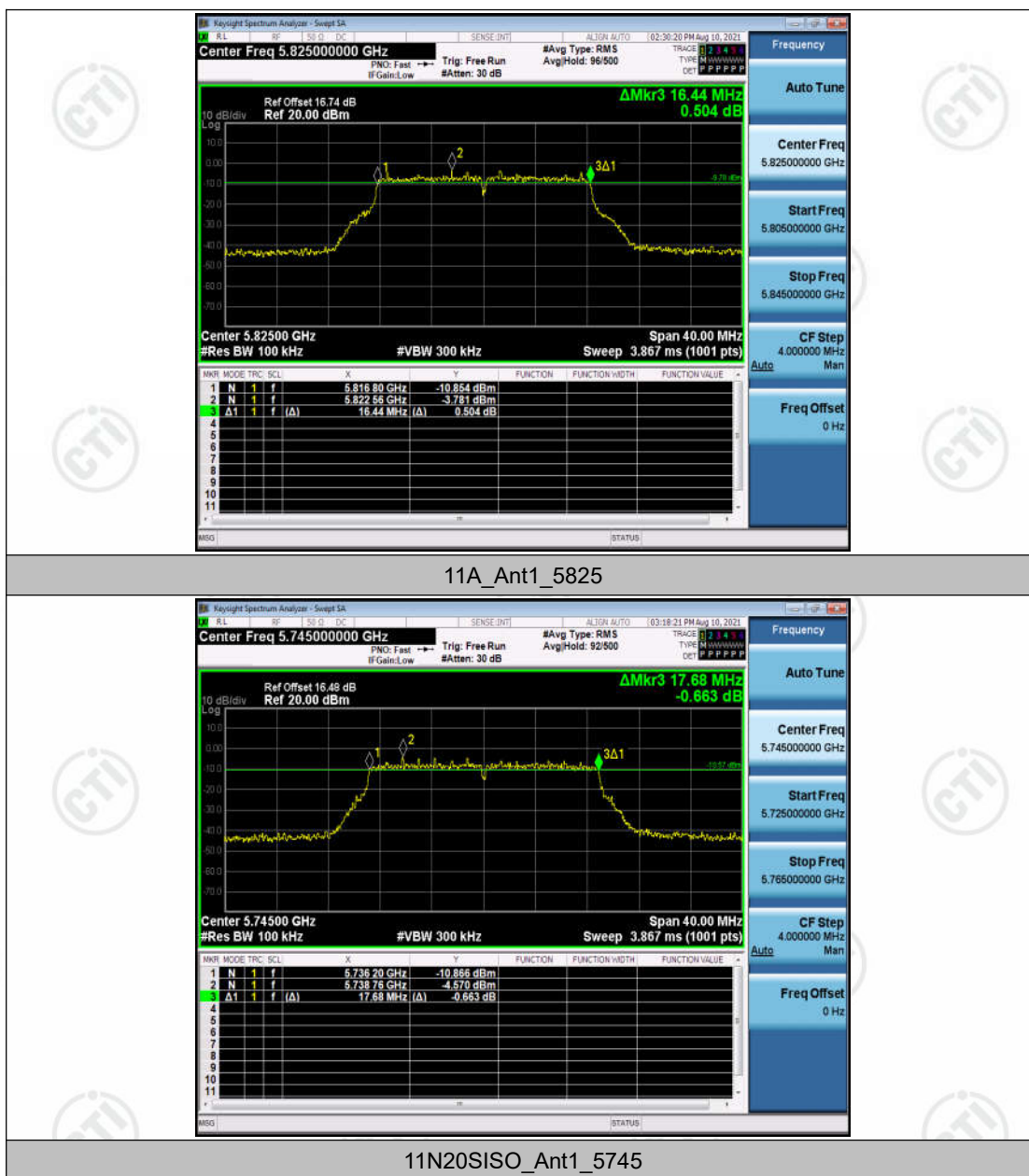


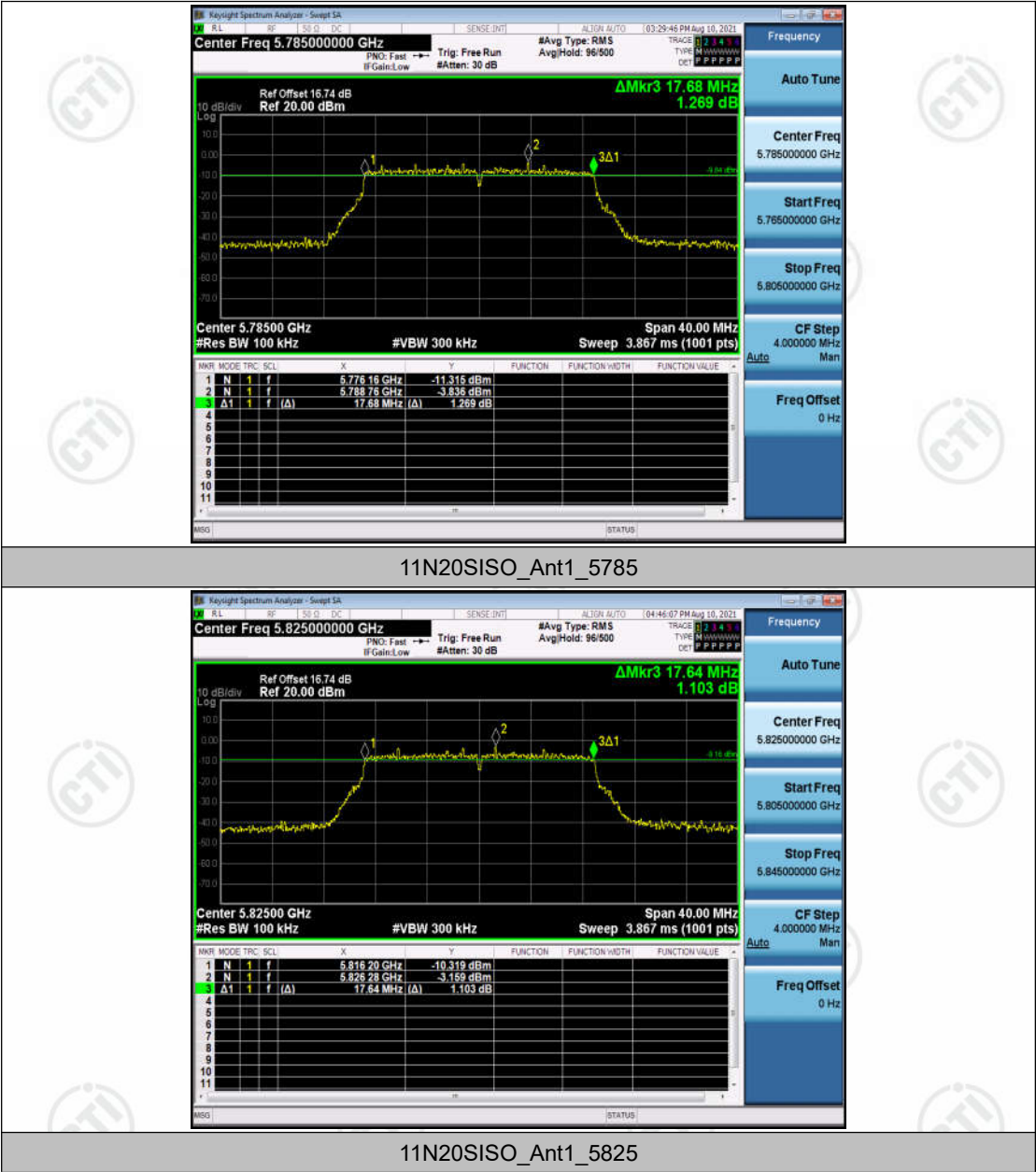
Appendix A3: Min emission bandwidth**Test Result**

Test Mode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.440	5736.800	5753.240	0.5	PASS
		5785	16.400	5776.840	5793.240	0.5	PASS
		5825	16.440	5816.800	5833.240	0.5	PASS
11N20SISO	Ant1	5745	17.680	5736.200	5753.880	0.5	PASS
		5785	17.680	5776.160	5793.840	0.5	PASS
		5825	17.640	5816.200	5833.840	0.5	PASS

Test Graphs







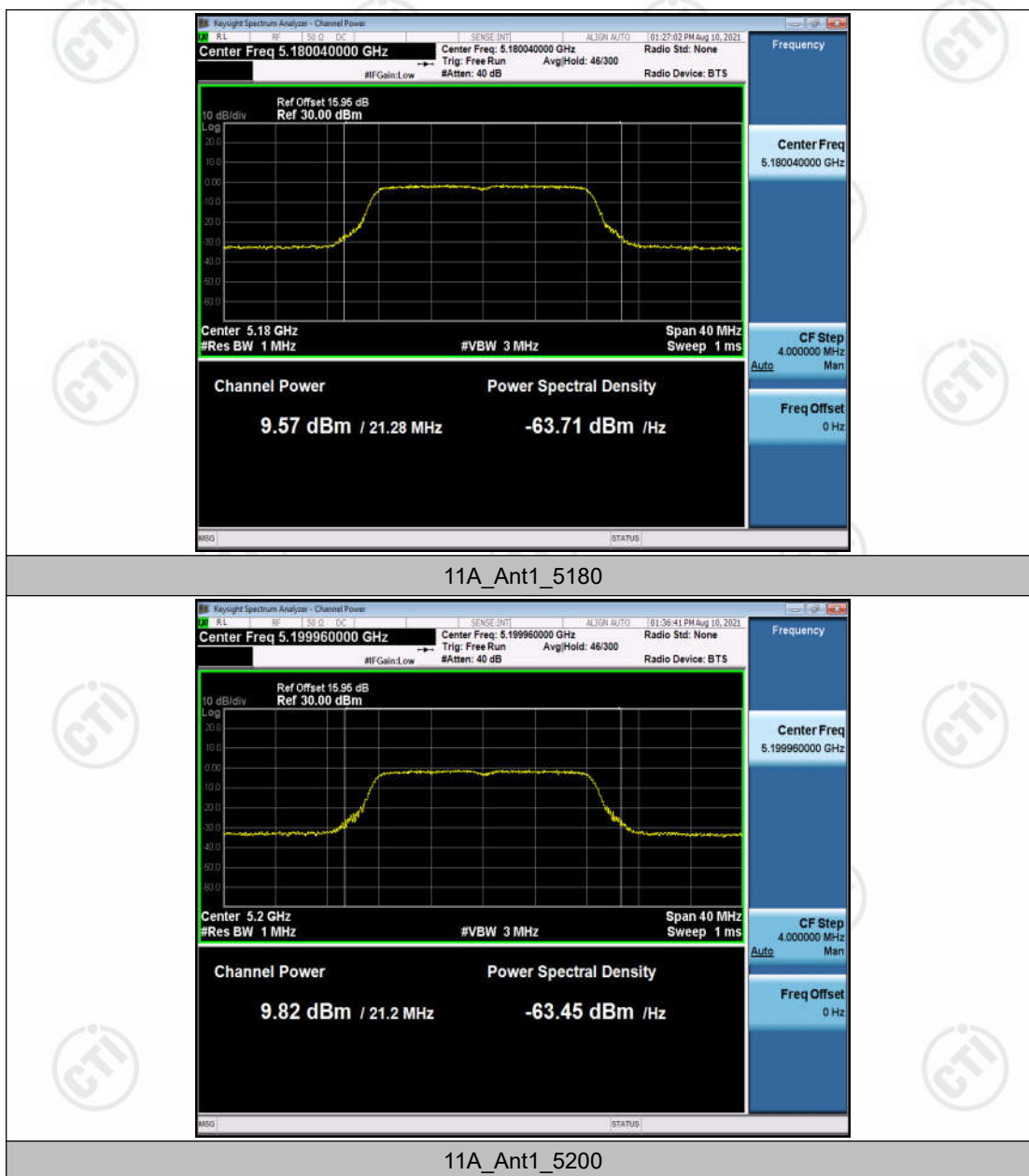
Appendix B: Maximum conducted output power

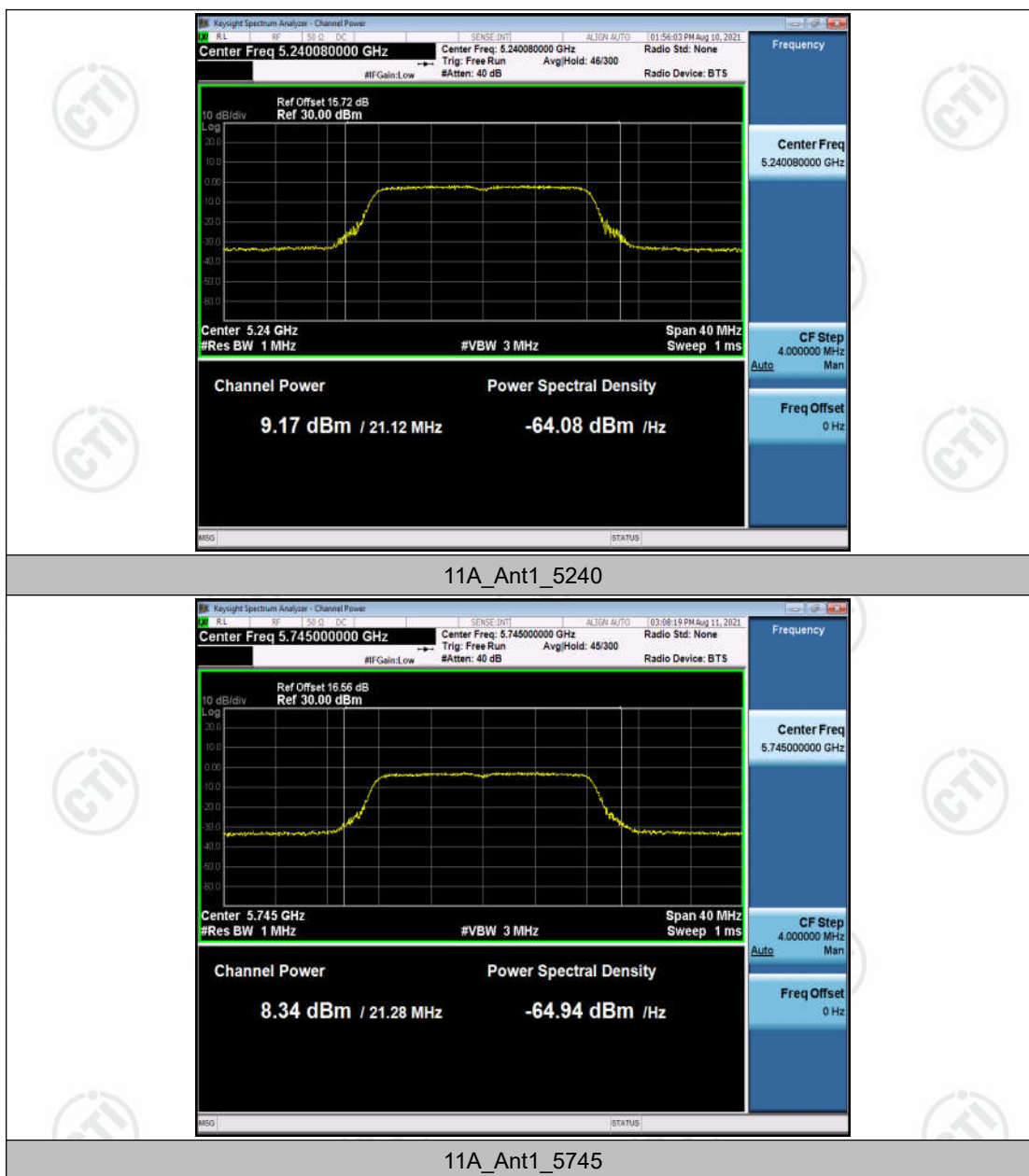
Test Result

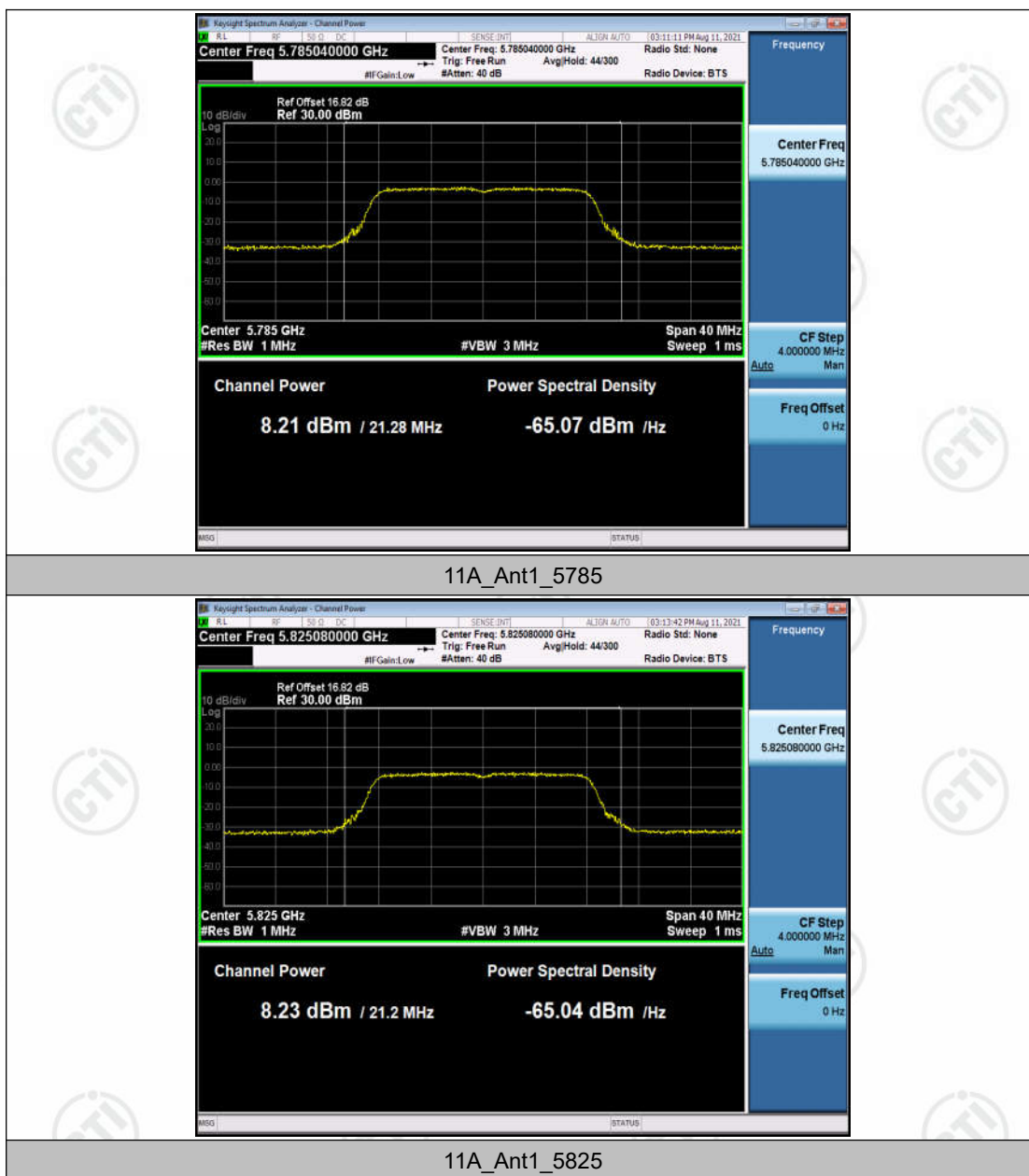
Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	9.61	<=23.46	PASS
		5200	9.80	<=23.46	PASS
		5240	9.01	<=23.46	PASS
		5745	8.39	<=29.48	PASS
		5785	8.22	<=29.48	PASS
		5825	8.34	<=29.48	PASS
11N20SISO	Ant1	5180	9.69	<=23.46	PASS
		5200	9.70	<=23.46	PASS
		5240	8.77	<=23.46	PASS
		5745	7.83	<=29.48	PASS
		5785	8.36	<=29.48	PASS
		5825	8.01	<=29.48	PASS

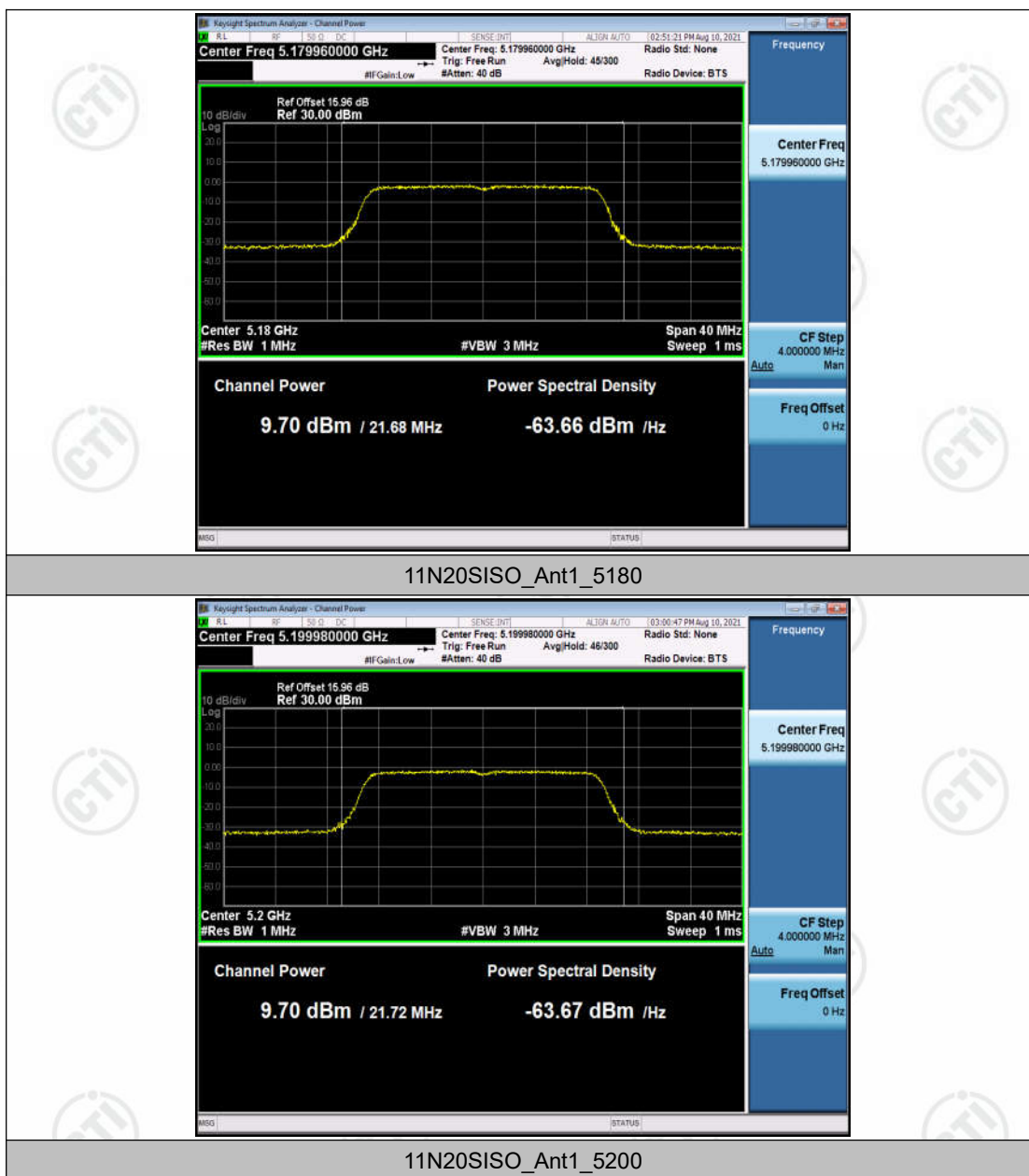
Note: The Duty Cycle Factor is compensated in the graph.

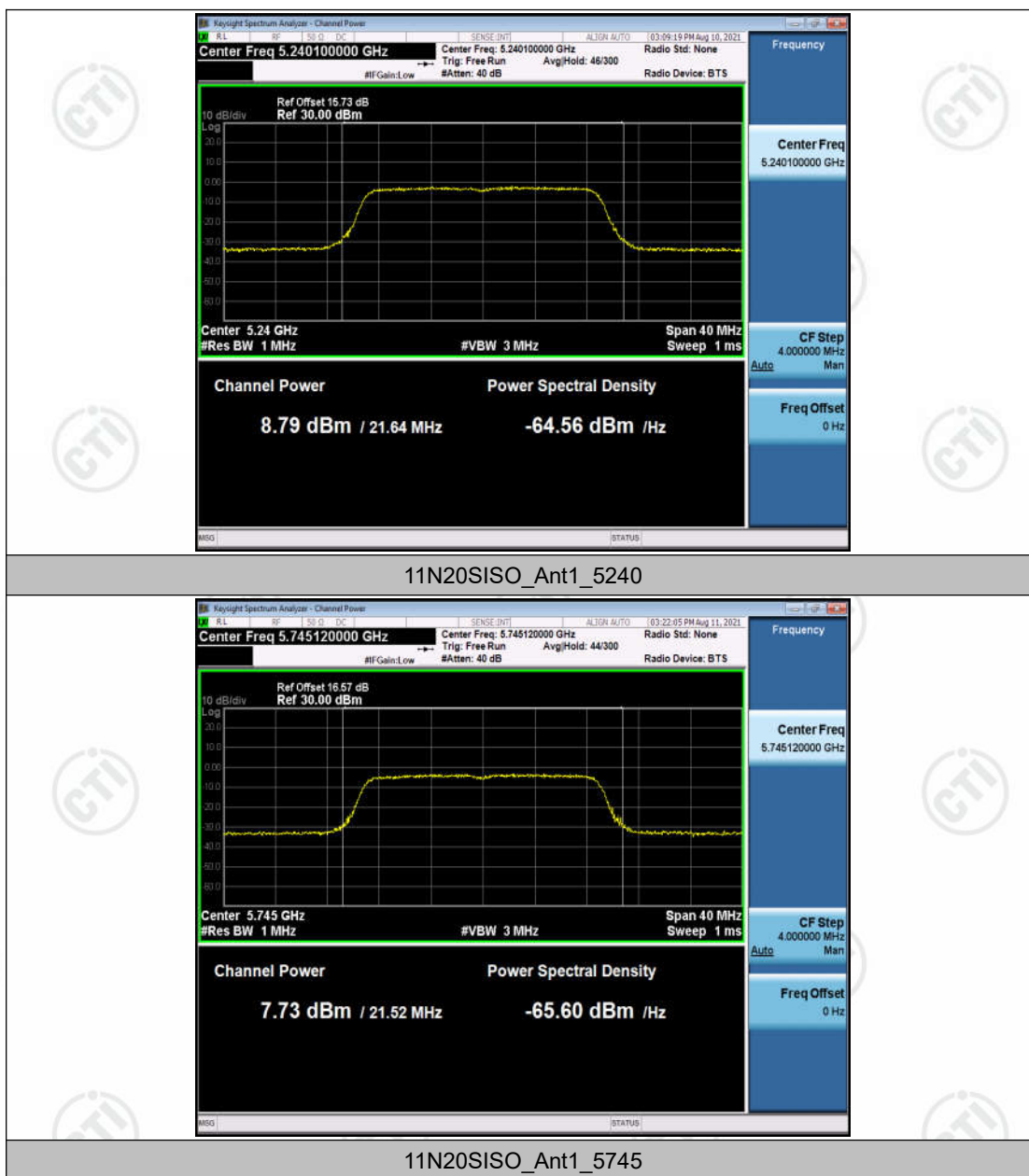
Test Graphs

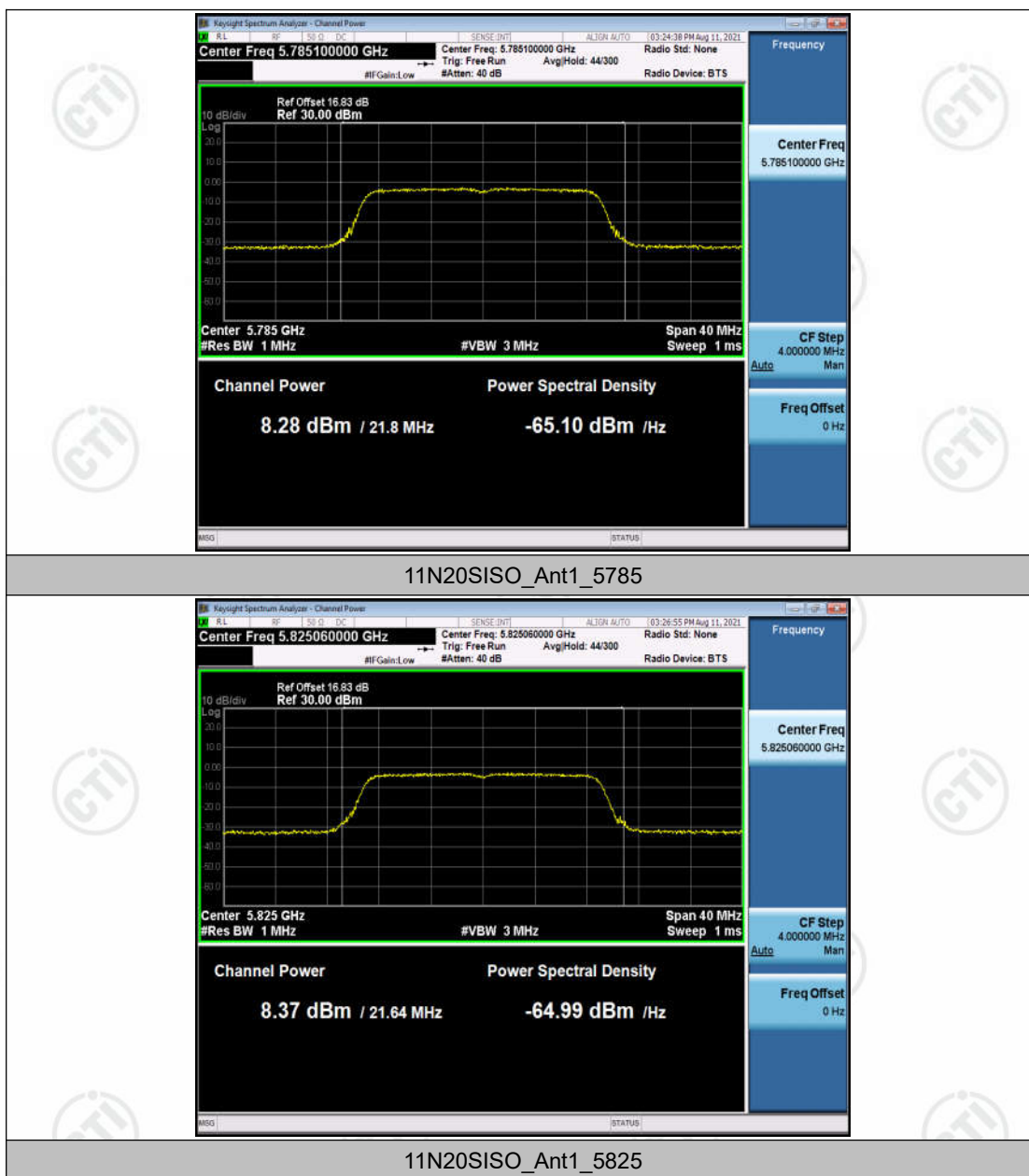












Appendix C: Maximum power spectral density

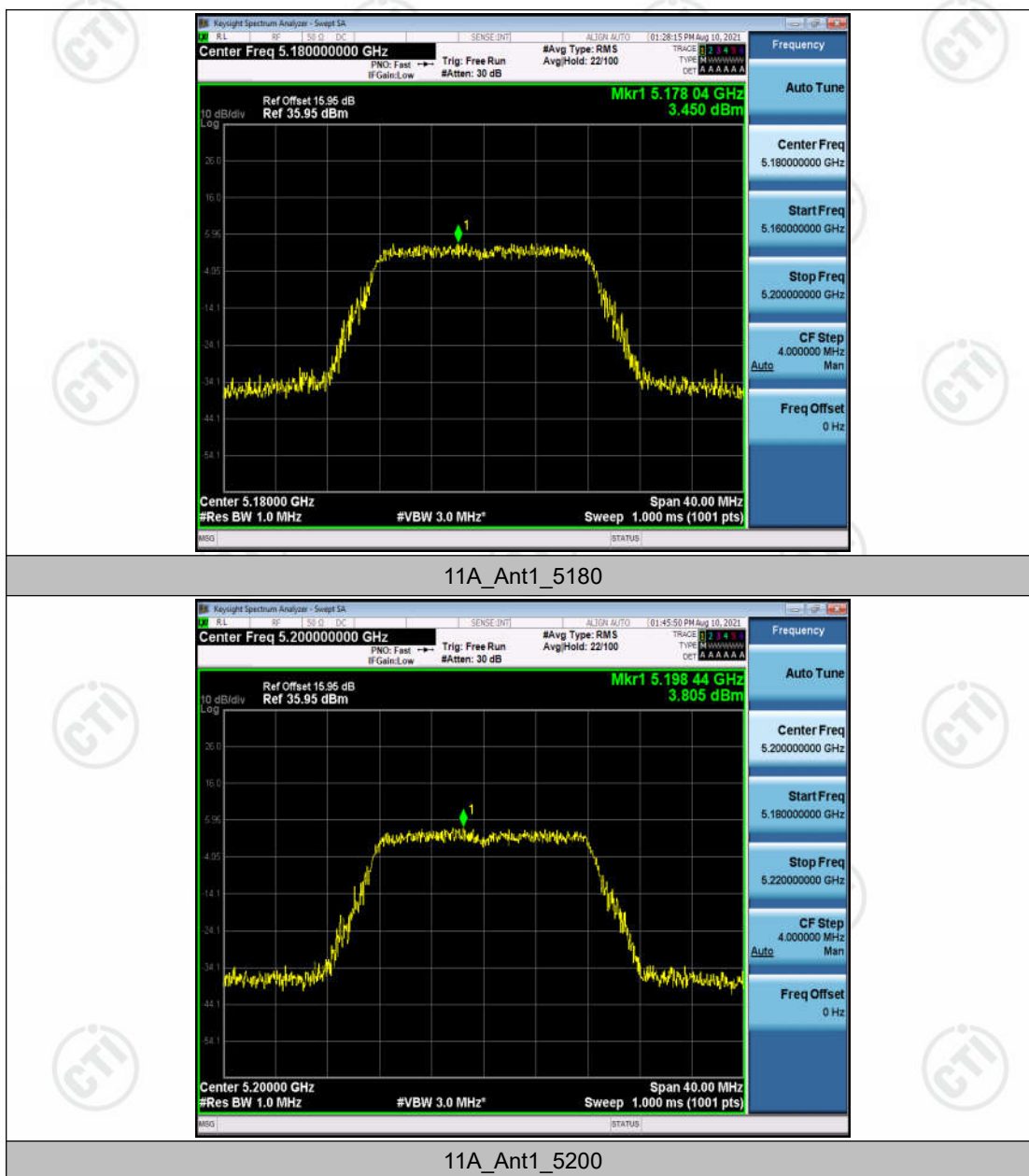
Test Result

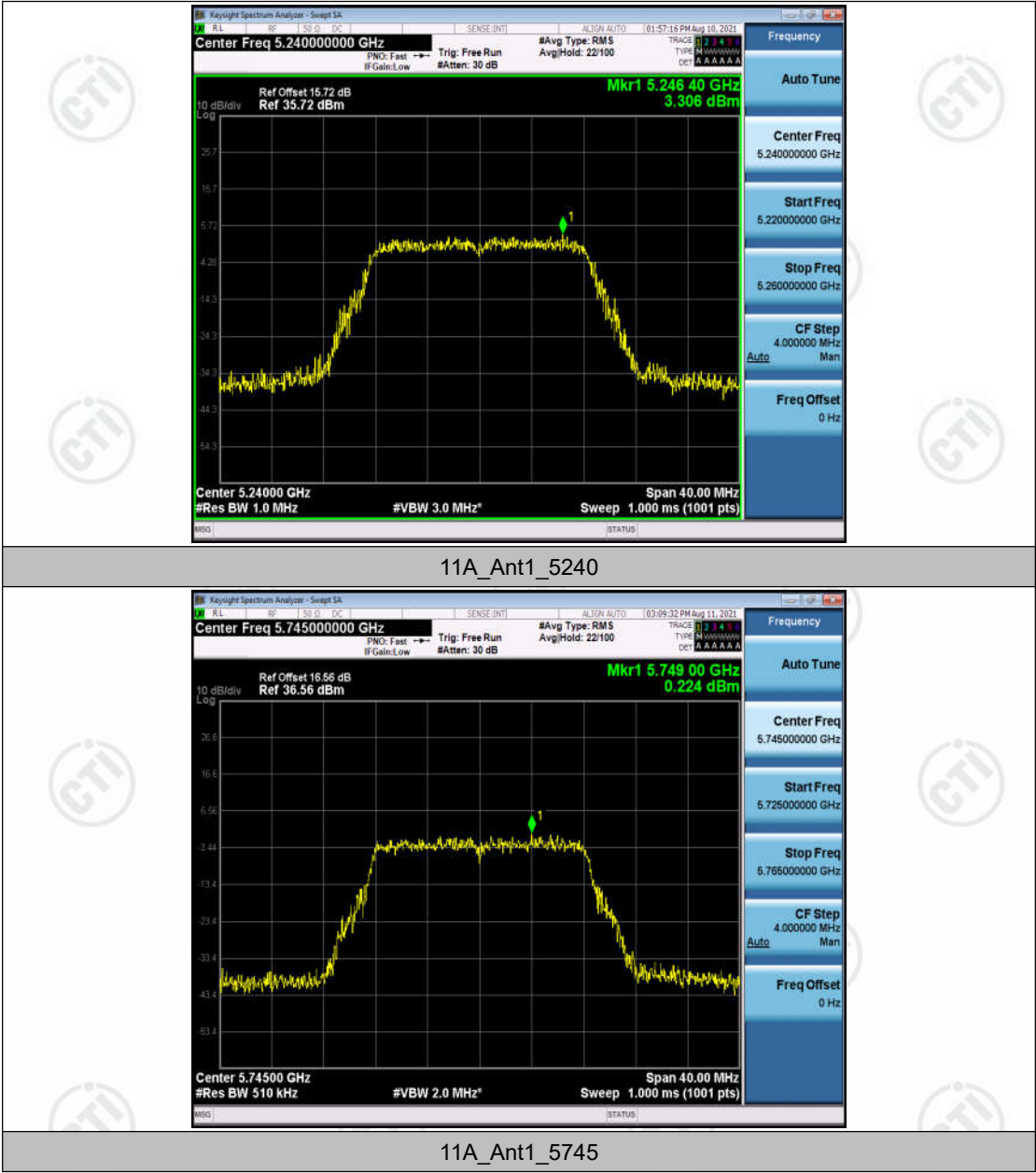
Test Mode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	3.45	<=10.48	PASS
		5200	3.81	<=10.48	PASS
		5240	3.31	<=10.48	PASS
		5745	0.22	<=29.48	PASS
		5785	-0.10	<=29.48	PASS
		5825	0.44	<=29.48	PASS
11N20SISO	Ant1	5180	3.31	<=10.48	PASS
		5200	3.68	<=10.48	PASS
		5240	2.61	<=10.48	PASS
		5745	-0.64	<=29.48	PASS
		5785	0.07	<=29.48	PASS
		5825	-0.90	<=29.48	PASS

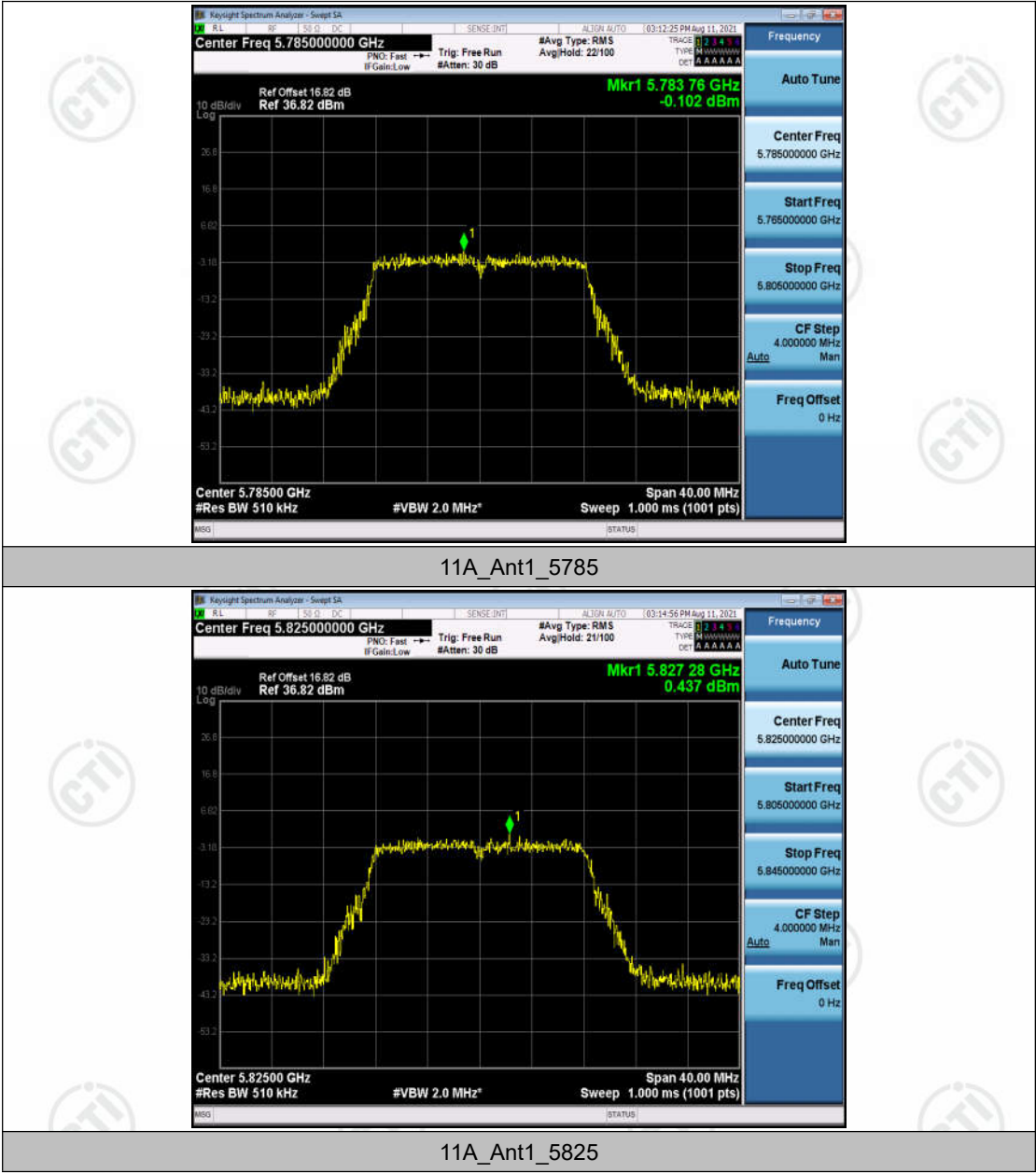
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

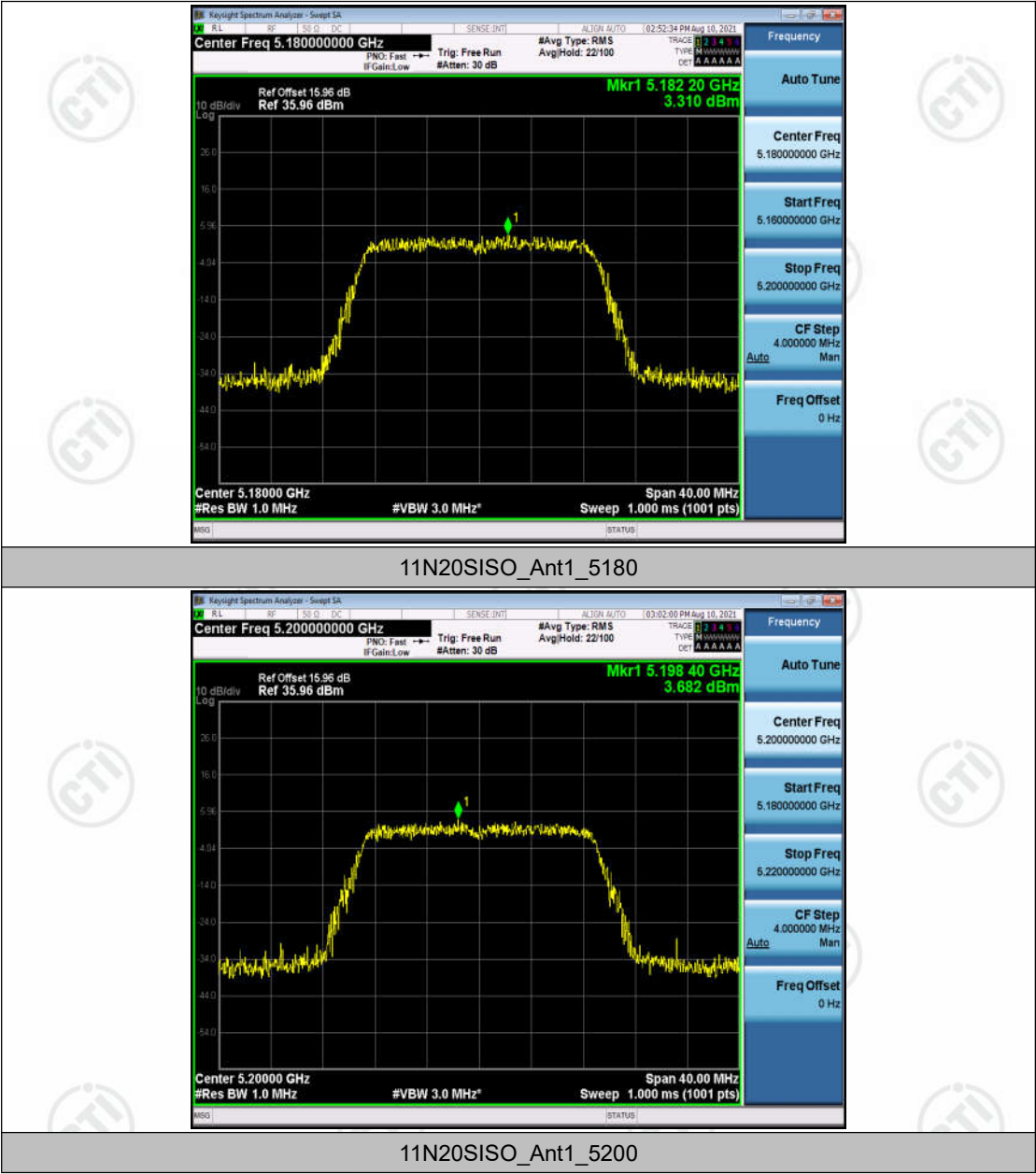
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

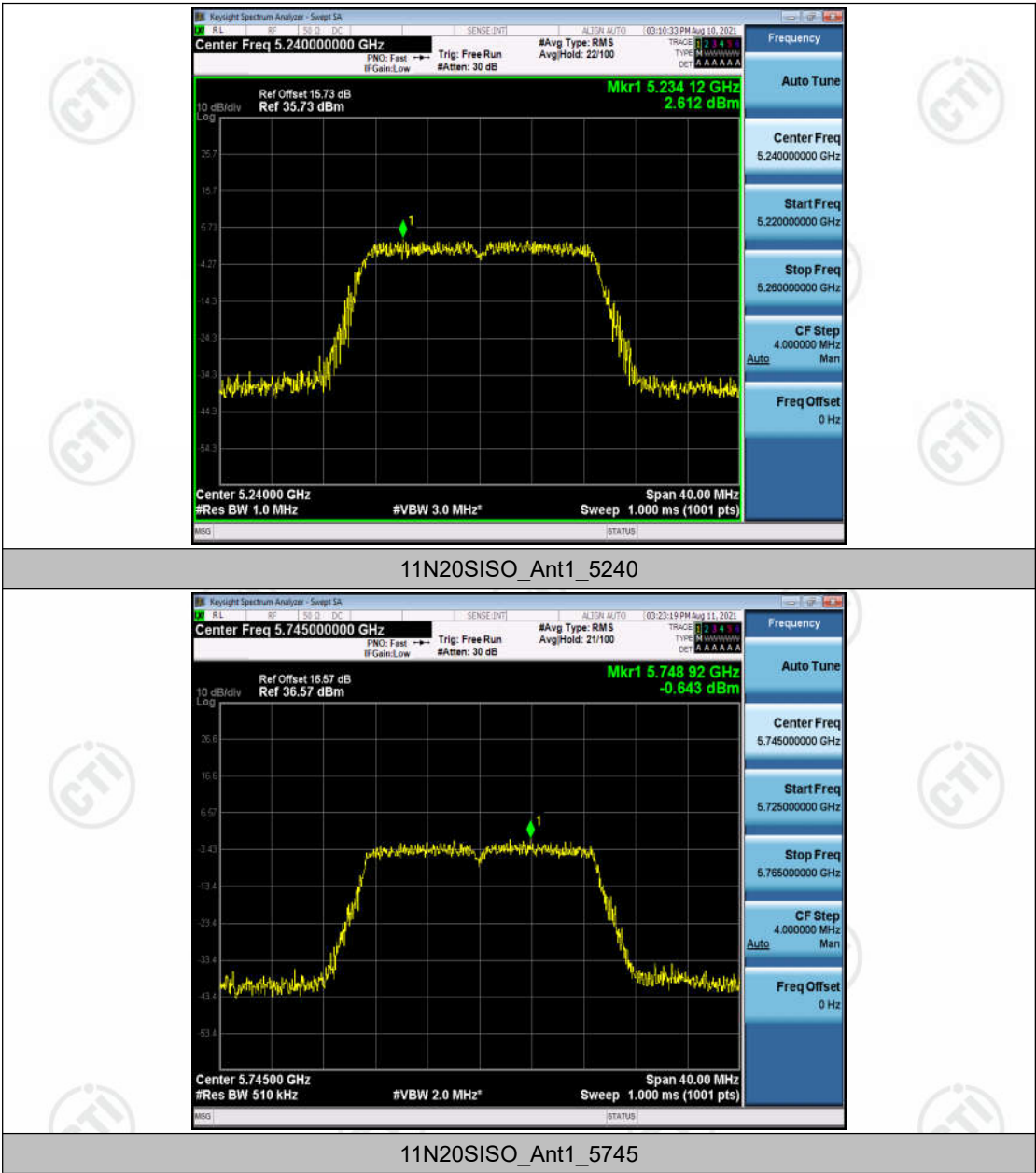
Test Graphs

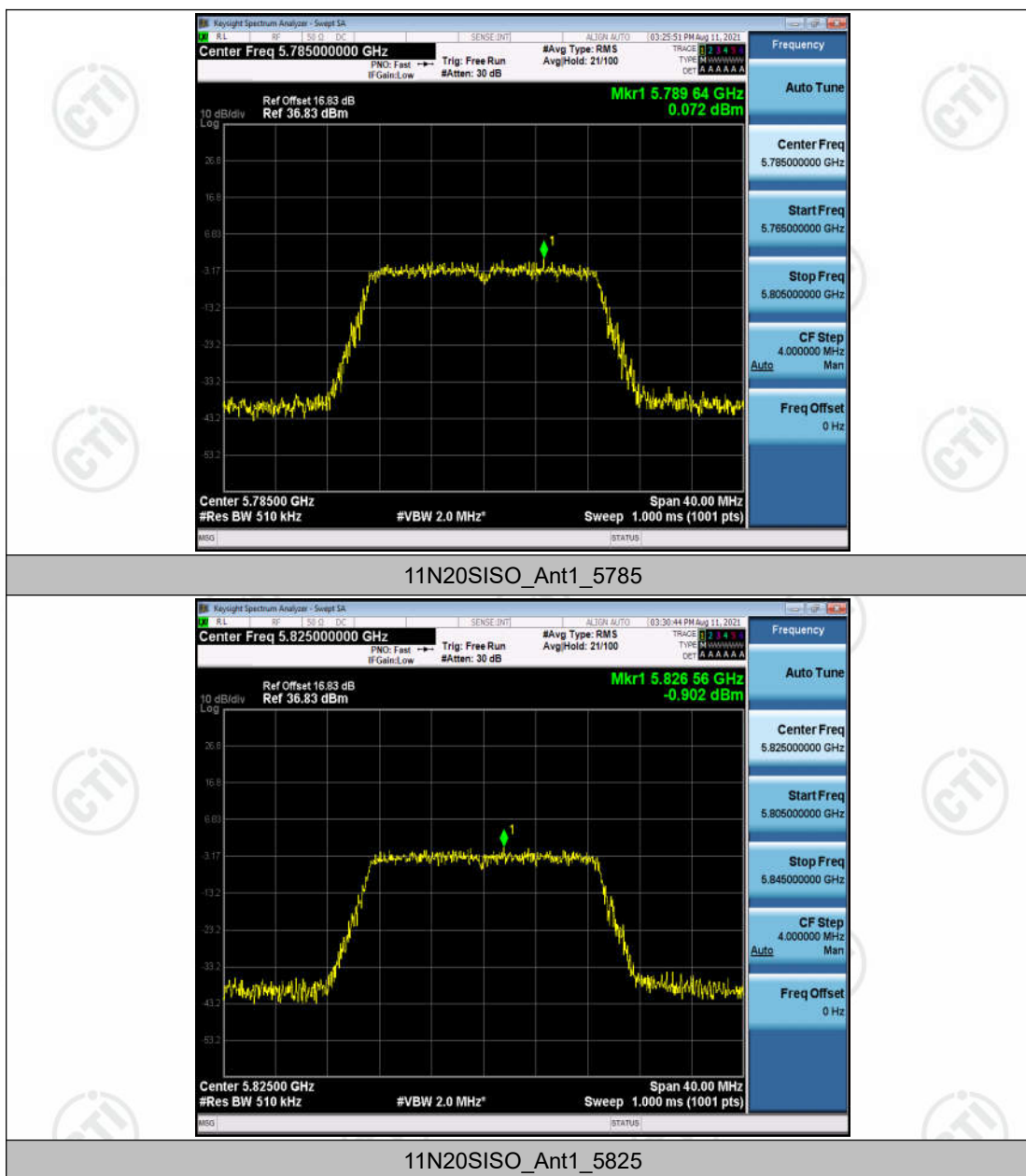












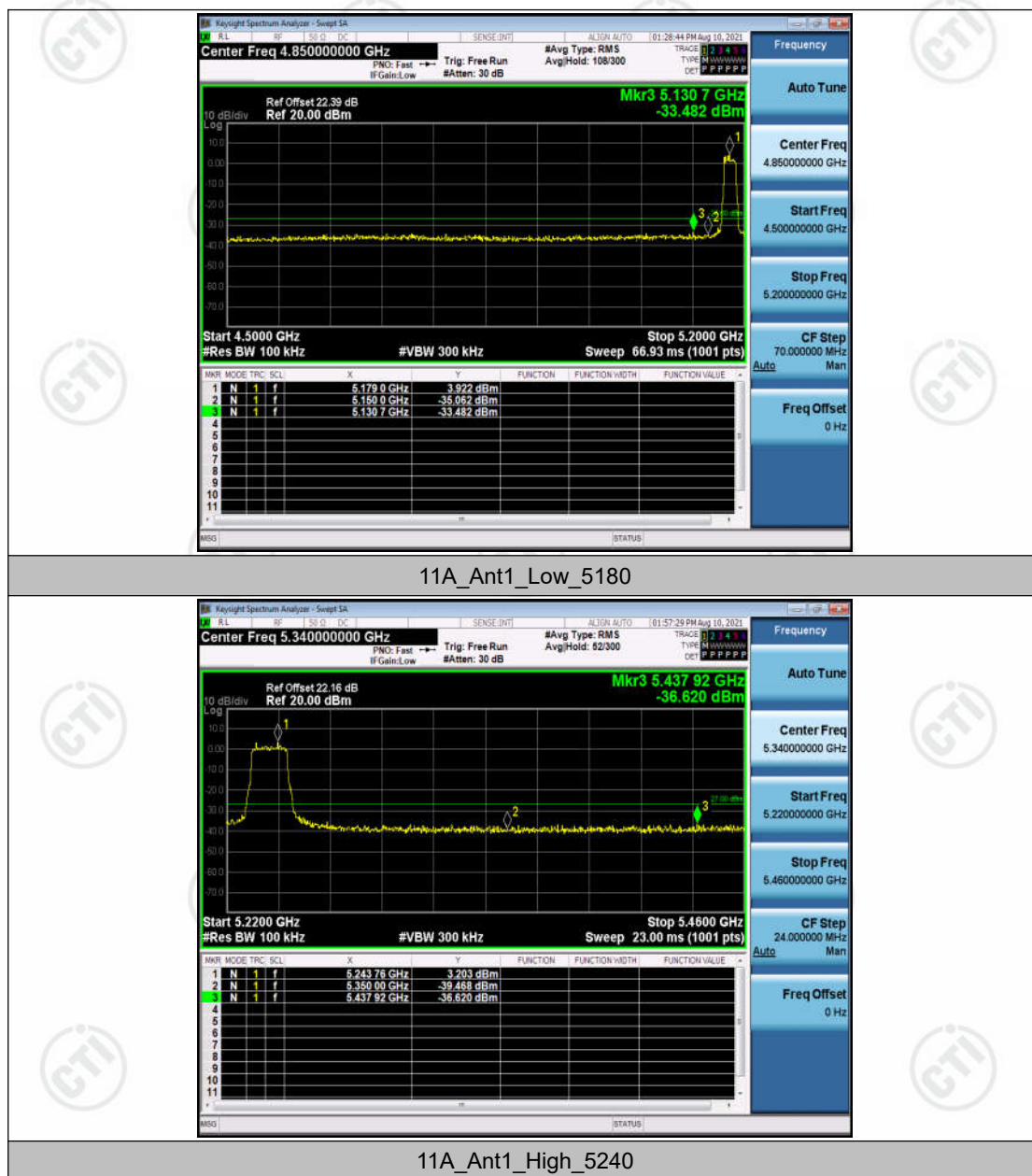
Appendix D: Band edge measurements

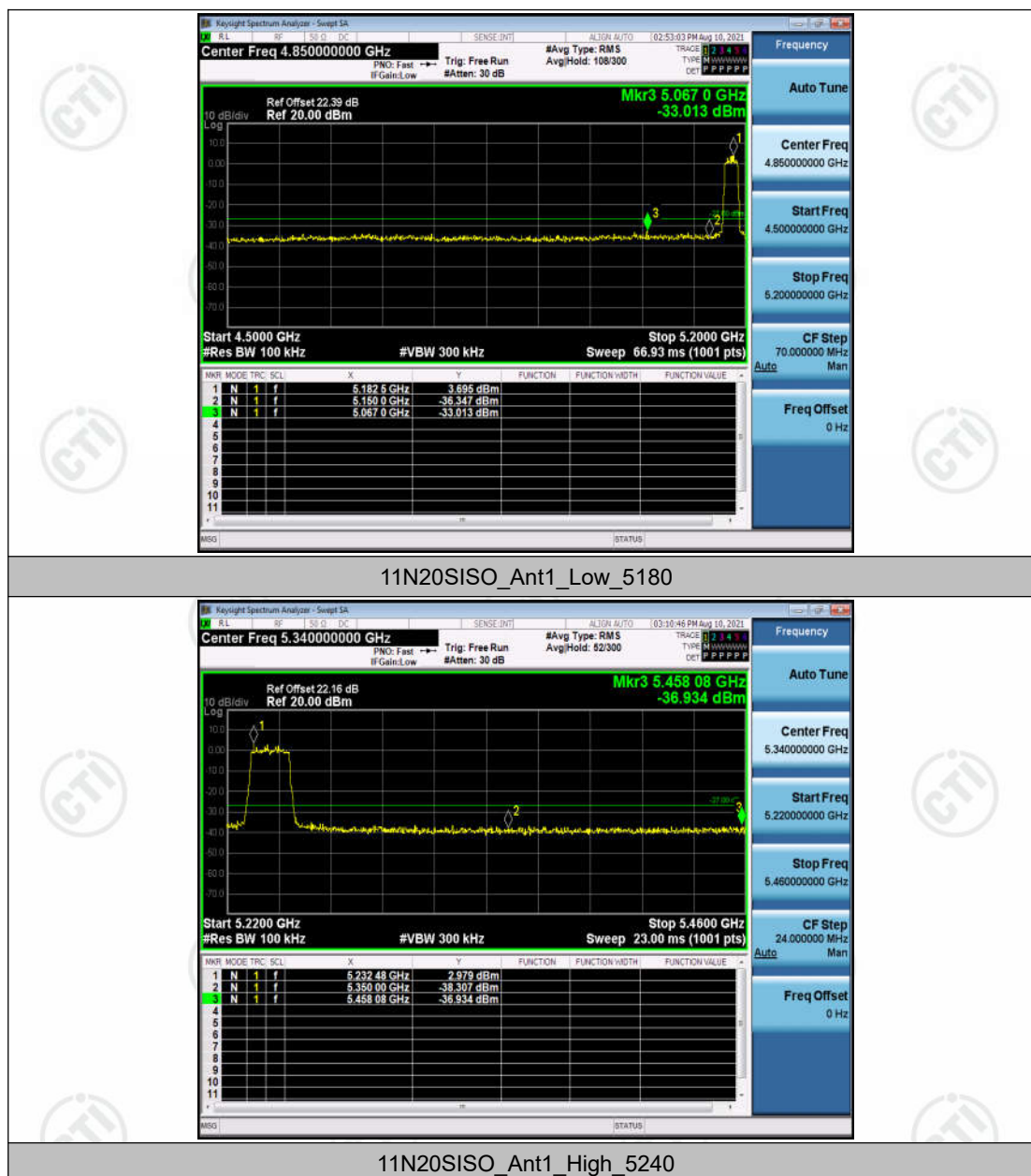
Test Result

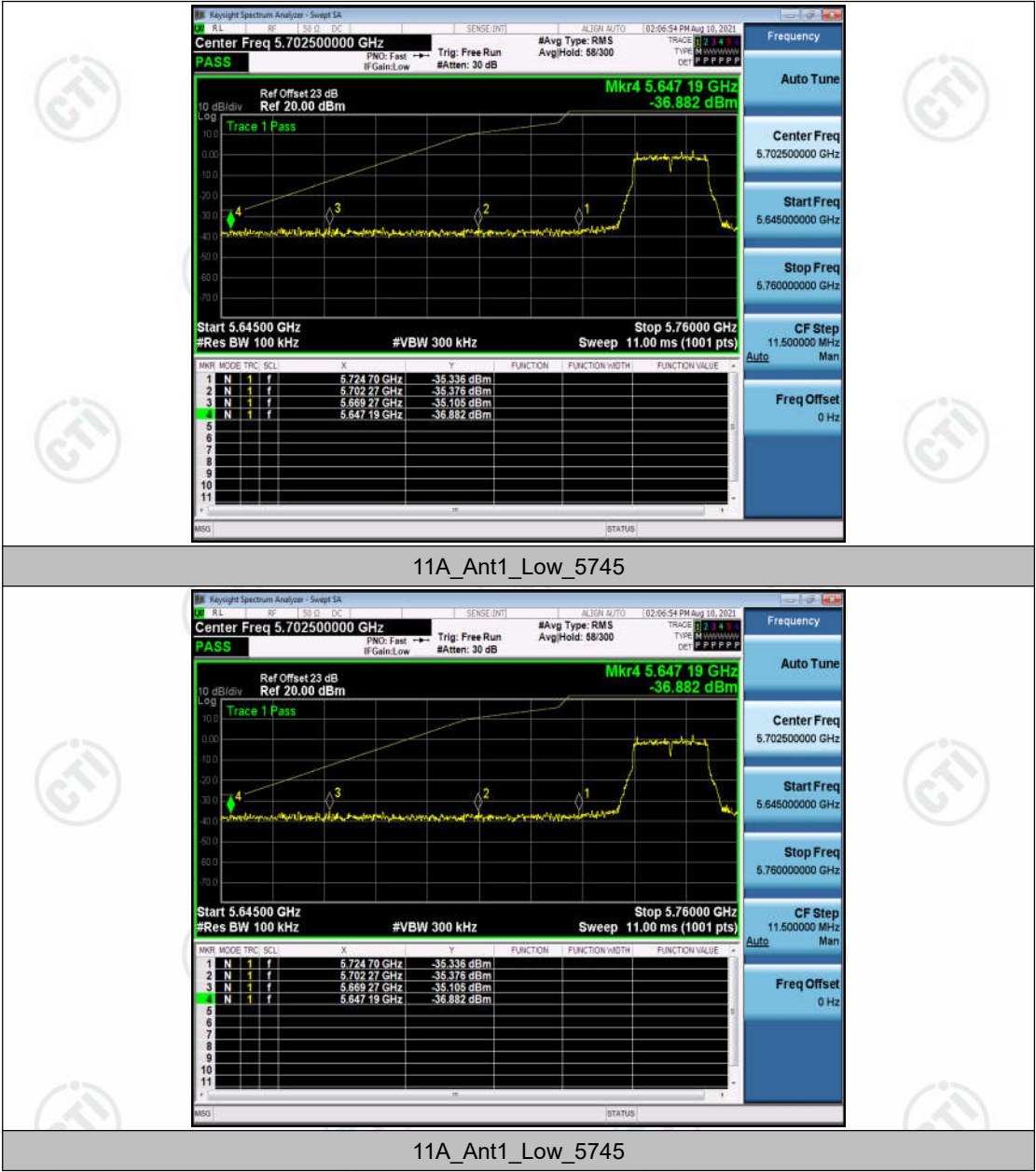
Test Mode	Antenna	Ch Name	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-33.48	≤ -27	PASS
		High	5240	-36.62	≤ -27	PASS
11N20SISO	Ant1	Low	5180	-33.01	≤ -27	PASS
		High	5240	-36.93	≤ -27	PASS

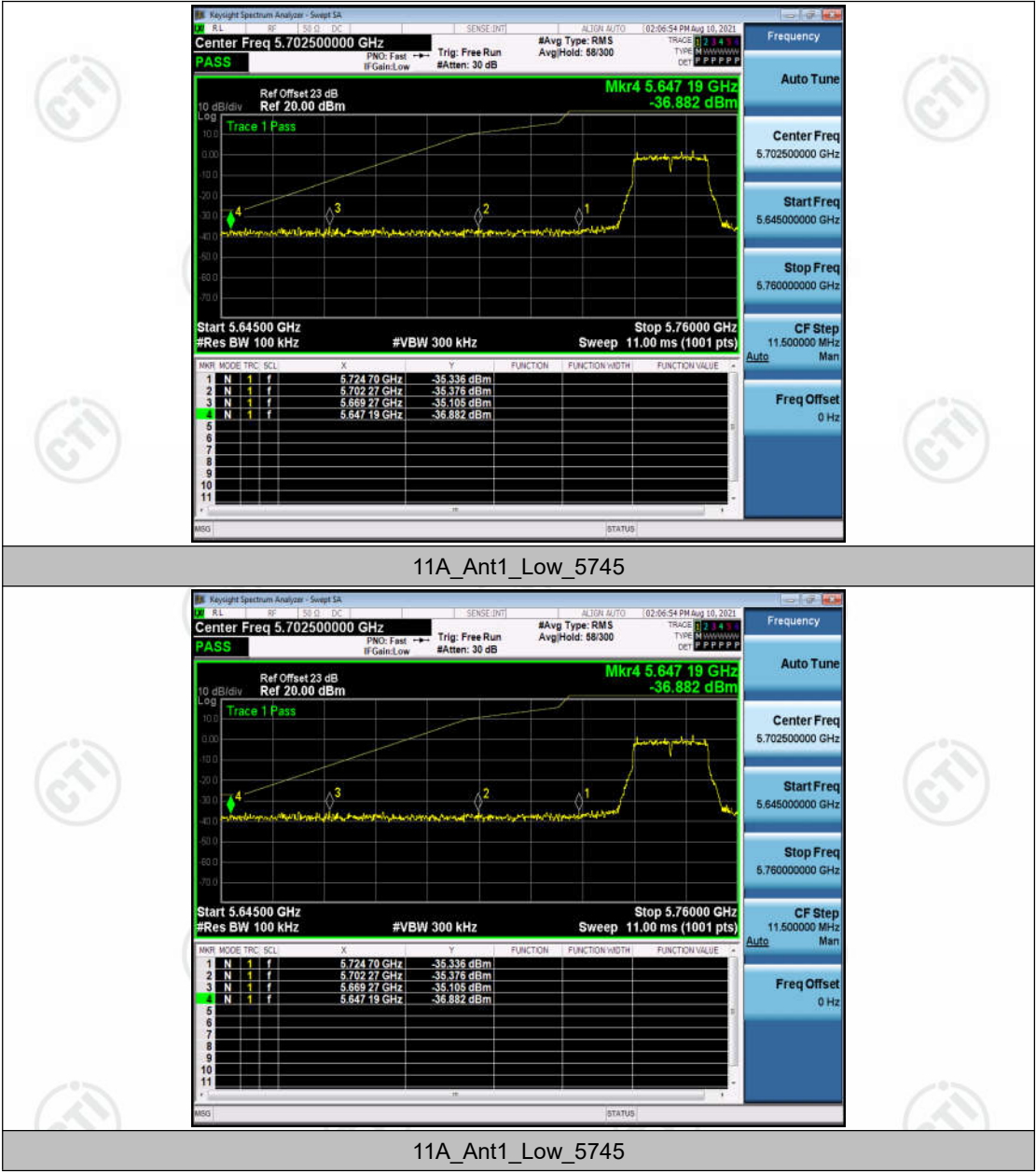
Test Mode	Antenna	Ch Name	Channel	Freq Range [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-35.11	≤ -12.74	PASS
				5700~5720	-35.38	≤ -10.64	PASS
				5720~5725	-35.34	≤ -26.30	PASS
				5760~5650	-36.88	≤ -27	PASS
		High	5825	5850~5855	-34.92	≤ -22.57	PASS
				5855~5875	-34.48	≤ -12.44	PASS
				5875~5925	-34.52	≤ -26.56	PASS
				5925~5935	-34.59	≤ -27	PASS
11N20SISO	Ant1	Low	5745	5650~5700	-34.7	≤ -25.17	PASS
				5700~5720	-34.33	≤ -15.08	PASS
				5720~5725	-35.22	≤ -21.58	PASS
				5760~5650	-36.67	≤ -27	PASS
		High	5825	5850~5855	-35.86	≤ -20.10	PASS
				5855~5875	-34.2	≤ -15.16	PASS
				5875~5925	-34.58	≤ -2.78	PASS
				5925~5935	-35.27	≤ -27	PASS

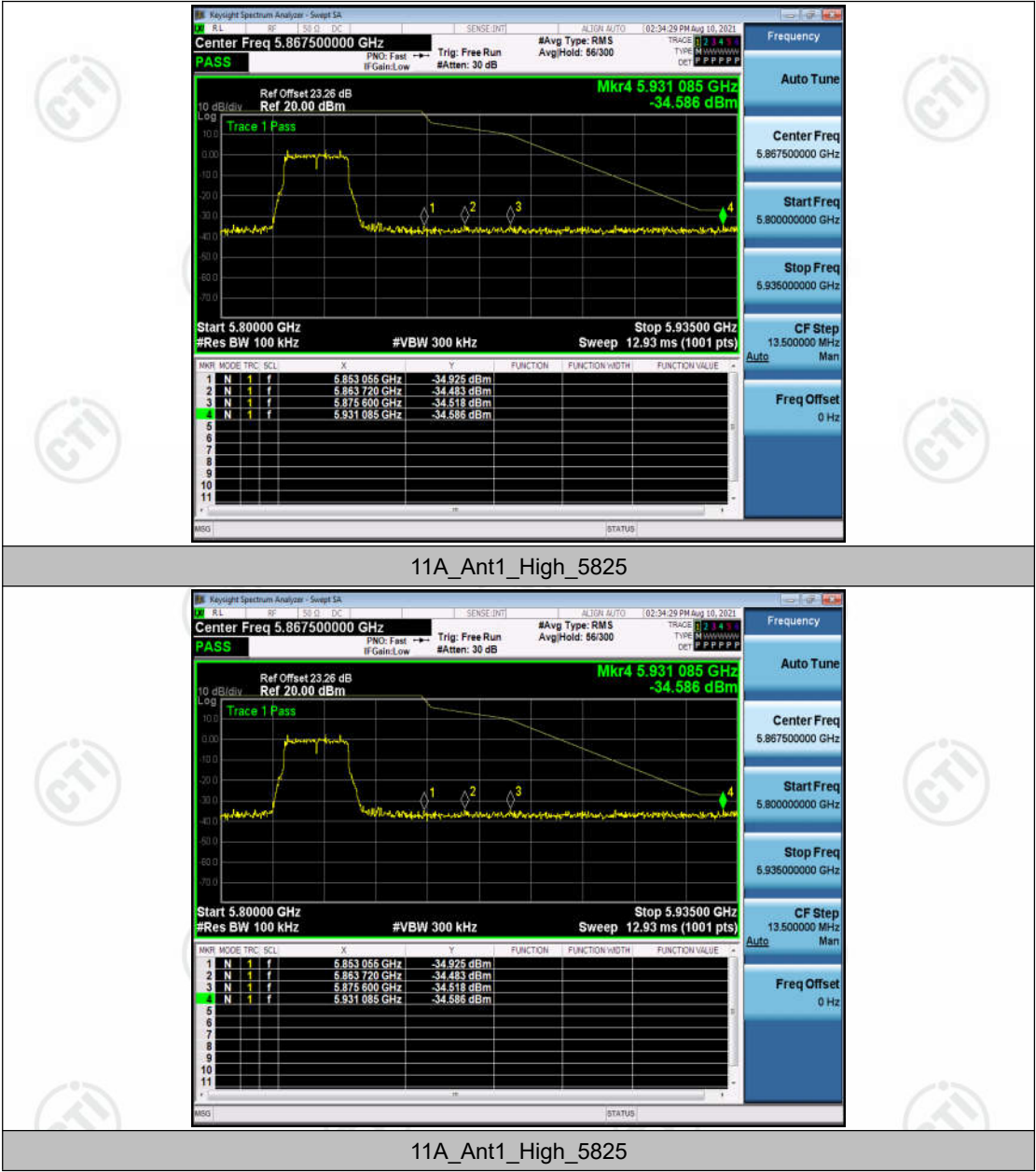
Test Graphs

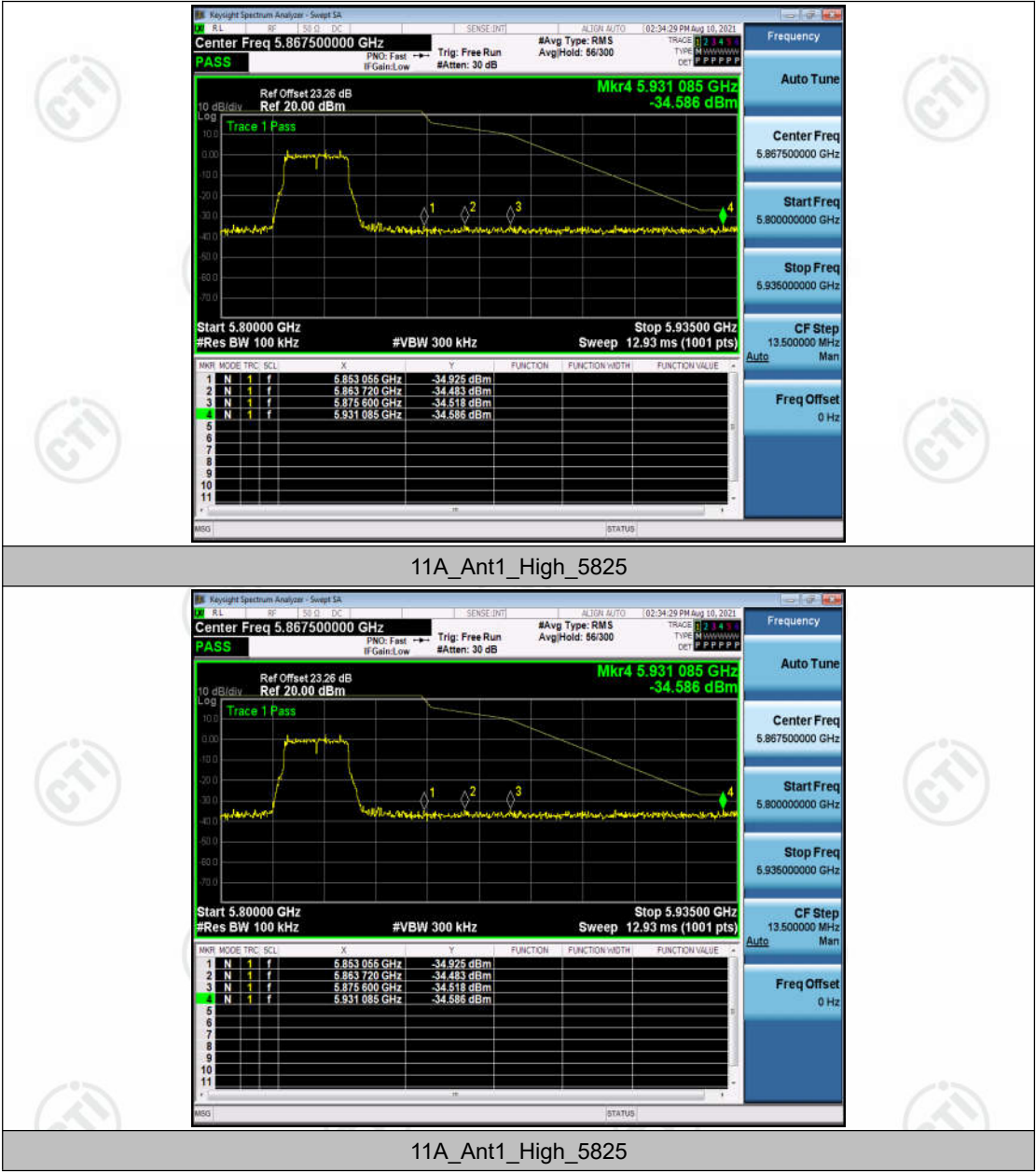


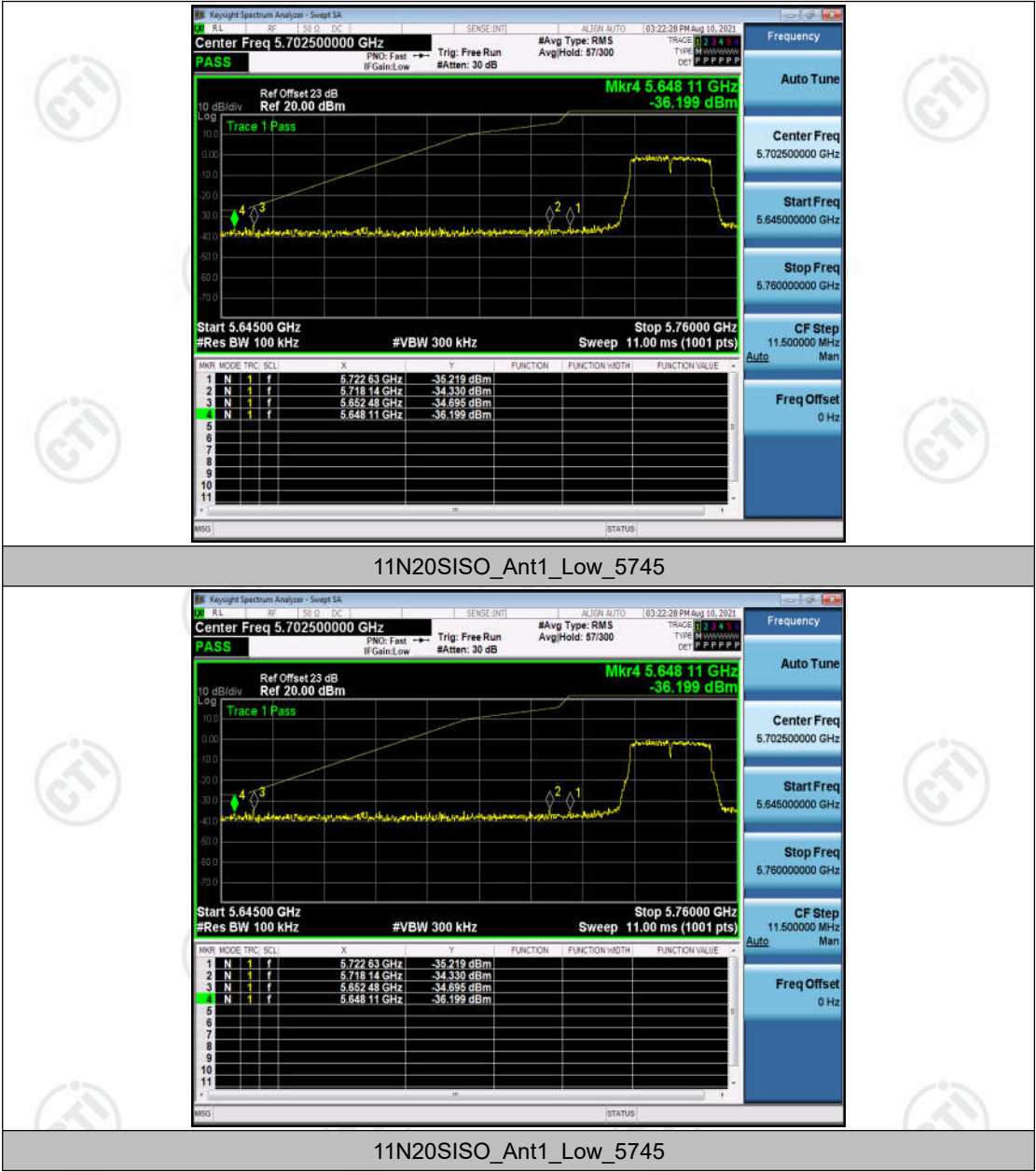


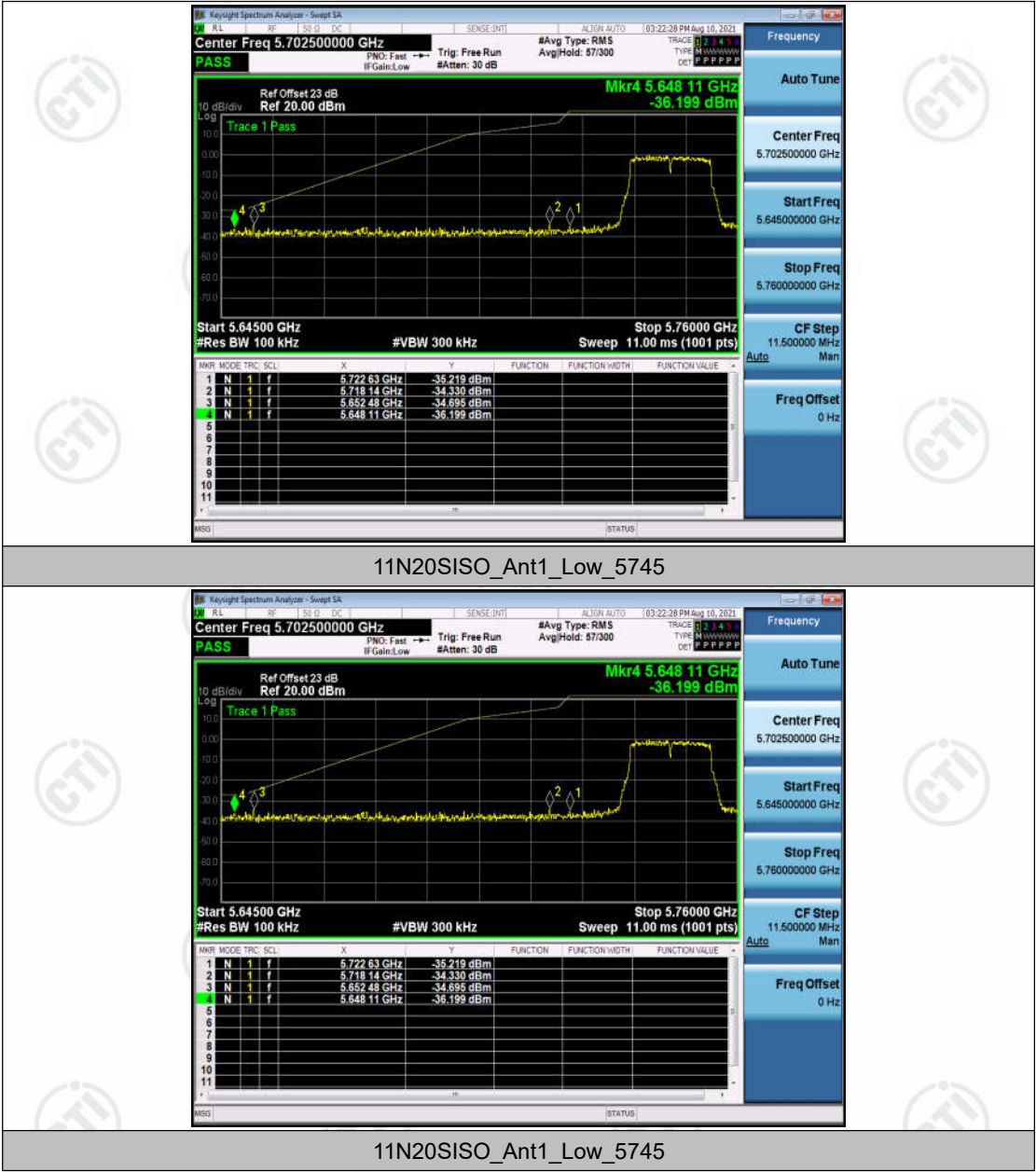


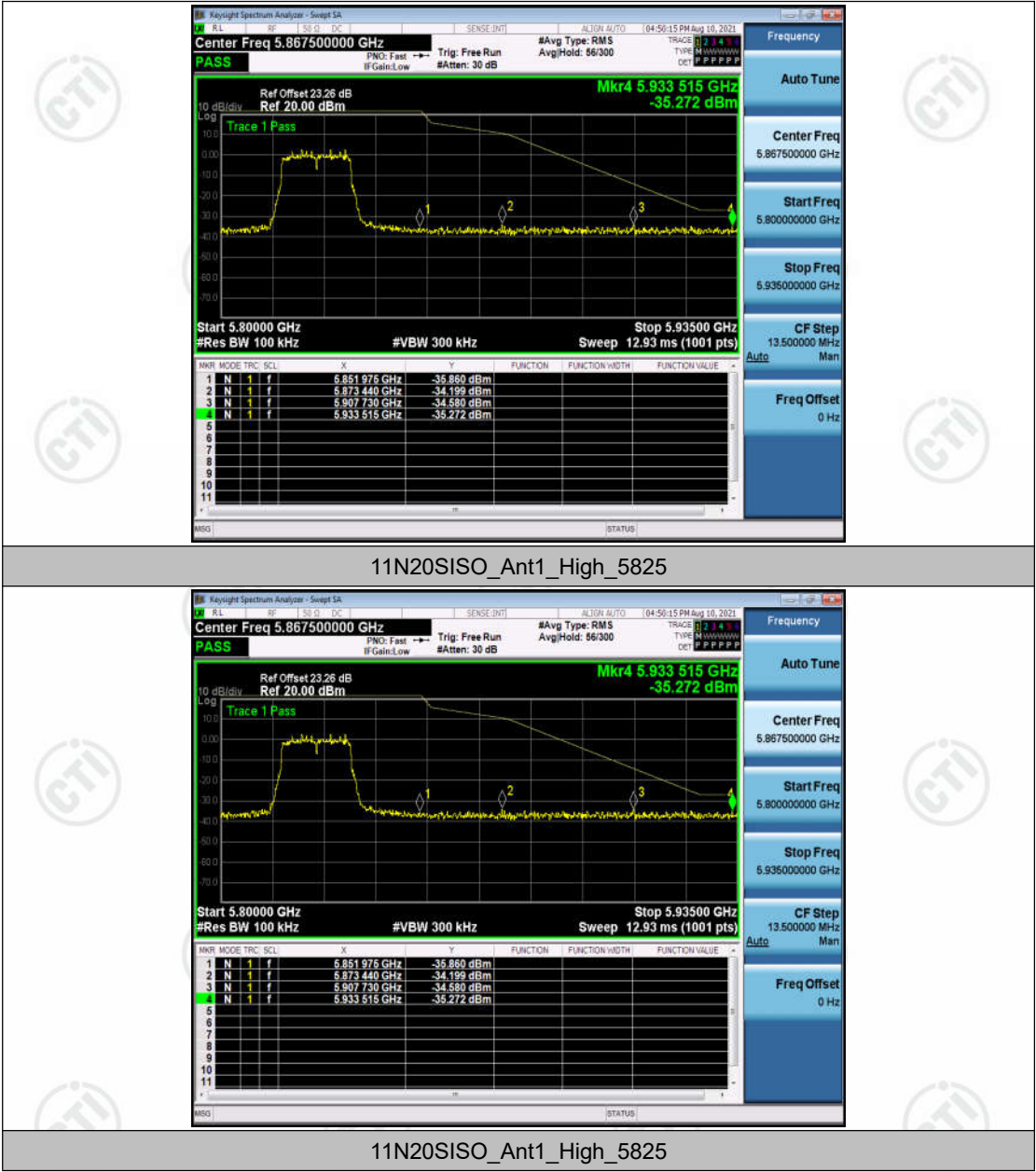


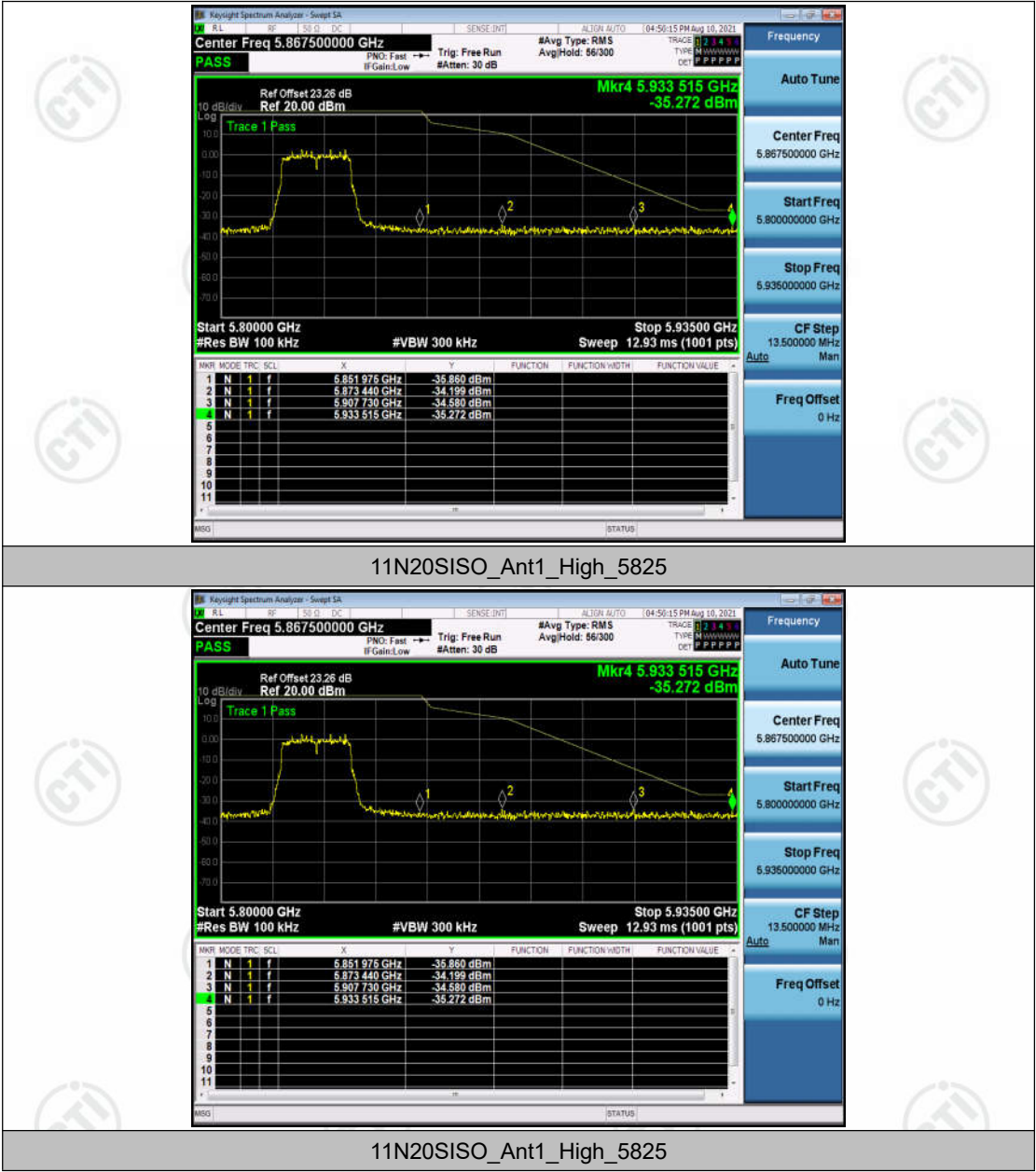










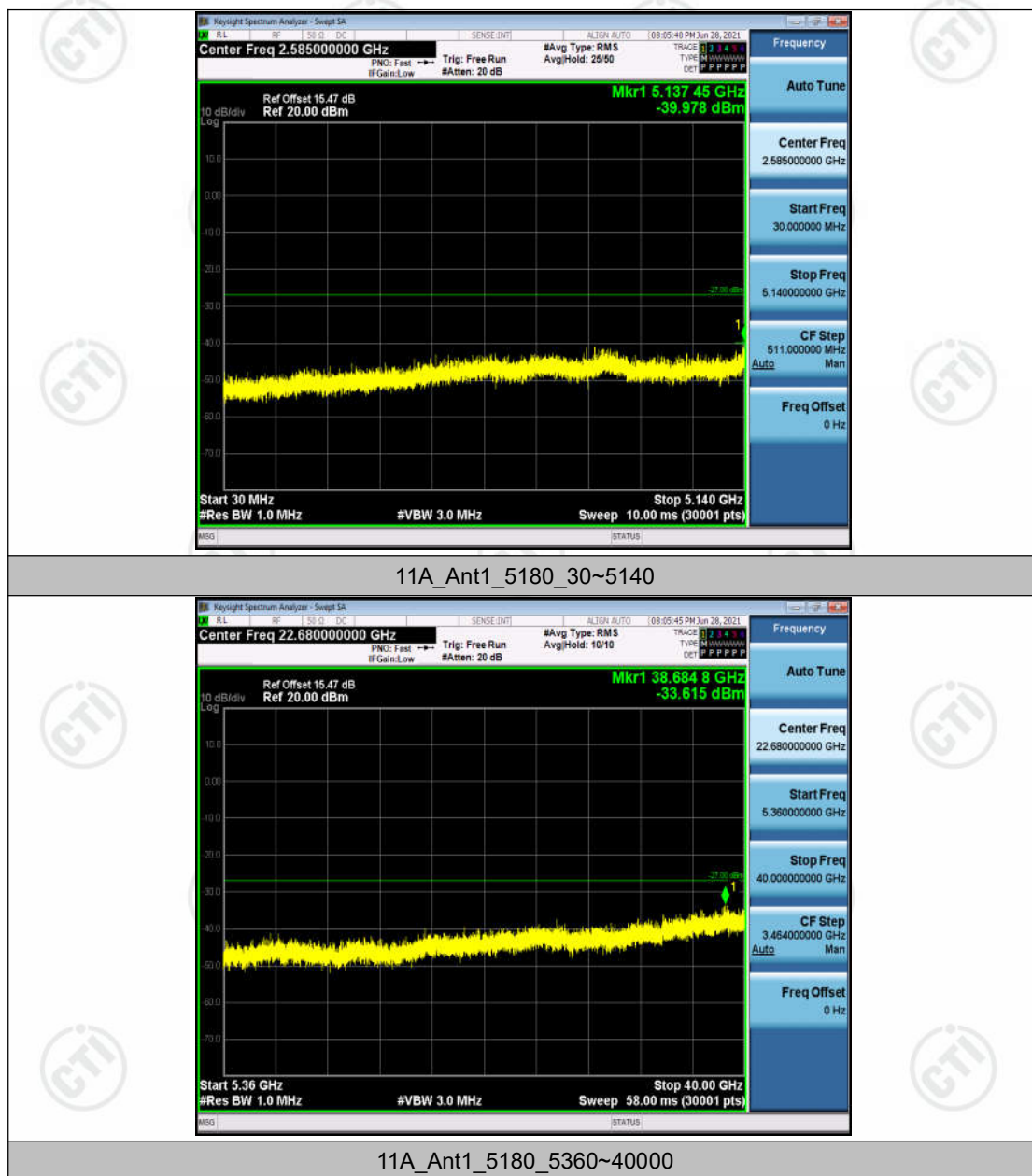


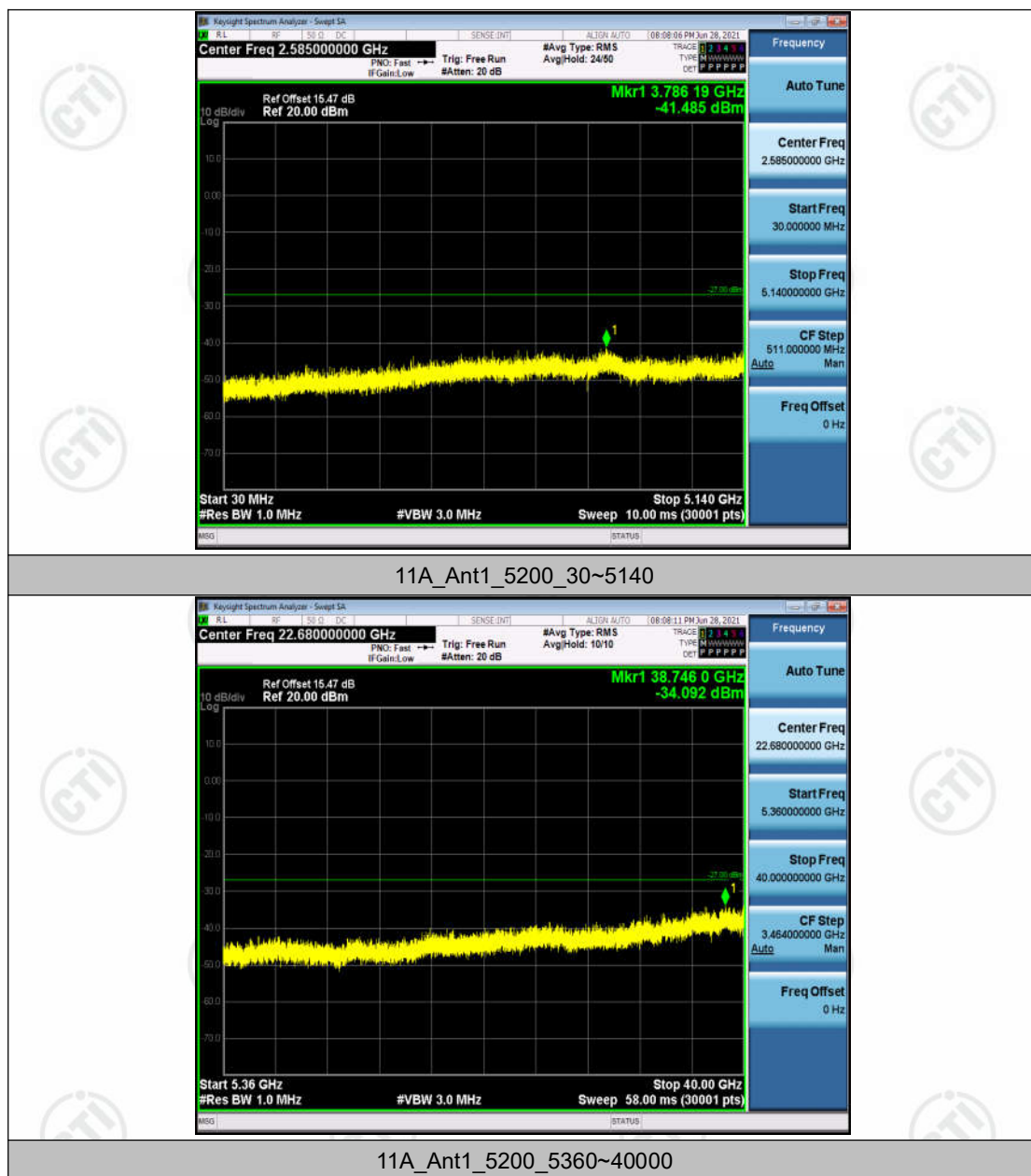
Appendix E: Conducted Spurious Emission

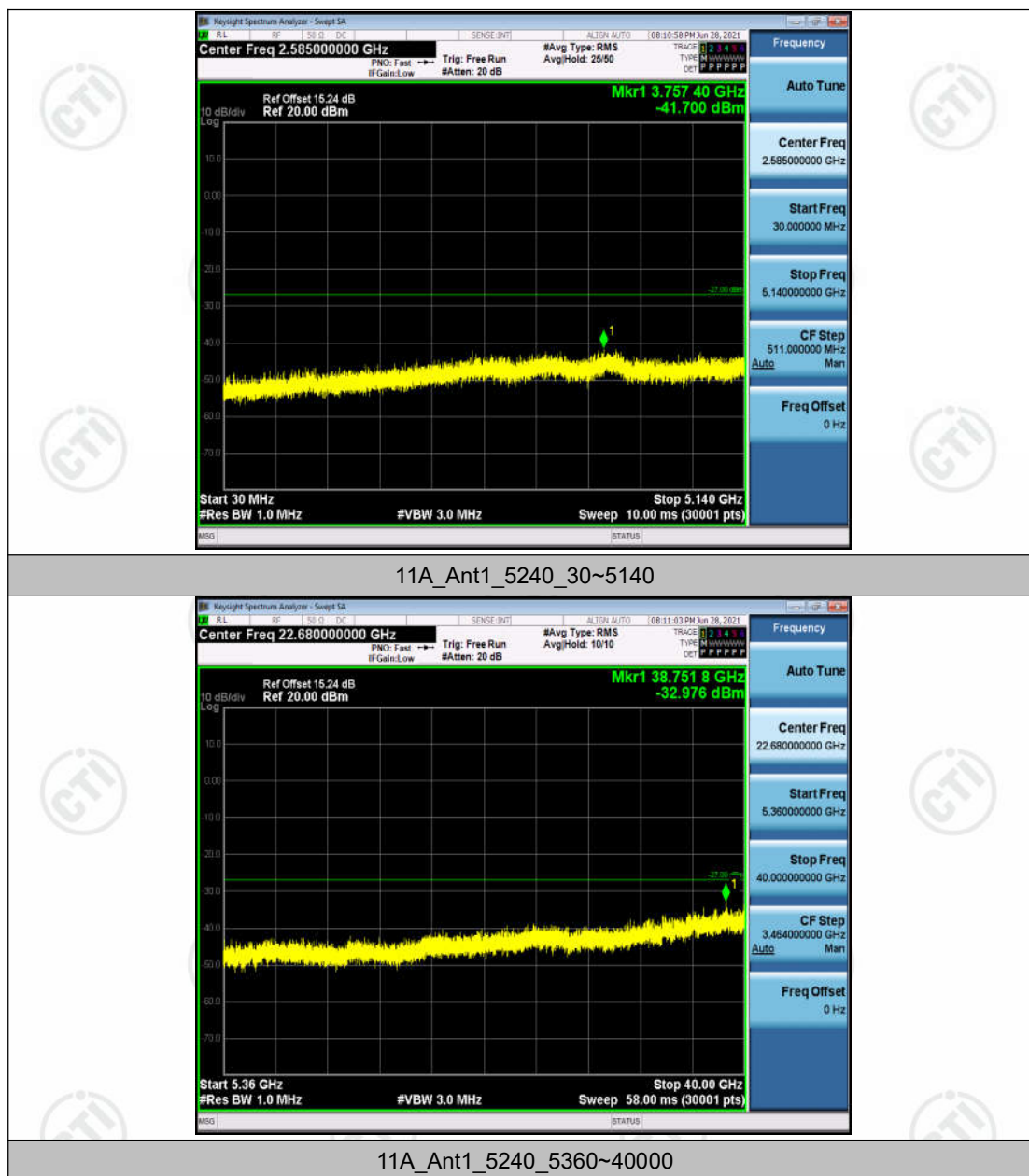
Test Result

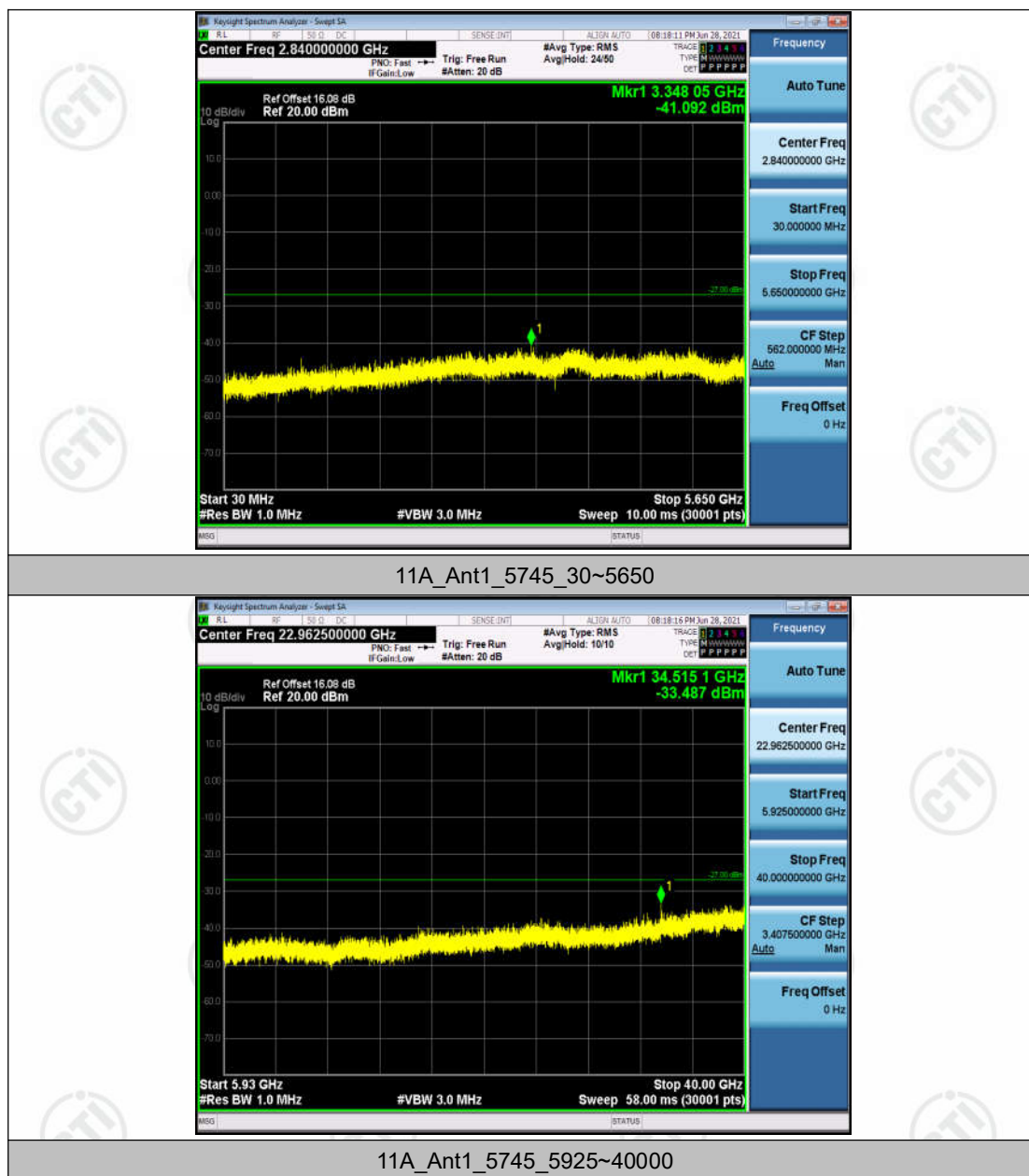
Test Mode	Antenna	Channel	Freq Range [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	30~5140	-39.978	<=-27	PASS
			5360~40000	5360~40000	-33.615	<=-27	PASS
		5200	30~5140	30~5140	-41.485	<=-27	PASS
			5360~40000	5360~40000	-34.092	<=-27	PASS
		5240	30~5140	30~5140	-41.7	<=-27	PASS
			5360~40000	5360~40000	-32.976	<=-27	PASS
		5745	30~5650	30~5650	-41.092	<=-27	PASS
			5925~40000	5925~40000	-33.487	<=-27	PASS
		5785	30~5650	30~5650	-40.478	<=-27	PASS
			5925~40000	5925~40000	-33.003	<=-27	PASS
		5825	30~5650	30~5650	-40.581	<=-27	PASS
			5925~40000	5925~40000	-33.191	<=-27	PASS
11N20SISO	Ant1	5180	30~5140	30~5140	-40.327	<=-27	PASS
			5360~40000	5360~40000	-32.775	<=-27	PASS
		5200	30~5140	30~5140	-40.567	<=-27	PASS
			5360~40000	5360~40000	-34.167	<=-27	PASS
		5240	30~5140	30~5140	-41.146	<=-27	PASS
			5360~40000	5360~40000	-34.054	<=-27	PASS
		5745	30~5650	30~5650	-40.362	<=-27	PASS
			5925~40000	5925~40000	-33.338	<=-27	PASS
		5785	30~5650	30~5650	-39.888	<=-27	PASS
			5925~40000	5925~40000	-32.486	<=-27	PASS
		5825	30~5650	30~5650	-40.54	<=-27	PASS
			5925~40000	5925~40000	-33.438	<=-27	PASS

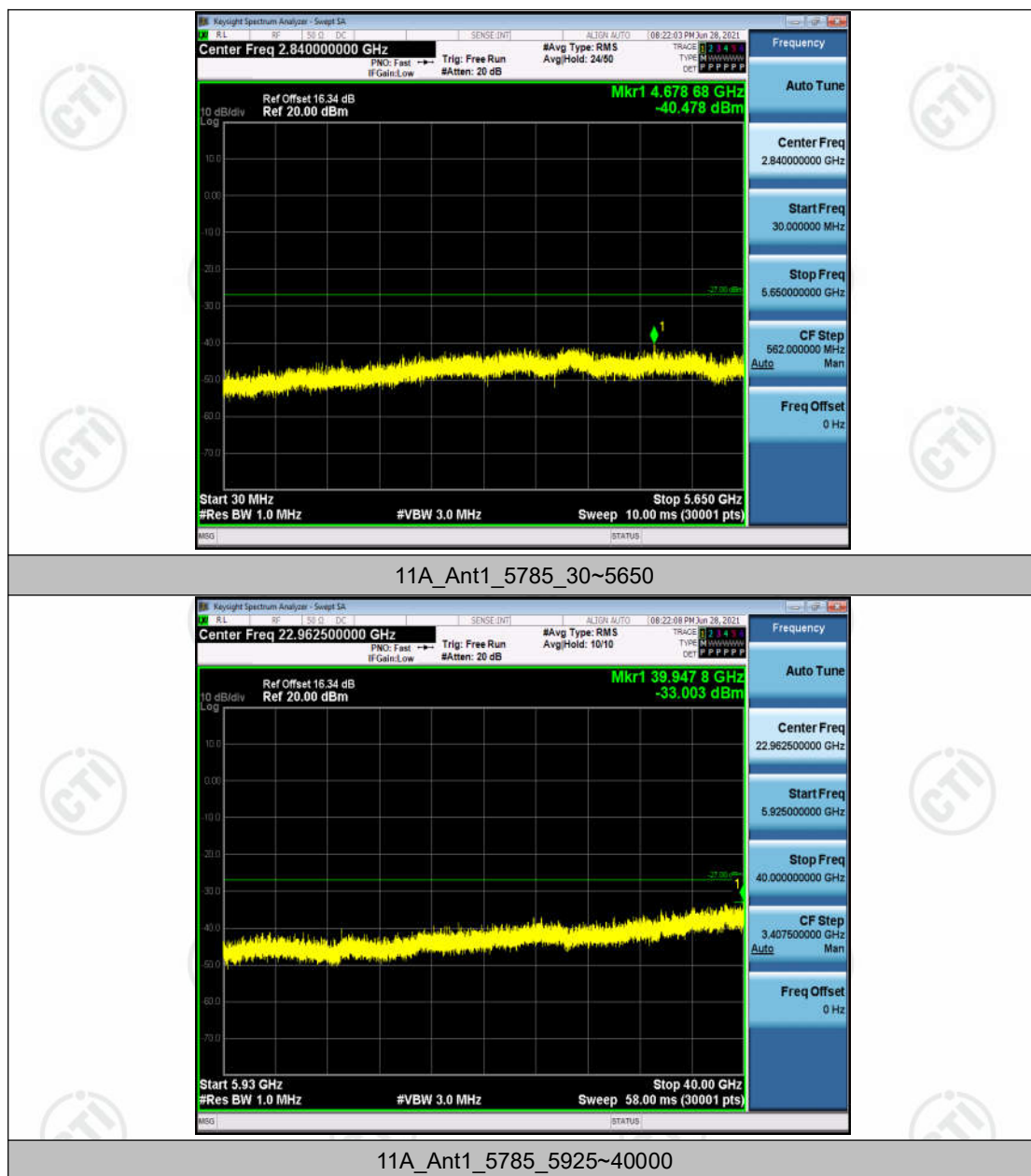
Test Graphs

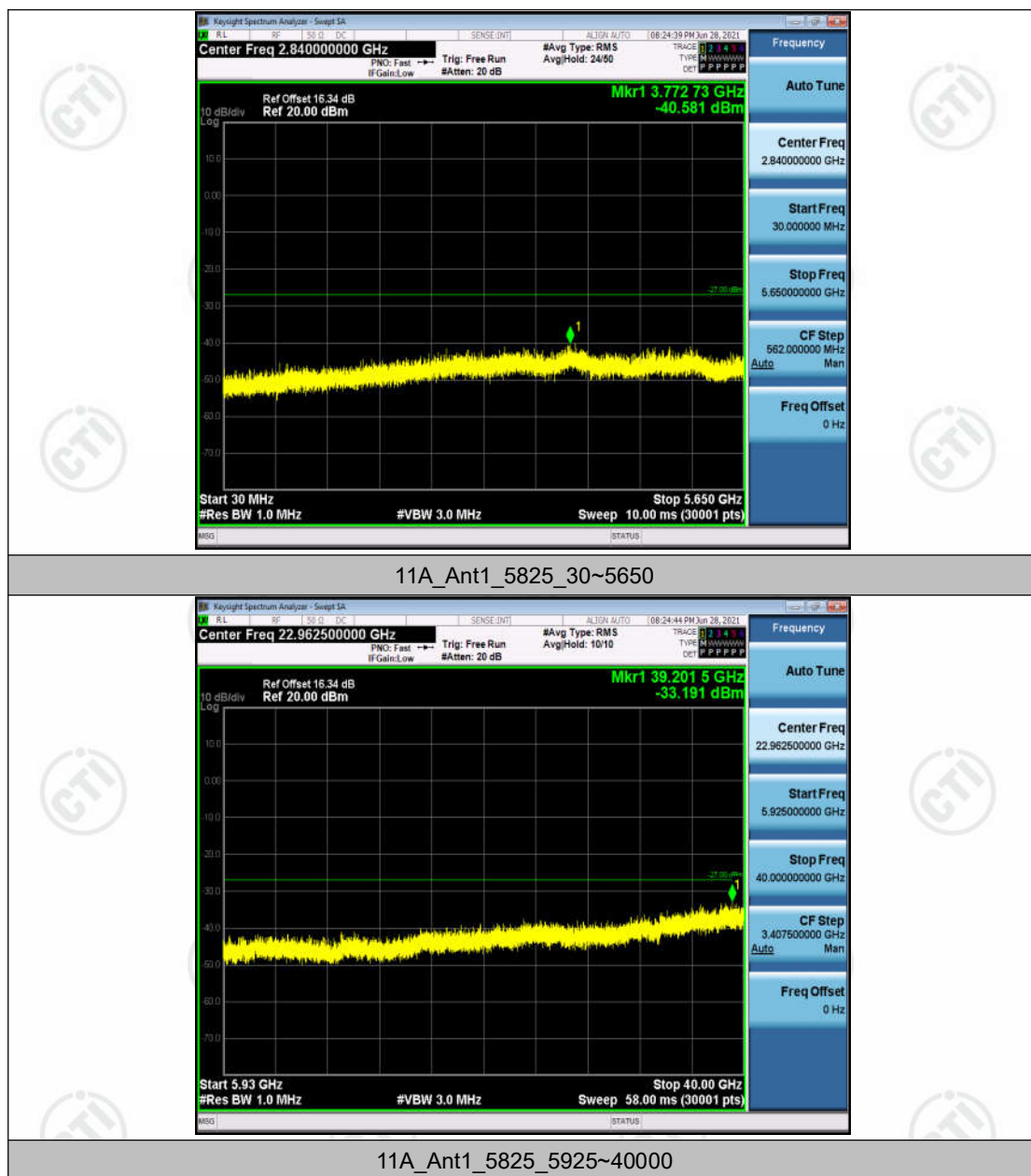


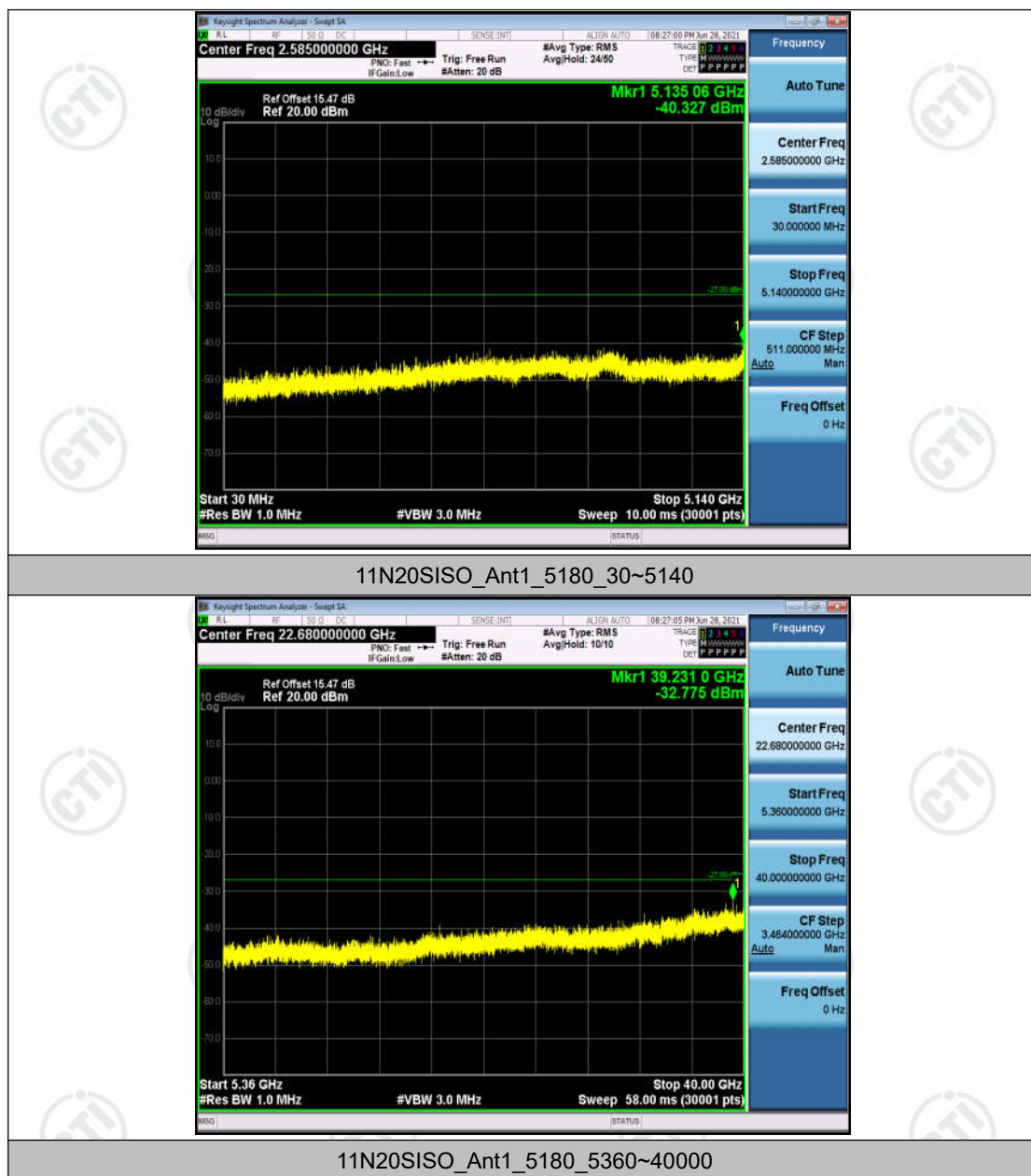


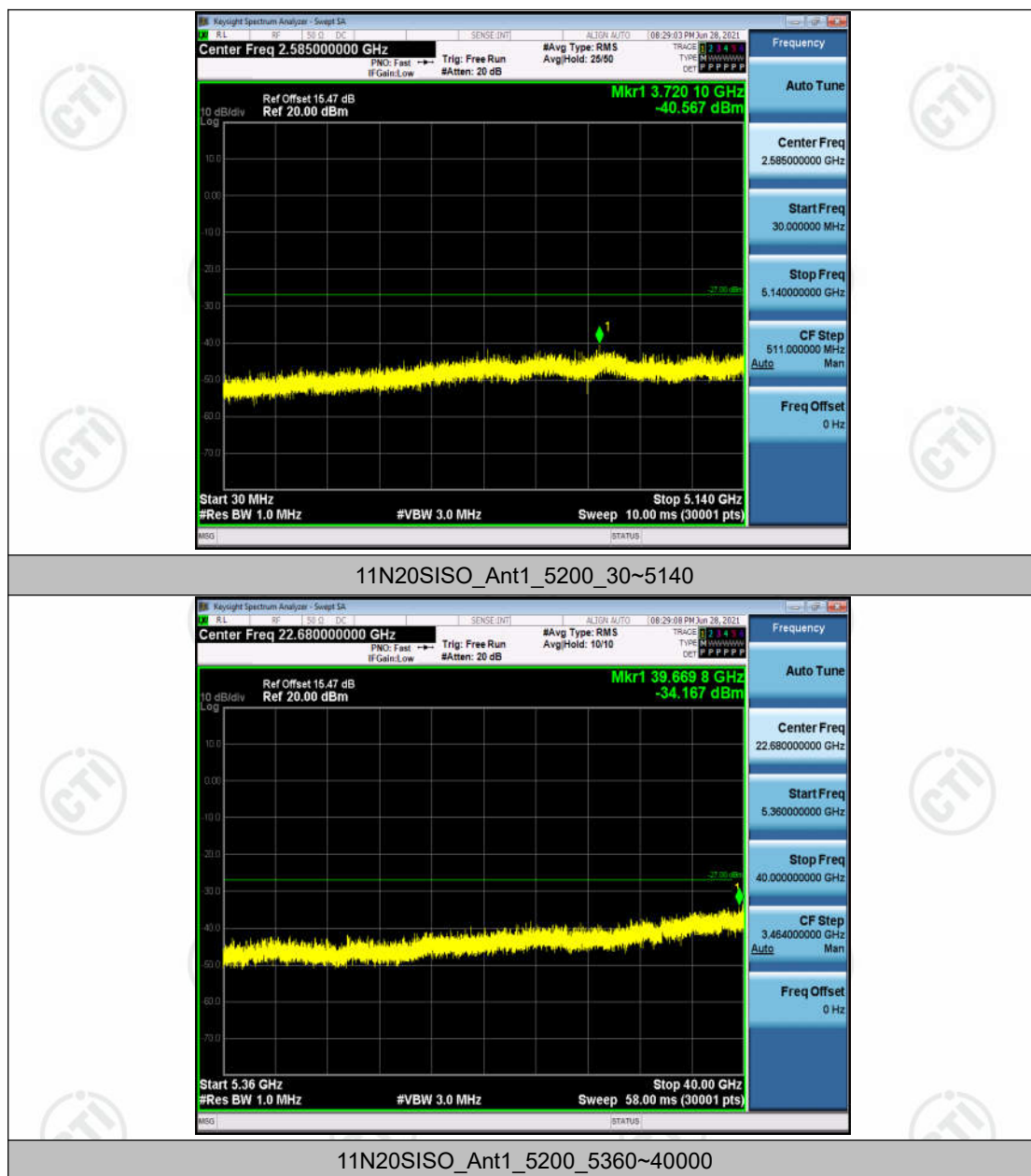


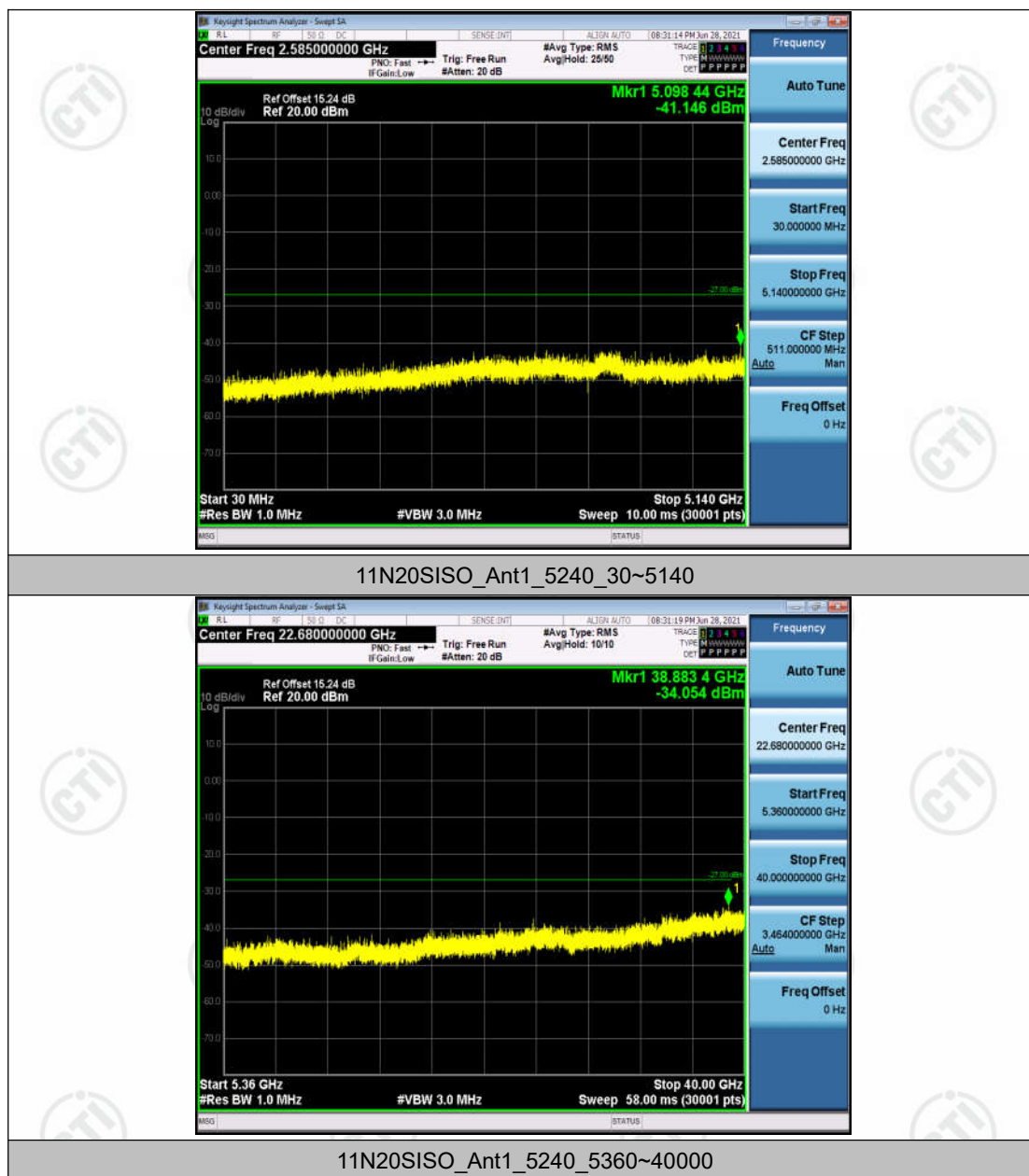


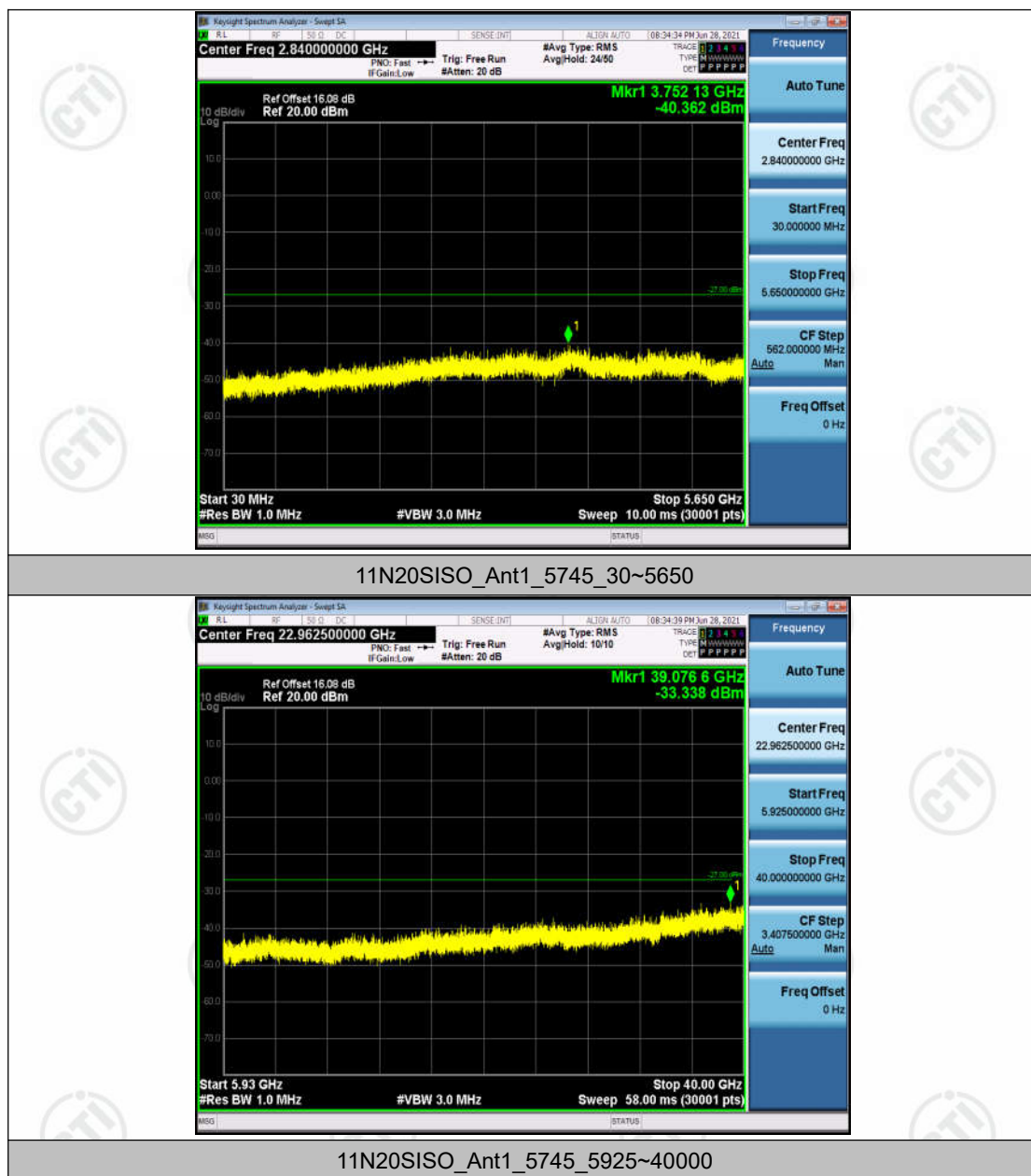


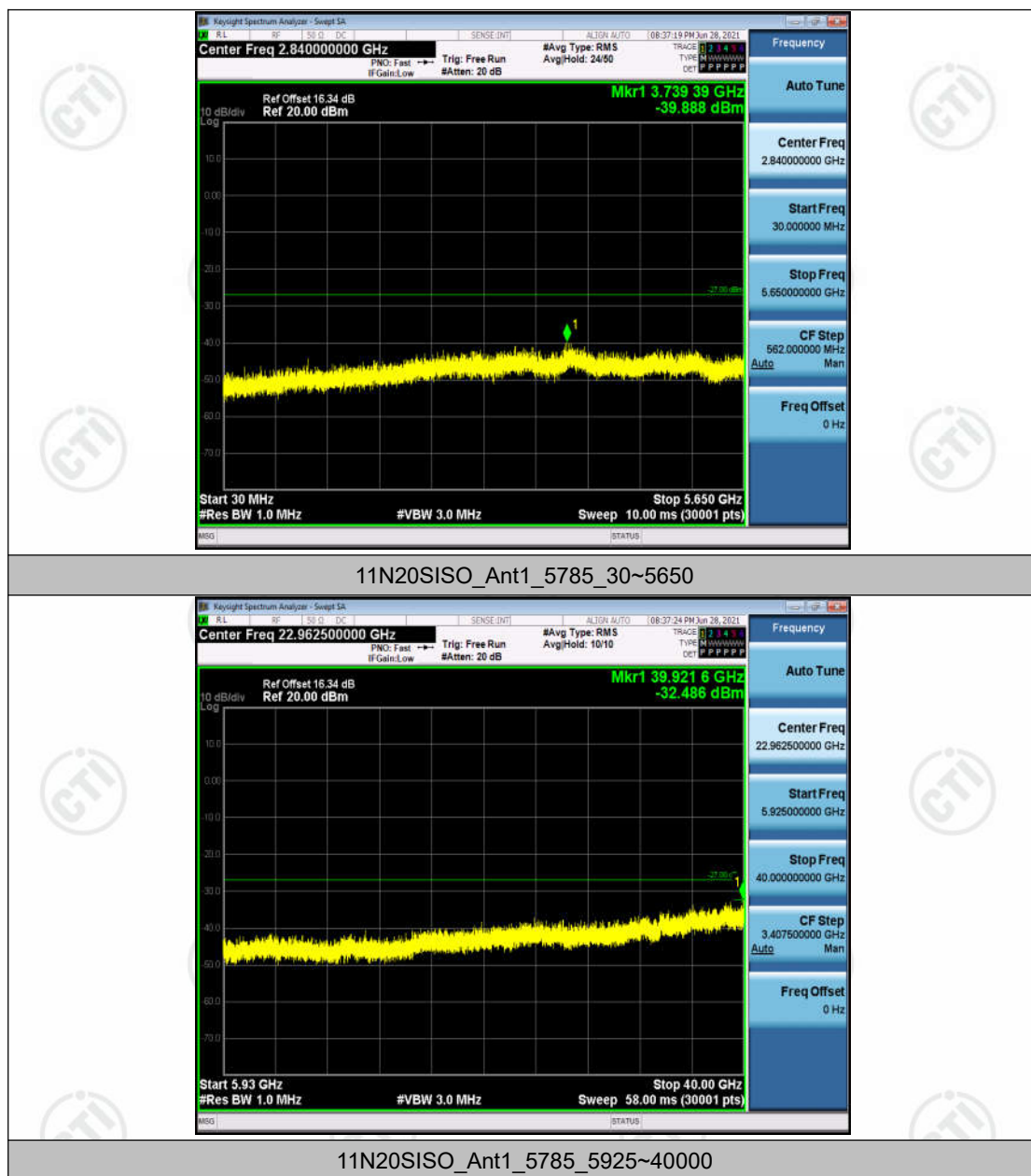


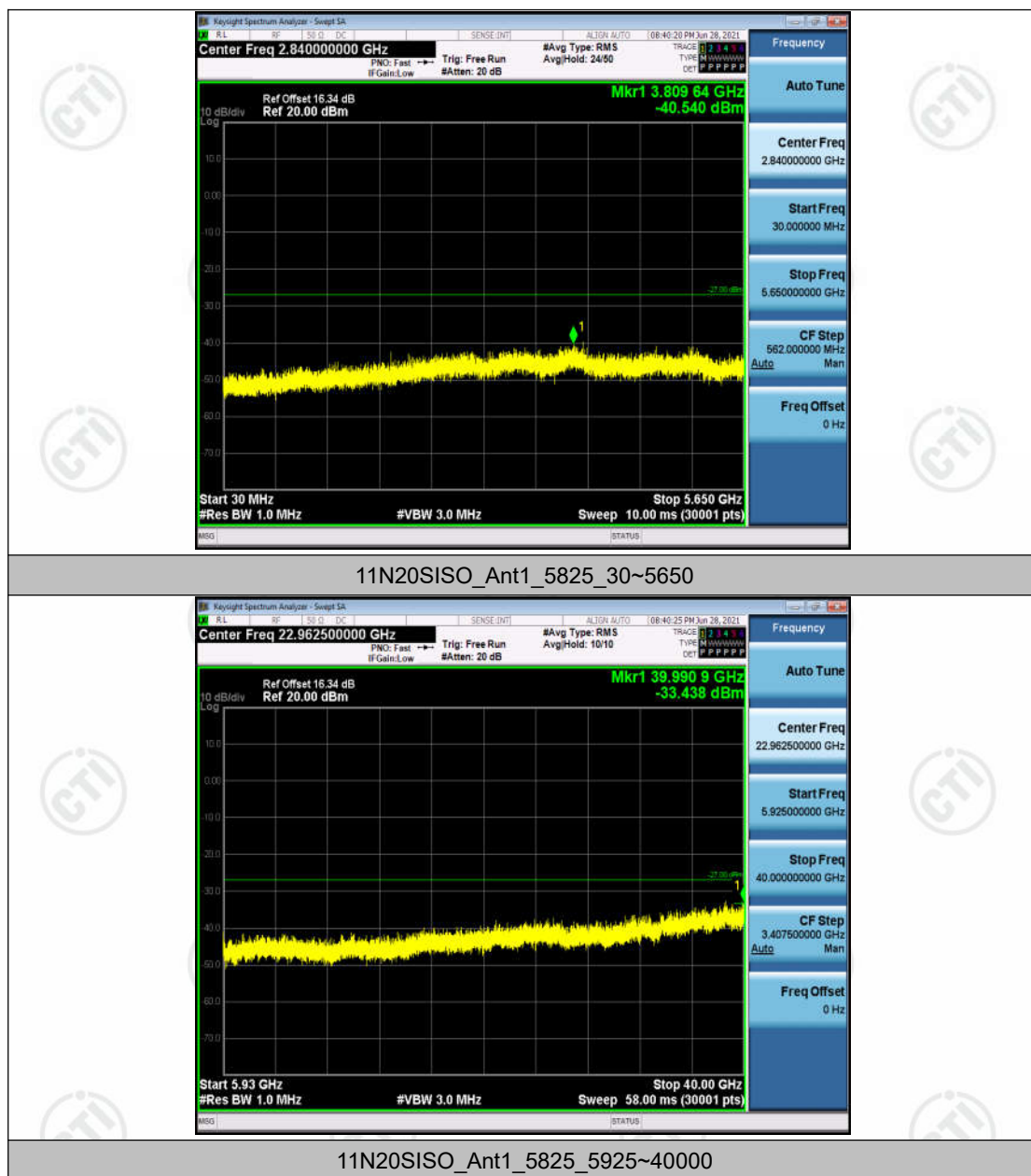












Appendix F: Frequency Stability

Test Result

Voltage								
Test Mode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	18000	3.474903	20	PASS
			LV	NT	17000	3.281853	20	PASS
			HV	NT	16000	3.088803	20	PASS
		5200	NV	NT	18000	3.461538	20	PASS
			LV	NT	17000	3.269231	20	PASS
			HV	NT	16000	3.076923	20	PASS
		5240	NV	NT	20000	3.816794	20	PASS
			LV	NT	17000	3.244275	20	PASS
			HV	NT	17000	3.244275	20	PASS
		5745	NV	NT	21000	3.655352	20	PASS
			LV	NT	19000	3.307224	20	PASS
			HV	NT	18000	3.133159	20	PASS
		5785	NV	NT	21000	3.630078	20	PASS
			LV	NT	19000	3.284356	20	PASS
			HV	NT	18000	3.111495	20	PASS
		5825	NV	NT	21000	3.60515	20	PASS
			LV	NT	19000	3.261803	20	PASS
			HV	NT	18000	3.090129	20	PASS
11N20SISO	Ant1	5180	NV	NT	18000	3.474903	20	PASS
			LV	NT	17000	3.281853	20	PASS
			HV	NT	16000	3.088803	20	PASS
		5200	NV	NT	18000	3.461538	20	PASS
			LV	NT	17000	3.269231	20	PASS
			HV	NT	16000	3.076923	20	PASS
		5240	NV	NT	18000	3.435115	20	PASS
			LV	NT	16000	3.053435	20	PASS
			HV	NT	16000	3.053435	20	PASS
		5745	NV	NT	21000	3.655352	20	PASS
			LV	NT	18000	3.133159	20	PASS
			HV	NT	18000	3.133159	20	PASS
		5785	NV	NT	26000	4.494382	20	PASS
			LV	NT	24000	4.14866	20	PASS
			HV	NT	22000	3.802939	20	PASS

		5825	NV	NT	20000	3.433476	20	PASS
			LV	NT	18000	3.090129	20	PASS
			HV	NT	18000	3.090129	20	PASS

Temperature								
Test Mode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	16000	3.088803	20	PASS
			NV	-20	16000	3.088803	20	PASS
			NV	-10	16000	3.088803	20	PASS
			NV	0	16000	3.088803	20	PASS
			NV	10	16000	3.088803	20	PASS
			NV	20	16000	3.088803	20	PASS
			NV	30	16000	3.088803	20	PASS
			NV	40	16000	3.088803	20	PASS
			NV	50	16000	3.088803	20	PASS
		5200	NV	-30	16000	3.076923	20	PASS
			NV	-20	16000	3.076923	20	PASS
			NV	-10	15000	2.884615	20	PASS
			NV	0	15000	2.884615	20	PASS
			NV	10	15000	2.884615	20	PASS
			NV	20	15000	2.884615	20	PASS
			NV	30	15000	2.884615	20	PASS
			NV	40	15000	2.884615	20	PASS
			NV	50	15000	2.884615	20	PASS
		5240	NV	-30	16000	3.053435	20	PASS
			NV	-20	16000	3.053435	20	PASS
			NV	-10	16000	3.053435	20	PASS
			NV	0	16000	3.053435	20	PASS
			NV	10	16000	3.053435	20	PASS
			NV	20	16000	3.053435	20	PASS
			NV	30	16000	3.053435	20	PASS
			NV	40	16000	3.053435	20	PASS
			NV	50	16000	3.053435	20	PASS
		5745	NV	-30	18000	3.133159	20	PASS
			NV	-20	18000	3.133159	20	PASS
			NV	-10	18000	3.133159	20	PASS
			NV	0	18000	3.133159	20	PASS
			NV	10	18000	3.133159	20	PASS
			NV	20	18000	3.133159	20	PASS
			NV	30	18000	3.133159	20	PASS

11N20SISO	Ant1		NV	40	18000	3.133159	20	PASS
			NV	50	18000	3.133159	20	PASS
		5785	NV	-30	18000	3.111495	20	PASS
			NV	-20	18000	3.111495	20	PASS
			NV	-10	18000	3.111495	20	PASS
			NV	0	18000	3.111495	20	PASS
			NV	10	18000	3.111495	20	PASS
			NV	20	18000	3.111495	20	PASS
			NV	30	18000	3.111495	20	PASS
			NV	40	18000	3.111495	20	PASS
			NV	50	17000	2.938634	20	PASS
		5825	NV	-30	18000	3.090129	20	PASS
			NV	-20	18000	3.090129	20	PASS
			NV	-10	18000	3.090129	20	PASS
			NV	0	18000	3.090129	20	PASS
			NV	10	18000	3.090129	20	PASS
			NV	20	18000	3.090129	20	PASS
			NV	30	18000	3.090129	20	PASS
			NV	40	18000	3.090129	20	PASS
			NV	50	18000	3.090129	20	PASS
		5180	NV	-30	16000	3.088803	20	PASS
			NV	-20	16000	3.088803	20	PASS
			NV	-10	16000	3.088803	20	PASS
			NV	0	16000	3.088803	20	PASS
			NV	10	16000	3.088803	20	PASS
			NV	20	16000	3.088803	20	PASS
			NV	30	16000	3.088803	20	PASS
			NV	40	16000	3.088803	20	PASS
		5200	NV	50	16000	3.088803	20	PASS
			NV	-30	16000	3.076923	20	PASS
			NV	-20	16000	3.076923	20	PASS
			NV	-10	16000	3.076923	20	PASS
			NV	0	16000	3.076923	20	PASS
			NV	10	16000	3.076923	20	PASS
			NV	20	16000	3.076923	20	PASS
			NV	30	16000	3.076923	20	PASS
		5240	NV	40	16000	3.076923	20	PASS
			NV	50	16000	3.076923	20	PASS
			NV	-30	16000	3.053435	20	PASS
			NV	-20	16000	3.053435	20	PASS
			NV	-10	16000	3.053435	20	PASS

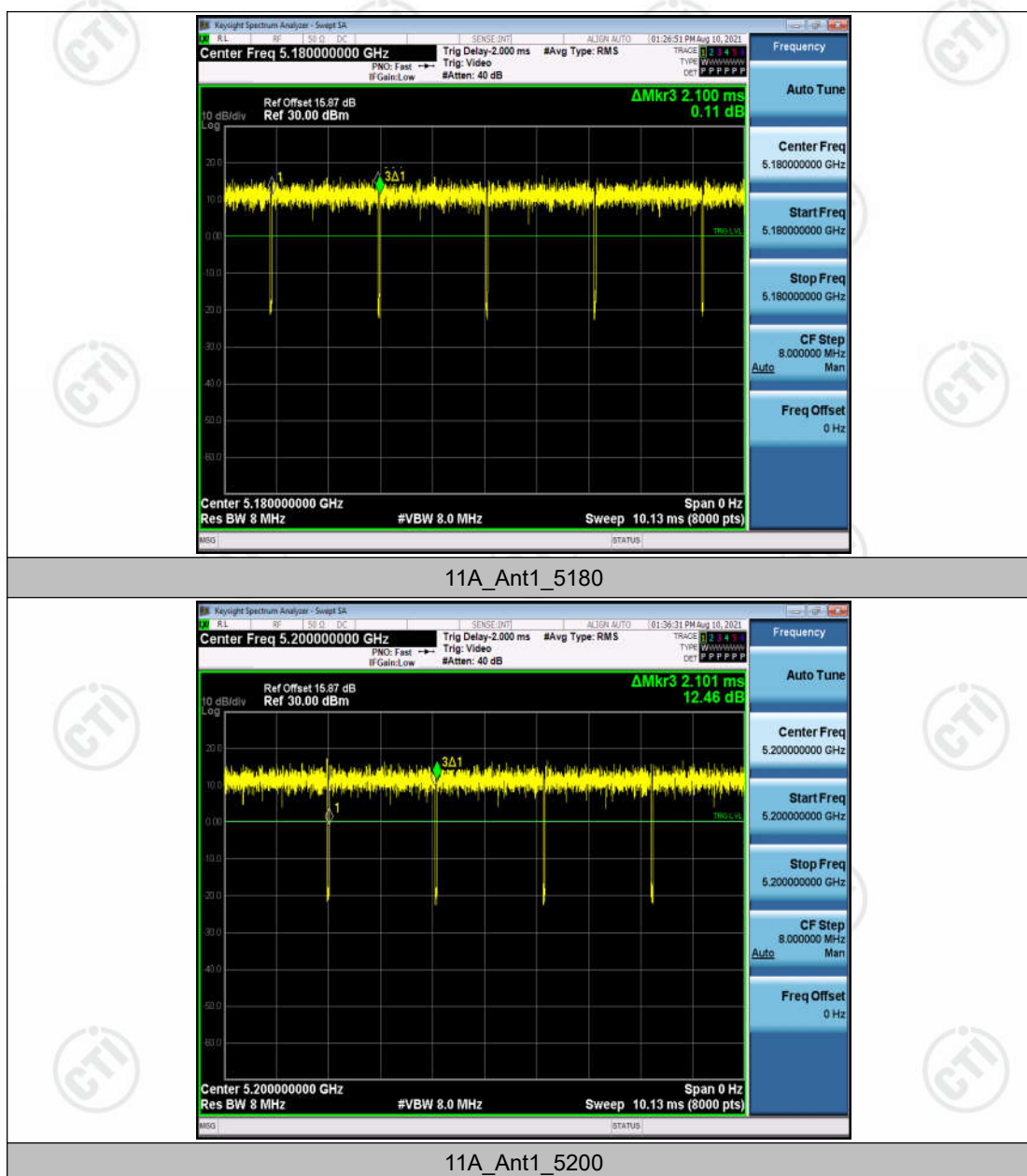
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			NV	20	16000	3.053435	20	PASS
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			NV	40	16000	3.053435	20	PASS
			NV	50	16000	3.053435	20	PASS
		5745	NV	-30	18000	3.133159	20	PASS
			NV	-20	18000	3.133159	20	PASS
			NV	-10	18000	3.133159	20	PASS
			NV	0	17000	2.959095	20	PASS
			NV	10	17000	2.959095	20	PASS
			NV	20	17000	2.959095	20	PASS
			NV	30	17000	2.959095	20	PASS
			NV	40	17000	2.959095	20	PASS
			NV	50	17000	2.959095	20	PASS
		5785	NV	-30	21000	3.630078	20	PASS
			NV	-20	20000	3.457217	20	PASS
			NV	-10	20000	3.457217	20	PASS
			NV	0	19000	3.284356	20	PASS
			NV	10	19000	3.284356	20	PASS
			NV	20	19000	3.284356	20	PASS
			NV	30	19000	3.284356	20	PASS
			NV	40	19000	3.284356	20	PASS
		5825	NV	50	18000	3.111495	20	PASS
			NV	-30	17000	2.918455	20	PASS
			NV	-20	17000	2.918455	20	PASS
			NV	-10	17000	2.918455	20	PASS
			NV	0	17000	2.918455	20	PASS
			NV	10	17000	2.918455	20	PASS
			NV	20	17000	2.918455	20	PASS
			NV	30	17000	2.918455	20	PASS
			NV	40	17000	2.918455	20	PASS
			NV	50	17000	2.918455	20	PASS

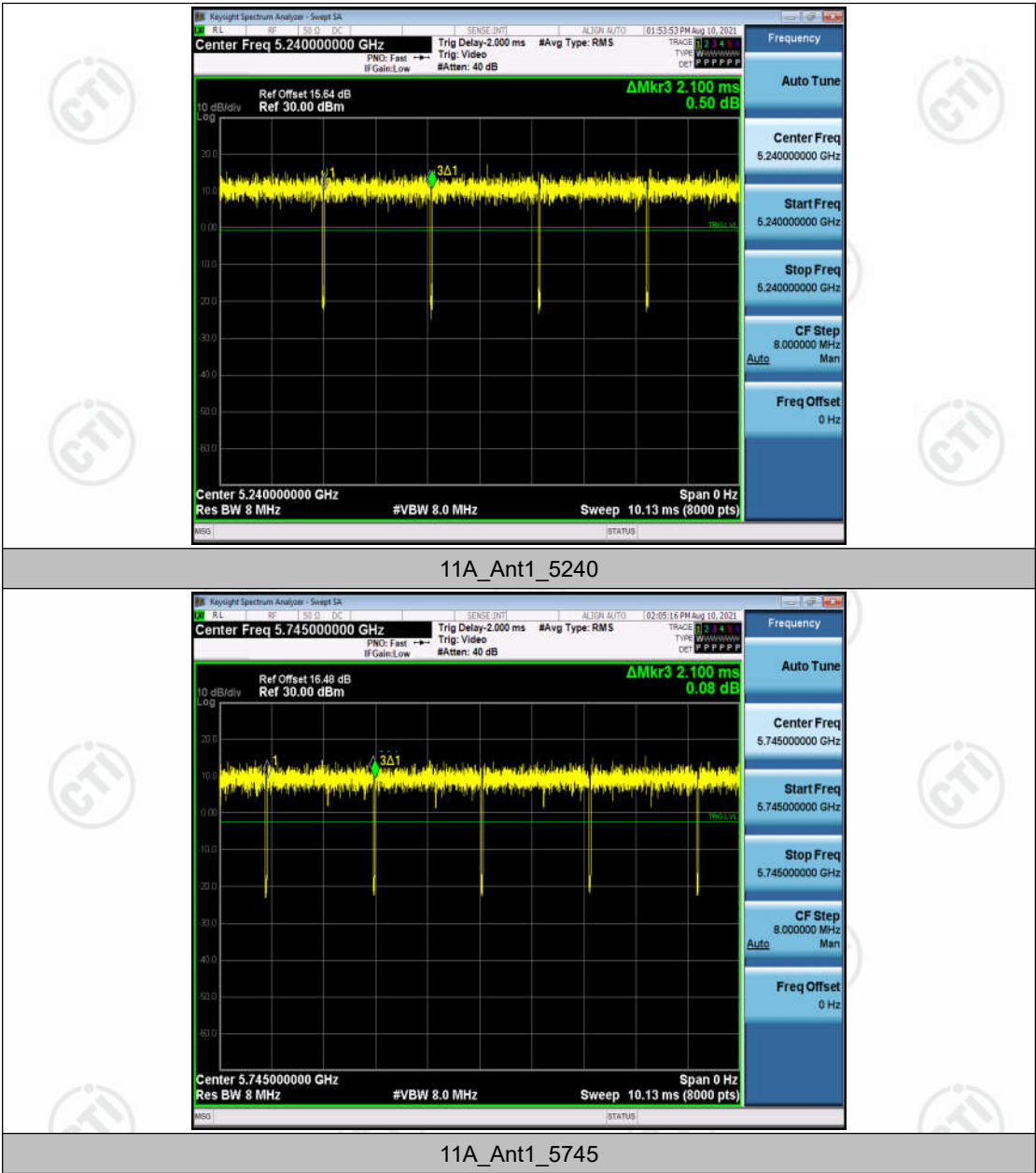
Appendix G: Duty Cycle

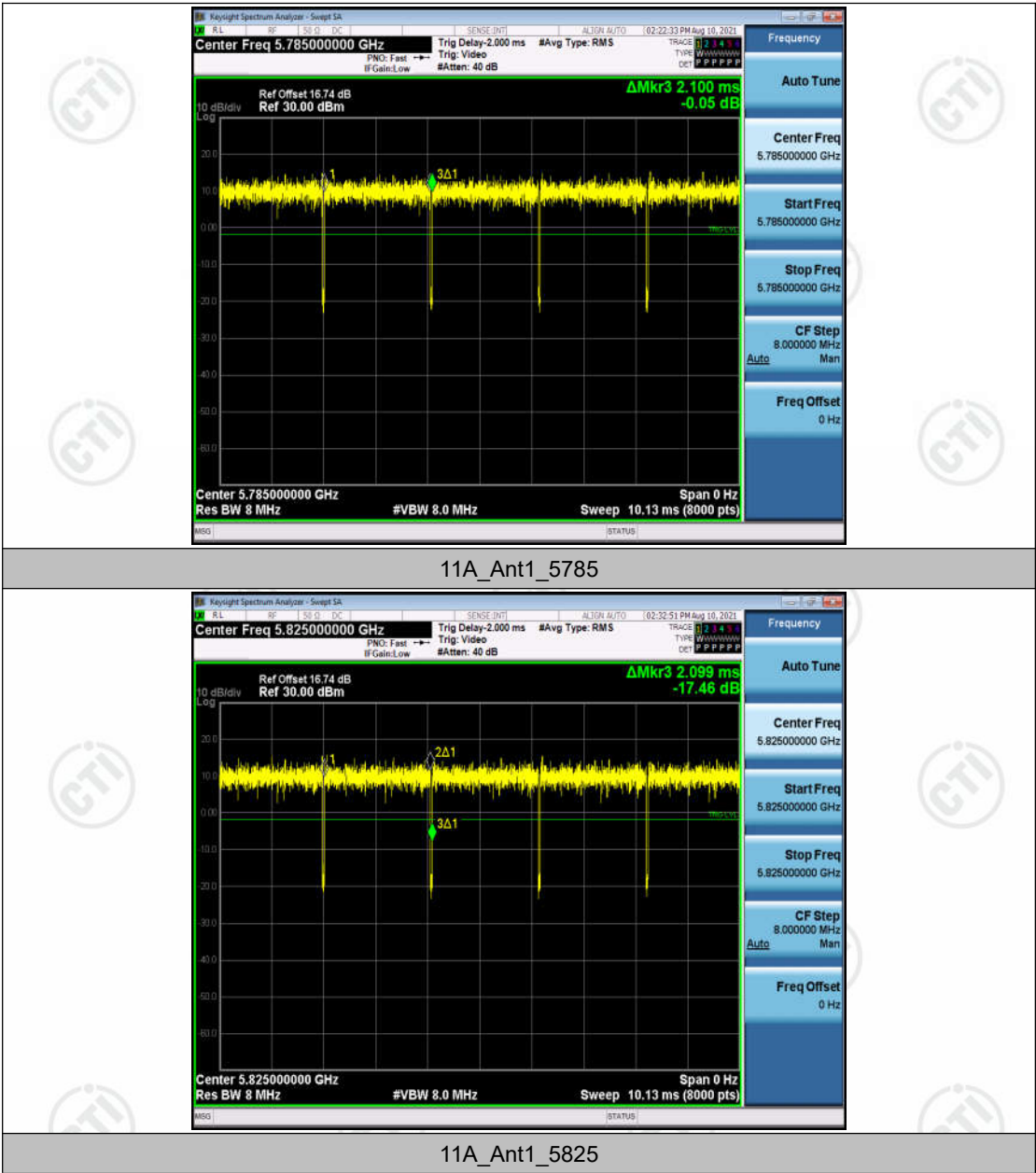
Test Result

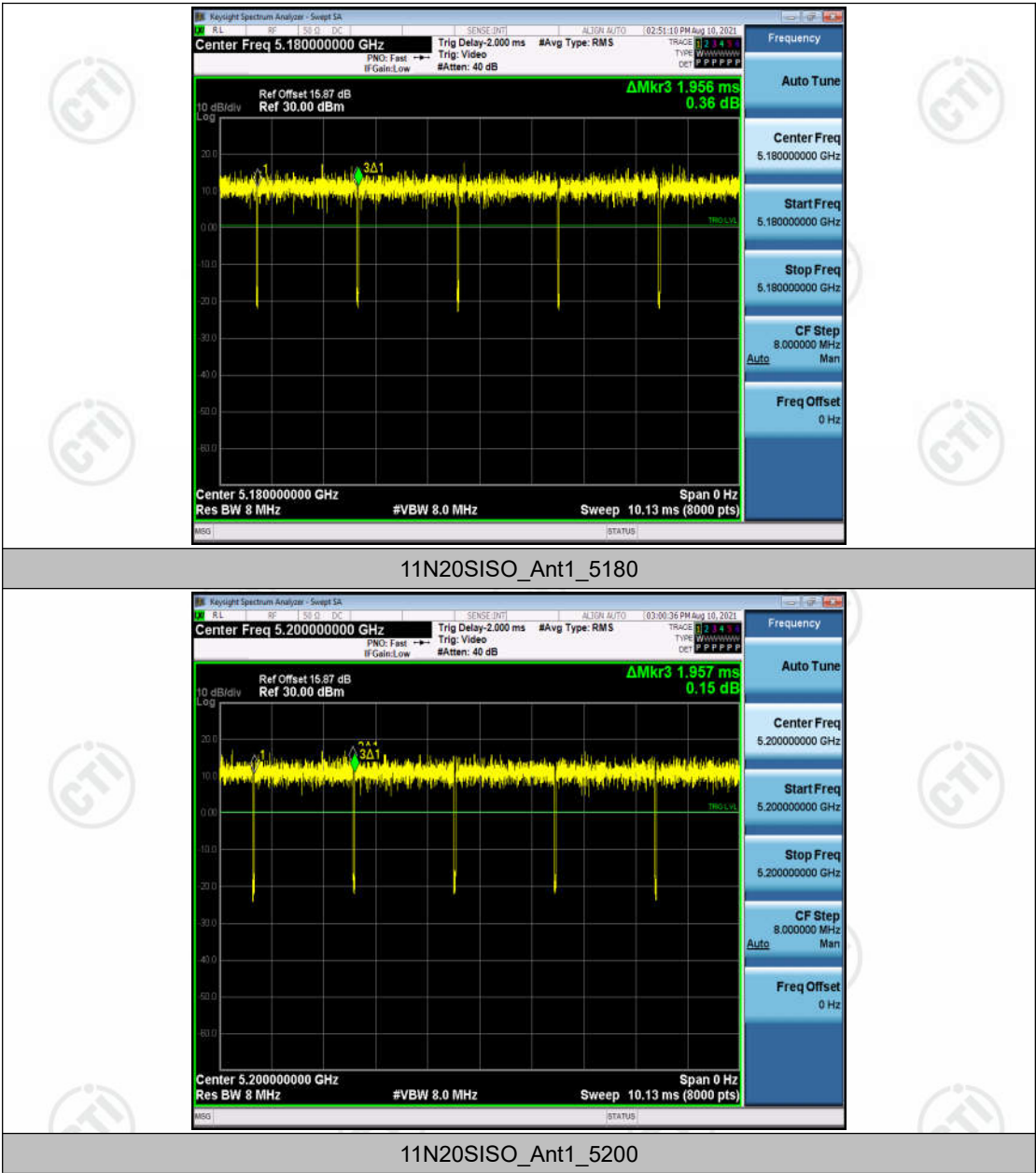
Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant1	5180	2.06	2.10	98.19	---	PASS
		5200	2.06	2.10	98.13	---	PASS
		5240	2.06	2.10	98.19	---	PASS
		5745	2.06	2.10	98.13	---	PASS
		5785	2.06	2.10	98.19	---	PASS
		5825	2.06	2.10	98.19	---	PASS
11N20SISO	Ant1	5180	1.92	1.96	98.06	---	PASS
		5200	1.92	1.96	97.99	---	PASS
		5240	1.92	1.96	98.06	---	PASS
		5745	1.92	1.96	98.06	---	PASS
		5785	1.92	1.96	97.99	---	PASS
		5825	1.92	1.96	98.06	---	PASS

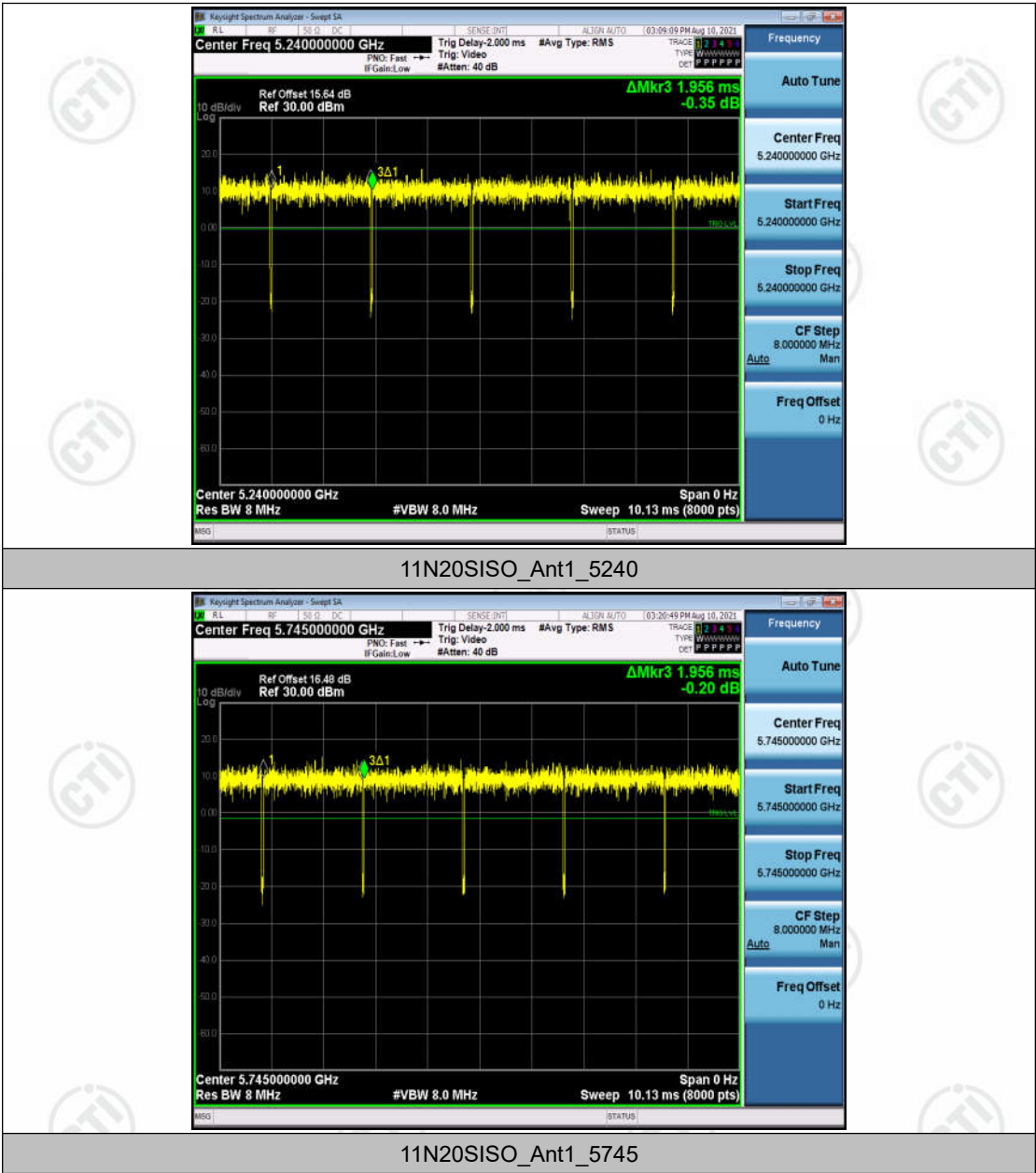
Test Graphs

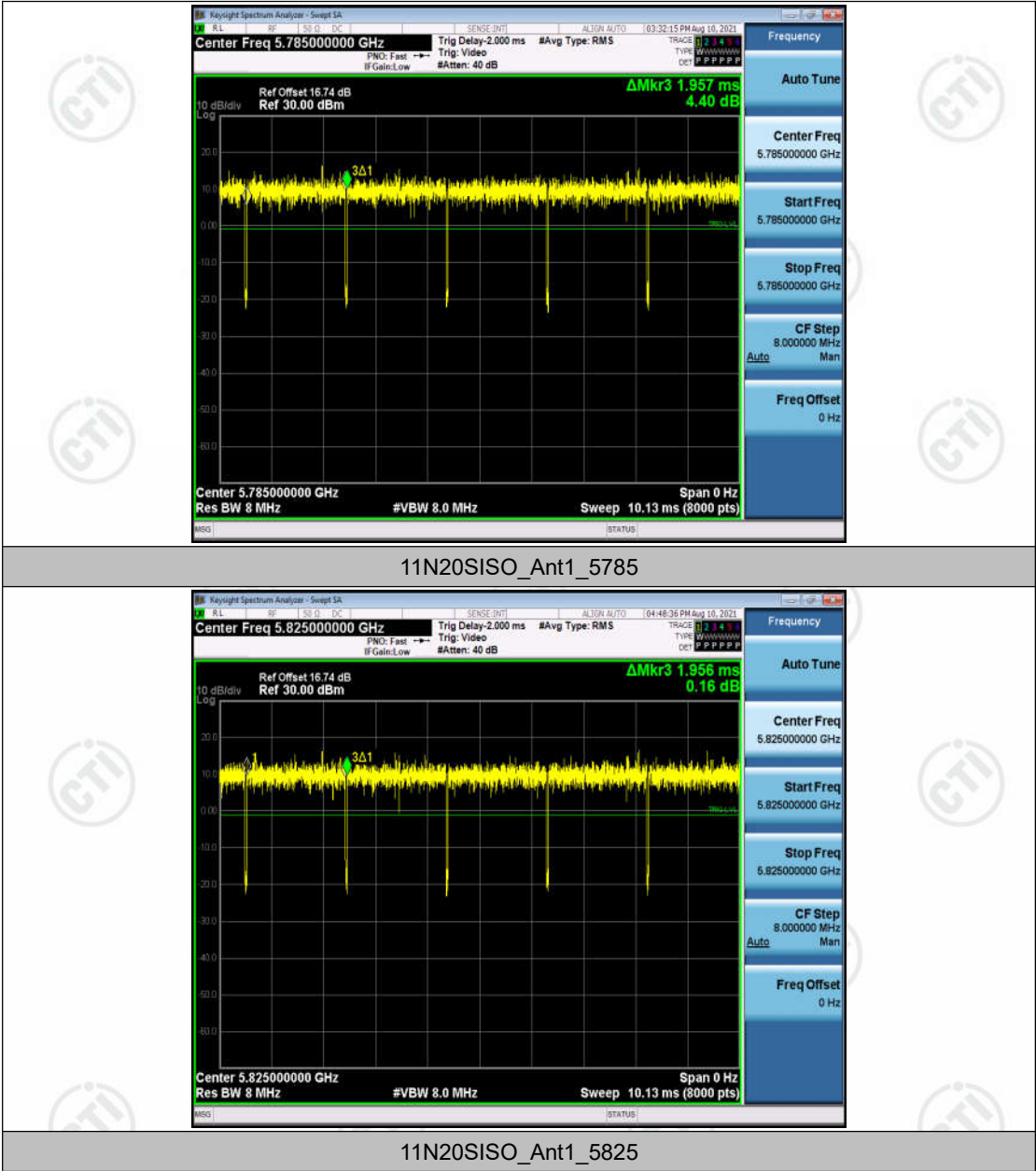












*** End of Report ***