

Case No. : <u>CTA24070301804</u>	
Ambient Condition: <u>23</u> °C, <u>51</u> %RH	
According Standard: ■Part15E	
Test Date: <u>2024.6.9-2024.7.10</u>	Test Engineer: <u>Lushan Kong</u>

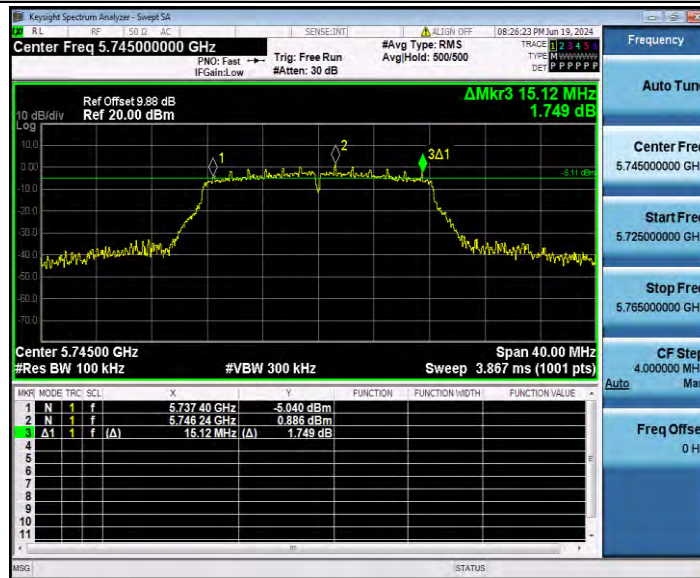
Appendix G.1: Min emission bandwidth

Test Result B4

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.120	5737.400	5752.520	0.5	PASS
		5785	15.440	5777.440	5792.880	0.5	PASS
		5825	15.080	5817.440	5832.520	0.5	PASS
11N20SISO	Ant1	5745	15.120	5737.400	5752.520	0.5	PASS
		5785	15.000	5777.520	5792.520	0.5	PASS
		5825	15.080	5817.440	5832.520	0.5	PASS
11N40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	15.080	5737.440	5752.520	0.5	PASS
		5785	15.080	5777.440	5792.520	0.5	PASS
		5825	15.040	5817.480	5832.520	0.5	PASS
11AC40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

Test Graphs B4

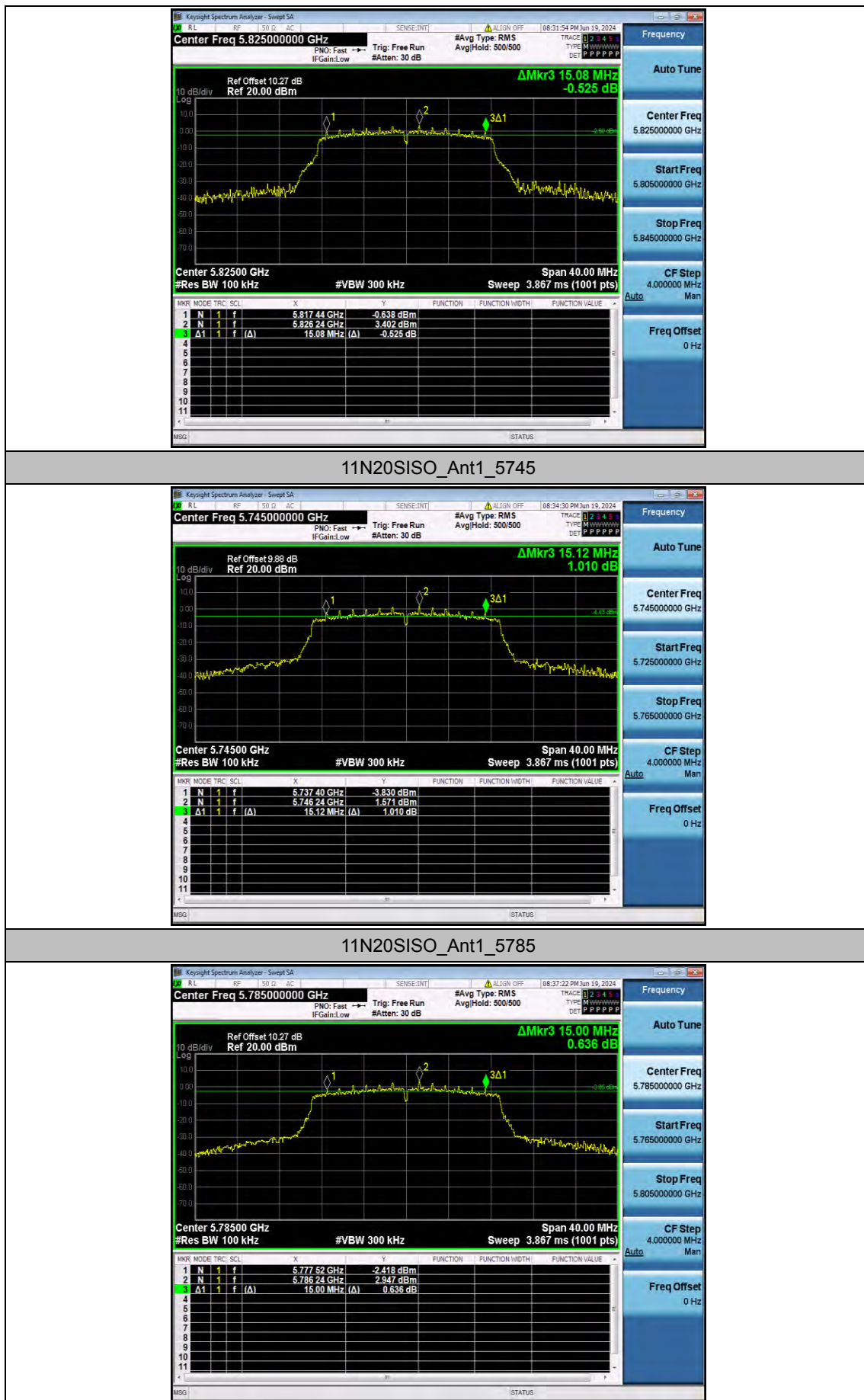
11A_Ant1_5745



11A_Ant1_5785



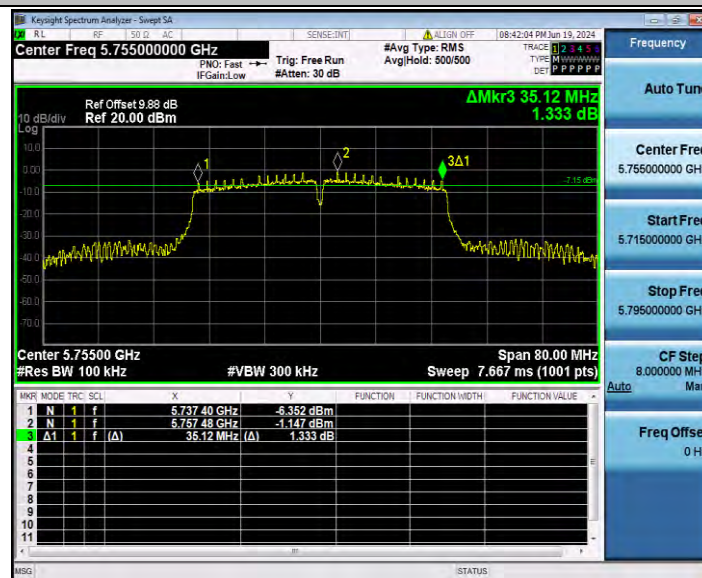
11A_Ant1_5825



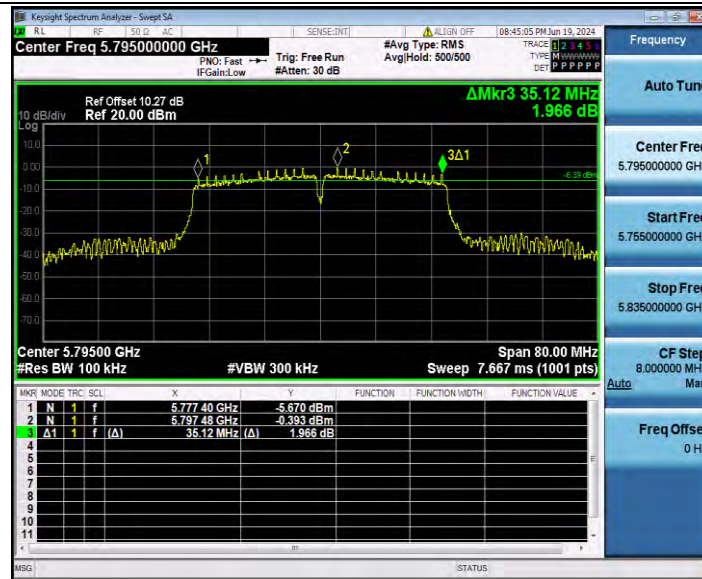
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



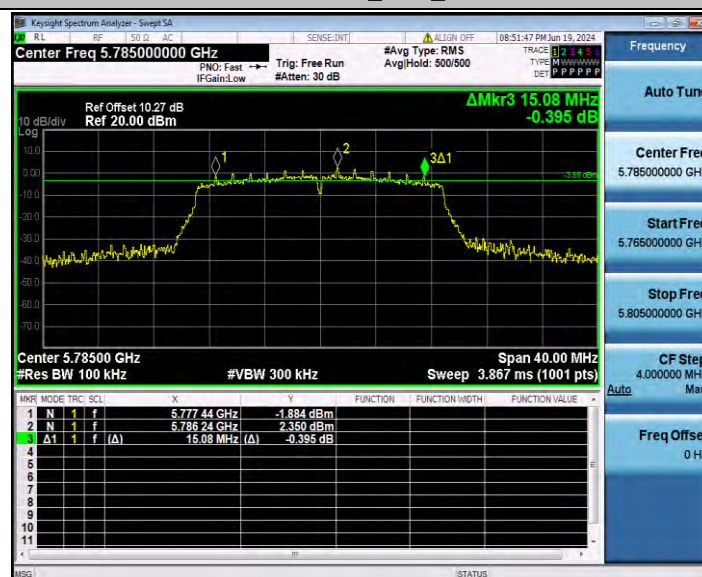
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



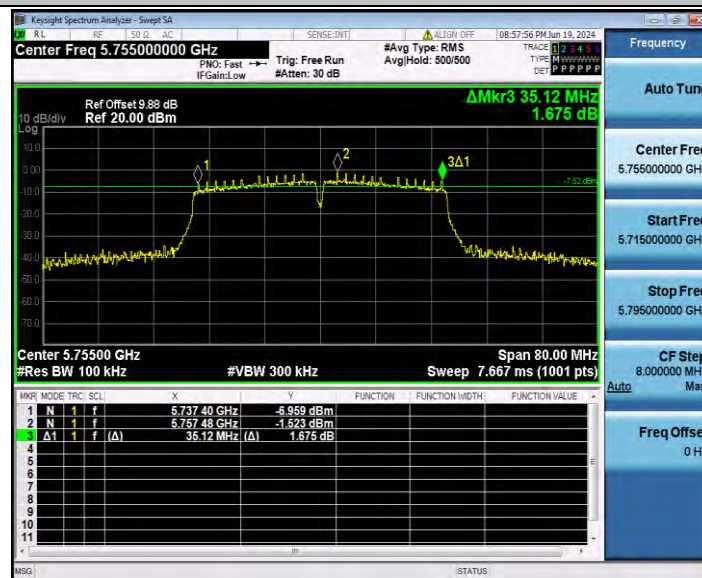
11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

KeySight Spectrum Analyzer - Sweep SA

RL 50.0 AC SENSE INT ALIGN OFF 09-03-29 PM Jun 19, 2024

Center Freq 5.775000000 GHz

Trig: Free Run Avg Type: RMS #Avg Hold: 500/500

Trace 1 2 3 4 5
Type M W W W W W W W W
Det P P P P P P P

Ref Offset 9.88 dB
Ref 20.00 dBm

**ΔMkr3 75.20 MHz
-0.269 dB**

10 dB/div
Log

Ref 9.88 dB
Ref 20.00 dBm

Center 5.77500 GHz Span 160.0 MHz
#Res BW 100 kHz #VBW 300 kHz Sweep 15.33 ms (1001 pts)

Mkr	Mode	Trc	SCL	X	Y	Function	Function Width	Function Value
1	N	1	f	5.737 40 GHz	-8.483 dBm			
2	N	1	f	5.777 56 GHz	-8.010 dBm			
3	Δ1	1	f (Δ)	75.20 MHz (Δ)	-0.269 dB			

Auto Tune

Center Freq 5.775000000 GHz

Start Freq 5.695000000 GHz

Stop Freq 5.855000000 GHz

CF Step 16.000000 MHz Man

Freq Offset 0 Hz

MSG STATUS

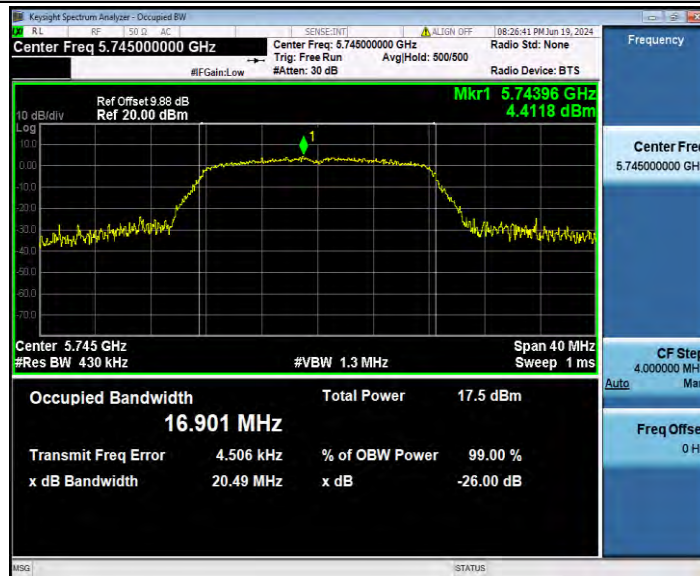
Appendix G.2: Occupied channel bandwidth

Test Result

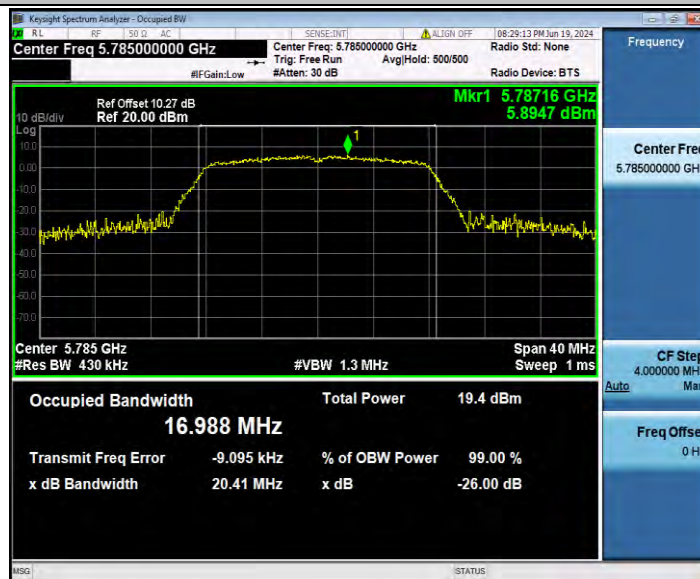
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.901	5736.5540	5753.4550	---	---
		5785	16.988	5776.4969	5793.4849	---	---
		5825	16.909	5816.5198	5833.4288	---	---
11N20SISO	Ant1	5745	17.968	5736.0240	5753.9920	---	---
		5785	18.015	5775.9942	5794.0092	---	---
		5825	17.937	5816.0137	5833.9507	---	---
11N40SISO	Ant1	5755	36.563	5736.8035	5773.3665	---	---
		5795	36.612	5776.8265	5813.4385	---	---
11AC20SISO	Ant1	5745	17.900	5736.0562	5753.9562	---	---
		5785	17.852	5776.0705	5793.9225	---	---
		5825	17.858	5816.0675	5833.9255	---	---
11AC40SISO	Ant1	5755	36.331	5736.8740	5773.2050	---	---
		5795	36.418	5776.8801	5813.2981	---	---
11AC80SISO	Ant1	5775	75.491	5737.4219	5812.9129	---	---

Test Graphs

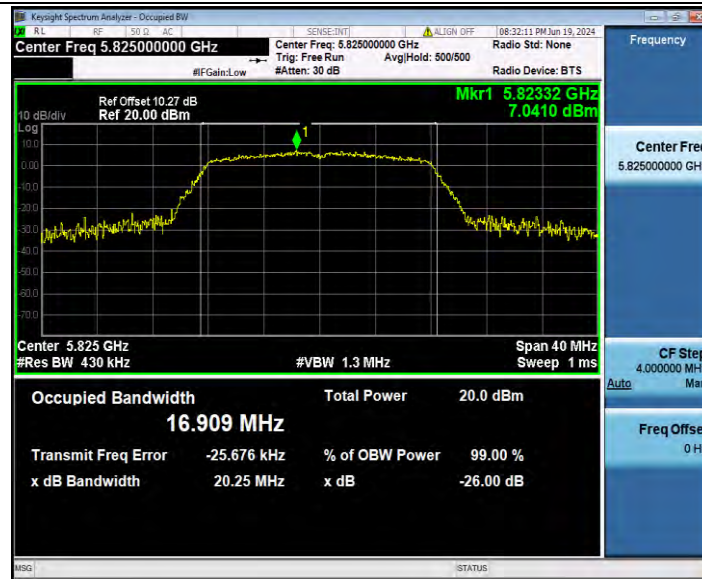
11A_Ant1_5745



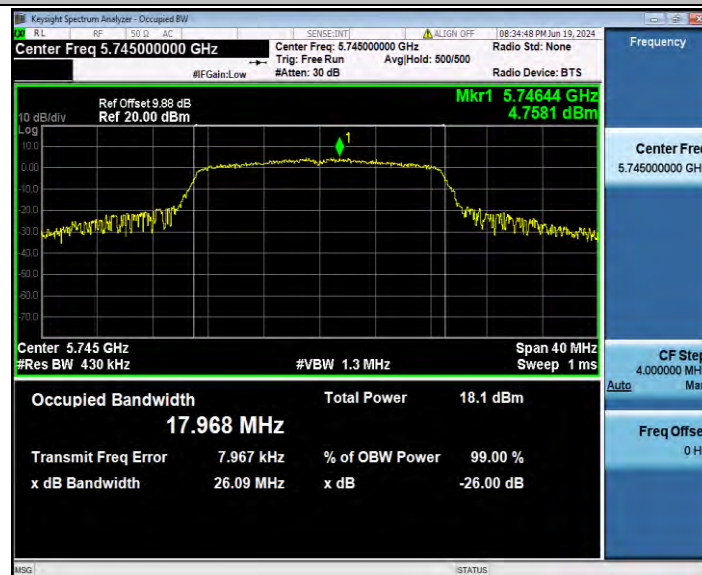
11A_Ant1_5785



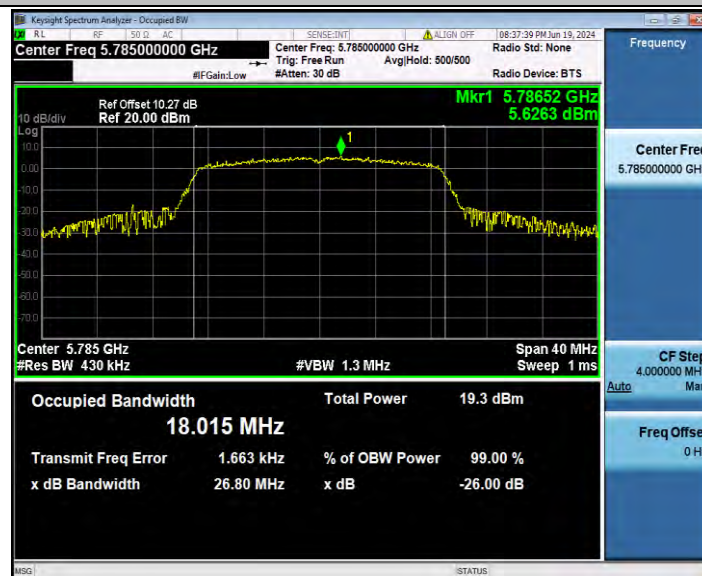
11A_Ant1_5825



11N20SISO_Ant1_5745



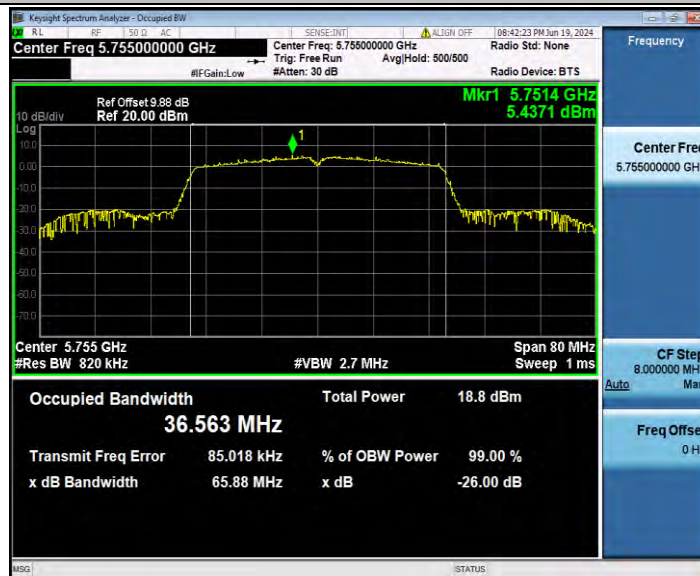
11N20SISO_Ant1_5785



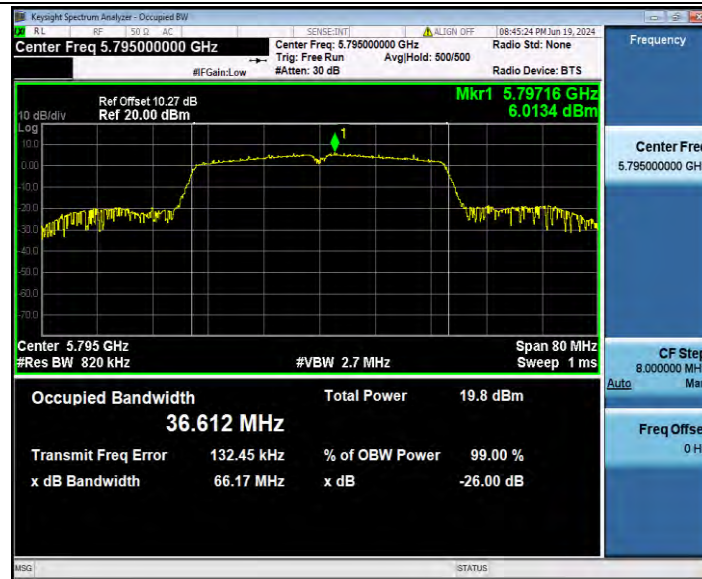
11N20SISO_Ant1_5825



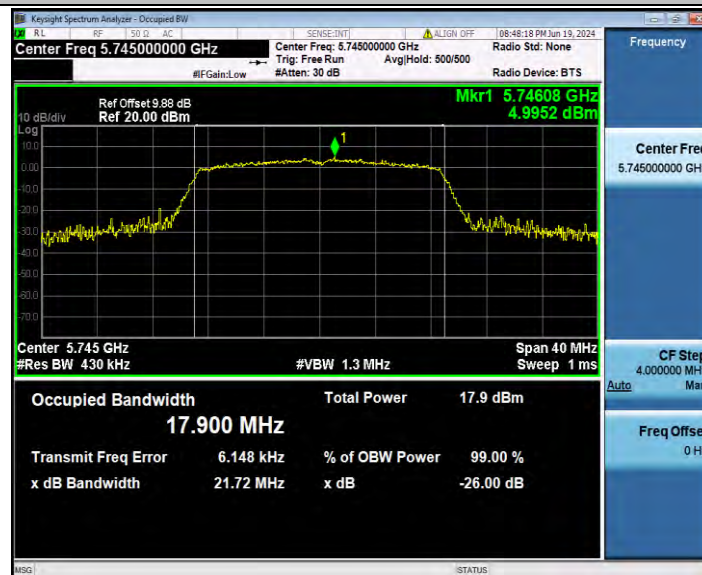
11N40SISO_Ant1_5755



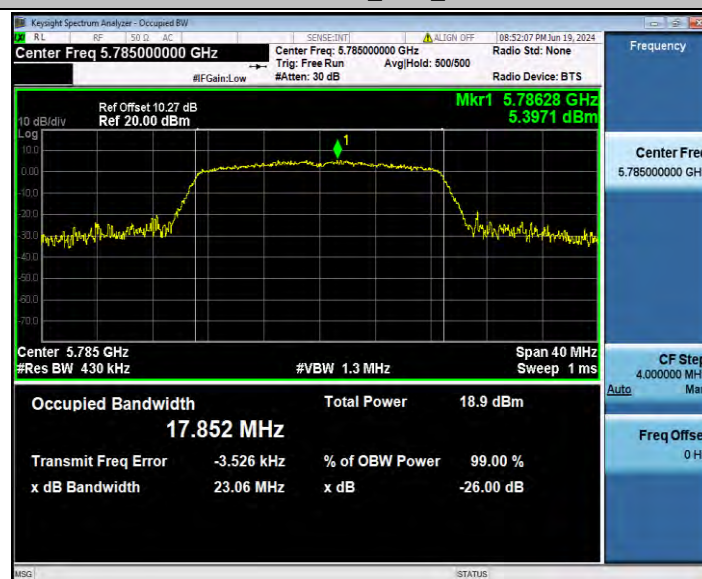
11N40SISO_Ant1_5795



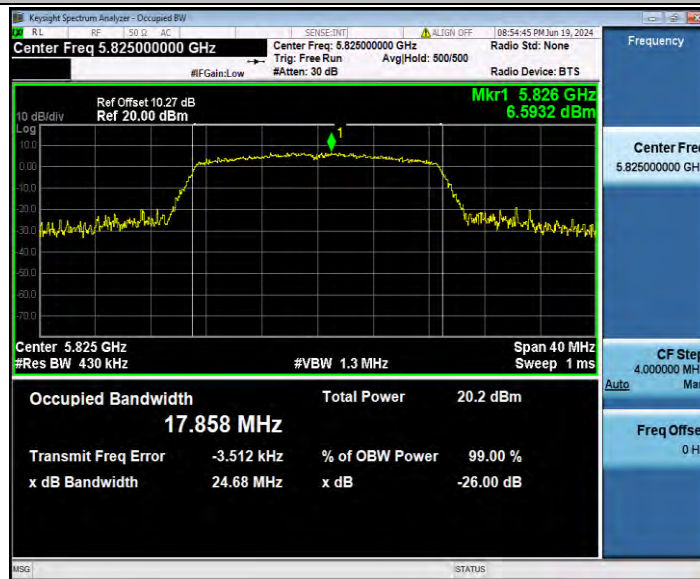
11AC20SISO_Ant1_5745



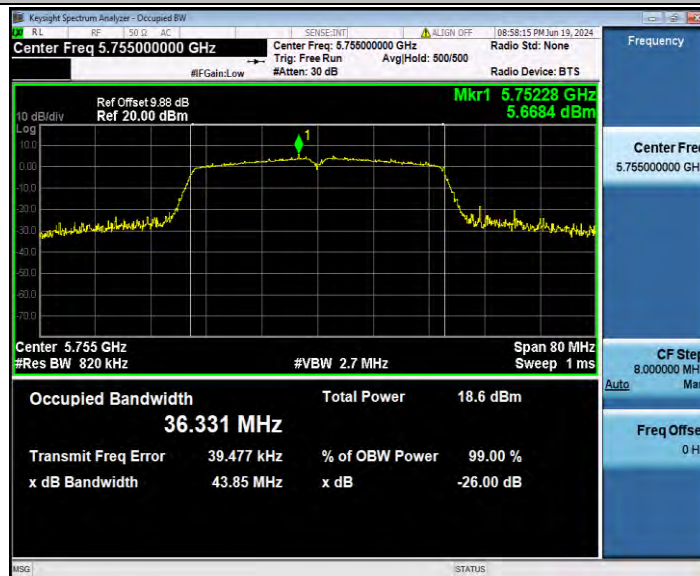
11AC20SISO_Ant1_5785



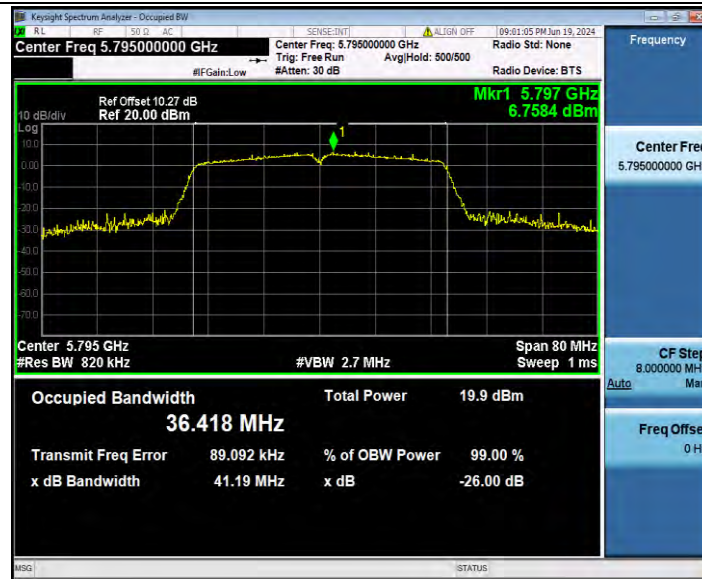
11AC20SISO_Ant1_5825



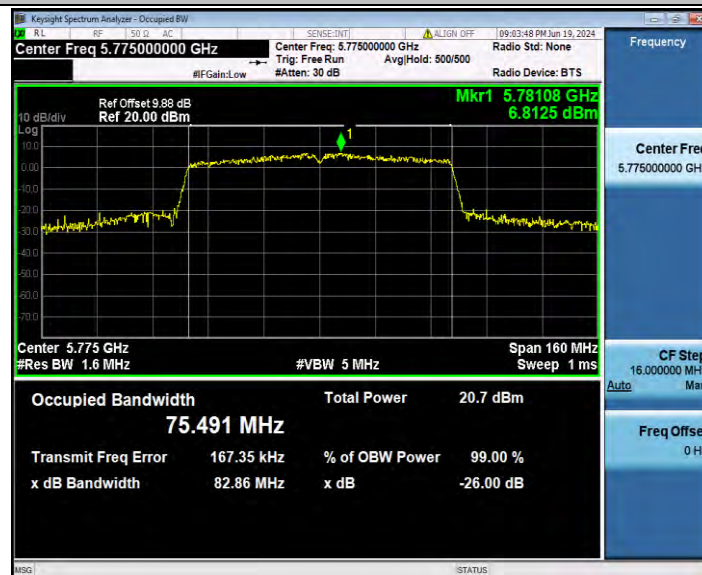
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



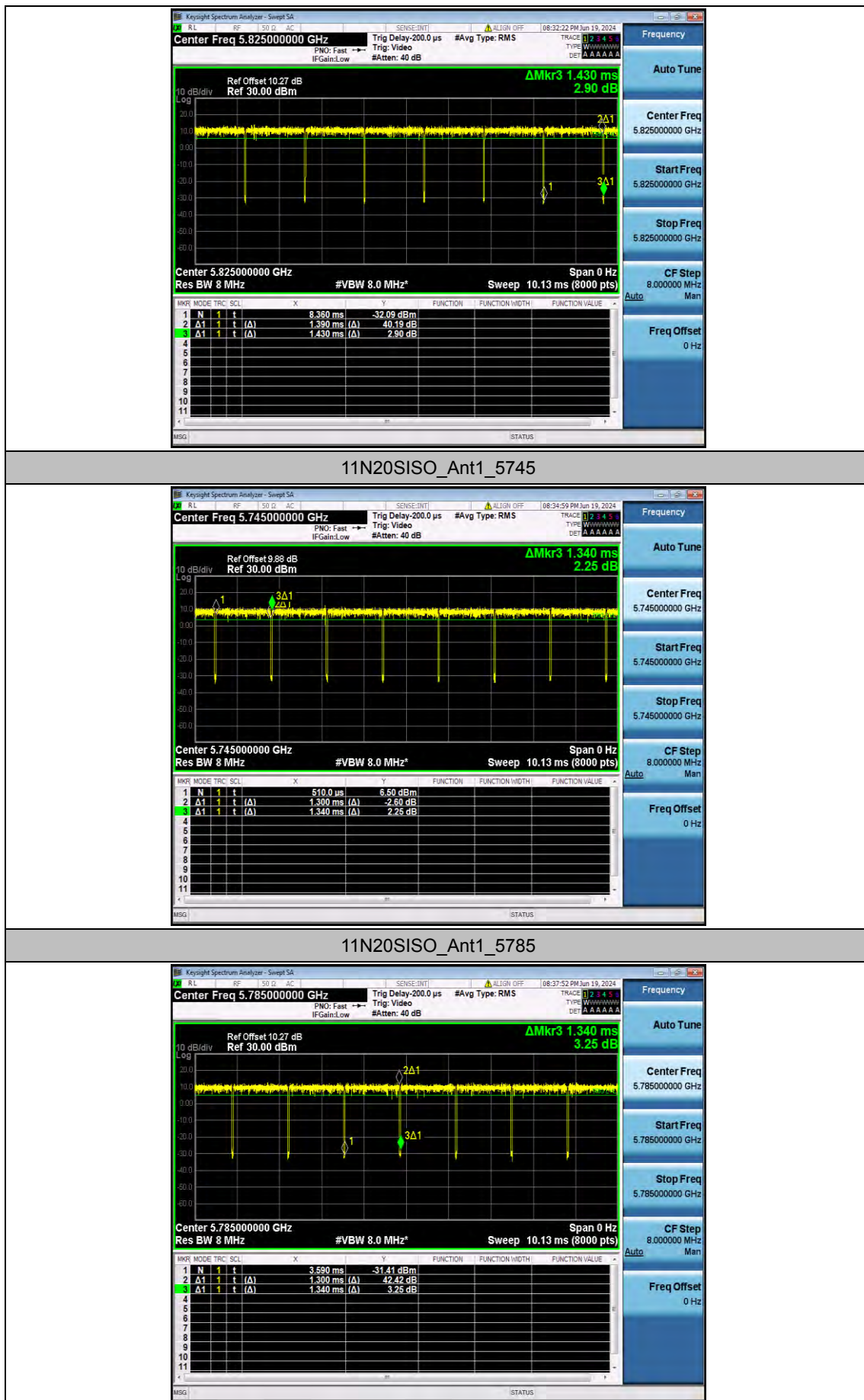
11AC80SISO_Ant1_5775



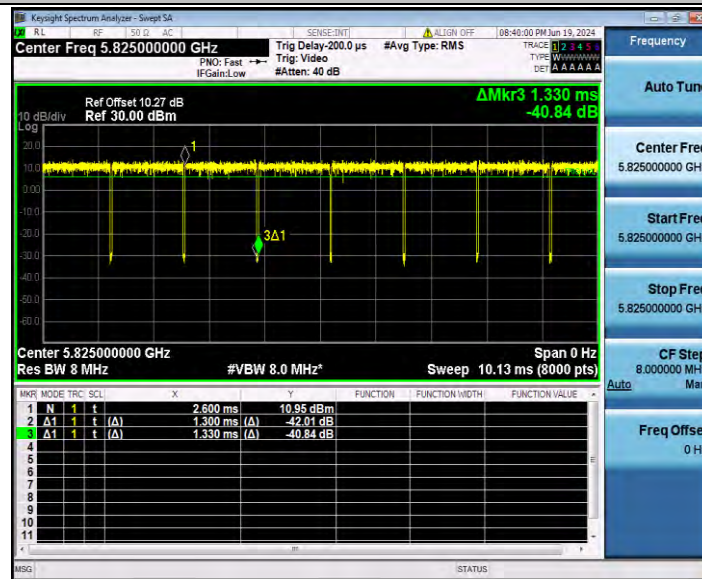
Appendix G.3: Duty Cycle

Test Result

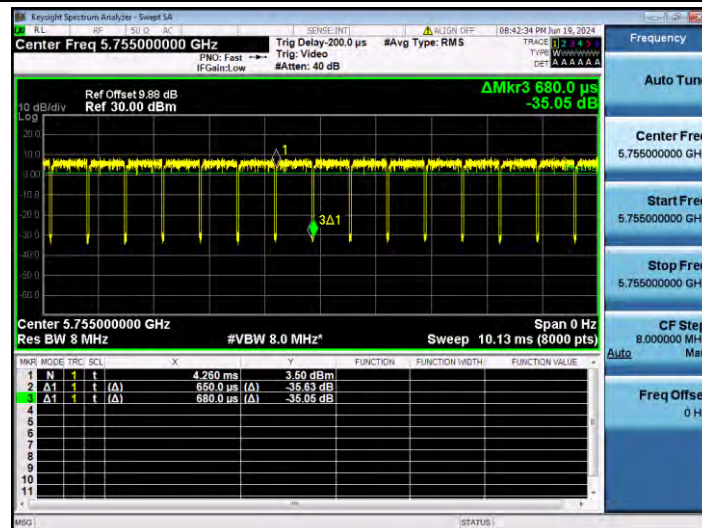
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5745	1.40	1.43	97.90	0.09	0.71
		5785	1.39	1.43	97.20	0.12	0.72
		5825	1.39	1.43	97.20	0.12	0.72
11N20SISO	Ant1	5745	1.30	1.34	97.01	0.13	0.77
		5785	1.30	1.34	97.01	0.13	0.77
		5825	1.30	1.33	97.74	0.10	0.77
11N40SISO	Ant1	5755	0.65	0.68	95.59	0.20	1.54
		5795	0.65	0.68	95.59	0.20	1.54
11AC20SISO	Ant1	5745	1.31	1.35	97.04	0.13	0.76
		5785	1.31	1.34	97.76	0.10	0.76
		5825	1.32	1.35	97.78	0.10	0.76
11AC40SISO	Ant1	5755	0.65	0.68	95.59	0.20	1.54
		5795	0.65	0.69	94.20	0.26	1.54
11AC80SISO	Ant1	5775	0.32	0.36	88.89	0.51	3.13



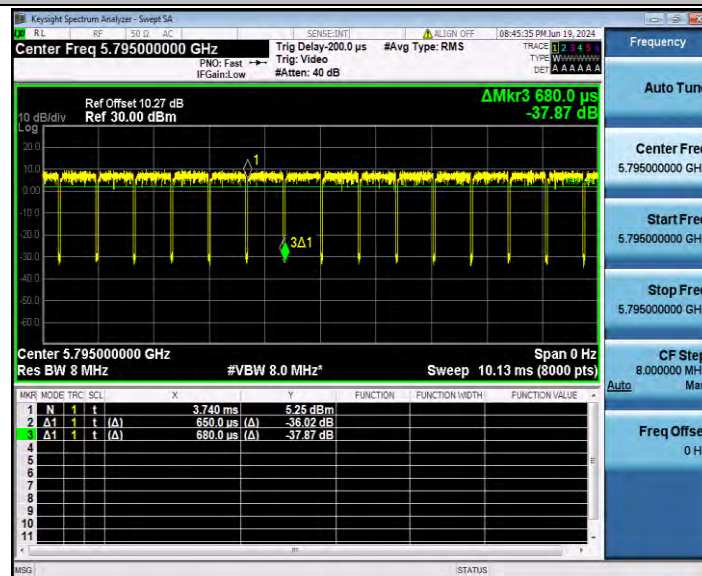
11N20SISO_Ant1_5825

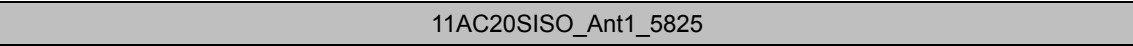
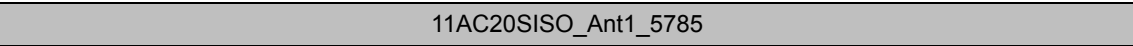


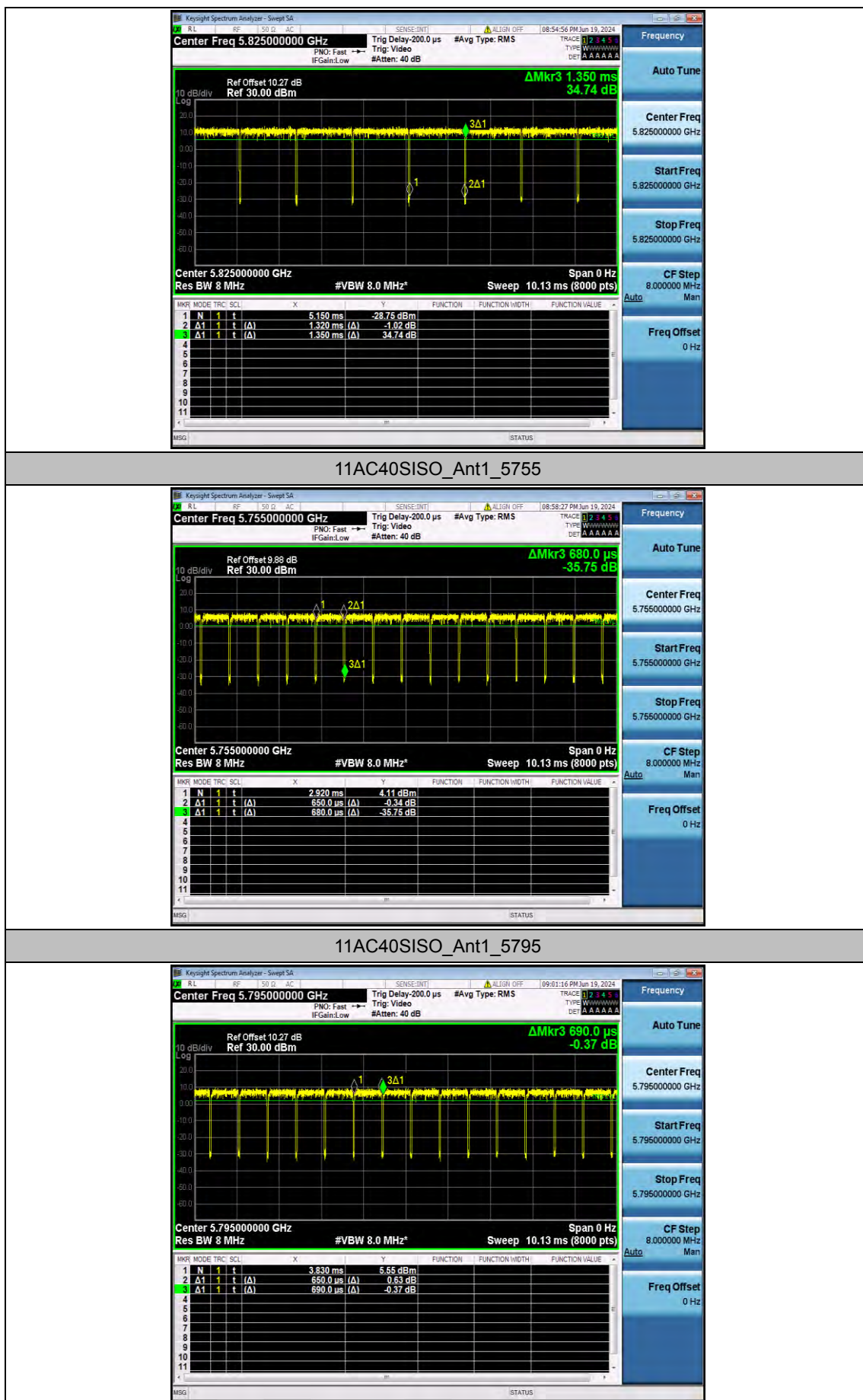
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795







Appendix G.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	10.77	97.90	0.09	10.86	≤30.00	PASS
		5785	12.71	97.20	0.12	12.83	≤30.00	PASS
		5825	13.17	97.20	0.12	13.29	≤30.00	PASS
11N20SISO	Ant1	5745	11.19	97.01	0.13	11.32	≤30.00	PASS
		5785	12.54	97.01	0.13	12.67	≤30.00	PASS
		5825	13.60	97.74	0.10	13.70	≤30.00	PASS
11N40SISO	Ant1	5755	11.24	95.59	0.20	11.44	≤30.00	PASS
		5795	12.17	95.59	0.20	12.37	≤30.00	PASS
11AC20SISO	Ant1	5745	11.03	97.04	0.13	11.16	≤30.00	PASS
		5785	11.98	97.76	0.10	12.08	≤30.00	PASS
		5825	13.40	97.78	0.10	13.50	≤30.00	PASS
11AC40SISO	Ant1	5755	10.97	95.59	0.20	11.17	≤30.00	PASS
		5795	12.34	94.20	0.26	12.60	≤30.00	PASS
11AC80SISO	Ant1	5775	11.42	88.89	0.51	11.93	≤30.00	PASS

Appendix G.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	-2.44	≤30.00	PASS
		5785	-0.65	≤30.00	PASS
		5825	0.29	≤30.00	PASS
11N20SISO	Ant1	5745	-2.13	≤30.00	PASS
		5785	-0.98	≤30.00	PASS
		5825	0.26	≤30.00	PASS
11N40SISO	Ant1	5755	-4.81	≤30.00	PASS
		5795	-3.86	≤30.00	PASS
11AC20SISO	Ant1	5745	-2.30	≤30.00	PASS
		5785	-1.08	≤30.00	PASS
		5825	0.12	≤30.00	PASS
11AC40SISO	Ant1	5755	-4.97	≤30.00	PASS
		5795	-3.66	≤30.00	PASS
11AC80SISO	Ant1	5775	-7.52	≤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



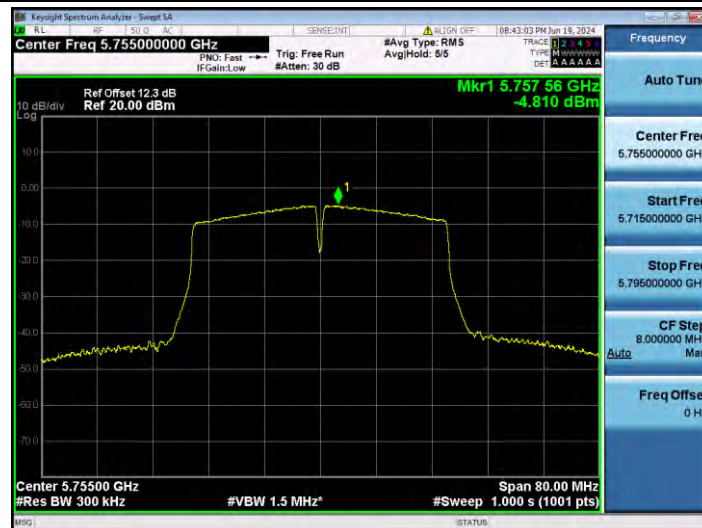
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



