

Appendix A1: Emission Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.680	5169.920	5189.600	---	---
		5200	19.240	5190.200	5209.440	---	---
		5240	19.120	5230.480	5249.600	---	---
		5745	19.800	5735.040	5754.840	---	---
		5785	19.560	5775.000	5794.560	---	---
		5825	19.280	5815.280	5834.560	---	---
11N20SISO	Ant1	5180	20.200	5169.960	5190.160	---	---
		5200	20.440	5189.800	5210.240	---	---
		5240	20.640	5229.640	5250.280	---	---
		5745	20.160	5734.760	5754.920	---	---
		5785	20.000	5774.920	5794.920	---	---
		5825	20.000	5815.000	5835.000	---	---
11N40SISO	Ant1	5190	38.080	5170.960	5209.040	---	---
		5230	38.080	5210.800	5248.880	---	---
		5755	38.080	5735.960	5774.040	---	---
		5795	37.920	5776.040	5813.960	---	---

11A_Ant1_5180

Spectrum Analyzer 1
Sweep SA

KEYSIGHT Input RF
Coupling DC
Align Auto

Input Z 50 Ω
Corrections Off
Freq Ref: Int (S)

#Atten: 30 dB
PNO: Fast
Gate Off
IF Gain: Low
Sig Track: Off

#Avg Type: Power (RMS)
Trig: Free Run

Center Frequency: 5.180000000 GHz
Span: 40.0000000 MHz
Start Freq: 5.160000000 GHz
Stop Freq: 5.200000000 GHz
AUTO TUNE

CF Step: 4.000000 MHz
Auto Man
Freq Offset: 0 Hz
X Axis Scale: Log Lin
Signal Track (Span Zoom)

1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 14.31 dB
Ref Level 20.00 dBm
ΔMkr3 19.68 MHz
1.91 dB

Center 5.180000 GHz
#Res BW 220 kHz
#Video BW 680 kHz
Sweep 1.00 ms (1001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	5.169 92 GHz	-24.21 dBm		
2	N	1	f	5.178 92 GHz	4.280 dBm		
3	Δ1	1	f (Δ)	19.68 MHz (Δ)	1.907 dB		
4							
5							
6							

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11A_Ant1_5200

Spectrum Analyzer 1
Sweep SA

KEYSIGHT Input RF
Coupling DC
Align Auto

Input Z 50 Ω
Corrections Off
Freq Ref: Int (S)

#Atten: 30 dB
PNO: Fast
Gate Off
IF Gain: Low
Sig Track: Off

#Avg Type: Power (RMS)
Trig: Free Run

Center Frequency: 5.200000000 GHz
Span: 40.0000000 MHz
Start Freq: 5.180000000 GHz
Stop Freq: 5.220000000 GHz
AUTO TUNE

CF Step: 4.000000 MHz
Auto Man
Freq Offset: 0 Hz
X Axis Scale: Log Lin
Signal Track (Span Zoom)

1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 14.28 dB
Ref Level 20.00 dBm
ΔMkr3 19.24 MHz
-0.39 dB

Center 5.200000 GHz
#Res BW 220 kHz
#Video BW 680 kHz
Sweep 1.00 ms (1001 pts)

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	5.190 20 GHz	-21.89 dBm		
2	N	1	f	5.198 72 GHz	4.204 dBm		
3	Δ1	1	f (Δ)	19.24 MHz (Δ)	-3.3886 dB		
4							
5							
6							

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11A_Ant1_5240



11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795

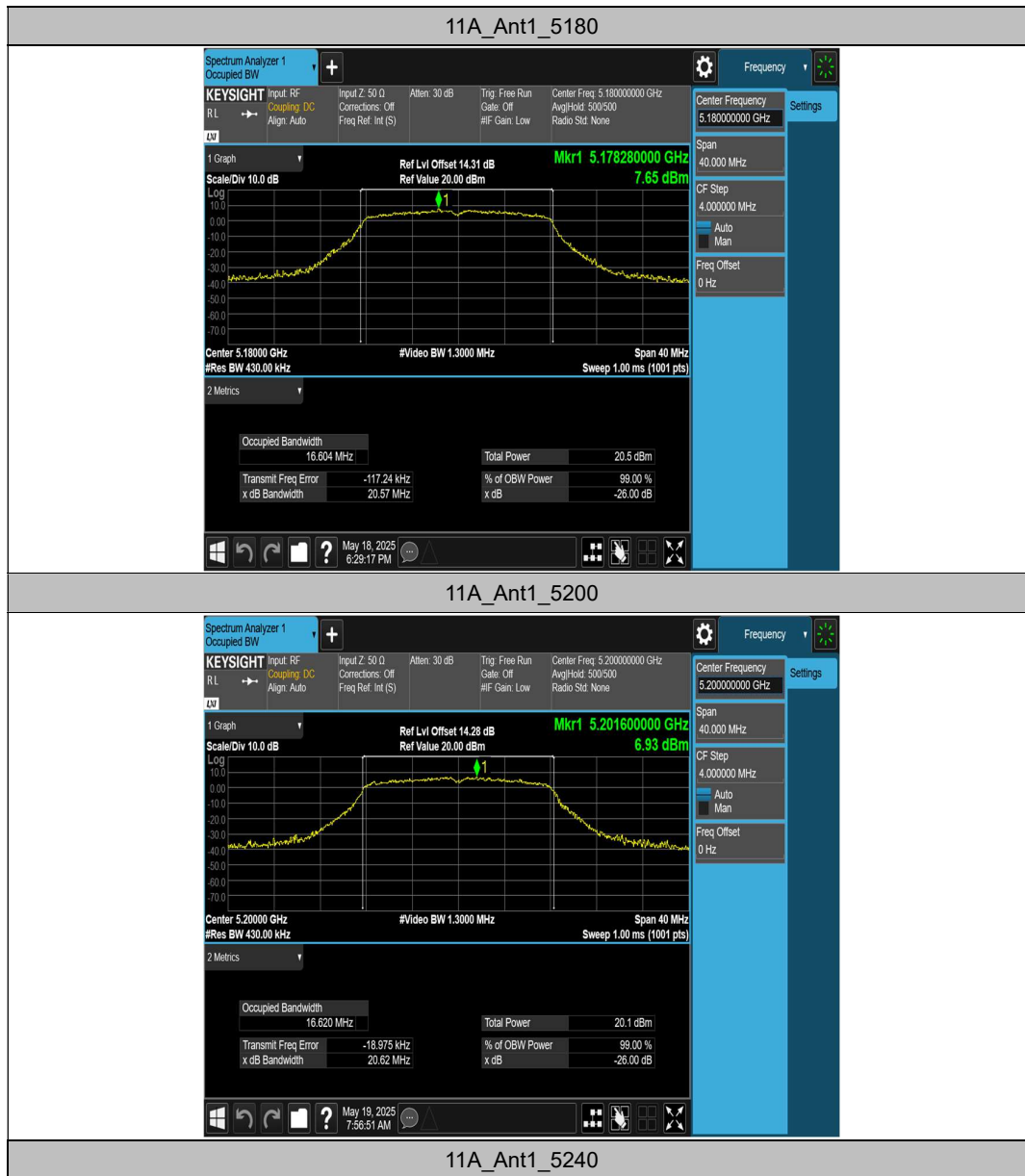


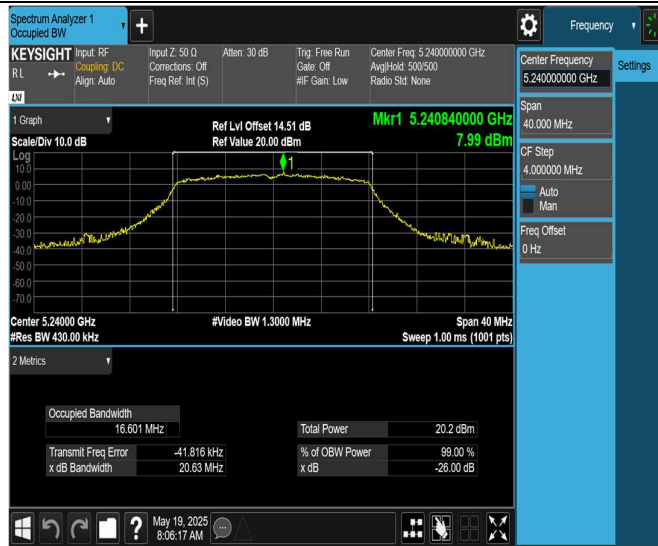
Appendix A2: Occupied channel bandwidth

Test Result

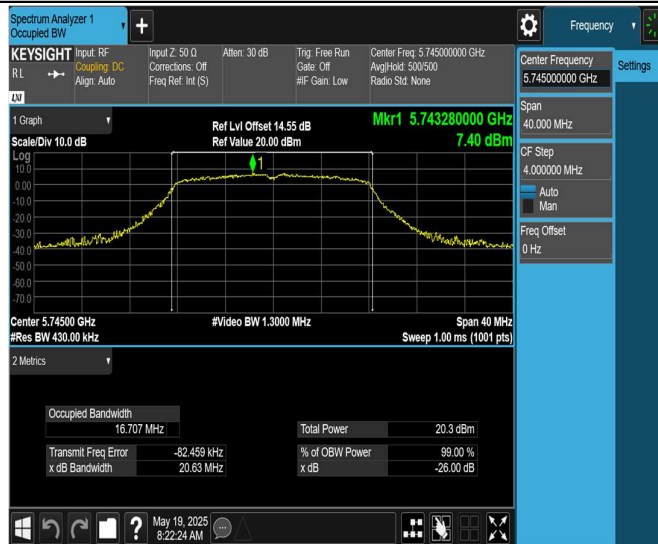
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.604	5171.5808	5188.1848	---	---
		5200	16.620	5191.6710	5208.2910	---	---
		5240	16.601	5231.6577	5248.2587	---	---
		5745	16.707	5736.5640	5753.2710	---	---
		5785	16.578	5776.6285	5793.2065	---	---
		5825	16.637	5816.6002	5833.2372	---	---
11N20SISO	Ant1	5180	17.638	5171.1308	5188.7688	---	---
		5200	17.653	5191.1111	5208.7641	---	---
		5240	17.659	5231.1276	5248.7866	---	---
		5745	17.720	5736.0292	5753.7492	---	---
		5785	17.642	5776.1384	5793.7804	---	---
		5825	17.765	5816.1022	5833.8672	---	---
11N40SISO	Ant1	5190	35.541	5172.1833	5207.7243	---	---
		5230	35.579	5212.1681	5247.7471	---	---
		5755	35.504	5737.2204	5772.7244	---	---
		5795	35.562	5777.2094	5812.7714	---	---

Test Graphs

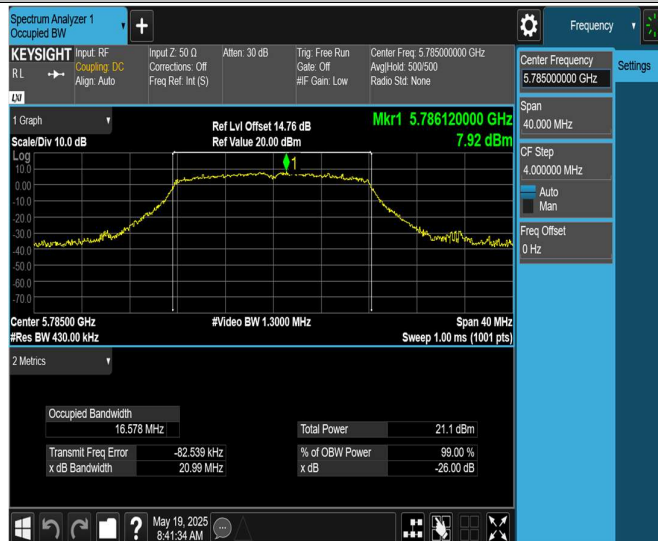




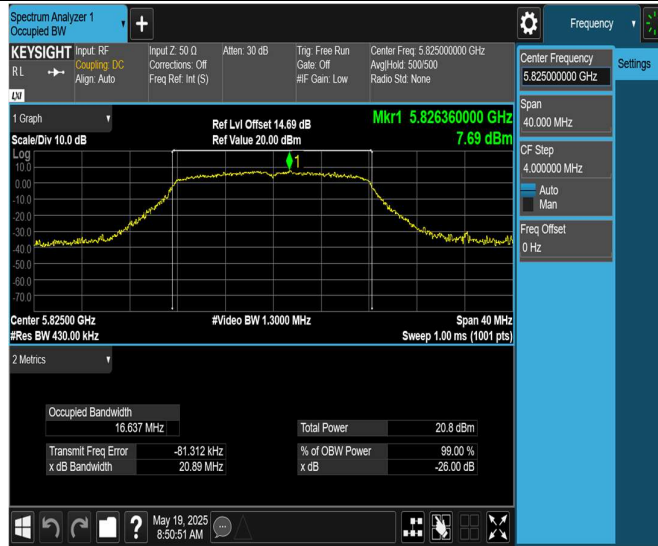
11A_Ant1_5745



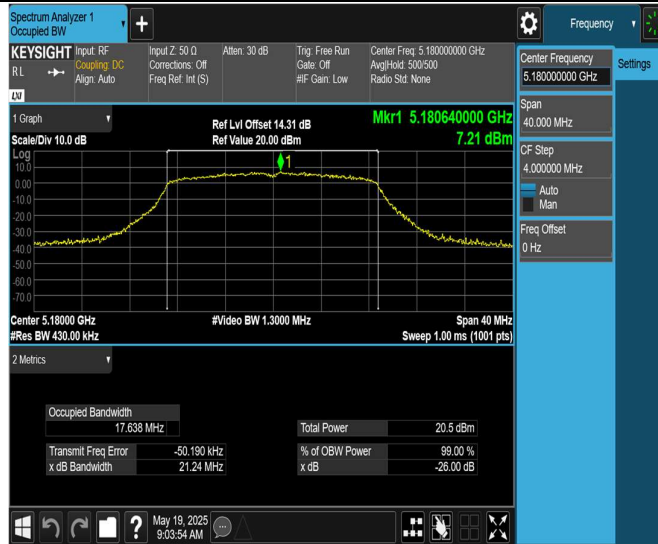
11A_Ant1_5785



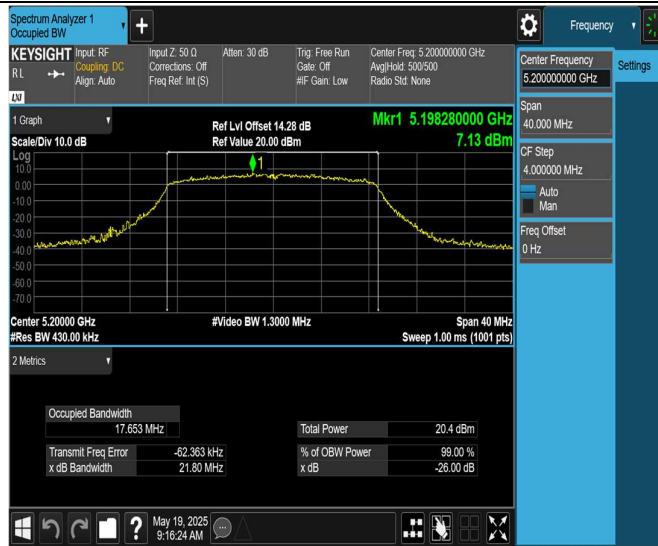
11A_Ant1_5825



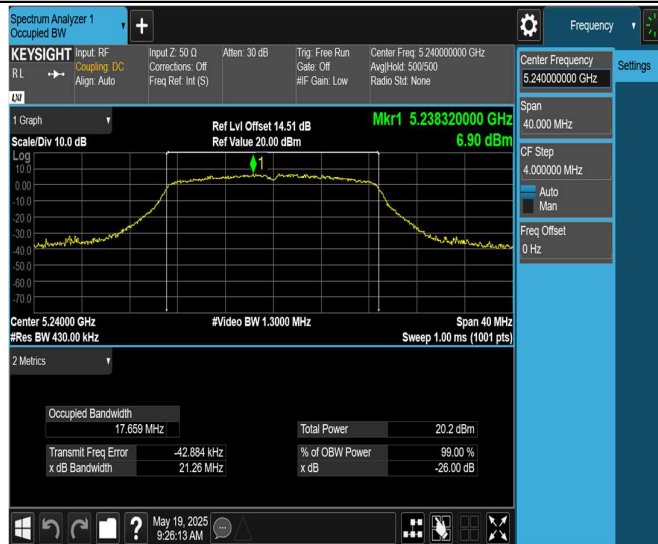
11N20SISO_Ant1_5180



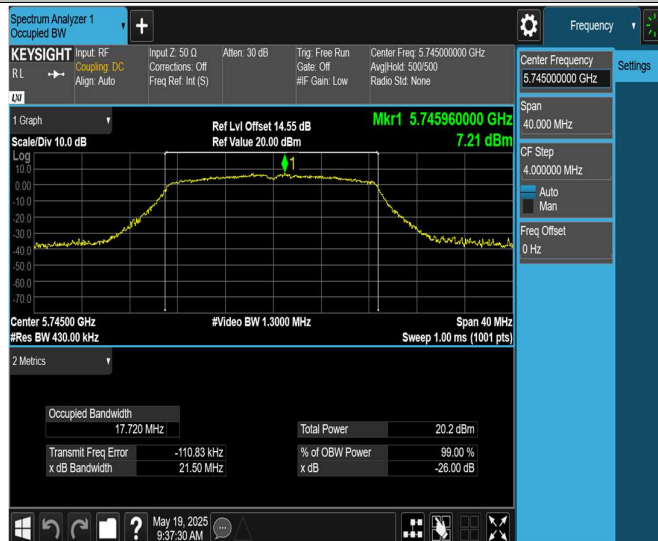
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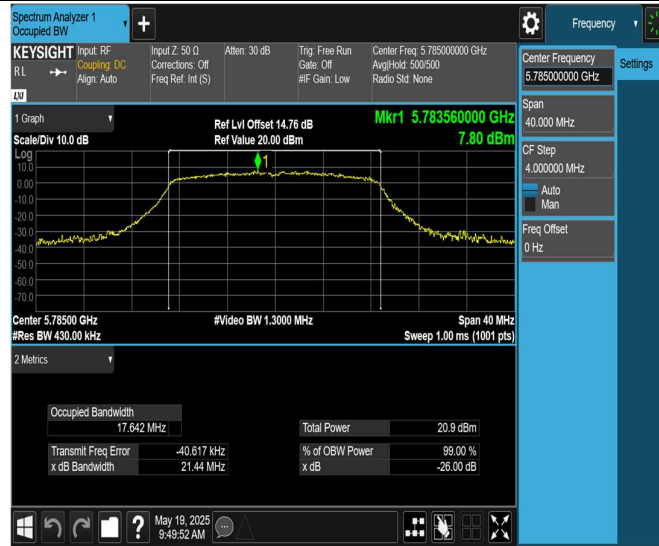
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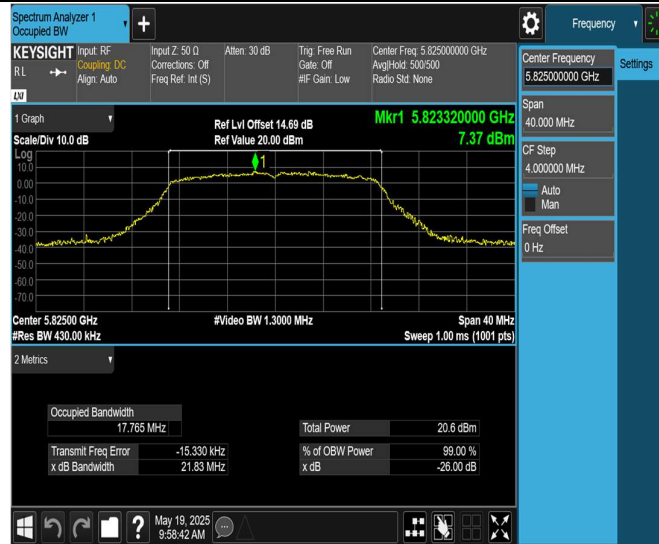
11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5190



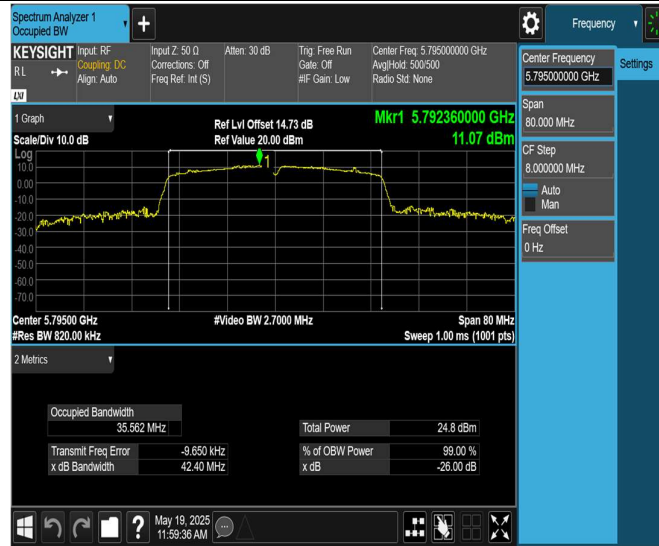
11N40SISO_Ant1_5230



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



Appendix A3: Min emission bandwidth

Test Result B4

TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.160	5736.760	5752.920	0.5	PASS
		5785	16.280	5776.800	5793.080	0.5	PASS
		5825	15.520	5817.560	5833.080	0.5	PASS
11N20SISO	Ant1	5745	16.960	5736.440	5753.400	0.5	PASS
		5785	14.920	5777.800	5792.720	0.5	PASS
		5825	13.920	5818.040	5831.960	0.5	PASS
11N40SISO	Ant1	5755	25.040	5742.440	5767.480	0.5	PASS
		5795	31.360	5779.880	5811.240	0.5	PASS

Test Graphs B4





11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



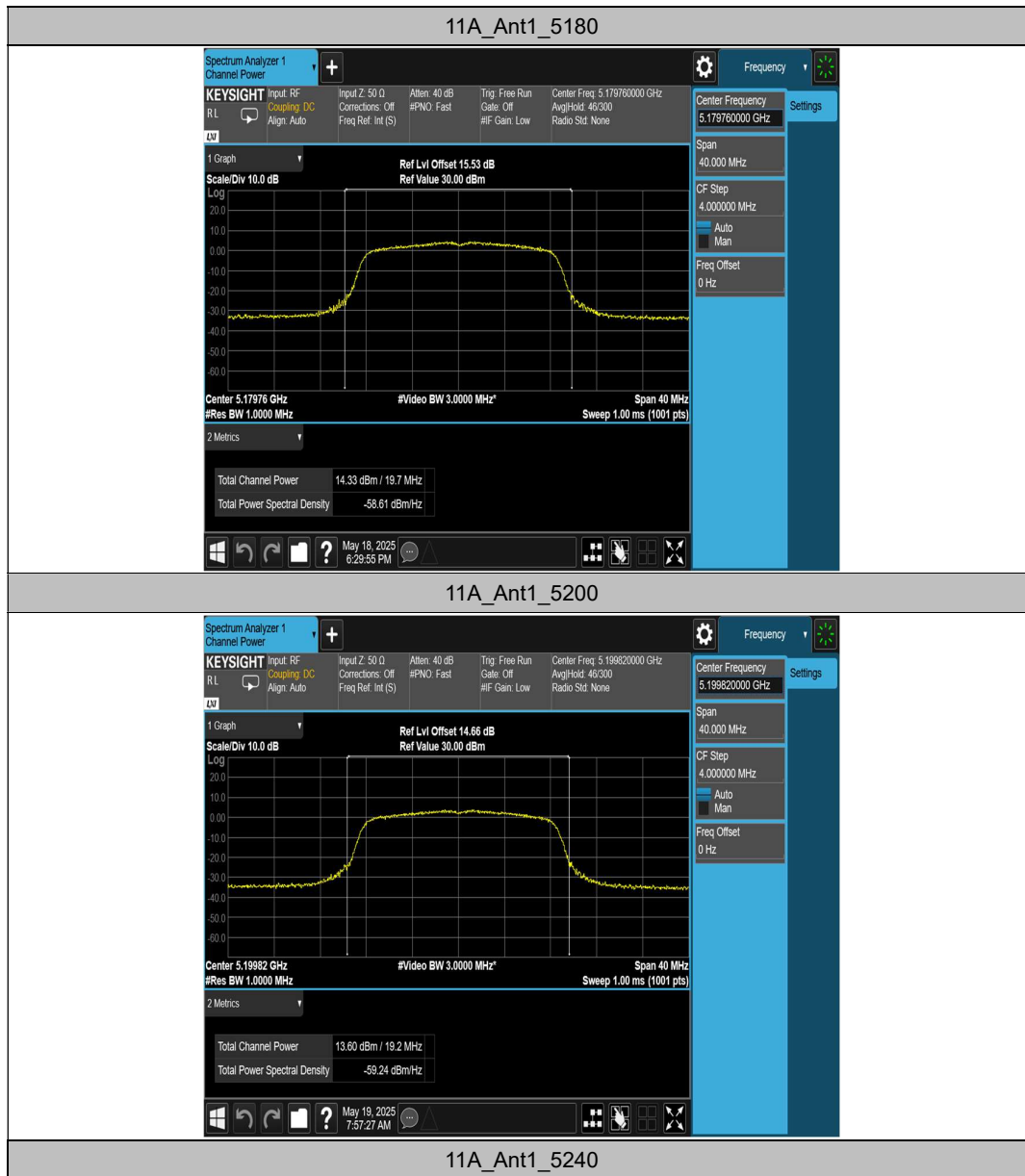
Appendix B: Maximum conducted output power

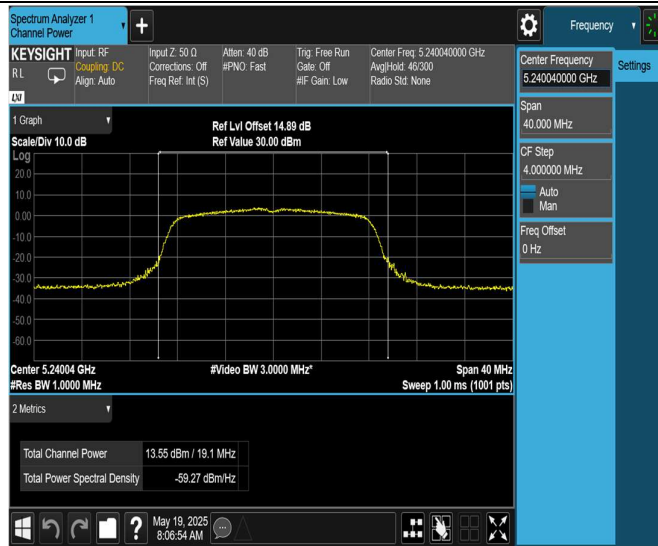
Test Result Channel Power

Test Mode	Antenna	Frequency [MHz]	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11A	Ant1	5180	13.37	75.46	1.22	14.59	≤23.98	2.07	16.66	---	PASS
		5200	13.06	91.56	0.38	13.44	≤23.98	2.07	15.51	---	PASS
		5240	13.15	91.56	0.38	13.53	≤23.98	2.07	15.60	---	PASS
		5745	13.27	91.19	0.40	13.67	≤30.00	1.07	14.74	---	PASS
		5785	13.91	91.56	0.38	14.29	≤30.00	1.07	15.36	---	PASS
		5825	13.73	90.75	0.42	14.15	≤30.00	1.07	15.22	---	PASS
11N20SISO	Ant1	5180	13.49	91.87	0.37	13.86	≤23.98	2.07	15.93	---	PASS
		5200	13.13	91.00	0.41	13.54	≤23.98	2.07	15.61	---	PASS
		5240	13.05	90.14	0.45	13.50	≤23.98	2.07	15.57	---	PASS
		5745	13.23	89.30	0.49	13.72	≤30.00	1.07	14.79	---	PASS
		5785	13.92	91.87	0.37	14.29	≤30.00	1.07	15.36	---	PASS
		5825	13.63	91.00	0.41	14.04	≤30.00	1.07	15.11	---	PASS
11N40SISO	Ant1	5190	16.34	80.34	0.95	17.29	≤23.98	2.07	19.36	---	PASS
		5230	16.08	83.33	0.79	16.87	≤23.98	2.07	18.94	---	PASS
		5755	16.23	83.33	0.79	17.02	≤30.00	1.07	18.09	---	PASS
		5795	16.73	82.46	0.84	17.57	≤30.00	1.07	18.64	---	PASS

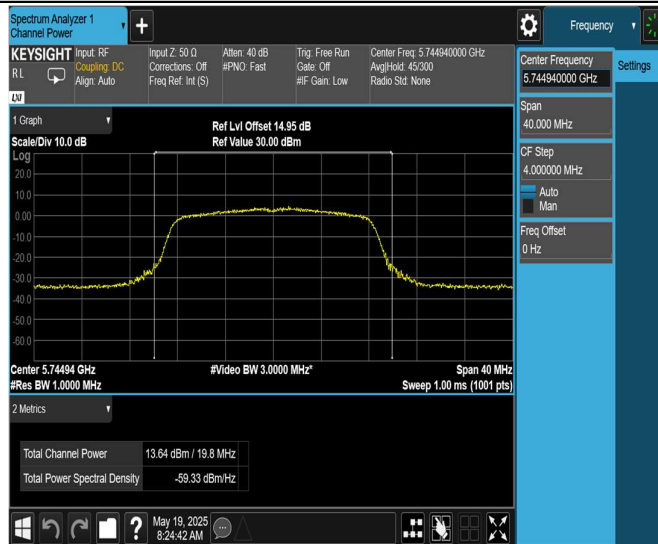
Note: The Duty Cycle Factor is compensated in the graph.

Test Graphs Channel Power

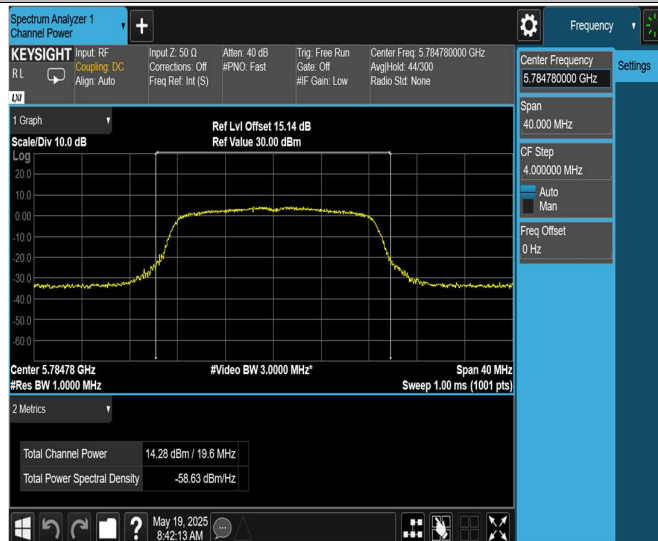




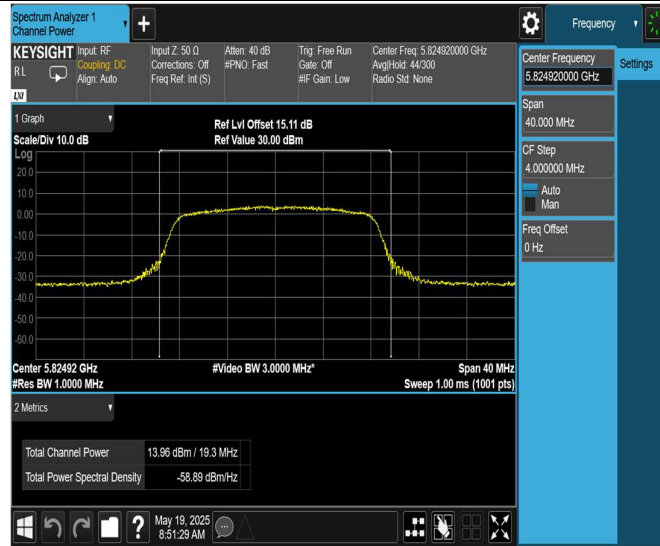
11A_Ant1_5745



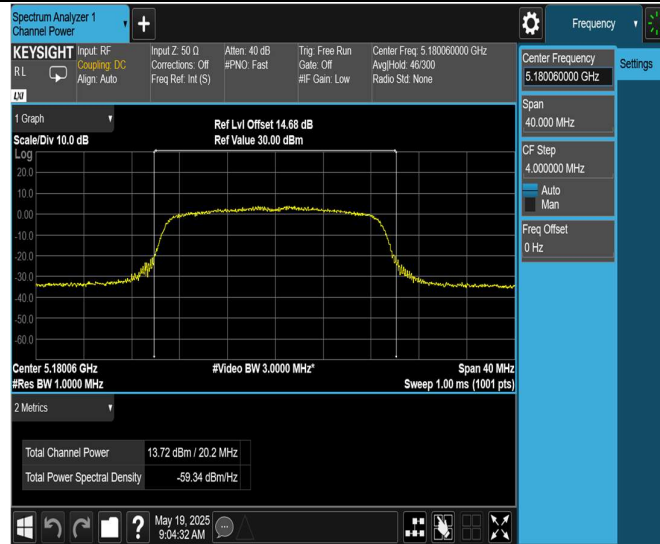
11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180



11N20SISO_Ant1_5200