

FCC Appendix RF Test Data for 5GWIFI

FCC ID : 2BSSX-MBR001

Company : Shanghai MBrainet Intelligent Technology Co.,Ltd

EUT : Intelligent Care Companion Device

Model Number : MBR001

Report No. : CTA25101000604

Reviewed By : Eric Wang

Appendix A1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	21.520	5169.240	5190.760	---	---
		5220	22.080	5208.920	5231.000	---	---
		5240	21.560	5229.320	5250.880	---	---
		5745	22.680	5733.400	5756.080	---	---
		5785	23.440	5773.320	5796.760	---	---
		5825	23.560	5813.400	5836.960	---	---
11N20SISO	Ant1	5180	22.120	5168.920	5191.040	---	---
		5220	22.240	5209.280	5231.520	---	---
		5240	22.680	5228.600	5251.280	---	---
		5745	22.800	5733.560	5756.360	---	---
		5785	22.920	5773.280	5796.200	---	---
		5825	22.280	5813.920	5836.200	---	---
11N40SISO	Ant1	5190	43.280	5168.880	5212.160	---	---
		5230	42.720	5208.720	5251.440	---	---
		5755	44.160	5733.640	5777.800	---	---
		5795	44.400	5773.480	5817.880	---	---
11AC20SISO	Ant1	5180	21.600	5169.440	5191.040	---	---
		5220	21.680	5209.080	5230.760	---	---
		5240	21.920	5229.440	5251.360	---	---
		5745	22.800	5733.520	5756.320	---	---
		5785	23.080	5773.360	5796.440	---	---
		5825	22.360	5813.720	5836.080	---	---
11AC40SISO	Ant1	5190	43.040	5168.480	5211.520	---	---
		5230	42.000	5209.440	5251.440	---	---
		5755	44.080	5733.800	5777.880	---	---
		5795	44.160	5773.640	5817.800	---	---
11AC80SISO	Ant1	5210	83.840	5167.920	5251.760	---	---
		5775	86.400	5731.800	5818.200	---	---

Test Graphs





11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



11N20SISO_Ant1_5240



11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5190



11N40SISO_Ant1_5230



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5220



11AC20SISO_Ant1_5240



11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5210



11AC80SISO_Ant1_5775



Appendix A2: Occupied channel bandwidth

Test Result

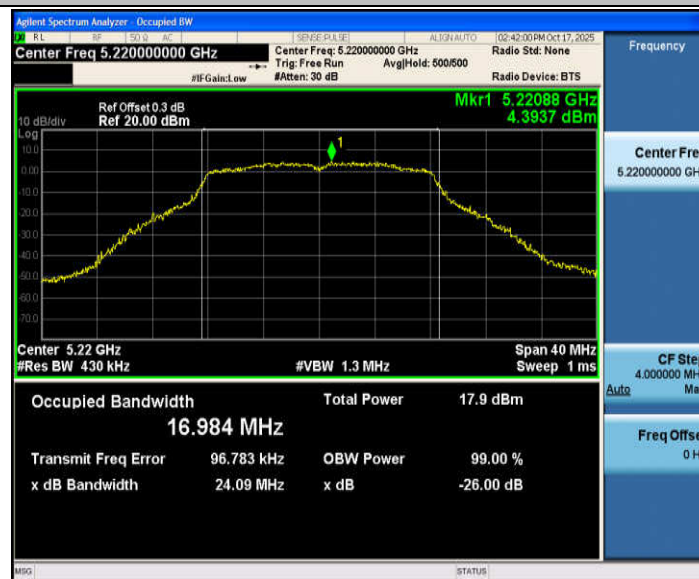
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.979	5171.5598	5188.5388	---	---
		5220	16.984	5211.6048	5228.5888	---	---
		5240	16.980	5231.5768	5248.5568	---	---
		5745	17.264	5736.3747	5753.6387	---	---
		5785	17.288	5776.3923	5793.6803	---	---
		5825	17.326	5816.4139	5833.7399	---	---
11N20SISO	Ant1	5180	18.011	5171.0521	5189.0631	---	---
		5220	18.092	5211.0222	5229.1142	---	---
		5240	17.968	5231.0523	5249.0203	---	---
		5745	18.325	5735.8243	5754.1493	---	---
		5785	18.256	5775.8877	5794.1437	---	---
		5825	18.338	5815.8320	5834.1700	---	---
11N40SISO	Ant1	5190	36.173	5171.9868	5208.1598	---	---
		5230	36.174	5211.9827	5248.1567	---	---
		5755	36.752	5736.6970	5773.4490	---	---
		5795	36.734	5776.7069	5813.4409	---	---
11AC20SISO	Ant1	5180	17.947	5171.0658	5189.0128	---	---
		5220	17.964	5211.0541	5229.0181	---	---
		5240	18.016	5231.0418	5249.0578	---	---
		5745	18.288	5735.8710	5754.1590	---	---
		5785	18.254	5775.8948	5794.1488	---	---
		5825	18.290	5815.8467	5834.1367	---	---
11AC40SISO	Ant1	5190	36.154	5171.9670	5208.1210	---	---
		5230	36.208	5211.9557	5248.1637	---	---
		5755	36.716	5736.7234	5773.4394	---	---
		5795	36.719	5776.7039	5813.4229	---	---
11AC80SISO	Ant1	5210	75.187	5172.5881	5247.7751	---	---
		5775	75.282	5737.4776	5812.7596	---	---

Test Graphs

11A_Ant1_5180



11A_Ant1_5220



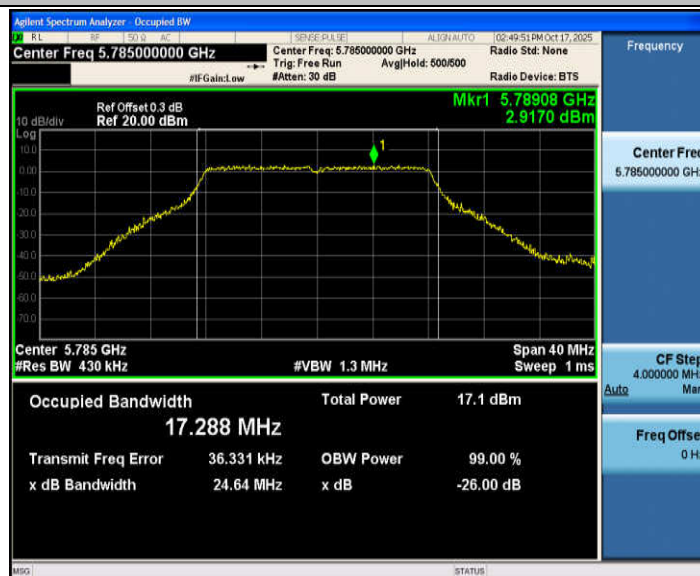
11A_Ant1_5240



11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180



11N20SISO_Ant1_5220



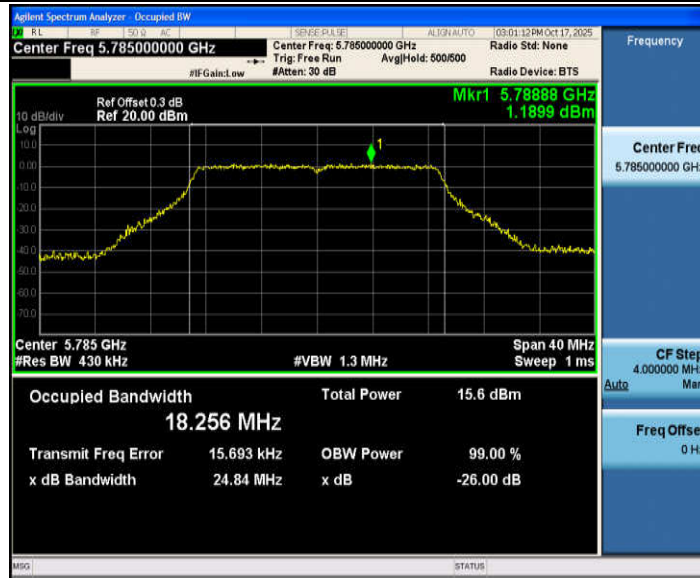
11N20SISO_Ant1_5240



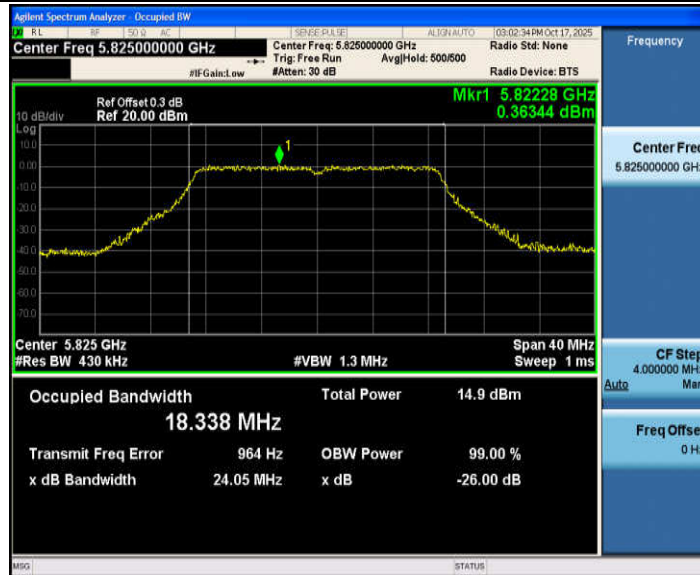
11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



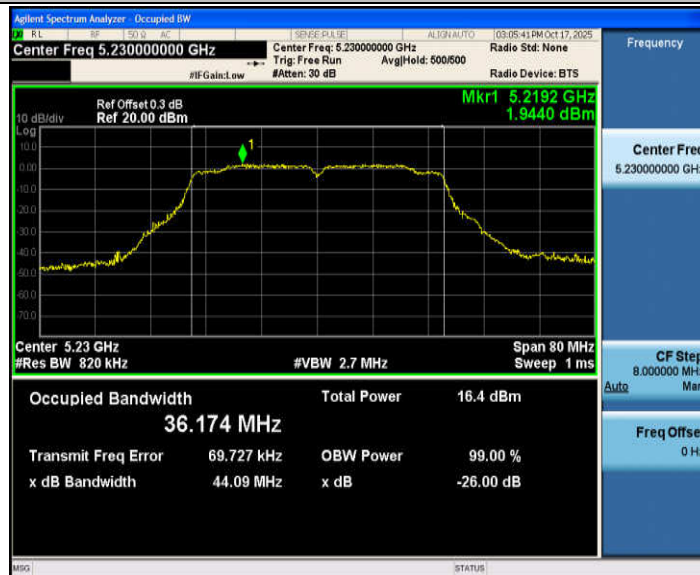
11N20SISO_Ant1_5825



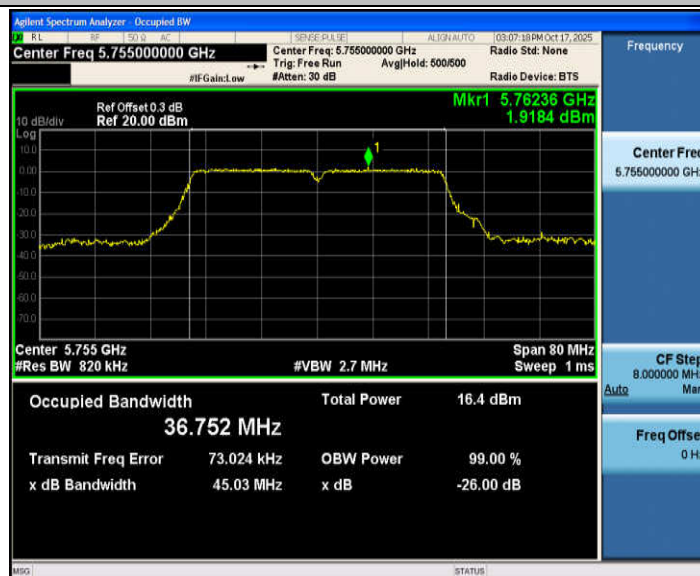
11N40SISO_Ant1_5190



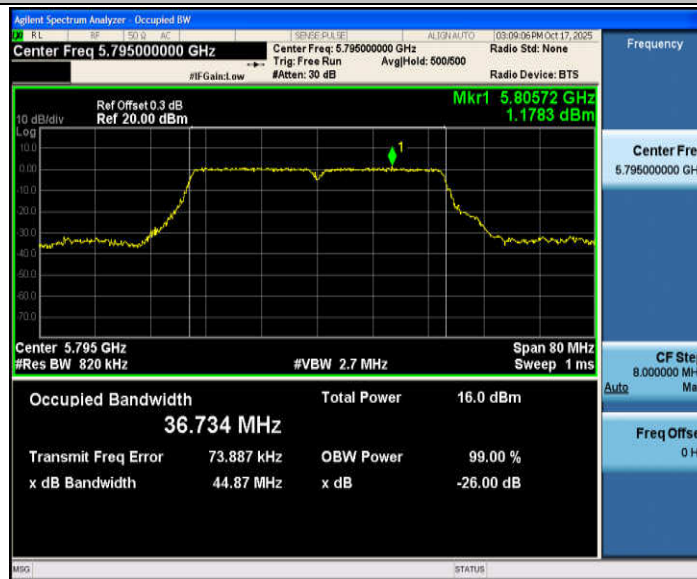
11N40SISO_Ant1_5230



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



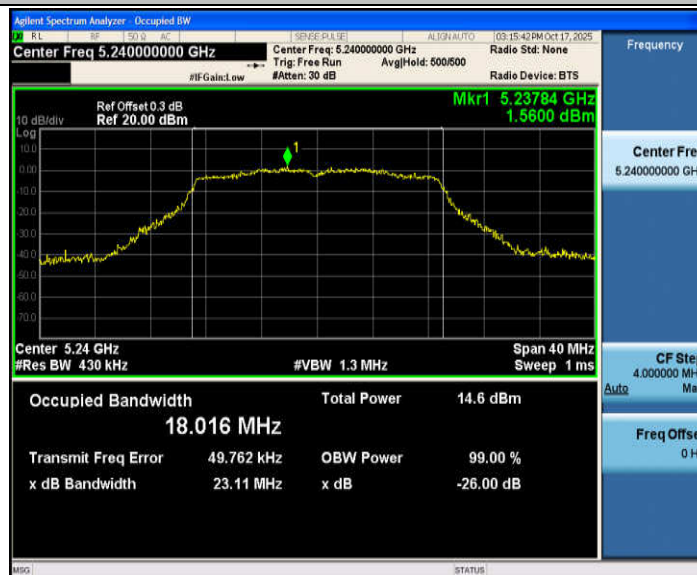
11AC20SISO_Ant1_5180



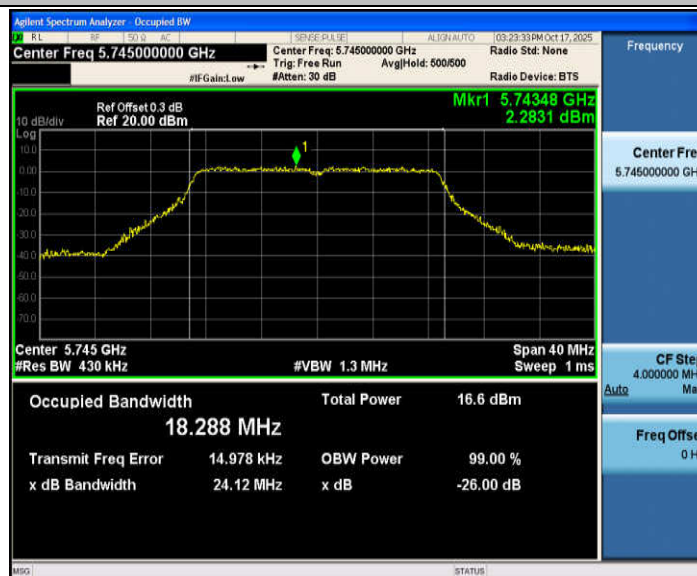
11AC20SISO_Ant1_5220



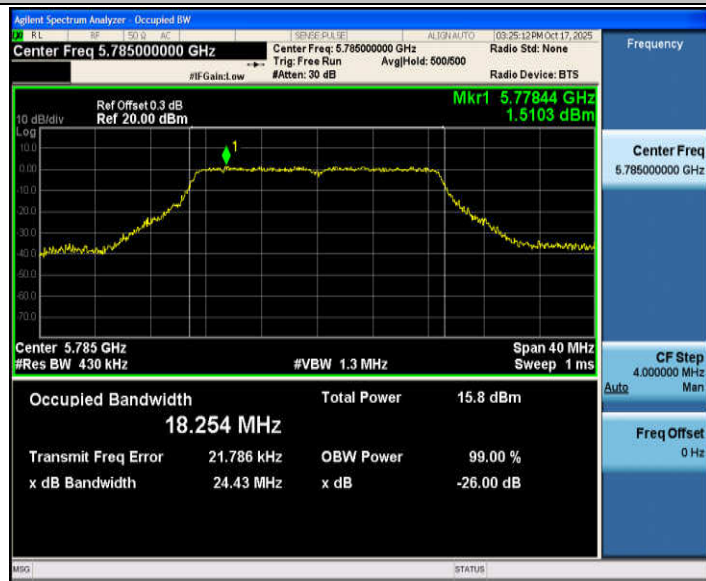
11AC20SISO_Ant1_5240



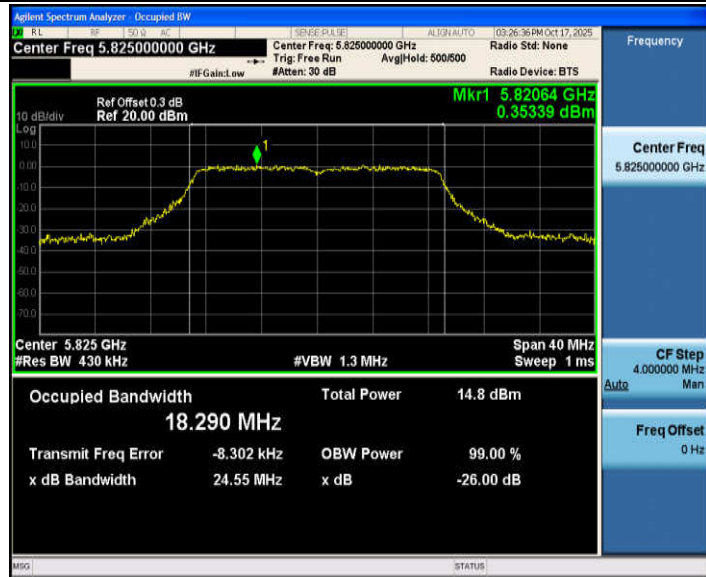
11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



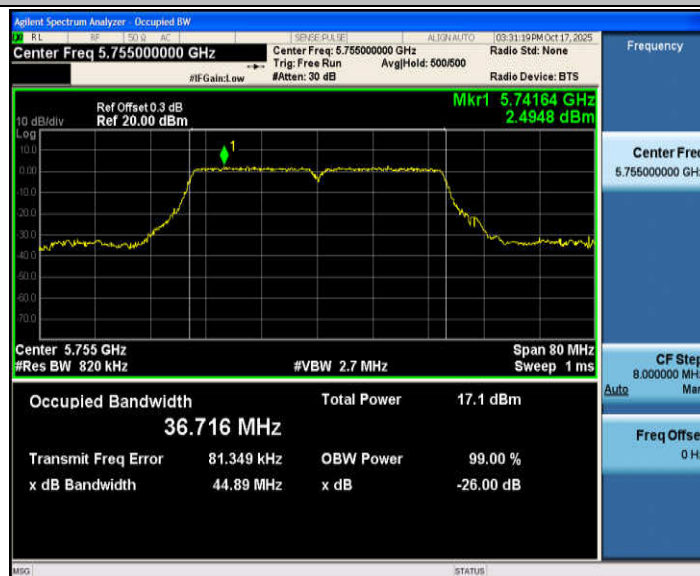
11AC40SISO_Ant1_5190



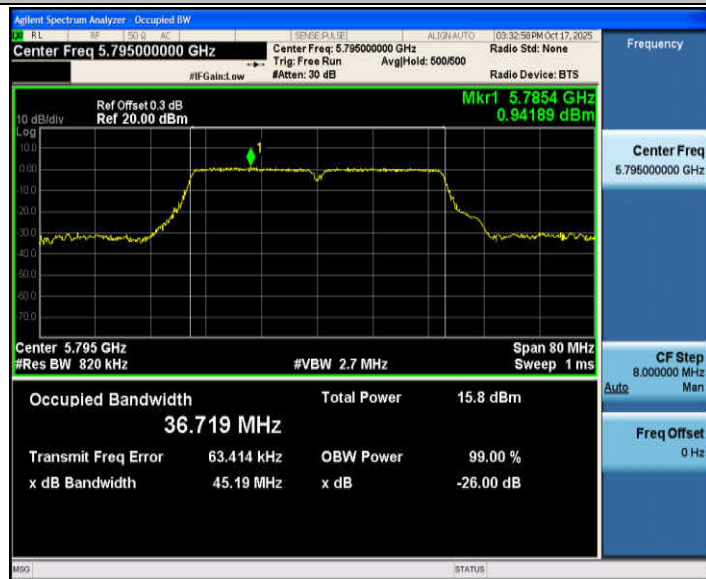
11AC40SISO_Ant1_5230



11AC40SISO_Ant1_5755



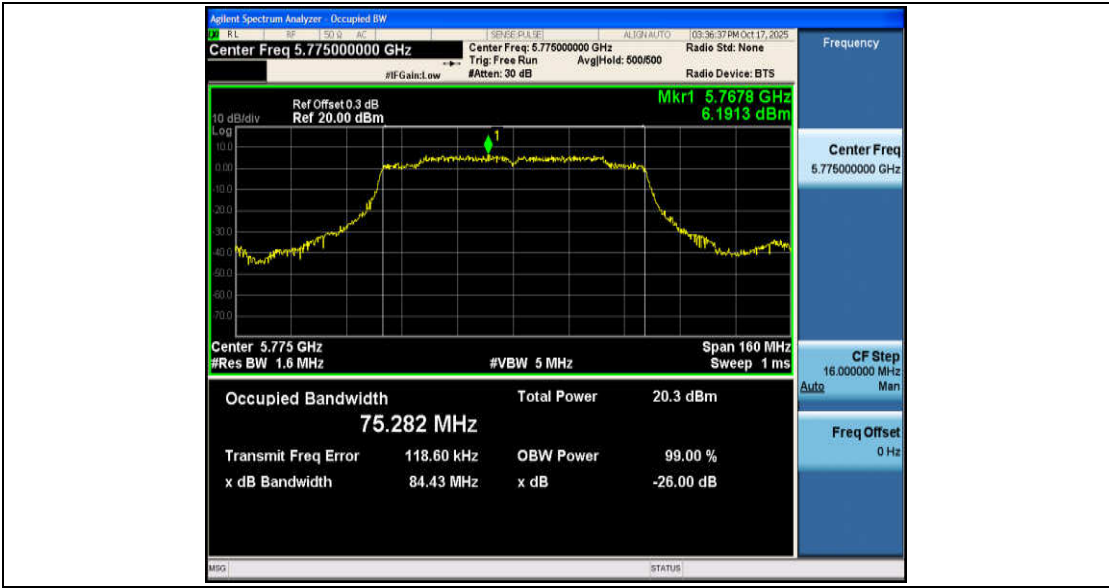
11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5210



11AC80SISO_Ant1_5775



Appendix A3: Min emission bandwidth

Test Result B4

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	16.320	5816.840	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.160	5736.240	5753.400	0.5	PASS
		5785	17.320	5776.480	5793.800	0.5	PASS
		5825	17.280	5816.240	5833.520	0.5	PASS
11N40SISO	Ant1	5755	36.320	5736.840	5773.160	0.5	PASS
		5795	36.320	5776.840	5813.160	0.5	PASS
11AC20SISO	Ant1	5745	17.560	5736.200	5753.760	0.5	PASS
		5785	17.520	5776.240	5793.760	0.5	PASS
		5825	17.560	5816.200	5833.760	0.5	PASS
11AC40SISO	Ant1	5755	35.920	5736.840	5772.760	0.5	PASS
		5795	36.320	5776.840	5813.160	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

11A_Ant1_5745

Agilent Spectrum Analyzer - Sweep SA

Center Freq 5.745000000 GHz

Ref Offset 0.3 dB
Ref 20.00 dBm

Trig: Free Run
#Att: 30 dB

#Avg Type: RMS
AvgHld: 100/100

Span 40.00 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 3.867 ms (1001 pts)

ΔMkr3 16.32 MHz
-0.139 dB

MNR	MODE	TRIG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.736 84 GHz	-4.988 dBm			
2	N	1	f	5.745 28 GHz	0.591 dBm			
3	Δ1	1	f (Δ)	16.32 MHz (Δ)	-0.139 dB			

11A_Ant1_5785

Agilent Spectrum Analyzer - Sweep SA

Center Freq 5.785000000 GHz

Ref Offset 0.3 dB
Ref 20.00 dBm

Trig: Free Run
#Att: 30 dB

#Avg Type: RMS
AvgHld: 100/100

Span 40.00 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep 3.867 ms (1001 pts)

ΔMkr3 16.32 MHz
0.002 dB

MNR	MODE	TRIG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	5.776 84 GHz	-5.361 dBm			
2	N	1	f	5.786 28 GHz	-0.125 dBm			
3	Δ1	1	f (Δ)	16.32 MHz (Δ)	0.002 dB			



11N20SISO_Ant1_5745



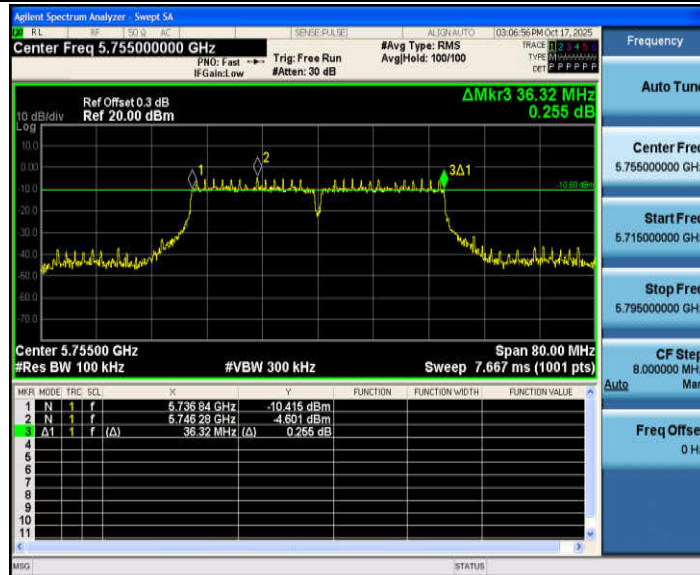
11N20SISO_Ant1_5785



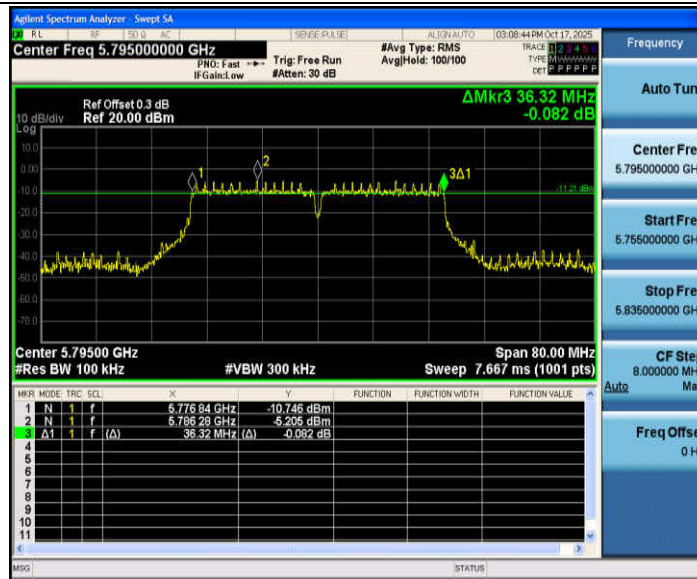
11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



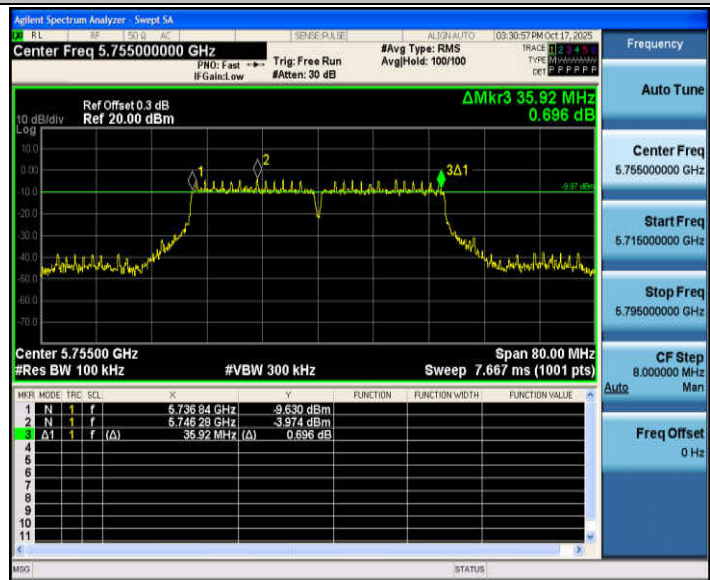
11AC20SISO_Ant1_5785



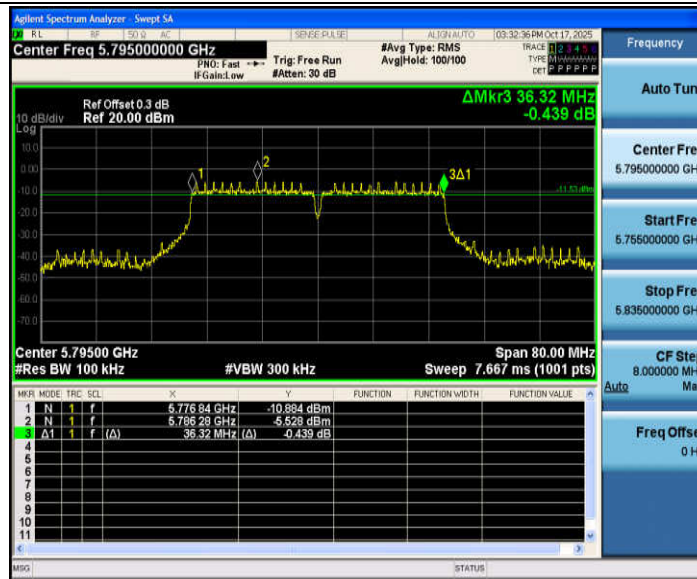
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775

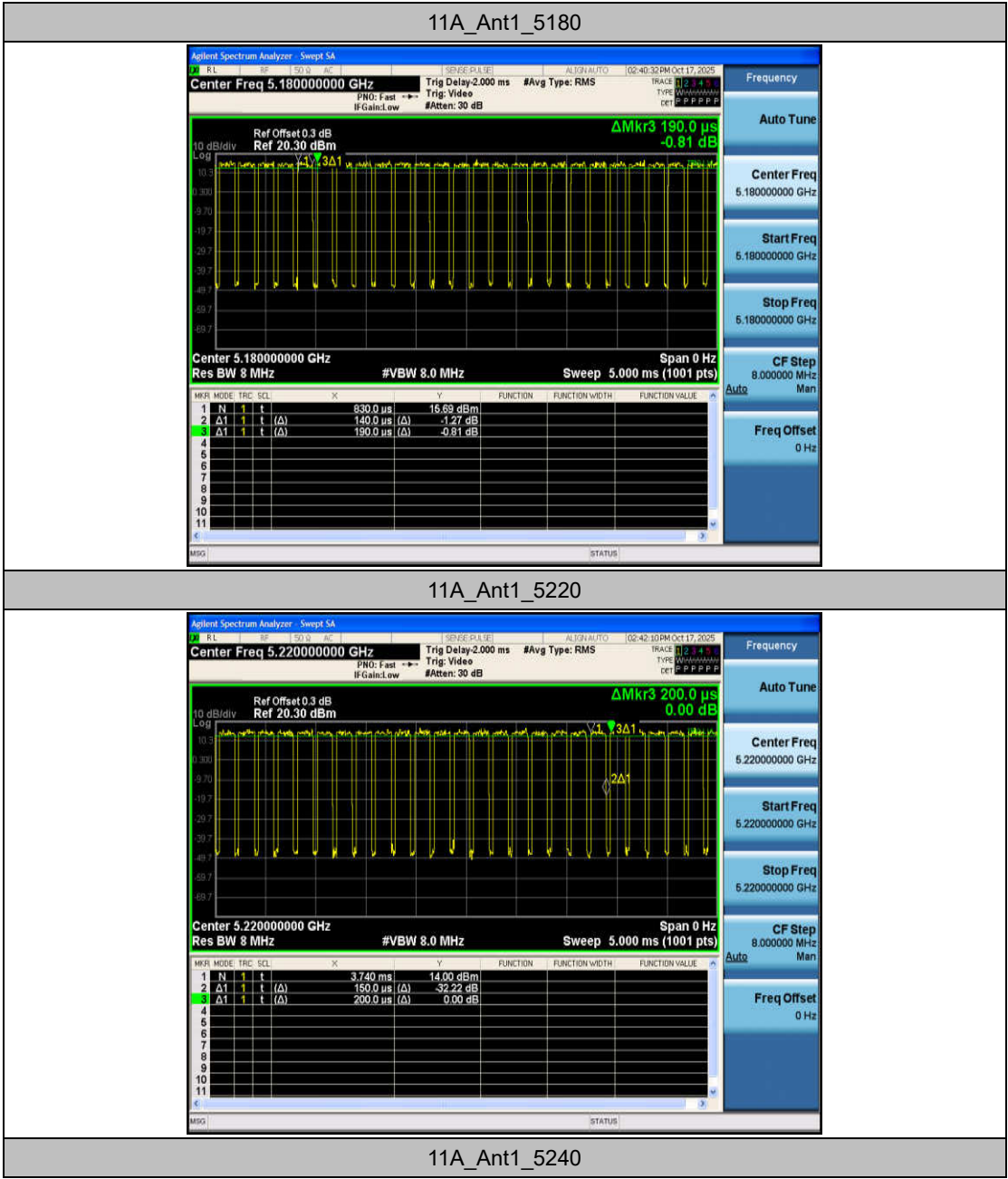


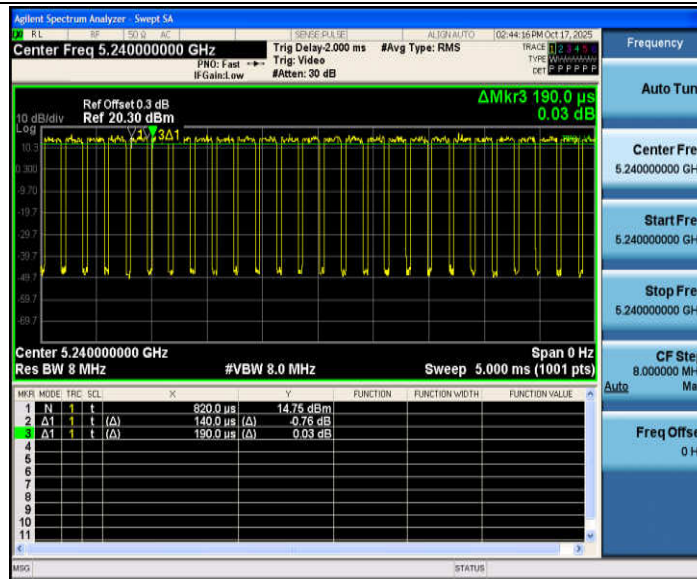
Appendix B: Duty Cycle

Test Result

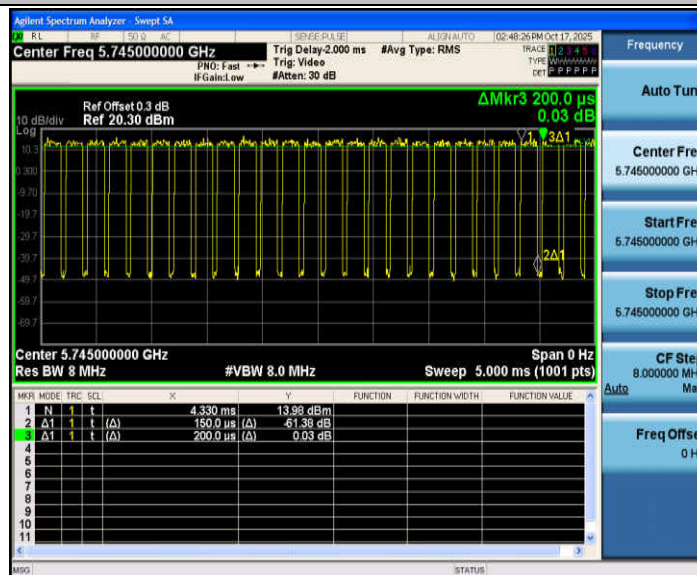
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty factor(dB)	Limit	Verdict
11A	Ant1	5180	0.14	0.19	73.68	1.33	---	---
		5220	0.15	0.20	75.00	1.25	---	---
		5240	0.14	0.19	73.68	1.33	---	---
		5745	0.15	0.20	75.00	1.25	---	---
		5785	0.14	0.19	73.68	1.33	---	---
		5825	0.14	0.19	73.68	1.33	---	---
11N20SISO	Ant1	5180	0.18	0.23	78.26	1.06	---	---
		5220	0.17	0.22	77.27	1.12	---	---
		5240	0.18	0.23	78.26	1.06	---	---
		5745	0.18	0.23	78.26	1.06	---	---
		5785	0.18	0.23	78.26	1.06	---	---
		5825	0.18	0.23	78.26	1.06	---	---
11N40SISO	Ant1	5190	0.18	0.23	78.26	1.06	---	---
		5230	0.18	0.23	78.26	1.06	---	---
		5755	0.18	0.23	78.26	1.06	---	---
		5795	0.18	0.23	78.26	1.06	---	---
11AC20SISO	Ant1	5180	0.16	0.21	76.19	1.18	---	---
		5220	0.16	0.21	76.19	1.18	---	---
		5240	0.16	0.21	76.19	1.18	---	---
		5745	0.16	0.21	76.19	1.18	---	---
		5785	0.16	0.21	76.19	1.18	---	---
		5825	0.16	0.21	76.19	1.18	---	---
11AC40SISO	Ant1	5190	0.15	0.20	75.00	1.25	---	---
		5230	0.16	0.21	76.19	1.18	---	---
		5755	0.15	0.20	75.00	1.25	---	---
		5795	0.15	0.20	75.00	1.25	---	---
11AC80SISO	Ant1	5210	0.16	0.21	76.19	1.18	---	---
		5775	0.16	0.21	76.19	1.18	---	---

Test Graphs

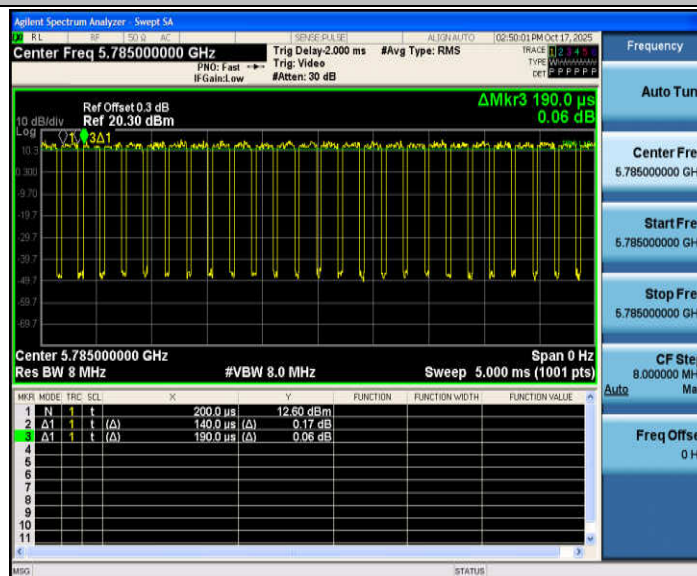




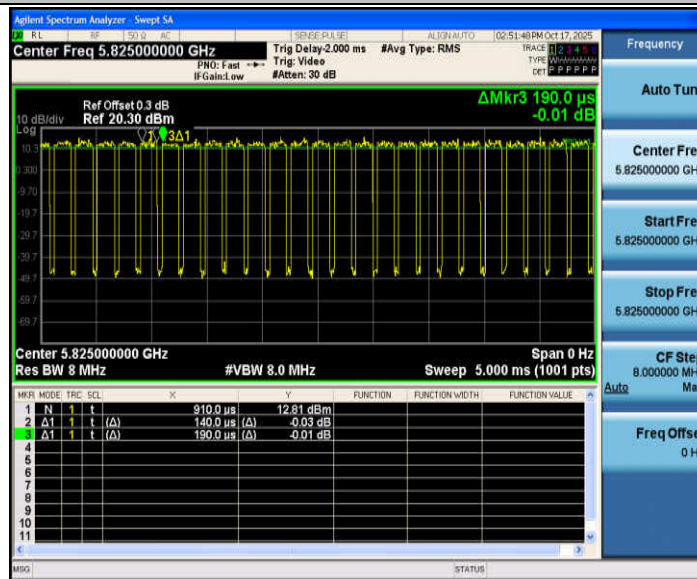
11A_Ant1_5745



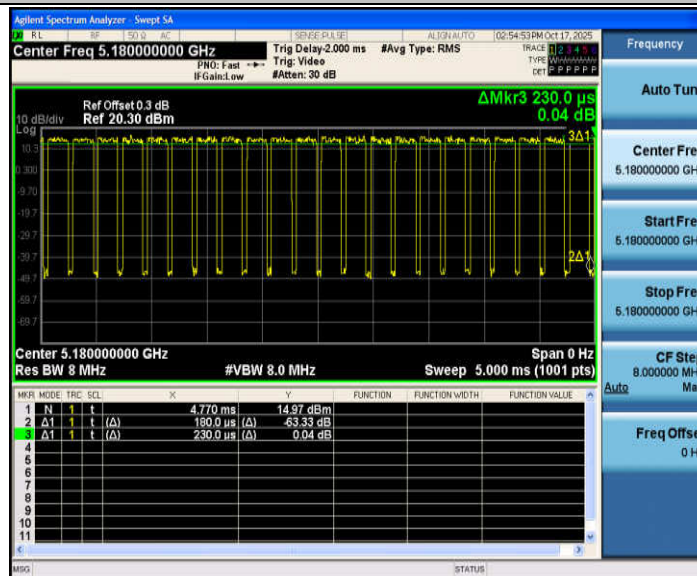
11A_Ant1_5785



11A_Ant1_5825



11N20SISO_Ant1_5180



11N20SISO_Ant1_5220