

FCC Appendix RF Test Data for 5GWIFI

FCC ID : 2BXYZ-CXZ581

Company : Shenzhen Chenxinzheng Technology Co., Ltd

EUT : Interactive Emoji Screen

Model Number : CXZ581

Report No. : CTA26090301102

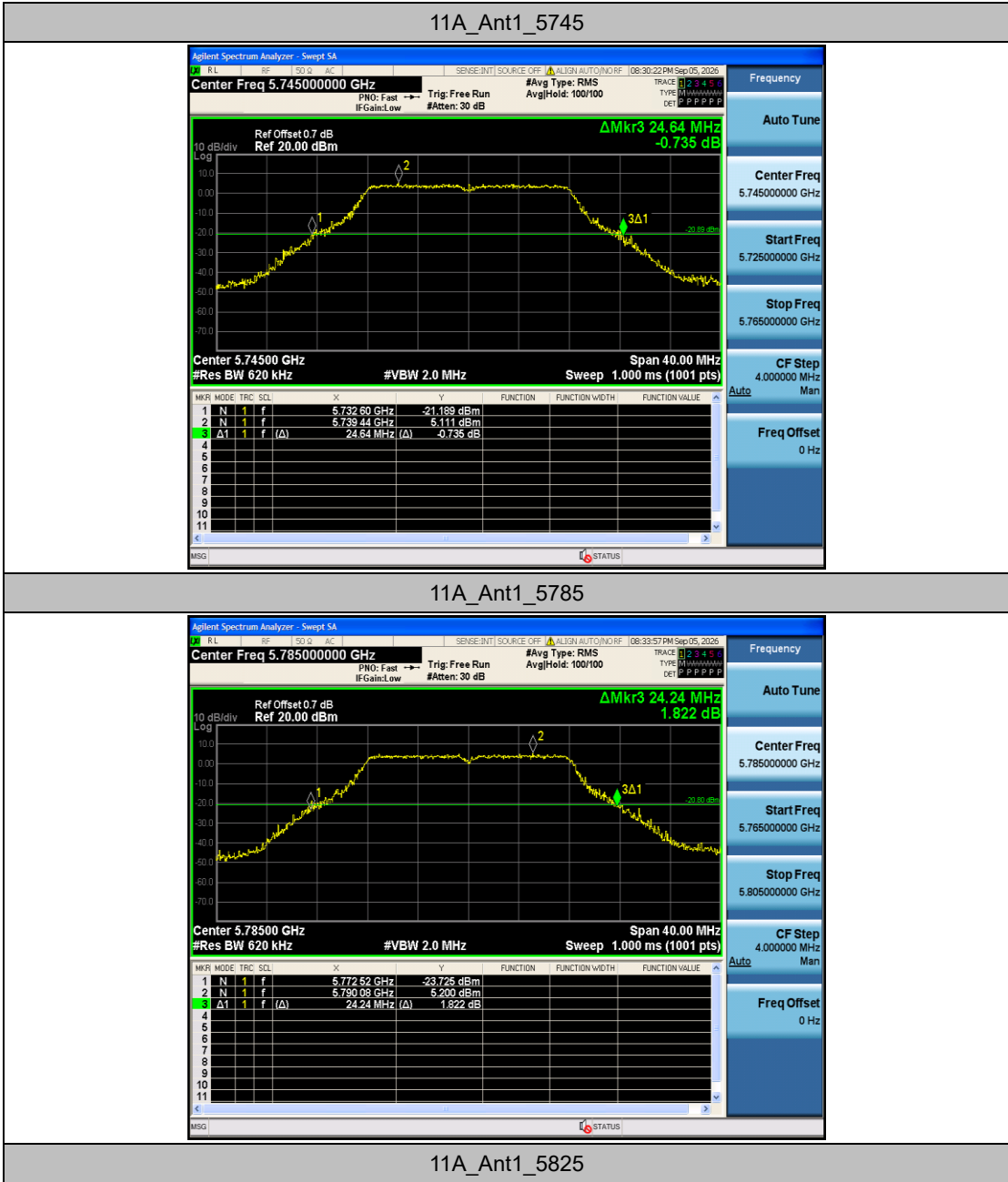
Reviewed By : Eric Wang

Appendix A1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	24.640	5732.600	5757.240	---	---
		5785	24.240	5772.520	5796.760	---	---
		5825	24.640	5812.280	5836.920	---	---
11N20SISO	Ant1	5745	24.480	5732.800	5757.280	---	---
		5785	25.560	5772.040	5797.600	---	---
		5825	24.880	5812.400	5837.280	---	---
11N40SISO	Ant1	5755	44.320	5733.000	5777.320	---	---
		5795	45.280	5772.840	5818.120	---	---
11AC20SISO	Ant1	5745	23.800	5733.120	5756.920	---	---
		5785	23.640	5773.400	5797.040	---	---
		5825	23.960	5812.880	5836.840	---	---
11AC40SISO	Ant1	5755	44.720	5732.760	5777.480	---	---
		5795	43.920	5773.560	5817.480	---	---

Test Graphs





11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



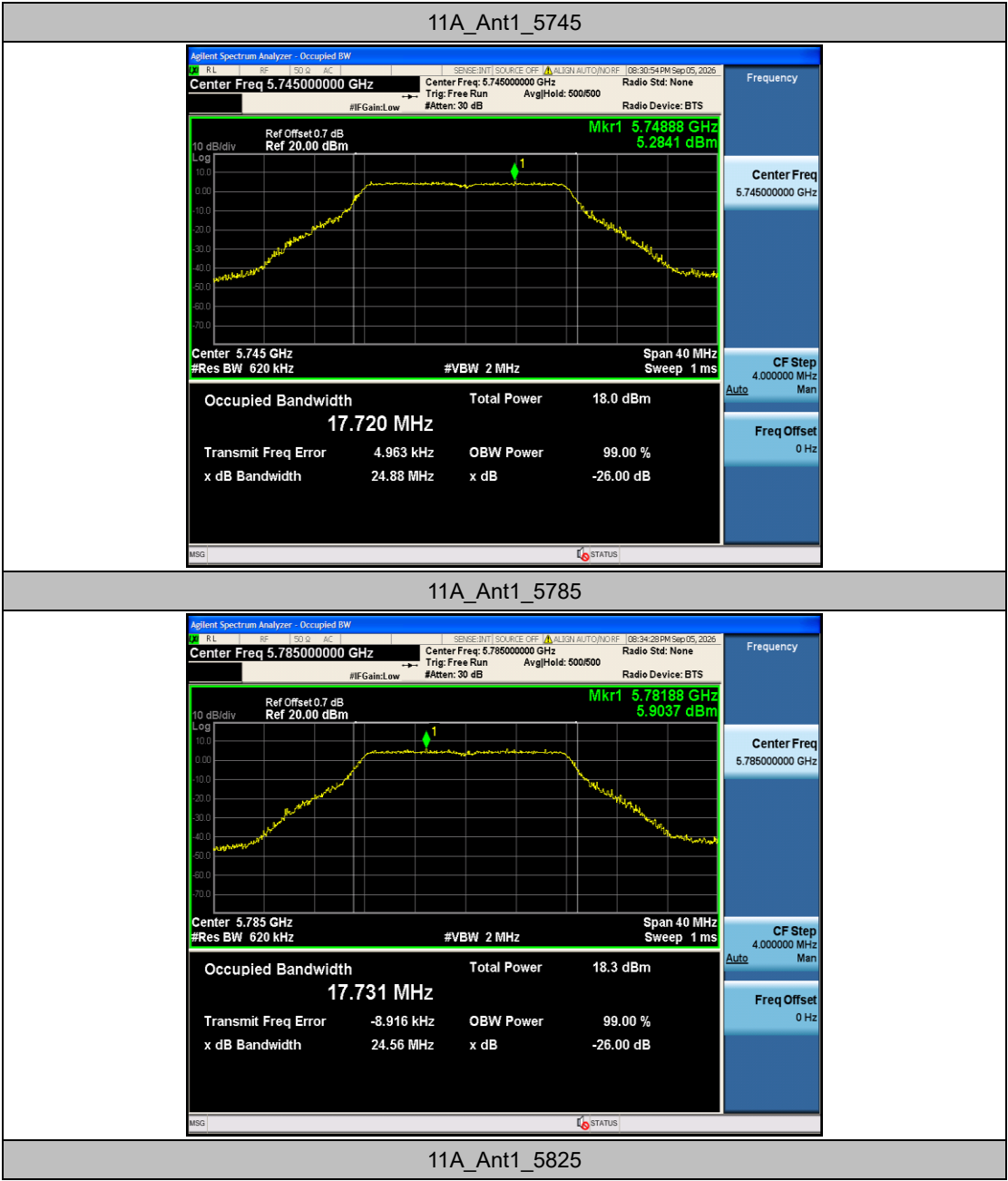


Appendix A2: Occupied channel bandwidth

Test Result

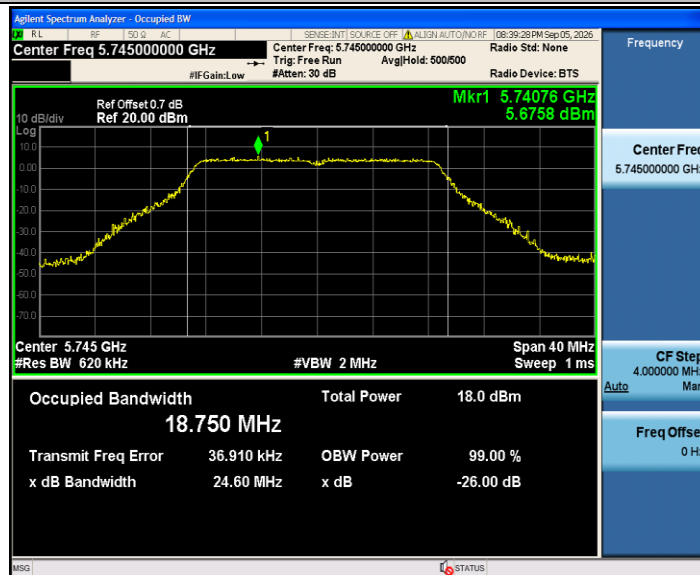
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	17.720	5736.1450	5753.8650	---	---
		5785	17.731	5776.1256	5793.8566	---	---
		5825	17.713	5816.1115	5833.8245	---	---
11N20SISO	Ant1	5745	18.750	5735.6619	5754.4119	---	---
		5785	18.760	5775.6222	5794.3822	---	---
		5825	18.729	5815.6288	5834.3578	---	---
11N40SISO	Ant1	5755	37.054	5736.5292	5773.5832	---	---
		5795	36.900	5776.6461	5813.5461	---	---
11AC20SISO	Ant1	5745	19.387	5735.3116	5754.6986	---	---
		5785	19.424	5775.3155	5794.7395	---	---
		5825	19.400	5815.3448	5834.7448	---	---
11AC40SISO	Ant1	5755	38.288	5735.8974	5774.1854	---	---
		5795	38.251	5775.9544	5814.2054	---	---

Test Graphs

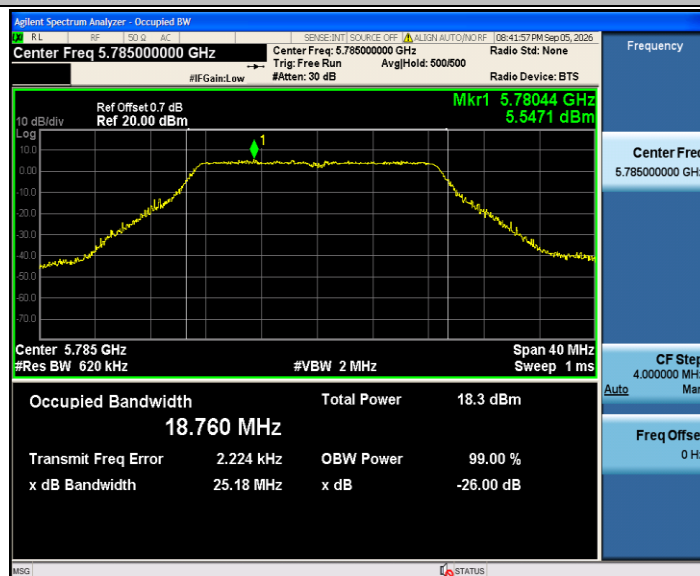




11N20SISO_Ant1_5745



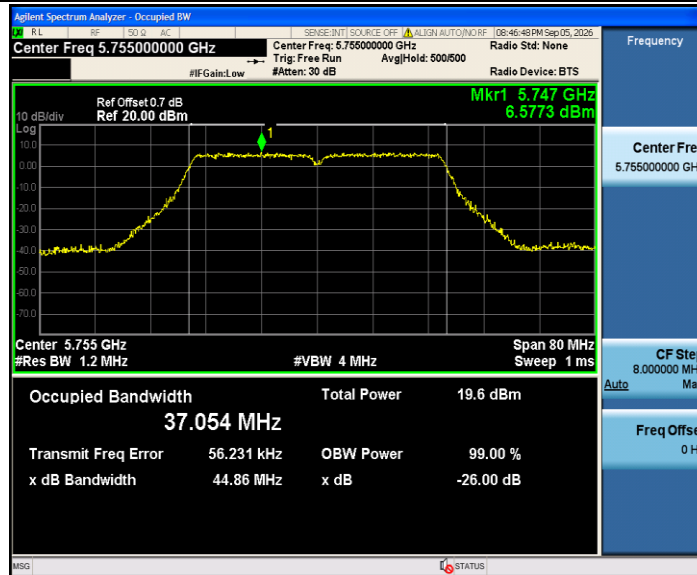
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



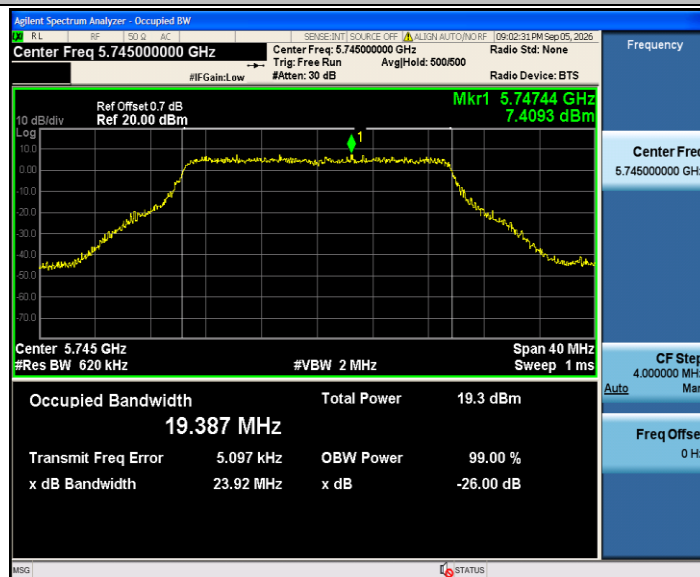
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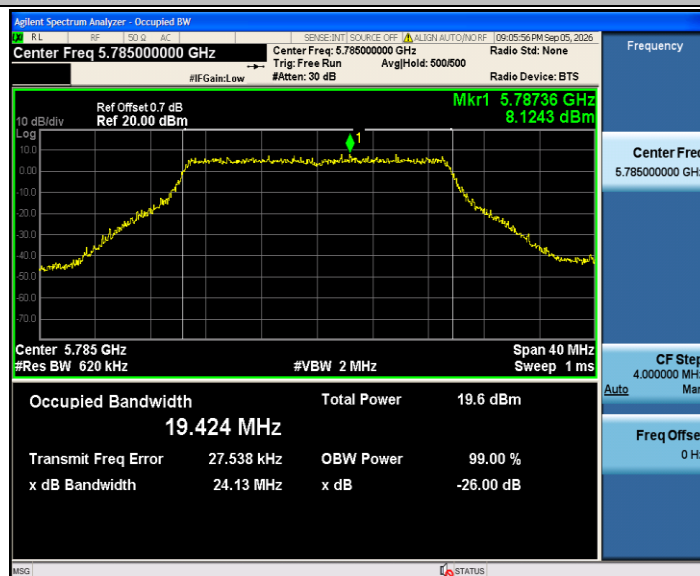
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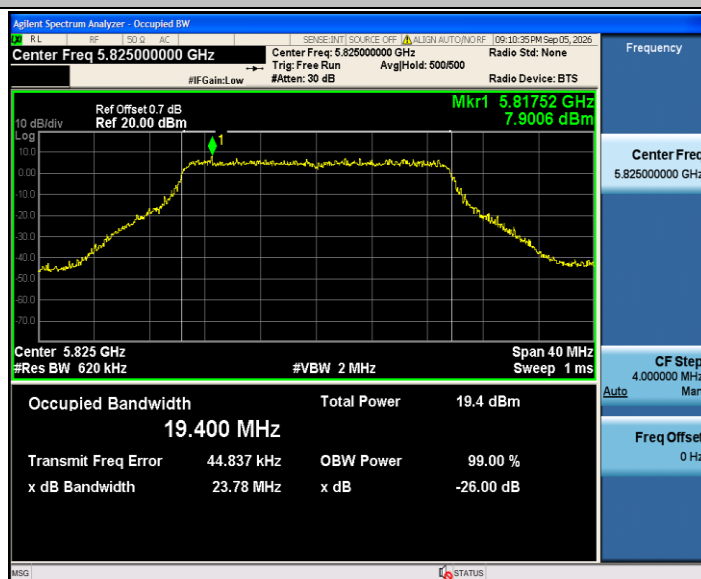
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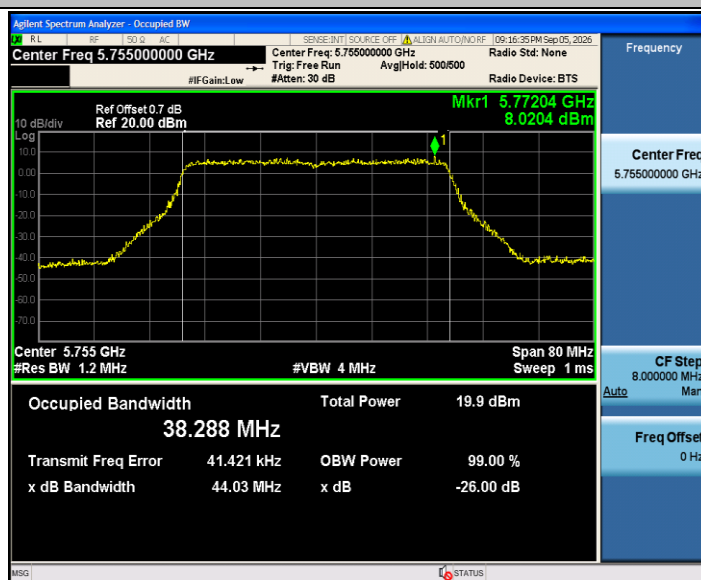
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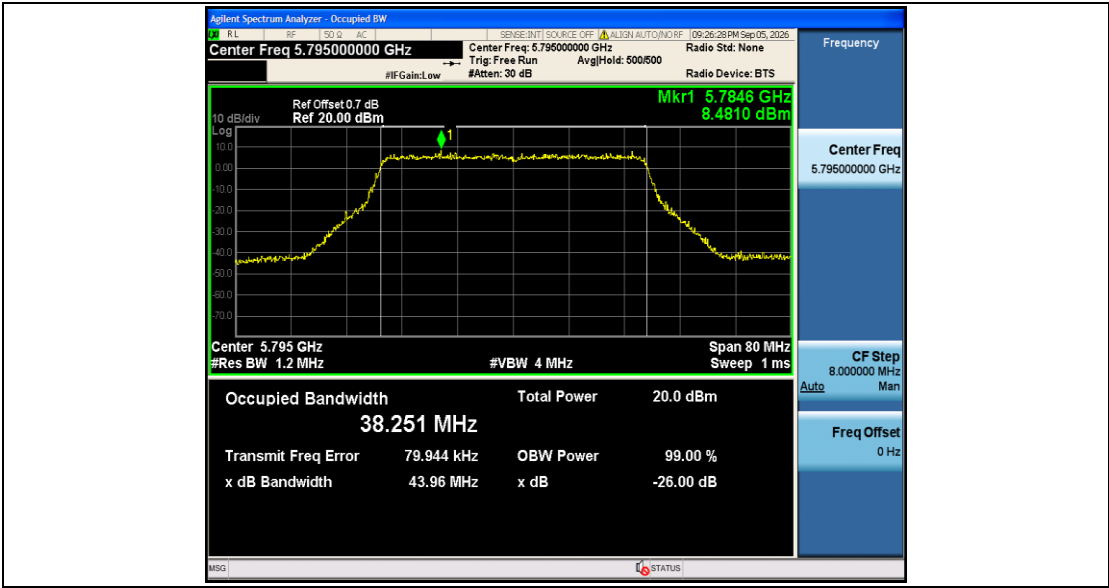
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11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795

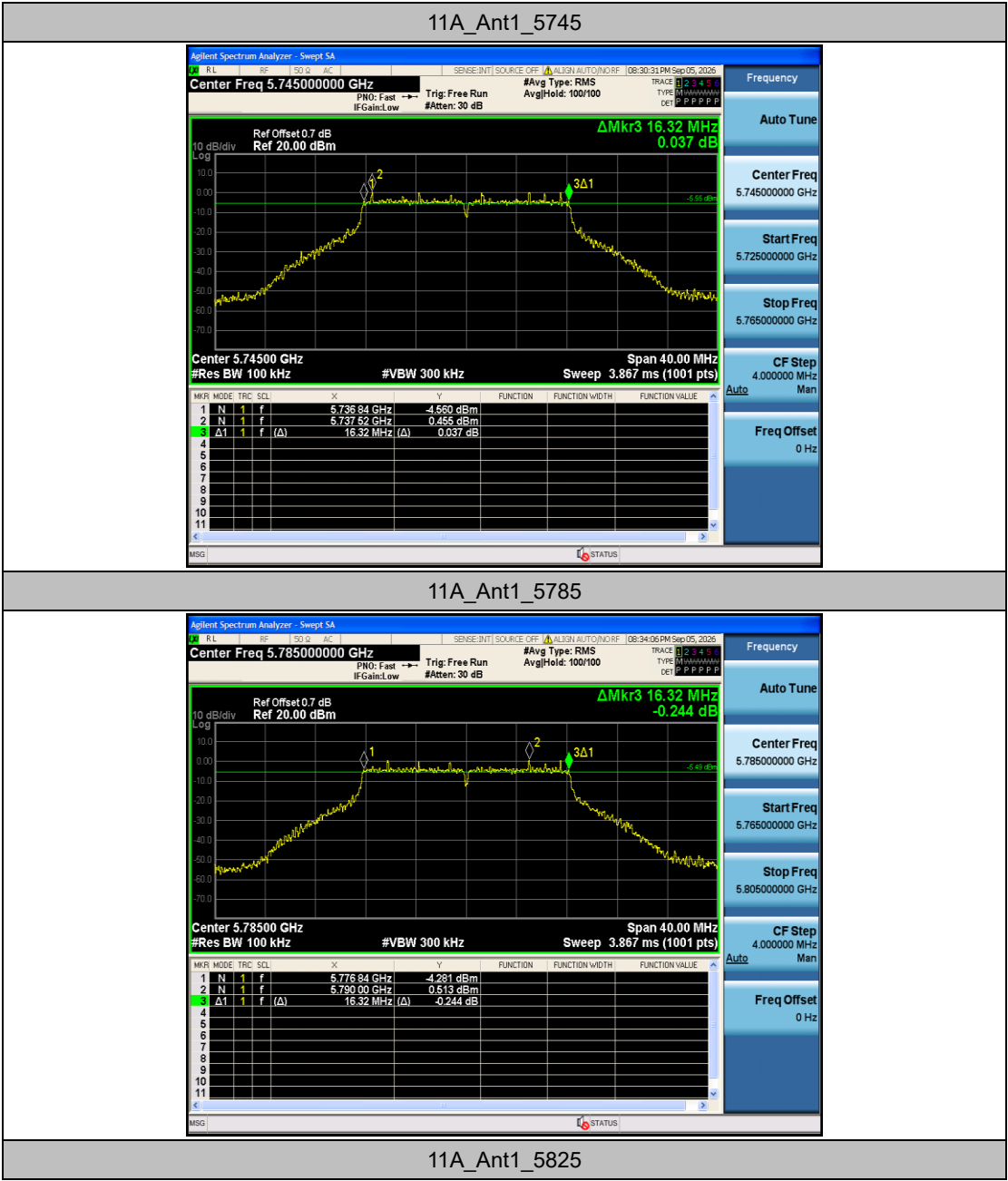


Appendix A3: Min emission bandwidth

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	17.600	5736.200	5753.800	0.5	PASS
		5785	17.600	5776.200	5793.800	0.5	PASS
		5825	17.600	5816.200	5833.800	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	18.920	5735.560	5754.480	0.5	PASS
		5785	18.560	5775.760	5794.320	0.5	PASS
		5825	18.840	5815.560	5834.400	0.5	PASS
11AC40SISO	Ant1	5755	37.920	5736.120	5774.040	0.5	PASS
		5795	37.600	5776.280	5813.880	0.5	PASS

Test Graphs B4





11N20SISO_Ant1_5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



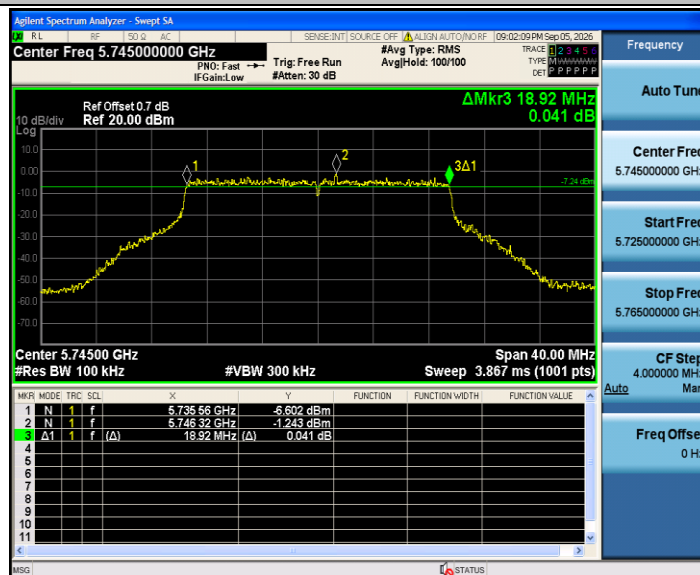
11N40SISO_Ant1_5755



11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



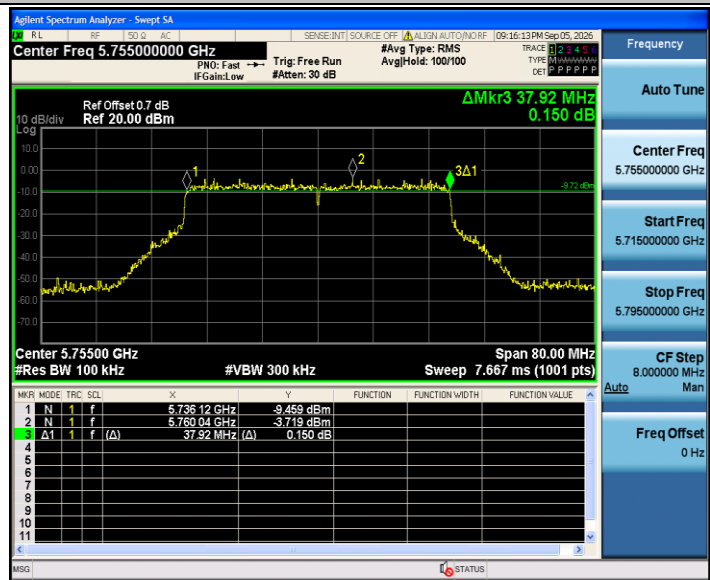
11AC20SISO_Ant1_5785



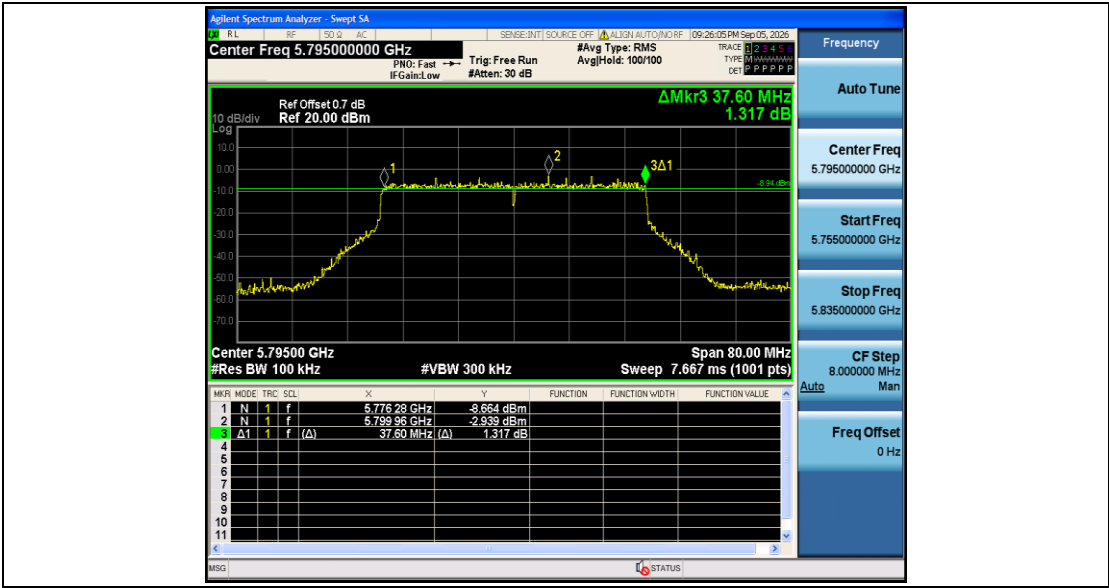
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



Appendix B: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dB]	Limit	Verdict
11A	Ant1	5745	2.08	2.13	97.65	0.10	---	---
		5785	2.09	2.13	98.12	0.08	---	---
		5825	2.09	2.14	97.66	0.10	---	---
11N20SISO	Ant1	5745	3.97	4.02	98.76	0.05	---	---
		5785	3.98	4.02	99.00	0.04	---	---
		5825	3.97	4.02	98.76	0.05	---	---
11N40SISO	Ant1	5755	3.97	4.02	98.76	0.05	---	---
		5795	3.97	4.01	99.00	0.04	---	---
11AC20SISO	Ant1	5745	3.95	4.00	98.75	0.05	---	---
		5785	3.95	4.00	98.75	0.05	---	---
		5825	3.96	4.01	98.75	0.05	---	---
11AC40SISO	Ant1	5755	3.96	4.01	98.75	0.05	---	---
		5795	3.95	4.00	98.75	0.05	---	---

11A_Ant1_5745

Agilent Spectrum Analyzer - Sweep SA

Center Freq 5.745000000 GHz

Trig Delay: 2.000 ms

Trig: Video

PNO: Fast

IF Gain: Low

#Atten: 30 dB

Ref Offset 0.7 dB

Ref 20.70 dBm

ΔMkr3 2.130 ms

0.61 dB

Center 5.745000000 GHz

Res BW 8 MHz

#VBW 8.0 MHz

Sweep 7.000 ms (1001 pts)

Span 0 Hz

MNR	MODE	TRIG	SQL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t		900.0 μs	12.78 dBm		
2	A1	1	t	(Δ)	2.090 ms	-1.13 dB		
3	A1	1	t	(Δ)	2.130 ms	0.61 dB		

Frequency

Auto Tune

Center Freq 5.745000000 GHz

Start Freq 5.745000000 GHz

Stop Freq 5.745000000 GHz

CF Step 8.000000 MHz

Man

Freq Offset 0 Hz

11A_Ant1_5785

Agilent Spectrum Analyzer - Sweep SA

Center Freq 5.785000000 GHz

Trig Delay: 2.000 ms

Trig: Video

PNO: Fast

IF Gain: Low

#Atten: 30 dB

Ref Offset 0.7 dB

Ref 20.70 dBm

ΔMkr3 2.130 ms

-0.58 dB

Center 5.785000000 GHz

Res BW 8 MHz

#VBW 8.0 MHz

Sweep 7.000 ms (1001 pts)

Span 0 Hz

MNR	MODE	TRIG	SQL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t		1.880 ms	13.67 dBm		
2	A1	1	t	(Δ)	2.090 ms	-9.95 dB		
3	A1	1	t	(Δ)	2.130 ms	-0.58 dB		

Frequency

Auto Tune

Center Freq 5.785000000 GHz

Start Freq 5.785000000 GHz

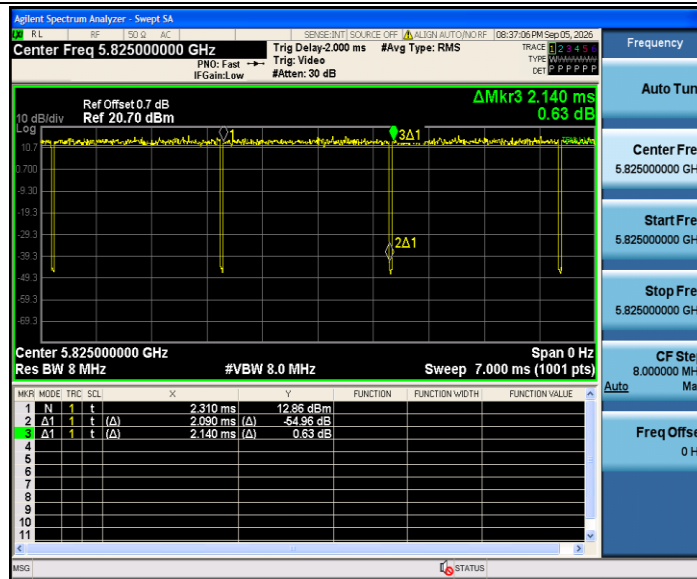
Stop Freq 5.785000000 GHz

CF Step 8.000000 MHz

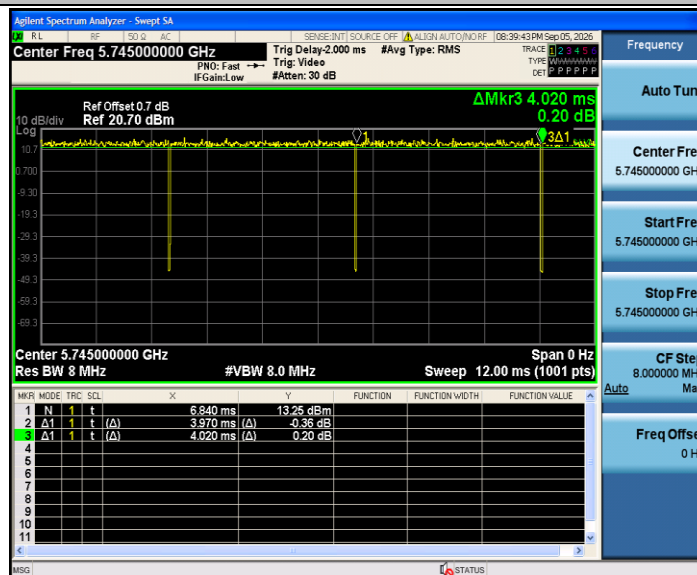
Man

Freq Offset 0 Hz

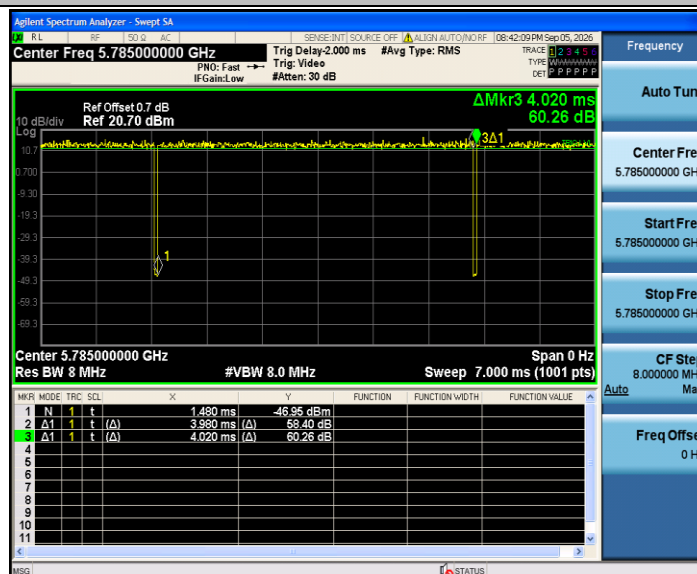
11A_Ant1_5825



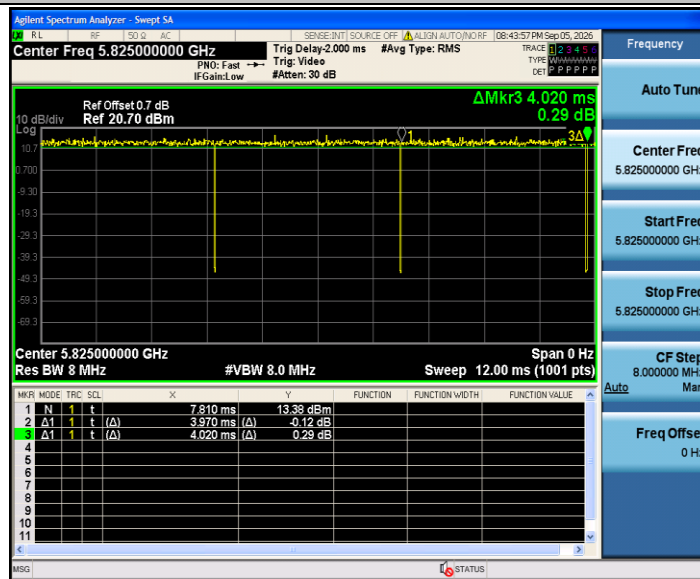
11N20SISO_Ant1_5745



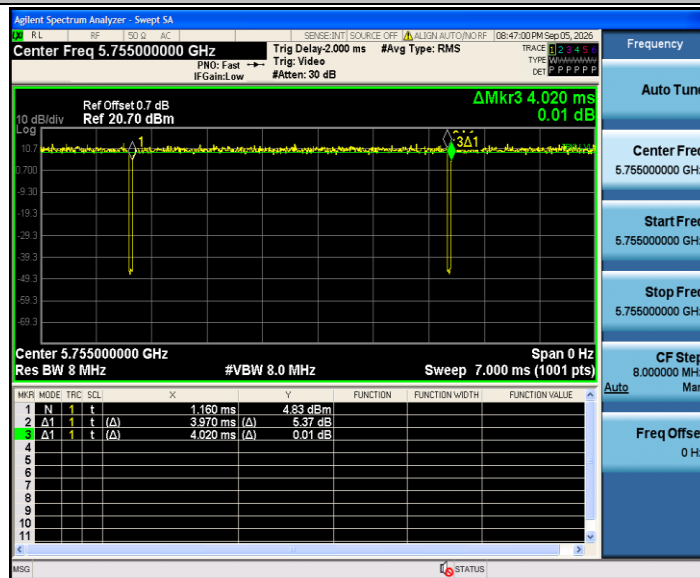
11N20SISO_Ant1_5785



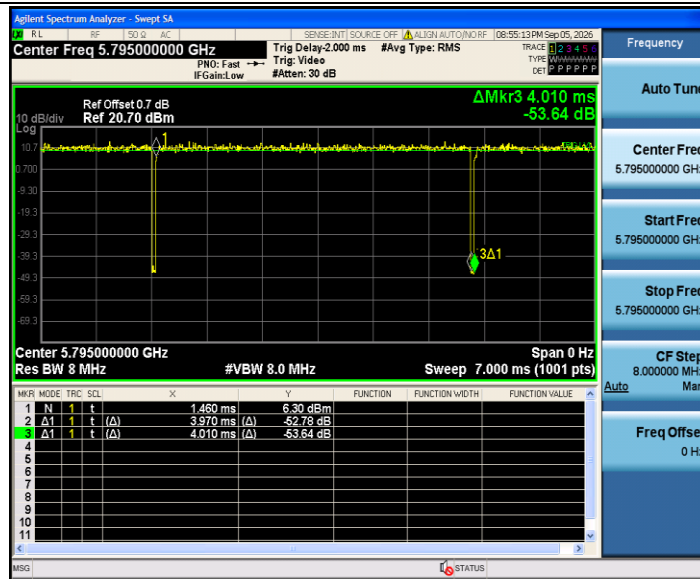
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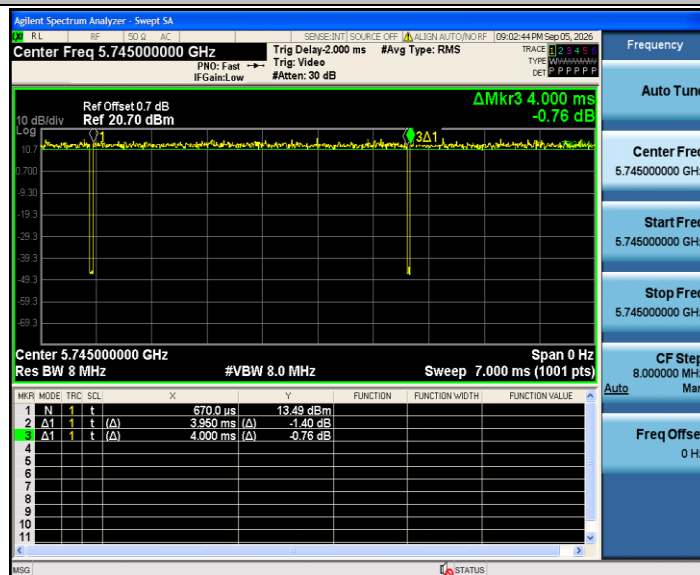
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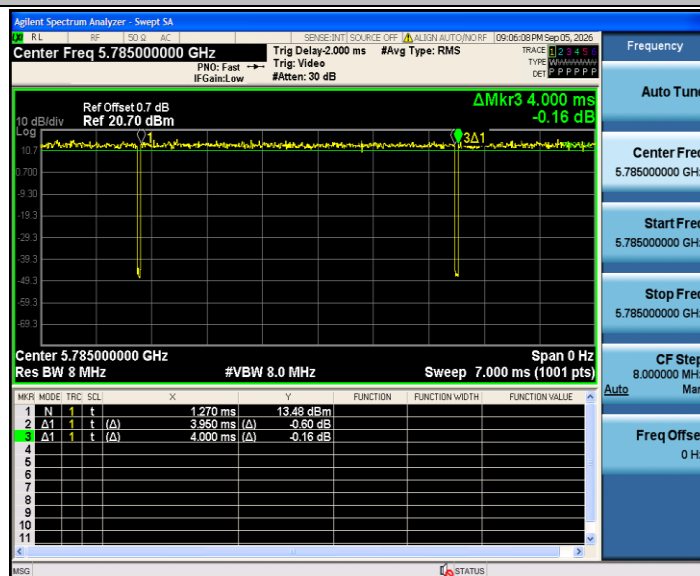
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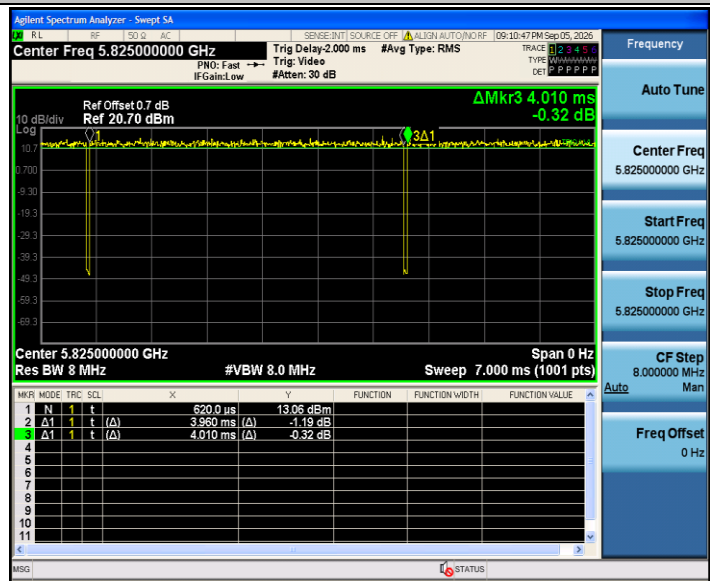
11AC20SISO_Ant1_5745



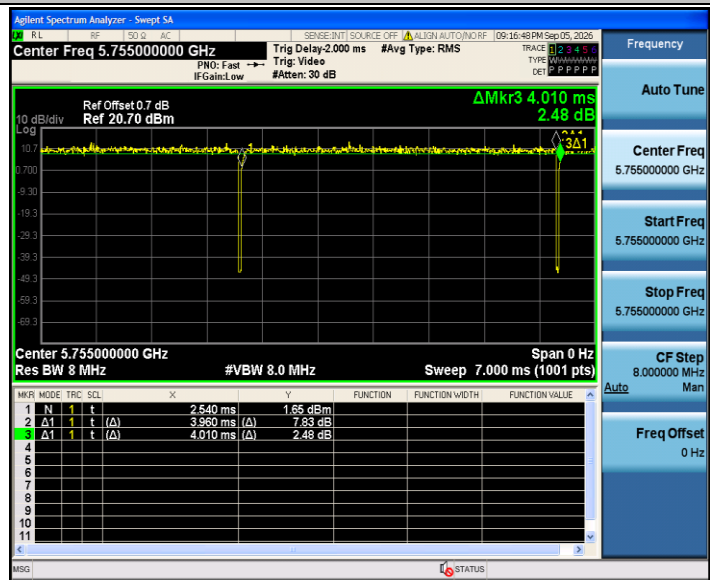
11AC20SISO_Ant1_5785



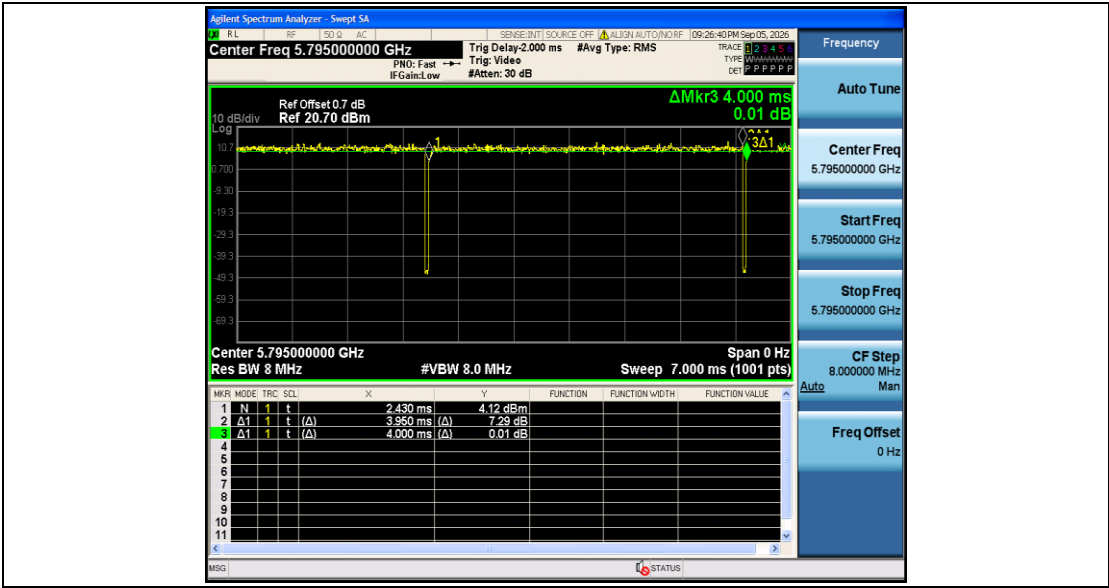
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Freq(MHz)	Conduct Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5745	10.93	97.65	0.1	11.03	≤30.00	PASS
		5785	11.19	98.12	0.08	11.27	≤30.00	PASS
		5825	10.99	97.66	0.1	11.09	≤30.00	PASS
11N20SISO	Ant1	5745	10.93	98.76	0.05	10.98	≤30.00	PASS
		5785	11.24	99.0	0.04	11.28	≤30.00	PASS
		5825	10.97	98.76	0.05	11.02	≤30.00	PASS
11N40SISO	Ant1	5755	11.2	98.76	0.05	11.25	≤30.00	PASS
		5795	11.06	99.0	0.04	11.10	≤30.00	PASS
11AC20SISO	Ant1	5745	10.8	98.75	0.05	10.85	≤30.00	PASS
		5785	11.03	98.75	0.05	11.08	≤30.00	PASS
		5825	10.83	98.75	0.05	10.88	≤30.00	PASS
11AC40SISO	Ant1	5755	10.87	98.75	0.05	10.92	≤30.00	PASS
		5795	11.11	98.75	0.05	11.16	≤30.00	PASS

Appendix D: Maximum power spectral density

Test Result

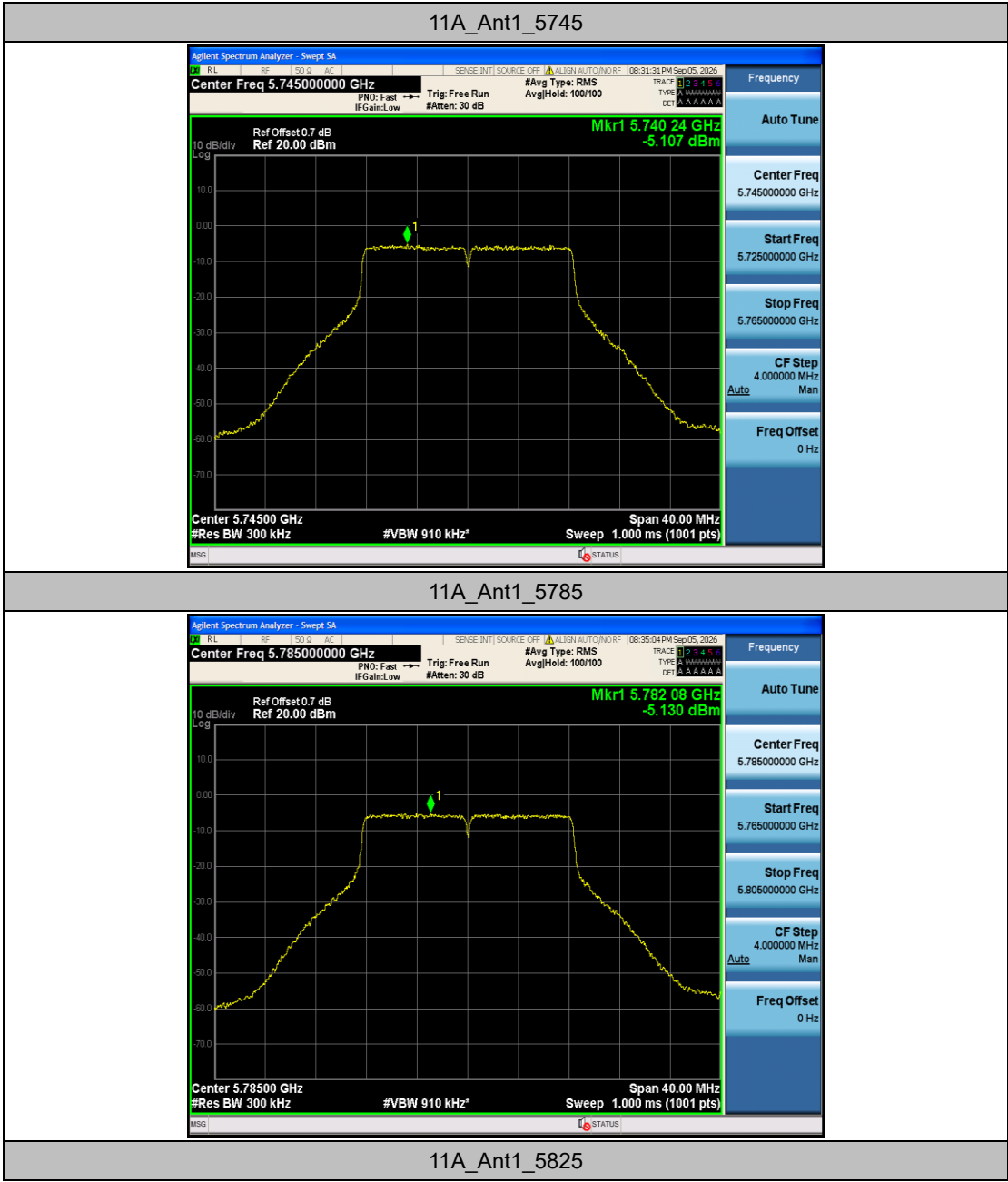
TestMode	Antenna	Freq(MHz)	RawData [dBm/MHz]	DC Factor [dBm]	RBW Factor [dBm]	Result [dBm/500KHz]	Limit [dBm/500KHz]	Verdict
11A	Ant1	5745	-5.11	0.10	2.22	-2.79	≤30.00	PASS
		5785	-5.13	0.08	2.22	-2.83	≤30.00	PASS
		5825	-5.21	0.10	2.22	-2.89	≤30.00	PASS
11N20SISO	Ant1	5745	-5.66	0.05	2.22	-3.39	≤30.00	PASS
		5785	-5.48	0.04	2.22	-3.22	≤30.00	PASS
		5825	-5.54	0.05	2.22	-3.27	≤30.00	PASS
11N40SISO	Ant1	5755	-8.63	0.05	2.22	-6.36	≤30.00	PASS
		5795	-8.31	0.04	2.22	-6.05	≤30.00	PASS
11AC20SISO	Ant1	5745	-5.9	0.05	2.22	-3.63	≤30.00	PASS
		5785	-5.82	0.05	2.22	-3.55	≤30.00	PASS
		5825	-5.85	0.05	2.22	-3.58	≤30.00	PASS
11AC40SISO	Ant1	5755	-8.92	0.05	2.22	-6.65	≤30.00	PASS
		5795	-8.83	0.05	2.22	-6.56	≤30.00	PASS

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

P.S.D(dBm/500KHz)= P.S.D(dBm/300KHz)+10 log (500 kHz/300KHz).

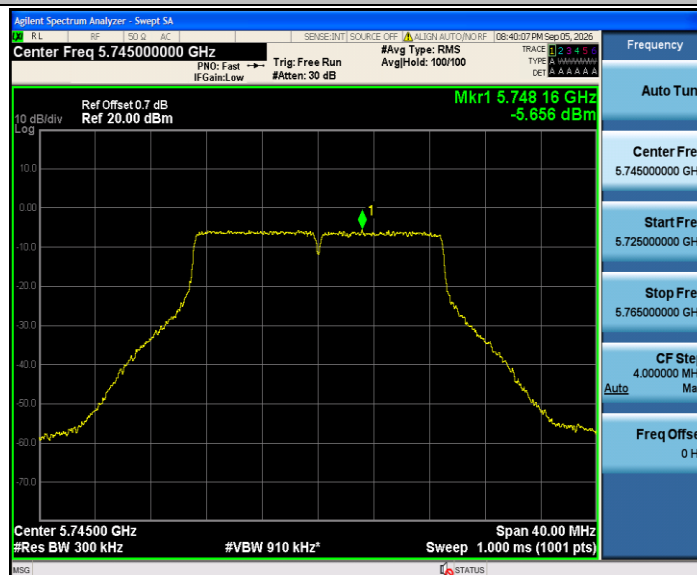
2. RBW factor= 10 log (500 KHz /300 KHz) = 2.22 dB

Test Graphs

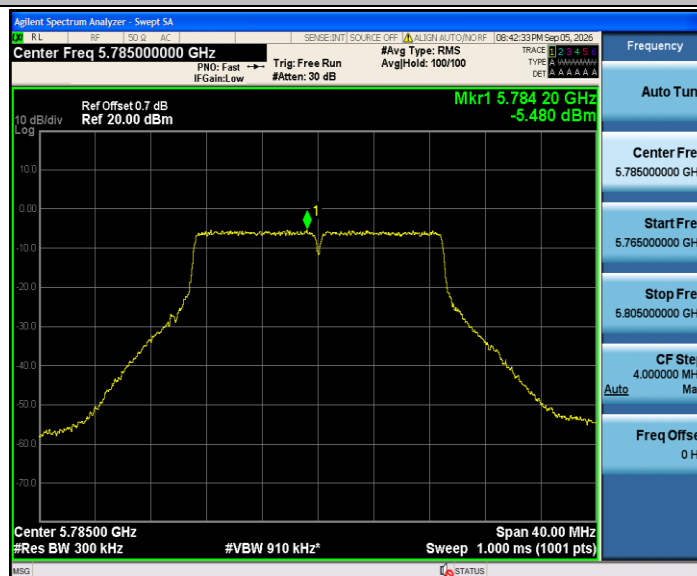




11N20SISO_Ant1_5745



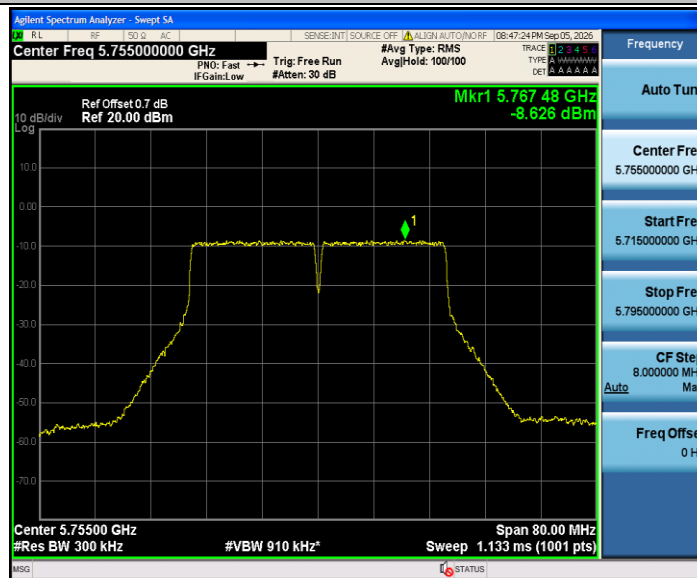
11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



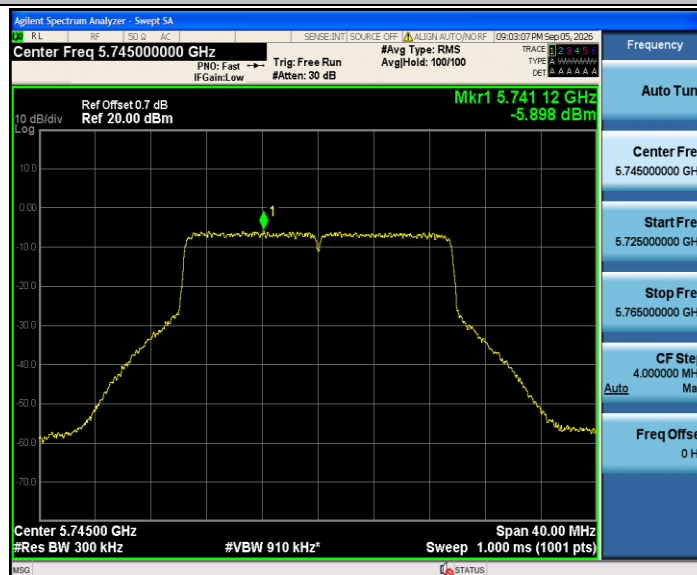
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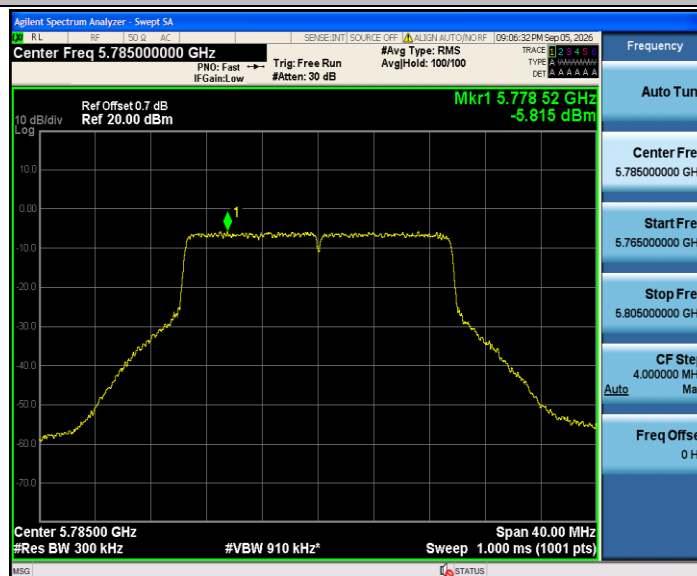
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11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795