

REPORT NO.: 4791339609-1-RF-2

Page 341 of 374

11.5. APPENDIX E: MAXIMUM POWER SPECTRAL DENSITY 11.5.1. Test Result

			Power	Limit	EIRP	Limit	
Test Mode	Antenna	Frequency[MHz]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	Verdict
11A		5180	5.06	≤11.00	8.99	≤10.00	PASS
		5200	5.44	≤11.00	9.37	≤10.00	PASS
		5240	4.89	≤11.00	8.82	≤10.00	PASS
	Ant1	5260	4.87	≤11.00	8.80		PASS
		5280	4.97	≤11.00	8.90		PASS
		5320	5.08	≤11.00	9.01		PASS
		5500	-3.12	≤11.00	0.81		PASS
		5580	-1.96	≤11.00	1.97		PASS
		5700	-3.56	≤11.00	0.37		PASS
		5720_UNII-2C	-2.26	≤11.00	1.67		PASS
		5720_UNII-3	-4.19	≤30.00	-0.26		PASS
		5745	1.82	≤30.00	5.75		PASS
		5785	1.65	≤30.00	5.58		PASS
		5825	2.33	≤30.00	6.26		PASS
11N20SISO	Ant1	5180	4.48	≤11.00	8.41	≤10.00	PASS
		5200	5.06	≤11.00	8.99	≤10.00	PASS
		5240	4.85	≤11.00	8.78	≤10.00	PASS
		5260	4.79	≤11.00	8.72		PASS
		5280	4.83	≤11.00	8.76		PASS
		5320	4.69	≤11.00	8.62		PASS
		5500	-2.82	≤11.00	1.11		PASS
		5580	-2.52	≤11.00	1.41		PASS
		5700 5720 UNII-2C	-2.71	≤11.00	1.22		PASS
			-1.37	≤11.00	2.56		PASS
		5720_UNII-3	-4.11 1.22	≤30.00	-0.18		PASS
		5745 5785	1.89	≤30.00 ≤30.00	5.15 5.82		PASS PASS
		5825	2.13	≤30.00	6.06		PASS
11N40SISO		5190	-0.10	≤30.00 ≤11.00	3.83	≤10.00	PASS
	Ant1	5230	-0.10	≤11.00 ≤11.00	3.92	≤10.00 ≤10.00	PASS
		5270	-2.30	≤11.00 ≤11.00	1.63	<u>≤10.00</u>	PASS
		5310	-2.49	≤11.00 ≤11.00	1.44		PASS
		5510	-2.15	≤11.00	1.78		PASS
		5550	-2.34	≤11.00	1.59		PASS
		5670	-2.65	≤11.00	1.28		PASS
		5710_UNII-2C	-1.67	≤11.00	2.26		PASS
		5710_UNII-3	-4.79	≤30.00	-0.86		PASS
		5755	-1.27	≤30.00	2.66		PASS
		5795	-1.77	≤30.00	2.16		PASS
11AX20SISO	Ant1	5180	1.74	≤11.00	5.67	≤10.00	PASS
		5200	2.10	≤11.00	6.03	≤10.00	PASS
		5240	2.21	≤11.00	6.14	≤10.00	PASS
		5260	2.14	≤11.00	6.07		PASS
		5280	2.02	≤11.00	5.95		PASS
		5320	1.76	≤11.00	5.69		PASS
		5500	1.17	≤11.00	5.10		PASS
		5580	0.97	≤11.00	4.90		PASS
		5700	1.28	≤11.00	5.21		PASS
		5720_UNII-2C	2.74	≤11.00	6.67		PASS
		5720_UNII-3	-0.62	≤30.00	3.31		PASS
		5745	1.21	≤30.00	5.14		PASS
		5785	1.32	≤30.00	5.25		PASS
		5825	1.12	≤30.00	5.05		PASS
11AX40SISO	Ant1	5190	-0.65	≤11.00	3.28	≤10.00	PASS
1177403130		5230	-0.43	≤11.00	3.50	≤10.00	PASS



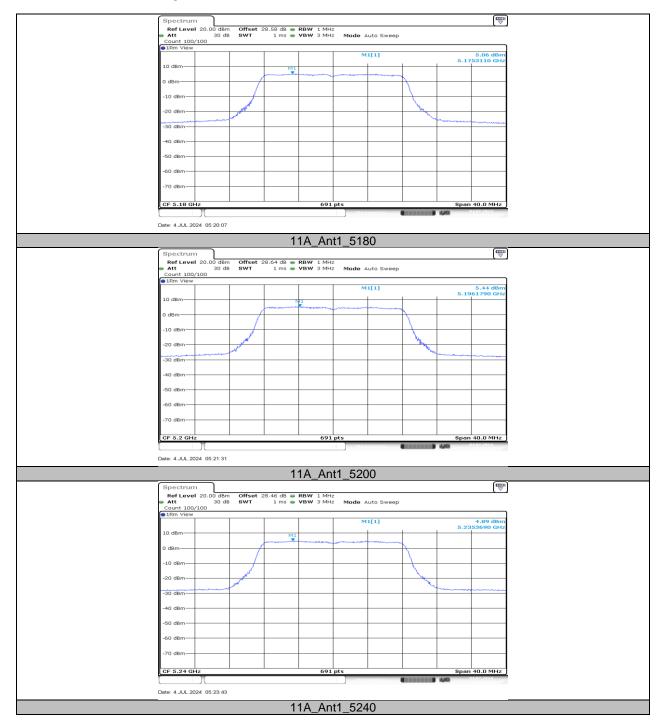
REPORT NO.: 4791339609-1-RF-2 Page 342 of 374

5270 -2.47 ≤11.00 1.46 **PASS** 5310 -2.93 ≤11.00 1.00 PASS -2.07 ≤11.00 1.86 PASS 5510 -2.25 ≤11.00 1.68 PASS 5550 ---5670 -2.06 ≤11.00 1.87 PASS ---PASS 5710_UNII-2C -1.83 ≤11.00 2.10 ---PASS ≤30.00 5710_UNII-3 -4.09 -0.16---PASS -1.05 ≤30.00 2.88 5755 ---5795 -2.00 ≤30.00 1.93 PASS ---

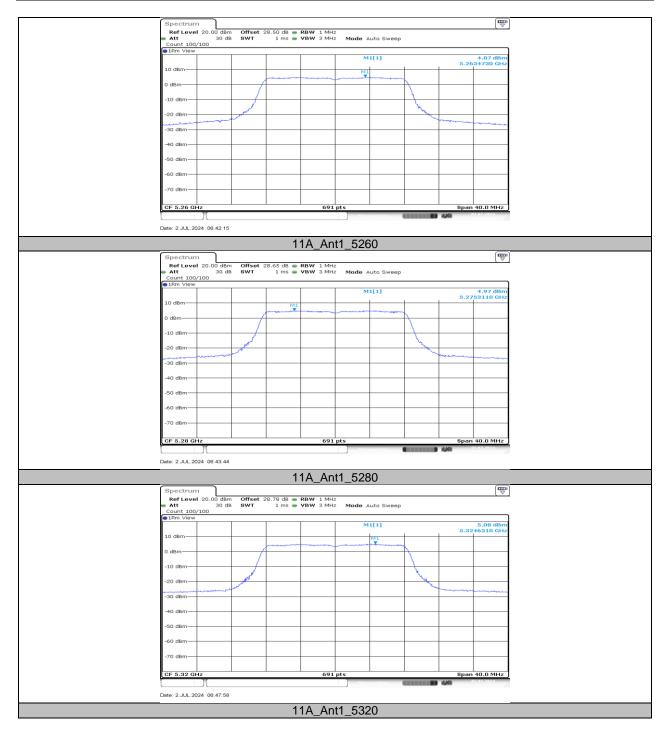
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz. 2.The Duty Cycle Factor and RBW Factor is compensated in the graph.



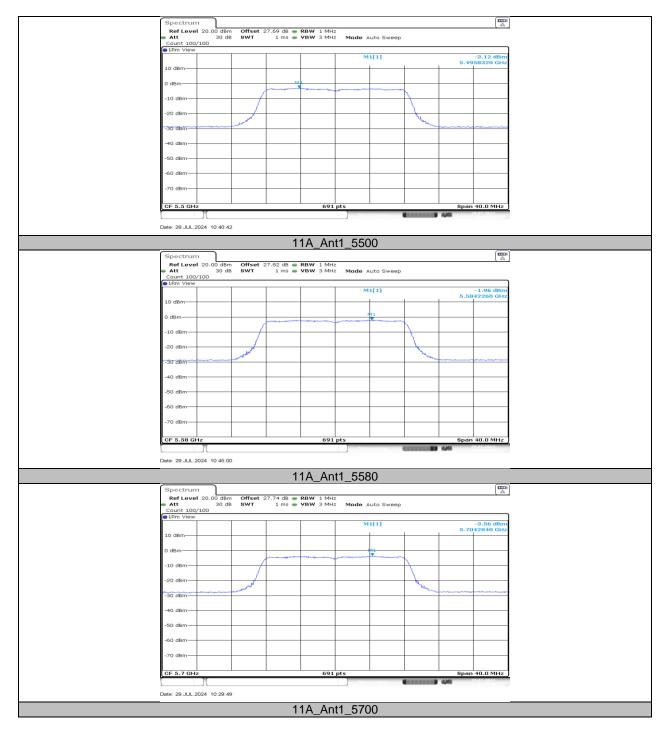
11.5.2. Test Graphs



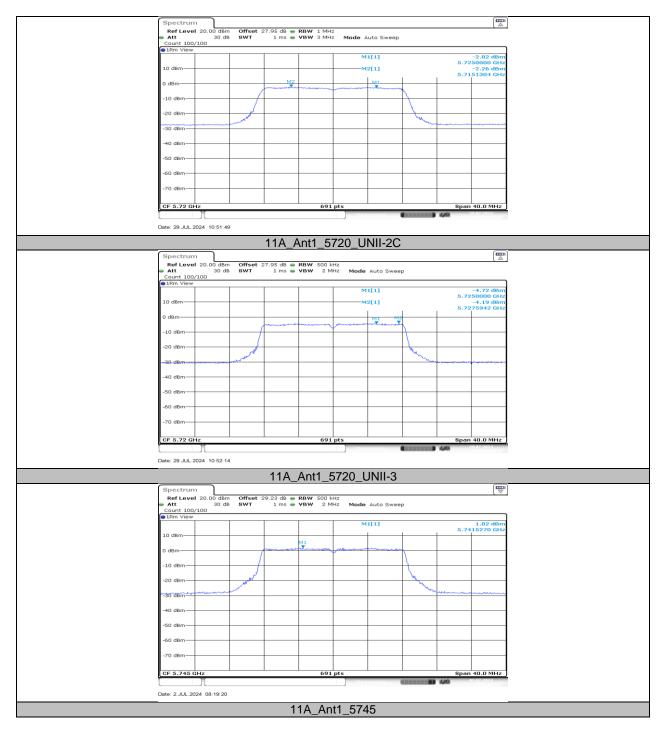




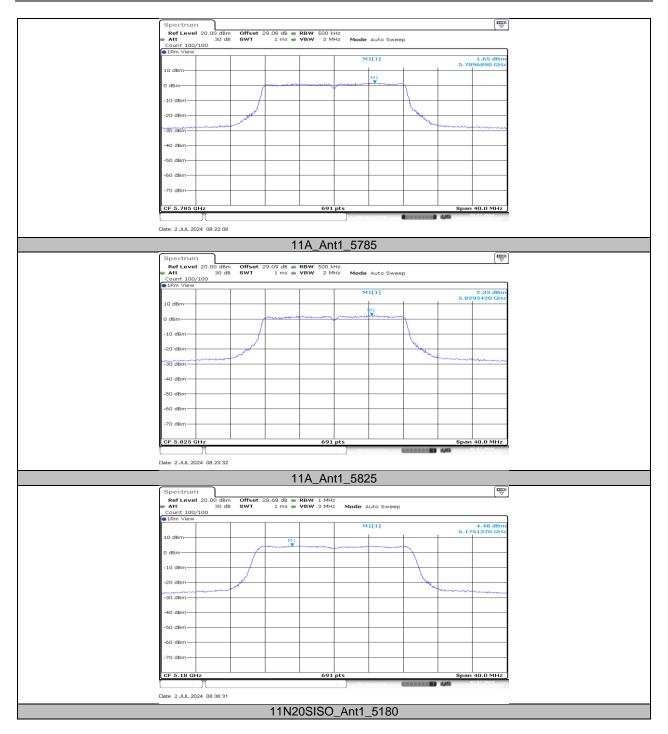




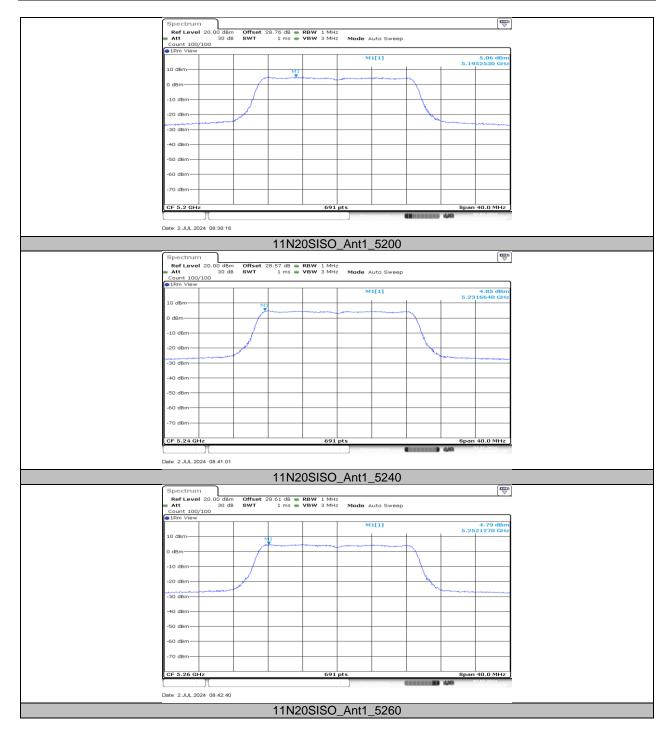




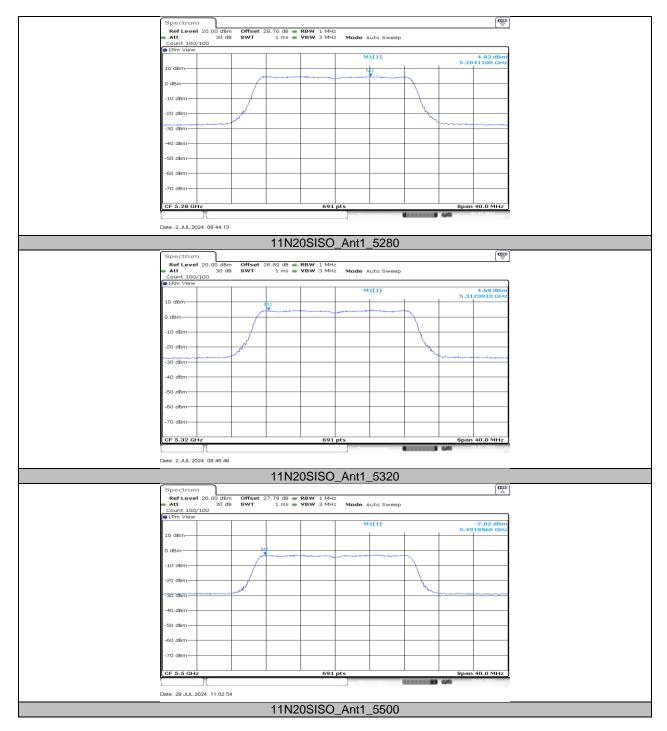




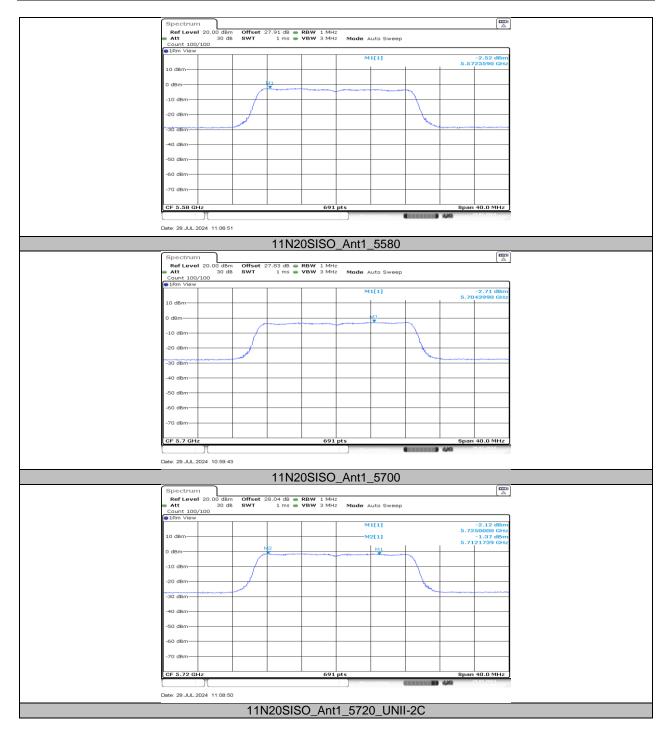




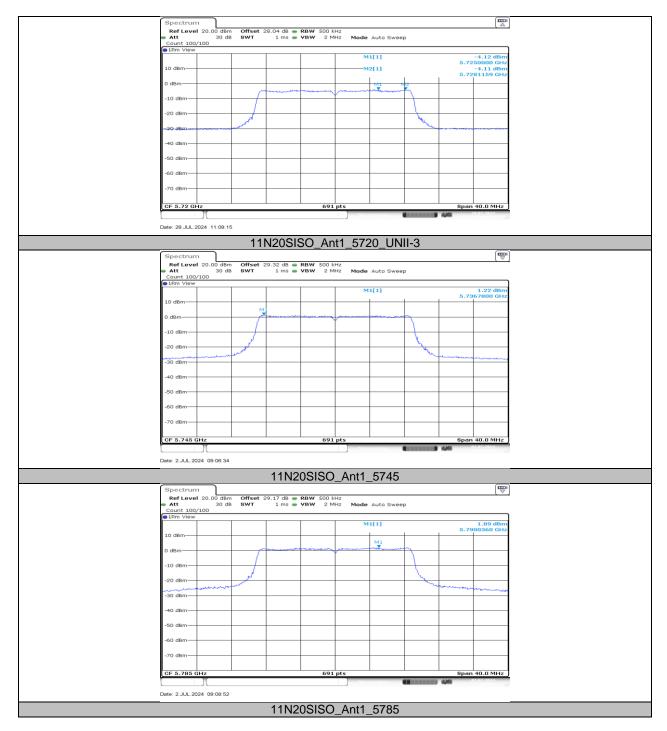




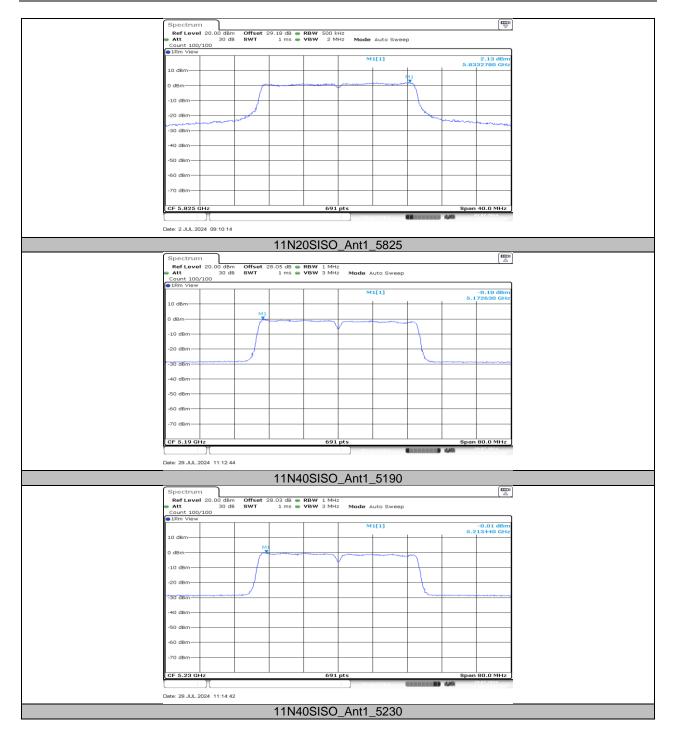




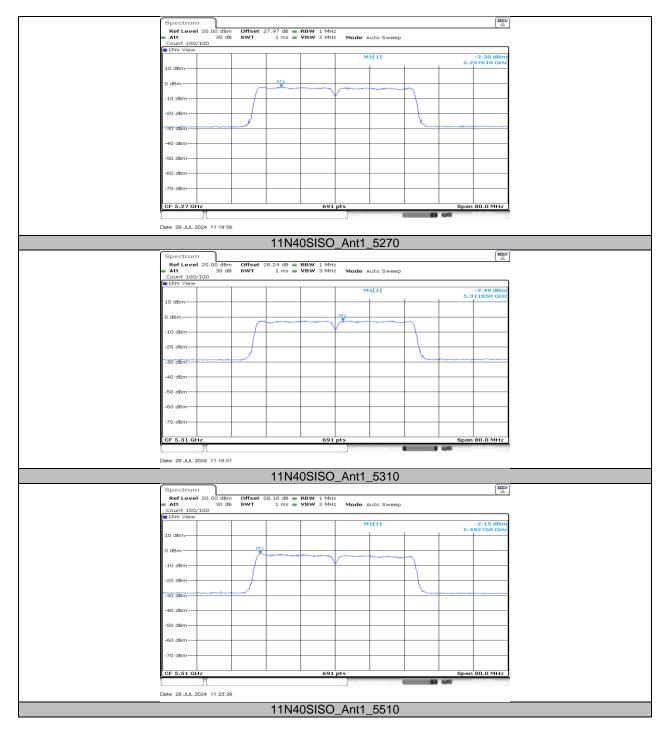




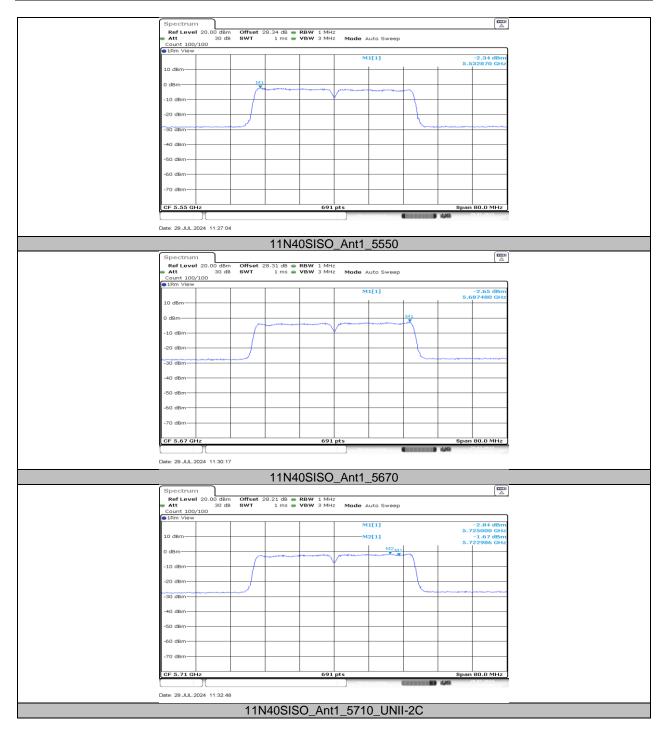




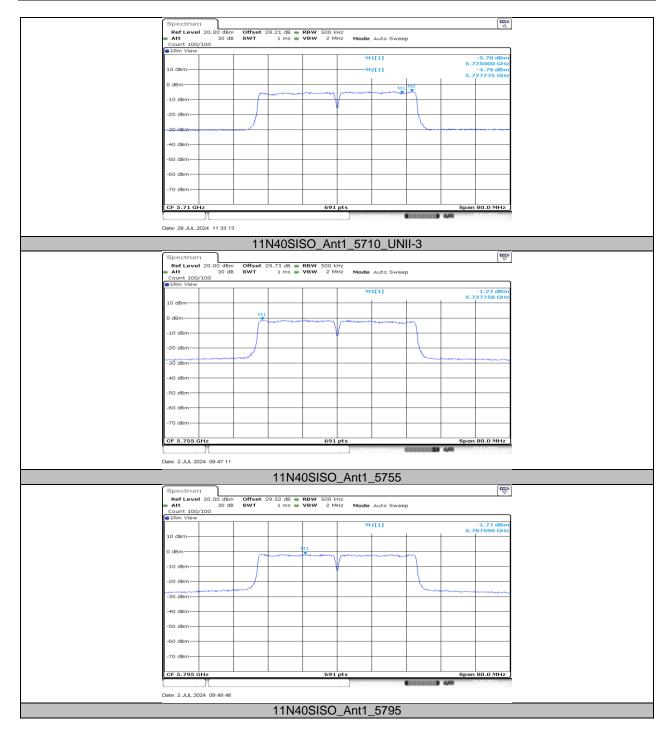




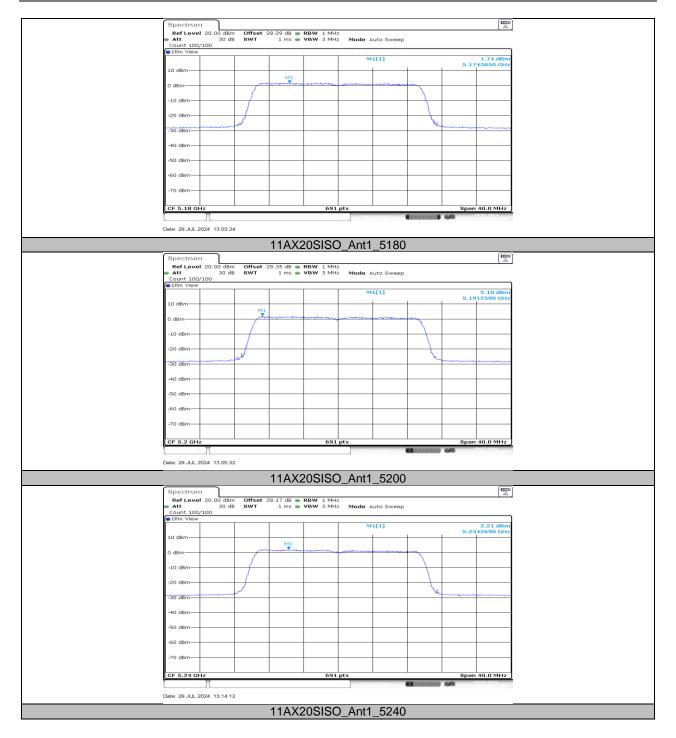




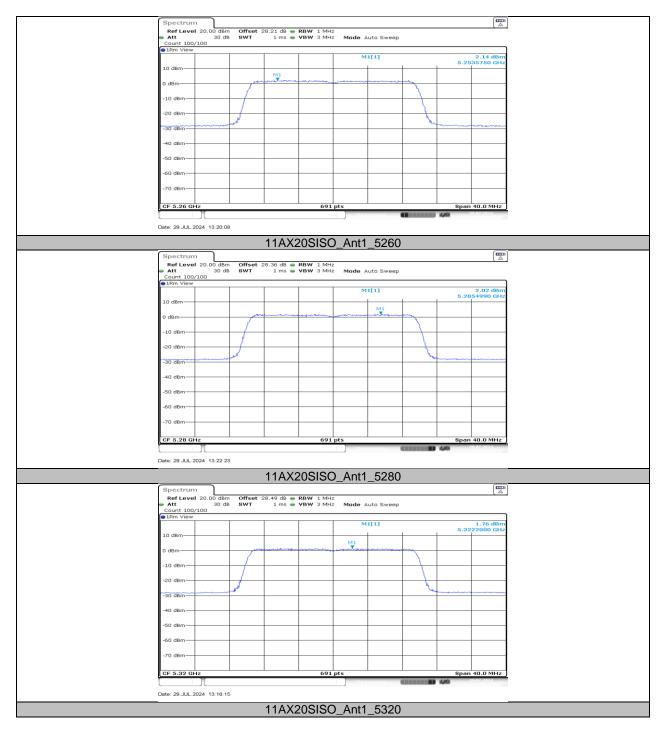




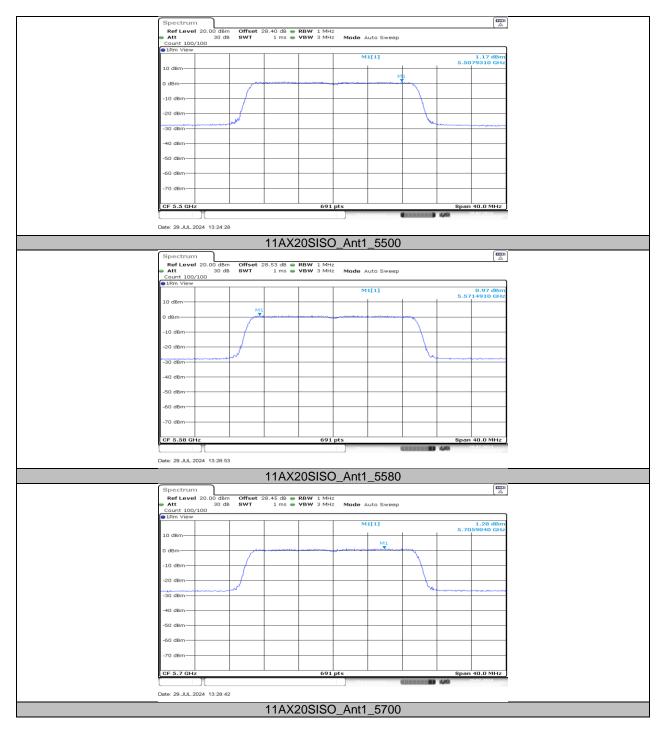








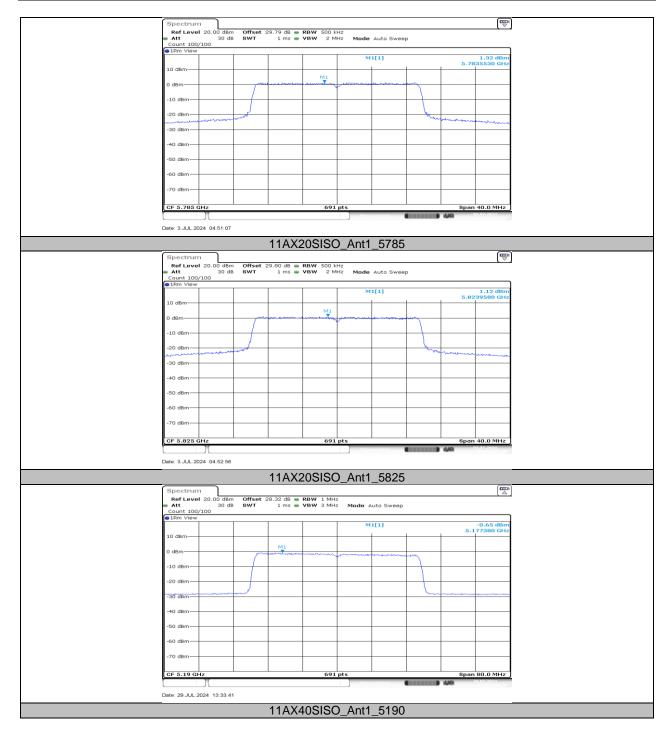




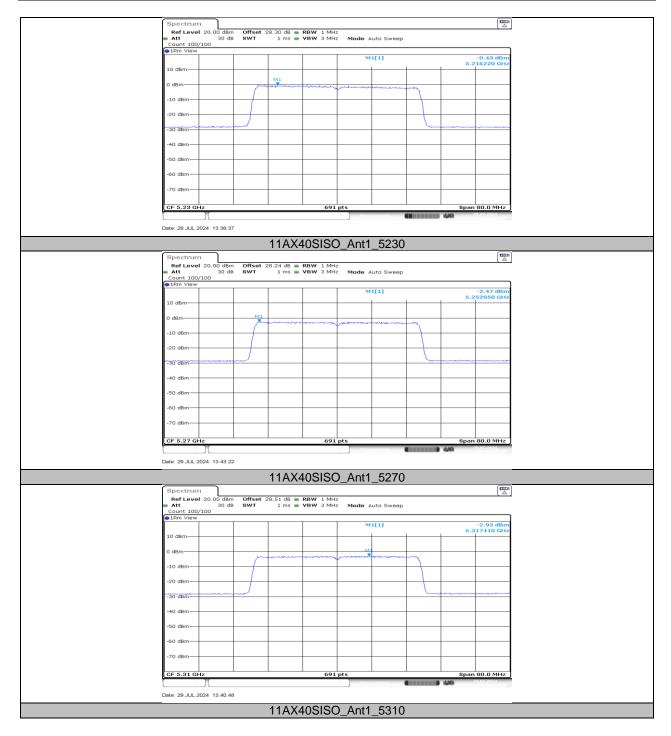




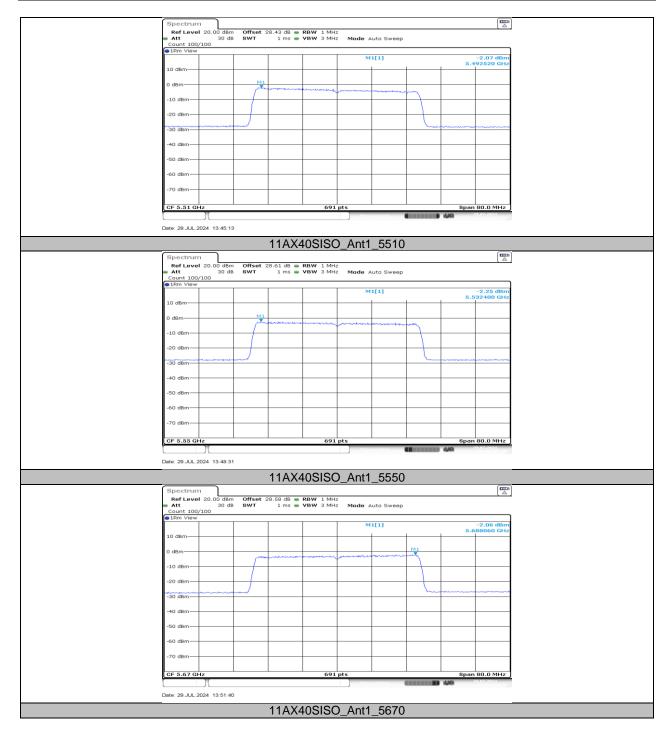




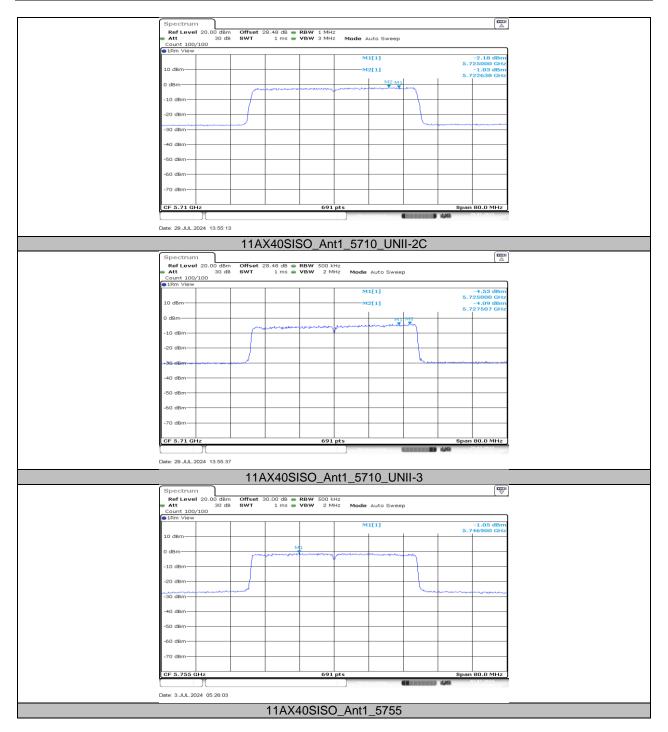




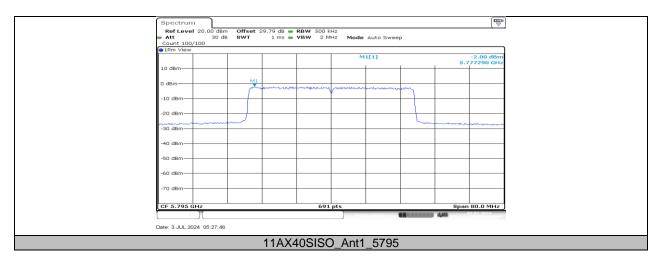












Page 365 of 374

11.6. APPENDIX F: FREQUENCY STABILITY

11.6.1. Test Result

Frequency Error vs. Voltage									
802.11a:5200MHz									
		0 Min	ute	2 Mir	iute	5 Minute		10 Minute	
Temp.	Volt.	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5200.0181	3.48	5200.0220	4.23	5200.0055	1.06	5200.0095	1.82
TN	VN	5200.0070	1.34	5200.0051	0.98	5199.9797	-3.90	5200.0076	1.47
TN	VH	5199.9953	-0.90	5199.9895	-2.01	5199.9810	-3.65	5199.9972	-0.54
				Frequency	Error vs. Temp	perature			
				802	.11a:5200MHz	!			
	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
Temp.							* * *		iidio
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
50	VN			•		•		Freq.Error	Tolerance
50		(MHz)	(ppm)	(MHz)	(ppm)	(MHz)	(ppm)	Freq.Error (MHz)	Tolerance (ppm)
	VN	(MHz) 5200.0225	(ppm) 4.33	(MHz) 5199.9778	(ppm) -4.28	(MHz) 5200.0235	(ppm) 4.51	Freq.Error (MHz) 5200.0081	Tolerance (ppm) 1.57
40	VN VN	(MHz) 5200.0225 5199.9870	(ppm) 4.33 -2.51	(MHz) 5199.9778 5199.9886	(ppm) -4.28 -2.18	(MHz) 5200.0235 5199.9826	(ppm) 4.51 -3.34	Freq.Error (MHz) 5200.0081 5200.0191	Tolerance (ppm) 1.57 3.67
40	VN VN VN	(MHz) 5200.0225 5199.9870 5199.9999	(ppm) 4.33 -2.51 -0.02	(MHz) 5199.9778 5199.9886 5199.9923	(ppm) -4.28 -2.18 -1.47	(MHz) 5200.0235 5199.9826 5199.9907	(ppm) 4.51 -3.34 -1.80	Freq.Error (MHz) 5200.0081 5200.0191 5200.0091	Tolerance (ppm) 1.57 3.67 1.75
40 30 20	VN VN VN VN	(MHz) 5200.0225 5199.9870 5199.9999 5199.9901	(ppm) 4.33 -2.51 -0.02 -1.90	(MHz) 5199.9778 5199.9886 5199.9923 5199.9790	(ppm) -4.28 -2.18 -1.47 -4.04	(MHz) 5200.0235 5199.9826 5199.9907 5200.0198	(ppm) 4.51 -3.34 -1.80 3.80	Freq.Error (MHz) 5200.0081 5200.0191 5200.0091 5200.0045	Tolerance (ppm) 1.57 3.67 1.75 0.87

Note:

- 1. All antennas, test modes and test channels have been tested, only the worst data record in the report.
- 2. For the detail Test Conditions, please refer to section 7.5 TEST ENVIRONMENT.



Page 366 of 374

11.7. APPENDIX G: DUTY CYCLE 11.7.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A	5.48	10.34	0.5300	53.00	2.76	0.18	1
11N20SISO	5.36	10.34	0.5184	51.84	2.85	0.19	1
11N40SISO	3.01	6.34	0.4748	47.48	3.24	0.33	1
11AX20SISO	4.65	10.34	0.4497	44.97	3.47	0.22	1
11AX40SISO	4.63	10.37	0.4465	44.65	3.50	0.22	1

Note:

Duty Cycle Correction Factor=10log (1/x).

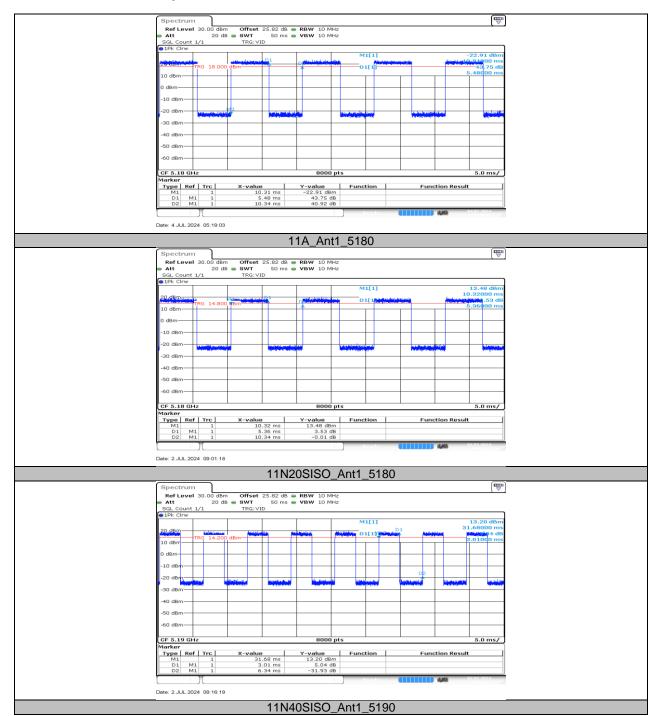
Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.



11.7.2. Test Graphs









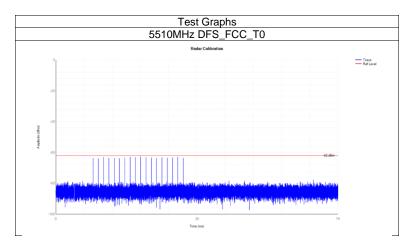
Page 369 of 374

11.8. APPENDIX H: DFS

11.8.1. Calibration

Mode	Frequency (MHz)	Туре	Result	Verdict
ax40	5510	DFS_FCC_T0	See test Graph	Pass





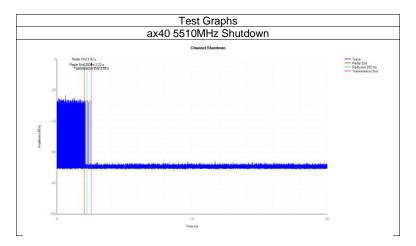


Page 371 of 374

11.8.2. Shutdown Time

	Mode	Frequency (MHz)	Channel Move	Limit Channel	Close Transmission	Limit Close Transmission	Close Transmission	Limit Close Transmission	Verdict
		(111112)	Time (s)	Move Time (s)	Time (s)	Time (s)	Time after 200ms(s)	Time after 200ms (s)	
İ	ax40	5510	0.53	10	0.019	0.26	0.005	0.06	Pass





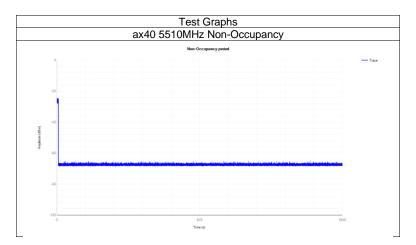


Page 373 of 374

11.8.3. Non-Occupancy

Mode	Frequency (MHz)	Result	Verdict
ax40	5510	See test Graph	Pass





END OF REPORT