

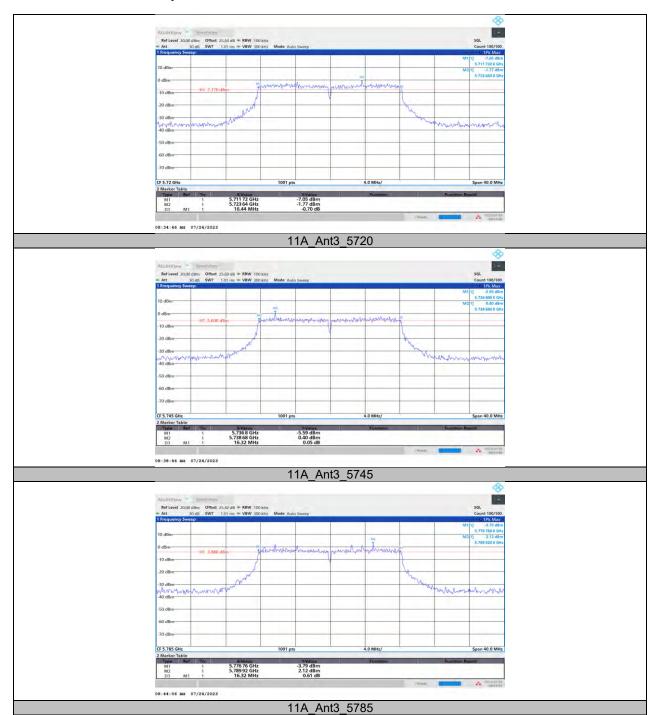


11.3. APPENDIX A3: MIN EMISSION BANDWIDTH 11.3.1. Test Result

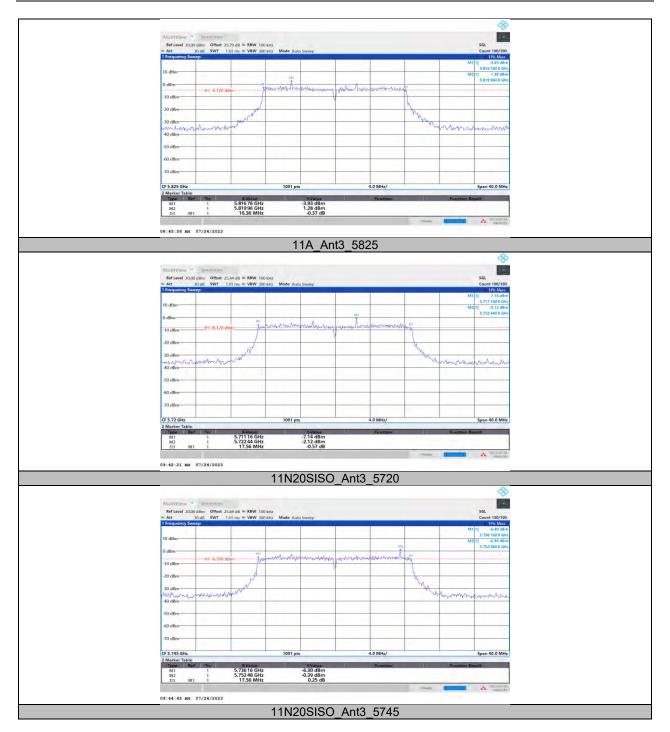
Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant3	5720	16.44	5711.72	5728.16	≥0.5	PASS
		5720_UNII-3	3.16	5725	5728.16	≥0.5	PASS
		5745	16.32	5736.80	5753.12	≥0.5	PASS
		5785	16.32	5776.76	5793.08	≥0.5	PASS
		5825	16.36	5816.76	5833.12	≥0.5	PASS
11N20SISO	Ant3	5720	17.56	5711.16	5728.72	≥0.5	PASS
		5720_UNII-3	3.72	5725	5728.72	≥0.5	PASS
		5745	17.56	5736.16	5753.72	≥0.5	PASS
		5785	17.32	5776.40	5793.72	≥0.5	PASS
		5825	17.56	5816.16	5833.72	≥0.5	PASS
11N40SISO	Ant3	5710	34.72	5692.80	5727.52	≥0.5	PASS
		5710_UNII-3	2.52	5725	5727.52	≥0.5	PASS
		5755	35.68	5737.48	5773.16	≥0.5	PASS
		5795	34.40	5778.12	5812.52	≥0.5	PASS
11AC80SISO	Ant3	5690	73.28	5654.32	5727.60	≥0.5	PASS
		5690_UNII-3	2.6	5725	5727.60	≥0.5	PASS
		5775	73.92	5738.68	5812.60	≥0.5	PASS



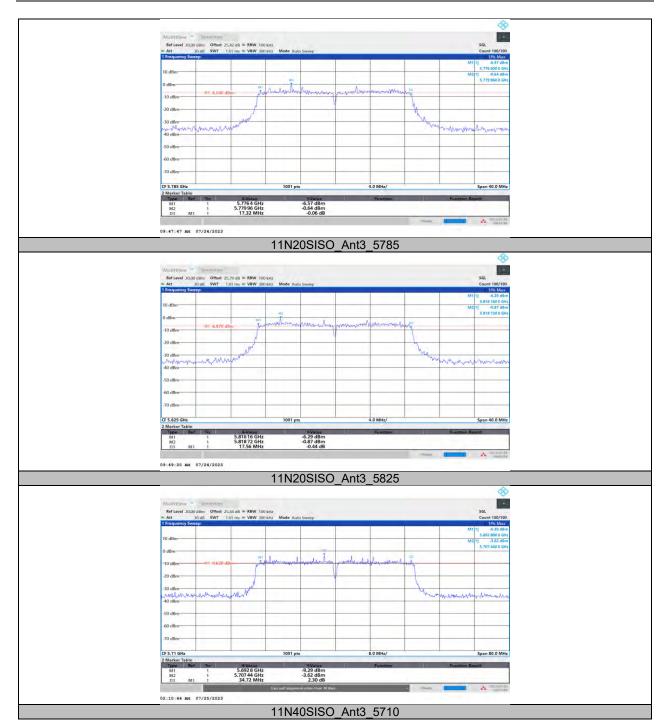
11.3.2. Test Graphs







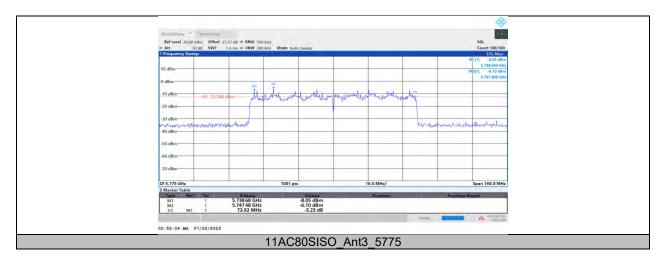












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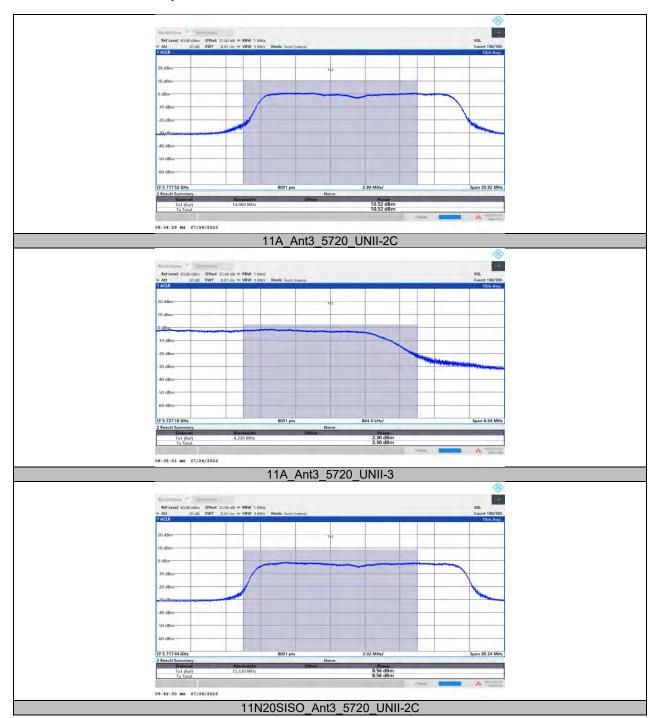
11.4. APPENDIX B: MAXIMUM CONDUCTED OUTPUT POWER 11.4.1. Test Result

Test Mode	Antenna	Frequency[MHz]	Power [dBm]	FCC Limit [dBm]	ISED Limit [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
11A		5180	12.17	≤23.98		17.12	≤22.30	PASS
		5200	12.67	≤23.98		17.62	≤22.25	PASS
		5240	12.55	≤23.98		17.50	≤22.36	PASS
		5260	12.11	≤23.97	≤23.37	17.06	≤29.37	PASS
		5280	12.44	≤23.98	≤23.36	17.39	≤29.36	PASS
		5320	12.25	≤23.98	≤23.37	17.20	≤29.37	PASS
		5500	12.04	≤23.98	≤23.37	16.99	≤29.37	PASS
	Ant3	5580	12.19	≤23.86	≤23.37	17.14	≤29.37	PASS
		5700	12.41	≤23.91	≤23.37	17.36	≤29.37	PASS
		5720 UNII-2C	10.52	≤22.75	≤22.37	15.47	≤28.37	PASS
		5720 UNII-3	2.30	≤30.00	≤30.00	7.25		PASS
			12.60	≤30.00	≤30.00	17.55		PASS
		5785	12.33	≤30.00	≤30.00	17.28		PASS
		5825	12.58	≤30.00	≤30.00	17.53		PASS
		5180	10.50	≤23.98		15.45	≤22.60	PASS
		5200	10.37	≤23.98		15.32	≤22.59	PASS
		5240	10.57	≤23.98		15.52	≤22.59	PASS
		5260	10.18	≤23.98	≤23.60	15.13	≤29.60	PASS
	Ant3	5280	10.45	≤23.98	≤23.59	15.40	≤29.59	PASS
		5320	10.19	≤23.98	≤23.60	15.14	≤29.60	PASS
11N20SISO		5500	10.19	≤23.98	≤23.60	15.14	≤29.60	PASS
		5580	10.44	≤23.98	≤23.58	15.39	≤29.58	PASS
		5700	10.57	≤23.98	≤23.58	15.52	≤29.58	PASS
		5720 UNII-2C	8.56	≤22.80	≤22.51	13.51	≤28.51	PASS
		5720 UNII-3	0.67	≤30.00	≤30.00	5.62		PASS
		5745	10.80	≤30.00	≤30.00	15.75		PASS
		5785	10.47	≤30.00	≤30.00	15.42		PASS
		5825	10.87	≤30.00	≤30.00	15.82		PASS
11N40SISO	Ant3	5190	10.47	≤23.98		15.42	≤23.00	PASS
		5230	10.07	≤23.98		15.02	≤23.00	PASS
		5270	10.25	≤23.98	≤23.98	15.20	≤29.98	PASS
		5310	10.42	≤23.98	≤23.98	15.37	≤29.98	PASS
		5510	10.38	≤23.98	≤23.98	15.33	≤29.98	PASS
		5550	10.43	≤23.98	≤23.98	15.38	≤29.98	PASS
		5670	10.75	≤23.98	≤23.98	15.70	≤29.98	PASS
		5710_UNII-2C	10.19	≤23.98	≤23.98	15.14	≤29.98	PASS
		5710_UNII-3	-4.74	≤30.00	≤30.00	0.21		PASS
		<u>5</u> 755	10.38	≤30.00	≤30.00	15.33		PASS
		5795	10.87	≤30.00	≤30.00	15.82		PASS
11AC80SISO	Ant3	5210	10.39	≤23.98		15.34	≤23.00	PASS
		5290	10.10	≤23.98	≤23.98	15.05	≤29.98	PASS
		5530	10.25	≤23.98	≤23.98	15.20	≤29.98	PASS
		5610	10.45	≤23.98	≤23.98	15.40	≤29.98	PASS
		5690_UNII-2C	9.86	≤23.98	≤23.98	14.81	≤29.98	PASS
		5690_UNII-3	-10.34	≤30.00	≤30.00	-5.39		PASS
		5775	10.39	≤30.00	≤30.00	15.34		PASS

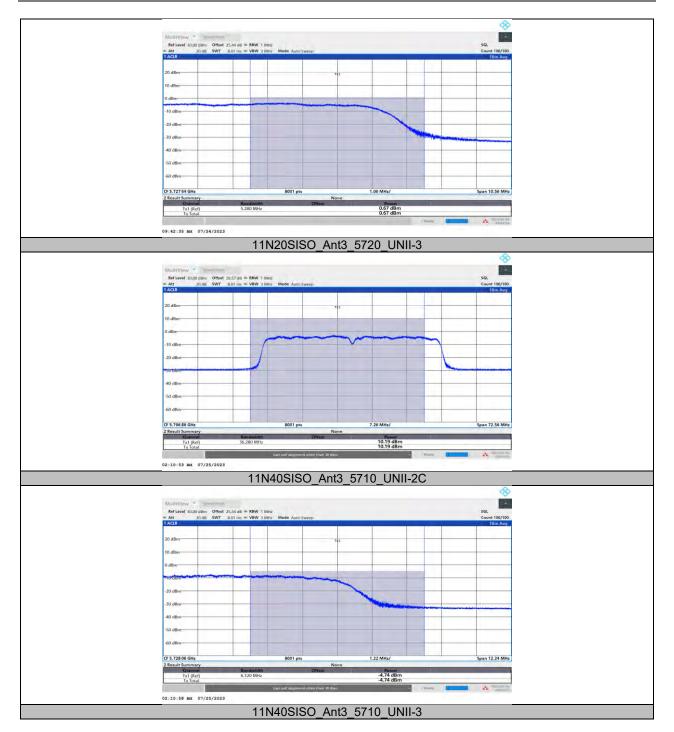
Note: The Duty Cycle Factor is compensated in the graph.



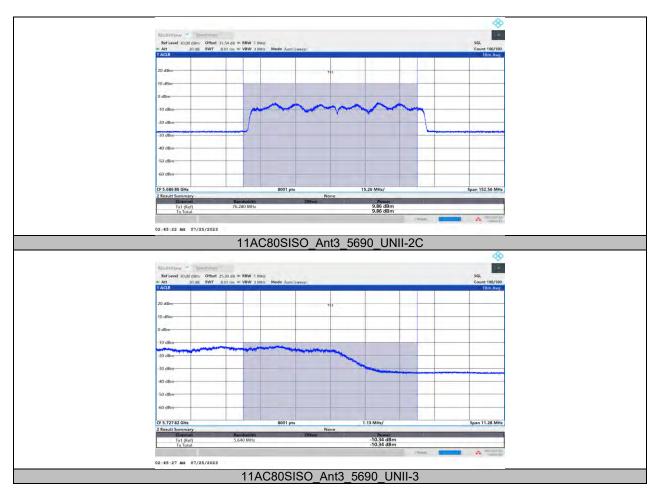
11.4.2. Test Graphs











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

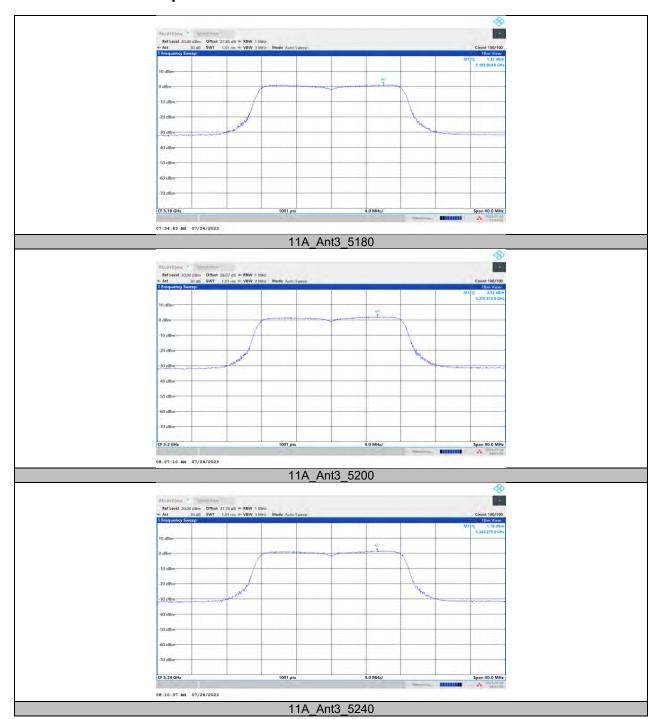
			Power	Limit	EIRP	Limit	
Test Mode	Antenna	Frequency[MHz]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	Verdict
11A		5180	1.32	≤11.00	6.27	≤10.00	PASS
		5200	2.32	≤11.00	7.27	≤10.00	PASS
		5240	1.78	≤11.00	6.73	≤10.00	PASS
		5260	1.07	≤11.00	6.02		PASS
		5280	0.82	≤11.00	5.77		PASS
	Ant3	5320	1.4	≤11.00	6.35		PASS
		5500	1.41	≤11.00	6.36		PASS
		5580	1.01	≤11.00	5.96		PASS
		5700	1.5	≤11.00	6.45		PASS
		5720 UNII-2C	0.63	≤11.00	5.58		PASS
		5720 UNII-3	-2.36	≤30.00	2.59		PASS
		5745	-1.28	≤30.00	3.67		PASS
		5785	-1.32	≤30.00	3.63		PASS
		5825	-0.99	≤30.00	3.96		PASS
		5180	-0.4	≤11.00	4.55	≤10.00	PASS
		5200	-0.71	≤11.00	4.24	≤10.00	PASS
		5240	-0.48	≤11.00	4.47	≤10.00	PASS
		5260	-0.57	≤11.00	4.38		PASS
		5280	-0.95	≤11.00	4.00		PASS
	Ant3	5320	-1.19	≤11.00	3.76		PASS
441000000		5500	-0.8	≤11.00	4.15		PASS
11N20SISO		5580	-0.97	≤11.00	3.98		PASS
		5700	-0.38	≤11.00	4.57		PASS
		5720 UNII-2C	-1.24	≤11.00	3.71		PASS
		5720 UNII-3	-4.16	≤30.00	0.79		PASS
		<u> </u>	-2.98	≤30.00	1.97		PASS
		5785	-3.58	≤30.00	1.37		PASS
		5825	-3.16	≤30.00	1.79		PASS
	Ant3	5190	-4.11	≤11.00	0.84	≤10.00	PASS
		5230	-2.33	≤11.00	2.62	≤10.00	PASS
		5270	-3.59	≤11.00	1.36		PASS
		5310	-2.32	≤11.00	2.63		PASS
11N40SISO		5510	-3.5	≤11.00	1.45		PASS
		5550	-3.31	≤11.00	1.64		PASS
		5670	-2.78	≤11.00	2.17		PASS
		5710 UNII-2C	-2.93	≤11.00	2.02		PASS
		5710 UNII-3	-5.75	≤30.00	-0.80		PASS
		5755	-6.44	≤30.00	-1.49		PASS
		5795	-5.4	≤30.00	-0.45		PASS
11AC80SISO	Ant3	5210	-4.84	≤11.00	0.11	≤10.00	PASS
		5290	-5.86	≤11.00	-0.91		PASS
		5530	-5.9	≤11.00	-0.95		PASS
		5610	-5.27	≤11.00	-0.32		PASS
		5690 UNII-2C	-5.67	≤11.00	-0.72		PASS
		5690 UNII-3	-10.05	≤30.00	-5.10		PASS
		5775	-7.72	≤30.00	-2.77		PASS

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

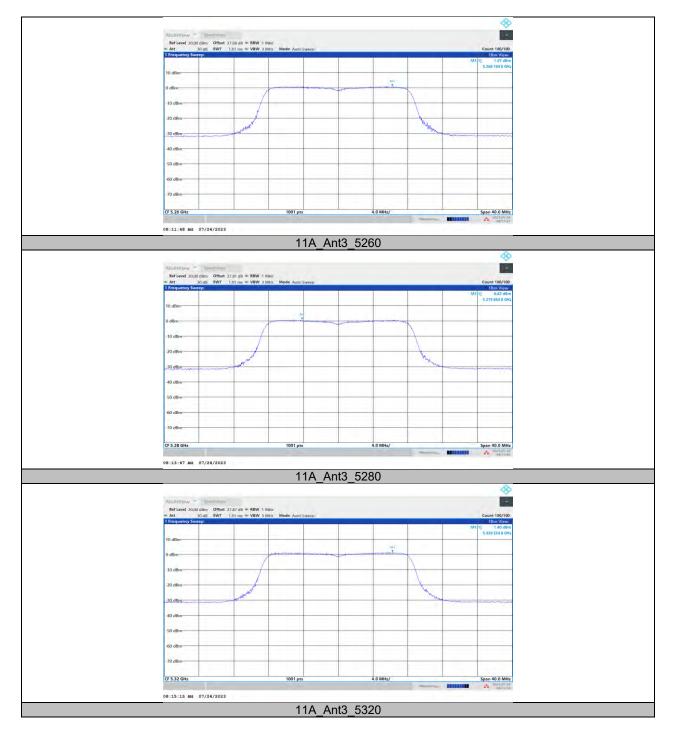
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.



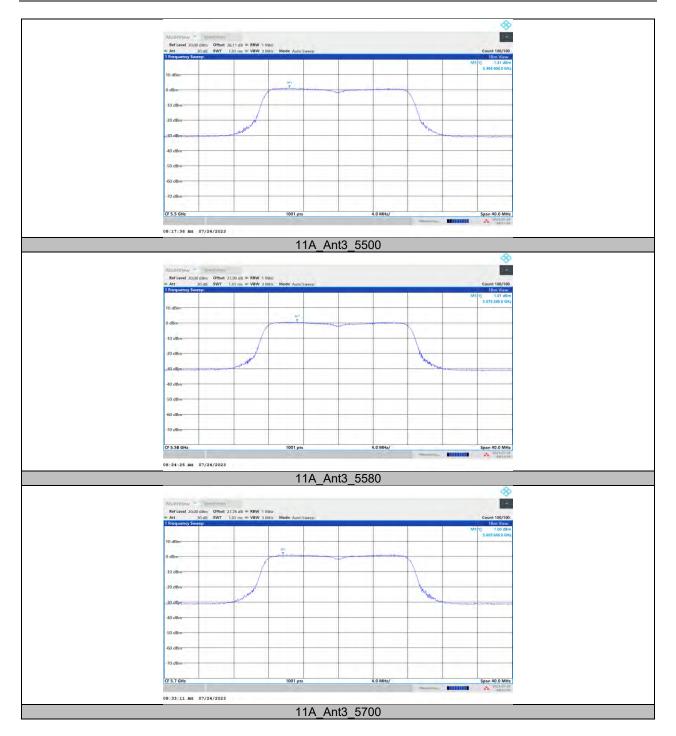
11.5.2. Test Graphs



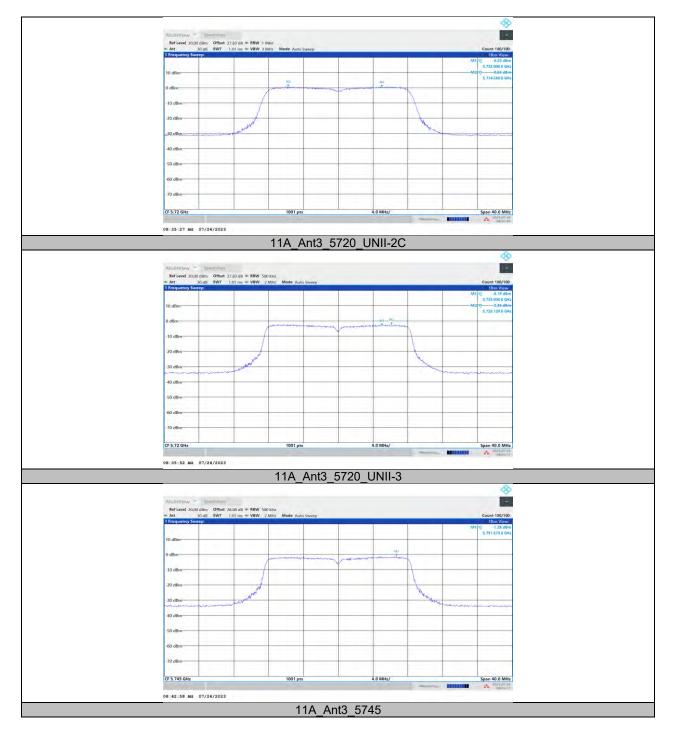




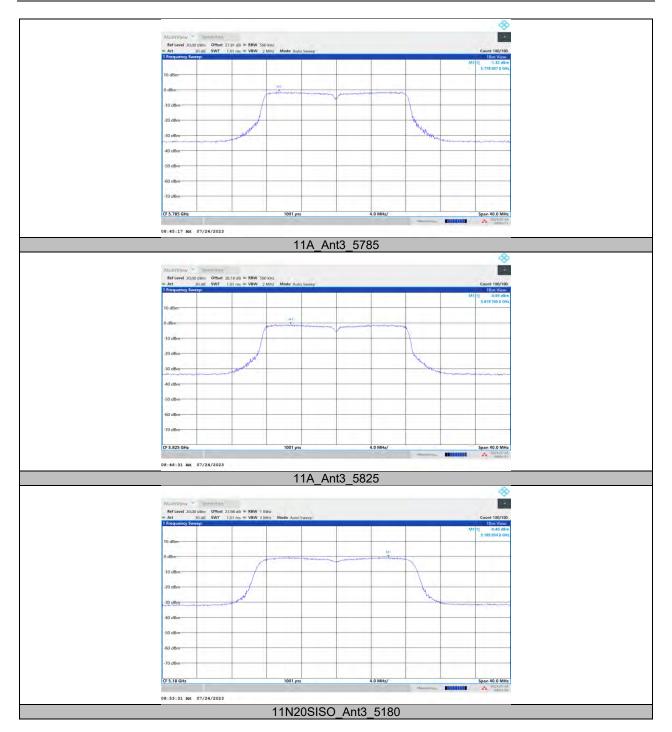




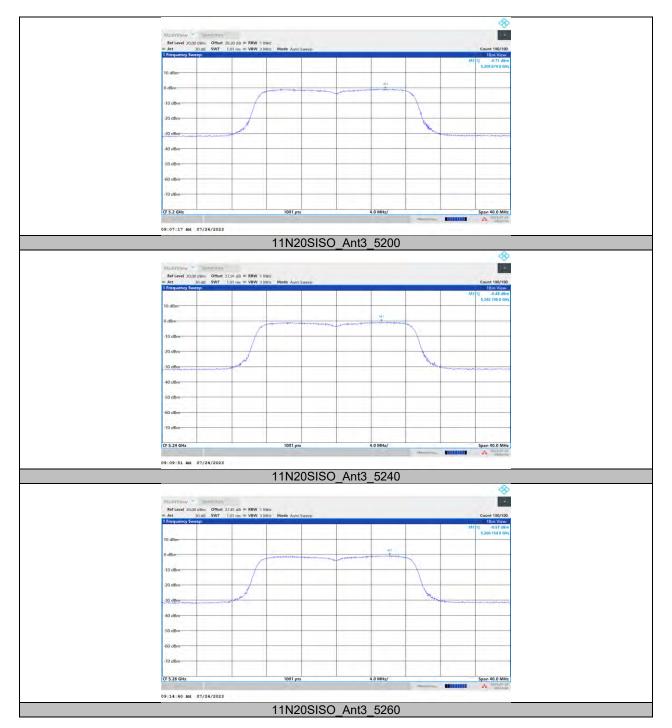








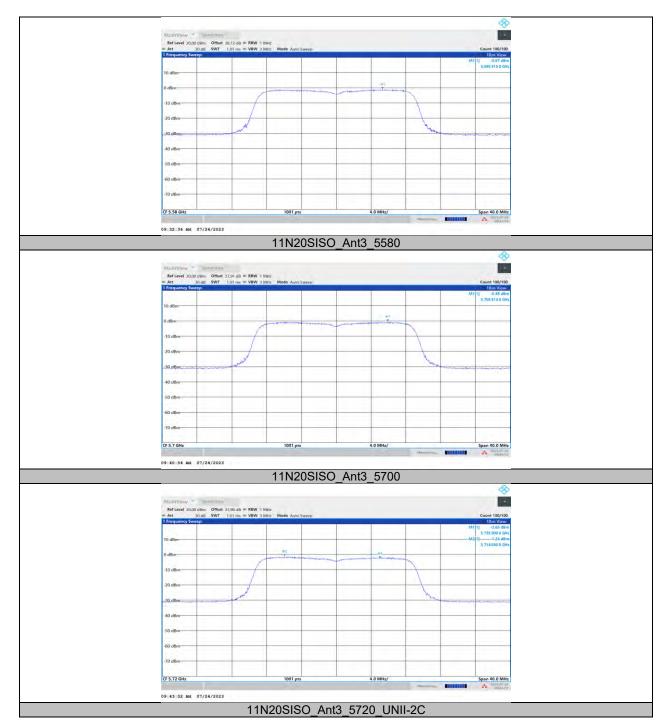




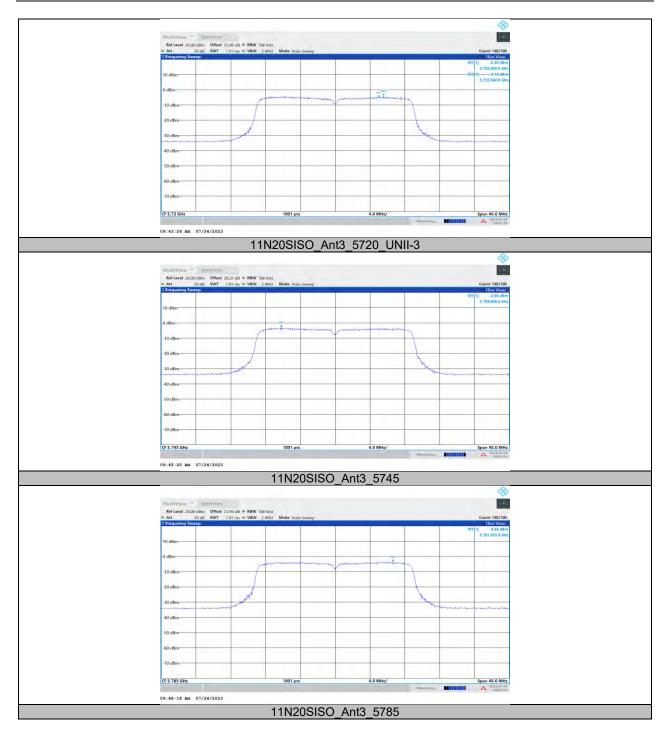




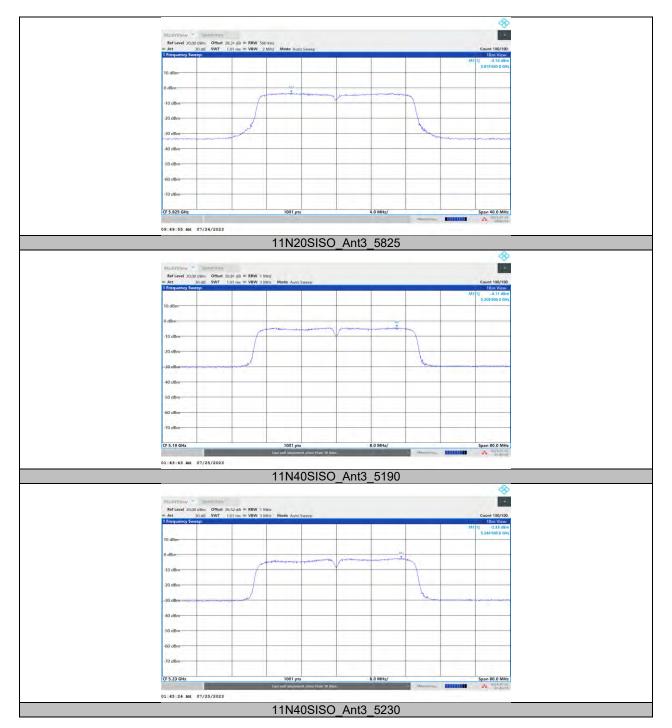








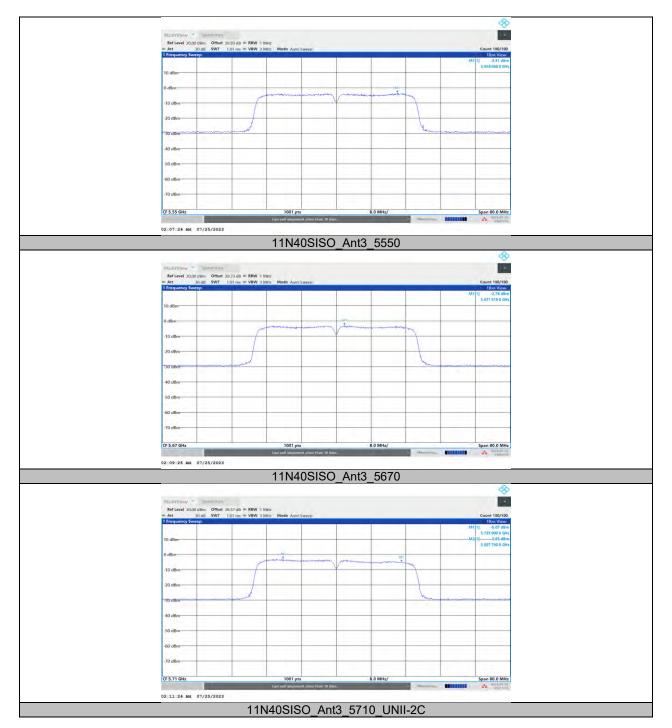




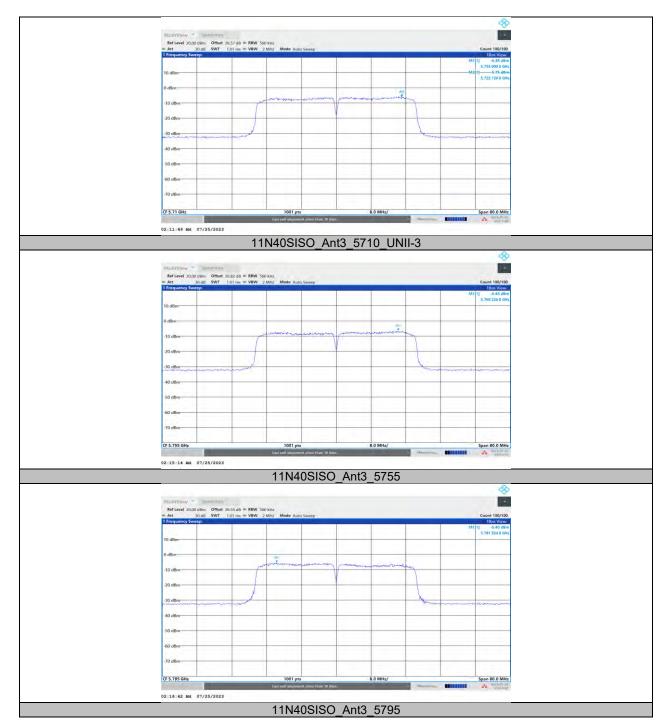




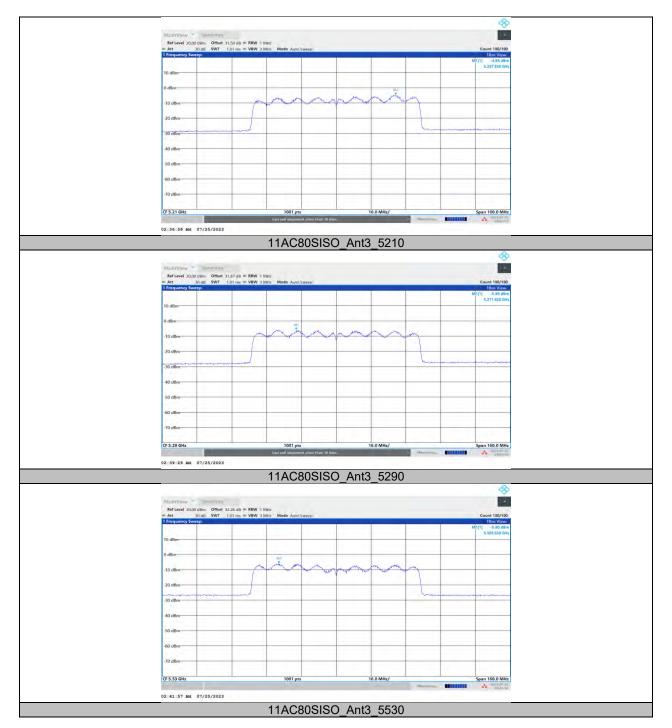




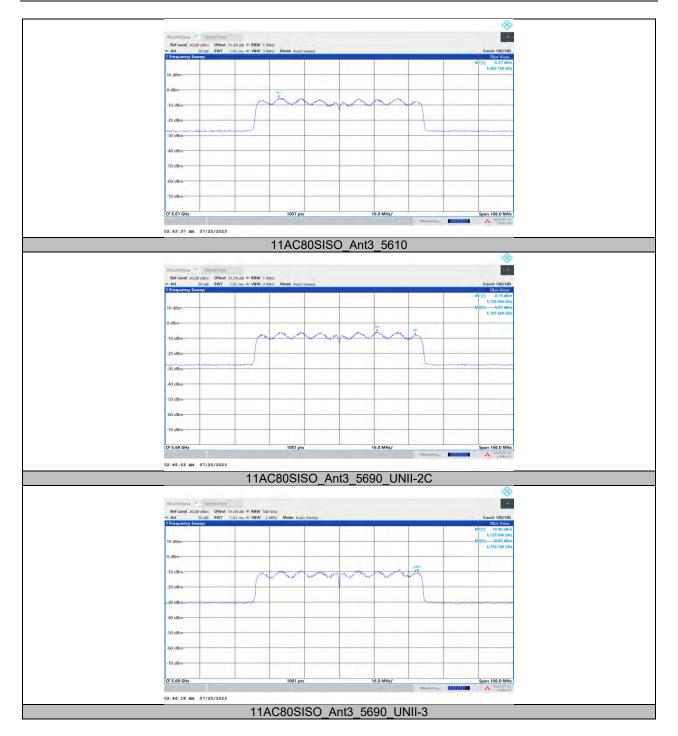




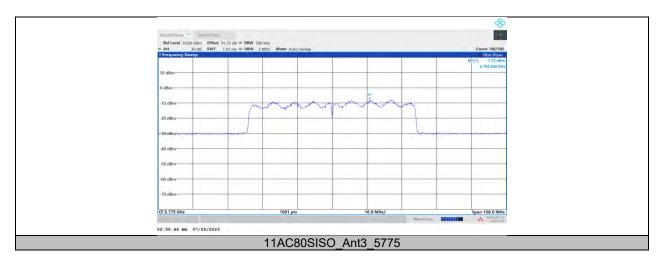












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11.6. APPENDIX D: FREQUENCY STABILITY 11.6.1. Test Result

Frequency Error vs. Voltage									
802.11a:5180MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5179. 9871	-2.49	5179. 9912	-1.70	5179. 9958	-0.82	5179. 9891	-2.11
TN	VN	5180.0053	1.03	5179. 9836	-3.17	5179. 9803	-3.80	5180. 0225	4.35
TN	VH	5179. 9955	-0.87	5179. 9985	-0.29	5179. 9776	-4.33	5180.0057	1.11
Frequency Error vs. Temperature									
802.11a:5180MHz									
_	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
Temp.		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
40	VN	5179. 9947	-1.03	5179. 9876	-2.40	5180. 0101	1.94	5179. 9780	-4.24
30	VN	5180. 0116	2.24	5179. 9926	-1.43	5179. 9812	-3.63	5180. 0191	3.70

VN Note:

VN

VN

5180.0050

5179.9755

5180.0125

0.96

-4.74

2.41

20

10

0

1. All antennas, test modes and test channels have been tested, only the worst data record in the report.

3.53

-4.47

-4.47

5179.9975

5180.0081

5179.9774

-0.48

1.57

-4.36

5179.9834

5180.0245

5179.9939

-3.21

4.73

-1.18

2. For the detail Test Conditions, please refer to section 7.5 TEST ENVIRONMENT.

5180.0183

5179.9769

5179.9768



Tolerance

(ppm)

1.91

-2.60

-0.04

-2.26

-3.12

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Freq.Error

(MHz)

5825.0023

5825. 0219

5825.0166

5824. 9908

5824.9776

Tolerance

(ppm)

0.39

3.75

2.85

-1.59

-3.84

Frequency Error vs. Voltage 802.11a:5825MHz 0 Minute 2 Minute 5 Minute 10 Minute Temp. Volt. Freq.Error Tolerance Freq.Error Tolerance Freq.Error Tolerance Freq.Error Tolerance (MHz) (MHz) (MHz) (ppm) (ppm) (ppm) (MHz) (ppm) VL TN 5824. 9997 -0.065825.0024 0.41 5824. 9814 -3.205824. 9977 -0.39 ΤN VN 5825.0040 0.68 5825.0187 3.21 5824. 9862 -2.38 2.17 5825.0126 VΗ TN 2.99 2.76 5825.0174 5825.0161 5824. 9882 -2.03 5825.0205 3.52 Frequency Error vs. Temperature 802.11a:5825MHz 10 Minute 0 Minute 2 Minute 5 Minute

Tolerance

(ppm)

1.68

4.18

-2.88

-1.36

1.78

Freq.Error

(MHz)

5825.0111

5824. 9848

5824.9997

5824. 9869

5824.9818

VN

Volt.

VN

VN

VN

VN

Note:

Freq.Error

(MHz)

5824. 9889

5825.0011

5824.9890

5825.0067

5825. 0212

Tolerance

(ppm)

-1.91

0.20

-1.90

1.15

3.64

Temp.

40

30

20

10

0

- 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.

Freq.Error

(MHz)

5825.0098

5825. 0244

5824. 9832

5824. 9921

5825.0104



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11.7. APPENDIX E: 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	1.36	2.36	0.5763	57.63	2.39	0.74	1
11N20SISO	1.27	2.27	0.5595	55.95	2.52	0.79	1
11N40SISO	0.63	1.63	0.3865	38.65	4.13	1.59	2
11AC80SISO	0.32	1.32	0.2424	24.24	6.15	3.13	4

Note:

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

Where: x is Duty Cycle (Linear)

Where: T is On Time

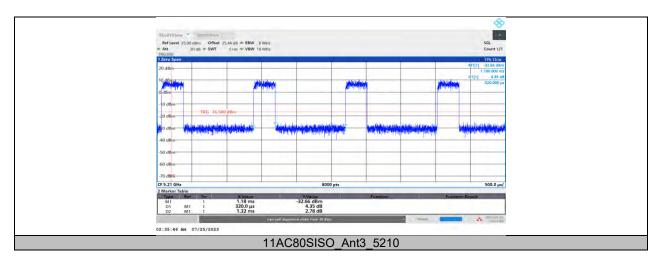
If that calculated VBW is not available on the analyzer then the next higher value should be used.



11.7.2. Test Graphs









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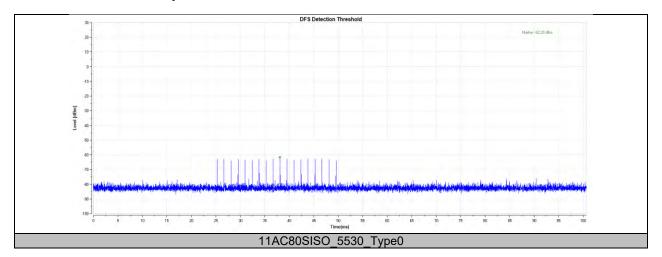
11.8. APPENDIX F: DFS DETECTION THRESHOLDS 11.8.1. Test Result

Test Mode	Channel	Radar Type	Result	Verdict
11AC80SISO	5530	Type0	-62.28	PASS

Note: All the test modes have been tested, only the worst data record in the report.



11.8.2. Test Graphs



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11.9. APPENDIX G: CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME

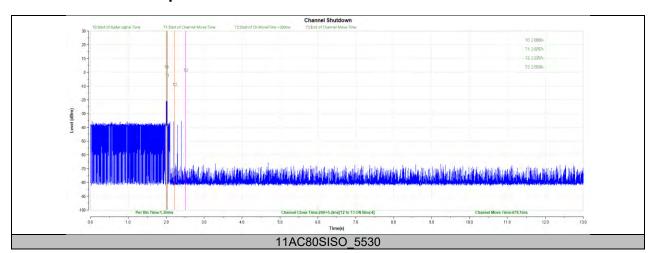
11.9.1. Test Result

Test Mode	Channel	CCT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11AC80SISO	5530	200+5.2	200+60	478.1	10000	PASS

Note: All the test modes have been tested, only the worst data record in the report.



11.9.2. Test Graphs





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11.10. APPENDIX H: NON-OCCUPANCY PERIOD

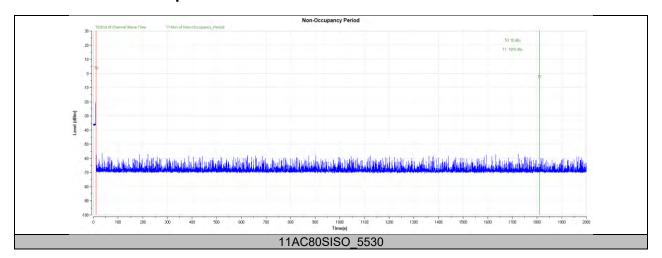
Test Result

Test Mode	Channel	Result	Limit[s]	Verdict
11AC80SISO	5530	see test graph	≥1800	PASS

Note: All the test modes have been tested, only the worst data record in the report.



11.10.1. Test Graphs



END OF REPORT