



Appendix D

RF Test Data for B1WIFI(Conducted Measurement)

Product Name: Four axis aircraft

Trade Mark: N/A

Test Model: AE86 Pro Max+

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



Contents

Page

COVER PAGE

1	Duty Cycle	3
1.1	Test Result	3
1.2	Test Graphs	4
2	Maximum Conducted Output Power	6
2.1	Test Result	6
3	-26dB Bandwidth	7
3.1	Test Result	7
3.2	Test Graphs	8
4	Occupied Channel Bandwidth	10
4.1	Test Result	10
4.2	Test Graphs	11
5	Maximum Power Spectral Density Level	13
5.1	Test Result	13
5.2	Test Graphs	14
6	Frequency Stability	16
6.1	Test Result	16
7	Conducted RF Spurious Emission	17
7.1	Test Result	17
7.2	Test Graphs	18

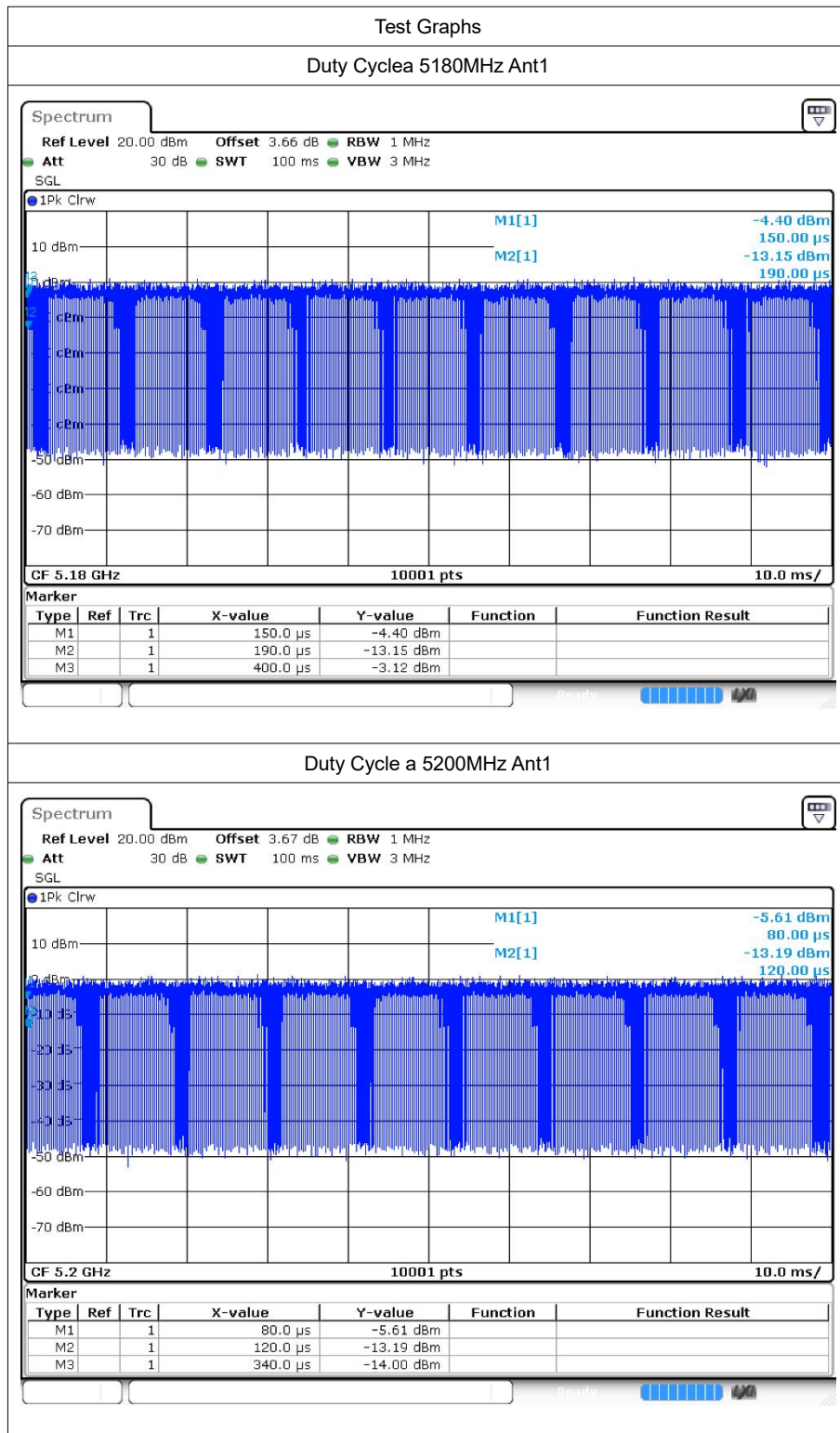


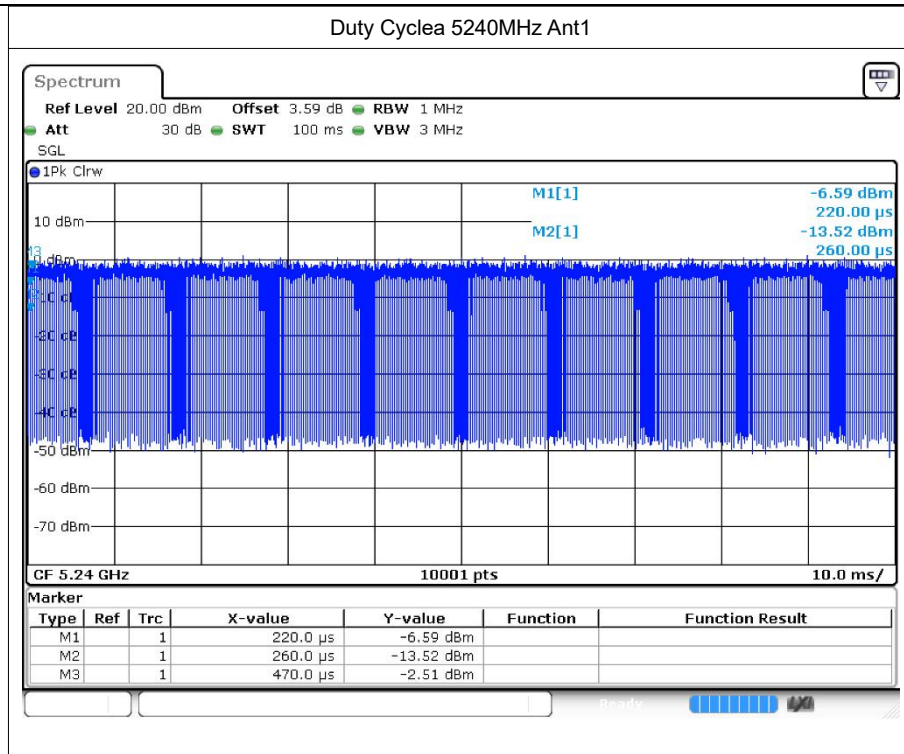
1 Duty Cycle

1.1 Test Result

Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
a	5180	Ant1	86.86	0.61	4.76
a	5200	Ant1	86.94	0.61	4.55
a	5240	Ant1	86.86	0.61	4.76

1.2 Test Graphs







2 Maximum Conducted Output Power

2.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
a	5180	Ant1	7.51	24	Pass
a	5200	Ant1	7.31	24	Pass
a	5240	Ant1	7.31	24	Pass

Note:

The duty factor has been compensated into the result.

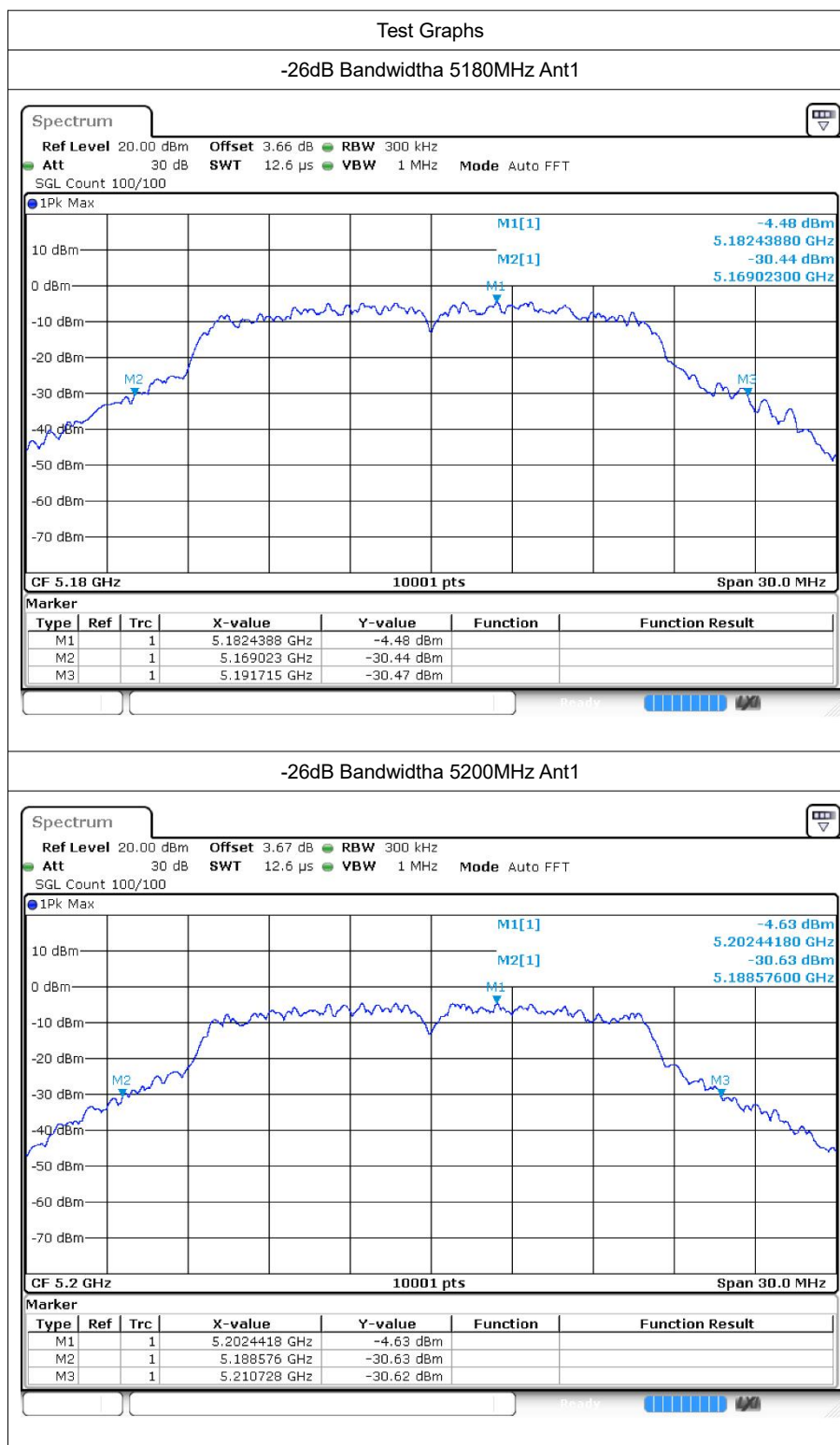


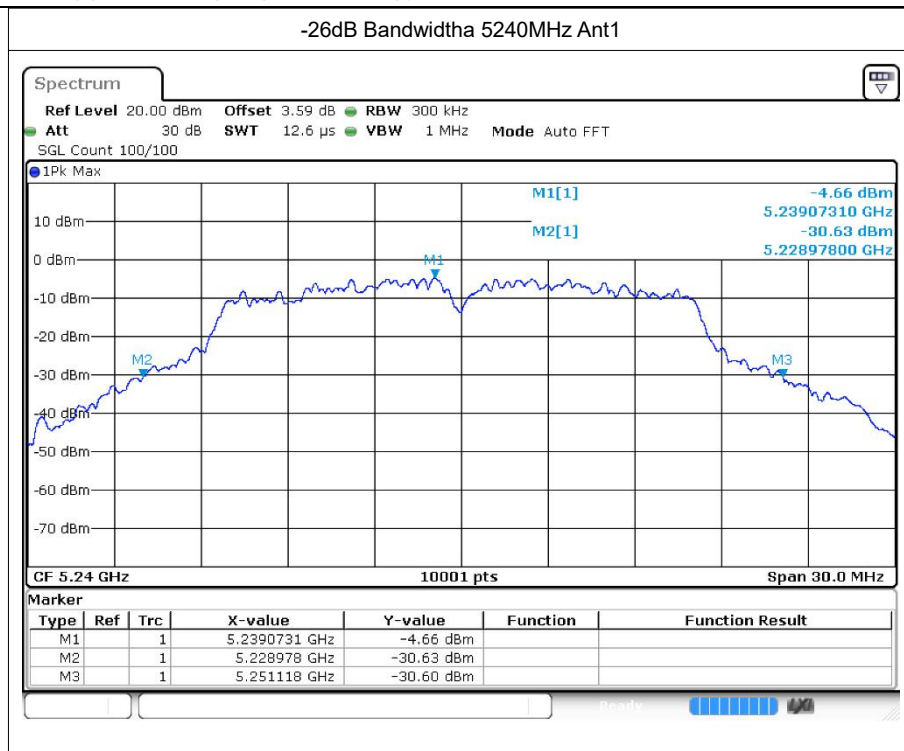
3 -26dB Bandwidth

3.1 Test Result

Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
a	5180	Ant1	22.692	0.5	Pass
a	5200	Ant1	22.152	0.5	Pass
a	5240	Ant1	22.14	0.5	Pass

3.2 Test Graphs





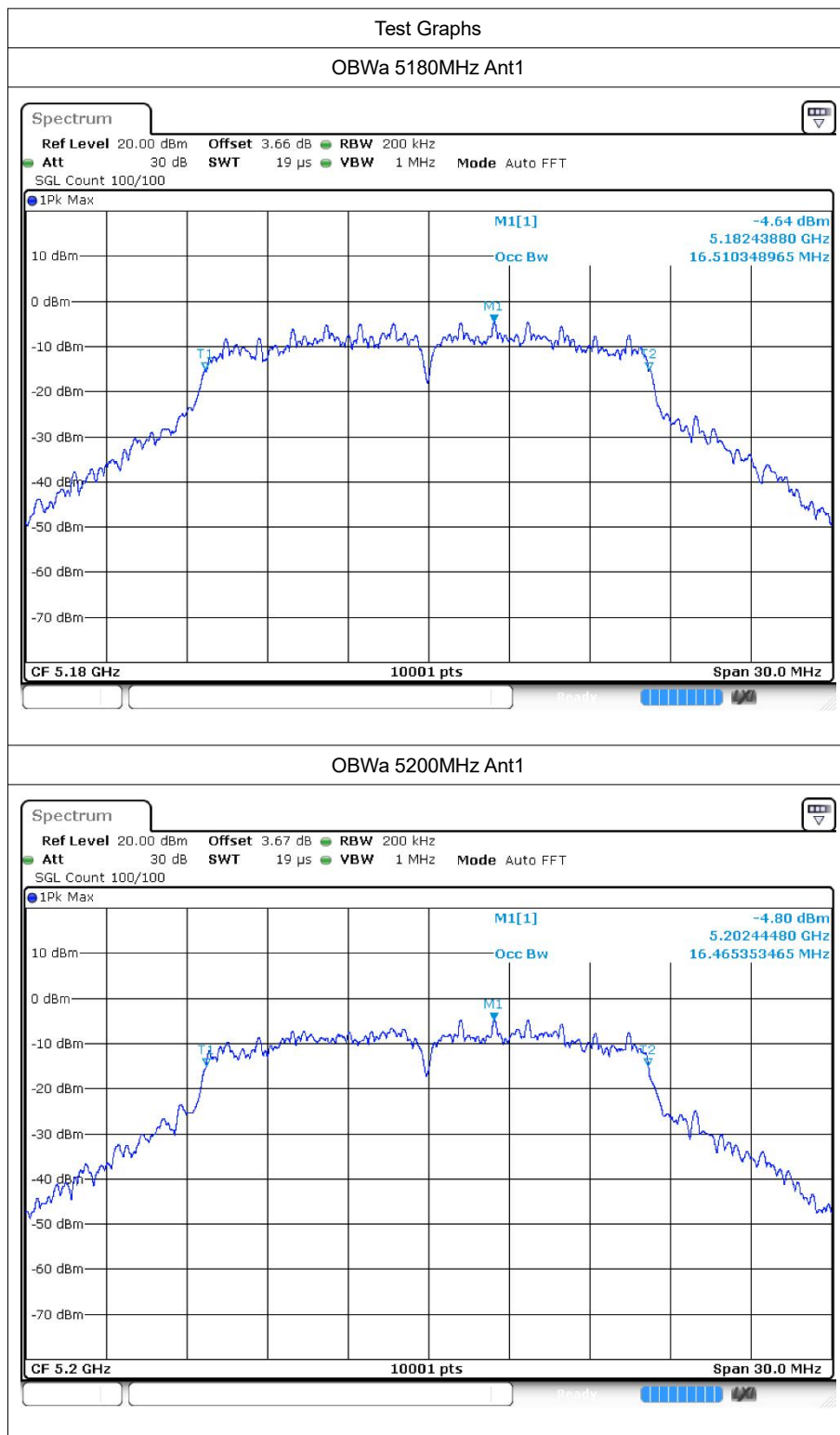


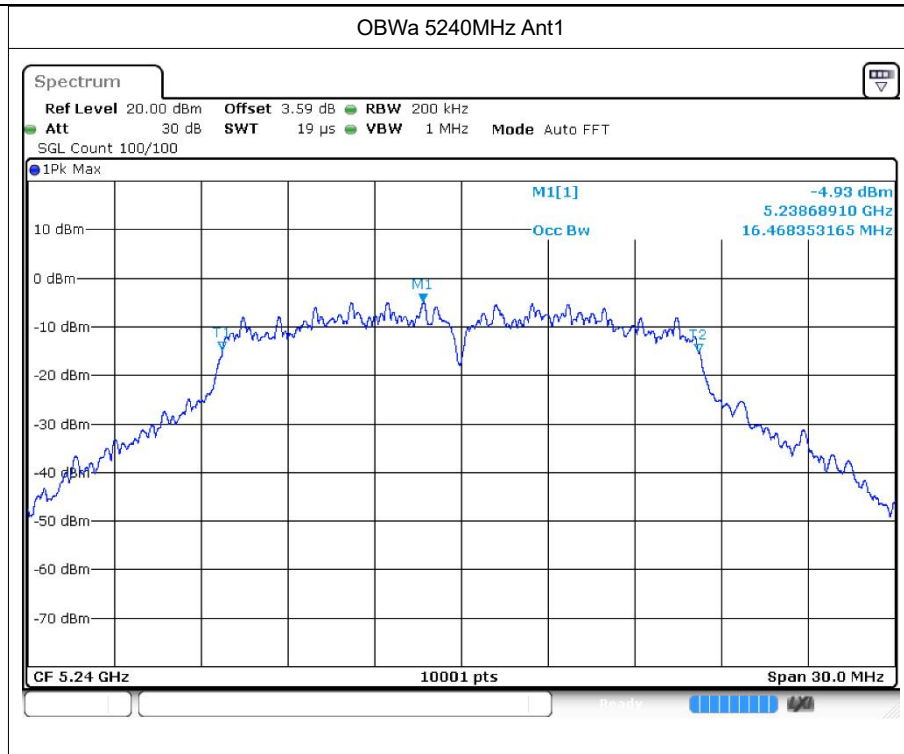
4 Occupied Channel Bandwidth

4.1 Test Result

Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
a	5180	Ant1	16.51
a	5200	Ant1	16.465
a	5240	Ant1	16.468

4.2 Test Graphs





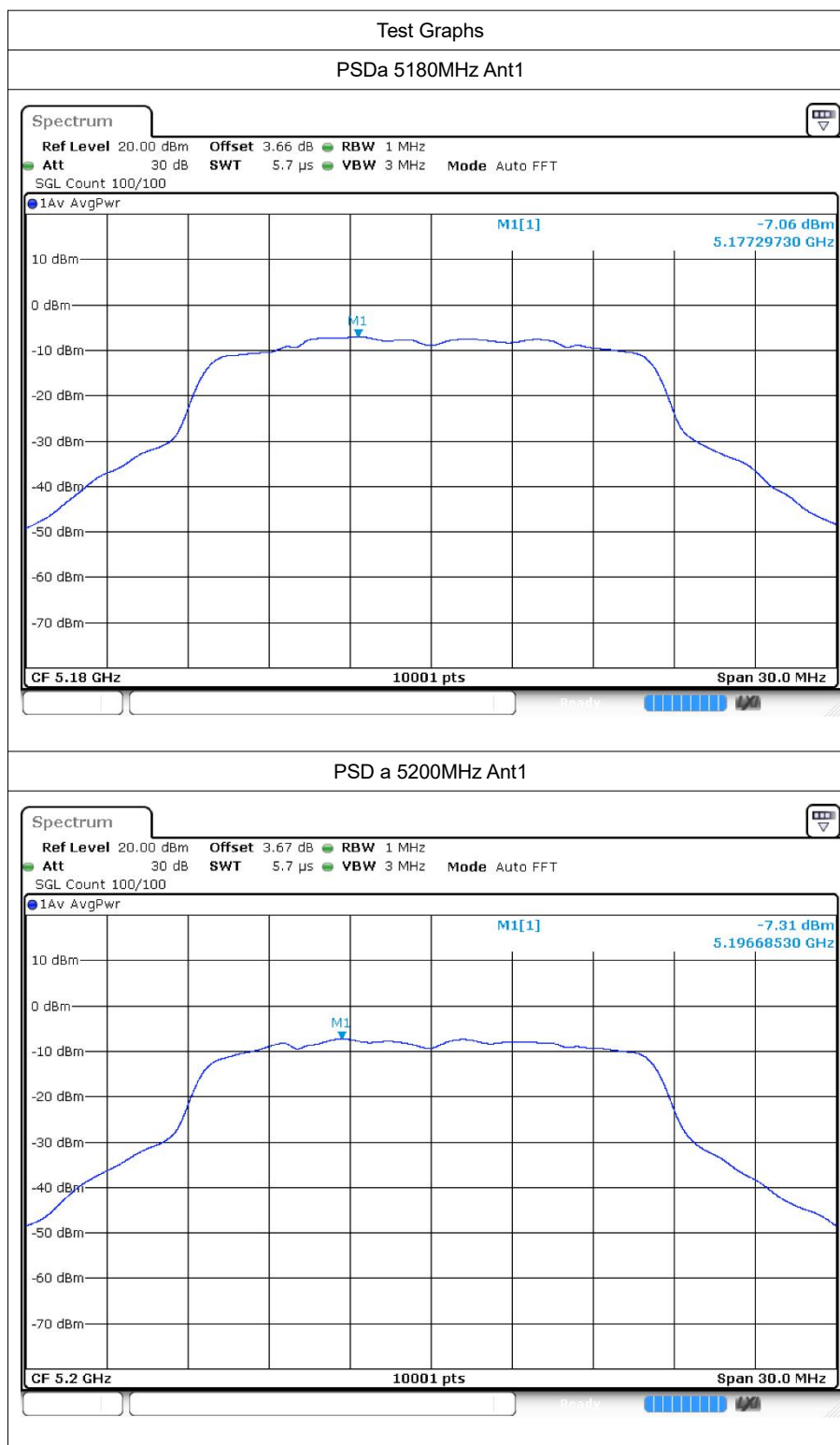


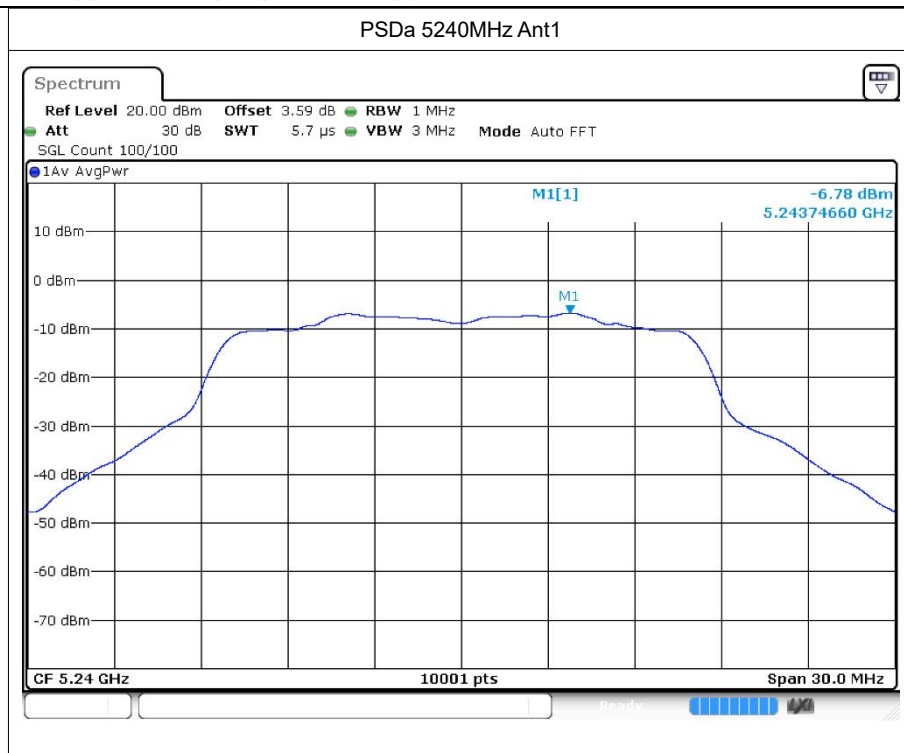
5 Maximum Power Spectral Density Level

5.1 Test Result

Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
a	5180	Ant1	-7.06	0.61	-6.45	11	Pass
a	5200	Ant1	-7.31	0.61	-6.7	11	Pass
a	5240	Ant1	-6.78	0.61	-6.17	11	Pass

5.2 Test Graphs





6 Frequency Stability

6.1 Test Result

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 102V	a	5180	Ant1	5179.96	-40000	-7.72	25	Pass
20C 120V	a	5180	Ant1	5179.94	-60000	-11.58	25	Pass
20C 138V	a	5180	Ant1	5179.92	-80000	-15.44	25	Pass
-20C 120V	a	5180	Ant1	5179.94	-60000	-11.58	25	Pass
-10C 120V	a	5180	Ant1	5179.96	-40000	-7.72	25	Pass
0C 120V	a	5180	Ant1	5179.96	-40000	-7.72	25	Pass
10C 120V	a	5180	Ant1	5179.94	-60000	-11.58	25	Pass
30C 120V	a	5180	Ant1	5179.94	-60000	-11.58	25	Pass
40C 120V	a	5180	Ant1	5179.96	-40000	-7.72	25	Pass
50C 120V	a	5180	Ant1	5179.94	-60000	-11.58	25	Pass
20C 102V	a	5200	Ant1	5199.94	-60000	-11.54	25	Pass
20C 120V	a	5200	Ant1	5199.94	-60000	-11.54	25	Pass
20C 138V	a	5200	Ant1	5199.96	-40000	-7.69	25	Pass
-20C 120V	a	5200	Ant1	5199.92	-80000	-15.38	25	Pass
-10C 120V	a	5200	Ant1	5199.92	-80000	-15.38	25	Pass
0C 120V	a	5200	Ant1	5199.96	-40000	-7.69	25	Pass
10C 120V	a	5200	Ant1	5199.92	-80000	-15.38	25	Pass
30C 120V	a	5200	Ant1	5199.96	-40000	-7.69	25	Pass
40C 120V	a	5200	Ant1	5199.96	-40000	-7.69	25	Pass
20C 102V	a	5200	Ant1	5199.94	-60000	-11.54	25	Pass
20C 102V	a	5240	Ant1	5239.94	-60000	-11.45	25	Pass
20C 120V	a	5240	Ant1	5239.96	-40000	-7.63	25	Pass
20C 138V	a	5240	Ant1	5239.94	-60000	-11.45	25	Pass
-20C 120V	a	5240	Ant1	5239.92	-80000	-15.27	25	Pass
-10C 120V	a	5240	Ant1	5239.92	-80000	-15.27	25	Pass
0C 120V	a	5240	Ant1	5239.96	-40000	-7.63	25	Pass
10C 120V	a	5240	Ant1	5239.92	-80000	-15.27	25	Pass
30C 120V	a	5240	Ant1	5239.94	-60000	-11.45	25	Pass
40C 120V	a	5240	Ant1	5239.92	-80000	-15.27	25	Pass
50C 120V	a	5240	Ant1	5239.94	-60000	-11.45	25	Pass

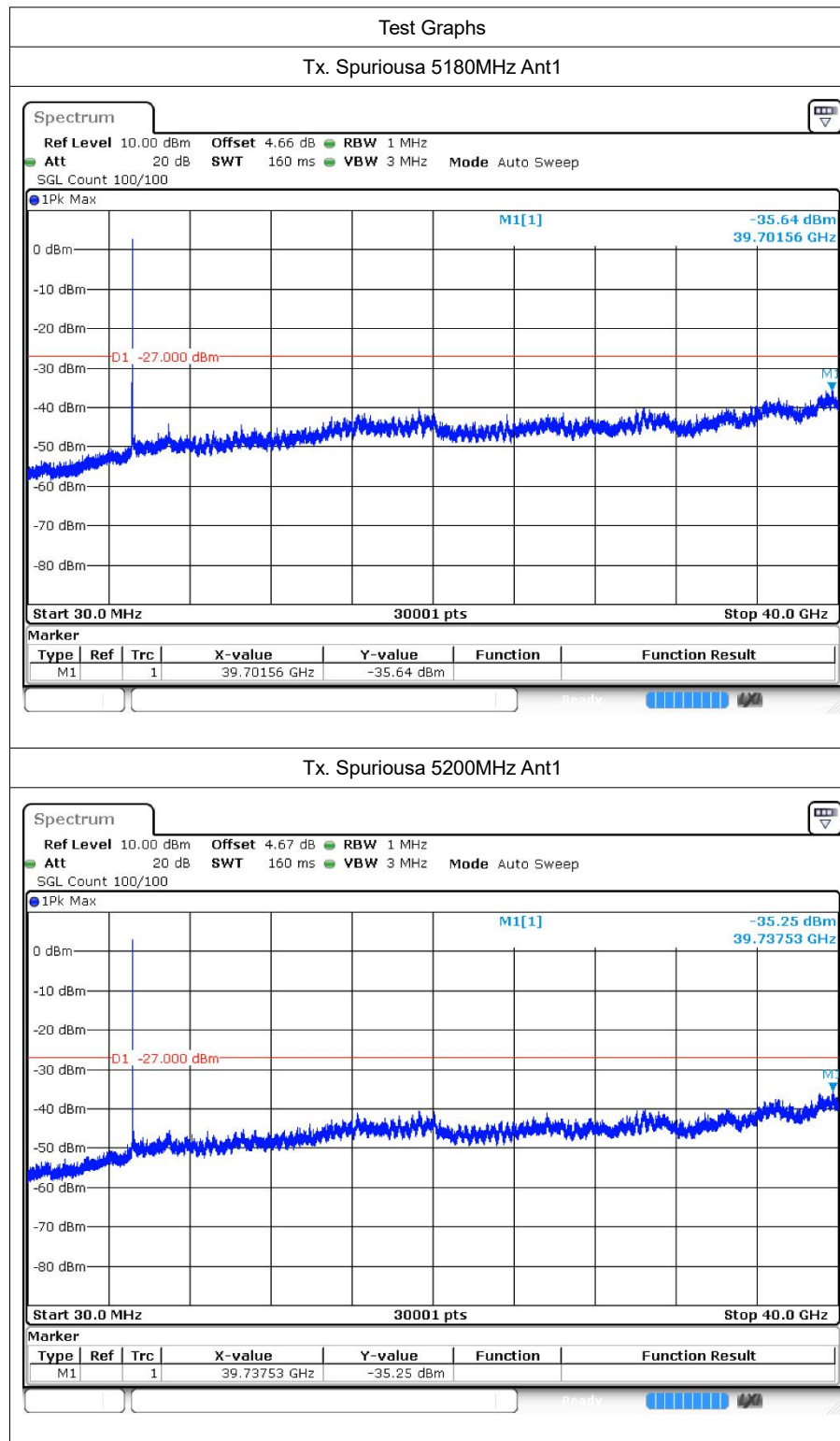


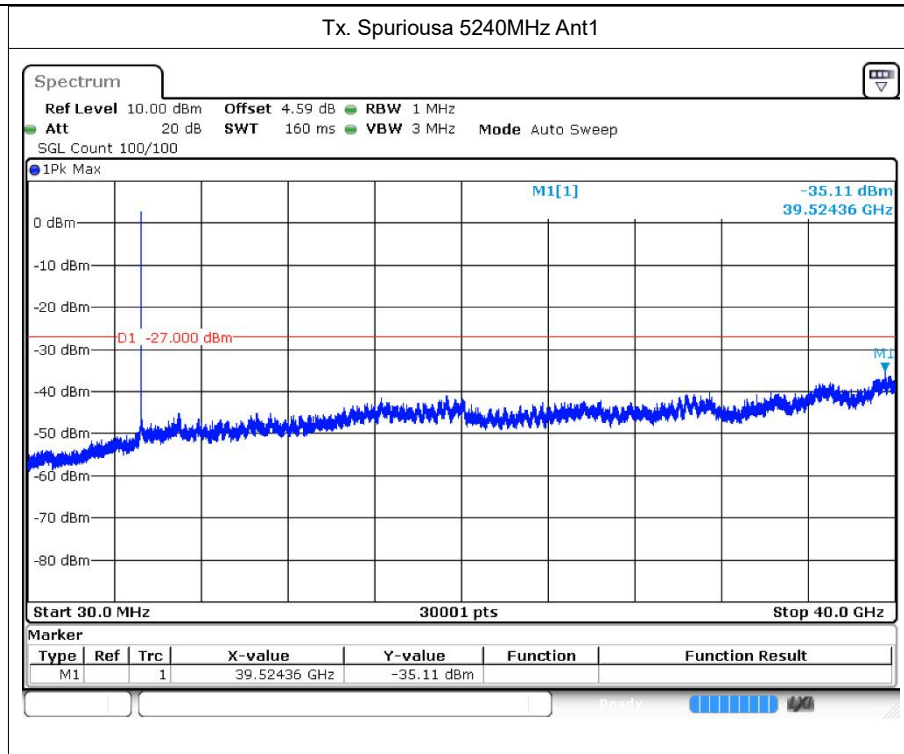
7 Conducted RF Spurious Emission

7.1 Test Result

Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
a	5180	Ant1	-35.63	-27	Pass
a	5200	Ant1	-35.25	-27	Pass
a	5240	Ant1	-35.1	-27	Pass

7.2 Test Graphs





---The End---