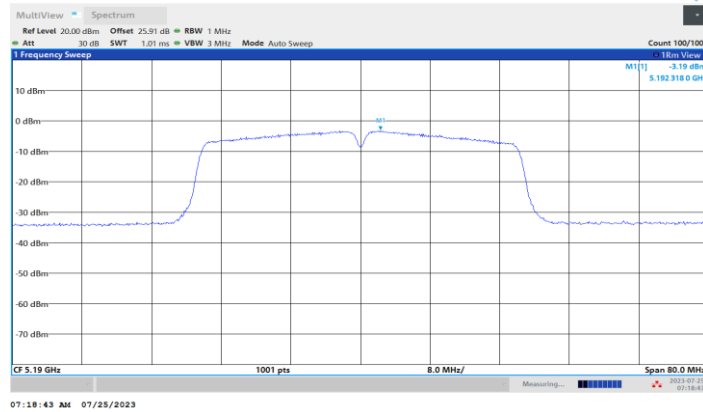
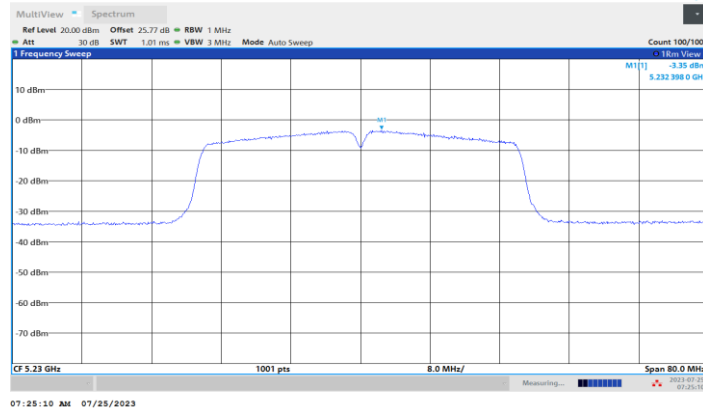


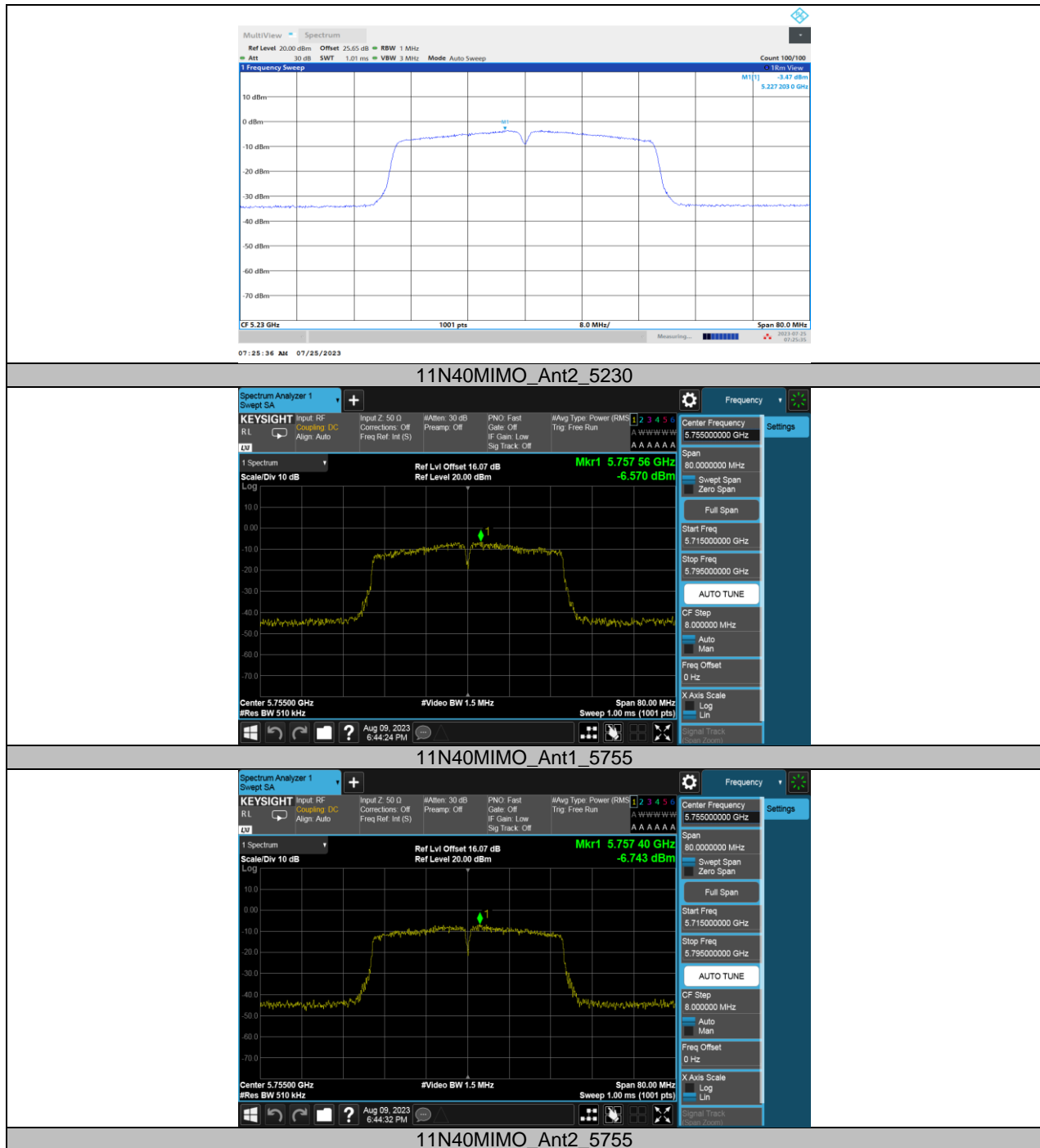
11N40MIMO\_Ant1\_5190

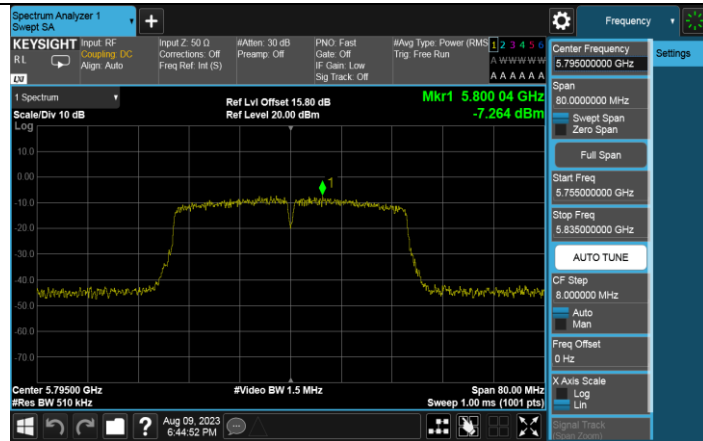


11N40MIMO\_Ant2\_5190

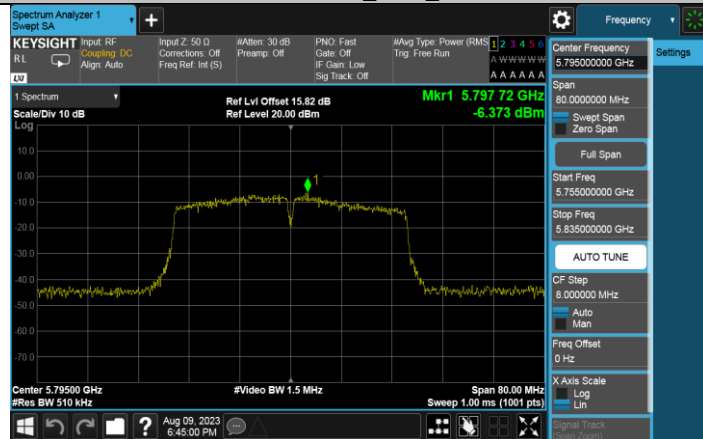


11N40MIMO\_Ant1\_5230

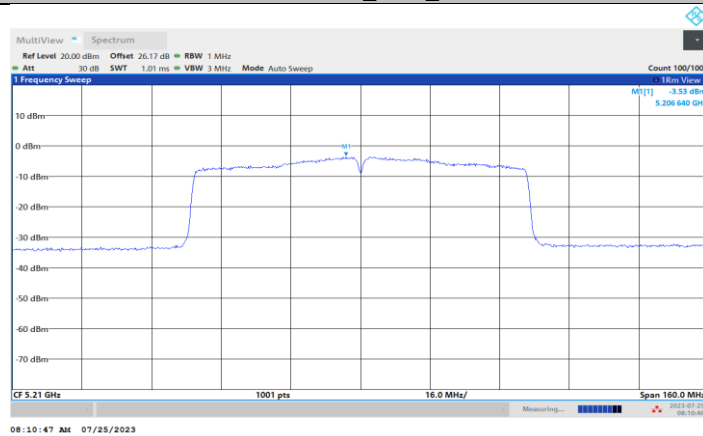




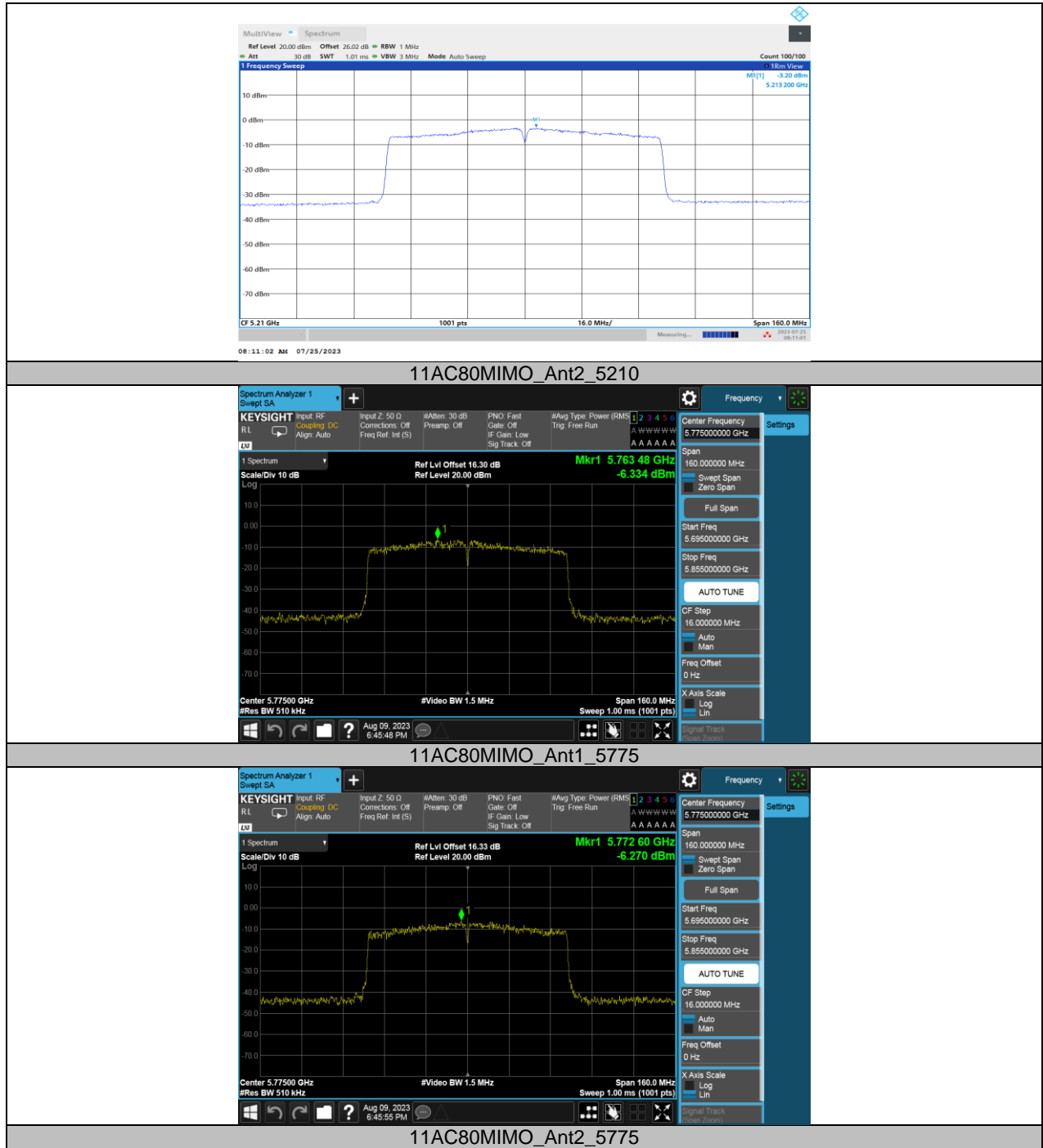
11N40MIMO\_Ant1\_5795



11N40MIMO\_Ant2\_5795



11AC80MIMO\_Ant1\_5210



## 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	5179.9822	-3.44	5180.0173	3.34	5180.0043	0.84	5180.0211	4.08
TN	VN	5180.0184	3.56	5180.0202	3.89	5179.9974	-0.50	5180.0125	2.41
TN	VH	5179.9800	-3.86	5179.9774	-4.36	5179.9879	-2.34	5180.0202	3.90
Frequency Error vs. Temperature									
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)
40	VN	5179.9984	-0.31	5179.9911	-1.71	5179.9897	-2.00	5179.9863	-2.65
30	VN	5179.9902	-1.90	5180.0056	1.09	5179.9984	-0.31	5179.9831	-3.26
20	VN	5179.9818	-3.52	5180.0158	3.04	5180.0065	1.26	5180.0083	1.59
10	VN	5179.9957	-0.83	5179.9853	-2.84	5179.9847	-2.95	5180.0223	4.30
0	VN	5179.9989	-0.22	5179.9902	-1.89	5180.0101	1.95	5180.0249	4.81

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.

Frequency Error vs. Voltage									
802.11a:5825MHz									
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	5825.0243	4.17	5825.0196	3.37	5825.0015	0.26	5824.9908	-1.59
TN	VN	5824.9800	-3.44	5825.0051	0.88	5824.9779	-3.80	5825.0053	0.92
TN	VH	5824.9809	-3.28	5825.0236	4.05	5825.0023	0.39	5825.0172	2.95
Frequency Error vs. Temperature									
802.11a:5825MHz									
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)
40	VN	5824.9860	-2.41	5825.0123	2.11	5825.0173	2.97	5825.0181	3.11
30	VN	5824.9846	-2.65	5824.9815	-3.17	5825.0071	1.22	5824.9909	-1.57
20	VN	5825.0172	2.96	5825.0222	3.82	5824.9861	-2.39	5825.0094	1.61
10	VN	5824.9966	-0.59	5824.9805	-3.35	5824.9838	-2.78	5824.9977	-0.39
0	VN	5825.0234	4.02	5825.0152	2.61	5825.0167	2.86	5824.9917	-1.43

**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.



## 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	1.39	1.45	0.9586	95.86	0.18	0.72	1
11N20MIMO	1.3	1.37	0.9489	94.89	0.23	0.77	1
11N40MIMO	0.65	0.71	0.9155	91.55	0.38	1.54	2
11AC80MIMO	0.33	0.39	0.8462	84.62	0.73	3.03	4

Note:

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

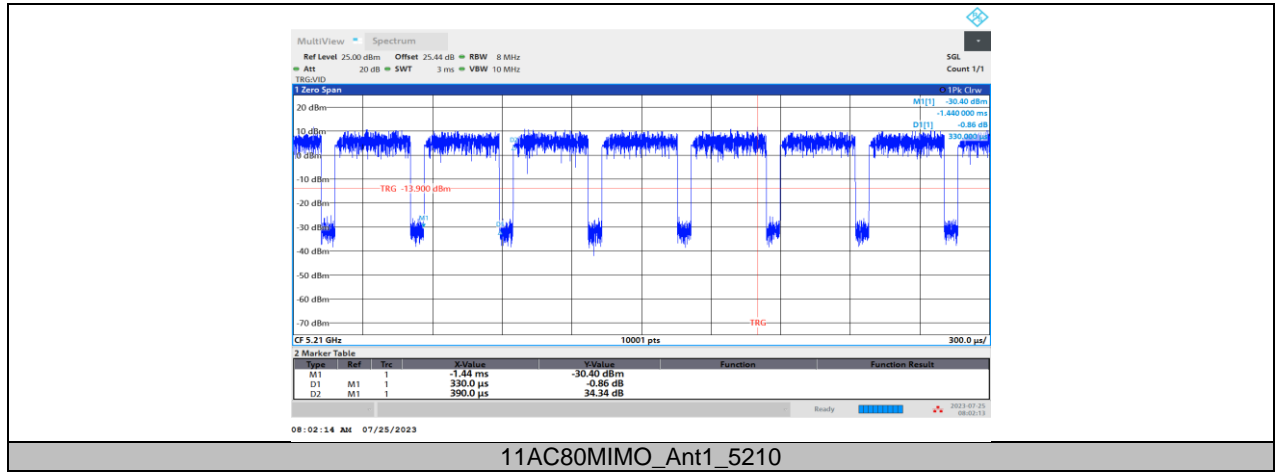
Where: x is Duty Cycle (Linear)

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





END OF REPORT