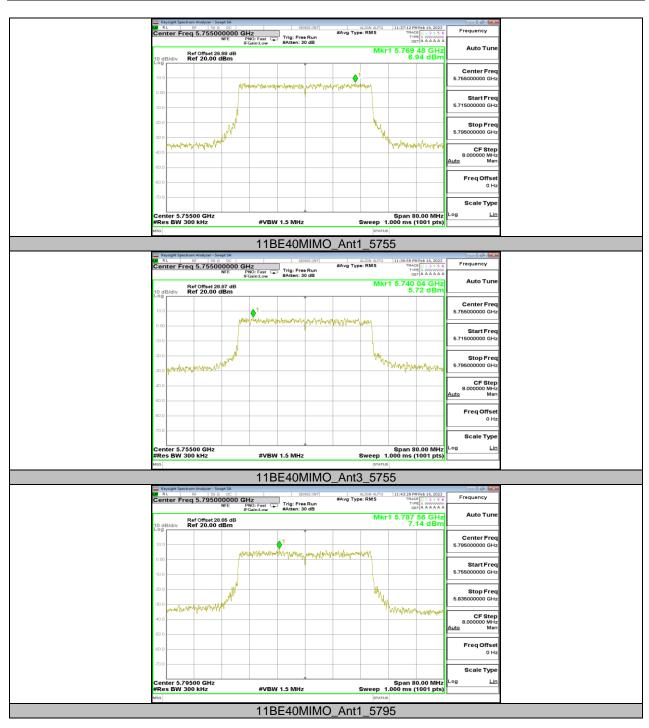


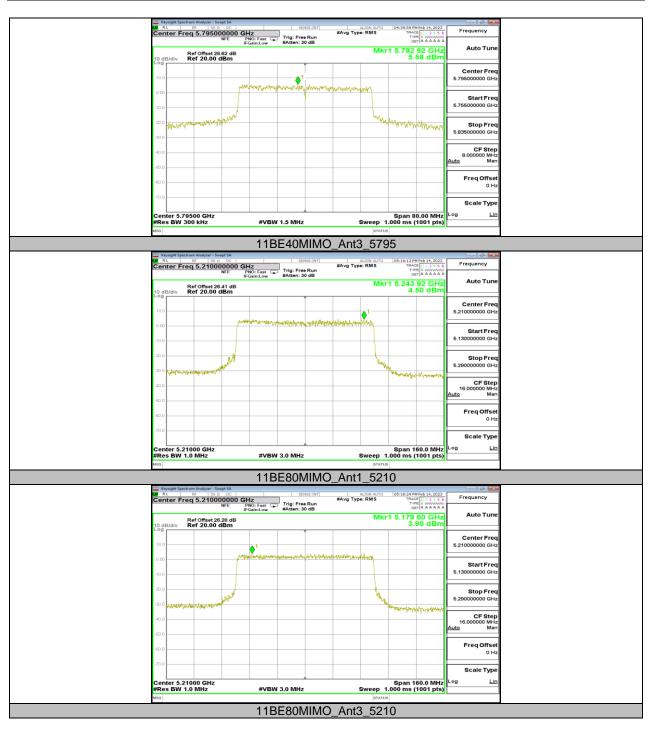


Key	ysight Spectrum Analyzer - Swe L RF 50 Ω	Ipt SA			ISE:INT	A1	IGN AUTO	10:49:05	PM Feb 10, 2023	
Cen	ter Freq 5.23000	0000 GH	IZ NO: Fast Gain:Low	1	Run	#Avg Type:		TRA	CE 1 2 3 4 5 6 PE A WWWWW DET A A A A A A	Frequency
10 dE		24 dB IBM					Mkr	1 5.215 8	68 GHz .97 dBm	Auto Tune
10.0			♦ ¹							Center Freq
0.00			and a second	warnandanda	ntrahahan tana	namhtrada				
-10.0							\rightarrow			Start Freq 5.19000000 GHz
-20.0		. Al					Ma			Stop Freq
-30.0	and and the second s	₩1.					. л	S. Marriella	Maria Nam	5.270000000 GHz
-40.0										CF Step 8.000000 MHz <u>Auto</u> Man
-50.0										Freq Offset
-70.0										0 Hz
Con	ter 5.23000 GHz							Span	80.00 MHz	Scale Type
	s BW 1.0 MHz		#VBW	3.0 MHz		S	weep 1	.000 ms	(1001 pts)	
			11B	E40N	1IMO	_Ant3	523	30		

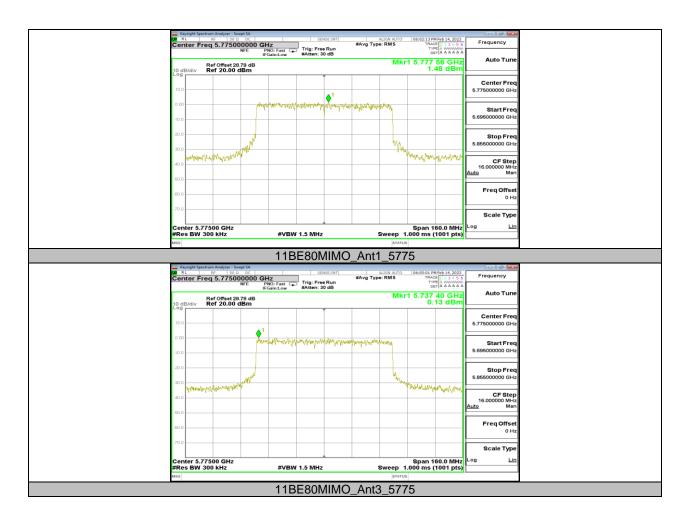








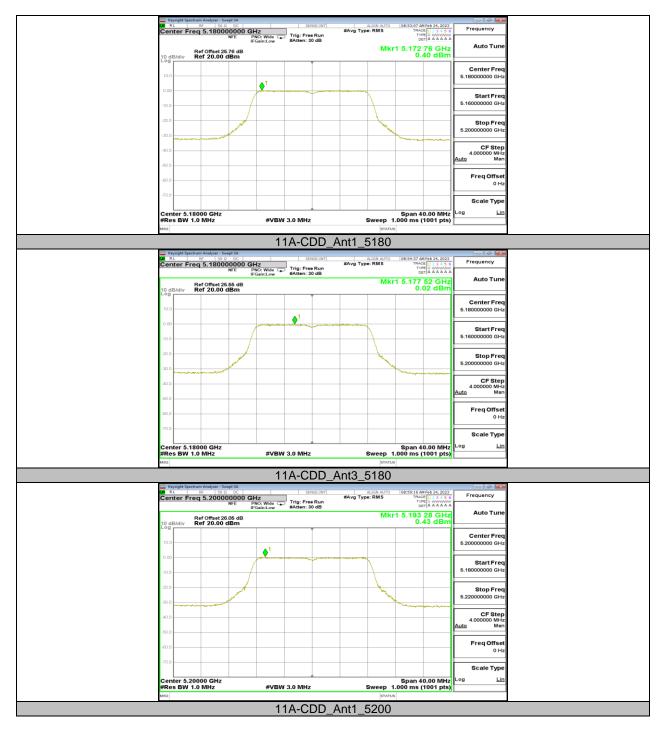




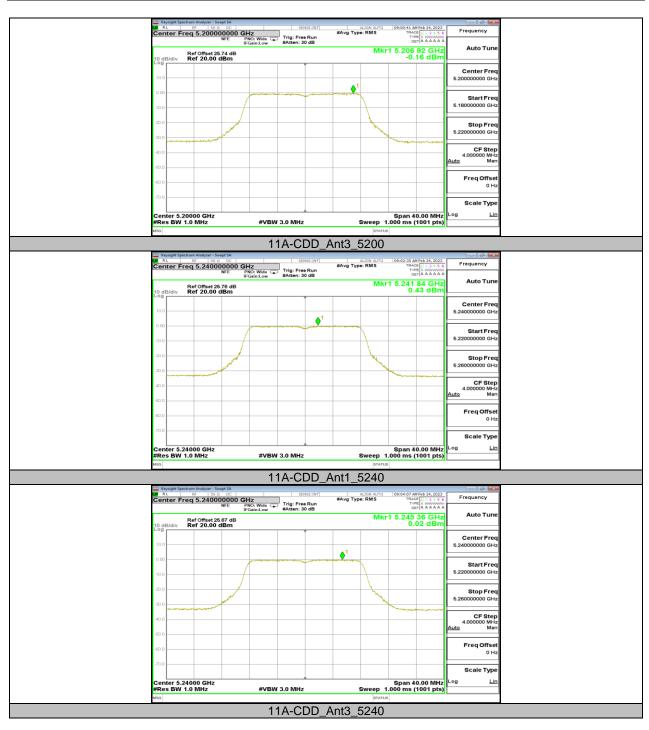


11.5.4. Test Graphs

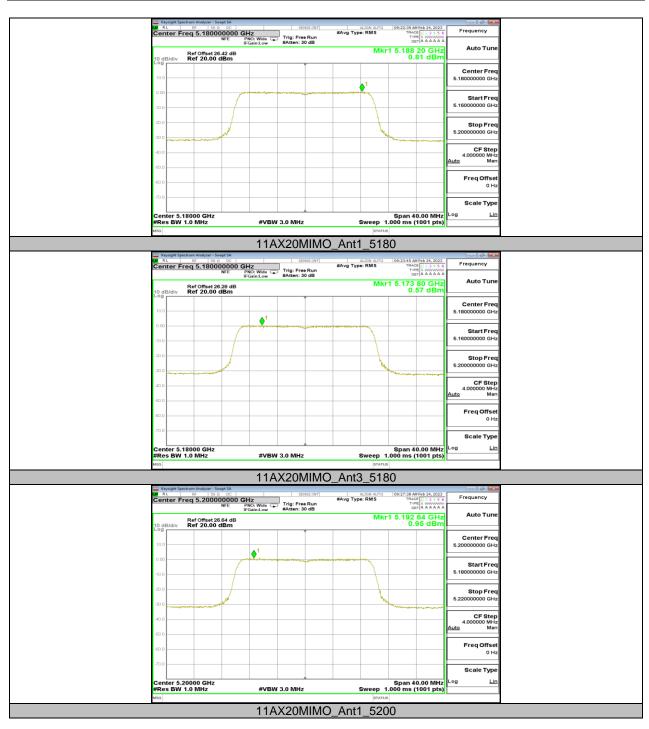
For ISED UNII-1 test data graphs:



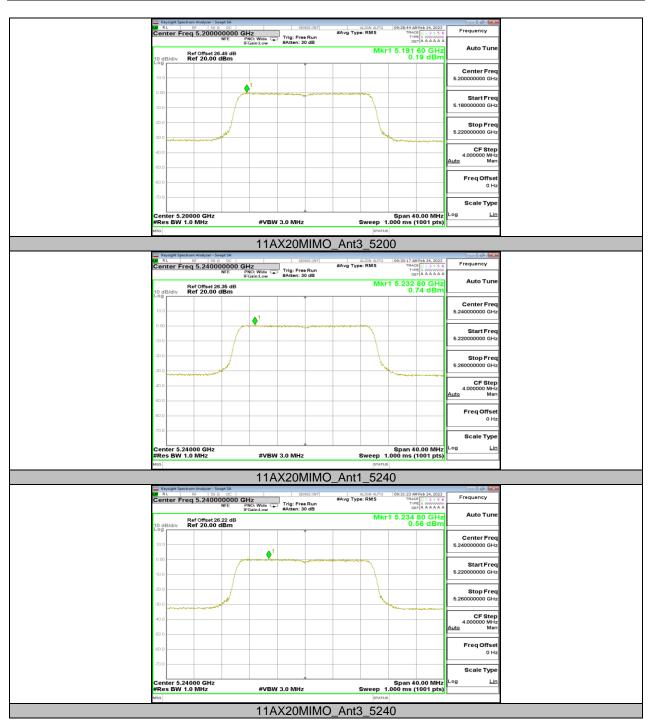




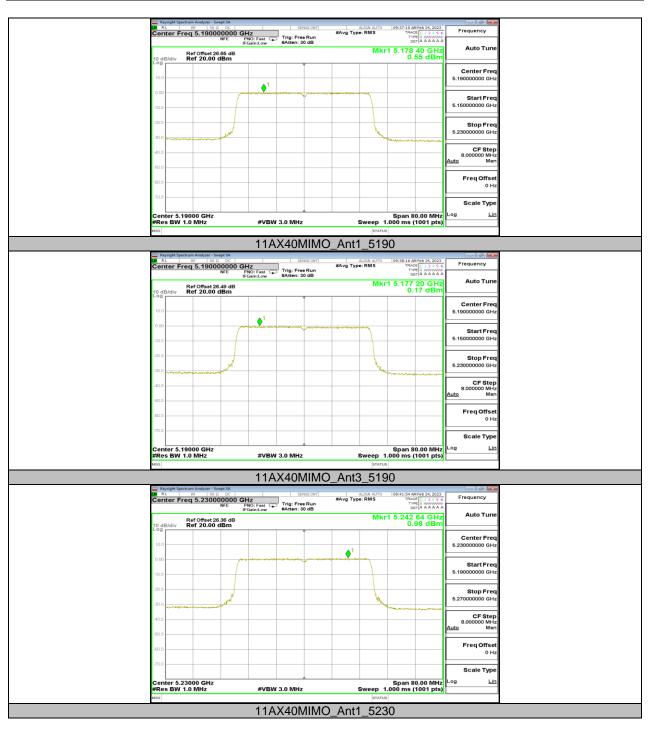




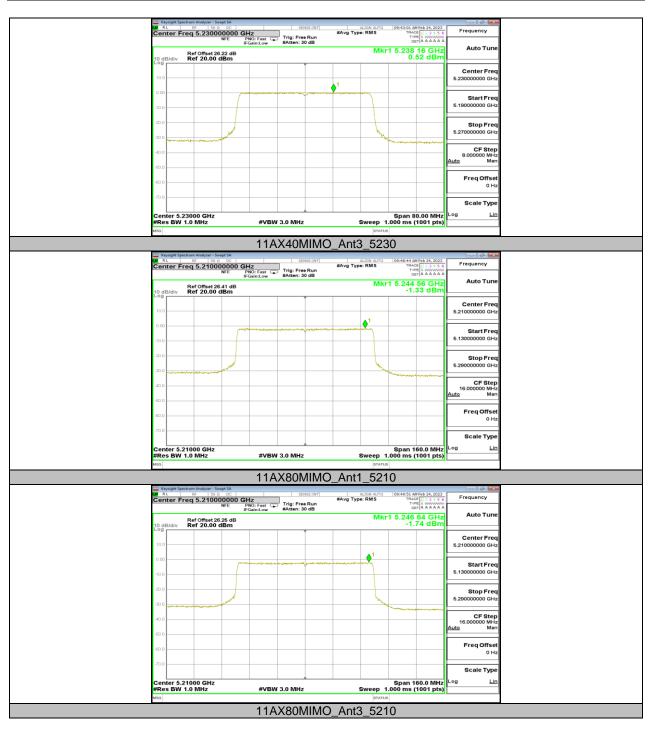


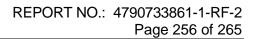


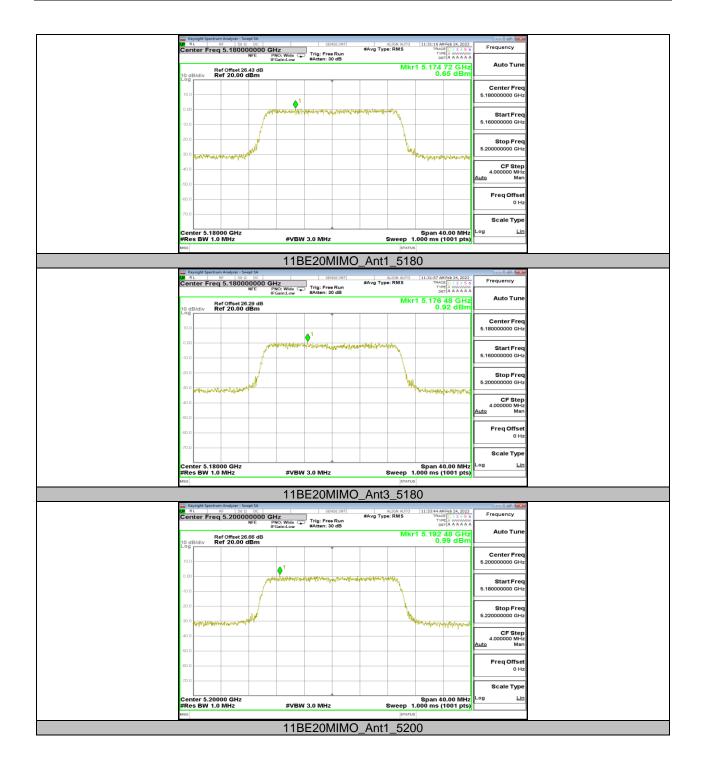




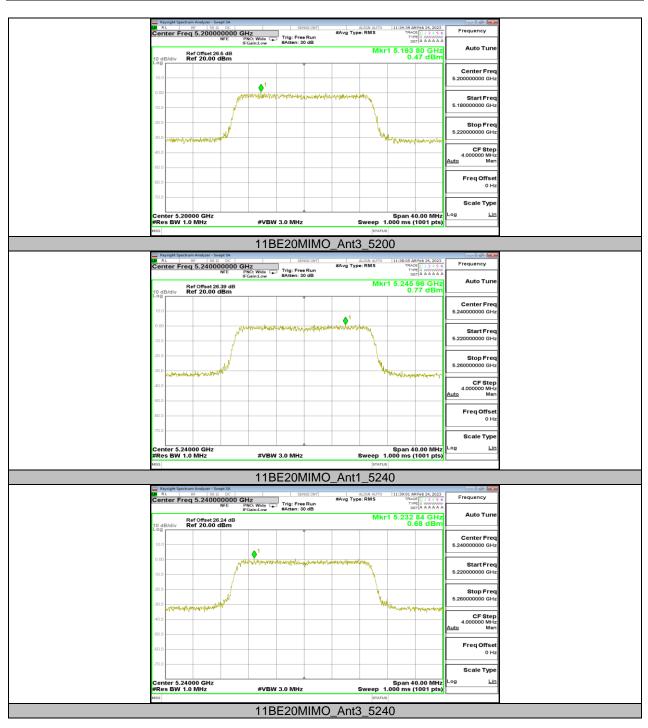




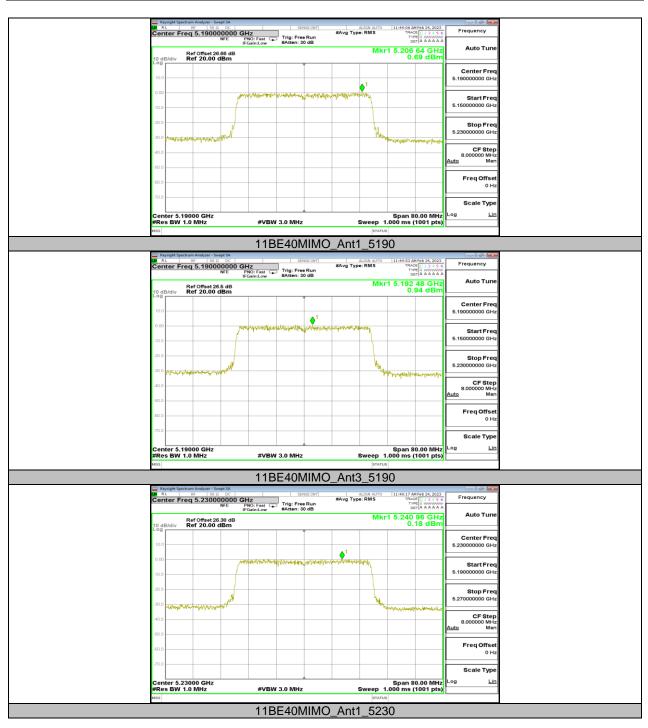




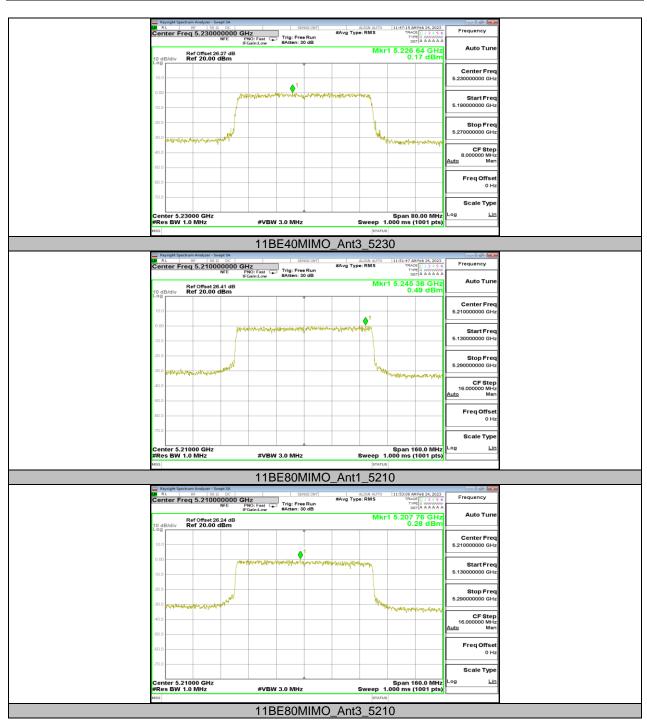














Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A-CDD	2.10	2.25	0.9333	93.33	0.30	0.48	0.5
11AX20MIMO	5.45	6.80	0.8015	80.15	0.96	0.18	0.5
11AX40MIMO	5.45	6.81	0.8003	80.03	0.97	0.18	0.5
11AX80MIMO	5.45	6.82	0.7991	79.91	0.97	0.18	0.5
11BE20MIMO	5.45	6.81	0.8003	80.03	0.97	0.18	0.5
11BE40MIMO	5.44	6.82	0.7977	79.77	0.98	0.18	0.5
11BE80MIMO	5.45	6.81	0.8003	80.03	0.97	0.18	0.5

11.6. APPENDIX F: DUTY CYCLE

11.6.1. Test Result

Note:

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

Where: x is Duty Cycle (Linear)

Where: T is On Time

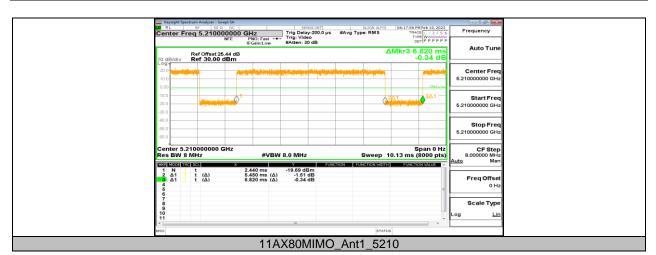
If that calculated VBW is not available on the analyzer then the next higher value should be used.

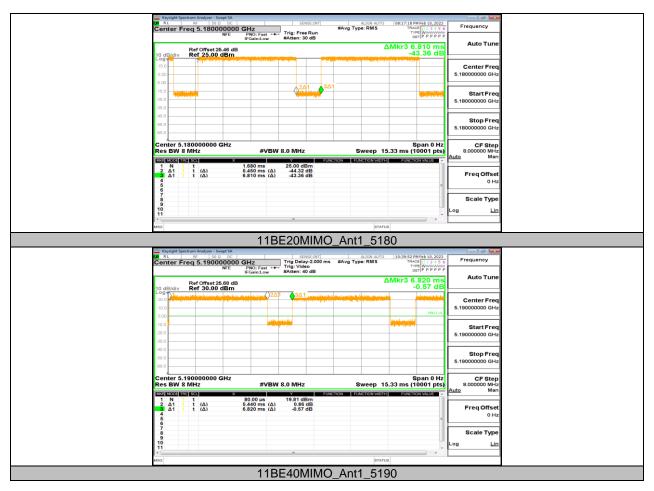


11.6.2. Test Graphs











Ref offset 25.44 dB Auto Tune 10 dB/dv Ref 30.00 dBm 1.26 dB 200 1.26 dB 1.26 dB 201 201 301 1000000 GHz 200 1.26 dB 1.26 dB 5.21000000 GHz 200 1.26 dB 1.26 dB 1.26 dB 200
300 201
Interpret/ Start Freq 300 5.21000000 GHz 400 5.21000000 GHz 400 5.21000000 GHz 400 5.21000000 GHz 400 5.21000000 GHz 400 <
40.0
Center 5.210000000 GHz Span 0 Hz Span 0 Hz CF Step Res BW 8 MHz #VBW 8.0 MHz Sweep 15.33 ms (10001 pts) 8.000000 MHz 8.000000 MHz Wold bool brid bool x Y Function Function Function Auto Man
1 N 1 t 3.650 ms -9.91 dBm 2 Δ1 1 t (Δ) 6.456 ms (Δ) 0.45 dB 3 Δ1 1 t (Δ) 6.456 ms (Δ) 0.45 dB 4 4 6 6 6 6 7 7
7 8 9 10 11
K STATUS



11.7. APPENDIX G: FREQUENCY STABILITY

11.7.1. Test Result

Frequency Error vs. Voltage												
802.11a:5200MHz												
_		0 Min	ute	2 Mir	nute	5 Mir	nute	10 Minute				
Temp.	Volt.	Freq.Error Tolerance (MHz) (ppm)		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)			
ΤN	VL	5200.0246	4.72	5199.9940	-1.16	5199.9784	-4.16	5199.9814	-3.58			
ΤN	VN	5199.9859	-2.71	5200.0003	0.06	5200.0209	4.01	5200.0211	4.05			
ΤN	VH	5200.0181	3.48	5200.0082	1.58	5200.0006	0.11	5199.9825	-3.37			
	Frequency Error vs. Temperature											
802.11a:5200MHz												
_	0 Minute 2 Minute 5 Minute 10 M											
Temp.	Volt.	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)			
40	VN	5199.9808	-3.68	5199.9969	-0.59	5200.0202	3.88	5200.0250	4.80			
30	VN	5199.9884	-2.23	5200.0083	1.59	5199.9898	-1.96	5200.0229	4.40			
20	VN	5199.9940	-1.15	5199.9869	-2.52	5200.0124	2.39	5200.0049	0.94			
10	VN	5200.0078	1.49	5200.0017	0.32	5200.0053	1.03	5200.0092	1.76			
0	VN	5200.0014	0.27	5199.9794	-3.95	5199.9964	-0.70	5199.9766	-4.49			

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												
Temm	0 Min	ute	2 Min	ute	5 Min	ute	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	5824.9752	-4.26	5825.0106	1.82	5824.9834	-2.86	5824.9971	-0.50			
TN	VN	5825.0022	0.37	5825.0072	1.23	5824.9780	-3.78	5824.9755	-4.21			
TN	VH	5824.9900	-1.72	5825.0141 2.41		5825.0045	0.77	5825.0048	0.83			
	Frequency Error vs. Temperature											
802.11a:5825MHz												
		0 Min	ute	2 Min	ute	5 Min	ute	10 Minute				
Temp.	Volt.	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)			
40	VN	5825.0078	1.34	5824.9904	-1.66	5825.0104	1.78	5825.0149	2.56			
30	VN	5825.0176	3.02	5825.0058	0.99	5824.9927	-1.25	5824.9917	-1.42			
20	VN	5824.9808	-3.30	5825.0141	2.42	5824.9993	-0.13	5824.9947	-0.91			
10	VN	5825.0031	0.53	5825.0038	0.65	5824.9909	-1.56	5825.0028	0.49			
0	VN	5824.9971	-0.49	5825.0016	0.27	5825.0146	2.51	5824.9855	-2.49			

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.

END OF REPORT