



12.6. Appendix D: Duty Cycle

12.6.1. Test Result

Mode	ON Time (ms)	Period (ms)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (KHz)	Final setting For VBW (KHz)
802.11a 20	1.36	1.56	0.8719	87.19	0.60	0.73	1
802.11ac VHT20	0.97	1.17	0.8296	82.96	0.81	1.03	1
802.11ac VHT40	0.49	0.69	0.7070	70.70	1.51	2.04	3
802.11ac VHT80	0.25	0.45	0.5537	55.37	2.57	4	4

Note:

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

Where: x is Duty Cycle (Linear)

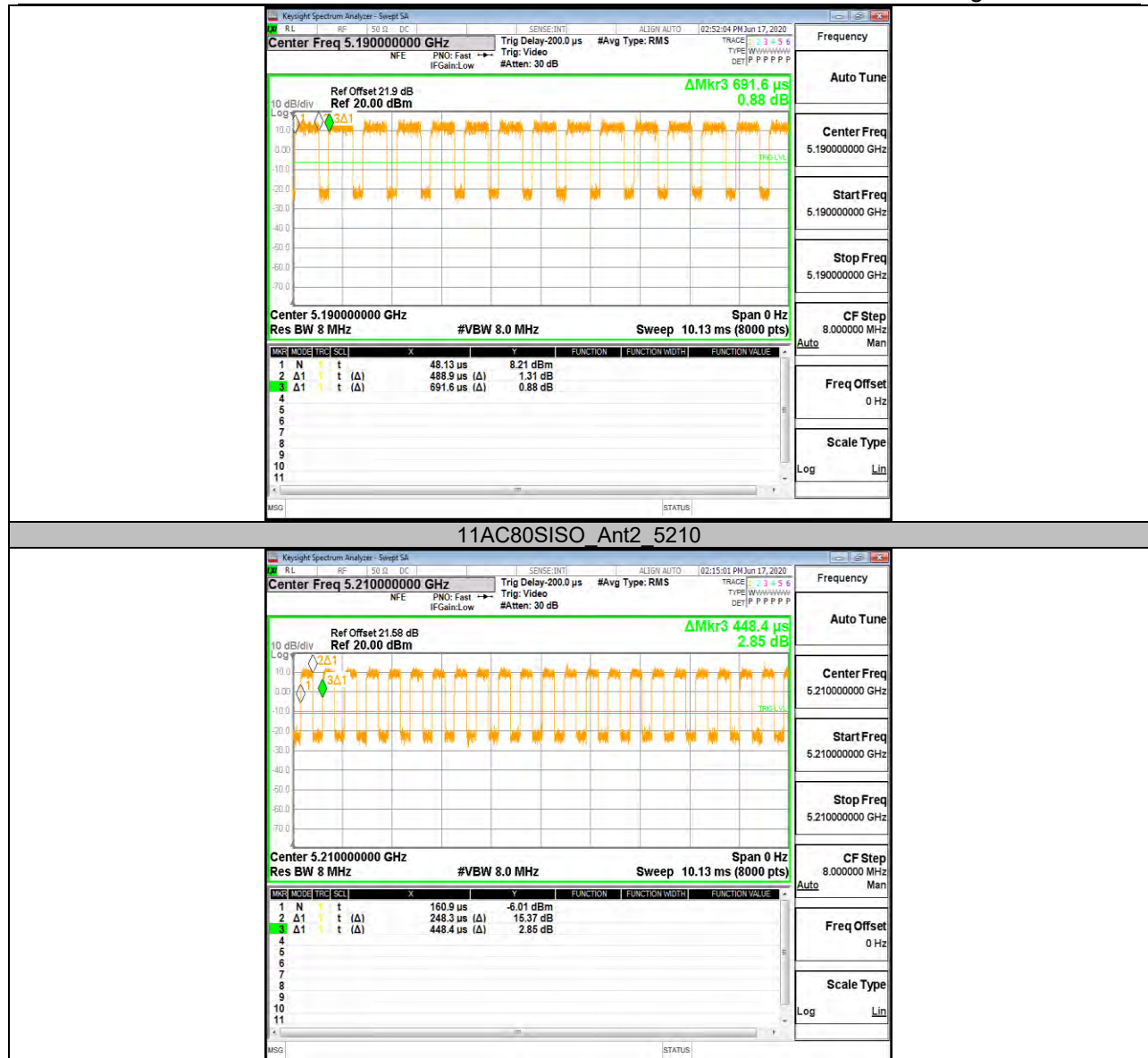
Where: T is On Time

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



12.6.2. Test Graphs







12.7. Appendix E: Frequency Stability

12.7.1. Test Result

Frequency Error vs. Voltage									
802.11a20:5200MHz									
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	5200.0322	6.19	5200.0311	5.98	5200.0221	4.25	5200.0365	7.02
TN	VN	5200.0312	6.00	5200.0322	6.19	5200.0321	6.17	5200.0299	5.75
TN	VH	5200.0344	6.62	5200.0267	5.13	5200.0266	5.12	5200.0309	5.94
Frequency Error vs. Temperature									
802.11a20:5200MHz									
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)
60	VN	5200.0136	2.62	5199.9793	-3.97	5200.0081	1.56	5200.0227	4.36
50	VN	5200.0312	6.00	5200.0322	6.19	5200.0209	4.02	5200.0321	6.17
40	VN	5200.0186	3.58	5199.9874	-2.43	5200.0102	1.96	5199.9803	-3.78
30	VN	5200.0242	4.65	5200.0290	5.58	5200.0211	4.06	5200.0233	4.48
20	VN	5200.0315	6.06	5200.0241	4.63	5200.0208	4.00	5200.0243	4.67
10	VN	5200.0234	4.50	5200.0225	4.38	5200.0211	4.06	5200.0165	3.17
0	VN	5200.0157	3.02	5200.0323	4.00	5200.0231	4.44	5200.0312	6.00



Frequency Error vs. Voltage									
802.11a20:5825MHz									
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	5825.0255	4.38	5825.0311	5.34	5825.0265	4.55	5825.0411	7.06
TN	VN	5825.0221	3.79	5825.0328	5.63	5825.0255	4.38	5825.0389	6.68
TN	VH	5825.0265	4.55	5825.0354	6.08	5825.0312	5.36	5825.0367	6.30
Frequency Error vs. Temperature									
802.11a20:5825MHz									
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)
60	VN	5825.0127	2.17	5825.0188	3.24	5824.9961	-0.67	5824.9994	-0.10
50	VN	5825.0209	3.59	5825.0255	4.38	5825.0232	3.98	5825.0245	4.21
40	VN	5825.0016	0.28	5824.9945	-0.94	5825.0080	1.37	5825.0170	2.92
30	VN	5825.0211	3.62	5825.0233	4.00	5825.0309	5.30	5825.0132	2.27
20	VN	5825.0179	3.07	5825.0209	3.59	5825.0219	3.76	5825.0233	4.00
10	VN	5825.0312	5.36	5825.0318	5.46	5825.0235	4.03	5825.0258	4.43
0	VN	5825.0211	3.62	5825.0166	2.85	5825.0286	4.91	5825.0233	4.00

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

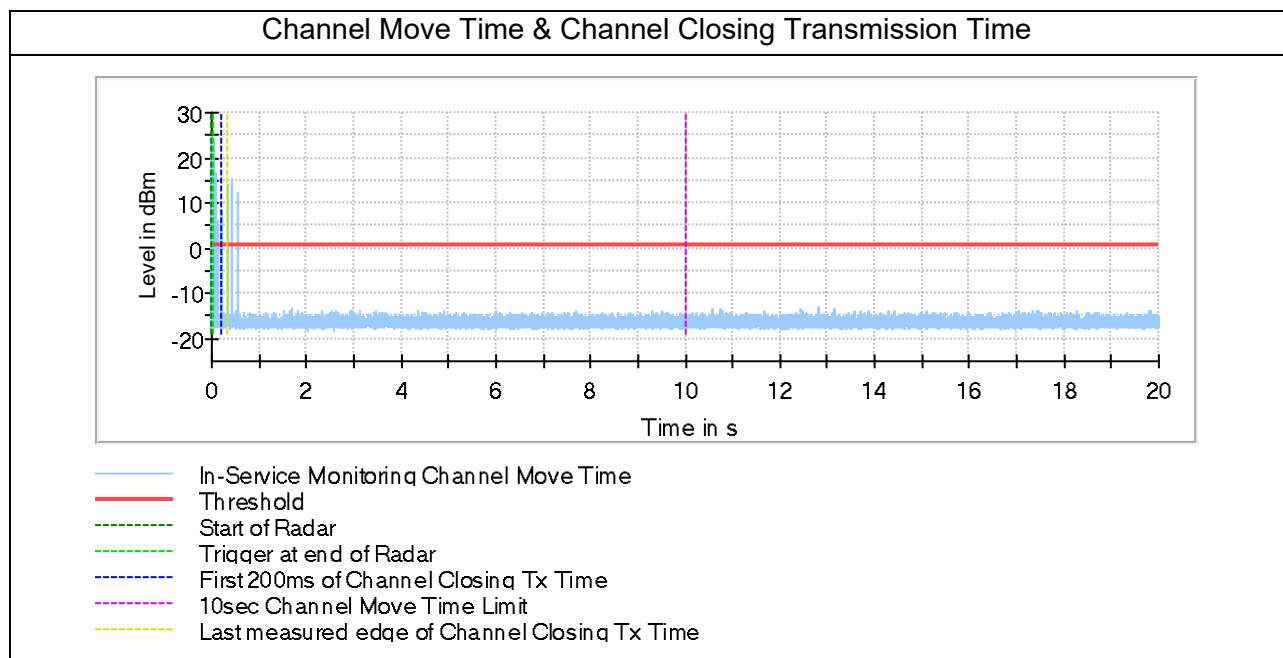


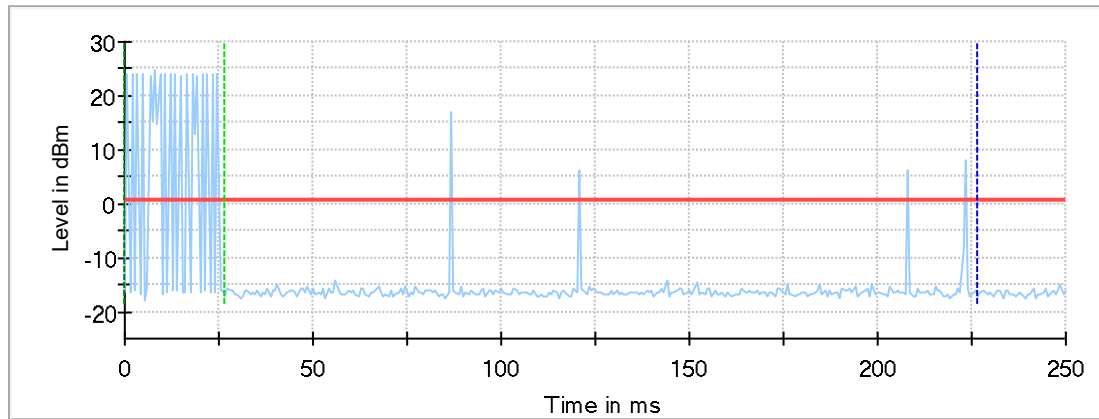
12.8. Appendix F: Dynamic Frequency Selection

12.8.1. Test Result

802.11ac VHT80 Mode

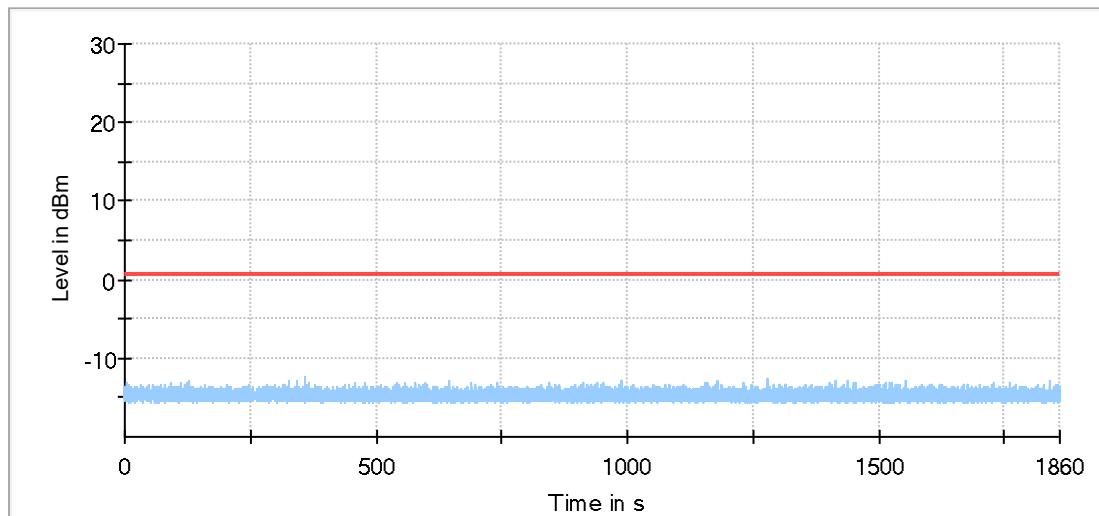
BW/Channel	Test Item	Test Result	Limit	Results
80MHz / 5290MHz	Channel Move Time	0.31S	< 10 s	pass
	Channel Closing Transmission Time	0.008S	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period.	pass
	Non-Occupancy Period	Nothing appears	If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear.	pass





- In-Service Monitoring Channel Move Time first 200ms
- Threshold
- Start of Radar
- Trigger at end of Radar
- First 200ms of Channel Closing Tx Time

Non-Occupancy Period



- In-Service Monitoring Non-occupancy period
- Threshold

END OF REPORT