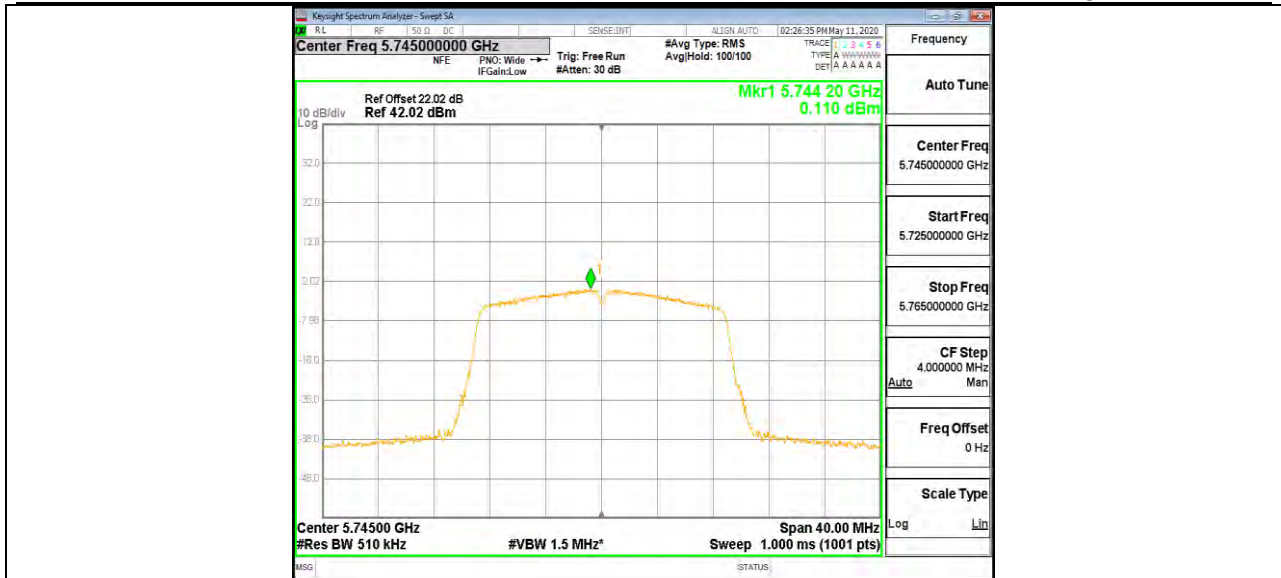




11N20MIMO Ant2 5720 UNII-3



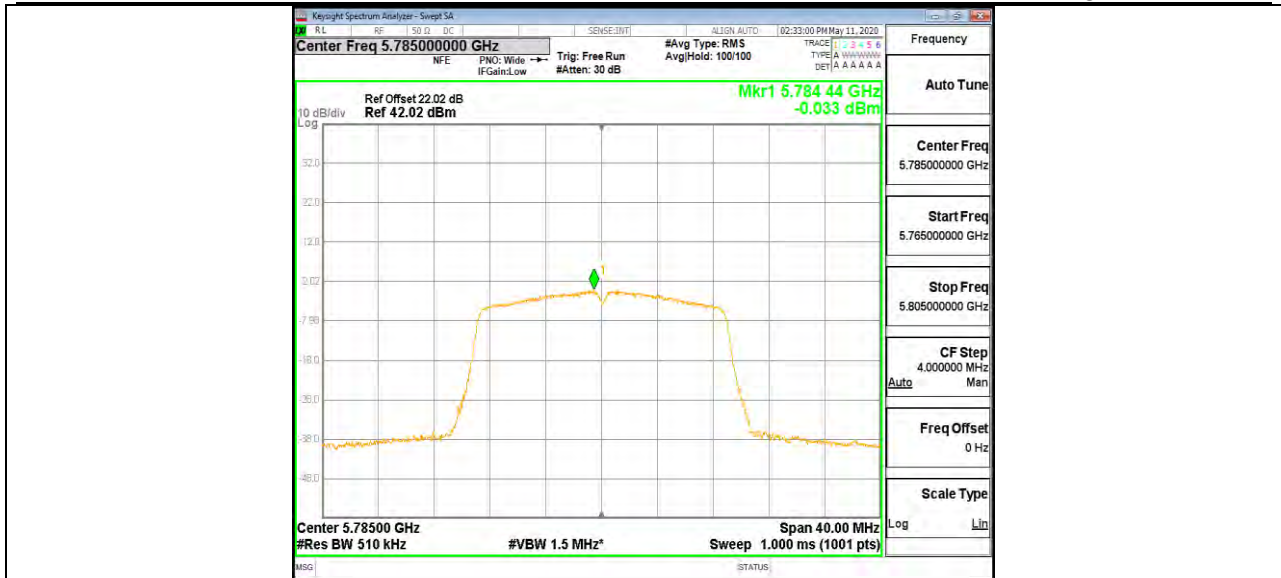
11N20MIMO Ant1 5745



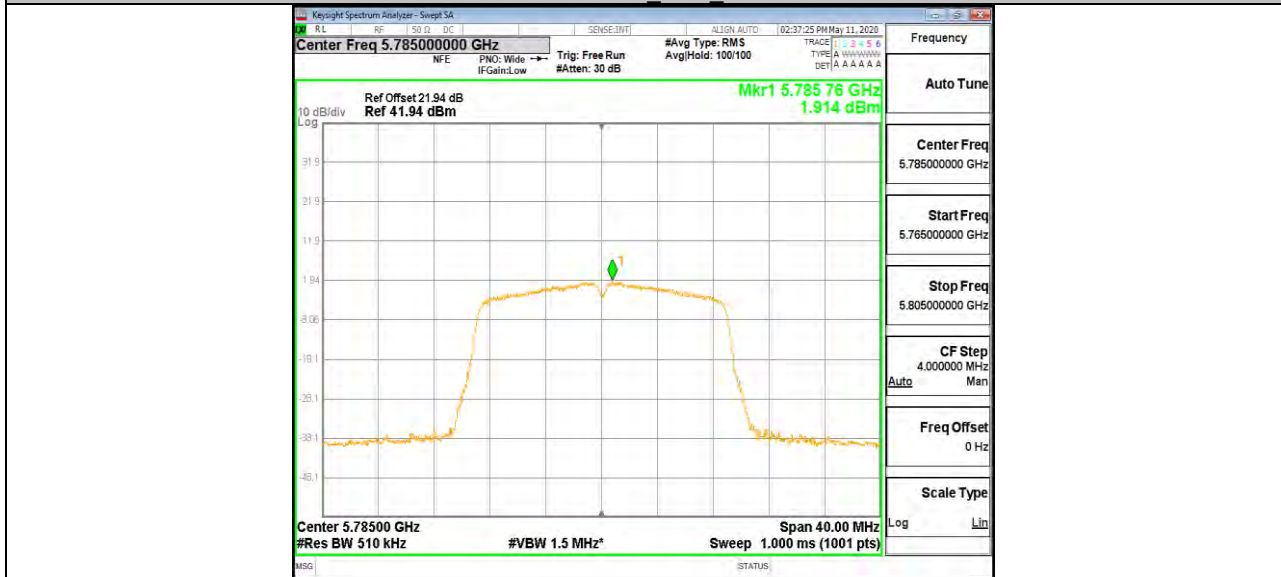
11N20MIMO Ant2 5745



11N20MIMO Ant1 5785



11N20MIMO Ant2 5785



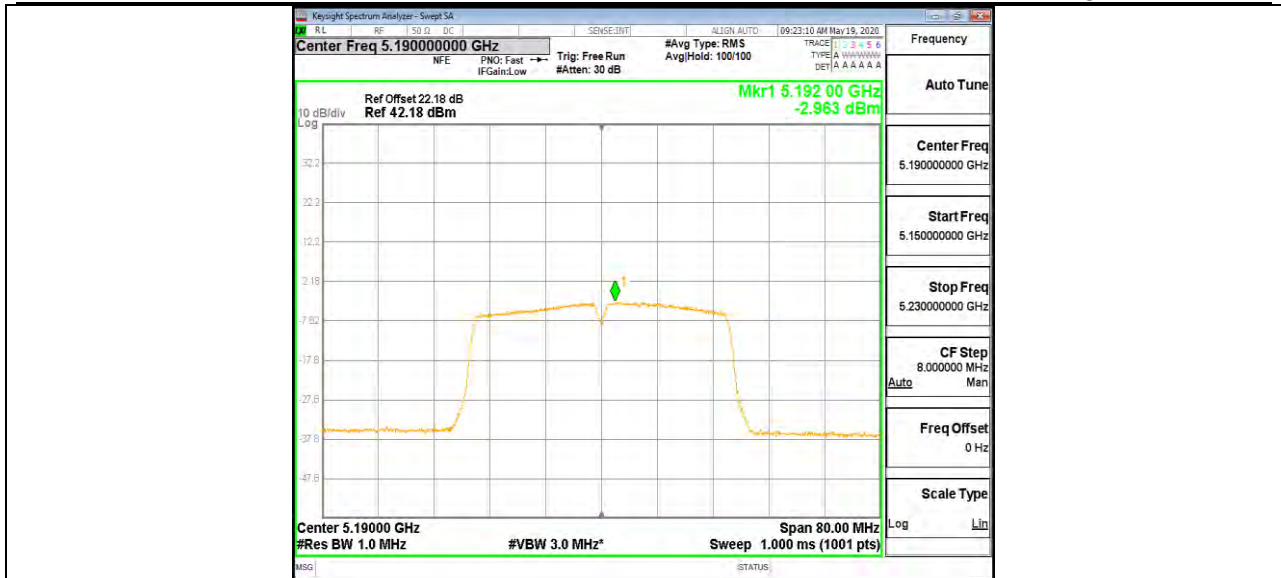
11N20MIMO Ant1 5825



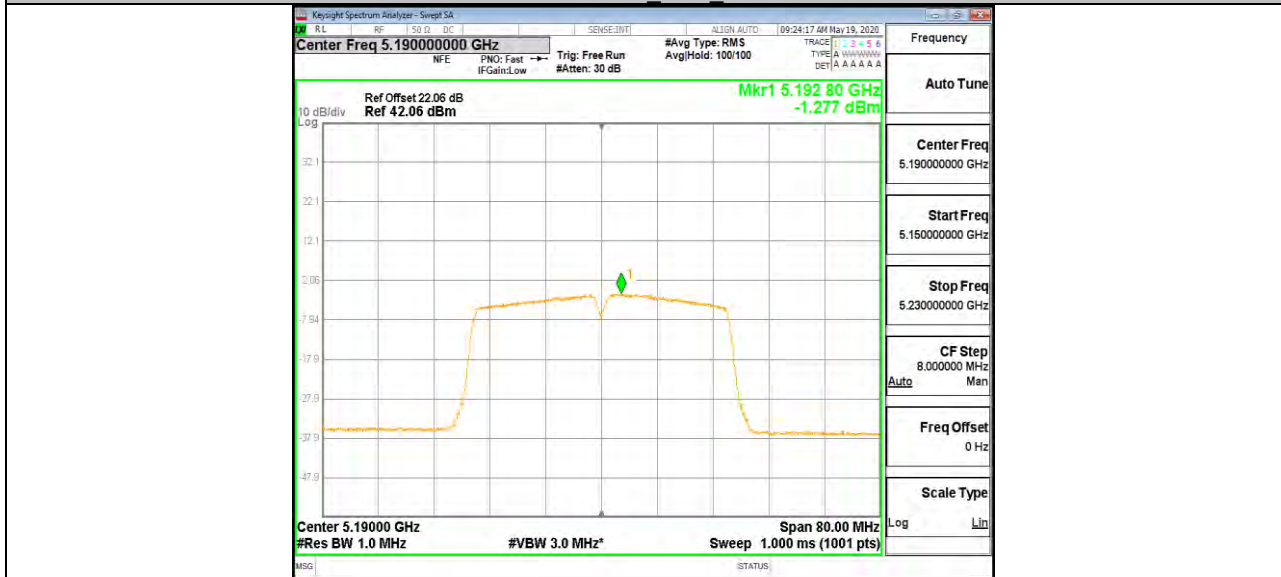
11N20MIMO Ant2 5825



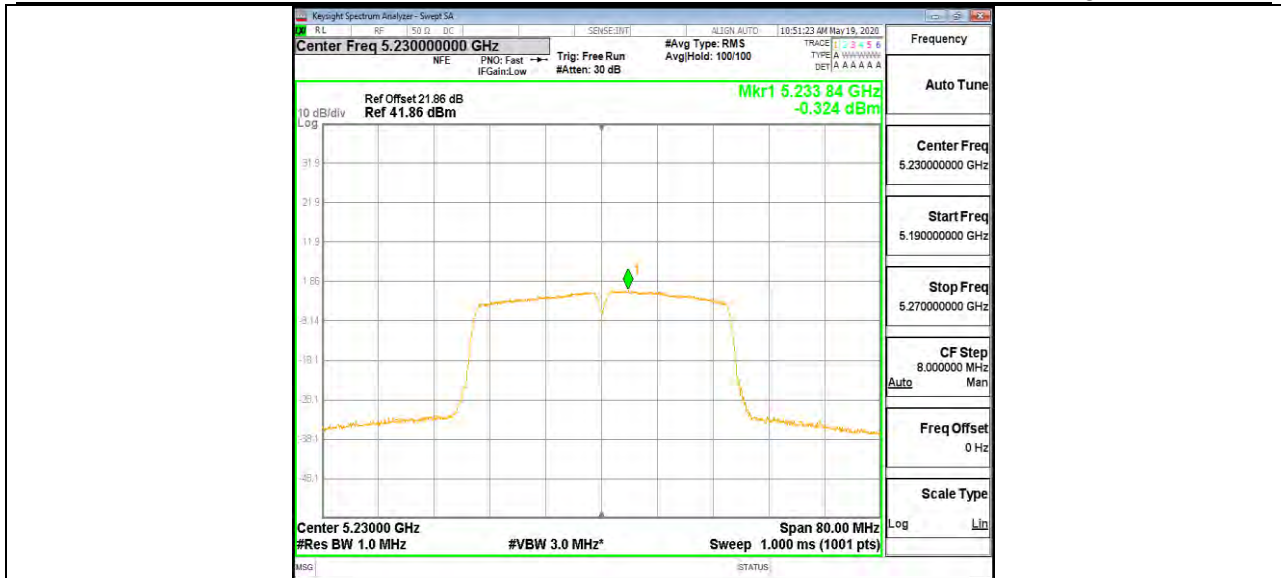
11N40MIMO Ant1 5190



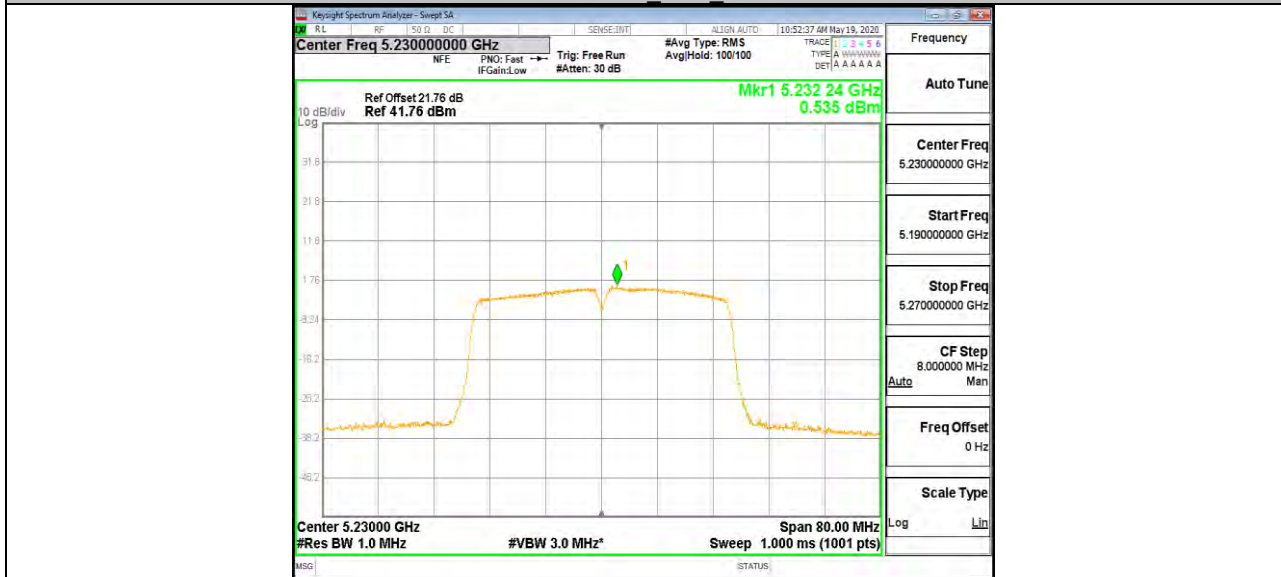
11N40MIMO Ant2 5190



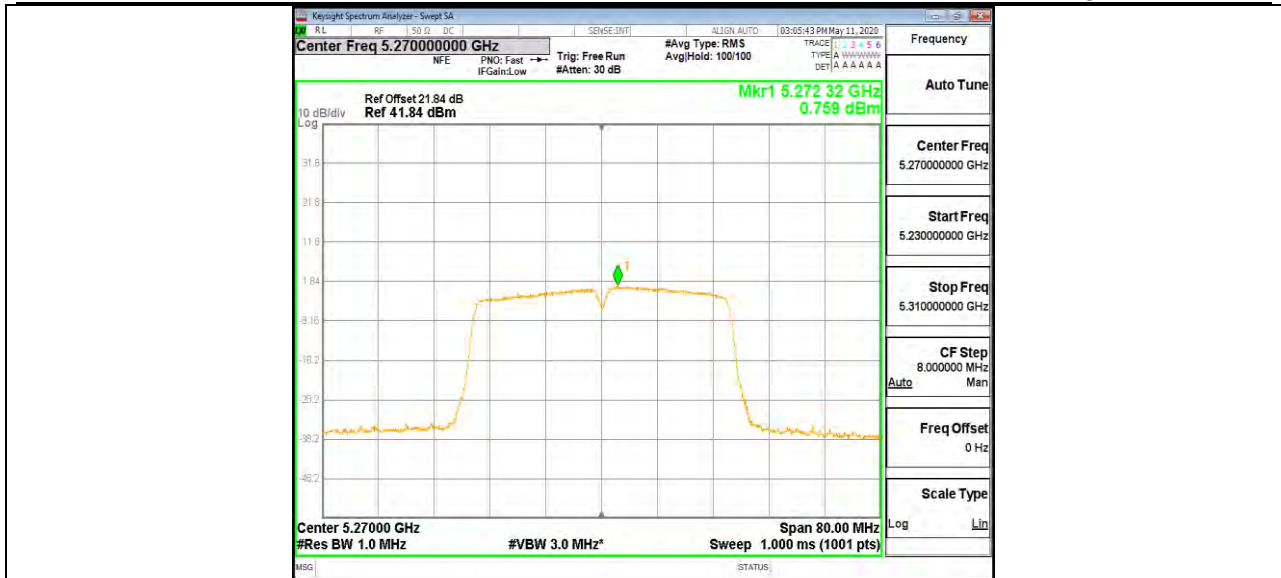
11N40MIMO Ant1 5230



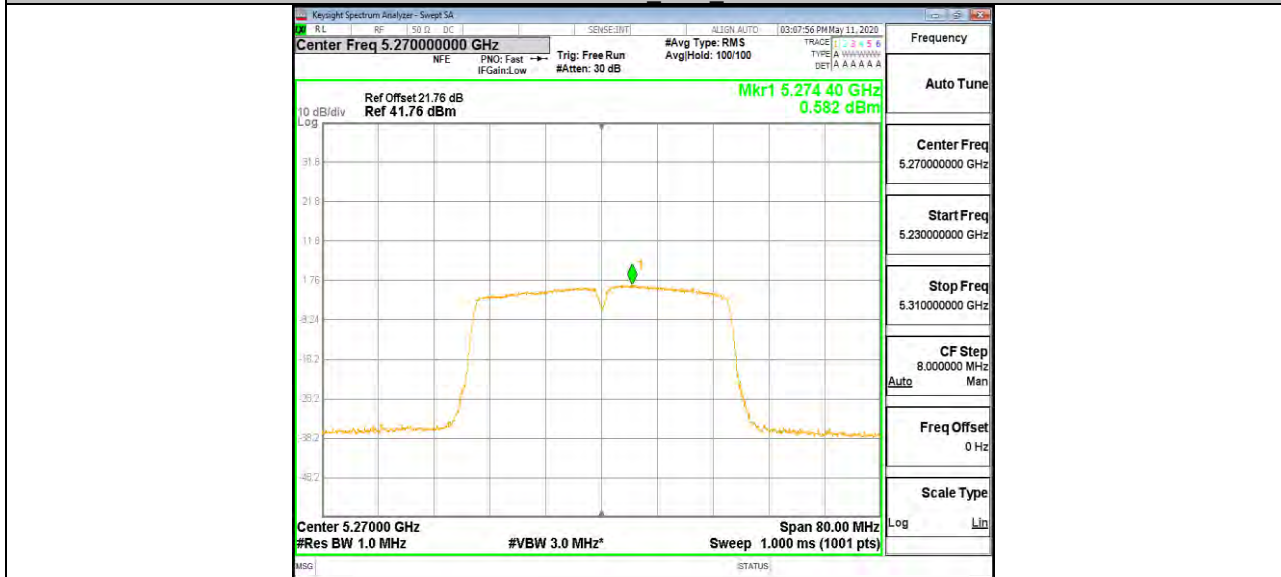
11N40MIMO Ant2 5230



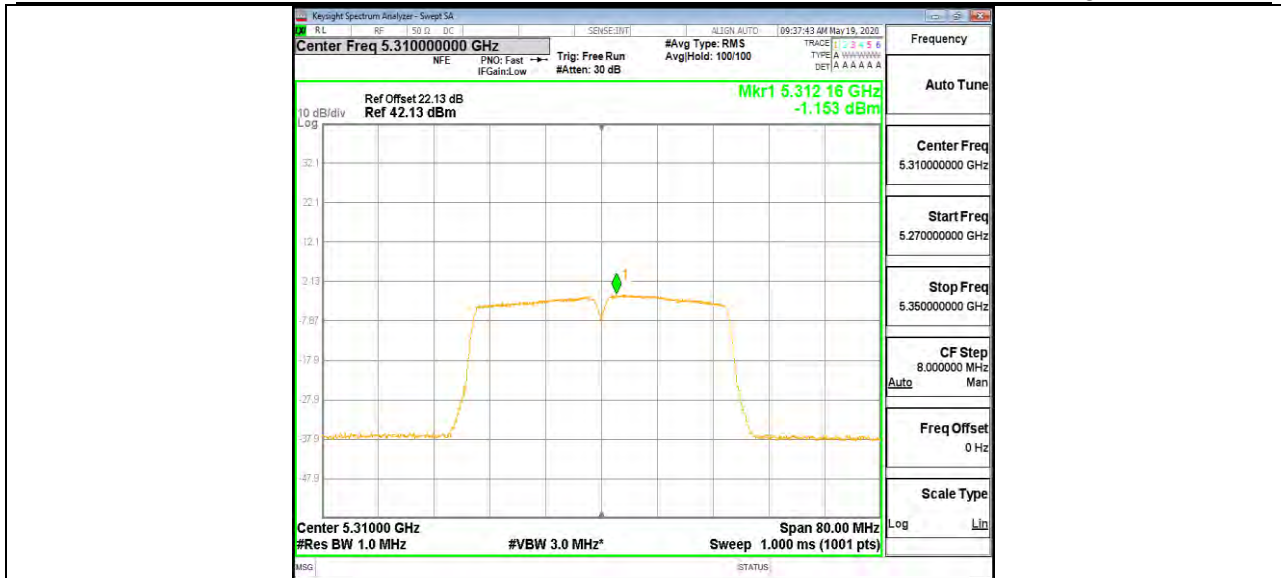
11N40MIMO Ant1 5270



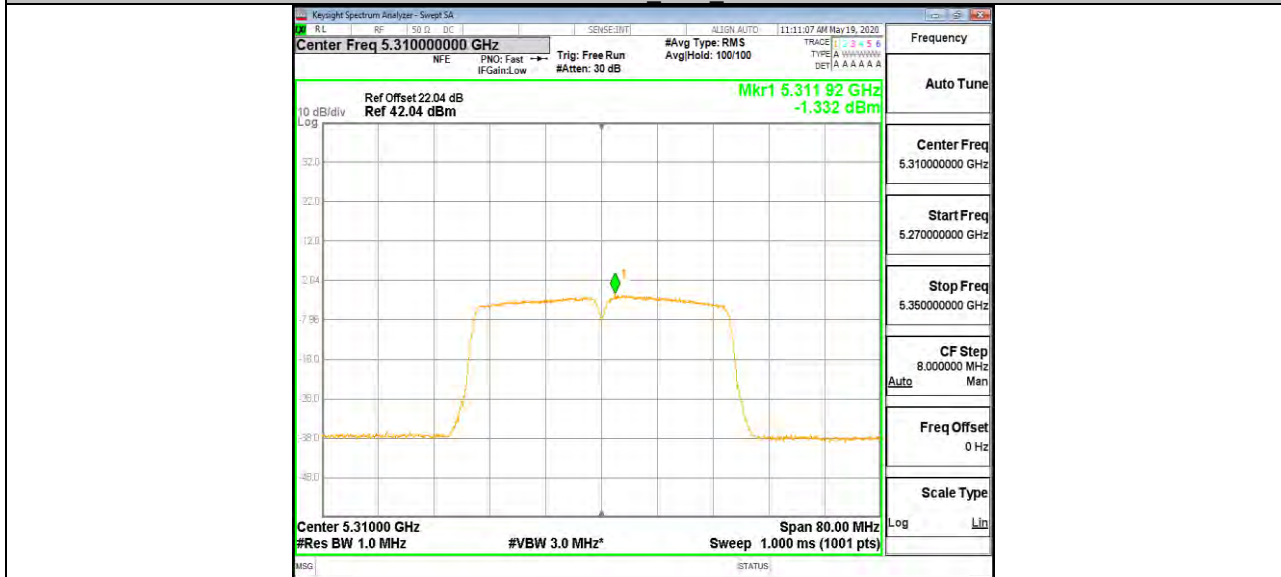
11N40MIMO Ant2 5270



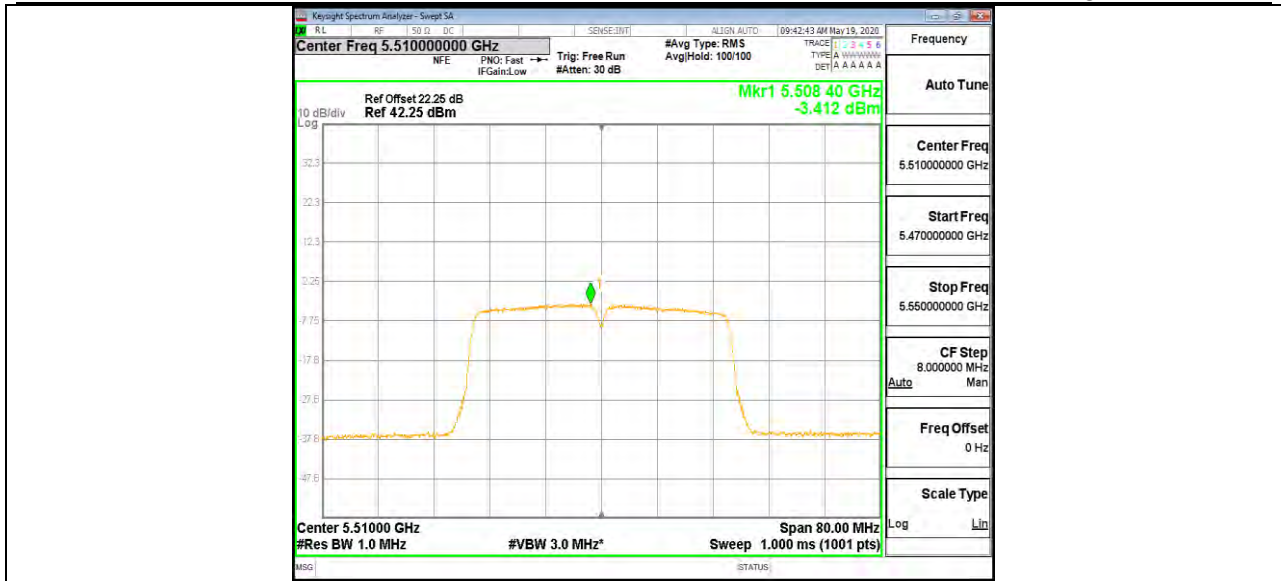
11N40MIMO Ant1 5310



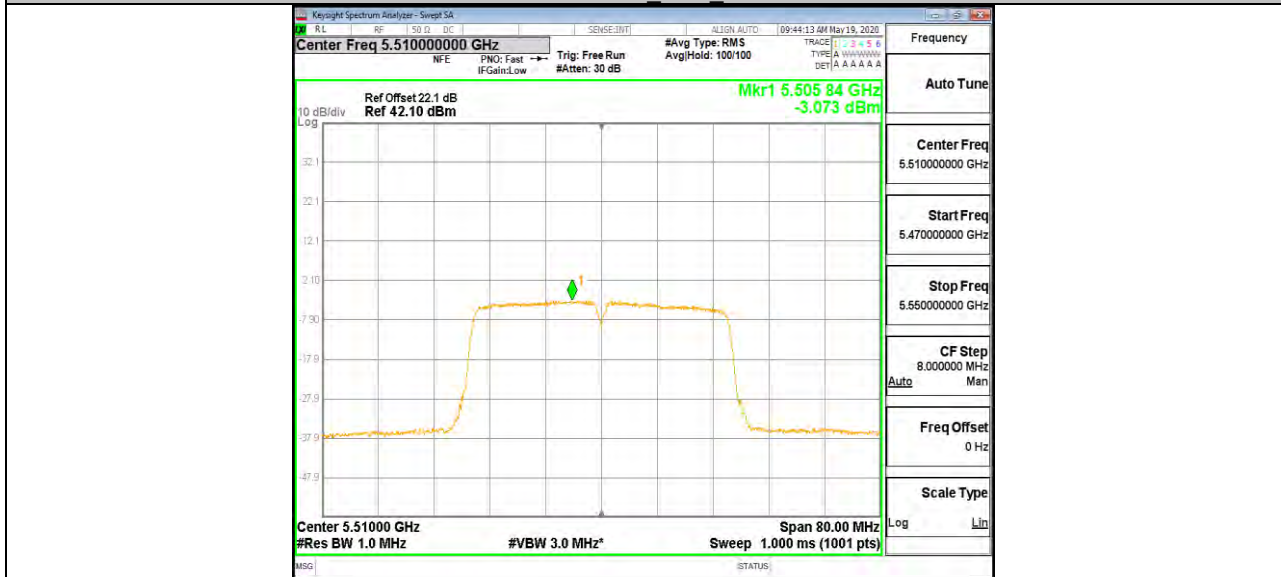
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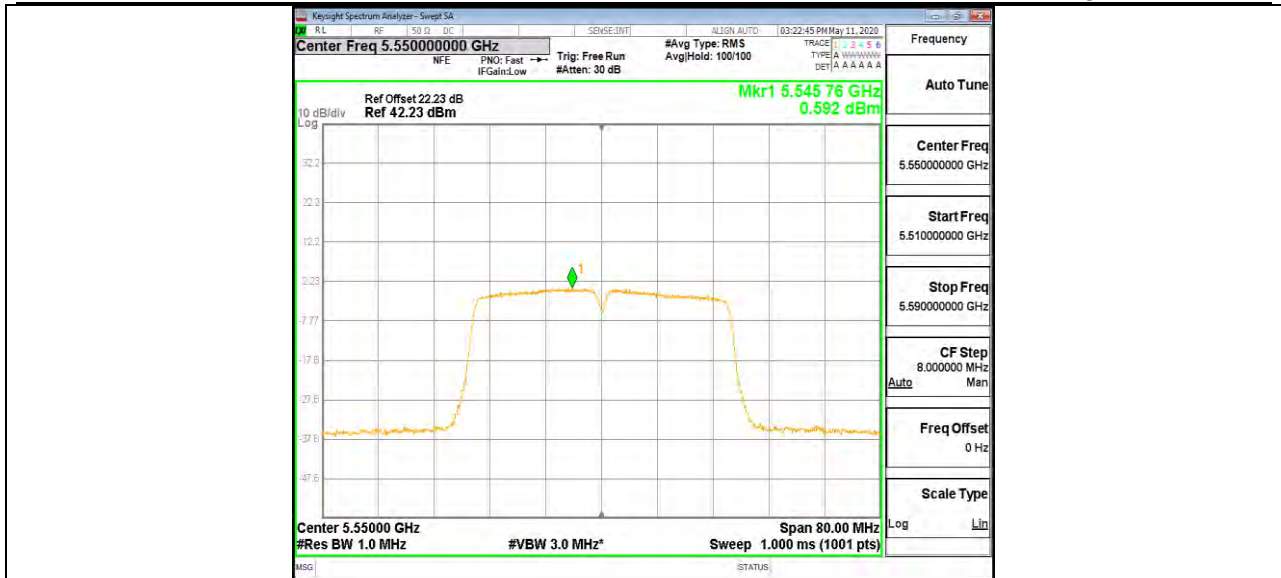
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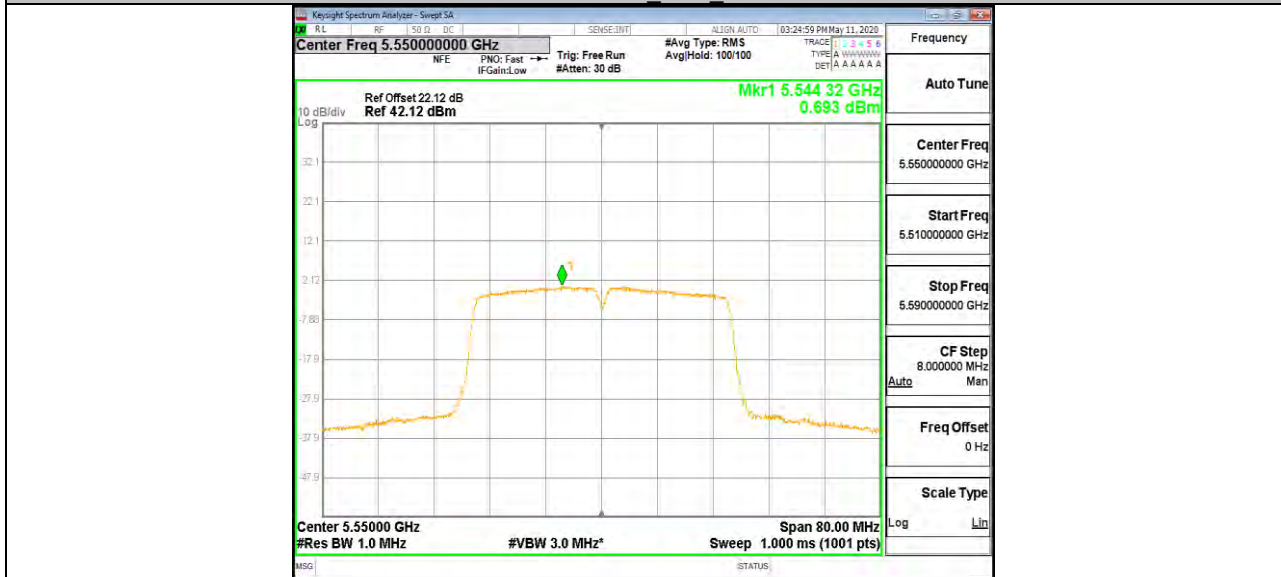
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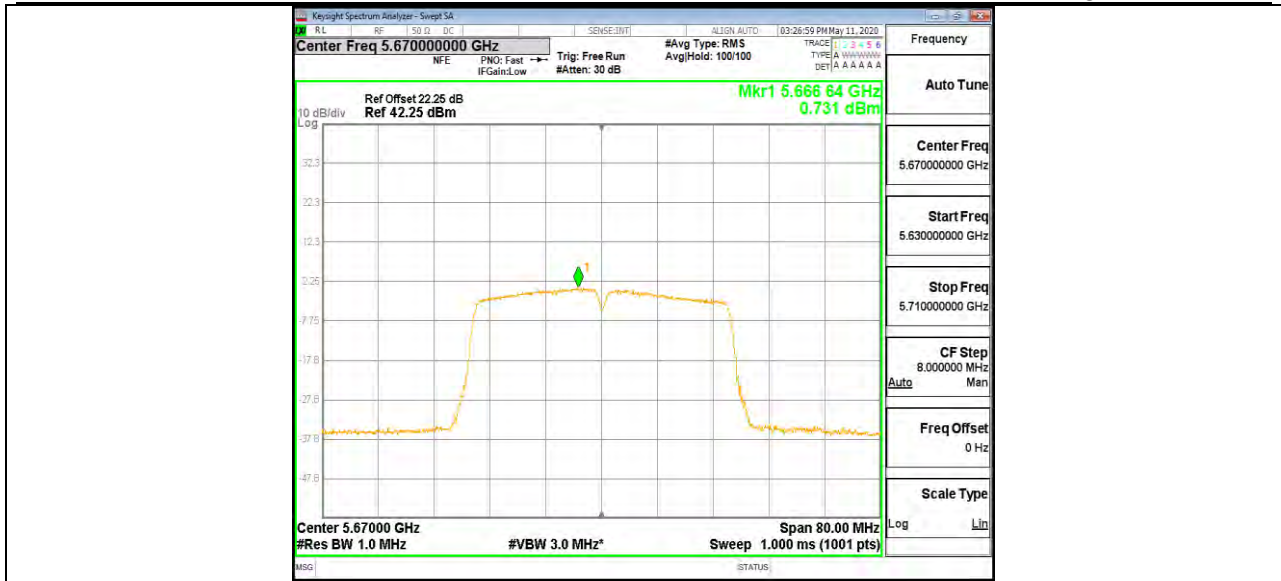
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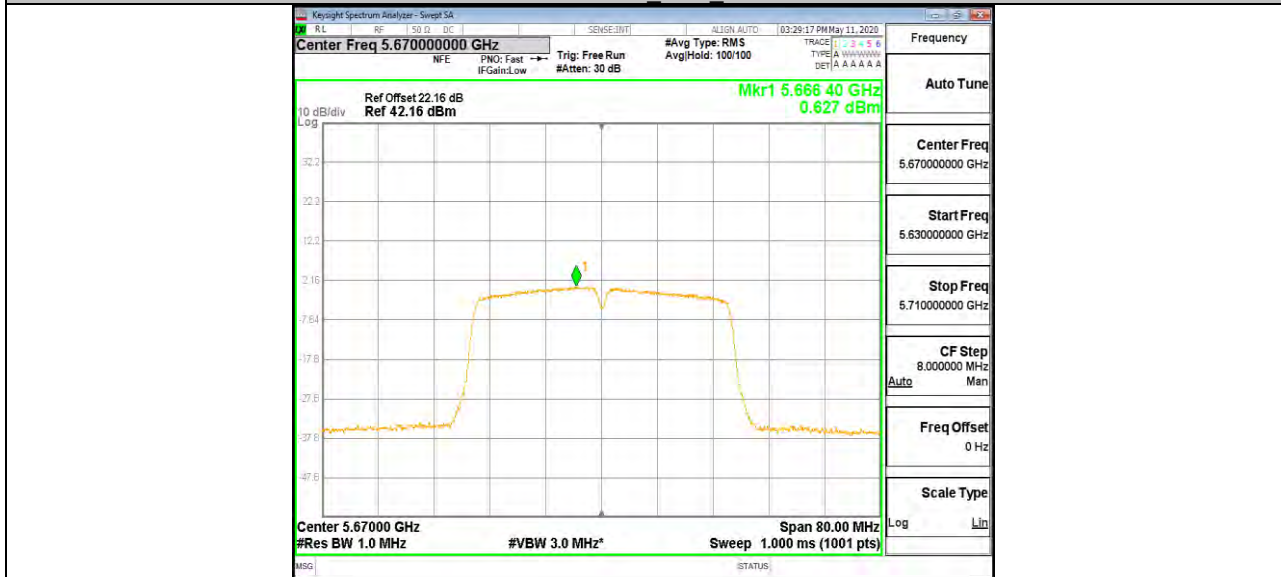
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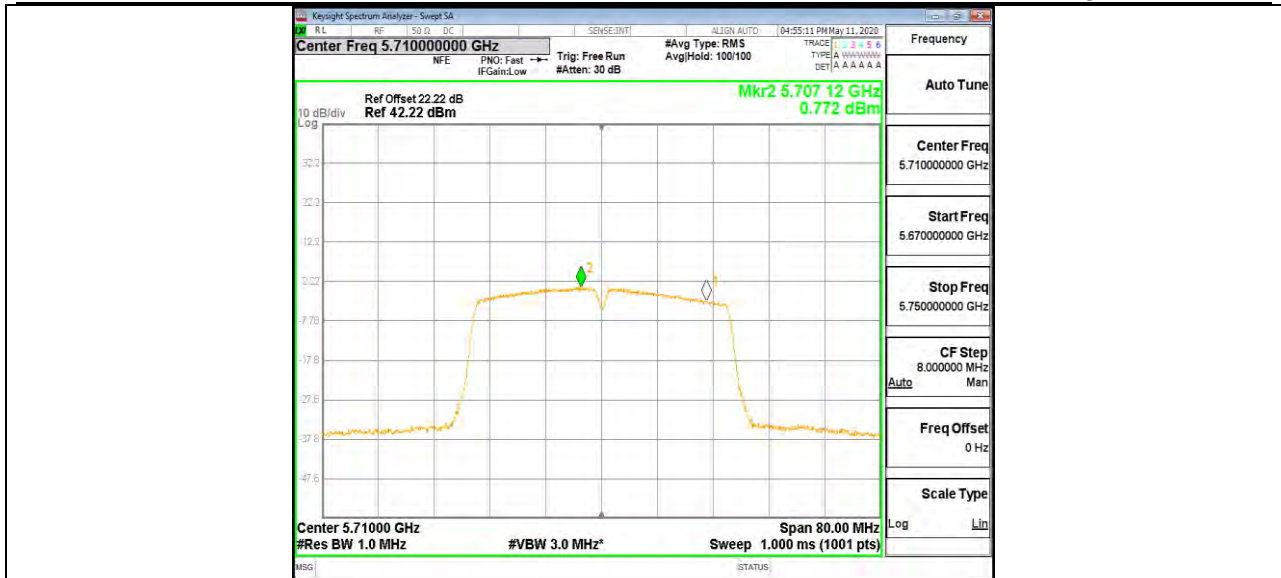
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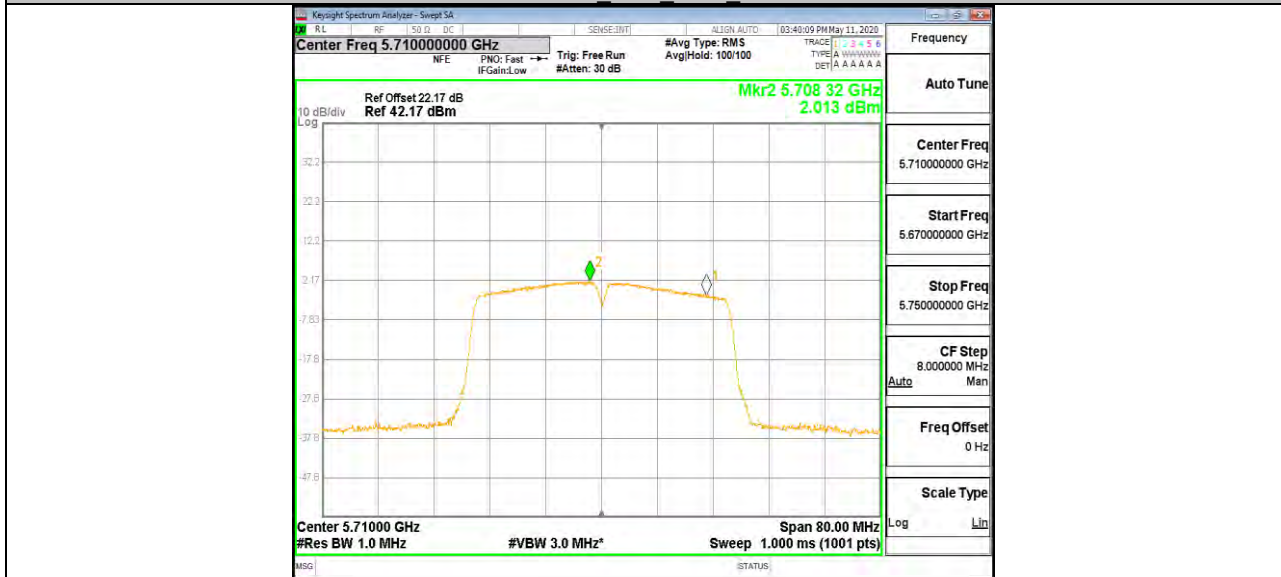
11N40MIMO Ant2 5670



11N40MIMO Ant1 5710 UNII-2C



11N40MIMO Ant2 5710 UNII-2C



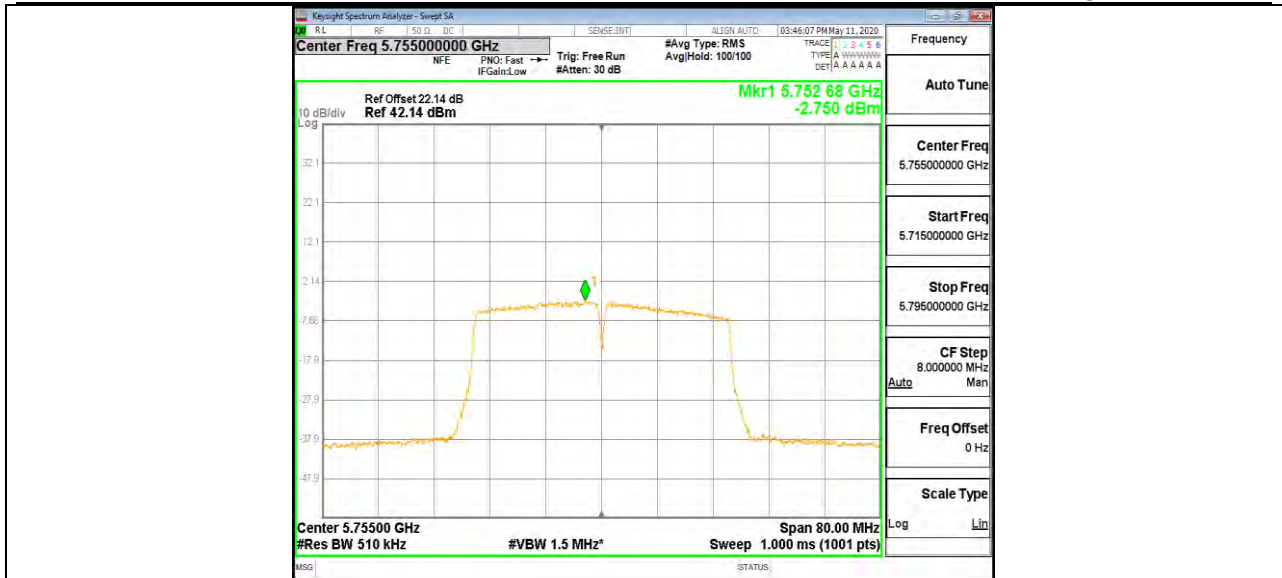
11N40MIMO Ant1 5710 UNII-3



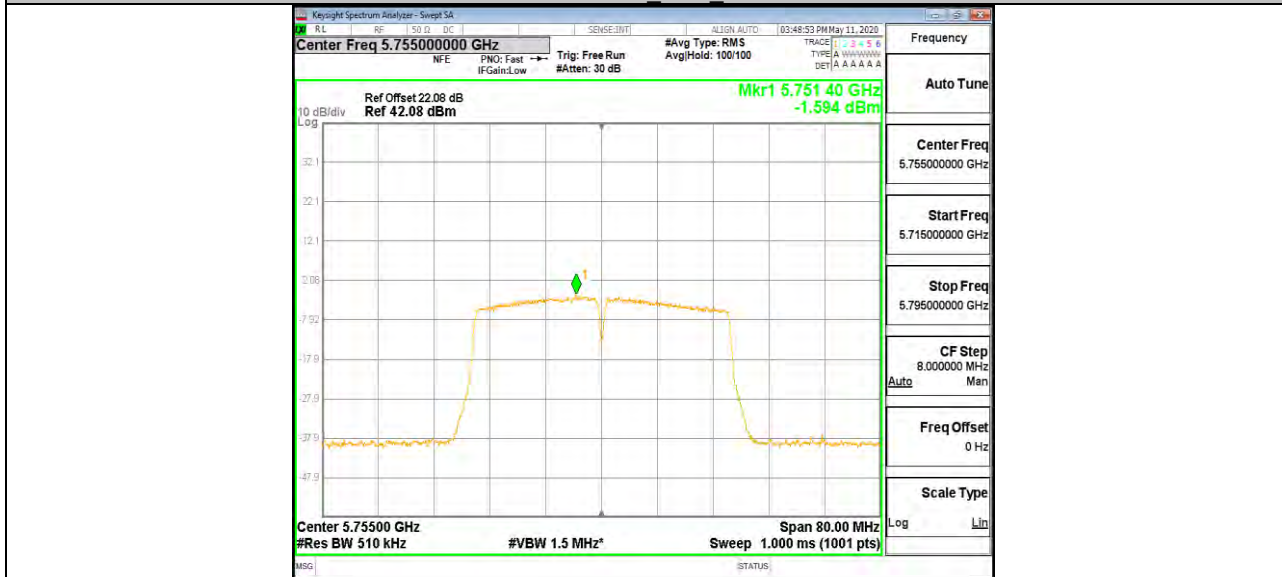
11N40MIMO Ant2 5710 UNII-3



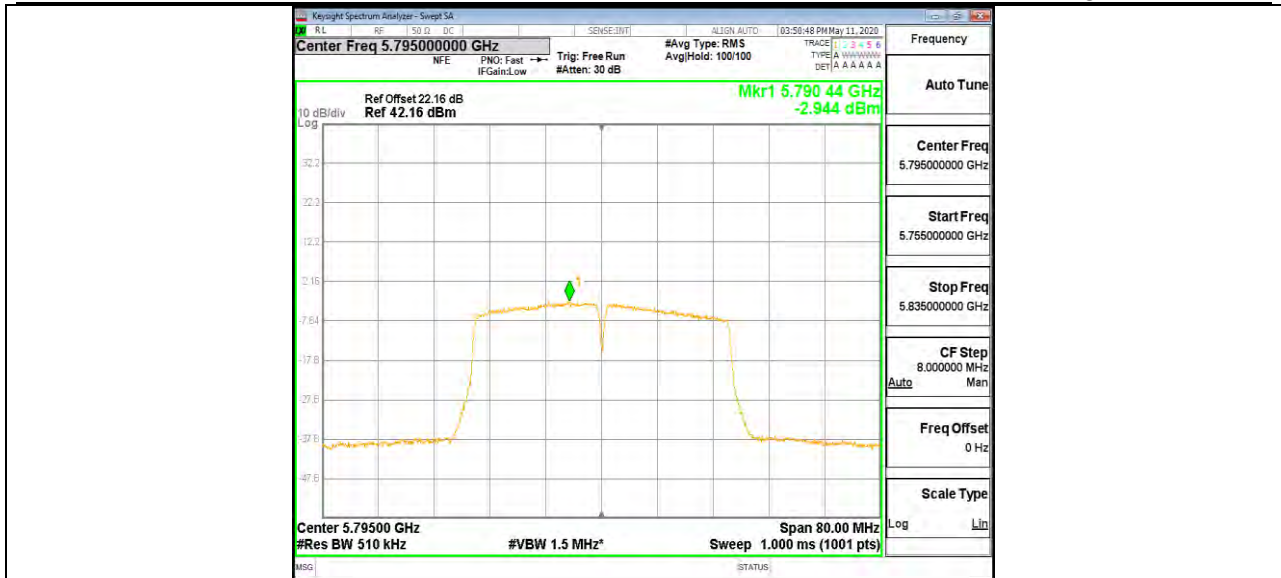
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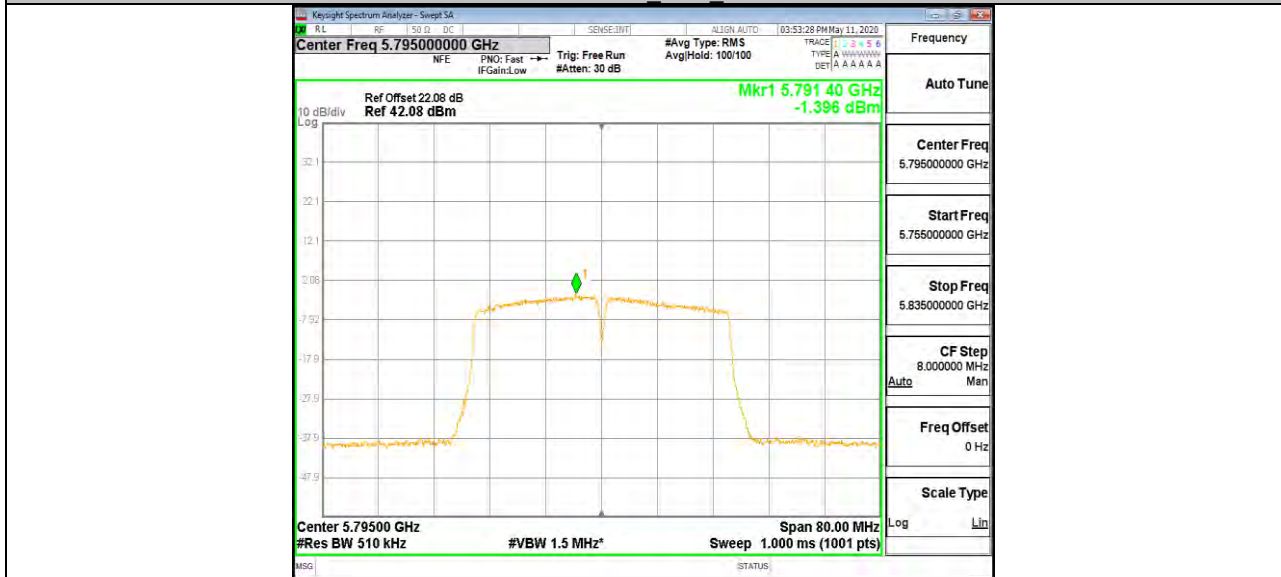
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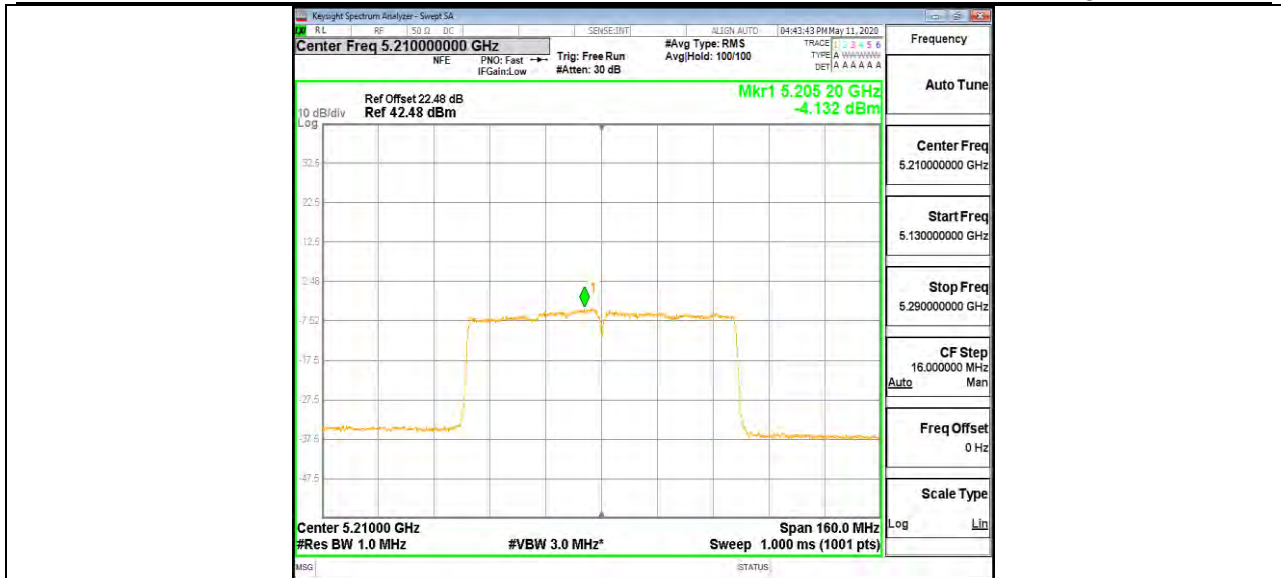
11N40MIMO Ant1 5795



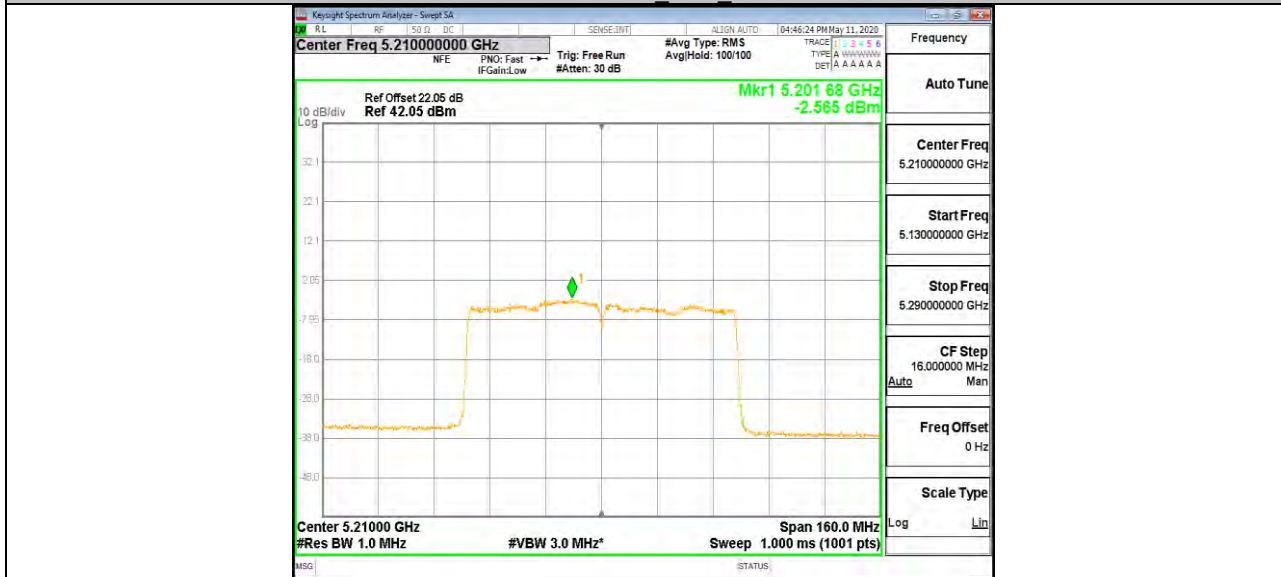
11N40MIMO Ant2 5795



11AC80MIMO Ant1 5210



11AC80MIMO Ant2 5210



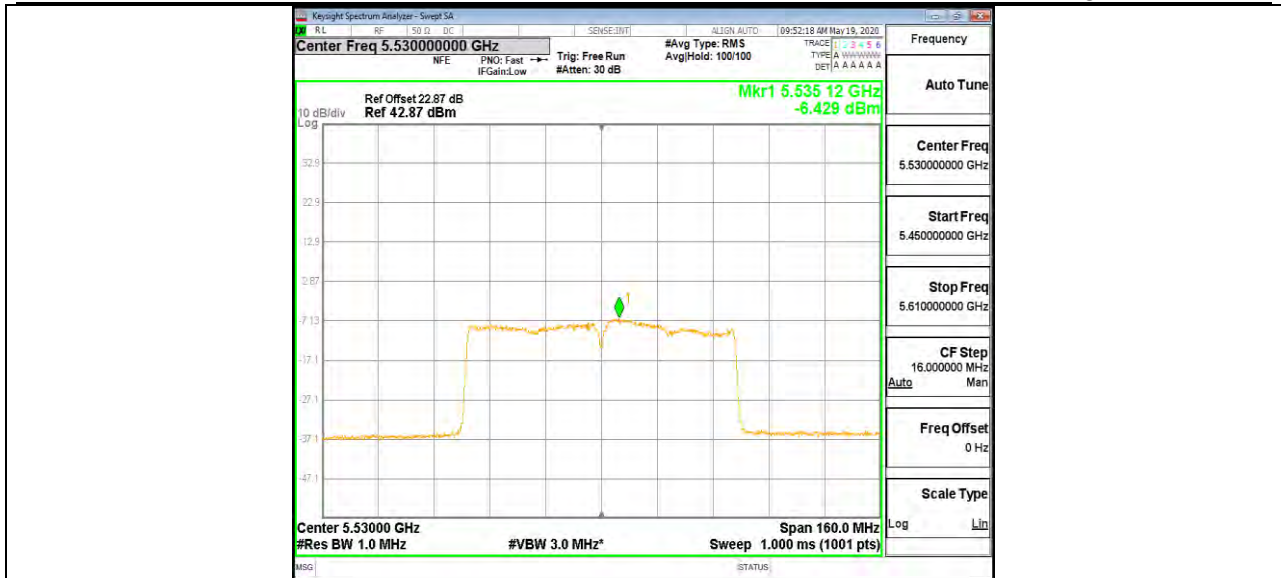
11AC80MIMO Ant1 5290



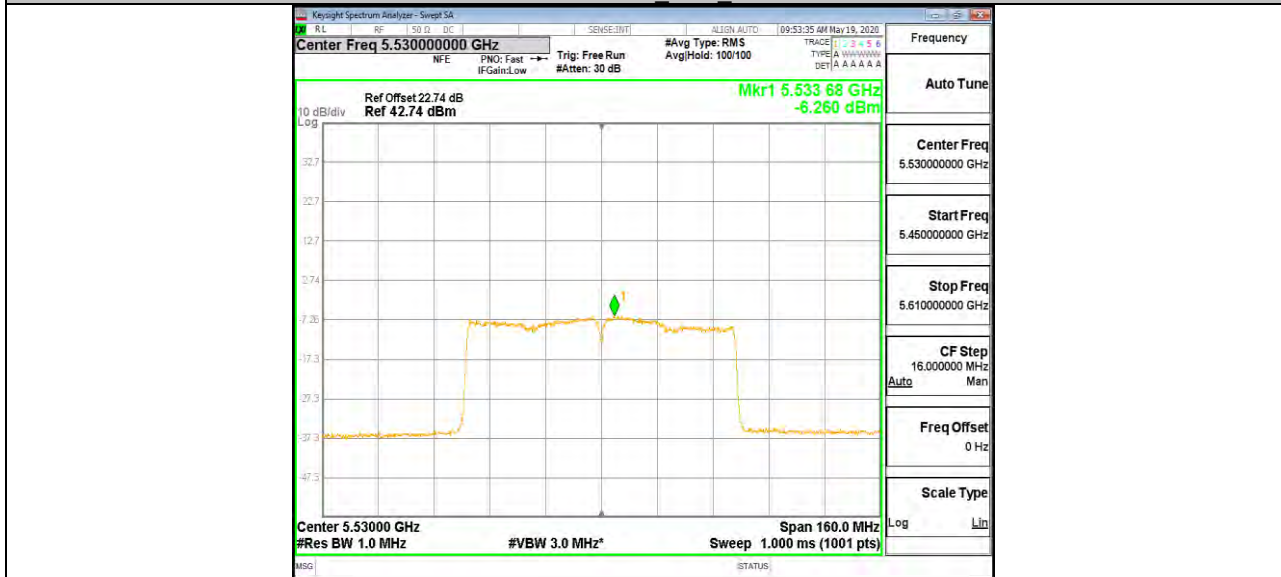
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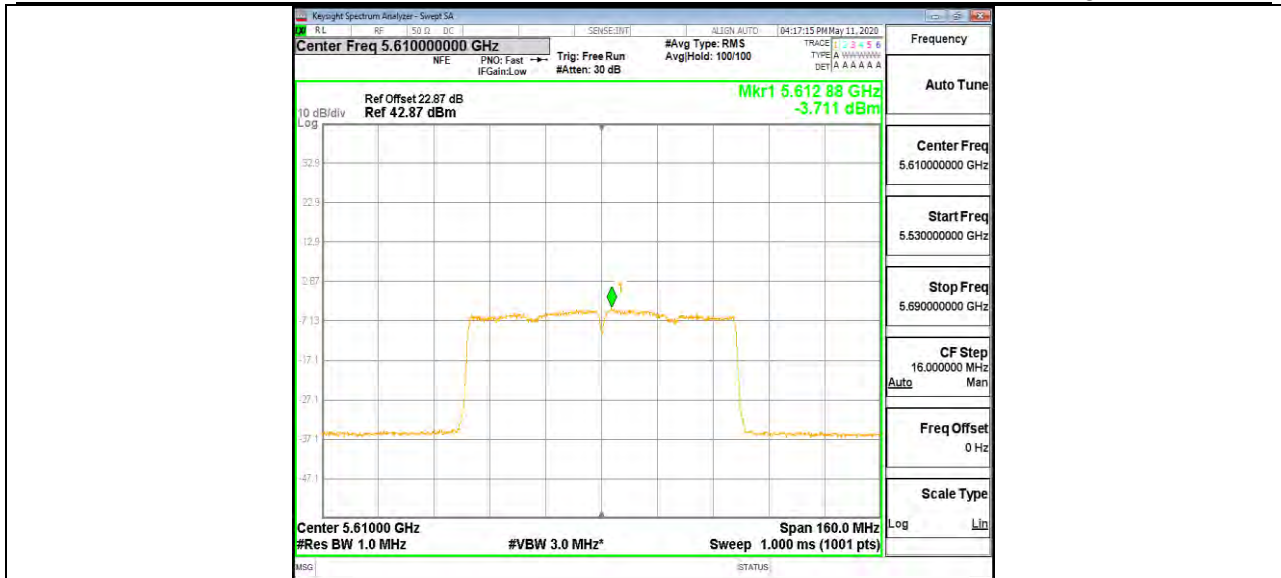
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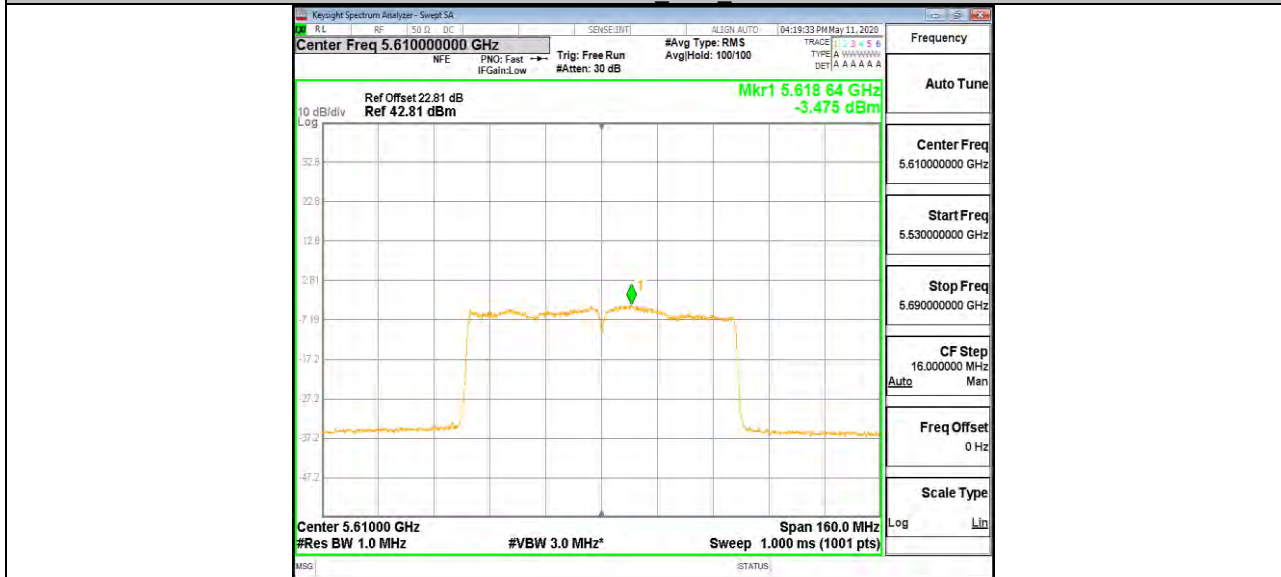
11AC80MIMO Ant2 5530



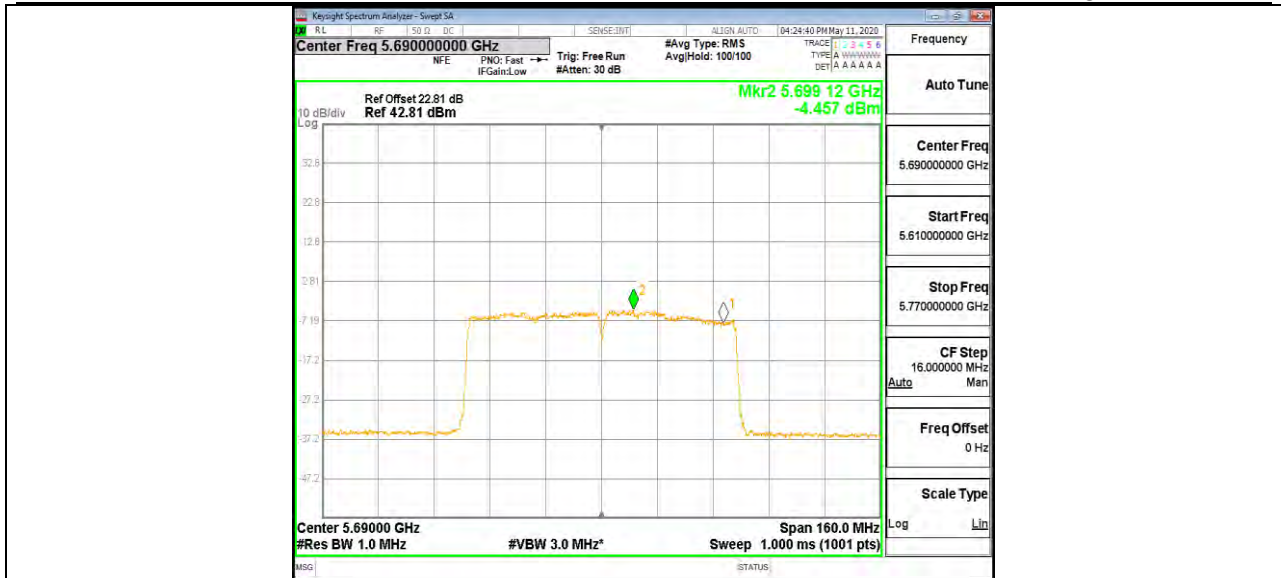
11AC80MIMO Ant1 5610



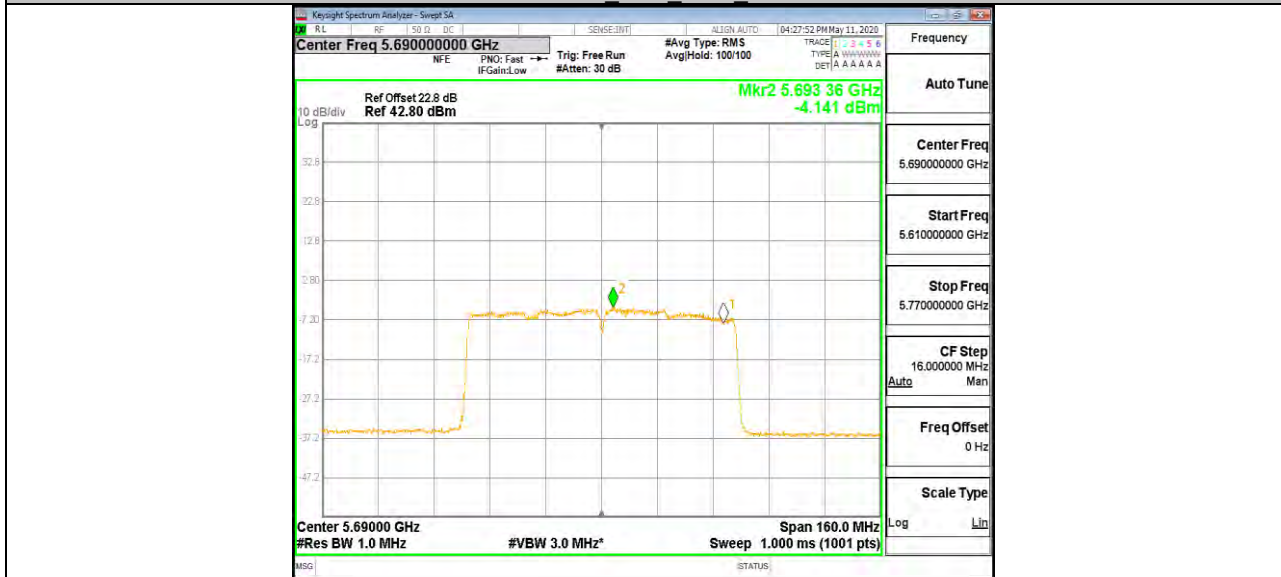
11AC80MIMO Ant2 5610



11AC80MIMO Ant1 5690 UNII-2C



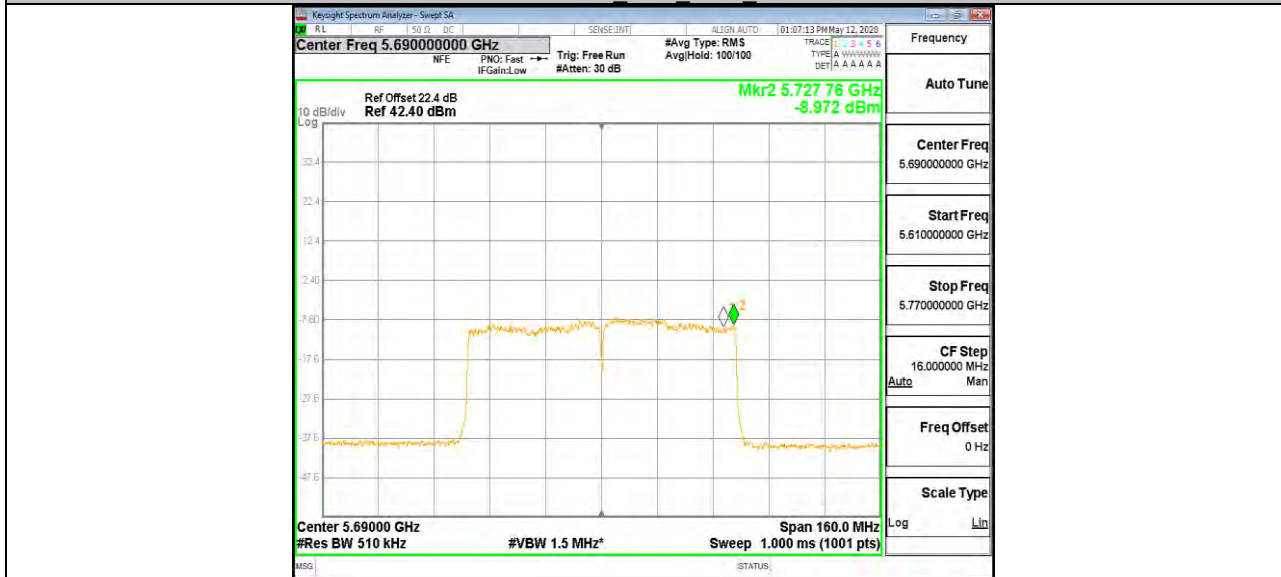
11AC80MIMO Ant2 5690 UNII-2C



11AC80MIMO Ant1 5690 UNII-3



11AC80MIMO Ant2 5690 UNII-3



11AC80MIMO Ant1 5775



11AC80MIMO Ant2 5775





13.6. Appendix D: Duty Cycle

13.6.1. Test Result

Mode	ON Time (ms)	Period (ms)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (KHz)	Final setting For VBW (KHz)
802.11a 20	1.39	1.43	0.9734	97.34%	0.12	0.72	1
802.11n HT20	1.30	1.34	0.9715	97.15%	0.13	0.77	1
802.11n HT40	0.64	0.68	0.9443	94.43%	1.06	1.56	2
802.11 ac VHT80	0.93	1.56	0.5962	59.62%	1.68	1.08	2

Note:

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

Where: x is Duty Cycle (Linear)

Where: T is On Time

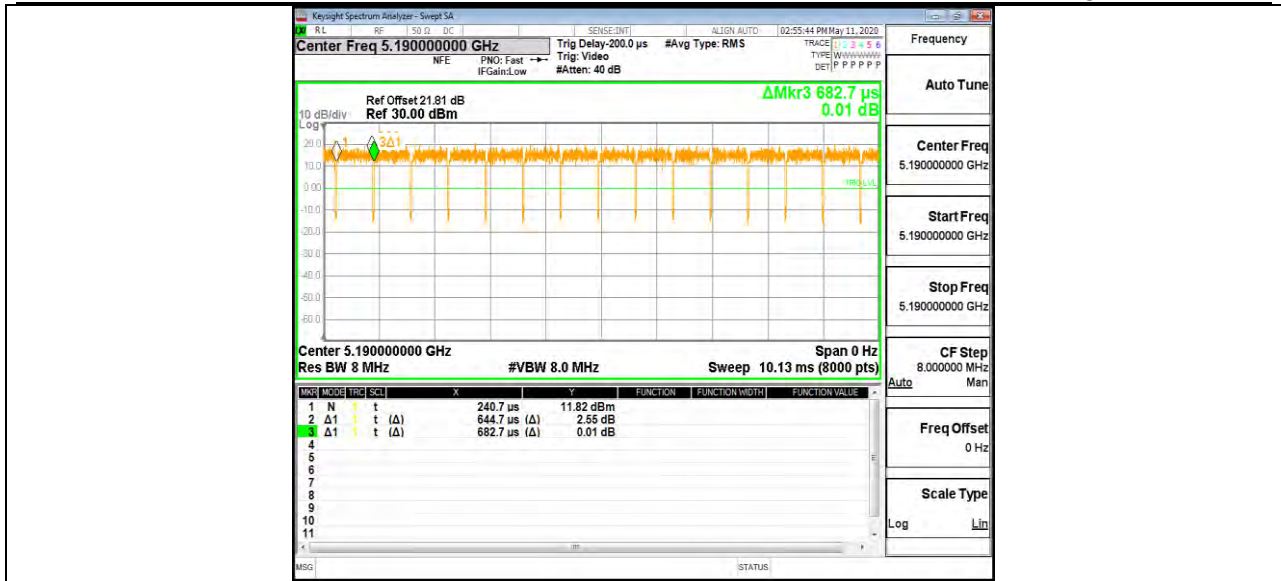
If that calculated VBW is not available on the analyzer then the next higher value should be used.

Antenna 1 and Antenna 2 has the same duty cycle, only Antenna 1 data show here.



13.6.2. Test Graphs





11AC80MIMO Ant1_5210





13.7. Appendix E: Frequency Stability

13.7.1. Test Result

Frequency Error vs. Voltage									
802.11a: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	5200.0198	3.81	5200.0177	3.40	5200.0256	4.92	5200.0179	3.44
TN	VN	5200.0213	4.10	5200.0201	3.87	5200.0213	4.10	5200.0259	4.98
TN	VH	5200.0189	3.63	5200.0178	3.42	5200.0189	3.63	5200.0197	3.79

Frequency Error vs. Temperature									
802.11a: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)
40	VN	5200.0231	4.44	5200.0198	3.81	5200.0180	3.46	5200.0211	4.06
30	VN	5200.0179	3.44	5200.0189	3.63	5200.0199	3.83	5200.0231	4.44
20	VN	5200.0255	4.90	5200.0160	3.08	5200.0186	3.58	5200.0206	3.96
10	VN	5200.0189	3.63	5200.0243	4.67	5200.0170	3.27	5200.0180	3.46
0	VN	5200.0177	3.40	5200.0212	4.08	5200.0211	4.06	5200.0201	3.87

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	5825.0301	5.17	5825.0221	3.79	5825.0211	3.62	5825.0210	3.61
TN	VN	5825.0213	3.66	5825.0140	2.40	5825.0269	4.62	5825.0187	3.21
TN	VH	5825.0188	3.23	5825.0176	3.02	5825.0212	3.64	5825.0231	3.97

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	5825.0199	3.42	5825.0199	3.42	5825.0233	4.00	5825.0311	5.34
30	VN	5825.0209	3.59	5825.0211	3.62	5825.0241	4.14	5825.0312	5.36
20	VN	5825.0145	2.49	5825.0234	4.02	5825.0209	3.59	5825.0288	4.94
10	VN	5825.0311	5.34	5825.0289	4.96	5825.0266	4.57	5825.0266	4.57
0	VN	5825.0289	4.96	5825.0283	4.86	5825.0210	3.61	5825.0239	4.10

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

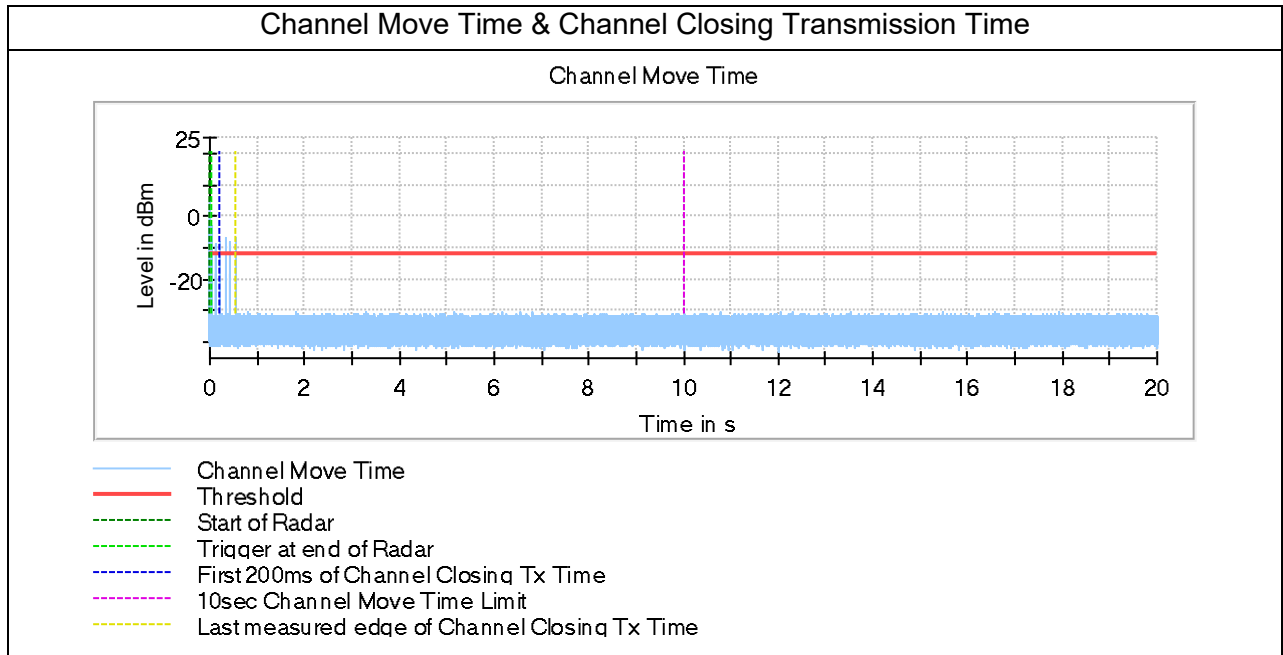


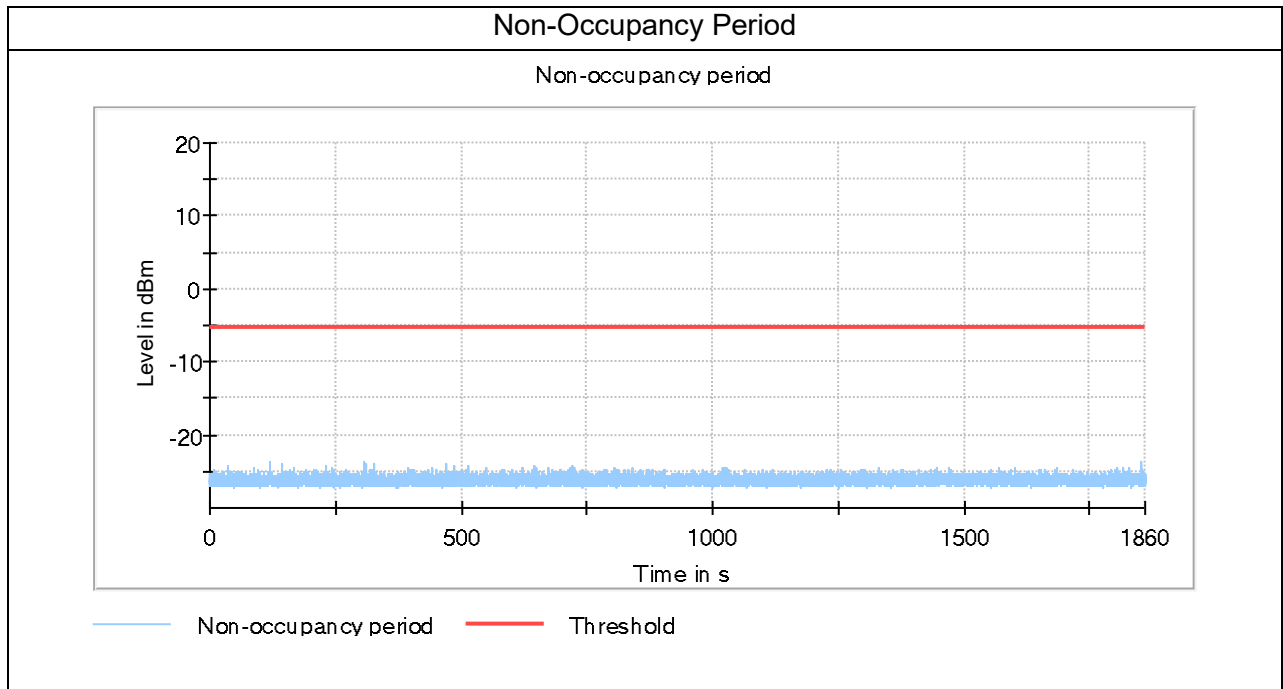
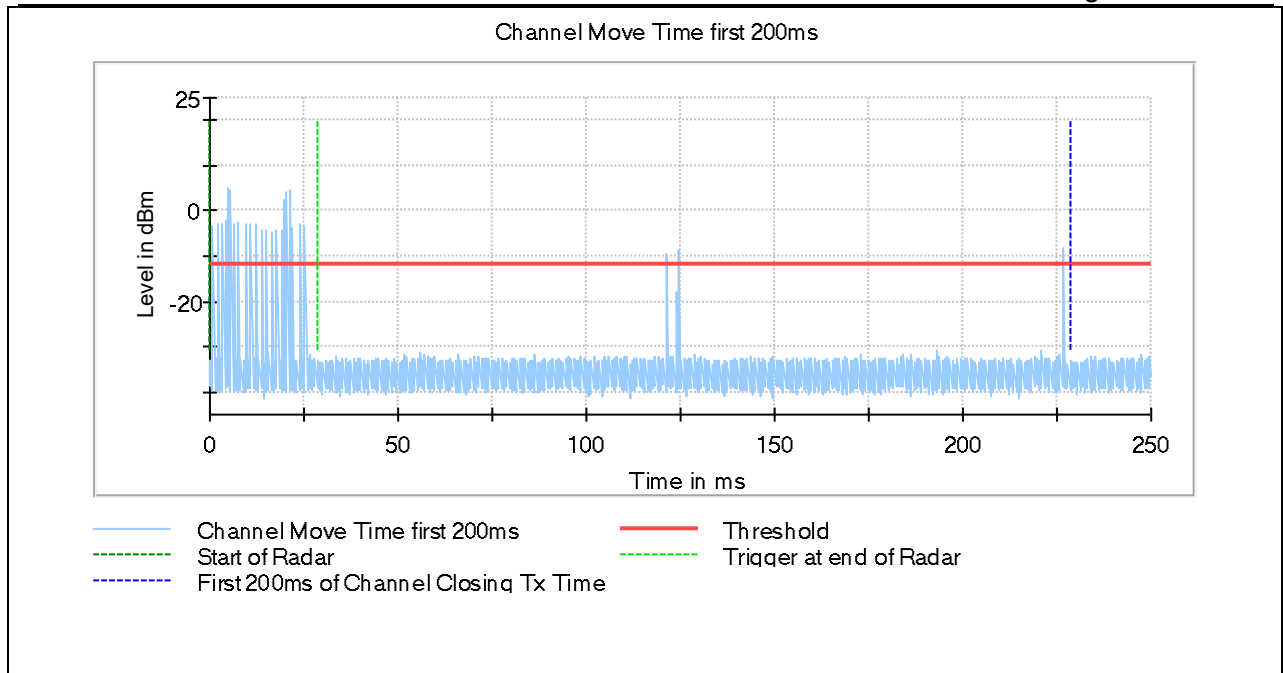
13.8. Appendix F: Dynamic Frequency Selection

13.8.1. Test Result

802.11ac VHT80 Mode

BW/Channel	Test Item	Test Result	Limit	Results
80MHz / 5290MHz	Channel Move Time	0.506S	< 10 s	pass
	Channel Closing Transmission Time	0.024S	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





END OF REPORT