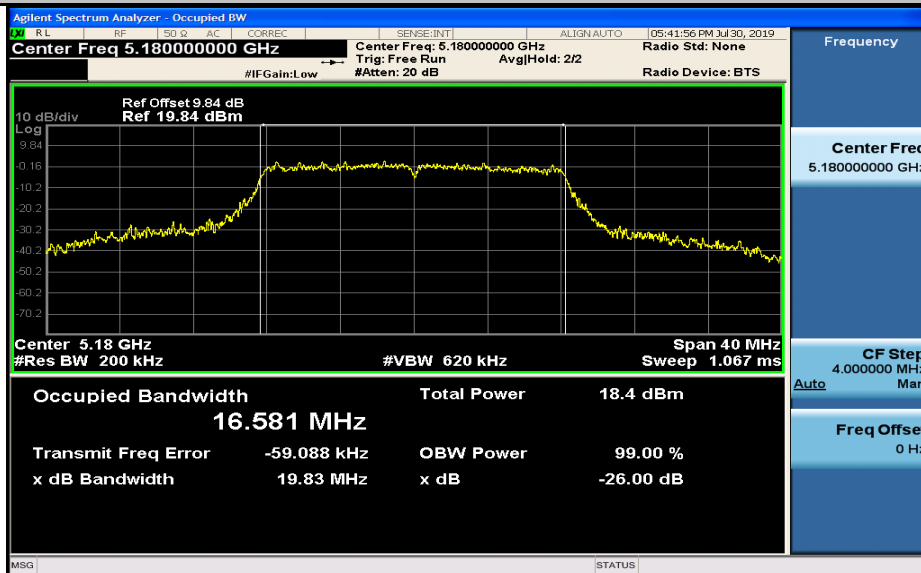


Appendix B SHEM190701519902

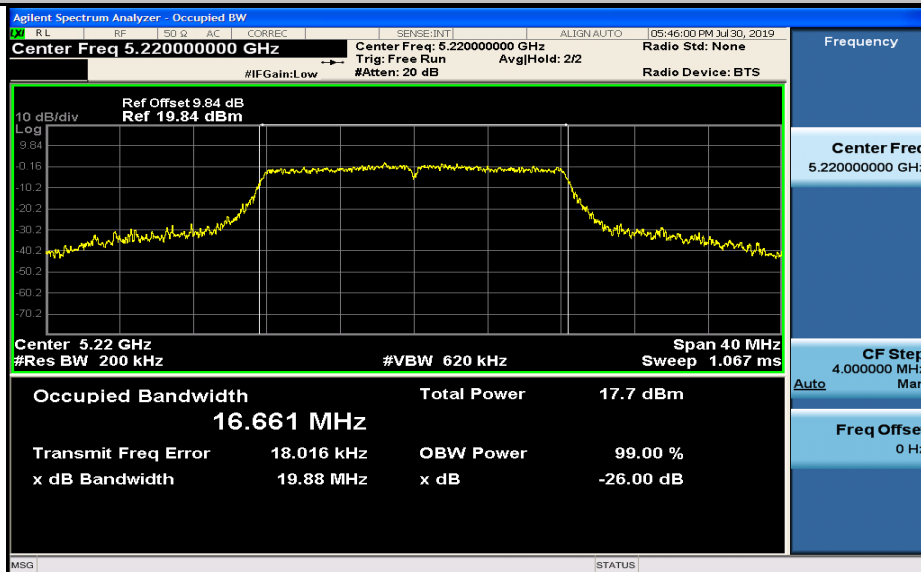
1.(26dB)Emission Bandwidth Measurement

Test Mode	Test Channel	Ant	(26dB)EBW[MHz]	Limit[MHz]	Verdict
11A	5180	Ant1	19.83	---	PASS
11A	5220	Ant1	19.88	---	PASS
11A	5240	Ant1	19.34	---	PASS
11N20	5180	Ant1	19.90	---	PASS
11N20	5220	Ant1	19.92	---	PASS
11N20	5240	Ant1	19.82	---	PASS
11N40	5190	Ant1	39.78	---	PASS
11N40	5230	Ant1	39.79	---	PASS
11AC20	5180	Ant1	19.91	---	PASS
11AC20	5220	Ant1	19.97	---	PASS
11AC20	5240	Ant1	19.97	---	PASS
11AC40	5190	Ant1	39.86	---	PASS
11AC40	5230	Ant1	39.97	---	PASS
11AC80	5210	Ant1	79.55	---	PASS

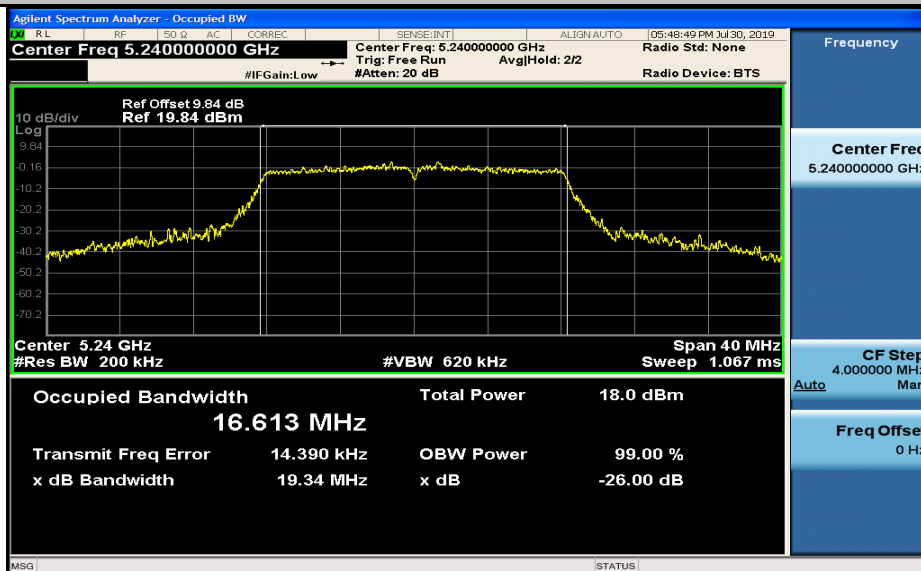
(26dB)Emission Bandwidth Measurement_11A_5180_Ant1



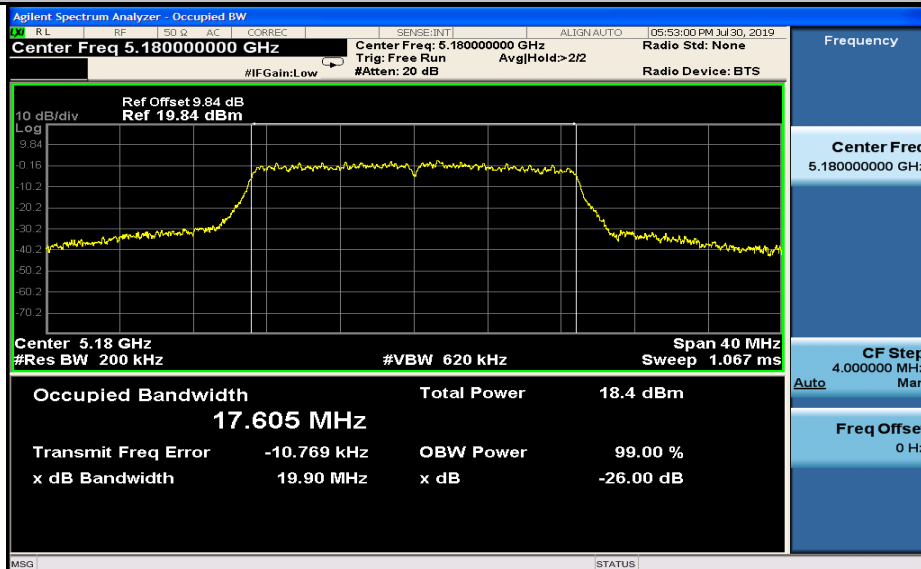
(26dB)Emission Bandwidth Measurement_11A_5220_Ant1



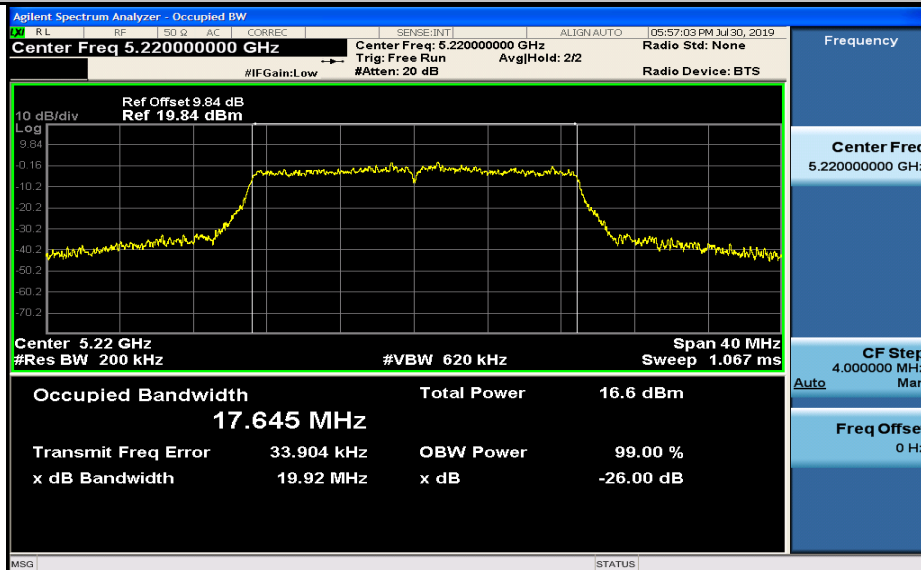
(26dB)Emission Bandwidth Measurement_11A_5240_Ant1



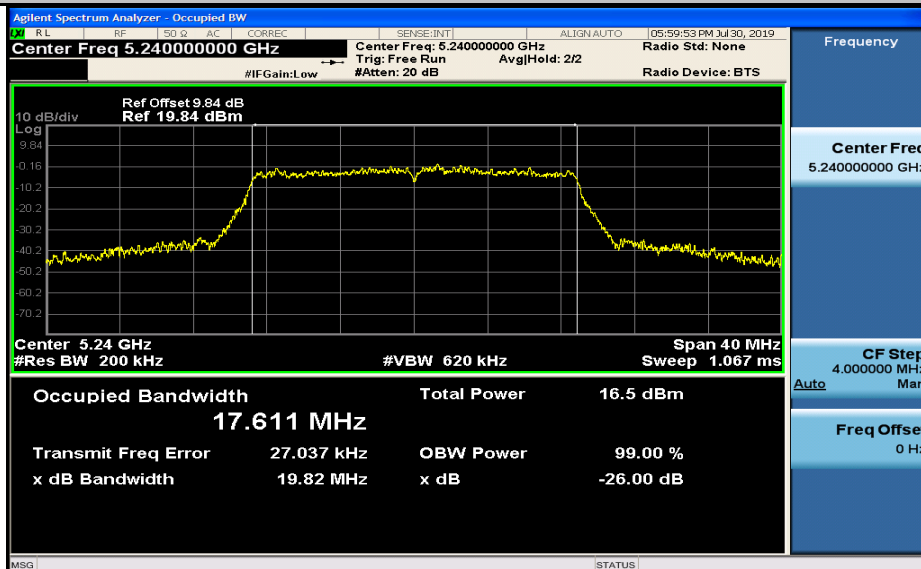
(26dB)Emission Bandwidth Measurement_11N20_5180_Ant1



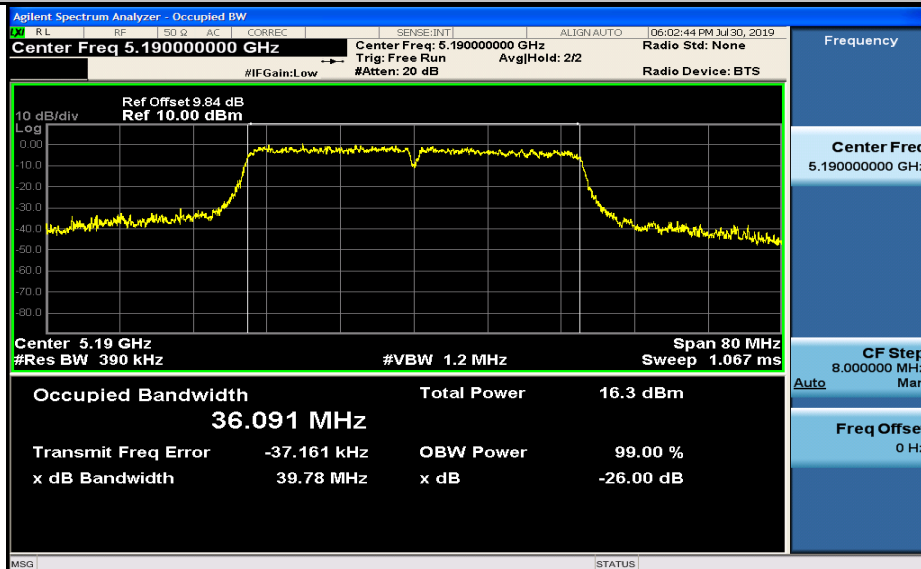
(26dB)Emission Bandwidth Measurement_11N20_5220_Ant1



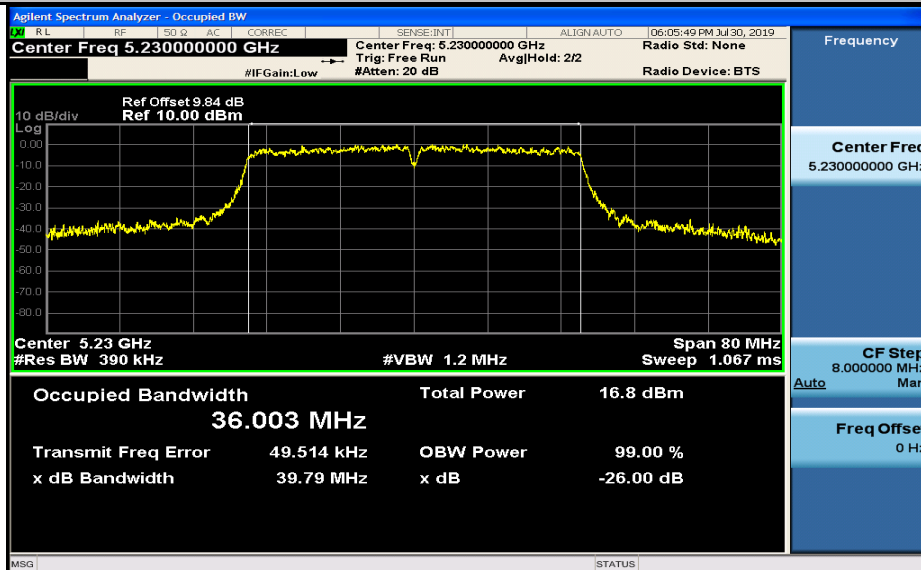
(26dB)Emission Bandwidth Measurement_11N20_5240_Ant1



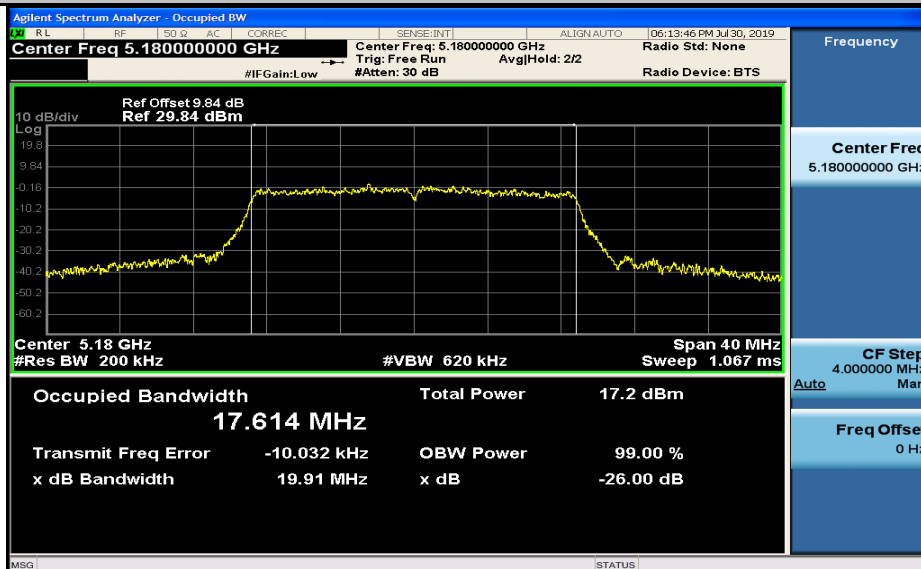
(26dB)Emission Bandwidth Measurement_11N40_5190_Ant1



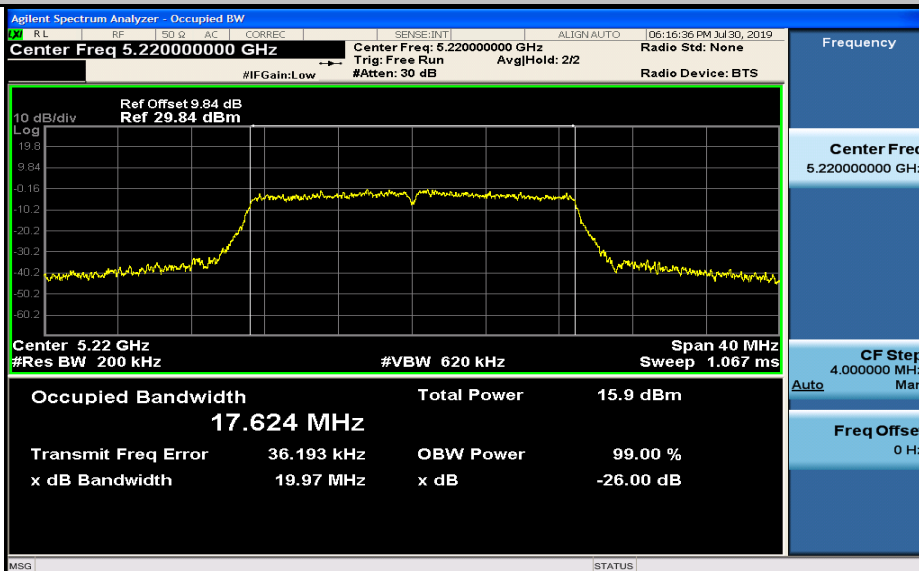
(26dB)Emission Bandwidth Measurement_11N40_5230_Ant1



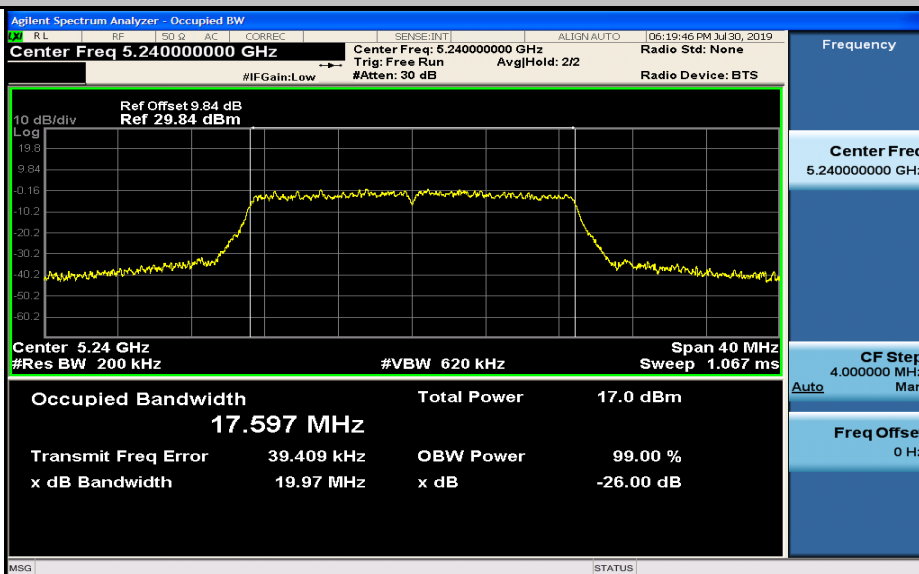
(26dB)Emission Bandwidth Measurement_11AC20_5180_Ant1



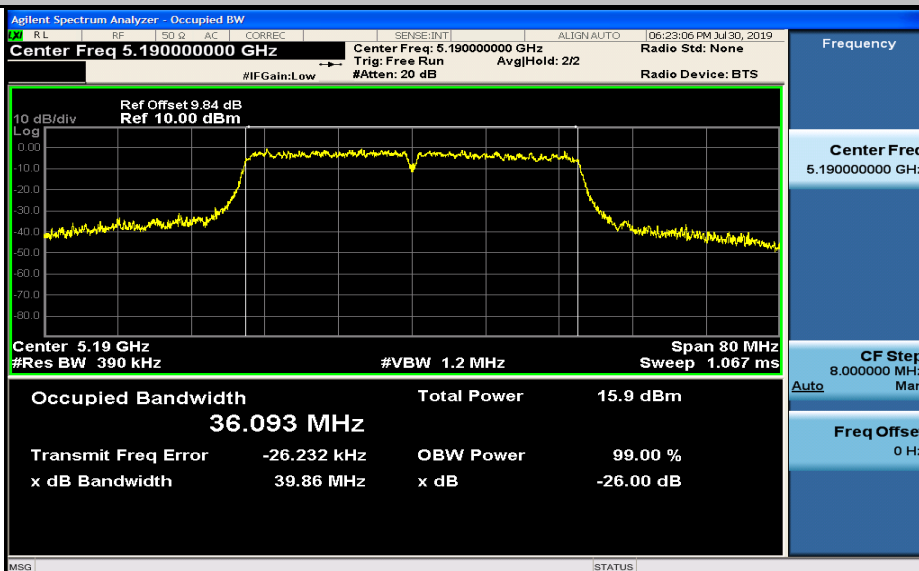
(26dB)Emission Bandwidth Measurement_11AC20_5220_Ant1



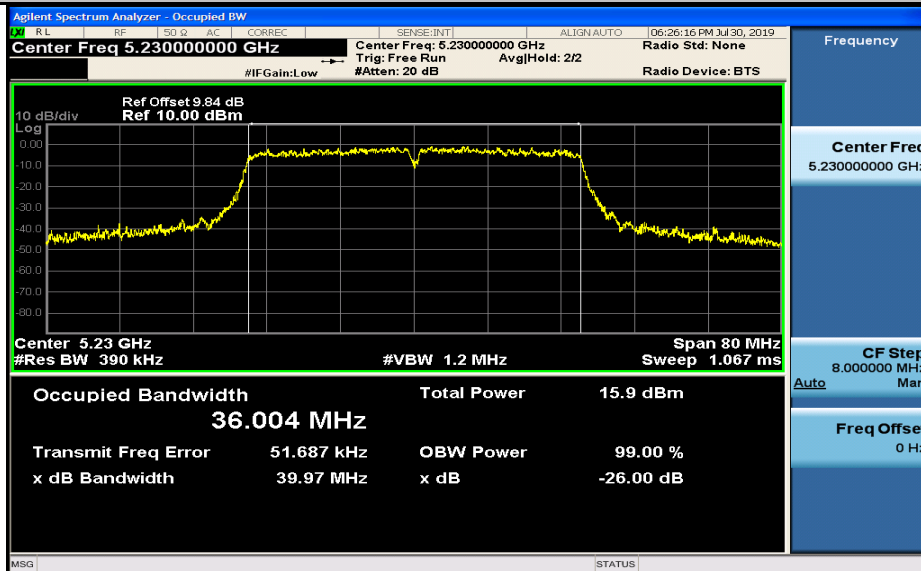
(26dB)Emission Bandwidth Measurement_11AC20_5240_Ant1



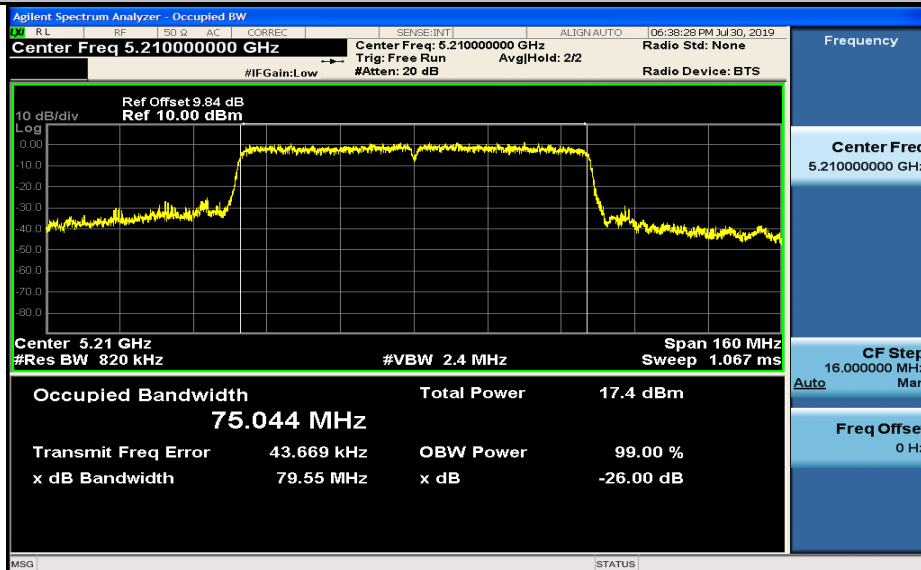
(26dB)Emission Bandwidth Measurement_11AC40_5190_Ant1



(26dB)Emission Bandwidth Measurement_11AC40_5230_Ant1



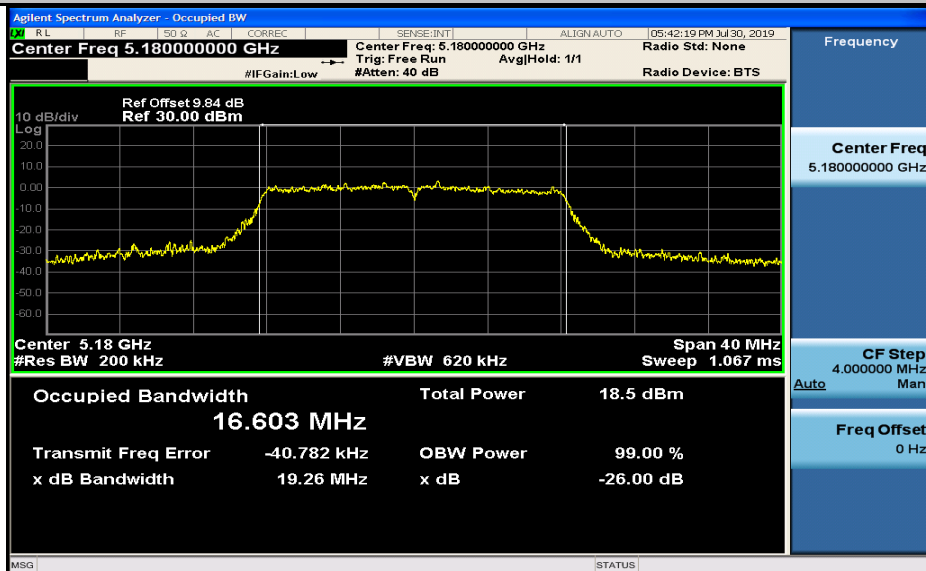
(26dB)Emission Bandwidth Measurement_11AC80_5210_Ant1



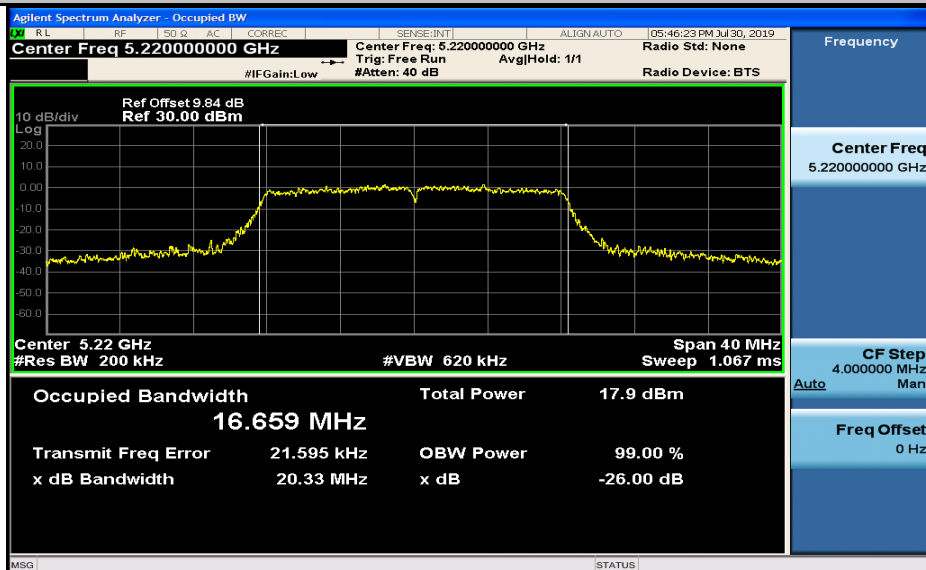
2.Occupied Bandwidth Measurement

Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict
11A	5180	Ant1	16.60	---	PASS
11A	5220	Ant1	16.66	---	PASS
11A	5240	Ant1	16.64	---	PASS
11N20	5180	Ant1	17.62	---	PASS
11N20	5220	Ant1	17.65	---	PASS
11N20	5240	Ant1	17.64	---	PASS
11N40	5190	Ant1	36.17	---	PASS
11N40	5230	Ant1	36.07	---	PASS
11AC20	5180	Ant1	17.62	---	PASS
11AC20	5220	Ant1	17.65	---	PASS
11AC20	5240	Ant1	17.60	---	PASS
11AC40	5190	Ant1	36.14	---	PASS
11AC40	5230	Ant1	36.04	---	PASS
11AC80	5210	Ant1	75.29	---	PASS

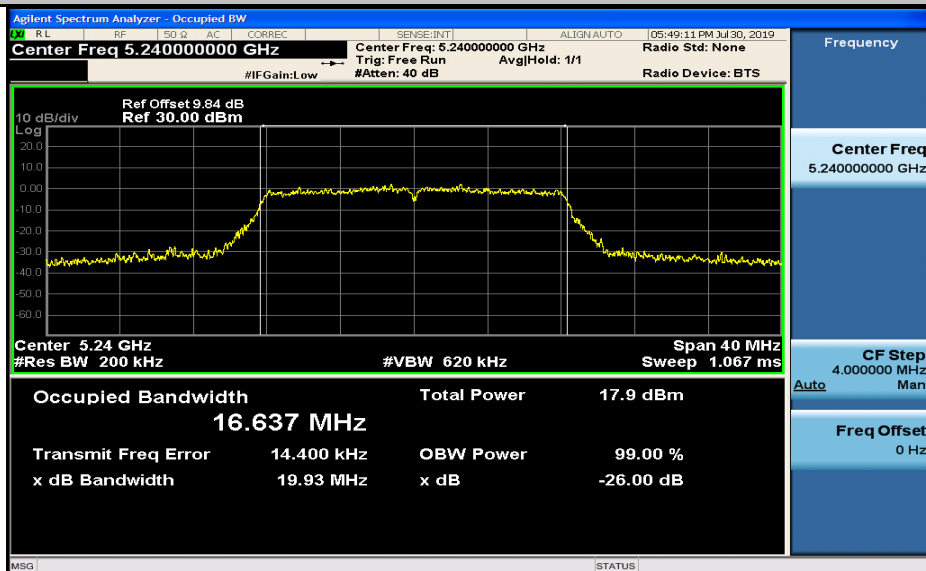
Occupied Bandwidth Measurement_11A_5180_Ant1



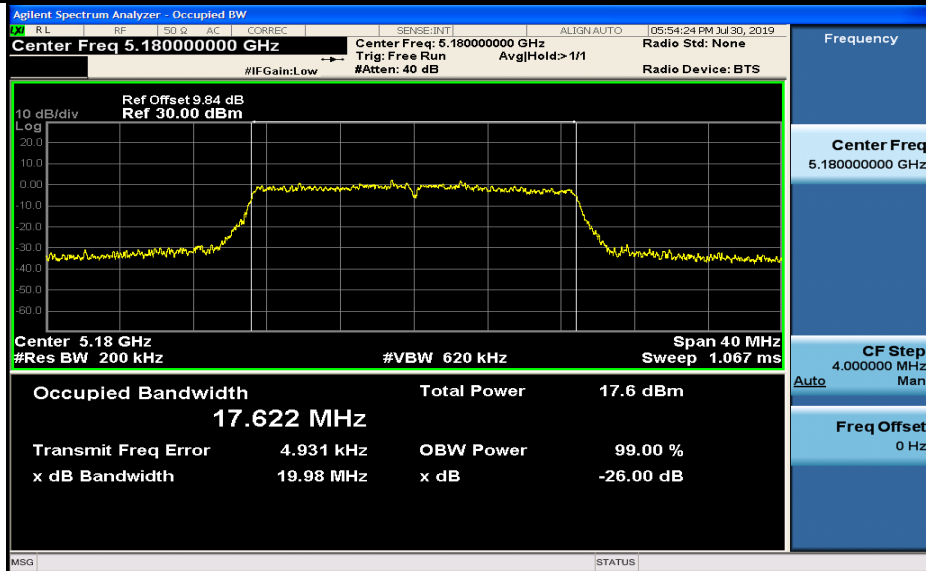
Occupied Bandwidth Measurement_11A_5220_Ant1



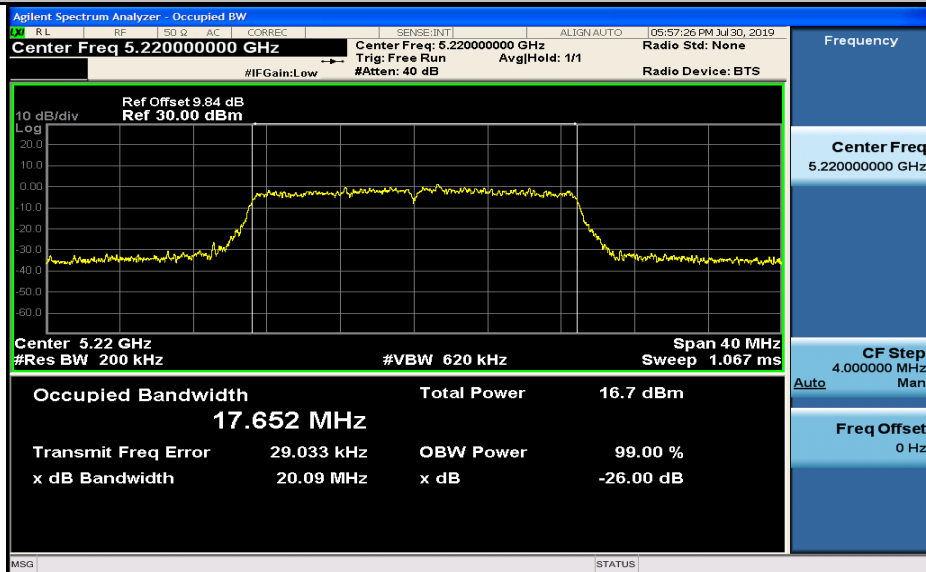
Occupied Bandwidth Measurement_11A_5240_Ant1



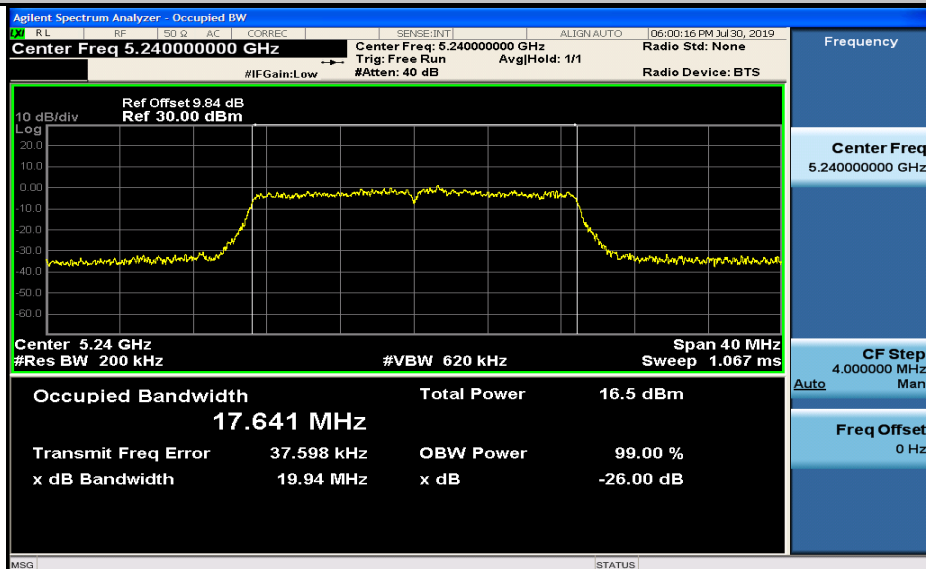
Occupied Bandwidth Measurement_11N20_5180_Ant1



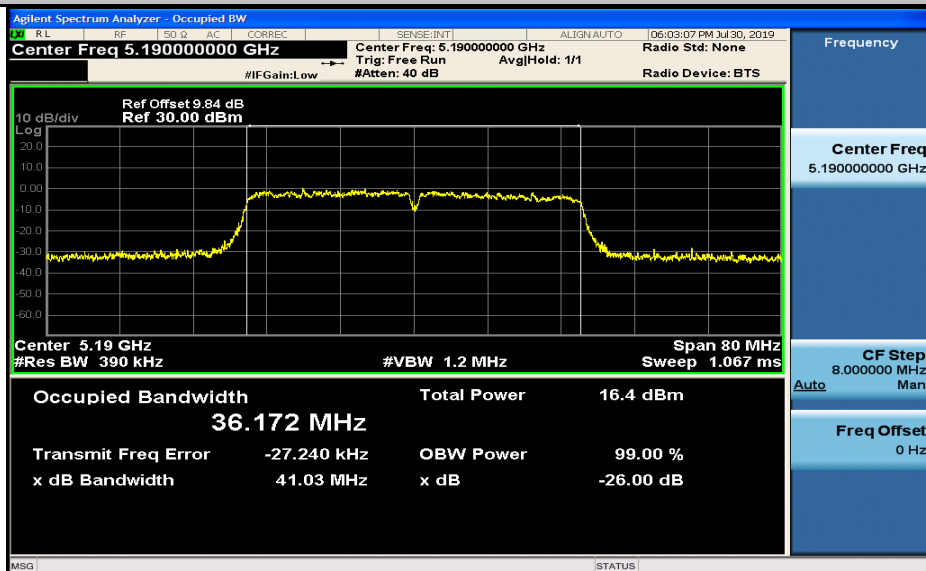
Occupied Bandwidth Measurement_11N20_5220_Ant1



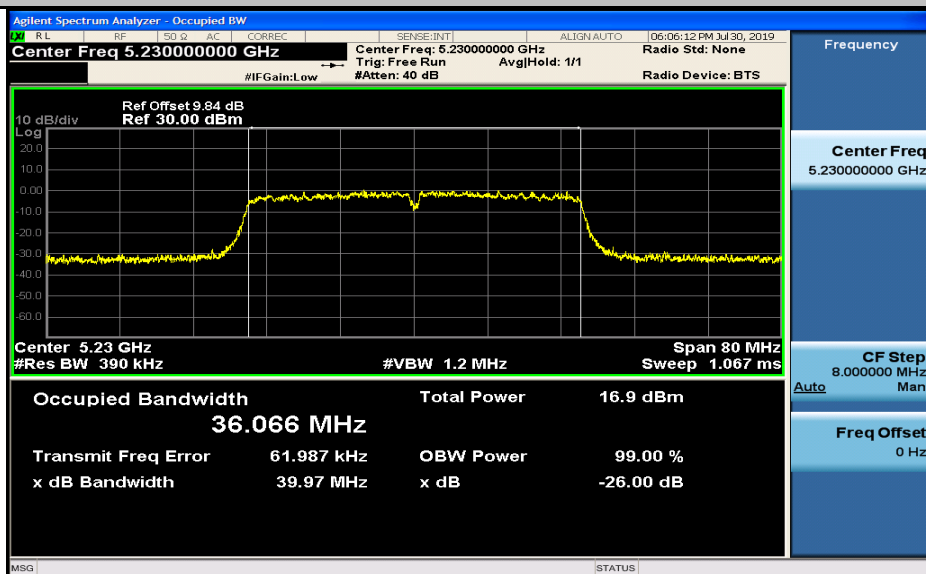
Occupied Bandwidth Measurement_11N20_5240_Ant1



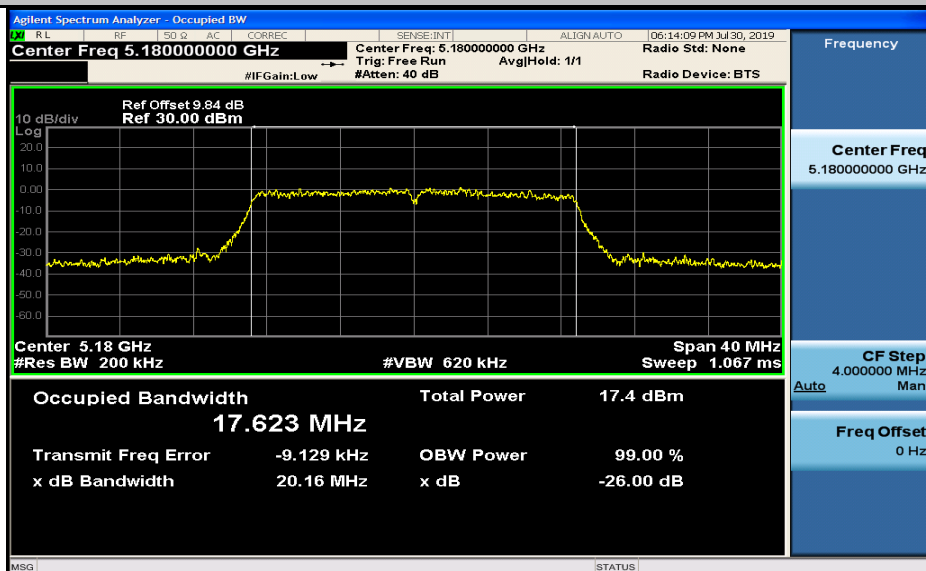
Occupied Bandwidth Measurement_11N40_5190_Ant1



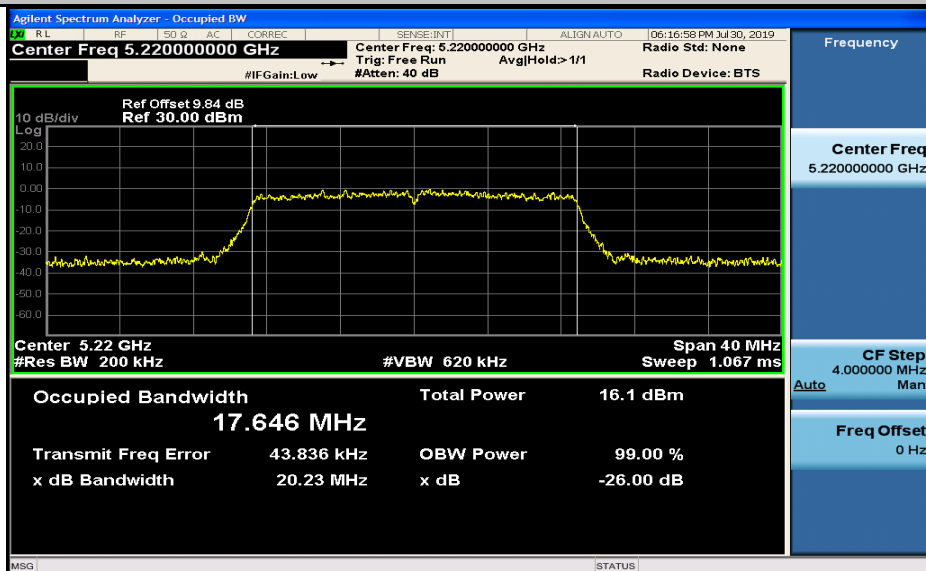
Occupied Bandwidth Measurement_11N40_5230_Ant1



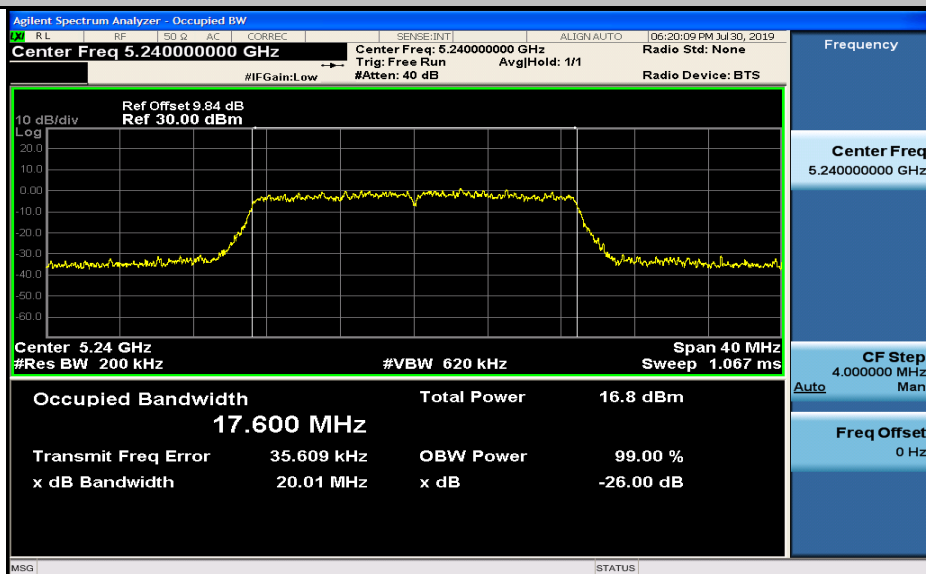
Occupied Bandwidth Measurement_11AC20_5180_Ant1



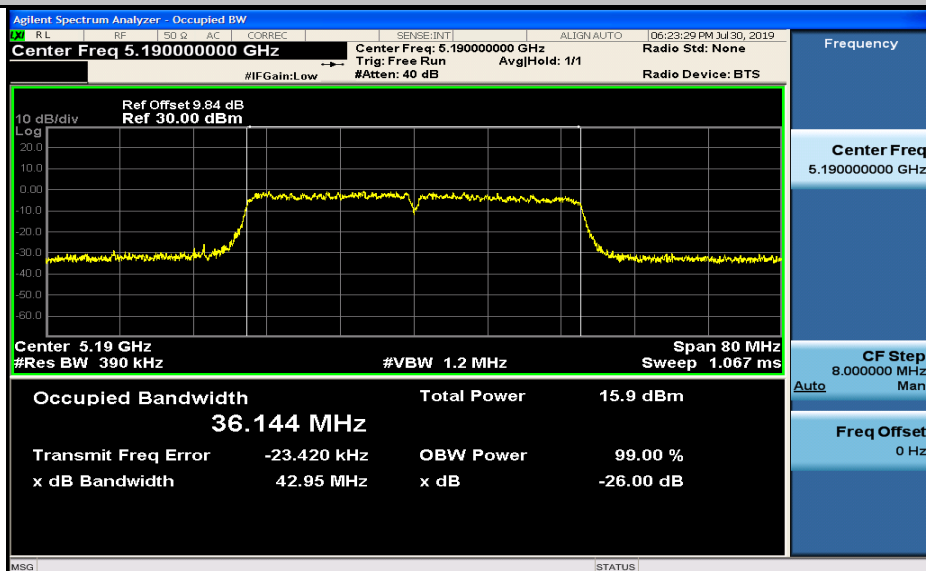
Occupied Bandwidth Measurement_11AC20_5220_Ant1



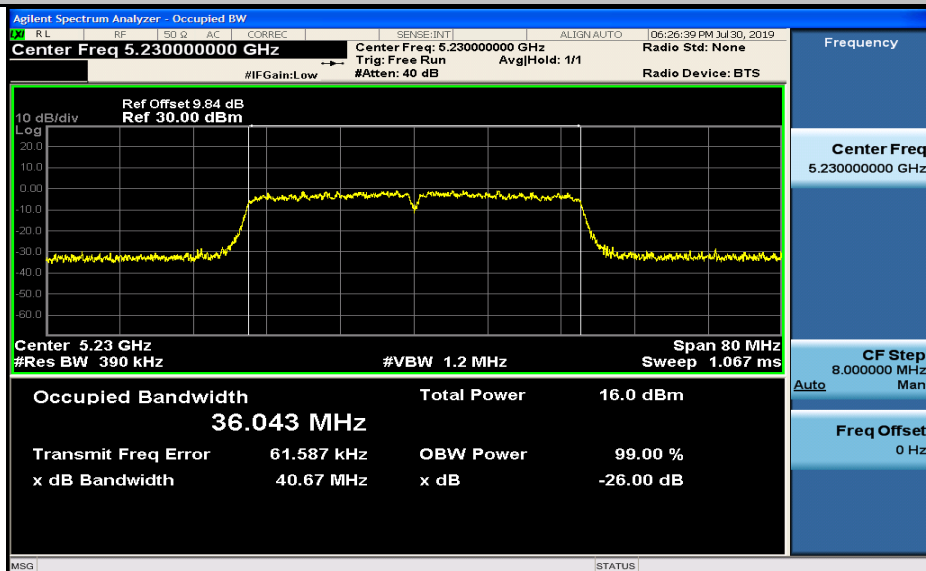
Occupied Bandwidth Measurement_11AC20_5240_Ant1



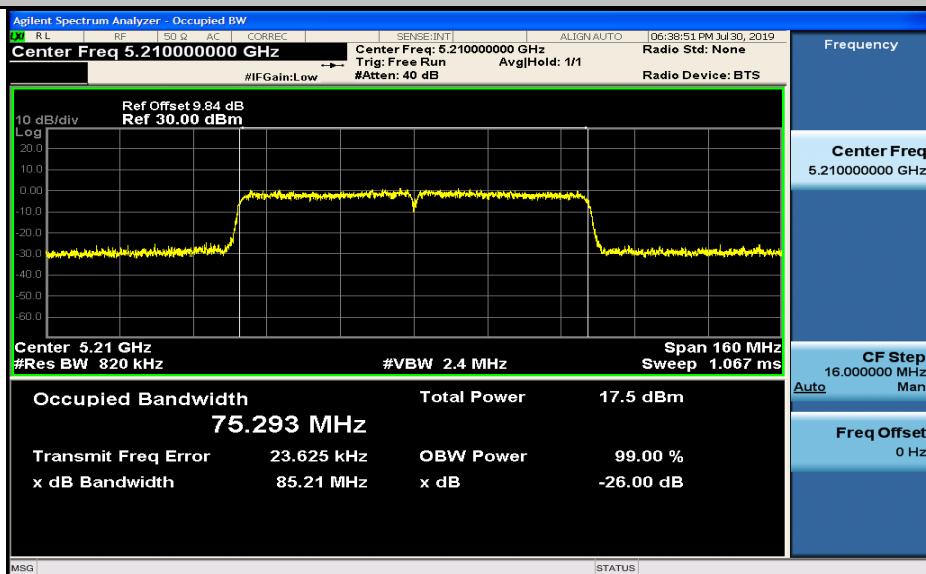
Occupied Bandwidth Measurement_11AC40_5190_Ant1



Occupied Bandwidth Measurement_11AC40_5230_Ant1



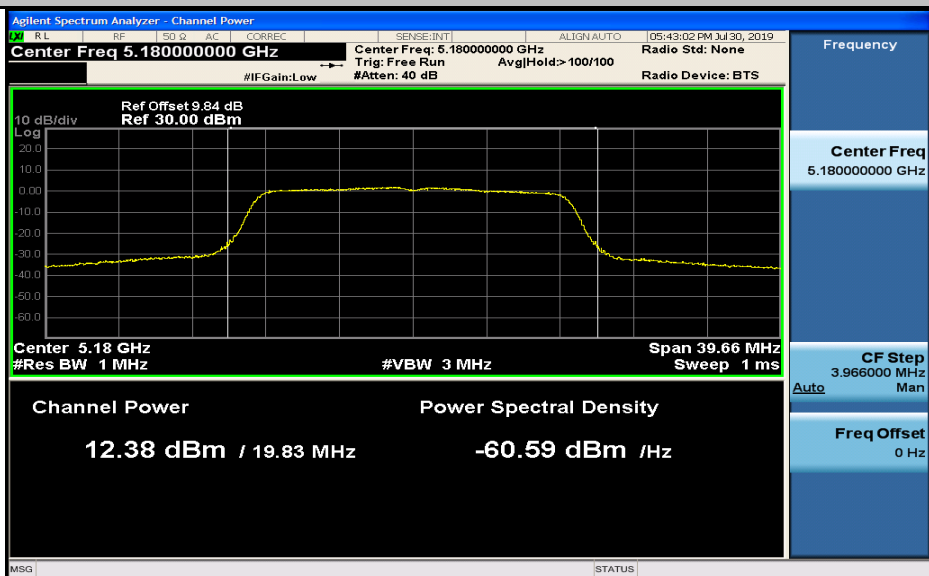
Occupied Bandwidth Measurement_11AC80_5210_Ant1



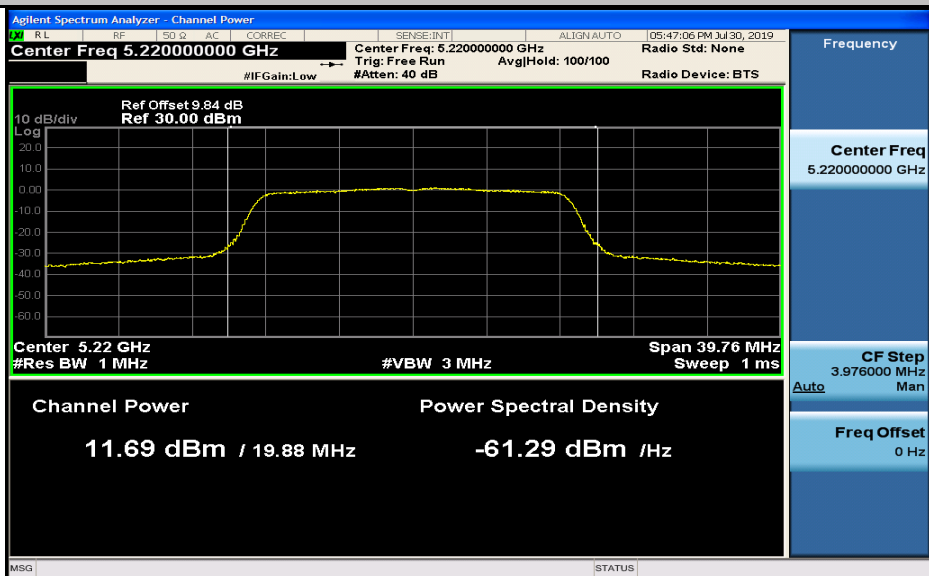
3.Maximum Conduct Output Power

Test Mode	Test Channel	Ant	Level [dBm]	10log(1/x) Factor [dB]	Power [dBm]	Limit [dBm]	Verdict
11A	5180	Ant1	12.38	0.00	12.38	23.98	PASS
11A	5220	Ant1	11.69	0.00	11.69	23.98	PASS
11A	5240	Ant1	11.61	0.00	11.61	23.98	PASS
11N20	5180	Ant1	11.4	0.00	11.4	23.98	PASS
11N20	5220	Ant1	10.35	0.00	10.35	23.98	PASS
11N20	5240	Ant1	10.04	0.00	10.04	23.98	PASS
11N40	5190	Ant1	10.11	0.00	10.11	23.98	PASS
11N40	5230	Ant1	10.47	0.00	10.47	23.98	PASS
11AC20	5180	Ant1	11.14	0.00	11.14	23.98	PASS
11AC20	5220	Ant1	9.81	0.00	9.81	23.98	PASS
11AC20	5240	Ant1	10.15	0.00	10.15	23.98	PASS
11AC40	5190	Ant1	9.56	0.00	9.56	23.98	PASS
11AC40	5230	Ant1	9.47	0.00	9.47	23.98	PASS
11AC80	5210	Ant1	9.09	0.00	9.09	23.98	PASS

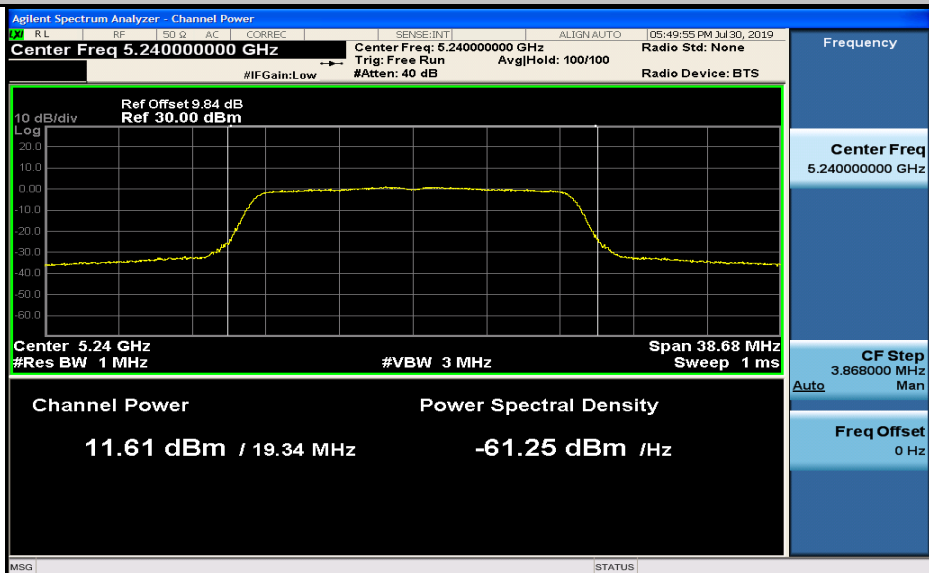
Maximum Conduct Output Power_11A_5180_Ant1



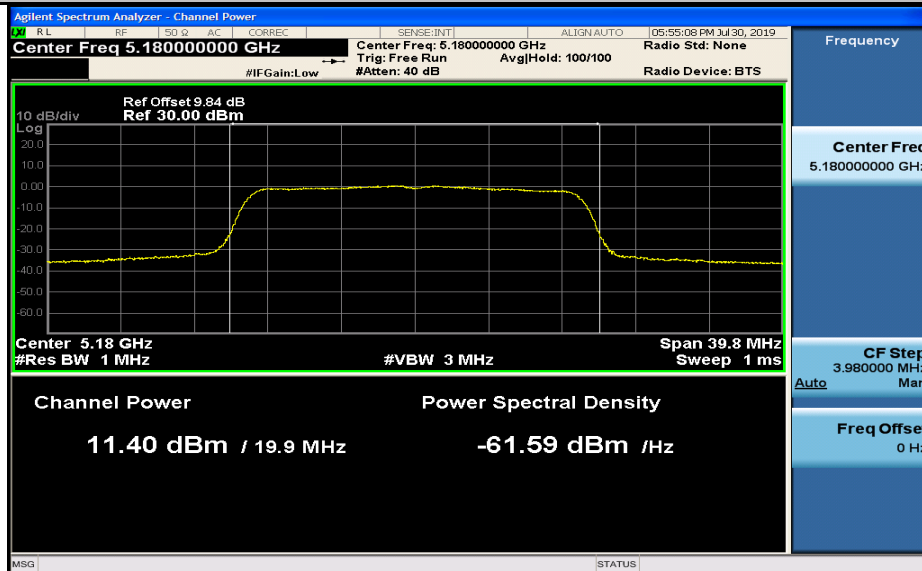
Maximum Conduct Output Power_11A_5220_Ant1



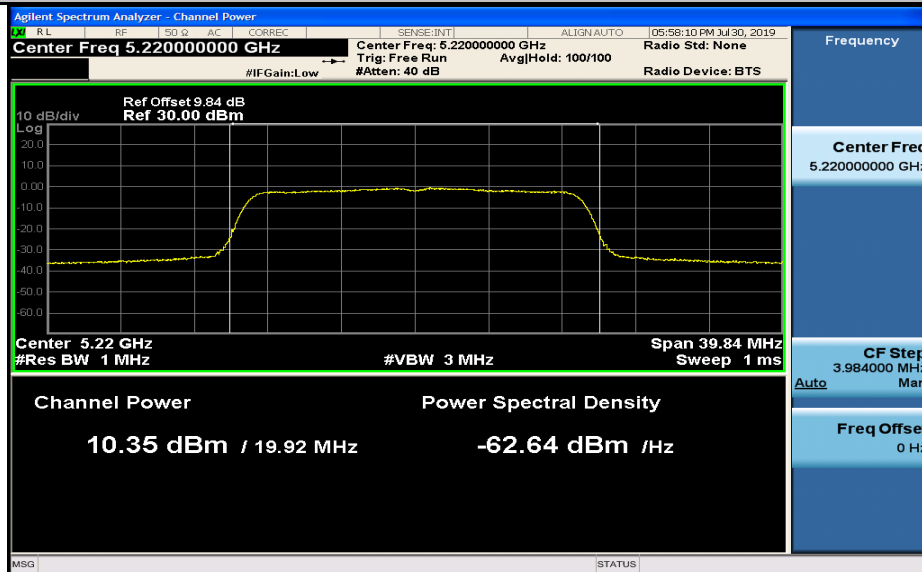
Maximum Conduct Output Power_11A_5240_Ant1



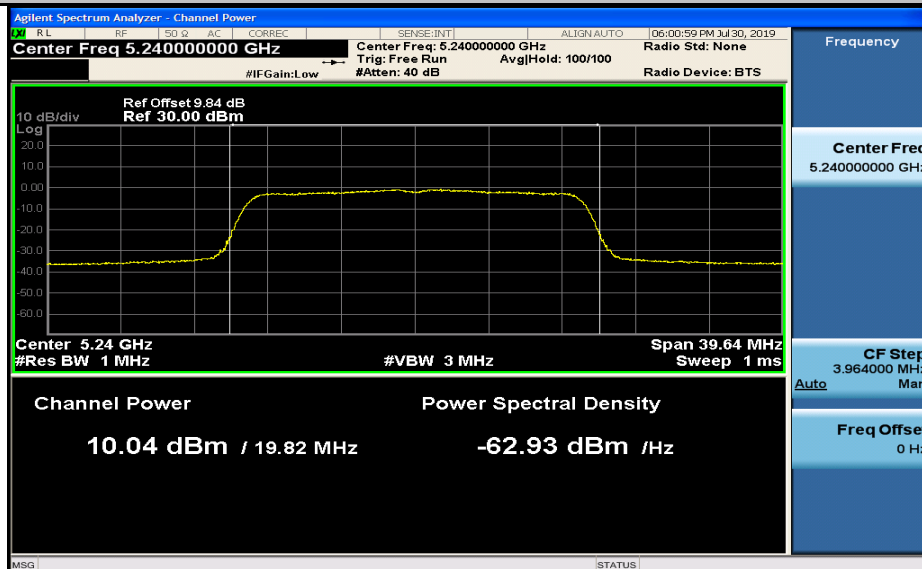
Maximum Conduct Output Power_11N20_5180_Ant1



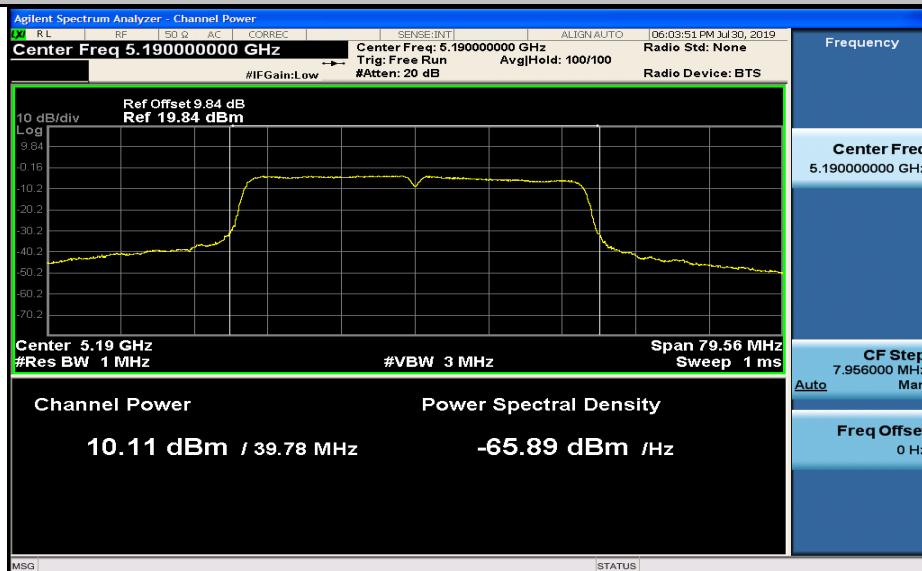
Maximum Conduct Output Power_11N20_5220_Ant1



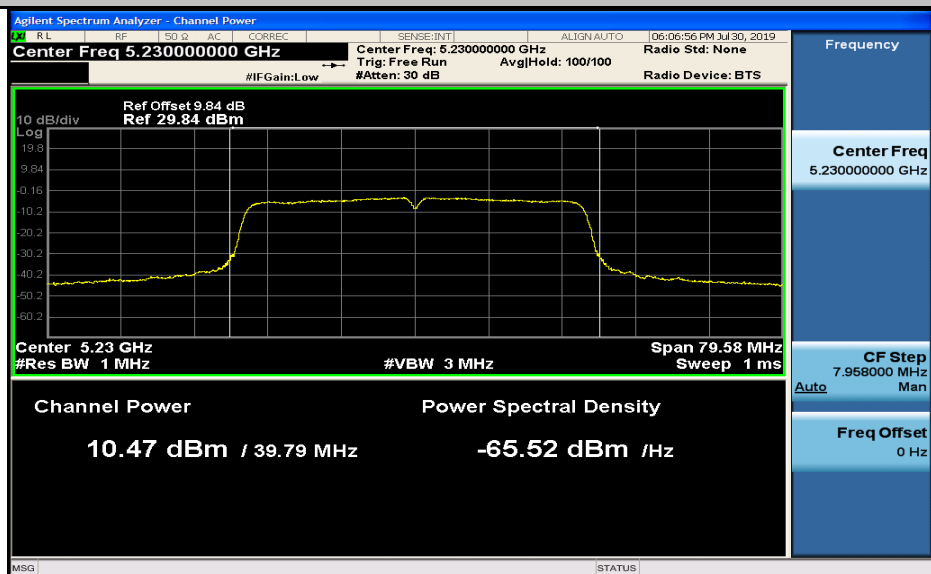
Maximum Conduct Output Power_11N20_5240_Ant1



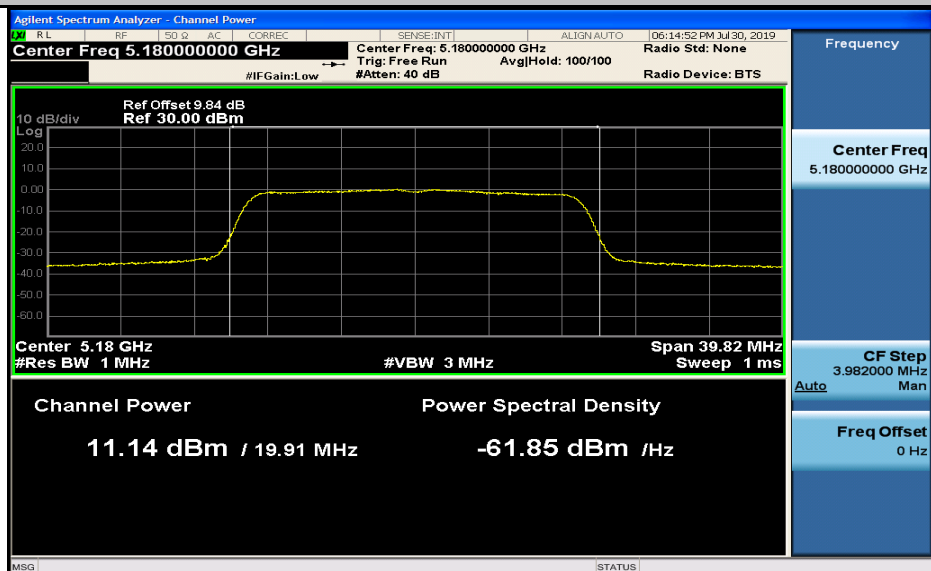
Maximum Conduct Output Power_11N40_5190_Ant1



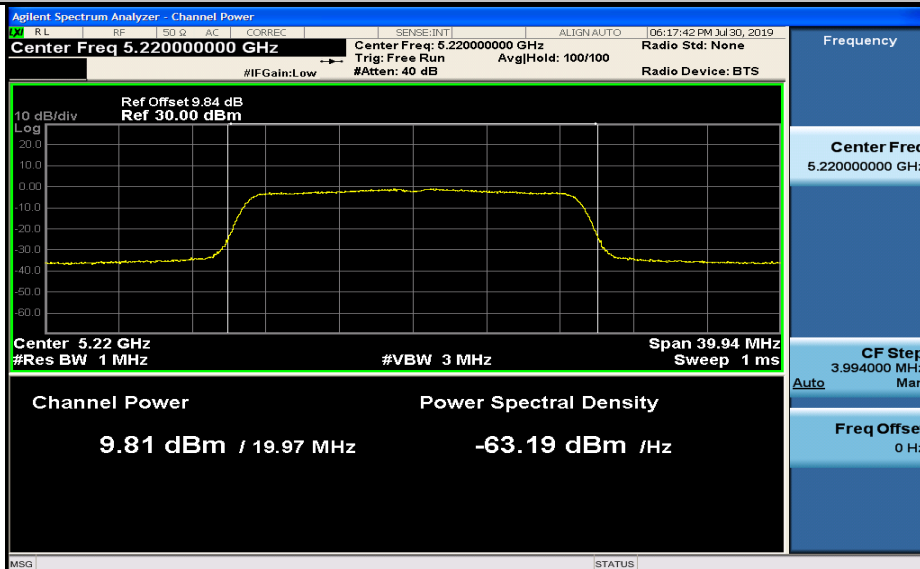
Maximum Conduct Output Power_11N40_5230_Ant1



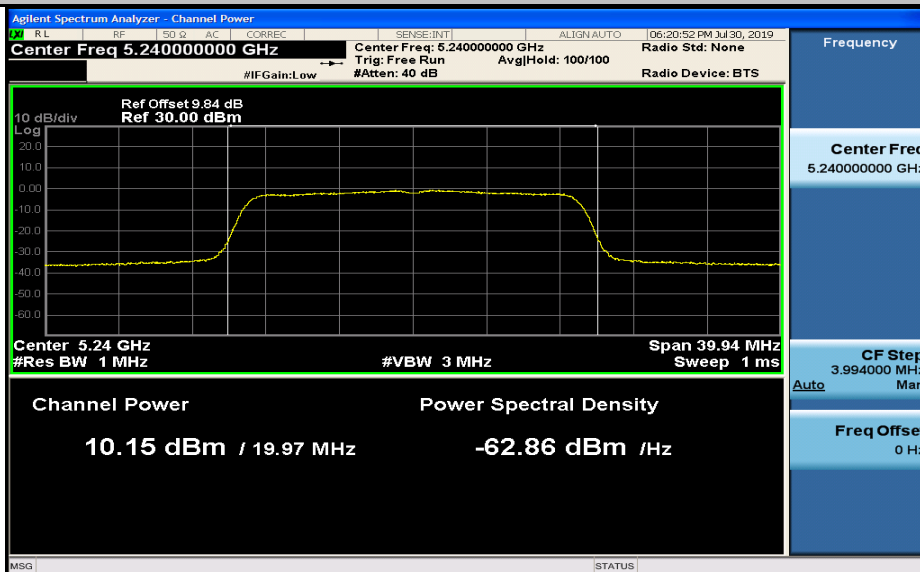
Maximum Conduct Output Power_11AC20_5180_Ant1



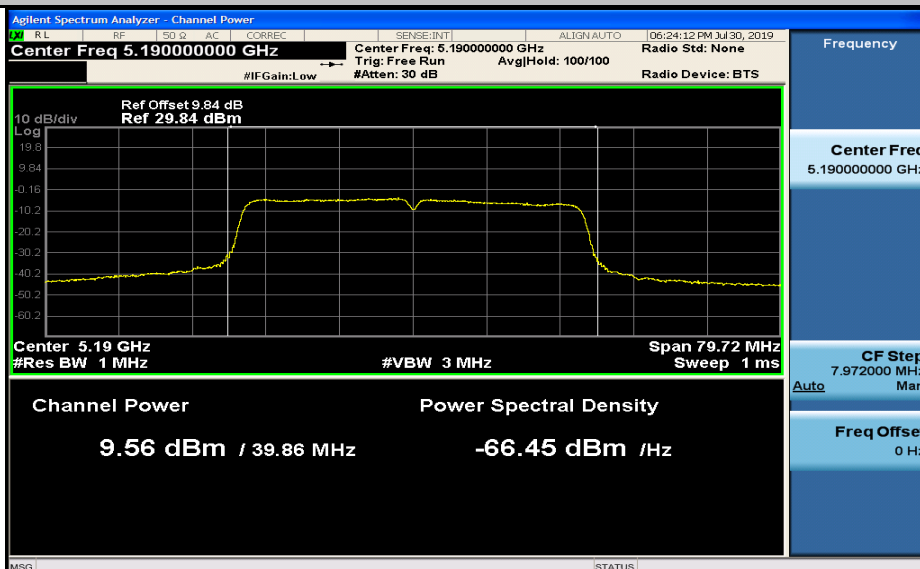
Maximum Conduct Output Power_11AC20_5220_Ant1



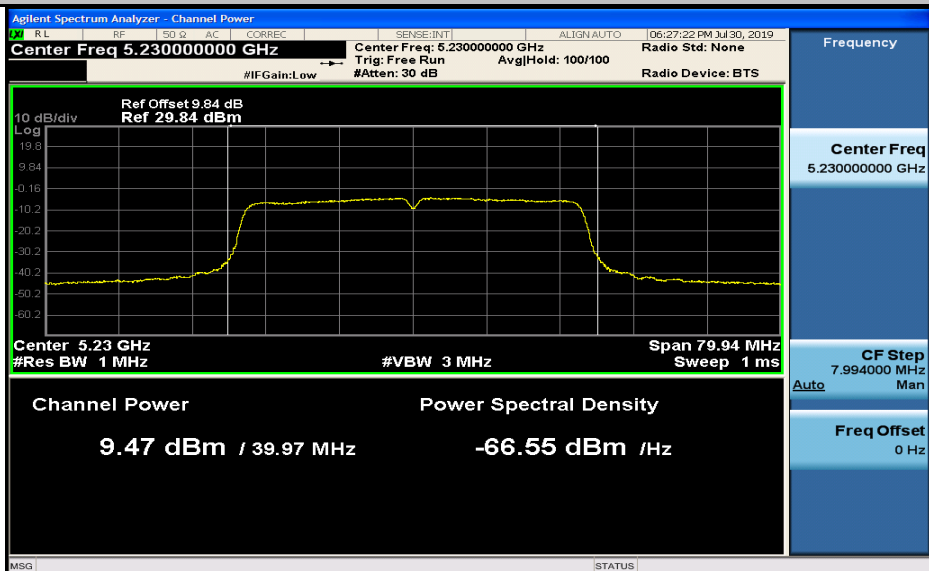
Maximum Conduct Output Power_11AC20_5240_Ant1



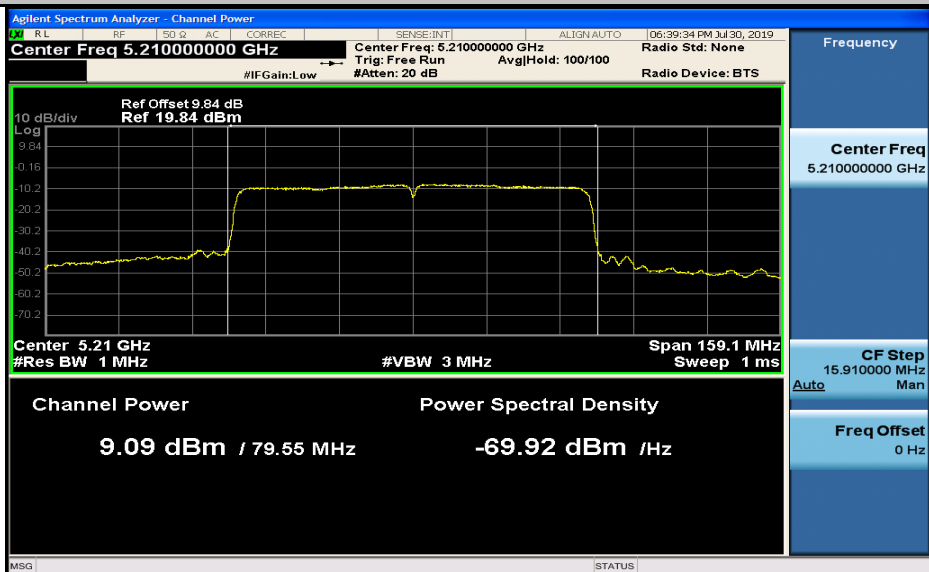
Maximum Conduct Output Power_11AC40_5190_Ant1



Maximum Conduct Output Power_11AC40_5230_Ant1

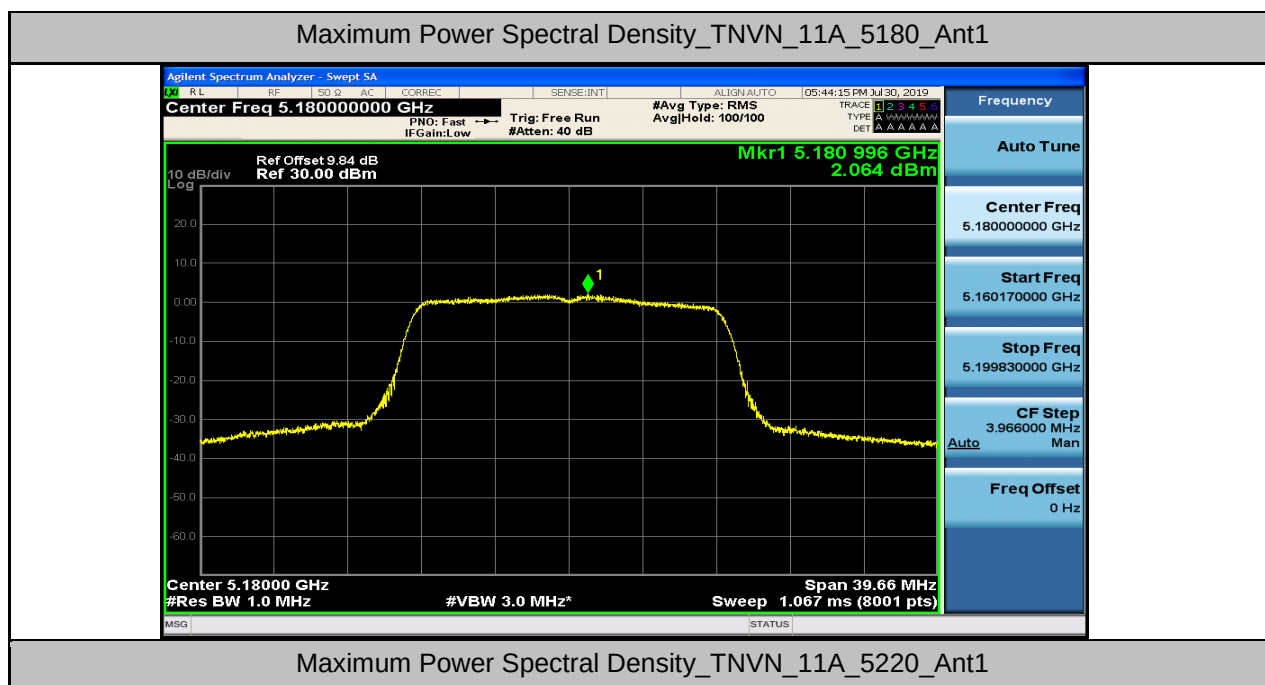


Maximum Conduct Output Power_11AC80_5210_Ant1



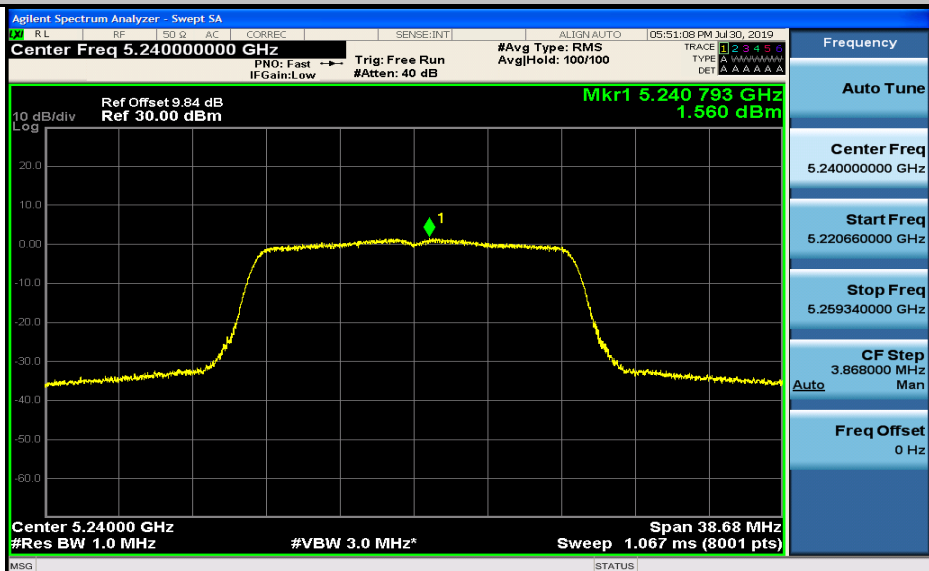
4. Maximum Power Spectral Density

Test Mode	Test Channel	Ant	Level [dBm/MHz]	10log(1/x) Factor [dB]	PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	5180	Ant1	2.06	0	2.06	11.00	PASS
11A	5220	Ant1	1.52	0	1.52	11.00	PASS
11A	5240	Ant1	1.56	0	1.56	11.00	PASS
11N20	5180	Ant1	0.92	0	0.92	11.00	PASS
11N20	5220	Ant1	0.01	0	0.01	11.00	PASS
11N20	5240	Ant1	-0.35	0	-0.35	11.00	PASS
11N40	5190	Ant1	-3.72	0	-3.72	11.00	PASS
11N40	5230	Ant1	-3.32	0	-3.32	11.00	PASS
11AC20	5180	Ant1	0.66	0	0.66	11.00	PASS
11AC20	5220	Ant1	-0.73	0	-0.73	11.00	PASS
11AC20	5240	Ant1	0.1	0	0.1	11.00	PASS
11AC40	5190	Ant1	-4.17	0	-4.17	11.00	PASS
11AC40	5230	Ant1	-3.88	0	-3.88	11.00	PASS
11AC80	5210	Ant1	-8.05	0	-8.05	11.00	PASS

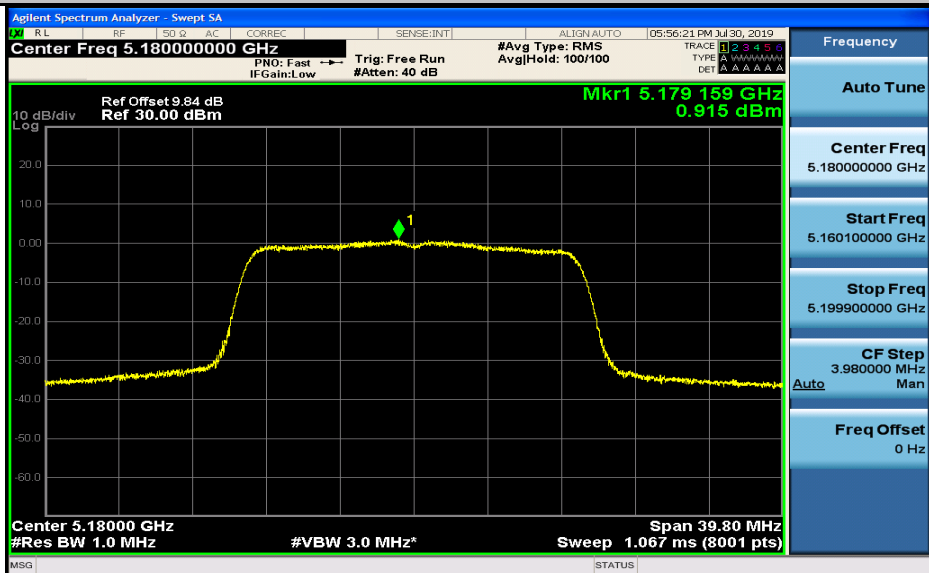




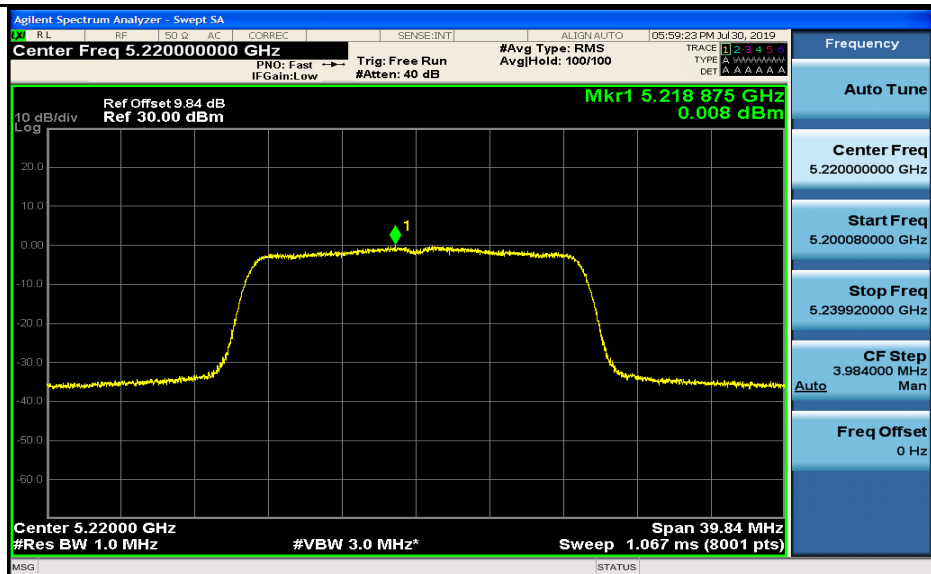
Maximum Power Spectral Density_TNVN_11A_5240_Ant1



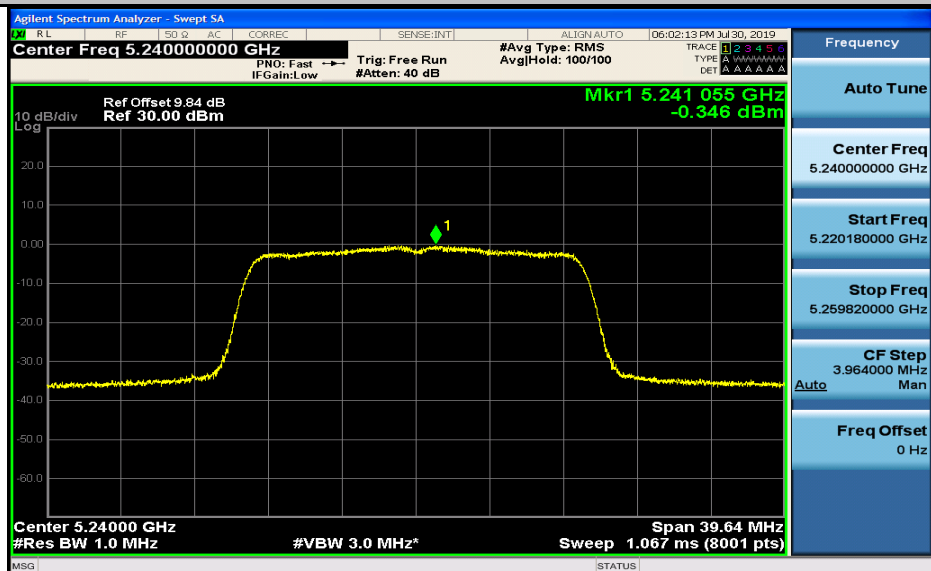
Maximum Power Spectral Density_TNVN_11N20_5180_Ant1



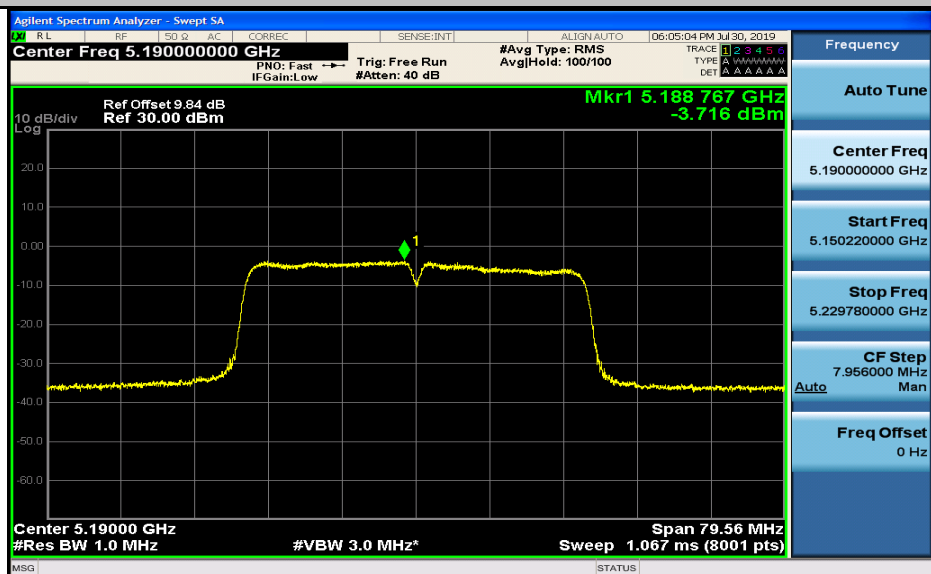
Maximum Power Spectral Density_TNVN_11N20_5220_Ant1



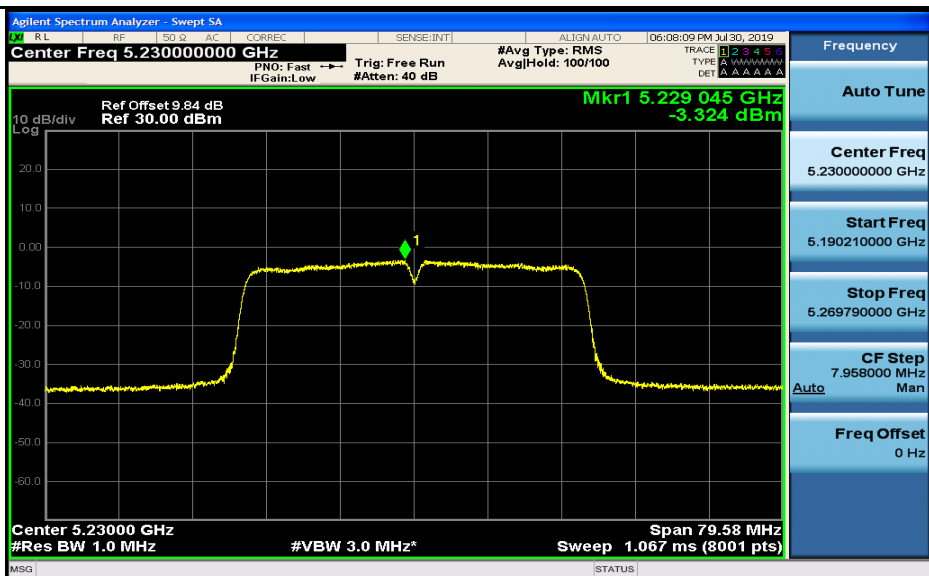
Maximum Power Spectral Density_TNVN_11N20_5240_Ant1



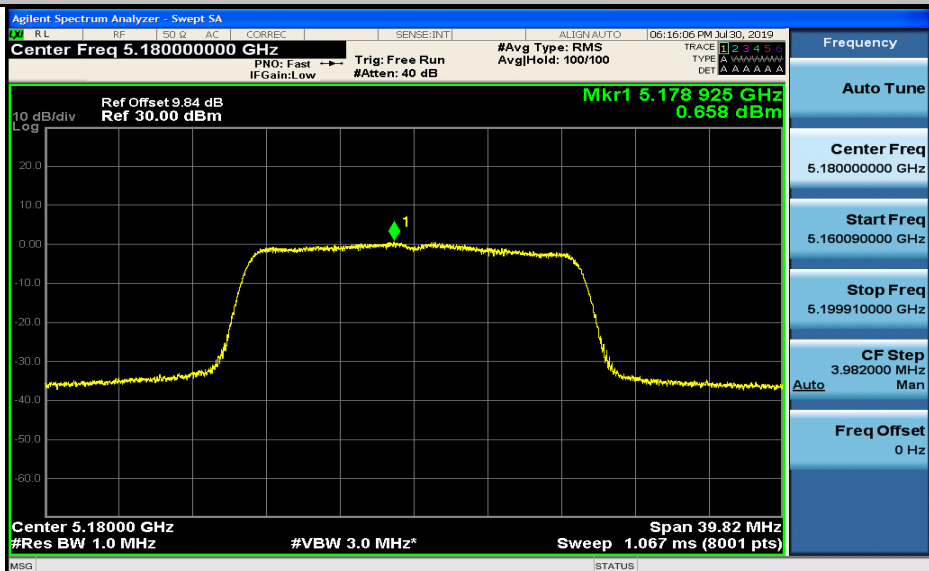
Maximum Power Spectral Density_TNVN_11N40_5190_Ant1



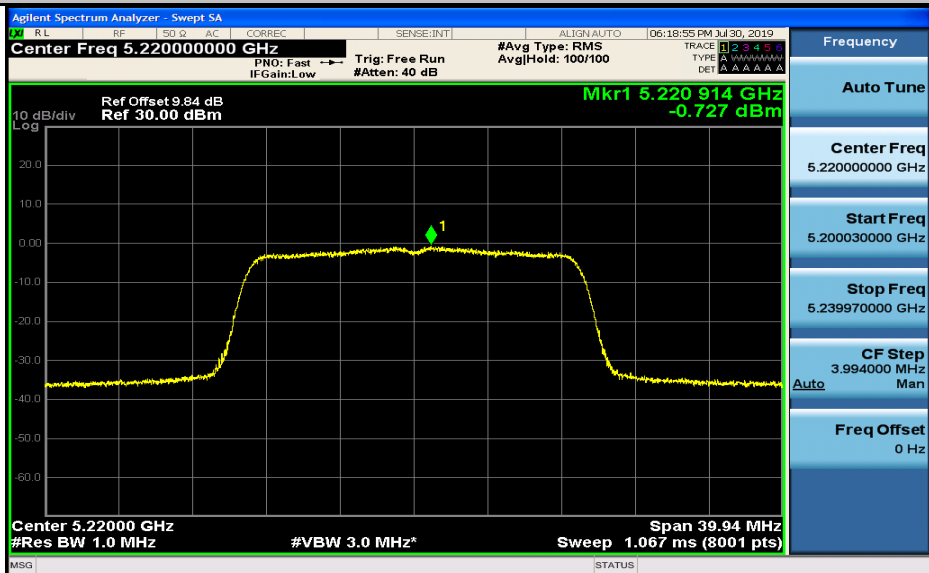
Maximum Power Spectral Density_TNVN_11N40_5230_Ant1



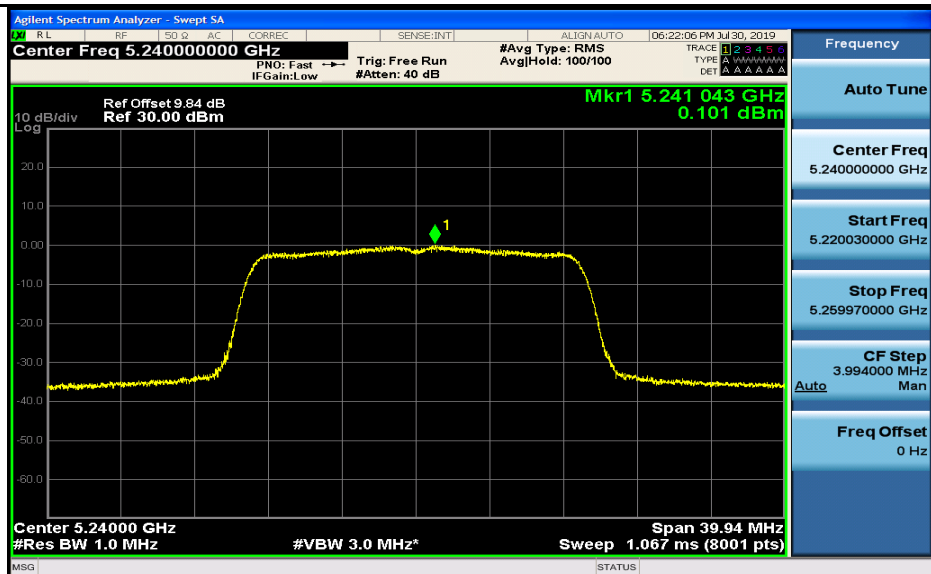
Maximum Power Spectral Density_TNVN_11AC20_5180_Ant1



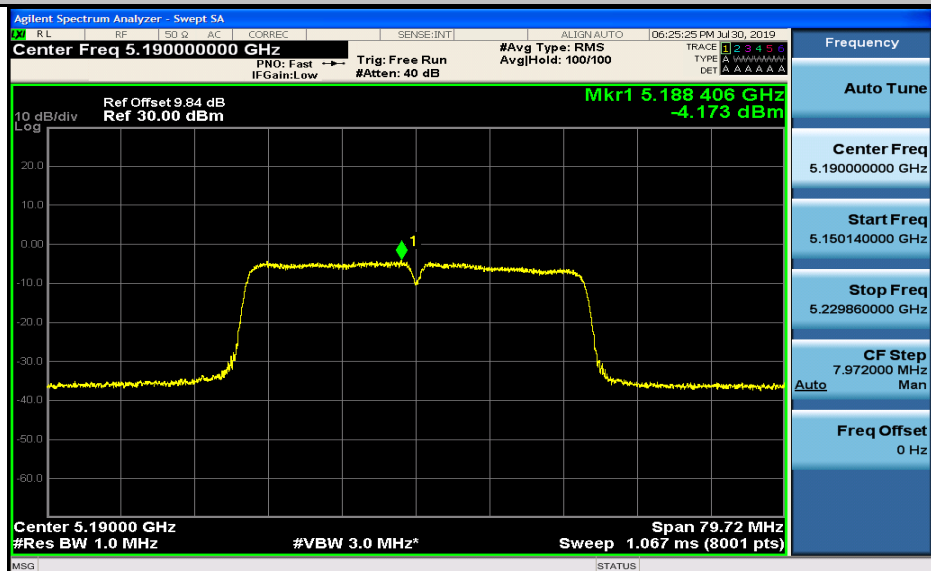
Maximum Power Spectral Density_TNVN_11AC20_5220_Ant1



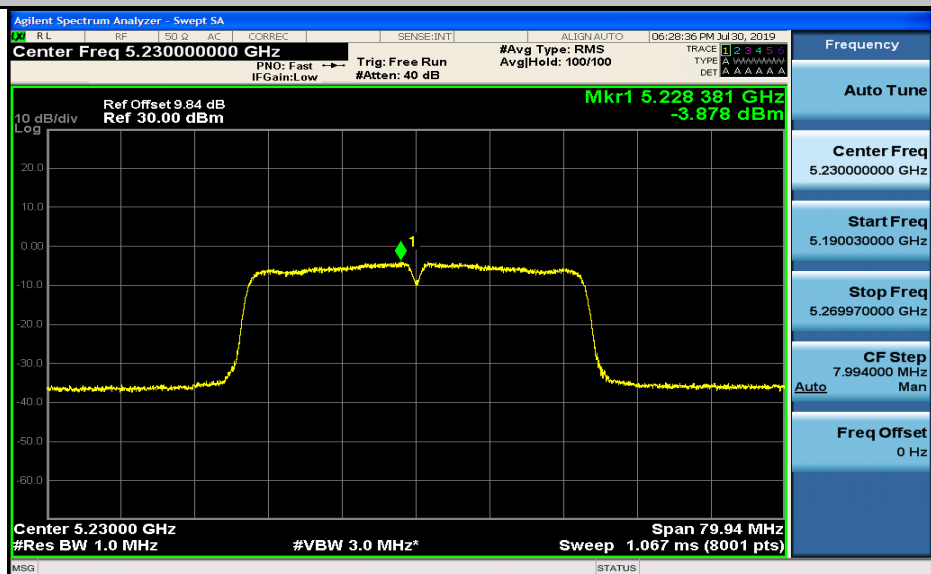
Maximum Power Spectral Density_TNVN_11AC20_5240_Ant1



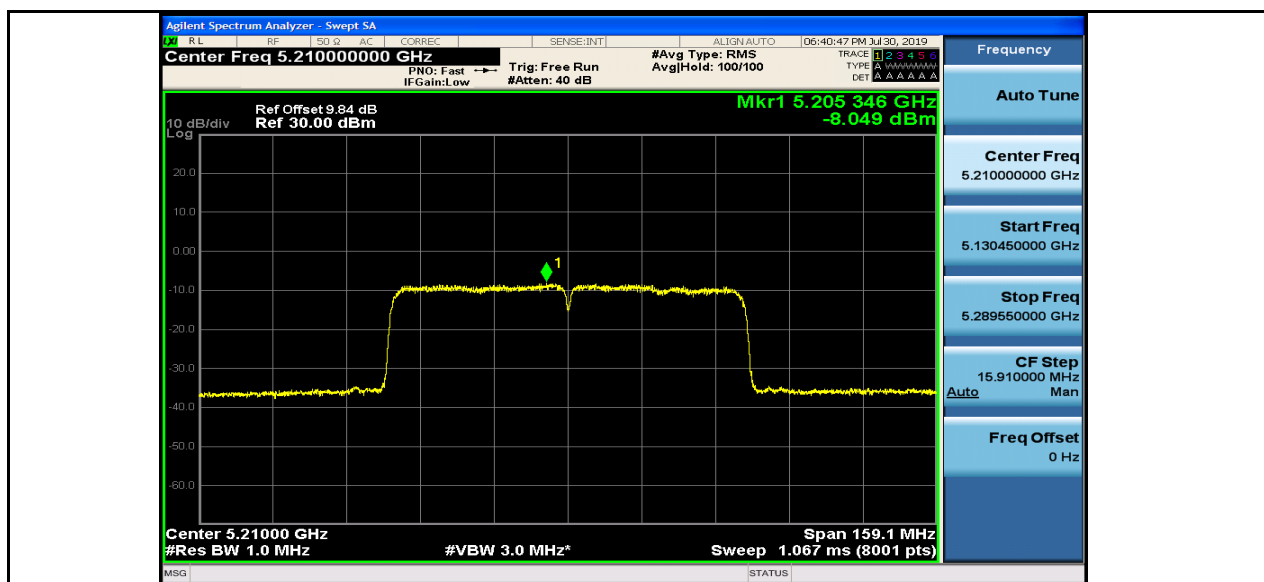
Maximum Power Spectral Density_TNVN_11AC40_5190_Ant1



Maximum Power Spectral Density_TNVN_11AC40_5230_Ant1



Maximum Power Spectral Density_TNVN_11AC80_5210_Ant1



5.Frequency Stability

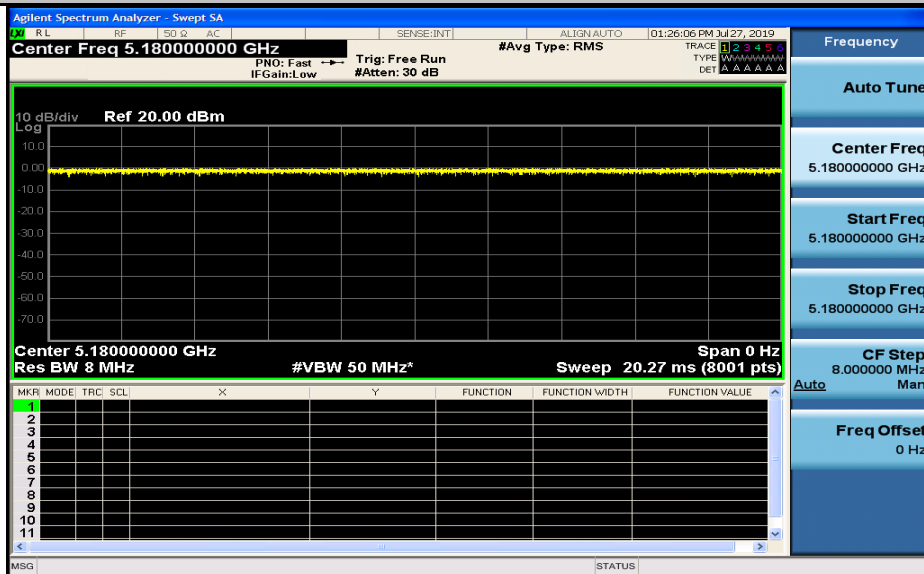
Band	Test Conditions		Operation Frequency (MHz)	Test Frequency (MHz)	Freq. Dev. (MHz)	Limit (GHz)	Result
	Volt (V AC)	Temp (°C)		ANT1	ANT1		
Band U-NII 1	Normal(120)	Extreme(-20)	5180	5180.0314	0.0314	5.15-5.25	Pass
		Extreme(-10)		5180.0368	0.0368		Pass
		Extreme(0)		5180.0384	0.0384		Pass
		Extreme(+10)		5180.0322	0.0322		Pass
		Extreme(+20)		5180.0296	0.0296		Pass
		Extreme(+30)		5180.0395	0.0395		Pass
		Extreme(+40)		5180.0297	0.0297		Pass
		Extreme(+55)		5180.0502	0.0502		Pass
	Extreme(85)	Norma(+20)		5180.0164	0.0164		Pass
	Extreme(318)			5180.0363	0.0363		Pass
	Normal(120)	Extreme(-20)	5240	5240.0269	0.0269		Pass
		Extreme(-10)		5240.0281	0.0281		Pass
		Extreme(0)		5240.0392	0.0392		Pass
		Extreme(+10)		5240.0376	0.0376		Pass
		Extreme(+20)		5240.0482	0.0482		Pass
		Extreme(+30)		5240.0234	0.0234		Pass
		Extreme(+40)		5240.0139	0.0139		Pass
		Extreme(+55)		5240.0494	0.0494		Pass
	Extreme(85)	Norma(20)		5240.0427	0.0427		Pass
	Extreme(318)			5240.0363	0.0363		Pass

Remark: Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested

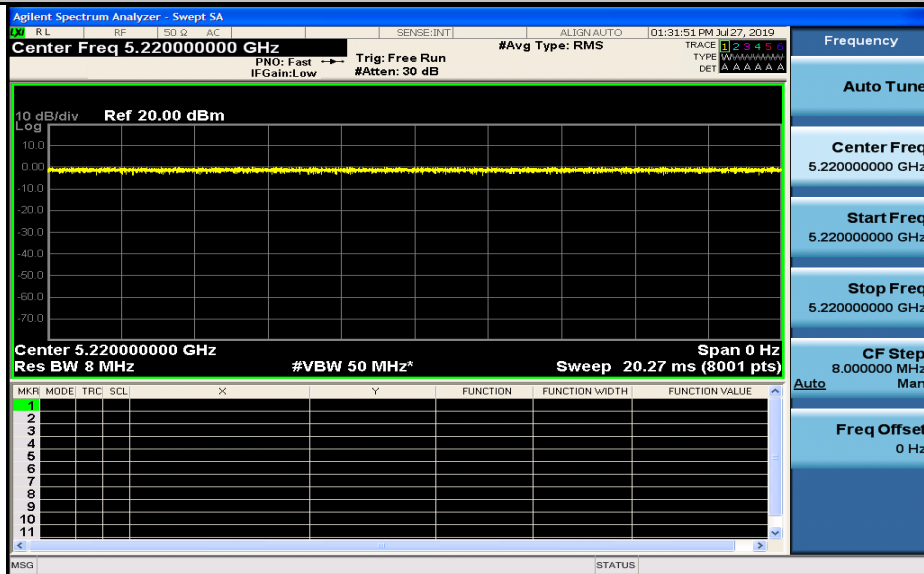
6.Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	10log(1/x) Factor[dB]
11A	5180	Ant1	100.00	0.00
11A	5220	Ant1	100.00	0.00
11A	5240	Ant1	100.00	0.00
11N20	5180	Ant1	100.00	0.00
11N20	5220	Ant1	100.00	0.00
11N20	5240	Ant1	100.00	0.00
11N40	5190	Ant1	100.00	0.00
11N40	5230	Ant1	100.00	0.00
11AC20	5180	Ant1	100.00	0.00
11AC20	5220	Ant1	100.00	0.00
11AC20	5240	Ant1	100.00	0.00
11AC40	5190	Ant1	100.00	0.00
11AC40	5230	Ant1	100.00	0.00
11AC80	5210	Ant1	100.00	0.00

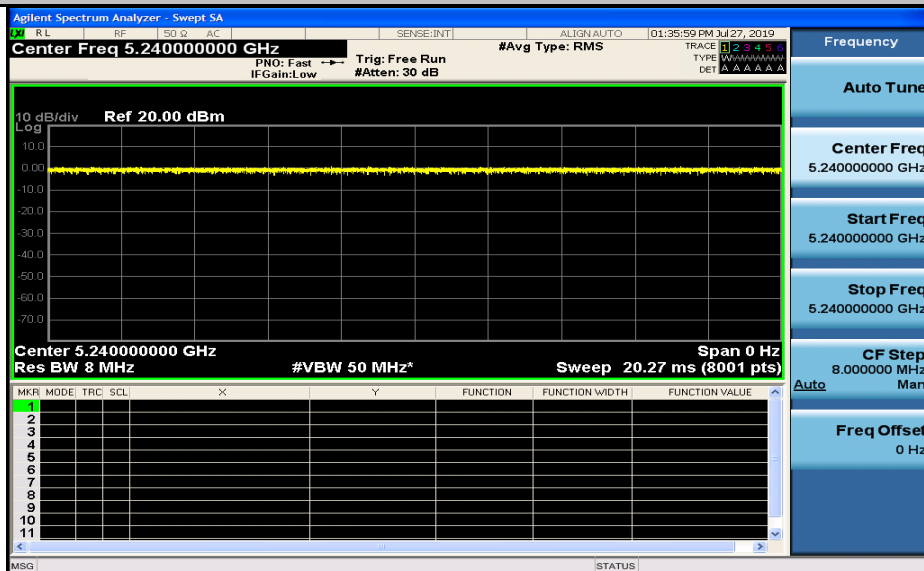
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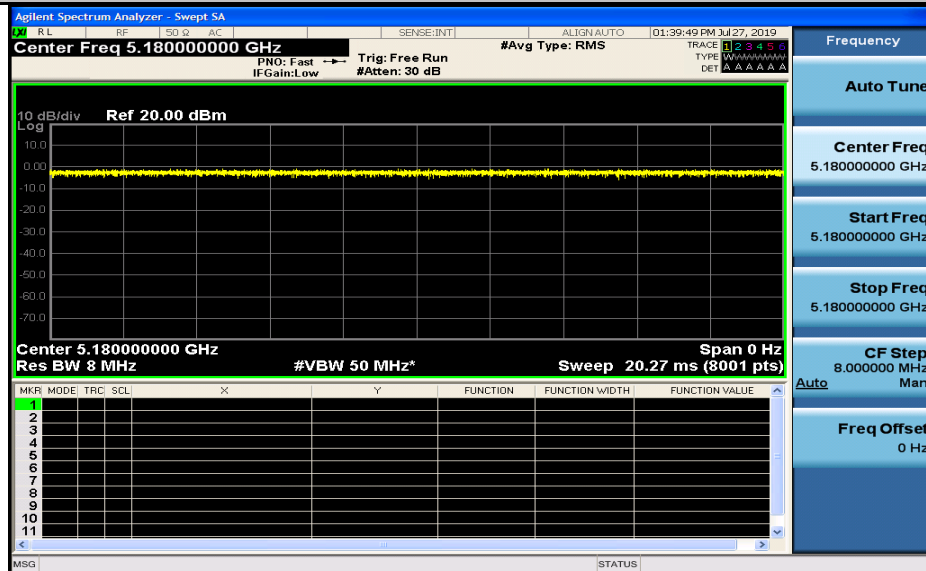
Duty Cycle_11A_5220_Ant1



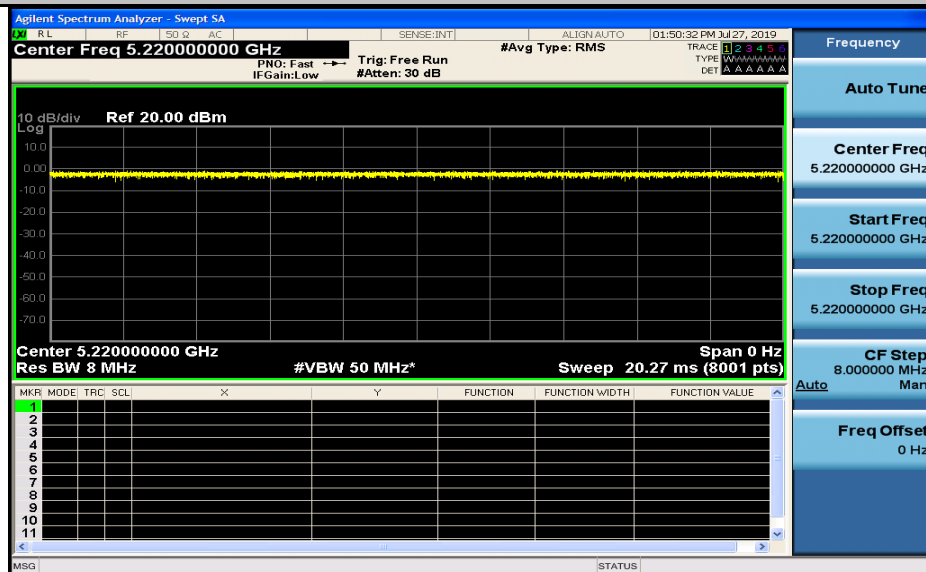
Duty Cycle_11A_5240_Ant1



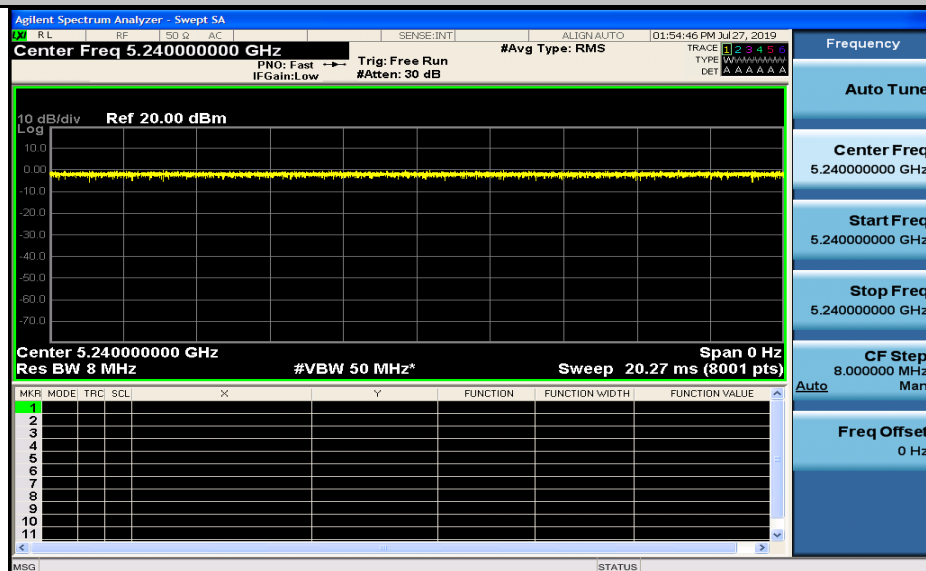
Duty Cycle_11N20_5180_Ant1



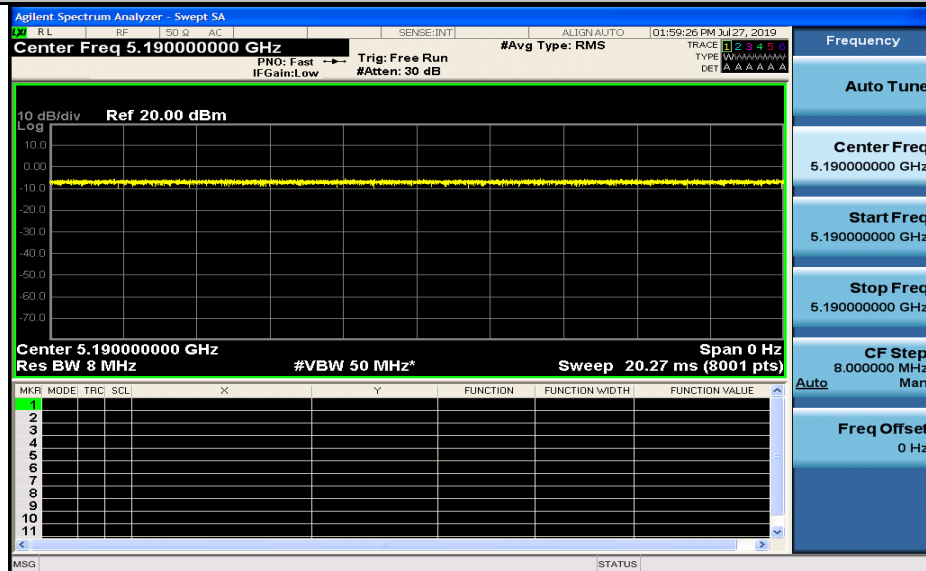
Duty Cycle_11N20_5220_Ant1



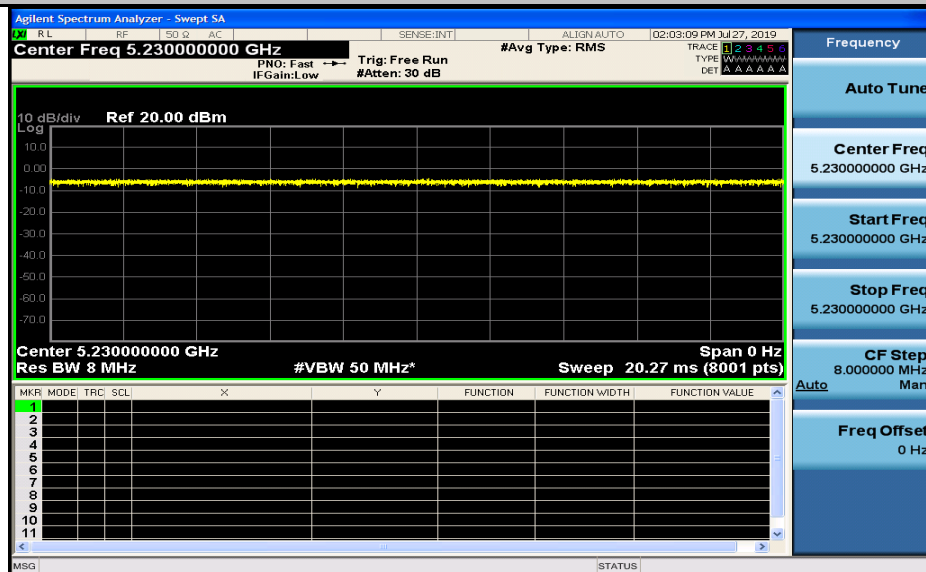
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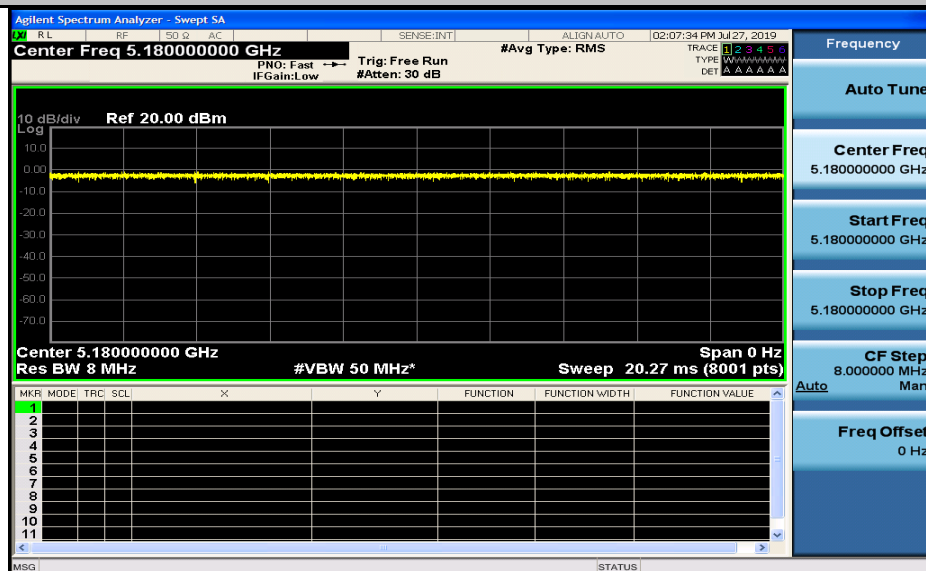
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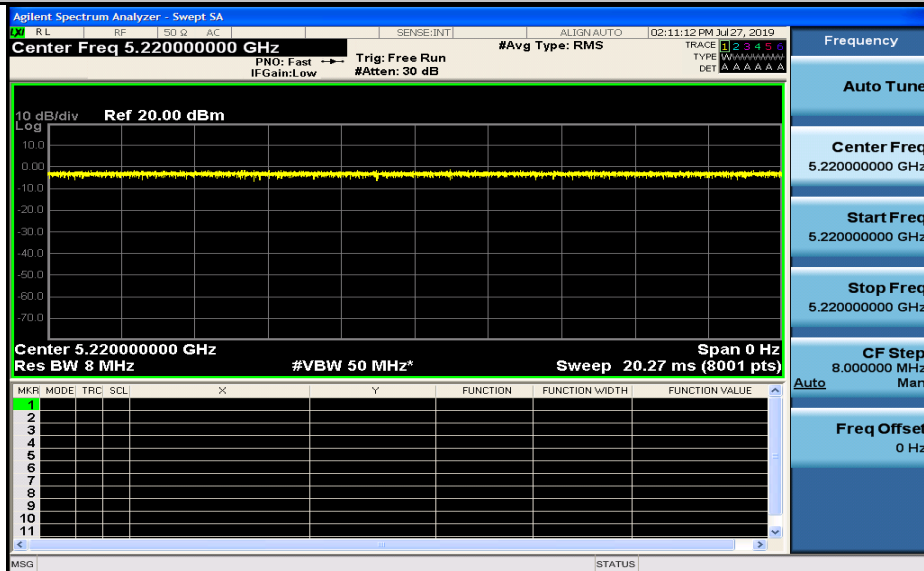
Duty Cycle_11N40_5230_Ant1



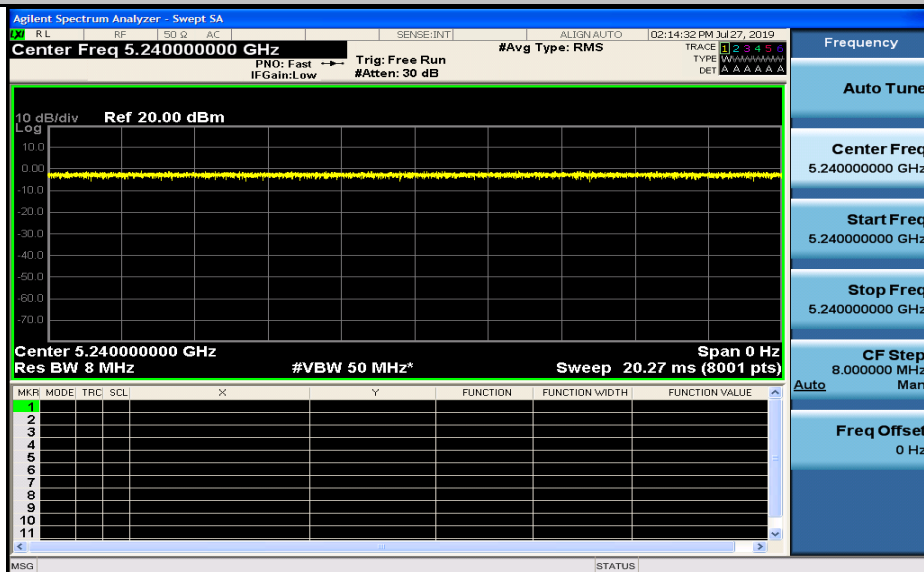
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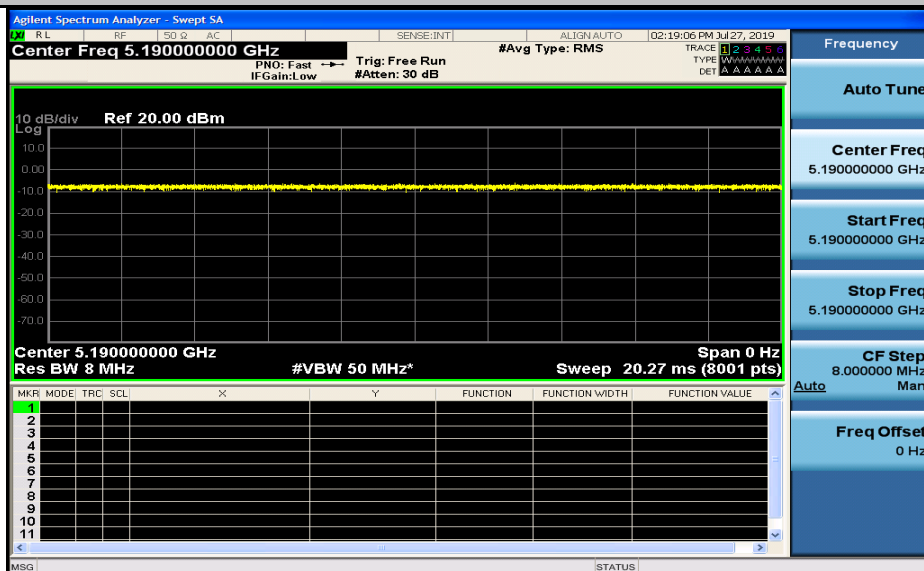
Duty Cycle_11AC20_5220_Ant1



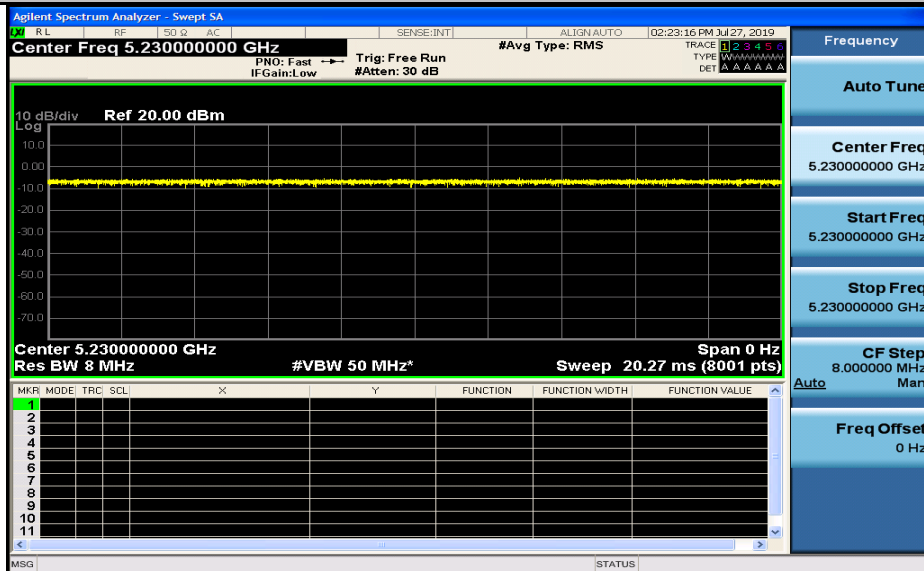
Duty Cycle_11AC20_5240_Ant1



Duty Cycle_11AC40_5190_Ant1



Duty Cycle_11AC40_5230_Ant1



Duty Cycle_11AC80_5210_Ant1

