

Appendix A for SHEM180200133501

1.Emission Bandwidth Measurement

Test Mode	Test Channel	EBW[MHz]		Limit[MHz]	Verdict
		ANT0	ANT1		
11A	5745	21.29	21.31	---	PASS
11A	5785	20.76	21.36	---	PASS
11A	5825	20.66	21.36	---	PASS
11N20	5745	23.47	21.83	---	PASS
11N20	5785	21.46	22.09	---	PASS
11N20	5825	21.68	21.87	---	PASS
11N40	5755	43.32	43.50	---	PASS
11N40	5795	43.23	43.39	---	PASS
11AC20	5745	21.55	22.36	---	PASS
11AC20	5785	21.32	22.40	---	PASS
11AC20	5825	21.64	22.34	---	PASS
11AC40	5755	42.83	42.90	---	PASS
11AC40	5795	42.68	43.12	---	PASS
11AC80	5775	82.39	84.93	---	PASS

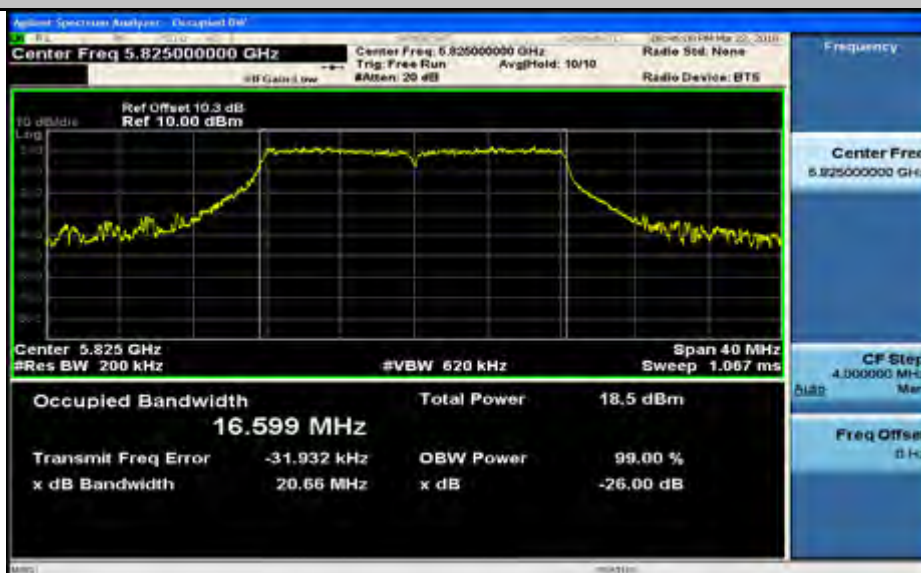
Emission Bandwidth Measurement_11A_5745_Ant0



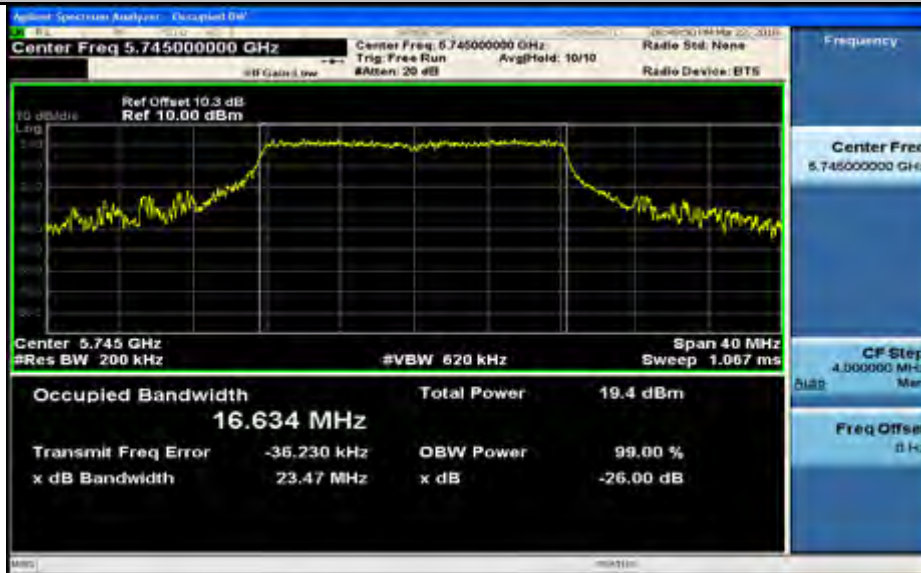
Emission Bandwidth Measurement_11A_5785_Ant0



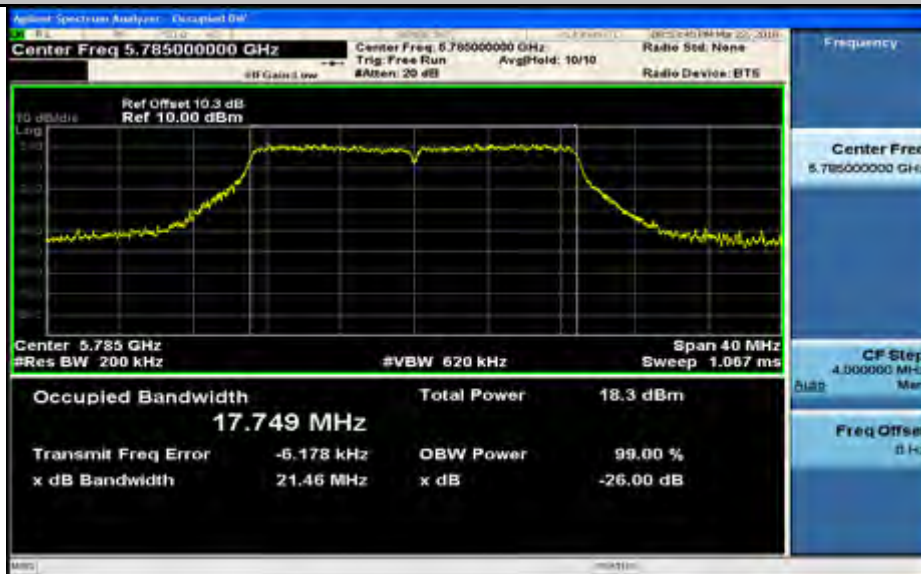
Emission Bandwidth Measurement_11A_5825_Ant0



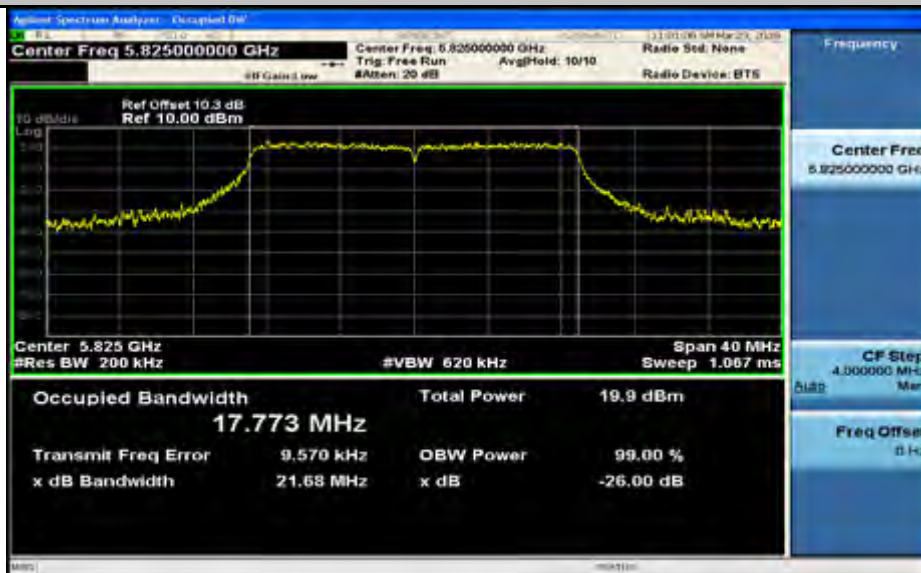
Emission Bandwidth Measurement_11N20_5745_Ant0



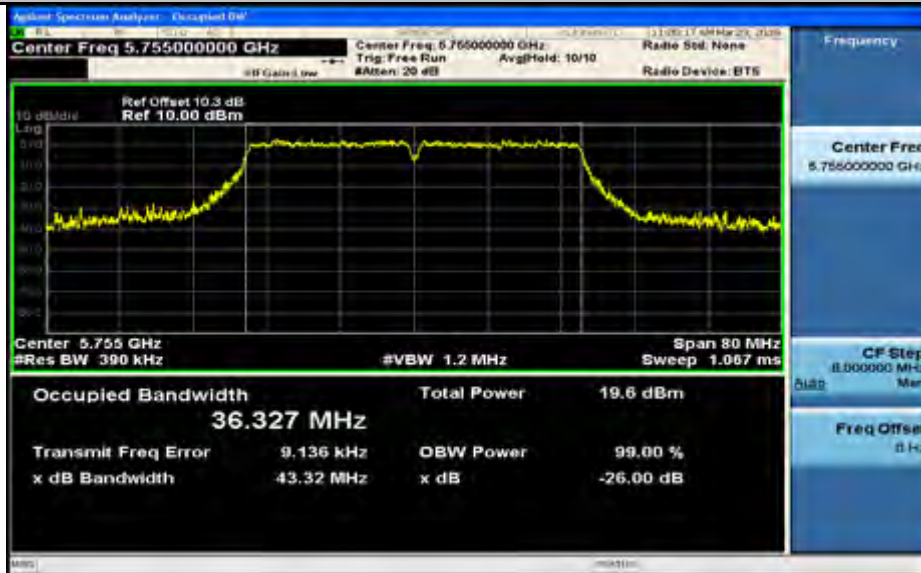
Emission Bandwidth Measurement_11N20_5785_Ant0



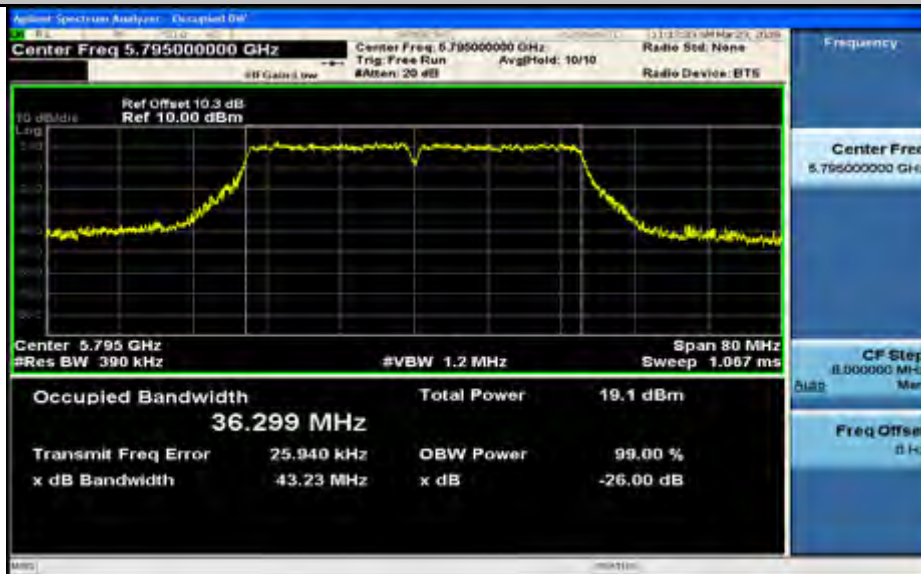
Emission Bandwidth Measurement_11N20_5825_Ant0



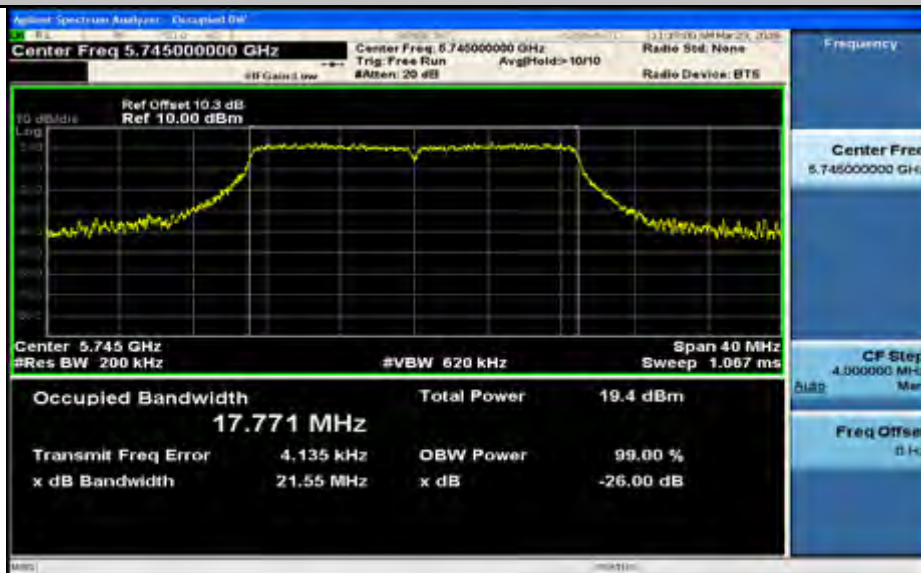
Emission Bandwidth Measurement_11N40_5755_Ant0



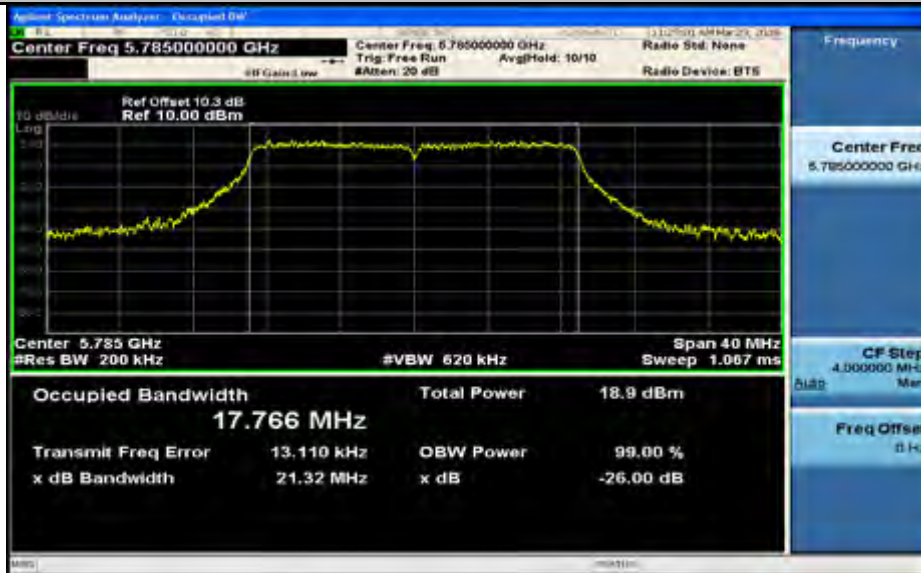
Emission Bandwidth Measurement_11N40_5795_Ant0



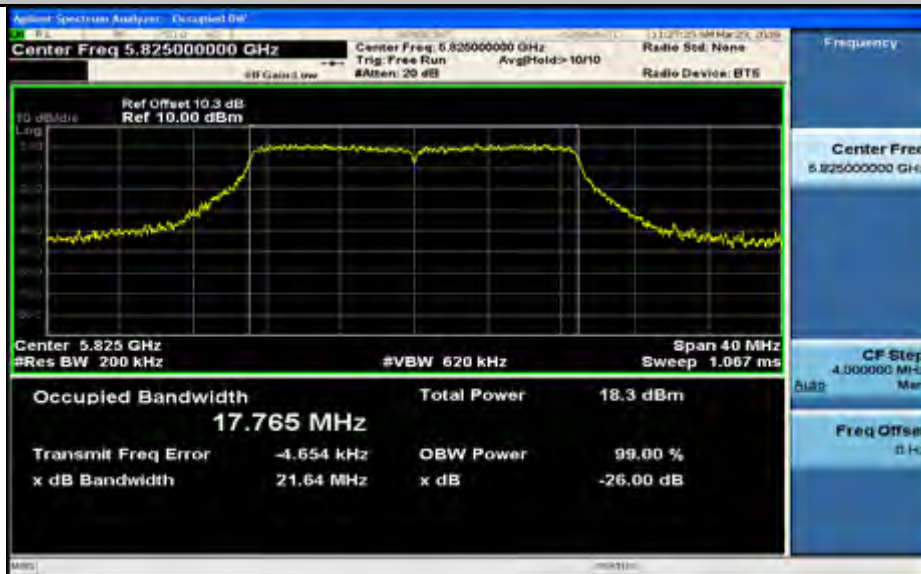
Emission Bandwidth Measurement_11AC20_5745_Ant0



Emission Bandwidth Measurement_11AC20_5785_Ant0



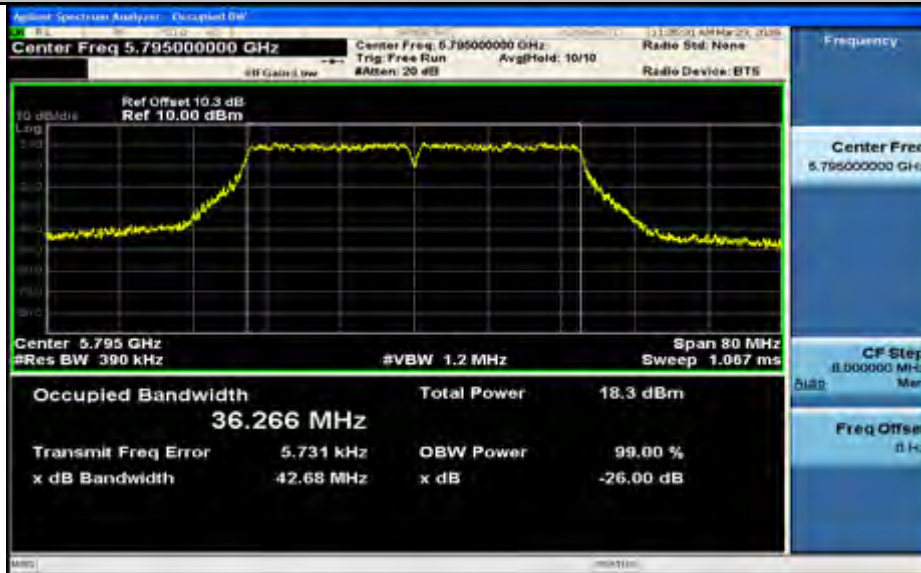
Emission Bandwidth Measurement_11AC20_5825_Ant0



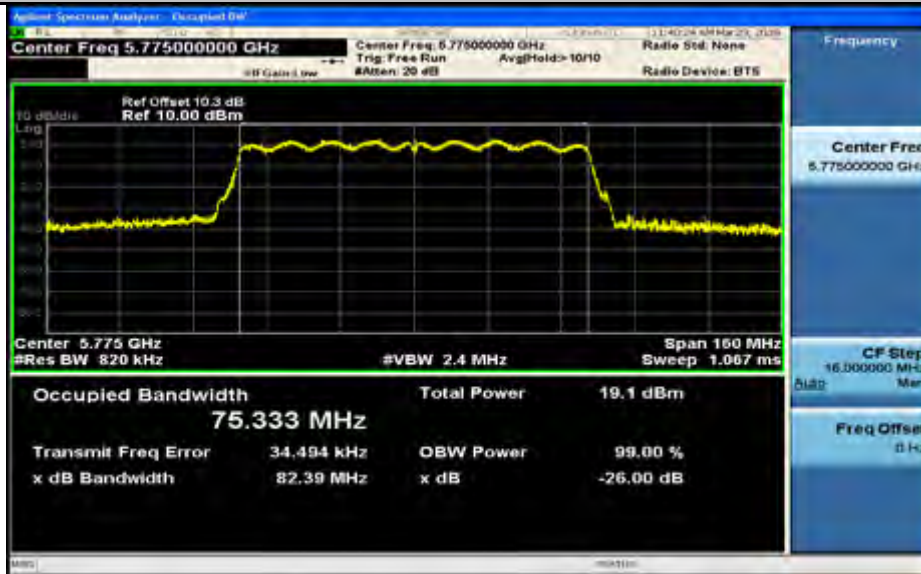
Emission Bandwidth Measurement_11AC40_5755_Ant0



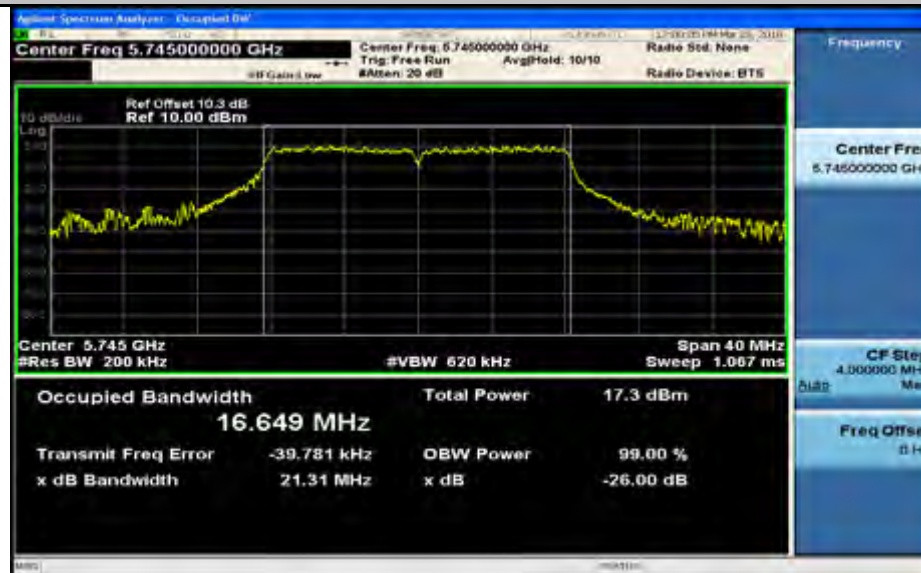
Emission Bandwidth Measurement_11AC40_5795_Ant0



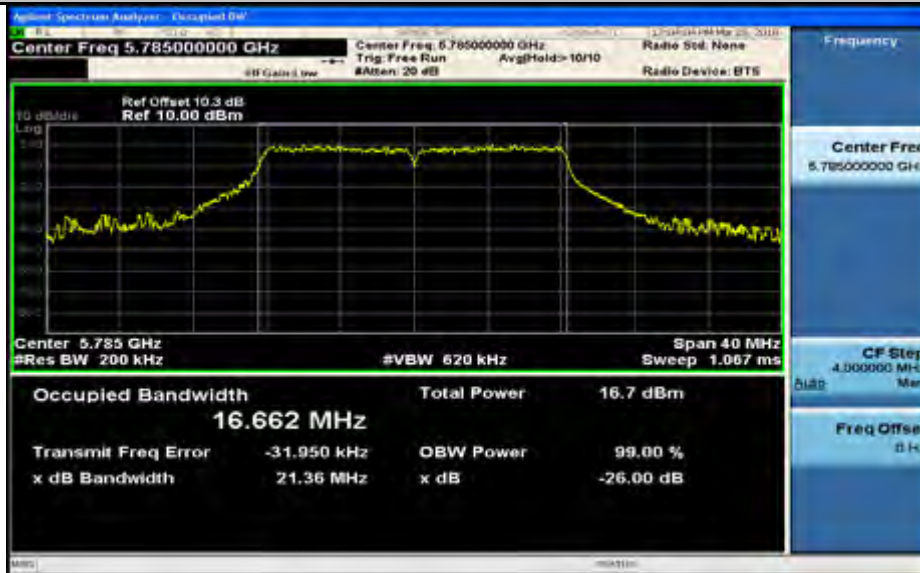
Emission Bandwidth Measurement_11AC80_5775_Ant0



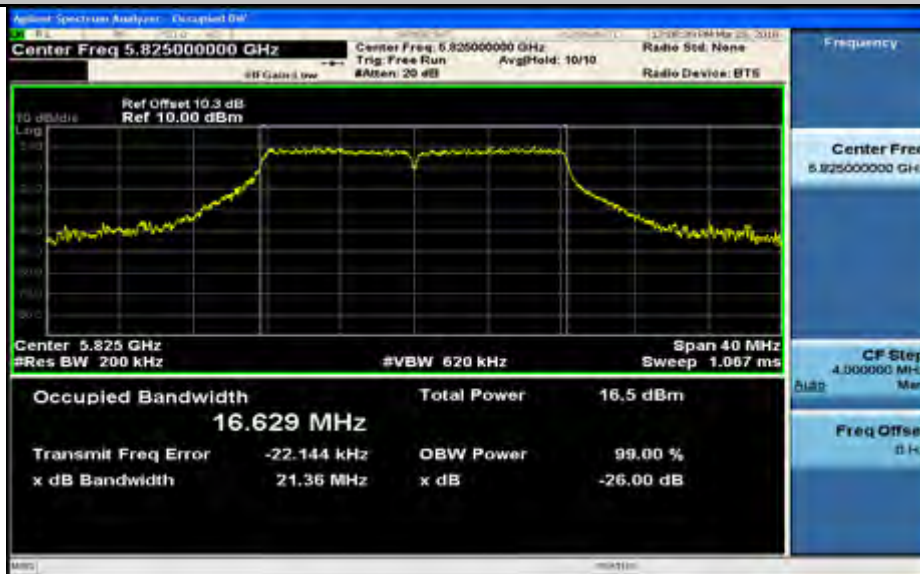
Emission Bandwidth Measurement_11A_5745_Ant1



Emission Bandwidth Measurement_11A_5785_Ant1



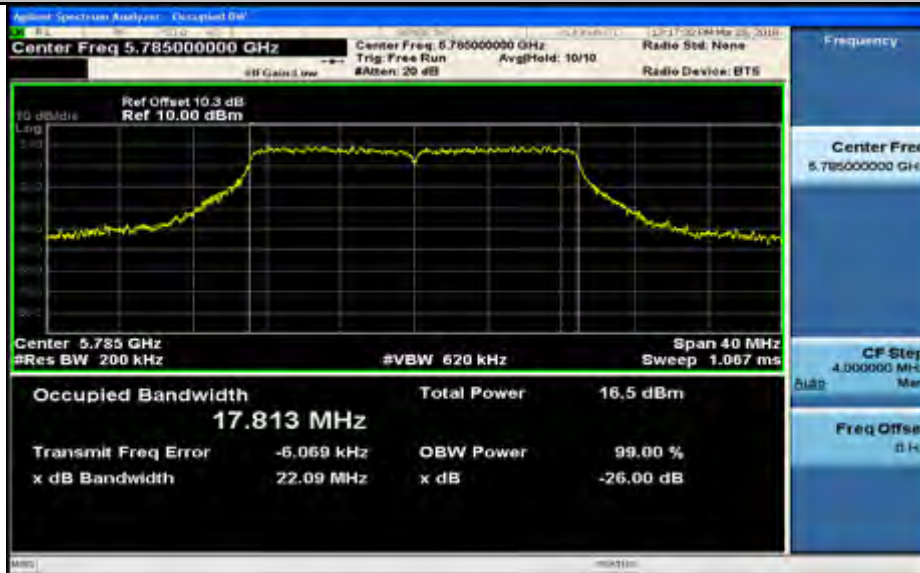
Emission Bandwidth Measurement_11A_5825_Ant1



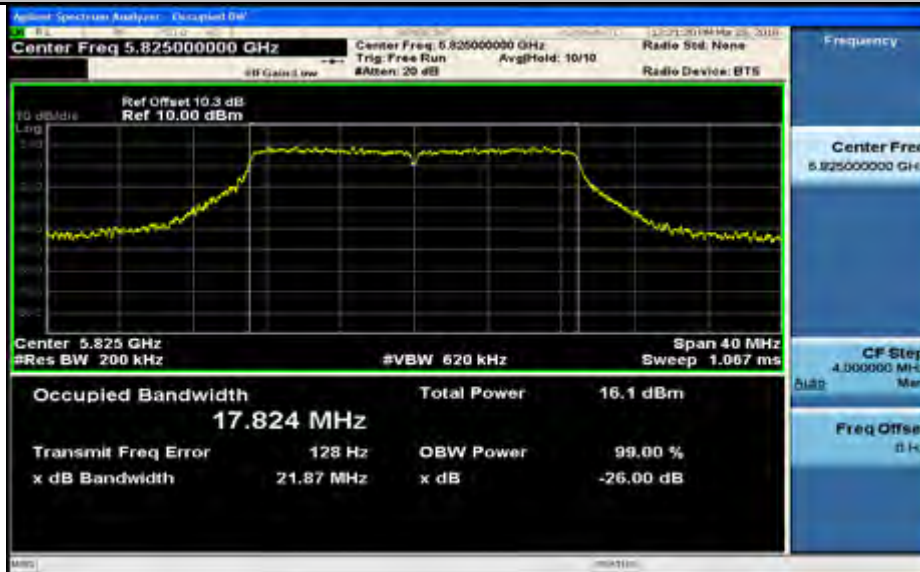
Emission Bandwidth Measurement_11N20_5745_Ant1



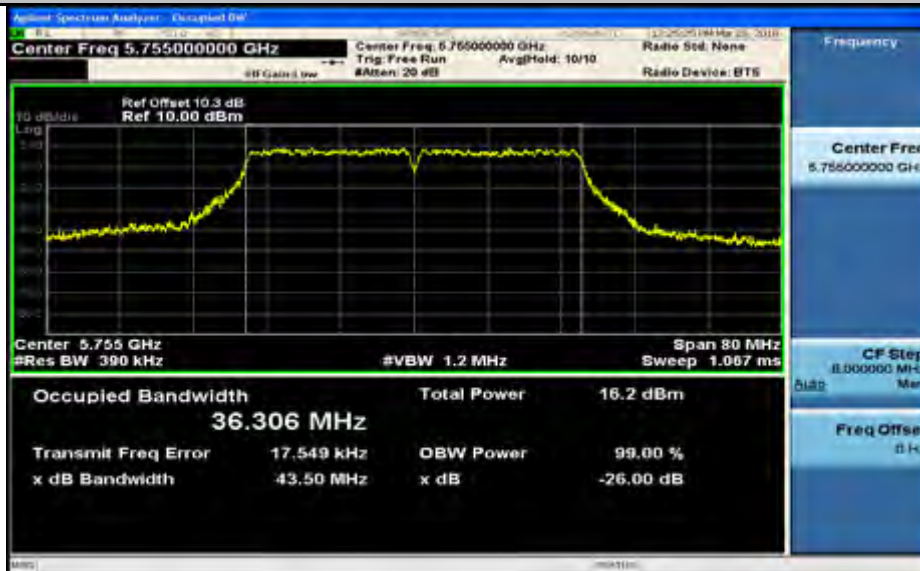
Emission Bandwidth Measurement_11N20_5785_Ant1



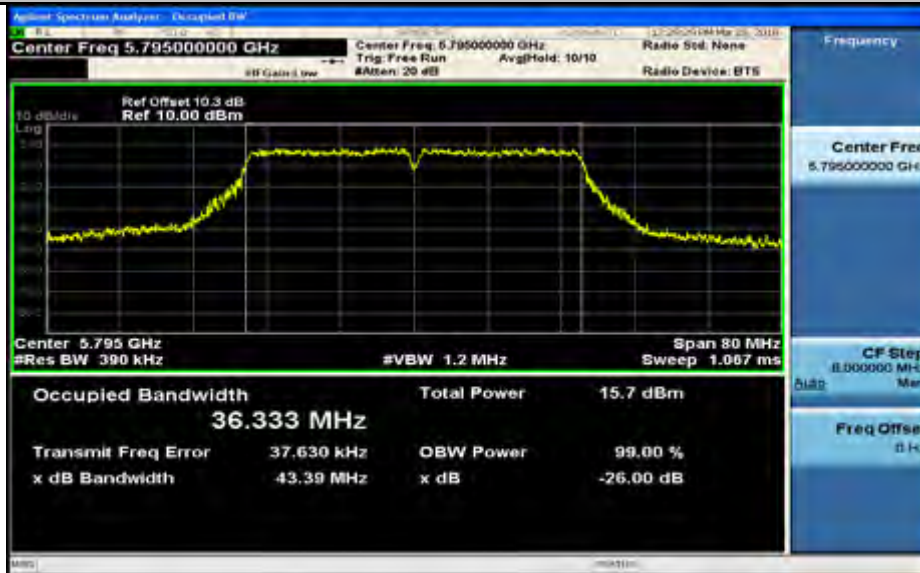
Emission Bandwidth Measurement_11N20_5825_Ant1



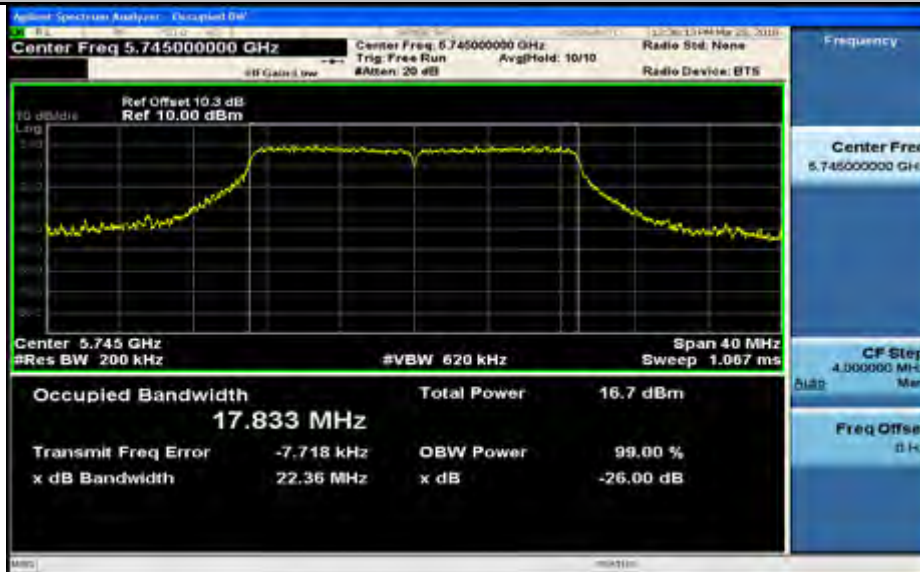
Emission Bandwidth Measurement_11N40_5755_Ant1



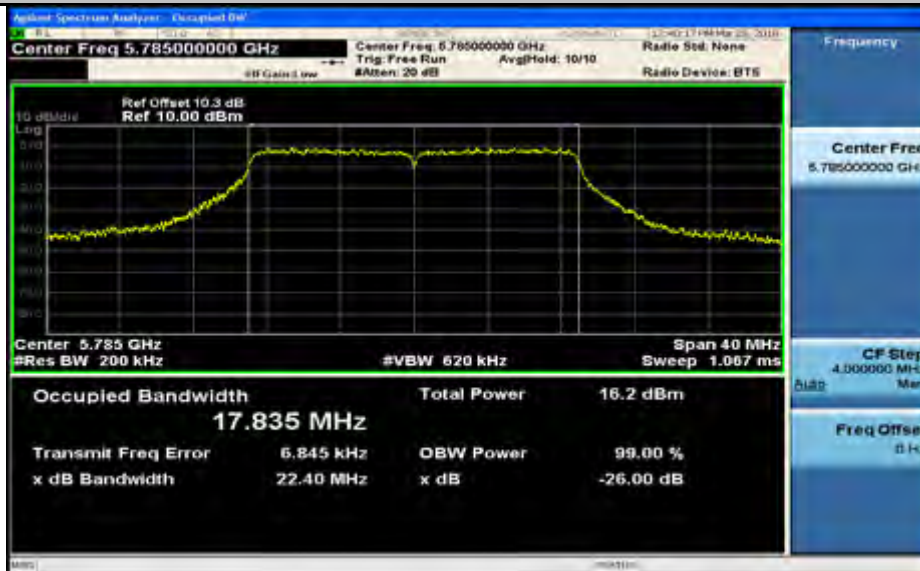
Emission Bandwidth Measurement_11N40_5795_Ant1



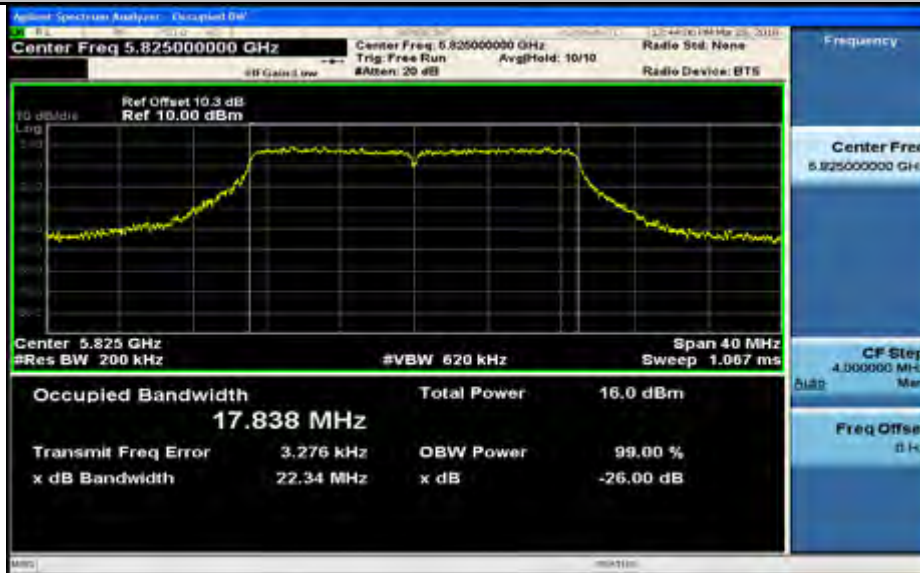
Emission Bandwidth Measurement_11AC20_5745_Ant1



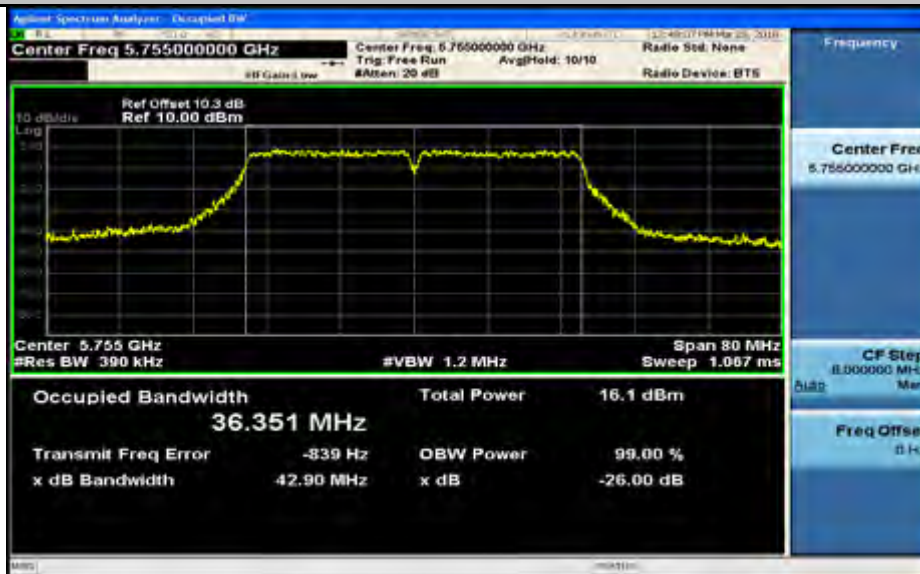
Emission Bandwidth Measurement_11AC20_5785_Ant1



Emission Bandwidth Measurement_11AC20_5825_Ant1



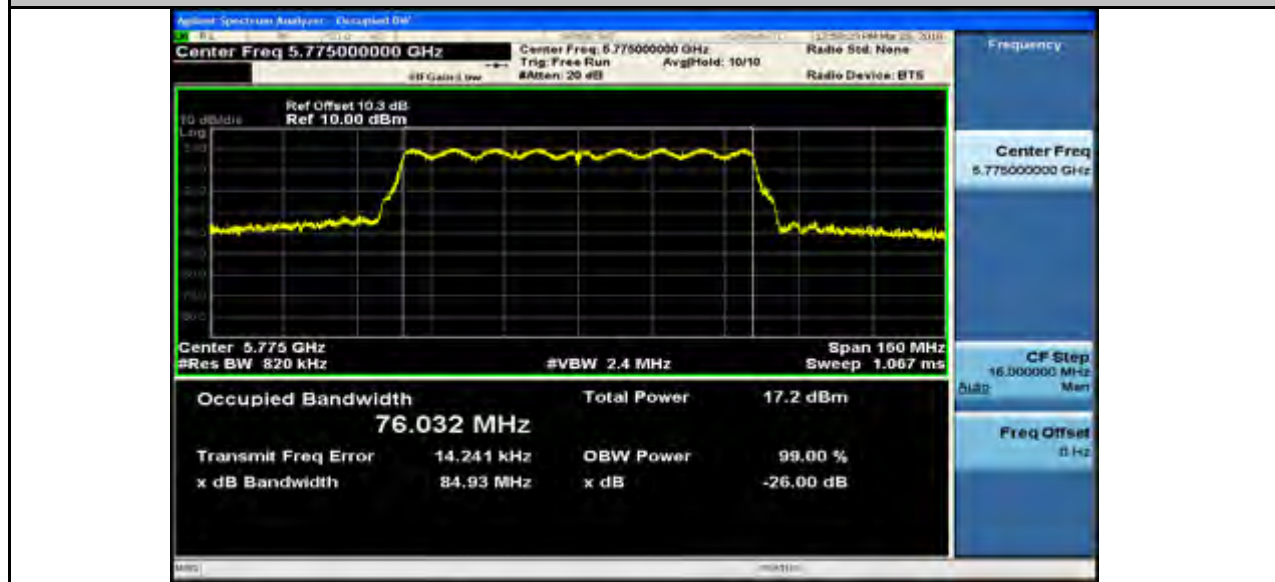
Emission Bandwidth Measurement_11AC40_5755_Ant1



Emission Bandwidth Measurement_11AC40_5795_Ant1



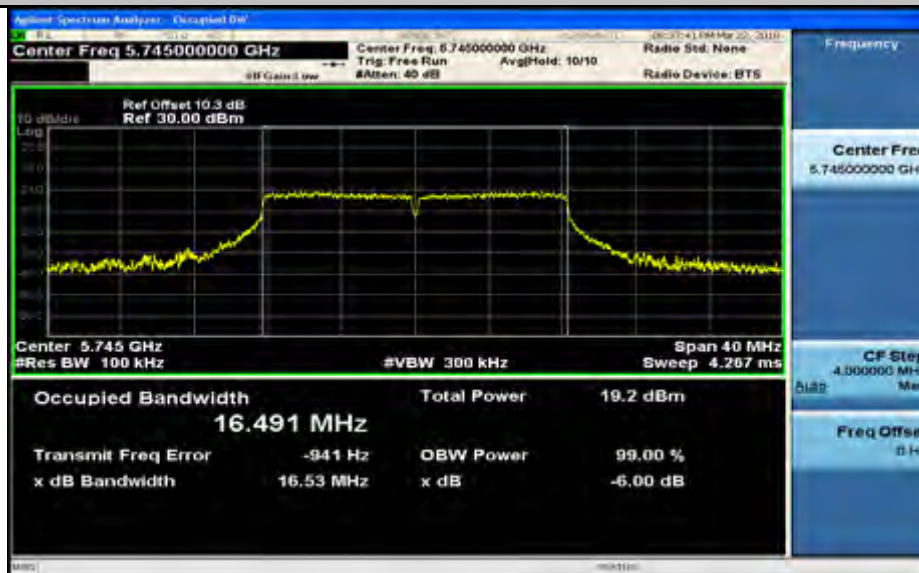
Emission Bandwidth Measurement_11AC80_5775_Ant1



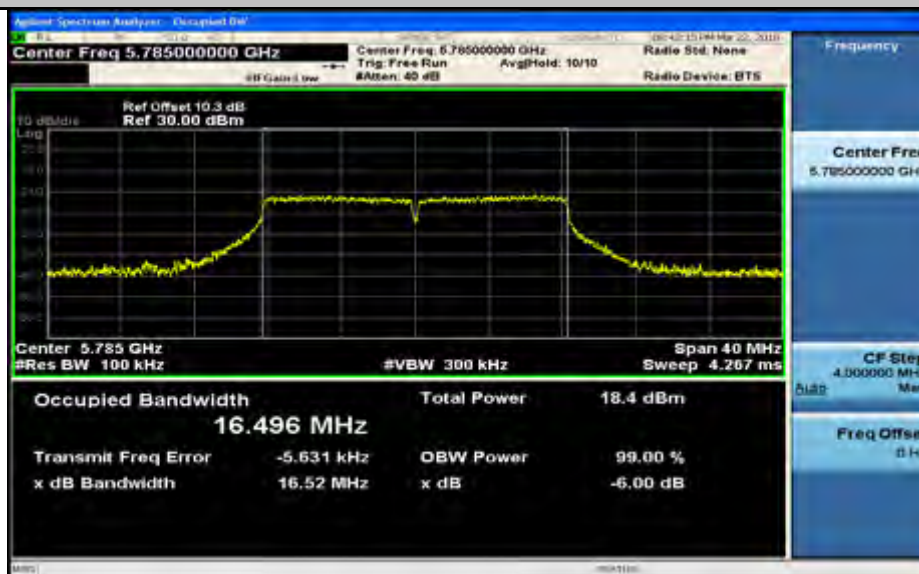
2.Minimum Emission Bandwidth Measurement

Test Mode	Test Channel	EBW[MHz] ANT0	EBW[MHz] ANT1	Limit[MHz]	Verdict
11A	5745	16.53	16.55	---	PASS
11A	5785	16.52	16.56	---	PASS
11A	5825	16.54	16.55	---	PASS
11N20	5745	16.55	17.76	---	PASS
11N20	5785	17.79	17.79	---	PASS
11N20	5825	17.77	17.76	---	PASS
11N40	5755	36.45	36.49	---	PASS
11N40	5795	36.48	36.45	---	PASS
11AC20	5745	17.75	17.74	---	PASS
11AC20	5785	17.77	17.80	---	PASS
11AC20	5825	17.79	17.82	---	PASS
11AC40	5755	36.44	36.45	---	PASS
11AC40	5795	36.45	36.50	---	PASS
11AC80	5775	76.09	76.43	---	PASS

Minimum Emission Bandwidth Measurement_11A_5745_Ant0



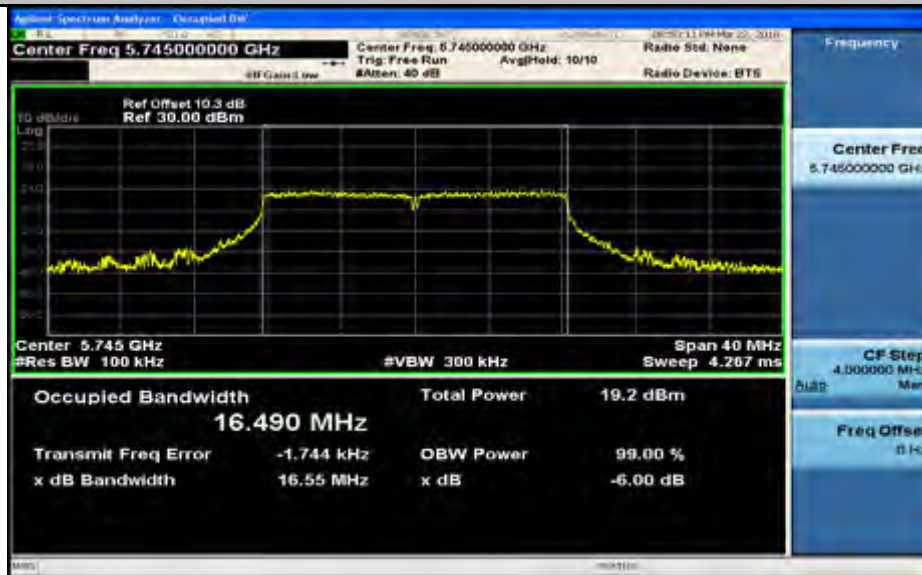
Minimum Emission Bandwidth Measurement_11A_5785_Ant0



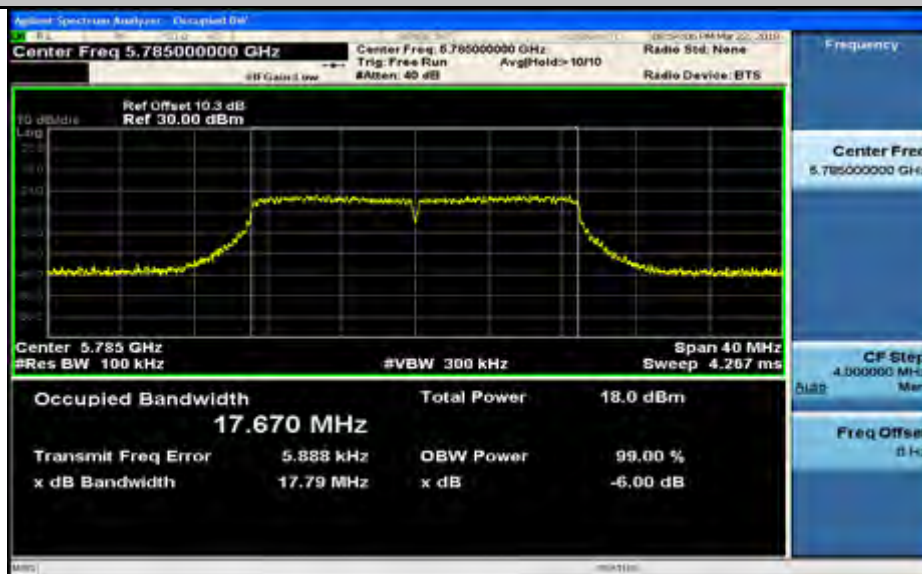
Minimum Emission Bandwidth Measurement_11A_5825_Ant0



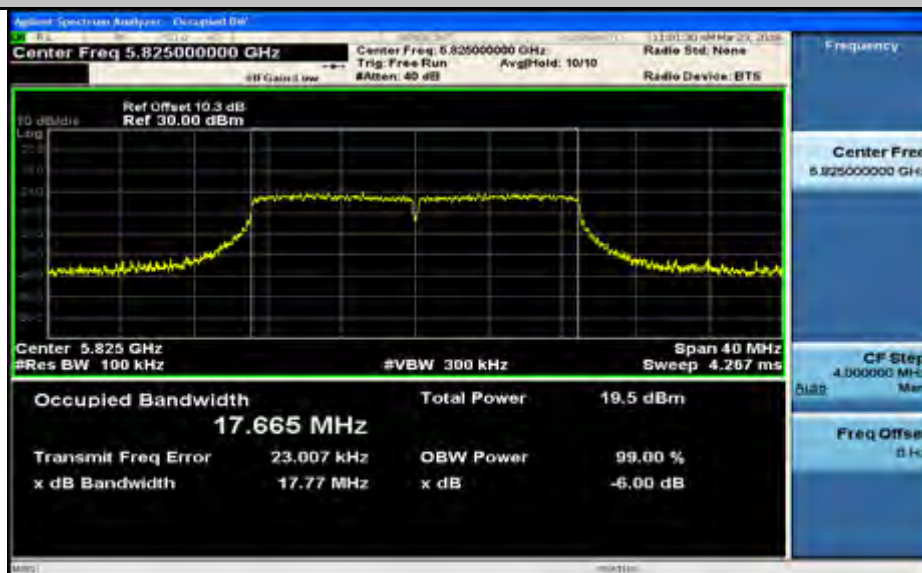
Minimum Emission Bandwidth Measurement_11N20_5745_Ant0



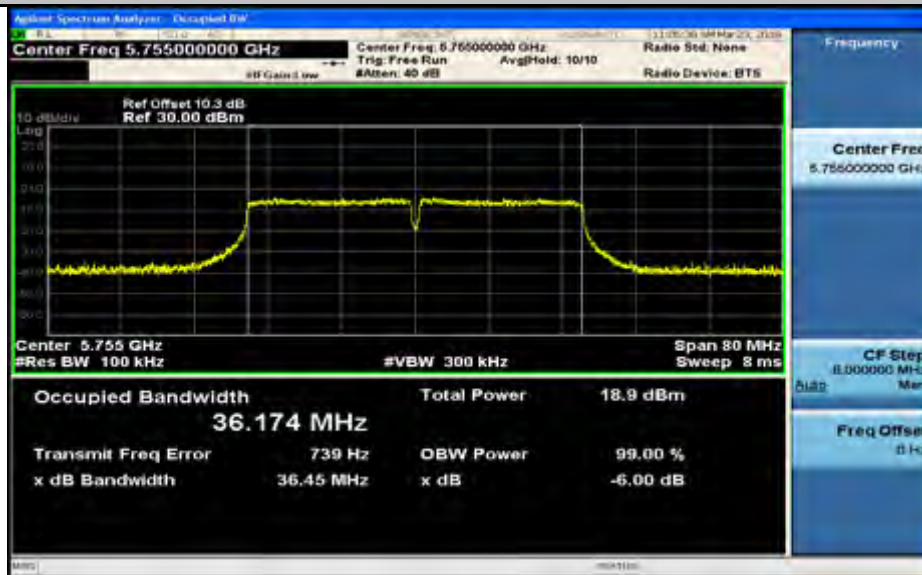
Minimum Emission Bandwidth Measurement_11N20_5785_Ant0



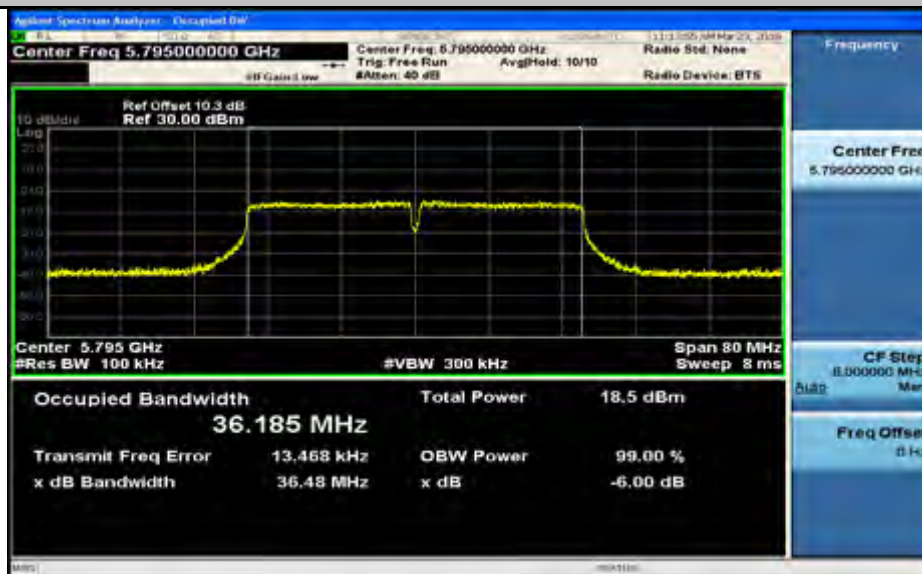
Minimum Emission Bandwidth Measurement_11N20_5825_Ant0



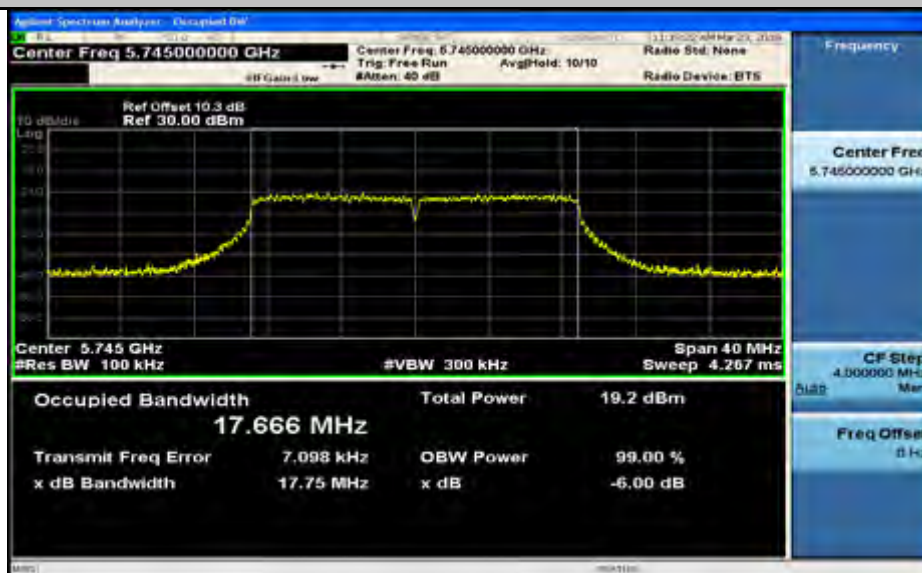
Minimum Emission Bandwidth Measurement_11N40_5755_Ant0



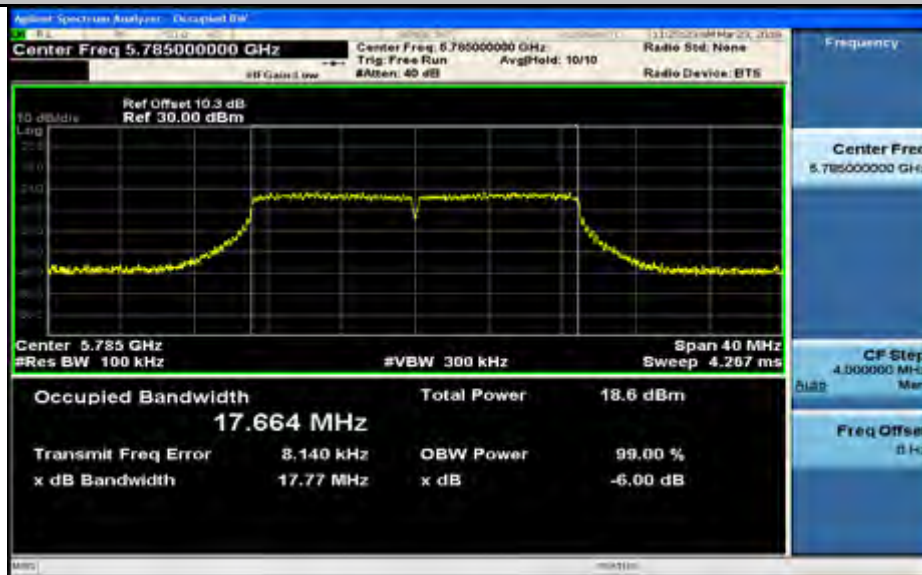
Minimum Emission Bandwidth Measurement_11N40_5795_Ant0



Minimum Emission Bandwidth Measurement_11AC20_5745_Ant0



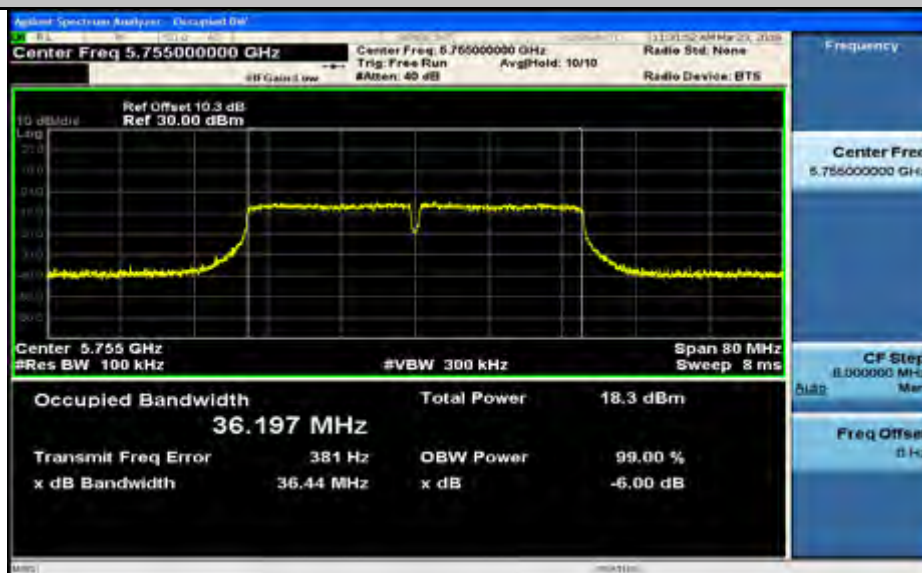
Minimum Emission Bandwidth Measurement_11AC20_5785_Ant0



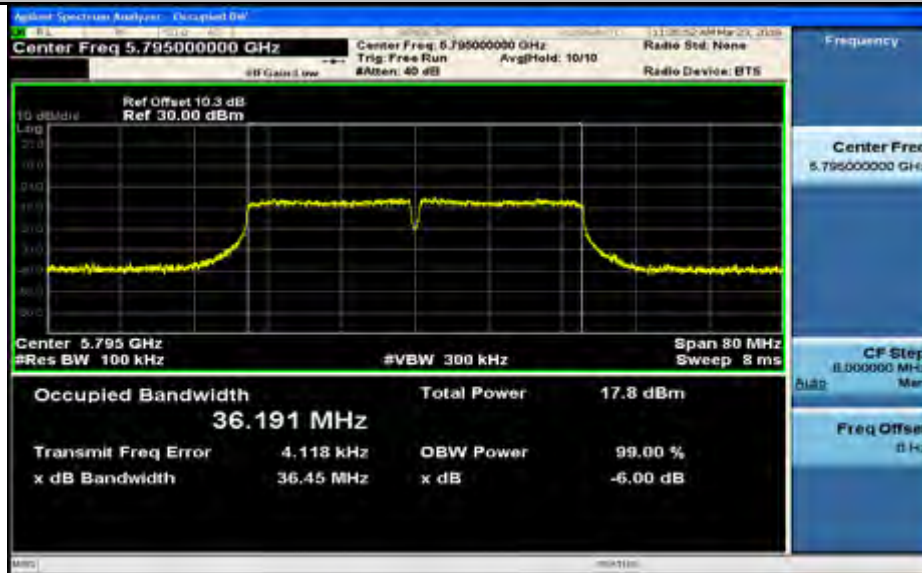
Minimum Emission Bandwidth Measurement_11AC20_5825_Ant0



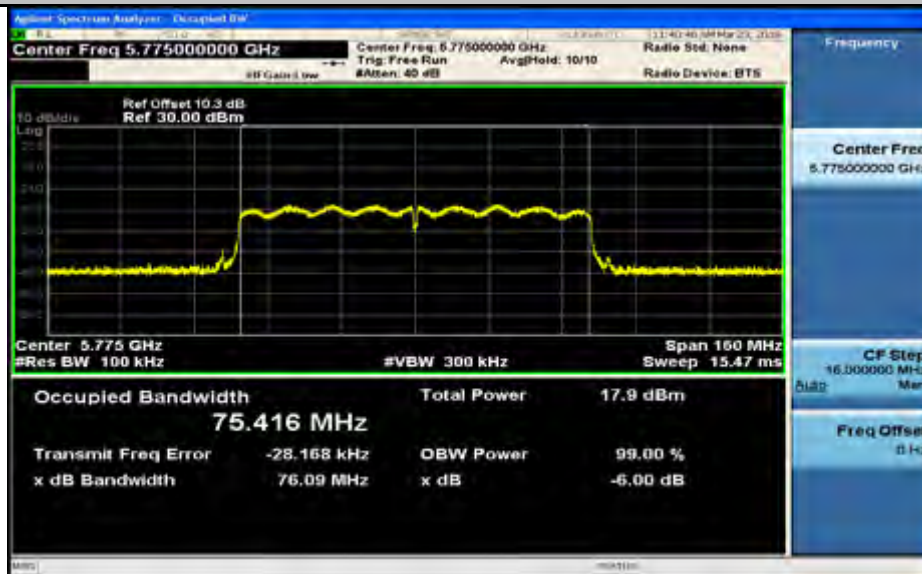
Minimum Emission Bandwidth Measurement_11AC40_5755_Ant0



Minimum Emission Bandwidth Measurement_11AC40_5795_Ant0



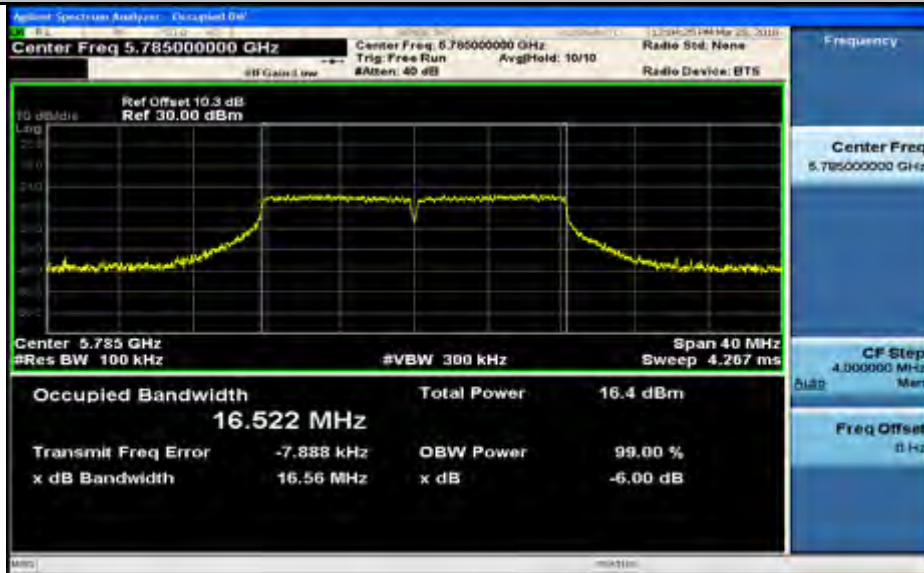
Minimum Emission Bandwidth Measurement_11AC80_5775_Ant0



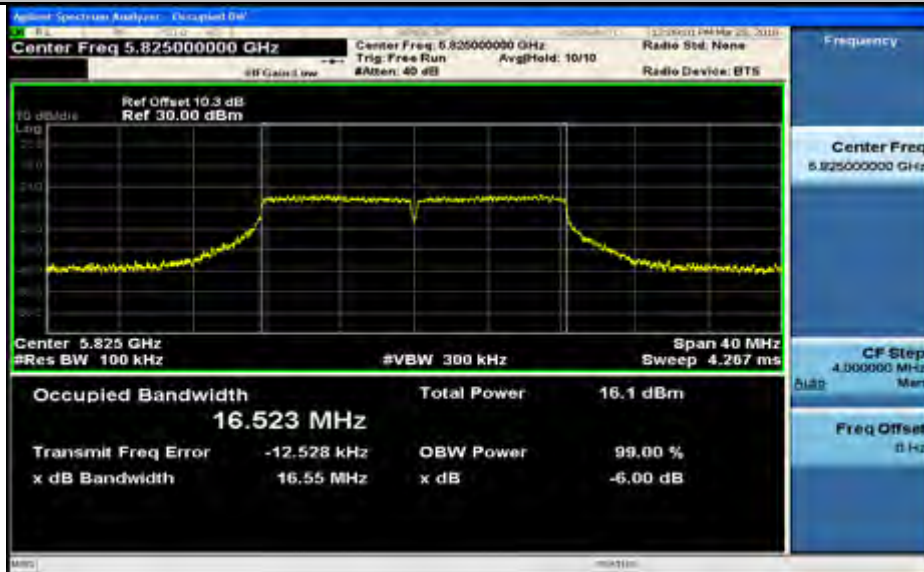
Minimum Emission Bandwidth Measurement_11A_5745_Ant1



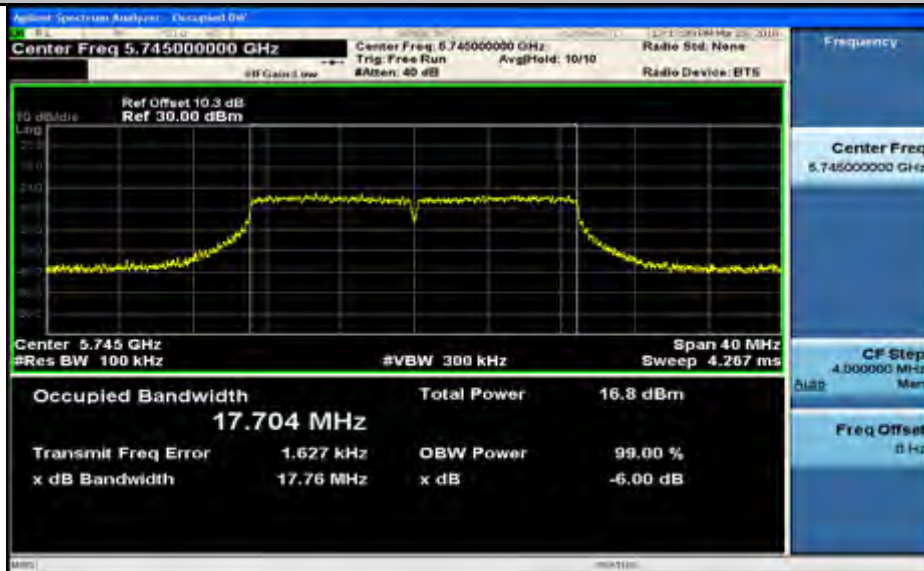
Minimum Emission Bandwidth Measurement_11A_5785_Ant1



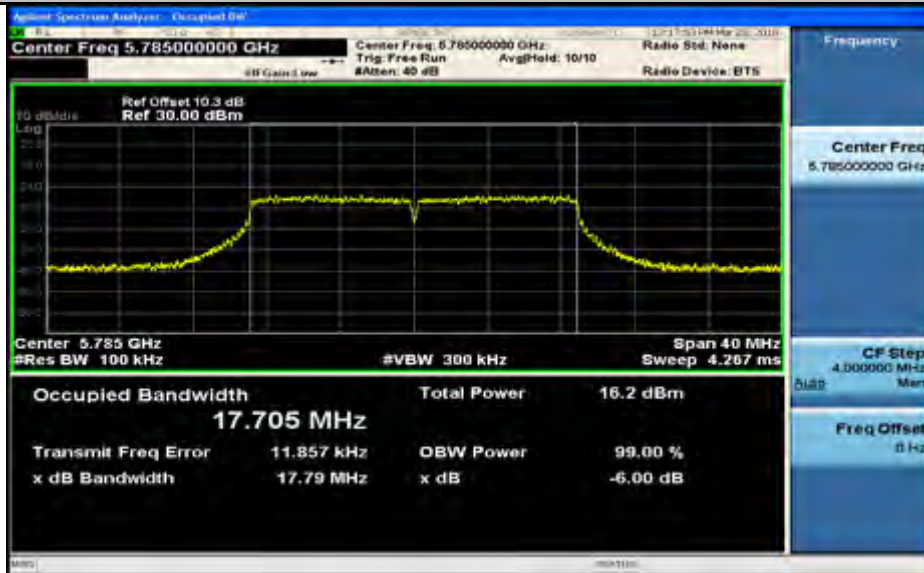
Minimum Emission Bandwidth Measurement_11A_5825_Ant1



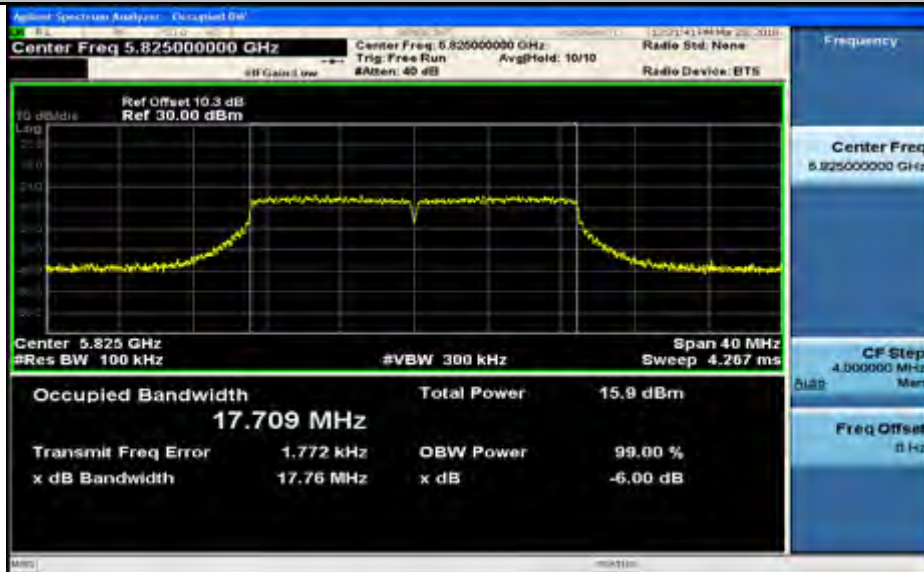
Minimum Emission Bandwidth Measurement_11N20_5745_Ant1



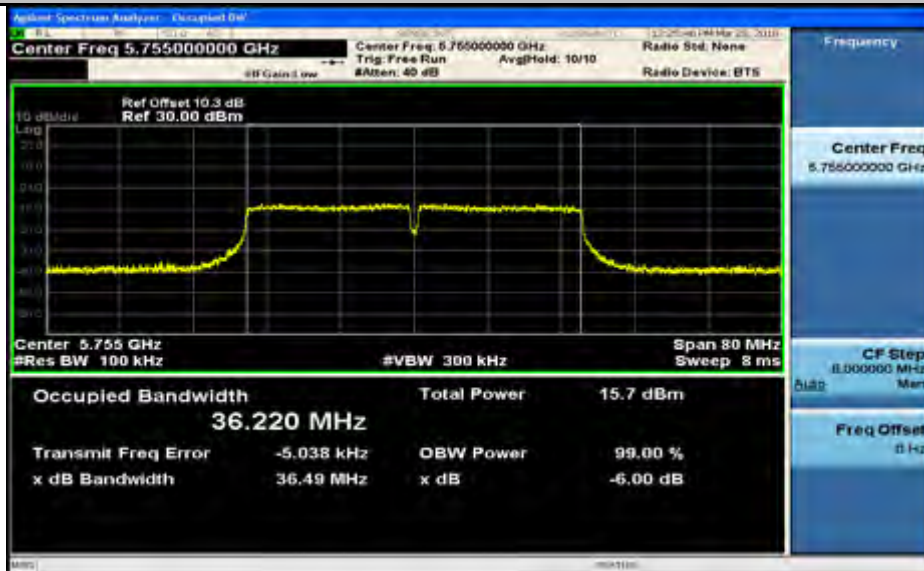
Minimum Emission Bandwidth Measurement_11N20_5785_Ant1



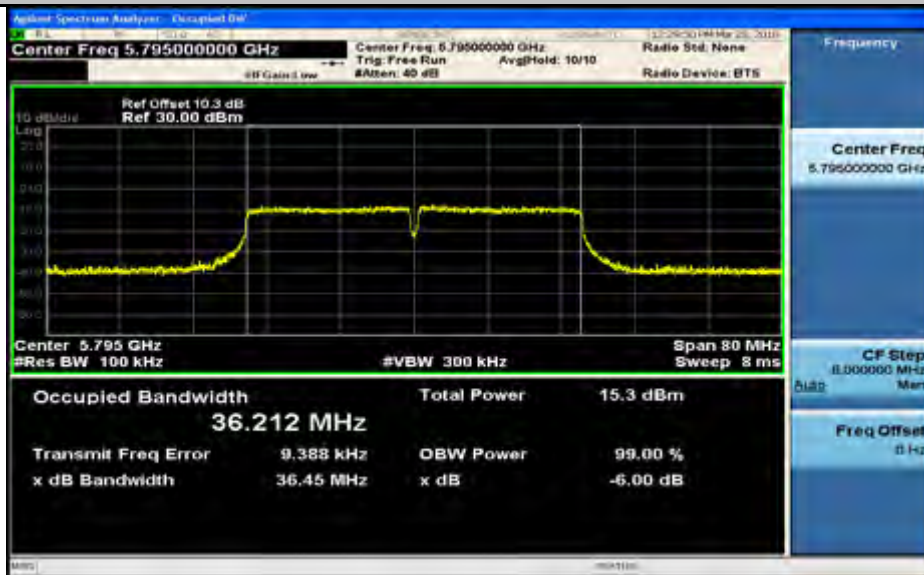
Minimum Emission Bandwidth Measurement_11N20_5825_Ant1



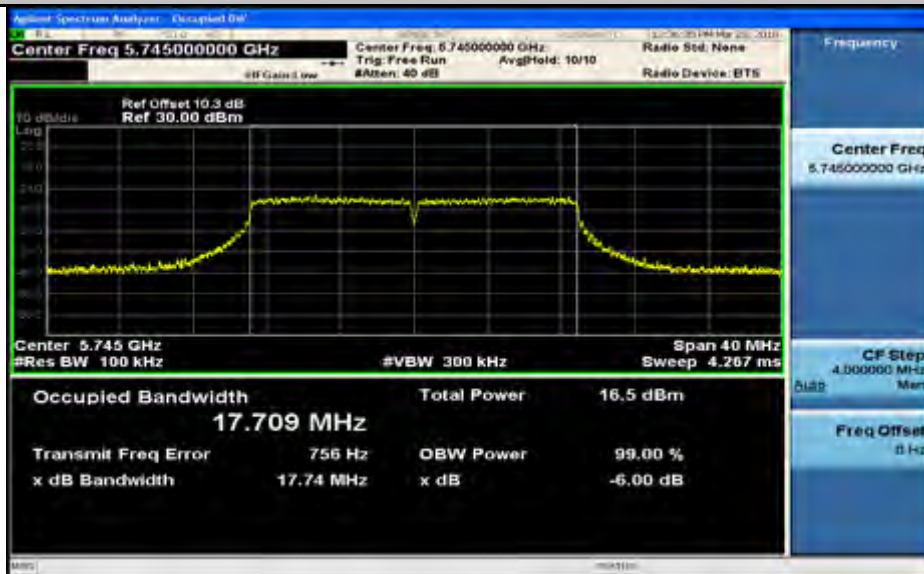
Minimum Emission Bandwidth Measurement_11N40_5755_Ant1



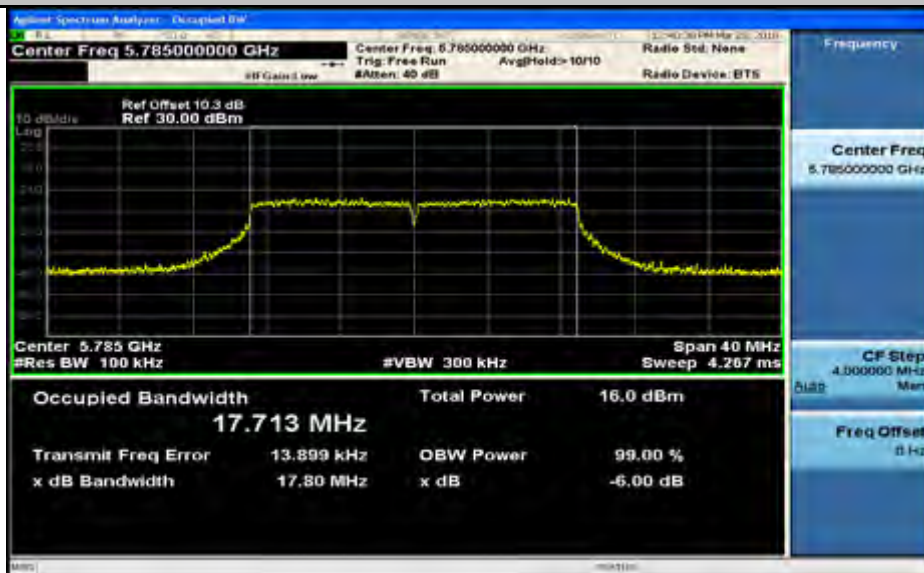
Minimum Emission Bandwidth Measurement_11N40_5795_Ant1



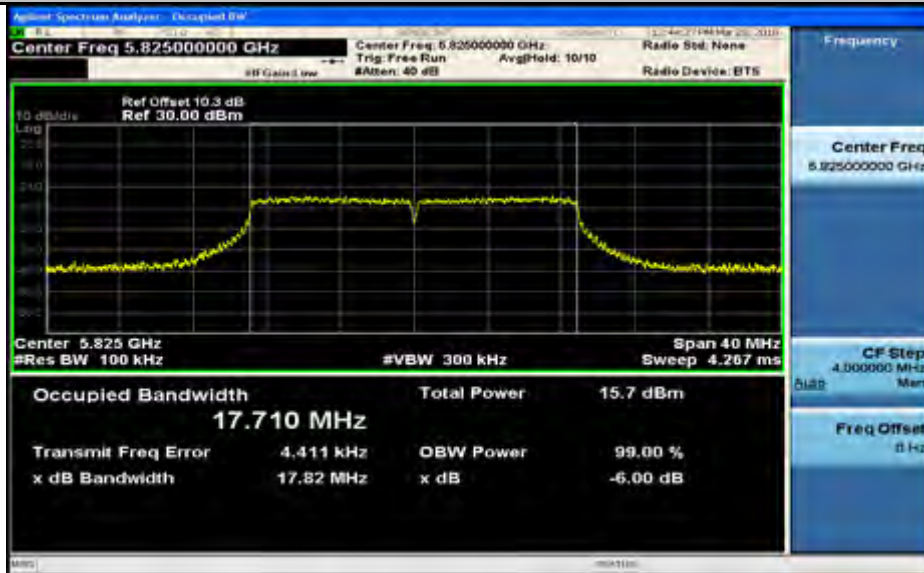
Minimum Emission Bandwidth Measurement_11AC20_5745_Ant1



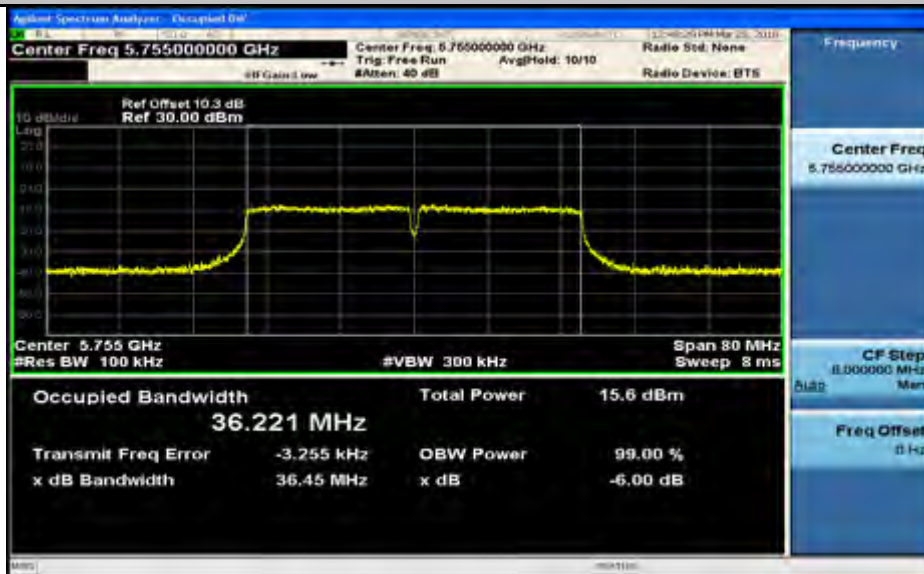
Minimum Emission Bandwidth Measurement_11AC20_5785_Ant1



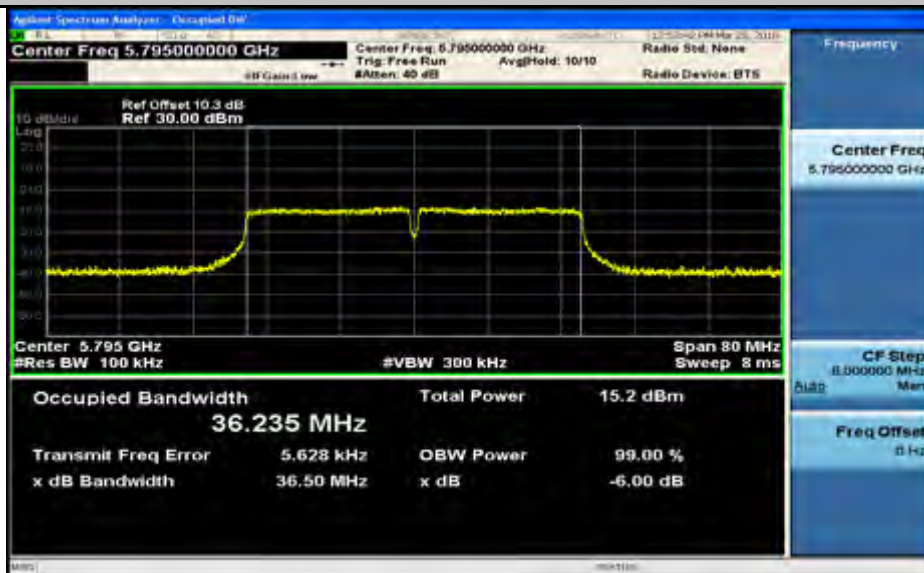
Minimum Emission Bandwidth Measurement_11AC20_5825_Ant1



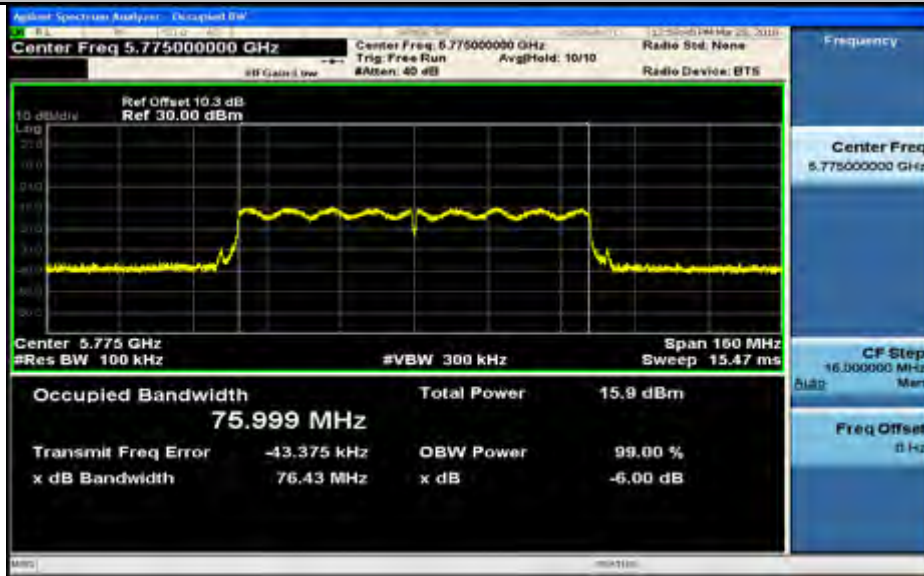
Minimum Emission Bandwidth Measurement_11AC40_5755_Ant1



Minimum Emission Bandwidth Measurement_11AC40_5795_Ant1



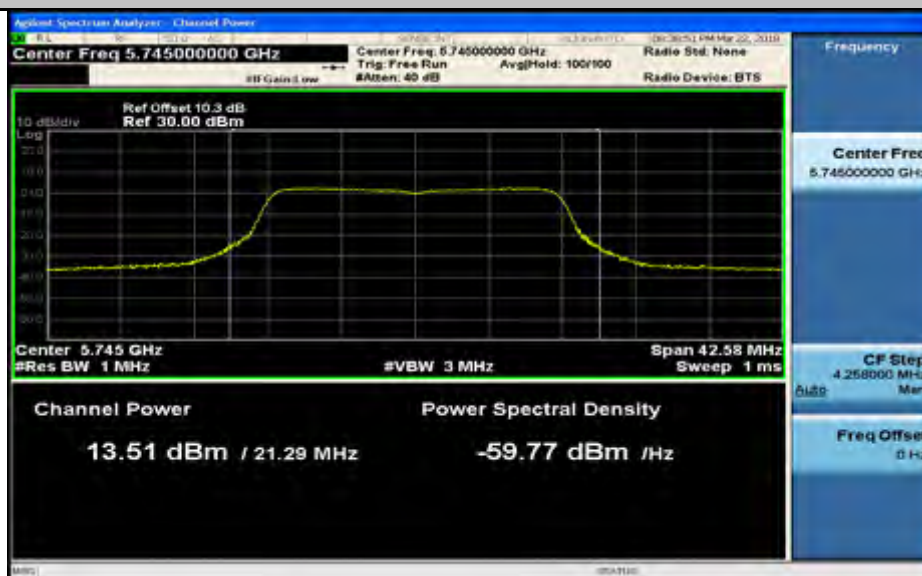
Minimum Emission Bandwidth Measurement_11AC80_5775_Ant1



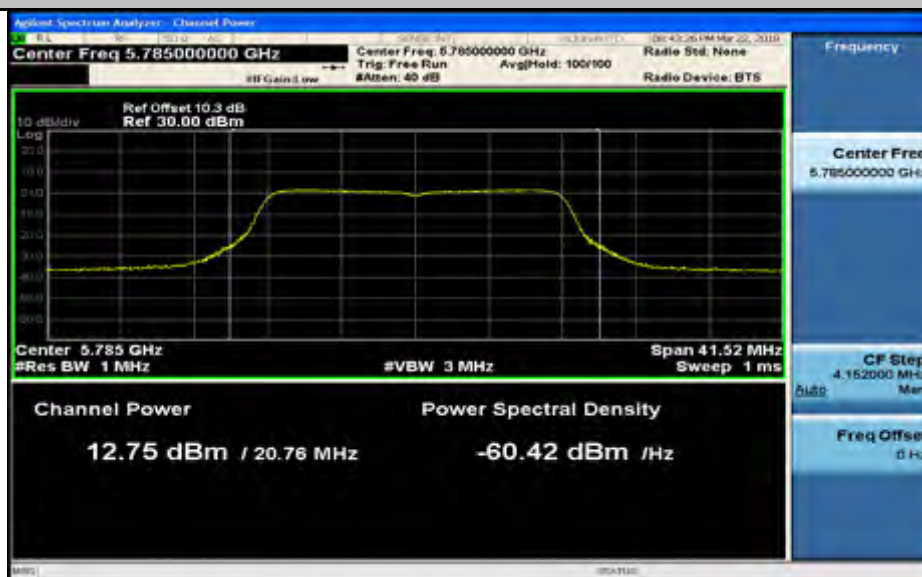
3.Maximum Conduct Output Power

Test Mode	Test Channel	Level [dBm]		10log(1/x) Factor [dB]		Power [dBm]		Limit [dBm]	Verdict
		ANT0	ANT1	ANT0	ANT1	ANT0	ANT1		
11A	5745	13.51	11.39	0.00	0.00	13.51	11.39	30.00	PASS
11A	5785	12.75	10.84	0.00	0.00	12.75	10.84	30.00	PASS
11A	5825	12.55	10.58	0.00	0.00	12.55	10.58	30.00	PASS
11N20	5745	13.56	11.2	0.00	0.00	13.56	11.20	30.00	PASS
11N20	5785	12.49	10.64	0.00	0.00	12.49	10.64	30.00	PASS
11N20	5825	13.68	10.36	0.00	0.00	13.68	10.36	30.00	PASS
11N40	5755	13.53	10.34	0.00	0.00	13.53	10.34	30.00	PASS
11N40	5795	13.15	10.02	0.00	0.00	13.15	10.02	30.00	PASS
11AC20	5745	13.6	11.08	0.00	0.00	13.60	11.08	30.00	PASS
11AC20	5785	13.03	10.5	0.00	0.00	13.03	10.50	30.00	PASS
11AC20	5825	12.48	10.32	0.00	0.00	12.48	10.32	30.00	PASS
11AC40	5755	12.79	10.24	0.00	0.00	12.79	10.24	30.00	PASS
11AC40	5795	12.45	9.92	0.00	0.00	12.45	9.92	30.00	PASS
11AC80	5775	12.6	10.67	0.00	0.00	12.60	10.67	30.00	PASS

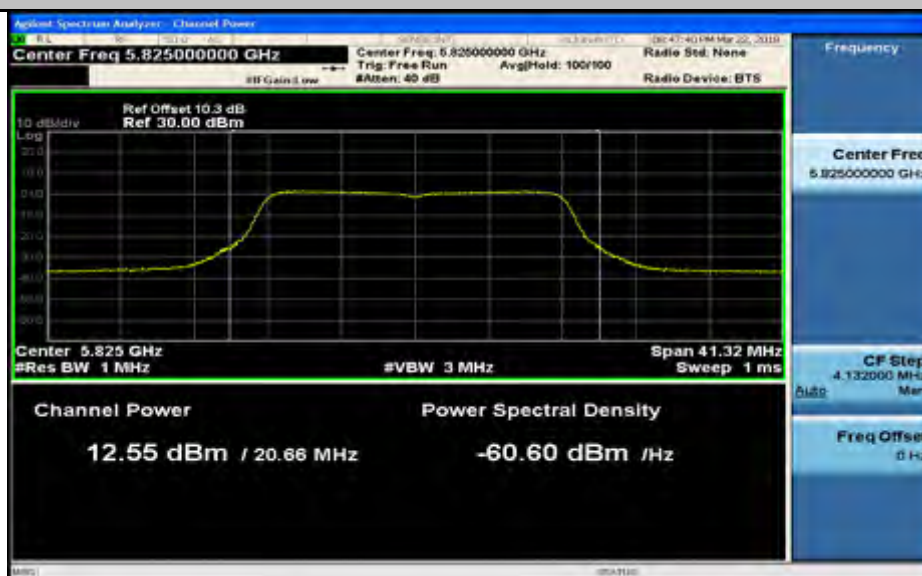
Maximum Conduct Output Power_11A_5745_Ant0



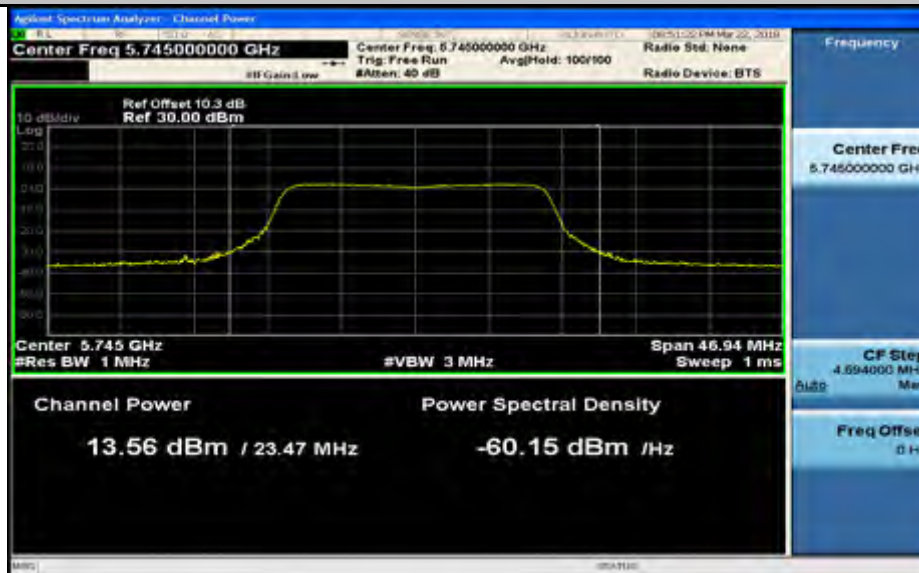
Maximum Conduct Output Power_11A_5785_Ant0



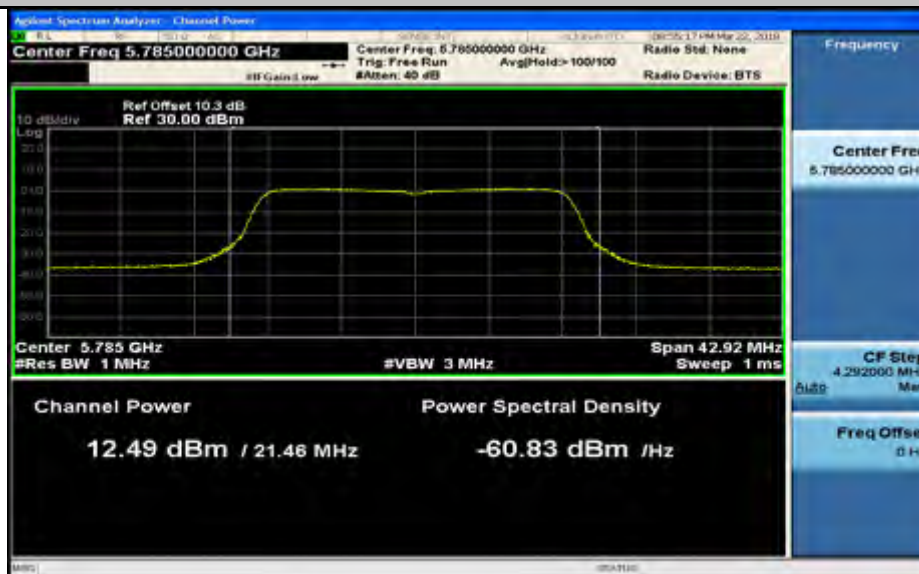
Maximum Conduct Output Power_11A_5825_Ant0



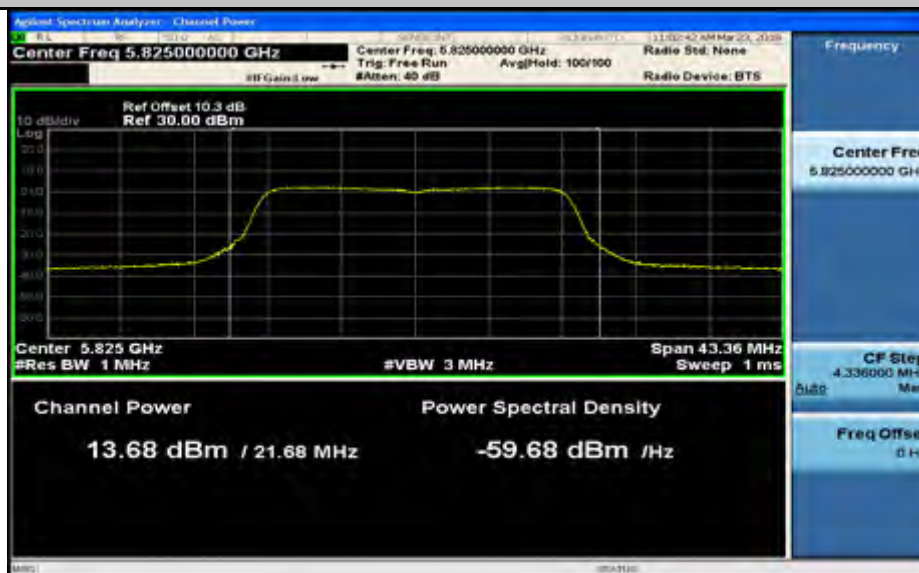
Maximum Conduct Output Power_11N20_5745_Ant0



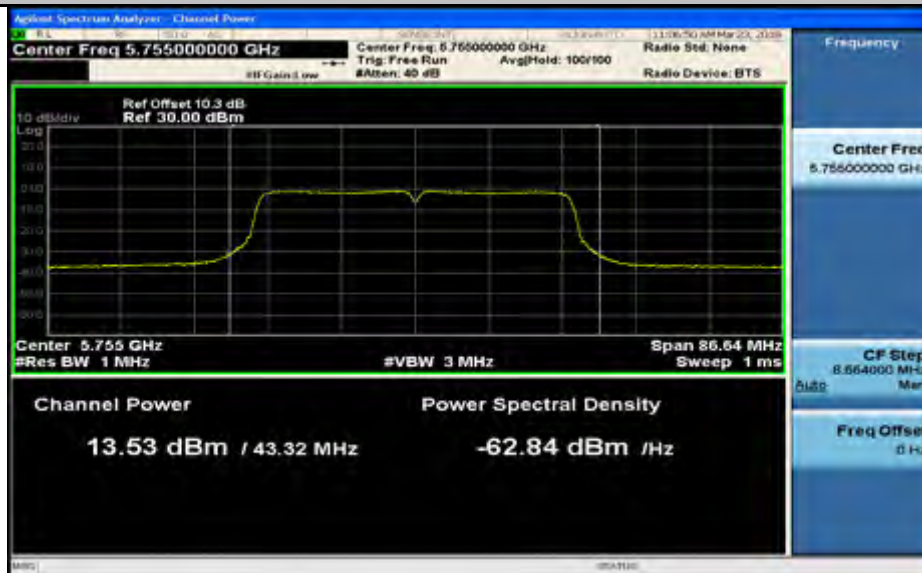
Maximum Conduct Output Power_11N20_5785_Ant0



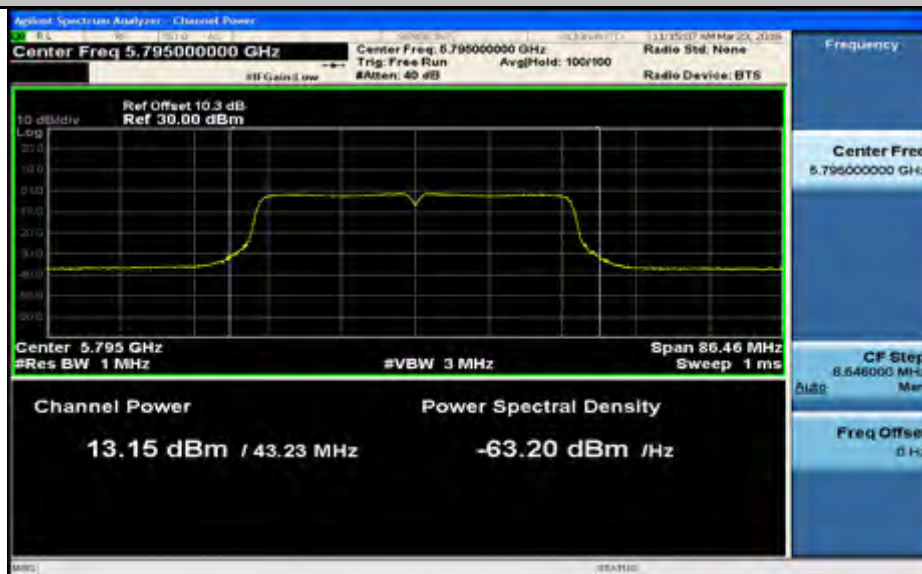
Maximum Conduct Output Power_11N20_5825_Ant0



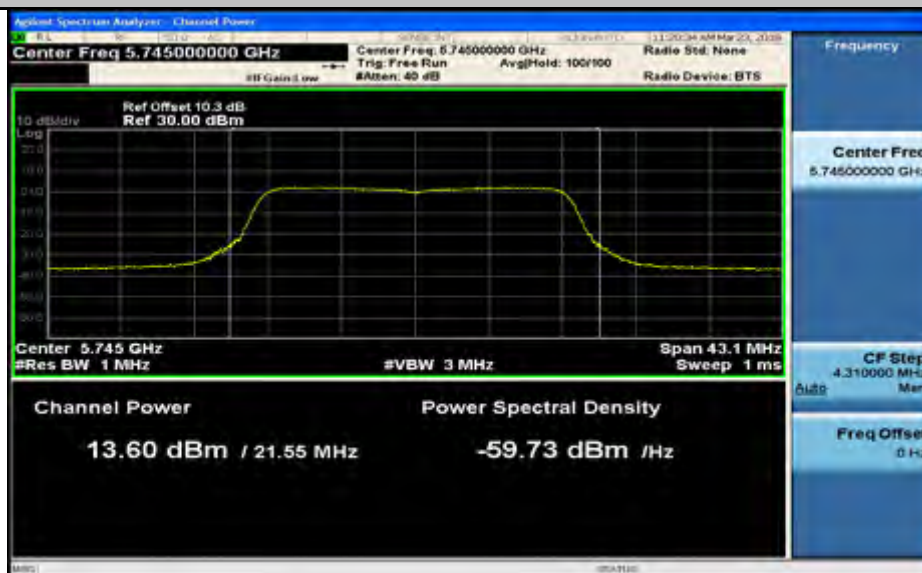
Maximum Conduct Output Power_11N40_5755_Ant0



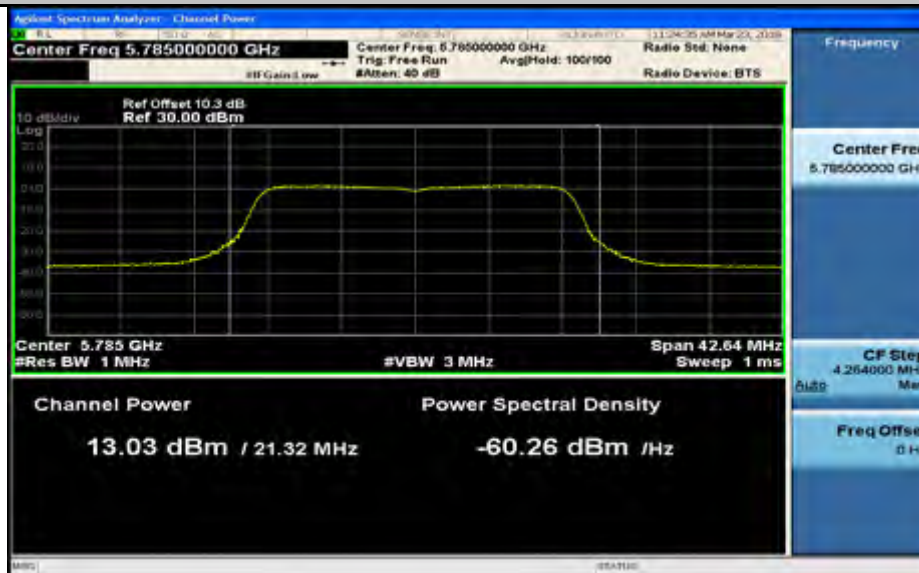
Maximum Conduct Output Power_11N40_5795_Ant0



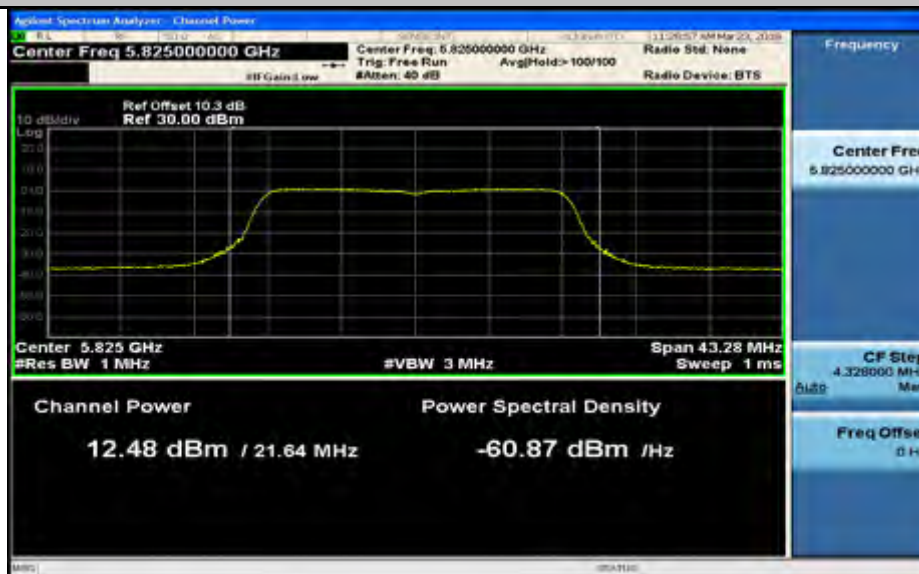
Maximum Conduct Output Power_11AC20_5745_Ant0



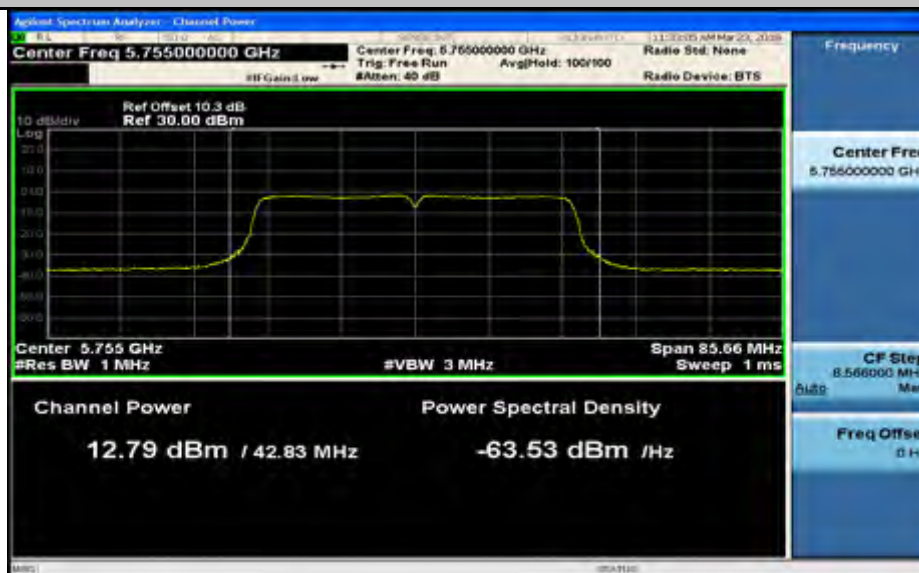
Maximum Conduct Output Power_11AC20_5785_Ant0



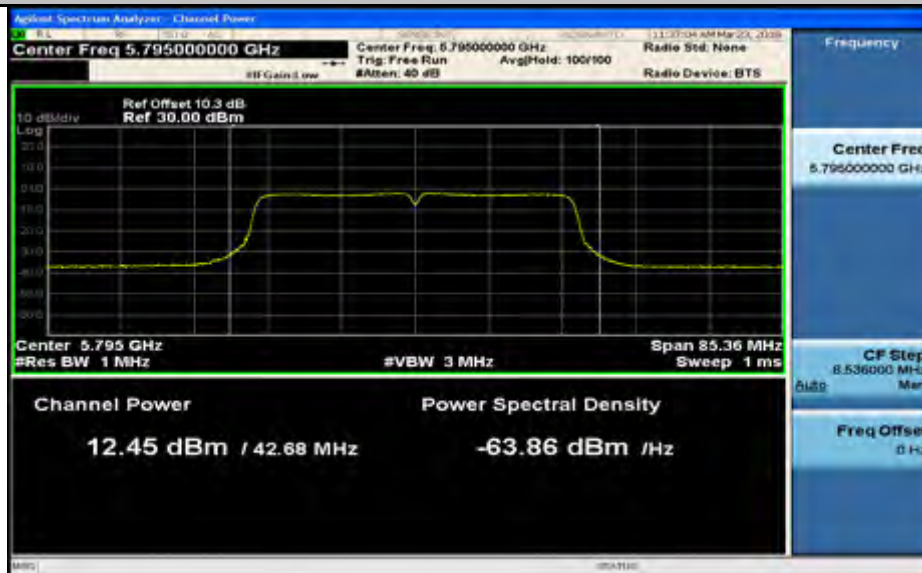
Maximum Conduct Output Power_11AC20_5825_Ant0



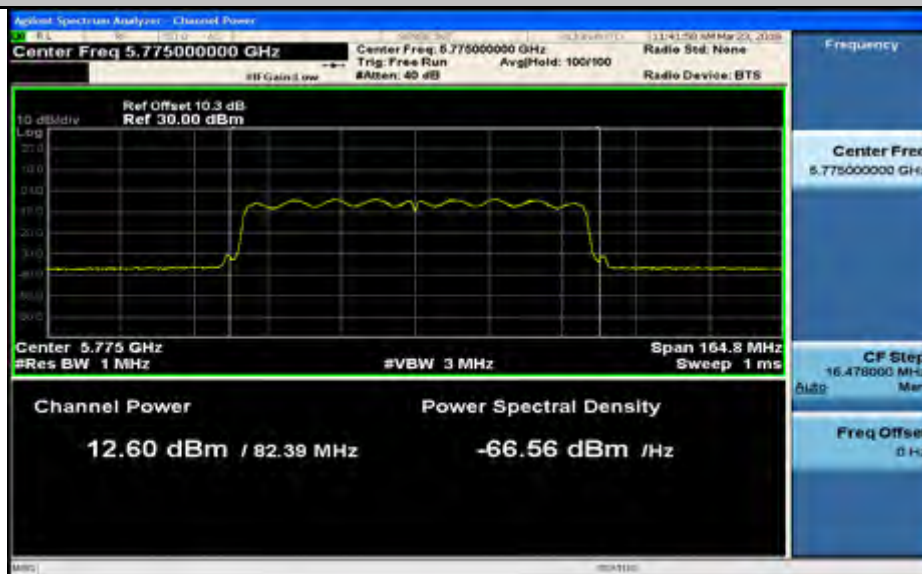
Maximum Conduct Output Power_11AC40_5755_Ant0



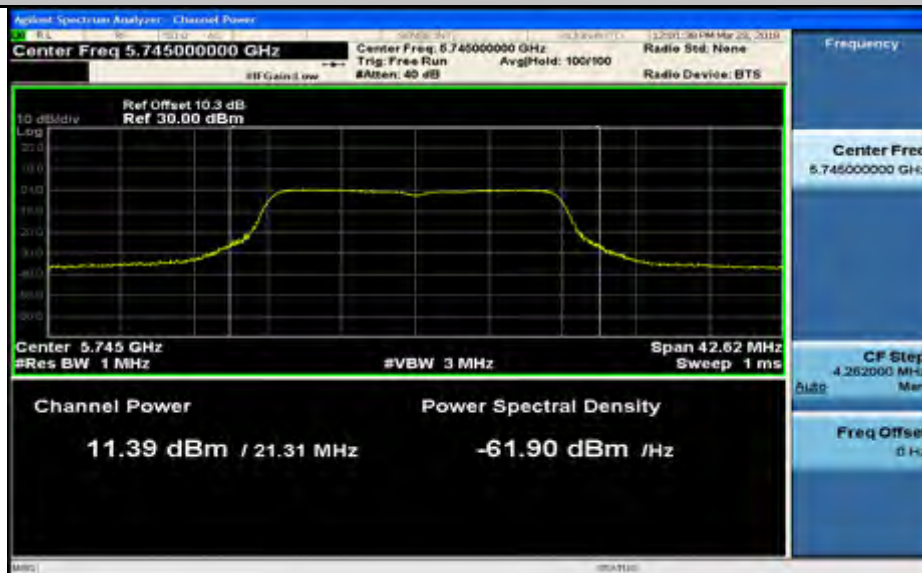
Maximum Conduct Output Power_11AC40_5795_Ant0



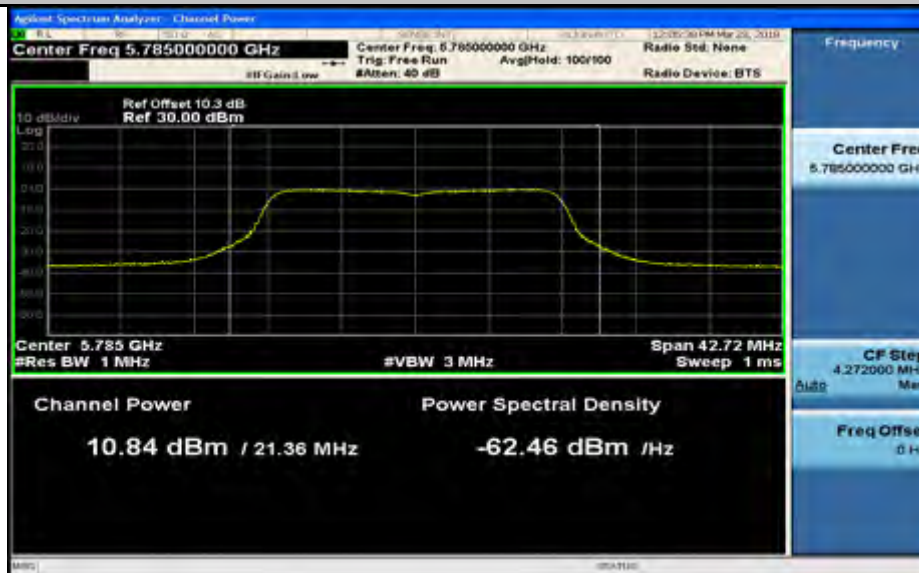
Maximum Conduct Output Power_11AC80_5775_Ant0



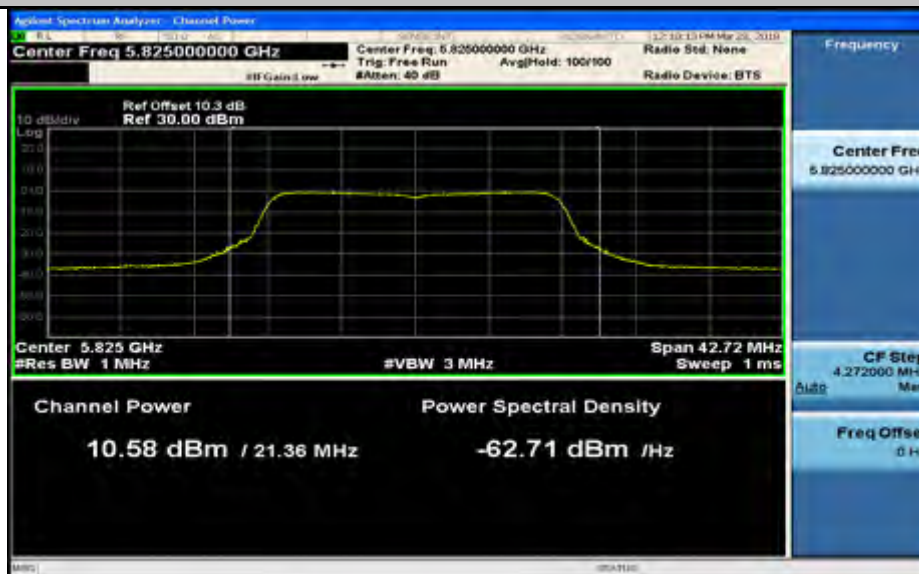
Maximum Conduct Output Power_11A_5745_Ant1



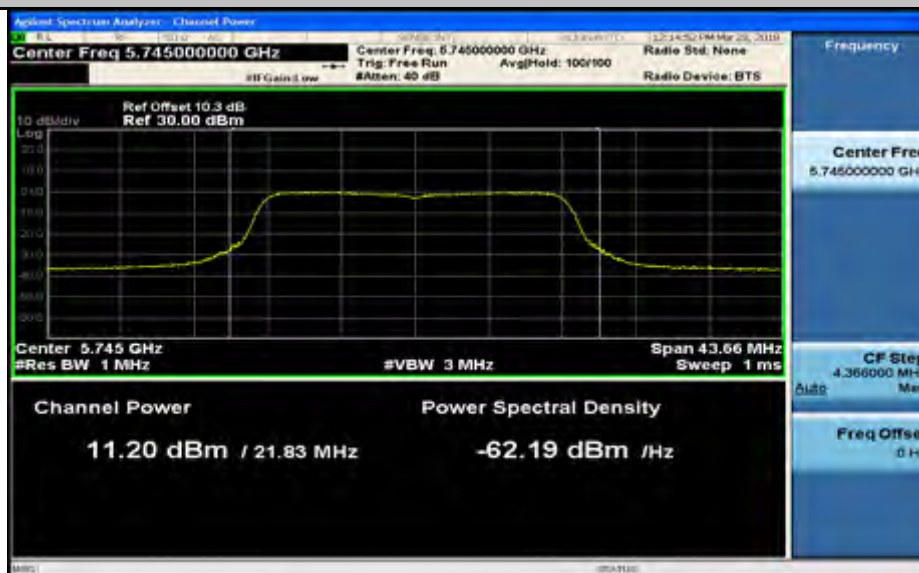
Maximum Conduct Output Power_11A_5785_Ant1



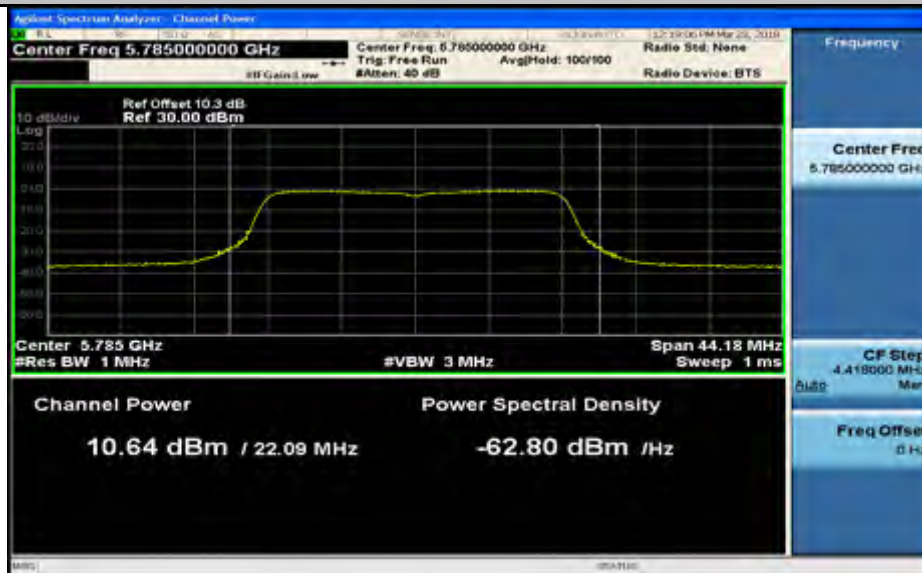
Maximum Conduct Output Power_11A_5825_Ant1



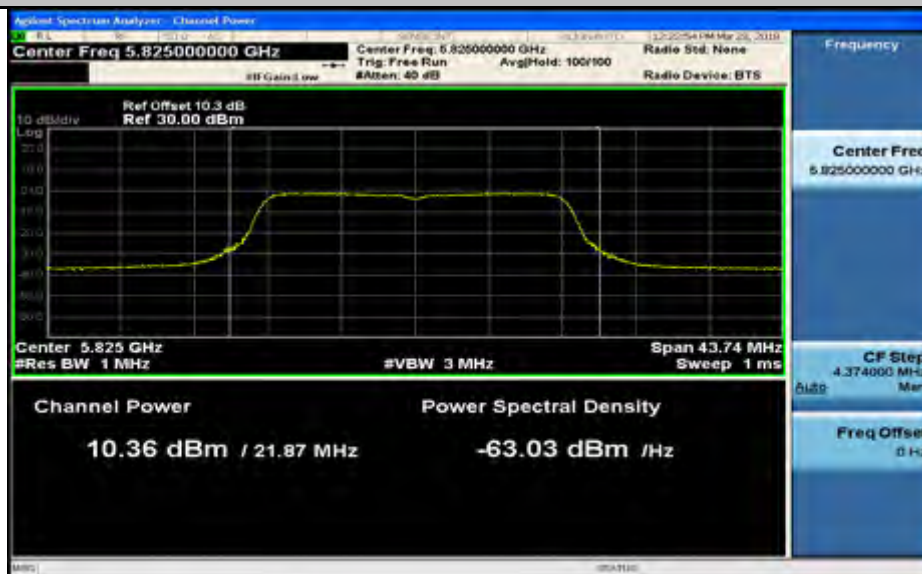
Maximum Conduct Output Power_11N20_5745_Ant1



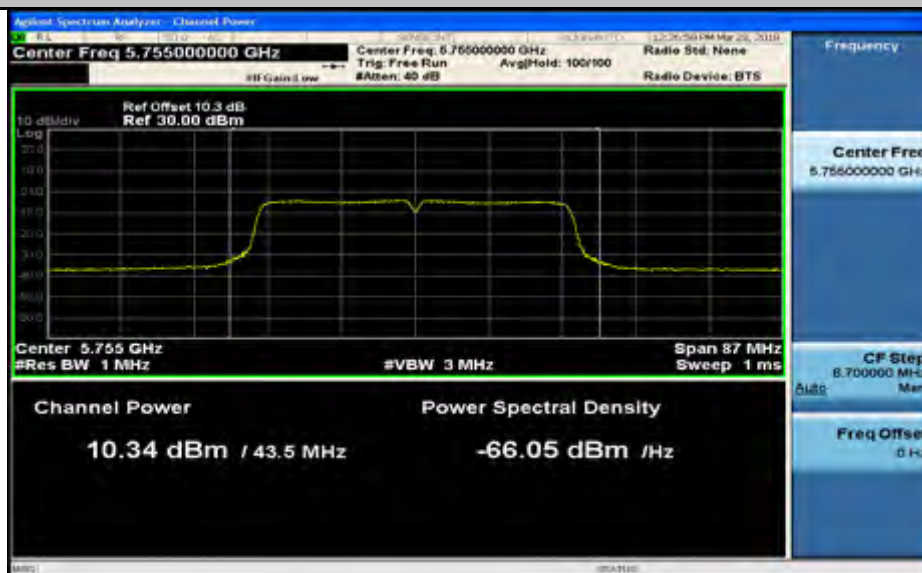
Maximum Conduct Output Power_11N20_5785_Ant1



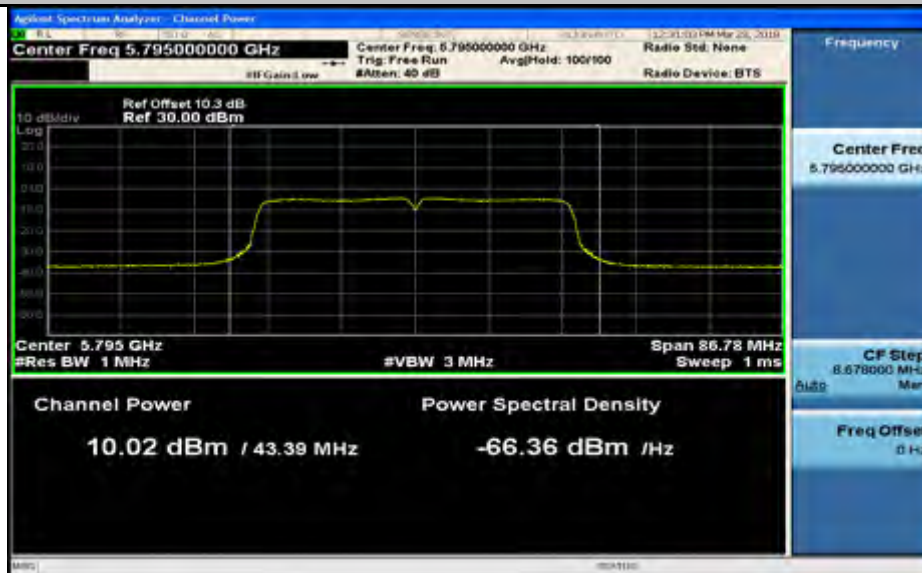
Maximum Conduct Output Power_11N20_5825_Ant1



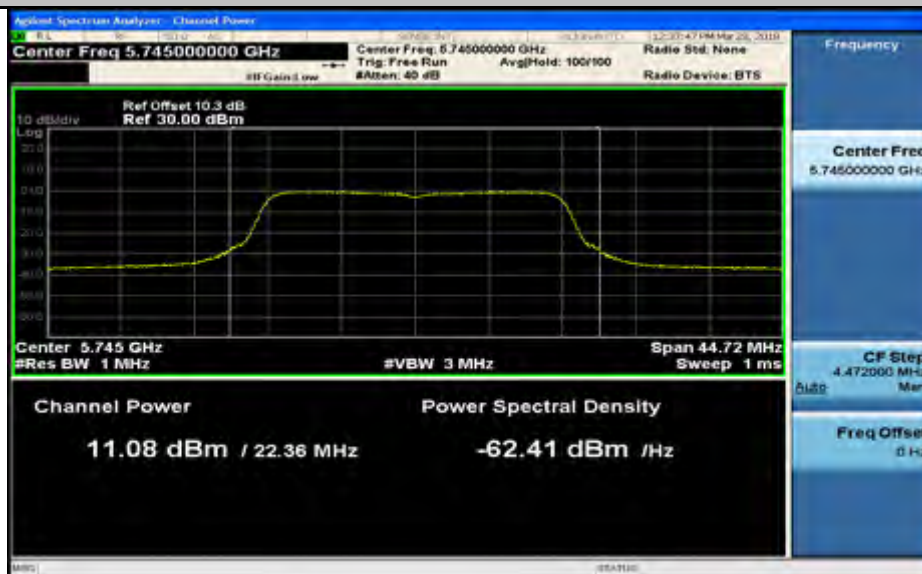
Maximum Conduct Output Power_11N40_5755_Ant1



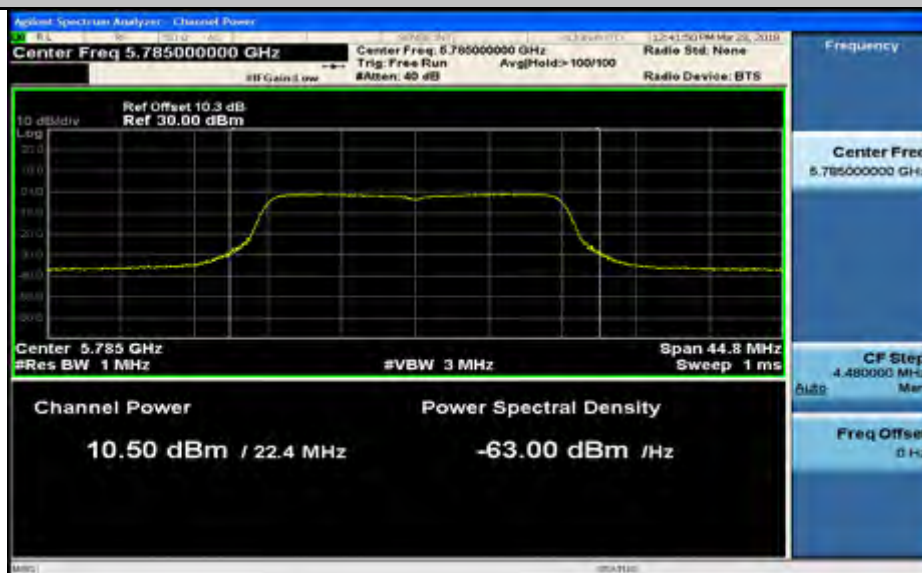
Maximum Conduct Output Power_11N40_5795_Ant1



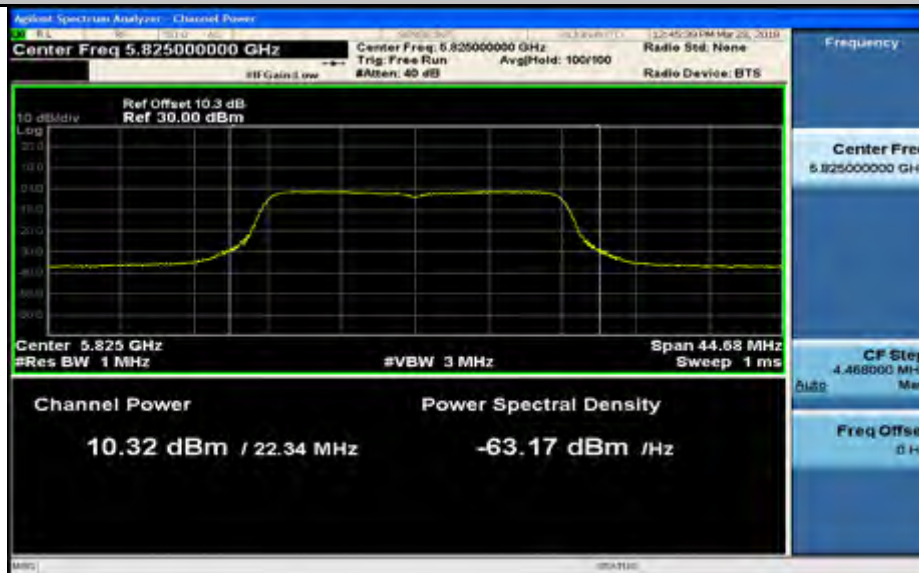
Maximum Conduct Output Power_11AC20_5745_Ant1



Maximum Conduct Output Power_11AC20_5785_Ant1



Maximum Conduct Output Power_11AC20_5825_Ant1



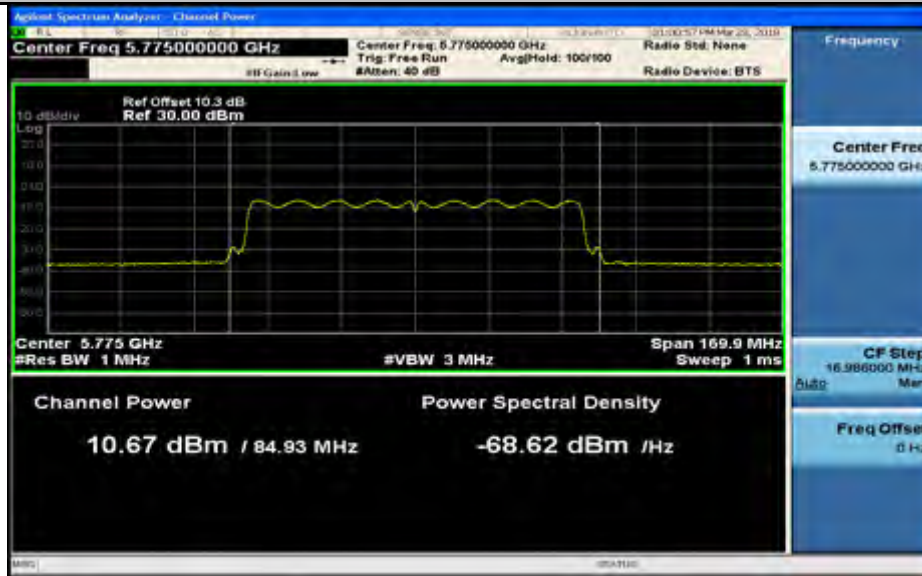
Maximum Conduct Output Power_11AC40_5755_Ant1



Maximum Conduct Output Power_11AC40_5795_Ant1



Maximum Conduct Output Power_11AC80_5775_Ant1



4.Maximum Power Spectral Density

Test Mode	Test Channel	Level [dBm/500kHz]		10log(1/x) Factor[dB]		10log(500kHz/RBW) Factor [dB]		PSD [dBm/500kHz]		Limit [dBm/500kHz]	Verdict
		ANT0	ANT1	ANT0	ANT1	ANT0	ANT1	ANT0	ANT1		
11A	5745	-2.78	-4.89	0.00	0.00	2.22	2.22	-0.56	-2.67	17.00	PASS
11A	5785	-3.35	-5.25	0.00	0.00	2.22	2.22	-1.13	-3.03	17.00	PASS
11A	5825	-3.67	-5.46	0.00	0.00	2.22	2.22	-1.46	-3.24	17.00	PASS
11N20	5745	-2.77	-5.11	0.00	0.00	2.22	2.22	-0.56	-2.89	17.00	PASS
11N20	5785	-3.75	-5.52	0.00	0.00	2.22	2.22	-1.53	-3.30	17.00	PASS
11N20	5825	-2.80	-6.08	0.00	0.00	2.22	2.22	-0.58	-3.86	17.00	PASS
11N40	5755	-6.25	-9.21	0.00	0.00	2.22	2.22	-4.03	-6.99	17.00	PASS
11N40	5795	-6.44	-9.42	0.00	0.00	2.22	2.22	-4.22	-7.20	17.00	PASS
11AC20	5745	-2.70	-5.28	0.00	0.00	2.22	2.22	-0.48	-3.06	17.00	PASS
11AC20	5785	-3.47	-5.87	0.00	0.00	2.22	2.22	-1.25	-3.65	17.00	PASS
11AC20	5825	-3.87	-6.02	0.00	0.00	2.22	2.22	-1.66	-3.80	17.00	PASS
11AC40	5755	-6.87	-9.27	0.00	0.00	2.22	2.22	-4.65	-7.05	17.00	PASS
11AC40	5795	-7.18	-9.70	0.00	0.00	2.22	2.22	-4.97	-7.48	17.00	PASS
11AC80	5775	-9.25	-11.68	0.00	0.00	2.22	2.22	-7.03	-9.46	17.00	PASS

Maximum Power Spectral Density_TNVN_11A_5745_Ant0



Maximum Power Spectral Density_TNVN_11A_5785_Ant0



Maximum Power Spectral Density_TNVN_11A_5825_Ant0



Maximum Power Spectral Density_TNVN_11N20_5745_Ant0



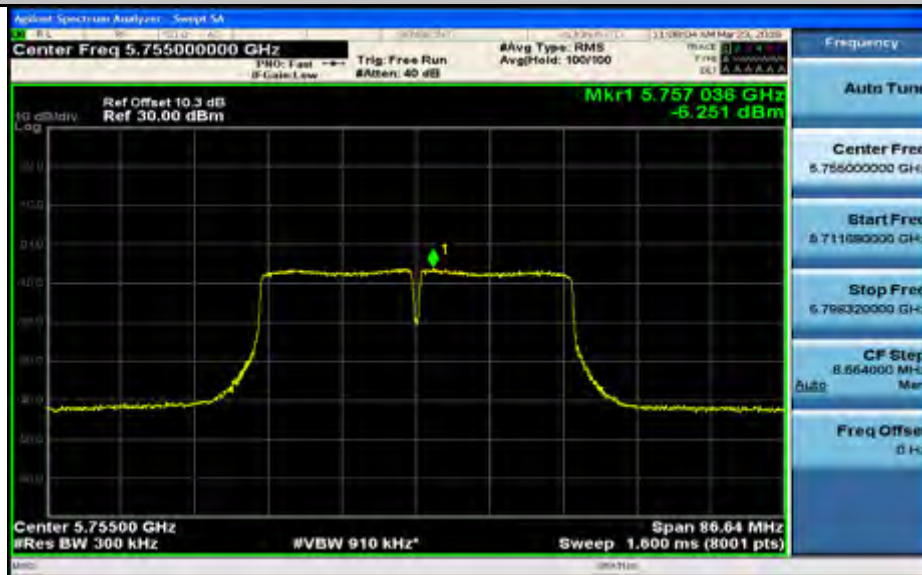
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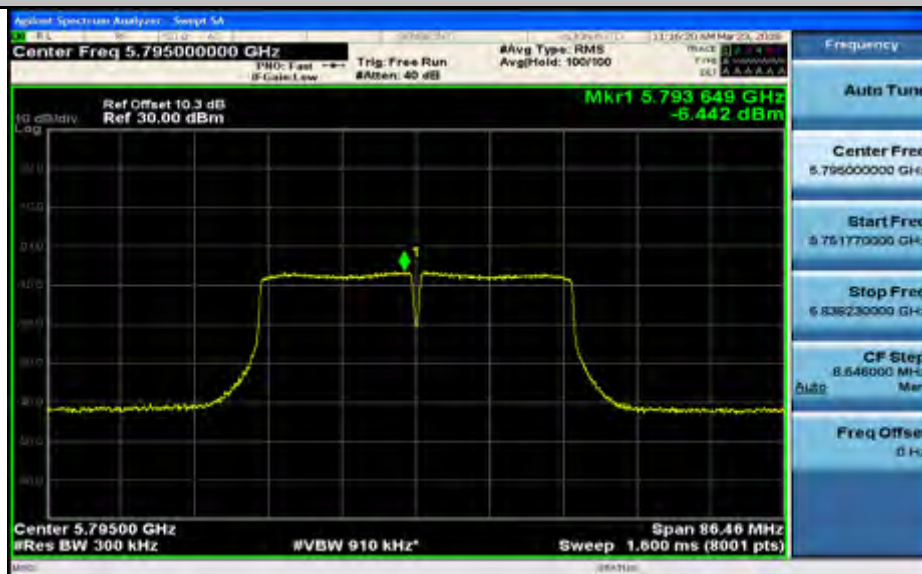
Maximum Power Spectral Density_TNVN_11N20_5825_Ant0



Maximum Power Spectral Density_TNVN_11N40_5755_Ant0



Maximum Power Spectral Density_TNVN_11N40_5795_Ant0



Maximum Power Spectral Density_TNVN_11AC20_5745_Ant0



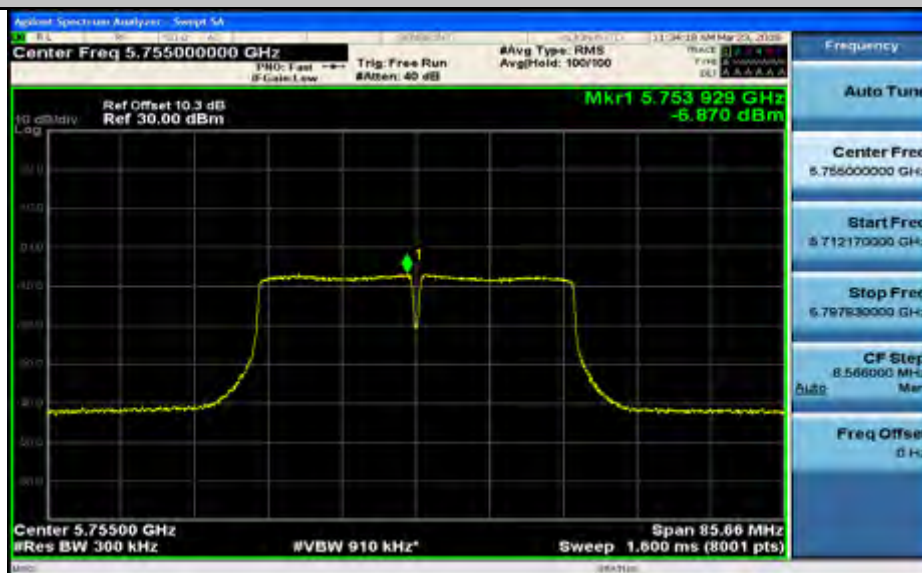
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Maximum Power Spectral Density_TNVN_11AC20_5825_Ant0



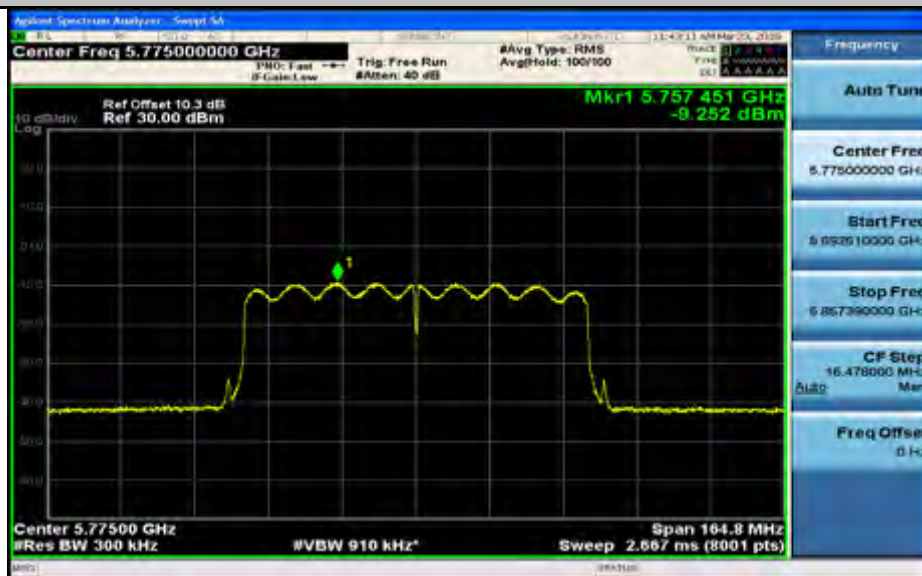
Maximum Power Spectral Density_TNVN_11AC40_5755_Ant0



Maximum Power Spectral Density_TNVN_11AC40_5795_Ant0



Maximum Power Spectral Density_TNVN_11AC80_5775_Ant0



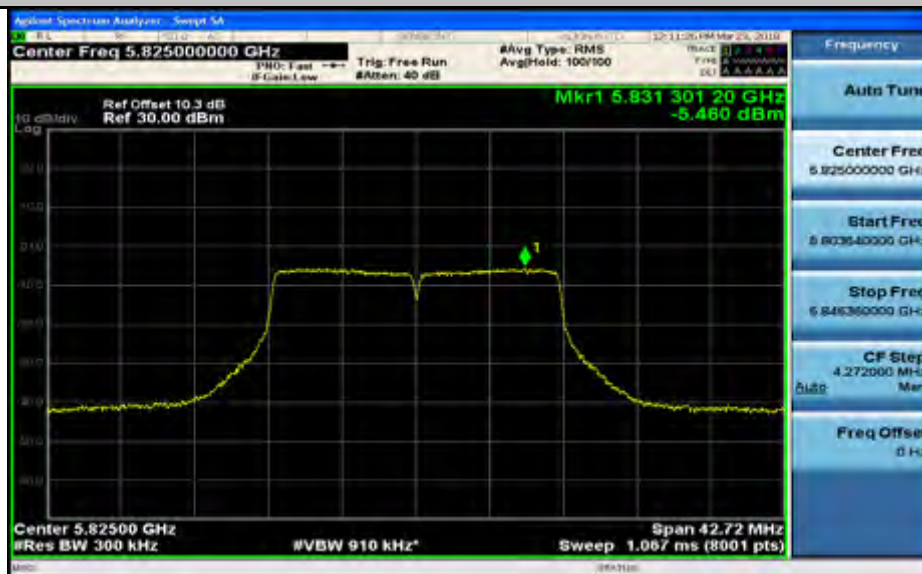
Maximum Power Spectral Density_TNVN_11A_5745_Ant1



Maximum Power Spectral Density_TNVN_11A_5785_Ant1



Maximum Power Spectral Density_TNVN_11A_5825_Ant1



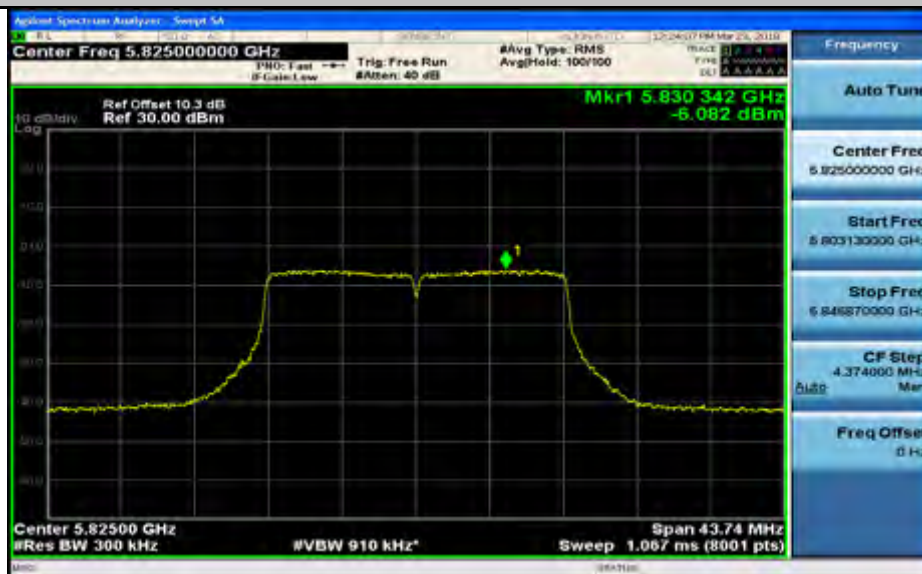
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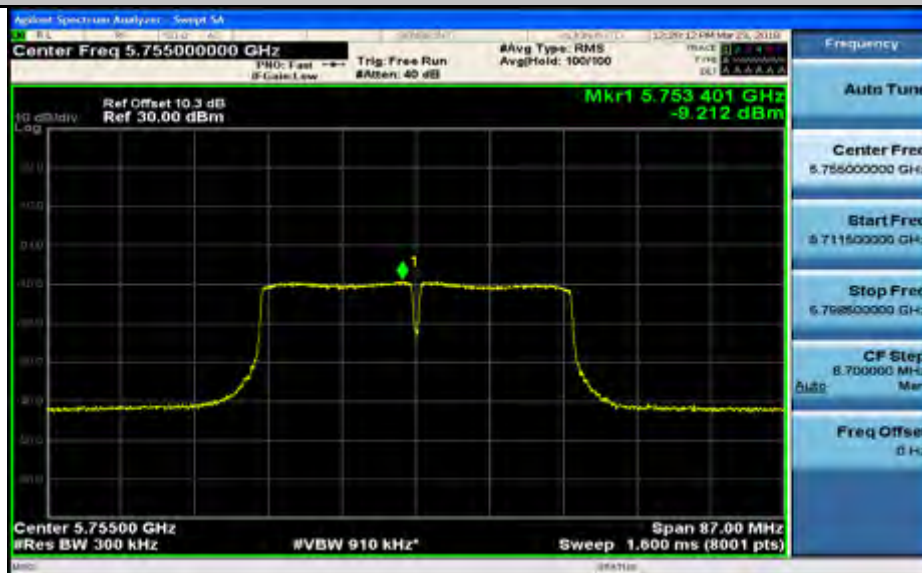
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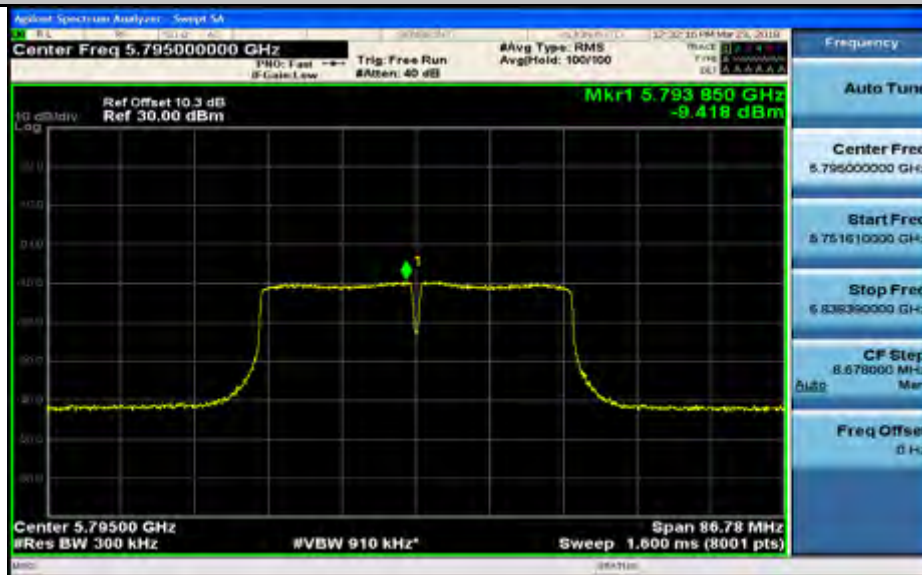
Maximum Power Spectral Density_TNVN_11N20_5825_Ant1



Maximum Power Spectral Density_TNVN_11N40_5755_Ant1



Maximum Power Spectral Density_TNVN_11N40_5795_Ant1



Maximum Power Spectral Density_TNVN_11AC20_5745_Ant1



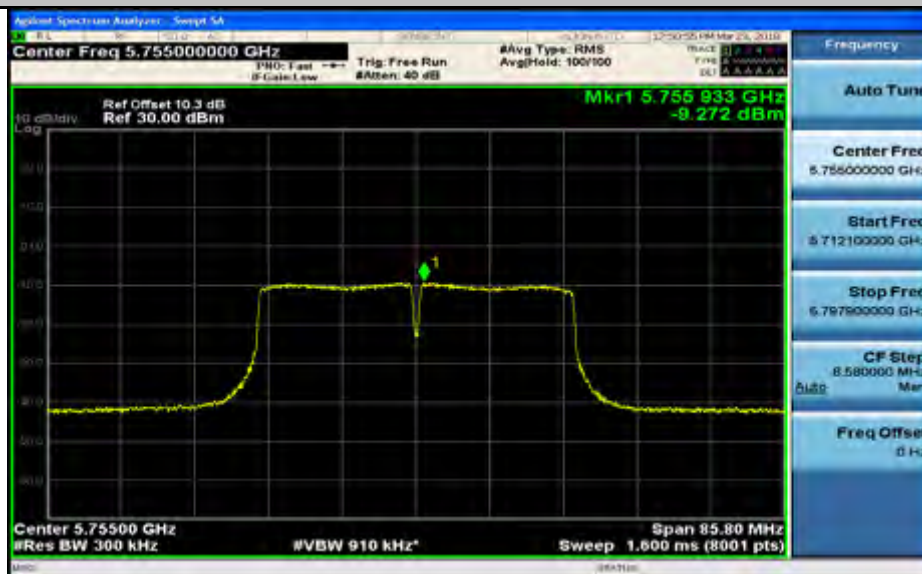
Maximum Power Spectral Density_TNVN_11AC20_5785_Ant1



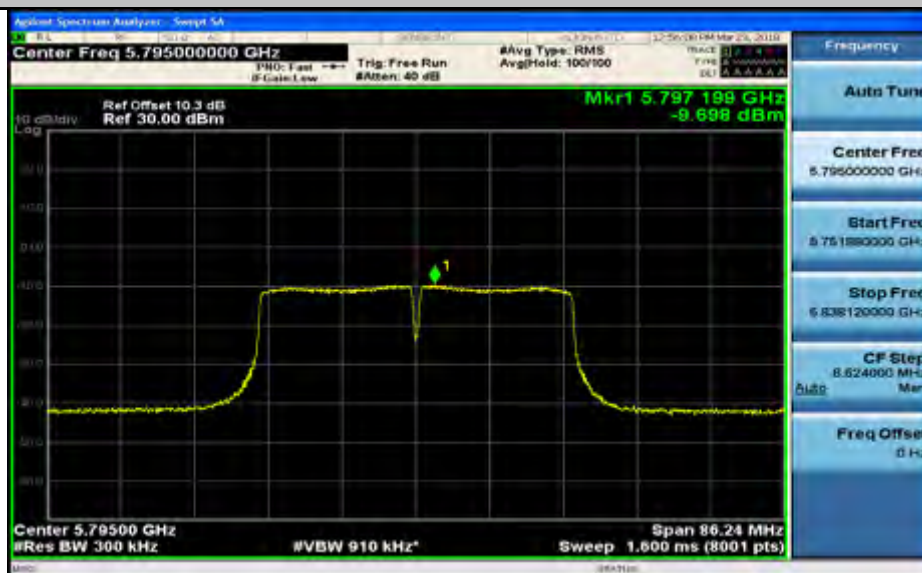
Maximum Power Spectral Density_TNVN_11AC20_5825_Ant1



Maximum Power Spectral Density_TNVN_11AC40_5755_Ant1



Maximum Power Spectral Density_TNVN_11AC40_5795_Ant1



Maximum Power Spectral Density_TNVN_11AC80_5775_Ant1



5.Frequency Stability

Band	Test Conditions		Operation Frequency (MHz)	Test Frequency (MHz)		Freq. Dev. (MHz)		Limit (GHz)	Result
	Volt (V DC)	Temp (°C)		ANT0	ANT1	ANT0	ANT1		
Band U-NII 1	Normal(24)	Extreme(-20)	5725	5725.0542	5725.0525	0.0542	0.0525	5.725- 5.850	Pass
		Extreme(-10)		5725.0715	5725.0734	0.0715	0.0734		Pass
		Extreme(0)		5725.0281	5725.0251	0.0281	0.0251		Pass
		Extreme(+10)		5725.0435	5725.0465	0.0435	0.0465		Pass
		Extreme(+20)		5725.0746	5725.0753	0.0746	0.0753		Pass
		Extreme(+30)		5725.0652	5725.0602	0.0652	0.0602		Pass
		Extreme(+40)		5725.0541	5725.0743	0.0541	0.0743		Pass
		Extreme(+55)		5725.0511	5725.0522	0.0511	0.0522		Pass
	Extreme(9)	Norma(+20)	5725.0426	5725.0418	0.0426	0.0418	Pass		
	Extreme(32)		5725.0523	5725.0541	0.0523	0.0541	Pass		
	Normal(24)	5850	Extreme(-20)	5850.0217	5850.0264	0.0271	0.0264		Pass
			Extreme(-10)	5850.0462	5850.0434	0.0462	0.0434		Pass
			Extreme(0)	5850.0254	5850.0234	0.0254	0.0234		Pass
			Extreme(+10)	5850.0315	5850.0405	0.0315	0.0405		Pass
			Extreme(+20)	5850.0154	5850.0175	0.0154	0.0175		Pass
			Extreme(+30)	5850.0237	5850.0242	0.0237	0.0242		Pass
			Extreme(+40)	5850.0326	5850.0331	0.0326	0.0331		Pass
			Extreme(+55)	5850.0475	5850.0424	0.0475	0.0424		Pass
	Extreme(9)	Norma(20)	5850.0264	5850.0220	0.0264	0.0220	Pass		
	Extreme(32)		5850.0254	5850.0241	0.0254	0.0241	Pass		

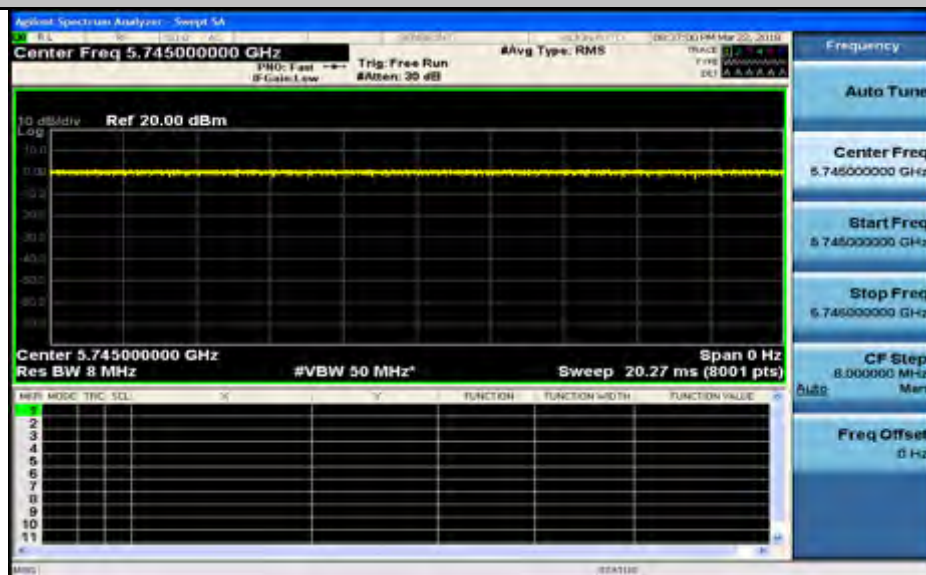
Remark: Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is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



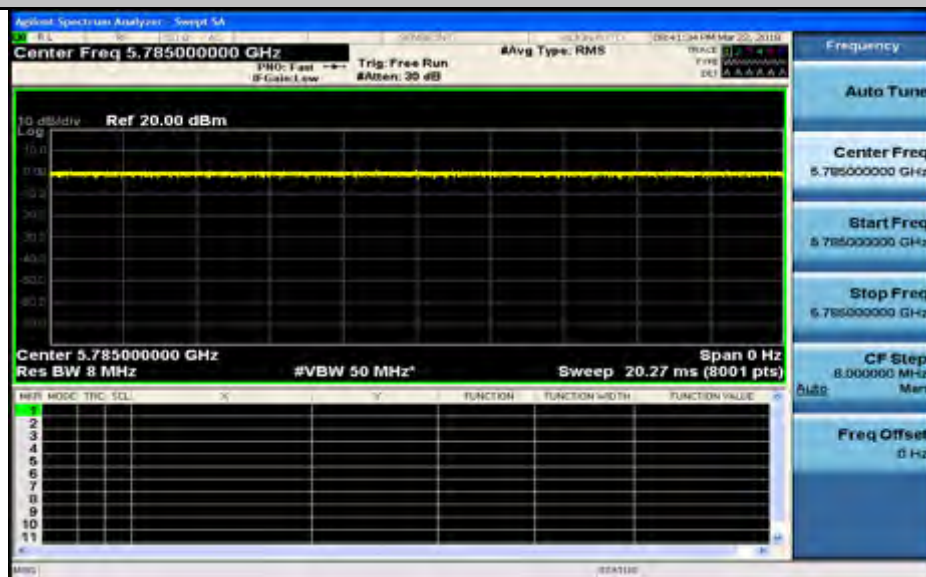
6.Duty Cycle

Test Mode	Test Channel	Duty Cycle[%]		10log(1/x) Factor[dB]	
		ANT0	ANT1	ANT0	ANT1
11A	5745	100.00	100.00	0.00	0.00
11A	5785	100.00	100.00	0.00	0.00
11A	5825	100.00	100.00	0.00	0.00
11N20	5745	100.00	100.00	0.00	0.00
11N20	5785	100.00	100.00	0.00	0.00
11N20	5825	100.00	100.00	0.00	0.00
11N40	5755	100.00	100.00	0.00	0.00
11N40	5795	100.00	100.00	0.00	0.00
11AC20	5745	100.00	100.00	0.00	0.00
11AC20	5785	100.00	100.00	0.00	0.00
11AC20	5825	100.00	100.00	0.00	0.00
11AC40	5755	100.00	100.00	0.00	0.00
11AC40	5795	100.00	100.00	0.00	0.00
11AC80	5775	100.00	100.00	0.00	0.00

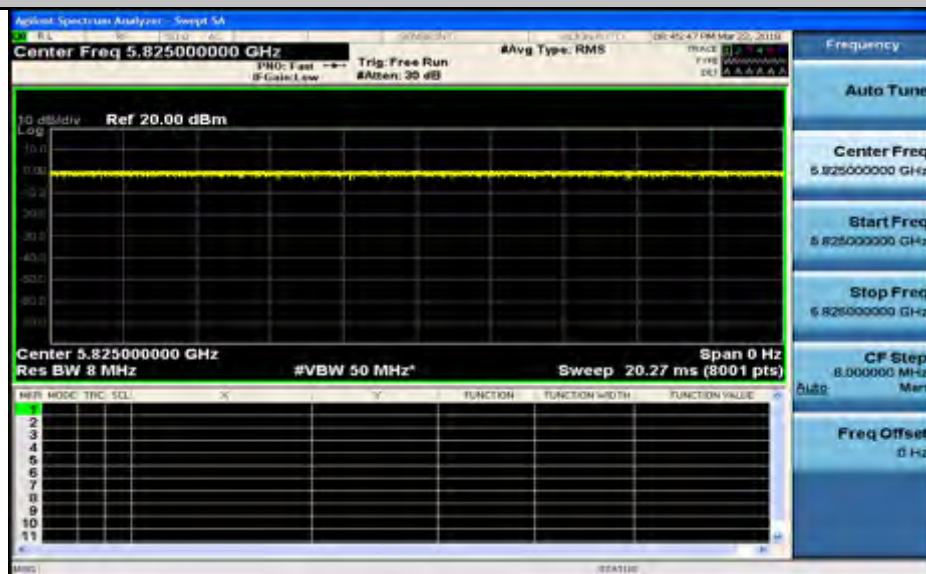
Duty Cycle_11A_5745_Ant0



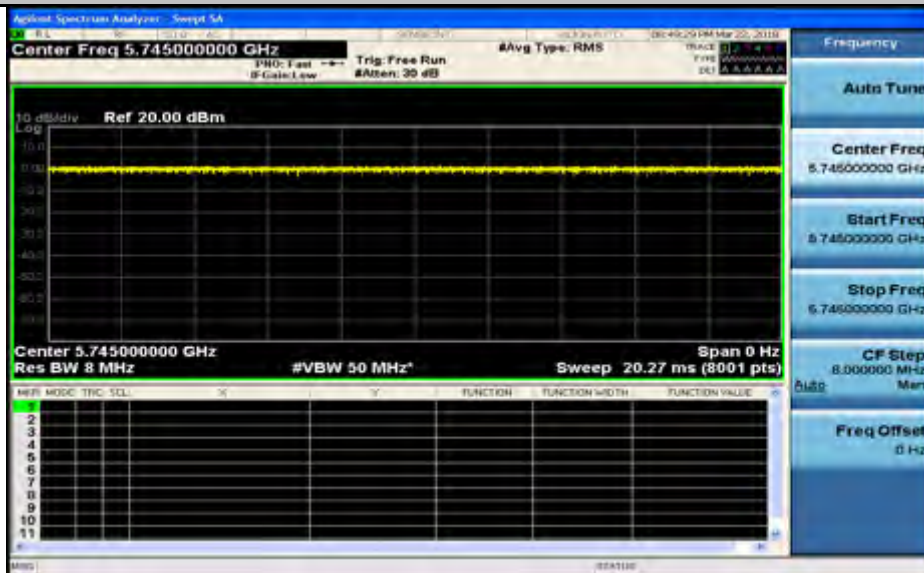
Duty Cycle_11A_5785_Ant0



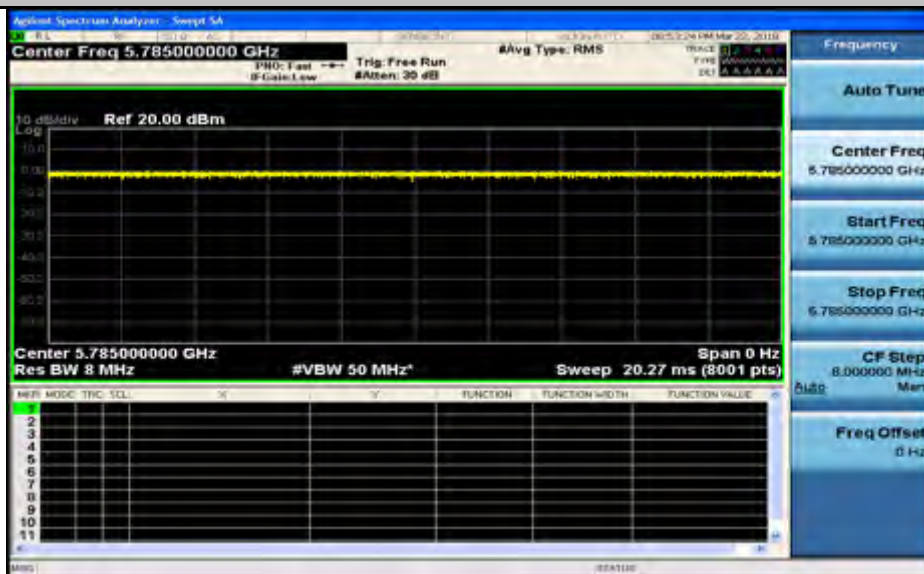
Duty Cycle_11A_5825_Ant0



Duty Cycle_11N20_5745_Ant0



Duty Cycle_11N20_5785_Ant0



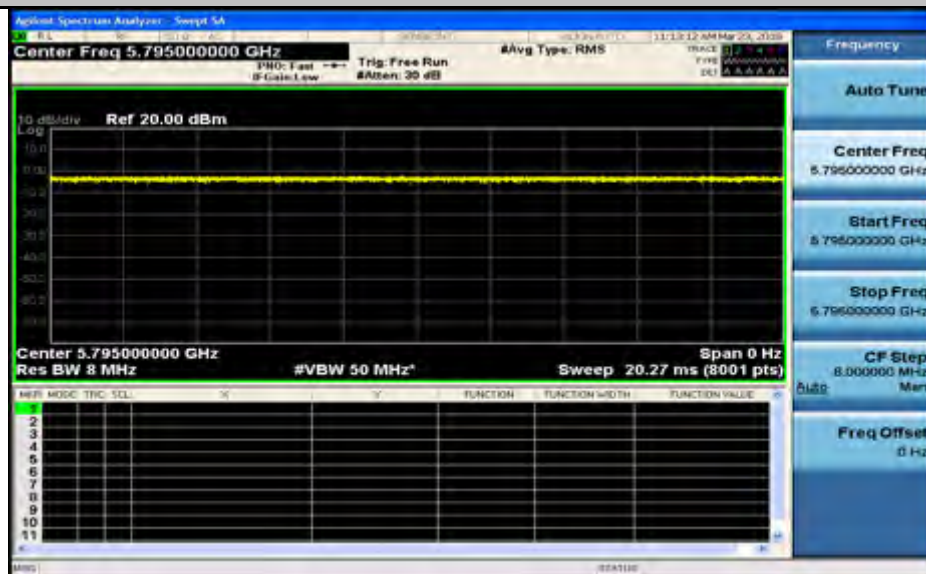
Duty Cycle_11N20_5825_Ant0



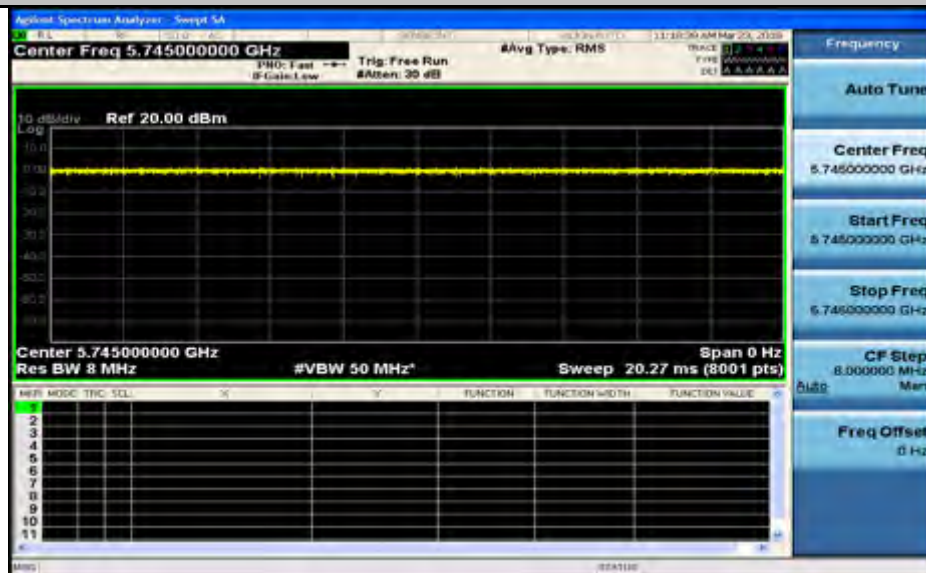
Duty Cycle_11N40_5755_Ant0



Duty Cycle_11N40_5795_Ant0



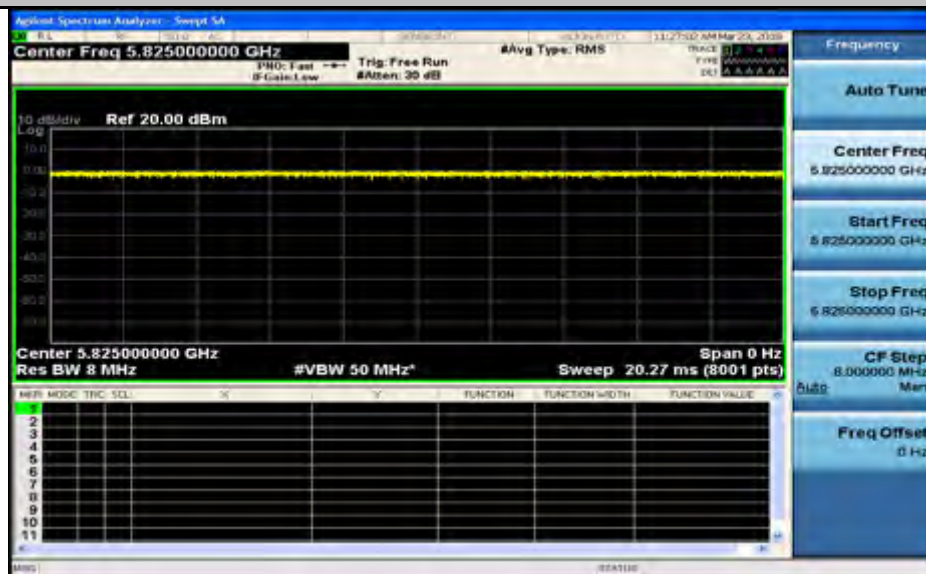
Duty Cycle_11AC20_5745_Ant0



Duty Cycle_11AC20_5785_Ant0



Duty Cycle_11AC20_5825_Ant0



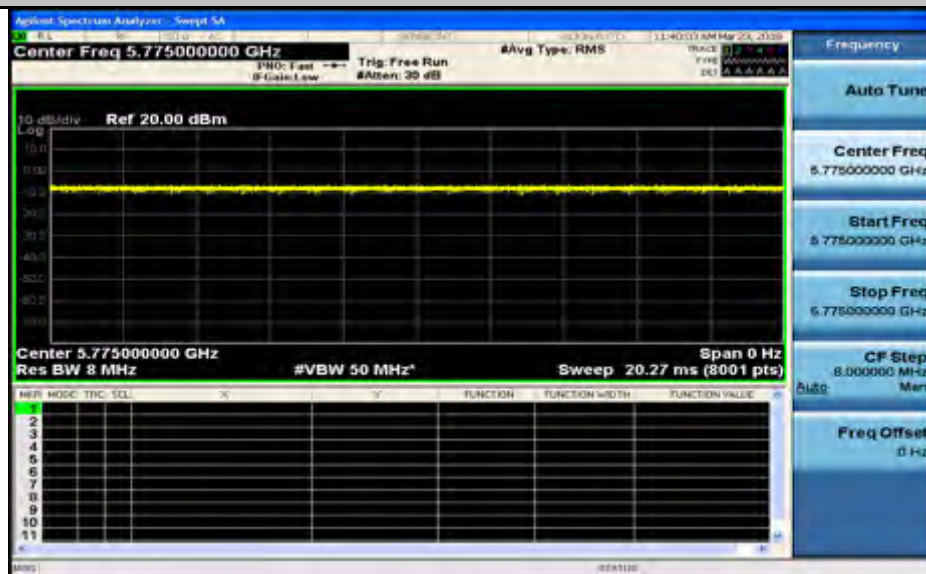
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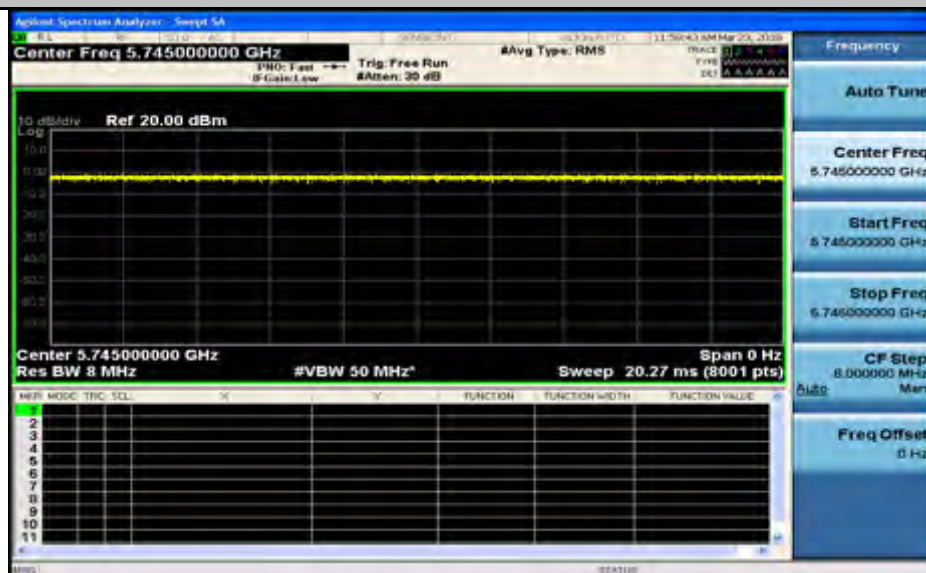
Duty Cycle_11AC40_5795_Ant0



Duty Cycle_11AC80_5775_Ant0



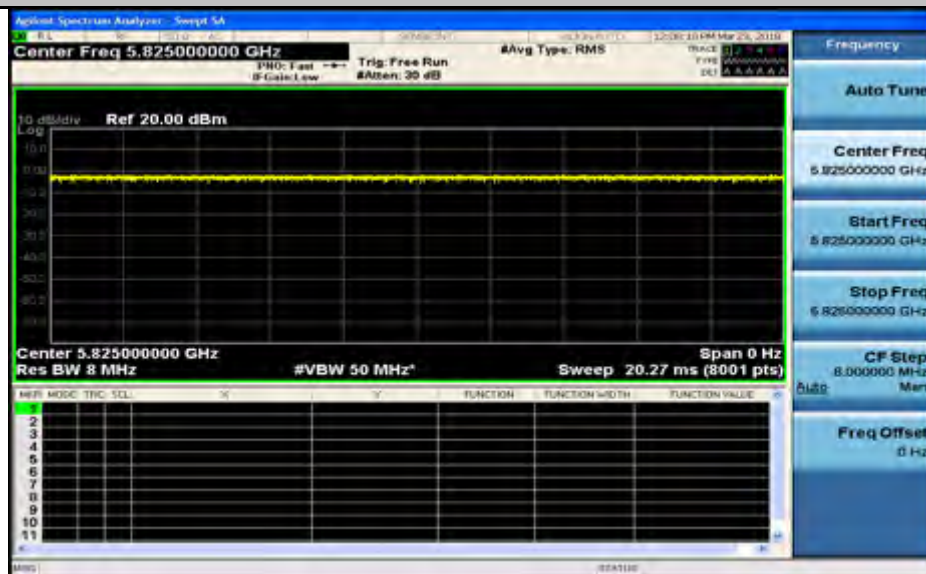
Duty Cycle_11A_5745_Ant1



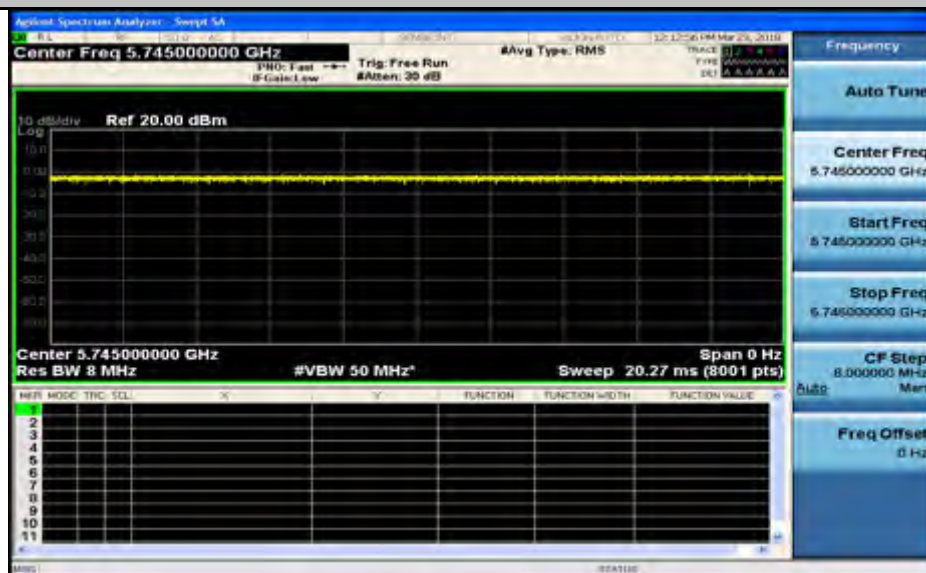
Duty Cycle_11A_5785_Ant1



Duty Cycle_11A_5825_Ant1



Duty Cycle_11N20_5745_Ant1



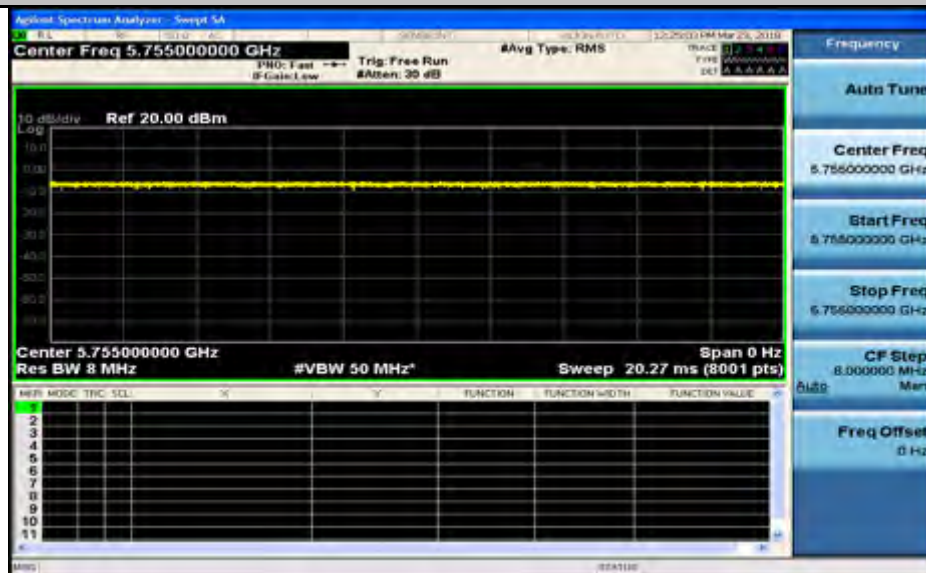
Duty Cycle_11N20_5785_Ant1



Duty Cycle_11N20_5825_Ant1



Duty Cycle_11N40_5755_Ant1



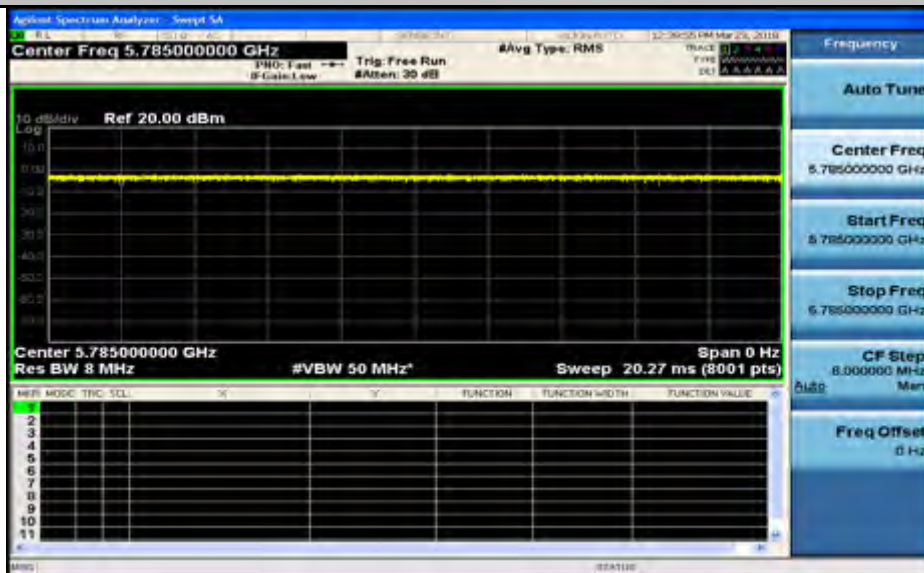
Duty Cycle_11N40_5795_Ant1



Duty Cycle_11AC20_5745_Ant1



Duty Cycle_11AC20_5785_Ant1



Duty Cycle_11AC20_5825_Ant1



Duty Cycle_11AC40_5755_Ant1



Duty Cycle_11AC40_5795_Ant1



