Appendix A: Test results

Band	Frequency	802.11 a		802.11 n (HT20)		Frequency	802.11 n (HT40)		Frequency	802.11 ac (VHT80)	
		Ant0	Ant1	Ant0	Ant1		Ant0	Ant1		Ant0	Ant1
NII 3	5745	53	53	53	53	5755	51	51	5775	50	50
	5785	53	53	53	53	5795	51	51			
	5825	53	53	53	53						

1. Occupied N dB Bandwidth

1.1 Test Data

U-NII-3 Occupied N dB Bandwidth				
Mode	Test Frequency (MHz)	Ant	Occupied Bandwidth (MHz)	Result
802.11a	5745	Ant0	16.34	Pass
802.11a	5745	Ant1	16.35	Pass
802.11a	5785	Ant0	16.36	Pass
802.11a	5785	Ant1	16.31	Pass
802.11a	5825	Ant0	16.31	Pass
802.11a	5825	Ant1	17.28	Pass
802.11n (HT20)	5745	Ant0	17.19	Pass
802.11n (HT20)	5745	Ant1	16.57	Pass
802.11n (HT20)	5785	Ant0	16.53	Pass
802.11n (HT20)	5785	Ant1	16.56	Pass
802.11n (HT20)	5825	Ant0	16.51	Pass
802.11n (HT20)	5825	Ant1	17.56	Pass
802.11n (HT40)	5755	Ant0	35.24	Pass
802.11n (HT40)	5755	Ant1	35.14	Pass
802.11n (HT40)	5795	Ant0	36.46	Pass
802.11n (HT40)	5795	Ant1	36.45	Pass
802.11ac (VHT80)	5775	Ant0	75.19	Pass
802.11ac (VHT80)	5775	Ant1	75.17	Pass

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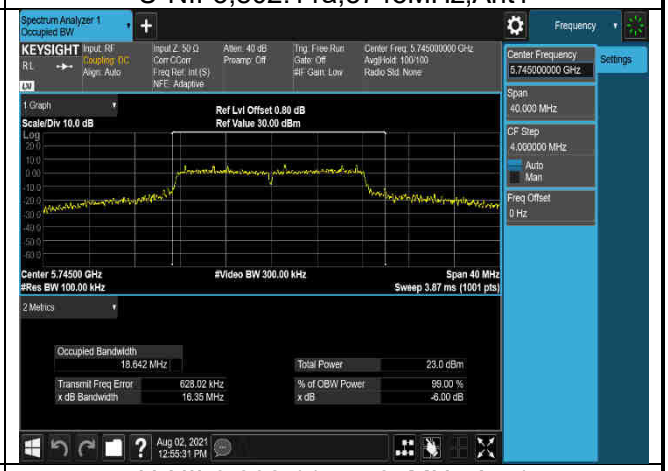
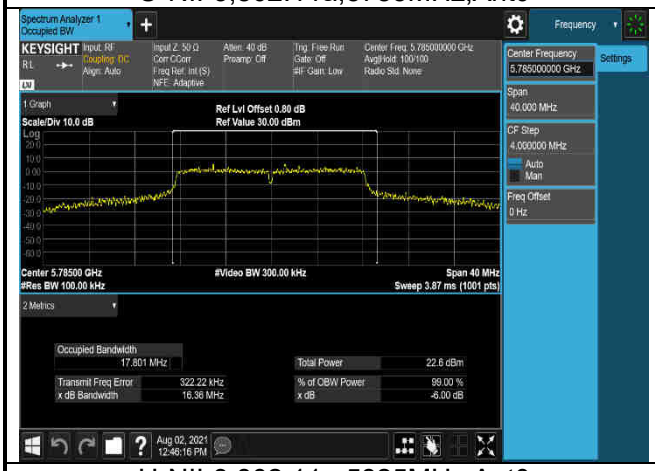
1.2 Test Plots

U-NII-3,802.11a,5745MHz,Ant0

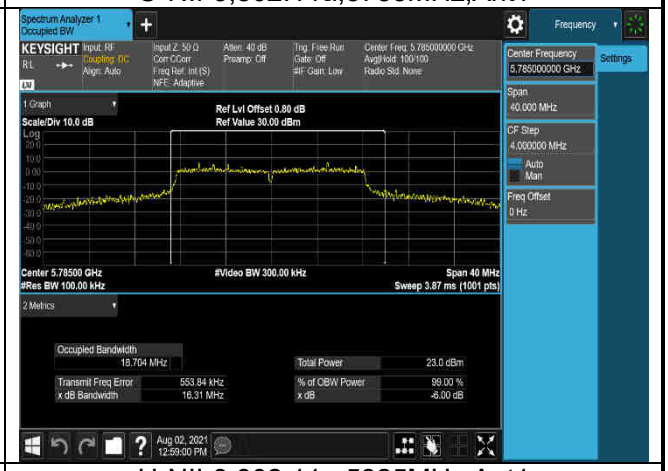
U-NII-3,802.11a,5745MHz,Ant1



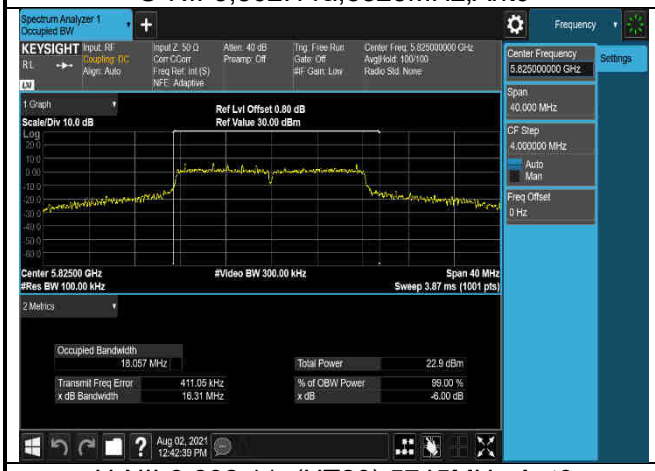
U-NII-3,802.11a,5785MHz,Ant0



U-NII-3,802.11a,5785MHz,Ant1



U-NII-3,802.11a,5825MHz,Ant0



U-NII-3,802.11a,5825MHz,Ant1

U-NII-3,802.11n(HT20),5745MHz,Ant0

U-NII-3,802.11n(HT20),5745MHz,Ant1

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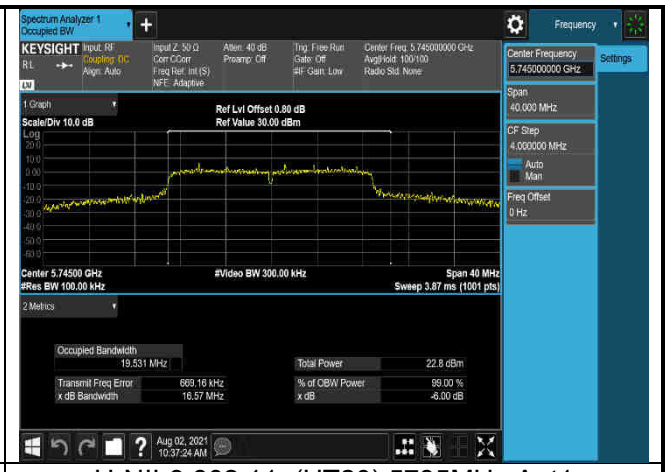
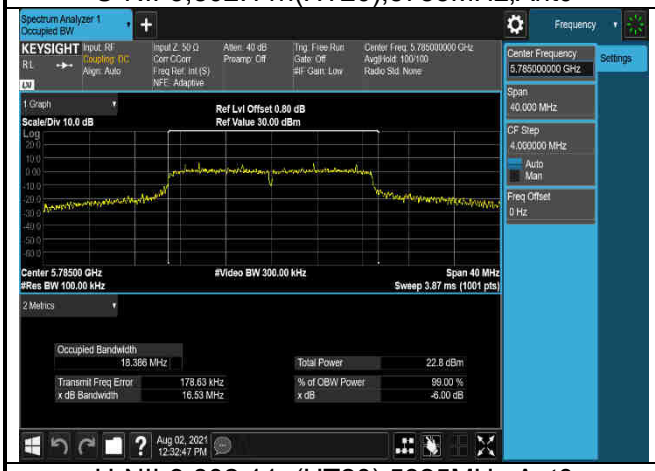
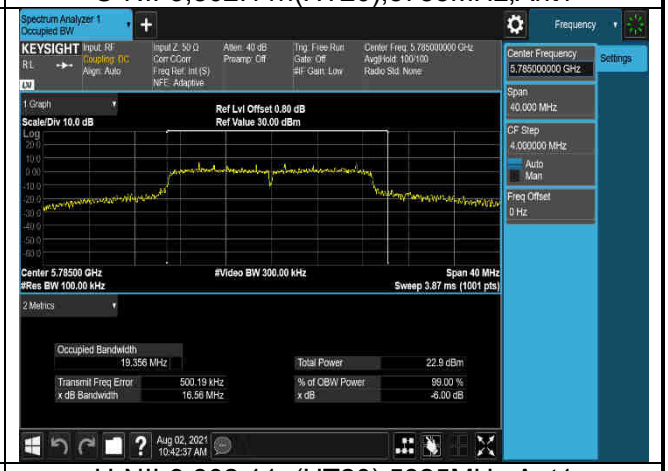
U-NII-3,802.11n(HT20),5785MHz,Ant0



U-NII-3,802.11n(HT20),5785MHz,Ant1

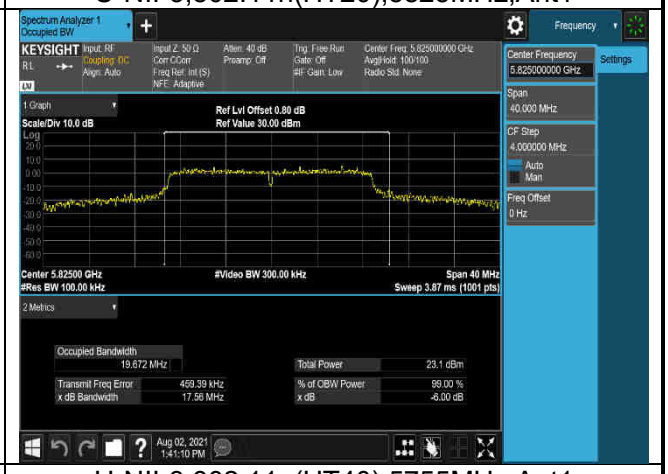


U-NII-3,802.11n(HT20),5825MHz,Ant0



U-NII-3,802.11n(HT20),5825MHz,Ant1

U-NII-3,802.11n(HT40),5755MHz,Ant0



U-NII-3,802.11n(HT40),5755MHz,Ant1

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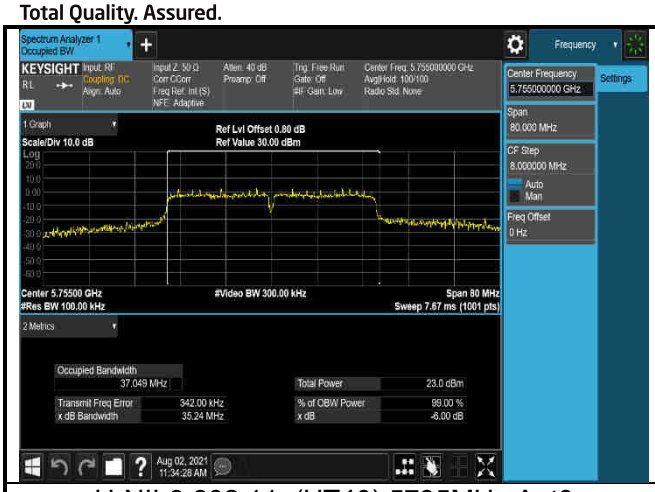
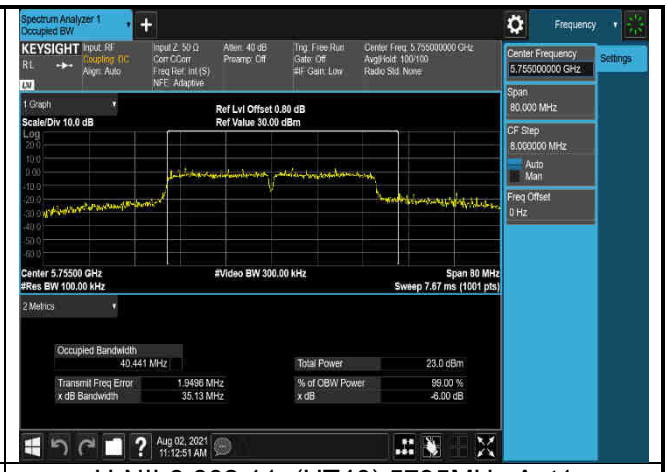
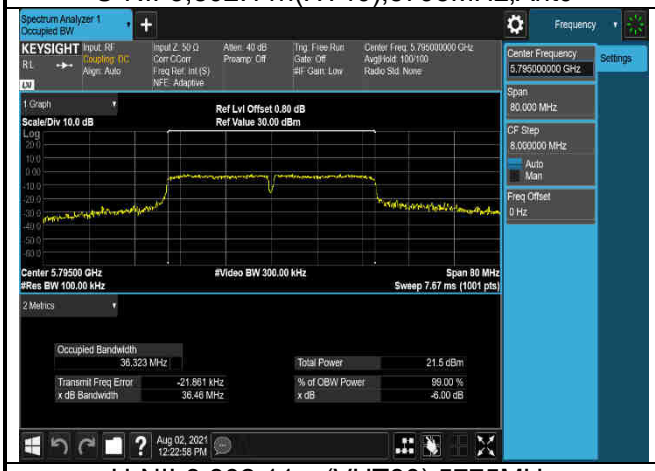


U-NII-3,802.11n(HT40),5795MHz,Ant0



U-NII-3,802.11n(HT40),5795MHz,Ant1



U-NII-3,802.11ac(VHT80),5775MHz
,Ant0

U-NII-3,802.11ac(VHT80),5775MHz
,Ant1

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2. 99% Occupied Bandwidth

2.1 Test Data

U-NII-3 99% Occupied Bandwidth				
Mode	Test Frequency (MHz)	Ant	99% Occupied Bandwidth (MHz)	Result
802.11a	5745	Ant0	18.003	Pass
802.11a	5745	Ant1	19.099	Pass
802.11a	5785	Ant0	18.111	Pass
802.11a	5785	Ant1	18.925	Pass
802.11a	5825	Ant0	18.434	Pass
802.11a	5825	Ant1	19.964	Pass
802.11n (HT20)	5745	Ant0	18.601	Pass
802.11n (HT20)	5745	Ant1	19.680	Pass
802.11n (HT20)	5785	Ant0	18.545	Pass
802.11n (HT20)	5785	Ant1	19.597	Pass
802.11n (HT20)	5825	Ant0	18.806	Pass
802.11n (HT20)	5825	Ant1	19.511	Pass
802.11n (HT40)	5755	Ant0	37.776	Pass
802.11n (HT40)	5755	Ant1	39.613	Pass
802.11n (HT40)	5795	Ant0	36.585	Pass
802.11n (HT40)	5795	Ant1	36.674	Pass
802.11ac (VHT80)	5775	Ant0	76.724	Pass
802.11ac (VHT80)	5775	Ant1	76.923	Pass

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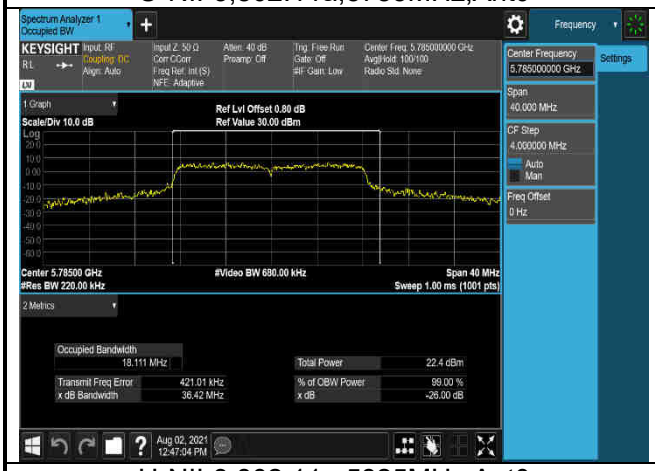
2.2 Test Plots

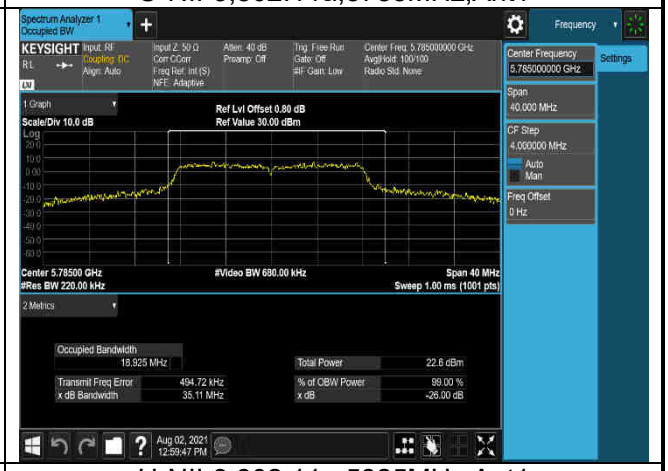
U-NII-3,802.11a,5745MHz,Ant0

U-NII-3,802.11a,5745MHz,Ant1

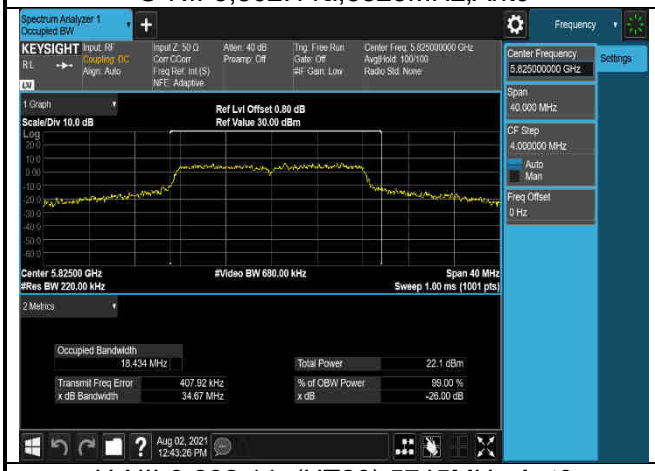
U-NII-3,802.11a,5785MHz,Ant0



U-NII-3,802.11a,5785MHz,Ant1



U-NII-3,802.11a,5825MHz,Ant0



U-NII-3,802.11a,5825MHz,Ant1

U-NII-3,802.11n(HT20),5745MHz,Ant0

U-NII-3,802.11n(HT20),5745MHz,Ant1

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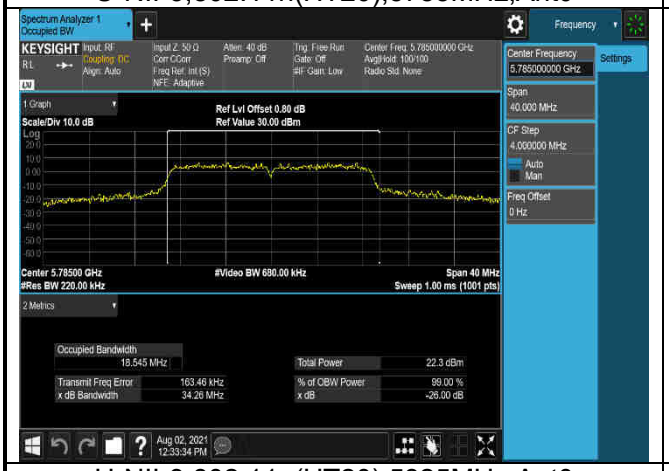
U-NII-3,802.11n(HT20),5785MHz,Ant0

U-NII-3,802.11n(HT20),5785MHz,Ant1



U-NII-3,802.11n(HT20),5825MHz,Ant0

U-NII-3,802.11n(HT20),5825MHz,Ant1

U-NII-3,802.11n(HT40),5755MHz,Ant0

U-NII-3,802.11n(HT40),5755MHz,Ant1

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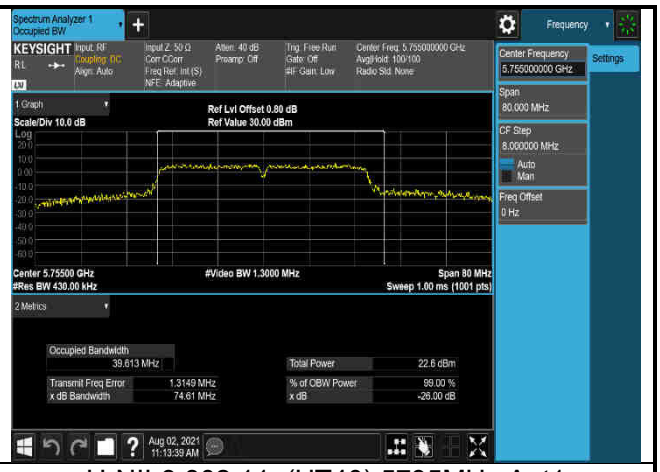
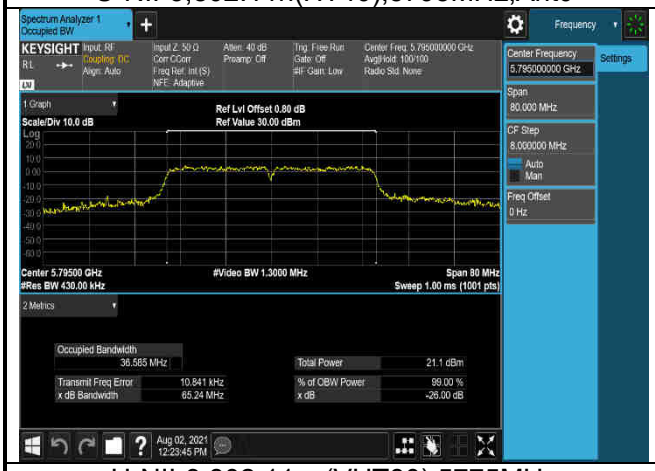
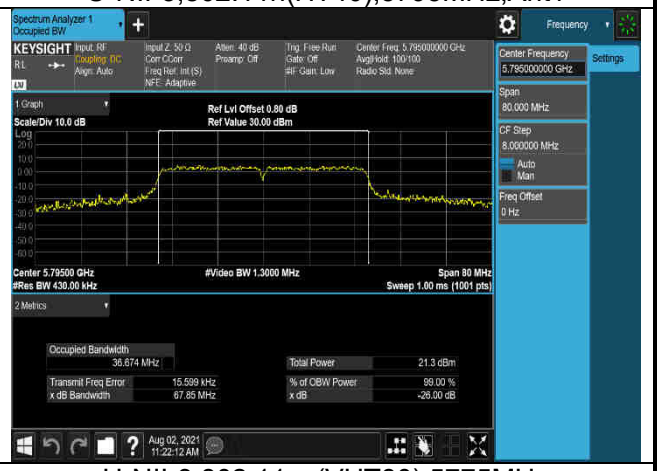
U-NII-3,802.11n(HT40),5795MHz,Ant0



U-NII-3,802.11n(HT40),5795MHz,Ant1



U-NII-3,802.11ac(VHT80),5775MHz
,Ant0



U-NII-3,802.11ac(VHT80),5775MHz
,Ant1

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3. Duty Cycle

3.1 Test Data

U-NII-3 Duty Cycle				
Mode	Test Frequency (MHz)	Ant	Duty Cycle (%)	Duty Cycle Factor (dB)
802.11a	5745	Ant0	57.55	2.40
802.11a	5745	Ant1	57.55	2.40
802.11a	5785	Ant0	57.55	2.40
802.11a	5785	Ant1	57.55	2.40
802.11a	5825	Ant0	57.55	2.40
802.11a	5825	Ant1	55.93	2.52
802.11n (HT20)	5745	Ant0	55.87	2.53
802.11n (HT20)	5745	Ant1	55.93	2.52
802.11n (HT20)	5785	Ant0	55.87	2.53
802.11n (HT20)	5785	Ant1	55.93	2.52
802.11n (HT20)	5825	Ant0	55.93	2.52
802.11n (HT20)	5825	Ant1	55.93	2.52
802.11n (HT40)	5755	Ant0	38.57	4.14
802.11n (HT40)	5755	Ant1	38.78	4.11
802.11n (HT40)	5795	Ant0	38.70	4.12
802.11n (HT40)	5795	Ant1	38.57	4.14
802.11ac (VHT80)	5775	Ant0	23.99	6.20
802.11ac (VHT80)	5775	Ant1	23.89	6.22

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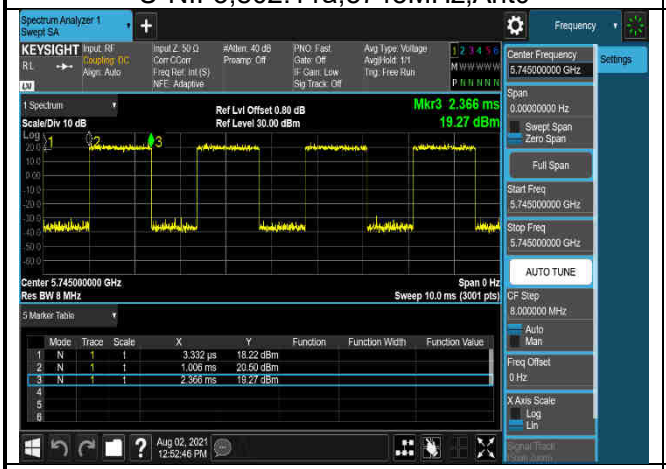
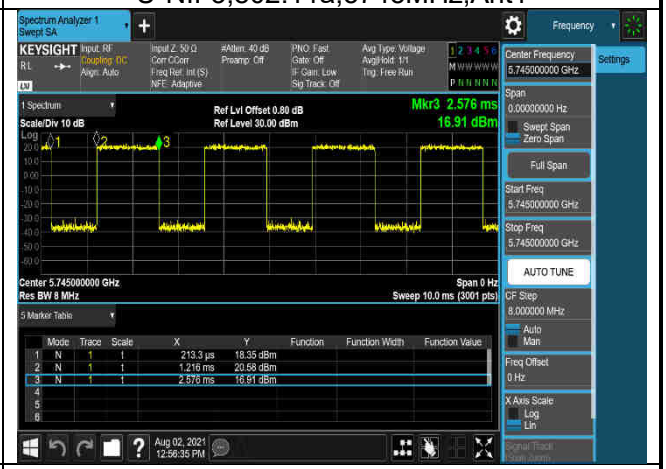
3.2 Test Plots

U-NII-3,802.11a,5745MHz,Ant0



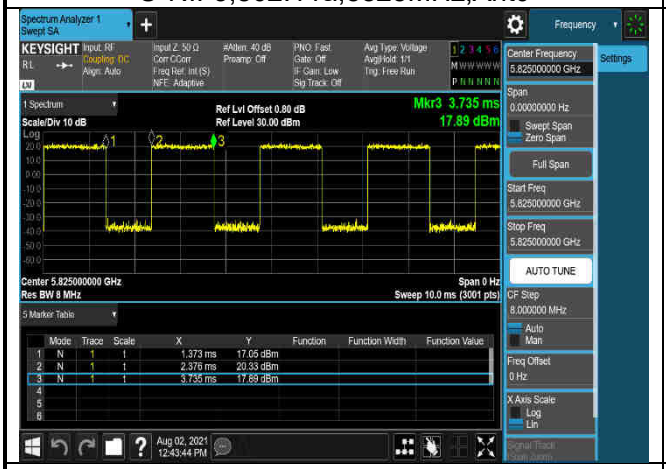
U-NII-3,802.11a,5745MHz,Ant1



U-NII-3,802.11a,5785MHz,Ant0

U-NII-3,802.11a,5785MHz,Ant1

U-NII-3,802.11a,5825MHz,Ant0



U-NII-3,802.11a,5825MHz,Ant1

U-NII-3,802.11n(HT20),5745MHz,Ant0

U-NII-3,802.11n(HT20),5745MHz,Ant1

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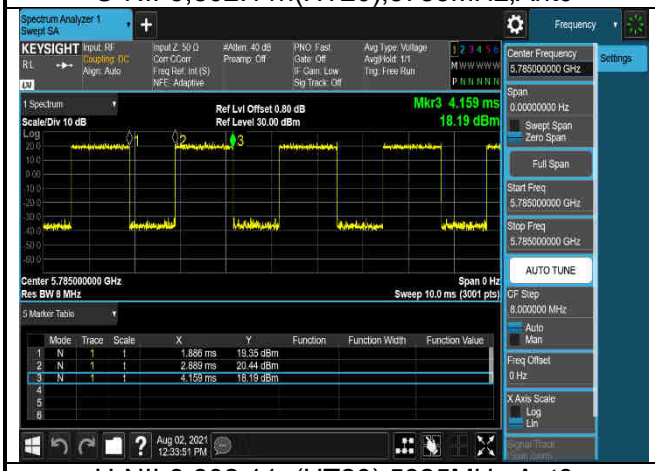
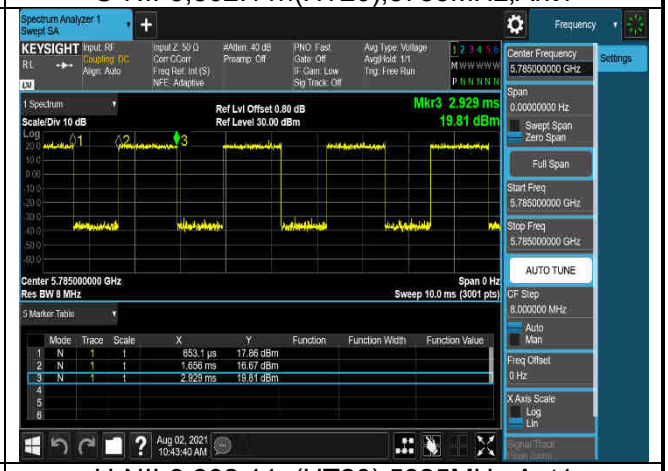
U-NII-3,802.11n(HT20),5785MHz,Ant0

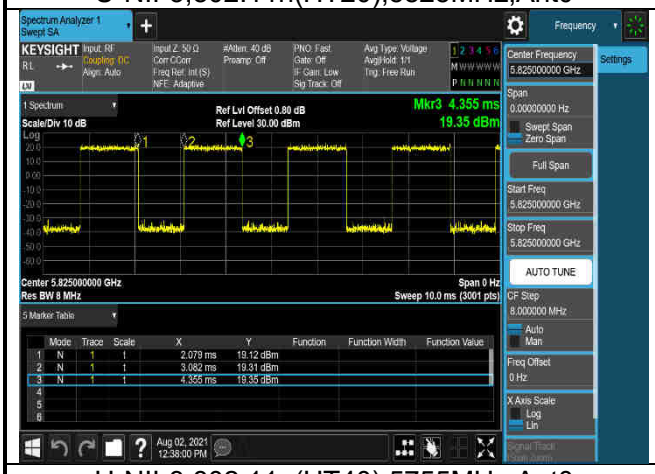
U-NII-3,802.11n(HT20),5785MHz,Ant1



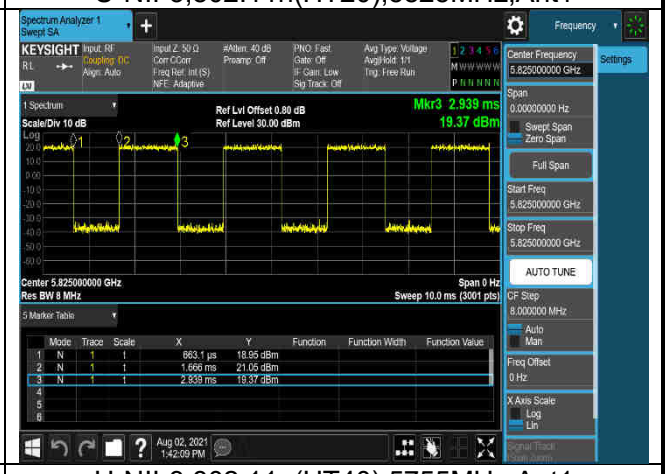
U-NII-3,802.11n(HT20),5825MHz,Ant0



U-NII-3,802.11n(HT20),5825MHz,Ant1



U-NII-3,802.11n(HT40),5755MHz,Ant0



U-NII-3,802.11n(HT40),5755MHz,Ant1

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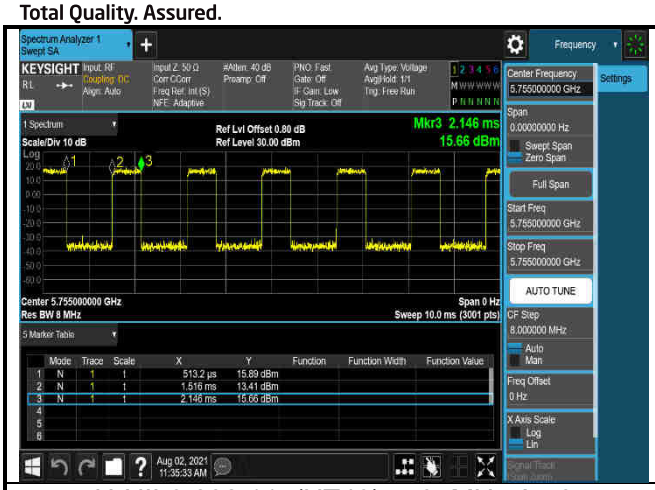
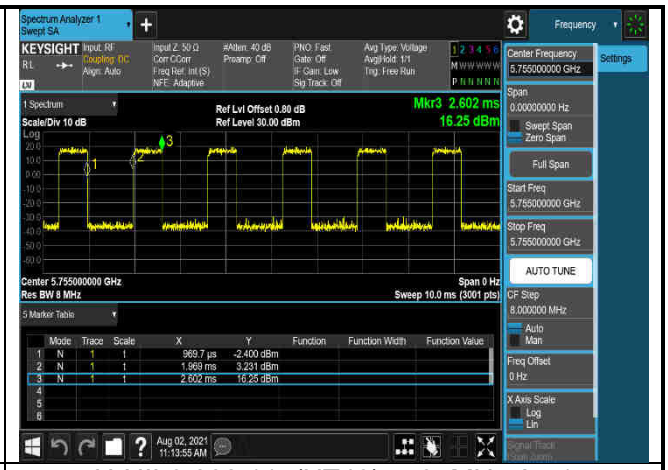
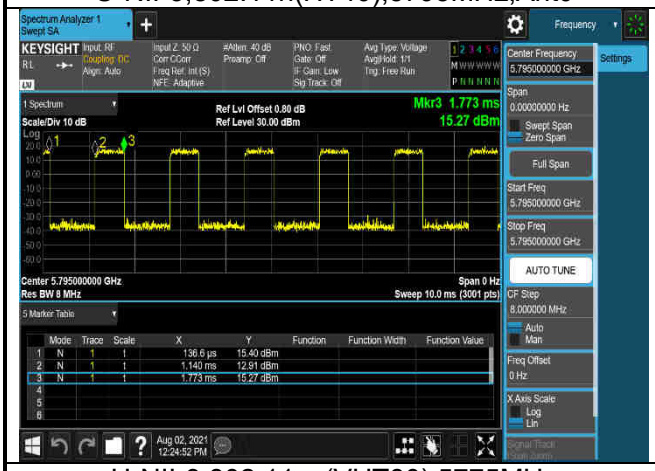


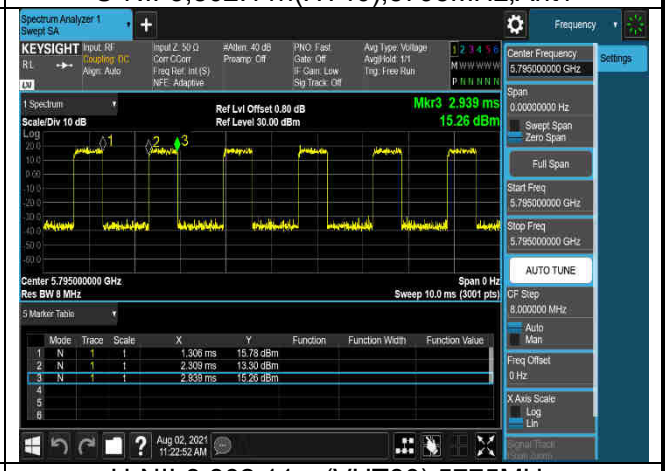
U-NII-3,802.11n(HT40),5795MHz,Ant0



U-NII-3,802.11n(HT40),5795MHz,Ant1



U-NII-3,802.11ac(VHT80),5775MHz
,Ant0



U-NII-3,802.11ac(VHT80),5775MHz
,Ant1

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4. AVGSA Output Power

4.1 Test Data

U-NII-3 AVGSA Output Power							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	Max Power (dBm)	Limit (dBm)	EIRP (dBm)	Result
802.11a	5745	Ant0	2.40	16.57	30	20.15	Pass
802.11a	5745	Ant1	2.40	16.97	30	20.55	Pass
802.11a	5785	Ant0	2.40	17.52	30	21.10	Pass
802.11a	5785	Ant1	2.40	16.74	30	20.32	Pass
802.11a	5825	Ant0	2.40	16.56	30	20.14	Pass
802.11a	5825	Ant1	2.52	17.11	30	20.69	Pass
802.11n (HT20)	5745	Ant0	2.53	16.87	30	20.45	Pass
802.11n (HT20)	5745	Ant1	2.52	16.50	30	20.08	Pass
802.11n (HT20)	5785	Ant0	2.53	16.68	30	20.26	Pass
802.11n (HT20)	5785	Ant1	2.52	16.65	30	20.23	Pass
802.11n (HT20)	5825	Ant0	2.52	16.57	30	20.15	Pass
802.11n (HT20)	5825	Ant1	2.52	16.93	30	20.51	Pass
802.11n (HT40)	5755	Ant0	4.14	16.73	30	20.31	Pass
802.11n (HT40)	5755	Ant1	4.11	17.14	30	20.72	Pass
802.11n (HT40)	5795	Ant0	4.12	16.22	30	19.80	Pass
802.11n (HT40)	5795	Ant1	4.14	16.50	30	20.08	Pass
802.11ac (VHT80)	5775	Ant0	6.20	16.62	30	20.20	Pass
802.11ac (VHT80)	5775	Ant1	6.22	16.74	30	20.32	Pass

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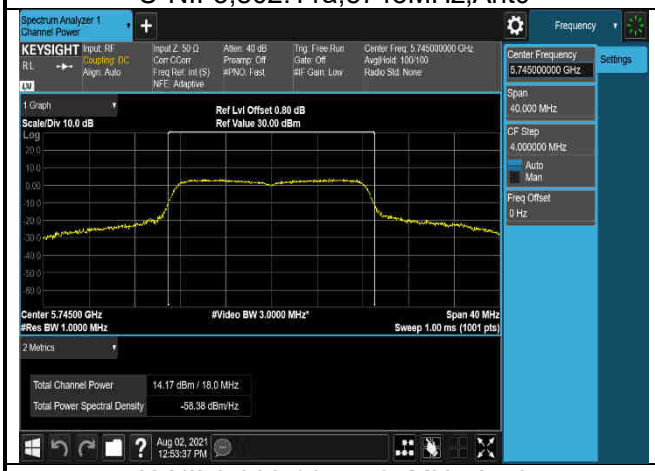
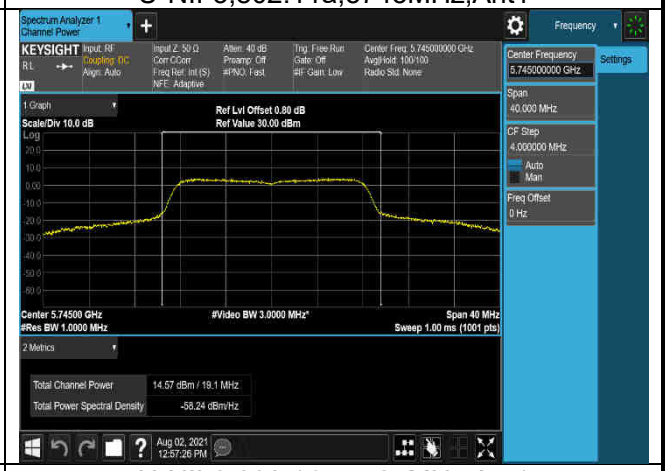
4.2 Test Plots

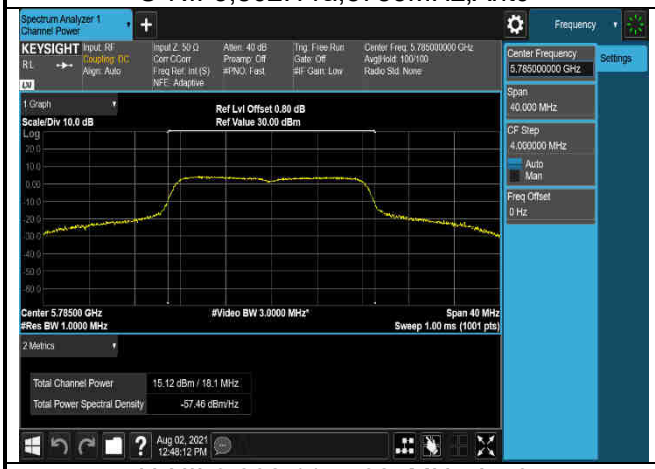
U-NII-3,802.11a,5745MHz,Ant0



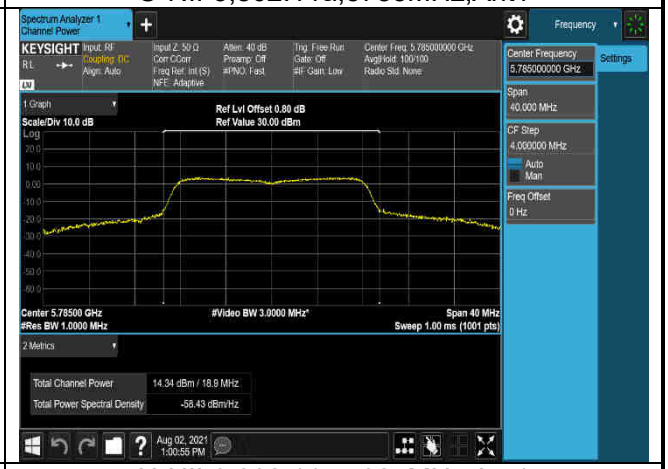
U-NII-3,802.11a,5745MHz,Ant1



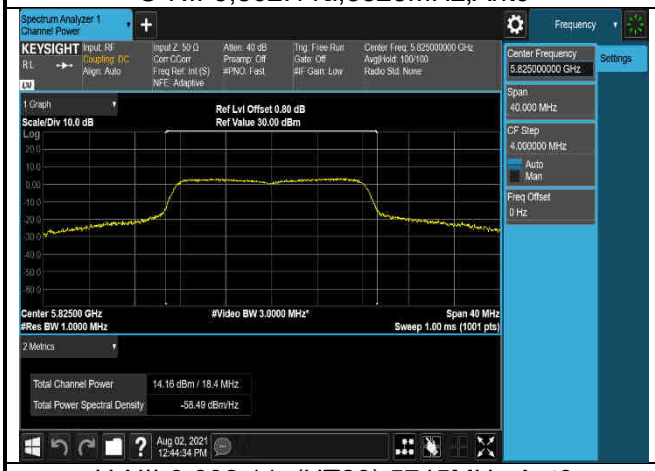
U-NII-3,802.11a,5785MHz,Ant0



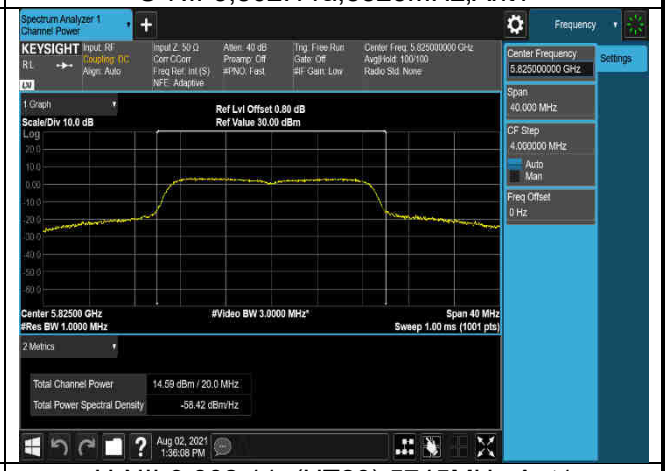
U-NII-3,802.11a,5785MHz,Ant1



U-NII-3,802.11a,5825MHz,Ant0



U-NII-3,802.11a,5825MHz,Ant1



U-NII-3,802.11n(HT20),5745MHz,Ant0

U-NII-3,802.11n(HT20),5745MHz,Ant1

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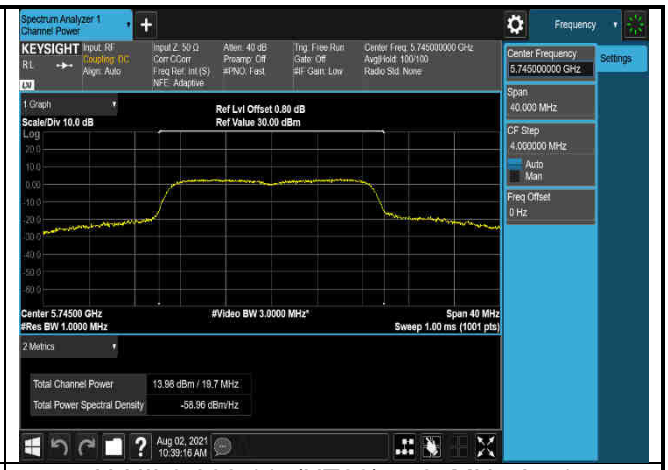
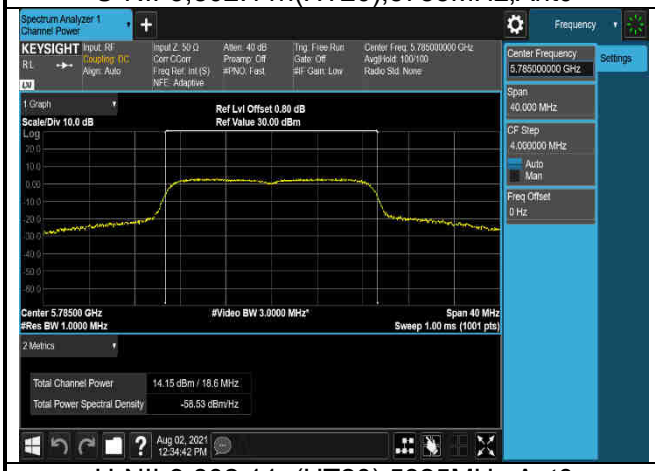
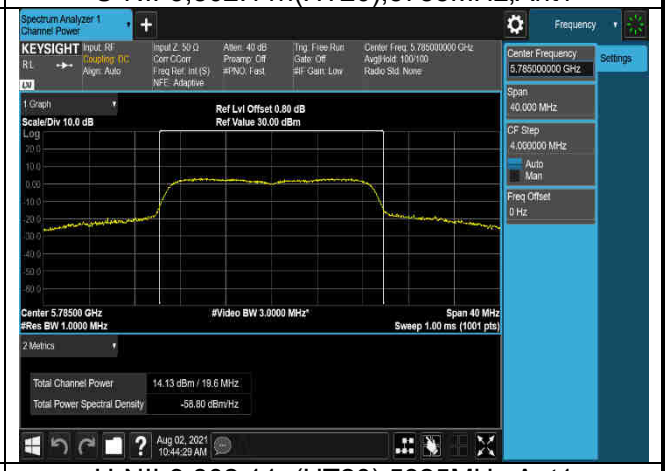
U-NII-3,802.11n(HT20),5785MHz,Ant0



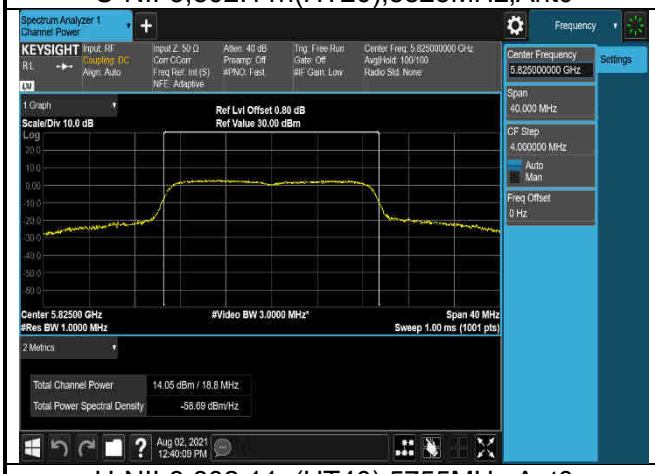
U-NII-3,802.11n(HT20),5785MHz,Ant1



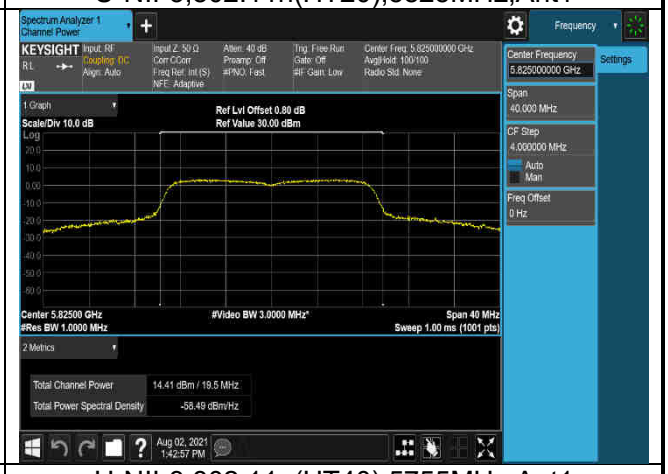
U-NII-3,802.11n(HT20),5825MHz,Ant0



U-NII-3,802.11n(HT20),5825MHz,Ant1



U-NII-3,802.11n(HT40),5755MHz,Ant0



U-NII-3,802.11n(HT40),5755MHz,Ant1

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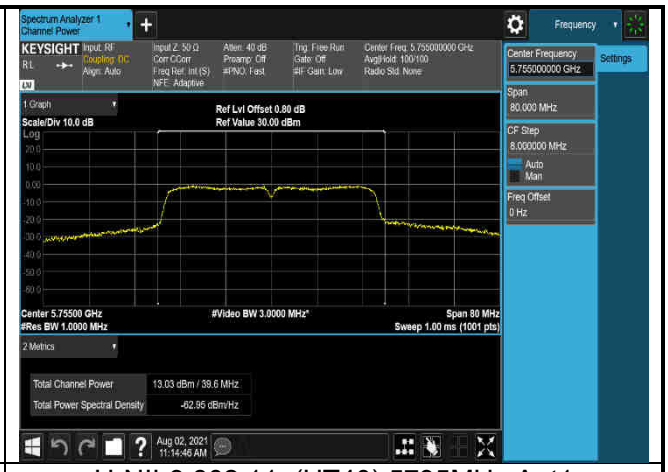
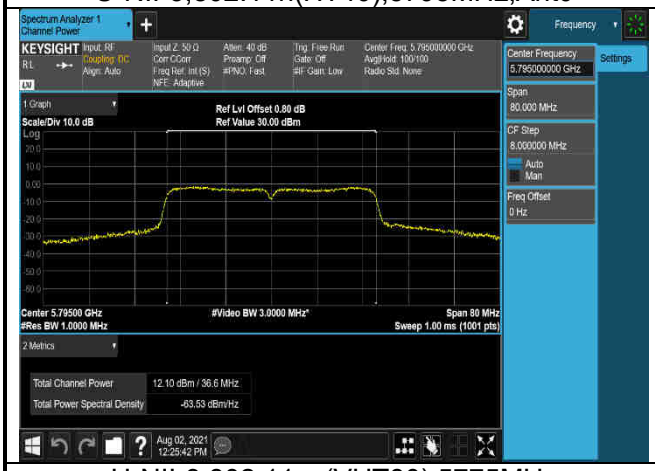
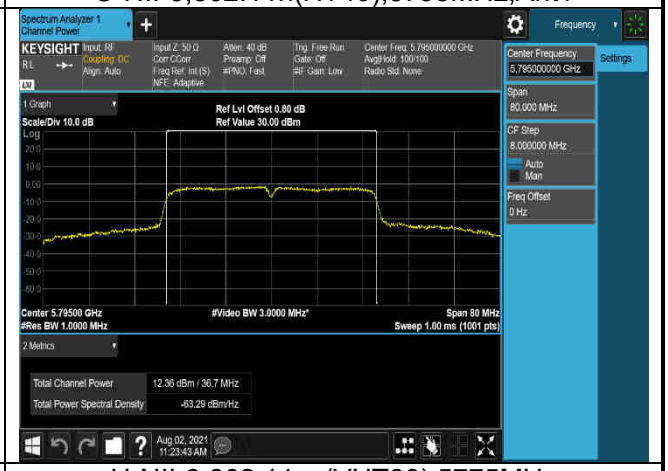
U-NII-3,802.11n(HT40),5795MHz,Ant0



U-NII-3,802.11n(HT40),5795MHz,Ant1



U-NII-3,802.11ac(VHT80),5775MHz
,Ant0



U-NII-3,802.11ac(VHT80),5775MHz
,Ant1

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5. AVGSA Power Spectral Density

5.1 Test Data

U-NII-3 AVGSA Power Spectral Density							
Mode	Test Frequency (MHz)	Ant	Duty Cycle Factor (dB)	PSD (dBm)	RBW (kHz)	Limit (dBm)	Result
802.11a	5745	Ant0	2.40	3.075	500	30	Pass
802.11a	5745	Ant1	2.40	3.505	500	30	Pass
802.11a	5785	Ant0	2.40	3.080	500	30	Pass
802.11a	5785	Ant1	2.40	3.492	500	30	Pass
802.11a	5825	Ant0	2.40	3.577	500	30	Pass
802.11a	5825	Ant1	2.52	3.182	500	30	Pass
802.11n (HT20)	5745	Ant0	2.53	2.417	500	30	Pass
802.11n (HT20)	5745	Ant1	2.52	3.068	500	30	Pass
802.11n (HT20)	5785	Ant0	2.53	3.057	500	30	Pass
802.11n (HT20)	5785	Ant1	2.52	2.911	500	30	Pass
802.11n (HT20)	5825	Ant0	2.52	2.782	500	30	Pass
802.11n (HT20)	5825	Ant1	2.52	3.645	500	30	Pass
802.11n (HT40)	5755	Ant0	4.14	1.210	500	30	Pass
802.11n (HT40)	5755	Ant1	4.11	-2.033	500	30	Pass
802.11n (HT40)	5795	Ant0	4.12	-0.164	500	30	Pass
802.11n (HT40)	5795	Ant1	4.14	0.124	500	30	Pass
802.11ac (VHT80)	5775	Ant0	6.20	-1.820	500	30	Pass
802.11ac (VHT80)	5775	Ant1	6.22	-1.297	500	30	Pass

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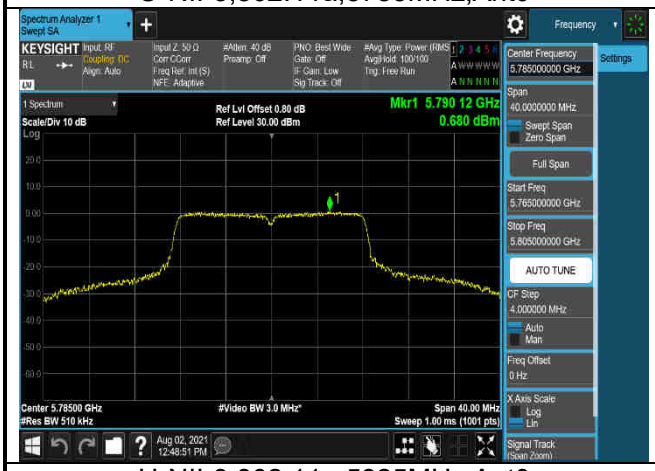
5.2 Test Plots

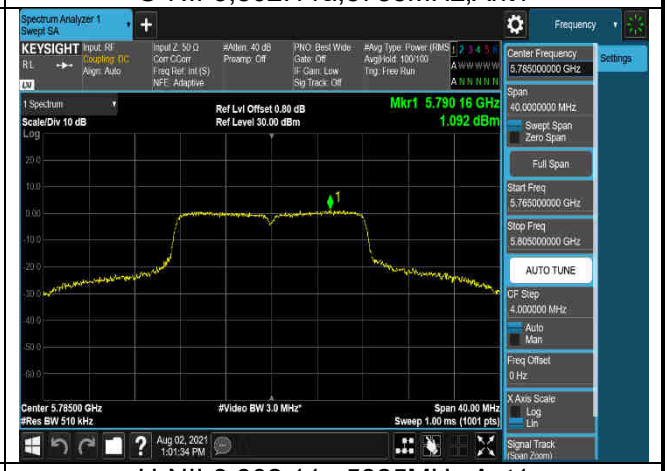
U-NII-3,802.11a,5745MHz,Ant0

U-NII-3,802.11a,5745MHz,Ant1

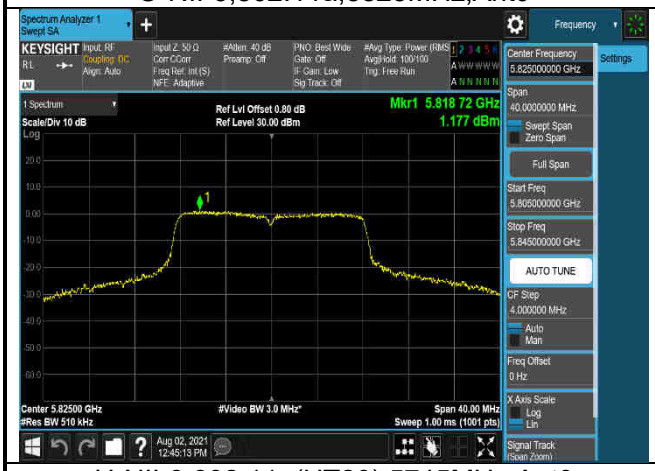
U-NII-3,802.11a,5785MHz,Ant0



U-NII-3,802.11a,5785MHz,Ant1



U-NII-3,802.11a,5825MHz,Ant0



U-NII-3,802.11a,5825MHz,Ant1

U-NII-3,802.11n(HT20),5745MHz,Ant0

U-NII-3,802.11n(HT20),5745MHz,Ant1

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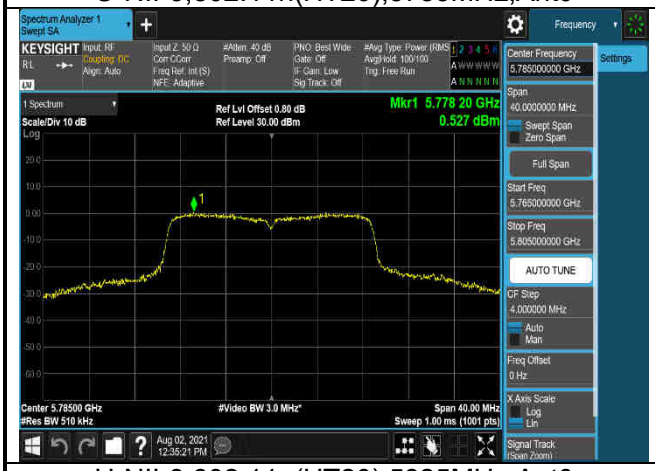
U-NII-3,802.11n(HT20),5785MHz,Ant0

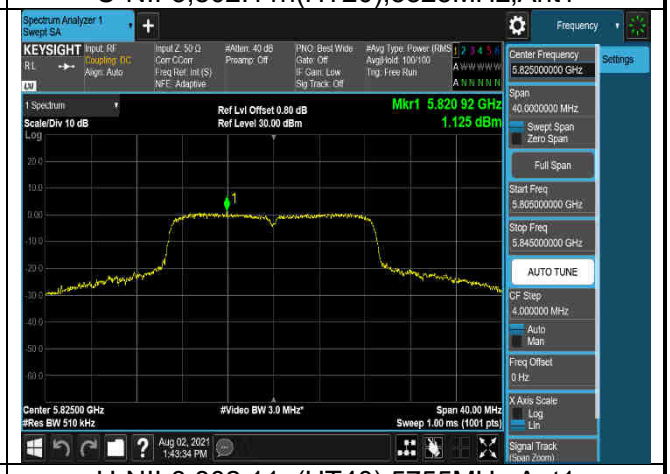
U-NII-3,802.11n(HT20),5785MHz,Ant1



U-NII-3,802.11n(HT20),5825MHz,Ant0

U-NII-3,802.11n(HT20),5825MHz,Ant1

U-NII-3,802.11n(HT40),5755MHz,Ant0



U-NII-3,802.11n(HT40),5755MHz,Ant1

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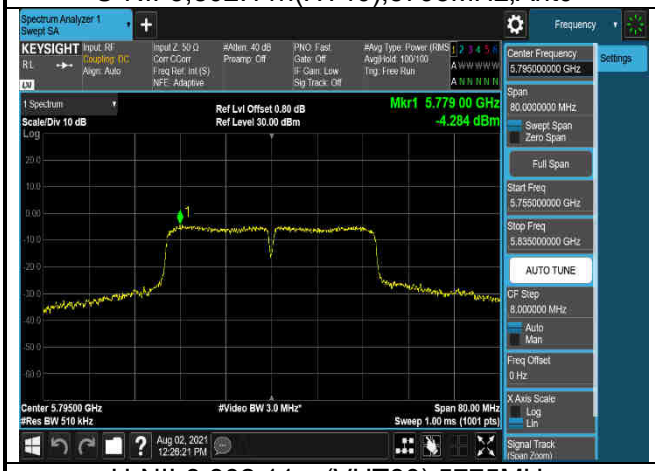
U-NII-3,802.11n(HT40),5795MHz,Ant0

U-NII-3,802.11n(HT40),5795MHz,Ant1



U-NII-3,802.11ac(VHT80),5775MHz
,Ant0

U-NII-3,802.11ac(VHT80),5775MHz
,Ant1

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