

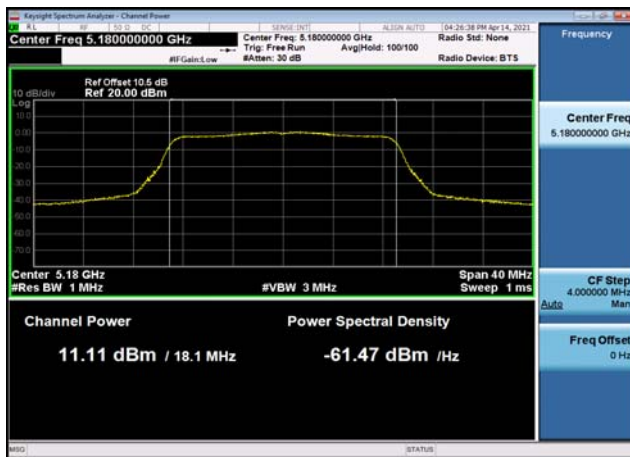
Appendix A

Conducted output power test results

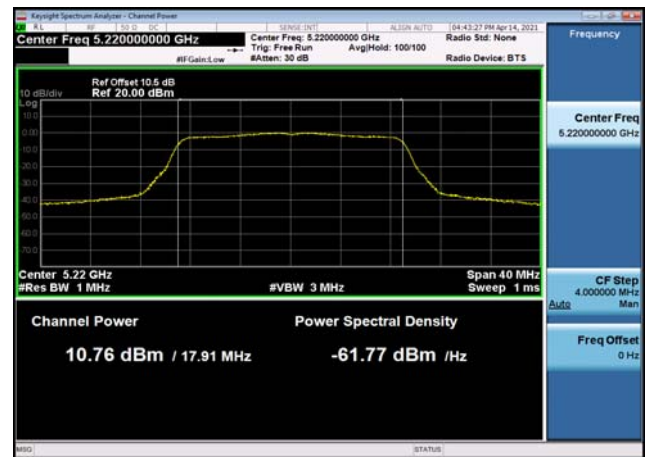
U-NII-1 AVGSA Output Power					
Mode	Test Frequency (MHz)	Max Power (dBm)	FCC Limit (dBm)	IC Limit (dBm)	Result
802.11n (20MHz)	5180	11.11	24	/	Pass
802.11n (20MHz)	5220	10.76			Pass
802.11n (20MHz)	5240	11.73			Pass
802.11n (40MHz)	5190	11.02			Pass
802.11n (40MHz)	5230	10.73			Pass
802.11ac (20MHz)	5180	11.47			Pass
802.11ac (20MHz)	5220	11.98			Pass
802.11ac (20MHz)	5240	11.83			Pass
802.11ac (40MHz)	5190	11.23			Pass
802.11ac (40MHz)	5230	11.77			Pass
802.11ac (80MHz)	5210	11.45			Pass
802.11a (20MHz)	5180	12.52			Pass
802.11a (20MHz)	5220	12.44			Pass
802.11a (20MHz)	5240	12.39			Pass
U-NII-3 AVGSA Output Power					
Mode	Test Frequency (MHz)	Max Power (dBm)	FCC Limit (dBm)	IC Limit (dBm)	Result
802.11n (20MHz)	5745	12.12	30	/	Pass
802.11n (20MHz)	5785	11.69			Pass
802.11n (20MHz)	5825	11.72			Pass
802.11n (40MHz)	5755	12.20			Pass
802.11n (40MHz)	5795	11.97			Pass
802.11ac (20MHz)	5745	11.97			Pass
802.11ac (20MHz)	5785	11.19			Pass
802.11ac (20MHz)	5825	11.71			Pass
802.11ac (40MHz)	5755	12.24			Pass
802.11ac (40MHz)	5795	11.95			Pass
802.11ac (80MHz)	5775	11.69			Pass
802.11a (20MHz)	5745	12.95			Pass
802.11a (20MHz)	5785	12.75			Pass
802.11a (20MHz)	5825	12.35			Pass

Test Plots

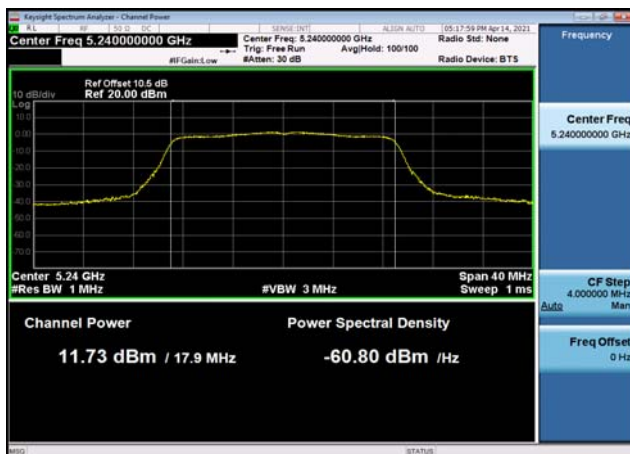
U-NII-1 Output Power-802.11n(20MHz)
,5180MHz,Ant1



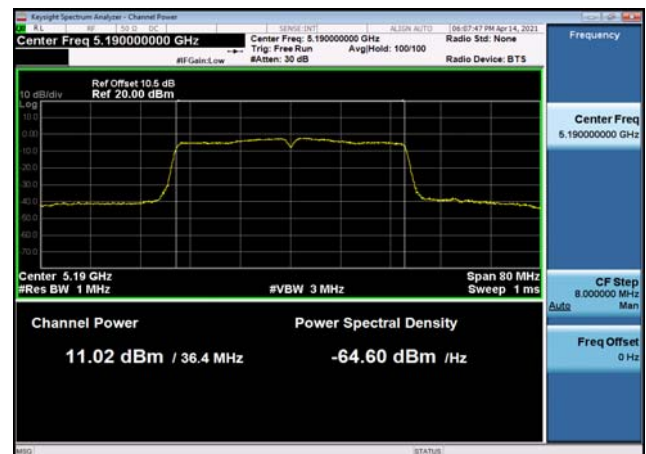
U-NII-1 Output Power-802.11n(20MHz)
,5220MHz,Ant1



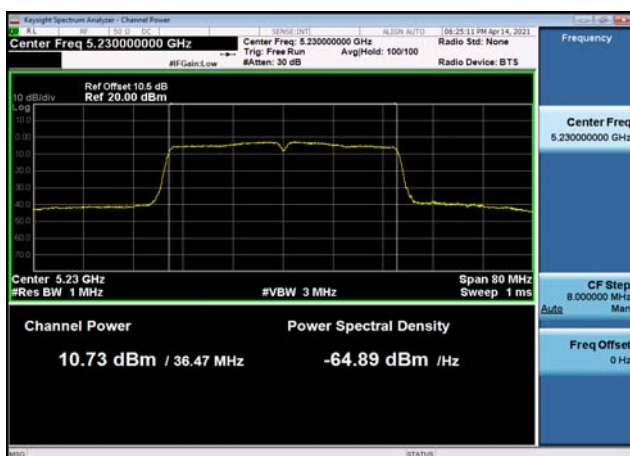
U-NII-1 Output Power-802.11n(20MHz)
,5240MHz,Ant1



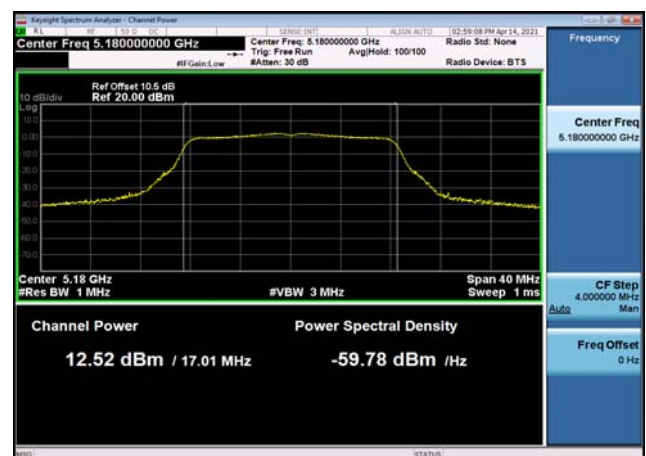
U-NII-1 Output Power-802.11n(40MHz)
,5190MHz,Ant1



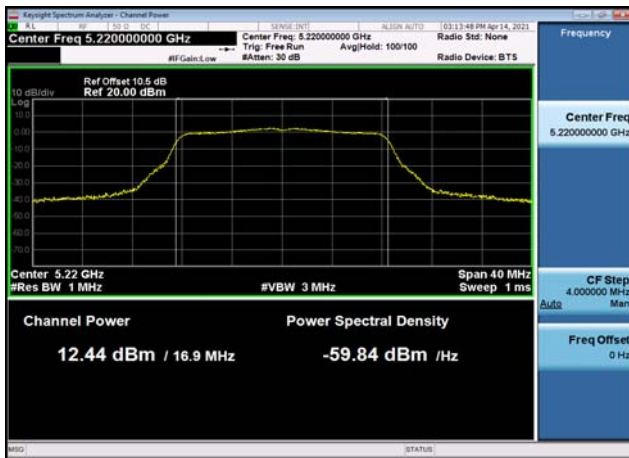
U-NII-1 Output Power-802.11n(40MHz)
,5230MHz,Ant1



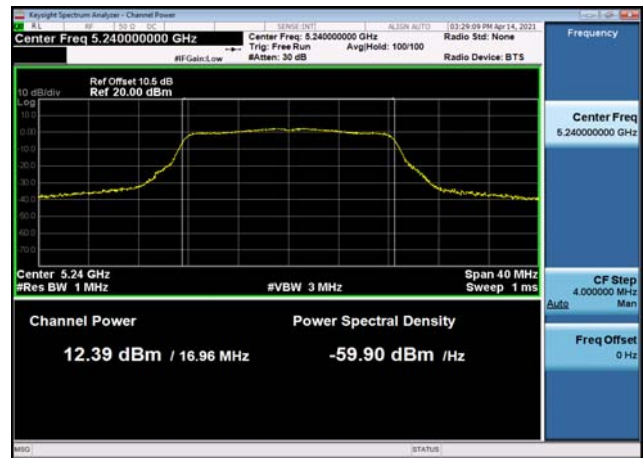
U-NII-1 Output Power-802.11a(20MHz)
,5180MHz,Ant1



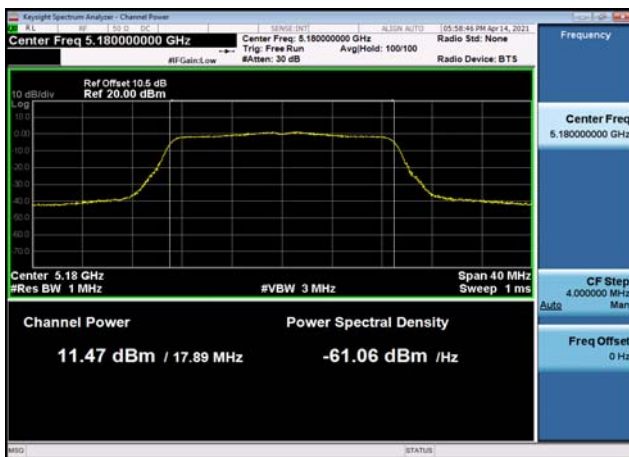
U-NII-1 Output Power-802.11a(20MHz)
,5220MHz,Ant1



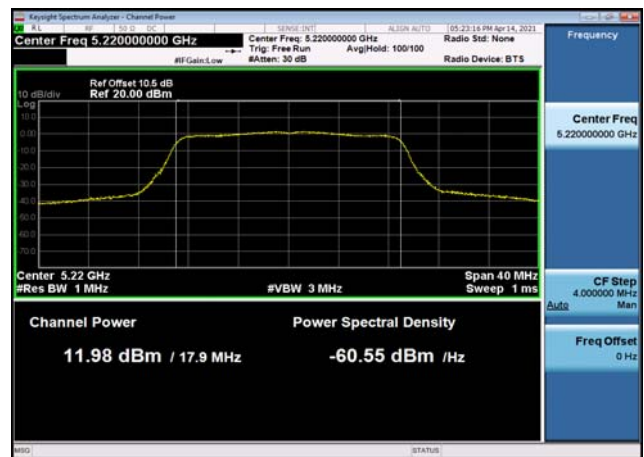
U-NII-1 Output Power-802.11a(20MHz)
,5240MHz,Ant1



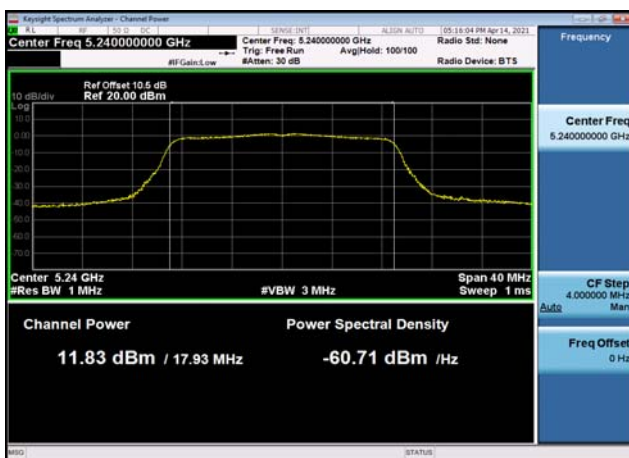
U-NII-1 Output Power-802.11ac(20MHz)
,5180MHz,Ant1



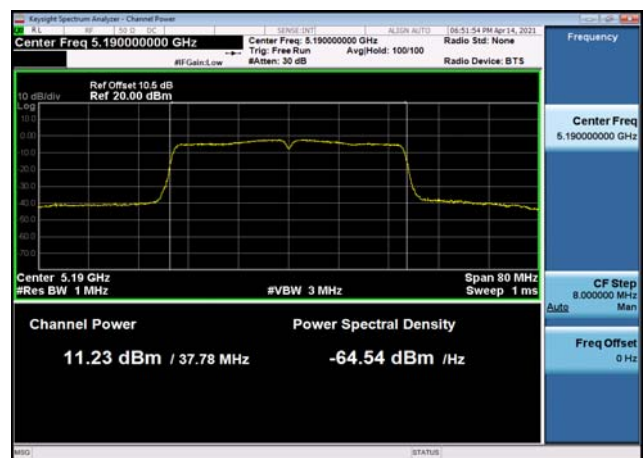
U-NII-1 Output Power-802.11ac(20MHz)
,5220MHz,Ant1



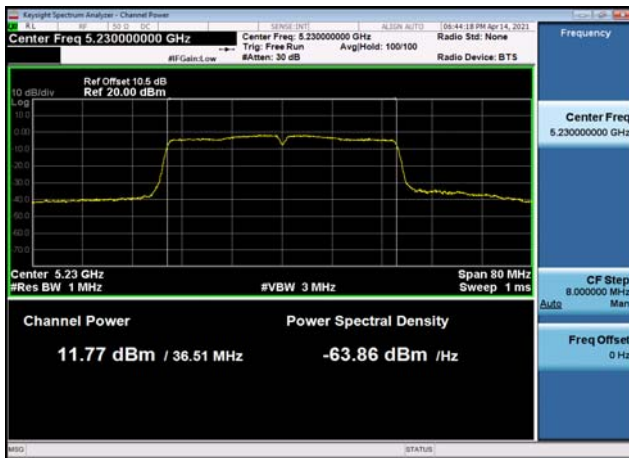
U-NII-1 Output Power-802.11ac(20MHz)
,5240MHz,Ant1



U-NII-1 Output Power-802.11ac(40MHz)
,5190MHz,Ant1



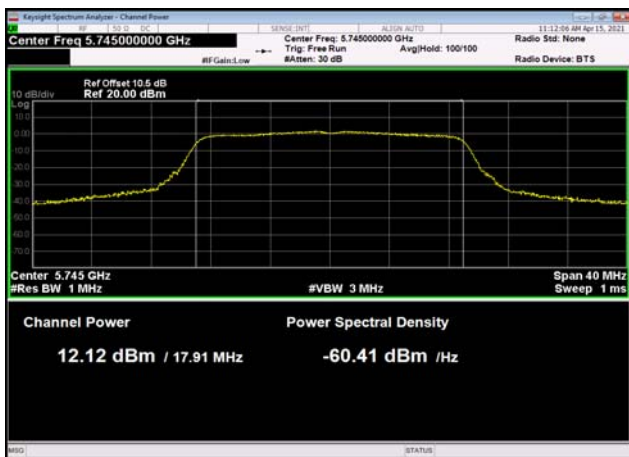
U-NII-1 Output Power-802.11ac(40MHz)
,5230MHz,Ant1



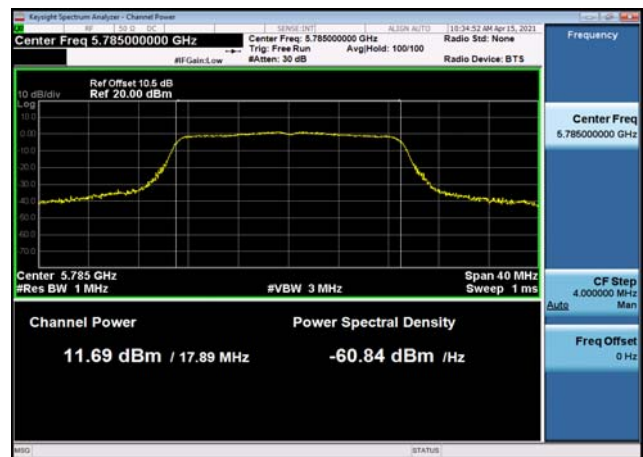
U-NII-1 Output Power-802.11ac(80MHz)
,5210MHz,Ant1



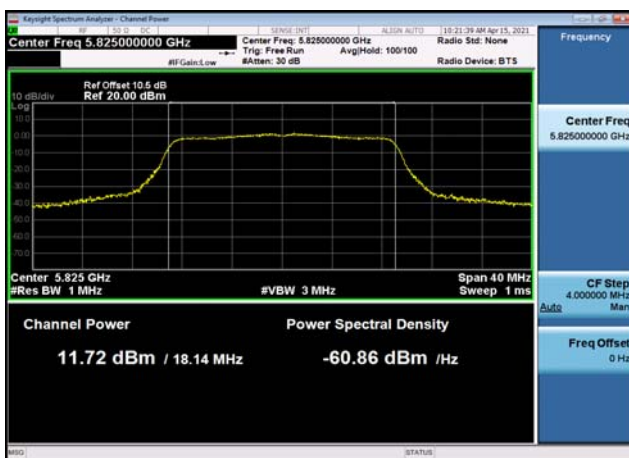
U-NII-3 Output Power-802.11n(20MHz)
,5745MHz,Ant1



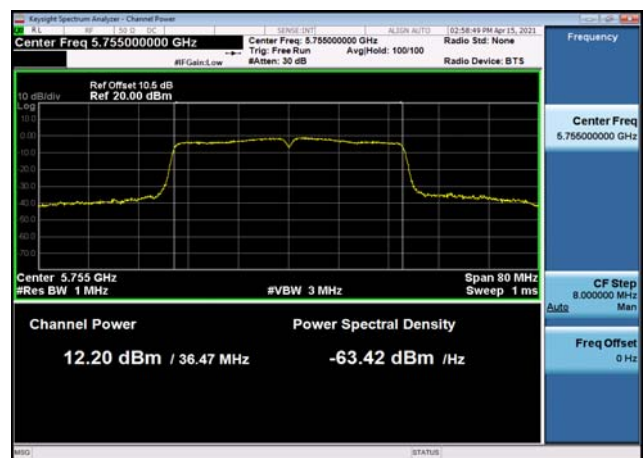
U-NII-3 Output Power-802.11n(20MHz)
,5785MHz,Ant1



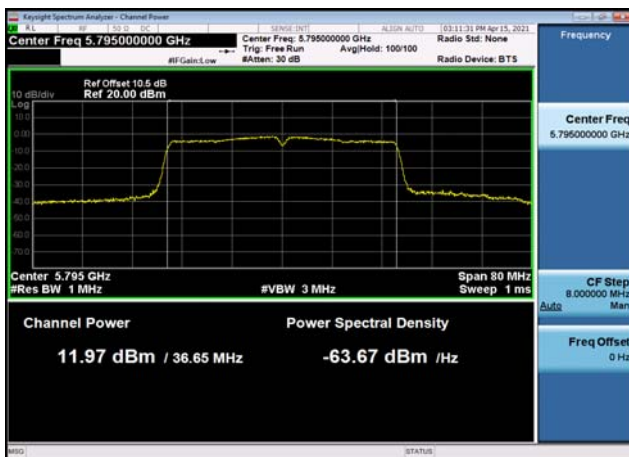
U-NII-3 Output Power-802.11n(20MHz)
,5825MHz,Ant1



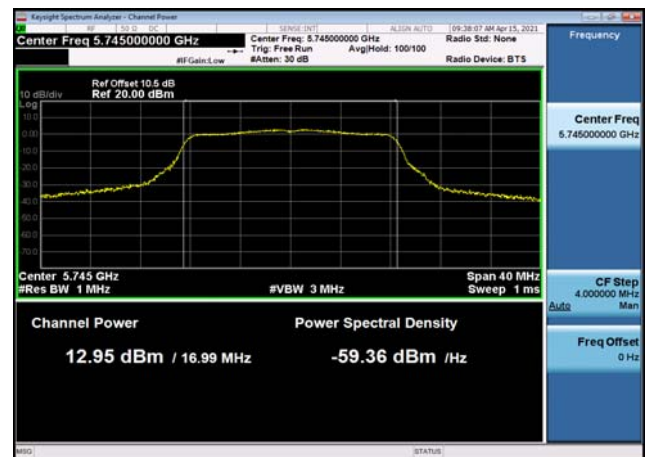
U-NII-3 Output Power-802.11n(40MHz)
,5755MHz,Ant1



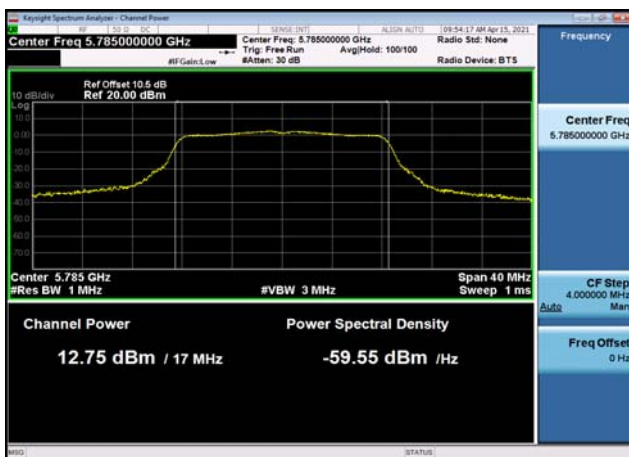
U-NII-3 Output Power-802.11n(40MHz)
,5795MHz,Ant1



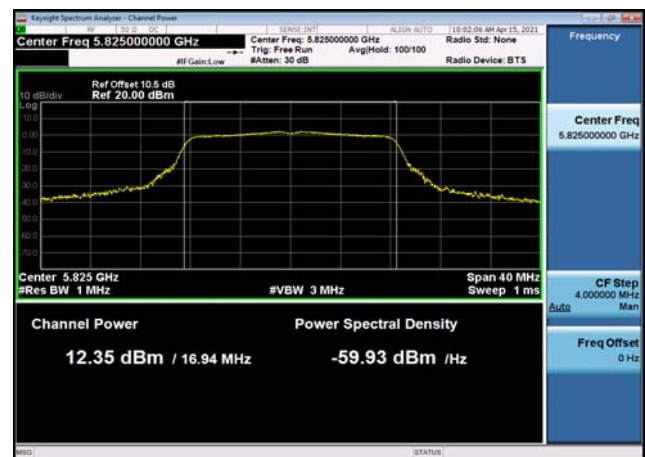
U-NII-3 Output Power-802.11a(20MHz)
,5745MHz,Ant1



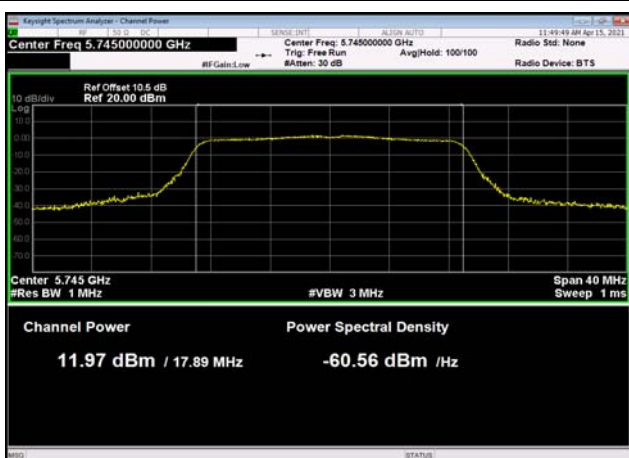
U-NII-3 Output Power-802.11a(20MHz)
,5785MHz,Ant1



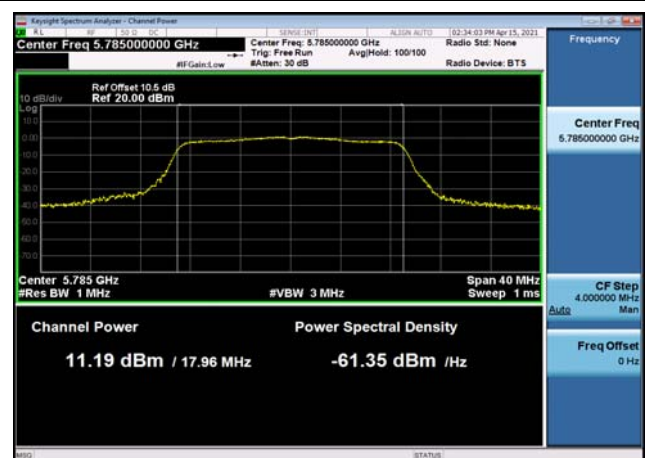
U-NII-3 Output Power-802.11a(20MHz)
,5825MHz,Ant1



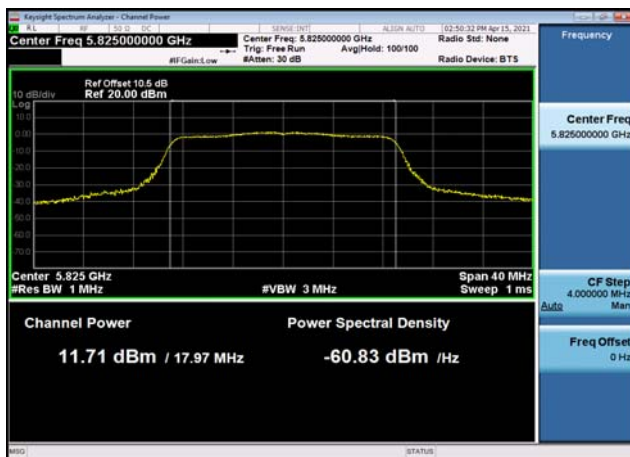
U-NII-3 Output Power-802.11ac(20MHz)
,5745MHz,Ant1



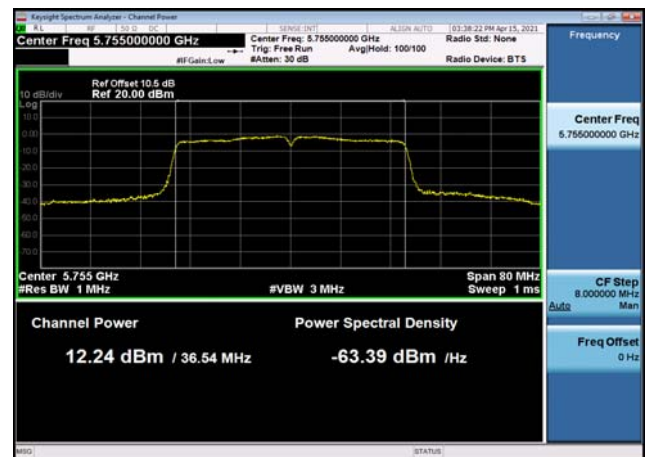
U-NII-3 Output Power-802.11ac(20MHz)
,5785MHz,Ant1



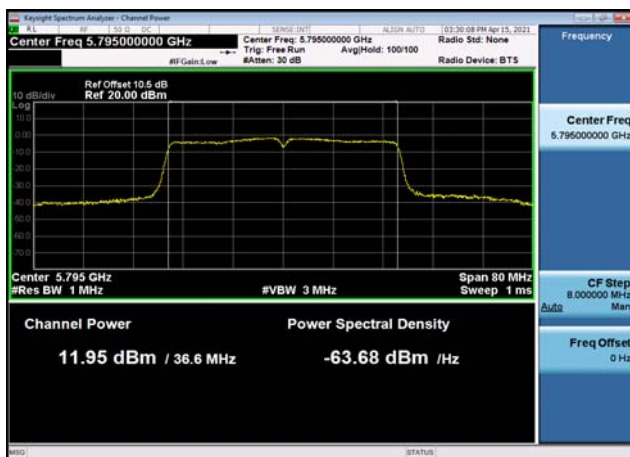
U-NII-3 Output Power-802.11ac(20MHz)
,5825MHz,Ant1



U-NII-3 Output Power-802.11ac(40MHz)
,5755MHz,Ant1



U-NII-3 Output Power-802.11ac(40MHz)
,5795MHz,Ant1



U-NII-3 Output Power-802.11ac(80MHz)
,5775MHz,Ant1



AVGSA Power Spectral Density

Test Result and Data

U-NII-1 AVGSA Power Spectral Density				
Mode	Test Frequency (MHz)	PSD (dBm/1MHz)	Limit (dBm/1MHz)	Result
802.11n (20MHz)	5180	0.384	11	Pass
802.11n (20MHz)	5220	0.573	11	Pass
802.11n (20MHz)	5240	0.423	11	Pass
802.11n (40MHz)	5190	-2.020	11	Pass
802.11n (40MHz)	5230	-2.440	11	Pass
802.11ac (20MHz)	5180	1.680	11	Pass
802.11ac (20MHz)	5220	1.593	11	Pass
802.11ac (20MHz)	5240	0.312	11	Pass
802.11ac (40MHz)	5190	-1.853	11	Pass
802.11ac (40MHz)	5230	-2.474	11	Pass
802.11ac (80MHz)	5210	-5.729	11	Pass
802.11a (20MHz)	5180	2.295	11	Pass
802.11a (20MHz)	5220	2.321	11	Pass
802.11a (20MHz)	5240	2.019	11	Pass

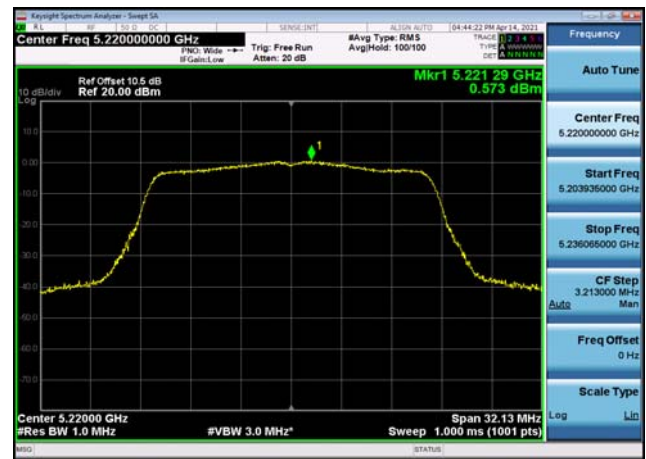
U-NII-3 AVGSA Power Spectral Density				
Mode	Test Frequency (MHz)	PSD (dBm/510KHz)	Limit (dBm/500KHz)	Result
802.11n (20MHz)	5745	-1.082	30	Pass
802.11n (20MHz)	5785	-1.120	30	Pass
802.11n (20MHz)	5825	-1.140	30	Pass
802.11n (40MHz)	5755	-3.347	30	Pass
802.11n (40MHz)	5795	-3.949	30	Pass
802.11ac (20MHz)	5745	-2.023	30	Pass
802.11ac (20MHz)	5785	-2.022	30	Pass
802.11ac (20MHz)	5825	-1.151	30	Pass
802.11ac (40MHz)	5755	-3.377	30	Pass
802.11ac (40MHz)	5795	-4.267	30	Pass
802.11ac (80MHz)	5775	-6.704	30	Pass
802.11a (20MHz)	5745	0.285	30	Pass
802.11a (20MHz)	5785	0.025	30	Pass
802.11a (20MHz)	5825	-0.675	30	Pass

Test Plots

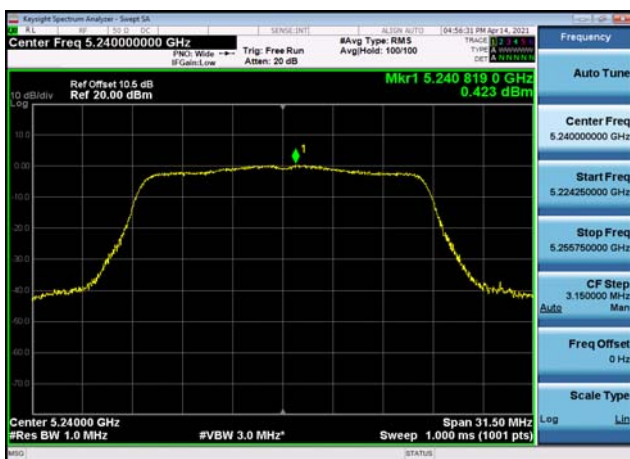
U-NII-1 Power spectral density-802.11
n(20MHz),5180MHz,Ant1



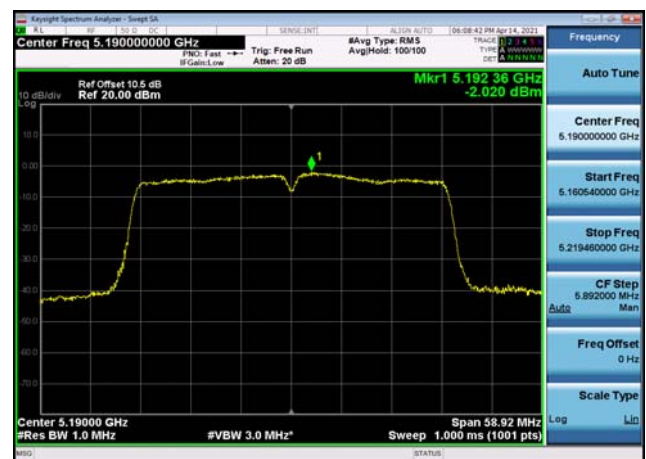
U-NII-1 Power spectral density-802.11
n(20MHz),5220MHz,Ant1



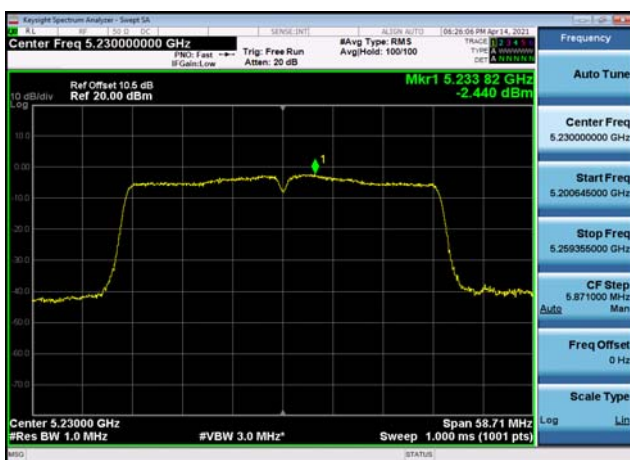
U-NII-1 Power spectral density-802.11
n(20MHz),5240MHz,Ant1



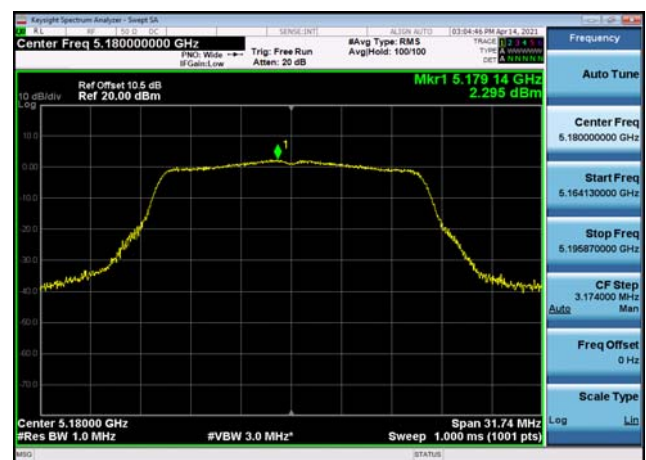
U-NII-1 Power spectral density-802.11
n(40MHz),5190MHz,Ant1



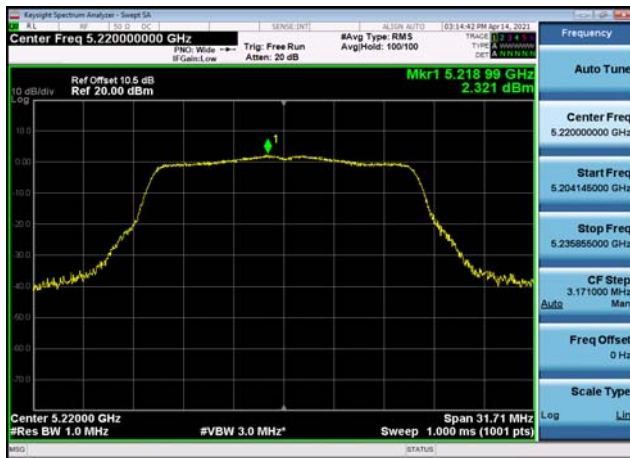
U-NII-1 Power spectral density-802.11
n(40MHz),5230MHz,Ant1



U-NII-1 Power spectral density-802.11
a(20MHz),5180MHz,Ant1



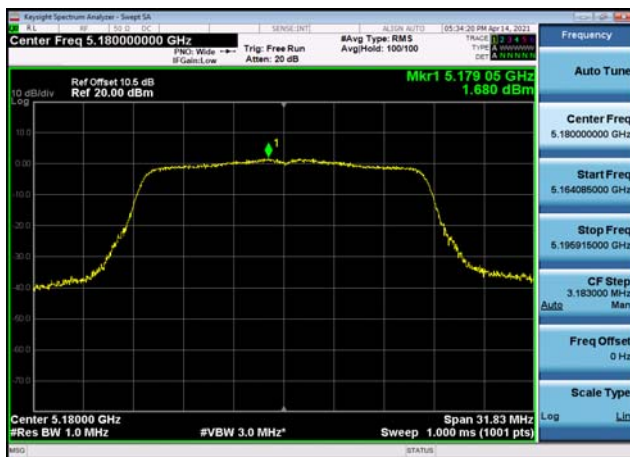
U-NII-1 Power spectral density-802.11
a(20MHz),5220MHz,Ant1



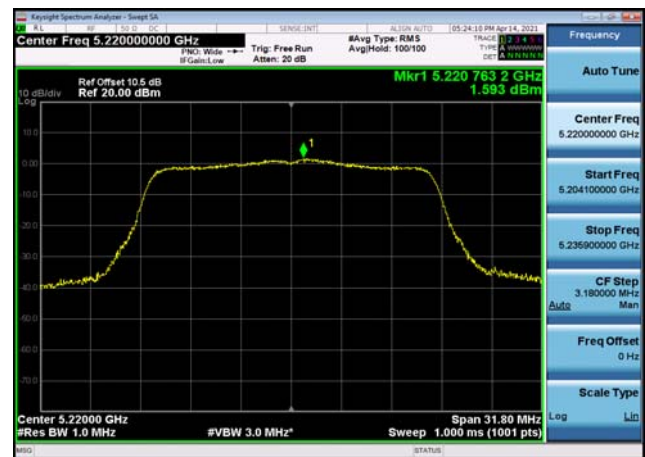
U-NII-1 Power spectral density-802.11
a(20MHz),5240MHz,Ant1



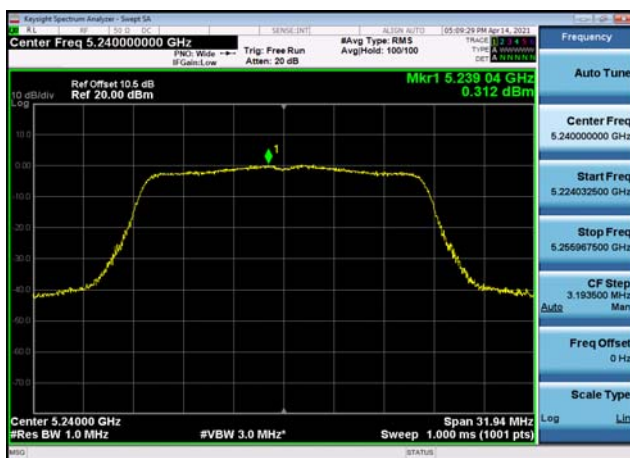
U-NII-1 Power spectral density-802.11
ac(20MHz),5180MHz,Ant1



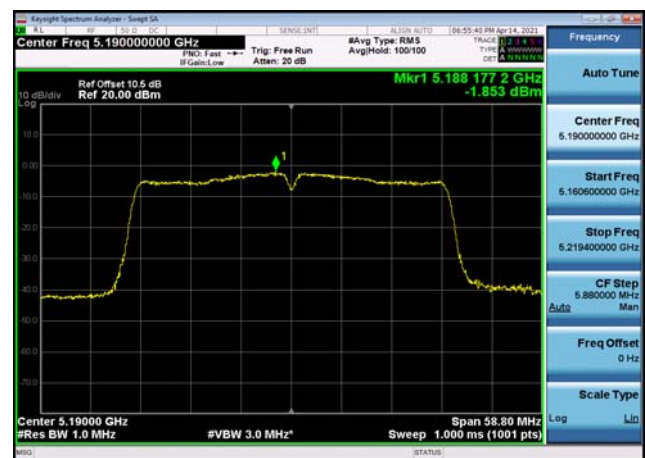
U-NII-1 Power spectral density-802.11
ac(20MHz),5220MHz,Ant1



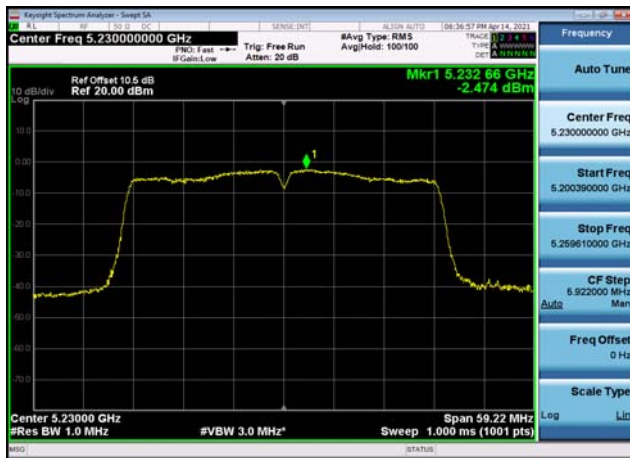
U-NII-1 Power spectral density-802.11
ac(20MHz),5240MHz,Ant1



U-NII-1 Power spectral density-802.11
ac(40MHz),5190MHz,Ant1



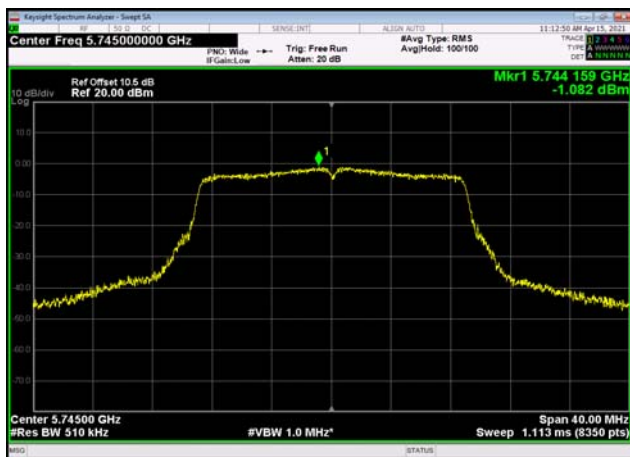
U-NII-1 Power spectral density-802.11
ac(40MHz),5230MHz,Ant1



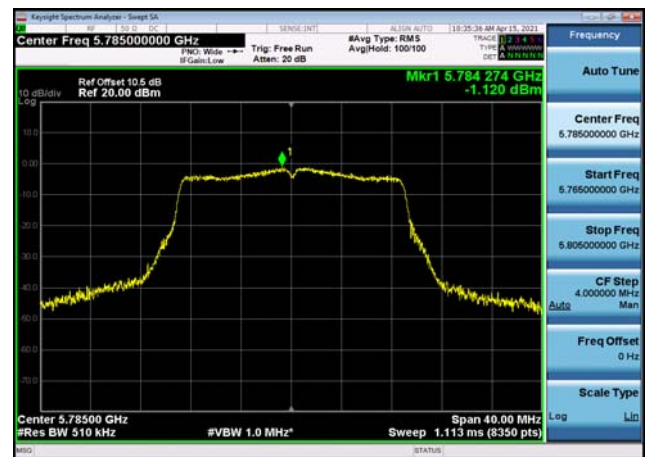
U-NII-1 Power spectral density-802.11
ac(80MHz),5210MHz,Ant1



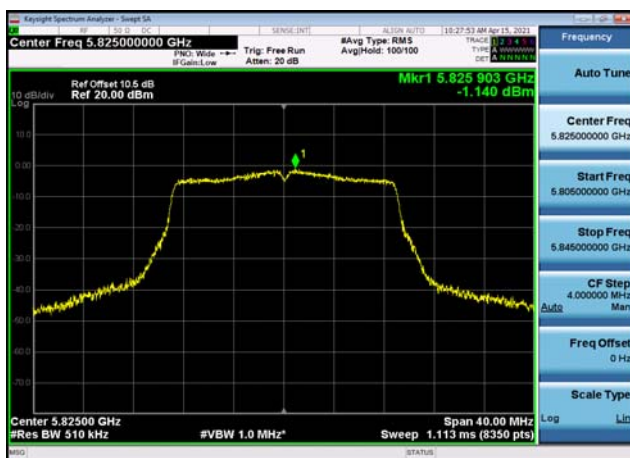
U-NII-3 Power spectral density-802.11
n(20MHz),5745MHz,Ant1



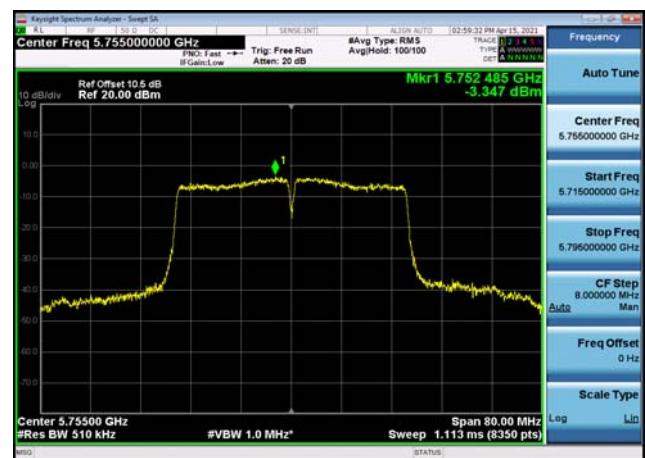
U-NII-3 Power spectral density-802.11
n(20MHz),5785MHz,Ant1



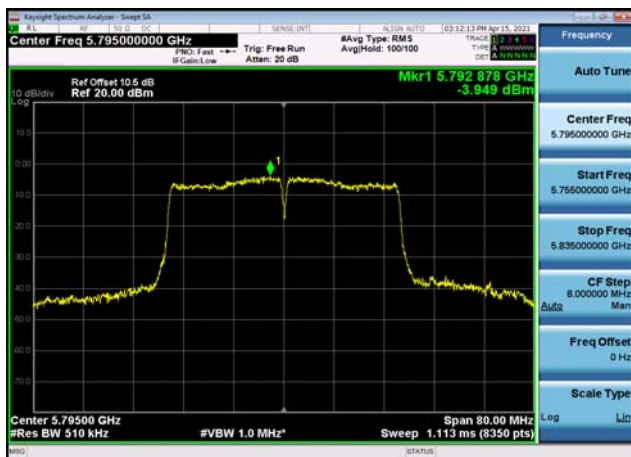
U-NII-3 Power spectral density-802.11
n(20MHz),5825MHz,Ant1



U-NII-3 Power spectral density-802.11
n(40MHz),5755MHz,Ant1



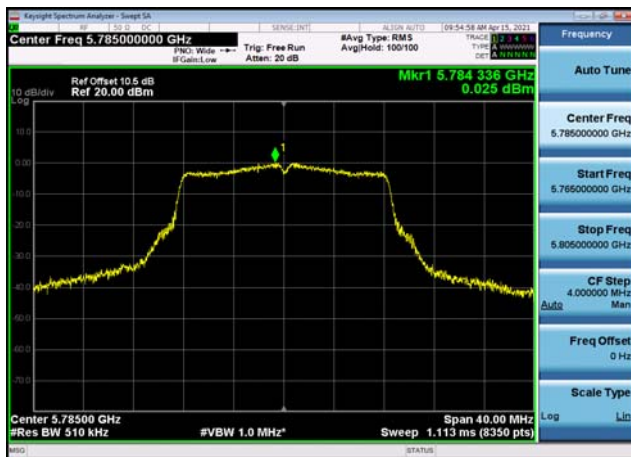
U-NII-3 Power spectral density-802.11
n(40MHz),5795MHz,Ant1



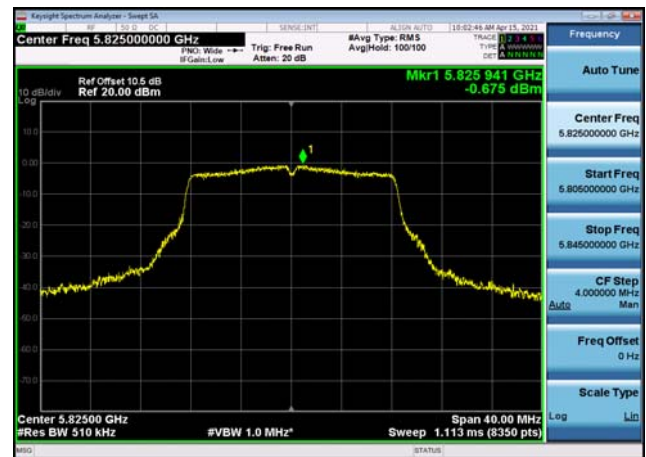
U-NII-3 Power spectral density-802.11
a(20MHz),5745MHz,Ant1



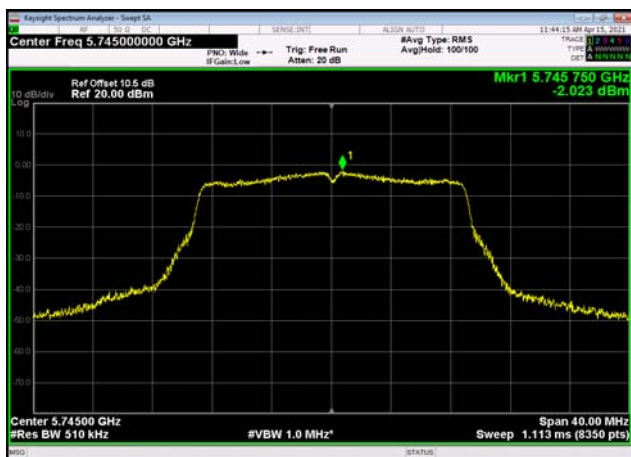
U-NII-3 Power spectral density-802.11
a(20MHz),5785MHz,Ant1



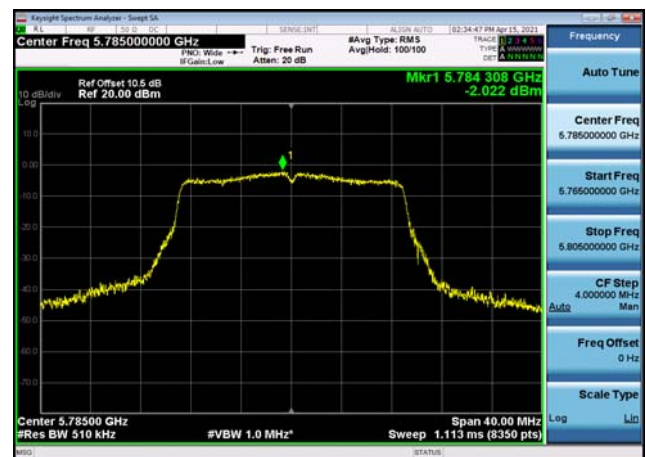
U-NII-3 Power spectral density-802.11
a(20MHz),5825MHz,Ant1



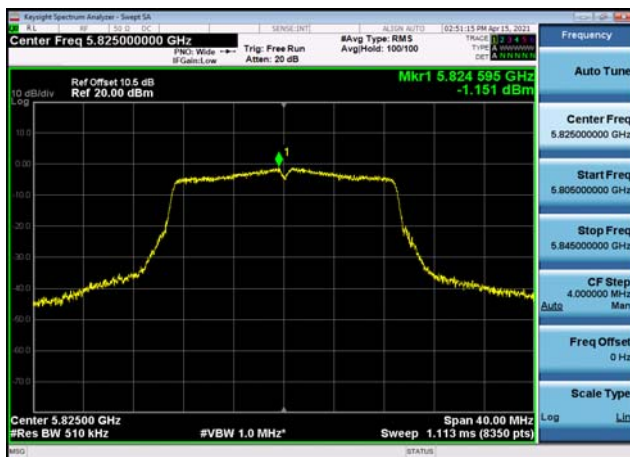
U-NII-3 Power spectral density-802.11
ac(20MHz),5745MHz,Ant1



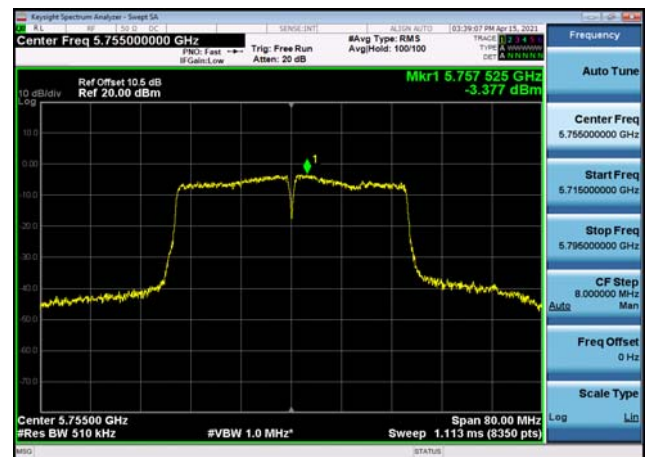
U-NII-3 Power spectral density-802.11
ac(20MHz),5785MHz,Ant1



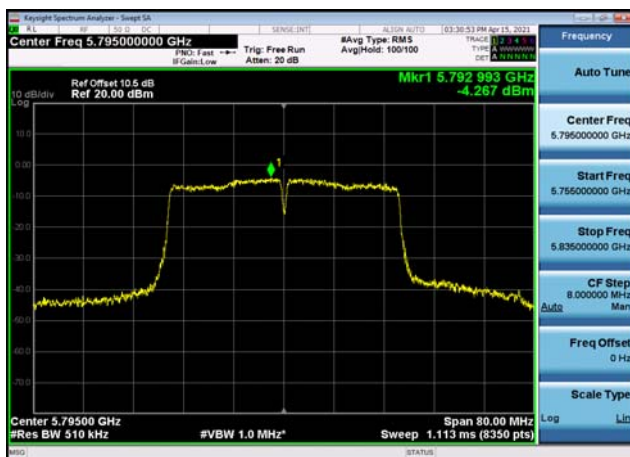
U-NII-3 Power spectral density-802.11
ac(20MHz),5825MHz,Ant1



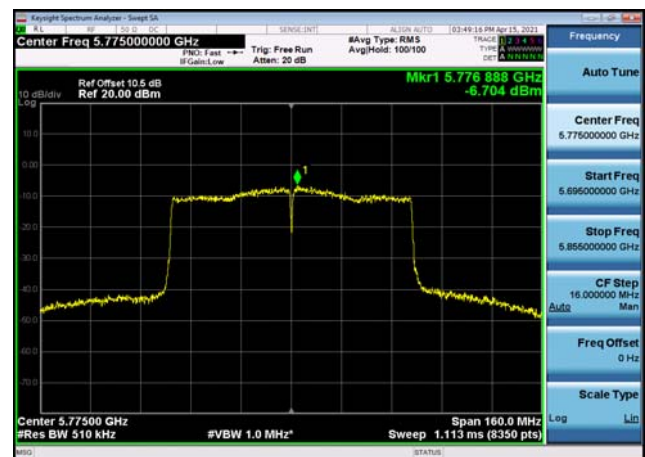
U-NII-3 Power spectral density-802.11
ac(40MHz),5755MHz,Ant1



U-NII-3 Power spectral density-802.11
ac(40MHz),5795MHz,Ant1



U-NII-3 Power spectral density-802.11
ac(80MHz),5775MHz,Ant1



6dB and 26dB Down Bandwidth

Test Result and Data

U-NII-1 Occupied 26dB Bandwidth				
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)		Result
802.11n (20MHz)	5180	21.09		Pass
802.11n (20MHz)	5220	21.42		Pass
802.11n (20MHz)	5240	21.00		Pass
802.11n (40MHz)	5190	39.28		Pass
802.11n (40MHz)	5230	39.14		Pass
802.11ac (20MHz)	5180	21.22		Pass
802.11ac (20MHz)	5220	21.20		Pass
802.11ac (20MHz)	5240	21.29		Pass
802.11ac (40MHz)	5190	39.20		Pass
802.11ac (40MHz)	5230	39.48		Pass
802.11ac (80MHz)	5210	81.61		Pass
802.11a (20MHz)	5180	21.16		Pass
802.11a (20MHz)	5220	21.14		Pass
802.11a (20MHz)	5240	21.08		Pass
U-NII-3 Occupied 6dB Bandwidth				
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (KHz)	Result
802.11n (20MHz)	5745	17.31	500	Pass
802.11n (20MHz)	5785	17.00	500	Pass
802.11n (20MHz)	5825	17.08	500	Pass
802.11n (40MHz)	5755	35.27	500	Pass
802.11n (40MHz)	5795	35.63	500	Pass
802.11ac (20MHz)	5745	16.91	500	Pass
802.11ac (20MHz)	5785	15.97	500	Pass
802.11ac (20MHz)	5825	17.30	500	Pass
802.11ac (40MHz)	5755	35.80	500	Pass
802.11ac (40MHz)	5795	35.51	500	Pass
802.11ac (80MHz)	5775	75.33	500	Pass
802.11a (20MHz)	5745	16.33	500	Pass
802.11a (20MHz)	5785	16.33	500	Pass
802.11a (20MHz)	5825	16.32	500	Pass

Test Plots

U-NII-1 26dB Bandwidth-802.11n(20MHz)
,5180MHz,Ant1



U-NII-1 26dB Bandwidth-802.11n(20MHz)
,5220MHz,Ant1



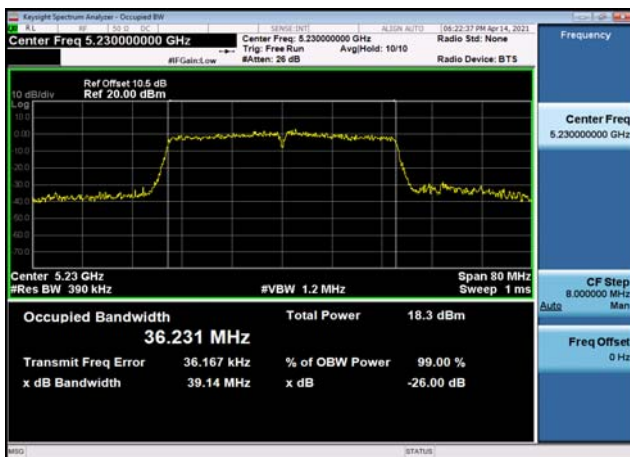
U-NII-1 26dB Bandwidth-802.11n(20MHz)
,5240MHz,Ant1



U-NII-1 26dB Bandwidth-802.11n(40MHz)
,5190MHz,Ant1



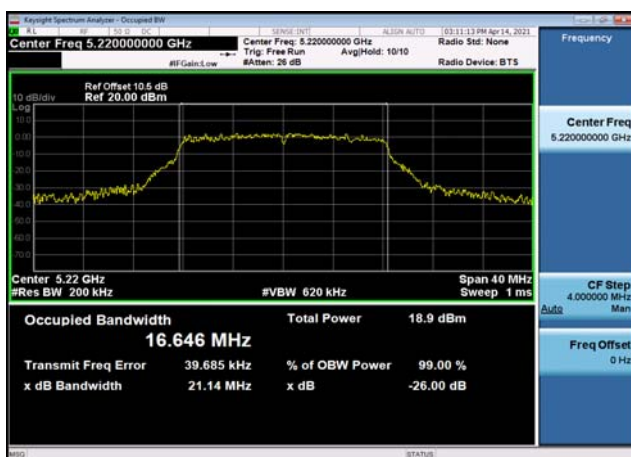
U-NII-1 26dB Bandwidth-802.11n(40MHz)
,5230MHz,Ant1



U-NII-1 26dB Bandwidth-802.11a(20MHz)
,5180MHz,Ant1



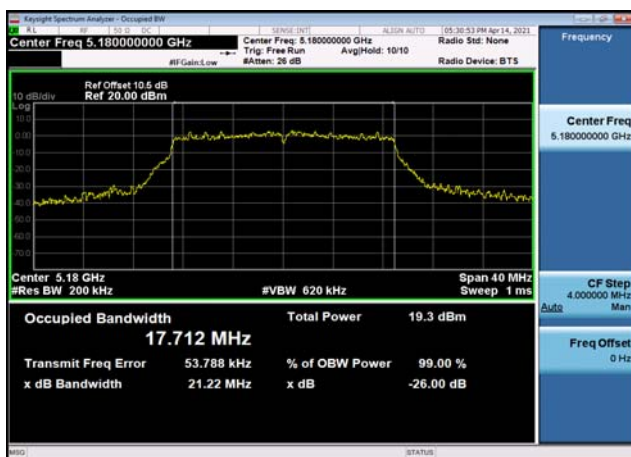
U-NII-1 26dB Bandwidth-802.11a(20MHz)
,5220MHz,Ant1



U-NII-1 26dB Bandwidth-802.11a(20MHz)
,5240MHz,Ant1



U-NII-1 26dB Bandwidth-802.11ac(20MHz)
,5180MHz,Ant1



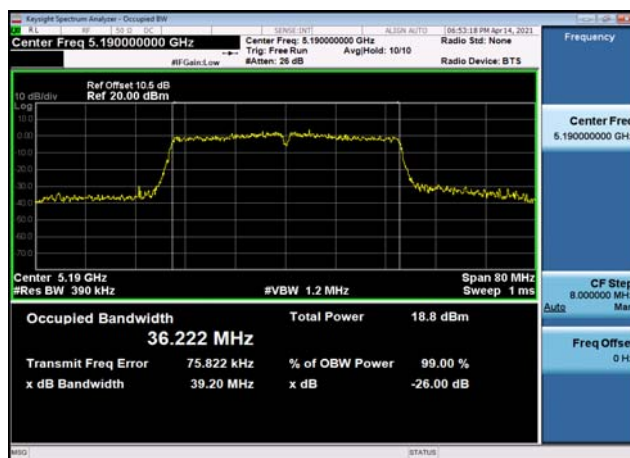
U-NII-1 26dB Bandwidth-802.11ac(20MHz)
,5220MHz,Ant1



U-NII-1 26dB Bandwidth-802.11ac(20MHz)
,5240MHz,Ant1



U-NII-1 26dB Bandwidth-802.11ac(40MHz)
,5190MHz,Ant1



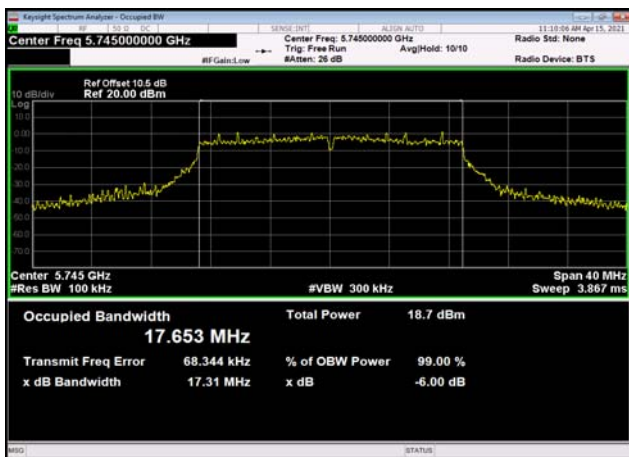
U-NII-1 26dB Bandwidth-802.11ac(40MHz),5230MHz,Ant1



U-NII-1 26dB Bandwidth-802.11ac(80MHz),5210MHz,Ant1



U-NII-3 6dB Bandwidth-802.11n(20MHz),5745MHz,Ant1



U-NII-3 6dB Bandwidth-802.11n(20MHz),5785MHz,Ant1



U-NII-3 6dB Bandwidth-802.11n(20MHz),5825MHz,Ant1



U-NII-3 6dB Bandwidth-802.11n(40MHz),5755MHz,Ant1



U-NII-3 6dB Bandwidth-802.11n(40MHz)
,5795MHz,Ant1



U-NII-3 6dB Bandwidth-802.11a(20MHz)
,5745MHz,Ant1



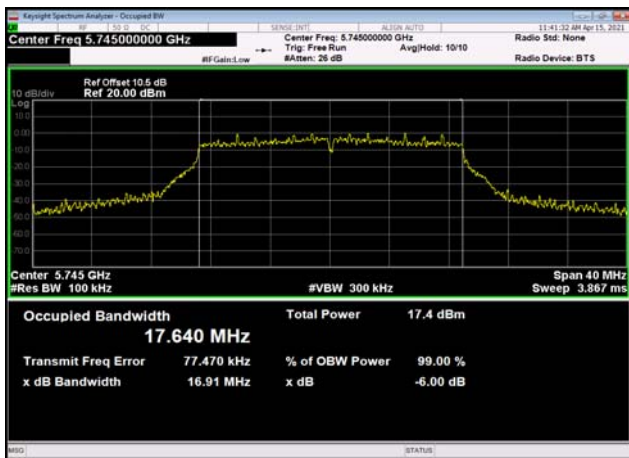
U-NII-3 6dB Bandwidth-802.11a(20MHz)
,5785MHz,Ant1



U-NII-3 6dB Bandwidth-802.11a(20MHz)
,5825MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(20MHz)
,5745MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(20MHz)
,5785MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(20MHz)
,5825MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(40MHz)
,5755MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(40MHz)
,5795MHz,Ant1



U-NII-3 6dB Bandwidth-802.11ac(80MHz)
,5775MHz,Ant1



Frequency Stability

U-NII-1

U-NII-1 Centre Frequency							
Mode	Test Frequency (MHz)	Ant	LF (MHz)	HF (MHz)	CF (MHz)	Freq Stability (ppm)	Test Result
802.11n (20MHz)	5180	Ant1	5171.176	5188.946	5180.061	11.740	Pass
802.11n (20MHz)	5220	Ant1	5211.173	5228.968	5220.070	13.490	Pass
802.11n (20MHz)	5240	Ant1	5231.180	5248.954	5240.067	12.800	Pass
802.11n (40MHz)	5190	Ant1	5171.823	5208.326	5190.074	14.310	Pass
802.11n (40MHz)	5230	Ant1	5211.816	5248.314	5230.065	12.330	Pass
802.11ac (20MHz)	5180	Ant1	5171.166	5188.948	5180.057	10.940	Pass
802.11ac (20MHz)	5220	Ant1	5211.193	5228.947	5220.070	13.330	Pass
802.11ac (20MHz)	5240	Ant1	5231.187	5248.941	5240.064	12.170	Pass
802.11ac (40MHz)	5190	Ant1	5171.835	5208.317	5190.076	14.600	Pass
802.11ac (40MHz)	5230	Ant1	5211.787	5248.335	5230.061	11.620	Pass
802.11ac (80MHz)	5210	Ant1	5171.883	5248.243	5210.063	12.160	Pass
802.11a (20MHz)	5180	Ant1	5171.785	5188.353	5180.069	13.350	Pass
802.11a (20MHz)	5220	Ant1	5211.798	5228.350	5220.074	14.210	Pass
802.11a (20MHz)	5240	Ant1	5231.785	5248.347	5240.066	12.560	Pass

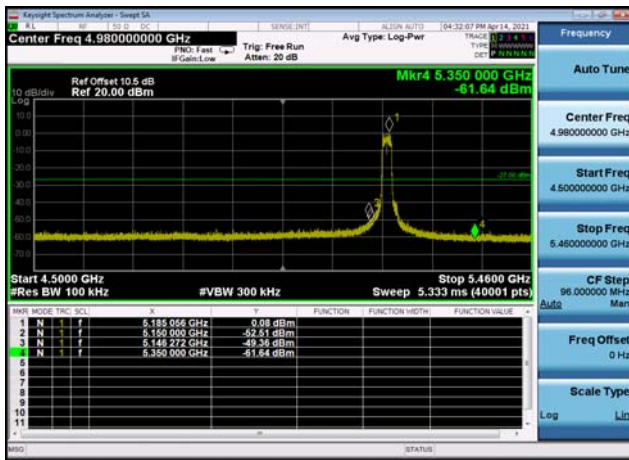
U-NII-3

U-NII-3 Centre Frequency							
Mode	Test Frequency (MHz)	Ant	LF (MHz)	HF (MHz)	CF (MHz)	Freq Stability (ppm)	Test Result
802.11n (20MHz)	5745	Ant1	5736.192	5753.955	5745.073	12.760	Pass
802.11n (20MHz)	5785	Ant1	5776.183	5793.948	5785.065	11.310	Pass
802.11n (20MHz)	5825	Ant1	5816.208	5833.960	5825.084	14.380	Pass
802.11n (40MHz)	5755	Ant1	5736.834	5773.336	5755.085	14.730	Pass
802.11n (40MHz)	5795	Ant1	5776.838	5813.327	5795.083	14.240	Pass
802.11ac (20MHz)	5745	Ant1	5736.184	5753.963	5745.074	12.840	Pass
802.11ac (20MHz)	5785	Ant1	5776.190	5793.958	5785.074	12.820	Pass
802.11ac (20MHz)	5825	Ant1	5816.198	5833.951	5825.075	12.800	Pass
802.11ac (40MHz)	5755	Ant1	5736.804	5773.329	5755.066	11.470	Pass
802.11ac (40MHz)	5795	Ant1	5776.826	5813.335	5795.080	13.850	Pass
802.11ac (80MHz)	5775	Ant1	5736.870	5813.263	5775.067	11.540	Pass
802.11a (20MHz)	5745	Ant1	5736.784	5753.356	5745.070	12.180	Pass
802.11a (20MHz)	5785	Ant1	5776.788	5793.357	5785.072	12.460	Pass
802.11a (20MHz)	5825	Ant1	5816.778	5833.363	5825.071	12.160	Pass

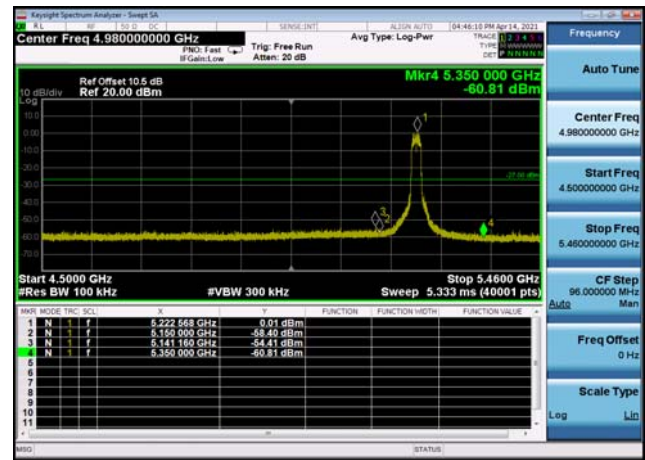
Note: The worst data reported only.

Bandedge and spurious Emission

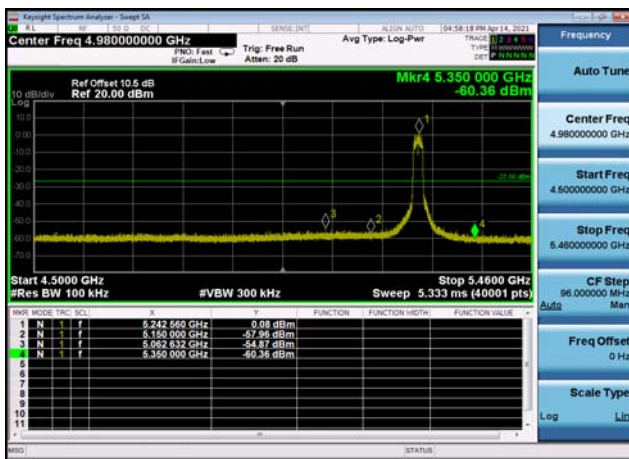
U-NII-1 ,Plot 1,Band Edge-802.11n(20M
Hz),5180MHz,Ant1



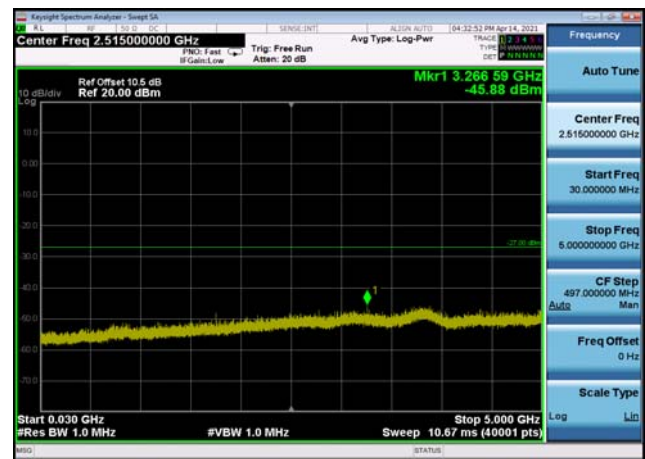
U-NII-1 ,Plot 1,Band Edge-802.11n(20M
Hz),5220MHz,Ant1



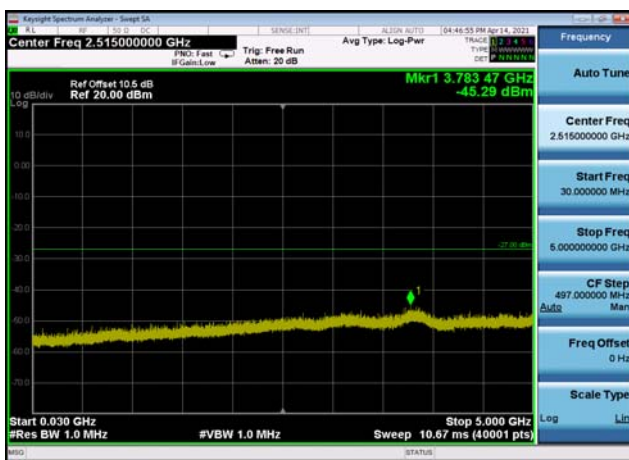
U-NII-1 ,Plot 1,Band Edge-802.11n(20M
Hz),5240MHz,Ant1



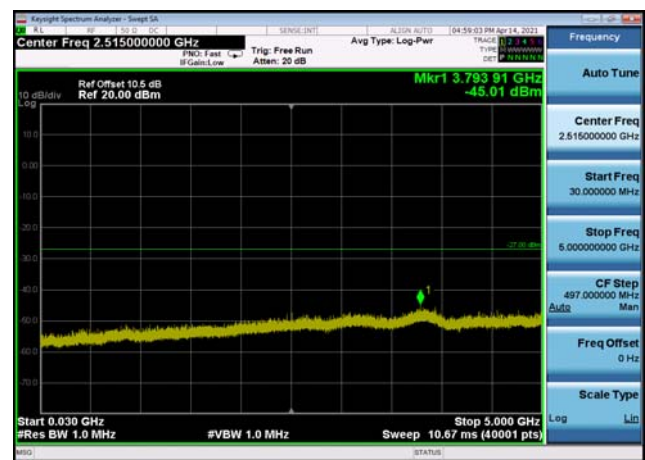
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11n
(20MHz),5180MHz,Ant1



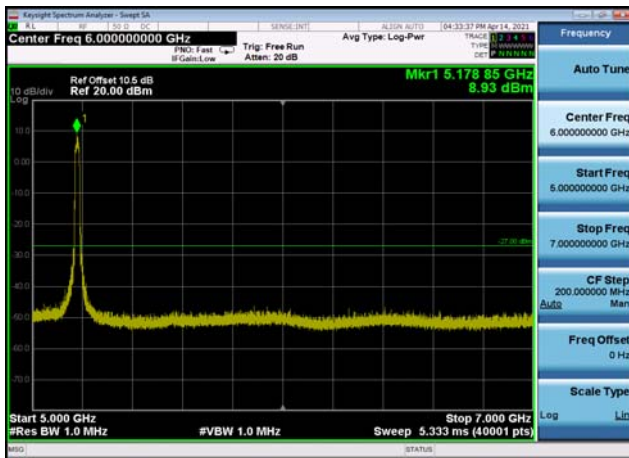
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11n
(20MHz),5220MHz,Ant1



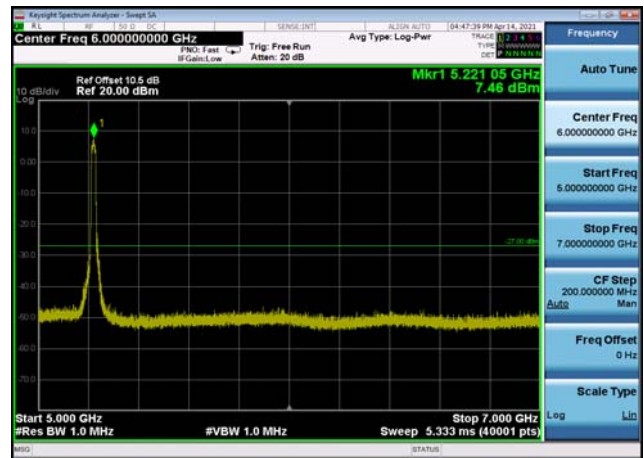
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11n
(20MHz),5240MHz,Ant1



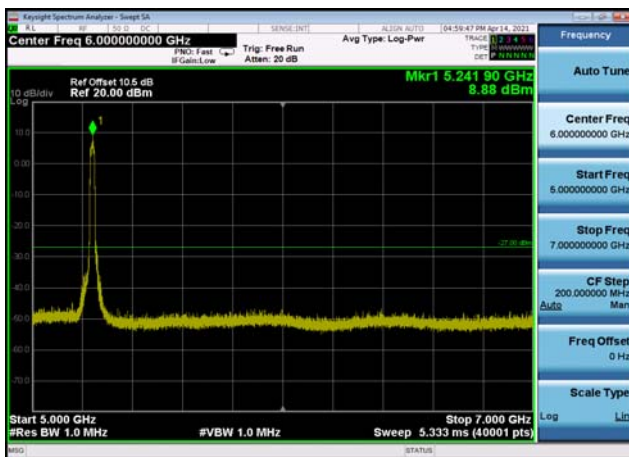
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1
1n(20MHz),5180MHz,Ant1



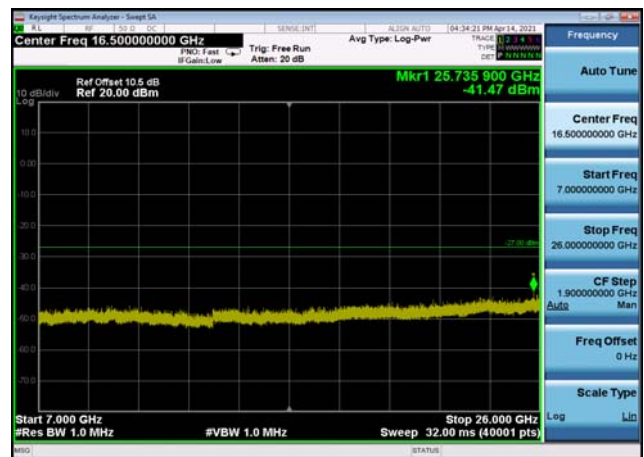
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1
1n(20MHz),5220MHz,Ant1



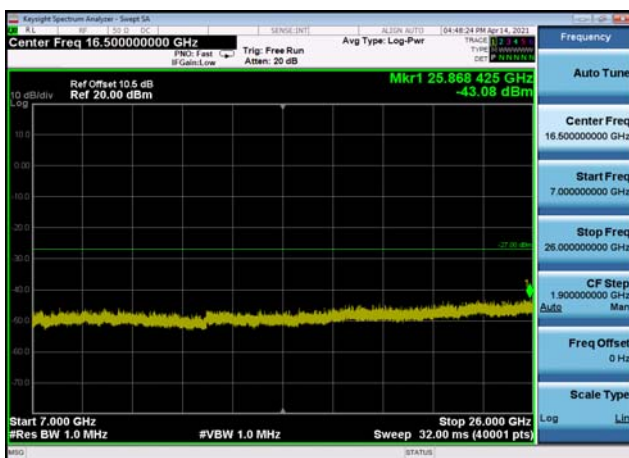
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1
1n(20MHz),5240MHz,Ant1



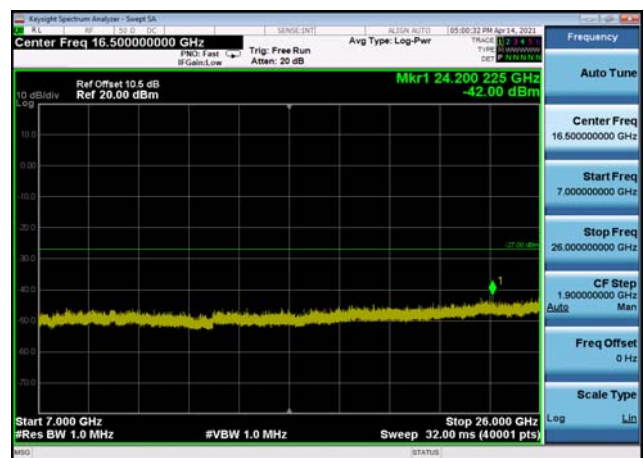
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.
11n(20MHz),5180MHz,Ant1



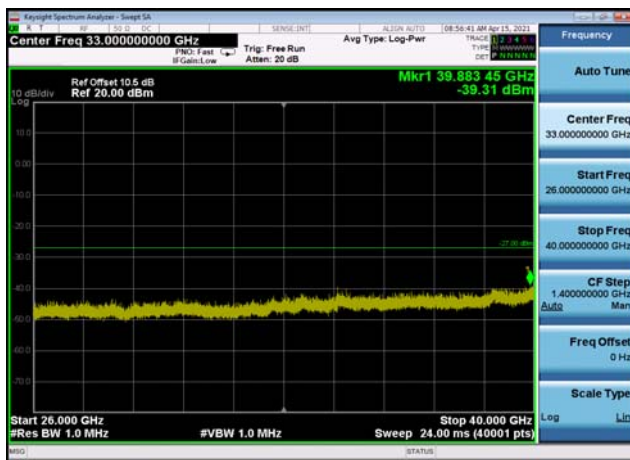
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.
11n(20MHz),5220MHz,Ant1



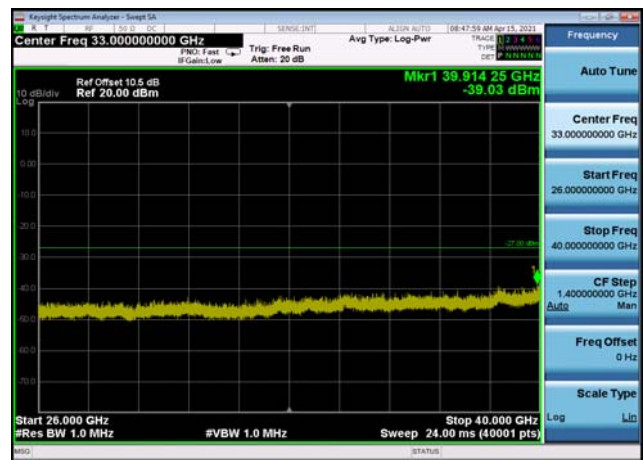
U-NII-1 ,Plot 4,7000MHz~26000MHz-802.
11n(20MHz),5240MHz,Ant1



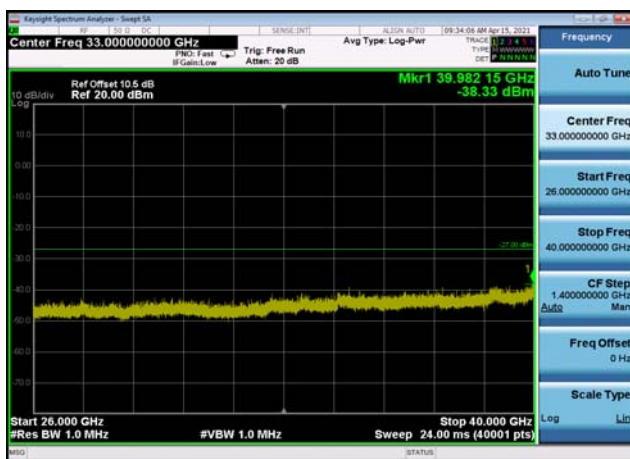
U-NII-1 ,Plot 2,26000MHz~40000MHz-802
.11n(20MHz),5220MHz,Ant1



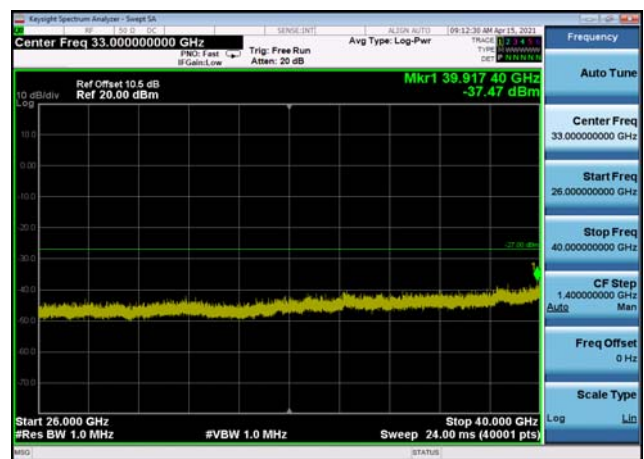
U-NII-1 ,Plot 2,26000MHz~40000MHz-802
.11n(20MHz),5180MHz,Ant1



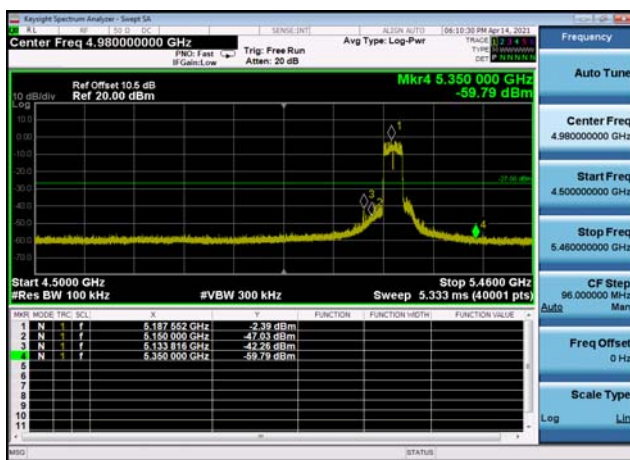
U-NII-1 ,Plot 2,26000MHz~40000MHz-802
.11n(40MHz),5190MHz,Ant1



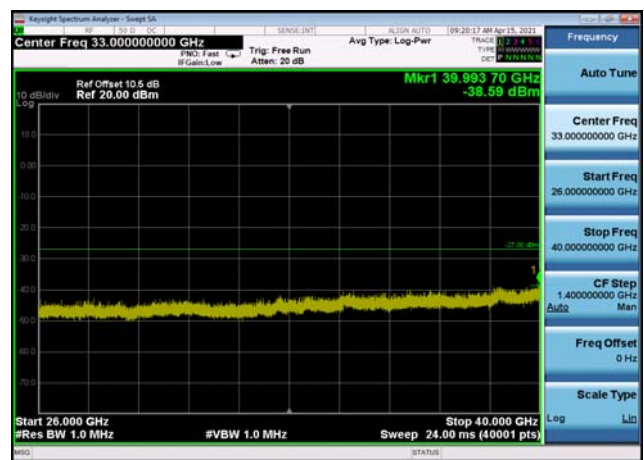
U-NII-1 ,Plot 2,26000MHz~40000MHz-802
.11n(20MHz),5240MHz,Ant1



U-NII-1 ,Plot 1,Band Edge-802.11n(40M
Hz),5190MHz,Ant1



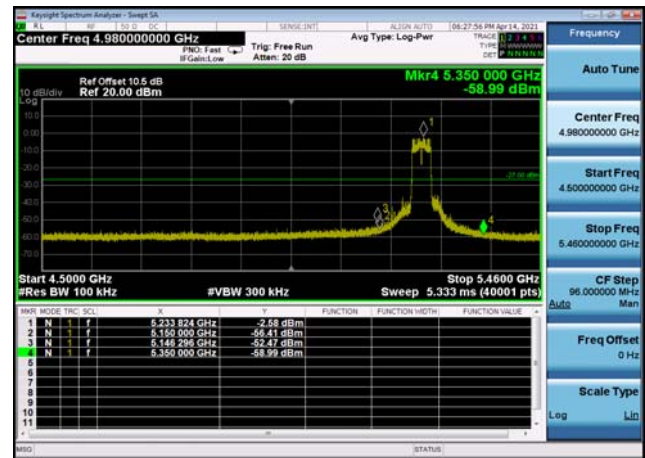
U-NII-1 ,Plot 2,26000MHz~40000MHz-802
.11n(40MHz),5230MHz,Ant1



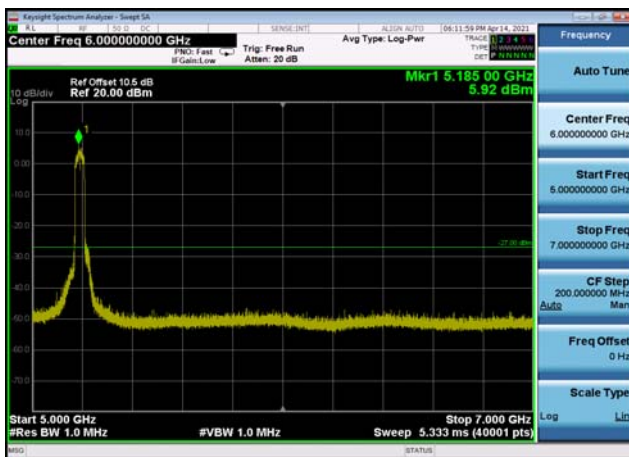
U-NII-1 ,Plot 2,30MHz~5000MHz-802.11n
(40MHz),5190MHz,Ant1



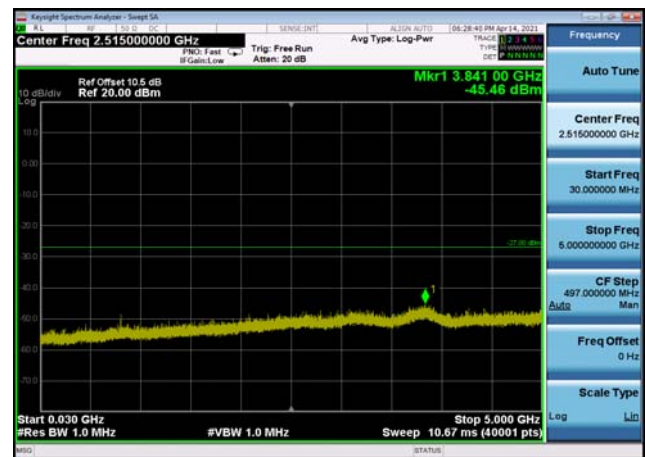
U-NII-1 ,Plot 1,Band Edge-802.11n(40M
Hz),5230MHz,Ant1



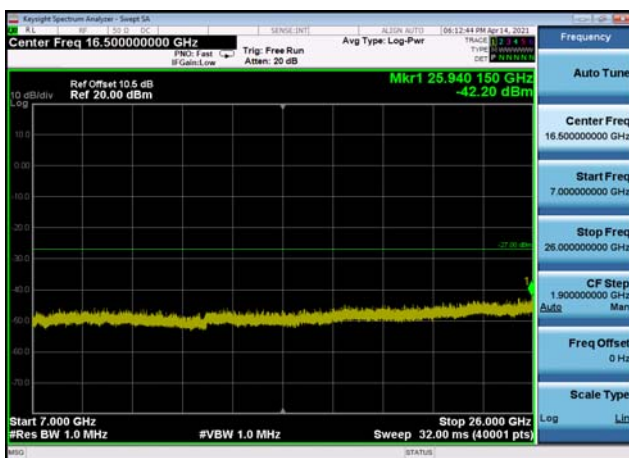
U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1
1n(40MHz),5190MHz,Ant1



U-NII-1 ,Plot 2,30MHz~5000MHz-802.11n
(40MHz),5230MHz,Ant1



U-NII-1 ,Plot 4,7000MHz~26000MHz-802.
11n(40MHz),5190MHz,Ant1



U-NII-1 ,Plot 3,5000MHz~7000MHz-802.1
1n(40MHz),5230MHz,Ant1

