

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
7	5985	19.77	12.96	4.76	59.156	17.72	24	Pass
39	6145	19.861	12.98	4.76	59.429	17.74	24	Pass
87	6385	19.055	12.80	4.76	57.016	17.56	24	Pass
103	6465	21.429	13.31	4.29	57.544	17.6	24	Pass
119	6545	19.409	12.88	4.61	56.105	17.49	24	Pass
135	6625	19.543	12.91	4.61	56.494	17.52	24	Pass
151	6705	19.634	12.93	4.61	56.754	17.54	24	Pass
167	6785	19.999	13.01	4.61	57.81	17.62	24	Pass
183	6865	21.429	13.31	4.61	61.944	17.92	24	Pass
199	6945	23.823	13.77	4.09	61.094	17.86	24	Pass
215	7025	24.099	13.82	4.09	61.802	17.91	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi))

2. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi
 U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi
 U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi
 U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
15	6025	34.119	15.33	4.76	102.094	20.09	24	Pass
47	6185	33.729	15.28	4.76	100.925	20.04	24	Pass
79	6345	33.574	15.26	4.76	100.462	20.02	24	Pass
111	6505	33.651	15.27	4.29	90.365	19.56	24	Pass
143	6665	34.514	15.38	4.61	99.77	19.99	24	Pass
175	6825	34.834	15.42	4.61	100.693	20.03	24	Pass
207	6985	35.645	15.52	4.09	91.411	19.61	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi))

2. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi
- U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi
- U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi
- U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
1	5955	5.408	7.33	4.76	16.181	12.09	24	Pass
45	6175	5.2	7.16	4.76	15.56	11.92	24	Pass
93	6415	5.333	7.27	4.76	15.959	12.03	24	Pass
97	6435	5.808	7.64	4.29	15.596	11.93	24	Pass
105	6475	5.902	7.71	4.29	15.849	12	24	Pass
113	6515	5.848	7.67	4.29	15.704	11.96	24	Pass
117	6535	5.358	7.29	4.61	15.488	11.9	24	Pass
153	6715	5.395	7.32	4.61	15.596	11.93	24	Pass
181	6855	5.176	7.14	4.61	14.962	11.75	24	Pass
185	6875	6.067	7.83	4.09	15.56	11.92	24	Pass
213	7015	6.124	7.87	4.09	15.704	11.96	24	Pass
233	7115	5.998	7.78	4.09	15.382	11.87	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi))

2. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi
- U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi
- U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi
- U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
3	5965	9.84	9.93	4.76	29.444	14.69	24	Pass
43	6165	10.28	10.12	4.76	30.761	14.88	24	Pass
91	6405	10.375	10.16	4.76	31.046	14.92	24	Pass
99	6445	11.561	10.63	4.29	31.046	14.92	24	Pass
107	6485	10.839	10.35	4.29	29.107	14.64	24	Pass
115	6525	10.093	10.04	4.61	29.174	14.65	24	Pass
123	6565	10.351	10.15	4.61	29.923	14.76	24	Pass
155	6725	10.116	10.05	4.61	29.242	14.66	24	Pass
179	6845	10.186	10.08	4.61	29.444	14.69	24	Pass
187	6885	11.298	10.53	4.09	28.973	14.62	24	Pass
211	7005	11.776	10.71	4.09	30.2	14.8	24	Pass
227	7085	12.106	10.83	4.09	31.046	14.92	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi))

2. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi
- U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi
- U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi
- U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
7	5985	19.77	12.96	4.76	59.156	17.72	24	Pass
39	6145	19.999	13.01	4.76	59.841	17.77	24	Pass
87	6385	19.143	12.82	4.76	57.28	17.58	24	Pass
103	6465	21.827	13.39	4.29	58.614	17.68	24	Pass
119	6545	19.543	12.91	4.61	56.494	17.52	24	Pass
135	6625	19.724	12.95	4.61	57.016	17.56	24	Pass
151	6705	20.606	13.14	4.61	59.566	17.75	24	Pass
167	6785	20.091	13.03	4.61	58.076	17.64	24	Pass
183	6865	21.878	13.40	4.61	63.241	18.01	24	Pass
199	6945	24.434	13.88	4.09	62.661	17.97	24	Pass
215	7025	24.604	13.91	4.09	63.096	18	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi))

2. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi
 U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi
 U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi
 U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

802.11be (EHT160)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
15	6025	34.435	15.37	4.76	103.039	20.13	24	Pass
47	6185	34.041	15.32	4.76	101.859	20.08	24	Pass
79	6345	33.806	15.29	4.76	101.158	20.05	24	Pass
111	6505	33.806	15.29	4.29	90.782	19.58	24	Pass
143	6665	34.914	15.43	4.61	100.925	20.04	24	Pass
175	6825	35.075	15.45	4.61	101.391	20.06	24	Pass
207	6985	36.308	15.60	4.09	93.111	19.69	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi))

2. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi
- U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi
- U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi
- U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

802.11be (EHT320)

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Max. Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Pass / Fail
31	6105	64.269	18.08	4.76	192.309	22.84	24	Pass
63	6265	65.163	18.14	4.76	194.984	22.9	24	Pass
95	6425	63.973	18.06	4.29	171.791	22.35	24	Pass
127	6585	66.069	18.20	4.61	190.985	22.81	24	Pass
159	6745	68.077	18.33	4.61	196.789	22.94	24	Pass
191	6905	69.663	18.43	4.09	178.649	22.52	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi))

2. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi
 U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi
 U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi
 U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

4.4.7 Test Result (Mode 2)

Power Output:

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
1	5955	0.82	0.65	2.369	3.75	4.76	7.096	8.51	24	Pass
45	6175	0.84	0.67	2.38	3.77	4.76	7.129	8.53	24	Pass
93	6415	0.86	0.63	2.375	3.76	4.76	7.112	8.52	24	Pass
97	6435	0.88	0.60	2.373	3.75	4.29	6.368	8.04	24	Pass
105	6475	0.91	0.63	2.389	3.78	4.29	6.412	8.07	24	Pass
113	6515	0.98	0.67	2.42	3.84	4.29	6.501	8.13	24	Pass
117	6535	0.92	0.55	2.371	3.75	4.61	6.855	8.36	24	Pass
153	6715	0.63	0.91	2.389	3.78	4.61	6.902	8.39	24	Pass
181	6855	0.87	0.65	2.383	3.77	4.61	6.887	8.38	24	Pass
185	6875	1.05	1.57	2.709	4.33	4.09	6.95	8.42	24	Pass
213	7015	1.19	1.33	2.674	4.27	4.09	6.855	8.36	24	Pass
233	7115	1.37	1.10	2.659	4.25	4.09	6.823	8.34	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

2. U-NII-5 Directional gain = antenna gain (dBi) + array gain (dB) = 4.76 + 0 dB = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) + array gain (dB) = 4.29 + 0 dB = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) + array gain (dB) = 4.61 + 0 dB = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) + array gain (dB) = 4.09 + 0 dB = 4.09 dBi

3. Since this device support 2TX, therefore array gain = 0 dB (i.e., no array gain) for NANT ≤ 4 (for conducted output power measurement)

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
1	5955	3.57	4.61	5.166	7.13	4.76	15.453	11.89	24	Pass
45	6175	4.48	4.21	5.442	7.36	4.76	16.293	12.12	24	Pass
93	6415	4.24	3.87	5.092	7.07	4.76	15.241	11.83	24	Pass
97	6435	4.73	4.58	5.842	7.67	4.29	15.704	11.96	24	Pass
105	6475	4.94	4.60	6.003	7.78	4.29	16.106	12.07	24	Pass
113	6515	4.92	4.67	6.035	7.81	4.29	16.218	12.1	24	Pass
117	6535	4.20	3.92	5.096	7.07	4.61	14.723	11.68	24	Pass
153	6715	3.94	4.18	5.096	7.07	4.61	14.723	11.68	24	Pass
181	6855	3.92	3.99	4.972	6.97	4.61	14.388	11.58	24	Pass
185	6875	4.31	4.96	5.831	7.66	4.09	14.962	11.75	24	Pass
213	7015	4.74	4.88	6.055	7.82	4.09	15.524	11.91	24	Pass
233	7115	4.94	5.11	6.362	8.04	4.09	16.331	12.13	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

2. U-NII-5 Directional gain = antenna gain (dBi) + array gain (dB) = 4.76 + 0 dB = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) + array gain (dB) = 4.29 + 0 dB = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) + array gain (dB) = 4.61 + 0 dB = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) + array gain (dB) = 4.09 + 0 dB = 4.09 dBi

3. Since this device support 2TX, therefore array gain = 0 dB (i.e., no array gain) for NANT ≤ 4 (for conducted output power measurement)

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	5.79	6.67	8.438	9.26	4.76	25.235	14.02	24	Pass
43	6165	6.51	6.34	8.782	9.44	4.76	26.303	14.2	24	Pass
91	6405	6.37	6.54	8.843	9.47	4.76	26.485	14.23	24	Pass
99	6445	6.91	6.67	9.554	9.80	4.29	25.645	14.09	24	Pass
107	6485	6.94	6.62	9.535	9.79	4.29	25.586	14.08	24	Pass
115	6525	6.72	6.76	9.441	9.75	4.61	27.29	14.36	24	Pass
123	6565	6.56	5.99	8.501	9.29	4.61	24.547	13.9	24	Pass
155	6725	6.12	6.36	8.418	9.25	4.61	24.322	13.86	24	Pass
179	6845	6.17	6.34	8.445	9.27	4.61	24.434	13.88	24	Pass
187	6885	6.59	7.21	9.821	9.92	4.09	25.177	14.01	24	Pass
211	7005	6.88	7.16	10.075	10.03	4.09	25.823	14.12	24	Pass
227	7085	6.94	7.24	10.24	10.10	4.09	26.242	14.19	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

2. U-NII-5 Directional gain = antenna gain (dBi) + array gain (dB) = 4.76 + 0 dB = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) + array gain (dB) = 4.29 + 0 dB = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) + array gain (dB) = 4.61 + 0 dB = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) + array gain (dB) = 4.09 + 0 dB = 4.09 dBi

3. Since this device support 2TX, therefore array gain = 0 dB (i.e., no array gain) for NANT ≤ 4 (for conducted output power measurement)

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	8.98	10.29	18.597	12.69	4.76	55.59	17.45	24	Pass
39	6145	9.46	9.49	17.723	12.49	4.76	53.088	17.25	24	Pass
87	6385	9.66	9.74	18.666	12.71	4.76	55.847	17.47	24	Pass
103	6465	10.21	9.78	20.001	13.01	4.29	53.703	17.3	24	Pass
119	6545	10.24	9.82	20.162	13.05	4.61	58.345	17.66	24	Pass
135	6625	10.08	9.94	20.049	13.02	4.61	57.943	17.63	24	Pass
151	6705	9.12	9.38	16.835	12.26	4.61	48.641	16.87	24	Pass
167	6785	9.23	9.28	16.848	12.27	4.61	48.753	16.88	24	Pass
183	6865	9.40	10.06	18.849	12.75	4.61	54.45	17.36	24	Pass
199	6945	9.86	10.01	19.706	12.95	4.09	50.582	17.04	24	Pass
215	7025	10.09	10.30	20.925	13.21	4.09	53.703	17.3	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

2. U-NII-5 Directional gain = antenna gain (dBi) + array gain (dB) = 4.76 + 0 dB = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) + array gain (dB) = 4.29 + 0 dB = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) + array gain (dB) = 4.61 + 0 dB = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) + array gain (dB) = 4.09 + 0 dB = 4.09 dBi

3. Since this device support 2TX, therefore array gain = 0 dB (i.e., no array gain) for NANT ≤ 4 (for conducted output power measurement)

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	12.17	12.48	34.183	15.34	4.76	102.329	20.1	24	Pass
47	6185	11.92	12.55	33.548	15.26	4.76	100.462	20.02	24	Pass
79	6345	12.34	12.51	34.963	15.44	4.76	104.713	20.2	24	Pass
111	6505	12.66	12.85	37.725	15.77	4.29	101.391	20.06	24	Pass
143	6665	12.42	12.33	34.558	15.39	4.61	100	20	24	Pass
175	6825	12.35	12.21	33.813	15.29	4.61	97.724	19.9	24	Pass
207	6985	12.86	12.75	38.156	15.82	4.09	97.949	19.91	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

2. U-NII-5 Directional gain = antenna gain (dBi) + array gain (dB) = 4.76 + 0 dB = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) + array gain (dB) = 4.29 + 0 dB = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) + array gain (dB) = 4.61 + 0 dB = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) + array gain (dB) = 4.09 + 0 dB = 4.09 dBi

3. Since this device support 2TX, therefore array gain = 0 dB (i.e., no array gain) for NANT ≤ 4 (for conducted output power measurement)

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
1	5955	3.61	4.62	5.193	7.15	4.76	15.524	11.91	24	Pass
45	6175	4.57	4.21	5.501	7.40	4.76	16.444	12.16	24	Pass
93	6415	4.26	3.87	5.105	7.08	4.76	15.276	11.84	24	Pass
97	6435	4.90	4.56	5.948	7.74	4.29	15.959	12.03	24	Pass
105	6475	5.09	4.53	6.066	7.83	4.29	16.293	12.12	24	Pass
113	6515	4.92	4.69	6.049	7.82	4.29	16.255	12.11	24	Pass
117	6535	4.19	4.08	5.183	7.15	4.61	14.997	11.76	24	Pass
153	6715	3.99	4.16	5.112	7.09	4.61	14.791	11.7	24	Pass
181	6855	3.88	4.13	5.032	7.02	4.61	14.555	11.63	24	Pass
185	6875	4.22	5.08	5.863	7.68	4.09	15.031	11.77	24	Pass
213	7015	4.88	4.76	6.068	7.83	4.09	15.56	11.92	24	Pass
233	7115	4.94	5.15	6.392	8.06	4.09	16.406	12.15	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

2. U-NII-5 Directional gain = antenna gain (dBi) + array gain (dB) = 4.76 + 0 dB = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) + array gain (dB) = 4.29 + 0 dB = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) + array gain (dB) = 4.61 + 0 dB = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) + array gain (dB) = 4.09 + 0 dB = 4.09 dBi

3. Since this device support 2TX, therefore array gain = 0 dB (i.e., no array gain) for NANT ≤ 4 (for conducted output power measurement)

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
3	5965	5.78	6.72	8.483	9.29	4.76	25.41	14.05	24	Pass
43	6165	6.43	6.49	8.852	9.47	4.76	26.485	14.23	24	Pass
91	6405	6.45	6.55	8.934	9.51	4.76	26.73	14.27	24	Pass
99	6445	6.83	6.86	9.672	9.86	4.29	26.002	14.15	24	Pass
107	6485	6.77	6.82	9.562	9.81	4.29	25.704	14.1	24	Pass
115	6525	6.56	6.96	9.495	9.77	4.61	27.416	14.38	24	Pass
123	6565	6.75	6.08	8.787	9.44	4.61	25.41	14.05	24	Pass
155	6725	6.19	6.38	8.504	9.30	4.61	24.604	13.91	24	Pass
179	6845	6.19	6.37	8.494	9.29	4.61	24.547	13.9	24	Pass
187	6885	6.47	7.38	9.906	9.96	4.09	25.41	14.05	24	Pass
211	7005	6.89	7.21	10.147	10.06	4.09	26.002	14.15	24	Pass
227	7085	6.84	7.43	10.364	10.16	4.09	26.607	14.25	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

2. U-NII-5 Directional gain = antenna gain (dBi) + array gain (dB) = 4.76 + 0 dB = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) + array gain (dB) = 4.29 + 0 dB = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) + array gain (dB) = 4.61 + 0 dB = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) + array gain (dB) = 4.09 + 0 dB = 4.09 dBi

3. Since this device support 2TX, therefore array gain = 0 dB (i.e., no array gain) for NANT ≤ 4 (for conducted output power measurement)

802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
7	5985	9.01	10.29	18.652	12.71	4.76	55.847	17.47	24	Pass
39	6145	9.36	9.62	17.792	12.50	4.76	53.211	17.26	24	Pass
87	6385	9.68	9.79	18.818	12.75	4.76	56.364	17.51	24	Pass
103	6465	10.08	9.96	20.094	13.03	4.29	53.951	17.32	24	Pass
119	6545	10.17	9.93	20.239	13.06	4.61	58.479	17.67	24	Pass
135	6625	9.92	10.21	20.313	13.08	4.61	58.749	17.69	24	Pass
151	6705	9.29	9.52	17.445	12.42	4.61	50.466	17.03	24	Pass
167	6785	9.23	9.34	16.965	12.30	4.61	49.091	16.91	24	Pass
183	6865	9.32	10.21	19.046	12.80	4.61	55.081	17.41	24	Pass
199	6945	9.84	10.32	20.403	13.10	4.09	52.36	17.19	24	Pass
215	7025	10.11	10.36	21.121	13.25	4.09	54.2	17.34	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

2. U-NII-5 Directional gain = antenna gain (dBi) + array gain (dB) = 4.76 + 0 dB = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) + array gain (dB) = 4.29 + 0 dB = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) + array gain (dB) = 4.61 + 0 dB = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) + array gain (dB) = 4.09 + 0 dB = 4.09 dBi

3. Since this device support 2TX, therefore array gain = 0 dB (i.e., no array gain) for NANT ≤ 4 (for conducted output power measurement)

802.11be (EHT160)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
15	6025	12.15	12.54	34.353	15.36	4.76	102.802	20.12	24	Pass
47	6185	12.16	12.36	33.662	15.27	4.76	100.693	20.03	24	Pass
79	6345	12.31	12.59	35.177	15.46	4.76	105.196	20.22	24	Pass
111	6505	12.71	12.93	38.297	15.83	4.29	102.802	20.12	24	Pass
143	6665	12.36	12.45	34.798	15.42	4.61	100.693	20.03	24	Pass
175	6825	12.29	12.33	34.044	15.32	4.61	98.401	19.93	24	Pass
207	6985	12.79	12.88	38.42	15.85	4.09	98.628	19.94	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

2. U-NII-5 Directional gain = antenna gain (dBi) + array gain (dB) = 4.76 + 0 dB = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) + array gain (dB) = 4.29 + 0 dB = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) + array gain (dB) = 4.61 + 0 dB = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) + array gain (dB) = 4.09 + 0 dB = 4.09 dBi

3. Since this device support 2TX, therefore array gain = 0 dB (i.e., no array gain) for NANT ≤ 4 (for conducted output power measurement)

802.11be (EHT320)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Maximum Gain (dBi)	EIRP (mW)	EIRP (dBm)	EIRP Limit (dBm)	Test Result
		Chain 0	Chain 1							
31	6105	15.73	14.51	65.66	18.17	4.76	196.336	22.93	24	Pass
63	6265	14.78	15.24	63.48	18.03	4.76	190.108	22.79	24	Pass
95	6425	15.27	14.73	63.368	18.02	4.29	170.216	22.31	24	Pass
127	6585	15.49	14.74	65.185	18.14	4.61	188.365	22.75	24	Pass
159	6745	15.54	15.10	68.169	18.34	4.61	197.242	22.95	24	Pass
191	6905	14.78	15.99	69.78	18.44	4.09	179.061	22.53	24	Pass

Note: 1. EIRP= Conducted Power (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

2. U-NII-5 Directional gain = antenna gain (dBi) + array gain (dB) = 4.76 + 0 dB = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) + array gain (dB) = 4.29 + 0 dB = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) + array gain (dB) = 4.61 + 0 dB = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) + array gain (dB) = 4.09 + 0 dB = 4.09 dBi

3. Since this device support 2TX, therefore array gain = 0 dB (i.e., no array gain) for NANT ≤ 4 (for conducted output power measurement)

4.5 Emission Bandwidth Measurement

4.5.1 Limits of Emission Bandwidth Measurement

The fundamental bandwidth shall be less than 320MHz.

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedure

FOR 99% OCCUPIED BANDWIDTH

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to SAMPLE. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean power of a given emission.

FOR 26dB BANDWIDTH

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.5.5 Test Results (Mode 1)
99% Occupied Bandwidth:

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
1	5955	16.26	320
45	6175	16.32	320
93	6415	16.32	320
97	6435	16.32	320
105	6475	16.32	320
113	6515	16.32	320
117	6535	16.32	320
153	6715	16.32	320
181	6855	16.32	320
185	6875	16.26	320
213	7015	16.32	320
233	7115	16.26	320

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
1	5955	18.84	320
233	7115	18.84	320

802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
3	5965	37.56	320
227	7085	37.8	320

802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
7	5985	77.04	320
215	7025	76.8	320

802.11ax (HE160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
15	6025	155.04	320
47	6185	156.48	320
79	6345	156.48	320
111	6505	155.04	320
143	6665	155.04	320
175	6825	155.04	320
207	6985	155.04	320

802.11be (EHT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
1	5955	18.78	320
45	6175	18.72	320
93	6415	18.72	320
97	6435	18.84	320
105	6475	18.72	320
113	6515	18.72	320
117	6535	18.72	320
153	6715	18.78	320
181	6855	18.78	320
185	6875	18.78	320
213	7015	18.78	320
233	7115	18.72	320

802.11be (EHT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
3	5965	37.56	320
43	6165	37.68	320
91	6405	37.8	320
99	6445	37.68	320
107	6485	37.56	320
115	6525	37.68	320
123	6565	37.56	320
155	6725	37.8	320
179	6845	37.44	320
187	6885	37.44	320
211	7005	37.68	320
227	7085	37.56	320

802.11be (EHT80)

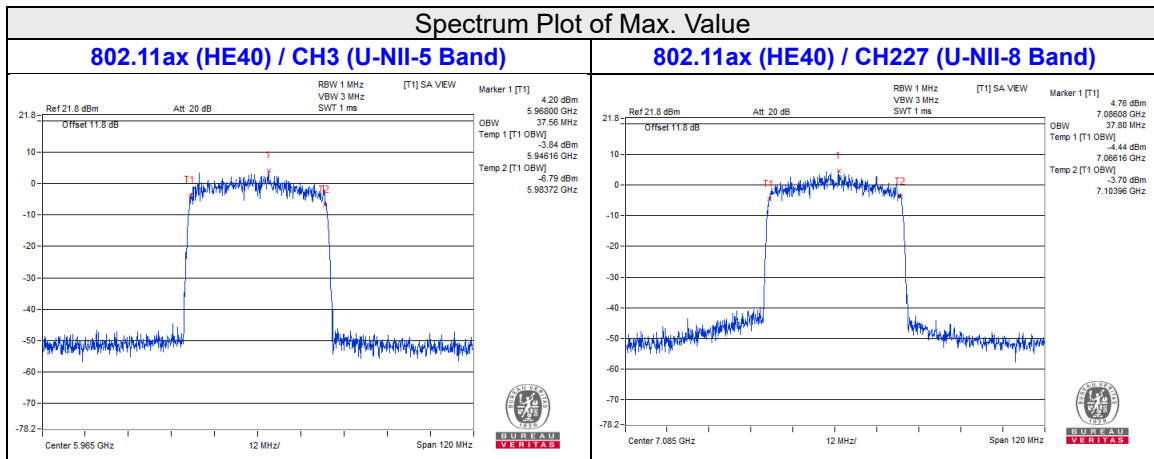
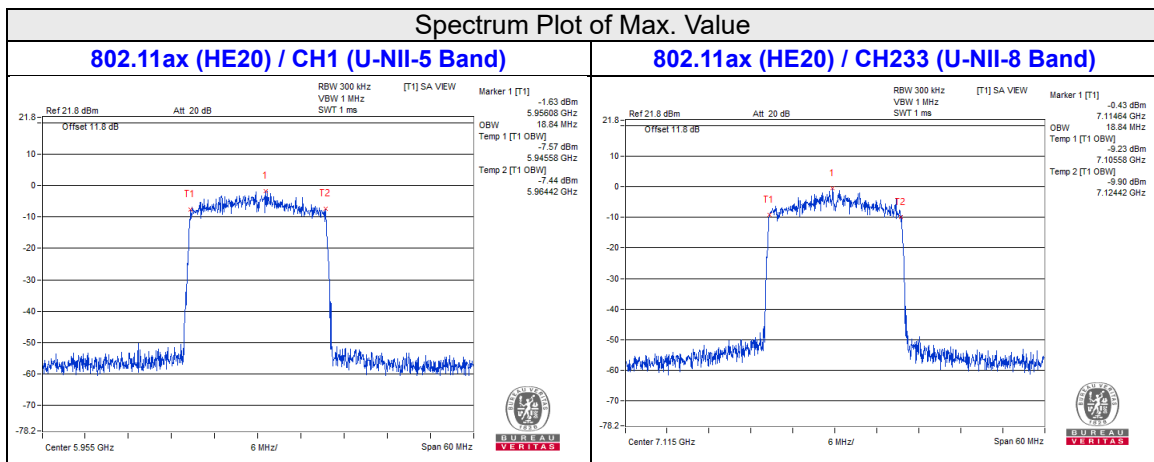
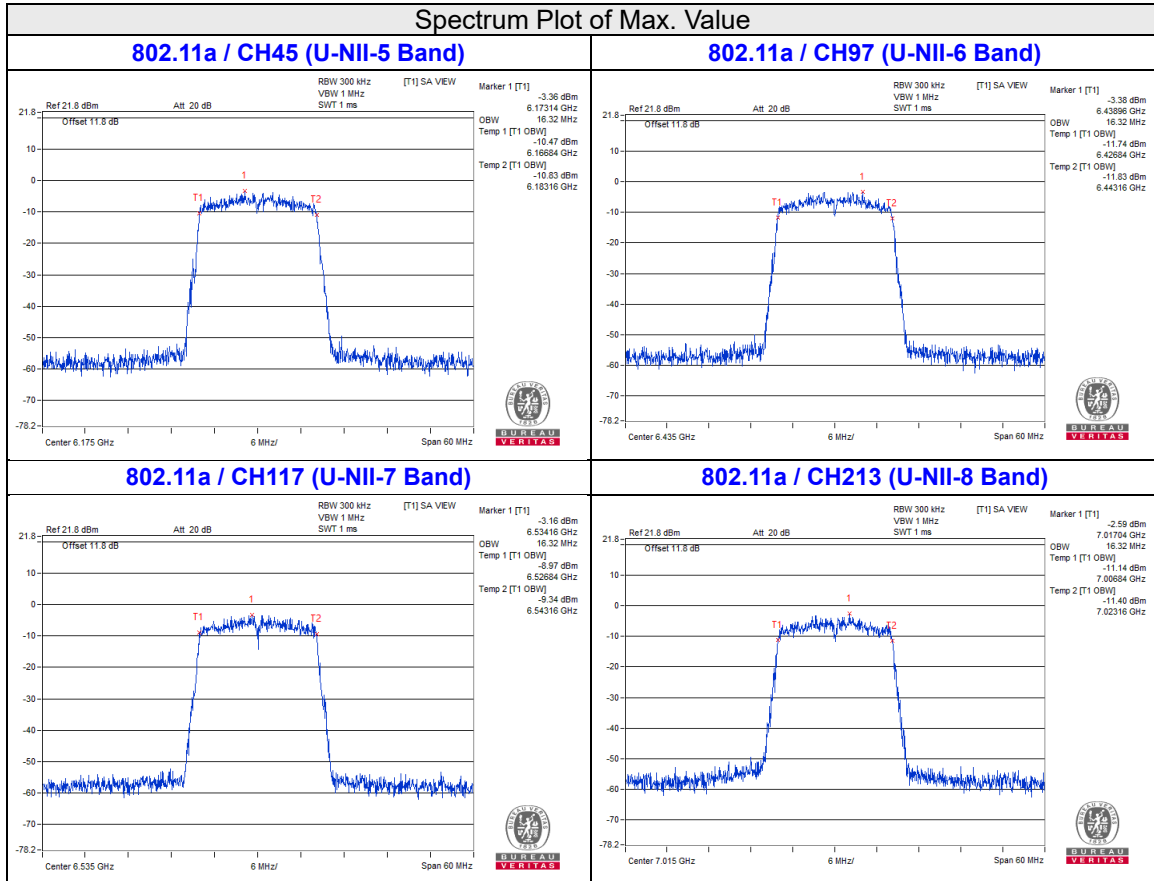
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
7	5985	77.04	320
39	6145	77.04	320
87	6385	76.8	320
103	6465	77.04	320
119	6545	77.04	320
135	6625	76.8	320
151	6705	76.8	320
167	6785	77.04	320
183	6865	77.04	320
199	6945	76.8	320
215	7025	76.56	320

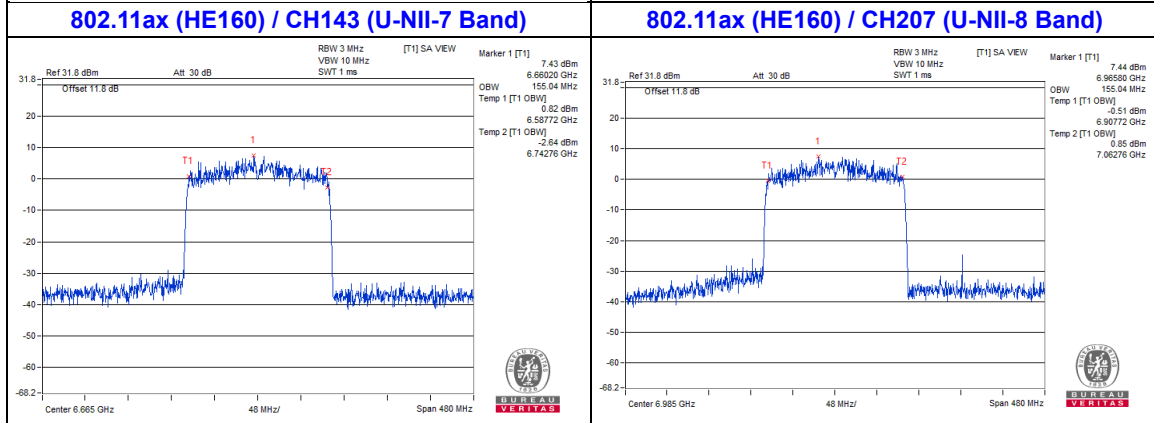
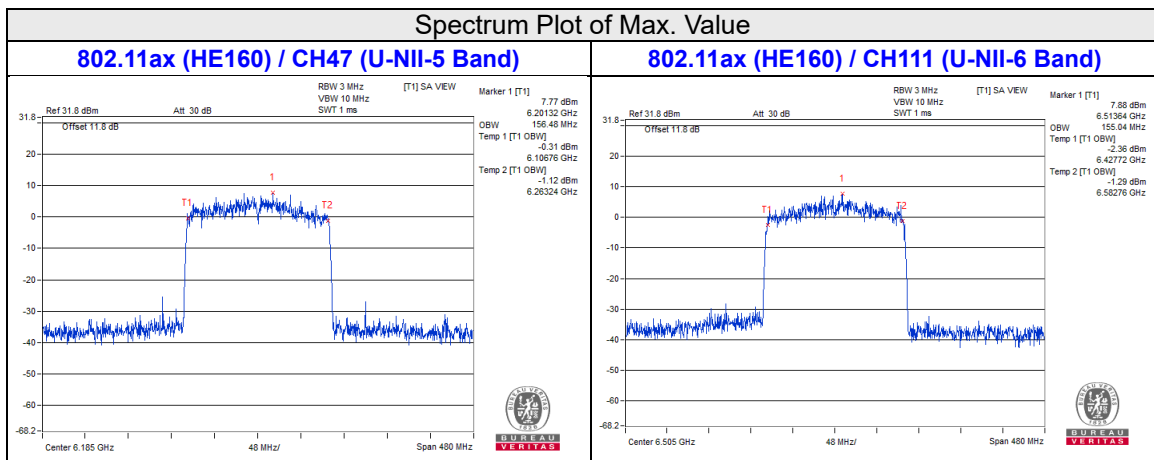
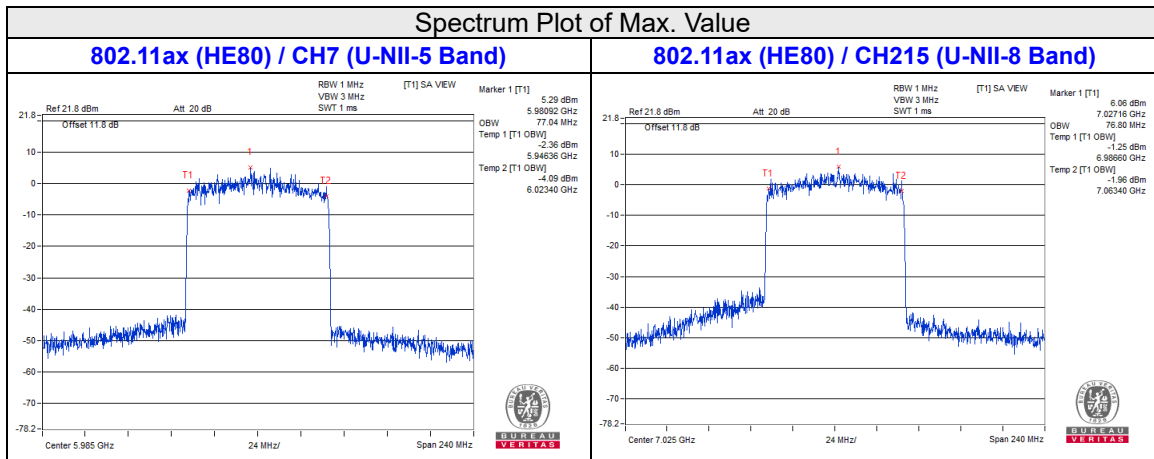
802.11be (EHT160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
15	6025	155.52	320
47	6185	156	320
79	6345	155.52	320
111	6505	156	320
143	6665	156	320
175	6825	156.48	320
207	6985	156	320

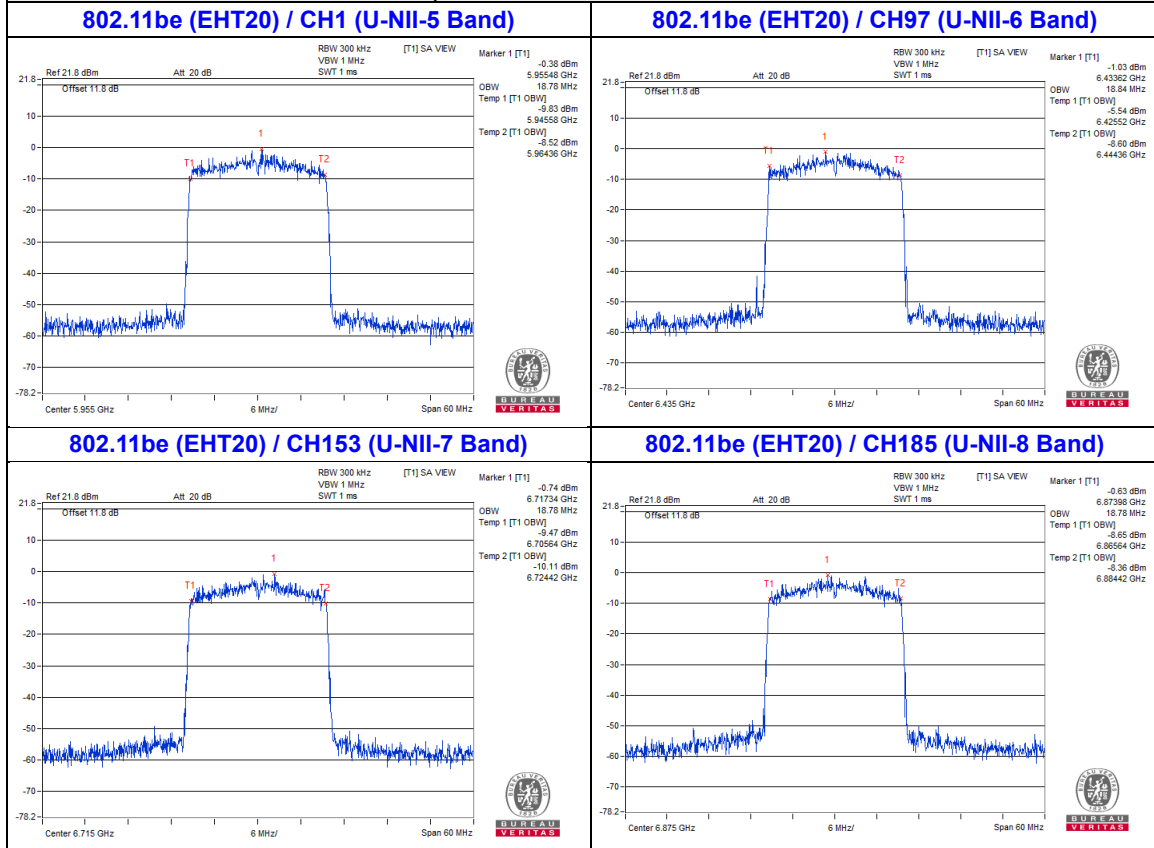
802.11be (EHT320)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (MHz)
31	6105	312.96	320
63	6265	313.92	320
95	6425	314.88	320
127	6585	312.96	320
159	6745	312.96	320
191	6905	313.92	320



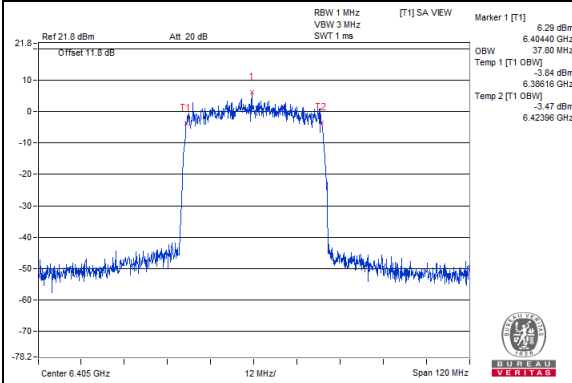


Spectrum Plot of Max. Value

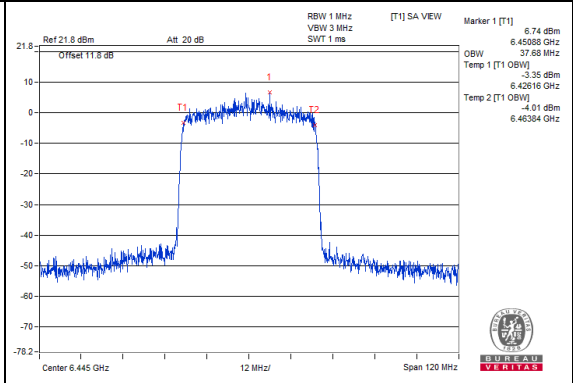


Spectrum Plot of Max. Value

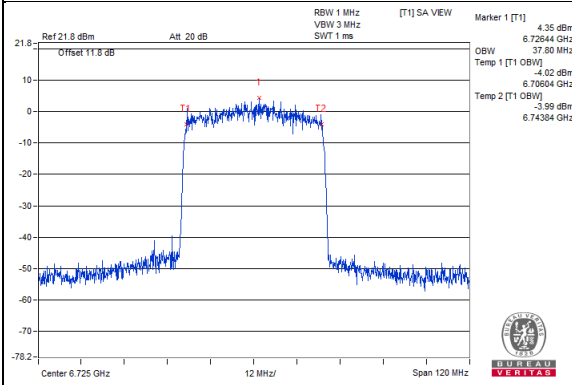
802.11be (EHT40) / CH91 (U-NII-5 Band)



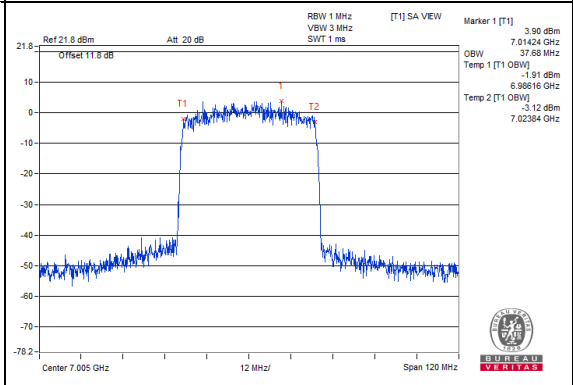
802.11be (EHT40) / CH99 (U-NII-6 Band)



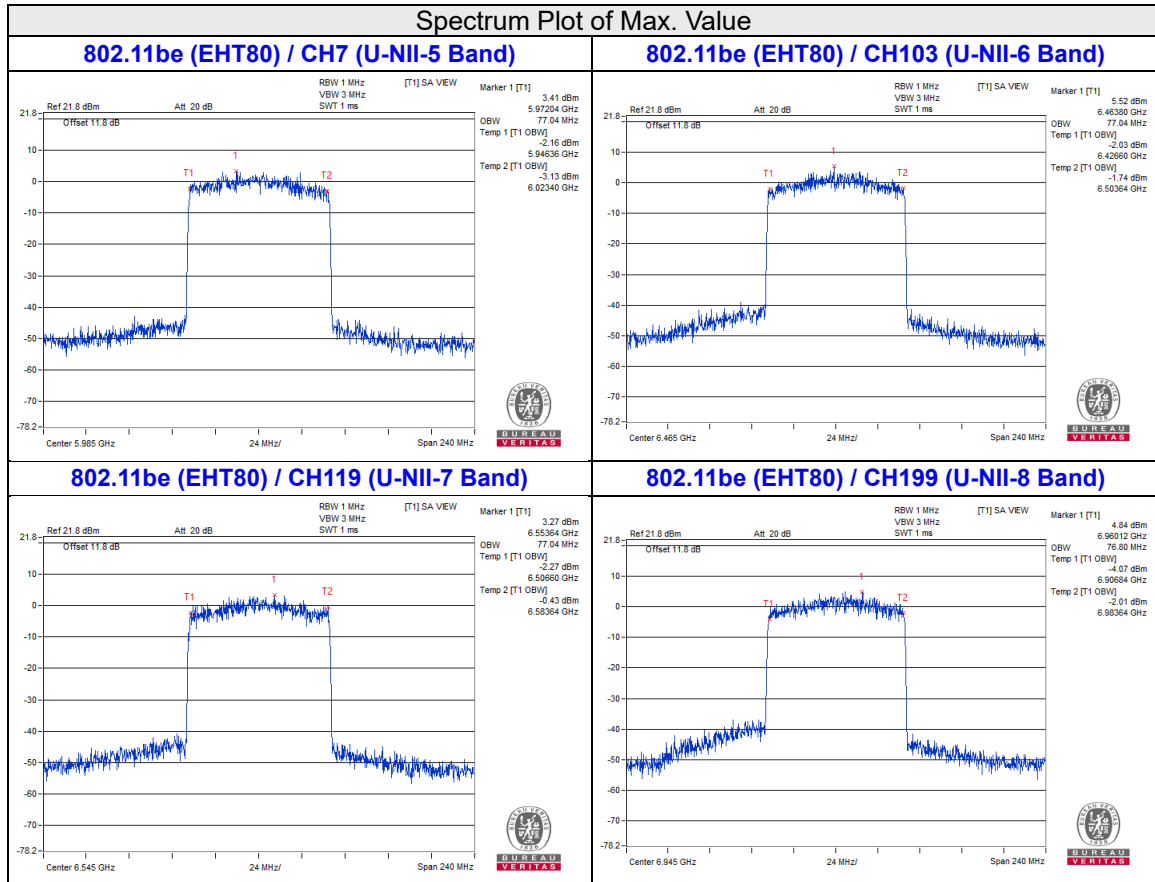
802.11be (EHT40) / CH155 (U-NII-7 Band)

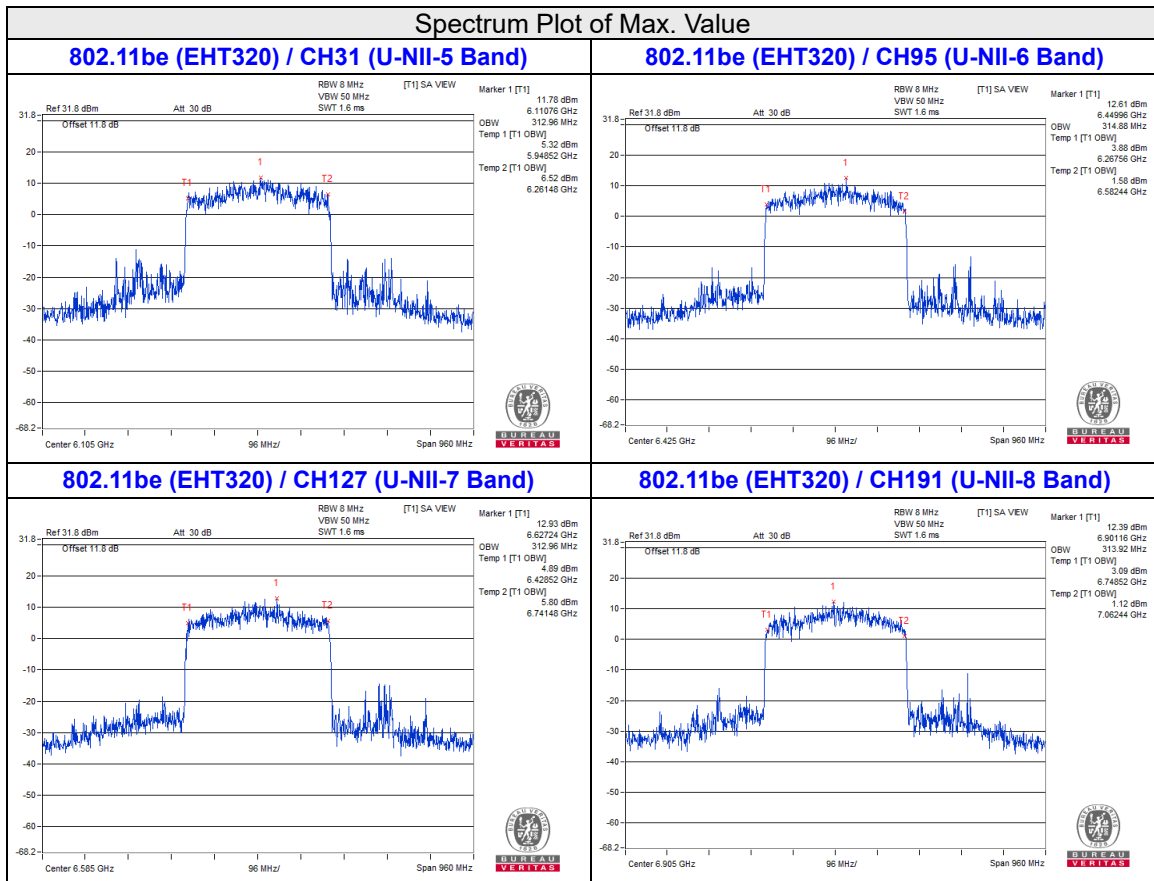
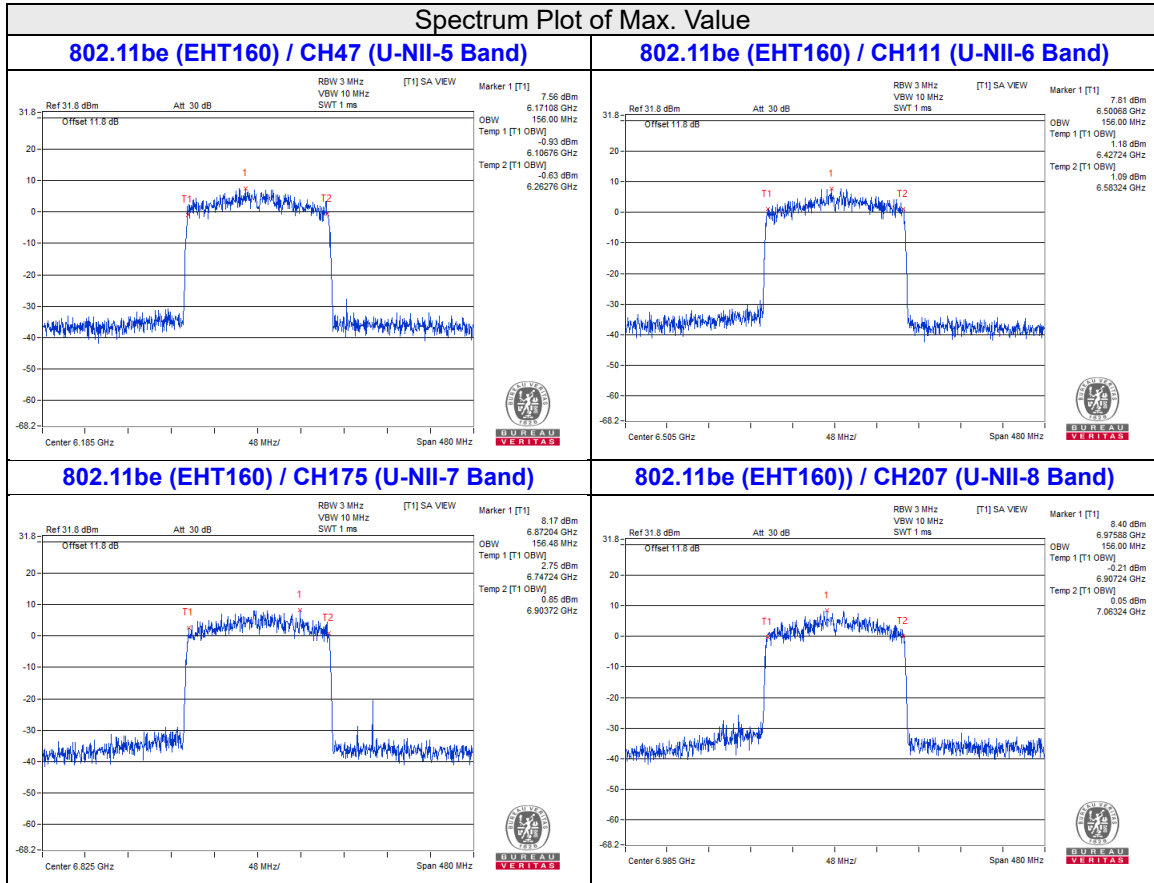


802.11be (EHT40) / CH211 (U-NII-8 Band)



Spectrum Plot of Max. Value





26dB Bandwidth:
802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
1	5955	18.6
45	6175	18.51
93	6415	18.61
97	6435	18.55
105	6475	18.5
113	6515	18.49
117	6535	18.5
153	6715	18.61
181	6855	18.55
185	6875	18.53
213	7015	18.55
233	7115	18.6

802.11ax (HE20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
1	5955	19.96
233	7115	19.88

802.11ax (HE40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
3	5965	40.34
227	7085	40.24

802.11ax (HE80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
7	5985	80.36
215	7025	80.41

802.11ax (HE160)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
15	6025	164.32
47	6185	164.34
79	6345	164.54
111	6505	164.75
143	6665	164.56
175	6825	164.18
207	6985	164.53

802.11be (EHT20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
1	5955	40.31
45	6175	40.24
93	6415	40.19
97	6435	40.37
105	6475	40.5
113	6515	40.43
117	6535	40.24
153	6715	40.28
181	6855	40.38
185	6875	40
213	7015	40.31
233	7115	40.31

802.11be (EHT40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
3	5965	80.27
43	6165	80.37
91	6405	80.32
99	6445	80.26
107	6485	80.3
115	6525	80.29
123	6565	80.34
155	6725	80.4
179	6845	80.31
187	6885	80.41
211	7005	80.26
227	7085	80.27

802.11be (EHT80)

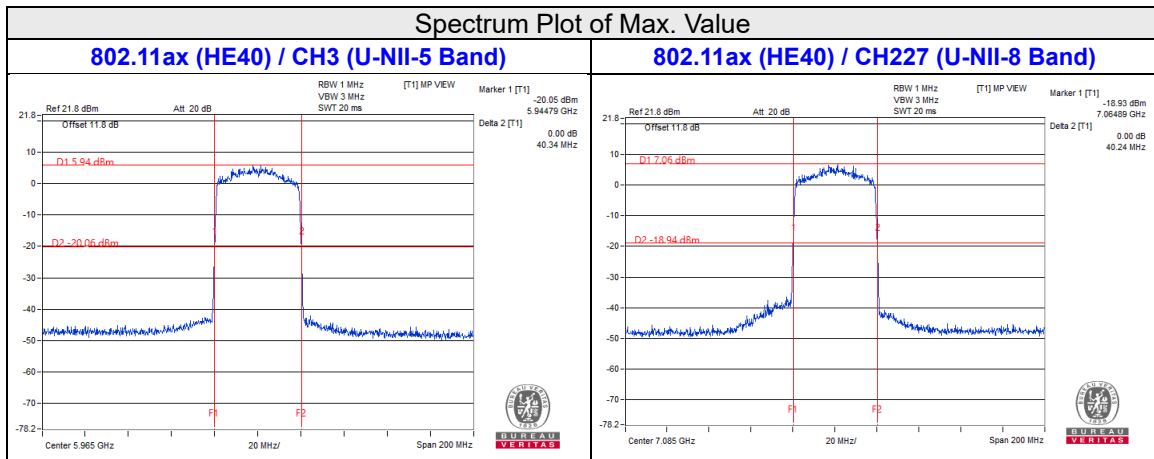
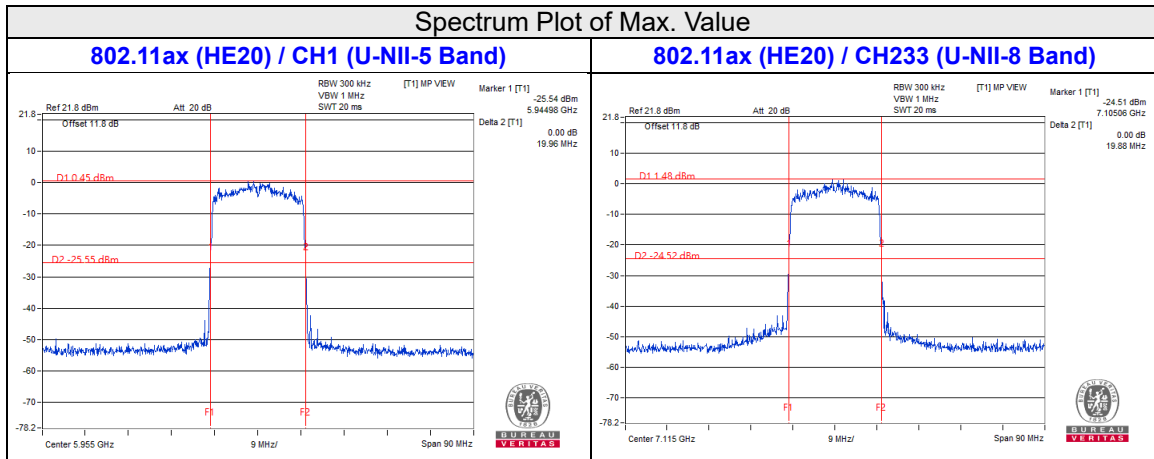
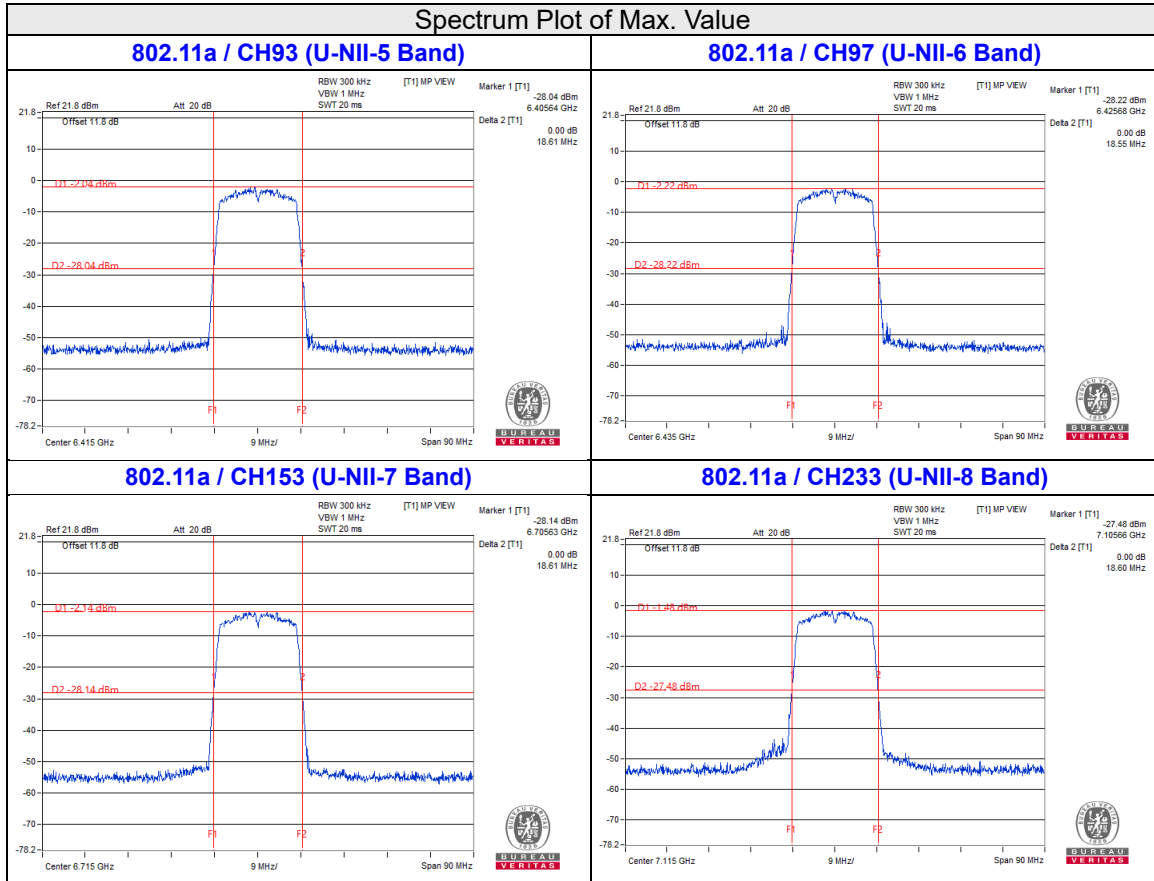
Channel	Frequency (MHz)	26dB Bandwidth (MHz)
7	5985	80.27
39	6145	80.37
87	6385	80.32
103	6465	80.26
119	6545	80.3
135	6625	80.29
151	6705	80.34
167	6785	80.4
183	6865	80.31
199	6945	80.41
215	7025	80.26

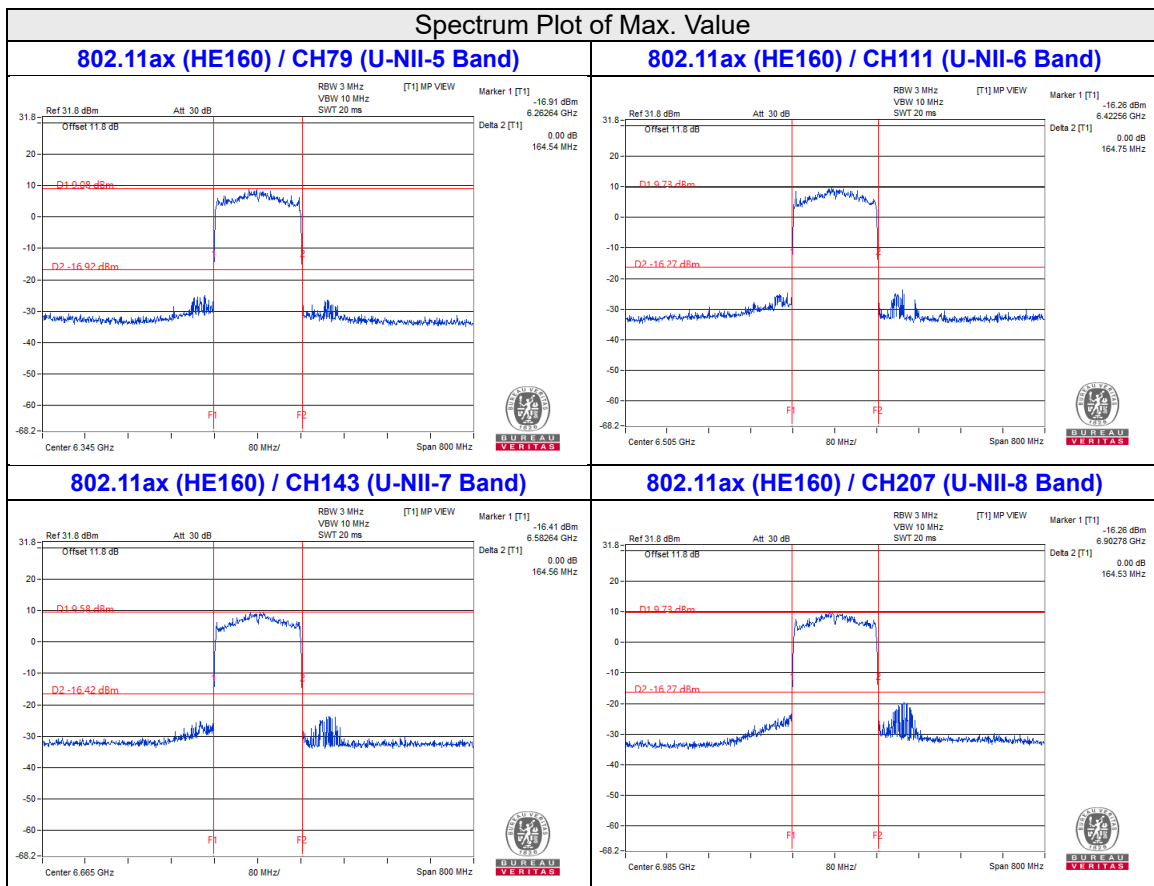
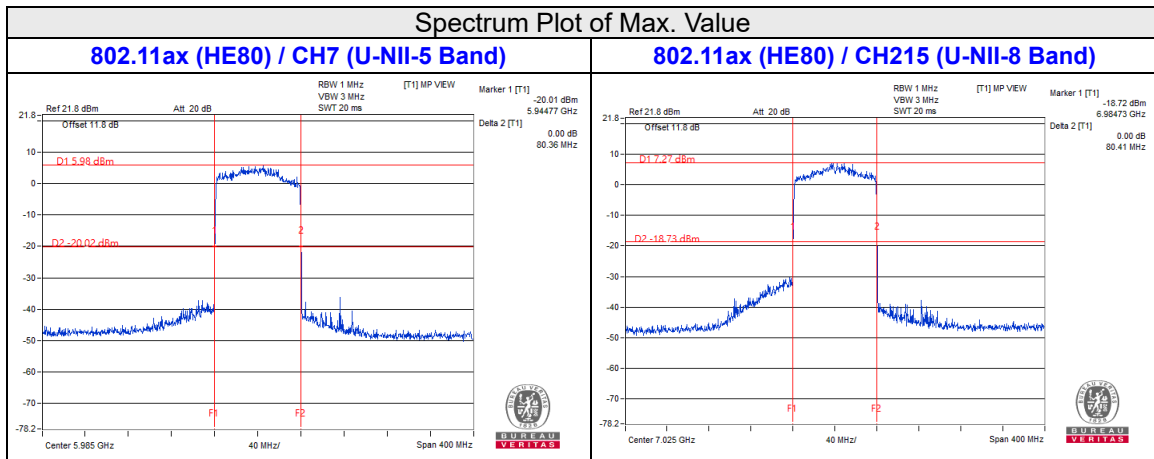
802.11be (EHT160)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
15	6025	164.34
47	6185	164.4
79	6345	164.32
111	6505	164.63
143	6665	164.62
175	6825	164.48
207	6985	164.48

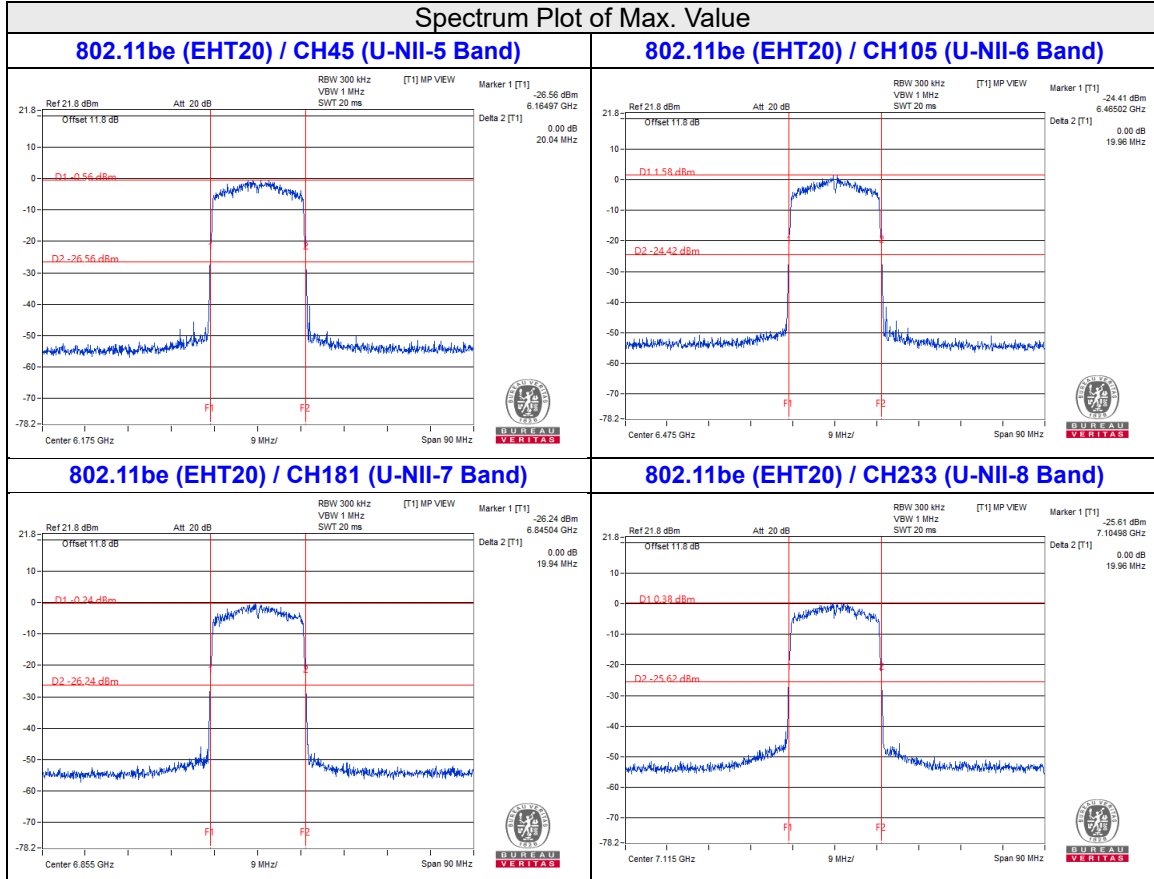
802.11be (EHT320)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
31	6105	566.57
63	6265	575.48
95	6425	575.33
127	6585	488.53
159	6745	487.29
191	6905	491.6

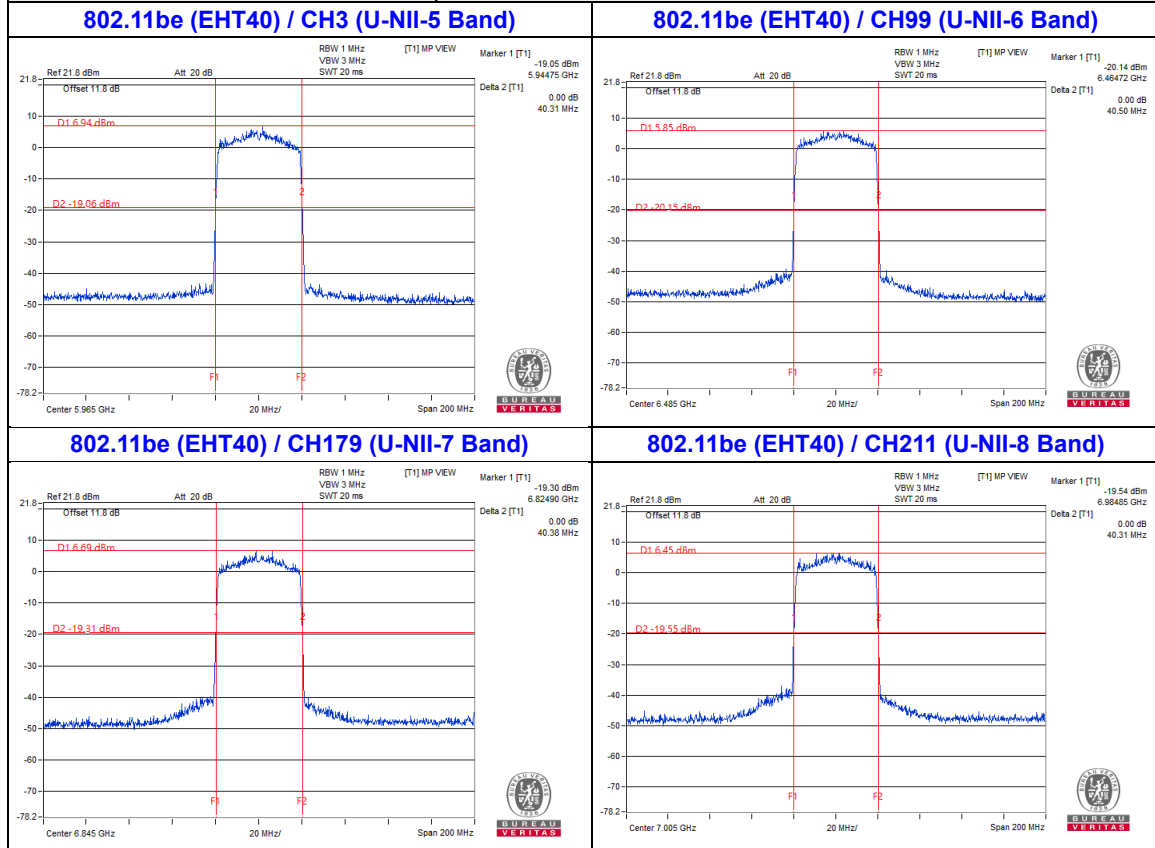


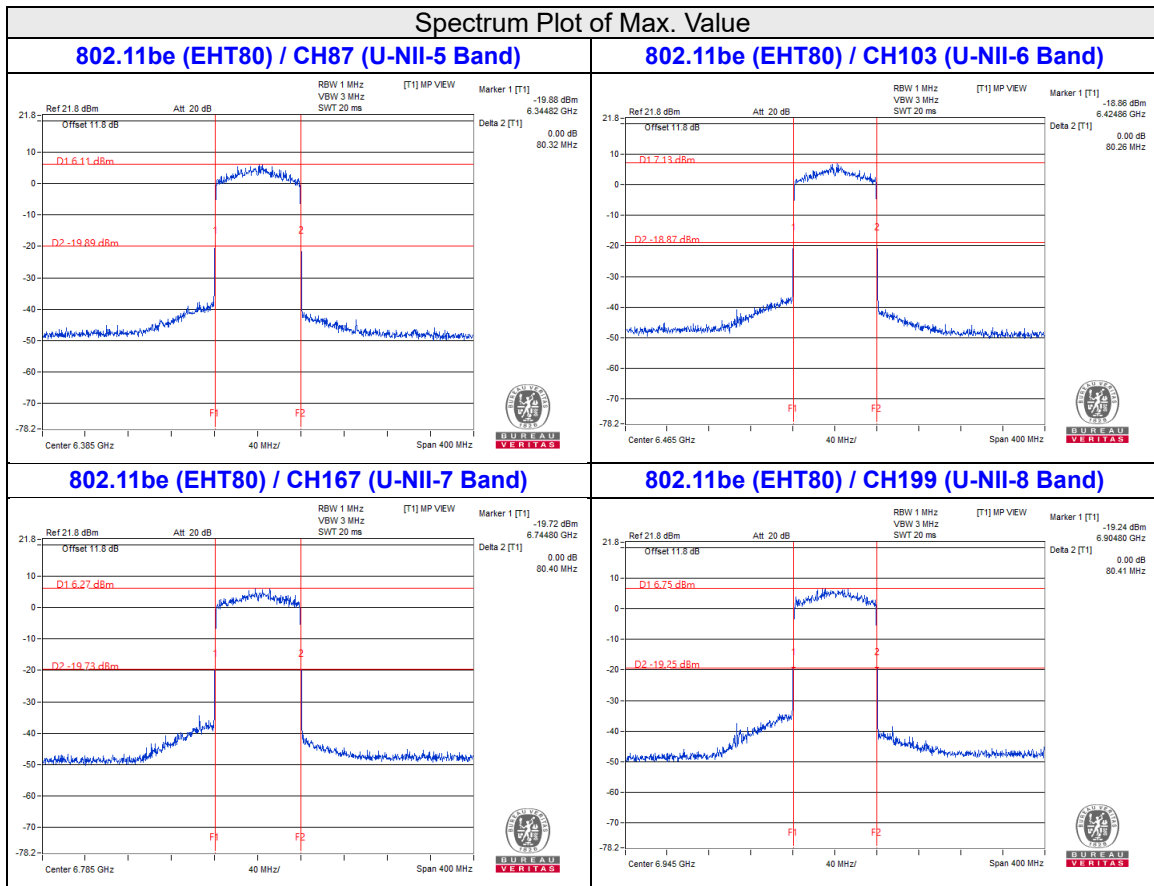


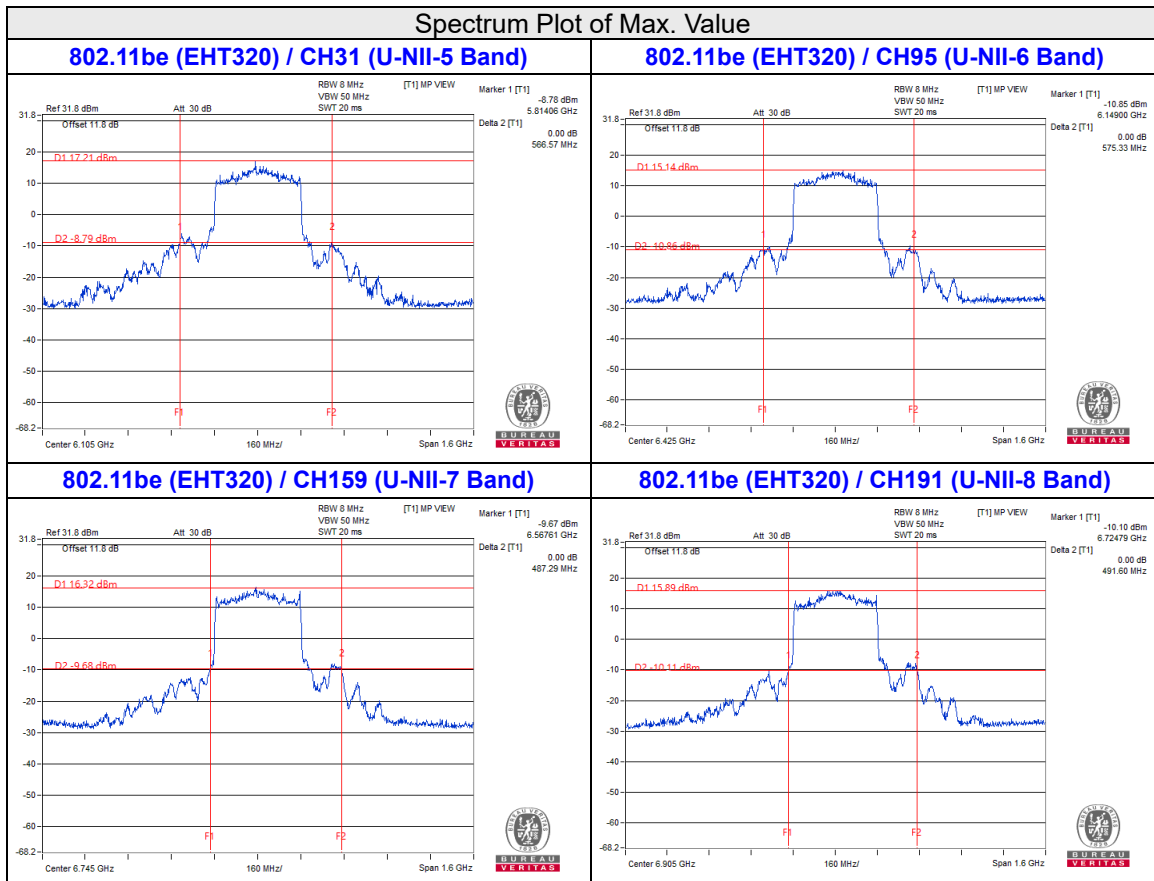
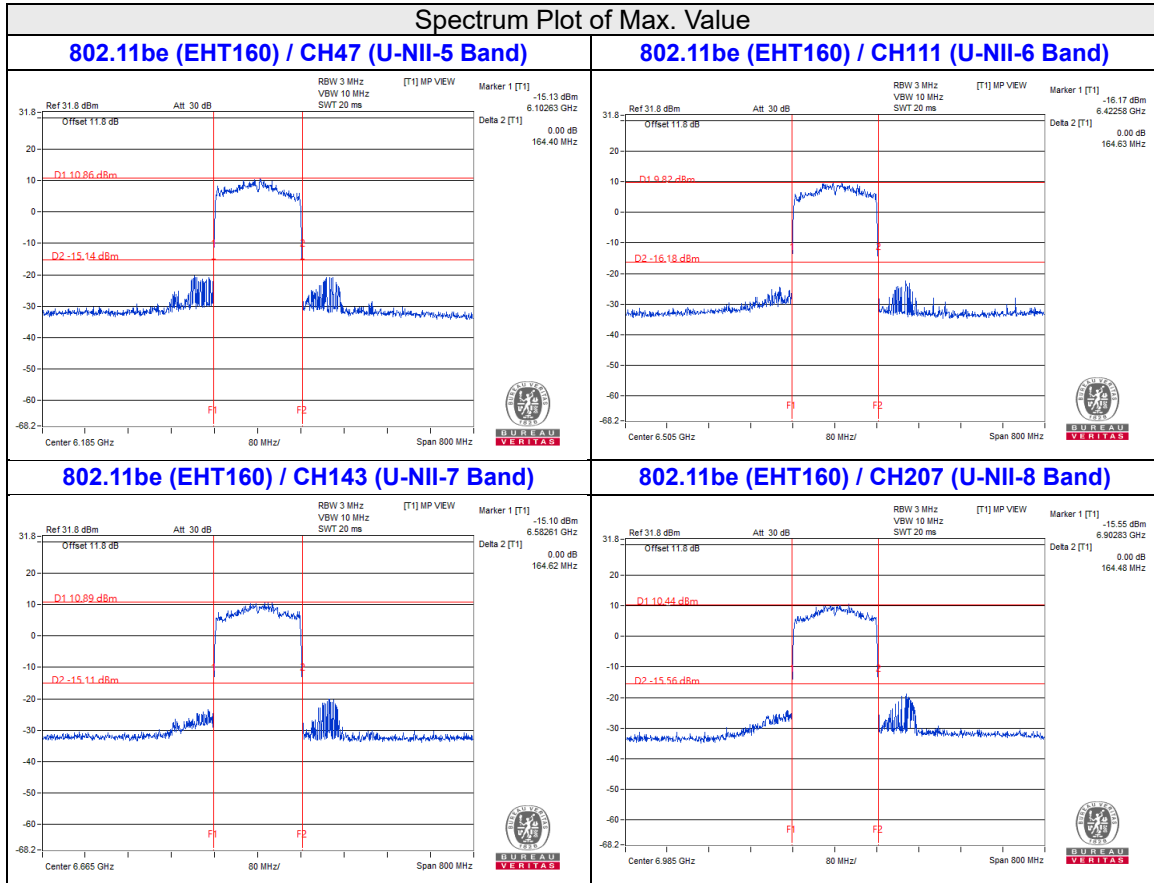
Spectrum Plot of Max. Value



Spectrum Plot of Max. Value







4.5.6 Test Results (Mode 2)
99% Occupied Bandwidth:

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
1	5955	16.32	16.32	320
45	6175	16.32	16.32	320
93	6415	16.32	16.32	320
97	6435	16.38	16.32	320
105	6475	16.32	16.38	320
113	6515	16.38	16.32	320
117	6535	16.32	16.32	320
153	6715	16.38	16.32	320
181	6855	16.32	16.26	320
185	6875	16.32	16.32	320
213	7015	16.26	16.32	320
233	7115	16.32	16.38	320

802.11ax (HE20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
1	5955	18.78	18.78	320
233	7115	18.84	18.78	320

802.11ax (HE40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
3	5965	37.80	37.68	320
227	7085	37.68	37.68	320

802.11ax (HE80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
7	5985	77.04	76.56	320
215	7025	76.80	77.28	320

802.11ax (HE160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
15	6025	155.04	156.00	320
47	6185	156.00	155.52	320
79	6345	156.00	155.52	320
111	6505	156.48	155.52	320
143	6665	156.00	155.04	320
175	6825	155.52	156.00	320
207	6985	155.52	155.52	320

802.11be (EHT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
1	5955	18.78	18.78	320
45	6175	18.84	18.72	320
93	6415	18.78	18.78	320
97	6435	18.72	18.78	320
105	6475	18.78	18.78	320
113	6515	18.72	18.84	320
117	6535	18.78	18.72	320
153	6715	18.84	18.78	320
181	6855	18.72	18.72	320
185	6875	18.78	18.78	320
213	7015	18.72	18.84	320
233	7115	18.90	18.78	320

802.11be (EHT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
3	5965	37.68	37.68	320
43	6165	37.68	37.80	320
91	6405	37.56	37.68	320
99	6445	37.68	37.68	320
107	6485	37.80	37.56	320
115	6525	37.56	37.68	320
123	6565	37.80	37.56	320
155	6725	37.80	37.56	320
179	6845	37.56	37.80	320
187	6885	37.68	37.44	320
211	7005	37.56	37.56	320
227	7085	37.68	37.68	320

802.11be (EHT80)

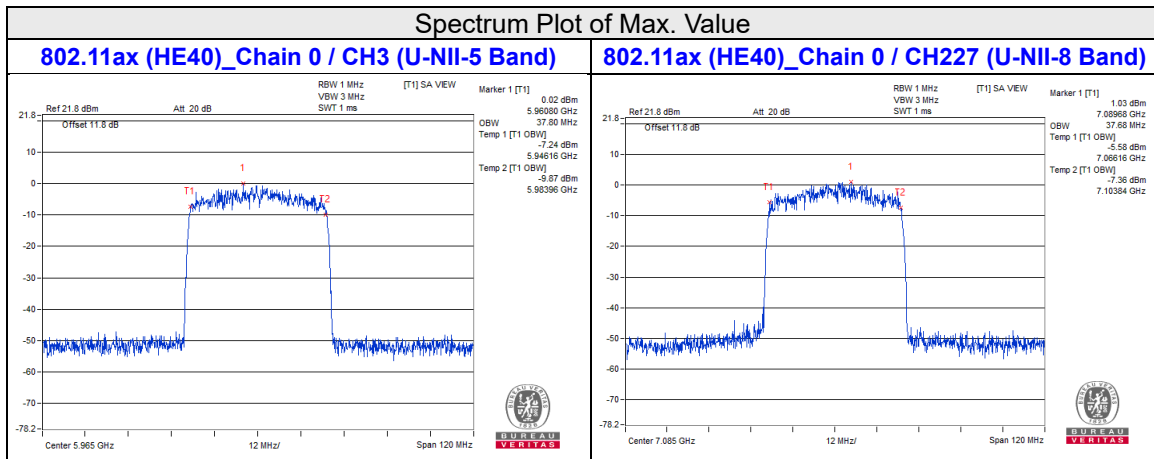
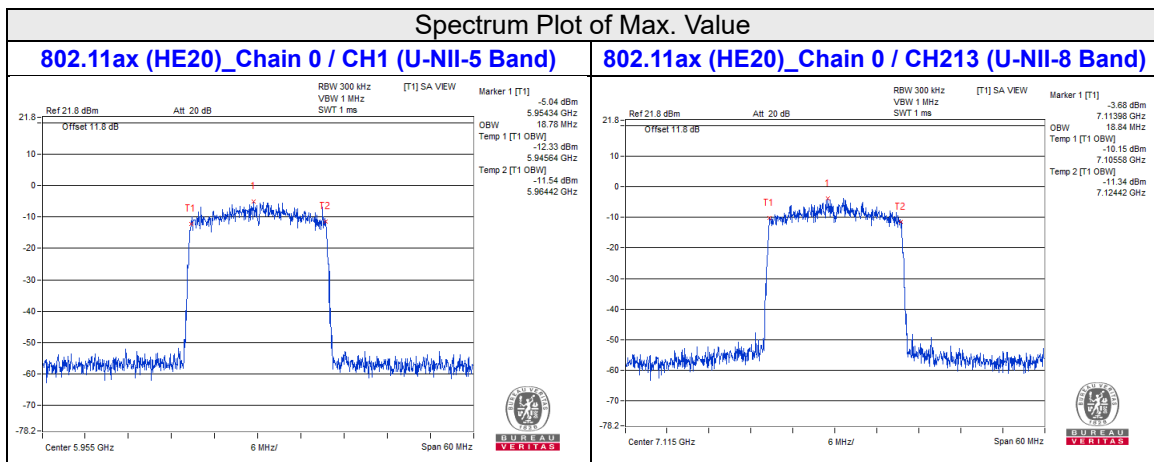
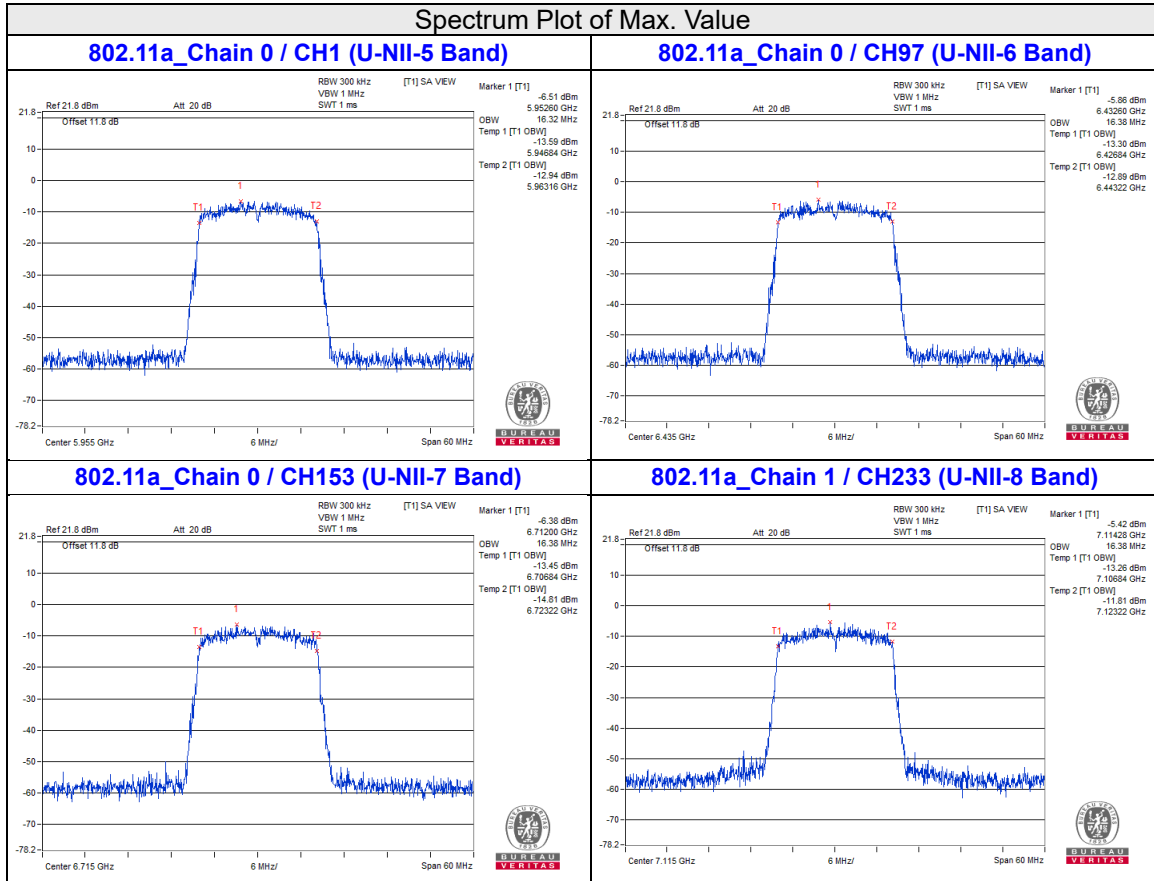
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
7	5985	76.80	77.04	320
39	6145	76.56	77.04	320
87	6385	76.56	76.80	320
103	6465	76.80	76.56	320
119	6545	76.32	76.80	320
135	6625	77.04	76.80	320
151	6705	77.04	76.80	320
167	6785	77.04	77.04	320
183	6865	77.04	77.04	320
199	6945	76.80	77.28	320
215	7025	76.80	77.04	320

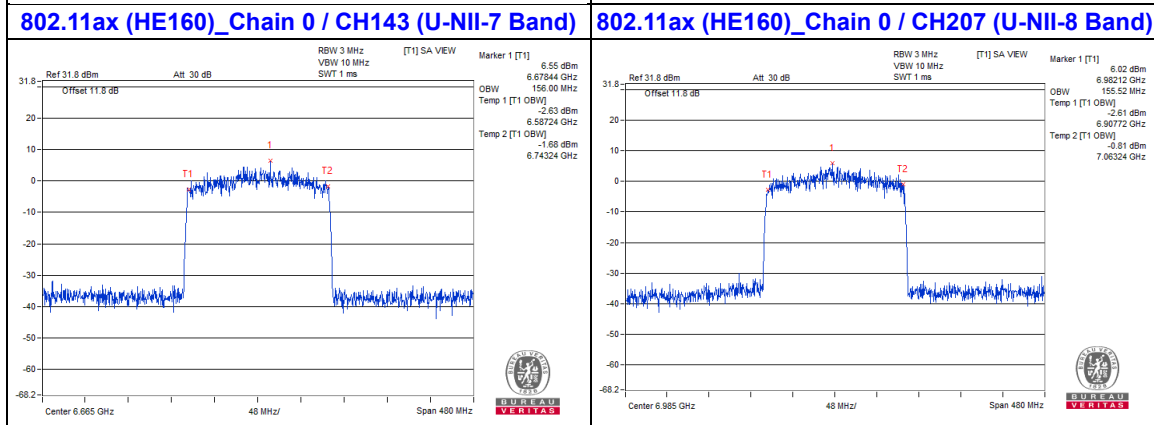
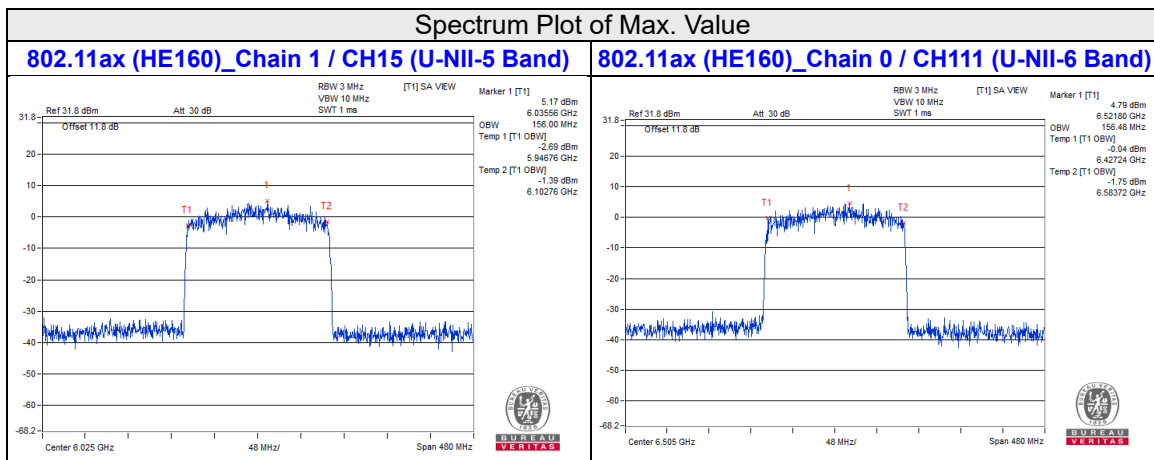
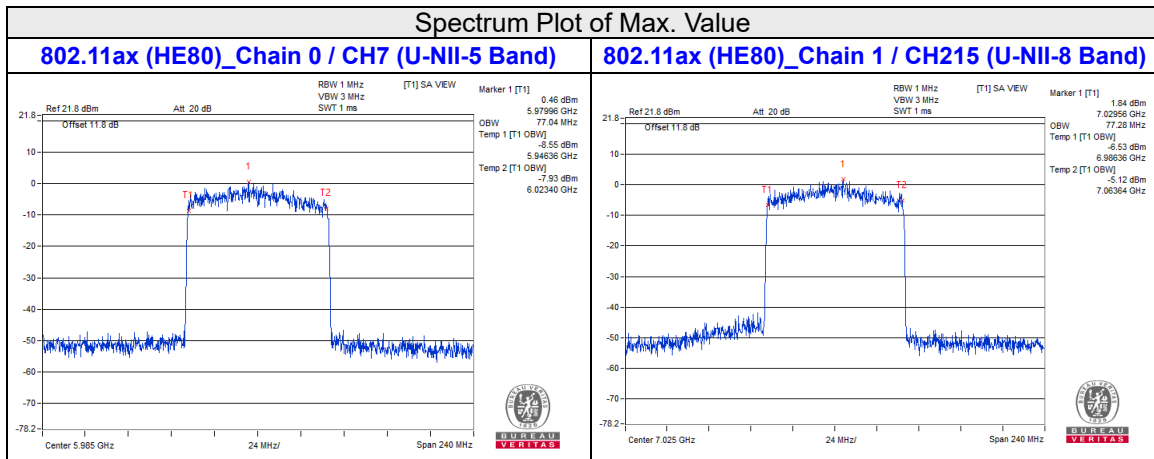
802.11be (EHT160)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
15	6025	155.52	156.48	320
47	6185	155.52	155.52	320
79	6345	156.96	155.52	320
111	6505	156.00	154.56	320
143	6665	155.52	155.52	320
175	6825	156.00	155.52	320
207	6985	154.56	155.52	320

802.11be (EHT320)

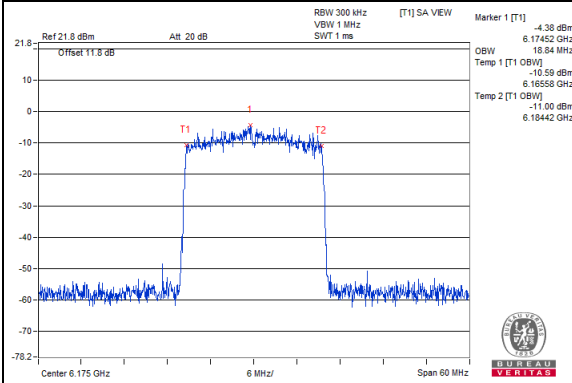
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
31	6105	314.88	314.88	320
63	6265	312.96	312.96	320
95	6425	313.92	312.96	320
127	6585	312.96	312.00	320
159	6745	315.84	314.88	320
191	6905	312.00	310.08	320



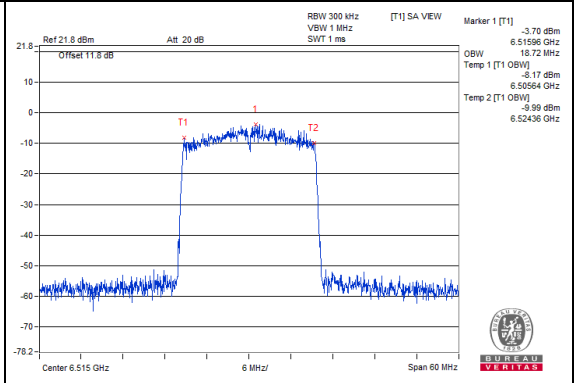


Spectrum Plot of Max. Value

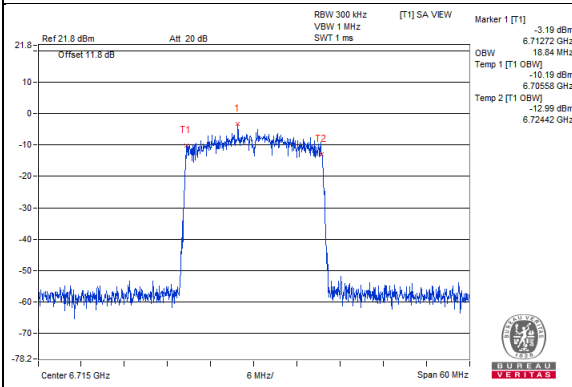
802.11be (EHT20)_Chain 0 / CH45 (U-NII-5 Band)



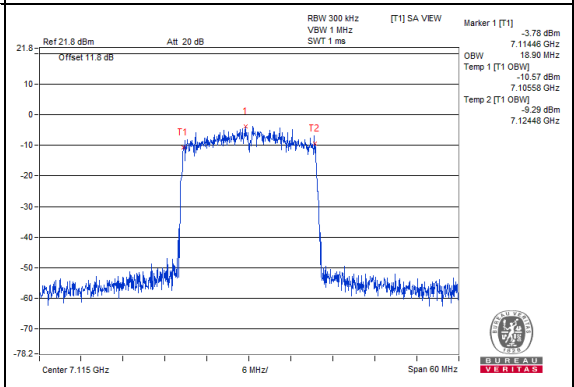
802.11be (EHT20)_Chain 0 / CH113 (U-NII-6 Band)



802.11be (EHT20)_Chain 0 / CH153 (U-NII-7 Band)

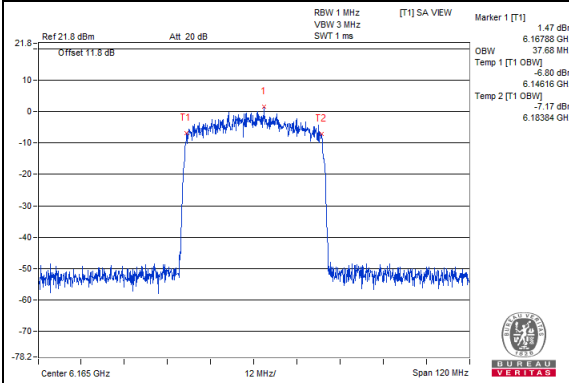


802.11be (EHT20)_Chain 0 / CH233 (U-NII-8 Band)

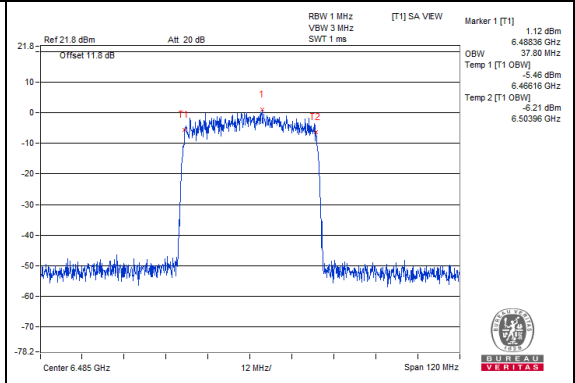


Spectrum Plot of Max. Value

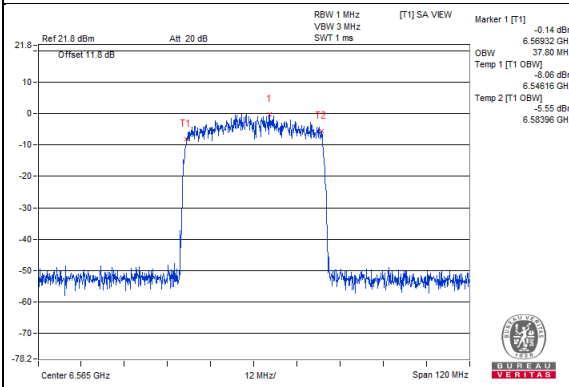
802.11be (EHT40)_Chain 0 / CH43 (U-NII-5 Band)



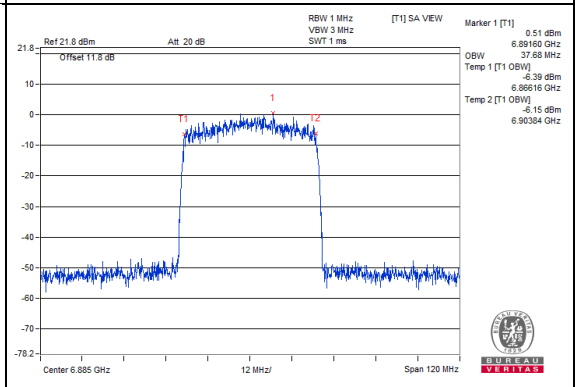
802.11be (EHT40)_Chain 0 / CH107 (U-NII-6 Band)



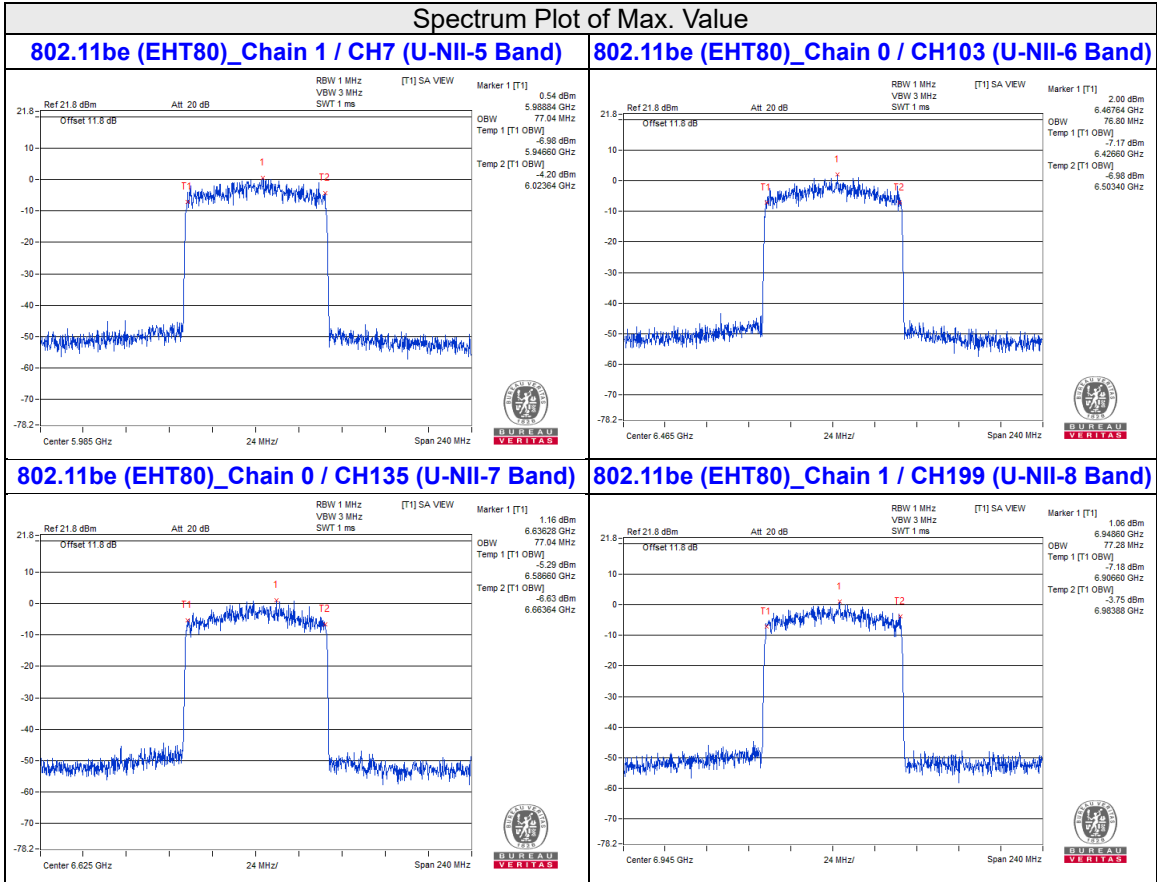
802.11be (EHT40)_Chain 0 / CH123 (U-NII-7 Band)



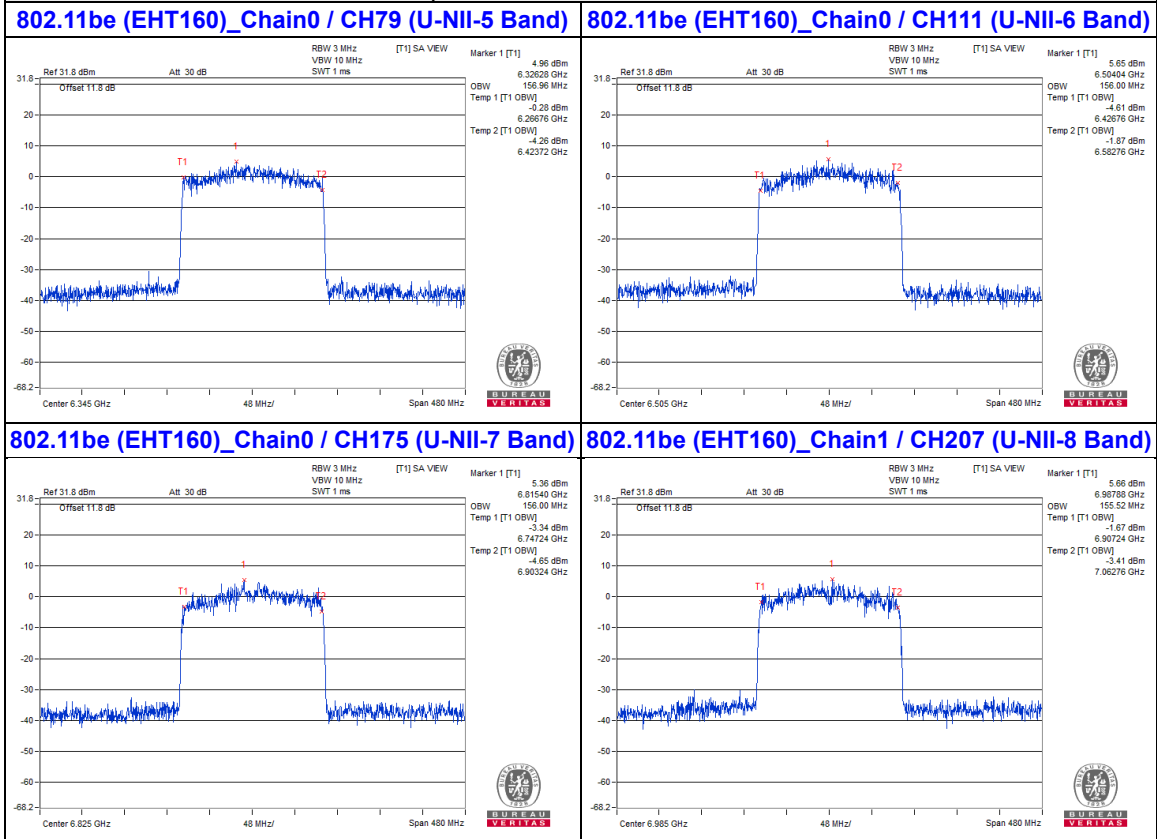
802.11be (EHT40)_Chain 0 / CH187 (U-NII-8 Band)



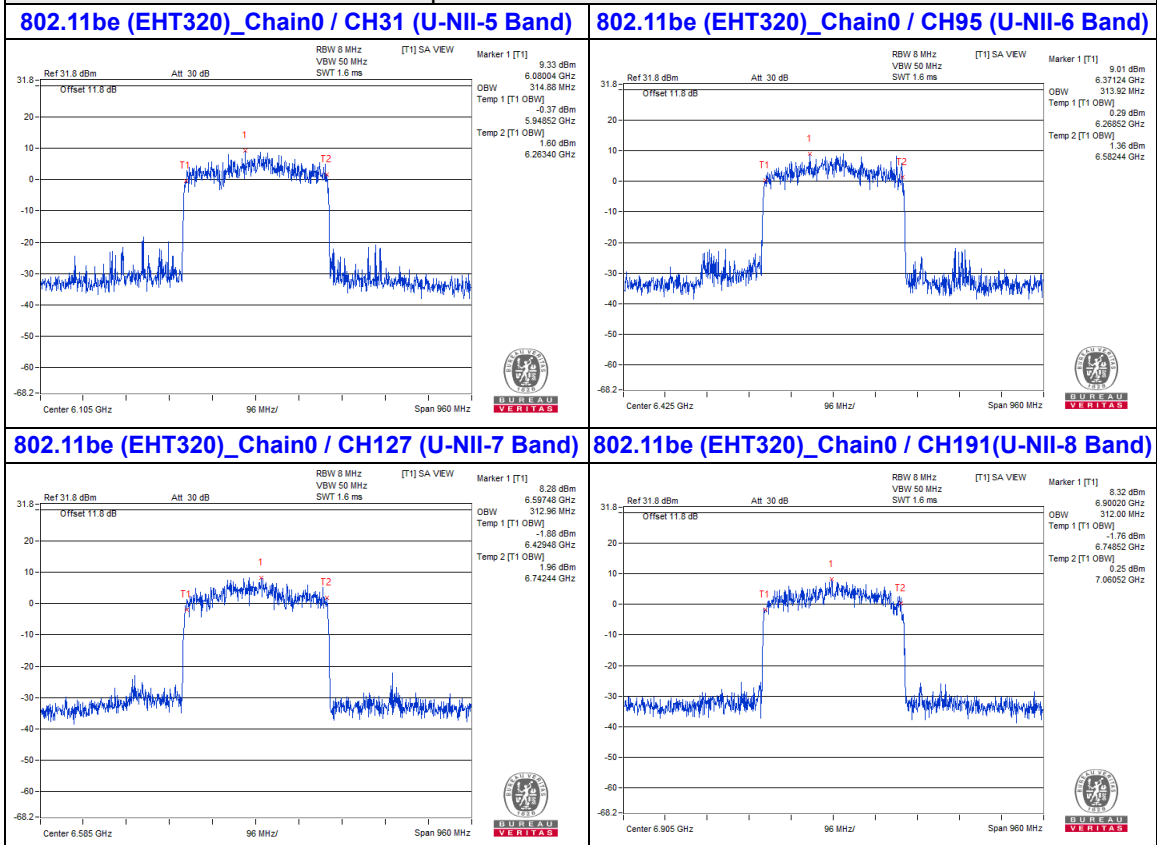
Spectrum Plot of Max. Value



Spectrum Plot of Max. Value



Spectrum Plot of Max. Value



26dB Bandwidth:
802.11a

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	18.64	18.29
45	6175	18.48	18.29
93	6415	18.64	18.26
97	6435	18.53	18.31
105	6475	18.67	18.32
113	6515	18.46	18.16
117	6535	18.65	18.22
153	6715	18.60	18.23
181	6855	18.64	18.28
185	6875	18.60	18.27
213	7015	18.60	18.27
233	7115	18.45	18.27

802.11ax (HE20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	19.91	19.95
233	7115	19.94	19.85

802.11ax (HE40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
3	5965	40.23	40.50
227	7085	40.25	40.43

802.11ax (HE80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
7	5985	80.32	80.33
215	7025	80.41	80.29

802.11ax (HE160)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
15	6025	164.19	164.21
47	6185	164.60	164.50
79	6345	164.49	164.42
111	6505	164.47	164.28
143	6665	164.68	164.40
175	6825	164.48	164.20
207	6985	164.51	164.50

802.11be (EHT20)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
1	5955	19.95	19.95
45	6175	19.98	19.90
93	6415	19.93	19.90
97	6435	19.94	19.91
105	6475	19.97	19.90
113	6515	19.85	19.92
117	6535	19.96	19.88
153	6715	19.95	19.97
181	6855	19.93	19.91
185	6875	19.97	19.95
213	7015	19.89	19.89
233	7115	19.95	19.91

802.11be (EHT40)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
3	5965	40.27	40.21
43	6165	40.33	40.37
91	6405	40.13	40.30
99	6445	40.23	40.19
107	6485	40.40	40.20
115	6525	40.23	40.27
123	6565	40.31	40.34
155	6725	40.21	40.35
179	6845	40.28	40.12
187	6885	40.26	40.33
211	7005	40.22	40.20
227	7085	40.28	40.14

802.11be (EHT80)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
7	5985	80.16	80.36
39	6145	80.26	80.32
87	6385	80.34	80.39
103	6465	80.38	80.22
119	6545	80.26	80.19
135	6625	80.30	80.34
151	6705	80.34	80.20
167	6785	80.33	80.17
183	6865	80.30	80.34
199	6945	80.41	80.26
215	7025	80.33	80.25

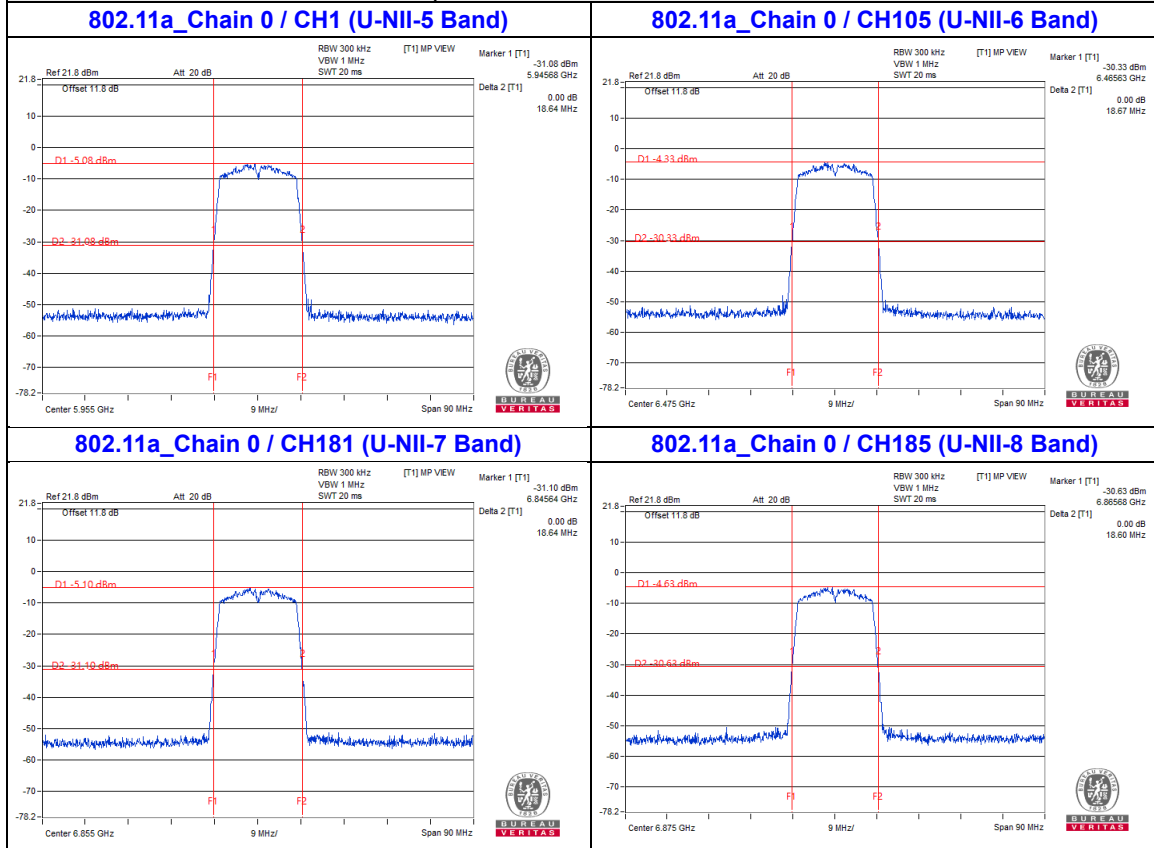
802.11be (EHT160)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
15	6025	164.31	164.34
47	6185	164.12	164.63
79	6345	164.50	164.49
111	6505	163.90	164.19
143	6665	164.10	164.44
175	6825	164.24	164.46
207	6985	164.35	164.80

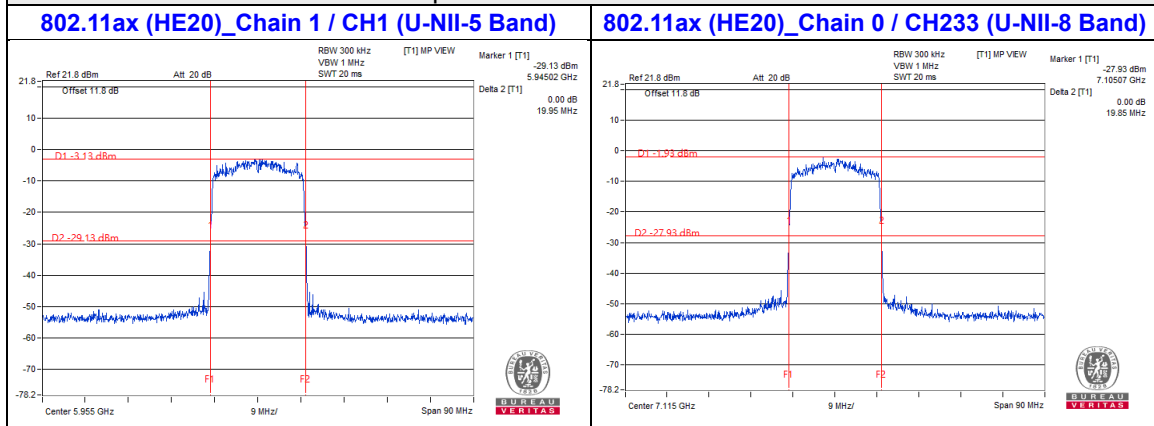
802.11be (EHT320)

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	
		Chain 0	Chain 1
31	6105	464.64	329.51
63	6265	329.53	329.35
95	6425	329.36	328.68
127	6585	328.83	328.07
159	6745	329.24	329.27
191	6905	328.98	331.00

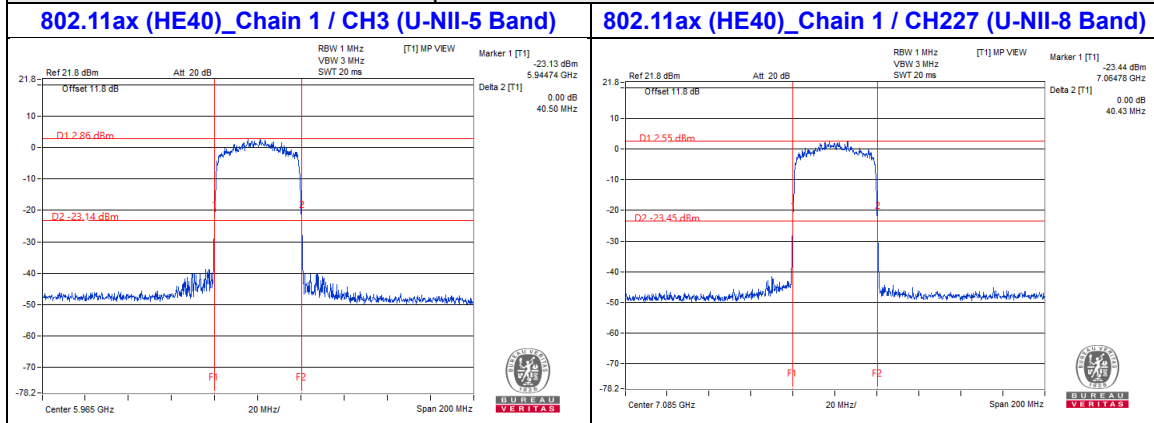
Spectrum Plot of Max. Value

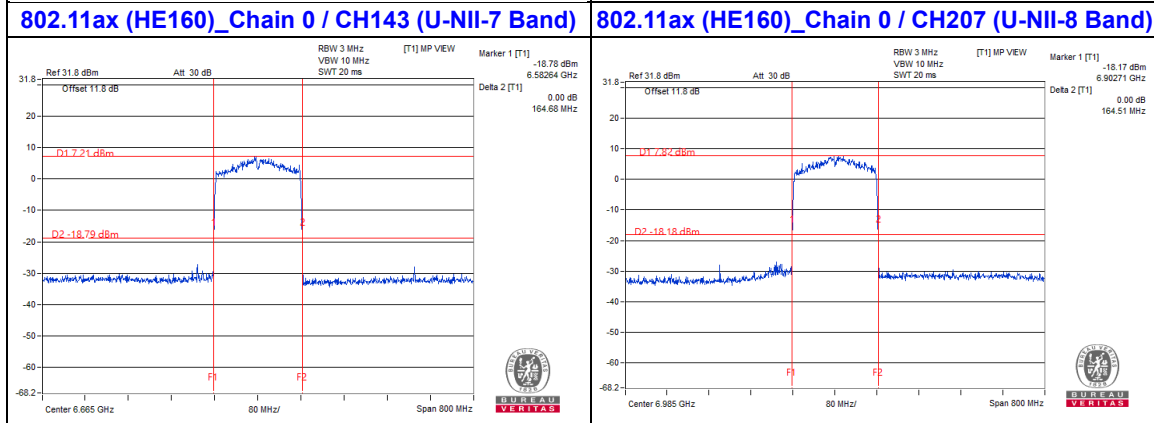
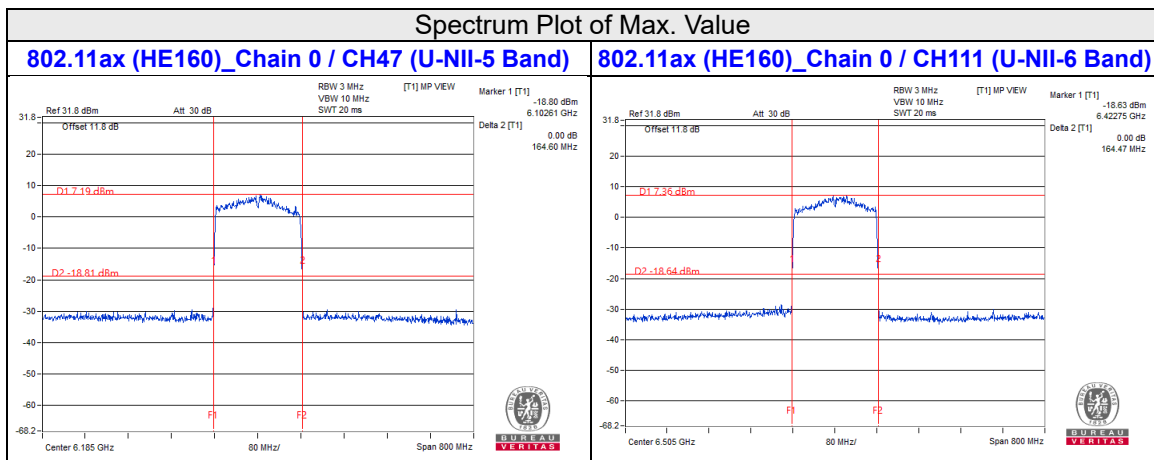
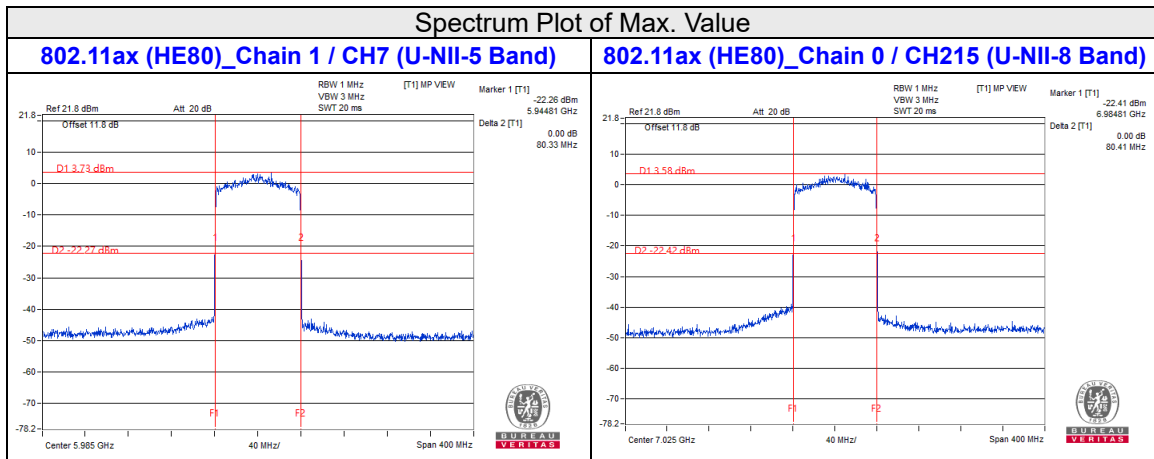


Spectrum Plot of Max. Value



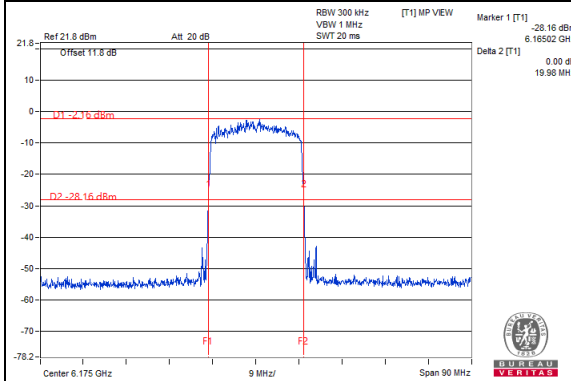
Spectrum Plot of Max. Value



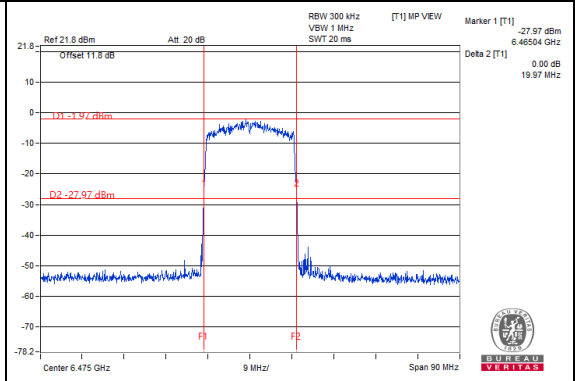


Spectrum Plot of Max. Value

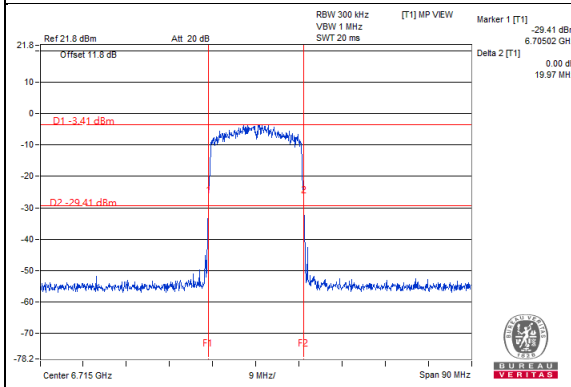
802.11be (EHT20)_Chain 0 / CH45 (U-NII-5 Band)



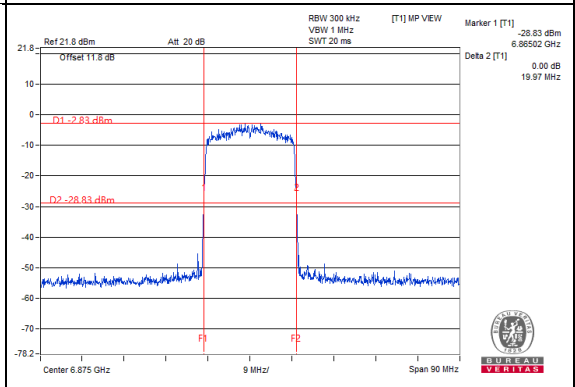
802.11be (EHT20)_Chain 0 / CH105 (U-NII-6 Band)



802.11be (EHT20)_Chain 1 / CH153 (U-NII-7 Band)

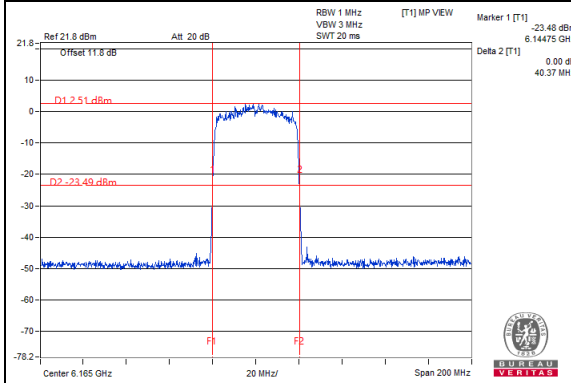


802.11be (EHT20)_Chain 0 / CH185 (U-NII-8 Band)

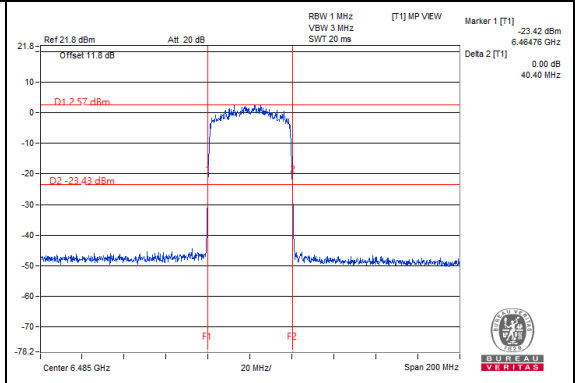


Spectrum Plot of Max. Value

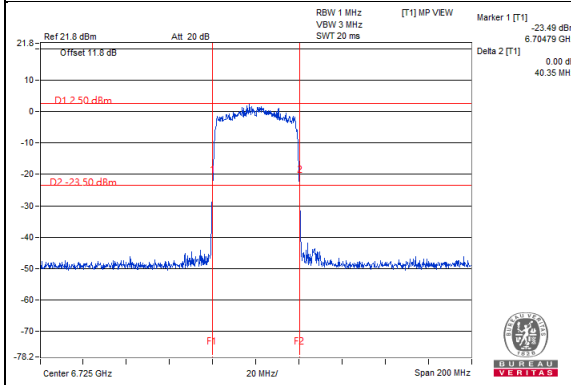
802.11be (EHT40)_Chain 1 / CH43 (U-NII-5 Band)



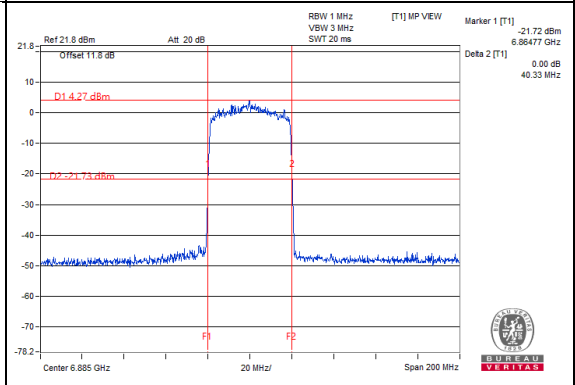
802.11be (EHT40)_Chain 0 / CH107 (U-NII-6 Band)



802.11be (EHT40)_Chain 1 / CH155 (U-NII-7 Band)

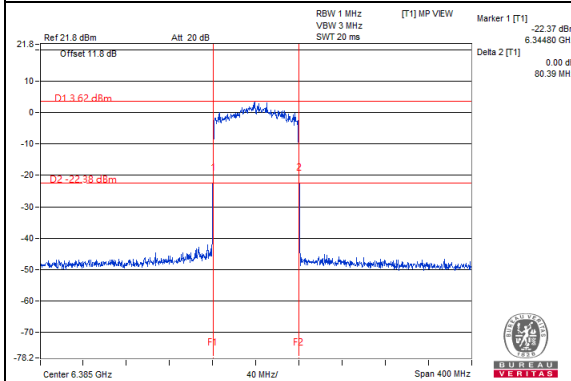


802.11be (EHT40)_Chain 1 / CH187 (U-NII-8 Band)

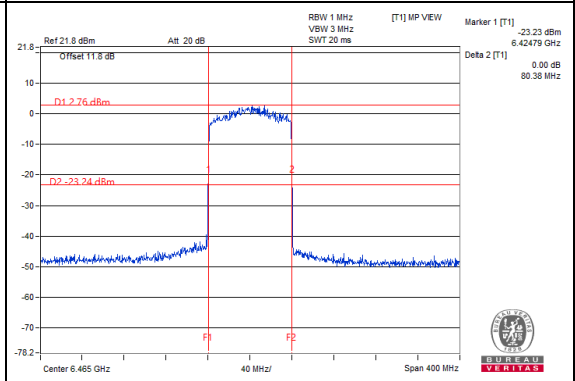


Spectrum Plot of Max. Value

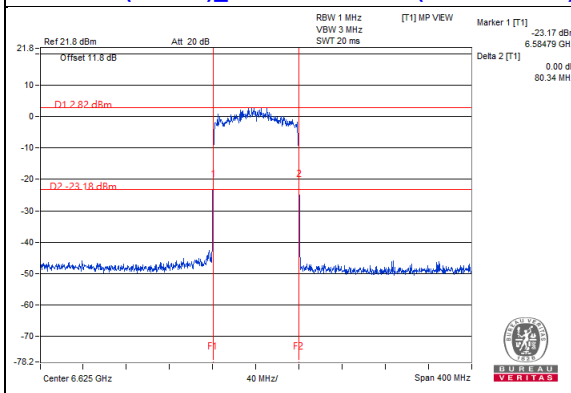
802.11be (EHT80)_Chain 1 / CH87 (U-NII-5 Band)



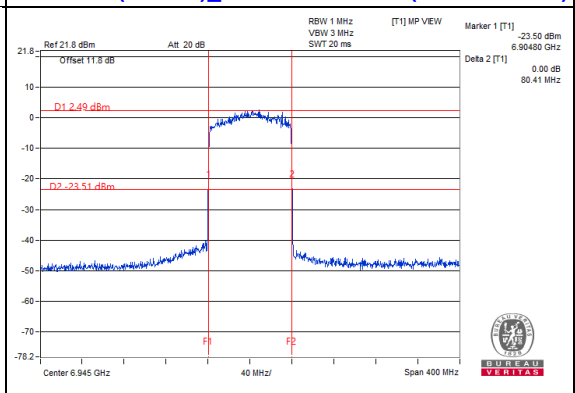
802.11be (EHT80)_Chain 0 / CH103 (U-NII-6 Band)



802.11be (EHT80)_Chain 1 / CH135 (U-NII-7 Band)

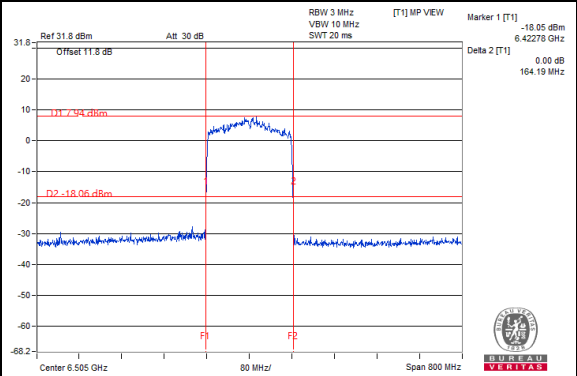
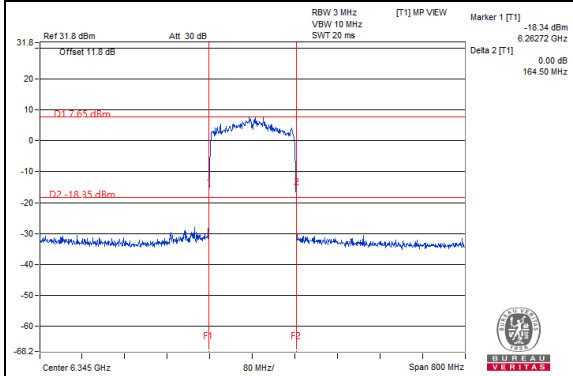


802.11be (EHT80)_Chain 0 / CH199 (U-NII-8 Band)

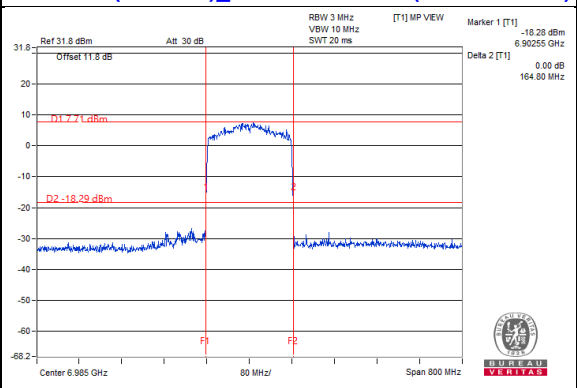
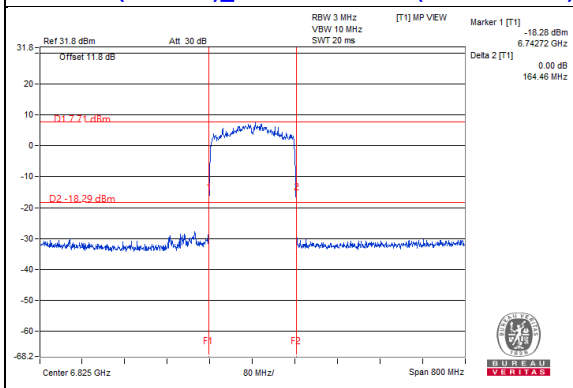


Spectrum Plot of Max. Value

802.11be (EHT160)_Chain0 / CH79 (U-NII-5 Band) **802.11be (EHT160)_Chain1 / CH111 (U-NII-6 Band)**

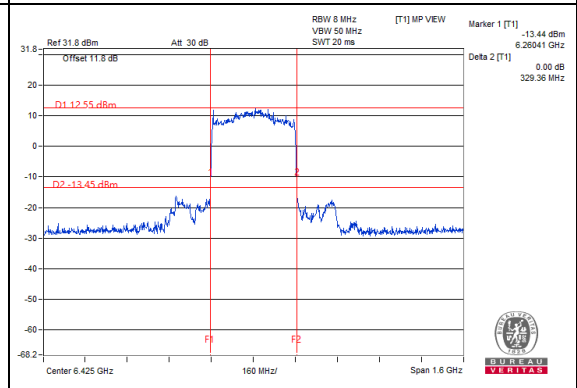
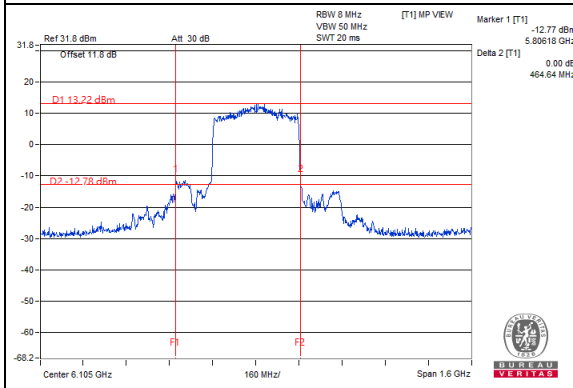


802.11be (EHT160)_Chain1 / CH175 (U-NII-7 Band) **802.11be (EHT160)_Chain1 / CH207 (U-NII-8 Band)**

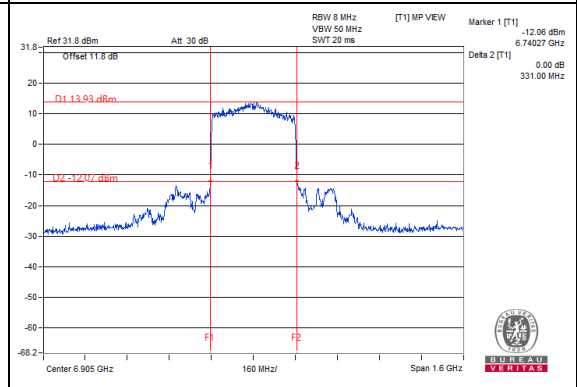
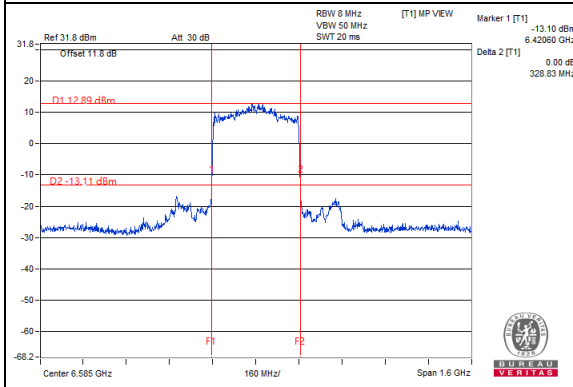


Spectrum Plot of Max. Value

802.11be (EHT320)_Chain0 / CH31 (U-NII-5 Band) **802.11be (EHT320)_Chain0 / CH95 (U-NII-6 Band)**



802.11be (EHT320)_Chain0 / CH127 (U-NII-7 Band) **802.11be (EHT320)_Chain1 / CH191 (U-NII-8 Band)**

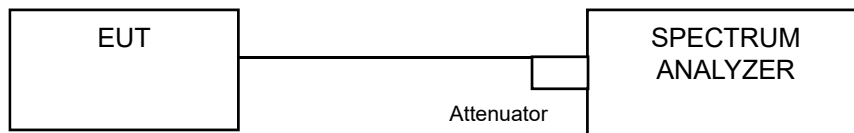


4.6 Peak Power Spectral Density Measurement

4.6.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category	Limit
		Peak Power Density (EIRP)
U-NII-5 U-NII-6 U-NII-7 U-NII-8	Client Devices (controlled of an indoor AP)	-1 dBm/MHz

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

Using method SA-2

- a. Set span to encompass the entire emission bandwidth (EBW) of the signal.
- b. Set RBW = 1 MHz, Set VBW \geq 3 MHz
- c. Sweep time = auto, trigger set to "free run".
- d. Detector = RMS
- e. Trace average at least 100 traces in power averaging mode.
- f. Record the max value and add $10 \log (1/\text{duty cycle})$
- g. EIRP PSD = Conducted PSD (dBm) + Directional gain (antenna gain (dBi) + array gain (dB))

4.6.5 EUT Operating Condition

Same as Item 4.3.6.

4.6.6 Test Results (Mode 1)

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
1	5955	-6.35	0.28	-6.07	4.76	-1.31	-1	Pass
45	6175	-6.05	0.28	-5.77	4.76	-1.01	-1	Pass
93	6415	-6.67	0.28	-6.39	4.76	-1.63	-1	Pass
97	6435	-6.39	0.28	-6.11	4.29	-1.82	-1	Pass
105	6475	-6.44	0.28	-6.16	4.29	-1.87	-1	Pass
113	6515	-6.66	0.28	-6.38	4.29	-2.09	-1	Pass
117	6535	-6.4	0.28	-6.12	4.61	-1.51	-1	Pass
153	6715	-6.33	0.28	-6.05	4.61	-1.44	-1	Pass
181	6855	-6.17	0.28	-5.89	4.61	-1.28	-1	Pass
185	6875	-6.28	0.28	-6.00	4.09	-1.91	-1	Pass
213	7015	-6.26	0.28	-5.98	4.09	-1.89	-1	Pass
233	7115	-6.47	0.28	-6.19	4.09	-2.1	-1	Pass

Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
1	5955	-5.94	0.15	-5.79	4.76	-1.03	-1	Pass
45	6175	-6.5	0.15	-6.35	4.76	-1.59	-1	Pass
93	6415	-6.36	0.15	-6.21	4.76	-1.45	-1	Pass
97	6435	-6.16	0.15	-6.01	4.29	-1.72	-1	Pass
105	6475	-5.9	0.15	-5.75	4.29	-1.46	-1	Pass
113	6515	-6.37	0.15	-6.22	4.29	-1.93	-1	Pass
117	6535	-6.24	0.15	-6.09	4.61	-1.48	-1	Pass
153	6715	-5.98	0.15	-5.83	4.61	-1.22	-1	Pass
181	6855	-6.01	0.15	-5.86	4.61	-1.25	-1	Pass
185	6875	-6.08	0.15	-5.93	4.09	-1.84	-1	Pass
213	7015	-5.54	0.15	-5.39	4.09	-1.3	-1	Pass
233	7115	-5.58	0.15	-5.43	4.09	-1.34	-1	Pass

Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
3	5965	-6.62	0.14	-6.48	4.76	-1.72	-1	Pass
43	6165	-6.54	0.14	-6.40	4.76	-1.64	-1	Pass
91	6405	-6.35	0.14	-6.21	4.76	-1.45	-1	Pass
99	6445	-5.47	0.14	-5.33	4.29	-1.04	-1	Pass
107	6485	-6.16	0.14	-6.02	4.29	-1.73	-1	Pass
115	6525	-6.12	0.14	-5.98	4.61	-1.37	-1	Pass
123	6565	-6.49	0.14	-6.35	4.61	-1.74	-1	Pass
155	6725	-6.13	0.14	-5.99	4.61	-1.38	-1	Pass
179	6845	-6.14	0.14	-6.00	4.61	-1.39	-1	Pass
187	6885	-5.67	0.14	-5.53	4.09	-1.44	-1	Pass
211	7005	-5.74	0.14	-5.60	4.09	-1.51	-1	Pass
227	7085	-5.48	0.14	-5.34	4.09	-1.25	-1	Pass

Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
7	5985	-6.47	0.26	-6.21	4.76	-1.45	-1	Pass
39	6145	-6.9	0.26	-6.64	4.76	-1.88	-1	Pass
87	6385	-6.17	0.26	-5.91	4.76	-1.15	-1	Pass
103	6465	-6.1	0.26	-5.84	4.29	-1.55	-1	Pass
119	6545	-6.81	0.26	-6.55	4.61	-1.94	-1	Pass
135	6625	-6.07	0.26	-5.81	4.61	-1.2	-1	Pass
151	6705	-6.44	0.26	-6.18	4.61	-1.57	-1	Pass
167	6785	-6.4	0.26	-6.14	4.61	-1.53	-1	Pass
183	6865	-6.73	0.26	-6.47	4.61	-1.86	-1	Pass
199	6945	-6.1	0.26	-5.84	4.09	-1.75	-1	Pass
215	7025	-5.79	0.26	-5.53	4.09	-1.44	-1	Pass

Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
15	6025	-6.97	0.47	-6.50	4.76	-1.74	-1	Pass
47	6185	-6.84	0.47	-6.37	4.76	-1.61	-1	Pass
79	6345	-6.65	0.47	-6.18	4.76	-1.42	-1	Pass
111	6505	-6.28	0.47	-5.81	4.29	-1.52	-1	Pass
143	6665	-6.4	0.47	-5.93	4.61	-1.32	-1	Pass
175	6825	-6.82	0.47	-6.35	4.61	-1.74	-1	Pass
207	6985	-5.75	0.47	-5.28	4.09	-1.19	-1	Pass

Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

2. Refer to section 3.3 for duty cycle spectrum plot.

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
1	5955	-6.34	0.12	-6.22	4.76	-1.46	-1	Pass
45	6175	-6.49	0.12	-6.37	4.76	-1.61	-1	Pass
93	6415	-5.89	0.12	-5.77	4.76	-1.01	-1	Pass
97	6435	-6	0.12	-5.88	4.29	-1.59	-1	Pass
105	6475	-5.98	0.12	-5.86	4.29	-1.57	-1	Pass
113	6515	-6.31	0.12	-6.19	4.29	-1.9	-1	Pass
117	6535	-5.87	0.12	-5.75	4.61	-1.14	-1	Pass
153	6715	-6.07	0.12	-5.95	4.61	-1.34	-1	Pass
181	6855	-6.2	0.12	-6.08	4.61	-1.47	-1	Pass
185	6875	-6.03	0.12	-5.91	4.09	-1.82	-1	Pass
213	7015	-5.62	0.12	-5.50	4.09	-1.41	-1	Pass
233	7115	-5.59	0.12	-5.47	4.09	-1.38	-1	Pass

Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

2. Refer to section 3.3 for duty cycle spectrum plot.

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
3	5965	-6.1	0.11	-5.99	4.76	-1.23	-1	Pass
43	6165	-6.03	0.11	-5.92	4.76	-1.16	-1	Pass
91	6405	-6.14	0.11	-6.03	4.76	-1.27	-1	Pass
99	6445	-5.53	0.11	-5.42	4.29	-1.13	-1	Pass
107	6485	-5.67	0.11	-5.56	4.29	-1.27	-1	Pass
115	6525	-6.28	0.11	-6.17	4.61	-1.56	-1	Pass
123	6565	-5.87	0.11	-5.76	4.61	-1.15	-1	Pass
155	6725	-6.07	0.11	-5.96	4.61	-1.35	-1	Pass
179	6845	-6.09	0.11	-5.98	4.61	-1.37	-1	Pass
187	6885	-5.66	0.11	-5.55	4.09	-1.46	-1	Pass
211	7005	-5.72	0.11	-5.61	4.09	-1.52	-1	Pass
227	7085	-5.28	0.11	-5.17	4.09	-1.08	-1	Pass

Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

2. Refer to section 3.3 for duty cycle spectrum plot.

802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
7	5985	-6.53	0.23	-6.30	4.76	-1.54	-1	Pass
39	6145	-6.96	0.23	-6.73	4.76	-1.97	-1	Pass
87	6385	-6.27	0.23	-6.04	4.76	-1.28	-1	Pass
103	6465	-5.7	0.23	-5.47	4.29	-1.18	-1	Pass
119	6545	-6.07	0.23	-5.84	4.61	-1.23	-1	Pass
135	6625	-6.01	0.23	-5.78	4.61	-1.17	-1	Pass
151	6705	-6.29	0.23	-6.06	4.61	-1.45	-1	Pass
167	6785	-6.03	0.23	-5.80	4.61	-1.19	-1	Pass
183	6865	-6.26	0.23	-6.03	4.61	-1.42	-1	Pass
199	6945	-5.48	0.23	-5.25	4.09	-1.16	-1	Pass
215	7025	-6.21	0.23	-5.98	4.09	-1.89	-1	Pass

Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

2. Refer to section 3.3 for duty cycle spectrum plot.

802.11be (EHT160)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
15	6025	-6.24	0.42	-5.82	4.76	-1.06	-1	Pass
47	6185	-6.41	0.42	-5.99	4.76	-1.23	-1	Pass
79	6345	-6.24	0.42	-5.82	4.76	-1.06	-1	Pass
111	6505	-5.95	0.42	-5.53	4.29	-1.24	-1	Pass
143	6665	-6.45	0.42	-6.03	4.61	-1.42	-1	Pass
175	6825	-6.58	0.42	-6.16	4.61	-1.55	-1	Pass
207	6985	-5.63	0.42	-5.21	4.09	-1.12	-1	Pass

Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

2. Refer to section 3.3 for duty cycle spectrum plot.

802.11be (EHT320)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Antenna Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
31	6105	-7.17	0.75	-6.42	4.76	-1.66	-1	Pass
63	6265	-6.53	0.75	-5.78	4.76	-1.02	-1	Pass
95	6425	-6.66	0.75	-5.91	4.29	-1.62	-1	Pass
127	6585	-6.86	0.75	-6.11	4.61	-1.5	-1	Pass
159	6745	-6.68	0.75	-5.93	4.61	-1.32	-1	Pass
191	6905	-6.53	0.75	-5.78	4.09	-1.69	-1	Pass

Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

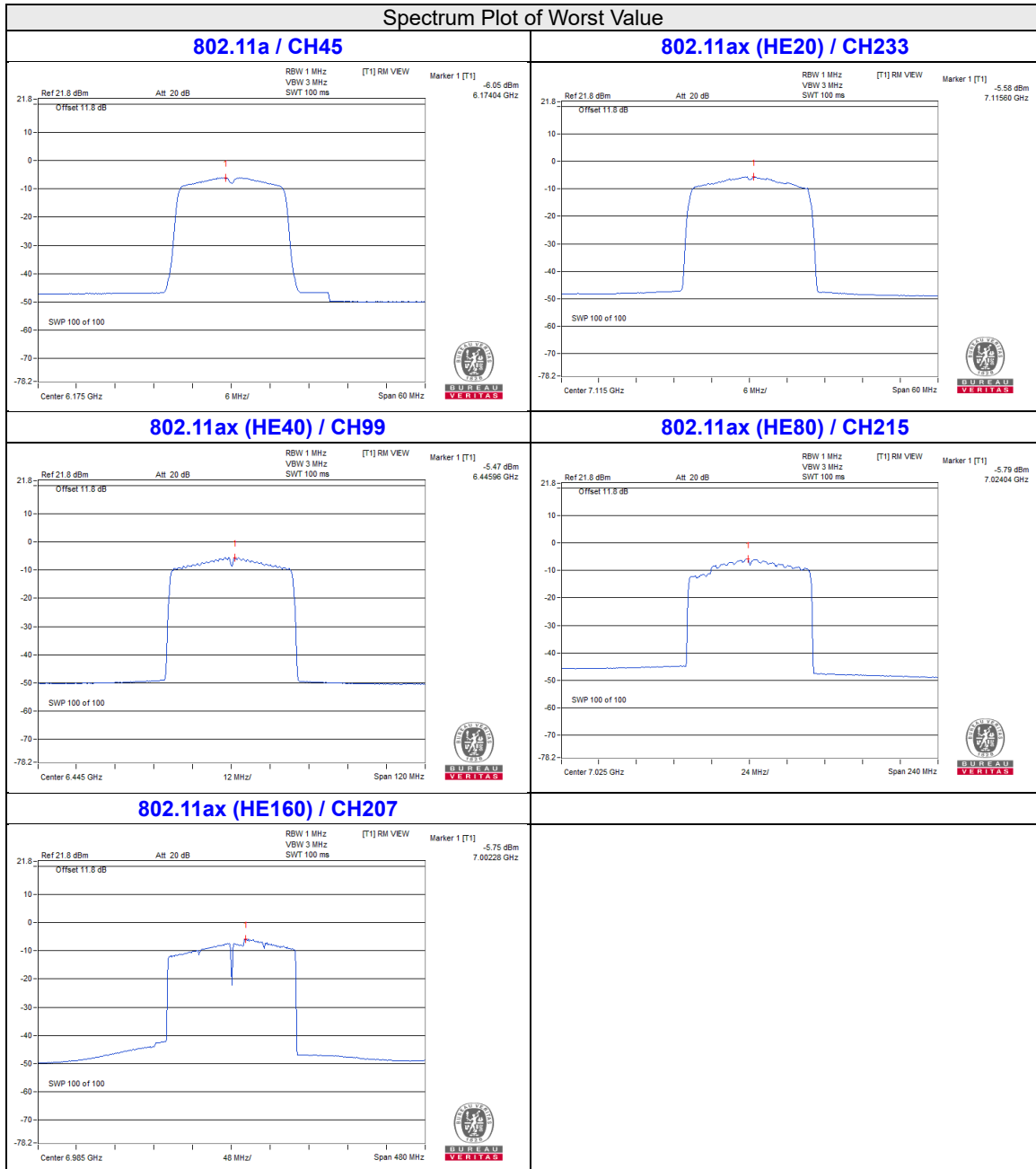
U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

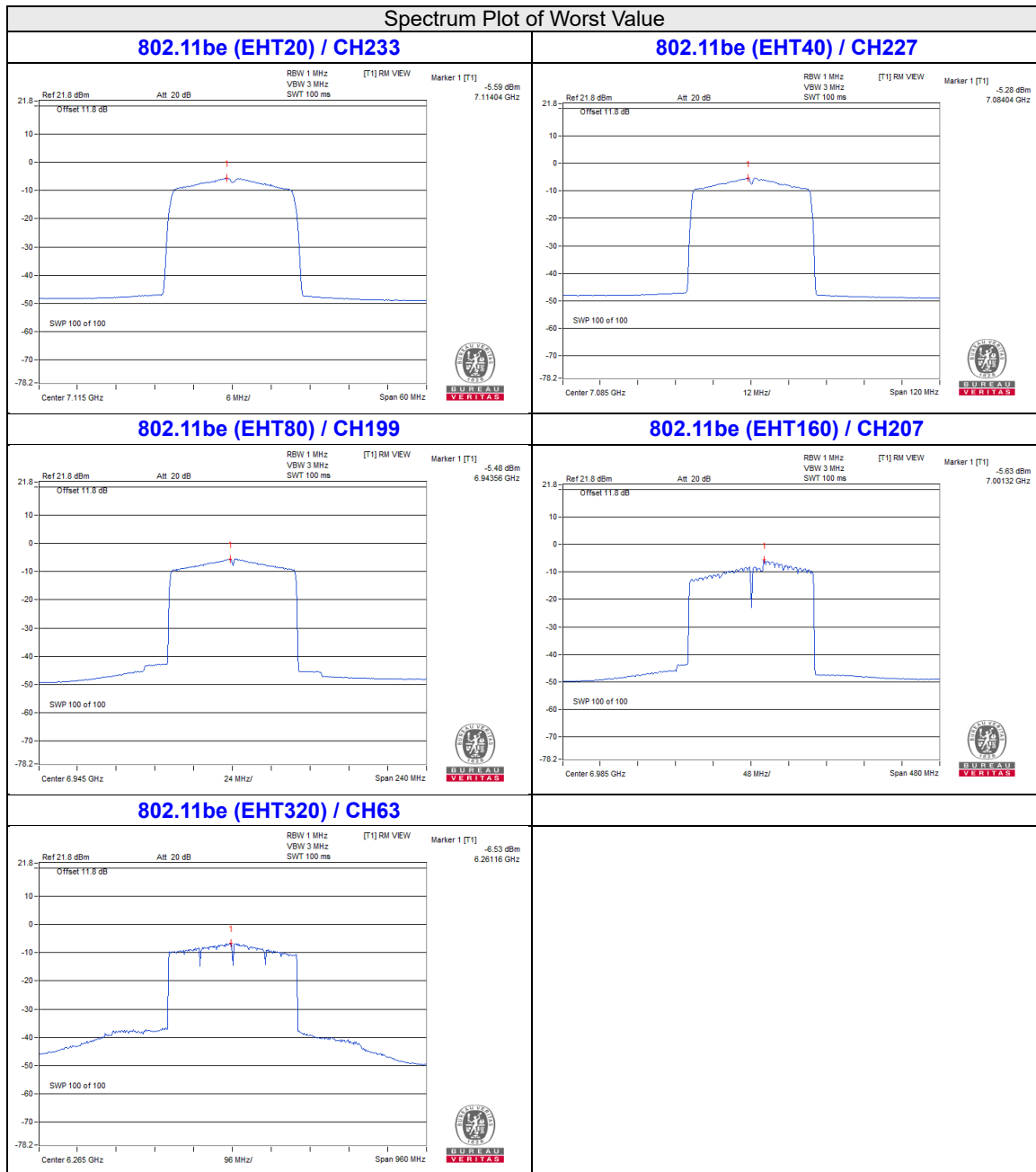
U-NII-7 Directional gain = antenna gain (dBi) = 4.61 dBi

U-NII-8 Directional gain = antenna gain (dBi) = 4.09 dBi

2. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value





4.6.7 Test Results (Mode 2)

802.11a

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1						
1	5955	-12.21	-12.01	0.28	-8.82	7.77	-1.05	-1	Pass
45	6175	-12.43	-12.60	0.28	-9.22	7.77	-1.45	-1	Pass
93	6415	-12.10	-12.52	0.28	-9.01	7.77	-1.24	-1	Pass
97	6435	-11.82	-12.48	0.28	-8.85	7.30	-1.55	-1	Pass
105	6475	-11.57	-12.36	0.28	-8.66	7.30	-1.36	-1	Pass
113	6515	-11.94	-12.43	0.28	-8.89	7.30	-1.59	-1	Pass
117	6535	-12.34	-12.42	0.28	-9.09	7.62	-1.47	-1	Pass
153	6715	-12.27	-12.26	0.28	-8.97	7.62	-1.35	-1	Pass
181	6855	-12.21	-12.52	0.28	-9.07	7.62	-1.45	-1	Pass
185	6875	-11.71	-11.39	0.28	-8.26	7.10	-1.16	-1	Pass
213	7015	-11.80	-11.87	0.28	-8.54	7.10	-1.44	-1	Pass
233	7115	-11.67	-12.00	0.28	-8.54	7.10	-1.44	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements)
3. For U-NII-5, The directional gain is 7.77 dBi
4. For U-NII-6, The directional gain is 7.3 dBi
5. For U-NII-7, The directional gain is 7.62 dBi
6. For U-NII-8, The directional gain is 7.1 dBi
7. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1						
1	5955	-9.30	-8.97	0.15	-5.97	4.76	-1.21	-1	Pass
45	6175	-9.38	-9.30	0.15	-6.18	4.76	-1.42	-1	Pass
93	6415	-9.18	-8.91	0.15	-5.88	4.76	-1.12	-1	Pass
97	6435	-9.00	-8.98	0.15	-5.83	4.29	-1.54	-1	Pass
105	6475	-8.58	-8.57	0.15	-5.41	4.29	-1.12	-1	Pass
113	6515	-9.22	-9.52	0.15	-6.21	4.29	-1.92	-1	Pass
117	6535	-8.72	-9.03	0.15	-5.71	4.61	-1.1	-1	Pass
153	6715	-8.85	-9.14	0.15	-5.83	4.61	-1.22	-1	Pass
181	6855	-8.85	-8.87	0.15	-5.70	4.61	-1.09	-1	Pass
185	6875	-8.91	-9.13	0.15	-5.86	4.09	-1.77	-1	Pass
213	7015	-8.20	-8.54	0.15	-5.21	4.09	-1.12	-1	Pass
233	7115	-8.47	-8.57	0.15	-5.36	4.09	-1.27	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log (2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
3. For U-NII-5, The directional gain is 4.76 dBi
4. For U-NII-6, The directional gain is 4.29 dBi
5. For U-NII-7, The directional gain is 4.61 dBi
6. For U-NII-8, The directional gain is 4.09 dBi
7. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1						
3	5965	-9.49	-9.53	0.14	-6.36	4.76	-1.6	-1	Pass
43	6165	-9.52	-9.39	0.14	-6.30	4.76	-1.54	-1	Pass
91	6405	-9.32	-9.24	0.14	-6.13	4.76	-1.37	-1	Pass
99	6445	-8.67	-8.78	0.14	-5.57	4.29	-1.28	-1	Pass
107	6485	-9.27	-9.07	0.14	-6.02	4.29	-1.73	-1	Pass
115	6525	-9.00	-9.39	0.14	-6.04	4.61	-1.43	-1	Pass
123	6565	-9.63	-9.33	0.14	-6.33	4.61	-1.72	-1	Pass
155	6725	-8.99	-9.05	0.14	-5.87	4.61	-1.26	-1	Pass
179	6845	-9.14	-9.10	0.14	-5.97	4.61	-1.36	-1	Pass
187	6885	-8.22	-8.59	0.14	-5.25	4.09	-1.16	-1	Pass
211	7005	-8.74	-9.23	0.14	-5.83	4.09	-1.74	-1	Pass
227	7085	-9.00	-8.88	0.14	-5.79	4.09	-1.7	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log(2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
3. For U-NII-5, The directional gain is 4.76 dBi
4. For U-NII-6, The directional gain is 4.29 dBi
5. For U-NII-7, The directional gain is 4.61 dBi
6. For U-NII-8, The directional gain is 4.09 dBi
7. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1						
7	5985	-9.57	-9.40	0.26	-6.21	4.76	-1.45	-1	Pass
39	6145	-9.31	-9.70	0.26	-6.23	4.76	-1.47	-1	Pass
87	6385	-9.46	-9.46	0.26	-6.19	4.76	-1.43	-1	Pass
103	6465	-9.64	-9.62	0.26	-6.36	4.29	-2.07	-1	Pass
119	6545	-9.40	-9.88	0.26	-6.36	4.61	-1.75	-1	Pass
135	6625	-9.28	-9.25	0.26	-5.99	4.61	-1.38	-1	Pass
151	6705	-9.33	-9.57	0.26	-6.18	4.61	-1.57	-1	Pass
167	6785	-9.23	-9.10	0.26	-5.89	4.61	-1.28	-1	Pass
183	6865	-9.22	-9.53	0.26	-6.10	4.61	-1.49	-1	Pass
199	6945	-8.80	-8.83	0.26	-5.54	4.09	-1.45	-1	Pass
215	7025	-8.80	-8.81	0.26	-5.53	4.09	-1.44	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log (2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
3. For U-NII-5, The directional gain is 4.76 dBi
4. For U-NII-6, The directional gain is 4.29 dBi
5. For U-NII-7, The directional gain is 4.61 dBi
6. For U-NII-8, The directional gain is 4.09 dBi
7. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1						
15	6025	-9.73	-9.64	0.47	-6.20	4.76	-1.44	-1	Pass
47	6185	-9.82	-9.70	0.47	-6.28	4.76	-1.52	-1	Pass
79	6345	-9.61	-9.55	0.47	-6.10	4.76	-1.34	-1	Pass
111	6505	-9.08	-9.67	0.47	-5.88	4.29	-1.59	-1	Pass
143	6665	-9.18	-9.62	0.47	-5.91	4.61	-1.3	-1	Pass
175	6825	-9.58	-9.12	0.47	-5.86	4.61	-1.25	-1	Pass
207	6985	-8.88	-9.09	0.47	-5.50	4.09	-1.41	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log (2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
3. For U-NII-5, The directional gain is 4.76 dBi
4. For U-NII-6, The directional gain is 4.29 dBi
5. For U-NII-7, The directional gain is 4.61 dBi
6. For U-NII-8, The directional gain is 4.09 dBi
7. Refer to section 3.3 for duty cycle spectrum plot.

802.11be (EHT20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1						
1	5955	-9.64	-9.65	0.12	-6.51	4.76	-1.75	-1	Pass
45	6175	-9.09	-8.85	0.12	-5.84	4.76	-1.08	-1	Pass
93	6415	-9.30	-9.36	0.12	-6.20	4.76	-1.44	-1	Pass
97	6435	-8.70	-8.79	0.12	-5.61	4.29	-1.32	-1	Pass
105	6475	-8.60	-8.77	0.12	-5.55	4.29	-1.26	-1	Pass
113	6515	-8.43	-8.51	0.12	-5.34	4.29	-1.05	-1	Pass
117	6535	-9.38	-9.27	0.12	-6.19	4.61	-1.58	-1	Pass
153	6715	-8.92	-8.89	0.12	-5.77	4.61	-1.16	-1	Pass
181	6855	-8.60	-8.92	0.12	-5.63	4.61	-1.02	-1	Pass
185	6875	-8.67	-8.93	0.12	-5.67	4.09	-1.58	-1	Pass
213	7015	-9.10	-9.23	0.12	-6.03	4.09	-1.94	-1	Pass
233	7115	-8.38	-8.48	0.12	-5.30	4.09	-1.21	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + 10 log (2 of TX antenna elements/NSS 2) = gain of antenna element + 0 dB
3. For U-NII-5, The directional gain is 4.76 dBi
4. For U-NII-6, The directional gain is 4.29 dBi
5. For U-NII-7, The directional gain is 4.61 dBi
6. For U-NII-8, The directional gain is 4.09 dBi
7. Refer to section 3.3 for duty cycle spectrum plot.

802.11be (EHT40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1						
3	5965	-9.44	-9.33	0.11	-6.26	4.76	-1.5	-1	Pass
43	6165	-9.43	-9.31	0.11	-6.25	4.76	-1.49	-1	Pass
91	6405	-9.17	-9.11	0.11	-6.02	4.76	-1.26	-1	Pass
99	6445	-8.65	-8.52	0.11	-5.46	4.29	-1.17	-1	Pass
107	6485	-8.92	-9.02	0.11	-5.85	4.29	-1.56	-1	Pass
115	6525	-9.62	-9.54	0.11	-6.46	4.61	-1.85	-1	Pass
123	6565	-9.26	-9.27	0.11	-6.14	4.61	-1.53	-1	Pass
155	6725	-9.17	-9.33	0.11	-6.13	4.61	-1.52	-1	Pass
179	6845	-9.11	-9.18	0.11	-6.02	4.61	-1.41	-1	Pass
187	6885	-8.55	-8.67	0.11	-5.49	4.09	-1.4	-1	Pass
211	7005	-8.62	-8.46	0.11	-5.42	4.09	-1.33	-1	Pass
227	7085	-8.74	-8.70	0.11	-5.60	4.09	-1.51	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log (2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
3. For U-NII-5, The directional gain is 4.76 dBi
4. For U-NII-6, The directional gain is 4.29 dBi
5. For U-NII-7, The directional gain is 4.61 dBi
6. For U-NII-8, The directional gain is 4.09 dBi
7. Refer to section 3.3 for duty cycle spectrum plot.

802.11be (EHT80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1						
7	5985	-9.59	-9.39	0.23	-6.25	4.76	-1.49	-1	Pass
39	6145	-9.21	-9.44	0.23	-6.08	4.76	-1.32	-1	Pass
87	6385	-9.78	-9.13	0.23	-6.20	4.76	-1.44	-1	Pass
103	6465	-9.31	-9.41	0.23	-6.12	4.29	-1.83	-1	Pass
119	6545	-9.82	-9.69	0.23	-6.51	4.61	-1.9	-1	Pass
135	6625	-9.60	-9.70	0.23	-6.41	4.61	-1.8	-1	Pass
151	6705	-9.77	-9.71	0.23	-6.50	4.61	-1.89	-1	Pass
167	6785	-9.54	-9.60	0.23	-6.33	4.61	-1.72	-1	Pass
183	6865	-9.35	-9.42	0.23	-6.14	4.61	-1.53	-1	Pass
199	6945	-8.70	-9.20	0.23	-5.70	4.09	-1.61	-1	Pass
215	7025	-8.84	-8.86	0.23	-5.61	4.09	-1.52	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log(2 \text{ of TX antenna elements/NSS } 2)$ = gain of antenna element + 0 dB
3. For U-NII-5, The directional gain is 4.76 dBi
4. For U-NII-6, The directional gain is 4.29 dBi
5. For U-NII-7, The directional gain is 4.61 dBi
6. For U-NII-8, The directional gain is 4.09 dBi
7. Refer to section 3.3 for duty cycle spectrum plot.

802.11be (EHT160)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1						
15	6025	-9.35	-9.58	0.42	-6.03	4.76	-1.27	-1	Pass
47	6185	-9.75	-9.43	0.42	-6.16	4.76	-1.4	-1	Pass
79	6345	-9.15	-9.65	0.42	-5.96	4.76	-1.2	-1	Pass
111	6505	-8.98	-9.01	0.42	-5.56	4.29	-1.27	-1	Pass
143	6665	-9.26	-9.03	0.42	-5.71	4.61	-1.1	-1	Pass
175	6825	-9.14	-9.61	0.42	-5.94	4.61	-1.33	-1	Pass
207	6985	-9.54	-9.12	0.42	-5.89	4.09	-1.8	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log(2 \text{ of TX antenna elements/NSS } 2)$ = gain of antenna element + 0 dB
3. For U-NII-5, The directional gain is 4.76 dBi
4. For U-NII-6, The directional gain is 4.29 dBi
5. For U-NII-7, The directional gain is 4.61 dBi
6. For U-NII-8, The directional gain is 4.09 dBi
7. Refer to section 3.3 for duty cycle spectrum plot.

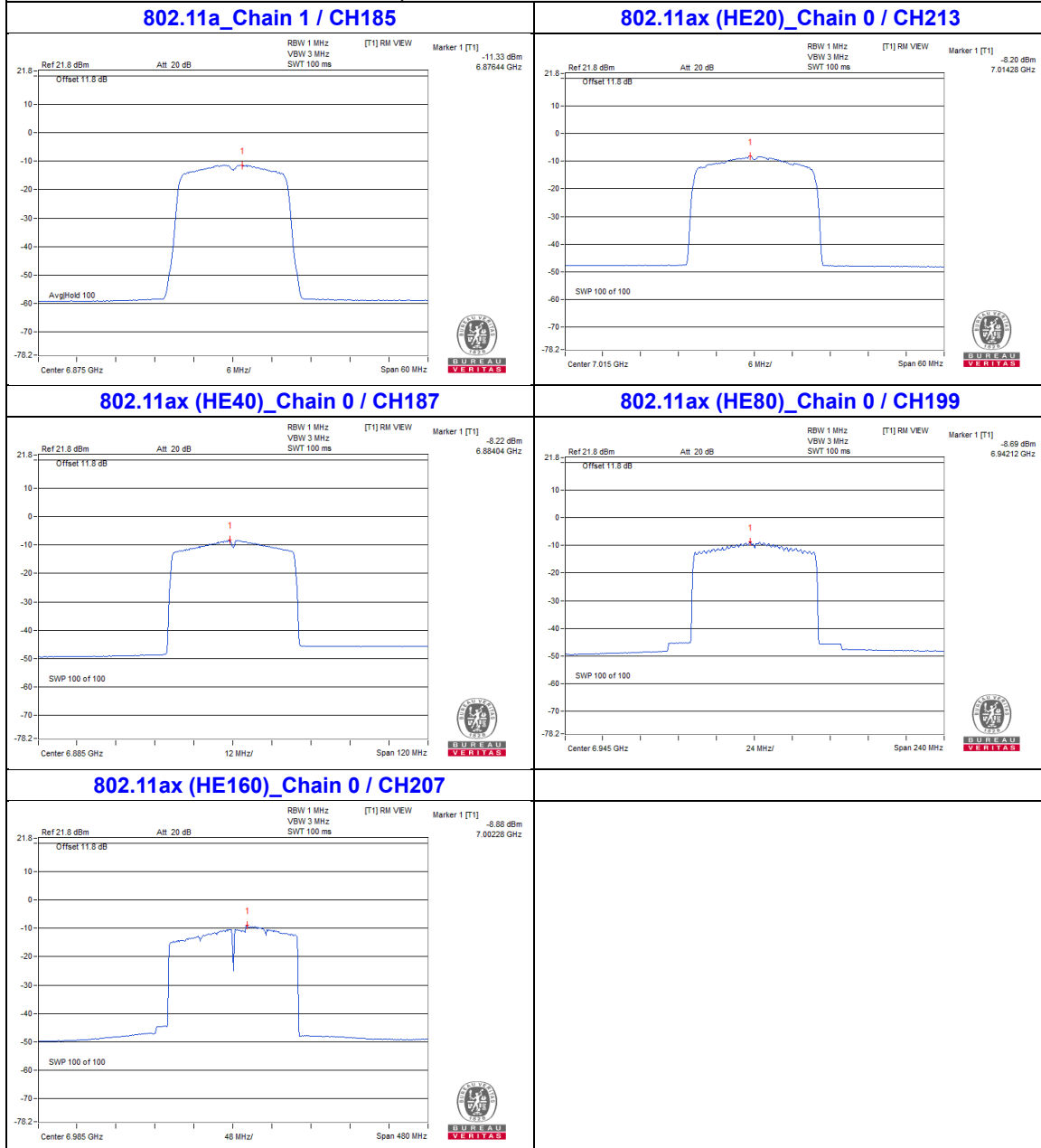
802.11be (EHT320)

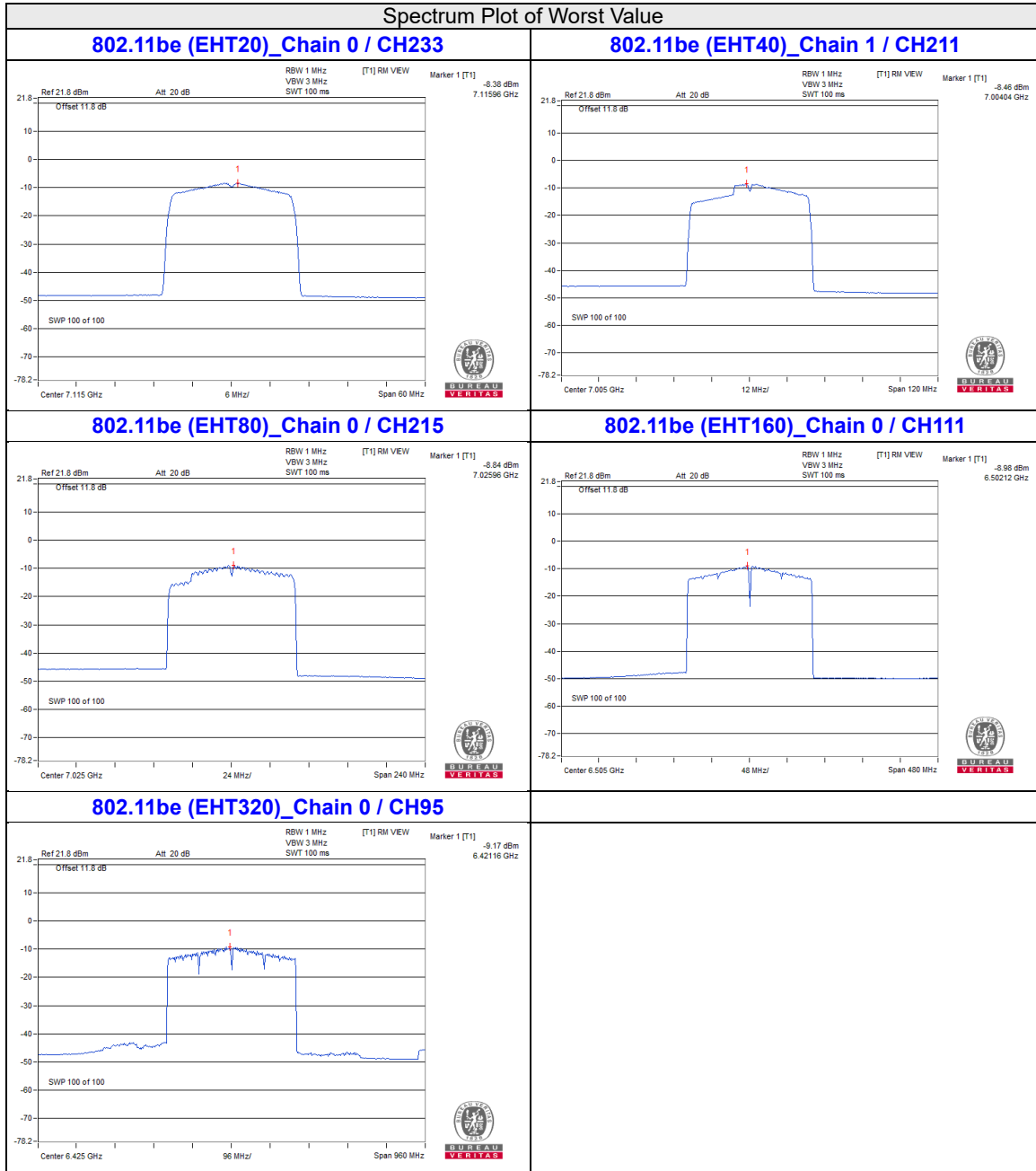
Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Test Result
		Chain 0	Chain 1						
31	6105	-9.95	-10.20	0.75	-6.31	4.76	-1.55	-1	Pass
63	6265	-9.97	-10.16	0.75	-6.30	4.76	-1.54	-1	Pass
95	6425	-9.17	-9.73	0.75	-5.68	4.29	-1.39	-1	Pass
127	6585	-9.56	-10.03	0.75	-6.03	4.61	-1.42	-1	Pass
159	6745	-9.23	-9.84	0.75	-5.76	4.61	-1.15	-1	Pass
191	6905	-9.90	-9.35	0.75	-5.86	4.09	-1.77	-1	Pass

Notes:

1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log (2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
3. For U-NII-5, The directional gain is 4.76 dBi
4. For U-NII-6, The directional gain is 4.29 dBi
5. For U-NII-7, The directional gain is 4.61 dBi
6. For U-NII-8, The directional gain is 4.09 dBi
7. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value



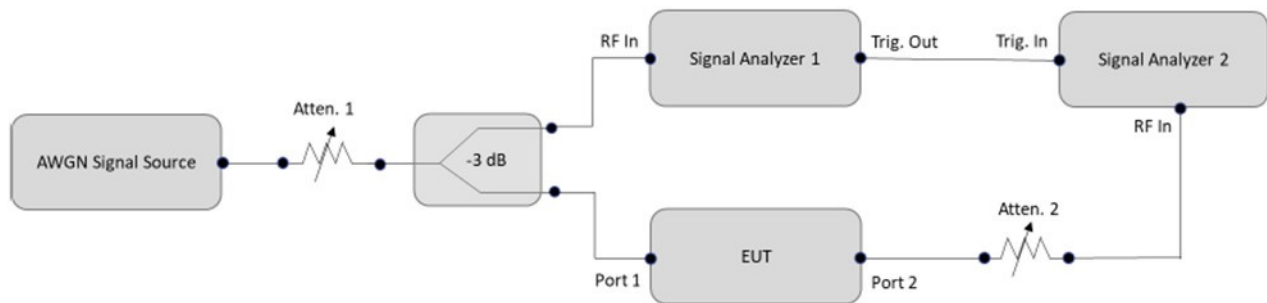


4.7 Contention Based Protocol Measurement

4.7.1 Limits of Contention Based Protocol Measurement

Unlicensed indoor low-power devices must detect co-channel radio frequency power that is at least -62 dBm (The threshold is referenced to a 0 dBi antenna gain.) or lower. Additionally, indoor low-power devices must detect co-channel energy with 90% or greater certainty.

4.7.2 Test Setup



4.7.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Signal Analyzer R&S	FSW8	101497	2021/10/25	2022/10/24
Spectrum Analyzer Keysight	N9030A	MY55410176	2022/6/21	2023/6/20
MXG X-Series RF Vector Signal Generator Keysight	N5182B	MY53052647	2021/11/5	2022/11/4
Frequency Extender KEYSIGHT	N5182BX07	MY59360198	2021/10/22	2022/10/21
Direct Coupler EMCI	CS20-18-436/16	1139	2022/1/10	2023/1/9
Power Splitter/combiner Mini-Circuits	ZN4PD-642W-S+	408501327_03	2021/9/28	2022/9/27
Power Splitter/combiner Mini-Circuits	ZN4PD-642W-S+	408501327_04	2021/9/28	2022/9/27

- NOTE:**
1. The test was performed in Adaptivity room.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. Tested Date: 2022/9/1

4.7.4 Test Procedure

- a. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
- b. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters (set as following section 4.7.5 EUT operating condition).
- c. Determine number of times detection threshold test as following table,

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Same as EUT transmission
$BW_{Inc} < BW_{EUT} \leq 2x BW_{Inc}$	Once	Contained within BW_{EUT}
$2x BW_{Inc} < BW_{EUT} \leq 4x BW_{Inc}$	Twice. (Incumbent transmission is contained within BW_{EUT})	Closely to the lower edge and upper edge of the EUT Channel
$BW_{EUT} > 4x BW_{Inc}$	Three times	Closely to the lower edge ,in the middle and upper edge of the EUT Channel

- d. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step c table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
- e. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
- f. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
- g. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
- h. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
- i. Refer to step c table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step d, choose a different center frequency for the AWGN signal and repeat the process.

4.7.5 EUT Operating Condition

Set the EUT to transmit with a constant duty cycle and relative operating parameters which including power level, operating frequency, modulation and bandwidth.

4.7.6 Test Results (Mode 1)

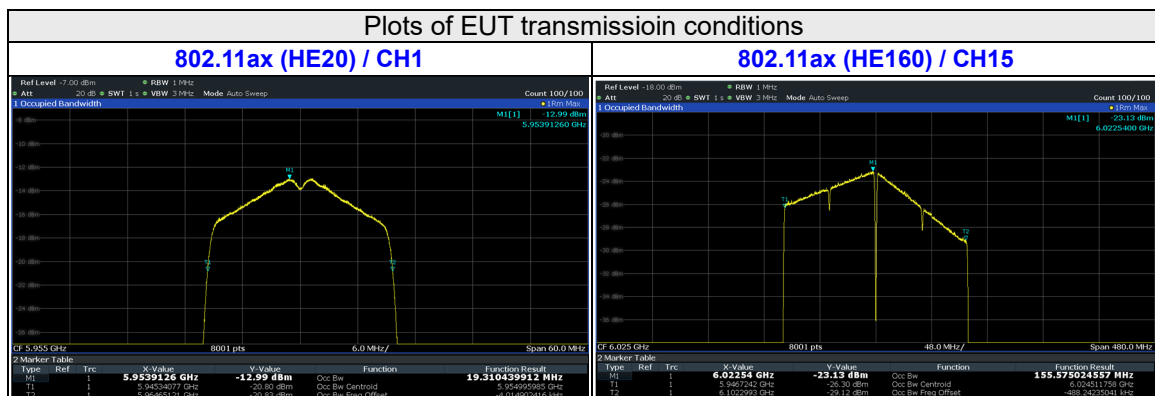
For U-NII-5 band

Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 2)	Adjusted Power (dBm)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	1	5955	5955	-82.09	-4.99	0	-77.1	-62	OFF
					-82.59	-4.99	0	-77.6	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
				5950	-82.09	-4.99	0	-77.1	-62	OFF
					-82.59	-4.99	0	-77.6	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
	160	15	6025	6025	-82.04	-4.99	0	-77.05	-62	OFF
					-82.54	-4.99	0	-77.55	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
				6100	-82.1	-4.99	0	-77.11	-62	OFF
					-82.6	-4.99	0	-77.61	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON

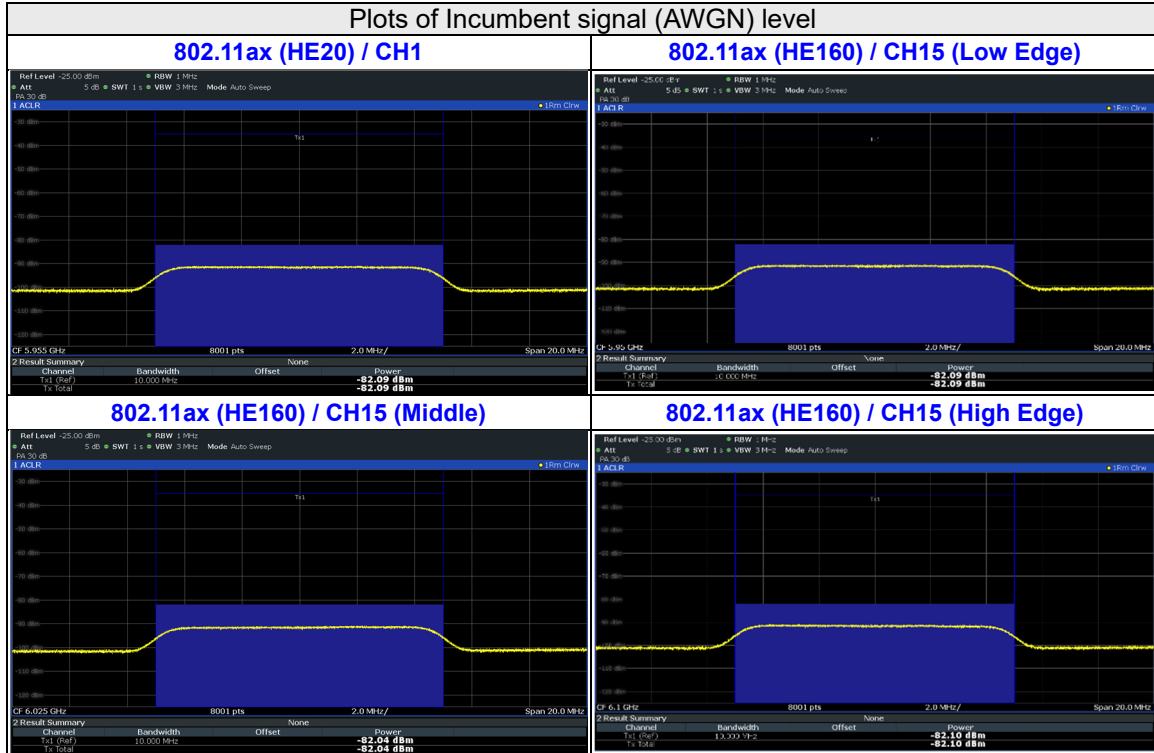
Notes:

- Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
- Antenna gain values include all the applicable path losses.

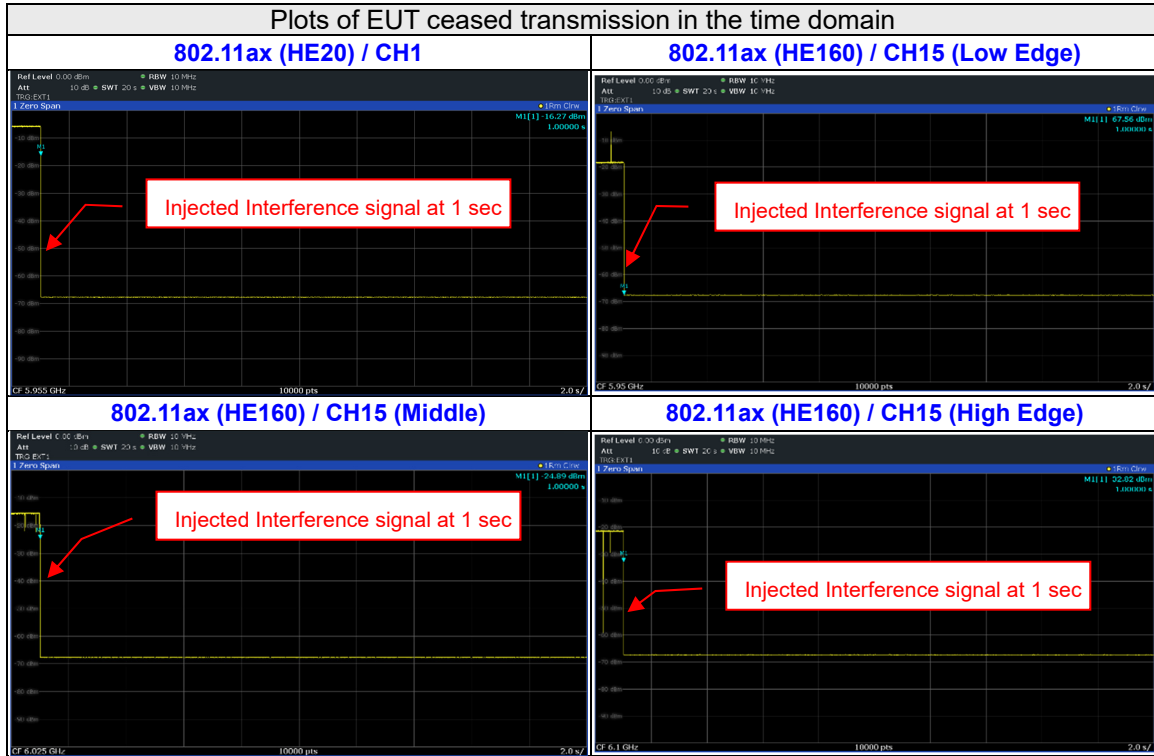
Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6915	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	160	6910	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6985	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		7060	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass



Plots of Incumbent signal (AWGN) level



Plots of EUT ceased transmission in the time domain

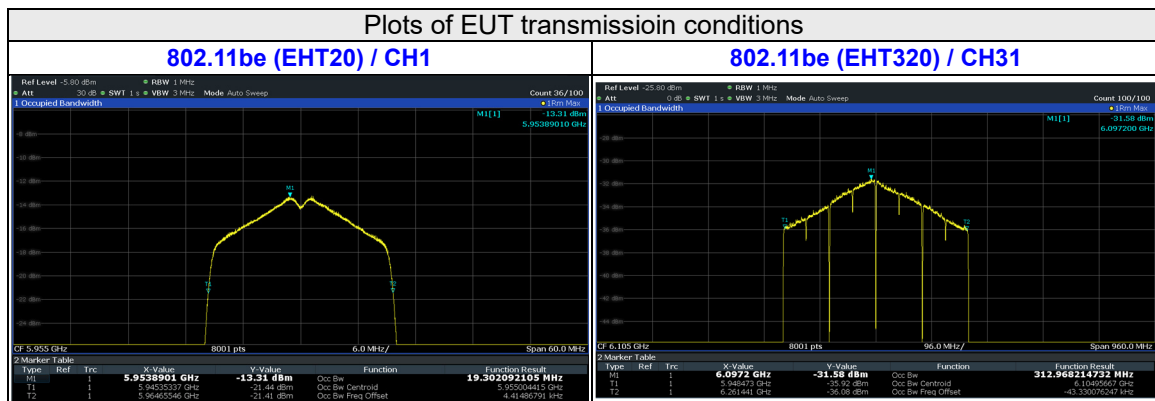


Contention Based Protocol Measurement																
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 2)	Adjusted Power (dBm)	Detection Limit	EUT TX Status						
				Freq. (MHz)	Power (dBm)											
802.11be	20	1	5955	5955	-82.08	-4.99	0	-77.09	-62	OFF						
					-82.58					-77.59	Minimal					
					-86.99					-82	ON					
	320	31	6105	5950	-82.06	-4.99	0	-77.07	-62	OFF						
					-82.56					-77.57	Minimal					
					-86.99					-82	ON					
				6105	-77.08	-4.99	0	-72.09	-62	OFF						
					-77.58					-72.59	Minimal					
					-86.99					-82	ON					
					6260					-82.05	-4.99	0	-77.06	-62	OFF	
										-82.55					-77.56	Minimal
										-86.99					-82	ON

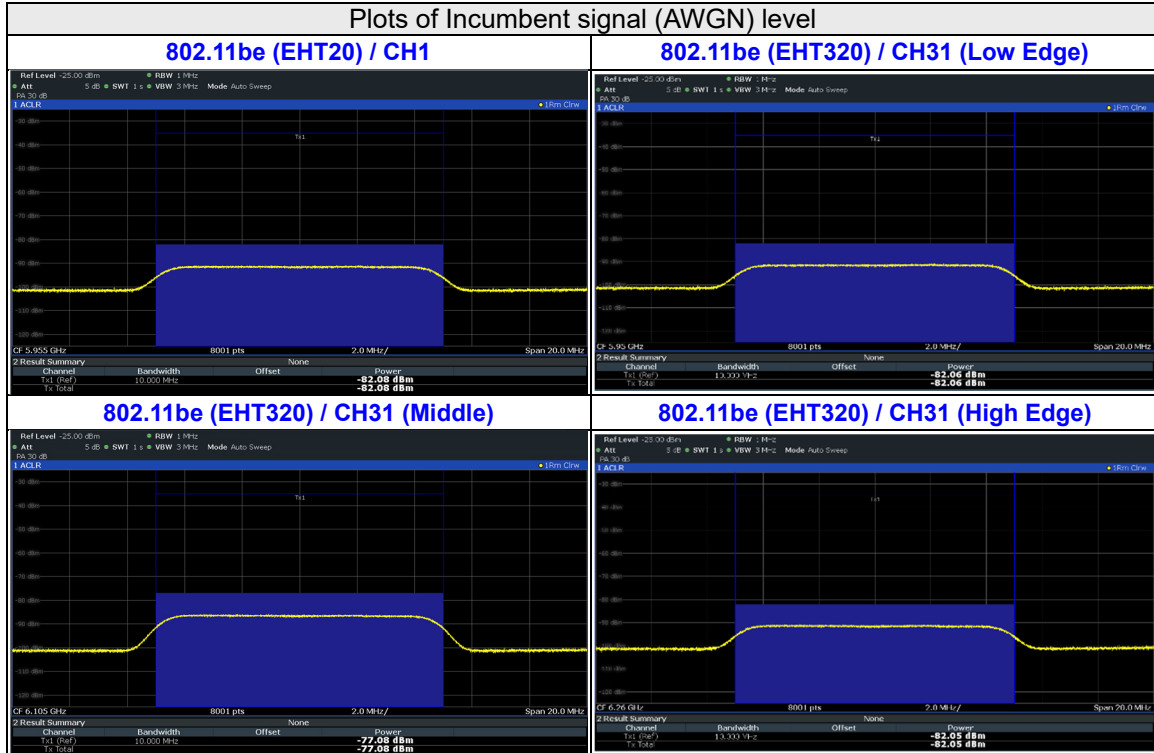
Notes:

- Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
- Antenna gain values include all the applicable path losses.

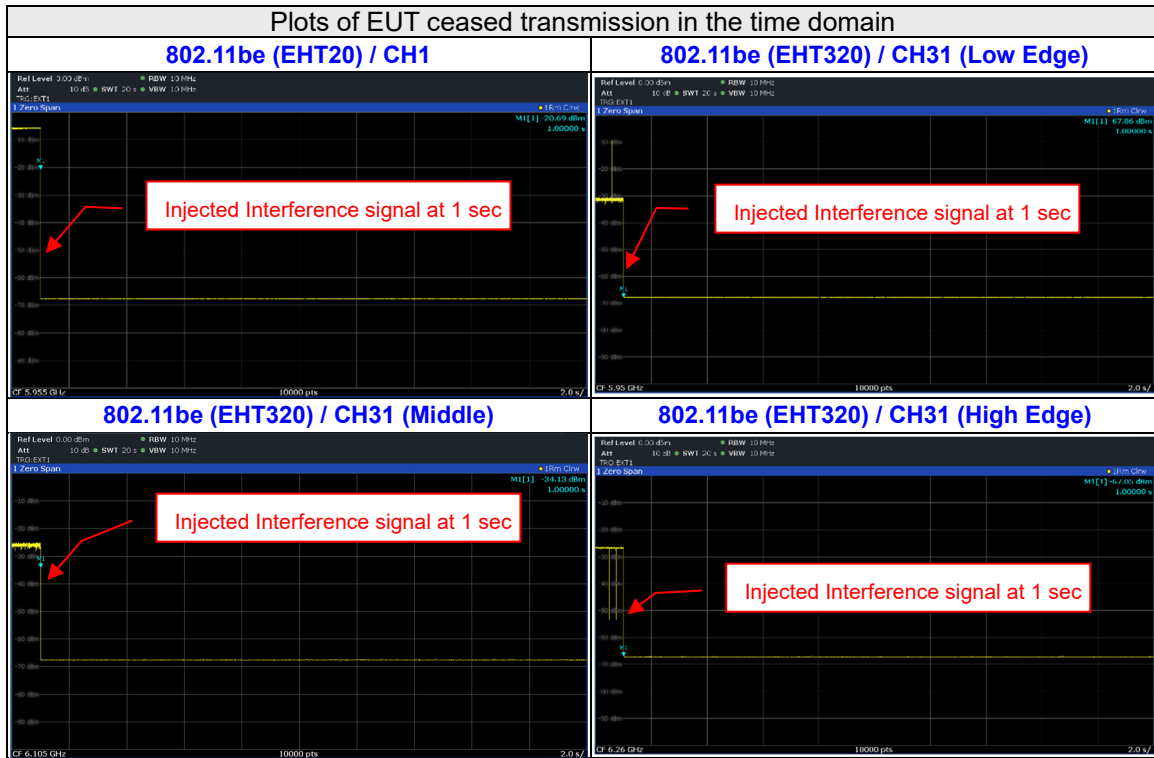
Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11be	20	5955	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	320	5950	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6105	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6260	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass



Plots of Incumbent signal (AWGN) level



Plots of EUT ceased transmission in the time domain



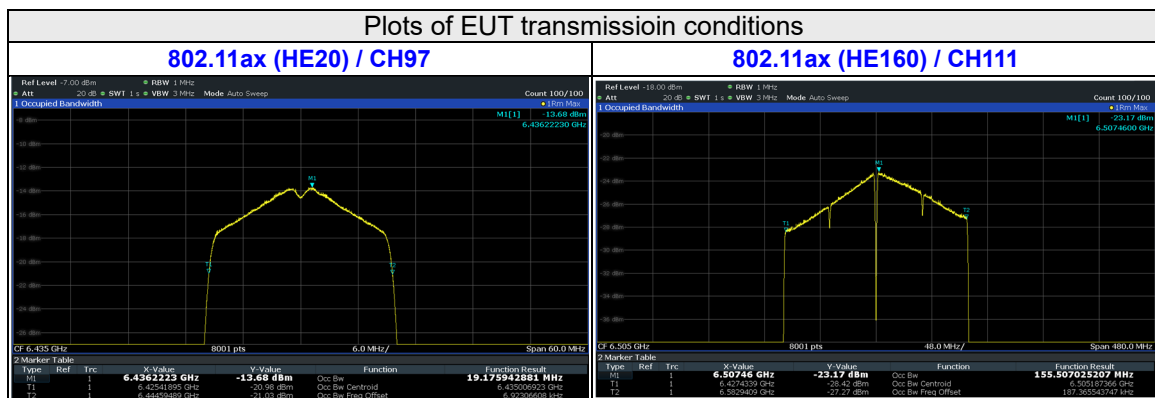
For U-NII-6 band

Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 2)	Adjusted Power (dBm)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11ax	20	97	6435	6435	-82.02	-4.99	0	-77.03	-62	OFF
					-82.52	-4.99	0	-77.53	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
	160	111	6505	6430	-82.03	-4.99	0	-77.04	-62	OFF
					-82.53	-4.99	0	-77.54	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
				6505	-82.26	-4.99	0	-77.27	-62	OFF
					-82.76	-4.99	0	-77.77	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
				6580	-82.09	-4.99	0	-77.1	-62	OFF
					-82.59	-4.99	0	-77.6	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON

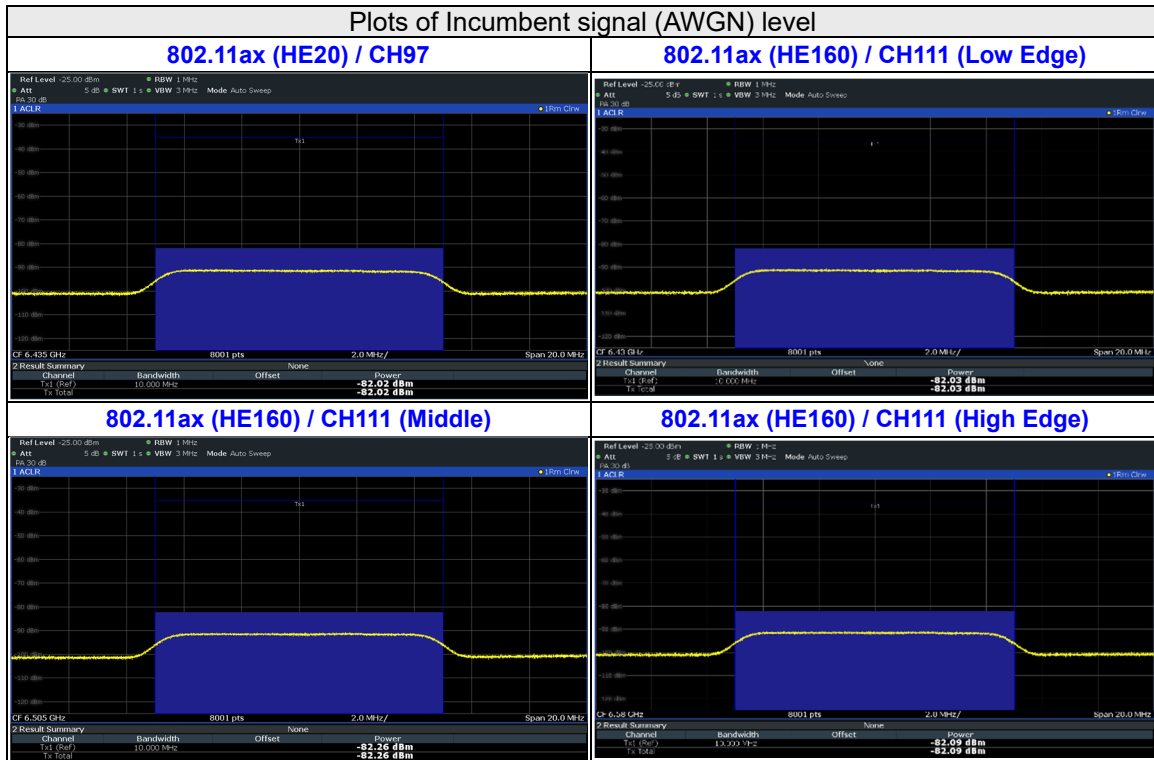
Notes:

- Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
- Antenna gain values include all the applicable path losses.

Contention Based Protocol Detection Probability															
Operation Mode	Channel Bandwidth (MHz)	AWGN Signal Freq. (MHz)	#01	#02	#03	#04	#05	#06	#07	#08	#09	#10	Detection Probability	Detection Limit	Test Result
802.11ax	20	6435	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	160	6430	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6505	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6580	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass



Plots of Incumbent signal (AWGN) level



Plots of EUT ceased transmission in the time domain

