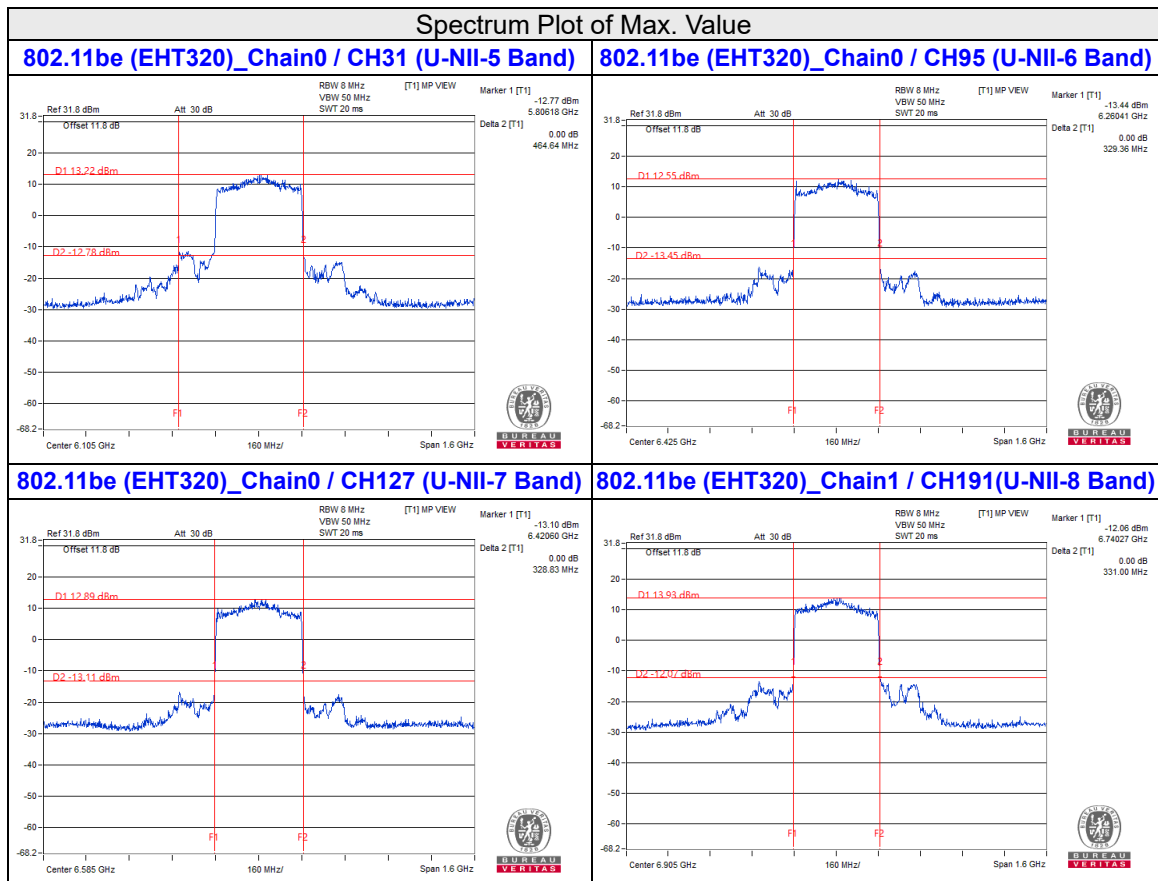
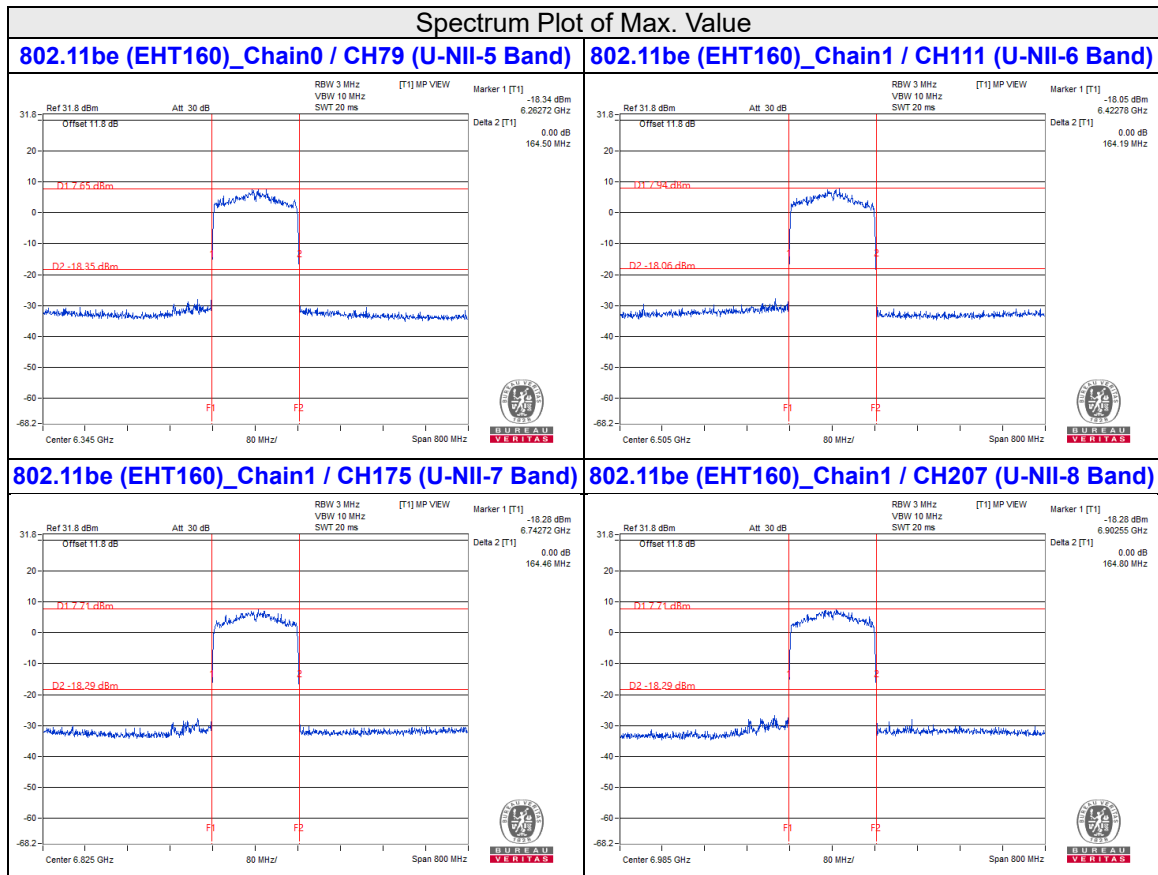


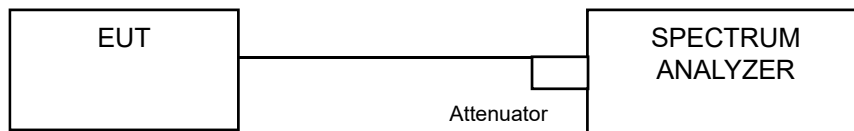


4.6 Peak Power Spectral Density Measurement

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

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz, Set VBW $\geq$ 3 MHz
- Sweep time = auto, trigger set to "free run".
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Record the max value and add 10 log (1/duty cycle)
- 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

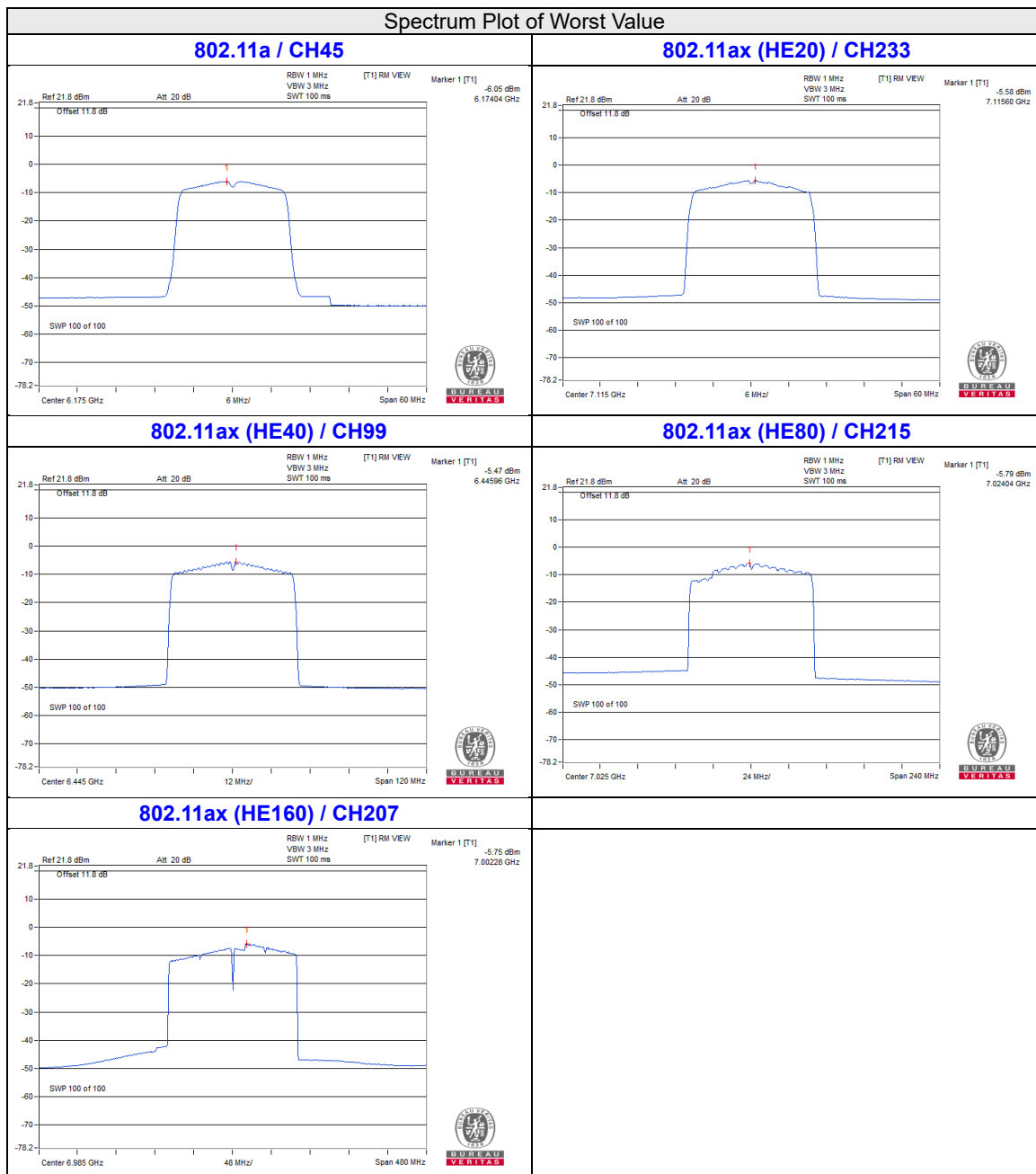
Note: 1. U-NII-5 Directional gain = antenna gain (dBi) = 4.76 dBi

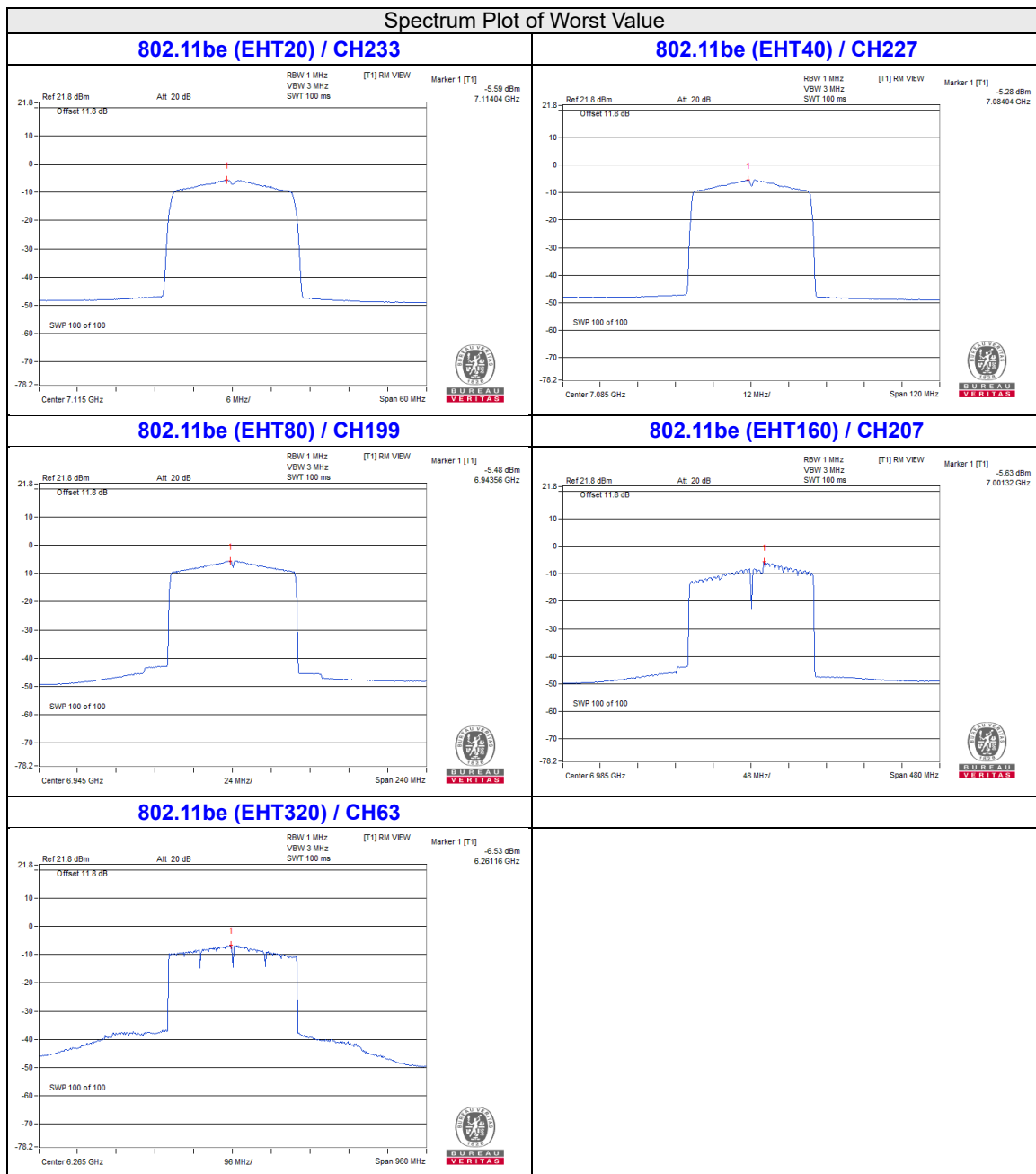
U-NII-6 Directional gain = antenna gain (dBi) = 4.29 dBi

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.





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 + $10 \log (2 \text{ of TX antenna elements} / \text{NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
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 + $10 \log (2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
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 (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 + $10 \log (2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
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 (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:

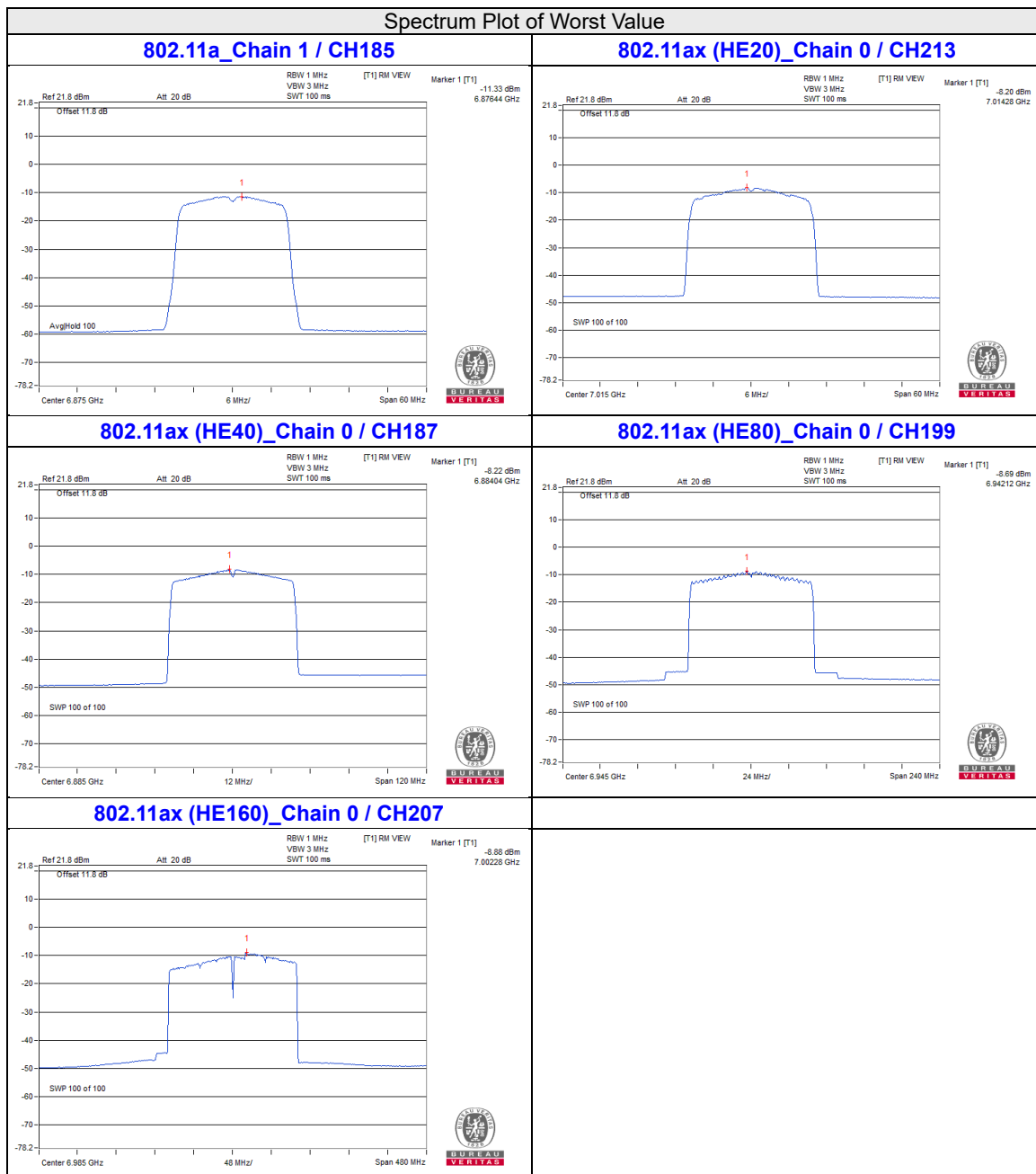
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = gain of antenna element + $10 \log (2 \text{ of TX antenna elements/NSS } 2) = \text{gain of antenna element} + 0 \text{ dB}$
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.

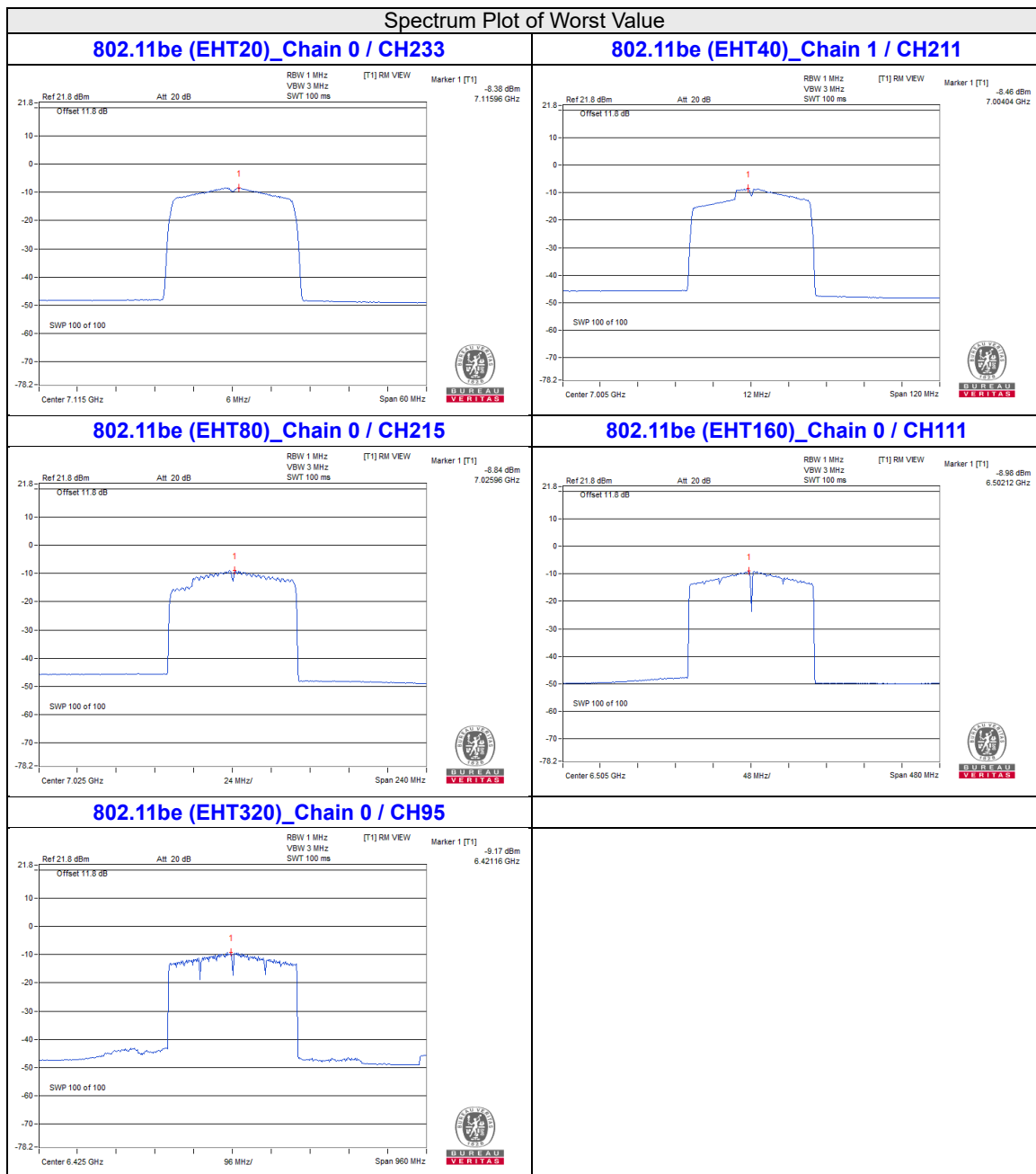
802.11be (EHT320)

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.



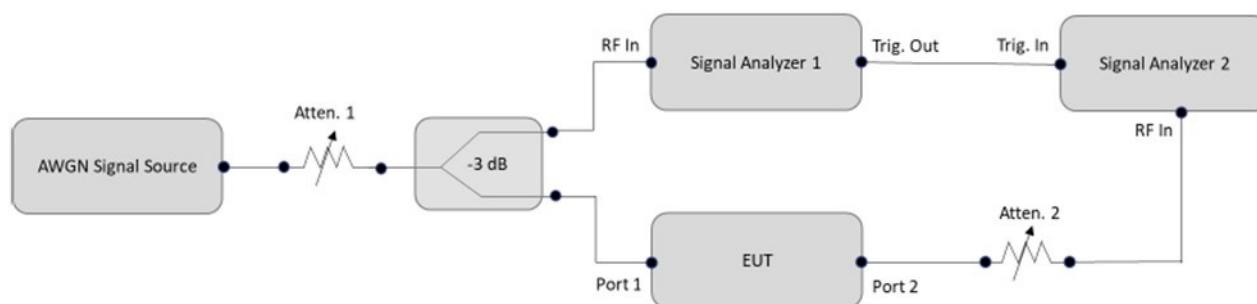


4.7 Contention Based Protocol Measurement

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)

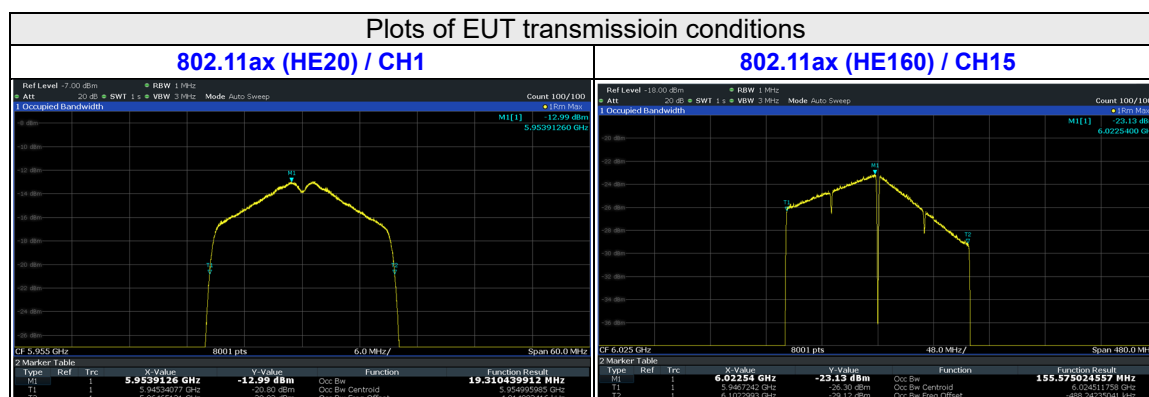
For U-NII-5 band

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
	160	15	5950	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
			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	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

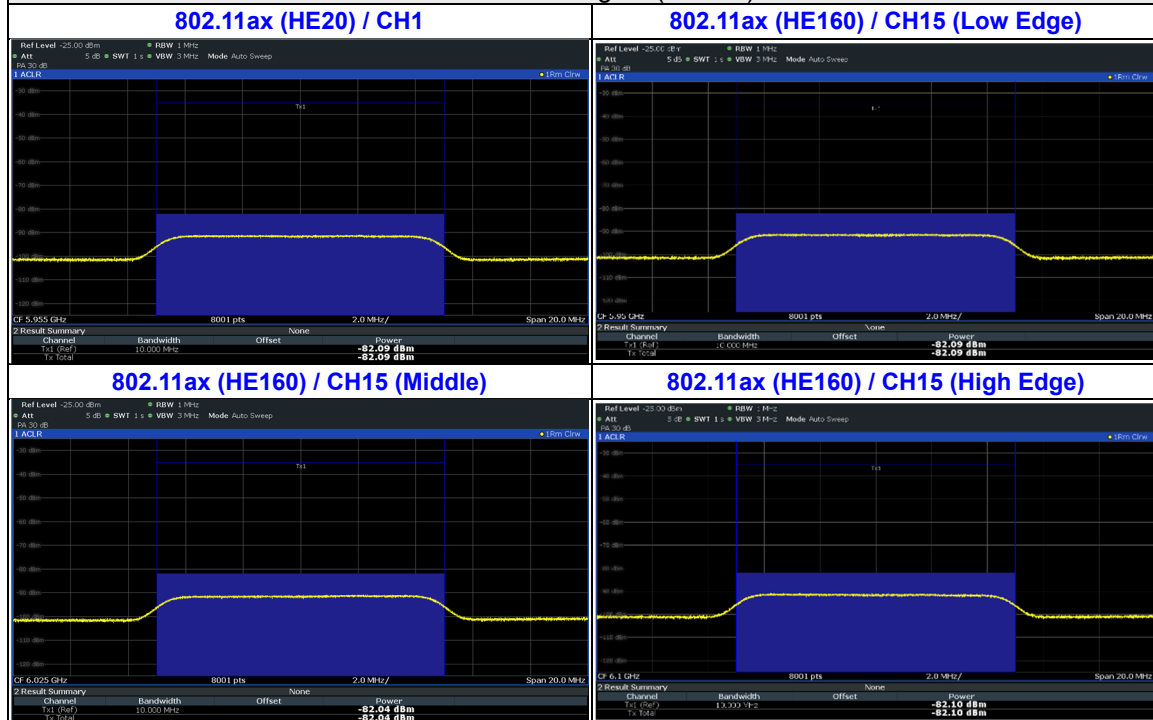
Notes:

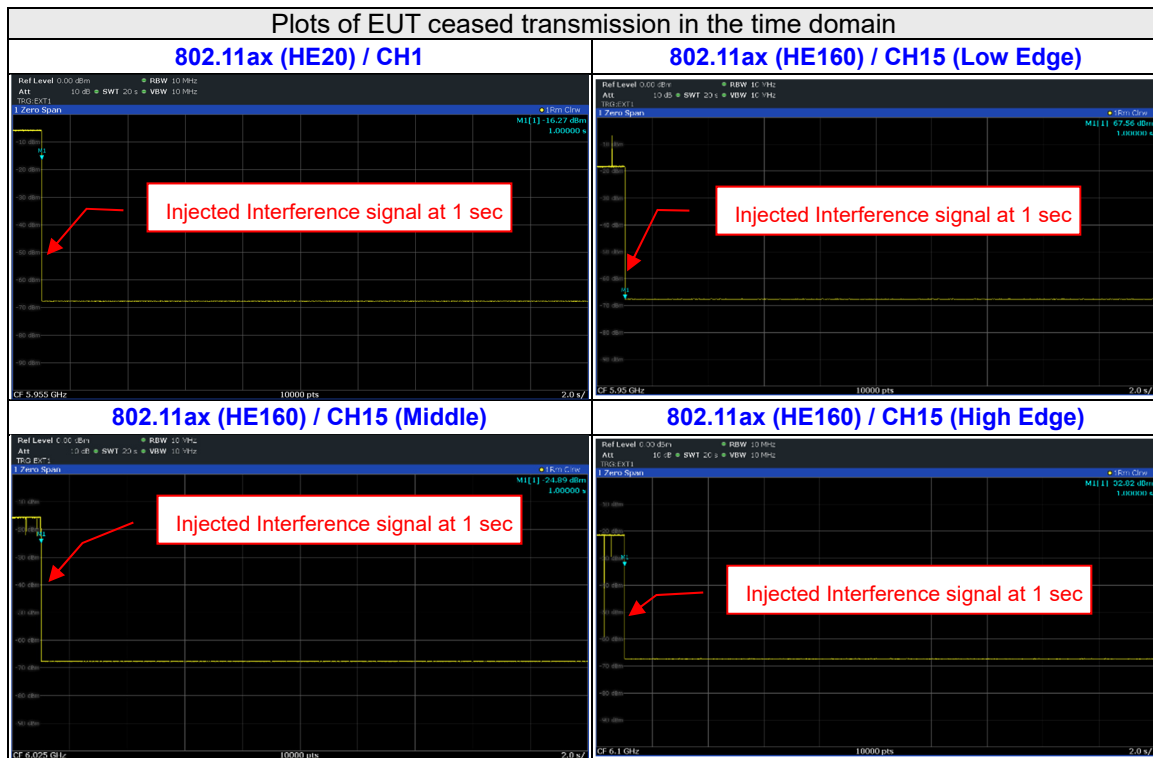
- Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
- Antenna gain values include all the applicable path losses.

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



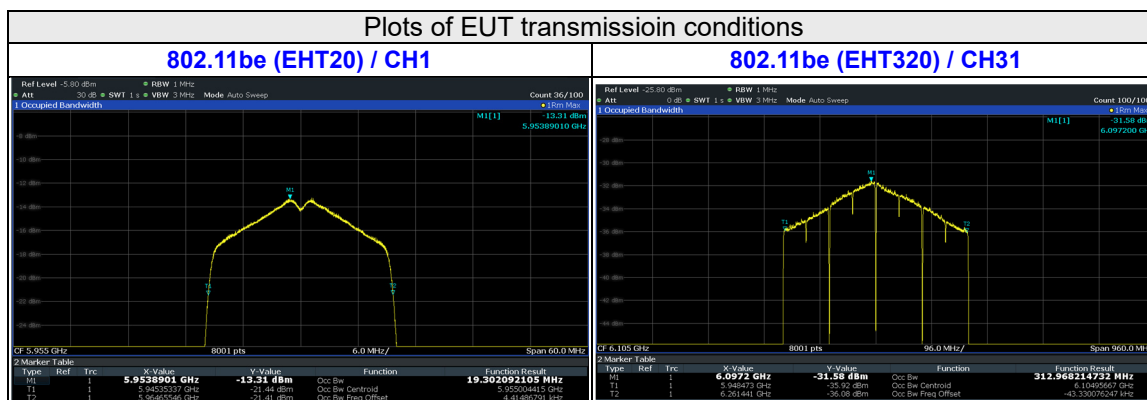


Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 2)	Adjusted Power (dBm)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11be	20	1	5955	5955	-82.08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

Notes:

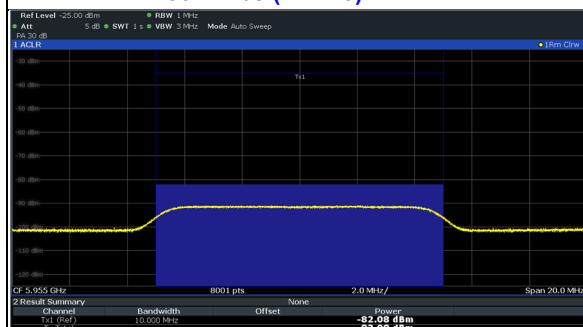
- Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
- Antenna gain values include all the applicable path losses.

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
802.11be	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

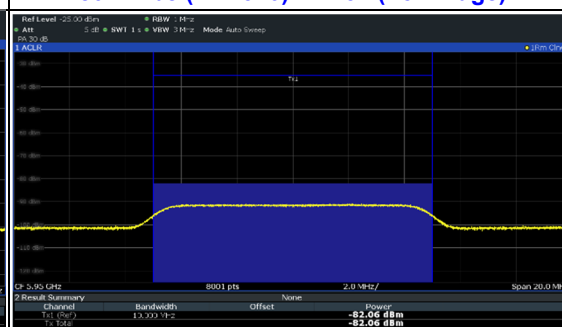


Plots of Incumbent signal (AWGN) level

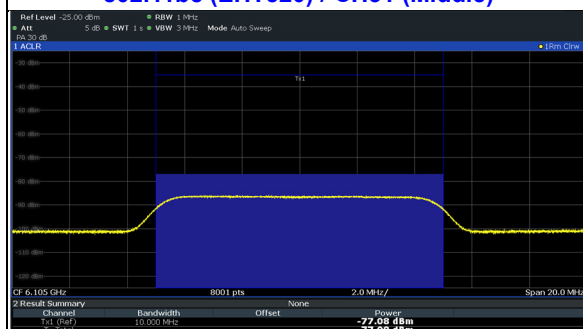
802.11be (EHT20) / CH1



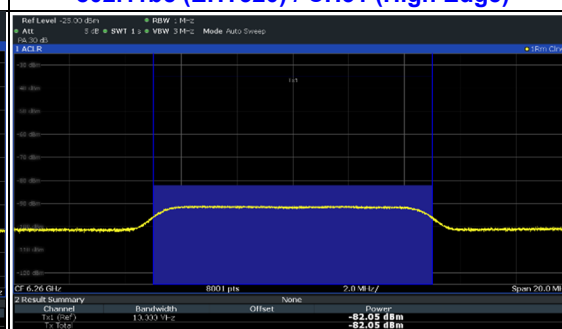
802.11be (EHT320) / CH31 (Low Edge)

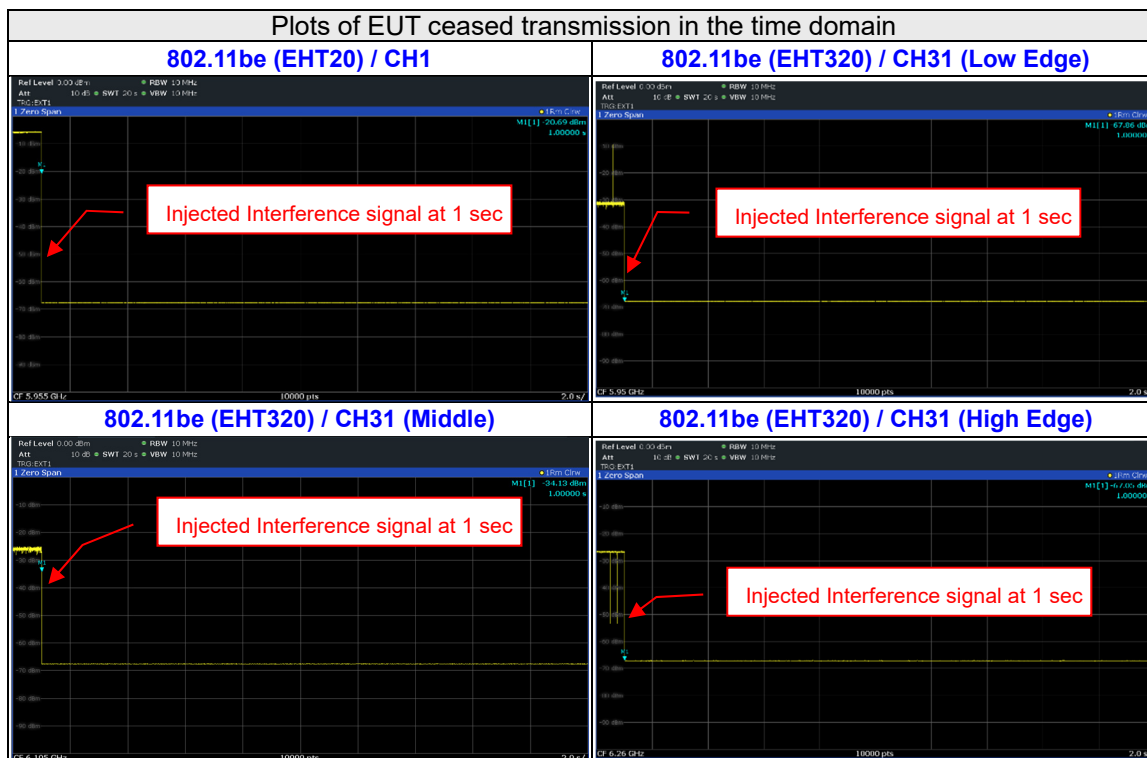


802.11be (EHT320) / CH31 (Middle)



802.11be (EHT320) / CH31 (High Edge)





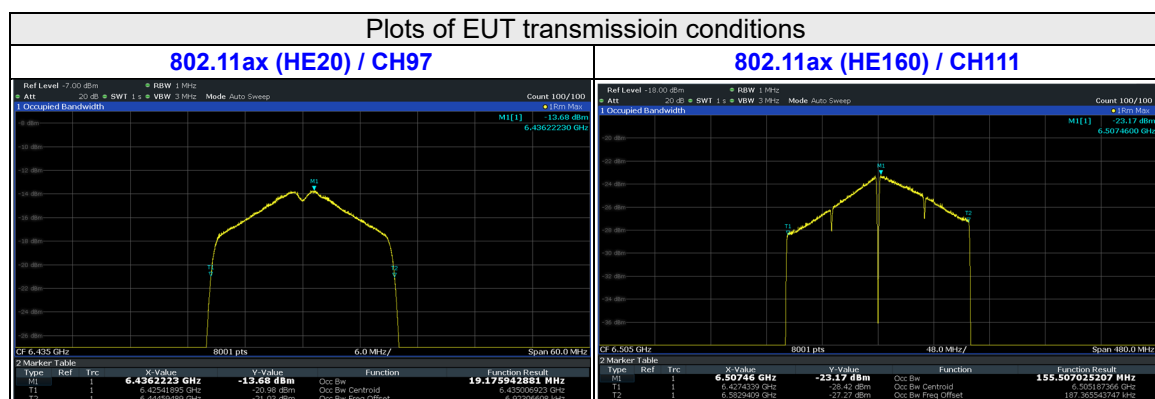
For U-NII-6 band

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	6430	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	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	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:

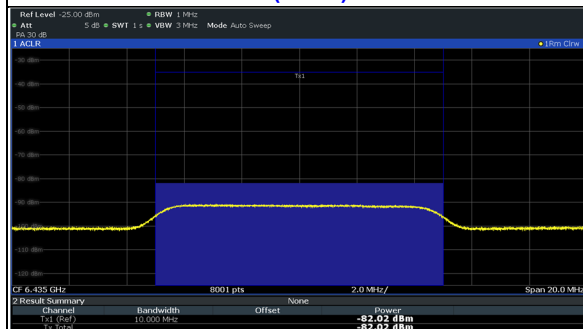
- Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
- Antenna gain values include all the applicable path losses.

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

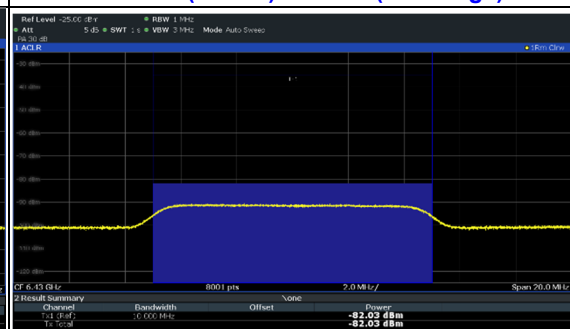


Plots of Incumbent signal (AWGN) level

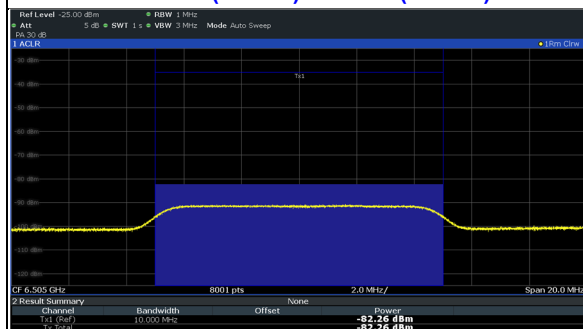
802.11ax (HE20) / CH97



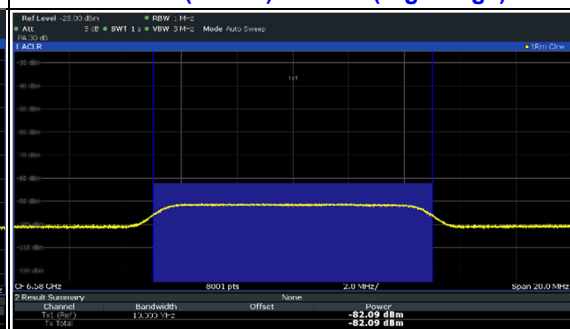
802.11ax (HE160) / CH111 (Low Edge)



802.11ax (HE160) / CH111 (Middle)

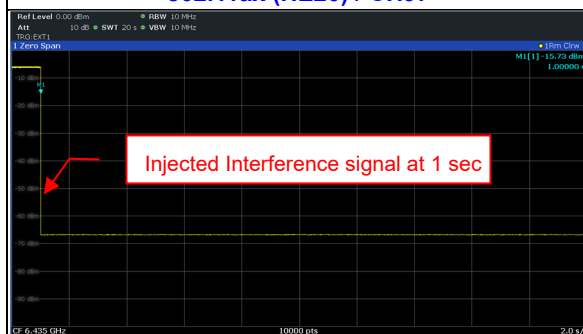


802.11ax (HE160) / CH111 (High Edge)

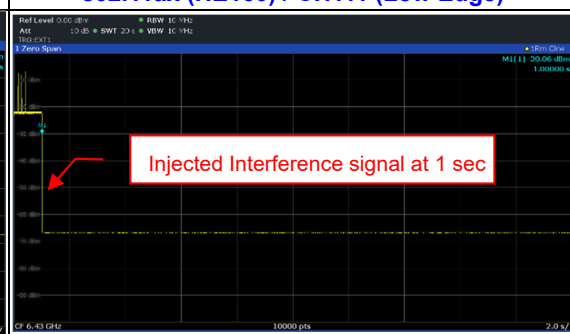


Plots of EUT ceased transmission in the time domain

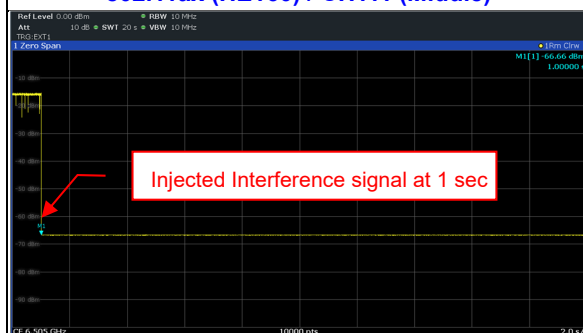
802.11ax (HE20) / CH97



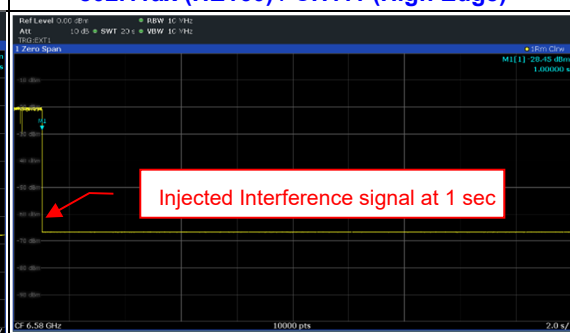
802.11ax (HE160) / CH111 (Low Edge)



802.11ax (HE160) / CH111 (Middle)



802.11ax (HE160) / CH111 (High Edge)

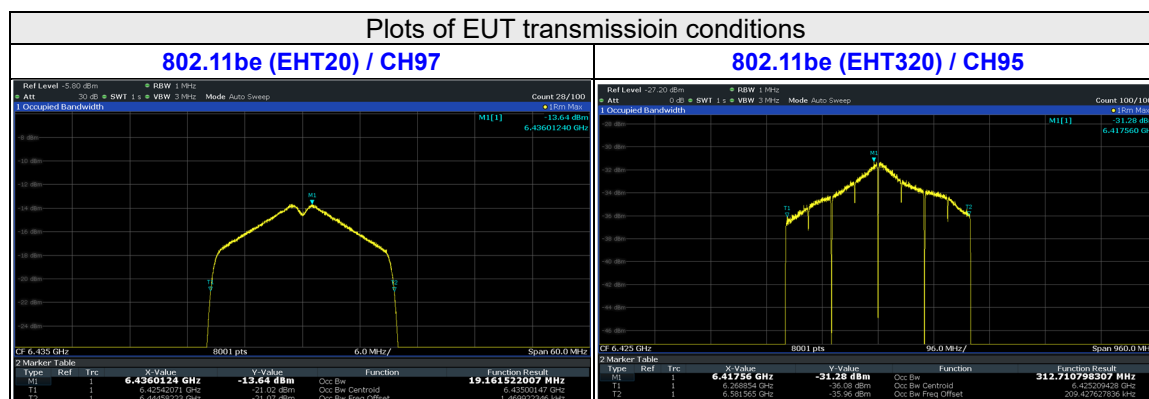


Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 2)	Adjusted Power (dBm)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11be	20	97	6435	6435	-82.03	-4.99	0	-77.04	-62	OFF
					-82.53	-4.99	0	-77.54	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
	320	95	6270	6270	-77.03	-4.99	0	-72.04	-62	OFF
					-77.53	-4.99	0	-72.54	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
			6425	6425	-67.08	-4.99	0	-62.09	-62	OFF
					-67.58	-4.99	0	-62.59	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
			6580	6580	-78.03	-4.99	0	-73.04	-62	OFF
					-78.53	-4.99	0	-73.54	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON

Notes:

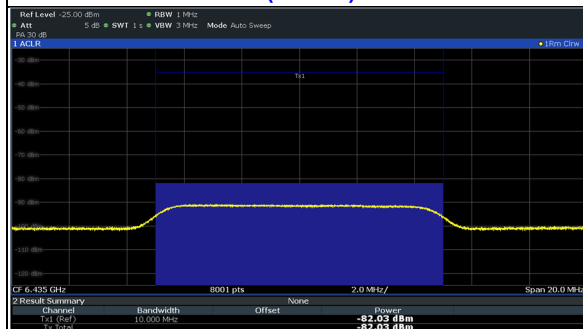
- Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
- Antenna gain values include all the applicable path losses.

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
802.11be	20	6435	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	320	6270	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6425	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

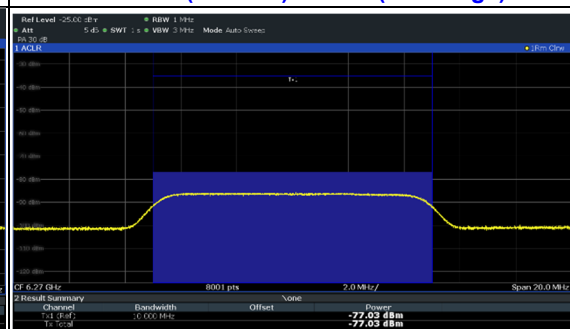


Plots of Incumbent signal (AWGN) level

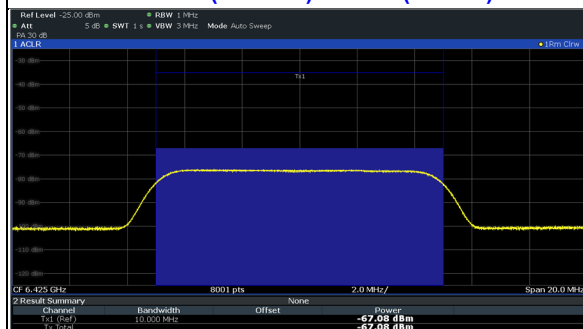
802.11be (EHT20) / CH97



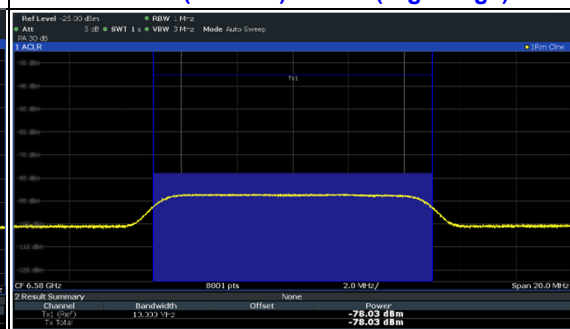
802.11be (EHT320) / CH95 (Low Edge)

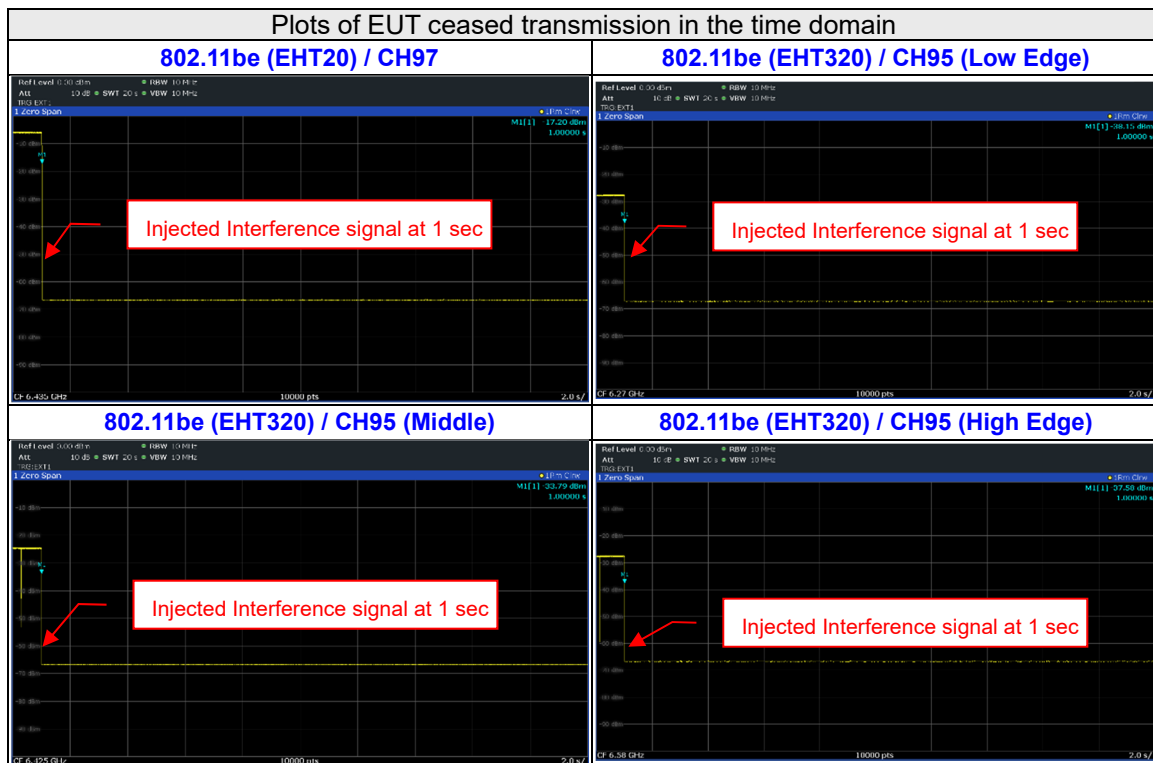


802.11be (EHT320) / CH95 (Middle)



802.11be (EHT320) / CH95 (High Edge)





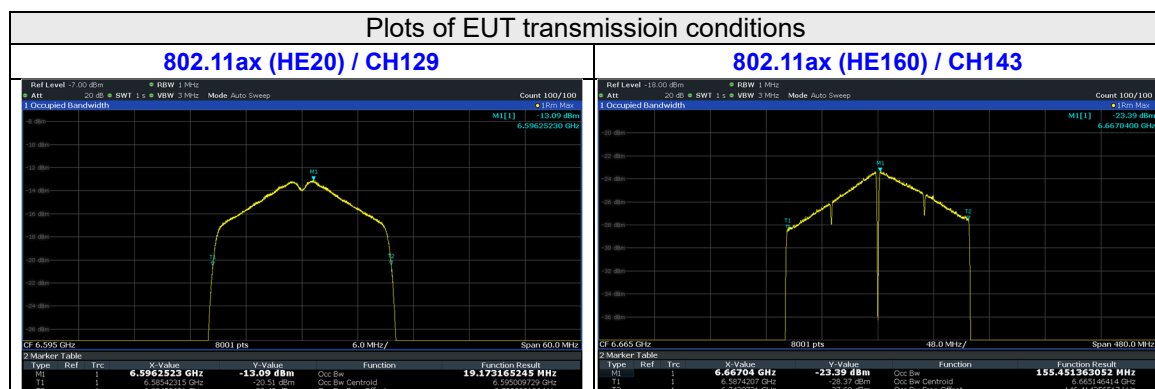
For U-NII-7 band

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	129	6595	6595	-82	-4.99	0	-77.01	-62	OFF
					-82.5	-4.99	0	-77.51	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
	160	143	6665	6590	-82.08	-4.99	0	-77.09	-62	OFF
					-82.58	-4.99	0	-77.59	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
				6665	-82.33	-4.99	0	-77.34	-62	OFF
					-82.83	-4.99	0	-77.84	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
				6740	-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

Notes:

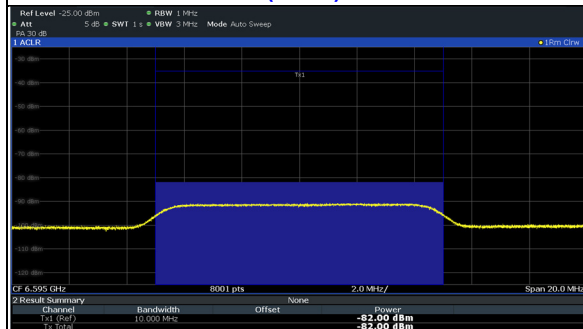
- Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
- Antenna gain values include all the applicable path losses.

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	6595	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	160	6590	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6665	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6740	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass

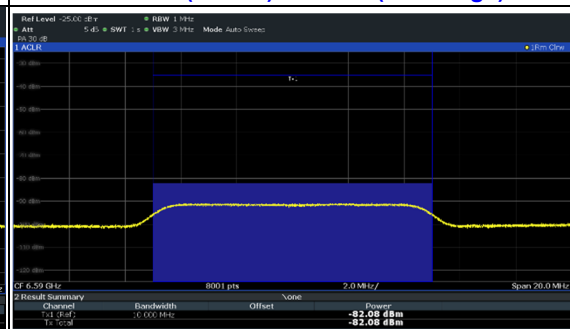


Plots of Incumbent signal (AWGN) level

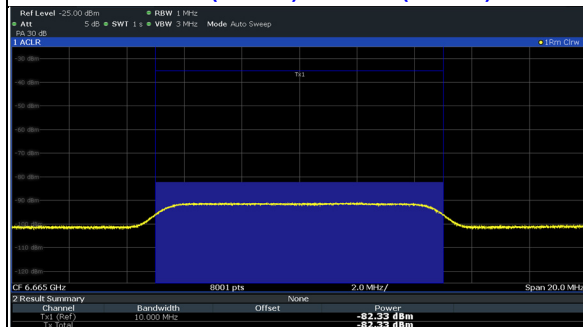
802.11ax (HE20) / CH129



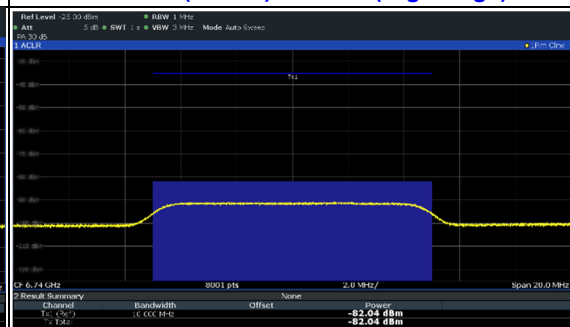
802.11ax (HE160) / CH143 (Low Edge)

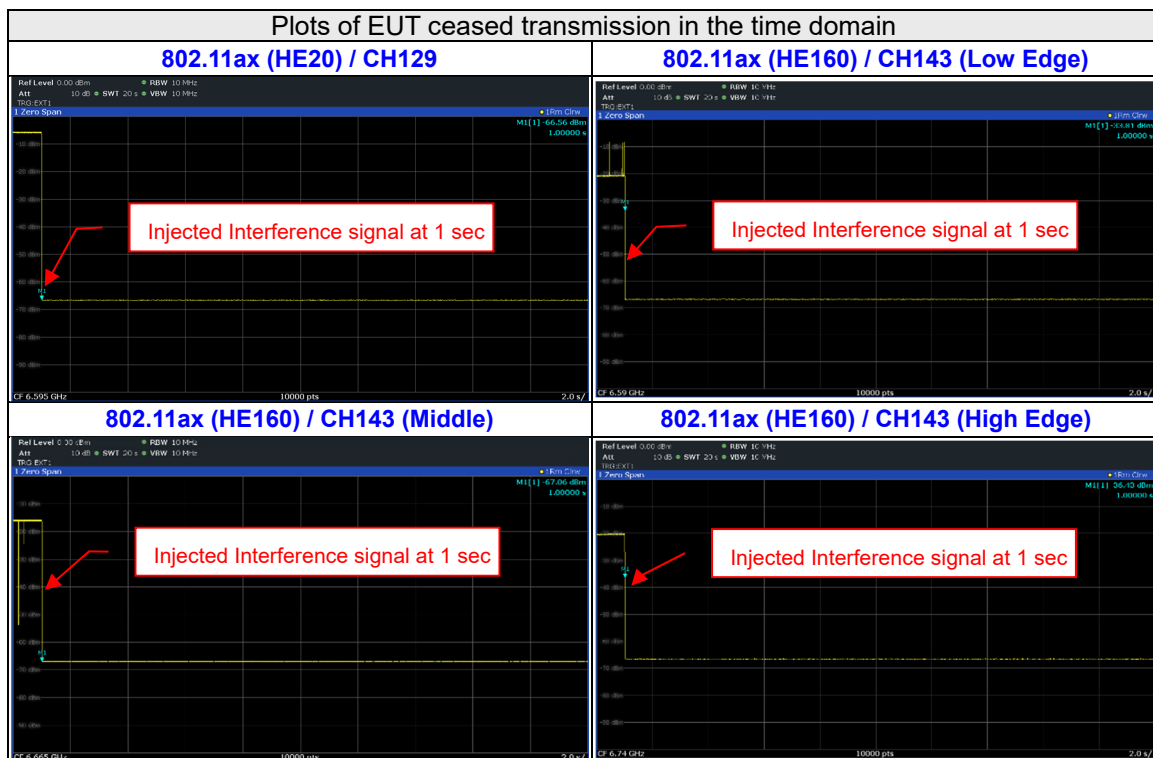


802.11ax (HE160) / CH143 (Middle)



802.11ax (HE160) / CH143 (High Edge)



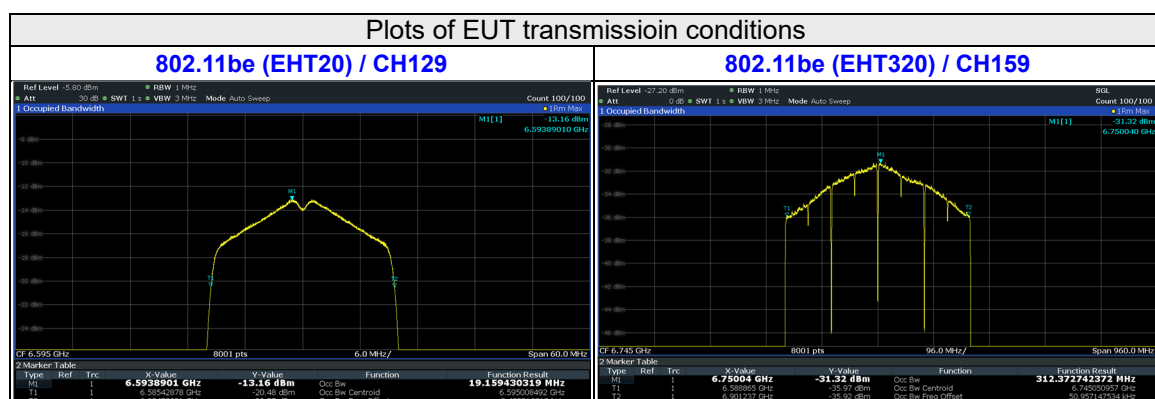


Contention Based Protocol Measurement										
Operation Mode	Channel Bandwidth (MHz)	Channel Number	Channel Freq. (MHz)	Injected Signal (AWGN)		Antenna Gain (dBi)	Path Loss (dB) (Note 2)	Adjusted Power (dBm)	Detection Limit	EUT TX Status
				Freq. (MHz)	Power (dBm)					
802.11be	20	129	6595	6595	-82.02	-4.99	0	-77.03	-62	OFF
					-82.52	-4.99	0	-77.53	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
	320	159	6590	6590	-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
			6745	6745	-74.12	-4.99	0	-69.13	-62	OFF
					-74.62	-4.99	0	-69.63	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
			6900	6900	-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

Notes:

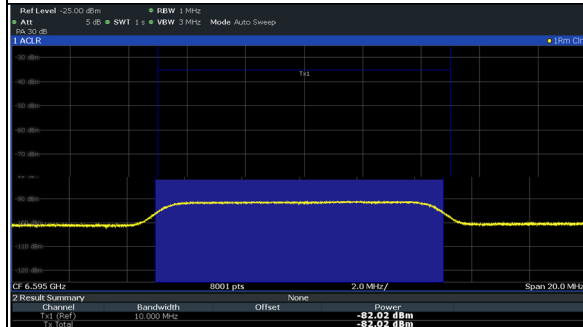
- Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
- Antenna gain values include all the applicable path losses.

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	6595	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
	320	6590	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6745	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass
		6900	v	v	v	v	v	v	v	v	v	v	100%	90%	Pass

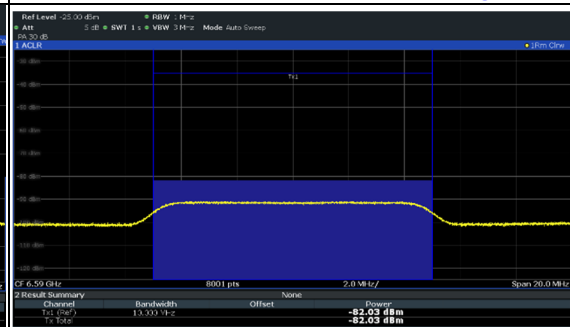


Plots of Incumbent signal (AWGN) level

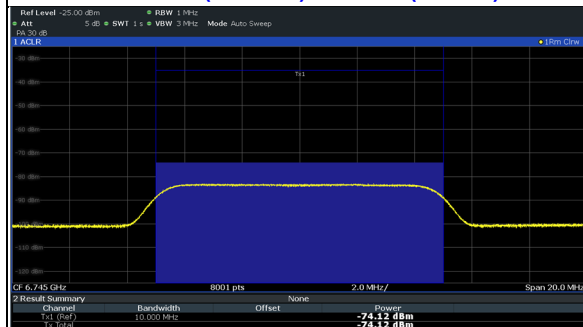
802.11be (EHT20) / CH129



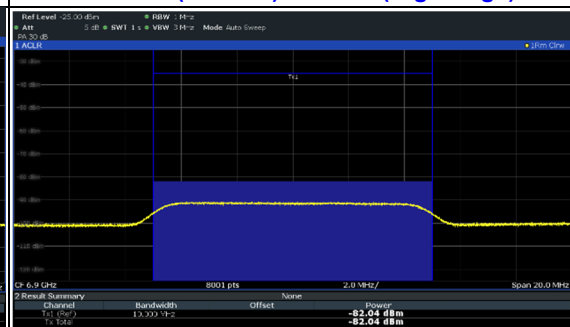
802.11be (EHT320) / CH159 (Low Edge)

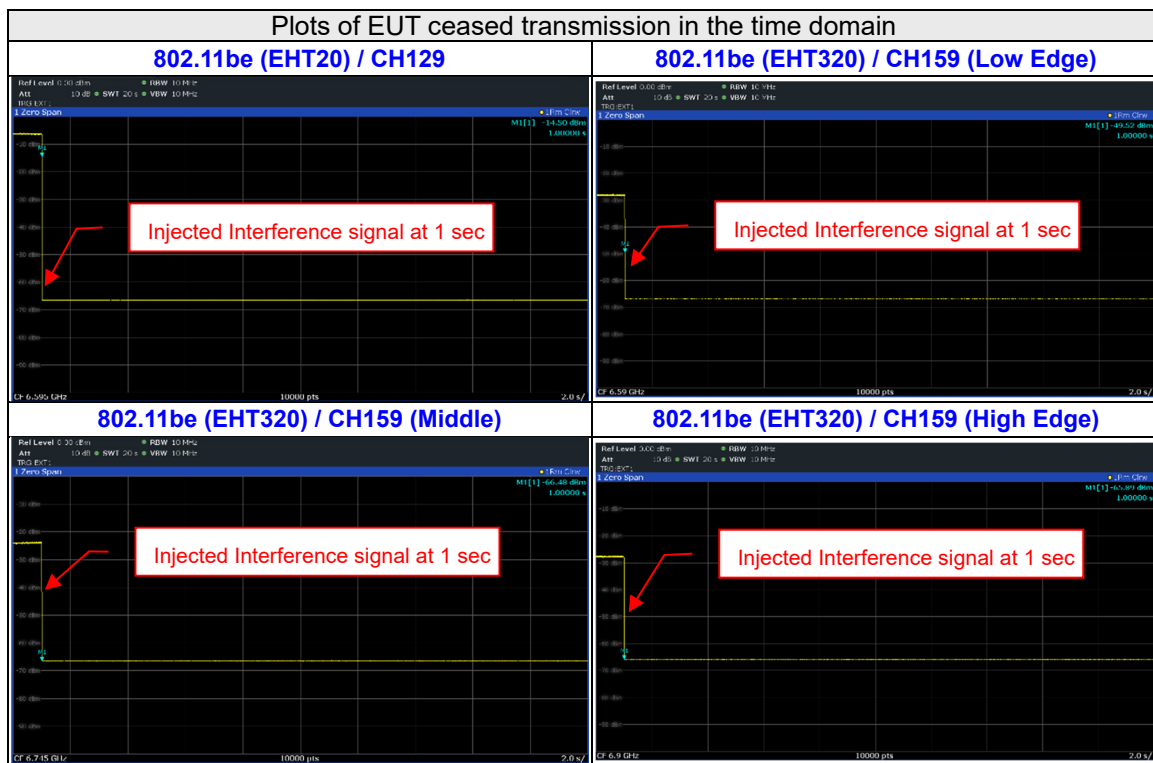


802.11be (EHT320) / CH159 (Middle)



802.11be (EHT320) / CH159 (High Edge)





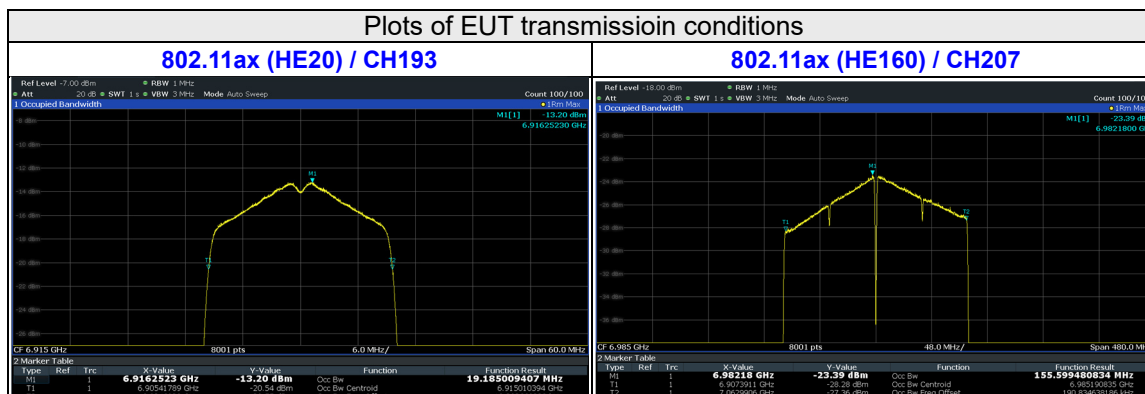
For U-NII-8 band

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	193	6915	6915	-82.05	-4.99	0	-77.06	-62	OFF
					-82.55	-4.99	0	-77.56	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
	160	207	6910	6910	-82.08	-4.99	0	-77.09	-62	OFF
					-82.58	-4.99	0	-77.59	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
			6985	6985	-82.07	-4.99	0	-77.08	-62	OFF
					-82.57	-4.99	0	-77.58	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON
			7060	7060	-82.06	-4.99	0	-77.07	-62	OFF
					-82.56	-4.99	0	-77.57	-62	Minimal
					-86.99	-4.99	0	-82	-62	ON

Notes:

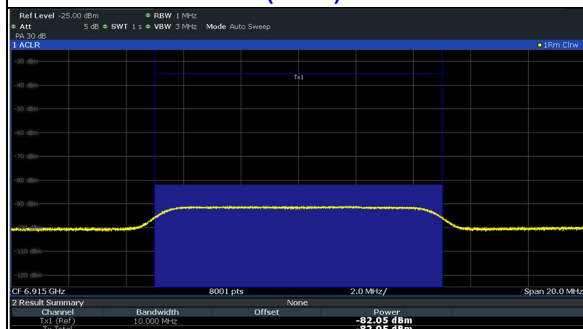
- Adjusted Power (dBm) = Injected Signal (AWGN) Power (dBm) - Antenna Gain (dBi) + Path Loss (dB)
- Antenna gain values include all the applicable path losses.

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

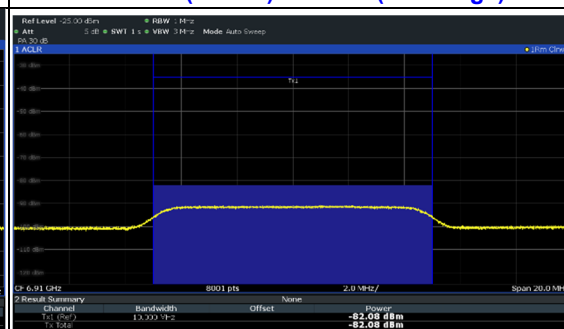


Plots of Incumbent signal (AWGN) level

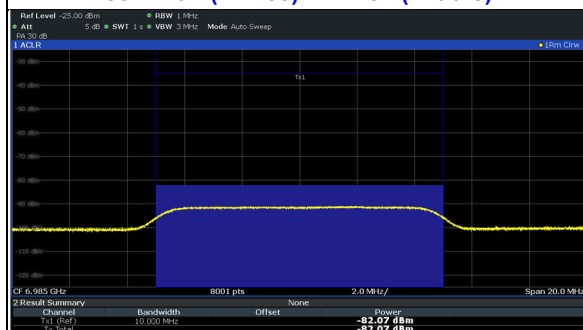
802.11ax (HE20) / CH193



802.11ax (HE160) / CH207 (Low Edge)



802.11ax (HE160) / CH207 (Middle)



802.11ax (HE160) / CH207 (High Edge)

