

802.11ac (VHT20)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	18.92	18.93	156.146	21.94	24.00	Pass
40	5200	19.66	19.52	182.006	22.60	24.00	Pass
48	5240	19.84	19.82	192.323	22.84	24.00	Pass
52	5260	19.71	19.73	187.513	22.73	24.00	Pass
60	5300	19.38	19.44	174.598	22.42	24.00	Pass
64	5320	19.45	19.34	174.006	22.41	24.00	Pass
100	5500	18.46	18.43	139.808	21.46	24.00	Pass
116	5580	19.57	19.66	183.043	22.63	24.00	Pass
140	5700	16.13	16.02	81.015	19.09	24.00	Pass
144	5720 (For U-NII-2C)	19.35	19.33	171.803	22.35	24.00	Pass
144	5720 (For U-NII-3)	13.92	14.05	50.070	17.00	30.00	Pass
149	5745	19.94	20.04	199.553	23.00	30.00	Pass
157	5785	19.74	20.11	196.754	22.94	30.00	Pass
165	5825	19.86	19.92	195.003	22.90	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(26.37) = 25.21 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.68) = 27.30 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(36.61) = 26.63 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(37.68) = 26.76 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(39.87) = 27.00 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(28.58) = 25.56 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5699.60) = 25.04 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(26.15) = 25.17 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.13) = 27.24 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(39.89) = 27.00 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(35.33) = 26.48 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(29.65) = 25.72 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(28.95) = 25.61 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5697.16) = 25.44 > 24\text{dBm}$

802.11ac (VHT40)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	17.25	17.13	104.730	20.20	24.00	Pass
46	5230	19.54	19.42	177.448	22.49	24.00	Pass
54	5270	19.78	19.72	188.817	22.76	24.00	Pass
62	5310	16.54	16.45	89.239	19.51	24.00	Pass
102	5510	16.63	16.52	90.900	19.59	24.00	Pass
110	5550	19.31	19.22	168.870	22.28	24.00	Pass
134	5670	18.29	18.13	132.466	21.22	24.00	Pass
142	5710 (For U-NII-2C)	20.01	20.19	204.703	23.11	24.00	Pass
142	5710 (For U-NII-3)	9.41	9.70	18.062	12.57	30.00	Pass
151	5755	19.51	19.72	183.087	22.63	30.00	Pass
159	5795	19.77	20.14	198.118	22.97	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(67.37) = 29.28 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(50.58) = 28.03 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(55.34) = 28.43 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(54.24) = 28.34 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(58.00) = 28.63 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(5725.00 - 5675.11) = 27.98 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(55.94) = 28.47 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(51.93) = 28.15 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(52.87) = 28.23 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(50.86) = 28.06 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(54.79) = 28.38 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(5725.00 - 5663.90) = 28.86 > 24\text{dBm}$

802.11ac (VHT80)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	14.22	14.31	53.401	17.28	24.00	Pass
58	5290	15.18	15.25	66.458	18.23	24.00	Pass
106	5530	16.47	16.50	89.029	19.50	24.00	Pass
122	5610	17.99	18.16	128.414	21.09	24.00	Pass
138	5690 (For U-NII-2C)	19.01	19.11	161.086	22.07	24.00	Pass
138	5690 (For U-NII-3)	4.93	5.07	6.325	8.01	30.00	Pass
155	5775	17.91	17.98	124.607	20.96	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(94.60) = 30.75 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(91.51) = 30.61 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(81.26) = 30.09 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(5725.00 - 5633.08) = 30.63 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(94.94) = 30.77 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(98.17) = 30.91 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.46) = 30.16 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(5725.00 - 5614.63) = 31.43 > 24\text{dBm}$

802.11ac (VHT160)

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
*50	5250 (For U-NII-1)	14.09	14.33	52.747	17.22	24.00	Pass
*50	5250 (For U-NII-2A)	15.22	15.05	65.255	18.15	24.00	Pass
114	5570	13.53	13.31	43.971	16.43	24.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(90.06) = 30.54 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(174.20) = 33.41 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(90.07) = 30.54 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(173.92) = 33.40 > 24\text{dBm}$

802.11ax (HE20)_RU26

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	12.31	12.17	33.503	15.25	24.00	Pass
64	5320	11.74	11.99	30.740	14.88	24.00	Pass
100	5500	11.64	11.81	29.759	14.74	24.00	Pass
140	5700	11.61	11.83	29.728	14.73	24.00	Pass
149	5745	19.92	20.07	199.800	23.01	30.00	Pass
165	5825	19.88	19.95	196.130	22.93	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(20.97) = 24.21 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.72) = 24.16 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(20.85) = 24.19 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(20.67) = 24.15 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.64) = 24.14 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(20.63) = 24.14 > 24\text{dBm}$

802.11ax (HE20)_RU52

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
48	5240	14.65	14.42	56.844	17.55	24.00	Pass
165	5825	19.88	19.96	196.358	22.93	30.00	Pass

802.11ax (HE20)_ RU106

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	16.65	16.51	91.009	19.59	24.00	Pass
64	5320	16.61	16.87	94.455	19.75	24.00	Pass
100	5500	16.09	16.16	81.949	19.14	24.00	Pass
140	5700	14.89	14.96	62.165	17.94	24.00	Pass
149	5745	19.89	20.04	198.424	22.98	30.00	Pass
165	5825	19.88	19.95	196.130	22.93	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(21.55) = 24.33 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.37) = 24.29 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.84) = 24.39 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(20.90) = 24.20 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(20.49) = 24.11 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(20.89) = 24.19 > 24\text{dBm}$

802.11ax (HE20)_Full RU

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	18.99	18.97	158.136	21.99	24.00	Pass
40	5200	19.74	19.61	185.600	22.69	24.00	Pass
48	5240	19.94	19.96	197.711	22.96	24.00	Pass
52	5260	19.81	19.85	192.324	22.84	24.00	Pass
60	5300	19.53	19.59	180.734	22.57	24.00	Pass
64	5320	19.57	19.48	179.289	22.54	24.00	Pass
100	5500	18.65	18.67	146.903	21.67	24.00	Pass
116	5580	19.67	19.74	186.872	22.72	24.00	Pass
140	5700	16.27	16.10	83.102	19.20	24.00	Pass
144	5720 (For U-NII-2C)	19.45	19.47	176.616	22.47	24.00	Pass
144	5720 (For U-NII-3)	13.99	14.15	51.063	17.08	30.00	Pass
149	5745	20.01	20.19	204.703	23.11	30.00	Pass
157	5785	19.89	20.21	202.453	23.06	30.00	Pass
165	5825	19.98	20.03	200.234	23.02	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(26.37) = 25.21 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.68) = 27.30 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(36.61) = 26.63 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(37.68) = 26.76 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(39.87) = 27.00 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(28.58) = 25.56 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5699.60) = 25.04 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(26.15) = 25.17 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.13) = 27.24 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(39.89) = 27.00 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(35.33) = 26.48 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(29.65) = 25.72 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(28.95) = 25.61 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5697.16) = 25.44 > 24\text{dBm}$

802.11ax (HE40)_Full RU

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	17.37	17.29	108.155	20.34	24.00	Pass
46	5230	19.63	19.58	182.615	22.62	24.00	Pass
54	5270	19.94	19.86	195.456	22.91	24.00	Pass
62	5310	16.67	16.59	92.055	19.64	24.00	Pass
102	5510	16.71	16.64	93.013	19.69	24.00	Pass
110	5550	19.45	19.38	174.801	22.43	24.00	Pass
134	5670	18.43	18.31	137.427	21.38	24.00	Pass
142	5710 (For U-NII-2C)	20.09	20.26	208.264	23.19	24.00	Pass
142	5710 (For U-NII-3)	9.47	9.78	18.357	12.64	30.00	Pass
151	5755	19.62	19.84	188.005	22.74	30.00	Pass
159	5795	19.87	20.22	202.247	23.06	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(67.37) = 29.28 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(50.58) = 28.03 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(55.34) = 28.43 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(54.24) = 28.34 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(58.00) = 28.63 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(5725.00 - 5675.11) = 27.98 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(55.94) = 28.47 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(51.93) = 28.15 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(52.87) = 28.23 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(50.86) = 28.06 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(54.79) = 28.38 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(5725.00 - 5663.90) = 28.86 > 24\text{dBm}$

802.11ax (HE80)_Full RU

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	14.37	14.46	55.278	17.43	24.00	Pass
58	5290	15.18	15.25	66.458	18.23	24.00	Pass
106	5530	16.47	16.50	89.029	19.50	24.00	Pass
122	5610	17.99	18.16	128.414	21.09	24.00	Pass
138	5690 (For U-NII-2C)	19.08	19.22	164.470	22.16	24.00	Pass
138	5690 (For U-NII-3)	5.04	5.15	6.465	8.11	30.00	Pass
155	5775	17.91	17.98	124.607	20.96	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(94.60) = 30.75 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(91.51) = 30.61 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(81.26) = 30.09 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(5725.00 - 5633.08) = 30.63 > 24\text{dBm}$

Chain 1

1. $11\text{dBm} + 10\log(94.94) = 30.77 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(98.17) = 30.91 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(82.46) = 30.16 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(5725.00 - 5614.63) = 31.43 > 24\text{dBm}$

802.11ax (HE160)_Full RU

Chan.	Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
*50	5250 (For U-NII-1)	14.18	14.41	53.788	17.31	24.00	Pass
*50	5250 (For U-NII-2A)	15.30	15.13	66.468	18.23	24.00	Pass
114	5570	13.67	13.45	45.412	16.57	24.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

Chain 0

1. $11\text{dBm} + 10\log(90.06) = 30.54 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(174.20) = 33.41 > 24\text{dBm}$

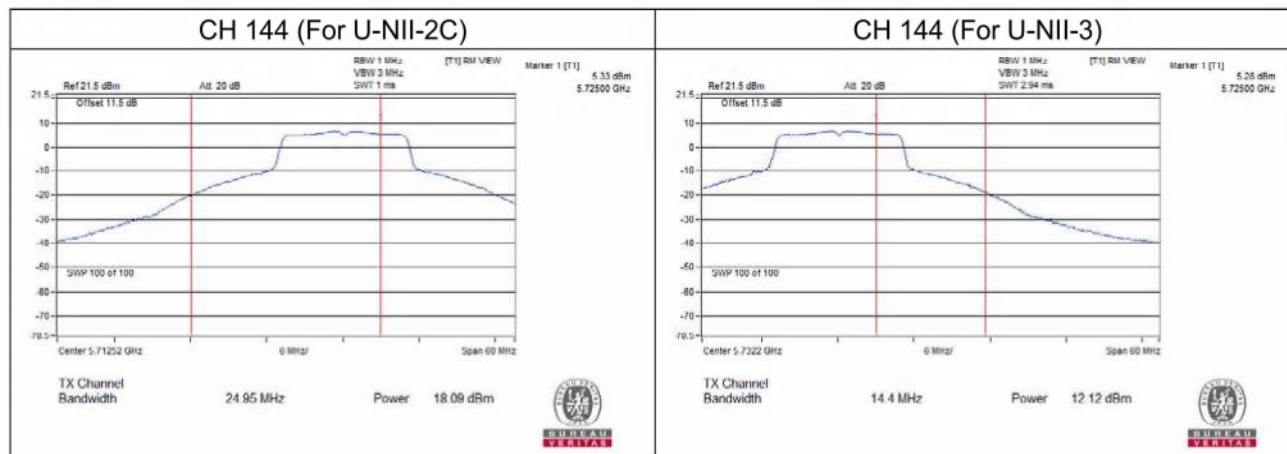
Chain 1

1. $11\text{dBm} + 10\log(90.07) = 30.54 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(173.92) = 33.40 > 24\text{dBm}$

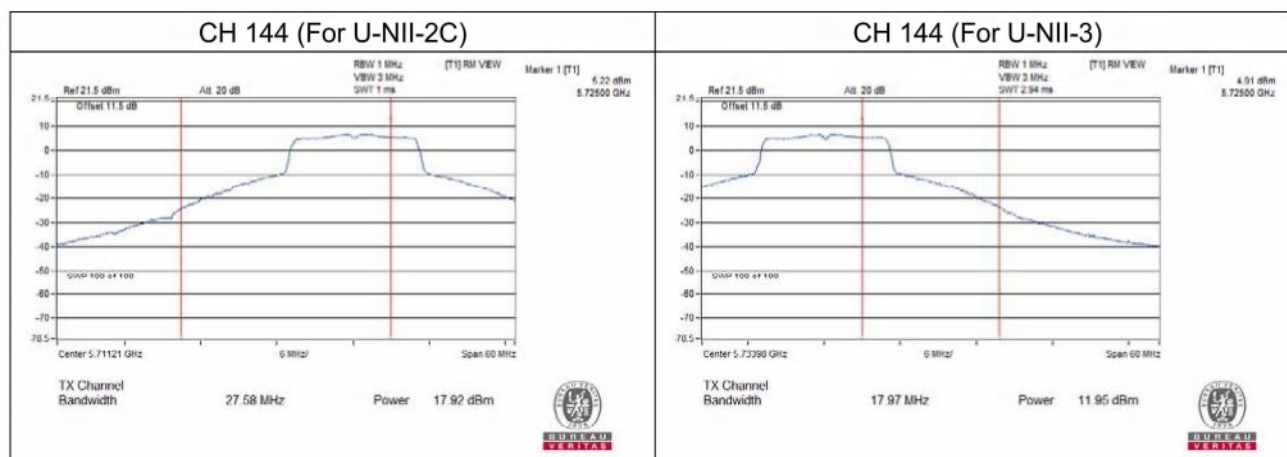
Straddle channel power plots:

802.11a

Chain 0

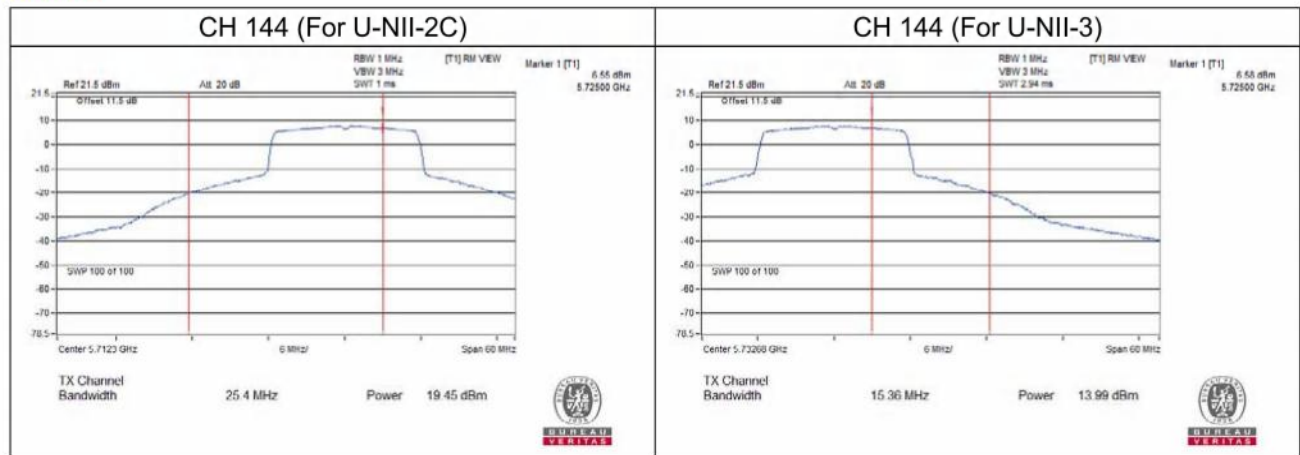


Chain 1

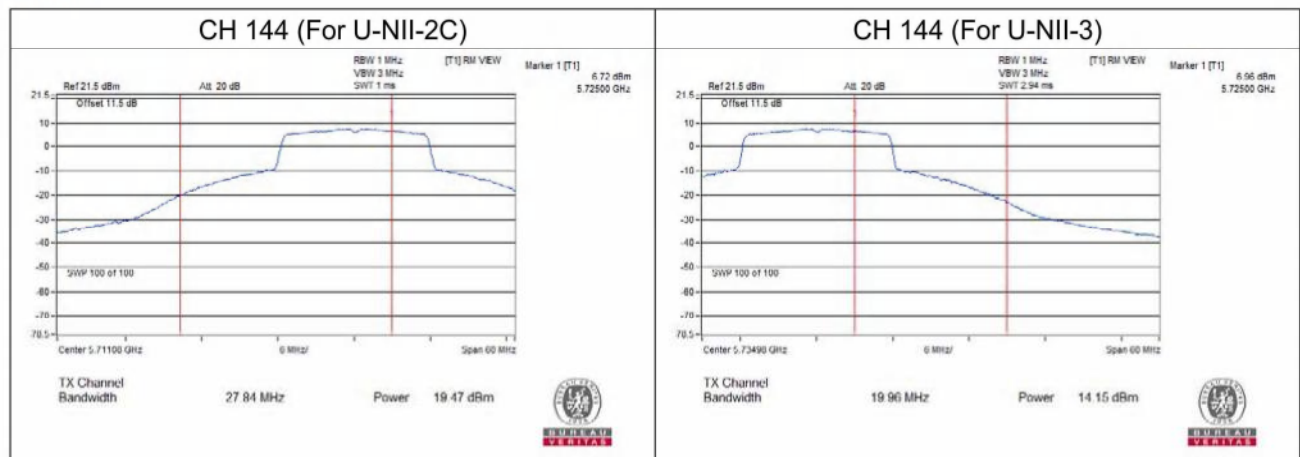


802.11ax (HE20)_Full RU

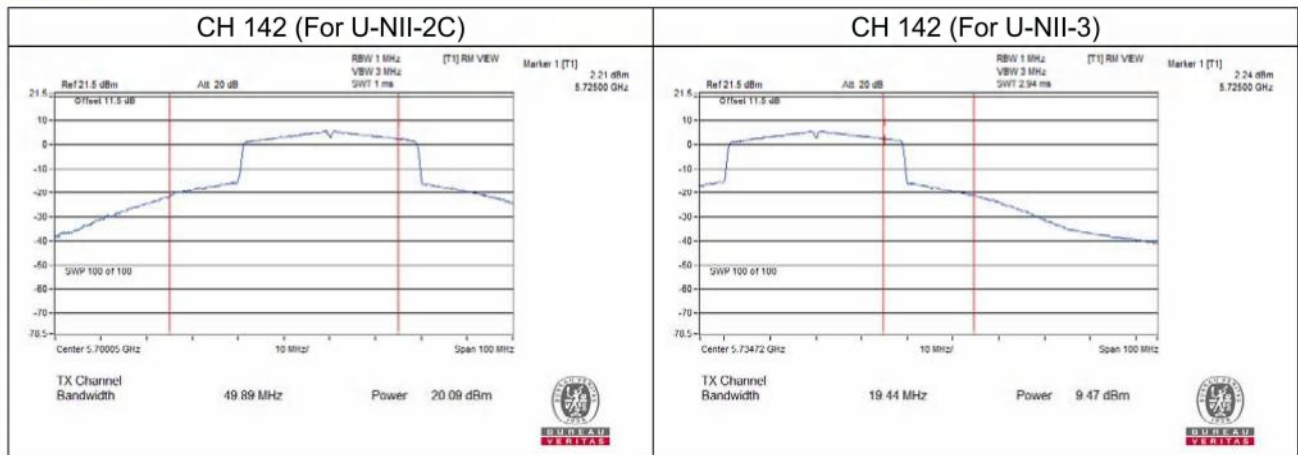
Chain 0



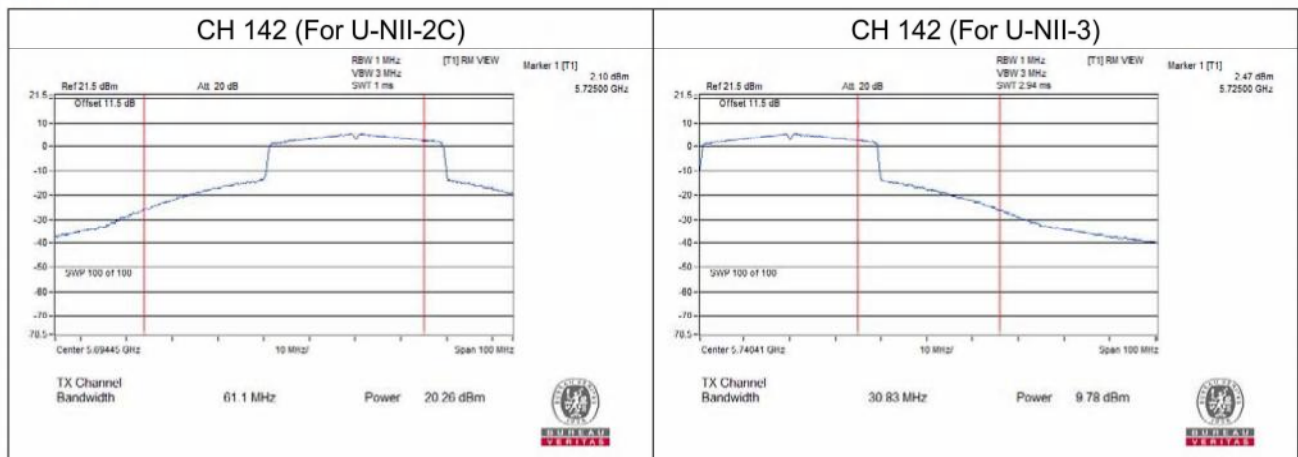
Chain 1



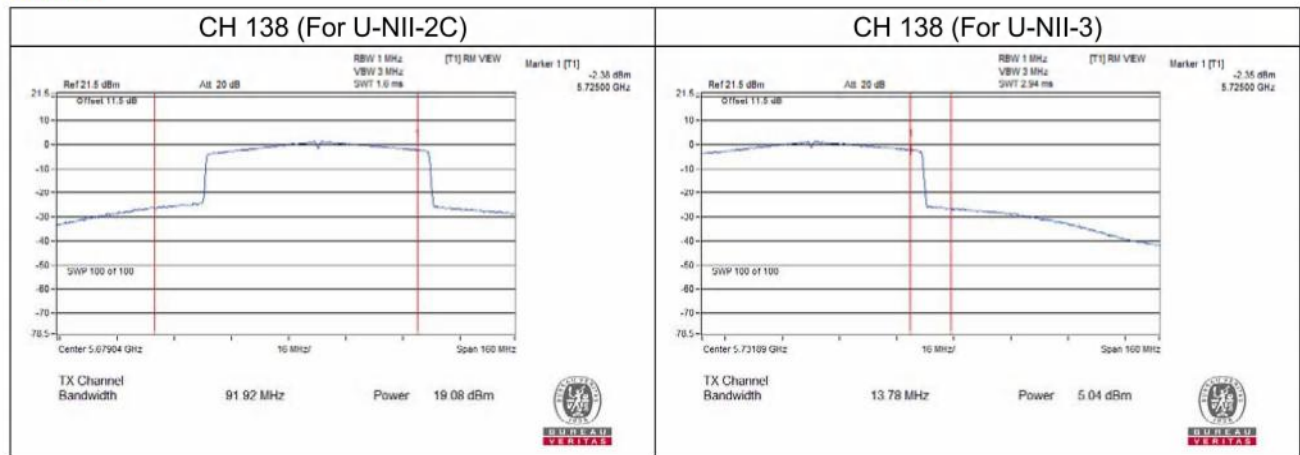
802.11ax (HE40)_Full RU
Chain 0



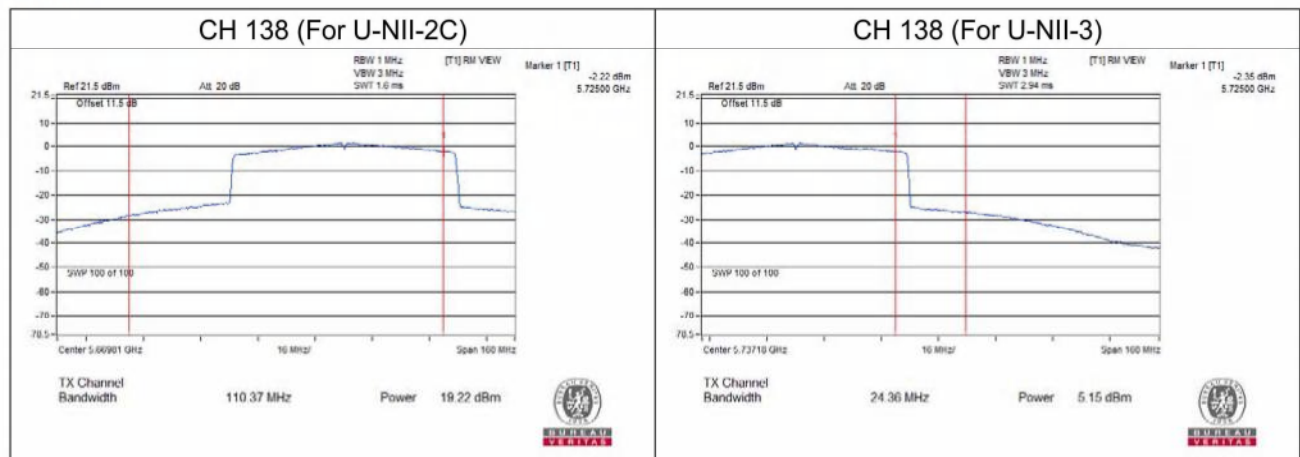
Chain 1



802.11ax (HE80)_Full RU Chain 0

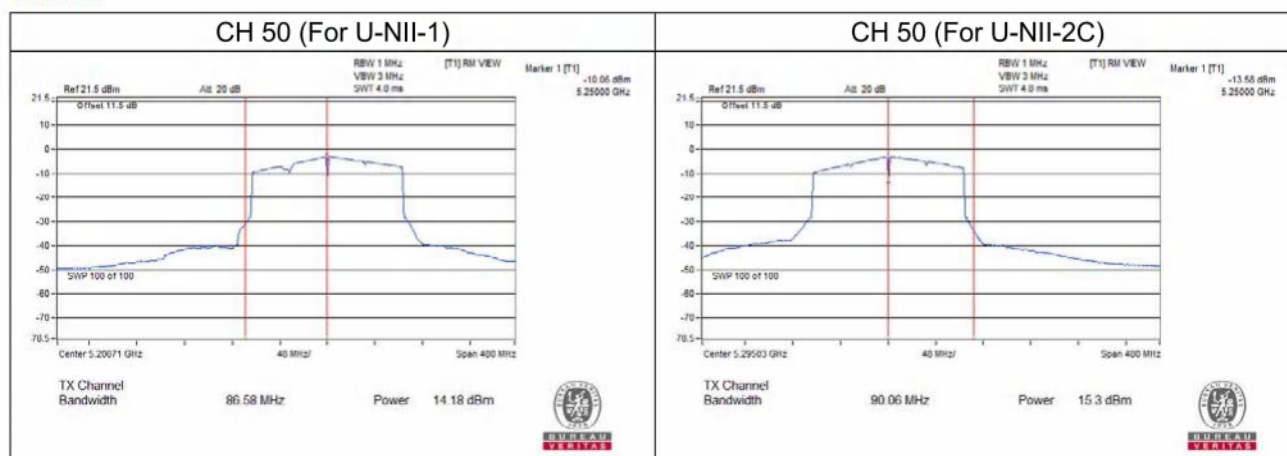


Chain 1

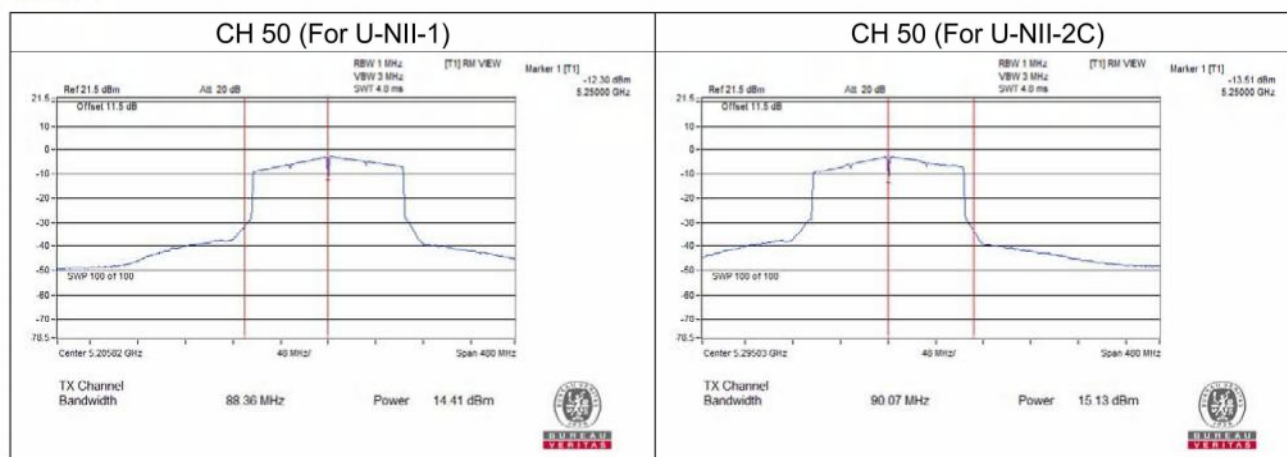


802.11ax (HE160)_Full RU

Chain 0



Chain 1



26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	28.45	23.99
60	5300	38.03	39.11
64	5320	36.69	37.95
100	5500	36.27	35.57
116	5580	24.59	24.10
140	5700	29.28	33.45
144	5720 (For U-NII-2C)	24.95	27.58
144	5720 (For U-NII-3)	14.40	17.97

For CH144 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

For CH144 (UNII-3 Band): The 26dBc bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ax (HE20)_RU26

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
64	5320	20.97	20.67
100	5500	20.72	20.64
140	5700	20.85	20.63

802.11ax (HE20)_RU106

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
64	5320	21.55	20.90
100	5500	21.37	20.49
140	5700	21.84	20.89

802.11ax (HE20)_Full RU

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	26.37	26.15
60	5300	42.68	42.13
64	5320	36.61	39.89
100	5500	37.68	35.33
116	5580	39.87	29.65
140	5700	28.58	28.95
144	5720 (For U-NII-2C)	25.40	27.84
144	5720 (For U-NII-3)	15.36	19.96

For CH144 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

For CH144 (UNII-3 Band): The 26dBc bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ax (HE40)_Full RU

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	67.37	55.94
62	5310	50.58	51.93
102	5510	55.34	52.87
110	5550	54.24	50.86
134	5670	58.00	54.79
142	5710 (For U-NII-2C)	49.89	61.10
142	5710 (For U-NII-3)	19.44	30.83

For CH142 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

For CH142 (UNII-3 Band): The 26dBc bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ax (HE80)_Full RU

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	94.60	94.94
106	5530	91.51	98.17
122	5610	81.26	82.46
138	5690 (For U-NII-2C)	91.92	110.37
138	5690 (For U-NII-3)	13.78	24.36

For CH138 (U-NII-2C Band): The 26dBc bandwidth below 5725MHz = 5725MHz - Marker 1

For CH138 (U-NII-3 Band): The 26dBc bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ax (HE160)_Full RU

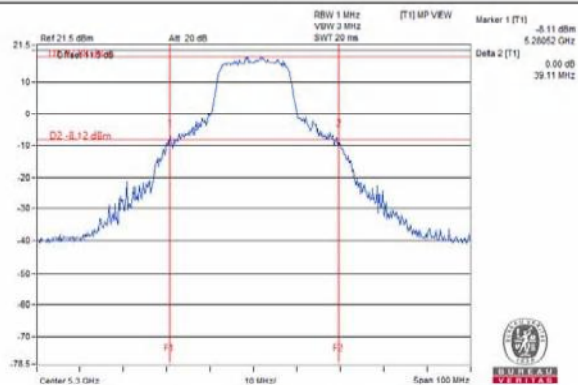
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
*50	5250 (For U-NII-1)	86.58	88.36
*50	5250 (For U-NII-2A)	90.06	90.07
114	5570	174.20	173.92

For CH50 (U-NII-1 Band): The 26dBc bandwidth below 5250MHz = 5250MHz - Marker 1

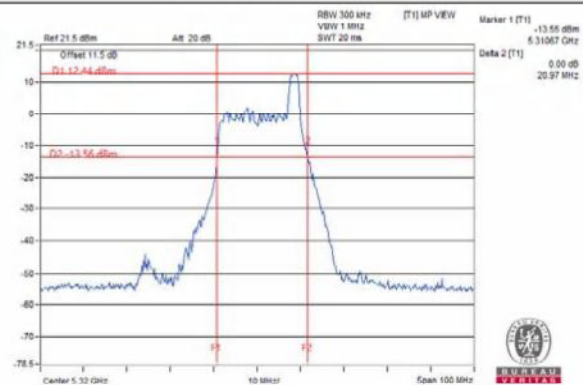
For CH50 (U-NII-2A Band): The 26dBc bandwidth above 5250MHz = Marker 1 + Delta 2 - 5250MHz

Spectrum Plot of Worst Value

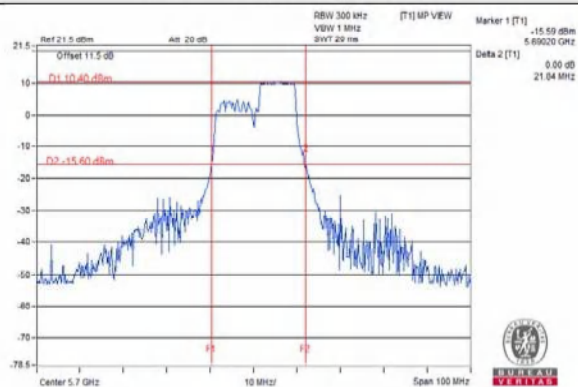
802.11a



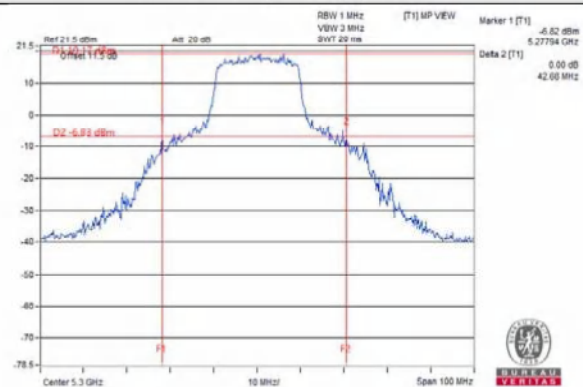
802.11ax (HE20)_RU26



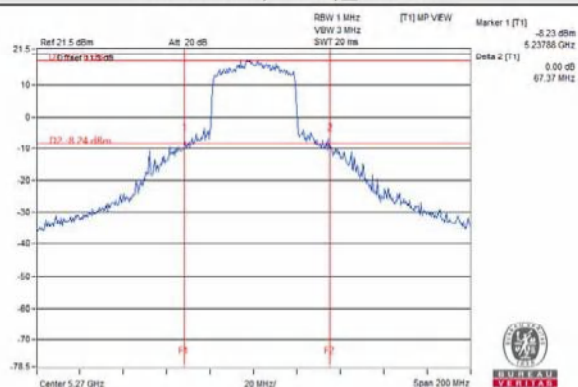
802.11ax (HE20)_RU106



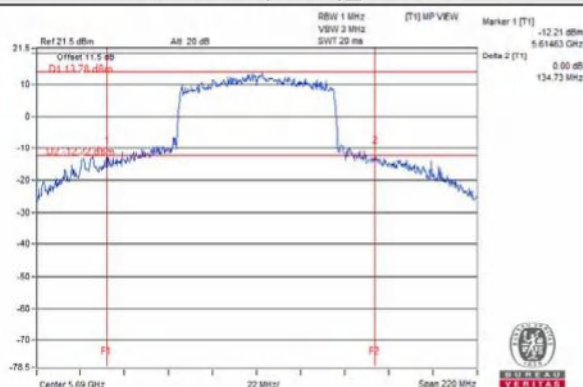
802.11ax (HE20)_Full RU



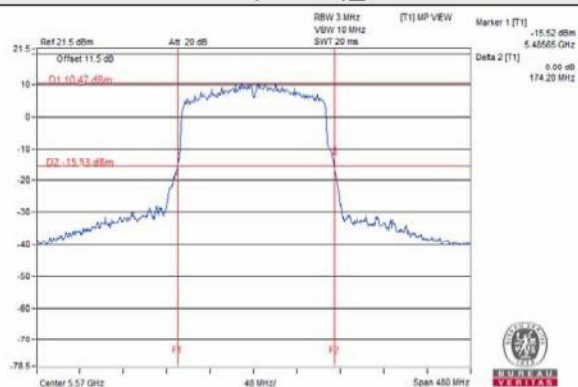
802.11ax (HE40)_Full RU



802.11ax (HE80)_Full RU



802.11ax (HE160)_Full RU



EUT Average Power

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	22.31	170.033
5470~5725	22.22	166.547

802.11ax (HE20)_Full RU

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	22.84	192.324
5470~5725	22.72	186.872

802.11ax (HE40)_Full RU

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	22.91	195.456
5470~5725	23.19	208.264

802.11ax (HE80)_Full RU

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	18.23	66.458
5470~5725	22.16	164.470

802.11ax (HE160)_Full RU

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	18.23	66.468
5470~5725	16.57	45.412

4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

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 sampling. 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.

4.4.4 Test Result

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.40	17.04
40	5200	17.04	17.04
48	5240	17.04	16.80
52	5260	17.04	16.68
60	5300	17.04	17.40
64	5320	17.16	17.40
100	5500	17.28	17.40
116	5580	16.80	16.68
140	5700	17.04	17.04
144	5720 (For U-NII-2C)	19.64	21.20
144	5720 (For U-NII-3)	9.88	11.68
149	5745	17.40	21.36
157	5785	18.24	17.64
165	5825	26.04	18.24

For CH144 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Marker 1

For CH144 (UNII-3 Band): The Occupied bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ax (HE20)_Full RU

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	19.20	19.32
40	5200	19.20	19.44
48	5240	19.08	19.20
52	5260	19.08	19.08
60	5300	19.32	19.44
64	5320	19.32	19.32
100	5500	19.32	19.20
116	5580	19.32	19.08
140	5700	19.20	19.32
144	5720 (For U-NII-2C)	16.88	20.24
144	5720 (For U-NII-3)	7.00	9.76
149	5745	19.32	19.08
157	5785	19.44	19.08
165	5825	19.68	19.20

For CH144 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Marker 1

For CH144 (U-NII-3 Band): The Occupied bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ax (HE40)_Full RU

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	37.92	38.04
46	5230	37.92	38.04
54	5270	38.16	37.92
62	5310	38.04	38.16
102	5510	38.04	38.04
110	5550	38.04	38.04
134	5670	38.04	38.04
142	5710 (For U-NII-2C)	34.32	35.88
142	5710 (For U-NII-3)	4.32	4.80
151	5755	38.04	38.18
159	5795	38.28	38.40

For CH142 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Marker 1

For CH142 (U-NII-3 Band): The Occupied bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ax (HE80)_Full RU

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	77.28	77.28
58	5290	77.28	77.28
106	5530	77.28	77.28
122	5610	77.28	77.04
138	5690 (For U-NII-2C)	73.88	73.88
138	5690 (For U-NII-3)	3.88	4.12
155	5775	76.80	77.04

For CH138 (U-NII-2C Band): The Occupied bandwidth below 5725MHz = 5725MHz - Marker 1

For CH138 (U-NII-3 Band): The Occupied bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ax (HE160)_Full RU

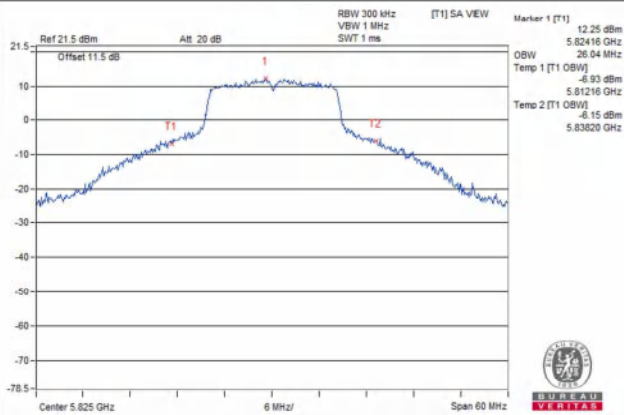
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
*50	5250 (For U-NII-1)	77.91	77.91
*50	5250 (For U-NII-2A)	78.61	78.61
114	5570	155.52	155.52

For CH50 (U-NII-1 Band): The Occupied bandwidth below 5250MHz = 5250MHz - Marker 1

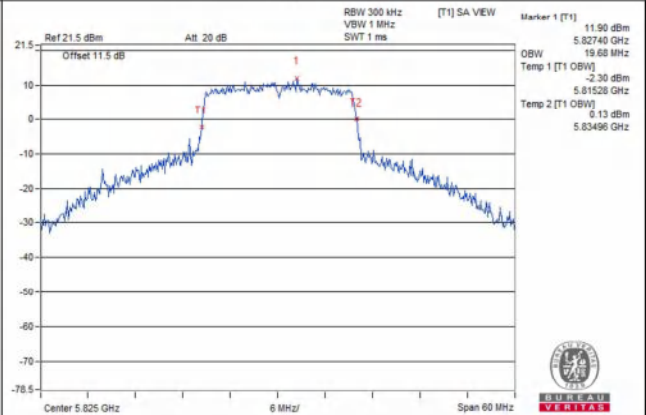
For CH50 (U-NII-2A Band): The Occupied bandwidth above 5250MHz = Marker 1 + Delta 2 - 5250MHz

Spectrum Plot of Worst Value

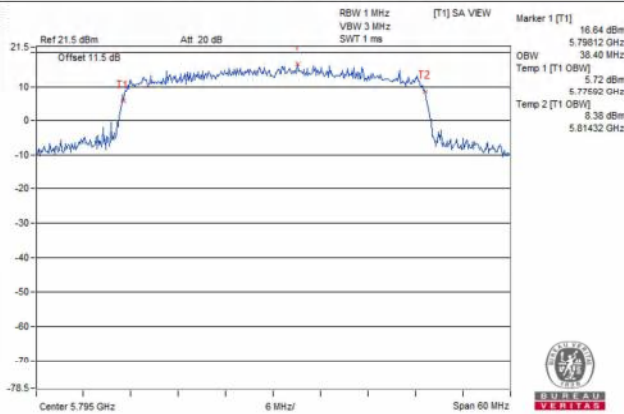
802.11a



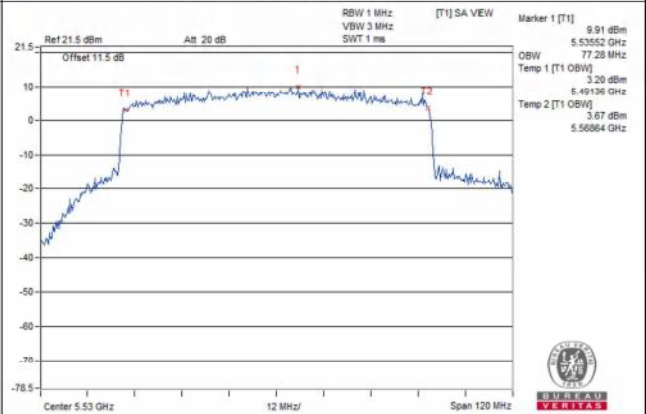
802.11ax (HE20)_Full RU



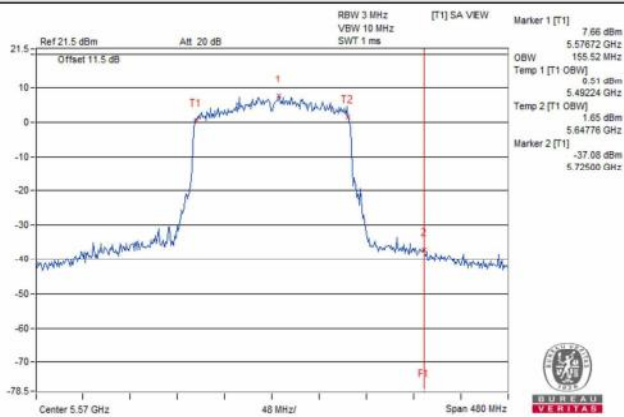
802.11ax (HE40)_Full RU



802.11ax (HE80)_Full RU

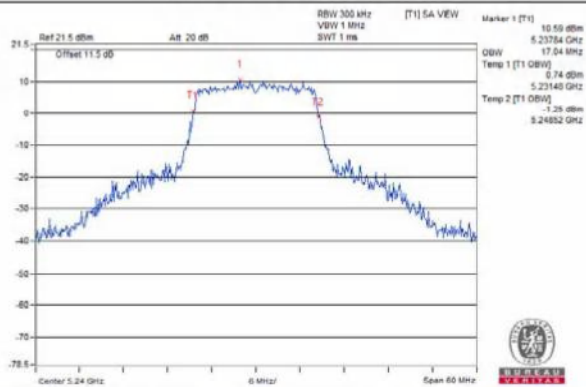


802.11ax (HE160)_Full RU

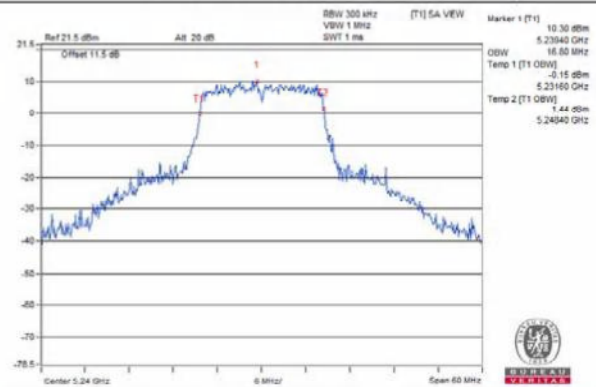


Spectrum Plot for near By DFS Band

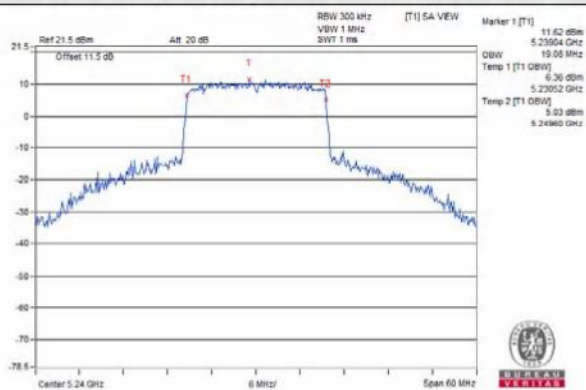
802.11a / Chain 0 / CH 48



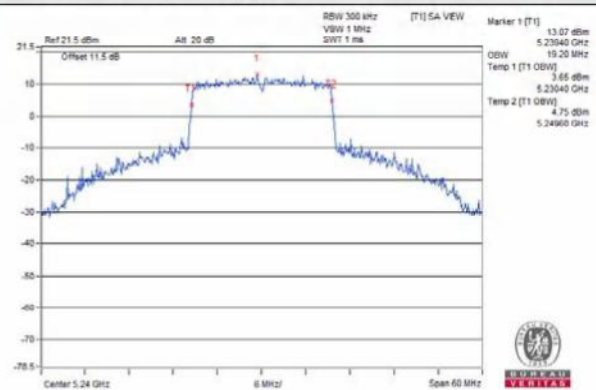
802.11a / Chain 1 / CH 48



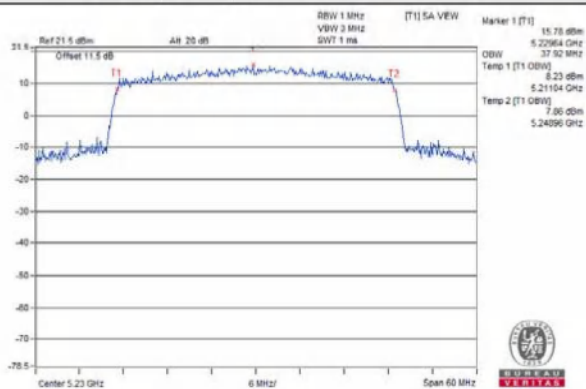
802.11ax (HE20)_Full RU / Chain 0 / CH 48



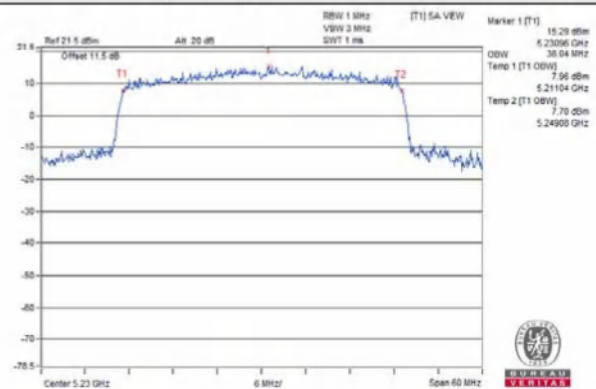
802.11ax (HE20)_Full RU / Chain 1 / CH 48



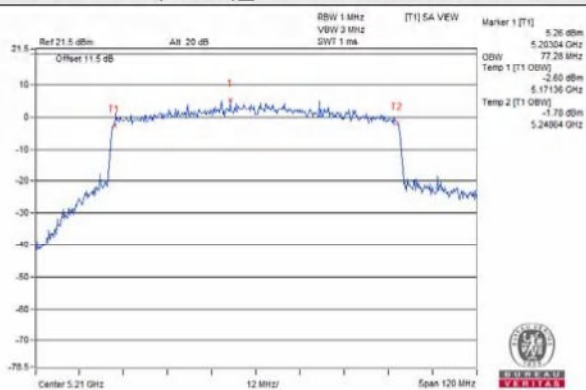
802.11ax (HE40)_Full RU / Chain 0 / CH 46



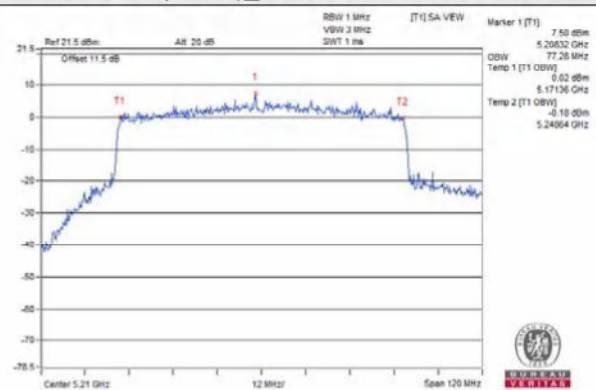
802.11ax (HE40)_Full RU / Chain 1 / CH 46



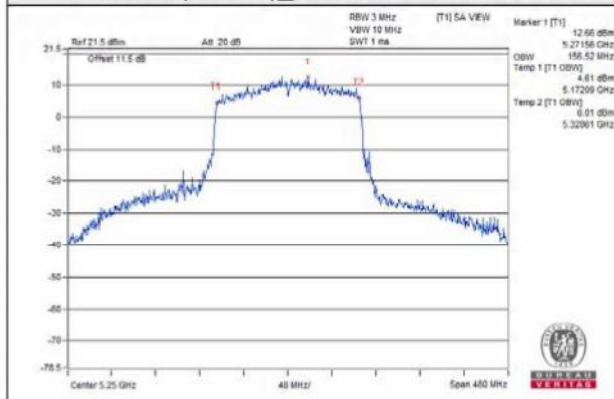
802.11ax (HE80)_Full RU / Chain 0 / CH 42



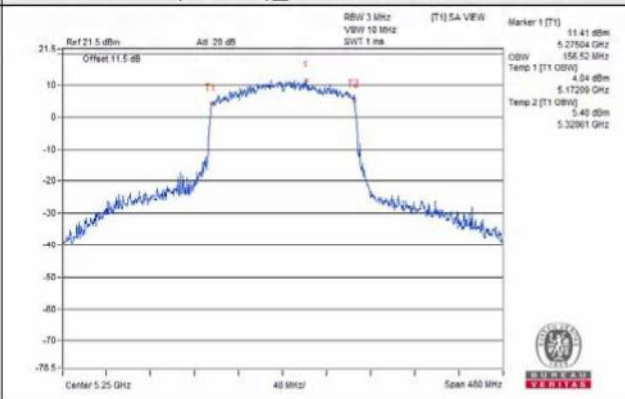
802.11ax (HE80)_Full RU / Chain 1 / CH 42



802.11ax (HE160)_Full RU / Chain 0 / CH 50

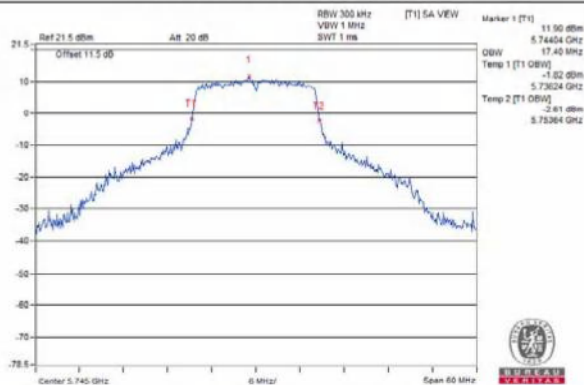


802.11ax (HE160)_Full RU / Chain 1 / CH 50

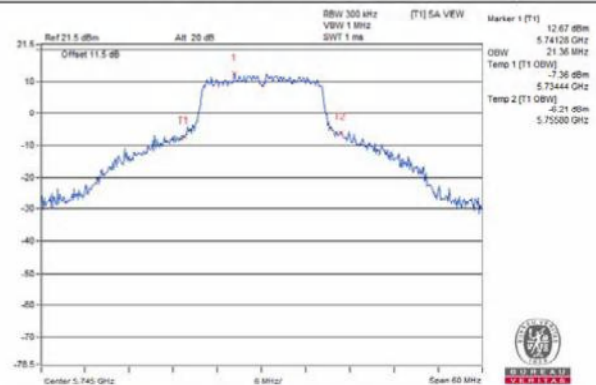


Spectrum Plot for near By DFS Band

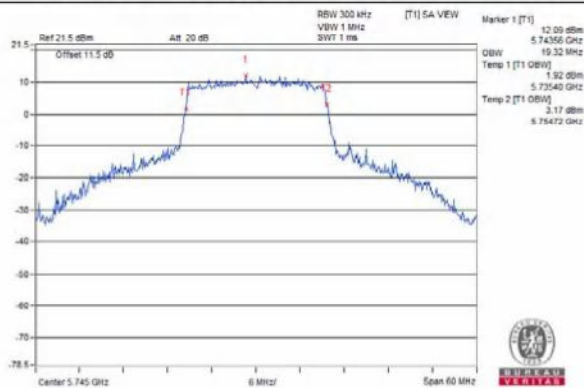
802.11a / Chain 0 / CH 149



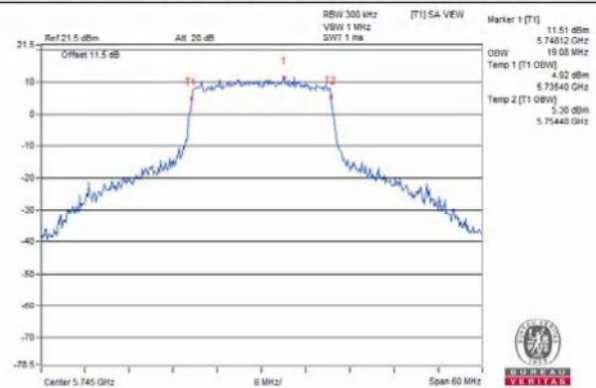
802.11a / Chain 1 / CH 149



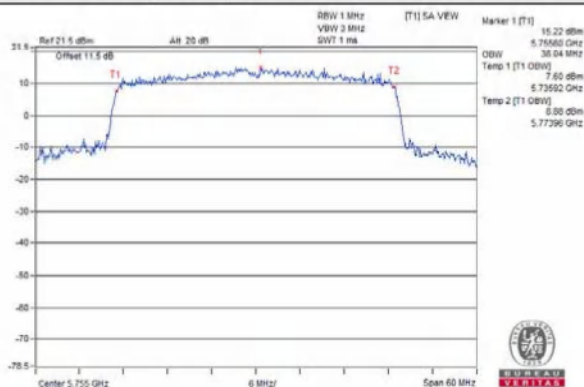
802.11ax (HE20)_Full RU / Chain 0 / CH 149



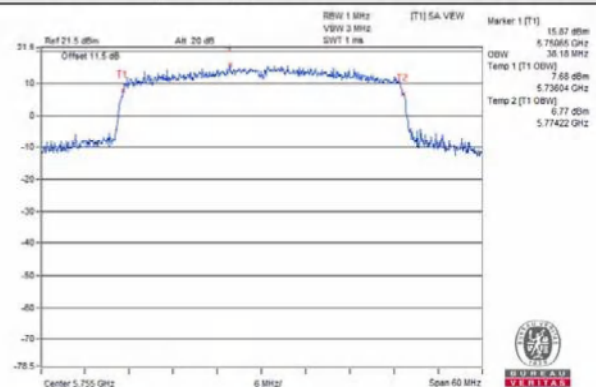
802.11ax (HE20)_Full RU / Chain 1 / CH 149



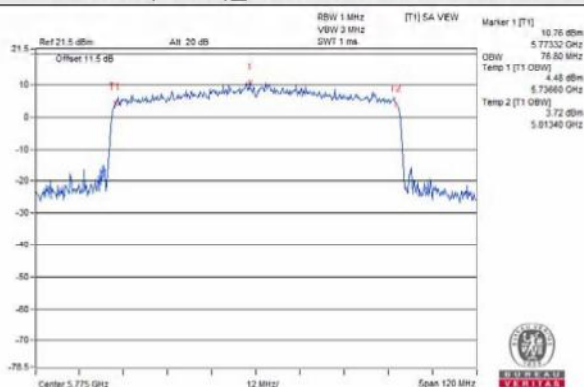
802.11ax (HE40)_Full RU / Chain 0 / CH 151



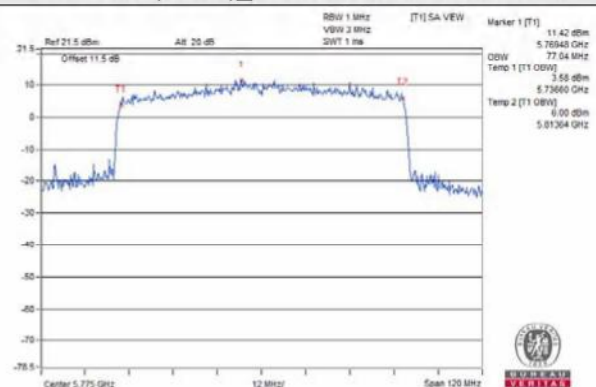
802.11ax (HE40)_Full RU / Chain 1 / CH 151



802.11ax (HE80)_Full RU / Chain 0 / CH 155



802.11ax (HE80)_Full RU / Chain 1 / CH 155



4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11dBm/ MHz
U-NII-2A	√		11dBm/ MHz
U-NII-2C	√		11dBm/ MHz
U-NII-3	√		30dBm/ 500kHz

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 Procedures

For U-NII-1, U-NII-2A and U-NII-2C band:

Using method SA-2

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

For U-NII-3 band:

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
- Scale the observed power level to an equivalent value in 500 kHz by adjusting (increasing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(500 \text{ kHz} / 300 \text{ kHz})$
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value and add 10 log (1/duty cycle)

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Conditions

Same as 4.3.6.

4.5.7 Test Results

For U-NII-1, U-NII-2A and U-NII-2C band:

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	4.81	5.25	0.69	8.74	9.07	Pass
40	5200	5.13	5.31	0.69	8.93	9.07	Pass
48	5240	5.22	5.38	0.69	9.01	9.07	Pass
52	5260	5.40	5.29	0.69	9.05	9.07	Pass
60	5300	5.41	5.14	0.69	8.98	9.07	Pass
64	5320	5.47	5.17	0.69	9.03	9.07	Pass
100	5500	5.35	5.33	0.69	9.04	9.07	Pass
116	5580	5.23	5.40	0.69	9.02	9.07	Pass
140	5700	5.06	5.48	0.69	8.98	9.07	Pass
144	5720 (For U-NII-2C)	5.45	5.03	0.69	8.95	9.07	Pass

Note:

- 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.
- 5180-5250MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- 5250-5320MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- 5500-5720MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)_RU26

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	5.31	5.65	0.39	8.88	9.07	Pass
64	5320	5.50	5.64	0.39	8.97	9.07	Pass
100	5500	5.57	5.69	0.39	9.03	9.07	Pass
140	5700	5.79	5.29	0.39	8.94	9.07	Pass

Note:

- 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.
- 5180-5250MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- 5250-5320MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- 5500-5720MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)_RU52

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
48	5240	5.72	5.47	0.39	8.99	9.07	Pass

Note:

- 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.
- 5180-5250MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)_RU106

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	5.13	5.19	0.39	8.56	9.07	Pass
64	5320	4.63	5.86	0.39	8.68	9.07	Pass
100	5500	4.79	4.21	0.39	7.91	9.07	Pass
140	5700	3.63	3.60	0.39	7.01	9.07	Pass

Note:

- 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.
- 5180-5250MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- 5250-5320MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- 5500-5720MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)_Full RU

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	3.42	2.49	0.39	6.38	9.07	Pass
40	5200	5.31	5.93	0.39	9.03	9.07	Pass
48	5240	4.56	5.16	0.39	8.27	9.07	Pass
52	5260	5.76	5.31	0.39	8.94	9.07	Pass
60	5300	5.84	4.31	0.39	8.54	9.07	Pass
64	5320	5.59	5.70	0.39	9.04	9.07	Pass
100	5500	5.41	4.82	0.39	8.52	9.07	Pass
116	5580	5.03	6.11	0.39	9.00	9.07	Pass
140	5700	1.38	1.57	0.39	4.87	9.07	Pass
144	5720 (For U-NII-2C)	5.58	5.69	0.39	9.03	9.07	Pass

Note:

- 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.
- 5180-5250MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- 5250-5320MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- 5500-5720MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)_Full RU

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
38	5190	-2.34	-1.39	0.52	1.69	9.07	Pass
46	5230	1.46	1.38	0.52	4.95	9.07	Pass
54	5270	2.15	2.11	0.52	5.66	9.07	Pass
62	5310	0.01	-0.64	0.52	3.23	9.07	Pass
102	5510	-1.06	-1.56	0.52	2.23	9.07	Pass
110	5550	1.29	1.70	0.52	5.03	9.07	Pass
134	5670	-0.75	0.95	0.52	3.71	9.07	Pass
142	5710 (For U-NII-2C)	4.03	4.61	0.52	7.86	9.07	Pass

Note:

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. 5180-5250MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
3. 5250-5320MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
4. 5500-5720MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
5. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)_Full RU

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
42	5210	-8.62	-8.23	1.02	-4.39	9.07	Pass
58	5290	-6.36	-6.73	1.02	-2.51	9.07	Pass
106	5530	-6.19	-6.75	1.02	-2.43	9.07	Pass
122	5610	-5.98	-6.20	1.02	-2.06	9.07	Pass
138	5690 (For U-NII-2C)	-1.46	-4.03	1.02	1.47	9.07	Pass

Note:

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. 5180-5250MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
3. 5250-5320MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
4. 5500-5720MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
5. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE160)_Full RU

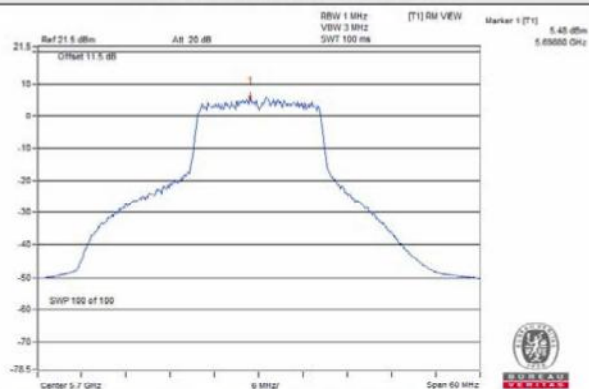
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
*50	5250 (For U-NII-1)	-7.52	-7.65	1.75	-2.82	9.07	Pass
*50	5250 (For U-NII-2A)	-7.52	-7.53	1.75	-2.76	9.07	Pass
114	5570	-8.02	-7.97	1.75	-3.23	9.07	Pass

Note:

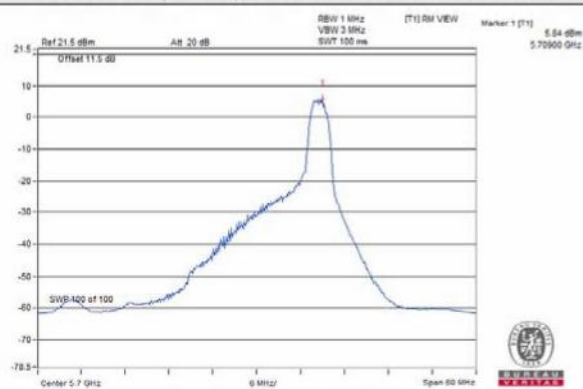
- Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- 5180-5250MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- 5250-5320MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- 5500-5720MHz: Directional gain = $4.92\text{dBi} + 10\log(2) = 7.93\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (7.93 - 6) = 9.07\text{dBi}$.
- Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

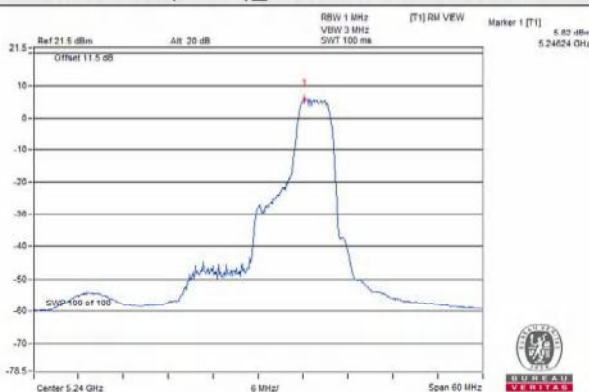
802.11a / Chain 1 / CH 140



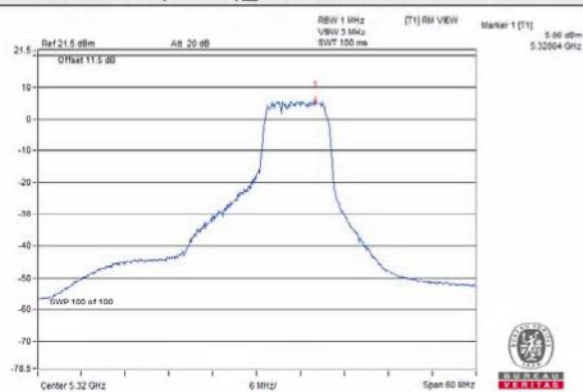
802.11ax (HE20)_RU26 / Chain 0 / CH 140



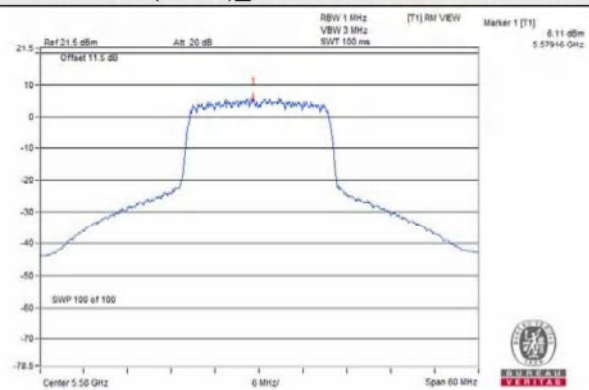
802.11ax (HE20)_RU52 / Chain 0 / CH 52



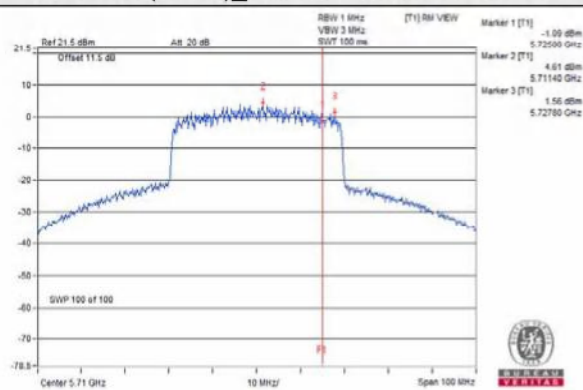
802.11ax (HE20)_RU106 / Chain 1 / CH 64



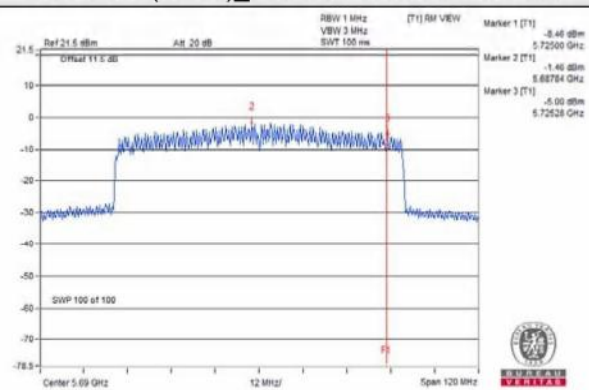
802.11ax (HE20)_Full RU / Chain 1 / CH 116



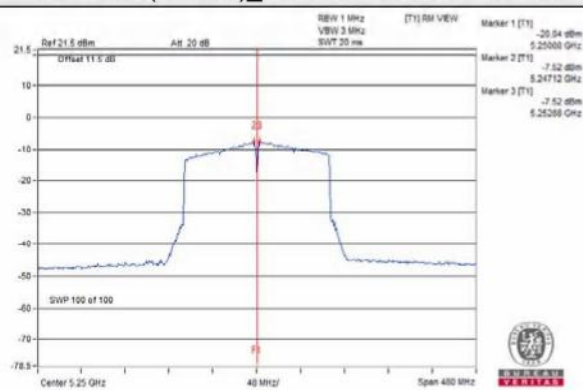
802.11ax (HE40)_Full RU / Chain 1 / CH 142



802.11ax (HE80)_Full RU / Chain 0 / CH 138



802.11ax (HE160)_Full RU / Chain 0 / CH 50



For U-NII-3 band:

802.11a

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	144	5720 (For U-NII-3)	-4.35	-2.13	3.01	0.69	1.57	28.07	Pass
	149	5745	-2.27	-0.05	3.01	0.69	3.65	28.07	Pass
	157	5785	-2.19	0.03	3.01	0.69	3.73	28.07	Pass
	165	5825	-1.39	0.83	3.01	0.69	4.53	28.07	Pass
1	144	5720 (For U-NII-3)	-3.77	-1.55	3.01	0.69	2.15	28.07	Pass
	149	5745	-2.00	0.22	3.01	0.69	3.92	28.07	Pass
	157	5785	-1.62	0.60	3.01	0.69	4.30	28.07	Pass
	165	5825	-2.17	0.05	3.01	0.69	3.75	28.07	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 4.92dBi + 10log(2) = 7.93dBi > 6dBi, so the power density limit shall be reduced to 30 - (7.93 - 6) = 28.07dBi.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)_RU26

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	4.38	6.60	3.01	0.39	10.00	28.07	Pass
	165	5825	2.70	4.92	3.01	0.39	8.32	28.07	Pass
1	149	5745	4.22	6.44	3.01	0.39	9.84	28.07	Pass
	165	5825	4.91	7.13	3.01	0.39	10.53	28.07	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 4.92dBi + 10log(2) = 7.93dBi > 6dBi, so the power density limit shall be reduced to 30 - (7.93 - 6) = 28.07dBi.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)_RU52

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	165	5825	2.92	5.14	3.01	0.39	8.54	28.07	Pass
1	165	5825	2.95	5.17	3.01	0.39	8.57	28.07	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 4.92dBi + 10log(2) = 7.93dBi > 6dBi, so the power density limit shall be reduced to 30 - (7.93 - 6) = 28.07dBi.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)_RU106

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	149	5745	-0.96	1.26	3.01	0.39	4.66	28.07	Pass
	165	5825	-0.68	1.54	3.01	0.39	4.94	28.07	Pass
1	149	5745	-1.00	1.22	3.01	0.39	4.62	28.07	Pass
	165	5825	-0.39	1.83	3.01	0.39	5.23	28.07	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 4.92dBi + 10log(2) = 7.93dBi > 6dBi, so the power density limit shall be reduced to 30 - (7.93 - 6) = 28.07dBi.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)_Full RU

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	144	5720 (For U-NII-3)	-3.61	-1.39	3.01	0.39	2.01	28.07	Pass
	149	5745	-3.96	-1.74	3.01	0.39	1.66	28.07	Pass
	157	5785	-4.65	-2.43	3.01	0.39	0.97	28.07	Pass
	165	5825	-3.82	-1.60	3.01	0.39	1.80	28.07	Pass
1	144	5720 (For U-NII-3)	-4.53	-2.31	3.01	0.39	1.09	28.07	Pass
	149	5745	-3.90	-1.68	3.01	0.39	1.72	28.07	Pass
	157	5785	-4.40	-2.18	3.01	0.39	1.22	28.07	Pass
	165	5825	-3.43	-1.21	3.01	0.39	2.19	28.07	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 4.92dBi + 10log(2) = 7.93dBi > 6dBi, so the power density limit shall be reduced to 30 - (7.93 - 6) = 28.07dBi.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)_Full RU

TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	142	5710 (For U-NII-3)	-9.37	-7.15	3.01	0.52	-3.62	28.07	Pass
	151	5755	-7.64	-5.42	3.01	0.52	-1.89	28.07	Pass
	159	5795	-8.62	-6.40	3.01	0.52	-2.87	28.07	Pass
1	142	5710 (For U-NII-3)	-8.22	-6.00	3.01	0.52	-2.47	28.07	Pass
	151	5755	-7.49	-5.27	3.01	0.52	-1.74	28.07	Pass
	159	5795	-6.68	-4.46	3.01	0.52	-0.93	28.07	Pass

Note:

1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 4.92dBi + 10log(2) = 7.93dBi > 6dBi, so the power density limit shall be reduced to 30 - (7.93 - 6) = 28.07dBi.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)_Full RU

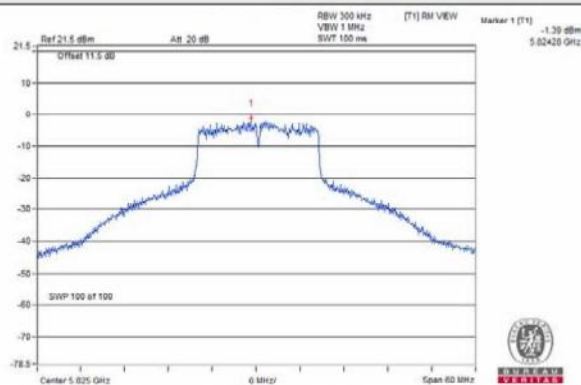
TX chain	Chan.	Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	138	5690 (For U-NII-3)	-15.58	-13.36	3.01	1.02	-9.33	28.07	Pass
	155	5775	-15.70	-13.48	3.01	1.02	-9.45	28.07	Pass
1	138	5690 (For U-NII-3)	-14.32	-12.10	3.01	1.02	-8.07	28.07	Pass
	155	5775	-14.16	-11.94	3.01	1.02	-7.91	28.07	Pass

Note:

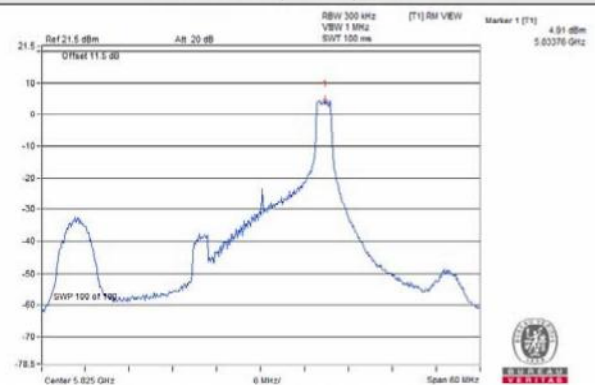
1. Method E) 2) c) of power density measurement of KDB 662911 is using for calculating total power density, Measure and add 10 log (N_{ANT}) dB.
2. Directional gain = 4.92dBi + 10log(2) = 7.93dBi > 6dBi, so the power density limit shall be reduced to 30 - (7.93 - 6) = 28.07dBi.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

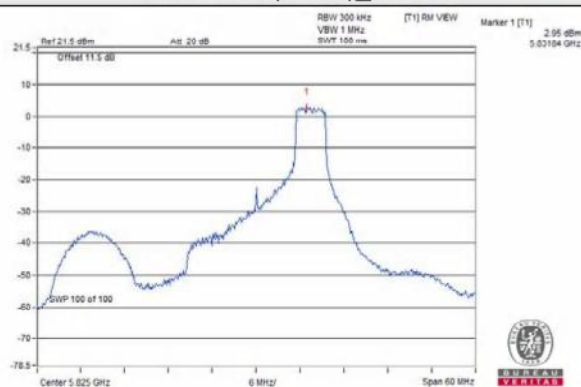
802.11a



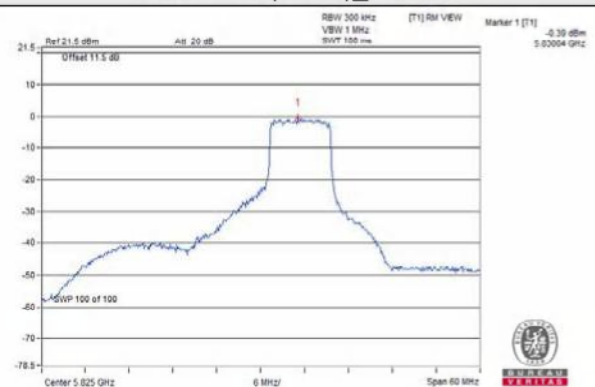
802.11ax (HE20)_RU26



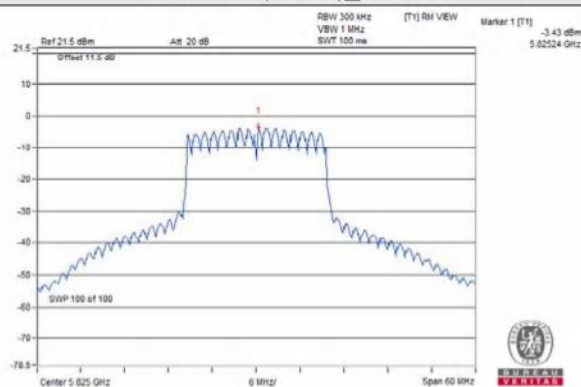
802.11ax (HE20)_RU52



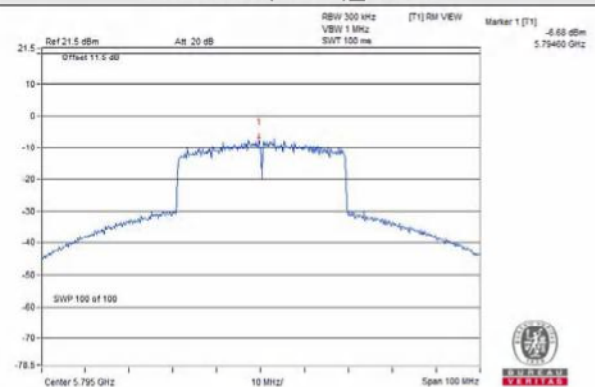
802.11ax (HE20)_RU106



802.11ax (HE20)_Full RU



802.11ax (HE40)_Full RU



802.11ax (HE80)_Full RU

