4.3.4 Test Procedure

For Average Power Measurement

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst and set the detector to average. Duty factor is not added to measured value.

For 26dB Bandwidth

a. Set RBW = approximately 1% of the emission bandwidth.

b. Set the VBW > RBW.

c. Detector = Peak.

d. Trace mode = max hold.

e. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 Test Result

Test Mode A (Internal antenna + Eth6 Radio)

1TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
52	5260	**139.959**	21.46	24.00	Pass
60	5300	132.739	21.23	24.00	Pass
64	5320	83.368	19.21	24.00	Pass
100	5500	56.105	17.49	24.00	Pass
116	5580	130.017	21.14	24.00	Pass
140	5700	32.961	15.18	24.00	Pass

Note:

1. 11dBm + 10log (45.49) = 27.57 > 24dBm
2. 11dBm + 10log (45.54) = 27.58 > 24dBm
3. 11dBm + 10log (41.44) = 27.17 > 24dBm
4. 11dBm + 10log (37.80) = 26.77 > 24dBm
5. 11dBm + 10log (45.45) = 27.57 > 24dBm
6. 11dBm + 10log (26.68) = 25.26 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
52	5260	137.088	21.37	24.00	Pass
60	5300	135.519	21.32	24.00	Pass
64	5320	76.560	18.84	24.00	Pass
100	5500	45.082	16.54	24.00	Pass
116	5580	**141.579**	21.51	24.00	Pass
140	5700	40.272	16.05	24.00	Pass

Note:

1. 11dBm + 10log (46.63) = 27.68 > 24dBm
2. 11dBm + 10log (48.75) = 27.87 > 24dBm
3. 11dBm + 10log (38.53) = 26.85 > 24dBm
4. 11dBm + 10log (32.02) = 26.05 > 24dBm
5. 11dBm + 10log (48.67) = 27.87 > 24dBm
6. 11dBm + 10log (23.01) = 24.61 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
54	5270	133.660	21.26	24.00	Pass
62	5310	44.771	16.51	24.00	Pass
102	5510	36.392	15.61	24.00	Pass
110	5550	135.519	21.32	24.00	Pass
134	5670	63.387	18.02	24.00	Pass

Note:

1. 11dBm + 10log (105.11) = 31.21 > 24dBm
2. 11dBm + 10log (62.51) = 28.95 > 24dBm
3. 11dBm + 10log (62.39) = 28.95 > 24dBm
4. 11dBm + 10log (103.04) = 31.13 > 24dBm
5. 11dBm + 10log (91.08) = 30.59 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
58	5290	37.844	15.78	24.00	Pass
106	5530	31.333	14.96	24.00	Pass
122	5610	90.782	19.58	24.00	Pass

Note:

1. 11dBm + 10log (116.82) = 31.67 > 24dBm
2. 11dBm + 10log (100.07) = 31.00 > 24dBm
3. 11dBm + 10log (201.18) = 34.03 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
52	5260	45.49
60	5300	45.54
64	5320	41.44
100	5500	37.80
116	5580	45.45
140	5700	26.68

802.11ax (HE20)

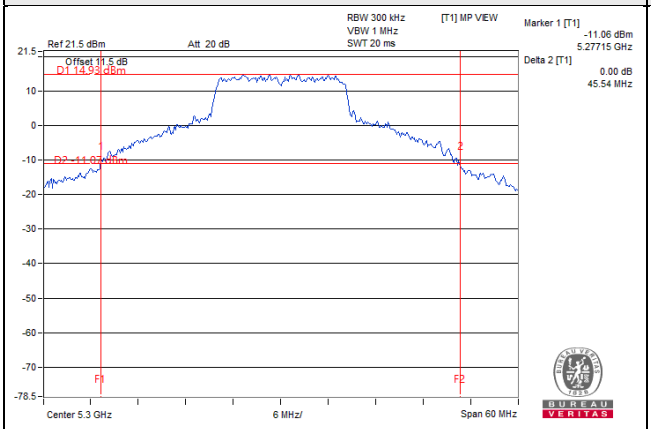
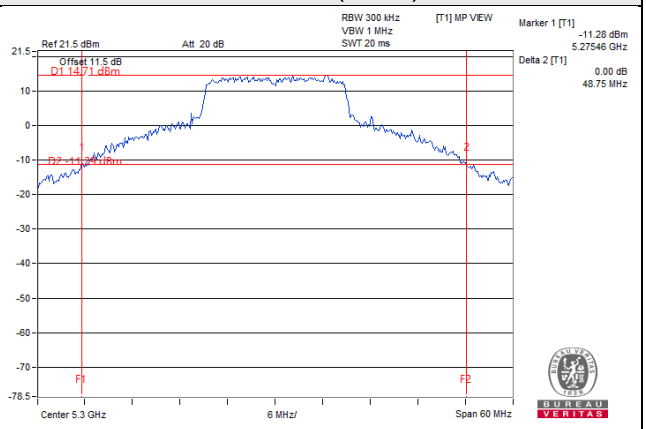
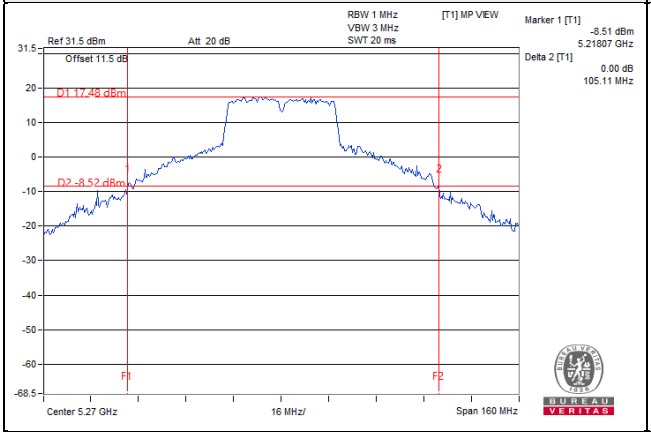
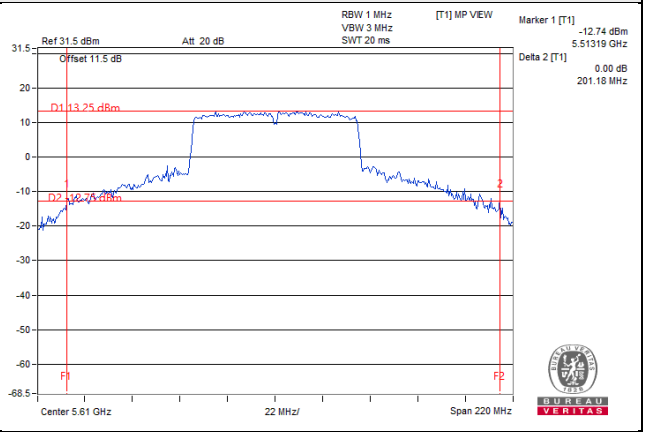
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
52	5260	46.63
60	5300	48.75
64	5320	38.53
100	5500	32.02
116	5580	48.67
140	5700	23.01

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
54	5270	105.11
62	5310	62.51
102	5510	62.39
110	5550	103.04
134	5670	91.08

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
58	5290	116.82
106	5530	100.07
122	5610	201.18

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	21.46	139.959
5470~5725	21.14	130.017

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	21.37	137.088
5470~5725	21.51	141.579

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	21.26	133.660
5470~5725	21.32	135.519

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	15.78	37.844
5470~5725	19.58	90.782

2TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 2	Chain 3				
52	5260	16.34	15.97	82.590	19.17	24.00	Pass
60	5300	16.05	15.88	78.998	18.98	24.00	Pass
64	5320	16.98	16.78	97.531	19.89	24.00	Pass
100	5500	14.65	14.57	57.816	17.62	24.00	Pass
116	5580	17.55	17.52	113.379	20.55	24.00	Pass
140	5700	15.04	14.52	60.229	17.80	24.00	Pass

Note:

Chain 2

1. 11dBm + 10log (24.34) = 24.86 > 24dBm
2. 11dBm + 10log (26.81) = 25.28 > 24dBm
3. 11dBm + 10log (26.78) = 25.27 > 24dBm
4. 11dBm + 10log (21.78) = 24.38 > 24dBm
5. 11dBm + 10log (21.93) = 24.41 > 24dBm
6. 11dBm + 10log (21.75) = 24.37 > 24dBm

Chain 3

1. 11dBm + 10log (26.66) = 25.25 > 24dBm
2. 11dBm + 10log (22.47) = 24.51 > 24dBm
3. 11dBm + 10log (26.77) = 25.27 > 24dBm
4. 11dBm + 10log (21.87) = 24.39 > 24dBm
5. 11dBm + 10log (22.40) = 24.50 > 24dBm
6. 11dBm + 10log (22.38) = 24.49 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 2	Chain 3				
52	5260	17.01	16.35	93.386	19.70	24.00	Pass
60	5300	17.07	16.44	94.988	19.78	24.00	Pass
64	5320	18.03	17.26	116.744	20.67	24.00	Pass
100	5500	15.01	15.10	64.055	18.07	24.00	Pass
116	5580	17.77	17.09	111.009	20.45	24.00	Pass
140	5700	15.03	14.68	61.218	17.87	24.00	Pass

Note:

Chain 2

1. 11dBm + 10log (26.04) = 25.15 > 24dBm
2. 11dBm + 10log (25.90) = 25.13 > 24dBm
3. 11dBm + 10log (28.26) = 25.51 > 24dBm
4. 11dBm + 10log (22.82) = 24.58 > 24dBm
5. 11dBm + 10log (21.98) = 24.42 > 24dBm
6. 11dBm + 10log (21.97) = 24.41 > 24dBm

Chain 3

1. 11dBm + 10log (24.88) = 24.95 > 24dBm
2. 11dBm + 10log (23.59) = 24.72 > 24dBm
3. 11dBm + 10log (23.61) = 24.73 > 24dBm
4. 11dBm + 10log (21.73) = 24.37 > 24dBm
5. 11dBm + 10log (22.29) = 24.48 > 24dBm
6. 11dBm + 10log (22.12) = 24.44 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 2	Chain 3				
54	5270	20.13	19.96	**202.122**	23.06	24.00	Pass
62	5310	15.59	14.85	66.773	18.25	24.00	Pass
102	5510	14.13	14.21	52.245	17.18	24.00	Pass
110	5550	19.68	19.38	**179.593**	22.54	24.00	Pass
134	5670	15.93	16.87	87.815	19.44	24.00	Pass

Note:
Chain 2
1. 11dBm + 10log (96.12) = 30.82 > 24dBm
2. 11dBm + 10log (51.80) = 28.14 > 24dBm
3. 11dBm + 10log (41.38) = 27.16 > 24dBm
4. 11dBm + 10log (91.96) = 30.63 > 24dBm
5. 11dBm + 10log (73.80) = 29.68 > 24dBm

Chain 3
1. 11dBm + 10log (89.91) = 30.53 > 24dBm
2. 11dBm + 10log (41.04) = 27.13 > 24dBm
3. 11dBm + 10log (40.96) = 27.12 > 24dBm
4. 11dBm + 10log (87.26) = 30.40 > 24dBm
5. 11dBm + 10log (69.22) = 29.40 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 2	Chain 3				
58	5290	15.36	15.18	67.317	18.28	24.00	Pass
106	5530	14.15	14.13	51.884	17.15	24.00	Pass
122	5610	18.08	18.29	131.722	21.20	24.00	Pass

Note:
Chain 2
1. 11dBm + 10log (99.58) = 30.98 > 24dBm
2. 11dBm + 10log (82.78) = 30.17 > 24dBm
3. 11dBm + 10log (162.13) = 33.09 > 24dBm

Chain 3
1. 11dBm + 10log (82.07) = 30.14 > 24dBm
2. 11dBm + 10log (82.06) = 30.14 > 24dBm
3. 11dBm + 10log (158.35) = 32.99 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 2	Chain 3				
52	5260	17.01	16.35	93.386	19.70	21.24	Pass
60	5300	17.07	16.44	94.988	19.78	21.24	Pass
64	5320	18.03	17.26	116.744	20.67	21.24	Pass
100	5500	15.01	15.10	64.055	18.07	21.24	Pass
116	5580	17.77	17.09	111.009	20.45	21.24	Pass
140	5700	15.03	14.68	61.218	17.87	21.24	Pass

Note:

1. 5260~5320MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.76dBi > 6dBi, so the power limit shall be reduced to 24-(8.76-6) = 21.24dBm.
2. 5500~5700MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.76dBi > 6dBi, so the power limit shall be reduced to 24-(8.76-6) = 21.24dBm.

Chain 2

1. 11dBm + 10log (26.04) = 25.15 > 24dBm
2. 11dBm + 10log (25.90) = 25.13 > 24dBm
3. 11dBm + 10log (28.26) = 25.51 > 24dBm
4. 11dBm + 10log (22.82) = 24.58 > 24dBm
5. 11dBm + 10log (21.98) = 24.42 > 24dBm
6. 11dBm + 10log (21.97) = 24.41 > 24dBm

Chain 3

1. 11dBm + 10log (24.88) = 24.95 > 24dBm
2. 11dBm + 10log (23.59) = 24.72 > 24dBm
3. 11dBm + 10log (23.61) = 24.73 > 24dBm
4. 11dBm + 10log (21.73) = 24.37 > 24dBm
5. 11dBm + 10log (22.29) = 24.48 > 24dBm
6. 11dBm + 10log (22.12) = 24.44 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 2	Chain 3				
54	5270	17.88	17.71	**120.396**	20.81	21.24	Pass
62	5310	15.59	14.85	66.773	18.25	21.24	Pass
102	5510	14.13	14.21	52.245	17.18	21.24	Pass
110	5550	17.93	17.63	120.03	20.79	21.24	Pass
134	5670	15.93	16.87	87.815	19.44	21.24	Pass

Note:

1. 5260~5320MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.76dBi > 6dBi, so the power limit shall be reduced to 24-(8.76-6) = 21.24dBm.
2. 5500~5700MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.76dBi > 6dBi, so the power limit shall be reduced to 24-(8.76-6) = 21.24dBm.

Chain 2

1. 11dBm + 10log (96.12) = 30.82 > 24dBm
2. 11dBm + 10log (51.80) = 28.14 > 24dBm
3. 11dBm + 10log (41.38) = 27.16 > 24dBm
4. 11dBm + 10log (91.96) = 30.63 > 24dBm
5. 11dBm + 10log (73.80) = 29.68 > 24dBm

Chain 3

1. 11dBm + 10log (89.91) = 30.53 > 24dBm
2. 11dBm + 10log (41.04) = 27.13 > 24dBm
3. 11dBm + 10log (40.96) = 27.12 > 24dBm
4. 11dBm + 10log (87.26) = 30.40 > 24dBm
5. 11dBm + 10log (69.22) = 29.40 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 2	Chain 3				
58	5290	15.36	15.18	67.317	18.28	21.24	Pass
106	5530	14.15	14.13	51.884	17.15	21.24	Pass
122	5610	17.83	18.04	**124.354**	20.95	21.24	Pass

Note:

1. 5260~5320MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.76dBi > 6dBi, so the power limit shall be reduced to 24-(8.76-6) = 21.24dBm.
2. 5500~5700MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.76dBi > 6dBi, so the power limit shall be reduced to 24-(8.76-6) = 21.24dBm.

Chain 2

1. 11dBm + 10log (99.58) = 30.98 > 24dBm
2. 11dBm + 10log (82.78) = 30.17 > 24dBm
3. 11dBm + 10log (162.13) = 33.09 > 24dBm

Chain 3

1. 11dBm + 10log (82.07) = 30.14 > 24dBm
2. 11dBm + 10log (82.06) = 30.14 > 24dBm
3. 11dBm + 10log (158.35) = 32.99 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 2	Chain 3
52	5260	24.34	26.66
60	5300	26.81	22.47
64	5320	26.78	26.77
100	5500	21.78	21.87
116	5580	21.93	22.40
140	5700	21.75	22.38

802.11ax (HE20)

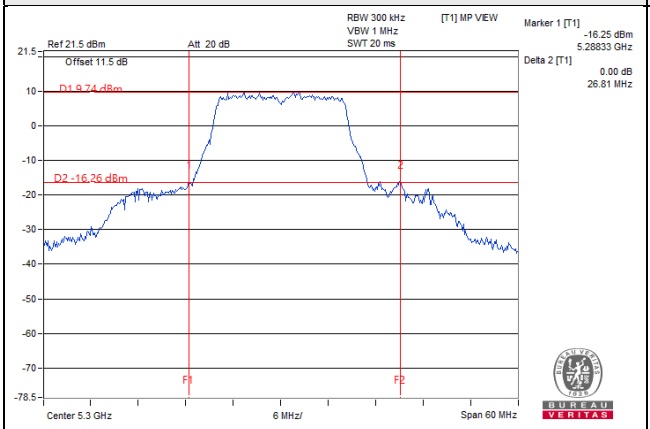
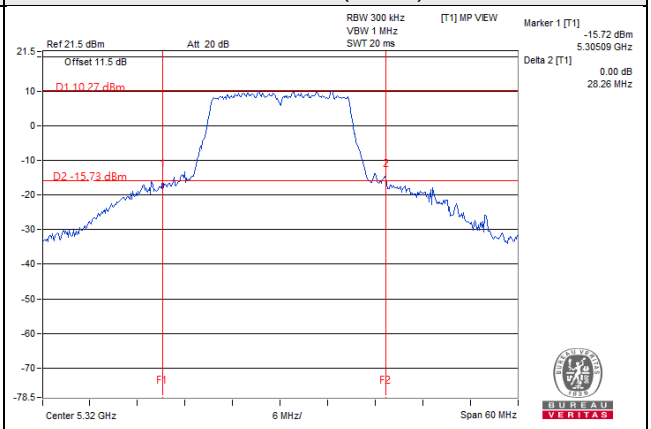
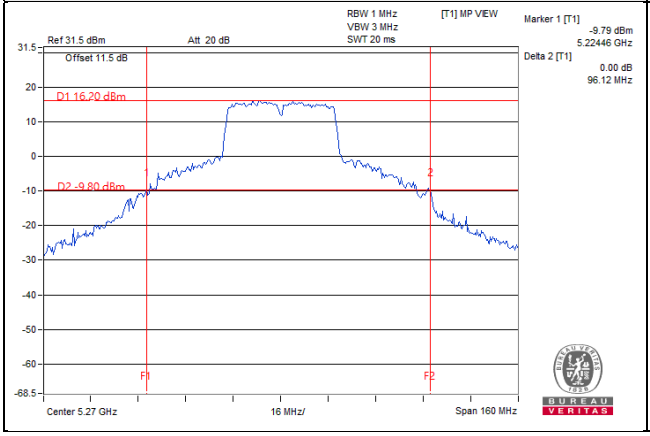
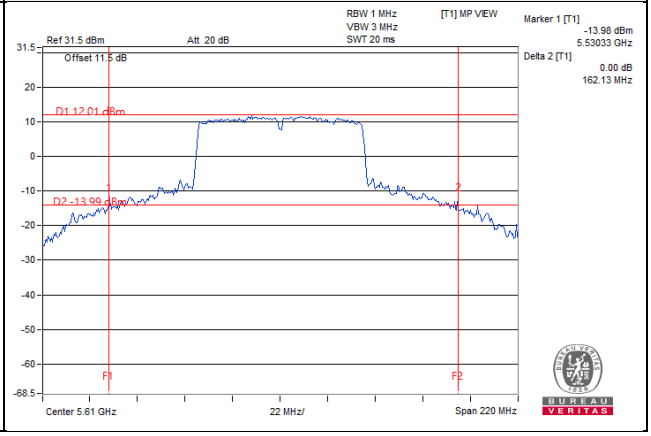
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 2	Chain 3
52	5260	26.04	24.88
60	5300	25.90	23.59
64	5320	28.26	23.61
100	5500	22.82	21.73
116	5580	21.98	22.29
140	5700	21.97	22.12

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 2	Chain 3
54	5270	96.12	89.91
62	5310	51.80	41.04
102	5510	41.38	40.96
110	5550	91.96	87.26
134	5670	73.80	69.22

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 2	Chain 3
58	5290	99.58	82.07
106	5530	82.78	82.06
122	5610	162.13	158.35

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.89	97.531
5470~5725	20.55	113.379

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	20.67	116.744
5470~5725	20.45	111.009

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	23.06	202.122
5470~5725	22.54	179.593

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	18.28	67.317
5470~5725	21.20	131.722

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	20.67	116.744
5470~5725	20.45	111.009

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	20.81	120.396
5470~5725	20.79	120.030

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	18.28	67.317
5470~5725	20.95	124.354

3TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
52	5260	14.63	13.98	14.85	84.592	19.27	24.00	Pass
60	5300	13.96	13.76	14.78	78.718	18.96	24.00	Pass
64	5320	14.32	13.72	14.71	80.170	19.04	24.00	Pass
100	5500	13.46	13.41	13.21	65.051	18.13	24.00	Pass
116	5580	15.11	15.06	17.23	117.342	20.69	24.00	Pass
140	5700	14.33	13.72	14.27	77.382	18.89	24.00	Pass

Note:

Chain 1

1. 11dBm + 10log (21.78) = 24.38 > 24dBm
2. 11dBm + 10log (21.82) = 24.38 > 24dBm
3. 11dBm + 10log (21.86) = 24.39 > 24dBm
4. 11dBm + 10log (21.85) = 24.39 > 24dBm
5. 11dBm + 10log (21.81) = 24.38 > 24dBm
6. 11dBm + 10log (21.80) = 24.38 > 24dBm

Chain 2

1. 11dBm + 10log (21.98) = 24.42 > 24dBm
2. 11dBm + 10log (22.00) = 24.42 > 24dBm
3. 11dBm + 10log (21.95) = 24.41 > 24dBm
4. 11dBm + 10log (21.52) = 24.32 > 24dBm
5. 11dBm + 10log (21.61) = 24.34 > 24dBm
6. 11dBm + 10log (21.91) = 24.40 > 24dBm

Chain 3

1. 11dBm + 10log (21.69) = 24.36 > 24dBm
2. 11dBm + 10log (21.58) = 24.34 > 24dBm
3. 11dBm + 10log (21.66) = 24.35 > 24dBm
4. 11dBm + 10log (21.71) = 24.36 > 24dBm
5. 11dBm + 10log (21.80) = 24.38 > 24dBm
6. 11dBm + 10log (21.77) = 24.37 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
52	5260	14.64	13.56	15.02	83.575	19.22	24.00	Pass
60	5300	14.32	13.60	14.75	79.803	19.02	24.00	Pass
64	5320	14.71	13.75	14.42	80.963	19.08	24.00	Pass
100	5500	14.24	14.44	14.43	82.076	19.14	24.00	Pass
116	5580	14.64	14.12	14.43	82.663	19.17	24.00	Pass
140	5700	13.56	13.58	14.56	74.078	18.70	24.00	Pass

Note:

Chain 1

1. 11dBm + 10log (21.68) = 24.36 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.71) = 24.36 > 24dBm
4. 11dBm + 10log (21.75) = 24.37 > 24dBm
5. 11dBm + 10log (21.66) = 24.35 > 24dBm
6. 11dBm + 10log (21.67) = 24.35 > 24dBm

Chain 2

1. 11dBm + 10log (21.61) = 24.34 > 24dBm
2. 11dBm + 10log (21.61) = 24.34 > 24dBm
3. 11dBm + 10log (21.63) = 24.35 > 24dBm
4. 11dBm + 10log (21.68) = 24.36 > 24dBm
5. 11dBm + 10log (21.62) = 24.34 > 24dBm
6. 11dBm + 10log (21.57) = 24.33 > 24dBm

Chain 3

1. 11dBm + 10log (21.93) = 24.41 > 24dBm
2. 11dBm + 10log (21.95) = 24.41 > 24dBm
3. 11dBm + 10log (21.88) = 24.40 > 24dBm
4. 11dBm + 10log (21.91) = 24.40 > 24dBm
5. 11dBm + 10log (21.95) = 24.41 > 24dBm
6. 11dBm + 10log (21.84) = 24.39 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
54	5270	18.24	17.37	18.20	**187.326**	22.73	24.00	Pass
62	5310	15.51	15.32	15.33	103.723	20.16	24.00	Pass
102	5510	14.16	14.05	13.75	75.186	18.76	24.00	Pass
110	5550	18.36	17.92	18.55	**202.107**	23.06	24.00	Pass
134	5670	15.38	15.56	14.82	100.828	20.04	24.00	Pass

Note:

Chain 1

1. 11dBm + 10log (50.55) = 28.03 > 24dBm
2. 11dBm + 10log (40.97) = 27.12 > 24dBm
3. 11dBm + 10log (40.91) = 27.11 > 24dBm
4. 11dBm + 10log (56.56) = 28.52 > 24dBm
5. 11dBm + 10log (57.14) = 28.56 > 24dBm

Chain 2

1. 11dBm + 10log (68.19) = 29.33 > 24dBm
2. 11dBm + 10log (48.86) = 27.88 > 24dBm
3. 11dBm + 10log (41.13) = 27.14 > 24dBm
4. 11dBm + 10log (47.45) = 27.76 > 24dBm
5. 11dBm + 10log (50.53) = 28.03 > 24dBm

Chain 3

1. 11dBm + 10log (70.54) = 29.48 > 24dBm
2. 11dBm + 10log (55.46) = 28.43 > 24dBm
3. 11dBm + 10log (41.29) = 27.15 > 24dBm
4. 11dBm + 10log (62.20) = 28.93 > 24dBm
5. 11dBm + 10log (57.73) = 28.61 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
58	5290	14.73	14.21	14.62	85.053	19.30	24.00	Pass
106	5530	14.19	13.84	13.86	74.774	18.74	24.00	Pass
122	5610	16.58	16.84	16.45	137.962	21.40	24.00	Pass

Note:

Chain 1

1. 11dBm + 10log (81.98) = 30.13 > 24dBm
2. 11dBm + 10log (82.07) = 30.14 > 24dBm
3. 11dBm + 10log (113.21) = 31.53 > 24dBm

Chain 2

1. 11dBm + 10log (82.34) = 30.15 > 24dBm
2. 11dBm + 10log (82.16) = 30.14 > 24dBm
3. 11dBm + 10log (128.48) = 32.08 > 24dBm

Chain 3

1. 11dBm + 10log (83.25) = 30.20 > 24dBm
2. 11dBm + 10log (82.43) = 30.16 > 24dBm
3. 11dBm + 10log (145.10) = 32.61 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
52	5260	14.64	13.56	15.02	**83.575**	19.22	19.59	Pass
60	5300	14.32	13.60	14.75	79.803	19.02	19.59	Pass
64	5320	14.71	13.75	14.42	80.963	19.08	19.59	Pass
100	5500	14.24	14.44	14.43	82.076	19.14	19.59	Pass
116	5580	14.64	14.12	14.43	**82.663**	19.17	19.59	Pass
140	5700	13.56	13.58	14.56	74.078	18.70	19.59	Pass

Note:

1. 5260~5320MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 10.41dBi > 6dBi, so the power limit shall be reduced to 24-(10.41-6) = 19.59dBm.
2. 5500~5700MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 10.41dBi > 6dBi, so the power limit shall be reduced to 24-(10.41-6) = 19.59dBm.

Chain 1

1. 11dBm + 10log (21.68) = 24.36 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.71) = 24.36 > 24dBm
4. 11dBm + 10log (21.75) = 24.37 > 24dBm
5. 11dBm + 10log (21.66) = 24.35 > 24dBm
6. 11dBm + 10log (21.67) = 24.35 > 24dBm

Chain 2

1. 11dBm + 10log (21.61) = 24.34 > 24dBm
2. 11dBm + 10log (21.61) = 24.34 > 24dBm
3. 11dBm + 10log (21.63) = 24.35 > 24dBm
4. 11dBm + 10log (21.68) = 24.36 > 24dBm
5. 11dBm + 10log (21.62) = 24.34 > 24dBm
6. 11dBm + 10log (21.57) = 24.33 > 24dBm

Chain 3

1. 11dBm + 10log (21.93) = 24.41 > 24dBm
2. 11dBm + 10log (21.95) = 24.41 > 24dBm
3. 11dBm + 10log (21.88) = 24.40 > 24dBm
4. 11dBm + 10log (21.91) = 24.40 > 24dBm
5. 11dBm + 10log (21.95) = 24.41 > 24dBm
6. 11dBm + 10log (21.84) = 24.39 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
54	5270	14.49	13.62	14.45	78.994	18.98	19.59	Pass
62	5310	14.51	14.32	14.33	82.391	19.16	19.59	Pass
102	5510	14.16	14.05	13.75	75.186	18.76	19.59	Pass
110	5550	14.36	13.92	14.55	80.460	19.06	19.59	Pass
134	5670	14.38	14.56	13.82	80.091	19.04	19.59	Pass

Note:

1. 5260~5320MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 10.41dBi > 6dBi, so the power limit shall be reduced to 24-(10.41-6) = 19.59dBm.
2. 5500~5700MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 10.41dBi > 6dBi, so the power limit shall be reduced to 24-(10.41-6) = 19.59dBm.

Chain 1

1. 11dBm + 10log (50.55) = 28.03 > 24dBm
2. 11dBm + 10log (40.97) = 27.12 > 24dBm
3. 11dBm + 10log (40.91) = 27.11 > 24dBm
4. 11dBm + 10log (56.56) = 28.52 > 24dBm
5. 11dBm + 10log (57.14) = 28.56 > 24dBm

Chain 2

1. 11dBm + 10log (68.19) = 29.33 > 24dBm
2. 11dBm + 10log (48.86) = 27.88 > 24dBm
3. 11dBm + 10log (41.13) = 27.14 > 24dBm
4. 11dBm + 10log (47.45) = 27.76 > 24dBm
5. 11dBm + 10log (50.53) = 28.03 > 24dBm

Chain 3

1. 11dBm + 10log (70.54) = 29.48 > 24dBm
2. 11dBm + 10log (55.46) = 28.43 > 24dBm
3. 11dBm + 10log (41.29) = 27.15 > 24dBm
4. 11dBm + 10log (62.20) = 28.93 > 24dBm
5. 11dBm + 10log (57.73) = 28.61 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
58	5290	14.48	13.96	14.37	80.296	19.05	19.59	Pass
106	5530	14.19	13.84	13.86	74.774	18.74	19.59	Pass
122	5610	14.33	14.59	14.20	82.179	19.15	19.59	Pass

Note:

1. 5260~5320MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 10.41dBi > 6dBi, so the power limit shall be reduced to 24-(10.41-6) = 19.59dBm.
2. 5500~5700MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 10.41dBi > 6dBi, so the power limit shall be reduced to 24-(10.41-6) = 19.59dBm.

Chain 1

1. 11dBm + 10log (81.98) = 30.13 > 24dBm
2. 11dBm + 10log (82.07) = 30.14 > 24dBm
3. 11dBm + 10log (113.21) = 31.53 > 24dBm

Chain 2

1. 11dBm + 10log (82.34) = 30.15 > 24dBm
2. 11dBm + 10log (82.16) = 30.14 > 24dBm
3. 11dBm + 10log (128.48) = 32.08 > 24dBm

Chain 3

1. 11dBm + 10log (83.25) = 30.20 > 24dBm
2. 11dBm + 10log (82.43) = 30.16 > 24dBm
3. 11dBm + 10log (145.10) = 32.61 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
52	5260	21.78	21.98	21.69
60	5300	21.82	22.00	21.58
64	5320	21.86	21.95	21.66
100	5500	21.85	21.52	21.71
116	5580	21.81	21.61	21.80
140	5700	21.80	21.91	21.77

802.11ax (HE20)

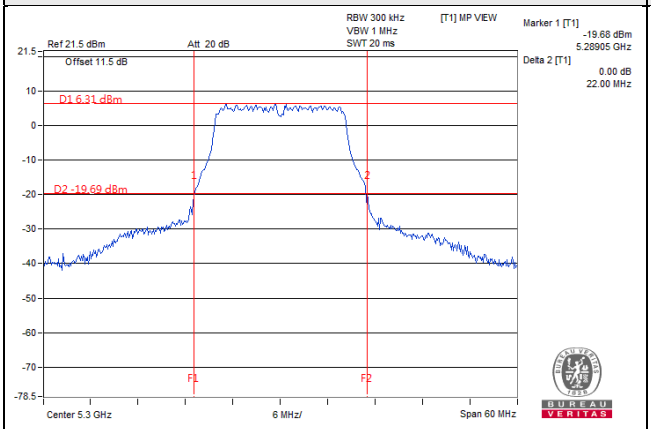
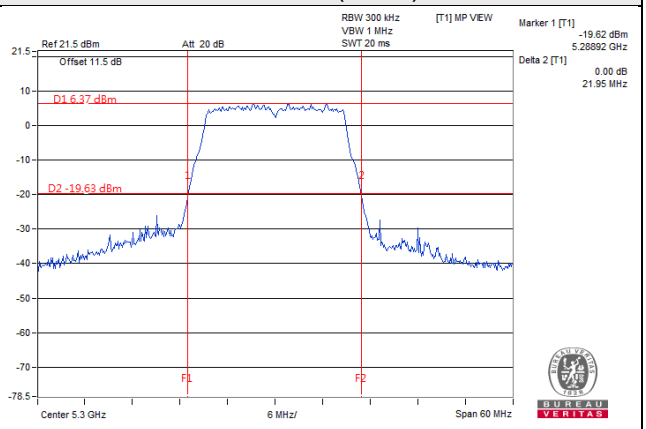
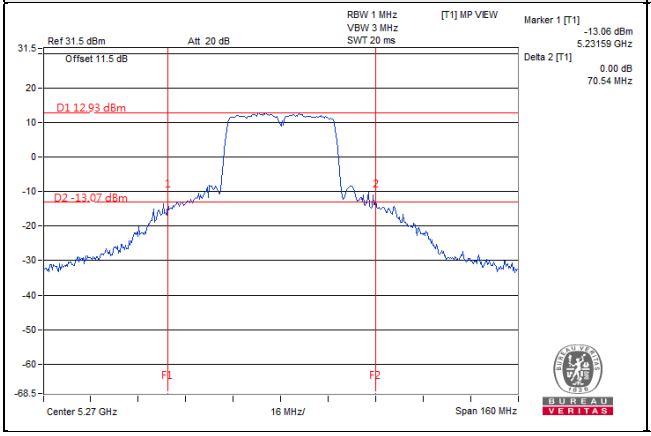
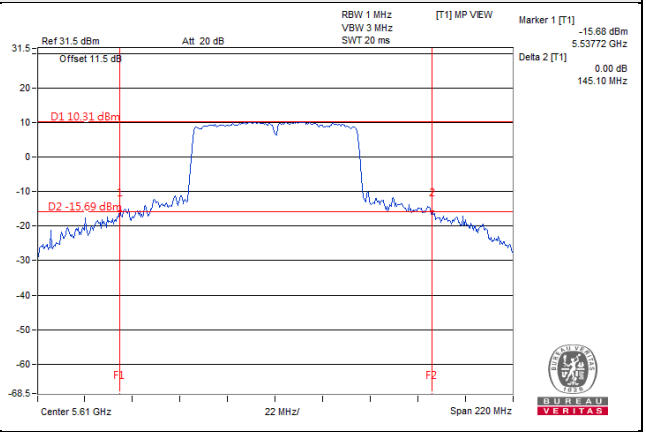
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
52	5260	21.68	21.61	21.93
60	5300	21.71	21.61	21.95
64	5320	21.71	21.63	21.88
100	5500	21.75	21.68	21.91
116	5580	21.66	21.62	21.95
140	5700	21.67	21.57	21.84

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
54	5270	50.55	68.19	70.54
62	5310	40.97	48.86	55.46
102	5510	40.91	41.13	41.29
110	5550	56.56	47.45	62.20
134	5670	57.14	50.53	57.73

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
58	5290	81.98	82.34	83.25
106	5530	82.07	82.16	82.43
122	5610	113.21	128.48	145.10

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.27	84.592
5470~5725	20.69	117.342

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.22	83.575
5470~5725	19.17	82.663

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	22.73	187.326
5470~5725	23.06	202.107

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.30	85.053
5470~5725	21.40	137.962

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.22	83.575
5470~5725	19.17	82.663

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.16	82.391
5470~5725	19.06	80.460

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.05	80.296
5470~5725	19.15	82.179

4TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.52	12.62	11.63	11.71	61.852	17.91	24.00	Pass
60	5300	11.63	12.53	11.75	12.74	66.216	18.21	24.00	Pass
64	5320	11.05	12.13	11.16	11.19	55.280	17.43	24.00	Pass
100	5500	10.99	11.37	10.13	10.86	48.763	16.88	24.00	Pass
116	5580	11.41	11.73	10.50	11.25	53.285	17.27	24.00	Pass
140	5700	10.16	11.40	10.61	10.40	46.652	16.69	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (21.60) = 24.34 > 24dBm
2. 11dBm + 10log (21.57) = 24.33 > 24dBm
3. 11dBm + 10log (21.76) = 24.37 > 24dBm
4. 11dBm + 10log (21.72) = 24.36 > 24dBm
5. 11dBm + 10log (21.64) = 24.35 > 24dBm
6. 11dBm + 10log (21.61) = 24.34 > 24dBm

Chain 1

1. 11dBm + 10log (21.66) = 24.35 > 24dBm
2. 11dBm + 10log (21.74) = 24.37 > 24dBm
3. 11dBm + 10log (21.70) = 24.36 > 24dBm
4. 11dBm + 10log (21.71) = 24.36 > 24dBm
5. 11dBm + 10log (21.70) = 24.36 > 24dBm
6. 11dBm + 10log (21.73) = 24.37 > 24dBm

Chain 2

1. 11dBm + 10log (21.75) = 24.37 > 24dBm
2. 11dBm + 10log (21.82) = 24.38 > 24dBm
3. 11dBm + 10log (21.77) = 24.37 > 24dBm
4. 11dBm + 10log (21.95) = 24.41 > 24dBm
5. 11dBm + 10log (21.82) = 24.38 > 24dBm
6. 11dBm + 10log (22.05) = 24.43 > 24dBm

Chain 3

1. 11dBm + 10log (21.68) = 24.36 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.68) = 24.36 > 24dBm
4. 11dBm + 10log (21.61) = 24.34 > 24dBm
5. 11dBm + 10log (21.72) = 24.36 > 24dBm
6. 11dBm + 10log (21.63) = 24.35 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.63	12.69	11.69	11.68	62.613	17.97	24.00	Pass
60	5300	11.06	12.18	12.25	12.17	62.554	17.96	24.00	Pass
64	5320	11.13	12.38	11.62	11.13	57.763	17.62	24.00	Pass
100	5500	11.26	11.63	10.20	10.40	49.357	16.93	24.00	Pass
116	5580	11.58	11.75	10.66	11.40	54.795	17.39	24.00	Pass
140	5700	11.14	11.96	12.01	11.00	57.180	17.57	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (21.84) = 24.39 > 24dBm
2. 11dBm + 10log (21.90) = 24.40 > 24dBm
3. 11dBm + 10log (21.94) = 24.41 > 24dBm
4. 11dBm + 10log (21.89) = 24.40 > 24dBm
5. 11dBm + 10log (21.90) = 24.40 > 24dBm
6. 11dBm + 10log (21.86) = 24.39 > 24dBm

Chain 1

1. 11dBm + 10log (21.66) = 24.35 > 24dBm
2. 11dBm + 10log (21.76) = 24.37 > 24dBm
3. 11dBm + 10log (21.75) = 24.37 > 24dBm
4. 11dBm + 10log (21.71) = 24.36 > 24dBm
5. 11dBm + 10log (21.73) = 24.37 > 24dBm
6. 11dBm + 10log (21.65) = 24.35 > 24dBm

Chain 2

1. 11dBm + 10log (21.66) = 24.35 > 24dBm
2. 11dBm + 10log (21.68) = 24.36 > 24dBm
3. 11dBm + 10log (21.57) = 24.33 > 24dBm
4. 11dBm + 10log (21.74) = 24.37 > 24dBm
5. 11dBm + 10log (21.72) = 24.36 > 24dBm
6. 11dBm + 10log (21.69) = 24.36 > 24dBm

Chain 3

1. 11dBm + 10log (21.67) = 24.35 > 24dBm
2. 11dBm + 10log (21.64) = 24.35 > 24dBm
3. 11dBm + 10log (21.76) = 24.37 > 24dBm
4. 11dBm + 10log (21.65) = 24.35 > 24dBm
5. 11dBm + 10log (21.71) = 24.36 > 24dBm
6. 11dBm + 10log (21.72) = 24.36 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	14.05	15.08	14.13	14.03	108.796	20.37	24.00	Pass
62	5310	14.24	15.27	14.22	14.37	113.974	20.57	24.00	Pass
102	5510	12.49	13.41	13.34	12.38	78.545	18.95	24.00	Pass
110	5550	14.50	14.70	13.51	14.69	109.579	20.40	24.00	Pass
134	5670	14.95	15.30	13.88	14.51	117.828	20.71	24.00	Pass

Note:
Chain 0
1. 11dBm + 10log (61.94) = 28.91 > 24dBm
2. 11dBm + 10log (41.33) = 27.16 > 24dBm
3. 11dBm + 10log (42.80) = 27.31 > 24dBm
4. 11dBm + 10log (69.96) = 29.44 > 24dBm
5. 11dBm + 10log (44.24) = 27.45 > 24dBm

Chain 1
1. 11dBm + 10log (49.16) = 27.91 > 24dBm
2. 11dBm + 10log (41.04) = 27.13 > 24dBm
3. 11dBm + 10log (41.00) = 27.12 > 24dBm
4. 11dBm + 10log (54.68) = 28.37 > 24dBm
5. 11dBm + 10log (49.34) = 27.93 > 24dBm

Chain 2
1. 11dBm + 10log (51.26) = 28.09 > 24dBm
2. 11dBm + 10log (41.34) = 27.16 > 24dBm
3. 11dBm + 10log (40.86) = 27.11 > 24dBm
4. 11dBm + 10log (55.79) = 28.46 > 24dBm
5. 11dBm + 10log (41.63) = 27.19 > 24dBm

Chain 3
1. 11dBm + 10log (50.48) = 28.03 > 24dBm
2. 11dBm + 10log (40.91) = 27.11 > 24dBm
3. 11dBm + 10log (40.72) = 27.09 > 24dBm
4. 11dBm + 10log (53.61) = 28.29 > 24dBm
5. 11dBm + 10log (40.72) = 27.09 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	14.39	15.52	14.50	14.53	**119.687**	20.78	24.00	Pass
106	5530	14.84	15.31	13.74	14.42	115.770	20.64	24.00	Pass
122	5610	15.77	16.15	14.92	15.37	**144.448**	21.60	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (105.92) = 31.24 > 24dBm
2. 11dBm + 10log (98.07) = 30.91 > 24dBm
3. 11dBm + 10log (95.68) = 30.80 > 24dBm

Chain 1

1. 11dBm + 10log (82.00) = 30.13 > 24dBm
2. 11dBm + 10log (82.22) = 30.14 > 24dBm
3. 11dBm + 10log (83.43) = 30.21 > 24dBm

Chain 2

1. 11dBm + 10log (81.94) = 30.13 > 24dBm
2. 11dBm + 10log (82.23) = 30.15 > 24dBm
3. 11dBm + 10log (82.20) = 30.14 > 24dBm

Chain 3

1. 11dBm + 10log (82.59) = 30.16 > 24dBm
2. 11dBm + 10log (82.74) = 30.17 > 24dBm
3. 11dBm + 10log (82.74) = 30.17 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.63	12.69	11.69	11.68	**62.613**	17.97	18.55	Pass
60	5300	11.06	12.18	12.25	12.17	**62.554**	17.96	18.55	Pass
64	5320	11.13	12.38	11.62	11.13	57.763	17.62	18.55	Pass
100	5500	11.26	11.63	10.20	10.40	49.357	16.93	18.55	Pass
116	5580	11.58	11.75	10.66	11.40	54.795	17.39	18.55	Pass
140	5700	11.14	11.96	12.01	11.00	57.180	17.57	18.55	Pass

Note:

1. 5260~5320MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 11.45dBi > 6dBi, so the power limit shall be reduced to 24-(11.45-6) = 18.55dBm.
2. 5500~5700MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 11.45dBi > 6dBi, so the power limit shall be reduced to 24-(11.45-6) = 18.55dBm.

Chain 0

1. 11dBm + 10log (21.84) = 24.39 > 24dBm
2. 11dBm + 10log (21.90) = 24.40 > 24dBm
3. 11dBm + 10log (21.94) = 24.41 > 24dBm
4. 11dBm + 10log (21.89) = 24.40 > 24dBm
5. 11dBm + 10log (21.90) = 24.40 > 24dBm
6. 11dBm + 10log (21.86) = 24.39 > 24dBm

Chain 1

1. 11dBm + 10log (21.66) = 24.35 > 24dBm
2. 11dBm + 10log (21.76) = 24.37 > 24dBm
3. 11dBm + 10log (21.75) = 24.37 > 24dBm
4. 11dBm + 10log (21.71) = 24.36 > 24dBm
5. 11dBm + 10log (21.73) = 24.37 > 24dBm
6. 11dBm + 10log (21.65) = 24.35 > 24dBm

Chain 2

1. 11dBm + 10log (21.66) = 24.35 > 24dBm
2. 11dBm + 10log (21.68) = 24.36 > 24dBm
3. 11dBm + 10log (21.57) = 24.33 > 24dBm
4. 11dBm + 10log (21.74) = 24.37 > 24dBm
5. 11dBm + 10log (21.72) = 24.36 > 24dBm
6. 11dBm + 10log (21.69) = 24.36 > 24dBm

Chain 3

1. 11dBm + 10log (21.67) = 24.35 > 24dBm
2. 11dBm + 10log (21.64) = 24.35 > 24dBm
3. 11dBm + 10log (21.76) = 24.37 > 24dBm
4. 11dBm + 10log (21.65) = 24.35 > 24dBm
5. 11dBm + 10log (21.71) = 24.36 > 24dBm
6. 11dBm + 10log (21.72) = 24.36 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	11.55	12.58	11.63	11.53	61.180	17.87	18.55	Pass
62	5310	11.49	12.52	11.47	11.62	60.507	17.82	18.55	Pass
102	5510	11.49	12.41	12.34	11.38	62.391	17.95	18.55	Pass
110	5550	12.00	12.20	11.01	12.19	61.621	17.90	18.55	Pass
134	5670	12.20	12.55	11.13	11.76	62.554	17.96	18.55	Pass

Note:

1. 5260~5320MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 11.45dBi > 6dBi, so the power limit shall be reduced to 24-(11.45-6) = 18.55dBm.
2. 5500~5700MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 11.45dBi > 6dBi, so the power limit shall be reduced to 24-(11.45-6) = 18.55dBm.

Chain 0

1. 11dBm + 10log (61.94) = 28.91 > 24dBm
2. 11dBm + 10log (41.33) = 27.16 > 24dBm
3. 11dBm + 10log (42.80) = 27.31 > 24dBm
4. 11dBm + 10log (69.96) = 29.44 > 24dBm
5. 11dBm + 10log (44.24) = 27.45 > 24dBm

Chain 1

1. 11dBm + 10log (49.16) = 27.91 > 24dBm
2. 11dBm + 10log (41.04) = 27.13 > 24dBm
3. 11dBm + 10log (41.00) = 27.12 > 24dBm
4. 11dBm + 10log (54.68) = 28.37 > 24dBm
5. 11dBm + 10log (49.34) = 27.93 > 24dBm

Chain 2

1. 11dBm + 10log (51.26) = 28.09 > 24dBm
2. 11dBm + 10log (41.34) = 27.16 > 24dBm
3. 11dBm + 10log (40.86) = 27.11 > 24dBm
4. 11dBm + 10log (55.79) = 28.46 > 24dBm
5. 11dBm + 10log (41.63) = 27.19 > 24dBm

Chain 3

1. 11dBm + 10log (50.48) = 28.03 > 24dBm
2. 11dBm + 10log (40.91) = 27.11 > 24dBm
3. 11dBm + 10log (40.72) = 27.09 > 24dBm
4. 11dBm + 10log (53.61) = 28.29 > 24dBm
5. 11dBm + 10log (40.72) = 27.09 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	11.39	12.52	11.50	11.39	59.985	17.78	18.55	Pass
106	5530	12.09	12.56	10.99	12.09	61.460	17.89	18.55	Pass
122	5610	12.02	12.40	11.17	12.02	60.913	17.85	18.55	Pass

Note:

1. 5260~5320MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 11.45dBi > 6dBi, so the power limit shall be reduced to 24-(11.45-6) = 18.55dBm.
2. 5500~5700MHz Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 11.45dBi > 6dBi, so the power limit shall be reduced to 24-(11.45-6) = 18.55dBm.

Chain 0

1. 11dBm + 10log (105.92) = 31.24 > 24dBm
2. 11dBm + 10log (98.07) = 30.91 > 24dBm
3. 11dBm + 10log (95.68) = 30.80 > 24dBm

Chain 1

1. 11dBm + 10log (82.00) = 30.13 > 24dBm
2. 11dBm + 10log (82.22) = 30.14 > 24dBm
3. 11dBm + 10log (83.43) = 30.21 > 24dBm

Chain 2

1. 11dBm + 10log (81.94) = 30.13 > 24dBm
2. 11dBm + 10log (82.23) = 30.15 > 24dBm
3. 11dBm + 10log (82.20) = 30.14 > 24dBm

Chain 3

1. 11dBm + 10log (82.59) = 30.16 > 24dBm
2. 11dBm + 10log (82.74) = 30.17 > 24dBm
3. 11dBm + 10log (82.74) = 30.17 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.60	21.66	21.75	21.68
60	5300	21.57	21.74	21.82	21.71
64	5320	21.76	21.70	21.77	21.68
100	5500	21.72	21.71	21.95	21.61
116	5580	21.64	21.70	21.82	21.72
140	5700	21.61	21.73	22.05	21.63

802.11ax (HE20)

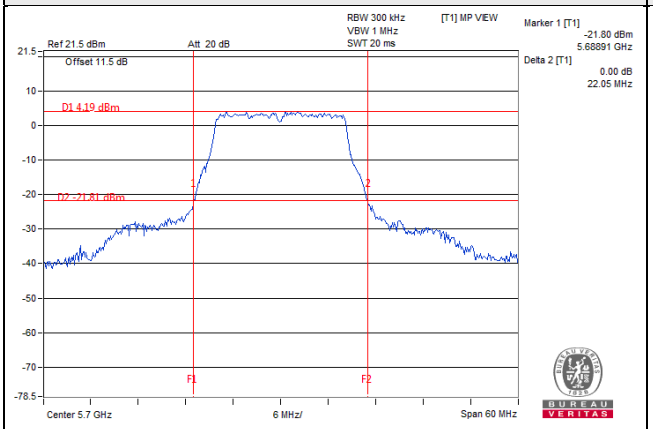
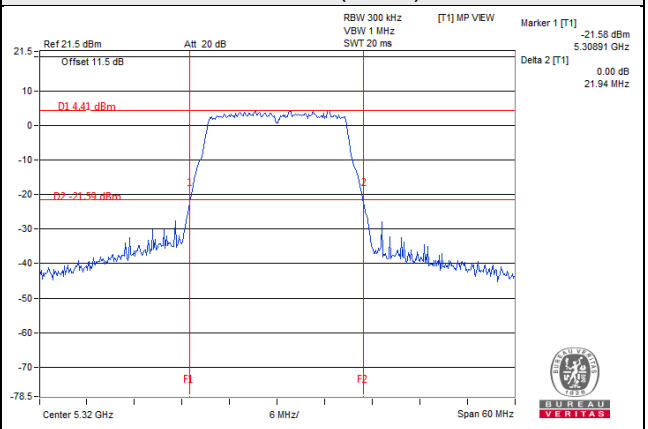
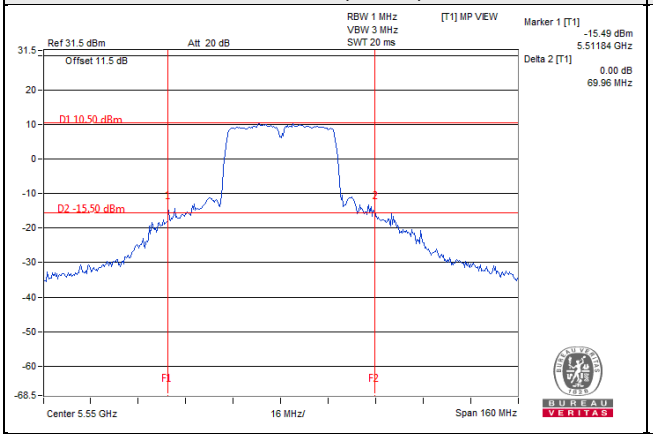
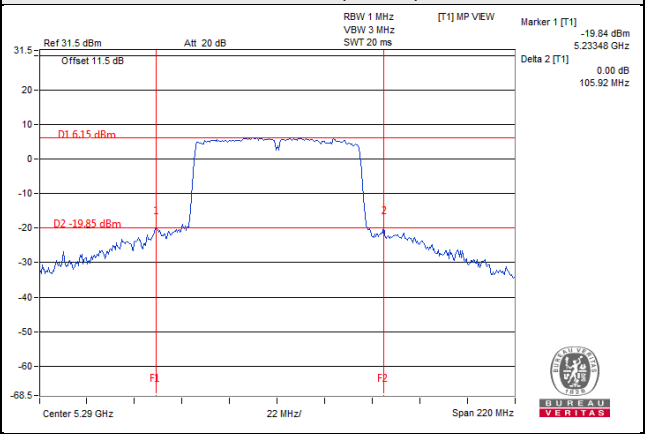
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.84	21.66	21.66	21.67
60	5300	21.90	21.76	21.68	21.64
64	5320	21.94	21.75	21.57	21.76
100	5500	21.89	21.71	21.74	21.65
116	5580	21.90	21.73	21.72	21.71
140	5700	21.86	21.65	21.69	21.72

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	61.94	49.16	51.26	50.48
62	5310	41.33	41.04	41.34	40.91
102	5510	42.80	41.00	40.86	40.72
110	5550	69.96	54.68	55.79	53.61
134	5670	44.24	49.34	41.63	40.72

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	105.92	82.00	81.94	82.59
106	5530	98.07	82.22	82.23	82.74
122	5610	95.68	83.43	82.20	82.74

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	18.21	66.216
5470~5725	17.27	53.285

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	17.97	62.613
5470~5725	17.57	57.180

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	20.57	113.974
5470~5725	20.71	117.828

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	20.78	119.687
5470~5725	21.60	144.448

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	17.97	62.613
5470~5725	17.57	57.180

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	17.87	61.180
5470~5725	17.96	62.554

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	17.78	59.985
5470~5725	17.89	61.460

Test Mode C (Internal antenna + Eth8 Radio)

1TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
100	5500	87.498	19.42	24.00	Pass
116	5580	142.889	21.55	24.00	Pass
140	5700	62.373	17.95	24.00	Pass

Note:

1. 11dBm + 10log (42.24) = 27.25 > 24dBm
2. 11dBm + 10log (45.58) = 27.58 > 24dBm
3. 11dBm + 10log (37.74) = 26.76 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
100	5500	64.863	18.12	24.00	Pass
116	5580	**144.877**	21.61	24.00	Pass
140	5700	53.088	17.25	24.00	Pass

Note:

1. 11dBm + 10log (37.06) = 26.68 > 24dBm
2. 11dBm + 10log (48.63) = 27.86 > 24dBm
3. 11dBm + 10log (32.62) = 26.13 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
102	5510	53.827	17.31	24.00	Pass
110	5550	127.644	21.06	24.00	Pass
134	5670	90.157	19.55	24.00	Pass

Note:

1. 11dBm + 10log (65.18) = 29.14 > 24dBm
2. 11dBm + 10log (100.61) = 31.02 > 24dBm
3. 11dBm + 10log (91.85) = 30.63 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
106	5530	54.075	17.33	24.00	Pass
122	5610	100.231	20.01	24.00	Pass

Note:

1. 11dBm + 10log (147.89) = 32.69 > 24dBm
2. 11dBm + 10log (192.61) = 33.84 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
100	5500	42.24
116	5580	45.58
140	5700	37.74

802.11ax (HE20)

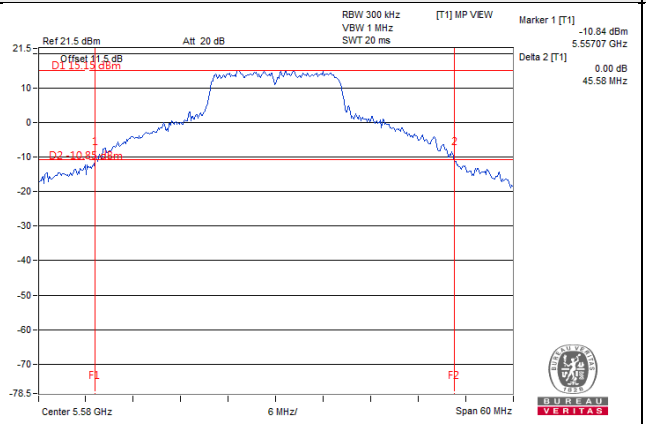
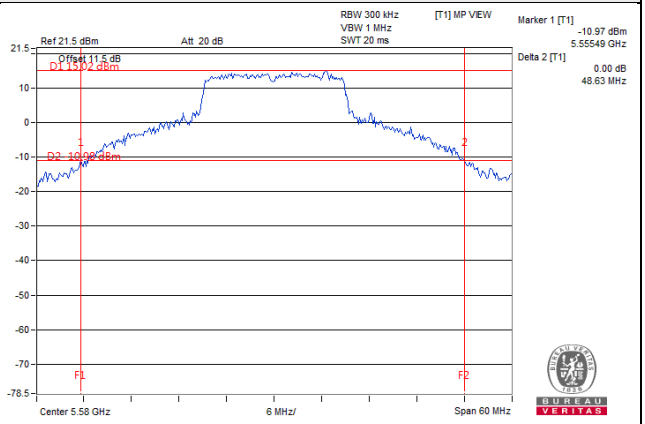
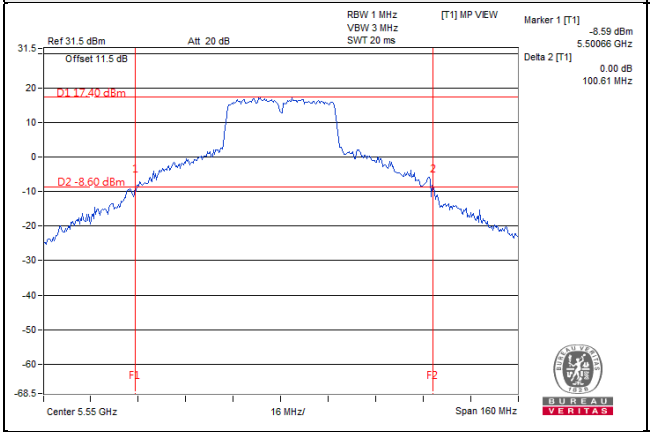
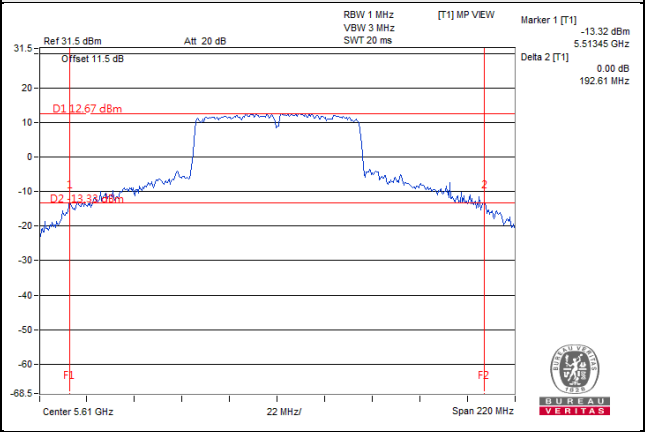
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
100	5500	37.06
116	5580	48.63
140	5700	32.62

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
102	5510	65.18
110	5550	100.61
134	5670	91.85

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
106	5530	147.89
122	5610	192.61

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	21.55	142.889

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	21.61	144.877

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	21.06	127.644

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	20.01	100.231

2TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
100	5500	16.11	16.98	90.720	19.58	24.00	Pass
116	5580	16.13	16.48	85.483	19.32	24.00	Pass
140	5700	15.82	15.97	77.731	18.91	24.00	Pass

Note:

Chain 1

1. 11dBm + 10log (22.32) = 24.48 > 24dBm
2. 11dBm + 10log (27.25) = 25.35 > 24dBm
3. 11dBm + 10log (26.64) = 25.25 > 24dBm

Chain 2

1. 11dBm + 10log (22.19) = 24.46 > 24dBm
2. 11dBm + 10log (27.29) = 25.36 > 24dBm
3. 11dBm + 10log (21.83) = 24.39 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
100	5500	15.05	15.71	69.228	18.40	24.00	Pass
116	5580	15.36	15.69	71.424	18.54	24.00	Pass
140	5700	14.71	15.43	64.494	18.10	24.00	Pass

Note:

Chain 1

1. 11dBm + 10log (22.66) = 24.55 > 24dBm
2. 11dBm + 10log (29.19) = 25.65 > 24dBm
3. 11dBm + 10log (21.75) = 24.37 > 24dBm

Chain 2

1. 11dBm + 10log (29.01) = 25.62 > 24dBm
2. 11dBm + 10log (23.61) = 24.73 > 24dBm
3. 11dBm + 10log (21.94) = 24.41 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
102	5510	15.32	15.97	73.578	18.67	24.00	Pass
110	5550	19.31	19.66	**177.780**	22.50	24.00	Pass
134	5670	17.67	17.86	119.573	20.78	24.00	Pass

Note:
Chain 1
1. 11dBm + 10log (40.94) = 27.12 > 24dBm
2. 11dBm + 10log (84.79) = 30.28 > 24dBm
3. 11dBm + 10log (64.81) = 29.11 > 24dBm

Chain 2
1. 11dBm + 10log (51.31) = 28.10 > 24dBm
2. 11dBm + 10log (88.19) = 30.45 > 24dBm
3. 11dBm + 10log (78.89) = 29.97 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
106	5530	15.88	15.98	78.354	18.94	24.00	Pass
122	5610	17.01	17.35	104.559	20.19	24.00	Pass

Note:
Chain 1
1. 11dBm + 10log (82.21) = 30.14 > 24dBm
2. 11dBm + 10log (112.14) = 31.49 > 24dBm

Chain 2
1. 11dBm + 10log (97.94) = 30.90 > 24dBm
2. 11dBm + 10log (148.07) = 32.70 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
100	5500	15.05	15.71	69.228	18.40	21.68	Pass
116	5580	15.36	15.69	71.424	18.54	21.68	Pass
140	5700	14.71	15.43	64.494	18.10	21.68	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.32dBi > 6dBi, so the power limit shall be reduced to 24-(8.32-6) = 21.68dBm.

Chain 1

1. 11dBm + 10log (22.66) = 24.55 > 24dBm
2. 11dBm + 10log (29.19) = 25.65 > 24dBm
3. 11dBm + 10log (21.75) = 24.37 > 24dBm

Chain 2

1. 11dBm + 10log (29.01) = 25.62 > 24dBm
2. 11dBm + 10log (23.61) = 24.73 > 24dBm
3. 11dBm + 10log (21.94) = 24.41 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
102	5510	15.32	15.97	73.578	18.67	21.68	Pass
110	5550	17.61	17.76	117.381	20.70	21.68	Pass
134	5670	17.67	17.86	**119.573**	20.78	21.68	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.32dBi > 6dBi, so the power limit shall be reduced to 24-(8.32-6) = 21.68dBm.

Chain 1

1. 11dBm + 10log (40.94) = 27.12 > 24dBm
2. 11dBm + 10log (84.79) = 30.28 > 24dBm
3. 11dBm + 10log (64.81) = 29.11 > 24dBm

Chain 2

1. 11dBm + 10log (51.31) = 28.10 > 24dBm
2. 11dBm + 10log (88.19) = 30.45 > 24dBm
3. 11dBm + 10log (78.89) = 29.97 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
106	5530	15.88	15.98	78.354	18.94	21.68	Pass
122	5610	17.01	17.35	104.559	20.19	21.68	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.32dBi > 6dBi, so the power limit shall be reduced to 24-(8.32-6) = 21.68dBm.

Chain 1

1. 11dBm + 10log (82.21) = 30.14 > 24dBm
2. 11dBm + 10log (112.14) = 31.49 > 24dBm

Chain 2

1. 11dBm + 10log (97.94) = 30.90 > 24dBm
2. 11dBm + 10log (148.07) = 32.70 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 1	Chain 2
100	5500	22.32	22.19
116	5580	27.25	27.29
140	5700	26.64	21.83

802.11ax (HE20)

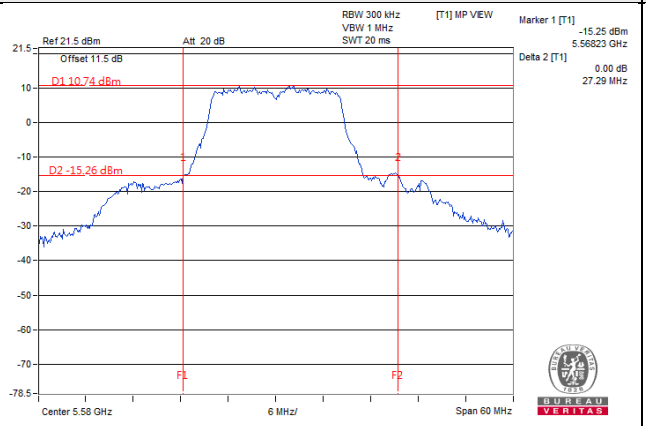
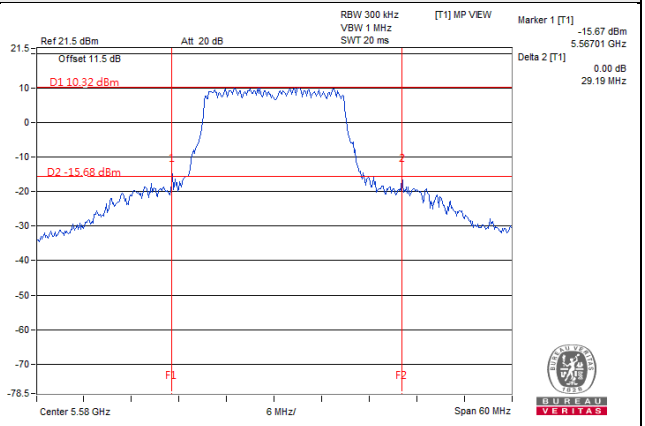
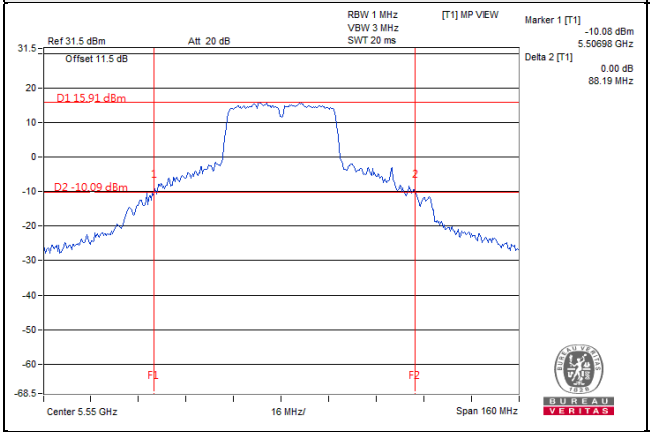
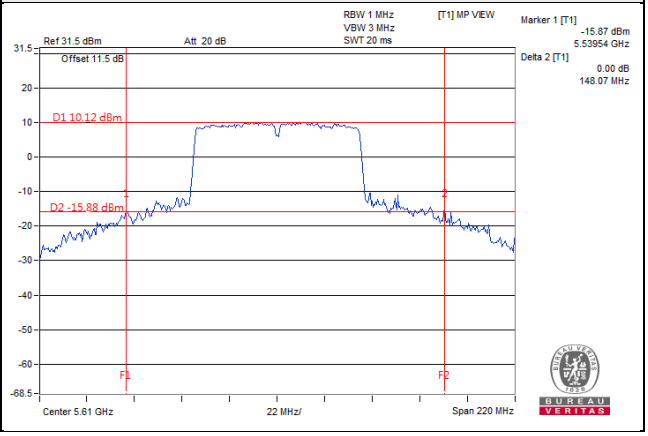
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 1	Chain 2
100	5500	22.66	29.01
116	5580	29.19	23.61
140	5700	21.75	21.94

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 1	Chain 2
102	5510	40.94	51.31
110	5550	84.79	88.19
134	5670	64.81	78.89

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 1	Chain 2
106	5530	82.21	97.94
122	5610	112.14	148.07

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	19.58	90.720

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.54	71.424

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	22.50	177.780

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	20.19	104.559

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.54	71.424

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	20.78	119.573

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	20.19	104.559

3TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
100	5500	13.01	13.52	13.22	63.479	18.03	24.00	Pass
116	5580	13.34	13.79	13.42	67.489	18.29	24.00	Pass
140	5700	13.05	13.42	13.51	64.602	18.10	24.00	Pass

Note:

Chain 1

1. 11dBm + 10log (21.83) = 24.39 > 24dBm
2. 11dBm + 10log (21.83) = 24.39 > 24dBm
3. 11dBm + 10log (21.80) = 24.38 > 24dBm

Chain 2

1. 11dBm + 10log (21.51) = 24.32 > 24dBm
2. 11dBm + 10log (21.55) = 24.33 > 24dBm
3. 11dBm + 10log (22.07) = 24.43 > 24dBm

Chain 3

1. 11dBm + 10log (21.67) = 24.35 > 24dBm
2. 11dBm + 10log (21.75) = 24.37 > 24dBm
3. 11dBm + 10log (21.70) = 24.36 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
100	5500	13.30	13.56	14.07	69.606	18.43	24.00	Pass
116	5580	13.47	13.80	13.92	70.881	18.51	24.00	Pass
140	5700	13.36	13.73	13.85	69.548	18.42	24.00	Pass

Note:

Chain 1

1. 11dBm + 10log (21.77) = 24.37 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.76) = 24.37 > 24dBm

Chain 2

1. 11dBm + 10log (21.62) = 24.34 > 24dBm
2. 11dBm + 10log (21.68) = 24.36 > 24dBm
3. 11dBm + 10log (21.62) = 24.34 > 24dBm

Chain 3

1. 11dBm + 10log (21.94) = 24.41 > 24dBm
2. 11dBm + 10log (21.88) = 24.40 > 24dBm
3. 11dBm + 10log (21.86) = 24.39 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
102	5510	15.03	15.41	15.52	102.241	20.10	24.00	Pass
110	5550	16.94	17.35	17.39	158.584	22.00	24.00	Pass
134	5670	16.46	16.87	16.93	142.217	21.53	24.00	Pass

Note:
Chain 1
1. 11dBm + 10log (41.10) = 27.13 > 24dBm
2. 11dBm + 10log (55.54) = 28.44 > 24dBm
3. 11dBm + 10log (63.60) = 29.03 > 24dBm
Chain 2
1. 11dBm + 10log (40.95) = 27.12 > 24dBm
2. 11dBm + 10log (41.66) = 27.19 > 24dBm
3. 11dBm + 10log (50.65) = 28.04 > 24dBm
Chain 3
1. 11dBm + 10log (55.53) = 28.44 > 24dBm
2. 11dBm + 10log (59.81) = 28.76 > 24dBm
3. 11dBm + 10log (61.81) = 28.91 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
106	5530	15.59	15.95	16.11	116.411	20.66	24.00	Pass
122	5610	18.23	18.59	18.68	**212.594**	23.28	24.00	Pass

Note:
Chain 1
1. 11dBm + 10log (82.25) = 30.15 > 24dBm
2. 11dBm + 10log (139.93) = 32.45 > 24dBm
Chain 2
1. 11dBm + 10log (82.11) = 30.14 > 24dBm
2. 11dBm + 10log (129.60) = 32.12 > 24dBm
Chain 3
1. 11dBm + 10log (82.50) = 30.16 > 24dBm
2. 11dBm + 10log (164.85) = 33.17 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
100	5500	13.30	13.56	14.07	69.606	18.43	20.25	Pass
116	5580	13.47	13.80	13.92	70.881	18.51	20.25	Pass
140	5700	13.36	13.73	13.85	69.548	18.42	20.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 9.75dBi > 6dBi, so the power limit shall be reduced to 24-(9.75-6) = 20.25dBm.

Chain 1

1. 11dBm + 10log (21.77) = 24.37 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.76) = 24.37 > 24dBm

Chain 2

1. 11dBm + 10log (21.62) = 24.34 > 24dBm
2. 11dBm + 10log (21.68) = 24.36 > 24dBm
3. 11dBm + 10log (21.62) = 24.34 > 24dBm

Chain 3

1. 11dBm + 10log (21.94) = 24.41 > 24dBm
2. 11dBm + 10log (21.88) = 24.40 > 24dBm
3. 11dBm + 10log (21.86) = 24.39 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
102	5510	13.28	13.66	13.77	68.331	18.35	20.25	Pass
110	5550	13.44	13.85	13.89	70.837	18.50	20.25	Pass
134	5670	13.46	13.87	13.93	**71.277**	18.53	20.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 9.75dBi > 6dBi, so the power limit shall be reduced to 24-(9.75-6) = 20.25dBm.

Chain 1

1. 11dBm + 10log (41.10) = 27.13 > 24dBm
2. 11dBm + 10log (55.54) = 28.44 > 24dBm
3. 11dBm + 10log (63.60) = 29.03 > 24dBm

Chain 2

1. 11dBm + 10log (40.95) = 27.12 > 24dBm
2. 11dBm + 10log (41.66) = 27.19 > 24dBm
3. 11dBm + 10log (50.65) = 28.04 > 24dBm

Chain 3

1. 11dBm + 10log (55.53) = 28.44 > 24dBm
2. 11dBm + 10log (59.81) = 28.76 > 24dBm
3. 11dBm + 10log (61.81) = 28.91 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
106	5530	13.09	13.45	13.61	65.462	18.16	20.25	Pass
122	5610	13.23	13.59	13.68	67.229	18.28	20.25	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 9.75dBi > 6dBi, so the power limit shall be reduced to 24-(9.75-6) = 20.25dBm.

Chain 1

1. 11dBm + 10log (82.25) = 30.15 > 24dBm
2. 11dBm + 10log (139.93) = 32.45 > 24dBm

Chain 2

1. 11dBm + 10log (82.11) = 30.14 > 24dBm
2. 11dBm + 10log (129.60) = 32.12 > 24dBm

Chain 3

1. 11dBm + 10log (82.50) = 30.16 > 24dBm
2. 11dBm + 10log (164.85) = 33.17 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
100	5500	21.83	21.51	21.67
116	5580	21.83	21.55	21.75
140	5700	21.80	22.07	21.70

802.11ax (HE20)

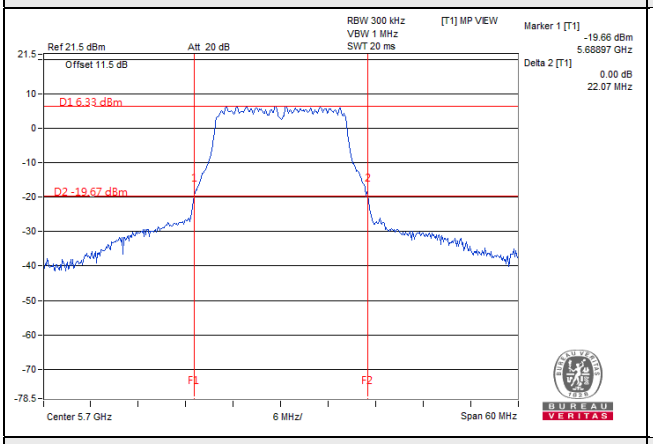
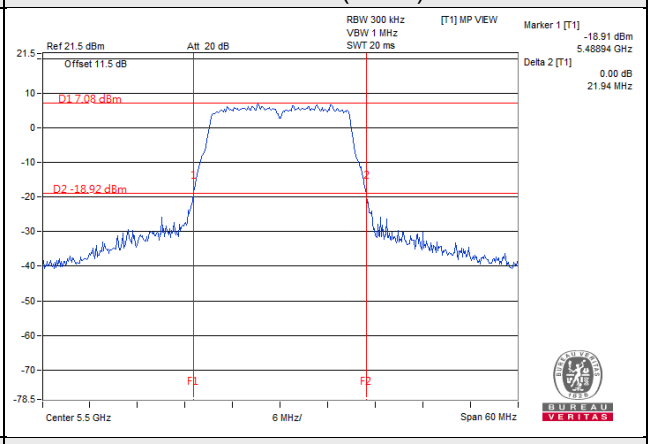
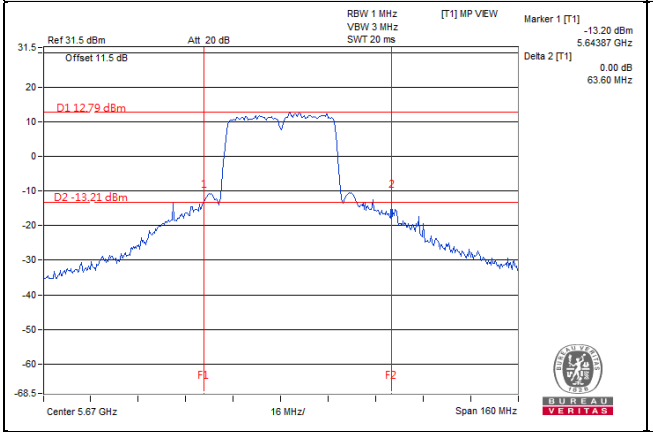
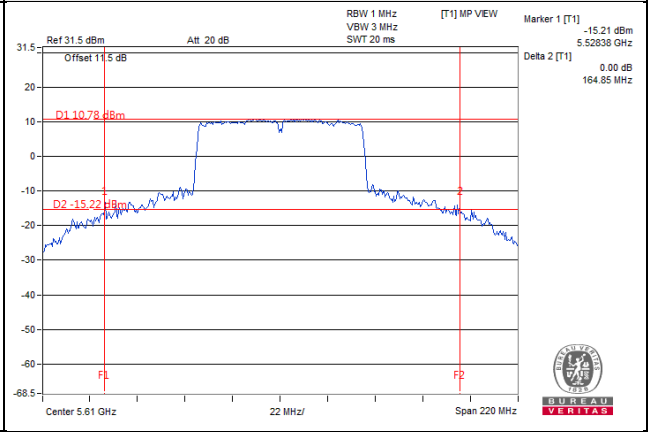
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
100	5500	21.77	21.62	21.94
116	5580	21.71	21.68	21.88
140	5700	21.76	21.62	21.86

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
102	5510	41.10	40.95	55.53
110	5550	55.54	41.66	59.81
134	5670	63.60	50.65	61.81

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
106	5530	82.25	82.11	82.50
122	5610	139.93	129.60	164.85

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.29	67.489

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.51	70.881

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	22.00	158.584

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	23.28	212.594

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.51	70.881

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.53	71.277

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.28	67.229

4TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	11.23	11.55	12.24	12.55	62.301	17.94	24.00	Pass
116	5580	11.25	11.48	12.19	12.52	61.818	17.91	24.00	Pass
140	5700	11.10	11.13	11.89	12.16	57.751	17.62	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (21.56) = 24.33 > 24dBm
2. 11dBm + 10log (21.77) = 24.37 > 24dBm
3. 11dBm + 10log (21.77) = 24.37 > 24dBm

Chain 1

1. 11dBm + 10log (21.61) = 24.34 > 24dBm
2. 11dBm + 10log (21.77) = 24.37 > 24dBm
3. 11dBm + 10log (21.74) = 24.37 > 24dBm

Chain 2

1. 11dBm + 10log (21.77) = 24.37 > 24dBm
2. 11dBm + 10log (21.86) = 24.39 > 24dBm
3. 11dBm + 10log (21.83) = 24.39 > 24dBm

Chain 3

1. 11dBm + 10log (21.52) = 24.32 > 24dBm
2. 11dBm + 10log (21.60) = 24.34 > 24dBm
3. 11dBm + 10log (21.73) = 24.37 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	11.90	11.85	12.56	12.98	68.690	18.37	24.00	Pass
116	5580	11.84	12.02	12.61	12.87	68.801	18.38	24.00	Pass
140	5700	11.59	12.63	12.54	13.18	71.488	18.54	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (21.87) = 24.39 > 24dBm
2. 11dBm + 10log (21.88) = 24.40 > 24dBm
3. 11dBm + 10log (21.89) = 24.40 > 24dBm

Chain 1

1. 11dBm + 10log (21.74) = 24.37 > 24dBm
2. 11dBm + 10log (21.72) = 24.36 > 24dBm
3. 11dBm + 10log (21.69) = 24.36 > 24dBm

Chain 2

1. 11dBm + 10log (21.67) = 24.35 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.65) = 24.35 > 24dBm

Chain 3

1. 11dBm + 10log (21.66) = 24.35 > 24dBm
2. 11dBm + 10log (21.66) = 24.35 > 24dBm
3. 11dBm + 10log (21.61) = 24.34 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	14.23	15.38	15.31	15.99	134.681	21.29	24.00	Pass
110	5550	15.39	15.74	16.08	16.41	156.394	21.94	24.00	Pass
134	5670	15.31	15.75	15.99	16.38	154.717	21.90	24.00	Pass

Note:
Chain 0
1. 11dBm + 10log (41.30) = 27.15 > 24dBm
2. 11dBm + 10log (41.31) = 27.16 > 24dBm
3. 11dBm + 10log (56.77) = 28.54 > 24dBm
Chain 1
1. 11dBm + 10log (41.01) = 27.12 > 24dBm
2. 11dBm + 10log (41.02) = 27.12 > 24dBm
3. 11dBm + 10log (41.03) = 27.13 > 24dBm
Chain 2
1. 11dBm + 10log (40.86) = 27.11 > 24dBm
2. 11dBm + 10log (41.25) = 27.15 > 24dBm
3. 11dBm + 10log (41.72) = 27.20 > 24dBm
Chain 3
1. 11dBm + 10log (40.67) = 27.09 > 24dBm
2. 11dBm + 10log (40.76) = 27.10 > 24dBm
3. 11dBm + 10log (40.83) = 27.10 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	14.59	15.64	15.60	16.23	143.702	21.57	24.00	Pass
122	5610	17.56	17.83	17.93	18.35	**248.168**	23.95	24.00	Pass

Note:
Chain 0
1. 11dBm + 10log (82.63) = 30.17 > 24dBm
2. 11dBm + 10log (116.02) = 31.64 > 24dBm
Chain 1
1. 11dBm + 10log (82.19) = 30.14 > 24dBm
2. 11dBm + 10log (138.44) = 32.41 > 24dBm
Chain 2
1. 11dBm + 10log (82.20) = 30.14 > 24dBm
2. 11dBm + 10log (138.67) = 32.41 > 24dBm
Chain 3
1. 11dBm + 10log (82.61) = 30.17 > 24dBm
2. 11dBm + 10log (111.48) = 31.47 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
100	5500	11.90	11.85	12.56	12.98	68.690	18.37	19.04	Pass
116	5580	11.84	12.02	12.61	12.87	68.801	18.38	19.04	Pass
140	5700	11.59	12.63	12.54	13.18	71.488	18.54	19.04	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 10.96dBi > 6dBi, so the power limit shall be reduced to 24-(10.96-6) = 19.04dBm.

Chain 0

1. 11dBm + 10log (21.87) = 24.39 > 24dBm
2. 11dBm + 10log (21.88) = 24.40 > 24dBm
3. 11dBm + 10log (21.89) = 24.40 > 24dBm

Chain 1

1. 11dBm + 10log (21.74) = 24.37 > 24dBm
2. 11dBm + 10log (21.72) = 24.36 > 24dBm
3. 11dBm + 10log (21.69) = 24.36 > 24dBm

Chain 2

1. 11dBm + 10log (21.67) = 24.35 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.65) = 24.35 > 24dBm

Chain 3

1. 11dBm + 10log (21.66) = 24.35 > 24dBm
2. 11dBm + 10log (21.66) = 24.35 > 24dBm
3. 11dBm + 10log (21.61) = 24.34 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
102	5510	11.48	12.63	12.56	13.24	**71.499**	18.54	19.04	Pass
110	5550	11.89	12.24	12.58	12.91	69.858	18.44	19.04	Pass
134	5670	11.81	12.25	12.49	12.88	69.110	18.40	19.04	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 10.96dBi > 6dBi, so the power limit shall be reduced to 24-(10.96-6) = 19.04dBm.

Chain 0

1. 11dBm + 10log (41.30) = 27.15 > 24dBm
2. 11dBm + 10log (41.31) = 27.16 > 24dBm
3. 11dBm + 10log (56.77) = 28.54 > 24dBm

Chain 1

1. 11dBm + 10log (41.01) = 27.12 > 24dBm
2. 11dBm + 10log (41.02) = 27.12 > 24dBm
3. 11dBm + 10log (41.03) = 27.13 > 24dBm

Chain 2

1. 11dBm + 10log (40.86) = 27.11 > 24dBm
2. 11dBm + 10log (41.25) = 27.15 > 24dBm
3. 11dBm + 10log (41.72) = 27.20 > 24dBm

Chain 3

1. 11dBm + 10log (40.67) = 27.09 > 24dBm
2. 11dBm + 10log (40.76) = 27.10 > 24dBm
3. 11dBm + 10log (40.83) = 27.10 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	11.34	12.39	12.35	12.98	67.992	18.32	19.04	Pass
122	5610	11.81	12.08	12.18	12.60	66.032	18.20	19.04	Pass

Note: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 10.96dBi > 6dBi, so the power limit shall be reduced to 24-(10.96-6) = 19.04dBm.

Chain 0

1. 11dBm + 10log (82.63) = 30.17 > 24dBm
2. 11dBm + 10log (116.02) = 31.64 > 24dBm

Chain 1

1. 11dBm + 10log (82.19) = 30.14 > 24dBm
2. 11dBm + 10log (138.44) = 32.41 > 24dBm

Chain 2

1. 11dBm + 10log (82.20) = 30.14 > 24dBm
2. 11dBm + 10log (138.67) = 32.41 > 24dBm

Chain 3

1. 11dBm + 10log (82.61) = 30.17 > 24dBm
2. 11dBm + 10log (111.48) = 31.47 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	21.56	21.61	21.77	21.52
116	5580	21.77	21.77	21.86	21.60
140	5700	21.77	21.74	21.83	21.73

802.11ax (HE20)

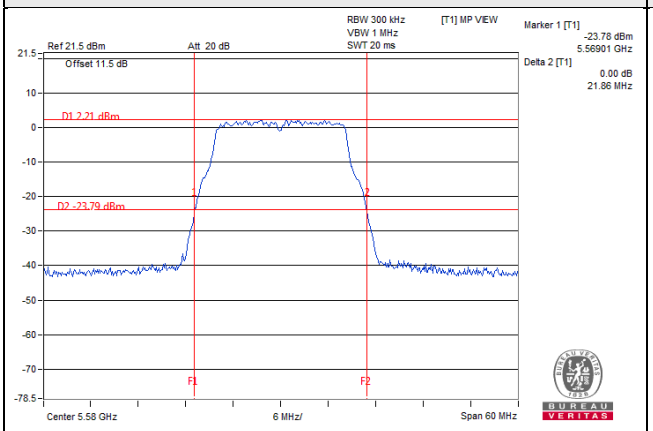
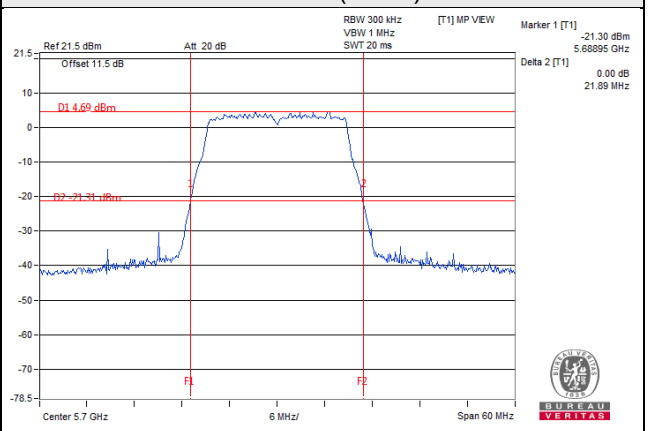
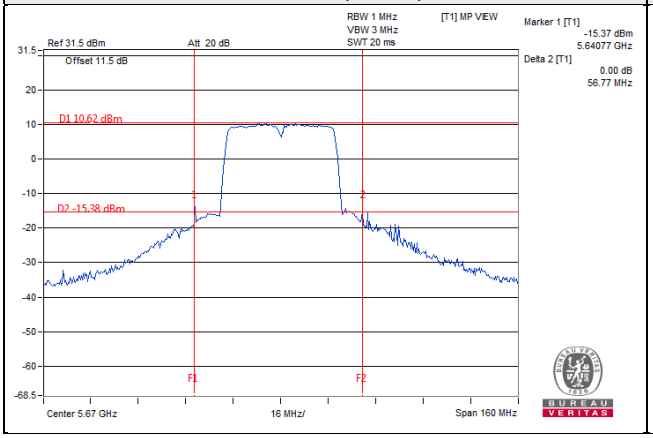
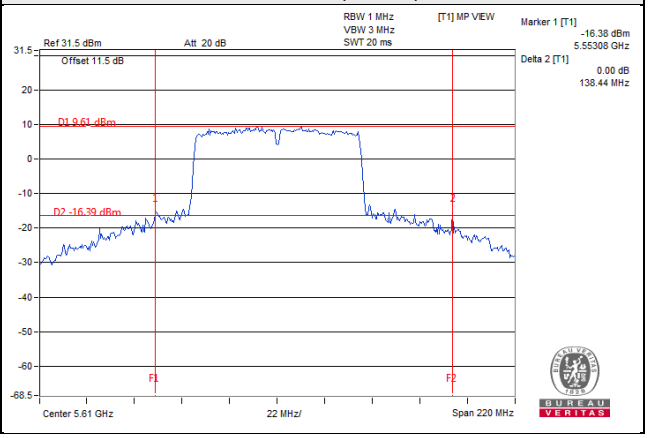
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	21.87	21.74	21.67	21.66
116	5580	21.88	21.72	21.67	21.66
140	5700	21.89	21.69	21.65	21.61

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
102	5510	41.30	41.01	40.86	40.67
110	5550	41.31	41.02	41.25	40.76
134	5670	56.77	41.03	41.72	40.83

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
106	5530	82.63	82.19	82.20	82.61
122	5610	116.02	138.44	138.67	111.48

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	17.94	62.301

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.54	71.488

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	21.94	156.394

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	23.95	248.168

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.54	71.488

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.54	71.499

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5470~5725	18.32	67.992

Test Mode E (External antenna – PN: ATS-OO-245-46-4RPSP-36 + Eth6 Radio)

1TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
52	5260	**139.959**	21.46	24.00	Pass
60	5300	132.739	21.23	24.00	Pass
64	5320	83.368	19.21	24.00	Pass
100	5500	56.105	17.49	24.00	Pass
116	5580	130.017	21.14	24.00	Pass
140	5700	32.961	15.18	24.00	Pass

Note:

1. 11dBm + 10log (45.65) = 27.59 > 24dBm
2. 11dBm + 10log (45.58) = 27.58 > 24dBm
3. 11dBm + 10log (40.34) = 27.05 > 24dBm
4. 11dBm + 10log (40.23) = 27.04 > 24dBm
5. 11dBm + 10log (45.64) = 27.59 > 24dBm
6. 11dBm + 10log (26.40) = 25.21 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
52	5260	137.088	21.37	24.00	Pass
60	5300	135.519	21.32	24.00	Pass
64	5320	76.560	18.84	24.00	Pass
100	5500	45.082	16.54	24.00	Pass
116	5580	**141.579**	21.51	24.00	Pass
140	5700	40.272	16.05	24.00	Pass

Note:

1. 11dBm + 10log (49.76) = 27.96 > 24dBm
2. 11dBm + 10log (48.62) = 27.86 > 24dBm
3. 11dBm + 10log (37.02) = 26.68 > 24dBm
4. 11dBm + 10log (36.97) = 26.67 > 24dBm
5. 11dBm + 10log (50.31) = 28.01 > 24dBm
6. 11dBm + 10log (22.03) = 24.43 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
54	5270	133.660	21.26	24.00	Pass
62	5310	44.771	16.51	24.00	Pass
102	5510	36.392	15.61	24.00	Pass
110	5550	135.519	21.32	24.00	Pass
134	5670	63.387	18.02	24.00	Pass

Note:

1. 11dBm + 10log (104.97) = 31.21 > 24dBm
2. 11dBm + 10log (70.21) = 29.46 > 24dBm
3. 11dBm + 10log (65.35) = 29.15 > 24dBm
4. 11dBm + 10log (103.55) = 31.15 > 24dBm
5. 11dBm + 10log (86.35) = 30.36 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
58	5290	37.844	15.78	24.00	Pass
106	5530	31.333	14.96	24.00	Pass
122	5610	90.782	19.58	24.00	Pass

Note:

1. 11dBm + 10log (130.06) = 32.14 > 24dBm
2. 11dBm + 10log (111.80) = 31.48 > 24dBm
3. 11dBm + 10log (193.01) = 33.85 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
52	5260	45.65
60	5300	45.58
64	5320	40.34
100	5500	40.23
116	5580	45.64
140	5700	26.40

802.11ax (HE20)

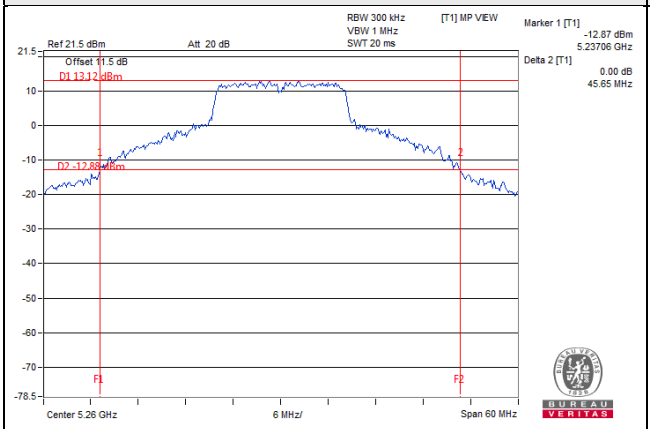
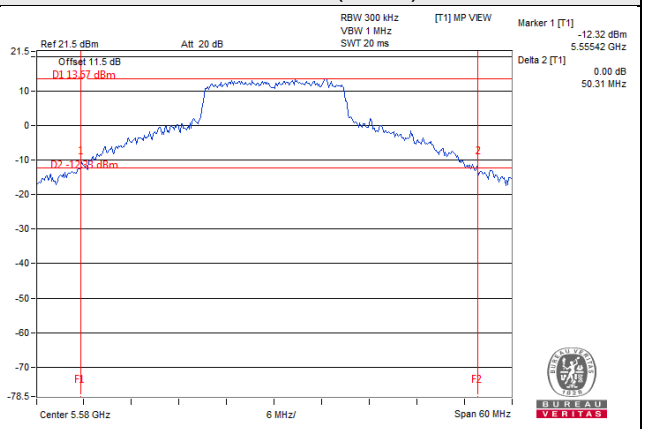
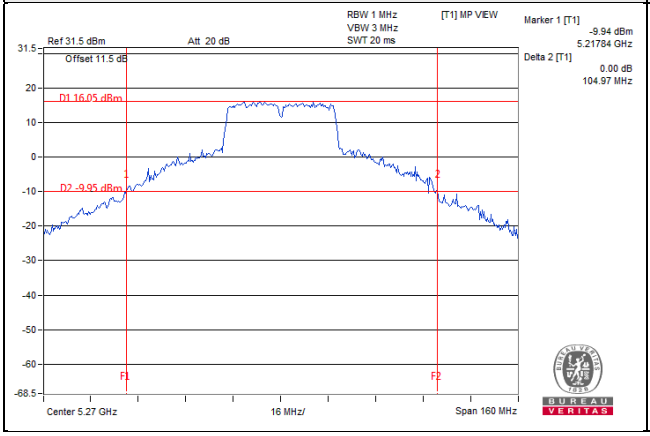
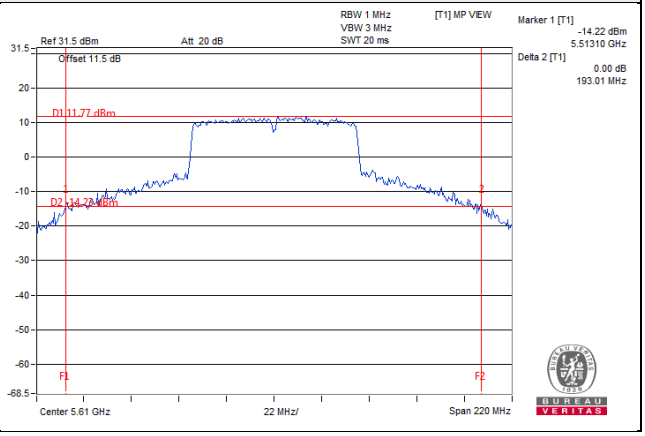
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
52	5260	49.76
60	5300	48.62
64	5320	37.02
100	5500	36.97
116	5580	50.31
140	5700	22.03

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
54	5270	104.97
62	5310	70.21
102	5510	65.35
110	5550	103.55
134	5670	86.35

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
58	5290	130.06
106	5530	111.80
122	5610	193.01

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	21.46	139.959
5470~5725	21.14	130.017

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	21.37	137.088
5470~5725	21.51	141.579

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	21.26	133.660
5470~5725	21.32	135.519

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	15.78	37.844
5470~5725	19.58	90.782

2TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
52	5260	16.34	15.97	82.590	19.17	24.00	Pass
60	5300	16.05	15.88	78.998	18.98	24.00	Pass
64	5320	16.98	16.78	97.531	19.89	24.00	Pass
100	5500	14.65	14.57	57.816	17.62	24.00	Pass
116	5580	17.55	17.52	113.379	20.55	24.00	Pass
140	5700	15.04	14.52	60.229	17.80	24.00	Pass

Note:

Chain 1

1. 11dBm + 10log (26.68) = 25.26 > 24dBm
2. 11dBm + 10log (27.27) = 25.35 > 24dBm
3. 11dBm + 10log (30.49) = 25.84 > 24dBm
4. 11dBm + 10log (22.20) = 24.46 > 24dBm
5. 11dBm + 10log (33.95) = 26.30 > 24dBm
6. 11dBm + 10log (26.22) = 25.18 > 24dBm

Chain 2

1. 11dBm + 10log (35.90) = 26.55 > 24dBm
2. 11dBm + 10log (28.55) = 25.55 > 24dBm
3. 11dBm + 10log (28.69) = 25.57 > 24dBm
4. 11dBm + 10log (22.27) = 24.47 > 24dBm
5. 11dBm + 10log (37.60) = 26.75 > 24dBm
6. 11dBm + 10log (21.69) = 24.36 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
52	5260	17.01	16.35	93.386	19.70	24.00	Pass
60	5300	17.07	16.44	94.988	19.78	24.00	Pass
64	5320	18.03	17.26	116.744	20.67	24.00	Pass
100	5500	15.01	15.10	64.055	18.07	24.00	Pass
116	5580	17.77	17.09	111.009	20.45	24.00	Pass
140	5700	15.03	14.68	61.218	17.87	24.00	Pass

Note:

Chain 1

1. 11dBm + 10log (28.00) = 25.47 > 24dBm
2. 11dBm + 10log (27.27) = 25.35 > 24dBm
3. 11dBm + 10log (24.40) = 24.87 > 24dBm
4. 11dBm + 10log (21.72) = 24.36 > 24dBm
5. 11dBm + 10log (35.77) = 26.53 > 24dBm
6. 11dBm + 10log (21.93) = 24.41 > 24dBm

Chain 2

1. 11dBm + 10log (37.07) = 26.69 > 24dBm
2. 11dBm + 10log (32.48) = 26.11 > 24dBm
3. 11dBm + 10log (33.58) = 26.26 > 24dBm
4. 11dBm + 10log (22.67) = 24.55 > 24dBm
5. 11dBm + 10log (35.32) = 26.48 > 24dBm
6. 11dBm + 10log (21.95) = 24.41 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
54	5270	20.13	19.96	**202.122**	23.06	24.00	Pass
62	5310	15.59	14.85	66.773	18.25	24.00	Pass
102	5510	14.13	14.21	52.245	17.18	24.00	Pass
110	5550	19.68	19.38	**179.593**	22.54	24.00	Pass
134	5670	15.93	16.87	87.815	19.44	24.00	Pass

Note:
Chain 1
1. 11dBm + 10log (86.94) = 30.39 > 24dBm
2. 11dBm + 10log (40.99) = 27.12 > 24dBm
3. 11dBm + 10log (40.99) = 27.12 > 24dBm
4. 11dBm + 10log (82.44) = 30.16 > 24dBm
5. 11dBm + 10log (65.98) = 29.19 > 24dBm

Chain 2
1. 11dBm + 10log (98.34) = 30.92 > 24dBm
2. 11dBm + 10log (50.18) = 28.00 > 24dBm
3. 11dBm + 10log (53.87) = 28.31 > 24dBm
4. 11dBm + 10log (93.57) = 30.71 > 24dBm
5. 11dBm + 10log (62.96) = 28.99 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
58	5290	15.36	15.18	67.317	18.28	24.00	Pass
106	5530	14.15	14.13	51.884	17.15	24.00	Pass
122	5610	18.08	18.29	131.722	21.20	24.00	Pass

Note:
Chain 1
1. 11dBm + 10log (82.19) = 30.14 > 24dBm
2. 11dBm + 10log (82.18) = 30.14 > 24dBm
3. 11dBm + 10log (173.53) = 33.39 > 24dBm

Chain 2
1. 11dBm + 10log (102.52) = 31.10 > 24dBm
2. 11dBm + 10log (99.48) = 30.97 > 24dBm
3. 11dBm + 10log (167.52) = 33.24 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
52	5260	17.01	16.35	93.386	19.70	20.99	Pass
60	5300	17.07	16.44	94.988	19.78	20.99	Pass
64	5320	18.03	17.26	116.744	20.67	20.99	Pass
100	5500	15.01	15.10	64.055	18.07	20.99	Pass
116	5580	17.77	17.09	111.009	20.45	20.99	Pass
140	5700	15.03	14.68	61.218	17.87	20.99	Pass

Note:

1. 5260~5320MHz Directional gain = 6dBi + 10log(2) = 9.01dBi > 6dBi, so the power limit shall be reduced to 24-(9.01-6) = 20.99dBm.
2. 5500~5700MHz Directional gain = 6dBi + 10log(2) = 9.01dBi > 6dBi, so the power limit shall be reduced to 24-(9.01-6) = 20.99dBm.

Chain 1

1. 11dBm + 10log (28.00) = 25.47 > 24dBm
2. 11dBm + 10log (27.27) = 25.35 > 24dBm
3. 11dBm + 10log (24.40) = 24.87 > 24dBm
4. 11dBm + 10log (21.72) = 24.36 > 24dBm
5. 11dBm + 10log (35.77) = 26.53 > 24dBm
6. 11dBm + 10log (21.93) = 24.41 > 24dBm

Chain 2

1. 11dBm + 10log (37.07) = 26.69 > 24dBm
2. 11dBm + 10log (32.48) = 26.11 > 24dBm
3. 11dBm + 10log (33.58) = 26.26 > 24dBm
4. 11dBm + 10log (22.67) = 24.55 > 24dBm
5. 11dBm + 10log (35.32) = 26.48 > 24dBm
6. 11dBm + 10log (21.95) = 24.41 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
54	5270	17.88	17.71	**120.396**	20.81	20.99	Pass
62	5310	15.59	14.85	66.773	18.25	20.99	Pass
102	5510	14.13	14.21	52.245	17.18	20.99	Pass
110	5550	17.93	17.63	120.030	20.79	20.99	Pass
134	5670	15.93	16.87	87.815	19.44	20.99	Pass

Note:
1. 5260~5320MHz Directional gain = 6dBi + 10log(2) = 9.01dBi > 6dBi, so the power limit shall be reduced to 24-(9.01-6) = 20.99dBm.
2. 5500~5700MHz Directional gain = 6dBi + 10log(2) = 9.01dBi > 6dBi, so the power limit shall be reduced to 24-(9.01-6) = 20.99dBm.

Chain 1

1. 11dBm + 10log (86.94) = 30.39 > 24dBm
2. 11dBm + 10log (40.99) = 27.12 > 24dBm
3. 11dBm + 10log (40.99) = 27.12 > 24dBm
4. 11dBm + 10log (82.44) = 30.16 > 24dBm
5. 11dBm + 10log (65.98) = 29.19 > 24dBm

Chain 2

1. 11dBm + 10log (98.34) = 30.92 > 24dBm
2. 11dBm + 10log (50.18) = 28.00 > 24dBm
3. 11dBm + 10log (53.87) = 28.31 > 24dBm
4. 11dBm + 10log (93.57) = 30.71 > 24dBm
5. 11dBm + 10log (62.96) = 28.99 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 1	Chain 2				
58	5290	15.36	15.18	67.317	18.28	20.99	Pass
106	5530	14.15	14.13	51.884	17.15	20.99	Pass
122	5610	17.83	18.04	**124.354**	20.95	20.99	Pass

Note:
1. 5260~5320MHz Directional gain = 6dBi + 10log(2) = 9.01dBi > 6dBi, so the power limit shall be reduced to 24-(9.01-6) = 20.99dBm.
2. 5500~5700MHz Directional gain = 6dBi + 10log(2) = 9.01dBi > 6dBi, so the power limit shall be reduced to 24-(9.01-6) = 20.99dBm.

Chain 1

1. 11dBm + 10log (82.19) = 30.14 > 24dBm
2. 11dBm + 10log (82.18) = 30.14 > 24dBm
3. 11dBm + 10log (173.53) = 33.39 > 24dBm

Chain 2

1. 11dBm + 10log (102.52) = 31.10 > 24dBm
2. 11dBm + 10log (99.48) = 30.97 > 24dBm
3. 11dBm + 10log (167.52) = 33.24 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 1	Chain 2
52	5260	26.68	35.90
60	5300	27.27	28.55
64	5320	30.49	28.69
100	5500	22.20	22.27
116	5580	33.95	37.60
140	5700	26.22	21.69

802.11ax (HE20)

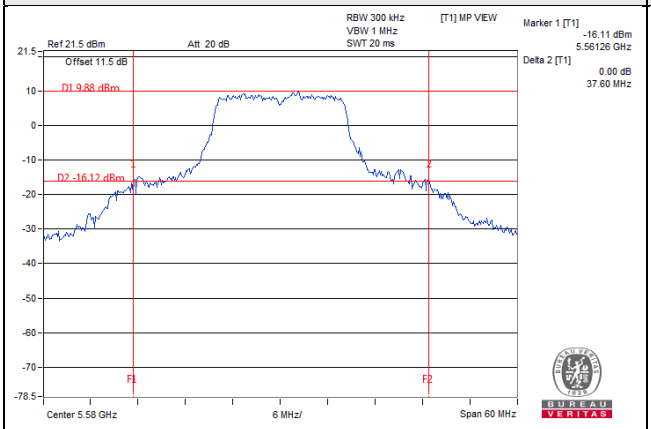
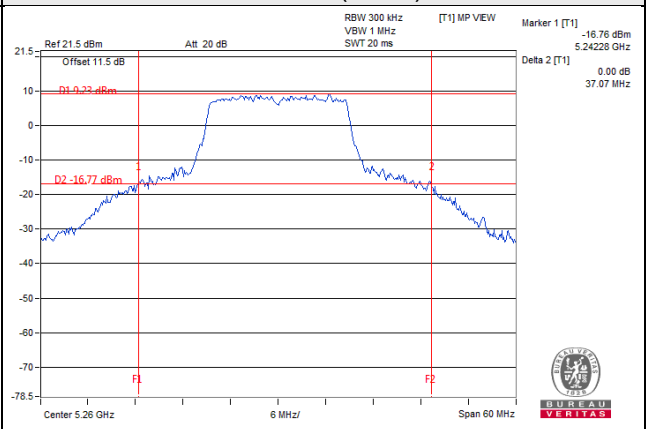
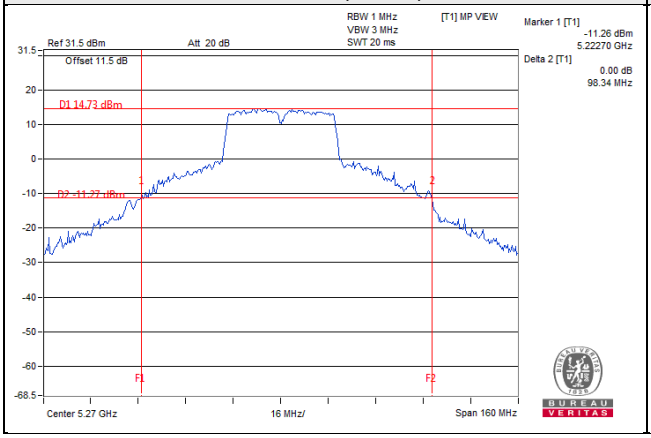
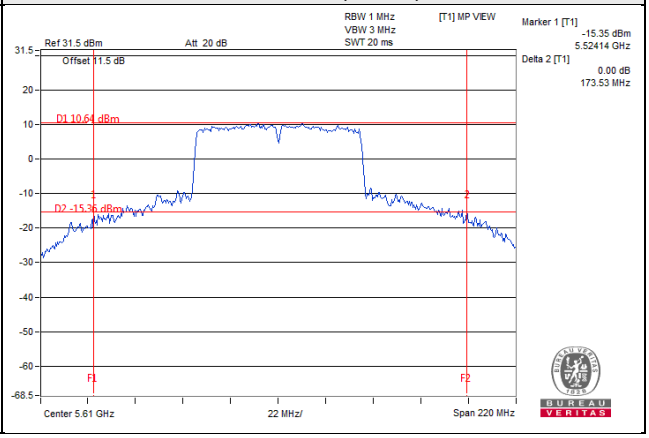
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 1	Chain 2
52	5260	28.00	37.07
60	5300	27.27	32.48
64	5320	24.40	33.58
100	5500	21.72	22.67
116	5580	35.77	35.32
140	5700	21.93	21.95

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 1	Chain 2
54	5270	86.94	98.34
62	5310	40.99	50.18
102	5510	40.99	53.87
110	5550	82.44	93.57
134	5670	65.98	62.96

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 1	Chain 2
58	5290	82.19	102.52
106	5530	82.18	99.48
122	5610	173.53	167.52

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.89	97.531
5470~5725	20.55	113.379

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	20.67	116.744
5470~5725	20.45	111.009

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	23.06	202.122
5470~5725	22.54	179.593

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	18.28	67.317
5470~5725	21.20	131.722

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	20.67	116.744
5470~5725	20.45	111.009

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	20.81	120.396
5470~5725	20.79	120.030

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	18.28	67.317
5470~5725	20.95	124.354

3TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
52	5260	14.63	13.98	14.85	84.592	19.27	24.00	Pass
60	5300	13.96	13.76	14.78	78.718	18.96	24.00	Pass
64	5320	14.32	13.72	14.71	80.170	19.04	24.00	Pass
100	5500	13.46	13.41	13.21	65.051	18.13	24.00	Pass
116	5580	15.11	15.06	17.23	117.342	20.69	24.00	Pass
140	5700	14.33	13.72	14.27	77.382	18.89	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (21.67) = 24.35 > 24dBm
2. 11dBm + 10log (21.66) = 24.35 > 24dBm
3. 11dBm + 10log (21.67) = 24.35 > 24dBm
4. 11dBm + 10log (21.68) = 24.36 > 24dBm
5. 11dBm + 10log (21.71) = 24.36 > 24dBm
6. 11dBm + 10log (21.80) = 24.38 > 24dBm

Chain 1

1. 11dBm + 10log (21.76) = 24.37 > 24dBm
2. 11dBm + 10log (21.74) = 24.37 > 24dBm
3. 11dBm + 10log (21.93) = 24.41 > 24dBm
4. 11dBm + 10log (21.75) = 24.37 > 24dBm
5. 11dBm + 10log (21.80) = 24.38 > 24dBm
6. 11dBm + 10log (21.95) = 24.41 > 24dBm

Chain 2

1. 11dBm + 10log (22.27) = 24.47 > 24dBm
2. 11dBm + 10log (22.12) = 24.44 > 24dBm
3. 11dBm + 10log (27.23) = 25.35 > 24dBm
4. 11dBm + 10log (21.76) = 24.37 > 24dBm
5. 11dBm + 10log (22.22) = 24.46 > 24dBm
6. 11dBm + 10log (22.32) = 24.48 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
52	5260	14.64	13.56	15.02	83.575	19.22	24.00	Pass
60	5300	14.32	13.60	14.75	79.803	19.02	24.00	Pass
64	5320	14.71	13.75	14.42	80.963	19.08	24.00	Pass
100	5500	14.24	14.44	14.43	82.076	19.14	24.00	Pass
116	5580	14.64	14.12	14.43	82.663	19.17	24.00	Pass
140	5700	13.56	13.58	14.56	74.078	18.70	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (23.89) = 24.78 > 24dBm
2. 11dBm + 10log (21.92) = 24.40 > 24dBm
3. 11dBm + 10log (21.97) = 24.41 > 24dBm
4. 11dBm + 10log (22.29) = 24.48 > 24dBm
5. 11dBm + 10log (21.94) = 24.41 > 24dBm
6. 11dBm + 10log (21.94) = 24.41 > 24dBm

Chain 1

1. 11dBm + 10log (21.64) = 24.35 > 24dBm
2. 11dBm + 10log (21.74) = 24.37 > 24dBm
3. 11dBm + 10log (21.70) = 24.36 > 24dBm
4. 11dBm + 10log (21.85) = 24.39 > 24dBm
5. 11dBm + 10log (21.79) = 24.38 > 24dBm
6. 11dBm + 10log (21.73) = 24.37 > 24dBm

Chain 2

1. 11dBm + 10log (21.70) = 24.36 > 24dBm
2. 11dBm + 10log (21.93) = 24.41 > 24dBm
3. 11dBm + 10log (23.36) = 24.68 > 24dBm
4. 11dBm + 10log (21.70) = 24.36 > 24dBm
5. 11dBm + 10log (21.64) = 24.35 > 24dBm
6. 11dBm + 10log (21.57) = 24.33 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
54	5270	18.24	17.37	18.20	**187.326**	22.73	24.00	Pass
62	5310	15.51	15.32	15.33	103.723	20.16	24.00	Pass
102	5510	14.16	14.05	13.75	75.186	18.76	24.00	Pass
110	5550	18.36	17.92	18.55	**202.107**	23.06	24.00	Pass
134	5670	15.38	15.56	14.82	100.828	20.04	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (83.89) = 30.23 > 24dBm
2. 11dBm + 10log (59.76) = 28.76 > 24dBm
3. 11dBm + 10log (45.39) = 27.56 > 24dBm
4. 11dBm + 10log (82.55) = 30.16 > 24dBm
5. 11dBm + 10log (57.50) = 28.59 > 24dBm

Chain 1

1. 11dBm + 10log (66.16) = 29.20 > 24dBm
2. 11dBm + 10log (41.05) = 27.13 > 24dBm
3. 11dBm + 10log (40.99) = 27.12 > 24dBm
4. 11dBm + 10log (66.97) = 29.25 > 24dBm
5. 11dBm + 10log (58.13) = 28.64 > 24dBm

Chain 2

1. 11dBm + 10log (73.35) = 29.65 > 24dBm
2. 11dBm + 10log (55.15) = 28.41 > 24dBm
3. 11dBm + 10log (41.02) = 27.12 > 24dBm
4. 11dBm + 10log (59.88) = 28.77 > 24dBm
5. 11dBm + 10log (53.27) = 28.26 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
58	5290	14.73	14.21	14.62	85.053	19.30	24.00	Pass
106	5530	14.19	13.84	13.86	74.774	18.74	24.00	Pass
122	5610	16.58	16.84	16.45	137.962	21.40	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (86.04) = 30.34 > 24dBm
2. 11dBm + 10log (84.29) = 30.25 > 24dBm
3. 11dBm + 10log (142.32) = 32.53 > 24dBm

Chain 1

1. 11dBm + 10log (82.02) = 30.13 > 24dBm
2. 11dBm + 10log (82.07) = 30.14 > 24dBm
3. 11dBm + 10log (119.70) = 31.78 > 24dBm

Chain 2

1. 11dBm + 10log (82.01) = 30.13 > 24dBm
2. 11dBm + 10log (82.24) = 30.15 > 24dBm
3. 11dBm + 10log (119.79) = 31.78 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
52	5260	14.64	13.56	15.02	**83.575**	19.22	19.23	Pass
60	5300	14.32	13.60	14.75	79.803	19.02	19.23	Pass
64	5320	14.71	13.75	14.42	80.963	19.08	19.23	Pass
100	5500	14.24	14.44	14.43	82.076	19.14	19.23	Pass
116	5580	14.64	14.12	14.43	**82.663**	19.17	19.23	Pass
140	5700	13.56	13.58	14.56	74.078	18.70	19.23	Pass

Note:

1. 5260~5320MHz Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power limit shall be reduced to 24-(10.77-6) = 19.23dBm.
2. 5500~5700MHz Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power limit shall be reduced to 24-(10.77-6) = 19.23dBm.

Chain 0

1. 11dBm + 10log (23.89) = 24.78 > 24dBm
2. 11dBm + 10log (21.92) = 24.40 > 24dBm
3. 11dBm + 10log (21.97) = 24.41 > 24dBm
4. 11dBm + 10log (22.29) = 24.48 > 24dBm
5. 11dBm + 10log (21.94) = 24.41 > 24dBm
6. 11dBm + 10log (21.94) = 24.41 > 24dBm

Chain 1

1. 11dBm + 10log (21.64) = 24.35 > 24dBm
2. 11dBm + 10log (21.74) = 24.37 > 24dBm
3. 11dBm + 10log (21.70) = 24.36 > 24dBm
4. 11dBm + 10log (21.85) = 24.39 > 24dBm
5. 11dBm + 10log (21.79) = 24.38 > 24dBm
6. 11dBm + 10log (21.73) = 24.37 > 24dBm

Chain 2

1. 11dBm + 10log (21.70) = 24.36 > 24dBm
2. 11dBm + 10log (21.93) = 24.41 > 24dBm
3. 11dBm + 10log (23.36) = 24.68 > 24dBm
4. 11dBm + 10log (21.70) = 24.36 > 24dBm
5. 11dBm + 10log (21.64) = 24.35 > 24dBm
6. 11dBm + 10log (21.57) = 24.33 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
54	5270	14.49	13.62	14.45	78.994	18.98	19.23	Pass
62	5310	14.51	14.32	14.33	82.391	19.16	19.23	Pass
102	5510	14.16	14.05	13.75	75.186	18.76	19.23	Pass
110	5550	14.36	13.92	14.55	80.460	19.06	19.23	Pass
134	5670	14.38	14.56	13.82	80.091	19.04	19.23	Pass

Note:
1. 5260~5320MHz Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power limit shall be reduced to 24-(10.77-6) = 19.23dBm.
2. 5500~5700MHz Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power limit shall be reduced to 24-(10.77-6) = 19.23dBm.

Chain 0

1. 11dBm + 10log (83.89) = 30.23 > 24dBm
2. 11dBm + 10log (59.76) = 28.76 > 24dBm
3. 11dBm + 10log (45.39) = 27.56 > 24dBm
4. 11dBm + 10log (82.55) = 30.16 > 24dBm
5. 11dBm + 10log (57.50) = 28.59 > 24dBm

Chain 1

1. 11dBm + 10log (66.16) = 29.20 > 24dBm
2. 11dBm + 10log (41.05) = 27.13 > 24dBm
3. 11dBm + 10log (40.99) = 27.12 > 24dBm
4. 11dBm + 10log (66.97) = 29.25 > 24dBm
5. 11dBm + 10log (58.13) = 28.64 > 24dBm

Chain 2

1. 11dBm + 10log (73.35) = 29.65 > 24dBm
2. 11dBm + 10log (55.15) = 28.41 > 24dBm
3. 11dBm + 10log (41.02) = 27.12 > 24dBm
4. 11dBm + 10log (59.88) = 28.77 > 24dBm
5. 11dBm + 10log (53.27) = 28.26 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
58	5290	14.48	13.96	14.37	80.296	19.05	19.23	Pass
106	5530	14.19	13.84	13.86	74.774	18.74	19.23	Pass
122	5610	14.33	14.59	14.20	82.179	19.15	19.23	Pass

Note:
1. 5260~5320MHz Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power limit shall be reduced to 24-(10.77-6) = 19.23dBm.
2. 5500~5700MHz Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power limit shall be reduced to 24-(10.77-6) = 19.23dBm.

Chain 0

1. 11dBm + 10log (86.04) = 30.34 > 24dBm
2. 11dBm + 10log (84.29) = 30.25 > 24dBm
3. 11dBm + 10log (142.32) = 32.53 > 24dBm

Chain 1

1. 11dBm + 10log (82.02) = 30.13 > 24dBm
2. 11dBm + 10log (82.07) = 30.14 > 24dBm
3. 11dBm + 10log (119.70) = 31.78 > 24dBm

Chain 2

1. 11dBm + 10log (82.01) = 30.13 > 24dBm
2. 11dBm + 10log (82.24) = 30.15 > 24dBm
3. 11dBm + 10log (119.79) = 31.78 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	21.67	21.76	22.27
60	5300	21.66	21.74	22.12
64	5320	21.67	21.93	27.23
100	5500	21.68	21.75	21.76
116	5580	21.71	21.80	22.22
140	5700	21.80	21.95	22.32

802.11ax (HE20)

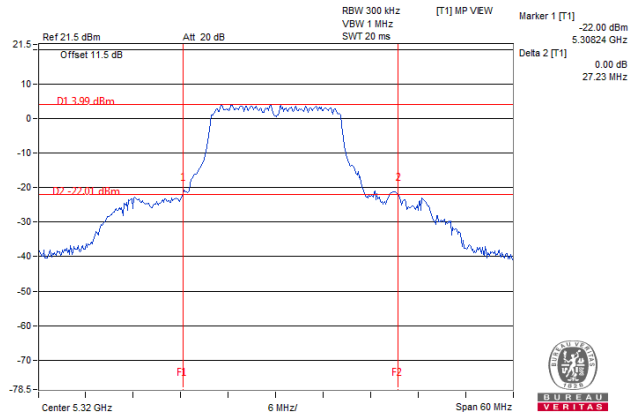
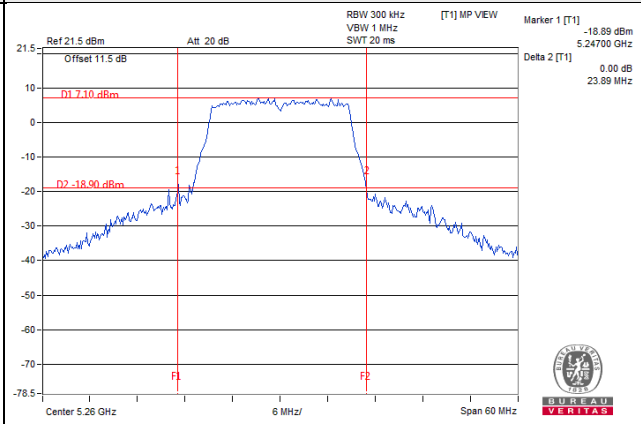
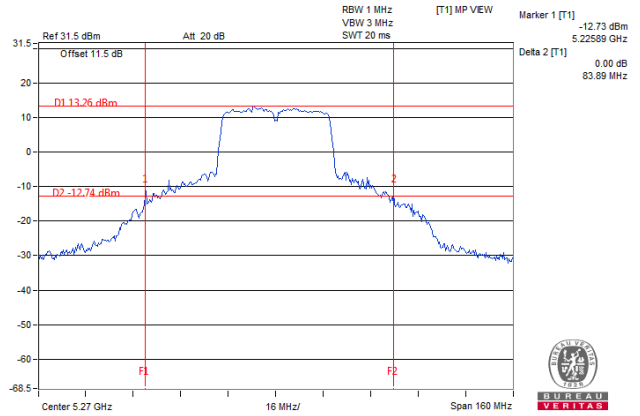
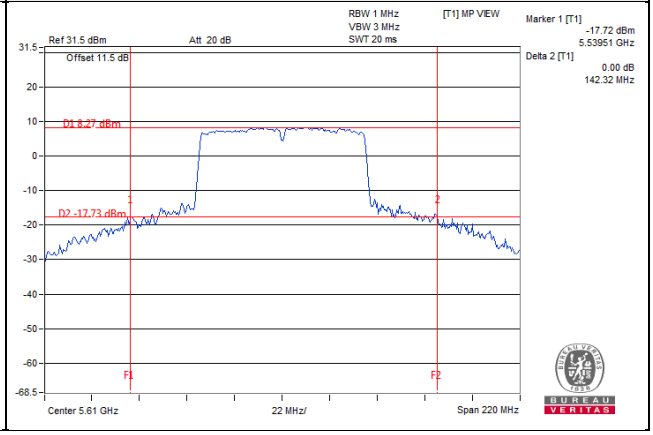
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	23.89	21.64	21.70
60	5300	21.92	21.74	21.93
64	5320	21.97	21.70	23.36
100	5500	22.29	21.85	21.70
116	5580	21.94	21.79	21.64
140	5700	21.94	21.73	21.57

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
54	5270	83.89	66.16	73.35
62	5310	59.76	41.05	55.15
102	5510	45.39	40.99	41.02
110	5550	82.55	66.97	59.88
134	5670	57.50	58.13	53.27

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
58	5290	86.04	82.02	82.01
106	5530	84.29	82.07	82.24
122	5610	142.32	119.70	119.79

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.27	84.592
5470~5725	20.69	117.342

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.22	83.575
5470~5725	19.17	82.663

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	22.73	187.326
5470~5725	23.06	202.107

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.30	85.053
5470~5725	21.40	137.962

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.22	83.575
5470~5725	19.17	82.663

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.16	82.391
5470~5725	19.06	80.460

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.05	80.296
5470~5725	19.15	82.179

4TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.52	12.62	11.63	11.71	61.852	17.91	24.00	Pass
60	5300	11.63	12.53	11.75	12.74	66.216	18.21	24.00	Pass
64	5320	11.05	12.13	11.16	11.19	55.280	17.43	24.00	Pass
100	5500	10.99	11.37	10.13	10.86	48.763	16.88	24.00	Pass
116	5580	11.41	11.73	10.50	11.25	53.285	17.27	24.00	Pass
140	5700	10.16	11.40	10.61	10.40	46.652	16.69	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (21.66) = 24.35 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.69) = 24.36 > 24dBm
4. 11dBm + 10log (21.64) = 24.35 > 24dBm
5. 11dBm + 10log (21.79) = 24.38 > 24dBm
6. 11dBm + 10log (21.63) = 24.35 > 24dBm

Chain 1

1. 11dBm + 10log (21.86) = 24.39 > 24dBm
2. 11dBm + 10log (21.74) = 24.37 > 24dBm
3. 11dBm + 10log (21.79) = 24.38 > 24dBm
4. 11dBm + 10log (21.68) = 24.36 > 24dBm
5. 11dBm + 10log (21.76) = 24.37 > 24dBm
6. 11dBm + 10log (21.76) = 24.37 > 24dBm

Chain 2

1. 11dBm + 10log (21.74) = 24.37 > 24dBm
2. 11dBm + 10log (21.80) = 24.38 > 24dBm
3. 11dBm + 10log (21.77) = 24.37 > 24dBm
4. 11dBm + 10log (21.73) = 24.37 > 24dBm
5. 11dBm + 10log (21.85) = 24.39 > 24dBm
6. 11dBm + 10log (21.84) = 24.39 > 24dBm

Chain 3

1. 11dBm + 10log (21.70) = 24.36 > 24dBm
2. 11dBm + 10log (21.59) = 24.34 > 24dBm
3. 11dBm + 10log (21.75) = 24.37 > 24dBm
4. 11dBm + 10log (21.65) = 24.35 > 24dBm
5. 11dBm + 10log (21.59) = 24.34 > 24dBm
6. 11dBm + 10log (21.62) = 24.34 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.63	12.69	11.69	11.68	62.613	17.97	24.00	Pass
60	5300	11.06	12.18	12.25	12.17	62.554	17.96	24.00	Pass
64	5320	11.13	12.38	11.62	11.13	57.763	17.62	24.00	Pass
100	5500	11.26	11.63	10.20	10.40	49.357	16.93	24.00	Pass
116	5580	11.58	11.75	10.66	11.40	54.795	17.39	24.00	Pass
140	5700	11.14	11.96	12.01	11.00	57.180	17.57	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (21.97) = 24.41 > 24dBm
2. 11dBm + 10log (21.92) = 24.40 > 24dBm
3. 11dBm + 10log (21.87) = 24.39 > 24dBm
4. 11dBm + 10log (21.87) = 24.39 > 24dBm
5. 11dBm + 10log (21.92) = 24.40 > 24dBm
6. 11dBm + 10log (21.82) = 24.38 > 24dBm

Chain 1

1. 11dBm + 10log (21.74) = 24.37 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.73) = 24.37 > 24dBm
4. 11dBm + 10log (21.76) = 24.37 > 24dBm
5. 11dBm + 10log (21.74) = 24.37 > 24dBm
6. 11dBm + 10log (21.57) = 24.33 > 24dBm

Chain 2

1. 11dBm + 10log (21.63) = 24.35 > 24dBm
2. 11dBm + 10log (21.61) = 24.34 > 24dBm
3. 11dBm + 10log (21.62) = 24.34 > 24dBm
4. 11dBm + 10log (21.64) = 24.35 > 24dBm
5. 11dBm + 10log (21.61) = 24.34 > 24dBm
6. 11dBm + 10log (21.57) = 24.33 > 24dBm

Chain 3

1. 11dBm + 10log (21.57) = 24.33 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.67) = 24.35 > 24dBm
4. 11dBm + 10log (21.73) = 24.37 > 24dBm
5. 11dBm + 10log (21.72) = 24.36 > 24dBm
6. 11dBm + 10log (21.68) = 24.36 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	14.05	15.08	14.13	14.03	108.796	20.37	24.00	Pass
62	5310	14.24	15.27	14.22	14.37	113.974	20.57	24.00	Pass
102	5510	12.49	13.41	13.34	12.38	78.545	18.95	24.00	Pass
110	5550	14.50	14.70	13.51	14.69	109.579	20.40	24.00	Pass
134	5670	14.95	15.30	13.88	14.51	117.828	20.71	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (68.29) = 29.34 > 24dBm
2. 11dBm + 10log (41.30) = 27.15 > 24dBm
3. 11dBm + 10log (41.41) = 27.17 > 24dBm
4. 11dBm + 10log (71.03) = 29.51 > 24dBm
5. 11dBm + 10log (41.40) = 27.17 > 24dBm

Chain 1

1. 11dBm + 10log (40.94) = 27.12 > 24dBm
2. 11dBm + 10log (41.01) = 27.12 > 24dBm
3. 11dBm + 10log (41.00) = 27.12 > 24dBm
4. 11dBm + 10log (41.01) = 27.12 > 24dBm
5. 11dBm + 10log (45.29) = 27.56 > 24dBm

Chain 2

1. 11dBm + 10log (43.54) = 27.38 > 24dBm
2. 11dBm + 10log (41.26) = 27.15 > 24dBm
3. 11dBm + 10log (40.91) = 27.11 > 24dBm
4. 11dBm + 10log (41.04) = 27.13 > 24dBm
5. 11dBm + 10log (41.74) = 27.20 > 24dBm

Chain 3

1. 11dBm + 10log (40.86) = 27.11 > 24dBm
2. 11dBm + 10log (40.84) = 27.11 > 24dBm
3. 11dBm + 10log (40.72) = 27.09 > 24dBm
4. 11dBm + 10log (40.78) = 27.10 > 24dBm
5. 11dBm + 10log (40.79) = 27.10 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	14.39	15.52	14.50	14.53	**119.687**	20.78	24.00	Pass
106	5530	14.84	15.31	13.74	14.42	115.770	20.64	24.00	Pass
122	5610	15.77	16.15	14.92	15.37	**144.448**	21.60	24.00	Pass

Note:

Chain 0

1. 11dBm + 10log (82.96) = 30.18 > 24dBm
2. 11dBm + 10log (85.42) = 30.31 > 24dBm
3. 11dBm + 10log (83.24) = 30.20 > 24dBm

Chain 1

1. 11dBm + 10log (82.08) = 30.14 > 24dBm
2. 11dBm + 10log (82.06) = 30.14 > 24dBm
3. 11dBm + 10log (84.11) = 30.24 > 24dBm

Chain 2

1. 11dBm + 10log (81.93) = 30.13 > 24dBm
2. 11dBm + 10log (82.23) = 30.15 > 24dBm
3. 11dBm + 10log (81.99) = 30.13 > 24dBm

Chain 3

1. 11dBm + 10log (82.59) = 30.16 > 24dBm
2. 11dBm + 10log (82.50) = 30.16 > 24dBm
3. 11dBm + 10log (82.76) = 30.17 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	11.63	12.69	11.69	11.63	**62.613**	17.97	17.98	Pass
60	5300	11.06	12.18	12.25	11.06	**62.554**	17.96	17.98	Pass
64	5320	11.13	12.38	11.62	11.13	57.763	17.62	17.98	Pass
100	5500	11.26	11.63	10.20	11.26	49.357	16.93	17.98	Pass
116	5580	11.58	11.75	10.66	11.58	54.795	17.39	17.98	Pass
140	5700	11.14	11.96	12.01	11.14	57.180	17.57	17.98	Pass

Note:

1. 5260~5320MHz Directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi, so the power limit shall be reduced to 24-(12.02-6) = 17.98dBm.
2. 5500~5700MHz Directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi, so the power limit shall be reduced to 24-(12.02-6) = 17.98dBm.

Chain 0

1. 11dBm + 10log (21.97) = 24.41 > 24dBm
2. 11dBm + 10log (21.92) = 24.40 > 24dBm
3. 11dBm + 10log (21.87) = 24.39 > 24dBm
4. 11dBm + 10log (21.87) = 24.39 > 24dBm
5. 11dBm + 10log (21.92) = 24.40 > 24dBm
6. 11dBm + 10log (21.82) = 24.38 > 24dBm

Chain 1

1. 11dBm + 10log (21.74) = 24.37 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.73) = 24.37 > 24dBm
4. 11dBm + 10log (21.76) = 24.37 > 24dBm
5. 11dBm + 10log (21.74) = 24.37 > 24dBm
6. 11dBm + 10log (21.57) = 24.33 > 24dBm

Chain 2

1. 11dBm + 10log (21.63) = 24.35 > 24dBm
2. 11dBm + 10log (21.61) = 24.34 > 24dBm
3. 11dBm + 10log (21.62) = 24.34 > 24dBm
4. 11dBm + 10log (21.64) = 24.35 > 24dBm
5. 11dBm + 10log (21.61) = 24.34 > 24dBm
6. 11dBm + 10log (21.57) = 24.33 > 24dBm

Chain 3

1. 11dBm + 10log (21.57) = 24.33 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.67) = 24.35 > 24dBm
4. 11dBm + 10log (21.73) = 24.37 > 24dBm
5. 11dBm + 10log (21.72) = 24.36 > 24dBm
6. 11dBm + 10log (21.68) = 24.36 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	11.55	12.58	11.63	11.53	61.180	17.87	17.98	Pass
62	5310	11.49	12.52	11.47	11.62	60.507	17.82	17.98	Pass
102	5510	11.49	12.41	12.34	11.38	62.391	17.95	17.98	Pass
110	5550	12.00	12.20	11.01	12.19	61.621	17.90	17.98	Pass
134	5670	12.20	12.55	11.13	11.76	62.554	17.96	17.98	Pass

Note:
1. 5260~5320MHz Directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi, so the power limit shall be reduced to 24-(12.02-6) = 17.98dBm.
2. 5500~5700MHz Directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi, so the power limit shall be reduced to 24-(12.02-6) = 17.98dBm.

Chain 0

1. 11dBm + 10log (68.29) = 29.34 > 24dBm
2. 11dBm + 10log (41.30) = 27.15 > 24dBm
3. 11dBm + 10log (41.41) = 27.17 > 24dBm
4. 11dBm + 10log (71.03) = 29.51 > 24dBm
5. 11dBm + 10log (41.40) = 27.17 > 24dBm

Chain 1

1. 11dBm + 10log (40.94) = 27.12 > 24dBm
2. 11dBm + 10log (41.01) = 27.12 > 24dBm
3. 11dBm + 10log (41.00) = 27.12 > 24dBm
4. 11dBm + 10log (41.01) = 27.12 > 24dBm
5. 11dBm + 10log (45.29) = 27.56 > 24dBm

Chain 2

1. 11dBm + 10log (43.54) = 27.38 > 24dBm
2. 11dBm + 10log (41.26) = 27.15 > 24dBm
3. 11dBm + 10log (40.91) = 27.11 > 24dBm
4. 11dBm + 10log (41.04) = 27.13 > 24dBm
5. 11dBm + 10log (41.74) = 27.20 > 24dBm

Chain 3

1. 11dBm + 10log (40.86) = 27.11 > 24dBm
2. 11dBm + 10log (40.84) = 27.11 > 24dBm
3. 11dBm + 10log (40.72) = 27.09 > 24dBm
4. 11dBm + 10log (40.78) = 27.10 > 24dBm
5. 11dBm + 10log (40.79) = 27.10 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	11.39	12.52	11.50	11.53	59.985	17.78	17.98	Pass
106	5530	12.09	12.56	10.99	11.67	61.460	17.89	17.98	Pass
122	5610	12.02	12.40	11.17	11.62	60.913	17.85	17.98	Pass

Note:
1. 5260~5320MHz Directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi, so the power limit shall be reduced to 24-(12.02-6) = 17.98dBm.
2. 5500~5700MHz Directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi, so the power limit shall be reduced to 24-(12.02-6) = 17.98dBm.

Chain 0

1. 11dBm + 10log (82.96) = 30.18 > 24dBm
2. 11dBm + 10log (85.42) = 30.31 > 24dBm
3. 11dBm + 10log (83.24) = 30.20 > 24dBm

Chain 1

1. 11dBm + 10log (82.08) = 30.14 > 24dBm
2. 11dBm + 10log (82.06) = 30.14 > 24dBm
3. 11dBm + 10log (84.11) = 30.24 > 24dBm

Chain 2

1. 11dBm + 10log (81.93) = 30.13 > 24dBm
2. 11dBm + 10log (82.23) = 30.15 > 24dBm
3. 11dBm + 10log (81.99) = 30.13 > 24dBm

Chain 3

1. 11dBm + 10log (82.59) = 30.16 > 24dBm
2. 11dBm + 10log (82.50) = 30.16 > 24dBm
3. 11dBm + 10log (82.76) = 30.17 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.66	21.86	21.74	21.70
60	5300	21.71	21.74	21.80	21.59
64	5320	21.69	21.79	21.77	21.75
100	5500	21.64	21.68	21.73	21.65
116	5580	21.79	21.76	21.85	21.59
140	5700	21.63	21.76	21.84	21.62

802.11ax (HE20)

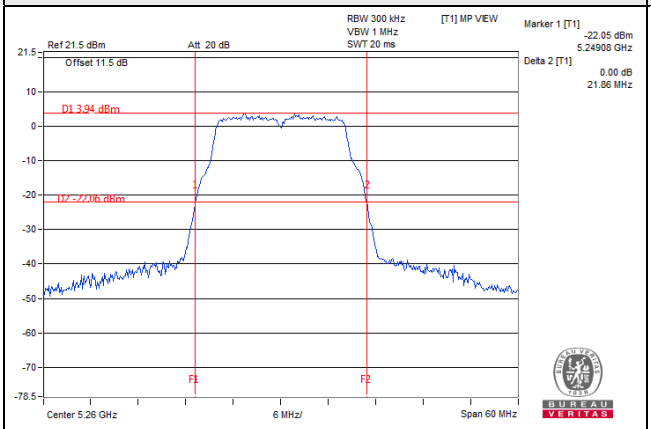
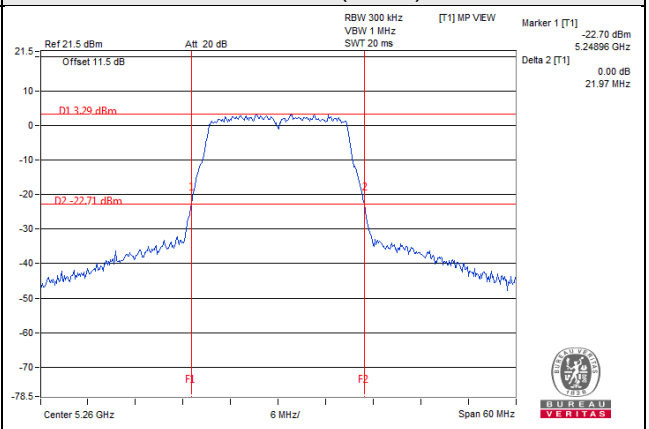
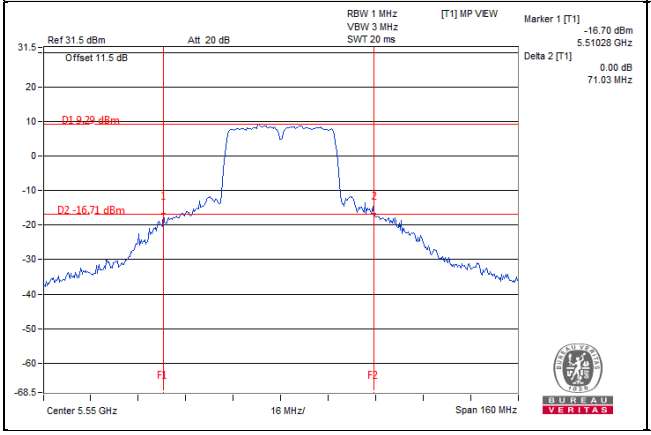
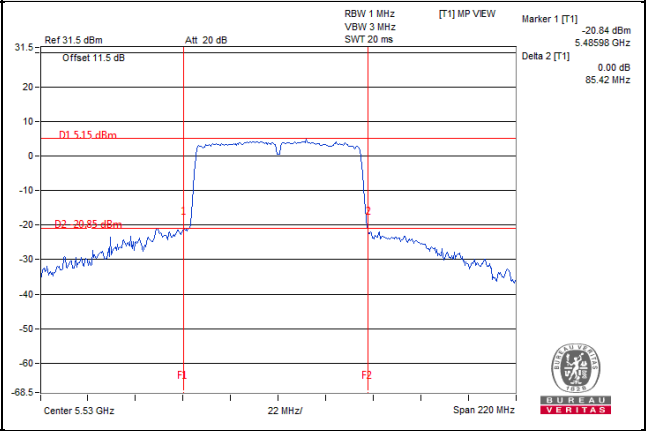
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.97	21.74	21.63	21.57
60	5300	21.92	21.71	21.61	21.67
64	5320	21.87	21.73	21.62	21.67
100	5500	21.87	21.76	21.64	21.73
116	5580	21.92	21.74	21.61	21.72
140	5700	21.82	21.57	21.57	21.68

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	68.29	40.94	43.54	40.86
62	5310	41.30	41.01	41.26	40.84
102	5510	41.41	41.00	40.91	40.72
110	5550	71.03	41.01	41.04	40.78
134	5670	41.40	45.29	41.74	40.79

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	82.96	82.08	81.93	82.59
106	5530	85.42	82.06	82.23	82.50
122	5610	83.24	84.11	81.99	82.76

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	18.21	66.216
5470~5725	17.27	53.285

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	17.97	62.613
5470~5725	17.57	57.180

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	20.57	113.974
5470~5725	20.71	117.828

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	20.78	119.687
5470~5725	21.60	144.448

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	17.97	62.613
5470~5725	17.57	57.180

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	17.87	61.180
5470~5725	17.96	62.554

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	17.78	59.985
5470~5725	17.89	61.460

Test Mode G (External antenna – PN: ATS-OP-245-810-4RPSP-36 + Eth6 Radio)

1TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
52	5260	93.972	19.73	20.00	Pass
60	5300	94.406	19.75	20.00	Pass
64	5320	93.111	19.69	20.00	Pass
100	5500	68.549	18.36	20.00	Pass
116	5580	87.096	19.40	20.00	Pass
140	5700	52.602	17.21	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

1. 11dBm + 10log (43.46) = 27.38 > 24dBm
2. 11dBm + 10log (42.25) = 27.25 > 24dBm
3. 11dBm + 10log (41.19) = 27.14 > 24dBm
4. 11dBm + 10log (42.20) = 27.25 > 24dBm
5. 11dBm + 10log (41.55) = 27.18 > 24dBm
6. 11dBm + 10log (33.79) = 26.28 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
52	5260	94.189	19.74	20.00	Pass
60	5300	93.972	19.73	20.00	Pass
64	5320	**94.406**	19.75	20.00	Pass
100	5500	85.704	19.33	20.00	Pass
116	5580	85.901	19.34	20.00	Pass
140	5700	47.753	16.79	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

1. 11dBm + 10log (43.48) = 27.38 > 24dBm
2. 11dBm + 10log (43.52) = 27.38 > 24dBm
3. 11dBm + 10log (41.94) = 27.22 > 24dBm
4. 11dBm + 10log (43.71) = 27.40 > 24dBm
5. 11dBm + 10log (42.88) = 27.32 > 24dBm
6. 11dBm + 10log (25.24) = 25.02 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
54	5270	92.470	19.66	20.00	Pass
62	5310	55.590	17.45	20.00	Pass
102	5510	47.534	16.77	20.00	Pass
110	5550	83.753	19.23	20.00	Pass
134	5670	79.616	19.01	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

1. 11dBm + 10log (98.94) = 30.95 > 24dBm
2. 11dBm + 10log (77.06) = 29.86 > 24dBm
3. 11dBm + 10log (71.44) = 29.53 > 24dBm
4. 11dBm + 10log (92.43) = 30.65 > 24dBm
5. 11dBm + 10log (89.54) = 30.52 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
58	5290	49.204	16.92	20.00	Pass
106	5530	43.053	16.34	20.00	Pass
122	5610	**88.105**	19.45	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

1. 11dBm + 10log (145.13) = 32.61 > 24dBm
2. 11dBm + 10log (111.84) = 31.48 > 24dBm
3. 11dBm + 10log (179.79) = 33.54 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
52	5260	43.46
60	5300	42.25
64	5320	41.19
100	5500	42.20
116	5580	41.55
140	5700	33.79

802.11ax (HE20)

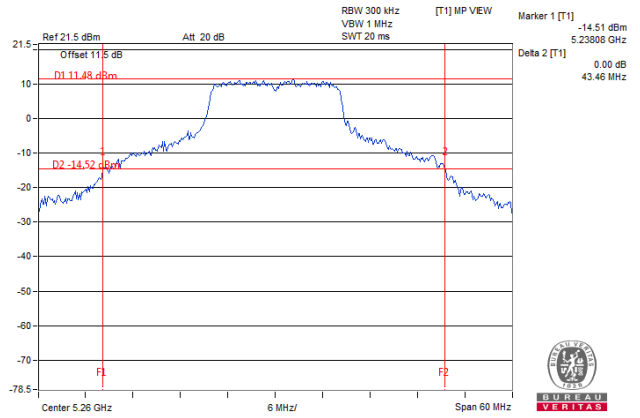
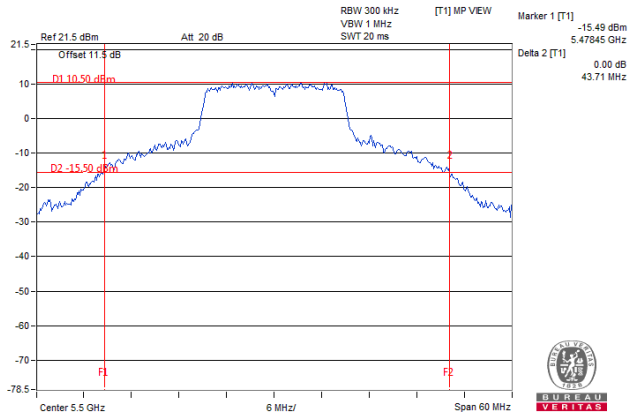
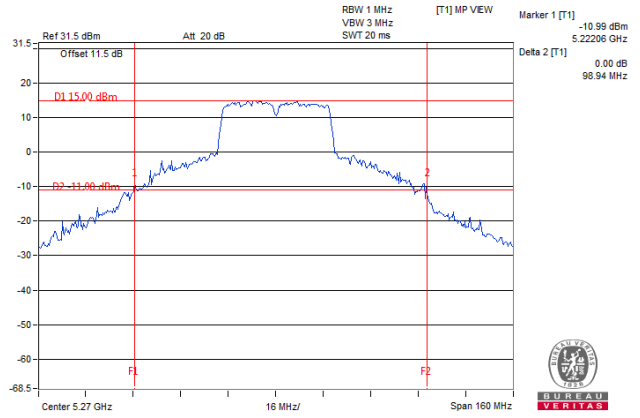
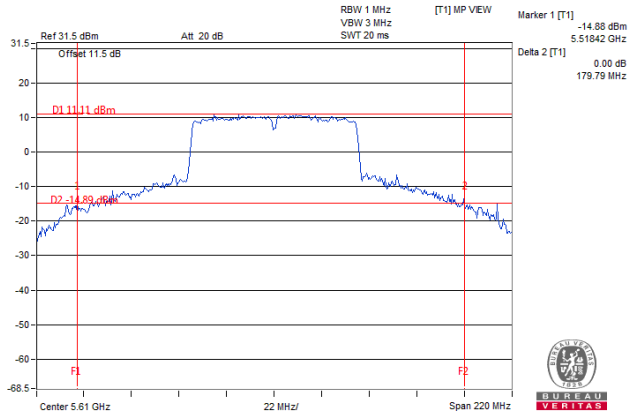
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
52	5260	43.48
60	5300	43.52
64	5320	41.94
100	5500	43.71
116	5580	42.88
140	5700	25.24

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
54	5270	98.94
62	5310	77.06
102	5510	71.44
110	5550	92.43
134	5670	89.54

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
58	5290	145.13
106	5530	111.84
122	5610	179.79

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.75	94.406
5470~5725	19.40	87.096

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.75	94.406
5470~5725	19.34	85.901

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.66	92.470
5470~5725	19.23	83.753

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	16.92	49.204
5470~5725	19.45	88.105

2TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
52	5260	13.89	14.01	49.668	16.96	20.00	Pass
60	5300	13.85	13.92	48.926	16.90	20.00	Pass
64	5320	13.88	13.83	48.589	16.87	20.00	Pass
100	5500	14.18	13.81	50.226	17.01	20.00	Pass
116	5580	14.22	13.73	50.029	16.99	20.00	Pass
140	5700	14.15	13.88	50.436	17.03	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0

1. 11dBm + 10log (21.69) = 24.36 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.74) = 24.37 > 24dBm
4. 11dBm + 10log (21.66) = 24.35 > 24dBm
5. 11dBm + 10log (21.82) = 24.38 > 24dBm
6. 11dBm + 10log (21.63) = 24.35 > 24dBm

Chain 1

1. 11dBm + 10log (21.83) = 24.39 > 24dBm
2. 11dBm + 10log (21.59) = 24.34 > 24dBm
3. 11dBm + 10log (21.72) = 24.36 > 24dBm
4. 11dBm + 10log (22.08) = 24.43 > 24dBm
5. 11dBm + 10log (21.95) = 24.41 > 24dBm
6. 11dBm + 10log (22.26) = 24.47 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
52	5260	13.88	13.79	48.367	16.85	20.00	Pass
60	5300	13.91	13.85	48.870	16.89	20.00	Pass
64	5320	13.82	13.83	48.254	16.84	20.00	Pass
100	5500	13.94	13.51	47.213	16.74	20.00	Pass
116	5580	14.00	13.55	47.765	16.79	20.00	Pass
140	5700	13.66	14.05	48.637	16.87	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0
1. 11dBm + 10log (21.94) = 24.41 > 24dBm
2. 11dBm + 10log (21.93) = 24.41 > 24dBm
3. 11dBm + 10log (21.91) = 24.40 > 24dBm
4. 11dBm + 10log (21.97) = 24.41 > 24dBm
5. 11dBm + 10log (22.01) = 24.42 > 24dBm
6. 11dBm + 10log (21.92) = 24.40 > 24dBm

Chain 1
1. 11dBm + 10log (21.68) = 24.36 > 24dBm
2. 11dBm + 10log (21.69) = 24.36 > 24dBm
3. 11dBm + 10log (21.65) = 24.35 > 24dBm
4. 11dBm + 10log (21.73) = 24.37 > 24dBm
5. 11dBm + 10log (21.75) = 24.37 > 24dBm
6. 11dBm + 10log (21.97) = 24.41 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
54	5270	16.89	16.84	**97.171**	19.88	20.00	Pass
62	5310	16.35	16.36	86.403	19.37	20.00	Pass
102	5510	15.01	15.27	65.347	18.15	20.00	Pass
110	5550	16.68	16.23	88.535	19.47	20.00	Pass
134	5670	16.71	16.28	**89.343**	19.51	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0
1. 11dBm + 10log (64.30) = 29.08 > 24dBm
2. 11dBm + 10log (61.60) = 28.89 > 24dBm
3. 11dBm + 10log (52.26) = 28.18 > 24dBm
4. 11dBm + 10log (69.48) = 29.41 > 24dBm
5. 11dBm + 10log (55.38) = 28.43 > 24dBm

Chain 1
1. 11dBm + 10log (50.39) = 28.02 > 24dBm
2. 11dBm + 10log (41.09) = 27.13 > 24dBm
3. 11dBm + 10log (41.03) = 27.13 > 24dBm
4. 11dBm + 10log (49.11) = 27.91 > 24dBm
5. 11dBm + 10log (61.66) = 28.90 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
58	5290	15.65	15.73	74.139	18.70	20.00	Pass
106	5530	15.44	14.99	66.545	18.23	20.00	Pass
122	5610	16.65	16.22	88.117	19.45	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0
1. 11dBm + 10log (106.15) = 31.25 > 24dBm
2. 11dBm + 10log (99.23) = 30.96 > 24dBm
3. 11dBm + 10log (102.37) = 31.10 > 24dBm

Chain 1
1. 11dBm + 10log (82.16) = 30.14 > 24dBm
2. 11dBm + 10log (82.10) = 30.14 > 24dBm
3. 11dBm + 10log (98.54) = 30.93 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
52	5260	13.88	13.79	48.367	16.85	16.99	Pass
60	5300	13.91	13.85	**48.870**	16.89	16.99	Pass
64	5320	13.82	13.83	48.254	16.84	16.99	Pass
100	5500	13.94	13.51	47.213	16.74	16.99	Pass
116	5580	14.00	13.55	47.765	16.79	16.99	Pass
140	5700	13.66	14.05	48.637	16.87	16.99	Pass

Note:

1. 5260~5320MHz Directional gain = 10dBi + 10log(2) = 13.01dBi > 6dBi, so the power limit shall be reduced to 24-(13.01-6) = 16.99dBm.
2. 5500~5700MHz Directional gain = 10dBi + 10log(2) = 13.01dBi > 6dBi, so the power limit shall be reduced to 24-(13.01-6) = 16.99dBm.

Chain 0

1. 11dBm + 10log (21.94) = 24.41 > 24dBm
2. 11dBm + 10log (21.93) = 24.41 > 24dBm
3. 11dBm + 10log (21.91) = 24.40 > 24dBm
4. 11dBm + 10log (21.97) = 24.41 > 24dBm
5. 11dBm + 10log (22.01) = 24.42 > 24dBm
6. 11dBm + 10log (21.92) = 24.40 > 24dBm

Chain 1

1. 11dBm + 10log (21.68) = 24.36 > 24dBm
2. 11dBm + 10log (21.69) = 24.36 > 24dBm
3. 11dBm + 10log (21.65) = 24.35 > 24dBm
4. 11dBm + 10log (21.73) = 24.37 > 24dBm
5. 11dBm + 10log (21.75) = 24.37 > 24dBm
6. 11dBm + 10log (21.97) = 24.41 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
54	5270	13.89	13.84	48.701	16.88	16.99	Pass
62	5310	13.85	13.86	48.588	16.87	16.99	Pass
102	5510	13.76	14.02	49.003	16.90	16.99	Pass
110	5550	14.18	13.73	**49.787**	16.97	16.99	Pass
134	5670	13.96	13.53	47.431	16.76	16.99	Pass

Note:
1. 5260~5320MHz Directional gain = 10dBi + 10log(2) = 13.01dBi > 6dBi, so the power limit shall be reduced to 24-(13.01-6) = 16.99dBm.
2. 5500~5700MHz Directional gain = 10dBi + 10log(2) = 13.01dBi > 6dBi, so the power limit shall be reduced to 24-(13.01-6) = 16.99dBm.

Chain 0

1. 11dBm + 10log (64.30) = 29.08 > 24dBm
2. 11dBm + 10log (61.60) = 28.89 > 24dBm
3. 11dBm + 10log (52.26) = 28.18 > 24dBm
4. 11dBm + 10log (69.48) = 29.41 > 24dBm
5. 11dBm + 10log (55.38) = 28.43 > 24dBm

Chain 1

1. 11dBm + 10log (50.39) = 28.02 > 24dBm
2. 11dBm + 10log (41.09) = 27.13 > 24dBm
3. 11dBm + 10log (41.03) = 27.13 > 24dBm
4. 11dBm + 10log (49.11) = 27.91 > 24dBm
5. 11dBm + 10log (61.66) = 28.90 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
58	5290	13.65	13.73	46.779	16.70	16.99	Pass
106	5530	13.94	13.49	47.110	16.73	16.99	Pass
122	5610	14.15	13.72	49.552	16.95	16.99	Pass

Note:
1. 5260~5320MHz Directional gain = 10dBi + 10log(2) = 13.01dBi > 6dBi, so the power limit shall be reduced to 24-(13.01-6) = 16.99dBm.
2. 5500~5700MHz Directional gain = 10dBi + 10log(2) = 13.01dBi > 6dBi, so the power limit shall be reduced to 24-(13.01-6) = 16.99dBm.

Chain 0

1. 11dBm + 10log (106.15) = 31.25 > 24dBm
2. 11dBm + 10log (99.23) = 30.96 > 24dBm
3. 11dBm + 10log (102.37) = 31.10 > 24dBm

Chain 1

1. 11dBm + 10log (82.16) = 30.14 > 24dBm
2. 11dBm + 10log (82.10) = 30.14 > 24dBm
3. 11dBm + 10log (98.54) = 30.93 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	21.69	21.83
60	5300	21.67	21.59
64	5320	21.74	21.72
100	5500	21.66	22.08
116	5580	21.82	21.95
140	5700	21.63	22.26

802.11ax (HE20)

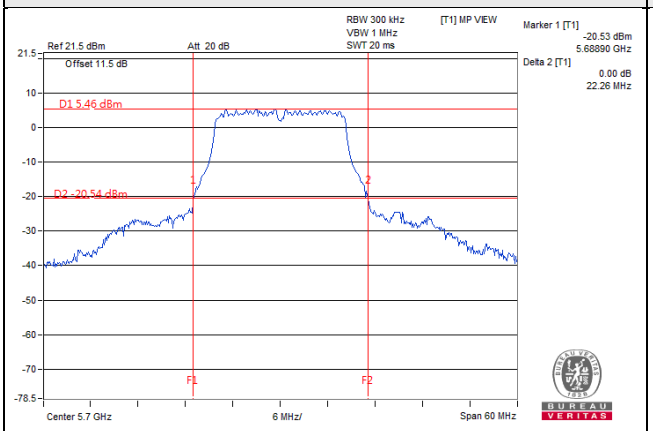
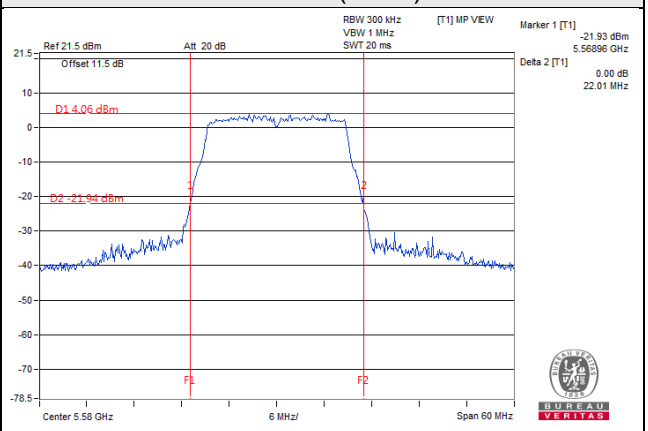
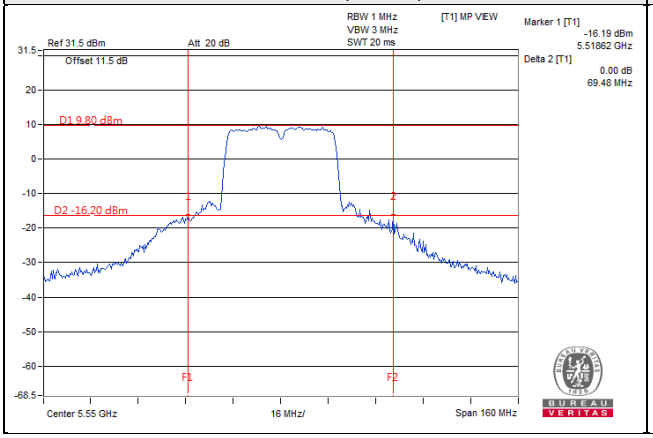
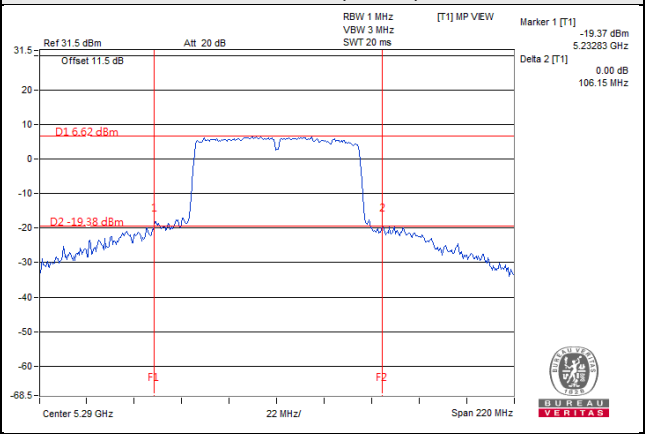
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	21.94	21.68
60	5300	21.93	21.69
64	5320	21.91	21.65
100	5500	21.97	21.73
116	5580	22.01	21.75
140	5700	21.92	21.97

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	64.30	50.39
62	5310	61.60	41.09
102	5510	52.26	41.03
110	5550	69.48	49.11
134	5670	55.38	61.66

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	106.15	82.16
106	5530	99.23	82.10
122	5610	102.37	98.54

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	16.96	49.668
5470~5725	17.03	50.436

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	16.89	48.870
5470~5725	16.87	48.637

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.88	97.171
5470~5725	19.51	89.343

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	18.70	74.139
5470~5725	19.45	88.117

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	16.89	48.870
5470~5725	16.87	48.637

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	16.88	48.701
5470~5725	16.97	49.787

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	16.70	46.779
5470~5725	16.95	49.552

3TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
52	5260	9.97	11.15	11.16	36.025	15.57	20.00	Pass
60	5300	10.38	11.07	11.09	36.561	15.63	20.00	Pass
64	5320	10.55	11.11	11.11	37.174	15.70	20.00	Pass
100	5500	11.22	11.20	10.62	37.961	15.79	20.00	Pass
116	5580	11.16	11.09	10.76	37.827	15.78	20.00	Pass
140	5700	11.09	11.14	10.77	37.795	15.77	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0

1. 11dBm + 10log (21.69) = 24.36 > 24dBm
2. 11dBm + 10log (21.65) = 24.35 > 24dBm
3. 11dBm + 10log (21.71) = 24.36 > 24dBm
4. 11dBm + 10log (21.70) = 24.36 > 24dBm
5. 11dBm + 10log (21.71) = 24.36 > 24dBm
6. 11dBm + 10log (21.78) = 24.38 > 24dBm

Chain 1

1. 11dBm + 10log (21.80) = 24.38 > 24dBm
2. 11dBm + 10log (21.83) = 24.39 > 24dBm
3. 11dBm + 10log (21.74) = 24.37 > 24dBm
4. 11dBm + 10log (21.82) = 24.38 > 24dBm
5. 11dBm + 10log (21.83) = 24.39 > 24dBm
6. 11dBm + 10log (21.62) = 24.34 > 24dBm

Chain 2

1. 11dBm + 10log (21.41) = 24.30 > 24dBm
2. 11dBm + 10log (21.46) = 24.31 > 24dBm
3. 11dBm + 10log (21.55) = 24.33 > 24dBm
4. 11dBm + 10log (21.57) = 24.33 > 24dBm
5. 11dBm + 10log (21.51) = 24.32 > 24dBm
6. 11dBm + 10log (21.64) = 24.35 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
52	5260	10.03	10.67	10.47	32.880	15.17	20.00	Pass
60	5300	9.57	10.62	10.65	32.206	15.08	20.00	Pass
64	5320	9.86	10.61	10.52	32.463	15.11	20.00	Pass
100	5500	10.47	10.58	10.22	33.092	15.20	20.00	Pass
116	5580	10.28	10.36	10.00	31.530	14.99	20.00	Pass
140	5700	10.37	10.33	9.98	31.632	15.00	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0
1. 11dBm + 10log (21.90) = 24.40 > 24dBm
2. 11dBm + 10log (21.86) = 24.39 > 24dBm
3. 11dBm + 10log (21.95) = 24.41 > 24dBm
4. 11dBm + 10log (21.98) = 24.42 > 24dBm
5. 11dBm + 10log (21.90) = 24.40 > 24dBm
6. 11dBm + 10log (21.93) = 24.41 > 24dBm

Chain 1
1. 11dBm + 10log (21.61) = 24.34 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.70) = 24.36 > 24dBm
4. 11dBm + 10log (21.69) = 24.36 > 24dBm
5. 11dBm + 10log (21.70) = 24.36 > 24dBm
6. 11dBm + 10log (21.62) = 24.34 > 24dBm

Chain 2
1. 11dBm + 10log (21.62) = 24.34 > 24dBm
2. 11dBm + 10log (21.56) = 24.33 > 24dBm
3. 11dBm + 10log (21.67) = 24.35 > 24dBm
4. 11dBm + 10log (21.61) = 24.34 > 24dBm
5. 11dBm + 10log (21.57) = 24.33 > 24dBm
6. 11dBm + 10log (21.59) = 24.34 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
54	5270	13.38	14.00	14.09	72.541	18.61	20.00	Pass
62	5310	13.31	14.05	14.14	72.781	18.62	20.00	Pass
102	5510	14.03	14.05	13.85	74.969	18.75	20.00	Pass
110	5550	14.02	14.07	13.87	75.140	18.76	20.00	Pass
134	5670	13.99	14.15	13.77	74.886	18.74	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0
1. 11dBm + 10log (41.31) = 27.16 > 24dBm
2. 11dBm + 10log (41.24) = 27.15 > 24dBm
3. 11dBm + 10log (51.47) = 28.11 > 24dBm
4. 11dBm + 10log (41.93) = 27.22 > 24dBm
5. 11dBm + 10log (45.70) = 27.59 > 24dBm

Chain 1
1. 11dBm + 10log (41.05) = 27.13 > 24dBm
2. 11dBm + 10log (40.96) = 27.12 > 24dBm
3. 11dBm + 10log (40.97) = 27.12 > 24dBm
4. 11dBm + 10log (40.99) = 27.12 > 24dBm
5. 11dBm + 10log (47.92) = 27.80 > 24dBm

Chain 2
1. 11dBm + 10log (40.80) = 27.10 > 24dBm
2. 11dBm + 10log (41.14) = 27.14 > 24dBm
3. 11dBm + 10log (40.75) = 27.10 > 24dBm
4. 11dBm + 10log (40.97) = 27.12 > 24dBm
5. 11dBm + 10log (41.50) = 27.18 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
58	5290	14.77	15.36	15.45	**99.423**	19.97	20.00	Pass
106	5530	14.62	14.69	14.23	**84.902**	19.29	20.00	Pass
122	5610	14.66	14.57	14.30	84.799	19.28	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0
1. 11dBm + 10log (82.83) = 30.18 > 24dBm
2. 11dBm + 10log (85.67) = 30.32 > 24dBm
3. 11dBm + 10log (82.51) = 30.16 > 24dBm

Chain 1
1. 11dBm + 10log (81.93) = 30.13 > 24dBm
2. 11dBm + 10log (82.16) = 30.14 > 24dBm
3. 11dBm + 10log (82.16) = 30.14 > 24dBm

Chain 2
1. 11dBm + 10log (82.27) = 30.15 > 24dBm
2. 11dBm + 10log (82.28) = 30.15 > 24dBm
3. 11dBm + 10log (82.41) = 30.15 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
52	5260	10.03	10.67	10.47	32.880	15.17	15.23	Pass
60	5300	9.57	10.62	10.65	32.206	15.08	15.23	Pass
64	5320	9.86	10.61	10.52	32.463	15.11	15.23	Pass
100	5500	10.47	10.58	10.22	**33.092**	15.20	15.23	Pass
116	5580	10.28	10.36	10.00	31.530	14.99	15.23	Pass
140	5700	10.37	10.33	9.98	31.632	15.00	15.23	Pass

Note:

1. 5260~5320MHz Directional gain = 10dBi + 10log(3) = 14.77dBi > 6dBi, so the power limit shall be reduced to 24-(14.77-6) = 15.23dBm.
2. 5500~5700MHz Directional gain = 10dBi + 10log(3) = 14.77dBi > 6dBi, so the power limit shall be reduced to 24-(14.77-6) = 15.23dBm.

Chain 0

1. 11dBm + 10log (21.90) = 24.40 > 24dBm
2. 11dBm + 10log (21.86) = 24.39 > 24dBm
3. 11dBm + 10log (21.95) = 24.41 > 24dBm
4. 11dBm + 10log (21.98) = 24.42 > 24dBm
5. 11dBm + 10log (21.90) = 24.40 > 24dBm
6. 11dBm + 10log (21.93) = 24.41 > 24dBm

Chain 1

1. 11dBm + 10log (21.61) = 24.34 > 24dBm
2. 11dBm + 10log (21.71) = 24.36 > 24dBm
3. 11dBm + 10log (21.70) = 24.36 > 24dBm
4. 11dBm + 10log (21.69) = 24.36 > 24dBm
5. 11dBm + 10log (21.70) = 24.36 > 24dBm
6. 11dBm + 10log (21.62) = 24.34 > 24dBm

Chain 2

1. 11dBm + 10log (21.62) = 24.34 > 24dBm
2. 11dBm + 10log (21.56) = 24.33 > 24dBm
3. 11dBm + 10log (21.67) = 24.35 > 24dBm
4. 11dBm + 10log (21.61) = 24.34 > 24dBm
5. 11dBm + 10log (21.57) = 24.33 > 24dBm
6. 11dBm + 10log (21.59) = 24.34 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
54	5270	9.88	10.50	10.59	32.402	15.11	15.23	Pass
62	5310	9.81	10.55	10.64	32.510	15.12	15.23	Pass
102	5510	10.28	10.30	10.10	31.614	15.00	15.23	Pass
110	5550	10.27	10.32	10.12	31.686	15.01	15.23	Pass
134	5670	10.24	10.40	10.02	31.579	14.99	15.23	Pass

Note:
1. 5260~5320MHz Directional gain = 10dBi + 10log(3) = 14.77dBi > 6dBi, so the power limit shall be reduced to 24-(14.77-6) = 15.23dBm.
2. 5500~5700MHz Directional gain = 10dBi + 10log(3) = 14.77dBi > 6dBi, so the power limit shall be reduced to 24-(14.77-6) = 15.23dBm.

Chain 0

1. 11dBm + 10log (41.31) = 27.16 > 24dBm
2. 11dBm + 10log (41.24) = 27.15 > 24dBm
3. 11dBm + 10log (51.47) = 28.11 > 24dBm
4. 11dBm + 10log (41.93) = 27.22 > 24dBm
5. 11dBm + 10log (45.70) = 27.59 > 24dBm

Chain 1

1. 11dBm + 10log (41.05) = 27.13 > 24dBm
2. 11dBm + 10log (40.96) = 27.12 > 24dBm
3. 11dBm + 10log (40.97) = 27.12 > 24dBm
4. 11dBm + 10log (40.99) = 27.12 > 24dBm
5. 11dBm + 10log (47.92) = 27.80 > 24dBm

Chain 2

1. 11dBm + 10log (40.80) = 27.10 > 24dBm
2. 11dBm + 10log (41.14) = 27.14 > 24dBm
3. 11dBm + 10log (40.75) = 27.10 > 24dBm
4. 11dBm + 10log (40.97) = 27.12 > 24dBm
5. 11dBm + 10log (41.50) = 27.18 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)			Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
58	5290	10.02	10.61	10.70	**33.303**	15.22	15.23	Pass
106	5530	10.37	10.44	9.98	31.909	15.04	15.23	Pass
122	5610	10.41	10.32	10.05	31.871	15.03	15.23	Pass

Note:
1. 5260~5320MHz Directional gain = 10dBi + 10log(3) = 14.77dBi > 6dBi, so the power limit shall be reduced to 24-(14.77-6) = 15.23dBm.
2. 5500~5700MHz Directional gain = 10dBi + 10log(3) = 14.77dBi > 6dBi, so the power limit shall be reduced to 24-(14.77-6) = 15.23dBm.

Chain 0

1. 11dBm + 10log (82.83) = 30.18 > 24dBm
2. 11dBm + 10log (85.67) = 30.32 > 24dBm
3. 11dBm + 10log (82.51) = 30.16 > 24dBm

Chain 1

1. 11dBm + 10log (81.93) = 30.13 > 24dBm
2. 11dBm + 10log (82.16) = 30.14 > 24dBm
3. 11dBm + 10log (82.16) = 30.14 > 24dBm

Chain 2

1. 11dBm + 10log (82.27) = 30.15 > 24dBm
2. 11dBm + 10log (82.28) = 30.15 > 24dBm
3. 11dBm + 10log (82.41) = 30.15 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	21.69	21.80	21.41
60	5300	21.65	21.83	21.46
64	5320	21.71	21.74	21.55
100	5500	21.70	21.82	21.57
116	5580	21.71	21.83	21.51
140	5700	21.78	21.62	21.64

802.11ax (HE20)

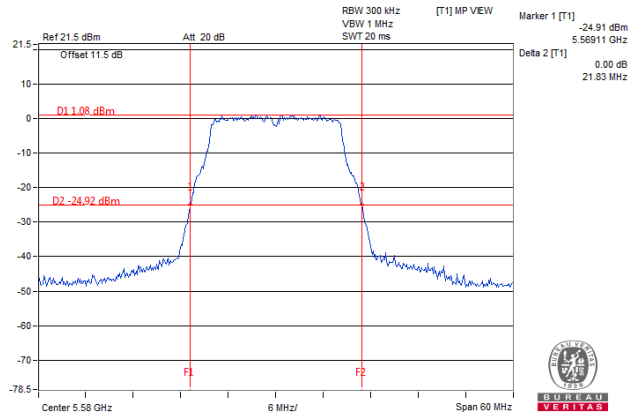
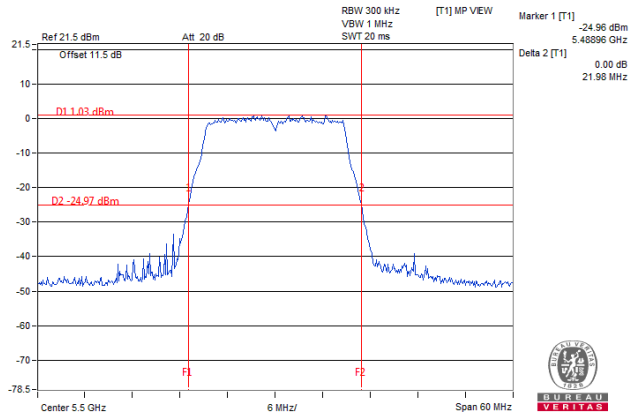
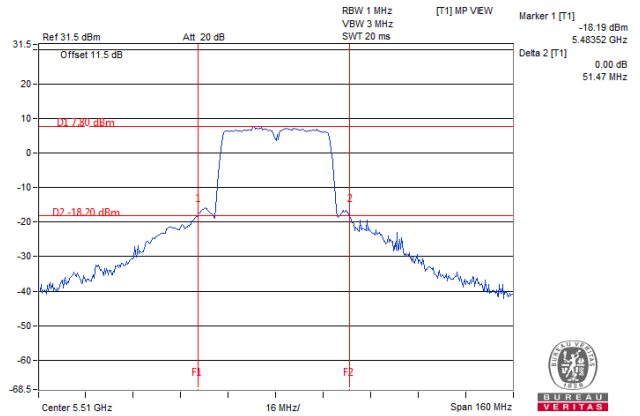
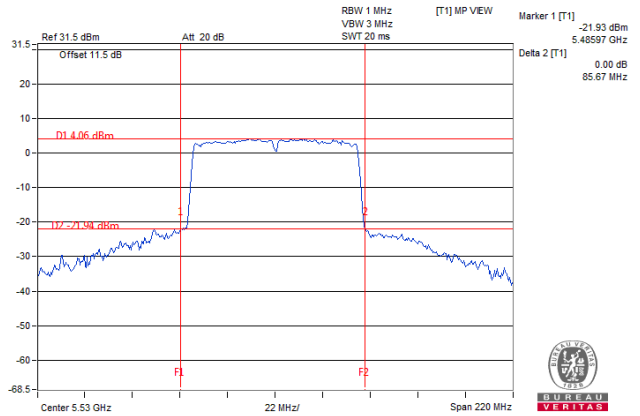
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	21.90	21.61	21.62
60	5300	21.86	21.71	21.56
64	5320	21.95	21.70	21.67
100	5500	21.98	21.69	21.61
116	5580	21.90	21.70	21.57
140	5700	21.93	21.62	21.59

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
54	5270	41.31	41.05	40.80
62	5310	41.24	40.96	41.14
102	5510	51.47	40.97	40.75
110	5550	41.93	40.99	40.97
134	5670	45.70	47.92	41.50

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
58	5290	82.83	81.93	82.27
106	5530	85.67	82.16	82.28
122	5610	82.51	82.16	82.41

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	15.70	37.174
5470~5725	15.79	37.961

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	15.17	32.880
5470~5725	15.20	33.092

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	18.62	72.781
5470~5725	18.76	75.140

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.97	99.423
5470~5725	19.29	84.902

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	15.17	32.880
5470~5725	15.20	33.092

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	15.12	32.510
5470~5725	15.01	31.686

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	15.22	33.303
5470~5725	15.04	31.909

4TX

Power Output:

CDD Mode

802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	7.38	7.89	7.42	7.23	22.427	13.51	20.00	Pass
60	5300	7.45	8.68	7.60	7.27	24.025	13.81	20.00	Pass
64	5320	7.47	8.84	7.69	7.39	24.599	13.91	20.00	Pass
100	5500	7.63	8.07	6.59	7.73	22.695	13.56	20.00	Pass
116	5580	8.55	9.01	7.58	8.54	27.996	14.47	20.00	Pass
140	5700	7.57	8.06	6.57	7.68	22.512	13.52	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0

1. 11dBm + 10log (21.61) = 24.34 > 24dBm
2. 11dBm + 10log (21.61) = 24.34 > 24dBm
3. 11dBm + 10log (21.71) = 24.36 > 24dBm
4. 11dBm + 10log (21.63) = 24.35 > 24dBm
5. 11dBm + 10log (21.68) = 24.36 > 24dBm
6. 11dBm + 10log (21.66) = 24.35 > 24dBm

Chain 1

1. 11dBm + 10log (21.78) = 24.38 > 24dBm
2. 11dBm + 10log (21.69) = 24.36 > 24dBm
3. 11dBm + 10log (21.79) = 24.38 > 24dBm
4. 11dBm + 10log (21.73) = 24.37 > 24dBm
5. 11dBm + 10log (21.74) = 24.37 > 24dBm
6. 11dBm + 10log (21.70) = 24.36 > 24dBm

Chain 2

1. 11dBm + 10log (21.85) = 24.39 > 24dBm
2. 11dBm + 10log (21.83) = 24.39 > 24dBm
3. 11dBm + 10log (21.76) = 24.37 > 24dBm
4. 11dBm + 10log (21.72) = 24.36 > 24dBm
5. 11dBm + 10log (21.82) = 24.38 > 24dBm
6. 11dBm + 10log (21.82) = 24.38 > 24dBm

Chain 3

1. 11dBm + 10log (21.62) = 24.34 > 24dBm
2. 11dBm + 10log (21.63) = 24.35 > 24dBm
3. 11dBm + 10log (21.64) = 24.35 > 24dBm
4. 11dBm + 10log (21.68) = 24.36 > 24dBm
5. 11dBm + 10log (21.67) = 24.35 > 24dBm
6. 11dBm + 10log (21.59) = 24.34 > 24dBm

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	7.26	8.57	7.52	7.73	24.093	13.82	20.00	Pass
60	5300	7.32	8.59	7.57	7.36	23.783	13.76	20.00	Pass
64	5320	7.24	8.56	7.45	7.34	23.454	13.70	20.00	Pass
100	5500	7.94	8.72	6.93	7.89	24.754	13.94	20.00	Pass
116	5580	6.96	8.73	7.57	7.91	24.325	13.86	20.00	Pass
140	5700	7.33	8.82	7.69	7.82	24.957	13.97	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0
1. 11dBm + 10log (21.85) = 24.39 > 24dBm
2. 11dBm + 10log (21.94) = 24.41 > 24dBm
3. 11dBm + 10log (21.82) = 24.38 > 24dBm
4. 11dBm + 10log (21.93) = 24.41 > 24dBm
5. 11dBm + 10log (21.87) = 24.39 > 24dBm
6. 11dBm + 10log (21.82) = 24.38 > 24dBm

Chain 1
1. 11dBm + 10log (21.79) = 24.38 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.71) = 24.36 > 24dBm
4. 11dBm + 10log (21.72) = 24.36 > 24dBm
5. 11dBm + 10log (21.68) = 24.36 > 24dBm
6. 11dBm + 10log (21.62) = 24.34 > 24dBm

Chain 2
1. 11dBm + 10log (21.63) = 24.35 > 24dBm
2. 11dBm + 10log (21.64) = 24.35 > 24dBm
3. 11dBm + 10log (21.61) = 24.34 > 24dBm
4. 11dBm + 10log (21.60) = 24.34 > 24dBm
5. 11dBm + 10log (21.65) = 24.35 > 24dBm
6. 11dBm + 10log (21.62) = 24.34 > 24dBm

Chain 3
1. 11dBm + 10log (21.69) = 24.36 > 24dBm
2. 11dBm + 10log (21.61) = 24.34 > 24dBm
3. 11dBm + 10log (21.70) = 24.36 > 24dBm
4. 11dBm + 10log (21.63) = 24.35 > 24dBm
5. 11dBm + 10log (21.84) = 24.39 > 24dBm
6. 11dBm + 10log (21.65) = 24.35 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	11.14	12.41	11.23	11.11	56.606	17.53	20.00	Pass
62	5310	11.04	12.24	11.19	11.07	55.401	17.44	20.00	Pass
102	5510	10.15	11.86	10.63	10.70	49.007	16.90	20.00	Pass
110	5550	10.97	12.61	11.57	11.72	59.956	17.78	20.00	Pass
134	5670	10.42	11.98	11.20	11.60	54.428	17.36	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0
1. 11dBm + 10log (41.34) = 27.16 > 24dBm
2. 11dBm + 10log (41.35) = 27.16 > 24dBm
3. 11dBm + 10log (41.30) = 27.15 > 24dBm
4. 11dBm + 10log (41.38) = 27.16 > 24dBm
5. 11dBm + 10log (41.28) = 27.15 > 24dBm

Chain 1
1. 11dBm + 10log (41.01) = 27.12 > 24dBm
2. 11dBm + 10log (40.99) = 27.12 > 24dBm
3. 11dBm + 10log (41.08) = 27.13 > 24dBm
4. 11dBm + 10log (41.08) = 27.13 > 24dBm
5. 11dBm + 10log (41.00) = 27.12 > 24dBm

Chain 2
1. 11dBm + 10log (41.01) = 27.12 > 24dBm
2. 11dBm + 10log (40.64) = 27.08 > 24dBm
3. 11dBm + 10log (41.07) = 27.13 > 24dBm
4. 11dBm + 10log (40.86) = 27.11 > 24dBm
5. 11dBm + 10log (40.99) = 27.12 > 24dBm

Chain 3
1. 11dBm + 10log (40.72) = 27.09 > 24dBm
2. 11dBm + 10log (40.64) = 27.08 > 24dBm
3. 11dBm + 10log (40.71) = 27.09 > 24dBm
4. 11dBm + 10log (40.67) = 27.09 > 24dBm
5. 11dBm + 10log (40.63) = 27.08 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	12.97	14.19	13.06	13.03	**86.378**	19.36	20.00	Pass
106	5530	12.33	14.28	12.88	13.29	84.631	19.28	20.00	Pass
122	5610	12.40	14.35	13.04	13.20	**85.635**	19.33	20.00	Pass

Note: Gain = 10dBi > 6dBi, so the power limit shall be reduced to 24-(10-6) = 20.00dBm.

Chain 0
1. 11dBm + 10log (82.42) = 30.16 > 24dBm
2. 11dBm + 10log (82.48) = 30.16 > 24dBm
3. 11dBm + 10log (82.35) = 30.15 > 24dBm

Chain 1
1. 11dBm + 10log (81.99) = 30.13 > 24dBm
2. 11dBm + 10log (82.05) = 30.14 > 24dBm
3. 11dBm + 10log (82.05) = 30.14 > 24dBm

Chain 2
1. 11dBm + 10log (81.82) = 30.12 > 24dBm
2. 11dBm + 10log (82.37) = 30.15 > 24dBm
3. 11dBm + 10log (82.11) = 30.14 > 24dBm

Chain 3
1. 11dBm + 10log (82.21) = 30.14 > 24dBm
2. 11dBm + 10log (82.67) = 30.17 > 24dBm
3. 11dBm + 10log (82.55) = 30.16 > 24dBm

Beamforming Mode

802.11ax (HE20)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
52	5260	7.26	8.57	7.52	7.73	24.093	13.82	13.98	Pass
60	5300	7.32	8.59	7.57	7.36	23.783	13.76	13.98	Pass
64	5320	7.24	8.56	7.45	7.34	23.454	13.70	13.98	Pass
100	5500	7.94	8.72	6.93	7.89	24.754	13.94	13.98	Pass
116	5580	6.96	8.73	7.57	7.91	24.325	13.86	13.98	Pass
140	5700	7.33	8.82	7.69	7.82	**24.957**	13.97	13.98	Pass

Note:

1. 5260~5320MHz Directional gain = 10dBi + 10log(4) = 16.02dBi > 6dBi, so the power limit shall be reduced to 24-(16.02-6) = 13.98dBm.
2. 5500~5700MHz Directional gain = 10dBi + 10log(4) = 16.02dBi > 6dBi, so the power limit shall be reduced to 24-(16.02-6) = 13.98dBm.

Chain 0

1. 11dBm + 10log (21.85) = 24.39 > 24dBm
2. 11dBm + 10log (21.94) = 24.41 > 24dBm
3. 11dBm + 10log (21.82) = 24.38 > 24dBm
4. 11dBm + 10log (21.93) = 24.41 > 24dBm
5. 11dBm + 10log (21.87) = 24.39 > 24dBm
6. 11dBm + 10log (21.82) = 24.38 > 24dBm

Chain 1

1. 11dBm + 10log (21.79) = 24.38 > 24dBm
2. 11dBm + 10log (21.67) = 24.35 > 24dBm
3. 11dBm + 10log (21.71) = 24.36 > 24dBm
4. 11dBm + 10log (21.72) = 24.36 > 24dBm
5. 11dBm + 10log (21.68) = 24.36 > 24dBm
6. 11dBm + 10log (21.62) = 24.34 > 24dBm

Chain 2

1. 11dBm + 10log (21.63) = 24.35 > 24dBm
2. 11dBm + 10log (21.64) = 24.35 > 24dBm
3. 11dBm + 10log (21.61) = 24.34 > 24dBm
4. 11dBm + 10log (21.60) = 24.34 > 24dBm
5. 11dBm + 10log (21.65) = 24.35 > 24dBm
6. 11dBm + 10log (21.62) = 24.34 > 24dBm

Chain 3

1. 11dBm + 10log (21.69) = 24.36 > 24dBm
2. 11dBm + 10log (21.61) = 24.34 > 24dBm
3. 11dBm + 10log (21.70) = 24.36 > 24dBm
4. 11dBm + 10log (21.63) = 24.35 > 24dBm
5. 11dBm + 10log (21.84) = 24.39 > 24dBm
6. 11dBm + 10log (21.65) = 24.35 > 24dBm

802.11ax (HE40)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	7.39	8.66	7.48	7.36	23.871	13.78	13.98	Pass
62	5310	7.54	8.74	7.69	7.57	**24.747**	13.94	13.98	Pass
102	5510	7.15	8.86	7.63	7.70	24.561	13.90	13.98	Pass
110	5550	6.97	8.61	7.57	7.72	23.869	13.78	13.98	Pass
134	5670	6.92	8.48	7.70	8.10	24.312	13.86	13.98	Pass

Note:
1. 5260~5320MHz Directional gain = 10dBi + 10log(4) = 16.02dBi > 6dBi, so the power limit shall be reduced to 24-(16.02-6) = 13.98dBm.
2. 5500~5700MHz Directional gain = 10dBi + 10log(4) = 16.02dBi > 6dBi, so the power limit shall be reduced to 24-(16.02-6) = 13.98dBm.

Chain 0

1. 11dBm + 10log (41.34) = 27.16 > 24dBm
2. 11dBm + 10log (41.35) = 27.16 > 24dBm
3. 11dBm + 10log (41.30) = 27.15 > 24dBm
4. 11dBm + 10log (41.38) = 27.16 > 24dBm
5. 11dBm + 10log (41.28) = 27.15 > 24dBm

Chain 1

1. 11dBm + 10log (41.01) = 27.12 > 24dBm
2. 11dBm + 10log (40.99) = 27.12 > 24dBm
3. 11dBm + 10log (41.08) = 27.13 > 24dBm
4. 11dBm + 10log (41.08) = 27.13 > 24dBm
5. 11dBm + 10log (41.00) = 27.12 > 24dBm

Chain 2

1. 11dBm + 10log (41.01) = 27.12 > 24dBm
2. 11dBm + 10log (40.64) = 27.08 > 24dBm
3. 11dBm + 10log (41.07) = 27.13 > 24dBm
4. 11dBm + 10log (40.86) = 27.11 > 24dBm
5. 11dBm + 10log (40.99) = 27.12 > 24dBm

Chain 3

1. 11dBm + 10log (40.72) = 27.09 > 24dBm
2. 11dBm + 10log (40.64) = 27.08 > 24dBm
3. 11dBm + 10log (40.71) = 27.09 > 24dBm
4. 11dBm + 10log (40.67) = 27.09 > 24dBm
5. 11dBm + 10log (40.63) = 27.08 > 24dBm

802.11ax (HE80)

Chan.	Freq. (MHz)	Maximum Conducted Power (dBm)				Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
58	5290	7.47	8.69	7.56	7.53	24.345	13.86	13.98	Pass
106	5530	6.83	8.78	7.38	7.79	23.852	13.78	13.98	Pass
122	5610	6.90	8.85	7.54	7.70	24.135	13.83	13.98	Pass

Note:
1. 5260~5320MHz Directional gain = 10dBi + 10log(4) = 16.02dBi > 6dBi, so the power limit shall be reduced to 24-(16.02-6) = 13.98dBm.
2. 5500~5700MHz Directional gain = 10dBi + 10log(4) = 16.02dBi > 6dBi, so the power limit shall be reduced to 24-(16.02-6) = 13.98dBm.

Chain 0

1. 11dBm + 10log (82.42) = 30.16 > 24dBm
2. 11dBm + 10log (82.48) = 30.16 > 24dBm
3. 11dBm + 10log (82.35) = 30.15 > 24dBm

Chain 1

1. 11dBm + 10log (81.99) = 30.13 > 24dBm
2. 11dBm + 10log (82.05) = 30.14 > 24dBm
3. 11dBm + 10log (82.05) = 30.14 > 24dBm

Chain 2

1. 11dBm + 10log (81.82) = 30.12 > 24dBm
2. 11dBm + 10log (82.37) = 30.15 > 24dBm
3. 11dBm + 10log (82.11) = 30.14 > 24dBm

Chain 3

1. 11dBm + 10log (82.21) = 30.14 > 24dBm
2. 11dBm + 10log (82.67) = 30.17 > 24dBm
3. 11dBm + 10log (82.55) = 30.16 > 24dBm

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.61	21.78	21.85	21.62
60	5300	21.61	21.69	21.83	21.63
64	5320	21.71	21.79	21.76	21.64
100	5500	21.63	21.73	21.72	21.68
116	5580	21.68	21.74	21.82	21.67
140	5700	21.66	21.70	21.82	21.59

802.11ax (HE20)

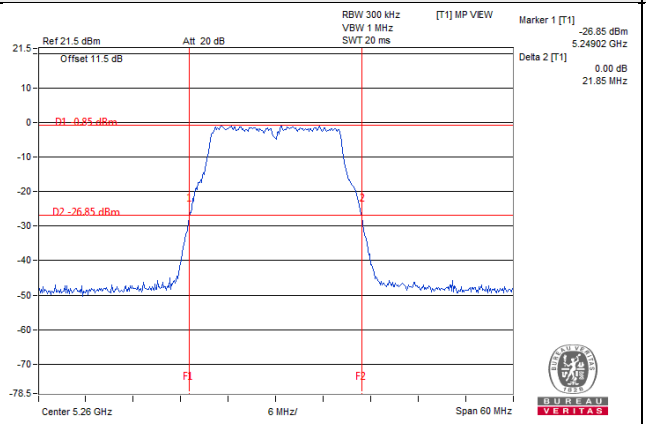
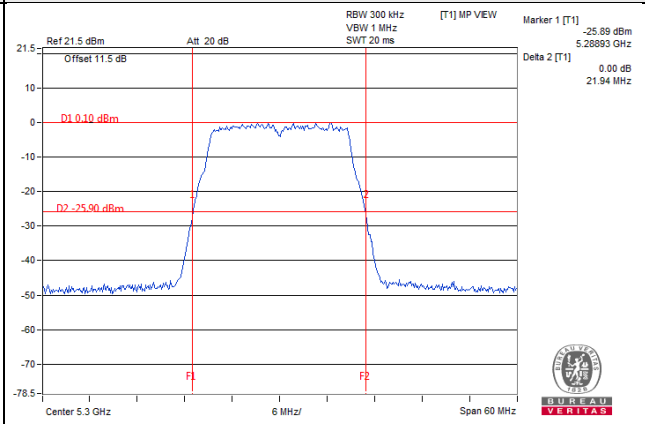
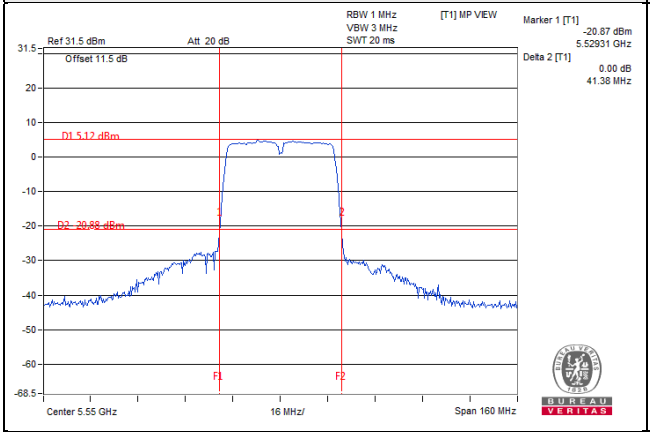
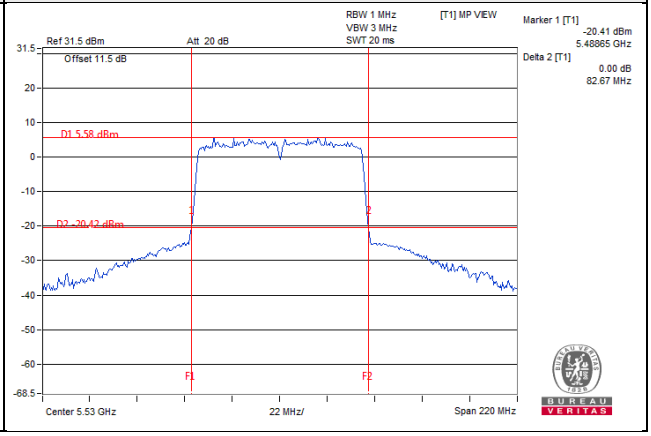
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	21.85	21.79	21.63	21.69
60	5300	21.94	21.67	21.64	21.61
64	5320	21.82	21.71	21.61	21.70
100	5500	21.93	21.72	21.60	21.63
116	5580	21.87	21.68	21.65	21.84
140	5700	21.82	21.62	21.62	21.65

802.11ax (HE40)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	41.34	41.01	41.01	40.72
62	5310	41.35	40.99	40.64	40.64
102	5510	41.30	41.08	41.07	40.71
110	5550	41.38	41.08	40.86	40.67
134	5670	41.28	41.00	40.99	40.63

802.11ax (HE80)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	82.42	81.99	81.82	82.21
106	5530	82.48	82.05	82.37	82.67
122	5610	82.35	82.05	82.11	82.55

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

EUT Maximum Conducted Power

CDD Mode

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	13.91	24.599
5470~5725	14.47	27.996

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	13.82	24.093
5470~5725	13.97	24.957

802.11ax (HE40)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	17.53	56.606
5470~5725	17.78	59.956

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	19.36	86.378
5470~5725	19.33	85.635

Beamforming Mode

802.11ax (HE20)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	13.82	24.093
5470~5725	13.97	24.957

802.11ax (HE40)

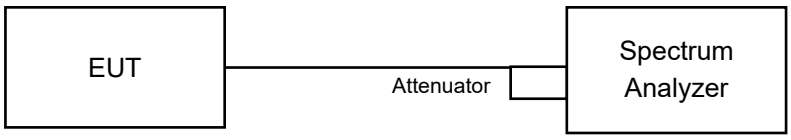
Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	13.94	24.747
5470~5725	13.90	24.561

802.11ax (HE80)

Frequency Band (MHz)	Max. Power	
	Output Power (dBm)	Output Power (mW)
5250~5350	13.86	24.345
5470~5725	13.83	24.135

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

Test Mode A (Internal antenna + Eth6 Radio)

1TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
52	5260	31.56
60	5300	32.16
64	5320	23.64
100	5500	18.60
116	5580	31.44
140	5700	17.28

802.11ax (HE20)

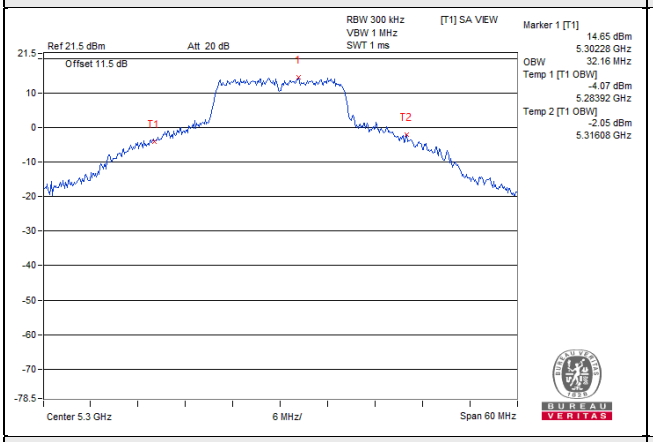
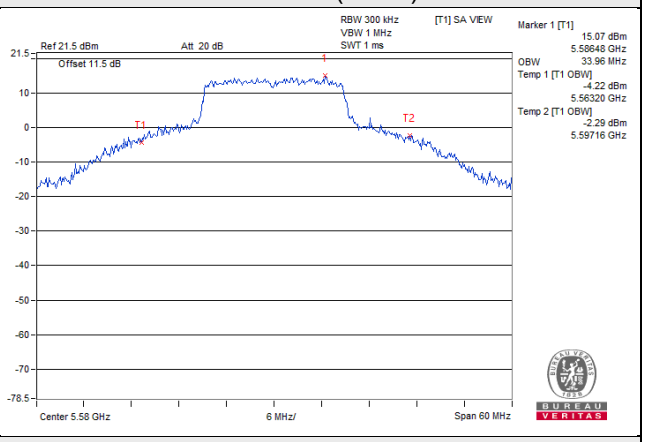
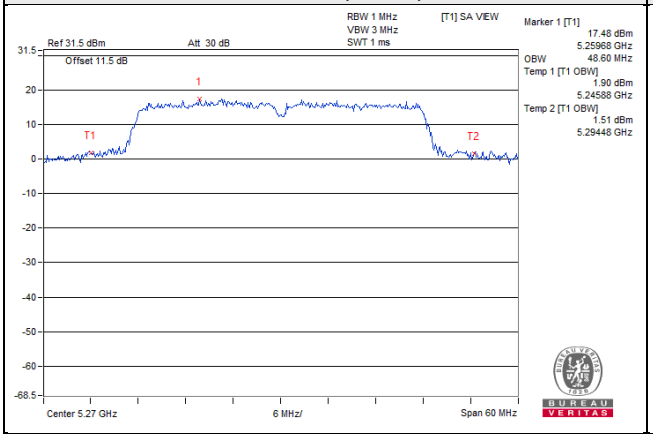
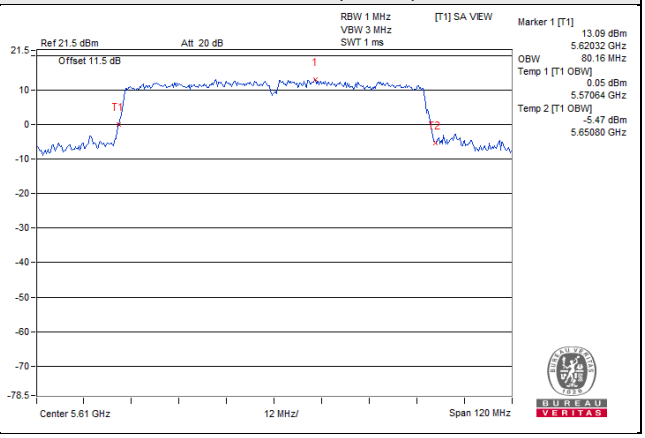
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
52	5260	32.76
60	5300	33.84
64	5320	19.44
100	5500	18.36
116	5580	33.96
140	5700	18.36

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
54	5270	48.60
62	5310	37.08
102	5510	36.96
110	5550	47.16
134	5670	37.80

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
58	5290	76.08
106	5530	75.84
122	5610	80.16

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

2TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 2	Chain 3
52	5260	17.28	17.04
60	5300	17.28	17.04
64	5320	17.40	17.16
100	5500	17.16	16.92
116	5580	17.28	17.04
140	5700	17.16	17.04

802.11ax (HE20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 2	Chain 3
52	5260	18.36	18.12
60	5300	18.36	18.00
64	5320	18.36	18.00
100	5500	18.24	17.88
116	5580	18.24	18.00
140	5700	18.12	18.00

802.11ax (HE40)

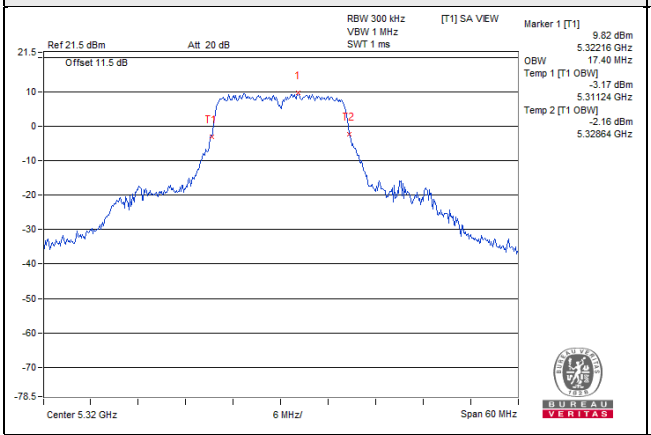
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 2	Chain 3
54	5270	41.40	38.04
62	5310	36.96	36.72
102	5510	36.84	36.60
110	5550	38.76	37.44
134	5670	37.20	36.96

802.11ax (HE80)

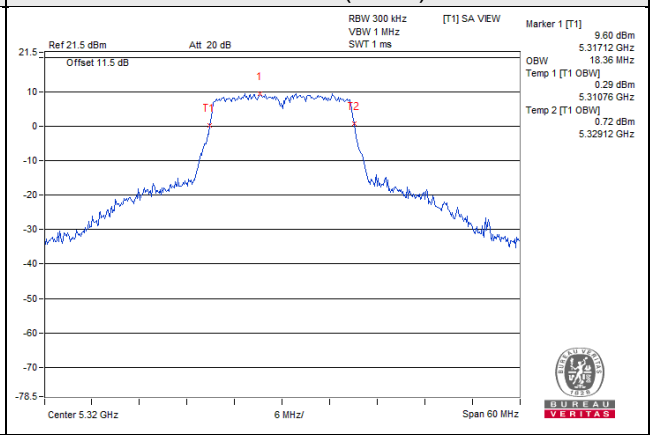
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 2	Chain 3
58	5290	75.84	75.84
106	5530	75.84	75.84
122	5610	76.80	76.56

Spectrum Plot of Worst Value

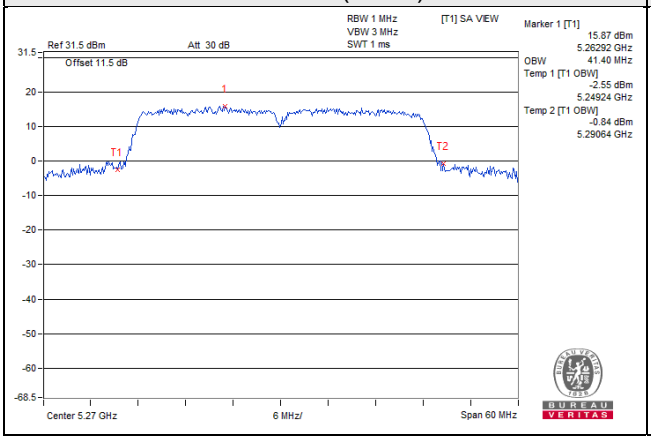
802.11a



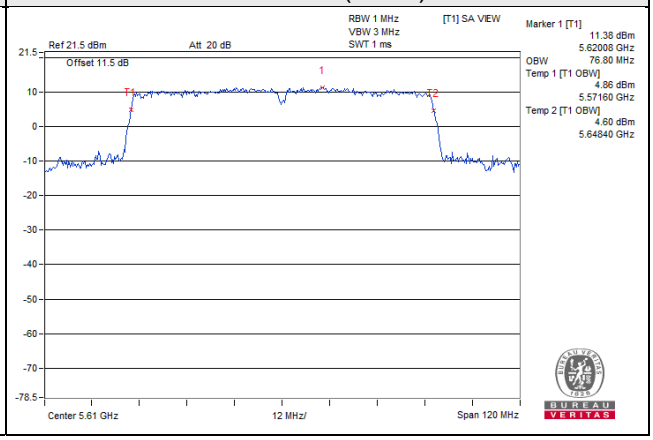
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



3TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
52	5260	17.04	16.92	17.04
60	5300	16.92	16.92	17.04
64	5320	17.04	16.92	17.04
100	5500	16.92	16.80	17.04
116	5580	16.92	16.92	17.04
140	5700	17.04	16.92	17.16

802.11ax (HE20)

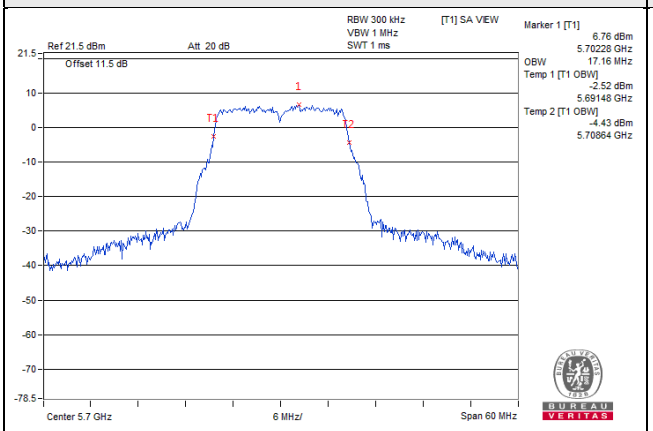
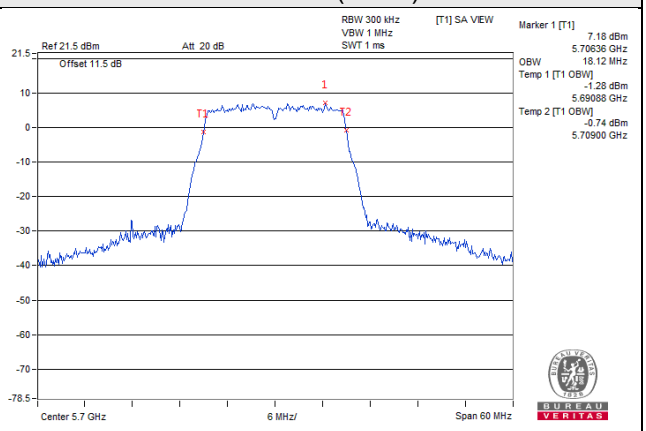
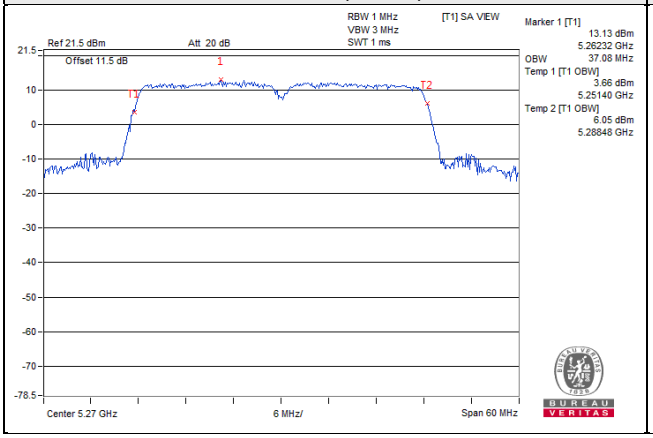
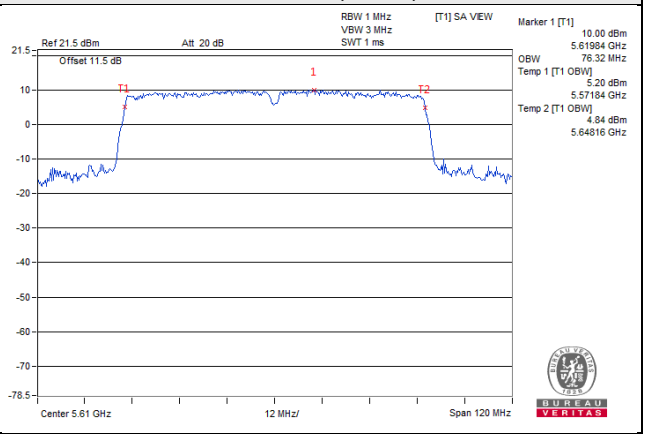
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
52	5260	17.88	17.88	18.12
60	5300	17.88	18.00	18.12
64	5320	17.88	18.00	18.12
100	5500	17.88	18.00	18.12
116	5580	17.88	18.00	18.12
140	5700	17.88	18.00	18.12

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
54	5270	36.60	36.84	37.08
62	5310	36.72	36.72	36.96
102	5510	36.60	36.72	36.72
110	5550	36.72	36.72	36.96
134	5670	36.72	36.96	36.96

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
58	5290	75.84	75.84	75.84
106	5530	75.84	75.84	75.84
122	5610	76.08	75.84	76.32

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

4TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	17.04	17.04	17.16	16.80
60	5300	17.04	17.04	17.04	16.92
64	5320	17.04	17.04	17.04	17.04
100	5500	17.16	17.16	17.04	17.04
116	5580	17.04	17.04	17.16	16.92
140	5700	17.04	17.04	17.16	17.04

802.11ax (HE20)

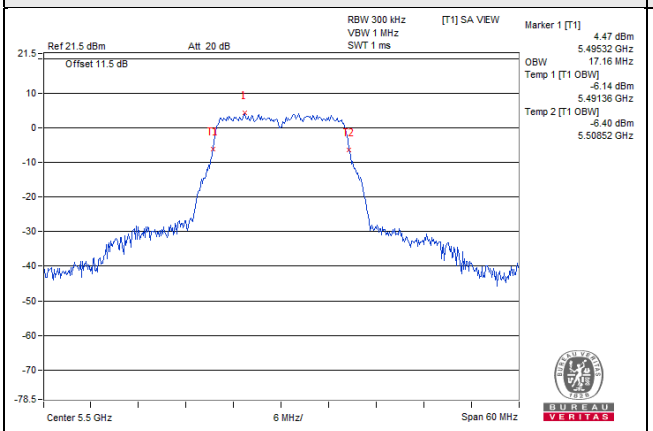
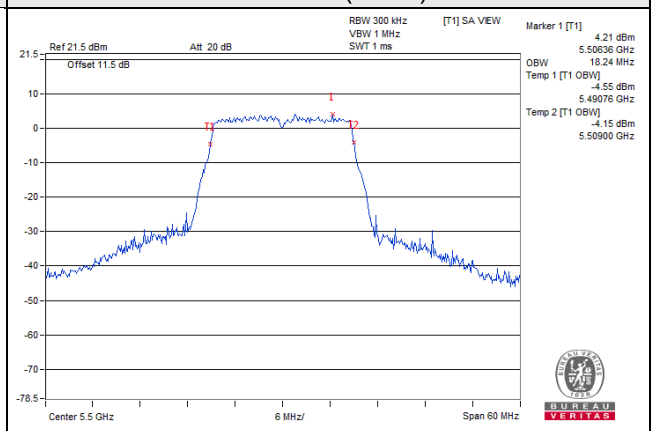
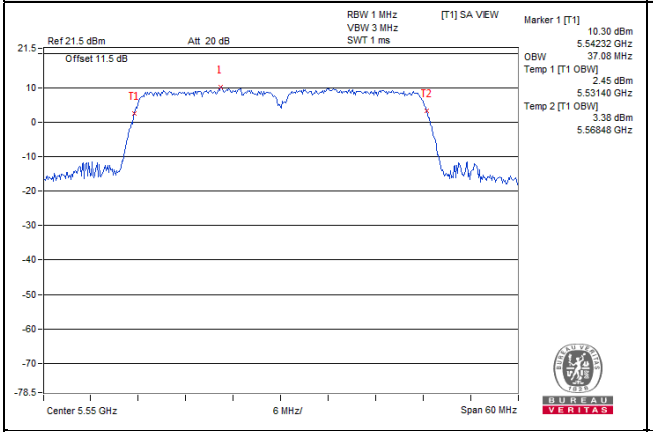
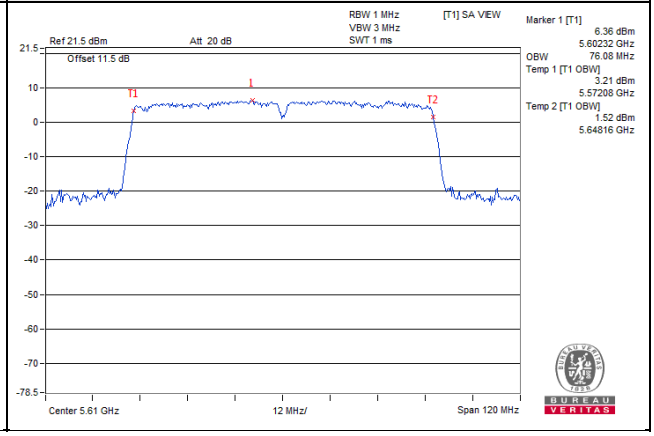
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	18.24	17.88	17.88	17.88
60	5300	18.12	17.88	17.88	18.00
64	5320	18.12	17.88	17.88	17.88
100	5500	18.24	17.88	17.88	18.00
116	5580	18.12	17.88	17.88	17.88
140	5700	18.12	18.00	17.88	17.88

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	36.96	36.60	36.96	36.84
62	5310	36.84	36.60	36.84	36.84
102	5510	36.84	36.60	36.72	36.72
110	5550	37.08	36.60	36.84	36.84
134	5670	36.84	36.72	36.84	36.72

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	75.84	75.84	75.60	75.84
106	5530	75.84	75.84	75.84	75.84
122	5610	76.08	75.84	75.84	75.84

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Test Mode C (Internal antenna + Eth8 Radio)

1TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
100	5500	23.52
116	5580	32.04
140	5700	18.48

802.11ax (HE20)

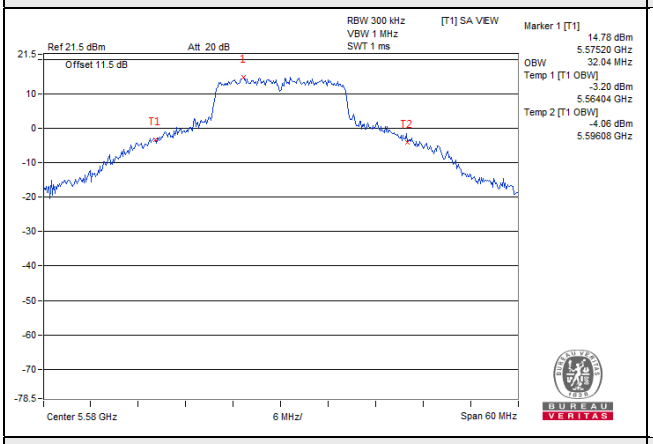
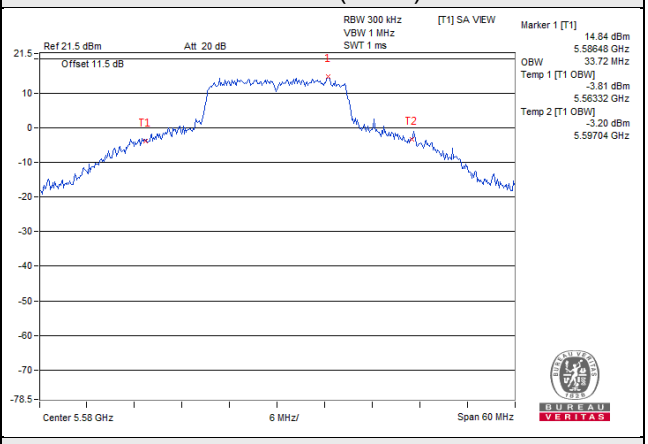
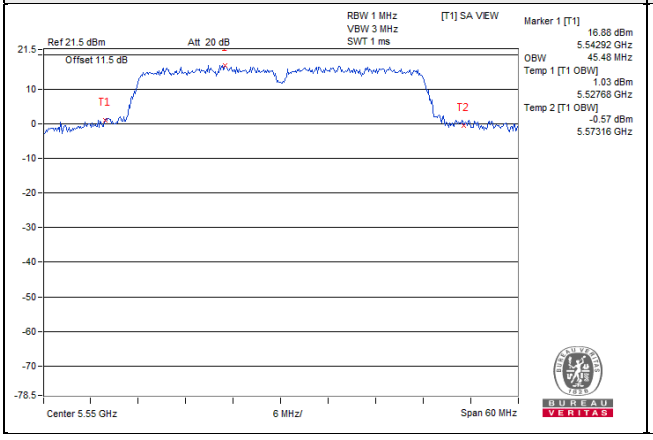
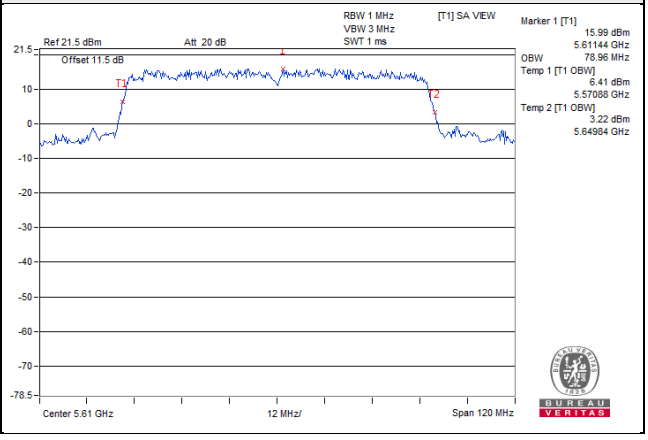
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
100	5500	18.84
116	5580	33.72
140	5700	18.60

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
102	5510	37.08
110	5550	45.48
134	5670	38.76

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
106	5530	76.32
122	5610	78.96

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

2TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 1	Chain 2
100	5500	17.04	17.28
116	5580	17.04	17.40
140	5700	17.04	17.28

802.11ax (HE20)

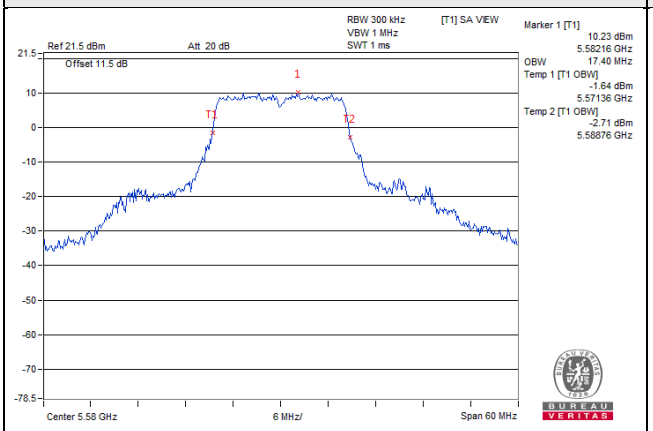
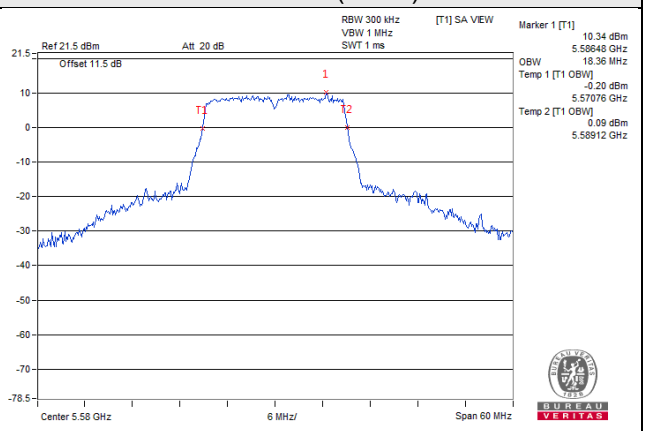
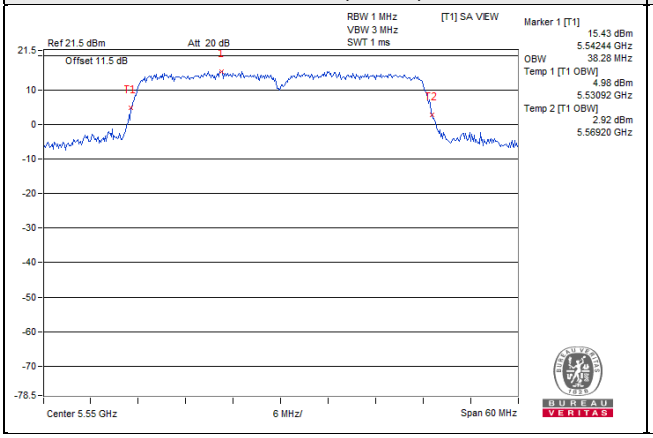
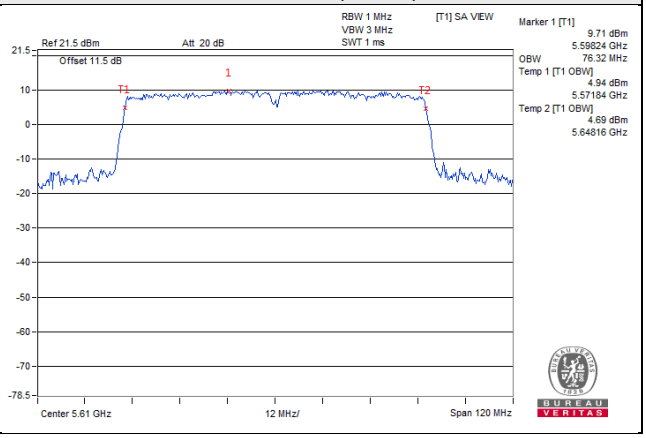
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 1	Chain 2
100	5500	18.00	18.36
116	5580	18.00	18.36
140	5700	18.00	18.12

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 1	Chain 2
102	5510	36.72	36.84
110	5550	37.44	38.28
134	5670	36.84	37.32

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 1	Chain 2
106	5530	75.84	75.84
122	5610	76.08	76.32

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

3TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
100	5500	17.04	16.92	17.04
116	5580	17.04	16.92	17.04
140	5700	17.16	16.92	17.04

802.11ax (HE20)

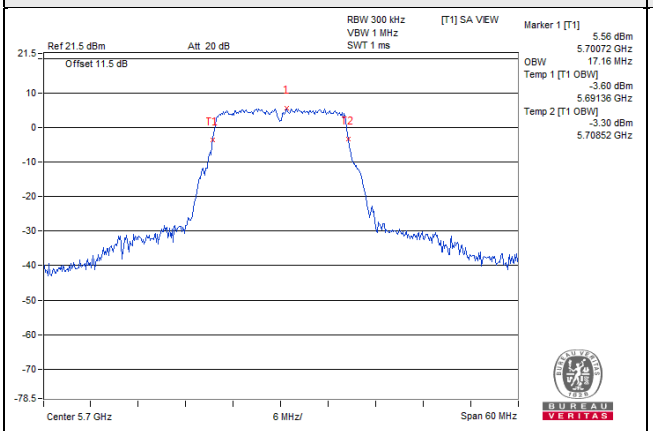
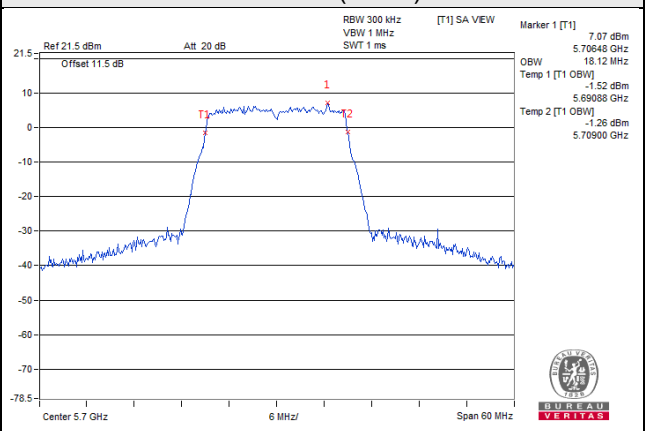
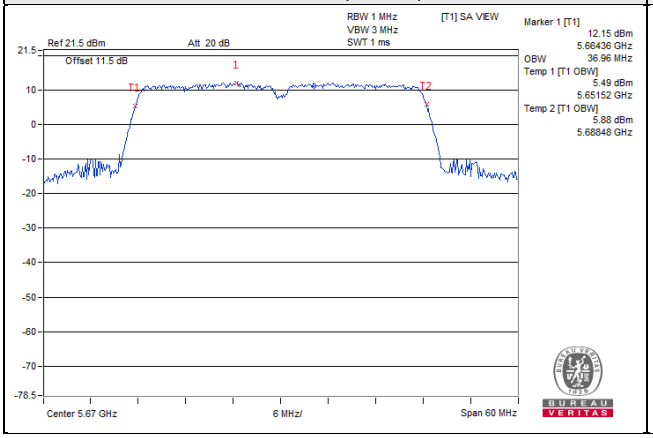
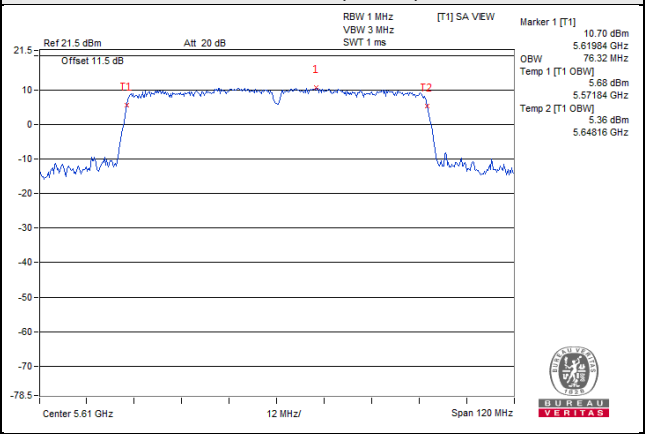
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
100	5500	17.88	17.88	18.12
116	5580	17.88	18.00	18.12
140	5700	17.88	17.88	18.12

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
102	5510	36.60	36.60	36.96
110	5550	36.84	36.72	36.96
134	5670	36.72	36.96	36.96

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 1	Chain 2	Chain 3
106	5530	75.84	75.84	75.84
122	5610	76.32	76.32	76.32

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

4TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	17.04	17.04	17.16	16.92
116	5580	17.04	17.04	17.04	16.92
140	5700	17.04	17.16	17.16	16.80

802.11ax (HE20)

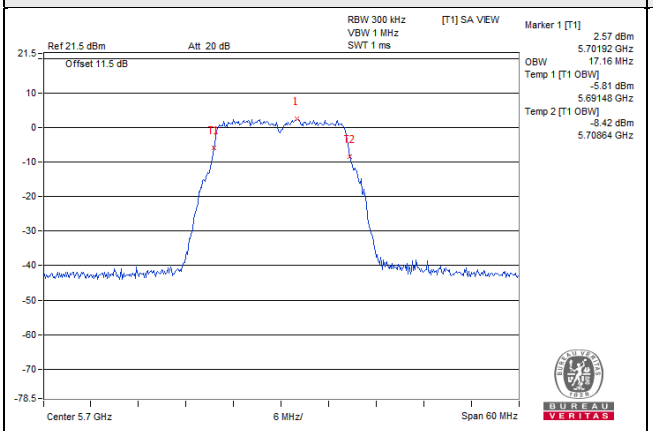
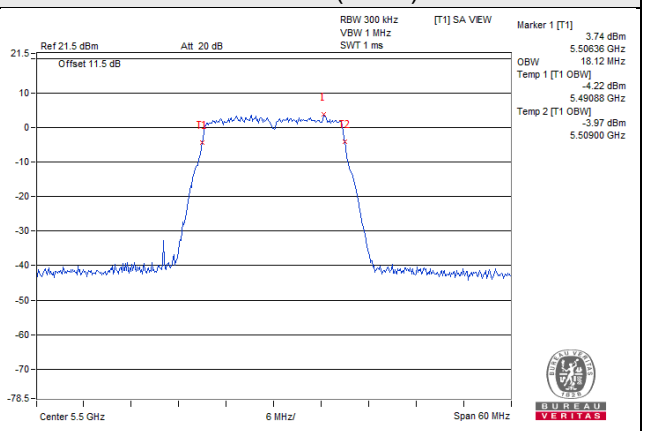
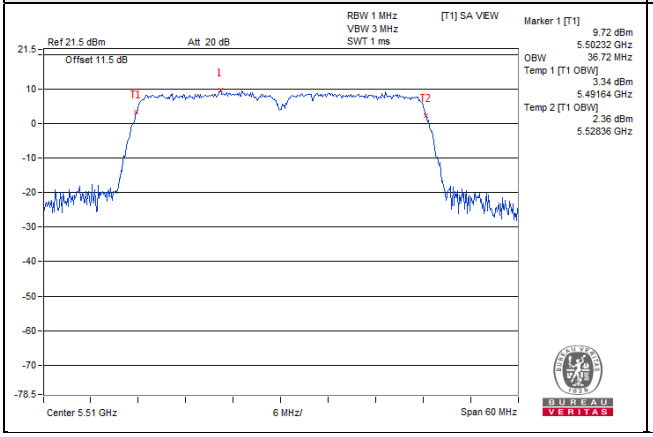
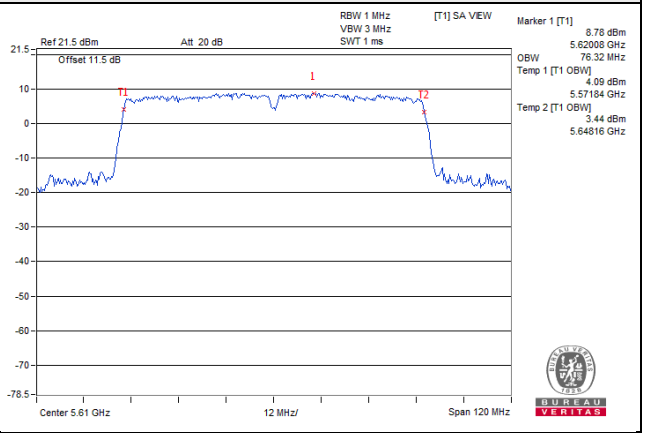
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
100	5500	18.12	18.00	17.88	17.88
116	5580	18.12	17.88	18.00	18.00
140	5700	18.12	17.88	17.88	18.00

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
102	5510	36.72	36.60	36.60	36.60
110	5550	36.72	36.60	36.72	36.72
134	5670	36.72	36.60	36.72	36.72

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
106	5530	75.84	75.84	75.84	75.84
122	5610	76.32	76.08	75.84	75.84

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Test Mode E (External antenna – PN: ATS-OO-245-46-4RPSP-36 + Eth6 Radio)

1TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
52	5260	32.28
60	5300	31.44
64	5320	22.08
100	5500	20.64
116	5580	32.16
140	5700	17.28

802.11ax (HE20)

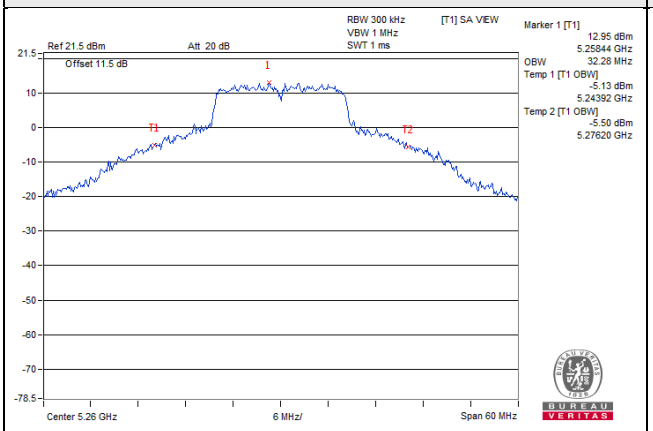
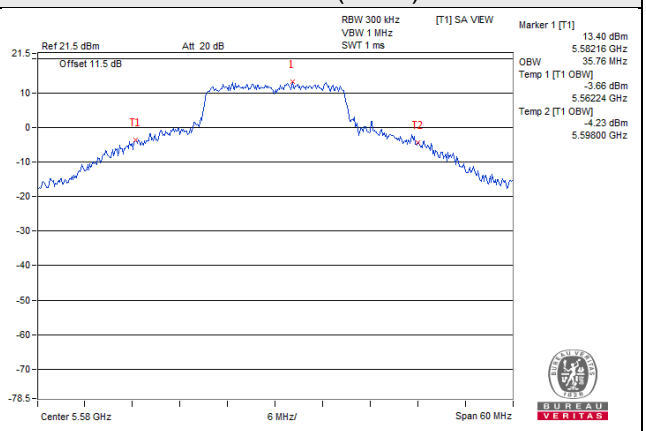
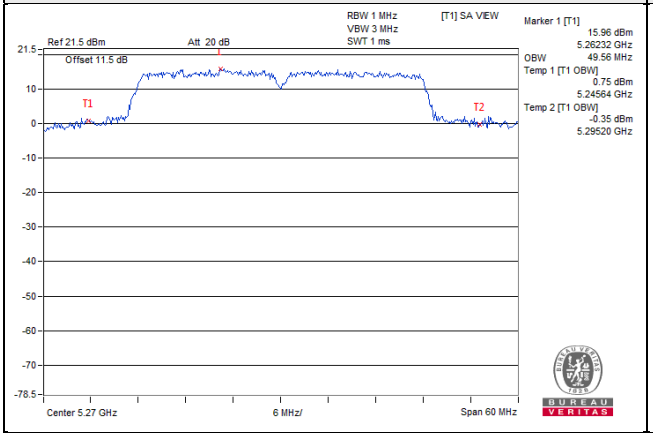
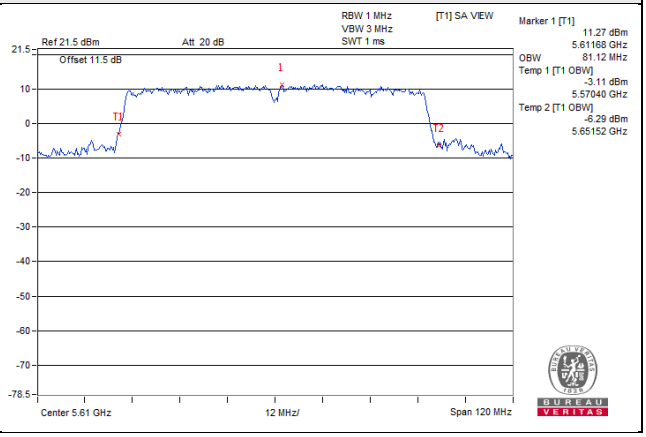
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
52	5260	34.56
60	5300	33.72
64	5320	18.96
100	5500	18.84
116	5580	35.76
140	5700	18.36

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
54	5270	49.56
62	5310	37.20
102	5510	37.08
110	5550	47.64
134	5670	37.68

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
58	5290	76.08
106	5530	76.08
122	5610	81.12

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

2TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 1	Chain 2
52	5260	17.04	18.12
60	5300	17.28	17.52
64	5320	17.16	17.52
100	5500	16.92	17.40
116	5580	17.40	18.48
140	5700	17.04	17.28

802.11ax (HE20)

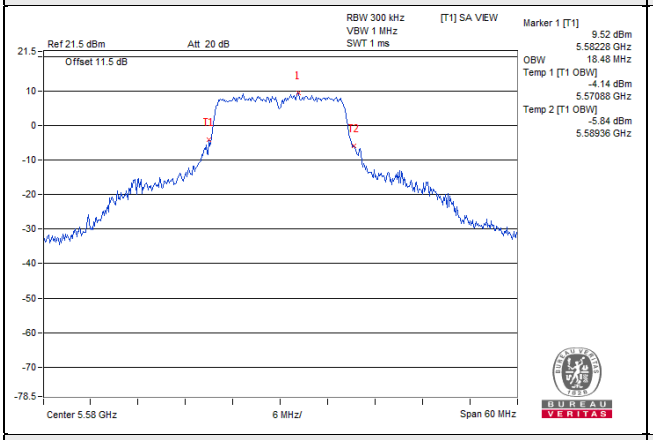
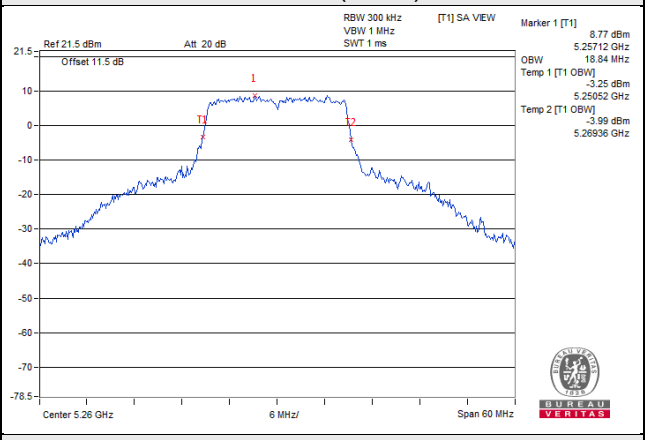
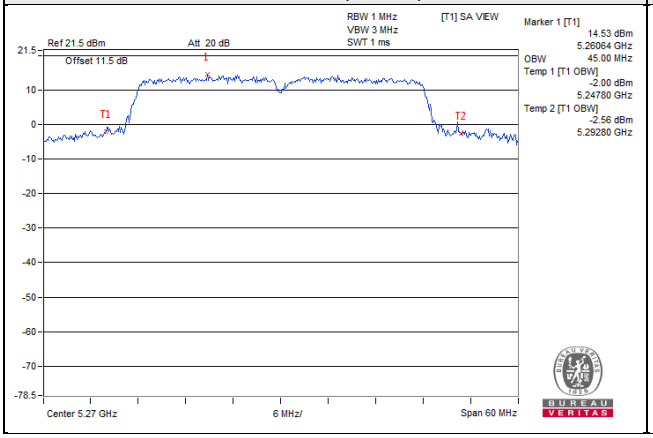
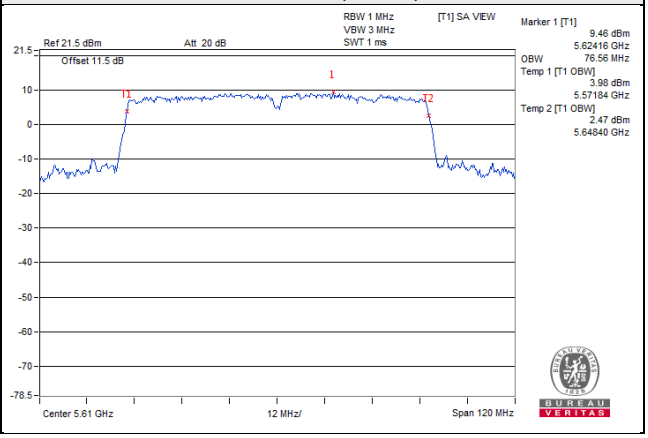
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 1	Chain 2
52	5260	18.12	18.84
60	5300	18.12	18.60
64	5320	18.12	18.60
100	5500	18.00	18.24
116	5580	18.36	18.72
140	5700	18.00	18.12

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 1	Chain 2
54	5270	38.16	45.00
62	5310	36.60	36.84
102	5510	36.60	36.84
110	5550	37.56	39.96
134	5670	36.96	37.08

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 1	Chain 2
58	5290	75.84	75.84
106	5530	75.84	75.84
122	5610	76.56	76.56

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

3TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	17.16	17.04	16.92
60	5300	17.16	17.16	16.92
64	5320	17.04	17.16	17.16
100	5500	17.16	17.16	16.92
116	5580	17.16	17.16	16.92
140	5700	17.16	17.16	16.92

802.11ax (HE20)

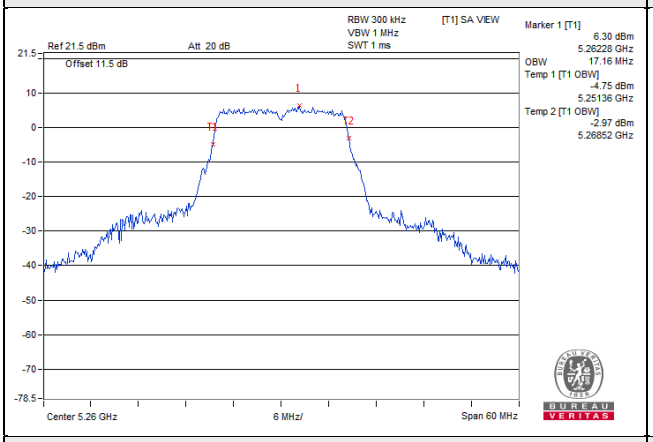
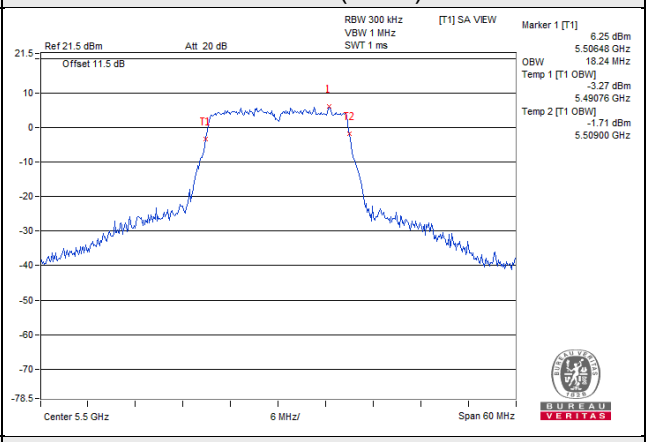
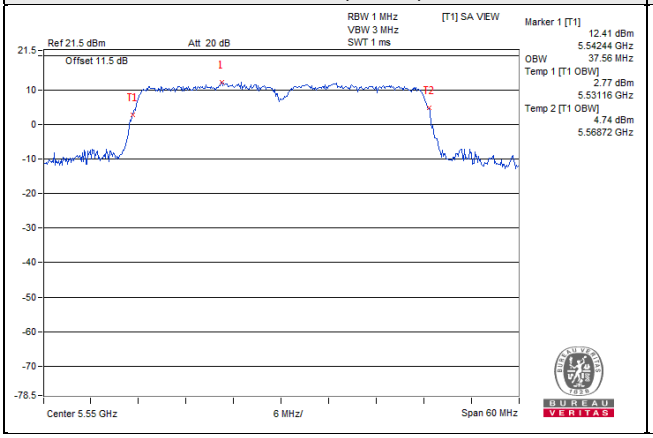
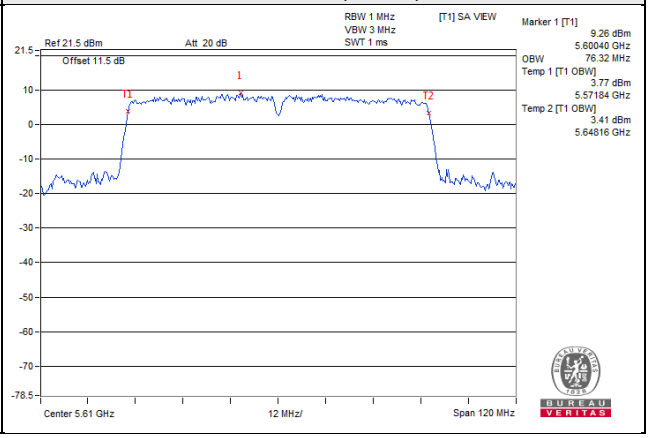
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	18.12	17.88	17.88
60	5300	18.12	17.88	18.00
64	5320	18.12	17.88	18.00
100	5500	18.24	17.88	18.00
116	5580	18.12	17.88	18.00
140	5700	18.12	18.00	18.00

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
54	5270	37.56	36.84	37.32
62	5310	36.84	36.60	36.84
102	5510	36.84	36.60	36.60
110	5550	37.56	36.96	36.96
134	5670	36.96	36.72	36.84

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
58	5290	75.84	75.84	75.60
106	5530	75.84	75.84	75.84
122	5610	76.08	76.32	75.84

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

4TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	17.04	17.16	16.92	16.80
60	5300	17.04	17.04	17.04	16.80
64	5320	17.04	17.04	17.04	16.80
100	5500	17.04	17.04	17.04	17.04
116	5580	17.04	17.04	17.04	16.80
140	5700	17.04	17.04	17.16	17.04

802.11ax (HE20)

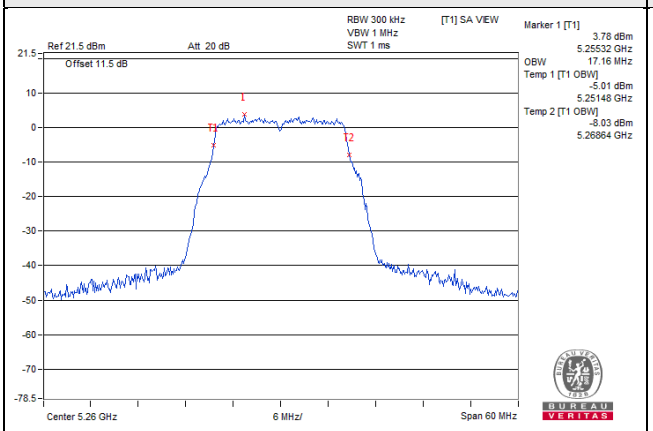
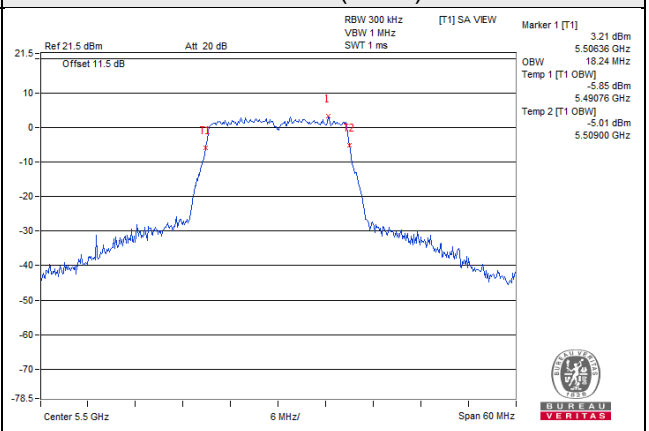
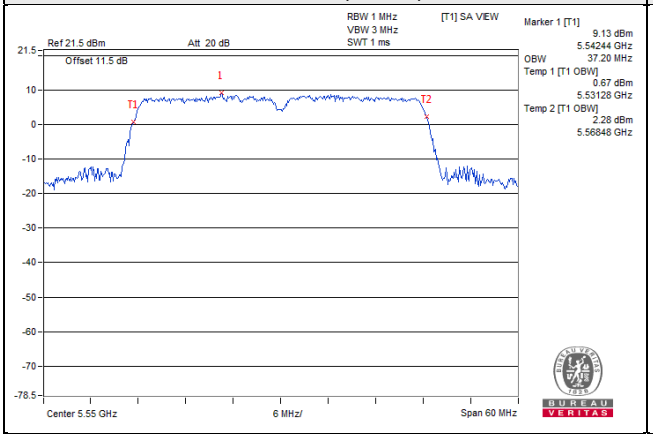
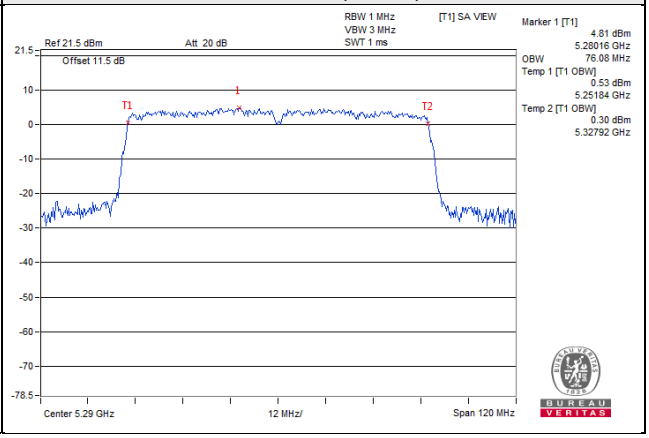
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	18.12	17.88	17.88	18.00
60	5300	18.12	17.88	17.88	17.88
64	5320	18.12	17.88	17.88	17.88
100	5500	18.24	17.88	17.88	17.88
116	5580	18.12	17.88	17.88	17.88
140	5700	18.12	17.88	17.88	17.88

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	37.08	36.60	36.84	36.72
62	5310	36.84	36.60	36.72	36.72
102	5510	36.84	36.60	36.60	36.60
110	5550	37.20	36.60	36.72	36.60
134	5670	36.84	36.60	36.84	36.72

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	76.08	75.84	76.08	75.84
106	5530	76.08	75.84	75.84	75.84
122	5610	75.84	75.84	75.84	75.84

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

Test Mode G (External antenna – PN: ATS-OP-245-810-4RPSP-36 + Eth6 Radio)

1TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
52	5260	26.16
60	5300	23.52
64	5320	23.16
100	5500	24.12
116	5580	23.16
140	5700	17.76

802.11ax (HE20)

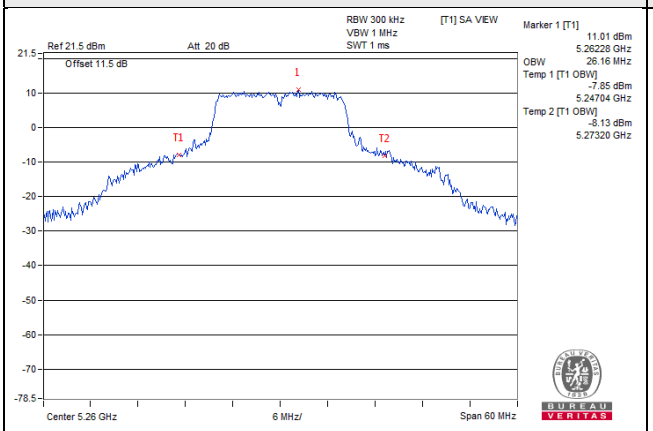
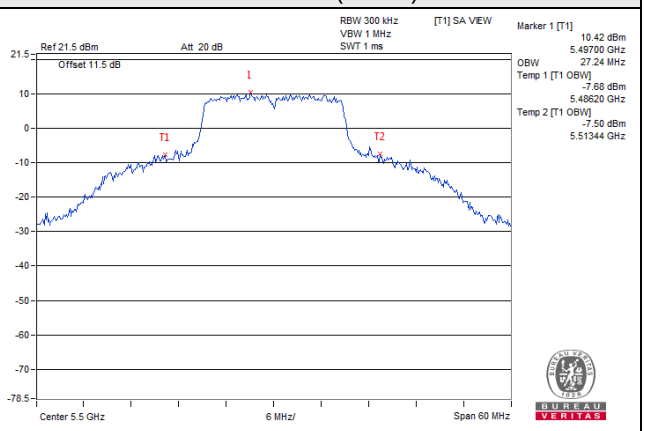
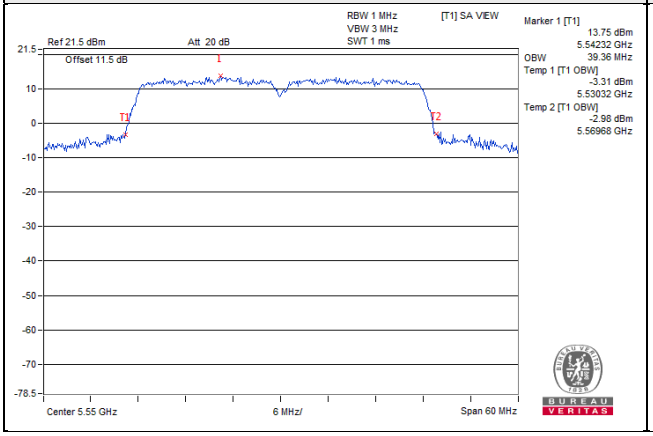
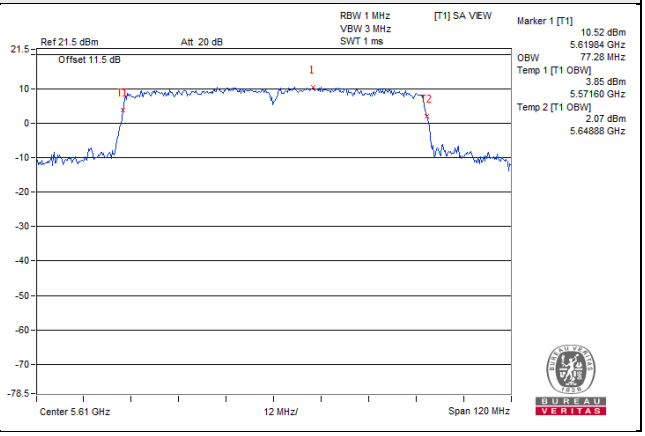
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
52	5260	25.80
60	5300	26.40
64	5320	23.52
100	5500	27.24
116	5580	23.64
140	5700	18.36

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
54	5270	44.88
62	5310	37.32
102	5510	37.20
110	5550	39.36
134	5670	38.52

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
58	5290	76.32
106	5530	76.32
122	5610	77.28

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

2TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	17.04	16.92
60	5300	17.04	16.92
64	5320	17.04	16.92
100	5500	17.16	16.92
116	5580	17.04	16.92
140	5700	17.16	16.92

802.11ax (HE20)

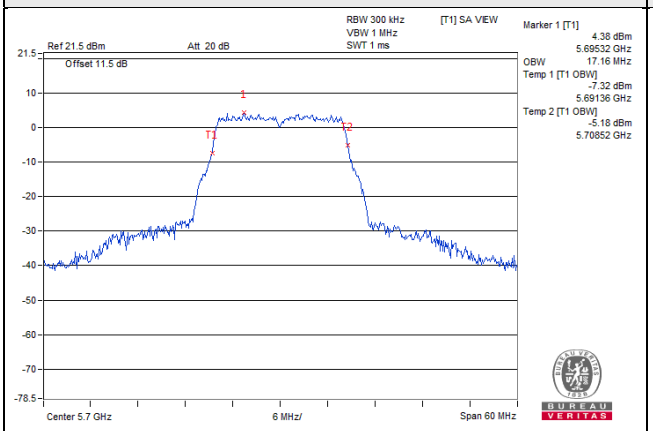
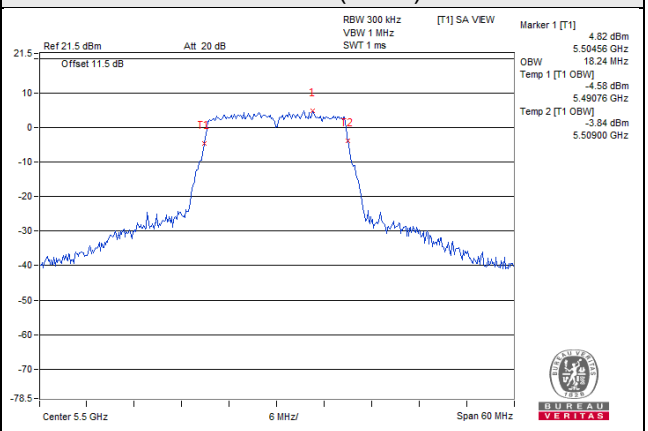
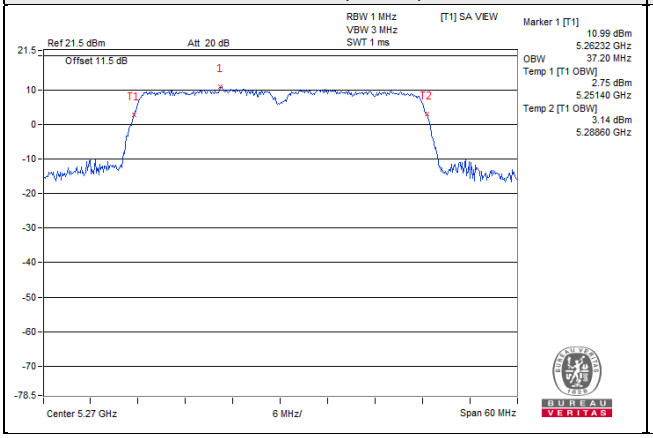
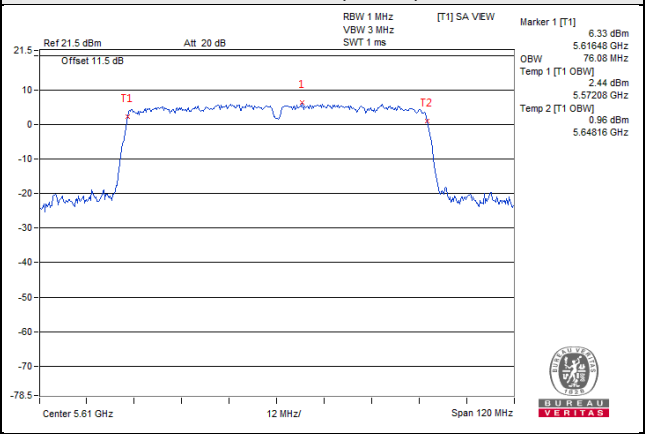
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	18.12	17.88
60	5300	18.12	17.88
64	5320	18.12	18.00
100	5500	18.24	17.88
116	5580	18.12	17.88
140	5700	18.12	18.00

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	37.20	36.60
62	5310	36.84	36.60
102	5510	36.96	36.60
110	5550	36.96	36.72
134	5670	36.84	36.72

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	76.08	75.84
106	5530	76.08	75.84
122	5610	76.08	76.08

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

3TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	17.04	17.04	16.80
60	5300	17.04	17.04	16.80
64	5320	17.04	17.04	16.80
100	5500	17.04	17.16	16.80
116	5580	17.04	17.04	16.92
140	5700	17.04	17.16	16.80

802.11ax (HE20)

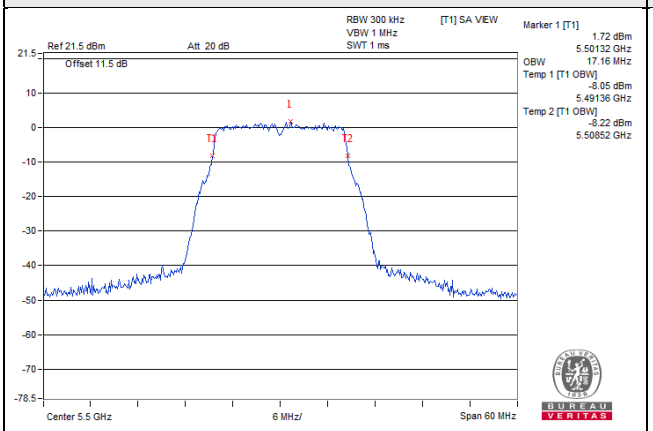
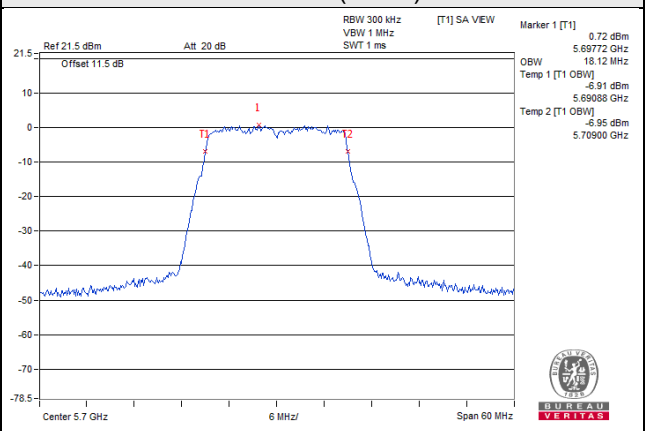
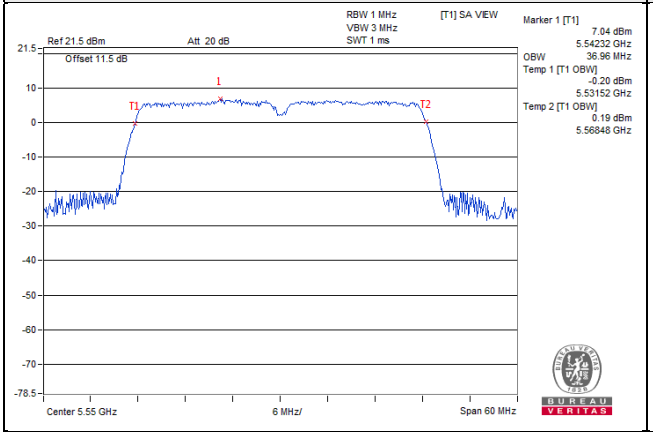
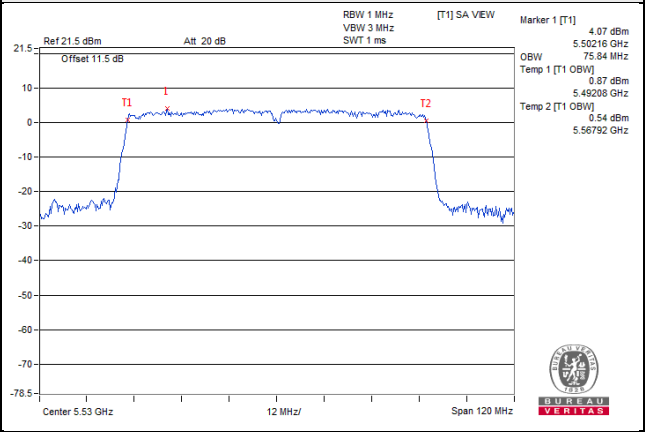
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
52	5260	18.12	17.88	18.00
60	5300	18.12	17.88	18.00
64	5320	18.12	17.88	17.88
100	5500	18.12	17.88	18.00
116	5580	18.12	17.88	17.88
140	5700	18.12	17.88	17.88

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
54	5270	36.84	36.60	36.72
62	5310	36.72	36.60	36.72
102	5510	36.96	36.60	36.60
110	5550	36.96	36.60	36.72
134	5670	36.84	36.72	36.84

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)		
		Chain 0	Chain 1	Chain 2
58	5290	75.84	75.84	75.84
106	5530	75.84	75.84	75.84
122	5610	75.84	75.84	75.84

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

4TX

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	17.04	17.04	17.16	16.92
60	5300	17.04	17.04	17.04	16.92
64	5320	17.04	17.16	17.16	16.92
100	5500	17.04	17.04	16.92	16.92
116	5580	17.04	17.04	16.92	17.04
140	5700	17.04	17.04	17.16	17.04

802.11ax (HE20)

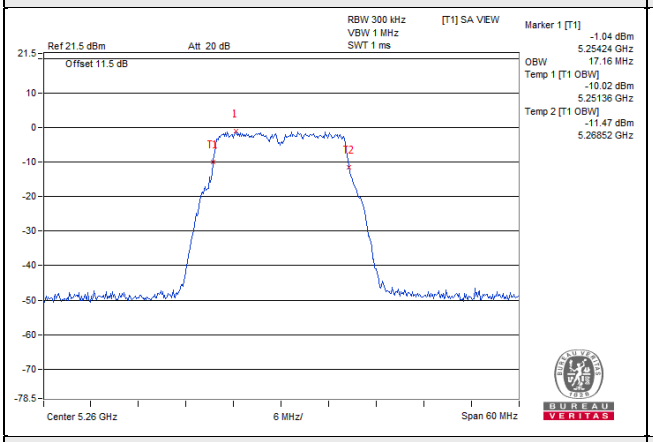
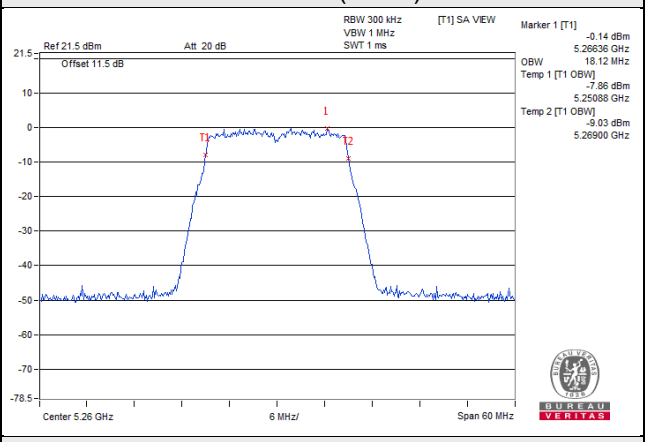
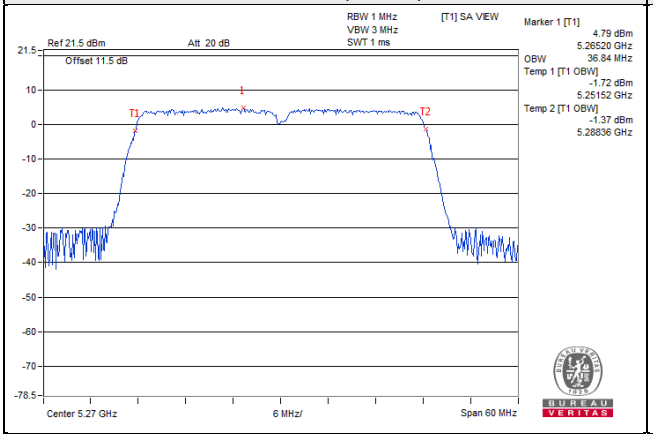
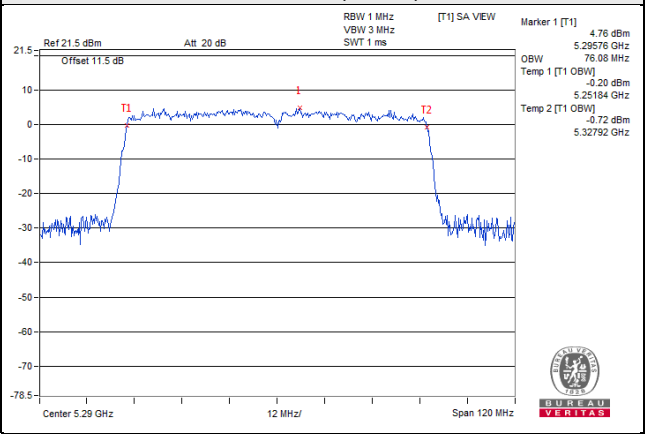
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
52	5260	18.12	17.88	17.88	17.88
60	5300	18.12	17.88	17.88	18.00
64	5320	18.12	17.88	17.88	18.00
100	5500	18.12	17.88	17.88	17.88
116	5580	18.12	17.88	17.88	17.88
140	5700	18.12	17.88	17.88	17.88

802.11ax (HE40)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
54	5270	36.84	36.60	36.72	36.72
62	5310	36.84	36.60	36.72	36.60
102	5510	36.84	36.60	36.72	36.60
110	5550	36.72	36.60	36.60	36.60
134	5670	36.84	36.60	36.72	36.60

802.11ax (HE80)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)			
		Chain 0	Chain 1	Chain 2	Chain 3
58	5290	75.84	75.84	76.08	75.84
106	5530	75.84	75.84	75.60	75.84
122	5610	75.84	75.84	75.84	75.84

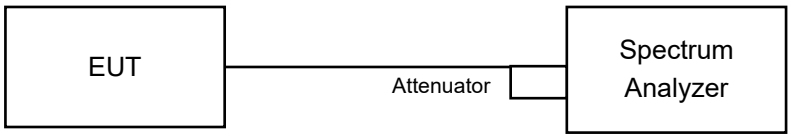
Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

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

Using method SA-2

a. Set span to encompass the entire emission bandwidth (EBW) of the signal.

b. Set RBW = 1MHz, Set VBW ≥ 3 MHz, Detector = RMS

c. Set Channel power measure = 1MHz

d. Sweep time = auto, trigger set to “free run”.

e. Trace average at least 100 traces in power averaging mode.

f. 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

Test Mode A (Internal antenna + Eth6 Radio)

1TX

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
52	5260	9.75	0.23	9.98	11.00	Pass
60	5300	10.04	0.23	10.27	11.00	Pass
64	5320	8.21	0.23	8.44	11.00	Pass
100	5500	7.04	0.23	7.27	11.00	Pass
116	5580	10.01	0.23	10.24	11.00	Pass
140	5700	5.37	0.23	5.60	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
52	5260	9.32	0.25	9.57	11.00	Pass
60	5300	9.51	0.25	9.76	11.00	Pass
64	5320	6.87	0.25	7.12	11.00	Pass
100	5500	5.52	0.25	5.77	11.00	Pass
116	5580	10.18	0.25	10.43	11.00	Pass
140	5700	4.84	0.25	5.09	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
54	5270	6.37	0.45	6.82	11.00	Pass
62	5310	2.48	0.45	2.93	11.00	Pass
102	5510	2.19	0.45	2.64	11.00	Pass
110	5550	6.39	0.45	6.84	11.00	Pass
134	5670	4.18	0.45	4.63	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

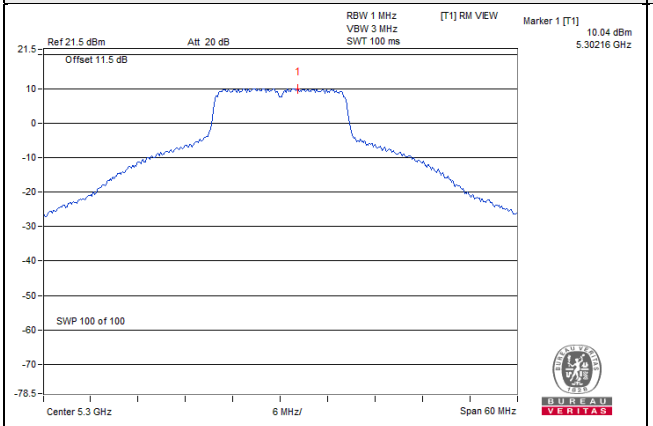
802.11ax (HE80)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
58	5290	-0.60	0.33	-0.27	11.00	Pass
106	5530	-1.23	0.33	-0.90	11.00	Pass
122	5610	2.91	0.33	3.24	11.00	Pass

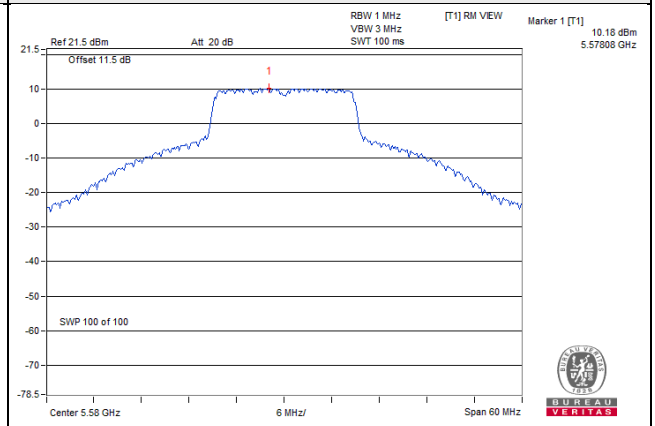
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

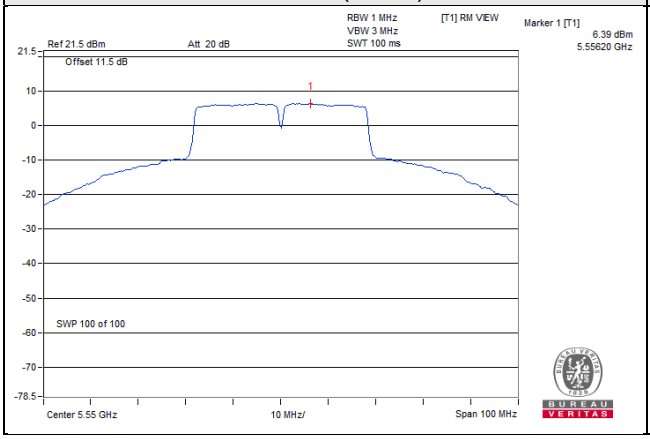
802.11a



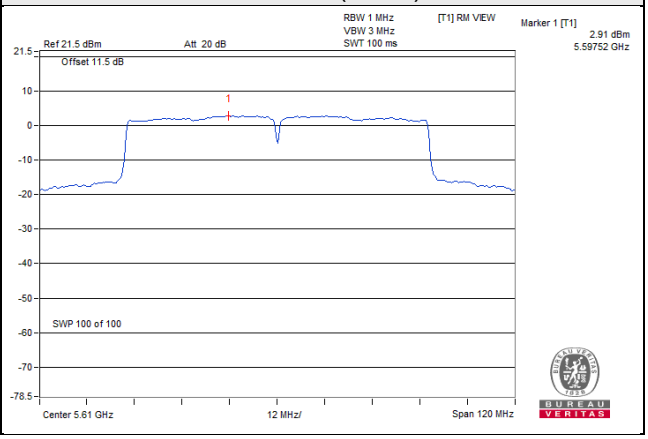
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



2TX

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 2	Chain 3				
52	5260	4.51	5.08	0.30	8.11	8.24	Pass
60	5300	4.49	4.70	0.30	7.91	8.24	Pass
64	5320	4.35	5.24	0.30	8.13	8.24	Pass
100	5500	4.44	4.10	0.30	7.58	8.24	Pass
116	5580	5.14	4.56	0.30	8.17	8.24	Pass
140	5700	4.35	3.96	0.30	7.47	8.24	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.76dBi > 6dBi, so the power density limit shall be reduced to 11-(8.76-6) = 8.24dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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 2	Chain 3				
52	5260	4.81	4.52	0.29	7.97	8.24	Pass
60	5300	4.48	4.50	0.29	7.79	8.24	Pass
64	5320	4.59	4.79	0.29	7.99	8.24	Pass
100	5500	4.04	3.99	0.29	7.32	8.24	Pass
116	5580	4.70	4.95	0.29	8.13	8.24	Pass
140	5700	3.92	3.46	0.29	7.00	8.24	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.76dBi > 6dBi, so the power density limit shall be reduced to 11-(8.76-6) = 8.24dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

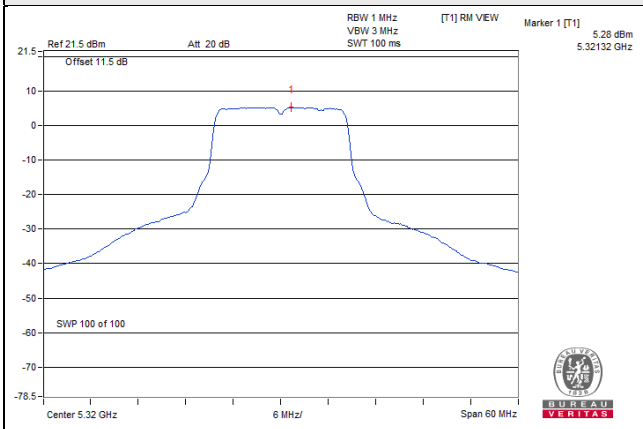
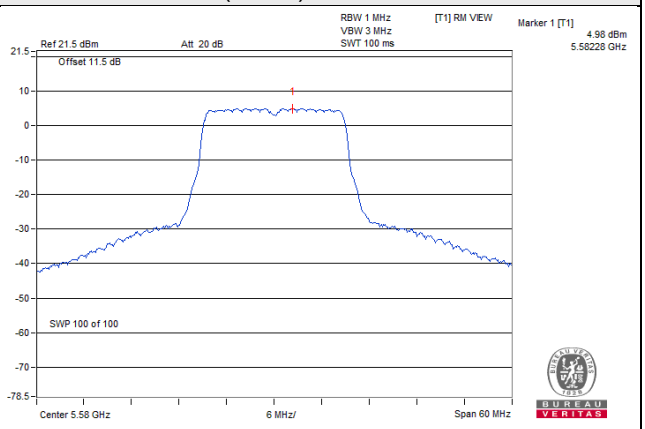
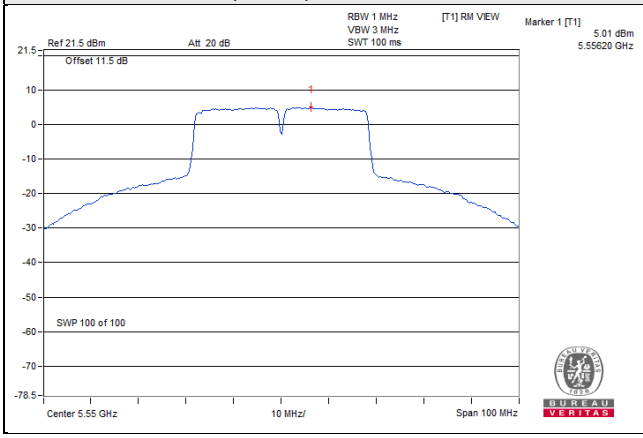
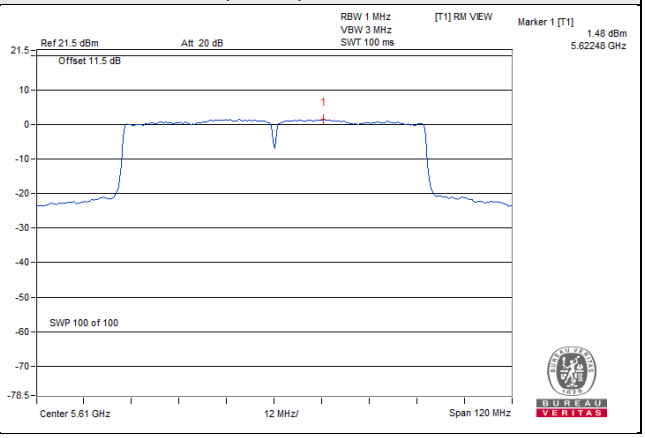
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 2	Chain 3				
54	5270	3.57	4.62	0.44	7.58	8.24	Pass
62	5310	1.14	1.13	0.44	4.59	8.24	Pass
102	5510	0.10	-0.17	0.44	3.42	8.24	Pass
110	5550	5.01	4.00	0.44	7.98	8.24	Pass
134	5670	2.89	2.12	0.44	5.97	8.24	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.76dBi > 6dBi, so the power density limit shall be reduced to 11-(8.76-6) = 8.24dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

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 2	Chain 3				
58	5290	-1.52	-1.51	0.37	1.87	8.24	Pass
106	5530	-2.56	-2.07	0.37	1.07	8.24	Pass
122	5610	1.48	0.92	0.37	4.59	8.24	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.76dBi > 6dBi, so the power density limit shall be reduced to 11-(8.76-6) = 8.24dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Chain 3 / CH 64	802.11ax (HE20) / Chain 3 / CH 116
	
802.11ax (HE40) / Chain 2 / CH 110	802.11ax (HE80) / Chain 2 / CH 122
	

3TX

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 1	Chain 2	Chain 3				
52	5260	-1.01	1.86	1.72	0.25	6.06	6.59	Pass
60	5300	-1.34	1.72	2.30	0.25	6.18	6.59	Pass
64	5320	1.38	1.59	1.69	0.25	6.58	6.59	Pass
100	5500	1.34	0.96	1.89	0.25	6.43	6.59	Pass
116	5580	1.37	1.01	1.91	0.25	6.47	6.59	Pass
140	5700	2.02	1.79	0.53	0.25	6.52	6.59	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 10.41dBi > 6dBi, so the power density limit shall be reduced to 11-(10.41-6) = 6.59dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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 1	Chain 2	Chain 3				
52	5260	1.57	1.25	0.86	0.34	6.35	6.59	Pass
60	5300	1.74	1.43	1.11	0.34	6.55	6.59	Pass
64	5320	1.99	0.70	0.75	0.34	6.30	6.59	Pass
100	5500	1.82	0.86	0.68	0.34	6.26	6.59	Pass
116	5580	1.90	0.49	0.64	0.34	6.17	6.59	Pass
140	5700	1.49	1.19	0.86	0.34	6.30	6.59	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 10.41dBi > 6dBi, so the power density limit shall be reduced to 11-(10.41-6) = 6.59dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

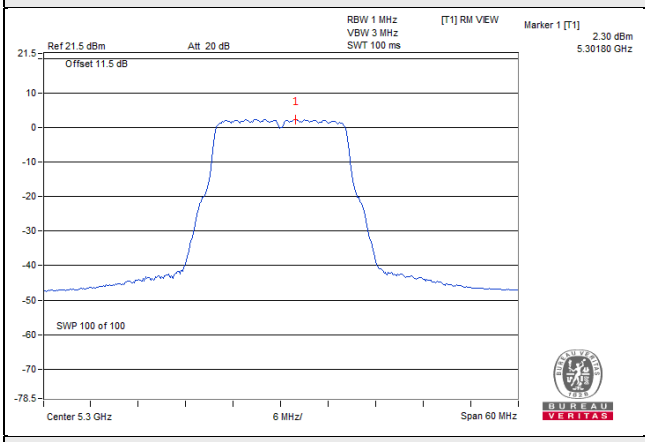
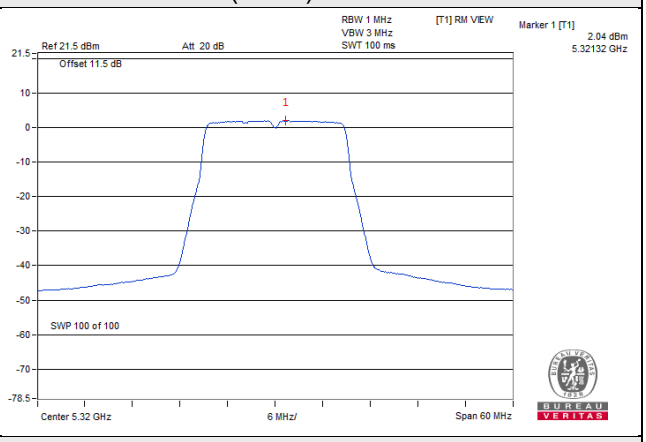
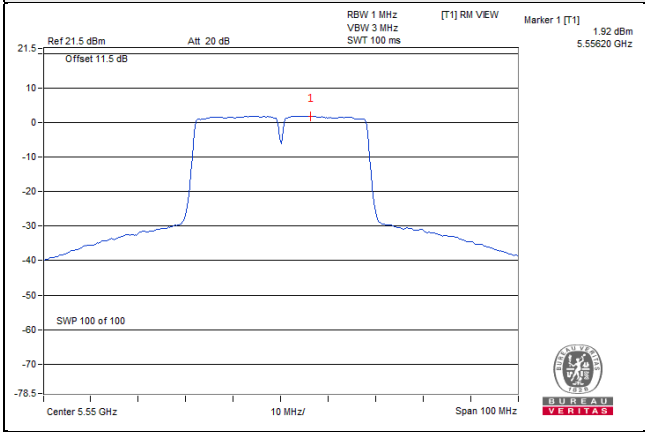
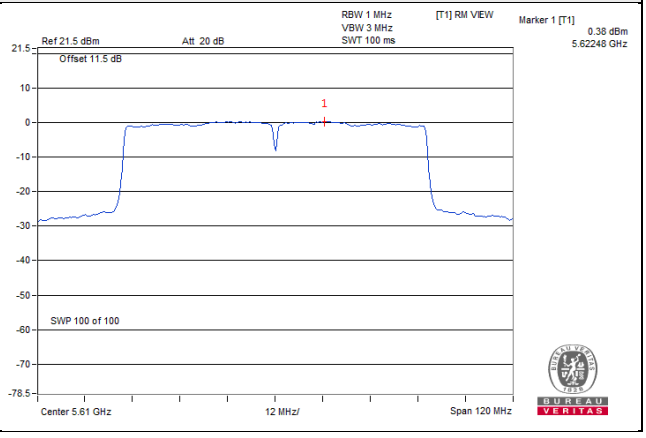
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)			Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
54	5270	1.36	1.35	0.93	0.46	6.45	6.59	Pass
62	5310	0.98	0.75	1.04	0.46	6.16	6.59	Pass
102	5510	-0.56	-1.05	-0.30	0.46	4.61	6.59	Pass
110	5550	1.92	0.58	1.19	0.46	6.50	6.59	Pass
134	5670	0.99	0.97	1.79	0.46	6.50	6.59	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 10.41dBi > 6dBi, so the power density limit shall be reduced to 11-(10.41-6) = 6.59dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

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 1	Chain 2	Chain 3				
58	5290	-2.45	-2.50	-2.09	0.37	2.80	6.59	Pass
106	5530	-2.49	-3.73	-2.28	0.37	2.35	6.59	Pass
122	5610	-0.41	-0.36	0.38	0.37	5.03	6.59	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 10.41dBi > 6dBi, so the power density limit shall be reduced to 11-(10.41-6) = 6.59dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Chain 3 / CH 60	802.11ax (HE20) / Chain 1 / CH 64
	
802.11ax (HE40) / Chain 1 / CH 110	802.11ax (HE80) / Chain 3 / CH 122
	

4TX

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	Chain 2	Chain 3				
52	5260	-0.07	-2.18	-1.55	-0.12	0.24	5.37	5.55	Pass
60	5300	-0.58	-1.85	-1.51	-0.40	0.24	5.22	5.55	Pass
64	5320	-1.19	-0.59	-1.33	-0.57	0.24	5.35	5.55	Pass
100	5500	-1.49	-0.18	-1.09	-0.55	0.24	5.46	5.55	Pass
116	5580	-0.37	-1.55	-1.47	-0.70	0.24	5.27	5.55	Pass
140	5700	-0.64	-1.23	-1.23	-0.53	0.24	5.37	5.55	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 11.45dBi > 6dBi, so the power density limit shall be reduced to 11-(11.45-6) = 5.55dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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	Chain 2	Chain 3				
52	5260	-0.18	-0.07	-1.55	-1.31	0.25	5.54	5.55	Pass
60	5300	-0.92	-0.10	-1.40	-1.46	0.25	5.34	5.55	Pass
64	5320	-0.48	-0.15	-1.38	-1.53	0.25	5.43	5.55	Pass
100	5500	-0.37	-0.24	-1.47	-1.21	0.25	5.48	5.55	Pass
116	5580	-0.44	-1.41	-0.37	-1.47	0.25	5.38	5.55	Pass
140	5700	-0.42	-0.65	-0.62	-2.00	0.25	5.39	5.55	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 11.45dBi > 6dBi, so the power density limit shall be reduced to 11-(11.45-6) = 5.55dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

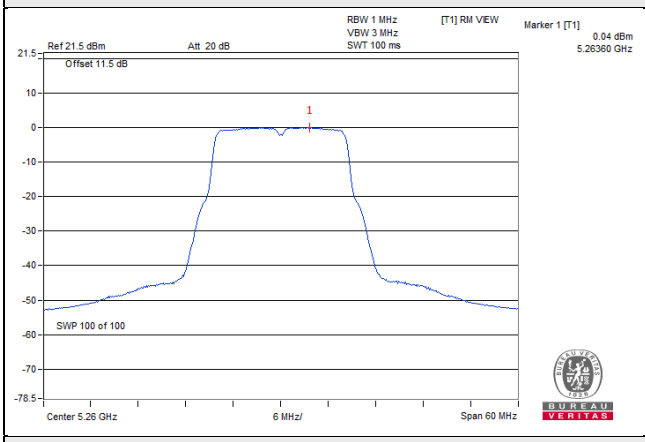
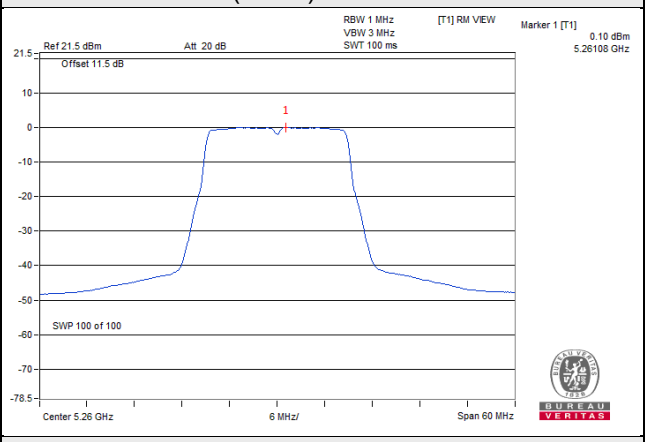
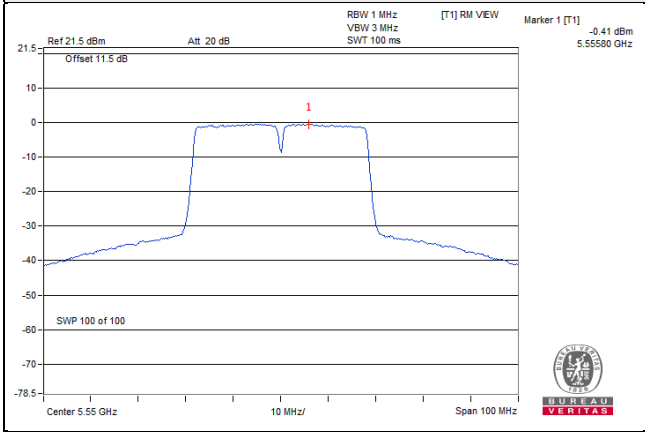
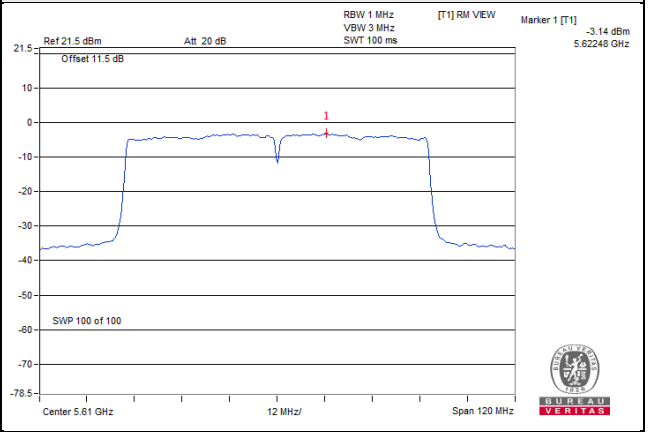
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	-1.08	-1.42	-1.08	-1.19	0.52	5.35	5.55	Pass
62	5310	-2.23	-1.45	-1.51	-1.34	0.52	4.92	5.55	Pass
102	5510	-3.43	-3.05	-3.86	-3.13	0.52	3.18	5.55	Pass
110	5550	-1.57	-0.55	-0.61	-1.45	0.52	5.52	5.55	Pass
134	5670	-2.18	-2.24	-2.66	-2.73	0.52	4.09	5.55	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 11.45dBi > 6dBi, so the power density limit shall be reduced to 11-(11.45-6) = 5.55dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

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	Chain 2	Chain 3				
58	5290	-3.81	-4.65	-4.20	-4.44	0.35	2.11	5.55	Pass
106	5530	-4.67	-4.70	-4.14	-4.74	0.35	1.82	5.55	Pass
122	5610	-3.14	-4.82	-4.81	-4.37	0.35	2.14	5.55	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 11.45dBi > 6dBi, so the power density limit shall be reduced to 11-(11.45-6) = 5.55dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Chain 0 / CH 52	802.11ax (HE20) / Chain 1 / CH 52
	
802.11ax (HE40) / Chain 1 / CH 110	802.11ax (HE80) / Chain 0 / CH 122
	

Test Mode C (Internal antenna + Eth8 Radio)

1TX

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
100	5500	8.04	0.27	8.31	11.00	Pass
116	5580	10.00	0.27	10.27	11.00	Pass
140	5700	6.87	0.27	7.14	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
100	5500	6.38	0.27	6.65	11.00	Pass
116	5580	10.00	0.27	10.27	11.00	Pass
140	5700	6.02	0.27	6.29	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

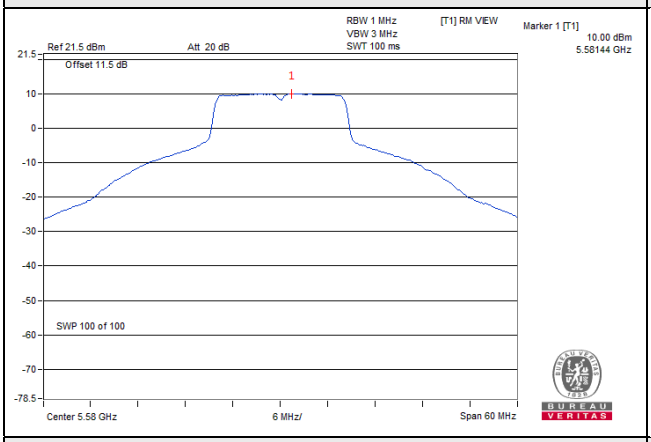
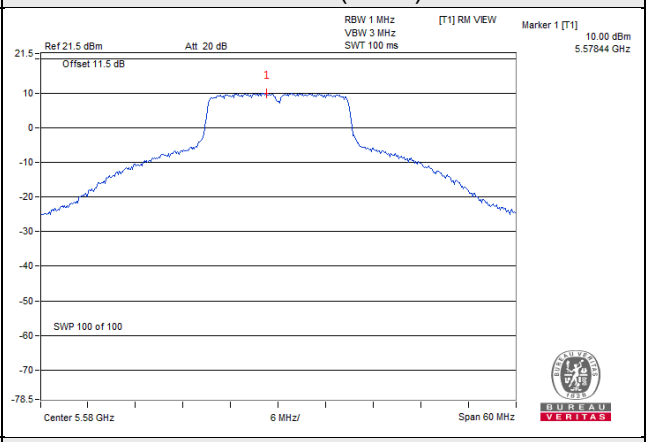
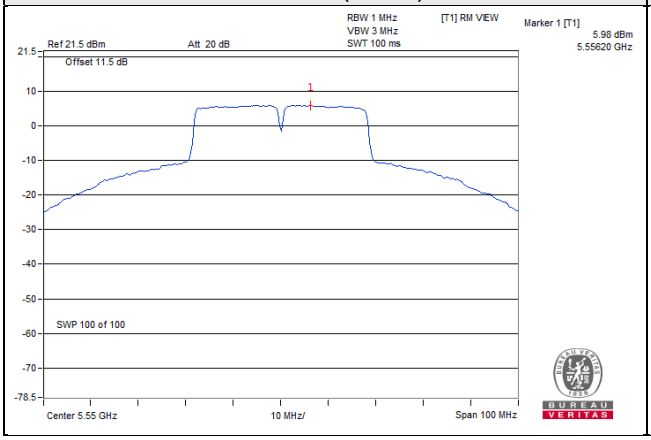
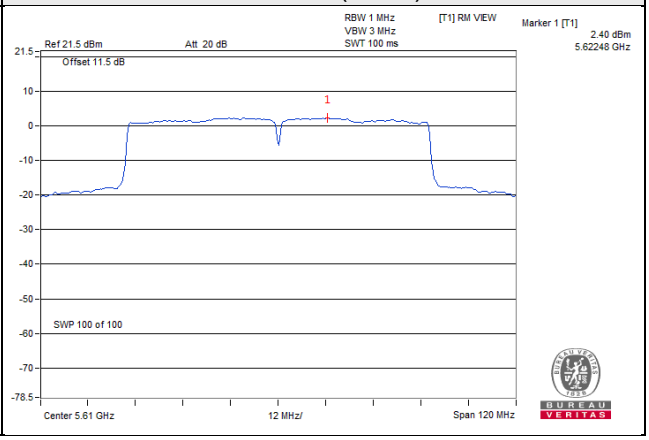
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
102	5510	2.29	0.51	2.80	11.00	Pass
110	5550	5.98	0.51	6.49	11.00	Pass
134	5670	4.85	0.51	5.36	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
106	5530	-0.20	0.36	0.16	11.00	Pass
122	5610	2.40	0.36	2.76	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a	802.11ax (HE20)
	
802.11ax (HE40)	802.11ax (HE80)
	

2TX

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 1	Chain 2				
100	5500	4.94	4.83	0.24	8.14	8.68	Pass
116	5580	4.46	5.13	0.24	8.06	8.68	Pass
140	5700	4.34	4.74	0.24	7.79	8.68	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.32dBi > 6dBi, so the power density limit shall be reduced to 11-(8.32-6) = 8.68dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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 1	Chain 2				
100	5500	4.41	5.12	0.24	8.03	8.68	Pass
116	5580	4.61	4.89	0.24	8.00	8.68	Pass
140	5700	2.59	3.59	0.24	6.37	8.68	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.32dBi > 6dBi, so the power density limit shall be reduced to 11-(8.32-6) = 8.68dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

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 1	Chain 2				
102	5510	0.70	0.51	0.45	4.07	8.68	Pass
110	5550	4.57	4.85	0.45	8.17	8.68	Pass
134	5670	2.06	3.50	0.45	6.30	8.68	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.32dBi > 6dBi, so the power density limit shall be reduced to 11-(8.32-6) = 8.68dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

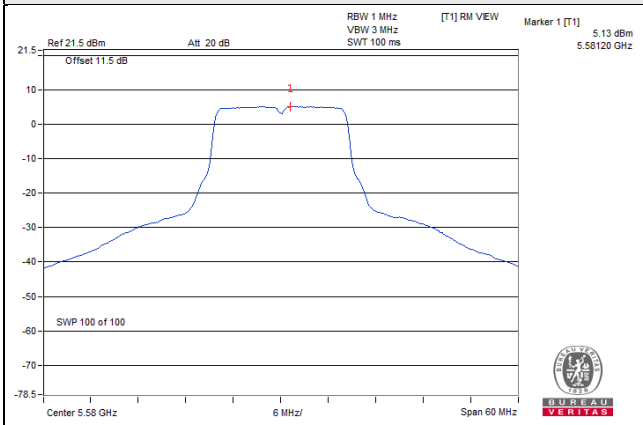
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 1	Chain 2				
106	5530	-1.61	-1.63	0.32	1.71	8.68	Pass
122	5610	-0.66	0.14	0.32	3.09	8.68	Pass

Note:

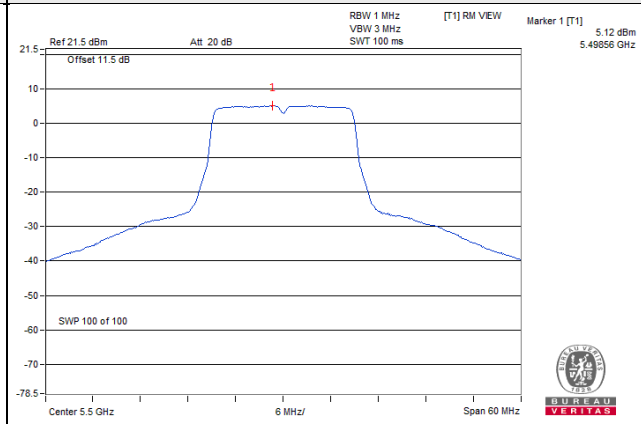
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/2$] = 8.32dBi > 6dBi, so the power density limit shall be reduced to 11-(8.32-6) = 8.68dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

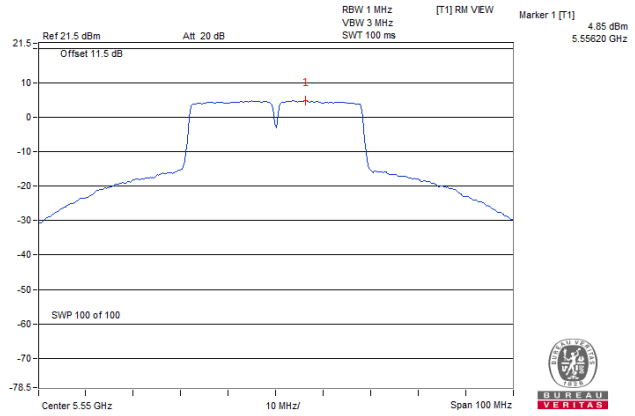
802.11a / Chain 2 / CH 116



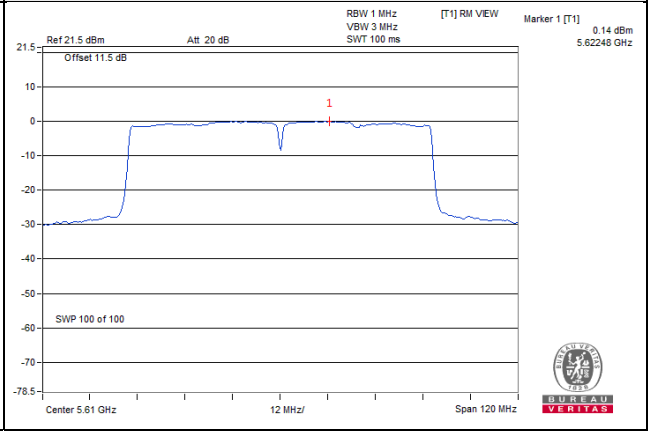
802.11ax (HE20) / Chain 2 / CH 100



802.11ax (HE40) / Chain 2 / CH 110



802.11ax (HE80) / Chain 2 / CH 122



3TX

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 1	Chain 2	Chain 3				
100	5500	1.68	0.99	1.66	0.24	6.47	7.25	Pass
116	5580	1.00	1.47	1.48	0.24	6.33	7.25	Pass
140	5700	1.59	1.53	1.28	0.24	6.48	7.25	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 9.75dBi > 6dBi, so the power density limit shall be reduced to 11-(9.75-6) = 7.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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 1	Chain 2	Chain 3				
100	5500	2.09	0.84	0.79	0.28	6.33	7.25	Pass
116	5580	1.64	0.57	1.41	0.28	6.28	7.25	Pass
140	5700	1.86	1.30	0.81	0.28	6.40	7.25	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 9.75dBi > 6dBi, so the power density limit shall be reduced to 11-(9.75-6) = 7.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

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 1	Chain 2	Chain 3				
102	5510	0.37	-1.00	0.65	0.45	5.29	7.25	Pass
110	5550	1.95	0.55	0.64	0.45	6.32	7.25	Pass
134	5670	1.23	1.10	0.78	0.45	6.26	7.25	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 9.75dBi > 6dBi, so the power density limit shall be reduced to 11-(9.75-6) = 7.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

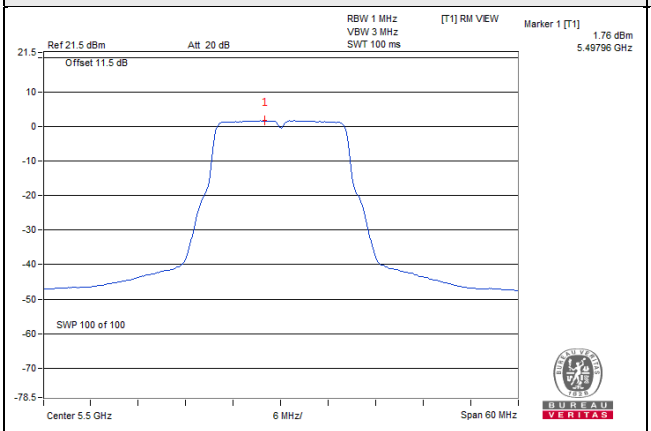
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)			Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 1	Chain 2	Chain 3				
106	5530	-1.56	-2.56	-1.70	0.36	3.21	7.25	Pass
122	5610	0.39	-0.24	0.82	0.36	5.48	7.25	Pass

Note:

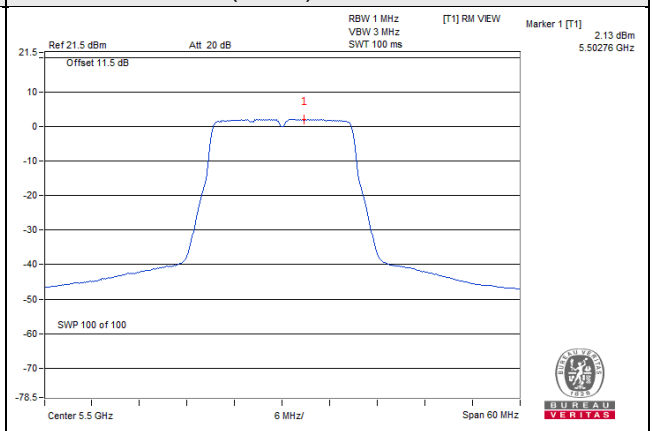
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/3$] = 9.75dBi > 6dBi, so the power density limit shall be reduced to 11-(9.75-6) = 7.25dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

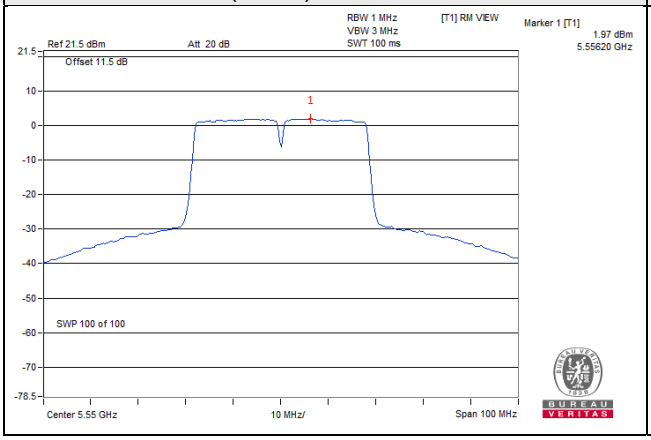
802.11a / Chain 1 / CH 100



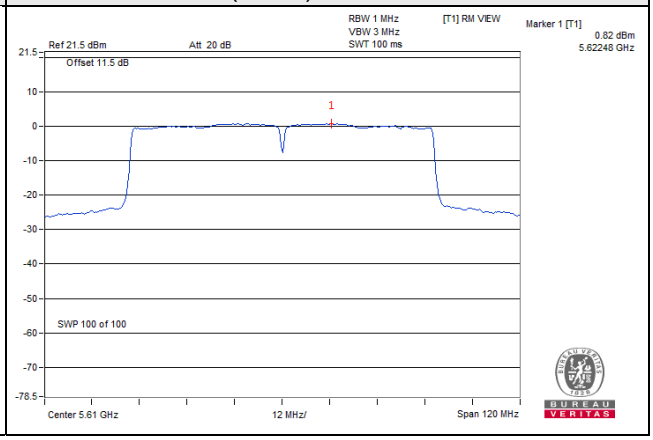
802.11ax (HE20) / Chain 1 / CH 100



802.11ax (HE40) / Chain 1 / CH 110



802.11ax (HE80) / Chain 3 / CH 122



4TX

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	Chain 2	Chain 3				
100	5500	-0.63	-1.55	-0.35	-1.16	0.28	5.40	6.04	Pass
116	5580	-1.30	-1.60	0.38	-1.85	0.28	5.30	6.04	Pass
140	5700	-0.67	-1.64	-1.62	-1.32	0.28	5.01	6.04	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 10.96dBi > 6dBi, so the power density limit shall be reduced to 11-(10.96-6) = 6.04dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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	Chain 2	Chain 3				
100	5500	-0.83	-0.94	-2.01	-1.16	0.28	5.09	6.04	Pass
116	5580	-0.71	-0.78	-1.75	-1.06	0.28	5.24	6.04	Pass
140	5700	-0.29	-1.10	-1.49	-0.76	0.28	5.41	6.04	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 10.96dBi > 6dBi, so the power density limit shall be reduced to 11-(10.96-6) = 6.04dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

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	Chain 2	Chain 3				
102	5510	-1.31	-1.72	-2.82	-1.90	0.52	4.64	6.04	Pass
110	5550	-0.51	-1.08	-2.09	-1.15	0.52	5.37	6.04	Pass
134	5670	-1.56	-1.06	-1.24	-0.91	0.52	5.35	6.04	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. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2/4$] = 10.96dBi > 6dBi, so the power density limit shall be reduced to 11-(10.96-6) = 6.04dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

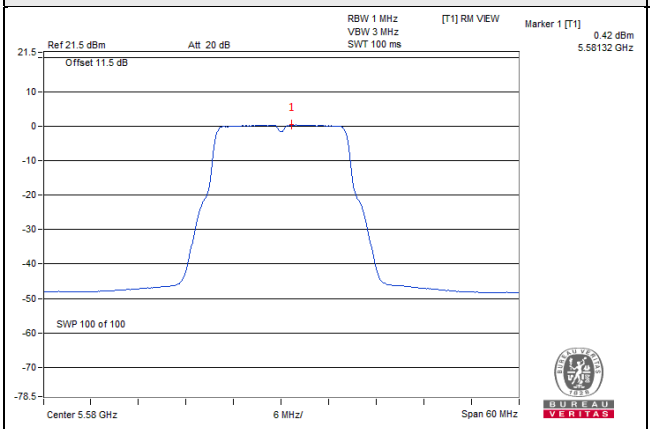
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
106	5530	-3.56	-3.48	-4.79	-4.07	0.36	2.44	6.04	Pass
122	5610	-0.82	-1.42	-2.10	-1.46	0.36	4.95	6.04	Pass

Note:

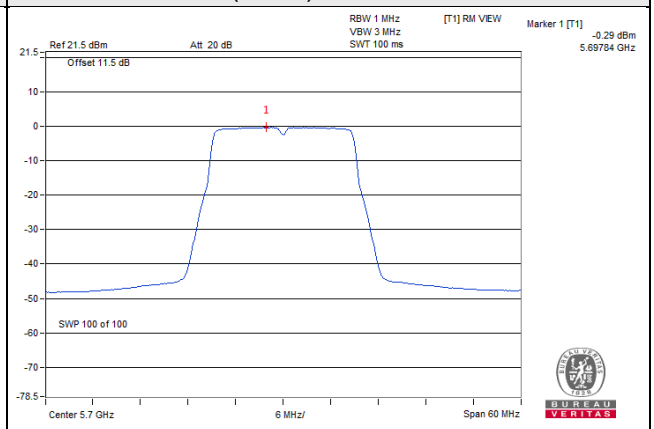
1. Method E) 2) a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 10 log[($10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20}$)^2/4] = 10.96dBi > 6dBi, so the power density limit shall be reduced to 11-(10.96-6) = 6.04dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

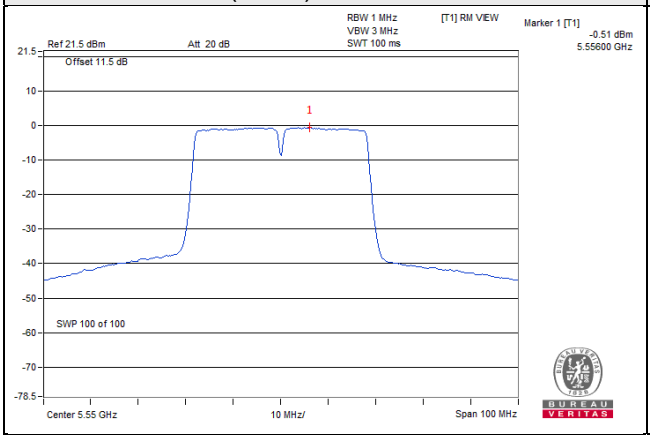
802.11a / Chain 2 / CH 116



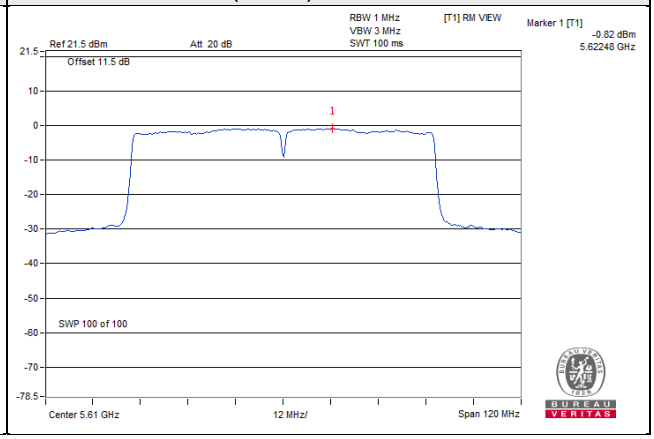
802.11ax (HE20) / Chain 0 / CH 140



802.11ax (HE40) / Chain 0 / CH 110



802.11ax (HE80) / Chain 0 / CH 122



Test Mode E (External antenna – PN: ATS-OO-245-46-4RPSP-36 + Eth6 Radio)

1TX

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
52	5260	7.46	0.23	7.69	11.00	Pass
60	5300	8.35	0.23	8.58	11.00	Pass
64	5320	6.80	0.23	7.03	11.00	Pass
100	5500	5.39	0.23	5.62	11.00	Pass
116	5580	8.29	0.23	8.52	11.00	Pass
140	5700	3.07	0.23	3.30	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
52	5260	8.04	0.26	8.30	11.00	Pass
60	5300	8.34	0.26	8.60	11.00	Pass
64	5320	5.53	0.26	5.79	11.00	Pass
100	5500	4.21	0.26	4.47	11.00	Pass
116	5580	8.49	0.26	8.75	11.00	Pass
140	5700	2.54	0.26	2.80	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
54	5270	4.95	0.48	5.43	11.00	Pass
62	5310	0.86	0.48	1.34	11.00	Pass
102	5510	0.14	0.48	0.62	11.00	Pass
110	5550	4.36	0.48	4.84	11.00	Pass
134	5670	2.05	0.48	2.53	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

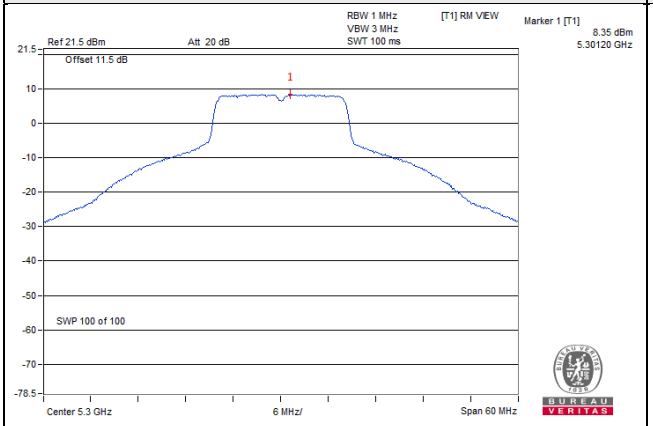
802.11ax (HE80)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
58	5290	-1.97	0.37	-1.60	11.00	Pass
106	5530	-3.20	0.37	-2.83	11.00	Pass
122	5610	1.17	0.37	1.54	11.00	Pass

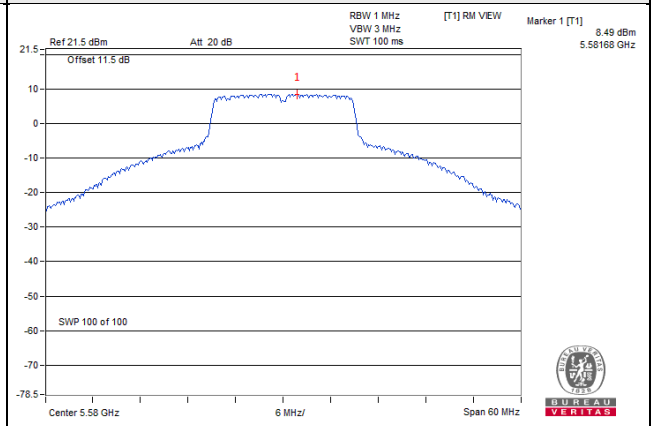
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

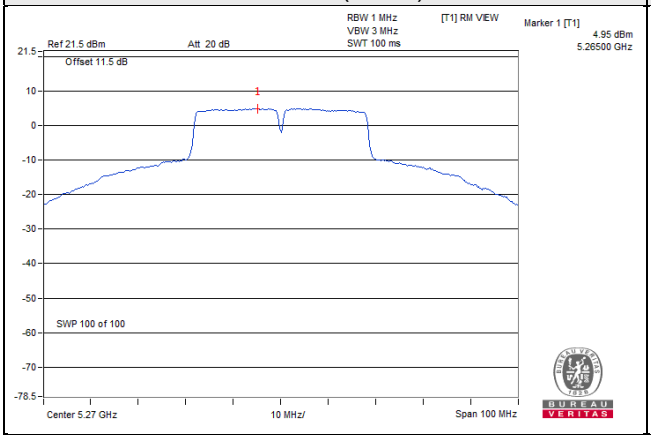
802.11a



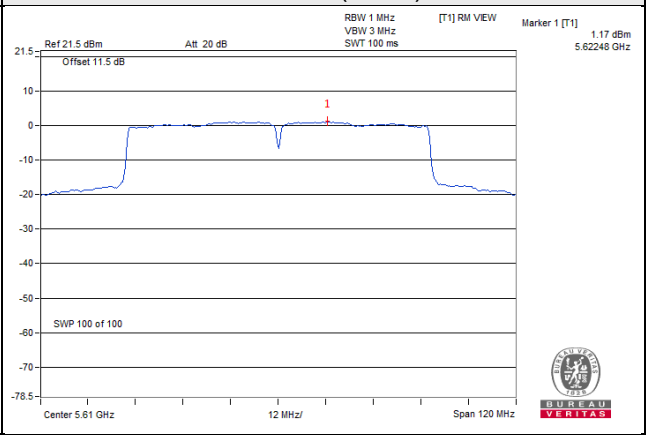
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



2TX

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 1	Chain 2				
52	5260	4.78	4.46	0.30	7.93	7.99	Pass
60	5300	4.85	4.28	0.30	7.88	7.99	Pass
64	5320	4.34	4.60	0.30	7.78	7.99	Pass
100	5500	2.93	2.03	0.30	5.81	7.99	Pass
116	5580	4.72	4.58	0.30	7.96	7.99	Pass
140	5700	2.30	1.67	0.30	5.31	7.99	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. Directional gain = 6dBi + 10log(2) = 9.01dBi > 6dBi, so the power density limit shall be reduced to 11-(9.01-6) = 7.99dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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 1	Chain 2				
52	5260	4.58	4.23	0.28	7.70	7.99	Pass
60	5300	4.50	4.53	0.28	7.81	7.99	Pass
64	5320	4.57	4.70	0.28	7.93	7.99	Pass
100	5500	2.96	1.40	0.28	5.54	7.99	Pass
116	5580	4.89	4.37	0.28	7.93	7.99	Pass
140	5700	1.67	0.97	0.28	4.62	7.99	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. Directional gain = 6dBi + 10log(2) = 9.01dBi > 6dBi, so the power density limit shall be reduced to 11-(9.01-6) = 7.99dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

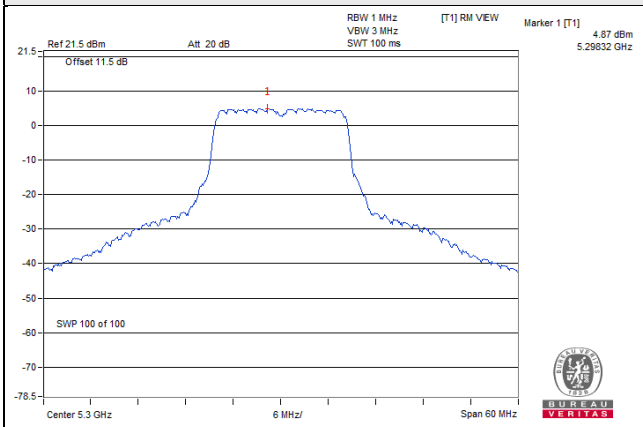
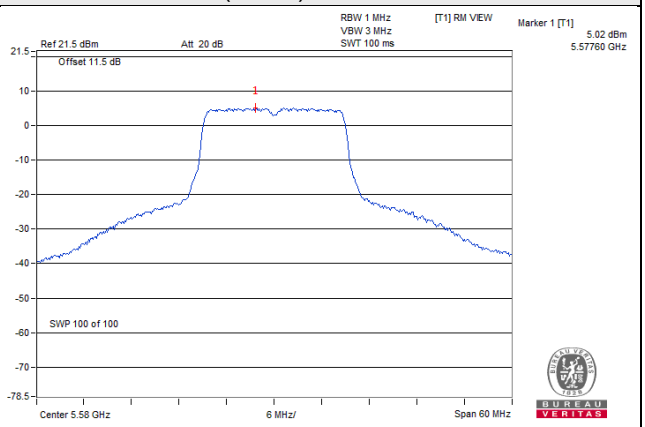
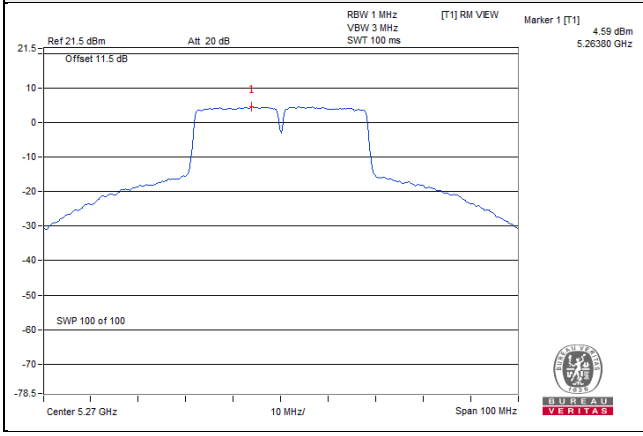
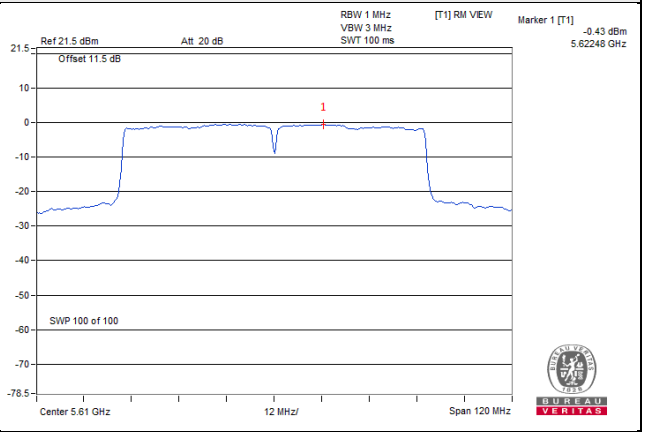
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 1	Chain 2				
54	5270	4.58	3.67	0.45	7.61	7.99	Pass
62	5310	0.51	-0.92	0.45	3.31	7.99	Pass
102	5510	-1.28	-2.27	0.45	1.71	7.99	Pass
110	5550	3.34	2.65	0.45	6.47	7.99	Pass
134	5670	0.27	0.29	0.45	3.74	7.99	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. Directional gain = 6dBi + 10log(2) = 9.01dBi > 6dBi, so the power density limit shall be reduced to 11-(9.01-6) = 7.99dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

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 1	Chain 2				
58	5290	-2.80	-2.99	0.45	0.57	7.99	Pass
106	5530	-3.44	-4.49	0.45	-0.47	7.99	Pass
122	5610	-0.43	-0.80	0.45	2.85	7.99	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. Directional gain = 6dBi + 10log(2) = 9.01dBi > 6dBi, so the power density limit shall be reduced to 11-(9.01-6) = 7.99dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Chain 1 / CH 60	802.11ax (HE20) / Chain 1 / CH 116
	
802.11ax (HE40) / Chain 1 / CH 54	802.11ax (HE80) / Chain 1 / CH 122
	

3TX

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	Chain 2				
52	5260	1.70	1.55	-2.04	0.27	5.75	6.23	Pass
60	5300	1.89	1.91	-2.34	0.27	5.93	6.23	Pass
64	5320	1.20	1.59	-0.87	0.27	5.81	6.23	Pass
100	5500	1.34	2.10	-3.53	0.27	5.62	6.23	Pass
116	5580	1.75	1.83	-1.43	0.27	6.00	6.23	Pass
140	5700	1.79	1.74	-1.61	0.27	5.94	6.23	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. Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power density limit shall be reduced to 11-(10.77-6) = 6.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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	Chain 2				
52	5260	2.23	1.72	-2.24	0.25	5.99	6.23	Pass
60	5300	2.01	2.02	-1.60	0.25	6.13	6.23	Pass
64	5320	2.14	1.90	-1.43	0.25	6.17	6.23	Pass
100	5500	1.40	2.10	-3.50	0.25	5.63	6.23	Pass
116	5580	2.22	1.67	-1.52	0.25	6.09	6.23	Pass
140	5700	1.22	0.92	-2.07	0.25	5.28	6.23	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. Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power density limit shall be reduced to 11-(10.77-6) = 6.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

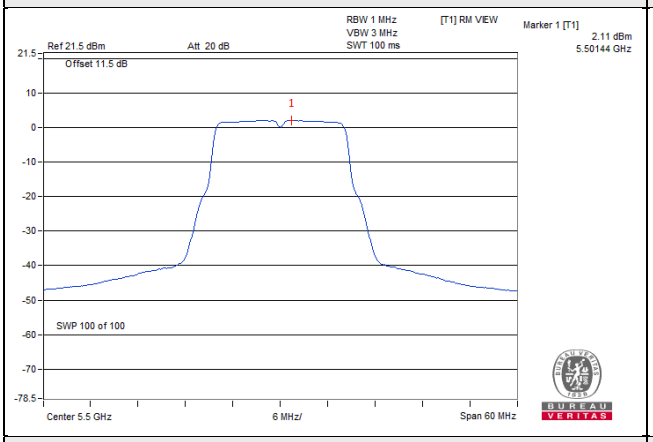
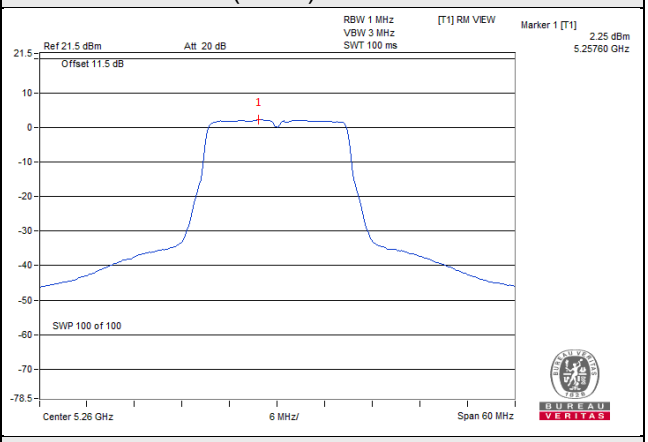
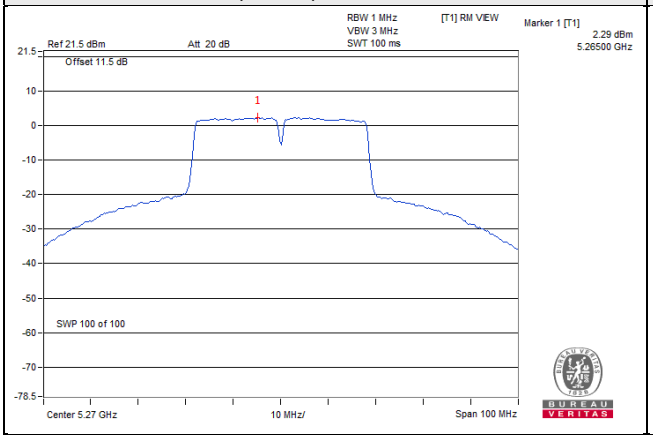
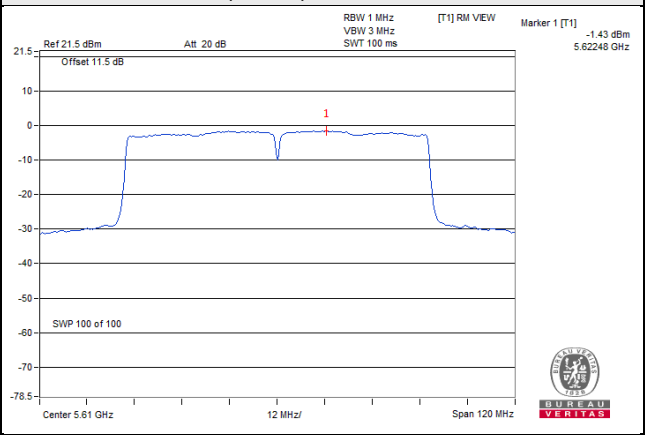
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)			Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
54	5270	2.22	1.38	-1.86	0.49	6.16	6.23	Pass
62	5310	-0.28	0.23	-4.23	0.49	4.24	6.23	Pass
102	5510	-2.43	-1.73	-6.37	0.49	2.17	6.23	Pass
110	5550	1.56	2.00	-1.67	0.49	6.17	6.23	Pass
134	5670	-0.44	-0.75	-3.71	0.49	3.86	6.23	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. Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power density limit shall be reduced to 11-(10.77-6) = 6.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

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	Chain 2				
58	5290	-3.05	-3.36	-7.51	0.36	0.91	6.23	Pass
106	5530	-4.31	-3.75	-9.00	0.36	-0.01	6.23	Pass
122	5610	-1.43	-1.75	-4.65	0.36	2.74	6.23	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. Directional gain = 6dBi + 10log(3) = 10.77dBi > 6dBi, so the power density limit shall be reduced to 11-(10.77-6) = 6.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Chain 1 / CH 100	802.11ax (HE20) / Chain 0 / CH 52
	
802.11ax (HE40) / Chain 0 / CH 54	802.11ax (HE80) / Chain 0 / CH 122
	

4TX

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	Chain 2	Chain 3				
52	5260	-1.45	-1.54	-1.11	-1.17	0.24	4.95	4.98	Pass
60	5300	-1.44	-1.30	-1.09	-1.65	0.24	4.90	4.98	Pass
64	5320	-1.15	-1.40	-1.54	-1.42	0.24	4.89	4.98	Pass
100	5500	-1.09	-1.49	-1.06	-1.63	0.24	4.95	4.98	Pass
116	5580	-1.36	-1.47	-1.45	-1.64	0.24	4.78	4.98	Pass
140	5700	-2.03	-1.23	-1.57	-1.63	0.24	4.65	4.98	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. Directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi, so the power density limit shall be reduced to 11-(12.02-6) = 4.98dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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	Chain 2	Chain 3				
52	5260	-1.59	-1.07	-1.23	-1.34	0.25	4.97	4.98	Pass
60	5300	-1.39	-1.44	-1.42	-1.39	0.25	4.86	4.98	Pass
64	5320	-1.24	-1.59	-1.40	-1.21	0.25	4.91	4.98	Pass
100	5500	-1.47	-1.21	-1.28	-1.35	0.25	4.94	4.98	Pass
116	5580	-1.23	-1.30	-1.35	-1.70	0.25	4.88	4.98	Pass
140	5700	-1.74	-1.21	-1.15	-1.87	0.25	4.79	4.98	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. Directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi, so the power density limit shall be reduced to 11-(12.02-6) = 4.98dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

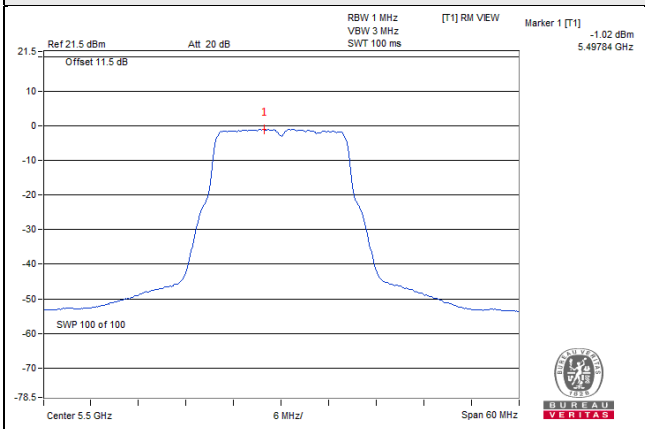
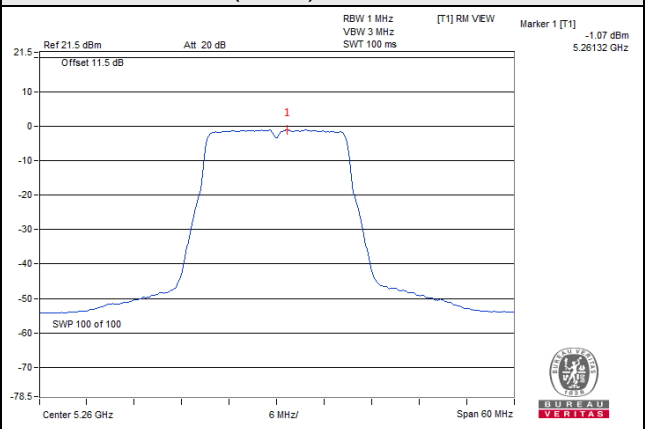
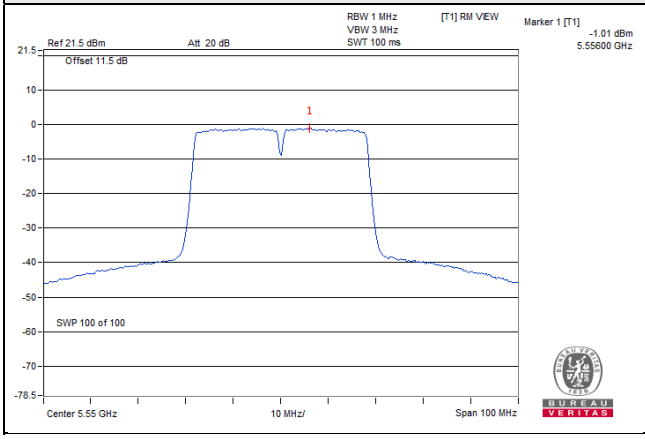
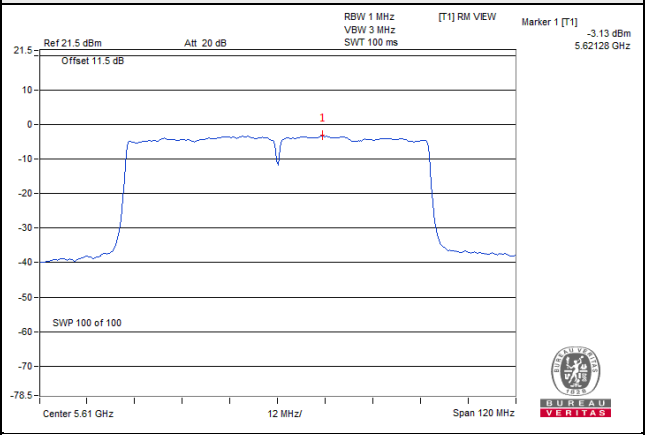
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	-1.19	-2.27	-1.42	-1.63	0.52	4.93	4.98	Pass
62	5310	-1.26	-2.33	-1.16	-1.70	0.52	4.95	4.98	Pass
102	5510	-2.96	-2.47	-3.87	-2.81	0.52	3.54	4.98	Pass
110	5550	-1.45	-1.16	-2.74	-1.57	0.52	4.85	4.98	Pass
134	5670	-2.87	-1.38	-1.51	-1.18	0.52	4.85	4.98	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. Directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi, so the power density limit shall be reduced to 11-(12.02-6) = 4.98dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

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	Chain 2	Chain 3				
58	5290	-5.05	-3.73	-3.70	-4.07	0.35	2.27	4.98	Pass
106	5530	-3.27	-3.53	-4.31	-4.09	0.35	2.59	4.98	Pass
122	5610	-5.12	-3.26	-3.13	-3.49	0.35	2.69	4.98	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. Directional gain = 6dBi + 10log(4) = 12.02dBi > 6dBi, so the power density limit shall be reduced to 11-(12.02-6) = 4.98dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Chain 2 / CH 100	802.11ax (HE20) / Chain 1 / CH 52
	
802.11ax (HE40) / Chain 1 / CH 110	802.11ax (HE80) / Chain 2 / CH 122
	

Test Mode G (External antenna – PN: ATS-OP-245-810-4RPSP-36 + Eth6 Radio)

1TX

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
52	5260	6.22	0.23	6.45	7.00	Pass
60	5300	6.56	0.23	6.79	7.00	Pass
64	5320	6.32	0.23	6.55	7.00	Pass
100	5500	5.39	0.23	5.62	7.00	Pass
116	5580	6.06	0.23	6.29	7.00	Pass
140	5700	3.56	0.23	3.79	7.00	Pass

Note:
1. Gain = 10dBi > 6dBi, so the power density limit shall be reduced to 11-(10-6) = 7.00dBm.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
52	5260	5.78	0.27	6.05	7.00	Pass
60	5300	6.42	0.27	6.69	7.00	Pass
64	5320	6.10	0.27	6.37	7.00	Pass
100	5500	5.49	0.27	5.76	7.00	Pass
116	5580	5.84	0.27	6.11	7.00	Pass
140	5700	2.34	0.27	2.61	7.00	Pass

Note:
1. Gain = 10dBi > 6dBi, so the power density limit shall be reduced to 11-(10-6) = 7.00dBm.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
54	5270	3.96	0.47	4.43	7.00	Pass
62	5310	1.93	0.47	2.40	7.00	Pass
102	5510	0.00	0.47	0.47	7.00	Pass
110	5550	2.78	0.47	3.25	7.00	Pass
134	5670	2.87	0.47	3.34	7.00	Pass

Note:
1. Gain = 10dBi > 6dBi, so the power density limit shall be reduced to 11-(10-6) = 7.00dBm.
2. Refer to section 3.3 for duty cycle spectrum plot.

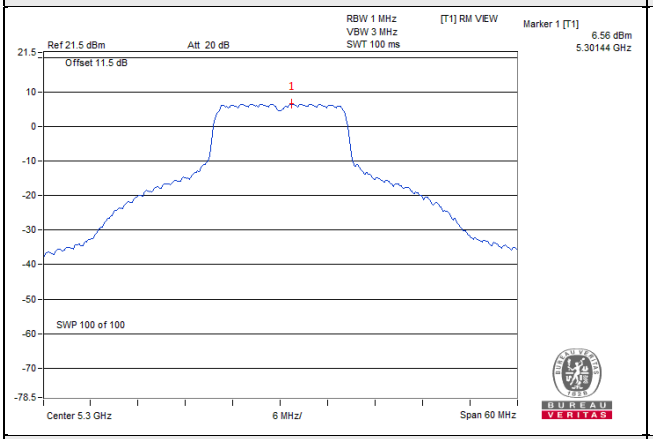
802.11ax (HE80)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
58	5290	-1.16	0.30	-0.86	7.00	Pass
106	5530	-3.41	0.30	-3.11	7.00	Pass
122	5610	0.55	0.30	0.85	7.00	Pass

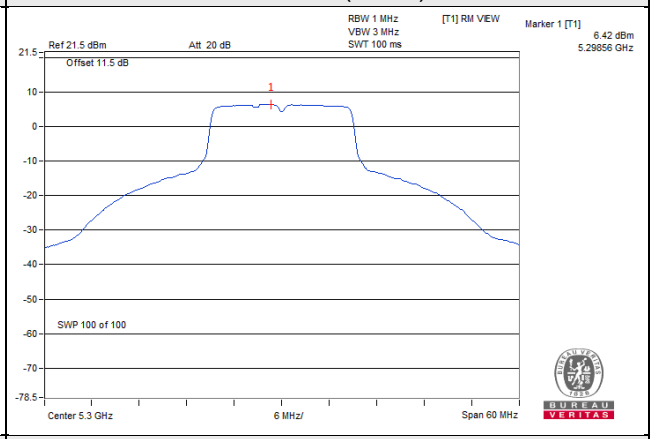
Note:
1. Gain = 10dBi > 6dBi, so the power density limit shall be reduced to 11-(10-6) = 7.00dBm.
2. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

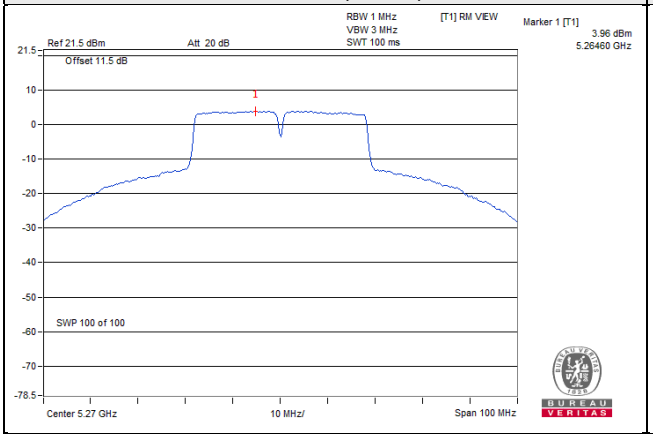
802.11a



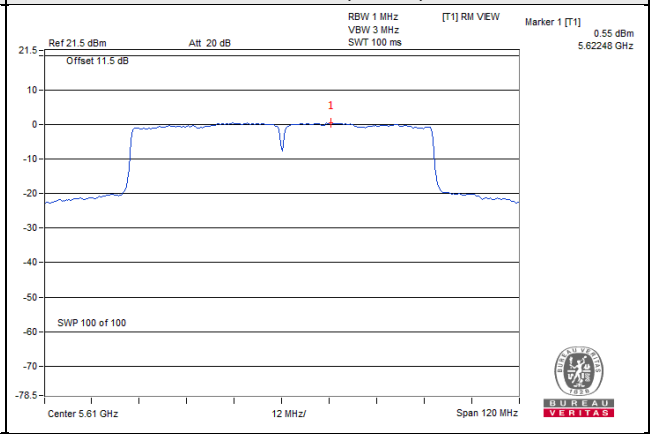
802.11ax (HE20)



802.11ax (HE40)



802.11ax (HE80)



2TX

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				
52	5260	0.03	1.16	0.25	3.89	3.99	Pass
60	5300	0.25	0.67	0.25	3.73	3.99	Pass
64	5320	-0.03	1.02	0.25	3.79	3.99	Pass
100	5500	0.30	0.46	0.25	3.64	3.99	Pass
116	5580	0.39	0.65	0.25	3.78	3.99	Pass
140	5700	-0.38	0.75	0.25	3.48	3.99	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. Directional gain = 10dBi + 10log(2) = 13.01dBi > 6dBi, so the power density limit shall be reduced to 11-(13.01-6) = 3.99dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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				
52	5260	-0.37	0.88	0.28	3.59	3.99	Pass
60	5300	-0.32	1.04	0.28	3.70	3.99	Pass
64	5320	-0.22	0.90	0.28	3.67	3.99	Pass
100	5500	0.28	1.00	0.28	3.95	3.99	Pass
116	5580	0.19	0.72	0.28	3.75	3.99	Pass
140	5700	-0.49	1.15	0.28	3.70	3.99	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. Directional gain = 10dBi + 10log(2) = 13.01dBi > 6dBi, so the power density limit shall be reduced to 11-(13.01-6) = 3.99dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

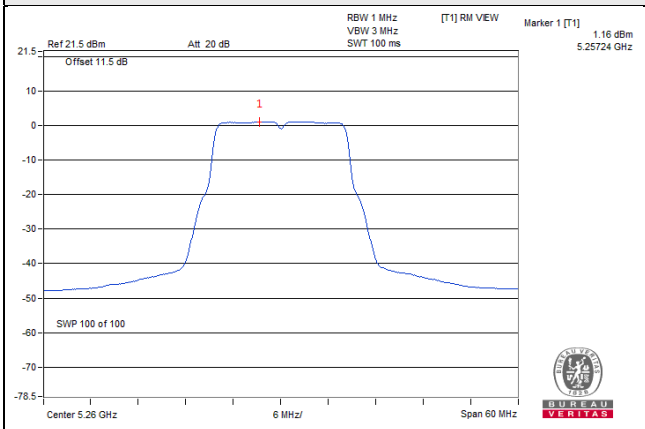
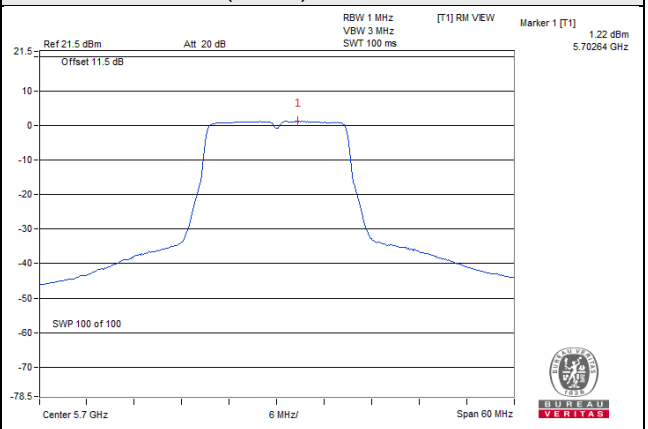
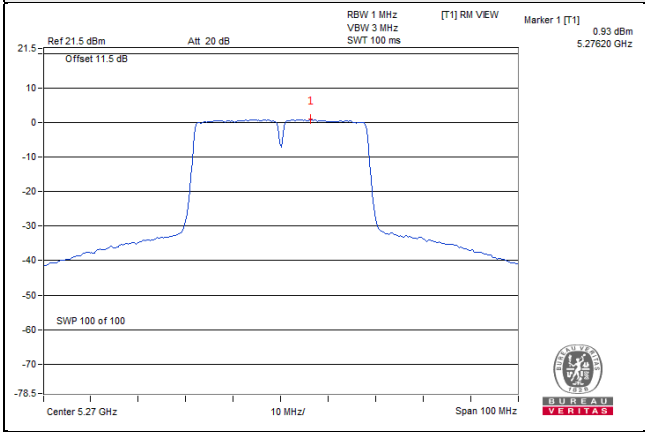
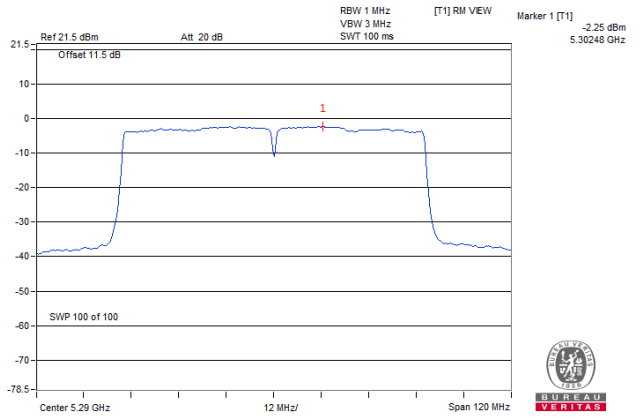
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
54	5270	-0.24	0.93	0.48	3.87	3.99	Pass
62	5310	-0.82	0.40	0.48	3.32	3.99	Pass
102	5510	-2.24	-0.27	0.48	2.35	3.99	Pass
110	5550	-1.18	-0.11	0.48	2.88	3.99	Pass
134	5670	-1.51	-0.50	0.48	2.51	3.99	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. Directional gain = 10dBi + 10log(2) = 13.01dBi > 6dBi, so the power density limit shall be reduced to 11-(13.01-6) = 3.99dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

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				
58	5290	-3.40	-2.31	0.27	0.46	3.99	Pass
106	5530	-4.98	-4.11	0.27	-1.24	3.99	Pass
122	5610	-3.74	-3.05	0.27	-0.10	3.99	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. Directional gain = 10dBi + 10log(2) = 13.01dBi > 6dBi, so the power density limit shall be reduced to 11-(13.01-6) = 3.99dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Chain 1 / CH 52	802.11ax (HE20) / Chain 1 / CH 140
	
802.11ax (HE40) / Chain 1 / CH 54	802.11ax (HE80) / Chain 1 / CH 58
	

3TX

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	Chain 2				
52	5260	-3.99	-3.48	-1.81	0.27	2.05	2.23	Pass
60	5300	-3.92	-3.53	-1.75	0.27	2.08	2.23	Pass
64	5320	-3.78	-3.77	-1.80	0.27	2.03	2.23	Pass
100	5500	-2.62	-2.90	-3.21	0.27	2.14	2.23	Pass
116	5580	-3.36	-3.36	-2.77	0.27	1.89	2.23	Pass
140	5700	-3.46	-3.03	-2.63	0.27	2.01	2.23	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. Directional gain = 10dBi + 10log(3) = 14.77dBi > 6dBi, so the power density limit shall be reduced to 11-(14.77-6) = 2.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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	Chain 2				
52	5260	-4.19	-3.77	-2.06	0.24	1.77	2.23	Pass
60	5300	-4.73	-3.47	-1.91	0.24	1.79	2.23	Pass
64	5320	-4.31	-3.31	-1.99	0.24	1.91	2.23	Pass
100	5500	-2.65	-2.84	-3.87	0.24	1.92	2.23	Pass
116	5580	-3.20	-3.40	-3.39	0.24	1.68	2.23	Pass
140	5700	-3.16	-3.00	-2.62	0.24	2.09	2.23	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. Directional gain = 10dBi + 10log(3) = 14.77dBi > 6dBi, so the power density limit shall be reduced to 11-(14.77-6) = 2.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

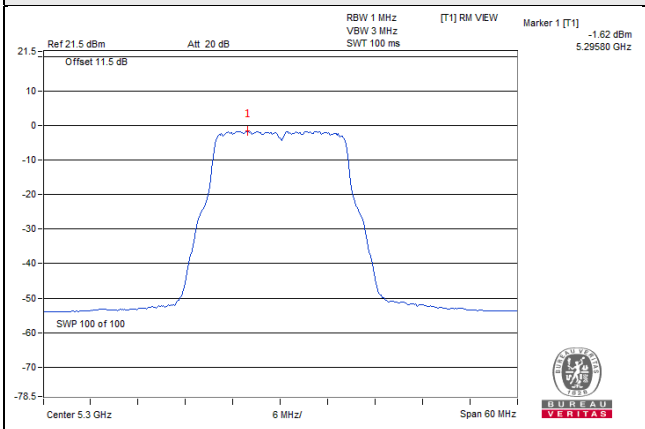
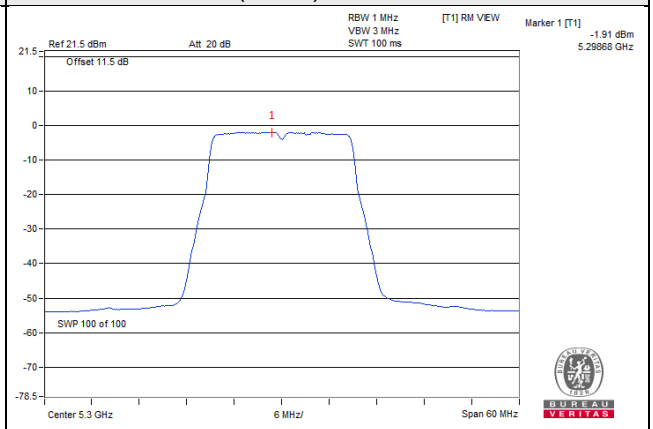
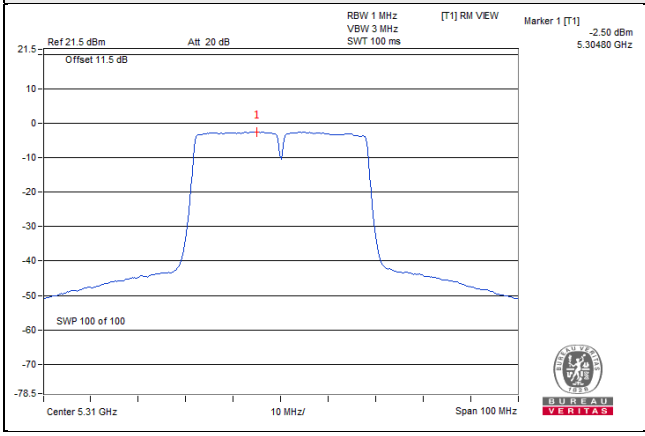
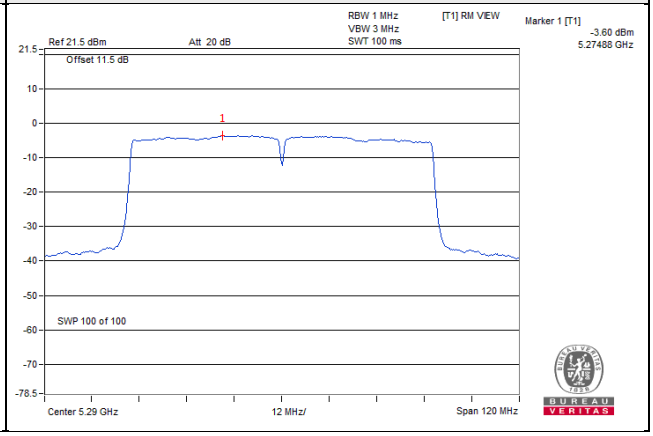
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)			Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2				
54	5270	-4.25	-3.22	-2.60	0.52	1.99	2.23	Pass
62	5310	-4.38	-3.41	-2.50	0.52	1.93	2.23	Pass
102	5510	-3.05	-3.21	-3.59	0.52	2.01	2.23	Pass
110	5550	-3.61	-3.06	-3.38	0.52	1.95	2.23	Pass
134	5670	-3.26	-3.65	-2.78	0.52	2.08	2.23	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. Directional gain = 10dBi + 10log(3) = 14.77dBi > 6dBi, so the power density limit shall be reduced to 11-(14.77-6) = 2.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

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	Chain 2				
58	5290	-5.74	-4.69	-3.60	0.35	0.53	2.23	Pass
106	5530	-5.53	-5.27	-5.52	0.35	-0.32	2.23	Pass
122	5610	-5.03	-5.42	-4.82	0.35	0.04	2.23	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. Directional gain = 10dBi + 10log(3) = 14.77dBi > 6dBi, so the power density limit shall be reduced to 11-(14.77-6) = 2.23dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a / Chain 2 / CH 60	802.11ax (HE20) / Chain 2 / CH 60
	
802.11ax (HE40) / Chain 2 / CH 62	802.11ax (HE80) / Chain 2 / CH 58
	

4TX

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	Chain 2	Chain 3				
52	5260	-5.33	-5.41	-5.36	-5.19	0.24	0.94	0.98	Pass
60	5300	-5.86	-5.58	-5.19	-4.89	0.24	0.90	0.98	Pass
64	5320	-5.68	-5.16	-5.21	-5.56	0.24	0.86	0.98	Pass
100	5500	-5.97	-5.03	-5.65	-5.54	0.24	0.73	0.98	Pass
116	5580	-5.53	-5.39	-5.54	-5.49	0.24	0.77	0.98	Pass
140	5700	-5.37	-5.57	-5.52	-5.36	0.24	0.81	0.98	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. Directional gain = 10dBi + 10log(4) = 16.02dBi > 6dBi, so the power density limit shall be reduced to 11-(16.02-6) = 0.98dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE20)

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	Chain 2	Chain 3				
52	5260	-5.16	-5.72	-5.40	-5.20	0.25	0.91	0.98	Pass
60	5300	-5.27	-5.60	-5.35	-5.12	0.25	0.94	0.98	Pass
64	5320	-5.20	-5.36	-5.51	-5.55	0.25	0.87	0.98	Pass
100	5500	-5.13	-5.31	-5.46	-5.35	0.25	0.96	0.98	Pass
116	5580	-5.97	-5.42	-5.17	-5.35	0.25	0.80	0.98	Pass
140	5700	-5.17	-5.46	-5.56	-5.61	0.25	0.82	0.98	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. Directional gain = 10dBi + 10log(4) = 16.02dBi > 6dBi, so the power density limit shall be reduced to 11-(16.02-6) = 0.98dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE40)

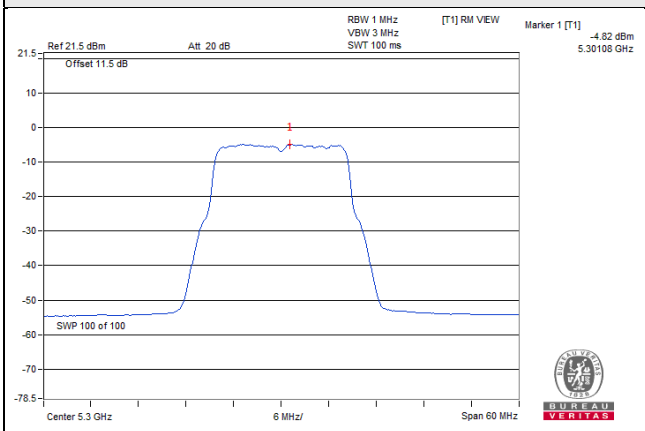
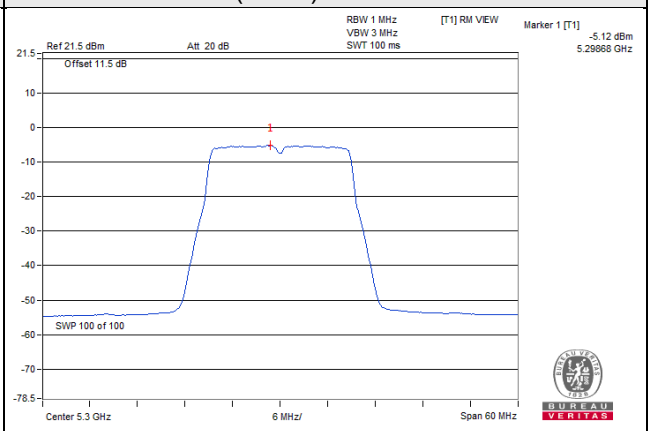
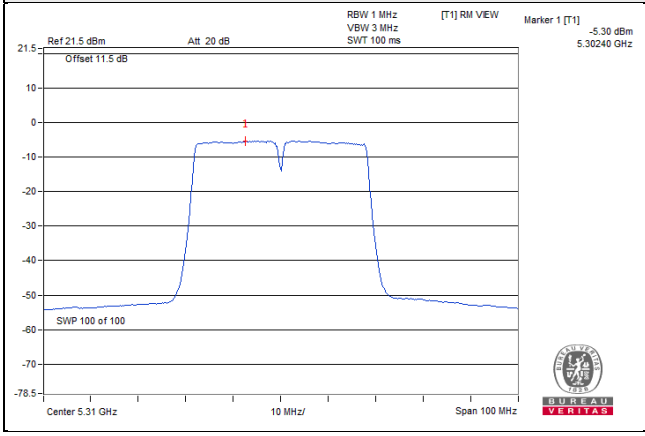
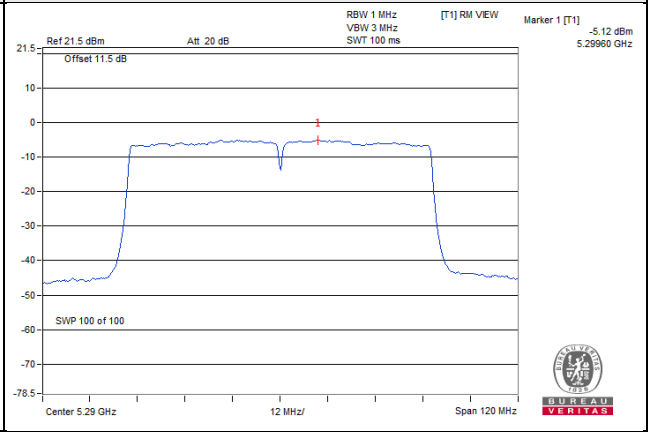
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Duty Factor (dB)	Total PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3				
54	5270	-5.36	-5.57	-5.68	-5.69	0.52	0.97	0.98	Pass
62	5310	-5.33	-5.67	-5.64	-6.04	0.52	0.88	0.98	Pass
102	5510	-5.65	-5.36	-5.68	-6.33	0.52	0.80	0.98	Pass
110	5550	-5.65	-5.34	-5.70	-6.21	0.52	0.83	0.98	Pass
134	5670	-5.45	-5.81	-5.70	-5.63	0.52	0.90	0.98	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. Directional gain = 10dBi + 10log(4) = 16.02dBi > 6dBi, so the power density limit shall be reduced to 11-(16.02-6) = 0.98dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ax (HE80)

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	Chain 2	Chain 3				
58	5290	-5.46	-5.28	-5.67	-5.69	0.35	0.85	0.98	Pass
106	5530	-6.46	-6.29	-6.47	-5.59	0.35	0.18	0.98	Pass
122	5610	-6.62	-7.27	-6.11	-6.44	0.35	-0.22	0.98	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. Directional gain = 10dBi + 10log(4) = 16.02dBi > 6dBi, so the power density limit shall be reduced to 11-(16.02-6) = 0.98dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

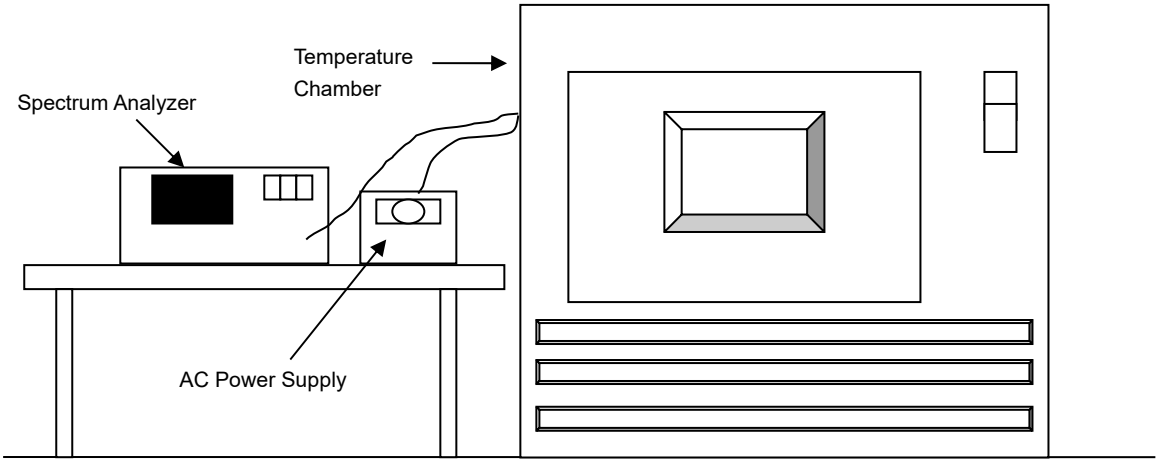
Spectrum Plot of Worst Value	
802.11a / Chain 3 / CH 60	802.11ax (HE20) / Chain 3 / CH 60
	
802.11ax (HE40) / Chain 0 / CH 62	802.11ax (HE80) / Chain 1 / CH 58
	

4.6 Frequency Stability

4.6.1 Limits of Frequency Stability Measurement

The frequency of the carrier signal shall be maintained within band of operation

4.6.2 Test Setup



4.6.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 25, 2018	Sep. 24, 2019
			Sep. 23, 2019	Sep. 22, 2020
Standard Temperature And Humidity Chamber TERCHY	MHU-225AU	920842	Jun. 01, 2018	May 31, 2019
			May 31, 2019	May 30, 2020
Digital Multimeter Fluke	87-III	70360742	Jun. 29, 2018	Jun. 28, 2019
			Jun. 28, 2019	Jun. 27, 2020
AC Power Supply Extech	CFW-105	E000603	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.6.4 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.

b. Turn the EUT on and couple its output to a spectrum analyzer.

c. Turn the EUT off and set the chamber to the highest temperature specified.

d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.

e. Repeat step d with every 10 degrees reduction until the lowest temperature achieved.

f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

4.6.7 Test Results

Test Mode A (Internal antenna + Eth6 Radio)

Frequency Stability Versus Temp.									
Operating Frequency: 5260MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	120	5259.9988	Pass	5259.9967	Pass	5259.9969	Pass	5259.997	Pass
40	120	5260.0048	Pass	5260.0008	Pass	5260.0037	Pass	5260.0005	Pass
30	120	5259.9753	Pass	5259.9763	Pass	5259.9748	Pass	5259.976	Pass
20	120	5260.0035	Pass	5260.0036	Pass	5260.0056	Pass	5260.0052	Pass
10	120	5259.9808	Pass	5259.9828	Pass	5259.984	Pass	5259.983	Pass
0	120	5259.9986	Pass	5260.0019	Pass	5260.0008	Pass	5259.9981	Pass
-10	120	5259.9911	Pass	5259.9907	Pass	5259.9903	Pass	5259.9922	Pass
-20	120	5260.0149	Pass	5260.0181	Pass	5260.0144	Pass	5260.0153	Pass
-30	120	5259.9867	Pass	5259.9819	Pass	5259.9826	Pass	5259.9835	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5260MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5260.0025	Pass	5260.004	Pass	5260.0062	Pass	5260.0049	Pass
	120	5260.0035	Pass	5260.0036	Pass	5260.0056	Pass	5260.0052	Pass
	102	5260.0036	Pass	5260.0042	Pass	5260.0054	Pass	5260.0054	Pass

Test Mode C (Internal antenna + Eth8 Radio)

Frequency Stability Versus Temp.									
Operating Frequency: 5500MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	120	5500.007	Pass	5500.008	Pass	5500.0103	Pass	5500.0078	Pass
40	120	5499.9988	Pass	5499.9984	Pass	5499.9991	Pass	5499.9981	Pass
30	120	5500.014	Pass	5500.0104	Pass	5500.0125	Pass	5500.0116	Pass
20	120	5499.9844	Pass	5499.9835	Pass	5499.9811	Pass	5499.9839	Pass
10	120	5499.974	Pass	5499.9736	Pass	5499.9777	Pass	5499.9772	Pass
0	120	5500.0115	Pass	5500.0128	Pass	5500.0106	Pass	5500.0115	Pass
-10	120	5499.9908	Pass	5499.9935	Pass	5499.9955	Pass	5499.9935	Pass
-20	120	5500.0185	Pass	5500.0142	Pass	5500.0146	Pass	5500.0145	Pass
-30	120	5499.9943	Pass	5499.9921	Pass	5499.9904	Pass	5499.9912	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5260MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5499.9836	Pass	5499.9842	Pass	5499.9806	Pass	5499.9833	Pass
	120	5499.9844	Pass	5499.9835	Pass	5499.9811	Pass	5499.9839	Pass
	102	5499.9849	Pass	5499.984	Pass	5499.9817	Pass	5499.9844	Pass

Test Mode E (External antenna – PN: ATS-OO-245-46-4RPSP-36 + Eth6 Radio)

Frequency Stability Versus Temp.									
Operating Frequency: 5260MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	120	5259.9907	Pass	5259.9918	Pass	5259.9948	Pass	5259.991	Pass
40	120	5259.9856	Pass	5259.9841	Pass	5259.9842	Pass	5259.9861	Pass
30	120	5260.001	Pass	5259.9969	Pass	5259.997	Pass	5259.9979	Pass
20	120	5259.9982	Pass	5259.9988	Pass	5259.9988	Pass	5259.9961	Pass
10	120	5260.0224	Pass	5260.021	Pass	5260.0241	Pass	5260.0219	Pass
0	120	5260.0039	Pass	5260.0041	Pass	5260.0067	Pass	5260.0054	Pass
-10	120	5260.0049	Pass	5260.0018	Pass	5260.001	Pass	5260.0033	Pass
-20	120	5260.0152	Pass	5260.0161	Pass	5260.0135	Pass	5260.0131	Pass
-30	120	5260.0176	Pass	5260.0175	Pass	5260.0165	Pass	5260.0168	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5260MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5259.9983	Pass	5259.9981	Pass	5259.9989	Pass	5259.9957	Pass
	120	5259.9982	Pass	5259.9988	Pass	5259.9988	Pass	5259.9961	Pass
	102	5259.9987	Pass	5259.9984	Pass	5259.9983	Pass	5259.9953	Pass

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Annex A- Band Edge Measurement

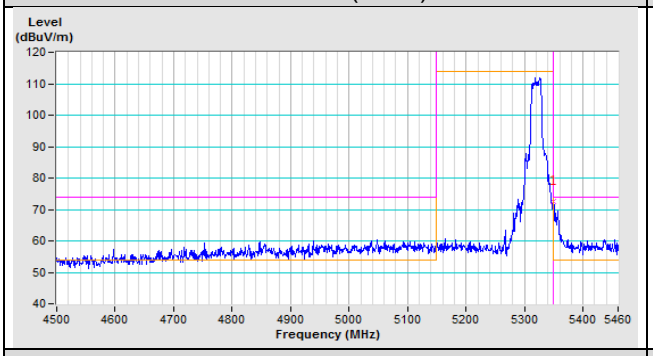
Test Mode A (Internal antenna + Eth6 Radio)

1TX

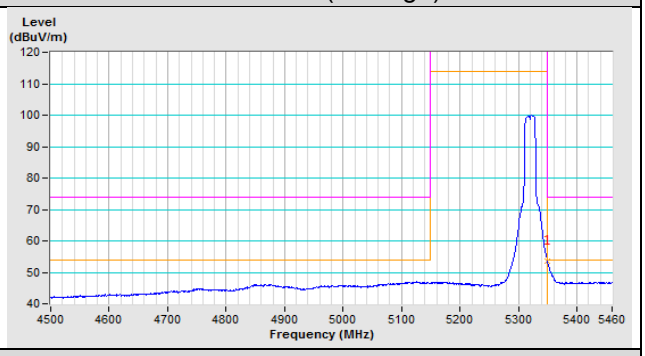
802.11a

Channel 64

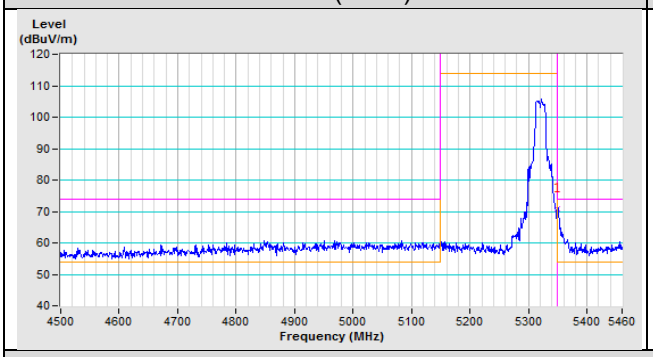
Horizontal (Peak)



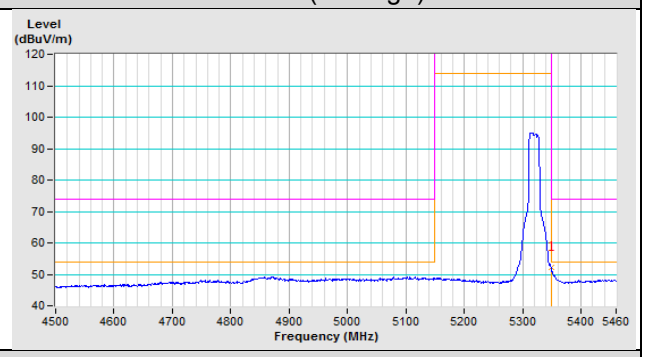
Horizontal (Average)



Vertical (Peak)

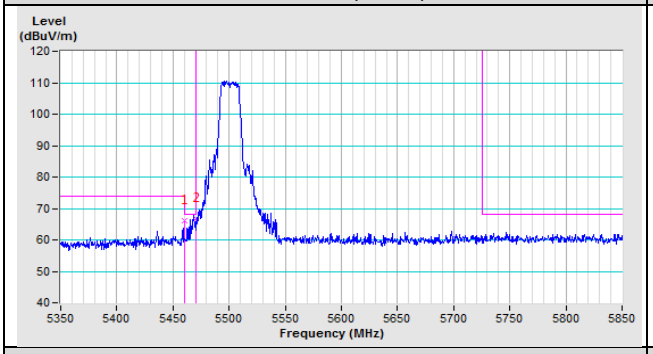


Vertical (Average)

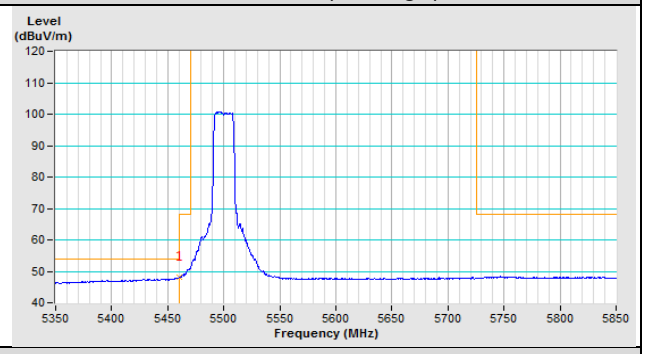


Channel 100

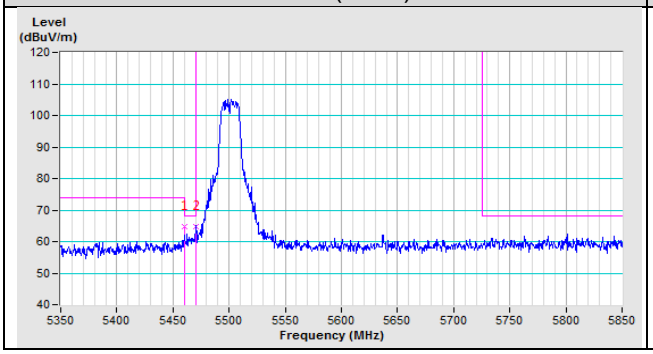
Horizontal (Peak)



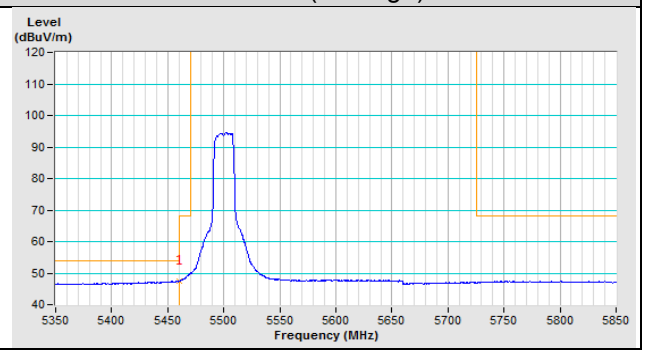
Horizontal (Average)



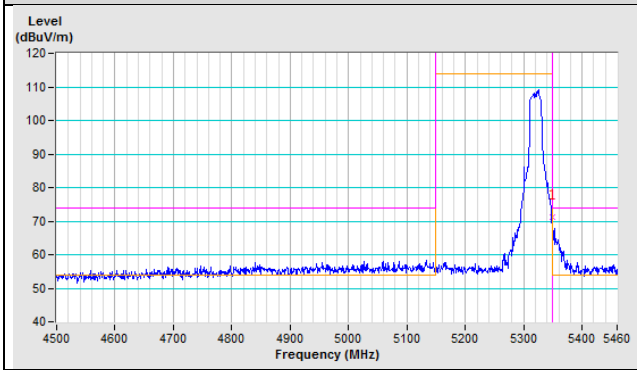
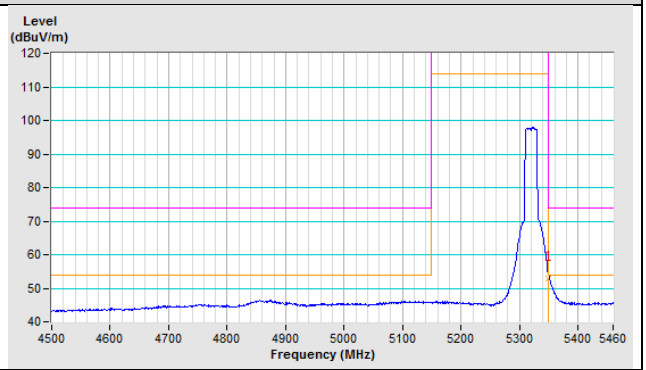
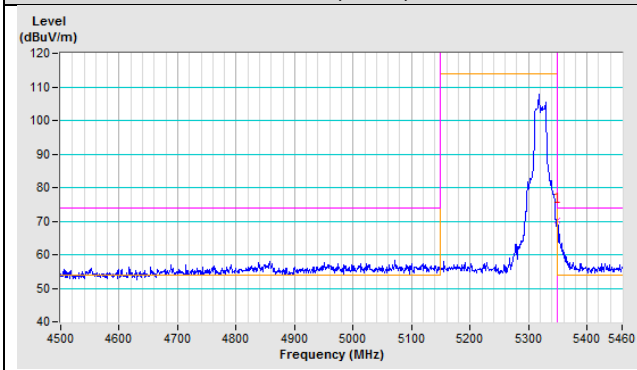
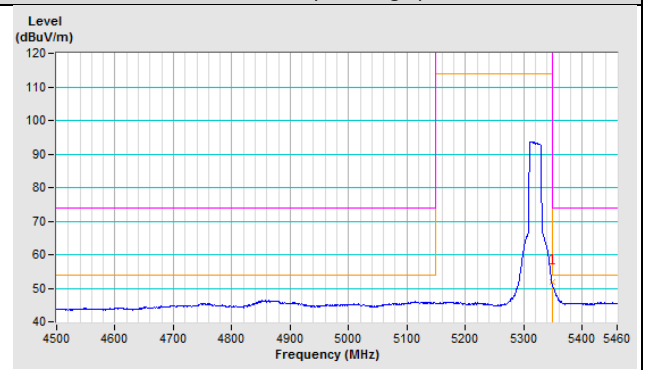
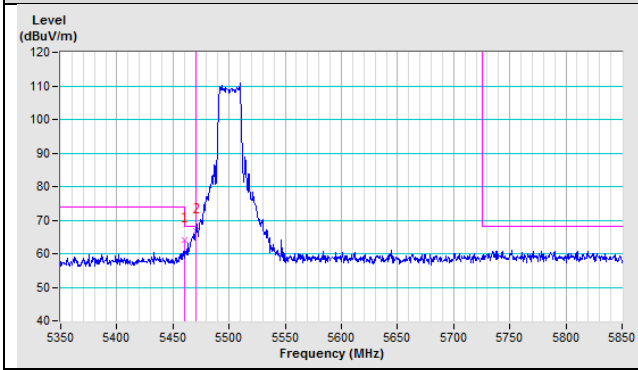
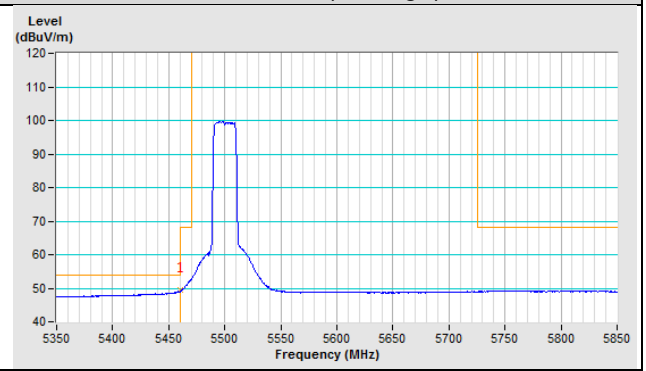
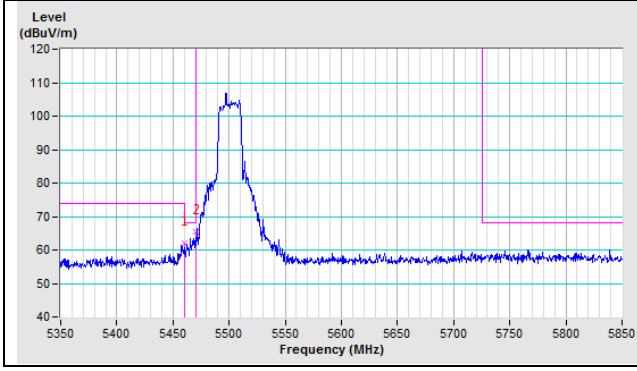
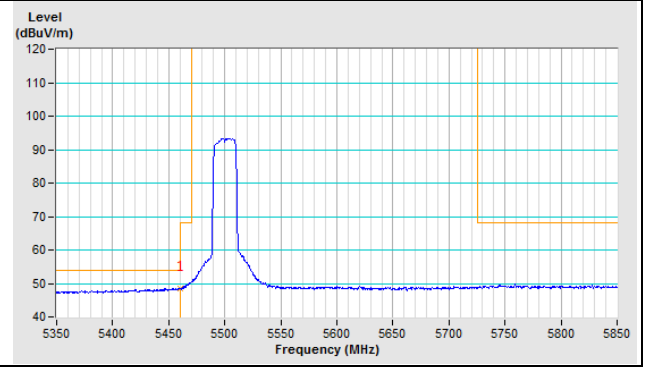
Vertical (Peak)



Vertical (Average)



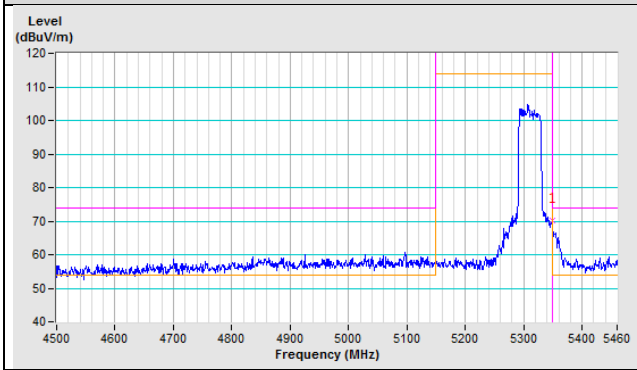
802.11ax (HE20)

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

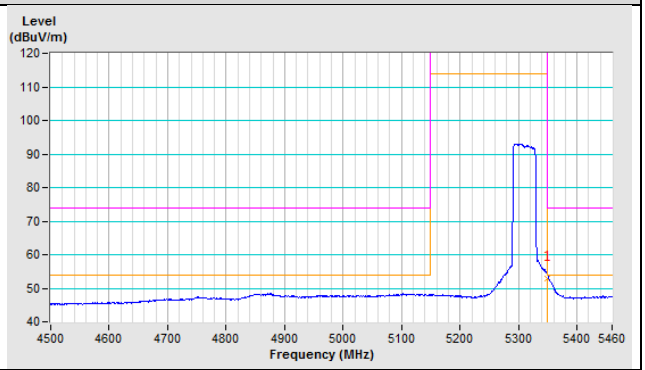
802.11ax (HE40)

Channel 62

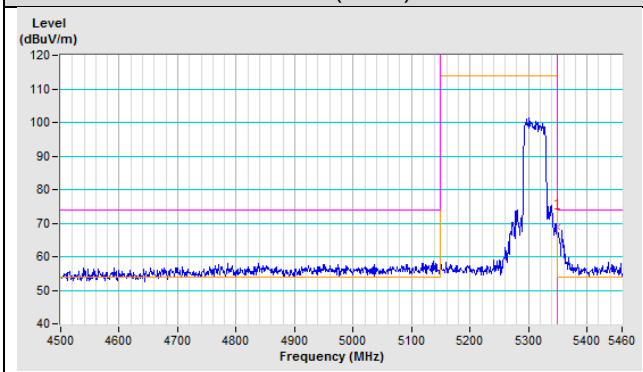
Horizontal (Peak)



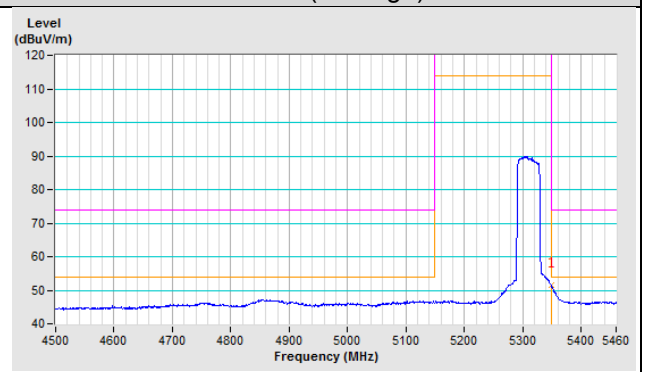
Horizontal (Average)



Vertical (Peak)

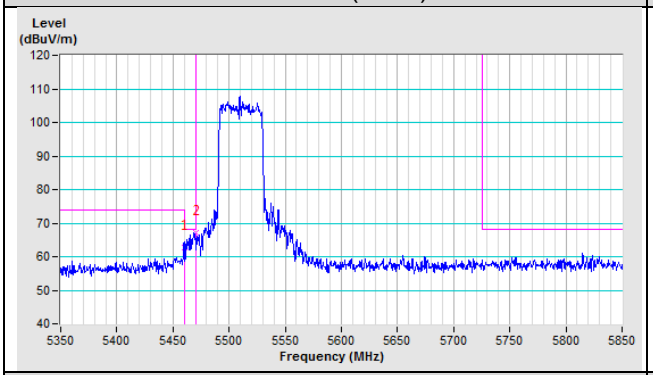


Vertical (Average)

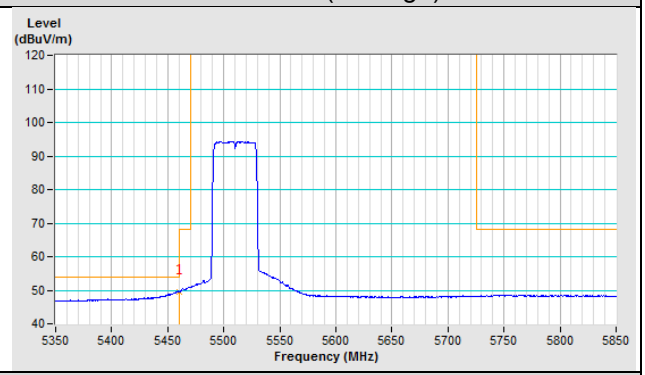


Channel 102

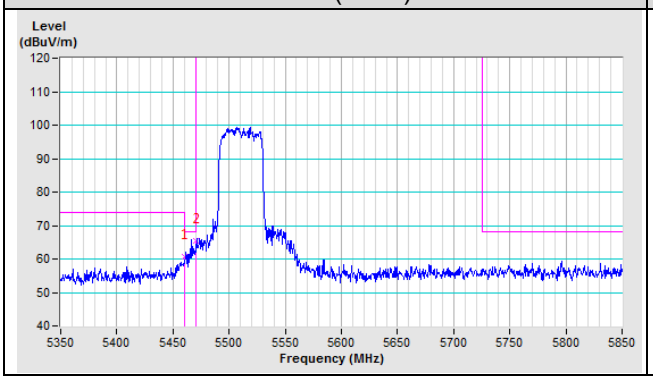
Horizontal (Peak)



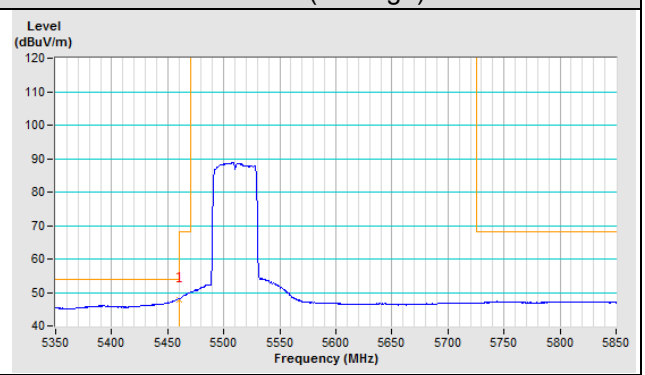
Horizontal (Average)



Vertical (Peak)



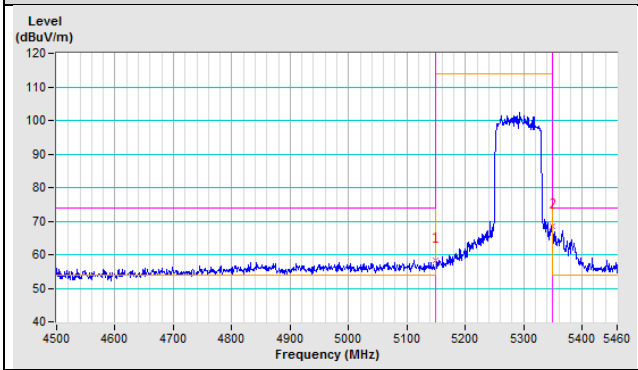
Vertical (Average)



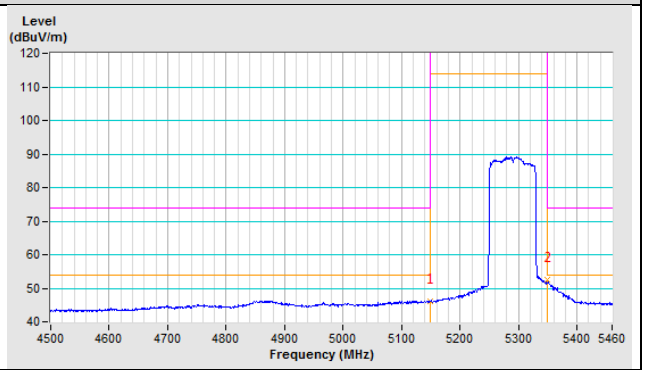
802.11ax (HE80)

Channel 58

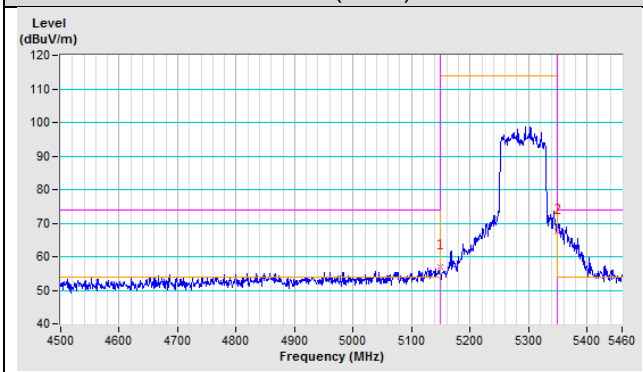
Horizontal (Peak)



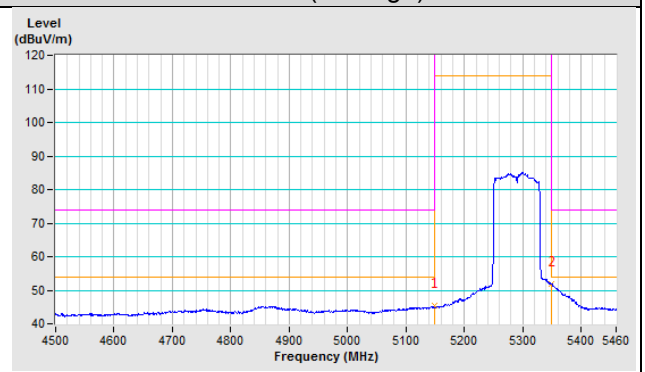
Horizontal (Average)



Vertical (Peak)

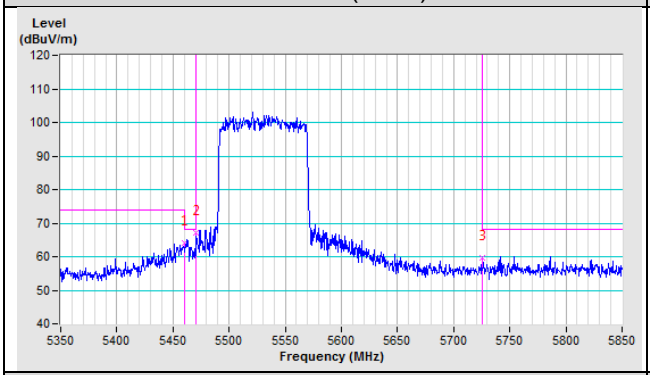


Vertical (Average)

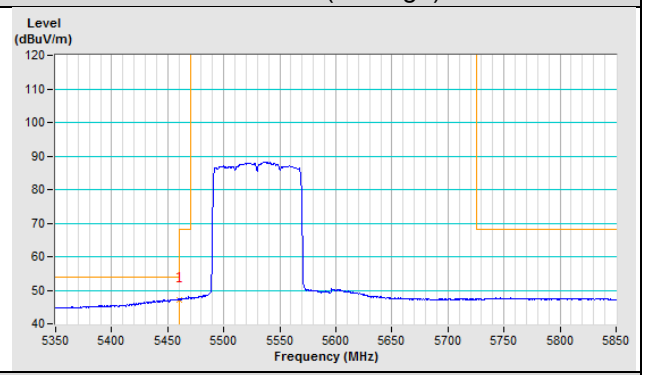


Channel 106

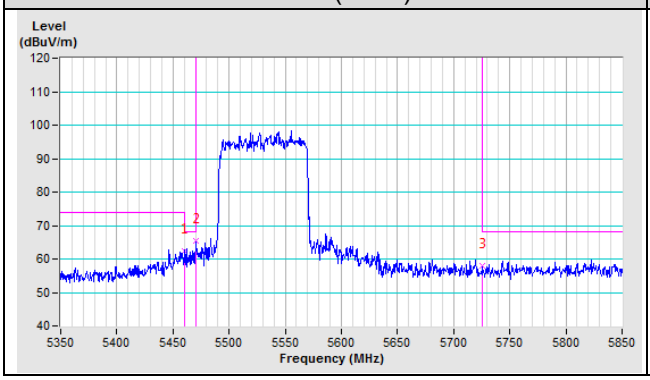
Horizontal (Peak)



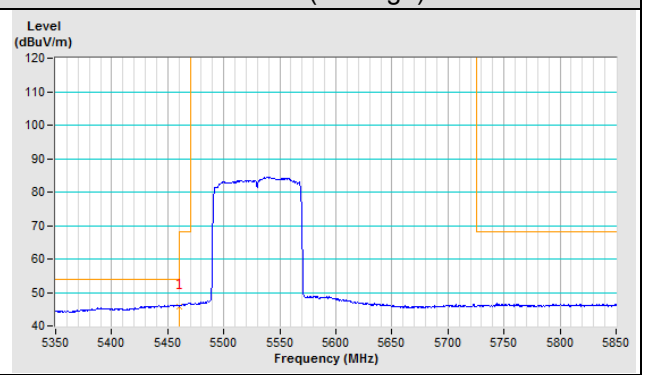
Horizontal (Average)



Vertical (Peak)

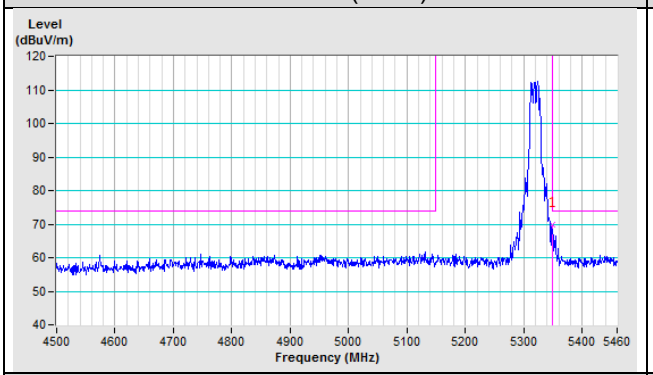
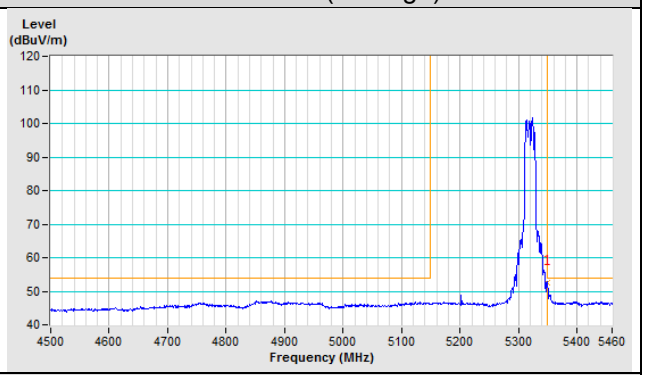
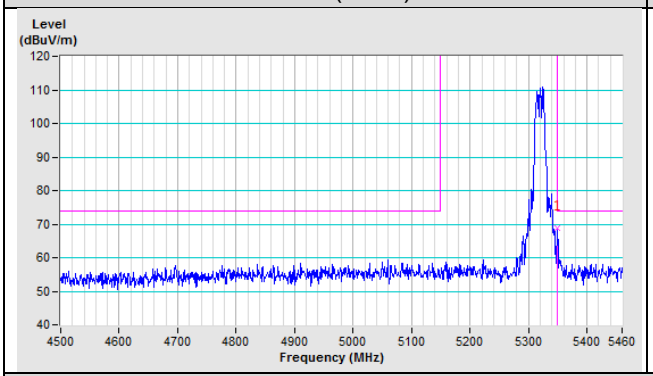
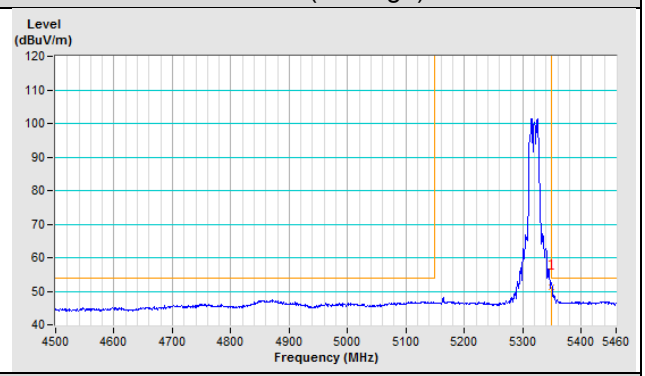
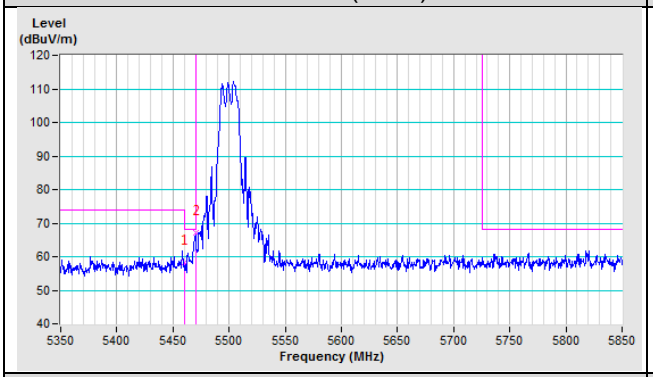
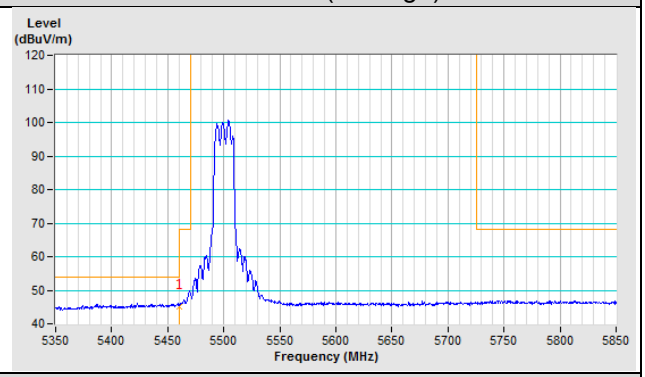
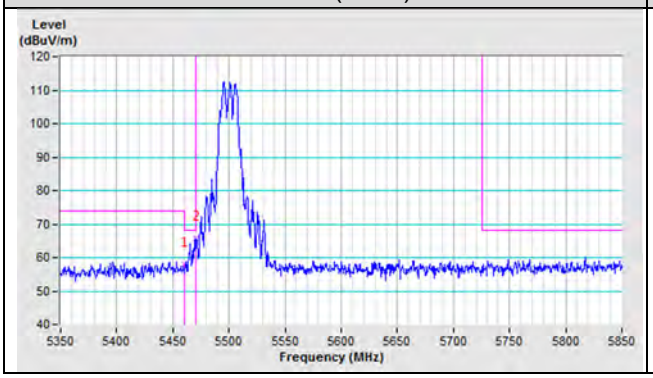
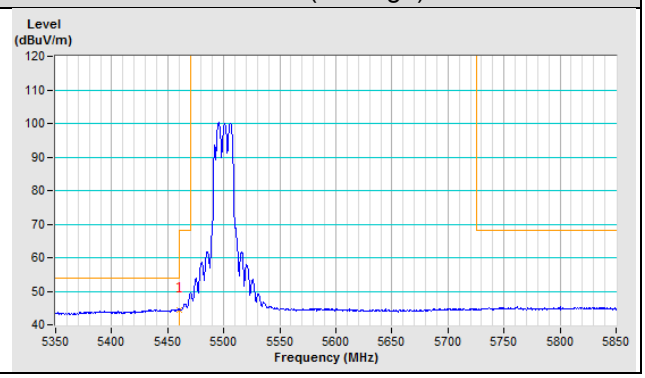


Vertical (Average)



2TX

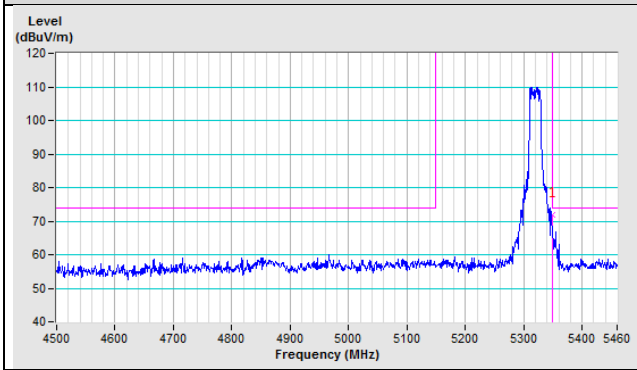
802.11a

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

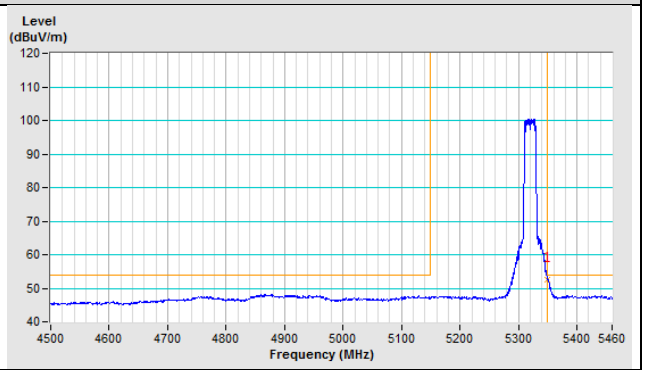
802.11ax (HE20)

Channel 64

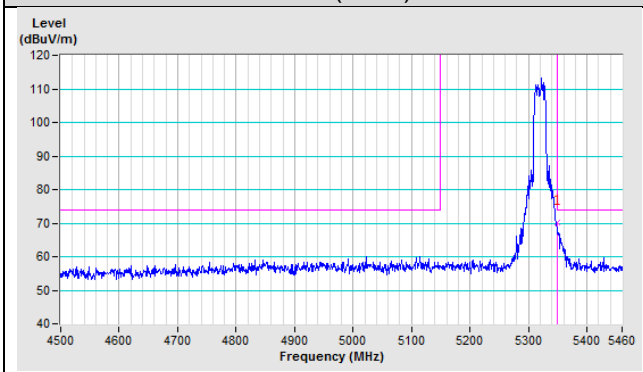
Horizontal (Peak)



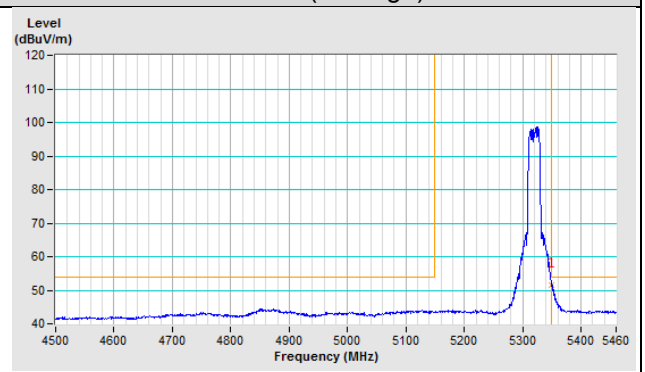
Horizontal (Average)



Vertical (Peak)

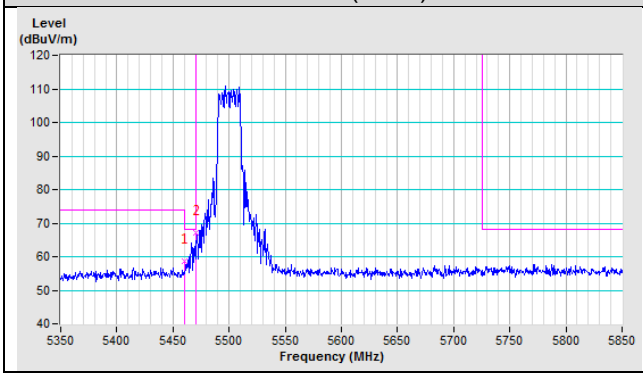


Vertical (Average)

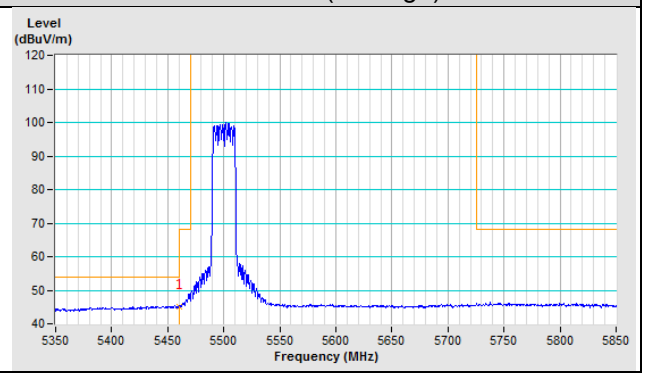


Channel 100

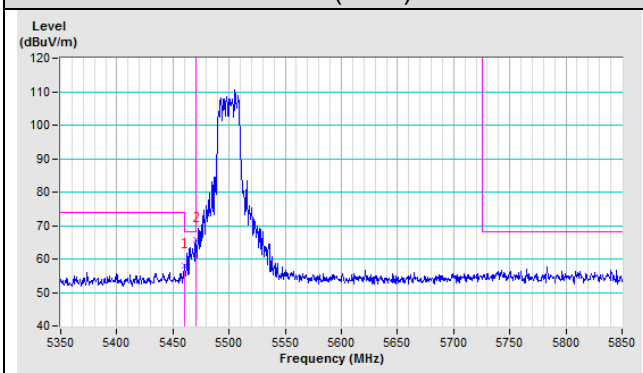
Horizontal (Peak)



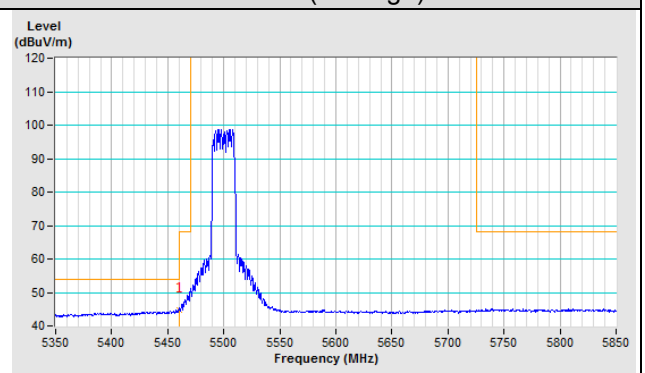
Horizontal (Average)



Vertical (Peak)



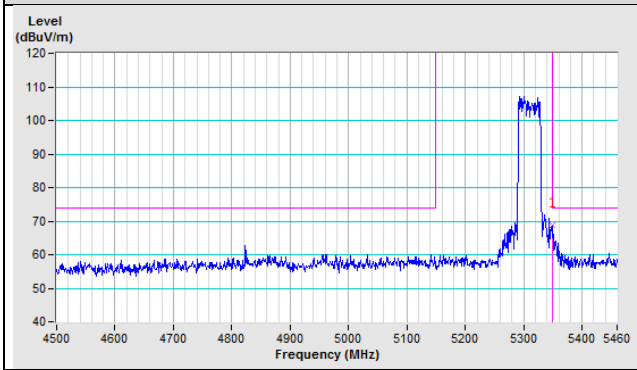
Vertical (Average)



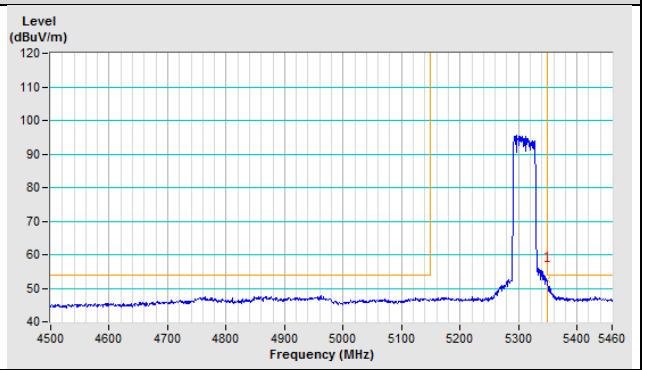
802.11ax (HE40)

Channel 62

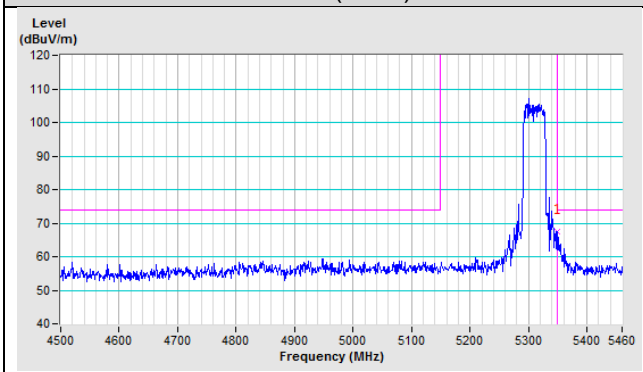
Horizontal (Peak)



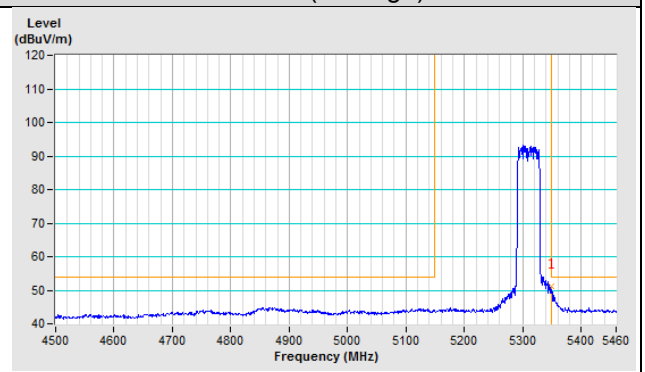
Horizontal (Average)



Vertical (Peak)

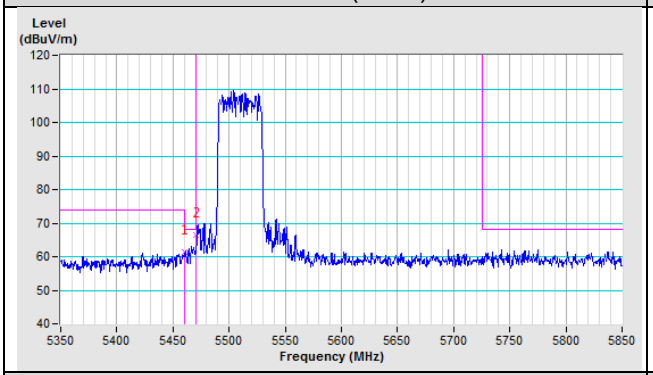


Vertical (Average)

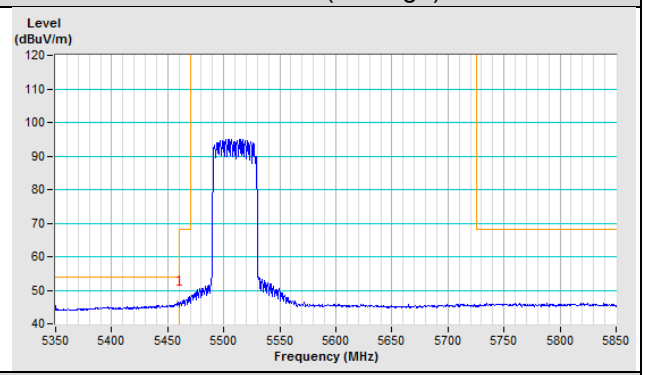


Channel 102

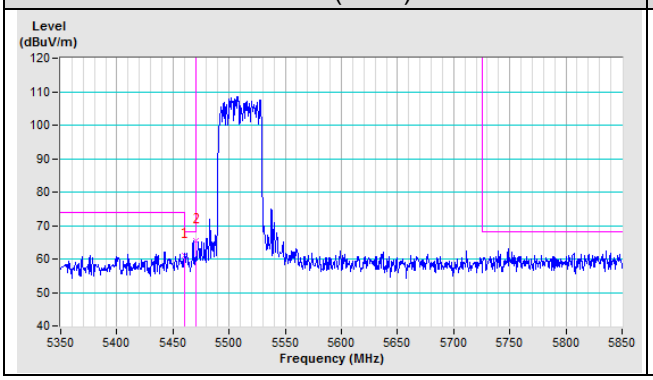
Horizontal (Peak)



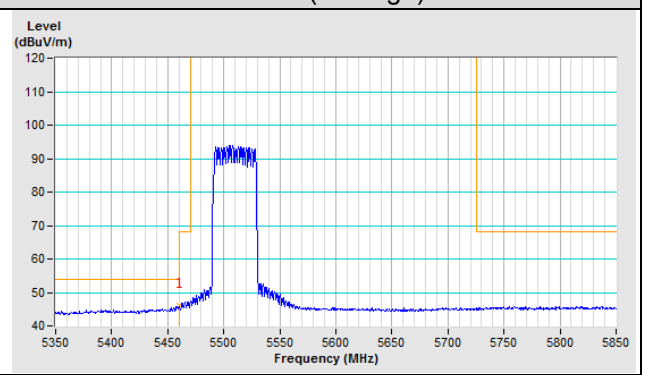
Horizontal (Average)



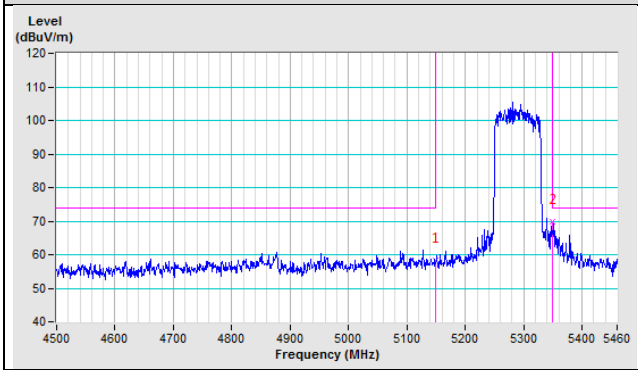
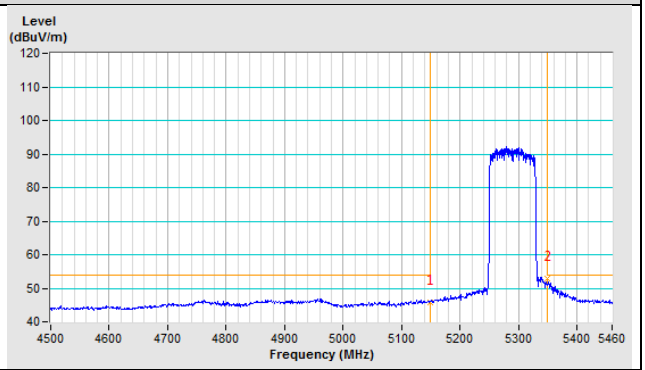
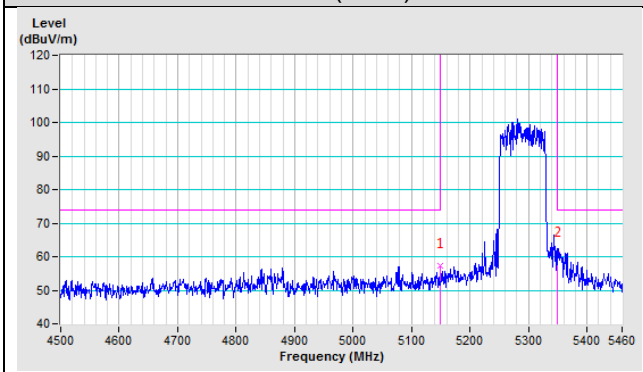
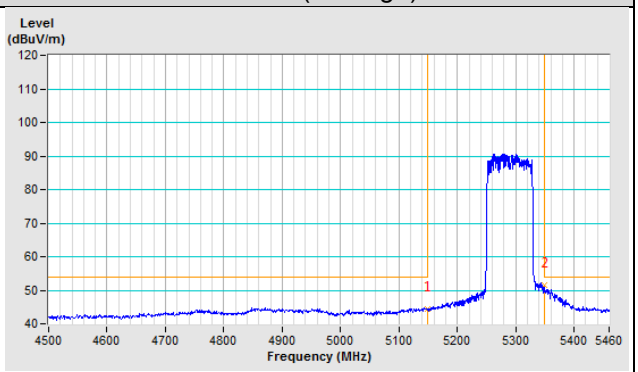
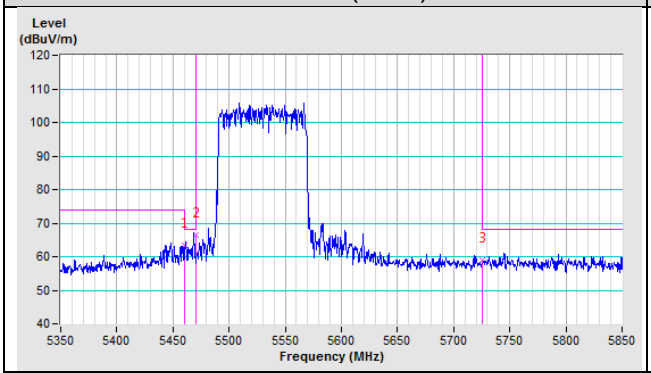
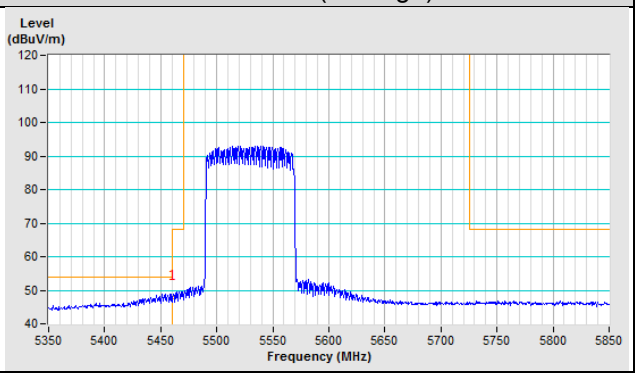
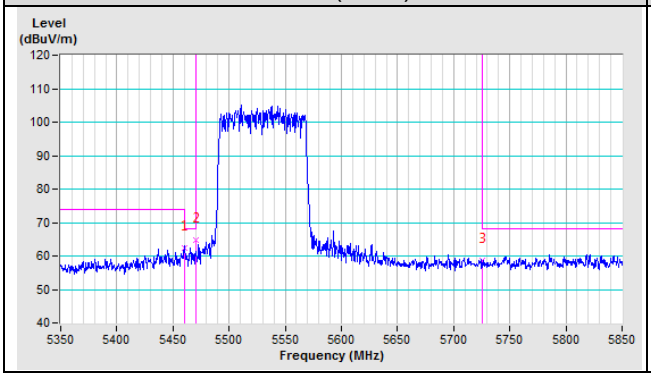
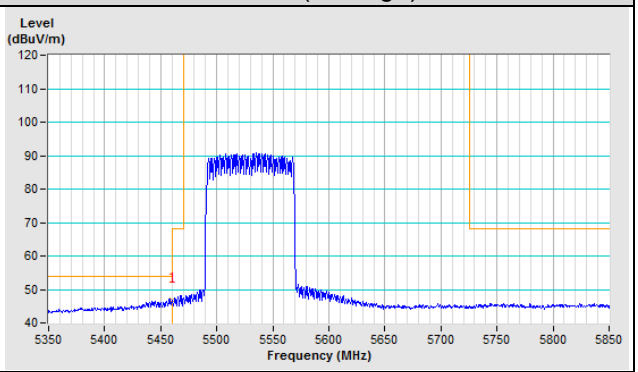
Vertical (Peak)



Vertical (Average)

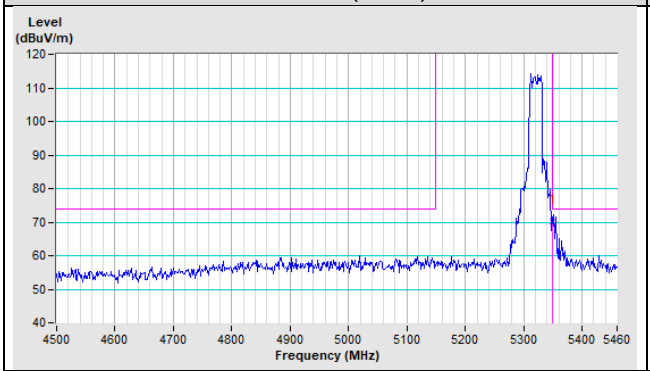
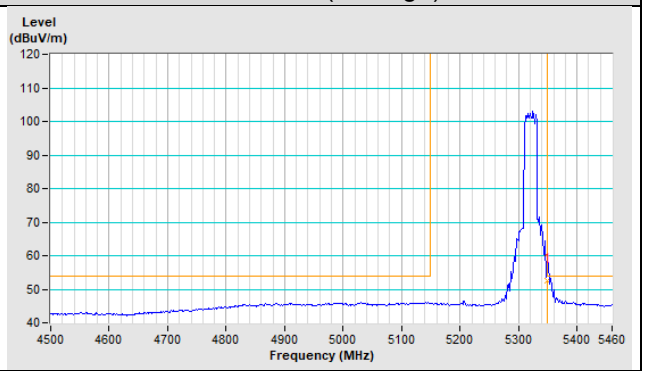
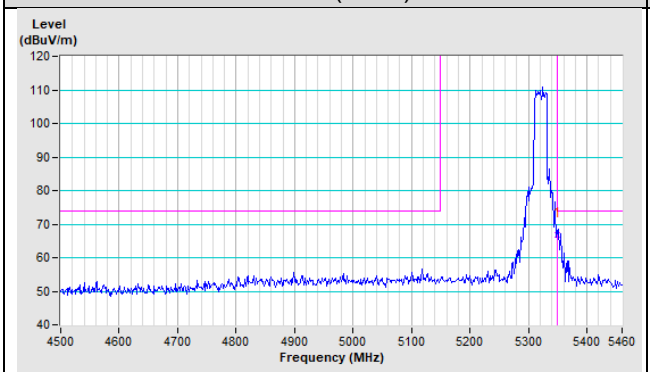
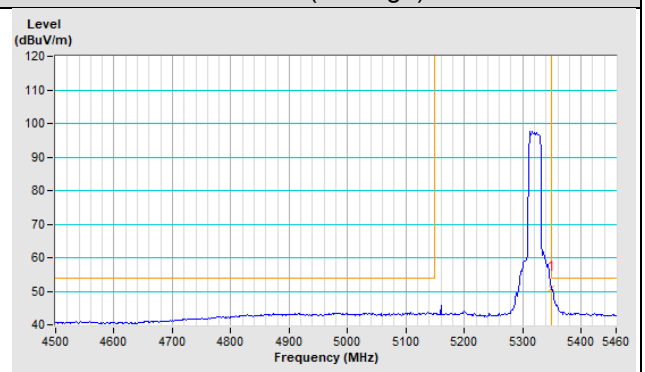
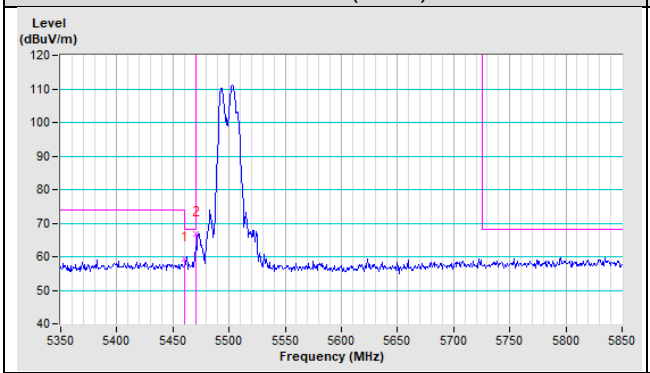
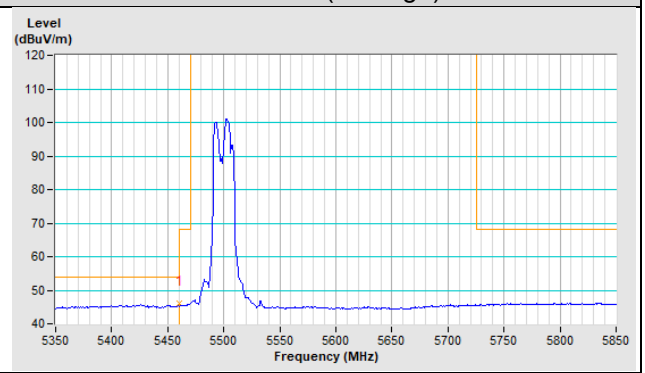
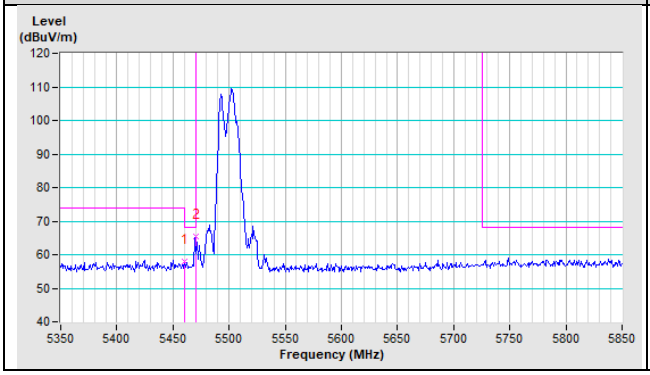
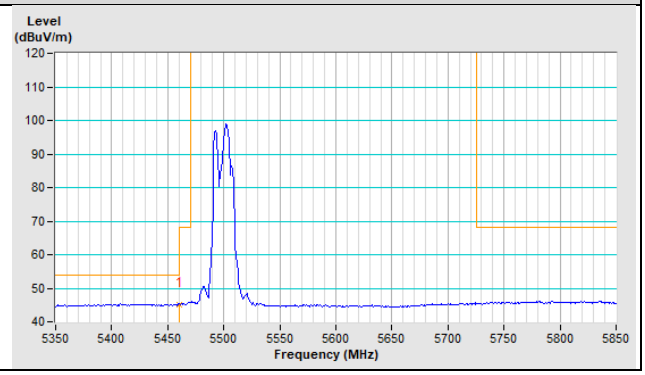


802.11ax (HE80)

Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

3TX

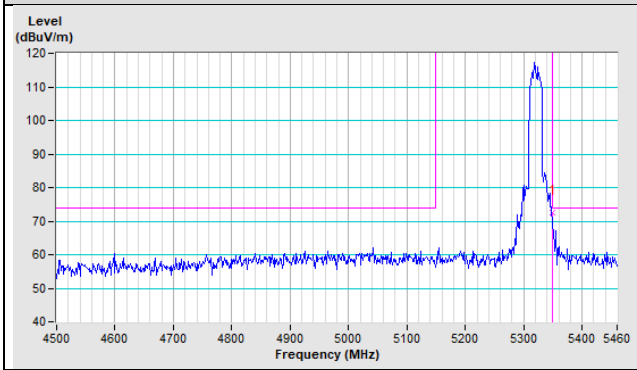
802.11a

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

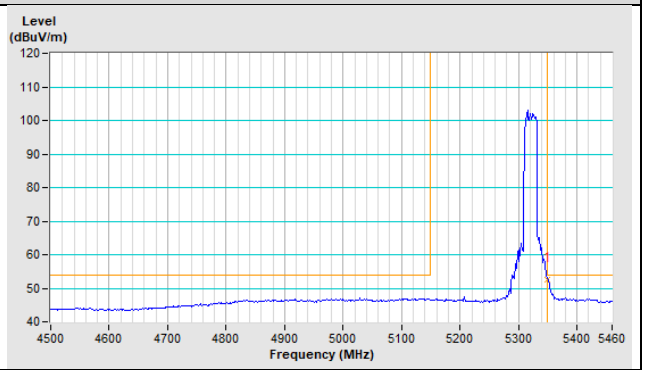
802.11ax (HE20)

Channel 64

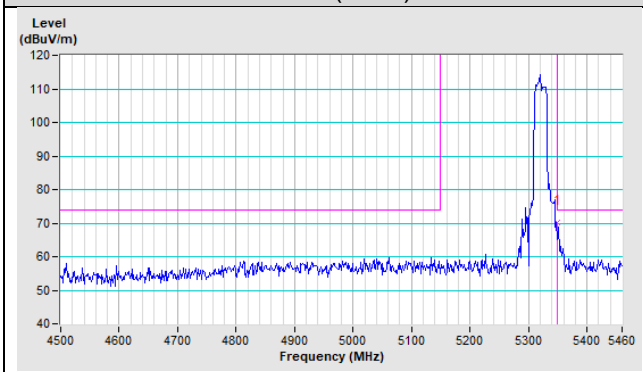
Horizontal (Peak)



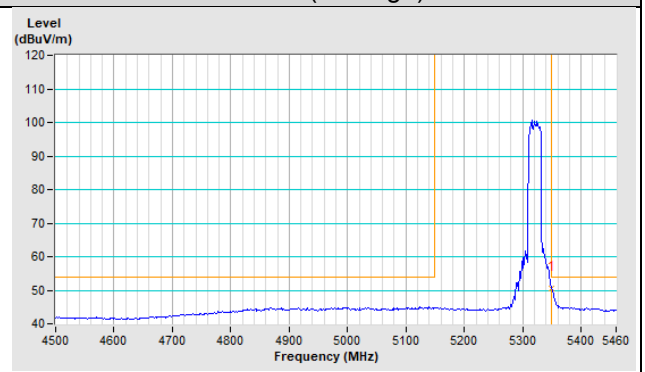
Horizontal (Average)



Vertical (Peak)

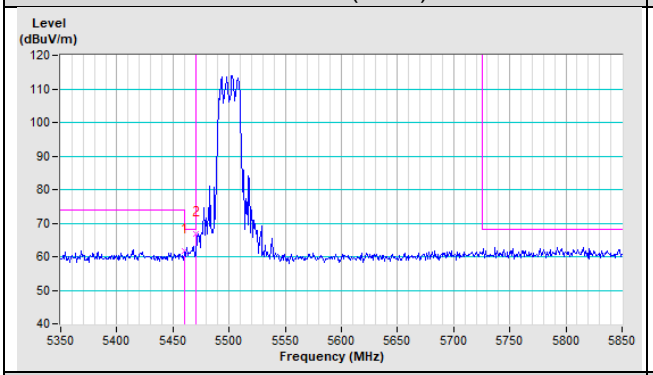


Vertical (Average)

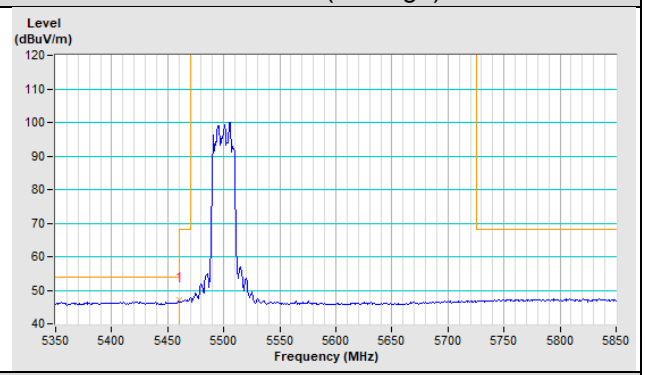


Channel 100

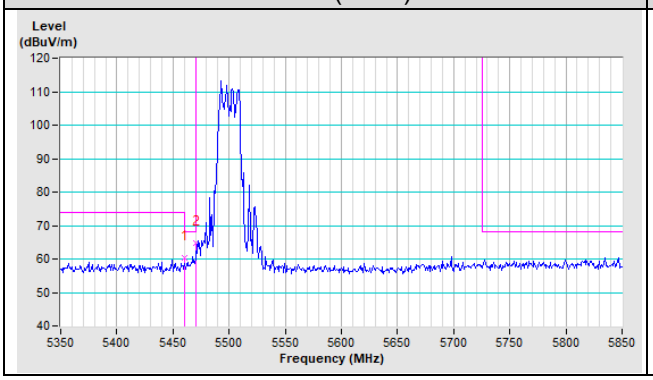
Horizontal (Peak)



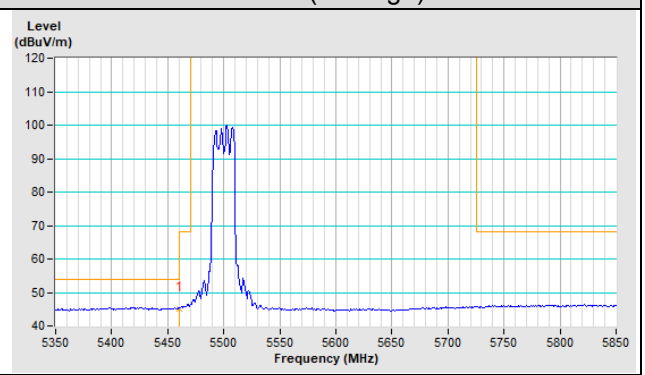
Horizontal (Average)



Vertical (Peak)



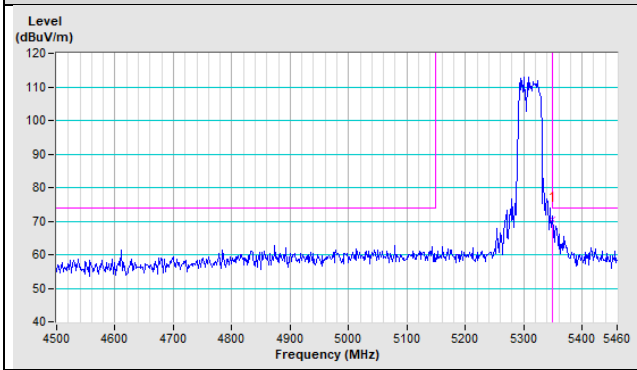
Vertical (Average)



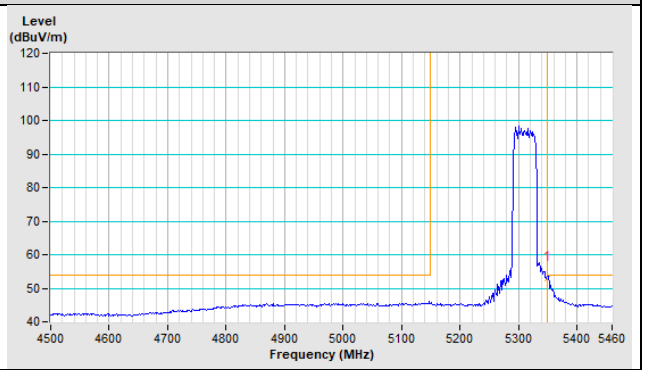
802.11ax (HE40)

Channel 62

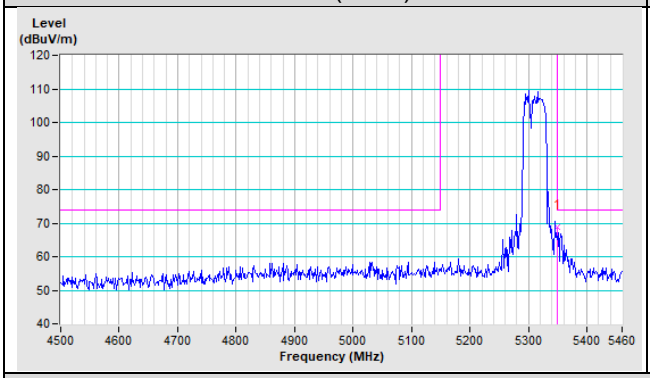
Horizontal (Peak)



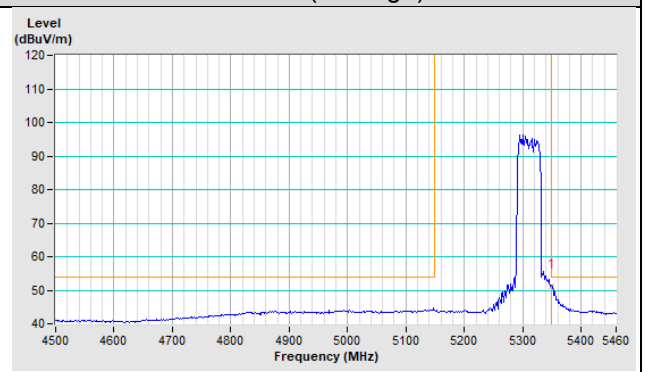
Horizontal (Average)



Vertical (Peak)

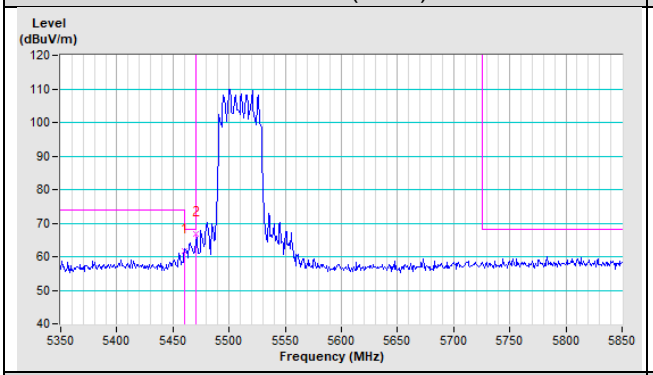


Vertical (Average)

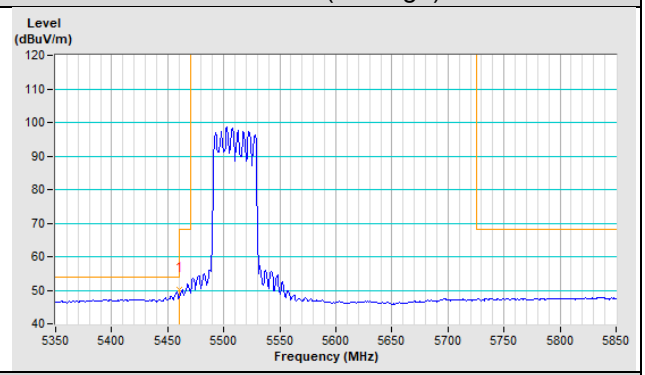


Channel 102

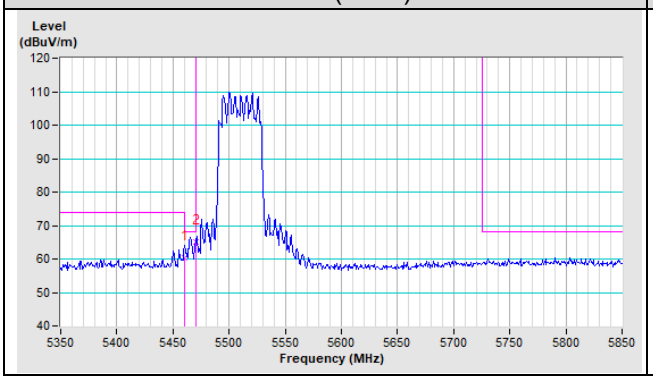
Horizontal (Peak)



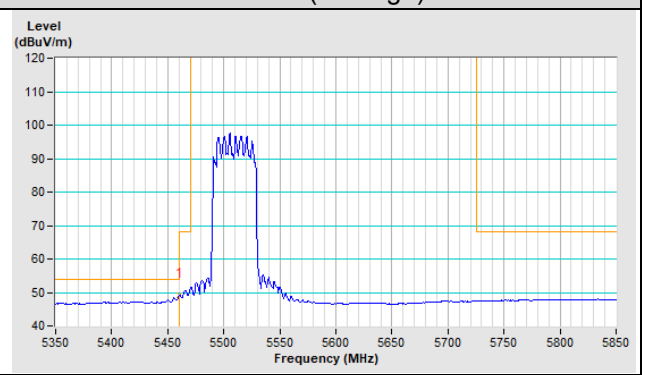
Horizontal (Average)



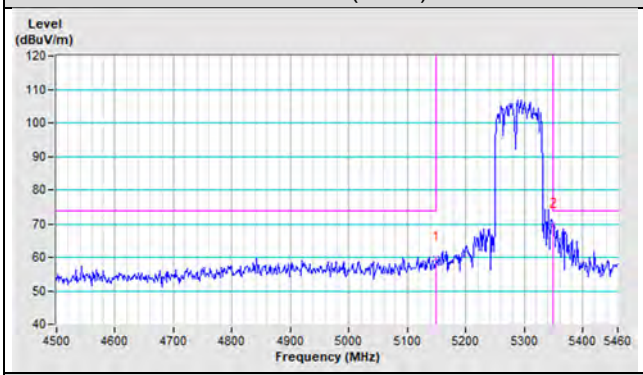
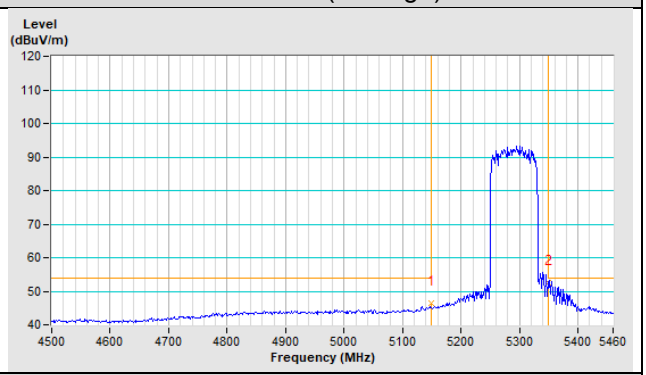
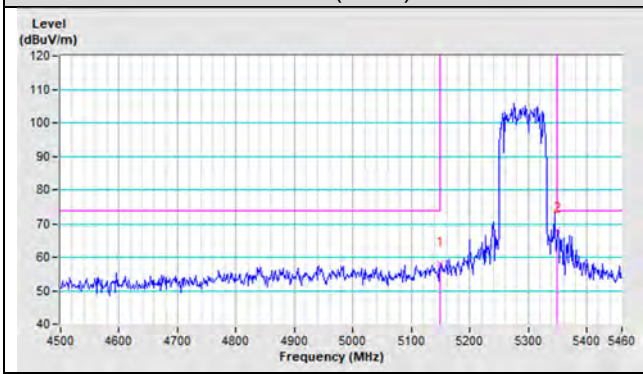
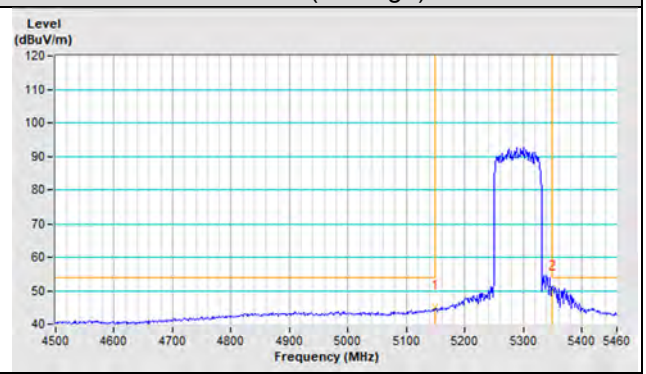
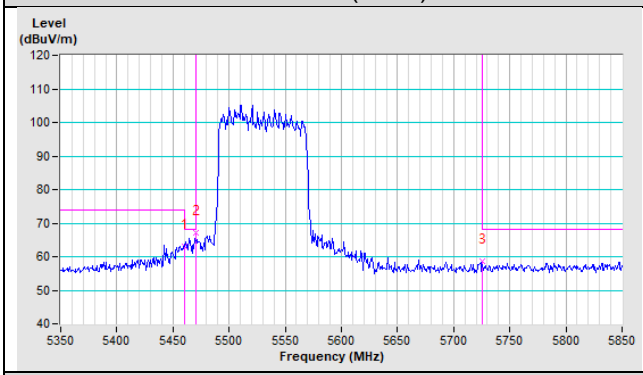
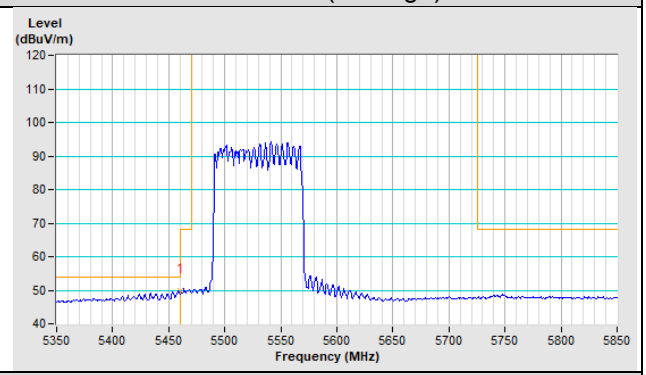
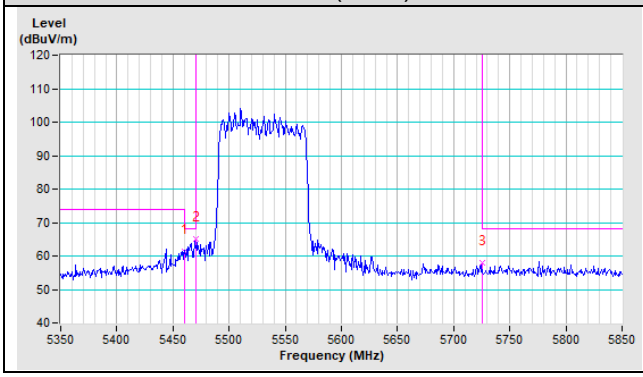
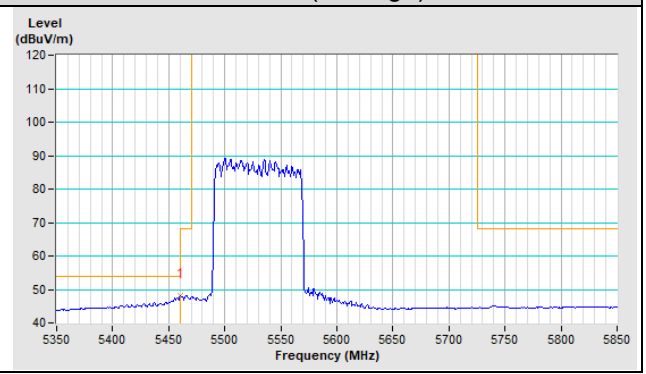
Vertical (Peak)



Vertical (Average)

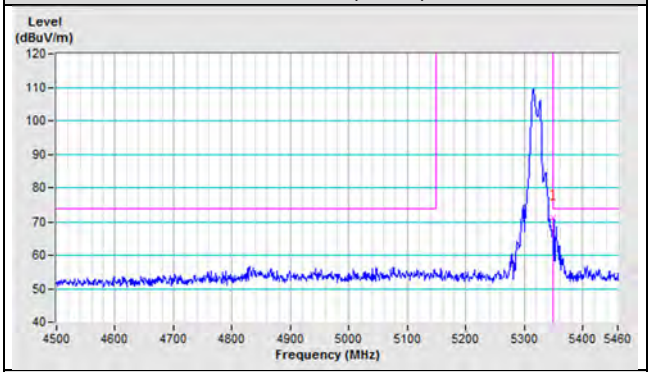
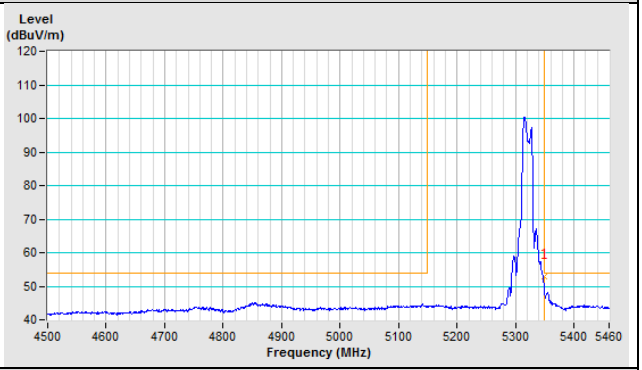
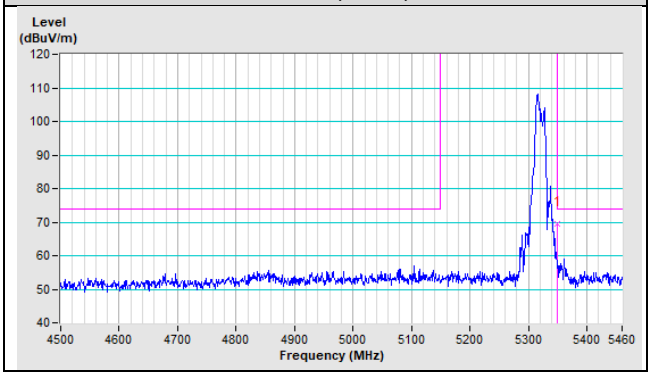
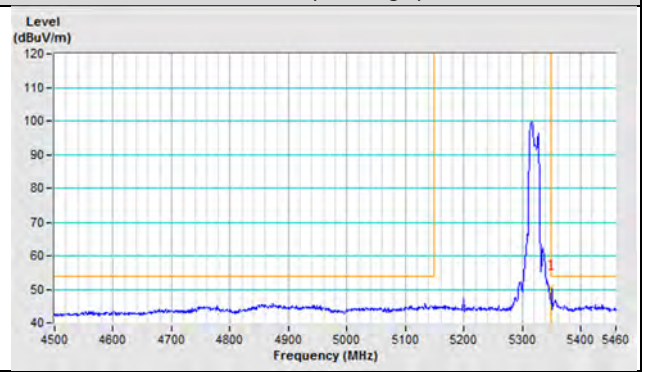
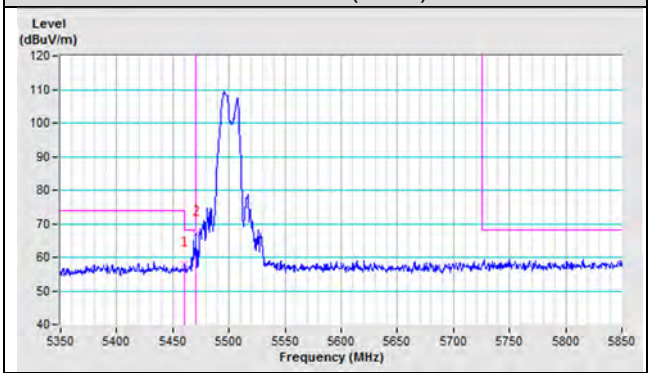
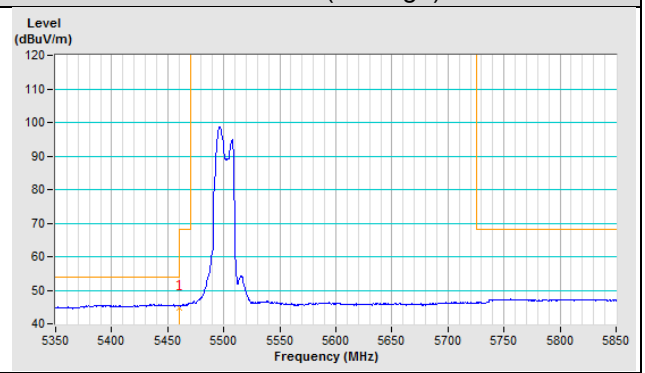
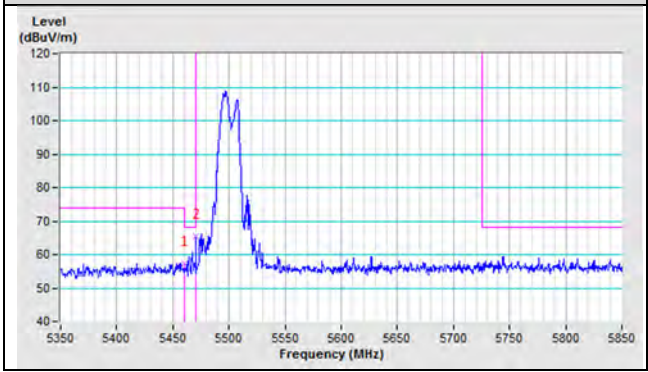
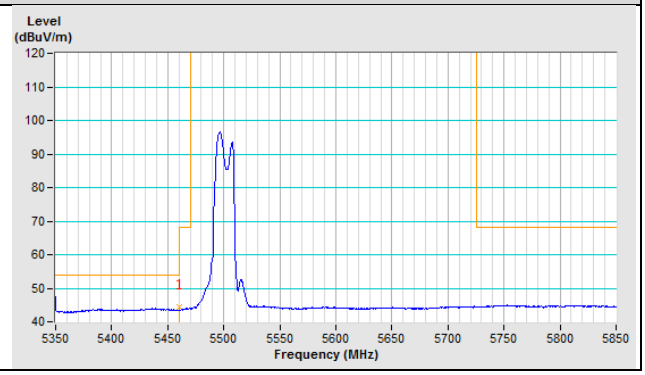


802.11ax (HE80)

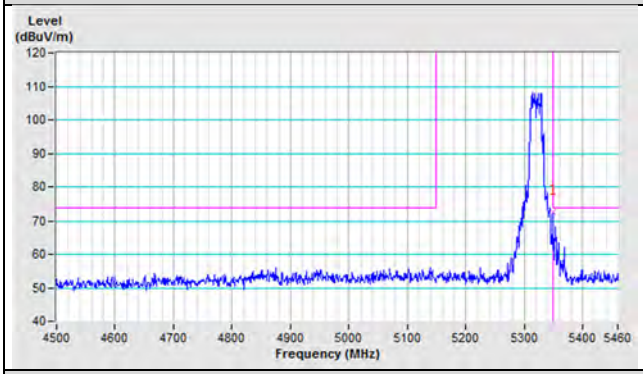
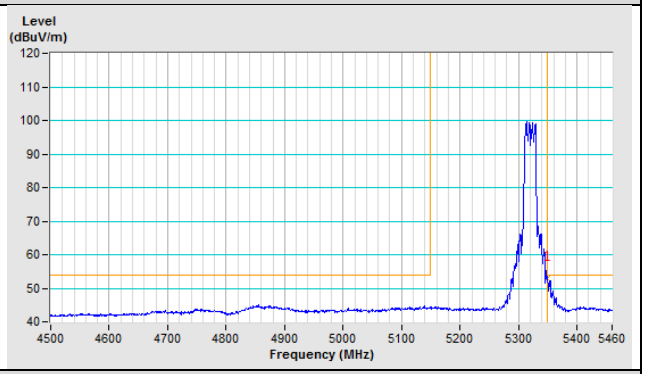
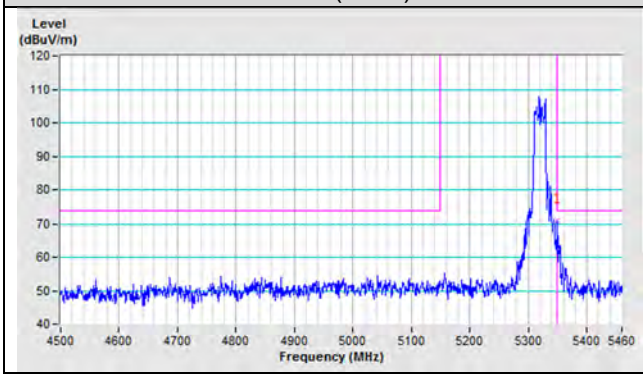
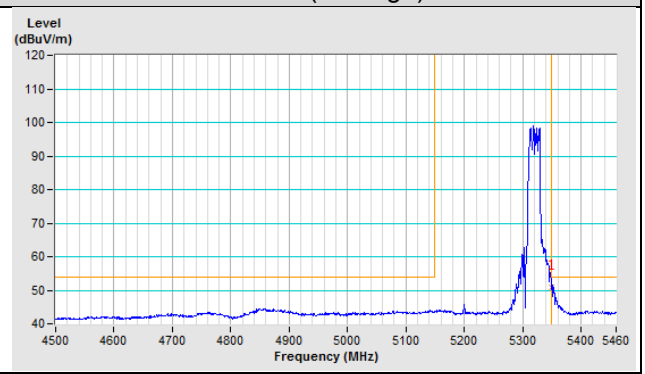
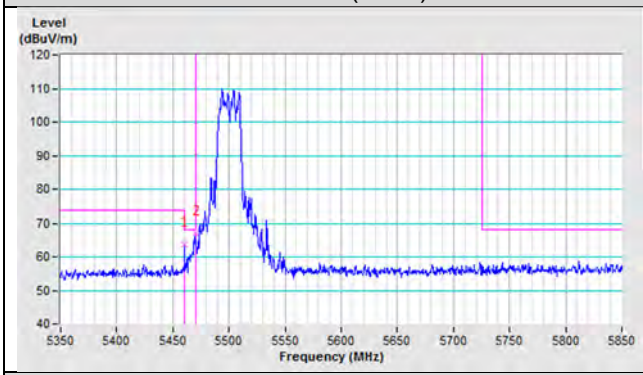
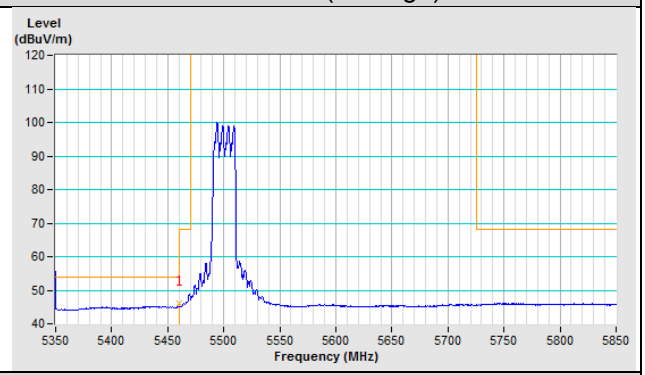
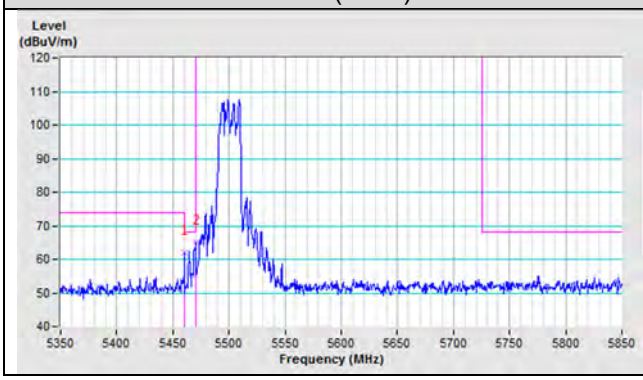
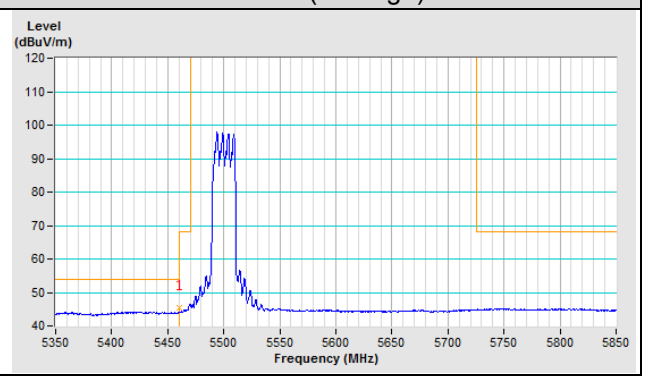
Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

4TX

802.11a

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

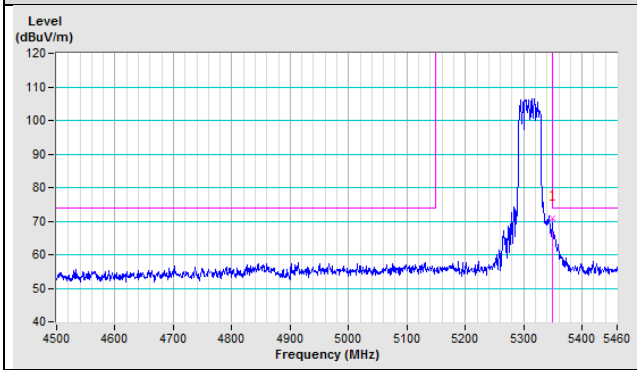
802.11ax (HE20)

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

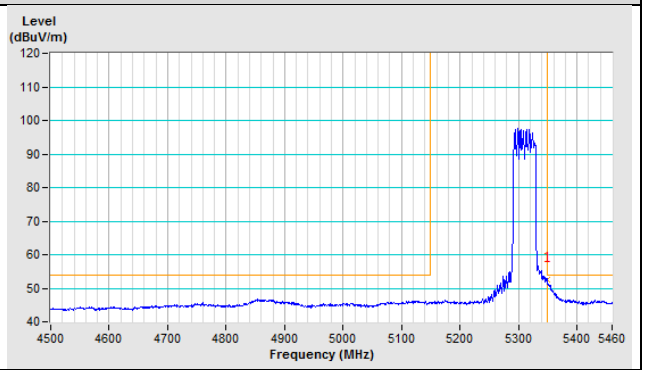
802.11ax (HE40)

Channel 62

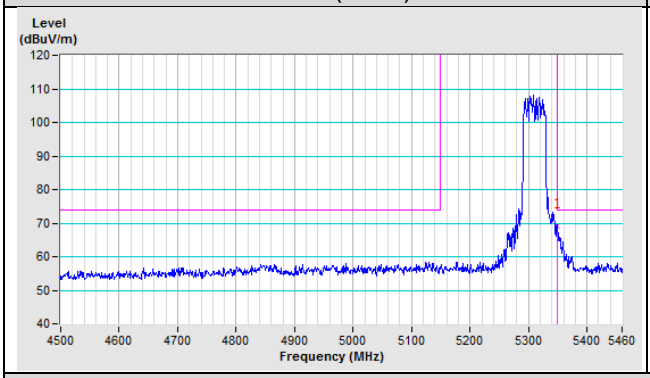
Horizontal (Peak)



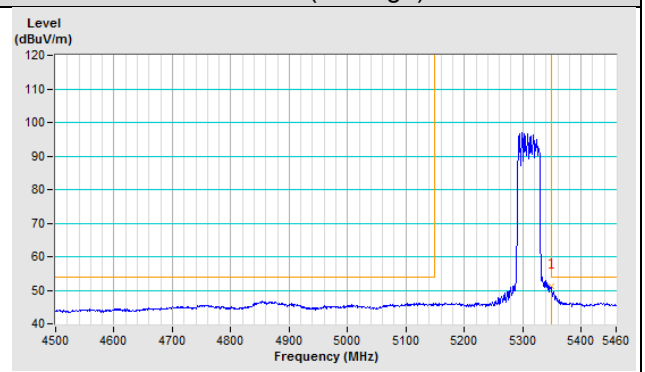
Horizontal (Average)



Vertical (Peak)

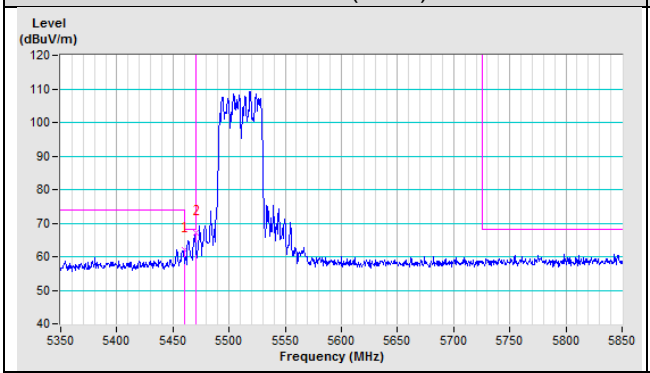


Vertical (Average)

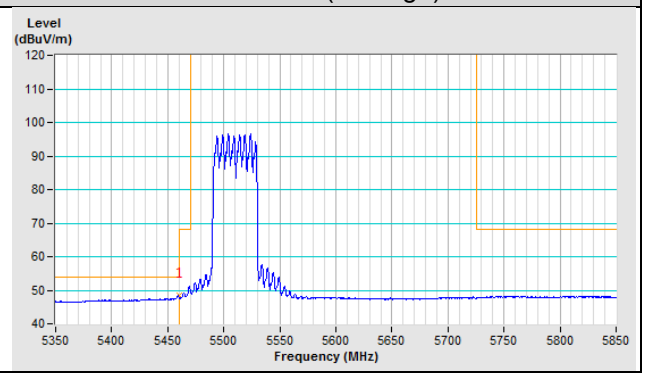


Channel 102

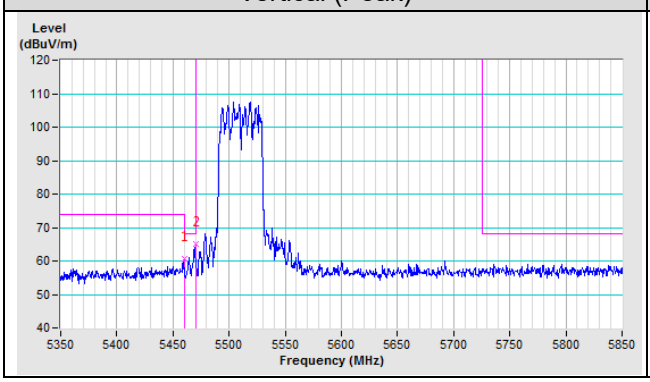
Horizontal (Peak)



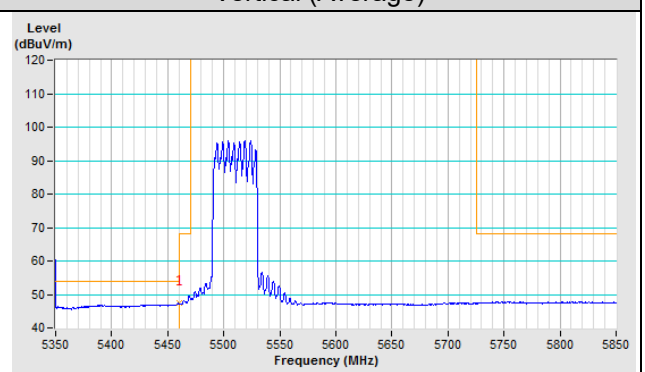
Horizontal (Average)



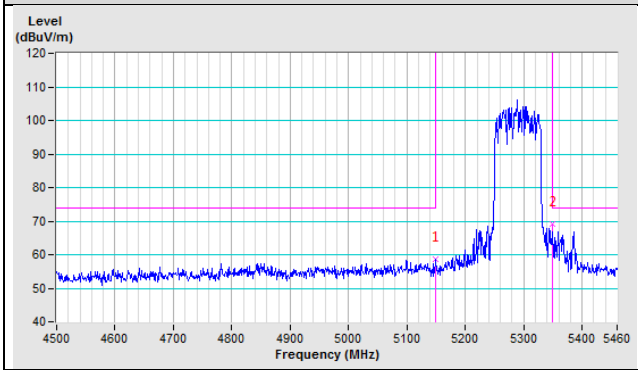
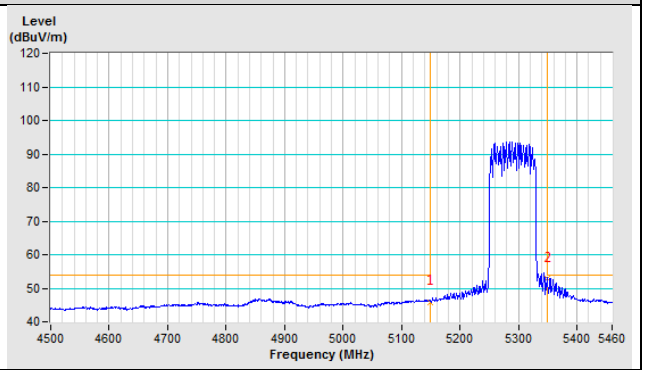
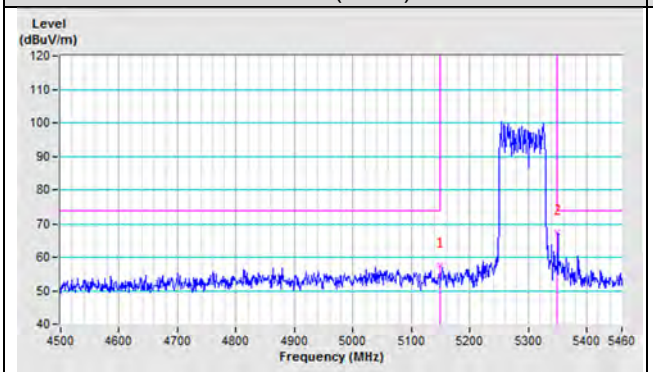
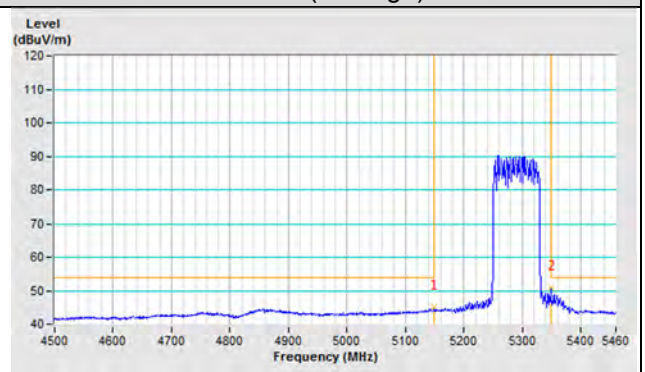
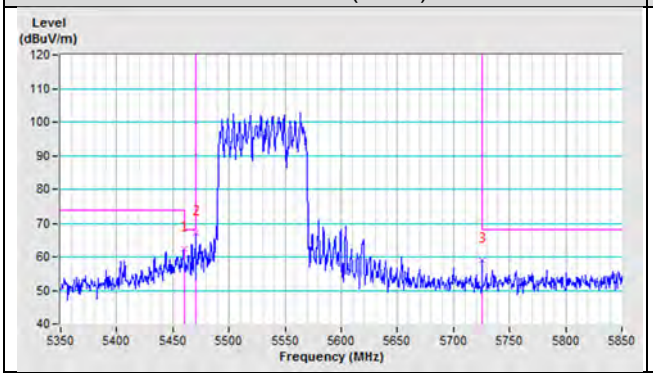
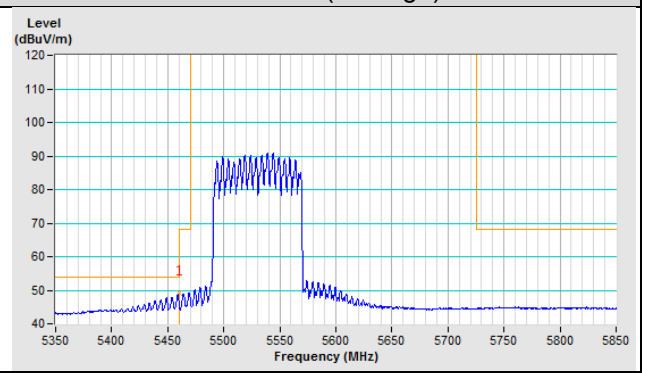
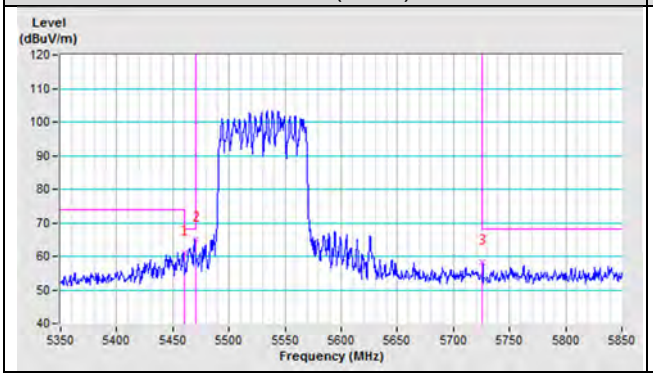
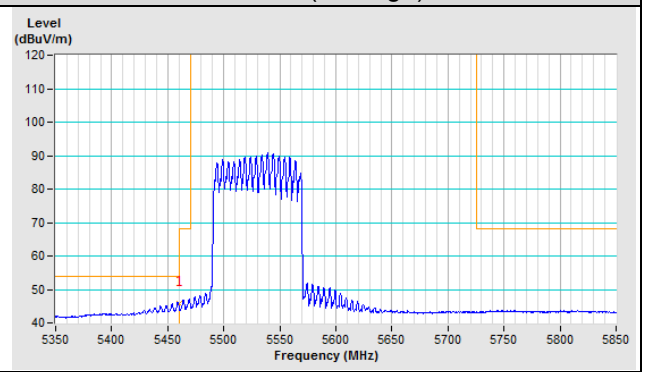
Vertical (Peak)



Vertical (Average)



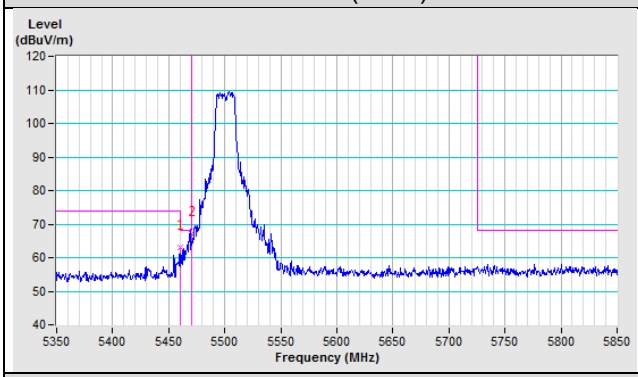
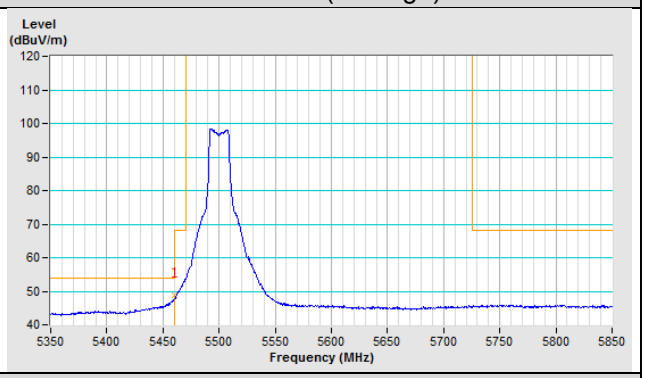
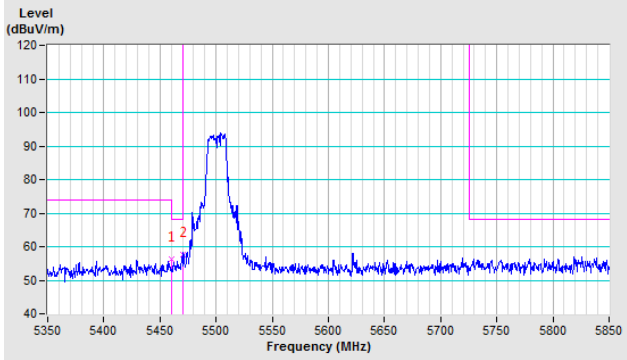
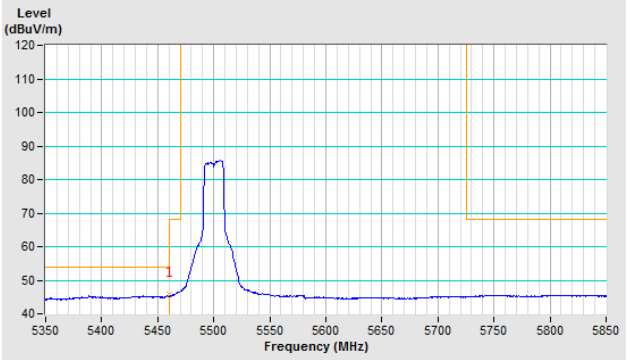
802.11ax (HE80)

Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

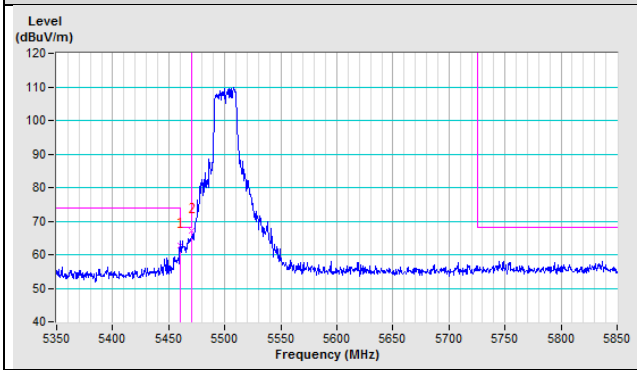
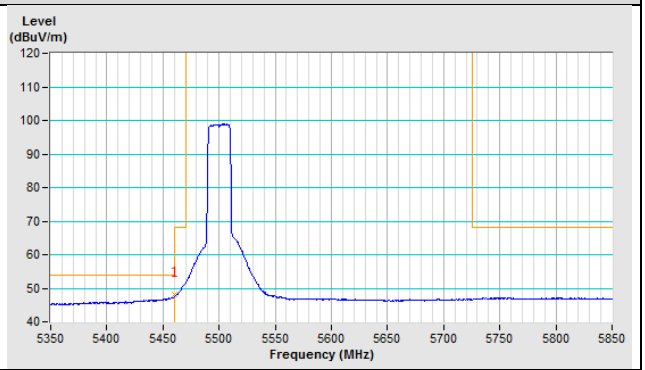
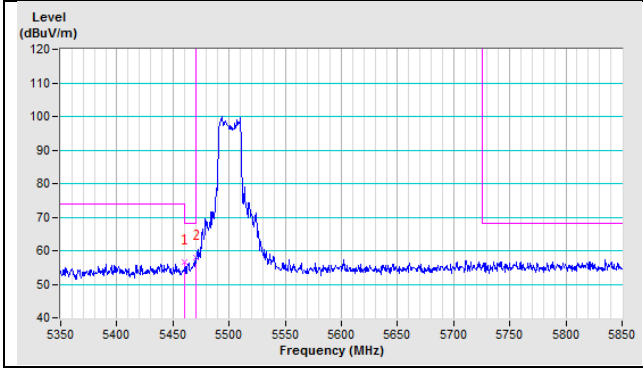
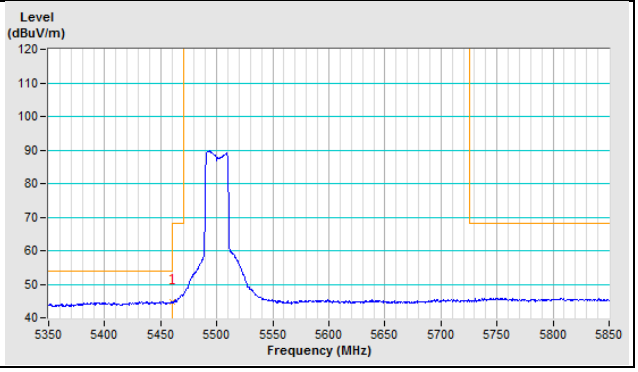
Test Mode C (Internal antenna + Eth8 Radio)

1TX

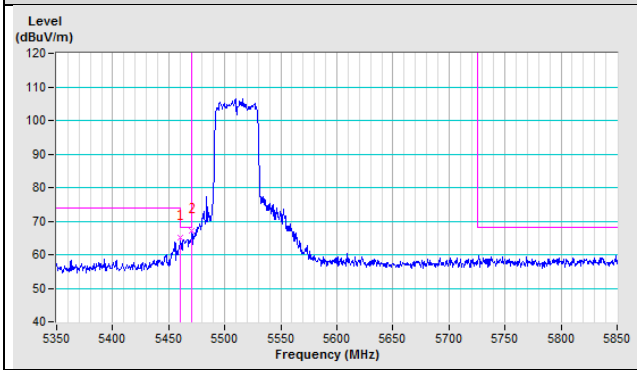
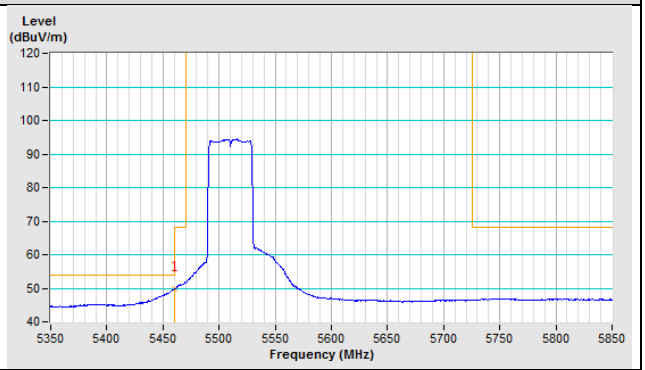
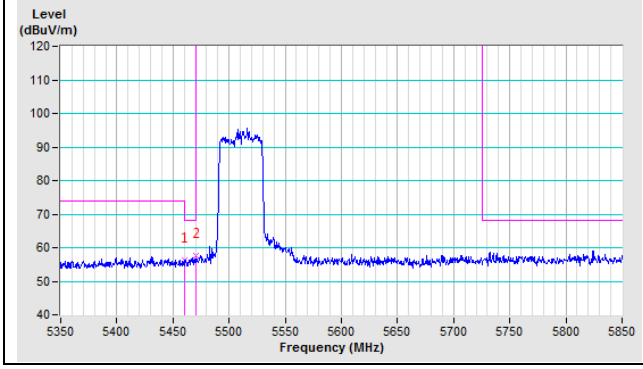
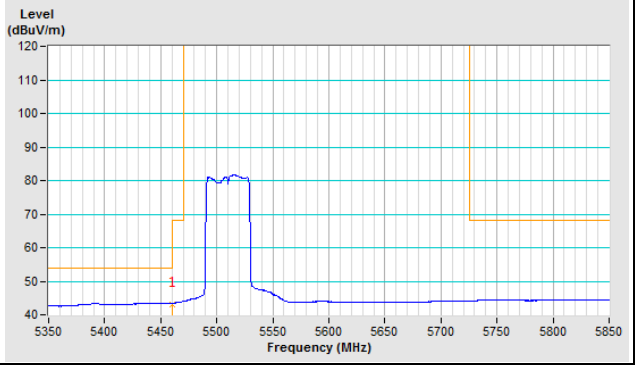
802.11a

Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

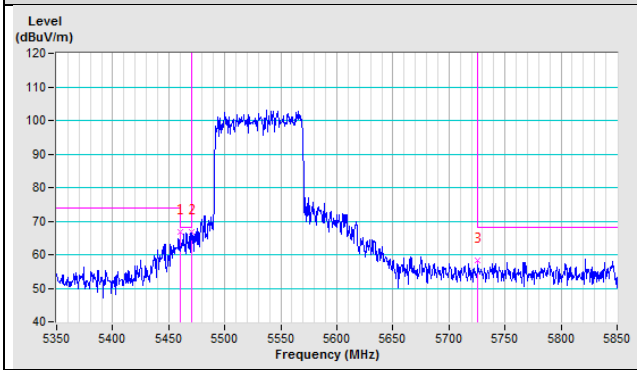
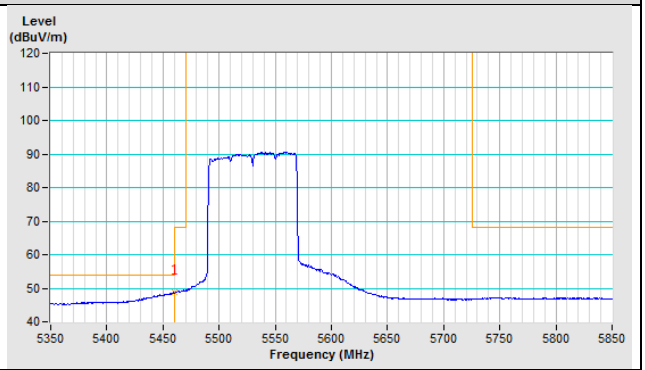
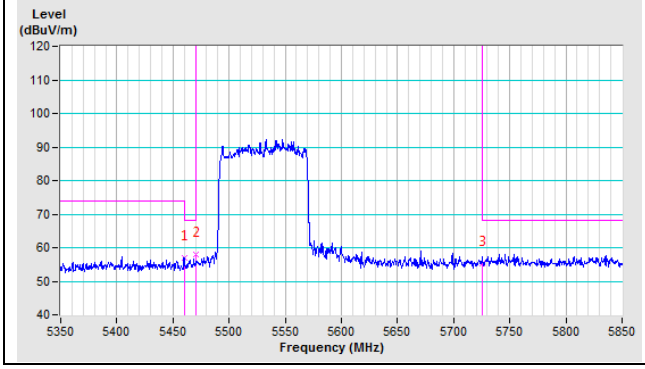
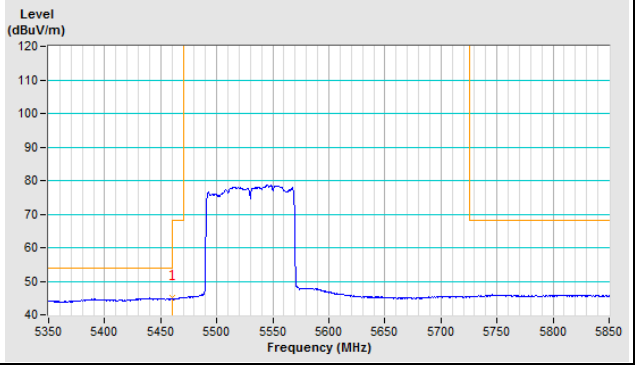
802.11ax (HE20)

Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE40)

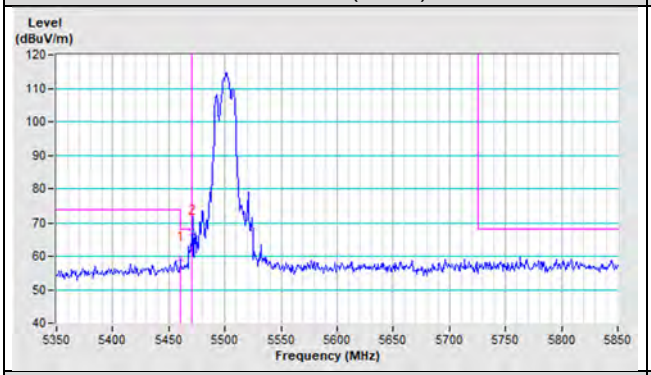
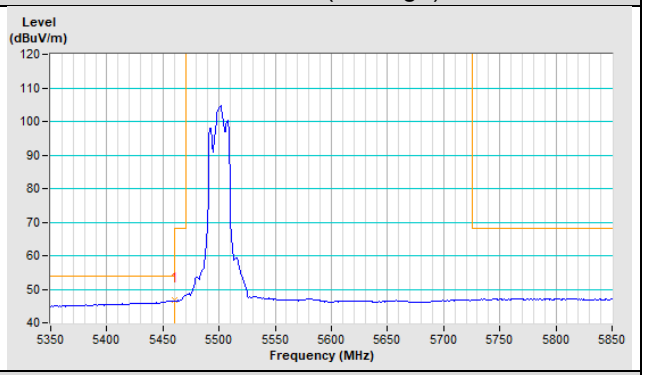
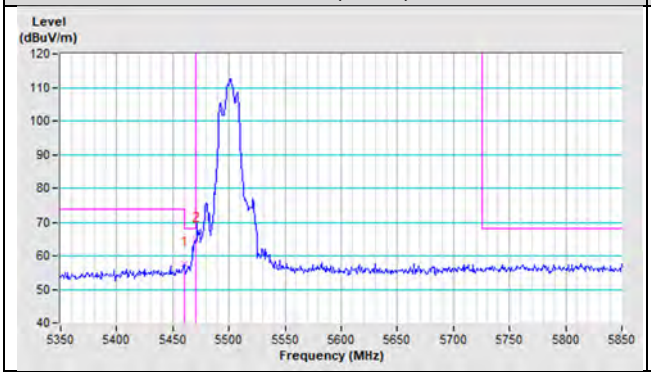
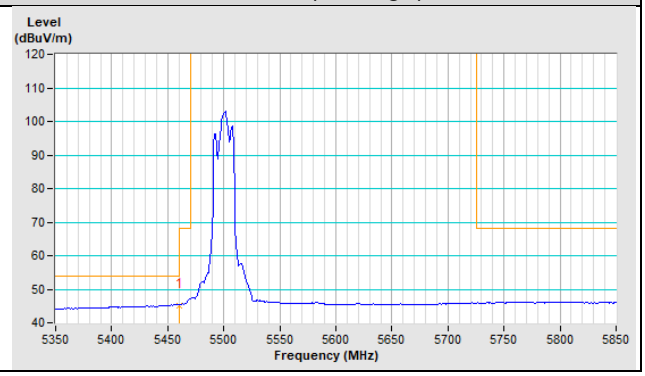
Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE80)

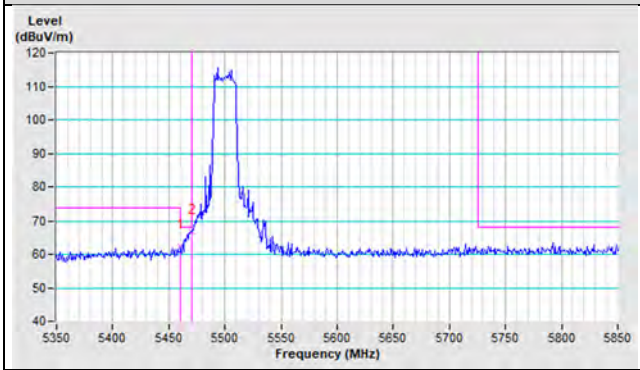
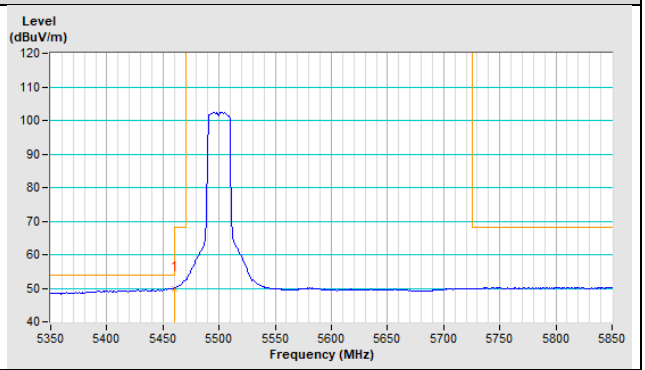
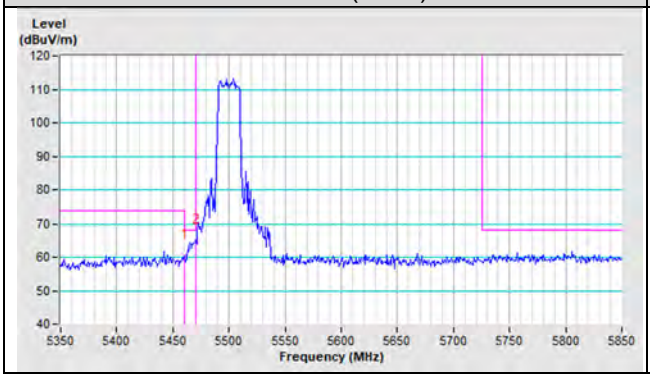
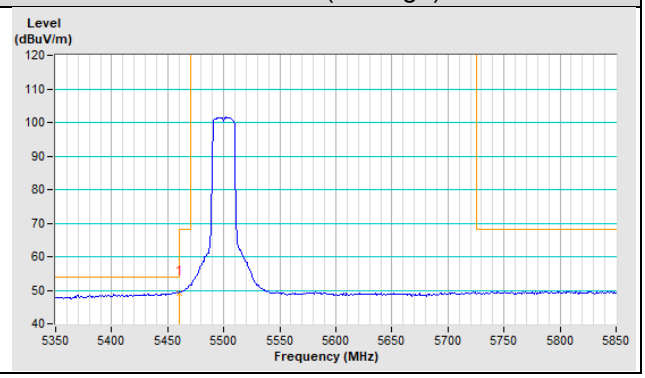
Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

2TX

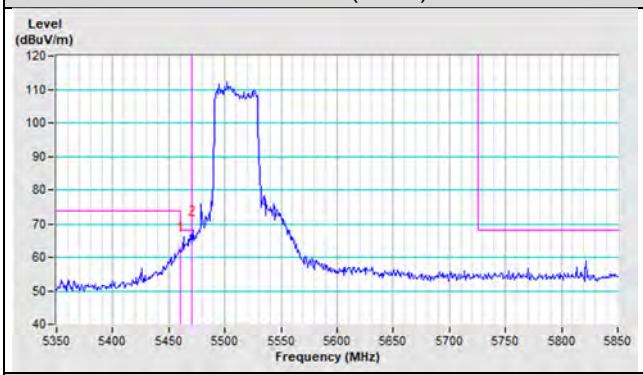
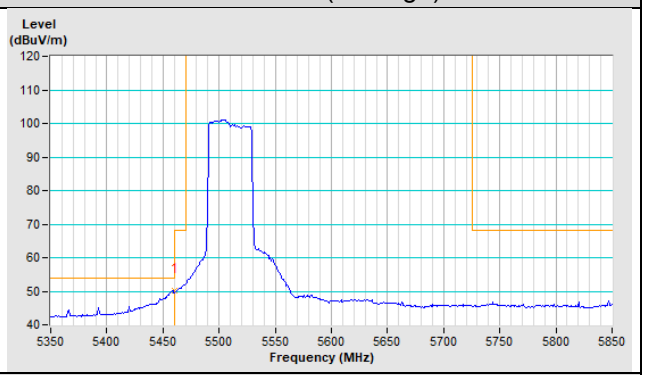
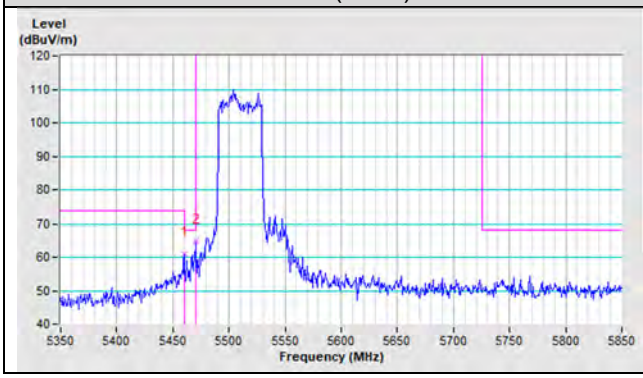
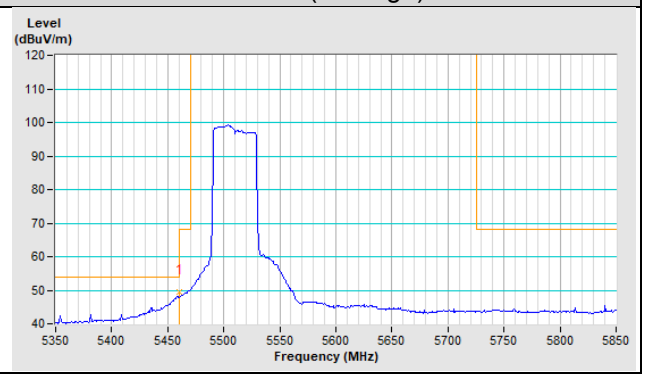
802.11a

Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

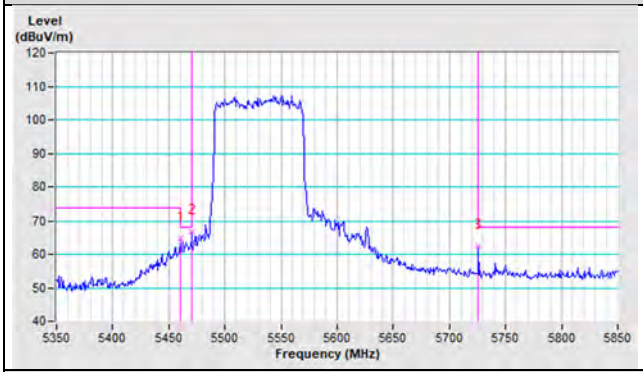
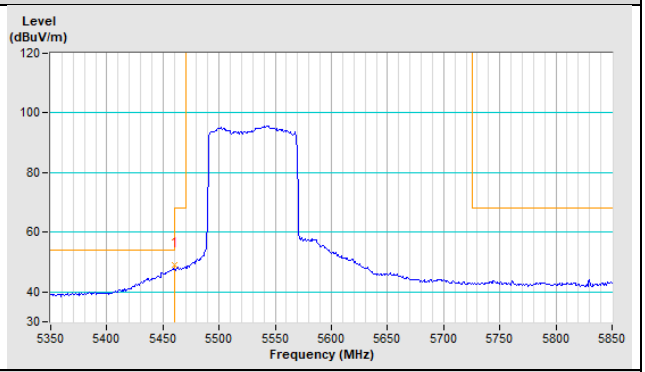
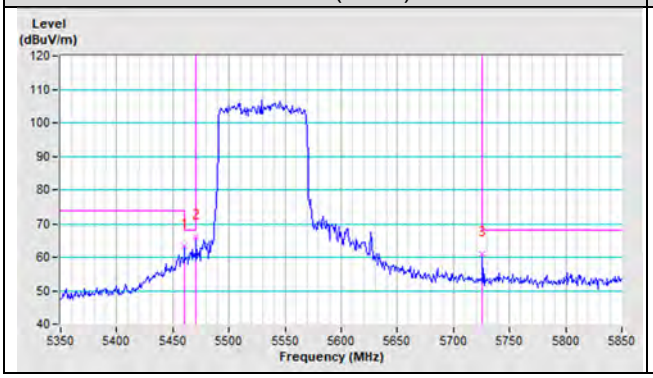
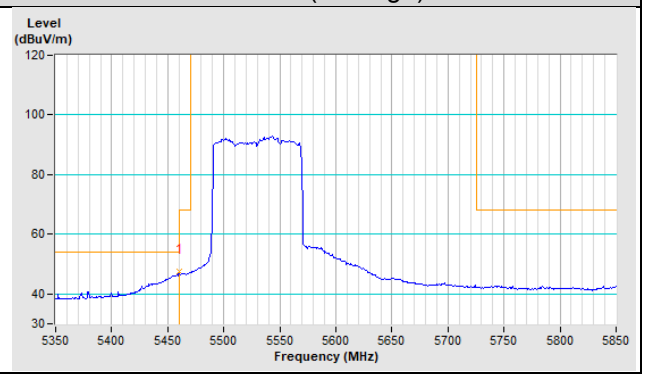
802.11ax (HE20)

Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Horizontal (Peak)	Horizontal (Average)
	

802.11ax (HE40)

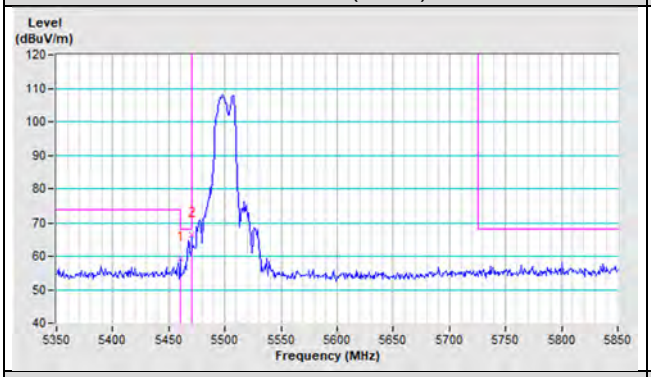
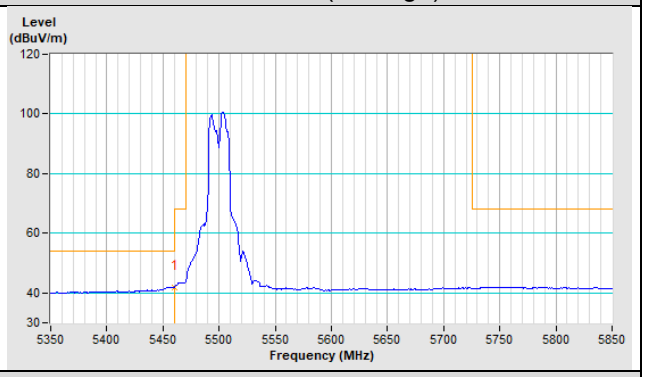
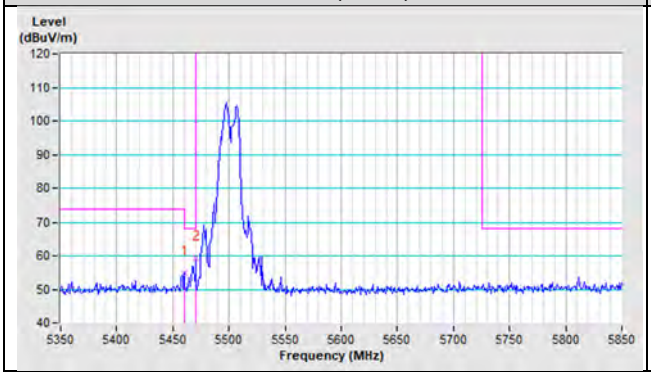
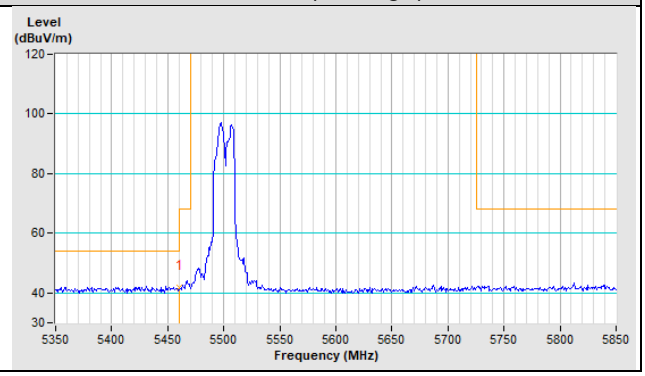
Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE80)

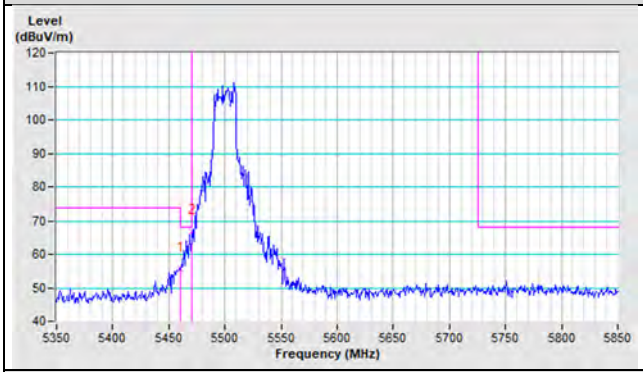
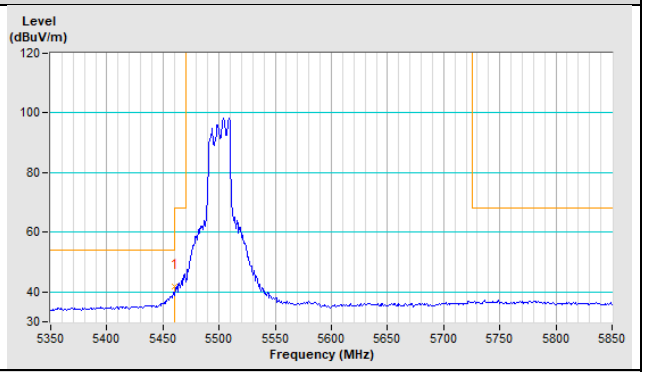
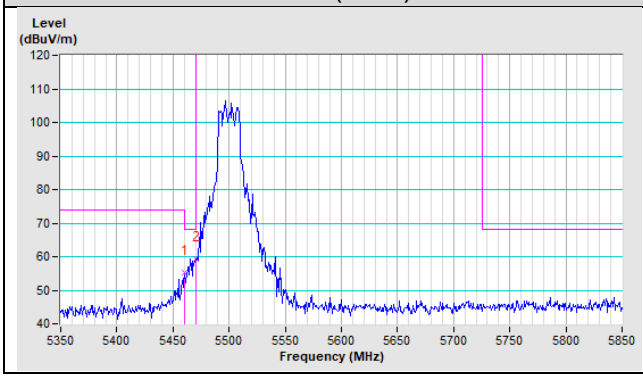
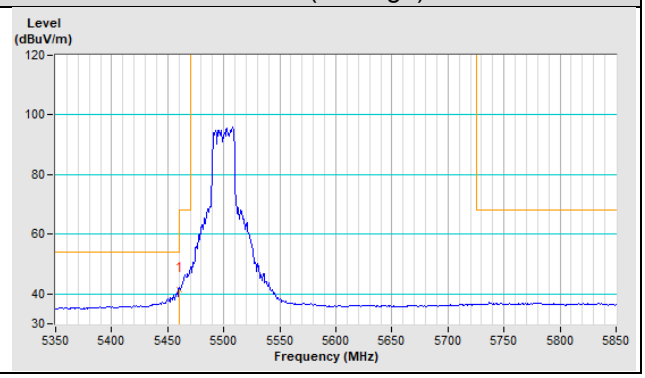
Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

3TX

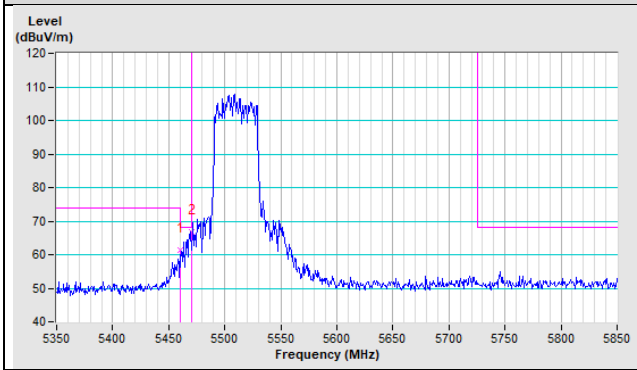
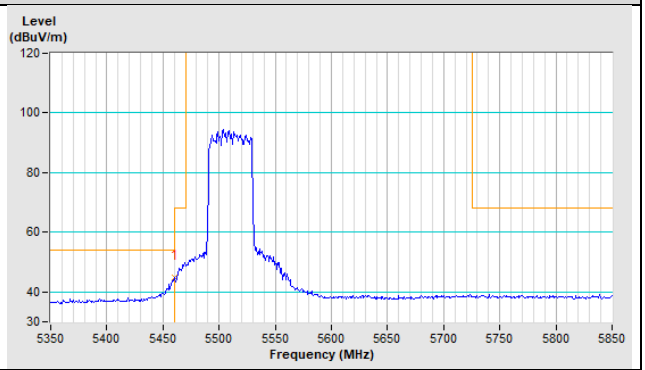
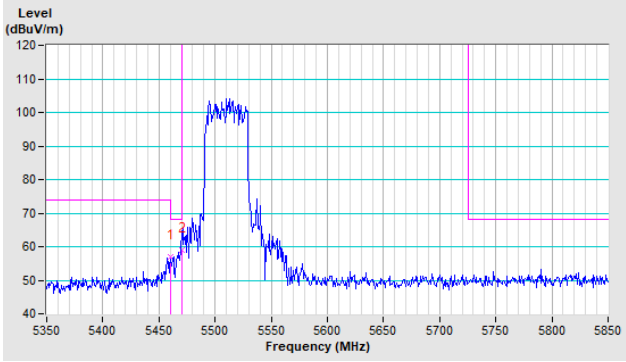
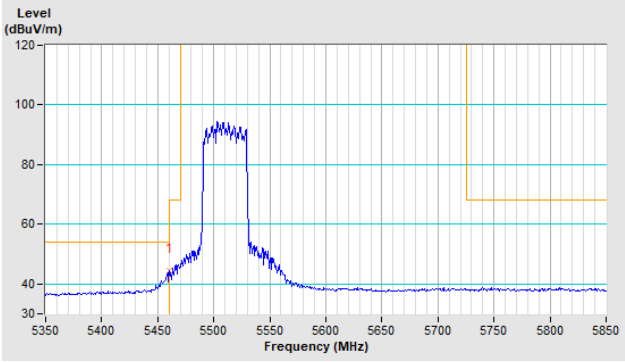
802.11a

Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

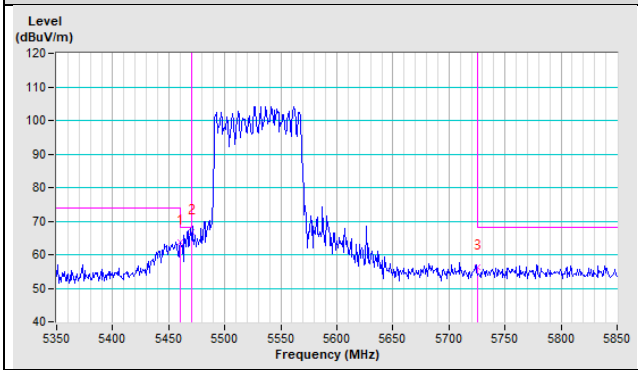
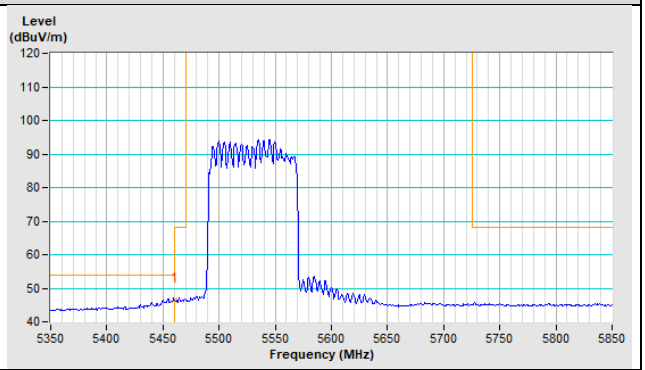
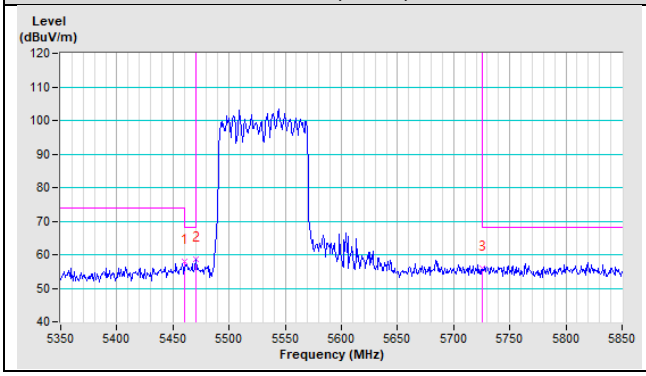
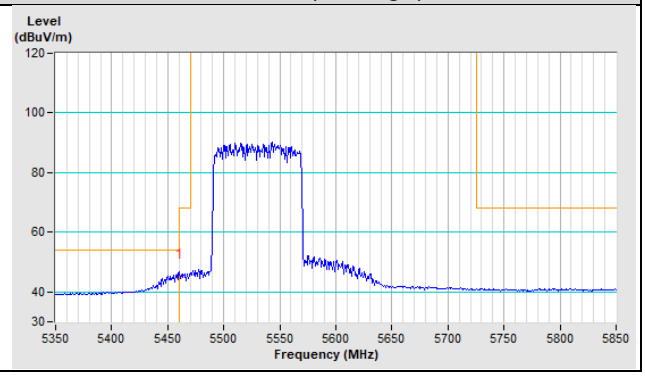
802.11ax (HE20)

Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE40)

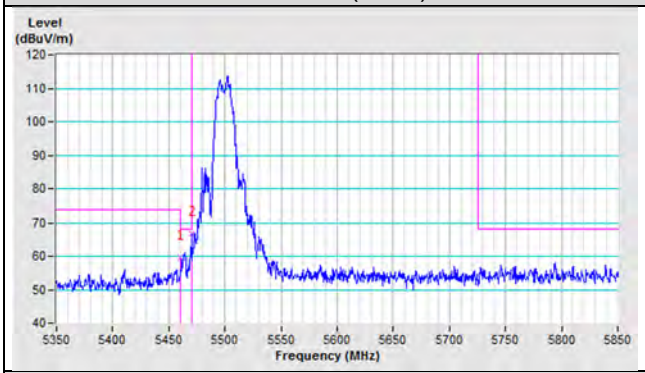
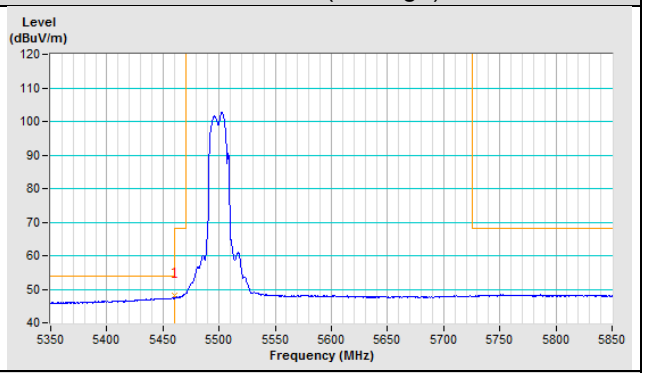
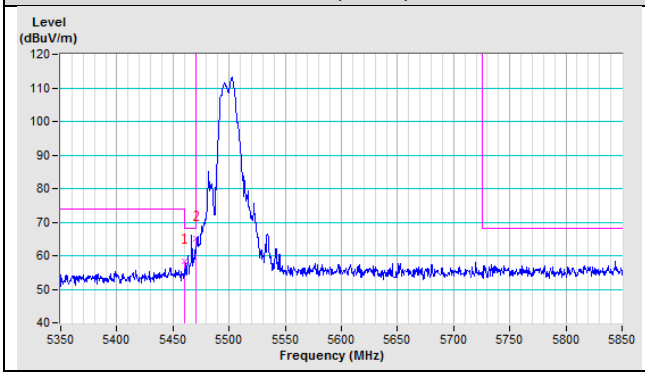
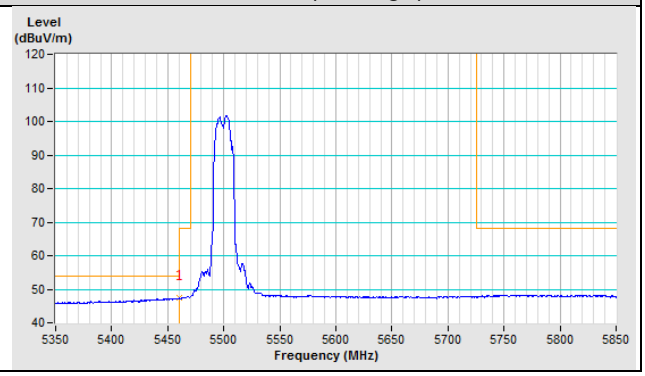
Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE80)

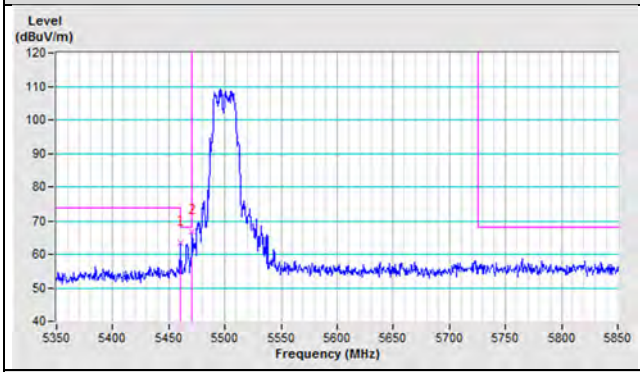
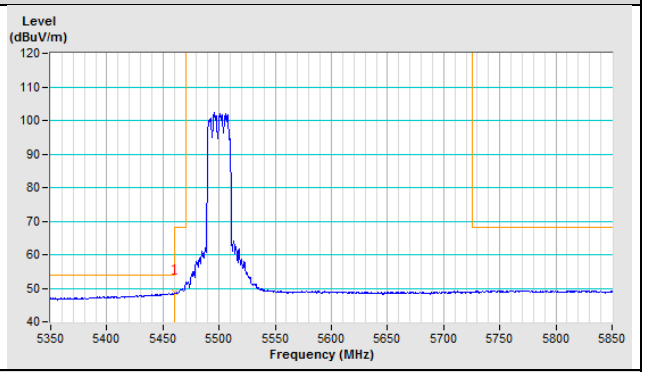
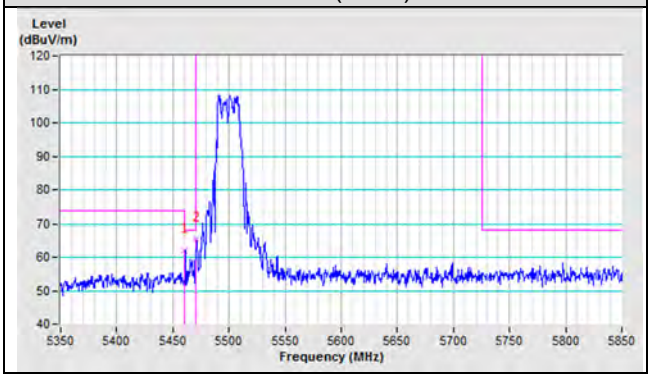
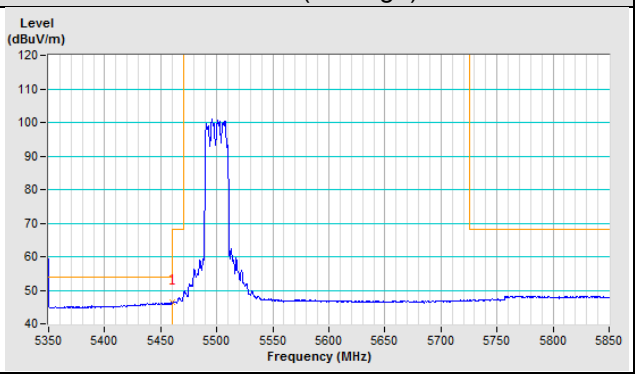
Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

4TX

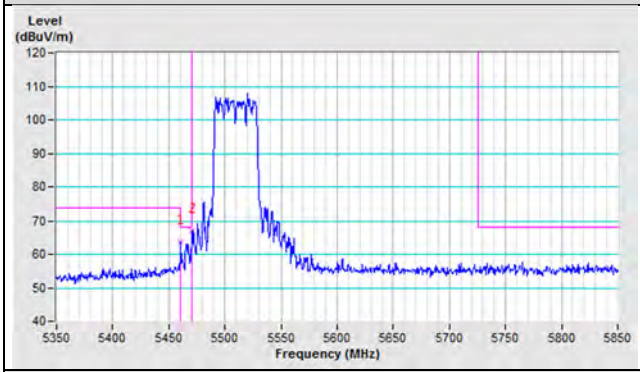
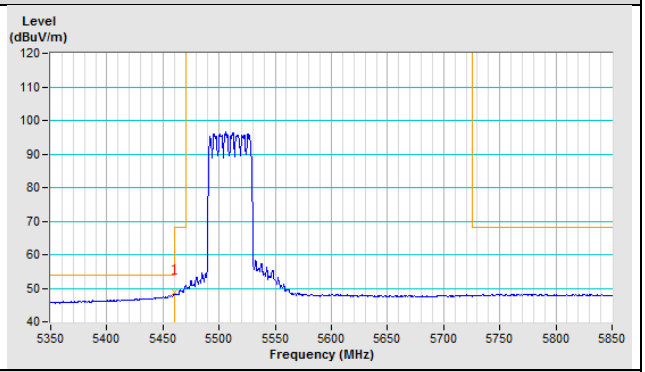
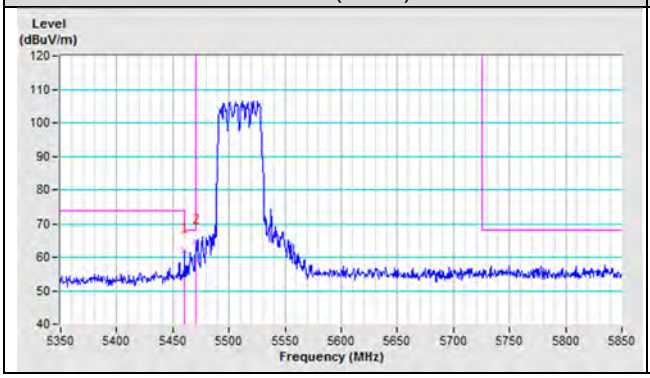
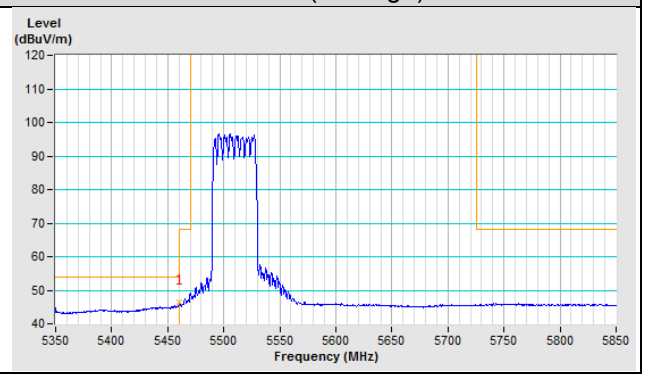
802.11a

Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

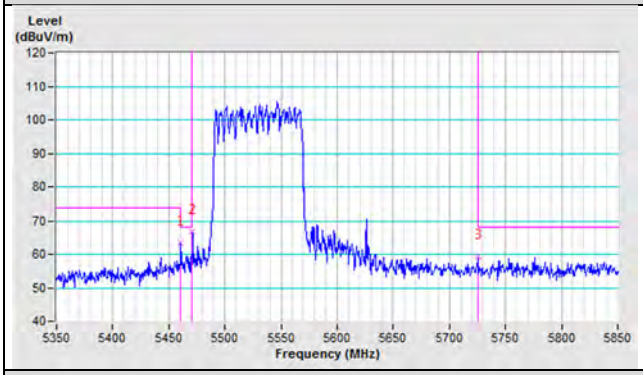
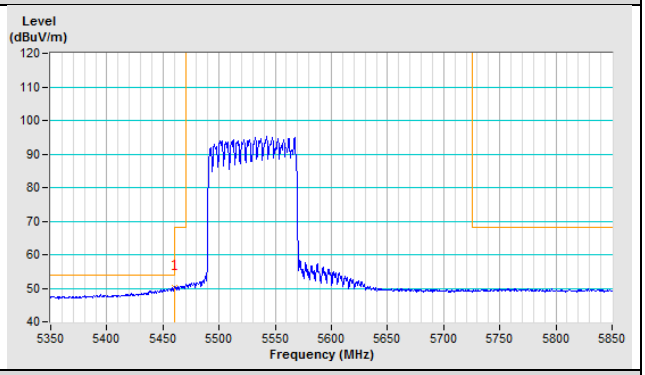
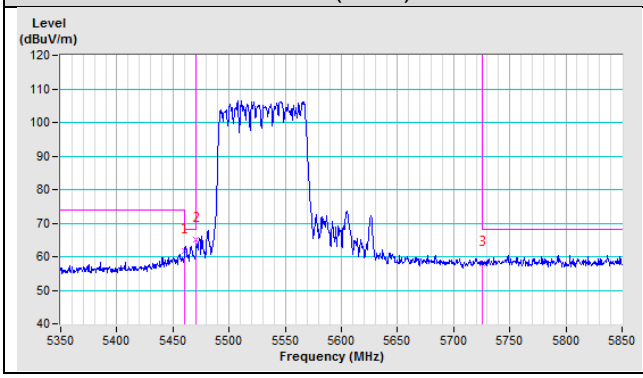
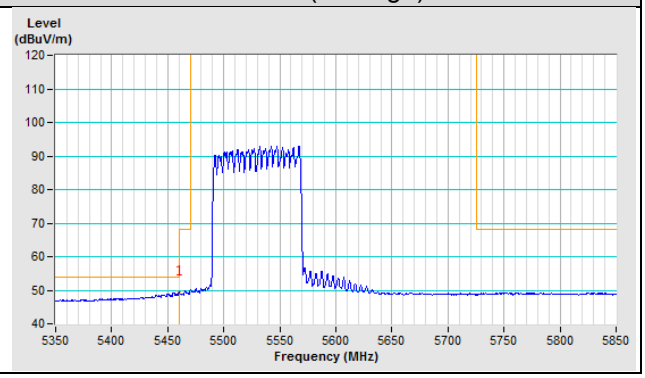
802.11ax (HE20)

Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE40)

Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE80)

Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

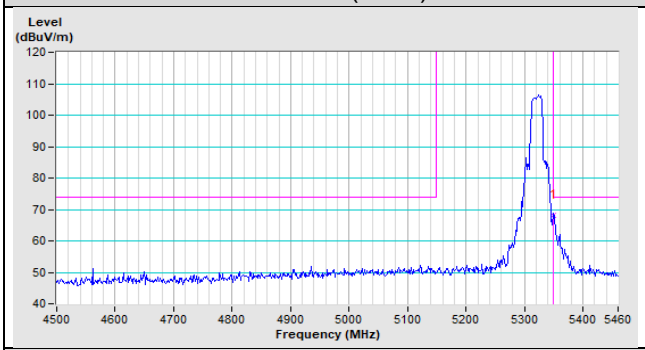
Test Mode E (External antenna – PN: ATS-OO-245-46-4RPSP-36 + Eth6 Radio)

1TX

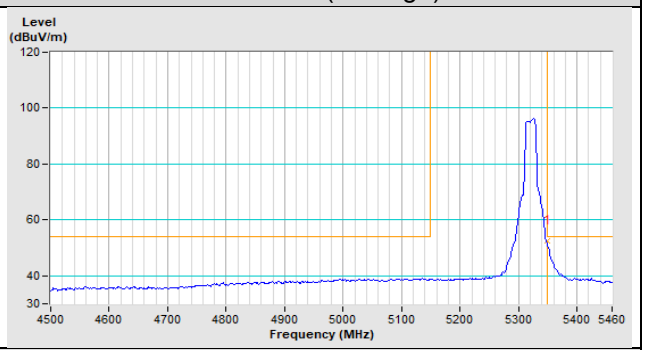
802.11a

Channel 64

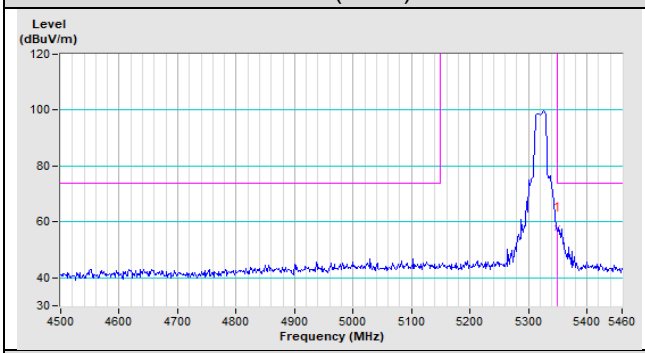
Horizontal (Peak)



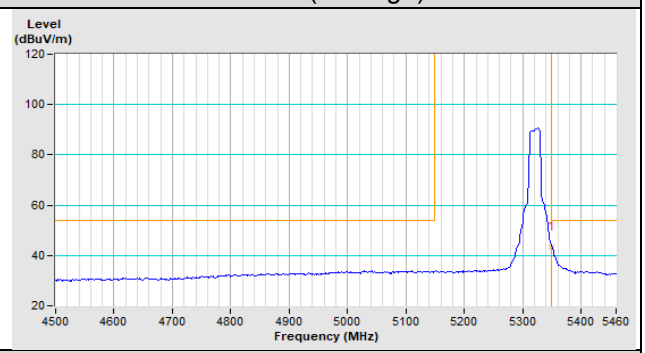
Horizontal (Average)



Vertical (Peak)

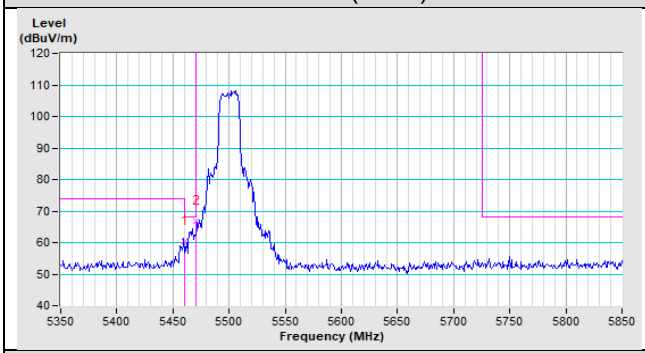


Vertical (Average)

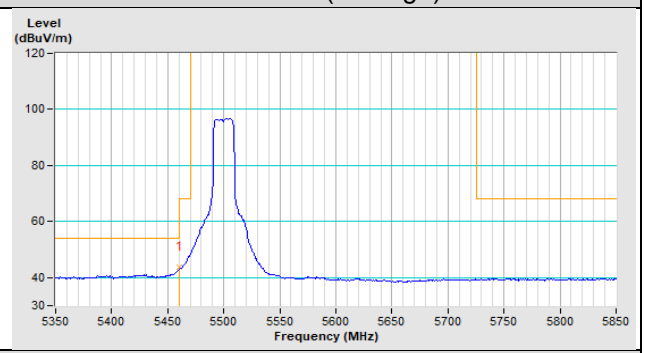


Channel 100

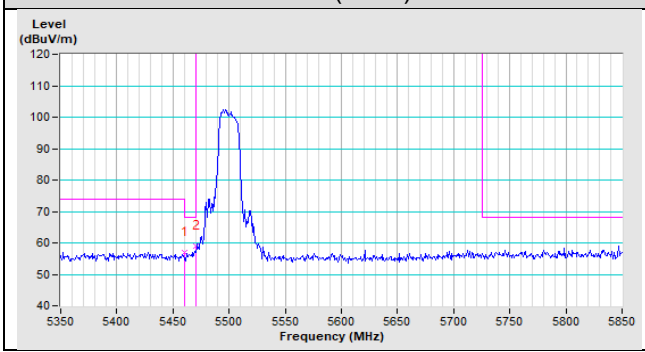
Horizontal (Peak)



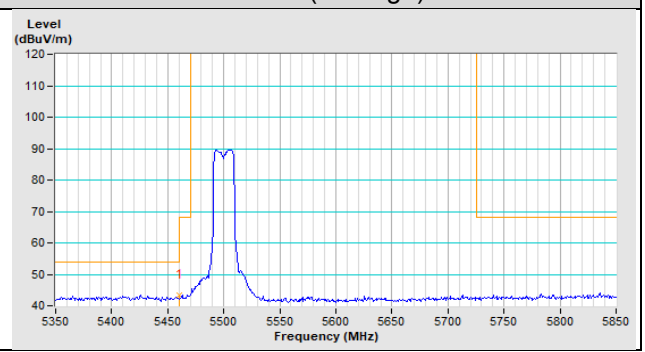
Horizontal (Average)



Vertical (Peak)



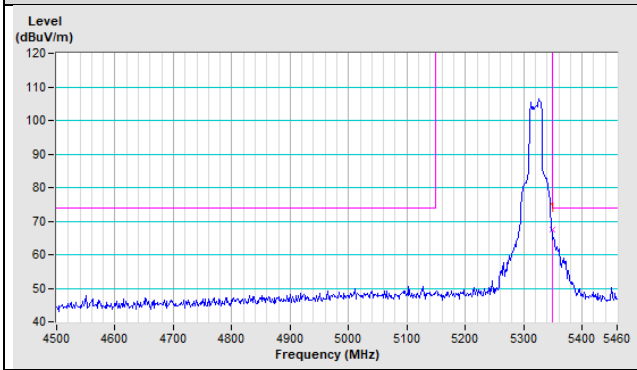
Vertical (Average)



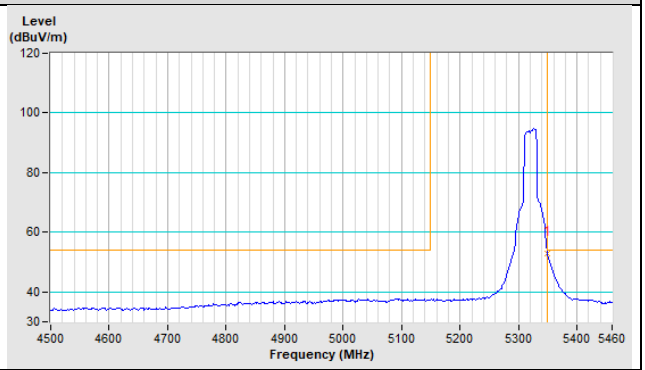
802.11ax (HE20)

Channel 64

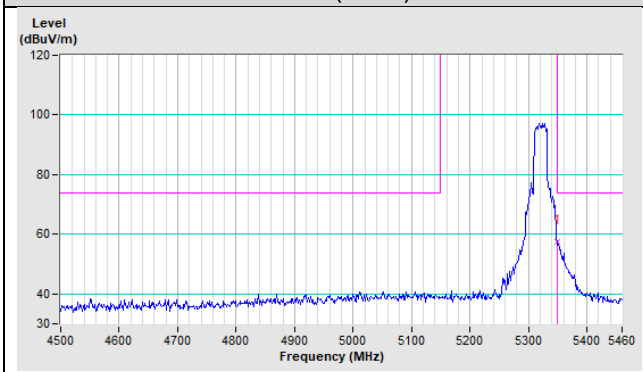
Horizontal (Peak)



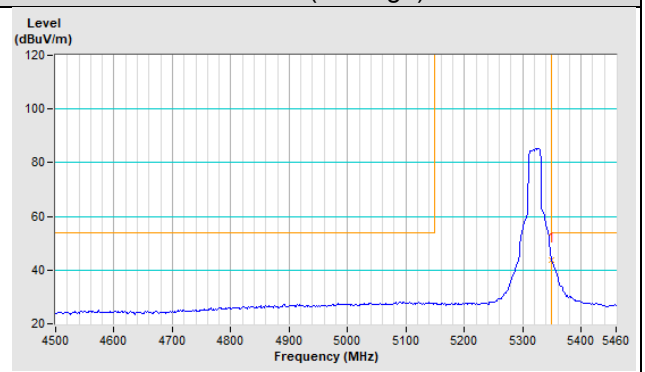
Horizontal (Average)



Vertical (Peak)

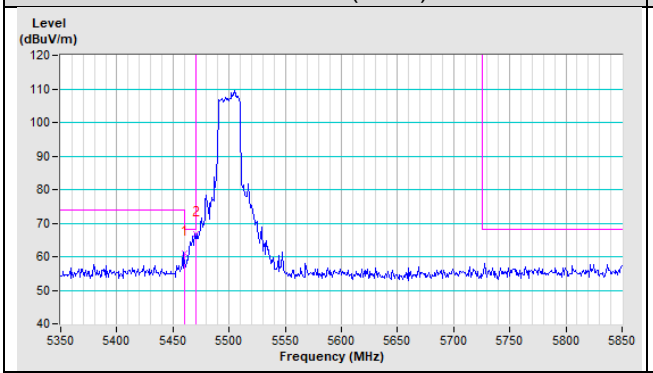


Vertical (Average)

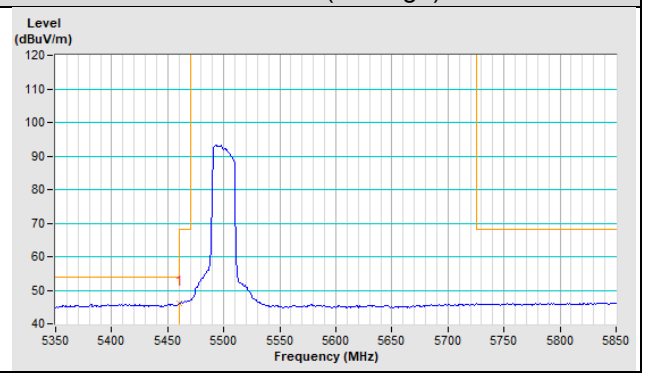


Channel 100

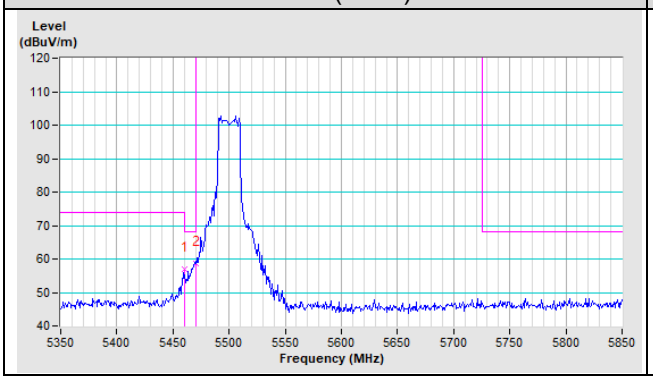
Horizontal (Peak)



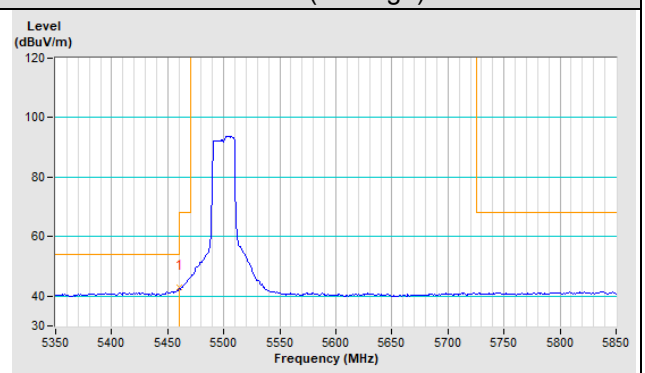
Horizontal (Average)



Vertical (Peak)



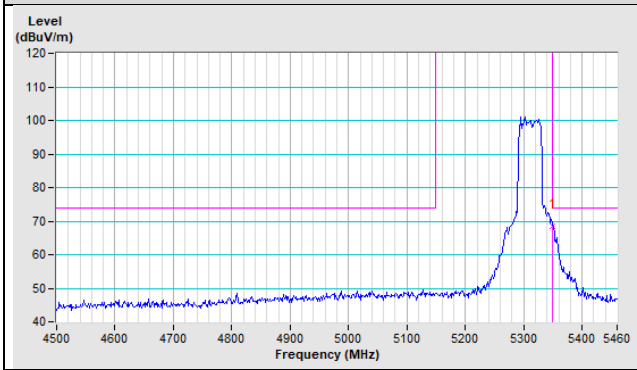
Vertical (Average)



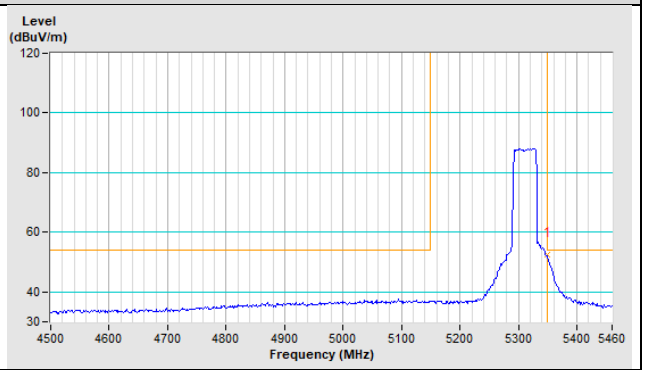
802.11ax (HE40)

Channel 62

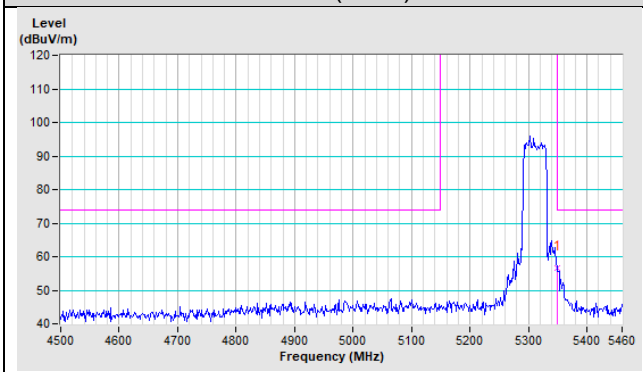
Horizontal (Peak)



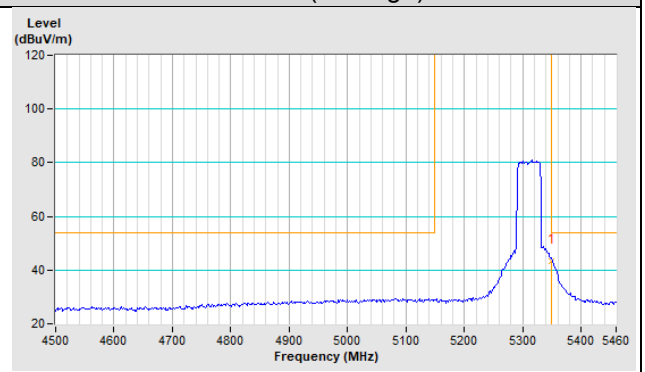
Horizontal (Average)



Vertical (Peak)

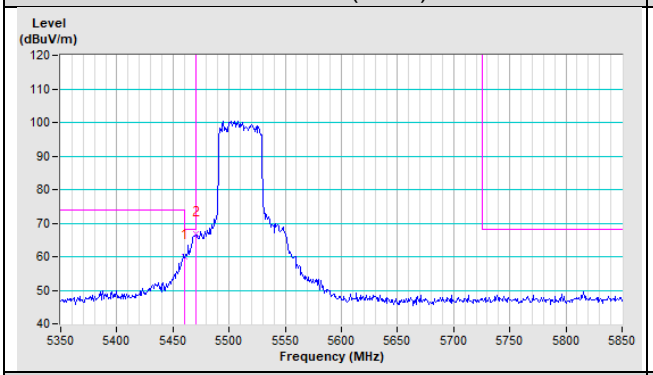


Vertical (Average)

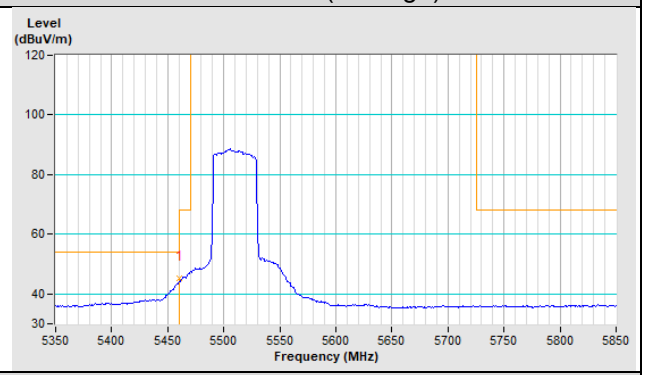


Channel 102

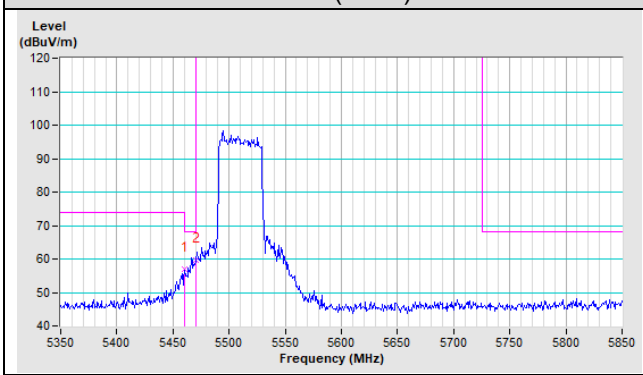
Horizontal (Peak)



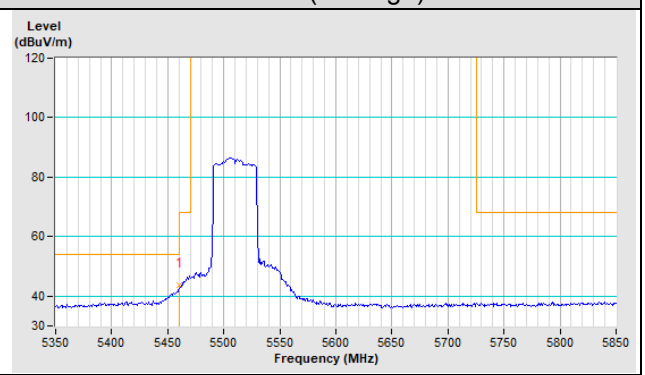
Horizontal (Average)



Vertical (Peak)



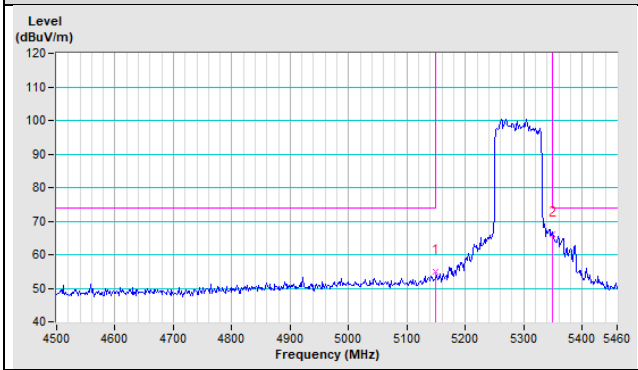
Vertical (Average)



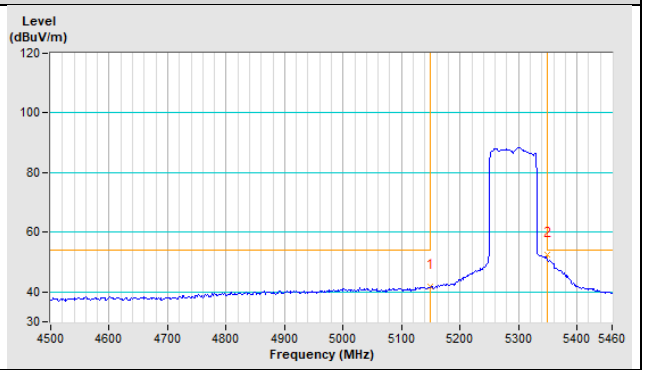
802.11ax (HE80)

Channel 58

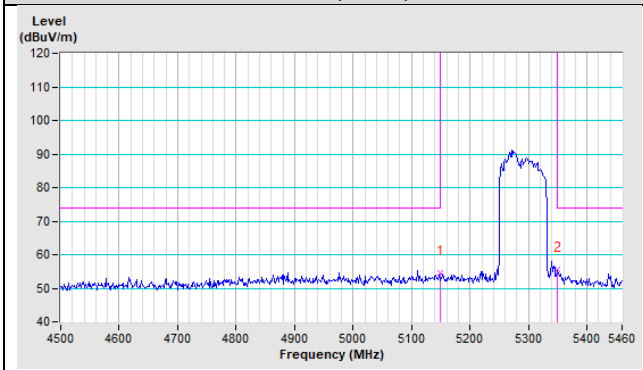
Horizontal (Peak)



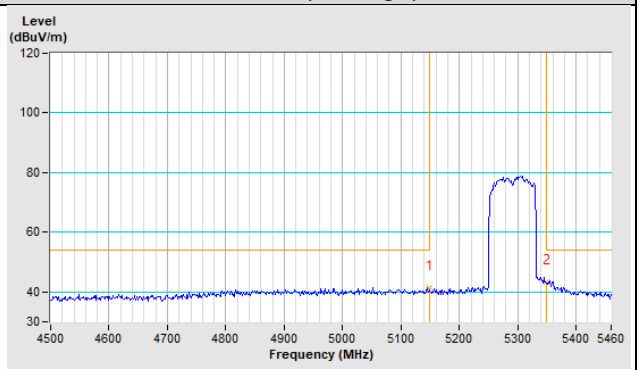
Horizontal (Average)



Vertical (Peak)

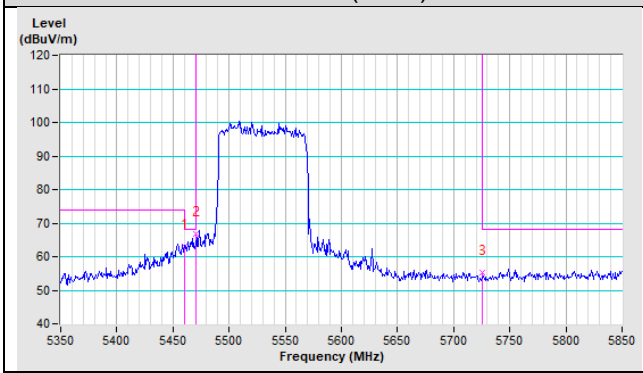


Vertical (Average)

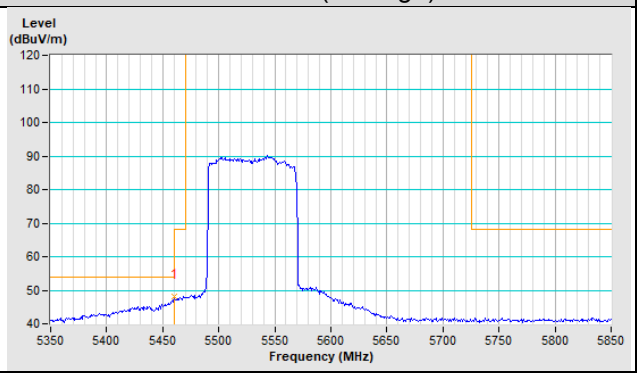


Channel 106

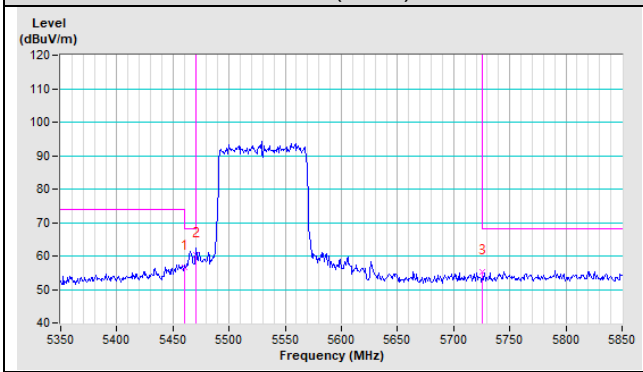
Horizontal (Peak)



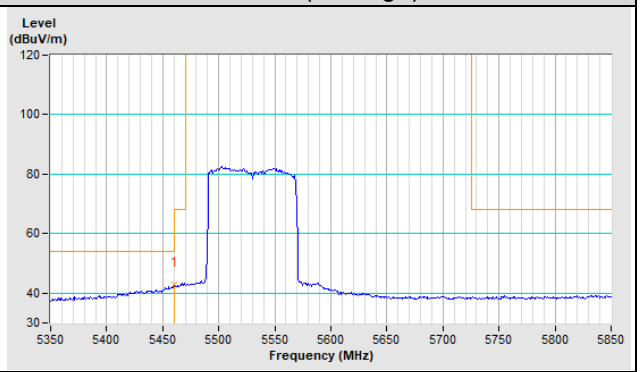
Horizontal (Average)



Vertical (Peak)

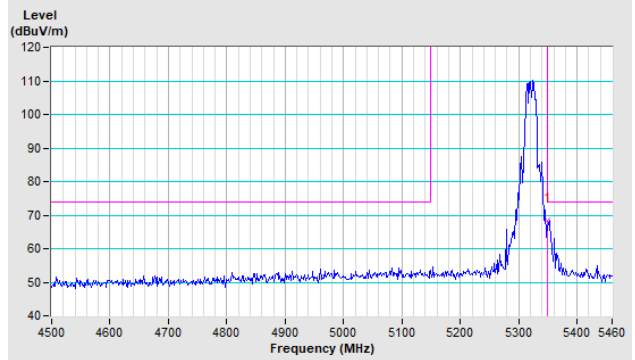
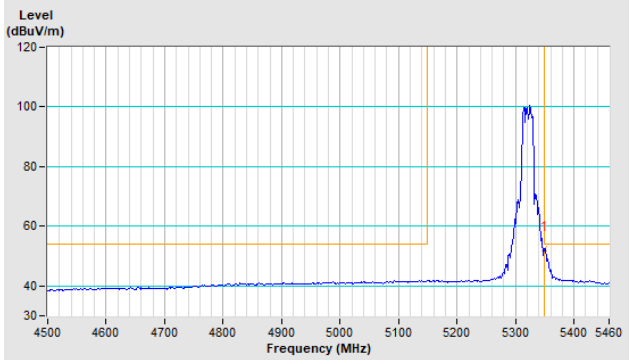
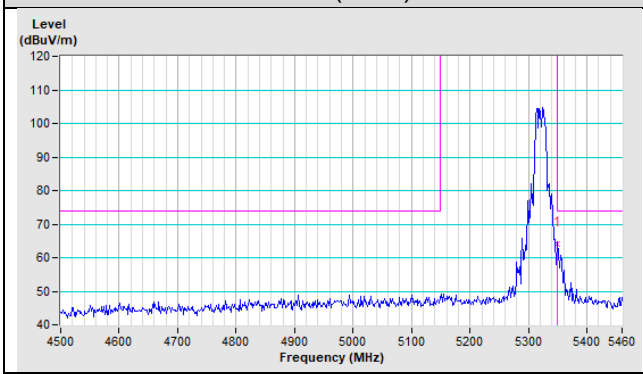
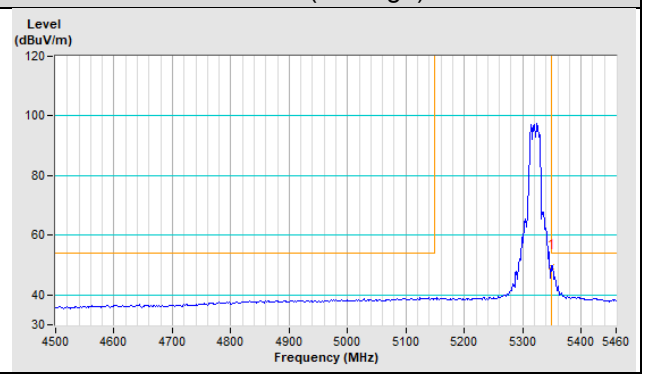
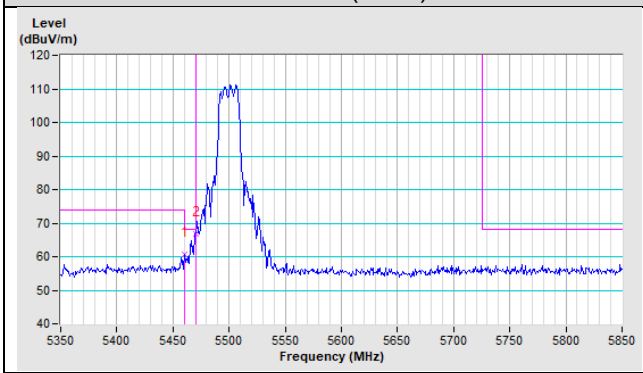
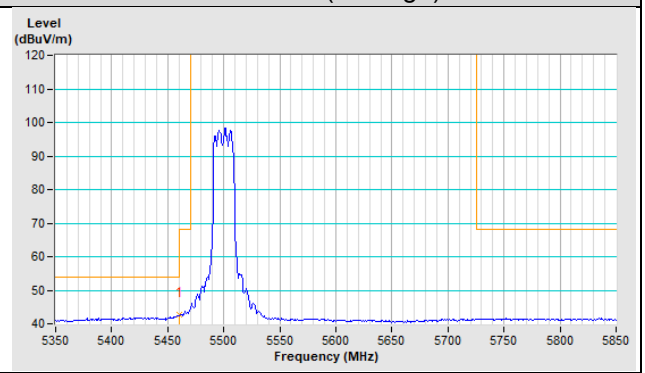
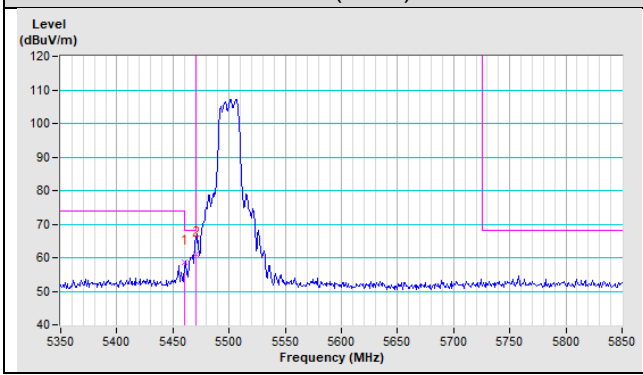
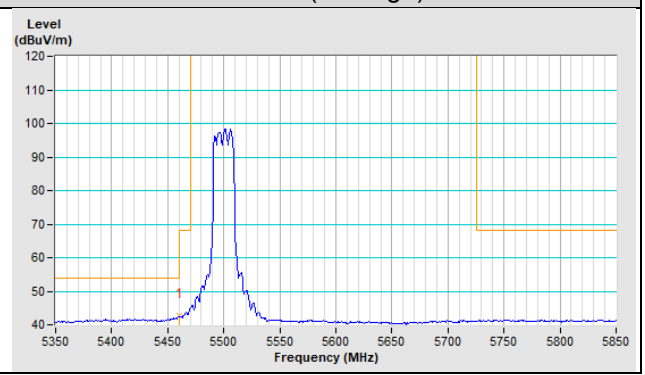


Vertical (Average)

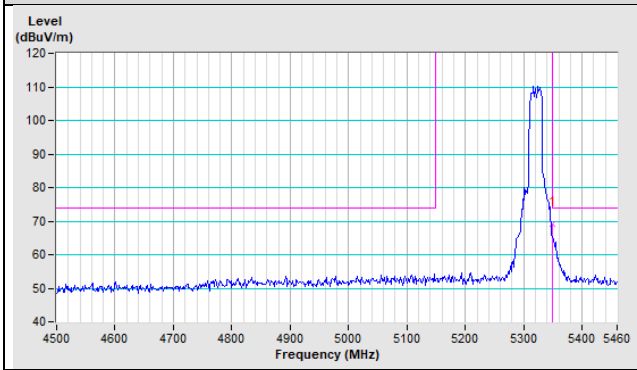
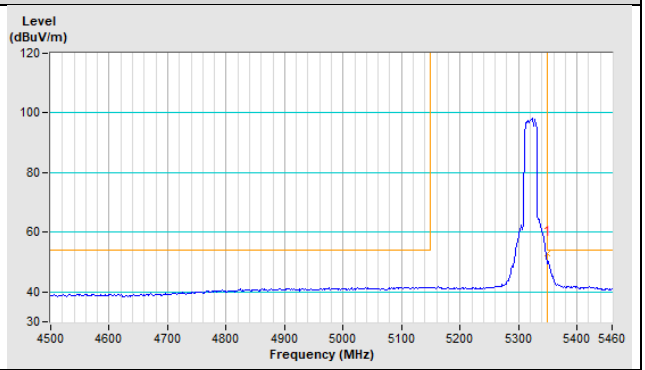
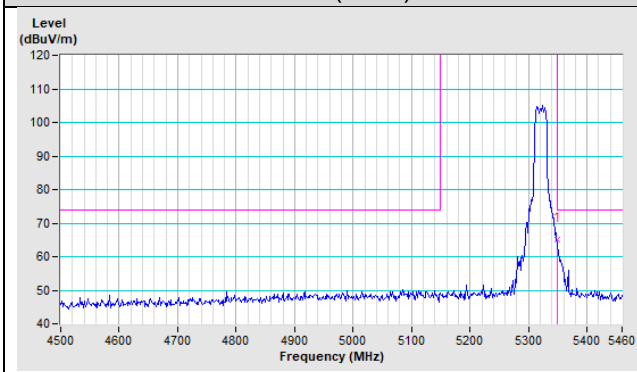
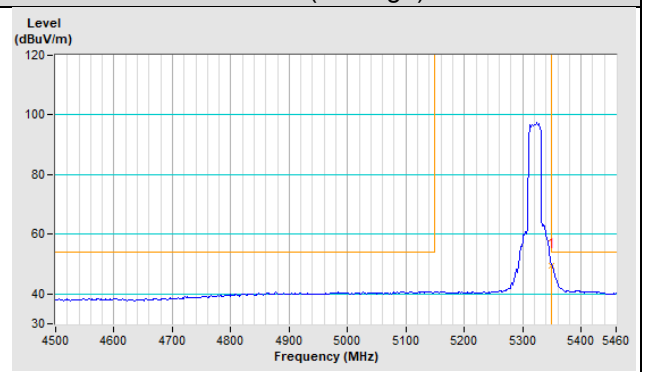
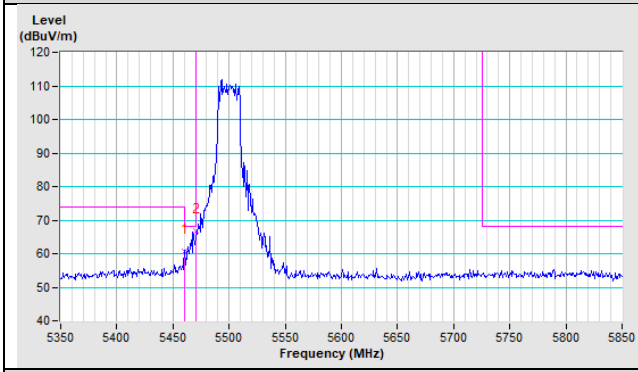
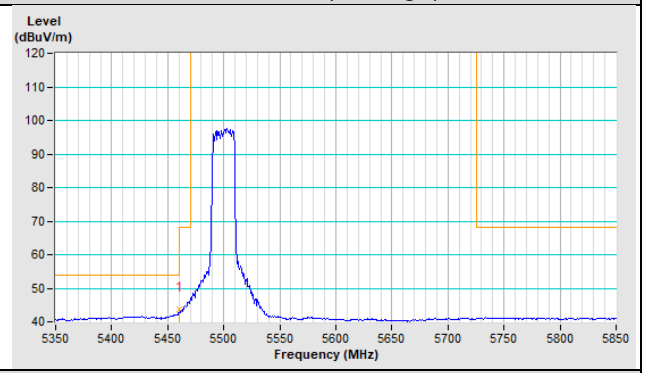
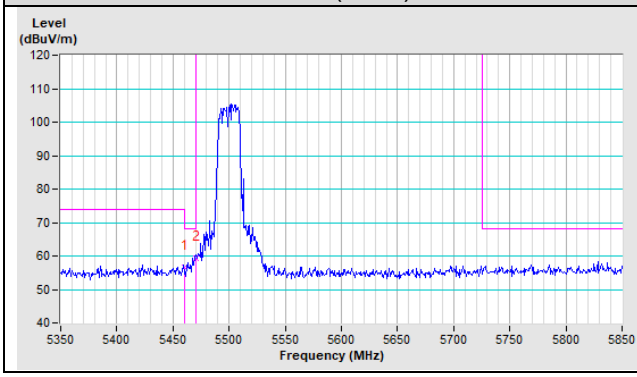
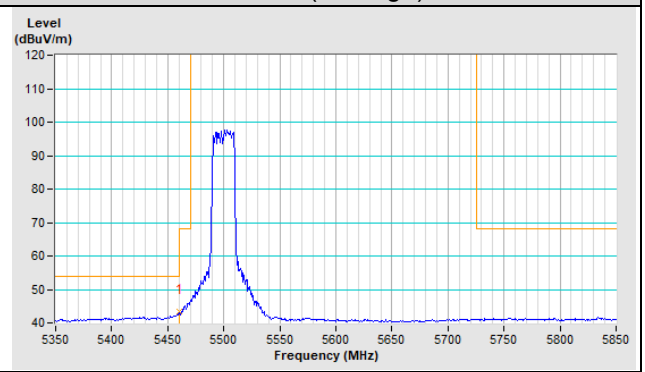


2TX

802.11a

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

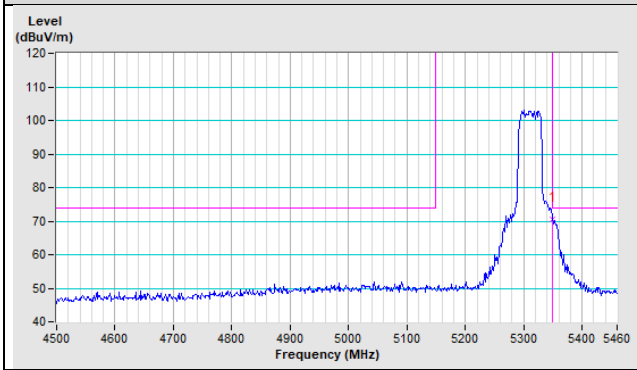
802.11ax (HE20)

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

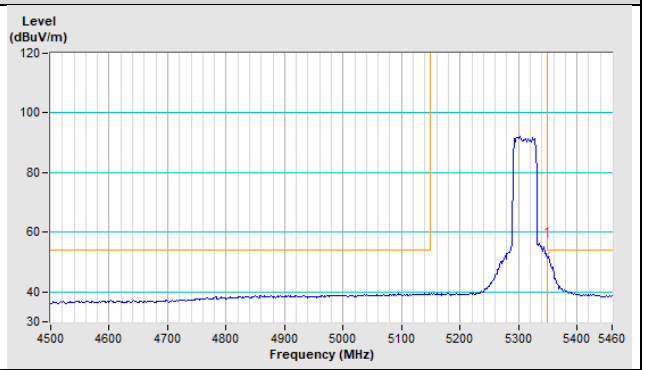
802.11ax (HE40)

Channel 62

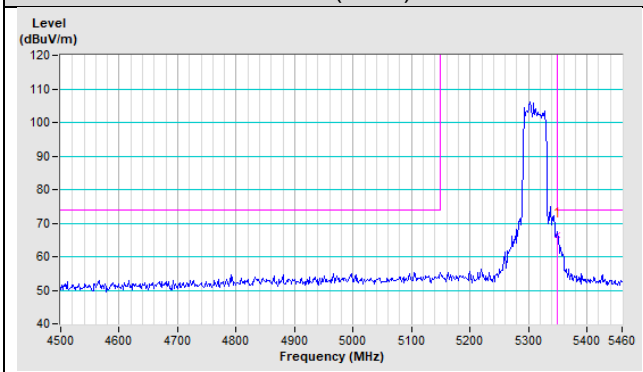
Horizontal (Peak)



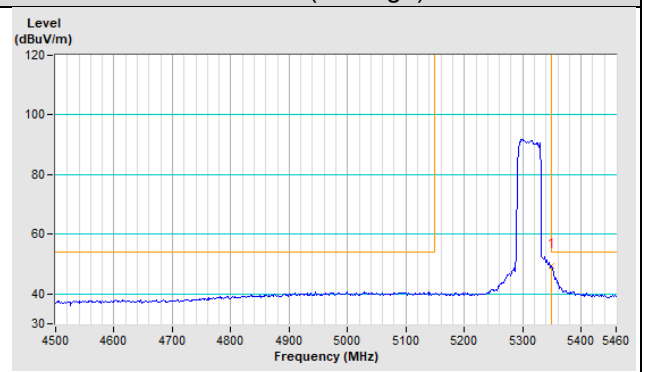
Horizontal (Average)



Vertical (Peak)

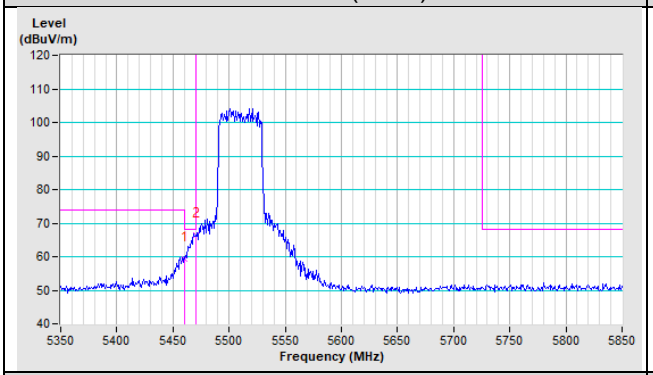


Vertical (Average)

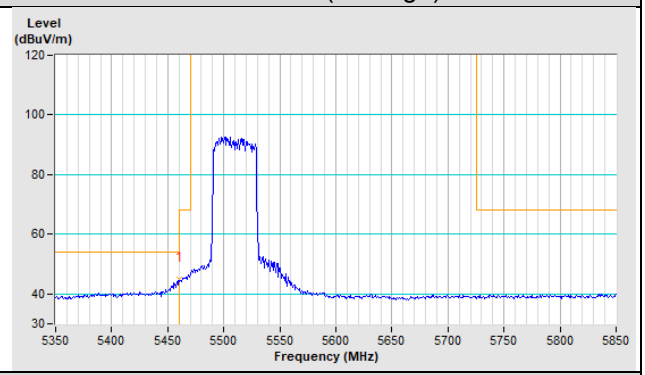


Channel 102

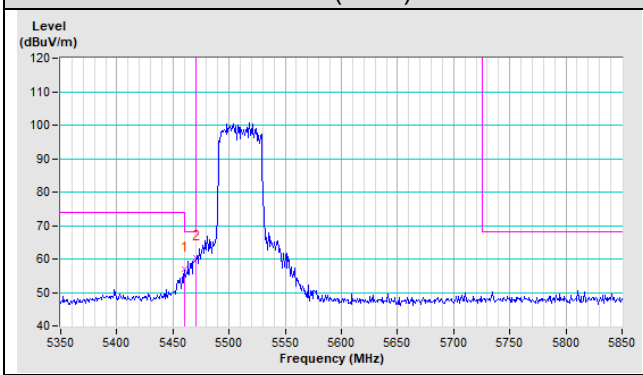
Horizontal (Peak)



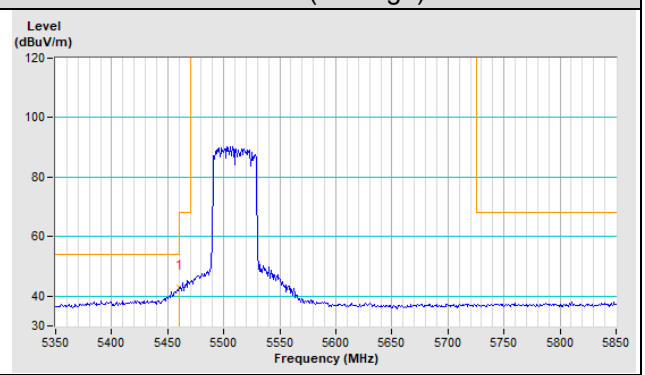
Horizontal (Average)



Vertical (Peak)



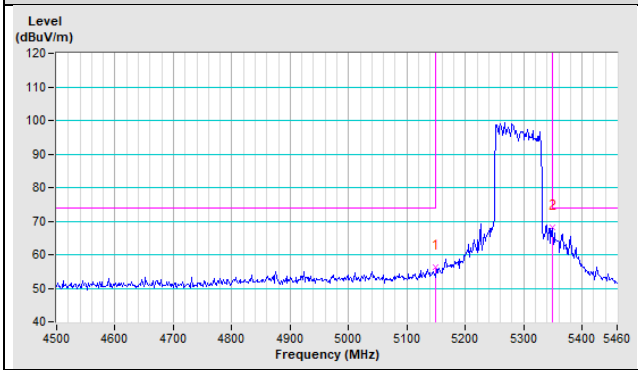
Vertical (Average)



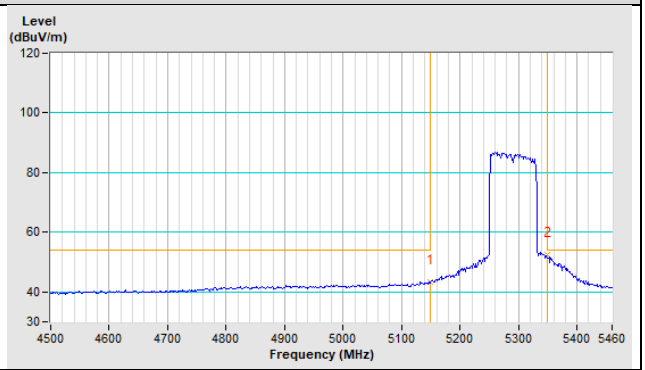
802.11ax (HE80)

Channel 58

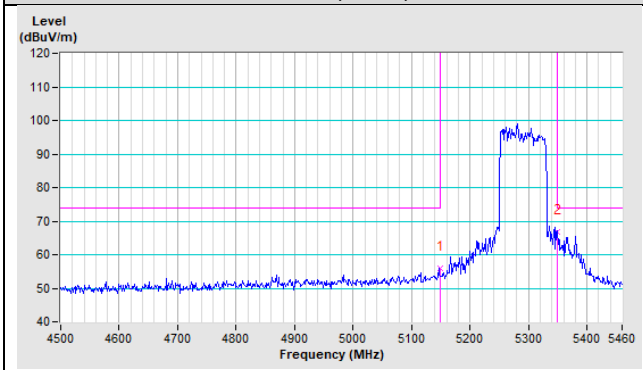
Horizontal (Peak)



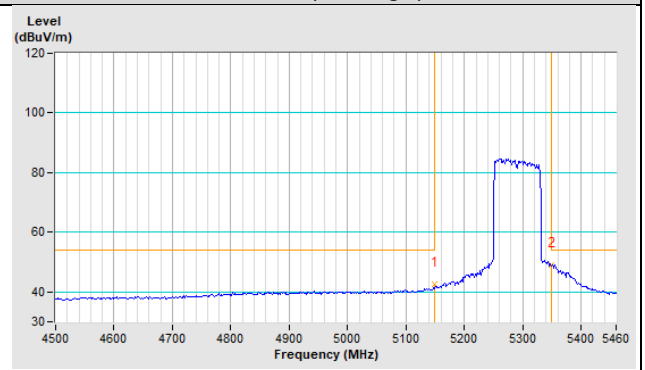
Horizontal (Average)



Vertical (Peak)

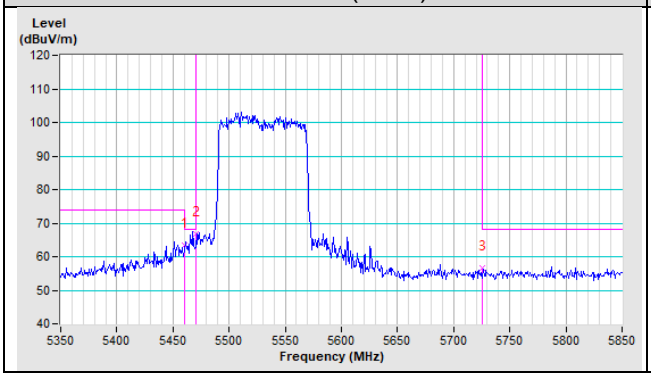


Vertical (Average)

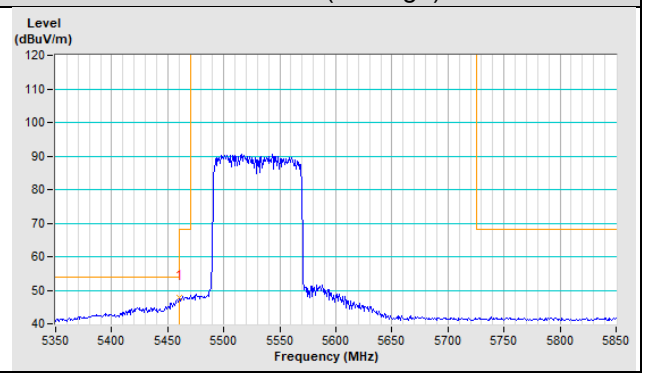


Channel 106

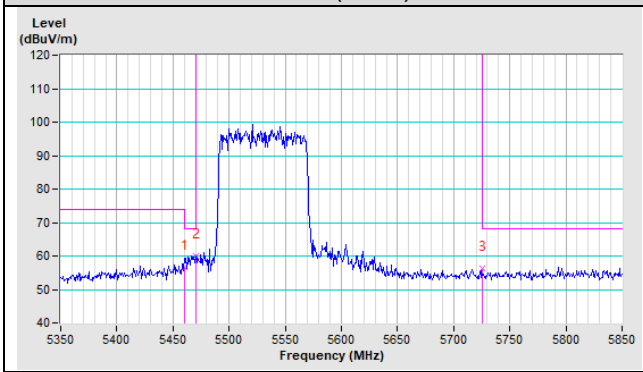
Horizontal (Peak)



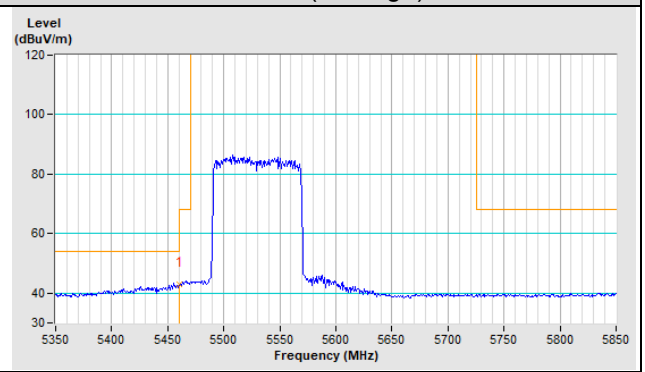
Horizontal (Average)



Vertical (Peak)

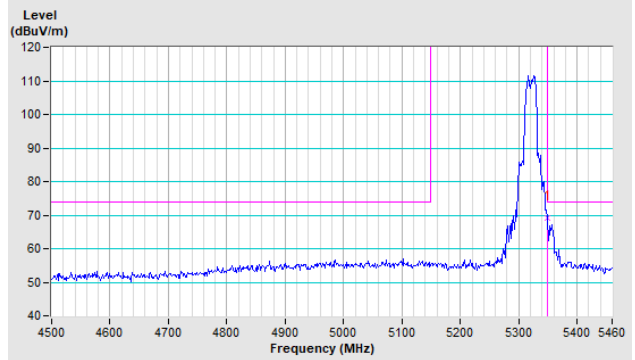
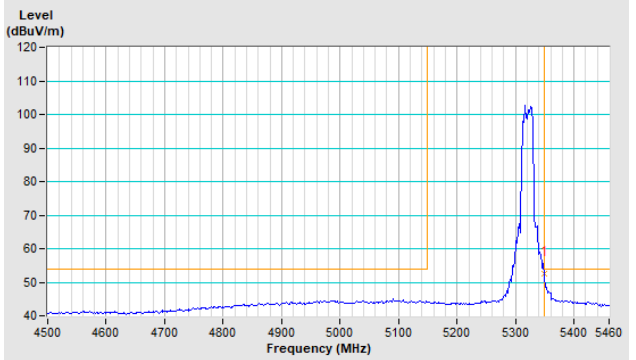
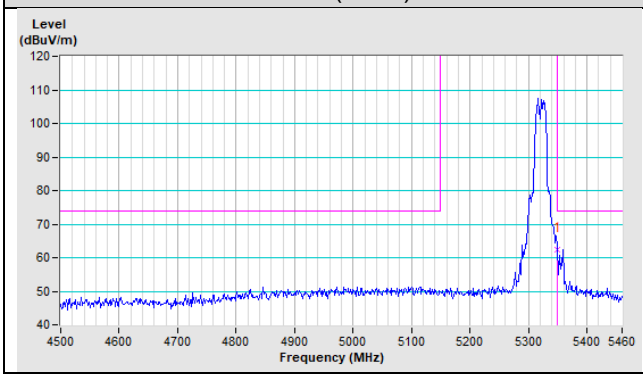
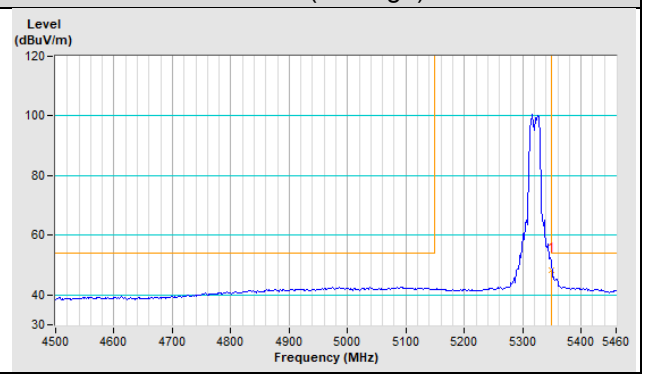
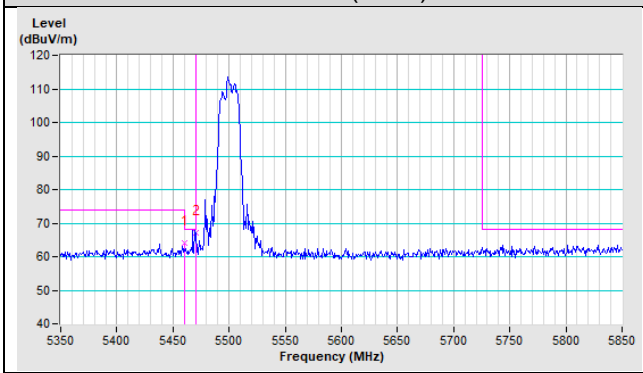
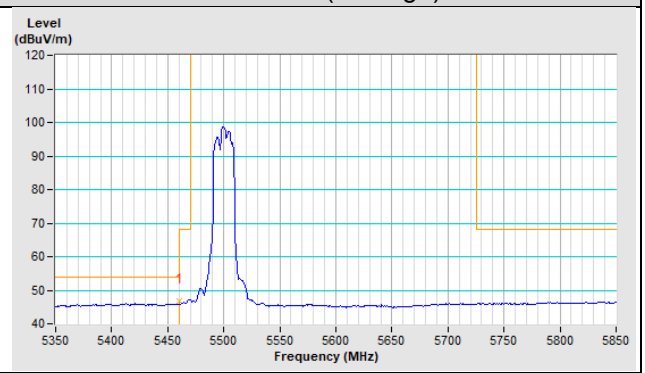
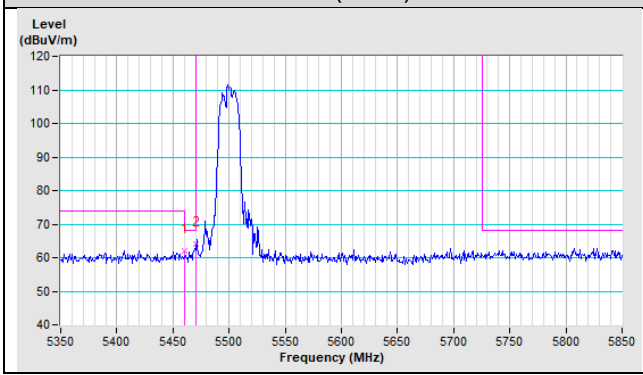
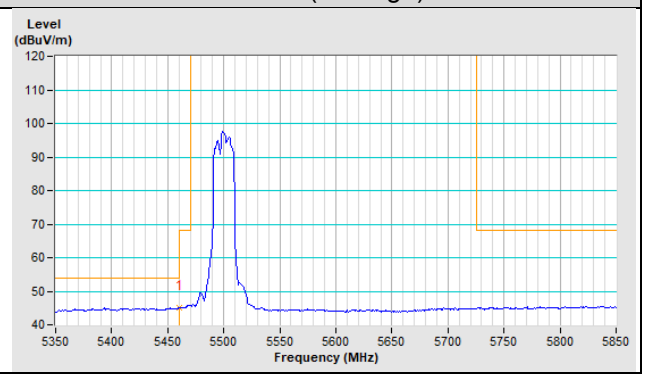


Vertical (Average)

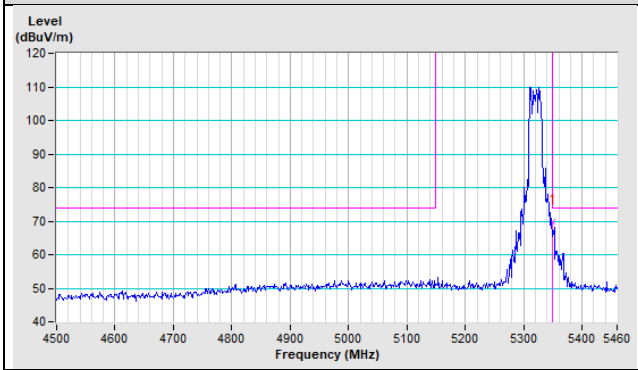
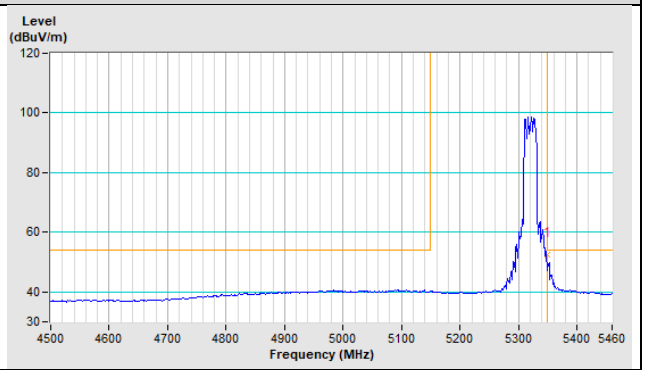
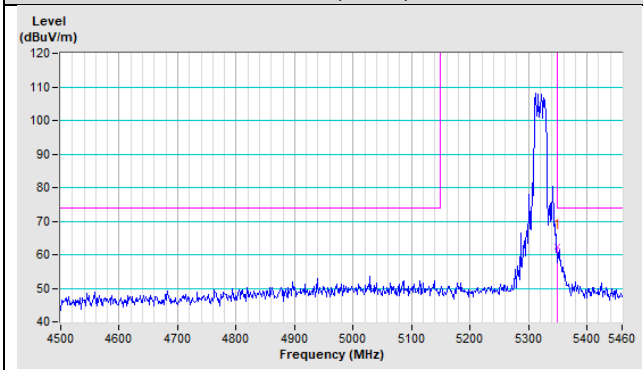
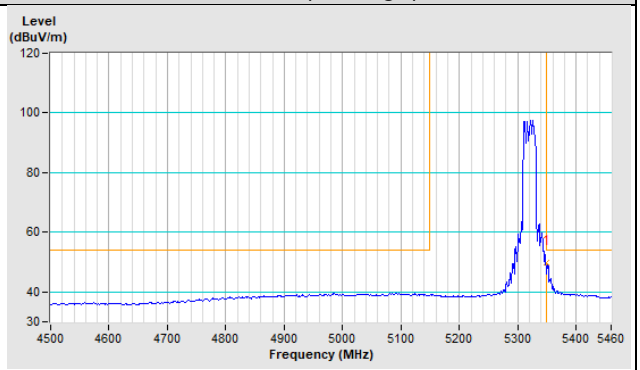
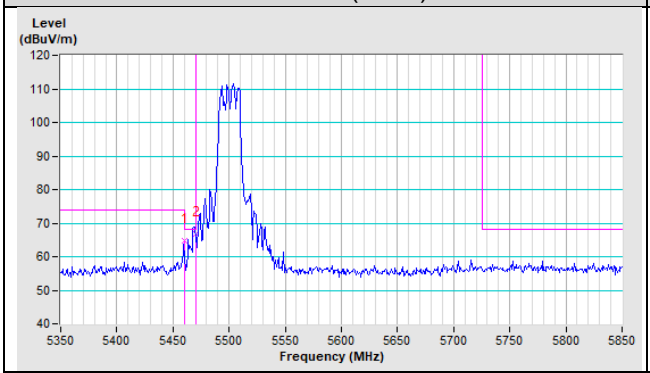
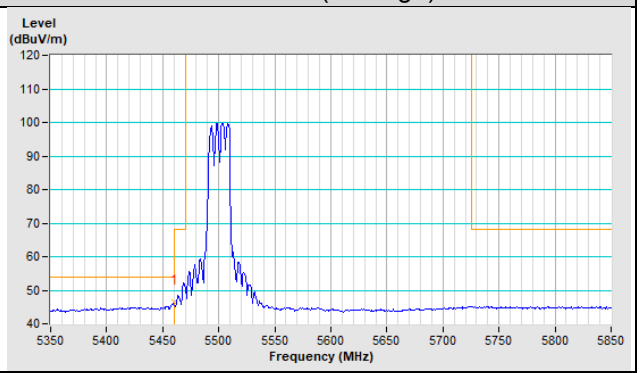
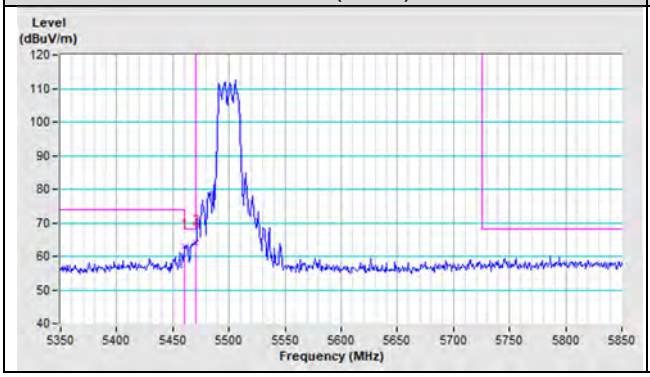
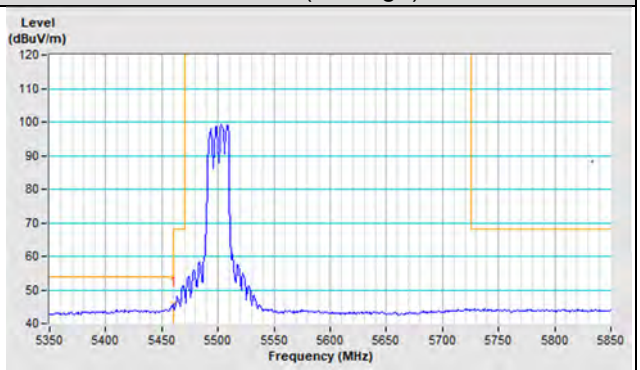


3TX

802.11a

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

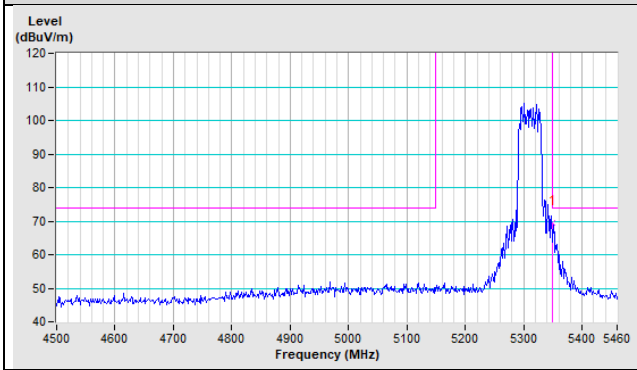
802.11ax (HE20)

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

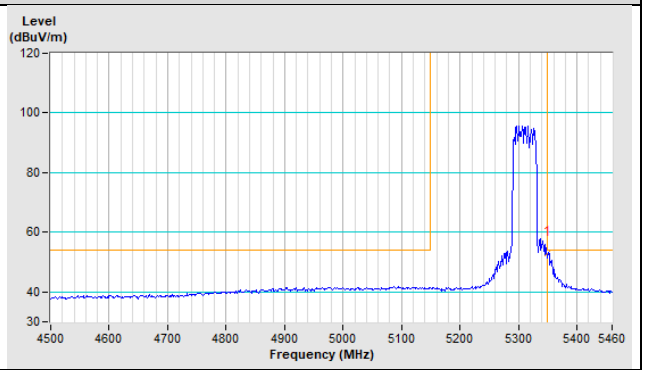
802.11ax (HE40)

Channel 62

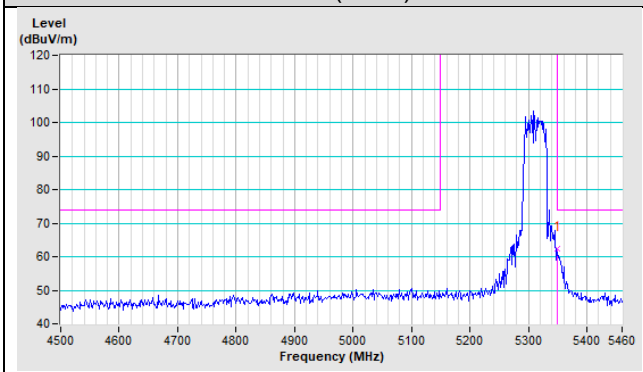
Horizontal (Peak)



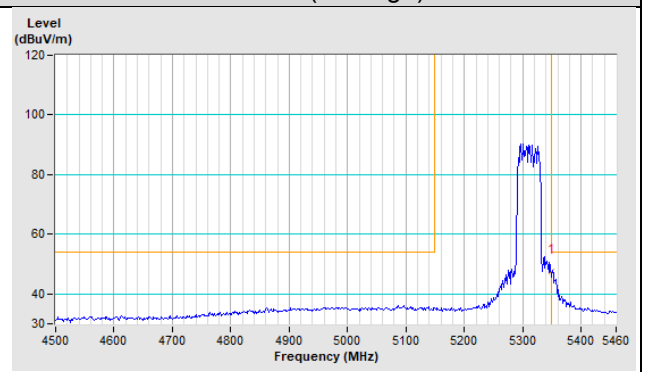
Horizontal (Average)



Vertical (Peak)

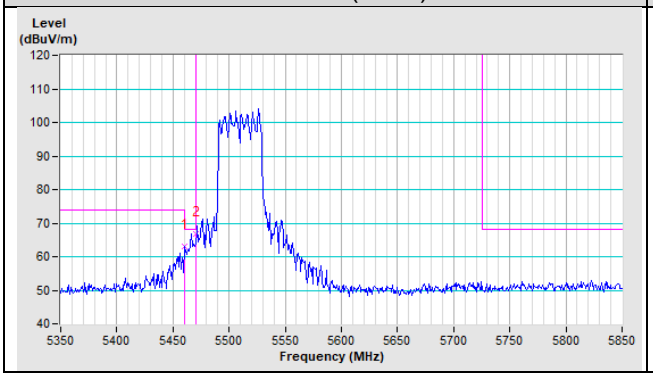


Vertical (Average)

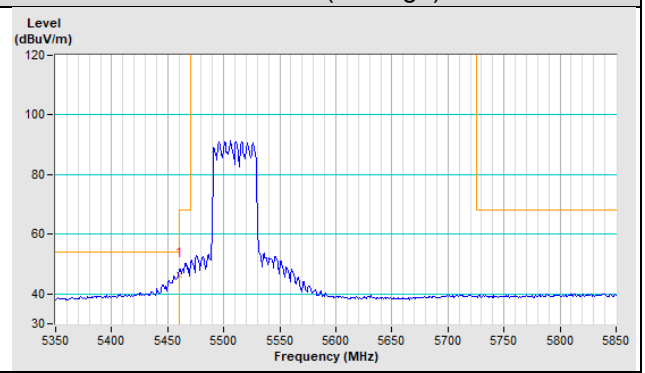


Channel 102

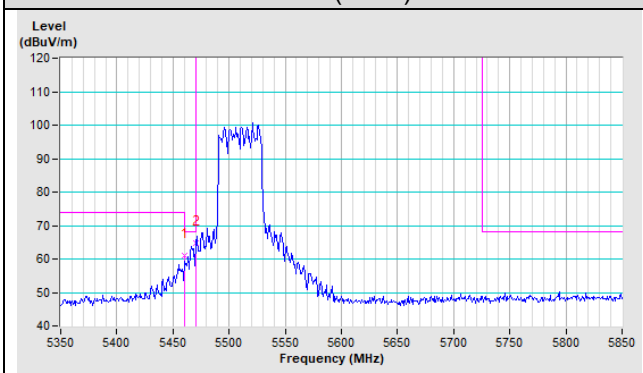
Horizontal (Peak)



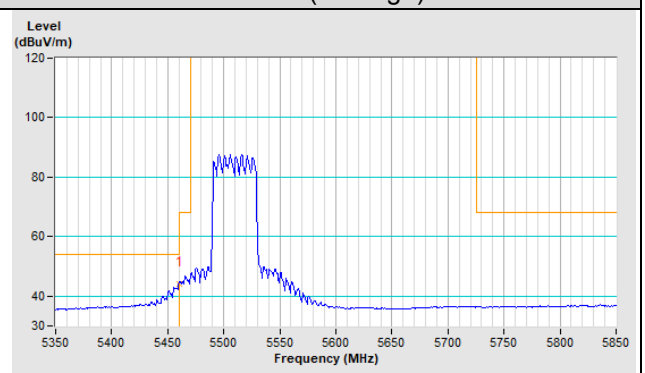
Horizontal (Average)



Vertical (Peak)



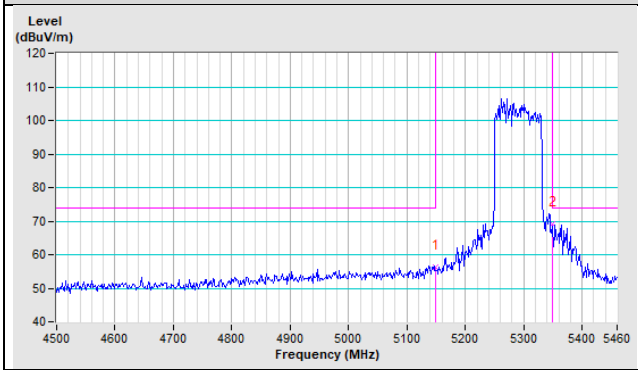
Vertical (Average)



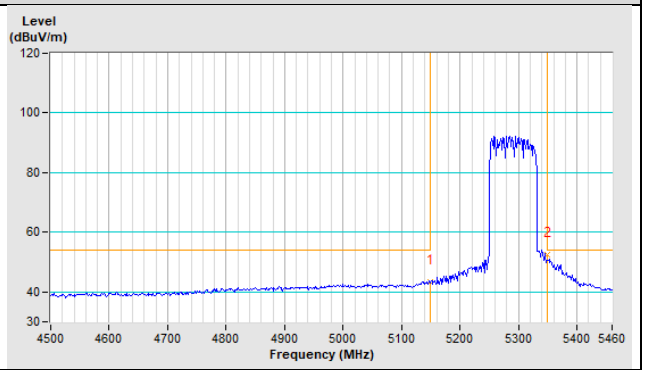
802.11ax (HE80)

Channel 58

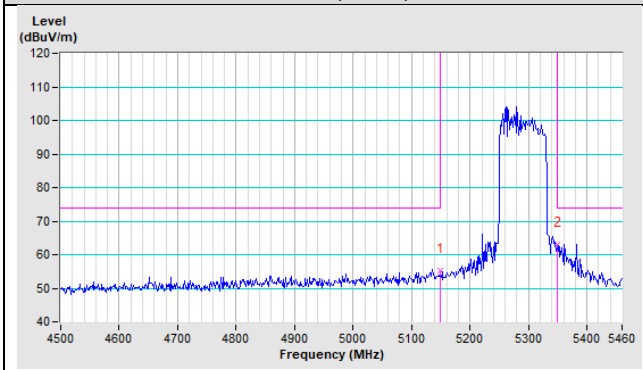
Horizontal (Peak)



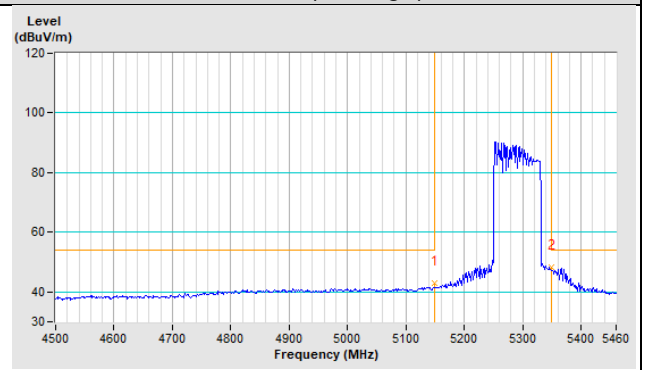
Horizontal (Average)



Vertical (Peak)

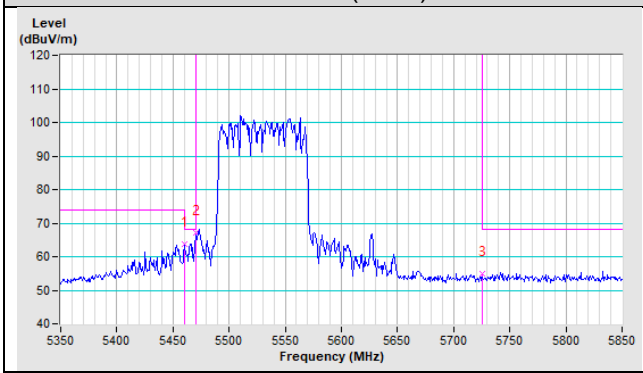


Vertical (Average)

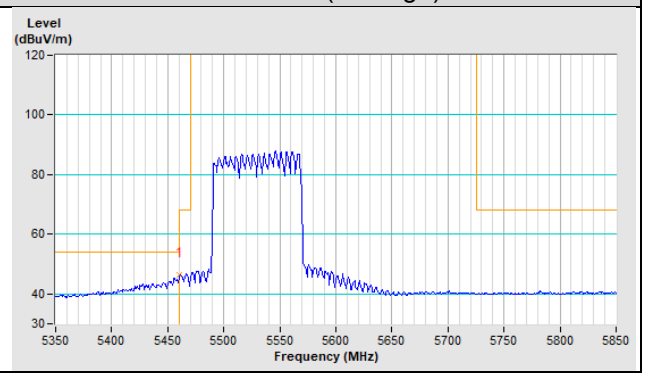


Channel 106

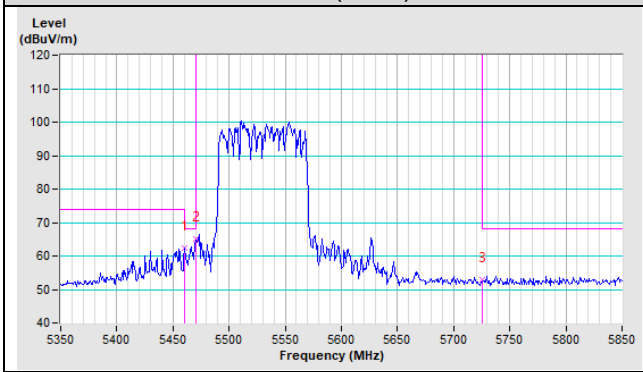
Horizontal (Peak)



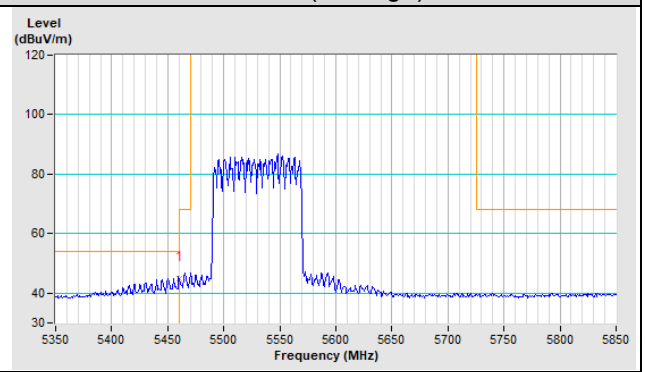
Horizontal (Average)



Vertical (Peak)

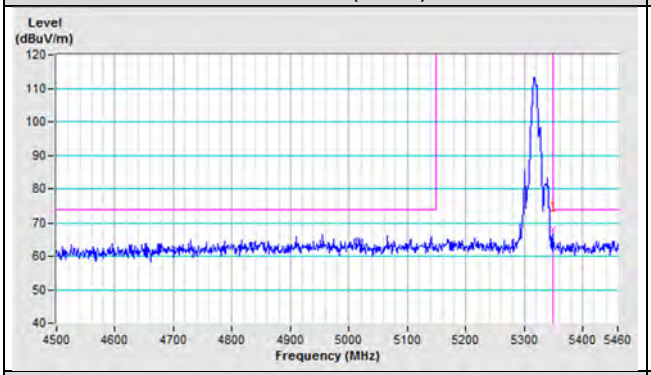
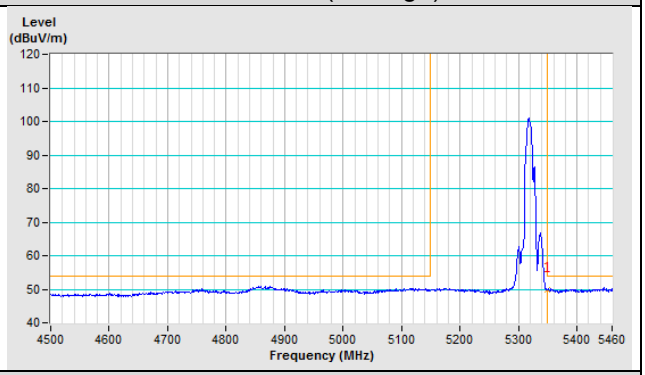
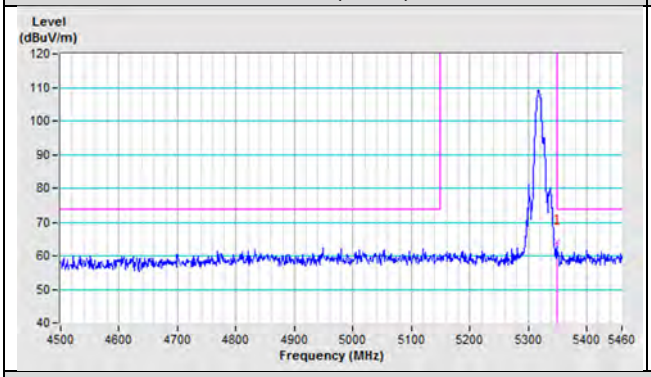
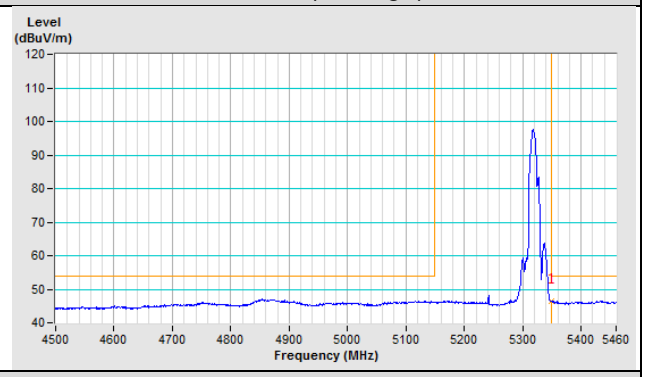
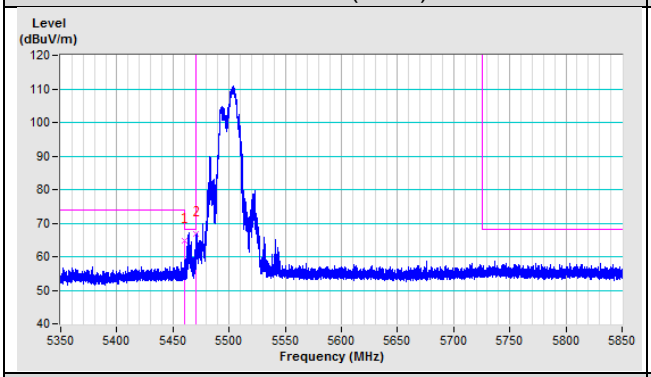
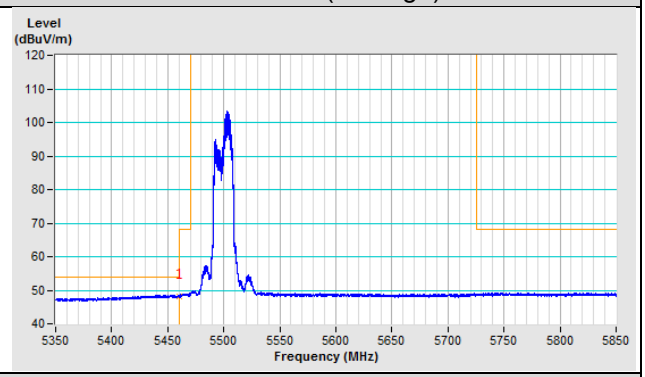
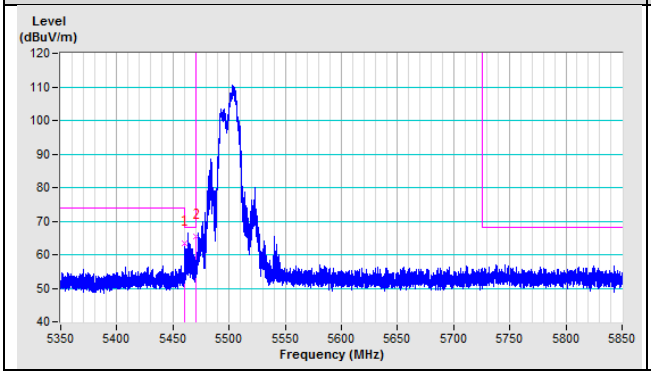
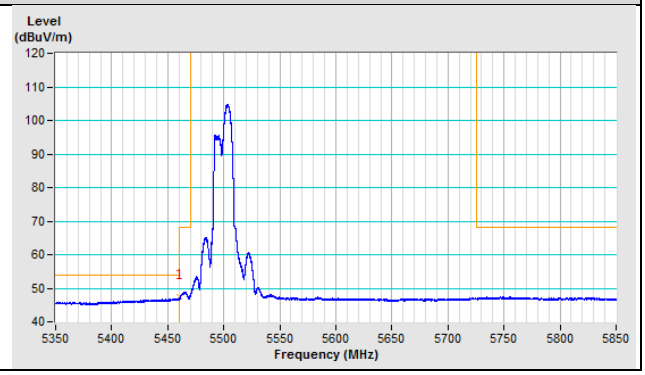


Vertical (Average)



4TX

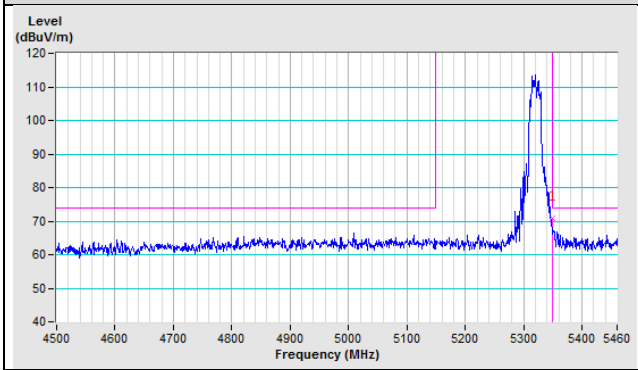
802.11a

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

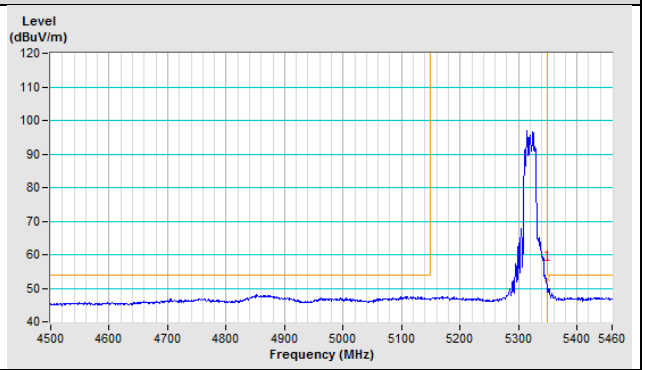
802.11ax (HE20)

Channel 64

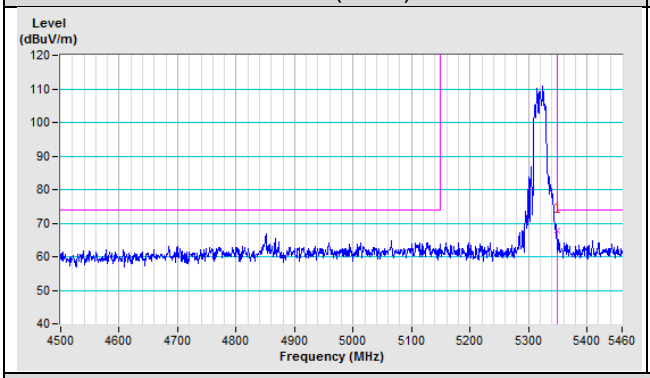
Horizontal (Peak)



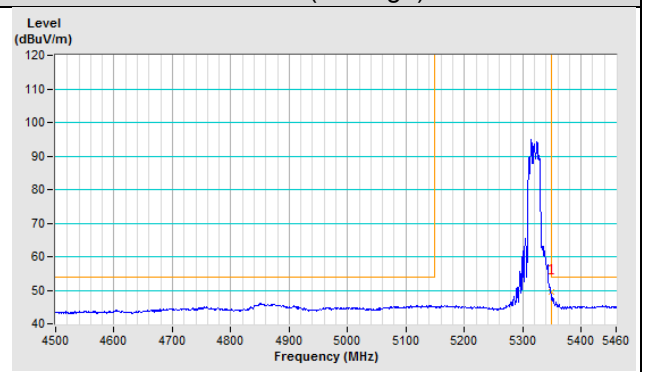
Horizontal (Average)



Vertical (Peak)

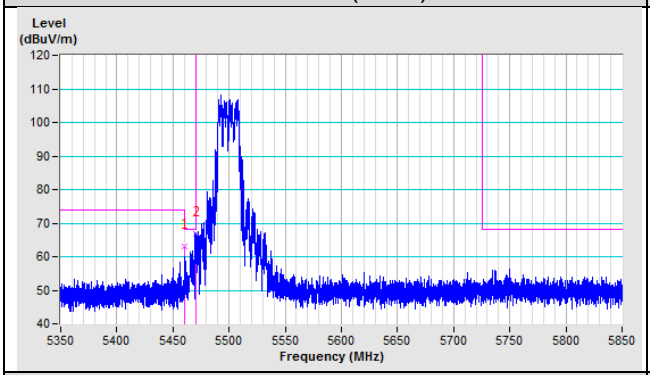


Vertical (Average)

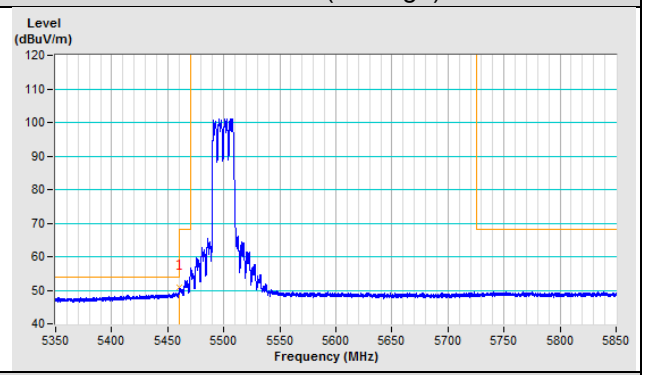


Channel 100

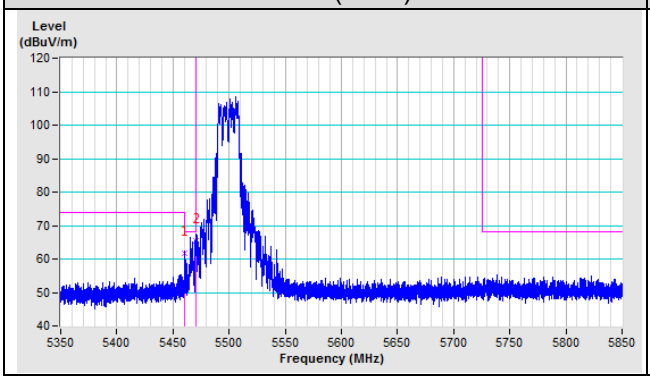
Horizontal (Peak)



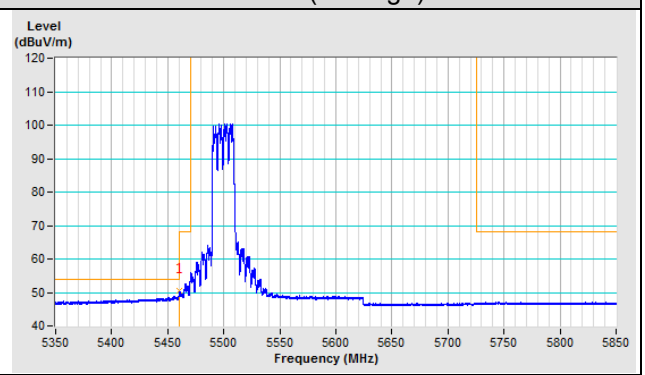
Horizontal (Average)



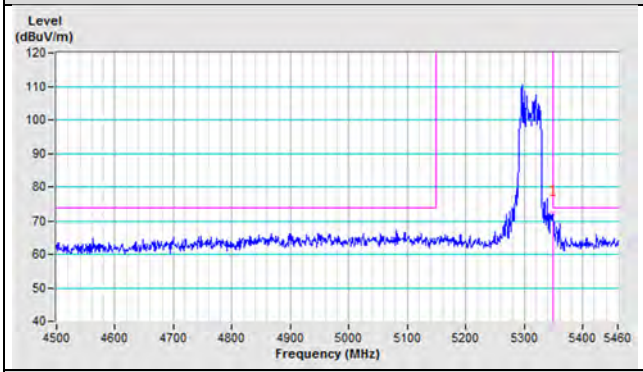
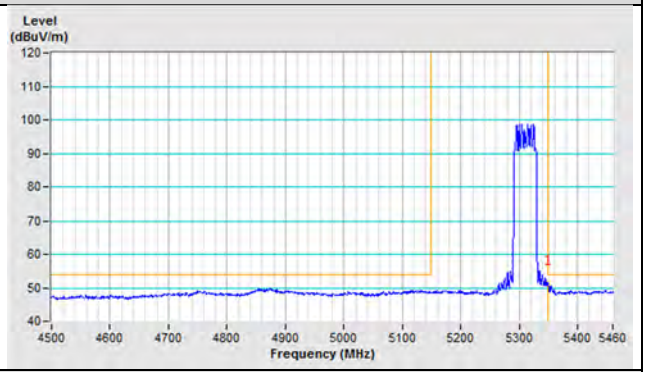
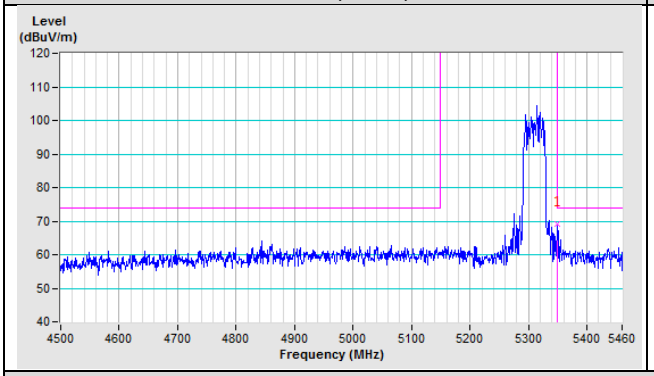
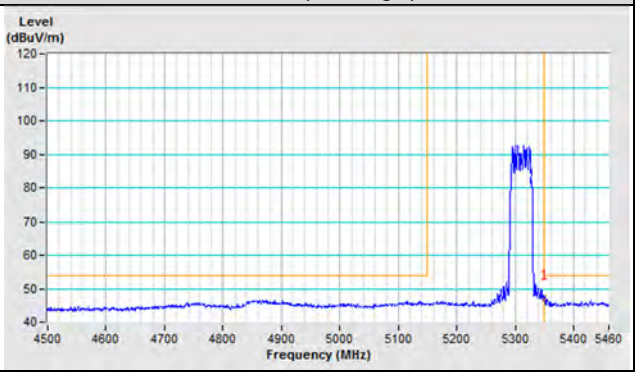
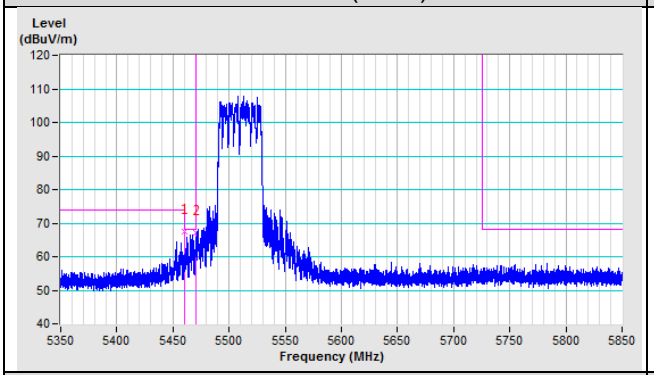
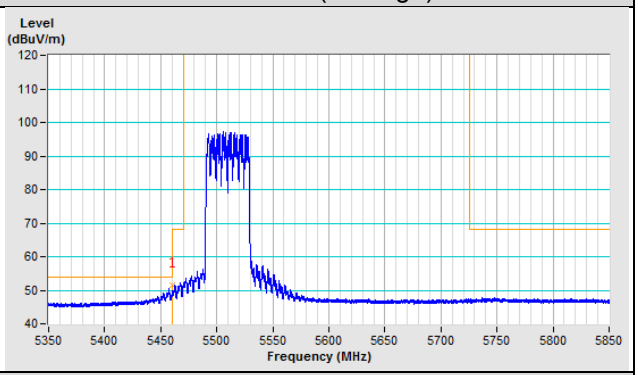
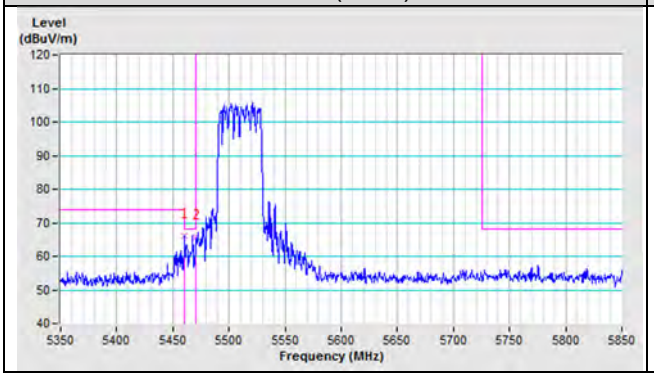
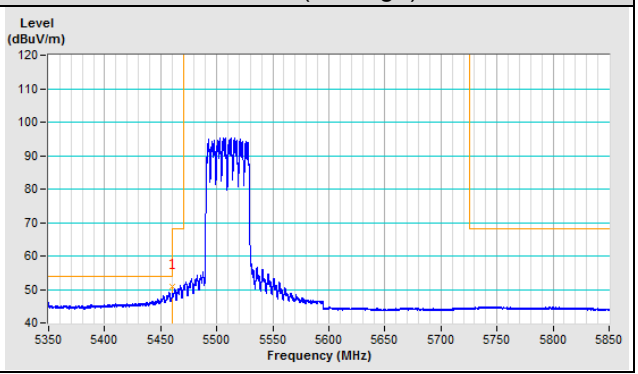
Vertical (Peak)



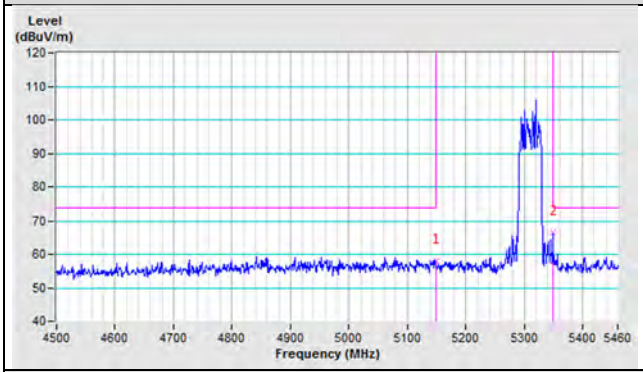
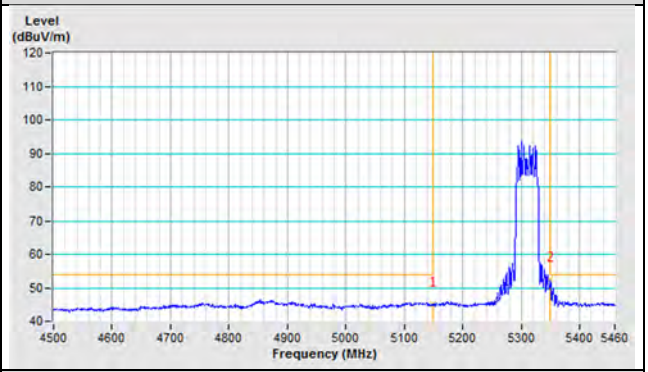
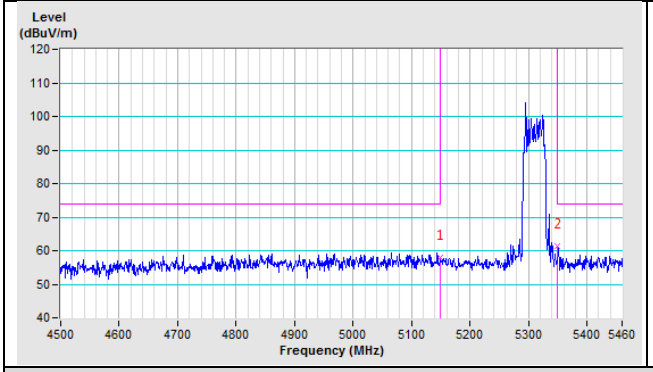
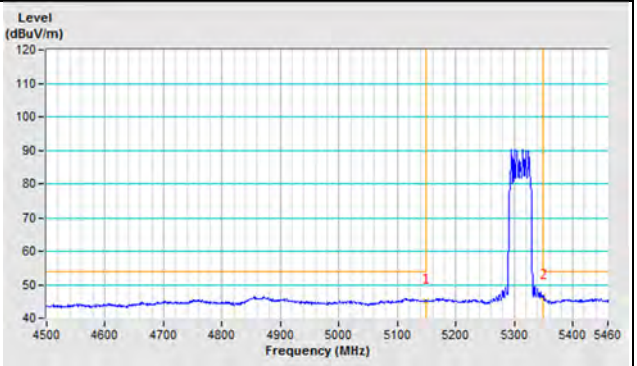
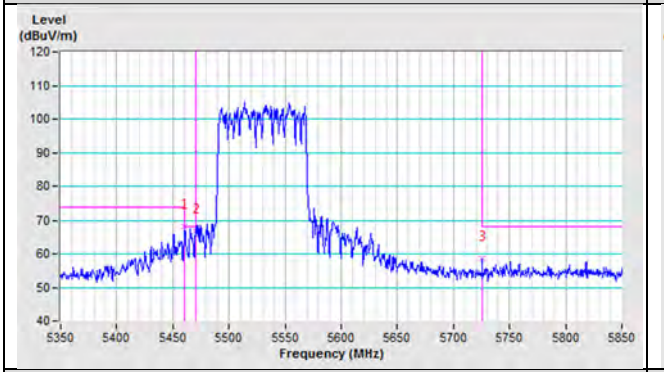
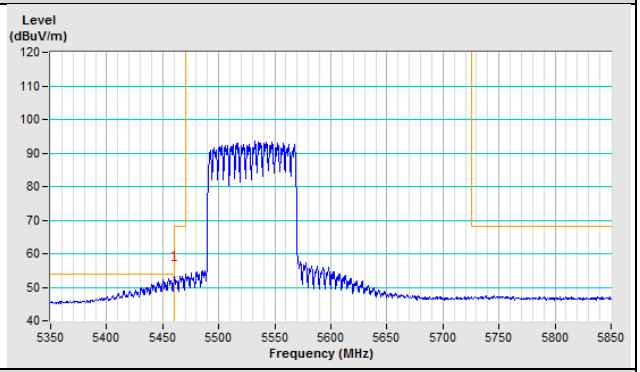
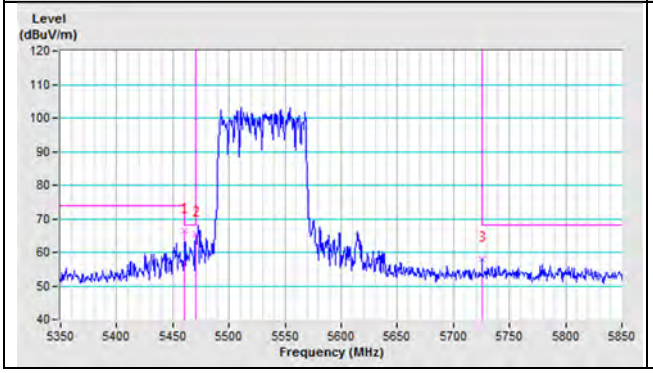
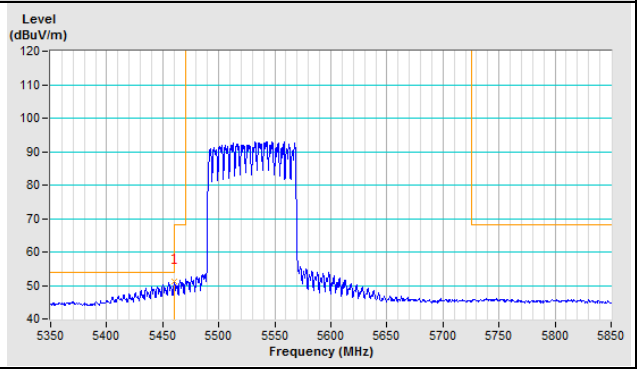
Vertical (Average)



802.11ax (HE40)

Channel 62	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

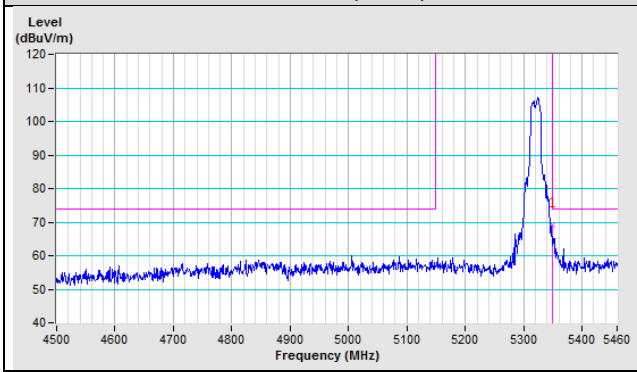
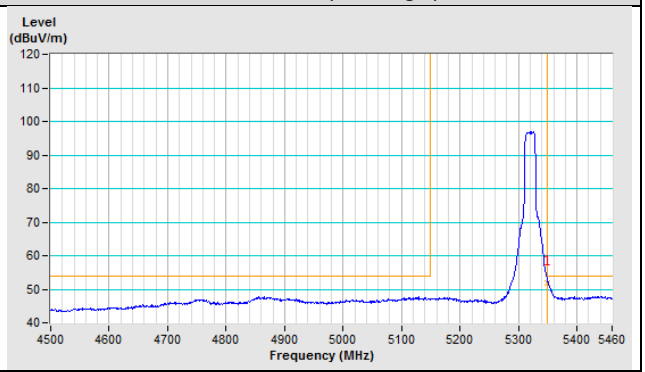
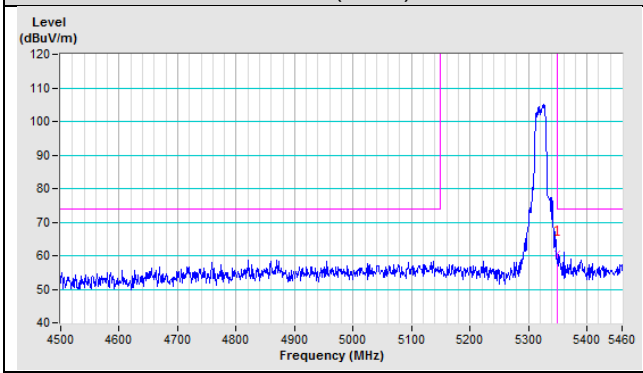
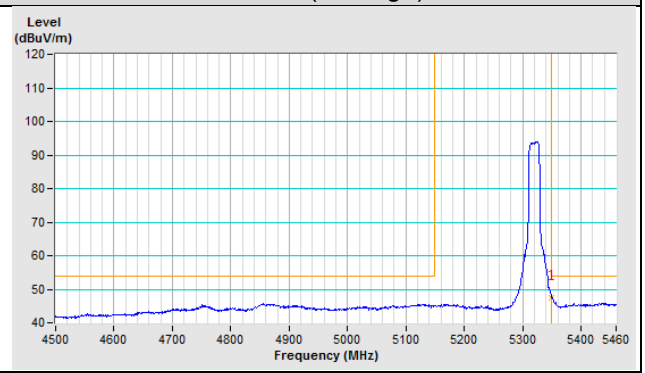
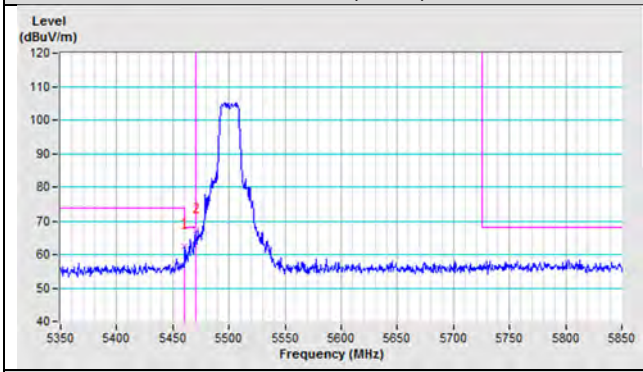
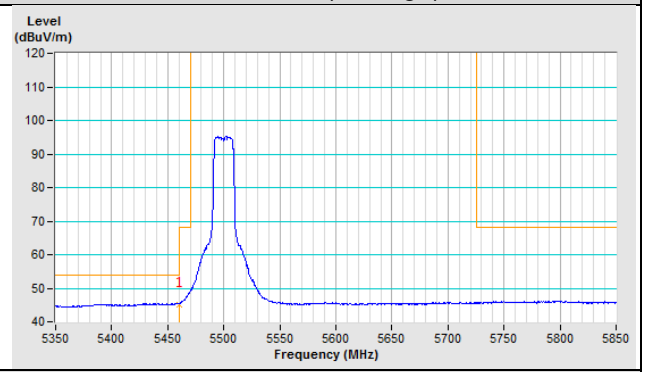
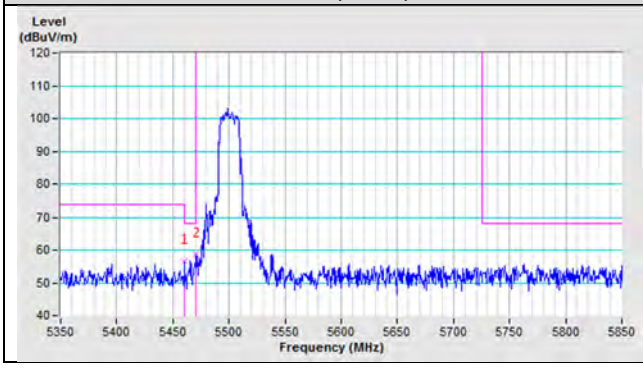
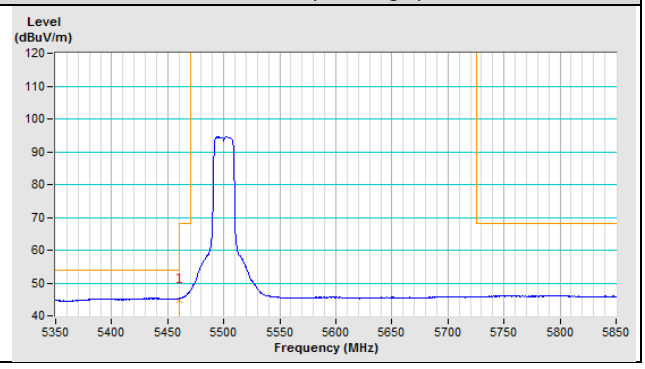
802.11ax (HE80)

Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

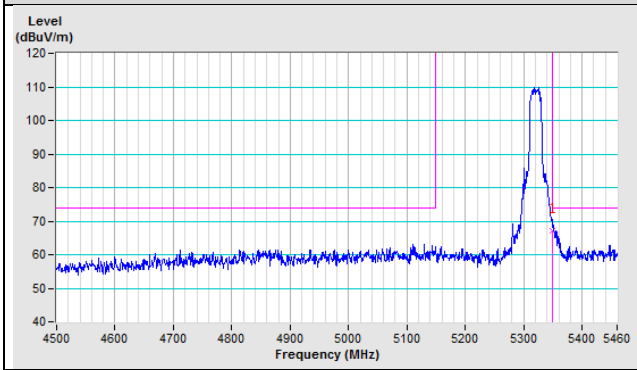
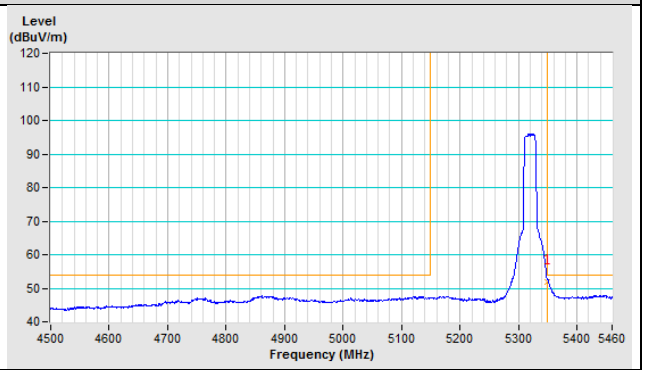
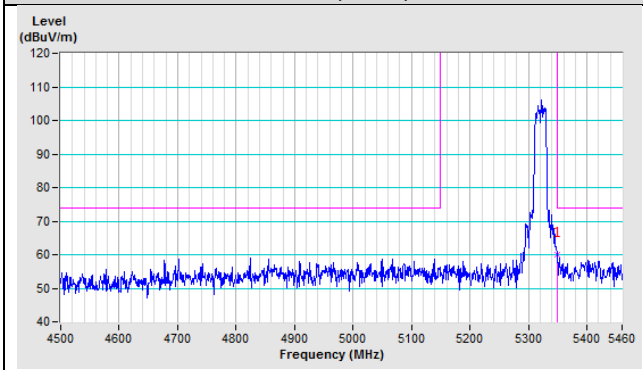
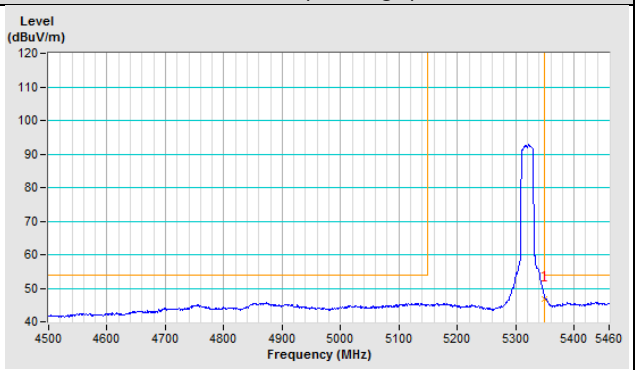
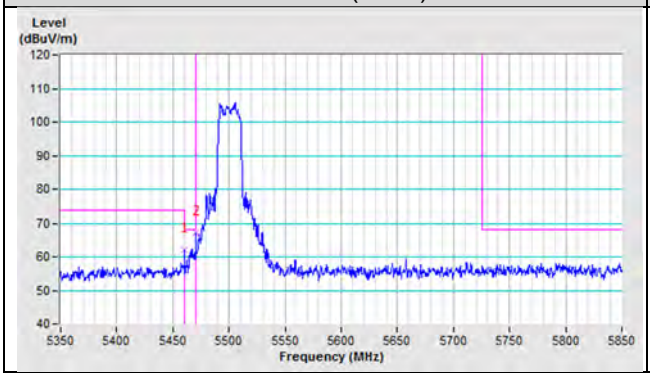
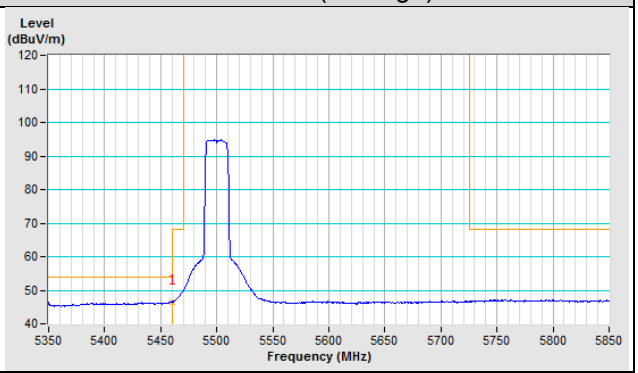
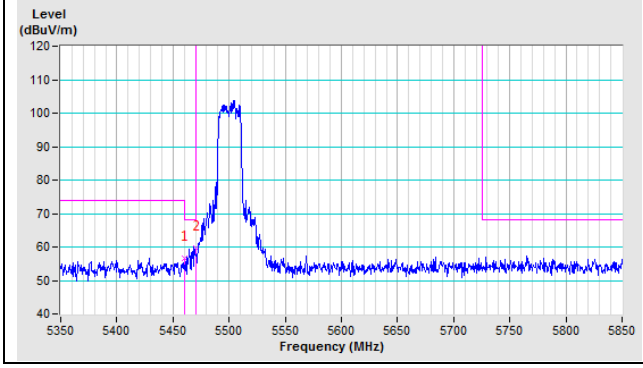
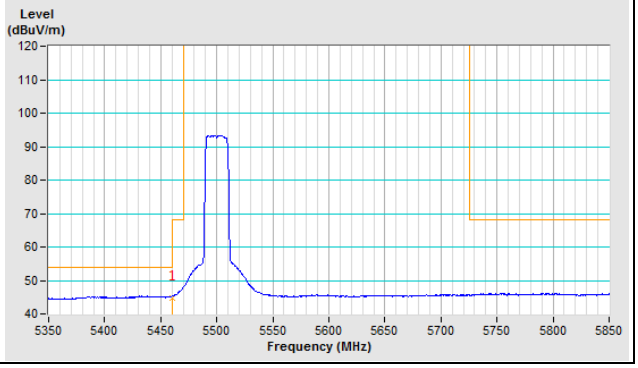
Test Mode G (External antenna – PN: ATS-OP-245-810-4RPSP-36 + Eth6 Radio)

1TX

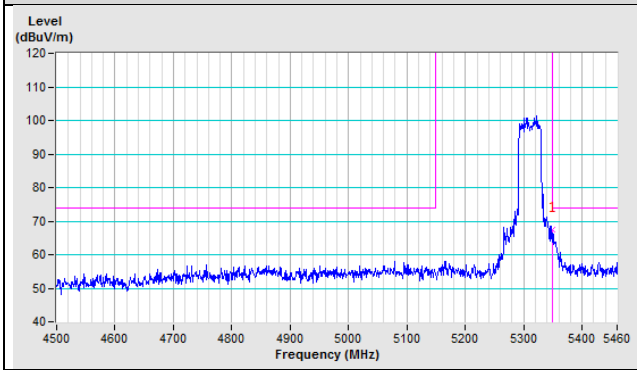
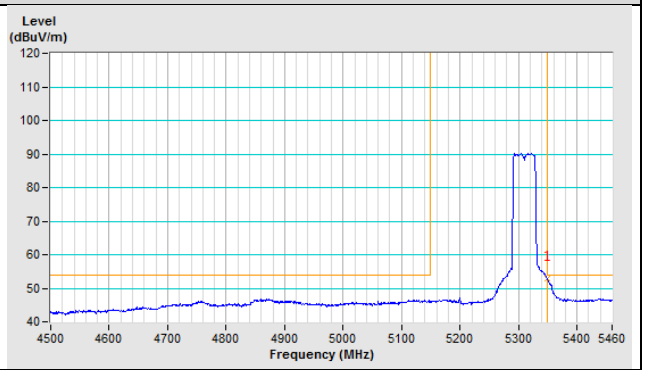
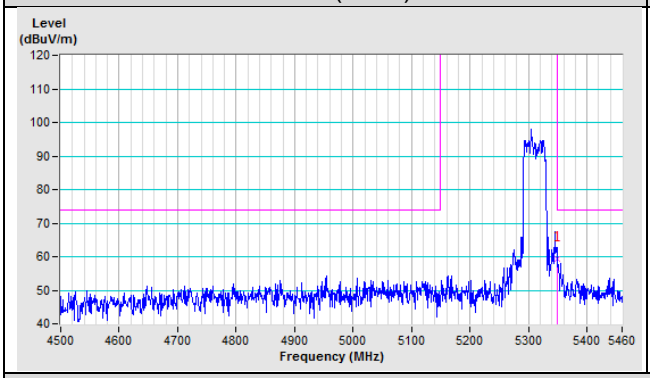
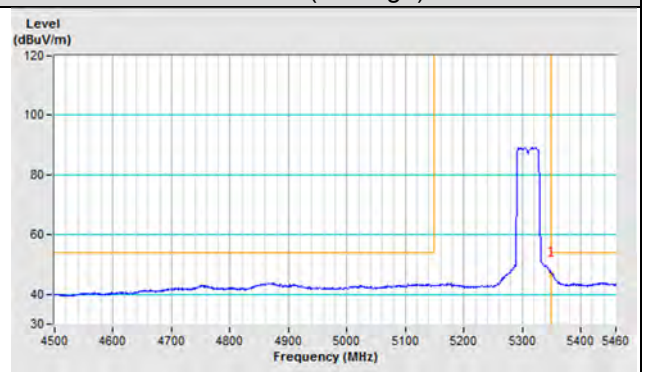
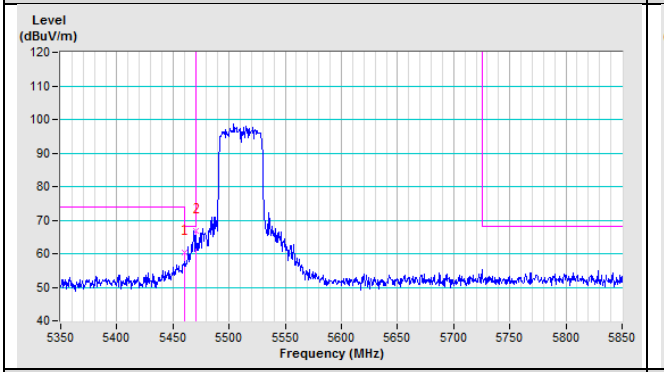
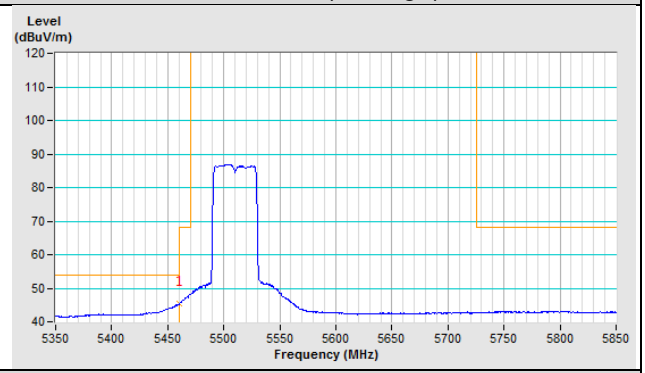
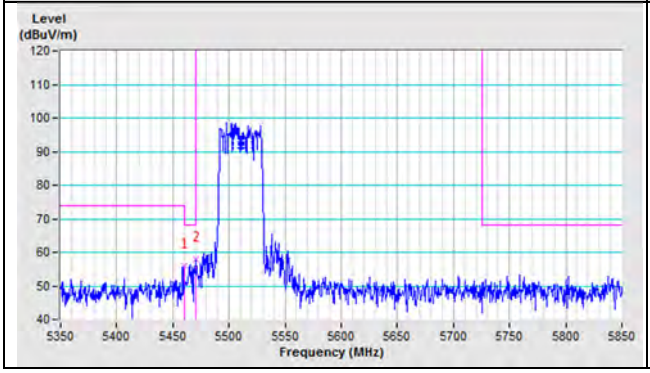
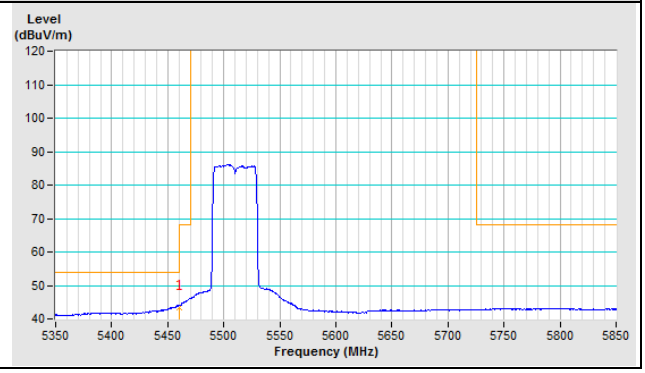
802.11a

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE20)

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

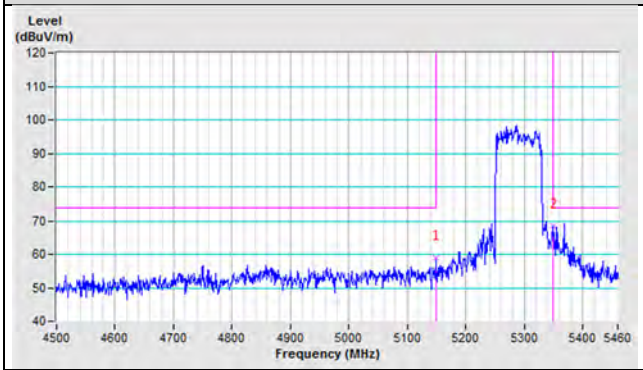
802.11ax (HE40)

Channel 62	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

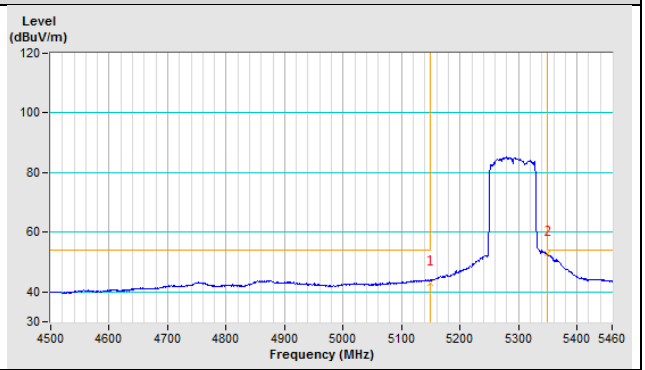
802.11ax (HE80)

Channel 58

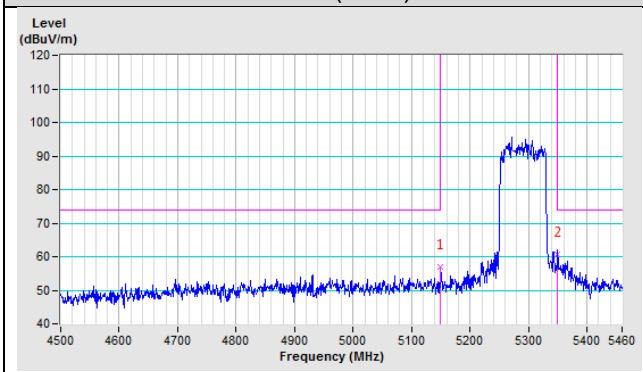
Horizontal (Peak)



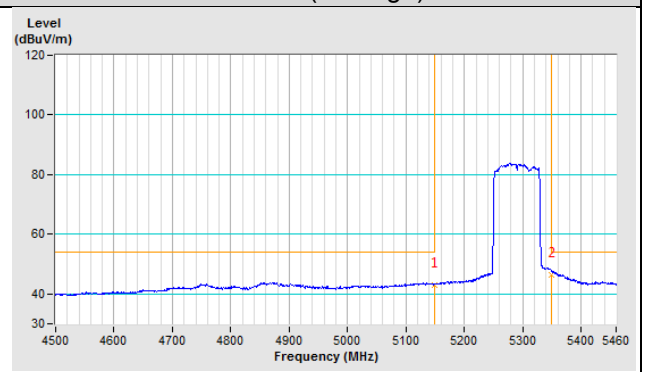
Horizontal (Average)



Vertical (Peak)

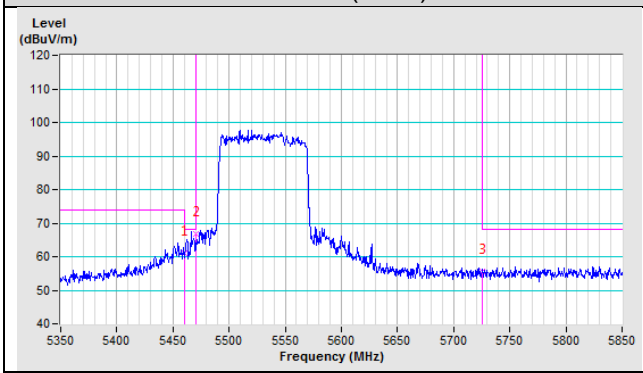


Vertical (Average)

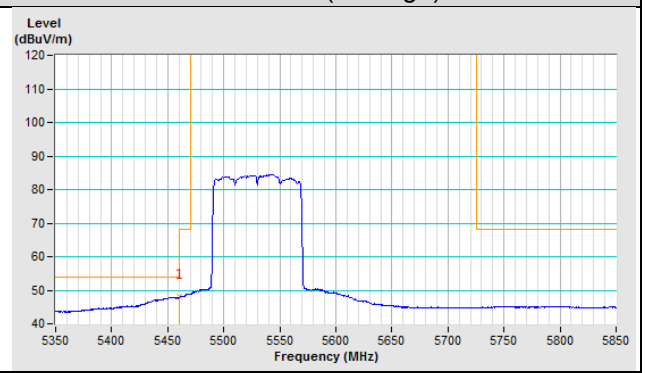


Channel 106

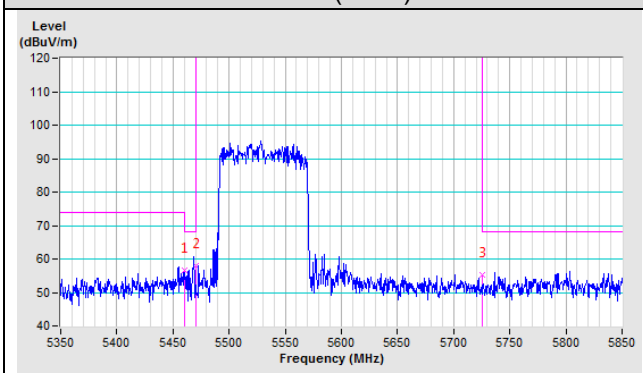
Horizontal (Peak)



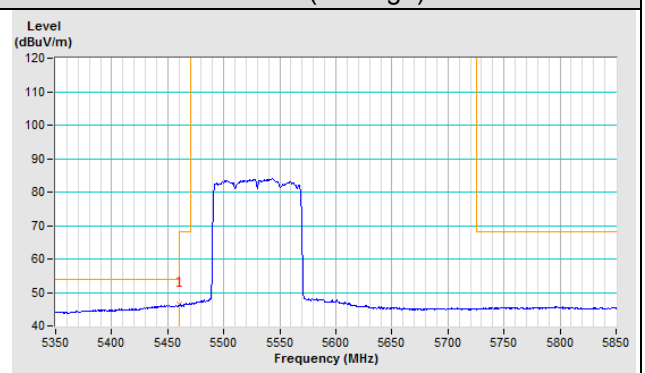
Horizontal (Average)



Vertical (Peak)

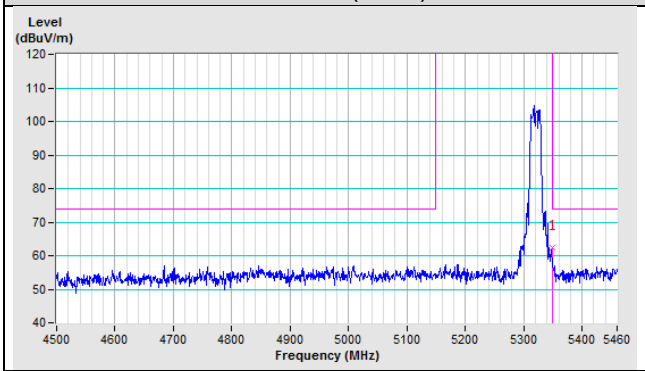
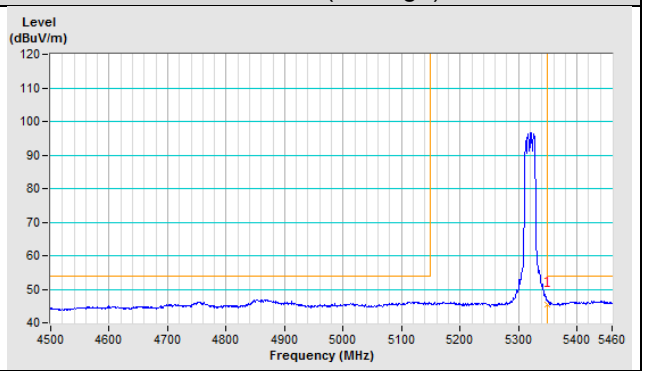
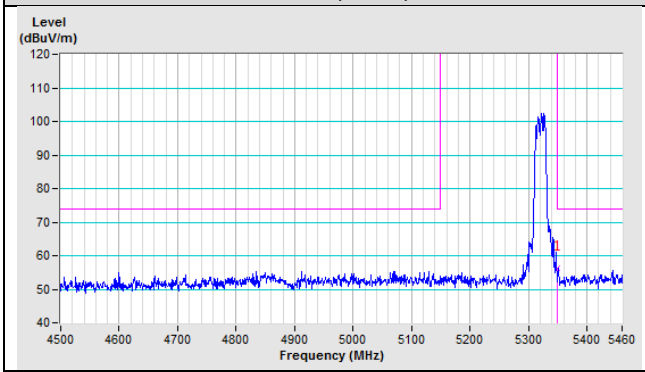
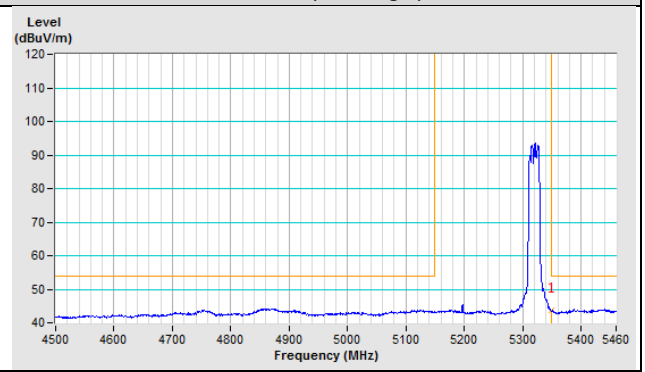
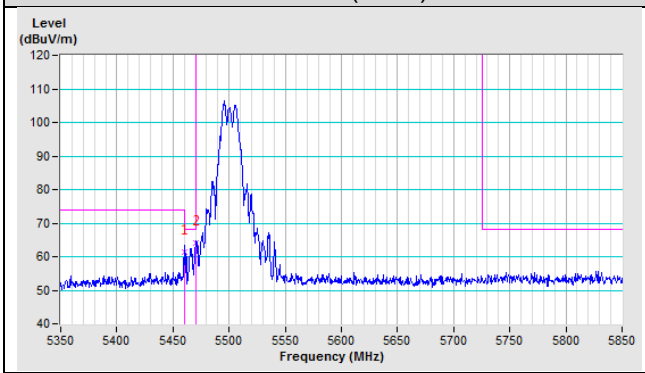
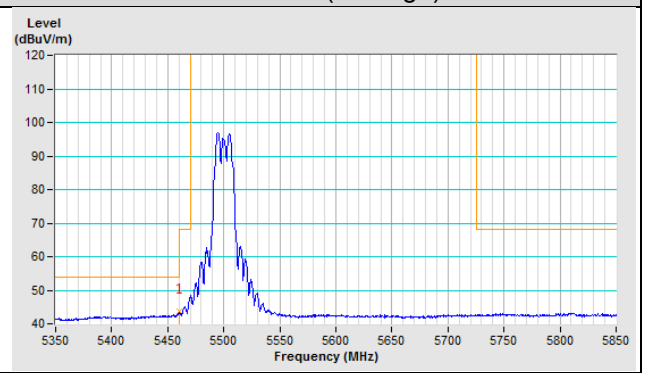
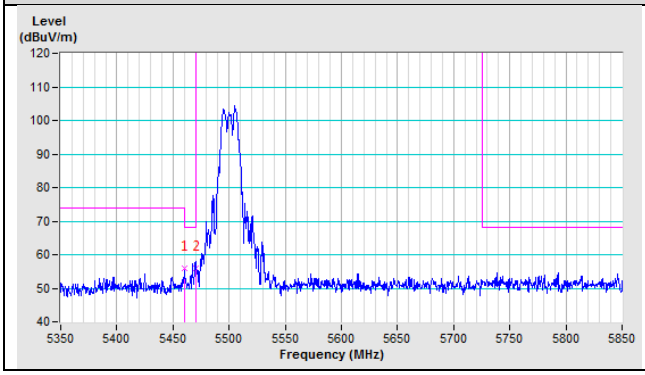
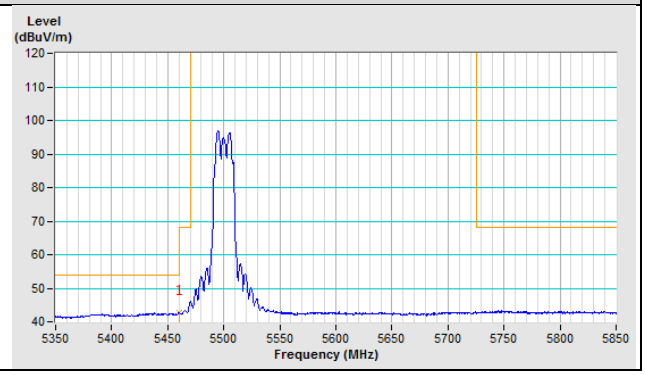


Vertical (Average)

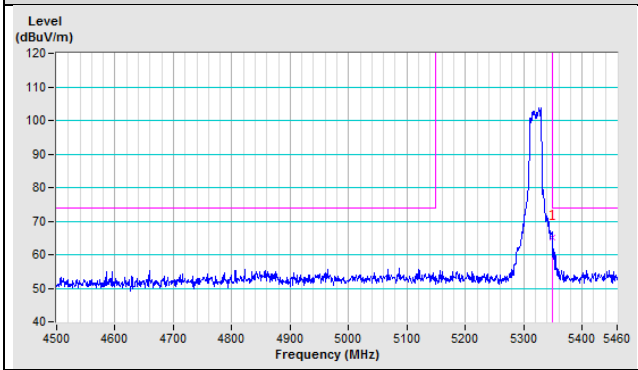
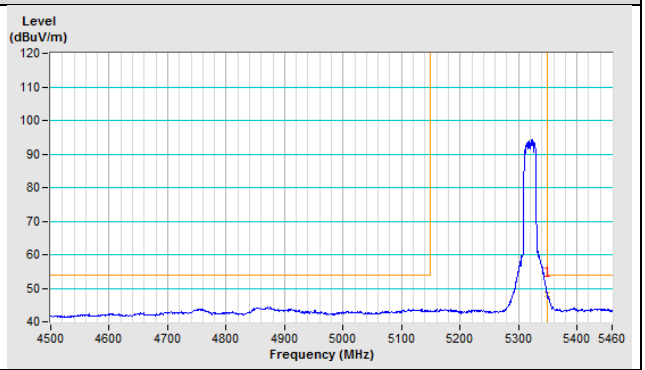
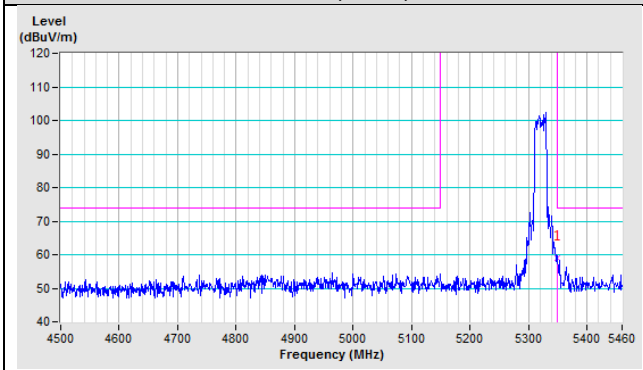
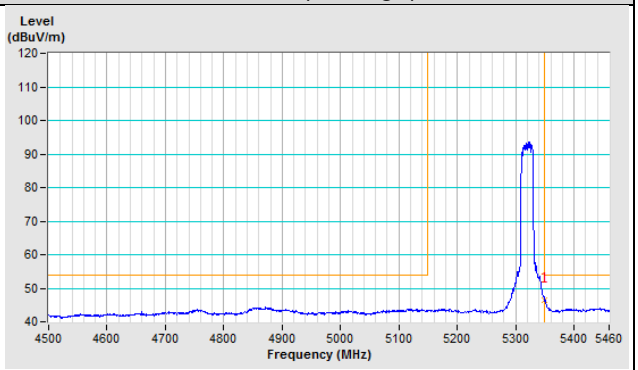
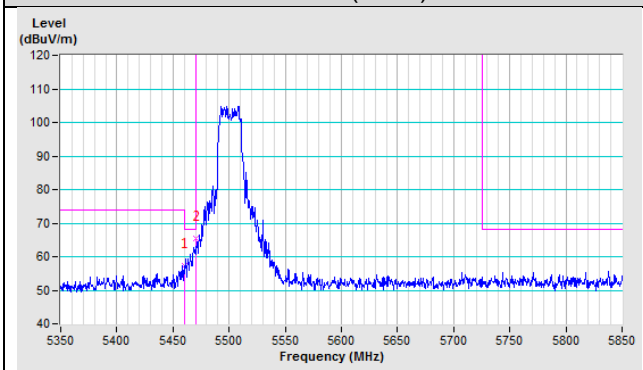
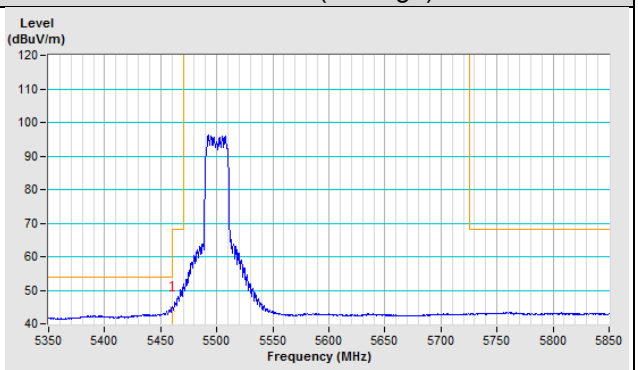
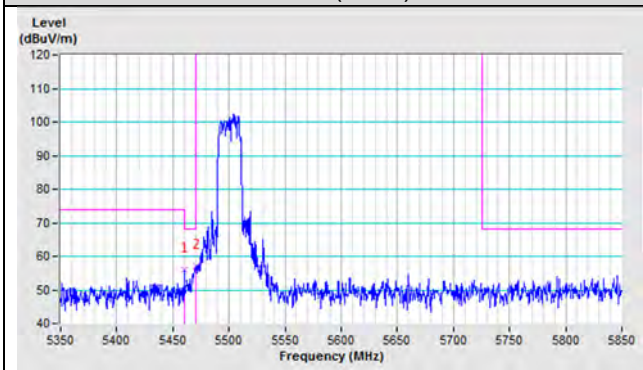
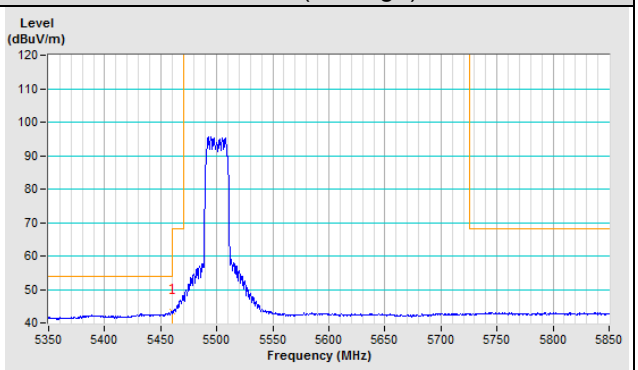


2TX

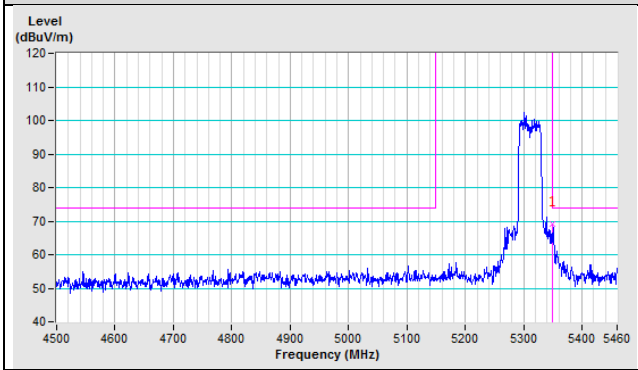
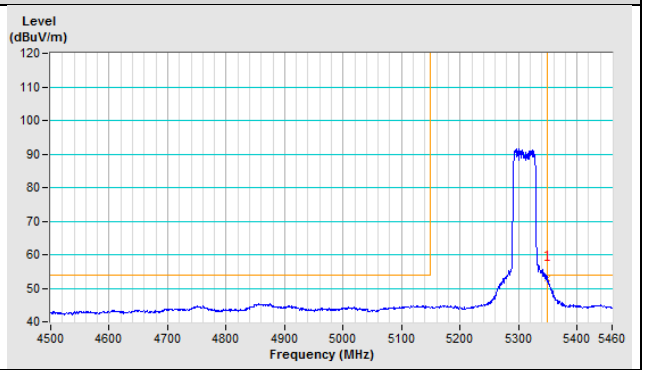
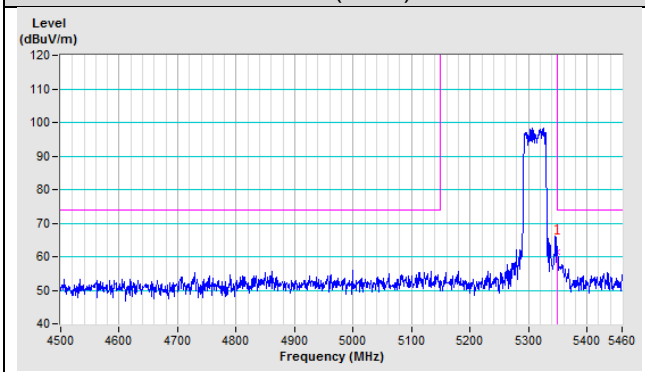
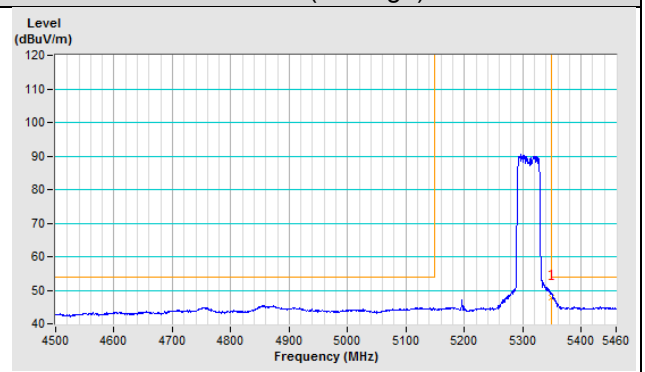
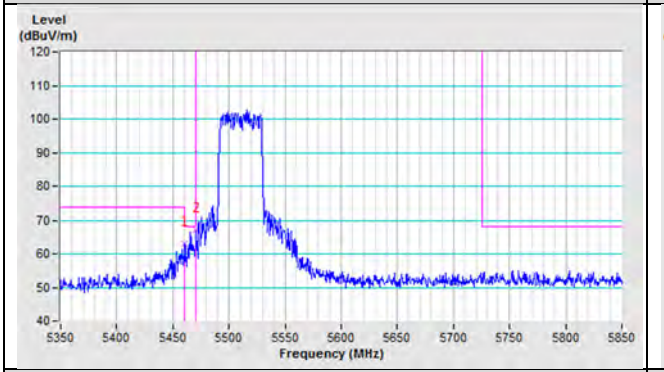
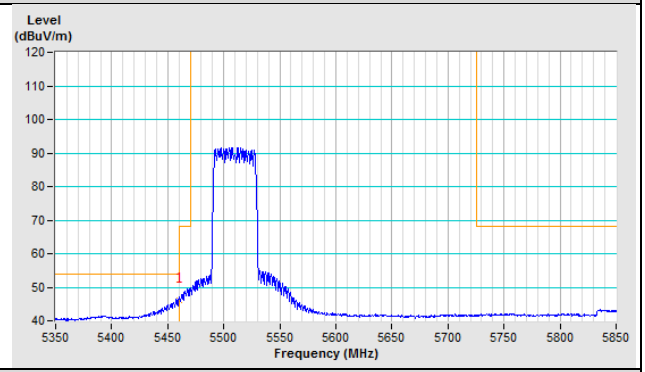
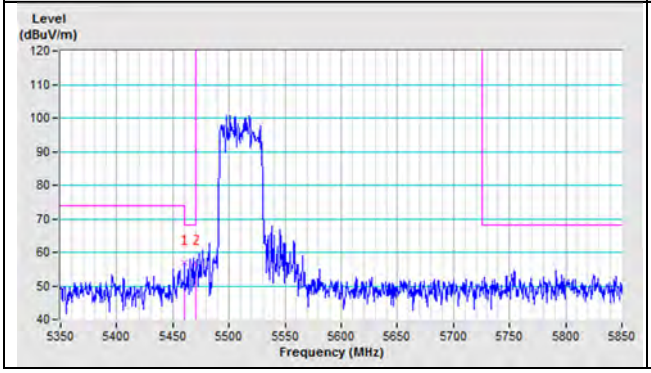
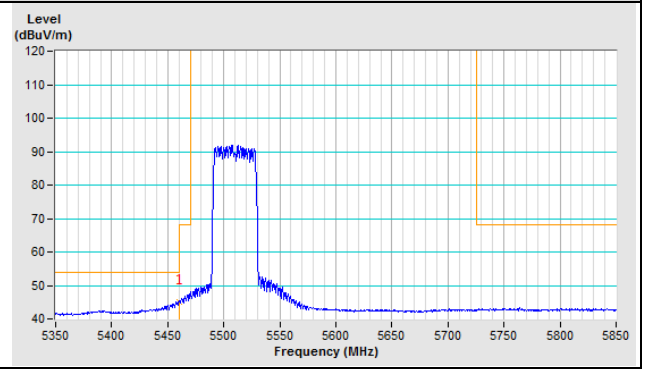
802.11a

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

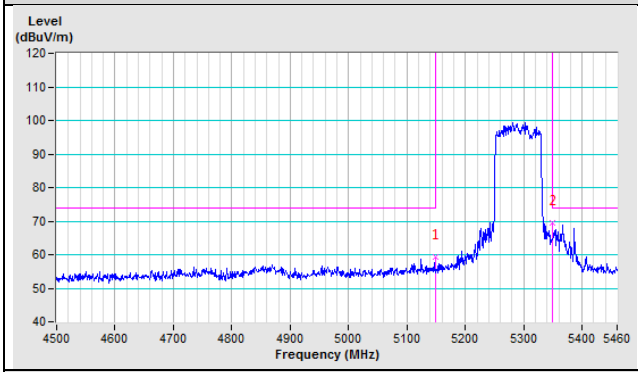
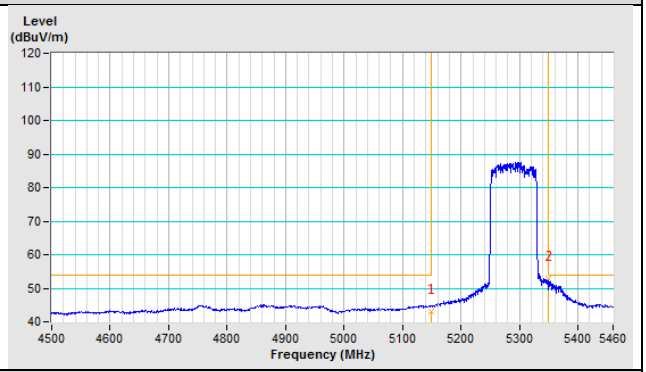
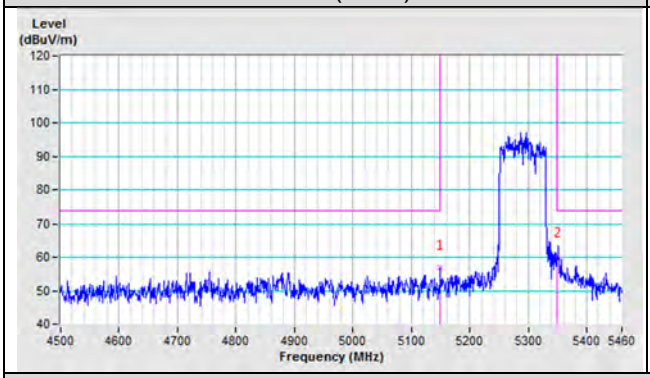
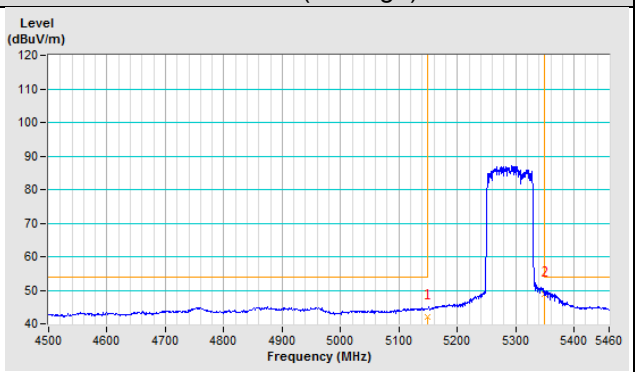
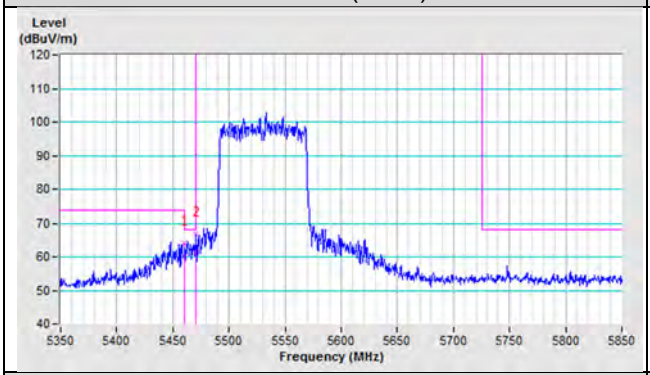
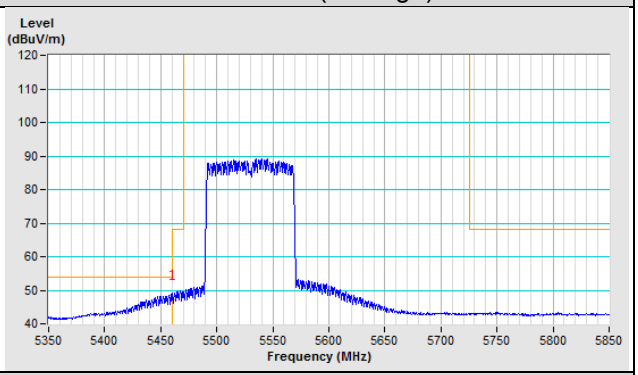
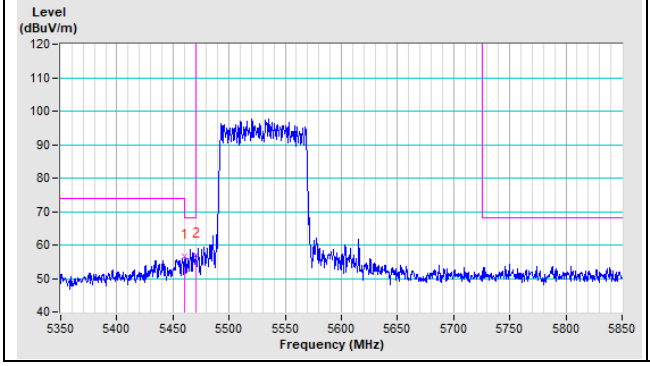
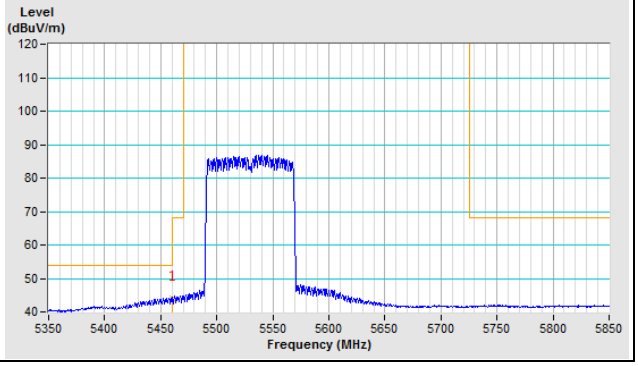
802.11ax (HE20)

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE40)

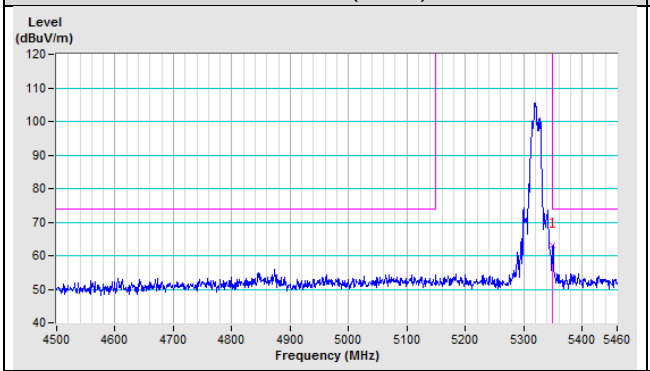
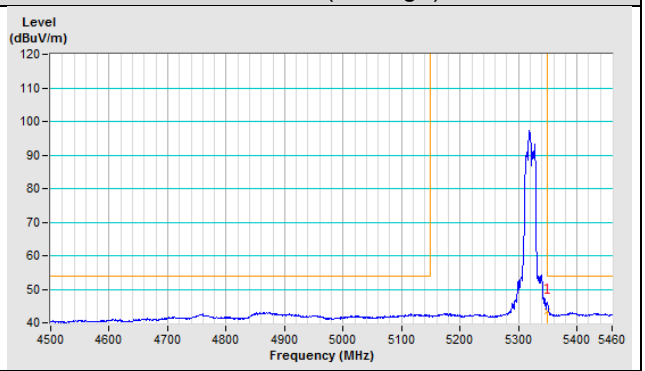
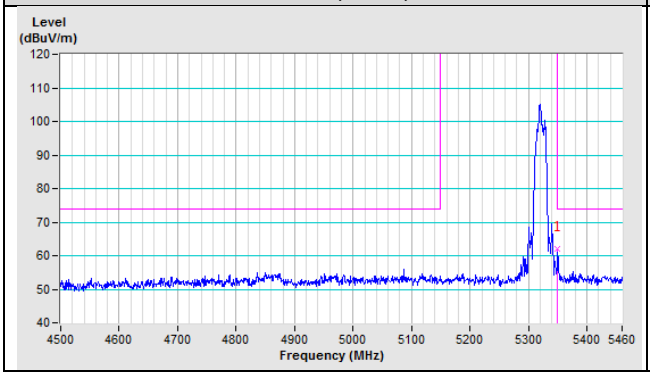
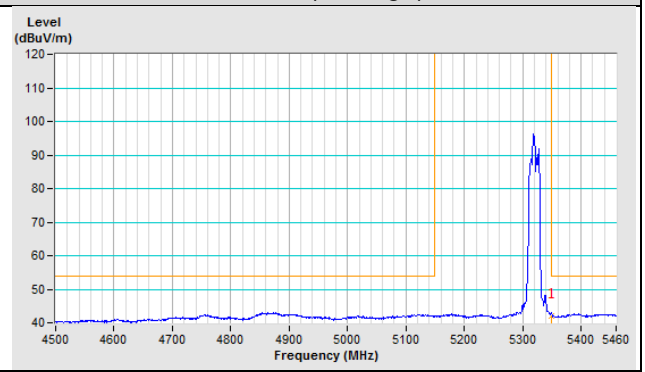
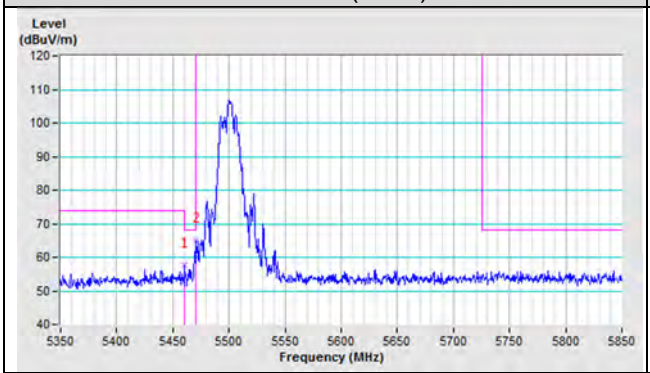
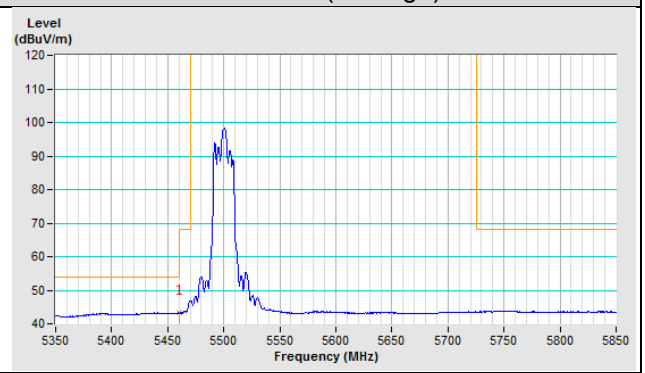
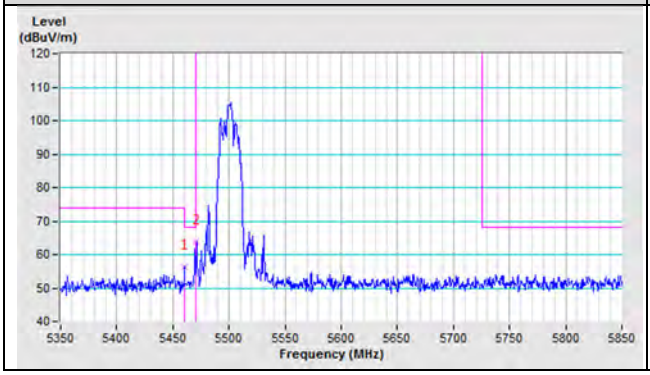
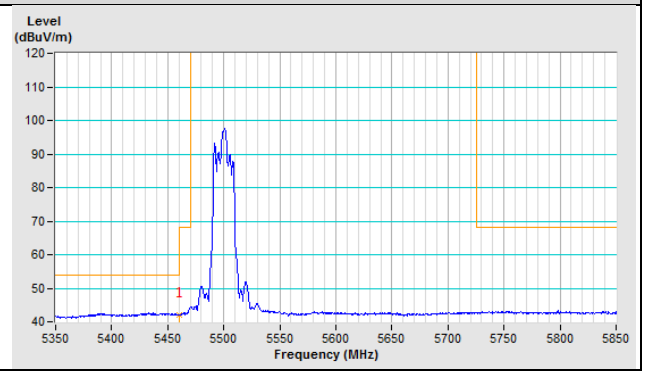
Channel 62	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 102	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE80)

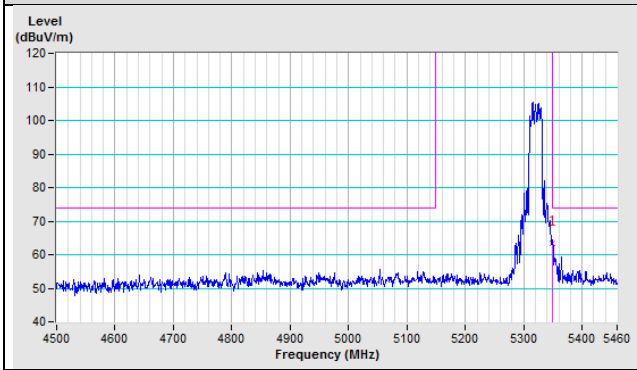
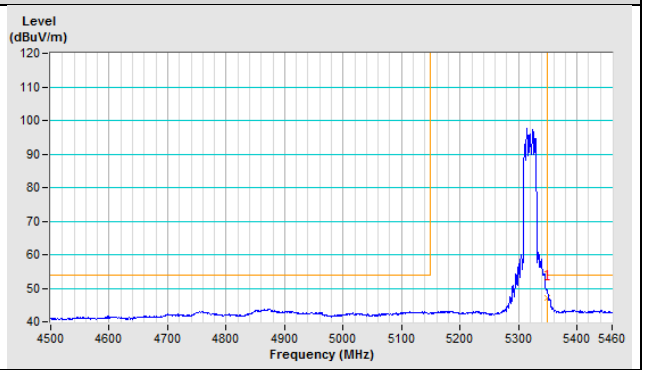
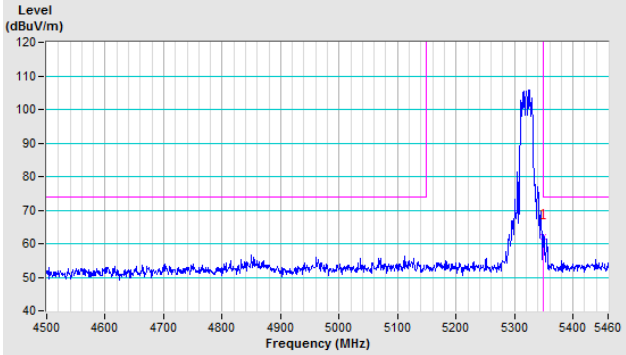
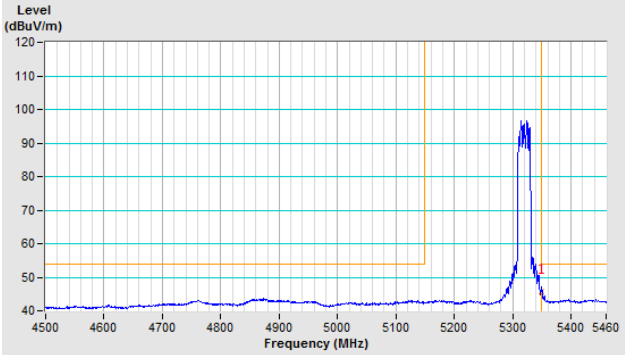
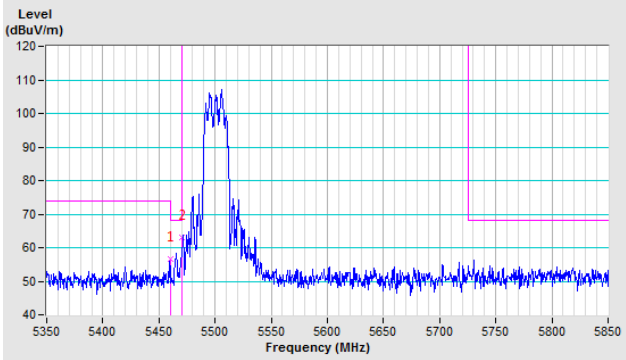
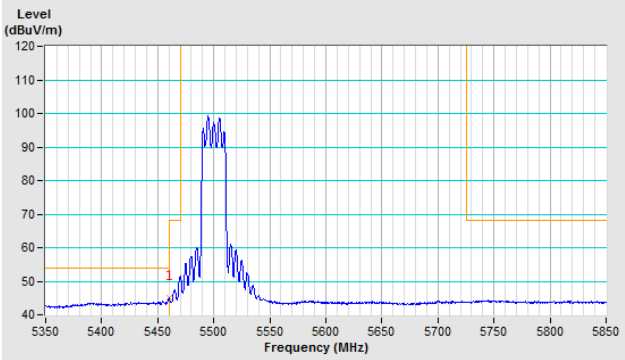
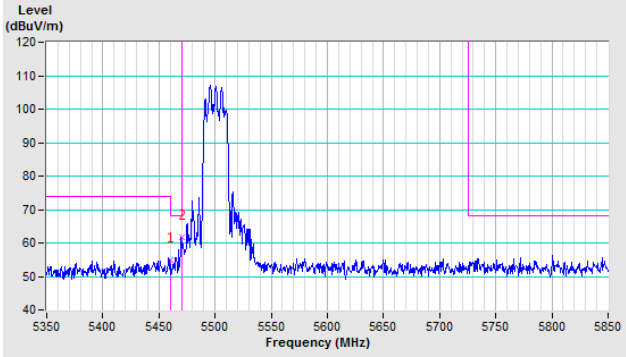
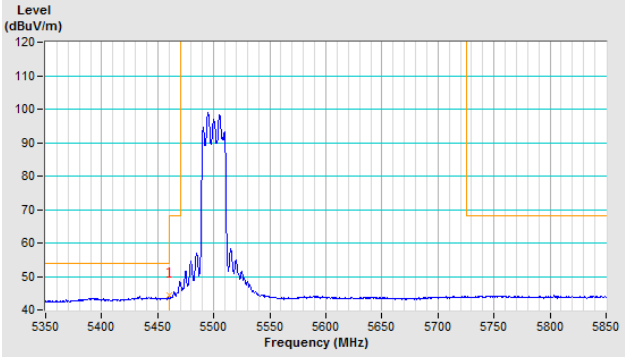
Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

3TX

802.11a

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

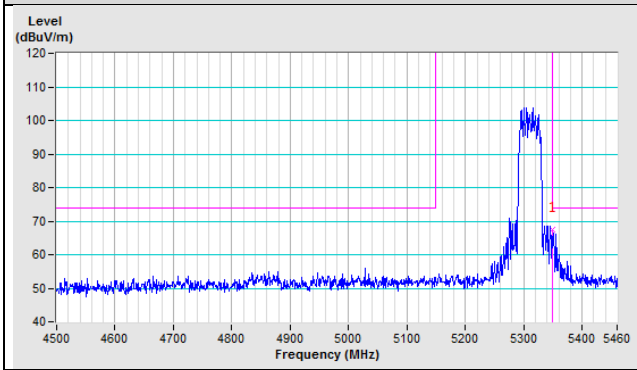
802.11ax (HE20)

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

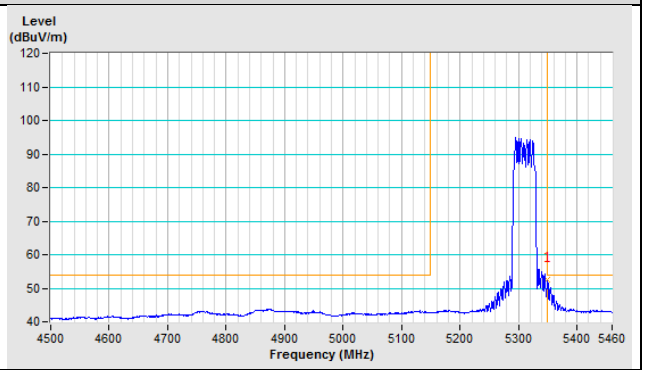
802.11ax (HE40)

Channel 62

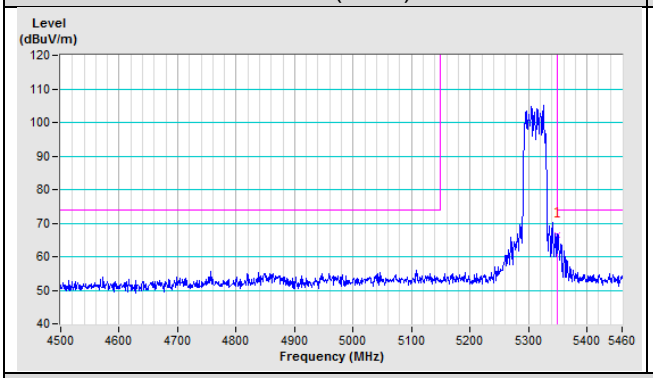
Horizontal (Peak)



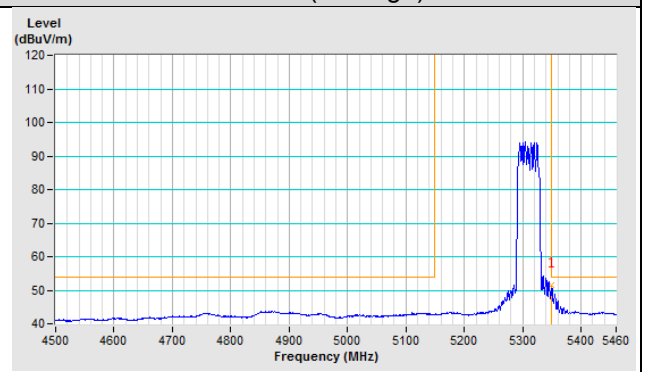
Horizontal (Average)



Vertical (Peak)

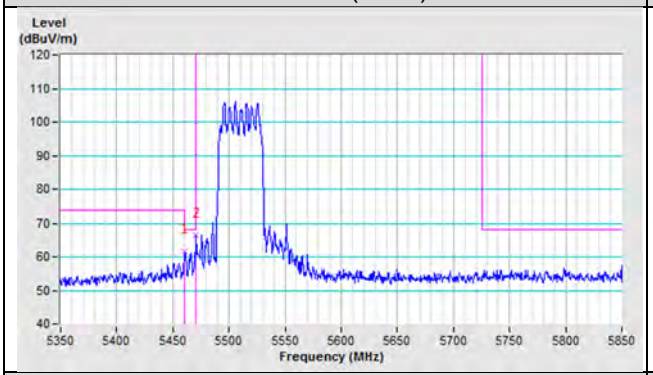


Vertical (Average)

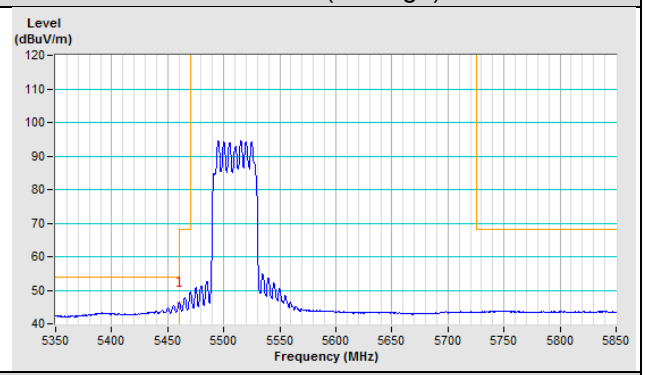


Channel 102

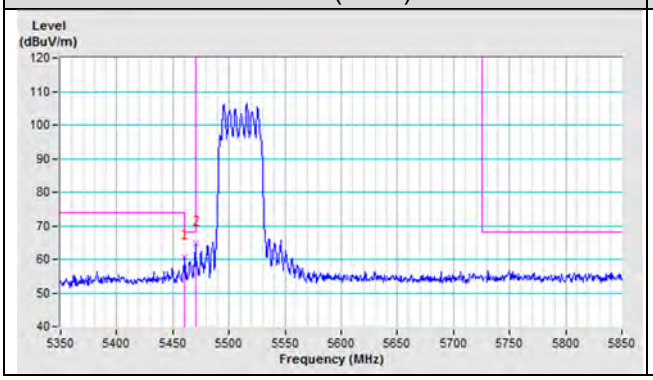
Horizontal (Peak)



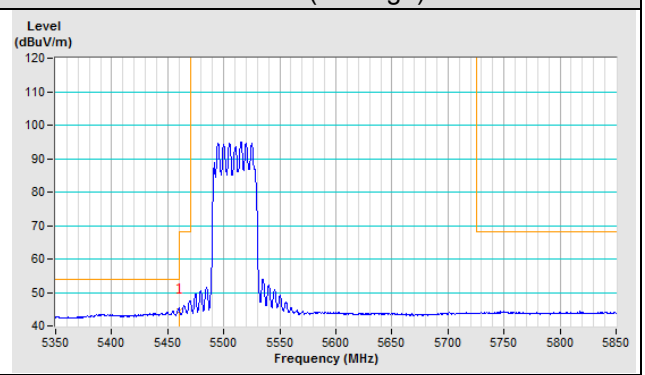
Horizontal (Average)



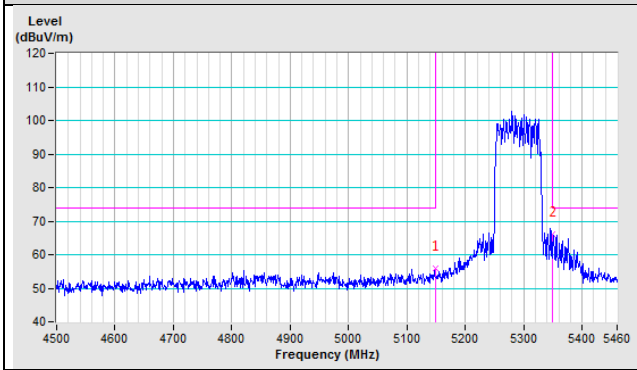
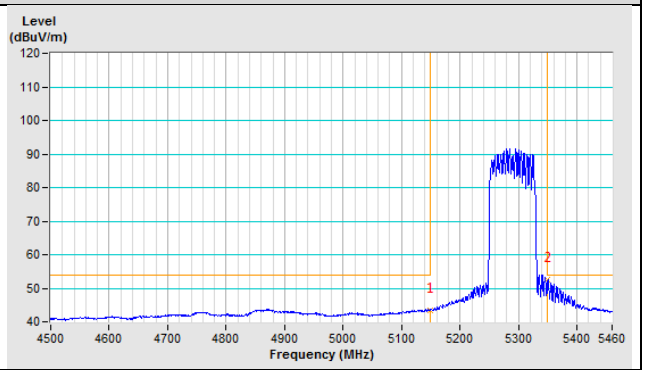
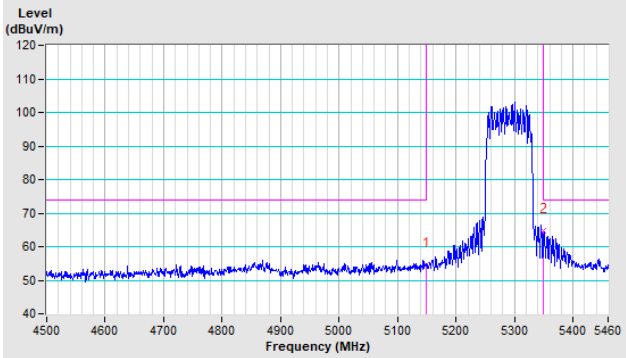
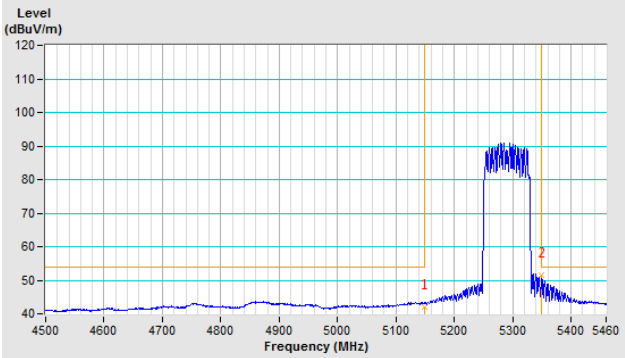
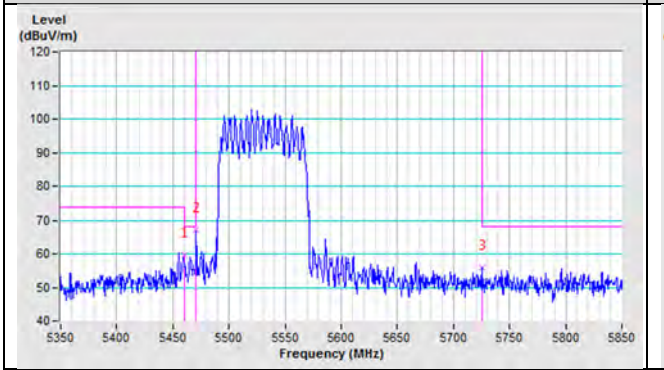
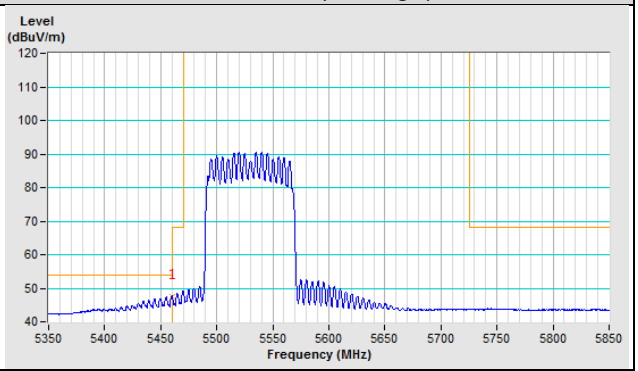
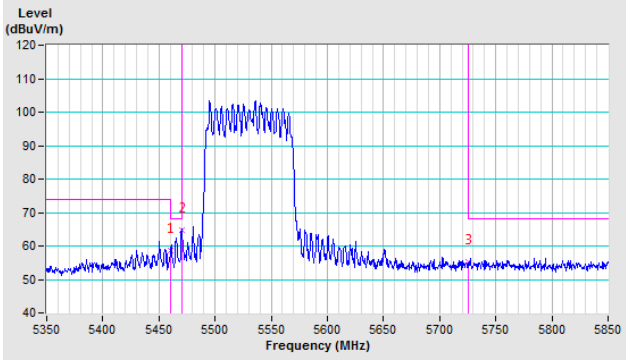
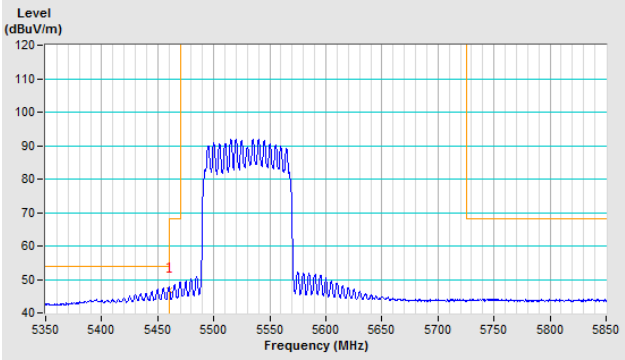
Vertical (Peak)



Vertical (Average)

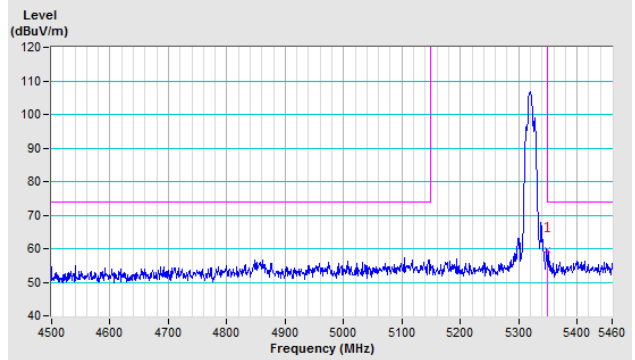
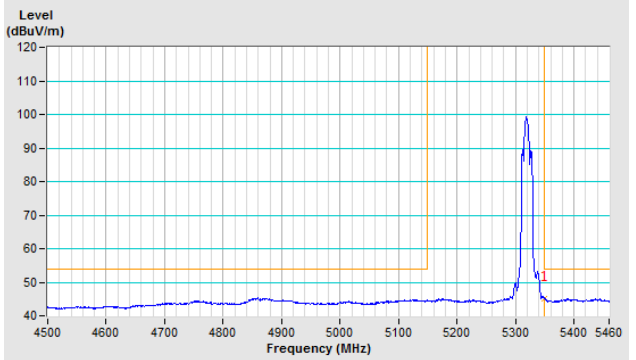
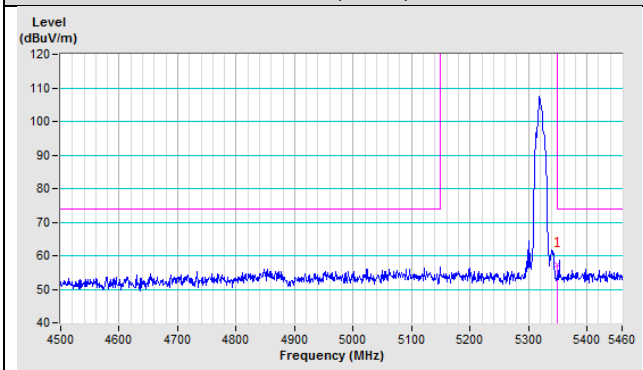
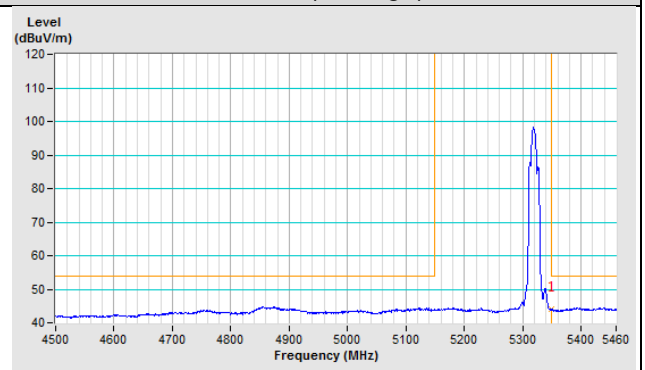
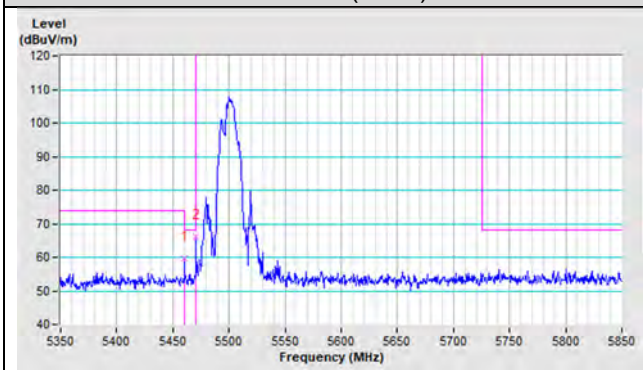
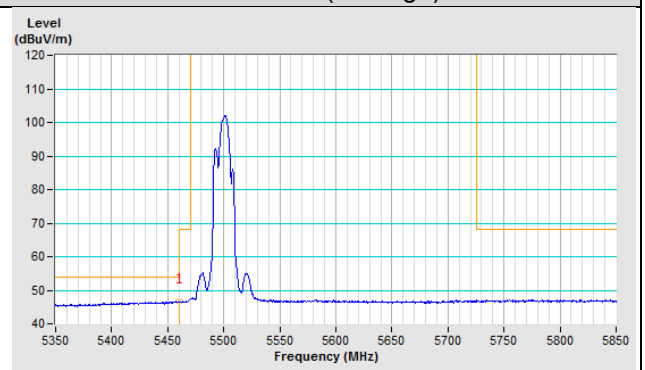
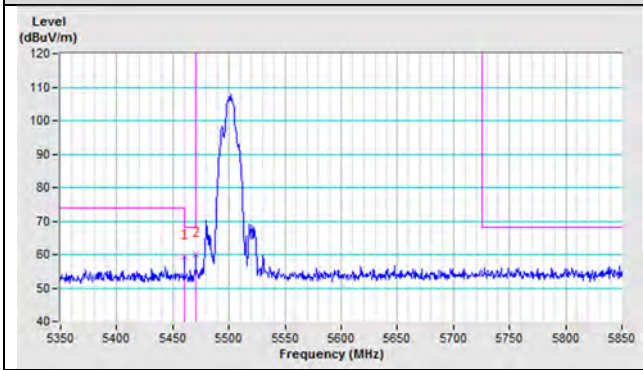
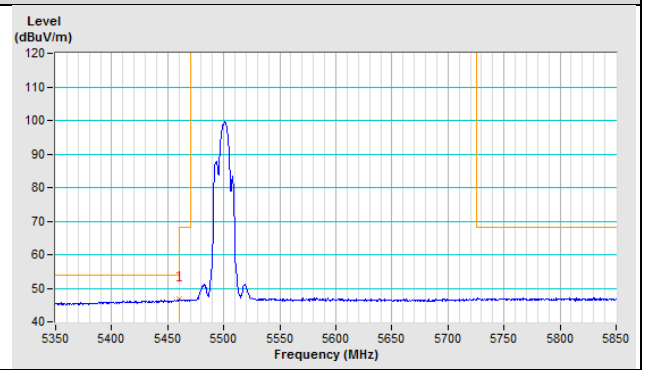


802.11ax (HE80)

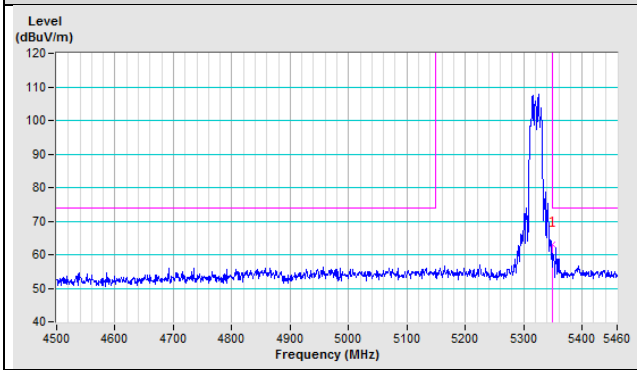
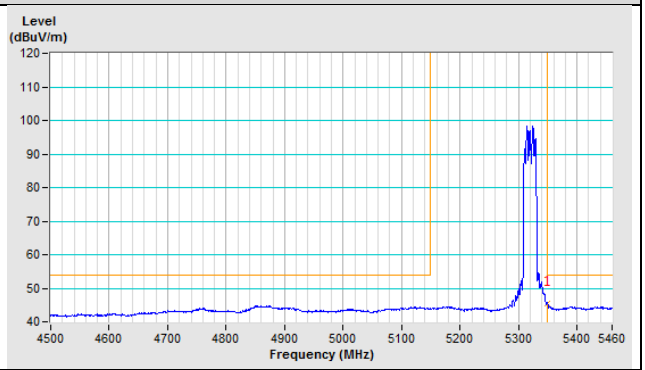
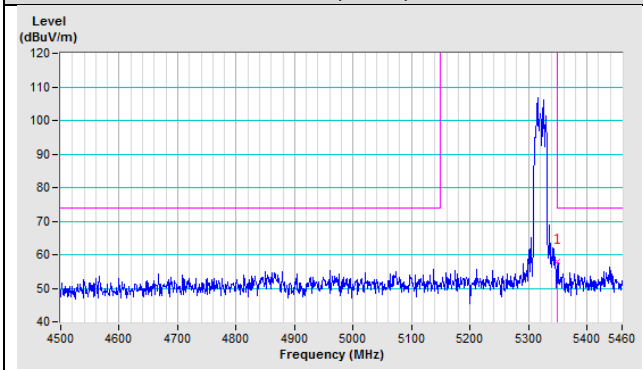
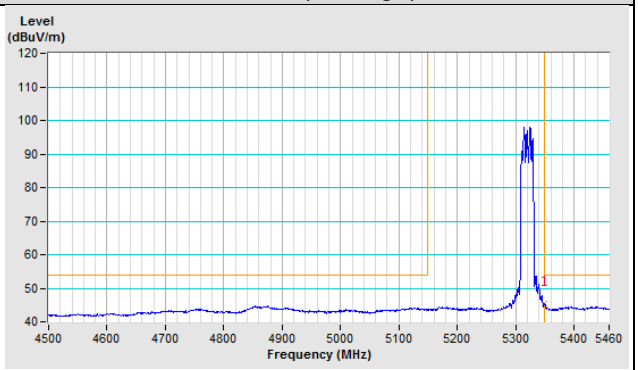
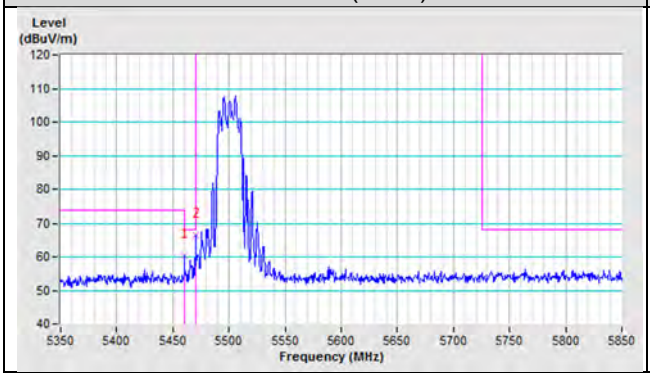
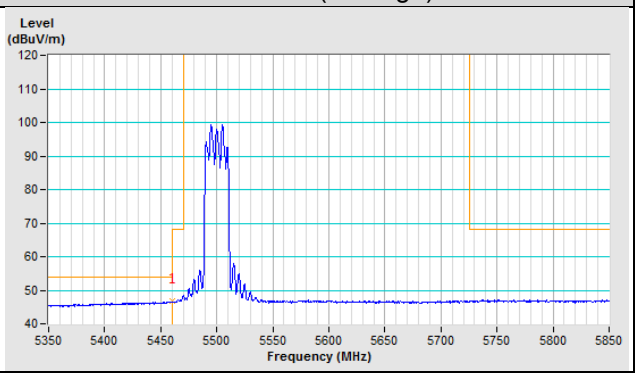
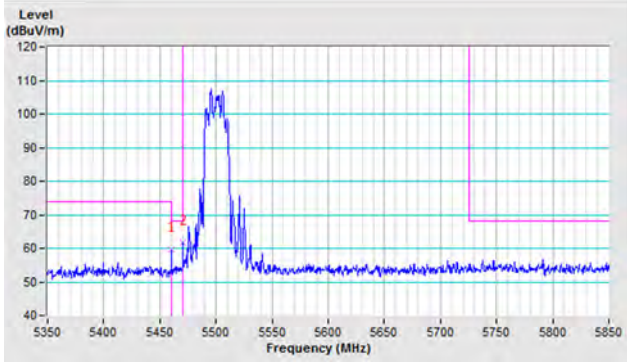
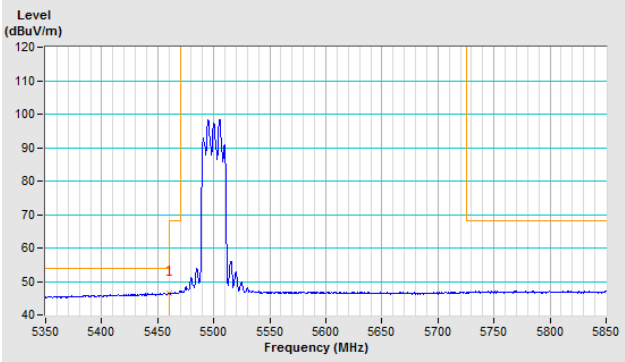
Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

4TX

802.11a

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

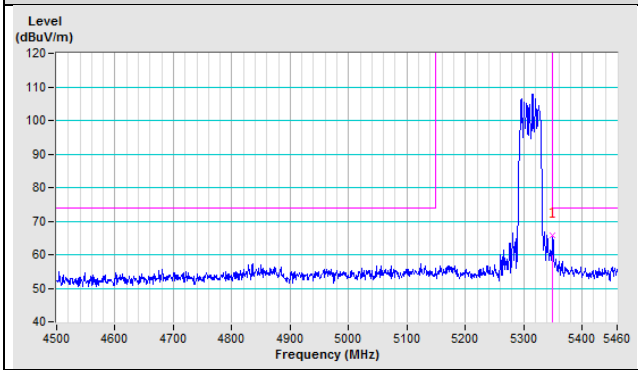
802.11ax (HE20)

Channel 64	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 100	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

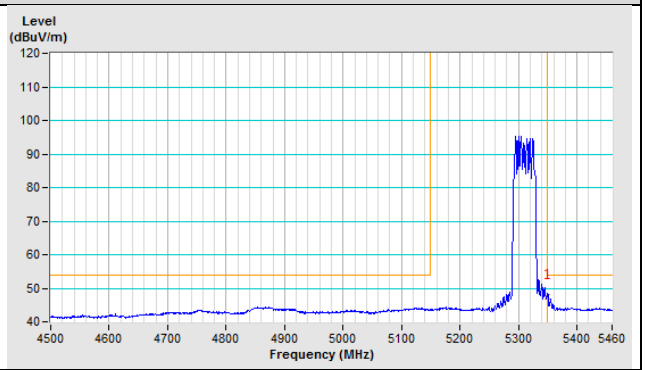
802.11ax (HE40)

Channel 62

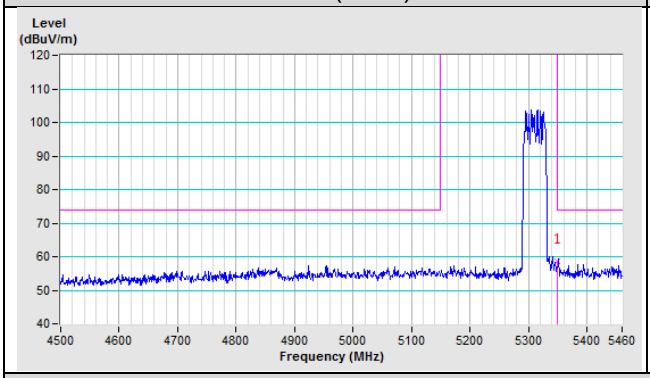
Horizontal (Peak)



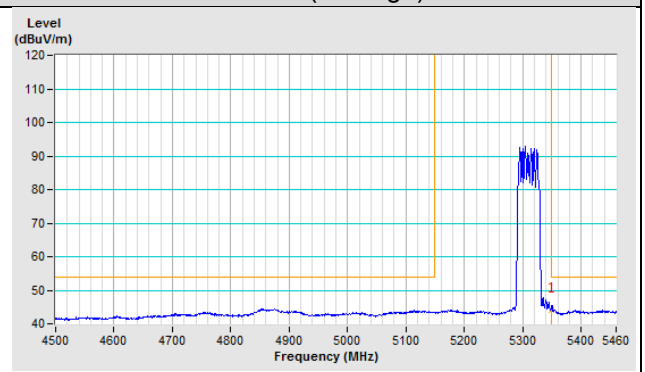
Horizontal (Average)



Vertical (Peak)

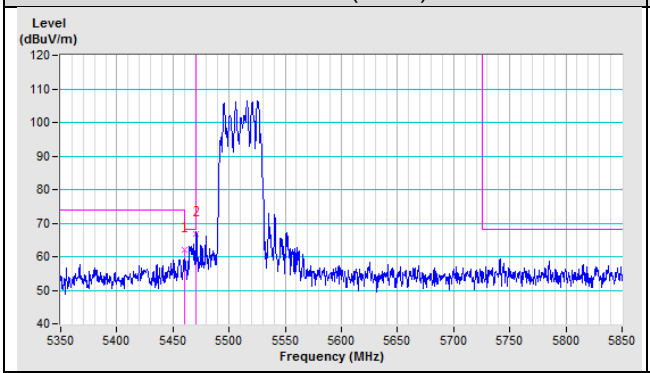


Vertical (Average)

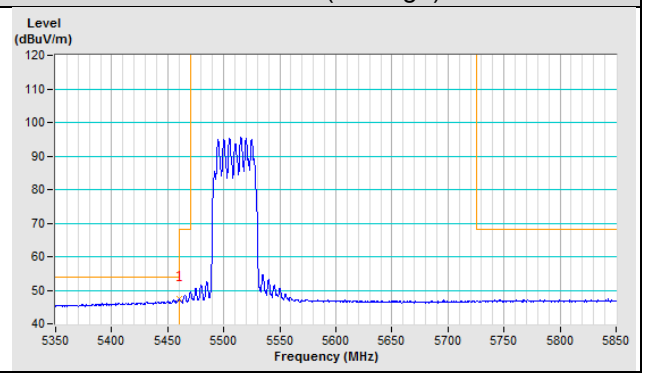


Channel 102

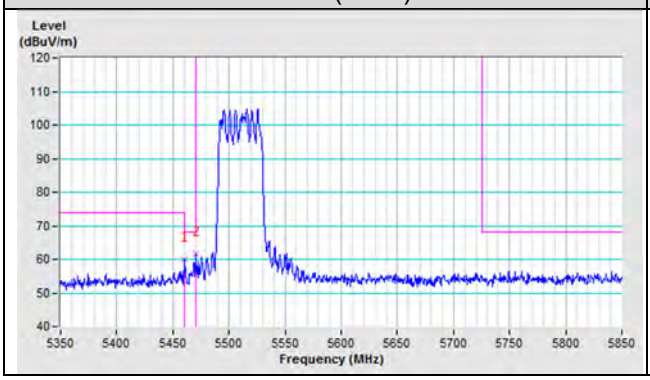
Horizontal (Peak)



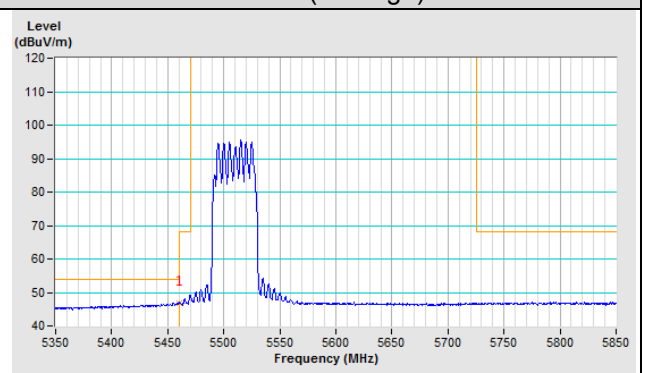
Horizontal (Average)



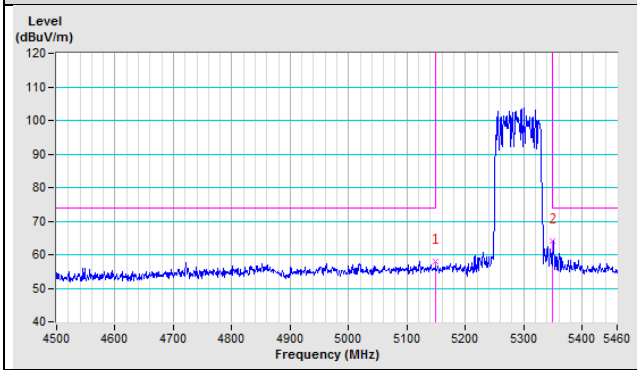
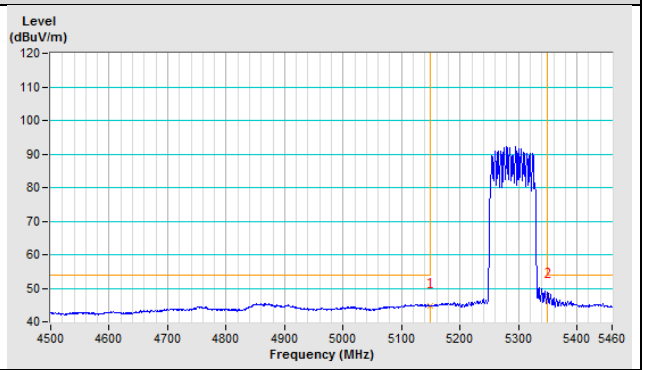
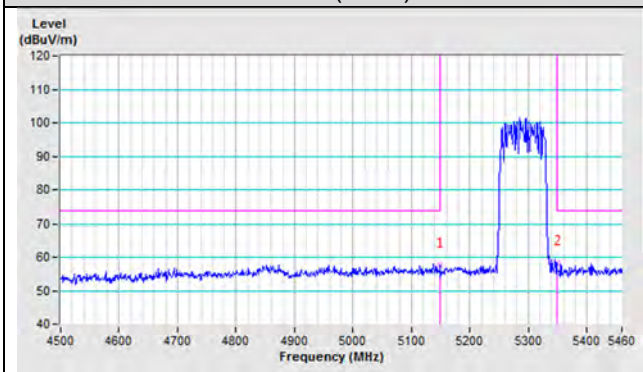
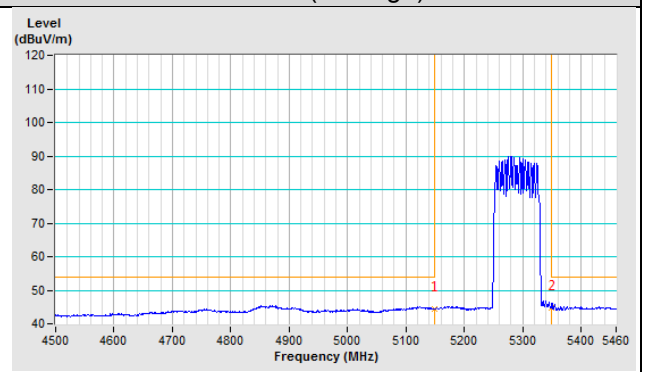
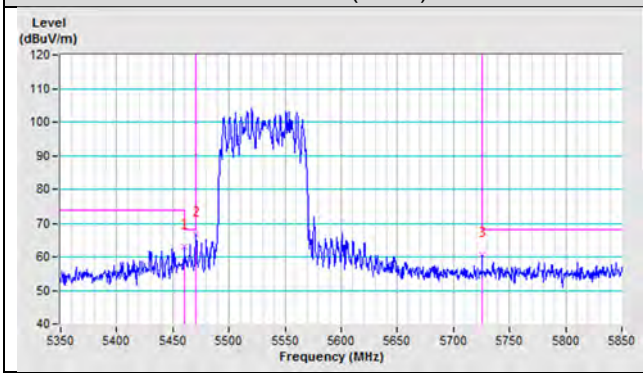
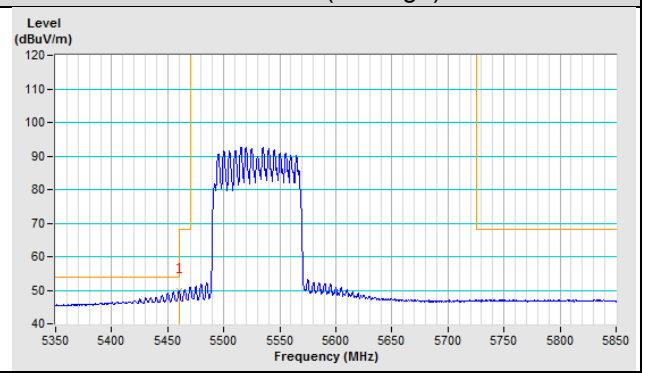
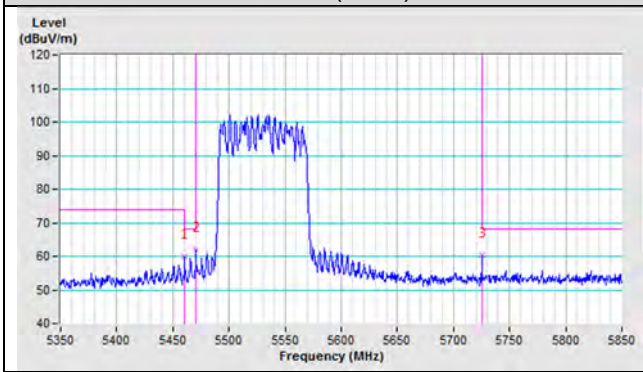
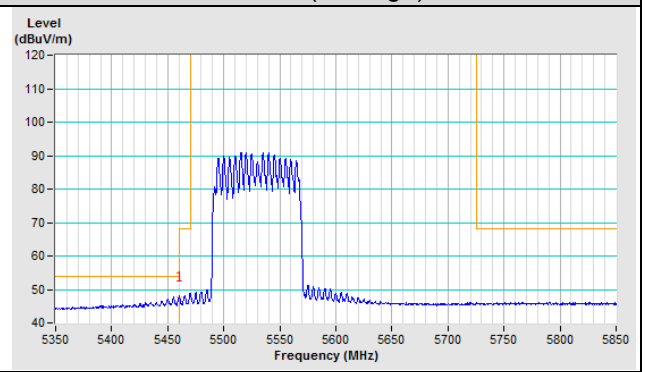
Vertical (Peak)



Vertical (Average)



802.11ax (HE80)

Channel 58	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 106	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.

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