

## 7.9 Radiated Spurious Emissions and Band-edge

**Test site/setup:** Measurement Distance: 3m (Semi-Anechoic Chamber)

Test instrumentation set-up:

Frequency Range(MHz)	Detector	RBW	VBW
0.009-0.090	Peak	10kHz	30kHz
0.009-0.090	Average	10kHz	30kHz
0.090-0.110	Quasi-peak	10kHz	30kHz
0.110-0.490MHz	Peak	10kHz	30kHz
0.110-0.490	Average	10kHz	30kHz
0.490 -30	Quasi-peak	10kHz	30kHz
30-1000	Quasi-peak	100kHz	300kHz
Above 1000	Peak	RBW=1MHz	VBW≥RBW
	Average		VBW=10Hz

Sweep=Auto

**15.209 Limit:**

Frequency(MHz)	Limit (dBuV/m)
0.009-0.490	128.5 ~ 93.8
0.490-1.705	73.8 ~63.0
1.705-30	69.5
30-88	40.0
88-216	43.5
216-960	46.0
960-1000	54.0
Above 1000	54.0

Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

**15.407 Limit:**

Operation Frequency (MHz)	EIRP Limit (dBm/MHz)	Equivalent Field Strength (dBuV/m)
5150-5250	-27	68.3
5250-5350		
5470-5725		
5725-5850	-27* <sup>1</sup>	68.3* <sup>1</sup>
	-17* <sup>2</sup>	78.3* <sup>2</sup>

Note: The following formula is used to convert the EIRP to field strength

$$E = \frac{1000000 \sqrt{30P}}{3} \text{ uV/m, where P is the EIRP (Watts).}$$

Remark: \*<sup>1</sup> Without 10MHz of band edge; \*<sup>2</sup> Within 10MHz of band edge

### Test Setup:

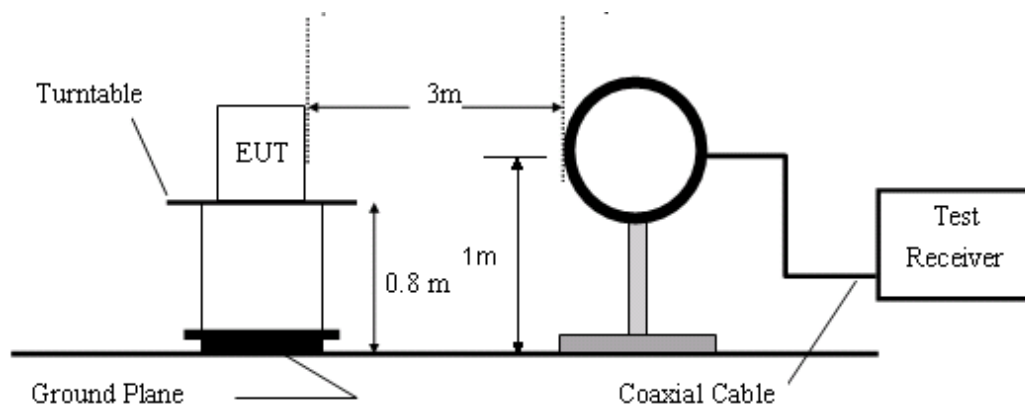


Figure1. Below 30MHz radiated emissions test configuration

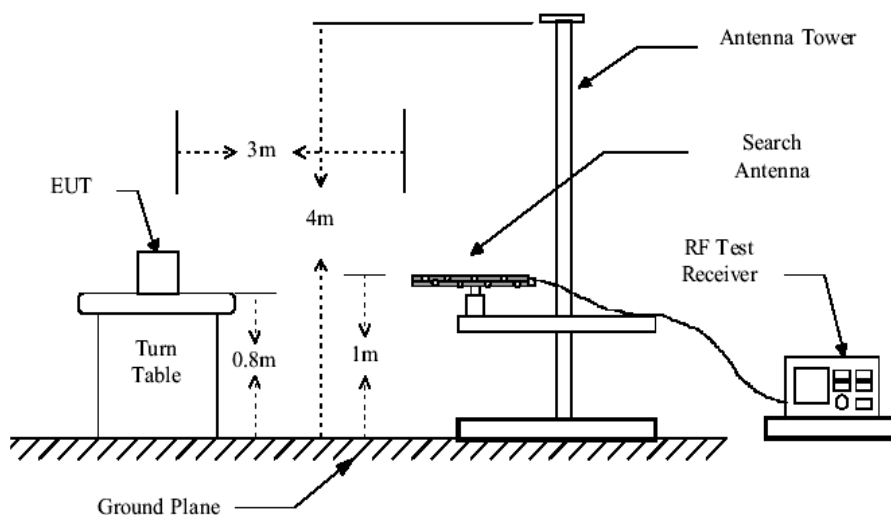


Figure2. 30MHz to 1GHz radiated emissions test configuration

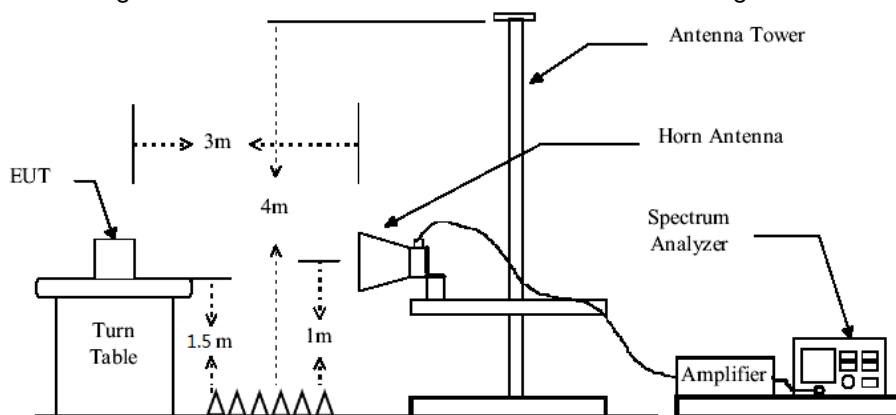


Figure3. Above 1GHz radiated emissions test configuration

- Test Procedure:**
- 1) The procedure used was ANSI Standard C63.10. When an emission was found, the table was rotated to produce the maximum signal strength. An initial pre-scan was performed for in peak detection mode using the receiver. The EUT was measured for both the Horizontal and Vertical polarities and performed a pre-test three orthogonal planes. For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. The worst case emissions were reported.
  - 2) Low noise amplifier was used below 1GHz, High pass Filter and amplifier was used above 3GHz. We did not use any amplifier or filter between 1G and 3GHz.
  - 3) Test were performed for their spatial orthogonal(X, Y, Z), the worst test data (X orthogonal) was submitted.
    - a) For this intentional radiator operates below 25 GHz. the spectrum shall be investigated to the tenth harmonic of the highest fundamental frequency. And above the third harmonic of this intentional radiator, the disturbance is very low. So the test result only displays to 5rd harmonic.
    - b) As shown in Section, for frequencies above 1000MHz. the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.
  - 4) Pretest under all modes during 30MHz to 1GHz; choose the worst case mode (Middle channel of 802.11a on band 1) record on the report.
  - 5) No spurious emissions were detected within 20dB of limit below 30MHz.

**Test Result:** Pass

## 7.9.1 Radiated Spurious Emissions

30MHz-1GHz:

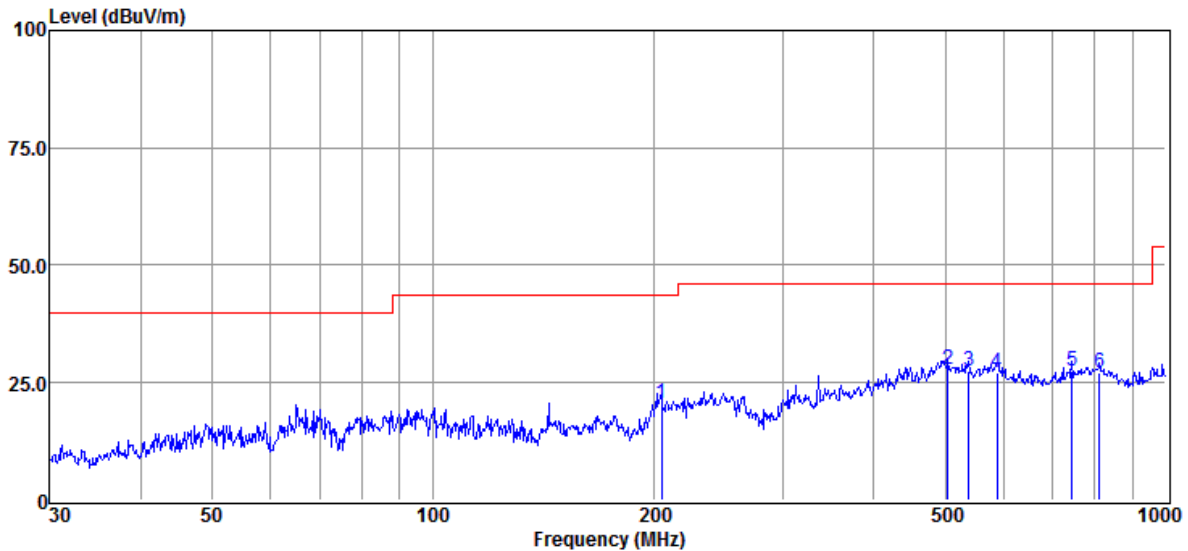
802.11 a

Channel: 149

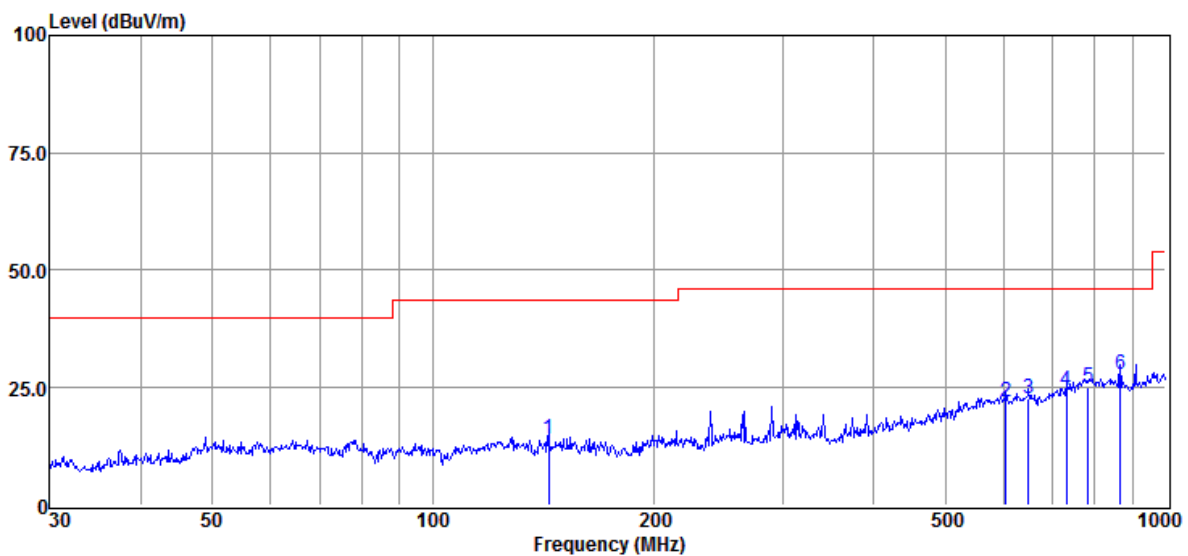
Item	Freq.	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Result Level	Limit Line	Over Limit	Detector	Polarization
(Mark)	(MHz)	(dBμV)	(dB/m)	(dB)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		
1	144.05	43.81	12.50	43.50	1.34	14.15	43.50	-29.35	QP	Horizontal
2	605.95	41.92	20.19	43.13	3.06	22.04	46.00	-23.96	QP	Horizontal
3	649.61	42.25	20.40	43.11	3.20	22.74	46.00	-23.26	QP	Horizontal
4	731.16	42.60	21.34	43.08	3.45	24.31	46.00	-21.69	QP	Horizontal
5	783.84	41.21	23.23	43.06	3.59	24.97	46.00	-21.03	QP	Horizontal
6	867.04	43.88	23.21	43.04	3.80	27.85	46.00	-18.15	QP	Horizontal
1	205.22	52.07	10.49	43.41	1.64	20.79	43.50	-22.71	QP	Vertical
2	504.23	50.99	17.31	43.18	2.78	27.90	46.00	-18.10	QP	Vertical
3	538.46	48.98	18.80	43.16	2.86	27.48	46.00	-18.52	QP	Vertical
4	589.11	47.07	20.30	43.14	3.00	27.23	46.00	-18.77	QP	Vertical
5	745.25	45.20	21.81	43.08	3.49	27.42	46.00	-18.58	QP	Vertical
6	812.54	43.00	23.63	43.05	3.66	27.24	46.00	-18.76	QP	Vertical

Remark: 1. Result Level = Read Level + Antenna Factor + Cable loss - Preamp Factor

Below is the plot of worst case:  
Vertical:



Horizontal:



Above 1GHz

**802.11a**

**Channel: 36**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6892	38.79	9.35	48.14	54	-5.86	peak	Horizontal
2	9244	36.55	14.16	50.71	54	-3.29	peak	Horizontal
3	10360	36.16	14.28	50.44	54	-3.56	peak	Horizontal
4	8152	39.28	11.68	50.96	54	-3.04	peak	Vertical
5	9100	36.48	13.91	50.39	54	-3.61	peak	Vertical
6	10360	37.10	14.28	51.38	54	-2.62	peak	Vertical

**802.11a**

**Channel: 40**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6748	39.52	8.85	48.37	54	-5.63	peak	Horizontal
2	8524	39.28	12.23	51.51	54	-2.49	peak	Horizontal
3	10400	35.98	14.22	50.20	54	-3.80	peak	Horizontal
4	8872	37.32	13.32	50.64	54	-3.36	peak	Vertical
5	9364	36.95	14.36	51.31	54	-2.69	peak	Vertical
6	10400	36.01	14.22	50.23	54	-3.77	peak	Vertical

**802.11a**

**Channel: 48**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	7180	38.14	10.52	48.66	54	-5.34	peak	Horizontal
2	9244	36.55	14.16	50.71	54	-3.29	peak	Horizontal
3	10480	36.65	14.08	50.73	54	-3.27	peak	Horizontal
4	8872	37.32	13.32	50.64	54	-3.36	peak	Vertical
5	10480	36.25	14.08	50.33	54	-3.67	peak	Vertical
6	11200	37.65	14.25	51.90	54	-2.10	peak	Vertical

**802.11a**

**Channel: 149**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6892	38.79	9.35	48.14	54	-5.86	peak	Horizontal
2	9244	36.55	14.16	50.71	54	-3.29	peak	Horizontal
3	10360	36.16	14.28	50.44	54	-3.56	peak	Horizontal
4	8152	39.28	11.68	50.96	54	-3.04	peak	Vertical
5	9100	36.48	13.91	50.39	54	-3.61	peak	Vertical
6	10360	37.10	14.28	51.38	54	-2.62	peak	Vertical

**802.11a**

**Channel: 157**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6748	39.52	8.85	48.37	54	-5.63	peak	Horizontal
2	8524	39.28	12.23	51.51	54	-2.49	peak	Horizontal
3	10400	35.98	14.22	50.20	54	-3.80	peak	Horizontal
4	8872	37.32	13.32	50.64	54	-3.36	peak	Vertical
5	9364	36.95	14.36	51.31	54	-2.69	peak	Vertical
6	10400	36.01	14.22	50.23	54	-3.77	peak	Vertical

**802.11a**

**Channel: 165**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	7180	38.14	10.52	48.66	54	-5.34	peak	Horizontal
2	9244	36.55	14.16	50.71	54	-3.29	peak	Horizontal
3	10480	36.65	14.08	50.73	54	-3.27	peak	Horizontal
4	8872	37.32	13.32	50.64	54	-3.36	peak	Vertical
5	10480	36.25	14.08	50.33	54	-3.67	peak	Vertical
6	11200	37.65	14.25	51.90	54	-2.10	peak	Vertical

**802.11 n(HT20)**

**Channel: 36**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	7072	38.83	10.05	48.88	54	-5.12	peak	Horizontal
2	9124	36.41	13.95	50.36	54	-3.64	peak	Horizontal
3	10360	36.51	14.28	50.79	54	-3.21	peak	Horizontal
4	8932	38.93	13.52	52.45	54	-1.55	peak	Vertical
5	10360	37.12	14.28	51.40	54	-2.60	peak	Vertical
6	11200	38.78	14.25	53.03	54	-0.97	peak	Vertical

**802.11 n(HT20)**

**Channel: 40**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8320	38.88	11.81	50.69	54	-3.31	peak	Horizontal
2	9124	36.41	13.95	50.36	54	-3.64	peak	Horizontal
3	10400	35.77	14.22	49.99	54	-4.01	peak	Horizontal
4	6988	40.13	9.68	49.81	54	-4.19	peak	Vertical
5	8416	39.83	12.00	51.83	54	-2.17	peak	Vertical
6	10400	37.80	14.22	52.02	54	-1.98	peak	Vertical

**802.11 n(HT20)**

**Channel: 48**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	7168	38.18	10.46	48.64	54	-5.36	peak	Horizontal
2	9040	36.82	13.81	50.63	54	-3.37	peak	Horizontal
3	10480	36.74	14.08	50.82	54	-3.18	peak	Horizontal
4	8416	39.83	12.00	51.83	54	-2.17	peak	Vertical
5	10480	38.15	14.08	52.23	54	-1.77	peak	Vertical
6	10792	38.47	14.41	52.88	54	-1.12	peak	Vertical

**802.11 n(HT20)**

**Channel: 149**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8944	37.55	13.55	51.10	54	-2.90	peak	Horizontal
2	10420	37.06	14.17	51.23	54	-2.77	peak	Horizontal
3	11490	37.29	14.41	51.70	54	-2.30	peak	Horizontal
4	8932	36.00	13.52	49.52	54	-4.48	peak	Vertical
5	9892	37.46	14.39	51.85	54	-2.15	peak	Vertical
6	11490	36.87	14.41	51.28	54	-2.72	peak	Vertical

**802.11 n(HT20)**

**Channel: 157**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8428	38.85	12.03	50.88	54	-3.12	peak	Horizontal
2	9040	36.82	13.81	50.63	54	-3.37	peak	Horizontal
3	11570	37.52	14.25	51.77	54	-2.23	peak	Horizontal
4	9100	35.35	13.91	49.26	54	-4.74	peak	Vertical
5	10372	35.96	14.26	50.22	54	-3.78	peak	Vertical
6	11570	35.77	14.25	50.02	54	-3.98	peak	Vertical

**802.11 n(HT20)**

**Channel: 165**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	9040	36.82	13.81	50.63	54	-3.37	peak	Horizontal
2	9976	37.02	14.42	51.44	54	-2.56	peak	Horizontal
3	11650	37.36	14.06	51.42	74	-22.58	peak	Horizontal
4	8236	38.41	11.65	50.06	54	-3.94	peak	Vertical
5	8932	36.00	13.52	49.52	54	-4.48	peak	Vertical
6	11650	36.87	14.06	50.93	54	-3.07	peak	Vertical



**802.11 n(HT40)**

**Channel: 38**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8656	37.28	12.63	49.91	54	-4.09	peak	Horizontal
2	9232	37.39	14.14	51.53	54	-2.47	peak	Horizontal
3	10380	36.27	14.25	50.52	54	-3.48	peak	Horizontal
4	6357	42.99	7.90	50.89	54	-3.11	peak	Vertical
5	8689	37.70	12.74	50.44	54	-3.56	peak	Vertical
6	10380	35.91	14.25	50.16	54	-3.84	peak	Vertical

**802.11 n(HT40)**

**Channel: 46**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8740	37.28	12.89	50.17	54	-3.83	peak	Horizontal
2	9160	36.54	14.02	50.56	54	-3.44	peak	Horizontal
3	10460	36.96	14.11	51.07	54	-2.93	peak	Horizontal
4	6412	42.41	8.11	50.52	54	-3.48	peak	Vertical
5	8502	38.43	12.16	50.59	54	-3.41	peak	Vertical
6	10460	35.24	14.11	49.35	54	-4.65	peak	Vertical

**802.11 n(HT40)**

**Channel: 151**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8284	39.92	11.74	51.66	54	-2.34	peak	Horizontal
2	8932	37.29	13.52	50.81	54	-3.19	peak	Horizontal
3	11510	38.09	14.4	52.49	54	-1.51	peak	Horizontal
4	7512	38.78	11.92	50.70	54	-3.30	peak	Vertical
5	8755	36.87	12.94	49.81	54	-4.19	peak	Vertical
6	11510	35.19	14.40	49.59	54	-4.41	peak	Vertical

**802.11 n(HT40)**

**Channel: 159**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8536	39.11	12.27	51.38	54	-2.62	peak	Horizontal
2	10384	38.36	14.23	52.59	54	-1.41	peak	Horizontal
3	11590	38.12	14.2	52.32	54	-1.68	peak	Horizontal
4	8755	36.87	12.94	49.81	54	-4.19	peak	Vertical
5	10152	36.75	14.40	51.15	54	-2.85	peak	Vertical
6	11590	36.31	14.20	50.51	54	-3.49	peak	Vertical

**802.11 ac(VHT20)**

**Channel: 36**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8680	36.85	12.71	49.56	54	-4.44	peak	Horizontal
2	9088	36.2	13.89	50.09	54	-3.91	peak	Horizontal
3	10360	35.91	14.28	50.19	54	-3.81	peak	Horizontal
4	9016	35.82	13.77	49.59	54	-4.41	peak	Vertical
5	10360	35.06	14.28	49.34	54	-4.66	peak	Vertical
6	10660	37.68	14.17	51.85	54	-2.15	peak	Vertical

**802.11 ac(VHT20)**

**Channel: 40**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8680	36.85	12.71	49.56	54	-4.44	peak	Horizontal
2	9160	36.56	14.02	50.58	54	-3.42	peak	Horizontal
3	10400	37.63	14.22	51.85	54	-2.15	peak	Horizontal
4	8368	38.01	11.91	49.92	54	-4.08	peak	Vertical
5	9124	36.45	13.95	50.40	54	-3.60	peak	Vertical
6	10400	35.51	14.22	49.73	54	-4.27	peak	Vertical

**802.11 ac(VHT20)**

**Channel: 48**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	7168	38.12	10.46	48.58	54	-5.42	peak	Horizontal
2	8236	38.51	11.65	50.16	54	-3.84	peak	Horizontal
3	10480	36.82	14.08	50.90	54	-3.10	peak	Horizontal
4	8812	37.72	13.10	50.82	54	-3.18	peak	Vertical
5	10024	37.19	14.41	51.60	54	-2.40	peak	Vertical
6	10480	36.51	14.08	50.59	54	-3.41	peak	Vertical

**802.11 ac(VHT20)**

**Channel: 149**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8236	38.51	11.65	50.16	54	-3.84	peak	Horizontal
2	9088	36.20	13.89	50.09	54	-3.91	peak	Horizontal
3	11490	37.21	14.41	51.62	54	-2.38	peak	Horizontal
4	10216	37.12	14.40	51.52	54	-2.48	peak	Vertical
5	11490	38.65	14.41	53.06	54	-0.94	peak	Vertical
6	12340	38.36	14.08	52.44	54	-1.56	peak	Vertical

**802.11 ac(VHT20)**

**Channel: 157**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	9160	36.56	14.02	50.58	54	-3.42	peak	Horizontal
2	10036	37.89	14.42	52.31	54	-1.69	peak	Horizontal
3	11570	36.55	14.25	50.80	54	-3.20	peak	Horizontal
4	9364	37.83	14.36	52.19	54	-1.81	peak	Vertical
5	10144	37.84	14.40	52.24	54	-1.76	peak	Vertical
6	11570	38.19	14.25	52.44	54	-1.56	peak	Vertical

**802.11 ac(VHT20)**

**Channel: 165**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8752	36.88	12.92	49.80	54	-4.20	peak	Horizontal
2	9220	37.08	14.12	51.20	54	-2.80	peak	Horizontal
3	11650	38.09	14.06	52.15	54	-1.85	peak	Horizontal
4	8752	37.99	12.92	50.91	54	-3.09	peak	Vertical
5	9136	37.14	13.97	51.11	54	-2.89	peak	Vertical
6	11650	37.59	14.06	51.65	54	-2.35	peak	Vertical

**802.11 ac(VHT40)**

**Channel: 38**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5896	38.20	6.61	44.81	54	-9.19	peak	Horizontal
2	8536	38.03	12.27	50.30	54	-3.70	peak	Horizontal
3	10380	35.92	14.25	50.17	54	-3.83	peak	Horizontal
4	7380	40.32	11.38	51.70	54	-2.30	peak	Vertical
5	8953	36.39	13.58	49.97	54	-4.03	peak	Vertical
6	10380	35.41	14.25	49.66	54	-4.34	peak	Vertical

**802.11 ac(VHT40)**

**Channel: 46**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8116	38.63	11.75	50.38	54	-3.62	peak	Horizontal
2	8944	37.71	13.55	51.26	54	-2.74	peak	Horizontal
3	10460	37.01	14.11	51.12	54	-2.88	peak	Horizontal
4	6401	43.27	8.08	51.35	54	-2.65	peak	Vertical
5	8645	38.59	12.60	51.19	54	-2.81	peak	Vertical
6	10460	36.49	14.11	50.60	54	-3.40	peak	Vertical

**802.11 ac(VHT40)**

**Channel: 151**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8116	39.76	11.75	51.51	54	-2.49	peak	Horizontal
2	9172	36.82	14.03	50.85	54	-3.15	peak	Horizontal
3	11510	37.43	14.40	51.83	54	-2.17	peak	Horizontal
4	7380	40.74	11.38	52.12	54	-1.88	peak	Vertical
5	8414	39.38	11.99	51.37	54	-2.63	peak	Vertical
6	11510	37.28	14.40	51.68	54	-2.32	peak	Vertical

**802.11 ac(VHT40)**

**Channel: 159**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	8944	37.71	13.55	51.26	54	-2.74	peak	Horizontal
2	10168	37.66	14.40	52.06	54	-1.94	peak	Horizontal
3	11590	36.66	14.20	50.86	54	-3.14	peak	Horizontal
4	8843	38.22	13.22	51.44	54	-2.56	peak	Vertical
5	10515	37.35	14.04	51.39	54	-2.61	peak	Vertical
6	11590	35.84	14.20	50.04	54	-3.96	peak	Vertical

**802.11 ac(VHT80)**

**Channel:42**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	6976	40.26	9.65	49.91	54	-4.09	peak	Horizontal
2	8812	38.13	13.10	51.23	54	-2.77	peak	Horizontal
3	10420	36.97	14.17	51.14	54	-2.86	peak	Horizontal
4	8164	39.00	11.66	50.66	54	-3.34	peak	Vertical
5	8668	38.08	12.66	50.74	54	-3.26	peak	Vertical
6	10420	37.24	14.17	51.41	54	-2.59	peak	Vertical

**802.11 ac(VHT80)**

**Channel: 155**

Mark	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Emission (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	9172	36.82	14.03	50.85	54	-3.15	peak	Horizontal
2	10672	38.27	14.18	52.45	54	-1.55	peak	Horizontal
3	11550	37.05	14.30	51.35	54	-2.65	peak	Horizontal
4	8164	39.00	11.66	50.66	54	-3.34	peak	Vertical
5	11200	37.92	14.25	52.17	54	-1.83	peak	Vertical
6	11550	37.24	14.30	51.54	54	-2.46	peak	Vertical

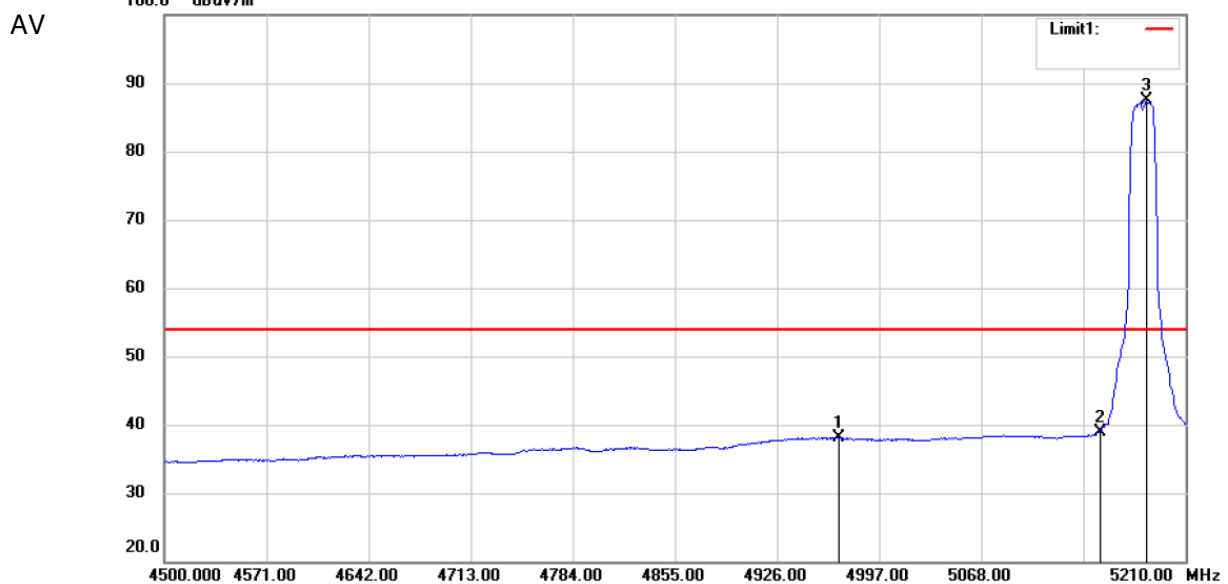
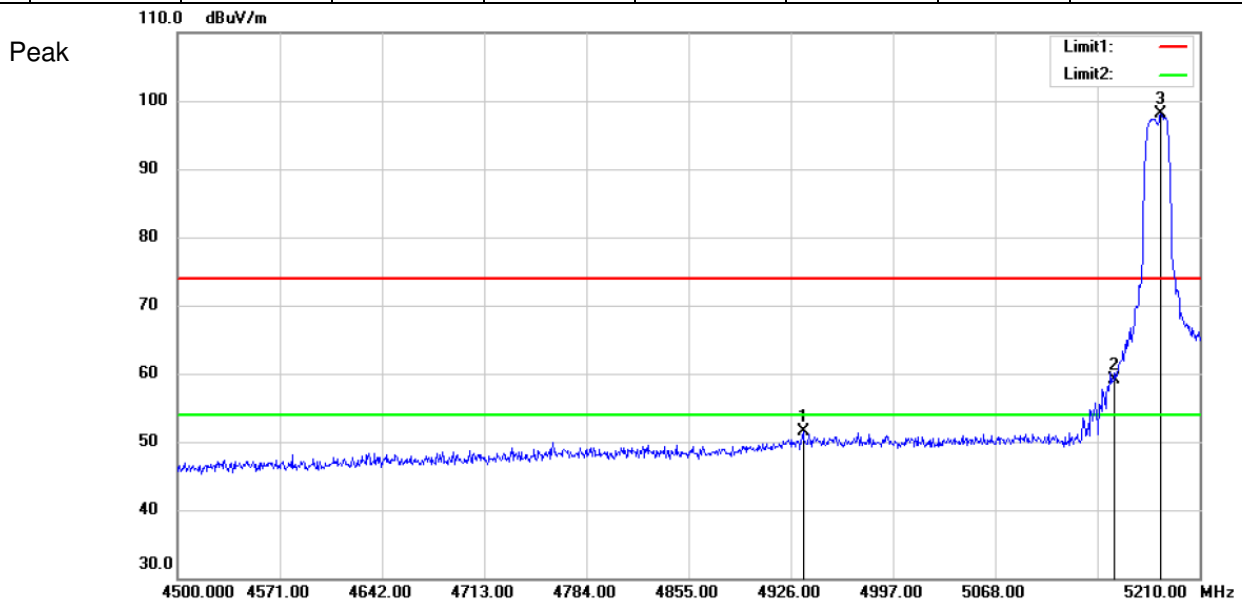
## 7.9.2 Radiated Band-edge

802.11 a

Channel: 36

Fundamental frequency: 5180MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	4934.52	44.12	7.37	51.49	74	-22.51	Peak	Horizontal
2	5150	52.23	6.92	59.15	74	-14.85	Peak	Horizontal
3	5183.02	91.32	6.74	98.06	74	24.06	Peak	Horizontal
1	4968.6	30.61	7.54	38.15	54	-15.85	AV	Horizontal
2	5150	32.06	6.92	38.98	54	-15.02	AV	Horizontal
3	5183.02	80.68	6.74	87.42	54	33.42	AV	Horizontal

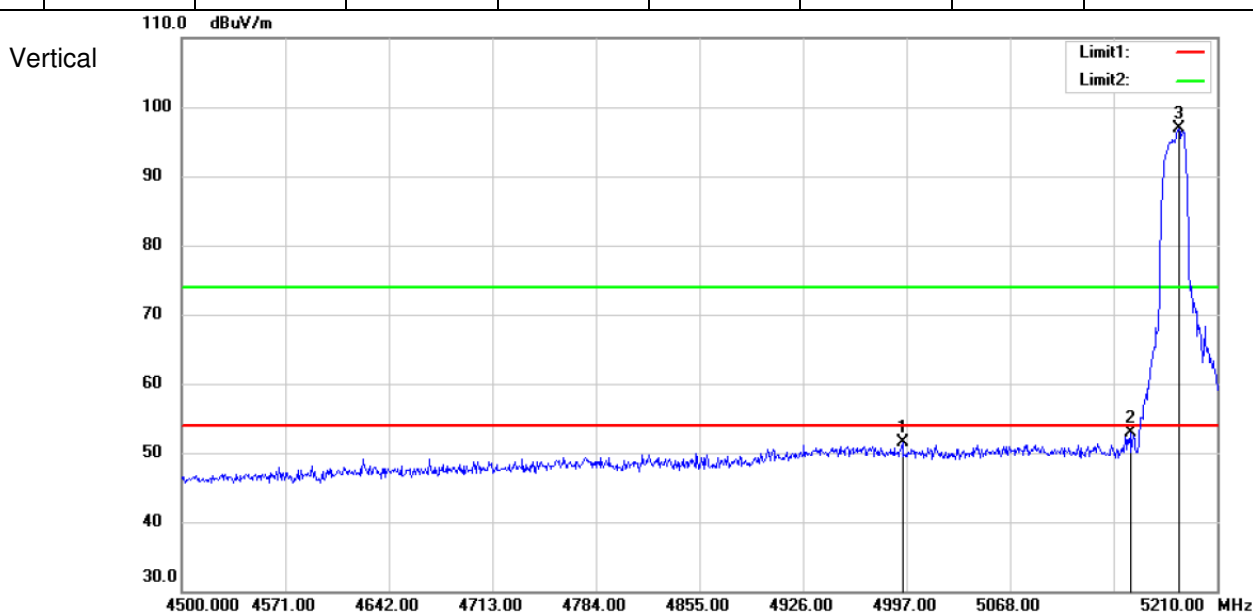


### 802.11 a

Channel: 36

Fundamental frequency: 5180MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	4994.16	43.79	7.67	51.46	54	-2.54	Peak	Vertical
2	5150	46.01	6.92	52.93	54	-1.07	Peak	Vertical
3	5183.73	90.15	6.74	96.89	54	42.89	Peak	Vertical

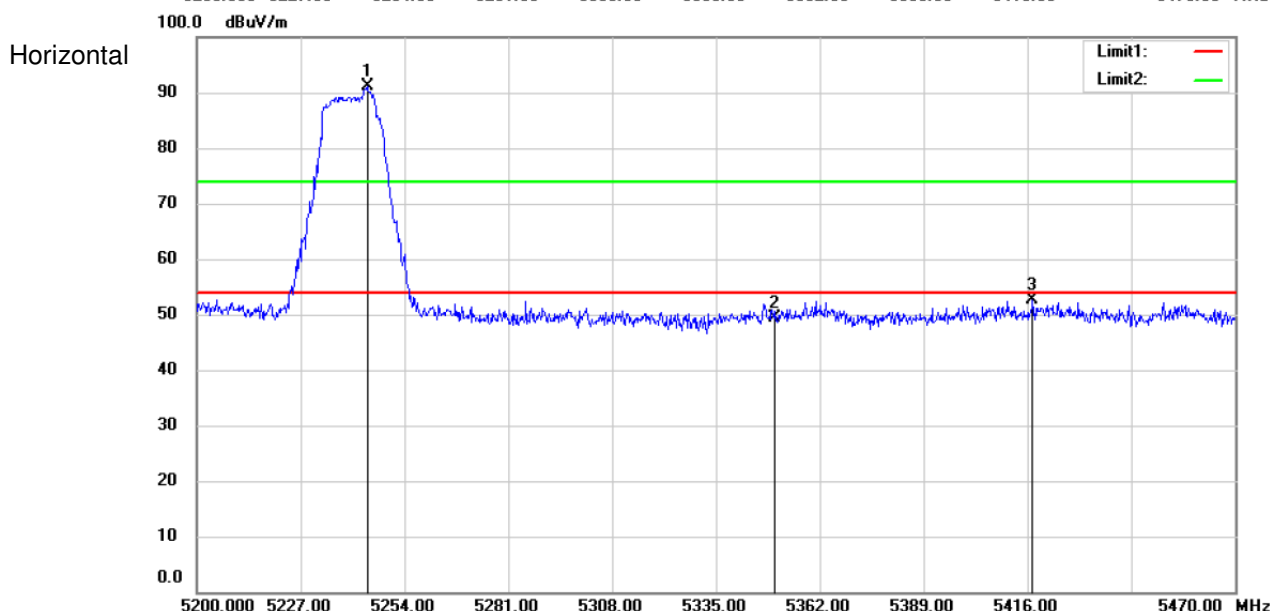
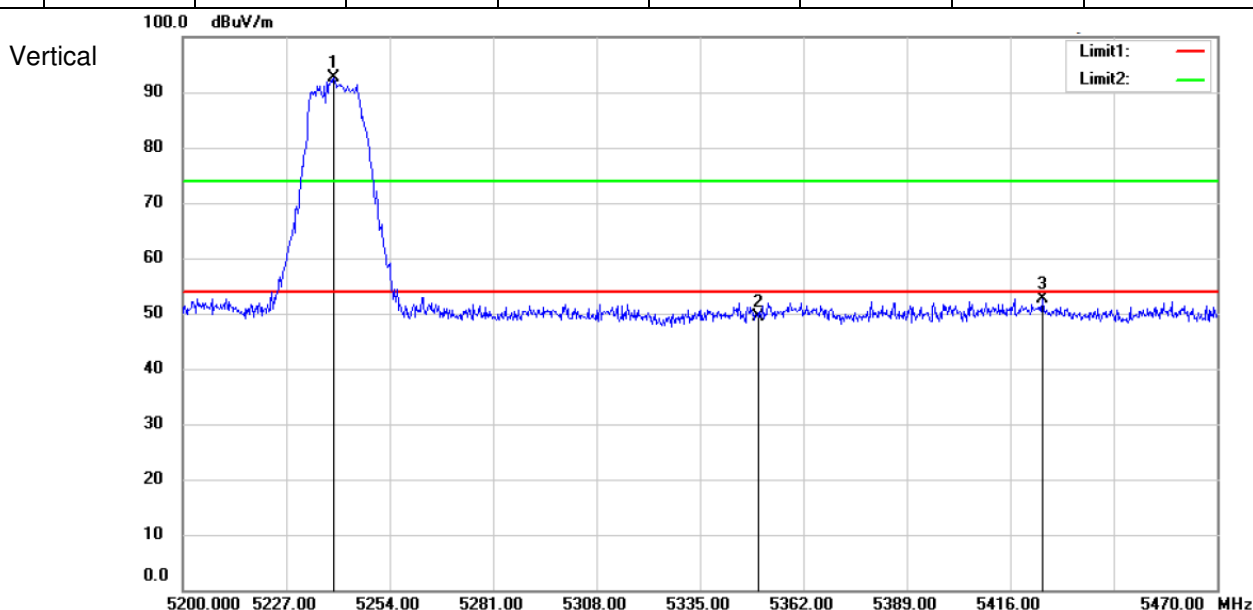


802.11 a

Channel: 48

Fundamental frequency: 5240MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5239.42	86.02	6.65	92.67	54	38.67	Peak	Vertical
2	5350	42.35	6.98	49.33	54	-4.67	Peak	Vertical
3	5424.37	45.44	7.23	52.67	54	-1.33	Peak	Vertical
1	5244.28	84.52	6.65	91.17	54	37.17	Peak	Horizontal
2	5350	42.49	6.98	49.47	54	-4.53	Peak	Horizontal
3	5417.35	45.29	7.27	52.56	54	-1.44	Peak	Horizontal

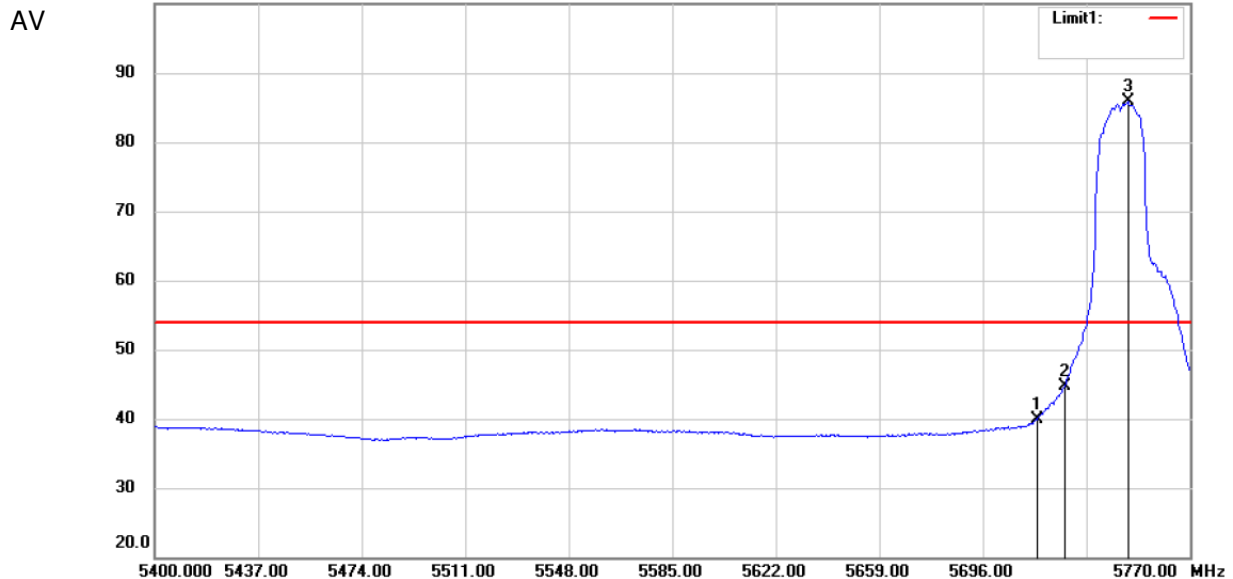
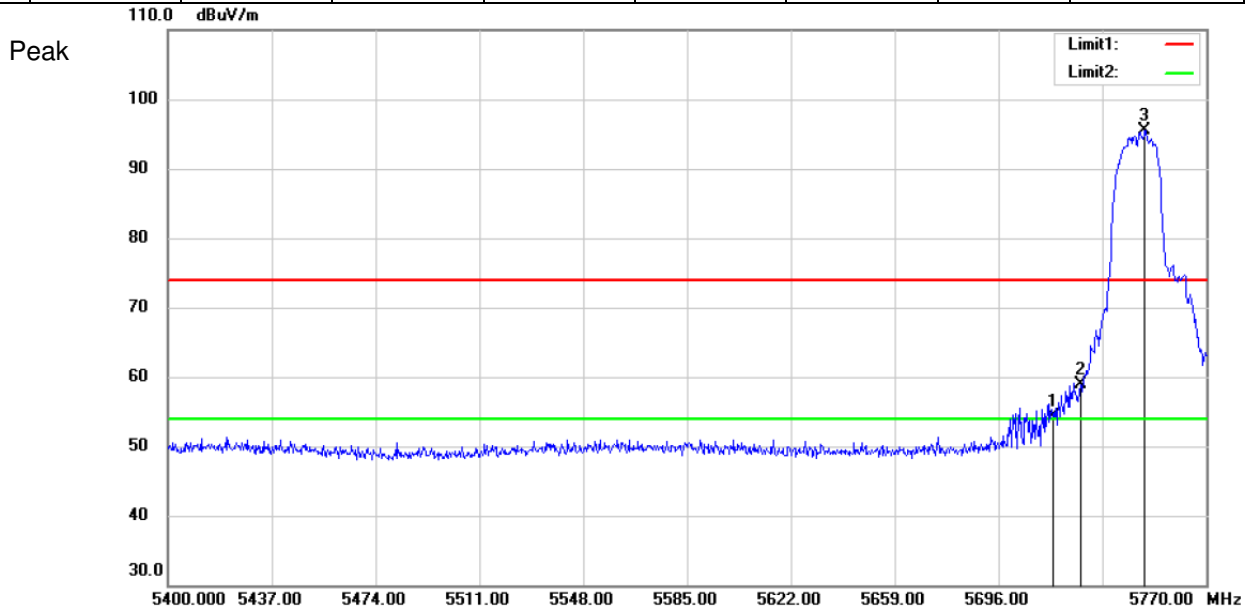


802.11 a

Channel: 149

Fundamental frequency: 5745MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5715	47.51	6.84	54.35	74	-19.65	Peak	Horizontal
2	5725	52.17	6.82	58.99	74	-15.01	Peak	Horizontal
3	5748.17	88.79	6.77	95.56	74	21.56	Peak	Horizontal
1	5715	33.11	6.84	39.95	54	-14.05	AV	Horizontal
2	5725	37.79	6.82	44.61	54	-9.39	AV	Horizontal
3	5747.8	79.06	6.77	85.83	54	31.83	AV	Horizontal



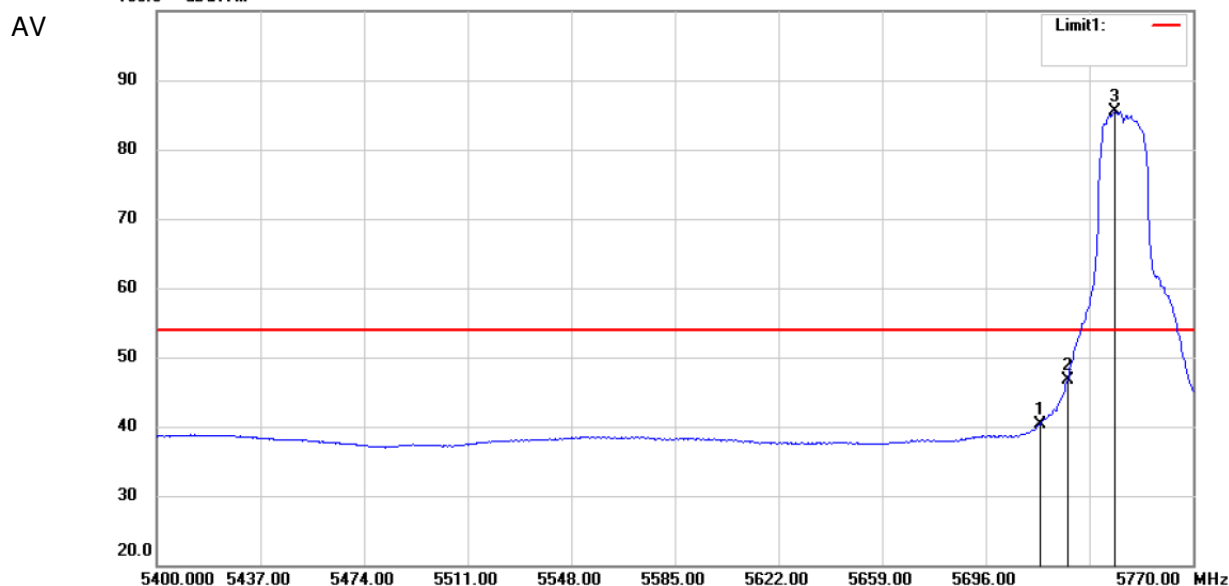
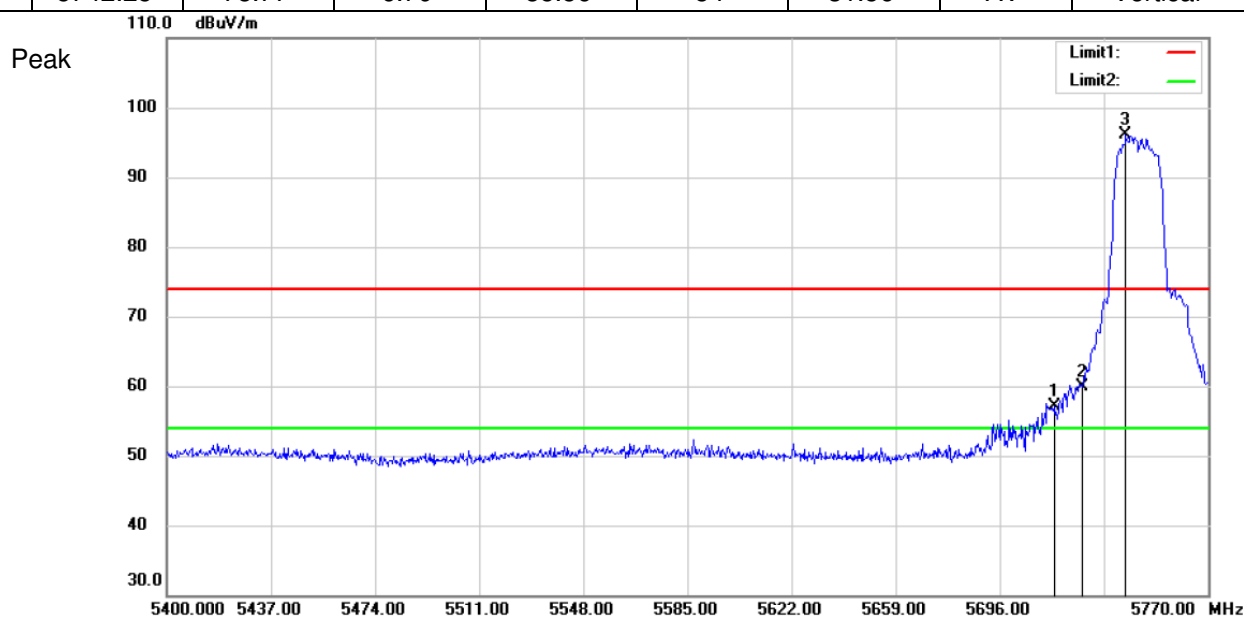


### 802.11 a

Channel: 149

Fundamental frequency: 5745MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5715	50.36	6.84	57.2	74	-16.8	Peak	Vertical
2	5725	53.12	6.82	59.94	74	-14.06	Peak	Vertical
3	5740.77	89.35	6.79	96.14	74	22.14	Peak	Vertical
1	5715	33.45	6.84	40.29	54	-13.71	AV	Vertical
2	5725	39.84	6.82	46.66	54	-7.34	AV	Vertical
3	5742.25	78.77	6.79	85.56	54	31.56	AV	Vertical

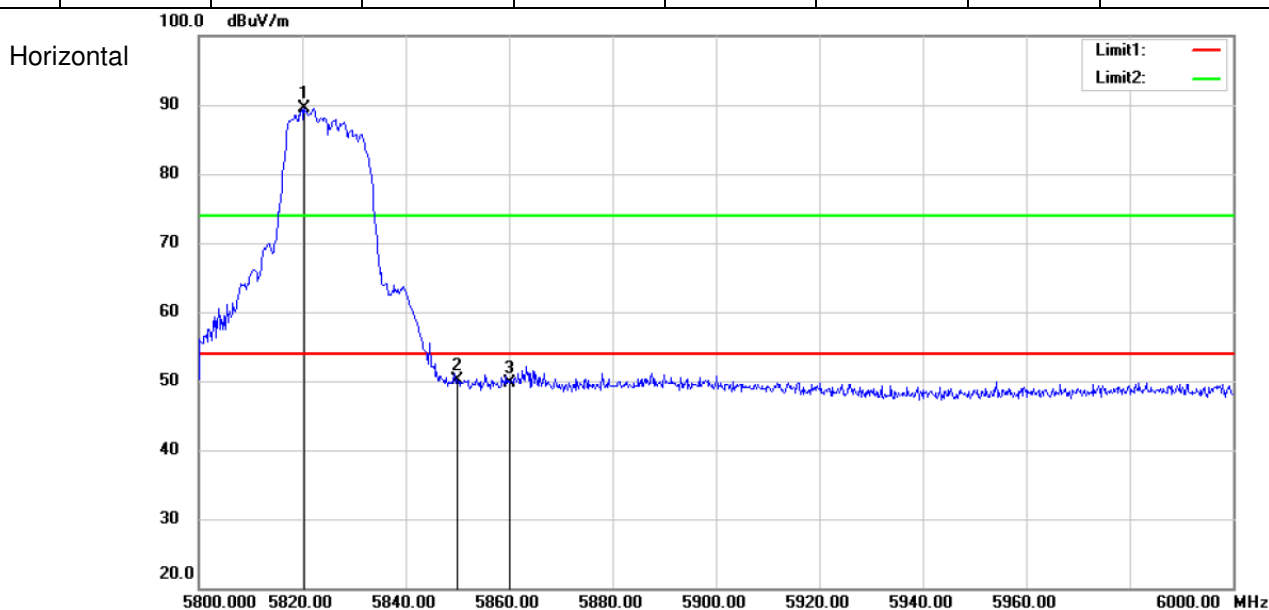


### 802.11 a

Channel: 165

Fundamental frequency: 5825MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5820.4	82.82	6.65	89.47	54	35.47	Peak	Horizontal
2	5850	43.4	6.64	50.04	54	-3.96	Peak	Horizontal
3	5860	43.05	6.63	49.68	54	-4.32	Peak	Horizontal

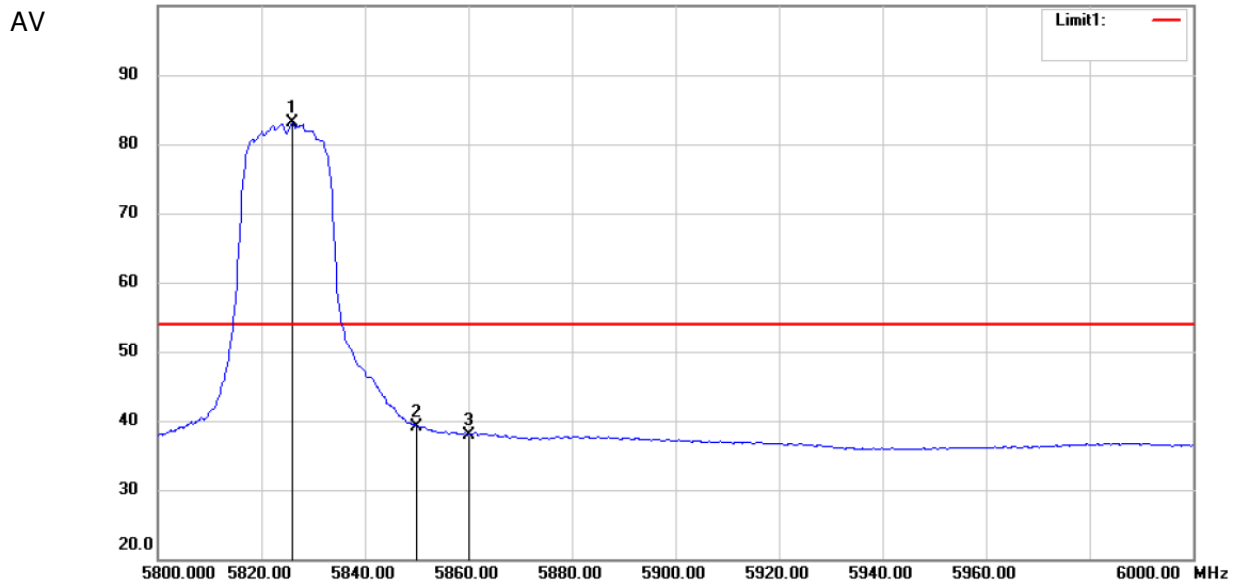
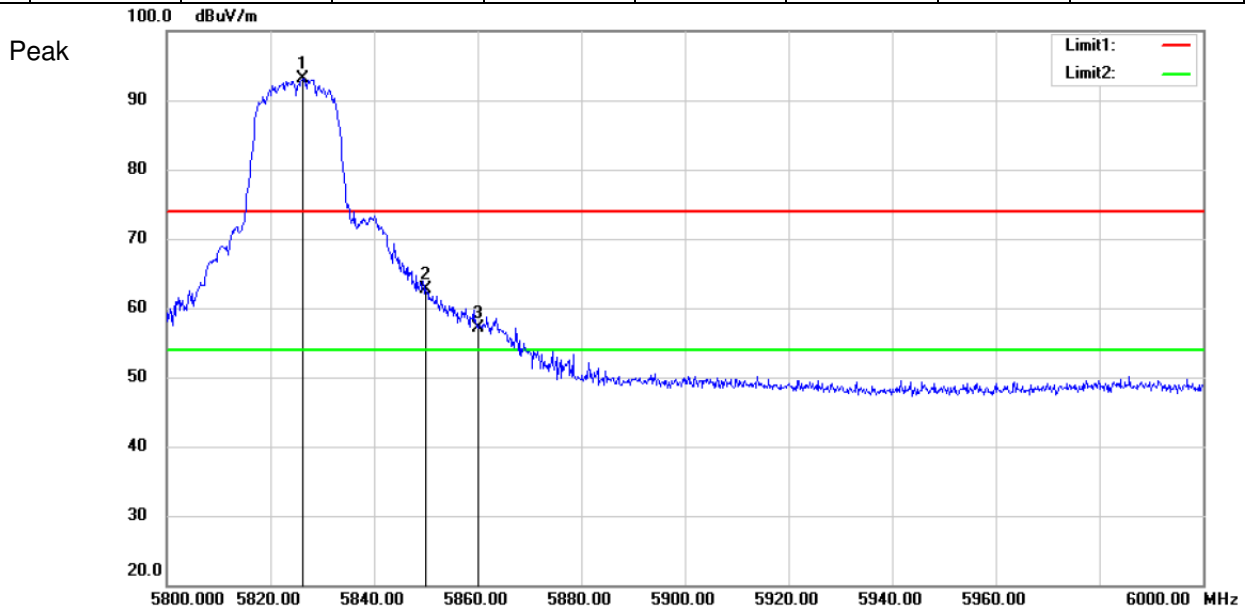


802.11 a

Channel: 165

Fundamental frequency: 5825MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5826.2	86.51	6.66	93.17	74	19.17	Peak	Vertical
2	5850	55.99	6.64	62.63	74	-11.37	Peak	Vertical
3	5860	50.53	6.63	57.16	74	-16.84	Peak	Vertical
1	5826	76.38	6.66	83.04	54	29.04	AV	Vertical
2	5850	32.44	6.64	39.08	54	-14.92	AV	Vertical
3	5860	31.37	6.63	38	54	-16	AV	Vertical

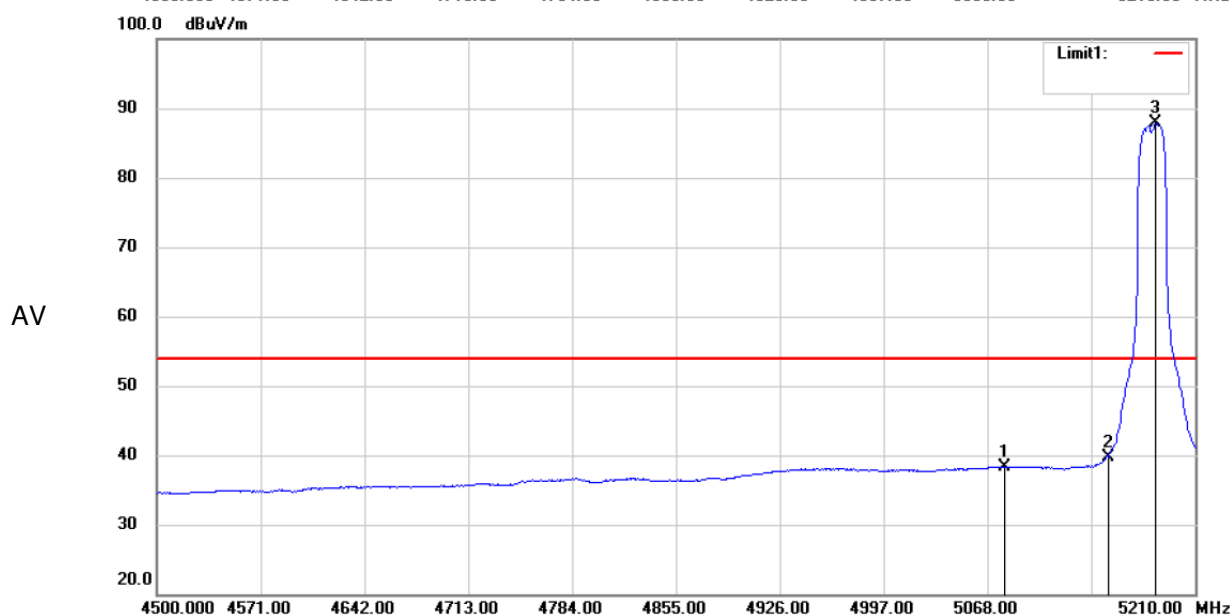
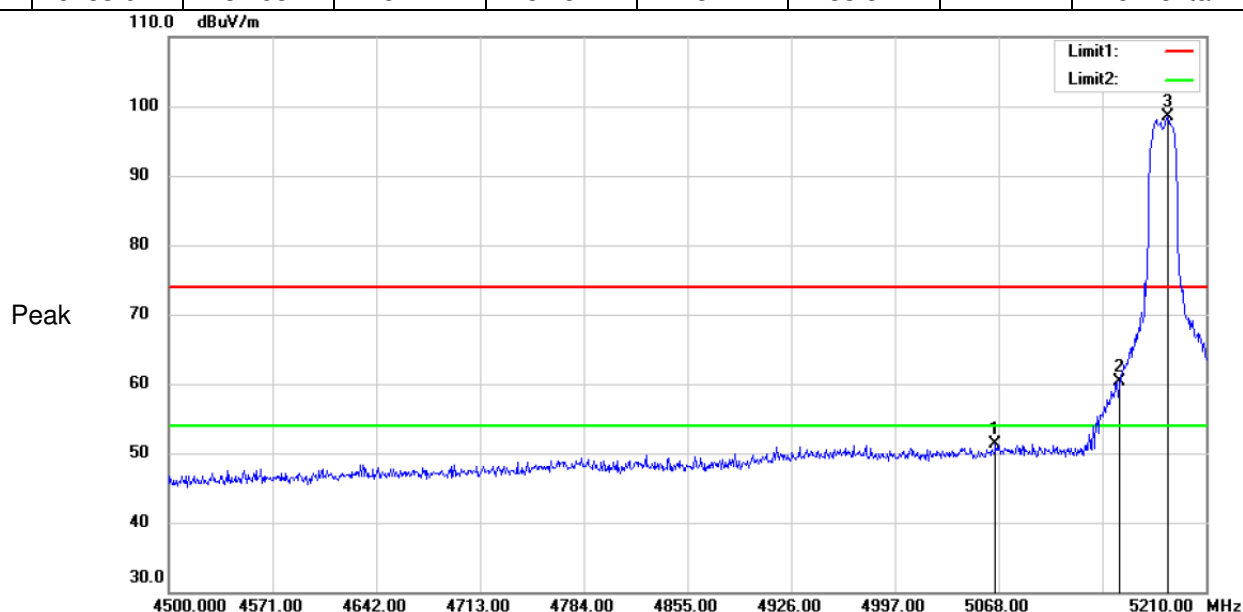


802.11 n(HT20)

Channel: 36

Fundamental frequency: 5180MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5065.87	43.87	7.38	51.25	74	-22.75	Peak	Horizontal
2	5150	53.4	6.92	60.32	74	-13.68	Peak	Horizontal
3	5183.73	91.72	6.74	98.46	74	24.46	Peak	Horizontal
1	5079.36	31.1	7.3	38.4	54	-15.6	AV	Horizontal
2	5150	32.88	6.92	39.8	54	-14.2	AV	Horizontal
3	5183.02	81.08	6.74	87.82	54	33.82	AV	Horizontal

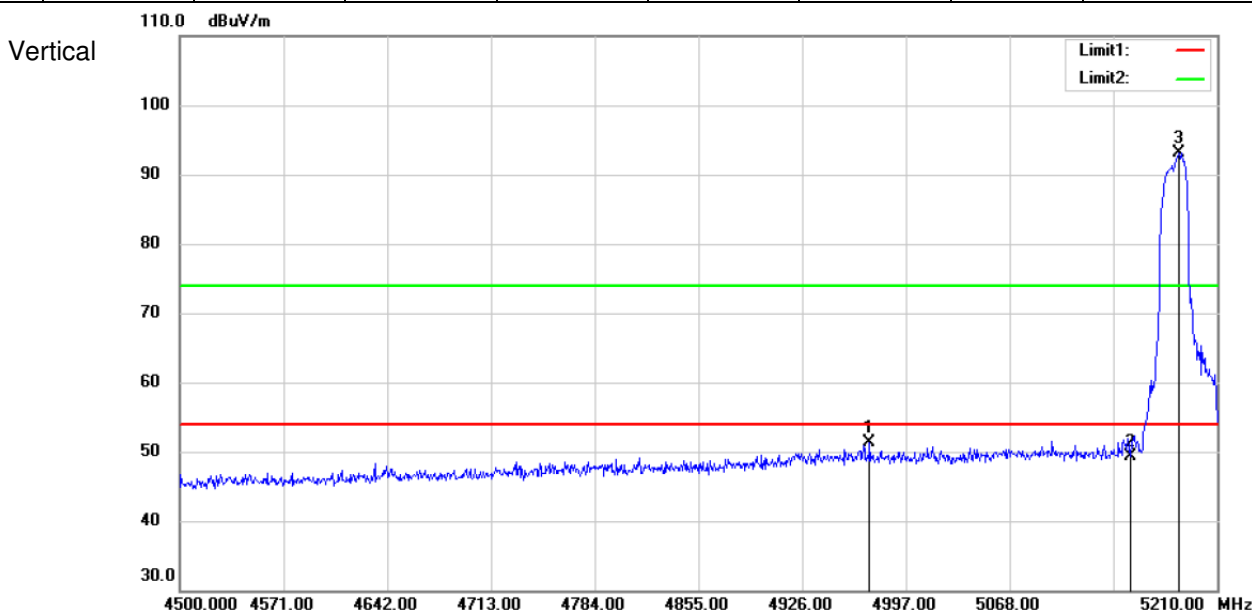


802.11 n(HT20)

Channel: 36

Fundamental frequency: 5180MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	4972.15	43.68	7.56	51.24	54	-2.76	Peak	Vertical
2	5150	42.33	6.92	49.25	54	-4.75	Peak	Vertical
3	5183.73	86.31	6.74	93.05	54	39.05	Peak	Vertical

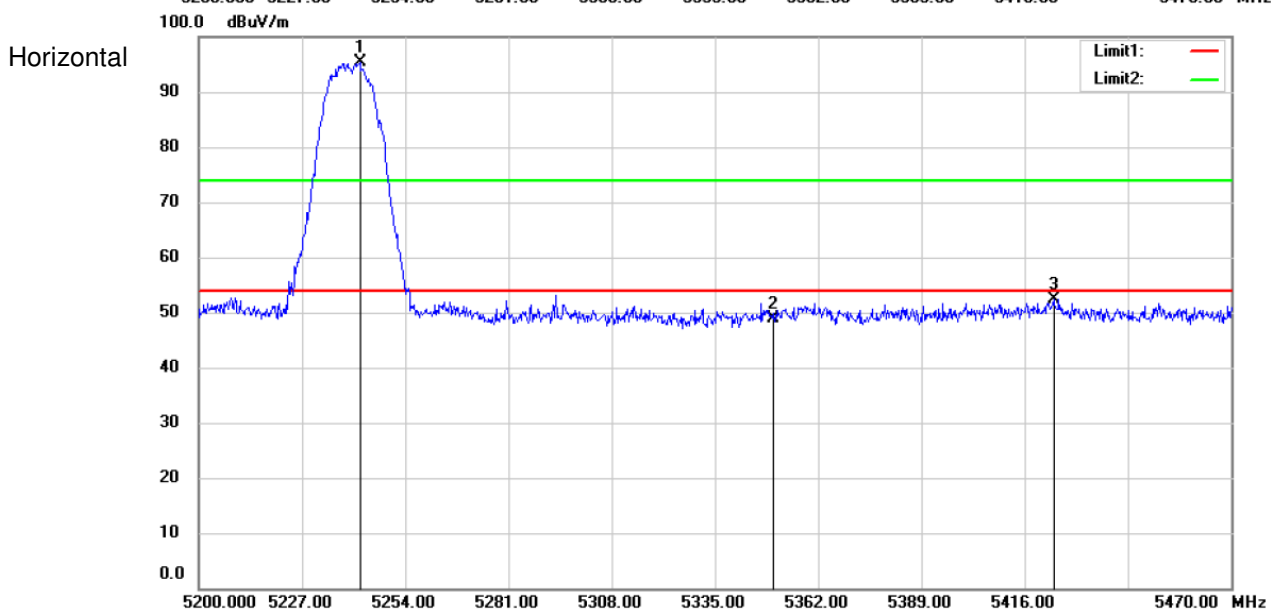
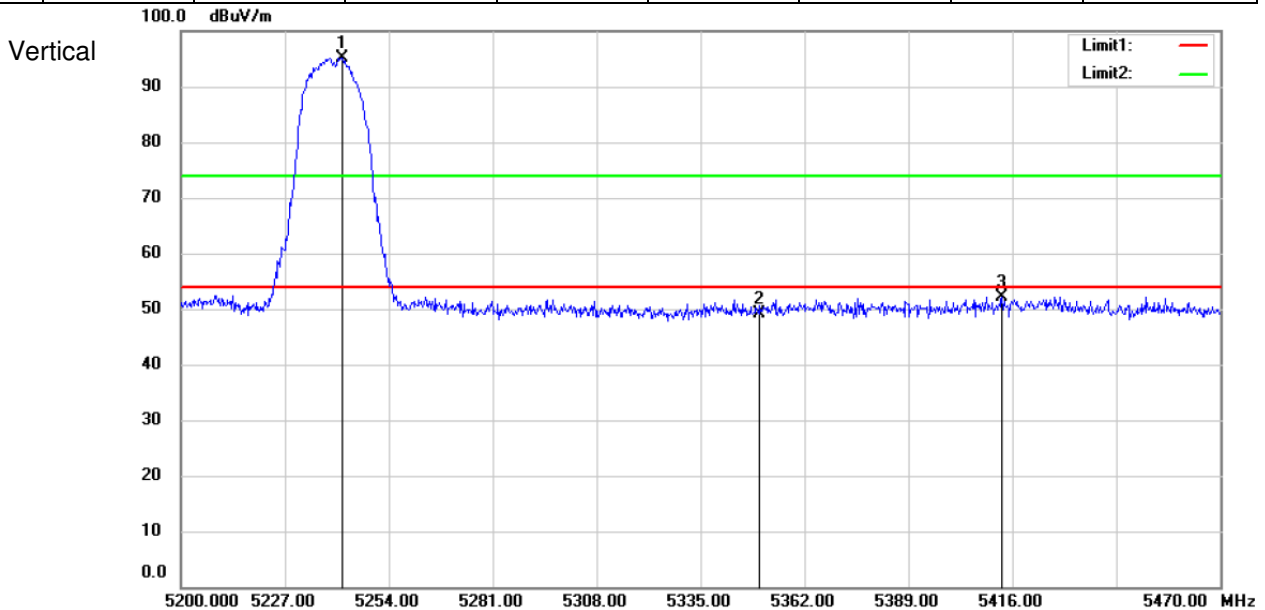


802.11 n(HT20)

Channel: 48

Fundamental frequency: 5240MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5241.85	88.49	6.65	95.14	54	41.14	Peak	Vertical
2	5350	42.24	6.98	49.22	54	-4.78	Peak	Vertical
3	5413.3	44.81	7.27	52.08	54	-1.92	Peak	Vertical
1	5242.12	88.81	6.65	95.46	54	41.46	Peak	Horizontal
2	5350	41.78	6.98	48.76	54	-5.24	Peak	Horizontal
3	5423.56	45.24	7.24	52.48	54	-1.52	Peak	Horizontal

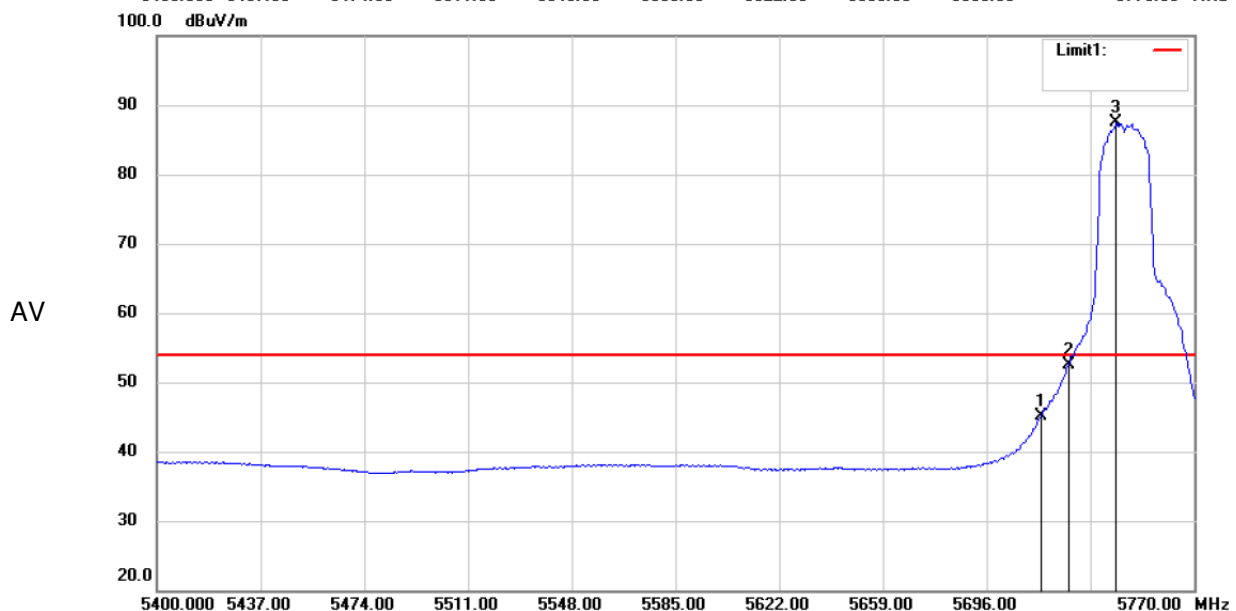
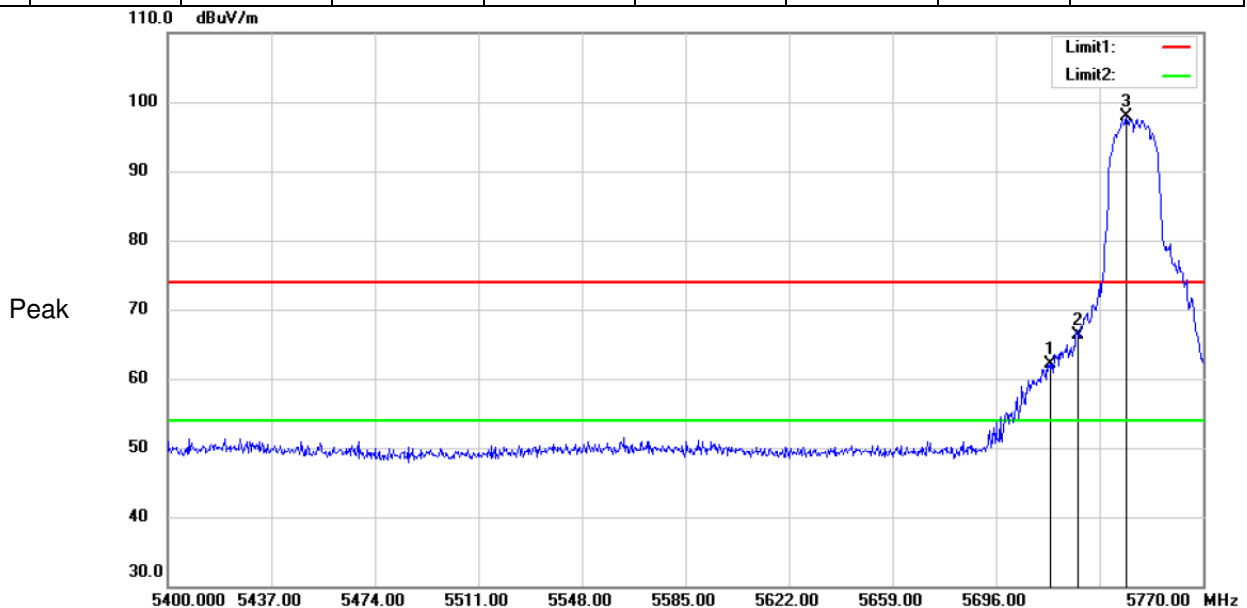


802.11 n(HT20)

Channel: 149

Fundamental frequency: 5745MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5715	55.17	6.84	62.01	74	-11.99	Peak	Horizontal
2	5725	59.56	6.82	66.38	74	-7.62	Peak	Horizontal
3	5742.62	91.12	6.79	97.91	74	23.91	Peak	Horizontal
1	5715	38.22	6.84	45.06	54	-8.94	AV	Horizontal
2	5725	45.64	6.82	52.46	54	-1.54	AV	Horizontal
3	5742.25	80.64	6.79	87.43	54	33.43	AV	Horizontal

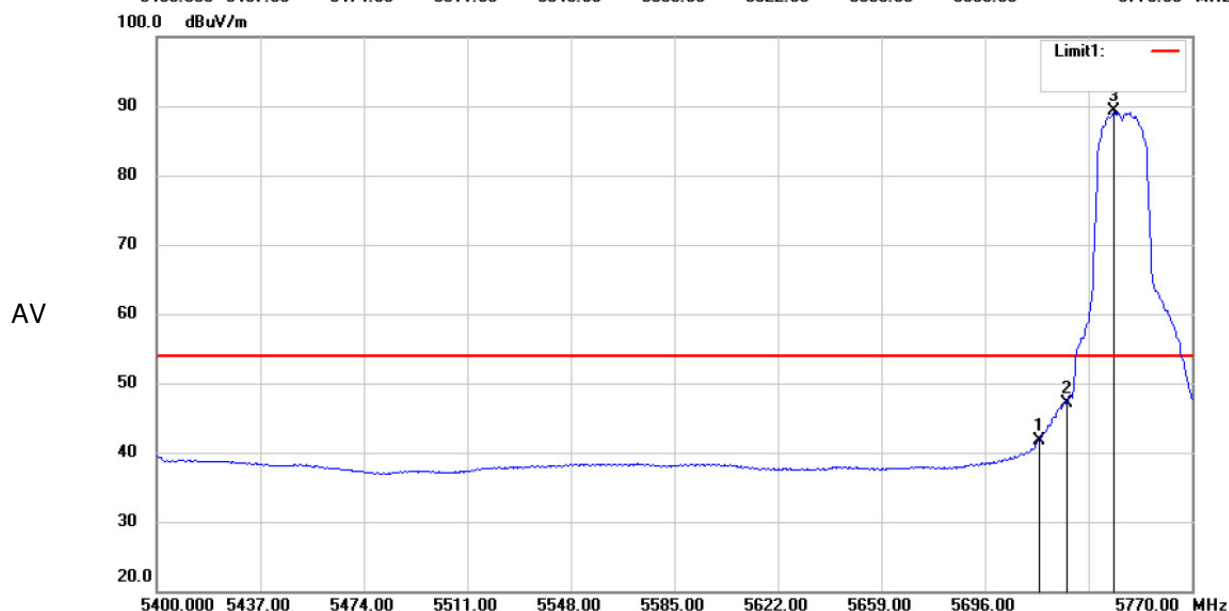
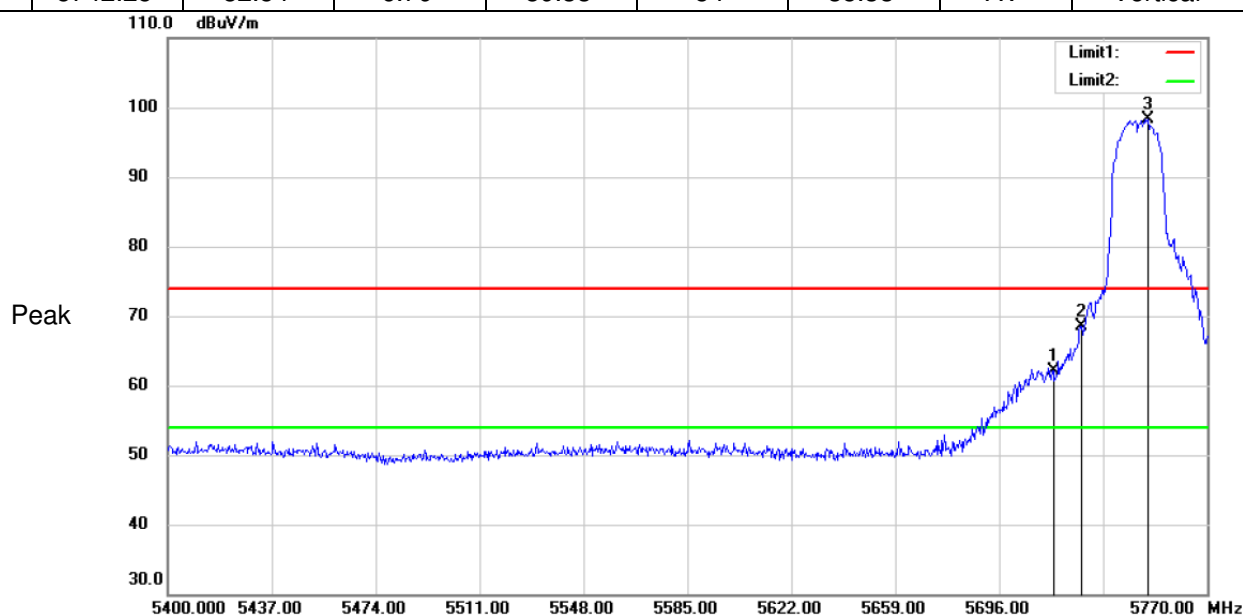


802.11 n(HT20)

Channel: 149

Fundamental frequency: 5745MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5715	55.26	6.84	62.1	74	-11.9	Peak	Vertical
2	5725	61.7	6.82	68.52	74	-5.48	Peak	Vertical
3	5748.91	91.62	6.77	98.39	74	24.39	Peak	Vertical
1	5715	34.87	6.84	41.71	54	-12.29	AV	Vertical
2	5725	40.31	6.82	47.13	54	-6.87	AV	Vertical
3	5742.25	82.54	6.79	89.33	54	35.33	AV	Vertical



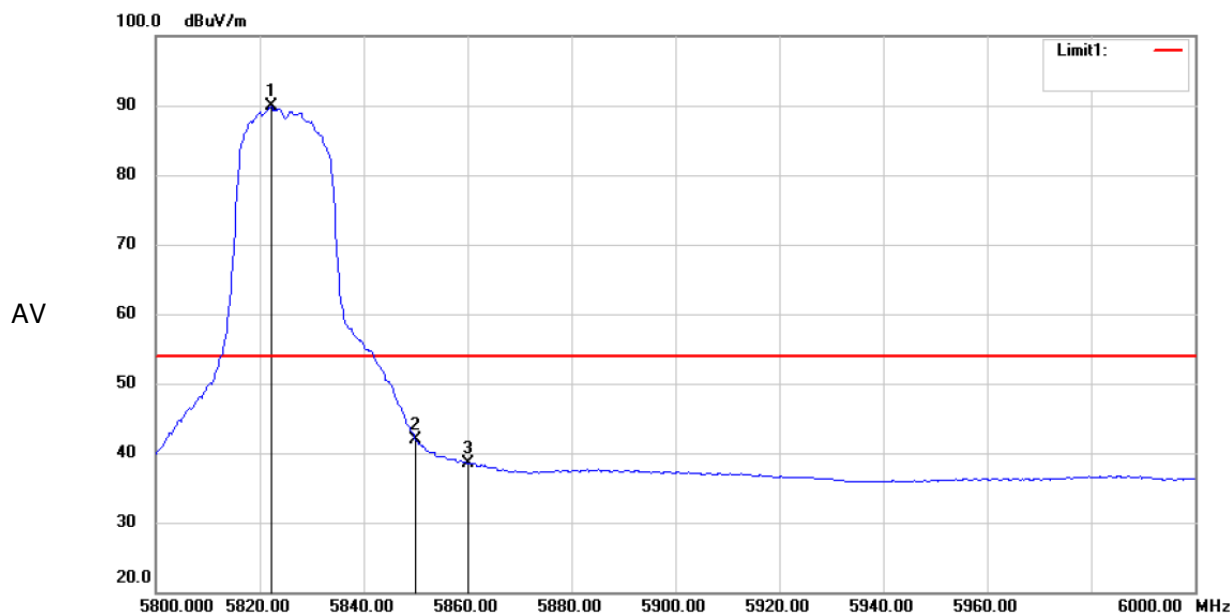
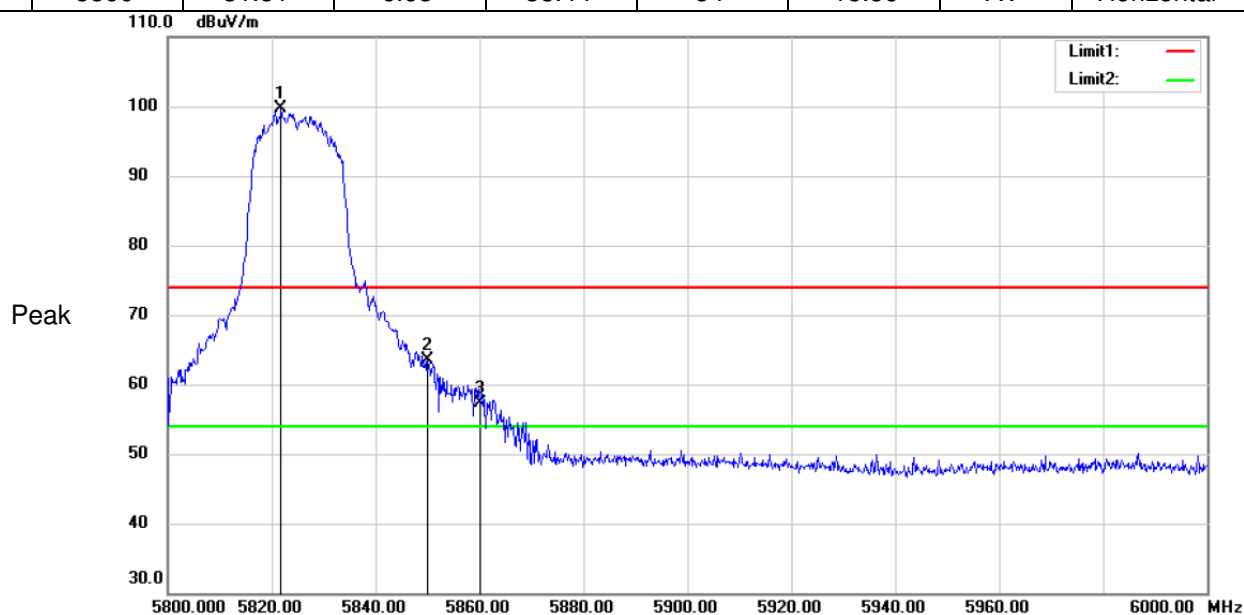


802.11 n(HT20)

Channel: 165

Fundamental frequency: 5825MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5821.8	93.09	6.65	99.74	74	25.74	Peak	Horizontal
2	5850	56.93	6.64	63.57	74	-10.43	Peak	Horizontal
3	5860	50.75	6.63	57.38	74	-16.62	Peak	Horizontal
1	5822.2	83.25	6.65	89.9	54	35.9	AV	Horizontal
2	5850	35.21	6.64	41.85	54	-12.15	AV	Horizontal
3	5860	31.81	6.63	38.44	54	-15.56	AV	Horizontal

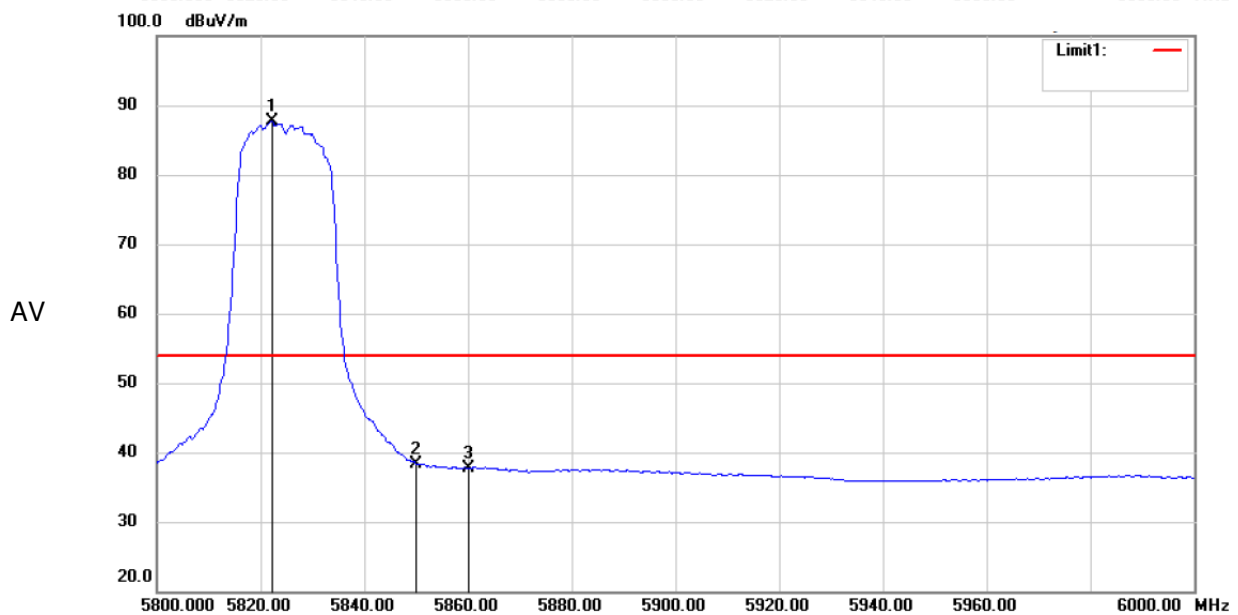
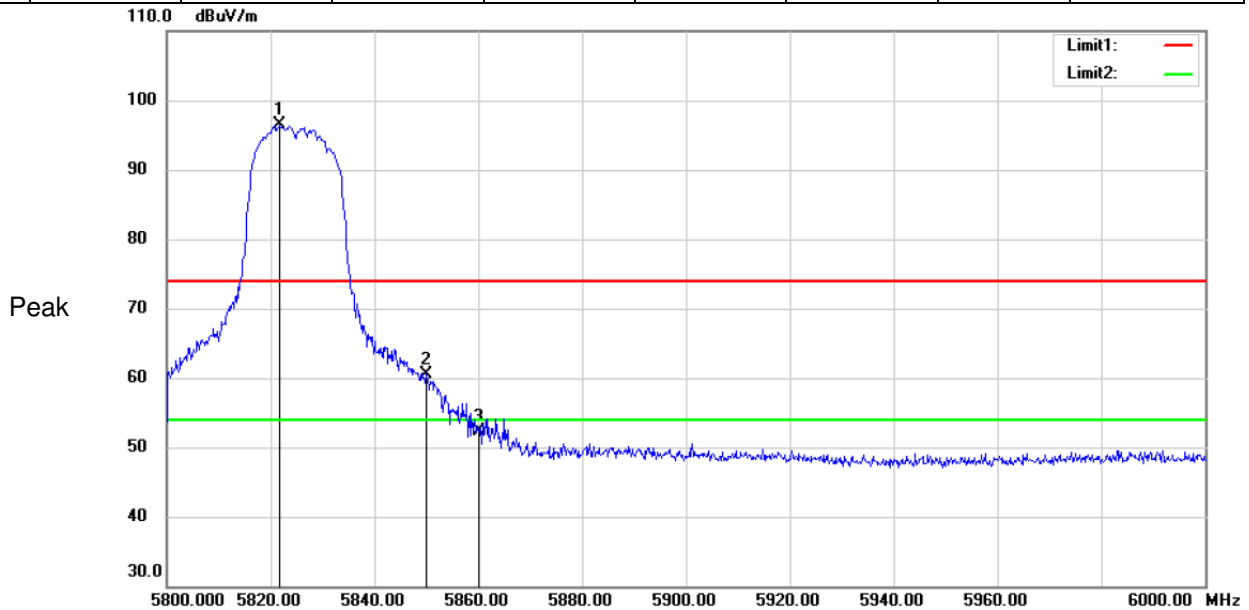


802.11 n(HT20)

Channel: 165

Fundamental frequency: 5825MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5821.8	89.82	6.65	96.47	74	22.47	Peak	Vertical
2	5850	53.77	6.64	60.41	74	-13.59	Peak	Vertical
3	5860	45.61	6.63	52.24	74	-21.76	Peak	Vertical
1	5822.2	81.12	6.65	87.77	54	33.77	AV	Vertical
2	5850	31.68	6.64	38.32	54	-15.68	AV	Vertical
3	5860	31.05	6.63	37.68	54	-16.32	AV	Vertical

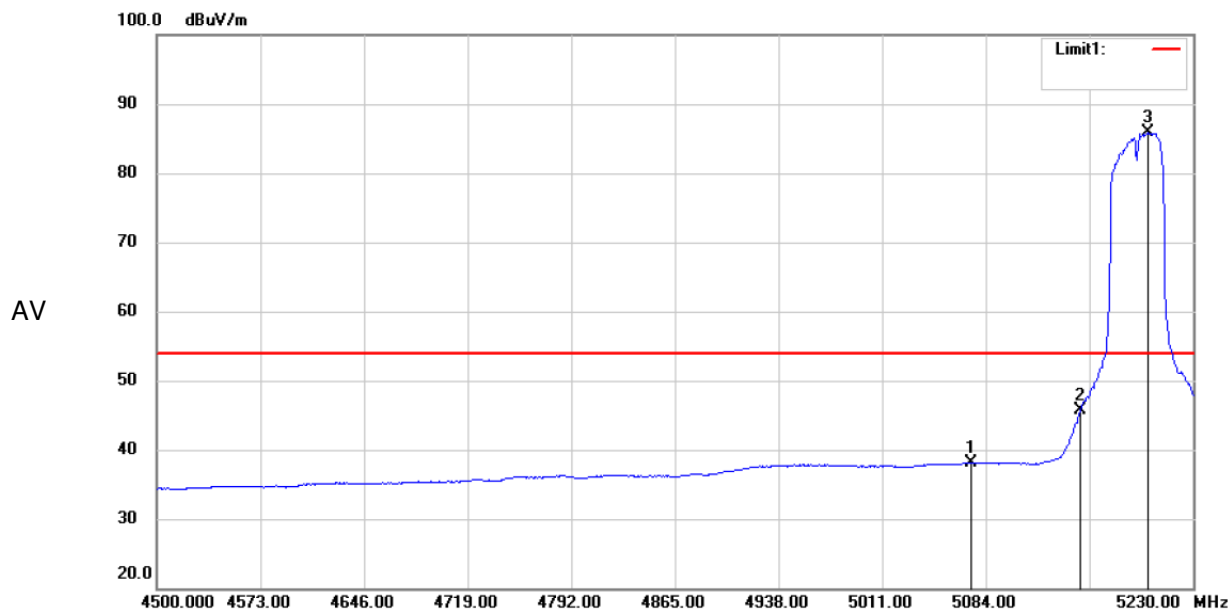
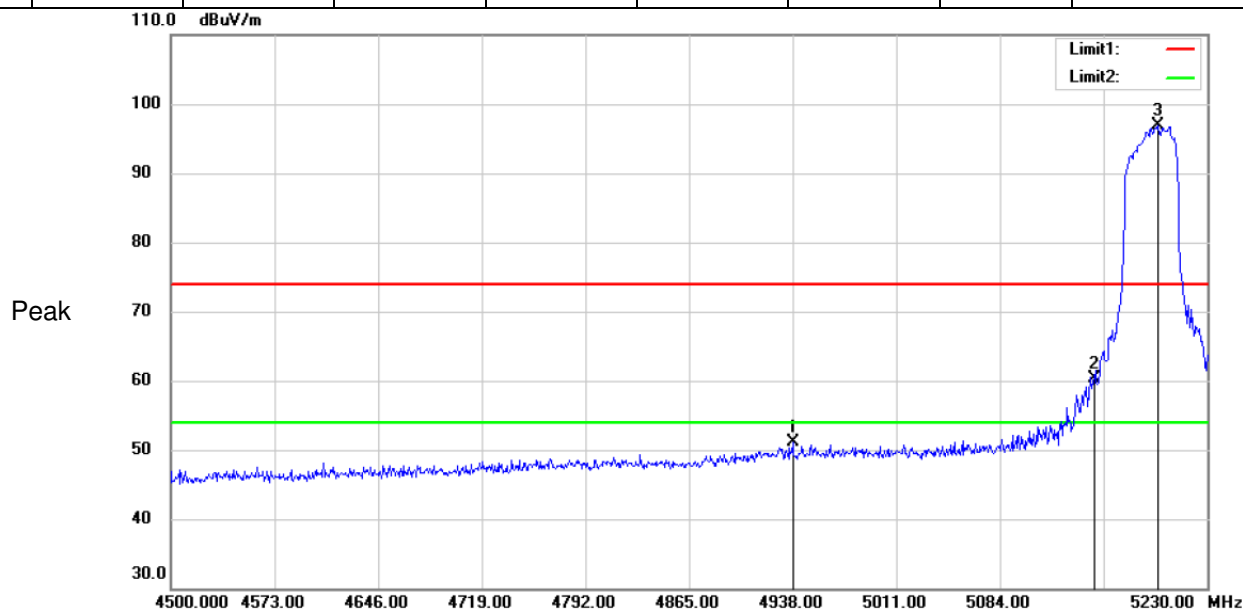


802.11 n(HT40)

Channel: 38

Fundamental frequency: 5190MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	4938	43.65	7.38	51.03	74	-22.97	Peak	Horizontal
2	5150	53.43	6.92	60.35	74	-13.65	Peak	Horizontal
3	5194.96	90.23	6.68	96.91	74	22.91	Peak	Horizontal
1	5073.78	30.81	7.33	38.14	54	-15.86	AV	Horizontal
2	5150	38.75	6.92	45.67	54	-8.33	AV	Horizontal
3	5198.61	79.18	6.66	85.84	54	31.84	AV	Horizontal

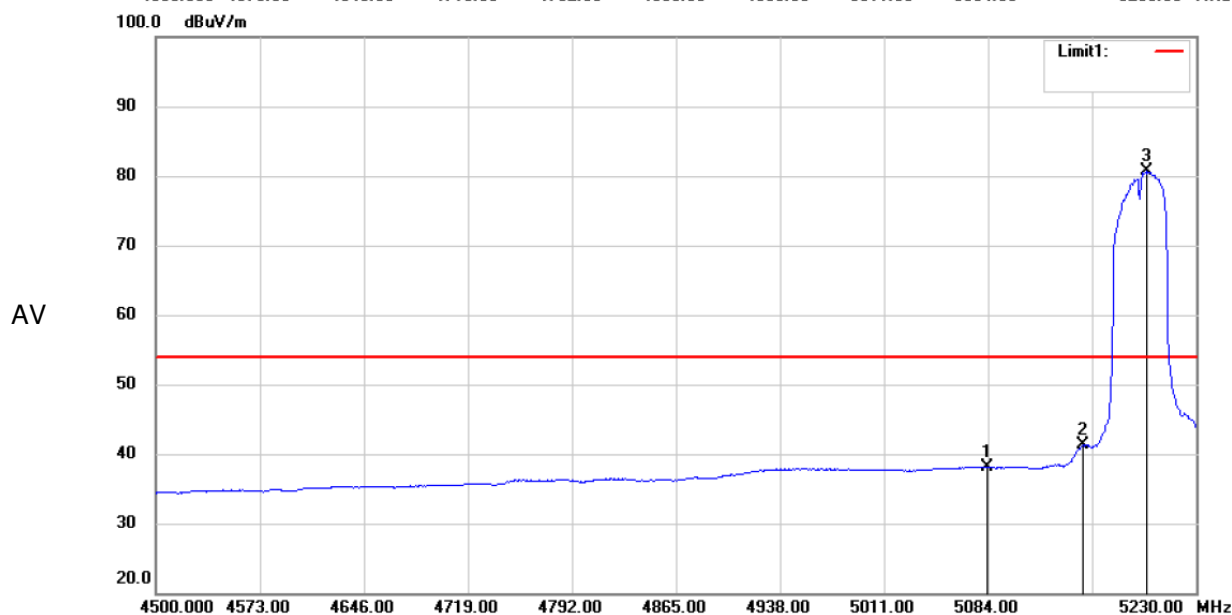
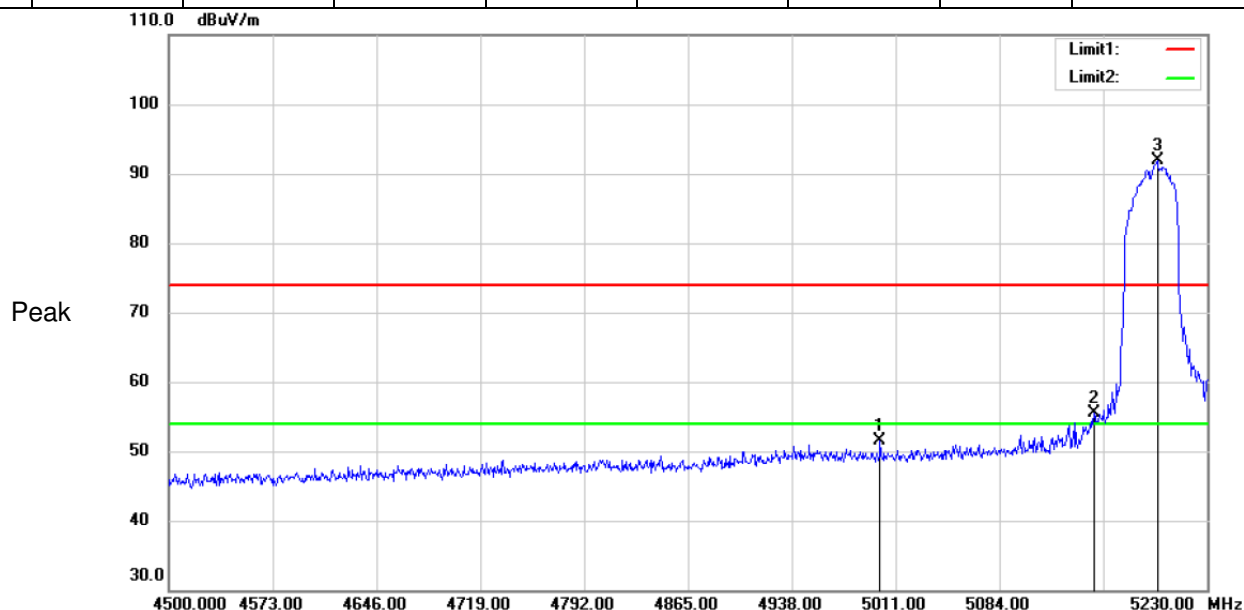


802.11 n(HT40)

Channel: 38

Fundamental frequency: 5190MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5000.05	43.87	7.7	51.57	74	-22.43	Peak	Vertical
2	5150	48.5	6.92	55.42	74	-18.58	Peak	Vertical
3	5194.96	85.17	6.68	91.85	74	17.85	Peak	Vertical
1	5083.27	30.9	7.28	38.18	54	-15.82	AV	Vertical
2	5150	34.34	6.92	41.26	54	-12.74	AV	Vertical
3	5194.96	73.96	6.68	80.64	54	26.64	AV	Vertical

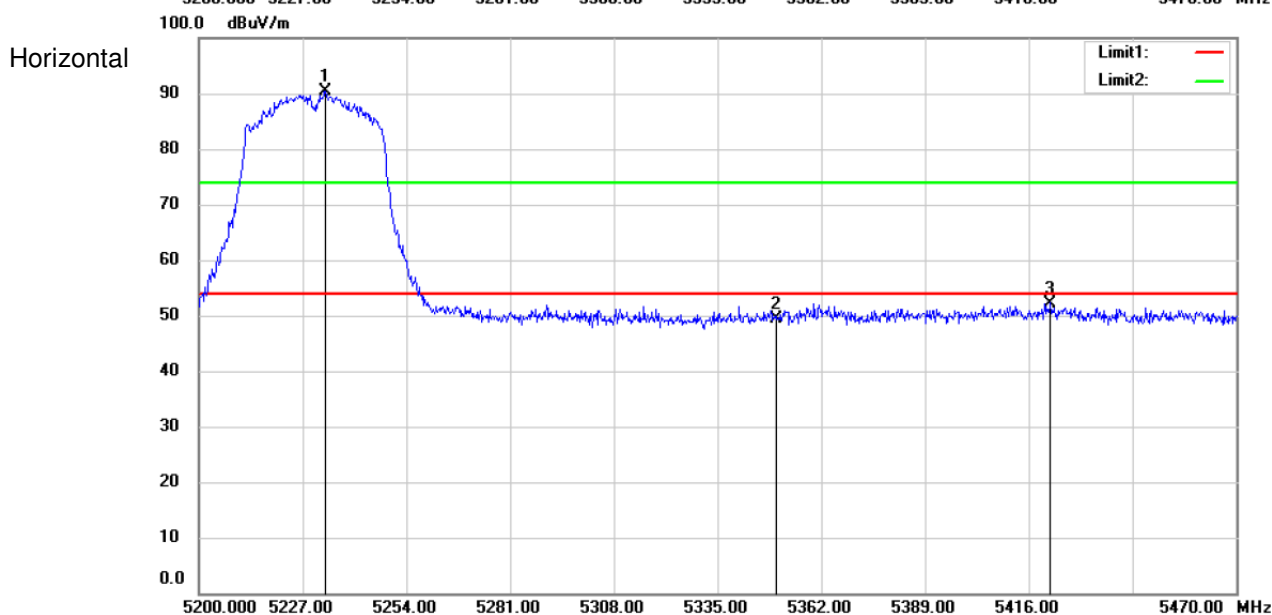
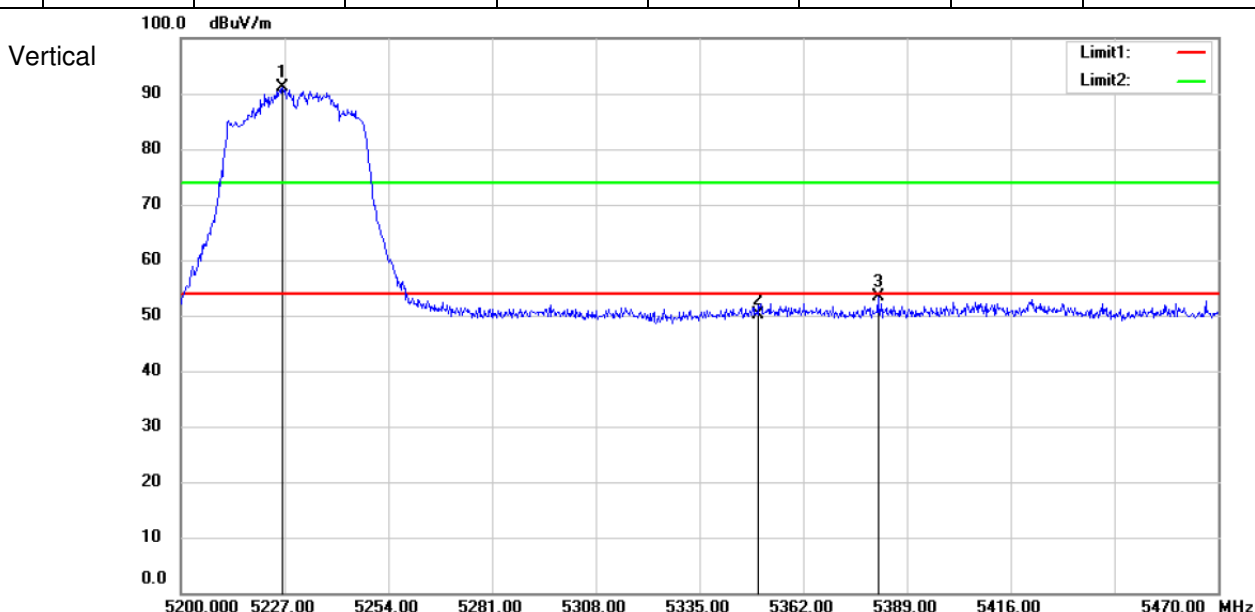


802.11 n(HT40)

Channel: 46

Fundamental frequency: 5230MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5226.46	84.44	6.64	91.08	54	37.08	Peak	Vertical
2	5350	43.22	6.98	50.2	54	-3.8	Peak	Vertical
3	5381.44	46.09	7.19	53.28	54	-0.72	Peak	Vertical
1	5232.94	83.71	6.65	90.36	54	36.36	Peak	Horizontal
2	5350	42.45	6.98	49.43	54	-4.57	Peak	Horizontal
3	5421.67	45.01	7.24	52.25	54	-1.75	Peak	Horizontal

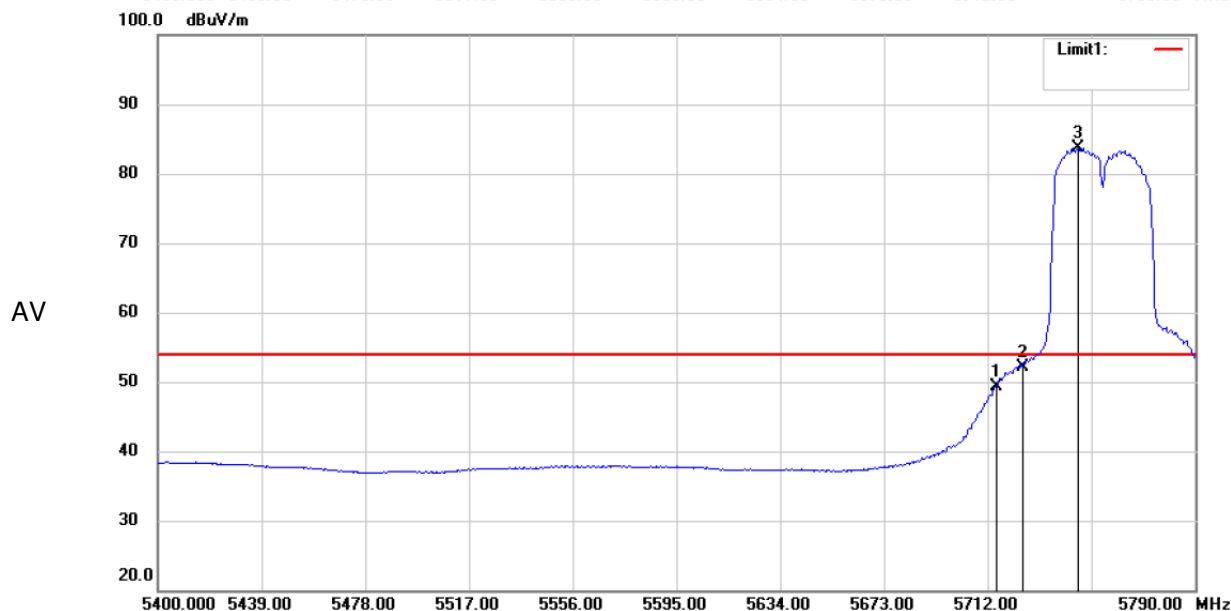
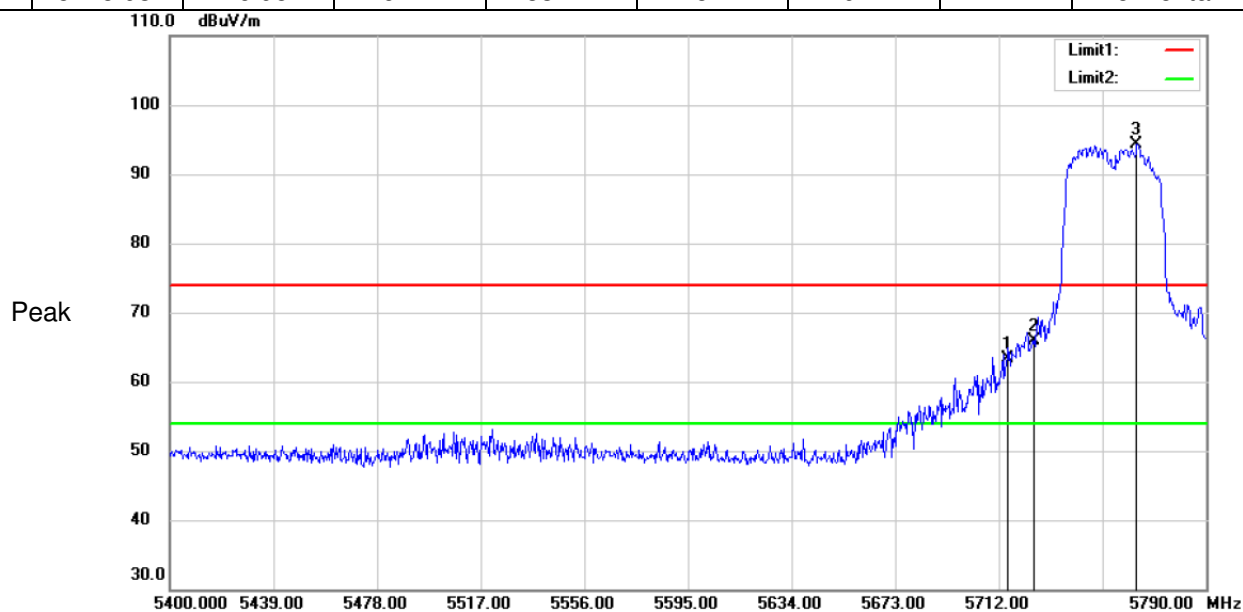


802.11 n(HT40)

Channel: 151

Fundamental frequency: 5755MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5715	56.44	6.84	63.28	74	-10.72	Peak	Horizontal
2	5725	58.99	6.82	65.81	74	-8.19	Peak	Horizontal
3	5763.87	87.6	6.74	94.34	74	20.34	Peak	Horizontal
1	5715	42.5	6.84	49.34	54	-4.66	AV	Horizontal
2	5725	45.33	6.82	52.15	54	-1.85	AV	Horizontal
3	5745.93	76.95	6.77	83.72	54	29.72	AV	Horizontal

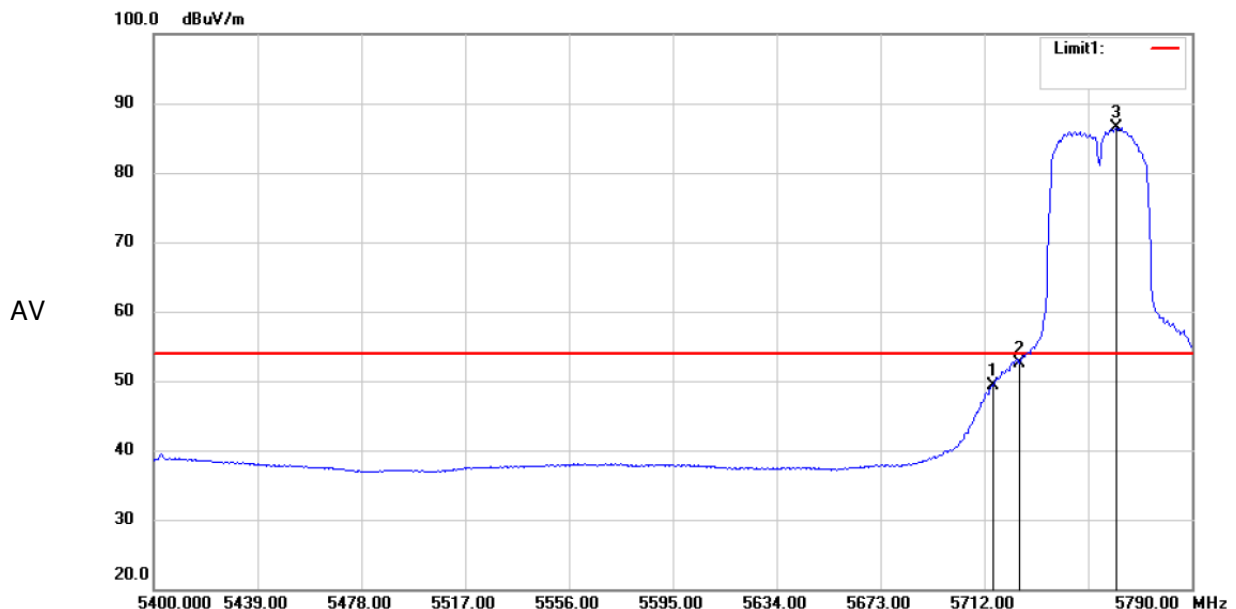
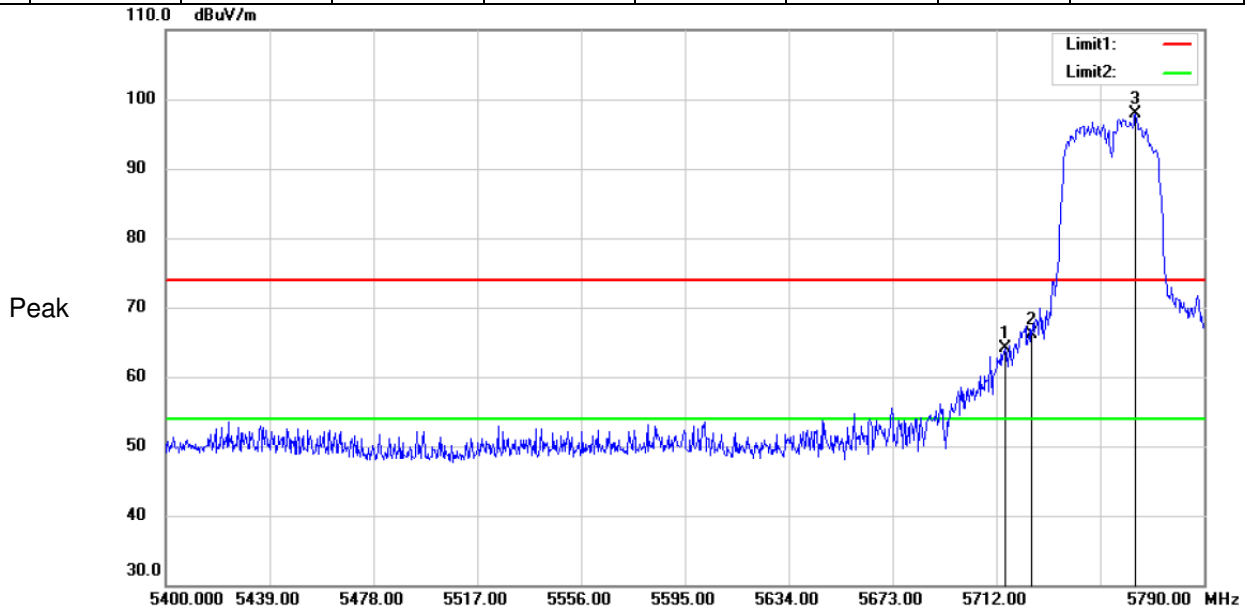


802.11 n(HT40)

Channel: 151

Fundamental frequency: 5755MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5715	57.19	6.84	64.03	74	-9.97	Peak	Vertical
2	5725	59.37	6.82	66.19	74	-7.81	Peak	Vertical
3	5764.26	91.1	6.74	97.84	74	23.84	Peak	Vertical
1	5715	42.49	6.84	49.33	54	-4.67	AV	Vertical
2	5725	45.78	6.82	52.6	54	-1.4	AV	Vertical
3	5761.53	79.81	6.74	86.55	54	32.55	AV	Vertical

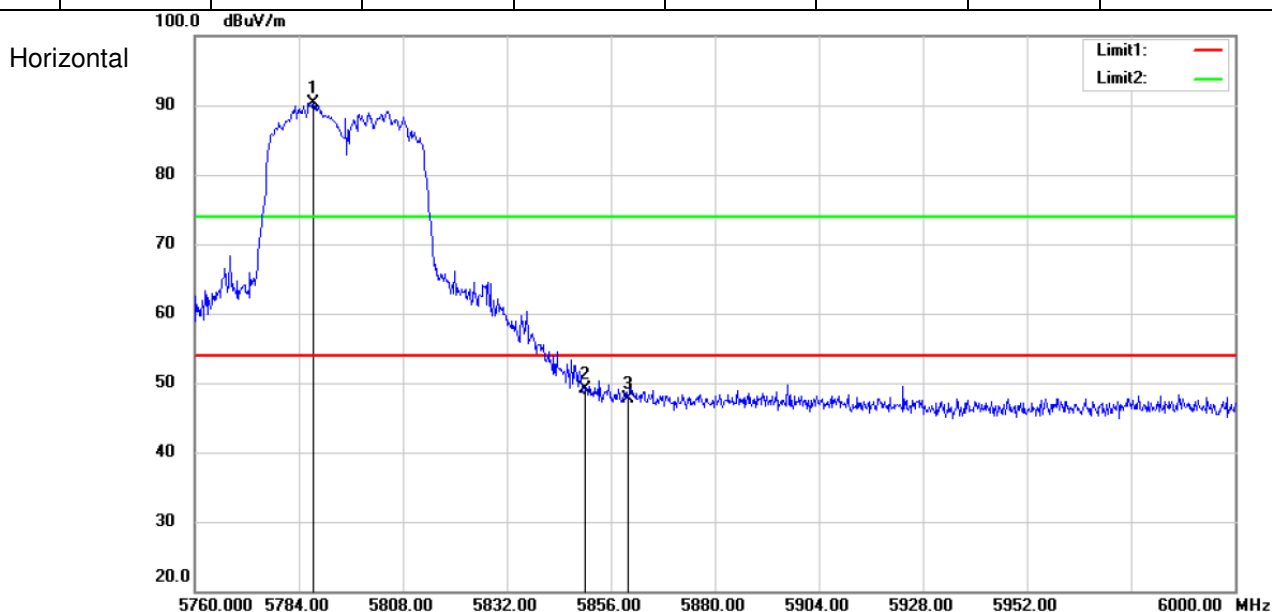


802.11 n(HT40)

Channel: 159

Fundamental frequency: 5795MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5787.36	83.58	6.69	90.27	54	36.27	Peak	Horizontal
2	5850	42.55	6.64	49.19	54	-4.81	Peak	Horizontal
3	5860	41.16	6.63	47.79	54	-6.21	Peak	Horizontal



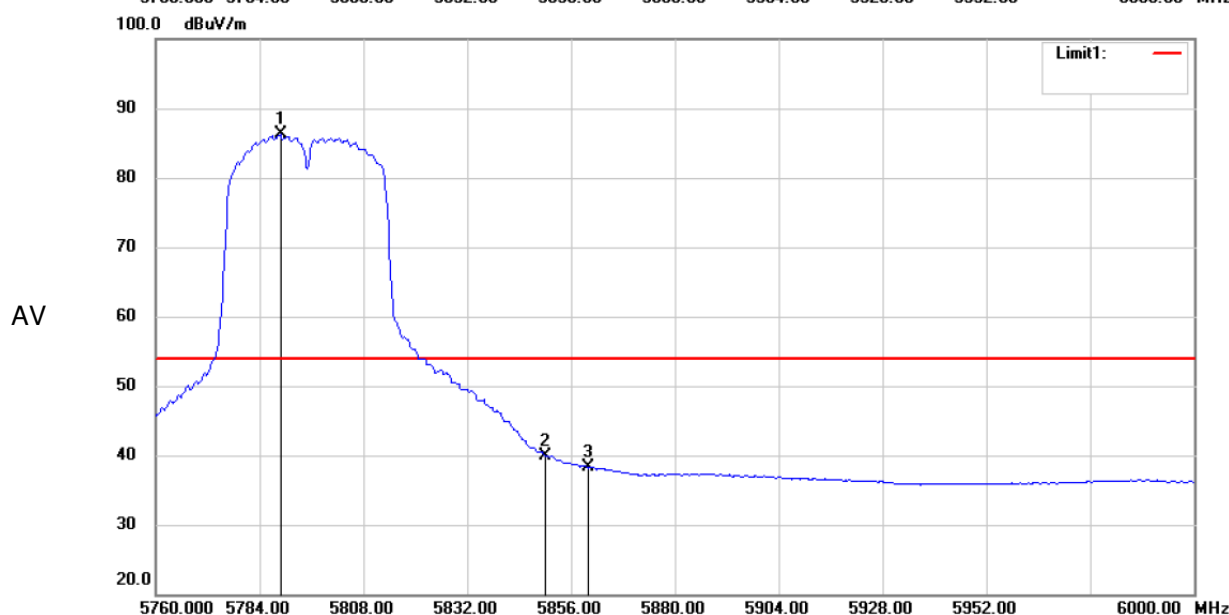
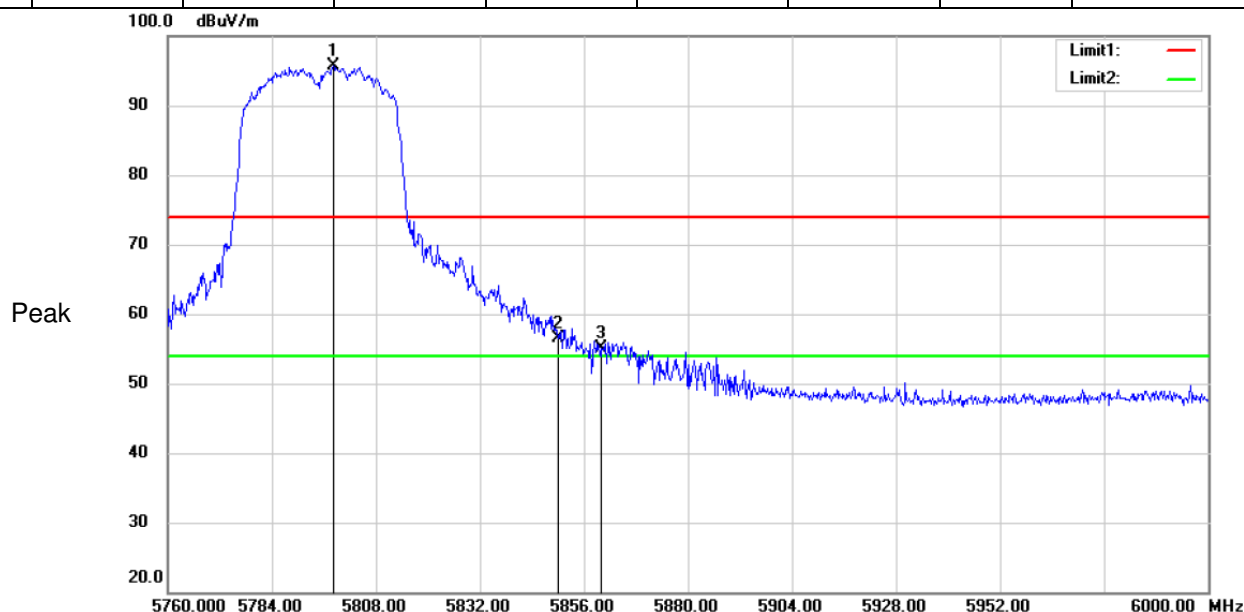


802.11 n(HT40)

Channel: 159

Fundamental frequency: 5795MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5798.16	89.01	6.67	95.68	74	21.68	Peak	Vertical
2	5850	49.83	6.64	56.47	74	-17.53	Peak	Vertical
3	5860	48.48	6.63	55.11	74	-18.89	Peak	Vertical
1	5788.8	79.53	6.69	86.22	54	32.22	AV	Vertical
2	5850	33.2	6.64	39.84	54	-14.16	AV	Vertical
3	5860	31.57	6.63	38.2	54	-15.8	AV	Vertical

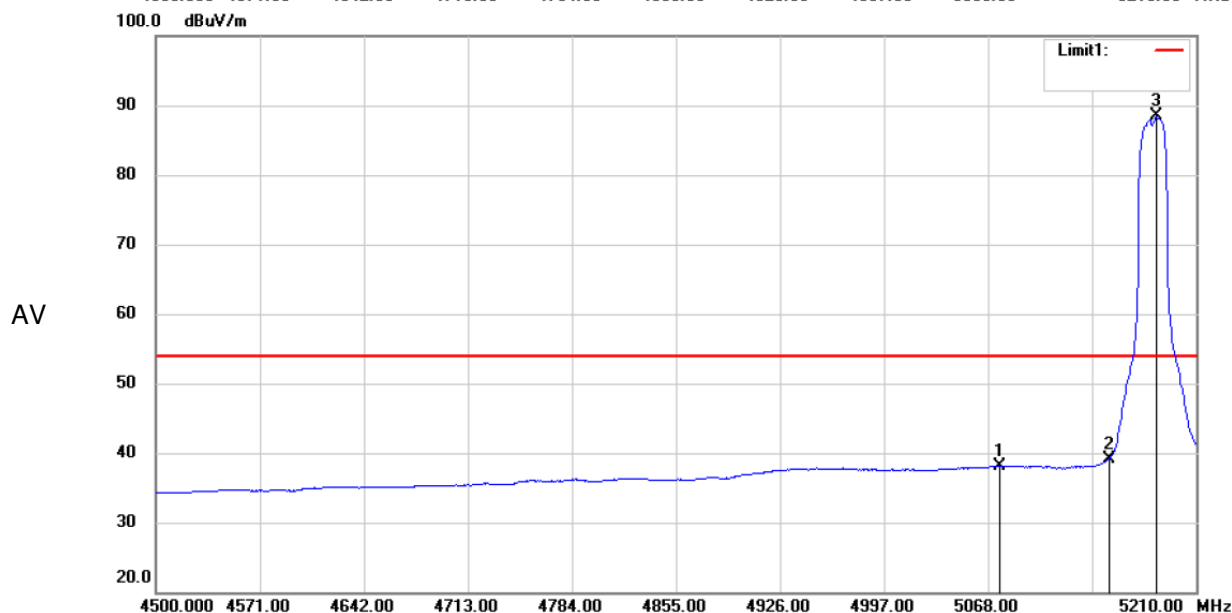
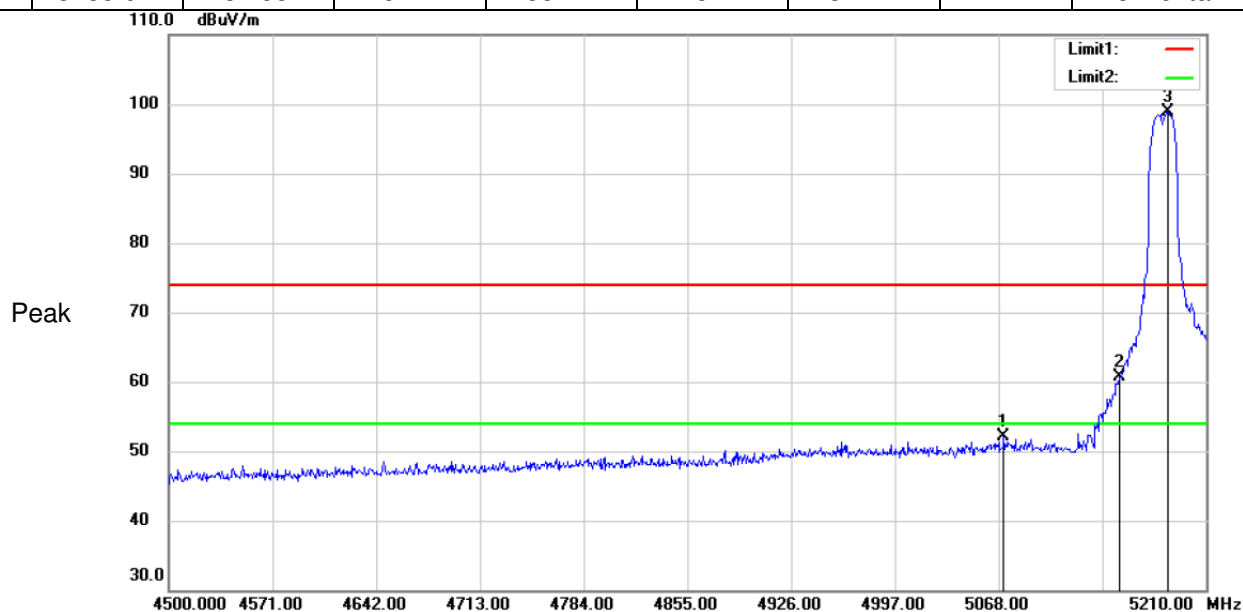


802.11 ac(VHT20)

Channel: 36

Fundamental frequency: 5180MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5071.55	44.77	7.34	52.11	74	-21.89	Peak	Horizontal
2	5150	53.86	6.92	60.78	74	-13.22	Peak	Horizontal
3	5183.73	92.26	6.74	99	74	25	Peak	Horizontal
1	5075.81	30.81	7.32	38.13	54	-15.87	AV	Horizontal
2	5150	32.1	6.92	39.02	54	-14.98	AV	Horizontal
3	5183.02	81.68	6.74	88.42	54	34.42	AV	Horizontal

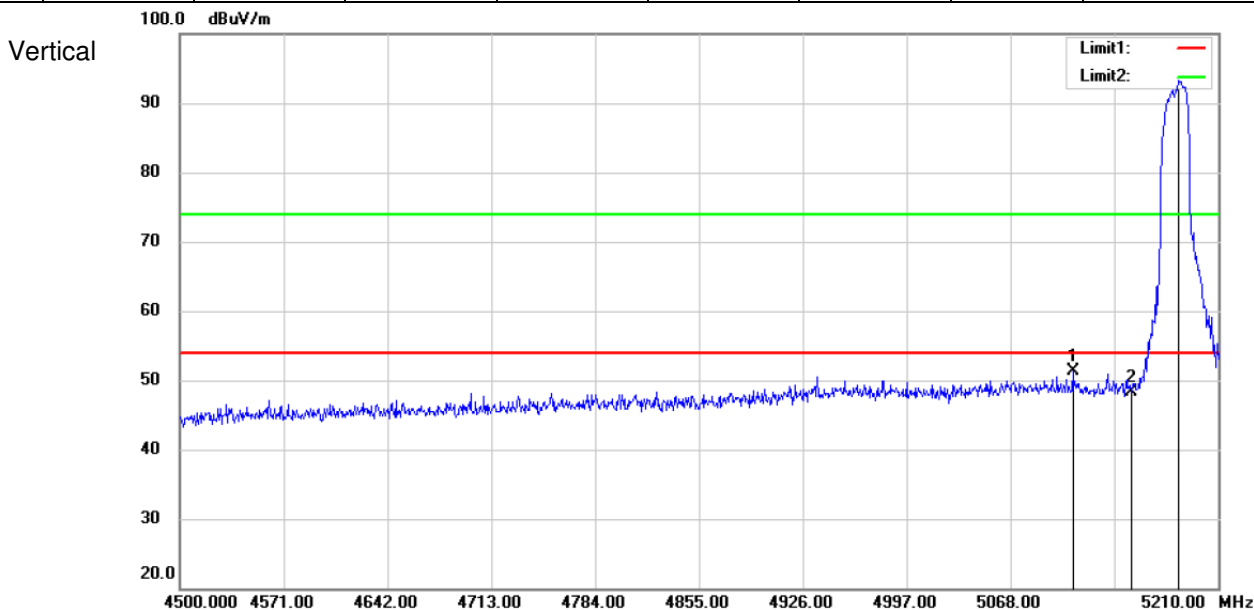


802.11 ac(VHT20)

Channel: 36

Fundamental frequency: 5180MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5110.6	44.22	7.15	51.37	54	-2.63	Peak	Vertical
2	5150	41.35	6.92	48.27	54	-5.73	Peak	Vertical
3	5183.02	86.56	6.74	93.3	54	39.3	Peak	Vertical

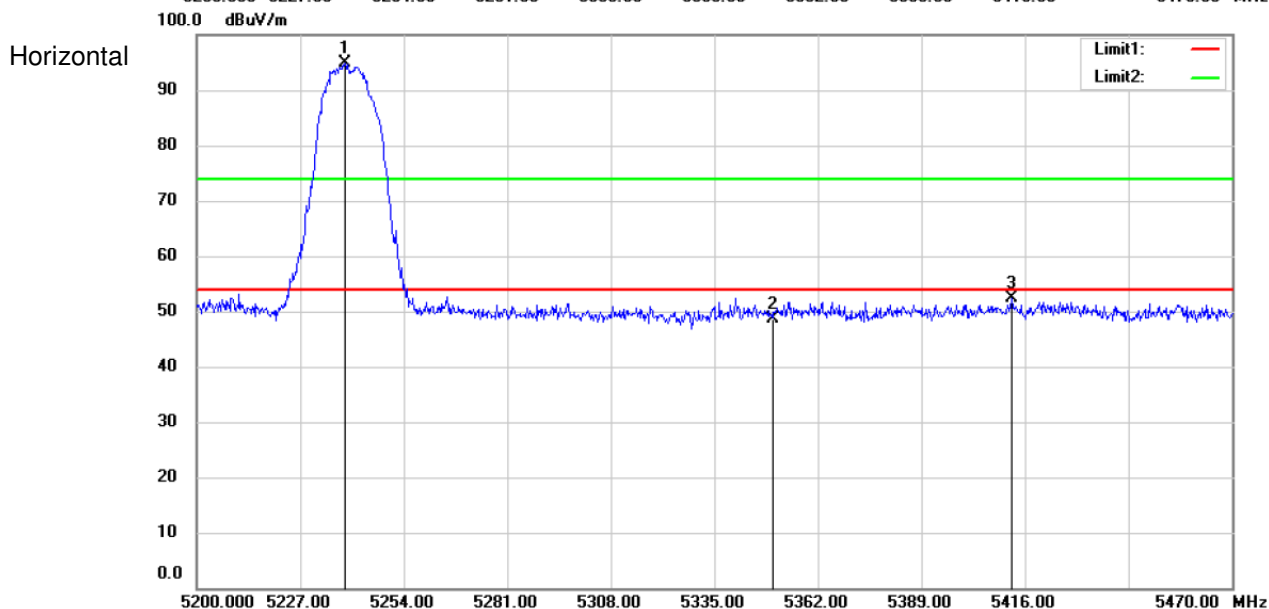
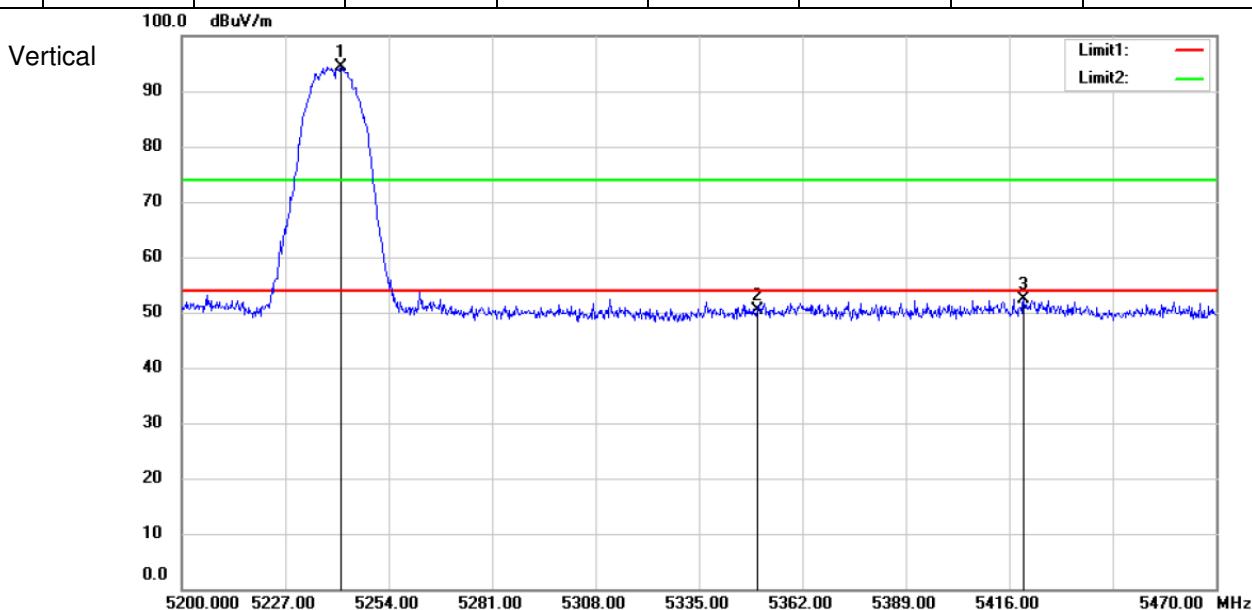


802.11 ac(VHT20)

Channel: 48

Fundamental frequency: 5240MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5241.58	87.68	6.65	94.33	54	40.33	Peak	Vertical
2	5350	43.35	6.98	50.33	54	-3.67	Peak	Vertical
3	5419.78	45.21	7.25	52.46	54	-1.54	Peak	Vertical
1	5238.61	88.24	6.65	94.89	54	40.89	Peak	Horizontal
2	5350	41.77	6.98	48.75	54	-5.25	Peak	Horizontal
3	5412.49	45.12	7.28	52.4	54	-1.6	Peak	Horizontal

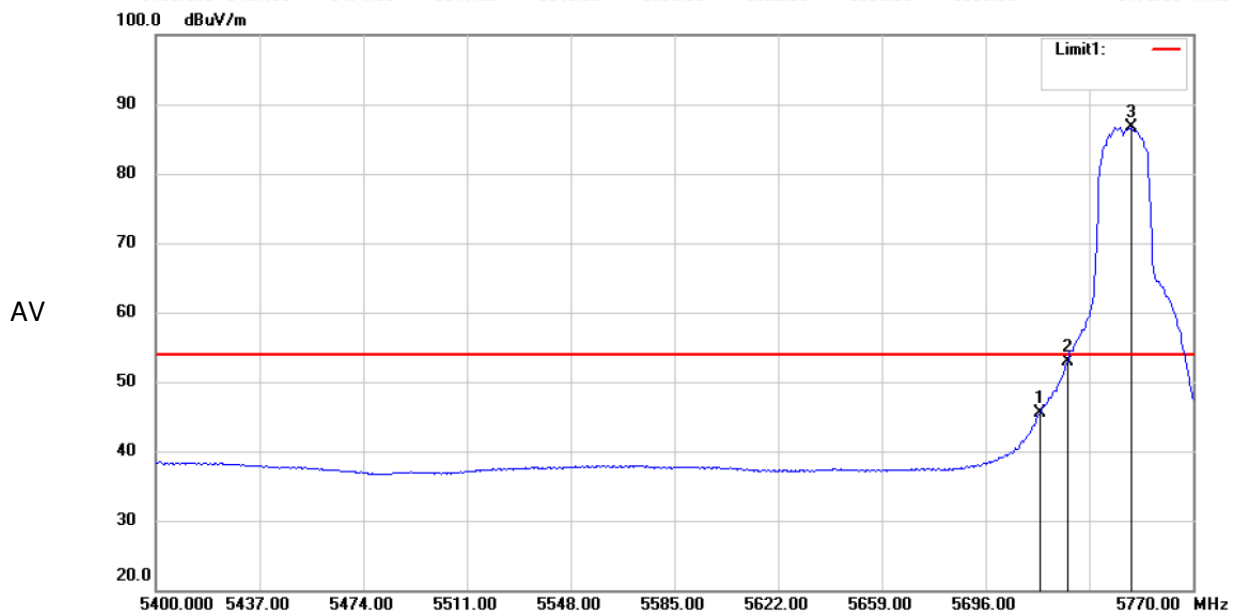
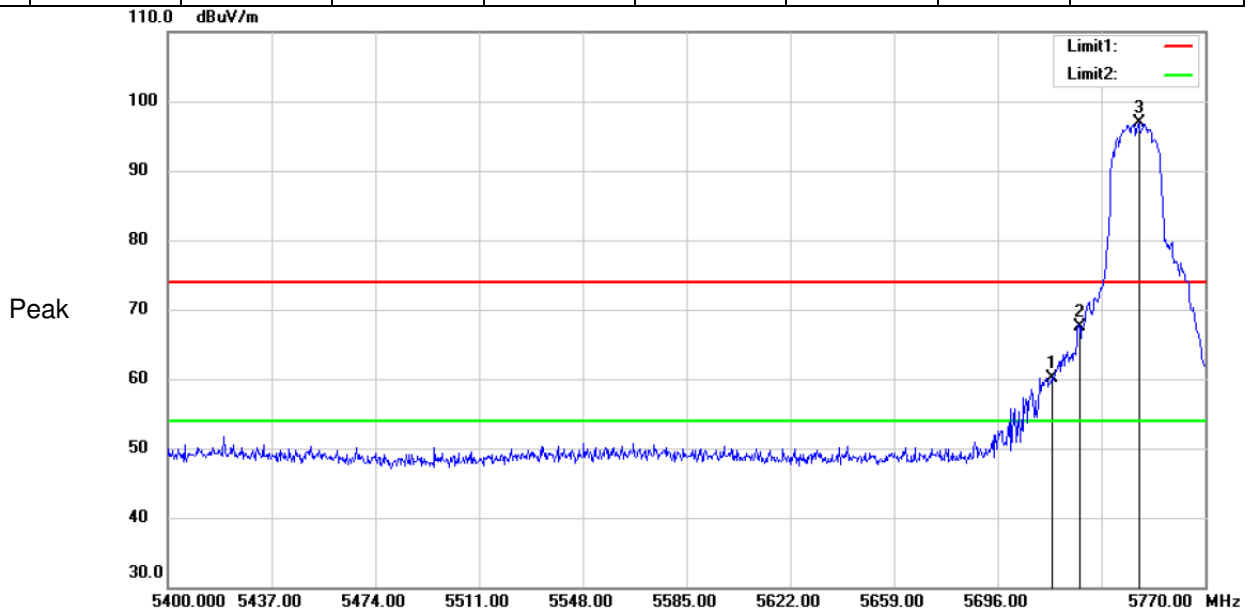


802.11 ac(VHT20)

Channel: 149

Fundamental frequency: 5745MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5715	53.18	6.84	60.02	74	-13.98	Peak	Horizontal
2	5725	60.67	6.82	67.49	74	-6.51	Peak	Horizontal
3	5746.32	90.12	6.77	96.89	74	22.89	Peak	Horizontal
1	5715	38.6	6.84	45.44	54	-8.56	AV	Horizontal
2	5725	46	6.82	52.82	54	-1.18	AV	Horizontal
3	5747.8	80	6.77	86.77	54	32.77	AV	Horizontal

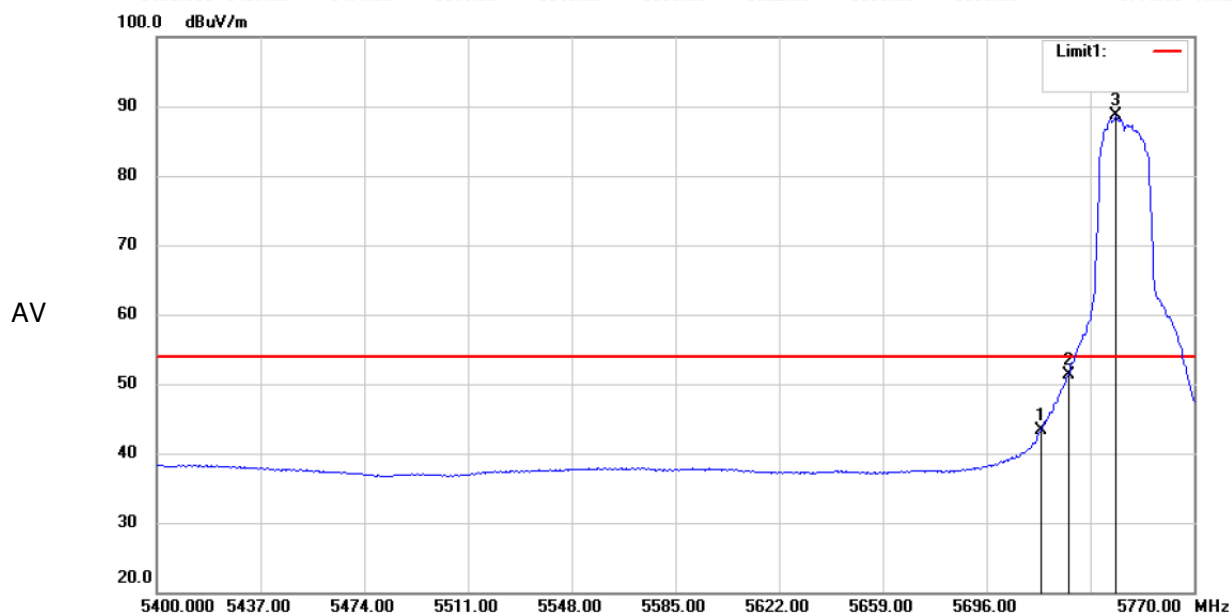
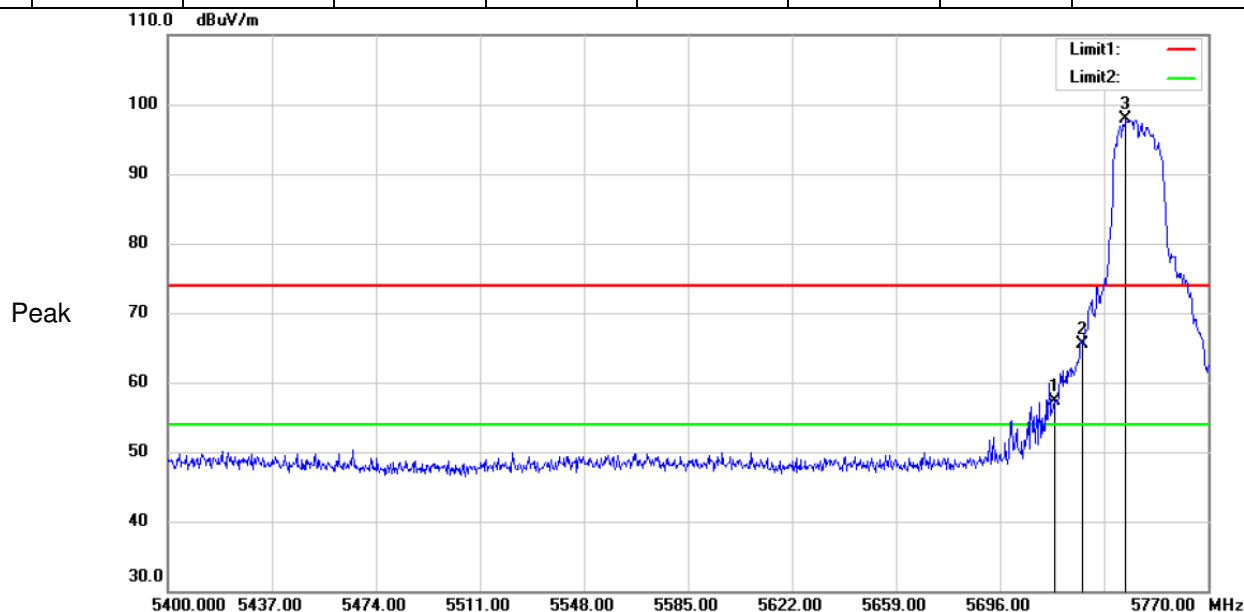


### 802.11 ac(VHT20)

Channel: 149

Fundamental frequency: 5745MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5715	50.38	6.84	57.22	74	-16.78	Peak	Vertical
2	5725	58.66	6.82	65.48	74	-8.52	Peak	Vertical
3	5740.77	91.03	6.79	97.82	74	23.82	Peak	Vertical
1	5715	36.43	6.84	43.27	54	-10.73	AV	Vertical
2	5725	44.51	6.82	51.33	54	-2.67	AV	Vertical
3	5742.25	81.84	6.79	88.63	54	34.63	AV	Vertical

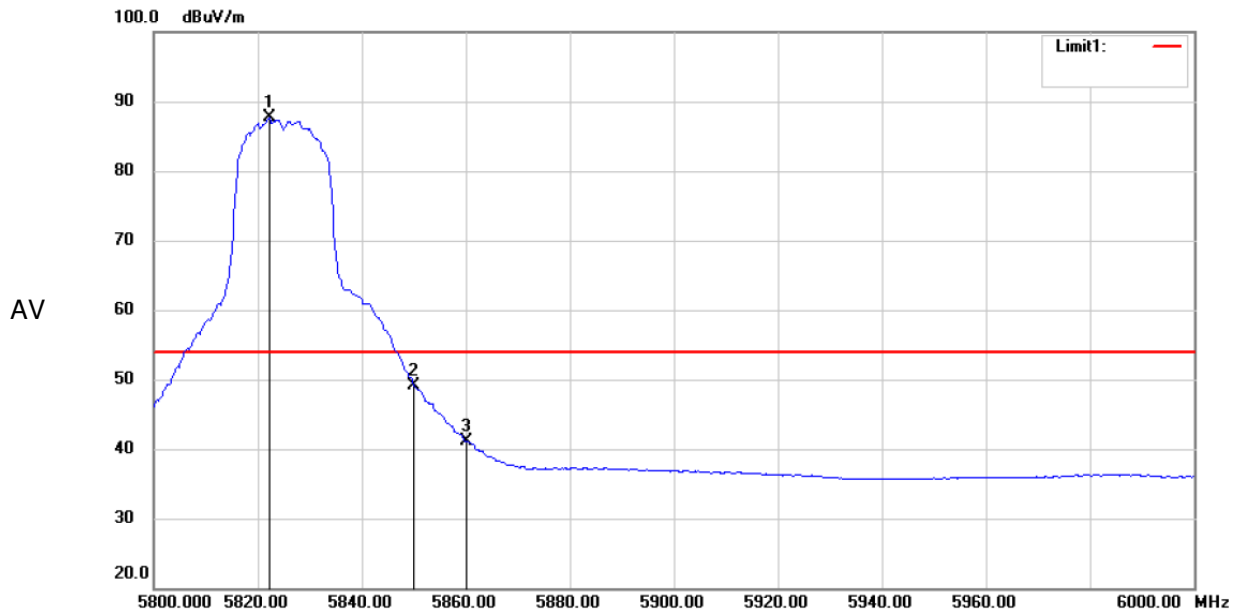
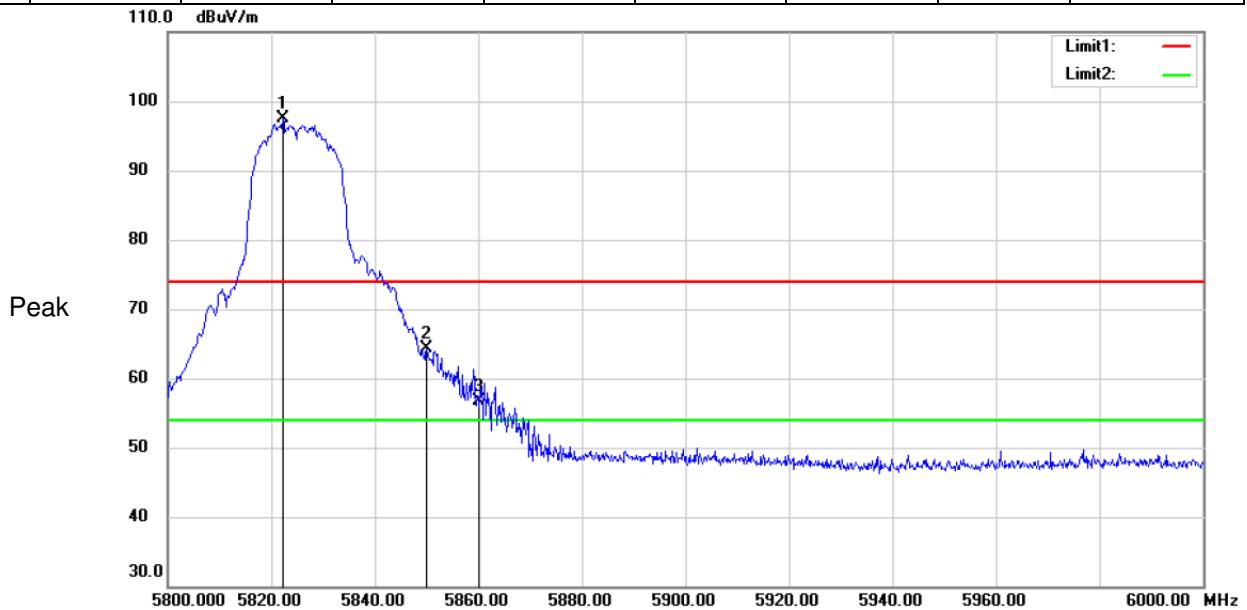


### 802.11 ac(VHT20)

Channel: 165

Fundamental frequency: 5825MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5822.2	90.78	6.65	97.43	74	23.43	Peak	Horizontal
2	5850	57.64	6.64	64.28	74	-9.72	Peak	Horizontal
3	5860	50.14	6.63	56.77	74	-17.23	Peak	Horizontal
1	5822.2	80.96	6.65	87.61	54	33.61	AV	Horizontal
2	5850	42.45	6.64	49.09	54	-4.91	AV	Horizontal
3	5860	34.5	6.63	41.13	54	-12.87	AV	Horizontal

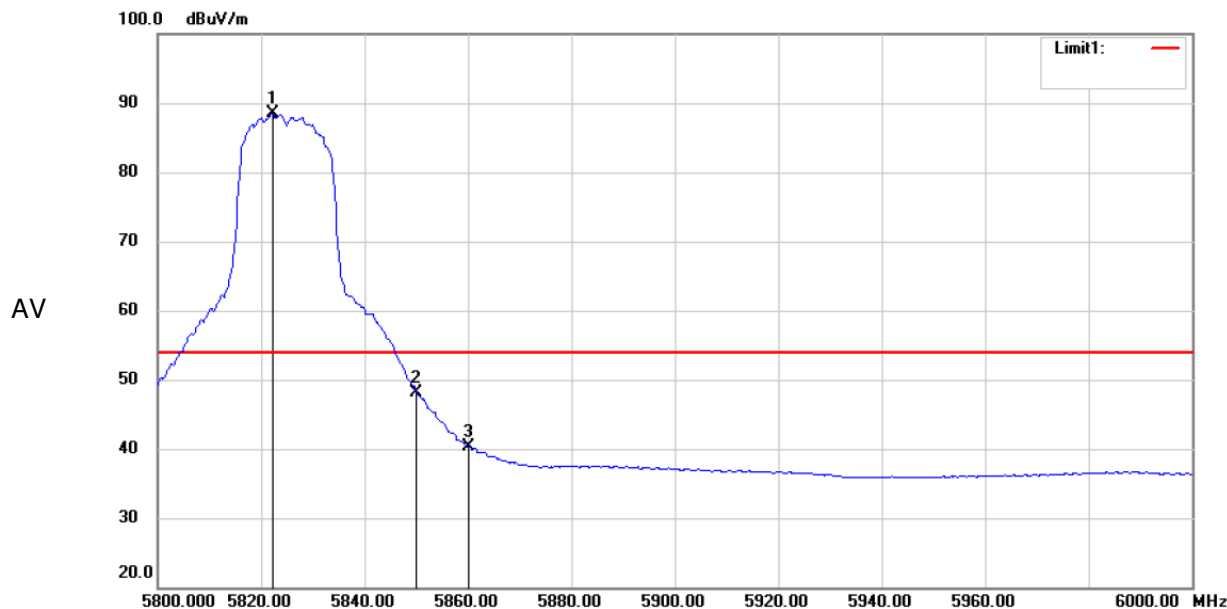
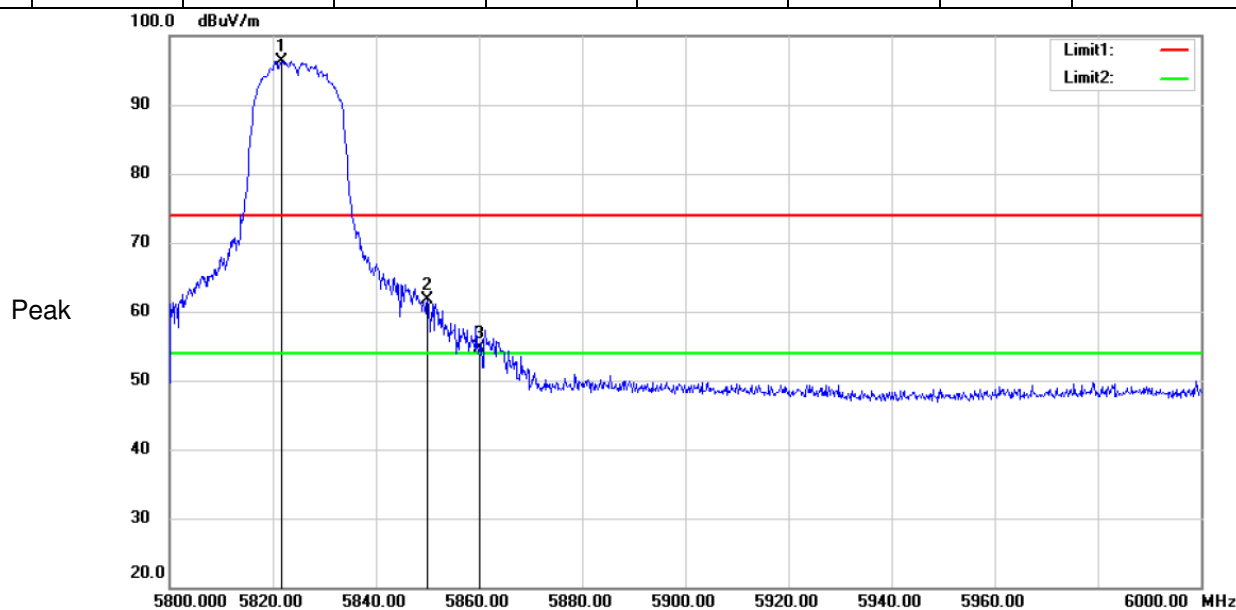


802.11 ac(VHT20)

Channel: 165

Fundamental frequency: 5825MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5821.8	89.72	6.65	96.37	74	22.37	Peak	Vertical
2	5850	55.02	6.64	61.66	74	-12.34	Peak	Vertical
3	5860	48.06	6.63	54.69	74	-19.31	Peak	Vertical
1	5822.2	81.88	6.65	88.53	54	34.53	AV	Vertical
2	5850	41.38	6.64	48.02	54	-5.98	AV	Vertical
3	5860	33.61	6.63	40.24	54	-13.76	AV	Vertical



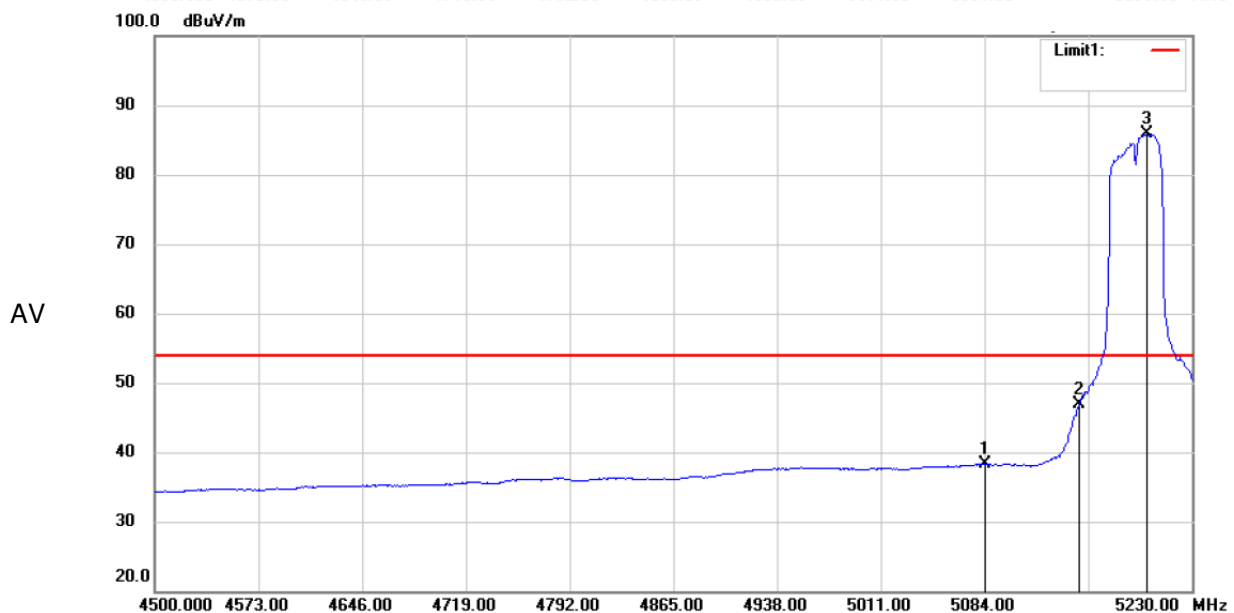
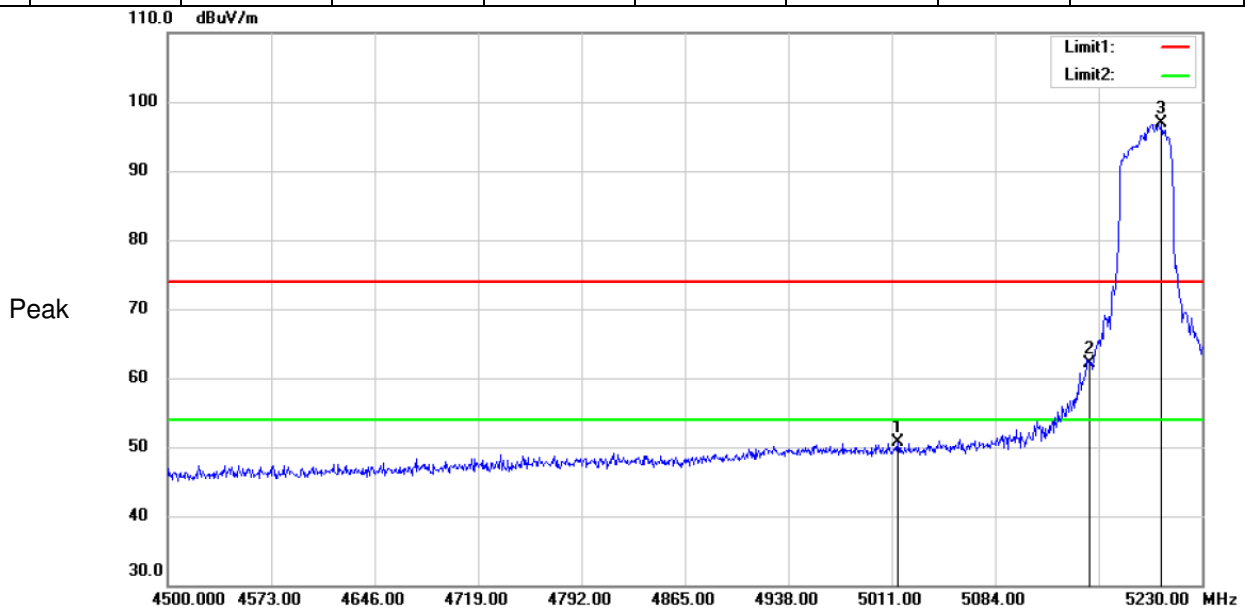


802.11 ac(VHT40)

Channel: 38

Fundamental frequency: 5190MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5015.38	43.02	7.62	50.64	74	-23.36	Peak	Horizontal
2	5150	55.26	6.92	62.18	74	-11.82	Peak	Horizontal
3	5201.53	90.28	6.65	96.93	74	22.93	Peak	Horizontal
1	5084	31.03	7.28	38.31	54	-15.69	AV	Horizontal
2	5150	39.98	6.92	46.9	54	-7.1	AV	Horizontal
3	5198.61	79.32	6.66	85.98	54	31.98	AV	Horizontal

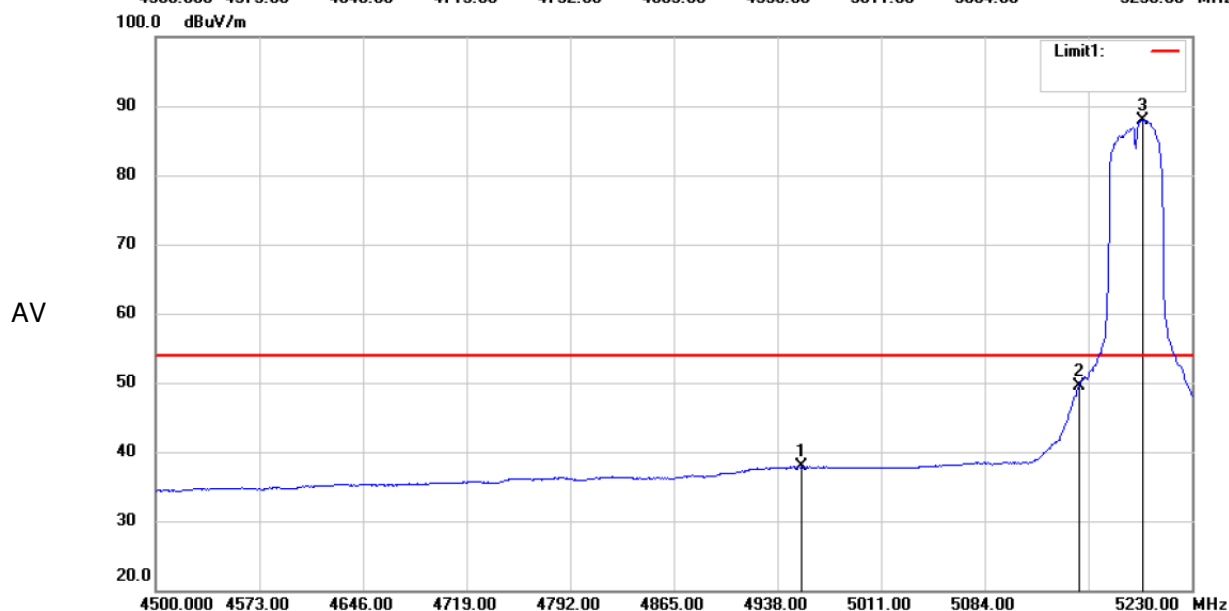
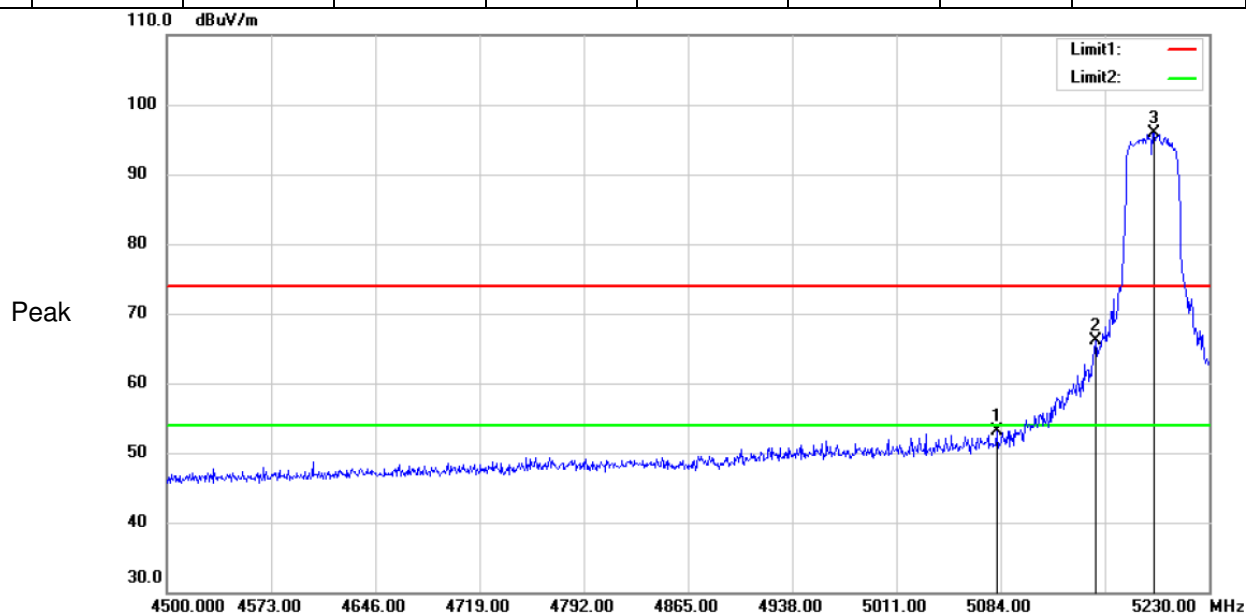


802.11 ac(VHT40)

Channel: 38

Fundamental frequency: 5190MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5081.08	45.77	7.29	53.06	74	-20.94	Peak	Vertical
2	5150	59.13	6.92	66.05	74	-7.95	Peak	Vertical
3	5191.31	89.3	6.7	96	74	22	Peak	Vertical
1	4954.79	30.42	7.47	37.89	54	-16.11	AV	Vertical
2	5150	42.63	6.92	49.55	54	-4.45	AV	Vertical
3	5194.96	81.3	6.68	87.98	54	33.98	AV	Vertical

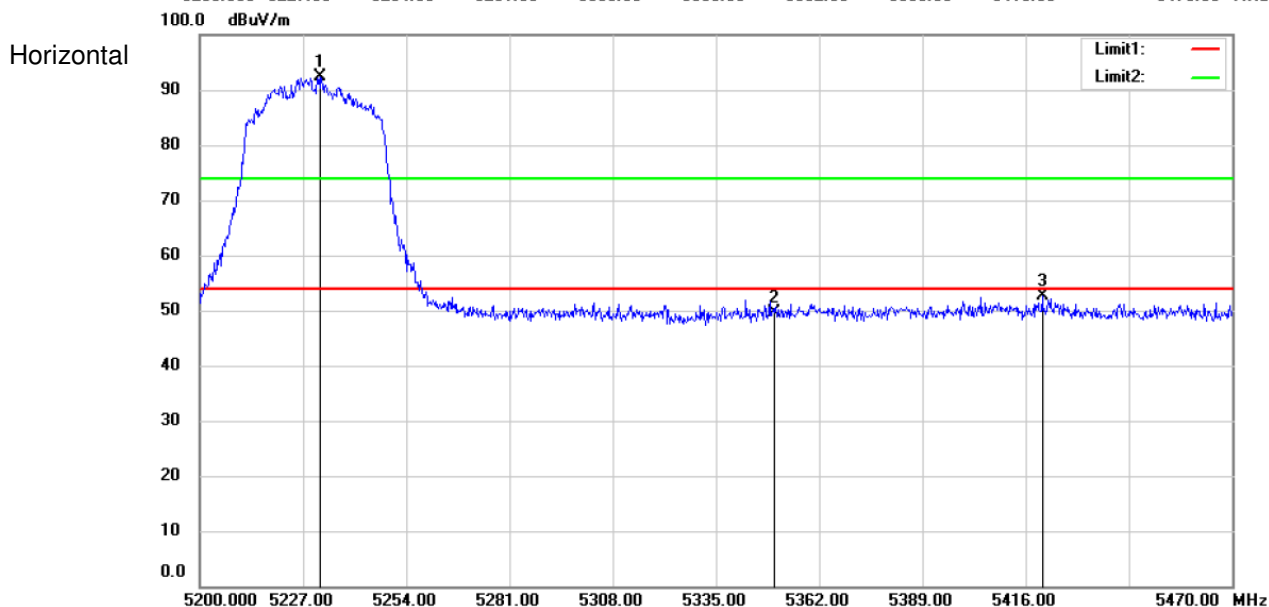
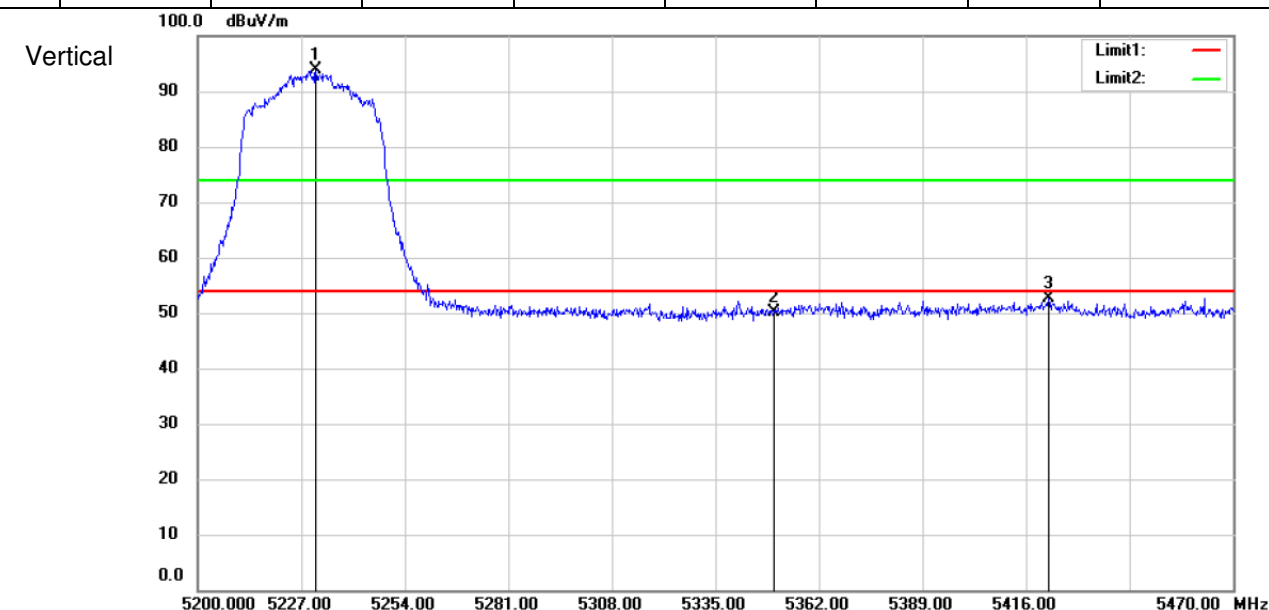


802.11 ac(VHT40)

Channel: 46

Fundamental frequency: 5230MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5230.78	87.18	6.65	93.83	54	39.83	Peak	Vertical
2	5350	43.19	6.98	50.17	54	-3.83	Peak	Vertical
3	5421.94	45.45	7.25	52.7	54	-1.3	Peak	Vertical
1	5231.59	85.74	6.65	92.39	54	38.39	Peak	Horizontal
2	5350	42.54	6.98	49.52	54	-4.48	Peak	Horizontal
3	5420.32	45.38	7.25	52.63	54	-1.37	Peak	Horizontal

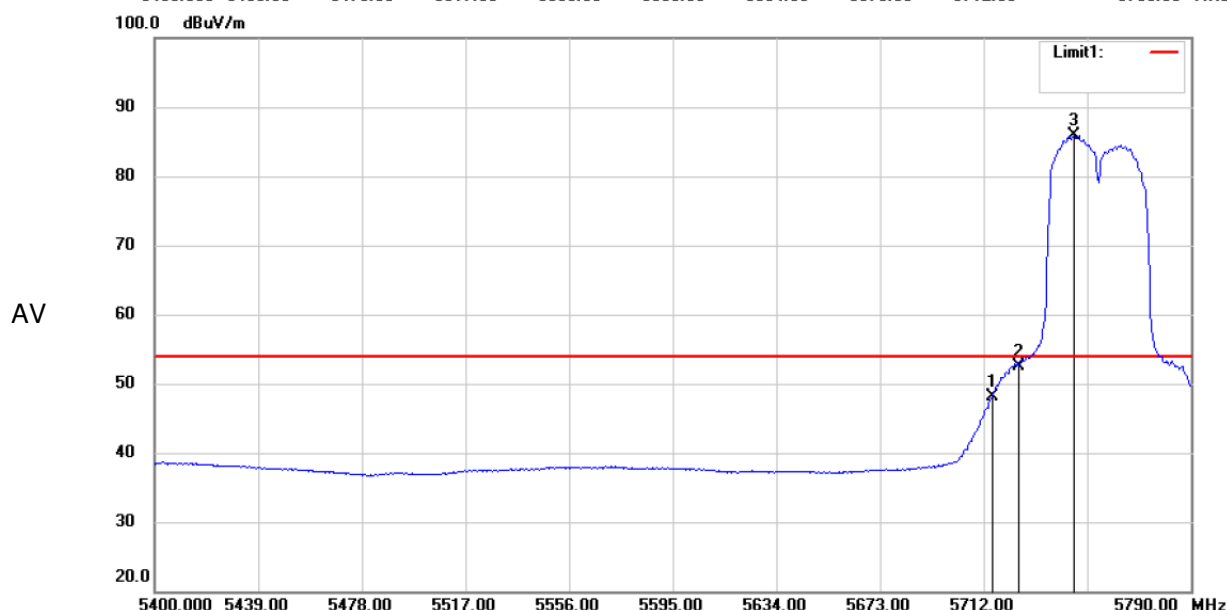
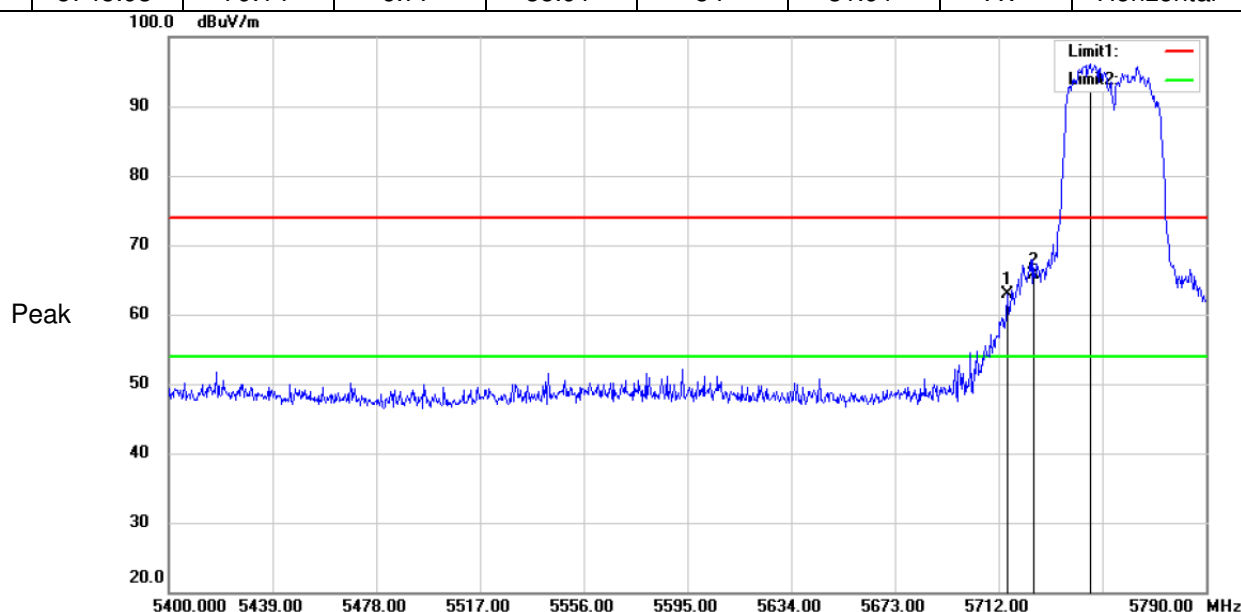


### 802.11 ac(VHT40)

Channel: 151

Fundamental frequency: 5755MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5715	55.97	6.84	62.81	74	-11.19	Peak	Horizontal
2	5725	58.8	6.82	65.62	74	-8.38	Peak	Horizontal
3	5746.32	89.39	6.77	96.16	74	22.16	Peak	Horizontal
1	5715	41.29	6.84	48.13	54	-5.87	AV	Horizontal
2	5725	45.77	6.82	52.59	54	-1.41	AV	Horizontal
3	5745.93	79.14	6.77	85.91	54	31.91	AV	Horizontal

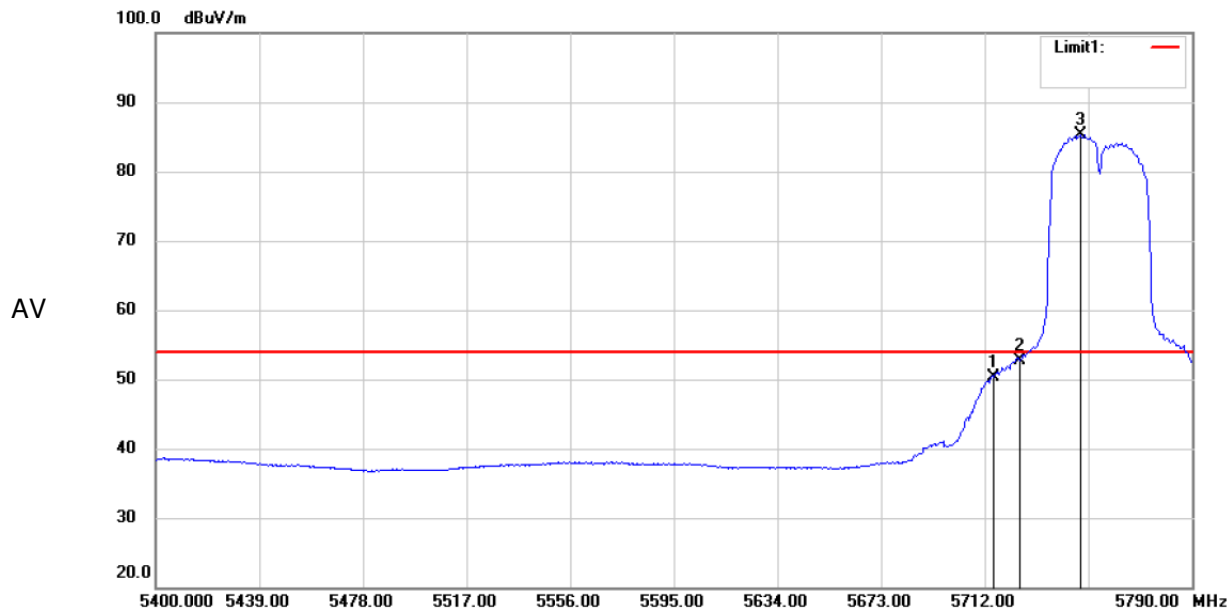
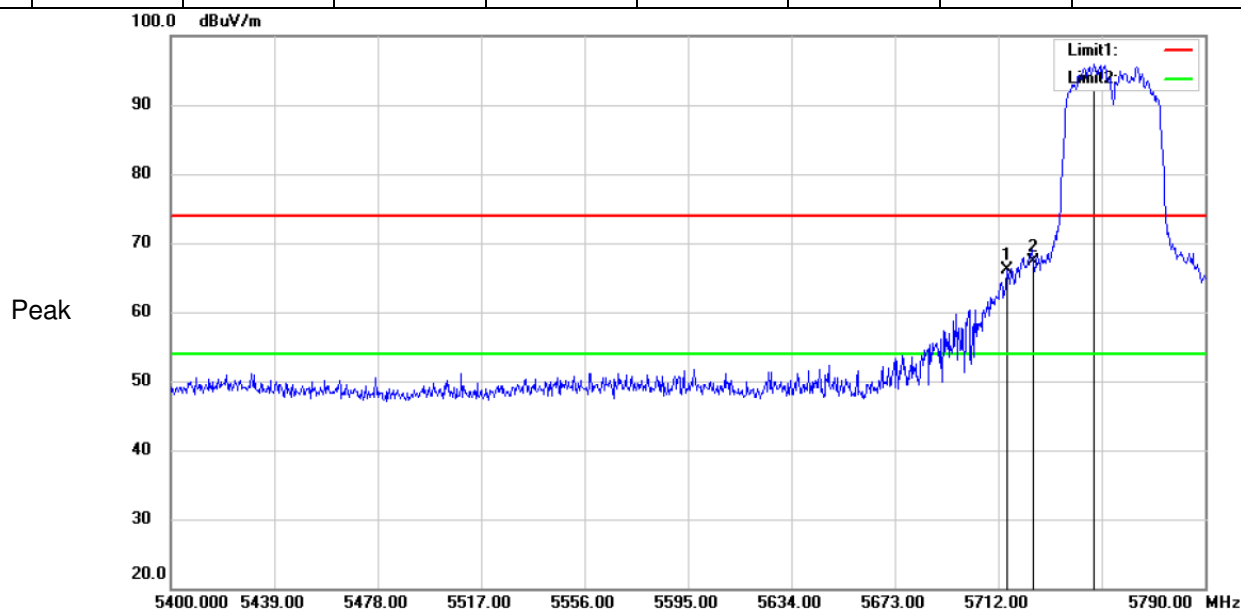


802.11 ac(VHT40)

Channel: 151

Fundamental frequency: 5755MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5715	59.2	6.84	66.04	74	-7.96	Peak	Vertical
2	5725	60.53	6.82	67.35	74	-6.65	Peak	Vertical
3	5748.27	89.14	6.77	95.91	74	21.91	Peak	Vertical
1	5715	43.56	6.84	50.4	54	-3.6	AV	Vertical
2	5725	45.83	6.82	52.65	54	-1.35	AV	Vertical
3	5747.88	78.6	6.77	85.37	54	31.37	AV	Vertical

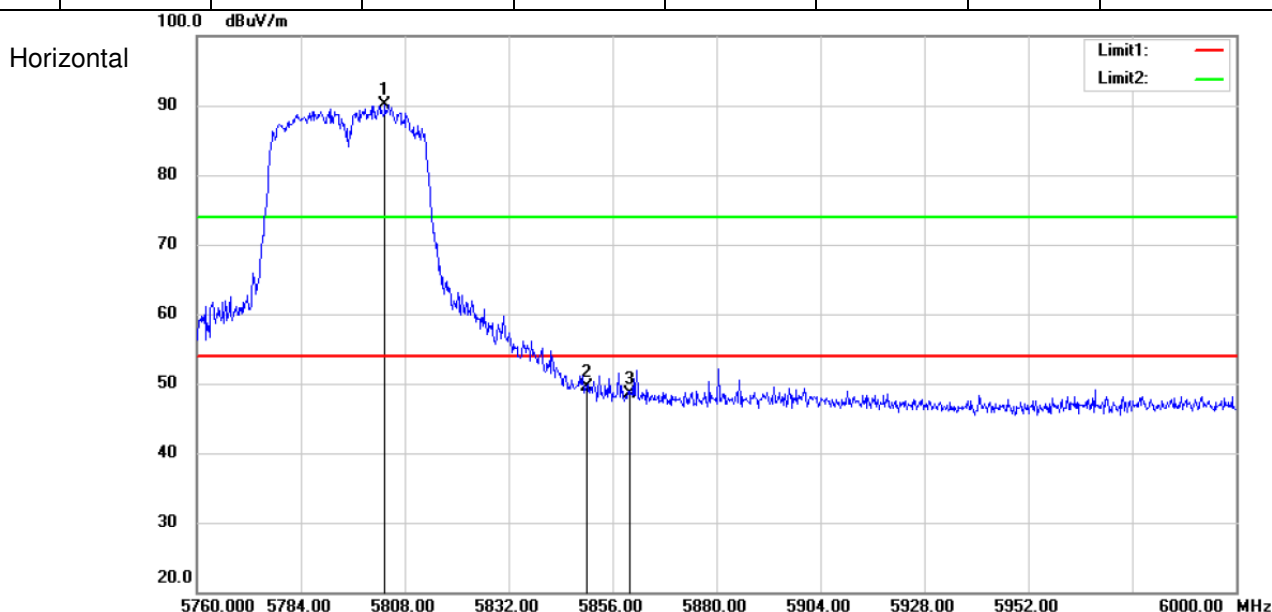


802.11 ac(VHT40)

Channel: 159

Fundamental frequency: 5795MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5803.44	83.51	6.67	90.18	54	36.18	Peak	Horizontal
2	5850	42.82	6.64	49.46	54	-4.54	Peak	Horizontal
3	5860	41.92	6.63	48.55	54	-5.45	Peak	Horizontal

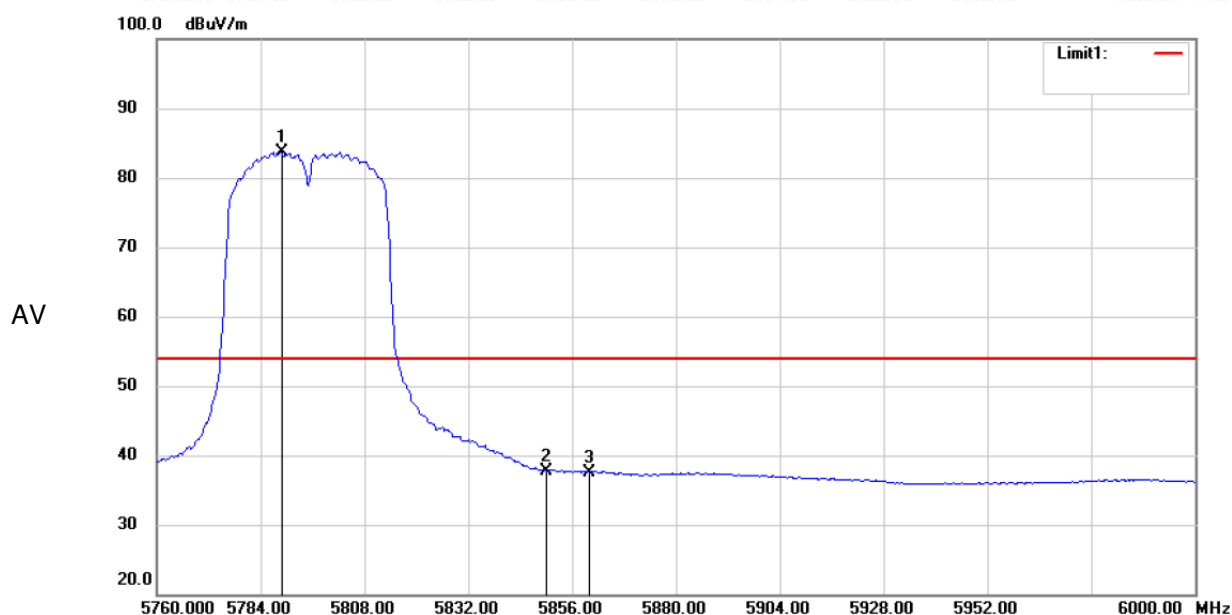
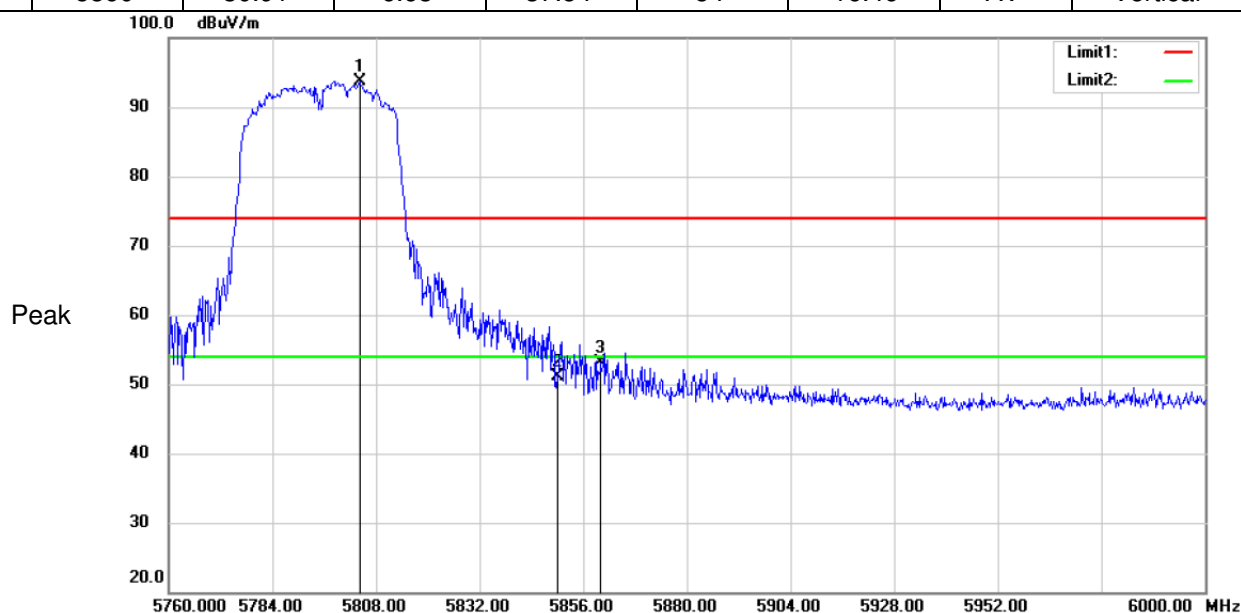


### 802.11 ac(VHT40)

Channel: 159

Fundamental frequency: 5795MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5804.16	87.08	6.67	93.75	74	19.75	Peak	Vertical
2	5850	44.4	6.64	51.04	74	-22.96	Peak	Vertical
3	5860	46.56	6.63	53.19	74	-20.81	Peak	Vertical
1	5788.8	77.06	6.69	83.75	54	29.75	AV	Vertical
2	5850	31.09	6.64	37.73	54	-16.27	AV	Vertical
3	5860	30.91	6.63	37.54	54	-16.46	AV	Vertical

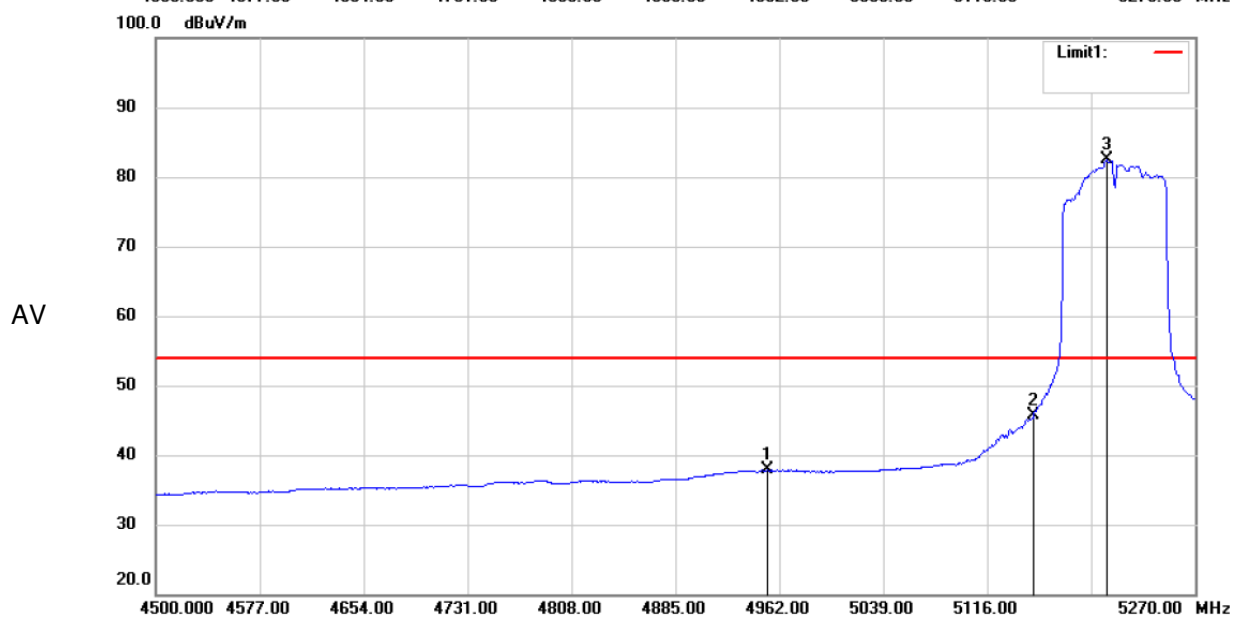
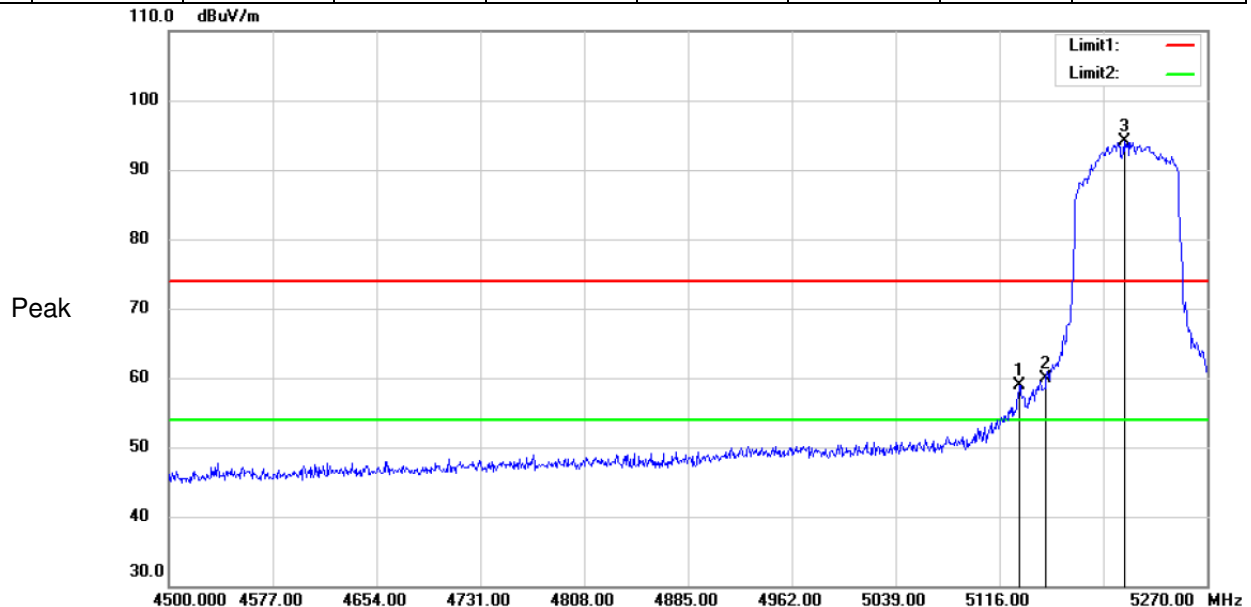


802.11 ac(VHT80)

Channel: 42

Fundamental frequency: 5210MHz - Left

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5130.63	51.8	7.04	58.84	74	-15.16	Peak	Horizontal
2	5150	52.94	6.92	59.86	74	-14.14	Peak	Horizontal
3	5208.4	87.41	6.64	94.05	74	20.05	Peak	Horizontal
1	4952.76	30.43	7.45	37.88	54	-16.12	AV	Horizontal
2	5150	38.88	6.92	45.8	54	-8.2	AV	Horizontal
3	5204.55	75.77	6.65	82.42	54	28.42	AV	Horizontal



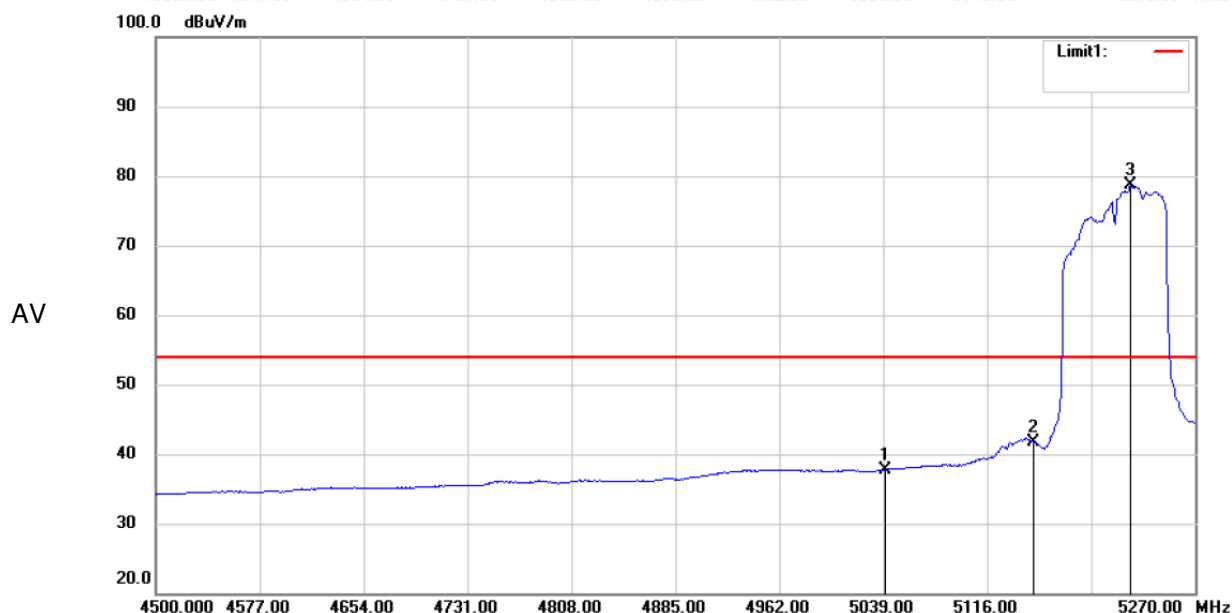
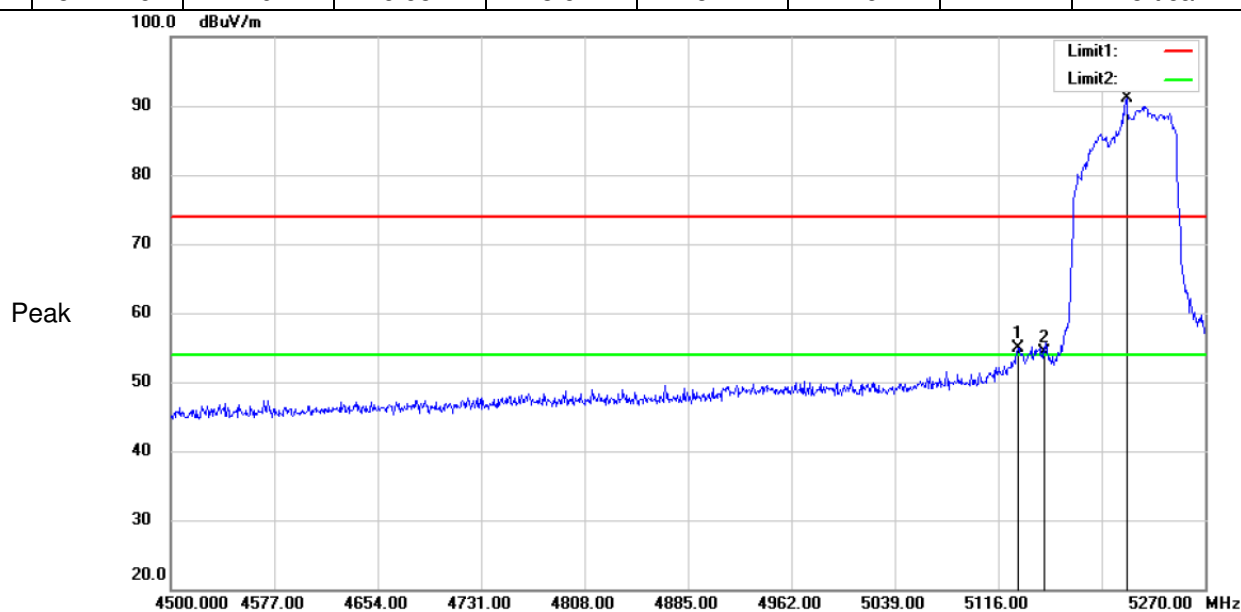


802.11 ac(VHT80)

Channel: 42

Fundamental frequency: 5210MHz -Left

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5130.63	47.93	7.04	54.97	74	-19.03	Peak	Vertical
2	5150	47.41	6.92	54.33	74	-19.67	Peak	Vertical
3	5211.48	84.37	6.66	91.03	74	17.03	Peak	Vertical
1	5040.54	30.28	7.5	37.78	54	-16.22	AV	Vertical
2	5150	34.84	6.92	41.76	54	-12.24	AV	Vertical
3	5222.26	72.02	6.65	78.67	54	24.67	AV	Vertical

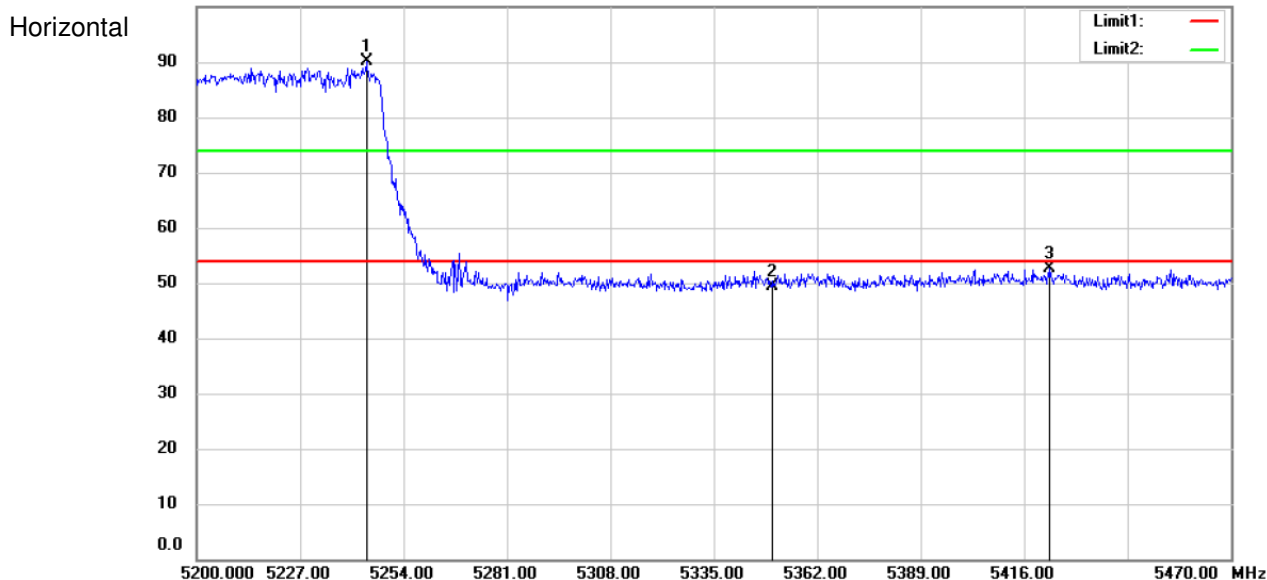
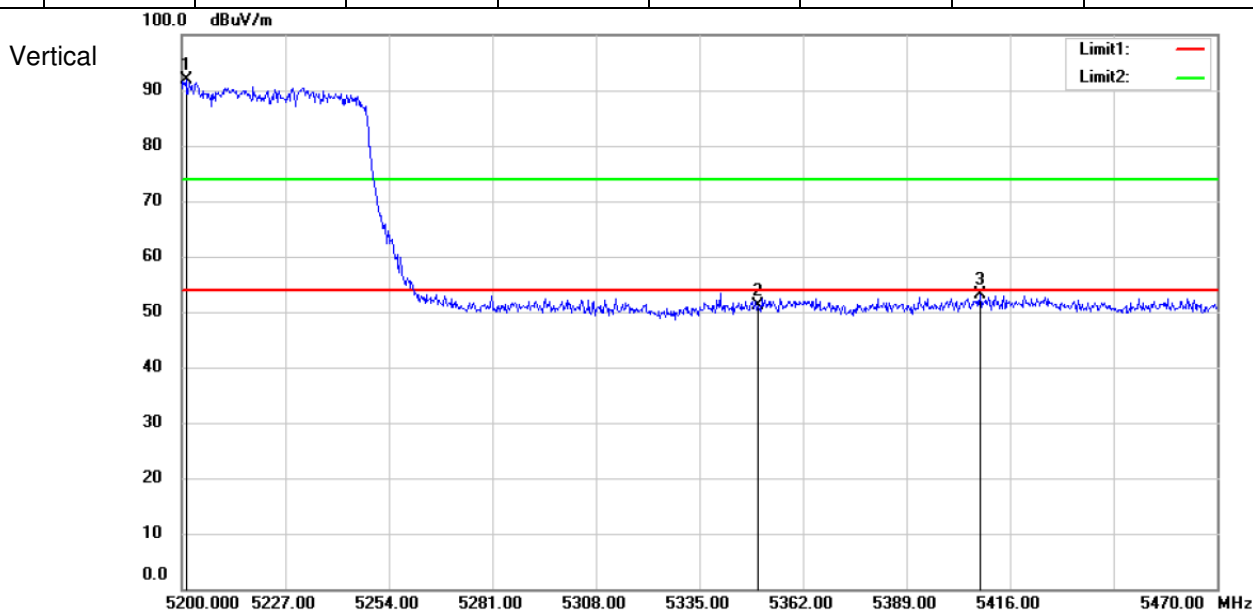


802.11 ac(VHT80)

Channel: 42

Fundamental frequency: 5210MHz -Right

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5201.08	85.2	6.65	91.85	54	37.85	Peak	Vertical
2	5350	44.25	6.98	51.23	54	-2.77	Peak	Vertical
3	5408.17	45.73	7.29	53.02	54	-0.98	Peak	Vertical
1	5244.28	83.5	6.65	90.15	54	36.15	Peak	Horizontal
2	5350	42.36	6.98	49.34	54	-4.66	Peak	Horizontal
3	5422.75	45.27	7.24	52.51	54	-1.49	Peak	Horizontal

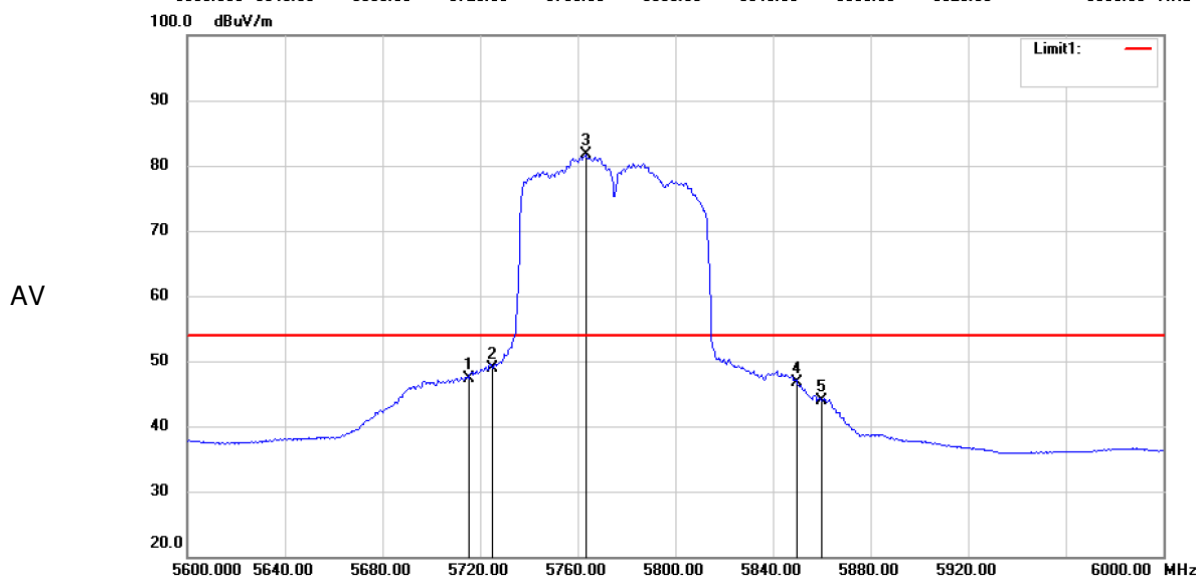
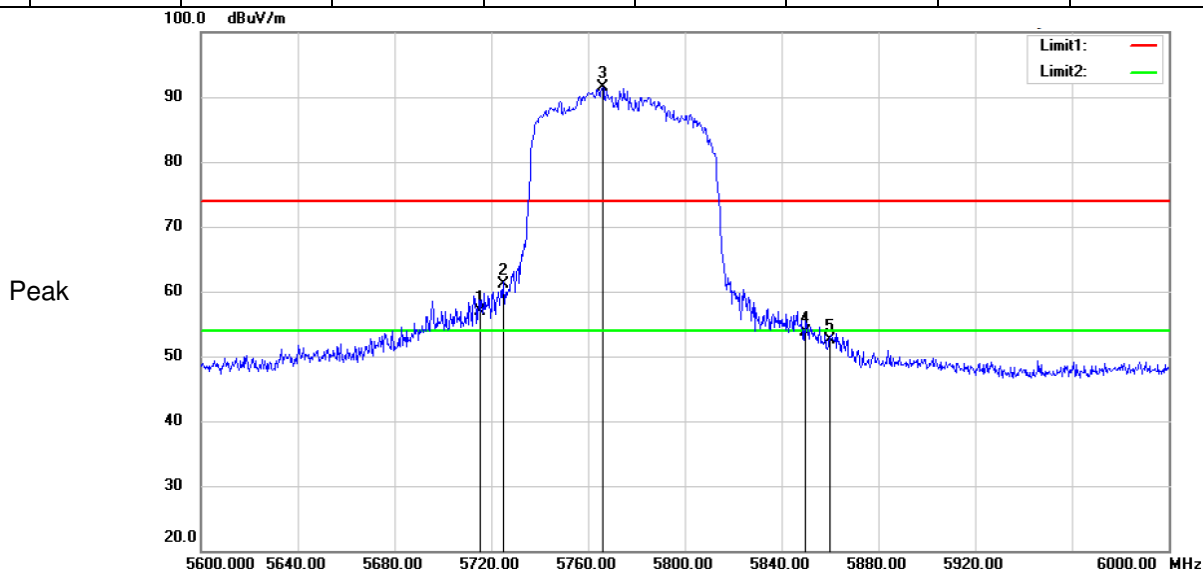


802.11 ac(VHT80)

Channel: 155

Fundamental frequency: 5775MHz

MK.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Detector	Polarization
1	5715	50.14	6.84	56.98	74	-17.02	Peak	Horizontal
2	5725	54.33	6.82	61.15	74	-12.85	Peak	Horizontal
3	5766	84.74	6.74	91.48	74	17.48	Peak	Horizontal
4	5850	47	6.64	53.64	74	-20.36	Peak	Horizontal
5	5860	45.78	6.63	52.41	74	-21.59	Peak	Horizontal
1	5715	40.53	6.84	47.37	54	-6.63	AV	Horizontal
2	5725	42.02	6.82	48.84	54	-5.16	AV	Horizontal
3	5763.2	74.96	6.74	81.7	54	27.7	AV	Horizontal
4	5850	40.12	6.64	46.76	54	-7.24	AV	Horizontal
5	5860	37.32	6.63	43.95	54	-10.05	AV	Horizontal

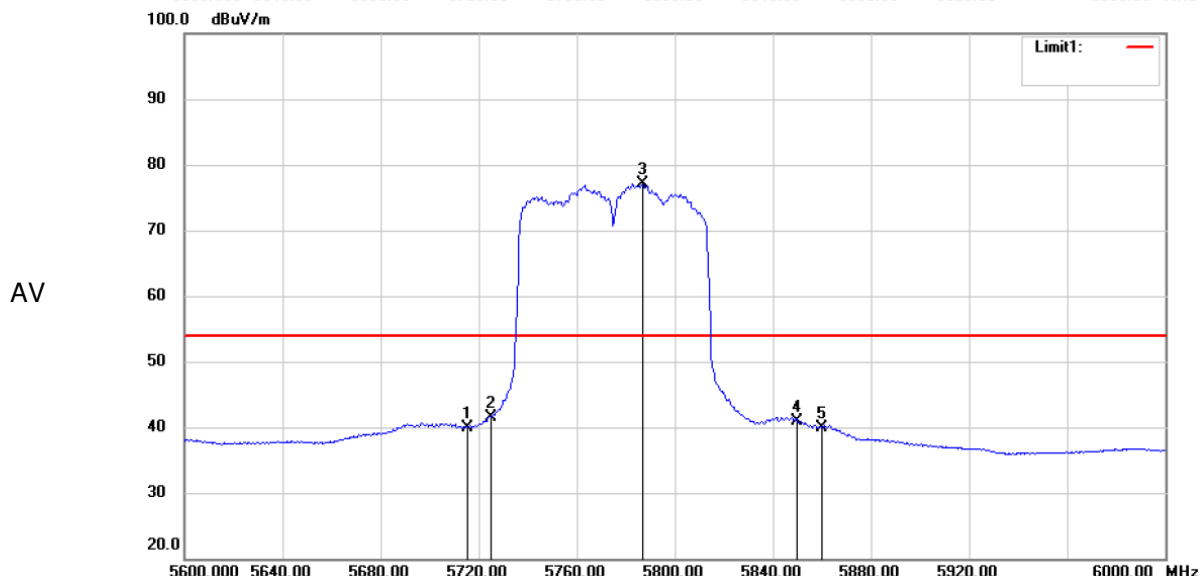
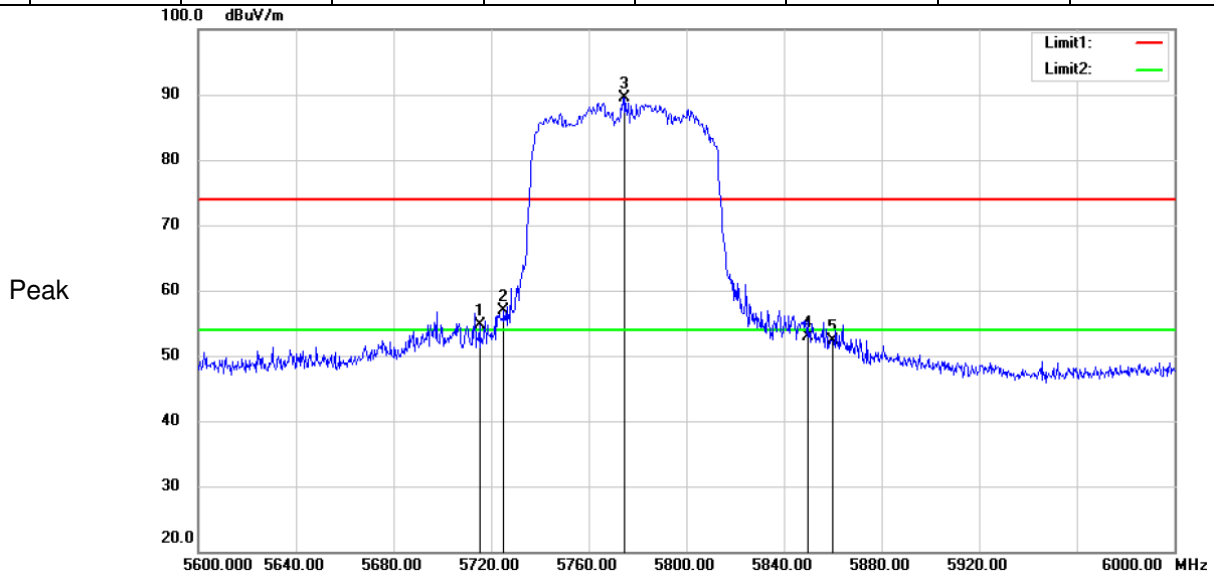


### 802.11 ac(VHT80)

Channel: 155

Fundamental frequency: 5775MHz

MK.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	5715	47.86	6.84	54.7	74	-19.3	Peak	Vertical
2	5725	50.01	6.82	56.83	74	-17.17	Peak	Vertical
3	5774.8	82.84	6.72	89.56	74	15.56	Peak	Vertical
4	5850	46.34	6.64	52.98	74	-21.02	Peak	Vertical
5	5860	45.65	6.63	52.28	74	-21.72	Peak	Vertical
1	5715	33.03	6.84	39.87	54	-14.13	AV	Vertical
2	5725	34.6	6.82	41.42	54	-12.58	AV	Vertical
3	5786.8	70.41	6.7	77.11	54	23.11	AV	Vertical
4	5850	34.33	6.64	40.97	54	-13.03	AV	Vertical
5	5860	33.29	6.63	39.92	54	-14.08	AV	Vertical



- Remark: 1. Test Level = Receiver Reading + Antenna Factor + Cable Loss- Preamplifier Factor  
2. No any other emission which falls in restricted bands can be detected and be reported.  
3. If the Peak value below the AV Limit, the AV test doesn't perform for this submission.

All frequencies within the "Restricted bands" have been evaluated to compliance. Section 15.205

Restricted bands of operation.

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.5 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	
13.36 - 13.41			

## **7.10 Transmission in the Absence of Data**

### **7.10.1 Standard Applicable**

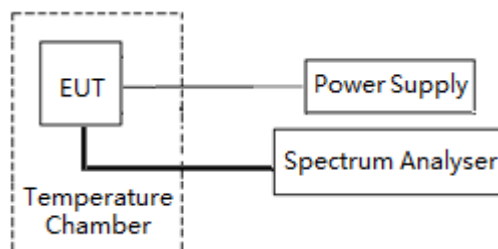
The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

### **7.10.2 Test Result**

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

### 7.11 Frequency stability

#### Test setup:



#### Test Procedure:

- The EUT was placed in the temperature chamber, the DC leads and RF output cable exited the chamber through an opening made for that purpose.
- After operating the equipment in standby conditions for 15 minutes before proceeding. The temperature was varied from -20°C to +55°C at intervals of not more than 10°C. The frequency stability was read from the spectrum analyzer and the frequency stability and input voltage was recorded.

#### Test Limit:

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

#### Test Data:

Test Data							
Band	Test Conditions		Operation Frequency(MHz)	Test Frequency (MHz)	Freq. Dev. (MHz)	Limit (GHz)	Result
	Volt (V DC)	Temp (°C)					
Band U-NII 1	Normal(3.8)	Extreme(-20)	5180	5179.9857	0.0143	5.15-5.25	Pass
		Extreme(-10)		5179.9860	0.0140		Pass
		Extreme(0)		5179.9853	0.0147		Pass
		Extreme(+10)		5179.9852	0.0148		Pass
		Extreme(+20)		5179.9867	0.0133		Pass
		Extreme(+30)		5179.9839	0.0161		Pass
		Extreme(+40)		5179.9851	0.0149		Pass
		Extreme(+55)		5179.9859	0.0141		Pass
	Extreme(3.23)	Norma(+20)		5179.9876	0.0124		Pass
	Extreme(4.37)			5179.9812	0.0188		Pass
Band U-NII 3	Normal(12)	Extreme(-20)	5825	5824.9793	0.0207	5.725-5.85	Pass
		Extreme(-10)		5824.9789	0.0211		Pass
		Extreme(0)		5824.9795	0.0205		Pass
		Extreme(+10)		5824.9793	0.0207		Pass
		Extreme(+20)		5824.9748	0.0252		Pass
		Extreme(+30)		5824.9789	0.0211		Pass
		Extreme(+40)		5824.9749	0.0251		Pass
		Extreme(+55)		5824.9774	0.0226		Pass
	Extreme(3.23)	Norma(20)		5824.9783	0.0217		Pass
	Extreme(4.37)			5824.9799	0.0201		Pass

Remark: Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

## **8 Test Setup Photographs**

Refer to the < CS-SP208 \_Test Setup photos-FCC>.

## **9 EUT Constructional Details**

Refer to the < CS-SP208 \_External Photos > & < CS-SP208 \_Internal Photos >.

**--End of the Report--**