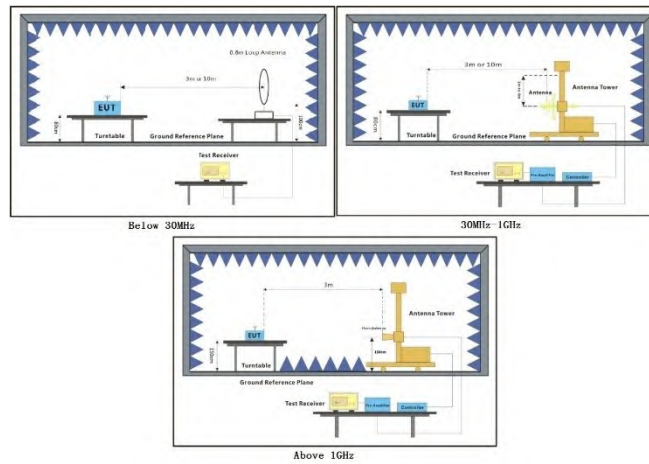


7.4.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac 20/40/80 Only the data of worst case is recorded in the report.

7.4.3 Test Setup Diagram



7.4.4 Measurement Procedure and Data

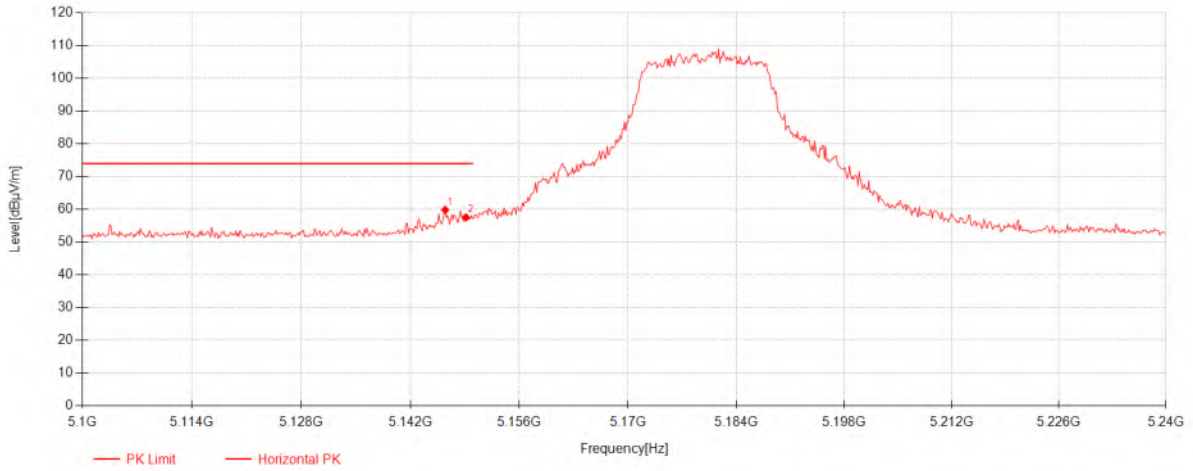
- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.

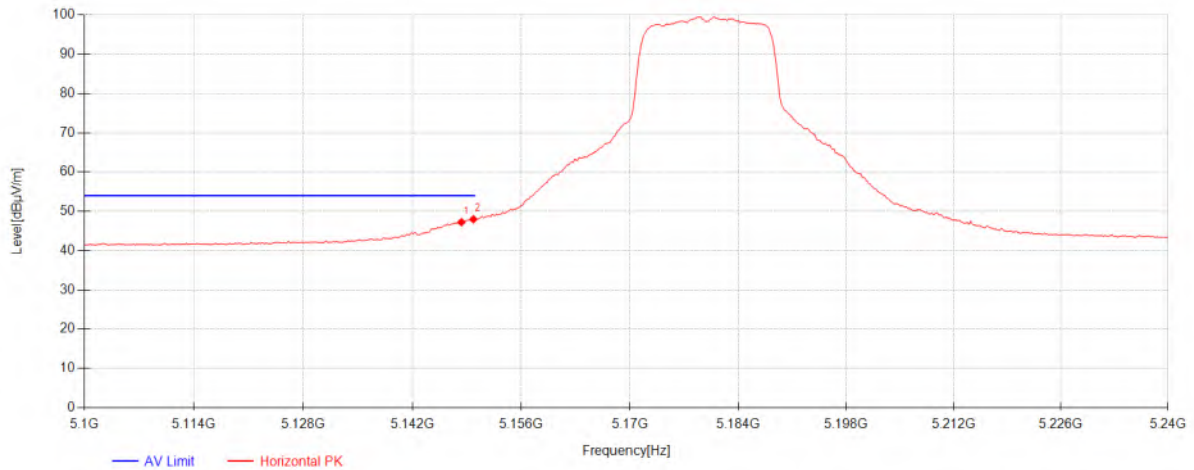
Remark 3: For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.

11a_TX_CH_36_Horizontal_Peak



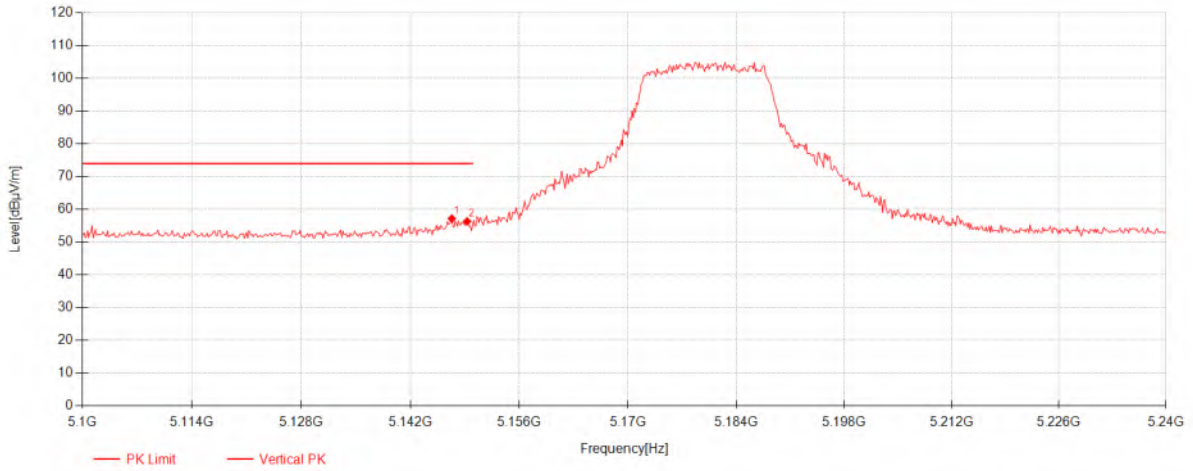
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.48	45.97	31.61	-17.76	59.82	74.00	14.18	Horizontal
2	5149.14	43.67	31.62	-17.76	57.53	74.00	16.47	Horizontal

11a_TX_CH_36_Horizontal_Average



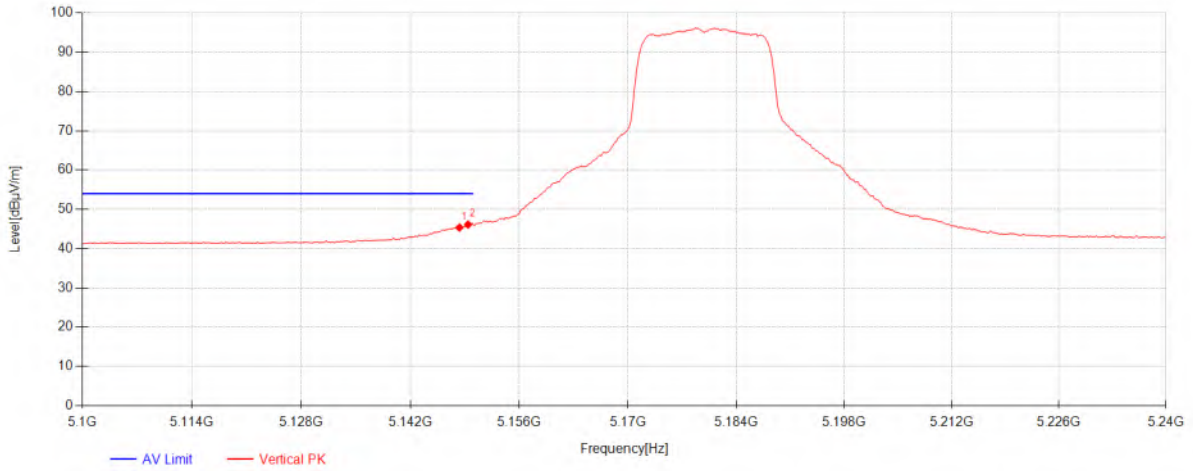
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.3	33.37	31.62	-17.76	47.23	54.00	6.77	Horizontal
2	5149.84	34.10	31.62	-17.76	47.96	54.00	6.04	Horizontal

11a_TX_CH_36_Vertical_Peak



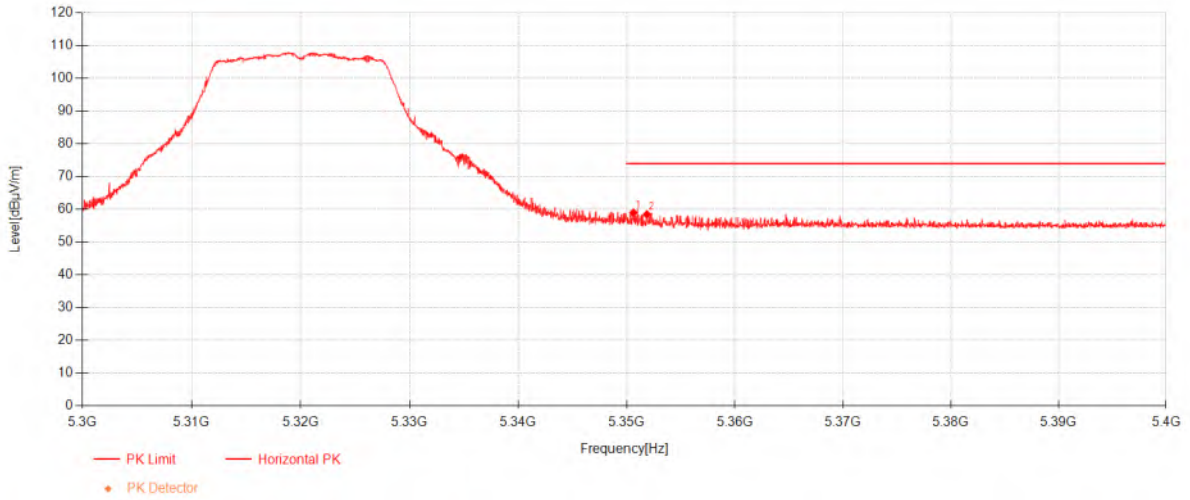
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.32	43.33	31.61	-17.76	57.18	74.00	16.82	Vertical
2	5149.28	42.45	31.62	-17.76	56.31	74.00	17.69	Vertical

11a_TX_CH_36_Vertical_Average



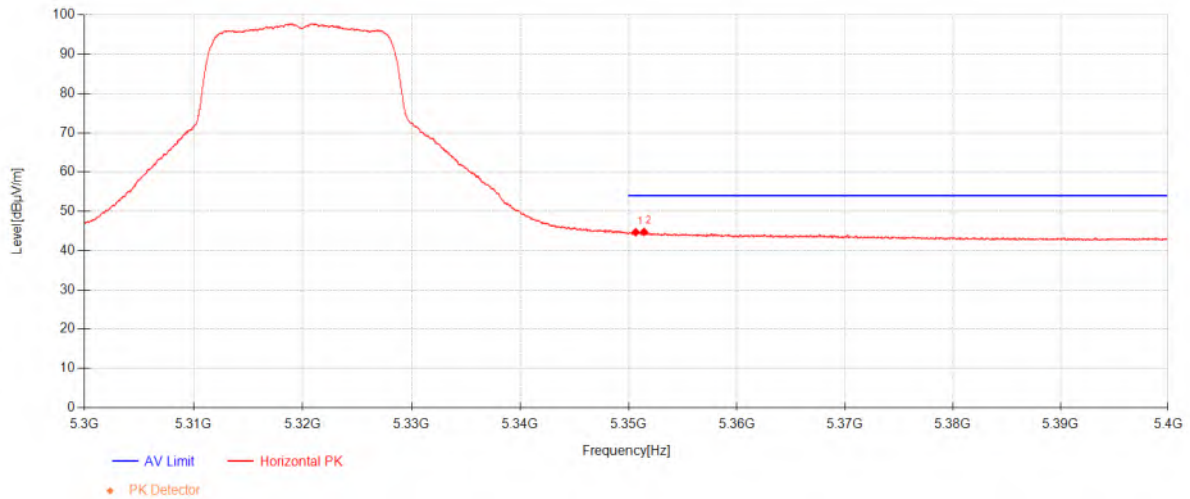
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.3	31.50	31.62	-17.76	45.36	54.00	8.64	Vertical
2	5149.42	32.26	31.62	-17.76	46.12	54.00	7.88	Vertical

11a_TX_CH_64_Horizontal_Peak



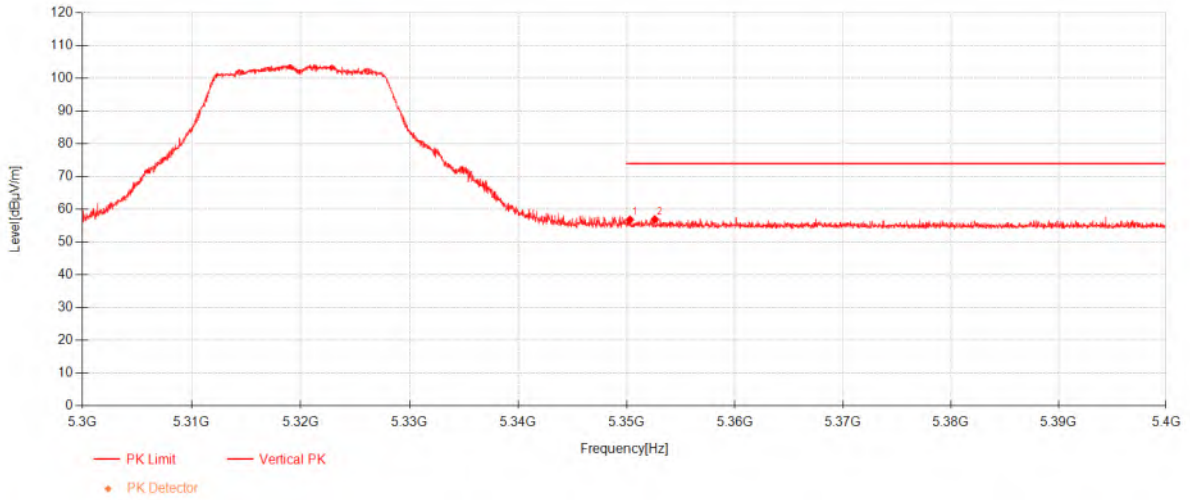
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.625	43.72	32.18	-16.93	58.97	74.00	15.03	Horizontal
2	5351.875	43.19	32.19	-16.92	58.45	74.00	15.55	Horizontal

11a_TX_CH_64_Horizontal_Average



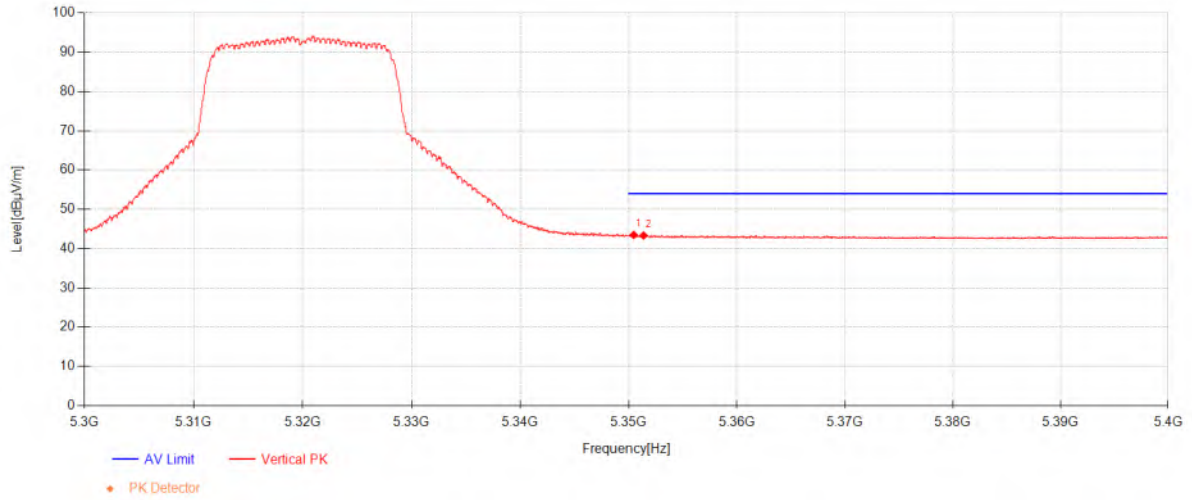
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.65	29.40	32.18	-16.93	44.66	54.00	9.34	Horizontal
2	5351.425	29.49	32.18	-16.92	44.75	54.00	9.25	Horizontal

11a_TX_CH_64_Vertical_Peak



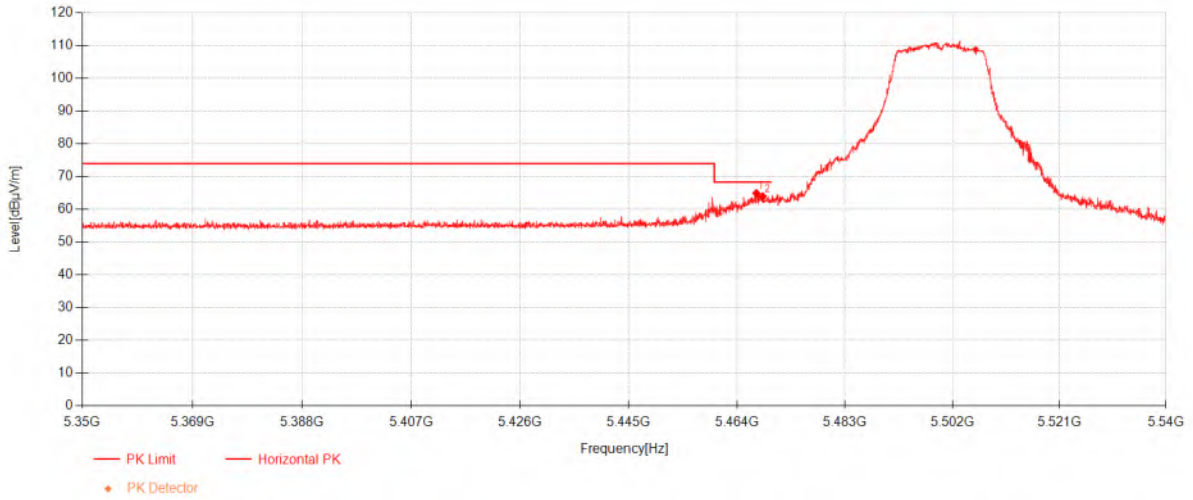
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.3	41.57	32.18	-16.93	56.82	74.00	17.18	Vertical
2	5352.6	41.62	32.19	-16.92	56.89	74.00	17.11	Vertical

11a_TX_CH_64_Veritical_Average



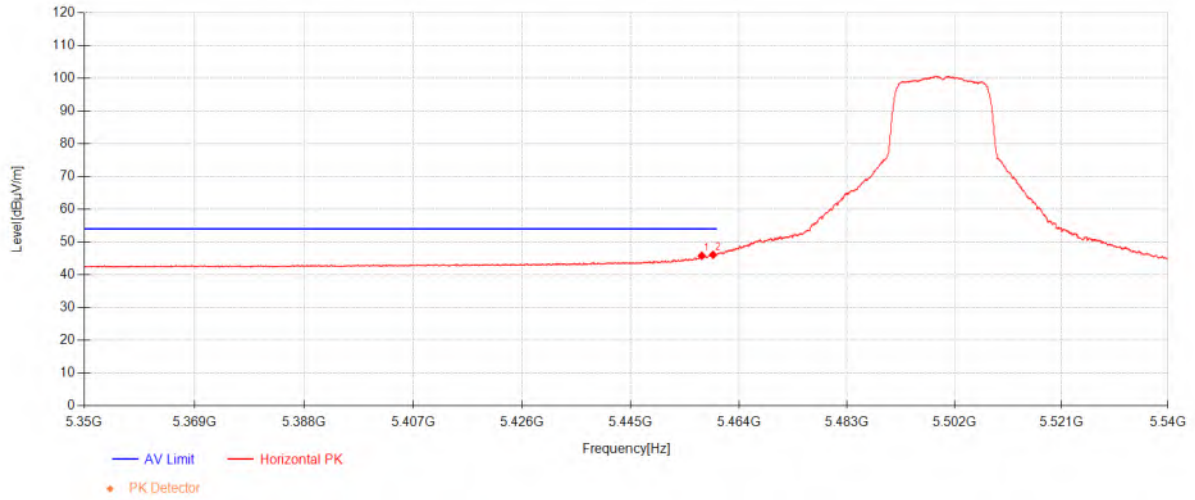
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.475	28.22	32.18	-16.93	43.47	54.00	10.53	Vertical
2	5351.375	28.07	32.18	-16.92	43.33	54.00	10.67	Vertical

11a_TX_CH_100_Horizontal_Peak



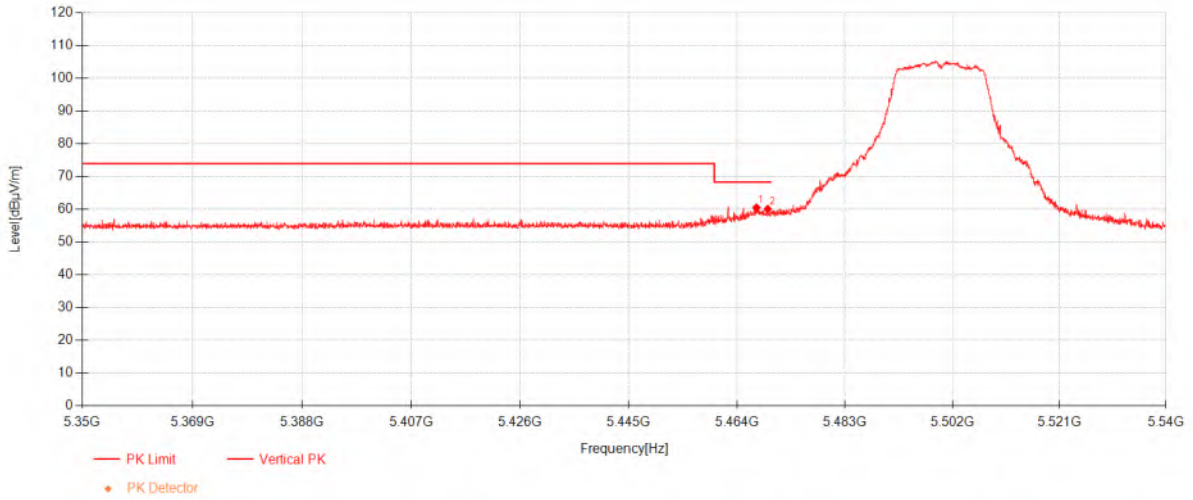
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5467.42	49.45	32.51	-17.04	64.91	68.30	3.39	Horizontal
2	5468.5125	48.47	32.51	-17.05	63.93	68.30	4.37	Horizontal

11a_TX_CH_100_Horizontal_Average



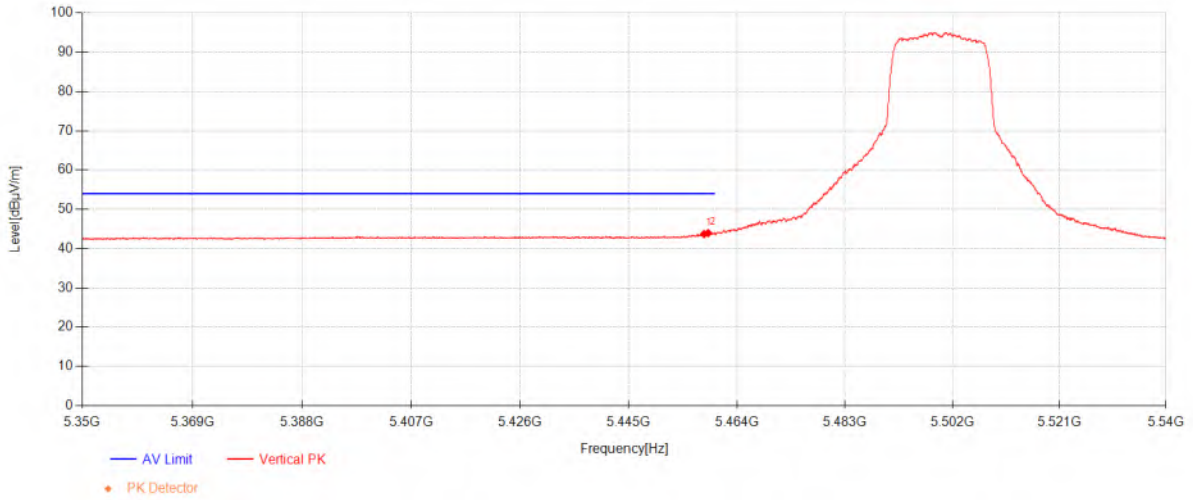
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5457.445	30.29	32.48	-16.99	45.78	54.00	8.22	Horizontal
2	5459.44	30.62	32.49	-17.00	46.11	54.00	7.89	Horizontal

11a_TX_CH_100_Vertical_Peak



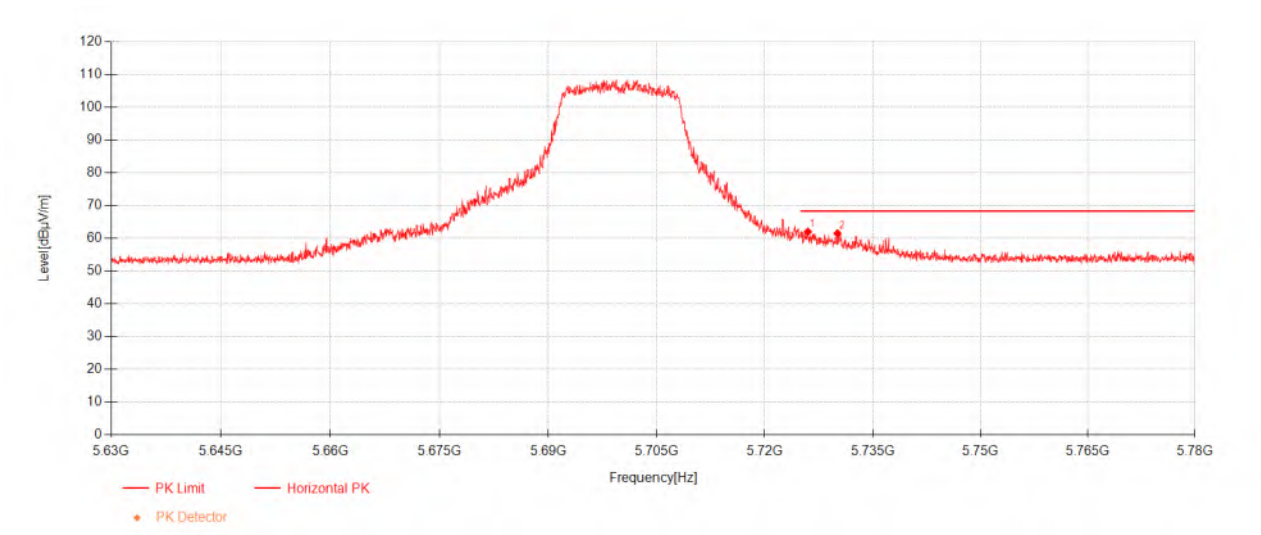
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5467.42	45.06	32.51	-17.04	60.52	68.30	7.78	Vertical
2	5469.415	44.61	32.51	-17.05	60.07	68.30	8.23	Vertical

11a_TX_CH_100_Vertical_Average



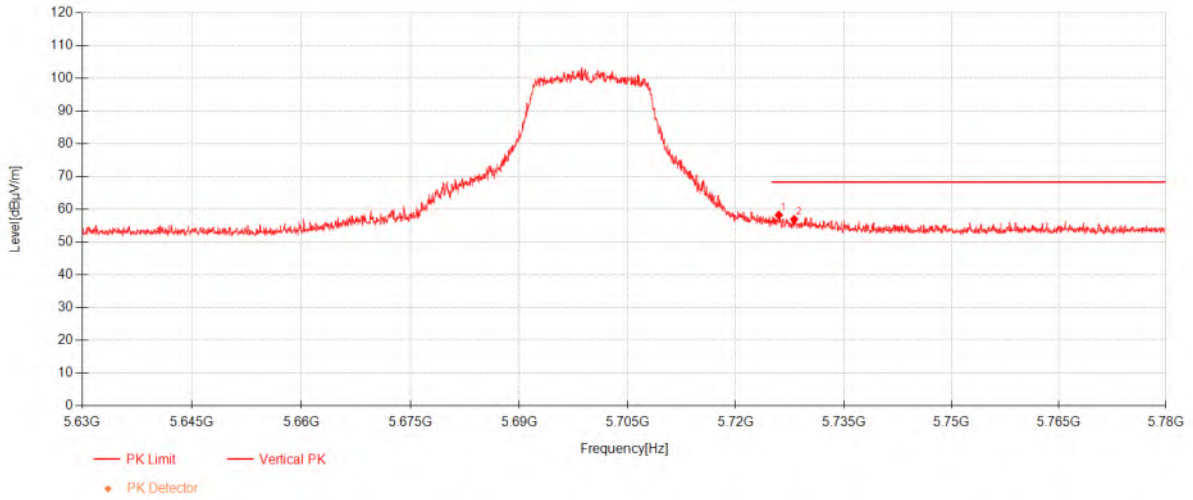
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5458.205	28.21	32.48	-16.99	43.70	54.00	10.30	Vertical
2	5458.9175	28.45	32.48	-17.00	43.94	54.00	10.06	Vertical

11a_TX_CH_140_Horizontal_Peak



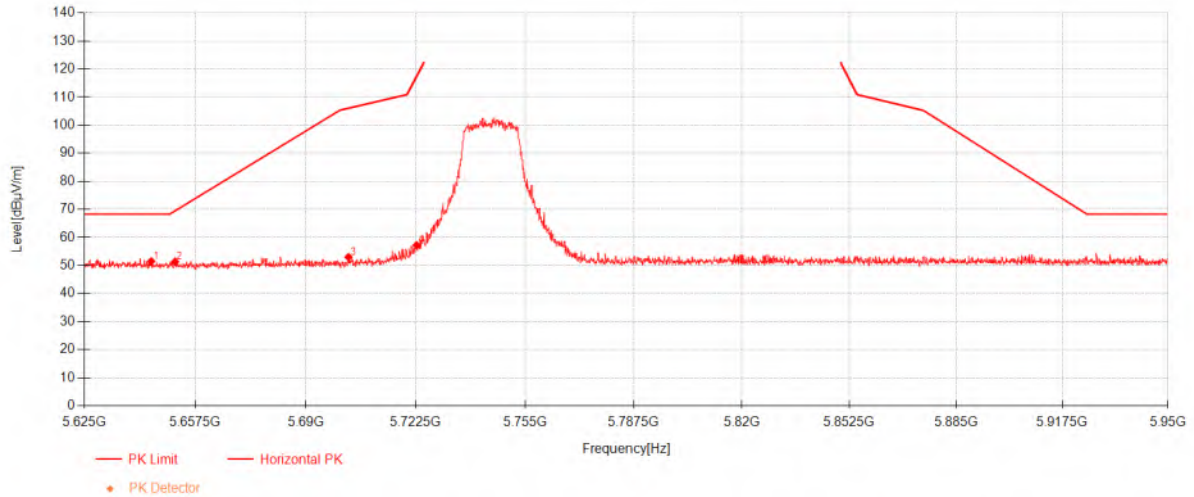
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5725.9625	46.17	32.69	-16.86	62.00	68.30	6.30	Horizontal
2	5730.0875	45.63	32.69	-16.84	61.48	68.30	6.82	Horizontal

11a_TX_CH_140_Vertical_Peak



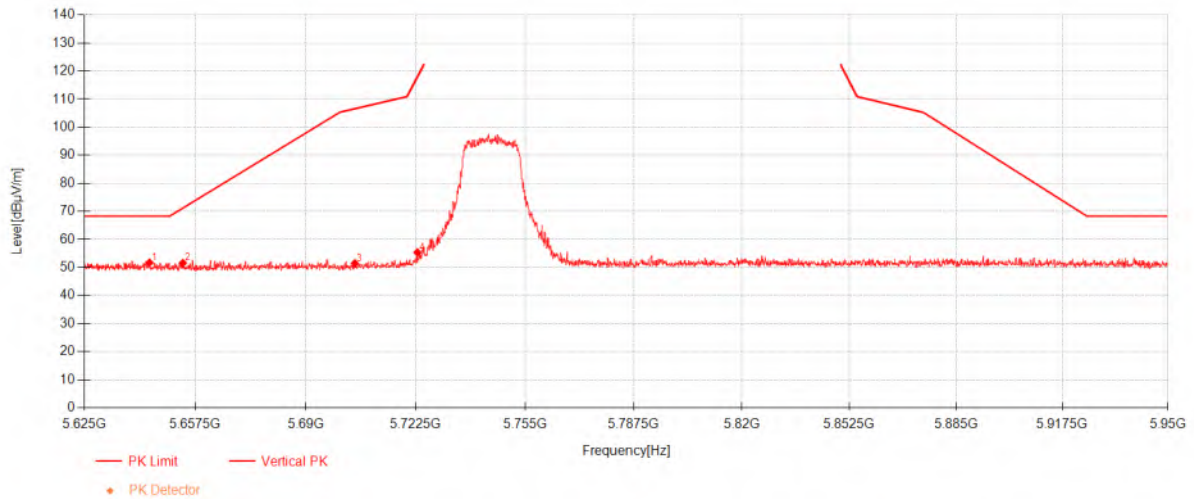
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5725.9625	42.41	32.69	-16.86	58.24	68.30	10.06	Vertical
2	5728.1	41.12	32.69	-16.85	56.96	68.30	11.34	Vertical

11a_TX_CH_149_Horizontal_Peak



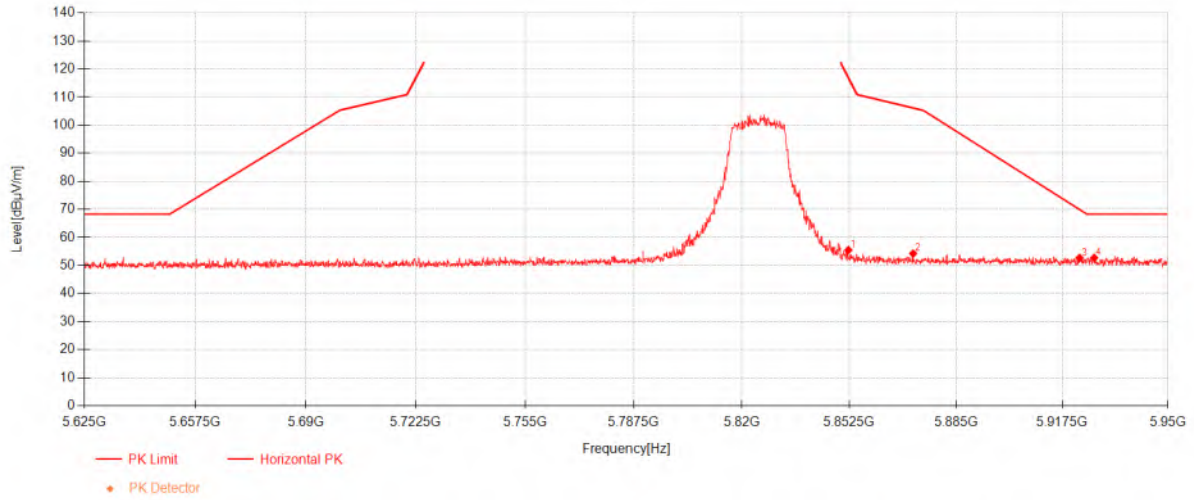
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5644.5812	38.27	32.66	-19.46	51.47	68.30	16.83	Horizontal
2	5651.5688	38.12	32.66	-19.46	51.32	69.47	18.15	Horizontal
3	5702.5938	39.72	32.68	-19.45	52.95	106.03	53.08	Horizontal
4	5722.7438	43.82	32.69	-19.32	57.18	117.16	59.98	Horizontal

11a_TX_CH_149_Vertical_Peak



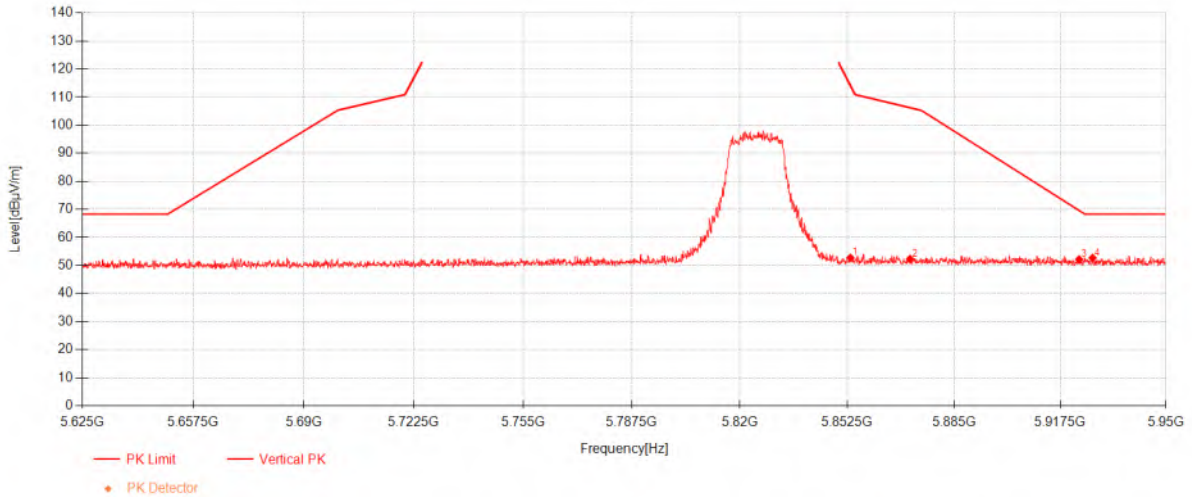
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5644.0938	38.51	32.66	-19.46	51.71	68.30	16.59	Vertical
2	5653.8438	38.37	32.66	-19.46	51.57	71.16	19.59	Vertical
3	5704.4625	38.23	32.68	-19.44	51.47	106.55	55.08	Vertical
4	5722.9875	41.98	32.69	-19.32	55.35	117.71	62.36	Vertical

11a_TX_CH_165_Horizontal_Peak



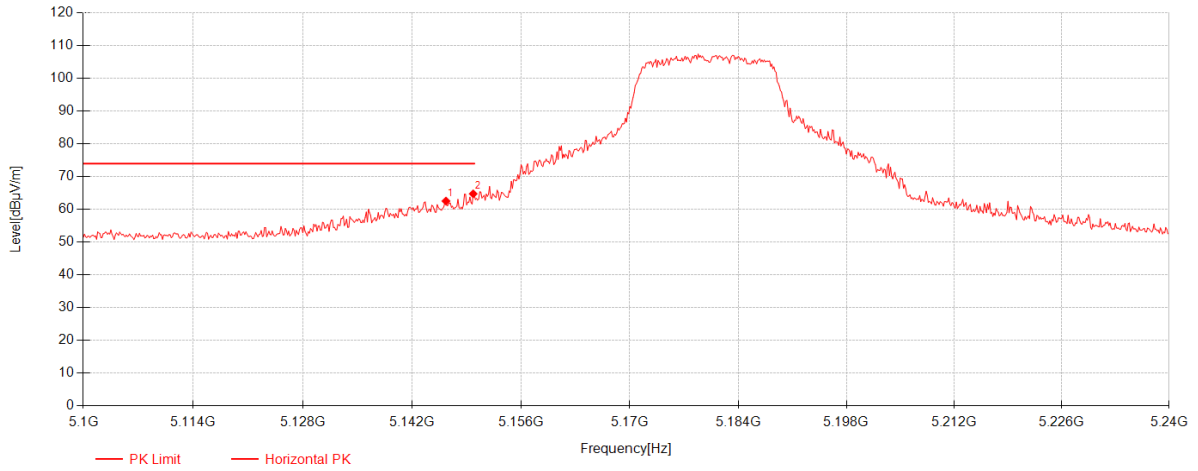
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5852.2562	41.54	32.74	-18.81	55.47	117.15	61.68	Horizontal
2	5871.9188	40.29	32.75	-18.80	54.24	106.16	51.92	Horizontal
3	5922.7812	38.85	32.77	-18.95	52.67	69.94	17.27	Horizontal
4	5927.25	38.90	32.77	-18.98	52.69	68.30	15.61	Horizontal

11a_TX_CH_165_Vertical_Peak



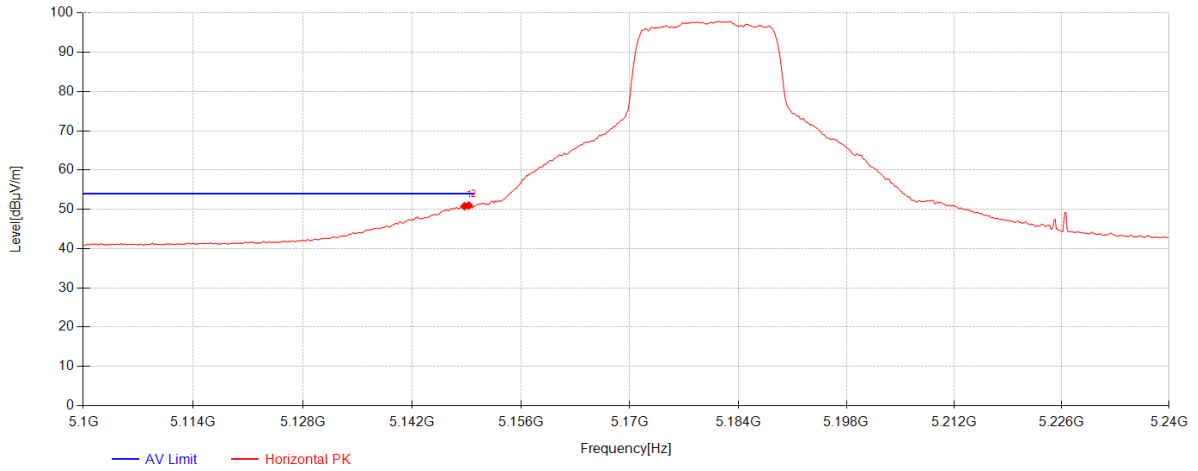
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5853.475	38.78	32.74	-18.81	52.71	114.38	61.67	Vertical
2	5871.5938	38.36	32.75	-18.80	52.31	106.25	53.94	Vertical
3	5923.2688	38.33	32.77	-18.95	52.15	69.58	17.43	Vertical
4	5927.4125	38.88	32.77	-18.98	52.67	68.30	15.63	Vertical

11ac(VHT20)_TX_CH_36_Horizontal_Peak



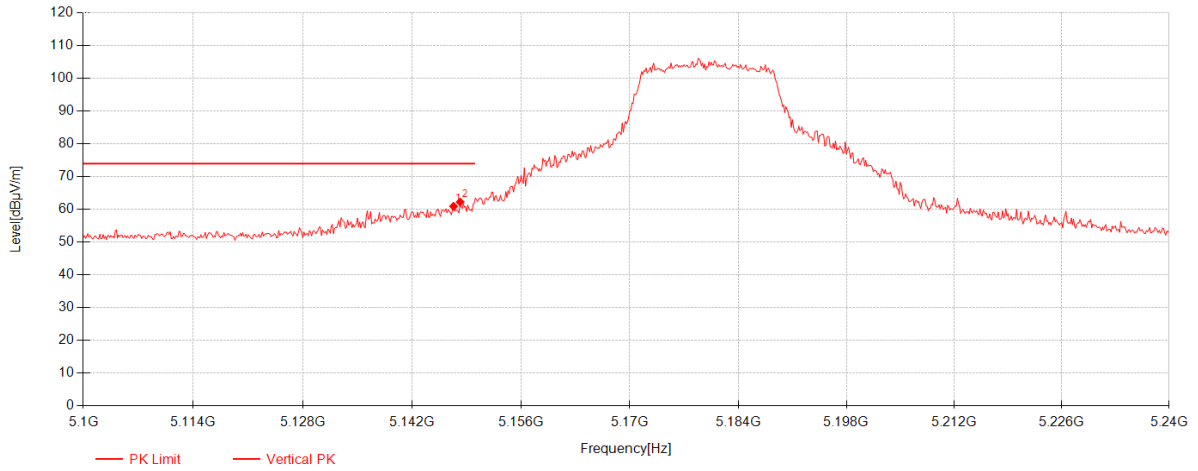
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.34	48.68	31.61	-17.76	62.53	74.00	11.47	Horizontal
2	5149.84	50.89	31.62	-17.76	64.75	74.00	9.25	Horizontal

11ac(VHT20)_TX_CH_36_Horizontal_Average



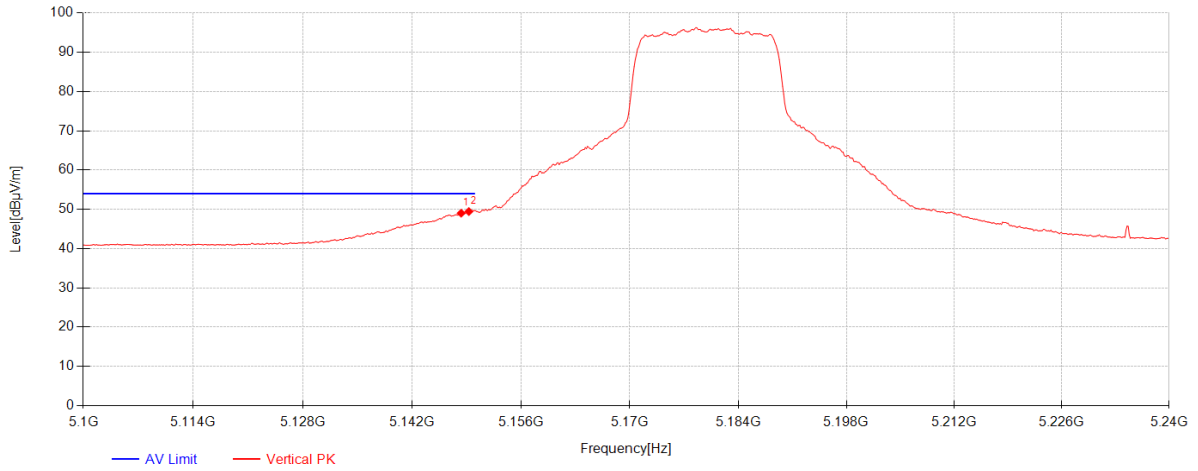
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.72	36.93	31.62	-17.76	50.79	54.00	3.21	Horizontal
2	5149.28	37.10	31.62	-17.76	50.96	54.00	3.04	Horizontal

11ac(VHT20)_TX_CH_36_Vetical_Peak



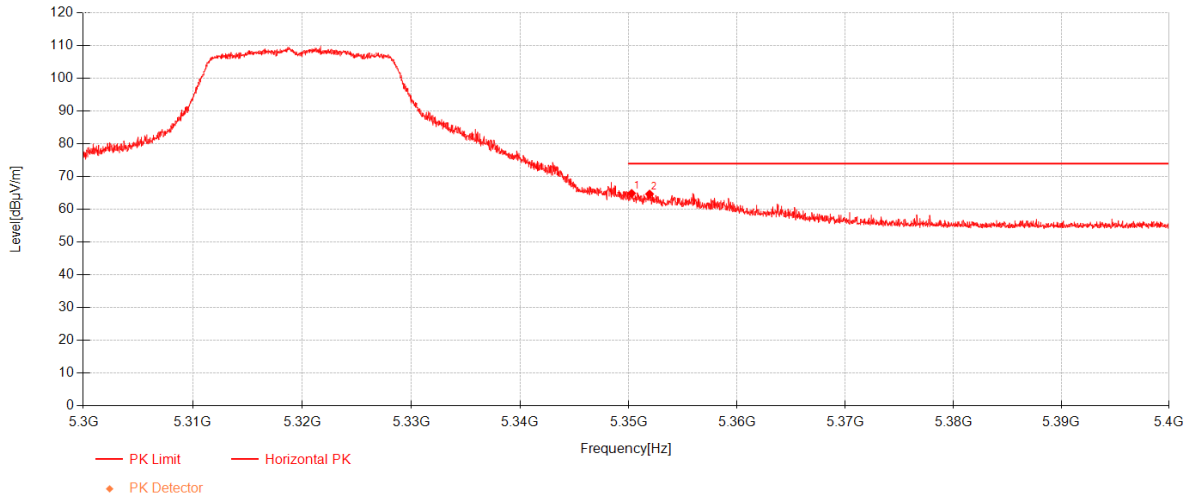
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.32	47.09	31.61	-17.76	60.94	74.00	13.06	Vertical
2	5148.16	48.38	31.61	-17.76	62.24	74.00	11.76	Vertical

11ac(VHT20)_TX_CH_36_Vetical_Average



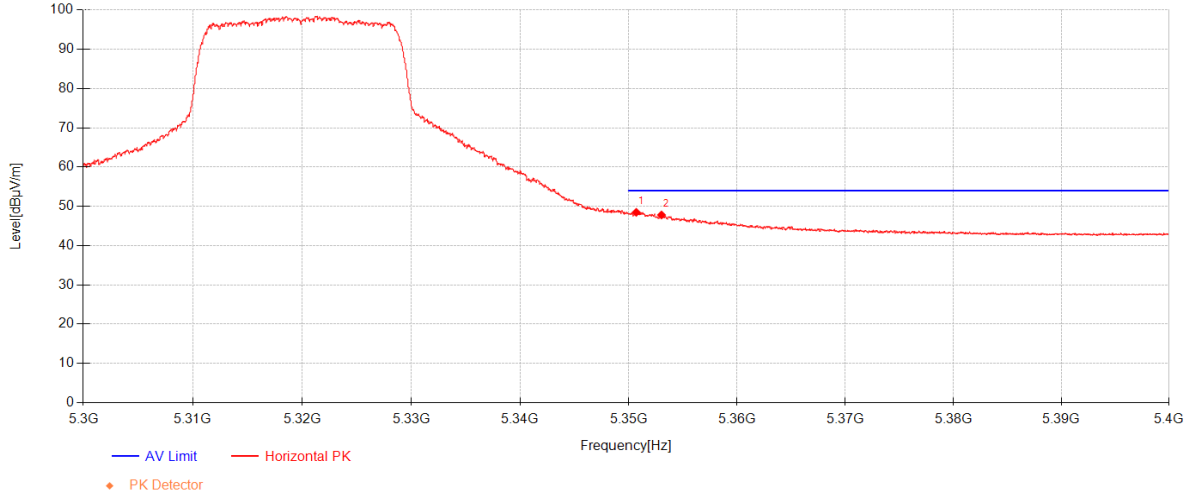
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.3	35.16	31.62	-17.76	49.02	54.00	4.98	Vertical
2	5149.28	35.58	31.62	-17.76	49.44	54.00	4.56	Vertical

11ac(VHT20)_TX_CH_64_Horizontal_Peak



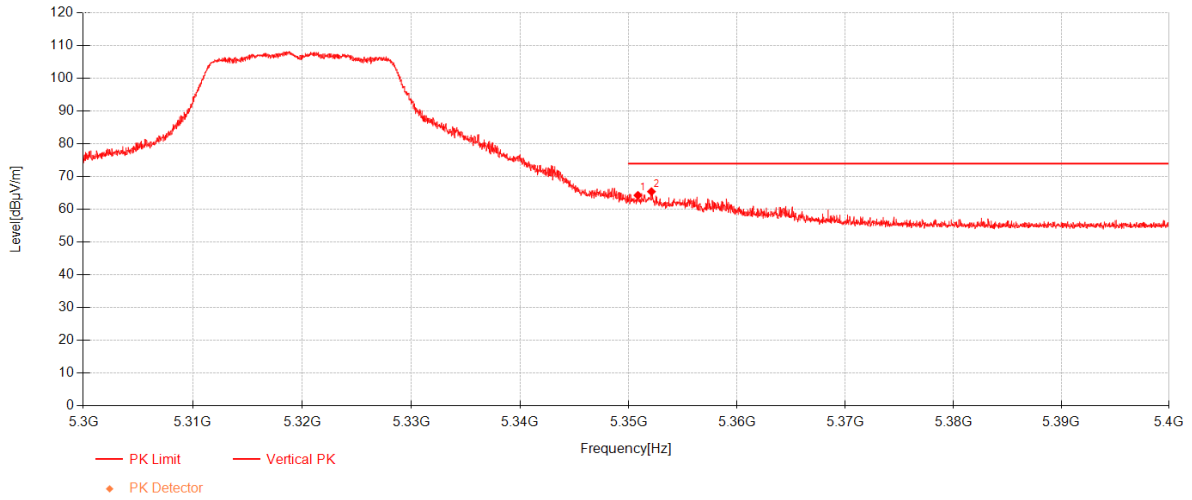
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.275	49.64	32.18	-16.93	64.89	74.00	9.11	Horizontal
2	5351.925	49.41	32.19	-16.92	64.68	74.00	9.32	Horizontal

11ac(VHT20)_TX_CH_64_Horizontal_Average



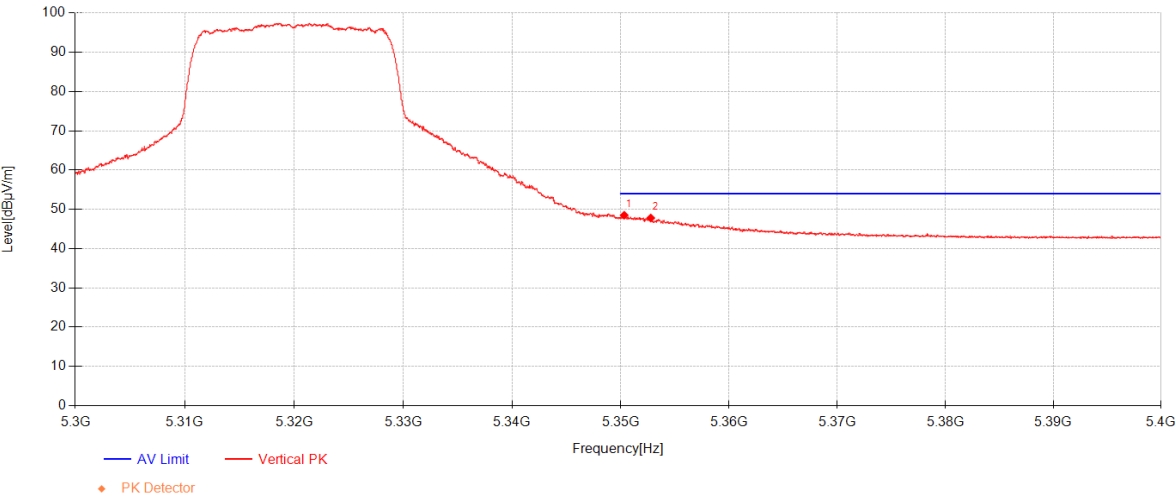
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.7	33.21	32.18	-16.93	48.47	54.00	5.53	Horizontal
2	5353.025	32.53	32.19	-16.91	47.80	54.00	6.20	Horizontal

11ac(VHT20)_TX_CH_64_Vetical_Peak



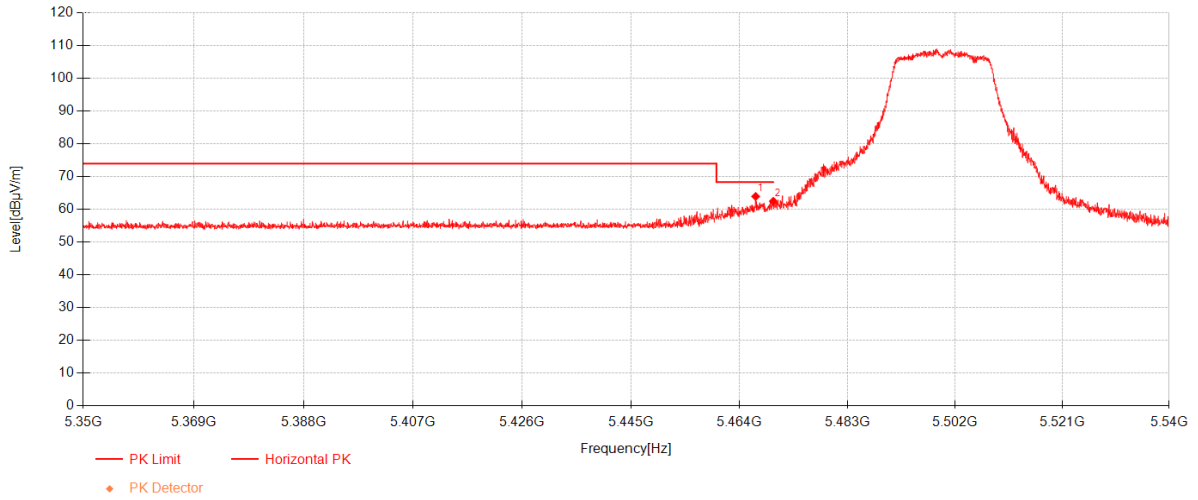
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.85	49.02	32.18	-16.93	64.28	74.00	9.72	Vertical
2	5352.1	50.14	32.19	-16.92	65.41	74.00	8.59	Vertical

11ac(VHT20)_TX_CH_64_Vetical_Average



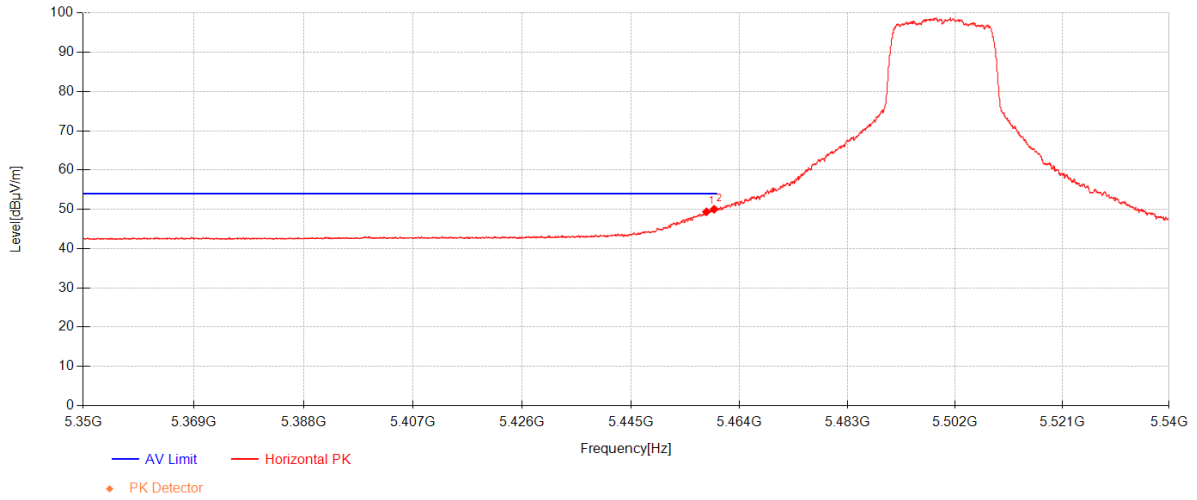
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.325	33.24	32.18	-16.93	48.49	54.00	5.51	Vertical
2	5352.775	32.52	32.19	-16.92	47.79	54.00	6.21	Vertical

11ac(VHT20)_TX_CH_100_Horizontal_Peak



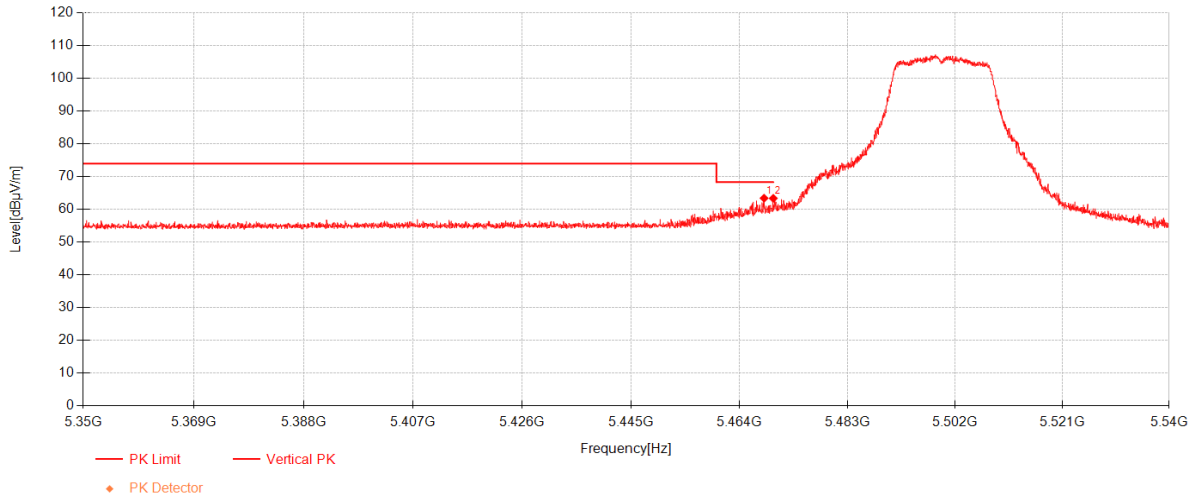
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5466.8975	48.47	32.51	-17.04	63.94	68.30	4.36	Horizontal
2	5469.985	47.02	32.52	-17.06	62.48	68.30	5.82	Horizontal

11ac(VHT20)_TX_CH_100_Horizontal_Average



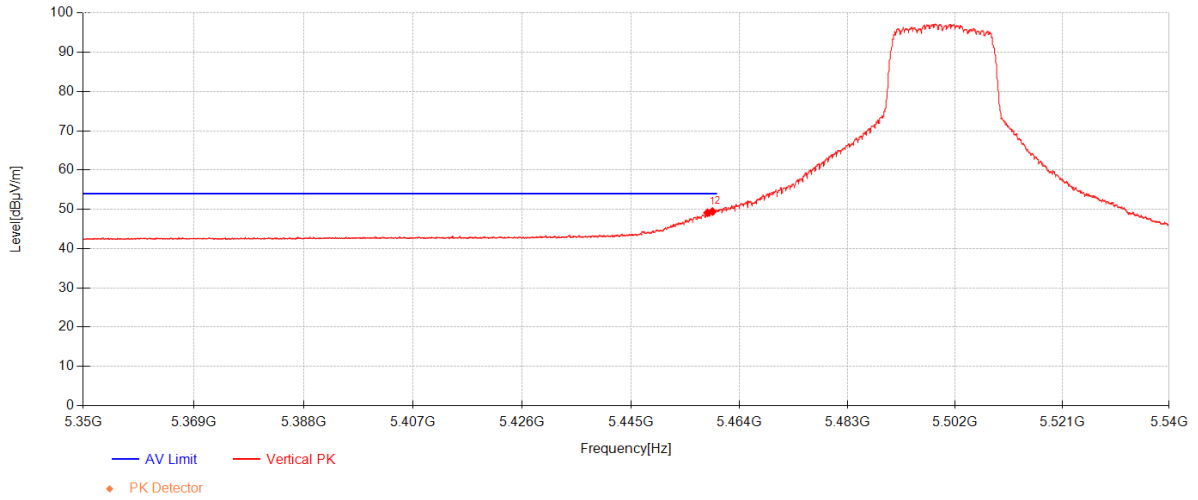
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5458.2525	33.88	32.48	-16.99	49.37	54.00	4.63	Horizontal
2	5459.5825	34.52	32.49	-17.00	50.01	54.00	3.99	Horizontal

11ac(VHT20)_TX_CH_100_Vertical_Peak



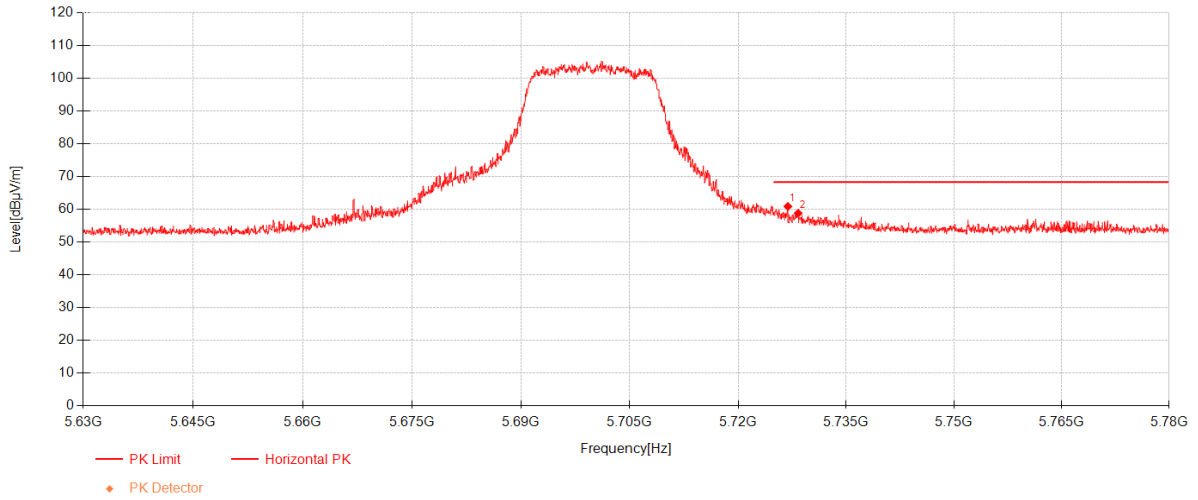
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5468.37	47.94	32.51	-17.05	63.40	68.30	4.90	Vertical
2	5469.985	47.91	32.52	-17.06	63.37	68.30	4.93	Vertical

11ac(VHT20)_TX_CH_100_Veritical_Average



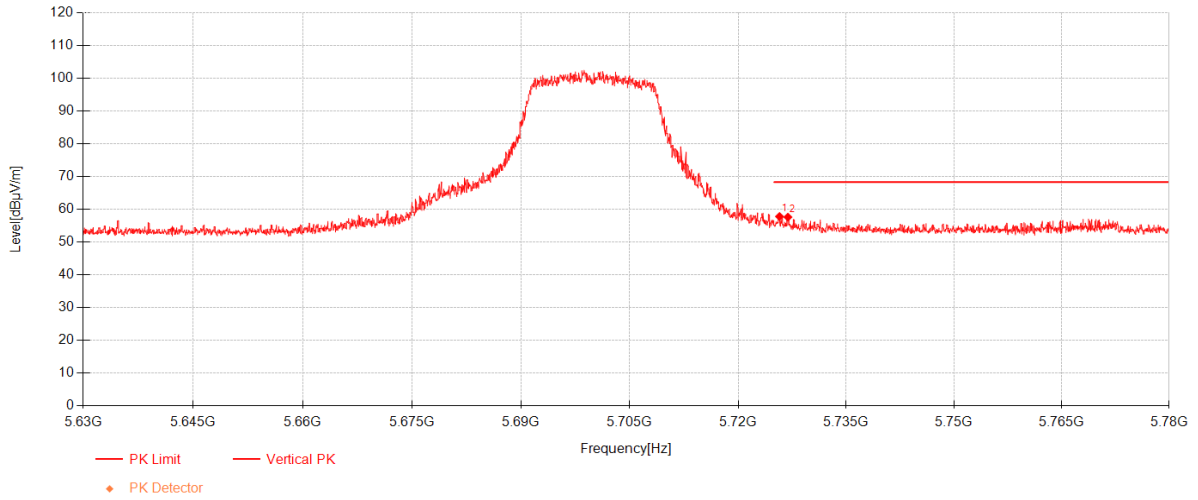
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5458.4425	33.64	32.48	-17.00	49.13	54.00	4.87	Vertical
2	5459.2975	33.95	32.49	-17.00	49.44	54.00	4.56	Vertical

11ac(VHT20)_TX_CH_140_Horizontal_Peak



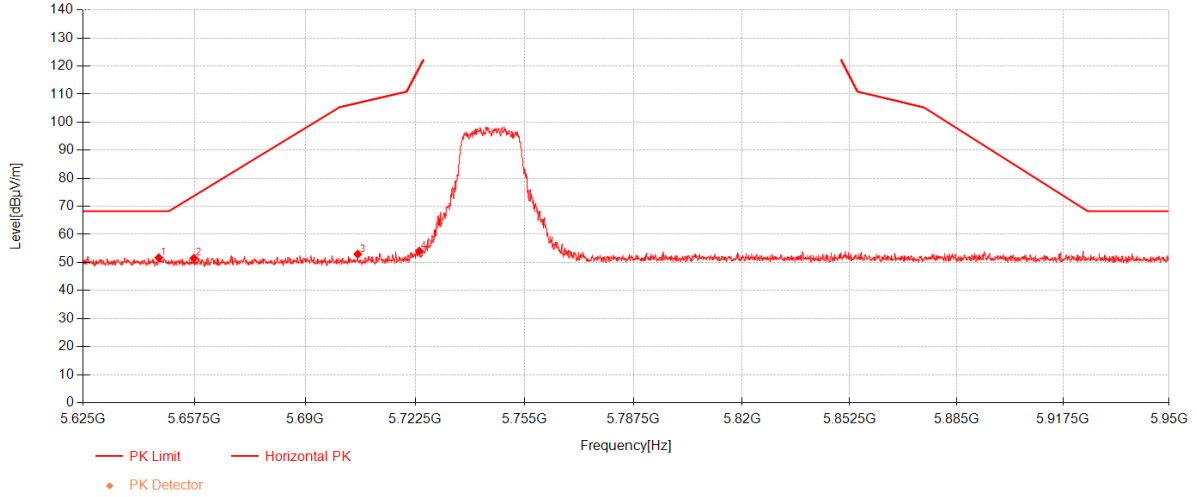
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5726.9	45.04	32.69	-16.85	60.88	68.30	7.42	Horizontal
2	5728.325	42.97	32.69	-16.85	58.81	68.30	9.49	Horizontal

11ac(VHT20)_TX_CH_140_Vertical_Peak



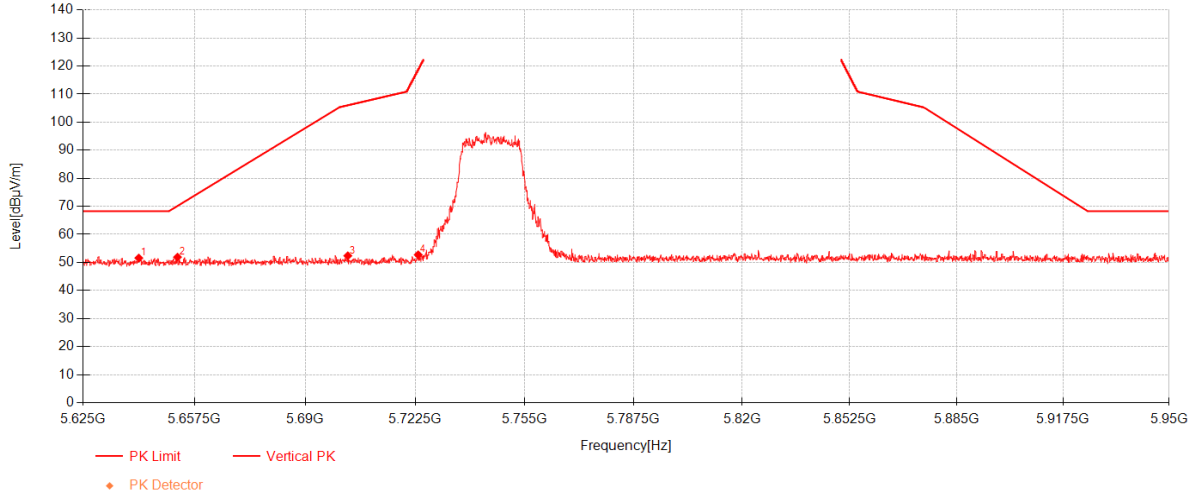
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5725.7375	41.98	32.69	-16.86	57.81	68.30	10.49	Vertical
2	5726.9	41.78	32.69	-16.85	57.62	68.30	10.68	Vertical

11ac(VHT20)_TX_CH_149_Horizontal_Peak



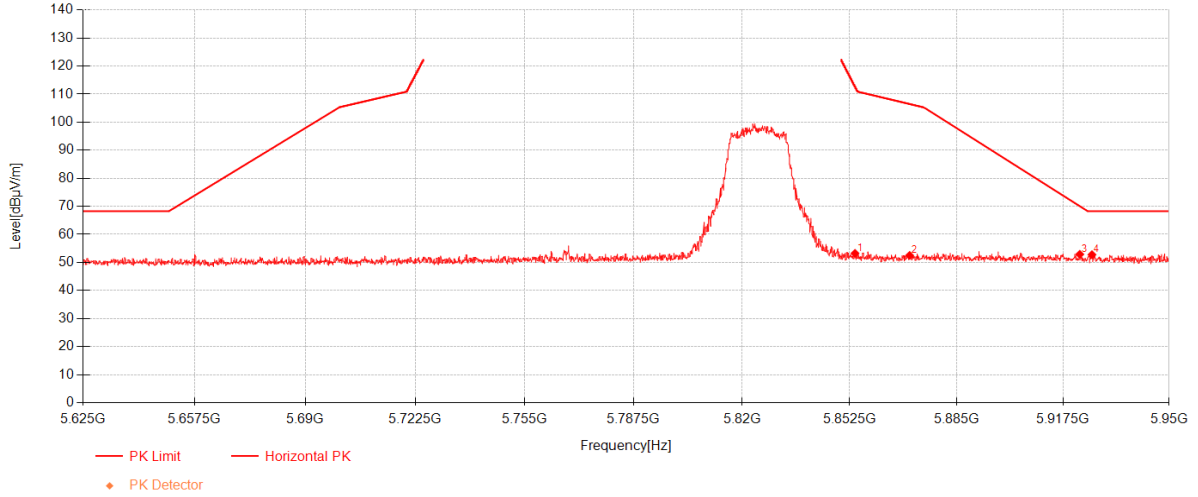
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5647.0188	38.50	32.66	-19.46	51.70	68.30	16.60	Horizontal
2	5657.2562	38.33	32.66	-19.46	51.53	73.69	22.16	Horizontal
3	5705.4375	39.71	32.68	-19.44	52.96	106.82	53.86	Horizontal
4	5723.6375	40.70	32.69	-19.32	54.07	119.19	65.12	Horizontal

11ac(VHT20)_TX_CH_149_Veritical_Peak



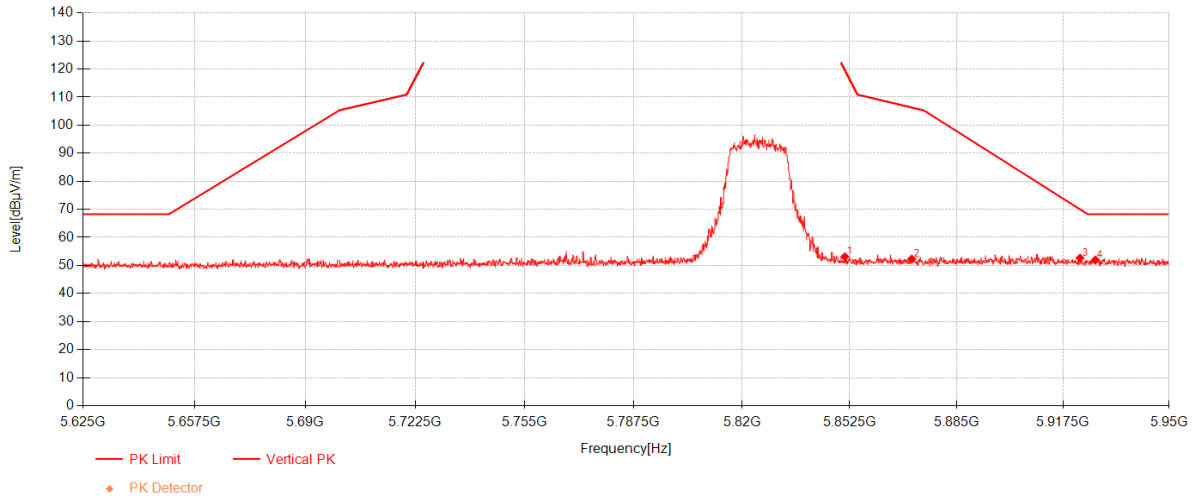
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5641.1688	38.38	32.66	-19.46	51.58	68.30	16.72	Vertical
2	5652.4625	38.69	32.66	-19.46	51.89	70.13	18.24	Vertical
3	5702.5125	39.14	32.68	-19.45	52.37	106.00	53.63	Vertical
4	5723.3125	39.36	32.69	-19.32	52.73	118.45	65.72	Vertical

11ac(VHT20)_TX_CH_165_Horizontal_Peak



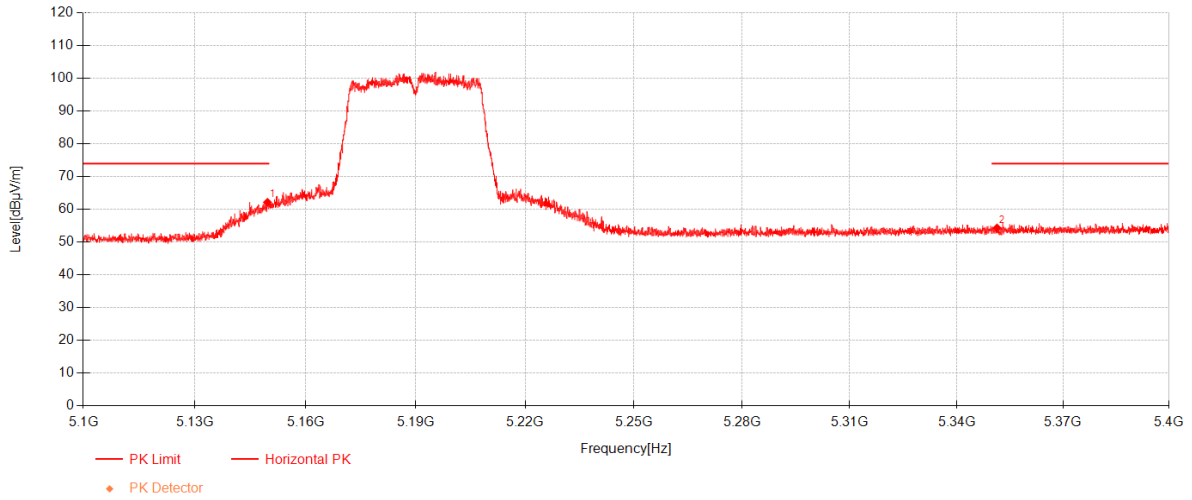
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5854.125	39.31	32.74	-18.81	53.24	112.89	59.65	Horizontal
2	5870.7	38.55	32.75	-18.80	52.50	106.50	54.00	Horizontal
3	5922.6188	39.07	32.77	-18.95	52.89	70.06	17.17	Horizontal
4	5926.3562	38.97	32.77	-18.97	52.77	68.30	15.53	Horizontal

11ac(VHT20)_TX_CH_165_Vertical_Peak



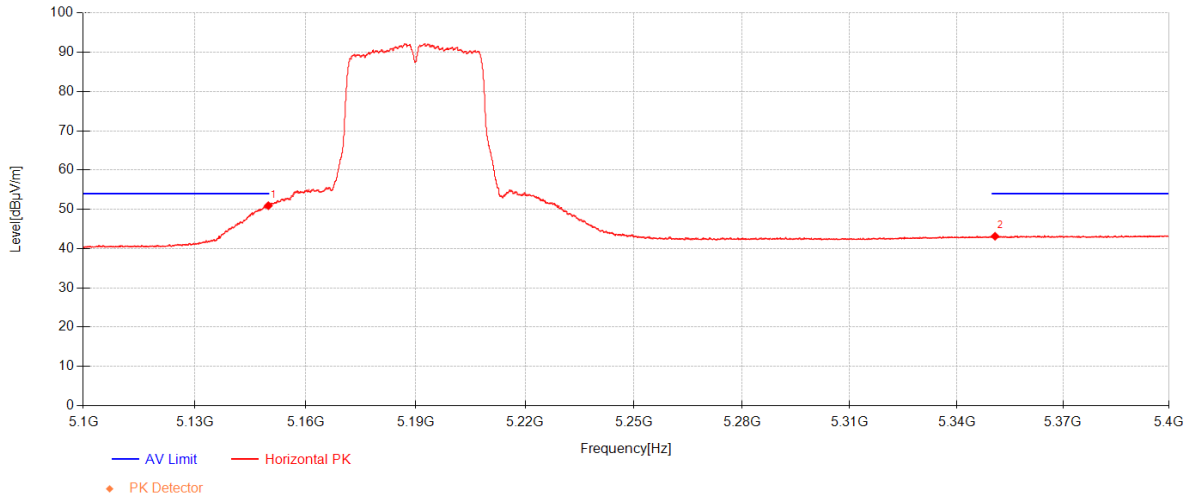
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5851.0375	39.20	32.74	-18.81	53.13	119.93	66.80	Vertical
2	5871.35	38.38	32.75	-18.80	52.33	106.32	53.99	Vertical
3	5922.7	38.84	32.77	-18.95	52.66	70.00	17.34	Vertical
4	5927.4125	38.19	32.77	-18.98	51.98	68.30	16.32	Vertical

11ac(VHT40)_TX_CH_38_Horizontal_Peak



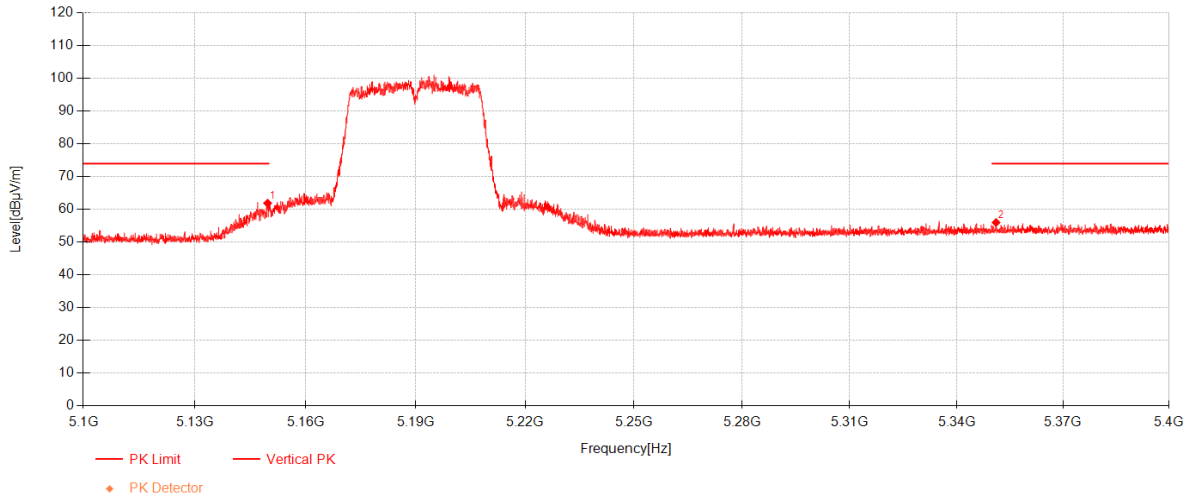
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.68	48.29	31.62	-17.76	62.15	74.00	11.85	Horizontal
2	5351.35	39.04	32.18	-16.92	54.30	74.00	19.70	Horizontal

11ac(VHT40)_TX_CH_38_Horizontal_Average



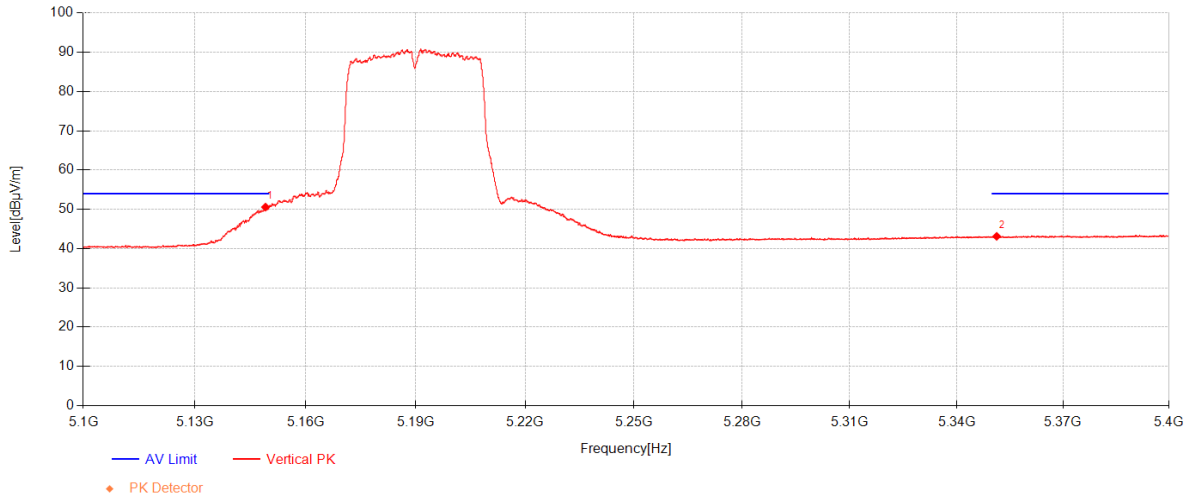
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.92	37.07	31.62	-17.76	50.93	54.00	3.07	Horizontal
2	5350.79	27.88	32.18	-16.93	43.14	54.00	10.86	Horizontal

11ac(VHT40)_TX_CH_38_Vetical_Peak



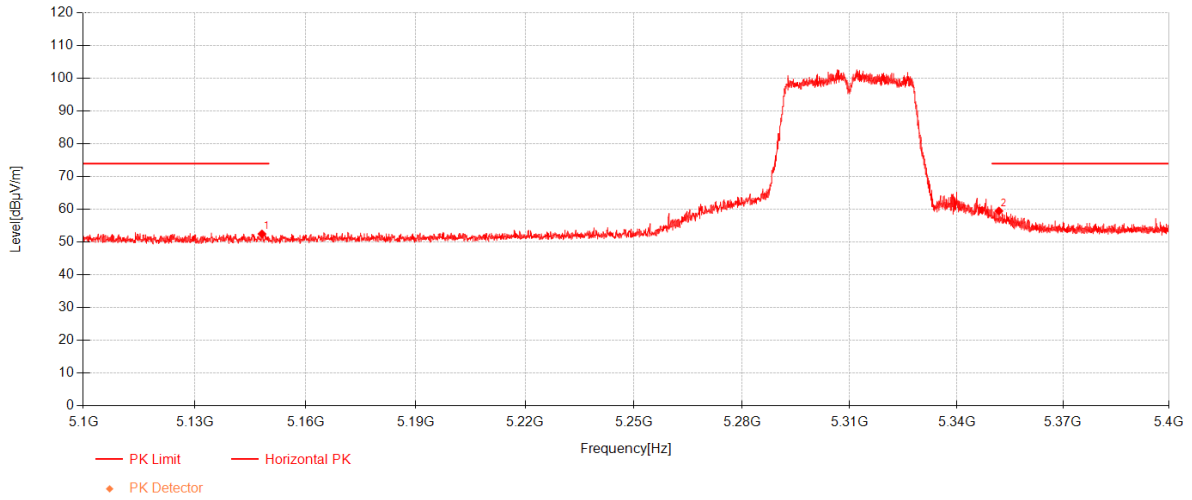
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.72	48.02	31.62	-17.76	61.88	74.00	12.12	Vertical
2	5351.07	40.71	32.18	-16.92	55.97	74.00	18.03	Vertical

11ac(VHT40)_TX_CH_38_Vetical_Average



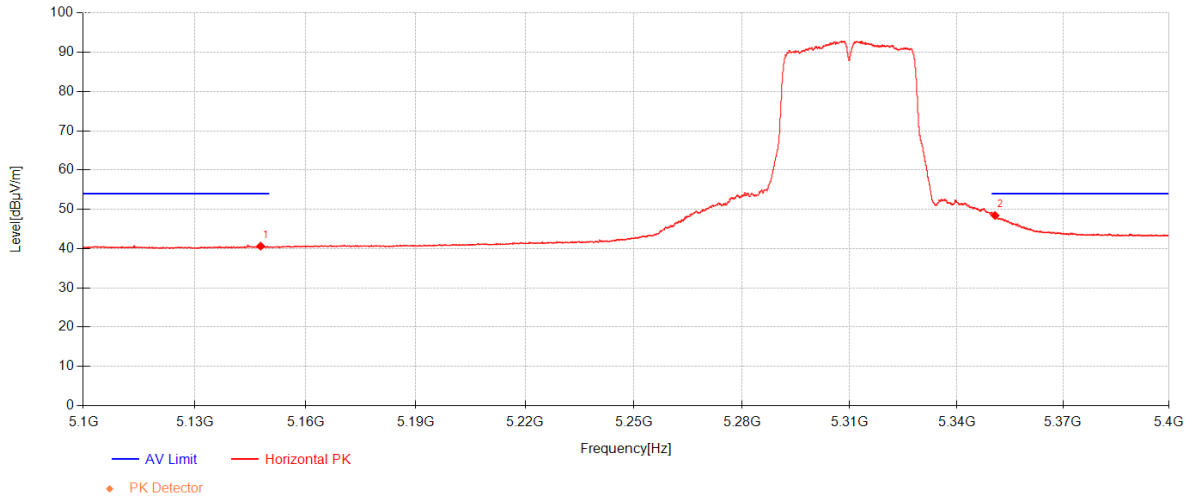
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.16	36.71	31.62	-17.76	50.57	54.00	3.43	Vertical
2	5351.245	27.86	32.18	-16.92	43.12	54.00	10.88	Vertical

11ac(VHT40)_TX_CH_62_Horizontal_Peak



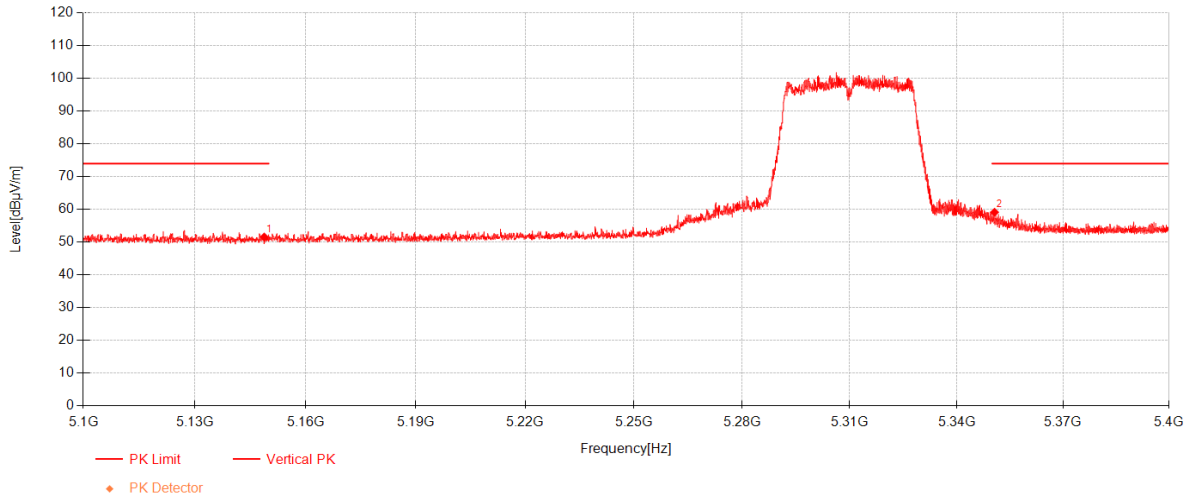
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.2	38.62	31.61	-17.76	52.48	74.00	21.52	Horizontal
2	5351.875	44.24	32.19	-16.92	59.50	74.00	14.50	Horizontal

11ac(VHT40)_TX_CH_62_Horizontal_Average



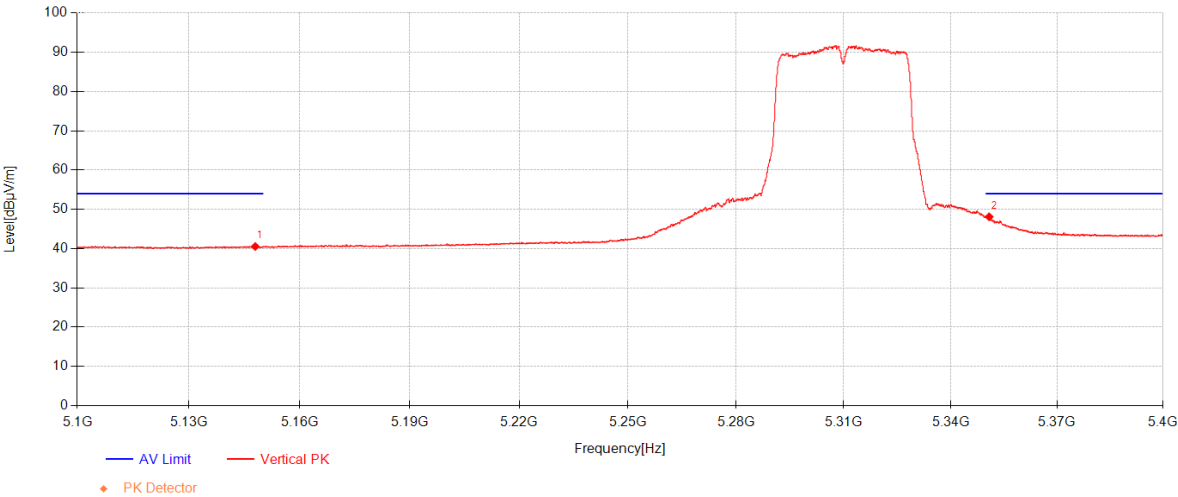
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.85	26.77	31.61	-17.76	40.63	54.00	13.37	Horizontal
2	5350.775	33.17	32.18	-16.93	48.43	54.00	5.57	Horizontal

11ac(VHT40)_TX_CH_62_Vetical_Peak



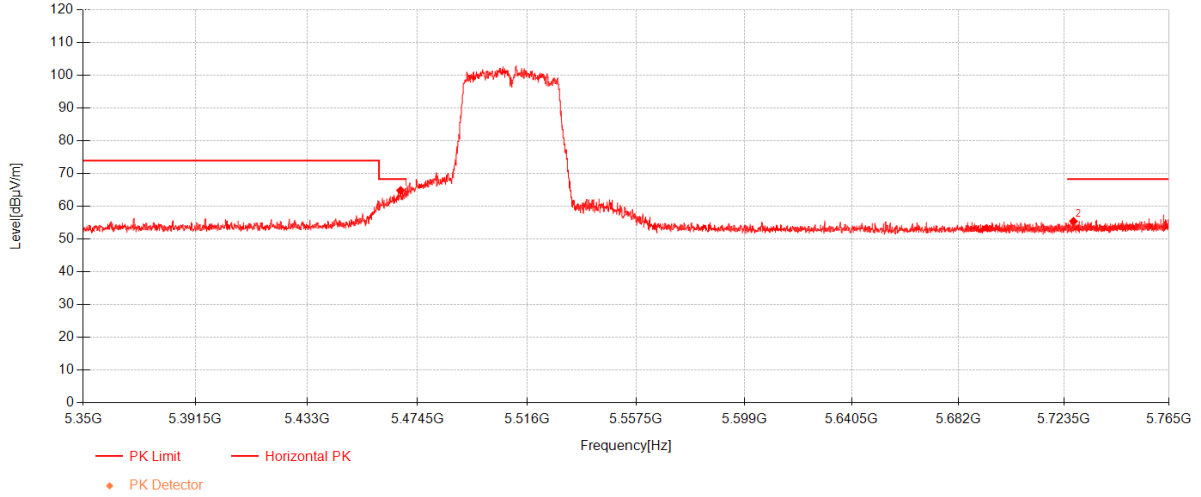
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.8	37.70	31.62	-17.76	51.56	74.00	22.44	Vertical
2	5350.65	43.85	32.18	-16.93	59.11	74.00	14.89	Vertical

11ac(VHT40)_TX_CH_62_Vetical_Average



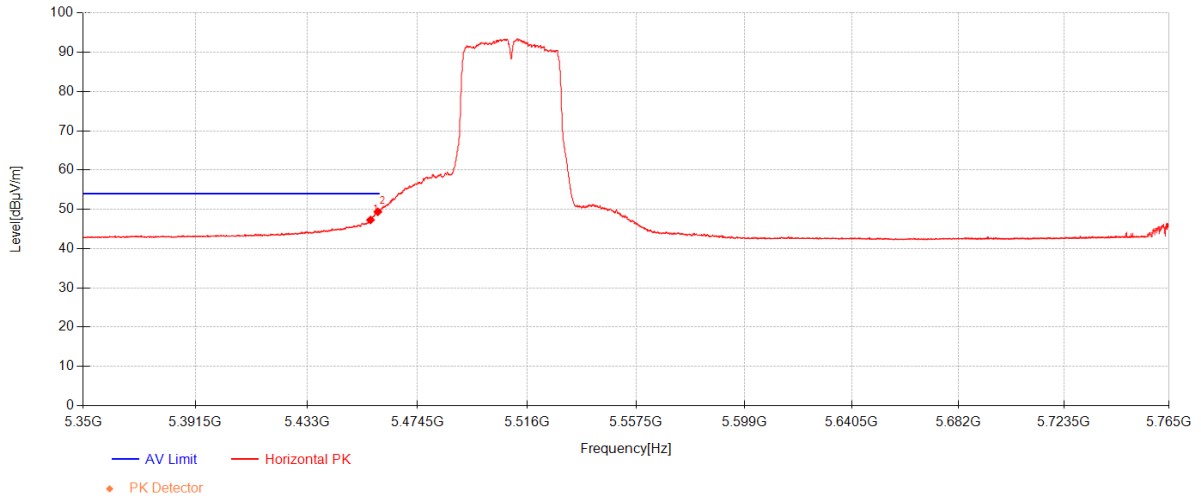
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148	26.67	31.61	-17.76	40.53	54.00	13.47	Vertical
2	5350.825	32.84	32.18	-16.93	48.10	54.00	5.90	Vertical

11ac(VHT40)_TX_CH_102_Horizontal_Peak



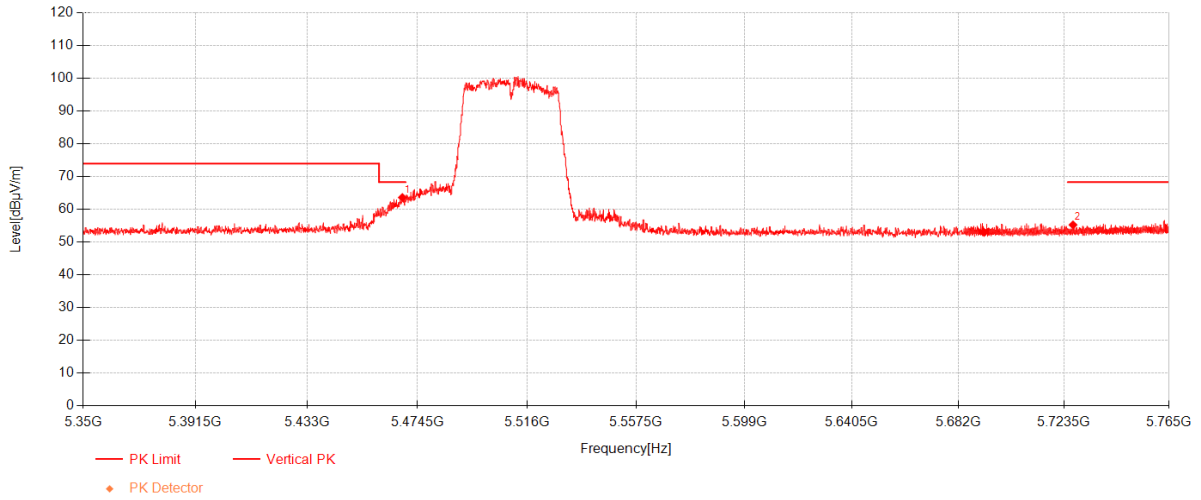
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5468.0875	49.39	32.51	-17.05	64.85	68.30	3.45	Horizontal
2	5727.26	39.58	32.69	-16.85	55.42	68.30	12.88	Horizontal

11ac(VHT40)_TX_CH_102_Horizontal_Average



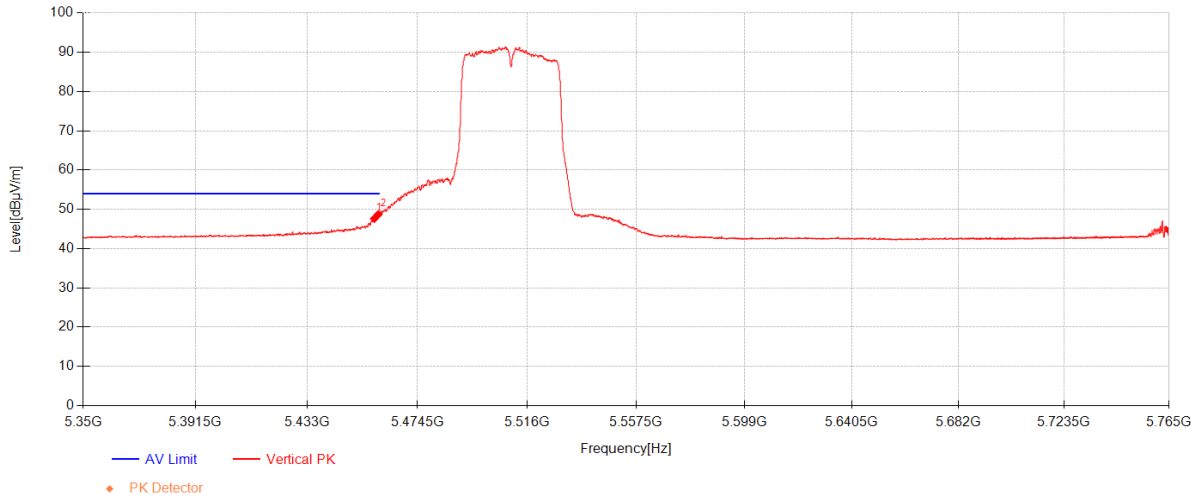
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5456.7812	31.80	32.48	-16.99	47.29	54.00	6.71	Horizontal
2	5459.545	33.88	32.49	-17.00	49.37	54.00	4.63	Horizontal

11ac(VHT40)_TX_CH_102_Vertical_Peak



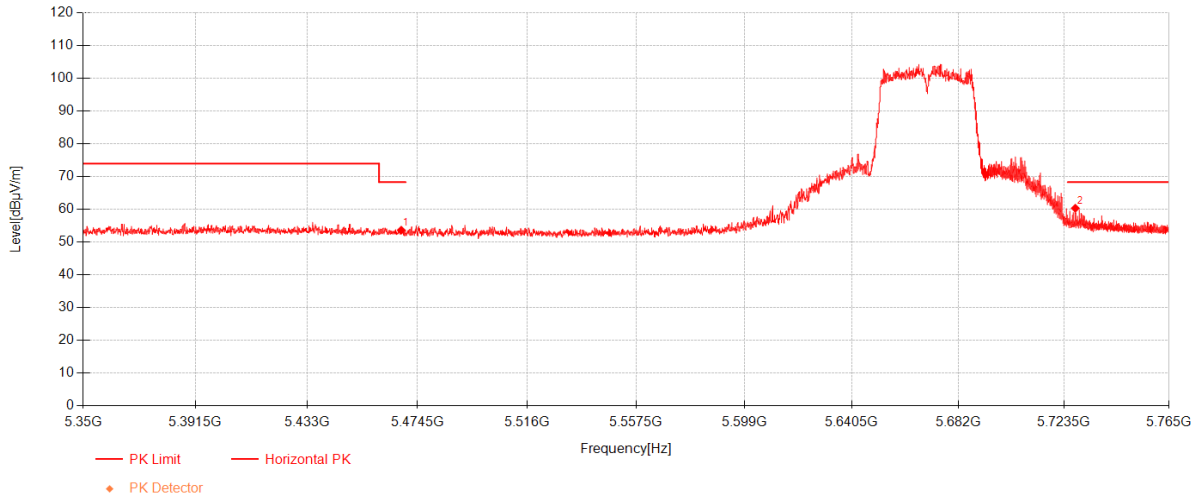
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5468.7575	48.16	32.51	-17.05	63.62	68.30	4.68	Vertical
2	5727.06	39.41	32.69	-16.85	55.25	68.30	13.05	Vertical

11ac(VHT40)_TX_CH_102_Vertical_Average



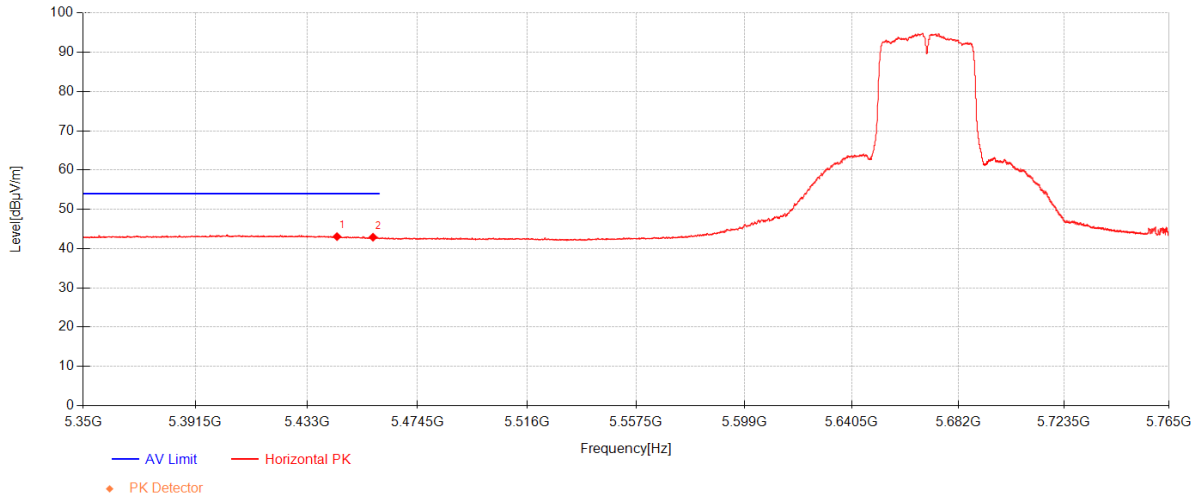
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5458.205	32.14	32.48	-16.99	47.63	54.00	6.37	Vertical
2	5459.7125	33.24	32.49	-17.00	48.72	54.00	5.28	Vertical

11ac(VHT40)_TX_CH_134_Horizontal_Peak



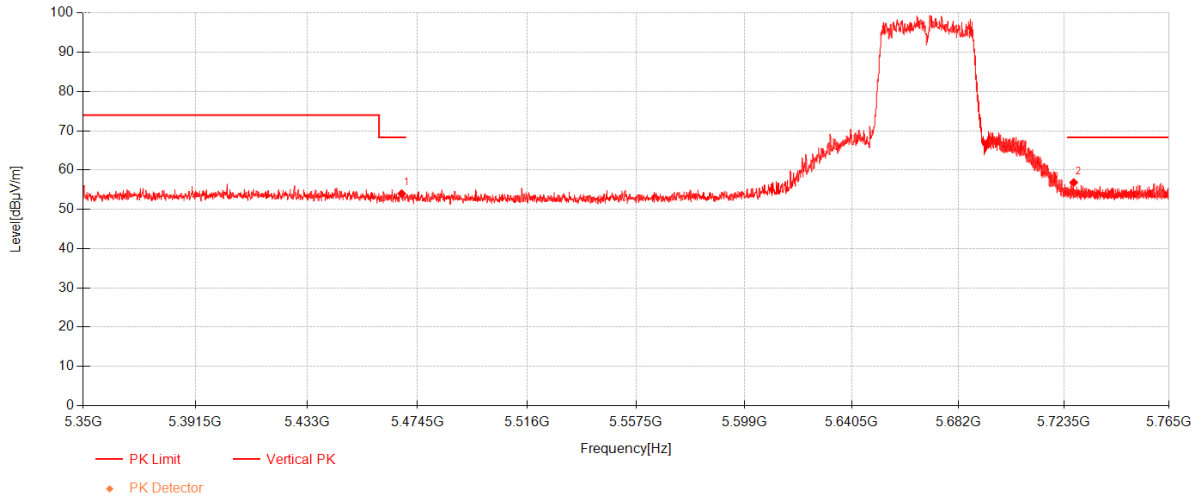
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5468.3388	38.17	32.51	-17.05	53.63	68.30	14.67	Horizontal
2	5727.98	44.50	32.69	-16.85	60.34	68.30	7.96	Horizontal

11ac(VHT40)_TX_CH_134_Horizontal_Average



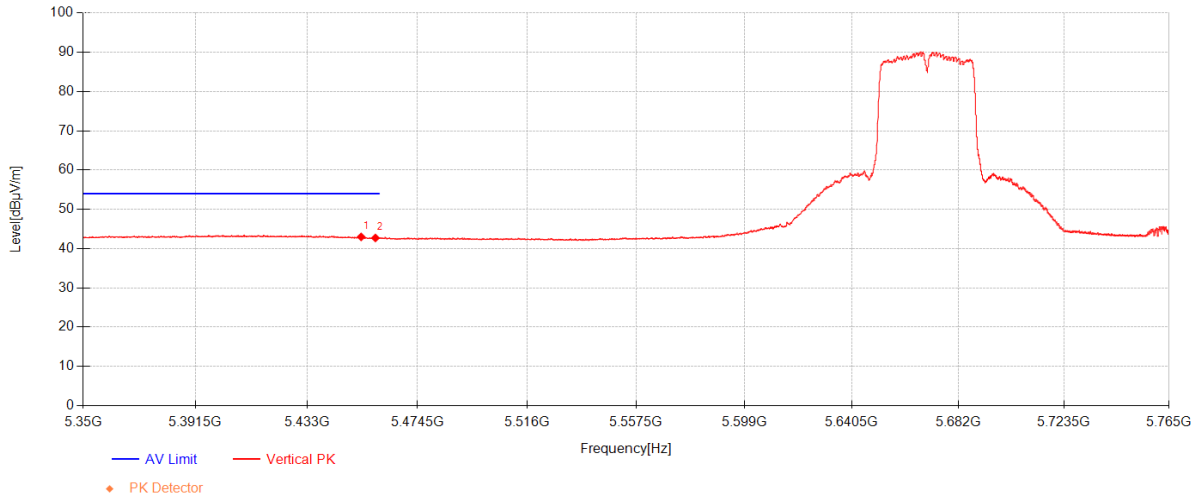
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5444.2188	27.52	32.44	-16.92	43.05	54.00	10.95	Horizontal
2	5457.7025	27.41	32.48	-16.99	42.90	54.00	11.10	Horizontal

11ac(VHT40)_TX_CH_134_Vertical_Peak



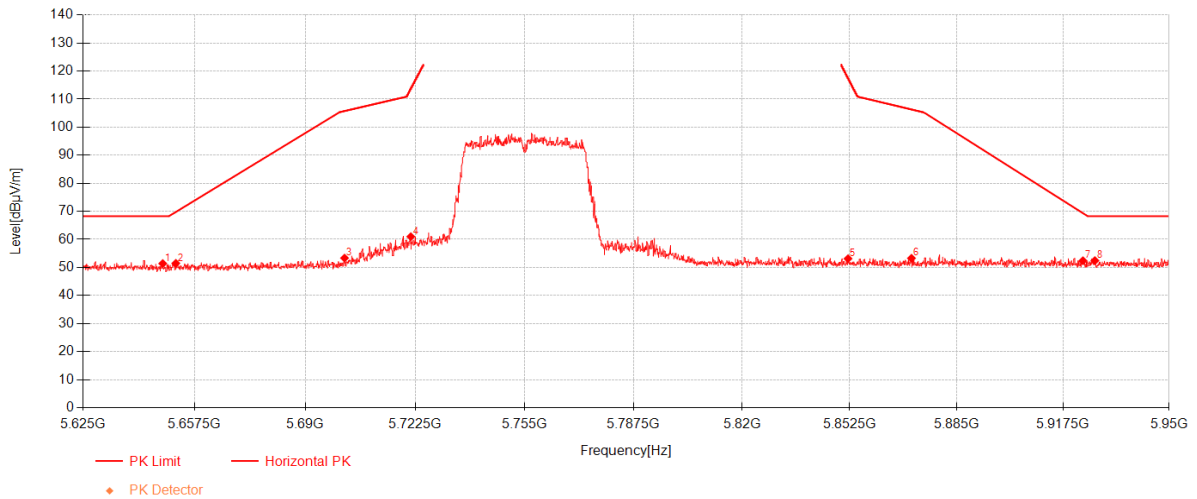
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5468.5062	38.54	32.51	-17.05	54.00	68.30	14.30	Vertical
2	5727.34	40.99	32.69	-16.85	56.83	68.30	11.47	Vertical

11ac(VHT40)_TX_CH_134_Veritical_Average



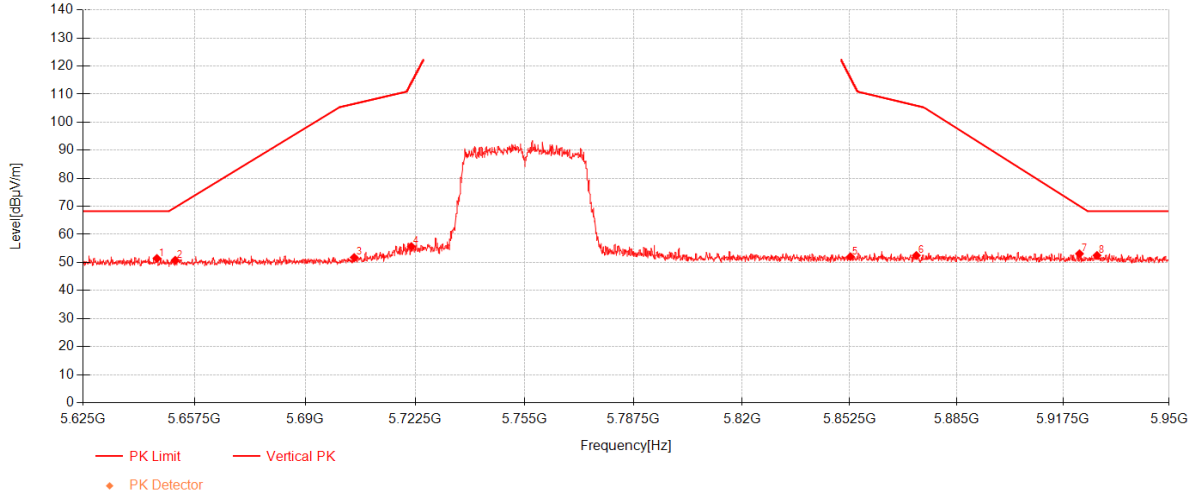
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5453.2638	27.48	32.47	-16.97	42.98	54.00	11.02	Vertical
2	5458.6238	27.23	32.48	-17.00	42.72	54.00	11.28	Vertical

11ac(VHT40)_TX_CH_151_Horizontal_Peak



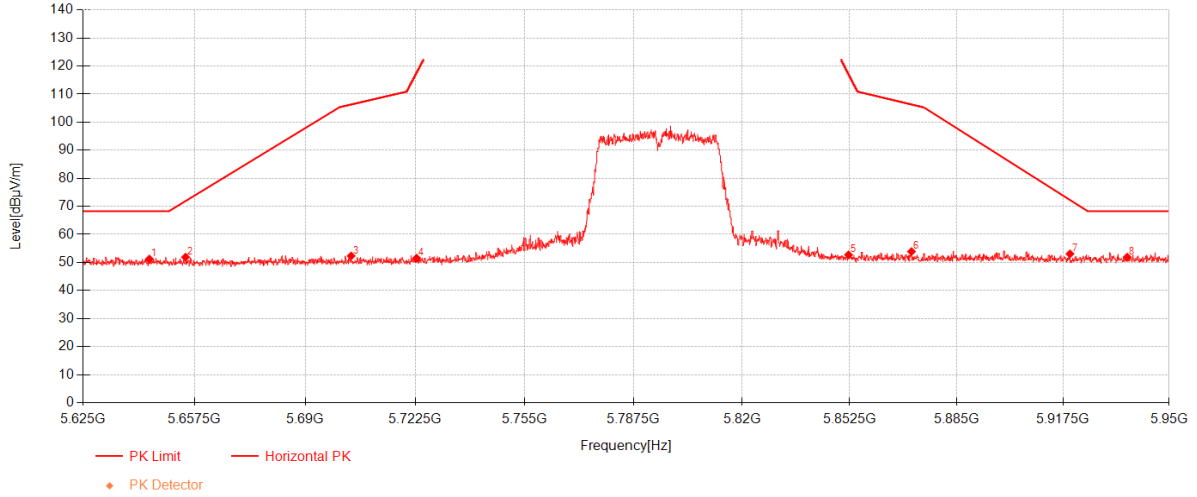
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5648.1562	38.18	32.66	-19.46	51.38	68.30	16.92	Horizontal
2	5651.975	38.27	32.66	-19.46	51.47	69.77	18.30	Horizontal
3	5701.5375	40.12	32.68	-19.46	53.34	105.73	52.39	Horizontal
4	5721.1188	47.63	32.69	-19.33	60.98	113.45	52.47	Horizontal
5	5852.0125	39.20	32.74	-18.81	53.13	117.71	64.58	Horizontal
6	5871.2688	39.33	32.75	-18.80	53.28	106.34	53.06	Horizontal
7	5923.5938	38.57	32.77	-18.95	52.39	69.34	16.95	Horizontal
8	5927.25	38.65	32.77	-18.98	52.44	68.30	15.86	Horizontal

11ac(VHT40)_TX_CH_151_Vertical_Peak



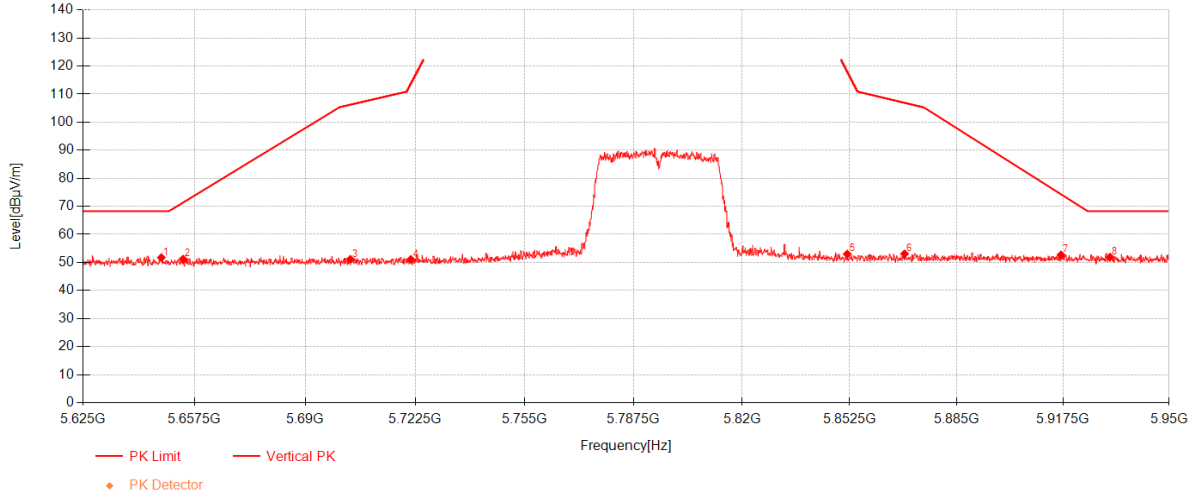
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5646.45	38.25	32.66	-19.46	51.45	68.30	16.85	Vertical
2	5651.8125	37.61	32.66	-19.46	50.81	69.65	18.84	Vertical
3	5704.3812	38.54	32.68	-19.44	51.78	106.53	54.75	Vertical
4	5721.2812	42.35	32.69	-19.33	55.70	113.82	58.12	Vertical
5	5852.7438	38.13	32.74	-18.81	52.06	116.04	63.98	Vertical
6	5872.7312	38.54	32.75	-18.80	52.49	105.93	53.44	Vertical
7	5922.5375	39.28	32.77	-18.95	53.10	70.11	17.01	Vertical
8	5927.9	38.72	32.77	-18.98	52.51	68.30	15.79	Vertical

11ac(VHT40)_TX_CH_159_Horizontal_Peak



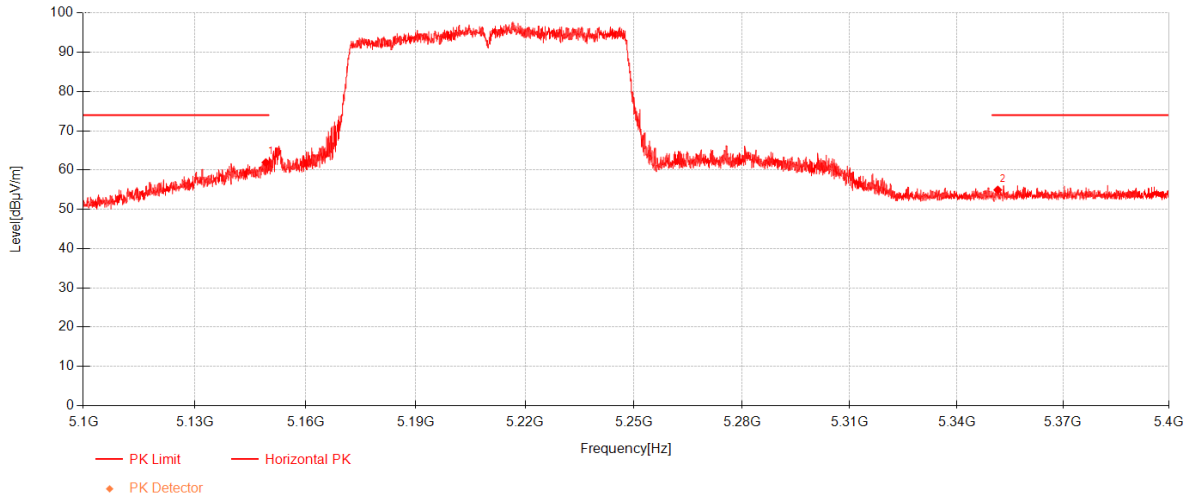
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5644.2562	38.02	32.66	-19.46	51.22	68.30	17.08	Horizontal
2	5654.8188	38.69	32.66	-19.46	51.89	71.88	19.99	Horizontal
3	5703.4875	39.08	32.68	-19.45	52.31	106.28	53.97	Horizontal
4	5722.825	38.16	32.69	-19.32	51.53	117.34	65.81	Horizontal
5	5852.175	38.77	32.74	-18.81	52.70	117.34	64.64	Horizontal
6	5871.2688	39.93	32.75	-18.80	53.88	106.34	52.46	Horizontal
7	5919.6125	39.22	32.77	-18.93	53.06	72.27	19.21	Horizontal
8	5937.1625	38.17	32.77	-19.05	51.90	68.30	16.40	Horizontal

11ac(VHT40)_TX_CH_159_Vertical_Peak



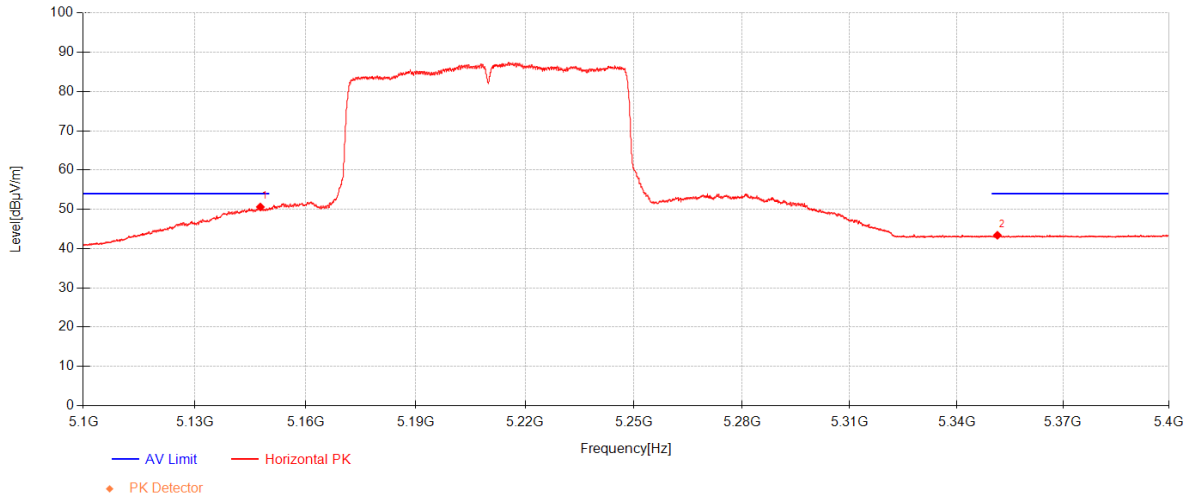
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5647.75	38.53	32.66	-19.46	51.73	68.30	16.57	Vertical
2	5654.0875	37.99	32.66	-19.46	51.19	71.34	20.15	Vertical
3	5703.2438	37.90	32.68	-19.45	51.13	106.21	55.08	Vertical
4	5721.1188	37.75	32.69	-19.33	51.10	113.45	62.35	Vertical
5	5851.7688	39.06	32.74	-18.81	52.99	118.27	65.28	Vertical
6	5869.1562	39.12	32.75	-18.80	53.07	106.93	53.86	Vertical
7	5916.85	38.82	32.77	-18.91	52.68	74.31	21.63	Vertical
8	5931.8812	38.16	32.77	-19.01	51.92	68.30	16.38	Vertical

11ac(VHT80)_TX_CH_42_Horizontal_Peak



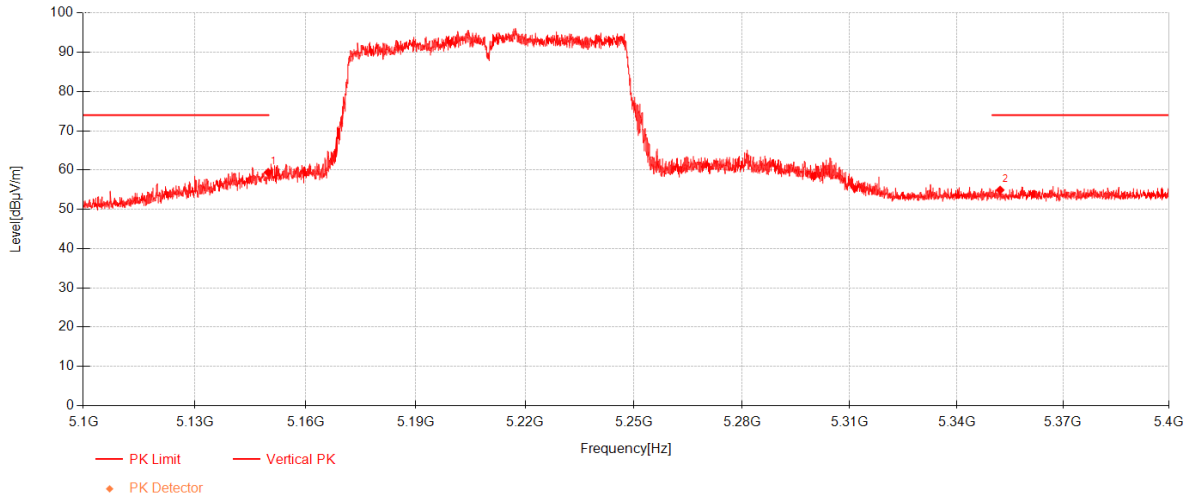
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.24	48.06	31.62	-17.76	61.92	74.00	12.08	Horizontal
2	5351.56	39.68	32.18	-16.92	54.94	74.00	19.06	Horizontal

11ac(VHT80)_TX_CH_42_Horizontal_Average



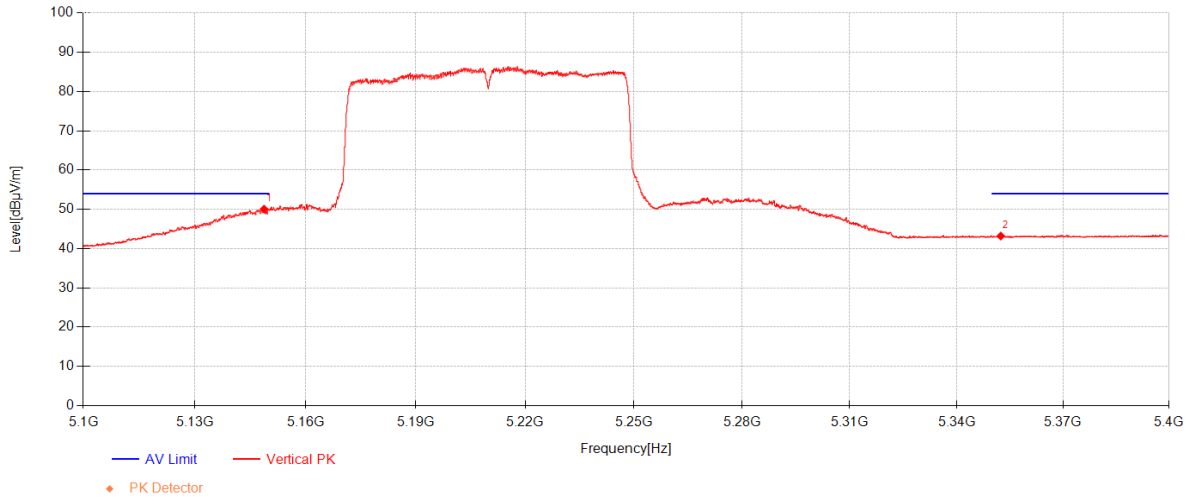
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.76	36.75	31.61	-17.76	50.60	54.00	3.40	Horizontal
2	5351.455	28.14	32.18	-16.92	43.40	54.00	10.60	Horizontal

11ac(VHT80)_TX_CH_42_Vetical_Peak



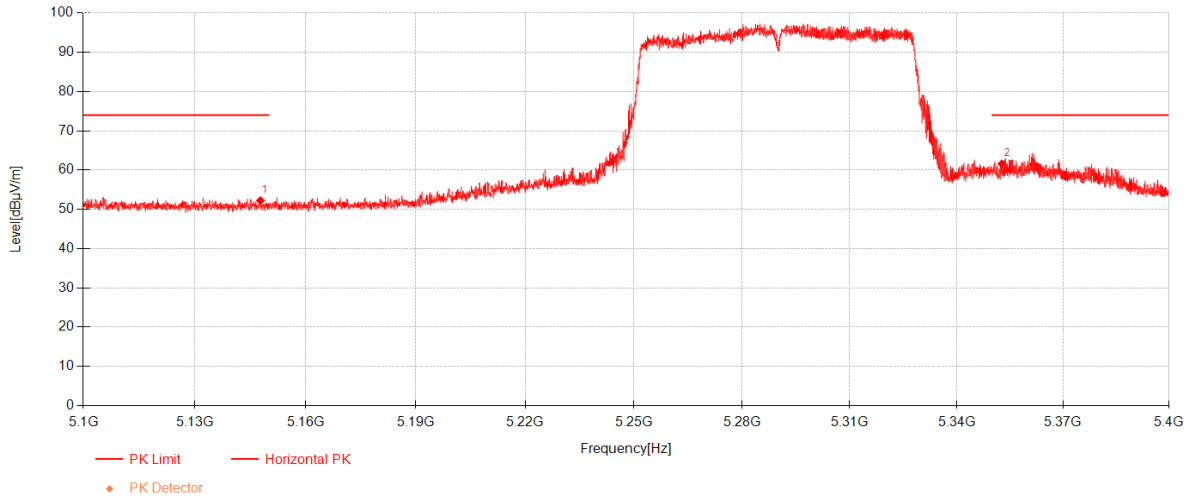
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.88	45.56	31.62	-17.76	59.42	74.00	14.58	Vertical
2	5352.225	39.65	32.19	-16.92	54.92	74.00	19.08	Vertical

11ac(VHT80)_TX_CH_42_Vetical_Average



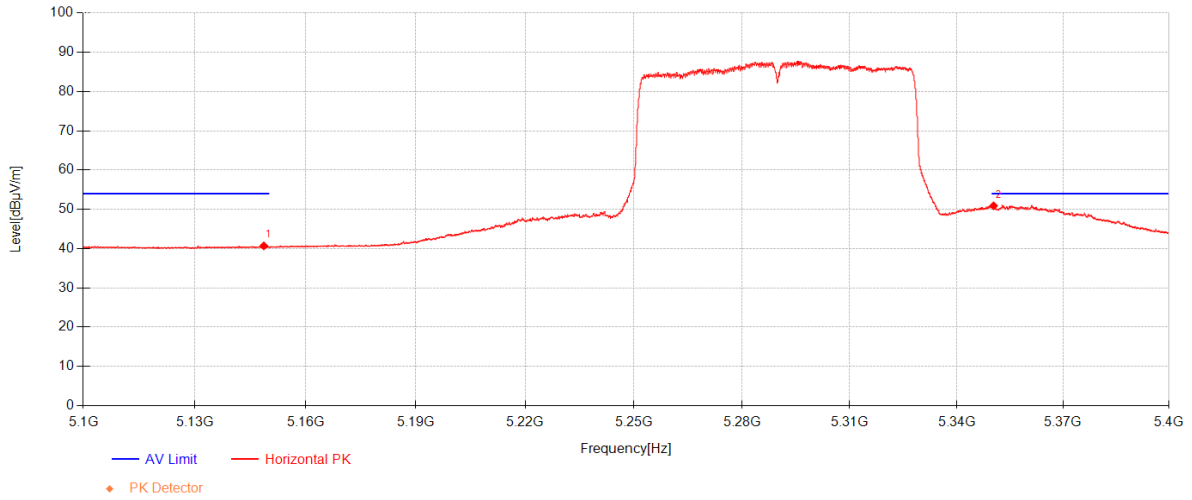
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.76	36.20	31.62	-17.76	50.06	54.00	3.94	Vertical
2	5352.4	27.93	32.19	-16.92	43.20	54.00	10.80	Vertical

11ac(VHT80)_TX_CH_58_Horizontal_Peak



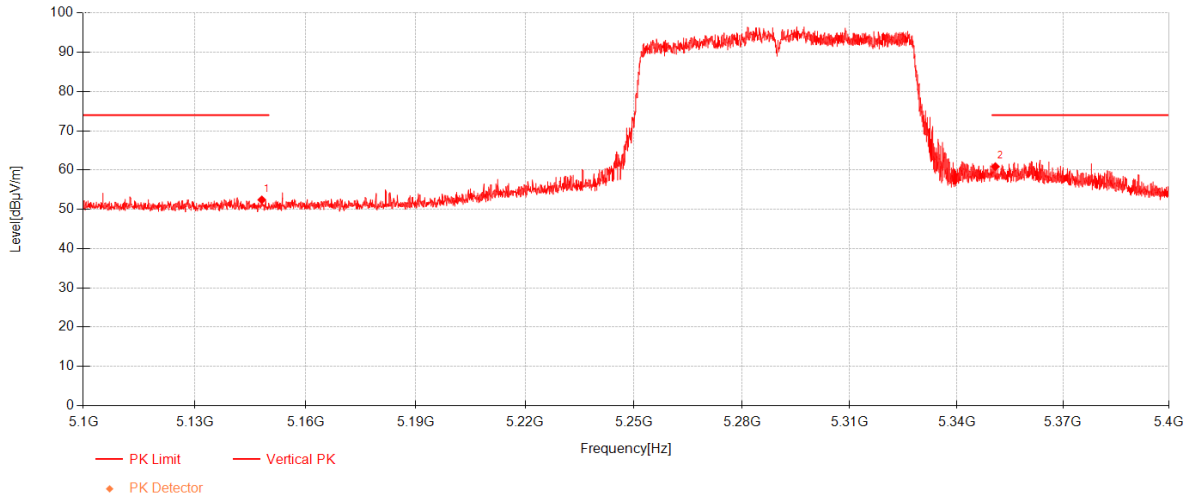
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.75	38.38	31.61	-17.76	52.23	74.00	21.77	Horizontal
2	5352.7	46.32	32.19	-16.92	61.59	74.00	12.41	Horizontal

11ac(VHT80)_TX_CH_58_Horizontal_Average



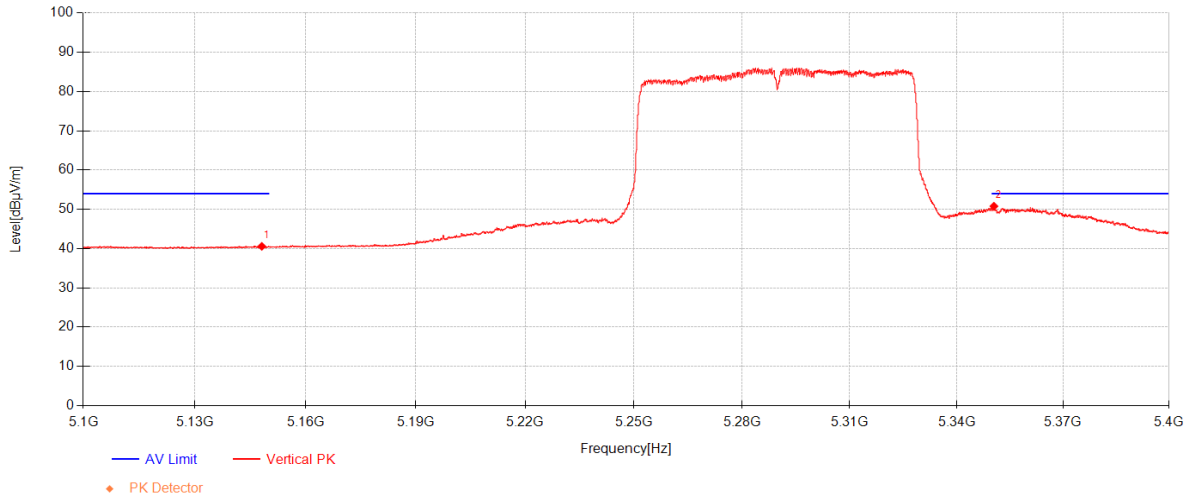
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.7	26.83	31.62	-17.76	40.69	54.00	13.31	Horizontal
2	5350.375	35.65	32.18	-16.93	50.90	54.00	3.10	Horizontal

11ac(VHT80)_TX_CH_58_Vetical_Peak



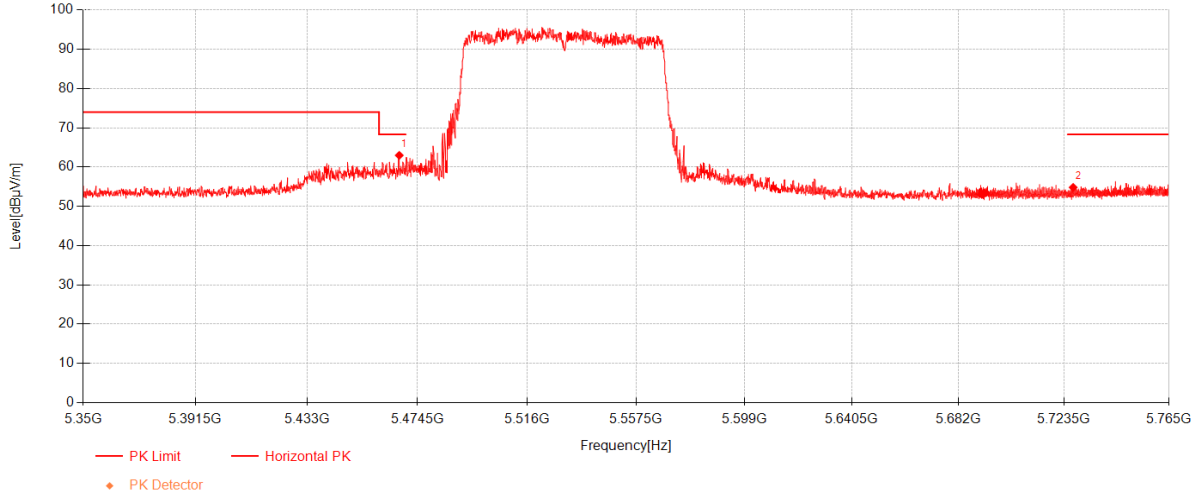
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.15	38.55	31.61	-17.76	52.41	74.00	21.59	Vertical
2	5350.875	45.61	32.18	-16.93	60.87	74.00	13.13	Vertical

11ac(VHT80)_TX_CH_58_Vetical_Average



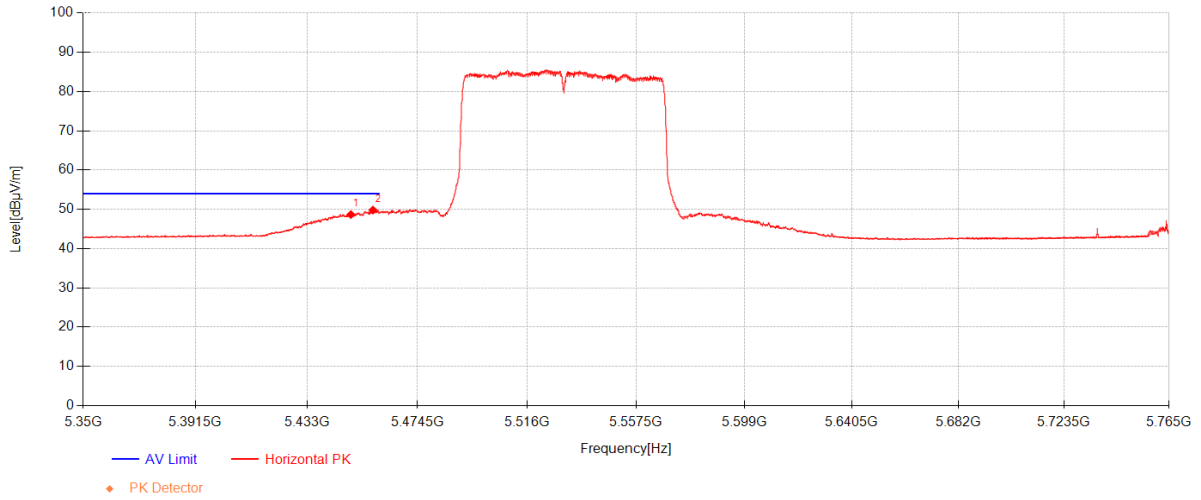
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.15	26.72	31.61	-17.76	40.58	54.00	13.42	Vertical
2	5350.475	35.54	32.18	-16.93	50.79	54.00	3.21	Vertical

11ac(VHT80)_TX_CH_106_Horizontal_Peak



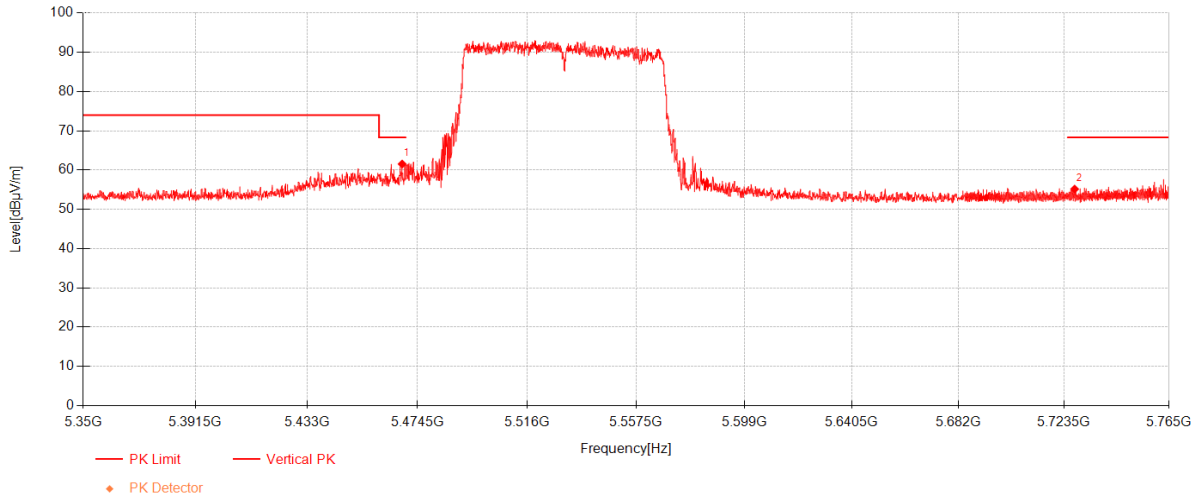
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5467.585	47.53	32.51	-17.04	62.99	68.30	5.31	Horizontal
2	5727.12	38.98	32.69	-16.85	54.82	68.30	13.48	Horizontal

11ac(VHT80)_TX_CH_106_Horizontal_Average



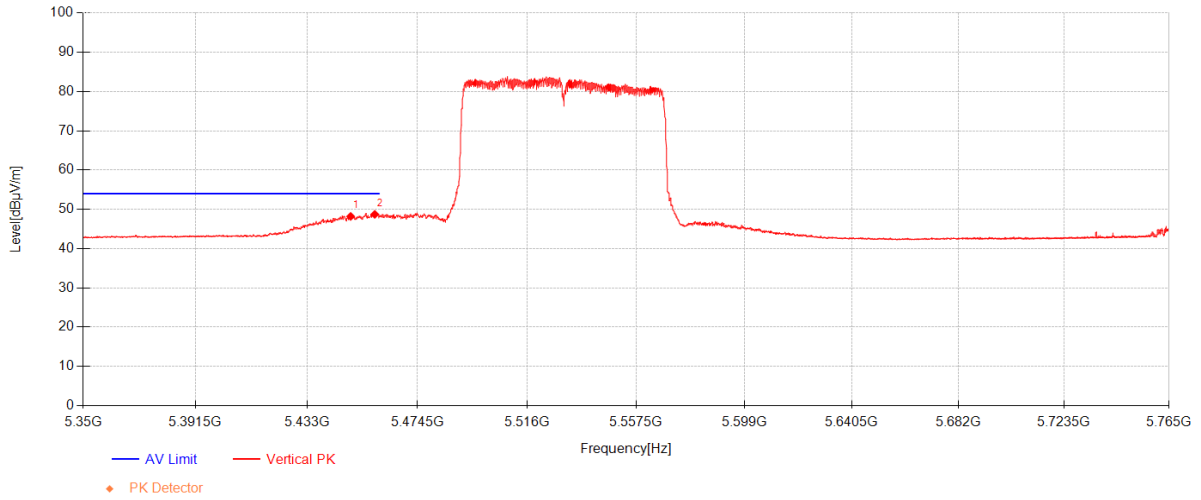
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5449.4112	33.16	32.46	-16.95	48.67	54.00	5.33	Horizontal
2	5457.7025	34.32	32.48	-16.99	49.81	54.00	4.19	Horizontal

11ac(VHT80)_TX_CH_106_Vertical_Peak



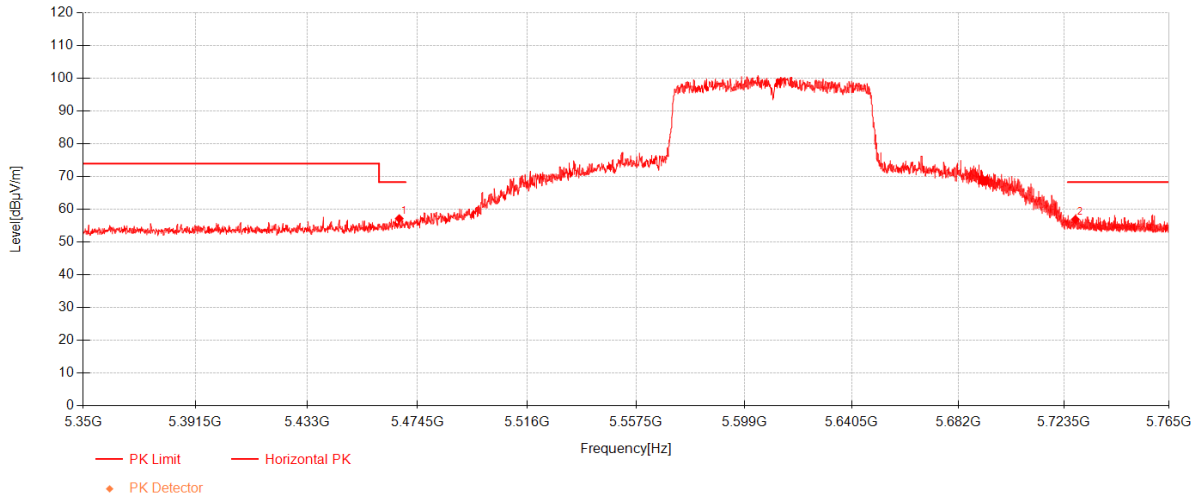
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5468.6738	46.08	32.51	-17.05	61.54	68.30	6.76	Vertical
2	5727.72	39.32	32.69	-16.85	55.16	68.30	13.14	Vertical

11ac(VHT80)_TX_CH_106_Vertical_Average



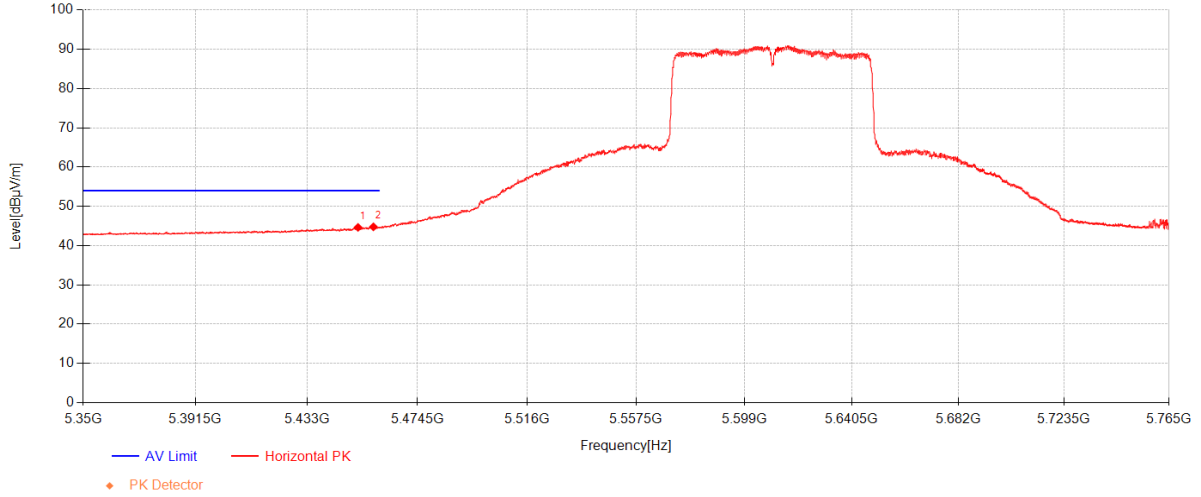
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5449.3275	32.69	32.46	-16.95	48.20	54.00	5.80	Vertical
2	5458.3725	33.23	32.48	-17.00	48.72	54.00	5.28	Vertical

11ac(VHT80)_TX_CH_122_Horizontal_Peak



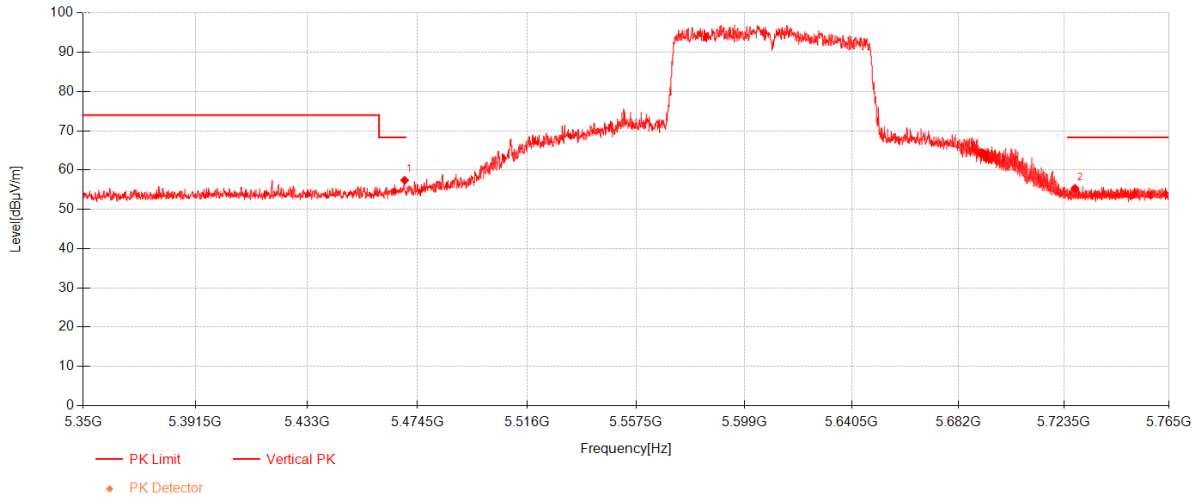
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5467.585	41.72	32.51	-17.04	57.18	68.30	11.12	Horizontal
2	5728	41.10	32.69	-16.85	56.94	68.30	11.36	Horizontal

11ac(VHT80)_TX_CH_122_Horizontal_Average



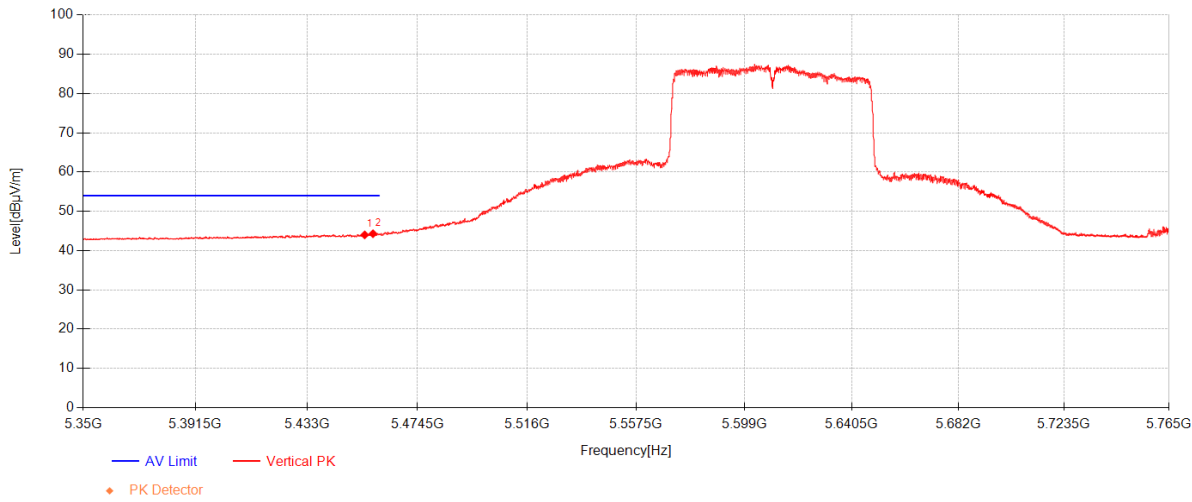
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5452.0913	29.14	32.47	-16.96	44.64	54.00	9.36	Horizontal
2	5457.87	29.29	32.48	-16.99	44.78	54.00	9.22	Horizontal

11ac(VHT80)_TX_CH_122_Vertical_Peak



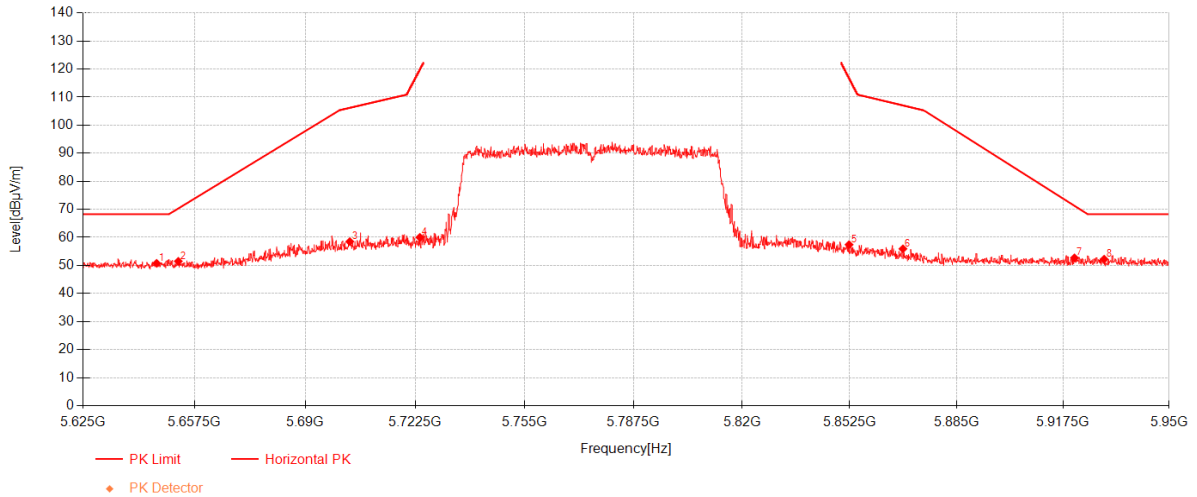
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5469.595	41.94	32.51	-17.06	57.40	68.30	10.90	Vertical
2	5727.84	39.50	32.69	-16.85	55.34	68.30	12.96	Vertical

11ac(VHT80)_TX_CH_122_Veritical_Average



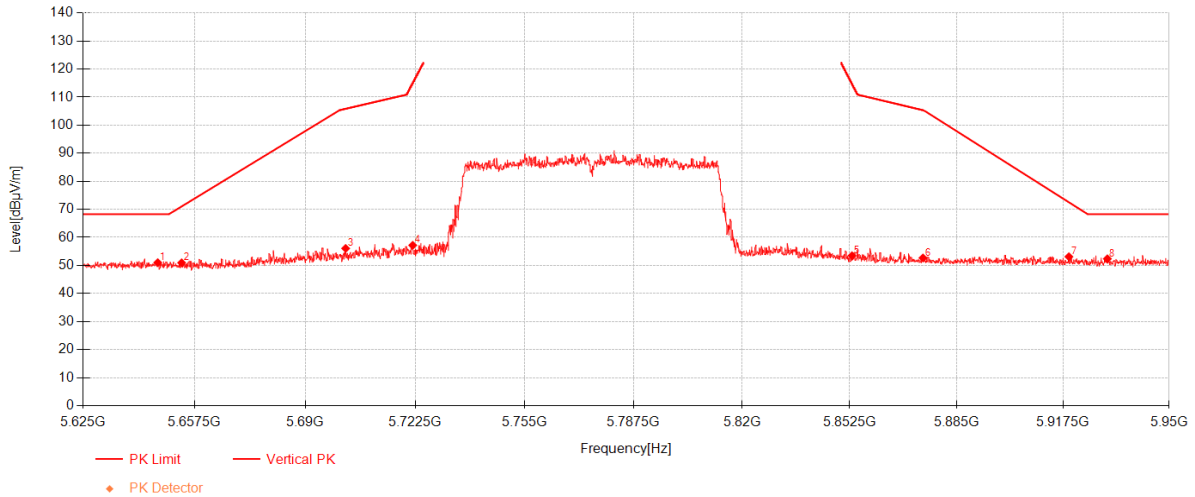
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5454.6038	28.50	32.47	-16.97	44.00	54.00	10.00	Vertical
2	5457.7025	28.81	32.48	-16.99	44.30	54.00	9.70	Vertical

11ac(VHT80)_TX_CH_155_Horizontal_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5646.3688	37.57	32.66	-19.46	50.77	68.30	17.53	Horizontal
2	5652.7062	38.27	32.66	-19.46	51.47	70.31	18.84	Horizontal
3	5703.0812	45.27	32.68	-19.45	58.50	106.16	47.66	Horizontal
4	5723.8	46.63	32.69	-19.32	60.00	119.56	59.56	Horizontal
5	5852.3375	43.49	32.74	-18.81	57.42	116.97	59.55	Horizontal
6	5868.6688	41.97	32.75	-18.80	55.91	107.07	51.16	Horizontal
7	5920.9938	38.86	32.77	-18.93	52.69	71.25	18.56	Horizontal
8	5930.0938	38.48	32.77	-19.00	52.25	68.30	16.05	Horizontal

11ac(VHT80)_TX_CH_155_Vetical_Peak



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5646.6938	37.81	32.66	-19.46	51.01	68.30	17.29	Vertical
2	5653.6812	37.75	32.66	-19.46	50.95	71.04	20.09	Vertical
3	5701.8625	42.84	32.68	-19.46	56.06	105.82	49.76	Vertical
4	5721.6875	43.82	32.69	-19.33	57.18	114.75	57.57	Vertical
5	5853.2312	39.54	32.74	-18.81	53.47	114.93	61.46	Vertical
6	5874.7625	38.72	32.75	-18.80	52.67	105.37	52.70	Vertical
7	5919.2875	39.27	32.77	-18.92	53.11	72.51	19.40	Vertical
8	5931.0688	38.60	32.77	-19.00	52.37	68.30	15.93	Vertical

7.5 Duty Cycle

Test Requirement ANSI C63.10-2020+Cor.1-2023 Section 12.2

Test Method: ANSI C63.10-2020+Cor.1-2023 Section 12.2

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

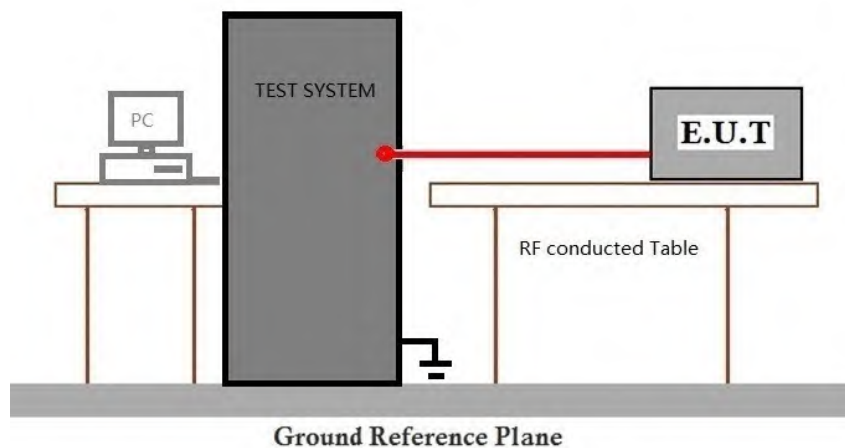
Humidity: 42 % RH

Atmospheric Pressure: 1001 mbar

7.5.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac 20/40/80 Only the data of worst case is recorded in the report.

7.5.3 Test Setup Diagram



7.5.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.6 99% Bandwidth

Test Requirement ANSI C63.10-2020+Cor.1-2023 Section 12.5.3

Test Method: ANSI C63.10-2020+Cor.1-2023 Section 6.9.3

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

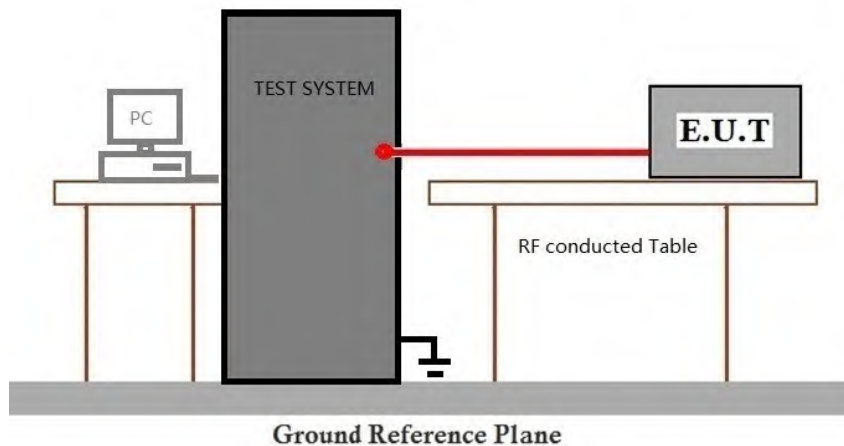
Humidity: 42 % RH

Atmospheric Pressure: 1001 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac 20/40/80 Only the data of worst case is recorded in the report.

7.6.3 Test Setup Diagram



7.6.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.7 26dB Emission Bandwidth

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: ANSI C63.10-2020+Cor.1-2023 Section 12.5.2

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

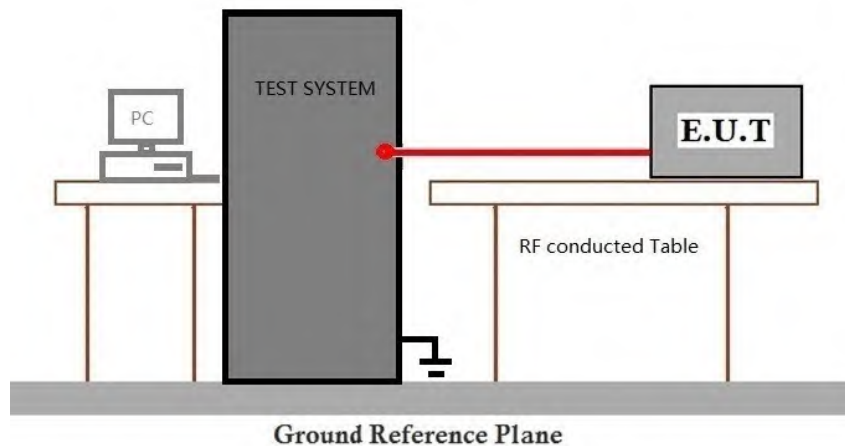
Humidity: 42 % RH

Atmospheric Pressure: 1001 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac 20/40/80 Only the data of worst case is recorded in the report.

7.7.3 Test Setup Diagram



7.7.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.8 Minimum 6 dB Bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart E 15.407 (e)

Test Method: ANSI C63.10-2020+Cor.1-2023 Section 12.5.1

Limit:

Frequency band(MHz)	Limit
5725-5850	≥ 500 kHz

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

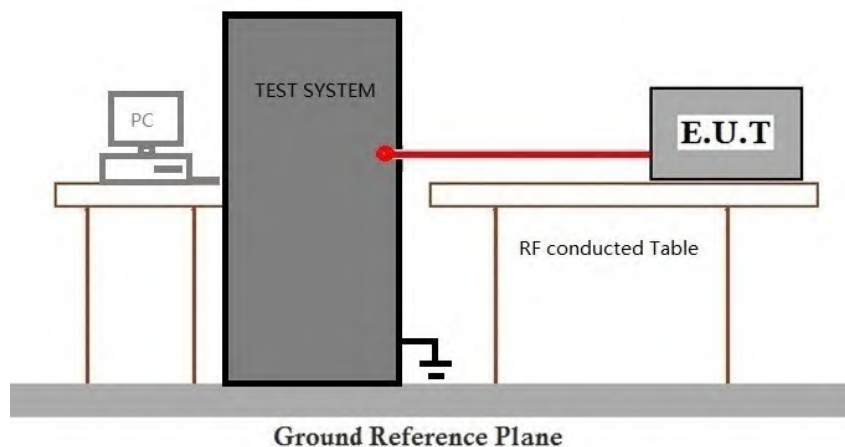
Humidity: 42 % RH

Atmospheric Pressure: 1001 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac 20/40/80 Only the data of worst case is recorded in the report.

7.8.3 Test Setup Diagram



7.8.4 Measurement Procedure and Data

Please Refer to Appendix for Details

7.9 Maximum Conducted Output Power

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: ANSI C63.10-2020+Cor.1-2023 Section 12.4

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) or 11dBm+10logB*
5470-5725	≤250mW(24dBm) or 11dBm+10logB*
5725-5850	≤1W(30dBm)
Remark:	* Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

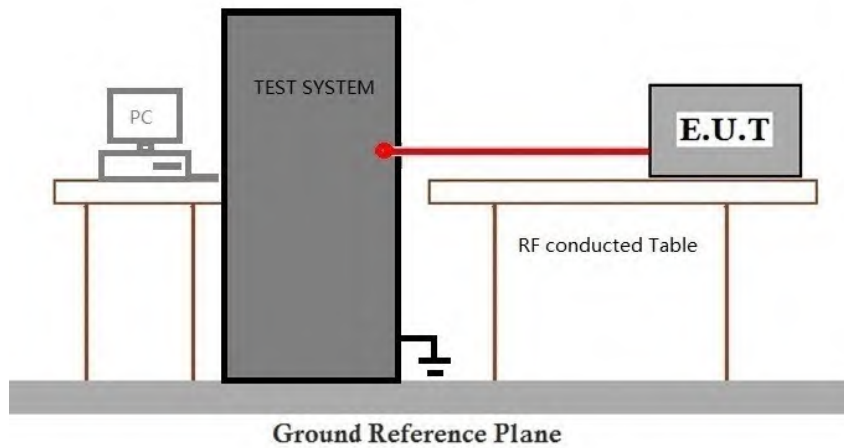
Humidity: 42 % RH

Atmospheric Pressure: 1001 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac 20/40/80 Only the data of worst case is recorded in the report.

7.9.3 Test Setup Diagram



7.9.4 Measurement Procedure and Data

Note: Since the verify power the same operating range bandwidth and smaller power can be covered by the higher power.

AV Output power Level = Reading level + Cable loss + DCCF

Please Refer to Appendix for Details

7.10 Power Spectral Density

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: ANSI C63.10-2020+Cor.1-2023 Section 12.6

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C

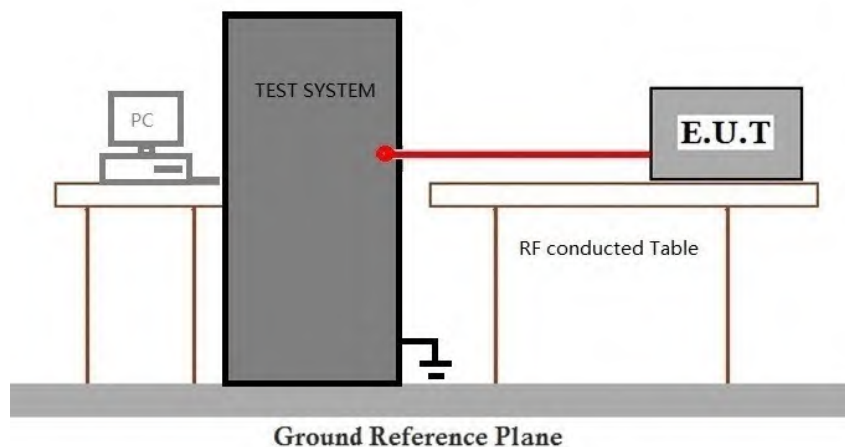
Humidity: 42 % RH

Atmospheric Pressure: 1001 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	03	TX mode_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac 20/40/80 Only the data of worst case is recorded in the report.

7.10.3 Test Setup Diagram



7.10.4 Measurement Procedure and Data

RBW conversion factor from 300kHz to 500kHz (2.22dB) for UNII Band 3 has been considered.

Please Refer to Appendix for Details

7.11 Non-occupancy Period

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

7.11.1 E.U.T. Operation

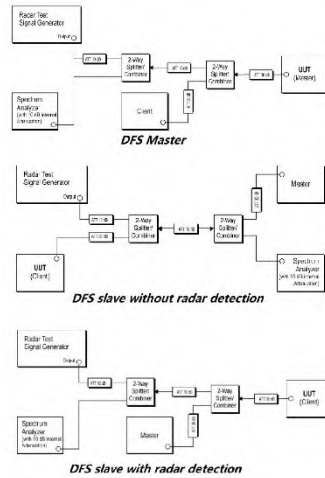
Operating Environment:

Temperature: 23 °C Humidity: 42 % RH Atmospheric Pressure: 1001 mbar

7.11.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	Normal operating_Keep the EUT communication with the companion device.

7.11.3 Test Setup Diagram



7.11.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details

7.12 Channel Move Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.			

7.12.1 E.U.T. Operation

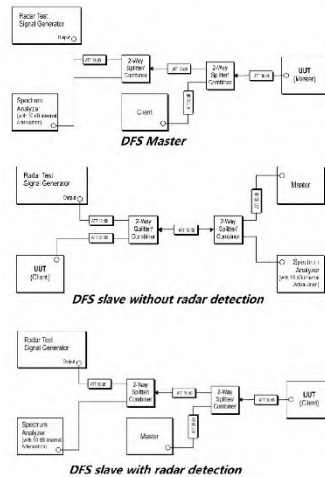
Operating Environment:

Temperature: 23 °C Humidity: 42 % RH Atmospheric Pressure: 1001 mbar

7.12.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	Normal operating_Keep the EUT communication with the companion device.

7.12.3 Test Setup Diagram



7.12.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details

7.13 Channel Closing Transmission Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

7.13.1 E.U.T. Operation

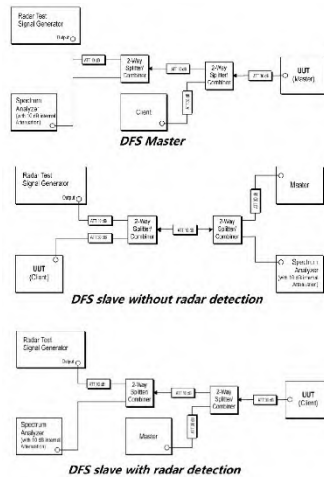
Operating Environment:

Temperature: 23 °C Humidity: 42 % RH Atmospheric Pressure: 1001 mbar

7.13.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	Normal operating_Keep the EUT communication with the companion device.

7.13.3 Test Setup Diagram



7.13.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details



Report No.: SUCR260800084006

Page: 190 of 284

8 Test Setup Photo

Refer to Appendix C.3 - Test Setup Photo for SUCR2608000840TL

9 EUT Constructional Details (EUT Photos)

Refer to Appendix C.1_External Photos for SUCR2608000840TL and Appendix C.2_Internal Photos for SUCR2608000840TL

10 Appendix

1. Duty Cycle

1.1 Test Result

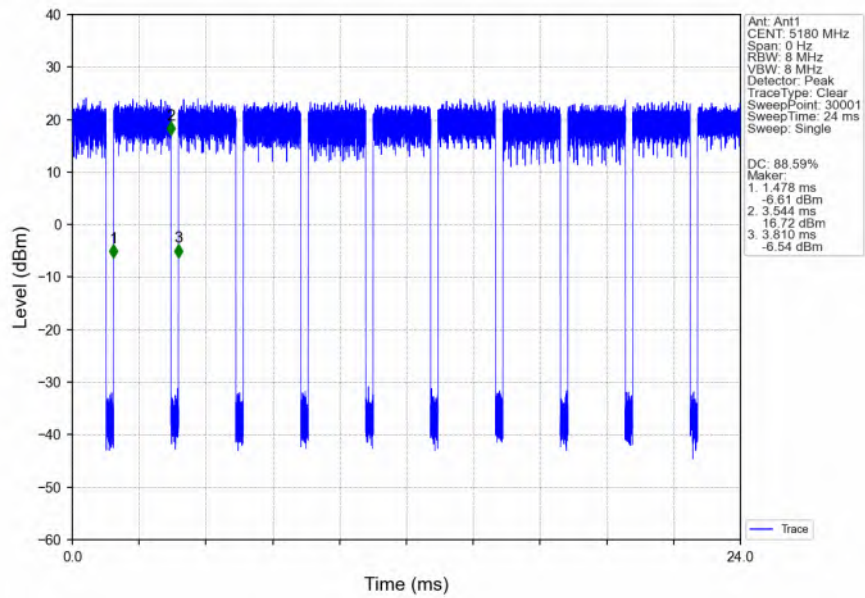
1.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	2.066	2.332	88.59	0.53	0.03
802.11ac (VHT20)	SISO	5180	1.934	2.199	87.95	0.56	0.03
802.11ac (VHT40)	SISO	5190	0.953	1.218	78.24	1.07	0.07
802.11ac (VHT80)	SISO	5210	0.465	0.519	89.60	0.48	0.06

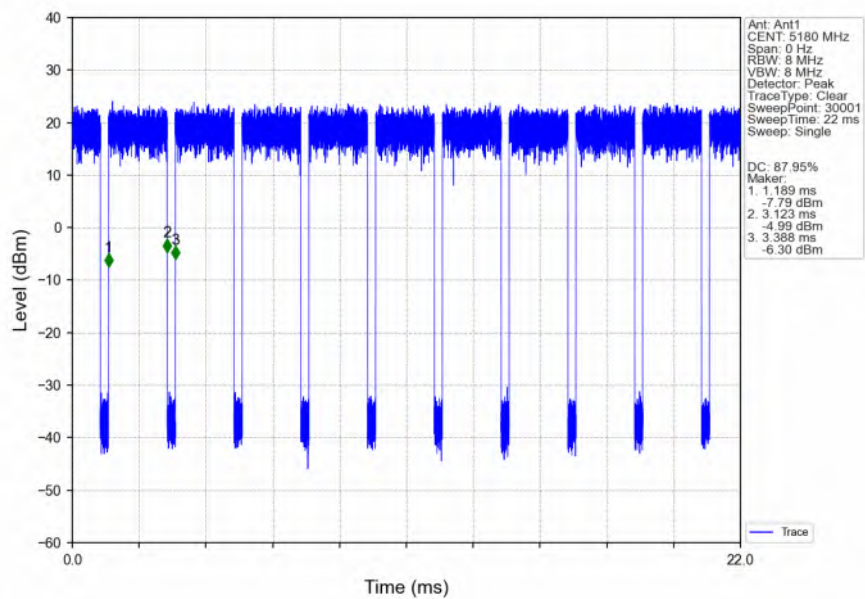
1.2 Test Graph

1.2.1 Ant1

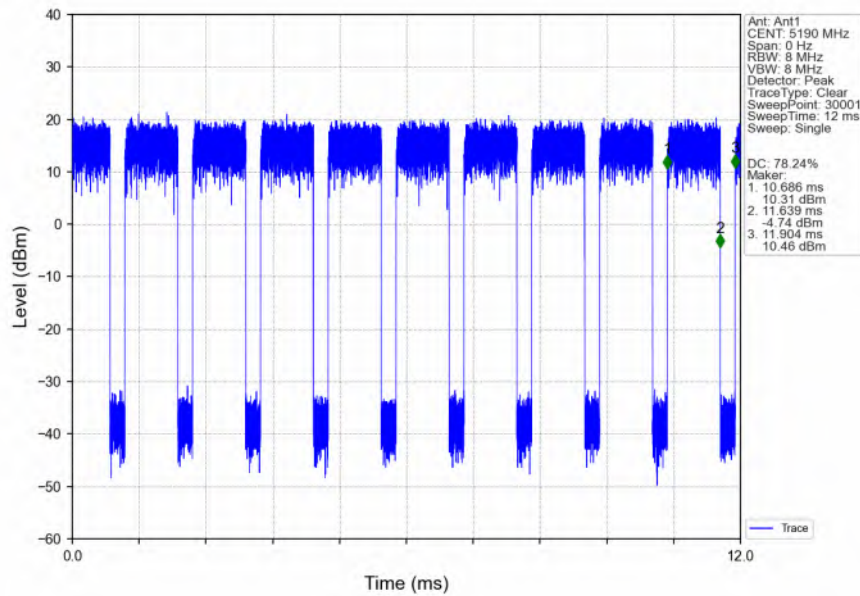
802.11a_LCH_5180MHz_Ant1_NTNV



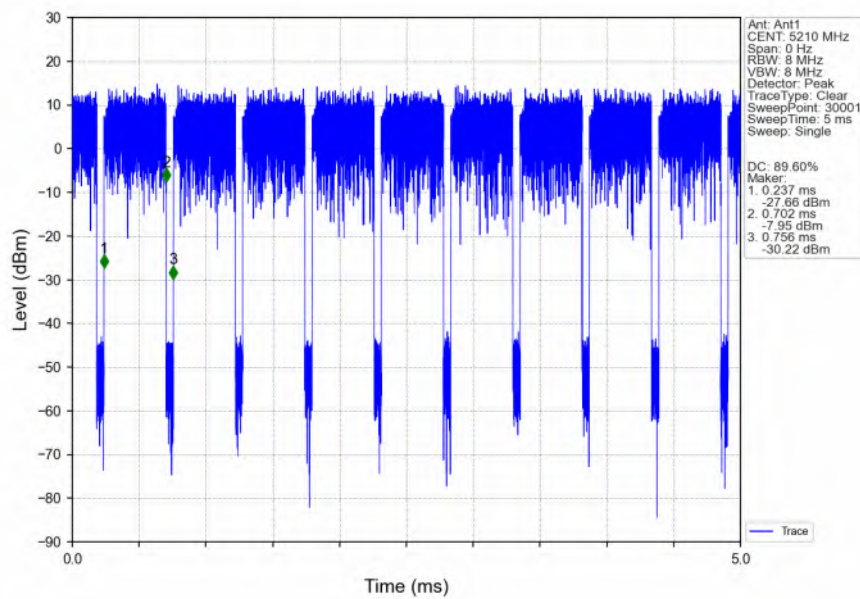
802.11ac(VHT20)_LCH_5180MHz_Ant1_NTNV



802.11ac(VHT40)_LCH_5190MHz_Ant1_NTNV



802.11ac(VHT80)_MCH_5210MHz_Ant1_NTNV



2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	ANT	99% Occupied Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	16.555	/	Pass
		5200	1	16.583	/	Pass
		5240	1	16.614	/	Pass
		5260	1	16.584	/	Pass
		5300	1	16.566	/	Pass
		5320	1	16.512	/	Pass
		5500	1	16.627	/	Pass
		5600	1	16.652	/	Pass
		5700	1	16.599	/	Pass
		5745	1	16.506	/	Pass
		5785	1	16.468	/	Pass
		5825	1	16.535	/	Pass
802.11ac (VHT20)	SISO	5180	1	17.767	/	Pass
		5200	1	17.746	/	Pass
		5240	1	17.784	/	Pass
		5260	1	17.788	/	Pass
		5300	1	17.778	/	Pass
		5320	1	17.711	/	Pass
		5500	1	17.809	/	Pass
		5600	1	17.798	/	Pass
		5700	1	17.738	/	Pass
		5745	1	17.721	/	Pass
		5785	1	17.719	/	Pass
		5825	1	17.698	/	Pass
802.11ac (VHT40)	SISO	5190	1	36.509	/	Pass
		5230	1	36.594	/	Pass
		5270	1	36.571	/	Pass
		5310	1	36.491	/	Pass
		5510	1	36.542	/	Pass
		5590	1	36.606	/	Pass
		5670	1	36.565	/	Pass
		5755	1	36.429	/	Pass
		5795	1	36.412	/	Pass
802.11ac	SISO	5210	1	76.017	/	Pass

(VHT80)		5290	1	75.985	/	Pass
		5530	1	76.152	/	Pass
		5610	1	75.985	/	Pass
		5775	1	75.697	/	Pass

2.1.2 26dB BW

Mode	TX Type	Frequency (MHz)	ANT	26dB Bandwidth (MHz)		Verdict
				Result	Limit	
802.11a	SISO	5180	1	22.707	/	Pass
		5200	1	22.833	/	Pass
		5240	1	23.409	/	Pass
		5260	1	22.971	/	Pass
		5300	1	23.490	/	Pass
		5320	1	23.011	/	Pass
		5500	1	23.184	/	Pass
		5600	1	23.383	/	Pass
		5700	1	25.054	/	Pass
802.11ac (VHT20)	SISO	5180	1	23.766	/	Pass
		5200	1	23.809	/	Pass
		5240	1	24.546	/	Pass
		5260	1	23.453	/	Pass
		5300	1	23.488	/	Pass
		5320	1	22.787	/	Pass
		5500	1	24.405	/	Pass
		5600	1	25.289	/	Pass
		5700	1	22.910	/	Pass
802.11ac (VHT40)	SISO	5190	1	58.504	/	Pass
		5230	1	56.223	/	Pass
		5270	1	58.694	/	Pass
		5310	1	41.360	/	Pass
		5510	1	56.385	/	Pass
		5590	1	59.212	/	Pass
		5670	1	58.901	/	Pass
802.11ac (VHT80)	SISO	5210	1	114.625	/	Pass
		5290	1	100.284	/	Pass
		5530	1	153.347	/	Pass
		5610	1	114.679	/	Pass

2.1.3 6dB BW

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	

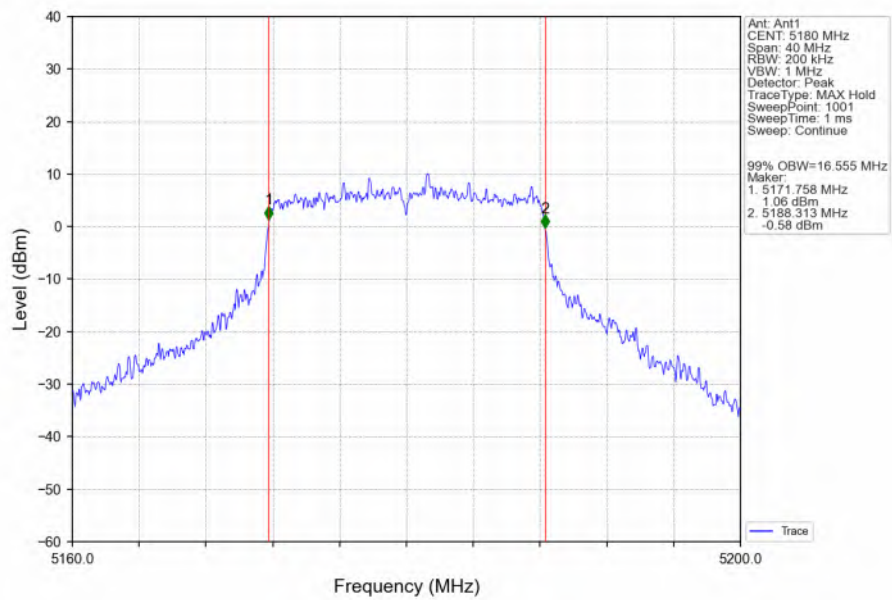


802.11a	SISO	5745	1	15.322	≥ 0.5	Pass
		5785	1	15.845	≥ 0.5	Pass
		5825	1	16.301	≥ 0.5	Pass
802.11ac (VHT20)	SISO	5745	1	17.280	≥ 0.5	Pass
		5785	1	16.946	≥ 0.5	Pass
		5825	1	15.956	≥ 0.5	Pass
802.11ac (VHT40)	SISO	5755	1	35.397	≥ 0.5	Pass
		5795	1	35.179	≥ 0.5	Pass
802.11ac (VHT80)	SISO	5775	1	75.153	≥ 0.5	Pass

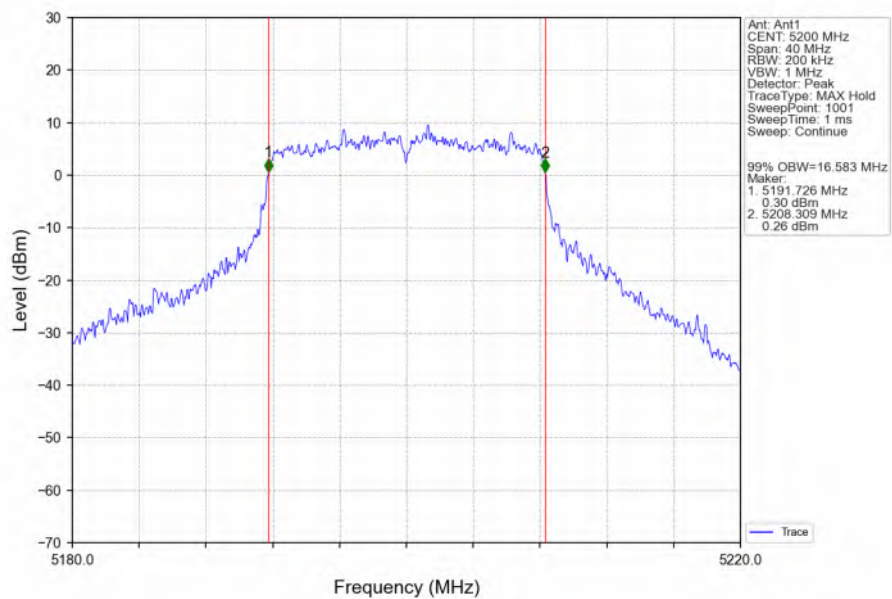
2.2 Test Graph

2.2.1 OBW

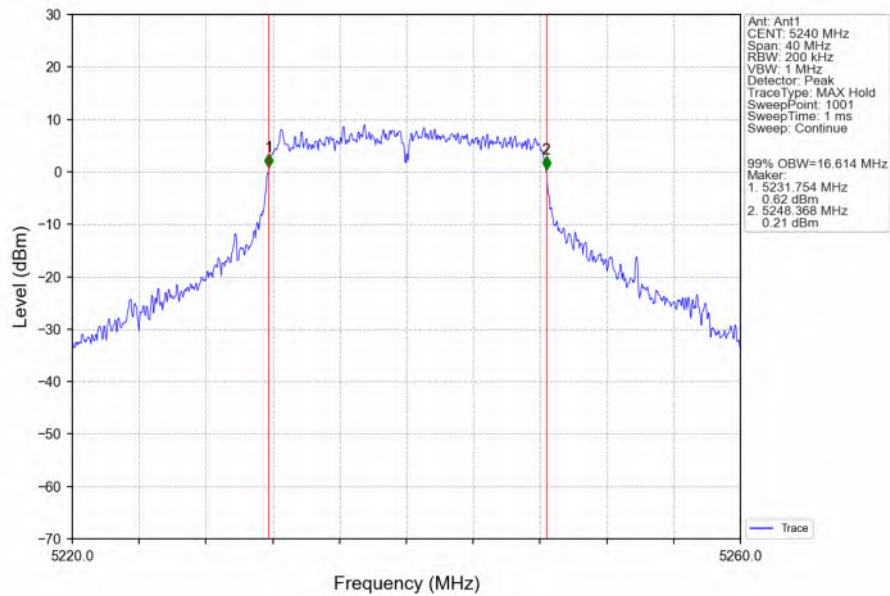
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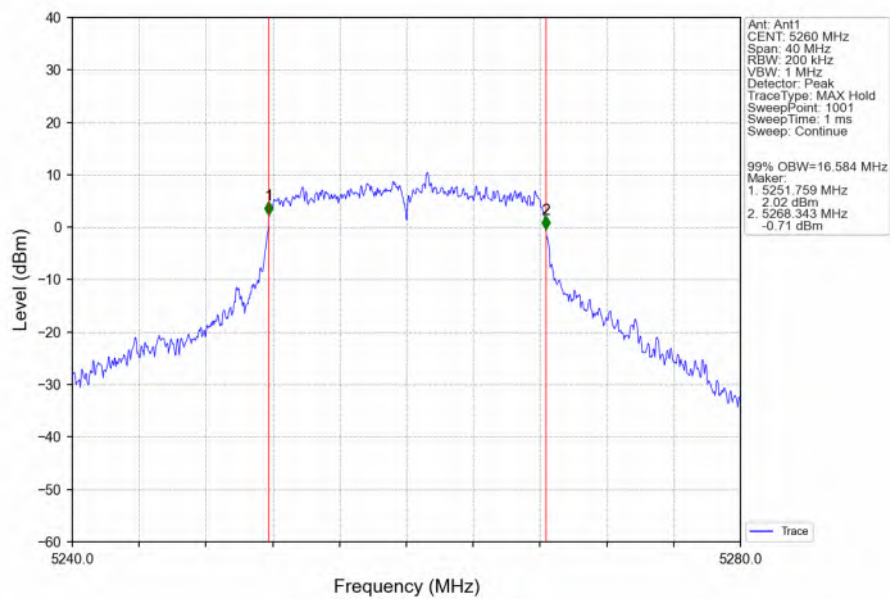
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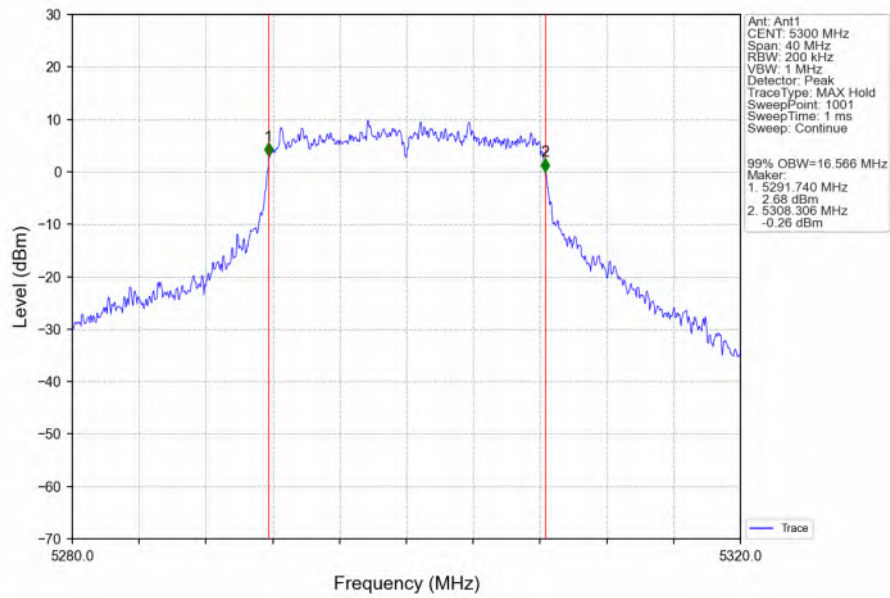
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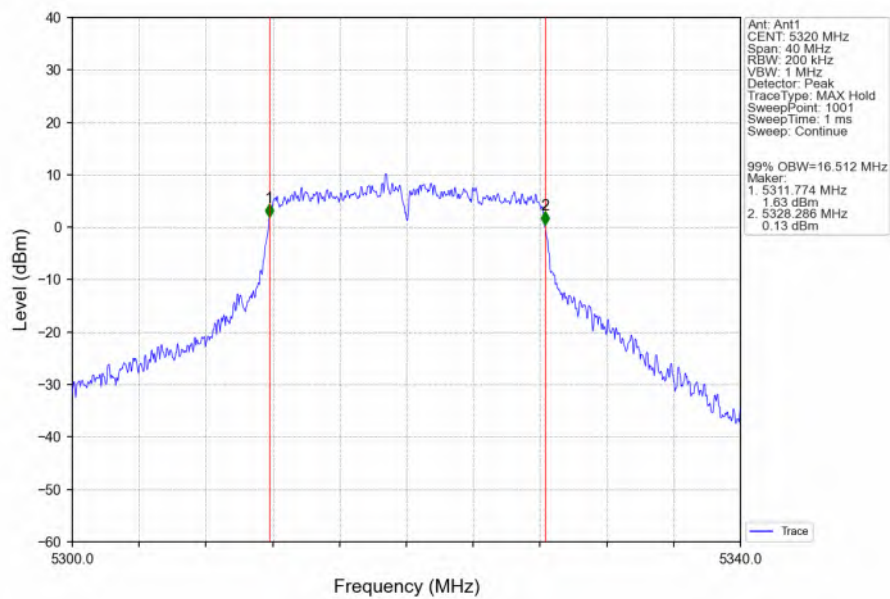
802.11a_LCH_5260MHz_Ant1_NTNV



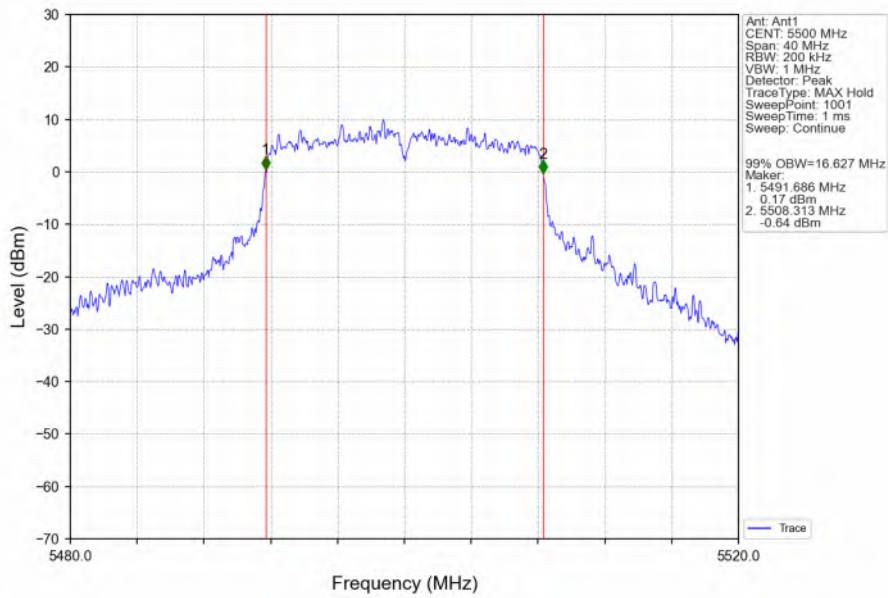
802.11a_MCH_5300MHz_Ant1_NTNV



802.11a_HCH_5320MHz_Ant1_NTNV



802.11a_LCH_5500MHz_Ant1_NTNV



802.11a_MCH_5600MHz_Ant1_NTNV

