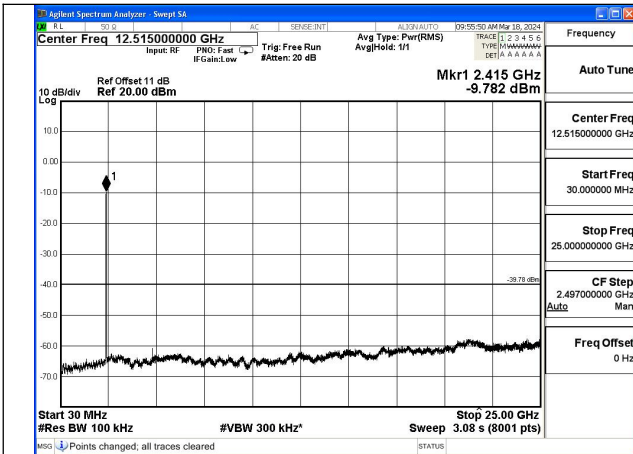
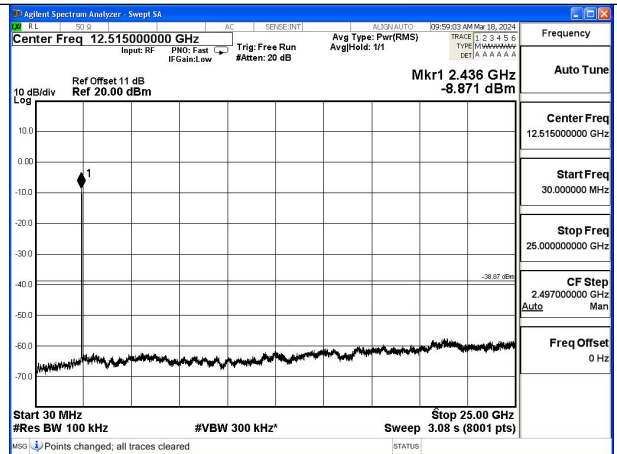


Mode:802.11g Frequency:2462MHz Ant:Chain0

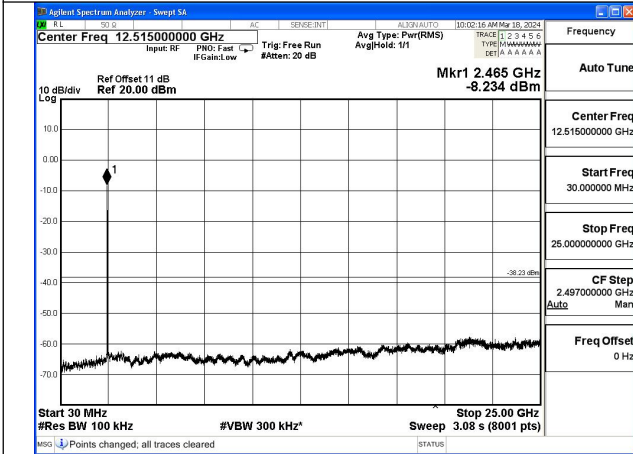
Test Mode: 802.11n HT20



Mode:802.11n HT20 Frequency:2412MHz Ant:Chain0



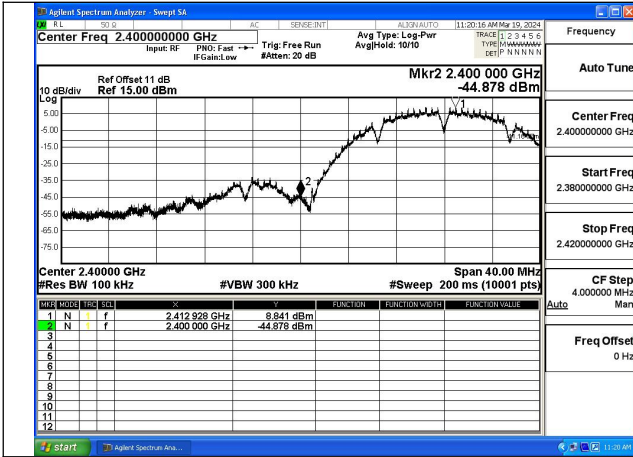
Mode:802.11n HT20 Frequency:2437MHz Ant:Chain0



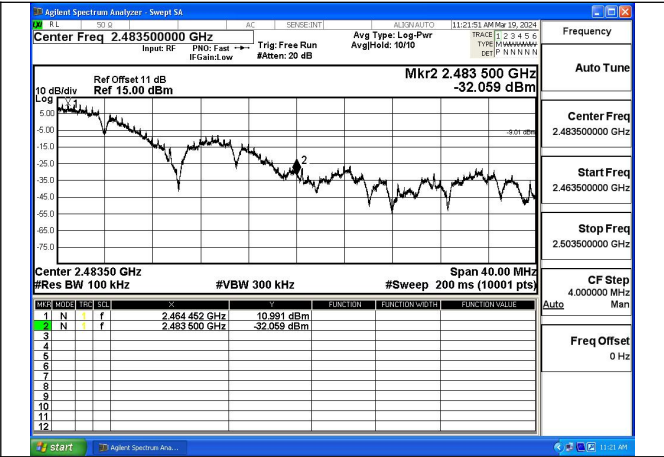
Mode:802.11n HT20 Frequency:2462MHz Ant:Chain0

# Band edge measurement

Test Mode: 802.11b

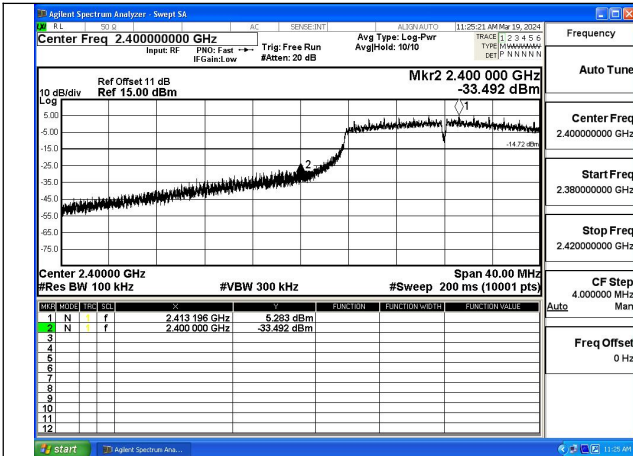


Mode:802.11b Frequency:2412MHz Ant:Chain0

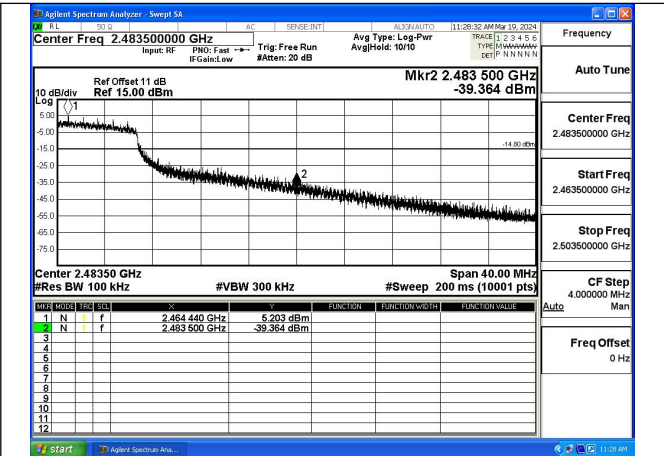


Mode:802.11b Frequency:2462MHz Ant:Chain0

Test Mode: 802.11g

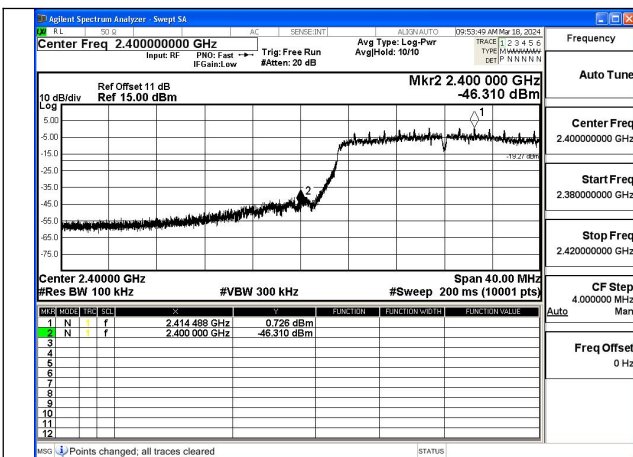


Mode:802.11g Frequency:2412MHz Ant:Chain0

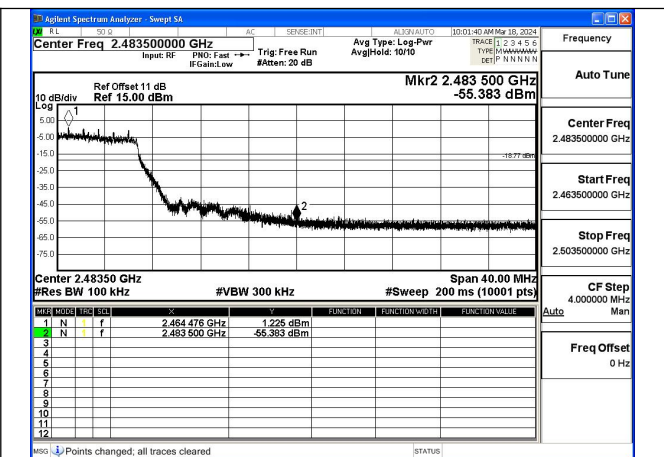


Mode:802.11g Frequency:2462MHz Ant:Chain0

Test Mode: 802.11n HT20



Mode:802.11n HT20 Frequency:2412MHz Ant:Chain0



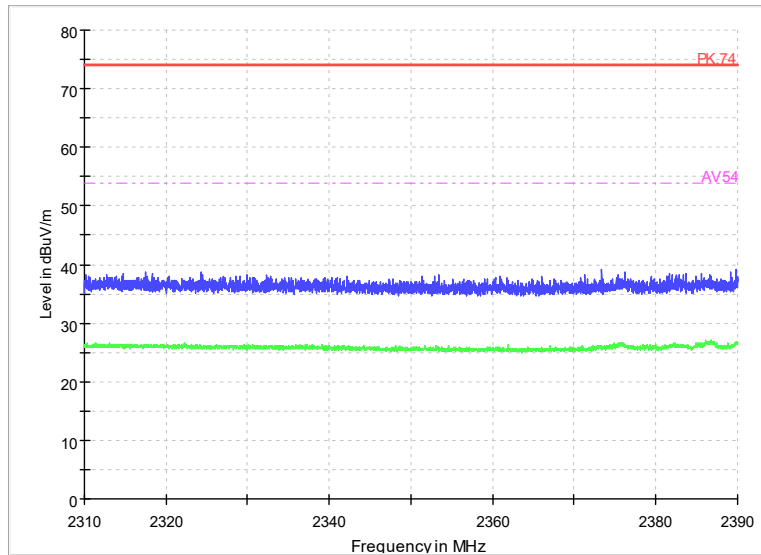
Mode:802.11n HT20 Frequency:2462MHz Ant:Chain0

## APPENDIX B – TEST DATA OF RADIATED EMISSION

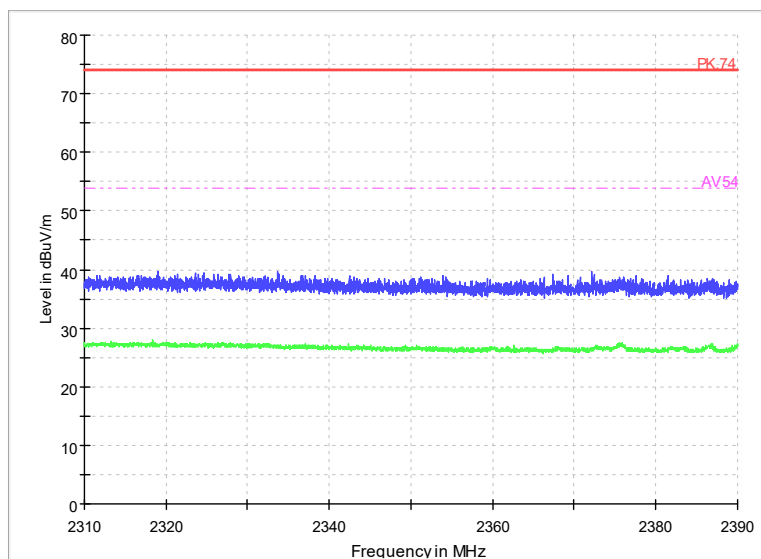
Note: The worst channel results are reflected in the report.

Note: The scanned graph represents the maximum of both horizontal and vertical polarizations and is not a single horizontal or vertical polarization scan

### **Radiated Emission Band Edge**

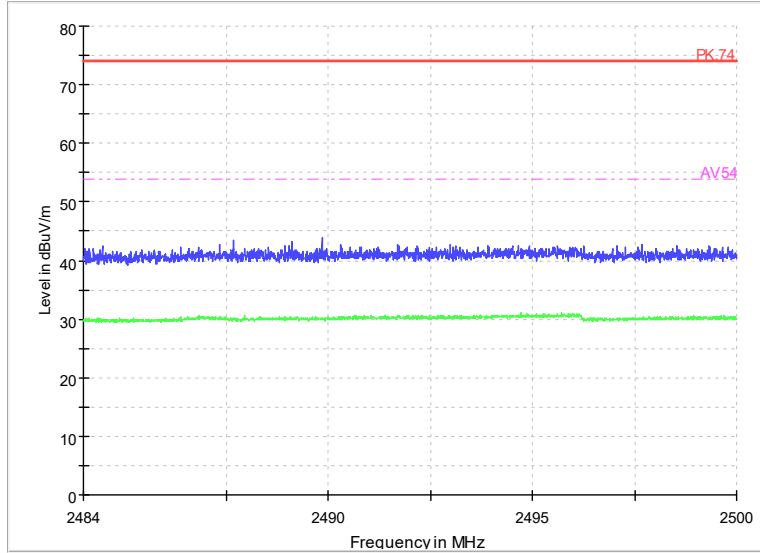


Radiated Emission Band Edge  
Channel No.:1  
Test Mode: 802.11b  
Polarization: V

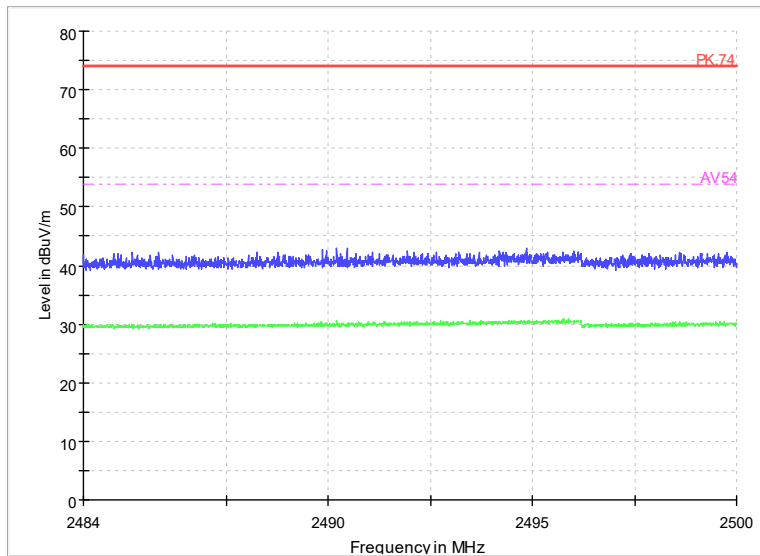


Radiated Emission Band Edge

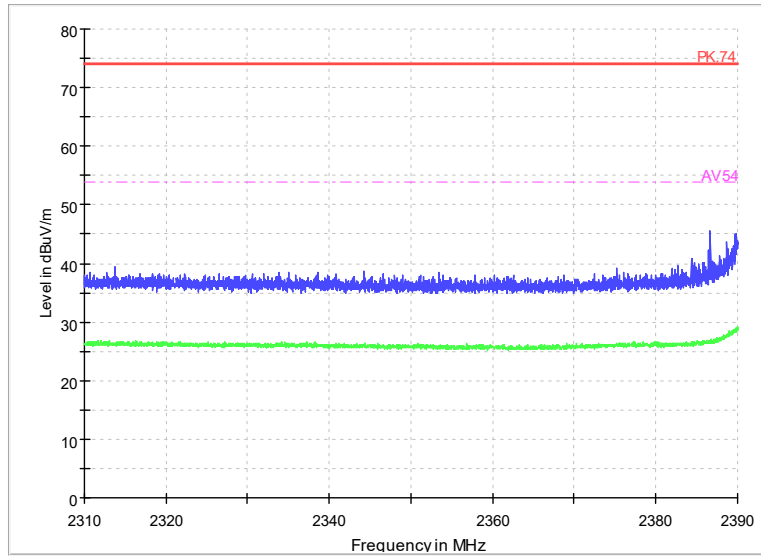
Channel No.:1  
 Test Mode: 802.11b  
 Polarization: H



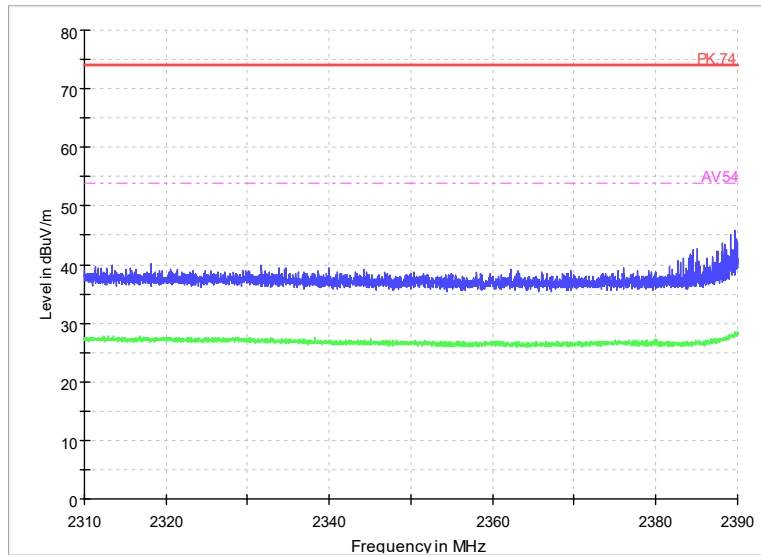
Radiated Emission Band Edge  
 Channel No.:11  
 Test Mode: 802.11b  
 Polarization: V



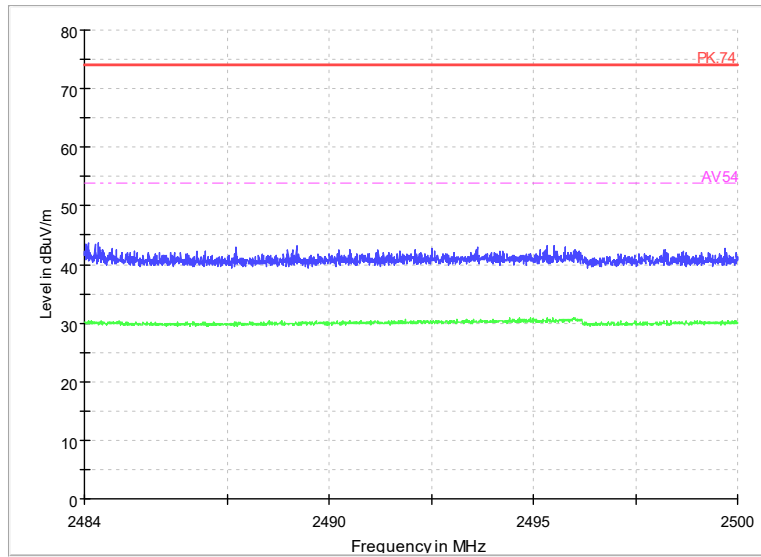
Radiated Emission Band Edge  
 Channel No.:11  
 Test Mode: 802.11b  
 Polarization: H



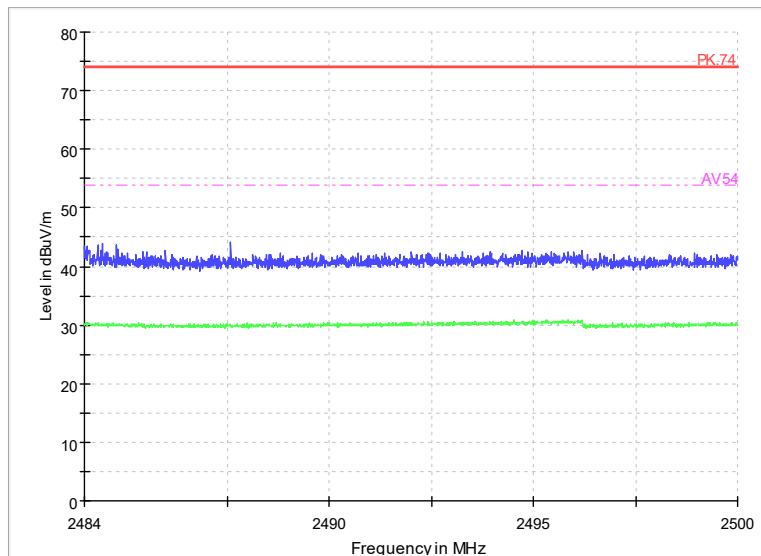
Radiated Emission Band Edge  
 Channel No.:1  
 Test Mode: 802.11g  
 Polarization: V



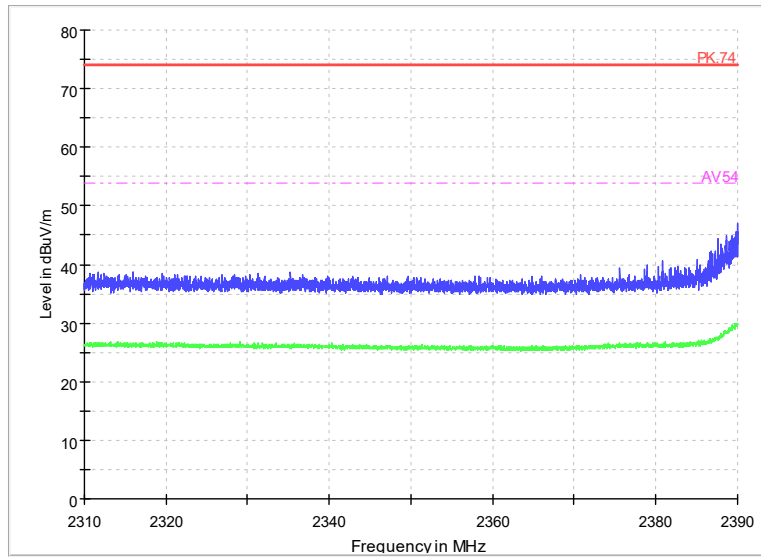
Radiated Emission Band Edge  
 Channel No.:1  
 Test Mode: 802.11g  
 Polarization: H



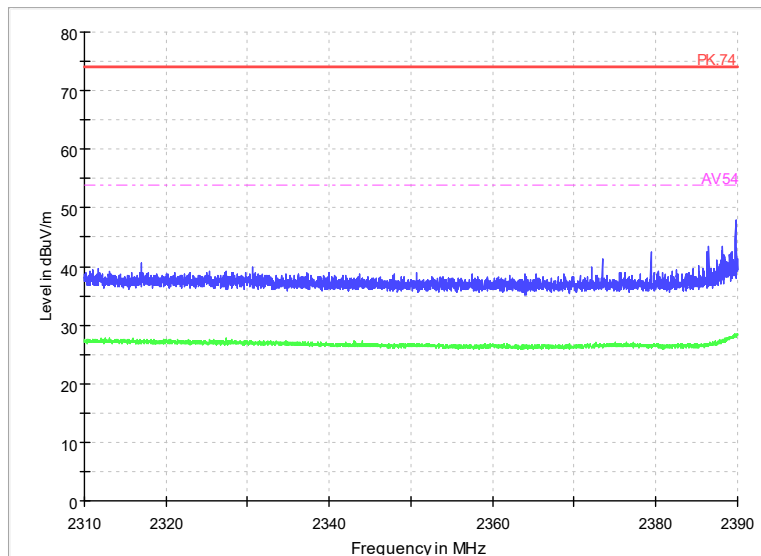
Radiated Emission Band Edge  
Channel No.:11  
Test Mode: 802.11g  
Polarization: V



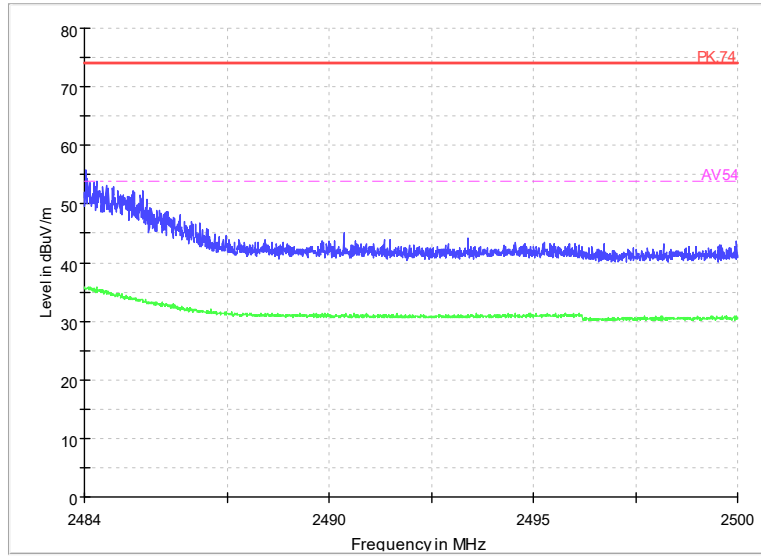
Radiated Emission Band Edge  
Channel No.:11  
Test Mode: 802.11g  
Polarization: H



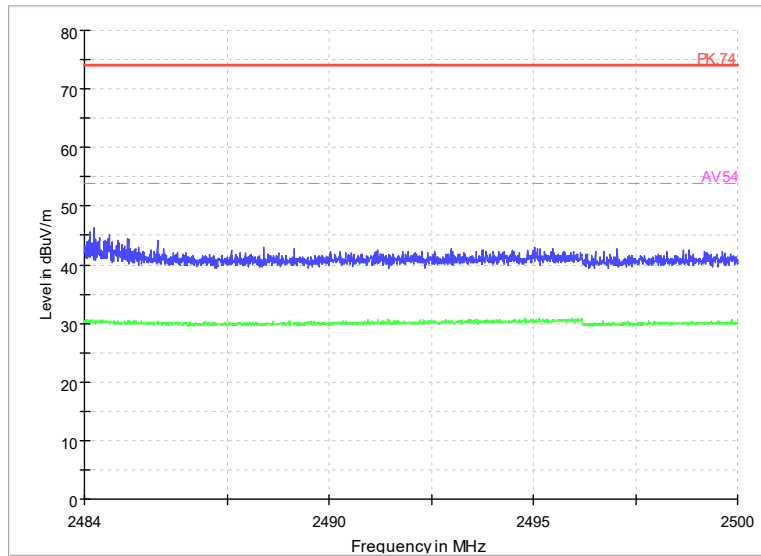
Radiated Emission Band Edge  
Channel No.:1  
Test Mode: 802.11n(HT20)  
Polarization: V



Radiated Emission Band Edge  
Channel No.:1  
Test Mode: 802.11n(HT20)  
Polarization: H



Radiated Emission Band Edge  
 Channel No.:11  
 Test Mode: 802.11n(HT20)  
 Polarization: V



Radiated Emission Band Edge  
 Channel No.:11  
 Test Mode: 802.11n(HT20)  
 Polarization: H



### Sample Calculations

After comparison, the worst case attitude is EUT lay down.

#### Determining Spurious Emissions Levels

A “reference path loss” is established and the  $A_{Rpl}$  is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

The measurement results are obtained as described below:

$$\text{Result} = P_{\text{mea}} + A_{Rpl}$$

Sample calculation:  $(5.53\text{dB}\mu\text{V}/\text{m}) = (24.63\text{dB}\mu\text{V}) + (-19.1\text{dB}/\text{m})$ , the corresponding frequency is 46.199MHz.

For 802.11b Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
40.185	5.53	-19.1	24.63	Vertical	40	34.47
58.0815	5.59	-19.7	25.29	Vertical	40	34.41
124.866	3.11	-21.1	24.21	Vertical	43.5	40.39
213.524	4.07	-19.5	23.57	Vertical	43.5	39.43
552.8785	11.18	-11.1	22.28	Vertical	46	34.82
931.4695	16.26	-5.2	21.46	Vertical	46	29.74

For 802.11g Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
33.007	4.84	-20.3	25.14	Vertical	40	35.16
58.712	5.24	-19.7	24.94	Vertical	40	34.76
97.9	5.13	-19.5	24.63	Vertical	43.5	38.37
309.457	6.61	-16.8	23.41	Vertical	46	39.39
545.943	11.33	-11.2	22.53	Vertical	46	34.67
931.9545	16.24	-5.2	21.44	Vertical	46	29.76

For 802.11n(HT20) Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
52.116	5.95	-19.1	25.05	Vertical	40	34.05
86.939	3.4	-20.6	24	Vertical	40	36.6
110.7525	5.01	-19.8	24.81	Vertical	43.5	38.49
309.554	6.56	-16.8	23.36	Vertical	46	39.44
513.3025	10.84	-11.9	22.74	Vertical	46	35.16
933.4095	16.34	-5.2	21.54	Vertical	46	29.66

For 802.11b Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.1805	6.2	-18.9	25.1	Vertical	40	33.8
58.0815	5.51	-19.7	25.21	Vertical	40	34.49

98.1425	5.12	-19.5	24.62	Vertical	43.5	38.38
206.152	3.94	-19.7	23.64	Vertical	43.5	39.56
540.705	11.25	-11.4	22.65	Vertical	46	34.75
917.9865	15.99	-5.3	21.29	Vertical	46	30.01

For 802.11g Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
39.7485	5.68	-19.2	24.88	Vertical	40	34.32
58.615	5.31	-19.7	25.01	Vertical	40	34.69
115.2145	3.77	-20.1	23.87	Vertical	43.5	39.73
288.9415	5.91	-17.4	23.31	Vertical	46	40.09
543.4695	11.25	-11.3	22.55	Vertical	46	34.75
907.0255	15.91	-5.4	21.31	Vertical	46	30.09

For 802.11n(HT20) Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
50.952	5.87	-19	24.87	Vertical	40	34.13
57.9845	5.45	-19.7	25.15	Vertical	40	34.55
97.9485	5.21	-19.5	24.71	Vertical	43.5	38.29
213.815	4.08	-19.5	23.58	Vertical	43.5	39.42
545.555	11.3	-11.2	22.5	Vertical	46	34.7
924.4855	16.06	-5.3	21.36	Vertical	46	29.94

For 802.11b Channel No.:11

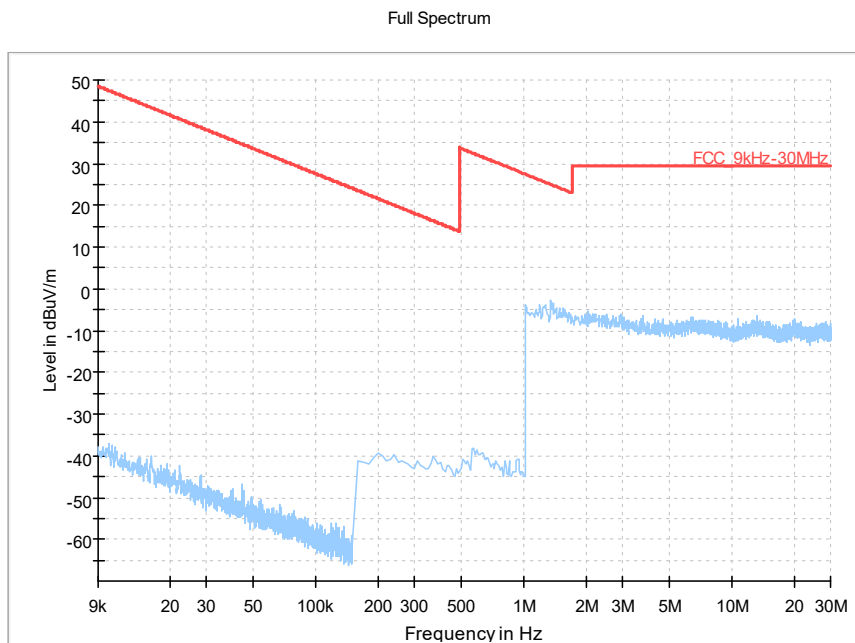
Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.5685	6.07	-18.9	24.97	Vertical	40	33.93
86.7935	3.49	-20.6	24.09	Vertical	40	36.51
109.831	4.63	-19.7	24.33	Vertical	43.5	38.87
303.2005	6.42	-17	23.42	Vertical	46	39.58
519.85	10.95	-11.8	22.75	Vertical	46	35.05
932.682	16.18	-5.2	21.38	Vertical	46	29.82

For 802.11g Channel No.:11

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
40.3305	5.3	-19.1	24.4	Vertical	40	34.7
57.16	5.14	-19.6	24.74	Vertical	40	34.86
111.3345	4.79	-19.8	24.59	Vertical	43.5	38.71
189.9045	3.15	-20.5	23.65	Vertical	43.5	40.35
549.629	11.09	-11.2	22.29	Vertical	46	34.91
926.5225	16.2	-5.2	21.4	Vertical	46	29.8

For 802.11n(HT20) Channel No.:11

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
51.3885	6.11	-19	25.11	Vertical	40	33.89
55.511	3.67	-19.4	23.07	Vertical	40	36.33
119.337	3.45	-20.4	23.85	Vertical	43.5	40.05
282.103	5.75	-17.6	23.35	Vertical	46	40.25
552.0055	11.27	-11.1	22.37	Vertical	46	34.73
927.8805	16.31	-5.2	21.51	Vertical	46	29.69



Frequency Range: 9kHz -30MHz

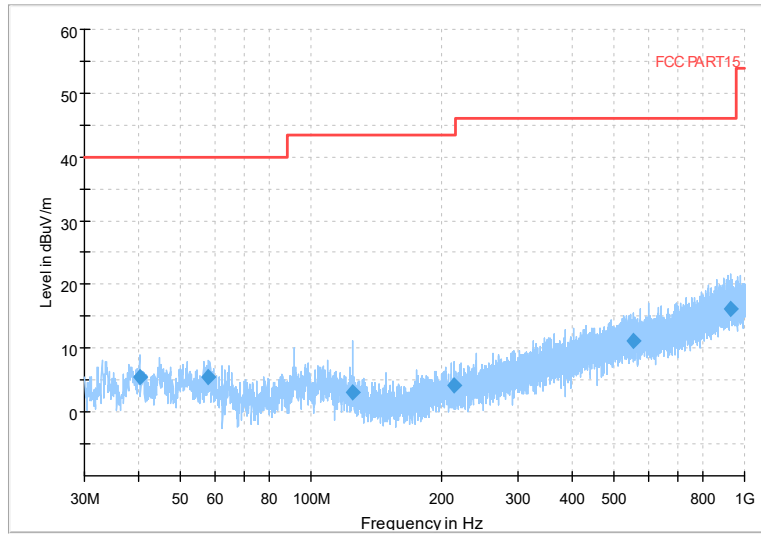
Detector: QP mode

Note: The relevant tests have been performed in order to verify in which mode would have the worst features, the result show above is the worst case.

Carrier frequency (MHz): 2412

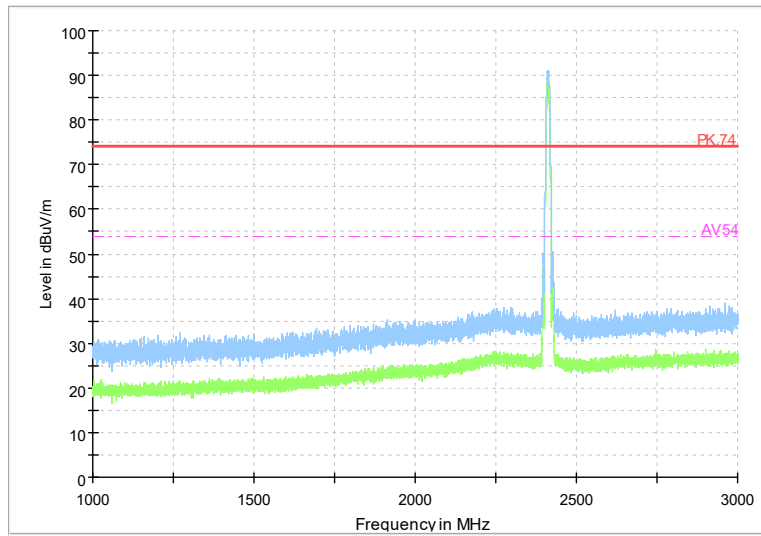
Channel No.:1

Full Spectrum



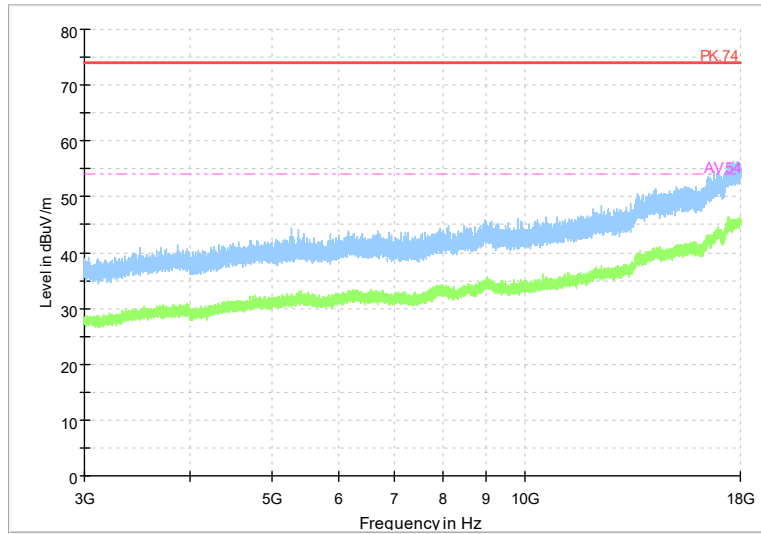
Frequency Range 30MHz -1GHz  
 Detector: QP mode  
 Modulation type: 802.11b

Full Spectrum



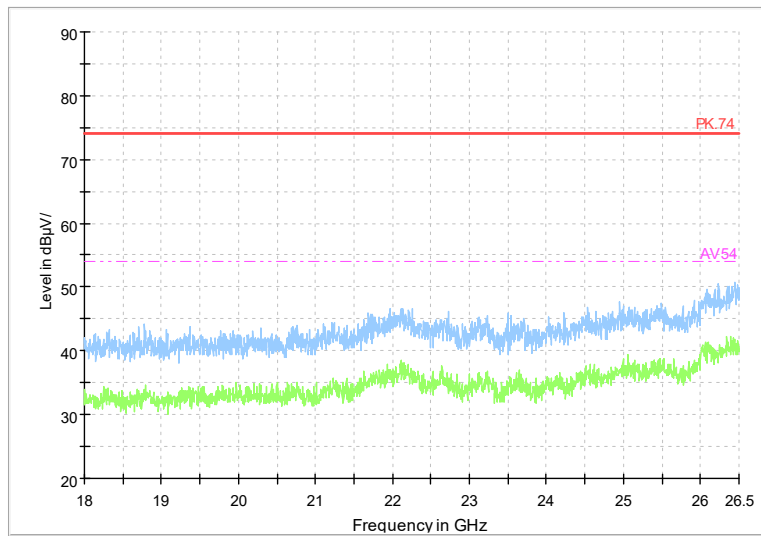
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

Full Spectrum



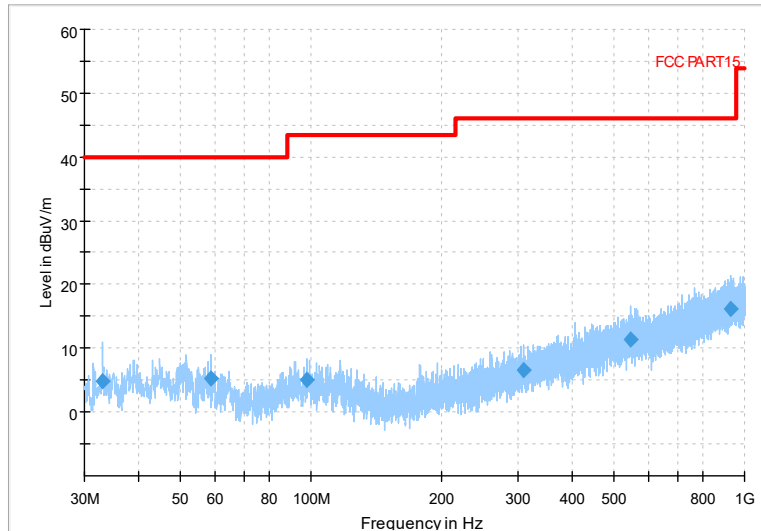
Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

Full Spectrum



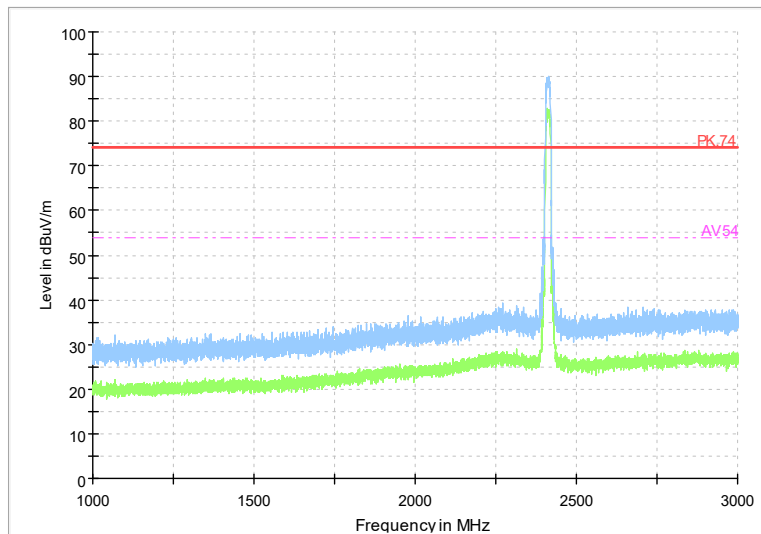
Frequency Range: 18GHz -26GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

Full Spectrum



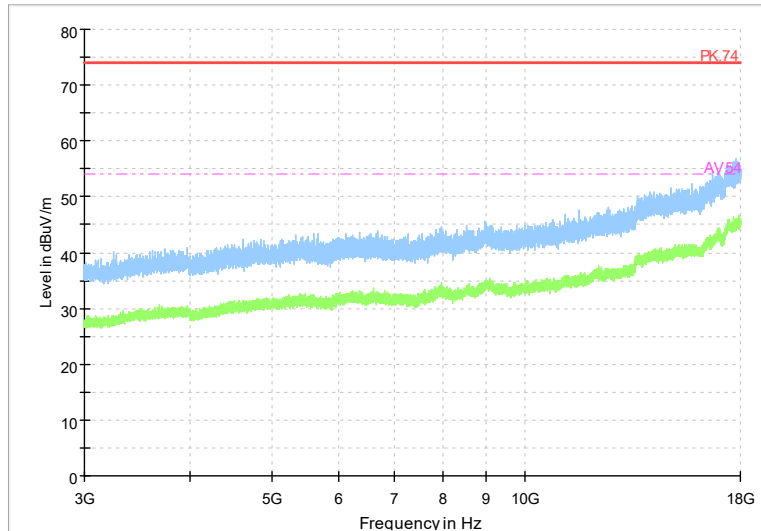
Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Modulation type: 802.11g

Full Spectrum



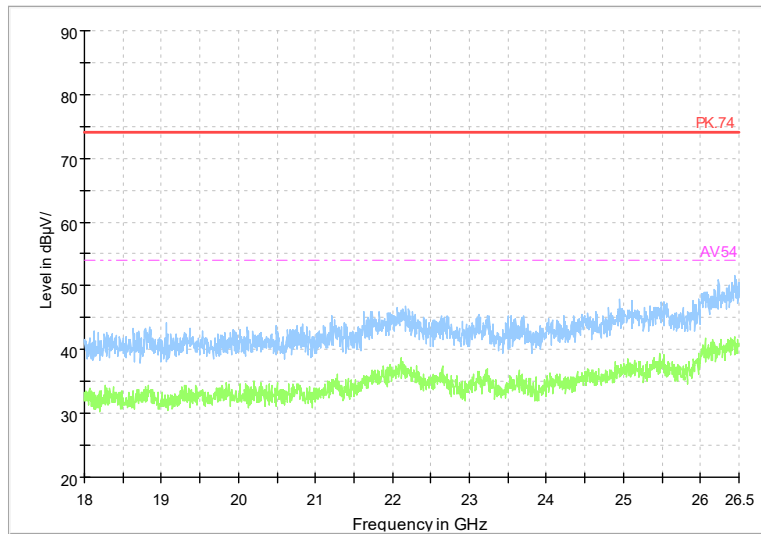
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



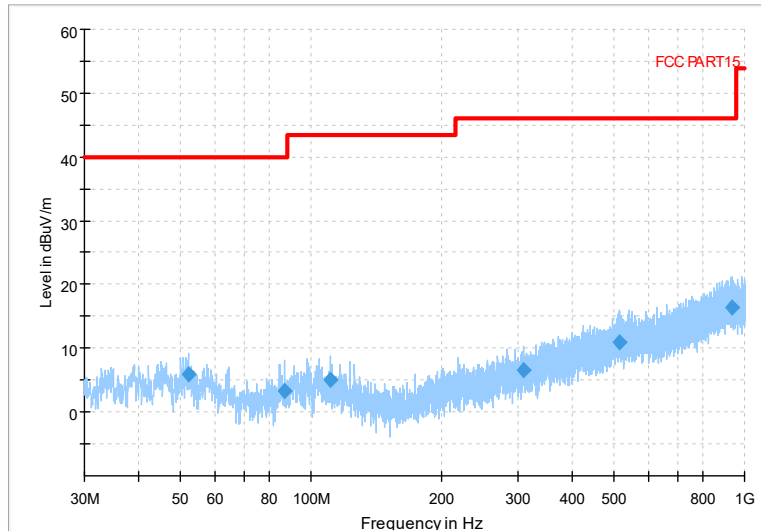
Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



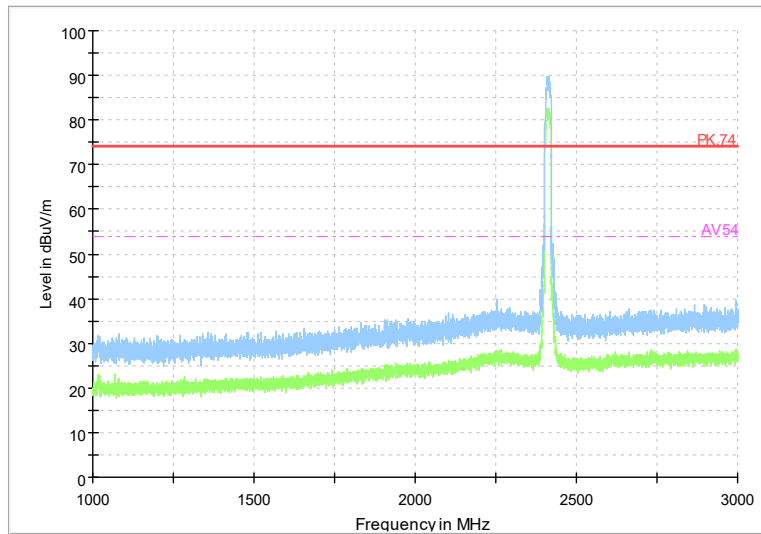
Frequency Range: 18GHz -26GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Modulation type: 802.11n(HT20)

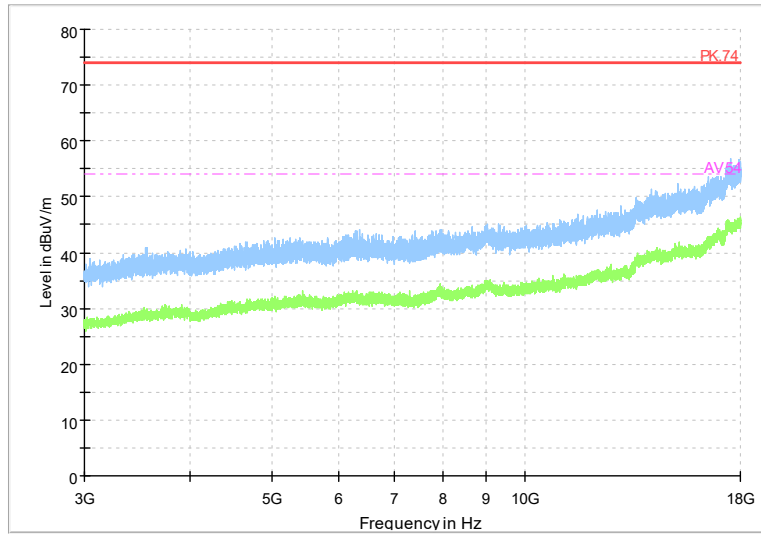
Full Spectrum



Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT20)

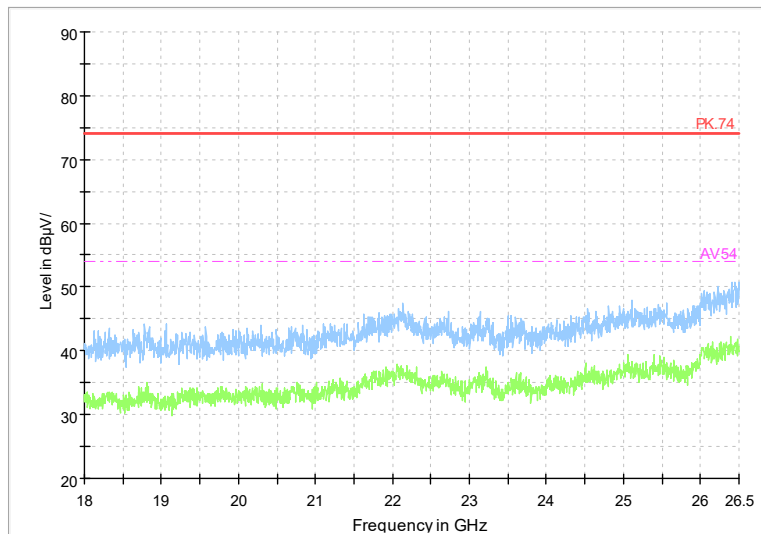


Full Spectrum



Frequency Range: 3GHz -18GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11n(HT20)

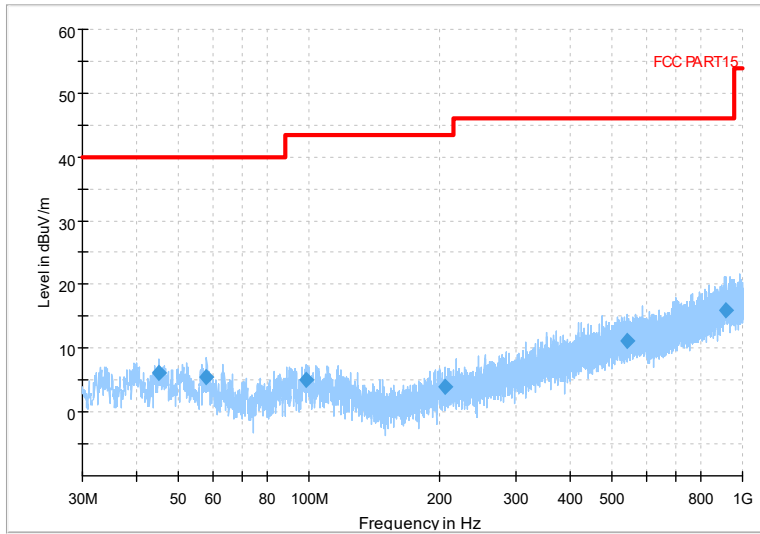
Full Spectrum



Frequency Range: 18GHz -26GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11n(HT20)

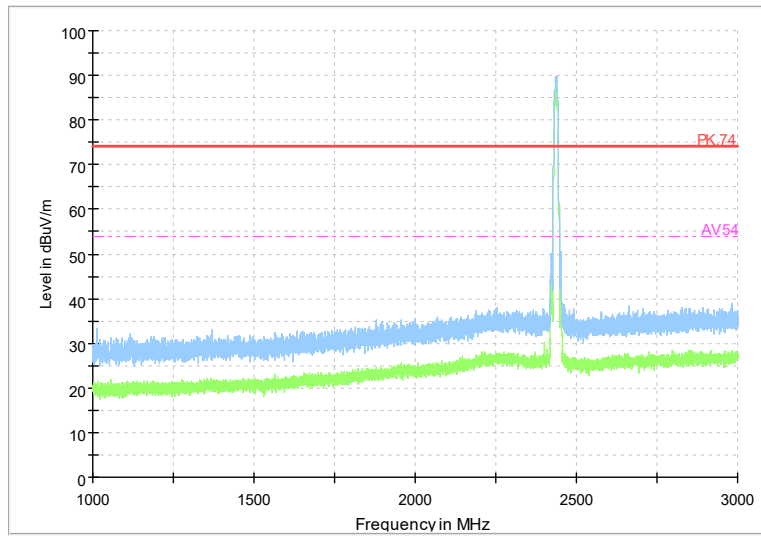
Carrier frequency (MHz): 2437  
Channel No.:6

Full Spectrum



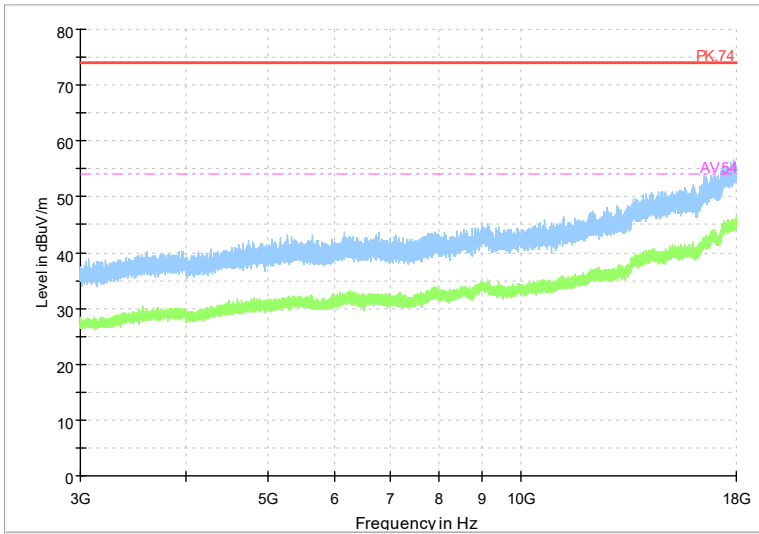
Frequency Range: 30MHz -1GHz  
Detector: QP mode  
Modulation type: 802.11b

Full Spectrum



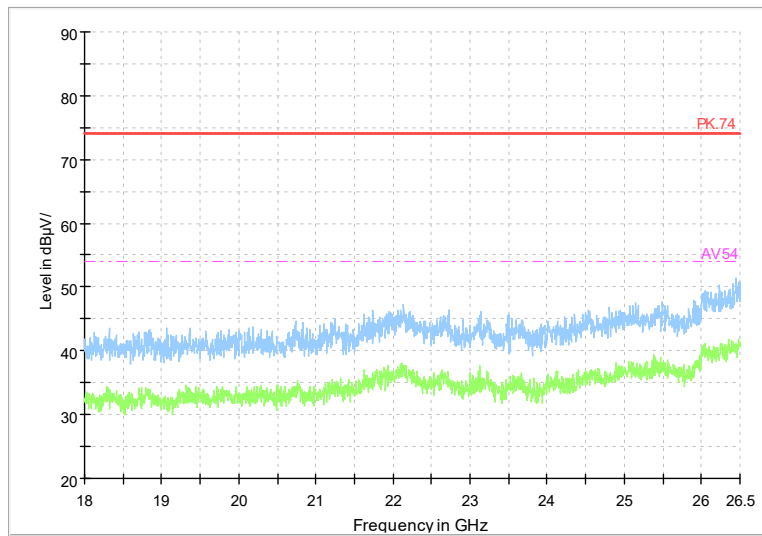
Frequency Range: 1GHz -3GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11b

Full Spectrum



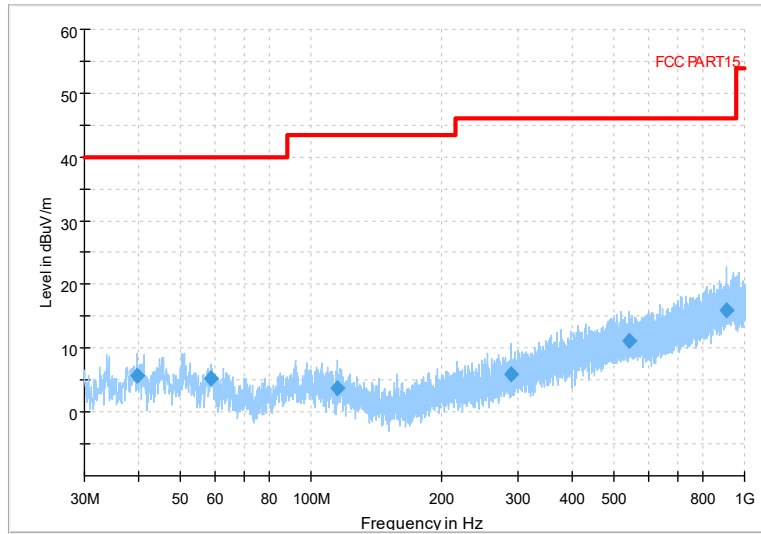
Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

Full Spectrum



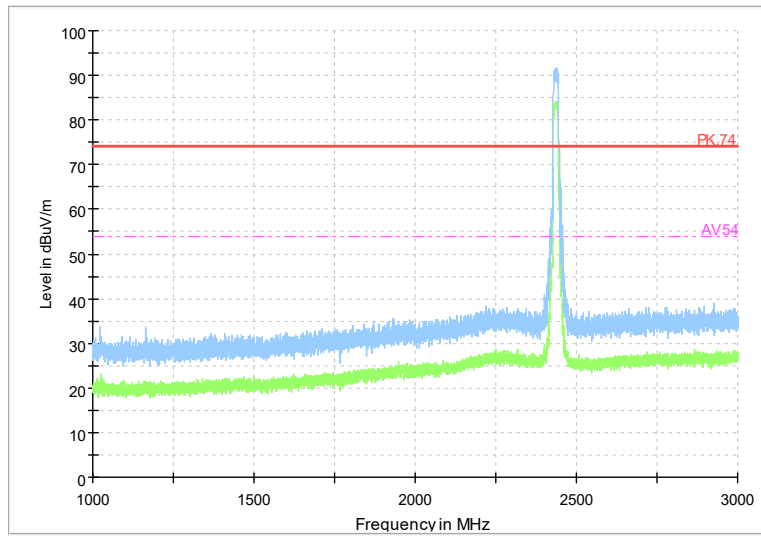
Frequency Range: 18GHz -26GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

Full Spectrum



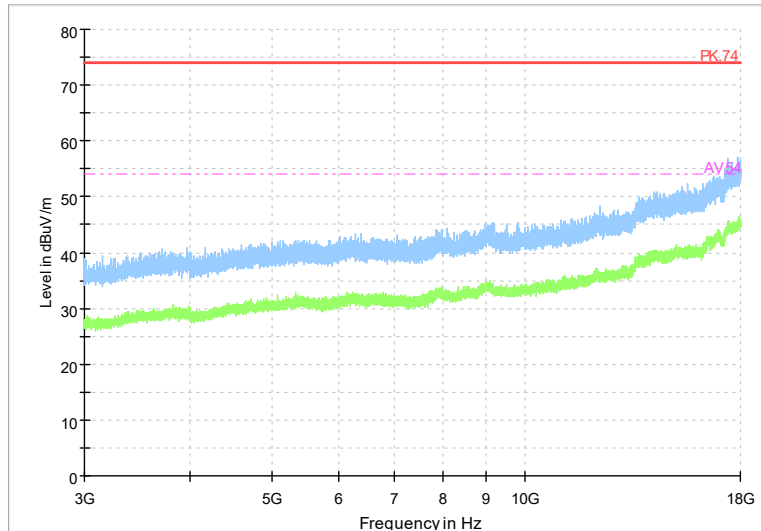
Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Modulation type: 802.11g

Full Spectrum



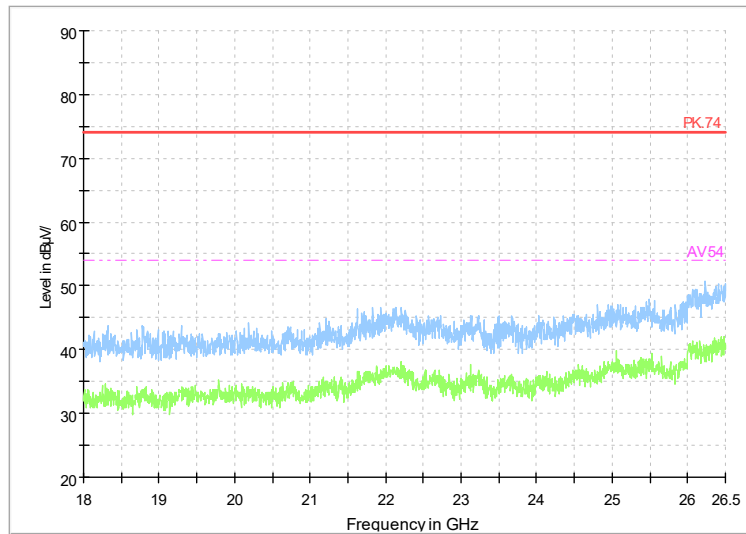
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



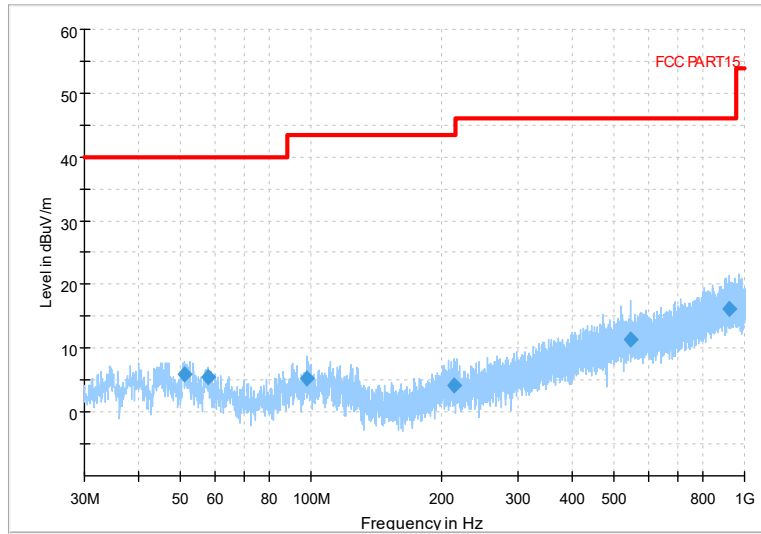
Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



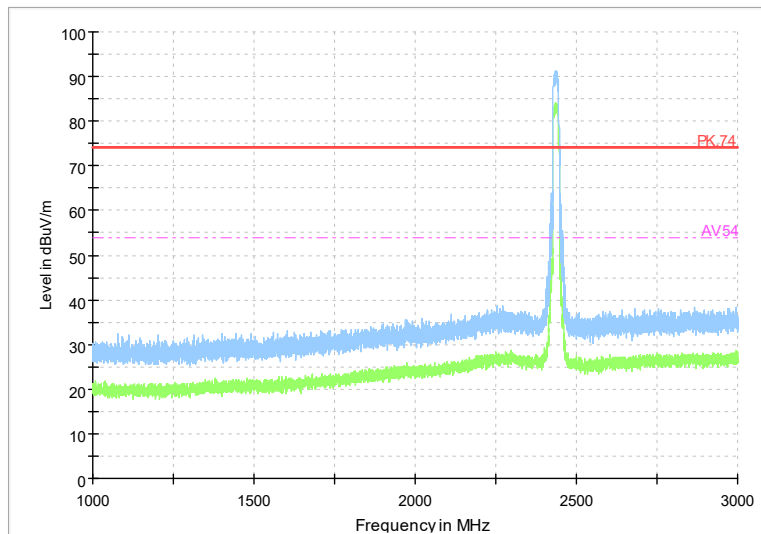
Frequency Range: 18GHz -26GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



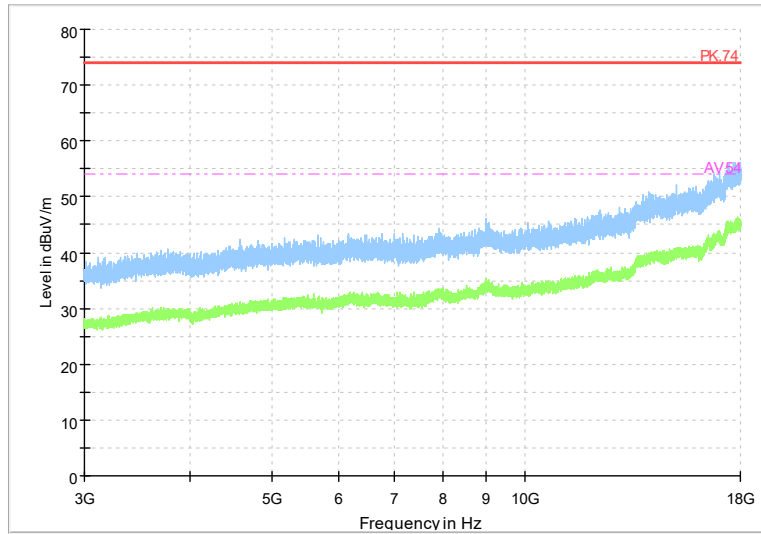
Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Modulation type: 802.11n(HT20)

Full Spectrum



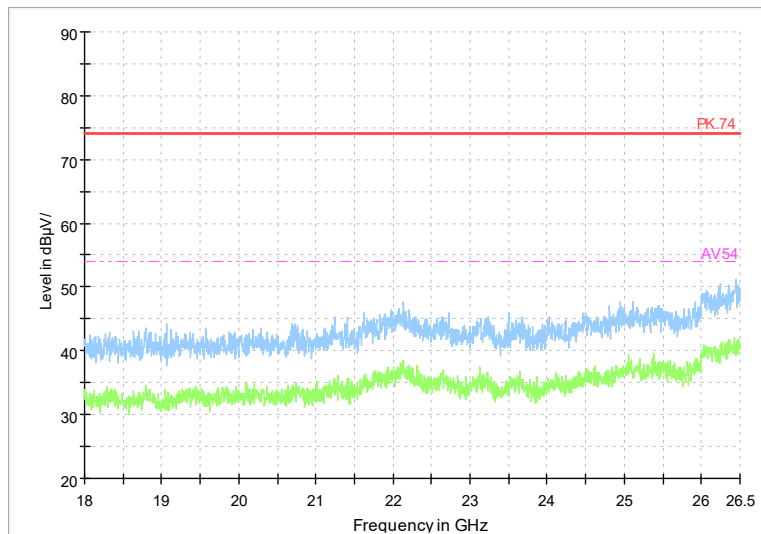
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT20)

Full Spectrum



Frequency Range: 3GHz -18GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11n(HT20)

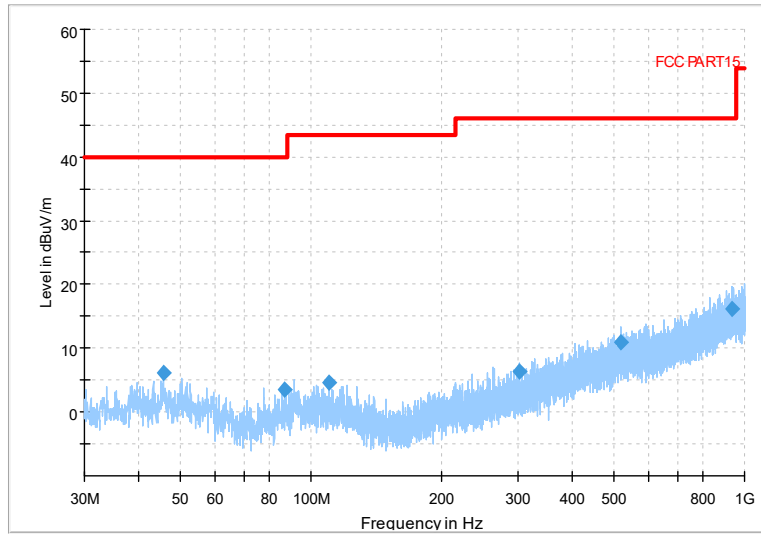
Full Spectrum



Frequency Range: 18GHz -26GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11n(HT20)

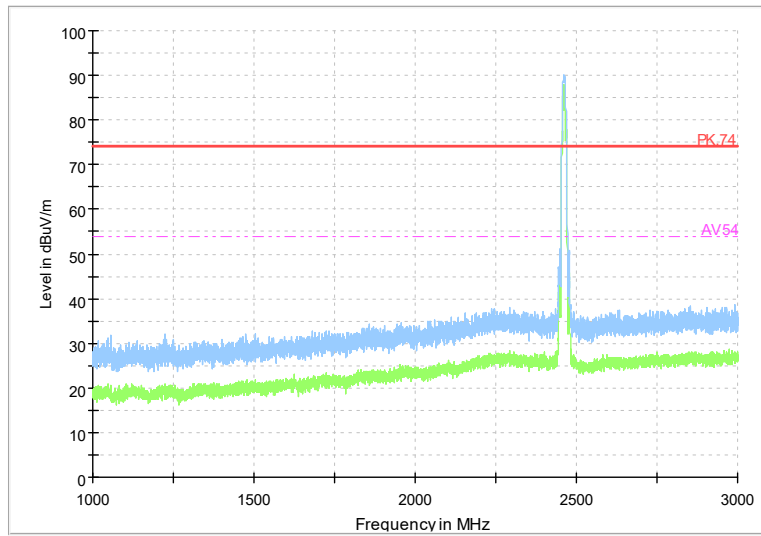
Carrier frequency (MHz): 2462  
Channel No.:11

Full Spectrum



Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Modulation type: 802.11b

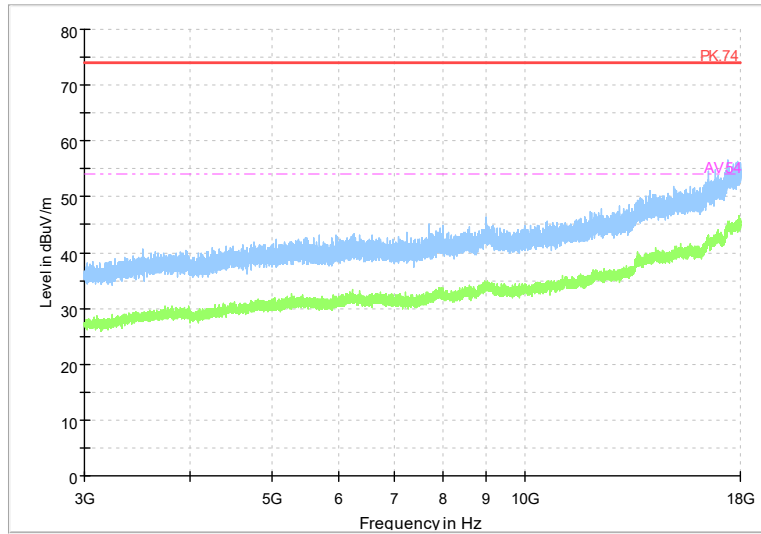
Full Spectrum



Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

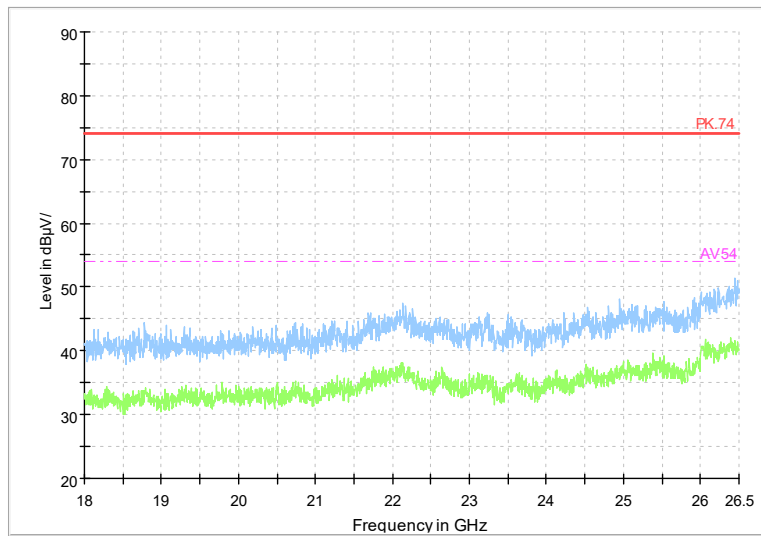


Full Spectrum



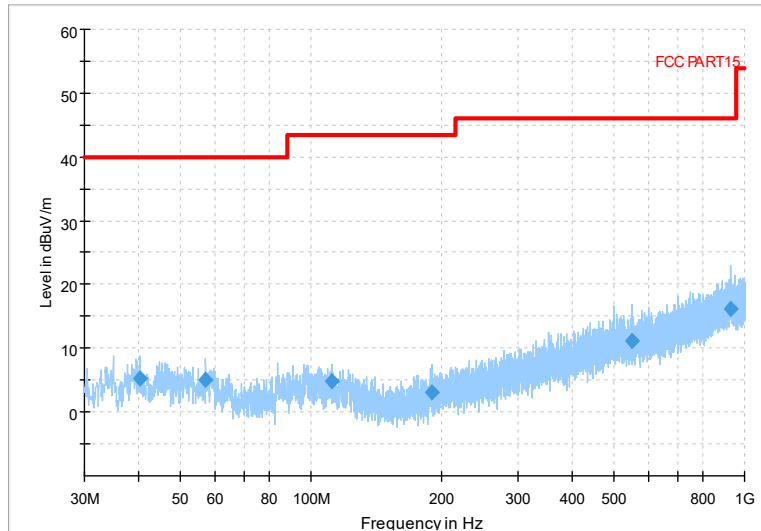
Frequency Range: 3GHz -18GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11b

Full Spectrum



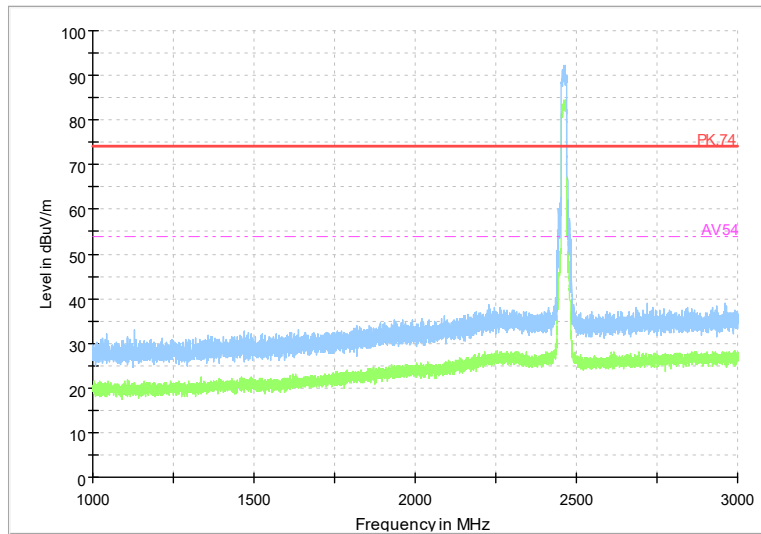
Frequency Range: 18GHz -26GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11b

Full Spectrum



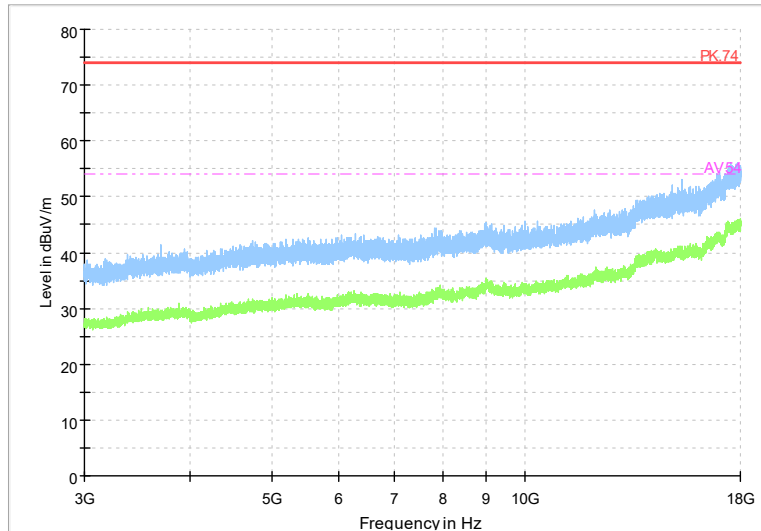
Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Modulation type: 802.11g

Full Spectrum



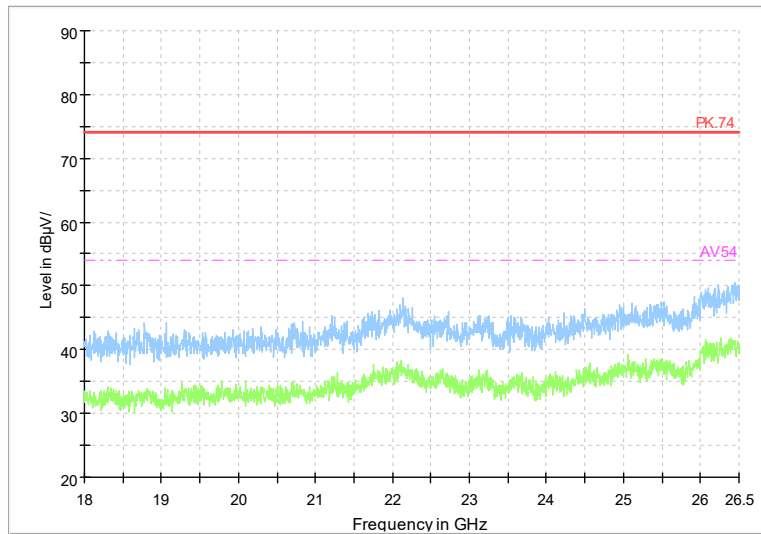
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



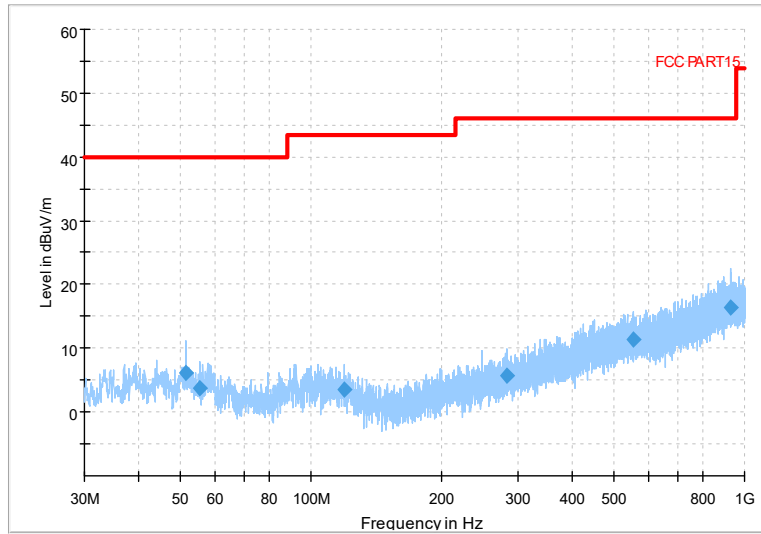
Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



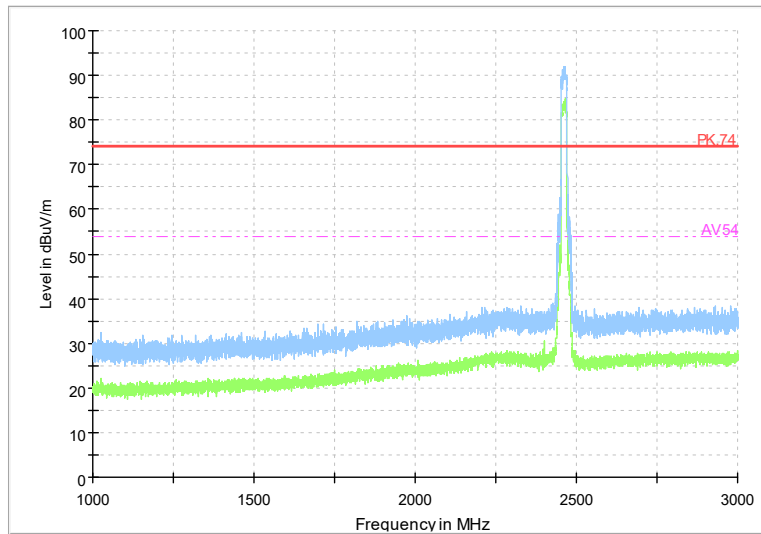
Frequency Range: 18GHz -26GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



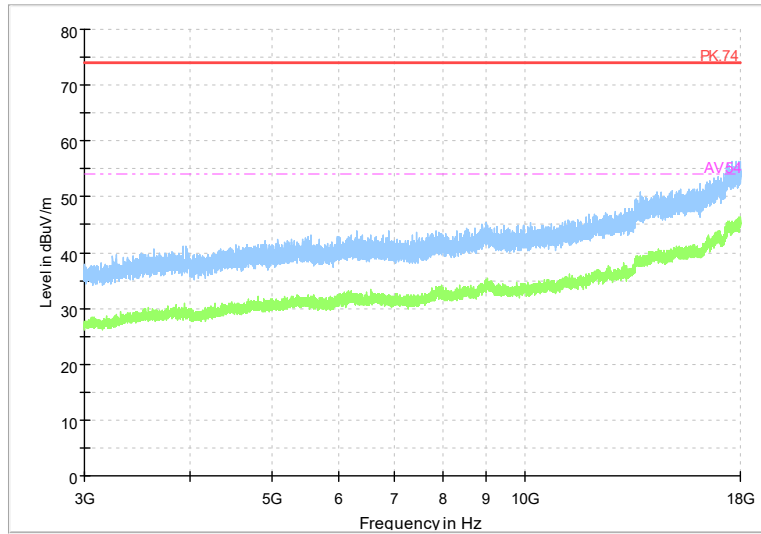
Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Modulation type: 802.11n(HT20)

Full Spectrum



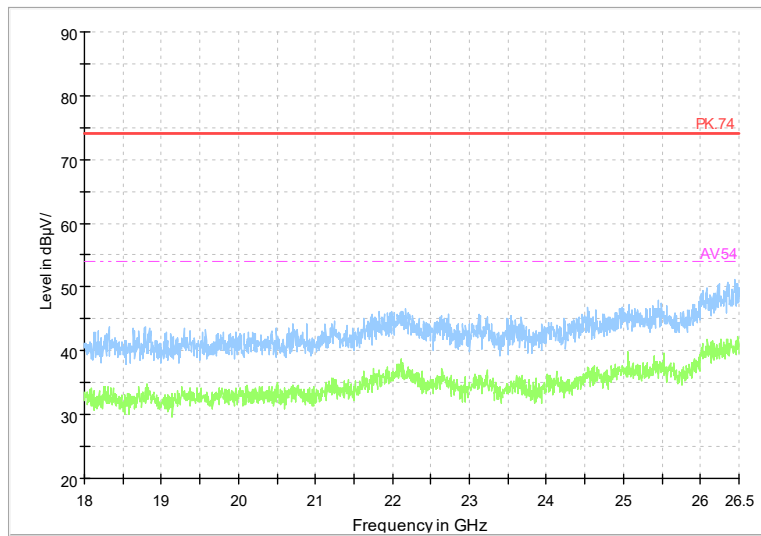
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT20)

Full Spectrum



Frequency Range: 3GHz -18GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11n(HT20)

Full Spectrum



Frequency Range: 18GHz -26GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11n(HT20)

---End of Test Report---