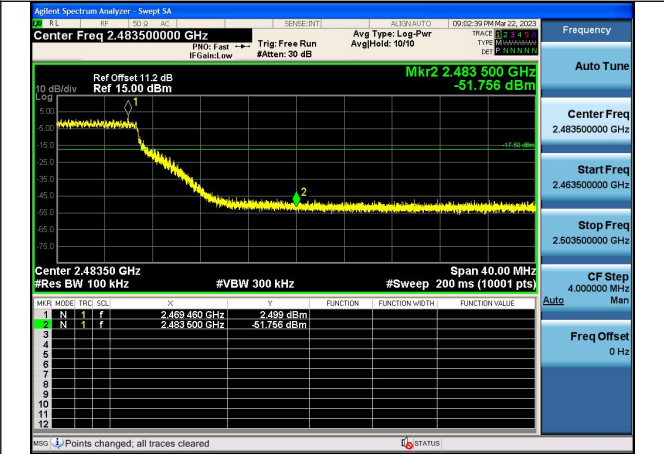
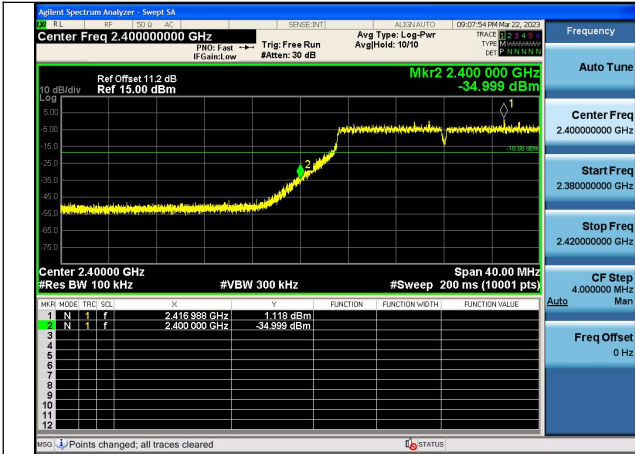


Test Mode:802.11g 2412MHz Chain1

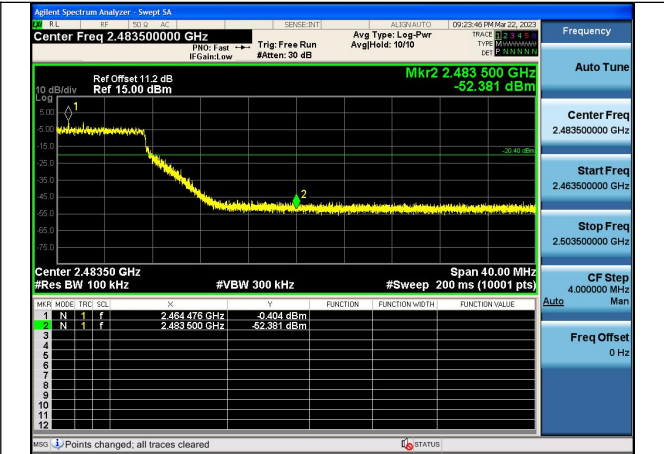


Test Mode:802.11g 2462MHz Chain1

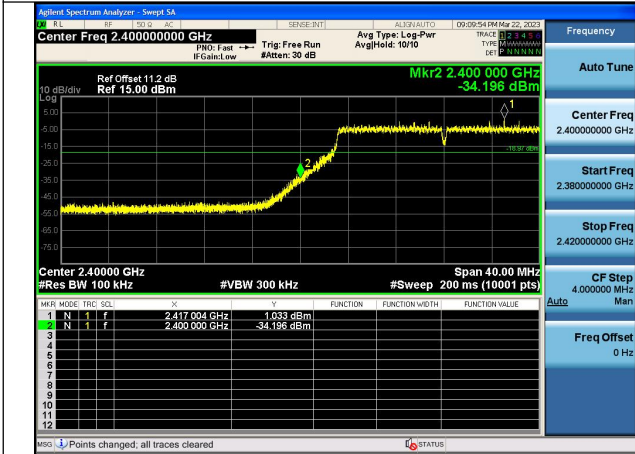
Test Mode: 802.11n HT20



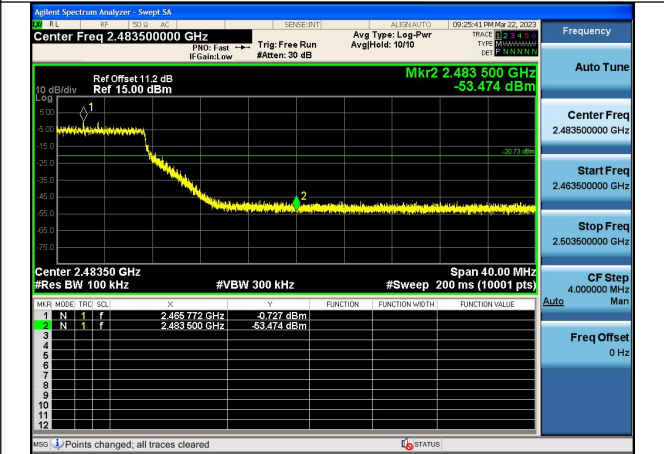
Test Mode:802.11n HT20 2412MHz Chain0



Test Mode:802.11n HT20 2462MHz Chain0

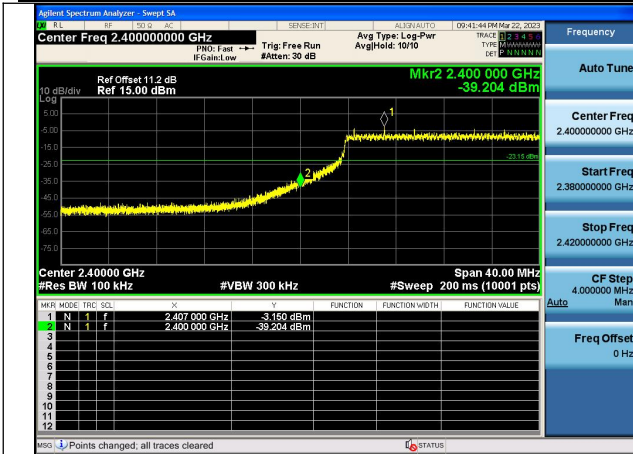


Test Mode:802.11n HT20 2412MHz Chain1



Test Mode:802.11n HT20 2462MHz Chain1

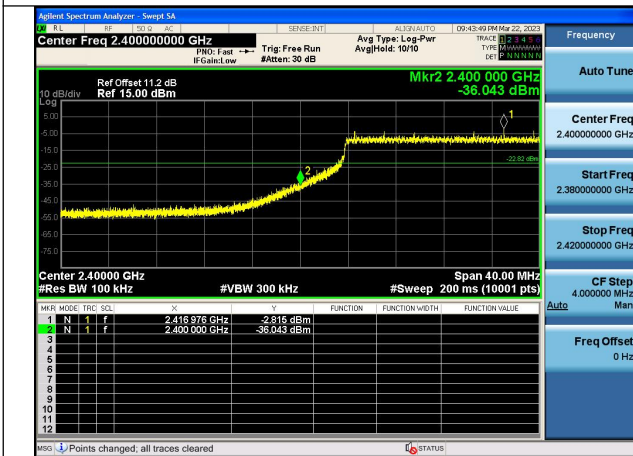
Test Mode: 802.11n HT40



Test Mode:802.11n HT40 2422MHz Chain0



Test Mode:802.11n HT40 2452MHz Chain0



Test Mode:802.11n HT40 2422MHz Chain1



Test Mode:802.11n HT40 2452MHz Chain1

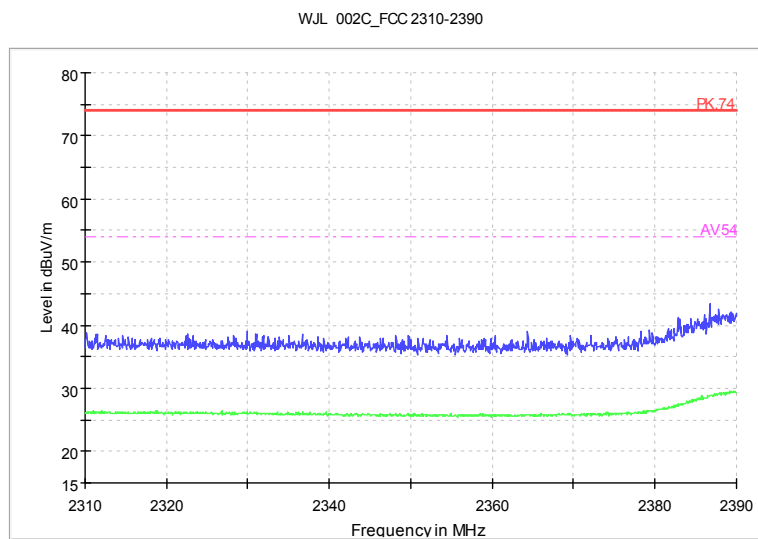
**APPENDIX B – TEST DATA OF RADIATED EMISSION**

Note1:Both horizontal and vertical polarizations of the antenna are set to make the measurement.

Note2:Because the test result is more than 20dB below the limit value, there was no point being taken

**Radiated Emission Band Edge**

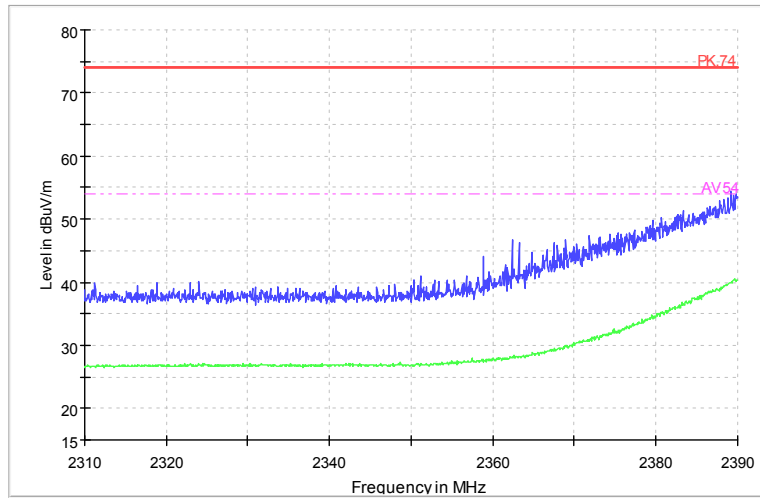
After comparison the worst case attitude is EUT vertical. The relevant tests have been performed in order to verify in which mode would have the worst features, the result show above is the worst case.



Comment

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

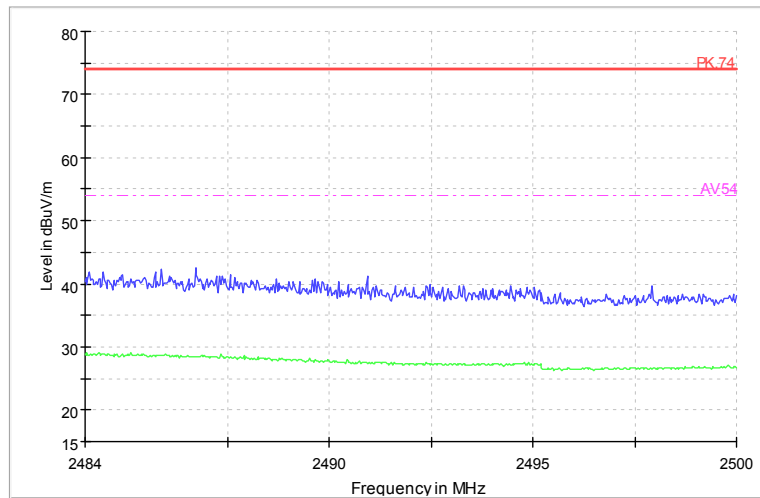
WJL 002C\_FCC 2310-2390



Comment

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

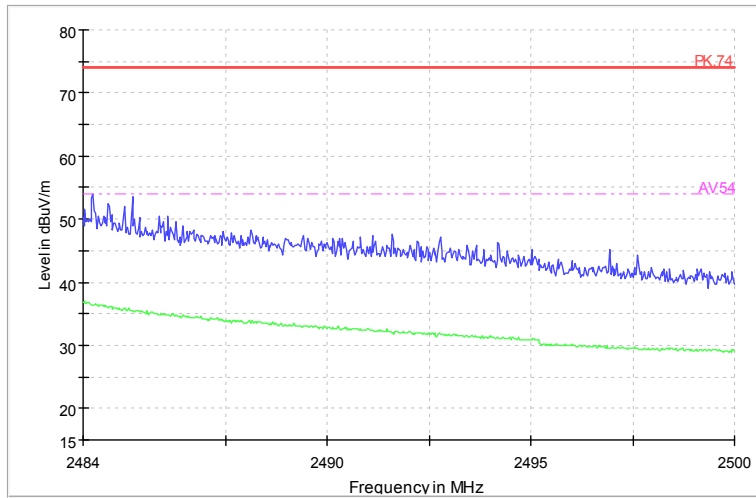
WJL 002C\_FCC 2483-2500



Comment

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

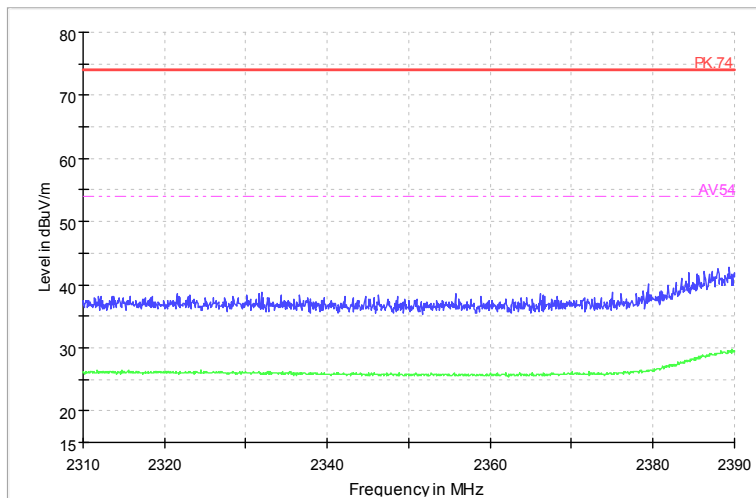
WJL 002C\_FCC 2483-2500



Comment

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

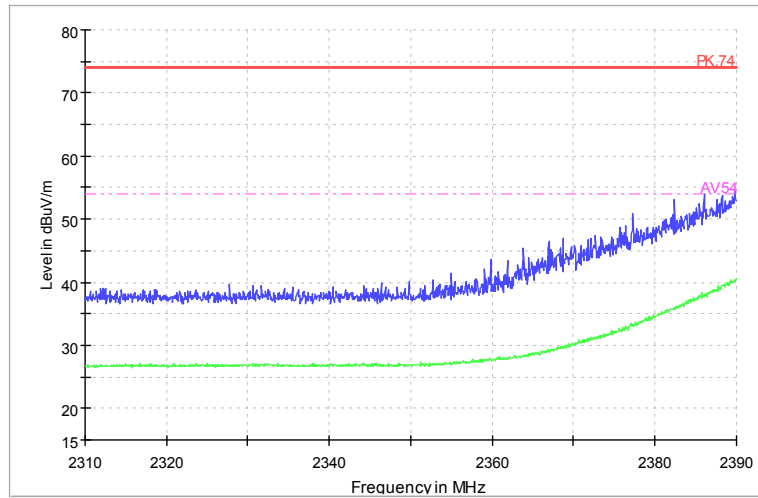
WJL 002C\_FCC 2310-2390



Comment

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

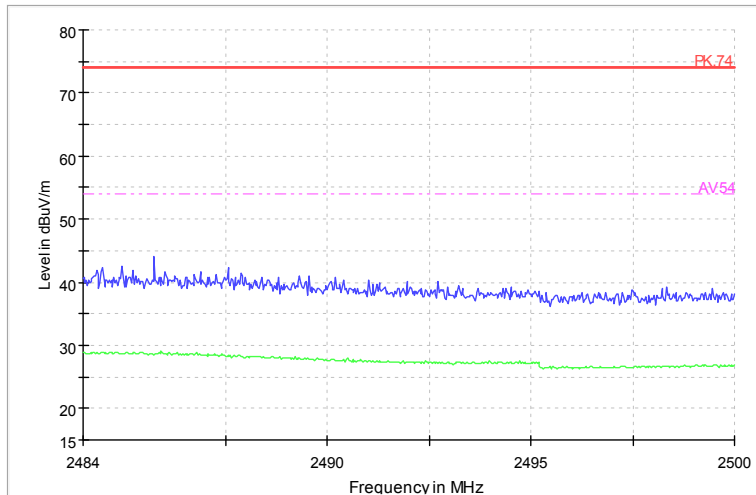
WJL 002C\_FCC 2310-2390



Comment

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

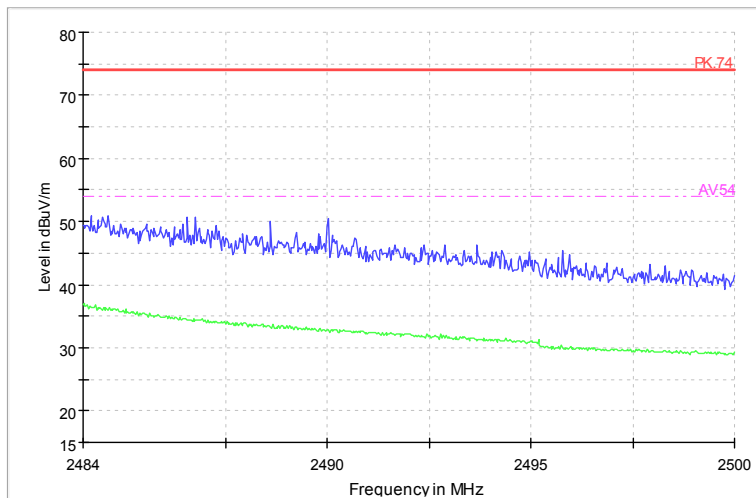
WJL 002C\_FCC 2483-2500



Comment

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

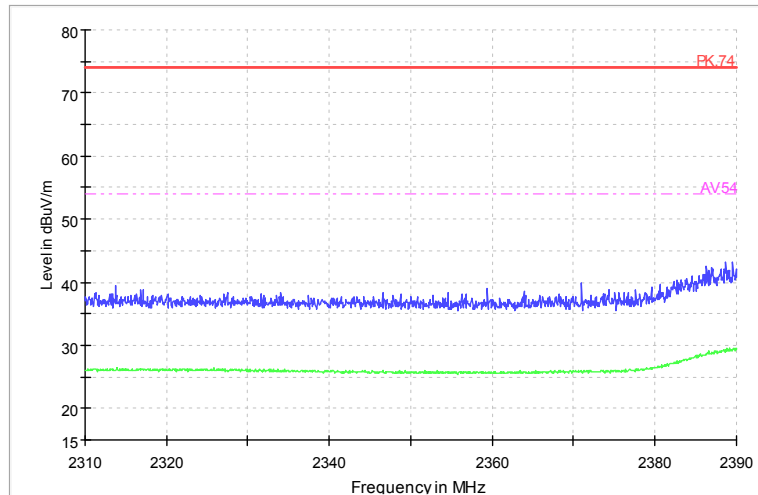
WJL 002C\_FCC 2483-2500



Comment

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

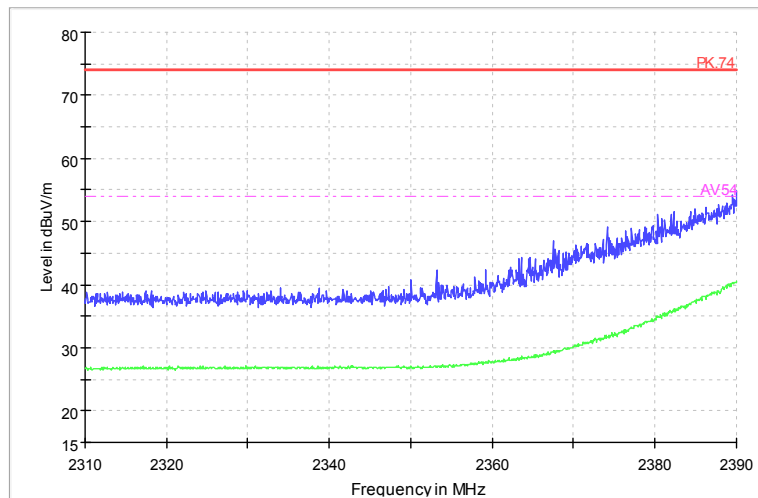
WJL 002C\_FCC 2310-2390



Comment

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

WJL 002C\_FCC 2310-2390

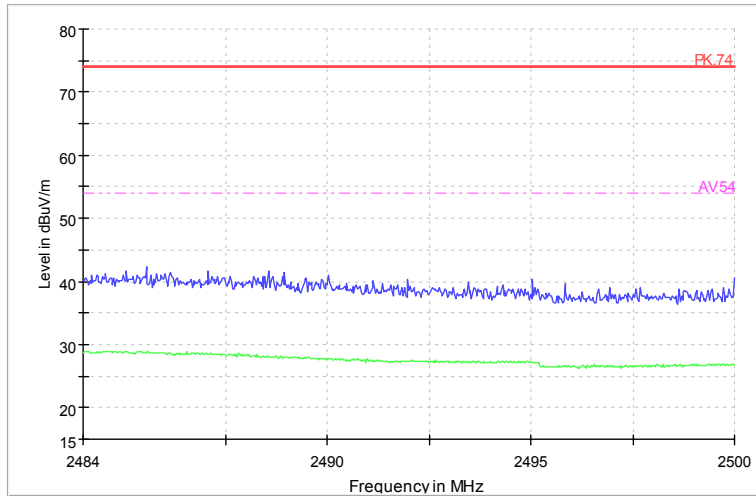


Comment

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



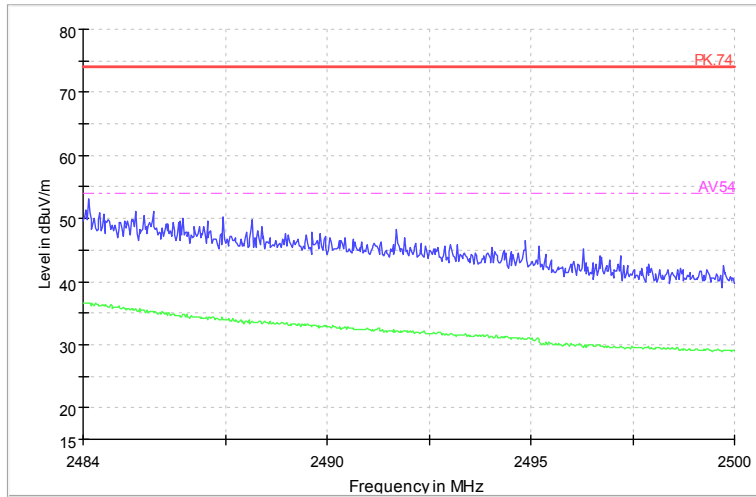
WJL 002C\_FCC 2483-2500



Comment

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

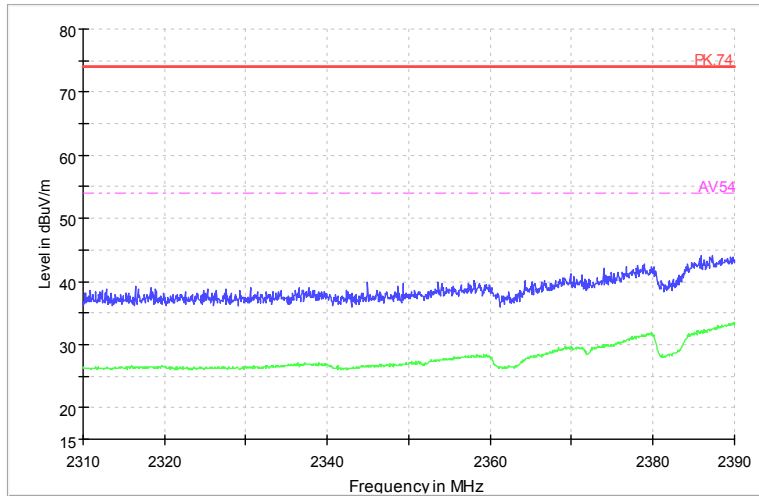
WJL 002C\_FCC 2483-2500



Comment

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

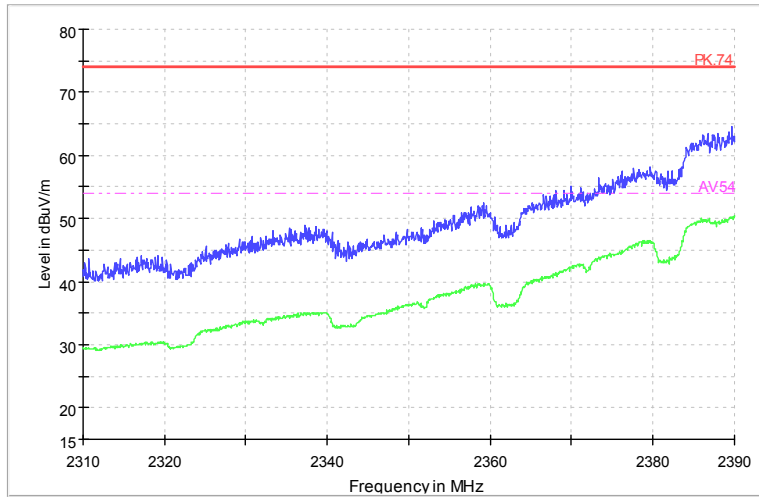
WJL 002C\_FCC 2310-2390



Comment

**Radiated Emission Band Edge**  
 Channel No.:3  
 Test Mode: 802.11n40  
 Polarization: V

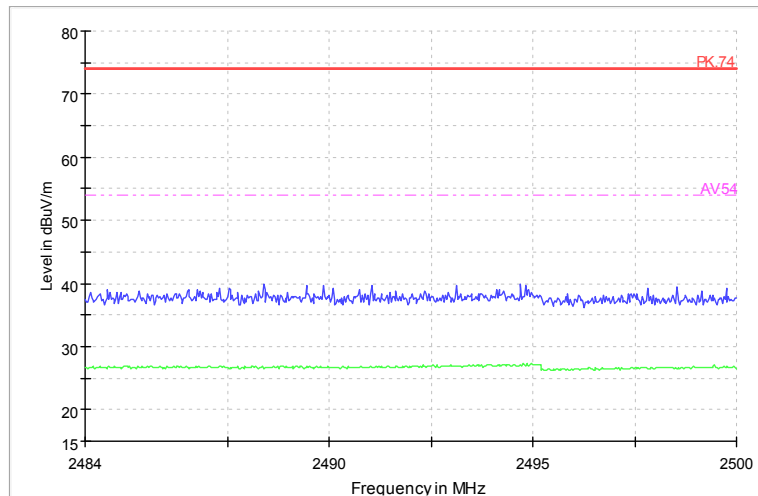
WJL 002C\_FCC 2310-2390



Comment

**Radiated Emission Band Edge**  
 Channel No.:3  
 Test Mode: 802.11n40  
 Polarization: H

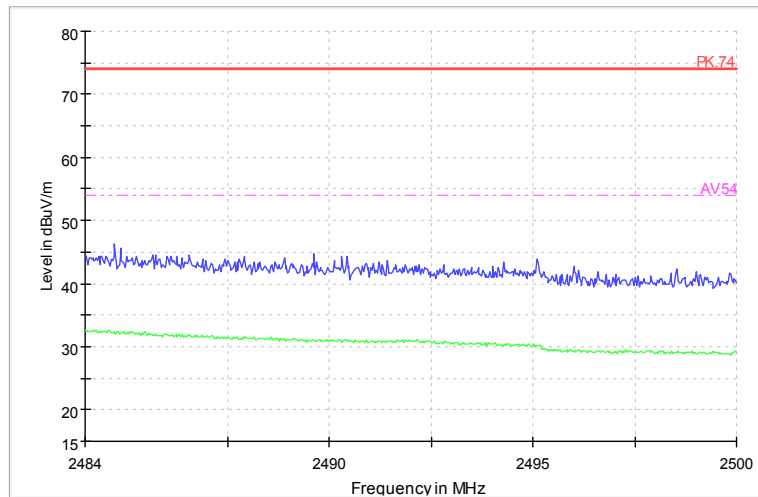
WJL 002C\_FCC 2483-2500



Comment

**Radiated Emission Band Edge**  
 Channel No.:9  
 Test Mode: 802.11n40  
 Polarization: V

WJL 002C\_FCC 2483-2500



Comment

**Radiated Emission Band Edge**  
 Channel No.:9  
 Test Mode: 802.11n40  
 Polarization: H

Test result

*Sample Calculations*

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:  $(2.35\text{dB}\mu\text{V}/\text{m}) = (20.55\text{dB}\mu\text{V}/\text{m}) + (-18.2\text{dB})$ , the corresponding frequency is 42.367500MHz.

The worst case attitude: The Module lay down.

For 802.11b Channel No.:1

Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
42.367500	2.35	40.00	37.65	-18.2	20.55	Vertical
57.160000	4.65	40.00	35.35	-18.5	23.15	Vertical
99.209500	3.87	43.50	39.63	-19.2	23.07	Vertical
180.786500	2.62	43.50	40.88	-20.9	23.52	Vertical
545.312500	11.29	46.00	34.71	-9.8	21.09	Vertical
898.635000	16.33	46.00	29.67	-3.3	19.63	Vertical

For 802.11g Channel No.:1

Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
51.485500	5.27	40.00	34.73	-17.7	5.27	Vertical
56.917500	4.18	40.00	35.82	-18.4	4.18	Vertical
144.120500	1.08	43.50	42.42	-22.7	1.08	Vertical
199.459000	2.44	43.50	41.06	-19.2	2.44	Vertical
327.838500	7.06	46.00	38.94	-15.2	7.06	Vertical
957.126000	16.64	46.00	29.36	-2.6	16.64	Vertical

For 802.11n(HT20) Channel No.:1

Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
51.776500	5.37	40.00	34.63	-17.8	23.17	Vertical
57.451000	4.56	40.00	35.44	-18.5	23.06	Vertical
98.967000	5.93	43.50	37.57	-19.3	25.23	Vertical
264.109500	3.66	46.00	42.34	-16.9	20.56	Vertical
505.203000	11.01	46.00	34.99	-10.7	21.71	Vertical
925.504000	16.50	46.00	29.50	-2.9	19.40	Vertical

For 802.11b Channel No.:6

Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
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40.912500	4.38	40.00	35.62	-18.4	22.78	Vertical
59.003000	4.47	40.00	35.53	-18.7	23.17	Vertical
98.433500	3.27	43.50	40.23	-19.4	22.67	Vertical
202.466000	1.88	43.50	41.62	-19.0	20.88	Vertical
532.945000	11.31	46.00	34.69	-10.1	21.41	Vertical
905.279500	16.26	46.00	29.74	-3.2	19.46	Vertical

For 802.11g Channel No.:6

Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
30.533500	0.78	40.00	39.22	-21.1	21.88	Vertical
54.056000	2.77	40.00	37.23	-18.1	20.87	Vertical
104.932500	3.01	43.50	40.49	-19.4	22.41	Vertical
285.498000	3.75	46.00	42.25	-16.4	20.15	Vertical
532.993500	11.31	46.00	34.69	-10.1	21.41	Vertical
887.819500	16.12	46.00	29.88	-3.5	19.62	Vertical

For 802.11n(HT20) Channel No.:6

Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
50.952000	5.04	40.00	34.96	-17.6	22.64	Vertical
57.063000	4.35	40.00	35.65	-18.4	22.75	Vertical
98.627500	5.89	43.50	37.61	-19.4	25.29	Vertical
280.745000	3.65	46.00	42.35	-16.6	20.25	Vertical
544.585000	11.24	46.00	34.76	-9.8	21.04	Vertical
883.406000	16.00	46.00	30.00	-3.6	19.60	Vertical

For 802.11b Channel No.:11

Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
50.855000	5.01	40.00	34.99	-17.6	22.61	Vertical
85.969000	-0.02	40.00	40.02	-22.6	22.58	Vertical
116.669500	2.12	43.50	41.38	-20.8	22.92	Vertical
199.701500	2.51	43.50	40.99	-19.2	21.71	Vertical
531.102000	11.24	46.00	34.76	-10.1	21.34	Vertical
946.068000	16.35	46.00	29.65	-2.8	19.15	Vertical

For 802.11g Channel No.:11

Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
52.698000	4.58	40.00	35.42	-17.9	22.48	Vertical
57.839000	4.54	40.00	35.46	-18.5	23.04	Vertical
105.272000	2.85	43.50	40.65	-19.4	22.25	Vertical

196.500500	2.43	43.50	41.07	-19.3	21.73	Vertical
499.480000	10.87	46.00	35.13	-10.8	21.67	Vertical
950.627000	16.47	46.00	29.53	-2.7	19.17	Vertical

For 802.11n(HT20) Channel No.:11

Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
43.919500	4.33	40.00	35.67	-18.0	22.33	Vertical
56.772000	3.98	40.00	36.02	-18.4	22.38	Vertical
99.306500	5.67	43.50	37.83	-19.2	24.87	Vertical
295.004000	3.50	46.00	42.50	-16.2	19.70	Vertical
545.797500	11.10	46.00	34.90	-9.8	20.90	Vertical
942.430500	16.34	46.00	29.66	-2.8	19.14	Vertical

For 802.11 n(HT40) Channel No.:3

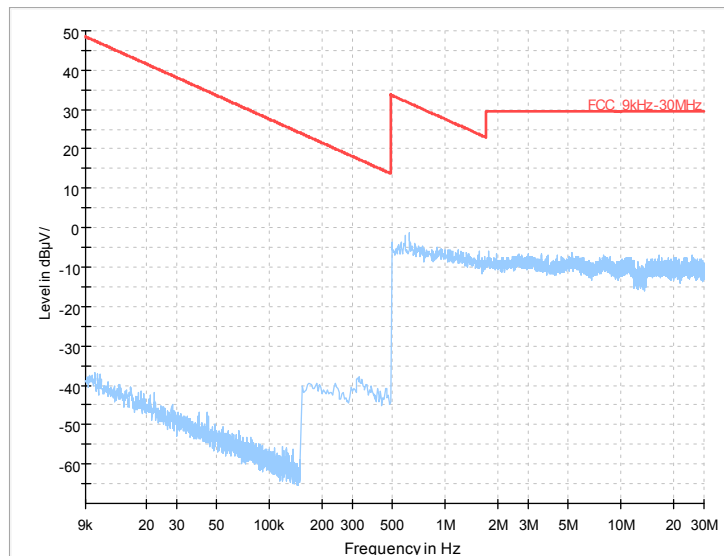
Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
39.554500	5.28	40.00	34.72	-18.6	23.88	Vertical
57.839000	4.56	40.00	35.44	-18.5	23.06	Vertical
118.658000	3.07	43.50	40.43	-21.2	24.27	Vertical
284.382500	3.77	46.00	42.23	-16.5	20.27	Vertical
512.090000	11.13	46.00	34.87	-10.5	21.63	Vertical
940.781500	16.40	46.00	29.60	-2.8	19.20	Vertical

For 802.11 n(HT40) Channel No.:6

Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
46.102000	4.87	40.00	35.13	-17.8	22.67	Vertical
89.412500	0.42	43.50	43.08	-21.5	21.92	Vertical
143.781000	0.29	43.50	43.21	-22.7	22.99	Vertical
181.562500	2.84	43.50	40.66	-20.8	23.64	Vertical
493.514500	10.62	46.00	35.38	-10.9	21.52	Vertical
929.044500	16.35	46.00	29.65	-2.9	19.25	Vertical

For 802.11 n(HT40) Channel No.:9

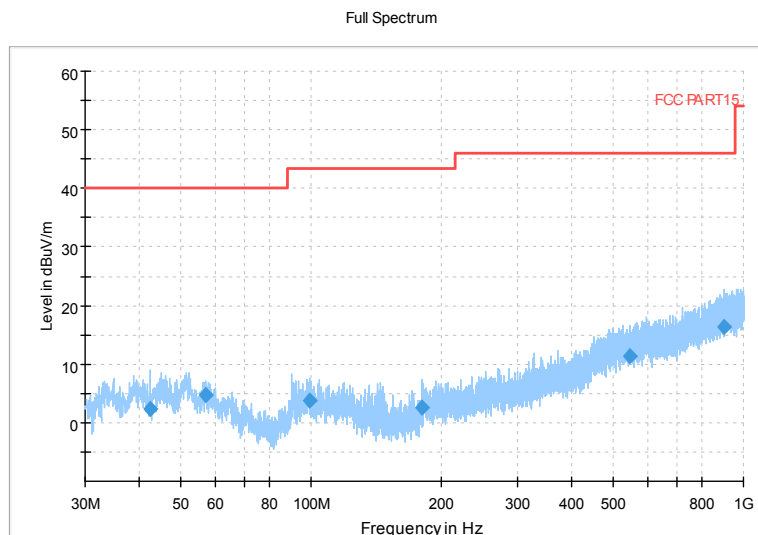
Frequency (MHz)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	ARpl (dB/m)	Pmea (dBuV)	Polarity
40.330500	3.86	40.00	36.14	-18.5	22.36	Vertical
57.790500	4.36	40.00	35.64	-18.5	22.86	Vertical
60.021500	2.28	40.00	37.72	-18.9	21.18	Vertical
60.312500	1.97	40.00	38.03	-19.0	20.97	Vertical
61.476500	1.01	40.00	38.99	-19.3	20.31	Vertical
62.010000	1.06	40.00	38.94	-19.5	20.56	Vertical



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.

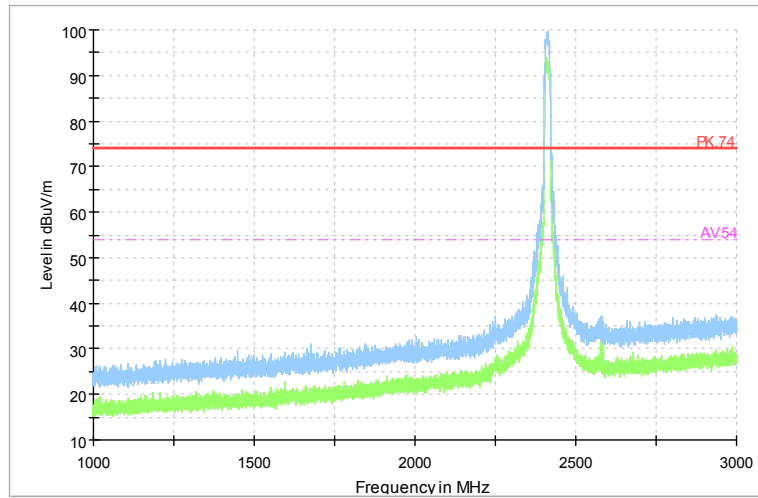
Carrier frequency (MHz): 2412  
 Channel No.:1



Comment

Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Test Mode: 802.11b

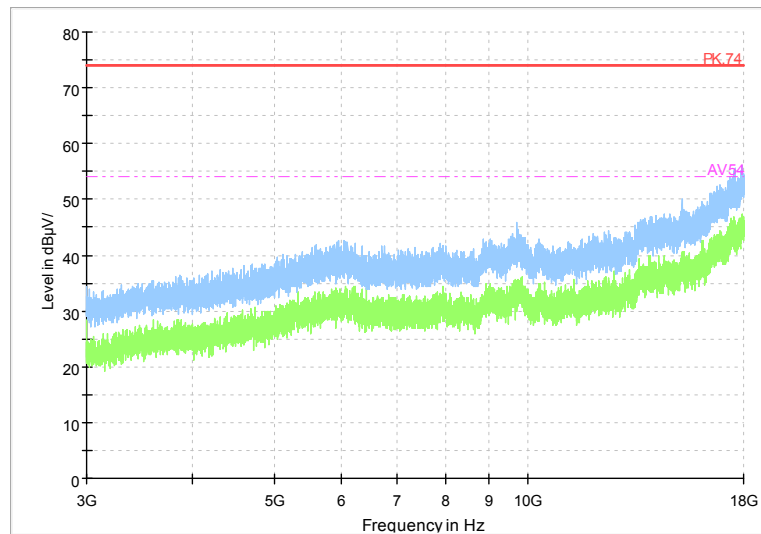
Full Spectrum



Comment

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

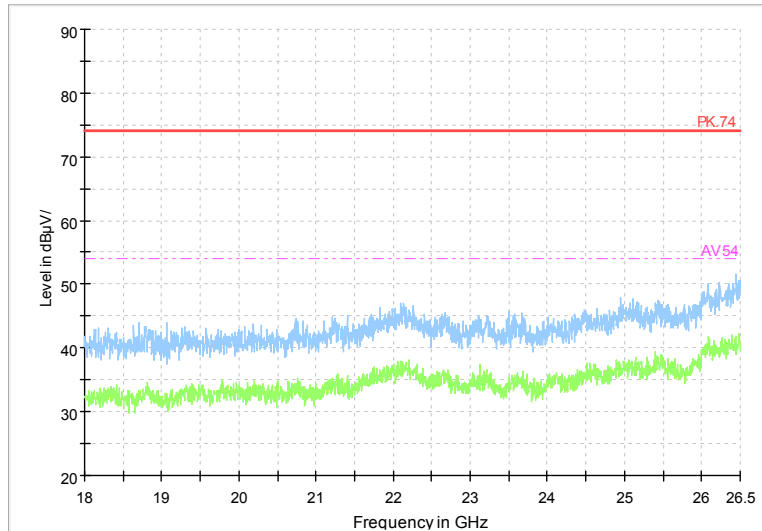
Full Spectrum



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

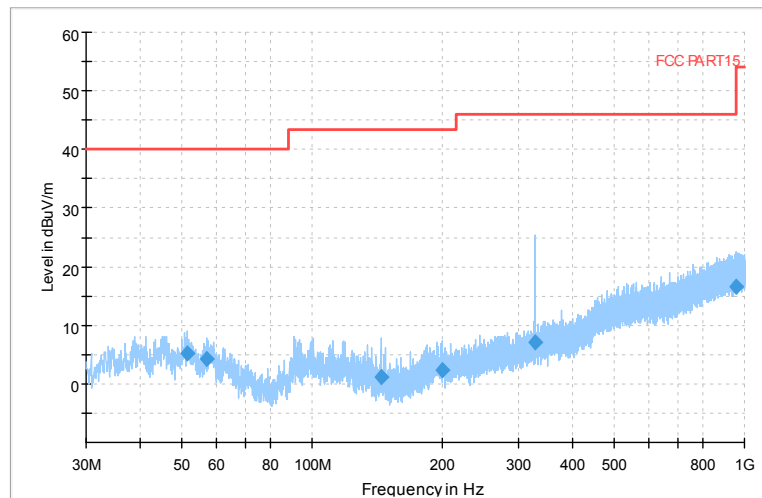


Full Spectrum



Frequency Range: 18GHz -25GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

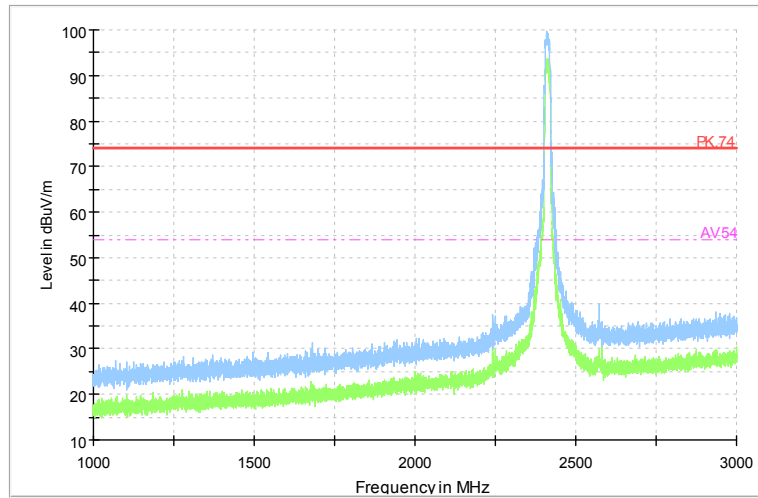
Full Spectrum



Comment

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

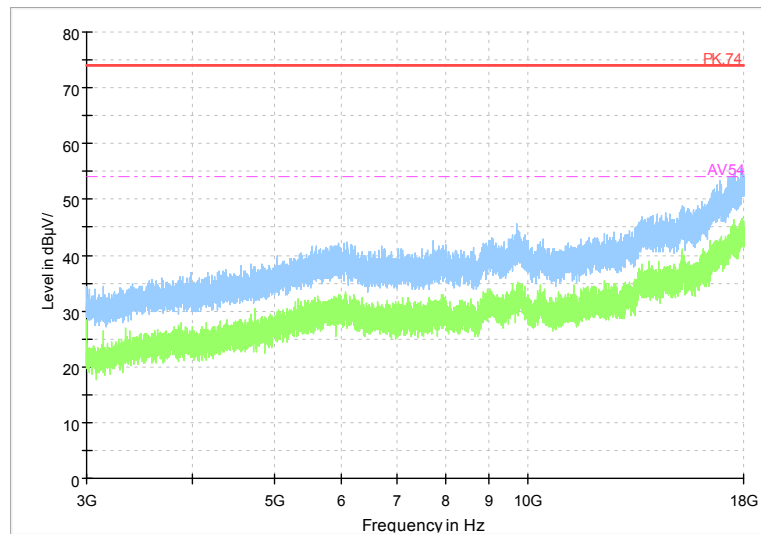
Full Spectrum



Comment

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

Full Spectrum



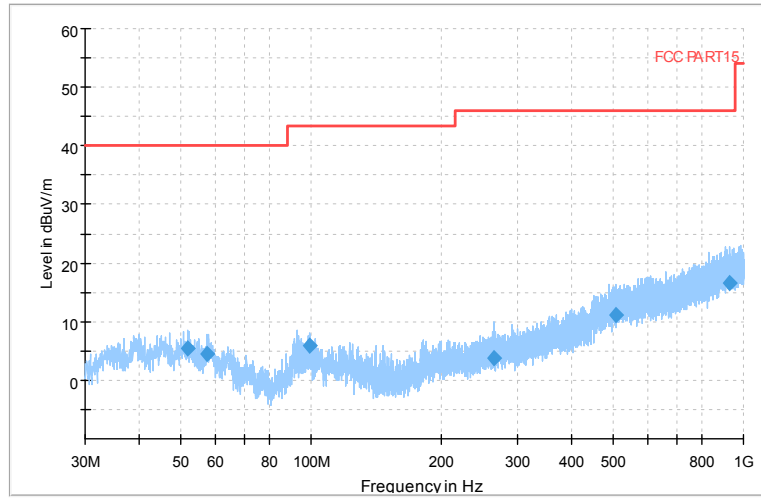
Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



Frequency Range: 18GHz -25GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

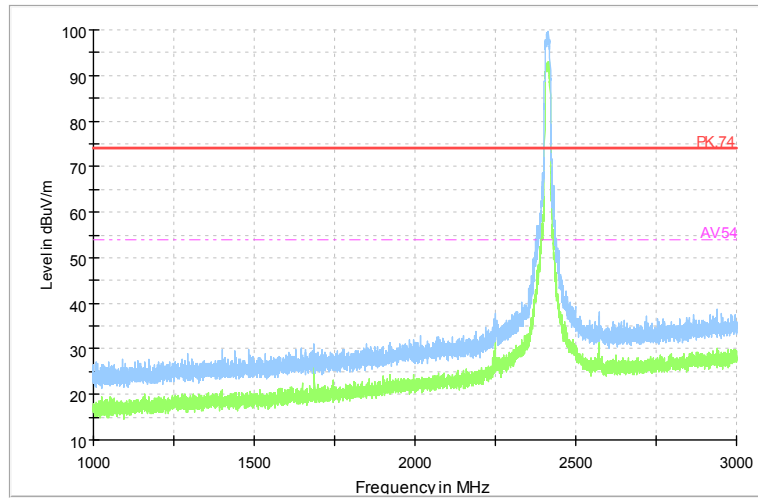
Full Spectrum



Comment

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

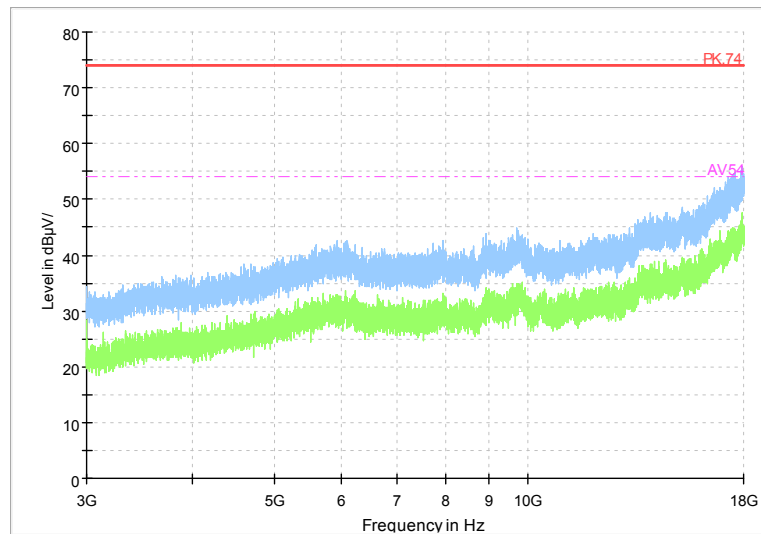
Full Spectrum



Comment

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)

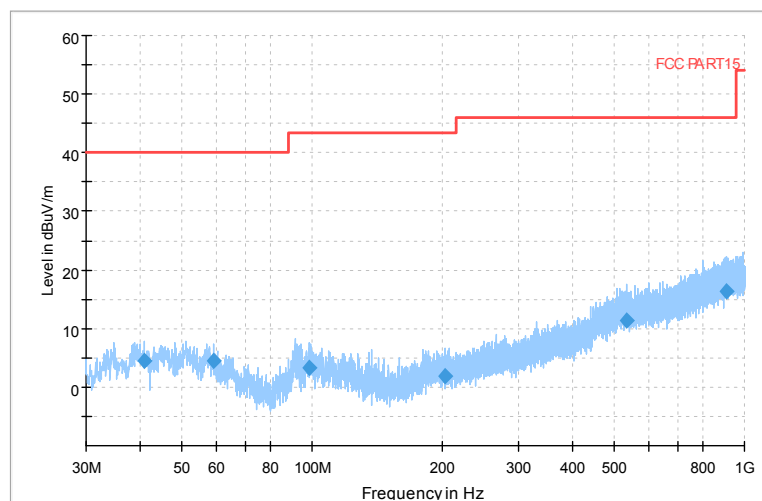
Full Spectrum



Frequency Range: 18GHz -25GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT20)

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

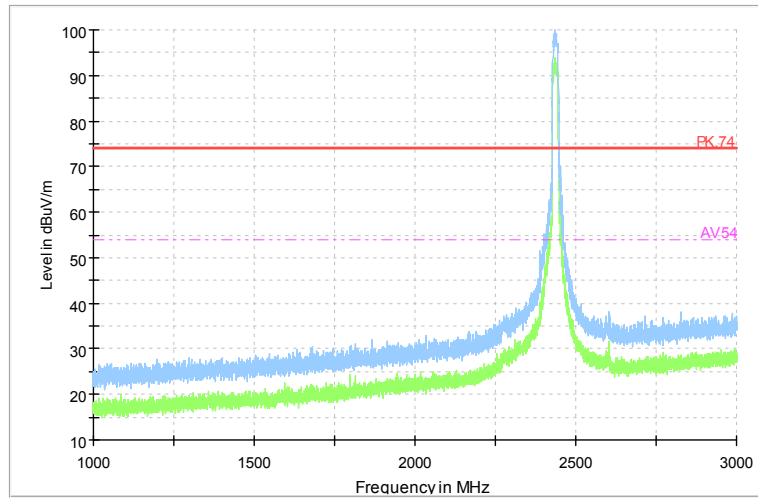
Full Spectrum



Comment

Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Test Mode: 802.11b

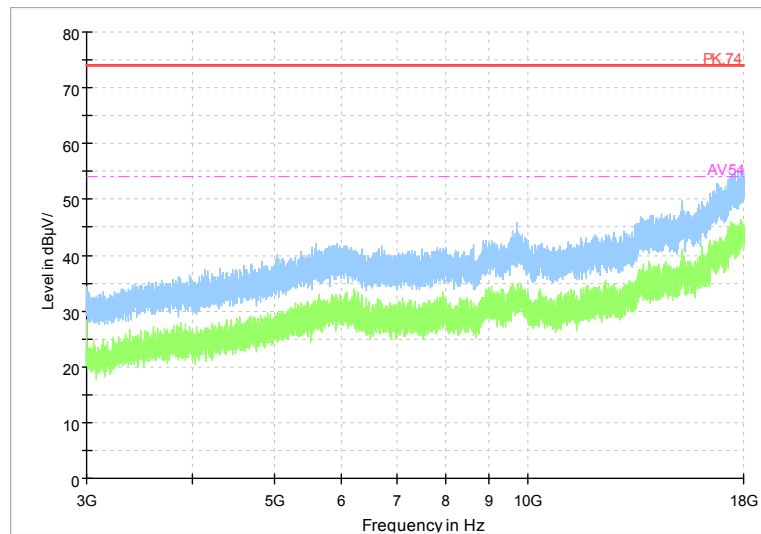
Full Spectrum



Comment

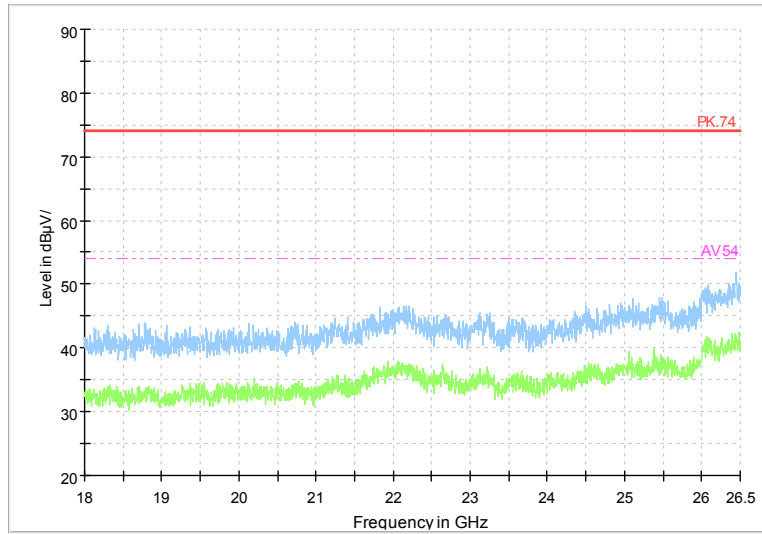
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

Full Spectrum



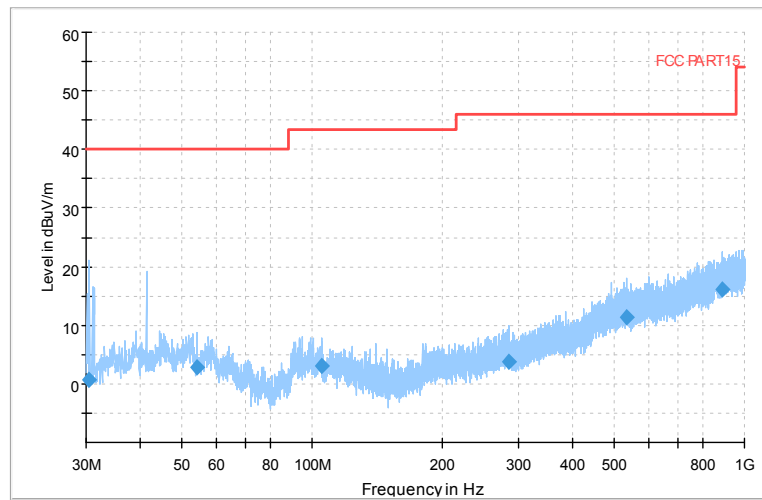
Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

Full Spectrum



Frequency Range: 18GHz -25GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

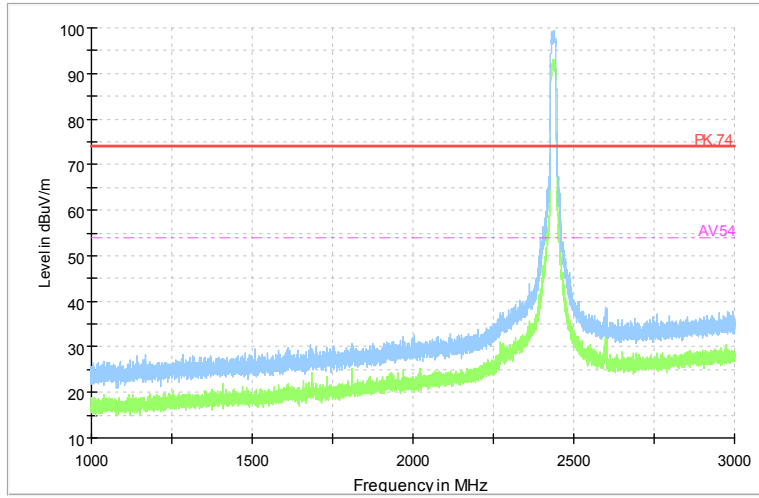
Full Spectrum



Comment

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

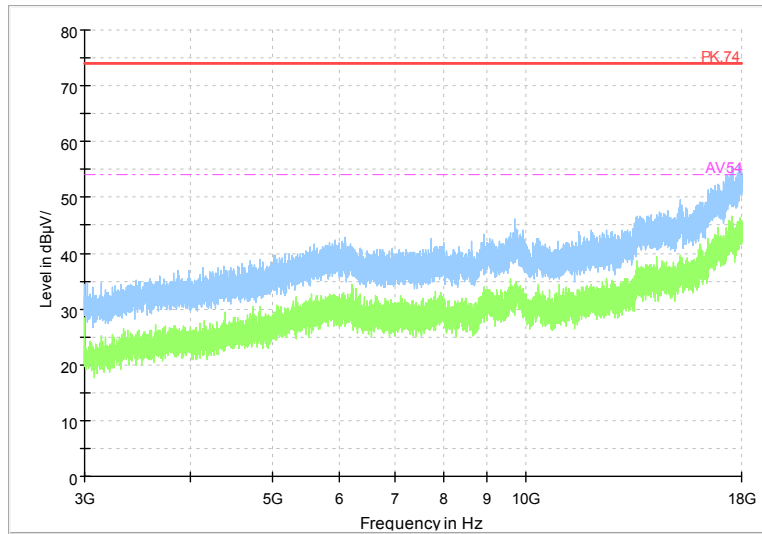
Full Spectrum



Comment

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

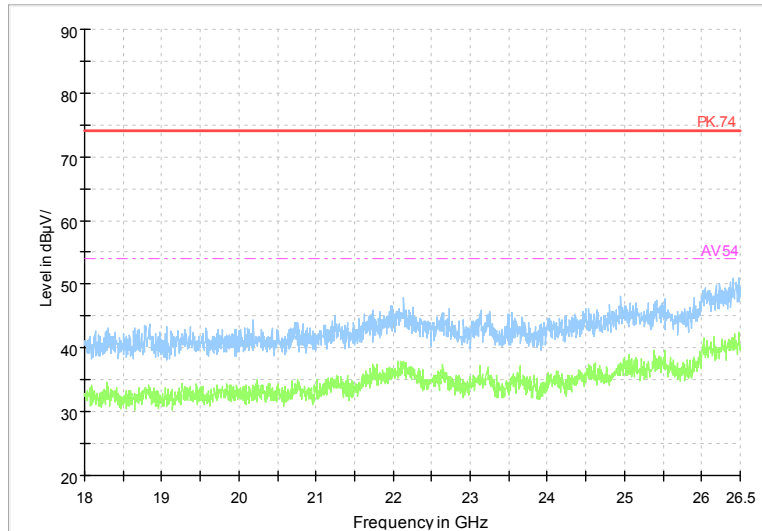
Full Spectrum



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

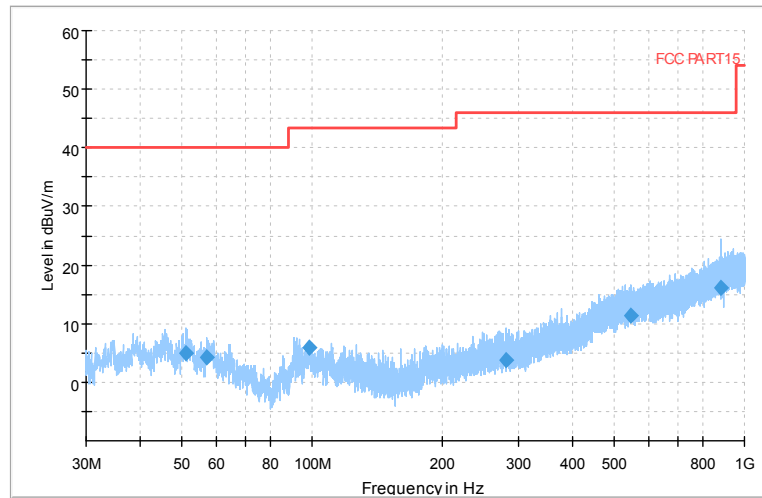


Full Spectrum



Frequency Range: 18GHz -25GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

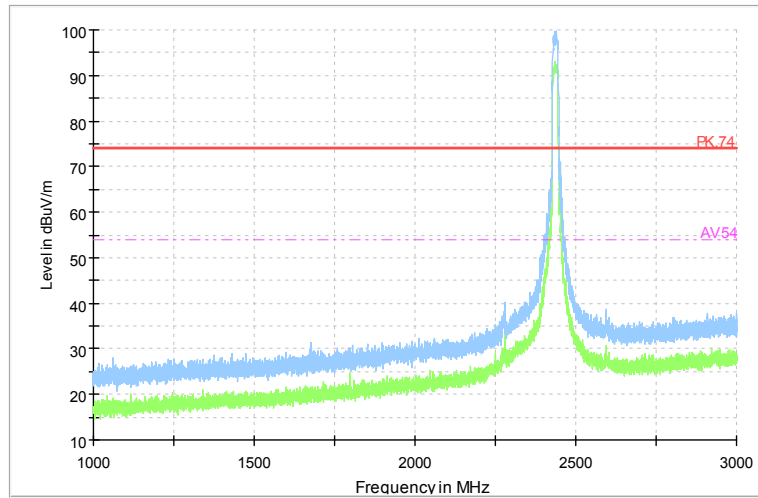
Full Spectrum



Comment

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

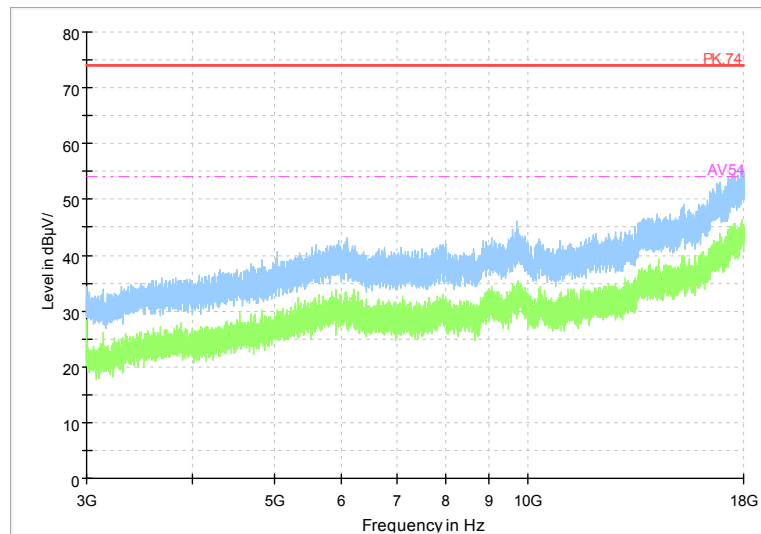
Full Spectrum



Comment

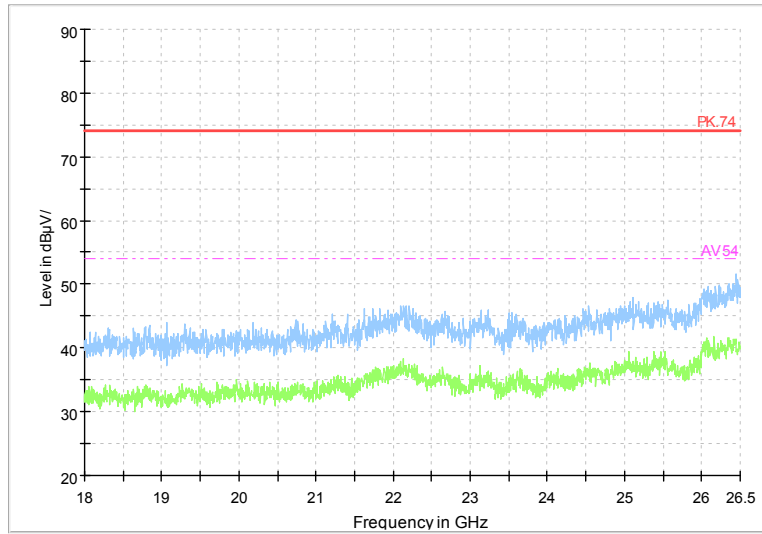
Frequency Range: 1GHz -3GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11n(HT20)

Full Spectrum



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

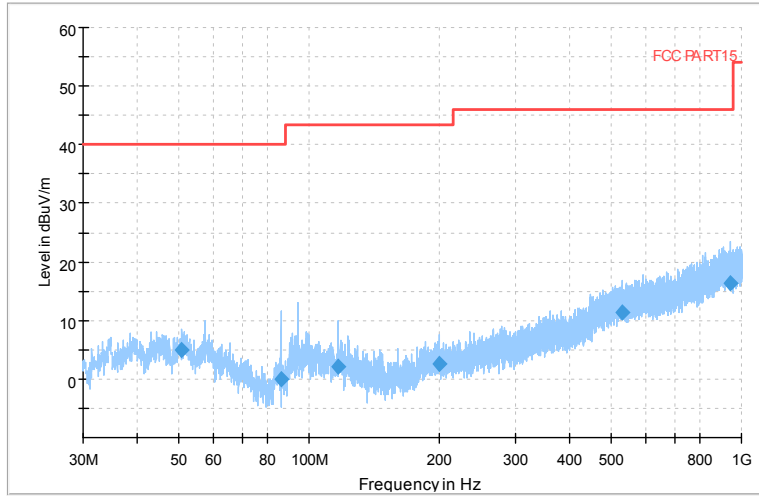
Full Spectrum



Frequency Range: 18GHz -25GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11n(HT20)

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

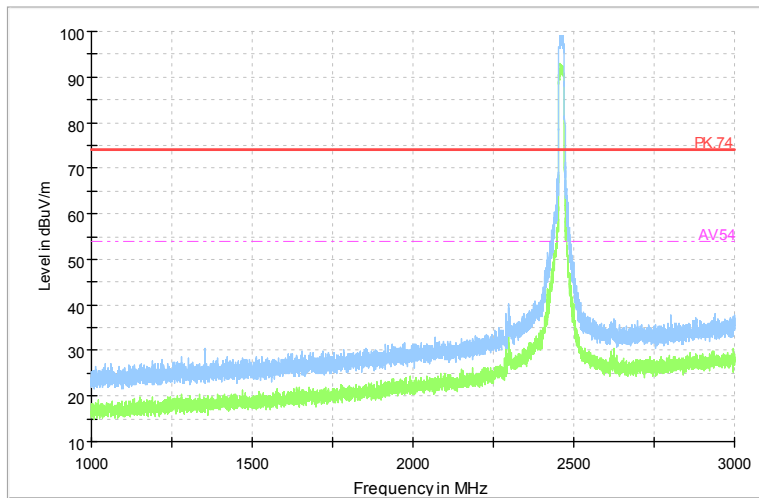
Full Spectrum



Comment

Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Test Mode: 802.11b

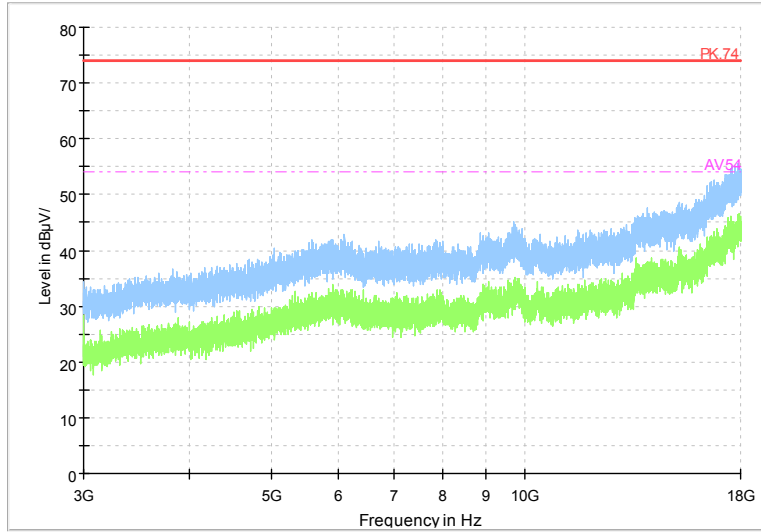
Full Spectrum



Comment

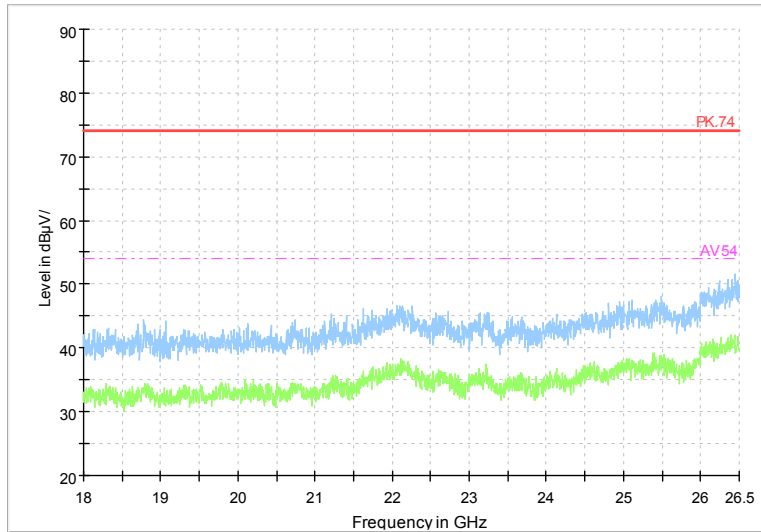
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

Full Spectrum



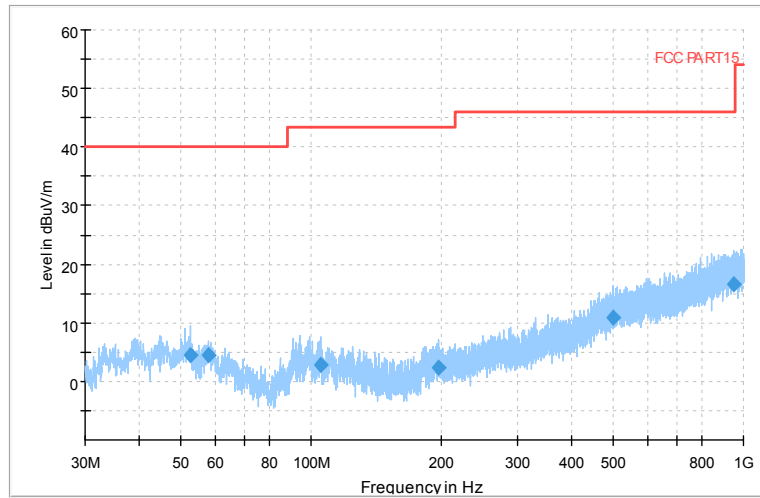
Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

Full Spectrum



Frequency Range: 18GHz -25GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11b

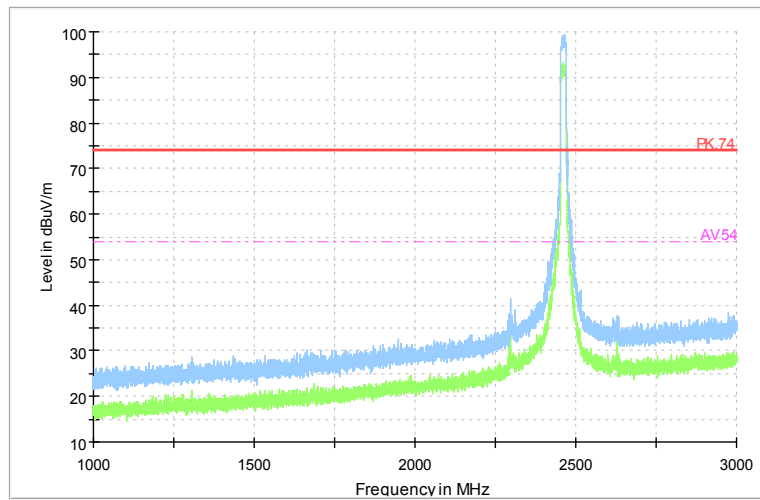
Full Spectrum



Comment

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

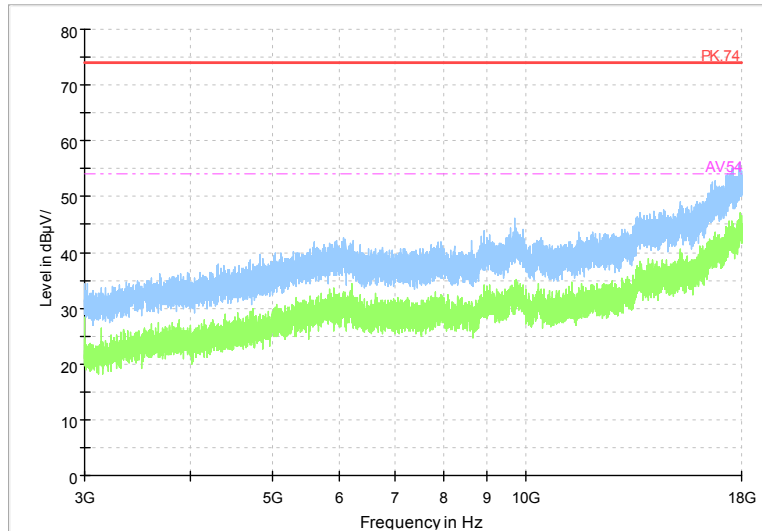
Full Spectrum



Comment

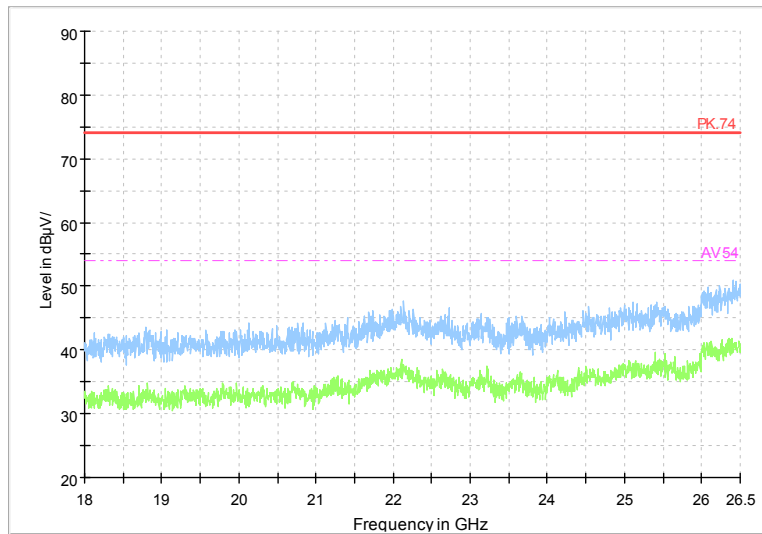
Frequency Range: 1GHz -3GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11g

Full Spectrum



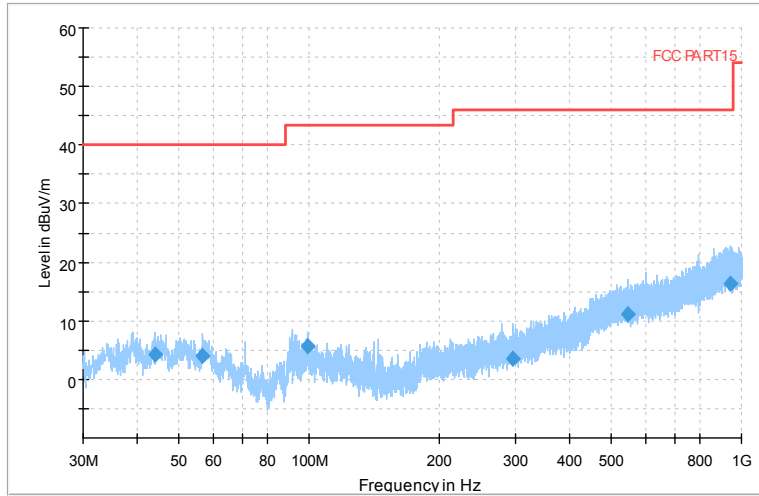
Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

Full Spectrum



Frequency Range: 18GHz -25GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11g

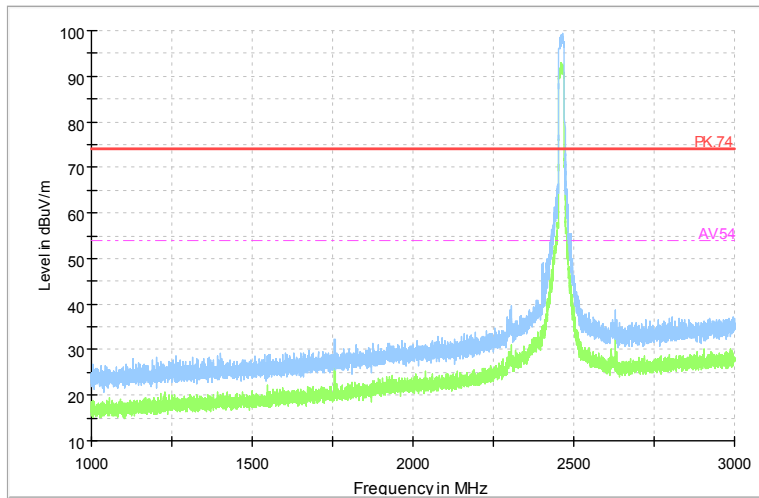
Full Spectrum



Comment

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

Full Spectrum

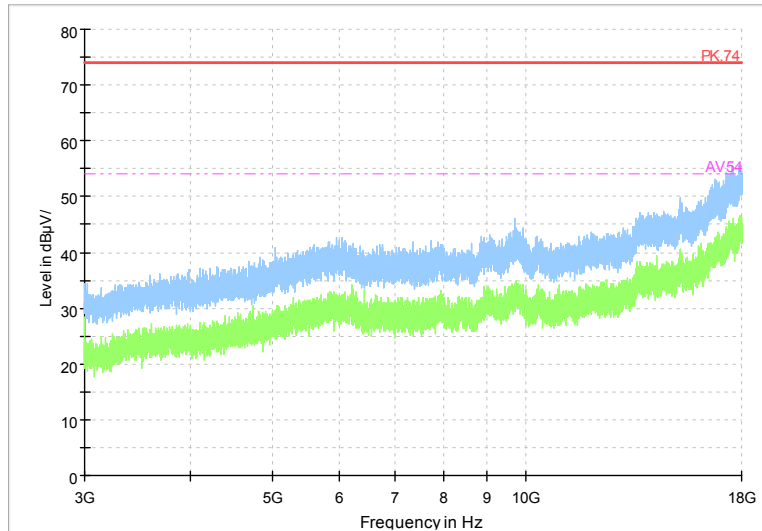


Comment

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

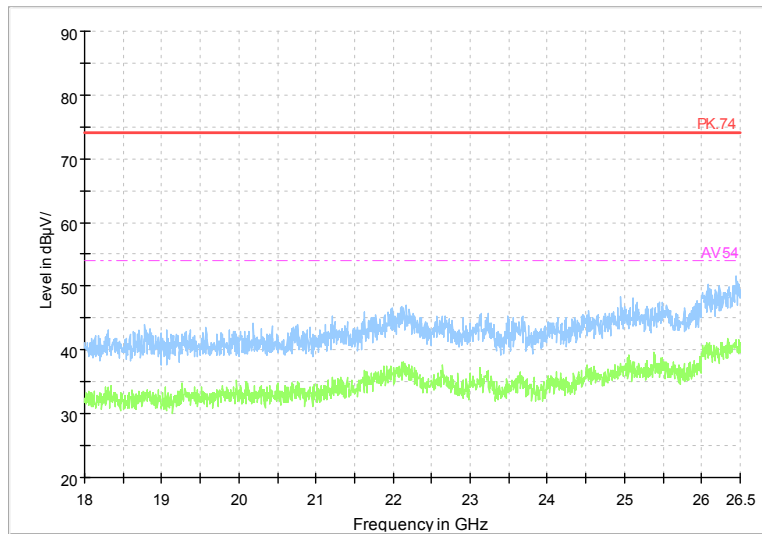


Full Spectrum



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

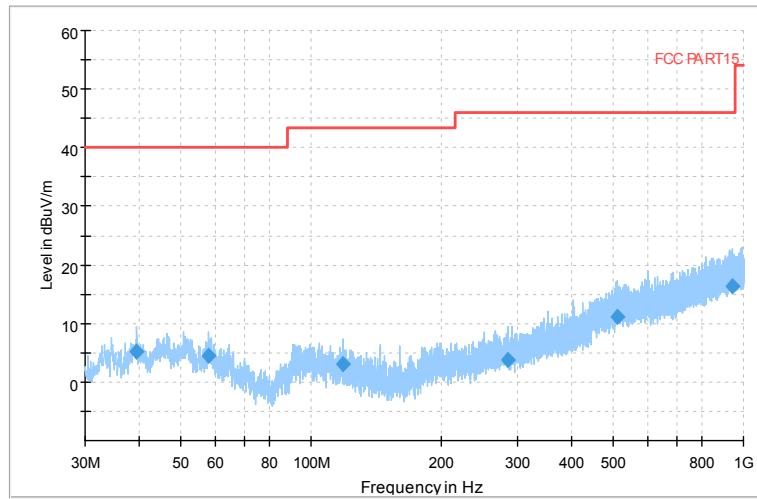
Full Spectrum



Frequency Range: 18GHz -25GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT20)

Carrier frequency (MHz): 2422  
 Channel No.:3

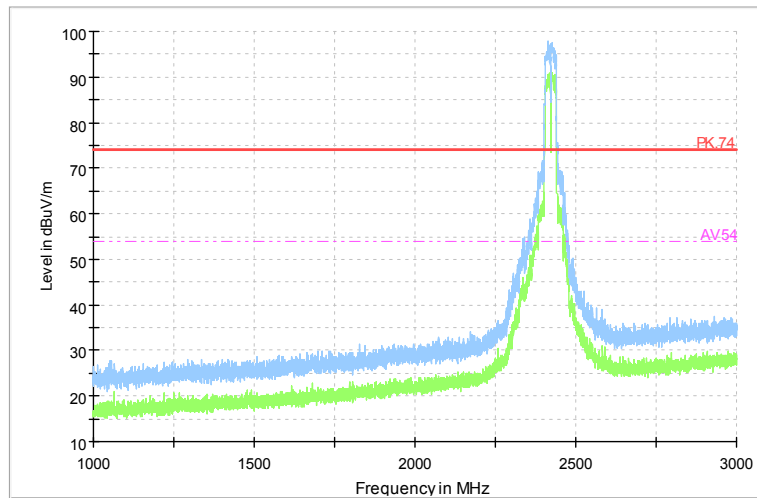
Full Spectrum



Comment

Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Test Mode: 802.11n(HT40)

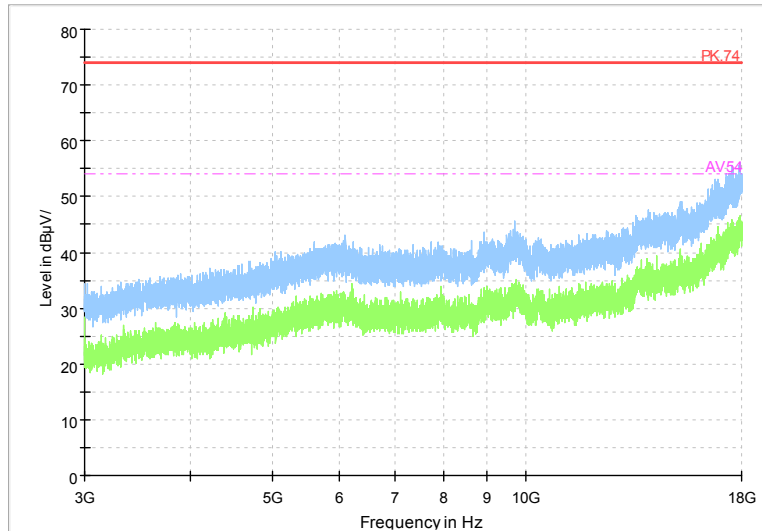
Full Spectrum



Comment

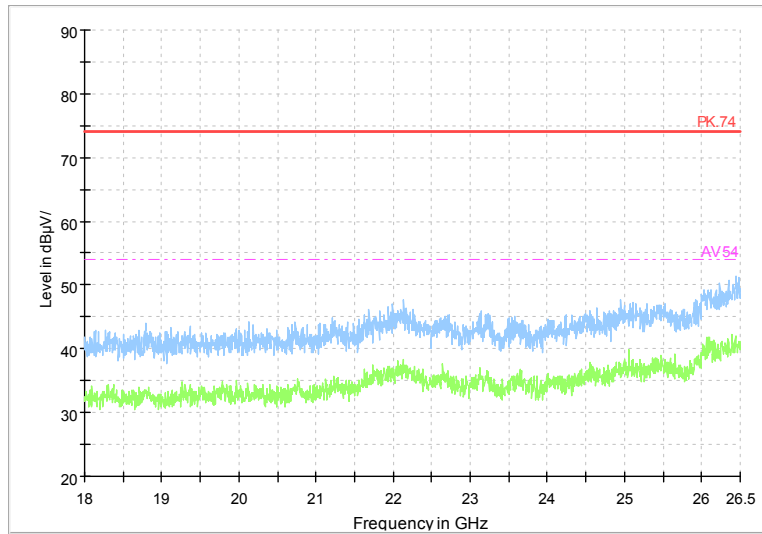
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT40)

Full Spectrum



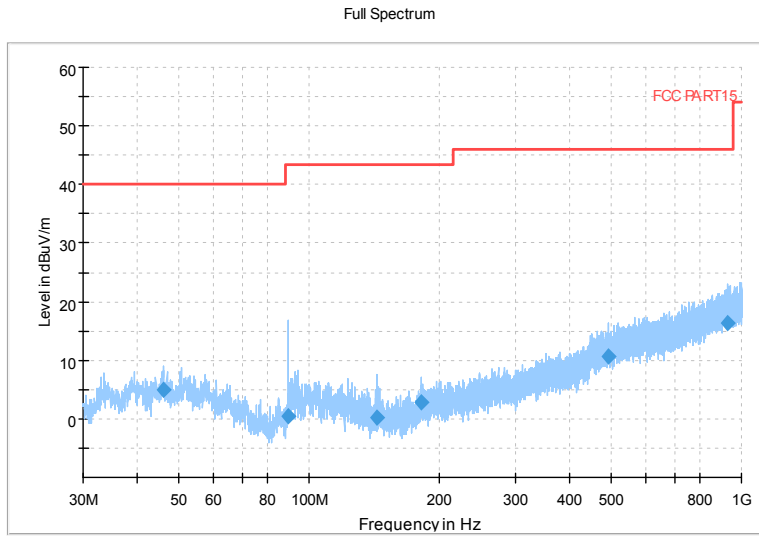
Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT40)

Full Spectrum



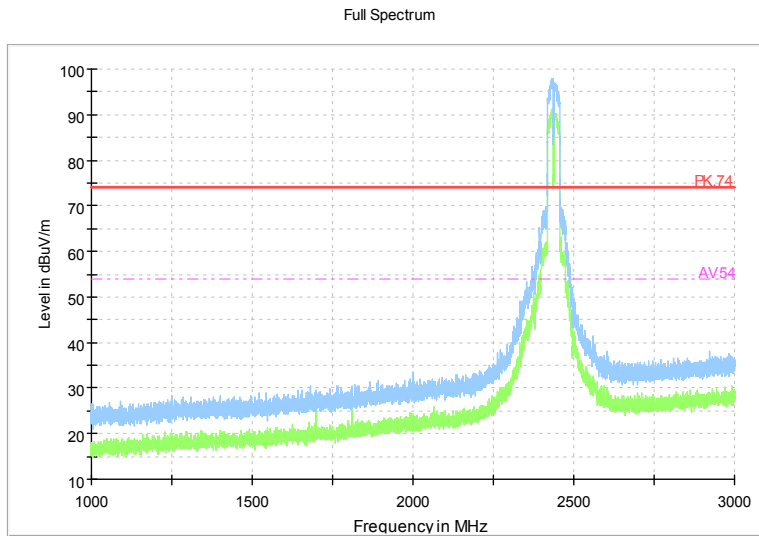
Frequency Range: 18GHz-26GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT40)

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



Comment

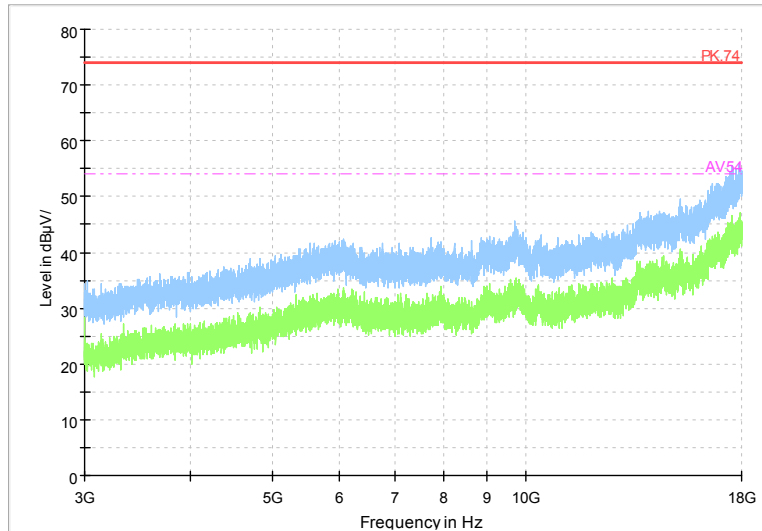
Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Test Mode: 802.11n(HT40)



Comment

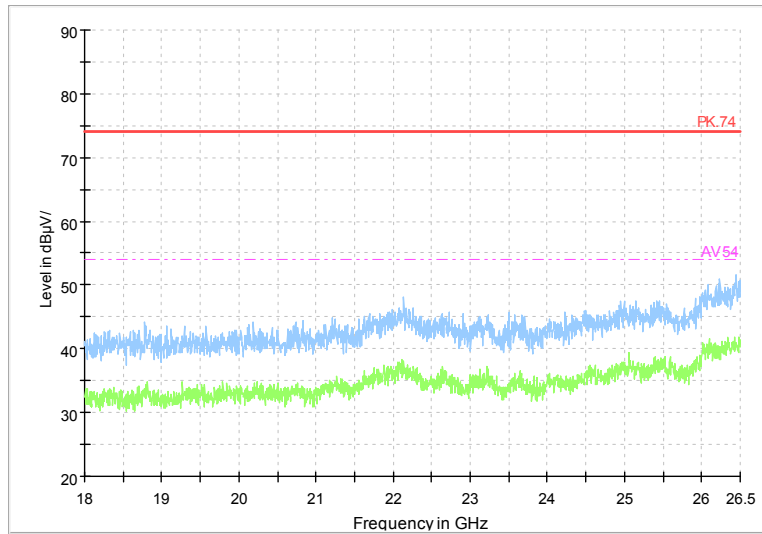
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT40)

Full Spectrum



Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT40)

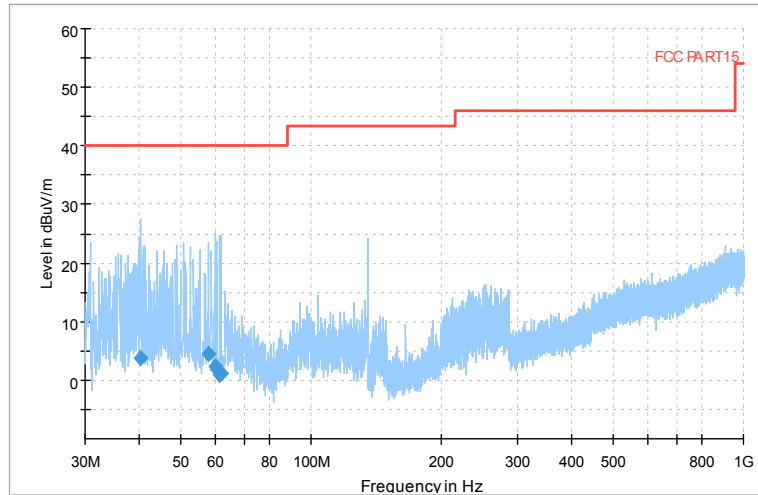
Full Spectrum



Frequency Range: 18GHz-26GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT40)

Carrier frequency (MHz): 2452  
 Channel No.:9

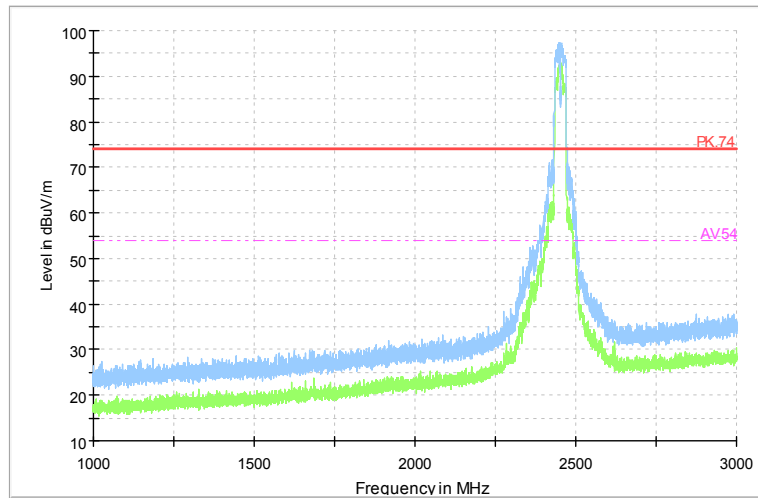
Full Spectrum



Comment

Frequency Range: 30MHz -1GHz  
 Detector: QP mode  
 Test Mode: 802.11n(HT40)

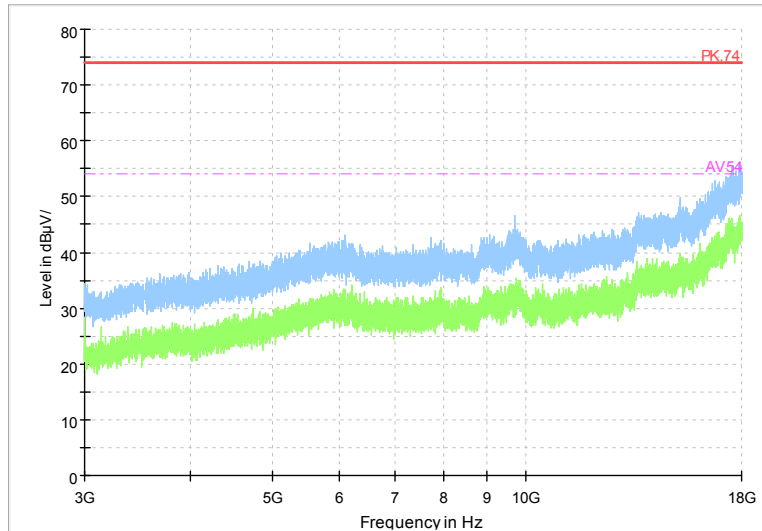
Full Spectrum



Comment

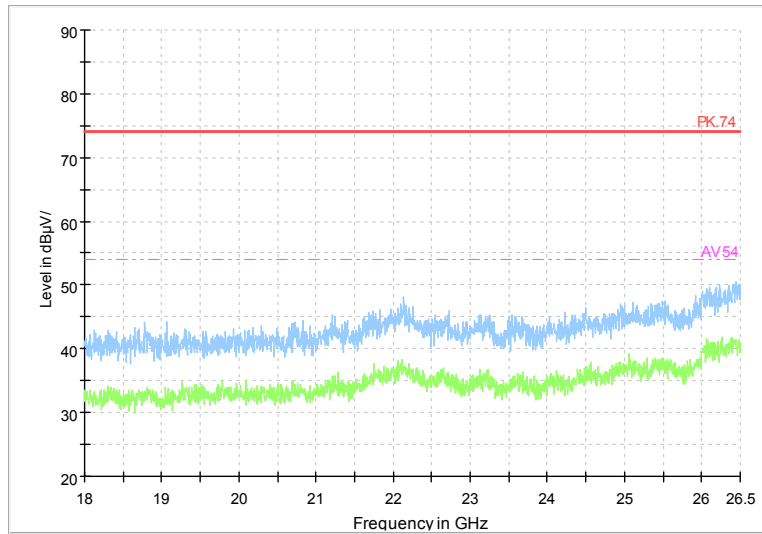
Frequency Range: 1GHz -3GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT40)

Full Spectrum



Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT40)

Full Spectrum



Frequency Range: 18GHz-26GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT40)

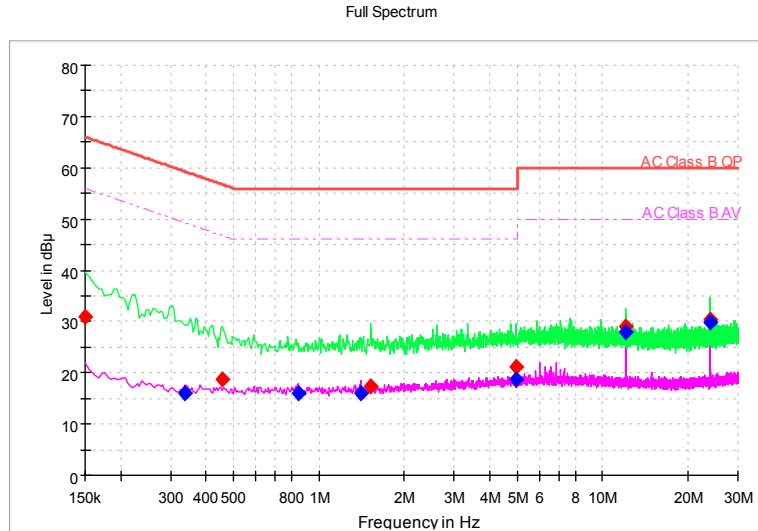
**AC Power line Conducted Emission**

A “reference path loss” Corr.(dB) is established and the  $L_{cable}+ATT+VDF$  is the attenuation of “reference path loss”, and including the cable loss, the attenuation of the attenuator, the voltage division factor of AMN.

The measurement results are obtained as described below:

$$P_{result}=P_{mea}+ Corr.(dB)$$

Sample calculation:  $(30.99dB\mu V) = (1.19 dB\mu V) + (29.8 dB)$ , the corresponding frequency is 0.150000MHz.



Comment

**L+N Line**

**MEASUREMENT RESULT:**

Frequency (MHz)	Quasi Peak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	Pmea Quasi Peak (dBμV)	Pmea Average (dBμV)
0.150000	30.99	---	66.00	35.01	L1	29.8	1.19	---
0.338757	---	16.11	49.23	33.13	L1	29.8	---	-13.69
0.457279	18.80	---	56.74	37.94	L1	29.8	-11	---
0.843574	---	15.99	46.00	30.01	L1	29.8	---	-13.81
1.409846	---	16.13	46.00	29.87	L1	29.8	---	-13.67
1.523978	17.22	---	56.00	38.78	L1	29.8	-12.58	---
4.952338	21.05	---	56.00	34.95	L1	29.9	-8.85	---
4.952338	---	18.74	46.00	27.26	L1	29.9	---	-11.16
12.041713	29.15	---	60.00	30.85	L1	30.0	-0.85	---
12.041713	---	27.94	50.00	22.07	N	30.0	---	-2.06
24.030000	---	29.94	50.00	20.06	N	30.0	---	-0.06
24.030000	30.26	---	60.00	29.74	L1	30.0	0.26	---

---End of the test report---