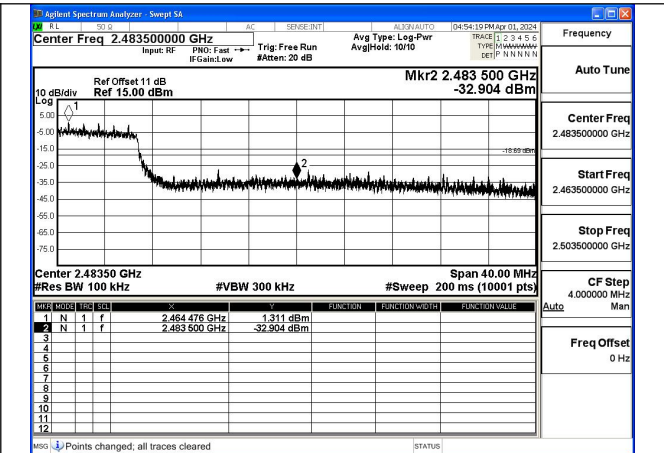
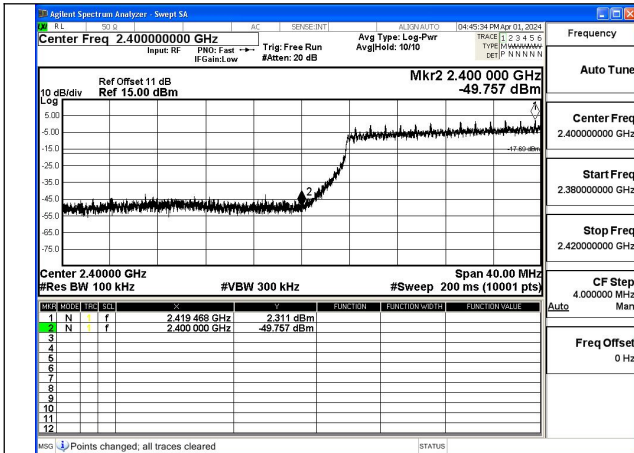
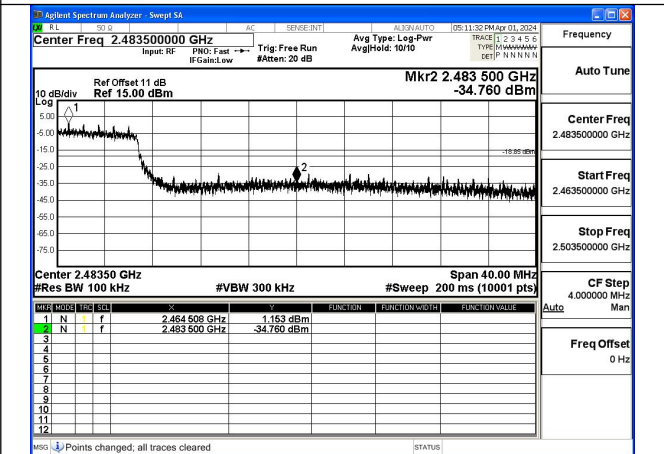
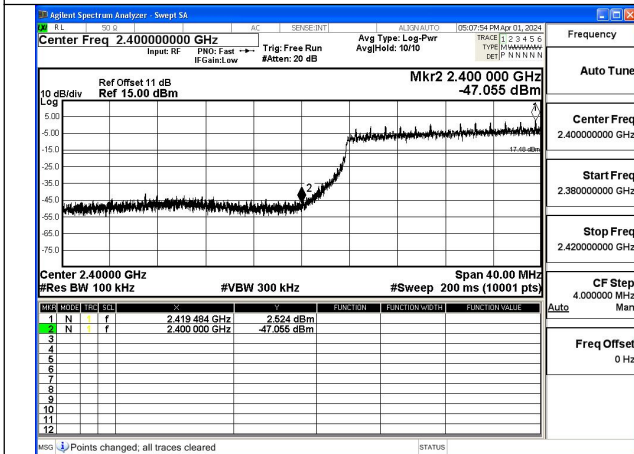


Test Mode: 802.11n HT40



Mode:802.11n HT40 Frequency:2422MHz Ant:Chain0

Mode:802.11n HT40 Frequency:2452MHz Ant:Chain0



Mode:802.11n HT40 Frequency:2422MHz Ant:Chain1

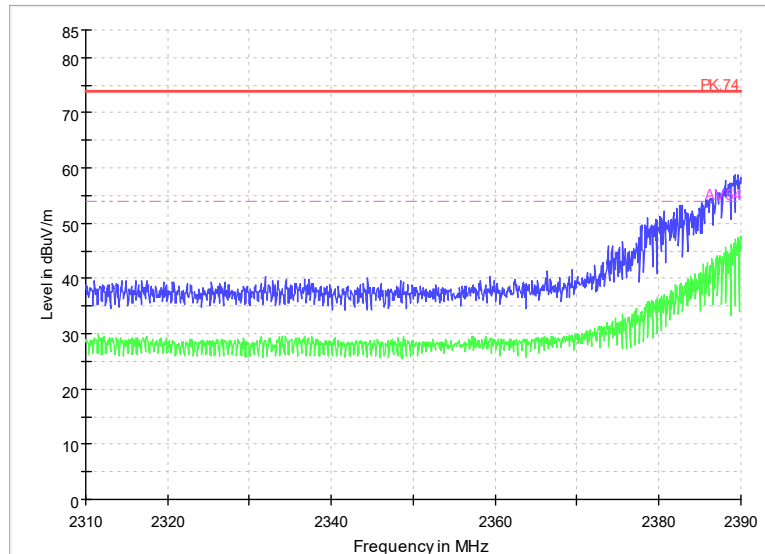
Mode:802.11n HT40 Frequency:2452MHz Ant:Chain1

APPENDIX B – TEST DATA OF RADIATED EMISSION

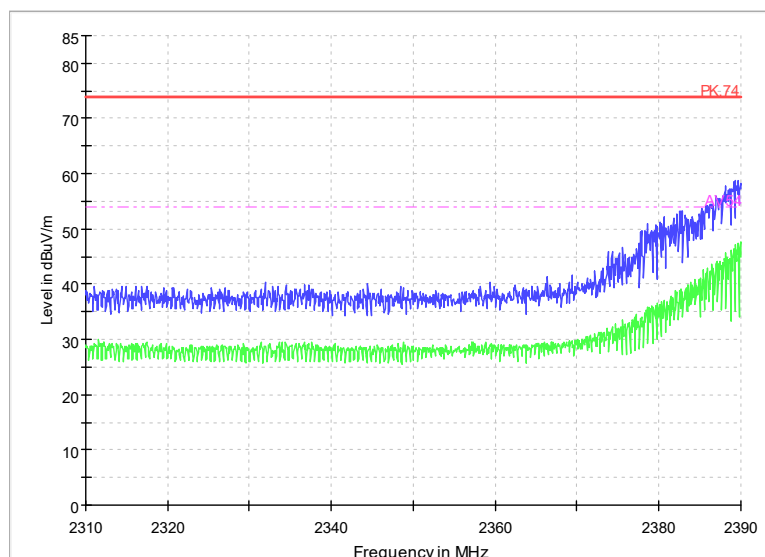
Note: The worst channel results are reflected in the report.

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

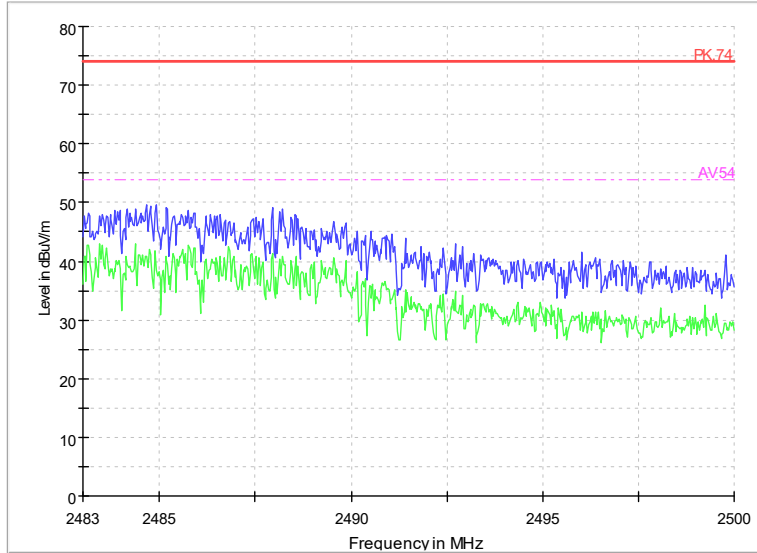
Radiated Emission Band Edge



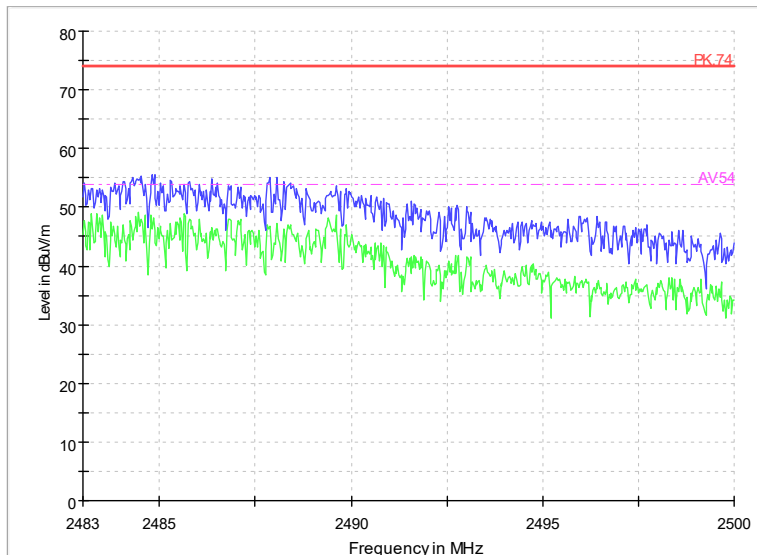
Radiated Emission Band Edge
 Channel No.:1
 Test Mode: 802.11b
 Polarization: V



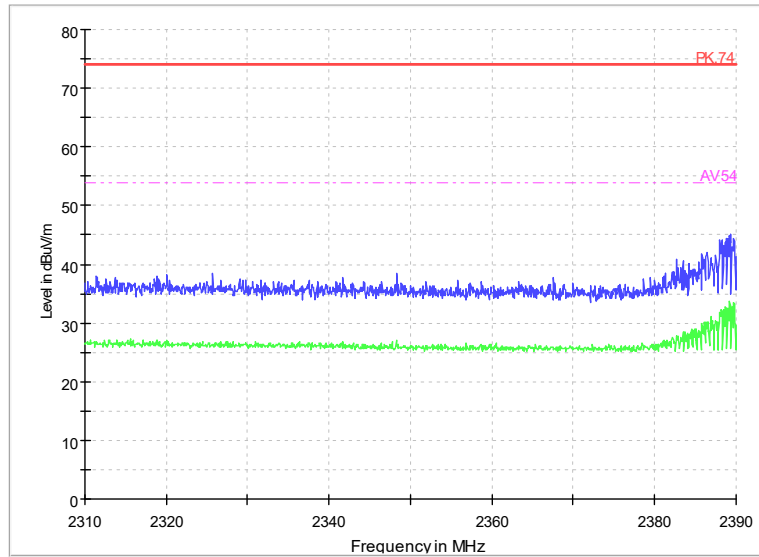
Radiated Emission Band Edge
Channel No.:1
Test Mode: 802.11b
Polarization: H



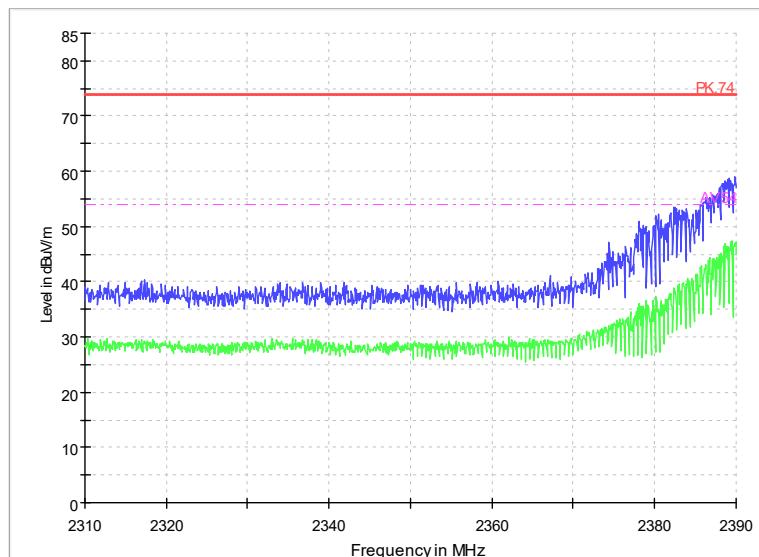
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11b
Polarization: V



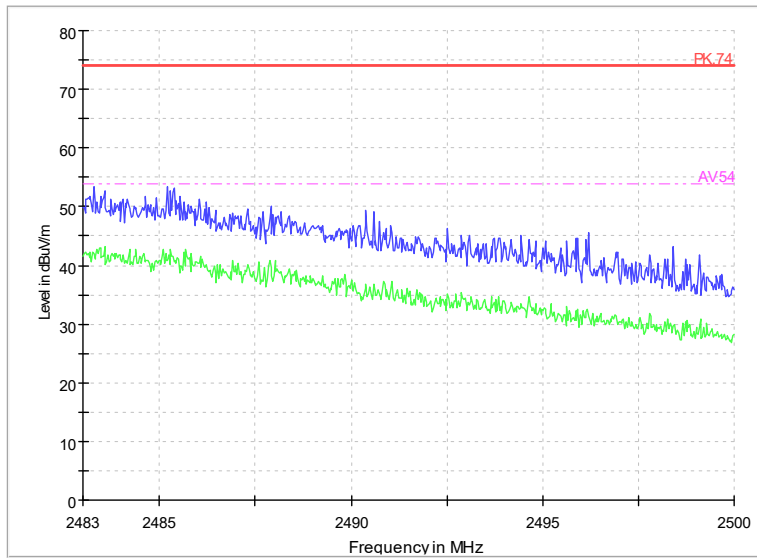
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11b
Polarization: H



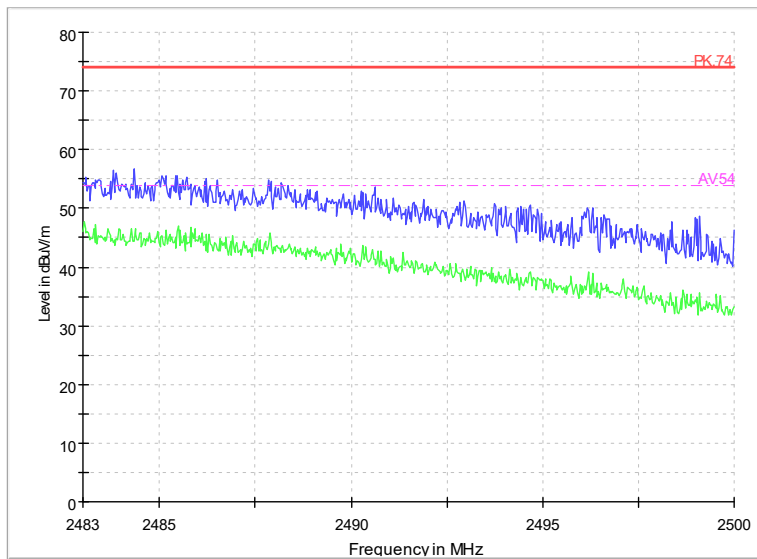
Radiated Emission Band Edge
Channel No.:1
Test Mode: 802.11g
Polarization: V



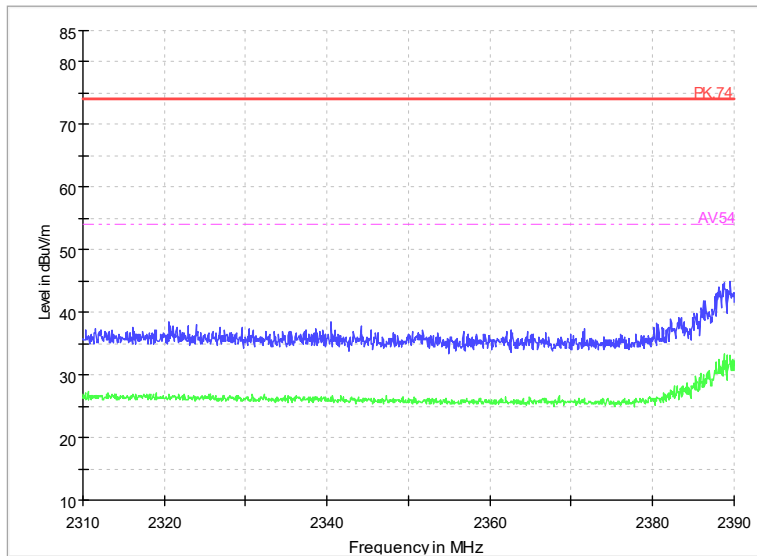
Radiated Emission Band Edge
Channel No.:1
Test Mode: 802.11g
Polarization: H



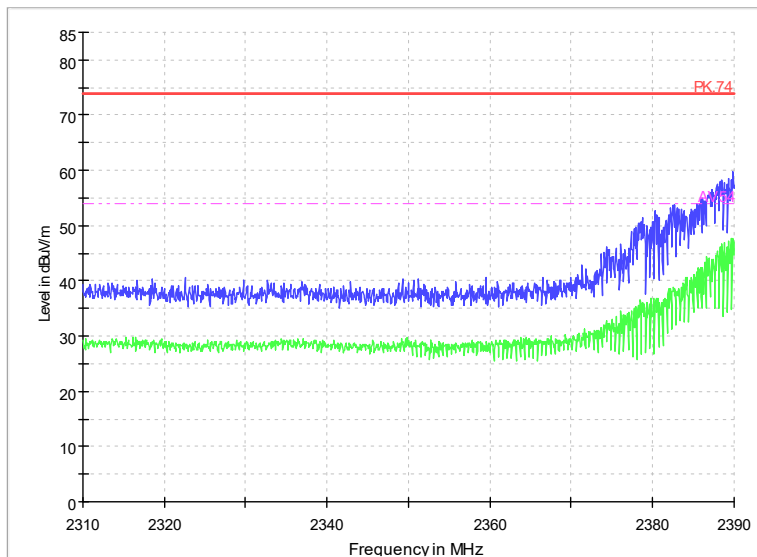
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11g
Polarization: V



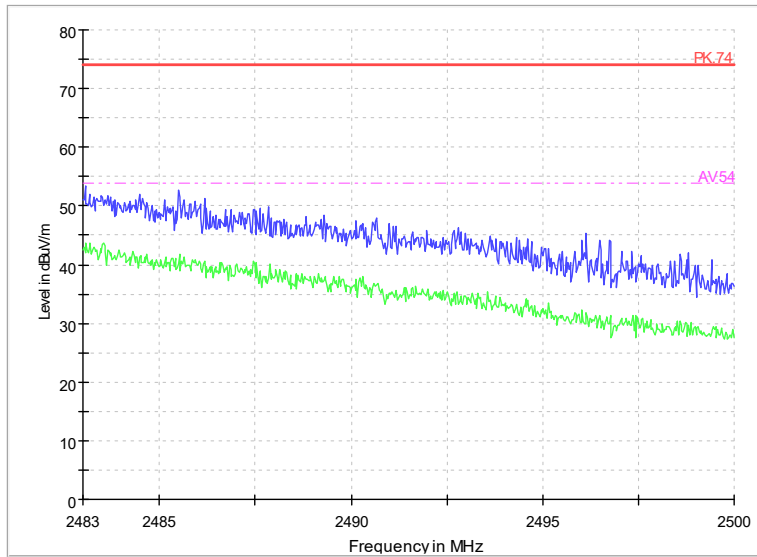
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11g
Polarization: H



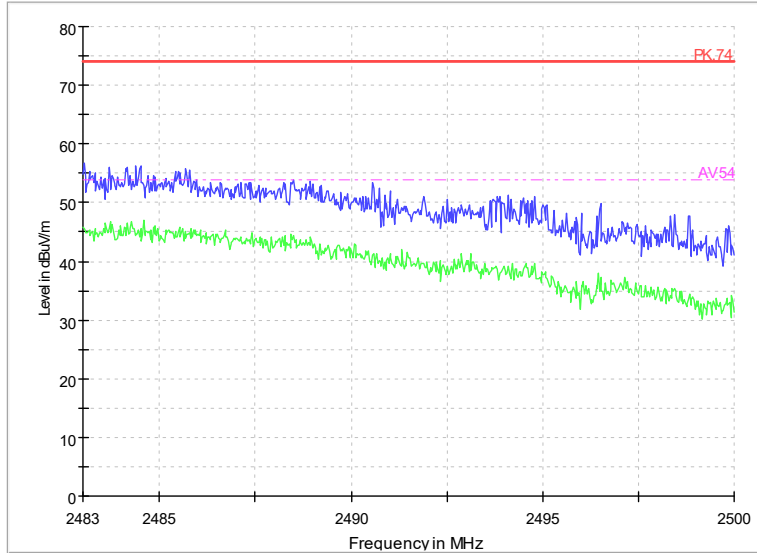
Radiated Emission Band Edge
 Channel No.:1
 Test Mode: 802.11n
 Polarization: V



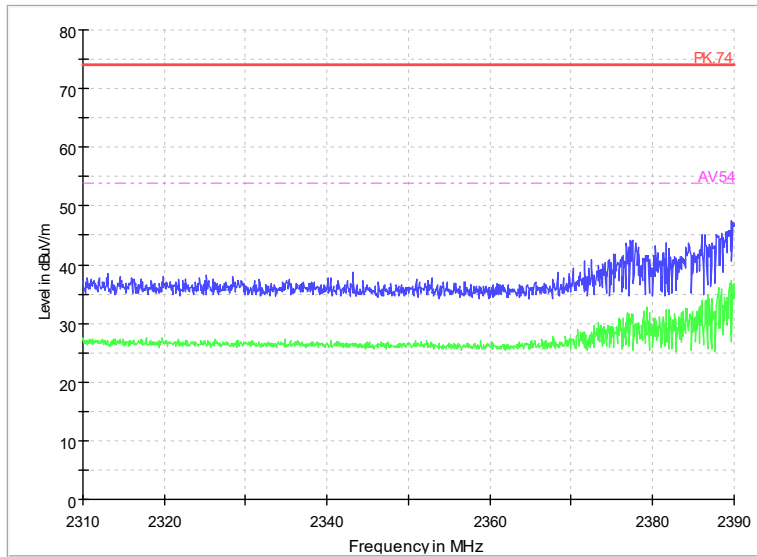
Radiated Emission Band Edge
 Channel No.:1
 Test Mode: 802.11n
 Polarization: H



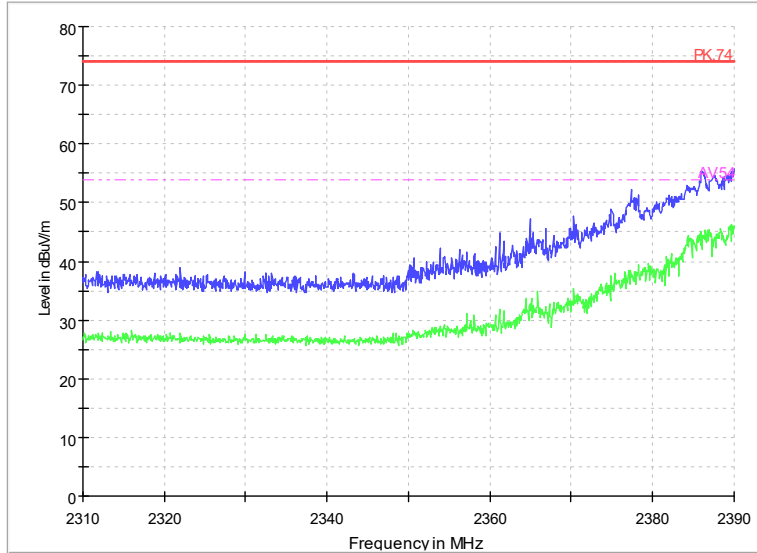
Radiated Emission Band Edge
 Channel No.:11
 Test Mode: 802.11n
 Polarization: V



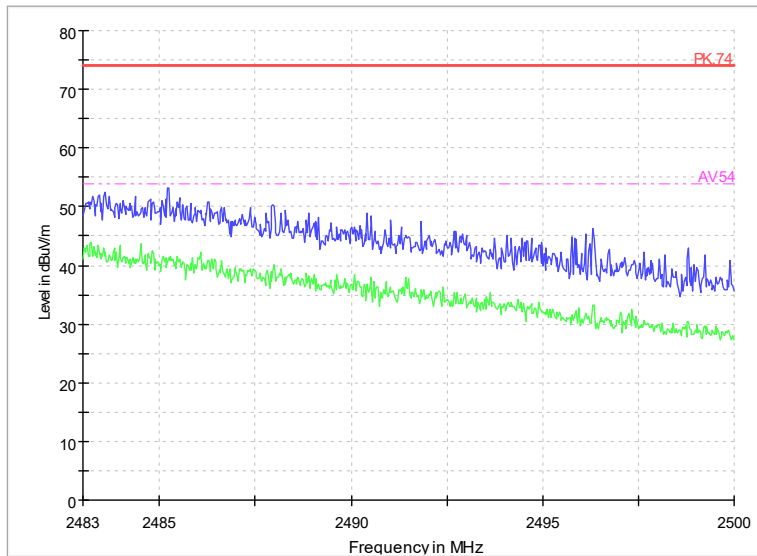
Radiated Emission Band Edge
 Channel No.:11
 Test Mode: 802.11n
 Polarization: H



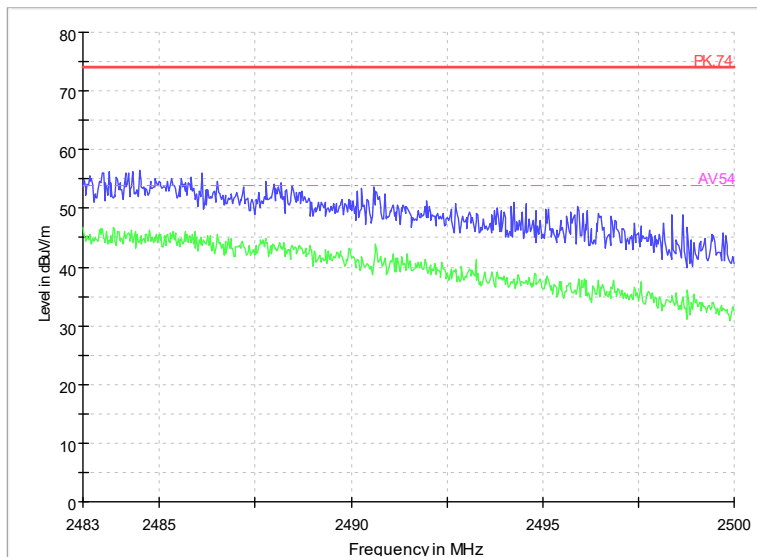
Radiated Emission Band Edge
 Channel No.:3
 Test Mode: 802.11n40
 Polarization: V



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



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



Radiated Emission Band Edge
 Channel No.:9
 Test Mode: 802.11n40
 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: $(8.58 \text{ dB}\mu\text{V/m}) = (44.11 \text{ dB}\mu\text{V}) + (-19.3 \text{ dB/m})$, the corresponding frequency is 36.014 MHz.

For 802.11b Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.81	-19.3	44.11	Vertical	40	15.19
78.1605	21.83	-21.5	43.33	Vertical	40	18.17
138.252	17.65	-21.5	39.15	Vertical	43.5	25.85
276.574	15.99	-16.6	32.59	Vertical	46	30.01
544.5365	13.47	-9.5	22.97	Vertical	46	32.53
952.47	20.42	-2.8	23.22	Vertical	46	25.58

For 802.11g Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.77	-19.3	44.07	Vertical	40	15.23
78.112	18.14	-21.5	39.64	Vertical	40	21.86
138.252	17.64	-21.5	39.14	Vertical	43.5	25.86
276.574	15.96	-16.6	32.56	Vertical	46	30.04
555.4005	13.59	-9.3	22.89	Vertical	46	32.41
915.998	20.08	-3.1	23.18	Vertical	46	25.92

For 802.11n(HT20) Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.76	-19.3	44.06	Vertical	40	15.24
78.112	18.14	-21.5	39.64	Vertical	40	21.86
138.252	17.66	-21.5	39.16	Vertical	43.5	25.84
276.574	15.98	-16.6	32.58	Vertical	46	30.02
553.8	13.72	-9.3	23.02	Vertical	46	32.28
910.1295	20	-3.2	23.2	Vertical	46	26

For 802.11b Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.79	-19.3	44.09	Vertical	40	15.21
78.112	18.15	-21.5	39.65	Vertical	40	21.85

138.252	17.64	-21.5	39.14	Vertical	43.5	25.86
303.637	13.3	-15.7	29	Vertical	46	32.7
539.9775	13.5	-9.6	23.1	Vertical	46	32.5
914.1065	20.07	-3.2	23.27	Vertical	46	25.93

For 802.11g Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.77	-19.3	44.07	Vertical	40	15.23
84.126	18.41	-20.5	38.91	Vertical	40	21.59
138.252	17.67	-21.5	39.17	Vertical	43.5	25.83
276.5255	13.13	-16.6	29.73	Vertical	46	32.87
546.5735	14.74	-9.5	24.24	Vertical	46	31.26
930.063	20.38	-3	23.38	Vertical	46	25.62

For 802.11n(HT20) Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.78	-19.3	44.08	Vertical	40	15.22
78.112	18.19	-21.5	39.69	Vertical	40	21.81
138.252	17.67	-21.5	39.17	Vertical	43.5	25.83
276.574	15.93	-16.6	32.53	Vertical	46	30.07
541.1415	16.66	-9.6	26.26	Vertical	46	29.34
882.9695	19.46	-3.6	23.06	Vertical	46	26.54

For 802.11b Channel No.:11

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.86	-19.3	44.16	Vertical	40	15.14
78.112	18.18	-21.5	39.68	Vertical	40	21.82
138.252	17.66	-21.5	39.16	Vertical	43.5	25.84
276.574	15.94	-16.6	32.54	Vertical	46	30.06
536.34	13.35	-9.7	23.05	Vertical	46	32.65
931.906	20.45	-3	23.45	Vertical	46	25.55

For 802.11g Channel No.:11

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.81	-19.3	44.11	Vertical	40	15.19
78.112	18.15	-21.5	39.65	Vertical	40	21.85
138.252	17.62	-21.5	39.12	Vertical	43.5	25.88
276.574	15.91	-16.6	32.51	Vertical	46	30.09
547.01	13.5	-9.5	23	Vertical	46	32.5
939.084	20.38	-2.9	23.28	Vertical	46	25.62

For 802.11n(HT20) Channel No.:11

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.75	-19.3	44.05	Vertical	40	15.25
78.112	18.16	-21.5	39.66	Vertical	40	21.84
138.252	17.65	-21.5	39.15	Vertical	43.5	25.85
288.602	14.17	-16.2	30.37	Vertical	46	31.83
541.1415	16.77	-9.6	26.37	Vertical	46	29.23
950.336	20.44	-2.8	23.24	Vertical	46	25.56

For 802.11n(HT40) Channel No.:3

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.76	-19.3	44.06	Vertical	40	15.24
78.1605	21.8	-21.5	43.3	Vertical	40	18.2
138.252	17.67	-21.5	39.17	Vertical	43.5	25.83
276.574	15.92	-16.6	32.52	Vertical	46	30.08
537.1645	13.47	-9.7	23.17	Vertical	46	32.53
902.0785	19.93	-3.3	23.23	Vertical	46	26.07

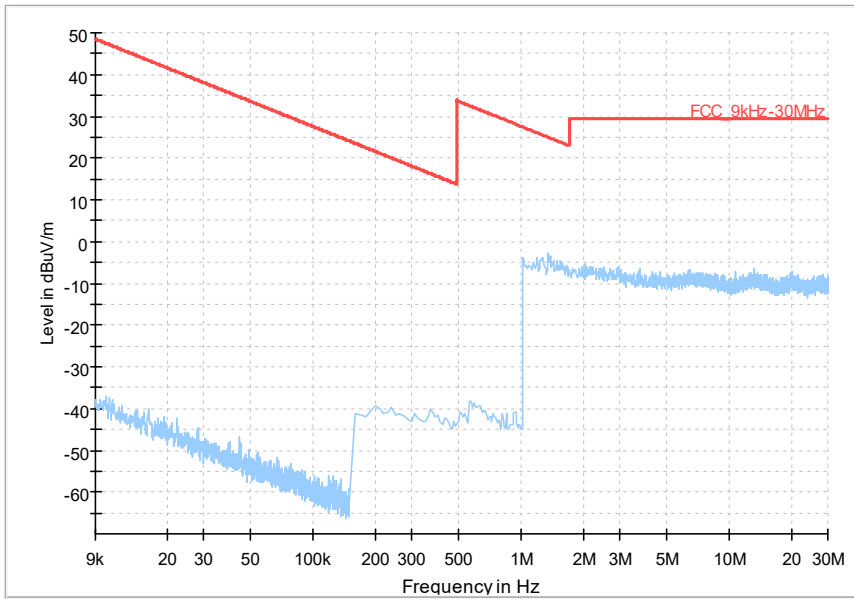
For 802.11n(HT40) Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.72	-19.3	44.02	Vertical	40	15.28
78.112	18.15	-21.5	39.65	Vertical	40	21.85
138.252	18.09	-21.5	39.59	Vertical	43.5	25.41
300.63	14.78	-15.8	30.58	Vertical	46	31.22
541.1415	16.52	-9.6	26.12	Vertical	46	29.48
925.213	20.35	-3.1	23.45	Vertical	46	25.65

For 802.11n(HT40) Channel No.:9

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	24.72	-19.3	44.02	Vertical	40	15.28
78.112	18.15	-21.5	39.65	Vertical	40	21.85
138.252	17.66	-21.5	39.16	Vertical	43.5	25.84
276.574	15.93	-16.6	32.53	Vertical	46	30.07
535.1275	15.76	-9.8	25.56	Vertical	46	30.24
956.253	20.26	-2.8	23.06	Vertical	46	25.74

Full Spectrum



Frequency Range: 9kHz -30MHz

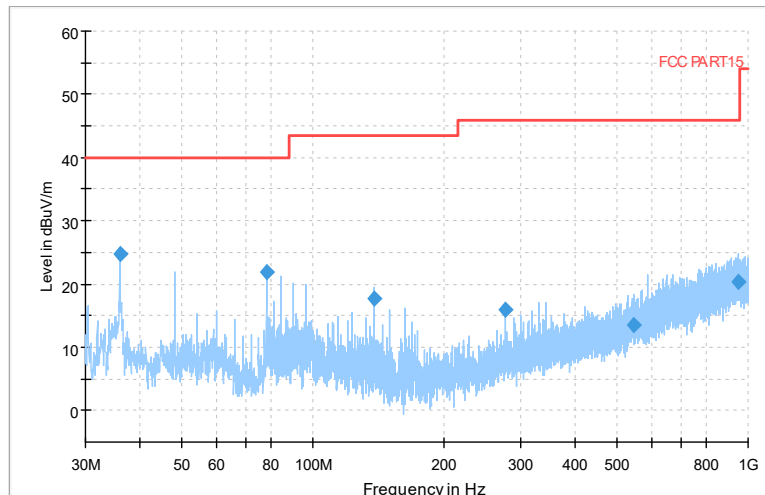
Detector: QP mode

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



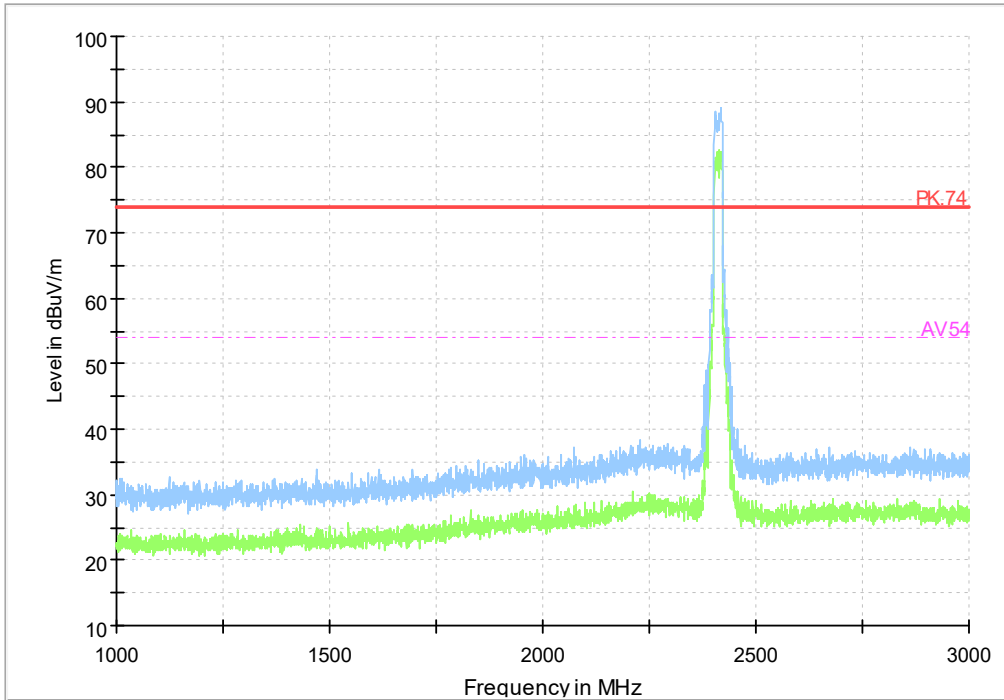
Comment

Frequency Range 30MHz -1GHz

Detector: Av mode and PK mode

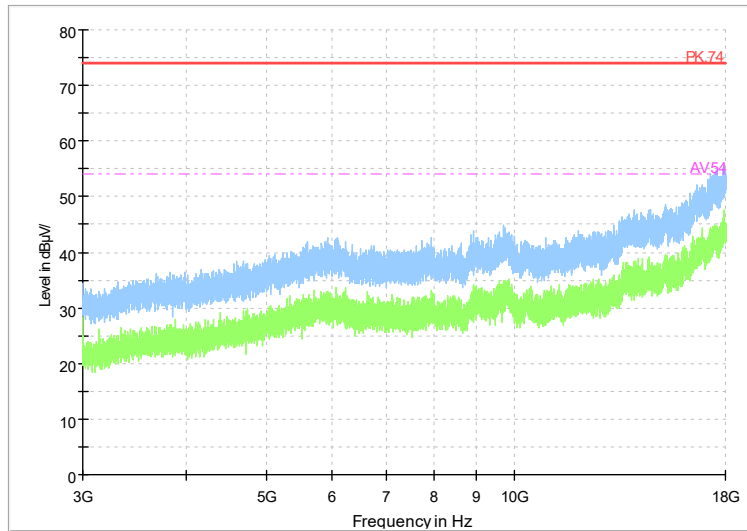
Modulation type: 802.11b

Full Spectrum



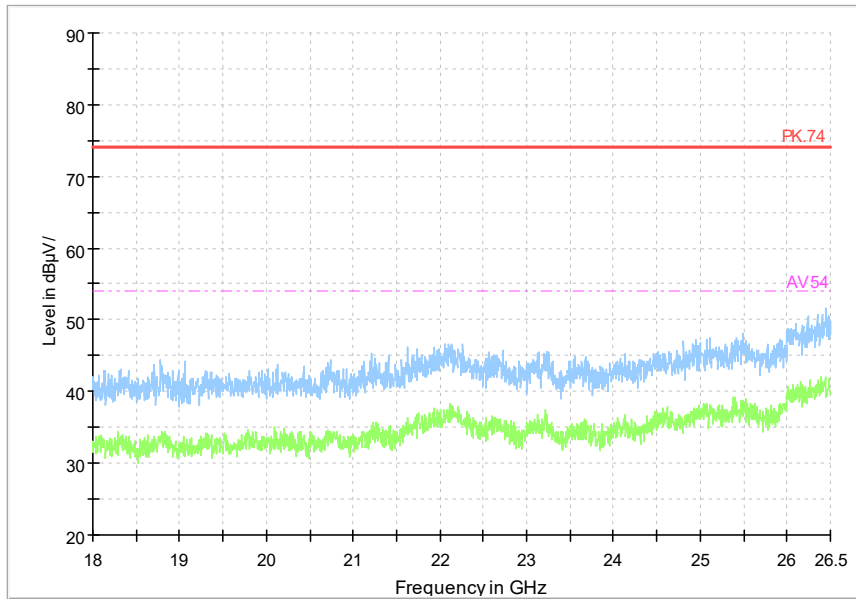
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



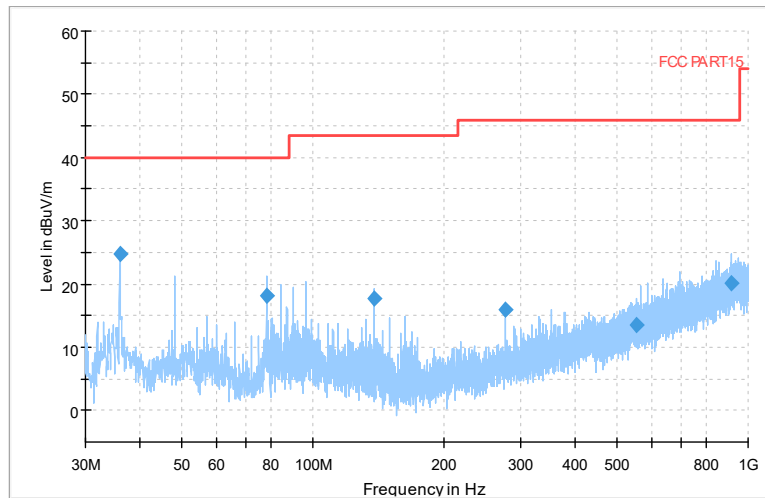
Frequency Range: 3GHz -18GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



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

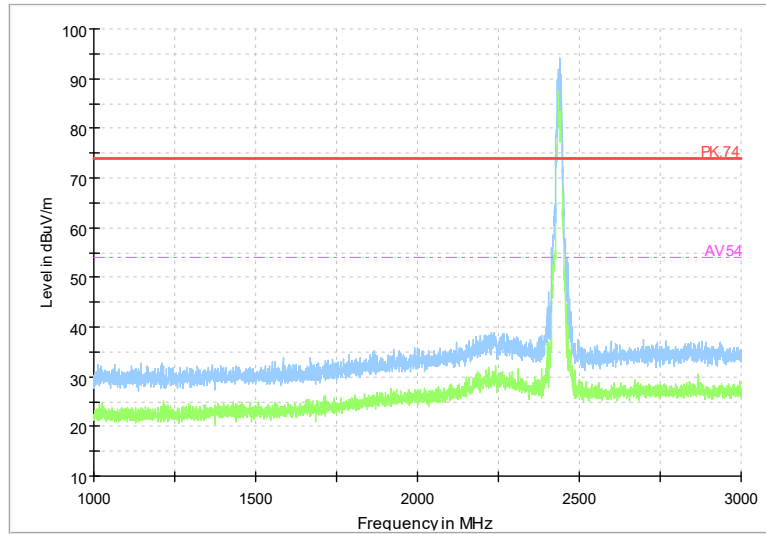
Full Spectrum



Comment

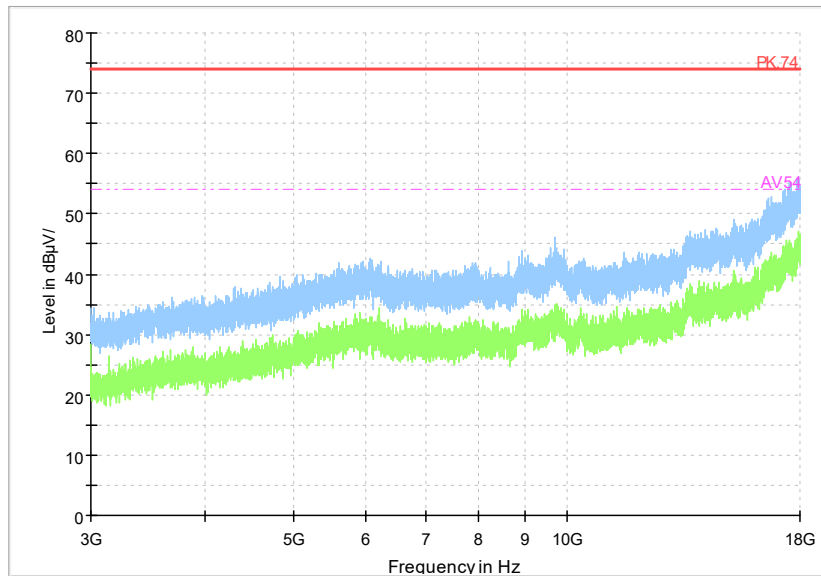
Frequency Range: 30MHz -1GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11g

Full Spectrum



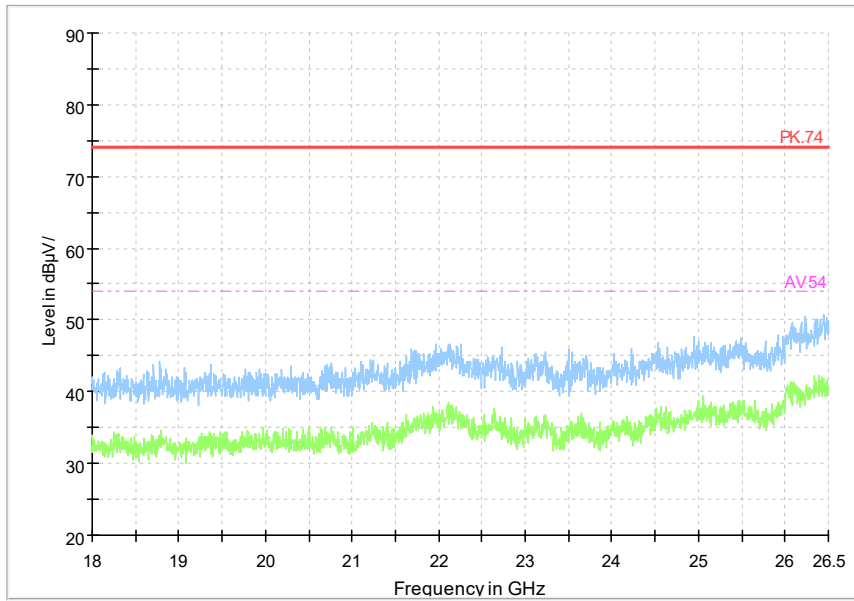
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11g

Full Spectrum



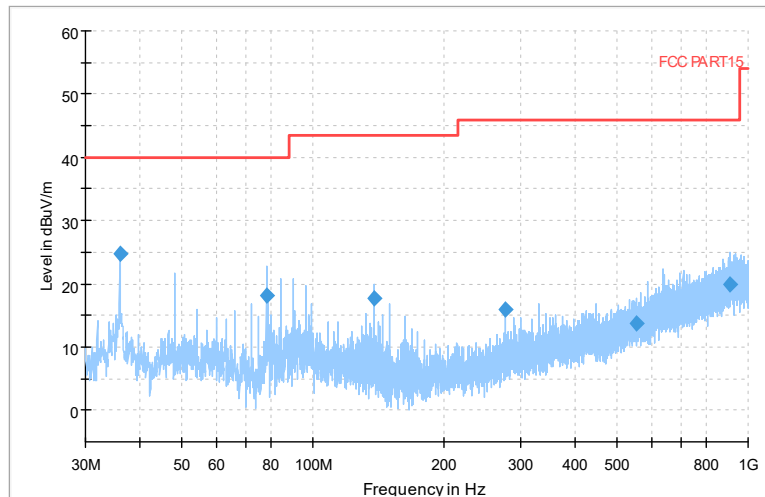
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11g

Full Spectrum



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

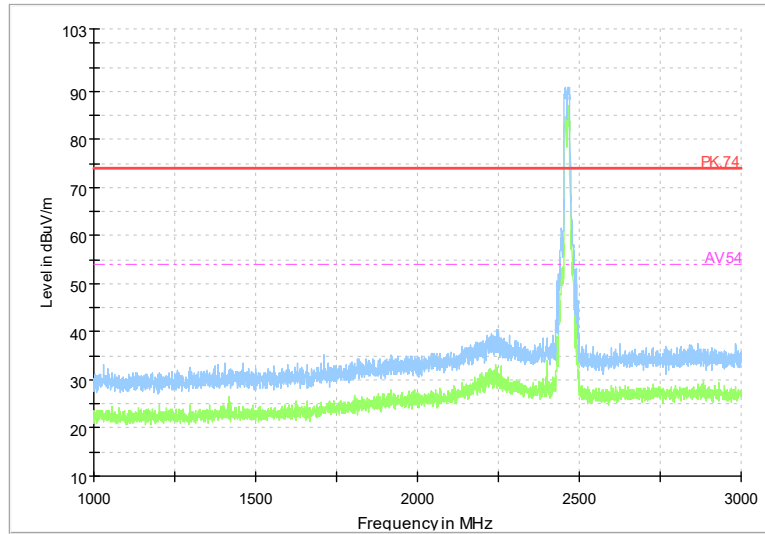
Full Spectrum



Comment

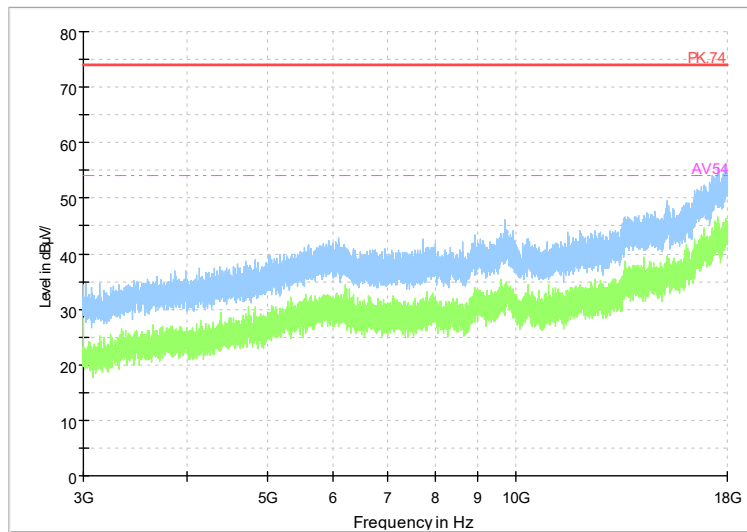
Frequency Range: 30MHz -1GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11n(HT20)

Full Spectrum



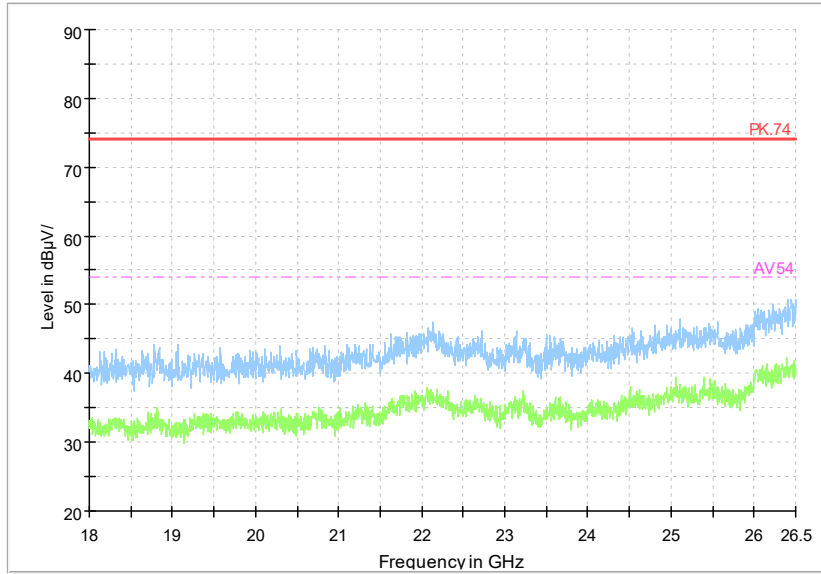
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11n(HT20)

Full Spectrum



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

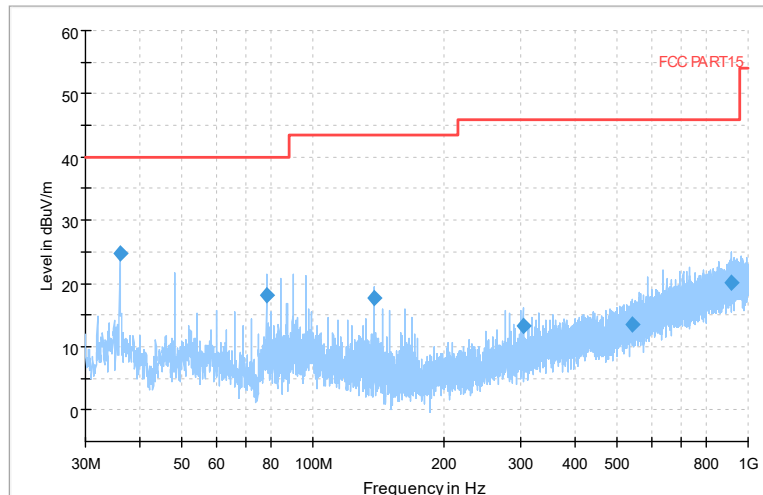
Full Spectrum



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

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

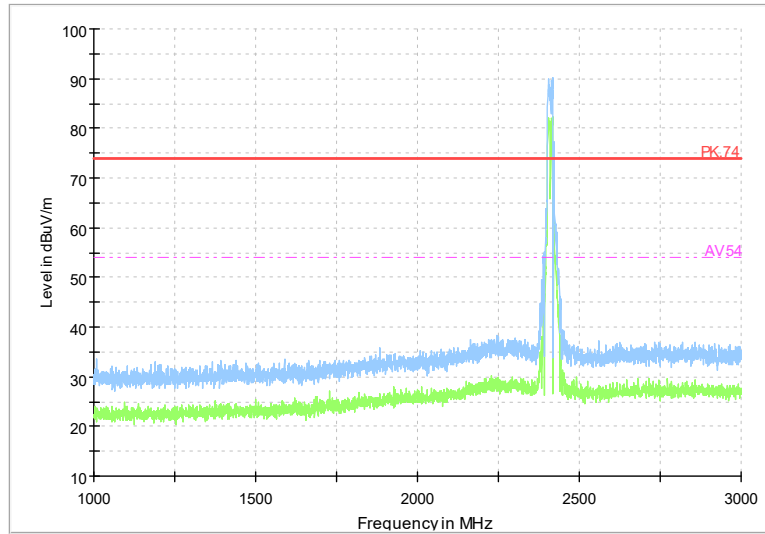
Full Spectrum



Comment

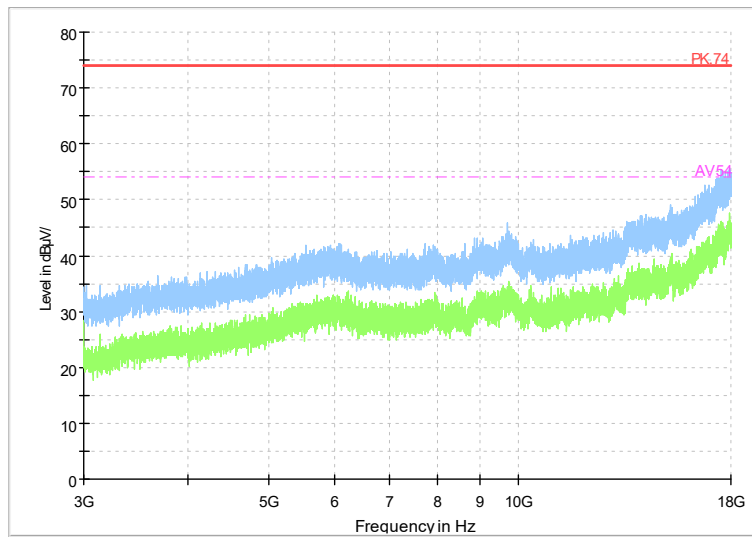
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11b

Full Spectrum



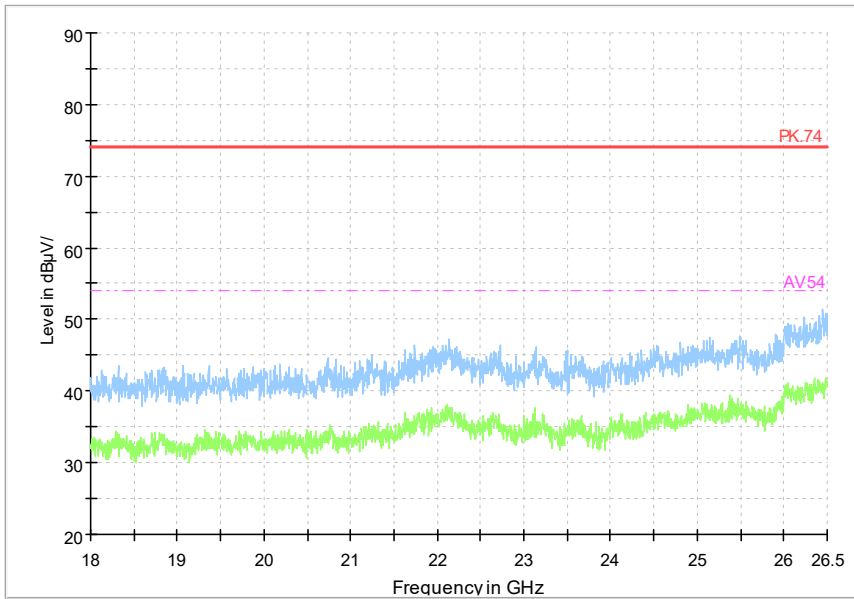
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



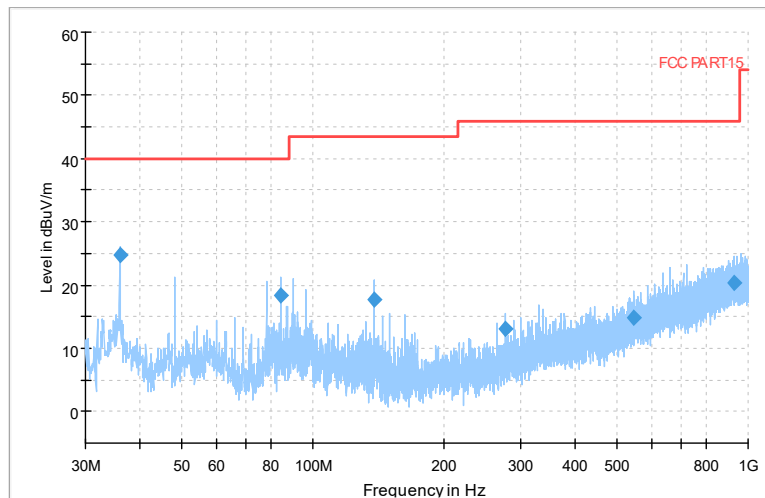
Frequency Range: 3GHz -18GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



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

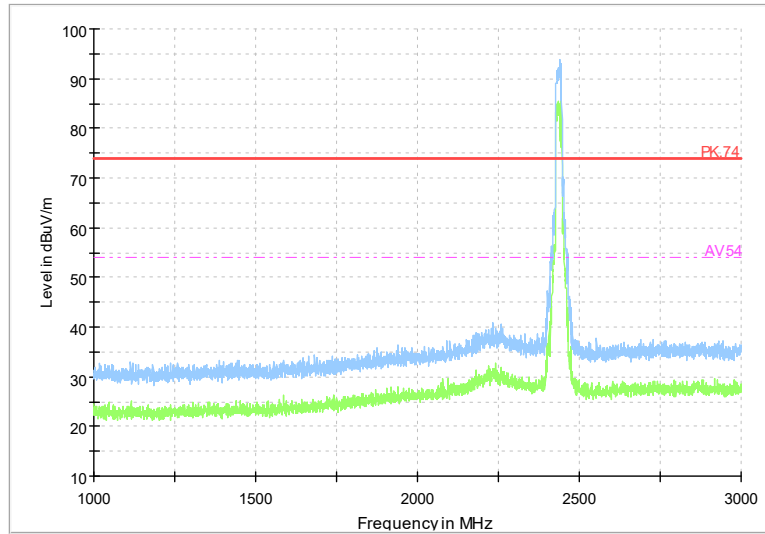
Full Spectrum



Comment

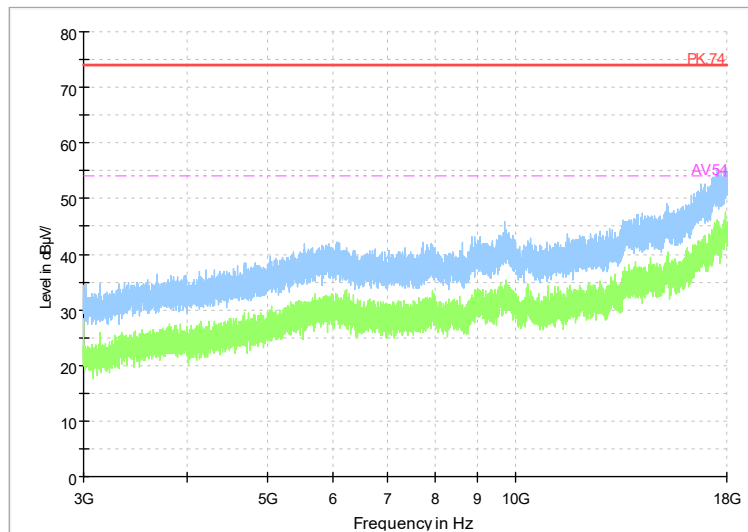
Frequency Range: 30MHz -1GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11g

Full Spectrum



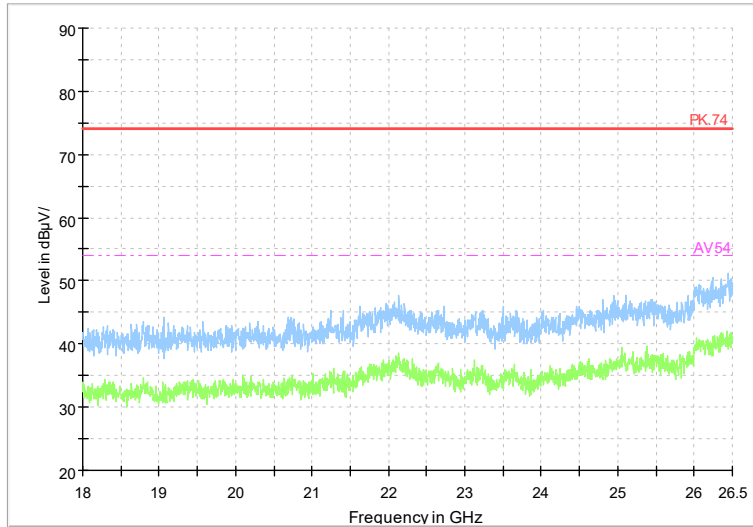
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11g

Full Spectrum



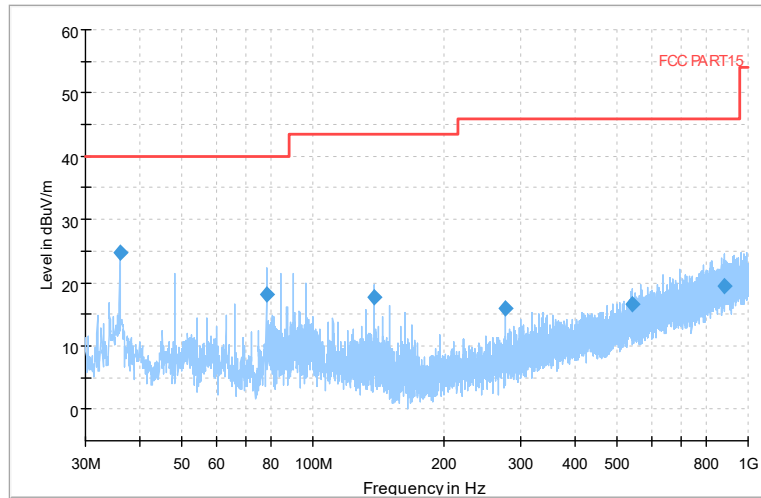
Frequency Range: 3GHz -18GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11g

Full Spectrum



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

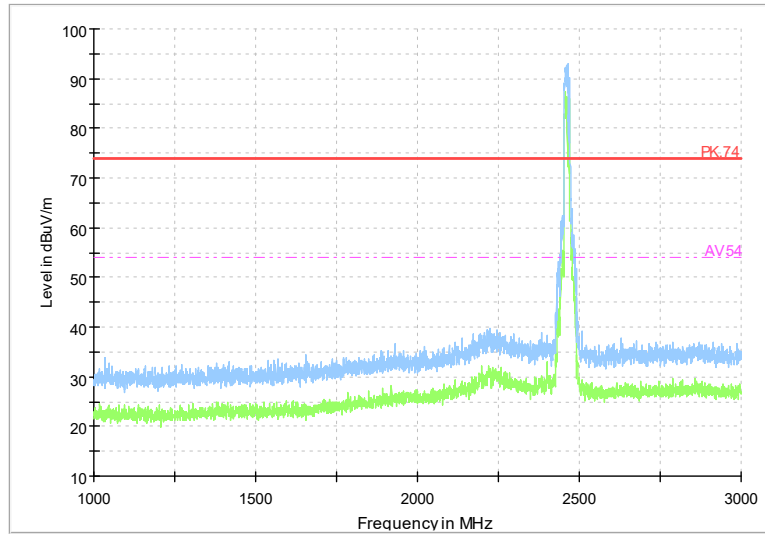
Full Spectrum



Comment

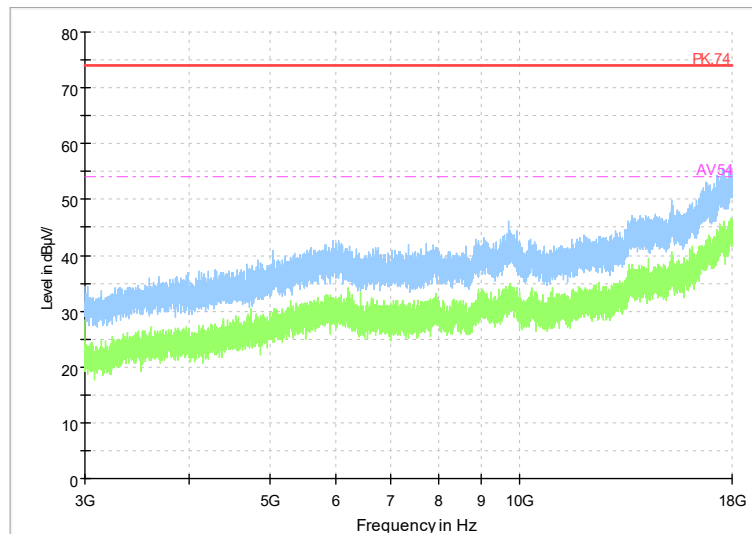
Frequency Range: 30MHz -1GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11n(HT20)

Full Spectrum



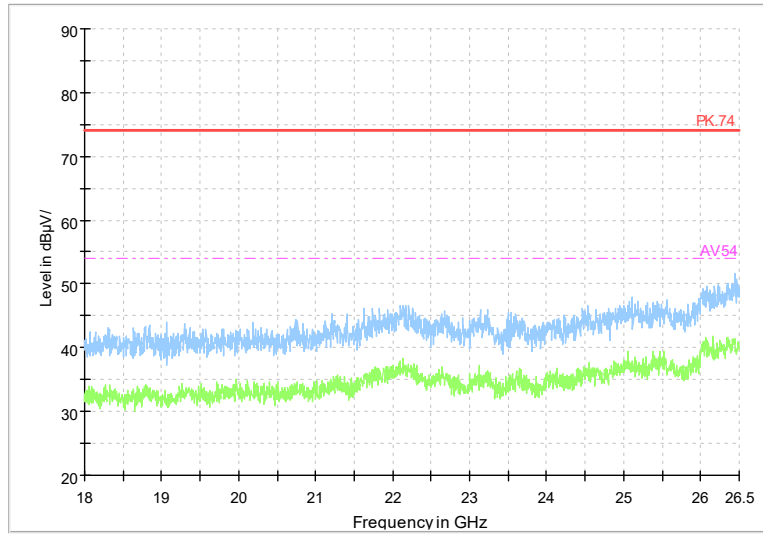
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11n(HT20)

Full Spectrum



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

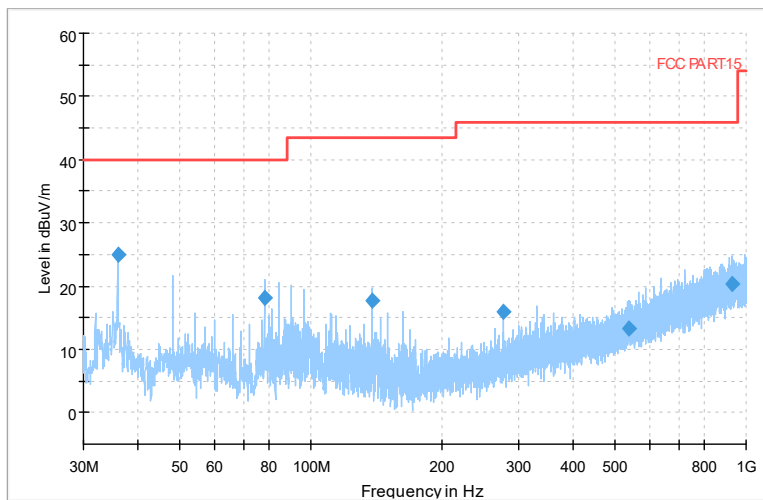
Full Spectrum



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

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

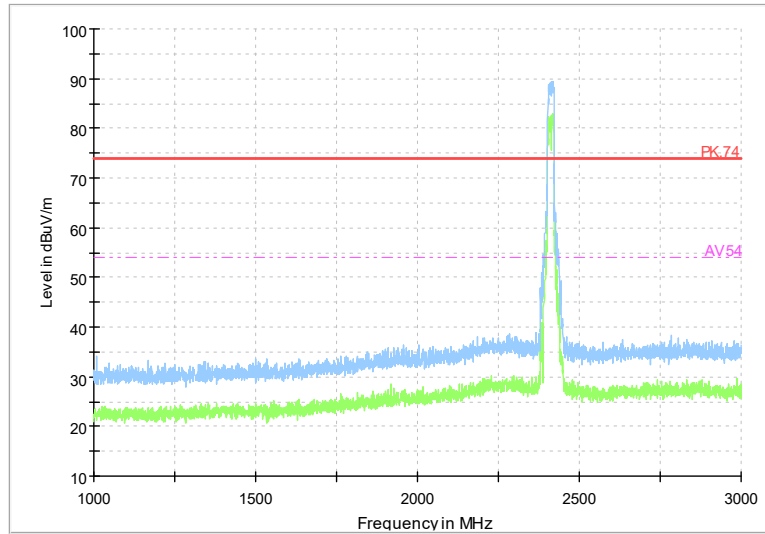
Full Spectrum



Comment

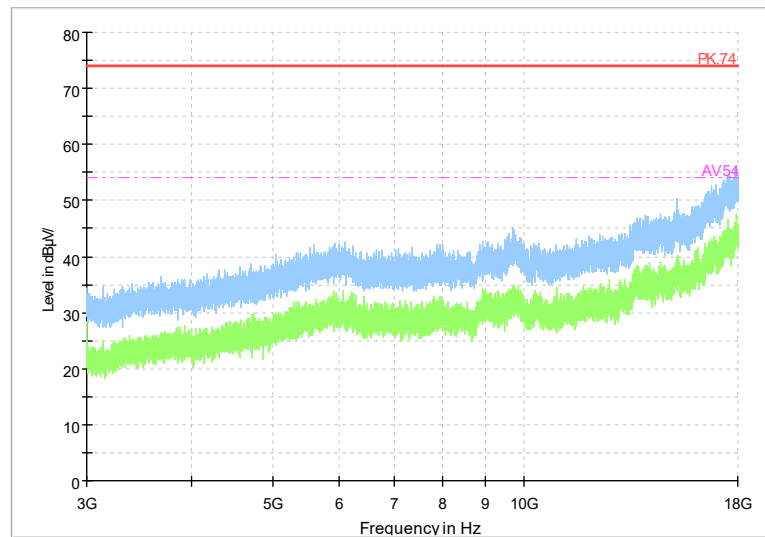
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11b

Full Spectrum



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

Full Spectrum



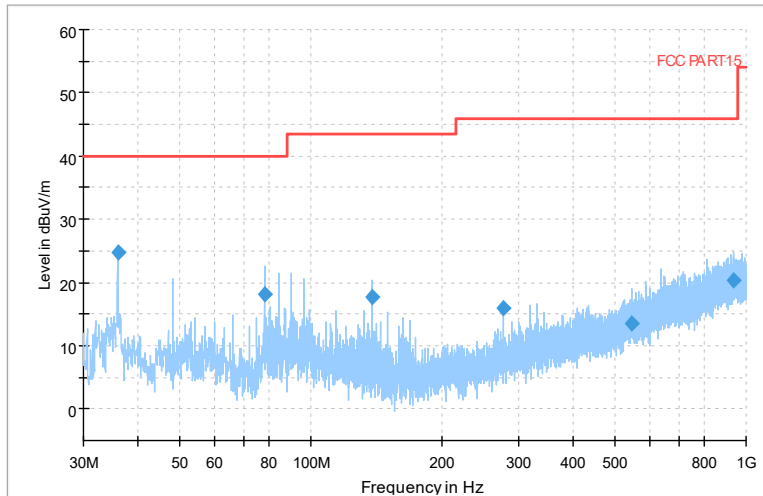
Frequency Range: 3GHz -18GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



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

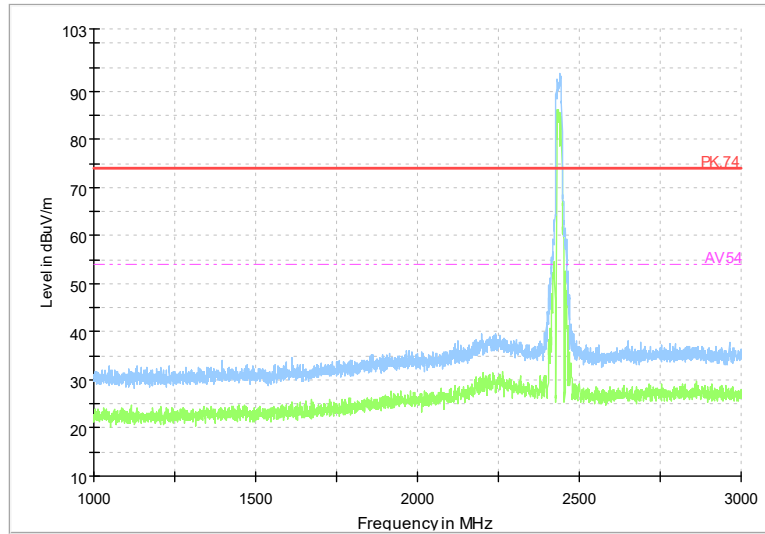
Full Spectrum



Comment

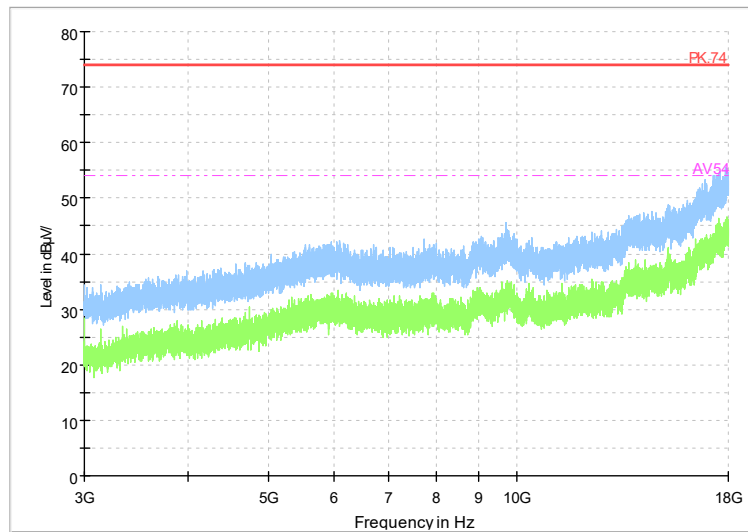
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11g

Full Spectrum



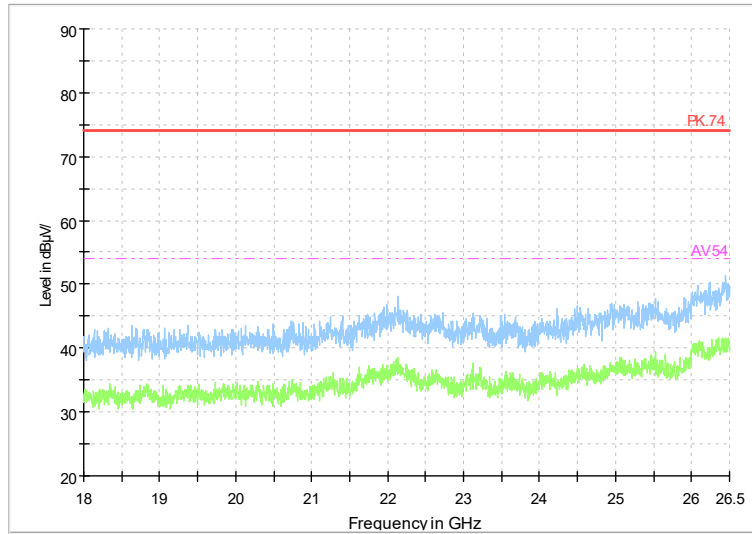
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11g

Full Spectrum



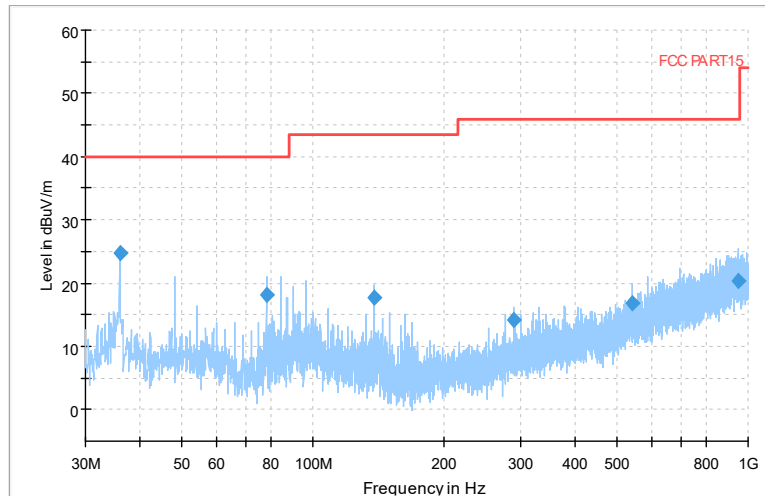
Frequency Range: 3GHz -18GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11g

Full Spectrum



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

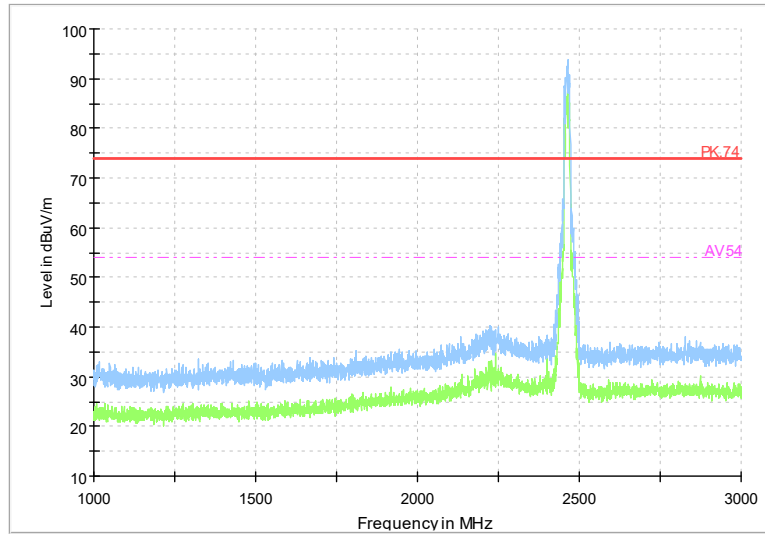
Full Spectrum



Comment

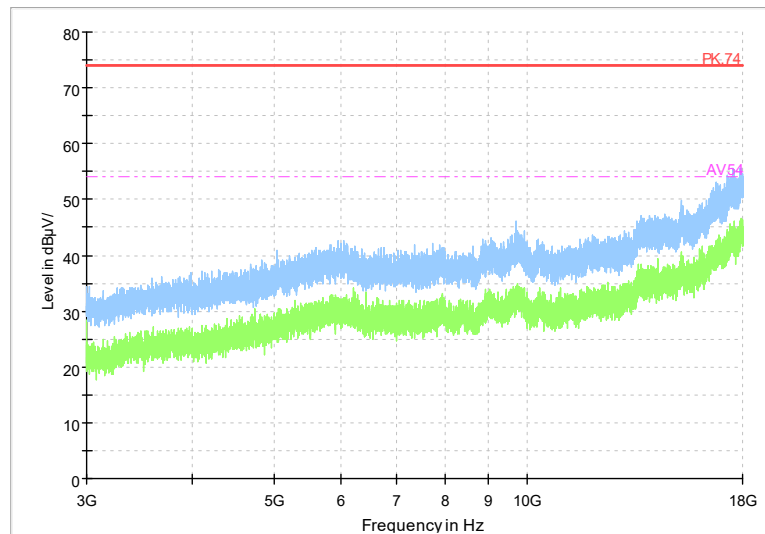
Frequency Range: 30MHz -1GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11n(HT20)

Full Spectrum



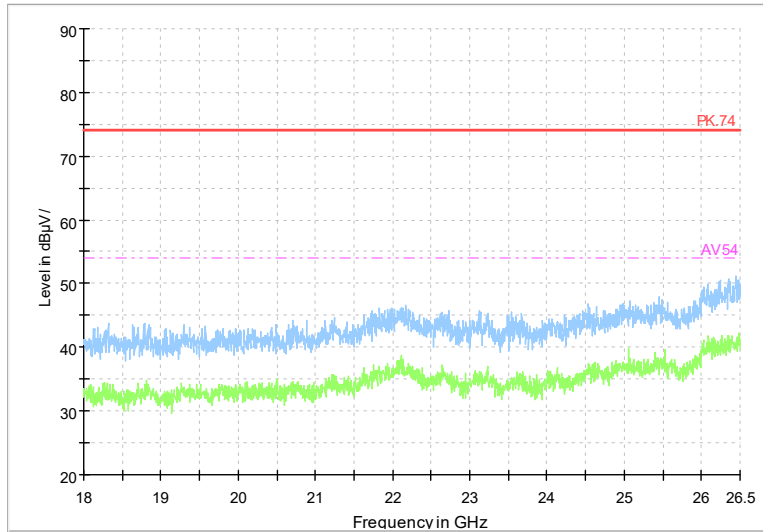
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)

Full Spectrum



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

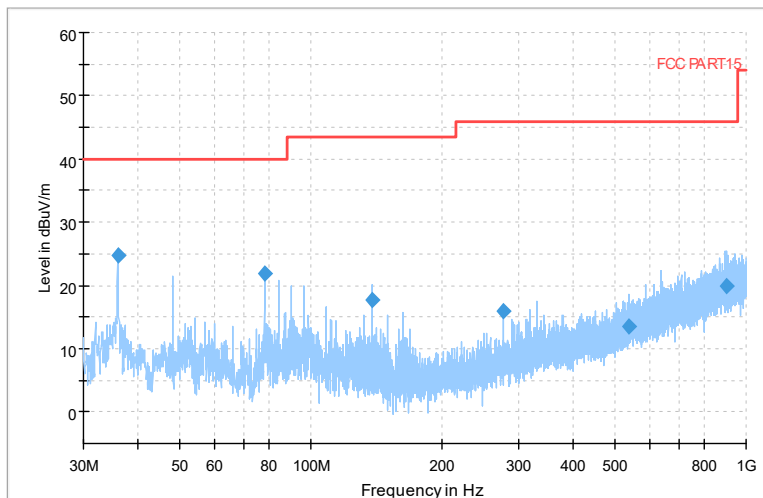
Full Spectrum



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

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

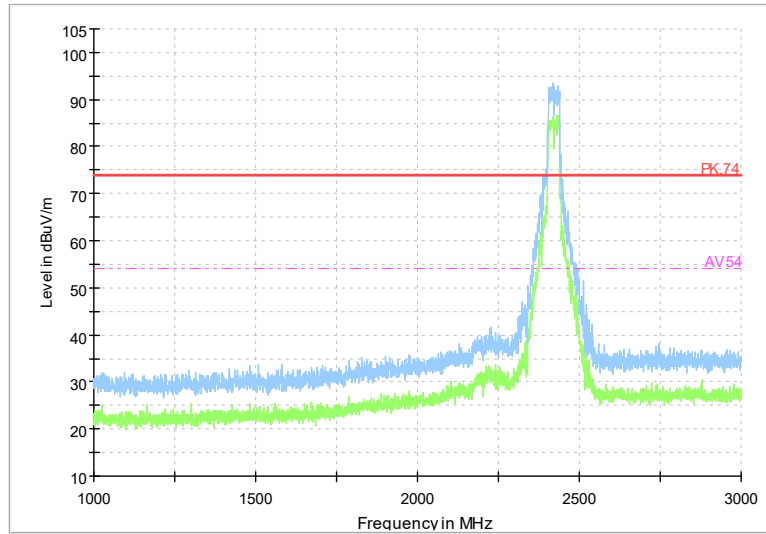
Full Spectrum



Comment

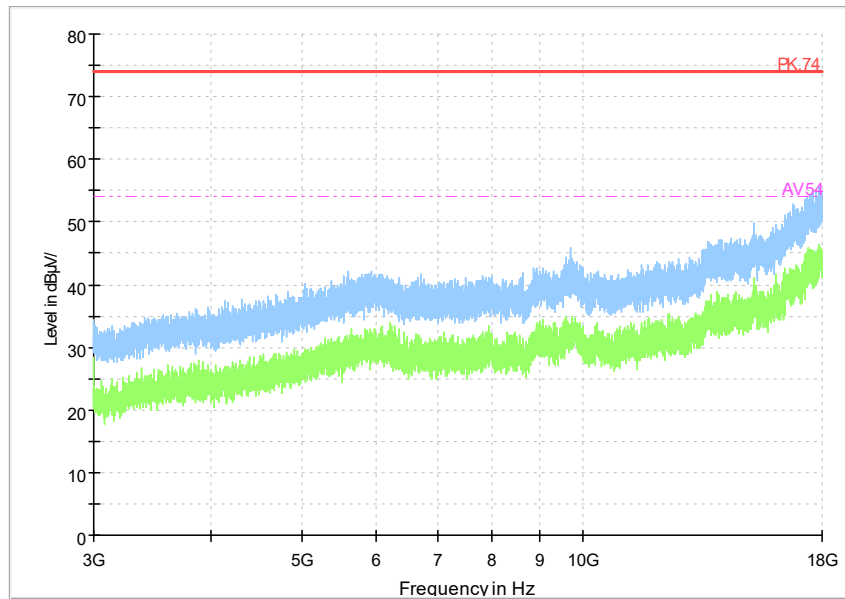
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)

Full Spectrum



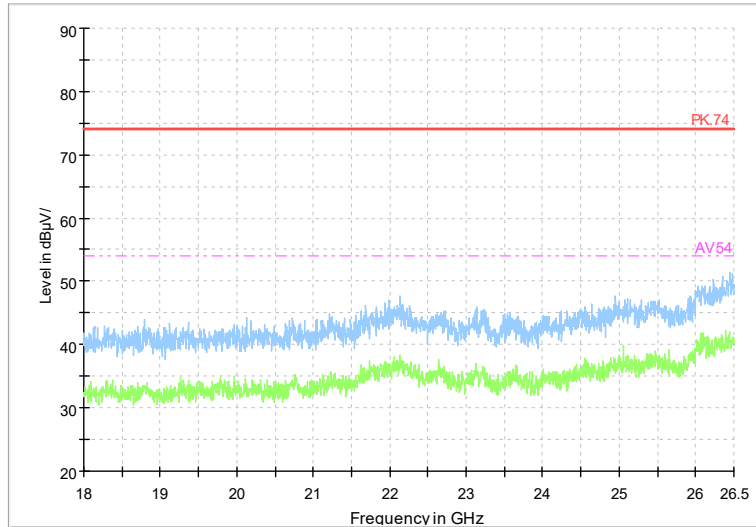
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11n(HT40)

Full Spectrum



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

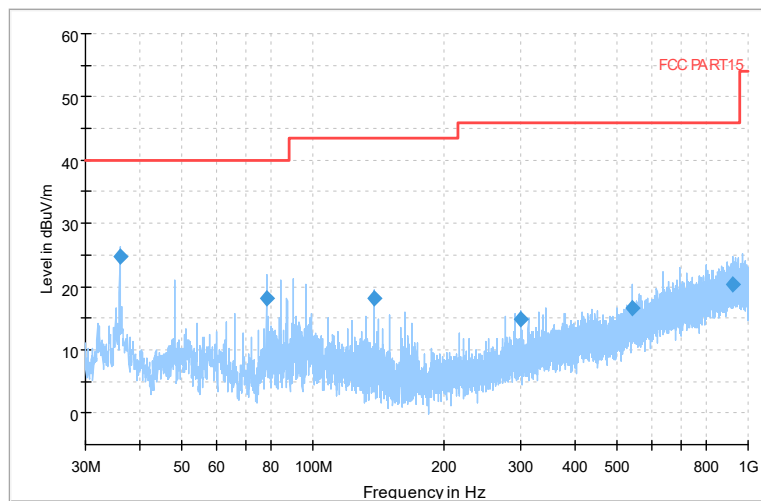
Full Spectrum



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

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

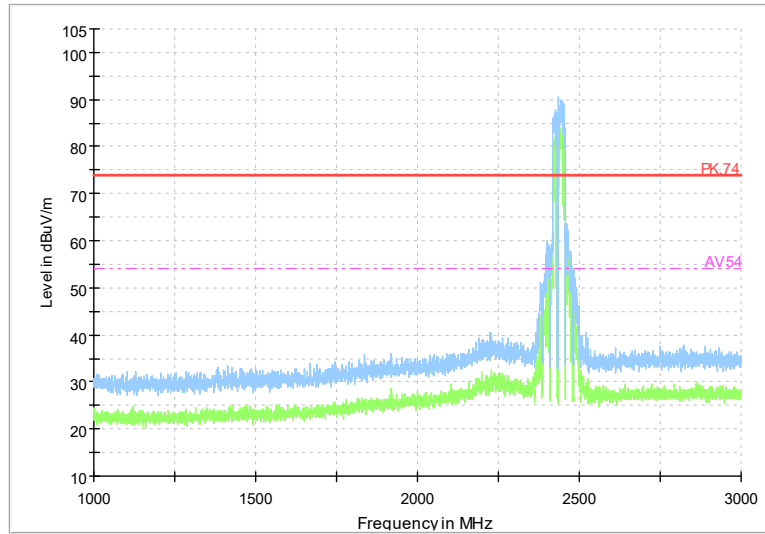
Full Spectrum



Comment

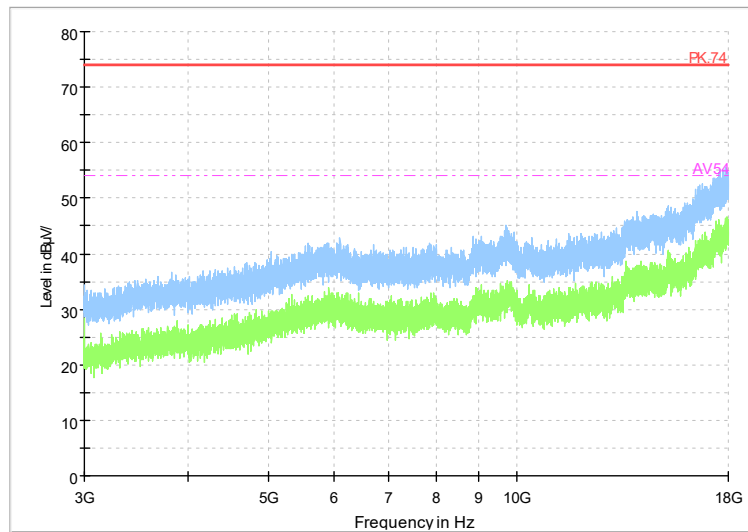
Frequency Range: 30MHz -1GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11n(HT40)

Full Spectrum



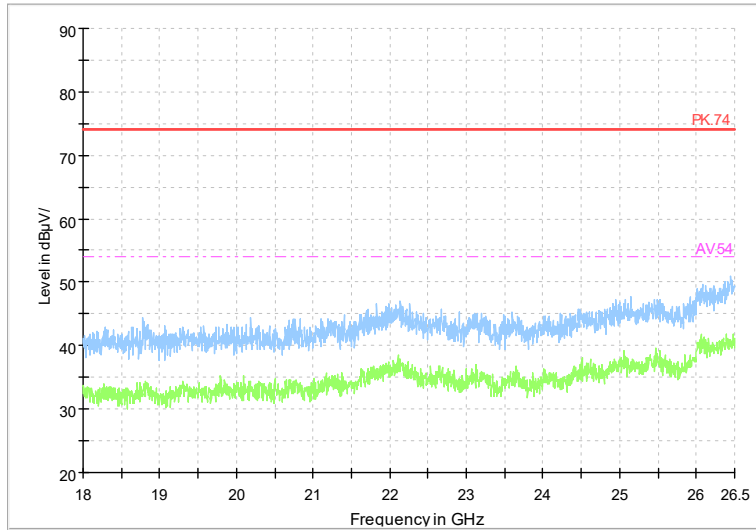
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11n(HT40)

Full Spectrum



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

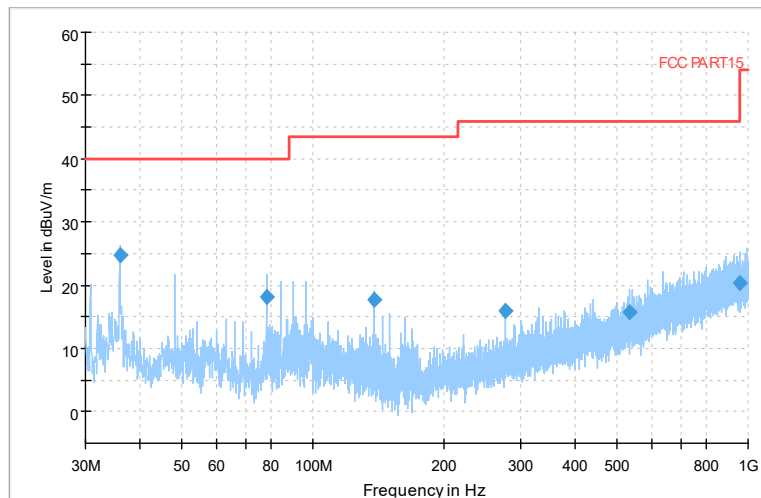
Full Spectrum



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

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

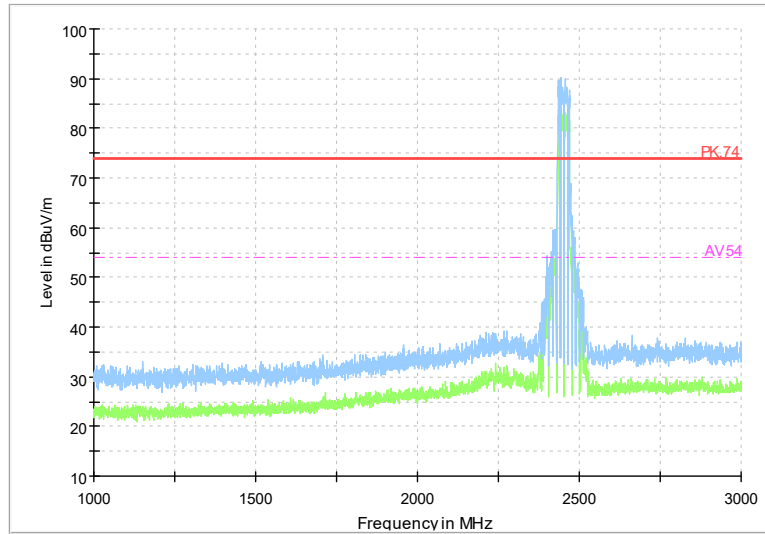
Full Spectrum



Comment

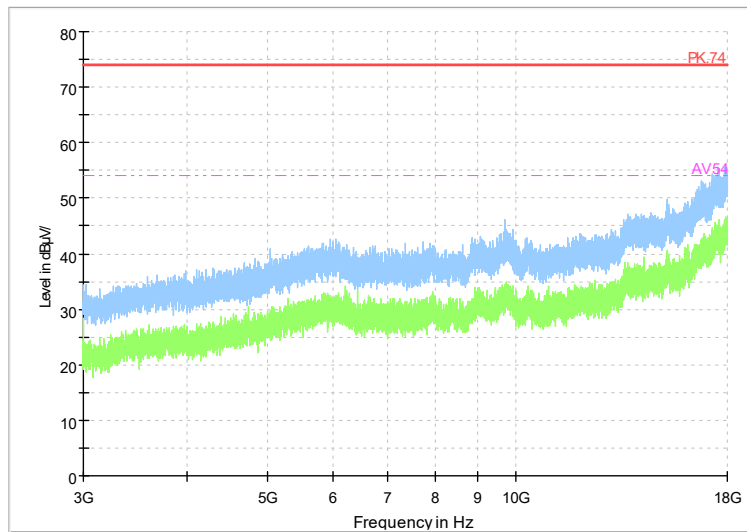
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)

Full Spectrum



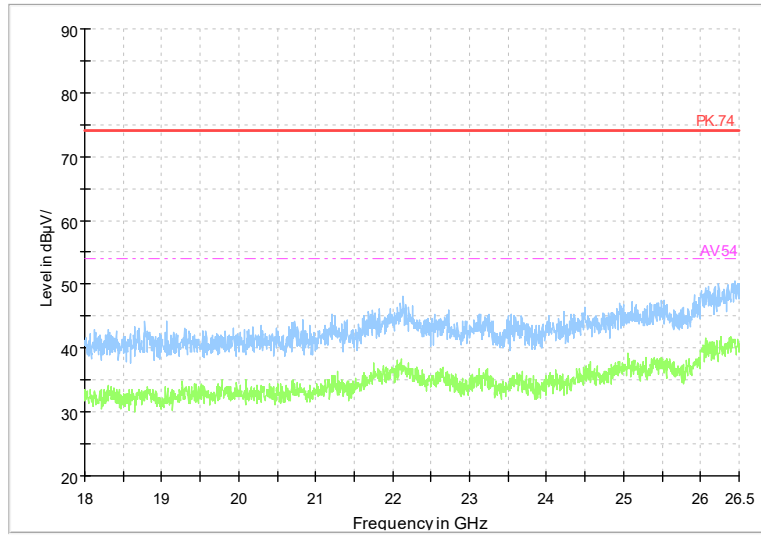
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11n(HT40)

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)

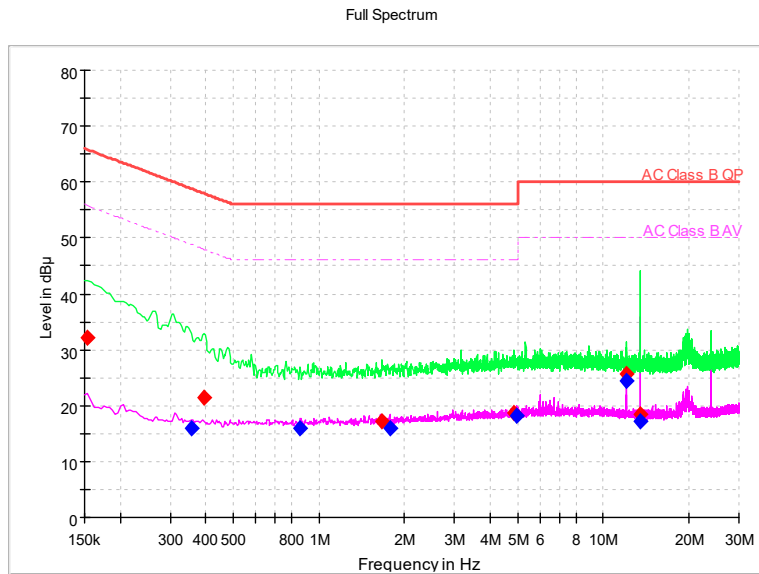
AC Power line Conducted Emission

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: $(32.06dB\mu V) = (2.36dB\mu V) + (29.7 dB)$, the corresponding frequency is 0.154264MHz.



L+N Line

MEASUREMENT RESULT:

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	PmeaQuasiPeak (dBµV)	Pmea Average (dBµV)
0.154264	32.06	---	65.77	33.71	N	29.7	2.36	---
0.354686	---	16.03	48.85	32.82	N	29.7	---	-13.67
0.393064	21.51	---	58	36.49	N	29.7	-8.19	---
0.862136	---	15.94	46	30.06	L1	29.8	---	-13.86
1.663822	17.09	---	56	38.91	L1	29.9	-12.81	---
1.774693	---	16.01	46	29.99	N	29.8	---	-13.79
4.870564	18.66	---	56	37.34	L1	29.9	-11.24	---
4.947322	---	18.08	46	27.92	L1	29.9	---	-11.82
12.038829	---	24.32	50	25.68	L1	30	---	-5.68
12.038829	25.62	---	60	34.38	L1	30	-4.38	---
13.561179	---	17.25	50	32.75	N	30	---	-12.75
13.561179	18.5	---	60	41.5	N	30	-11.5	---

---End of Test Report---