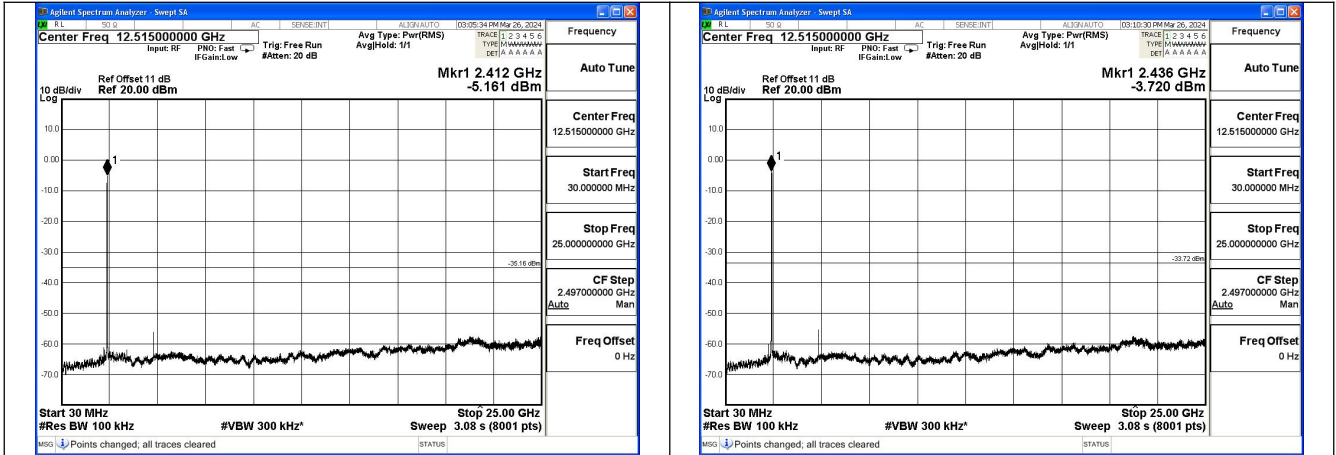


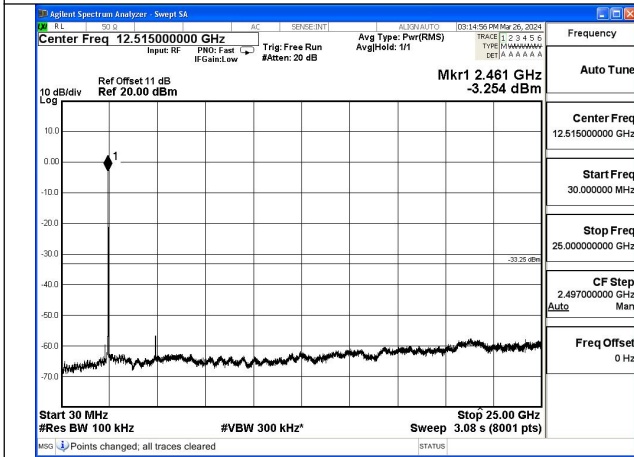
Conducted Out of band emission measurement

Test Mode: 802.11b



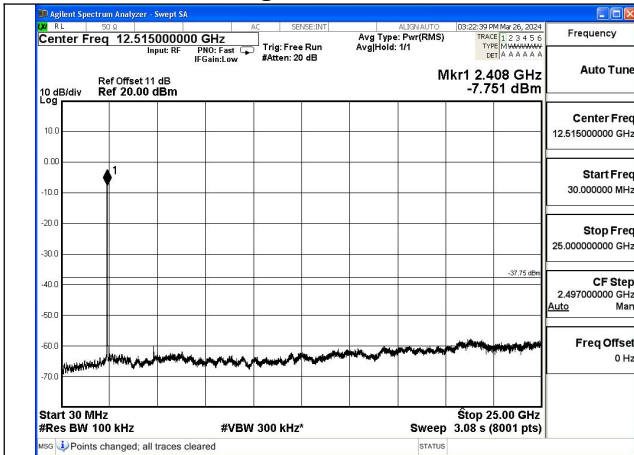
Mode:802.11b Frequency:2412MHz Ant:Chain0

Mode:802.11b Frequency:2437MHz Ant:Chain0

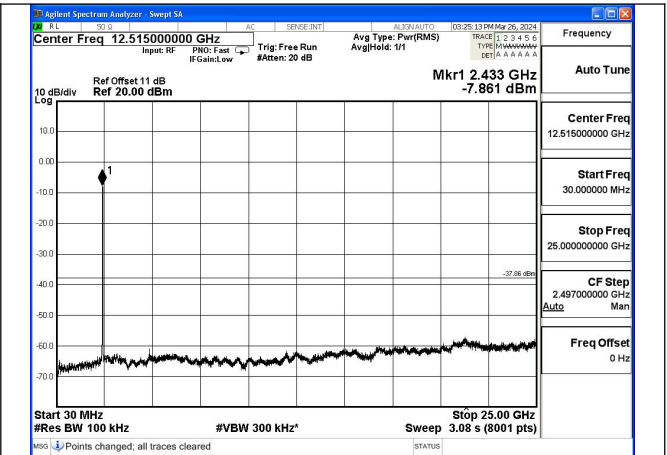


Mode:802.11b Frequency:2462MHz Ant:Chain0

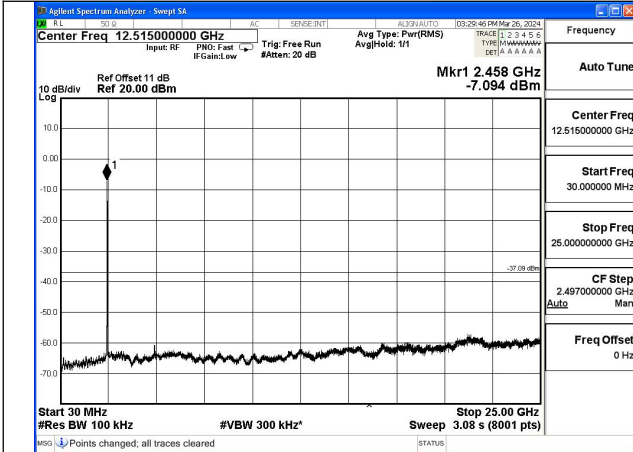
Test Mode: 802.11g



Mode:802.11g Frequency:2412MHz Ant:Chain0

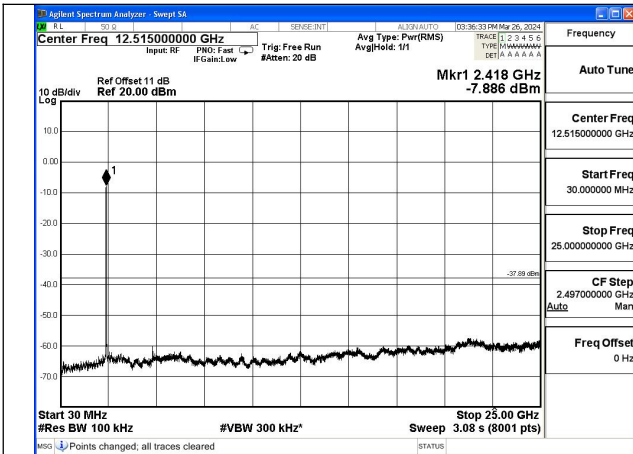


Mode:802.11g Frequency:2437MHz Ant:Chain0

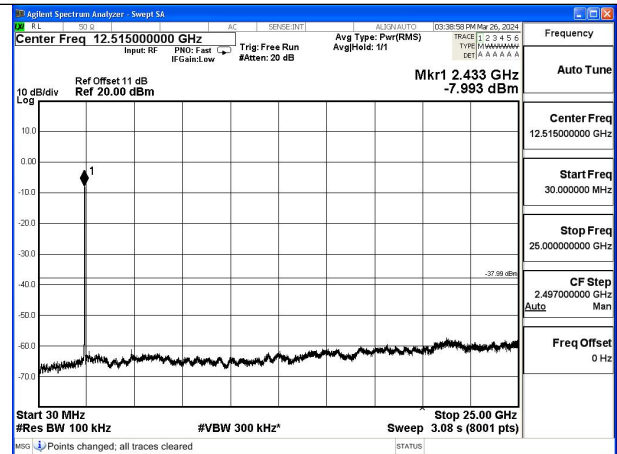


Mode:802.11g Frequency:2462MHz Ant:Chain0

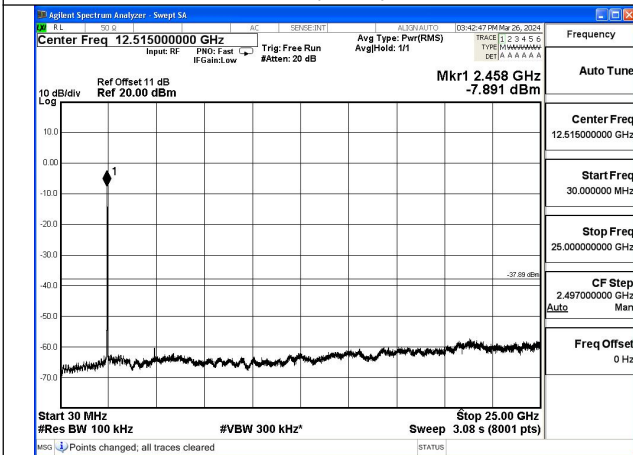
Test Mode: 802.11n HT20



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

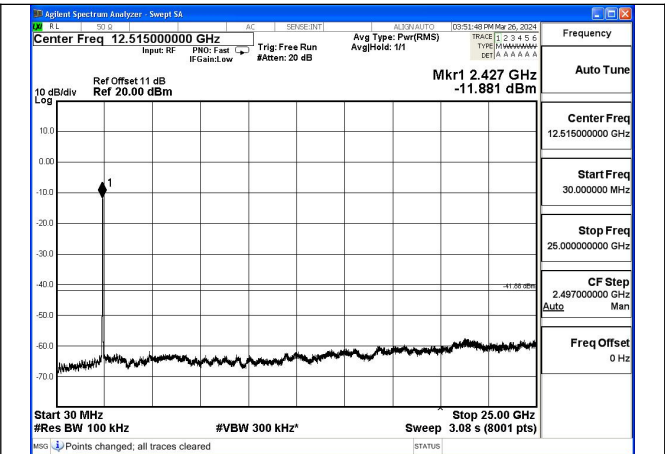
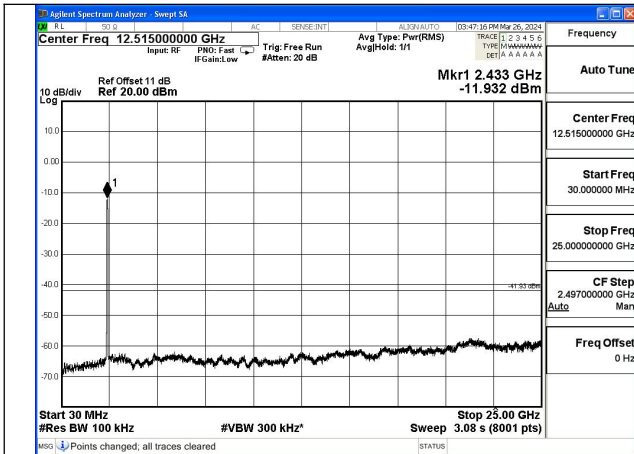


Mode:802.11n HT20 Frequency:2437MHz Ant:Chain0



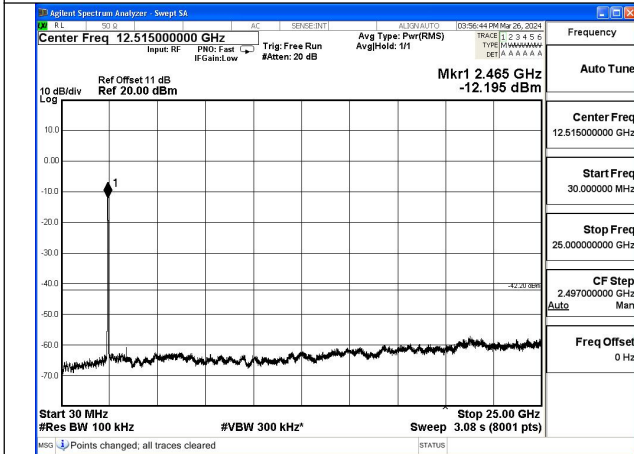
Mode:802.11n HT20 Frequency:2462MHz Ant:Chain0

Test Mode: 802.11n HT40



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

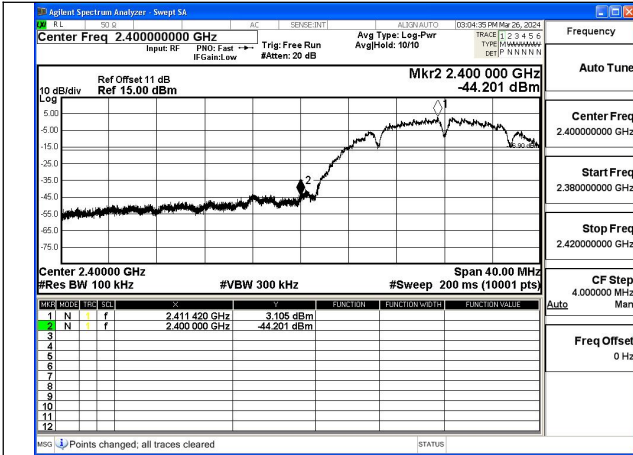
Mode:802.11n HT40 Frequency:2437MHz Ant:Chain0



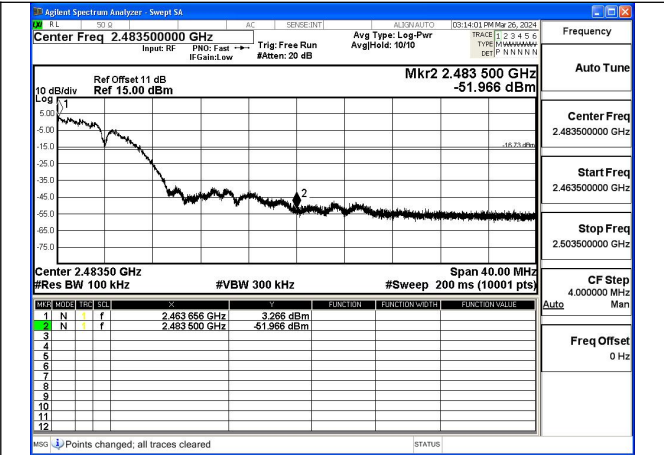
Mode:802.11n HT40 Frequency:2452MHz Ant:Chain0

Band edge measurement

Test Mode: 802.11b

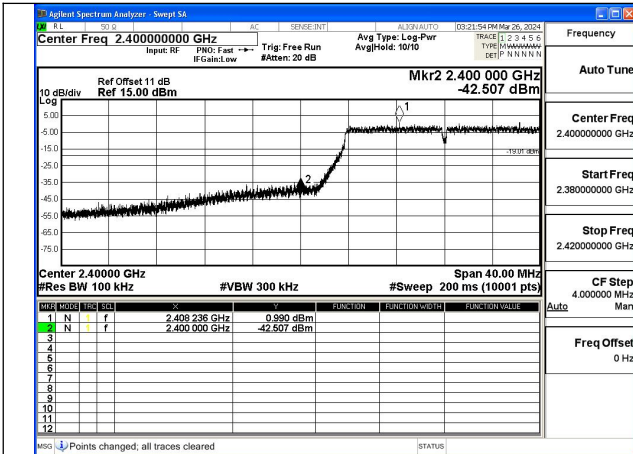


Mode:802.11b Frequency:2412MHz Ant:Chain0

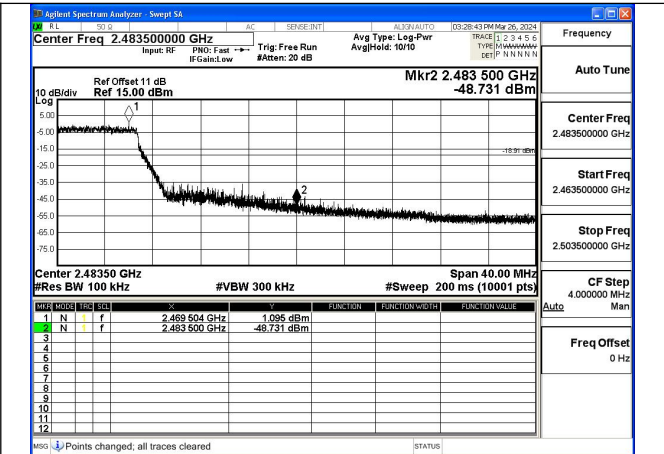


Mode:802.11b Frequency:2462MHz Ant:Chain0

Test Mode: 802.11g

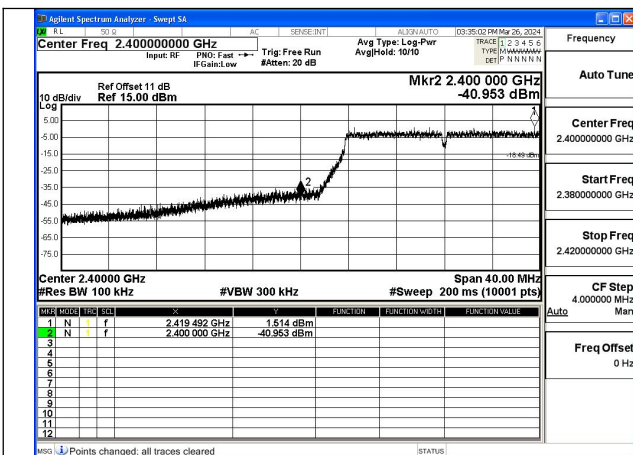


Mode:802.11g Frequency:2412MHz Ant:Chain0

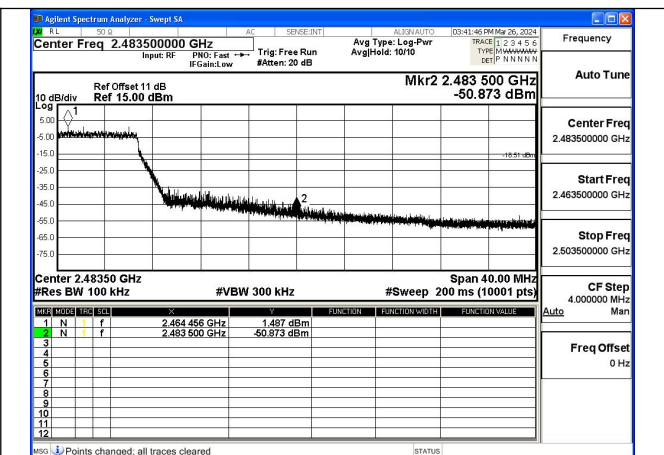


Mode:802.11g Frequency:2462MHz Ant:Chain0

Test Mode: 802.11n HT20

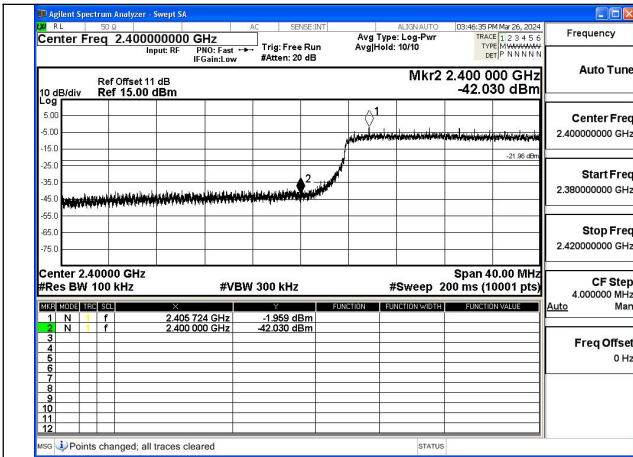


Mode:802.11n HT20 Frequency:2412MHz Ant:Chain0

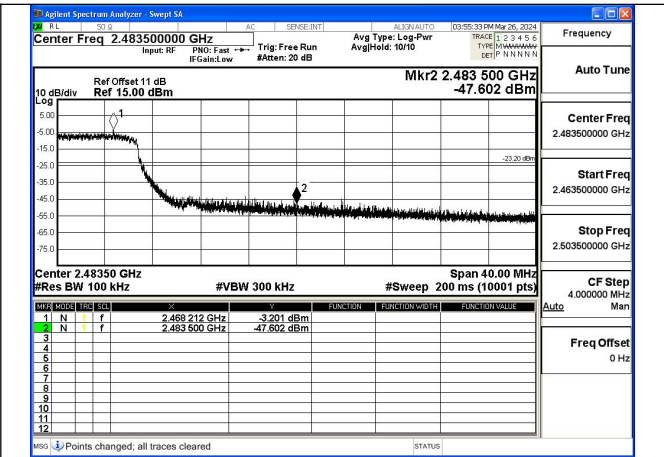


Mode:802.11n HT20 Frequency:2462MHz Ant:Chain0

Test Mode: 802.11n HT40



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



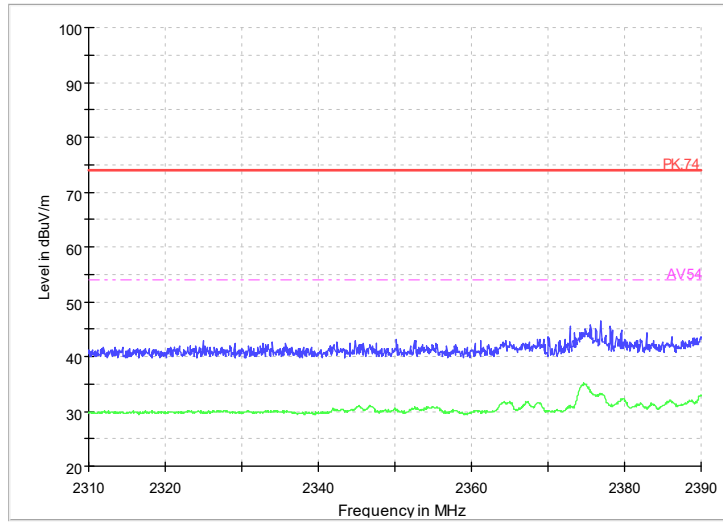
Mode:802.11n HT40 Frequency:2452MHz Ant:Chain0

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



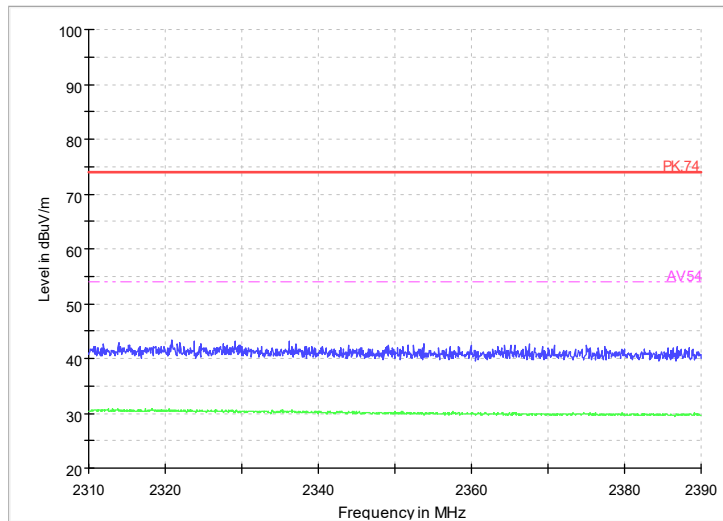
Comment

Radiated Emission Band Edge

Channel No.:1

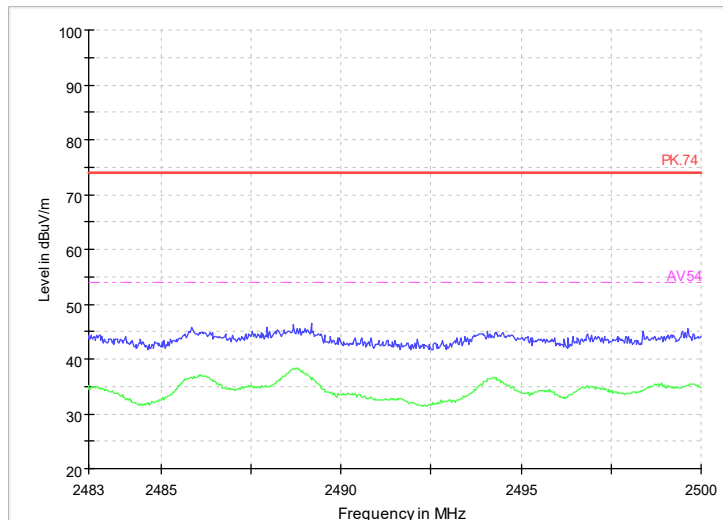
Test Mode: 802.11b

Polarization: V



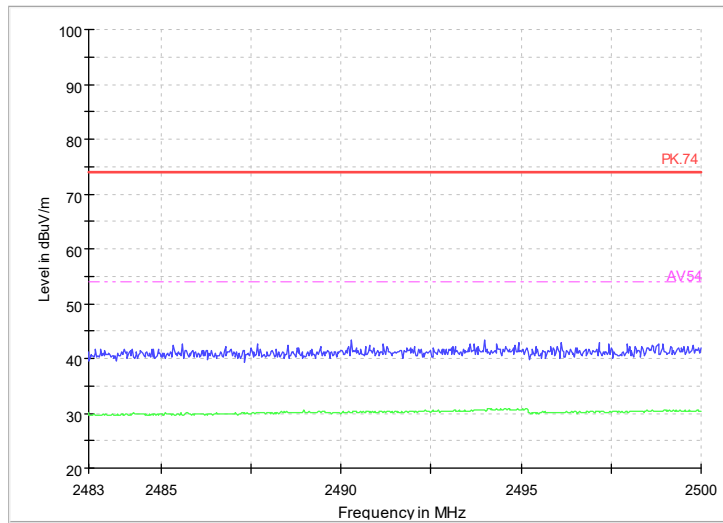
Comment

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



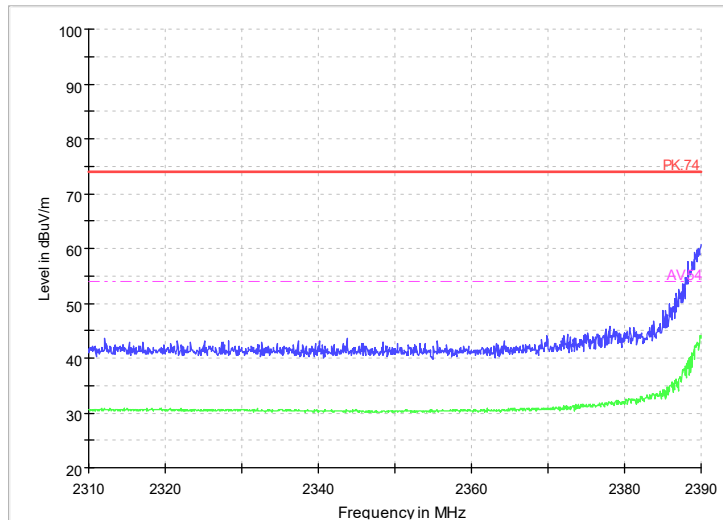
Comment

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



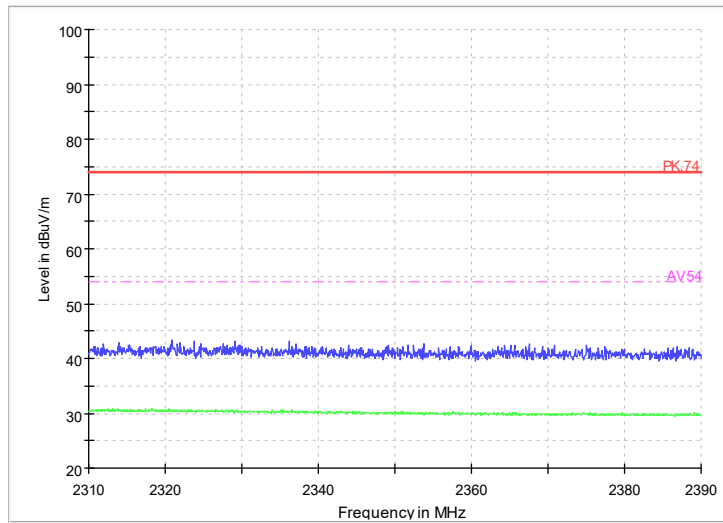
Comment

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



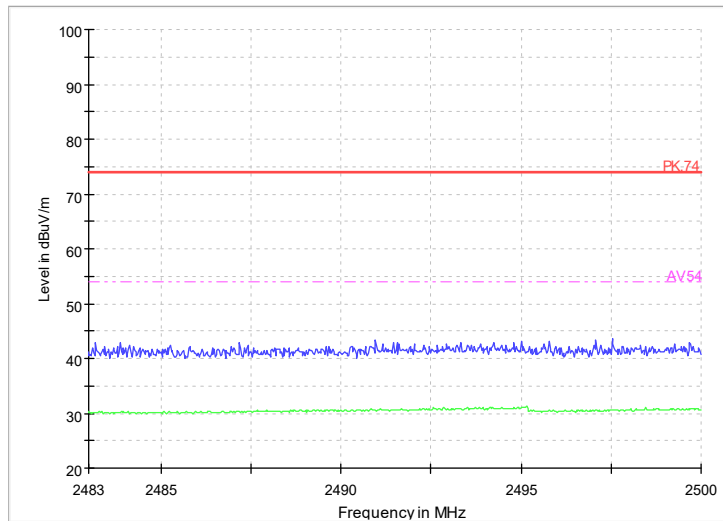
Comment

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



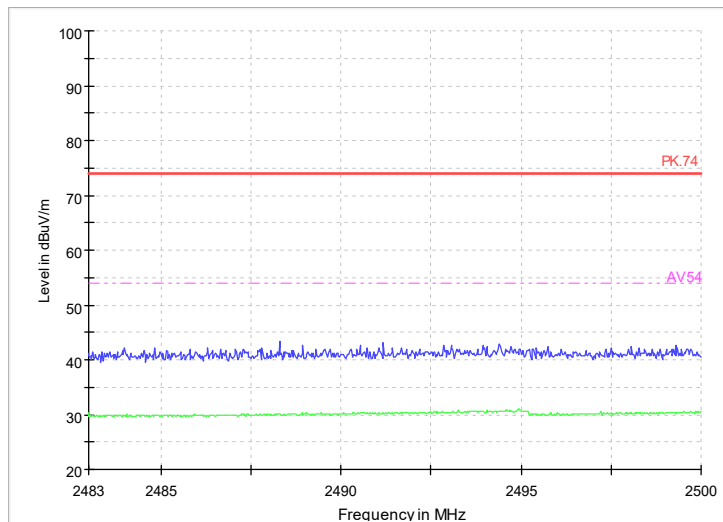
Comment

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



Comment

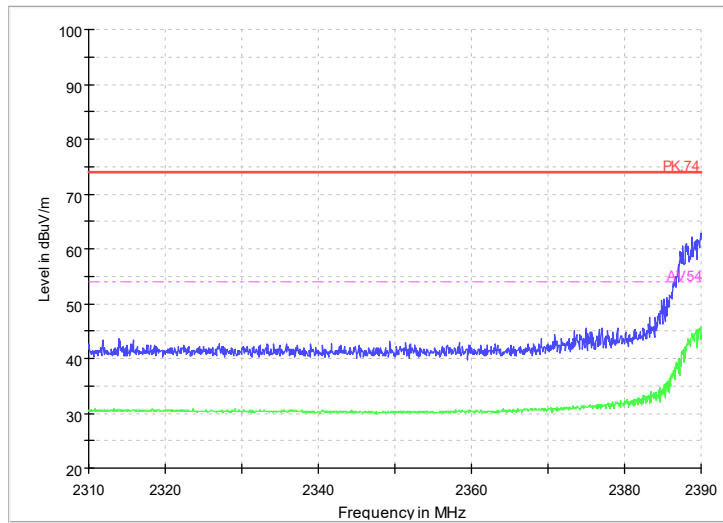
Radiated Emission Band Edge
 Channel No.:11
 Test Mode: 802.11g
 Polarization: V



Comment

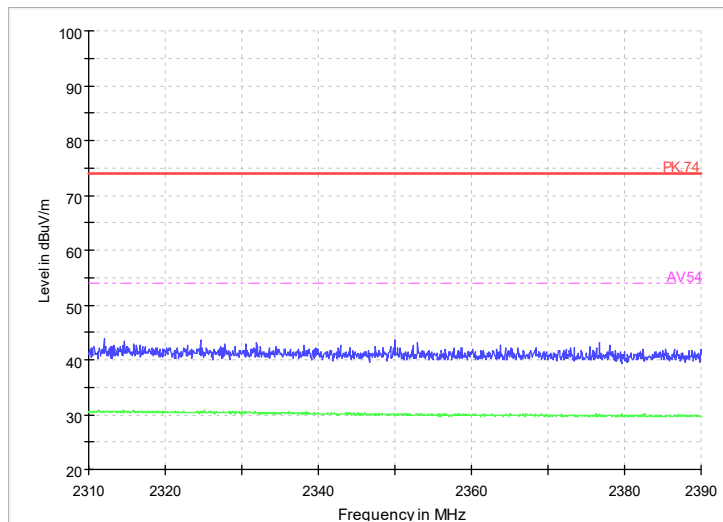
Radiated Emission Band Edge

Channel No.:11
Test Mode: 802.11g
Polarization: H



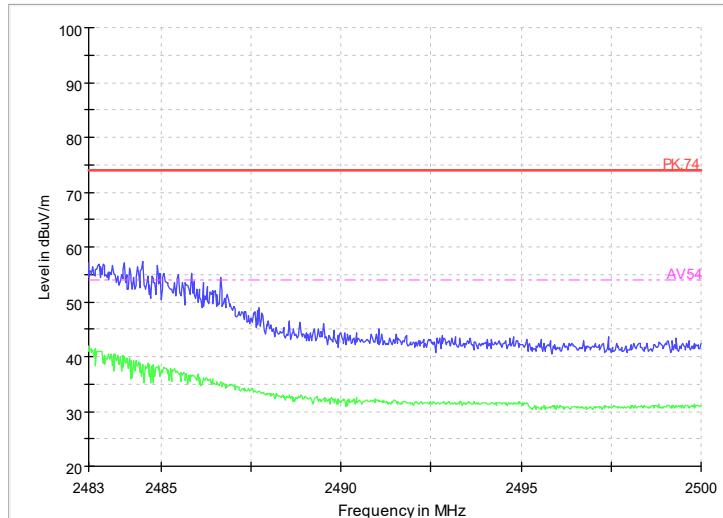
Comment

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



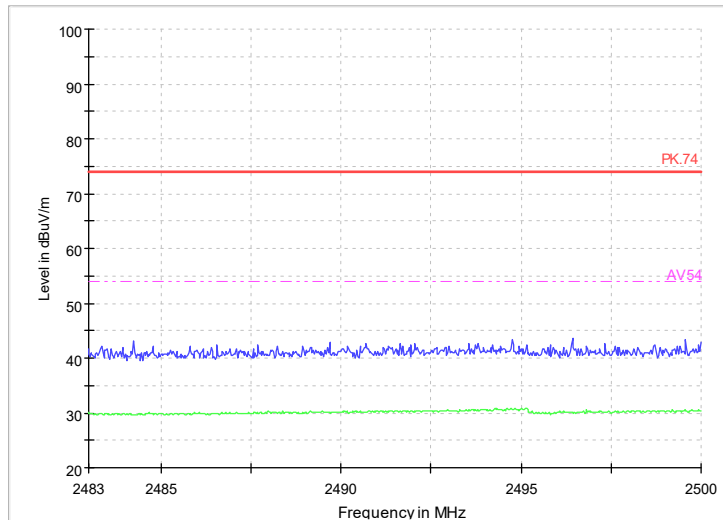
Comment

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



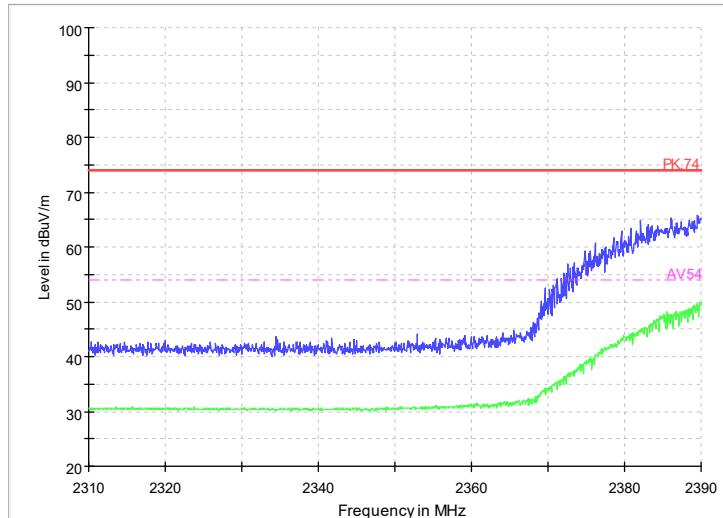
Comment

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



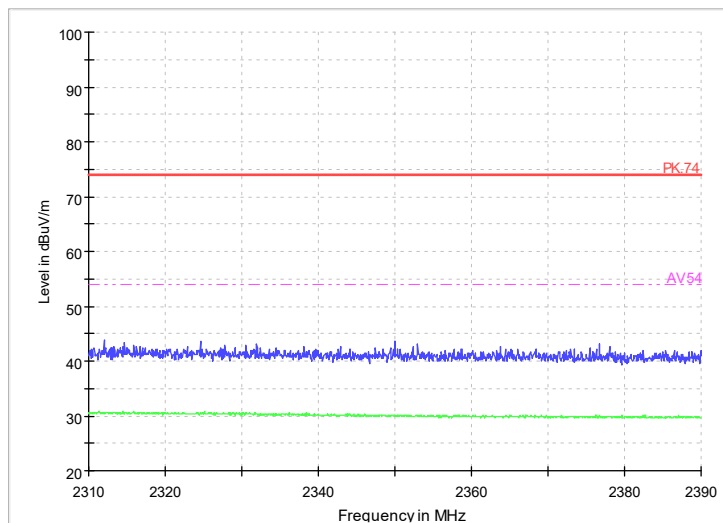
Comment

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



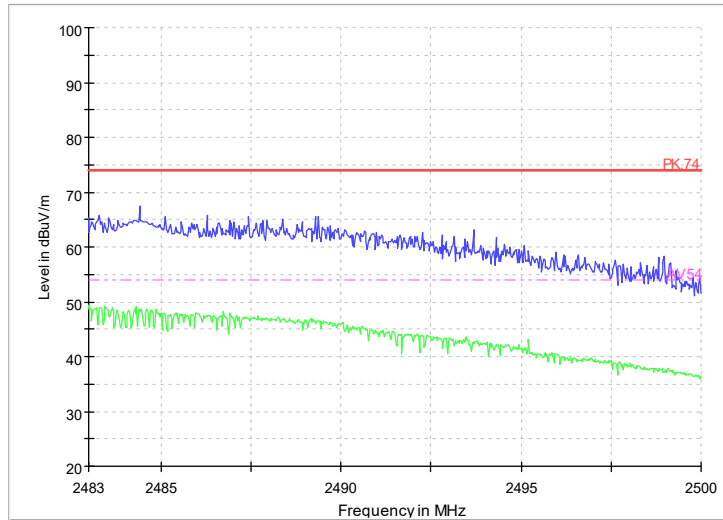
Comment

Radiated Emission Band Edge
 Channel No.:3
 Test Mode: 802.11n(HT40)
 Polarization: V



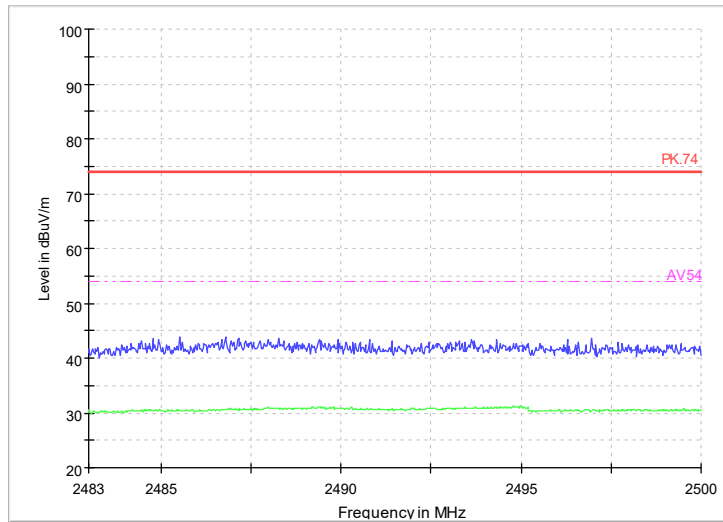
Comment

Radiated Emission Band Edge
 Channel No.:3
 Test Mode: 802.11n(HT40)
 Polarization: H



Comment

Radiated Emission Band Edge
Channel No.:9
Test Mode: 802.11n(HT40)
Polarization: V



Comment

Radiated Emission Band Edge
Channel No.:9
Test Mode: 802.11n(HT40)
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: $(5.40\text{dB}\mu\text{V}/\text{m}) = (24.30\text{dB}\mu\text{V}) + (-18.9\text{dB}/\text{m})$, the corresponding frequency is 45.8595MHz.

For 802.11b Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
44.0165	5.40	40.00	34.60	Vertical	-18.9	24.30
57.1115	4.99	40.00	35.01	Vertical	-19.6	24.59
143.975	9.45	43.50	34.05	Vertical	-22.5	31.95
263.964	18.05	46.00	27.95	Vertical	-18.1	36.15
479.983	26.74	46.00	19.26	Vertical	-12.7	39.44
959.9875	23.36	46.00	22.64	Vertical	-5.0	28.36

For 802.11g Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
44.647	6.08	40.00	33.92	Vertical	-18.9	24.98
57.4995	5.42	40.00	34.58	Vertical	-19.6	25.02
143.975	9.49	43.50	34.01	Vertical	-22.5	31.99
263.964	18.15	46.00	27.85	Vertical	-18.1	36.25
479.983	26.81	46.00	19.19	Vertical	-12.7	39.51
959.939	25.39	46.00	20.61	Vertical	-5.0	30.39

For 802.11n(HT20) Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
44.841	6.06	40.00	33.94	Vertical	-18.9	24.96
57.4025	5.35	40.00	34.65	Vertical	-19.6	24.95
143.975	9.48	43.50	34.02	Vertical	-22.5	31.98
263.964	18.16	46.00	27.84	Vertical	-18.1	36.26
479.983	26.83	46.00	19.17	Vertical	-12.7	39.53
959.939	25.39	46.00	20.61	Vertical	-5.0	30.39

For 802.11b Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
46.199	5.87	40.00	34.13	Vertical	-18.9	24.77
58.2755	5.35	40.00	34.65	Vertical	-19.7	25.05

143.975	9.37	43.50	34.13	Vertical	-22.5	31.87
263.964	18.05	46.00	27.95	Vertical	-18.1	36.15
479.983	26.70	46.00	19.30	Vertical	-12.7	39.40
959.939	25.29	46.00	20.71	Vertical	-5.0	30.29

For 802.11g Channel No.:6

Frequency(MHz)	Result(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polarity	ARpl (dB)	Pmea (dBuV/m)
40.379	5.39	40.00	34.61	Vertical	-19.1	24.49
85.484	3.94	40.00	36.06	Vertical	-20.9	24.84
143.975	9.46	43.50	34.04	Vertical	-22.5	31.96
215.949	13.87	43.50	29.63	Vertical	-19.4	33.27
479.983	26.80	46.00	19.20	Vertical	-12.7	39.50
959.939	25.45	46.00	20.55	Vertical	-5.0	30.45

For 802.11n(HT20) Channel No.:6

Frequency(MHz)	Result(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polarity	ARpl (dB)	Pmea (dBuV/m)
38.73	5.75	40.00	34.25	Vertical	-19.4	25.15
59.4395	4.66	40.00	35.34	Vertical	-19.8	24.46
143.975	9.43	43.50	34.07	Vertical	-22.5	31.93
263.964	18.17	46.00	27.83	Vertical	-18.1	36.27
479.983	26.81	46.00	19.19	Vertical	-12.7	39.51
959.939	25.46	46.00	20.54	Vertical	-5.0	30.46

For 802.11b Channel No.:11

Frequency(MHz)	Result(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polarity	ARpl (dB)	Pmea (dBuV/m)
46.7325	5.47	40.00	34.53	Vertical	-18.9	24.37
58.033	5.49	40.00	34.51	Vertical	-19.7	25.19
143.975	9.39	43.50	34.11	Vertical	-22.5	31.89
263.964	18.17	46.00	27.83	Vertical	-18.1	36.27
479.983	26.79	46.00	19.21	Vertical	-12.7	39.49
959.939	25.42	46.00	20.58	Vertical	-5.0	30.42

For 802.11g Channel No.:11

Frequency(MHz)	Result(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polarity	ARpl (dB)	Pmea (dBuV/m)
45.2775	5.84	40.00	34.16	Vertical	-18.9	24.74
59.1	4.59	40.00	35.41	Vertical	-19.8	24.39
143.975	9.05	43.50	34.45	Vertical	-22.5	31.55
263.964	17.73	46.00	28.27	Vertical	-18.1	35.83
479.983	26.37	46.00	19.63	Vertical	-12.7	39.07
959.939	24.96	46.00	21.04	Vertical	-5.0	29.96

For 802.11n(HT20) Channel No.:11

Frequency(MHz)	Result(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polarity	ARpl (dB)	Pmea (dBuV/m)
50.37	4.68	40.00	35.32	Vertical	-18.9	23.58
58.712	4.39	40.00	35.61	Vertical	-19.7	24.09
143.975	8.65	43.50	34.85	Vertical	-22.5	31.15
263.964	17.27	46.00	28.73	Vertical	-18.1	35.37
479.983	26.44	46.00	19.56	Vertical	-12.7	39.14
959.939	25.06	46.00	20.94	Vertical	-5.0	30.06

For 802.11n(HT40) Channel No.:3

Frequency(MHz)	Result(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polarity	ARpl (dB)	Pmea (dBuV/m)
45.9565	5.94	40.00	34.06	Vertical	-18.9	24.84
59.003	5.05	40.00	34.95	Vertical	-19.8	24.85
119.919	4.80	43.50	38.70	Vertical	-20.4	25.20
263.9155	12.22	46.00	33.78	Vertical	-18.1	30.32
479.9345	24.50	46.00	21.50	Vertical	-12.7	37.20
959.8905	21.63	46.00	24.37	Vertical	-5.0	26.63

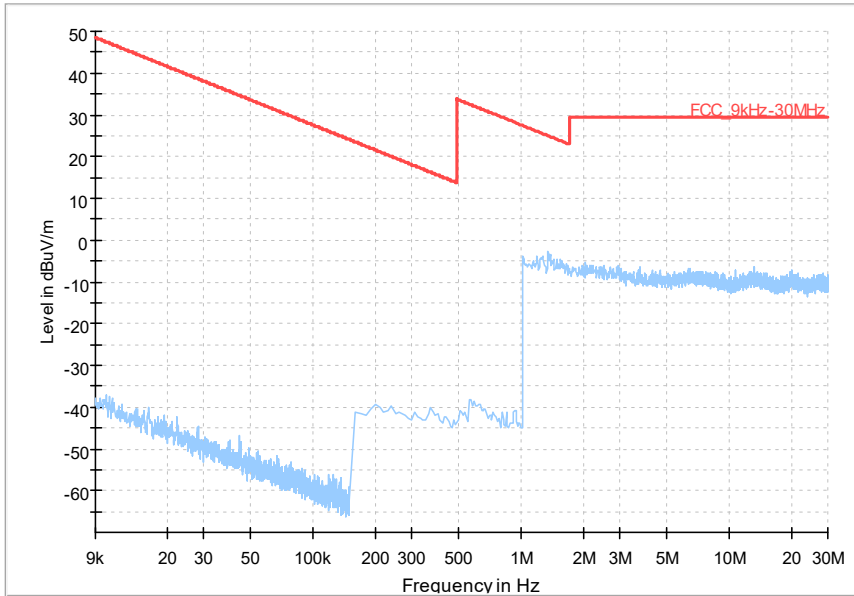
For 802.11n(HT40) Channel No.:6

Frequency(MHz)	Result(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polarity	ARpl (dB)	Pmea (dBuV/m)
51.534	5.59	40.00	34.41	Vertical	-19.0	24.59
57.548	4.96	40.00	35.04	Vertical	-19.6	24.56
119.919	4.30	43.50	39.20	Vertical	-20.4	24.70
263.9155	11.92	46.00	34.08	Vertical	-18.1	30.02
479.9345	24.14	46.00	21.86	Vertical	-12.7	36.84
959.8905	21.31	46.00	24.69	Vertical	-5.0	26.31

For 802.11n(HT40) Channel No.:9

Frequency(MHz)	Result(dBuV/m)	Limit (dBuV/m)	Margin (dB)	Polarity	ARpl (dB)	Pmea (dBuV/m)
45.3745	6.20	40.00	33.80	Vertical	-18.9	25.10
59.3425	4.70	40.00	35.30	Vertical	-19.8	24.50
143.9265	5.22	43.50	38.28	Vertical	-22.5	27.72
215.9005	7.41	43.50	36.09	Vertical	-19.4	26.81
479.9345	24.56	46.00	21.44	Vertical	-12.7	37.26
959.8905	21.70	46.00	24.30	Vertical	-5.0	26.70

Full Spectrum



Frequency Range: 9kHz -30MHz

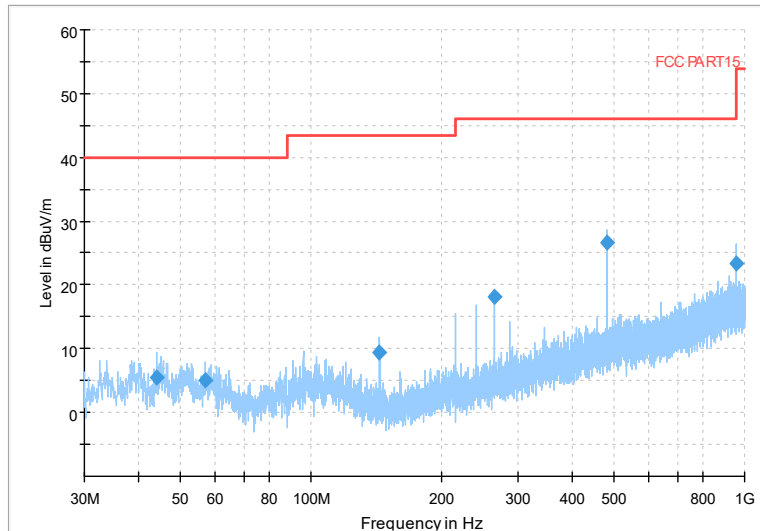
Detector: QP mode

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

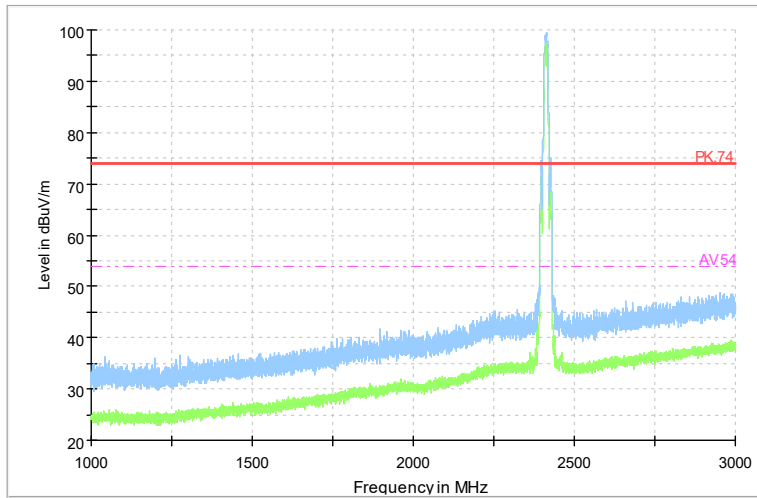


Frequency Range 30MHz -1GHz

Detector: Av mode and PK mode

Modulation type: 802.11b

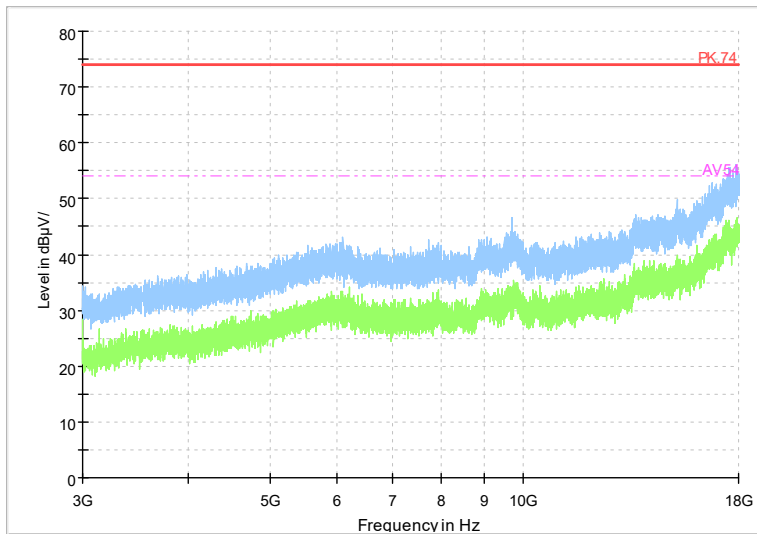
Full Spectrum



Comment

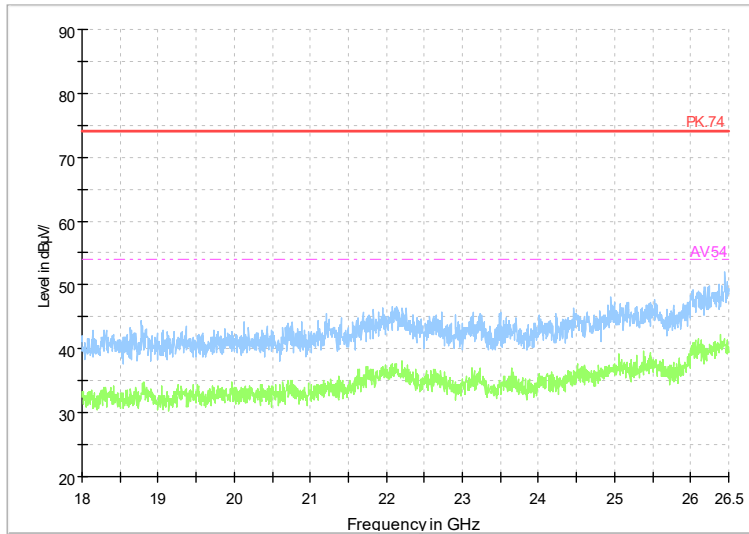
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



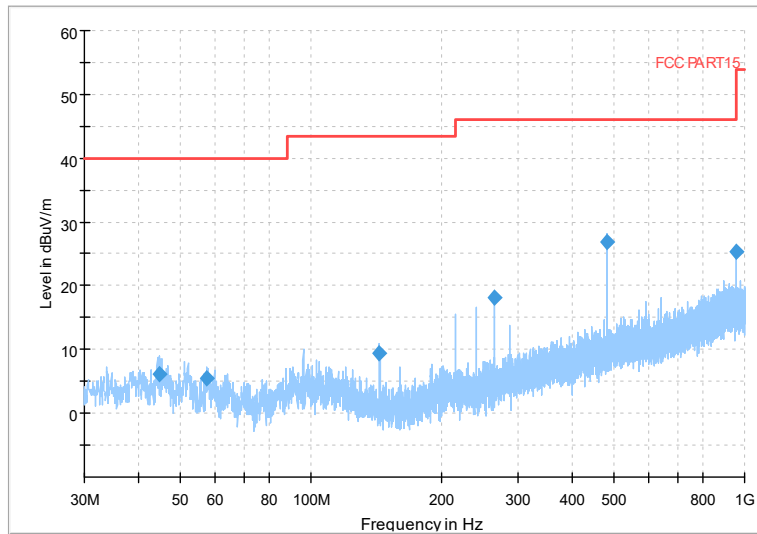
Frequency Range: 3GHz -18GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



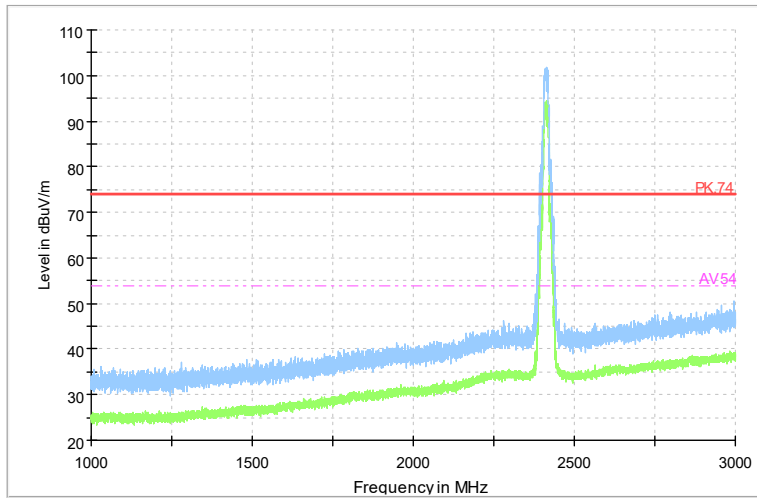
Frequency Range: 18GHz -26GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



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

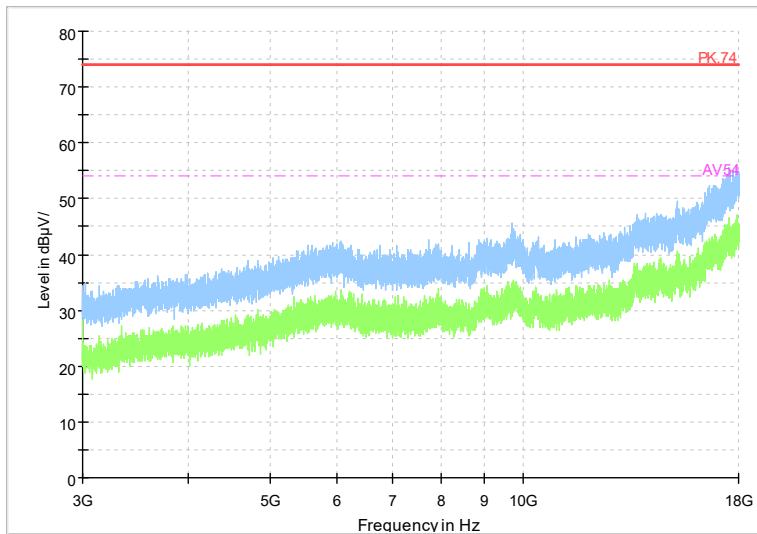
Full Spectrum



Comment

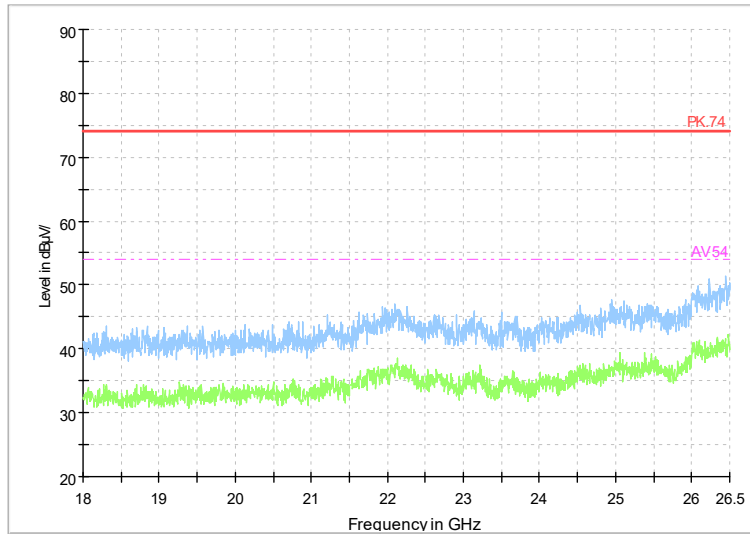
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11g

Full Spectrum



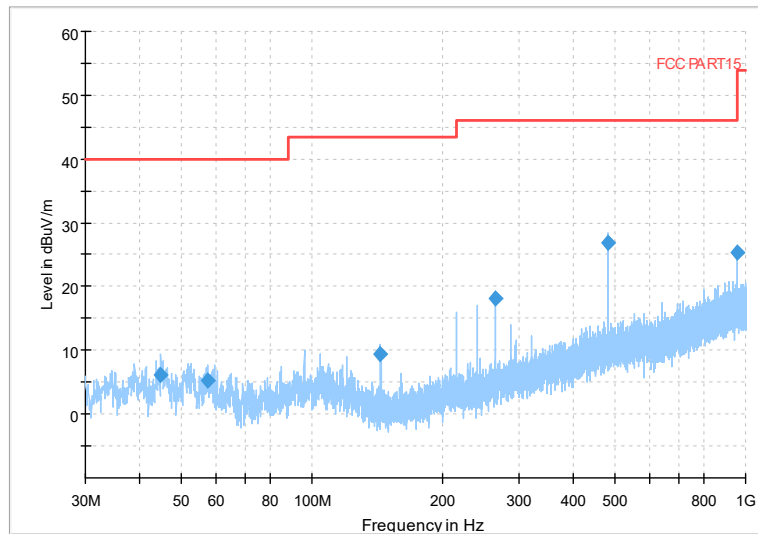
Frequency Range: 3GHz -18GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11g

Full Spectrum



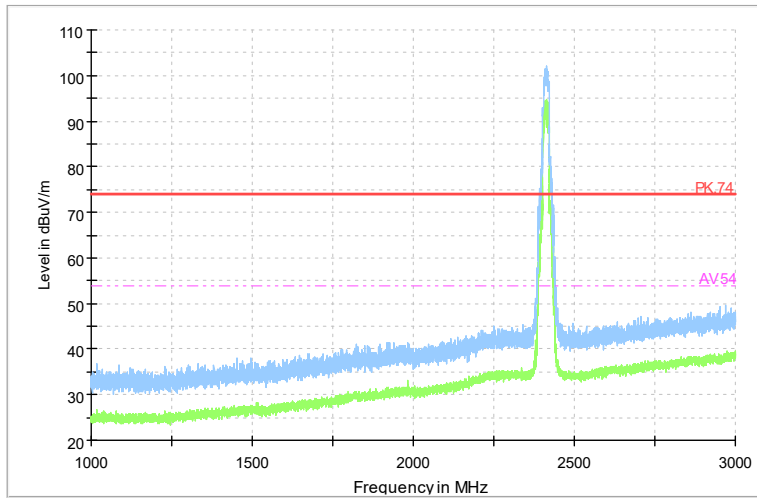
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11g

Full Spectrum



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

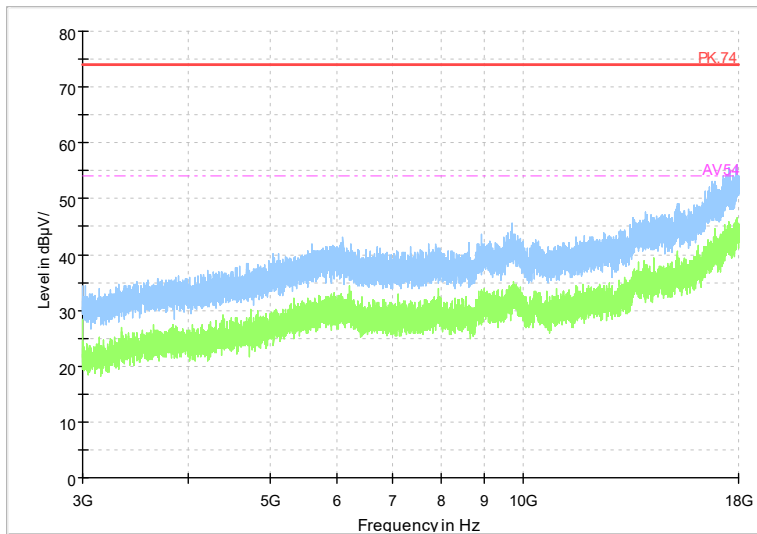
Full Spectrum



Comment

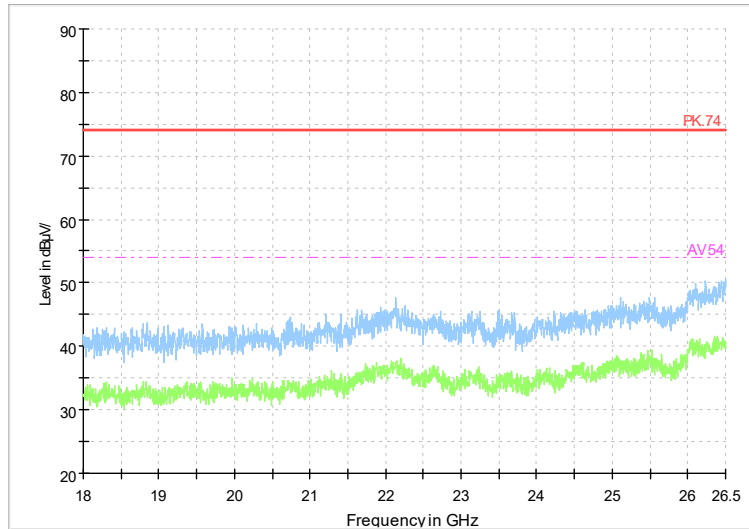
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)

Full Spectrum



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

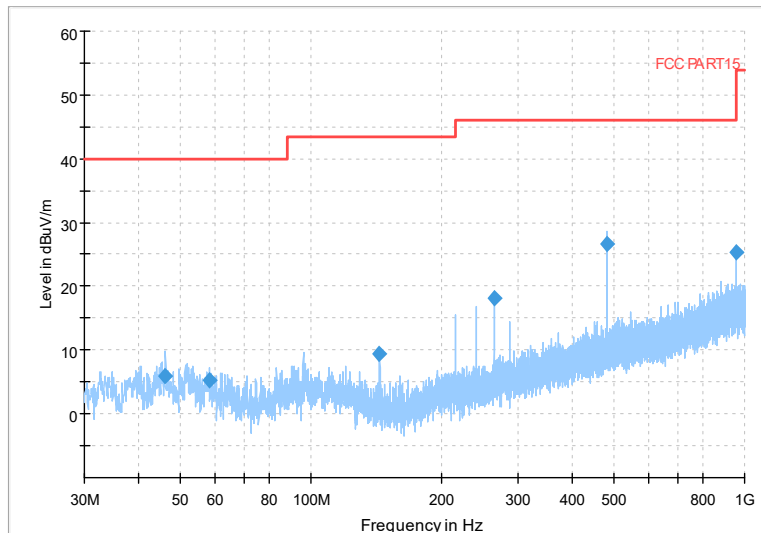
Full Spectrum



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

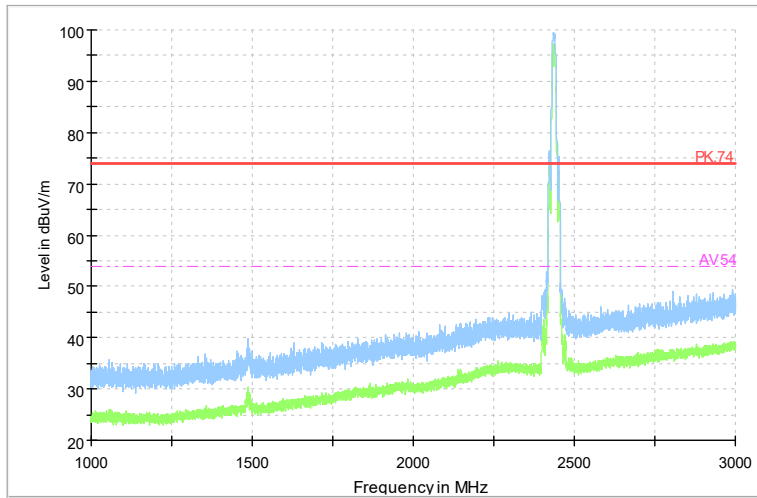
Carrier frequency (MHz): 2437
Channel No.:6

Full Spectrum



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

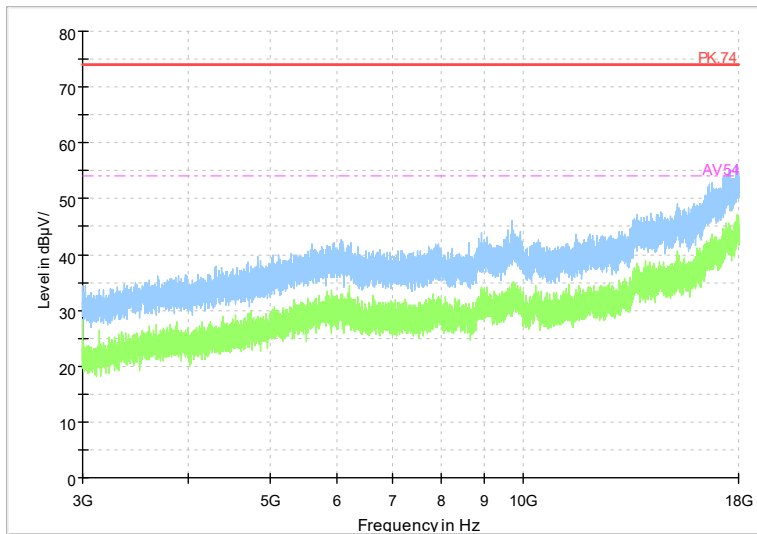
Full Spectrum



Comment

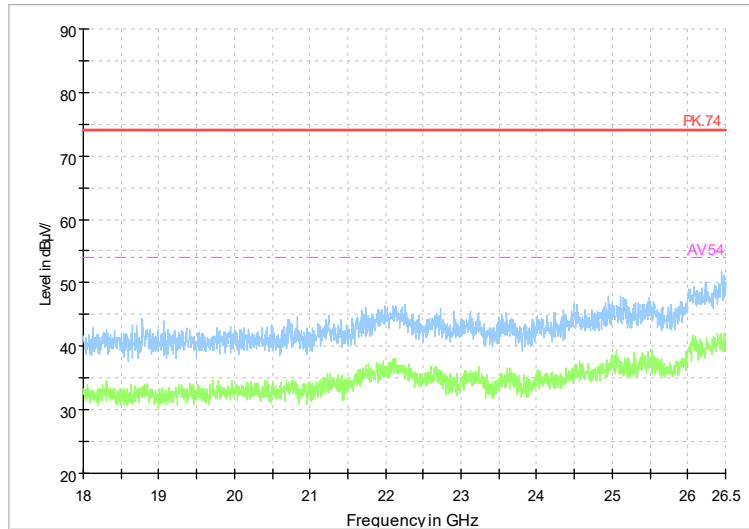
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



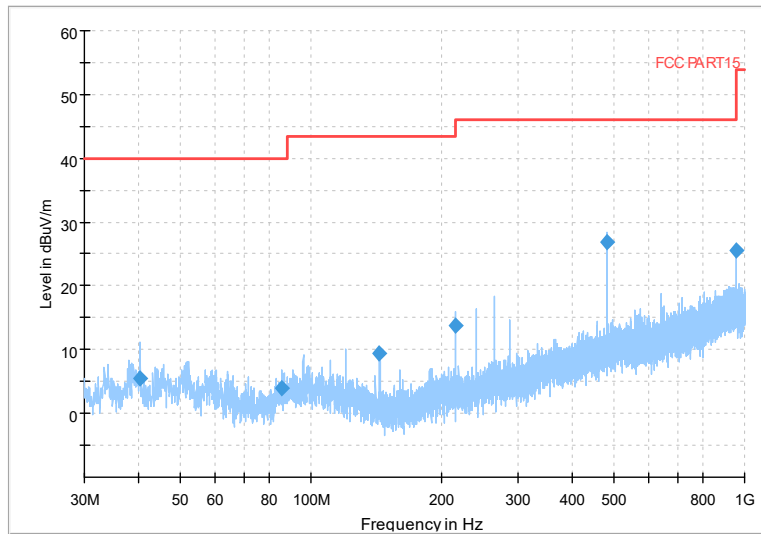
Frequency Range: 3GHz -18GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



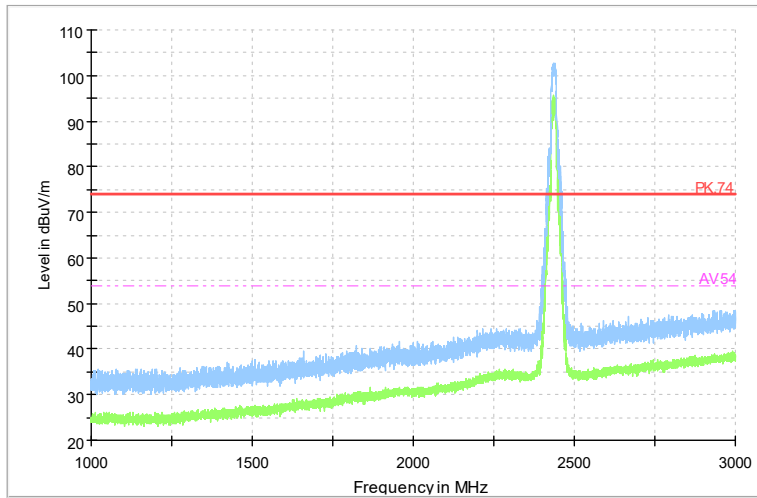
Frequency Range: 18GHz -26GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11b

Full Spectrum



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

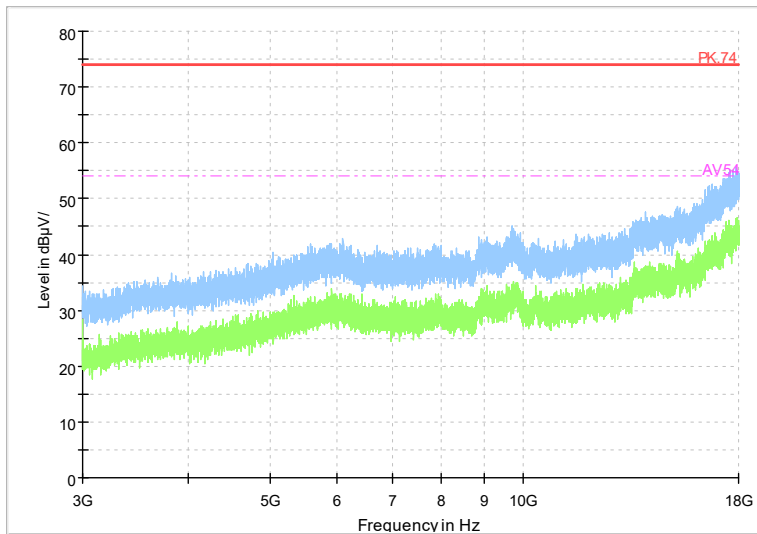
Full Spectrum



Comment

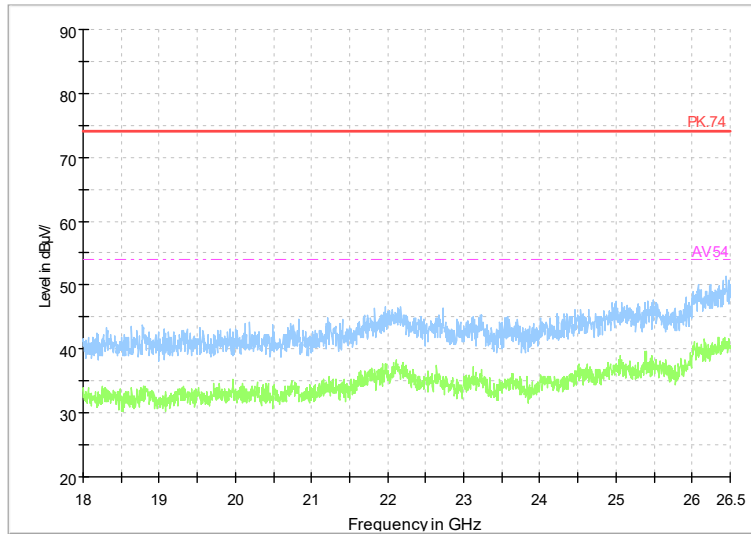
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11g

Full Spectrum



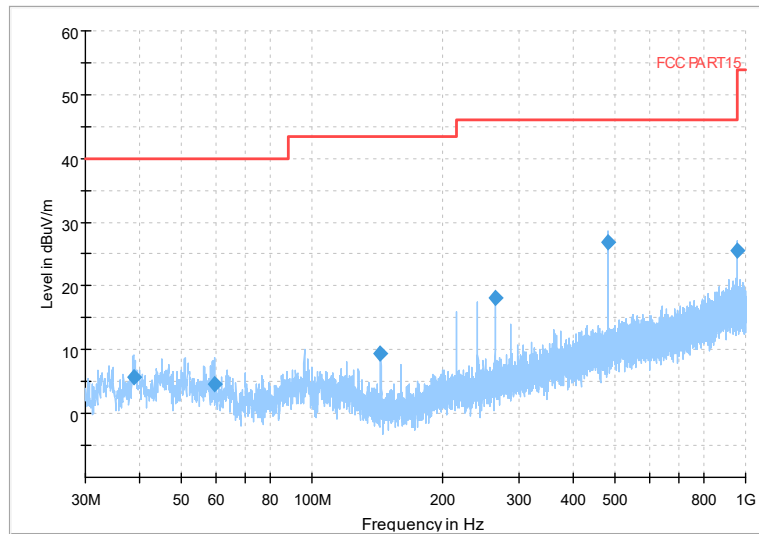
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11g

Full Spectrum



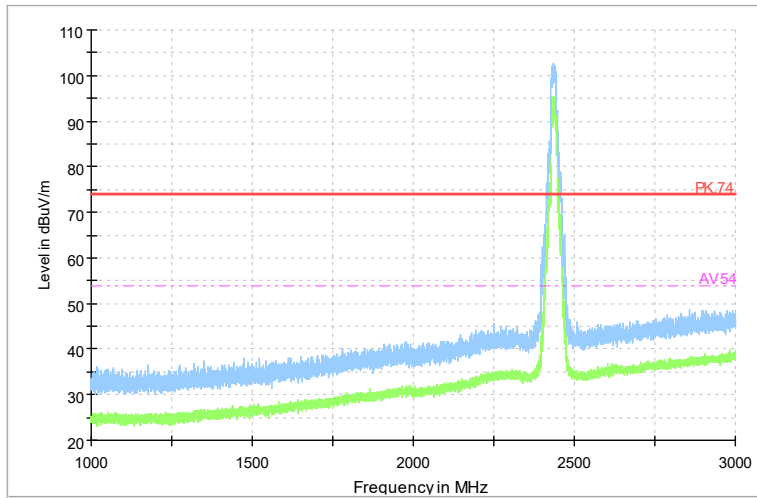
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11g

Full Spectrum



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

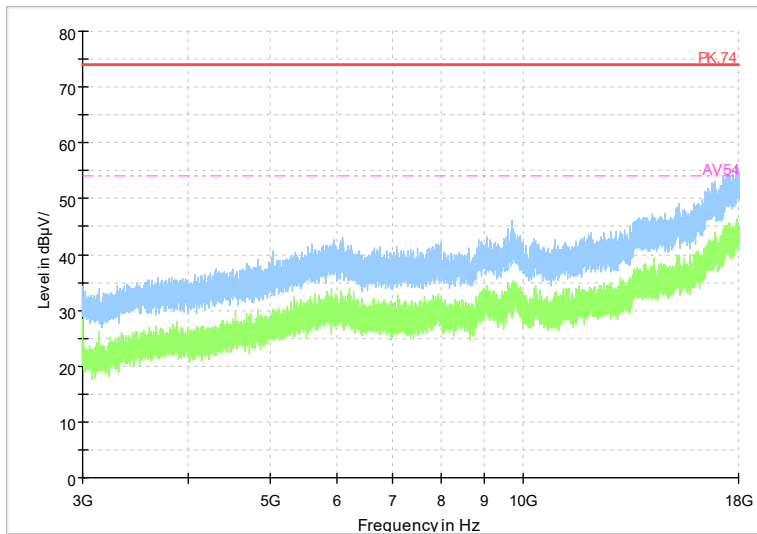
Full Spectrum



Comment

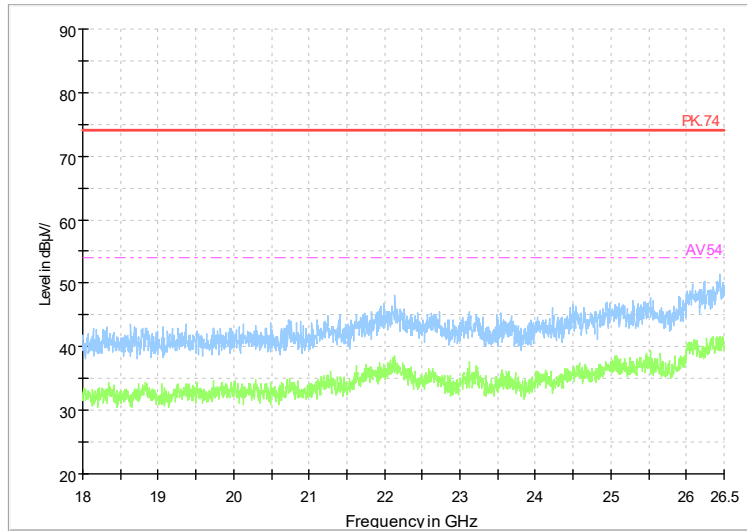
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)

Full Spectrum



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

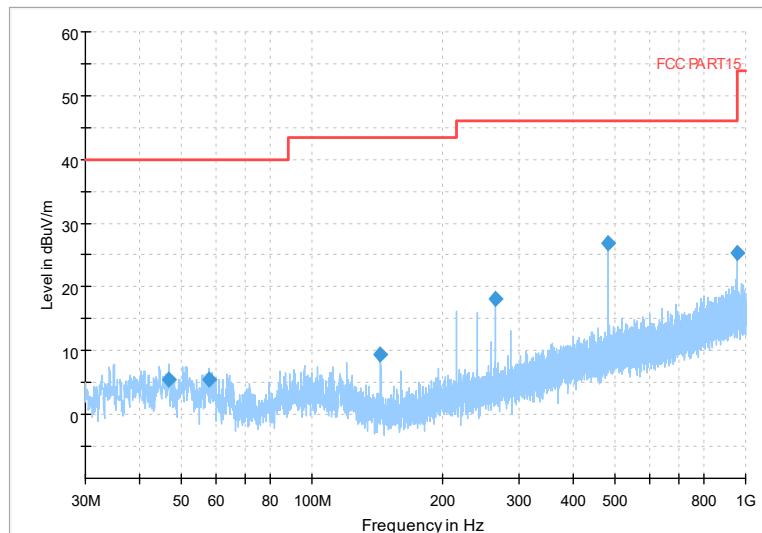
Full Spectrum



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

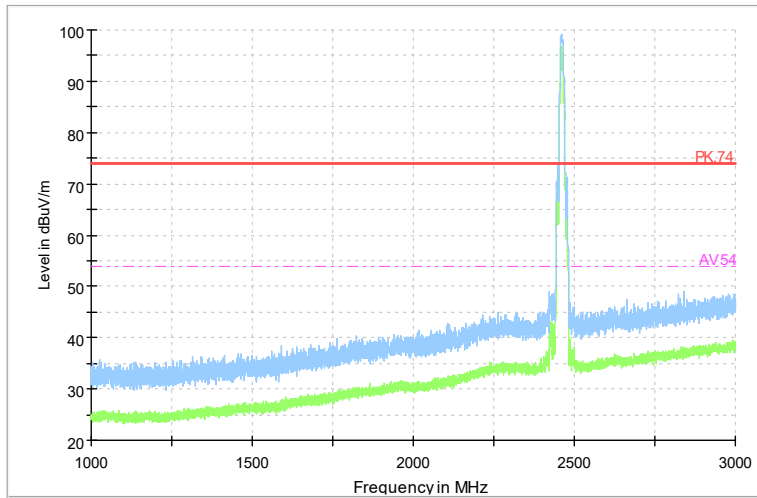
Carrier frequency (MHz): 2462
Channel No.:11

Full Spectrum



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

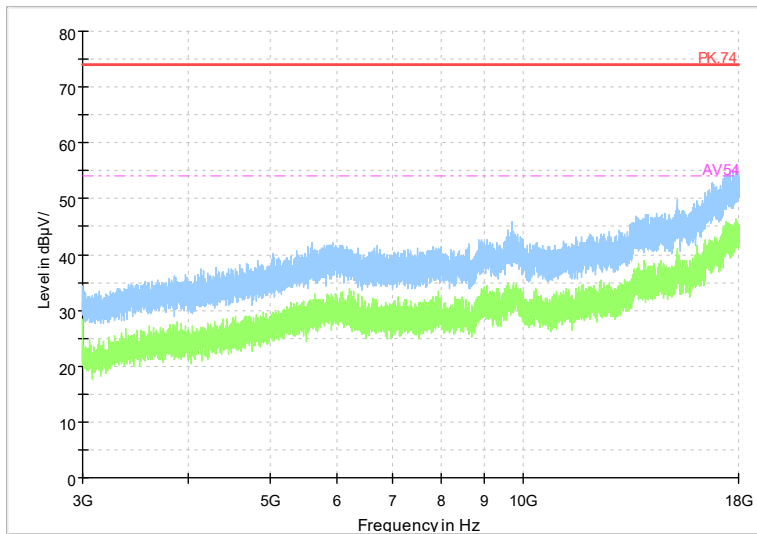
Full Spectrum



Comment

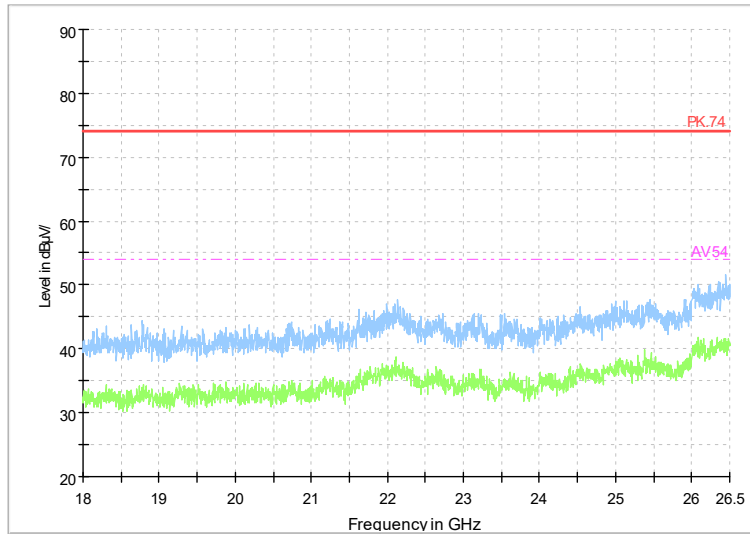
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11b

Full Spectrum



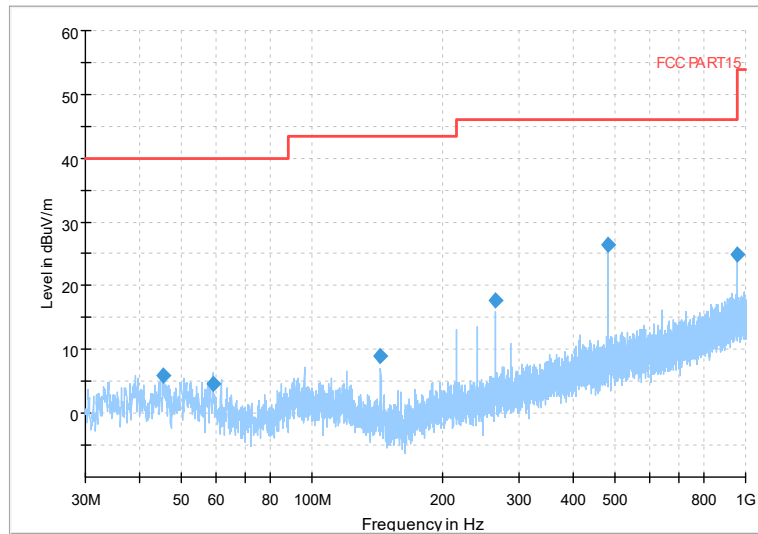
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11b

Full Spectrum



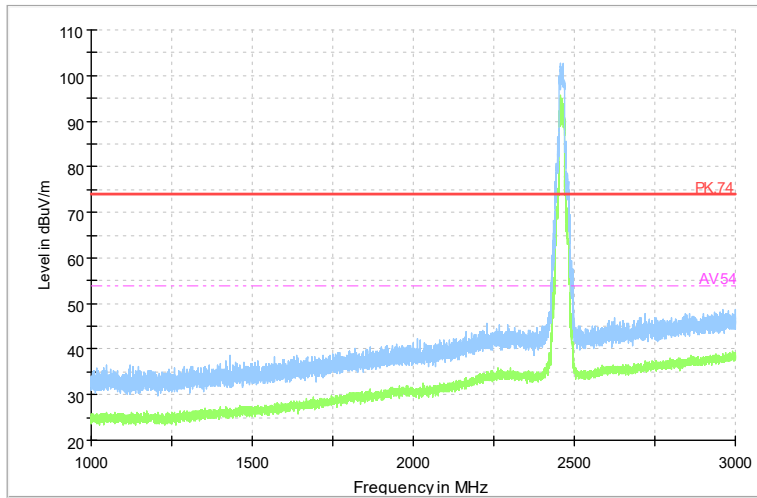
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11b

Full Spectrum



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

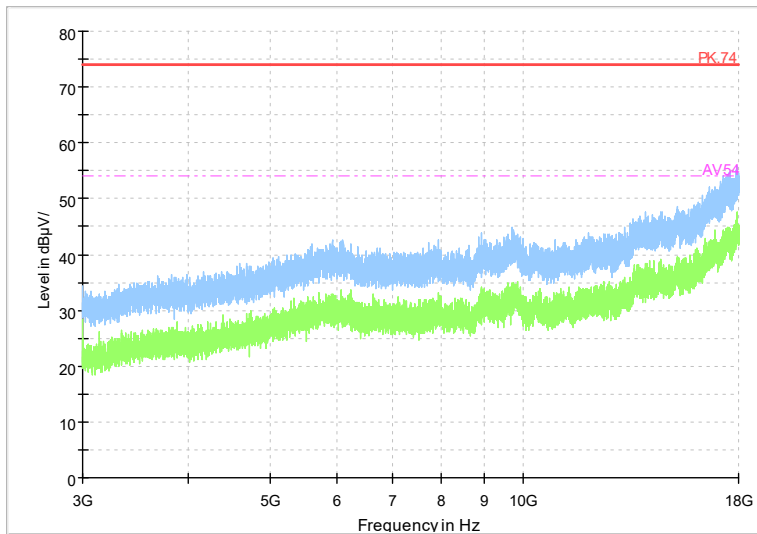
Full Spectrum



Comment

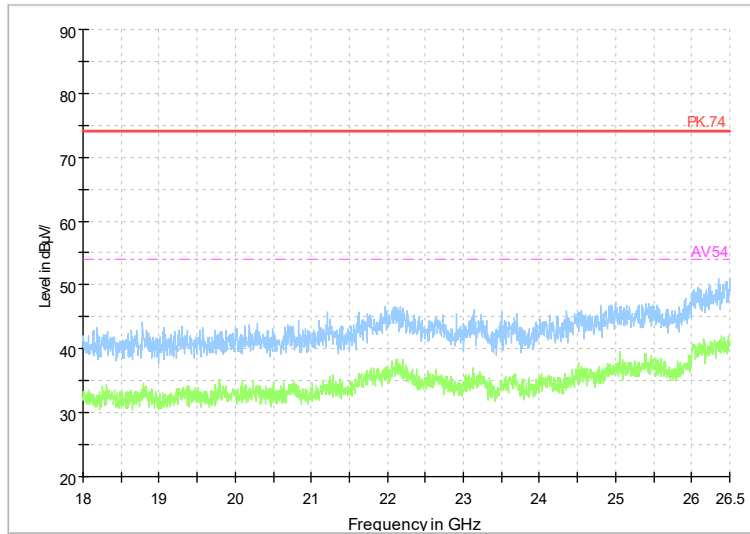
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11g

Full Spectrum



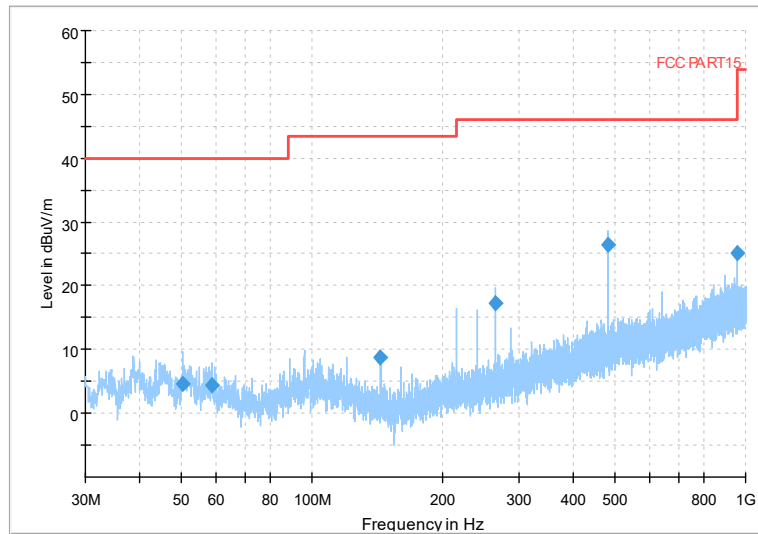
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11g

Full Spectrum



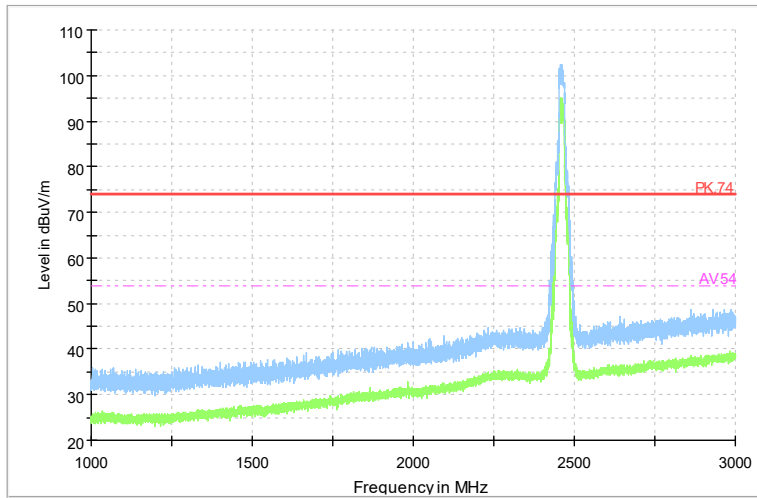
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11g

Full Spectrum



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

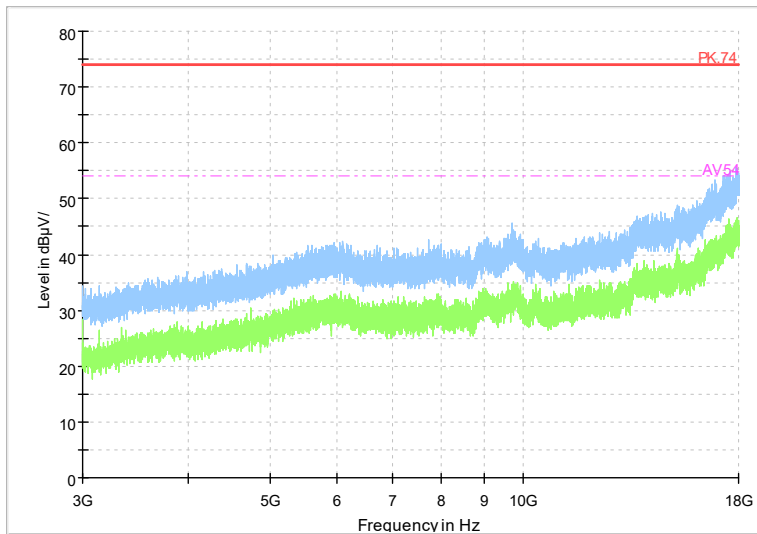
Full Spectrum



Comment

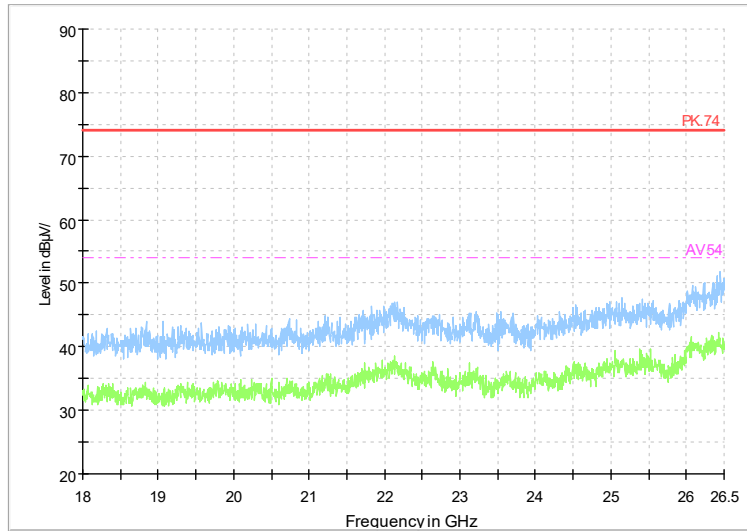
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)

Full Spectrum



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

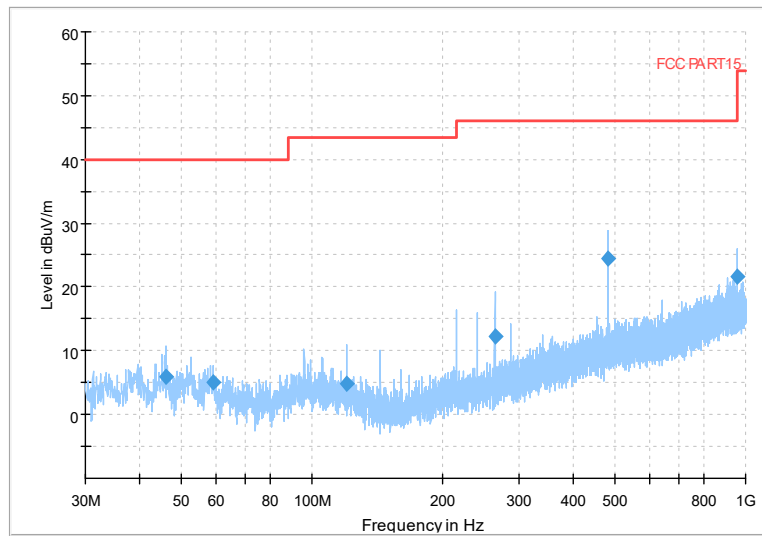
Full Spectrum



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

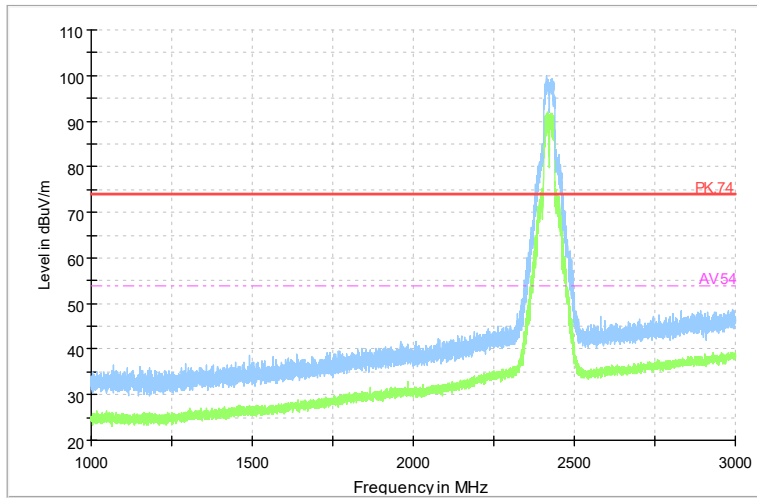
Carrier frequency (MHz): 2422
Channel No.:3

Full Spectrum



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

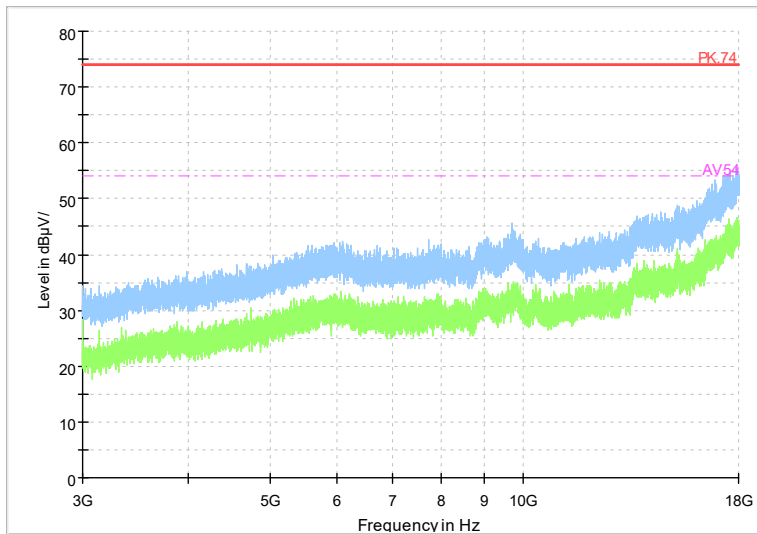
Full Spectrum



Comment

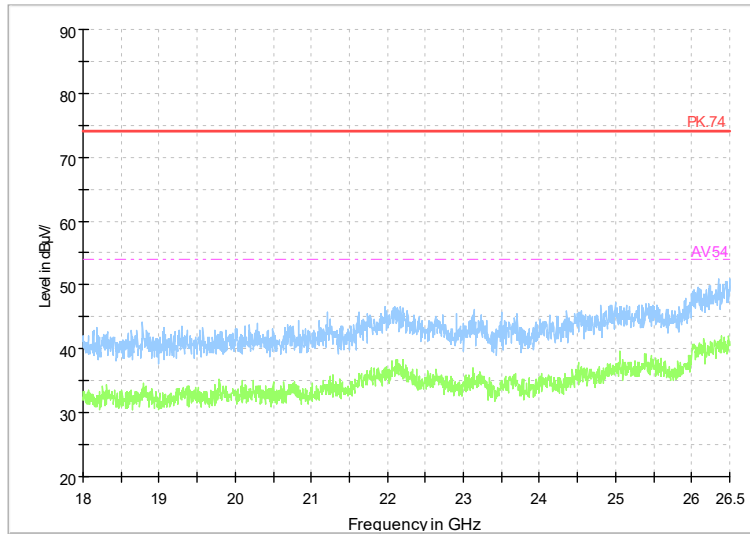
Frequency Range: 1GHz -3GHz
 Detector: Av mode and PK mode
 Modulation type: 802.11n(HT40)

Full Spectrum



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

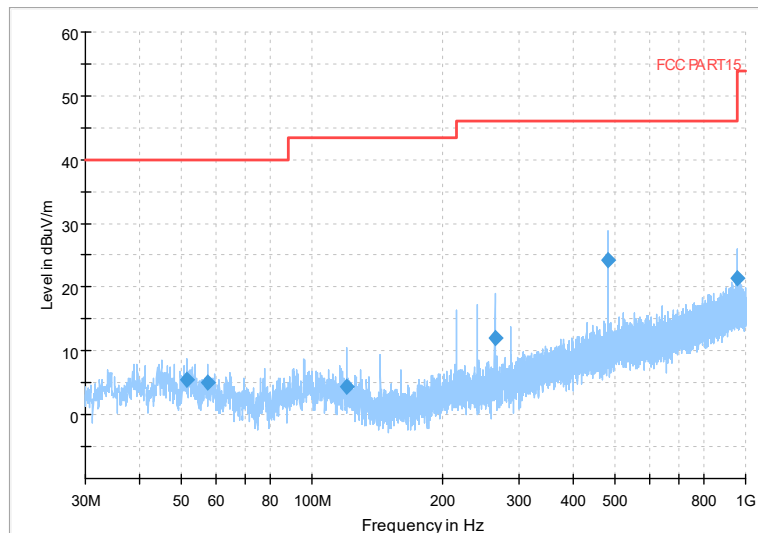
Full Spectrum



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

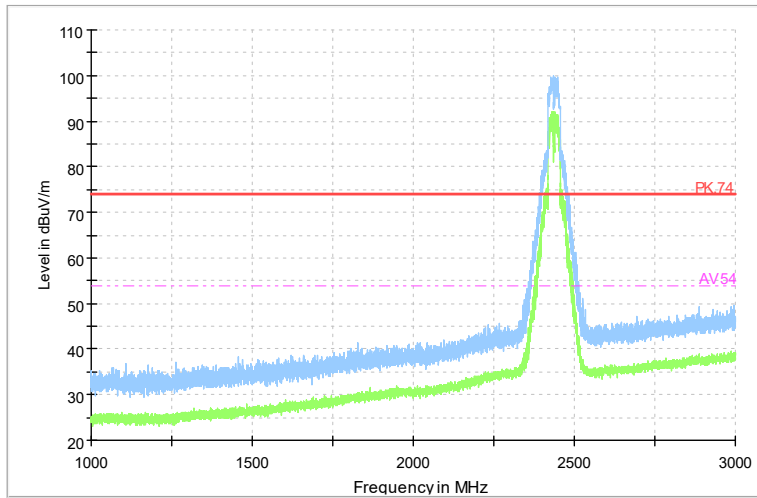
Carrier frequency (MHz): 2437
Channel No.:6

Full Spectrum



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

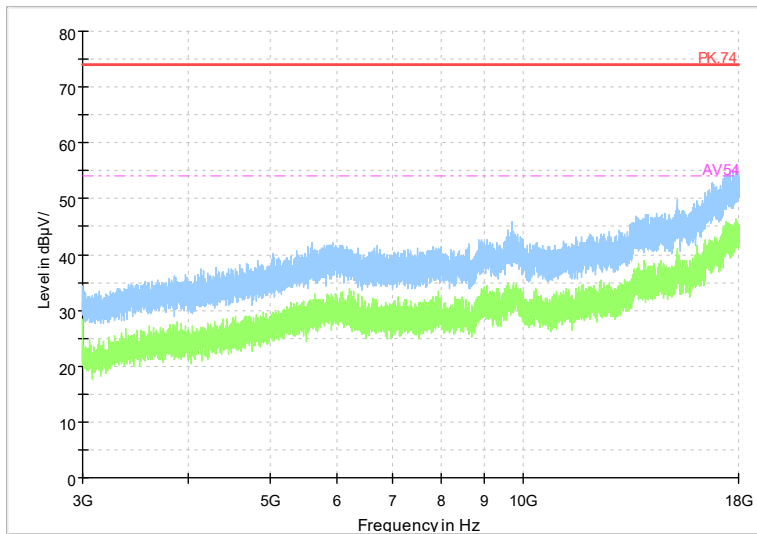
Full Spectrum



Comment

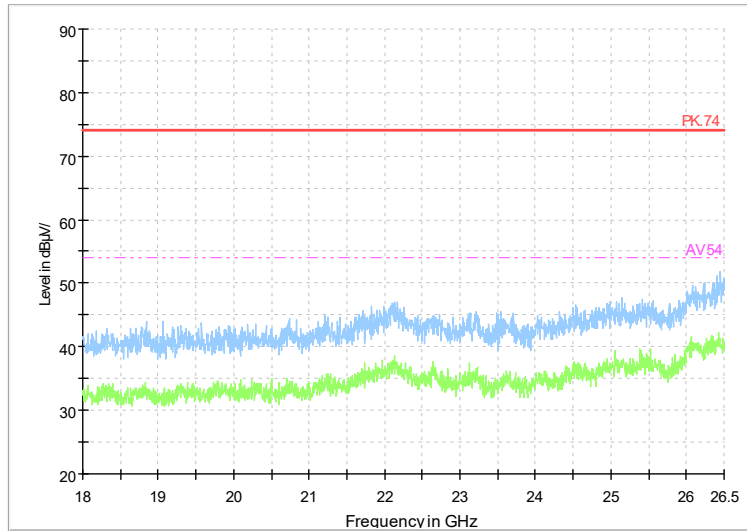
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)

Full Spectrum



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

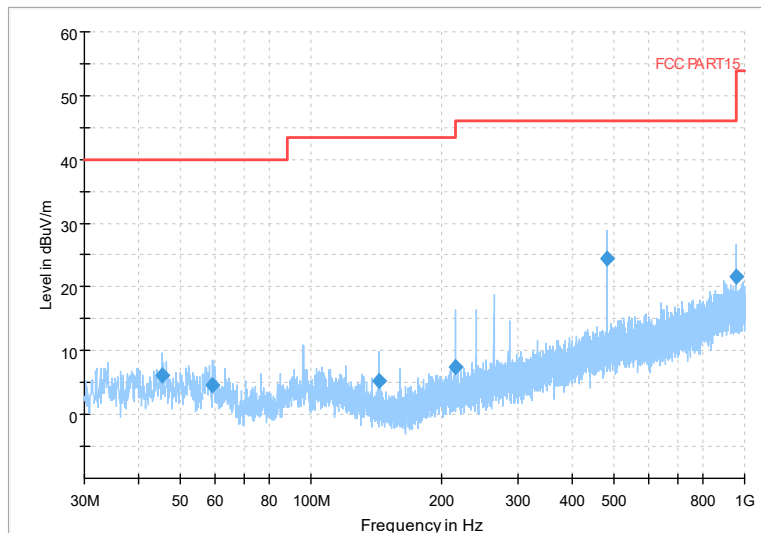
Full Spectrum



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

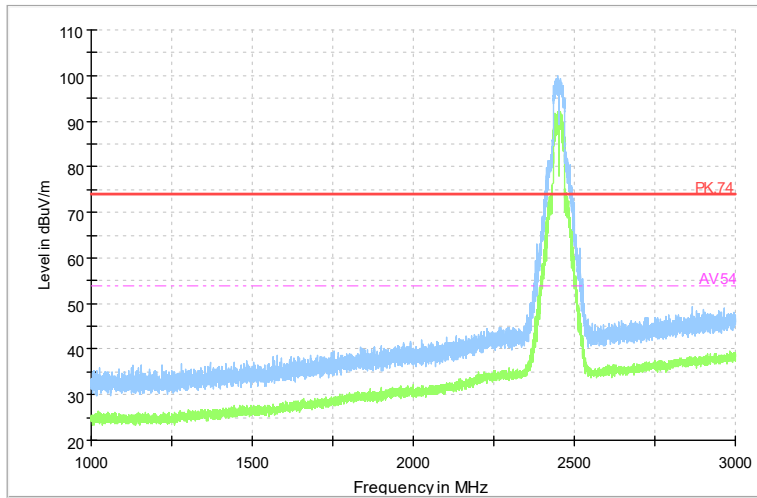
Carrier frequency (MHz): 2452
Channel No.:9

Full Spectrum



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

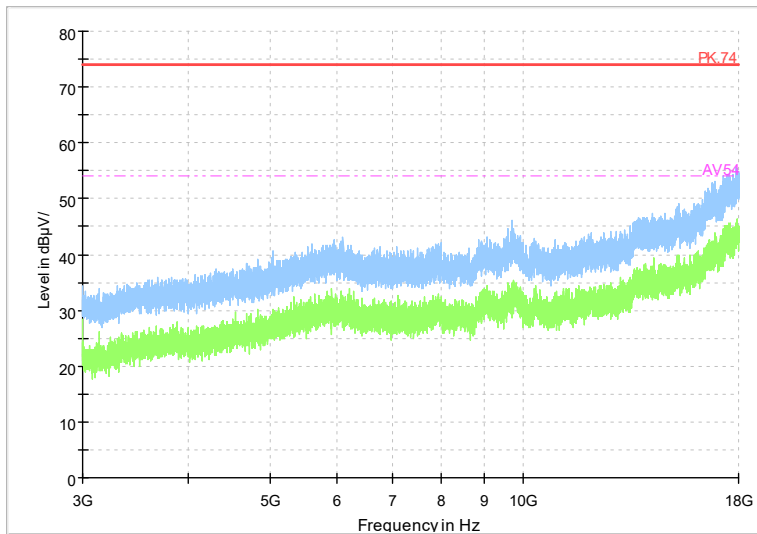
Full Spectrum



Comment

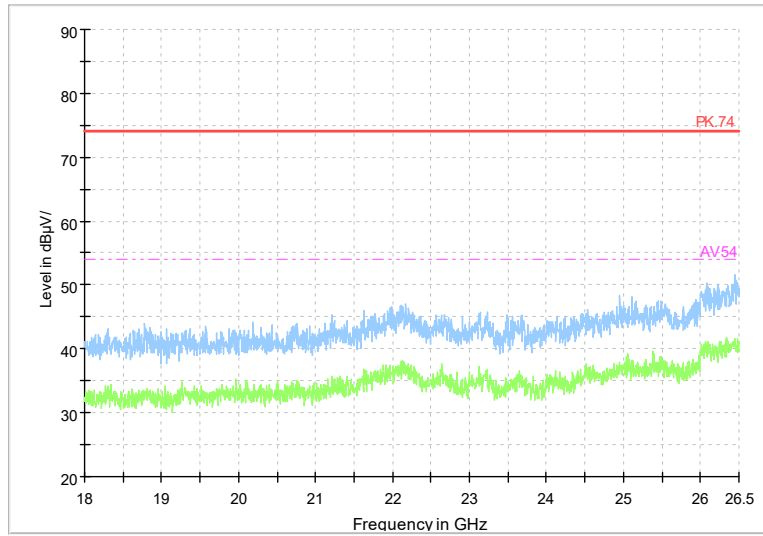
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)

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)

---End of Test Report---