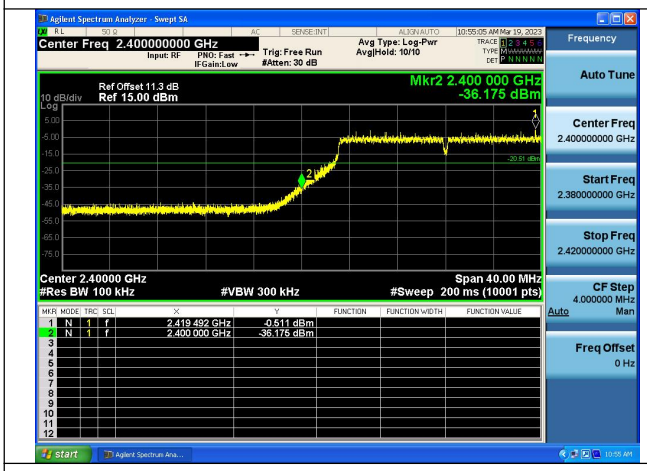
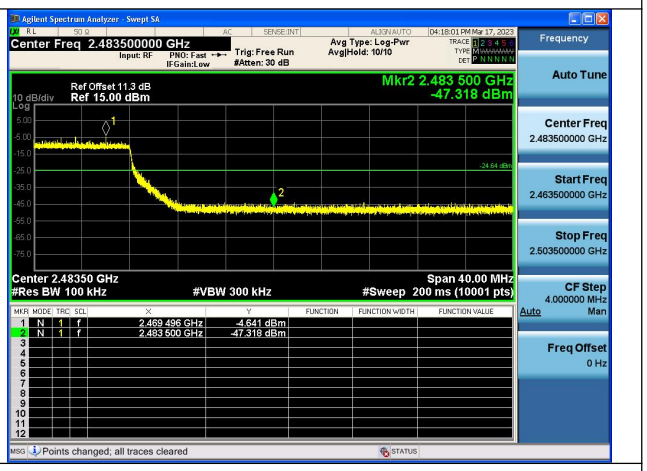
Test Mode:802.11ax HE20 2412MHz Chain0

Test Mode:802.11ax HE20 2462MHz Chain0

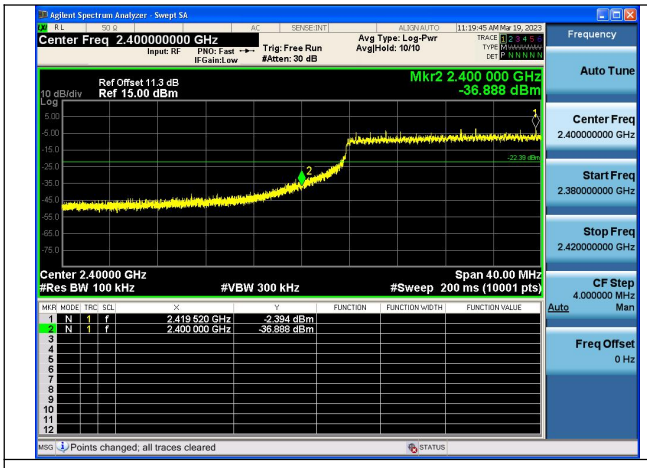


Test Mode:802.11ax HE20 2412MHz Chain1

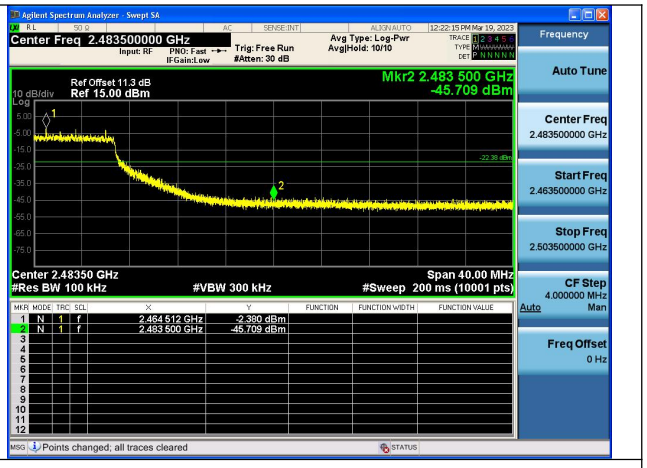


Test Mode:802.11ax HE20 2462MHz Chain1

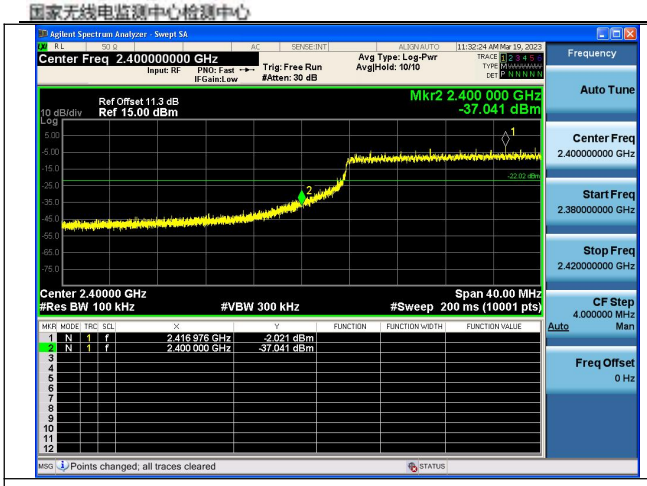
Test Mode: 802.11ax HE40



Test Mode:802.11ax HE40 2422MHz Chain0



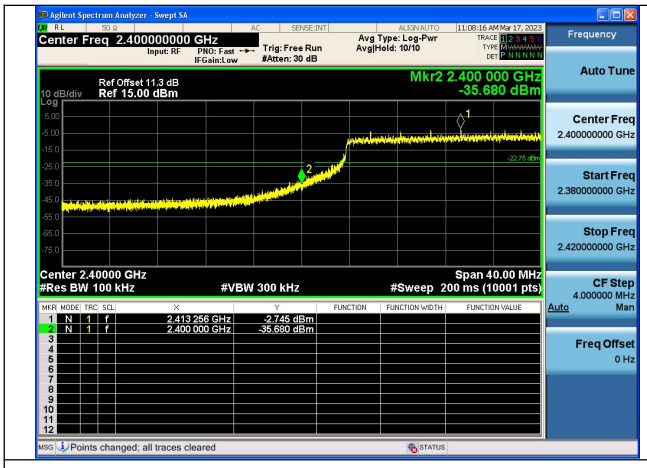
Test Mode:802.11ax HE40 2452MHz Chain0



Test Mode:802.11ax HE40 2422MHz Chain1

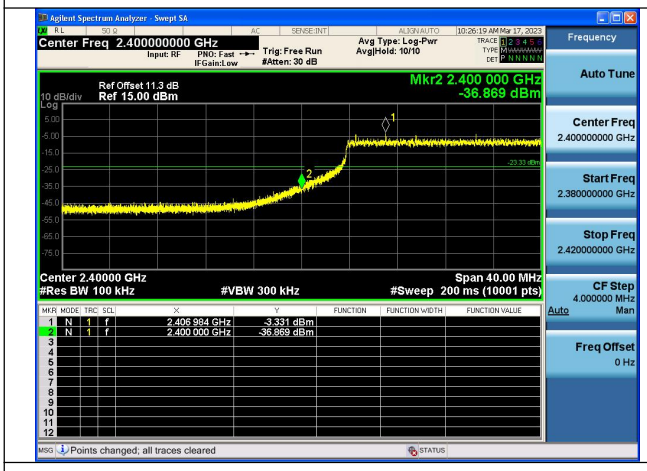
Test Mode:802.11ax HE40 2452MHz Chain1

Test Mode: 802.11n HT40

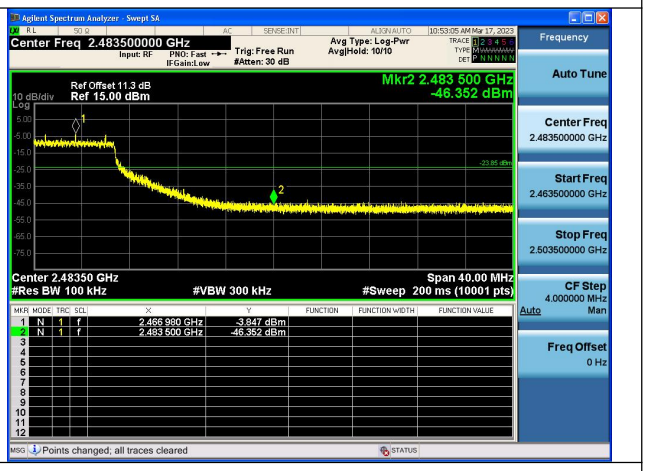


Test Mode:802.11n HT40 2422MHz Chain0

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

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

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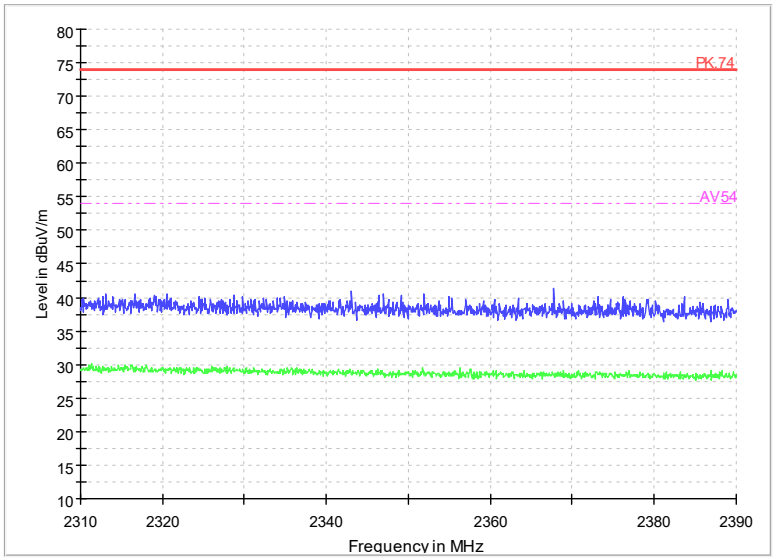
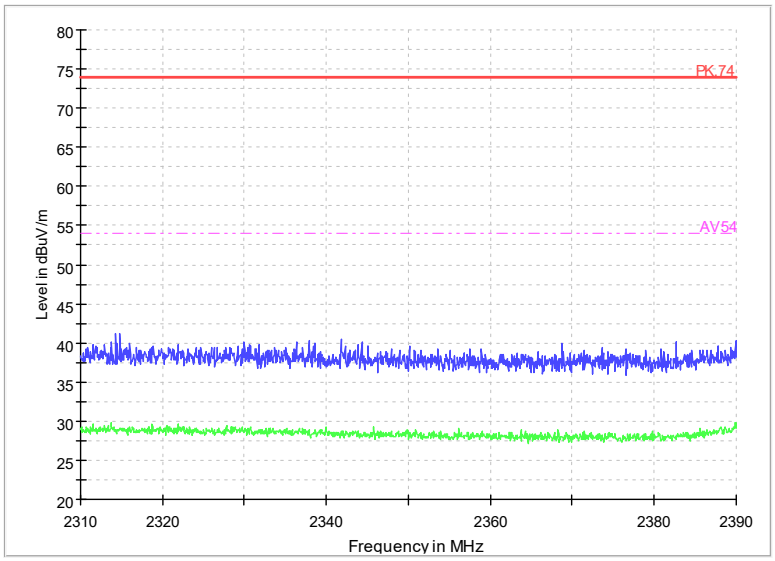
Radiated Emission Band Edge

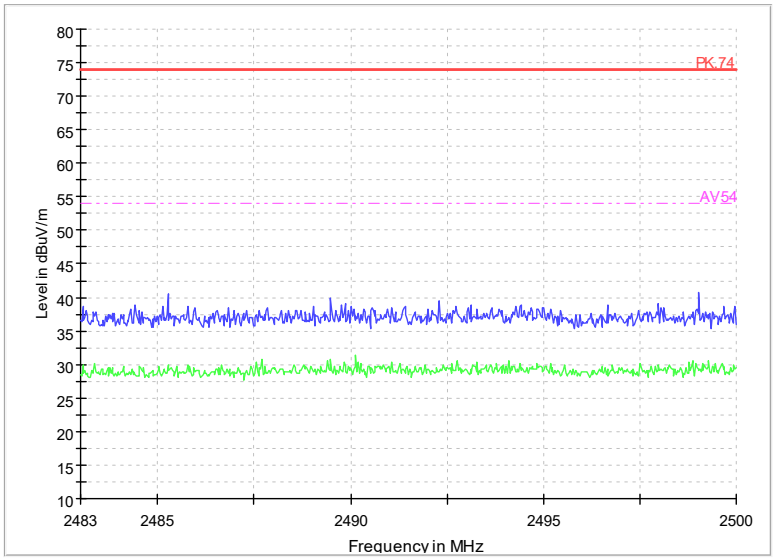


Radiated Emission Band Edge
Channel No.:1
Test Mode: 802.11b
Polarization：V

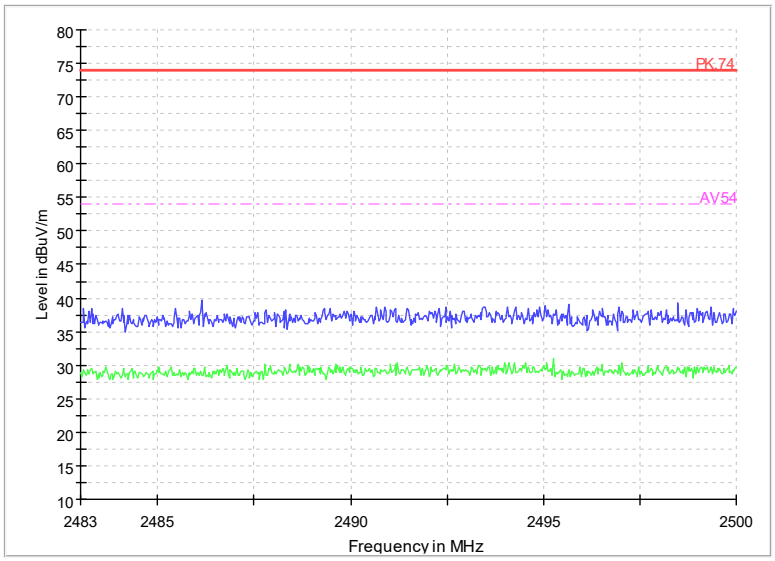


Radiated Emission Band Edge

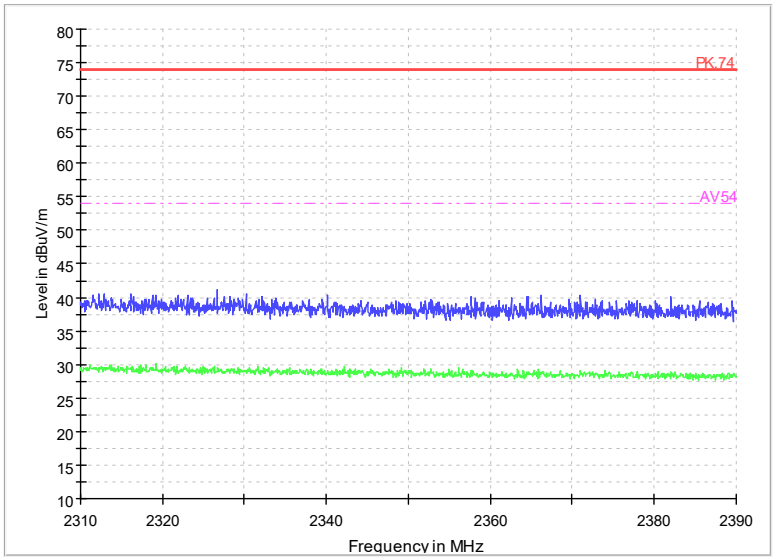
Channel No.:1
Test Mode: 802.11b
Polarization：H



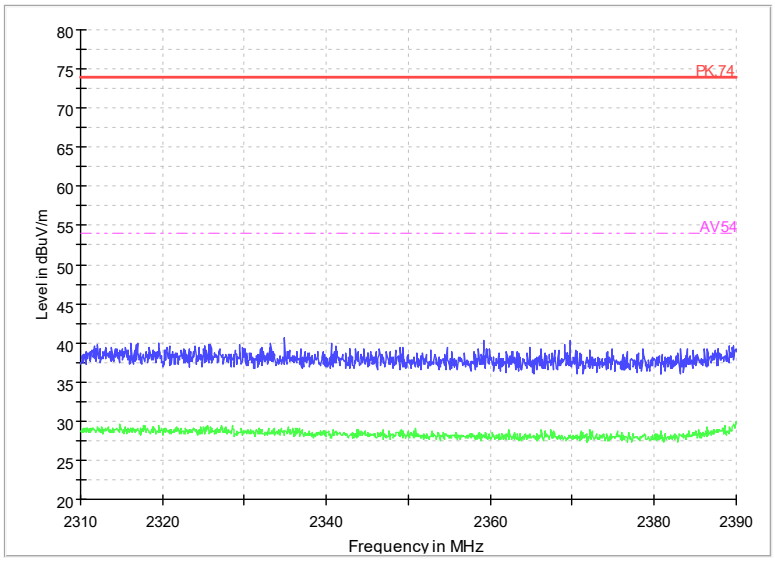
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11b
Polarization：V



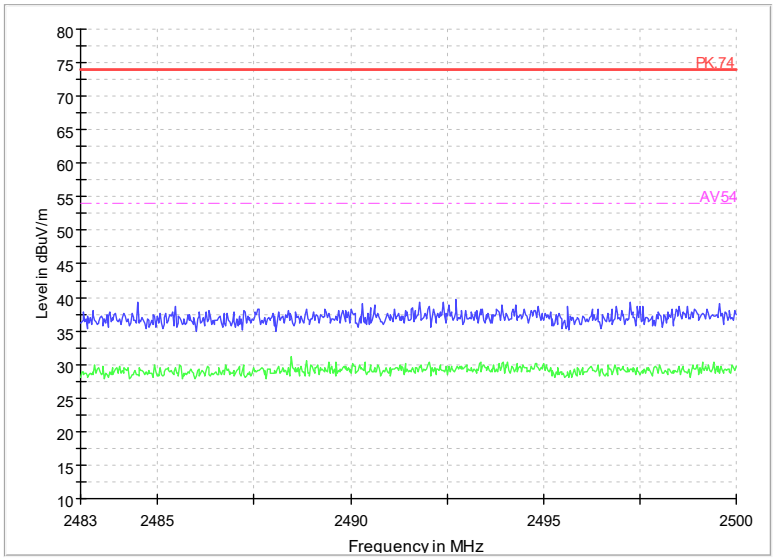
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11b
Polarization：H



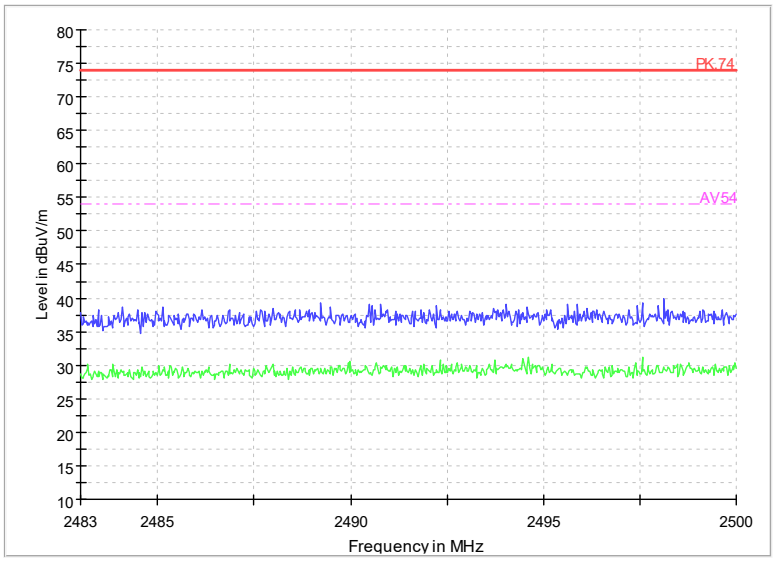
Radiated Emission Band Edge
Channel No.:1
Test Mode: 802.11g
Polarization：V



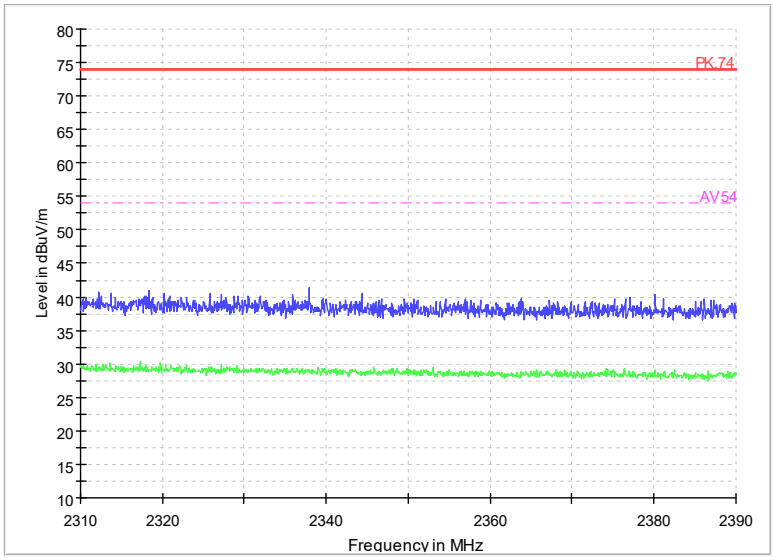
Radiated Emission Band Edge
Channel No.:1
Test Mode: 802.11g
Polarization：H



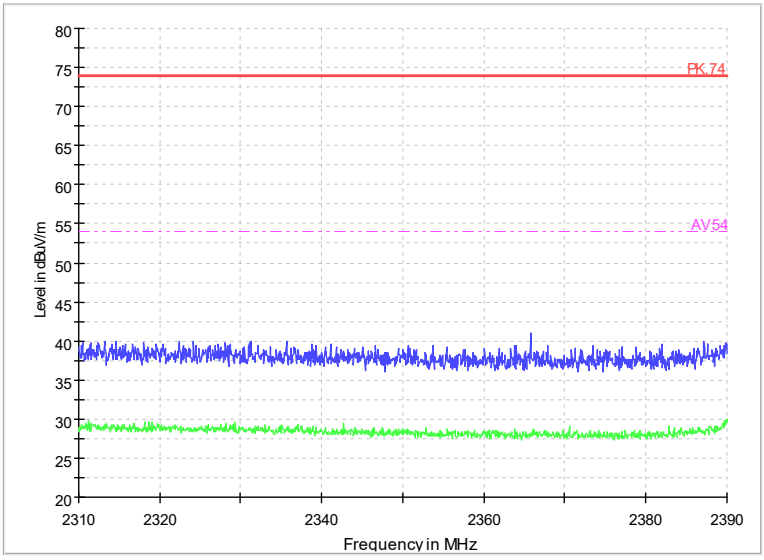
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11g
Polarization：V



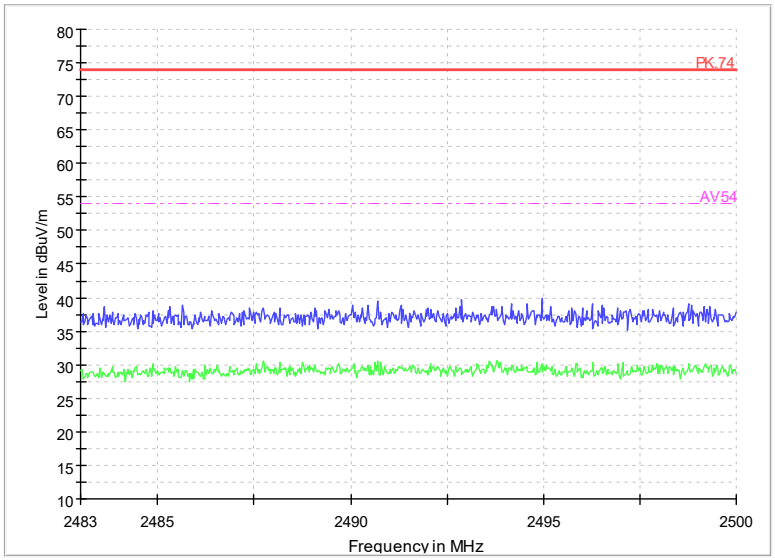
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11g
Polarization：H



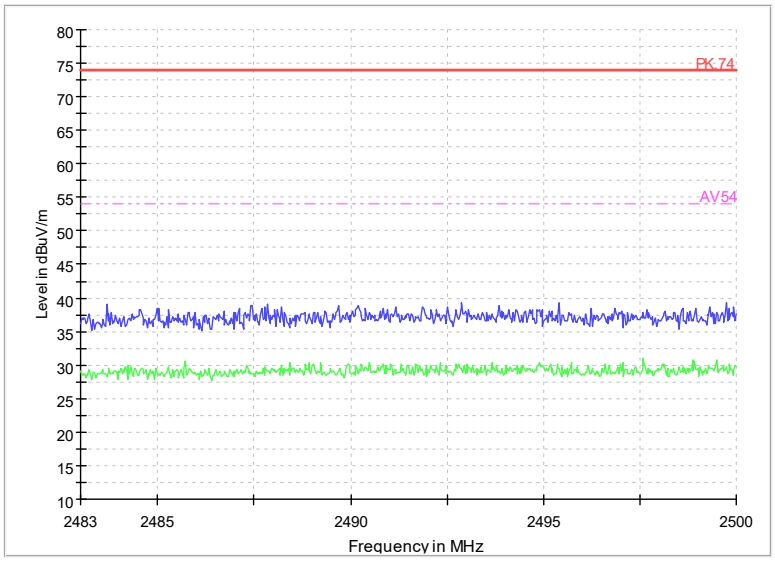
Radiated Emission Band Edge
Channel No.:1
Test Mode: 802.11n
Polarization：V



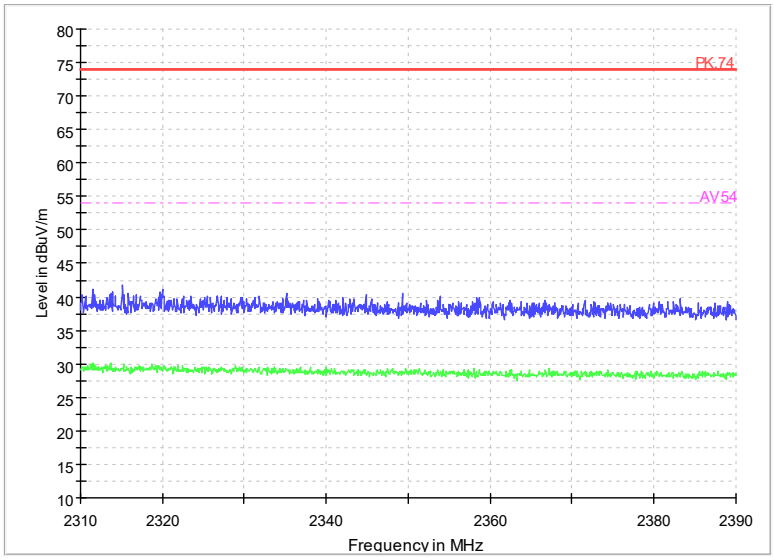
Radiated Emission Band Edge
Channel No.:1
Test Mode: 802.11n
Polarization：H



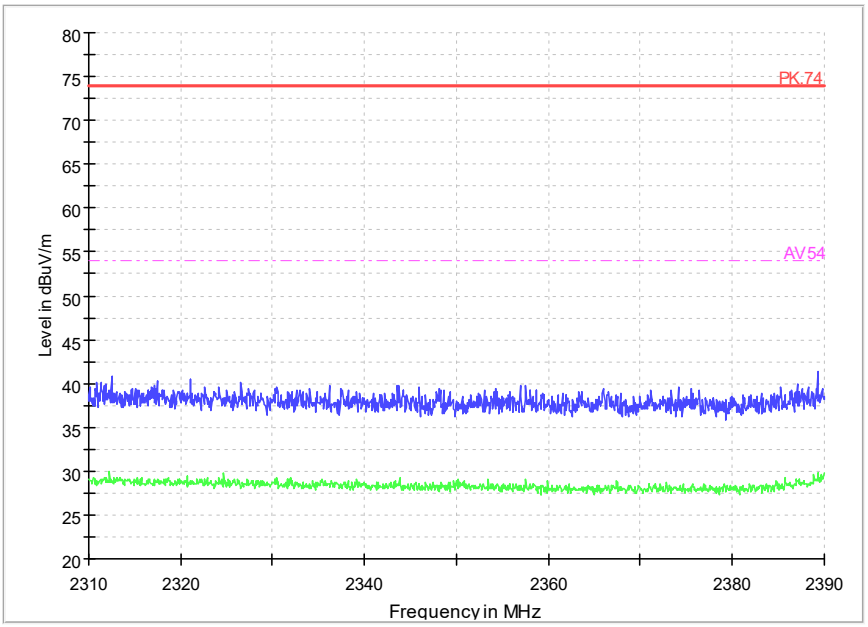
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11n
Polarization：V



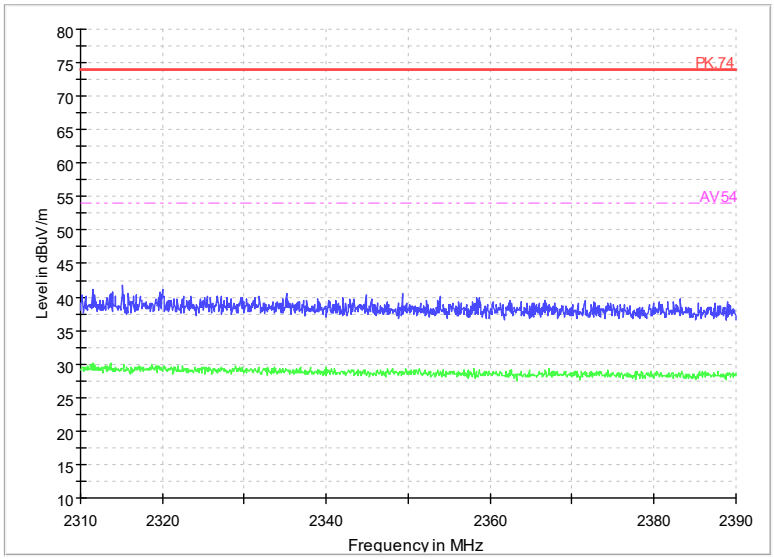
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11n
Polarization：H



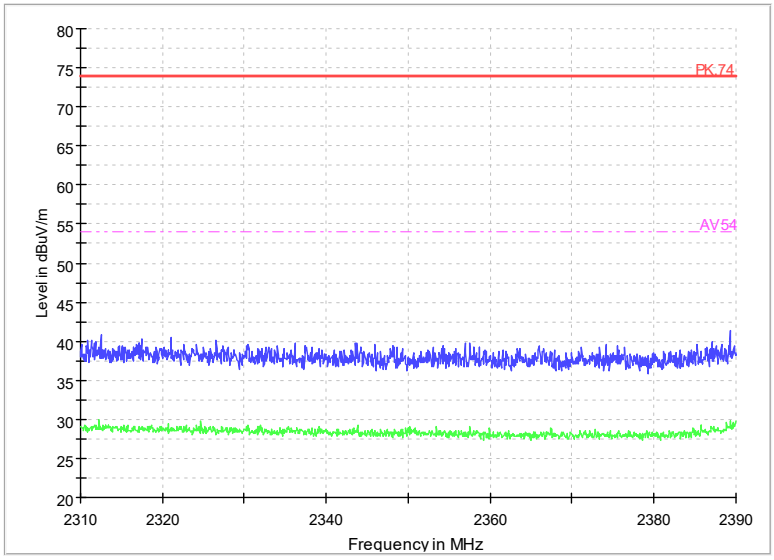
Radiated Emission Band Edge
Channel No.:1
Test Mode: 802.11ax
Polarization：V



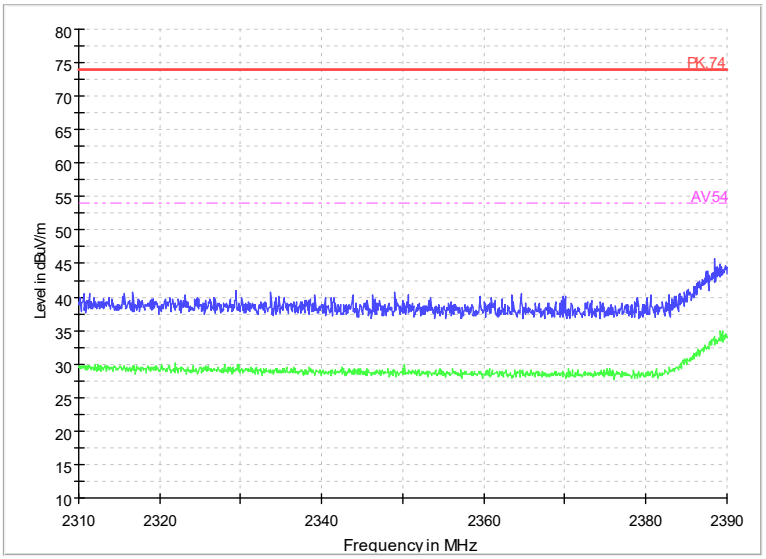
Radiated Emission Band Edge
Channel No.:1
Test Mode: 802.11ax
Polarization：H



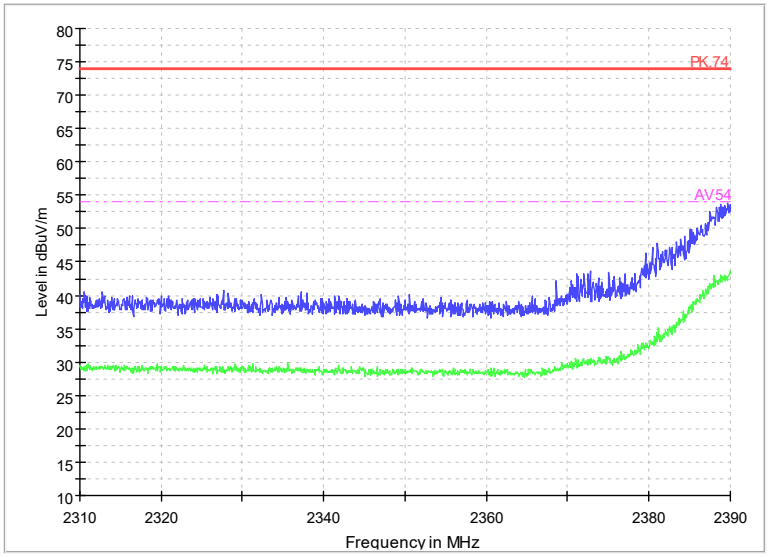
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11ax
Polarization：V



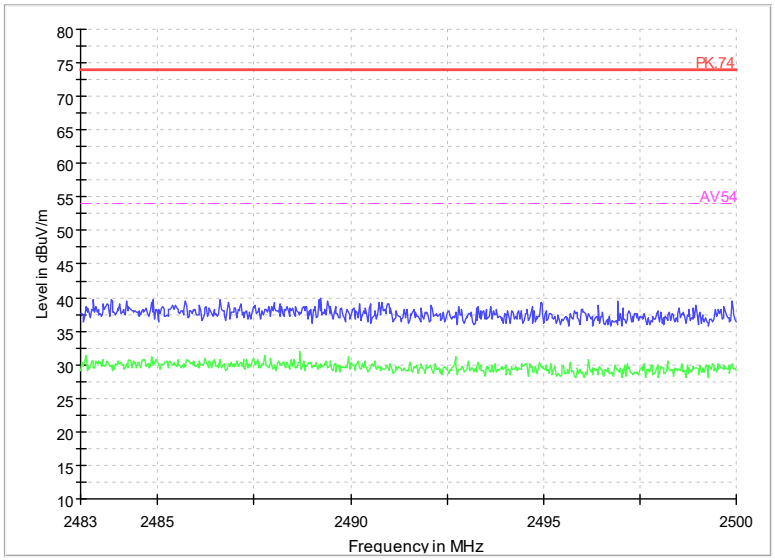
Radiated Emission Band Edge
Channel No.:11
Test Mode: 802.11ax
Polarization：H



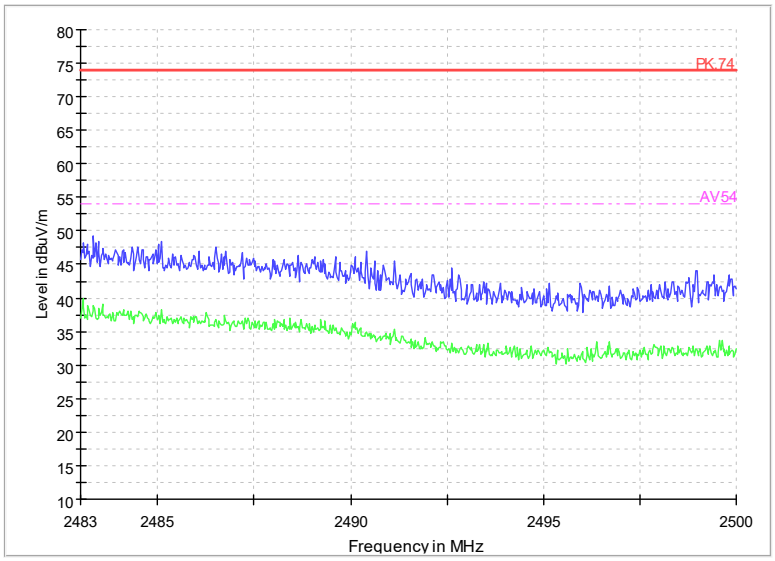
Radiated Emission Band Edge
Channel No.:3
Test Mode: 802.11n40
Polarization：V



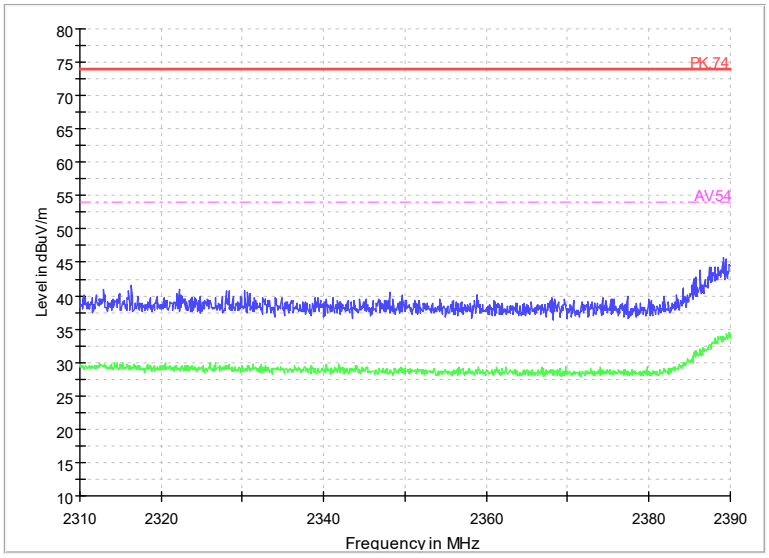
Radiated Emission Band Edge
Channel No.:3
Test Mode: 802.11n40
Polarization：H



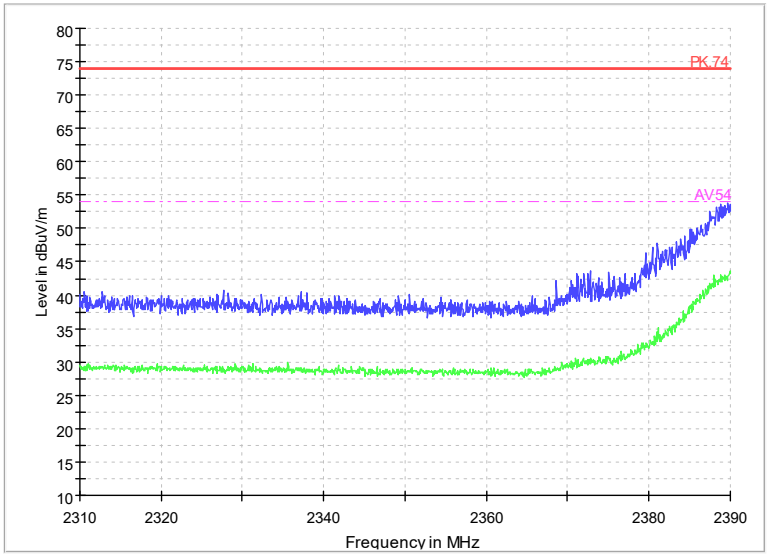
Radiated Emission Band Edge
Channel No.:9
Test Mode: 802.11n40
Polarization：V



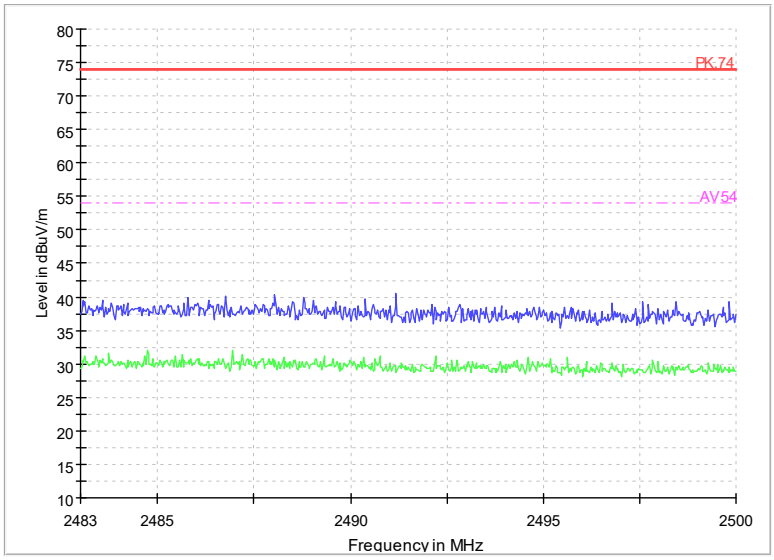
Radiated Emission Band Edge
Channel No.:9
Test Mode: 802.11n40
Polarization：H



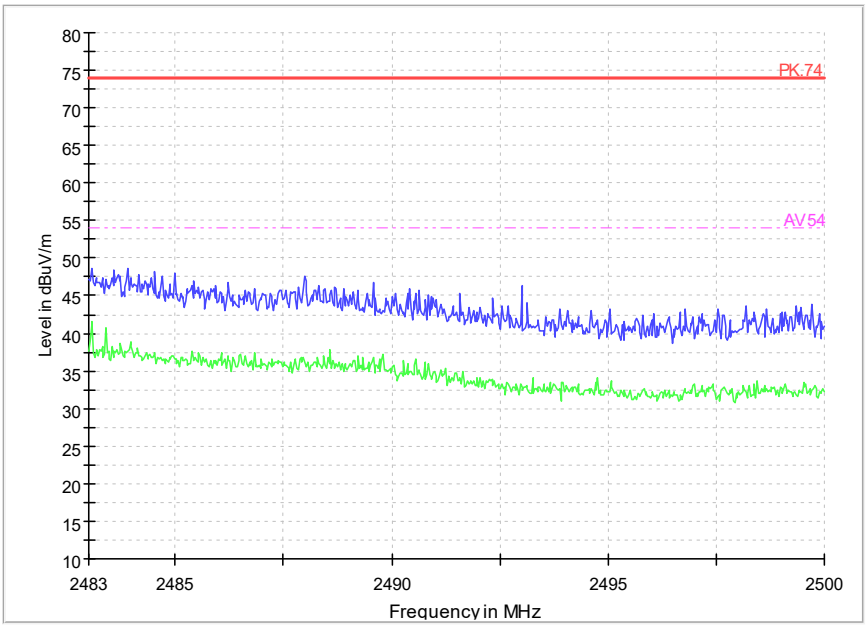
Radiated Emission Band Edge
Channel No.:3
Test Mode: 802.11ax40
Polarization：V



Radiated Emission Band Edge
Channel No.:3
Test Mode: 802.11ax40
Polarization：H



Radiated Emission Band Edge
Channel No.:9
Test Mode: 802.11ax40
Polarization：V



Radiated Emission Band Edge
Channel No.:9
Test Mode: 802.11ax40
Polarization：H

Radiated Emission

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:
Result= P_{mea} + A_{Rpl}
Sample calculation: (6.3 dBμV/m) = (25dBμV) + (-18.7dB/m), the corresponding frequency is39.603MHz.

For 802.11b Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
39.603	6.3	-18.7	25	Vertical	40	33.7
56.966	5.63	-18.9	24.53	Vertical	40	34.37
104.69	5.93	-18.8	24.73	Vertical	43.5	37.57
202.1265	4.85	-18.8	23.65	Vertical	43.5	38.65
516.164	12.12	-10.2	22.32	Vertical	46	33.88
930.4025	17.85	-3	20.85	Vertical	46	28.15

For 802.11g Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
50.952	6.55	-18.4	24.95	Vertical	40	33.45
65.308	4.53	-20.5	25.03	Vertical	40	35.47
124.866	3.89	-20.2	24.09	Vertical	43.5	39.61
213.039	5.18	-18.4	23.58	Vertical	43.5	38.32
538.2315	12.83	-9.7	22.53	Vertical	46	33.17
950.9665	17.97	-2.8	20.77	Vertical	46	28.03

For 802.11n(HT20) Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
38.342	6.06	-18.9	24.96	Vertical	40	33.94
59.876	4.84	-19.2	24.04	Vertical	40	35.16
98.967	5.67	-18.7	24.37	Vertical	43.5	37.83
309.845	7.87	-15.5	23.37	Vertical	46	38.13
524.7	12.54	-10.1	22.64	Vertical	46	33.46
946.165	17.96	-2.9	20.86	Vertical	46	28.04

For 802.11ax(HE20) Channel No.:1

Frequency(MHz)	Result(dBuV/m)	ARpl	Pmea	Polarity	Limit	Margin

		(dB)	(dBuV/m)		(dBuV/m)	(dB)
46.0535	6.56	-18.4	24.96	Vertical	40	33.44
57.5965	6.01	-19	25.01	Vertical	40	33.99
110.316	5.76	-18.9	24.66	Vertical	43.5	37.74
310.5725	7.91	-15.5	23.41	Vertical	46	38.09
495.406	11.57	-10.7	22.27	Vertical	46	34.43
902.515	17.48	-3.3	20.78	Vertical	46	28.52

For 802.11b Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
51.825	6.66	-18.5	25.16	Vertical	40	33.34
65.308	4.5	-20.5	25	Vertical	40	35.5
125.1085	3.83	-20.3	24.13	Vertical	43.5	39.67
205.182	4.87	-18.7	23.57	Vertical	43.5	38.63
545.749	12.84	-9.5	22.34	Vertical	46	33.16
924.6795	17.78	-3.1	20.88	Vertical	46	28.22

For 802.11g Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.326	6.67	-18.4	25.07	Vertical	40	33.33
58.0815	6.1	-19.1	25.2	Vertical	40	33.9
104.2535	5.93	-18.8	24.73	Vertical	43.5	37.57
204.1635	4.65	-18.7	23.35	Vertical	43.5	38.85
516.8915	12.23	-10.2	22.43	Vertical	46	33.77
948.7355	17.92	-2.8	20.72	Vertical	46	28.08

For 802.11n(HT20) Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.3745	6.72	-18.4	25.12	Vertical	40	33.28
64.2895	4.88	-20.3	25.18	Vertical	40	35.12
110.1705	5.77	-18.9	24.67	Vertical	43.5	37.73
296.1195	7.46	-15.9	23.36	Vertical	46	38.54
512.1385	12.25	-10.3	22.55	Vertical	46	33.75
931.421	17.9	-3	20.9	Vertical	46	28.1

For 802.11ax(HE20) Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
46.3445	6.36	-18.3	24.66	Vertical	40	33.64
56.869	5.54	-18.9	24.44	Vertical	40	34.46
96.7845	5.53	-18.8	24.33	Vertical	43.5	37.97

200.914	5.04	-18.8	23.84	Vertical	43.5	38.46
526.5915	12.63	-10	22.63	Vertical	46	33.37
948.784	17.98	-2.8	20.78	Vertical	46	28.02

For 802.11b Channel No.:11

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
39.021	6.38	-18.8	25.18	Vertical	40	33.62
84.611	4.54	-20.4	24.94	Vertical	40	35.46
103.1865	5.46	-18.7	24.16	Vertical	43.5	38.04
304.4615	7.73	-15.7	23.43	Vertical	46	38.27
530.2775	12.64	-9.9	22.54	Vertical	46	33.36
876.3735	16.96	-3.7	20.66	Vertical	46	29.04

For 802.11g Channel No.:11

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
46.49	6.18	-18.3	24.48	Vertical	40	33.82
64.047	4.78	-20.2	24.98	Vertical	40	35.22
102.071	4.64	-18.7	23.34	Vertical	43.5	38.86
277.738	6.98	-16.6	23.58	Vertical	46	39.02
556.031	12.45	-9.3	21.75	Vertical	46	33.55
939.957	17.98	-2.9	20.88	Vertical	46	28.02

For 802.11n(HT20) Channel No.:11

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
50.758	6.43	-18.4	24.83	Vertical	40	33.57
58.6635	5.98	-19.1	25.08	Vertical	40	34.02
97.997	6.02	-18.8	24.82	Vertical	43.5	37.48
251.742	5.87	-17.3	23.17	Vertical	46	40.13
522.1295	12.31	-10.1	22.41	Vertical	46	33.69
866.14	16.86	-3.9	20.76	Vertical	46	29.14

For 802.11ax(HE20) Channel No.:11

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.3745	6.83	-18.4	25.23	Vertical	40	33.17
59.294	5.51	-19.2	24.71	Vertical	40	34.49
107.9395	4.51	-18.8	23.31	Vertical	43.5	38.99
201.205	5.04	-18.8	23.84	Vertical	43.5	38.46
522.857	12.3	-10.1	22.4	Vertical	46	33.7
945.9225	18.04	-2.9	20.94	Vertical	46	27.96

For 802.11n(HT40) Channel No.:3

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
44.9865	6.68	-18.4	25.08	Vertical	40	33.32
62.398	3.94	-19.8	23.74	Vertical	40	36.06
110.316	5.78	-18.9	24.68	Vertical	43.5	37.72
201.399	5.03	-18.8	23.83	Vertical	43.5	38.47
553.606	12.67	-9.3	21.97	Vertical	46	33.33
920.46	17.83	-3.1	20.93	Vertical	46	28.17

For 802.11ax(HE40) Channel No.:3

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
39.312	6.3	-18.7	25	Vertical	40	33.7
59.1	5.6	-19.2	24.8	Vertical	40	34.4
98.482	5.84	-18.7	24.54	Vertical	43.5	37.66
213.427	5.09	-18.4	23.49	Vertical	43.5	38.41
551.181	12.55	-9.4	21.95	Vertical	46	33.45
909.693	17.52	-3.2	20.72	Vertical	46	28.48

For 802.11n(HT40) Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
52.019	6.62	-18.5	25.12	Vertical	40	33.38
58.4695	6.07	-19.1	25.17	Vertical	40	33.93
97.5605	5.88	-18.8	24.68	Vertical	43.5	37.62
284.9645	7.27	-16.3	23.57	Vertical	46	38.73
552.1025	12.69	-9.4	22.09	Vertical	46	33.31
924.631	17.79	-3.1	20.89	Vertical	46	28.21

For 802.11ax(HE40) Channel No.:6

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.326	6.66	-18.4	25.06	Vertical	40	33.34
64.0955	4.69	-20.2	24.89	Vertical	40	35.31
99.4035	5.28	-18.7	23.98	Vertical	43.5	38.22
210.0805	4.79	-18.5	23.29	Vertical	43.5	38.71
536.9705	12.57	-9.7	22.27	Vertical	46	33.43
896.113	17.13	-3.5	20.63	Vertical	46	28.87

For 802.11n(HT40) Channel No.:9

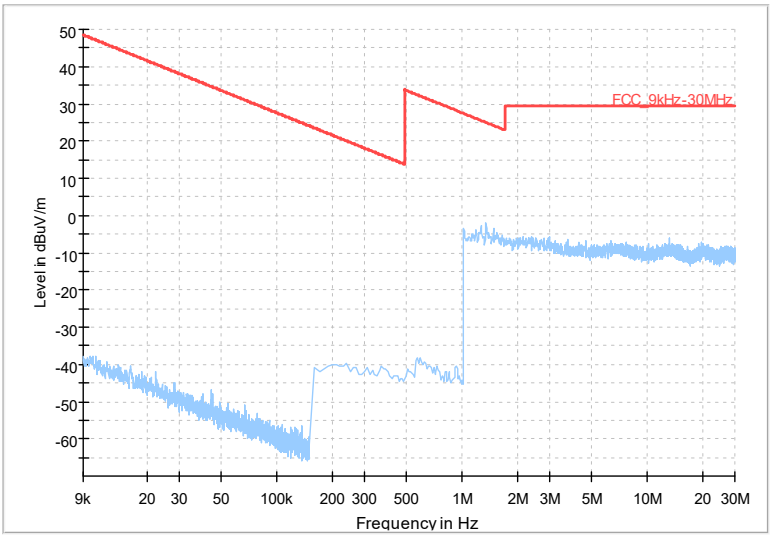
Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
51.2915	6.67	-18.4	25.07	Vertical	40	33.33

57.839	6.21	-19	25.21	Vertical	40	33.79
110.219	5.77	-18.9	24.67	Vertical	43.5	37.73
292.482	7.28	-16	23.28	Vertical	46	38.72
551.4235	12.69	-9.4	22.09	Vertical	46	33.31
929.2385	17.99	-3	20.99	Vertical	46	28.01

For 802.11ax(HE40) Channel No.:9

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
44.7925	6.69	-18.4	25.09	Vertical	40	33.31
59.0515	5.71	-19.1	24.81	Vertical	40	34.29
122.15	4.52	-19.9	24.42	Vertical	43.5	38.98
212.3115	5.19	-18.4	23.59	Vertical	43.5	38.31
538.8135	12.94	-9.6	22.54	Vertical	46	33.06
937.5805	18.02	-2.9	20.92	Vertical	46	27.98

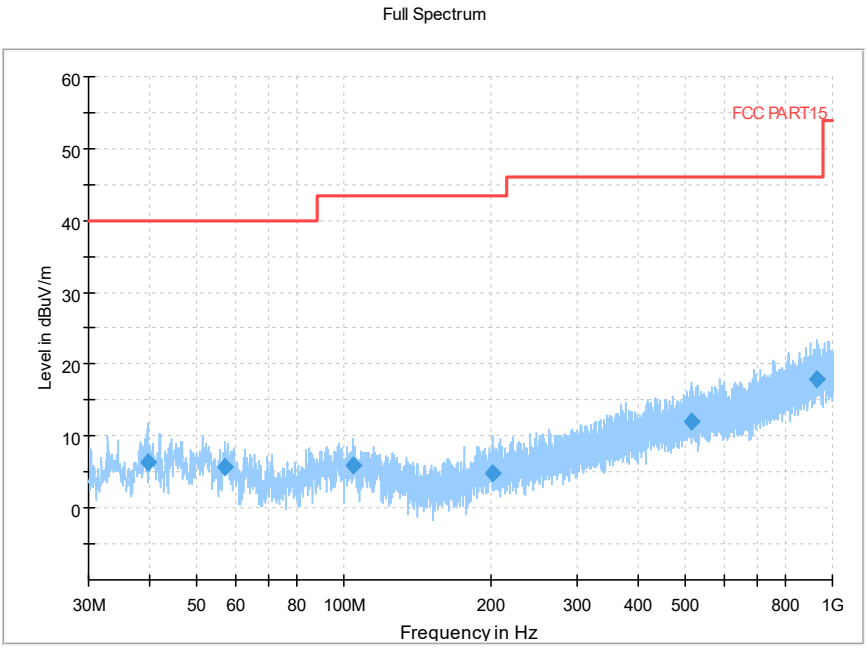
Full Spectrum



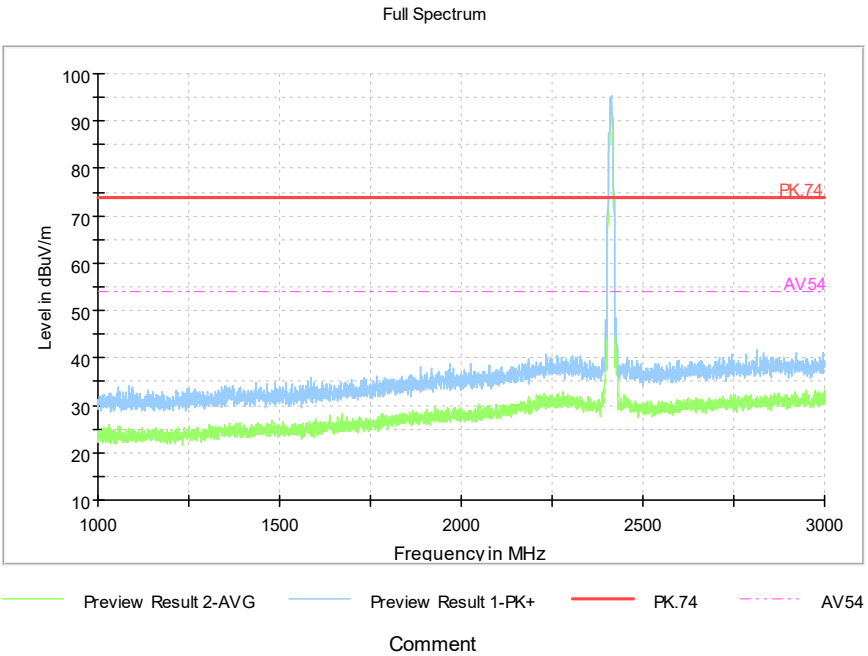
Frequency Range: 9kHz -30MHz
Detector: QP mode

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.

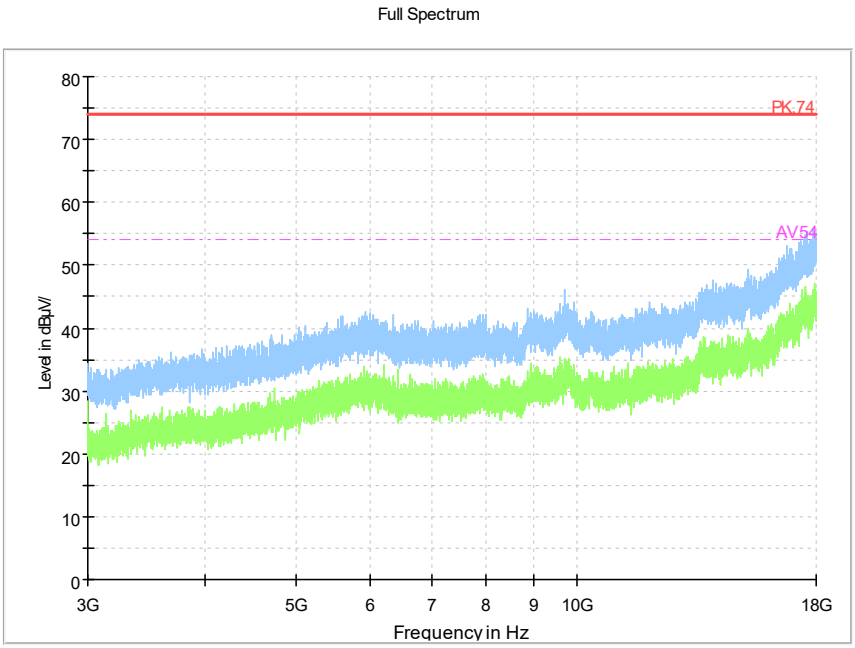
Carrier frequency (MHz): 2412
Channel No.:1



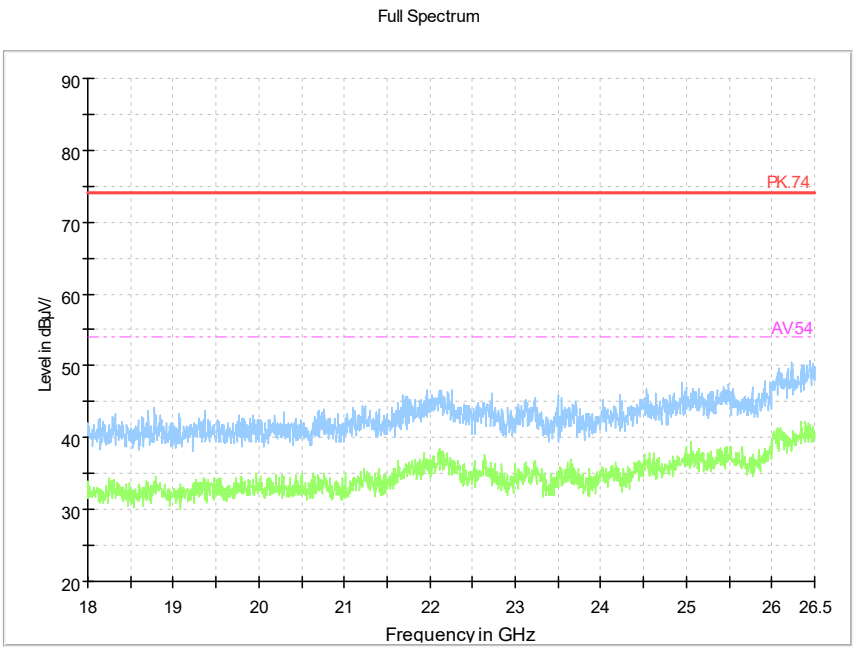
Frequency Range30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



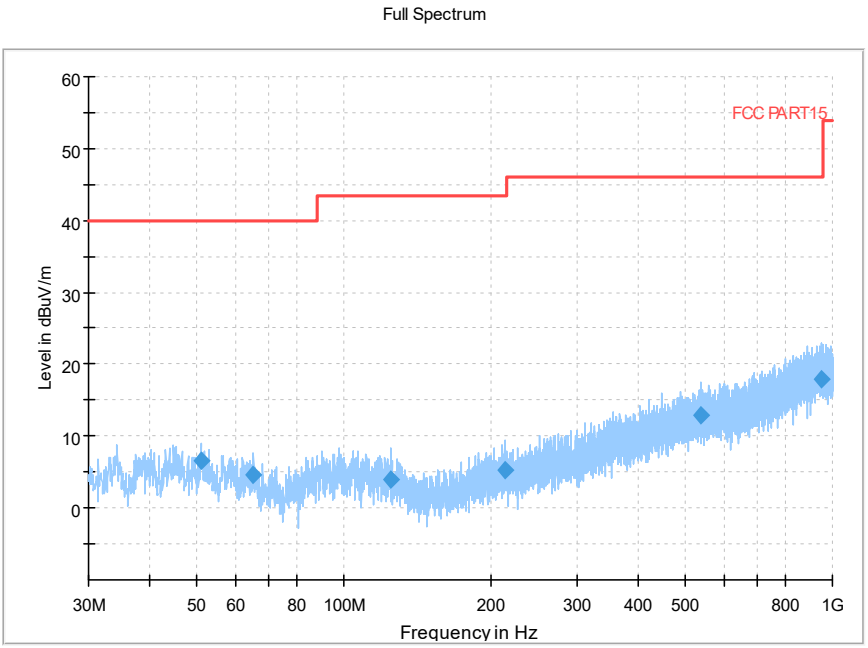
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



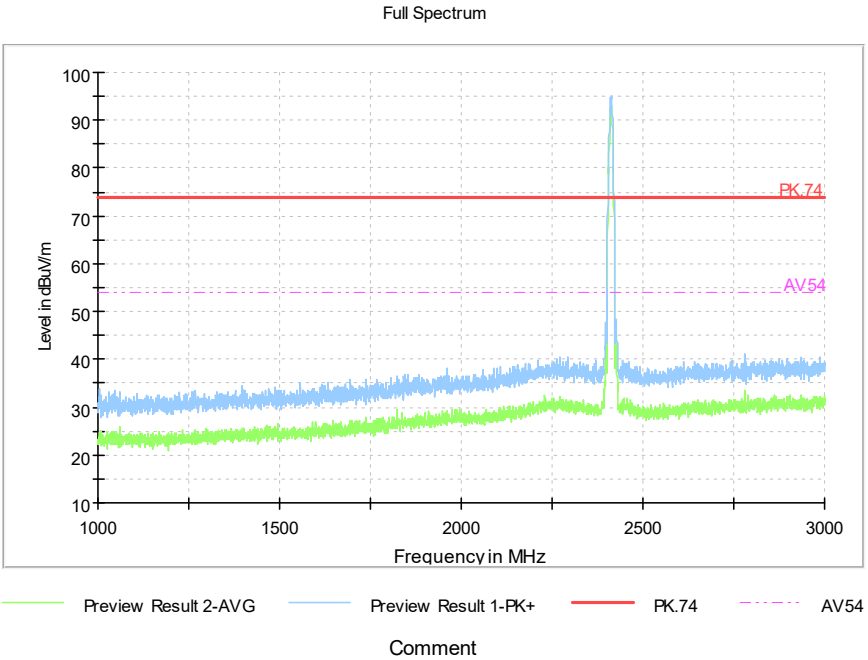
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



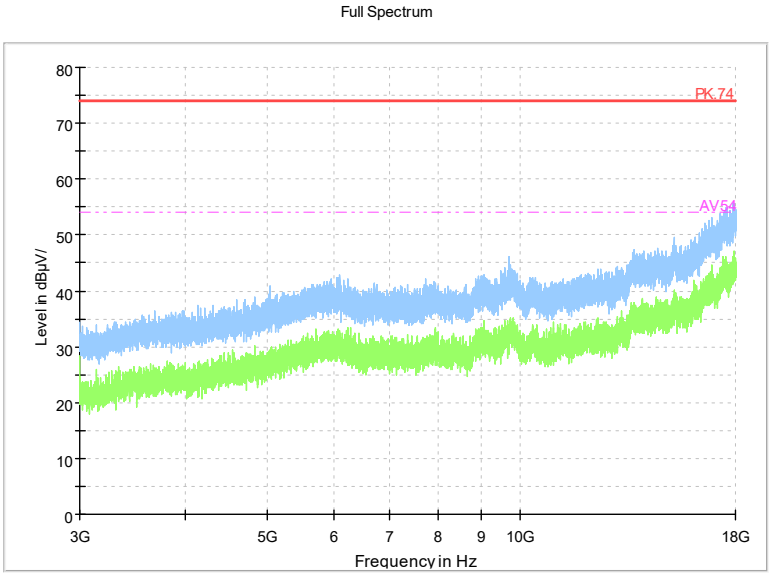
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



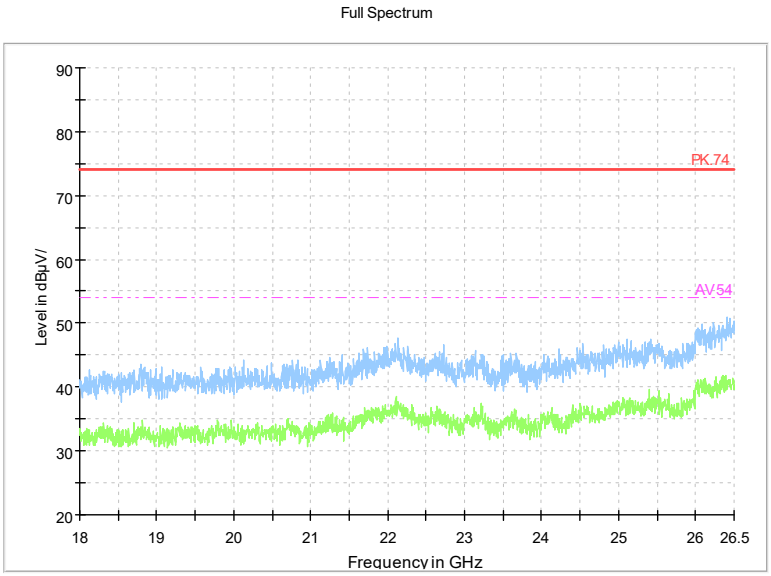
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



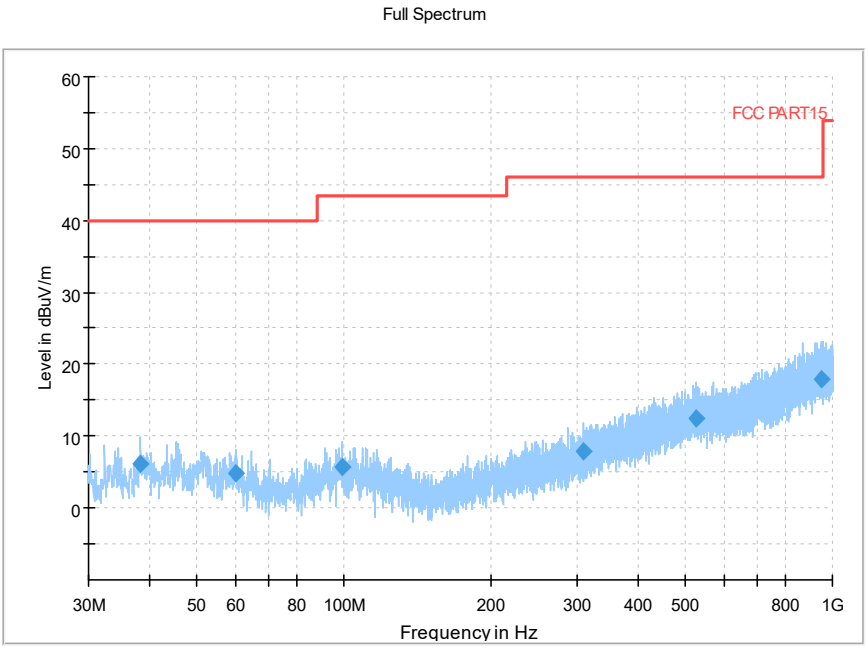
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



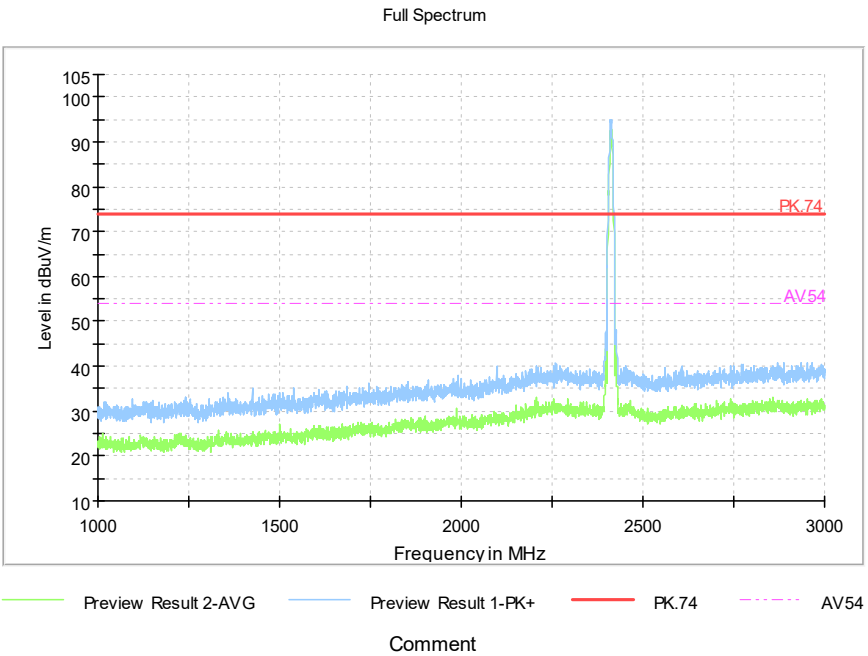
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



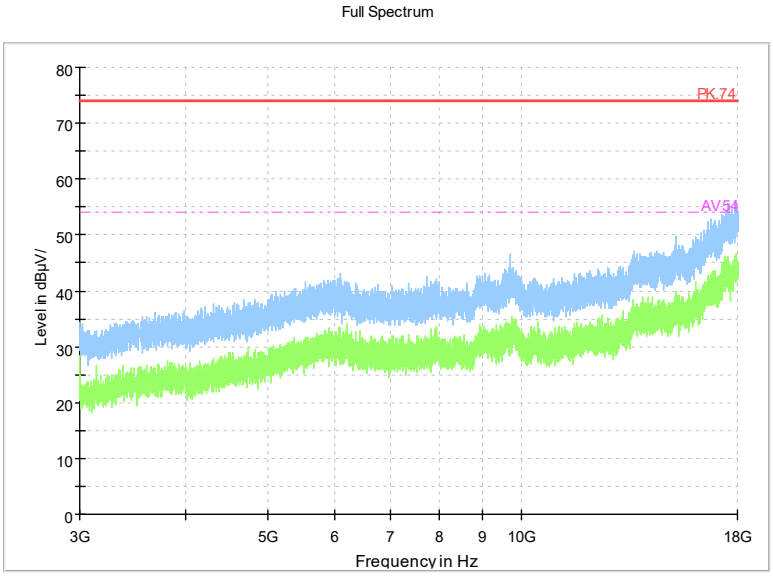
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



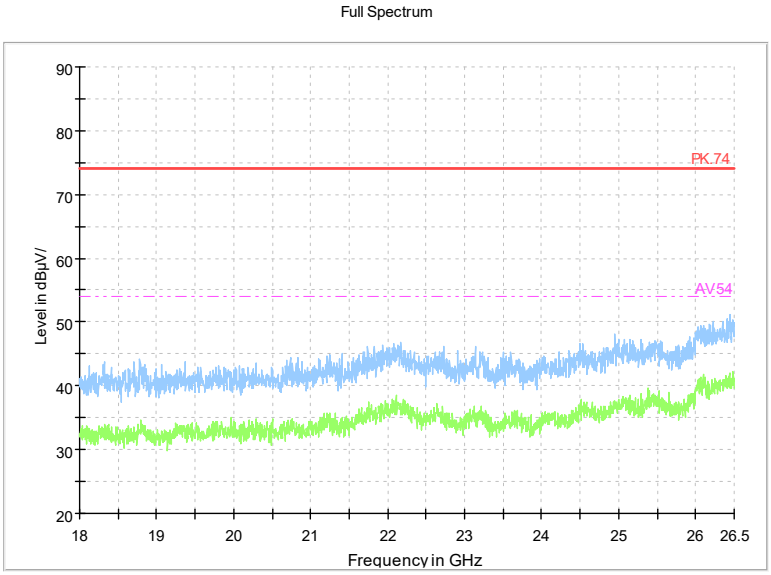
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



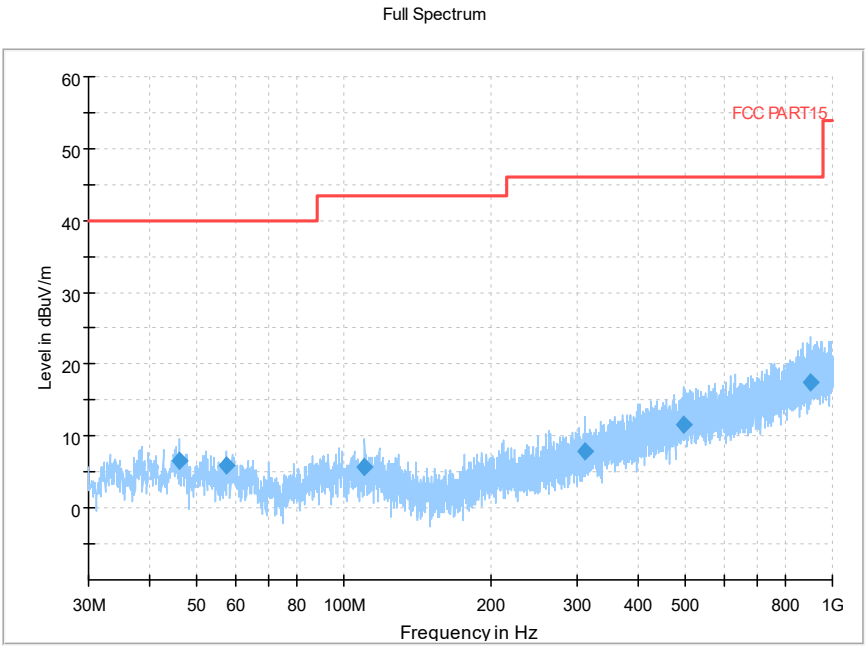
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



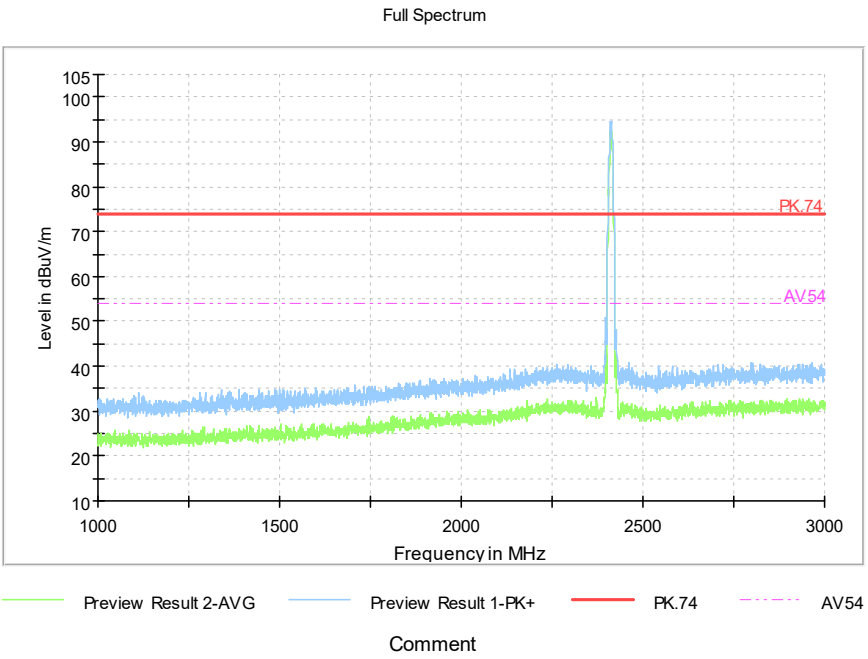
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



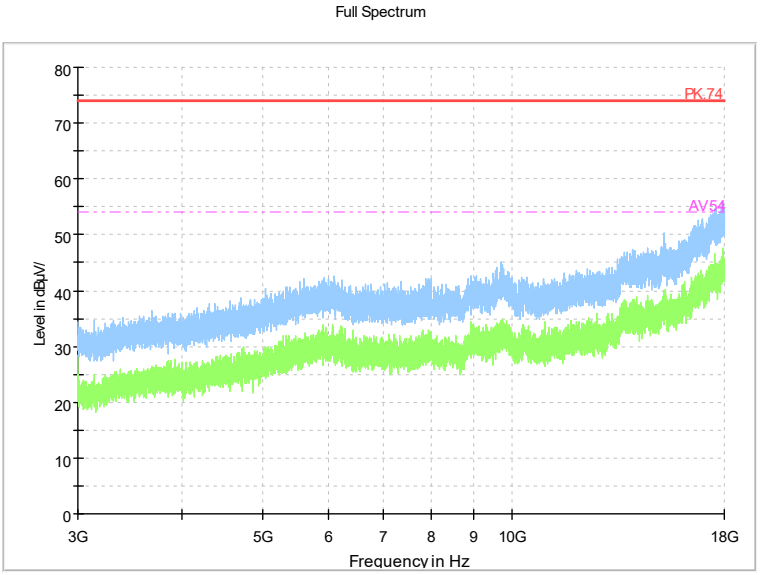
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



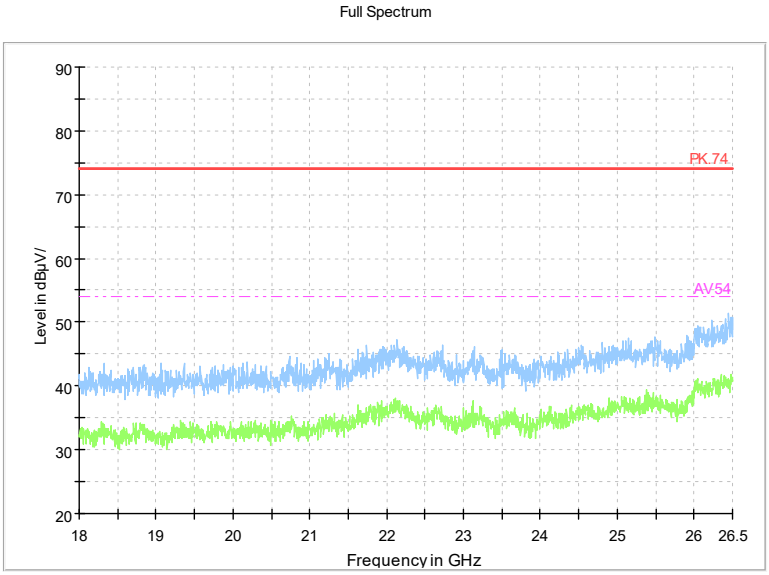
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11 ax(HT20)



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



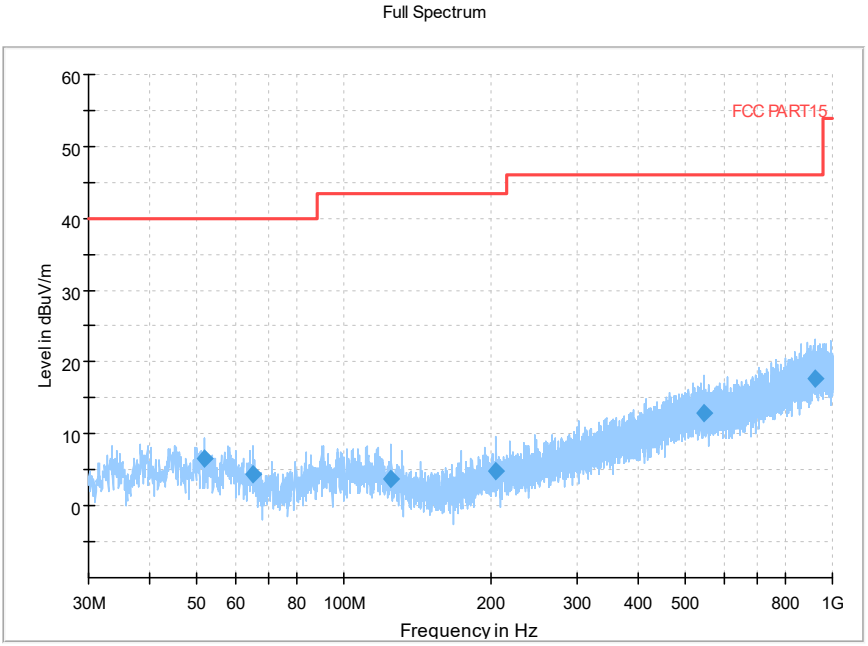
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11 ax(HT20)



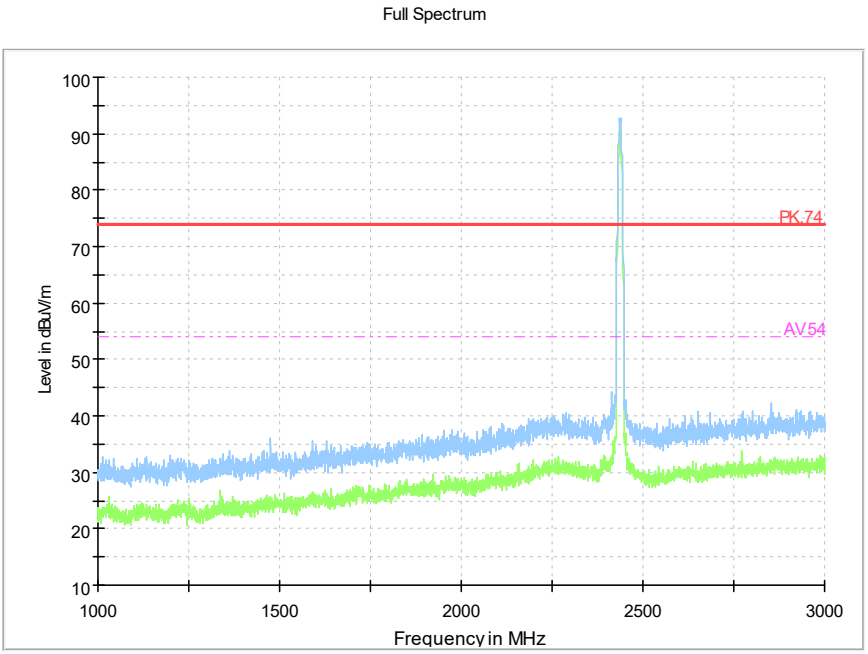
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11 ax(HT20)

Carrier frequency (MHz): 2437

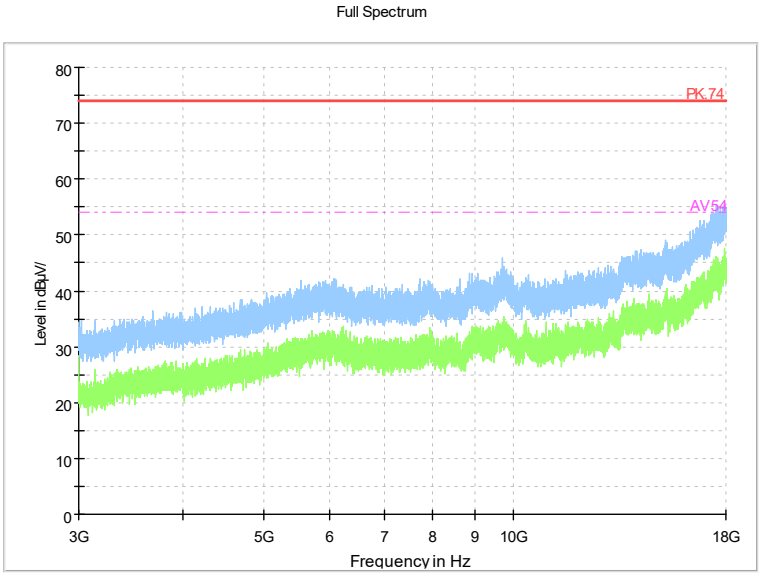
Channel No.:6



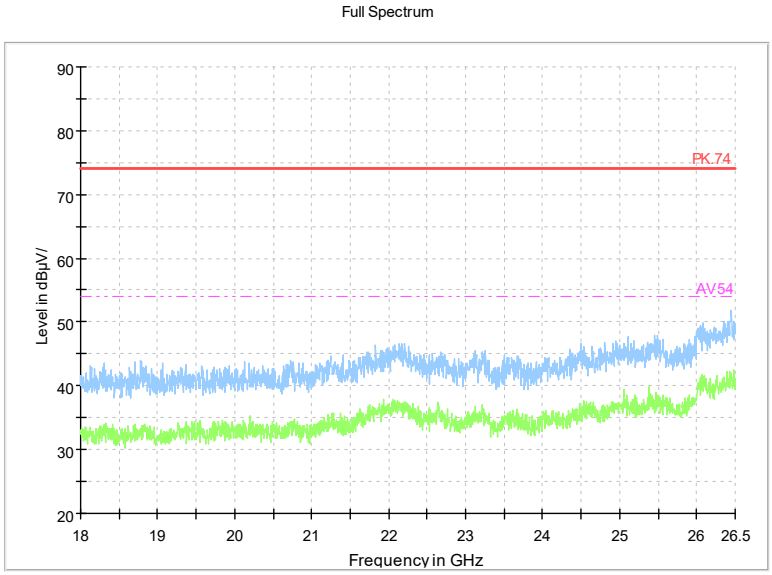
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



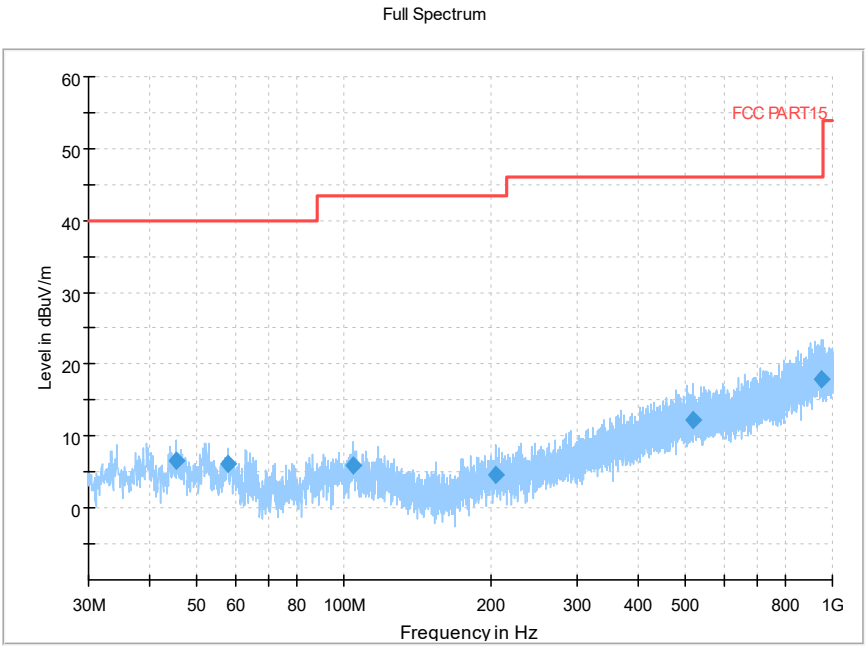
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



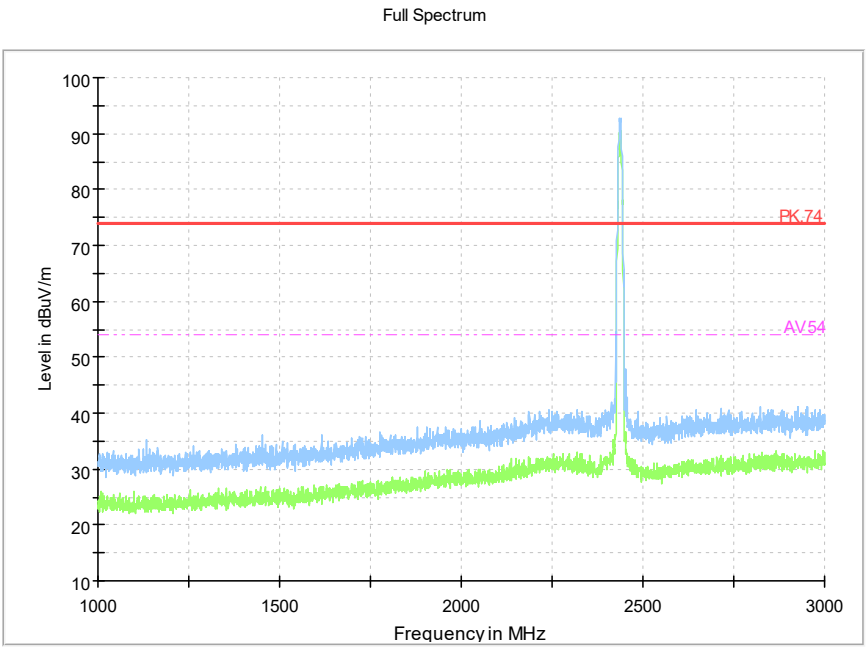
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



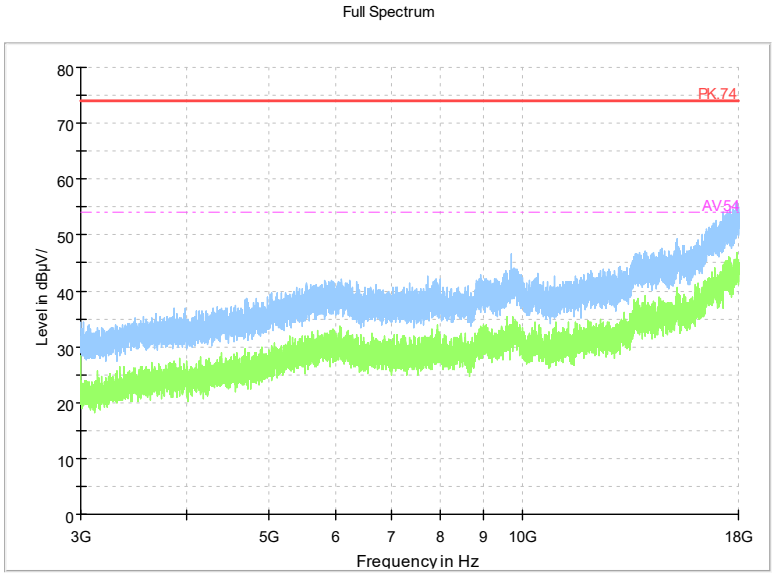
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



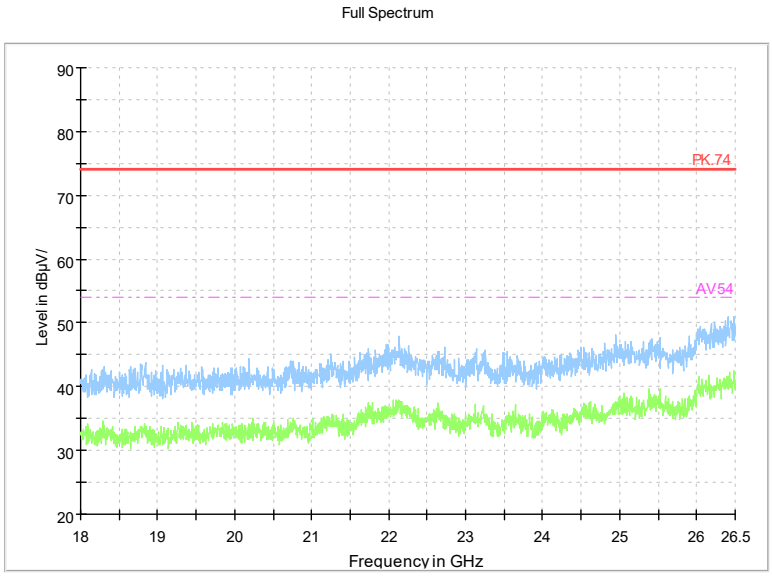
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



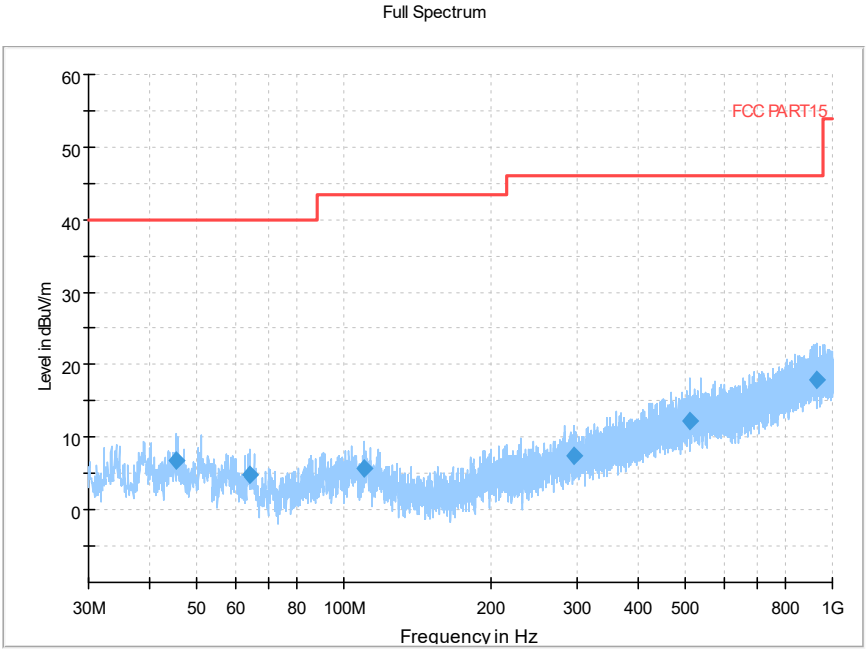
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



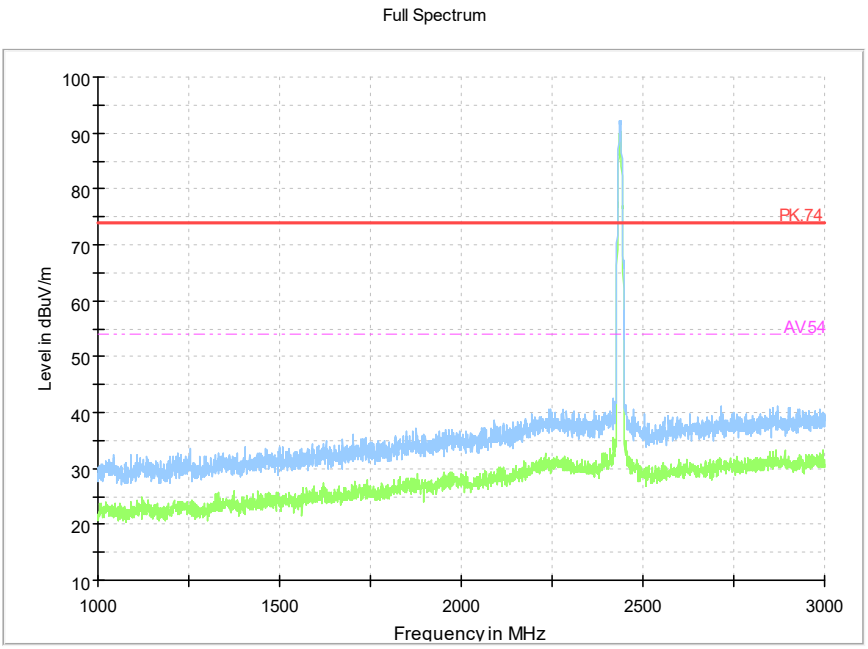
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



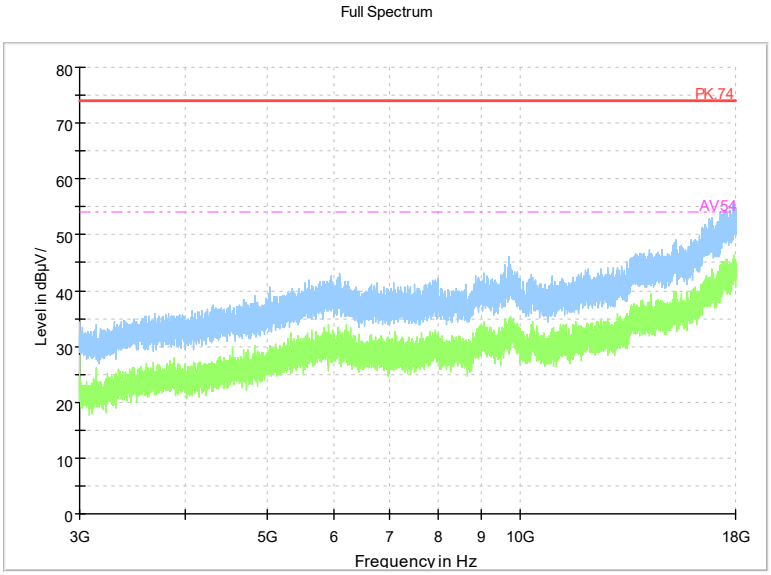
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



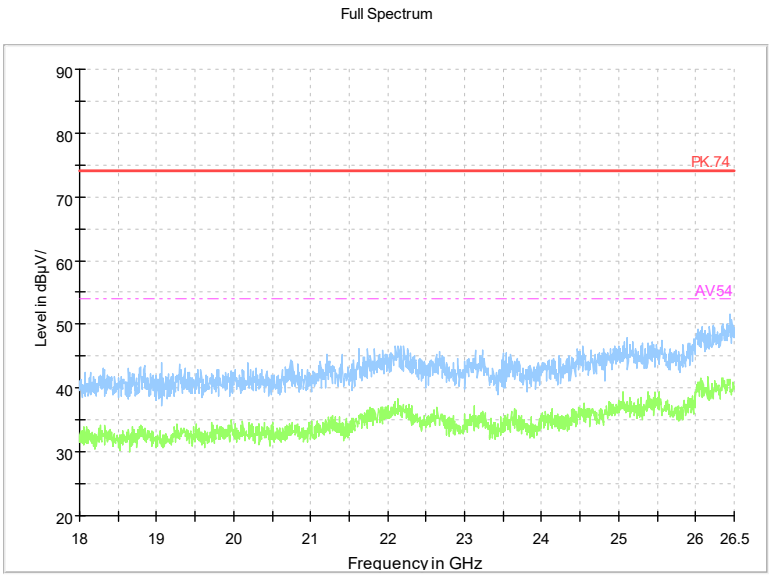
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



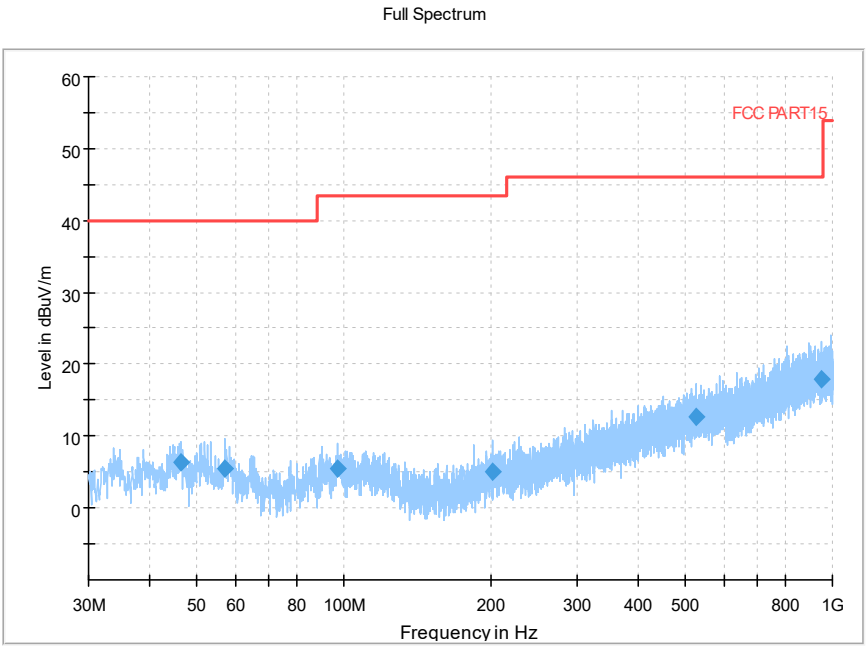
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



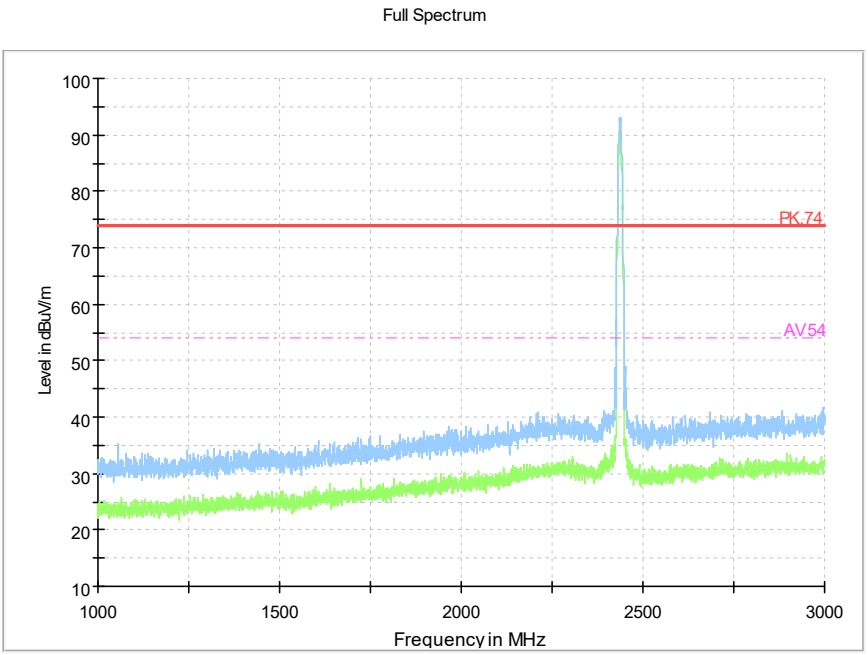
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



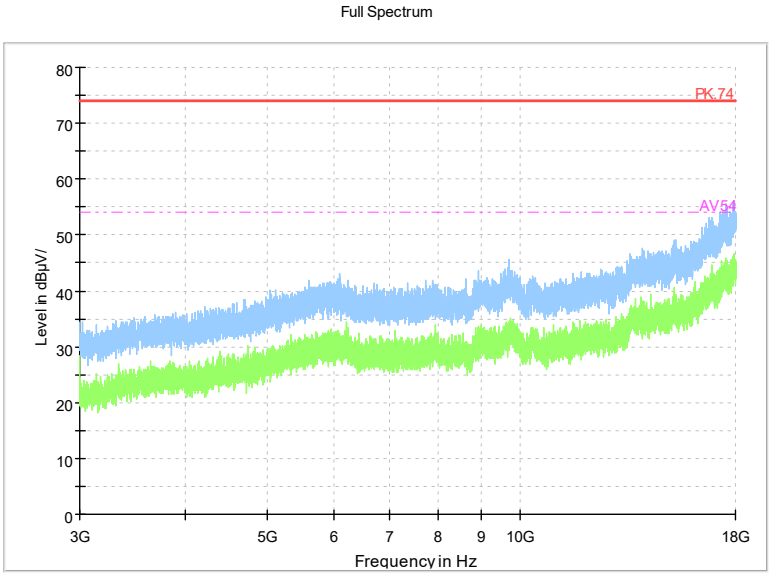
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



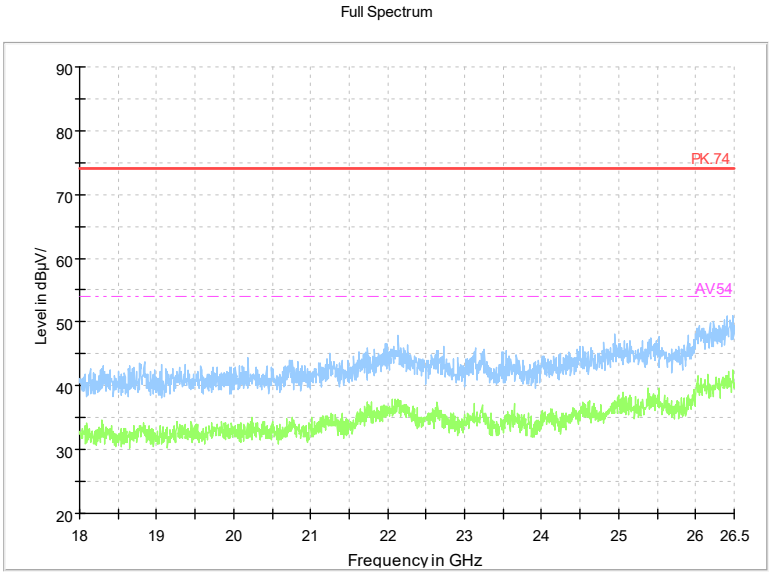
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11 ax(HT20)



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

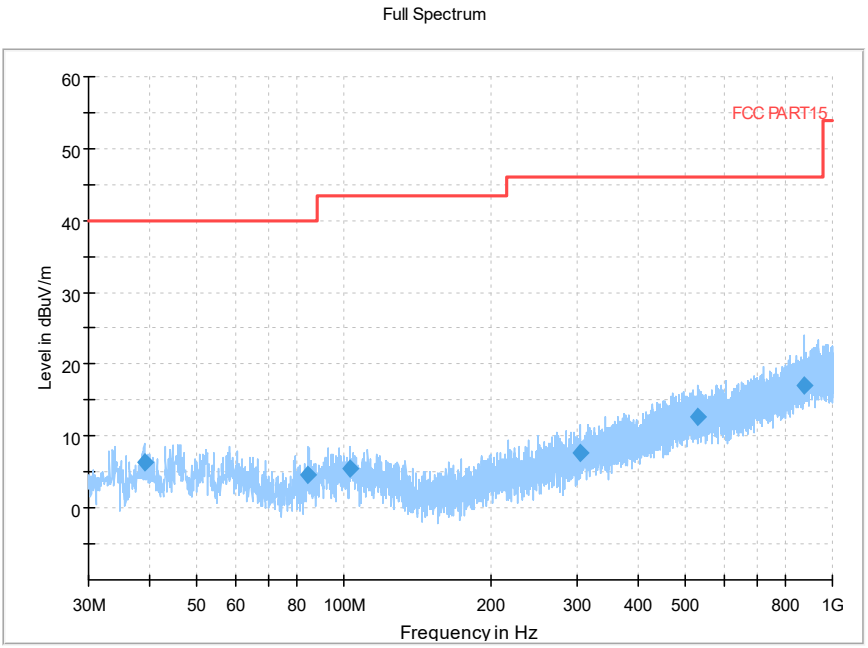


Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11 ax(HT20)

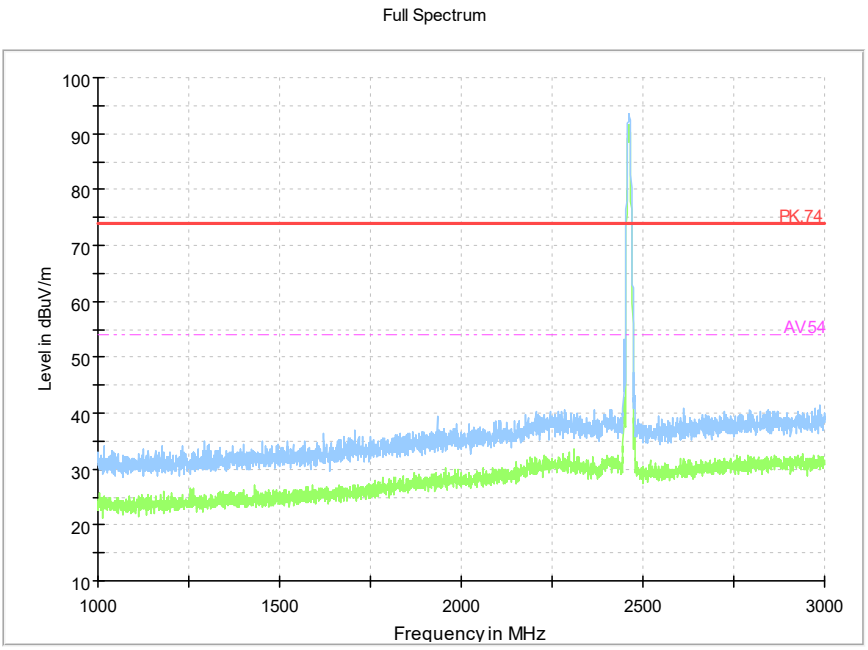


Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11 ax(HT20)

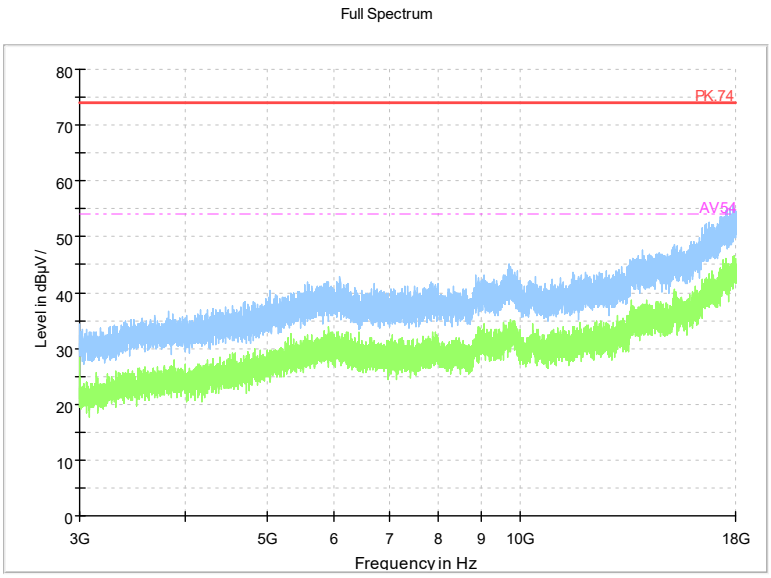
Carrier frequency (MHz): 2462
Channel No.:11



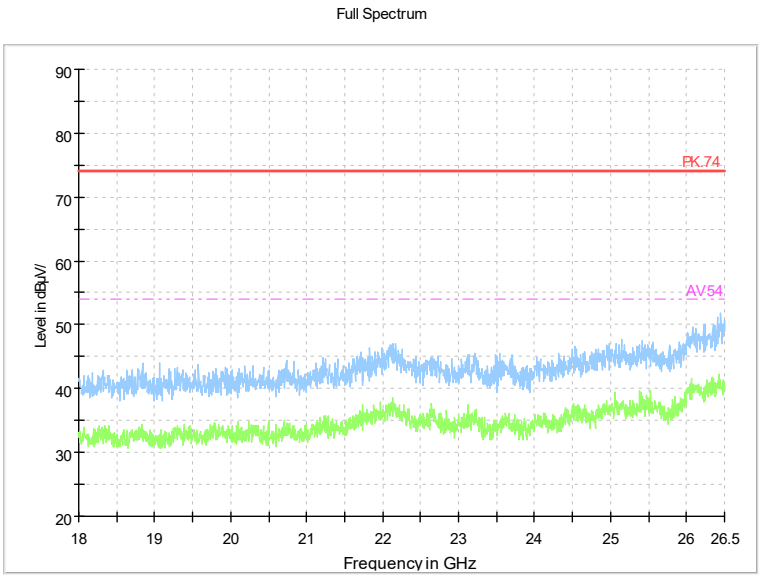
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



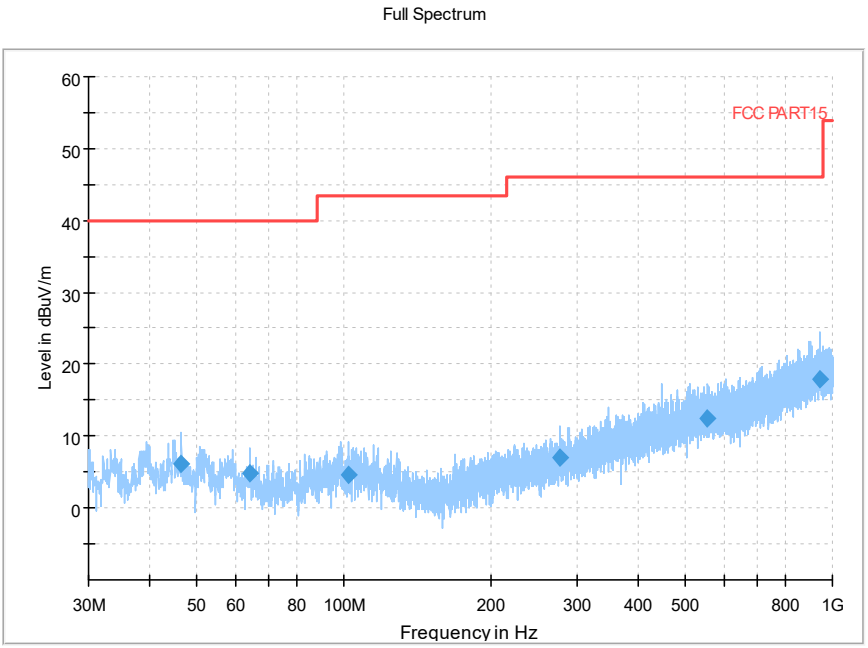
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



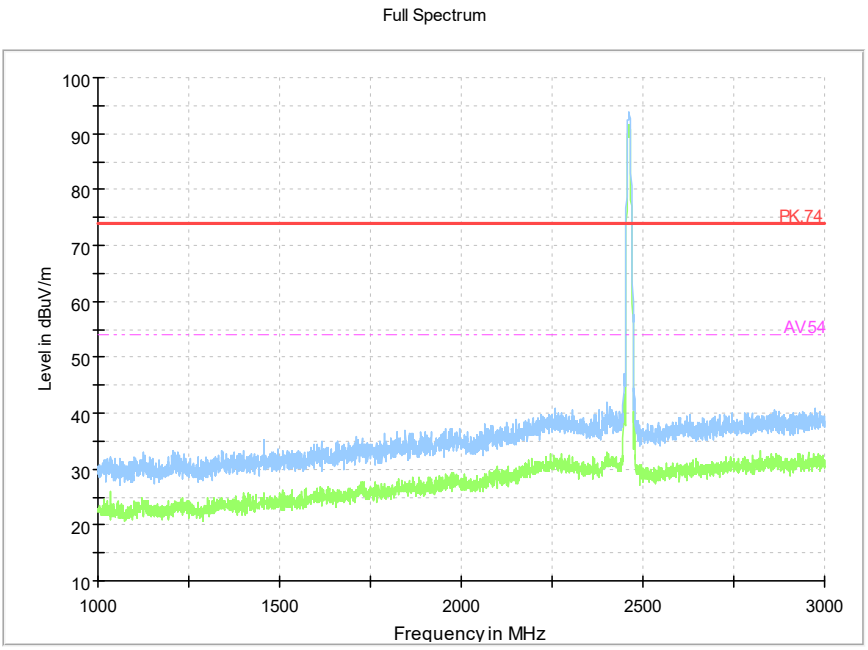
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



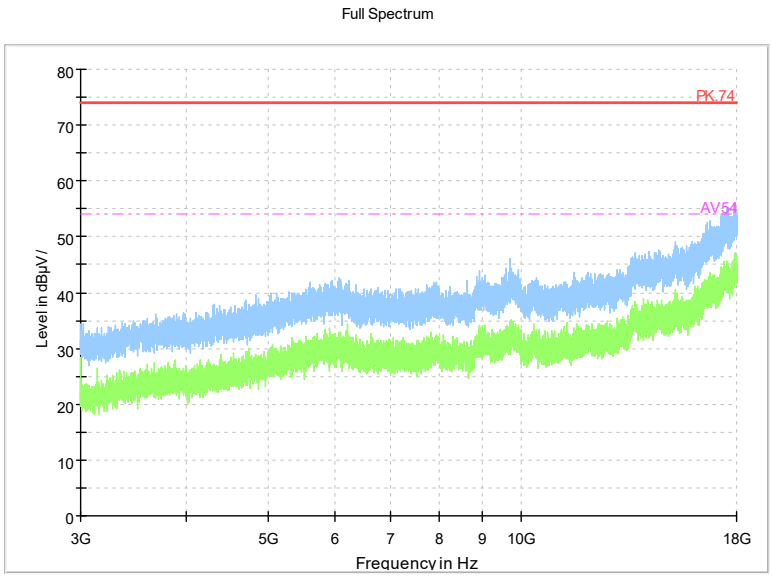
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11b



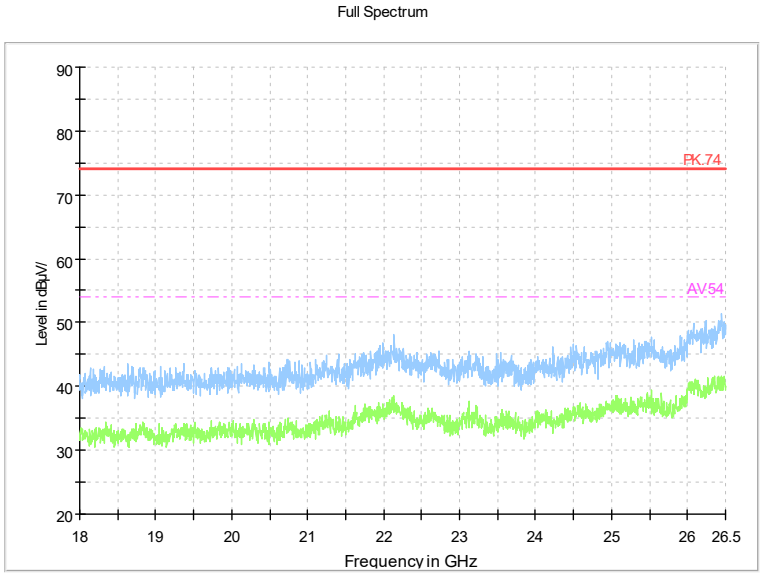
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



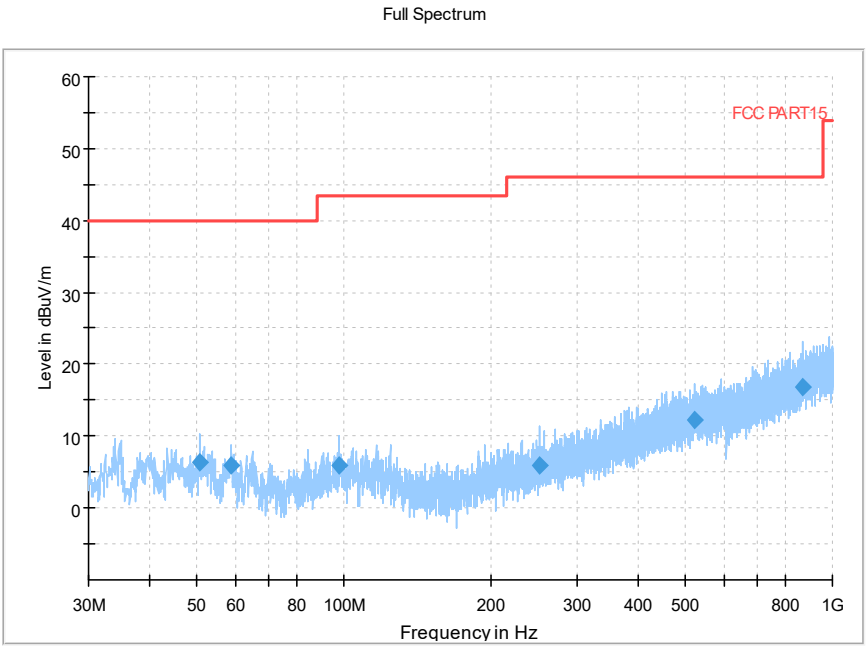
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



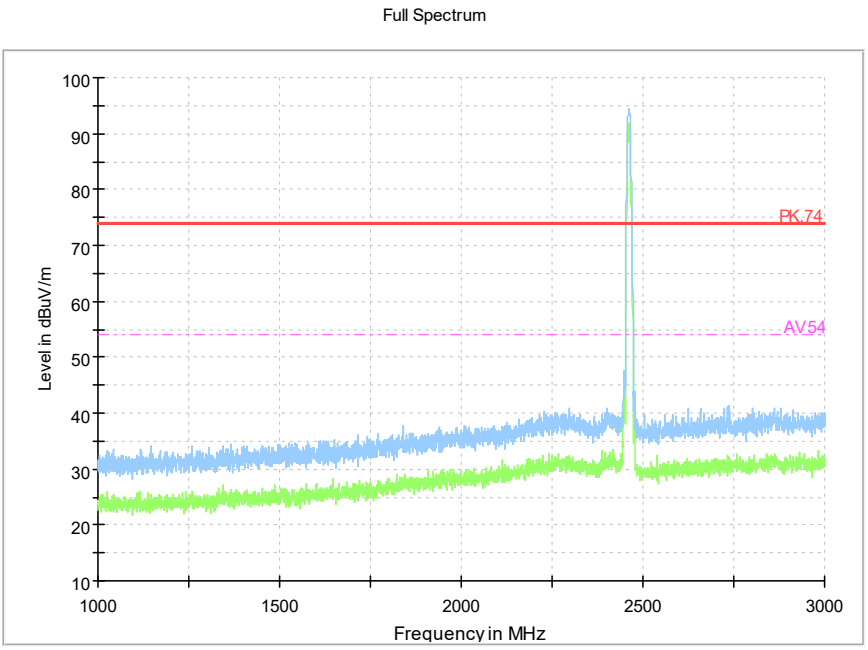
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



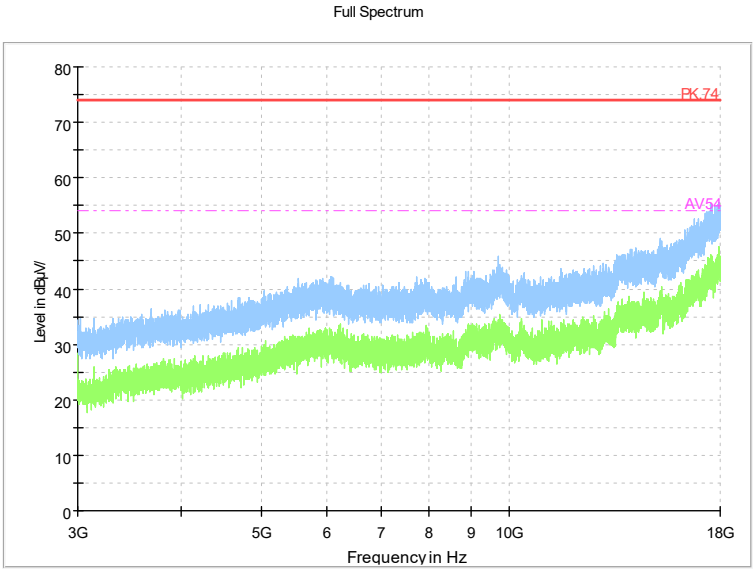
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11g



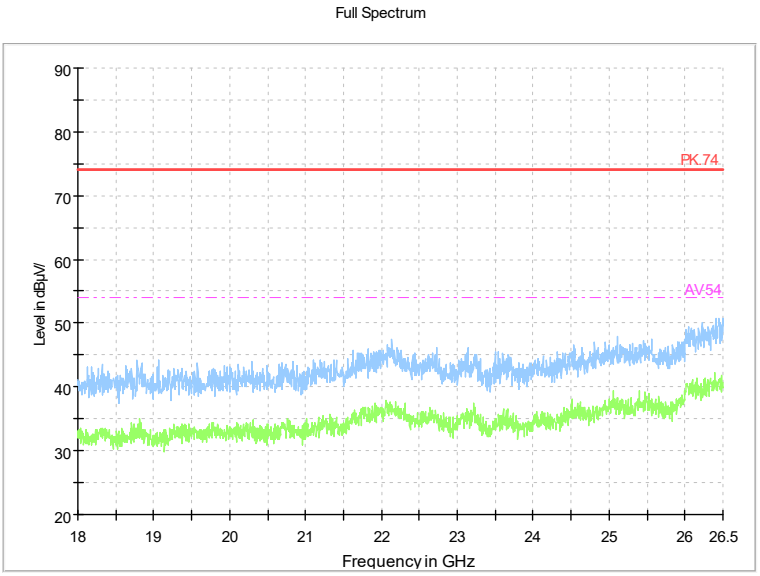
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



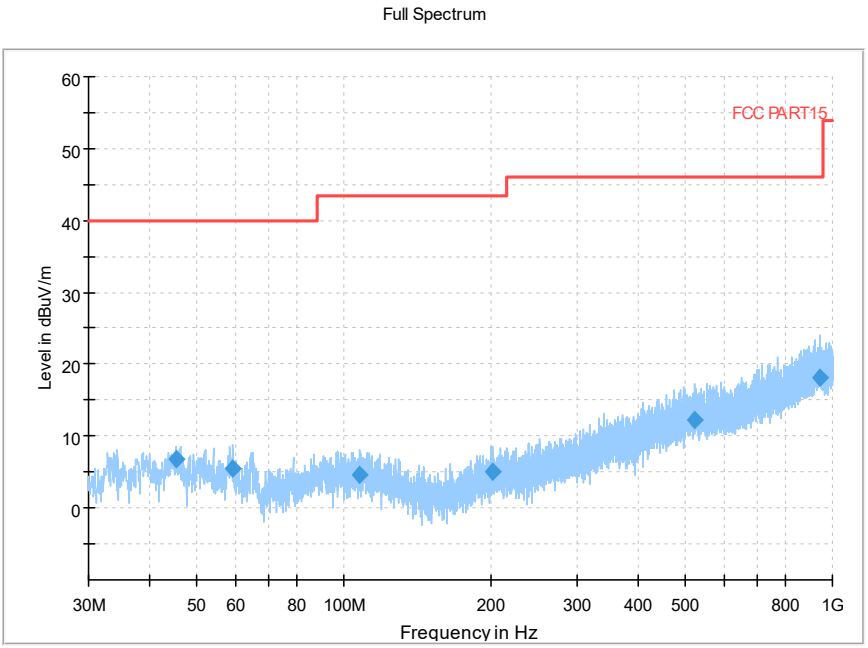
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



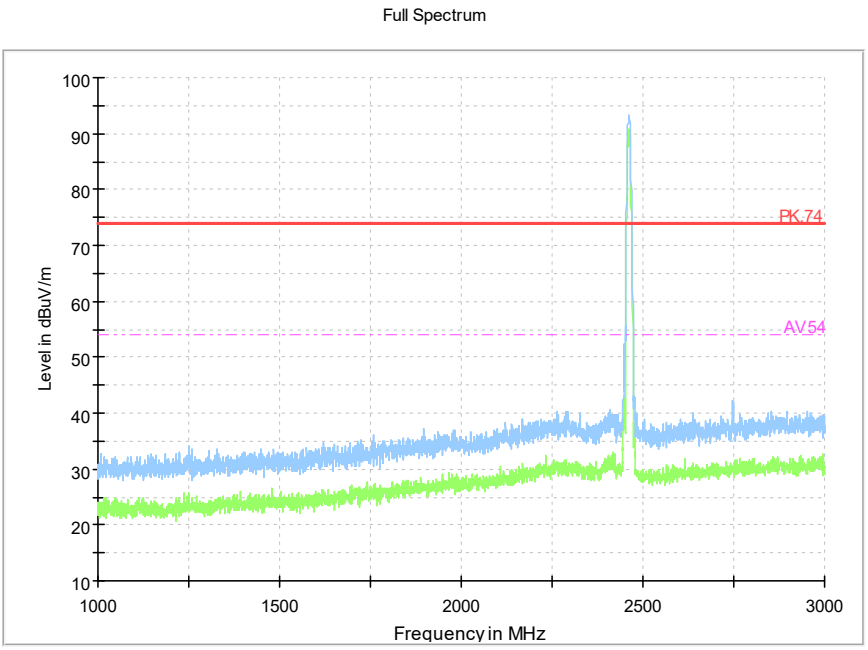
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



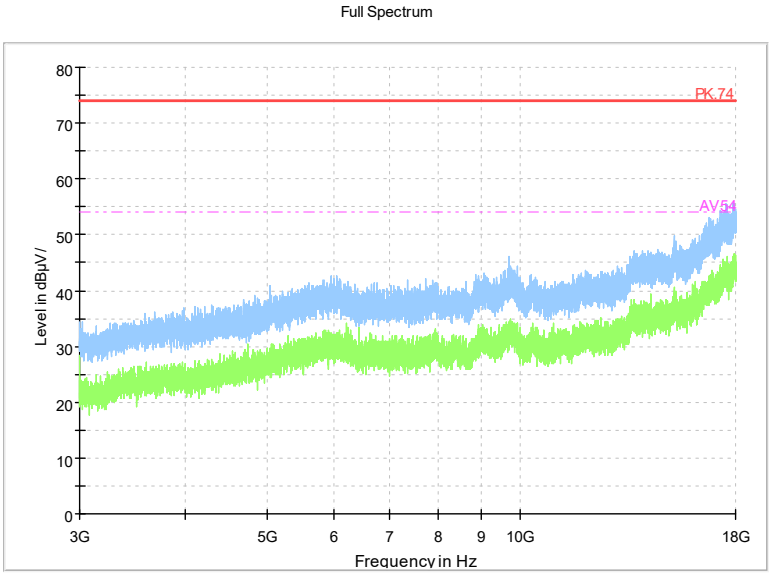
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT20)



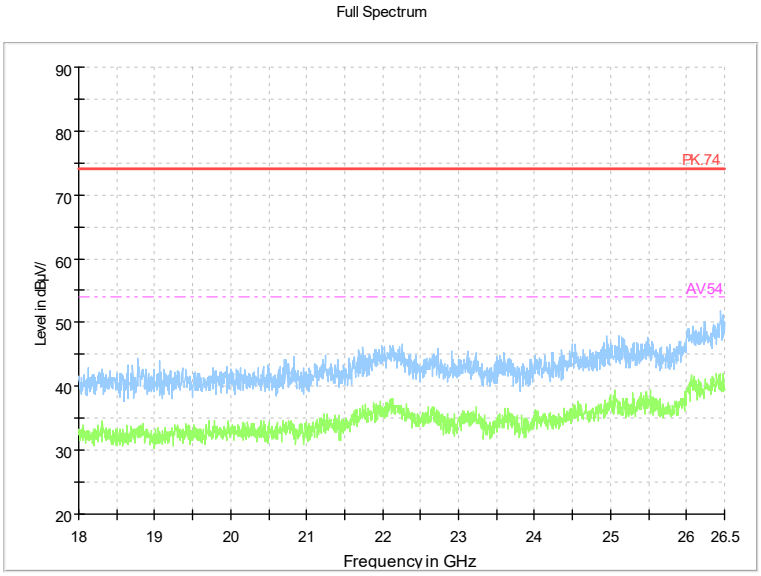
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11ax(HT20)



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

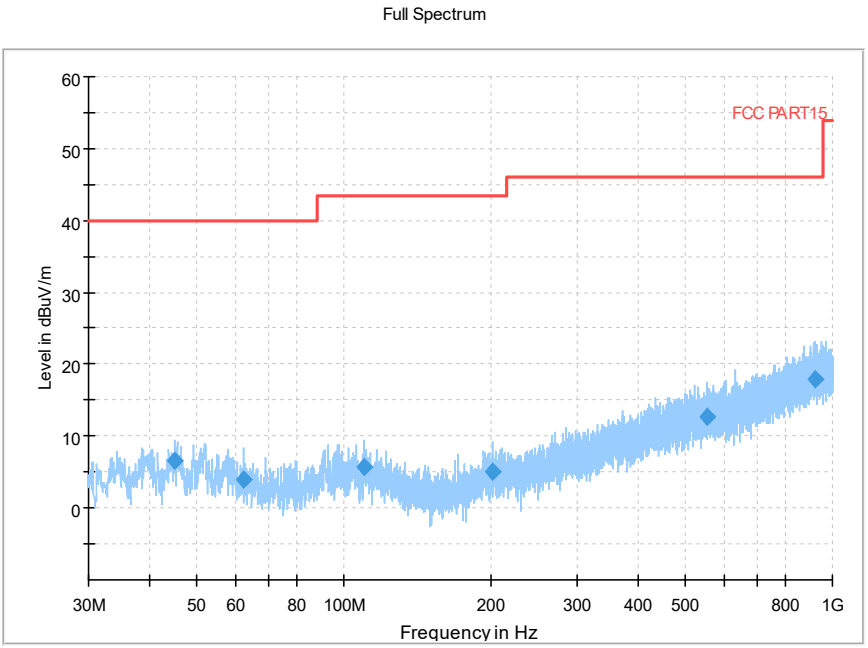


Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11ax(HT20)

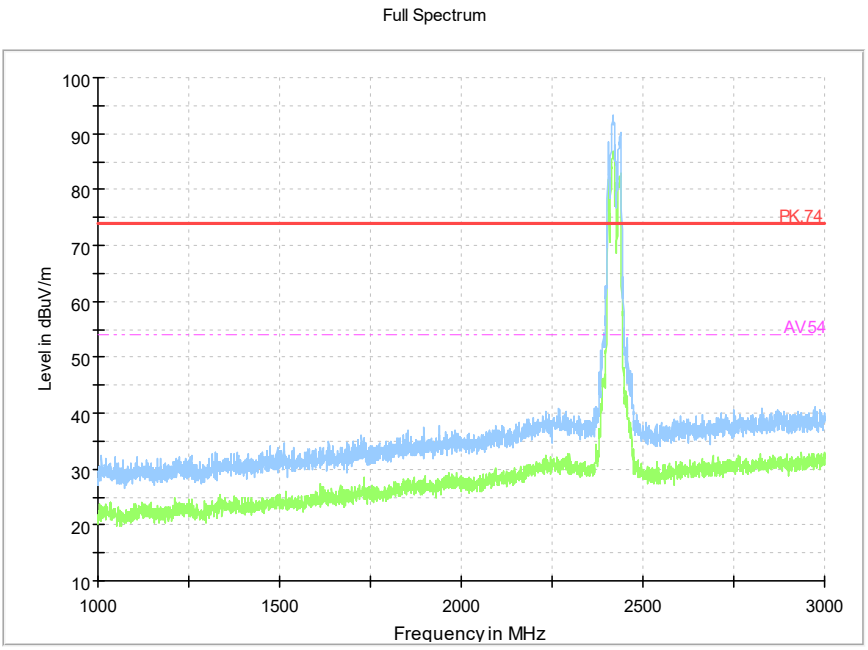


Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11ax(HT20)

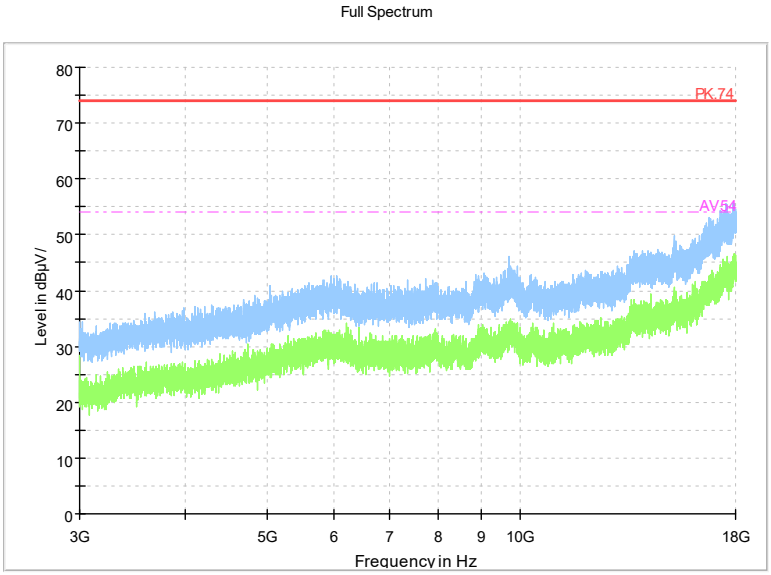
Carrier frequency (MHz): 2422
Channel No.:3



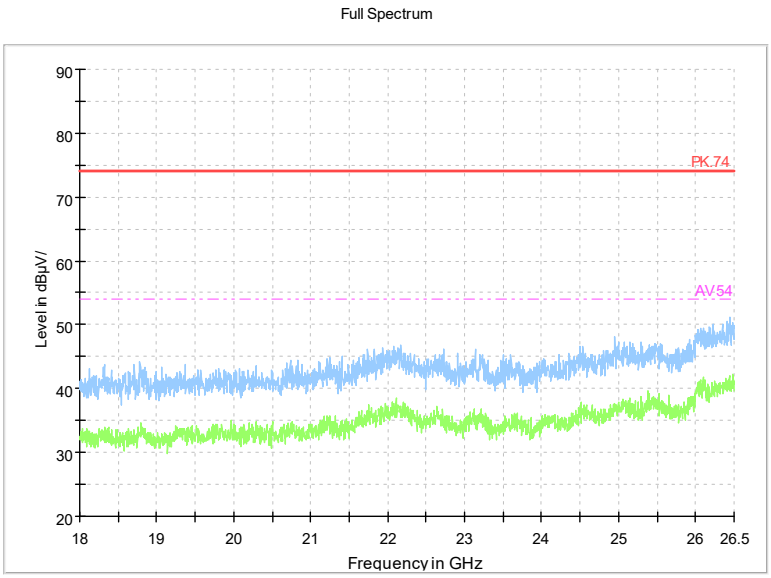
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)



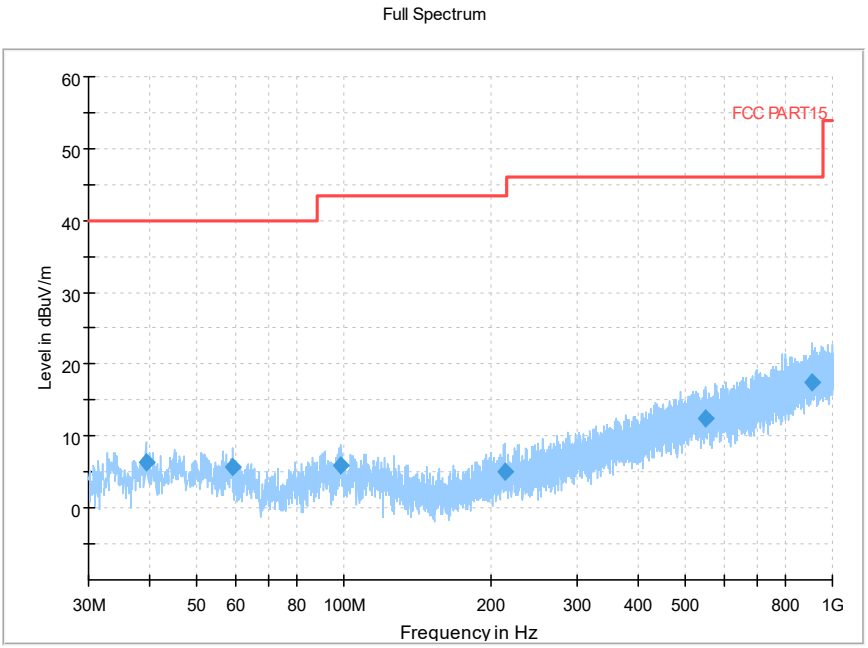
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)



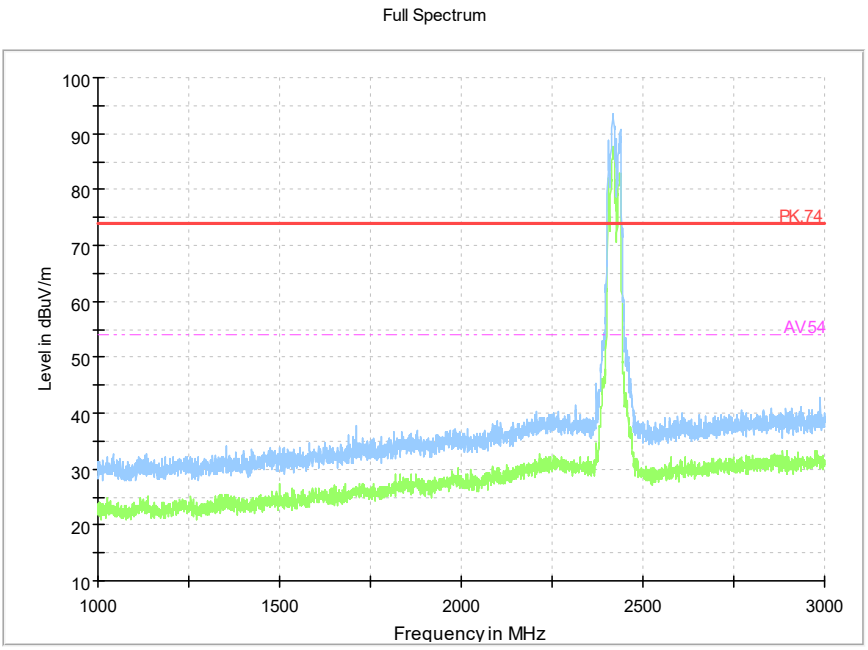
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)



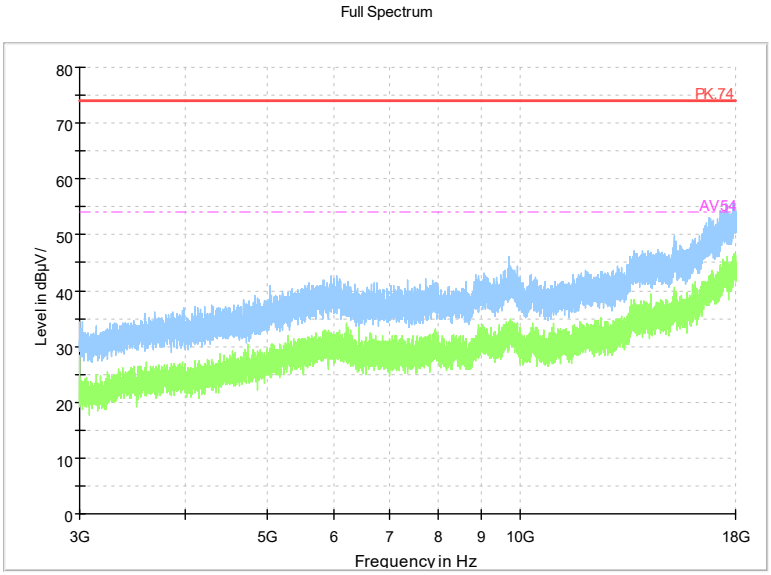
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)



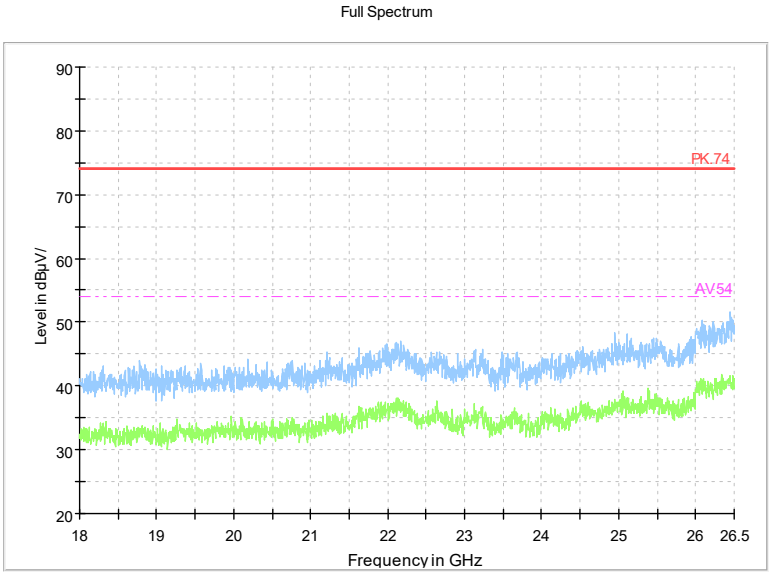
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11ax(HT40)



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

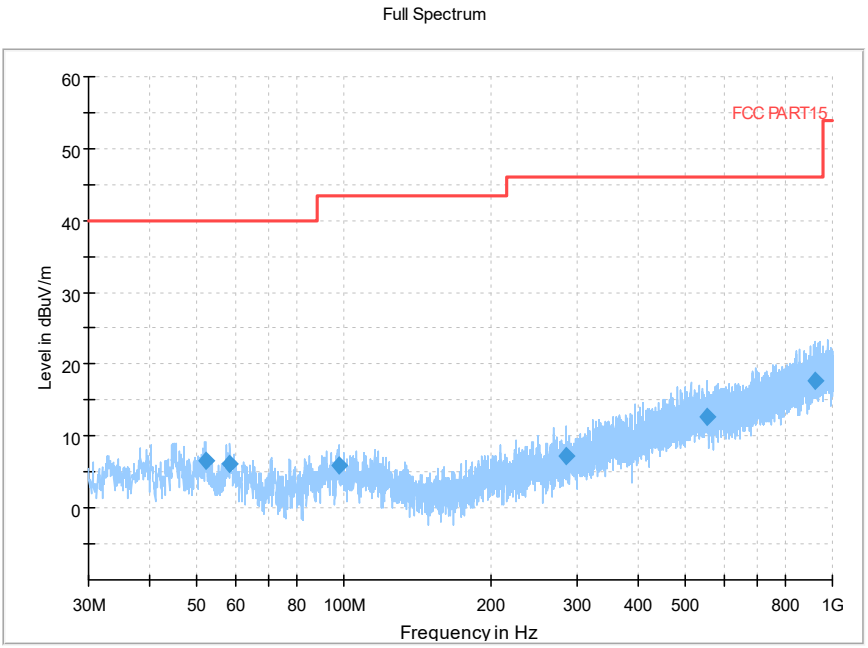


Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11ax(HT40)

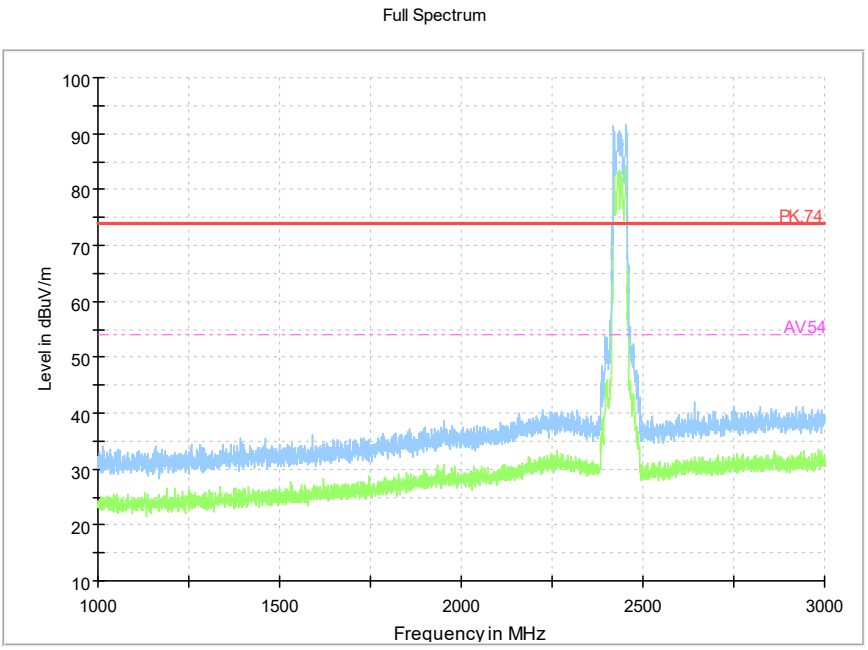


Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11ax(HT40)

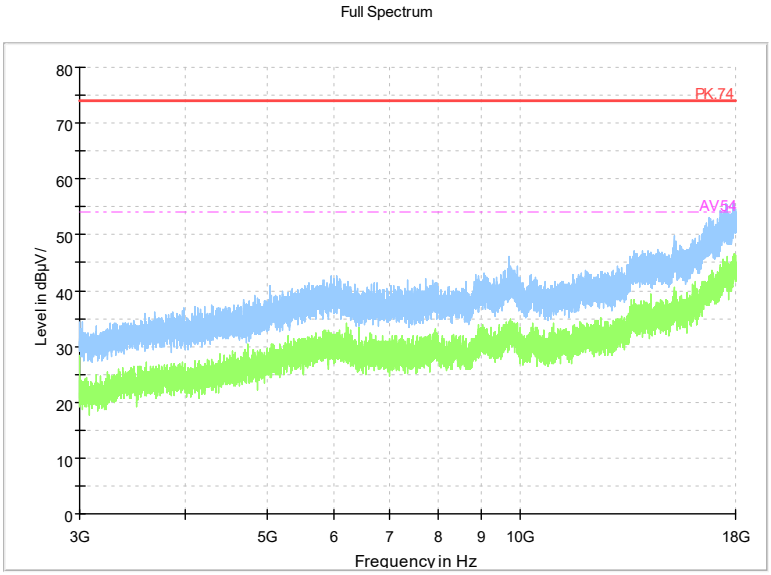
Carrier frequency (MHz): 2437
Channel No.:6



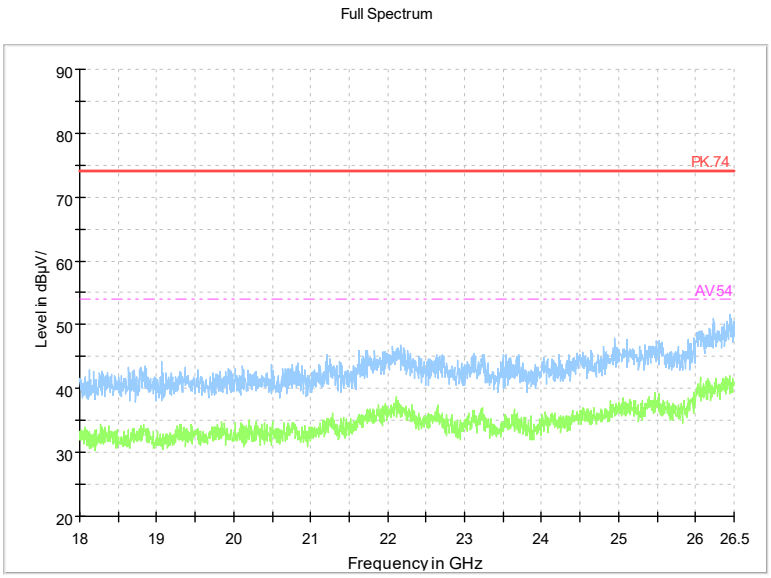
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)



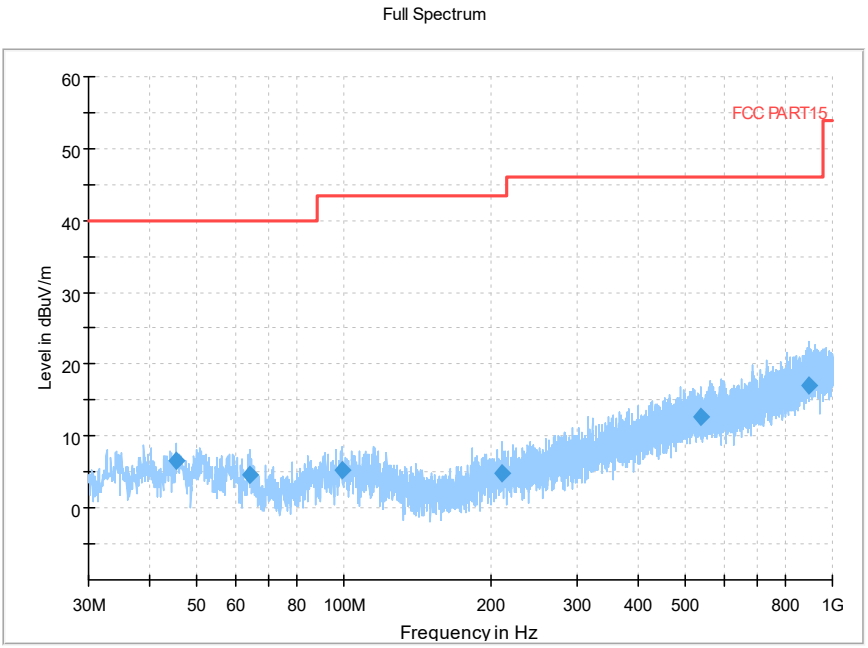
Frequency Range: 1GHz -3GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)



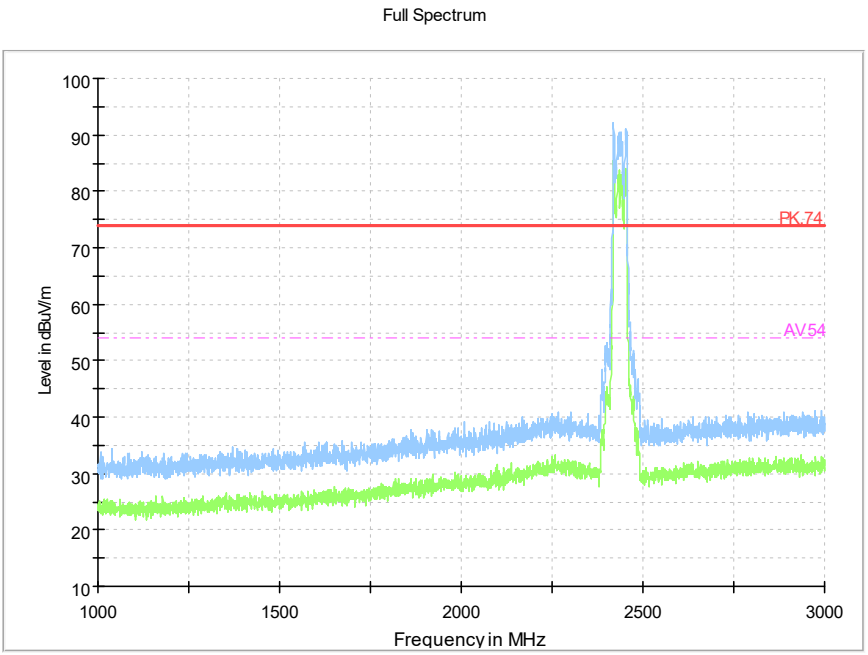
Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)



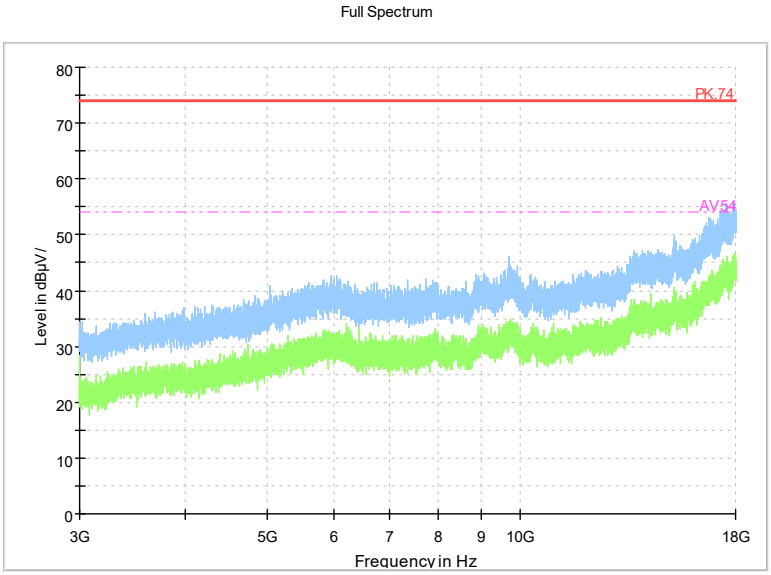
Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11n(HT40)



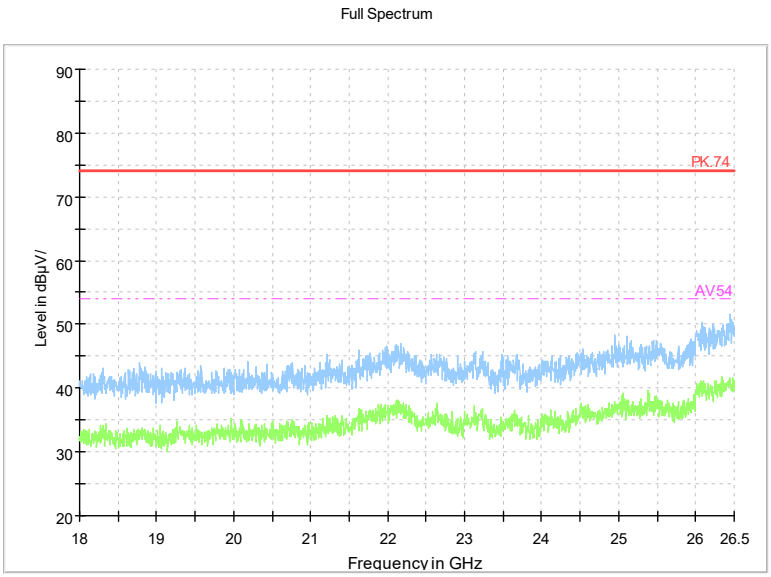
Frequency Range: 30MHz -1GHz
Detector: Av mode and PK mode
Modulation type: 802.11ax(HT40)



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

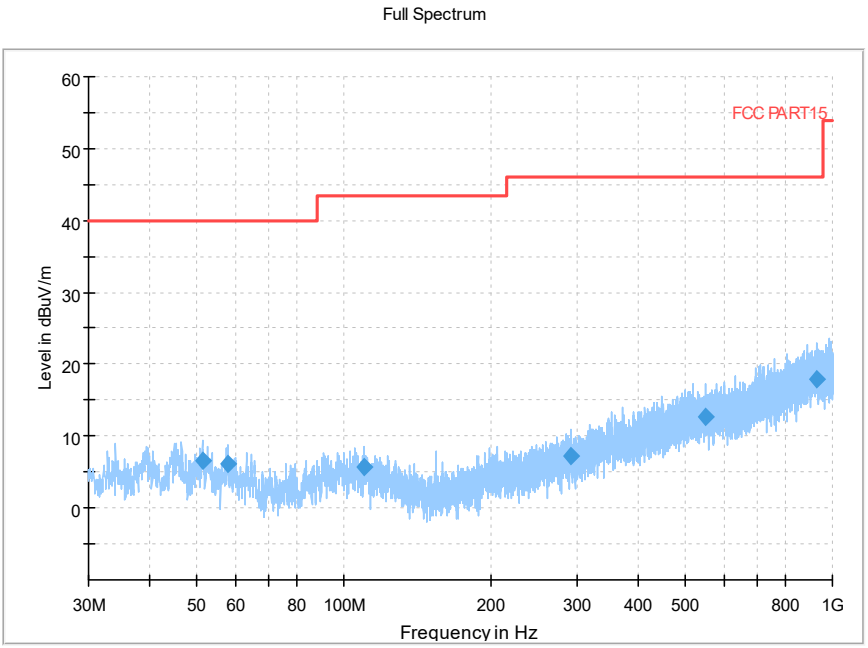


Frequency Range: 3GHz -18GHz
Detector: Av mode and PK mode
Modulation type: 802.11ax(HT40)

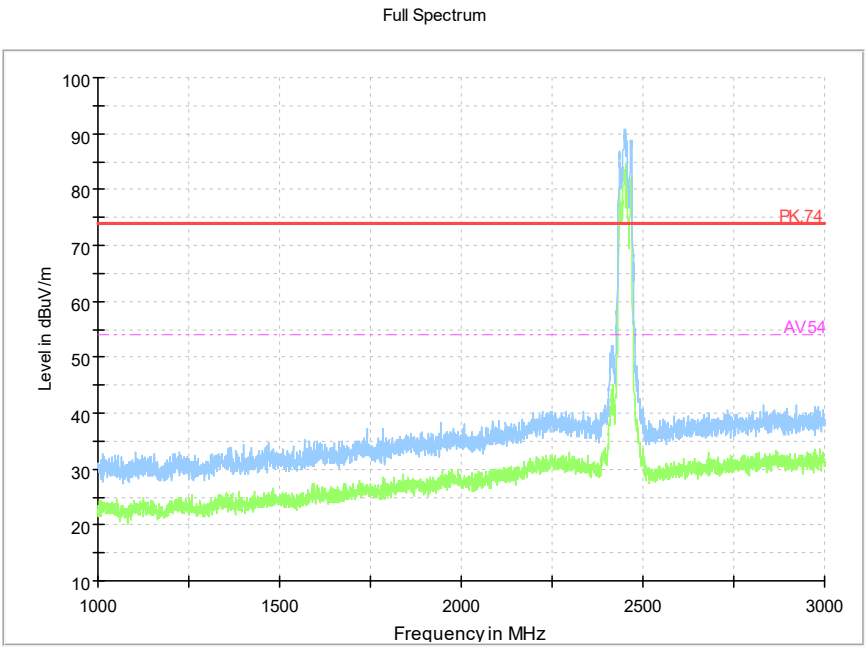


Frequency Range: 18GHz -26GHz
Detector: Av mode and PK mode
Modulation type: 802.11ax(HT40)

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



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



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