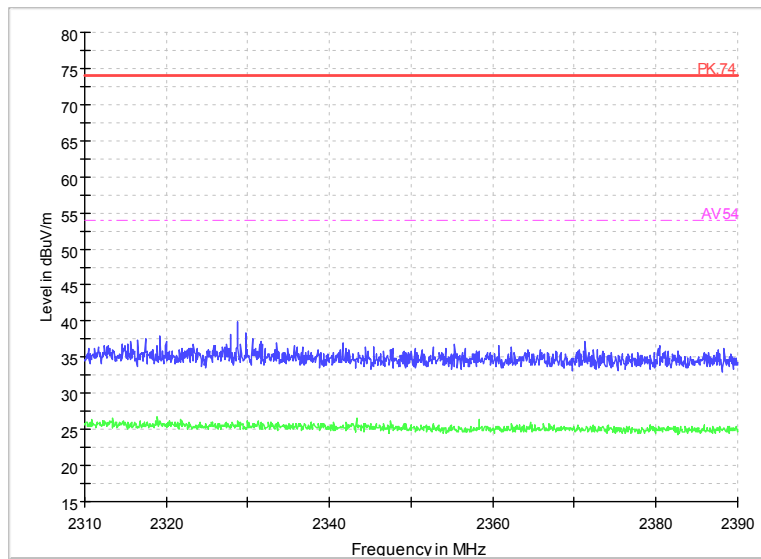
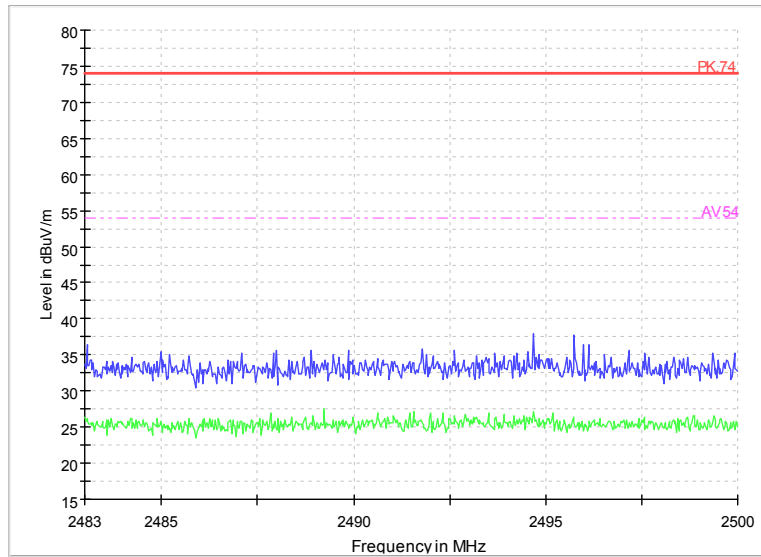


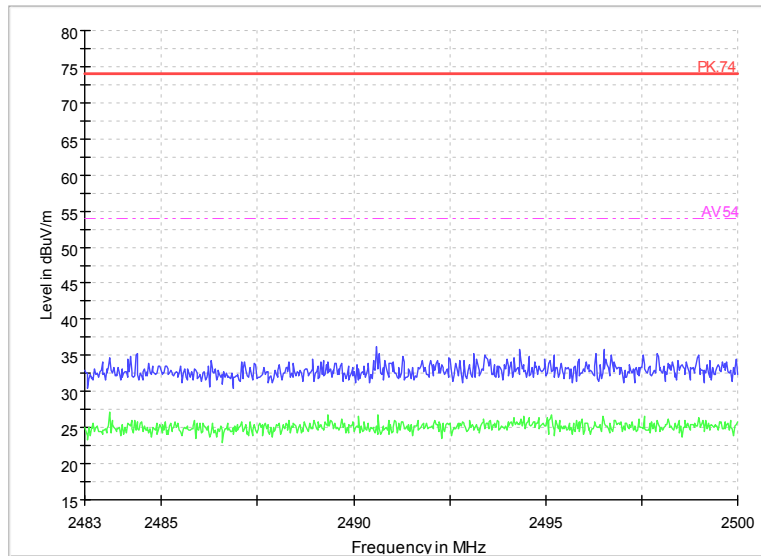
Carrier frequency (MHz): 2402  
 Channel No.:0  
 Test Mode: GFSK (LE 2Mbps)  
 Polarity: Vertical



Carrier frequency (MHz): 2402  
 Channel No.:0  
 Test Mode: GFSK (LE 2Mbps)  
 Polarity: Horizontal



Carrier frequency (MHz): 2480  
 Channel No.:39  
 Test Mode: GFSK (LE 2Mbps)  
 Polarity: Vertical



Carrier frequency (MHz): 2480  
 Channel No.:39  
 Test Mode: GFSK (LE 2Mbps)  
 Polarity: Horizontal

## Radiated Emission : unwanted emission

### Test result

#### 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:  $(30.03 \text{ dB}\mu\text{V/m}) = (50.13 \text{ dBuV}) + (-20.1 \text{ dB/m})$ , the corresponding frequency is 36.014MHz.

For GFSK (LE 1Mbps)

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	30.03	-20.1	50.13	Vertical	40	9.97
78.112	20.02	-24	44.02	Vertical	40	19.98
138.252	14.63	-22.6	37.23	Vertical	43.5	28.87
300.5815	14.69	-15.8	30.49	Vertical	46	31.31
553.4605	11.03	-9.6	20.63	Vertical	46	34.97
905.4735	16.87	-3.1	19.97	Vertical	46	29.13

Channel No.:19

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	30.04	-20.1	50.14	Vertical	40	9.96
78.112	20	-24	44	Vertical	40	20.00
138.252	14.62	-22.6	37.22	Vertical	43.5	28.88
300.5815	14.7	-15.8	30.5	Vertical	46	31.30
555.7885	10.96	-9.5	20.46	Vertical	46	35.04
917.162	17.12	-3	20.12	Vertical	46	28.88

Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
51.4855	6.93	-17.9	24.83	Vertical	40	30.03
36.014	30.03	-20.1	50.13	Vertical	40	20.02
78.112	20.02	-24	44.02	Vertical	40	14.62
138.252	14.62	-22.6	37.22	Vertical	43.5	13.06
276.5255	13.06	-16.5	29.56	Vertical	46	11.00
537.213	11	-9.9	20.9	Vertical	46	17.11

For GFSK (LE 2Mbps)

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	30.02	-20.1	50.12	Vertical	40	9.98
60.07	21.54	-18.8	40.34	Vertical	40	18.46
138.252	14.63	-22.6	37.23	Vertical	43.5	28.87
300.5815	14.66	-15.8	30.46	Vertical	46	31.34
554.6245	10.94	-9.5	20.44	Vertical	46	35.06
897.665	16.74	-3.2	19.94	Vertical	46	29.26

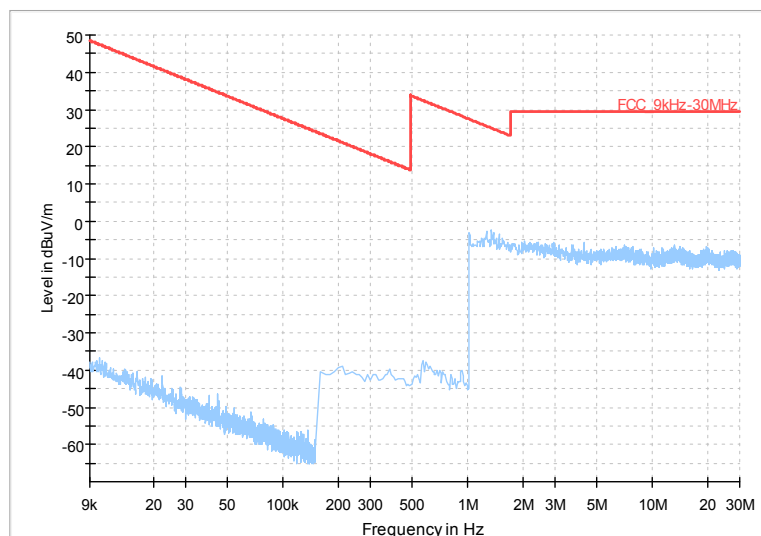
Channel No.:19

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	30.04	-20.1	50.14	Vertical	40	9.96
78.112	20.02	-24	44.02	Vertical	40	19.98
138.252	15.06	-22.6	37.66	Vertical	43.5	28.44
300.5815	14.67	-15.8	30.47	Vertical	46	31.33
553.0725	11.12	-9.6	20.72	Vertical	46	34.88
946.6015	17.03	-3	20.03	Vertical	46	28.97

Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	30.03	-20.1	50.13	Vertical	40	9.97
78.112	20.02	-24	44.02	Vertical	40	19.98
150.28	14.74	-22.6	37.34	Vertical	43.5	28.76
300.5815	14.66	-15.8	30.46	Vertical	46	31.34
539.832	11.06	-9.9	20.96	Vertical	46	34.94
913.379	17.08	-3.1	20.18	Vertical	46	28.92

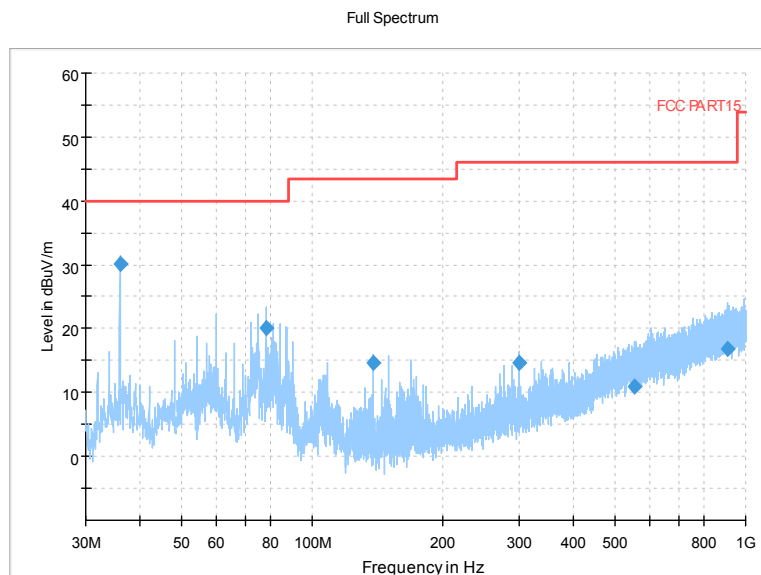
Full Spectrum



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

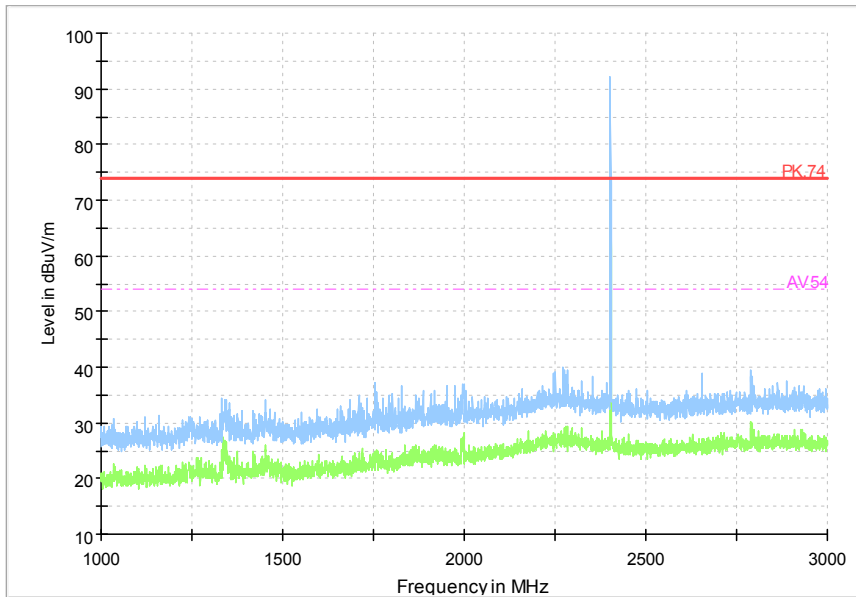
Note: The relevant tests have been performed in order to verify in which mode would have the worst features, the result show above is the worst case.

Channel No.:0



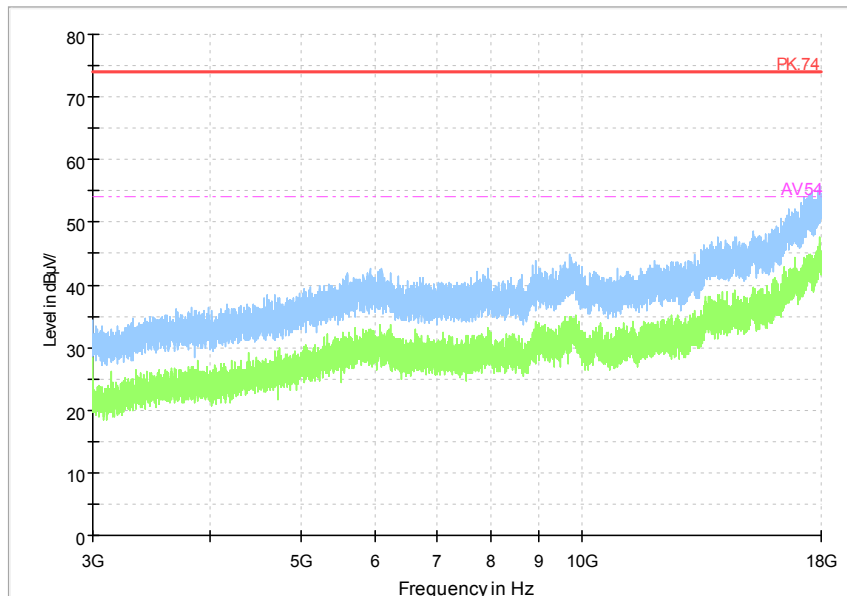
Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 1Mbps)

Full Spectrum



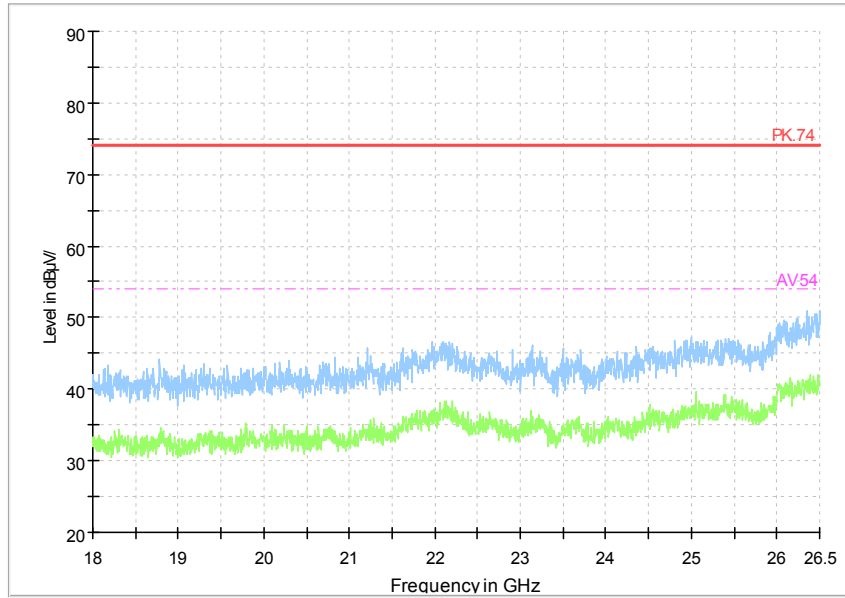
Frequency Range: 1GHz-3GHz  
 Detector: Av mode and PK mode  
 Modulation type: GFSK (LE 1Mbps)

Full Spectrum



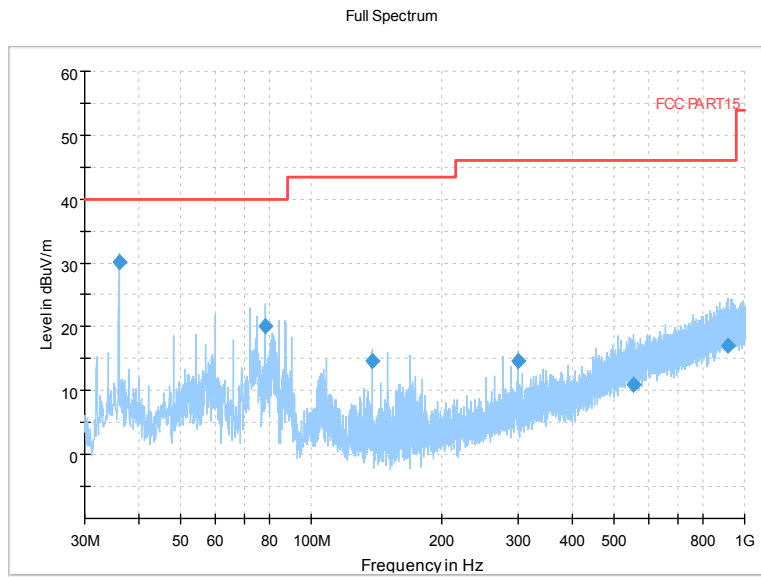
Frequency Range: 3GHz-18GHz  
 Detector: Av mode and PK mode  
 Modulation type: GFSK (LE 1Mbps)

Full Spectrum

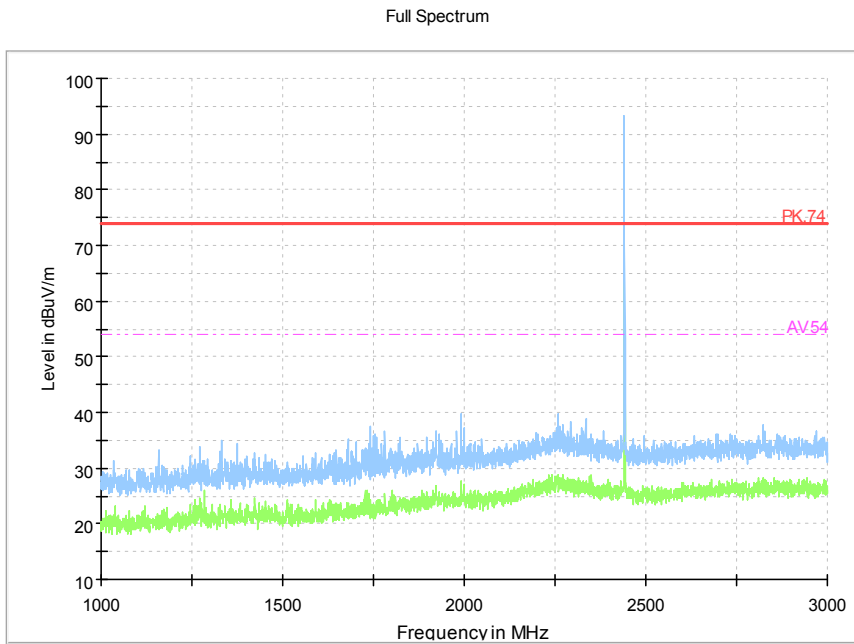


Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 1Mbps)

Channel No.:19



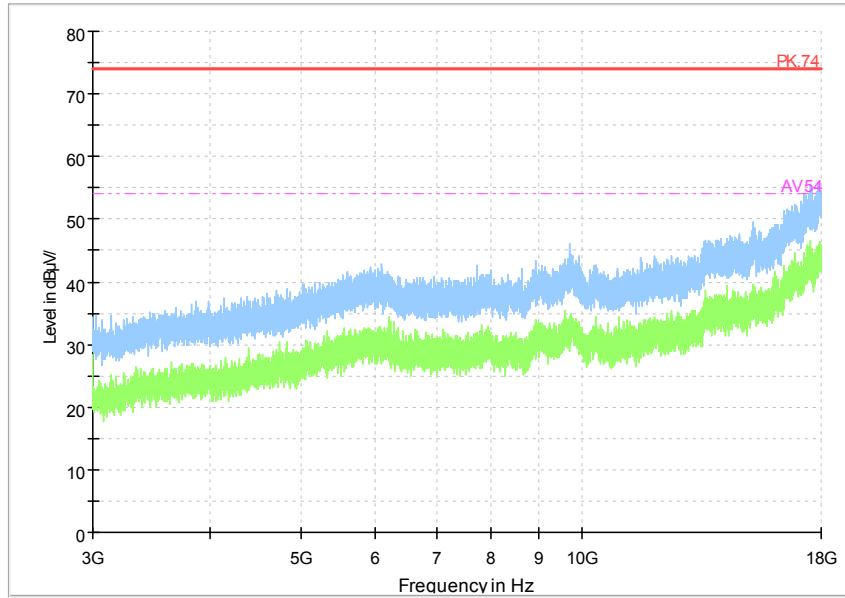
Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 1Mbps)



Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 1Mbps)

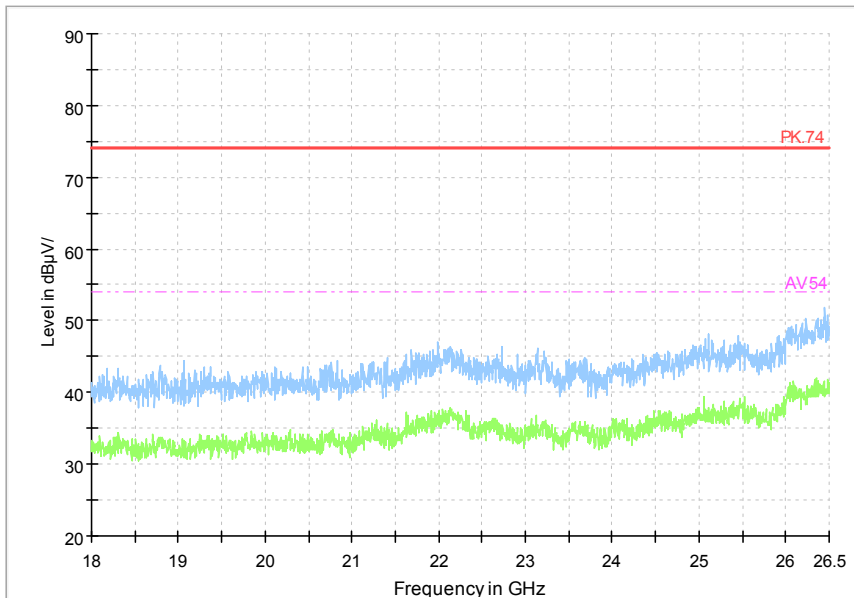


Full Spectrum



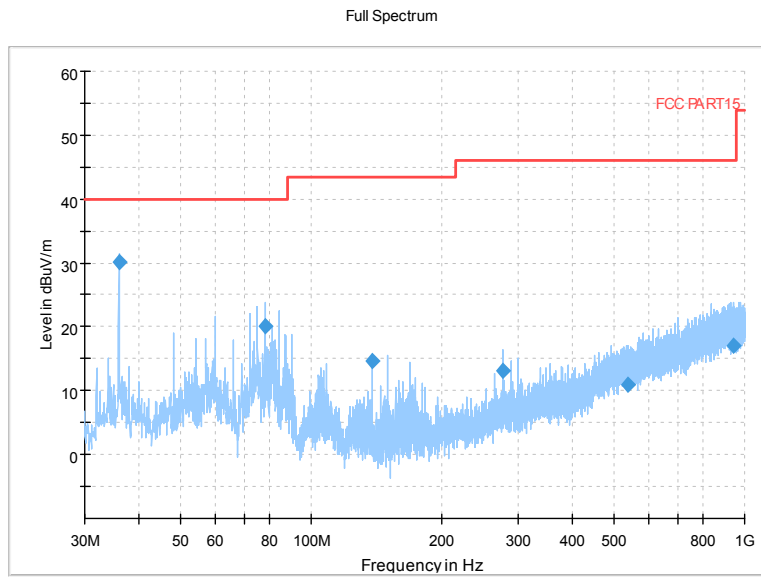
Frequency Range: 3GHz-18GHz  
 Detector: Av mode and PK mode  
 Modulation type: GFSK (LE 1Mbps)

Full Spectrum

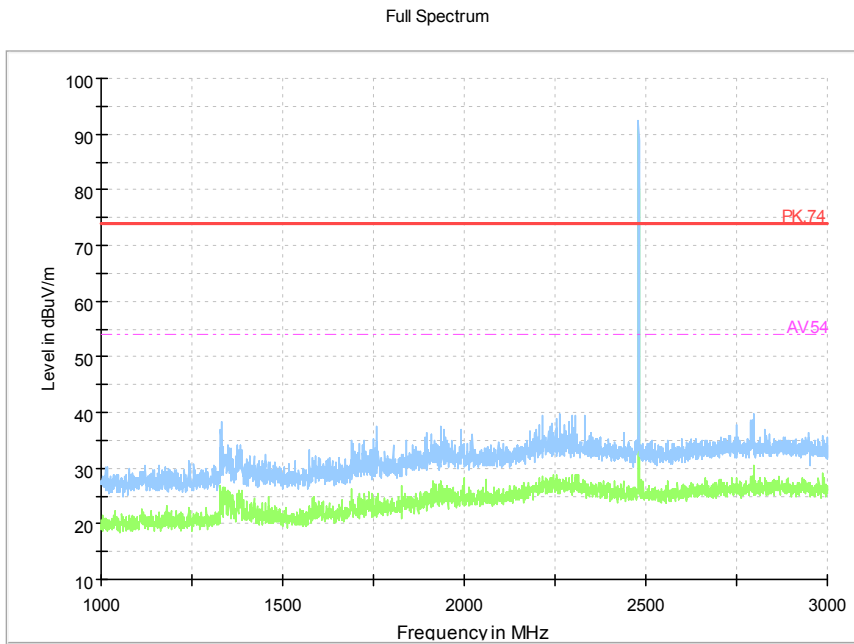


Frequency Range: 18GHz-26GHz  
 Detector: Av mode and PK mode  
 Modulation type: GFSK (LE 1Mbps)

Channel No.:39

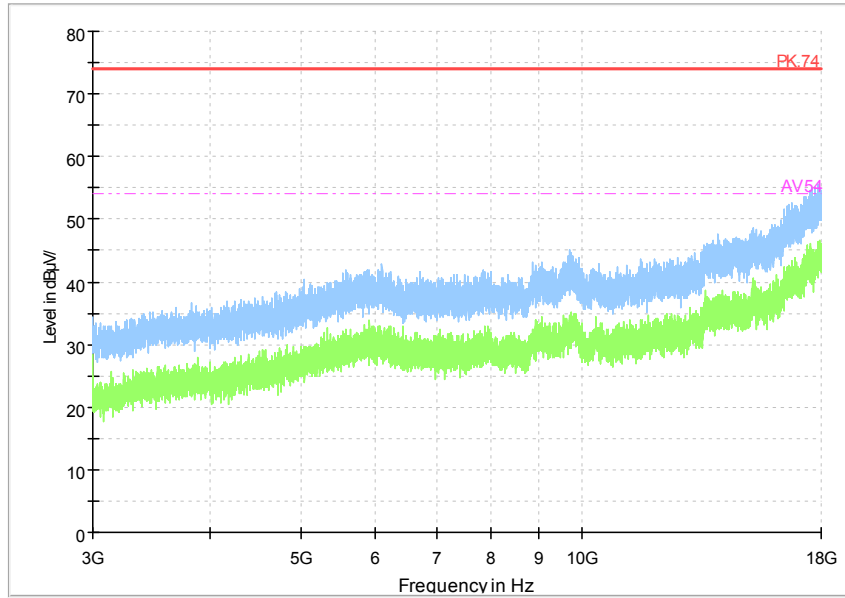


Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 1Mbps)



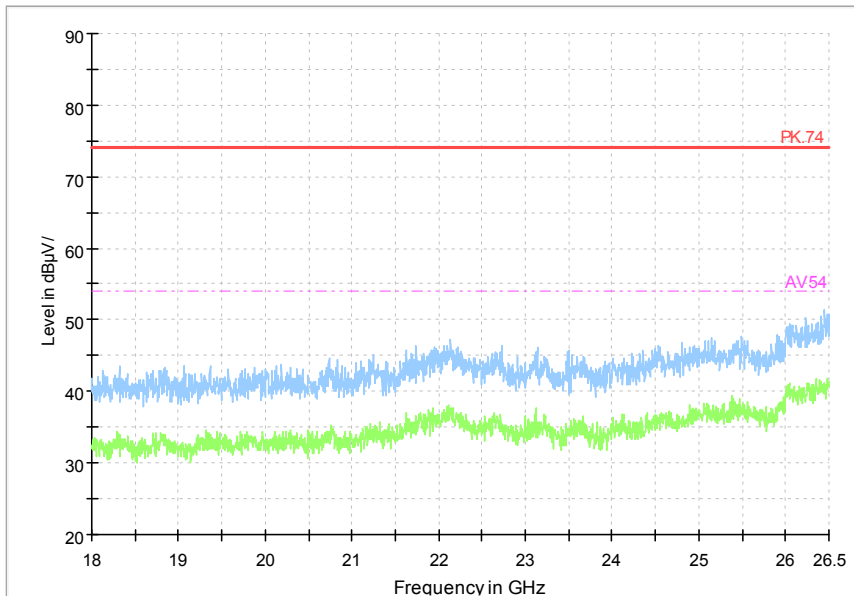
Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 1Mbps)

Full Spectrum



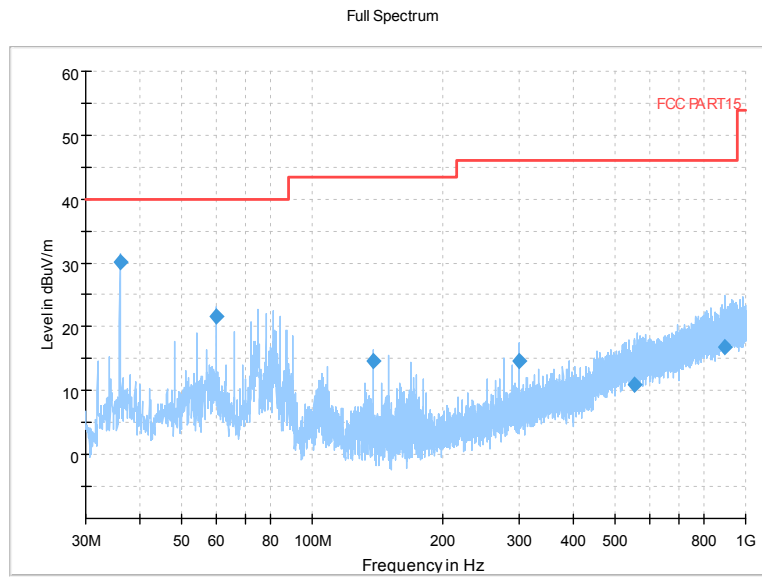
Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 1Mbps)

Full Spectrum

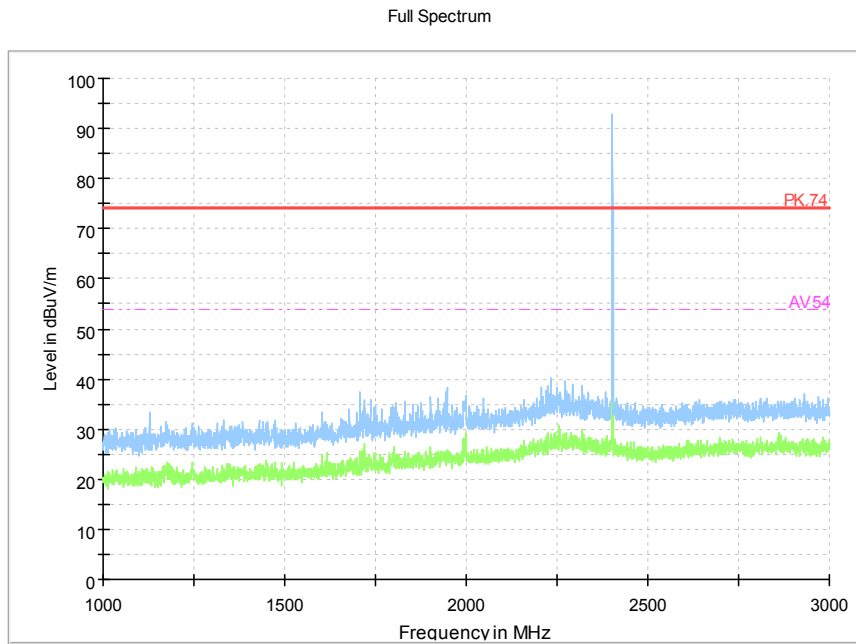


Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 1Mbps)

Channel No.:0

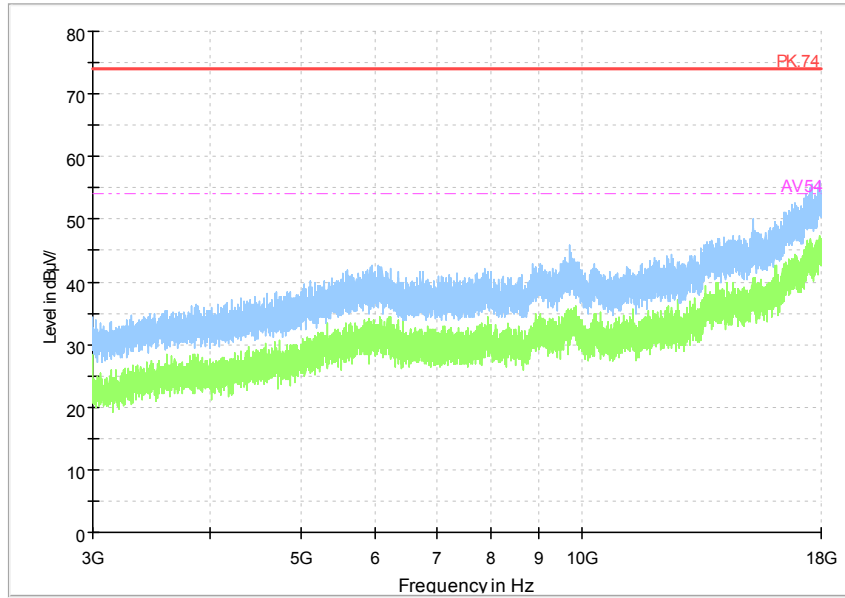


Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 2Mbps)



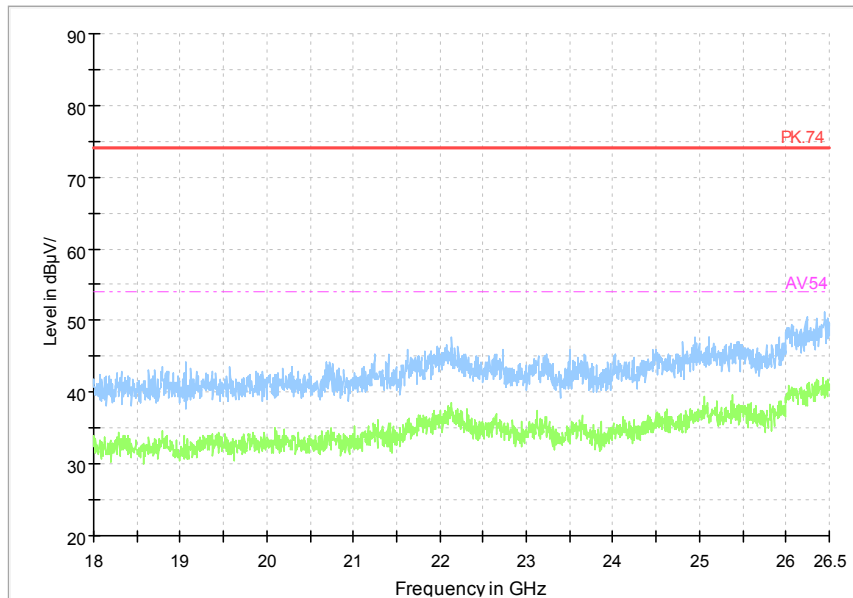
Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 2Mbps)

Full Spectrum



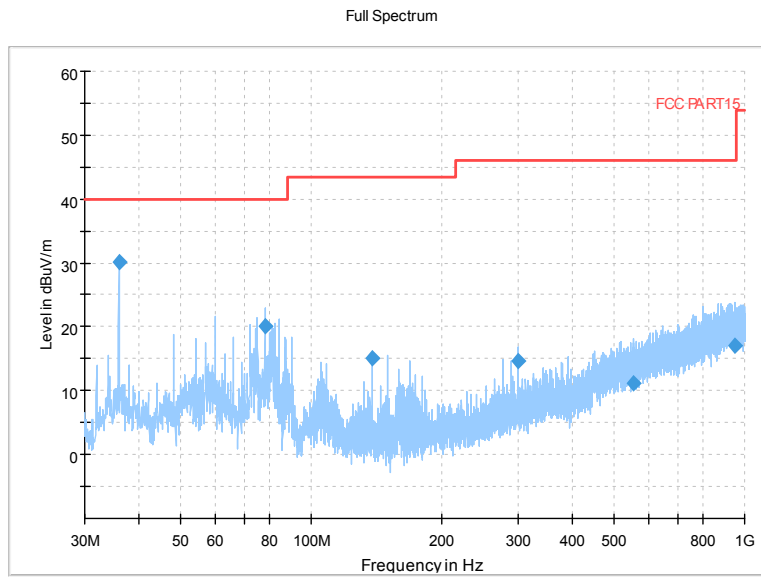
Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 2Mbps)

Full Spectrum

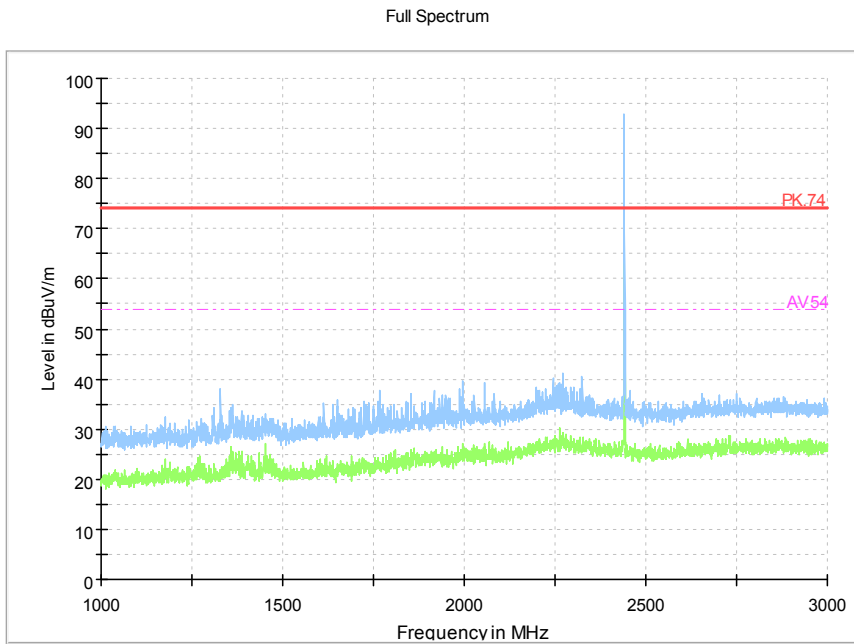


Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 2Mbps)

Channel No.:19

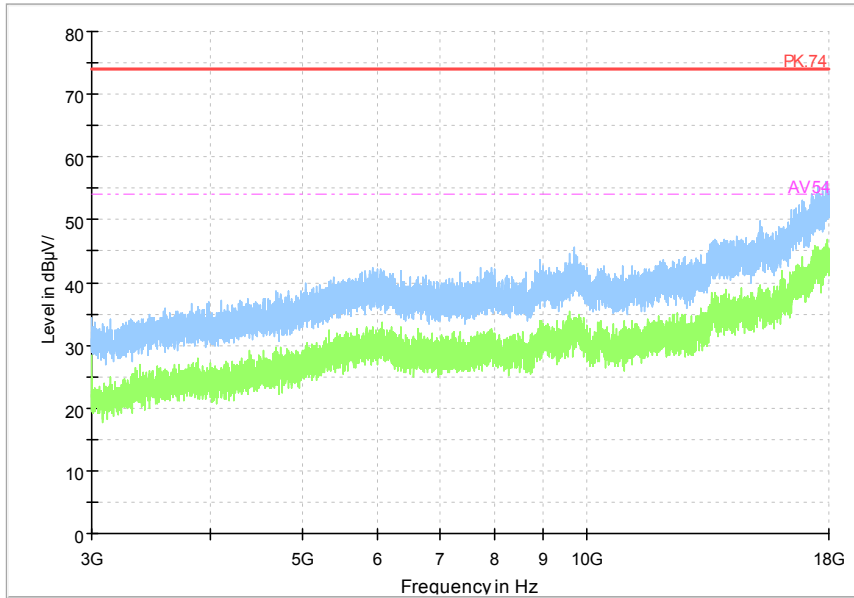


Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 2Mbps)



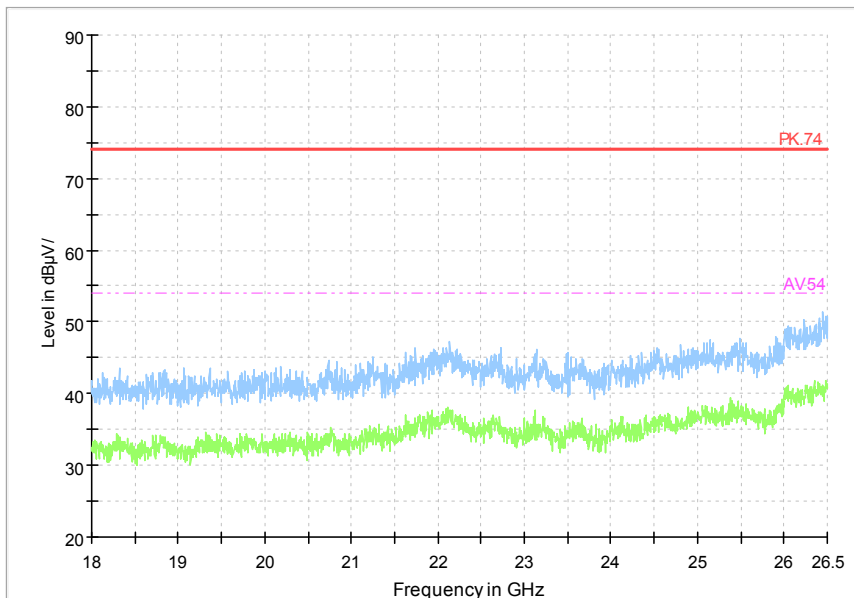
Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 2Mbps)

Full Spectrum



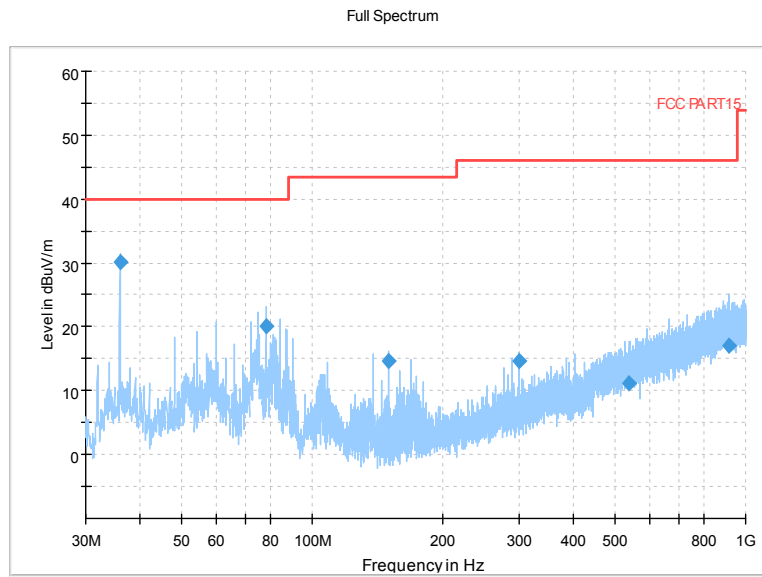
Frequency Range: 3GHz-18GHz  
 Detector: Av mode and PK mode  
 Modulation type: GFSK (LE 2Mbps)

Full Spectrum

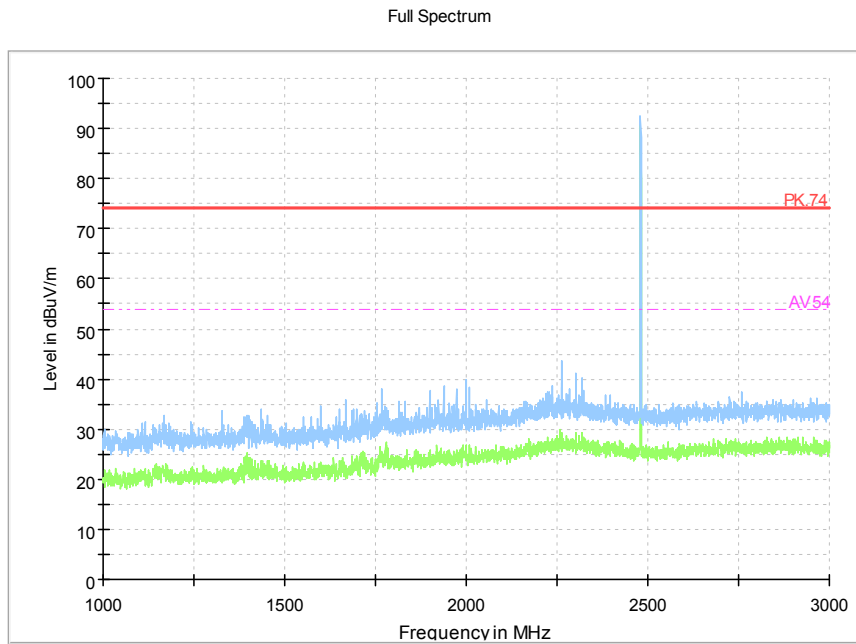


Frequency Range: 18GHz-26GHz  
 Detector: Av mode and PK mode  
 Modulation type: GFSK (LE 2Mbps)

Channel No.:39



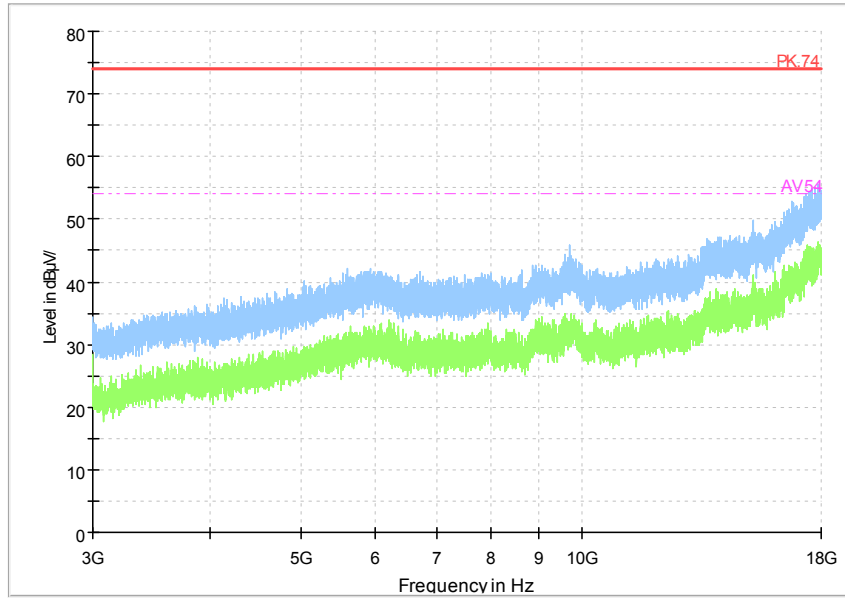
Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 2Mbps)



Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK (LE 2Mbps)

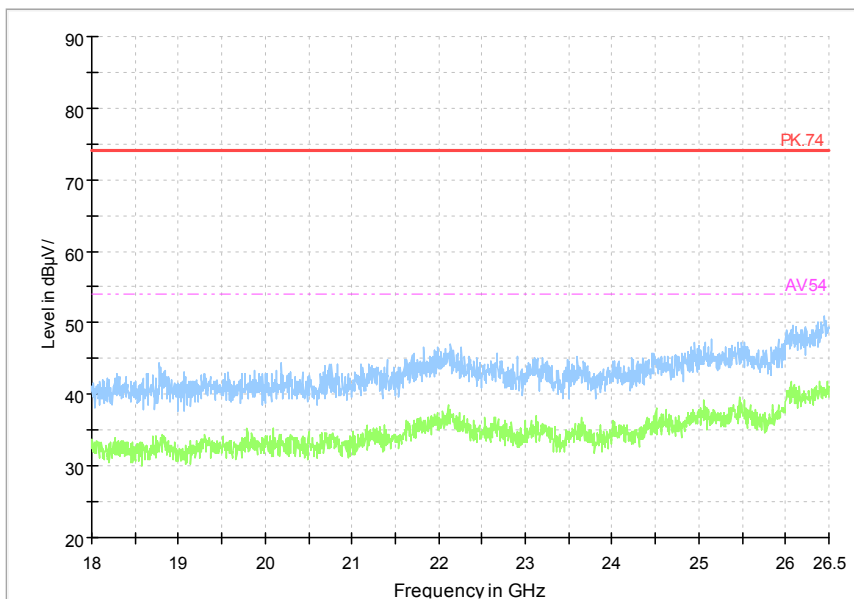


Full Spectrum



Frequency Range: 3GHz-18GHz  
 Detector: Av mode and PK mode  
 Modulation type: GFSK (LE 2Mbps)

Full Spectrum



Frequency Range: 18GHz-26GHz  
 Detector: Av mode and PK mode  
 Modulation type: GFSK (LE 2Mbps)

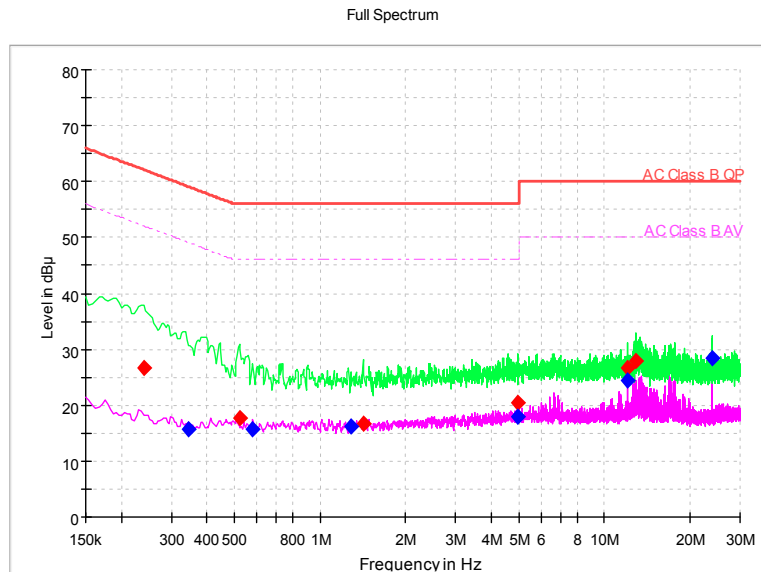
### AC Power line Conducted Emission

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:  $(26.6 \text{ dB}\mu\text{V}) = (-3.1 \text{ dB}\mu\text{V}) + (29.7\text{dB})$ , the corresponding frequency is 0.23955MHz.



L+N Line

**MEASUREMENT RESULT:**

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	Pmea QuasiPeak (dBμV)	Pmea Average (dBμV)
0.23955	26.6	---	62.11	35.51	N	29.7	-3.1	---
0.34616	---	15.76	49.05	33.3	N	29.7	---	-13.94
0.52099	17.68	---	56	38.32	N	29.8	-12.12	---
0.58069	---	15.58	46	30.42	L1	29.8	---	-14.22
1.2843	---	16.14	46	29.86	L1	29.8	---	-13.66
1.41649	16.71	---	56	39.29	L1	29.8	-13.09	---
4.95159	---	18.02	46	27.98	N	29.8	---	-11.78
4.95159	20.54	---	56	35.46	L1	29.8	-9.26	---
12.0388	---	24.47	50	25.53	L1	29.9	---	-5.43
12.0388	26.61	---	60	33.39	L1	29.9	-3.29	---
12.9514	27.91	---	60	32.09	L1	29.9	-1.99	---
24.0812	---	28.38	50	21.62	N	30.1	---	-1.72