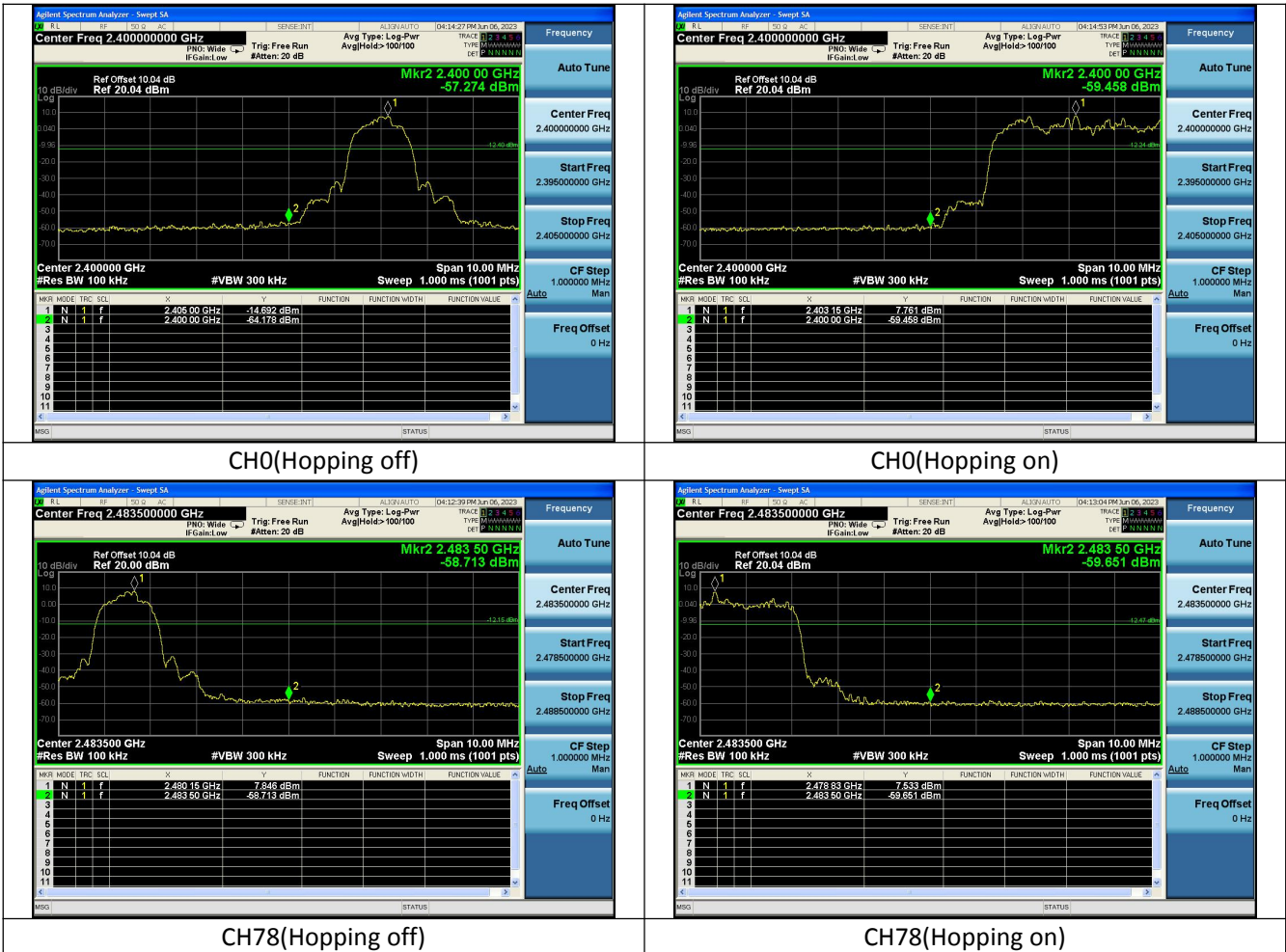


Test Mode: 8DPSK



## BT(MIMO)

### Conducted Power

Modulation type	Conducted Peak Power(dBm)		
	2402MHz	2441MHz	2480MHz
GFSK(DH5)	11.25	10.57	11.21
$\pi/4$ DQPSK(2DH5)	11.07	10.45	11.08
8DPSK(3DH5)	11.16	10.50	11.06

Modulation type	Conducted Average Power(dBm)		
	2402MHz	2441MHz	2480MHz
GFSK(DH5)	10.46	10.04	10.60
$\pi/4$ DQPSK(2DH5)	8.06	7.84	7.91
8DPSK(3DH5)	8.08	7.49	8.63

### EIRP

Modulation type	Peak EIRP (dBm)		
	2402MHz	2441MHz	2480MHz
GFSK(DH5)	12.31	11.63	12.27
$\pi/4$ DQPSK(2DH5)	12.13	11.51	12.15
8DPSK(3DH5)	12.22	11.55	12.12

Modulation type	Average EIRP (dBm)		
	2402MHz	2441MHz	2480MHz
GFSK(DH5)	11.52	11.10	11.66
$\pi/4$ DQPSK(2DH5)	9.12	8.90	8.97
8DPSK(3DH5)	9.14	8.55	9.69

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

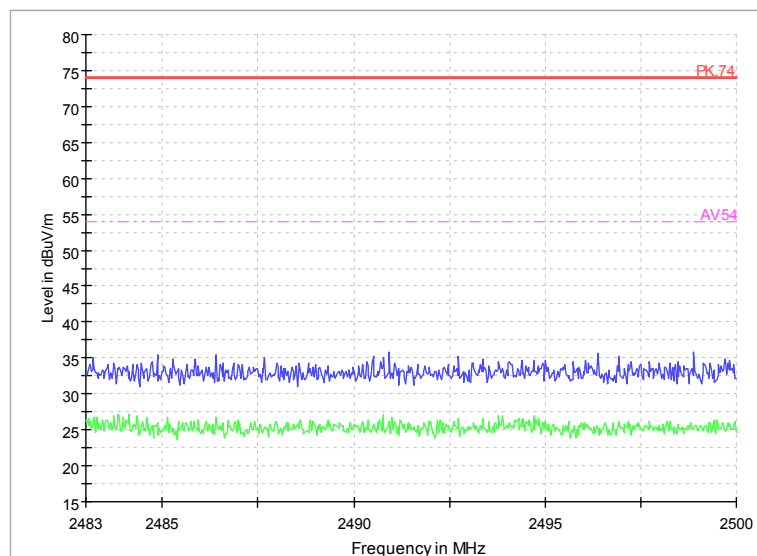
Note1:Both horizontal and vertical polarizations of the antenna are set to make the measurement.

Note2: Evaluated two antennas type and show the worst result(Worst Case:ANT0).

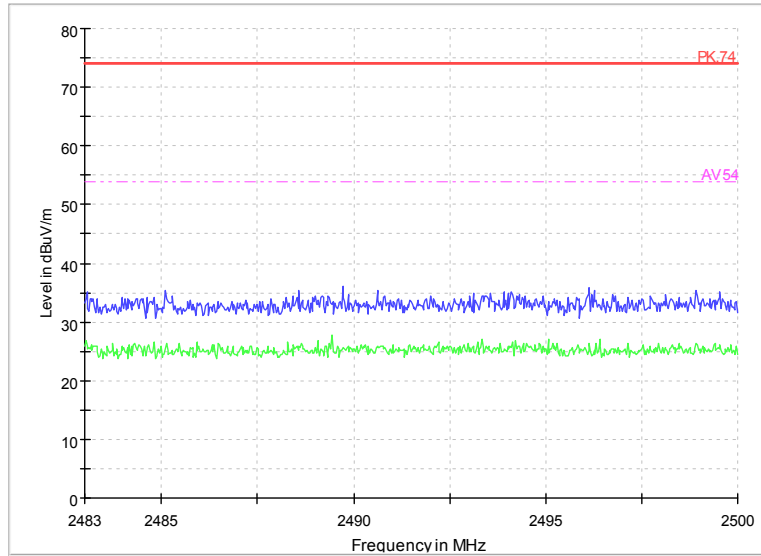
Note3: Three-axis equipment has been evaluated in test.

### **Radiated Emission : unwanted emission**

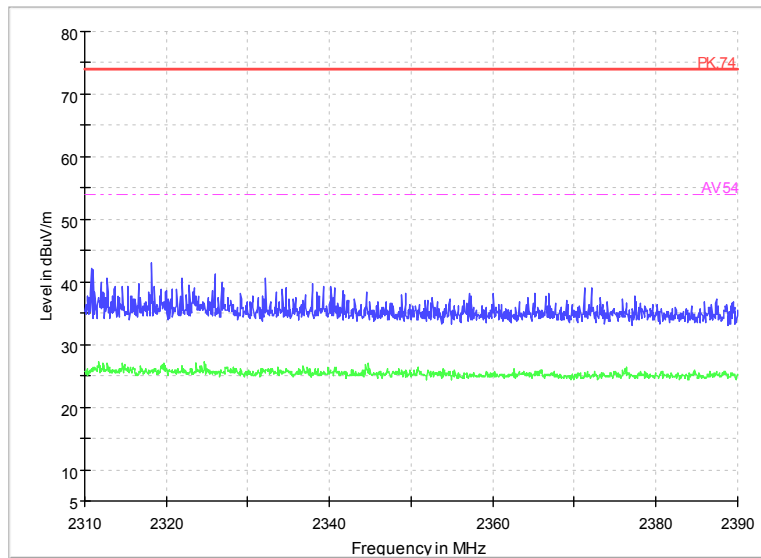
After comparison the worst case attitude is EUT vertical. The relevant tests have been performed in order to verify in which mode would have the worst features, the result show above is the worst case.



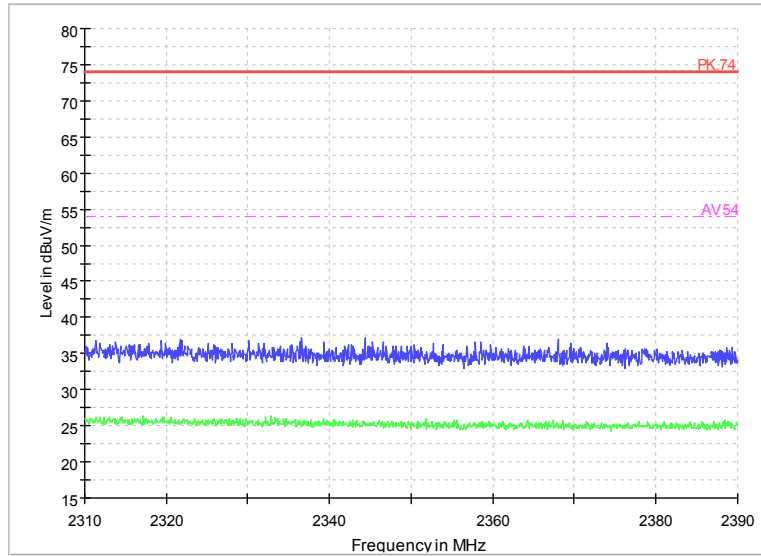
Carrier frequency (MHz): 2402  
Channel No.:0  
Test Mode: GFSK  
Polarity: Vertical



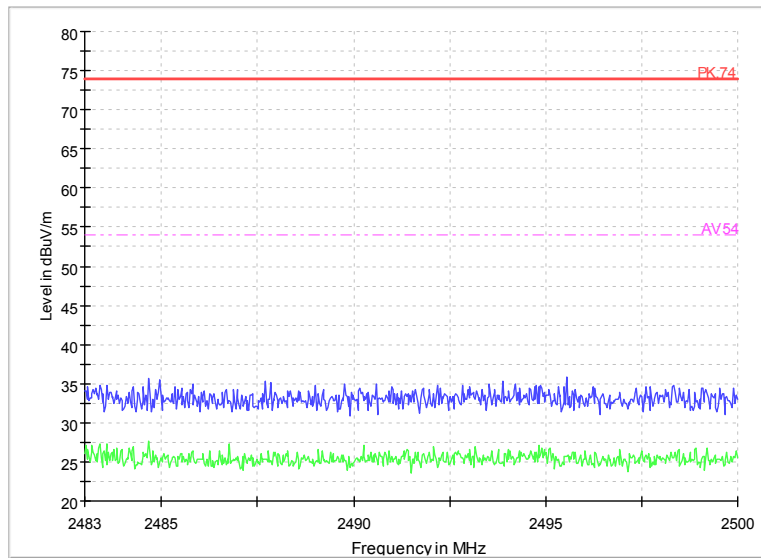
Carrier frequency (MHz): 2402  
Channel No.:0  
Test Mode: GFSK  
Polarity: Horizontal



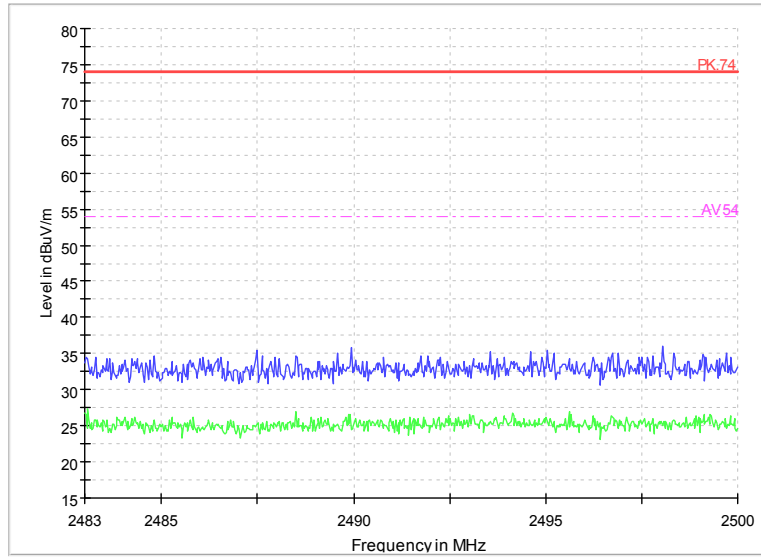
Carrier frequency (MHz): 2480  
Channel No.:78  
Test Mode: GFSK  
Polarity: Vertical



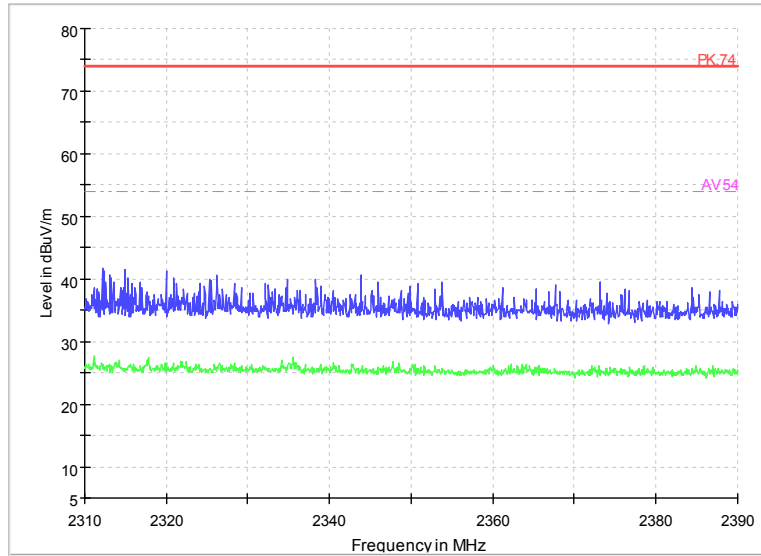
Carrier frequency (MHz): 2480  
Channel No.:78  
Test Mode: GFSK  
Polarity: Horizontal



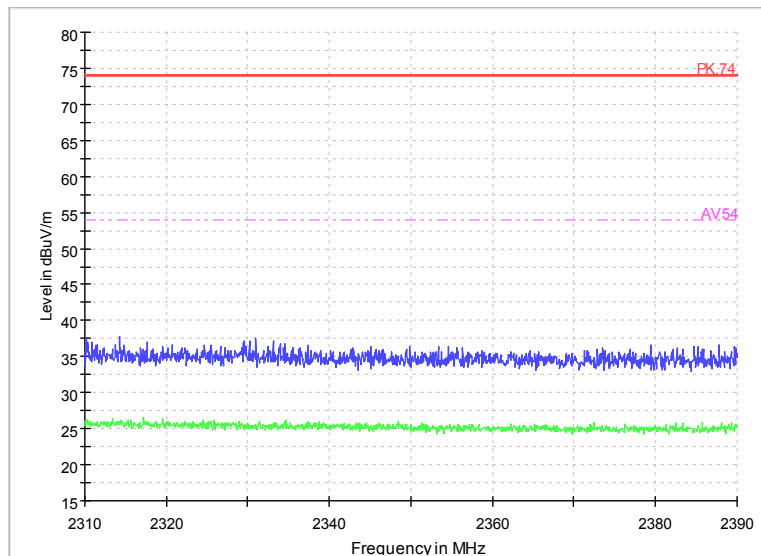
Carrier frequency (MHz): 2402  
Channel No.:0  
Test Mode:  $\pi/4$ DQPSK  
Polarity: Vertical



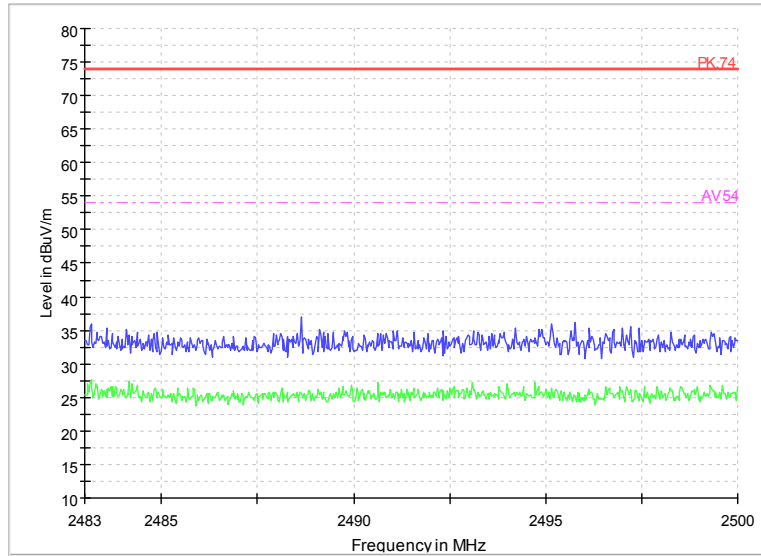
Carrier frequency (MHz): 2402  
Channel No.:0  
Test Mode:  $\pi/4$ DQPSK  
Polarity: Horizontal



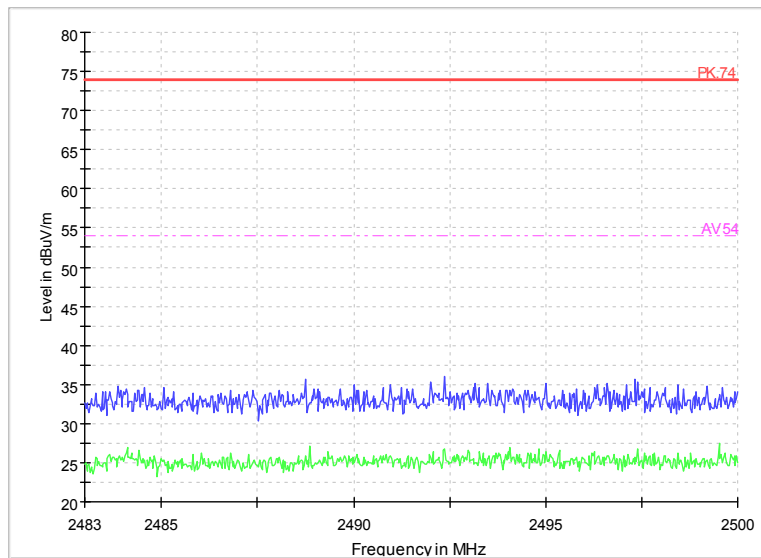
Carrier frequency (MHz): 2480  
Channel No.:78  
Test Mode:  $\pi/4$ DQPSK  
Polarity: Vertical



Carrier frequency (MHz): 2480  
Channel No.:78  
Test Mode:  $\pi/4$ DQPSK  
Polarity: Horizontal

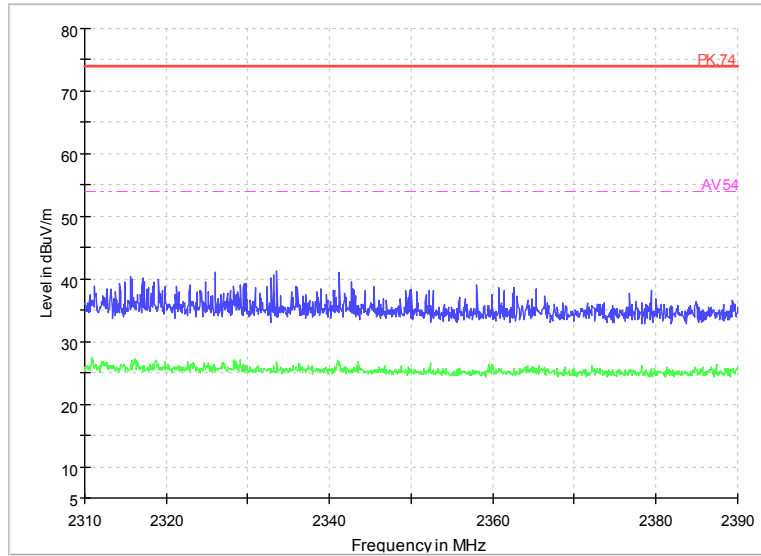


Carrier frequency (MHz): 2402  
Channel No.:0  
Test Mode: 8DPSK  
Polarity: Vertical

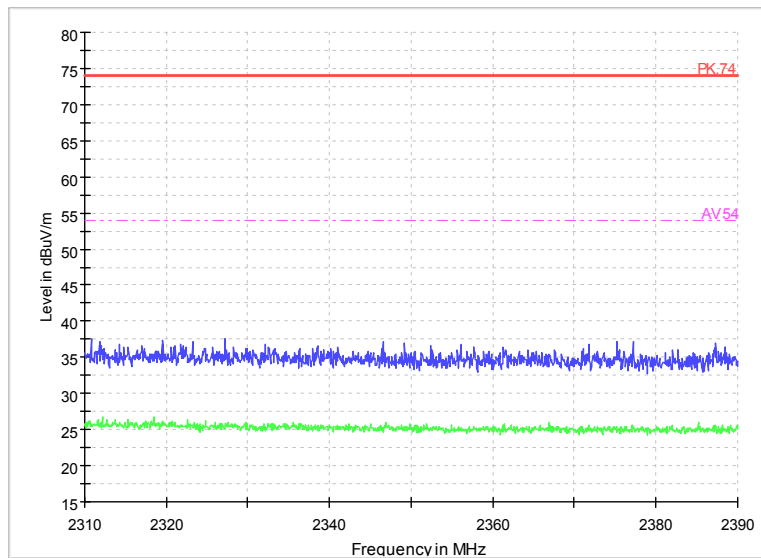


Carrier frequency (MHz): 2402  
Channel No.:0  
Test Mode: 8DPSK  
Polarity: Horizontal





Carrier frequency (MHz): 2480  
Channel No.:78  
Test Mode: 8DPSK  
Polarity: Vertical



Carrier frequency (MHz): 2480  
Channel No.:78  
Test Mode: 8DPSK  
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:

Result=  $P_{mea} + A_{Rpl}$

Sample calculation:  $(30.02\text{dB}\mu\text{V}/\text{m}) = (50.12\text{dB}\mu\text{V}) + (-20.1\text{dB}/\text{m})$ , the corresponding frequency is 36.014MHz.

For GFSK

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
78.112	20	-24	44	Vertical	40	20.00
138.252	14.61	-22.6	37.21	Vertical	43.5	28.89
300.5815	14.66	-15.8	30.46	Vertical	46	31.34
534.885	10.85	-10	20.85	Vertical	46	35.15
958.29	16.94	-2.8	19.74	Vertical	46	29.06

For  $\pi/4$ DQPSK

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
78.112	20.01	-24	44.01	Vertical	40	19.99
138.252	14.61	-22.6	37.21	Vertical	43.5	28.89
300.5815	14.67	-15.8	30.47	Vertical	46	31.33
538.377	11.05	-9.9	20.95	Vertical	46	34.95
959.066	16.93	-2.8	19.73	Vertical	46	29.07

For 8DPSK

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	30.01	-20.1	50.11	Vertical	40	9.99
78.112	20.01	-24	44.01	Vertical	40	19.99
138.252	14.61	-22.6	37.21	Vertical	43.5	28.89

300.5815	14.66	-15.8	30.46	Vertical	46	31.34
550.114	10.85	-9.7	20.55	Vertical	46	35.15
891.7965	16.6	-3.4	20	Vertical	46	29.4

For GFSK  
Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	30.01	-20.1	50.11	Vertical	40	9.99
78.112	20	-24	44	Vertical	40	20
138.252	15.64	-22.6	38.24	Vertical	43.5	27.86
300.5815	14.68	-15.8	30.48	Vertical	46	31.32
545.264	10.91	-9.8	20.71	Vertical	46	35.09
953.1005	17.04	-2.9	19.94	Vertical	46	28.96

For  $\pi/4$ DQPSK  
Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	30.01	-20.1	50.11	Vertical	40	9.99
78.112	20.01	-24	44.01	Vertical	40	19.99
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
540.6565	10.91	-9.9	20.81	Vertical	46	35.09
898.926	16.88	-3.2	20.08	Vertical	46	29.12

For 8DPSK  
Channel No.:39

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
78.112	20.02	-24	44.02	Vertical	40	19.98
138.252	15.66	-22.6	38.26	Vertical	43.5	27.84
174.336	11.93	-21.2	33.13	Vertical	43.5	31.57
541.384	11	-9.9	20.9	Vertical	46	35
885.055	16.52	-3.5	20.02	Vertical	46	29.48

For GFSK  
Channel No.:78

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
78.112	20.01	-24	44.01	Vertical	40	19.99
138.252	14.64	-22.6	37.24	Vertical	43.5	28.86
174.336	11.92	-21.2	33.12	Vertical	43.5	31.58
548.95	10.86	-9.7	20.56	Vertical	46	35.14
916.1435	17.06	-3	20.06	Vertical	46	28.94

For  $\pi/4$ DQPSK

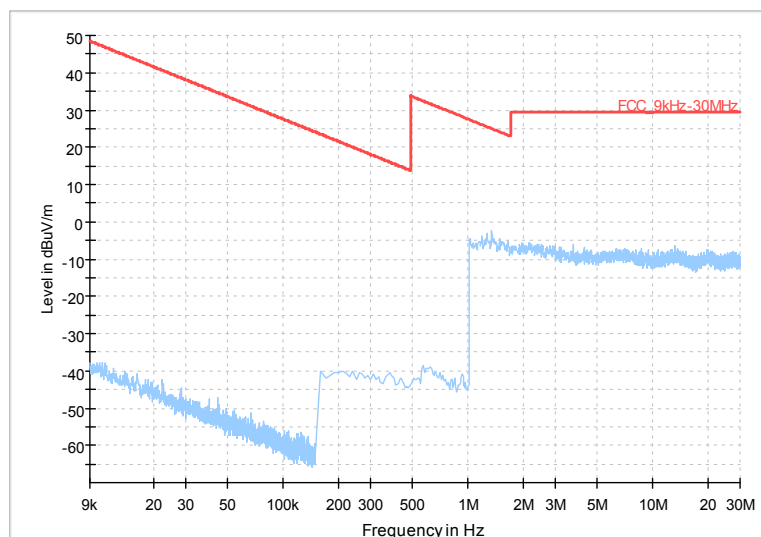
Channel No.:78

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	30.01	-20.1	50.11	Vertical	40	9.99
78.112	20.03	-24	44.03	Vertical	40	19.97
138.252	14.65	-22.6	37.25	Vertical	43.5	28.85
300.5815	14.7	-15.8	30.5	Vertical	46	31.3
551.6175	10.95	-9.6	20.55	Vertical	46	35.05
887.771	16.56	-3.5	20.06	Vertical	46	29.44

For 8DPSK  
Channel No.:78

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
36.014	30	-20.1	50.1	Vertical	40	10
78.112	20.02	-24	44.02	Vertical	40	19.98
150.28	14.55	-22.6	37.15	Vertical	43.5	28.95
300.5815	14.74	-15.8	30.54	Vertical	46	31.26
529.6955	10.81	-10.1	20.91	Vertical	46	35.19
920.848	17.15	-3	20.15	Vertical	46	28.85

Full Spectrum

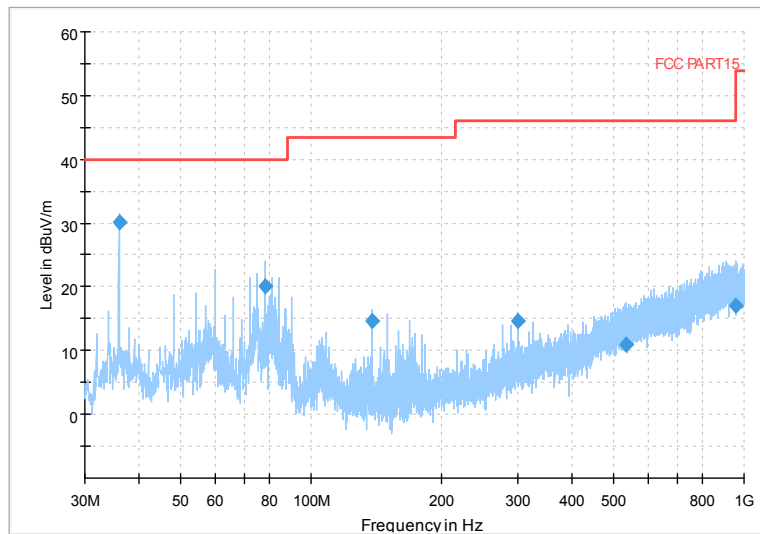


Frequency Range: 9kHz -30MHz  
Detector: QP mode

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.

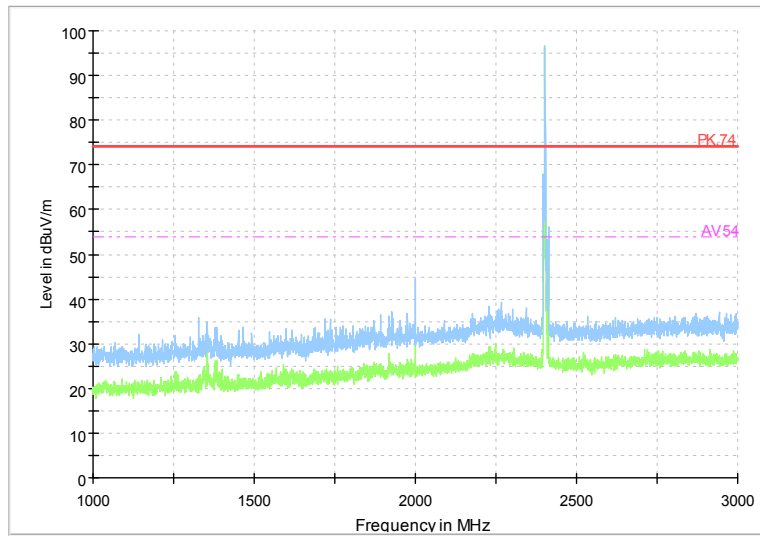
Carrier frequency (MHz): 2402  
Channel No.:0

Full Spectrum



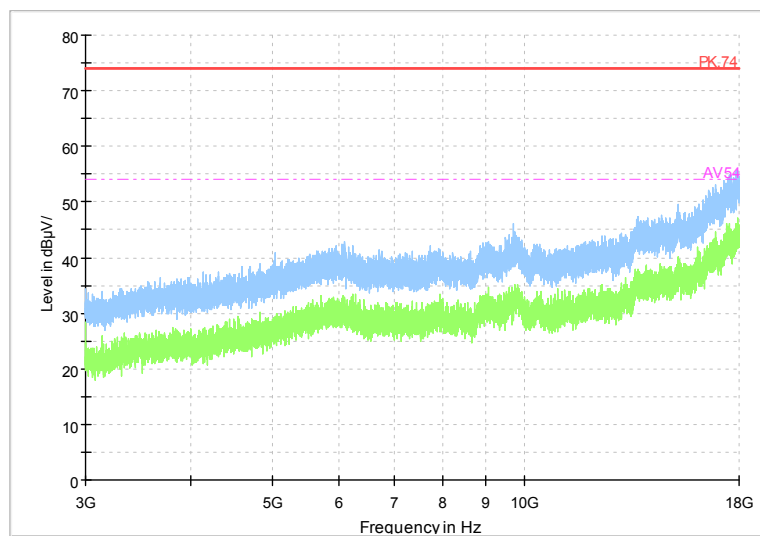
Frequency Range:30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



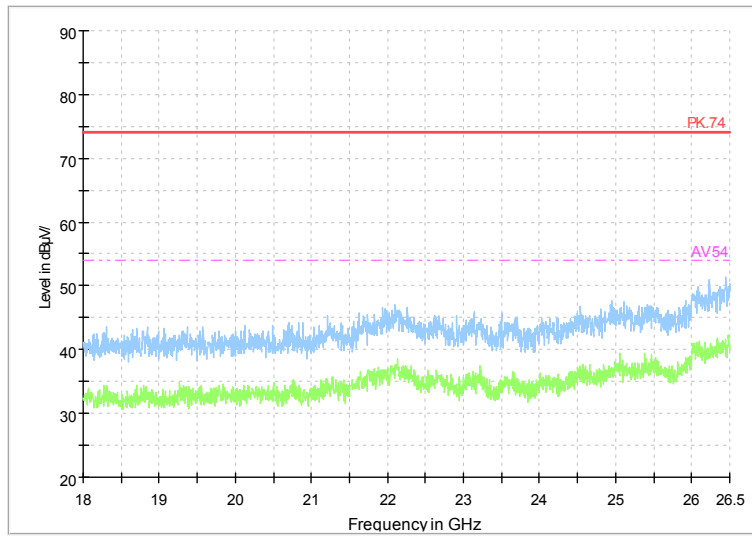
Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



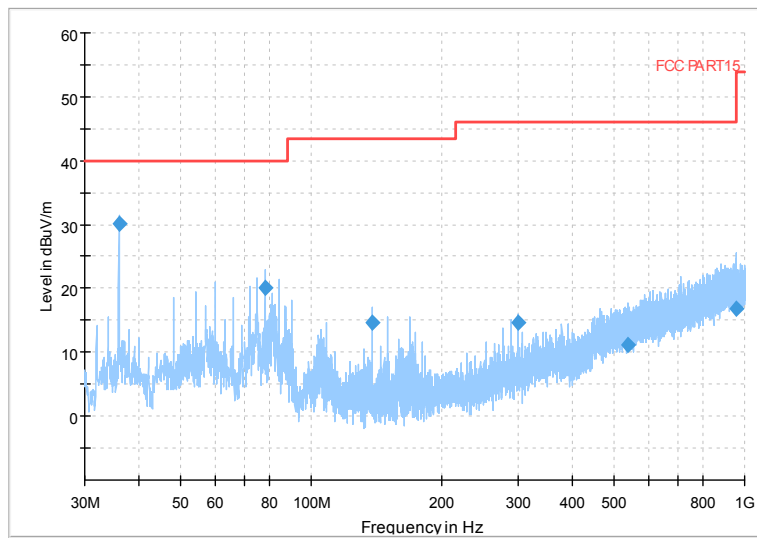
Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



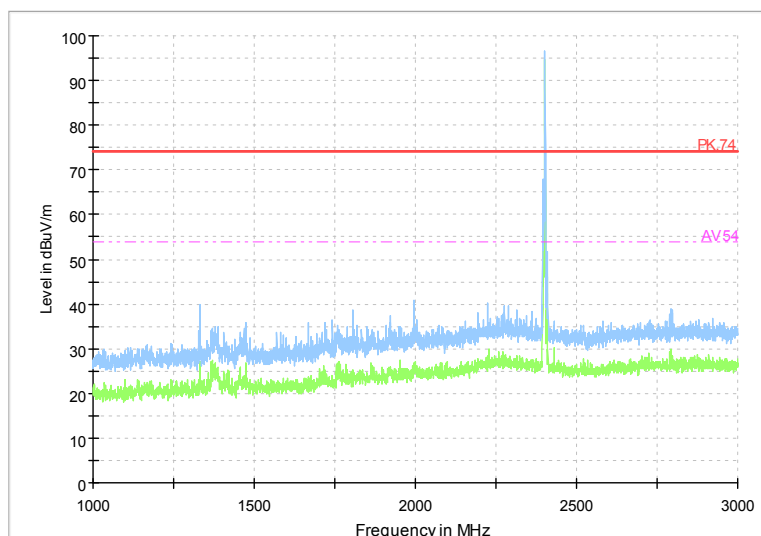
Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



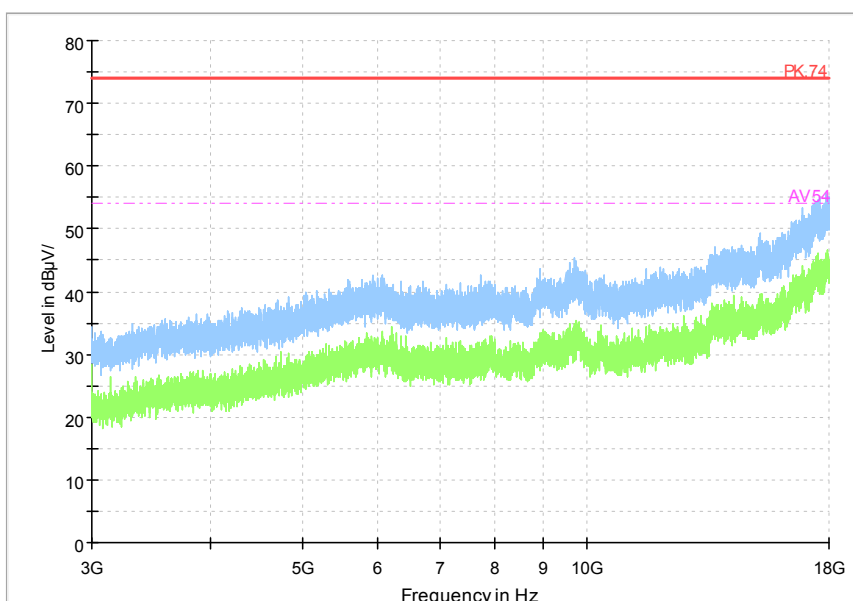
Frequency Range:30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

Full Spectrum



Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

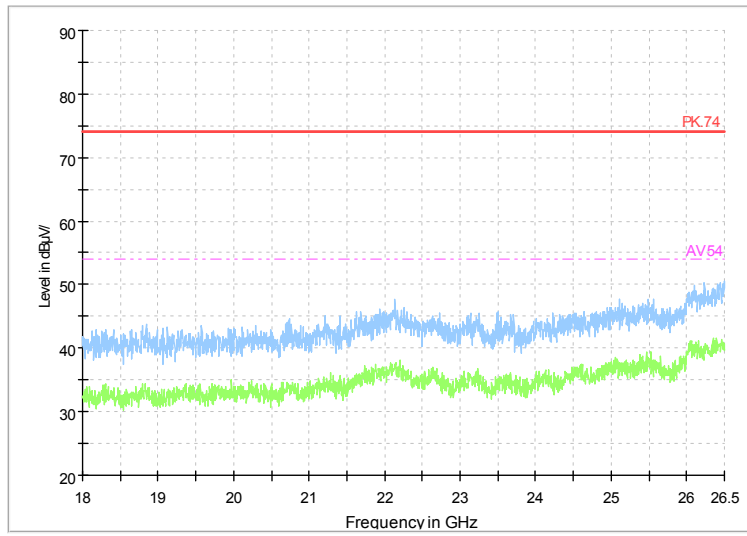
Full Spectrum



Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

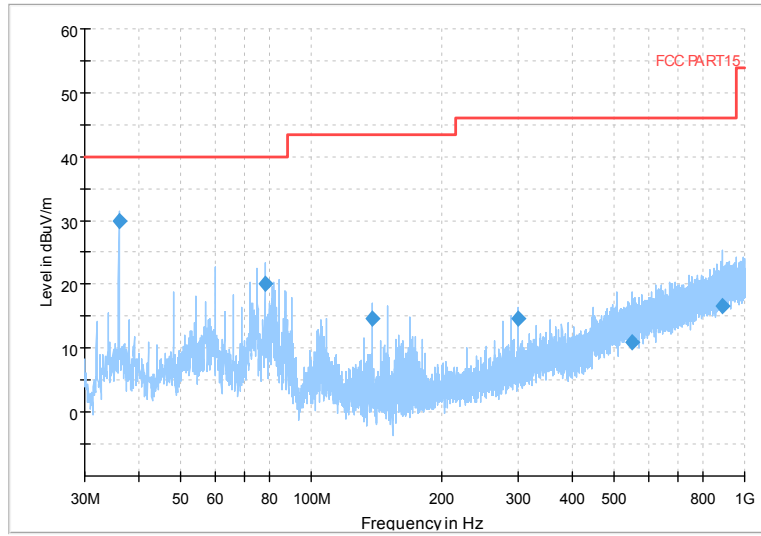


Full Spectrum



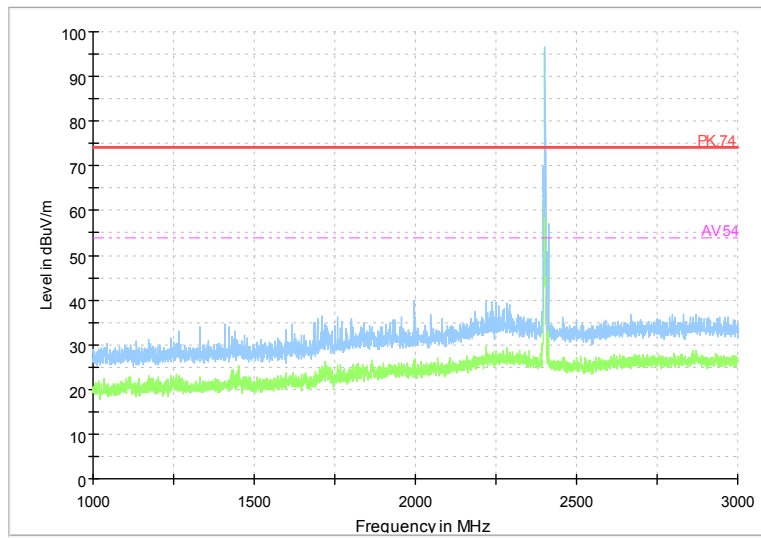
Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

Full Spectrum



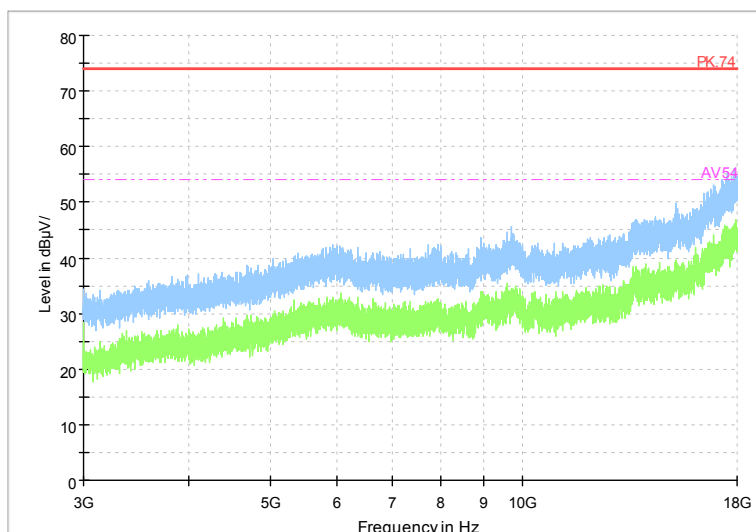
Frequency Range:30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

Full Spectrum



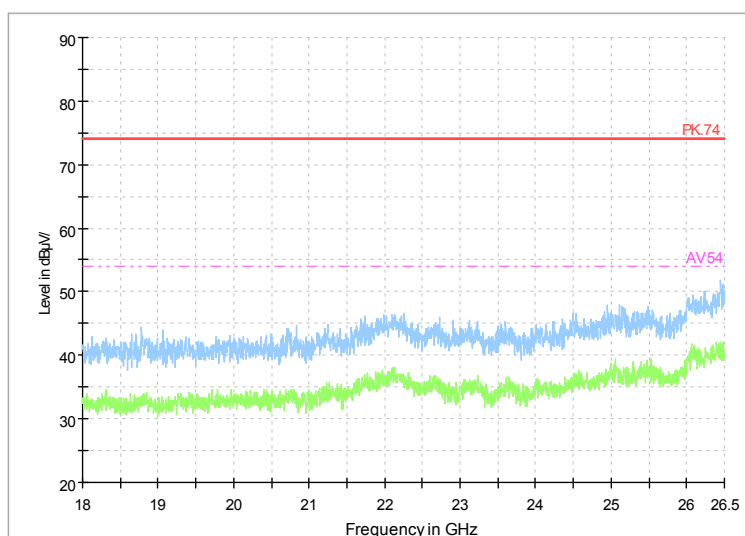
Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

Full Spectrum



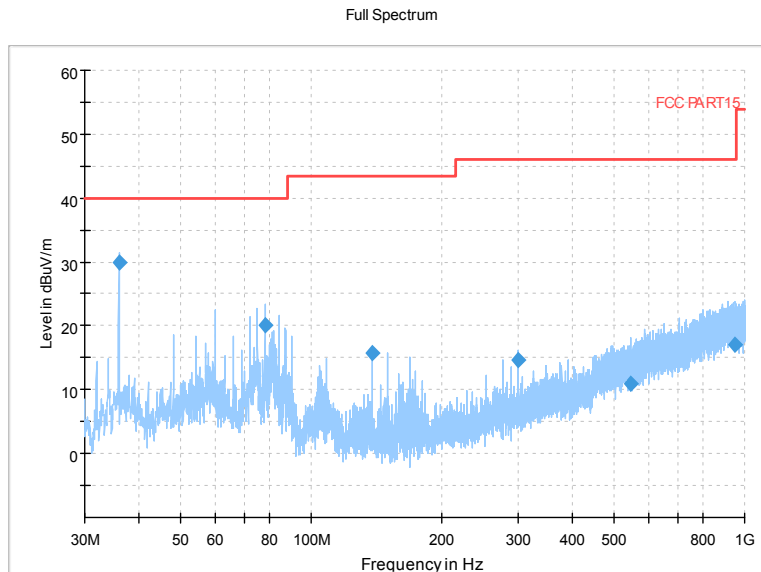
Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

Full Spectrum

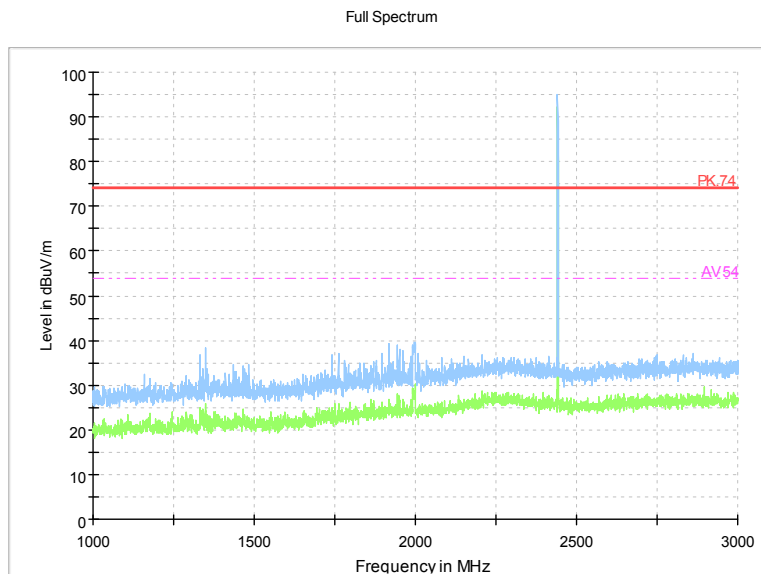


Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

Carrier frequency (MHz): 2440  
Channel No.:39

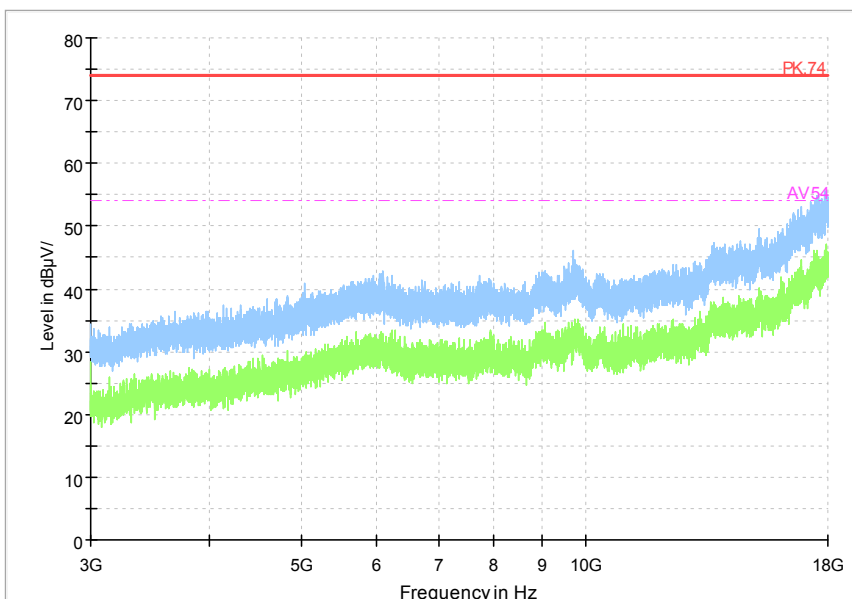


Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK



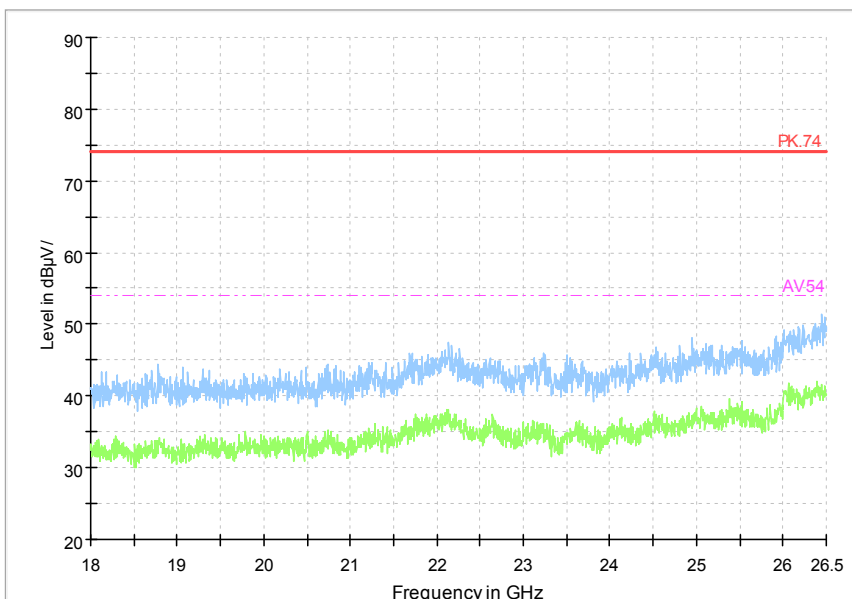
Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



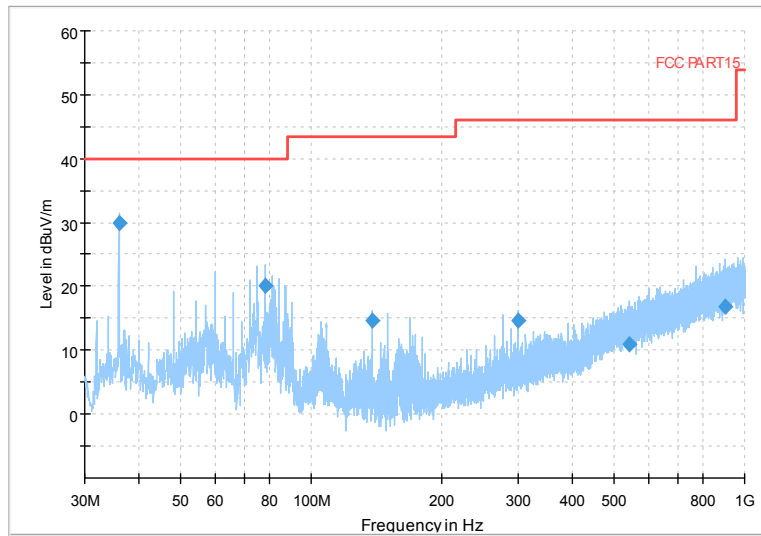
Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



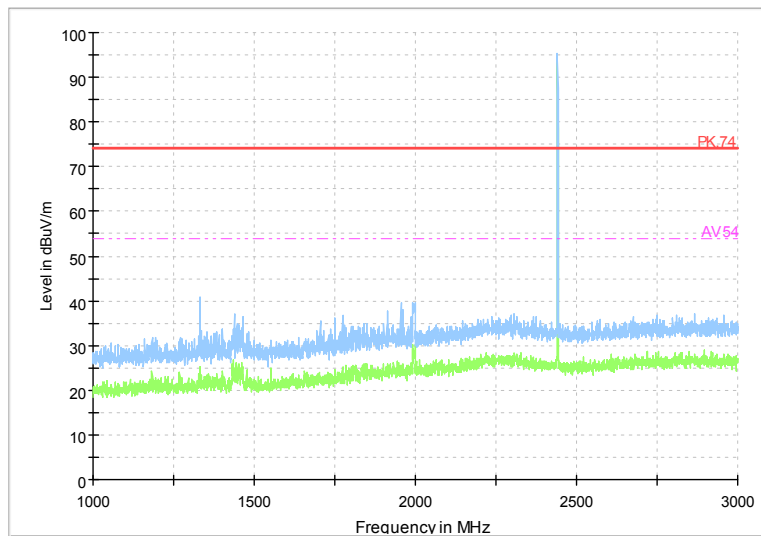
Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



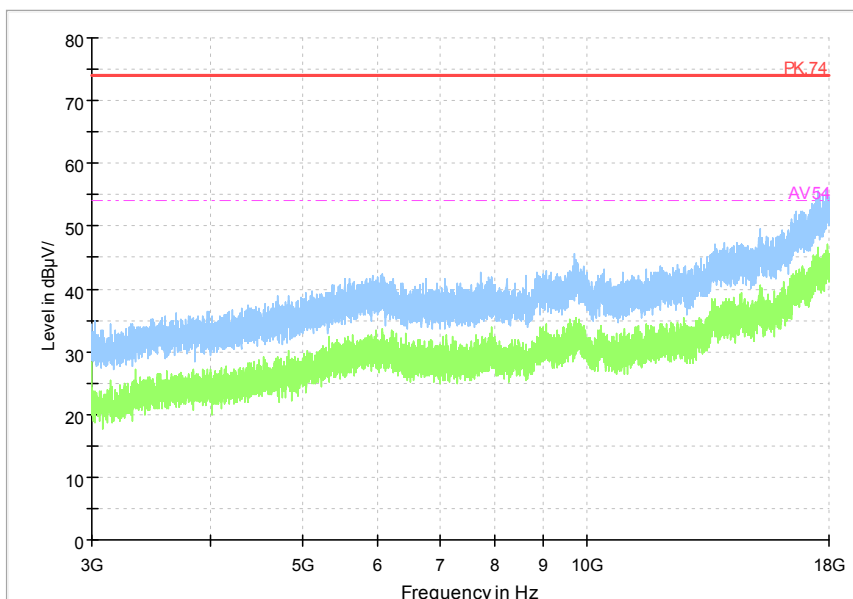
Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

Full Spectrum



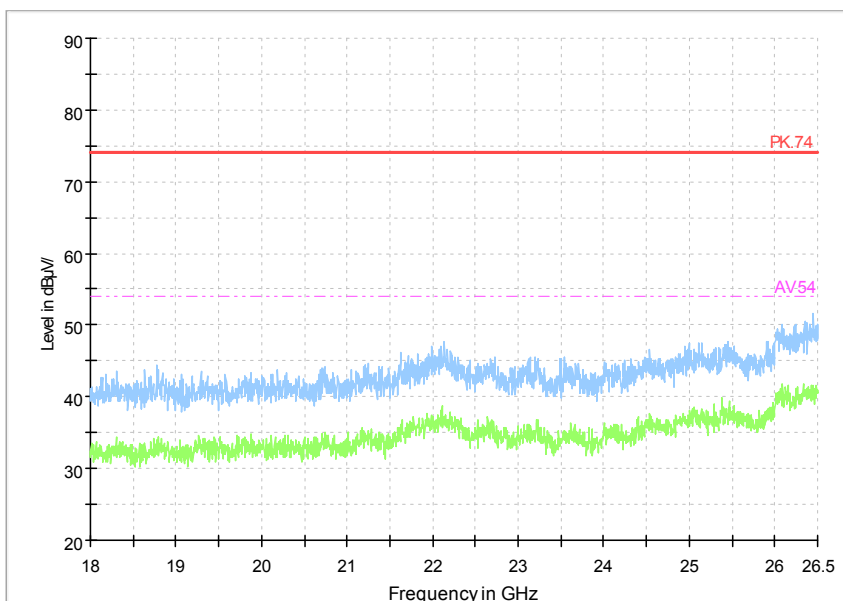
Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

Full Spectrum



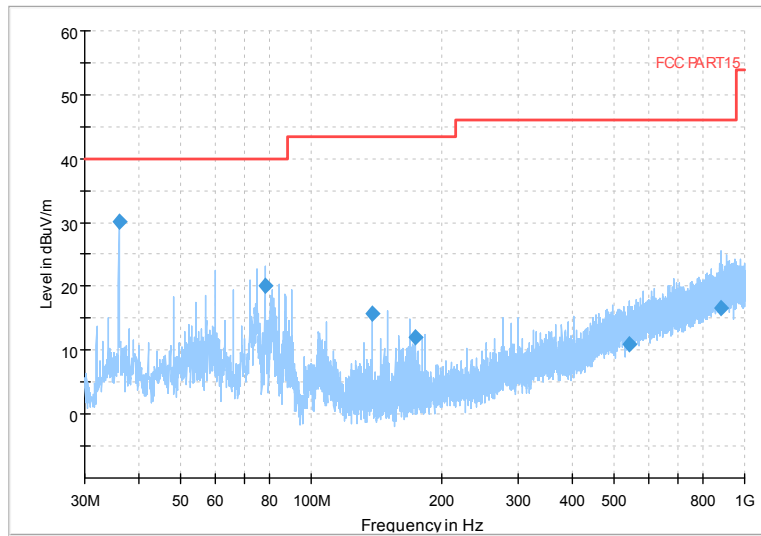
Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

Full Spectrum



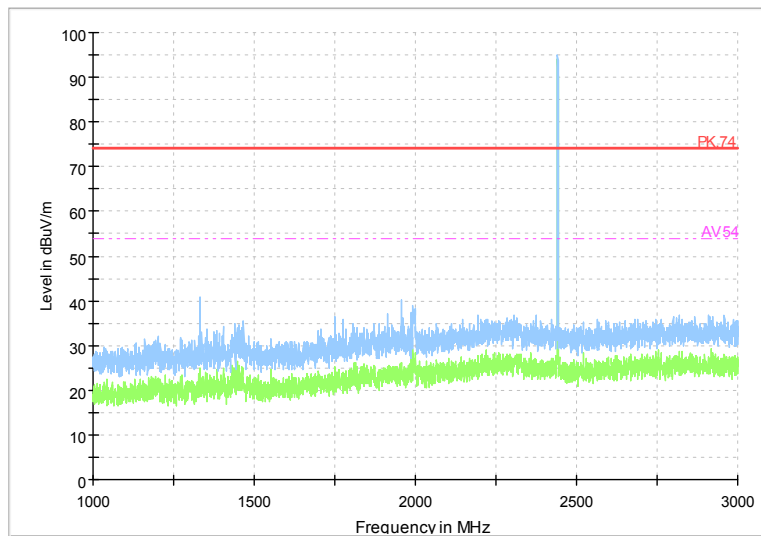
Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

Full Spectrum



Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

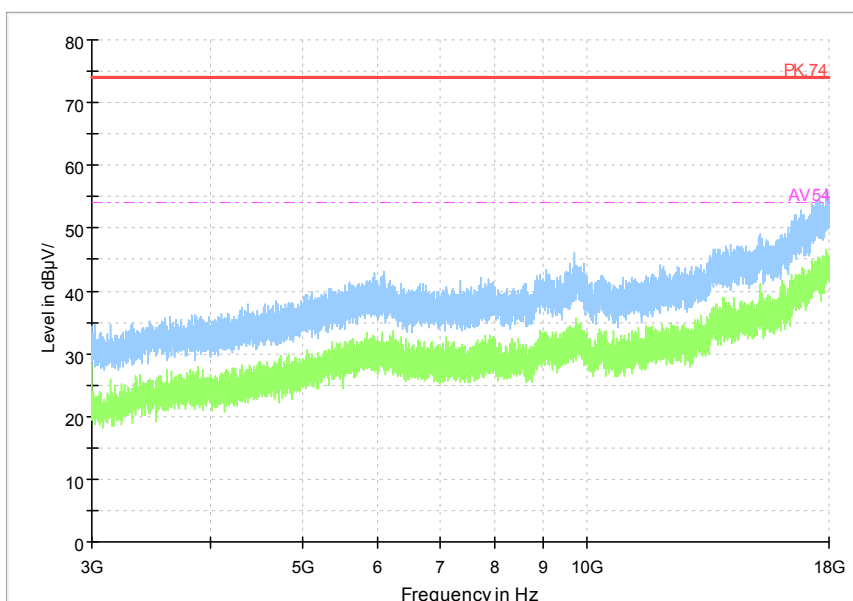
Full Spectrum



Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

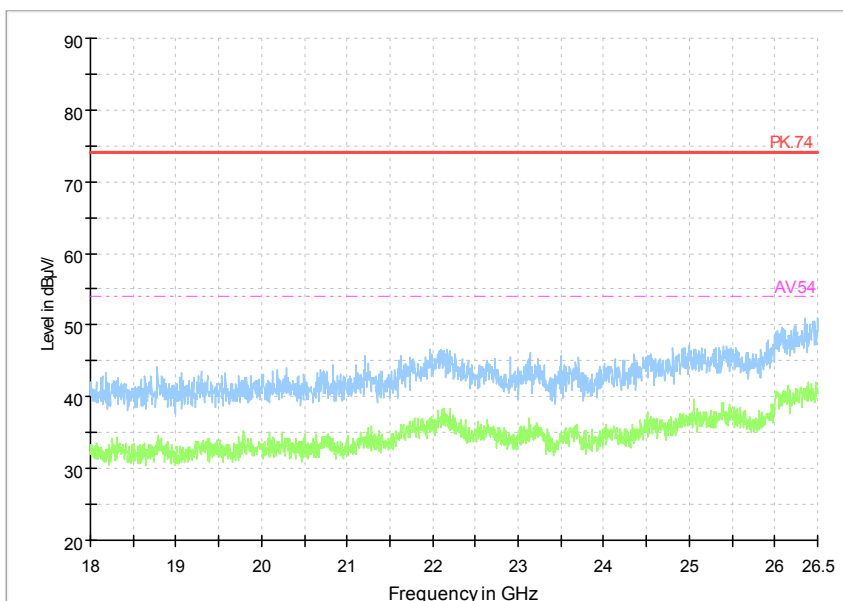


Full Spectrum



Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

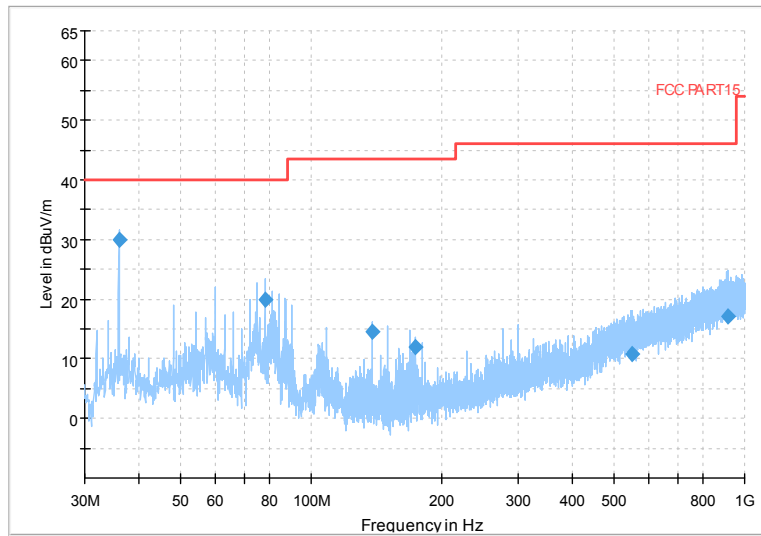
Full Spectrum



Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

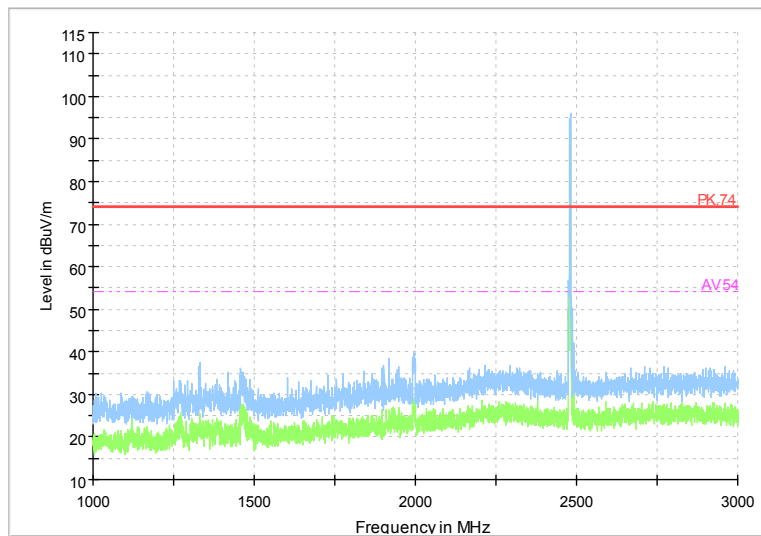
Carrier frequency (MHz): 2480  
Channel No.:78

Full Spectrum



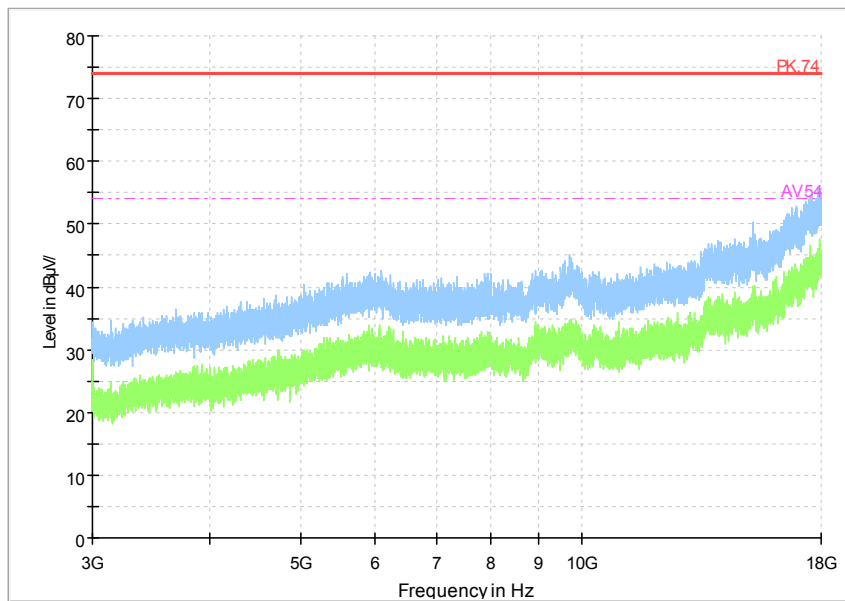
Frequency Range:30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



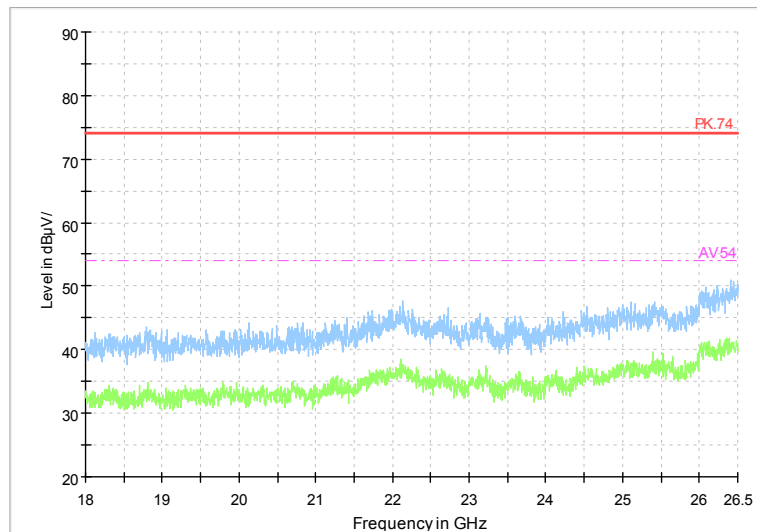
Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



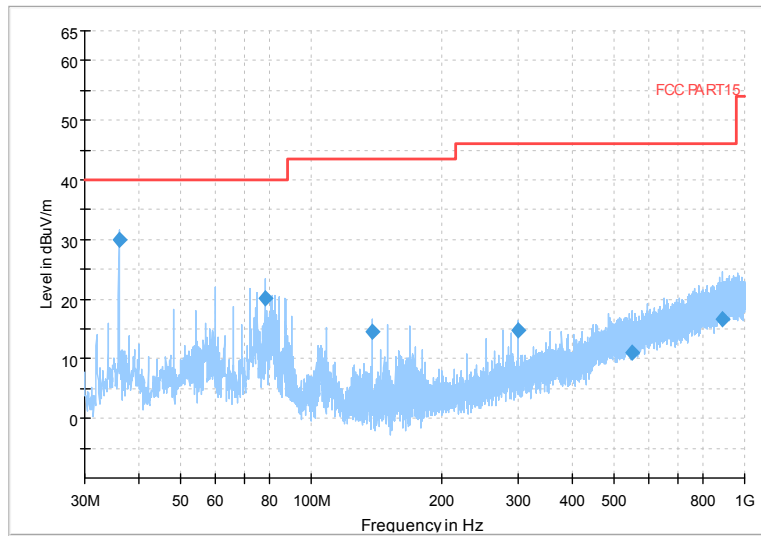
Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



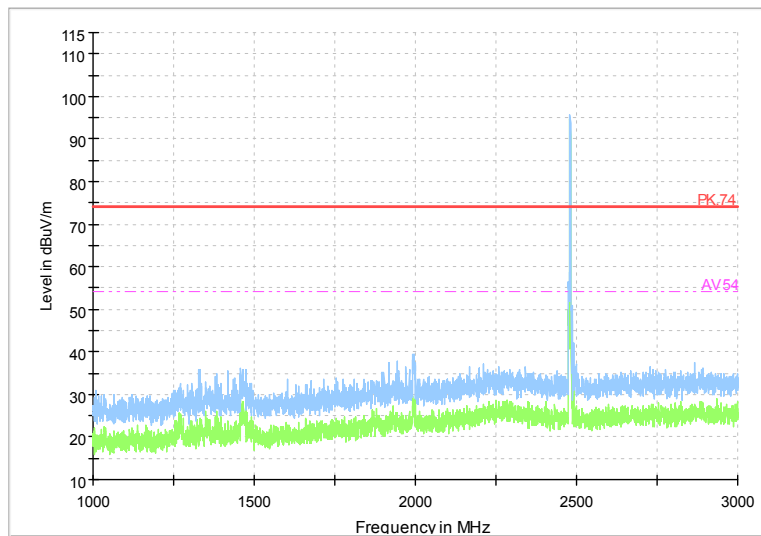
Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type: GFSK

Full Spectrum



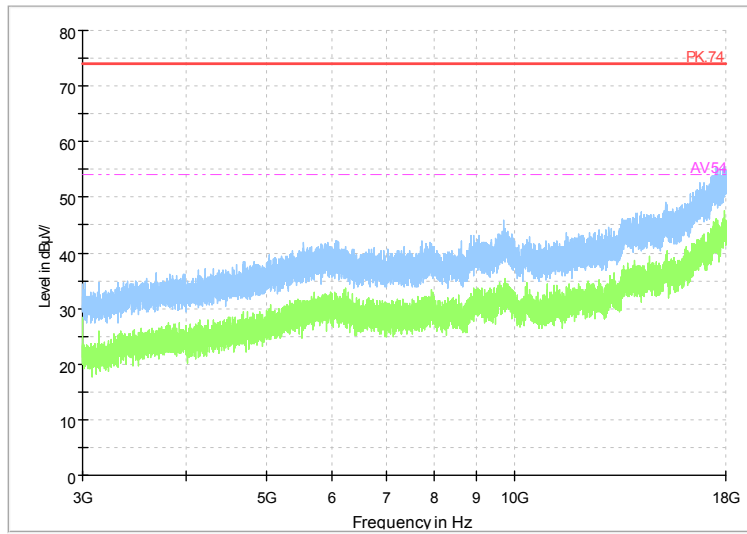
Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

Full Spectrum



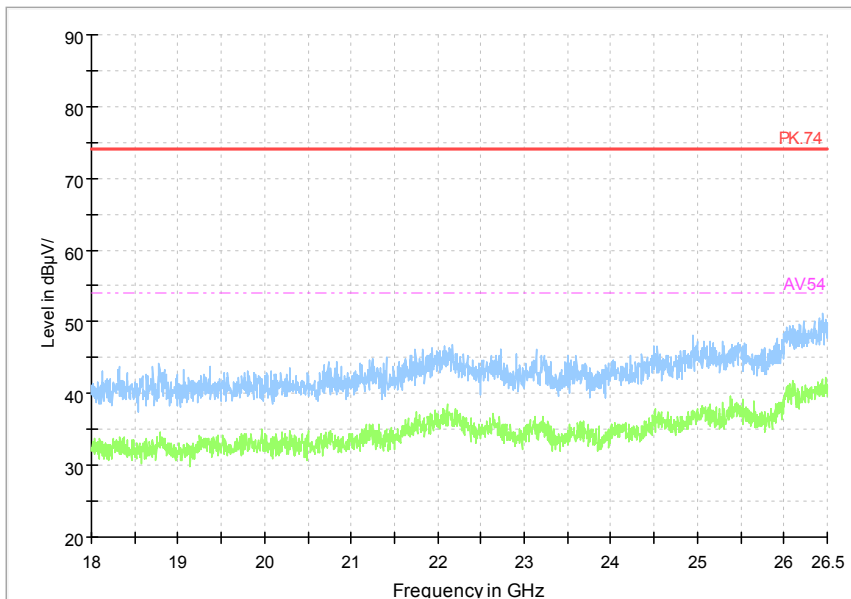
Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

Full Spectrum



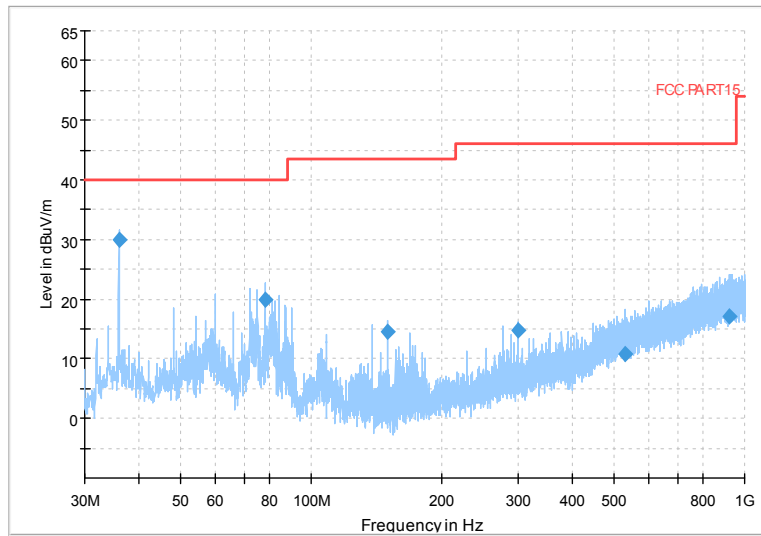
Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

Full Spectrum



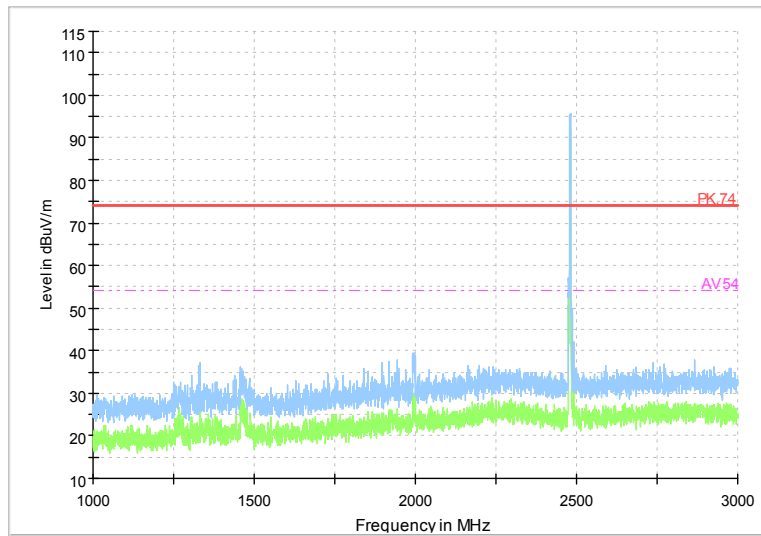
Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type:  $\pi/4$ DQPSK

Full Spectrum



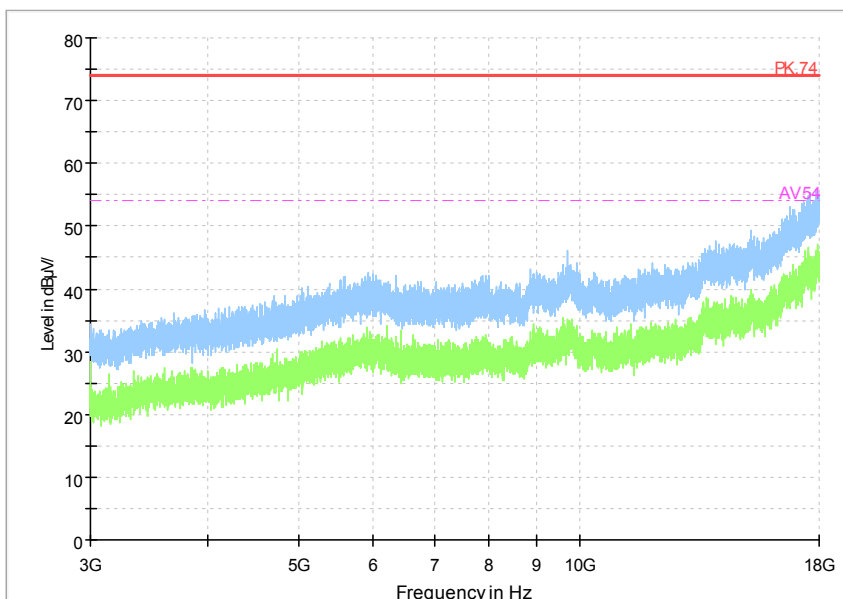
Frequency Range: 30MHz-1GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

Full Spectrum



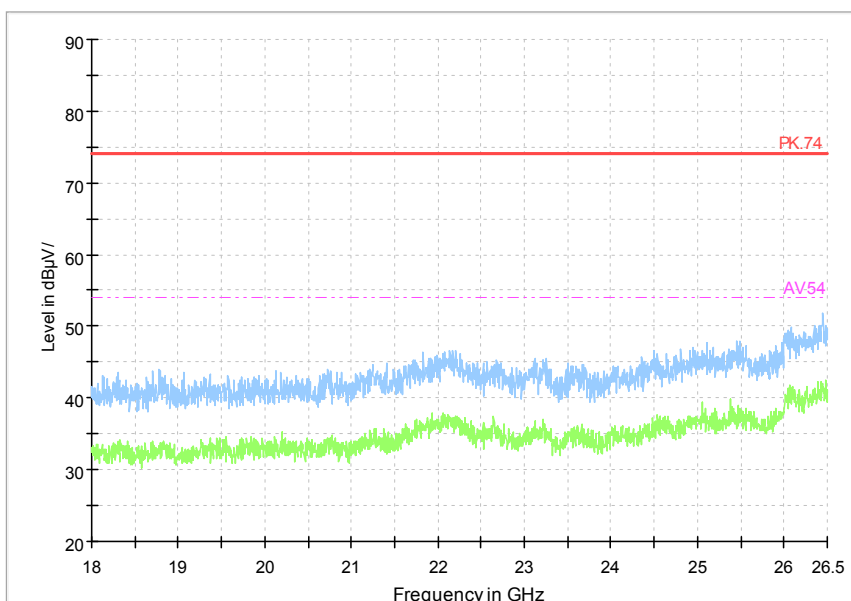
Frequency Range: 1GHz-3GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

Full Spectrum



Frequency Range: 3GHz-18GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

Full Spectrum



Frequency Range: 18GHz-26GHz  
Detector: Av mode and PK mode  
Modulation type: 8DPSK

### AC Power line Conducted Emission

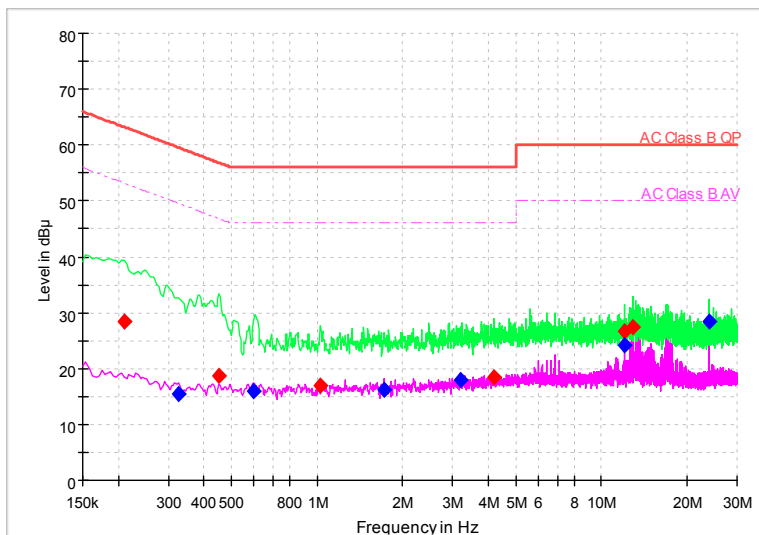
A “reference path loss” Corr.(dB) is established and the  $L_{cable}+ATT+VDF$  is the attenuation of “reference path loss”, and including the cable loss, the attenuation of the attenuator, the voltage division factor of AMN.

The measurement results are obtained as described below:

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

Sample calculation:  $(28.3dB\mu V) = (-1.4dB\mu V) + (29.7 dB)$ , the corresponding frequency is 0.02097MHz.

Full Spectrum



L+N Line

**MEASUREMENT RESULT:**

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	Pmea QuasiPeak (dBμV)	Pmea Average (dBμV)
0.2097	28.3	---	63.22	34.92	N	29.7	-1.4	---
0.32484	---	15.51	49.58	34.07	N	29.7	---	-14.19
0.45276	18.78	---	56.82	38.05	N	29.8	-11.02	---
0.59775	---	15.86	46	30.14	N	29.8	---	-13.94
1.02844	16.86	---	56	39.14	N	29.8	-12.94	---
1.71926	---	16.32	46	29.68	N	29.8	---	-13.48
3.18191	---	17.89	46	28.11	L1	29.8	---	-11.91
4.19681	18.47	---	56	37.53	L1	29.8	-11.33	---
12.0388	26.63	---	60	33.37	L1	29.9	-3.27	---
12.0388	---	24.27	50	25.73	L1	29.9	---	-5.63
12.9514	27.47	---	60	32.53	L1	29.9	-2.43	---
24.0812	---	28.37	50	21.63	N	30.1	---	-1.73