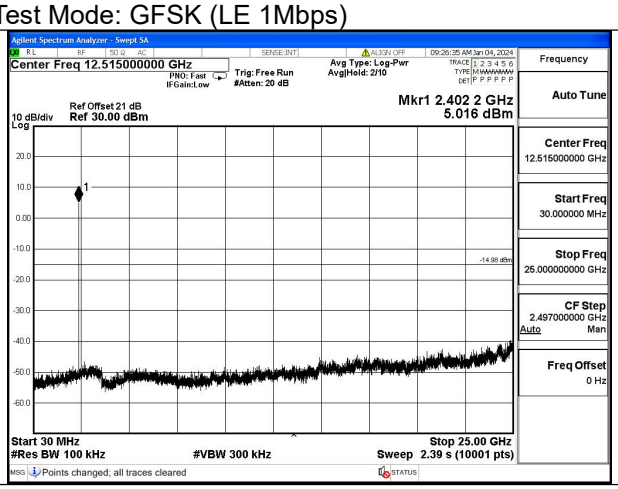
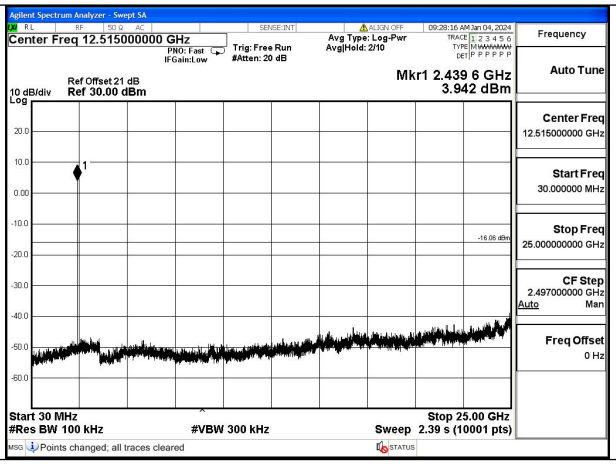
5 Conducted Out of band emission measurement

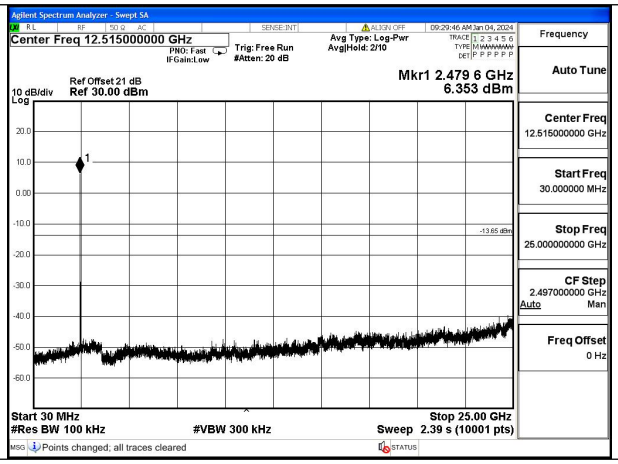
Test Mode: GFSK (LE 1Mbps)



CH0

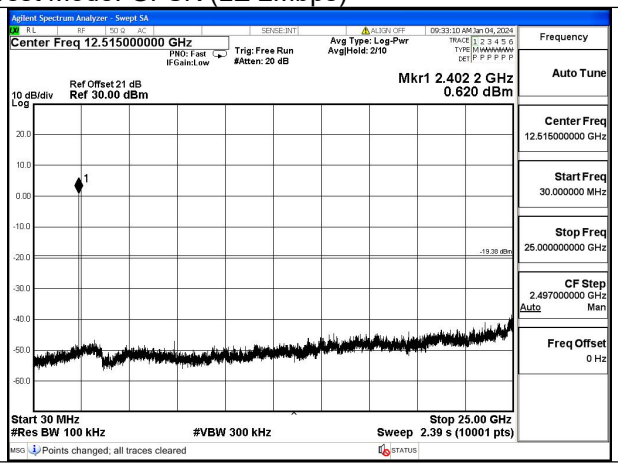


CH19

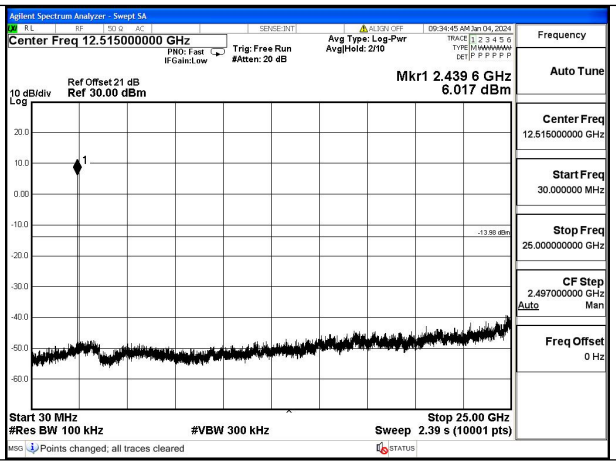


CH39

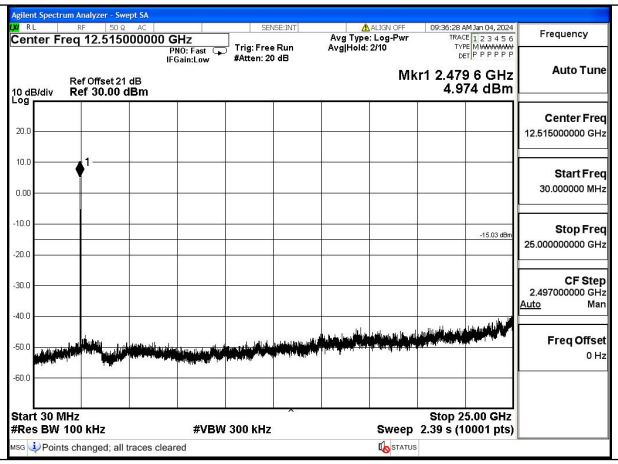
Test Mode: GFSK (LE 2Mbps)



CH0

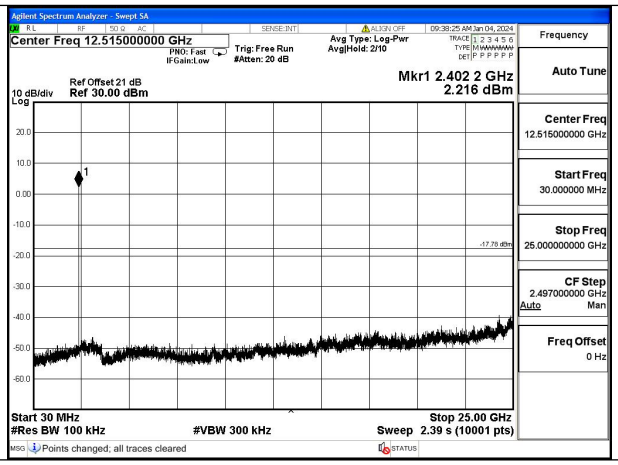


CH19

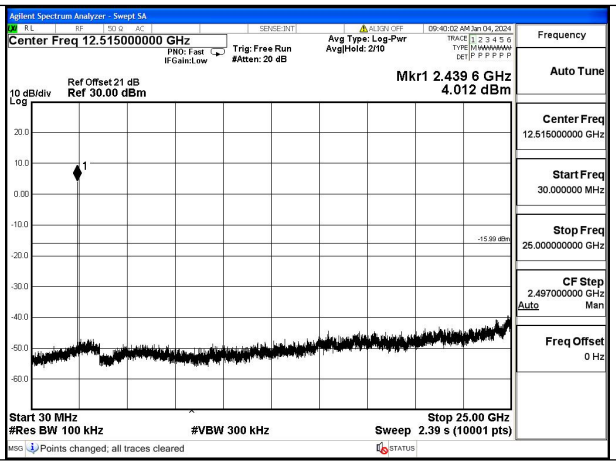


CH39

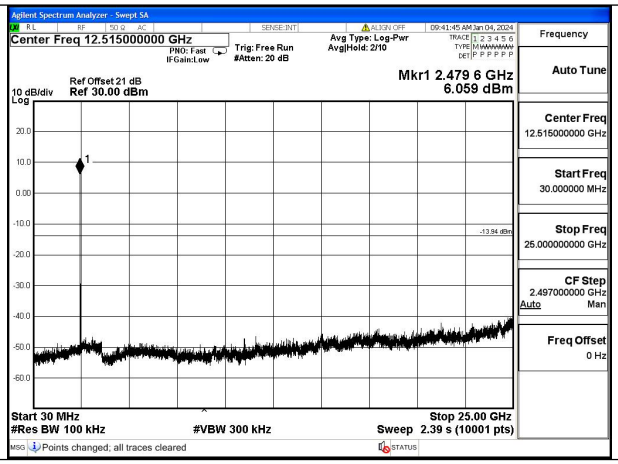
Test Mode: Coded 125K



CH0

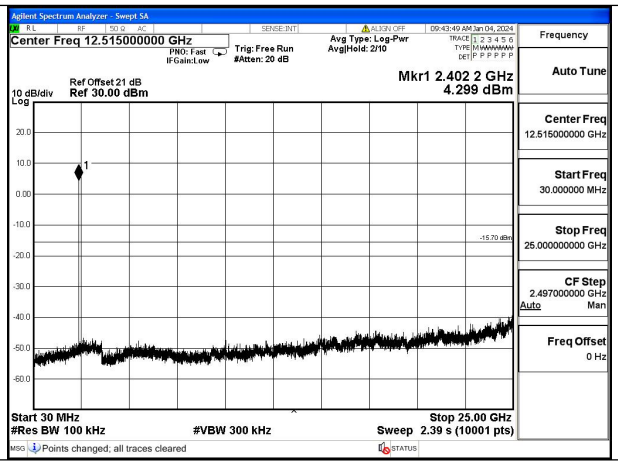


CH19

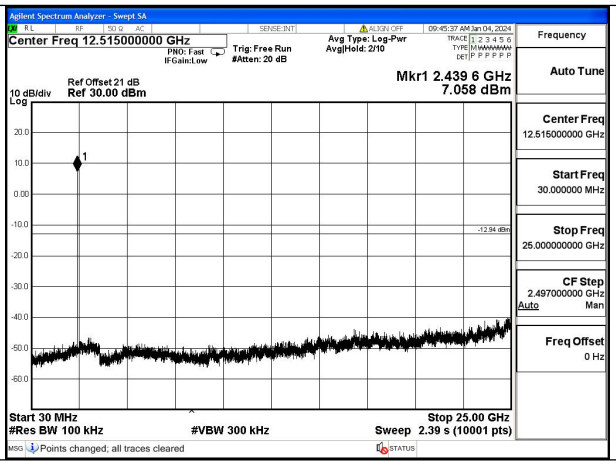


CH39

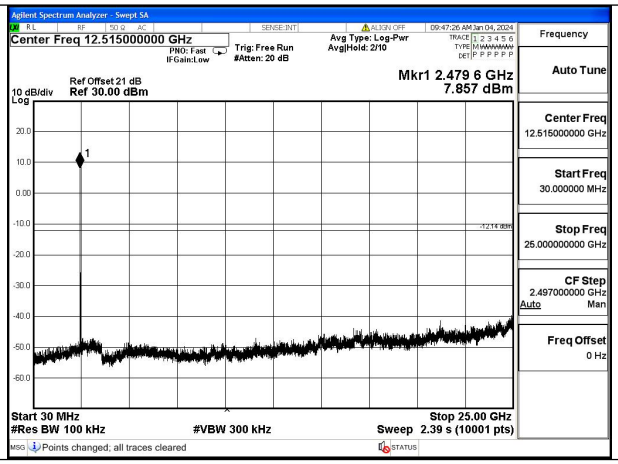
Test Mode: Coded 500K



CH0



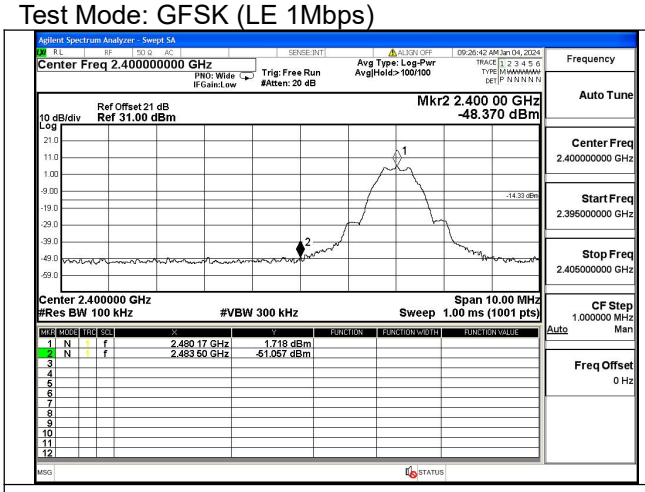
CH19



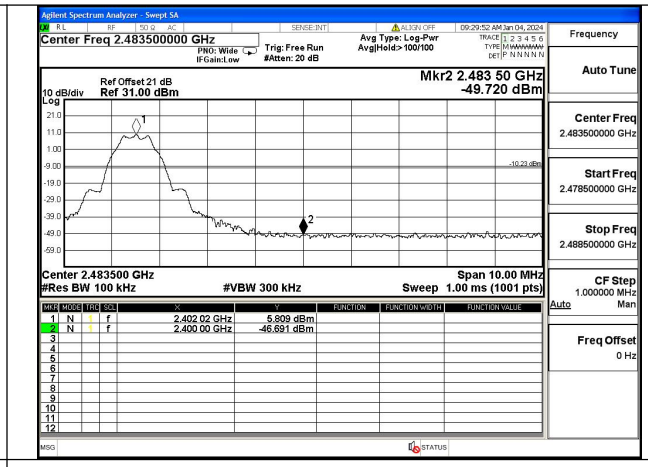
CH39

6 Band Edge measurement

Test Mode: GFSK (LE 1Mbps)

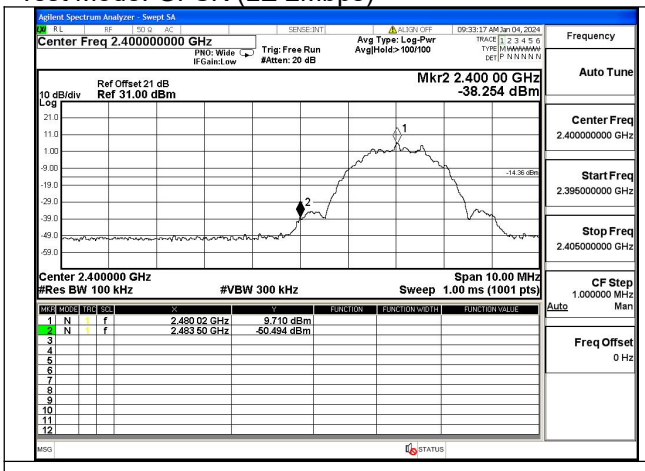


CH0

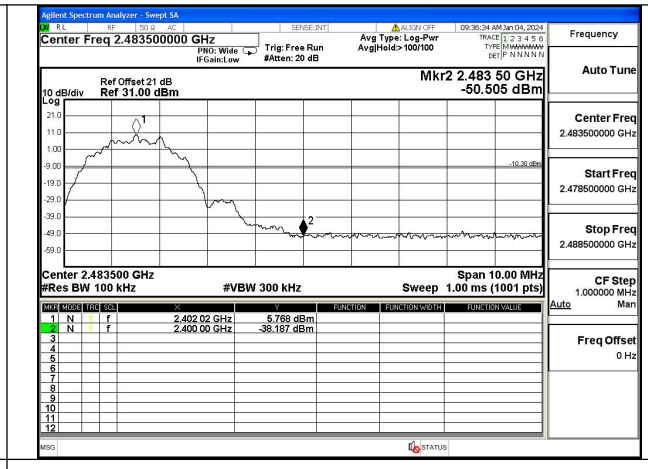


CH39

Test Mode: GFSK (LE 2Mbps)

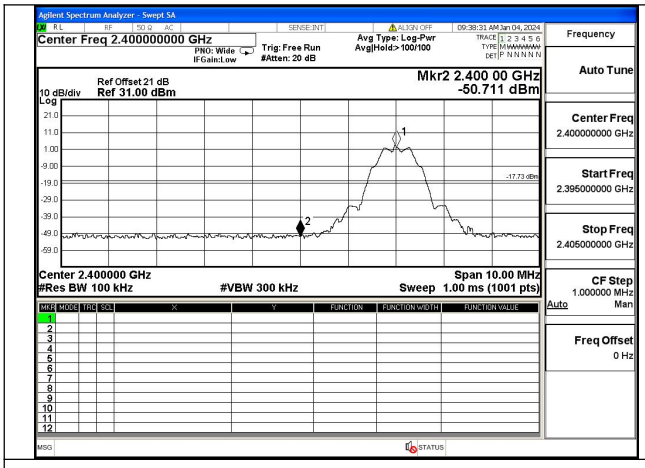


CH0

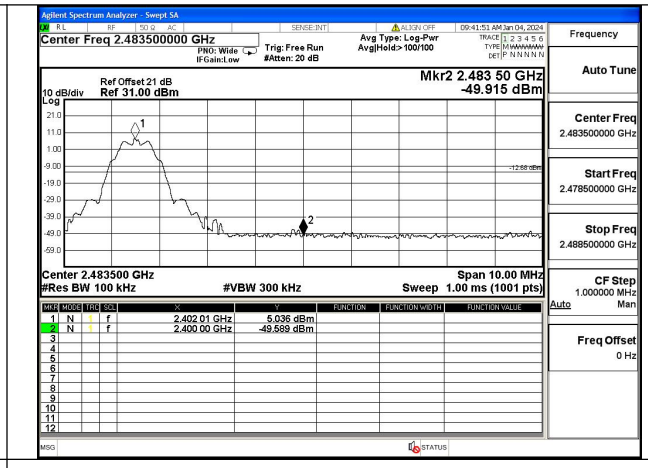


CH39

Test Mode: Coded 125K

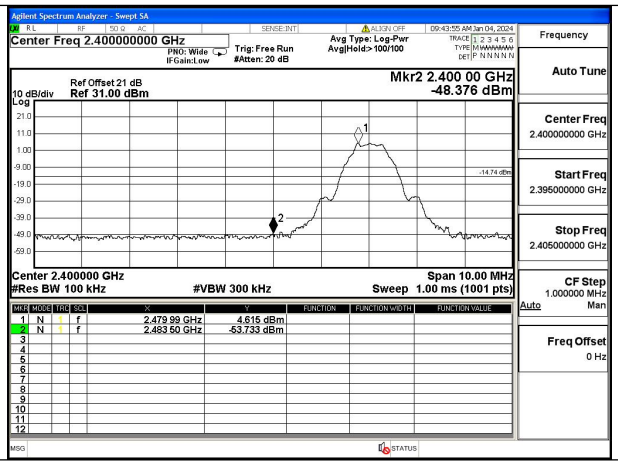


CH0

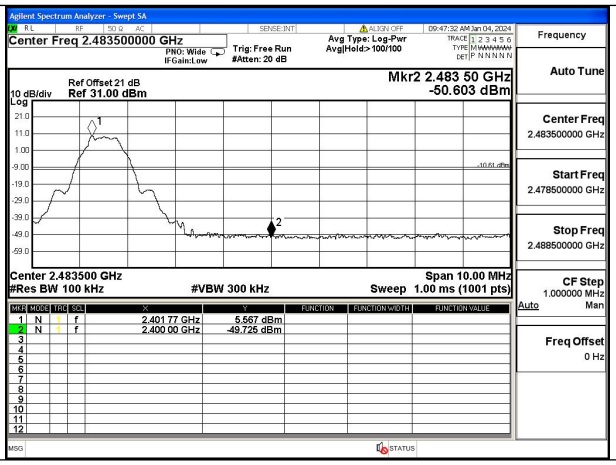


CH39

Test Mode: Coded 500K



CH0



CH39

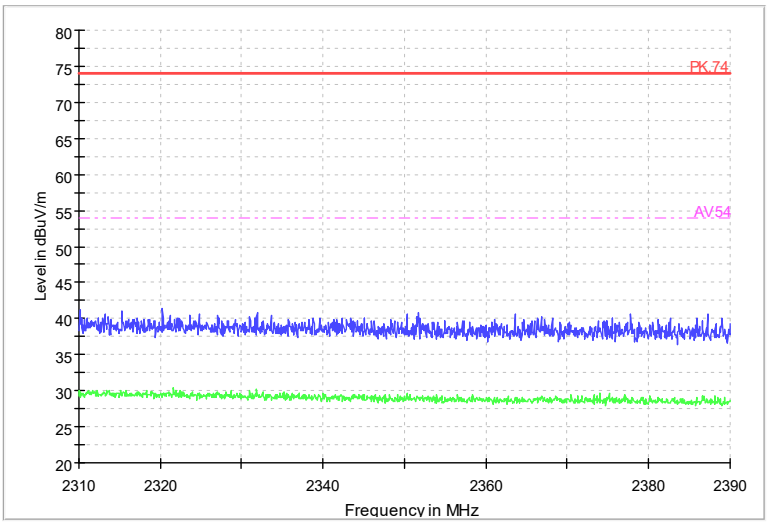
APPENDIX B – TEST DATA OF RADIATED EMISSION

Note1： The worst channel results are reflected in the report.

Note2: The scanned graph represents the maximum of both horizontal and vertical polarizations and is not a single horizontal or vertical polarization scan.

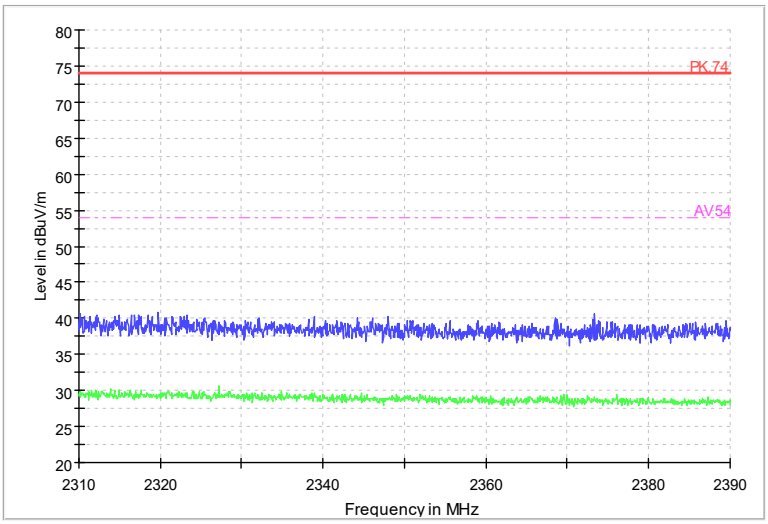
Radiated Emission Band Edge

After comparison,the worst case attitude is EUT lay down.



Comment

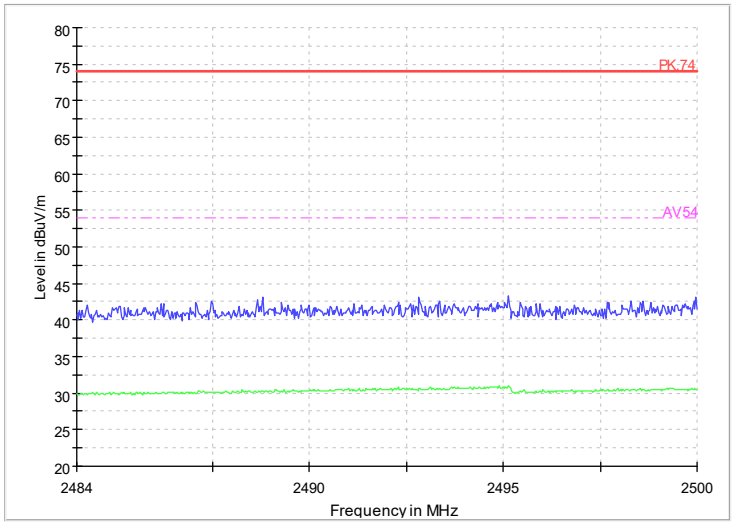
Radiated Emission Band Edge
Channel No.:0
Test Mode: GFSK (LE 1Mbps)
Polarization：V



Comment

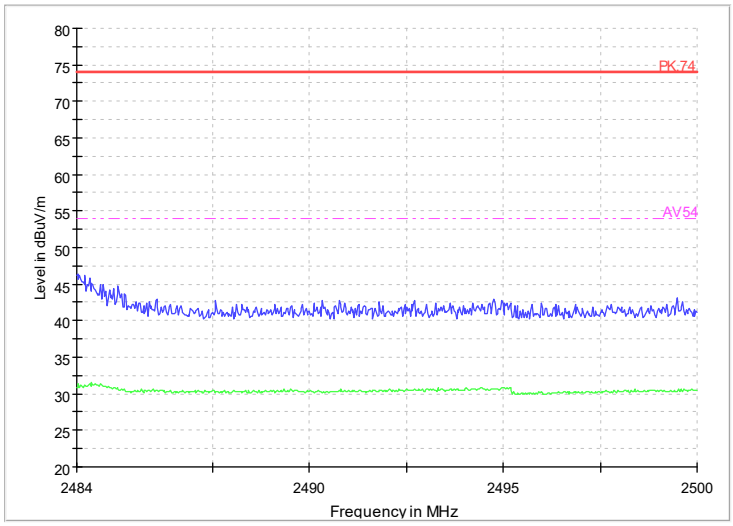
Radiated Emission Band Edge

Channel No.:0
Test Mode: GFSK (LE 1Mbps)
Polarization：H



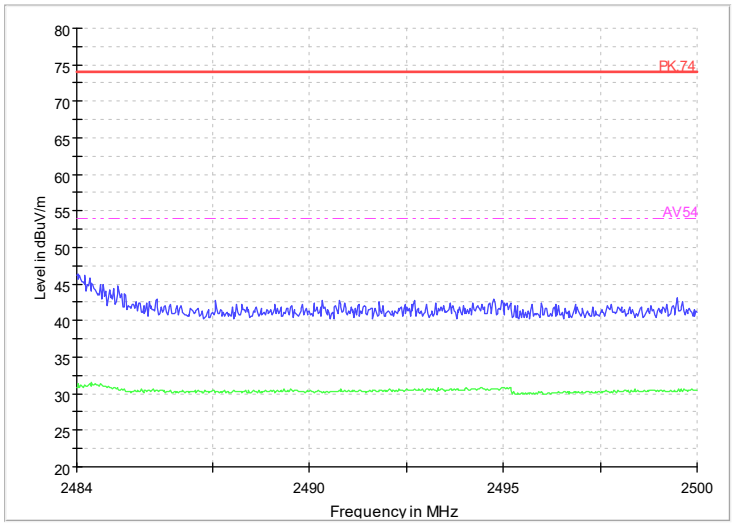
Comment

Radiated Emission Band Edge
Channel No.:39
Test Mode: GFSK (LE 1Mbps)
Polarization：V



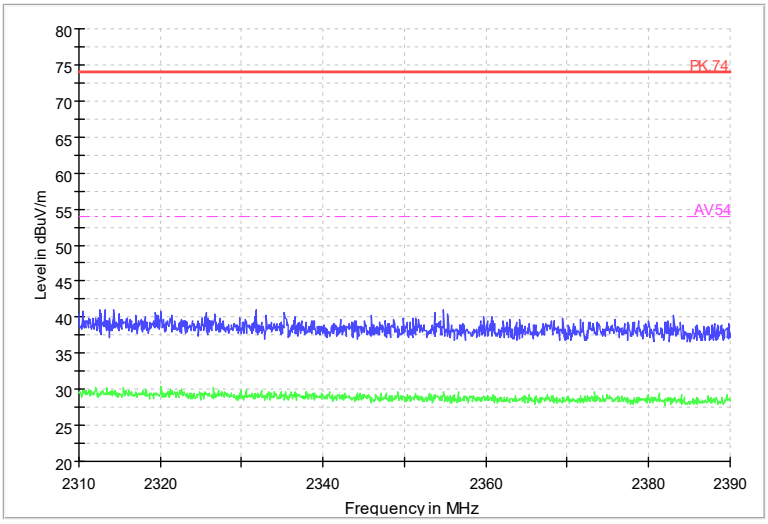
Comment

Radiated Emission Band Edge
Channel No.:39
Test Mode: GFSK (LE 1Mbps)
Polarization：H



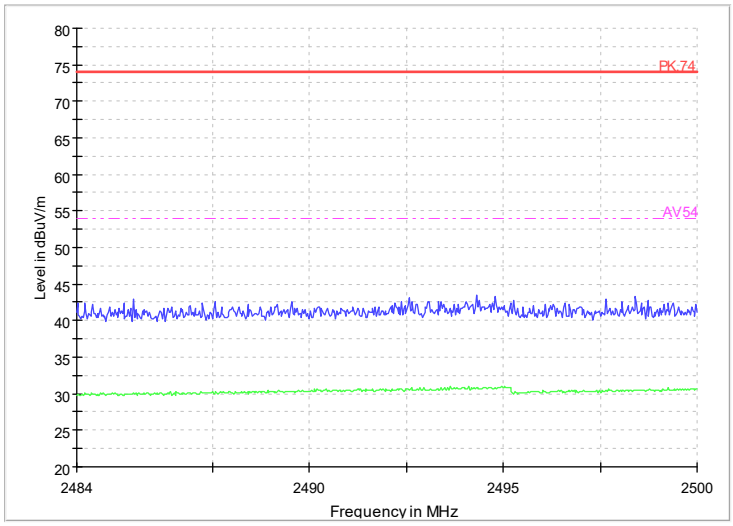
Comment

Radiated Emission Band Edge
Channel No.:0
Test Mode: GFSK (LE 2Mbps)
Polarization：V



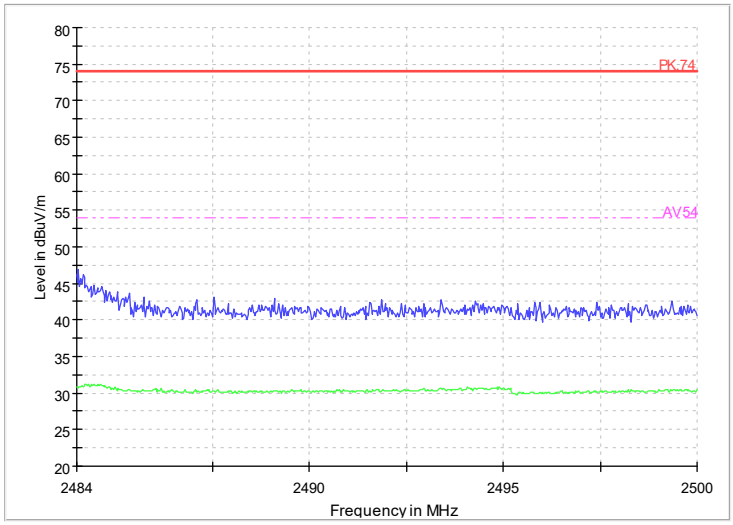
Comment

Radiated Emission Band Edge
Channel No.:0
Test Mode: GFSK (LE 2Mbps)
Polarization：H



Comment

Radiated Emission Band Edge
Channel No.:39
Test Mode: GFSK (LE 2Mbps)
Polarization：V



Comment

Radiated Emission Band Edge
Channel No.:39
Test Mode: GFSK (LE 2Mbps)
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:

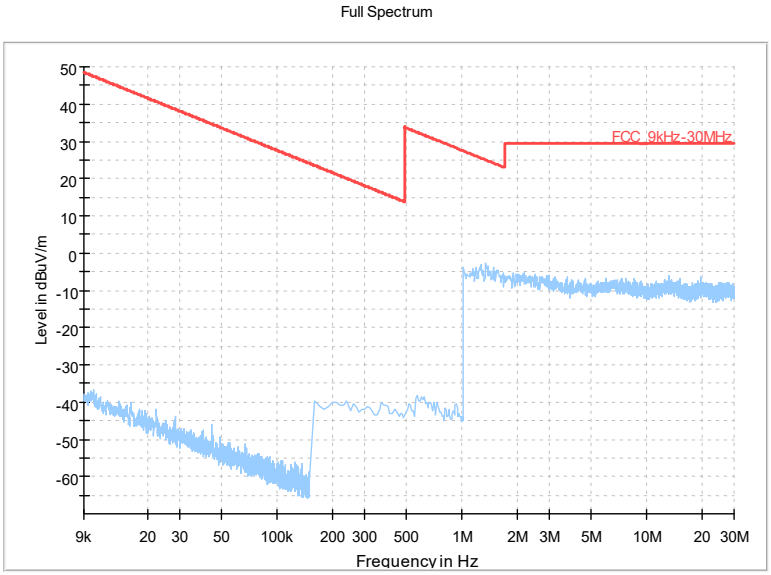
Result= P_{mea} + A_{Rpl}

Sample calculation: (6.67dBμV/m) = (25.07dBuV) + (-18.4dB/m), the corresponding frequency is 45.714000MHz..

For GFSK (LE 1Mbps)

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.714000	6.67	-18.4	25.07	Vertical	40.00	33.33
85.435500	4.73	-20.2	24.93	Vertical	40.00	35.27
98.627500	5.93	-18.7	24.63	Vertical	43.50	37.57
214.591000	5.14	-18.4	23.54	Vertical	43.50	38.36
531.441500	12.93	-9.9	22.83	Vertical	46.00	33.07
860.174500	17.03	-4.0	21.03	Vertical	46.00	28.97

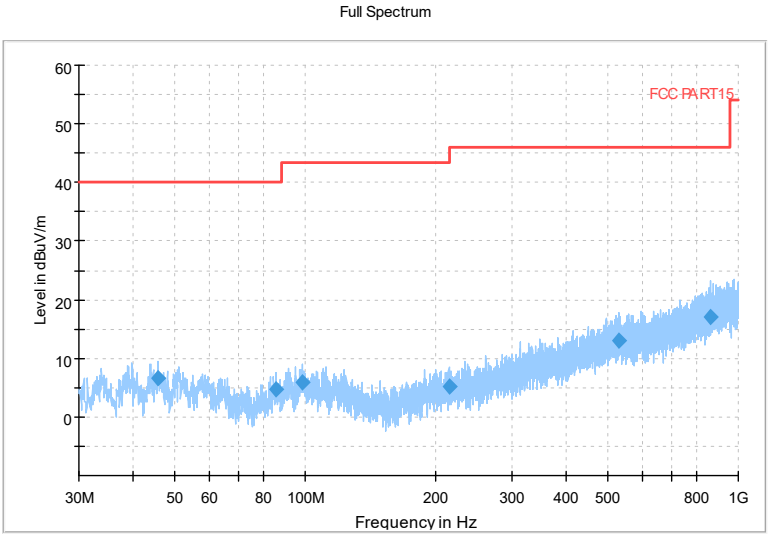


Frequency Range: 9kHz -30MHz

Detector: QP mode

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

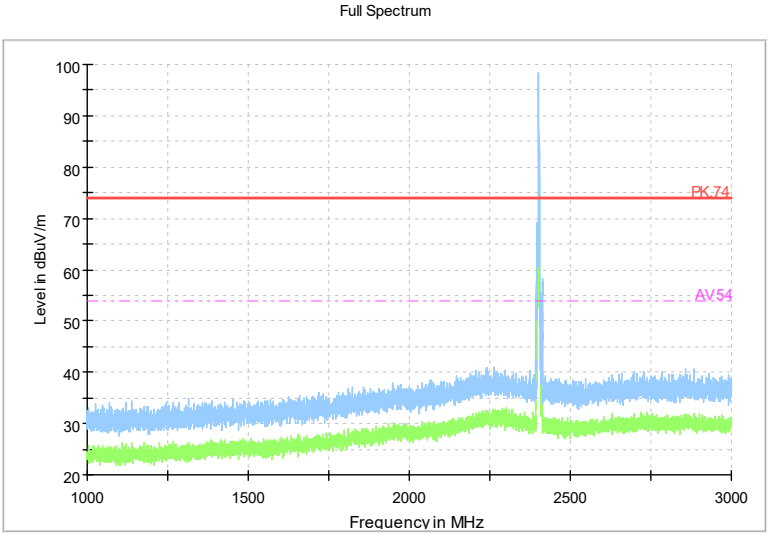
Channel No.:0



Comment

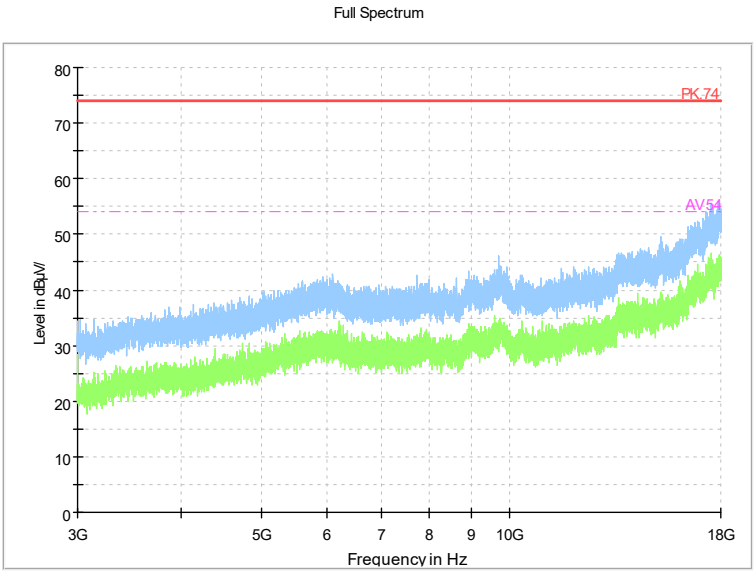
Frequency Range: 30MHz-1GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)

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.

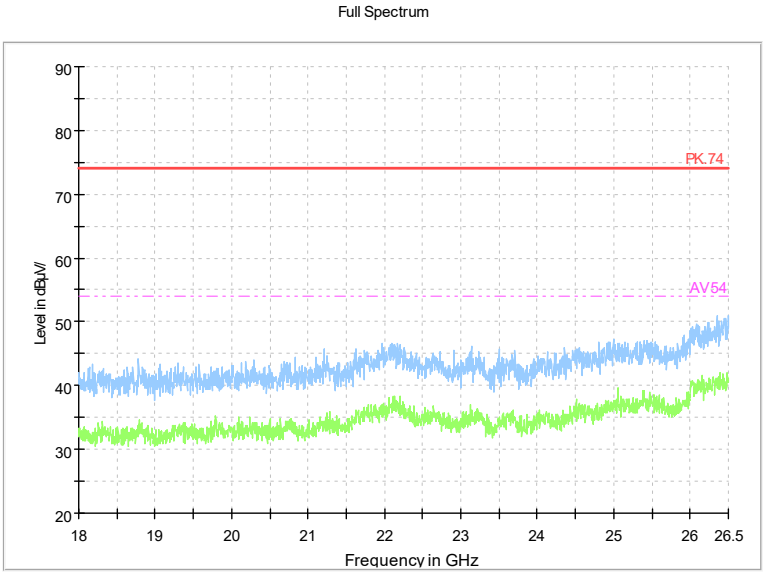


Comment

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

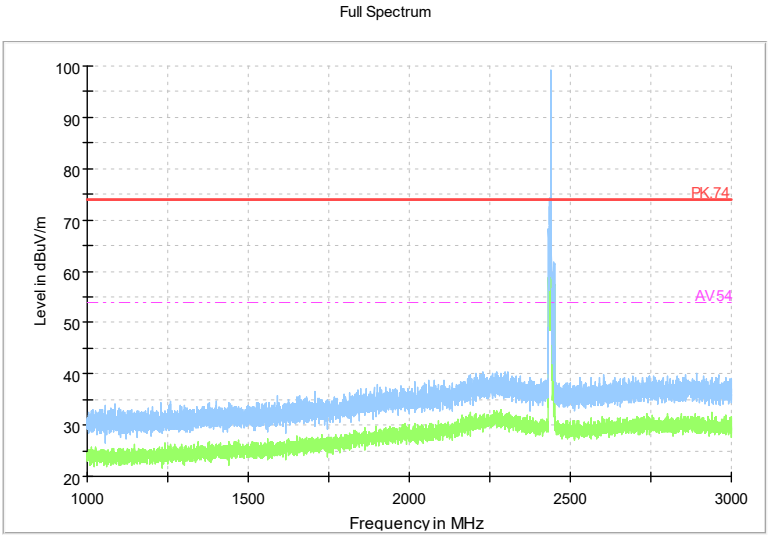


Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)



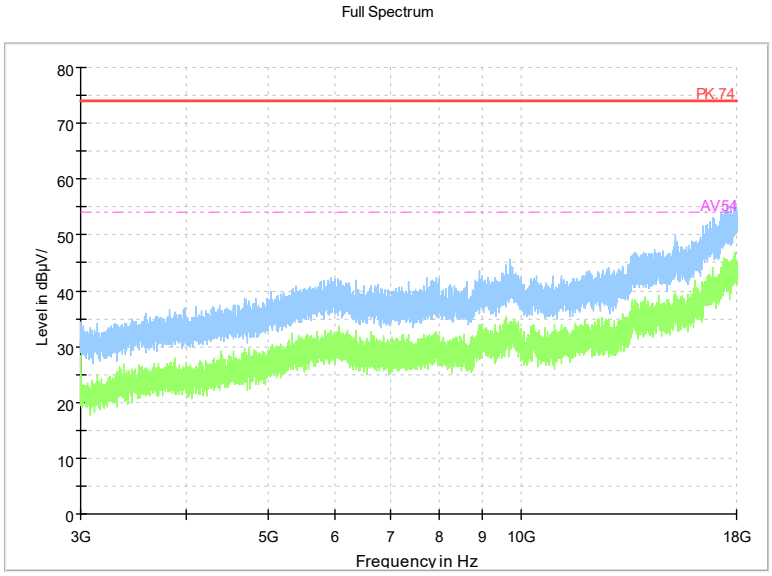
Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)

Channel No.:19



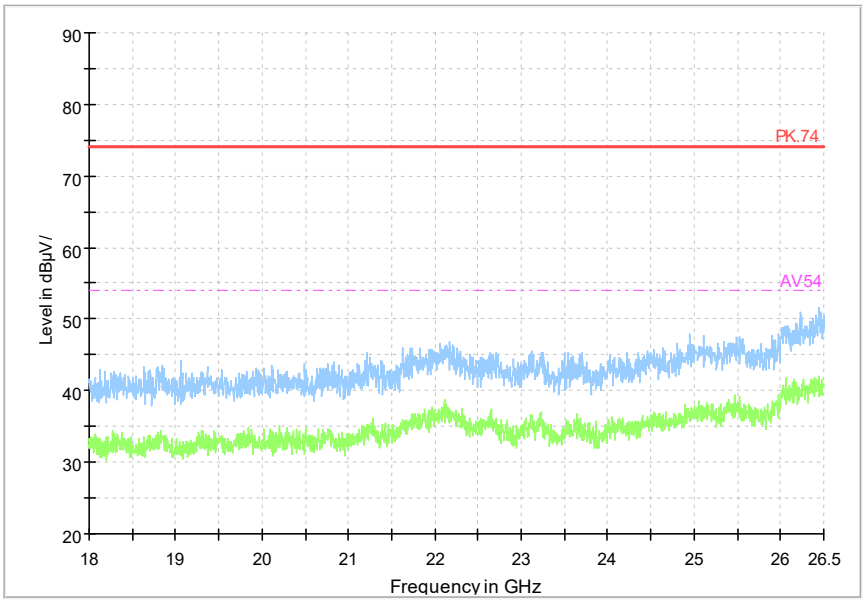
Comment

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



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

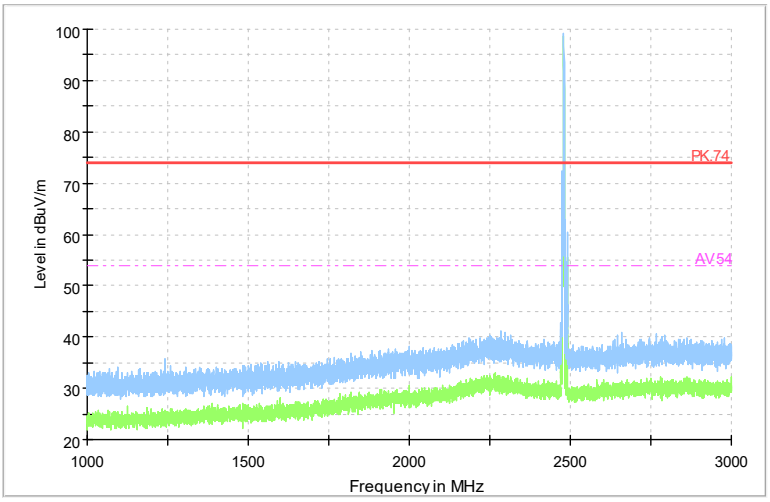
Full Spectrum



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

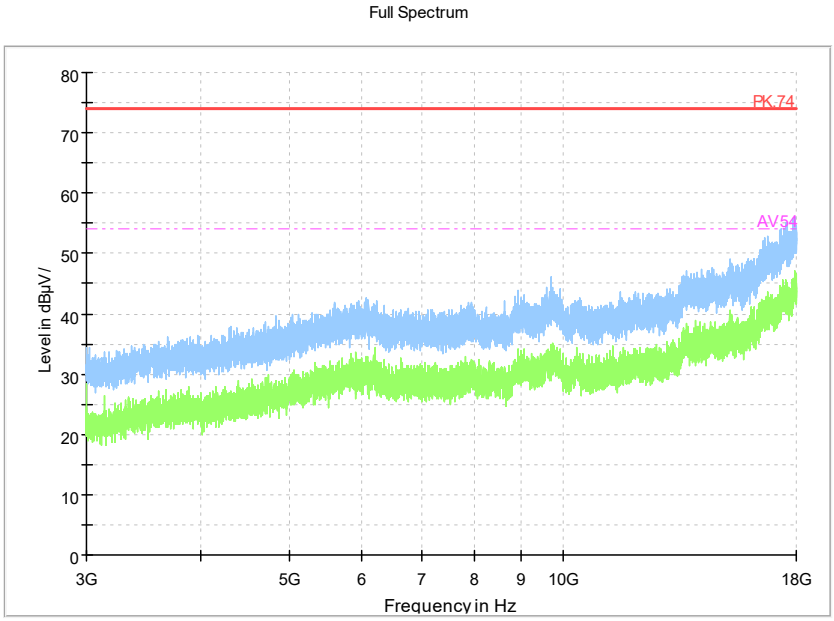
Channel No.:39

Full Spectrum

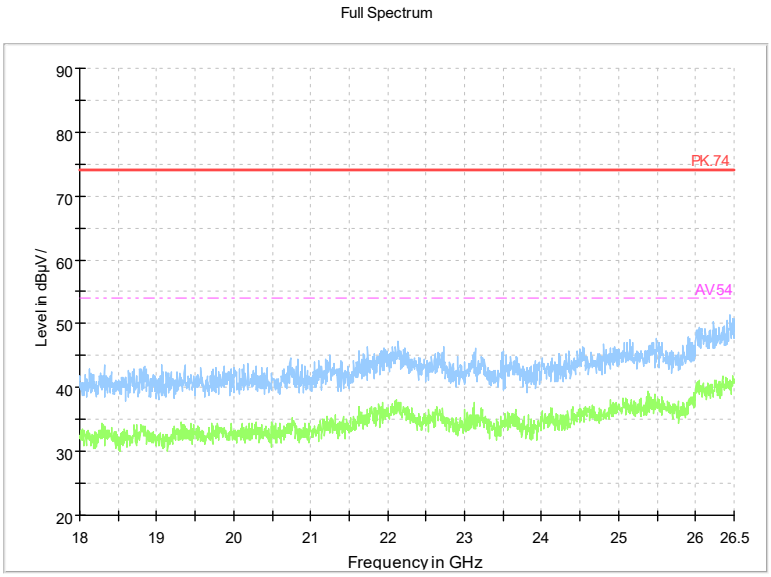


Comment

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



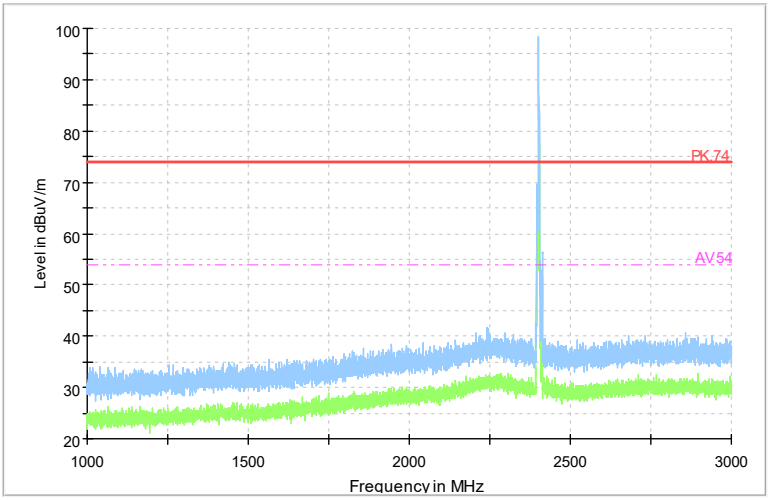
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)



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

Channel No.:0

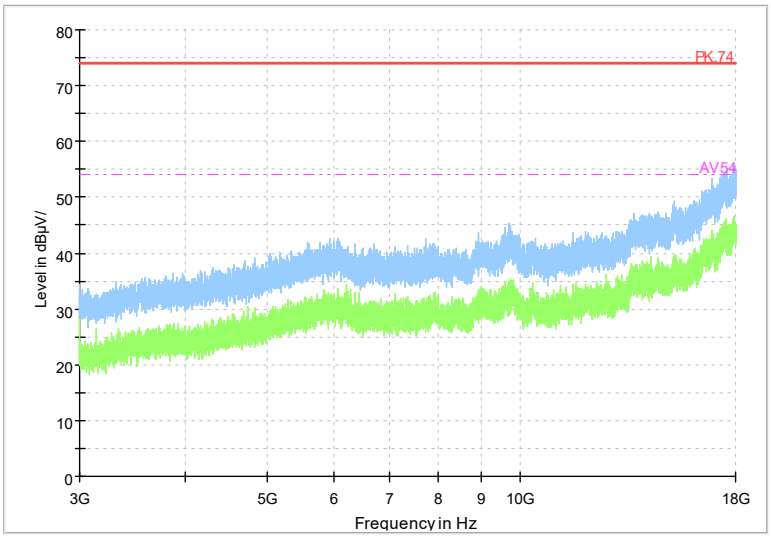
Full Spectrum



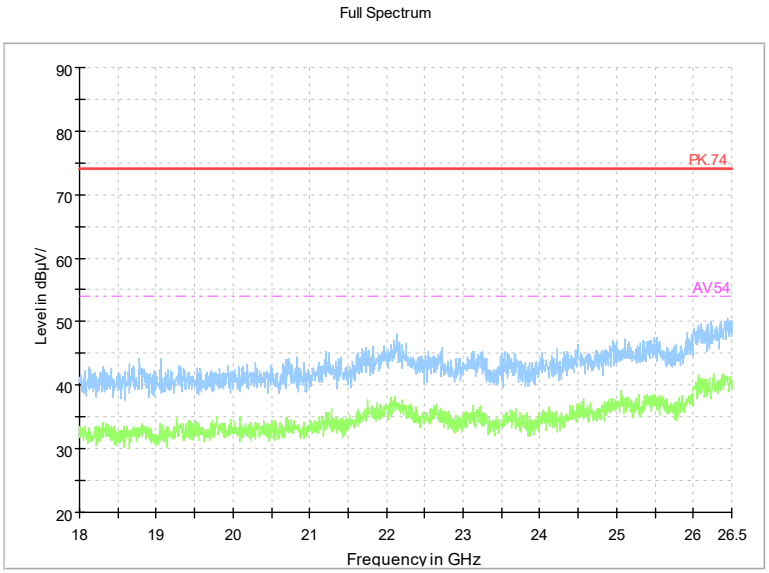
Comment

Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE2Mbps)

Full Spectrum

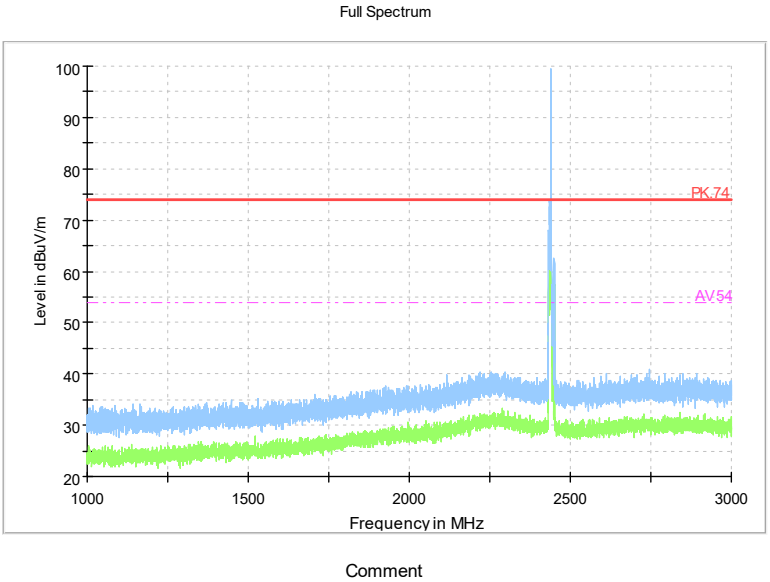


Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE2Mbps)

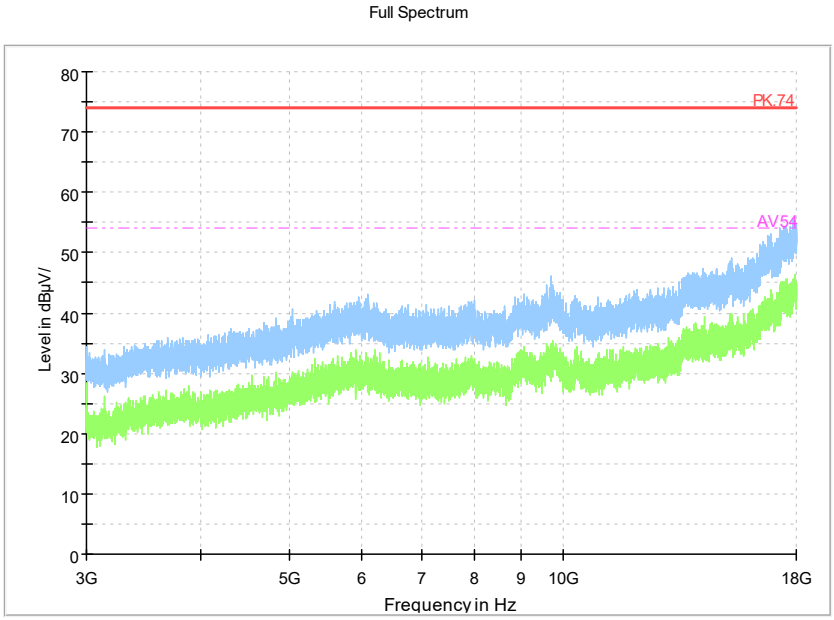


Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE2Mbps)

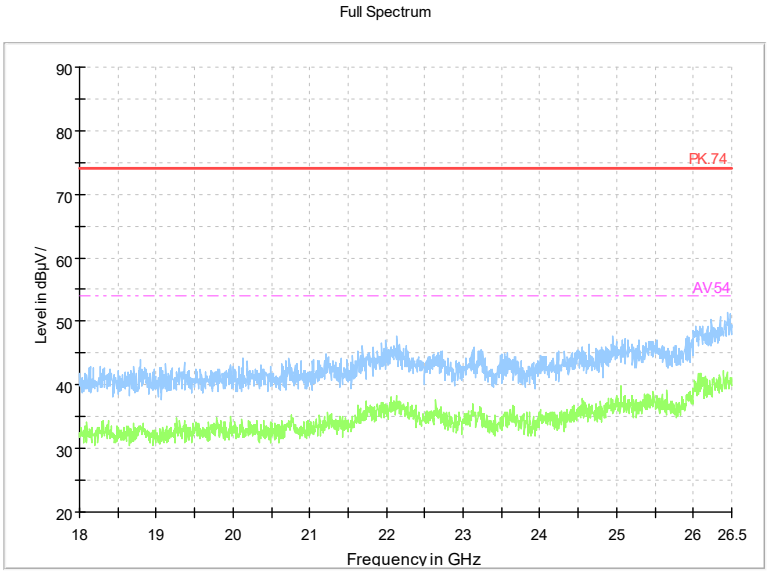
Channel No.:19



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



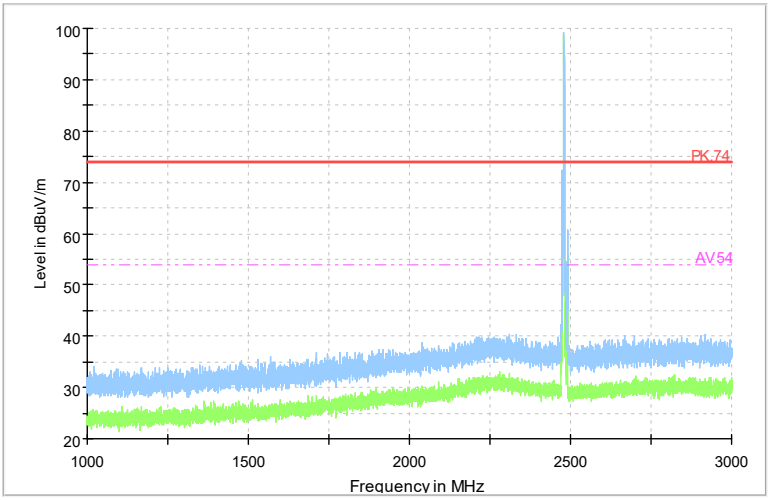
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)



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

Channel No.:39

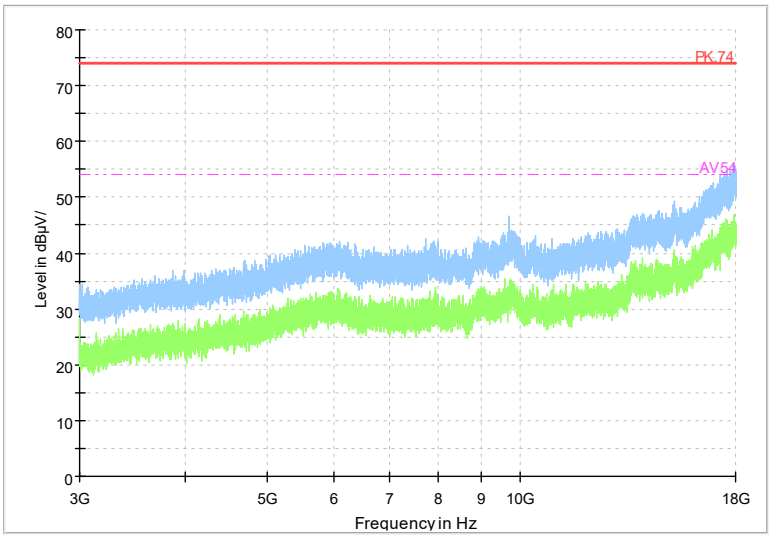
Full Spectrum



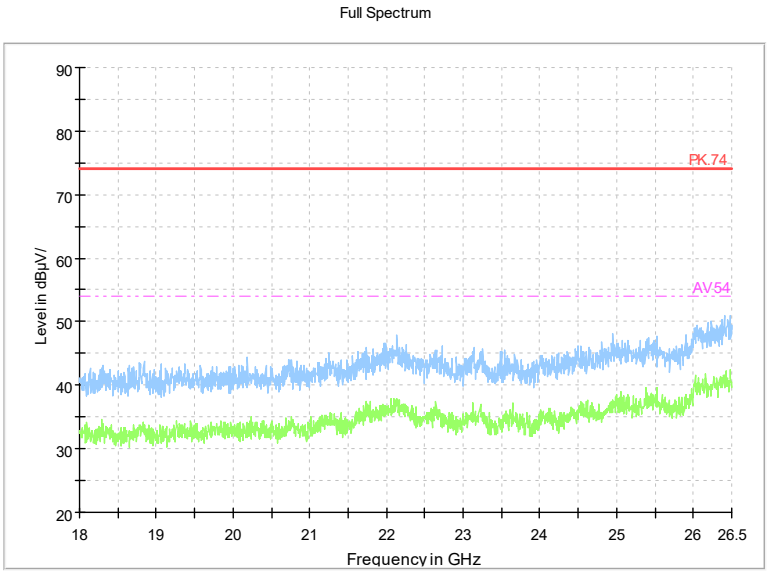
Comment

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)



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

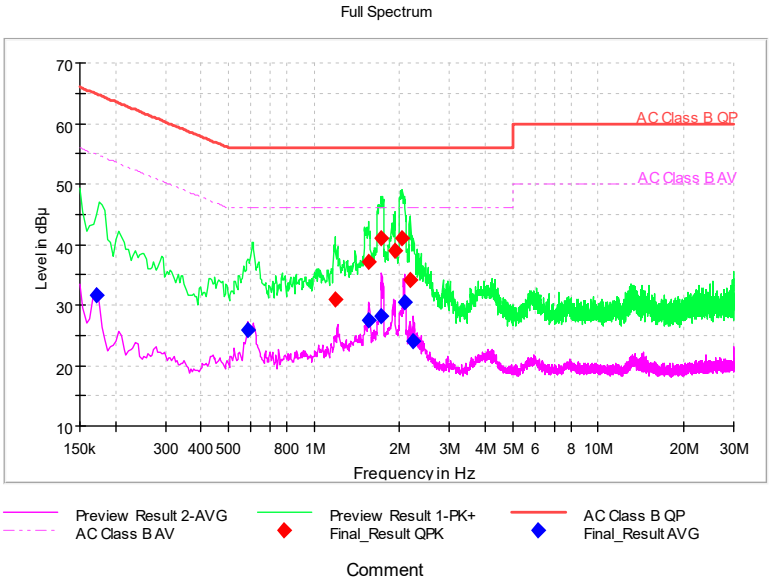
AC Power line Conducted Emission

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: (31.60dBμV) = (1.8dBμV) + (29.8dB), the corresponding frequency is 0.171322MHz.



L+N Line

MEASUREMENT RESULT:

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	PmeaQuasiPeak (dBμV)	PmeaAverage (dBμV)
0.171322	---	31.60	54.90	23.30	L1	29.8	---	1.8
0.584957	---	25.91	46.00	20.09	L1	29.8	---	-3.89
1.186222	30.92	---	56.00	25.08	L1	29.9	1.02	---
1.552950	37.02	---	56.00	18.98	L1	29.9	7.12	---
1.561479	---	27.41	46.00	18.59	L1	29.9	---	-2.49
1.723522	41.03	---	56.00	14.97	L1	29.9	11.13	---
1.732050	---	28.05	46.00	17.95	L1	29.9	---	-1.85
1.923943	38.98	---	56.00	17.02	L1	29.9	9.08	---
2.047607	40.95	---	56.00	15.05	L1	29.9	11.05	---
2.081722	---	30.43	46.00	15.57	N	29.9	---	0.53
2.171272	34.03	---	56.00	21.97	L1	29.9	4.13	---
2.243764	---	24.00	46.00	22.00	N	29.9	---	-5.9

---End of Test Report---