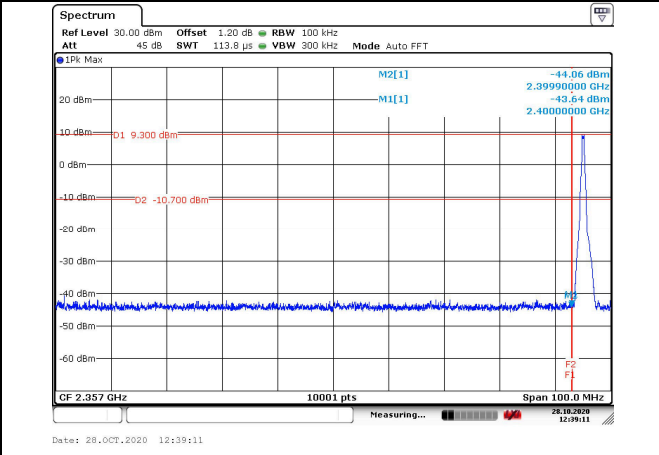
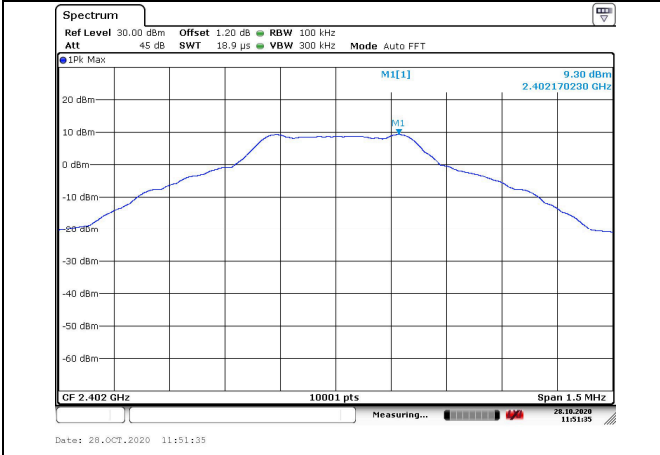


Band Edge measurement

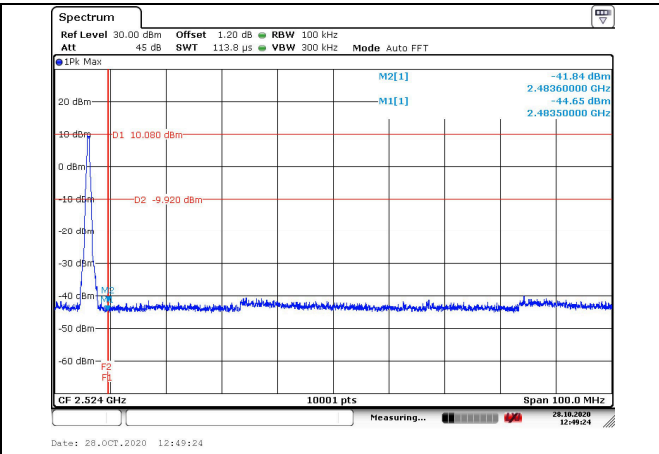
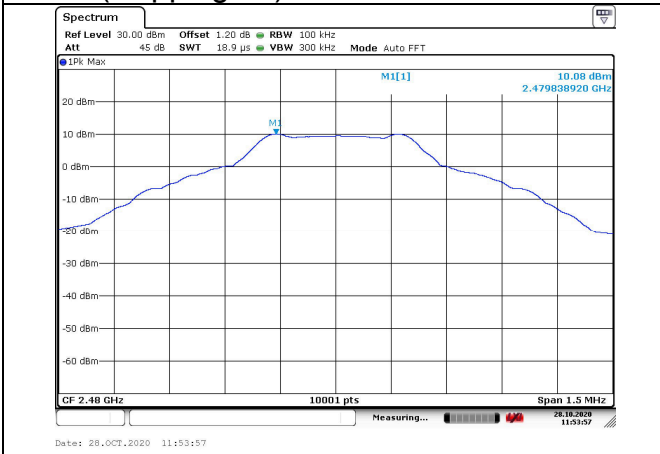
Offset 1.2dB = Temporary antenna connector loss 0.2dB+ Cable loss 1dB

GFSK

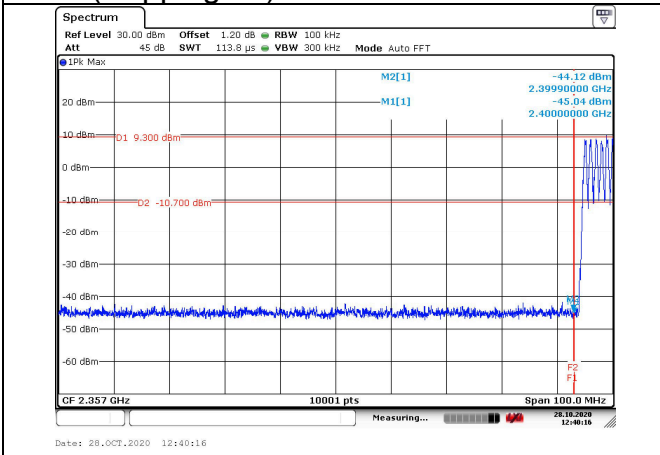
CH0 (Hopping off)



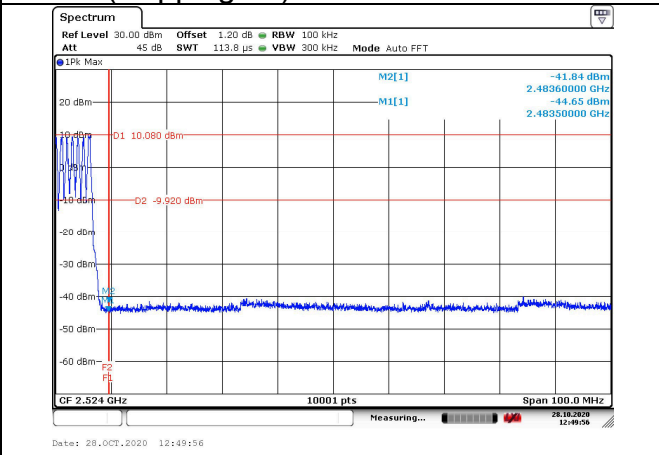
CH78 (Hopping off)



CH0 (Hopping on)

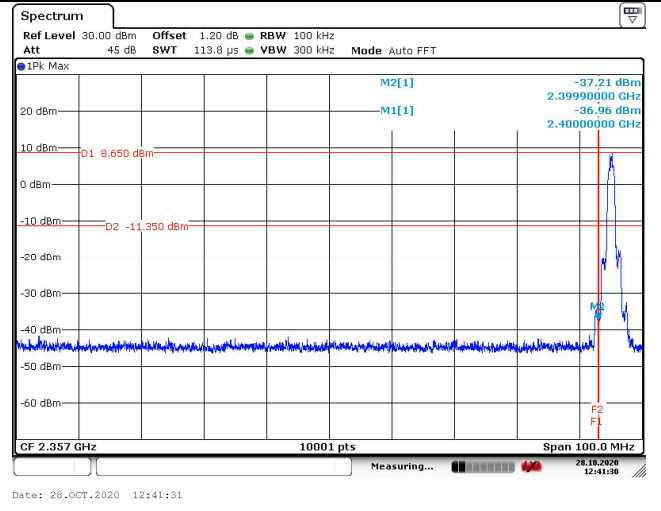
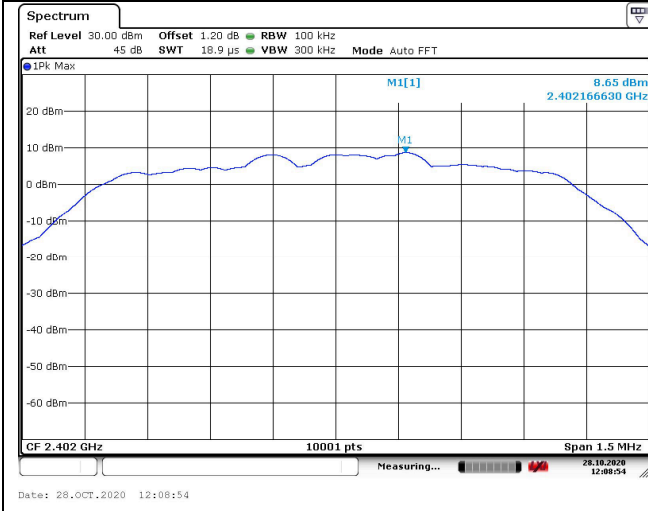


CH78 (Hopping on)

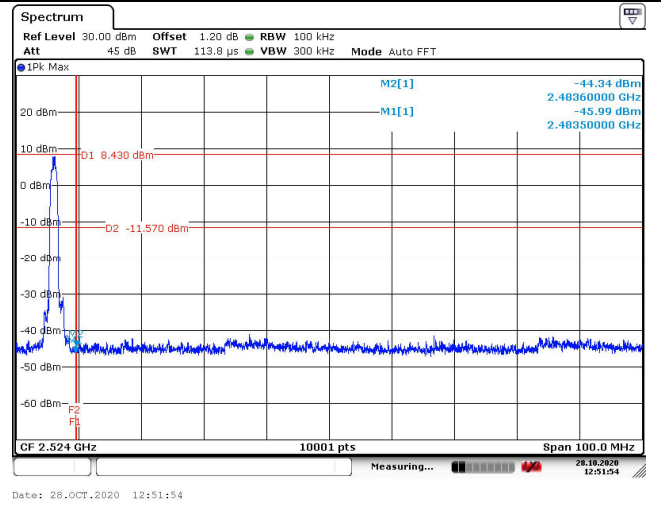
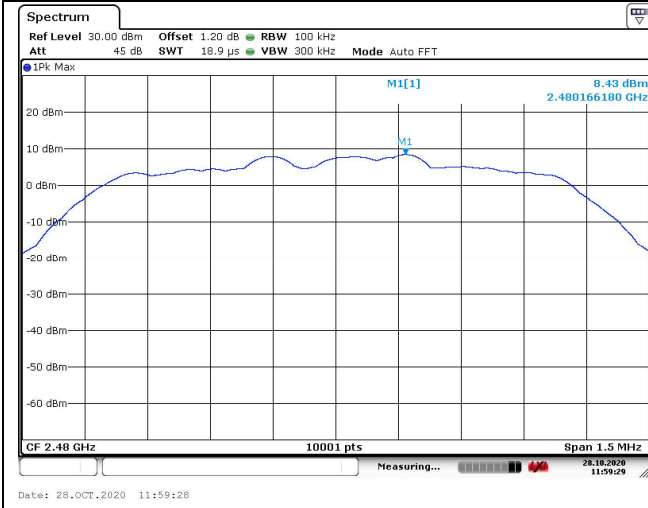


$\pi/4$ DQPSK

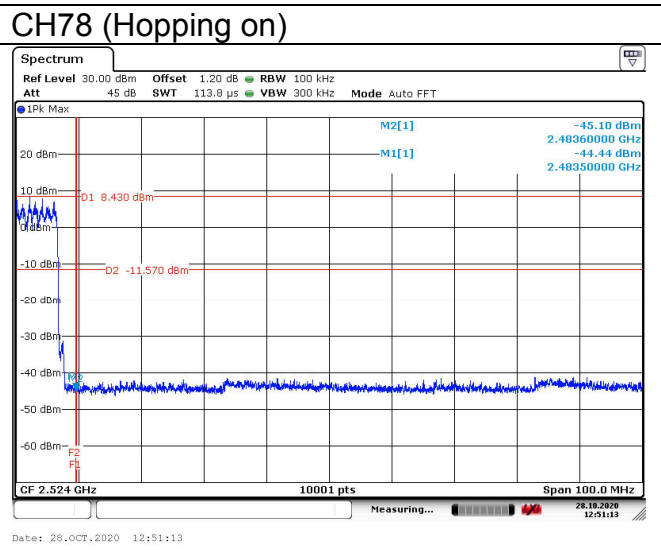
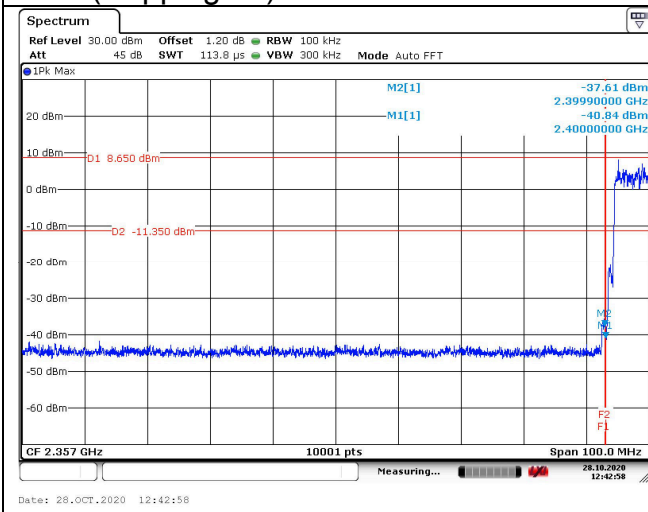
CH0 (Hopping off)



CH78(Hopping off)

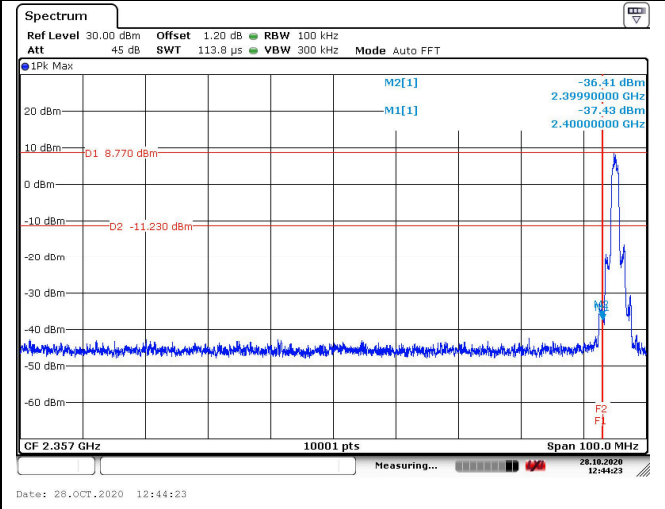
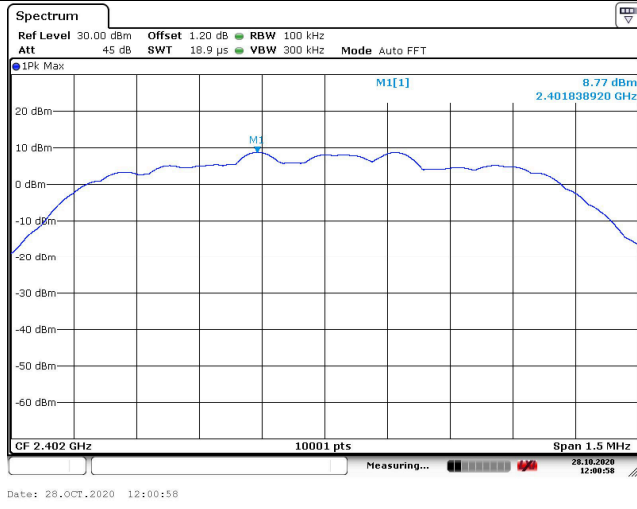


CH0 (Hopping on)

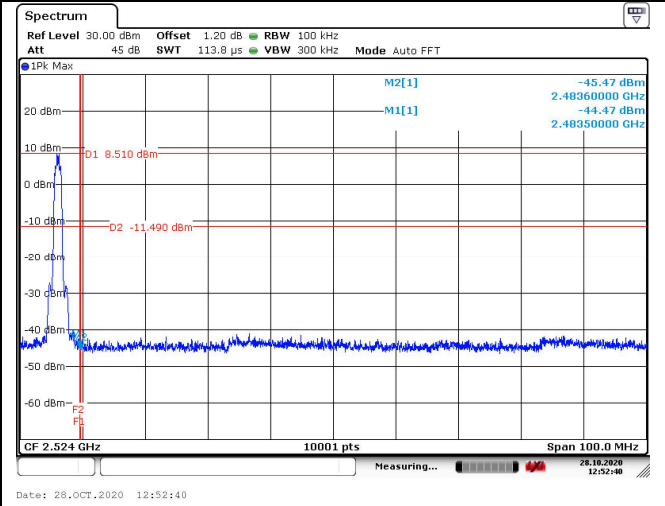
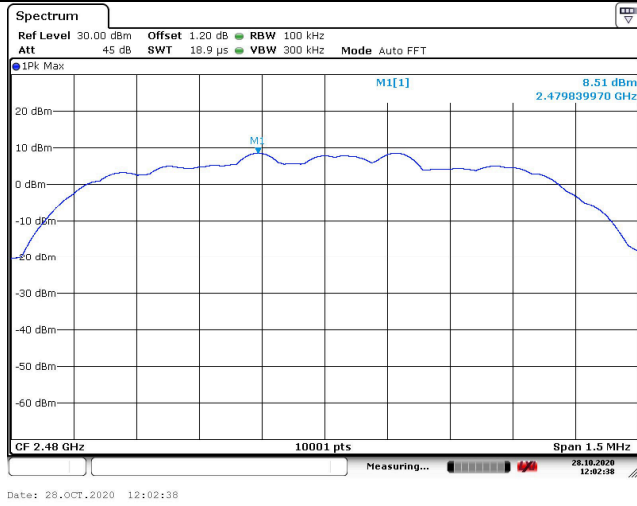


8DPSK

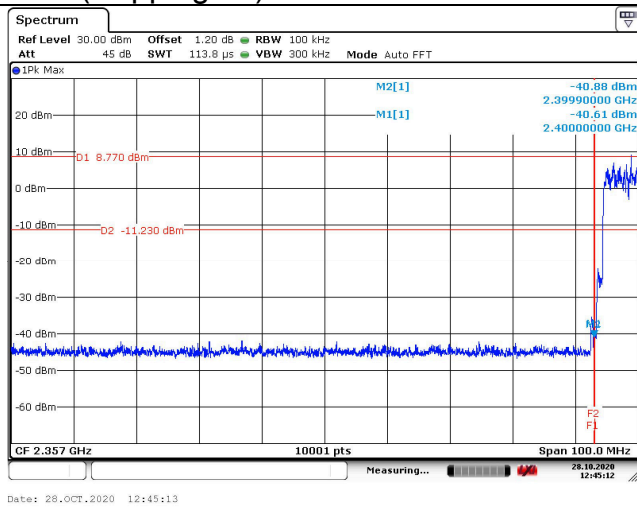
CH0 (Hopping off)



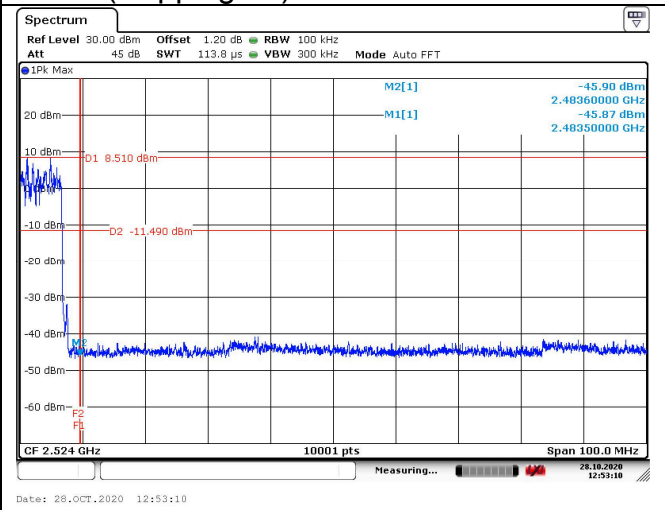
CH78(Hopping off)



CH0 (Hopping on)



CH78 (Hopping on)



APPENDIX B – TEST DATA OF RADIATED EMISSION

Radiated Emission Band Edge

The worst case attitude: The mobile lay down.

The measurement results are obtained as described below:

Measure Level = Reading Level + cable loss + antenna factor

Sample calculation: (102.25 dBuV/m) = (68.25 dBμV) + (8.90 dB) + (25.10 dB), the corresponding frequency is 2402MHz.

Carrier frequency (MHz): 2402

Channel No.:0

Test Mode: GFSK

Polarity: Vertical

Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	102.25	68.25	N/A	N/A	8.90	25.10
2	2390	42.54	8.54	-31.46	74.00	8.90	25.10

Carrier frequency (MHz): 2402

Channel No.:0

Test Mode: GFSK

Polarity: Horizontal

Detector: Peak

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	99.82	65.82	N/A	N/A	8.90	25.10
2	2390	38.95	4.95	-35.05	74.00	8.90	25.10

Carrier frequency (MHz): 2402

Channel No.:0

Test Mode: GFSK

Polarity: Vertical

Detector: Average

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	100.20	66.20	N/A	N/A	8.90	25.10
2	2390	36.81	2.81	-17.19	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	97.85	63.85	N/A	N/A	8.90	25.10
2	2390	35.81	1.81	-18.19	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	103.53	69.53	N/A	N/A	8.90	25.10
2	2483.5	43.64	9.64	-30.36	74.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	100.53	66.53	N/A	N/A	8.90	25.10
2	2483.5	40.13	6.13	-33.87	74.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	100.85	66.85	N/A	N/A	8.90	25.10
2	2483.5	36.36	2.36	-17.64	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	97.88	63.88	N/A	N/A	8.90	25.10
2	2483.5	34.40	0.40	-19.60	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	103.46	69.46	N/A	N/A	8.90	25.10
2	2390	43.21	9.21	-30.79	74.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	101.32	67.32	N/A	N/A	8.90	25.10
2	2390	39.14	5.14	-34.86	74.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	98.98	64.98	N/A	N/A	8.90	25.10
2	2390	37.41	3.41	-16.59	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	96.80	62.80	N/A	N/A	8.90	25.10
2	2390	36.11	2.11	-17.89	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	103.19	69.19	N/A	N/A	8.90	25.10
2	2483.5	43.74	9.74	-30.26	74.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	100.50	66.50	N/A	N/A	8.90	25.10
2	2483.5	40.16	6.16	-33.84	74.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	97.48	63.48	N/A	N/A	8.90	25.10
2	2483.5	38.02	4.02	-15.98	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	94.99	60.99	N/A	N/A	8.90	25.10
2	2483.5	37.33	3.33	-16.67	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	104.44	70.44	N/A	N/A	8.90	25.10
2	2390	42.39	8.39	-31.61	74.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	101.92	67.92	N/A	N/A	8.90	25.10
2	2390	38.36	4.36	-35.64	74.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	98.08	64.08	N/A	N/A	8.90	25.10
2	2390	37.30	3.30	-16.70	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2402	95.45	61.45	N/A	N/A	8.90	25.10
2	2390	35.87	1.87	-18.13	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	103.00	69.00	N/A	N/A	8.90	25.10
2	2483.5	43.11	9.11	-30.89	74.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	100.29	66.29	N/A	N/A	8.90	25.10
2	2483.5	39.25	5.25	-34.75	74.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	99.08	65.08	N/A	N/A	8.90	25.10
2	2483.5	36.60	2.60	-17.40	54.00	8.90	25.10

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

No	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	cable loss (dB)	antenna factor (dB)
1	2480	96.41	62.41	N/A	N/A	8.90	25.10
2	2483.5	35.45	1.45	-18.55	54.00	8.90	25.10

Sample Calculations

Determining Spurious Emissions Levels

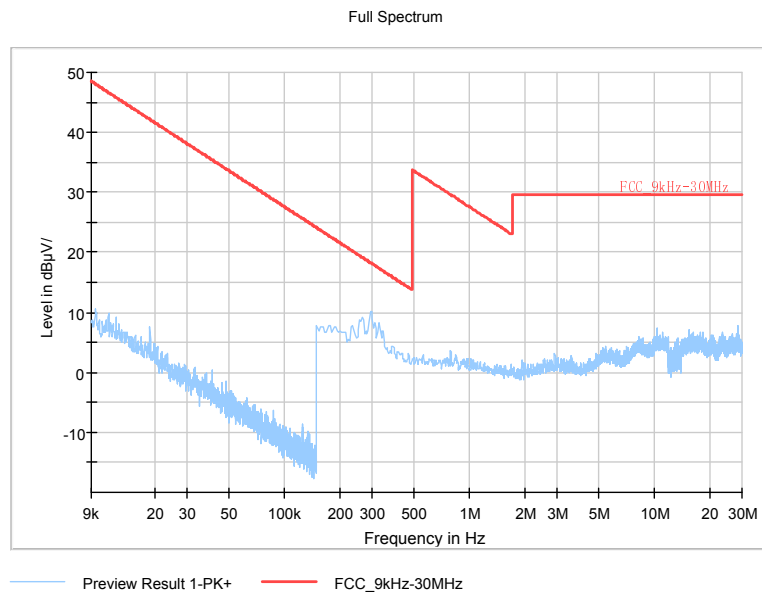
A “reference path loss” is established and the A_{Rpl} is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss.

The measurement results are obtained as described below:

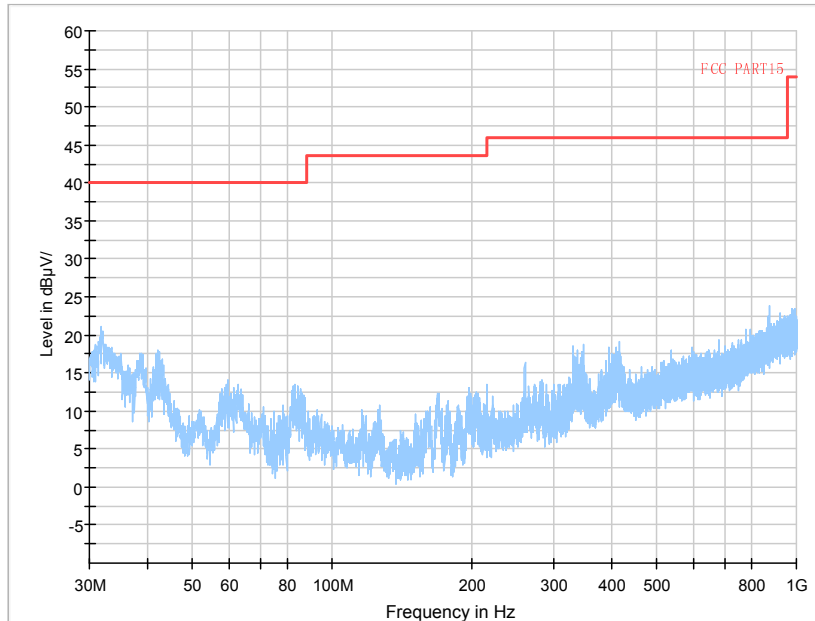
$$\text{Result} = P_{\text{mea}} + A_{Rpl}$$

Sample calculation: $(33.86 \text{ dB}\mu\text{V/m}) = (44.34 \text{ dB}\mu\text{V}) + (-18.0 \text{ dB/m})$, the corresponding frequency is 41.177500MHz.

The worst case attitude: The mobile lay down.

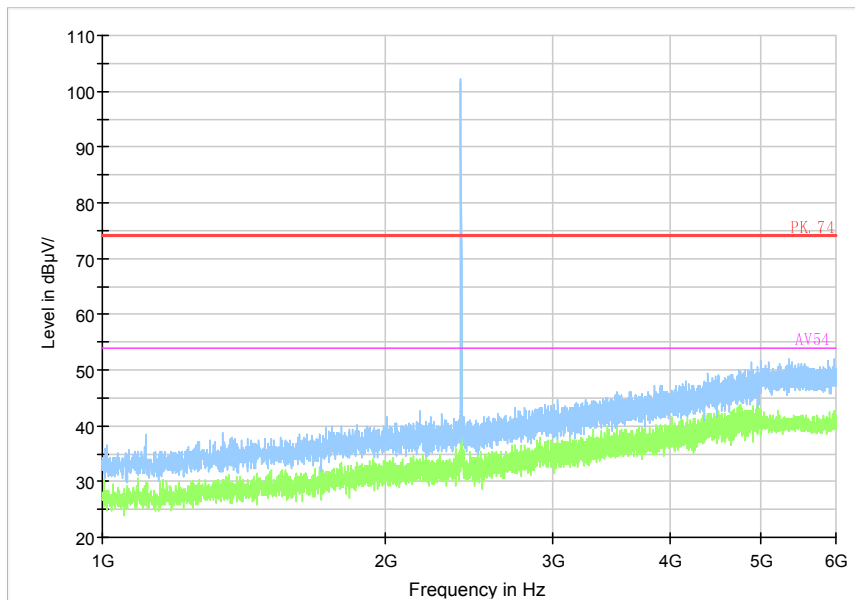


Carrier frequency (MHz): 2402
Channel No.:0

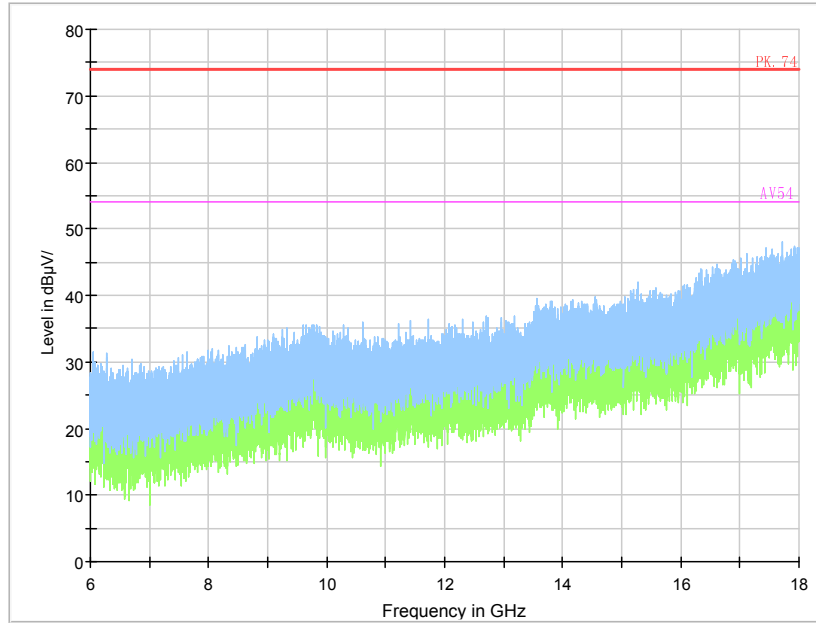


Frequency Range: 30MHz-1000MHz
Detector: QP mode
Modulation type: GFSK

Full Spectrum

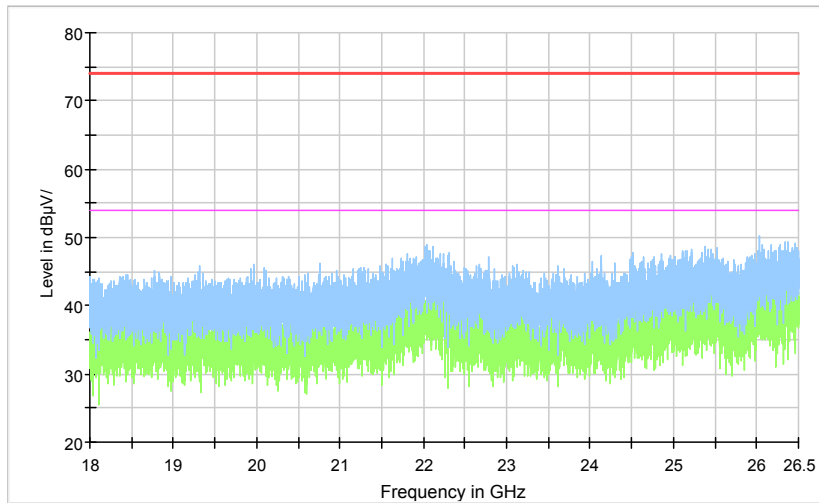


Frequency Range: 1GHz-6GHz
Detector: Av mode and PK mode
Modulation type: GFSK



Frequency Range: 6GHz- 18GHz
Detector: Av mode and PK mode
Modulation type: GFSK

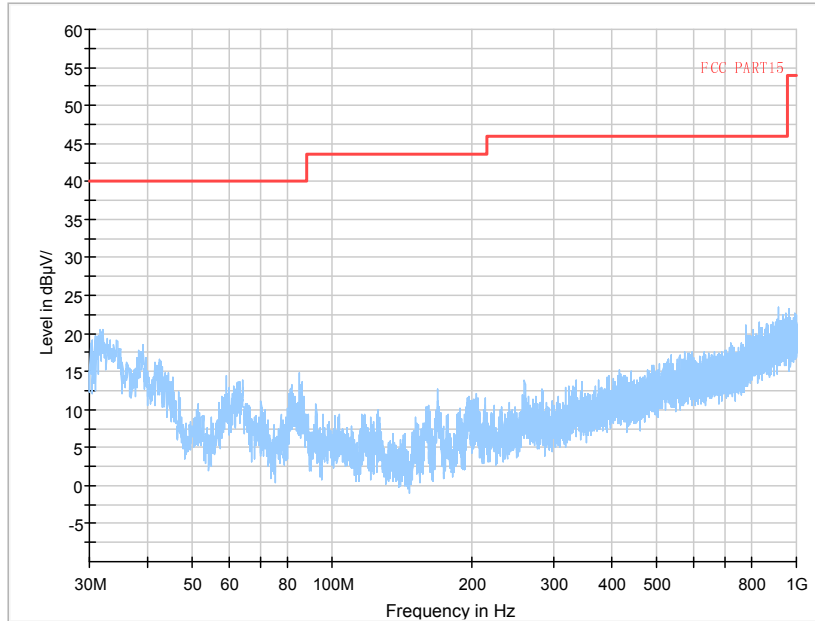
Full Spectrum



Preview Result 2-AVG Preview Result 1-PK+ PK70-74 AV50-54

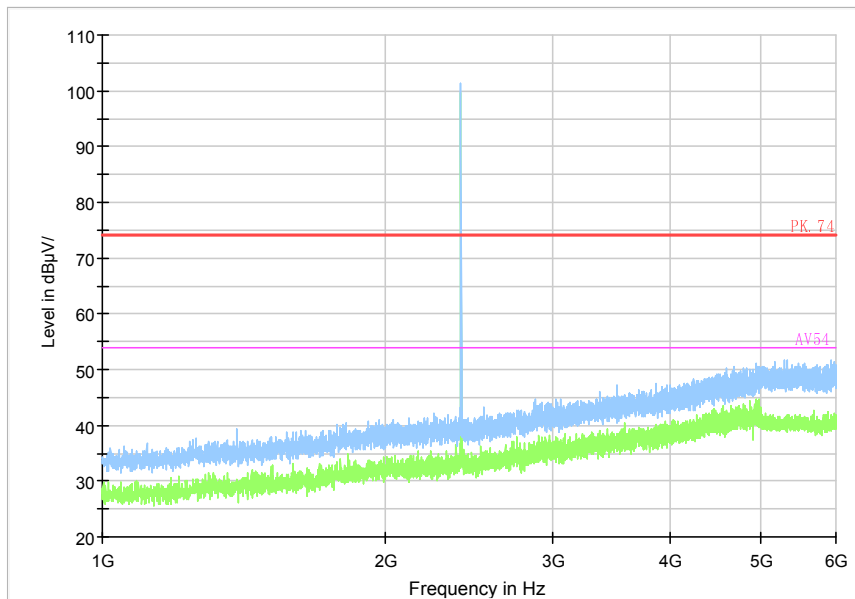
Comment

Frequency Range: 18GHz-25GHz
Detector: Av mode and PK mode
Modulation type: GFSK

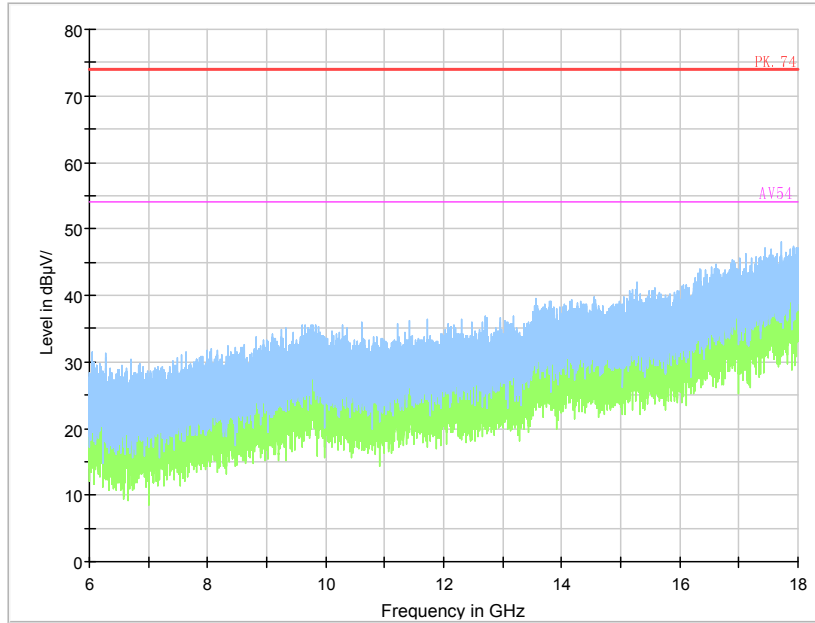


Frequency Range: 30MHz-1000 MHz
Detector: QP mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum

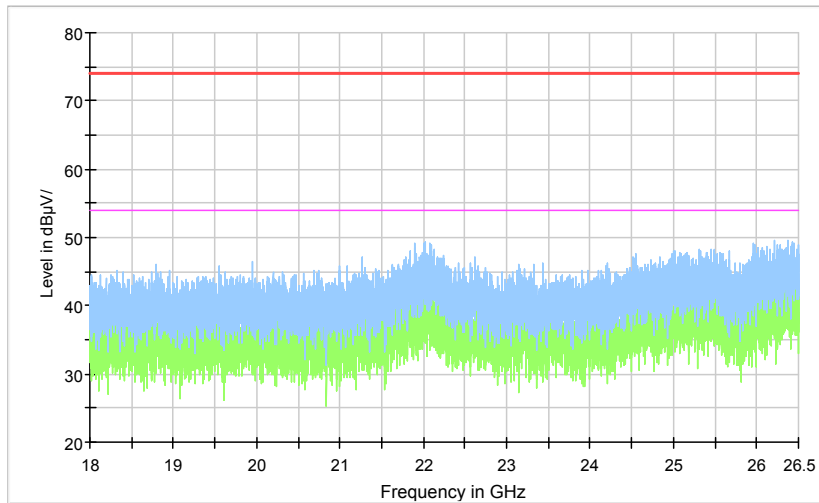


Frequency Range: 1GHz-6GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK



Frequency Range: 6GHz-18GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK

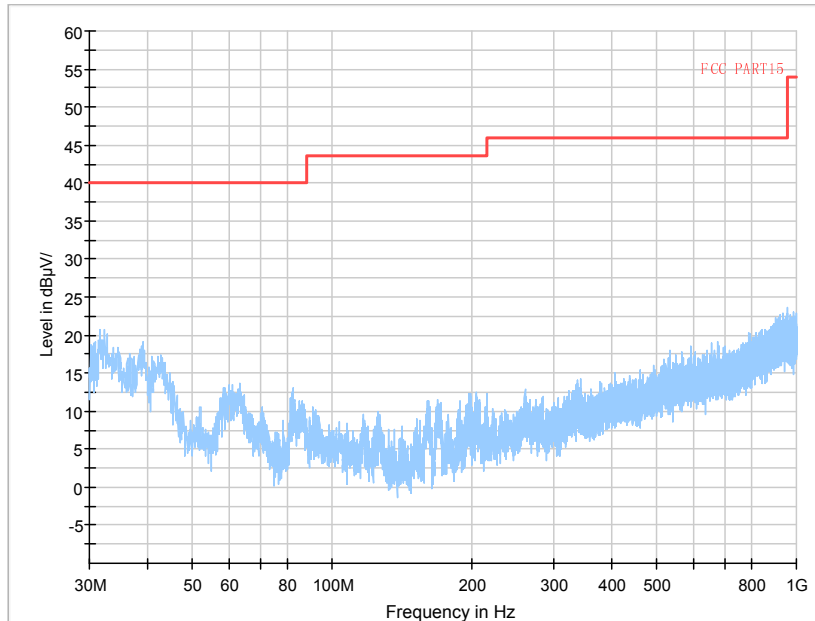
Full Spectrum



Preview Result 2-AVG Preview Result 1-PK+ PK70-74 AV50-54

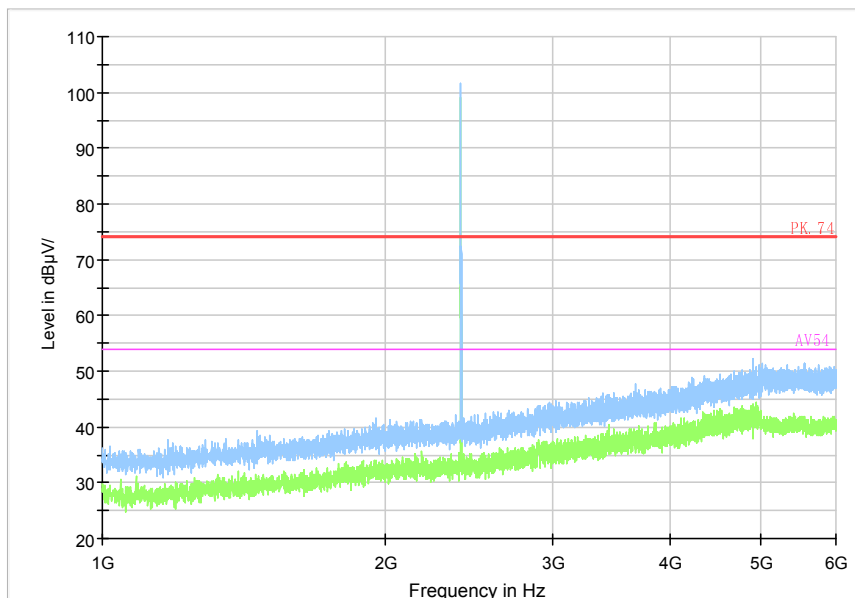
Comment

Frequency Range: 18GHz-25GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK



Frequency Range: 30MHz-1000 MHz
Detector: QP mode
Modulation type: 8DPSK

Full Spectrum



Frequency Range: 1GHz-6GHz
Detector: Av mode and PK mode
Modulation type: 8DPSK