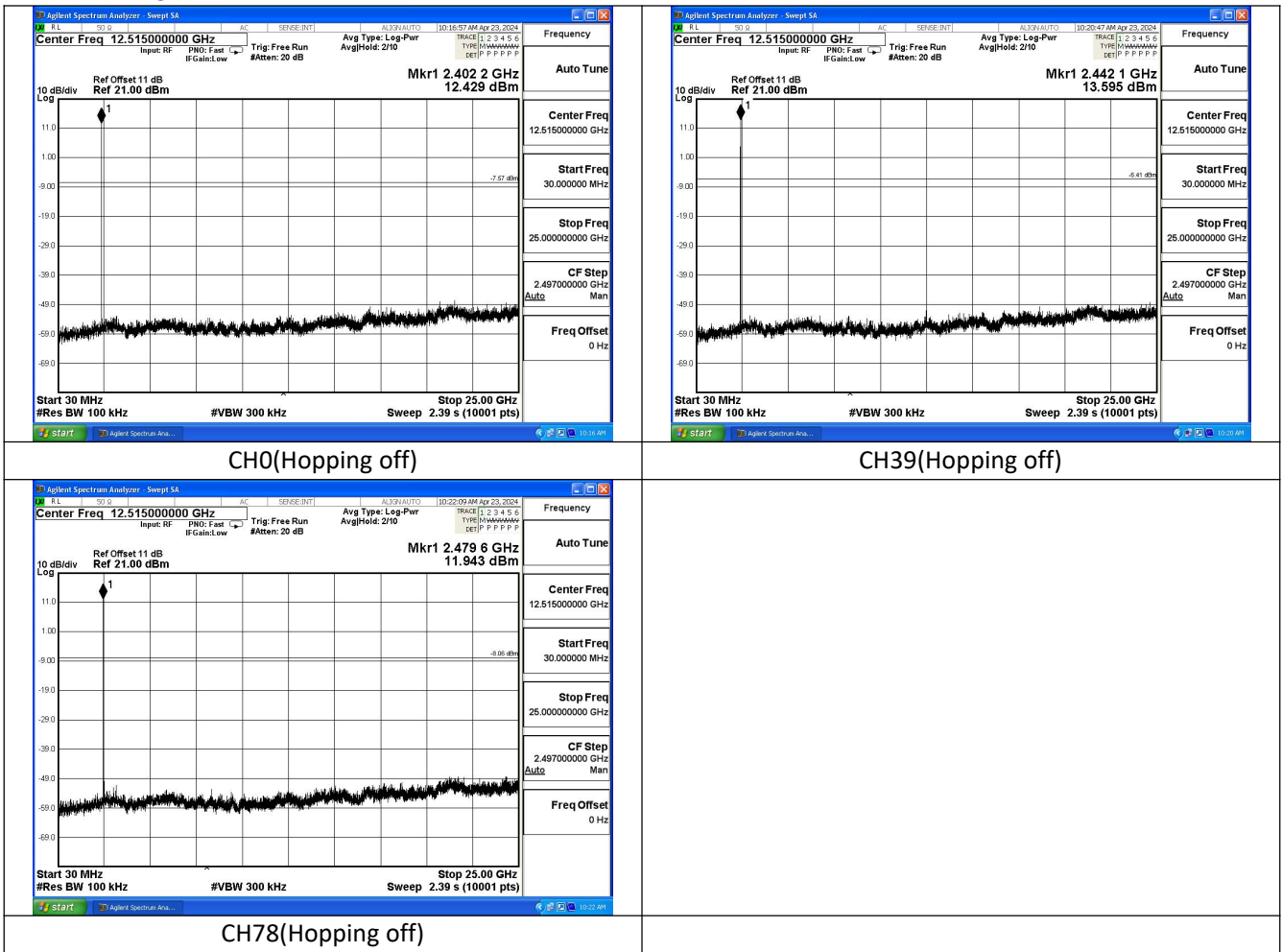
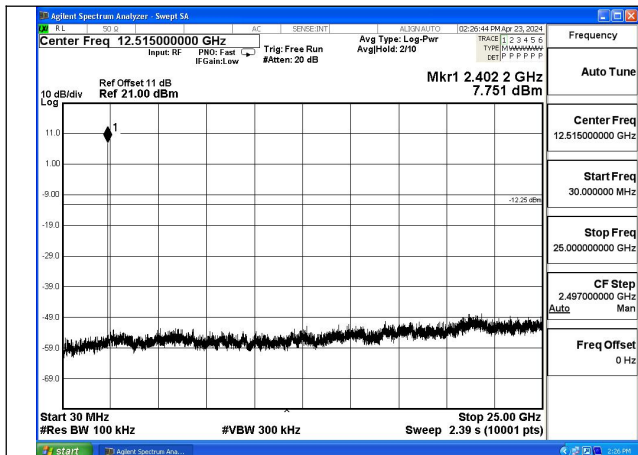


6 Conducted Out of band emission measurement

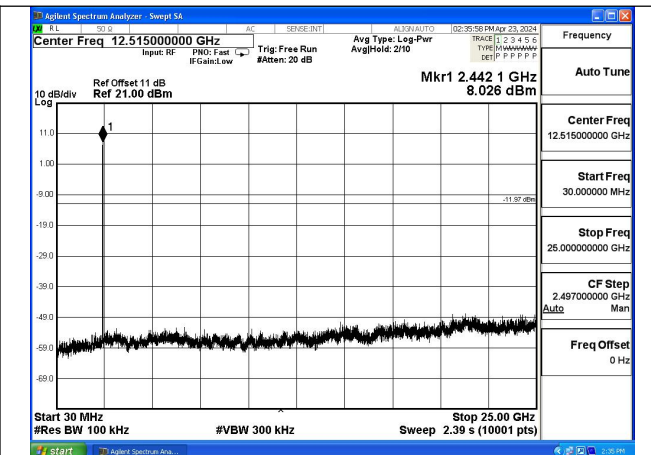
Test Mode: GFSK



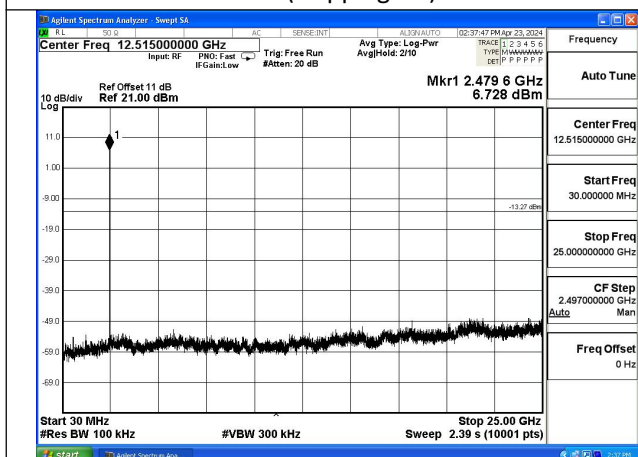
Test Mode: π /4DQPSK



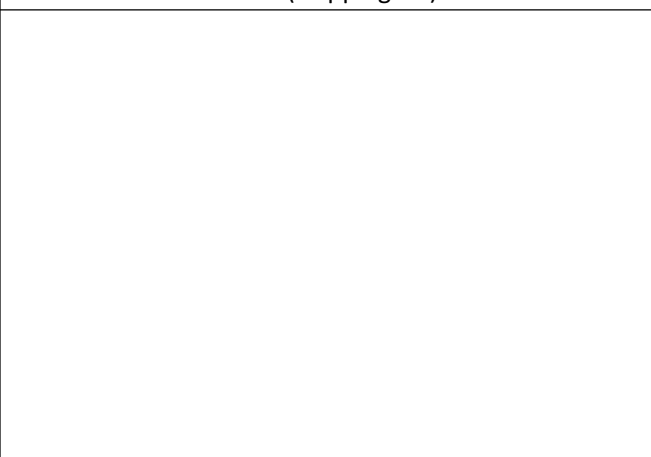
CH0(Hopping off)



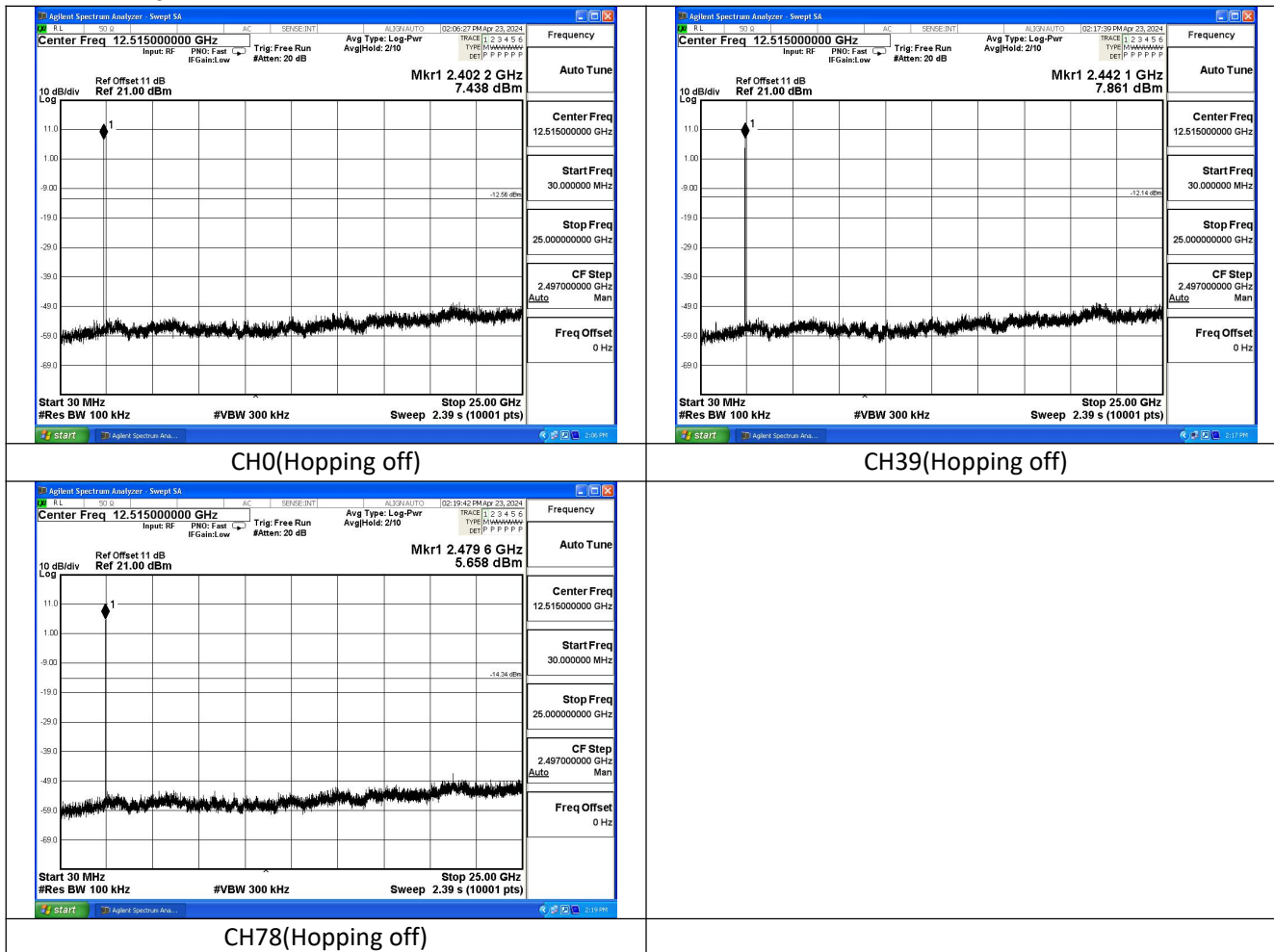
CH39(Hopping off)



CH78(Hopping off)

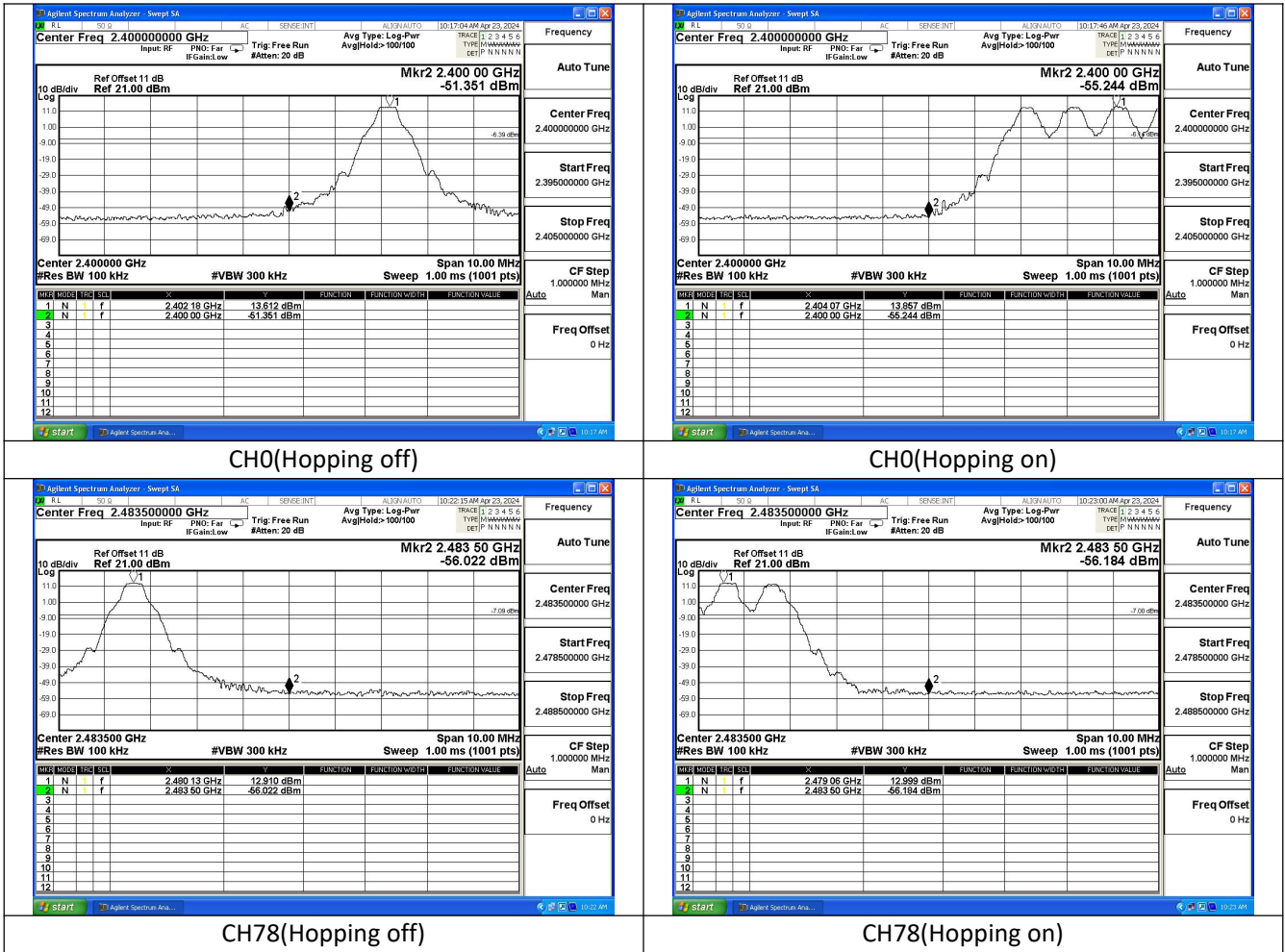


Test Mode: 8DPSK

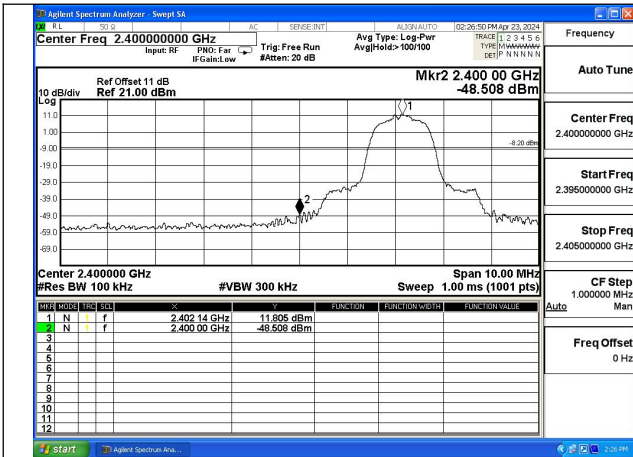


7 Band Edge measurement

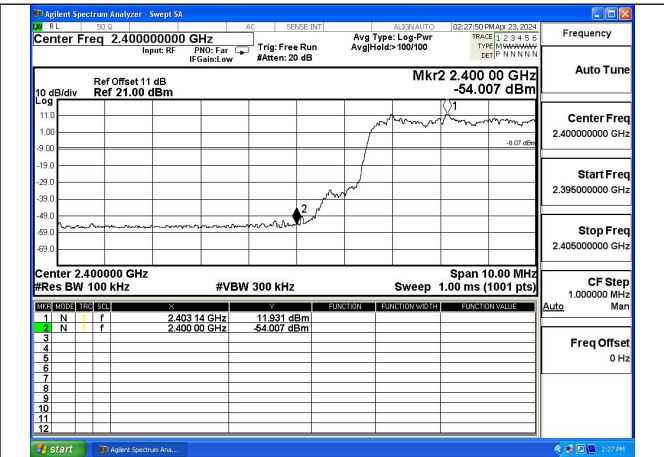
Test Mode: GFSK



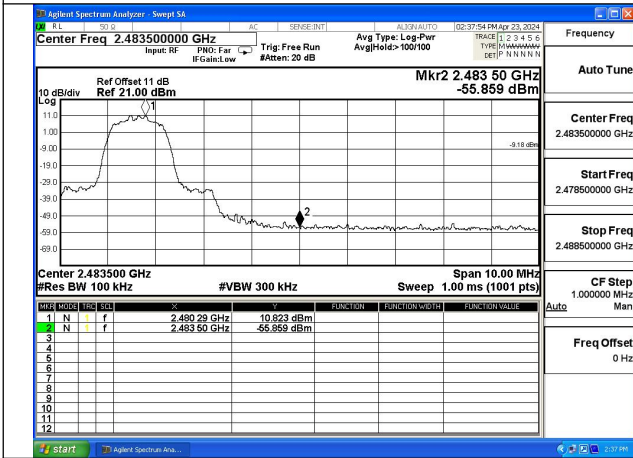
Test Mode: $\pi/4$ DQPSK



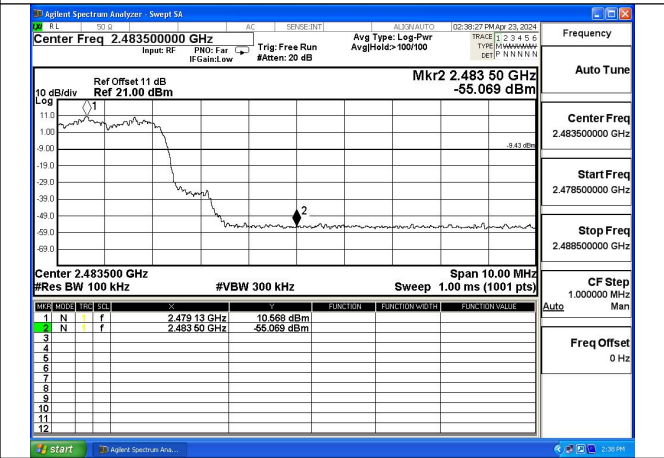
CH0(Hopping off)



CH0(Hopping on)

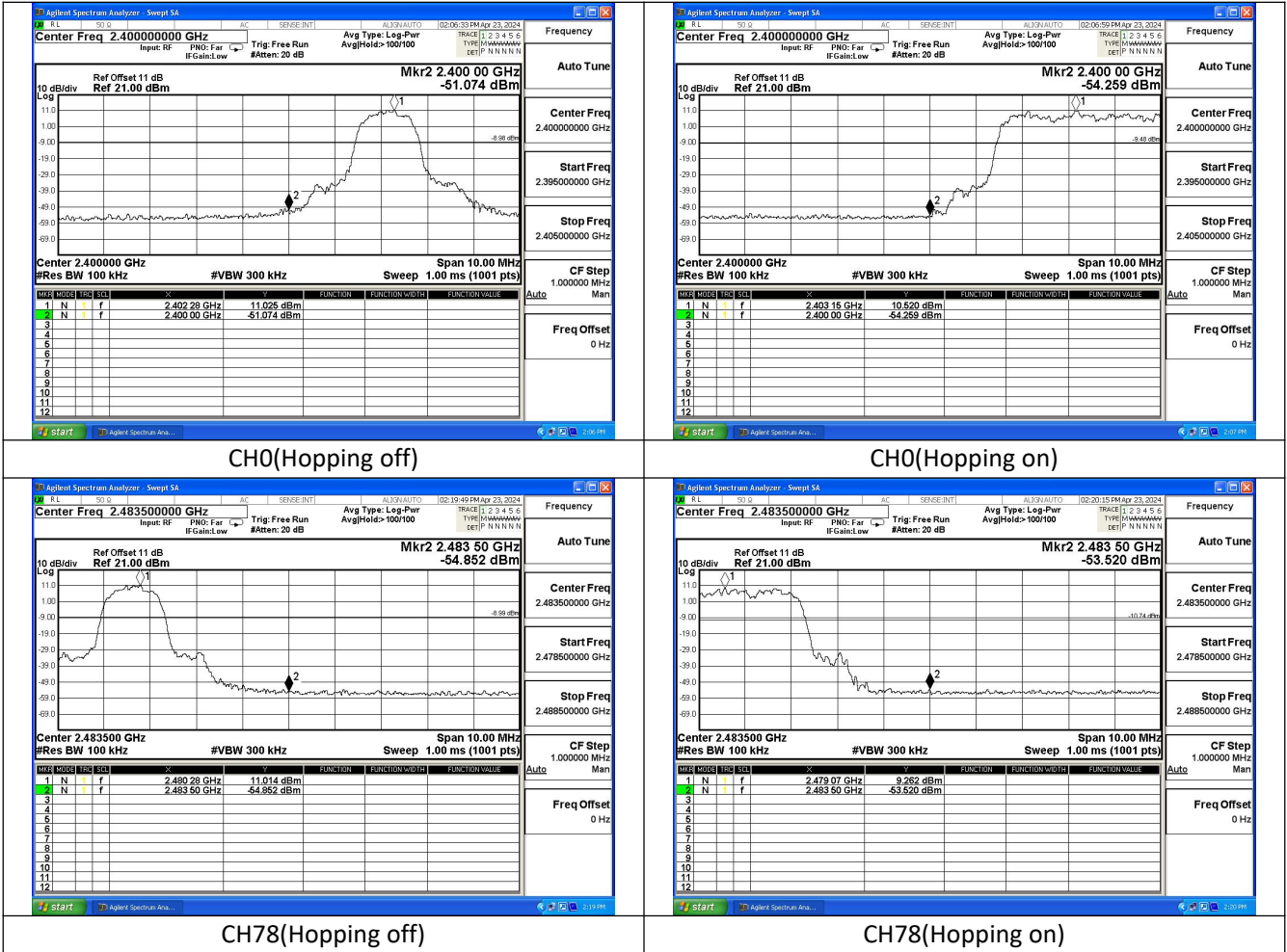


CH78(Hopping off)



CH78(Hopping on)

Test Mode: 8DPSK



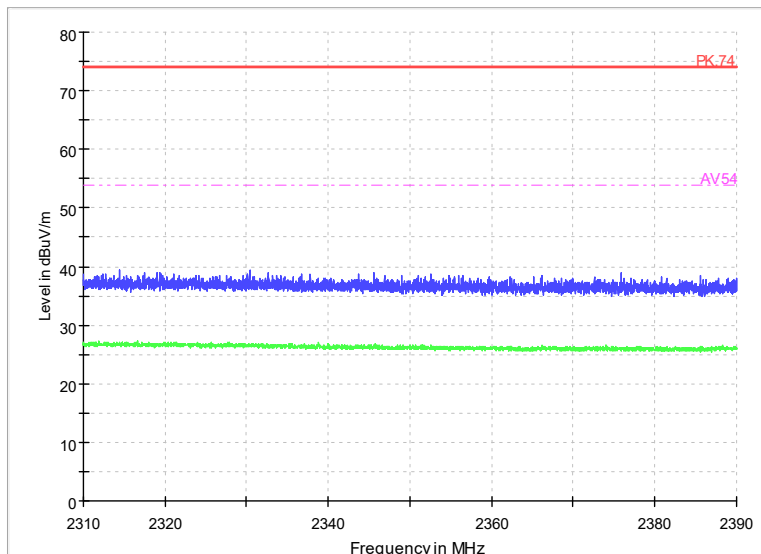
APPENDIX B – TEST DATA OF RADIATED EMISSION

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

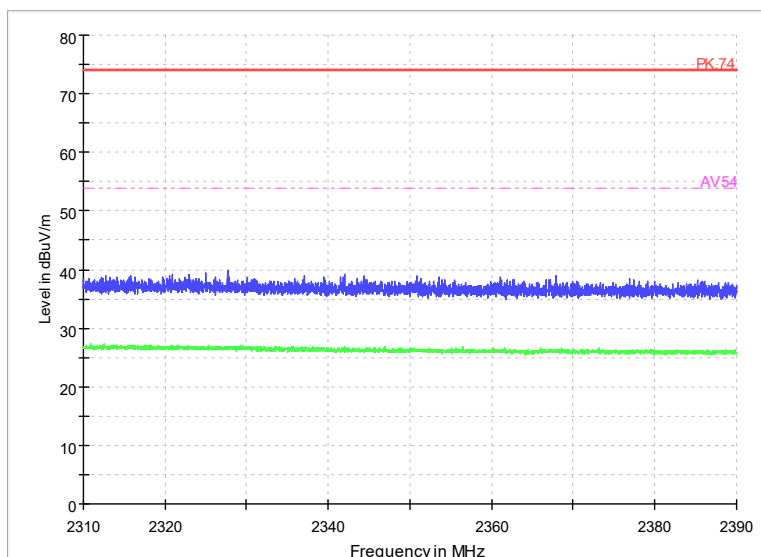
Note: The scanned graph represents the maximum of both horizontal and vertical polarizations and is not a single horizontal or vertical polarization scan.

Note: This product has multiple types of batteries, and according to verification, the following batteries were found to be the worst mode, so all tests were conducted using this battery

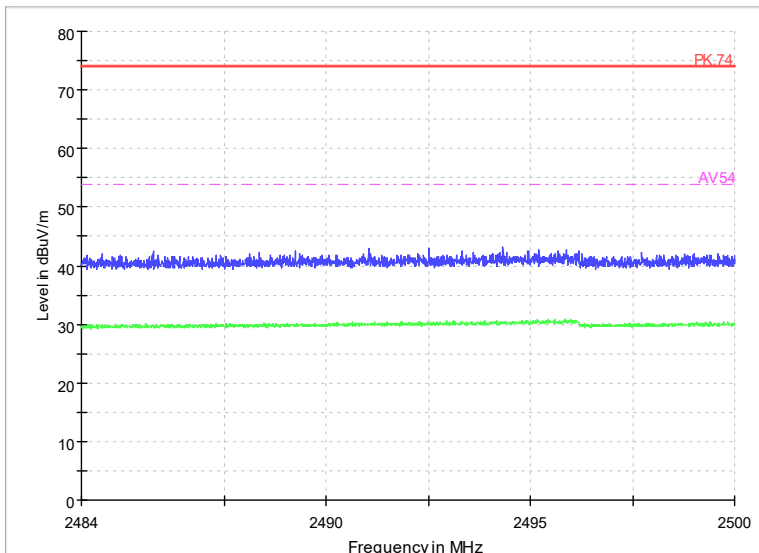
Radiated Emission Band Edge



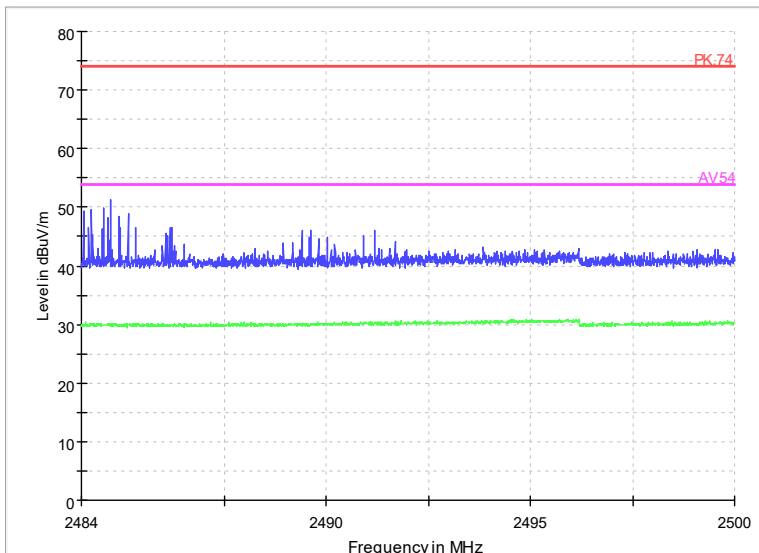
Radiated Emission Band Edge
Channel No.:0
Test Mode: GFSK
Polarization: V



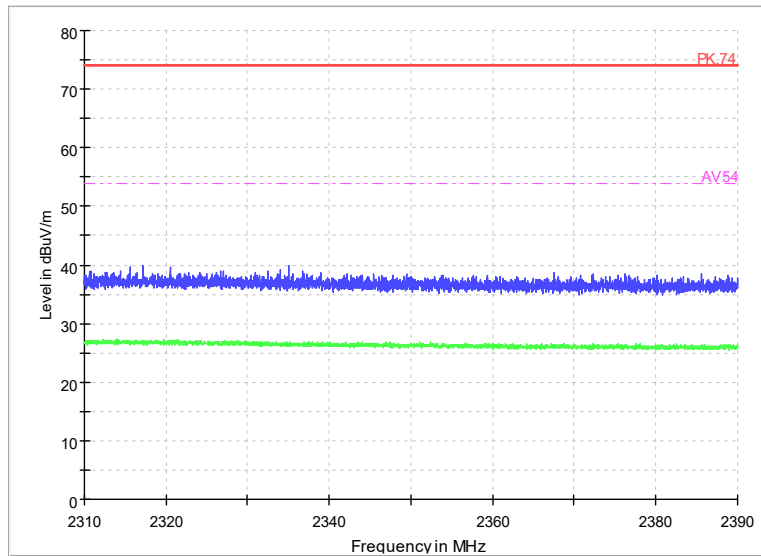
Radiated Emission Band Edge
Channel No.:0
Test Mode: GFSK
Polarization: H



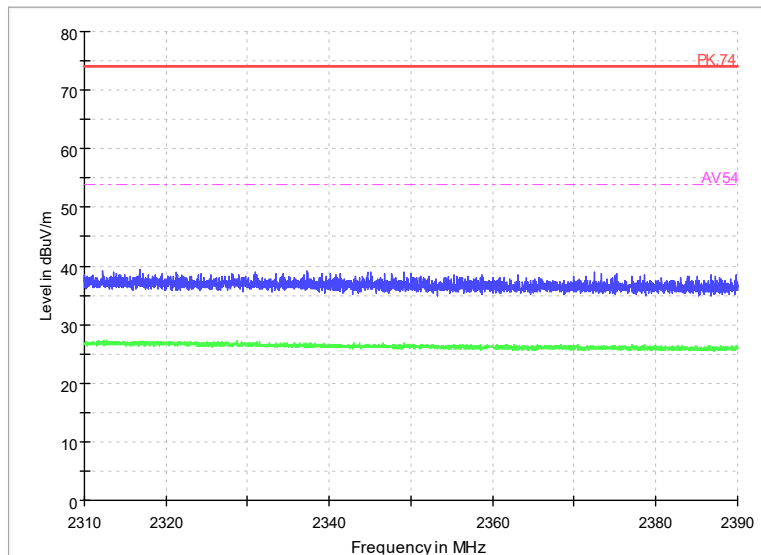
Radiated Emission Band Edge
Channel No.:78
Test Mode: GFSK
Polarization: V



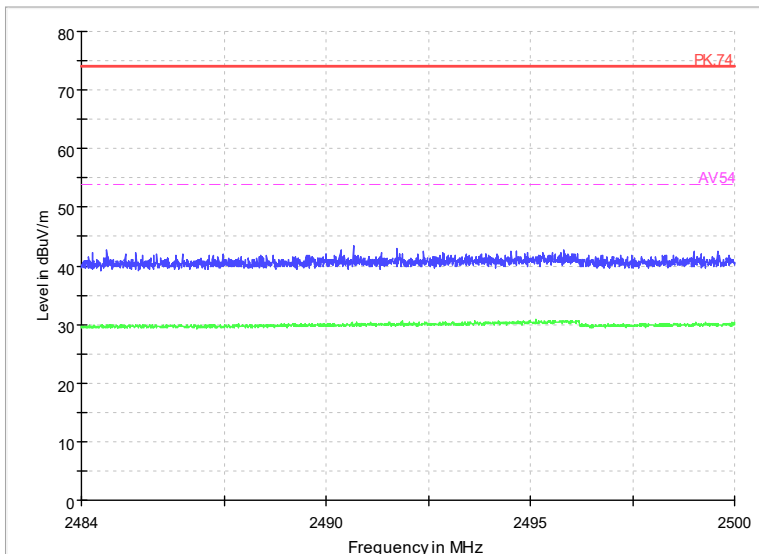
Radiated Emission Band Edge
Channel No.:78
Test Mode: GFSK
Polarization: H



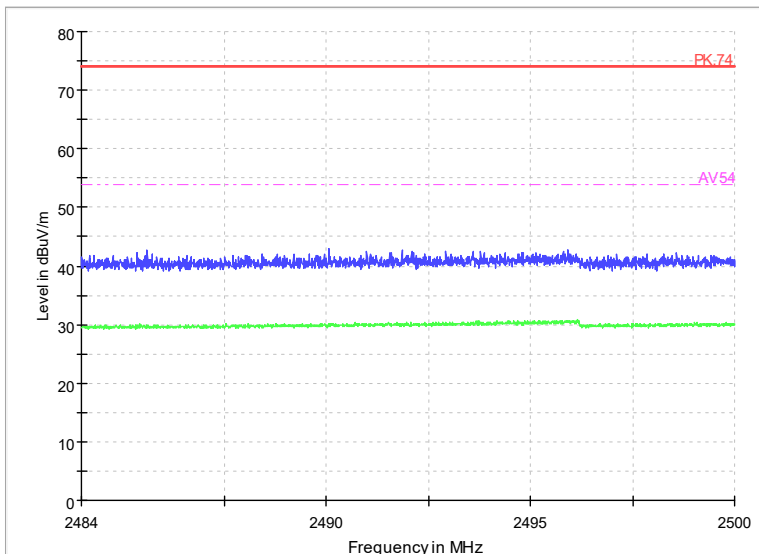
Radiated Emission Band Edge
Channel No.:0
Test Mode: $\pi/4$ DQPSK
Polarization: V



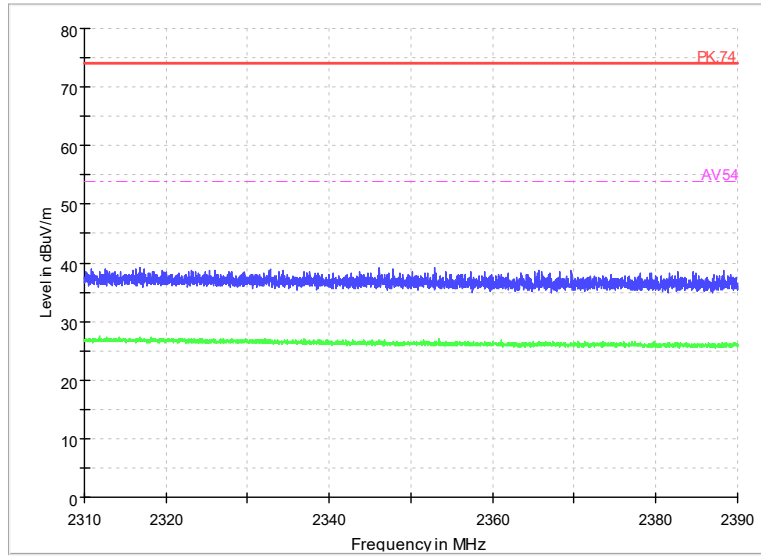
Radiated Emission Band Edge
Channel No.:0
Test Mode: $\pi/4$ DQPSK
Polarization: H



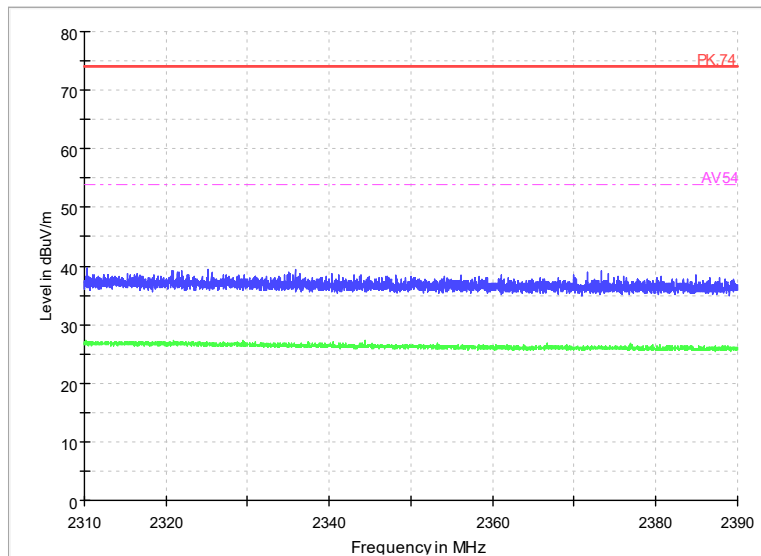
Radiated Emission Band Edge
Channel No.:78
Test Mode: $\pi/4$ DQPSK
Polarization: V



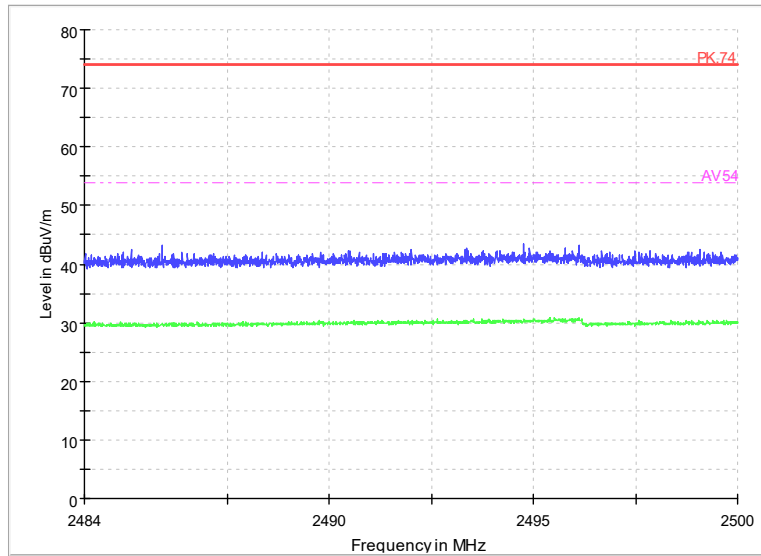
Radiated Emission Band Edge
Channel No.:78
Test Mode: $\pi/4$ DQPSK
Polarization: H



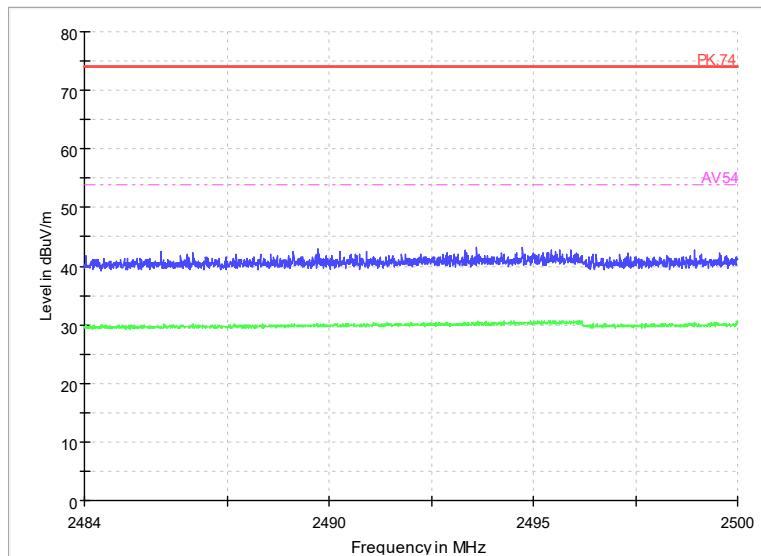
Radiated Emission Band Edge
Channel No.:0
Test Mode: 8DPSK
Polarization: V



Radiated Emission Band Edge
Channel No.:0
Test Mode: 8DPSK
Polarization: H



Radiated Emission Band Edge
Channel No.:78
Test Mode: 8DPSK
Polarization: V



Radiated Emission Band Edge
Channel No.:78
Test Mode: 8DPSK
Polarization: H

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: $(6.14\text{dB}\mu\text{V}/\text{m}) = (25.04\text{dB}\mu\text{V}) + (-18.9\text{dB}/\text{m})$, the corresponding frequency is 45.374500MHz.

For GFSK

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.3745	6.14	-18.9	25.04	Vertical	40	33.86
85.4355	4.05	-20.9	24.95	Vertical	40	35.95
120.3555	11.63	-20.5	32.13	Vertical	43.5	31.87
263.964	19.7	-18.1	37.8	Vertical	46	26.3
311.979	17.46	-16.8	34.26	Vertical	46	28.54
901.351	15.65	-5.5	21.15	Vertical	46	30.35

For $\pi/4$ DQPSK

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
46.975	5	-18.9	23.9	Vertical	40	35
56.481	4.73	-19.5	24.23	Vertical	40	35.27
168.322	11.82	-21.9	33.72	Vertical	43.5	31.68
199.9925	17.89	-19.9	37.79	Vertical	43.5	25.61
455.9755	16.35	-13.2	29.55	Vertical	46	29.65
929.5295	15.97	-5.2	21.17	Vertical	46	30.03

For 8DPSK

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
51.631	6.08	-19.1	25.18	Vertical	40	33.92
58.0815	5.67	-19.7	25.37	Vertical	40	34.33
159.592	13.46	-22.2	35.66	Vertical	43.5	30.04
263.964	19.66	-18.1	37.76	Vertical	46	26.34
503.9905	17	-12.1	29.1	Vertical	46	29
928.4625	15.99	-5.2	21.19	Vertical	46	30.01

For GFSK

Channel No.:39

Frequency	Result	ARpl	Pmea	Polarity	Limit	Margin
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(MHz)	(dBuV/m)	(dB)	(dBuV/m)		(dBuV/m)	(dB)
44.9865	6.1	-18.9	25	Vertical	40	33.9
58.0815	5.71	-19.7	25.41	Vertical	40	34.29
167.9825	14.28	-21.9	36.18	Vertical	43.5	29.22
263.964	19.73	-18.1	37.83	Vertical	46	26.27
407.9605	15.63	-14.1	29.73	Vertical	46	30.37
935.2525	16.13	-5.2	21.33	Vertical	46	29.87

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

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
38.0025	4.86	-19.5	24.36	Vertical	40	35.14
85.6295	4.25	-20.9	25.15	Vertical	40	35.75
167.9825	14.43	-21.9	36.33	Vertical	43.5	29.07
263.964	19.79	-18.1	37.89	Vertical	46	26.21
455.9755	16.36	-13.2	29.56	Vertical	46	29.64
947.8625	16.41	-5.1	21.51	Vertical	46	29.59

For 8DPSK
Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
52.795	5.85	-19.2	25.05	Vertical	40	34.15
57.5965	5.73	-19.6	25.33	Vertical	40	34.27
154.6935	12.33	-22.5	34.83	Vertical	43.5	31.17
199.9925	18.3	-19.9	38.2	Vertical	43.5	25.2
455.9755	16.32	-13.2	29.52	Vertical	46	29.68
951.3545	16.04	-5.1	21.14	Vertical	46	29.96

For GFSK
Channel No.:78

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
45.229	6.17	-18.9	25.07	Vertical	40	33.83
57.3055	5.21	-19.6	24.81	Vertical	40	34.79
165.121	8.64	-22	30.64	Vertical	43.5	34.86
263.964	8.56	-18.1	26.66	Vertical	46	37.44
455.9755	8.73	-13.2	21.93	Vertical	46	37.27
942.4305	16.02	-5.1	21.12	Vertical	46	29.98

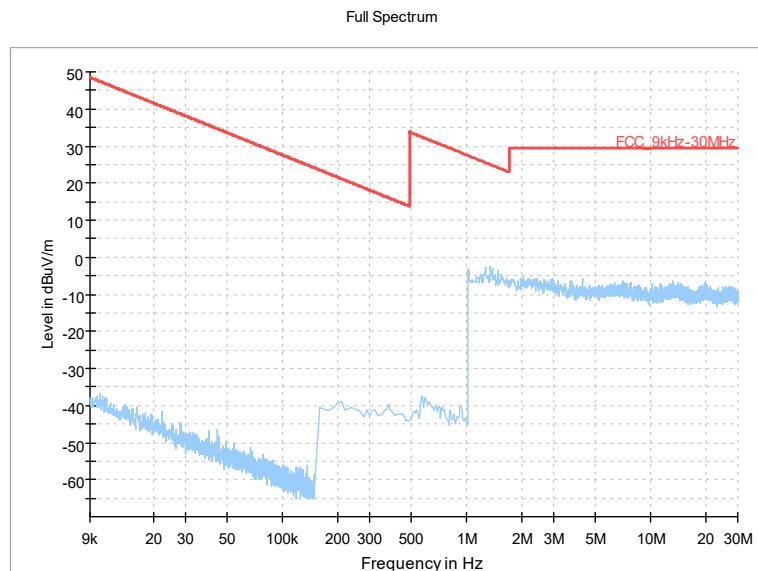
For $\pi/4$ DQPSK
Channel No.:78

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
50.661	5.62	-19	24.62	Vertical	40	34.38
63.9015	6.46	-20.8	27.26	Vertical	40	33.54
169.4375	9.88	-21.8	31.68	Vertical	43.5	33.62

257.95	10.29	-18.3	28.59	Vertical	46	35.71
551.0355	11.38	-11.1	22.48	Vertical	46	34.62
950.7725	16.03	-5.1	21.13	Vertical	46	29.97

For 8DPSK
Channel No.:78

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
50.661	5.62	-19	24.62	Vertical	40	34.38
63.9015	6.46	-20.8	27.26	Vertical	40	33.54
169.4375	9.88	-21.8	31.68	Vertical	43.5	33.62
257.95	10.29	-18.3	28.59	Vertical	46	35.71
551.0355	11.38	-11.1	22.48	Vertical	46	34.62
950.7725	16.03	-5.1	21.13	Vertical	46	29.97

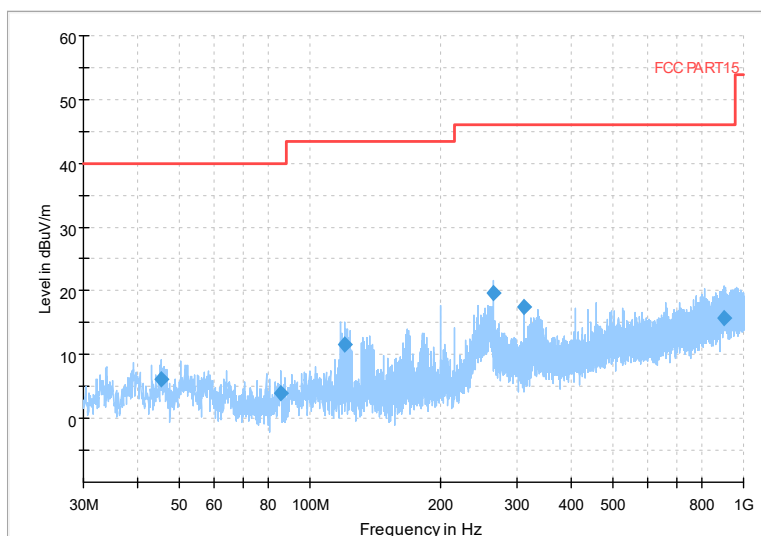


Frequency Range: 9kHz -30MHz
Detector: QP mode

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

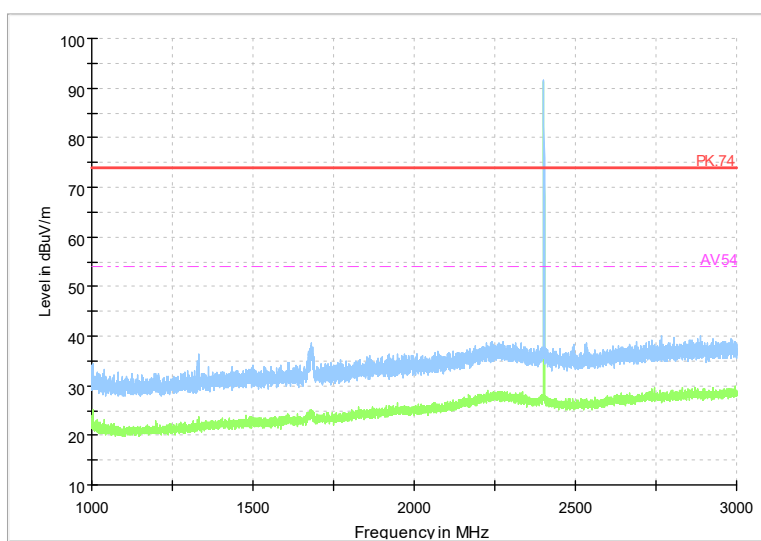
Carrier frequency (MHz): 2402
Channel No.:0

Full Spectrum



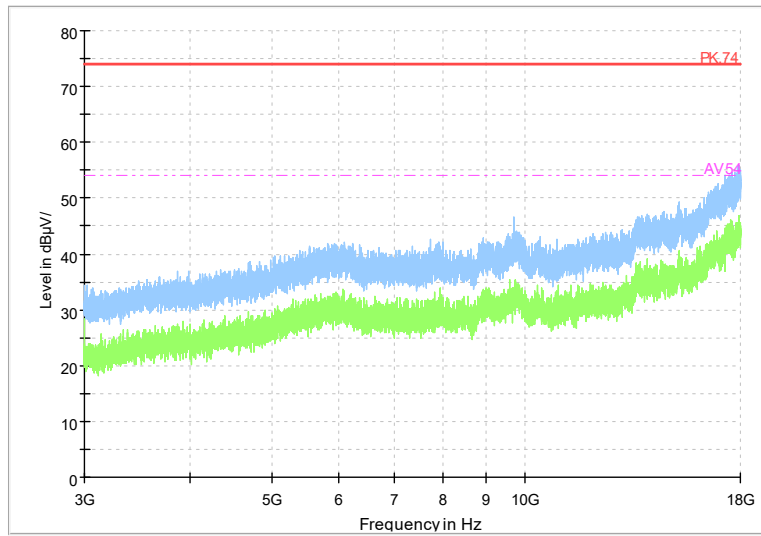
Frequency Range:30MHz-1GHz
Detector: QP mode
Modulation type: GFSK

Full Spectrum



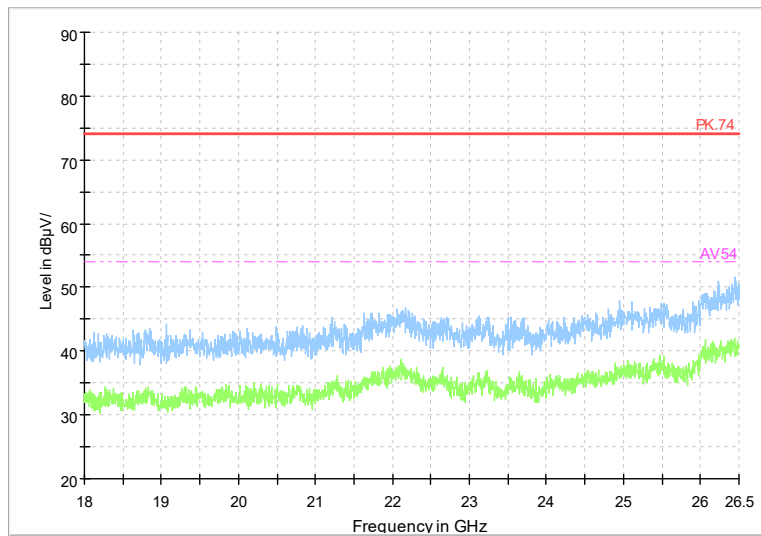
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK

Full Spectrum



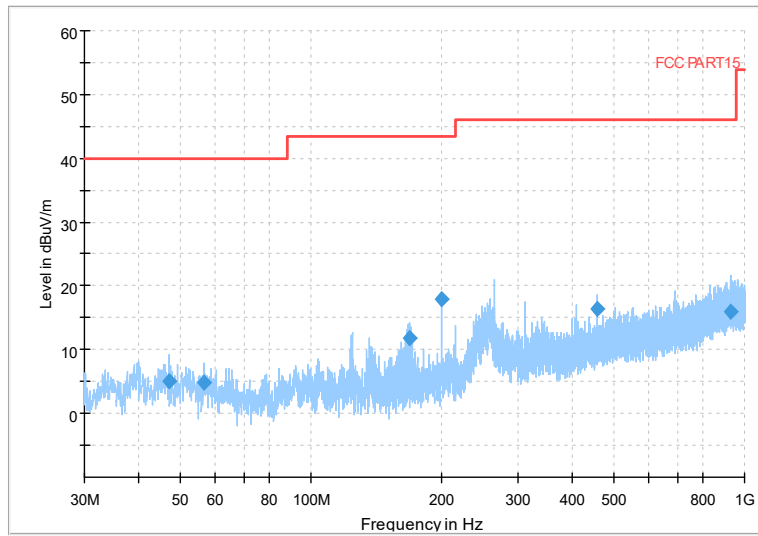
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK

Full Spectrum



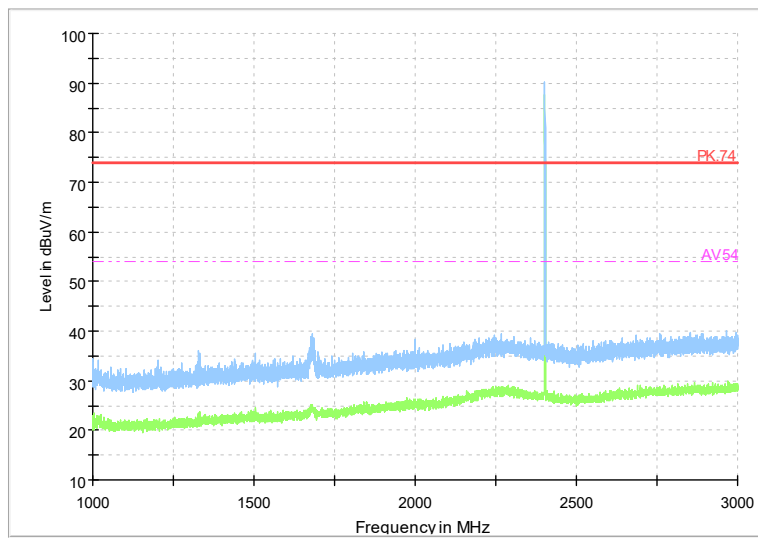
Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK

Full Spectrum



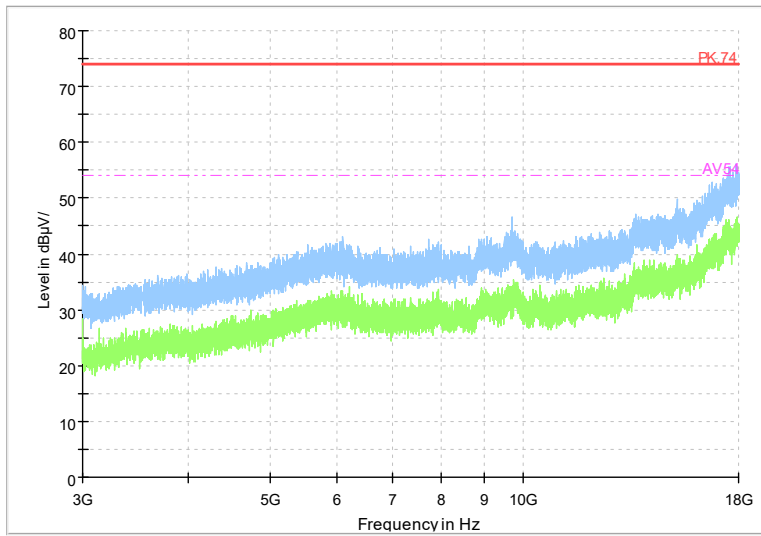
Frequency Range:30MHz-1GHz
Detector: QP mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



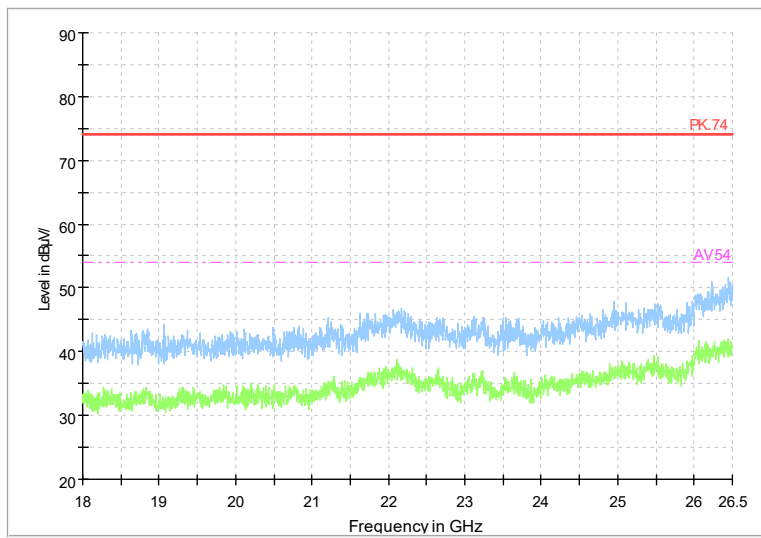
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



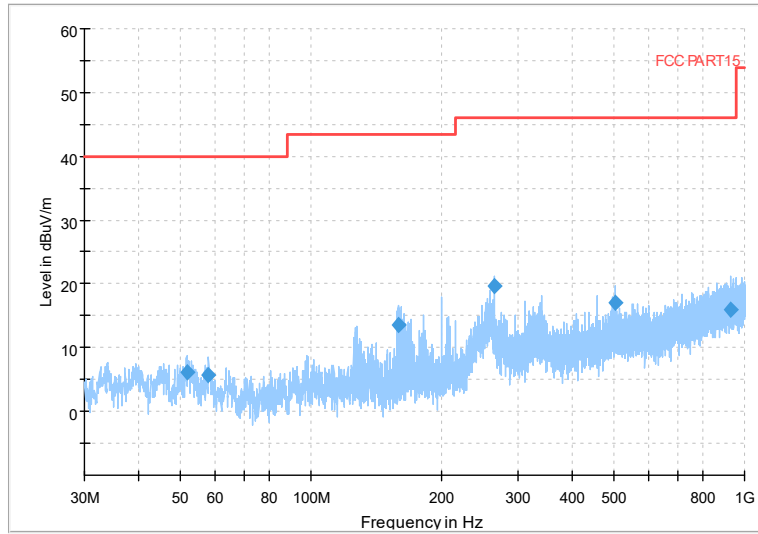
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



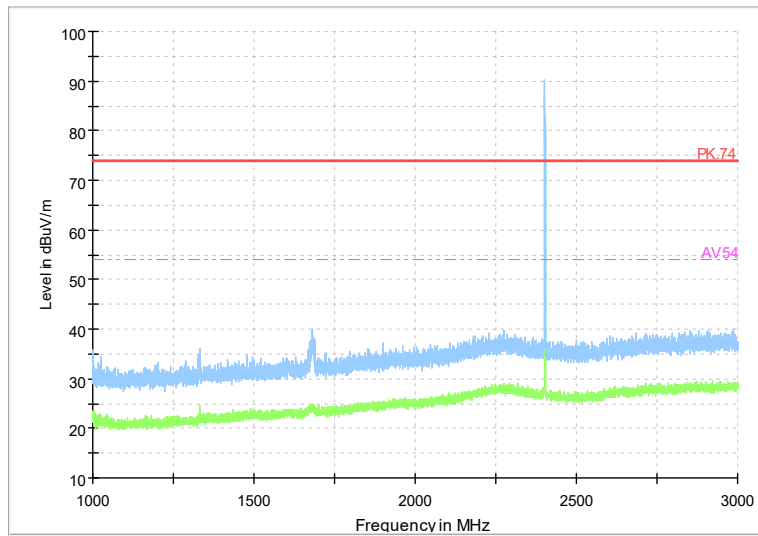
Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



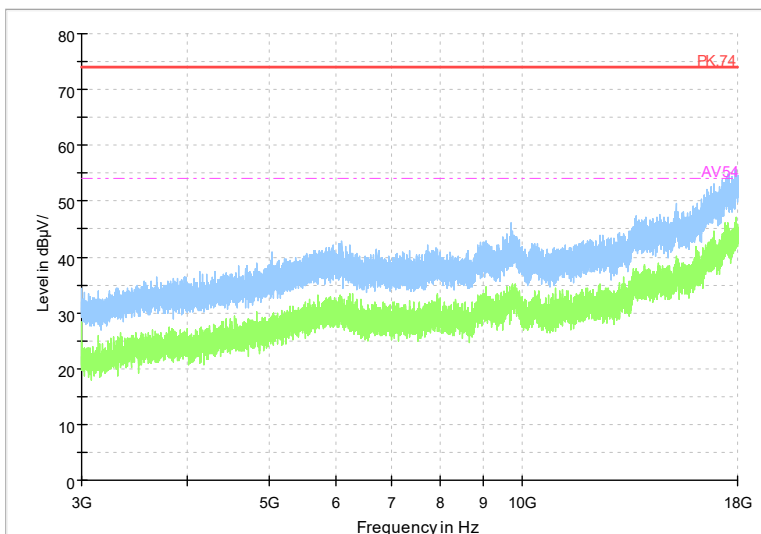
Frequency Range:30MHz-1GHz
Detector: QP mode
Modulation type: 8DPSK

Full Spectrum



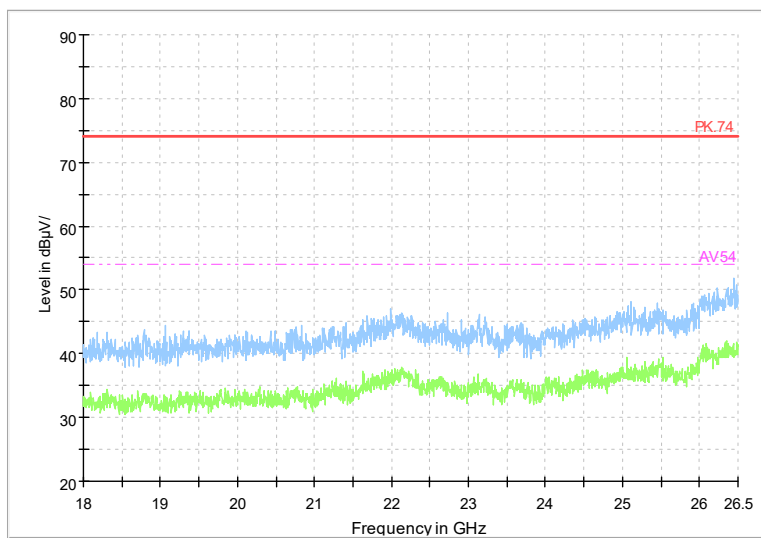
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: 8DPSK

Full Spectrum



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

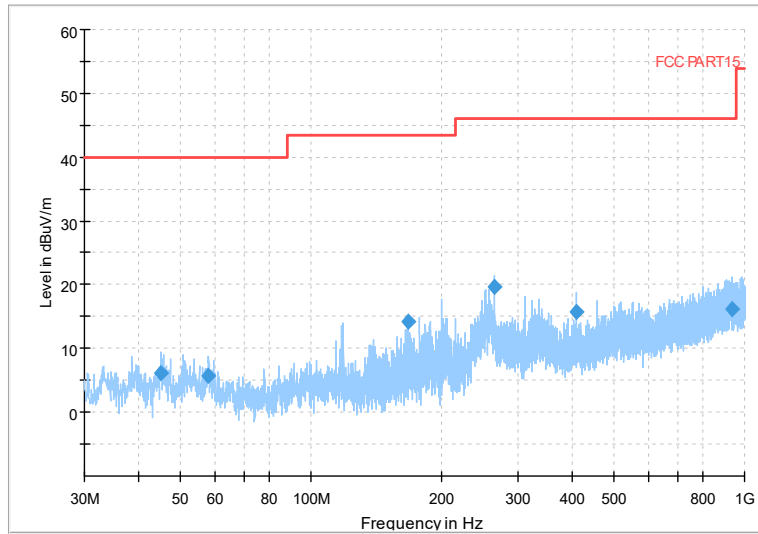
Full Spectrum



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

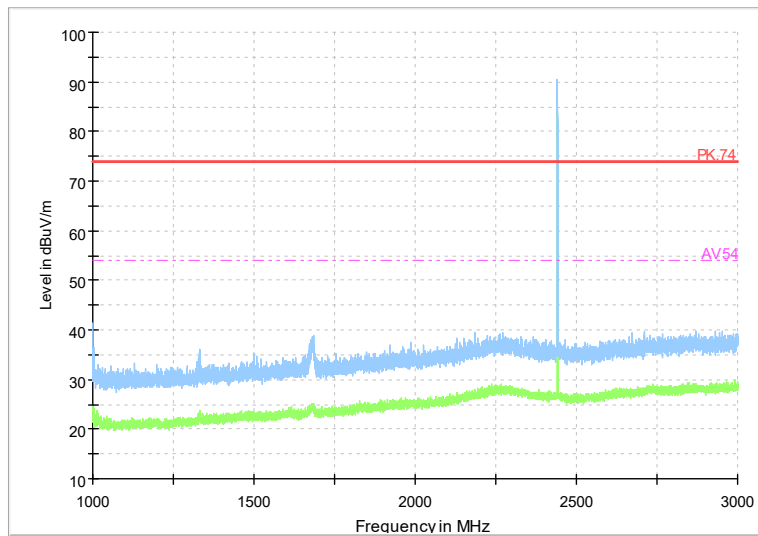
Carrier frequency (MHz): 2440
Channel No.:39

Full Spectrum



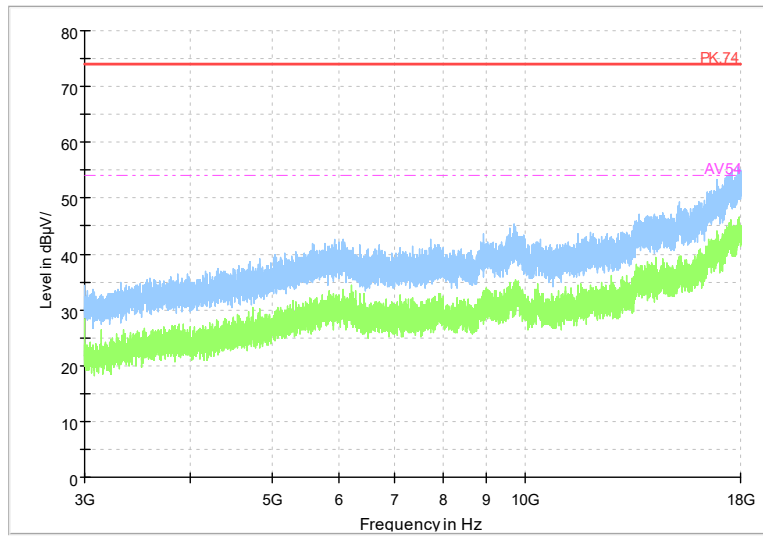
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: GFSK

Full Spectrum



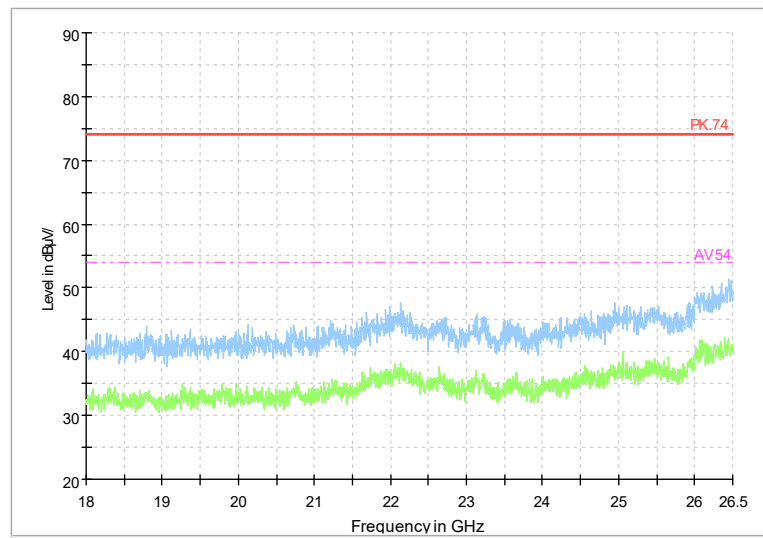
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK

Full Spectrum



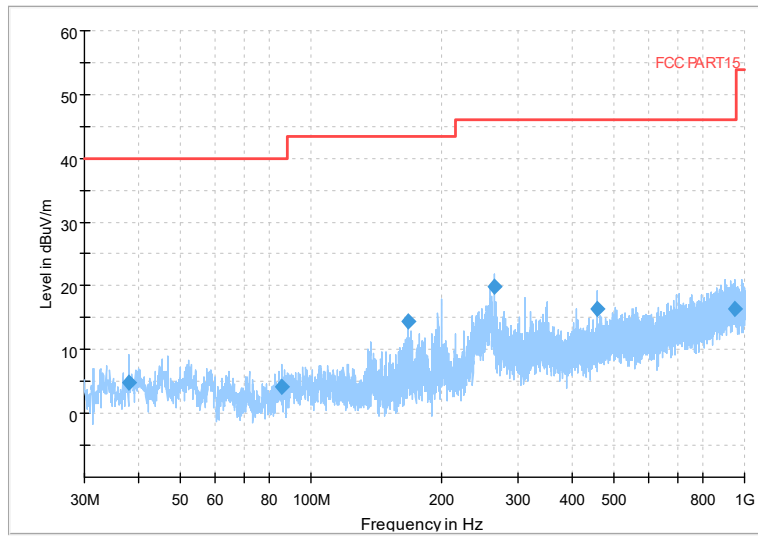
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK

Full Spectrum



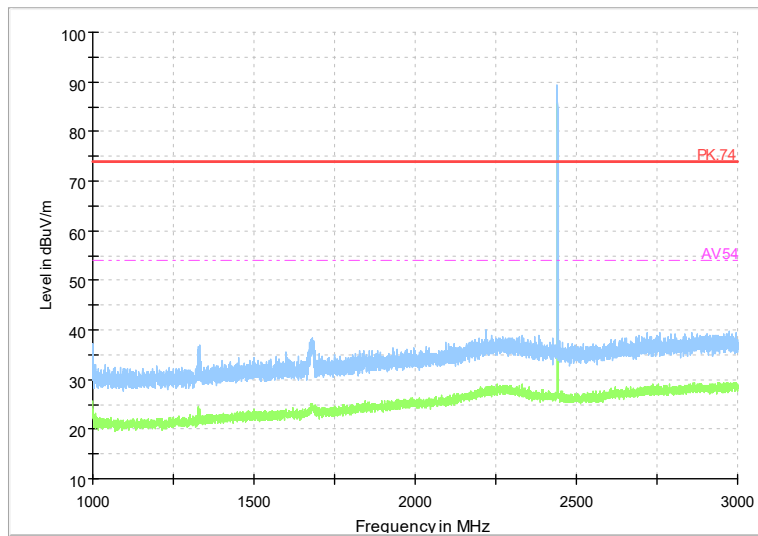
Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK

Full Spectrum



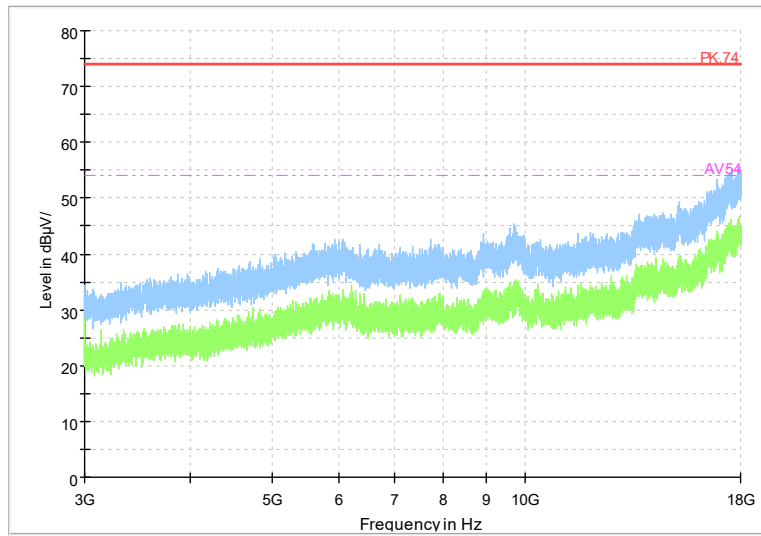
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



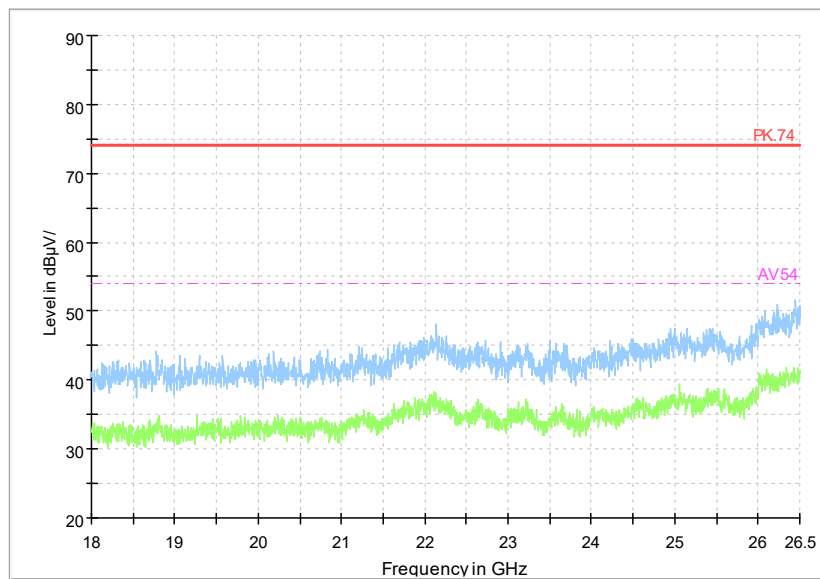
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



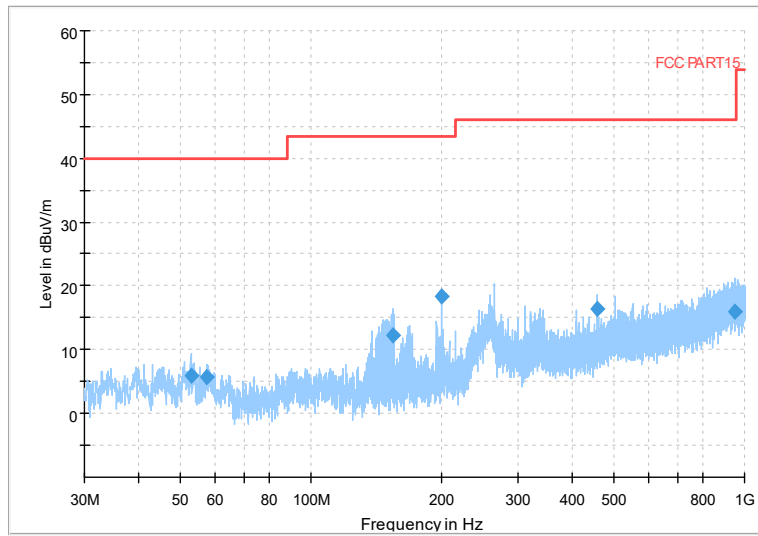
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



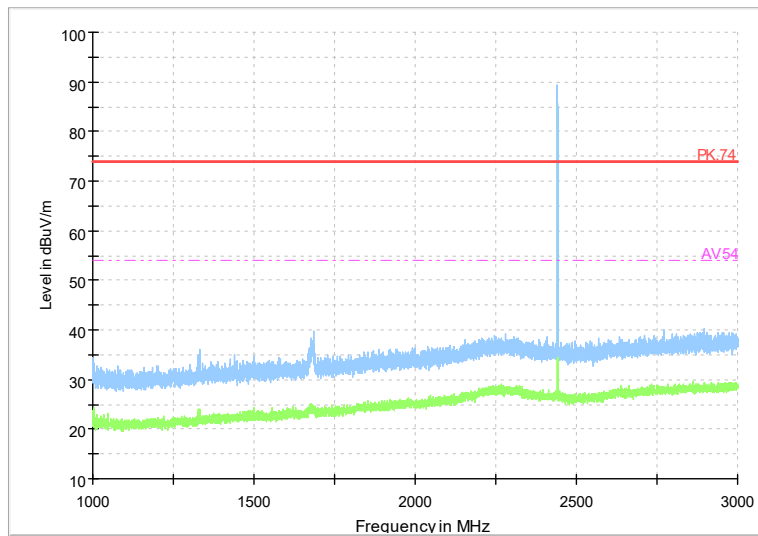
Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



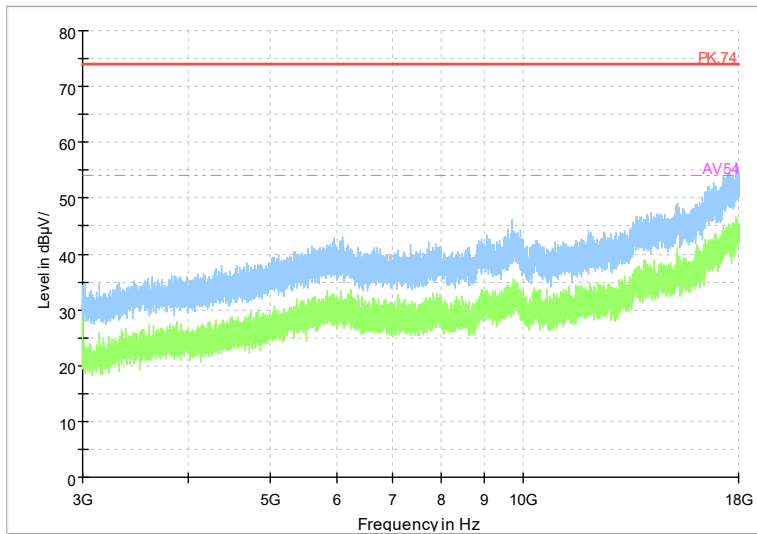
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: 8DPSK

Full Spectrum



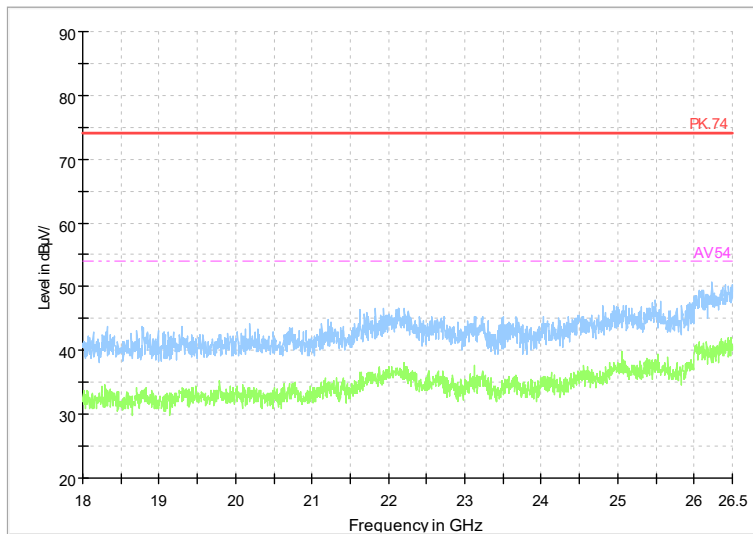
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: 8DPSK

Full Spectrum



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

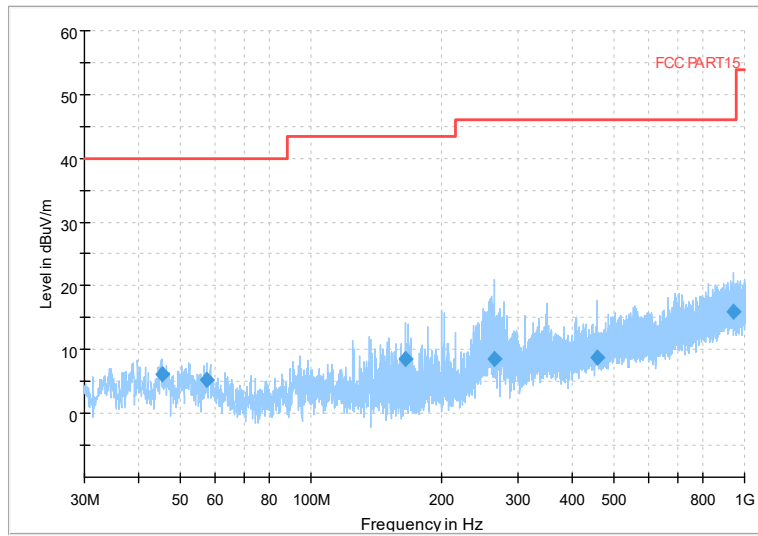
Full Spectrum



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

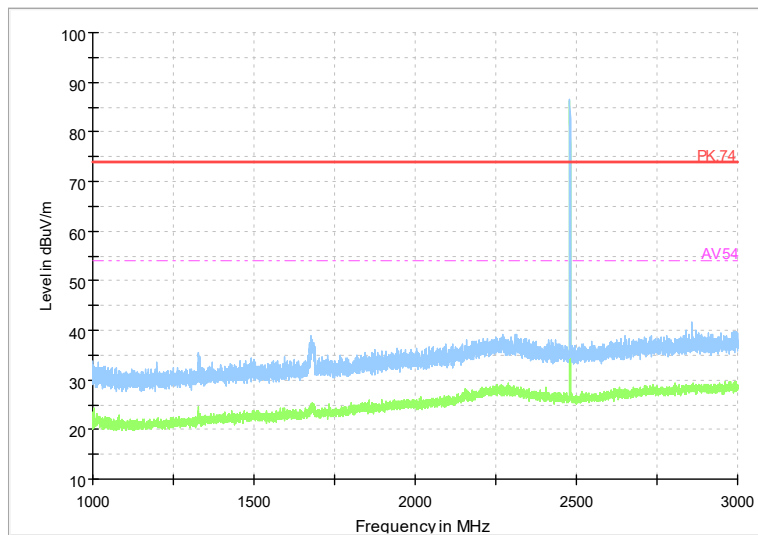
Carrier frequency (MHz): 2480
Channel No.:78

Full Spectrum



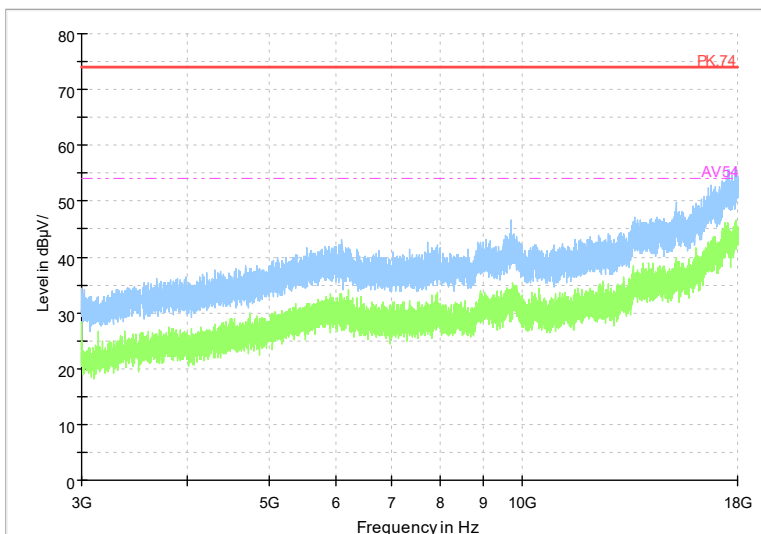
Frequency Range:30MHz-1GHz
Detector: QP mode
Modulation type: GFSK

Full Spectrum



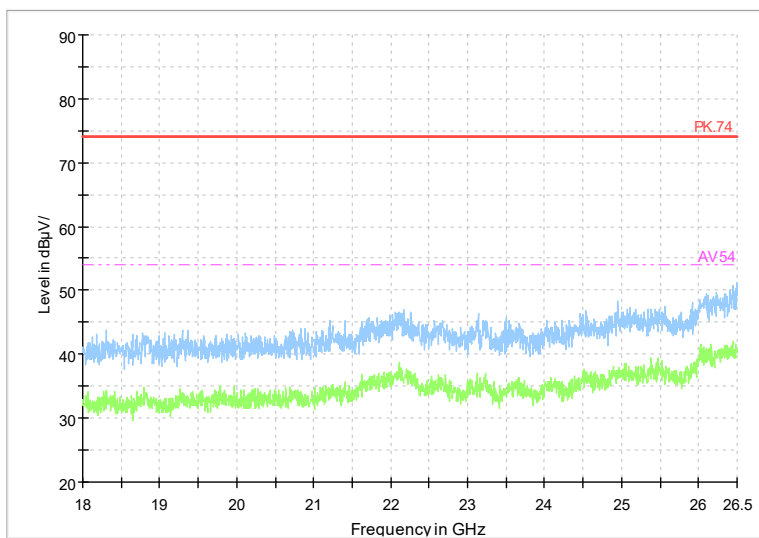
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK

Full Spectrum



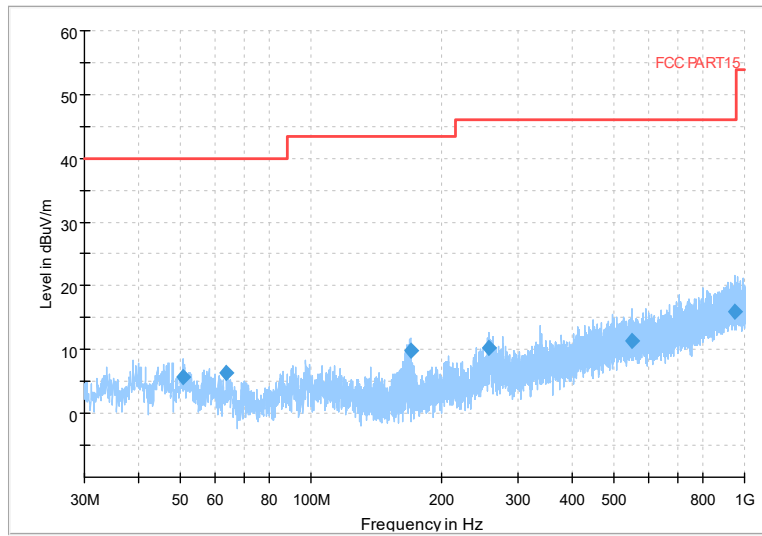
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK

Full Spectrum



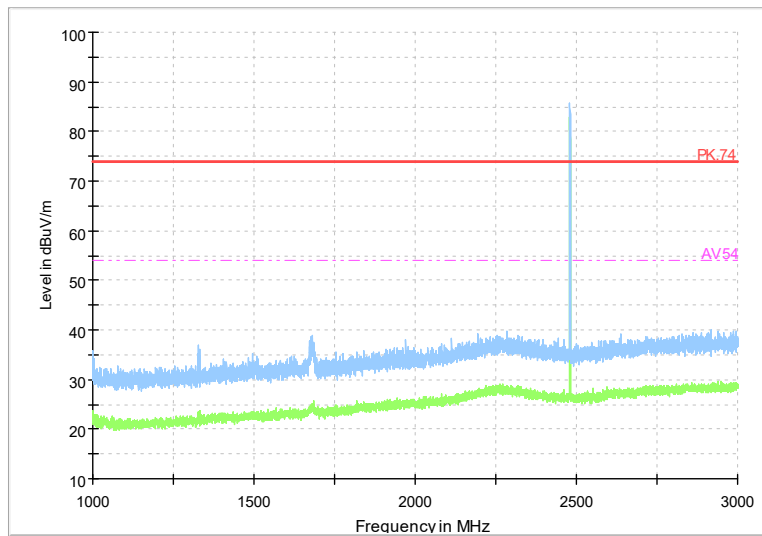
Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: GFSK

Full Spectrum



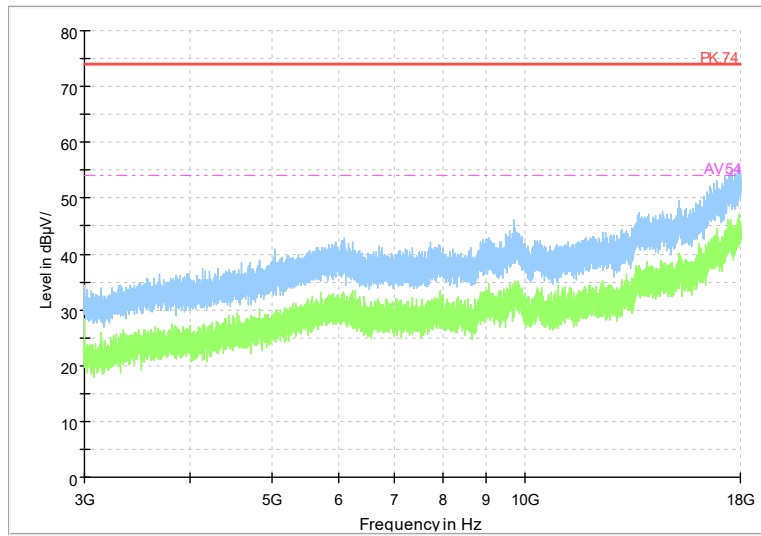
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



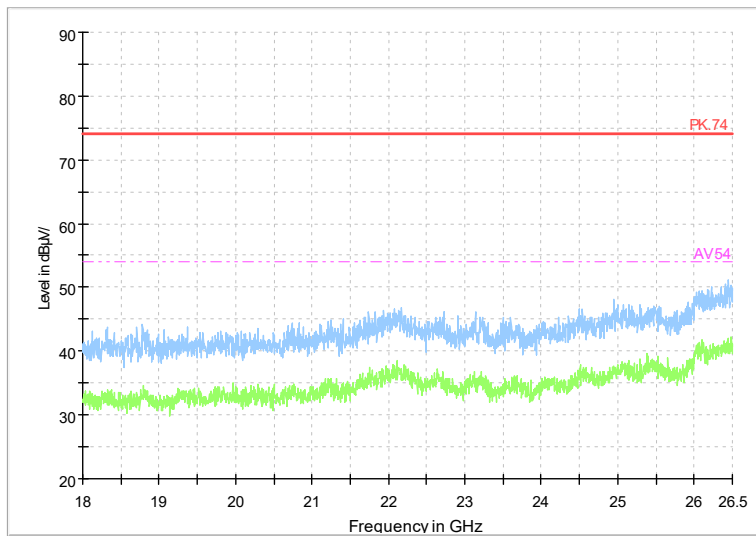
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



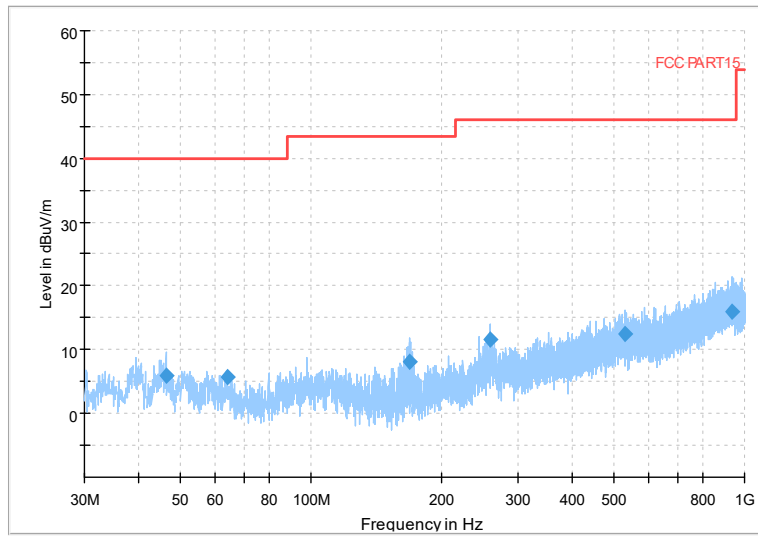
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



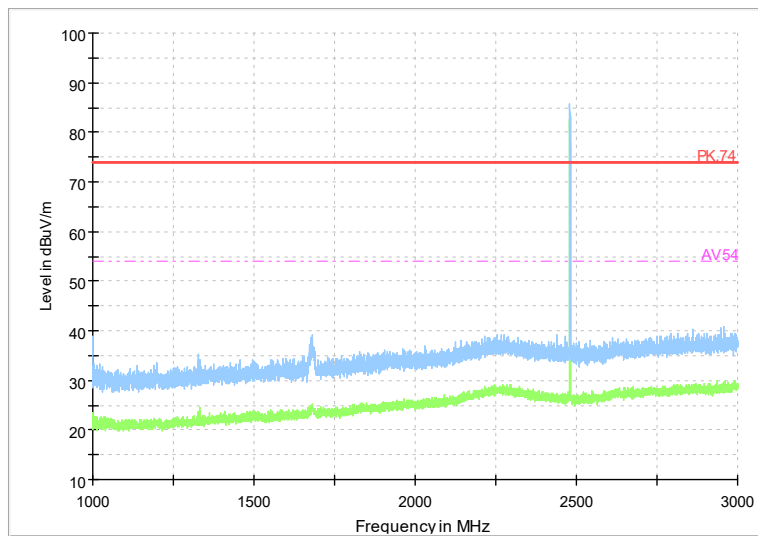
Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: $\pi/4$ DQPSK

Full Spectrum



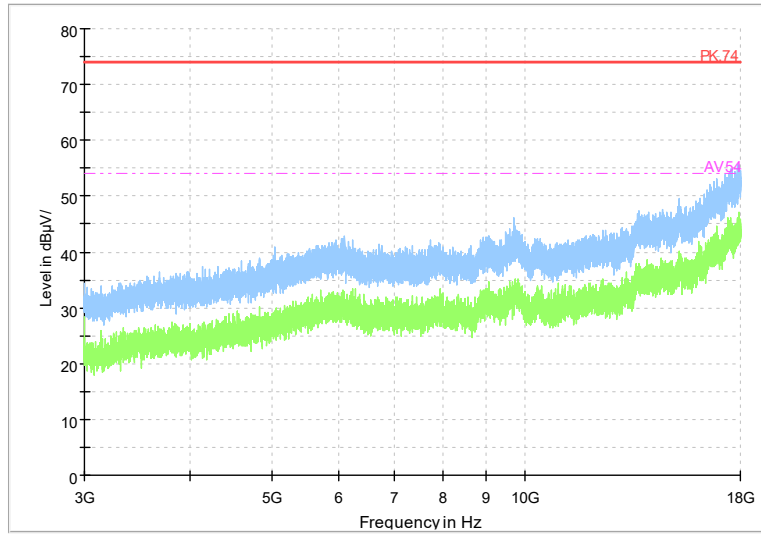
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: 8DPSK

Full Spectrum



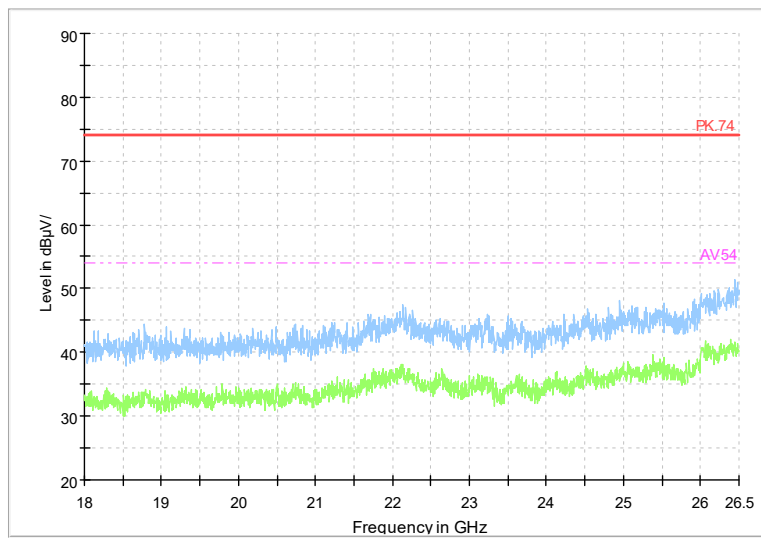
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: 8DPSK

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

---End of Test Report---