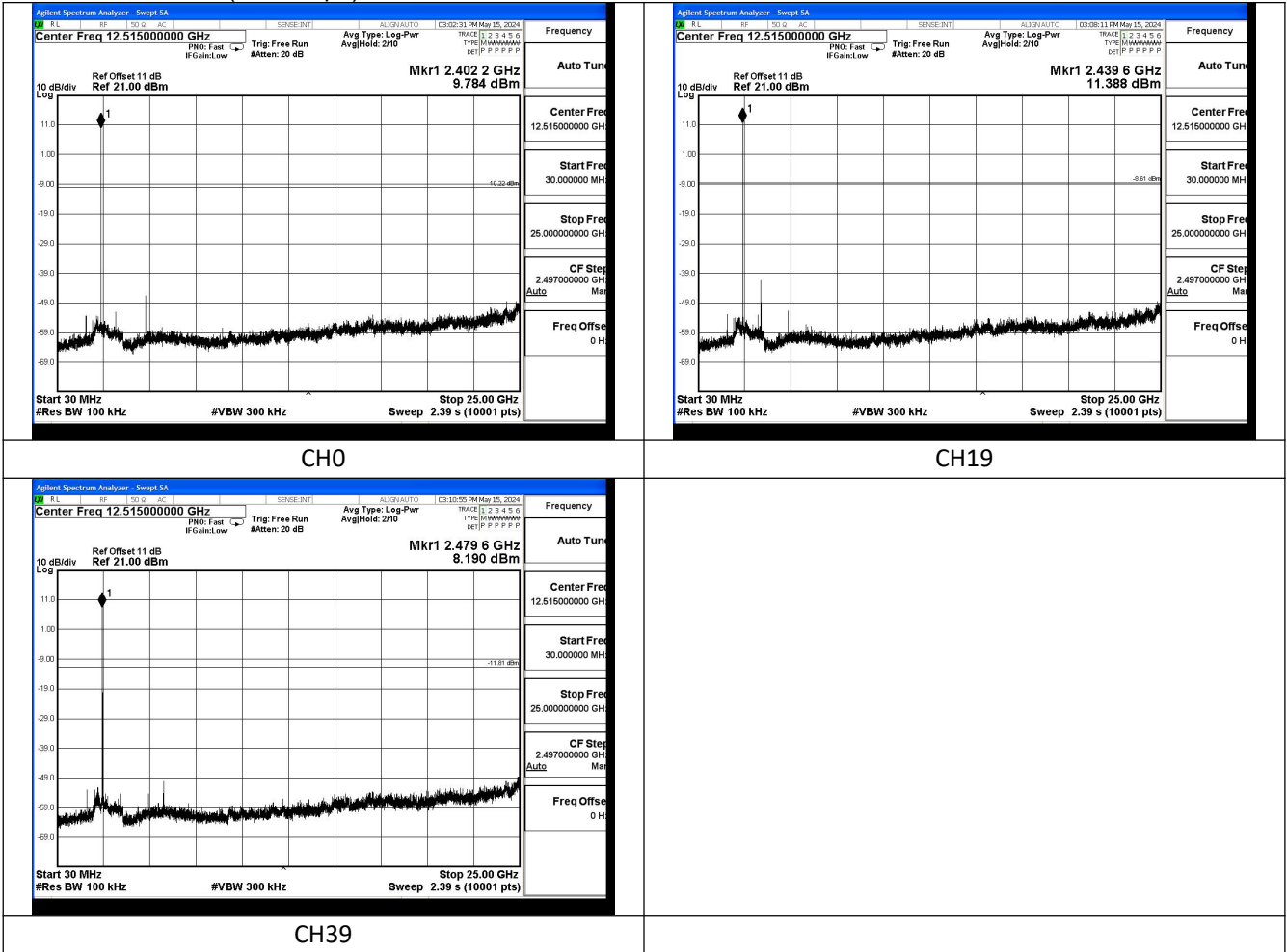
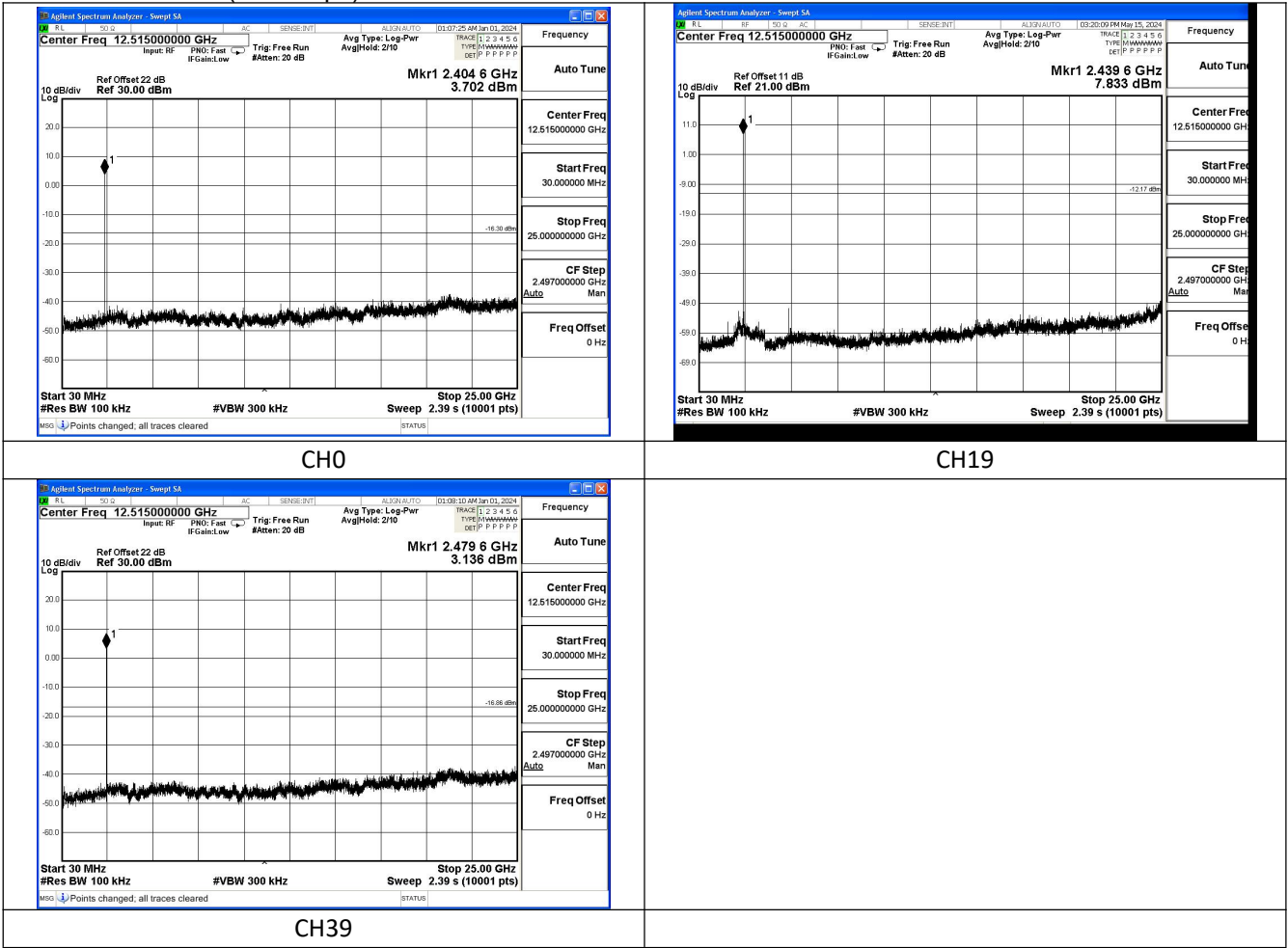


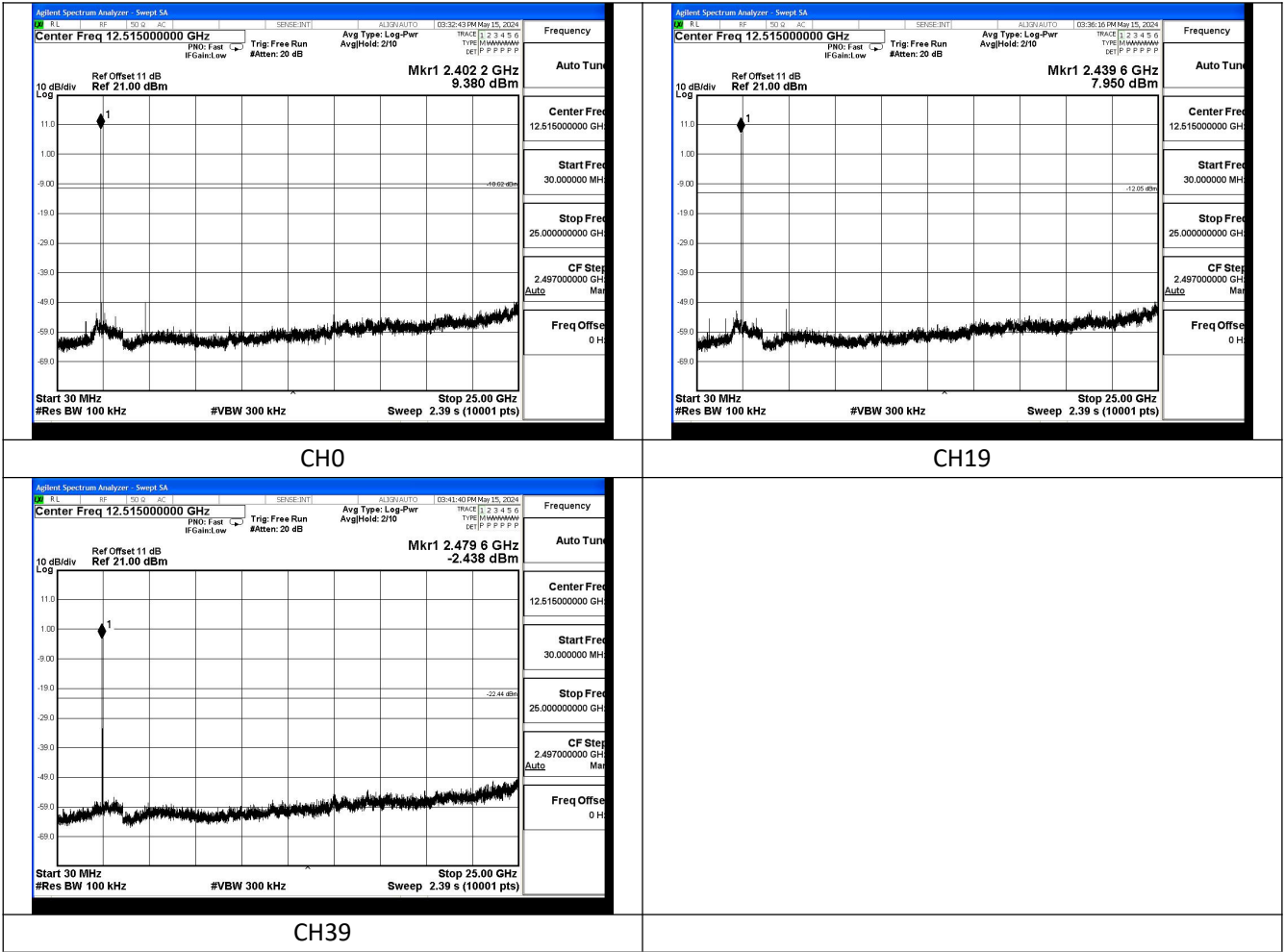
5 Conducted Out of band emission measurement
Test Mode: GFSK (LE 1Mbps)



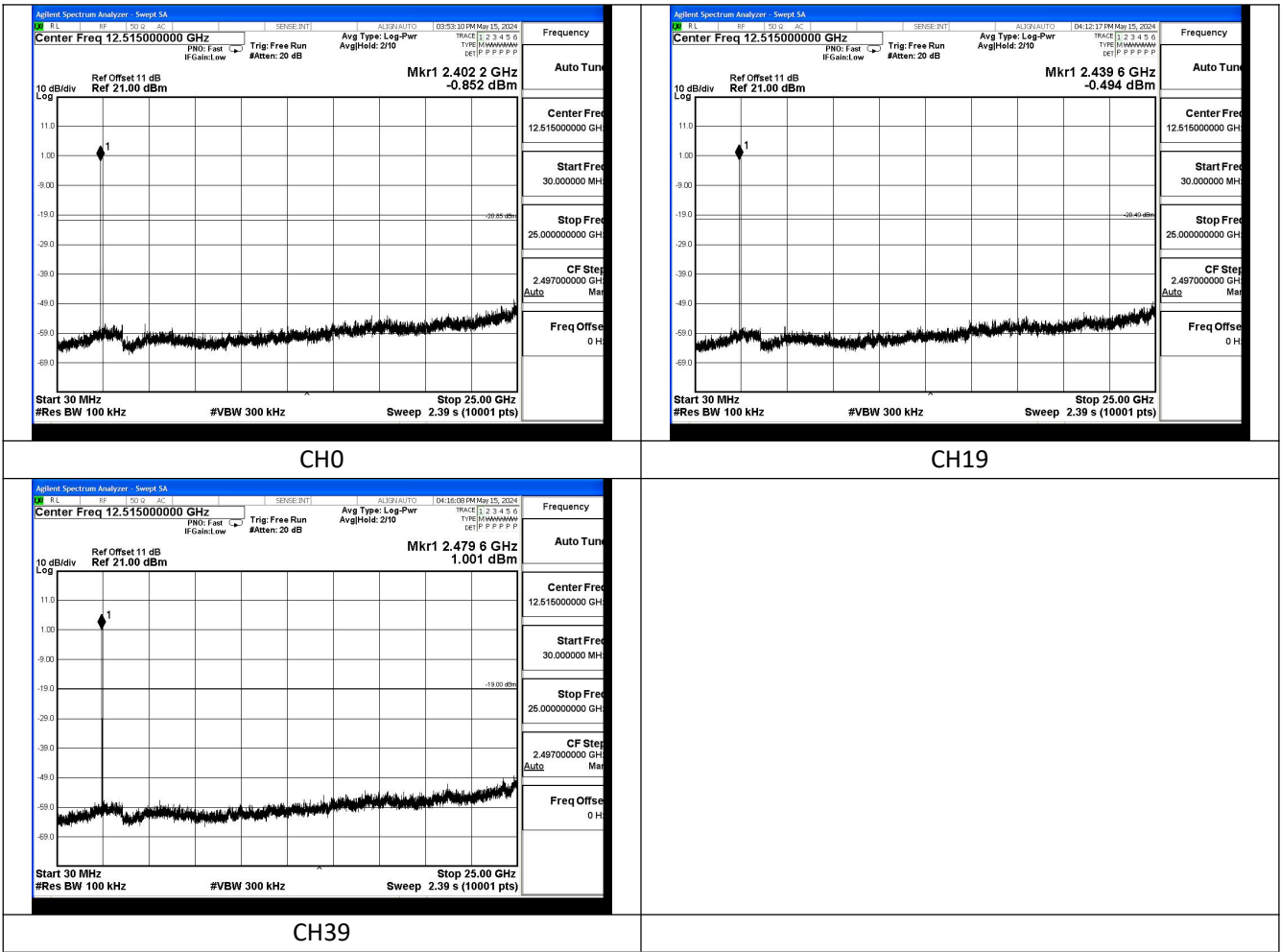
Test Mode: GFSK (LE 2Mbps)



Test Mode: Coded 125K

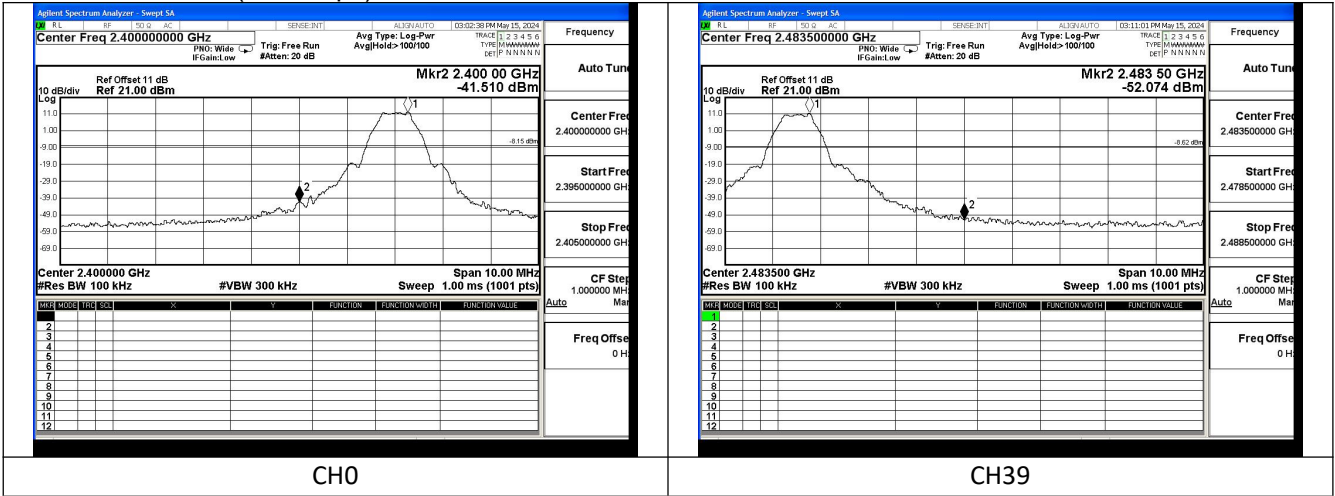


Test Mode: Coded 500K

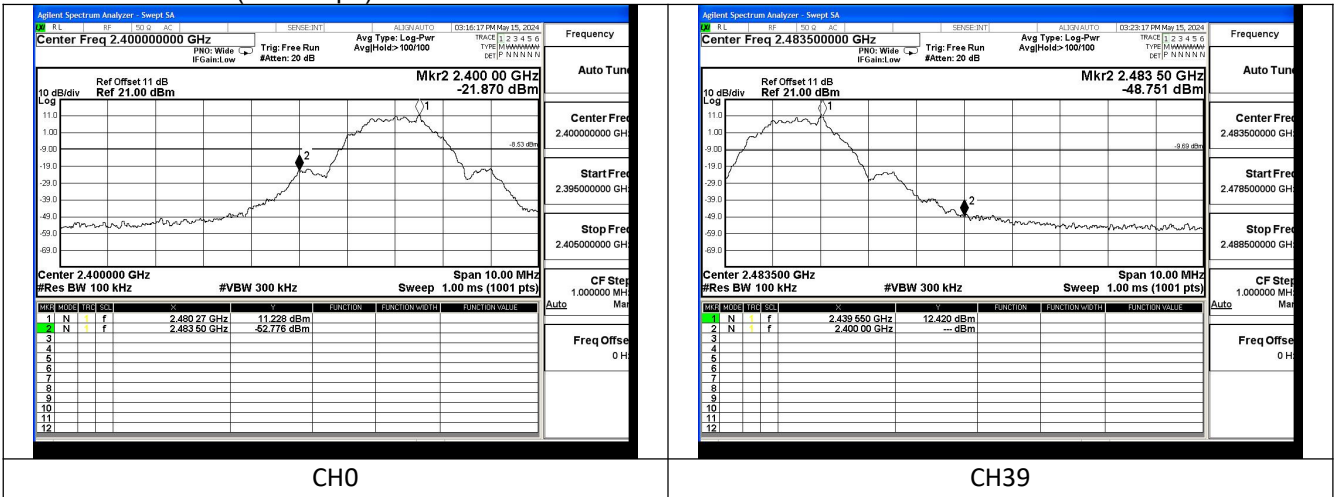


6 Band Edge measurement

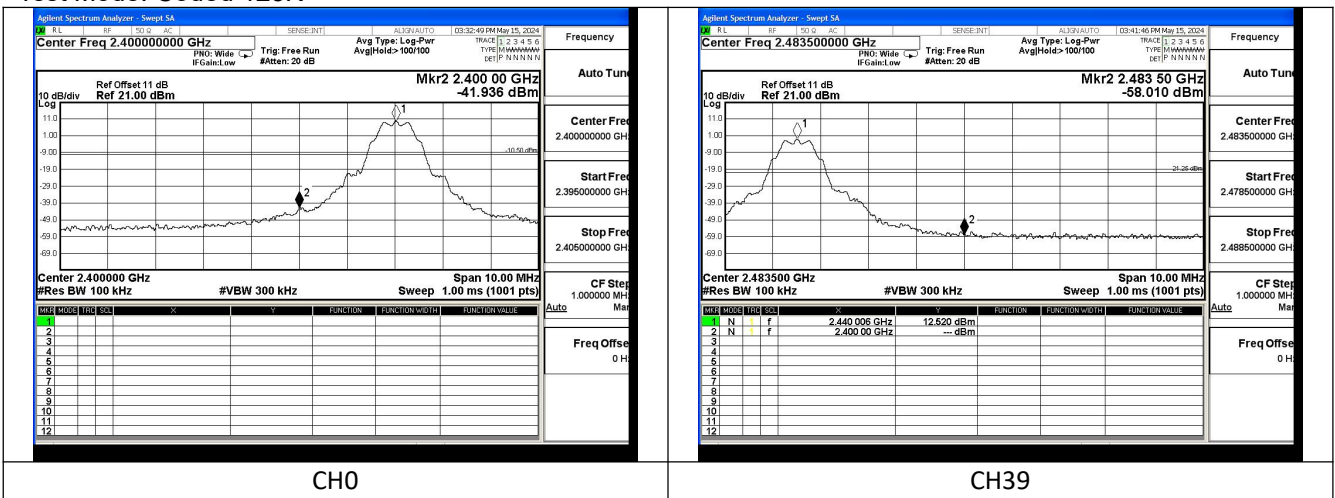
Test Mode: GFSK (LE 1Mbps)



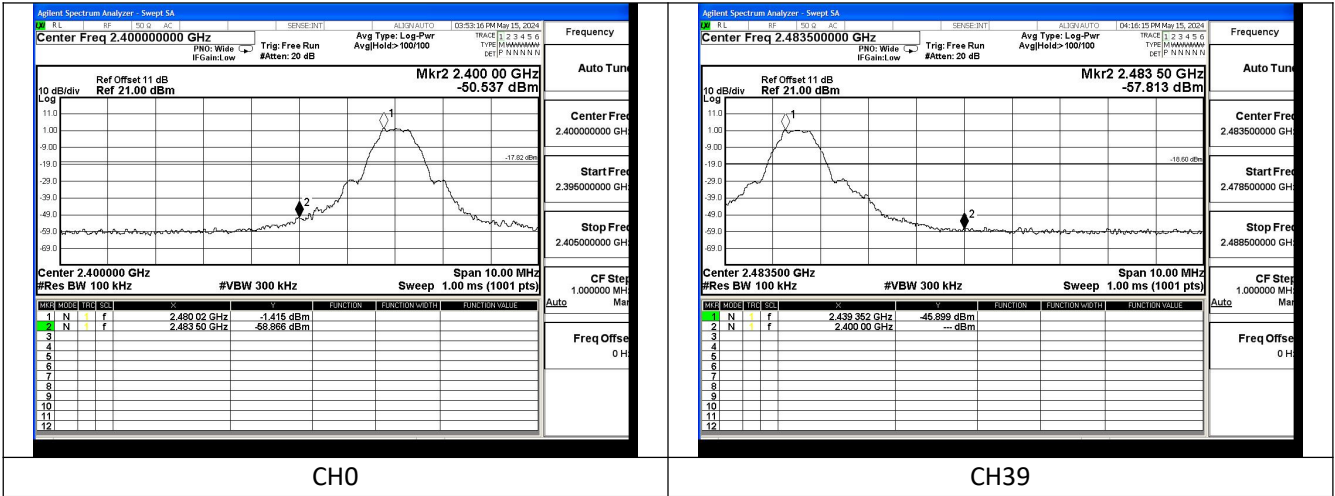
Test Mode: GFSK (LE 2Mbps)



Test Mode: Coded 125K



Test Mode: Coded 500K



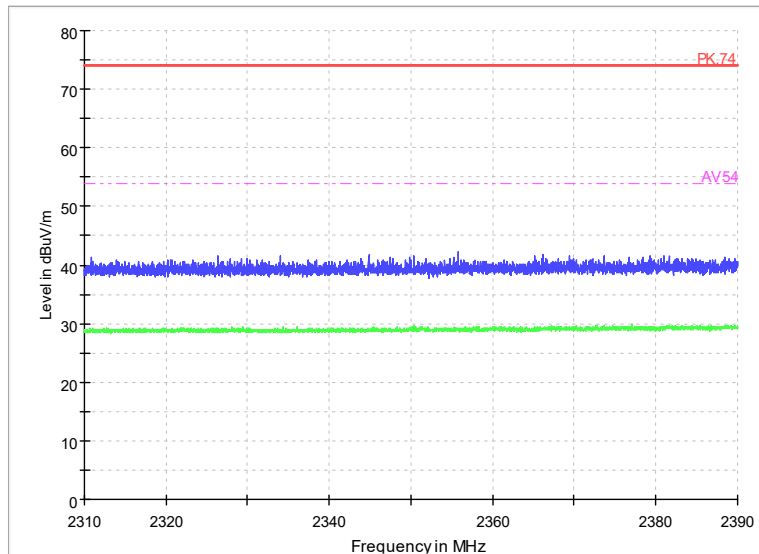
APPENDIX B – TEST DATA OF RADIATED EMISSION

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

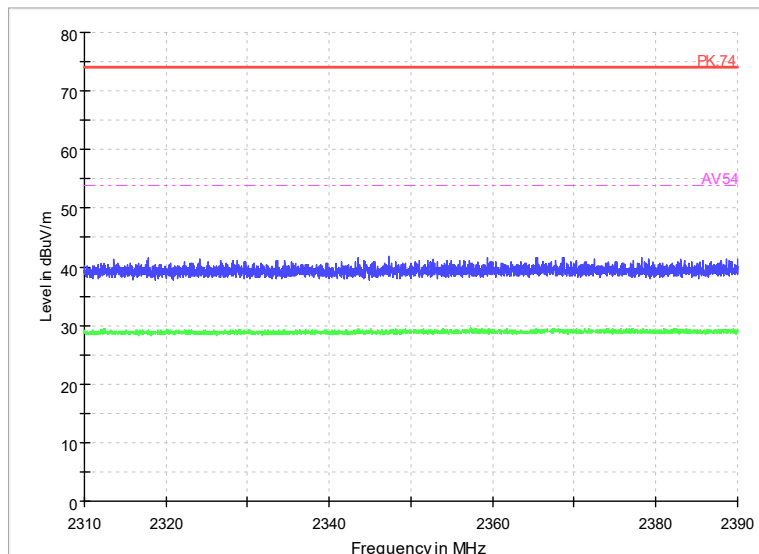
Note: The scanned graph represents the maximum of both horizontal and vertical polarizations and is not a single horizontal or vertical polarization scan.

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

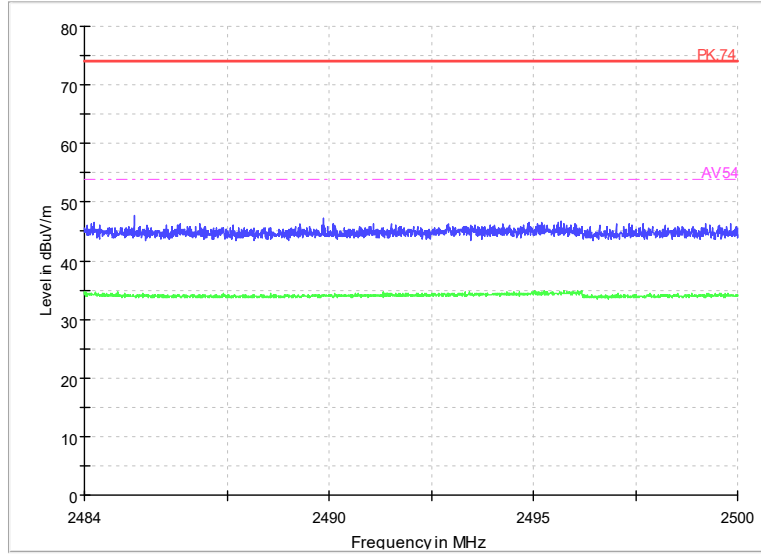
Radiated Emission Band Edge



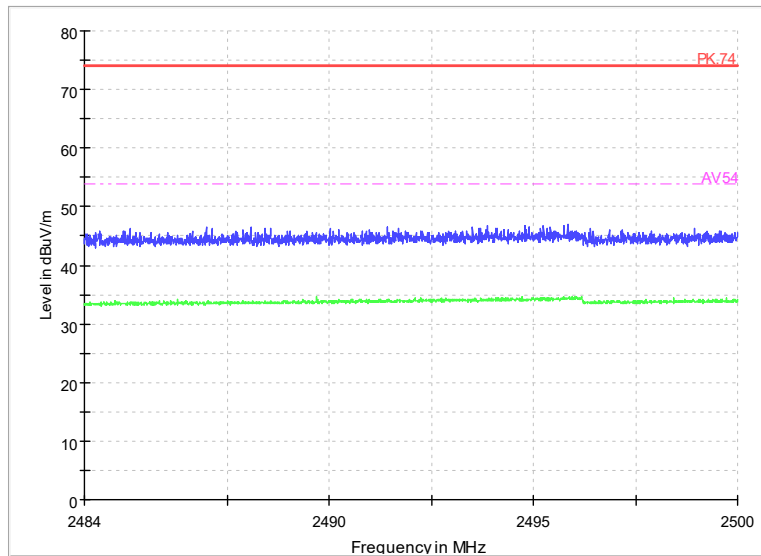
Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE 1Mbps)
Polarity: Vertical



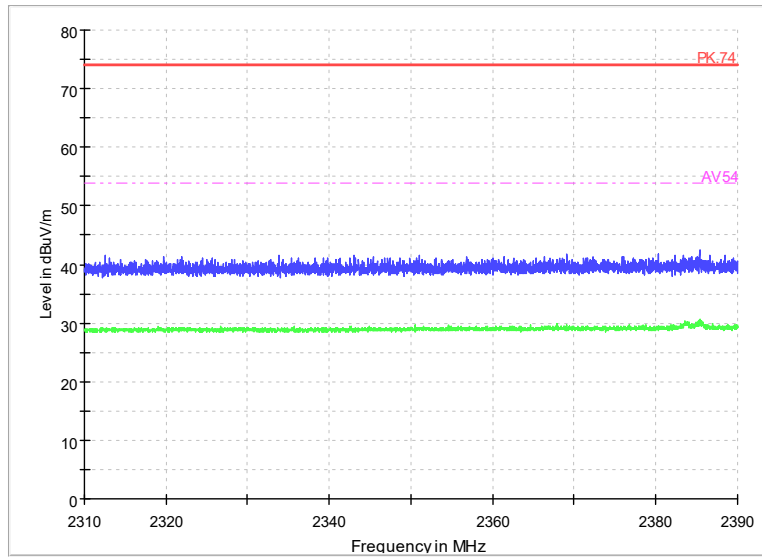
Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE 1Mbps)
Polarity: Horizontal



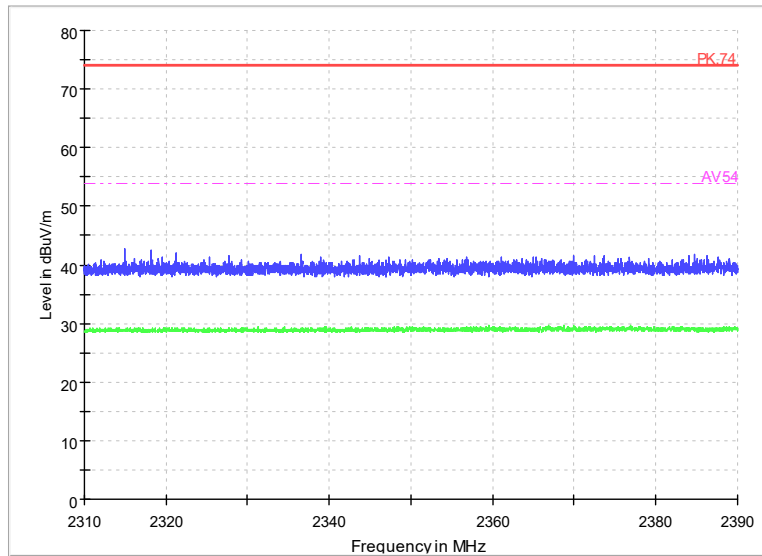
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE 1Mbps)
Polarity: Vertical



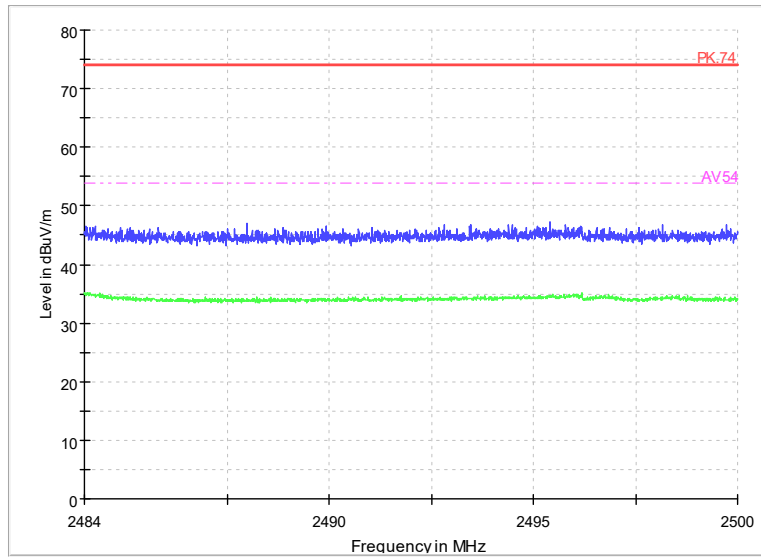
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE 1Mbps)
Polarity: Horizontal



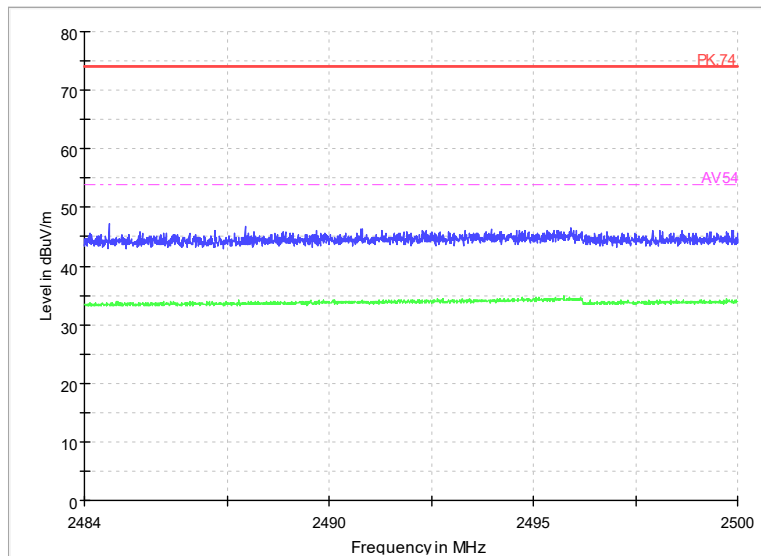
Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE 2Mbps)
Polarity: Vertical



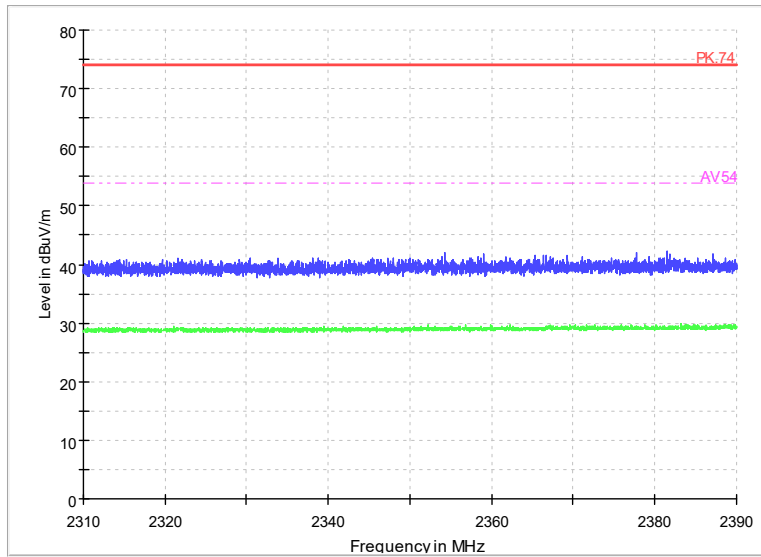
Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE 2Mbps)
Polarity: Horizontal



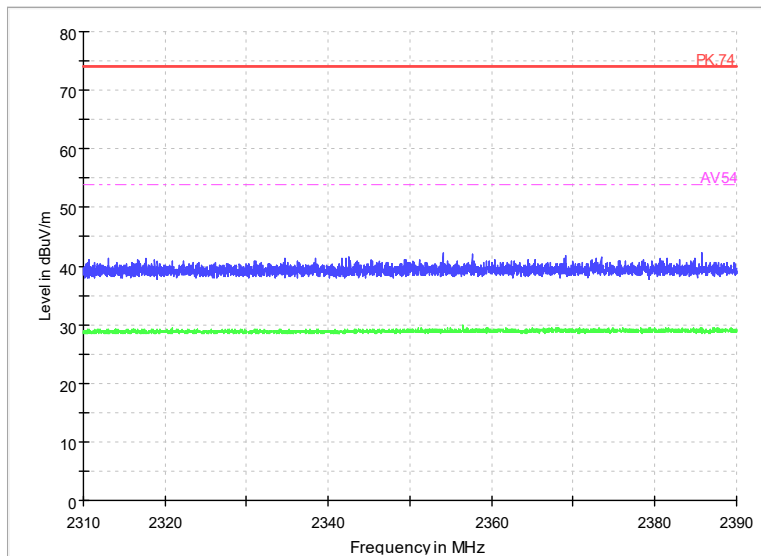
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE 2Mbps)
Polarity: Vertical



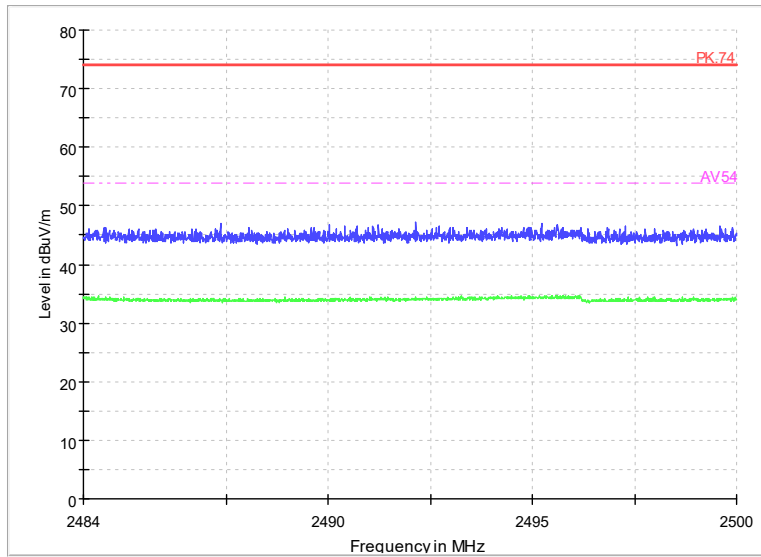
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE 2Mbps)
Polarity: Horizontal



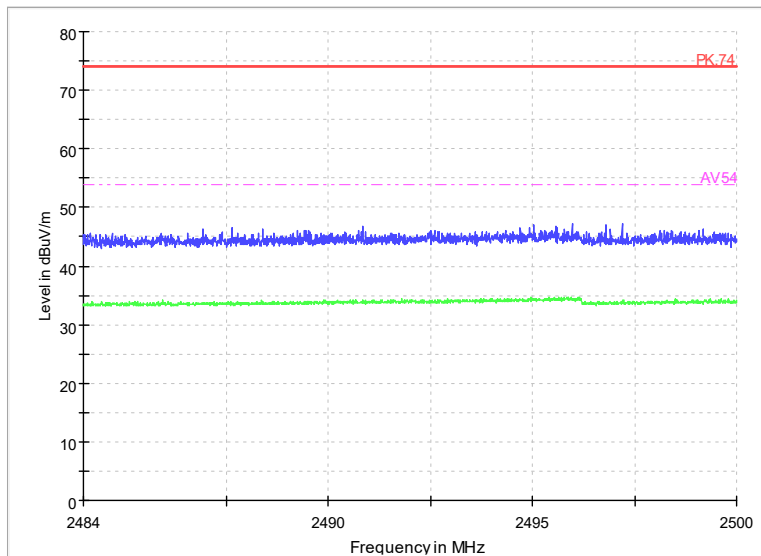
Carrier frequency (MHz): 2402
 Channel No.:0
 Test Mode: Coded 125K
 Polarity: Vertical



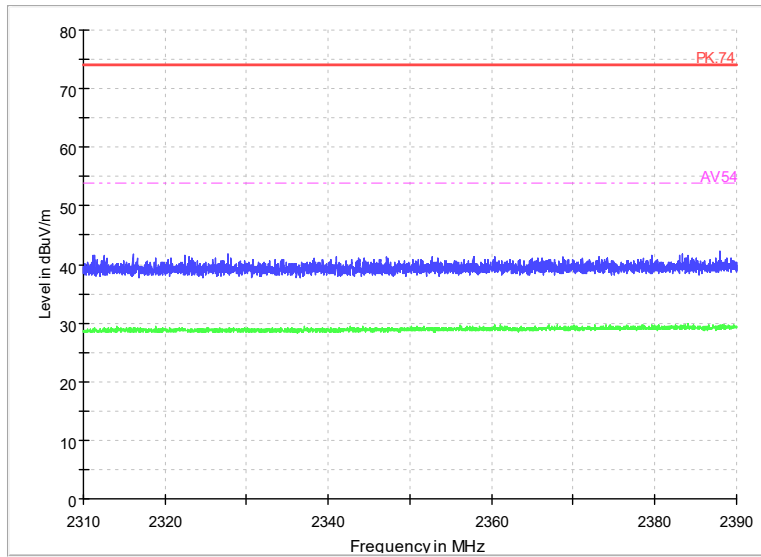
Carrier frequency (MHz): 2402
 Channel No.:0
 Test Mode: Coded 125K
 Polarity: Horizontal



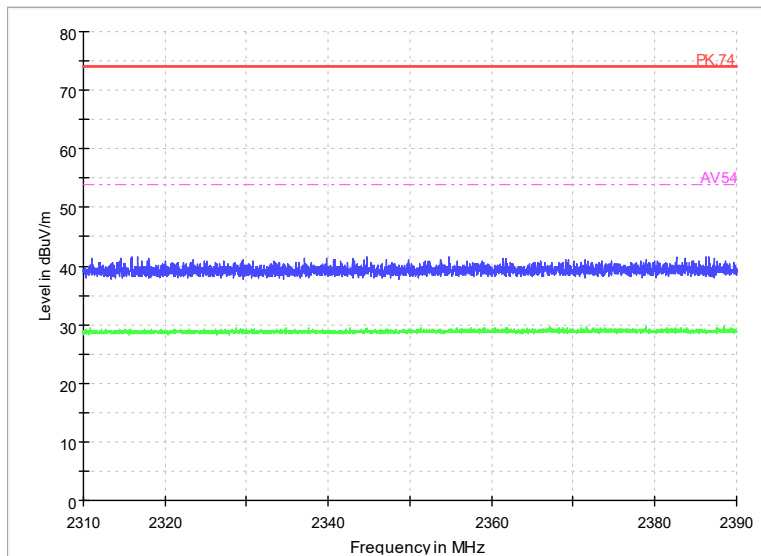
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: Coded 125K
Polarity: Vertical



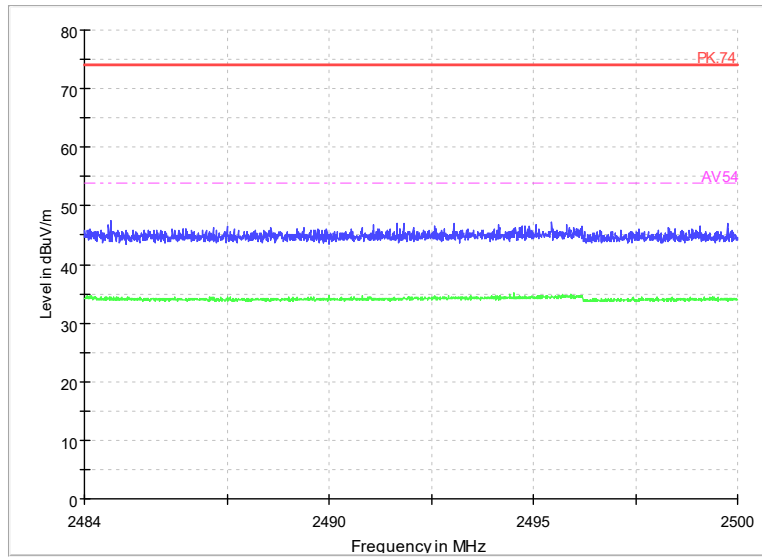
Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: Coded 125K
Polarity: Horizontal



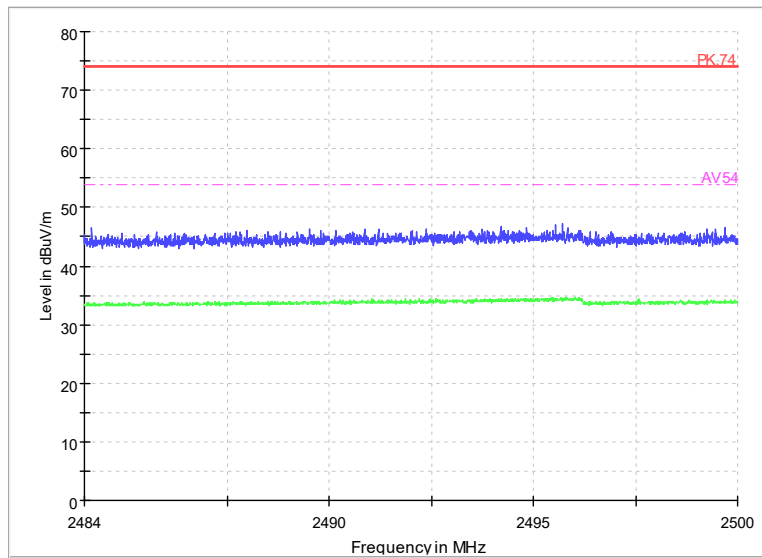
Carrier frequency (MHz): 2402
 Channel No.:0
 Test Mode: Coded 500K
 Polarity: Vertical



Carrier frequency (MHz): 2402
 Channel No.:0
 Test Mode: Coded 500K
 Polarity: Horizontal



Carrier frequency (MHz): 2480
 Channel No.:39
 Test Mode: Coded 500K
 Polarity: Vertical



Carrier frequency (MHz): 2480
 Channel No.:39
 Test Mode: Coded 500K
 Polarity: Horizontal

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: $(6.66 \text{ dB}\mu\text{V/m}) = (25.46 \text{ dBuV}) + (-18.8 \text{ dB/m})$, the corresponding frequency is 44.9865MHz.

For GFSK (LE 1Mbps)

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
44.938	6.66	-18.8	25.46	Vertical	40	33.34
96.2995	18.69	-19.3	37.99	Vertical	43.5	24.81
155.7605	17.74	-21.9	39.64	Vertical	43.5	25.76
239.811	10.05	-18.1	28.15	Vertical	46	35.95
332.3975	16.63	-15.2	31.83	Vertical	46	29.37
924.0975	18.5	-3.4	21.9	Vertical	46	27.5

Channel No.:19

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
44.8895	6.66	-18.8	25.46	Vertical	40	33.34
96.154	18.26	-19.3	37.56	Vertical	43.5	25.24
156.197	18.21	-21.9	40.11	Vertical	43.5	25.29
240.393	15.14	-18	33.14	Vertical	46	30.86
331.6215	12.74	-15.3	28.04	Vertical	46	33.26
953.537	18.55	-3.2	21.75	Vertical	46	27.45

Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
51.437	6.64	-18.8	25.44	Vertical	40	33.36
96.057	17.71	-19.3	37.01	Vertical	43.5	25.79
156.0515	18.22	-21.9	40.12	Vertical	43.5	25.28
239.0835	14.17	-18.1	32.27	Vertical	46	31.83
504.9605	17.17	-10.9	28.07	Vertical	46	28.83
935.883	18.53	-3.3	21.83	Vertical	46	27.47

For GFSK (LE 2Mbps)

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
46.587	5.99	-18.7	24.69	Vertical	40	34.01

96.348	18.47	-19.3	37.77	Vertical	43.5	25.03
155.906	18.11	-21.9	40.01	Vertical	43.5	25.39
239.908	15.96	-18.1	34.06	Vertical	46	30.04
387.4935	18.09	-13.6	31.69	Vertical	46	27.91
946.7955	18.52	-3.2	21.72	Vertical	46	27.48

Channel No.:19

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
43.871	5.7	-18.8	24.5	Vertical	40	34.3
96.348	19.1	-19.3	38.4	Vertical	43.5	24.4
155.8575	18.08	-21.9	39.98	Vertical	43.5	25.42
239.7625	16.29	-18.1	34.39	Vertical	46	29.71
502.487	18.45	-10.9	29.35	Vertical	46	27.55
911.0025	18.14	-3.5	21.64	Vertical	46	27.86

Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
50.5155	6.16	-18.7	24.86	Vertical	40	33.84
96.2995	17.31	-19.3	36.61	Vertical	43.5	26.19
155.8575	18	-21.9	39.9	Vertical	43.5	25.5
239.811	16.34	-18.1	34.44	Vertical	46	29.66
505.009	18.34	-10.9	29.24	Vertical	46	27.66
935.01	19.26	-3.3	22.56	Vertical	46	26.74

For Coded 125K

Channel No.:0

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
48.1875	5.37	-18.7	24.07	Vertical	40	34.63
96.348	18.63	-19.3	37.93	Vertical	43.5	24.87
156.585	18.19	-21.8	39.99	Vertical	43.5	25.31
239.908	15.84	-18.1	33.94	Vertical	46	30.16
500.0135	17.95	-11	28.95	Vertical	46	28.05
902.806	18.02	-3.6	21.62	Vertical	46	27.98

Channel No.:19

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
46.005	6.3	-18.8	25.1	Vertical	40	33.7
96.348	16.78	-19.3	36.08	Vertical	43.5	26.72
155.9545	18.07	-21.9	39.97	Vertical	43.5	25.43
240.005	15.64	-18.1	33.74	Vertical	46	30.36
500.0135	18.05	-11	29.05	Vertical	46	27.95
944.904	18.33	-3.3	21.63	Vertical	46	27.67

Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
39.3605	6.32	-19	25.32	Vertical	40	33.68
96.348	17.98	-19.3	37.28	Vertical	43.5	25.52
156.585	17.69	-21.8	39.49	Vertical	43.5	25.81
240.975	16.27	-18	34.27	Vertical	46	29.73
382.498	18.73	-13.7	32.43	Vertical	46	27.27
899.0715	18.01	-3.7	21.71	Vertical	46	27.99

For Coded 500K
Channel No.:0

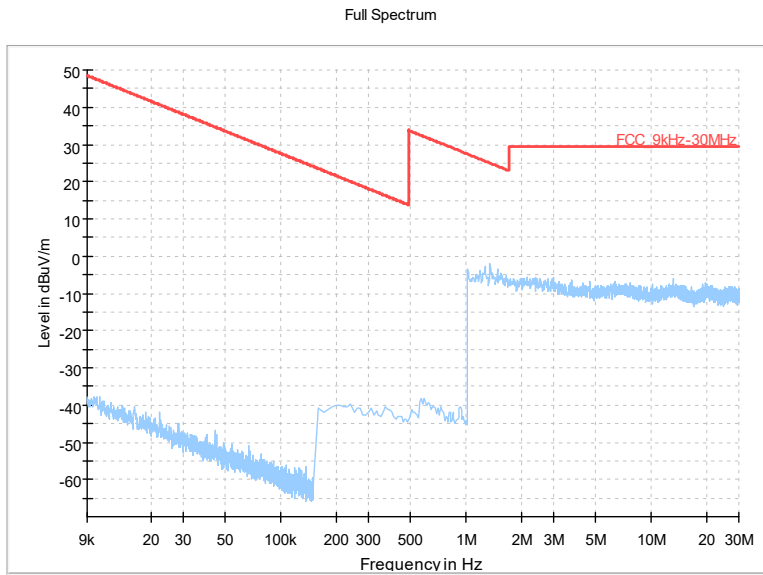
Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
52.0675	6.47	-18.8	25.27	Vertical	40	33.53
96.348	18.94	-19.3	38.24	Vertical	43.5	24.56
156.5365	18	-21.8	39.8	Vertical	43.5	25.5
240.878	15.93	-18	33.93	Vertical	46	30.07
505.009	18.28	-10.9	29.18	Vertical	46	27.72
897.5195	19.22	-3.7	22.92	Vertical	46	26.78

Channel No.:19

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
44.744	6.26	-18.8	25.06	Vertical	40	33.74
95.9115	16.42	-19.3	35.72	Vertical	43.5	27.08
155.906	17.08	-21.9	38.98	Vertical	43.5	26.42
239.908	14.59	-18.1	32.69	Vertical	46	31.41
489.198	11.19	-11.3	22.49	Vertical	46	34.81
923.661	18.05	-3.4	21.45	Vertical	46	27.95

Channel No.:39

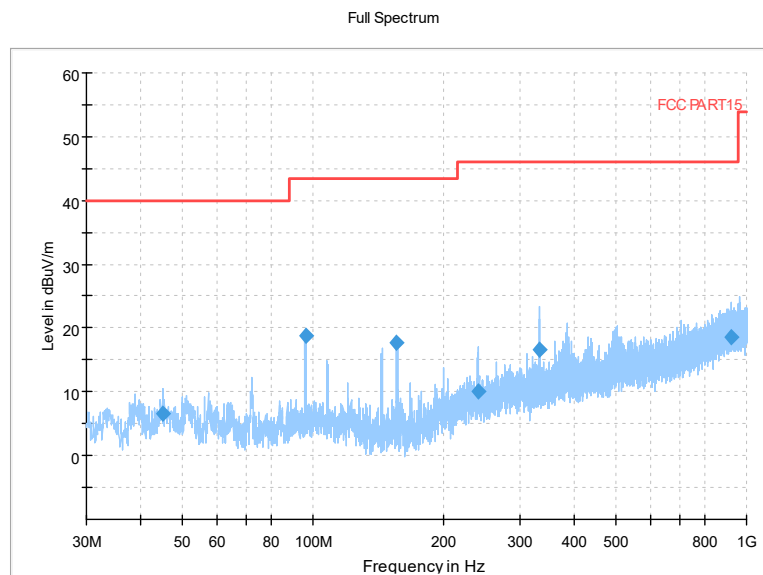
Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)	Margin (dB)
32.1825	3.92	-20.3	24.22	Vertical	40	36.08
95.9115	16.83	-19.3	36.13	Vertical	43.5	26.67
155.906	16.76	-21.9	38.66	Vertical	43.5	26.74
239.811	15.56	-18.1	33.66	Vertical	46	30.44
431.774	11.86	-12.5	24.36	Vertical	46	34.14
908.529	17.93	-3.6	21.53	Vertical	46	28.07



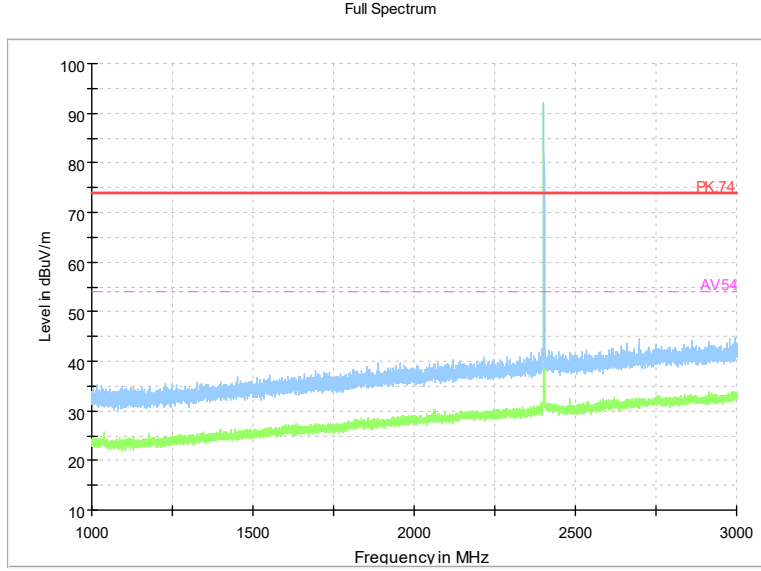
Frequency Range: 9kHz -30MHz
Detector: QP mode

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.

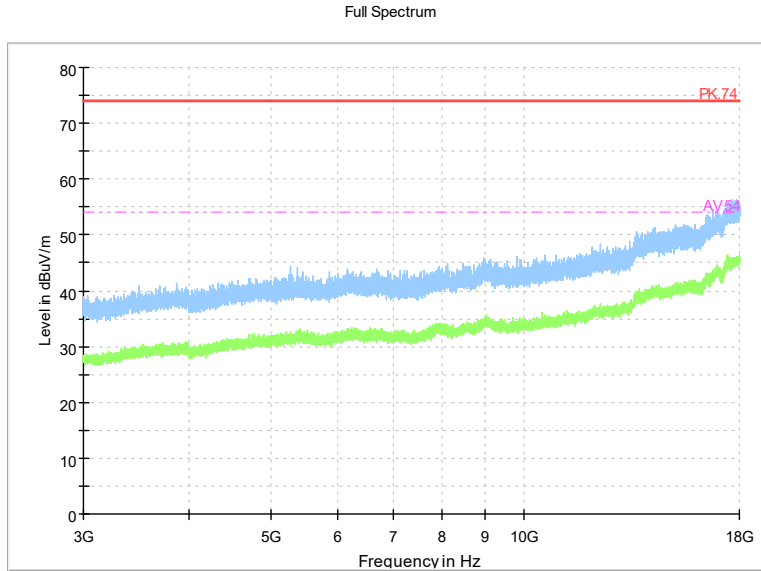
Channel No.:0



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

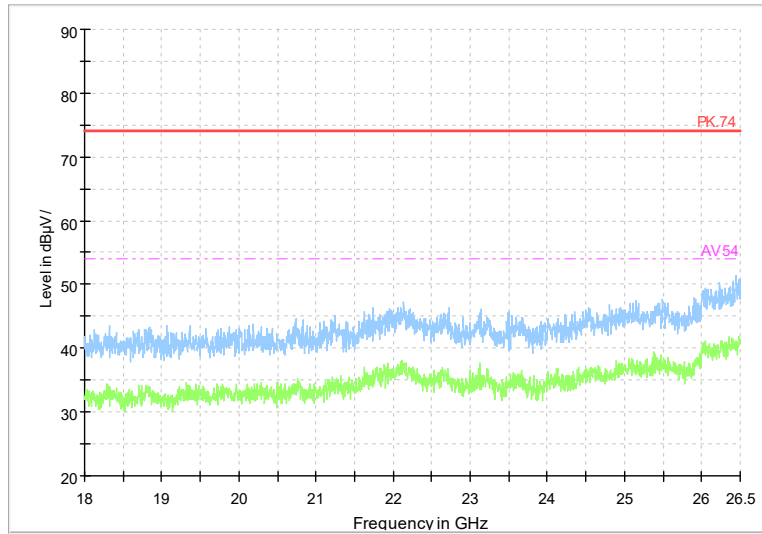


Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 1Mbps)



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

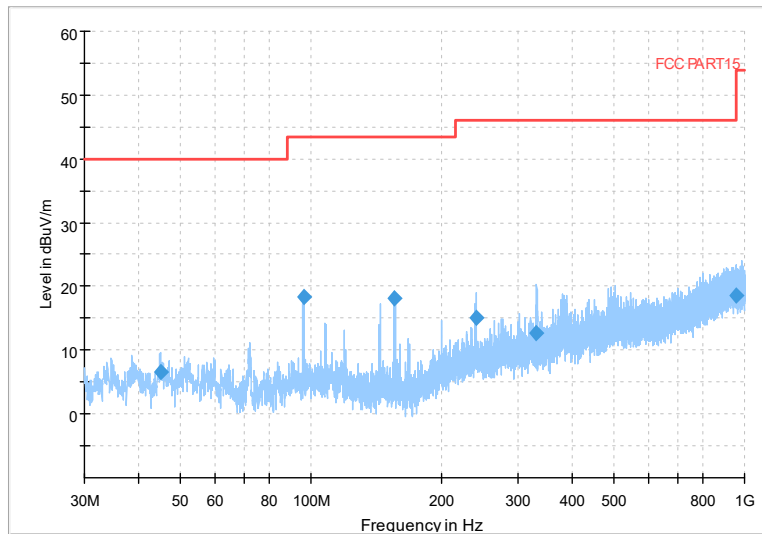
Full Spectrum



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

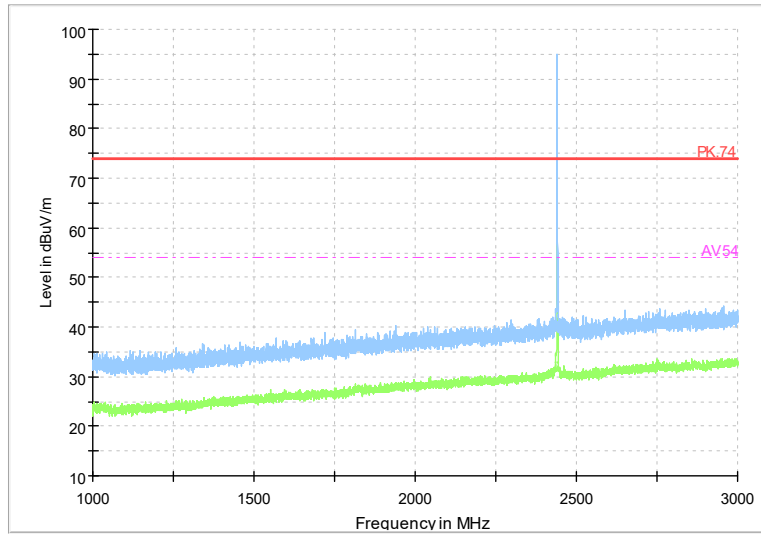
Channel No.:19

Full Spectrum



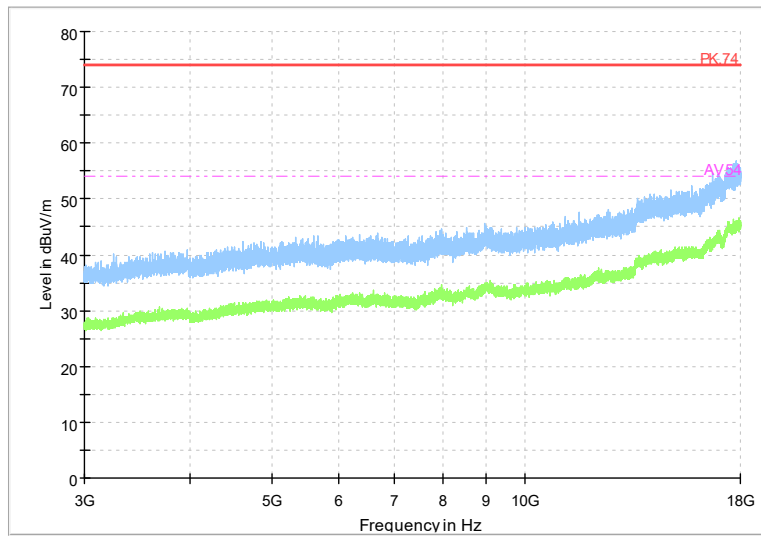
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: GFSK (LE 1Mbps)

Full Spectrum



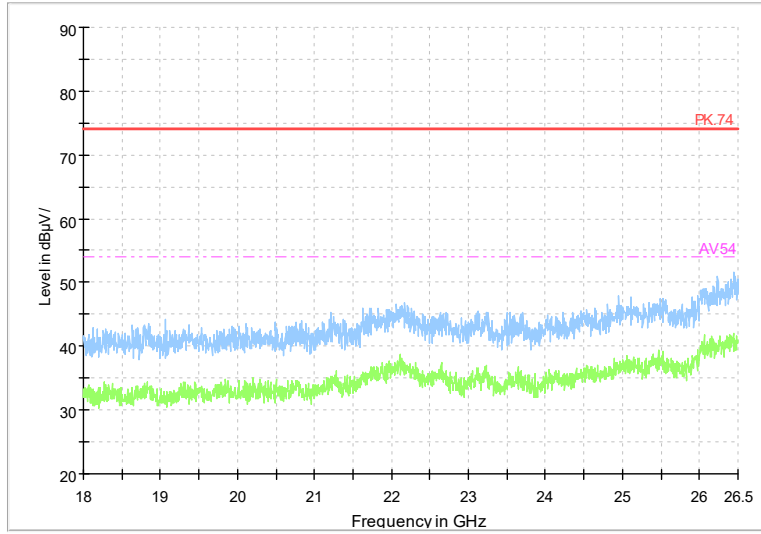
Frequency Range: 1GHz-3GHz
 Detector: Av mode and PK mode
 Modulation type: GFSK (LE 1Mbps)

Full Spectrum



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

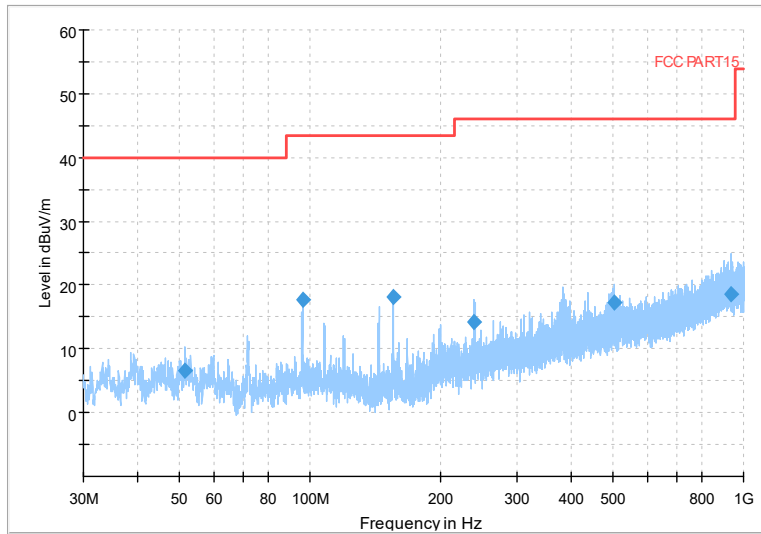
Full Spectrum



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

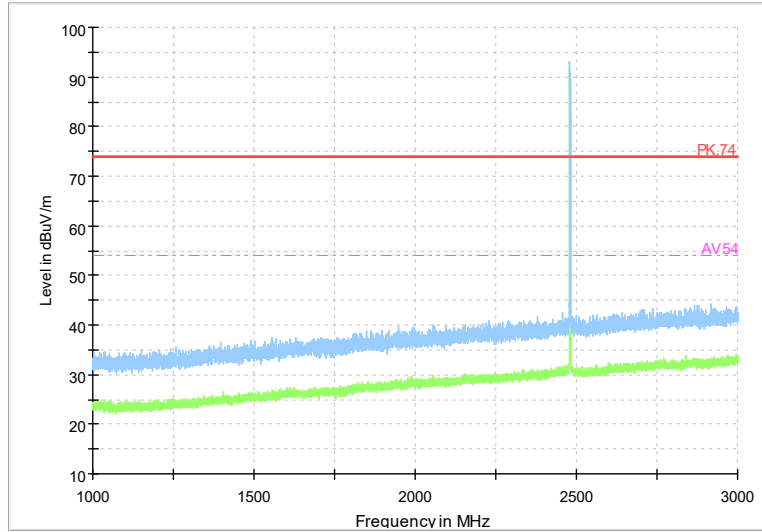
Channel No.:39

Full Spectrum



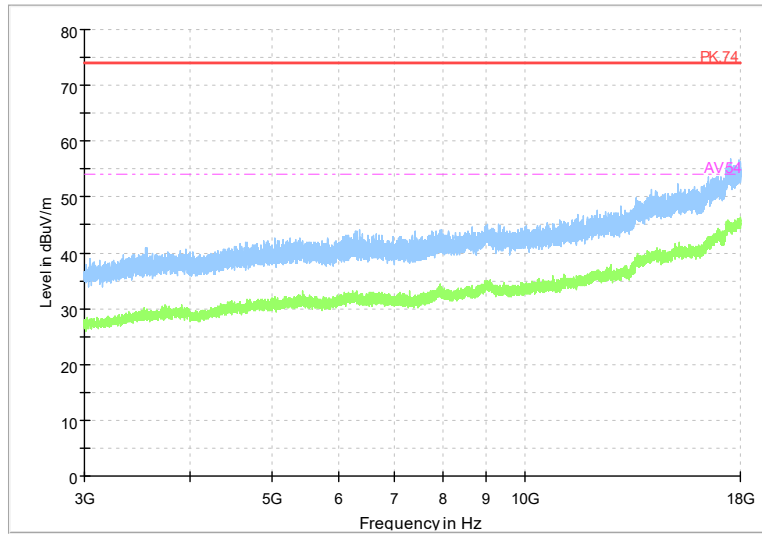
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: GFSK (LE 1Mbps)

Full Spectrum



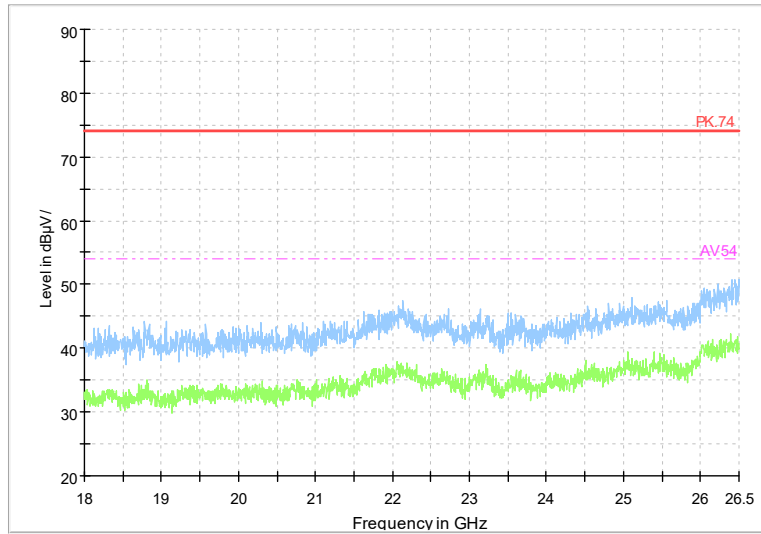
Frequency Range: 1GHz-3GHz
 Detector: Av mode and PK mode
 Modulation type: GFSK (LE 1Mbps)

Full Spectrum



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

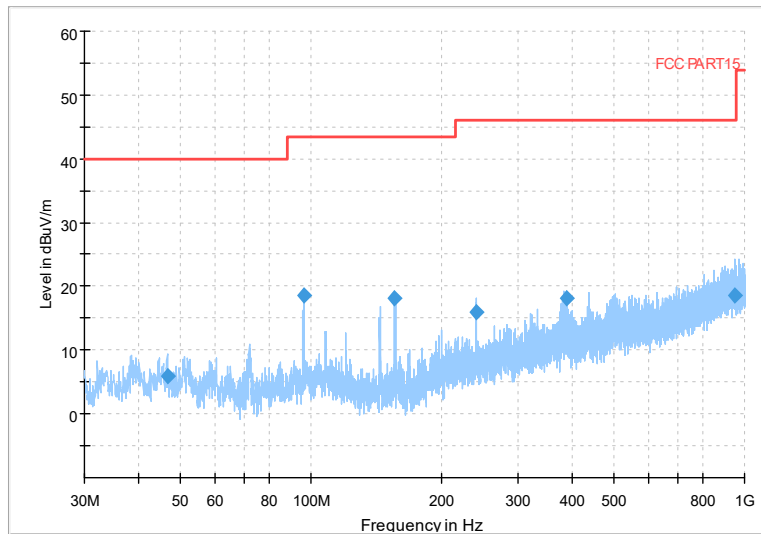
Full Spectrum



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

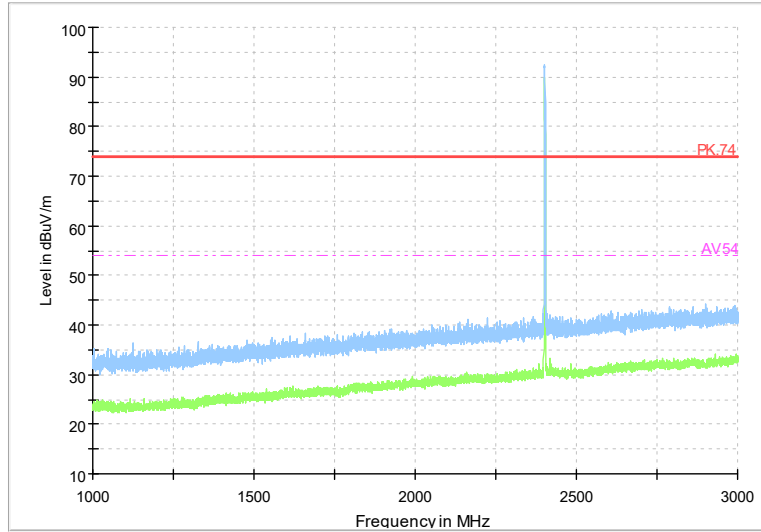
Channel No.:0

Full Spectrum



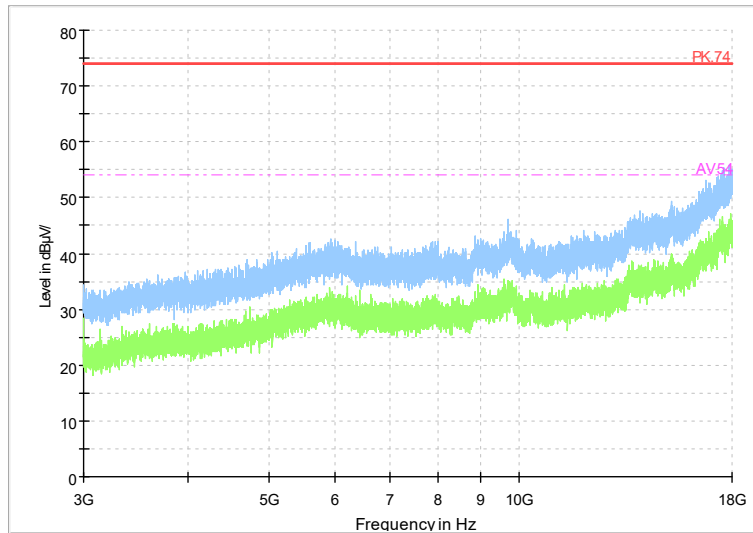
Frequency Range: 30MHz-1GHz
Detector:QP mode
Modulation type: GFSK (LE 2Mbps)

Full Spectrum



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)

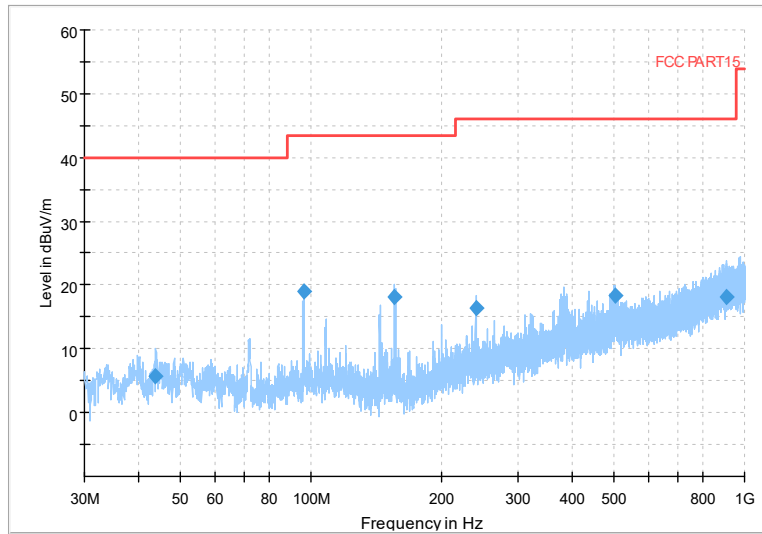
Full Spectrum



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

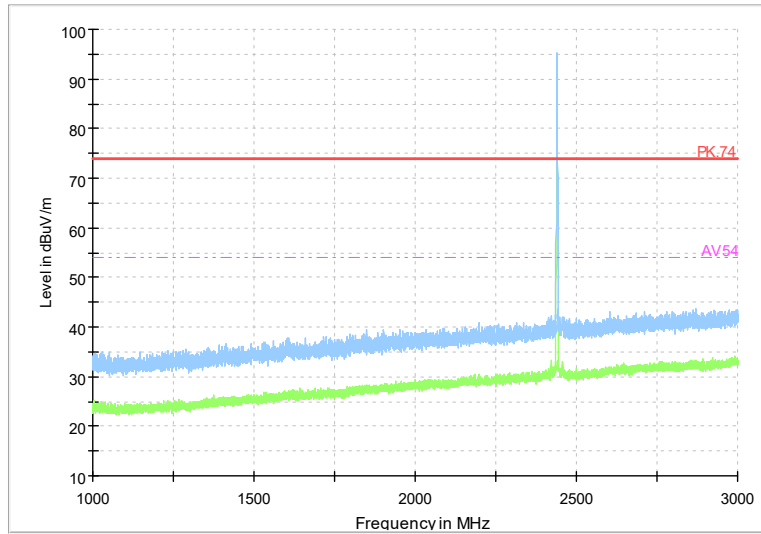
Channel No.:19

Full Spectrum



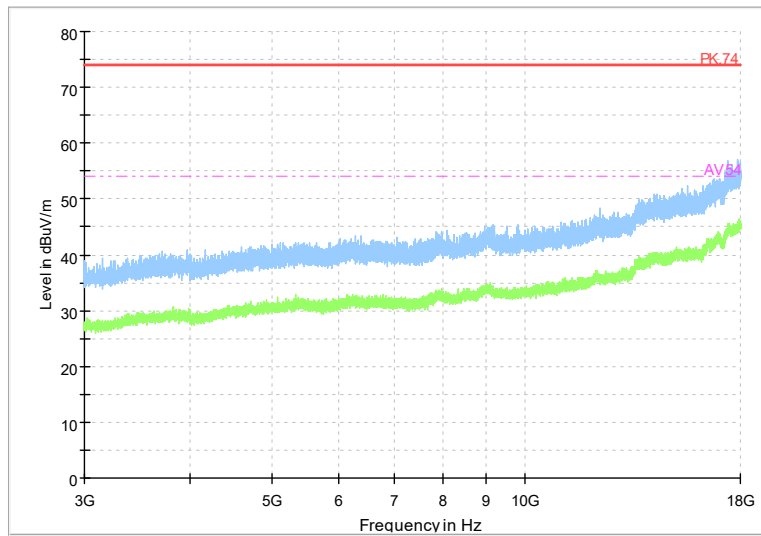
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: GFSK (LE 2Mbps)

Full Spectrum



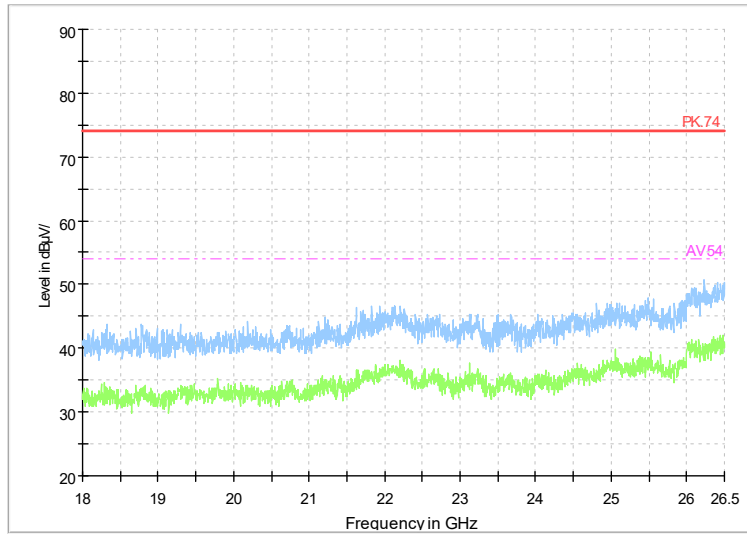
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

Full Spectrum



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

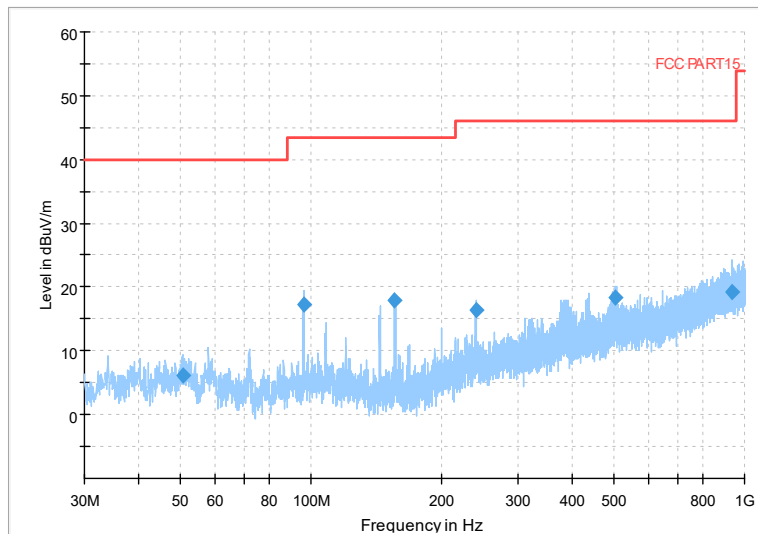
Full Spectrum



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

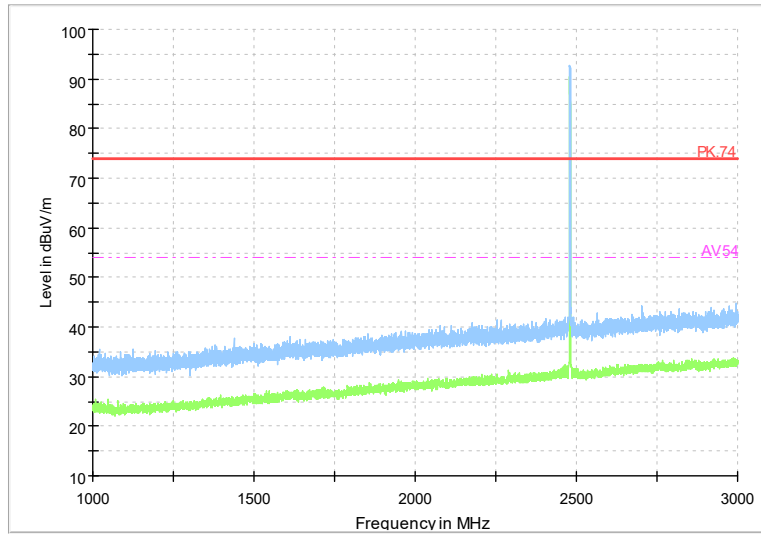
Channel No.:39

Full Spectrum



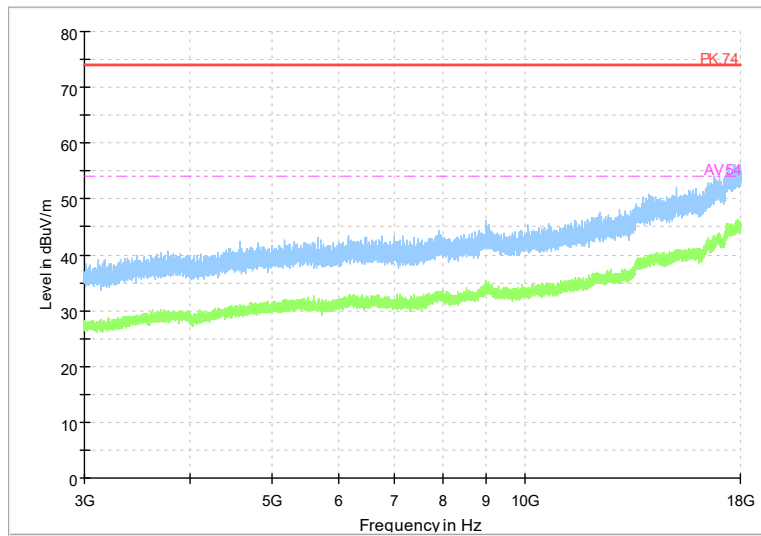
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: GFSK (LE 2Mbps)

Full Spectrum



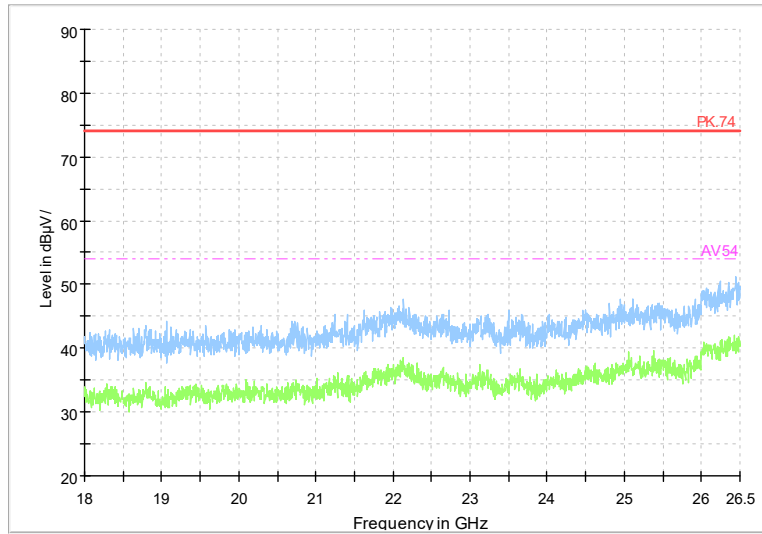
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE 2Mbps)

Full Spectrum



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

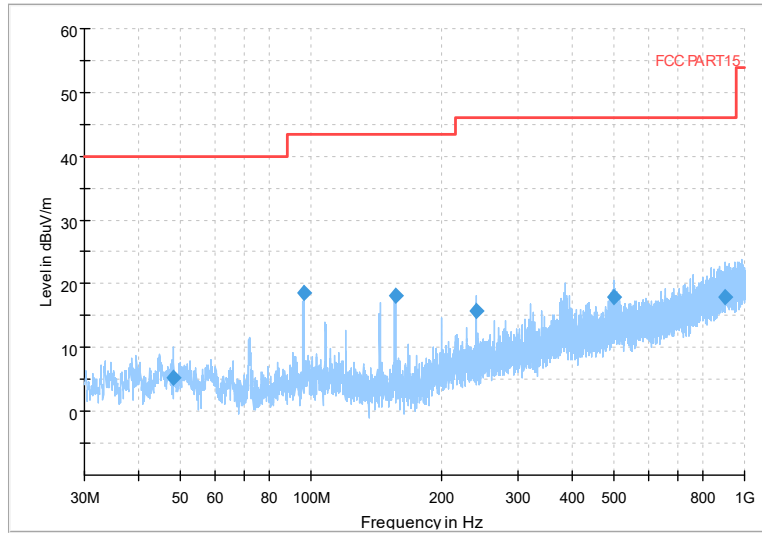
Full Spectrum



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

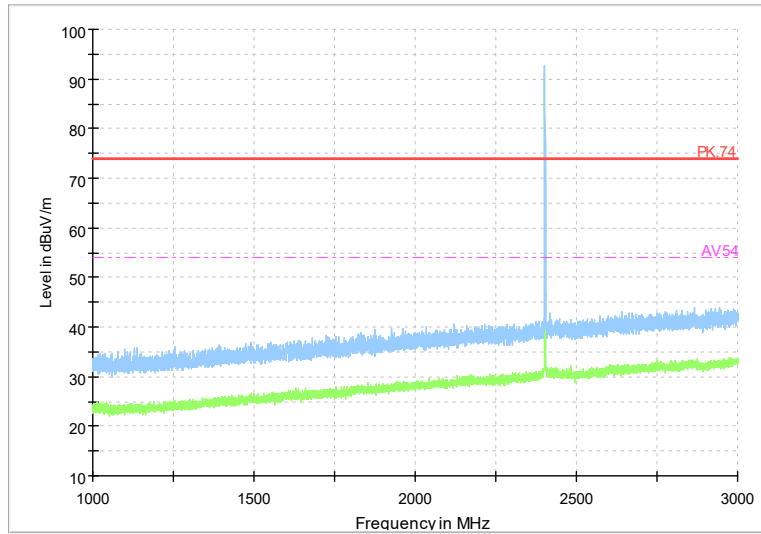
Channel No.:0

Full Spectrum



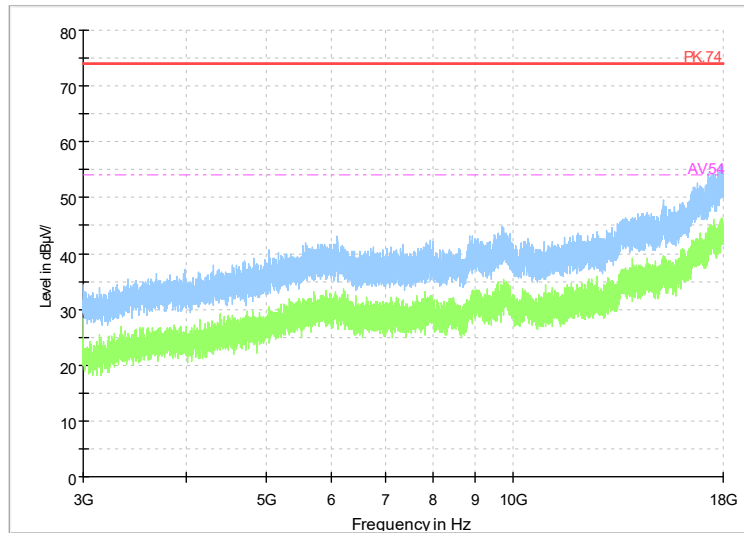
Frequency Range: 30MHz-1GHz
Detector:QP mode
Modulation type: Coded 125K

Full Spectrum



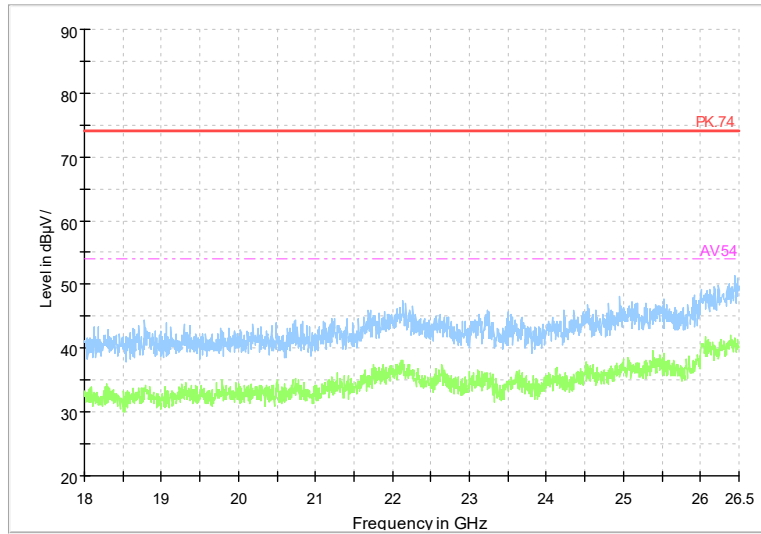
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

Full Spectrum



Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

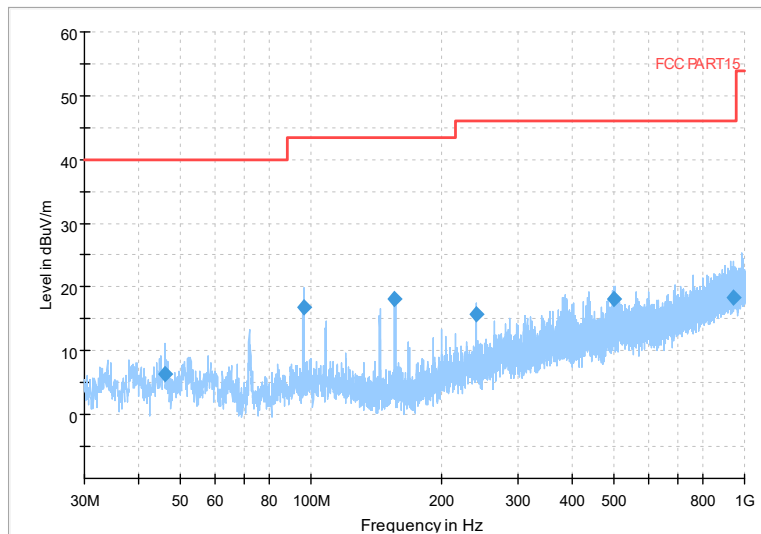
Full Spectrum



Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

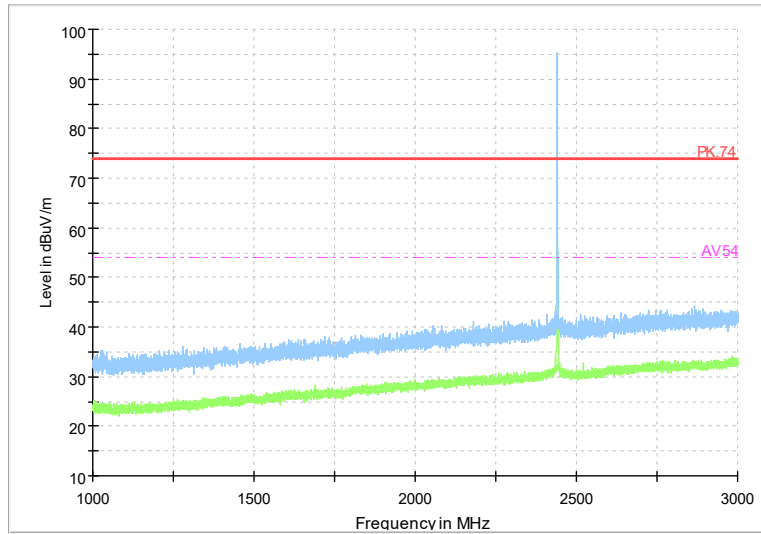
Channel No.:19

Full Spectrum



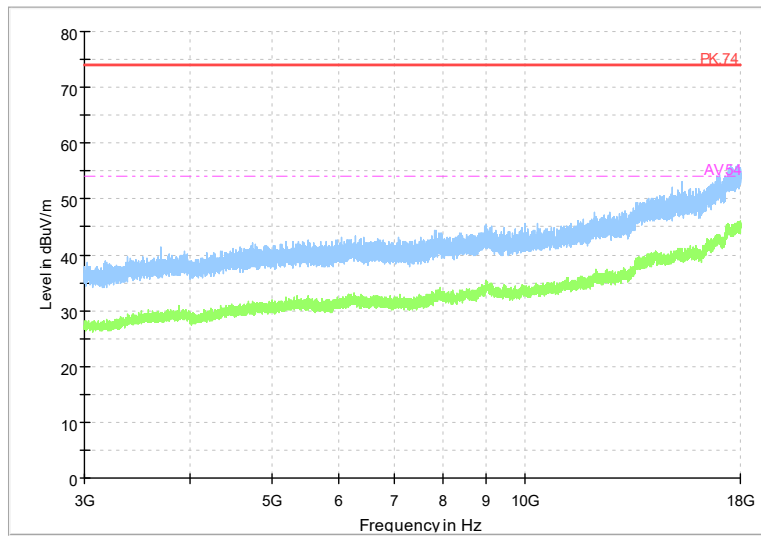
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 125K

Full Spectrum



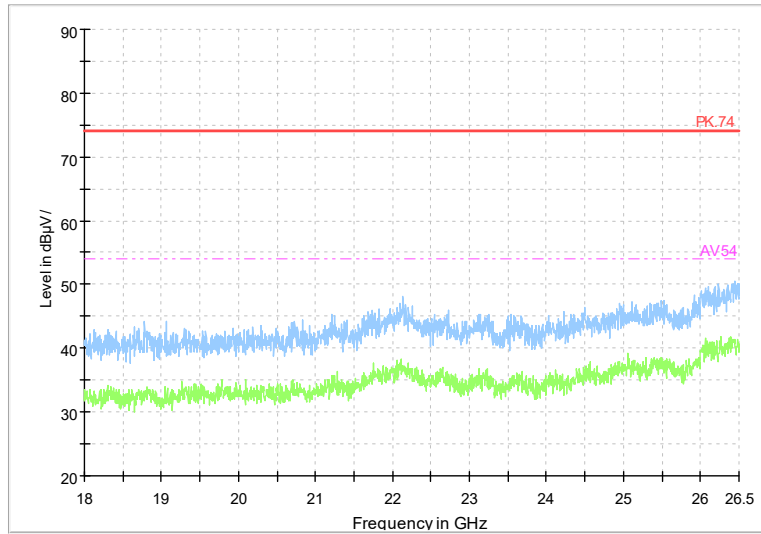
Frequency Range: 1GHz-3GHz
 Detector: Av mode and PK mode
 Modulation type: Coded 125K

Full Spectrum



Frequency Range: 3GHz-18GHz
 Detector: Av mode and PK mode
 Modulation type: Coded 125K

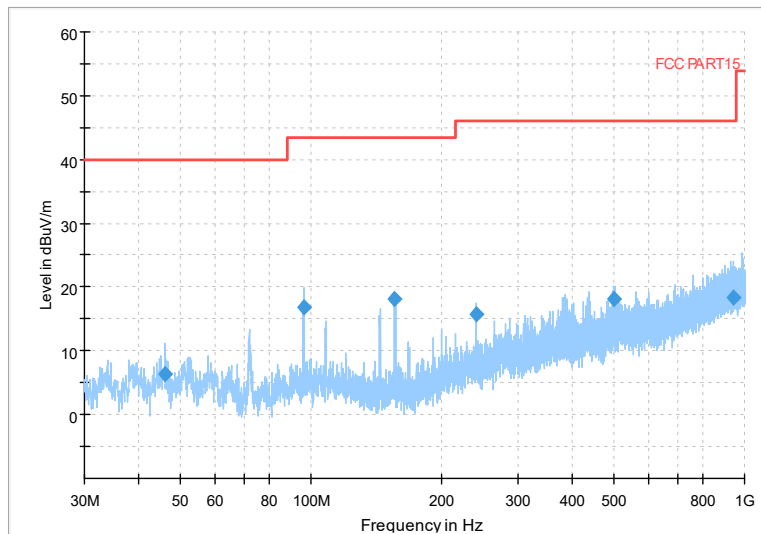
Full Spectrum



Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

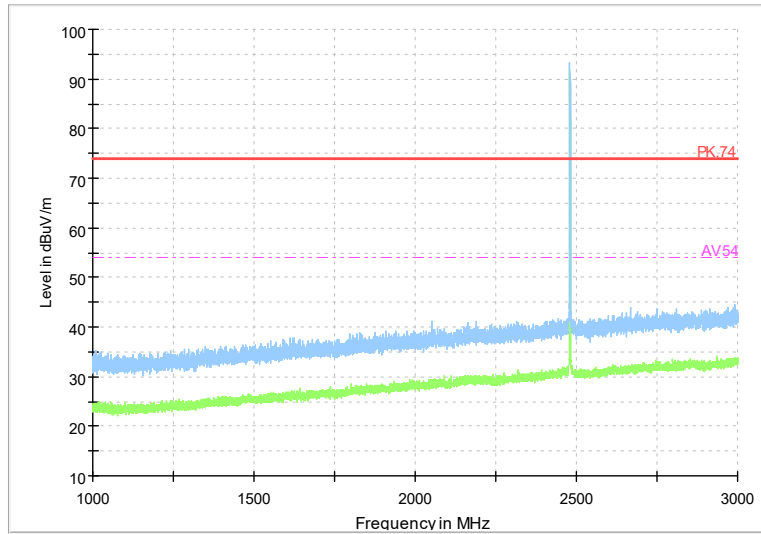
Channel No.:39

Full Spectrum



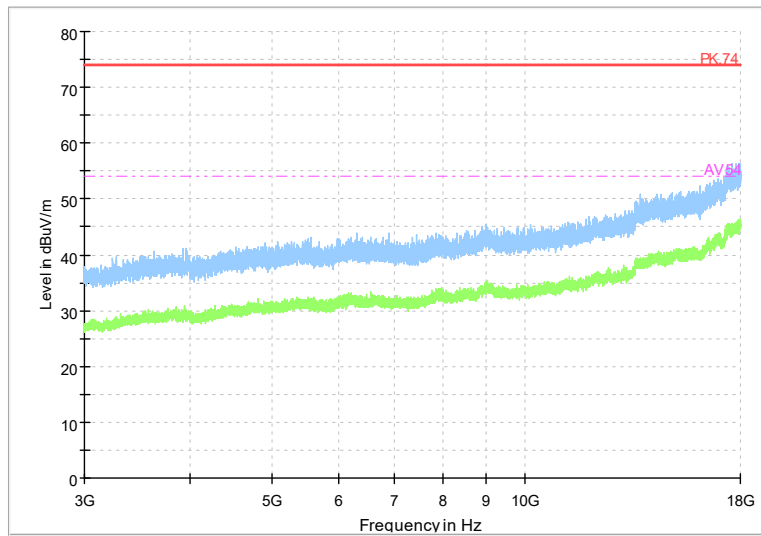
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 125K

Full Spectrum



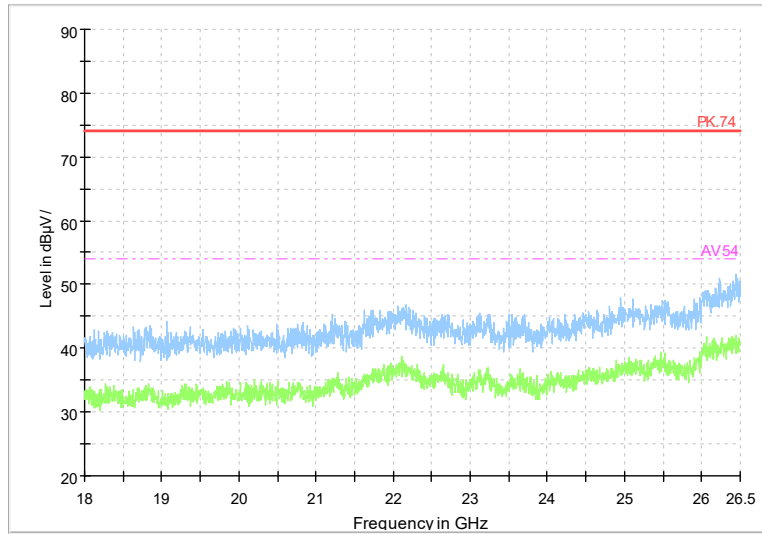
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

Full Spectrum



Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

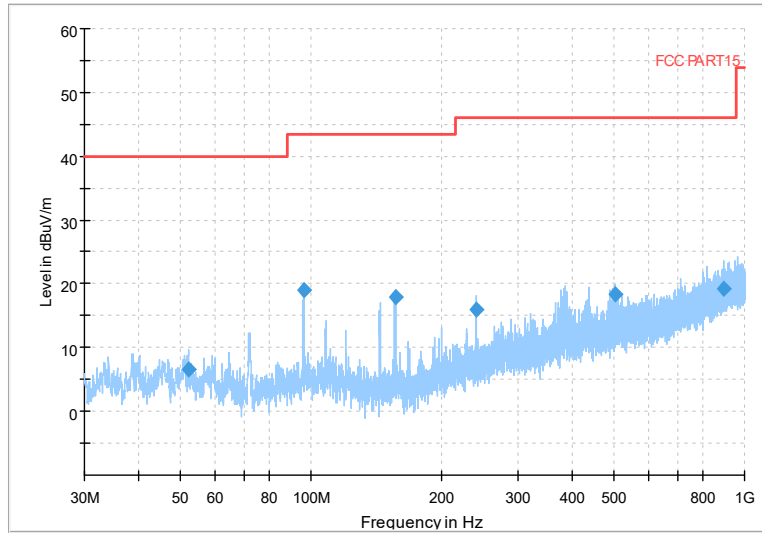
Full Spectrum



Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 125K

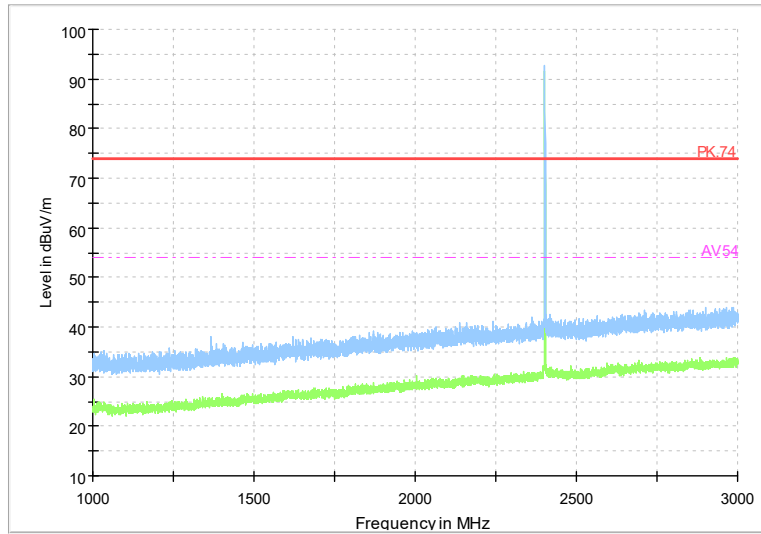
Channel No.:0

Full Spectrum



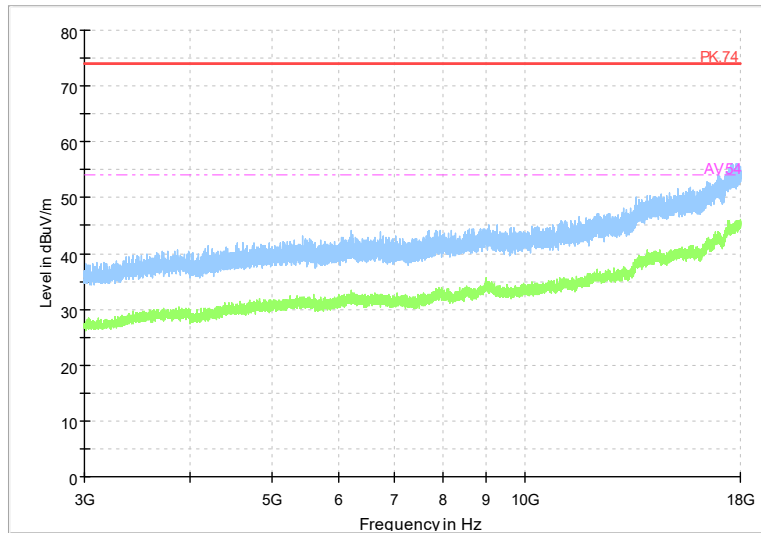
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 500K

Full Spectrum



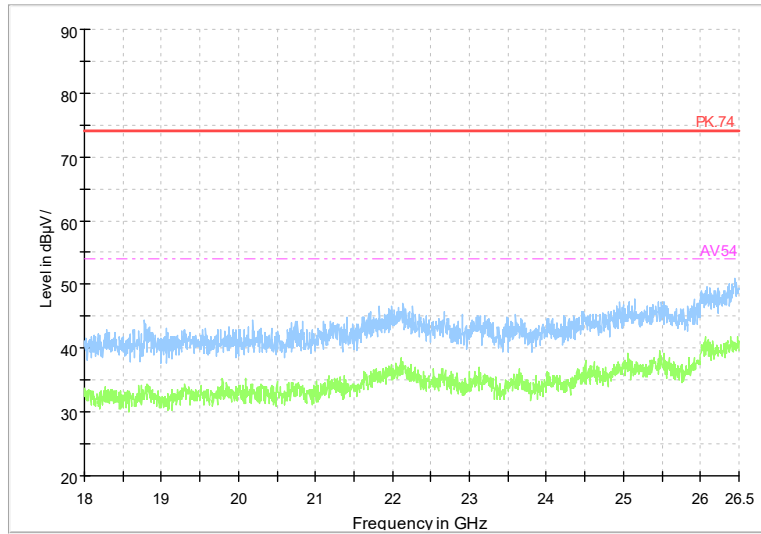
Frequency Range: 1GHz-3GHz
 Detector: Av mode and PK mode
 Modulation type: Coded 500K

Full Spectrum



Frequency Range: 3GHz-18GHz
 Detector: Av mode and PK mode
 Modulation type: Coded 500K

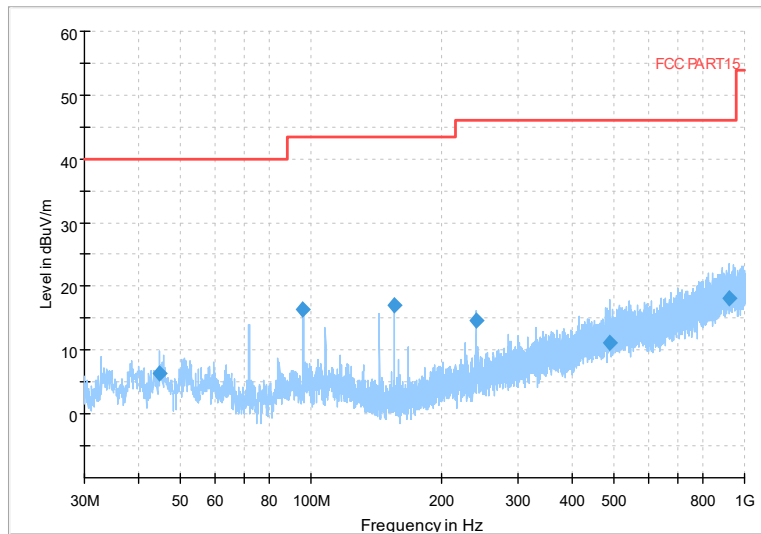
Full Spectrum



Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

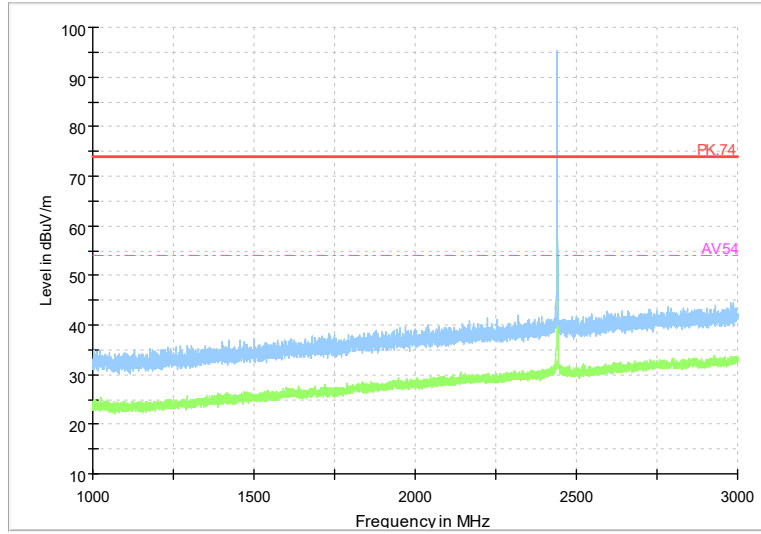
Channel No.:19

Full Spectrum



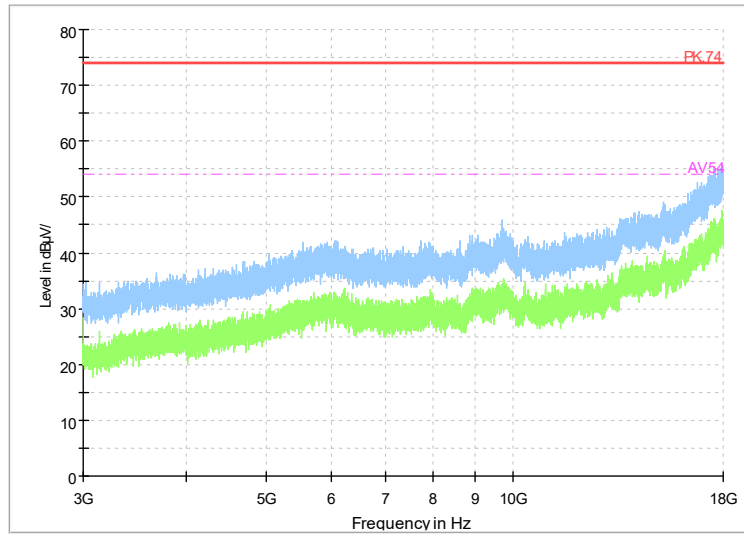
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 500K

Full Spectrum



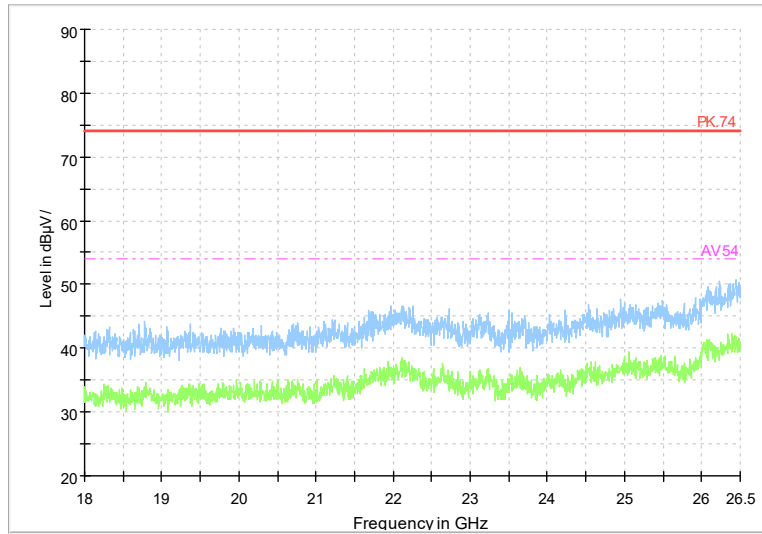
Frequency Range: 1GHz-3GHz
 Detector: Av mode and PK mode
 Modulation type: Coded 500K

Full Spectrum



Frequency Range: 3GHz-18GHz
 Detector: Av mode and PK mode
 Modulation type: Coded 500K

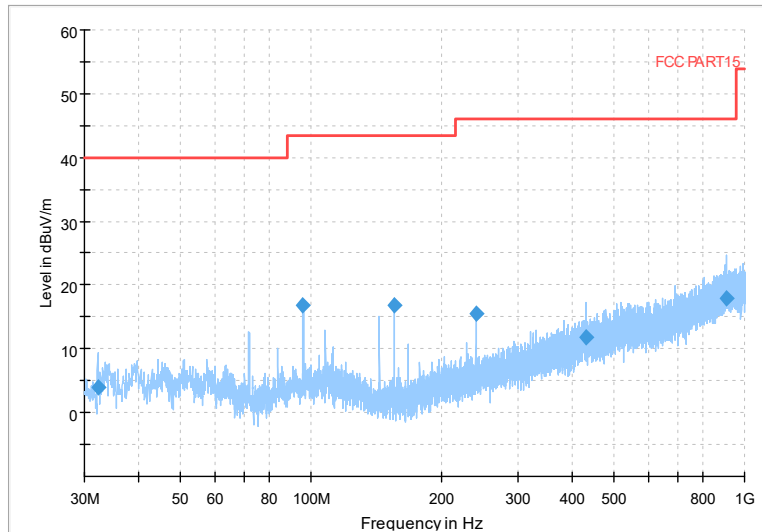
Full Spectrum



Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

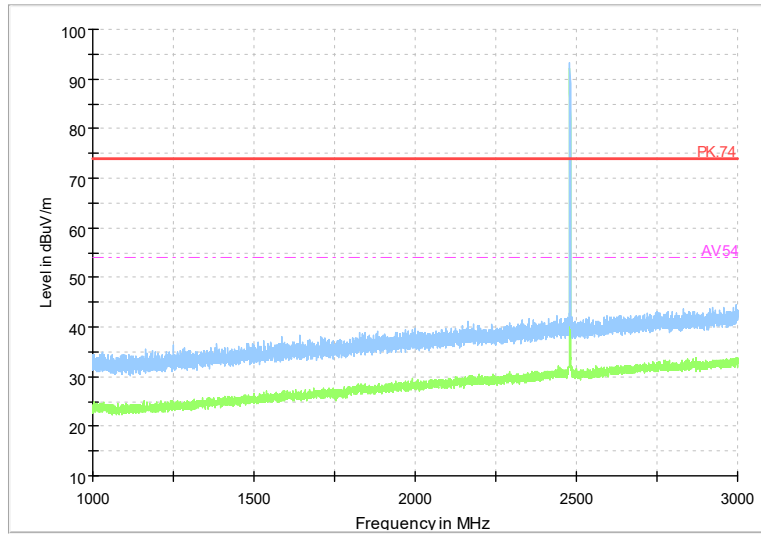
Channel No.:39

Full Spectrum



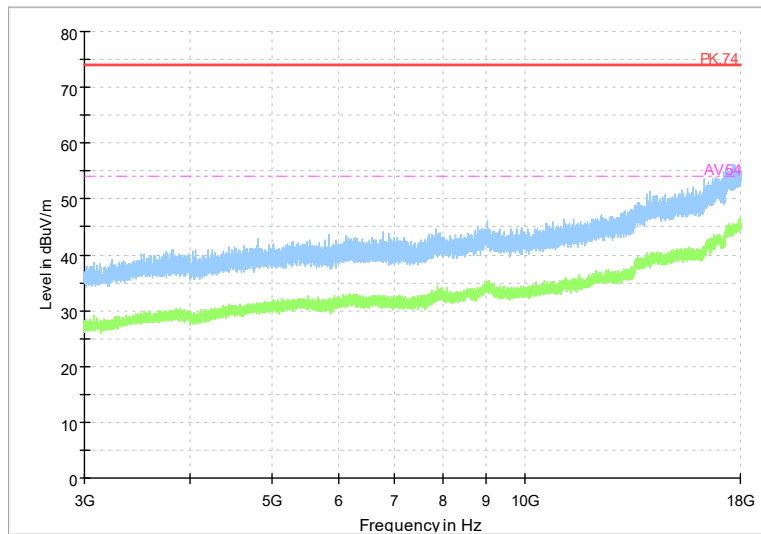
Frequency Range: 30MHz-1GHz
Detector: QP mode
Modulation type: Coded 500K

Full Spectrum



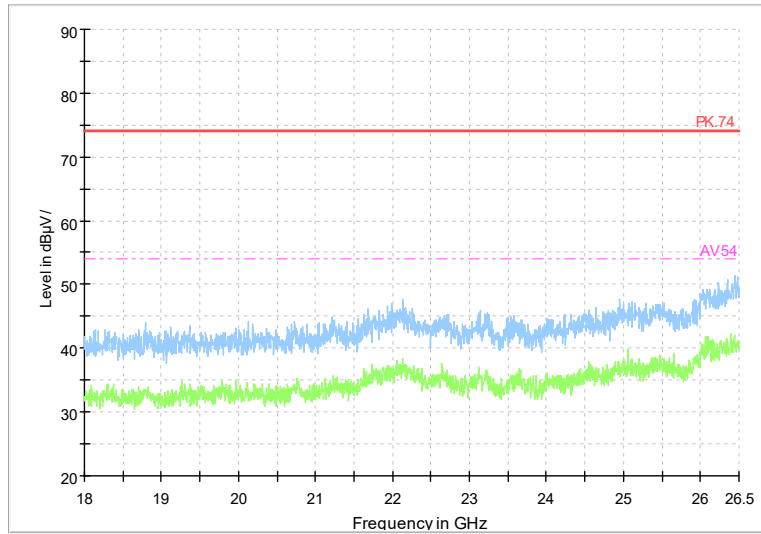
Frequency Range: 1GHz-3GHz
 Detector: Av mode and PK mode
 Modulation type: Coded 500K

Full Spectrum



Frequency Range: 3GHz-18GHz
 Detector: Av mode and PK mode
 Modulation type: Coded 500K

Full Spectrum



Frequency Range: 18GHz-26GHz
Detector: Av mode and PK mode
Modulation type: Coded 500K

---End of Test Report---