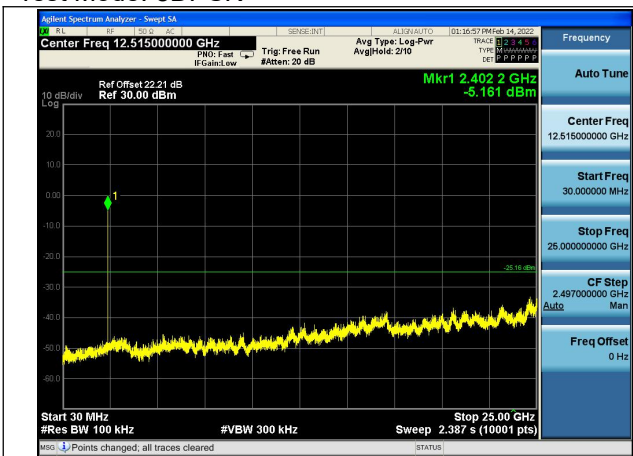


CH78(Hopping off)

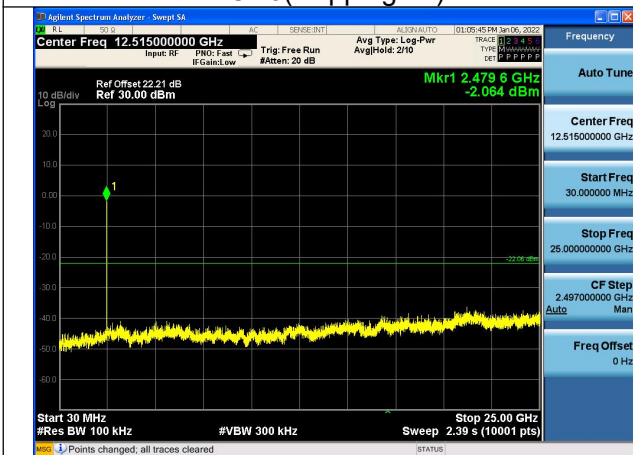
Test Mode: 8DPSK



CH0(Hopping off)

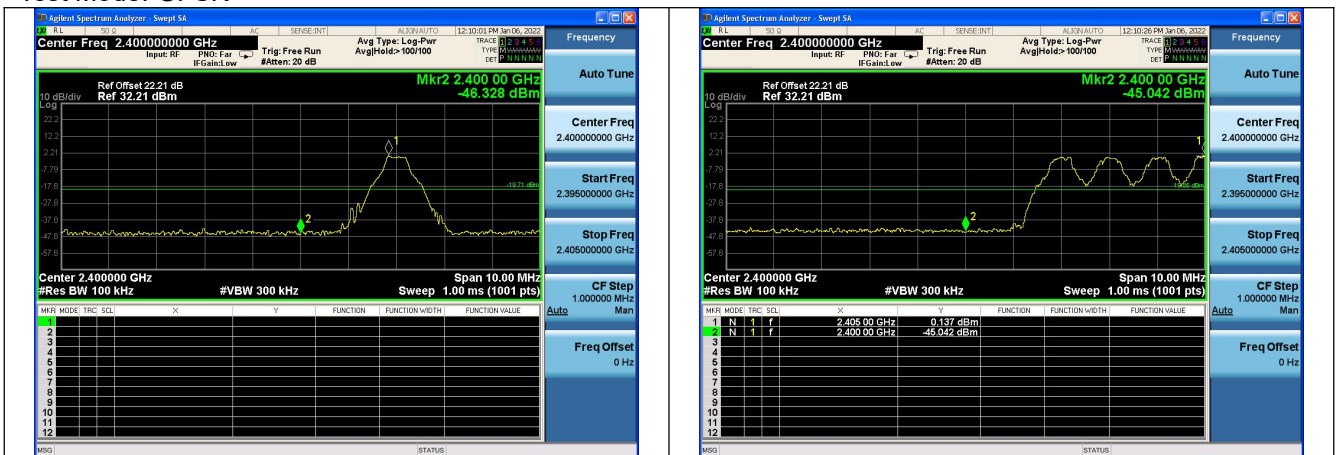


CH39(Hopping off)



CH78(Hopping off)

7 Band Edge measurement
Test Mode: GFSK



CH0(Hopping off)

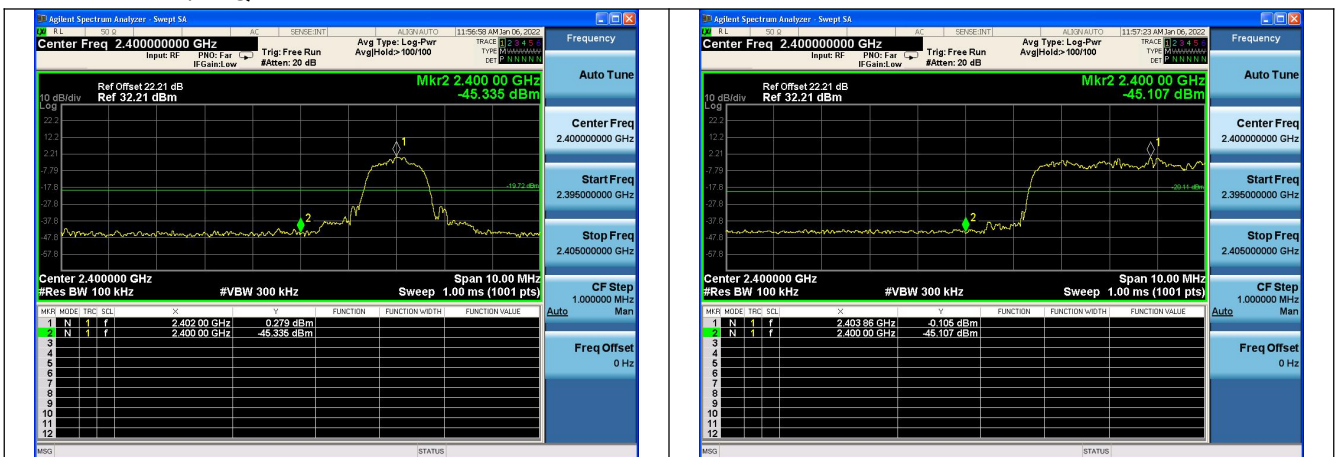
CH0(Hopping on)



CH78(Hopping off)

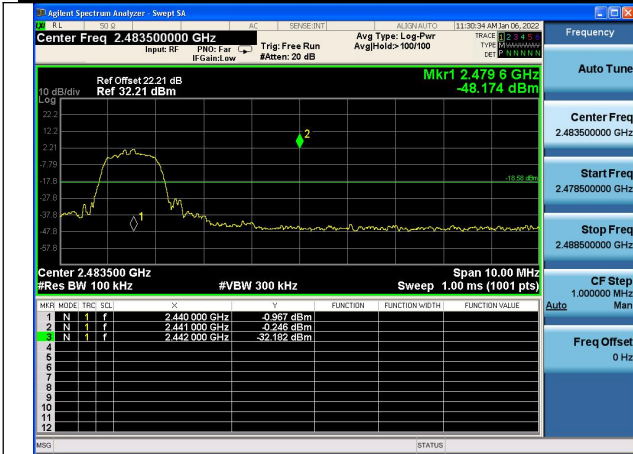
CH78(Hopping on)

Test Mode: $\pi/4$ DQPSK



CH0(Hopping off)

CH0(Hopping on)

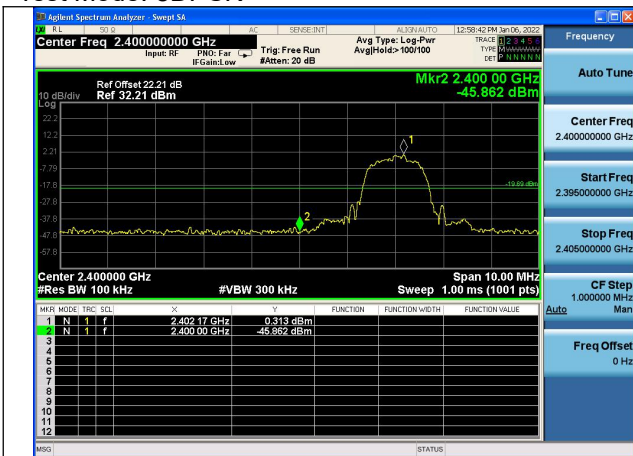


CH78(Hopping off)



CH78(Hopping on)

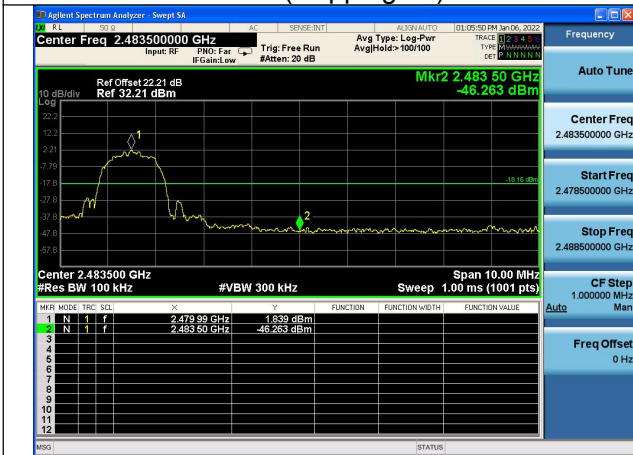
Test Mode: 8DPSK



CH0(Hopping off)



CH0(Hopping on)



CH78(Hopping off)



CH78(Hopping on)

APPENDIX B – TEST DATA OF RADIATED EMISSION

Radiated Emission Band Edge

The measurement results are obtained as described below:

Measure Level = Reading Level + Cable loss + Antenna factor
Sample calculation: (98.10 dBuV/m) = (64.10 dBμV) + (8.90 dB) + (25.10 dB), the corresponding frequency is 2402MHz.

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

Note: There were no emissions above 18GHz found within 20dB of the limit. Thus the test result was not reported according to §15.31 (o)

- **BR-1Mbps**

Carrier Frequency (MHz): 2402

Channel No.: 0

Test Mode: GFSK

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2402.0	64.10	98.10	N/A	N/A	8.90	25.10
2390.0	9.50	43.50	-30.50	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2402.0	59.00	93.00	N/A	N/A	8.90	25.10
2390.0	-4.20	29.80	-24.20	54.00	8.90	25.10

Carrier Frequency (MHz): 2480

Channel No.: 78

Test Mode: GFSK

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2480.0	61.00	95.00	N/A	N/A	8.90	25.10
2483.5	11.50	45.50	-28.50	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2480.0	58.20	92.20	N/A	N/A	8.90	25.10
2483.5	-5.10	28.90	-25.10	54.00	8.90	25.10

● **EDR-2Mbps**

Carrier Frequency (MHz): 2402

Channel No.: 0

Test Mode: π /4DQPSK

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2402.0	67.50	101.50	N/A	N/A	8.90	25.10
2390.0	10.00	44.00	-30.00	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2402.0	62.10	96.10	N/A	N/A	8.90	25.10
2390.0	-4.10	29.90	-24.10	54.00	8.90	25.10

Carrier Frequency (MHz): 2480

Channel No.: 78

Test Mode: π /4DQPSK

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2480.0	62.20	96.20	N/A	N/A	8.90	25.10
2483.5	15.20	49.20	-24.80	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2480.0	56.30	90.30	N/A	N/A	8.90	25.10
2483.5	-2.30	31.70	-22.30	54.00	8.90	25.10

● EDR-3Mbps

Carrier Frequency (MHz): 2402

Channel No.: 0

Test Mode: 8DPSK

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2402.0	67.70	101.70	N/A	N/A	8.90	25.10
2390.0	10.70	44.70	-29.30	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2402.0	61.70	95.70	N/A	N/A	8.90	25.10
2390.0	-4.10	29.90	-24.10	54.00	8.90	25.10

Carrier Frequency (MHz): 2480

Channel No.: 78

Test Mode: 8DPSK

Detector: Peak

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2480.0	62.30	96.30	N/A	N/A	8.90	25.10
2483.5	15.60	49.60	-24.40	74.00	8.90	25.10

Detector: Average

Frequency (MHz)	Reading Level (dBuV)	Measure Level (dBuV/m)	Over Limit (dB)	Limit (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB)
2480.0	56.30	90.30	N/A	N/A	8.90	25.10
2483.5	-2.20	31.80	-22.20	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:

Below 1GHz:

$$\text{QuasiPeak} = \text{Reading Value} + A_{Rpl}$$

Above 1GHz:

$$\text{MaxPeak} = \text{Reading MaxPeak} + A_{Rpl}$$

OR

$$\text{Average} = \text{Reading Average} + A_{Rpl}$$

Sample calculation: $(11.40 \text{ dB}\mu\text{V/m}) = (31.40 \text{ dB}\mu\text{V}) + (-20.00 \text{ dB/m})$, the corresponding frequency is 45.132MHz.

The worst case attitude: The mobile lay down.

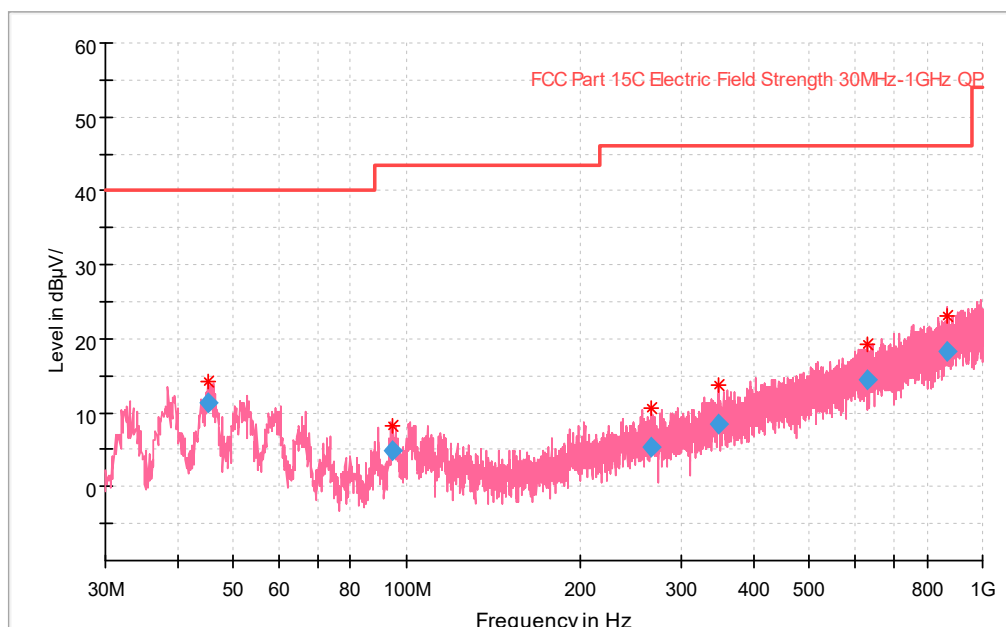
● BR-1Mbps

Spurious Radiated Emissions from 30MHz to 1GHz:

GFSK:

CH Middle (No.39)

Full Spectrum

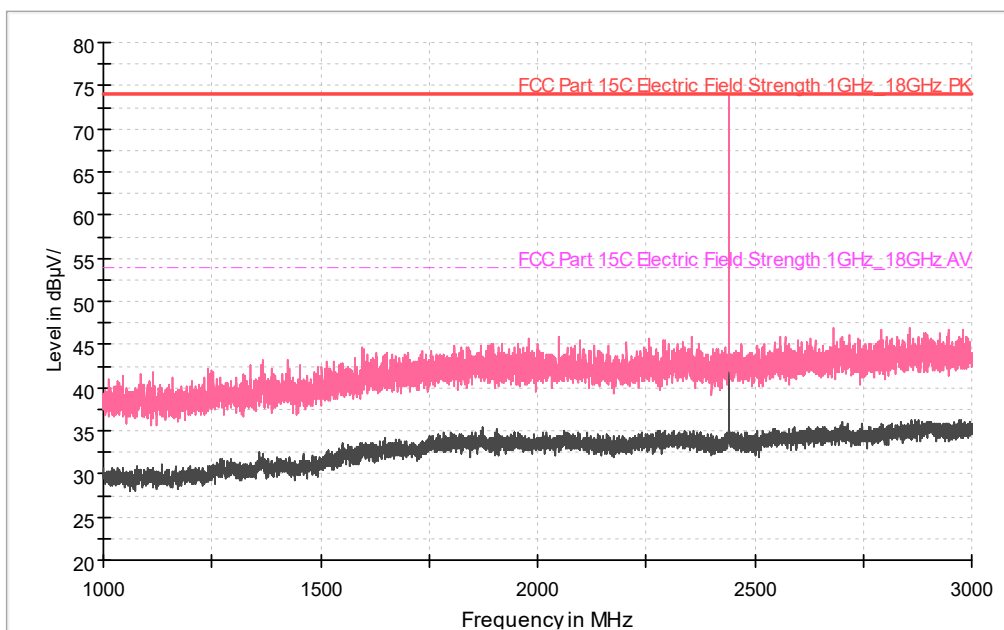


Frequency (MHz)	Reading (dBuV)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A_{Rpl} (dB)	Polarity
45.132	31.40	11.40	40.00	28.60	-20.00	Vertical

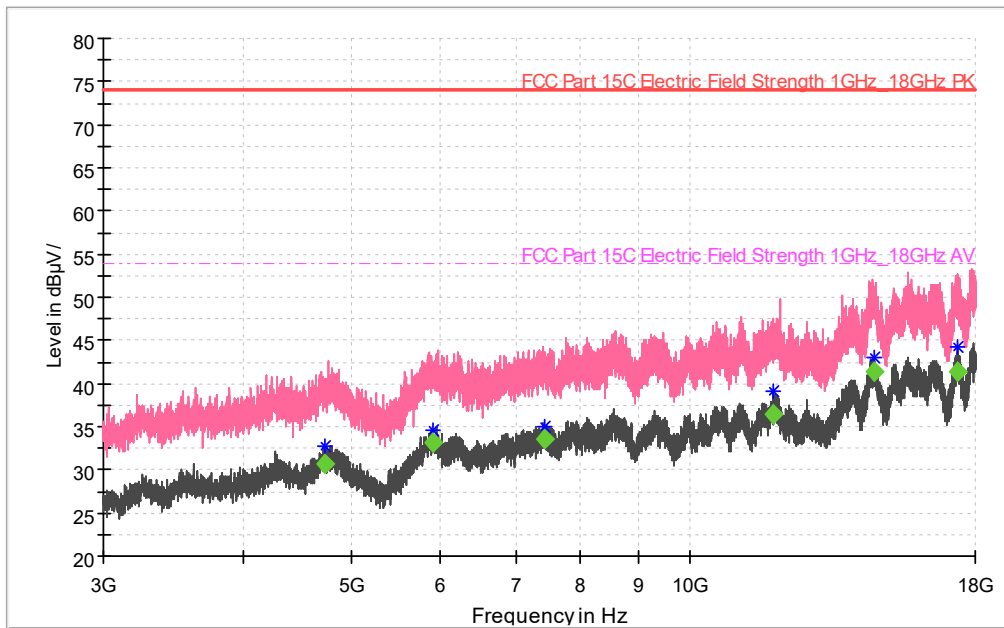
94.311	26.84	4.94	43.50	38.56	-21.90	Vertical
265.613	23.36	5.36	46.00	40.64	-18.00	Vertical
348.548	23.46	8.56	46.00	37.44	-14.90	Vertical
630.721	22.35	14.55	46.00	31.45	-7.80	Vertical
870.214	21.93	18.33	46.00	27.67	-3.60	Vertical

Spurious Radiated Emissions from 1GHz to 18GHz:
GFSK:
CH Middle (No.39)

Full Spectrum



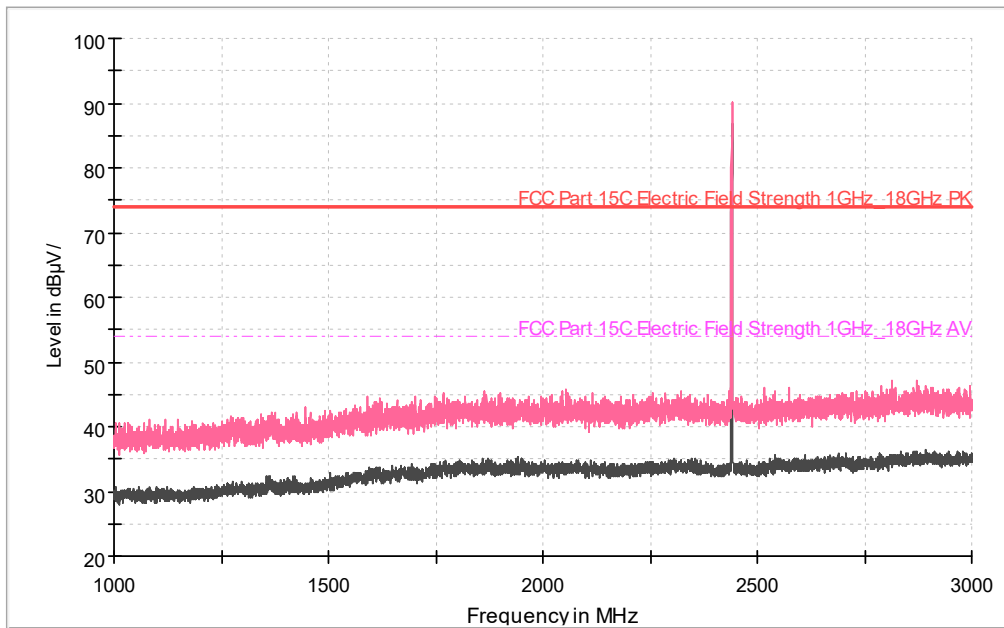
Full Spectrum



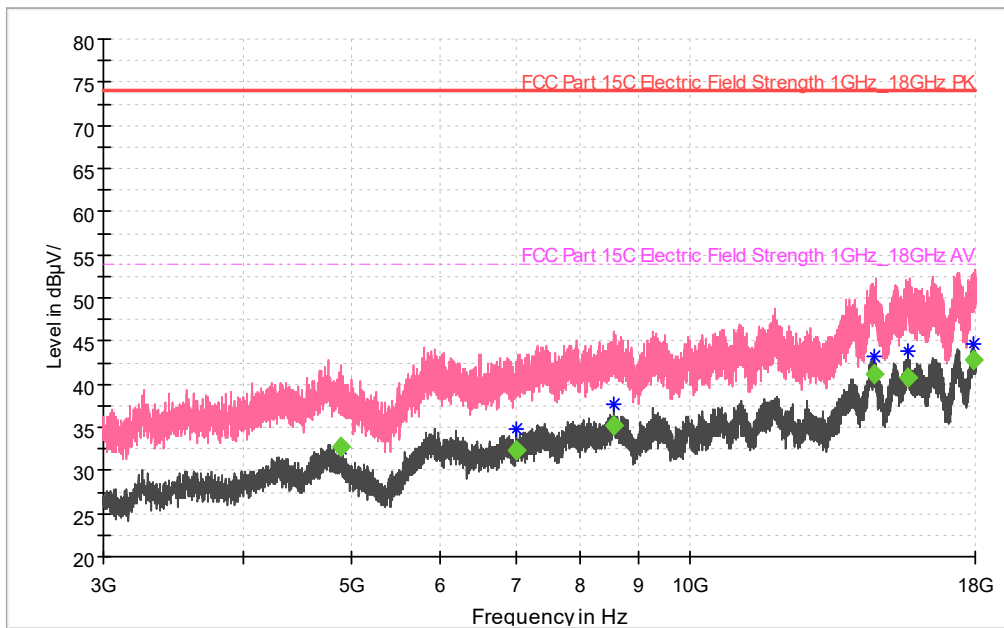
Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{Rpl} (dB)	Polarity
4734.167	---	51.85	---	30.65	54.00	23.35	-21.20	Vertical
5910.000	---	53.23	---	33.13	54.00	20.87	-20.10	Vertical
7440.833	---	54.66	---	33.46	54.00	20.54	-21.20	Vertical
11905.000	---	53.13	---	36.53	54.00	17.47	-16.60	Vertical
14601.667	---	54.77	---	41.27	54.00	12.73	-13.50	Vertical
17334.167	---	52.92	---	41.42	54.00	12.58	-11.50	Vertical

- EDR-2Mbps
Spurious Radiated Emissions from 1GHz to 18GHz:
 $\pi/4$ DQPSK:
CH Middle (No.39)

Full Spectrum



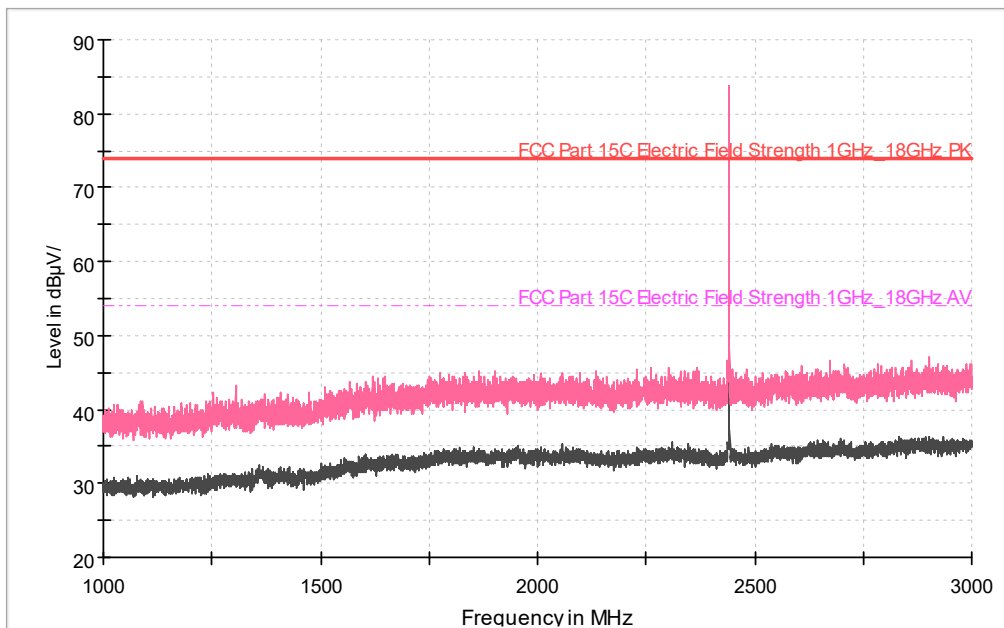
Full Spectrum



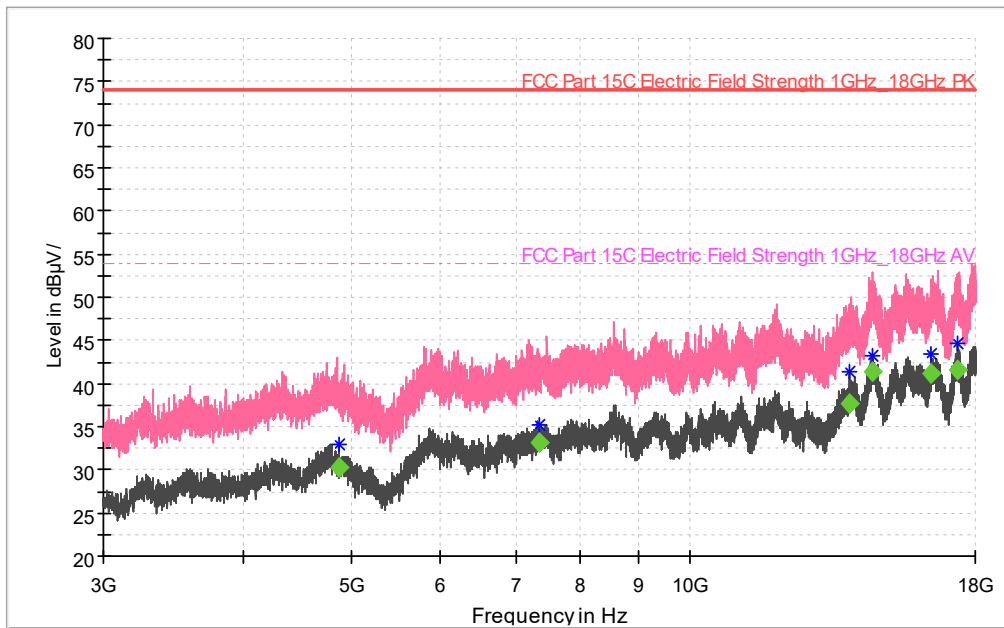
Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{Rpl} (dB)	Polarity
4881.667	---	54.27	---	32.67	54.00	21.33	-21.60	Vertical
7010.000	---	53.73	---	32.43	54.00	21.57	-21.30	Vertical
8570.833	---	55.26	---	35.26	54.00	18.74	-20.00	Vertical
14624.167	---	54.77	---	41.17	54.00	12.83	-13.60	Vertical
15662.500	---	54.38	---	40.78	54.00	13.22	-13.60	Vertical
17933.333	---	52.46	---	42.76	54.00	11.24	-9.70	Vertical

- EDR-3Mbps
Spurious Radiated Emissions from 1GHz to 18GHz:
8DPSK:
CH Middle (No.39)

Full Spectrum

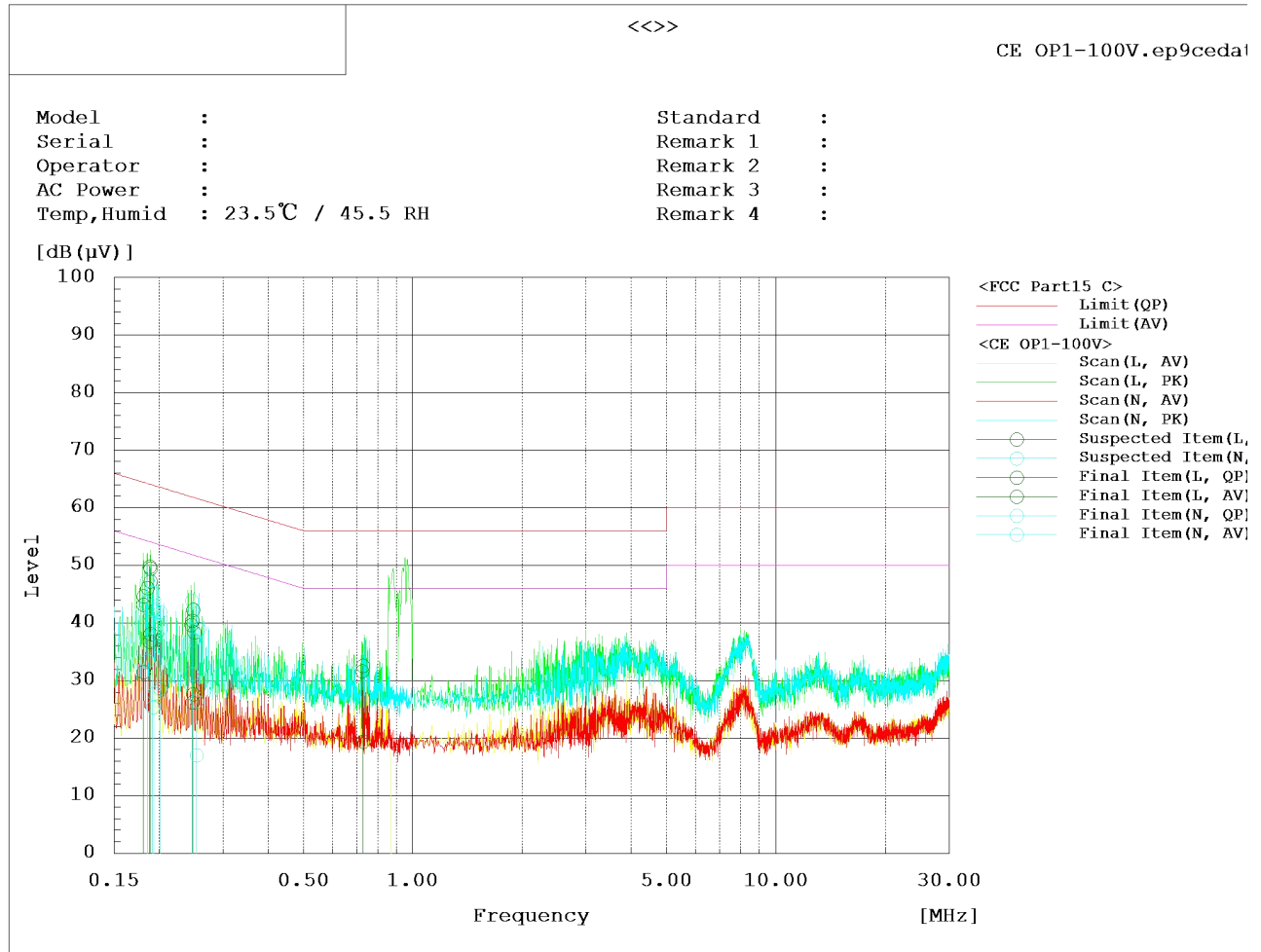


Full Spectrum

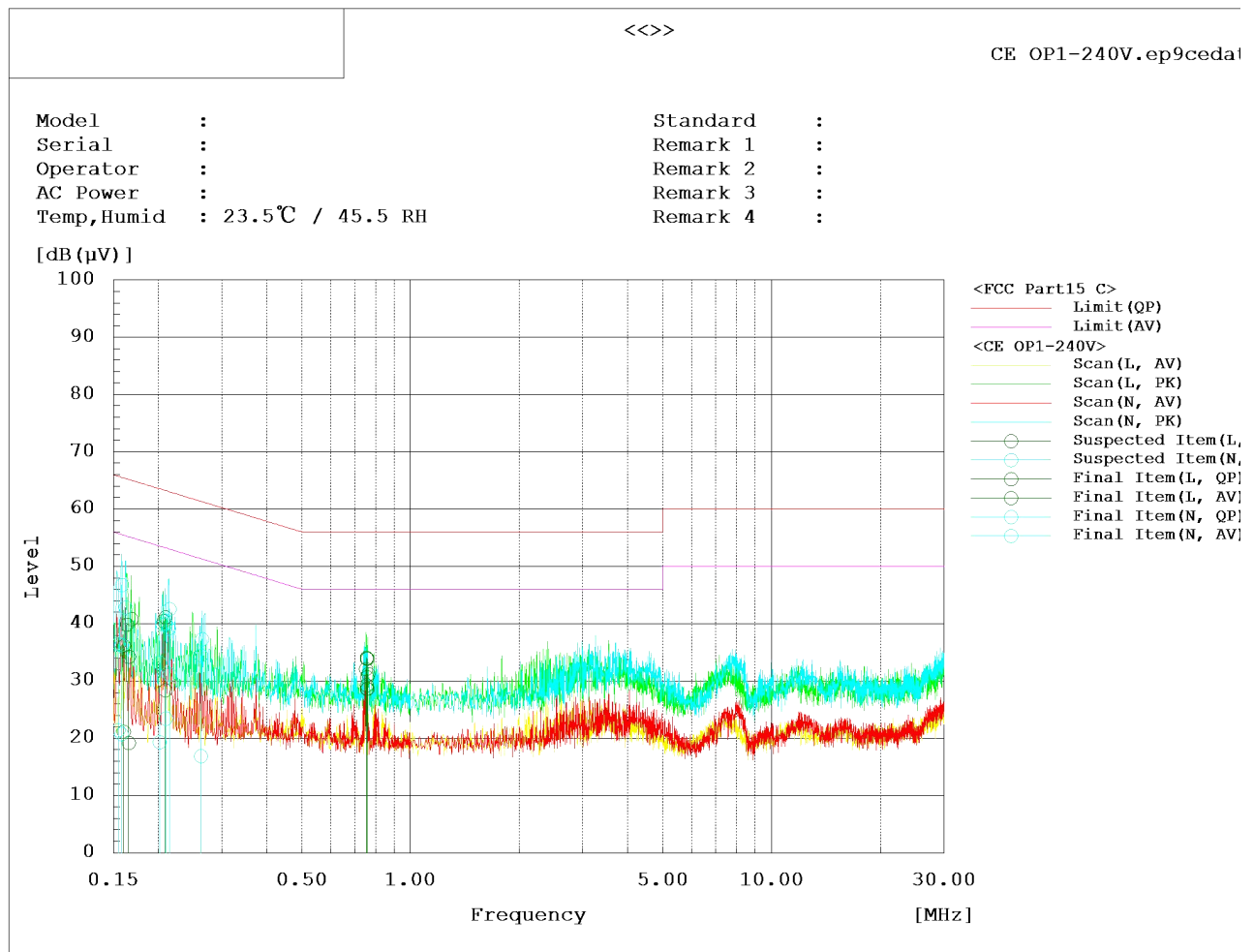


Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A _{Rpl} (dB)	Polarity
4867.500	---	51.79	---	30.29	54.00	23.71	-21.50	Vertical
7345.833	---	54.32	---	33.12	54.00	20.88	-21.20	Vertical
13913.333	---	51.37	---	37.57	54.00	16.43	-13.80	Vertical
14585.833	---	54.78	---	41.28	54.00	12.72	-13.50	Vertical
16443.333	---	54.53	---	41.23	54.00	12.77	-13.30	Vertical
17349.167	---	53.05	---	41.55	54.00	12.45	-11.50	Vertical

AC Power line Conducted Emission



Range	Frequency	Line	Reading		Factor	Level		Limit		Limit		Margin		Pass/Fail
	MHz		dB(µV)	dB		dB(µV)	dB(µV)	dB(µV)	dB(µV)	dB	dB			
Band1	0.18	L	24.7	12	20	44.7	31.5			64.4	54.4	19.7	22.9	Pass
Band1	0.19	L	29.5	18	20	49.5	38.1			64.1	54.1	14.6	16	Pass
Band1	0.19	L	29.8	17	20	49.8	36.8			64.1	54.1	14.3	17.3	Pass
Band1	0.25	L	22.3	7.7	20	42.3	27.7			61.8	51.8	19.5	24.1	Pass
Band1	0.25	L	20.4	6.2	20	40.4	26.2			61.9	51.9	21.5	25.7	Pass
Band1	0.73	L	12.8	-0.4	19.8	32.6	19.4			56	46	23.4	26.6	Pass
Band1	0.19	N	27.5	14	20	47.5	33.5			64.2	54.2	16.7	20.7	Pass
Band1	0.19	N	22.5	7.8	19.9	42.4	27.7			63.9	53.9	21.5	26.2	Pass
Band1	0.19	N	25.3	5.5	19.9	45.2	25.4			63.9	53.9	18.7	28.5	Pass
Band1	0.2	N	22	8.7	19.9	41.9	28.6			63.6	53.6	21.7	25	Pass
Band1	0.25	N	23.9	11	20	43.9	31.1			61.9	51.9	18	20.8	Pass
Band1	0.25	N	6.4	-3	20	26.4	17			61.6	51.6	35.2	34.6	Pass



Range	Frequency	Line	Reading			Factor	Level			Limit		Margin		Pass/Fail
	MHz		dB(µV)	dB	dB(µV)		dB(µV)	dB(µV)	dB(µV)	dB	dB			
Band1	0.16	N	16.5	1.5	20	36.5	21.5		65.7	55.7	29.2	34.2	Pass	
Band1	0.16	N	16.3	0.8	20	36.3	20.8		65.6	55.6	29.3	34.8	Pass	
Band1	0.2	N	13.3	-0.6	19.9	33.2	19.3		63.6	53.6	30.4	34.3	Pass	
Band1	0.21	N	20.1	3.6	19.9	40	23.5		63.2	53.2	23.2	29.7	Pass	
Band1	0.22	N	22.7	11	19.9	42.6	31.2		63	53	20.4	21.8	Pass	
Band1	0.26	N	14.5	-3.1	20	34.5	16.9		61.4	51.4	26.9	34.5	Pass	
Band1	0.16	L	16.1	1.1	20	36.1	21.1		65.4	55.4	29.3	34.3	Pass	
Band1	0.17	L	14.3	-0.8	20	34.3	19.2		65.2	55.2	30.9	36	Pass	
Band1	0.21	L	21.2	8.5	19.9	41.1	28.4		63.2	53.2	22.1	24.8	Pass	
Band1	0.76	L	14.2	9.5	19.8	34	29.3		56	46	22	16.7	Pass	
Band1	0.76	L	14.1	8.9	19.8	33.9	28.7		56	46	22.1	17.3	Pass	
Band1	0.76	L	14.2	8.9	19.8	34	28.7		56	46	22	17.3	Pass	

---End of Test Report---