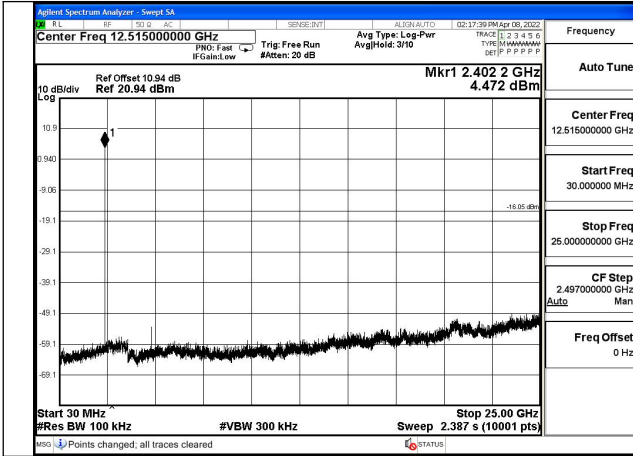
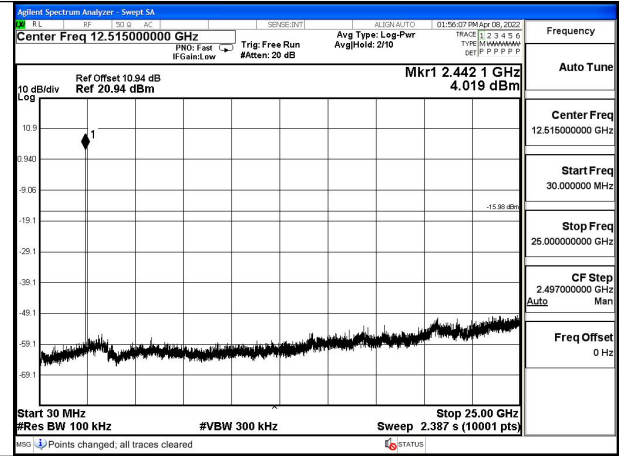


CH78(Hopping off)

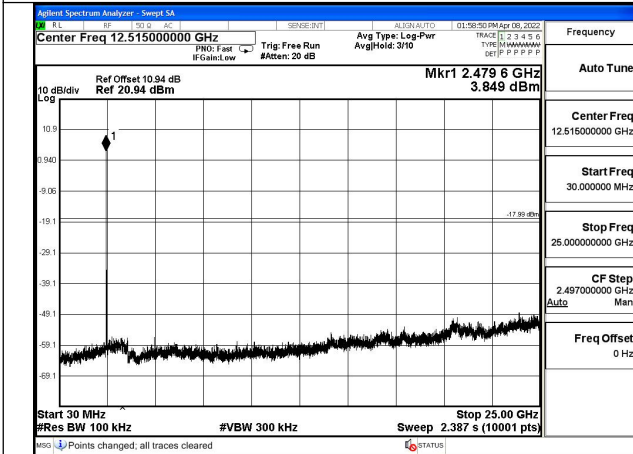
Test Mode: 8DPSK



CH0(Hopping off)

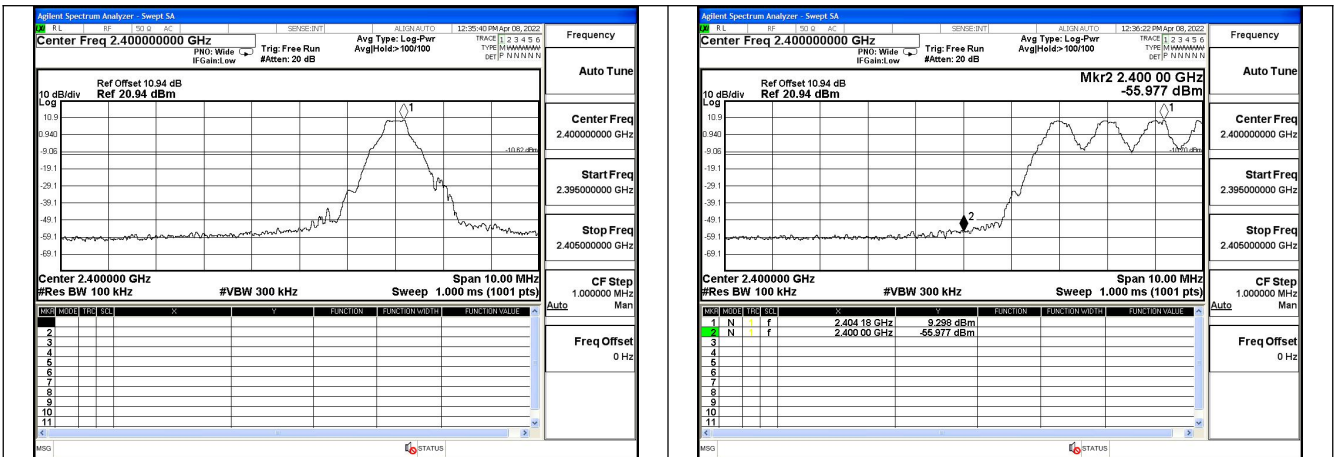


CH39(Hopping off)



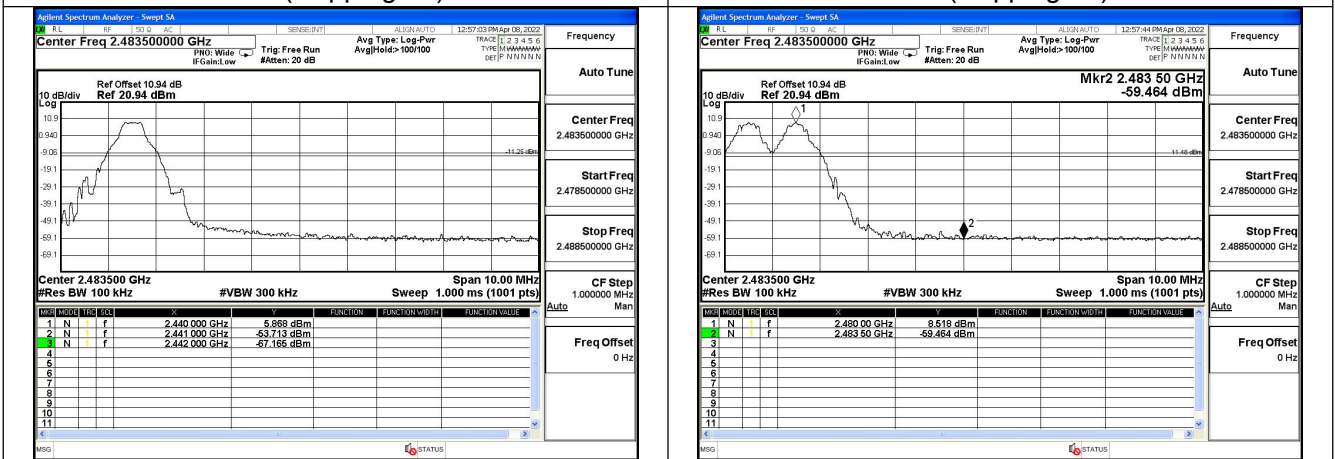
CH78(Hopping off)

**7 Band Edge measurement**  
Test Mode: GFSK



CH0(Hopping off)

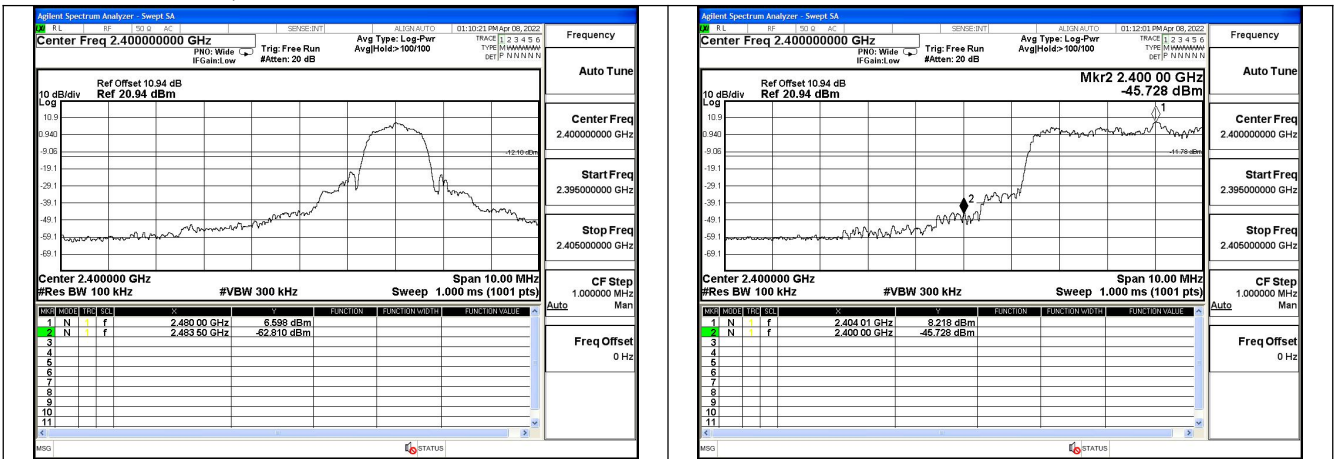
CH0(Hopping on)



CH78(Hopping off)

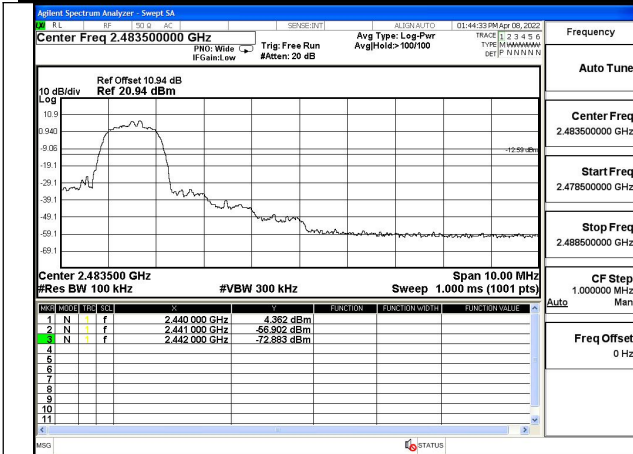
CH78(Hopping on)

Test Mode:  $\pi/4$ DQPSK

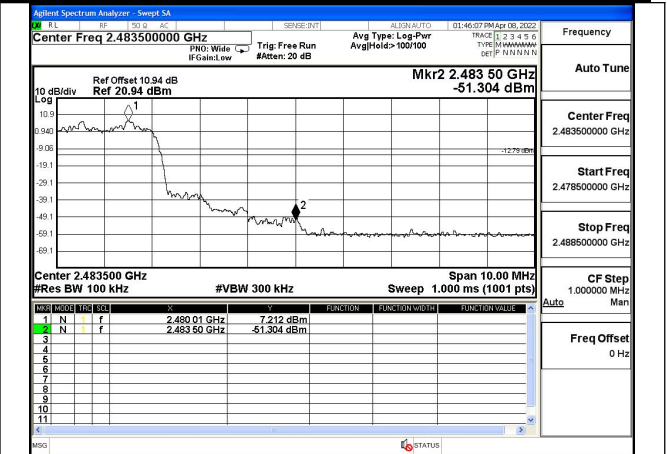


CH0(Hopping off)

CH0(Hopping on)



CH78(Hopping off)



CH78(Hopping on)

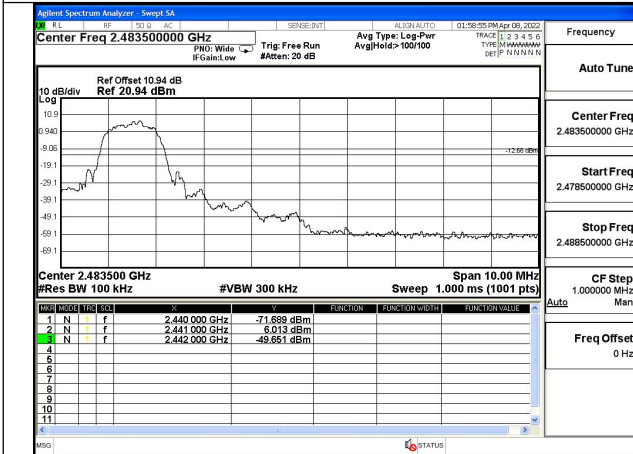
Test Mode: 8DPSK



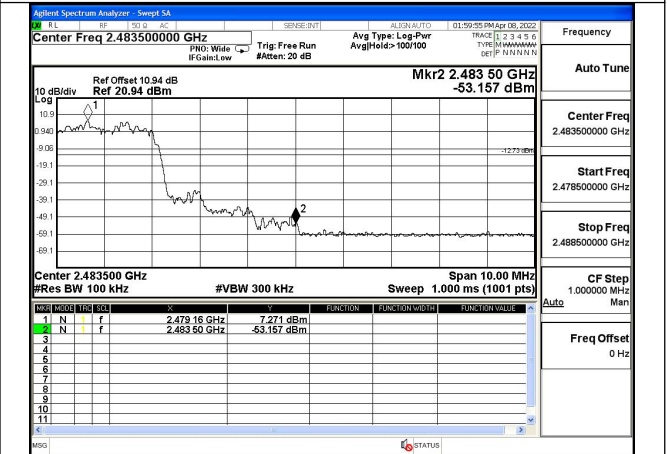
CH0(Hopping off)



CH0(Hopping on)



CH78(Hopping off)



CH78(Hopping on)

## APPENDIX B – TEST DATA OF RADIATED EMISSION

### Radiated Emissions Band Edge-BT

The measurement results are obtained as described below:

Measure Level = Reading Level + Cable loss + Antenna factor  
Sample calculation:  
(91.40 dBuV/m) = (57.40 dB $\mu$ V) + (8.90 dB) + (25.10 dB), the corresponding frequency is 2402MHz.

- 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	57.40	91.40	N/A	N/A	8.90	25.10
2390.0	9.70	43.70	-30.30	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	43.90	77.90	N/A	N/A	8.90	25.10
2390.0	-6.10	27.90	-26.10	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	57.30	91.30	N/A	N/A	8.90	25.10
2483.5	13.90	47.90	-26.10	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	50.20	84.20	N/A	N/A	8.90	25.10
2483.5	-1.30	32.70	-21.30	54.00	8.90	25.10

● EDR-2Mbps

Carrier Frequency (MHz): 2402

Channel No.: 0

Test Mode:  $\pi/4$ DQPSK

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	56.23	90.23	N/A	N/A	8.90	25.10
2390.0	11.60	45.60	-28.40	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)
2402.0	51.30	85.30	N/A	N/A	8.90	25.10
2390.0	-4.70	29.30	-24.70	54.00	8.90	25.10

Carrier Frequency (MHz): 2480

Channel No.: 78

Test Mode:  $\pi/4$ DQPSK

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	54.70	88.70	N/A	N/A	8.90	25.10
2483.5	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)
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	56.20	90.20	N/A	N/A	8.90	25.10
2390.0	12.70	46.70	-27.30	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	52.50	86.50	N/A	N/A	8.90	25.10
2390.0	-1.20	32.80	-21.20	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	58.40	92.40	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	49.20	83.20	N/A	N/A	8.90	25.10
2483.5	-2.60	31.40	-22.60	54.00	8.90	25.10

## Radiated Emissions Data-BT

### 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**

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

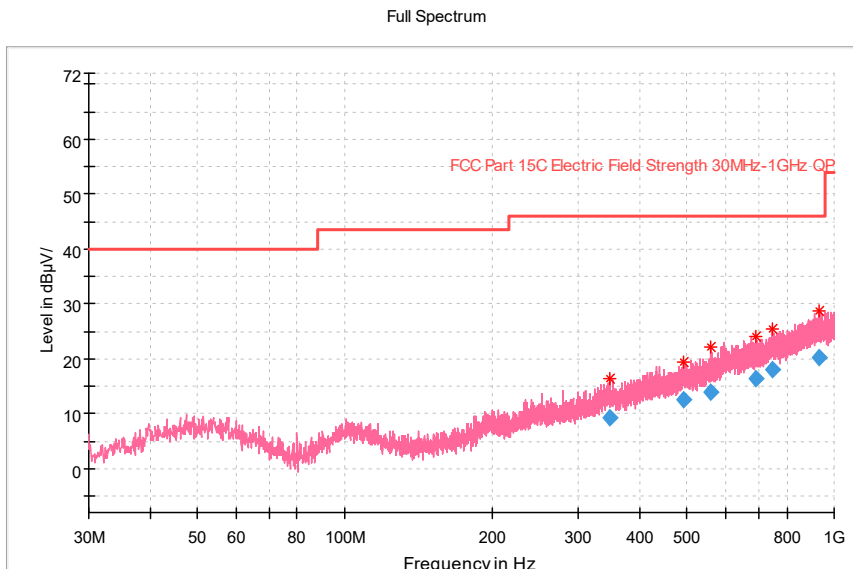
Sample calculation:  $(9.22 \text{ dB}\mu\text{V/m}) = (24.12 \text{ dB}\mu\text{V}) + (-14.90 \text{ dB/m})$ , the corresponding frequency is 348.26MHz.

The worst case attitude: The mobile lay down.

#### Spurious Radiated Emissions below 30MHz:

There were no emissions from 9kHz to 30MHz found within 20dB of the limit. Thus, the test result was not reported according to §15.31 (o).

● **BR-1Mbps**  
**Spurious Radiated Emissions from 30MHz to 1GHz:**  
**GFSK:**  
**CH Middle (No.39)**

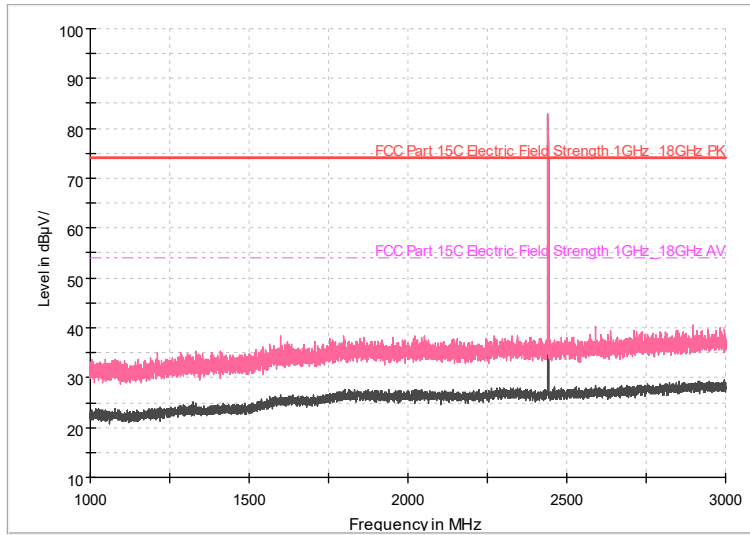


Frequency (MHz)	Reading (dBuV)	QuasiPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A <sub>Rpl</sub> (dB)	Polarity
348.26	24.12	9.22	46.00	36.78	-14.90	Vertical
492.59	23.78	12.58	46.00	33.42	-11.20	Vertical
559.81	23.70	13.90	46.00	32.10	-9.80	Vertical
694.26	23.62	16.42	46.00	29.58	-7.20	Vertical
749.45	23.42	18.12	46.00	27.88	-5.30	Vertical
932.78	22.93	20.33	46.00	25.67	-2.60	Vertical

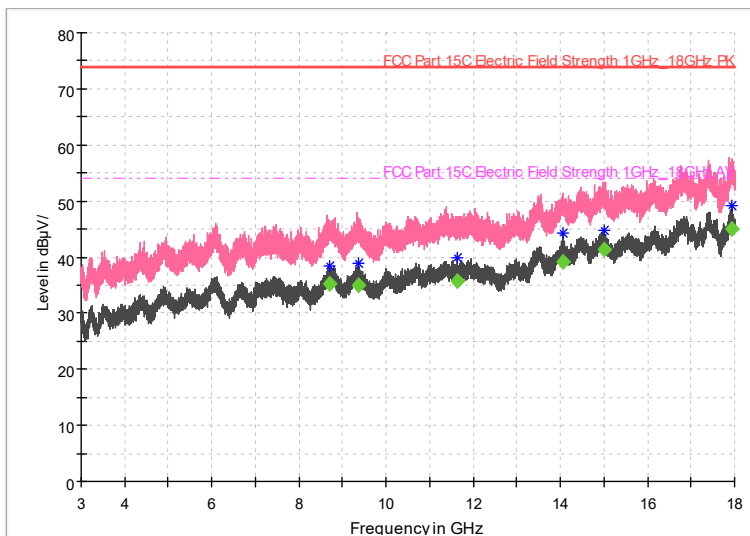


**Spurious Radiated Emissions from 1GHz to 18GHz:  
GFSK:  
CH Middle (No.39)**

Full Spectrum



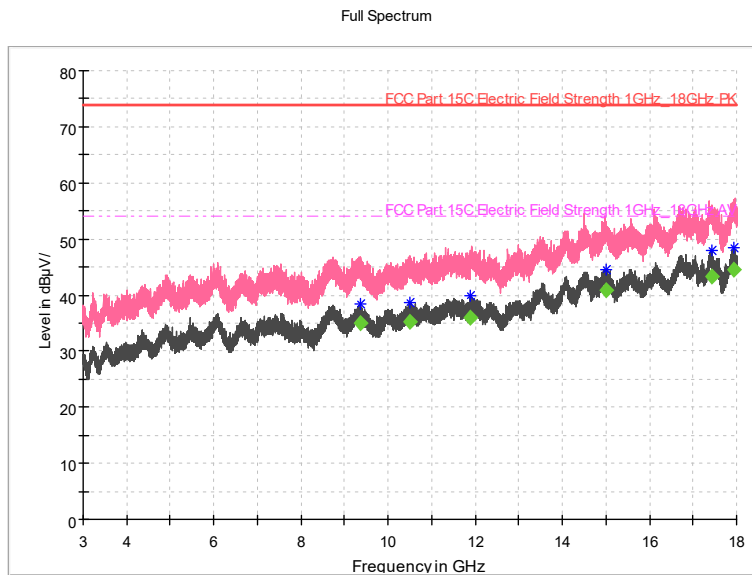
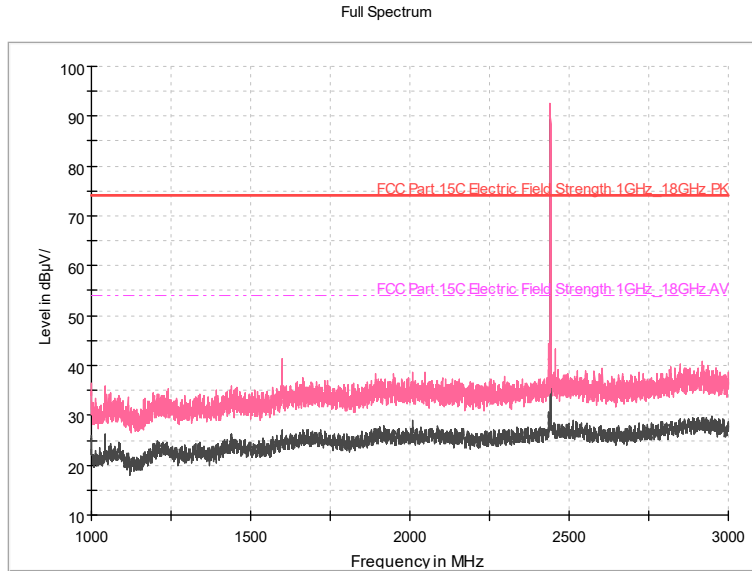
Full Spectrum



Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A <sub>Rpl</sub> (dB)	Polarity
8694.00	---	55.62	---	35.32	54.00	18.68	-20.30	Vertical
9364.50	---	54.74	---	35.04	54.00	18.96	-19.70	Vertical
11626.00	---	52.11	---	35.61	54.00	18.39	-16.50	Vertical
14066.00	---	52.79	---	39.09	54.00	14.91	-13.70	Vertical
15000.50	---	54.64	---	41.34	54.00	12.66	-13.30	Vertical
17931.00	---	54.81	---	45.11	54.00	8.89	-9.70	Vertical



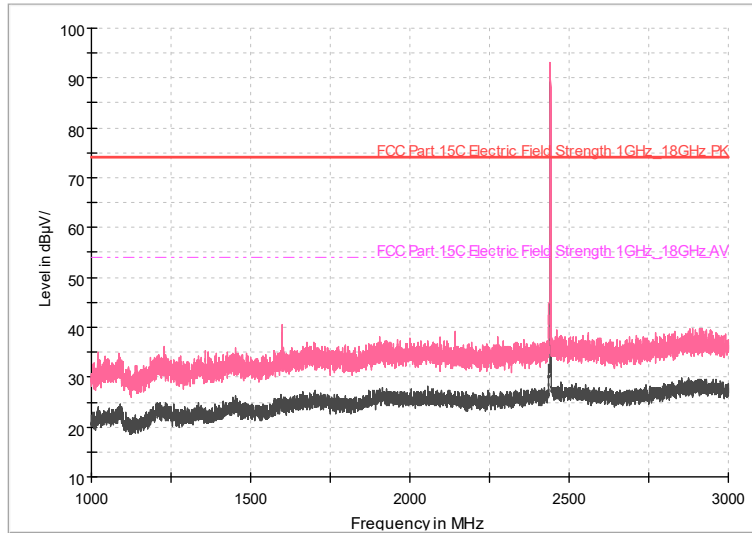
● EDR-2Mbps  
Spurious Radiated Emissions from 1GHz to 18GHz:  
 $\pi/4$ DQPSK:  
CH Middle (No.39)



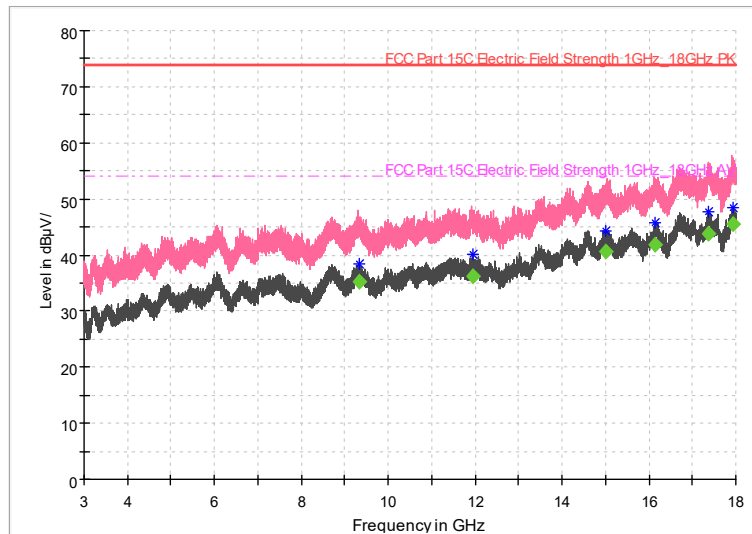
Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A <sub>Rpl</sub> (dB)	Polarity
9365.50	---	54.63	---	34.93	54.00	19.07	-19.70	Vertical
10486.50	---	54.06	---	35.26	54.00	18.74	-18.80	Vertical
11897.00	---	52.66	---	36.06	54.00	17.94	-16.60	Vertical
15009.50	---	54.08	---	40.78	54.00	13.22	-13.30	Vertical
17419.00	---	54.77	---	43.27	54.00	10.73	-11.50	Vertical
17925.00	---	54.43	---	44.63	54.00	9.37	-9.80	Vertical

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

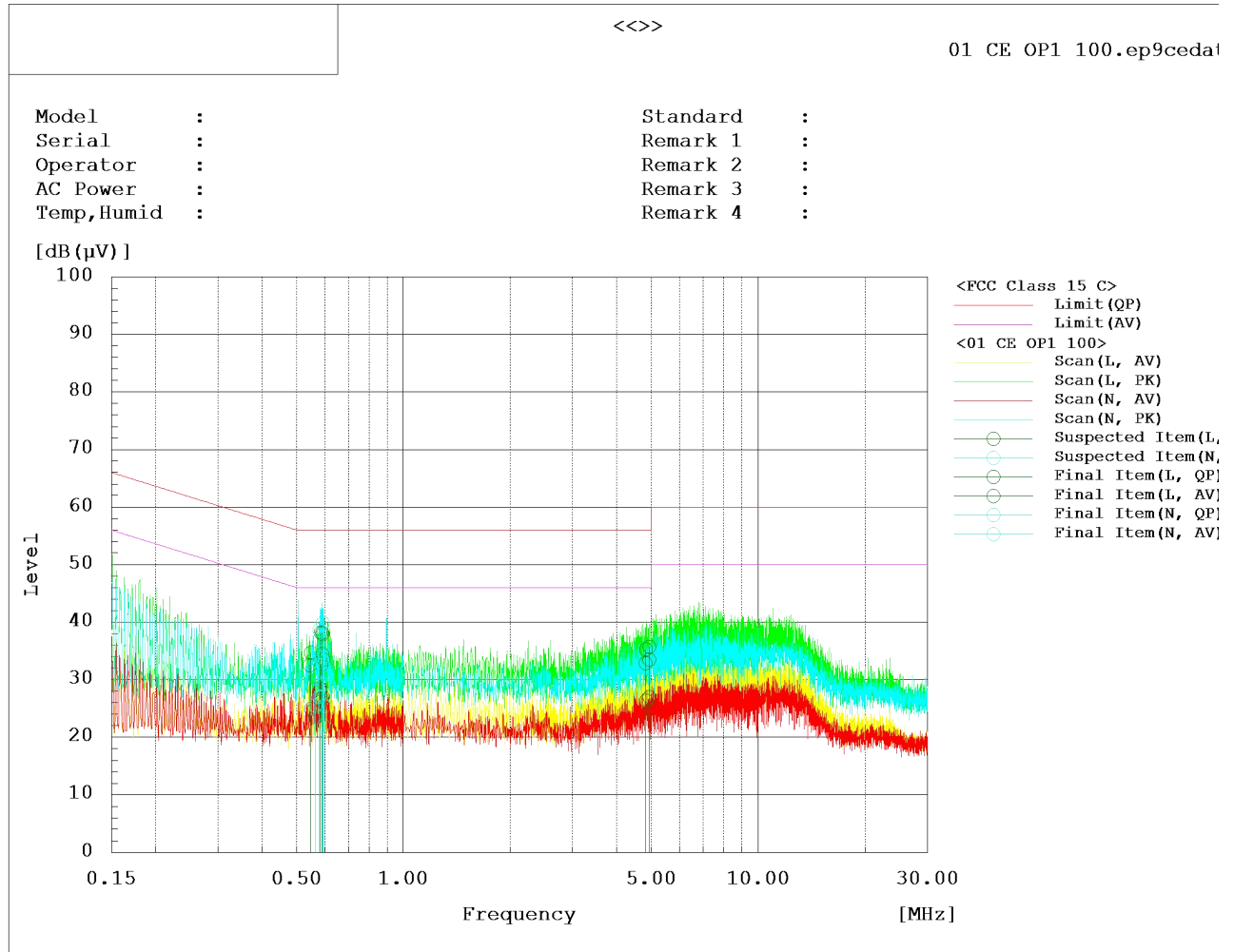
Full Spectrum



Full Spectrum



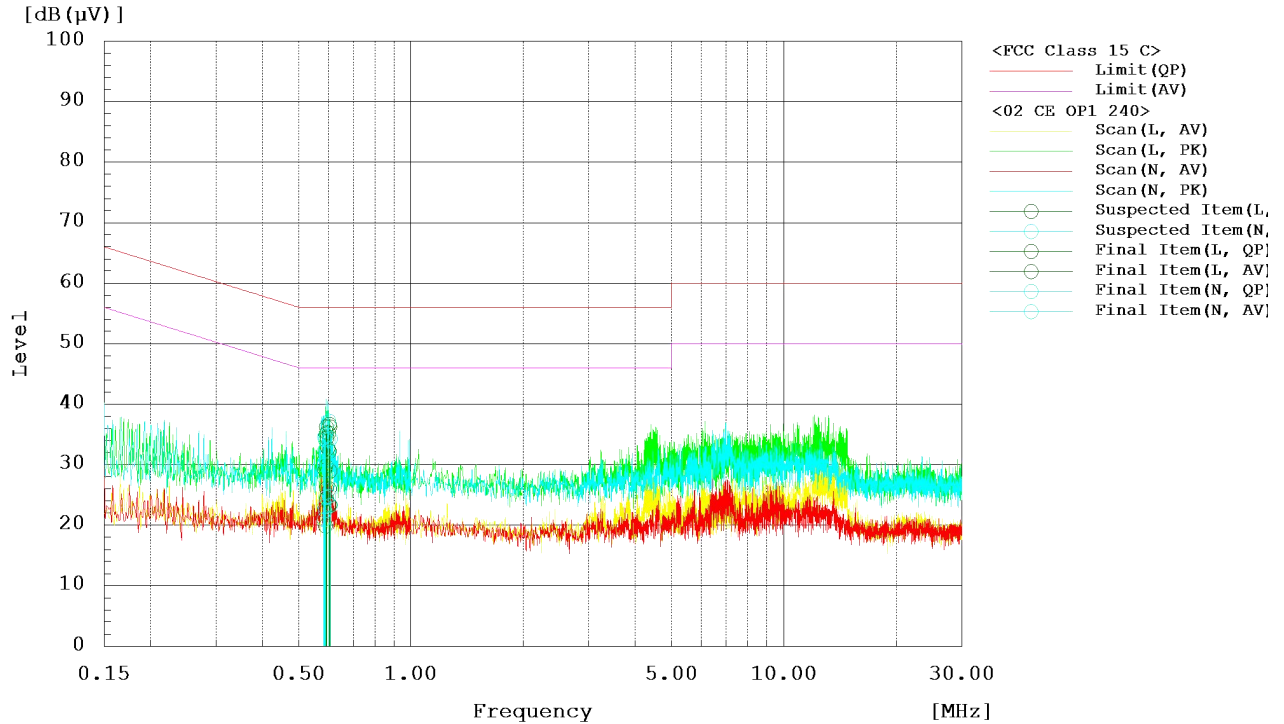
Frequency (MHz)	Reading MaxPeak (dBuV)	Reading Average (dBuV)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	A <sub>RPI</sub> (dB)	Polarity
9330.50	---	54.99	---	35.29	54.00	18.71	-19.70	Vertical
11943.50	---	52.77	---	36.27	54.00	17.73	-16.50	Vertical
14995.50	---	53.82	---	40.52	54.00	13.48	-13.30	Vertical
16150.00	---	55.86	---	41.76	54.00	12.24	-14.10	Vertical
17369.50	---	55.22	---	43.72	54.00	10.28	-11.50	Vertical
17935.50	---	55.32	---	45.62	54.00	8.38	-9.70	Vertical



Range	Frequency MHz	Line	Reading			Factor	Level			Limit	Limit			Margin			Pass /Fail	Remark	
			dB(μV)				dB	dB(μV)			dB(μV)			dB					
			QP	AV	PK			QP	AV		PK	QP	AV	PK	QP	AV			PK
Band1	0.55	L	14.8	5.1		19.9	34.7	25		56	46		21.3	21		Pass			
Band1	0.58	L	18.3	8.5		19.9	38.2	28.4		56	46		17.8	17.6		Pass			
Band1	0.59	L	18.3	6.9		19.9	38.2	26.8		56	46		17.8	19.2		Pass			
Band1	0.59	L	18.1	7.1		19.9	38	27		56	46		18	19		Pass			
Band1	4.82	L	15.4	6.5		19.9	35.3	26.4		56	46		20.7	19.6		Pass			
Band1	4.92	L	15.8	7.1		19.9	35.7	27		56	46		20.3	19		Pass			
Band1	0.56	N	14.6	5.7		19.9	34.5	25.6		56	46		21.5	20.4		Pass			
Band1	0.58	N	18.8	7.2		19.9	38.7	27.1		56	46		17.3	18.9		Pass			
Band1	0.59	N	20	9.4		19.9	39.9	29.3		56	46		16.1	16.7		Pass			
Band1	0.59	N	20	9.3		19.9	39.9	29.2		56	46		16.1	16.8		Pass			
Band1	0.6	N	15	2.1		19.9	34.9	22		56	46		21.1	24		Pass			
Band1	0.6	N	16.2	5.6		19.9	36.1	25.5		56	46		19.9	20.5		Pass			

02 CE OP1 240.ep9cedat

Model : Standard :  
Serial : Remark 1 :  
Operator : Remark 2 :  
AC Power : Remark 3 :  
Temp, Humid : Remark 4 :



Range	Frequency MHz	Line	Reading			Factor	Level			Limit	Limit			Margin			Pass /Fail	Remark	
			dB(μV)				dB	dB(μV)			dB(μV)			dB					
			QP	AV	PK			QP	AV		PK	QP	AV	PK	QP	AV			PK
Band1	0.58	N	12.4	1		19.9	32.3	20.9		56	46		23.7	25.1		Pass			
Band1	0.58	N	14.7	3.2		19.9	34.6	23.1		56	46		21.4	22.9		Pass			
Band1	0.59	N	15	4.7		19.9	34.9	24.6		56	46		21.1	21.4		Pass			
Band1	0.59	N	14.2	2.6		19.9	34.1	22.5		56	46		21.9	23.5		Pass			
Band1	0.6	N	17.4	4.9		19.9	37.3	24.8		56	46		18.7	21.2		Pass			
Band1	0.61	N	14.4	3.5		19.9	34.3	23.4		56	46		21.7	22.6		Pass			
Band1	0.59	L	15.1	0		19.9	35	19.9		56	46		21	26.1		Pass			
Band1	0.59	L	16.4	6.2		19.9	36.3	26.1		56	46		19.7	19.9		Pass			
Band1	0.59	L	15.5	4.5		19.9	35.4	24.4		56	46		20.6	21.6		Pass			
Band1	0.6	L	15.4	3.6		19.9	35.3	23.5		56	46		20.7	22.5		Pass			
Band1	0.61	L	16.4	3.5		19.9	36.3	23.4		56	46		19.7	22.6		Pass			
Band1	0.6	L	16.8	6.1		19.9	36.7	26		56	46		19.3	20		Pass			

---End of Test Report---