

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	83.95	49.95	N/A	N/A	8.90	25.10
2	2390	44.38	10.38	-9.62	54.0	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	96.36	62.36	N/A	N/A	8.90	25.10
2	2483.5	54.98	20.98	-19.02	74.0	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	91.18	57.18	N/A	N/A	8.90	25.10
2	2483.5	49.40	15.40	-24.60	74.0	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	86.89	52.89	N/A	N/A	8.90	25.10
2	2483.5	46.98	12.98	-7.02	54.0	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	83.26	49.26	N/A	N/A	8.90	25.10
2	2483.5	46.02	12.02	-7.98	54.0	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	96.53	62.53	N/A	N/A	8.90	25.10
2	2390	51.08	17.08	-22.92	74.0	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	91.11	57.11	N/A	N/A	8.90	25.10
2	2390	46.90	12.90	-27.10	74.0	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	87.77	53.77	N/A	N/A	8.90	25.10
2	2390	45.96	11.96	-8.04	54.0	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	80.33	46.33	N/A	N/A	8.90	25.10
2	2390	45.13	11.13	-8.87	54.0	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	97.28	63.28	N/A	N/A	8.90	25.10
2	2483.5	53.72	19.72	-20.28	74.0	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	91.08	57.08	N/A	N/A	8.90	25.10
2	2483.5	46.67	12.67	-27.33	74.0	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	86.48	52.48	N/A	N/A	8.90	25.10
2	2483.5	44.62	10.62	-9.38	54.0	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	82.42	48.42	N/A	N/A	8.90	25.10
2	2483.5	44.15	10.15	-9.85	54.0	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:

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

Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)
37.77	36.60	17.1	21.50	Horizontal	40.0
53.32	14.90	8.3	17.70	Vertical	40.0
55.27	14.80	7.5	15.40	Vertical	40.0
183.56	10.40	11.0	18.50	Vertical	43.5
543.18	21.50	22.1	18.00	Vertical	46.0
957.23	29.00	28.6	17.50	Vertical	46.0

For $\pi/4$ DQPSK

Channel No.:39

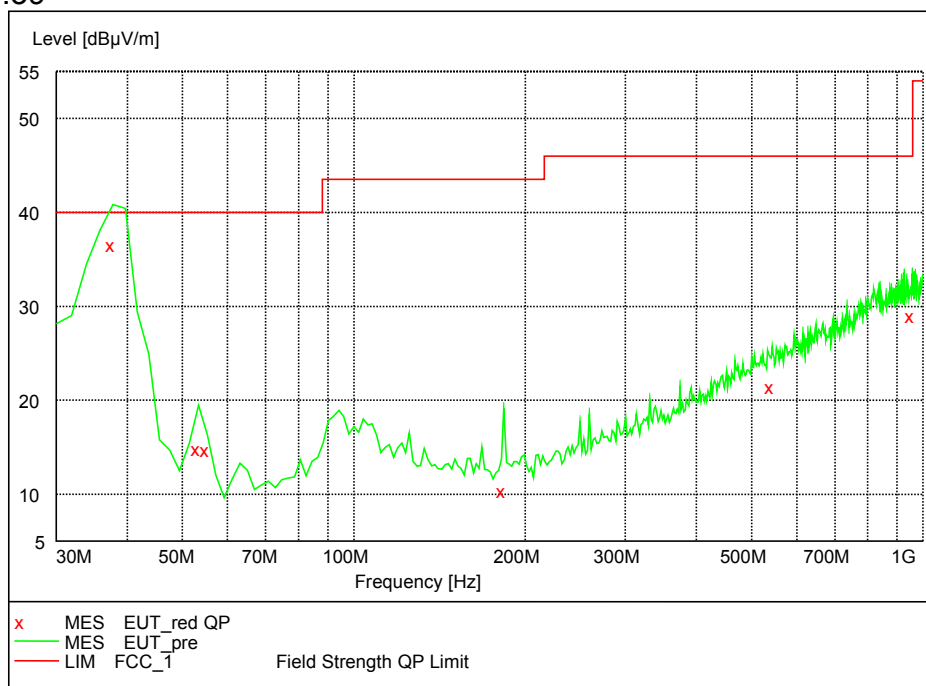
Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)
39.71	38.20	15.7	17.80	Vertical	40.0
55.27	14.90	7.5	23.40	Vertical	40.0
98.03	14.80	12.1	14.10	Vertical	43.5
183.56	10.50	11.0	16.70	Vertical	43.5
547.07	21.50	22.2	15.10	Vertical	46.0
949.45	28.70	28.4	16.00	Vertical	46.0

For 8DPSK

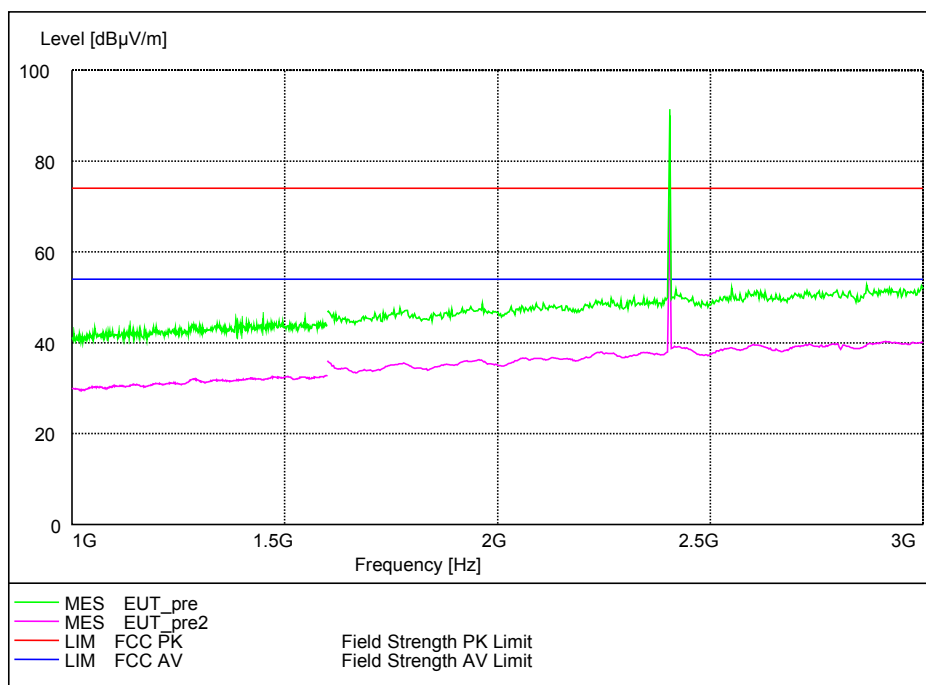
Channel No.:39

Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)
37.77	36.40	17.1	20.30	Vertical	40.0
55.27	14.80	7.5	17.00	Vertical	40.0
90.26	15.40	11.0	18.40	Vertical	43.5
103.86	15.30	12.3	15.50	Vertical	43.5
535.41	21.40	21.9	11.20	Vertical	46.0
957.23	28.90	28.6	12.40	Horizontal	46.0

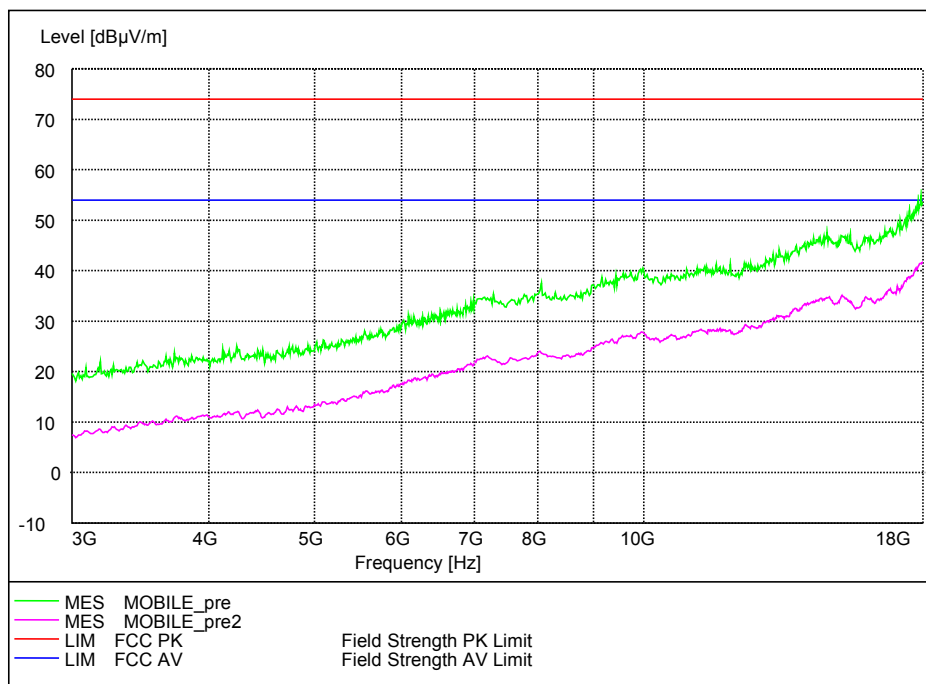
Carrier frequency (MHz): 2441
Channel No.:39



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



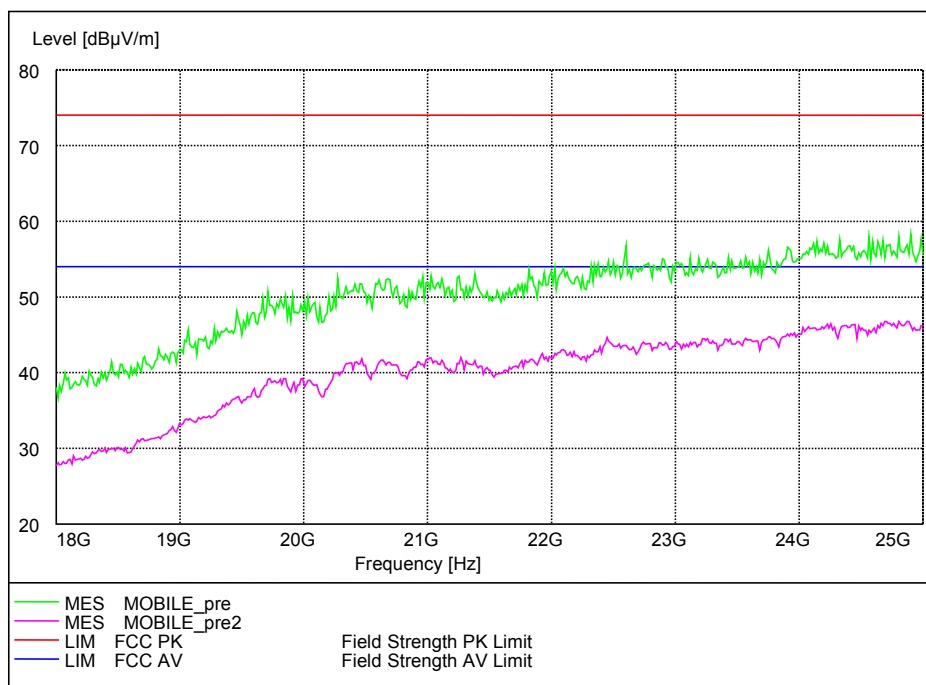
Frequency Range: 1GHz-3GHz
Detector: Av mode and PK mode
Modulation type: GFSK



Frequency Range: 3GHz-18GHz

Detector: Av mode and PK mode

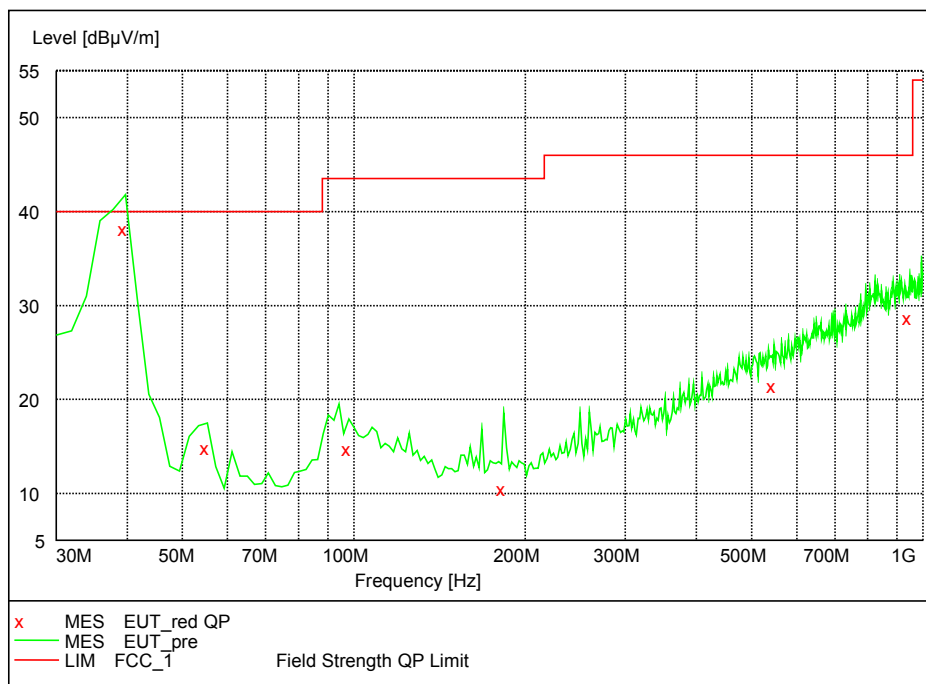
Modulation type: GFSK



Frequency Range: 18GHz-25GHz

Detector: Av mode and PK mode

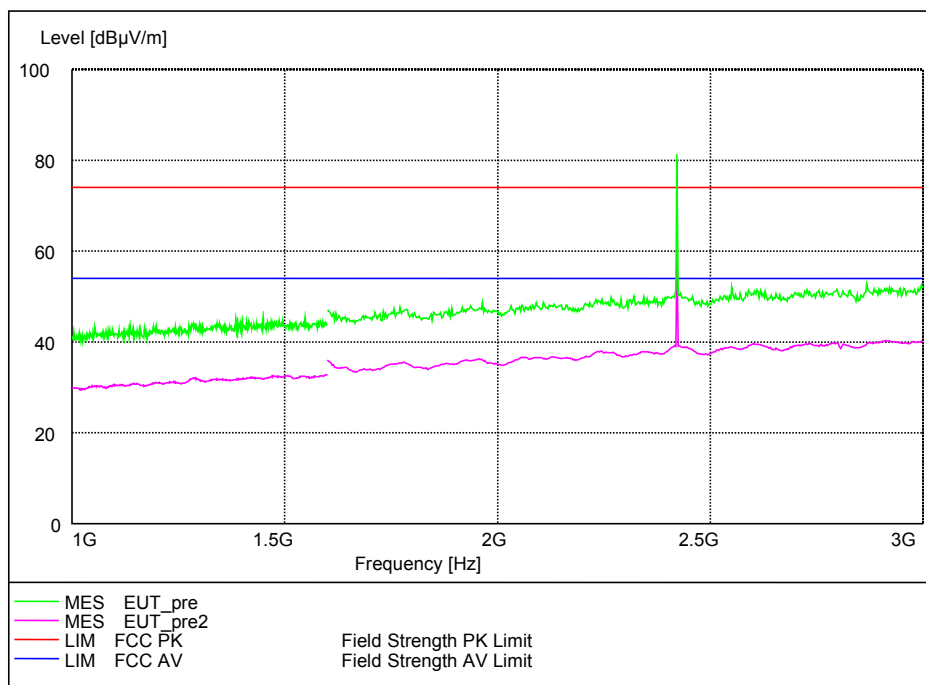
Modulation type: GFSK



Frequency Range: 30MHz-1000 MHz

Detector: QP mode

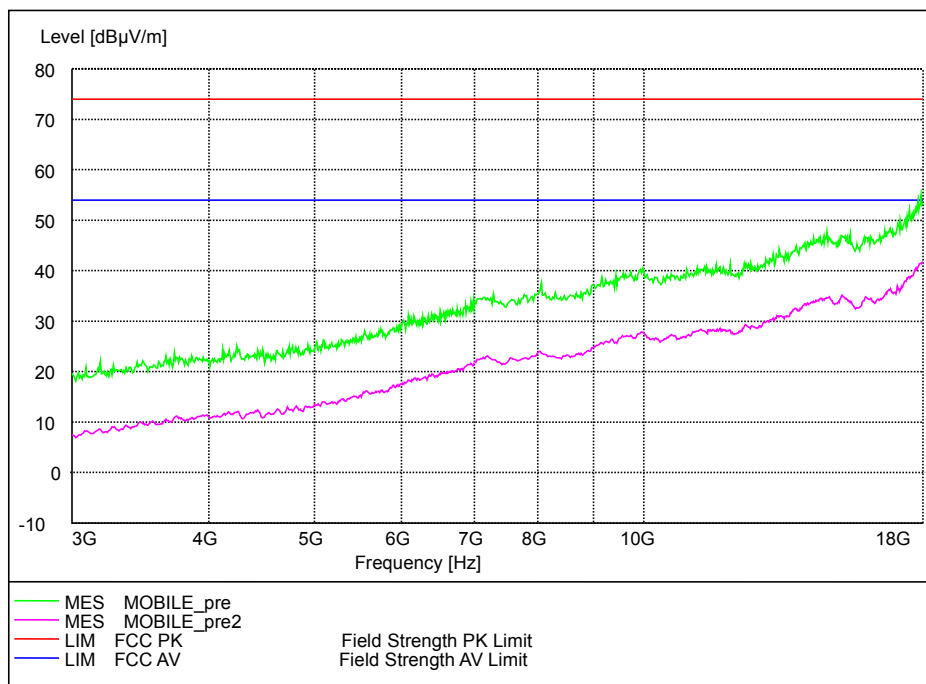
Modulation type: $\pi/4$ DQPSK



Frequency Range: 1GHz-3GHz

Detector: Av mode and PK mode

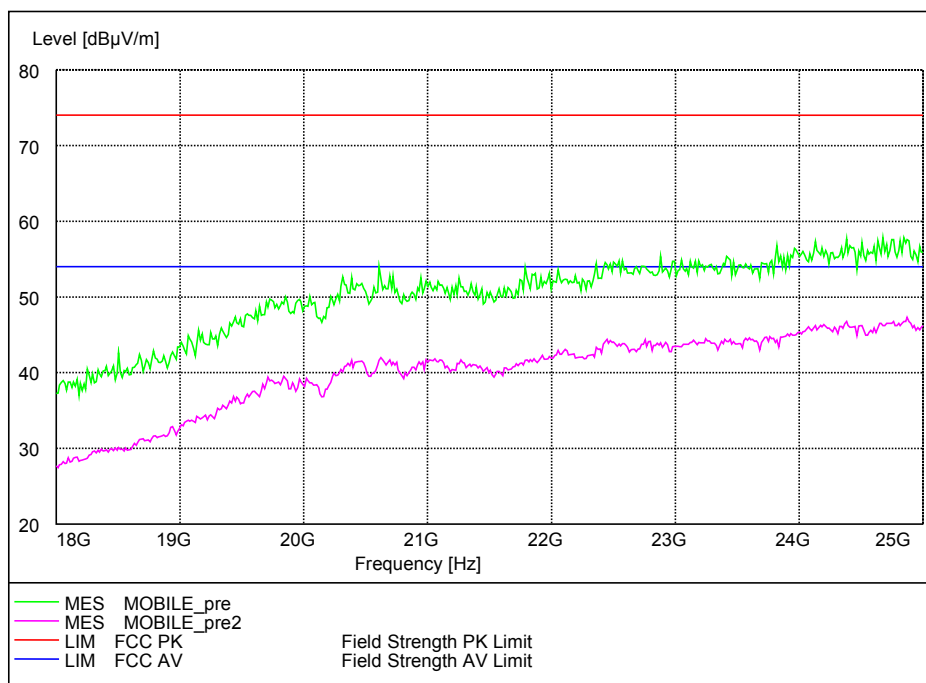
Modulation type: $\pi/4$ DQPSK



Frequency Range: 3GHz-18GHz

Detector: Av mode and PK mode

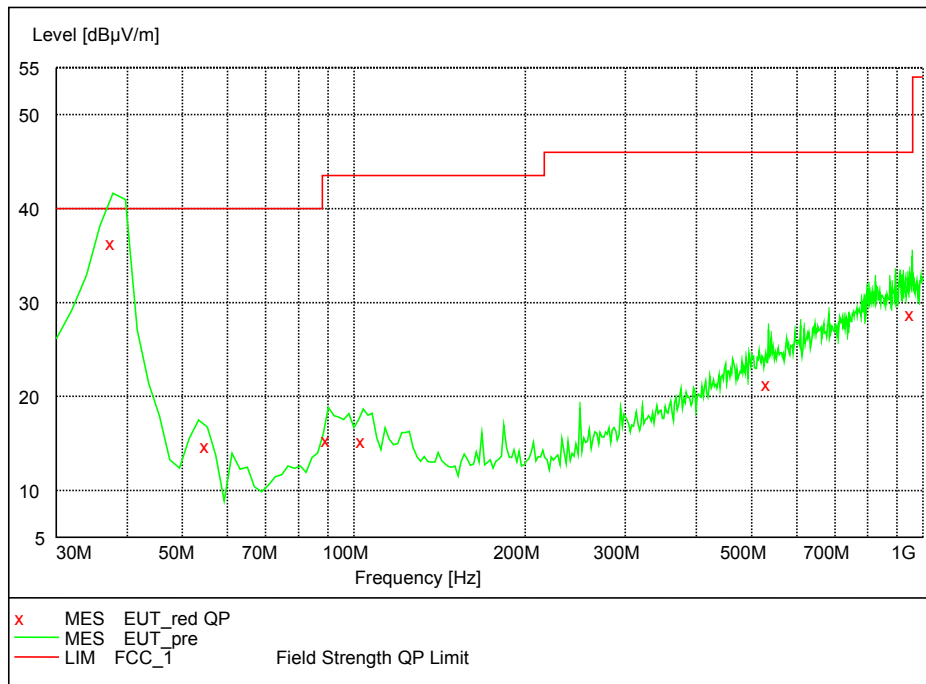
Modulation type: $\pi/4$ DQPSK



Frequency Range: 18GHz-25GHz

Detector: Av mode and PK mode

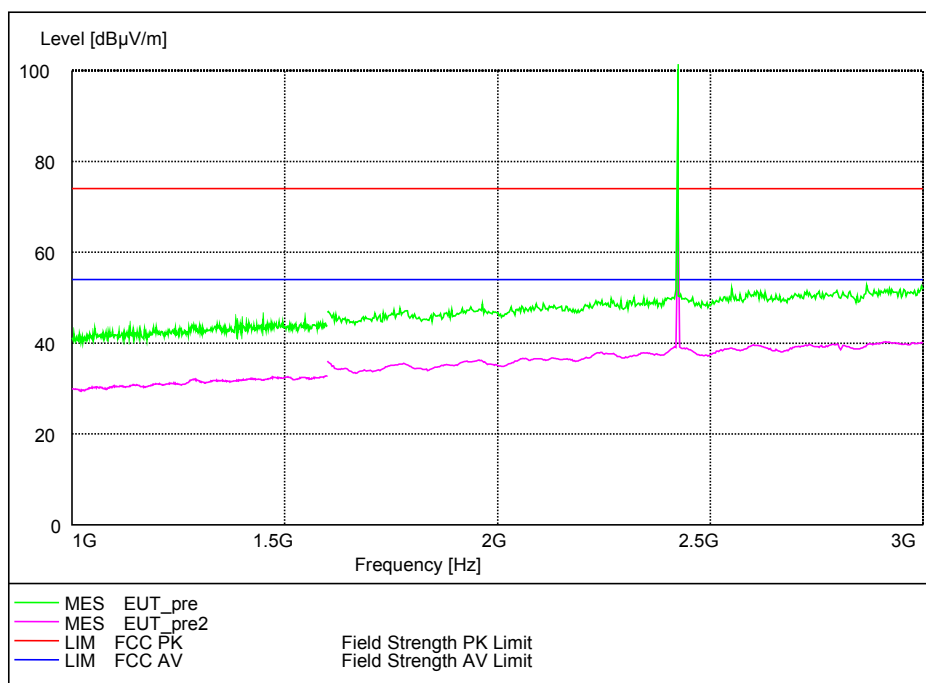
Modulation type: $\pi/4$ DQPSK



Frequency Range: 30MHz-1000 MHz

Detector: QP mode

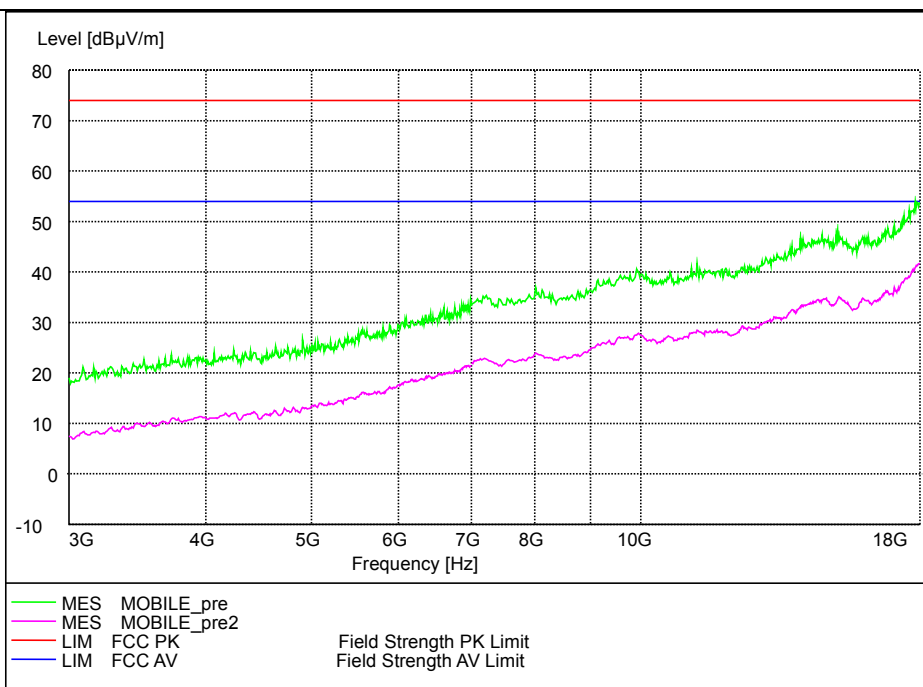
Modulation type: 8DPSK



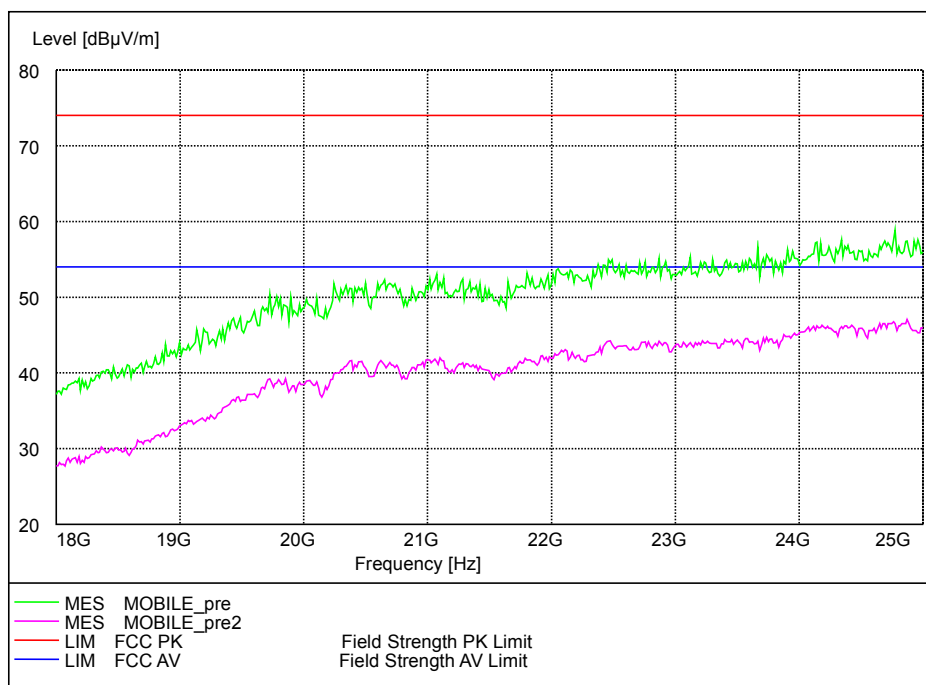
Frequency Range: 1GHz-3GHz

Detector: Av mode and PK mode

Modulation type: 8DPSK



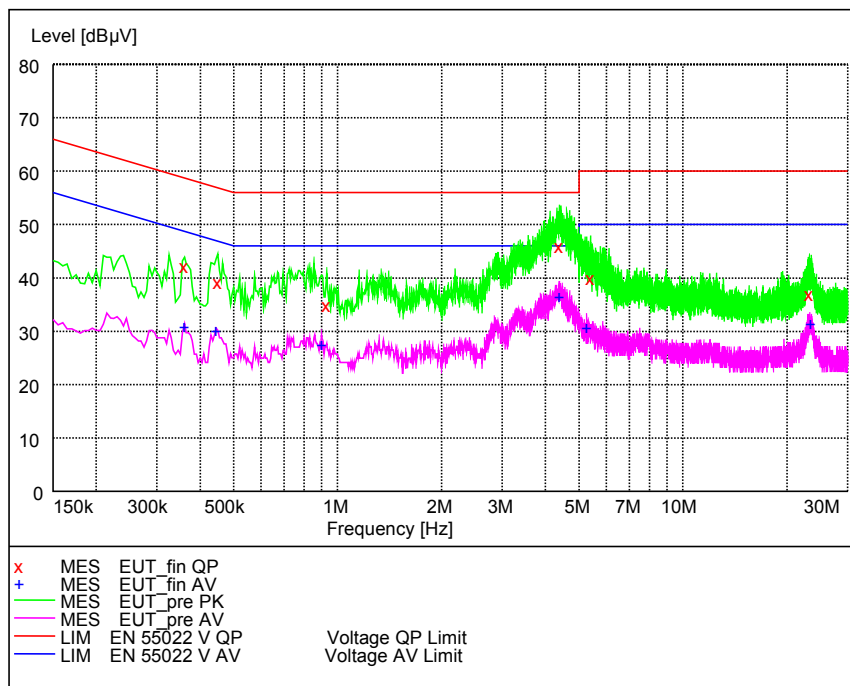
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: 8DPSK



Frequency Range: 18GHz-25GHz
Detector: Av mode and PK mode
Modulation type: 8DPSK

AC Power line Conducted Emission

Noise Level of the Measuring Instrument



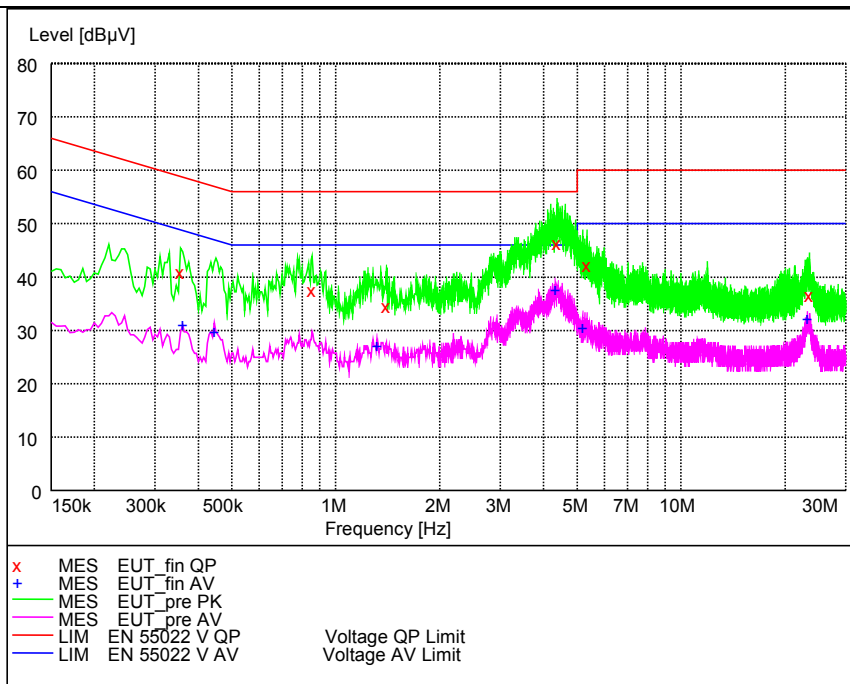
L Line

MEASUREMENT RESULT: "EUT_fin QP"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.360000	42.60	29.5	59	16.2	---	---
0.450000	39.50	29.5	57	17.4	---	---
0.930000	35.30	29.5	56	20.7	---	---
4.385000	46.30	29.6	56	9.7	---	---
5.410000	40.30	29.6	60	19.7	---	---
23.190000	37.30	30.9	60	22.7	---	---

MEASUREMENT RESULT: "EUT_fin AV"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.360000	31.00	29.5	49	17.7	---	---
0.445000	30.30	29.5	47	16.7	---	---
0.900000	27.70	29.5	46	18.3	---	---
4.385000	36.70	29.6	46	9.3	---	---
5.275000	30.80	29.6	50	19.2	---	---
23.505000	31.70	30.9	50	18.3	---	---



N Line

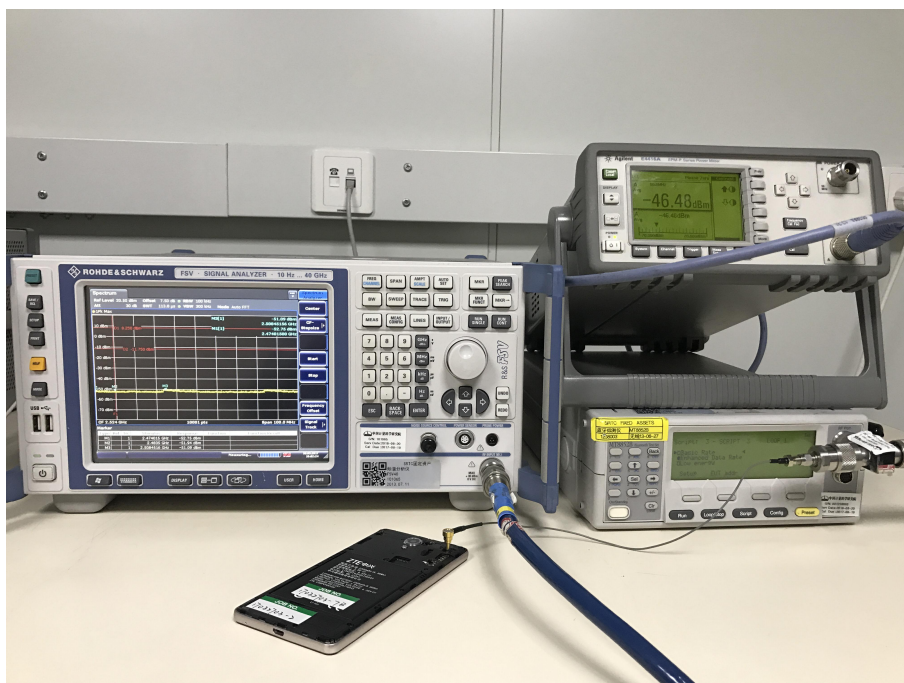
MEASUREMENT RESULT: "EUT_fin QP"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.355000	41.10	29.6	59	17.7	---	---
0.855000	37.80	29.5	56	18.2	---	---
1.400000	34.80	29.5	56	21.2	---	---
4.380000	46.60	29.6	56	9.4	---	---
5.340000	42.50	29.6	60	17.5	---	---
23.560000	36.90	30.9	60	23.1	---	---

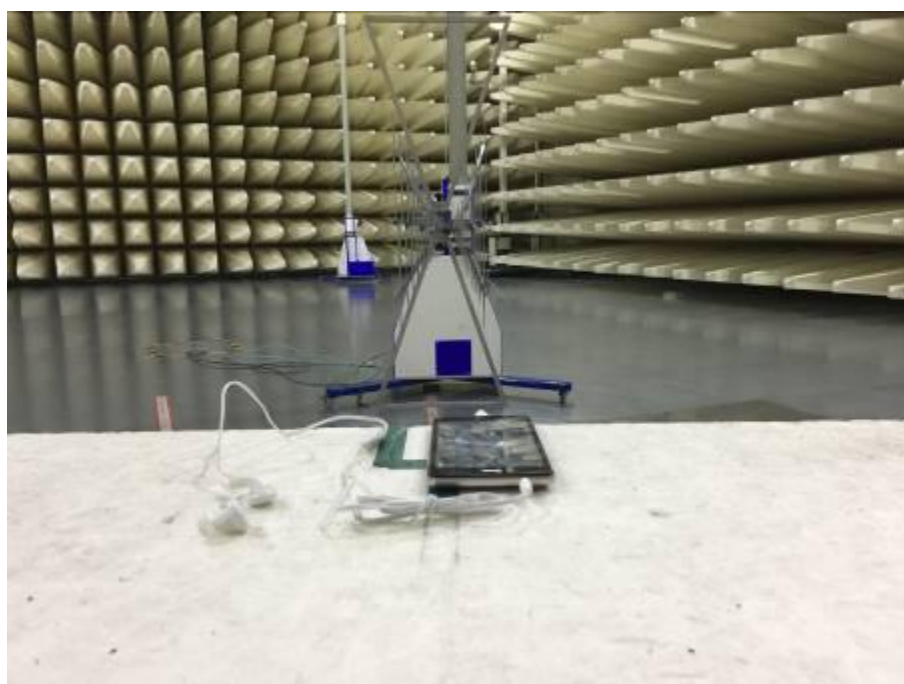
MEASUREMENT RESULT: "EUT_fin AV"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.360000	31.30	29.5	49	17.5	---	---
0.445000	30.00	29.5	47	17.0	---	---
1.315000	27.30	29.5	46	18.7	---	---
4.330000	37.90	29.6	46	8.1	---	---
5.190000	30.80	29.6	50	19.2	---	---
23.250000	32.40	30.9	50	17.6	---	---

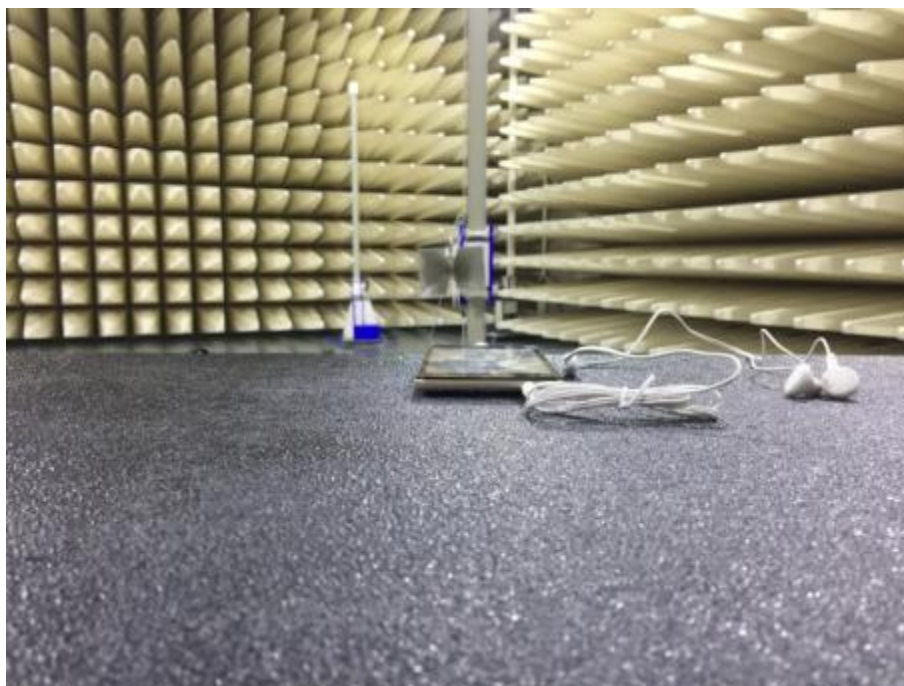
APPENDIX C – TEST SETUP



Spurious RF Conducted Emissions Test setup



Spurious Radiated Emissions Test setup (30MHz~1GHz)



Spurious Radiated Emissions Test setup (1GHz~25GHz)

---End of Test Report---