Registration
No.910917

TEST REPORT FOR BLUETOOTH TESTING

Report No.: SRTC2017-9004(F)-0044

Product Name: Mobile Phone

Product Model: Hisense F10

Applicant: Hisense International Co., Ltd.

Manufacturer: Hisense Communications Co., Ltd.

Specification: FCC Part 15, Subpart C (October, 2016 edition)

FCC ID: 2ADOBF10

The State Radio_monitoring_center Testing Center (SRTC)

No.80 Beilishi Road Xicheng District Beijing, China

Tel: 86-10-57996181 Fax: 86-10-57996288

CONTENTS

1. GENERAL INFORMATION

1.1 Notes of the test report

The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written permission of The State Radio_monitoring_center Testing Center (SRTC).
The test results relate only to individual items of the samples which have been tested.

1.2 Information about the testing laboratory

Company:	The State Radio_monitoring_center Testing Center (SRTC)
Address:	No.80 Beilishi Road, Xicheng District
City:	Beijing
Country or Region:	P.R.China
Contacted person:	liujia
Tel:	+86 10 5799 6181
Fax:	+86 10 5799 6288
Email:	liujiaf@srtc.org.cn

1.3 Applicant's details

Company:	Hisense International Co., Ltd.
Address:	Floor 22, Hisense Tower, 17 Donghai Xi Road, Qingdao, 266071, China
City:	Qingdao
Country or Region:	China
Grantee Code:	2ADOB
Contacted person:	Zhang Kelin
Tel:	+86-532-55753242
Fax:	--------
Email:	zhangkelin@hisense.com

1.4 Manufacturer's details

Company:	Hisense Communications Co., Ltd.
Address:	218 Qianwangang Road, Economic & Technological Development Zone, Qingdao, Shandong Province, P.R. China
City:	Qingdao
Country or Region:	China
Contacted person:	Li Xin
Tel:	+86-532-55755993
Fax:	---------
Email:	linxin12@hisense.com

1.5 Test Environment

Date of Receipt of test sample at SRTC:	2017.04.24
Testing Start Date:	2017.05.02
Testing End Date:	2017.05.02

Environmental Data:	Temperature (°C)	Humidity (%)
Ambient	25	38
Maximum Extreme	55	40
Minimum Extreme	-10	---

Normal Supply Voltage (V d.c.):	3.8
Maximum Extreme Supply Voltage (V d.c.):	4.35
Minimum Extreme Supply Voltage (V d.c.):	3.5

2 DESCRIPTION OF THE DEVICE UNDER TEST

2.1 Final Equipment Build Status

Frequency Range	2.4GHz~2.4835GHz
Number of Channel	40
Modulation Type	GFSK
Duplex Mode	TDD
Channel Spacing	1MHz
Data Rate	1Mbps
Antenna Type	PIFA Antenna
Power Supply	Battery or Charger
Rated Power Supply Voltage	3.8V
HW Version	V1.00
SW Version	L1402.6.01.01.MX06
IMEI	863721030069261

2.2 Support Equipment

The following support equipment was used to exercise the DUT during testing:

Battery 1

Equipment	Battery
Manufacturer	TMB
Model Number	LIW38238
Serial Number	-----

Battery 2

Equipment	Battery
Manufacturer	VEKEN
Model Number	LIW38238
Serial Number	-----

As the information described above, there are one models of battery manufactured by two companies. The relevant tests have been performed in order to verify in which combination case (EUT exercised by one models of battery manufactured by two companies) the EUT would have the worst features. So all the tests shown in this test report are performed when the EUT exercised by the battery 1 manufactured by TMB.

3 REFERENCE SPECIFICATION

Specification	Version	Title
15.35	Mar. 6, 2014	Measurement detector functions and bandwidths.
15.209	Oct. 30, 1997	Radiated emission limits; general requirements.
15.247	May 1, 2014	Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

4 KEY TO NOTES AND RESULT CODES

Code	Meaning
PASS	Test result shows that the requirements of the relevant specification have been met.
FAIL	Test result shows that the requirements of the relevant specification have not been met.
N/T	Test case is not tested.
NTC	Nominal voltage, Normal Temperature
HV	High voltage, Normal Temperature
LV	Low voltage, Normal Temperature
HTHV	high voltage, High Temperature
LTHV	High voltage, Low Temperature
HTLV	Low voltage, High Temperature
LTLV	Low voltage, Low Temperature

5 RESULT SUMMARY

No.	Test case	FCC reference	Verdict
1	Occupied Bandwidth	15.247(a)(2)	Pass
2	Peak Power Output	15.247(b)(3)	Pass
3	Transmitter Power Spectral Density	15.247(e)	Pass
4	Conducted Out of band emission measurement	15.247(d)	Pass
5	Spurious Radiated Emissions	15.247(d)/15.35(b)/15.209	Pass
6	AC Power line Conducted Emission	15.207	Pass

This Test Report Is Issued by: Mr. Peng Zhen	Checked by: Ms. Liu Jia
Tested by: Mr. He Dengshun	Issued date: 20170512

6 TEST RESULT

6.1 Occupied Bandwidth

6.1.1 Ambient condition

Temperature	Relative humidity	Pressure
22°C	40%	101.5kPa

6.1.2 Test Description

The bandwidth at 6dB down from the highest in-band spectral density is measured with a spectrum analyzer and Bluetooth test set via a power splitter with a known loss. Which connected to the transmitter antenna terminal of the EUT while the EUT is operating at maximum power and at the appropriate frequencies. All modes of operation were investigated and the worst case configuration results are reported in this section.

6.1.3 Test limit

Part15.247(a)(2)
The minimum permissible 6dB bandwidth is 500 kHz

6.1.4 Test Procedure Used

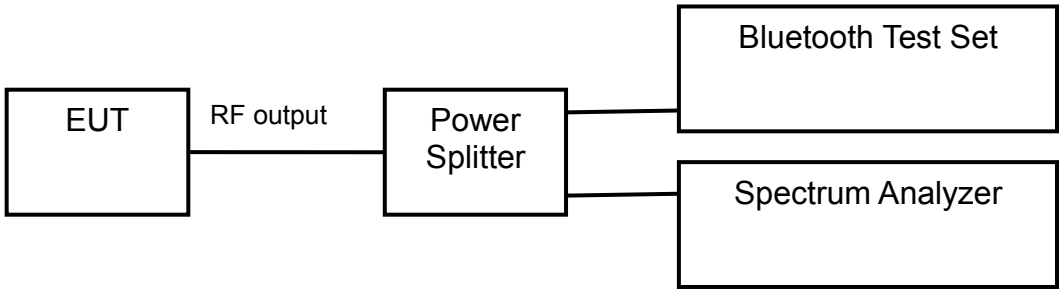
KDB 558074 D01 v03r02 – Section 8.1 Option 1

6.1.5 Test Settings

a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 x RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

6.1.6 Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



6.1.7 Test result

The test results are shown in Appendix A .

6.2 Peak Power Output

6.2.1 Ambient condition

Temperature	Relative humidity	Pressure
22°C	40%	101.5kPa

6.2.2 Test Description

The transmitter antenna terminal of the EUT is connected to the spectrum analyzer and Bluetooth test set via a power splitter with a known loss. Measurements are made while the EUT is operating at maximum power and at the appropriate frequencies.

6.2.3 Test limit

Part15.247(b)(3)
The maximum permissible conducted output power is 1 Watt.
Used conversion factor: Limit (dBm) = 10 log (Limit (W)/1mW)
==> Maximum Output Power: 30.0 dBm

6.2.4 Test Procedure Used

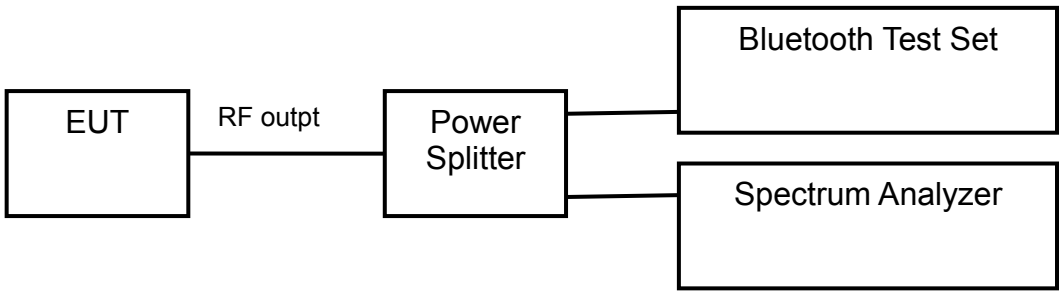
KDB 558074 D01 v03r02 – Section 9.1.1

6.2.5 Test Settings

a) RBW =2 MHz
b) VBW =10 MHz
c) span ≥ 3 x RBW
d) Sweep time = auto couple.
e) Detector = peak.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use peak marker function to determine the peak amplitude level.

6.2.6 Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



6.2.7 Test result

The test results are shown in Appendix A .

6.3 Transmitter Power Spectral Density

6.3.1 Ambient condition

Temperature	Relative humidity	Pressure
22°C	40%	101.5kPa

6.3.2 Test Description

The peak power density is measured with a spectrum analyzer and Bluetooth test set via a power splitter with a known loss connected to the antenna terminal of the EUT while the EUT is operating at maximum power and at the appropriate frequencies.

6.3.3 Test limit

Part15.247(e)
The maximum permissible power spectral density is 8.0 dBm in any 3 kHz band.

6.3.4 Test Procedure Used

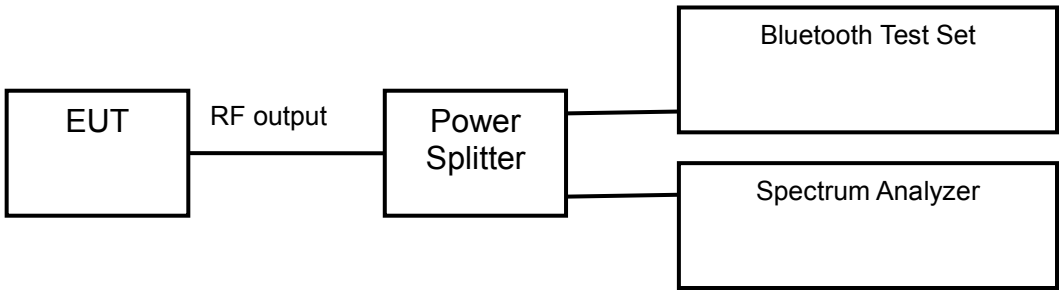
KDB 558074 D01 v03r02 Section 10.2.

6.3.5 Test Settings

a) Set analyzer center frequency to DTS channel center frequency.
b) Set the span to 1.5 times the DTS bandwidth.
c) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
d) Set the VBW ≥ 3 x RBW.
e) Detector = peak.
f) Sweep time = auto couple.
g) Trace mode = max hold.
h) Allow trace to fully stabilize.
i) Use the peak marker function to determine the maximum amplitude level within the RBW.
j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

6.3.6 Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



6.3.7 Test result

The test results are shown in Appendix A.

6.4 Conducted Out of band emission measurement

6.4.1 Ambient condition

Temperature	Relative humidity	Pressure
22°C	40%	101.5kPa

6.4.2 Test Description

For the following out of band conducted spurious emissions plots, the EUT was set to transmit at maximum power with the largest packet size available. The worst case spurious emissions were found in this configuration.

6.4.3 Test limit

Part 15.247(d)
The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth.

6.4.4 Test Procedure Used

KDB 558074 D01 v03r02 Section 11.3

6.4.5 Test Settings

a) Set the center frequency and span to encompass frequency range to be measured.
b) Set the RBW = 100kHz.
c) Set the VBW ≥ 300kHz.
d) Detector = peak.
e) Set span to encompass the spectrum to be examined
f) Sweep time = auto couple.
g) Trace mode = max hold.
h) Allow trace to fully stabilize.
i) Use the peak marker function to determine the maximum amplitude level.

6.4.6 Test Setup

The EUT and measurement equipment were set up as shown in 2.2.3.6

6.4.7 Test result

The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.

The test results are shown in Appendix A .

6.5 Spurious Radiated Emissions

6.5.1 Ambient condition

Temperature	Relative humidity	Pressure
20.8°C	36.5%	100.9kPa

6.5.2 Test Description

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at maximum power and at the appropriate frequencies. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

6.5.3 Test limit

Part15.205, 15.209, 15.247(d);
All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in below Table per Section 15.209.

Frequency [MHz]	Field strength [μV/m]	Measured Distance [meters]
30～88	100	3
88～216	150	3
216～960	200	3
Above 960	500	3

Radiated Limits

Part15.35(b):
there is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit

Used conversion factor: Limit (dBμV/m) = 20 log (Limit (μV/m)/1μV/m)

Frequency [MHz]	Detector	Unit (dBμV/m)
30～88	Quasi-peak	40.0
88～216	Quasi-peak	43.5
216～960	Quasi-peak	46.0
960～1000	Quasi-peak	54.0
1000～5th harmonic of the highest frequency or 40GHz, whichever is lower	Average	54.0
	Peak	74.0

Conversion Radiated limits

6.5.4 Test Procedure Used

KDB 558074 D01 v03r02 – Section 12.2.5 (average power measurements)
KDB 558074 D01 v03r02 – Section 12.2.4 (peak power measurements)

6.5.5 Test Settings

Average Field Strength Measurements per Section 12.2.5.3 of KDB 558074 v03r02

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3kHz > 1/T
4. Averaging type was set to RMS to ensure that video filtering was applied in the power domain
5. Detector = peak
6. Sweep time = auto
7. Trace mode = max hold
8. Trace was allowed to run for at least 50 times (1/duty cycle) traces

Peak Field Strength Measurements per Section 12.2.4 of KDB 558074 v03r02

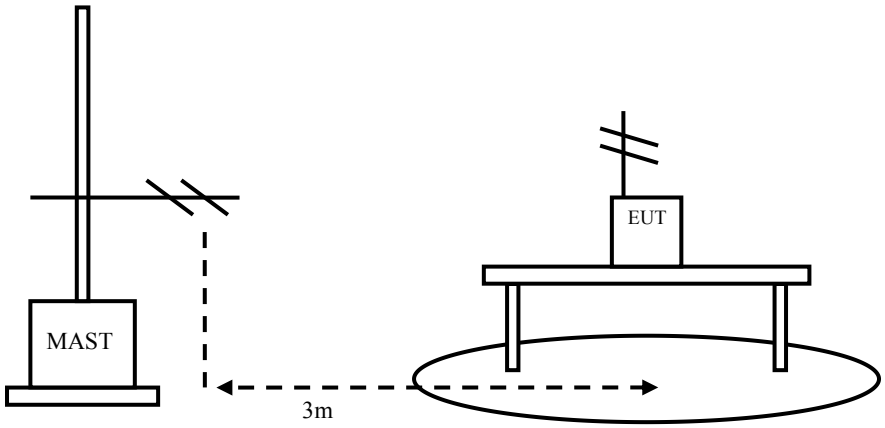
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW is set depending on measurement frequency, as specified in following table

Frequency	RBW
9-150kHz	200-300Hz
0.15-30MHz	9-10kHz
30-1000MHz	100-120kHz
>1000MHz	1MHz

3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

6.5.6 Test Setup

The EUT and measurement equipment were set up as shown in the diagram below



The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration. Then start the test software ES-K1. Sweep the whole frequency band through the range from 30MHz to 1GHz or above, using receive log period antenna HL562 or Ridge horn antenna HF906.

During the test, the antenna height and EUT azimuth were varied in order to identify the maximum level of emission from the EUT. The height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees. The measurements shall be repeated with orthogonal polarization of the test antenna. The results shall be showed the worst case of the three orthogonal axes.

The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

6.5.7 Test result

The test results are shown in Appendix B.

6.6 AC Power line Conducted Emission

6.6.1 Ambient condition

Temperature	Relative humidity	Pressure
20.8°C	36.5%	100.9kPa

6.6.2 Test limit

FCC Part15.207

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

The measurement is made according to ANSI C63.4-2014

6.6.3 Test result

The test results are shown in AppendixB .

7 MEASUREMENT UNCERTAINTIES

Items	Uncertainty	
Occupied Bandwidth	3kHz	
Peak power output	0.67dB	
Band edge compliance	1.20dB	
Spurious emissions	30MHz～1GHz	2.83dB
	1GHz～12.75GHz	2.50dB
	12.75GHz～25GHz	2.75dB

8 TEST EQUIPMENTS

No.	Name/ Model	Manufacturer	S/N	Cal Due date
1.	Spectrum Analyzer FSV	ROHDE&SCHWARZ	101065	2017.08.20
2.	Signal Generator MG3700A	Anritsu	6200677084	2017.08.20
3.	Bluetooth Test Set MT8852B	Anritsu	1142010	2018.03.01
4.	Cable 104EA	SUCOFLEX	9272/4EA	2018.03.01
5.	Cable 104EA	SUCOFLEX	9266/4EA	2018.03.01
6.	Power Splitter 11850C	Agilent	026057	2017.08.20
7.	12.65m×8.03m×7.50m Fully-Anechoic Chamber	FRANKONIA	-----	-----
8.	23.18m×16.88m×9.60m Semi-Anechoic Chamber	FRANKONIA	---	-----
9.	Turn table Diameter:1m	HD	-----	-----
10.	Turn table Diameter:5m	HD	-----	-----
11.	Antenna master FAC(MA4.0)	MATURO	-----	-----
12.	Antenna master SAC(MA4.0)	MATURO	-----	-----
13.	9.080m×5.255m×3.525m Shielding room	FRANKONIA	-----	-----
14.	HF 906 Double-Ridged Waveguide Horn Antenna	R&S	100030	2017.08.20
15.	HF 906 Double-Ridged Waveguide Horn Antenna	R&S	100029	2017.08.20
16.	HL562 Ultra log antenna	R&S	100016	2017.08.20
17.	3160-09 Receive antenna	SCHWARZ-BECK	002058-002	2017.08.20
18.	ESI 40 EMI test receiver	R&S	100015	2017.08.20
19.	Radio tester	CMU 200	114667	2017.08.20
20.	ESCS30 EMI test receiver	R&S	100029	2017.08.20
21.	HL562 Receive antenna	R&S	100167	2017.08.20
22.	ESH3-Z5 LISN	R&S	100020	2017.08.20

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

Please refer to the attachment.

APPENDIX B – TEST DATA OF RADIATED EMISSION

Please refer to the attachment.

APPENDIX C – TEST SETUP

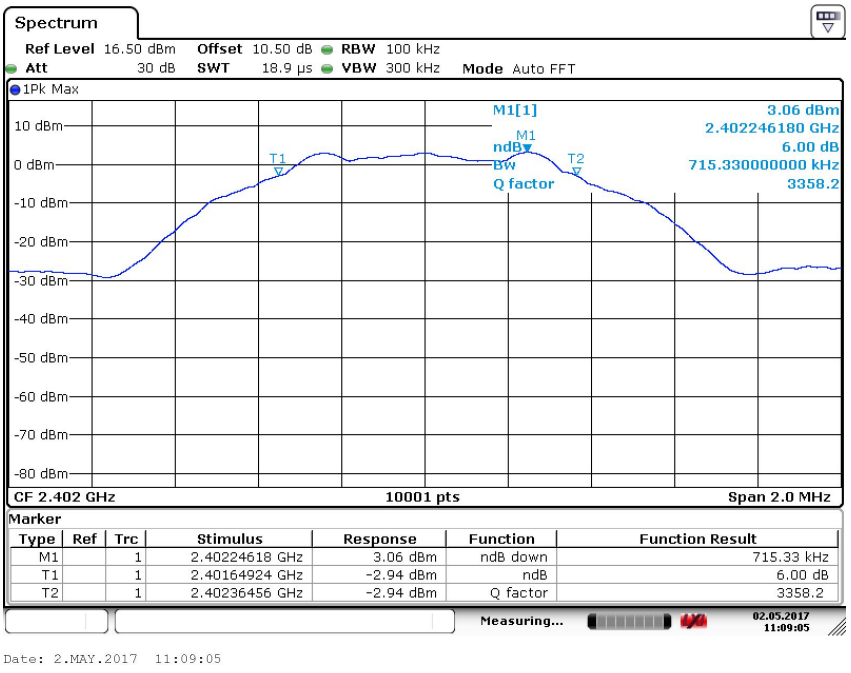
Please refer to the attachment.

APPENDIX A – TEST DATA OF CONDUCTED EMISSION

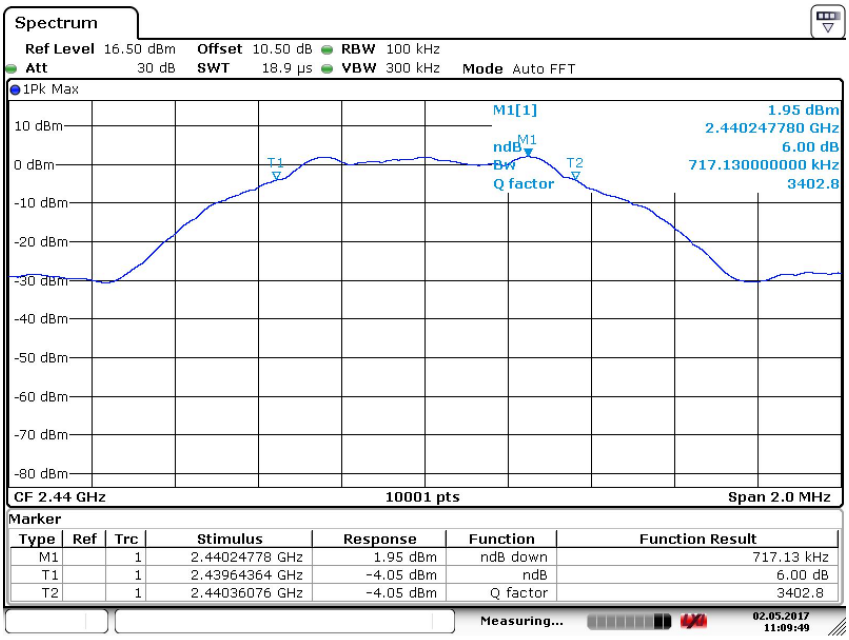
Occupied Bandwidth

Modulation type: GFSK (LE)

Carrier frequency (MHz)	Channel No.	6 dB bandwidth(kHz)
2402	0	715.3
2440	19	717.1
2480	39	715.5

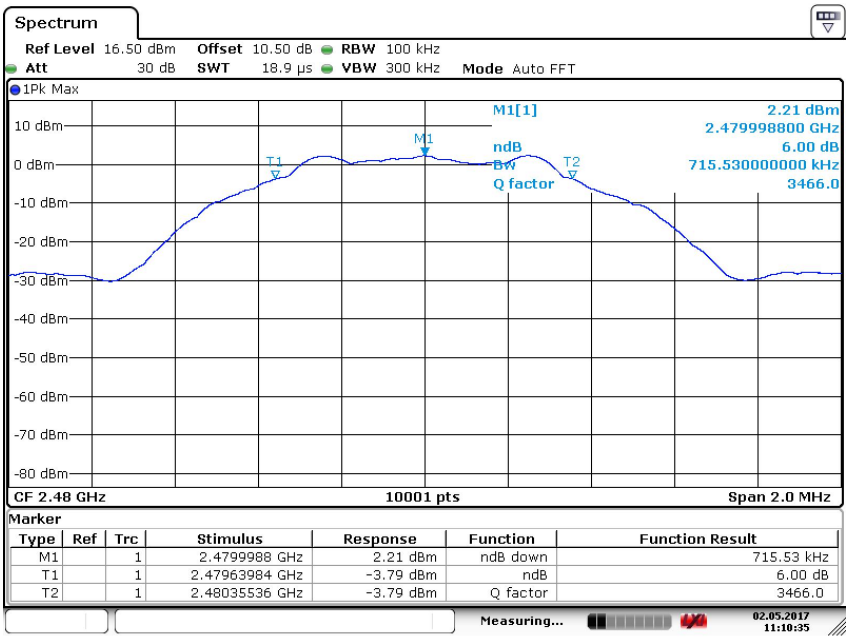


Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK (LE)



Date: 2.MAY.2017 11:09:49

Carrier frequency (MHz): 2440
Channel No.:19
Modulation type: GFSK (LE)



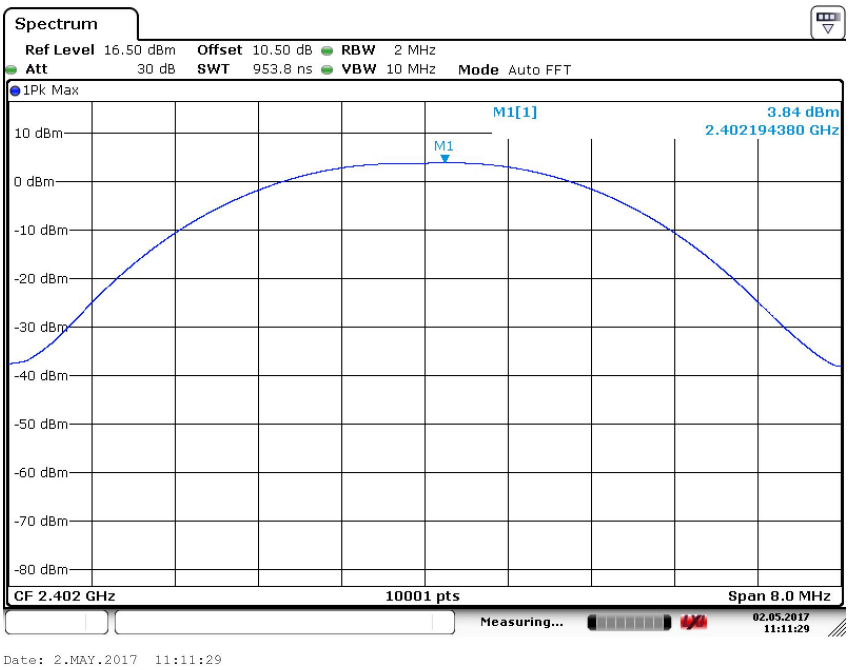
Date: 2.MAY.2017 11:10:35

Carrier frequency (MHz): 2480
Channel No.:39
Modulation type: GFSK (LE)

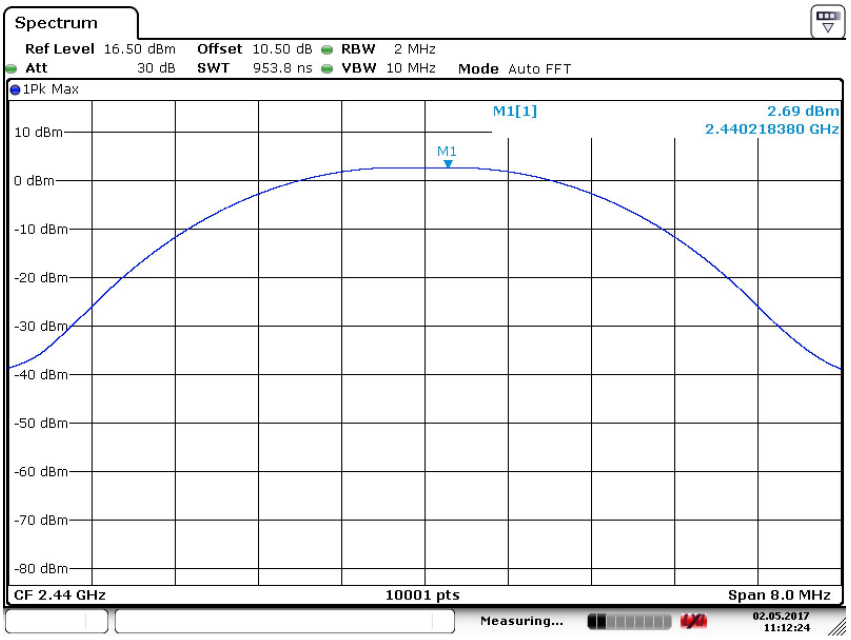
Peak Power Output

Modulation type	Average Power Output (dBm)		
	2402MHz (Ch0)	2440MHz (Ch19)	2480MHz (Ch39)
GFSK (LE)	1.31	1.14	1.18

Modulation type	Peak Power Output (dBm)		
	2402MHz (Ch0)	2440MHz (Ch19)	2480MHz (Ch39)
GFSK (LE)	3.84	2.69	2.99

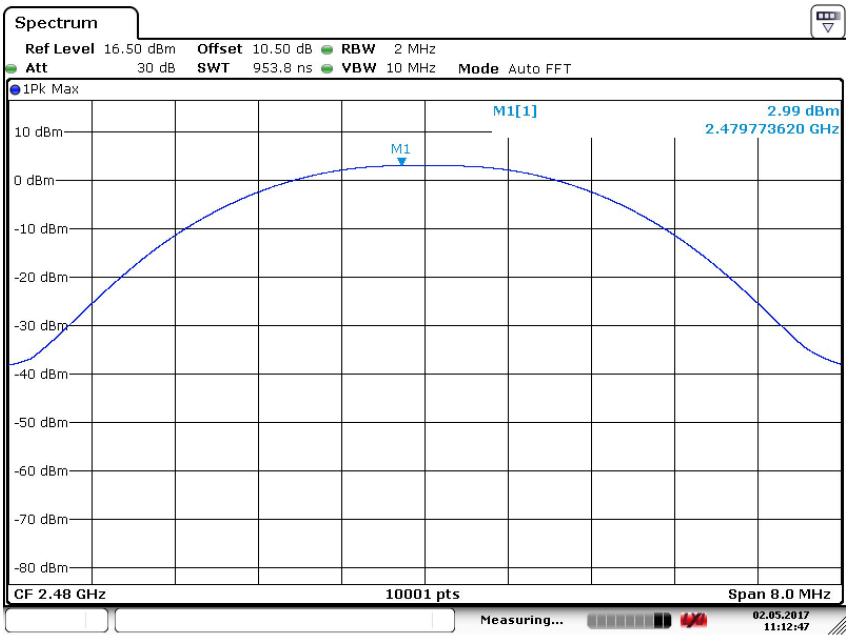


Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK (LE)



Date: 2.MAY.2017 11:12:24

Carrier frequency (MHz): 2440
Channel No.:19
Modulation type: GFSK (LE)

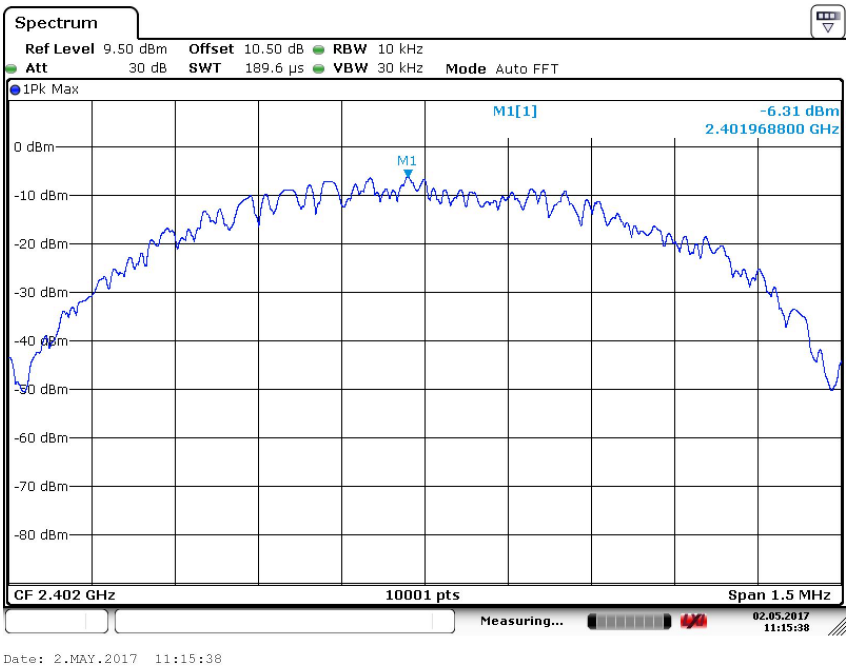


Date: 2.MAY.2017 11:12:47

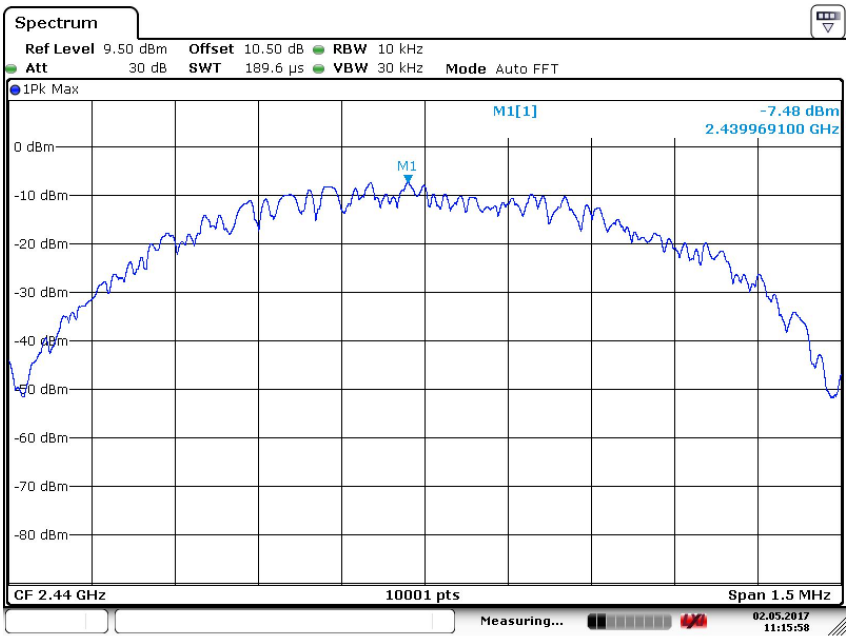
Carrier frequency (MHz): 2480
Channel No.:39
Modulation type: GFSK (LE)

Transmitter Power Spectral Density

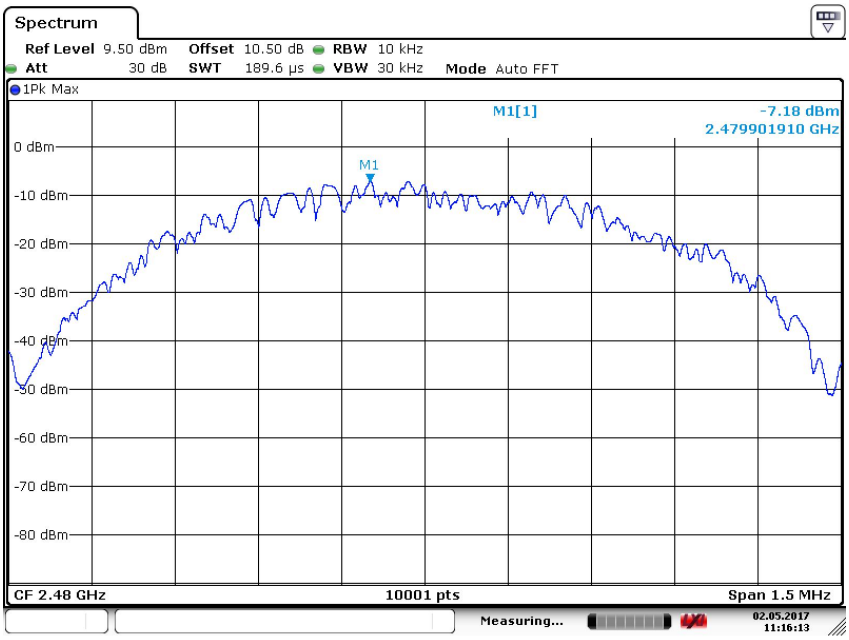
Carrier frequency (MHz)	Channel No	Power Density
2402	0	-6.31
2440	19	-7.48
2480	39	-7.18



Carrier frequency (MHz): 2402
Channel No.:0
Modulation type: GFSK (LE)



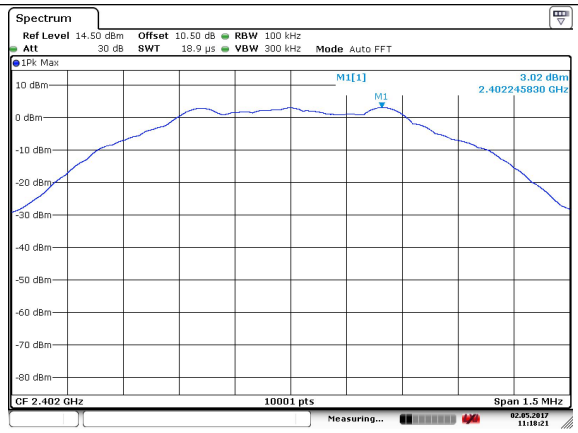
Carrier frequency (MHz): 2440
Channel No.:19
Modulation type: GFSK (LE)

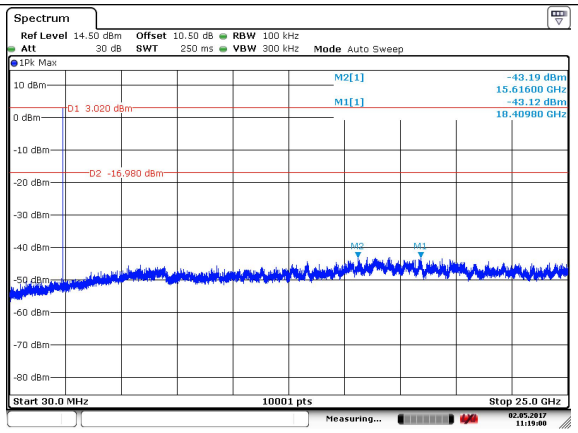


Carrier frequency (MHz): 2480
Channel No.:39
Modulation type: GFSK (LE)

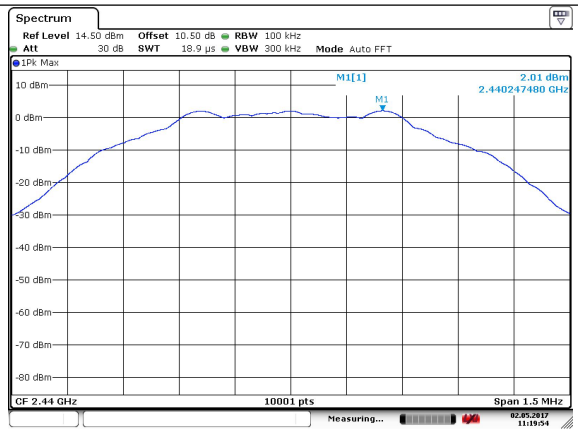
Conducted Out of band emission measurement

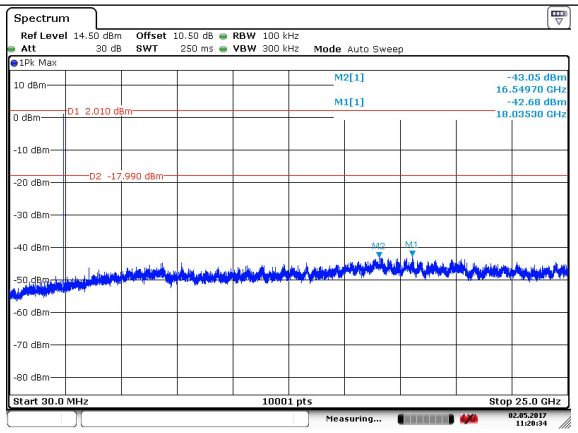
CH0



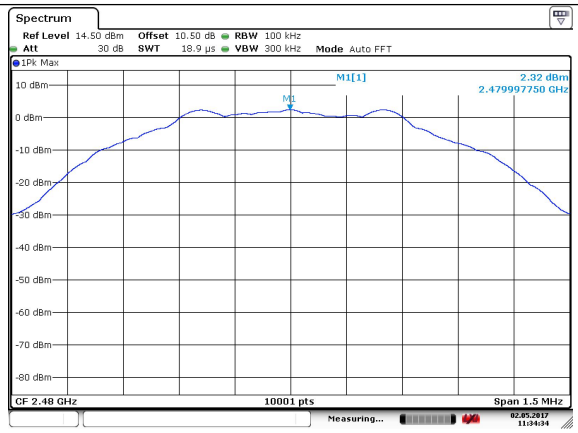


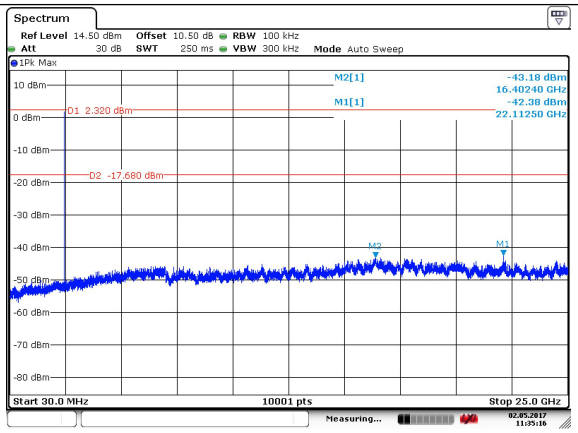
CH19





CH39





APPENDIX B – TEST DATA OF RADIATED EMISSION

Spurious Radiated Emissions

The worst case attitude: The mobile lay down.

Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE)
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	88.49	54.49	N/A	N/A	8.90	25.10
2	2390	56.48	22.48	-17.52	74.00	8.90	25.10

Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE)
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	87.50	53.50	N/A	N/A	8.90	25.10
2	2390	54.81	20.81	-19.19	74	8.90	25.10

Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE)
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	78.32	44.32	N/A	N/A	8.90	25.10
2	2390	40.80	6.80	-13.20	54.00	8.90	25.10

Carrier frequency (MHz): 2402
Channel No.:0
Test Mode: GFSK (LE)
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	77.35	43.35	N/A	N/A	8.90	25.10
2	2390	41.50	7.50	-12.50	54	8.90	25.10

Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE)
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	90.40	56.40	N/A	N/A	8.90	25.10
2	2483.5	55.49	21.49	-18.51	74.00	8.90	25.10

Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE)
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	84.56	50.56	N/A	N/A	8.90	25.10
2	2483.5	54.96	20.96	-19.04	74	8.90	25.10

Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE)
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	77.97	43.97	N/A	N/A	8.90	25.10
2	2483.5	41.98	7.98	-12.02	54.00	8.90	25.10

Carrier frequency (MHz): 2480
Channel No.:39
Test Mode: GFSK (LE)
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	75.10	41.10	N/A	N/A	8.90	25.10
2	2483.5	41.14	7.14	-12.86	54	8.90	25.10

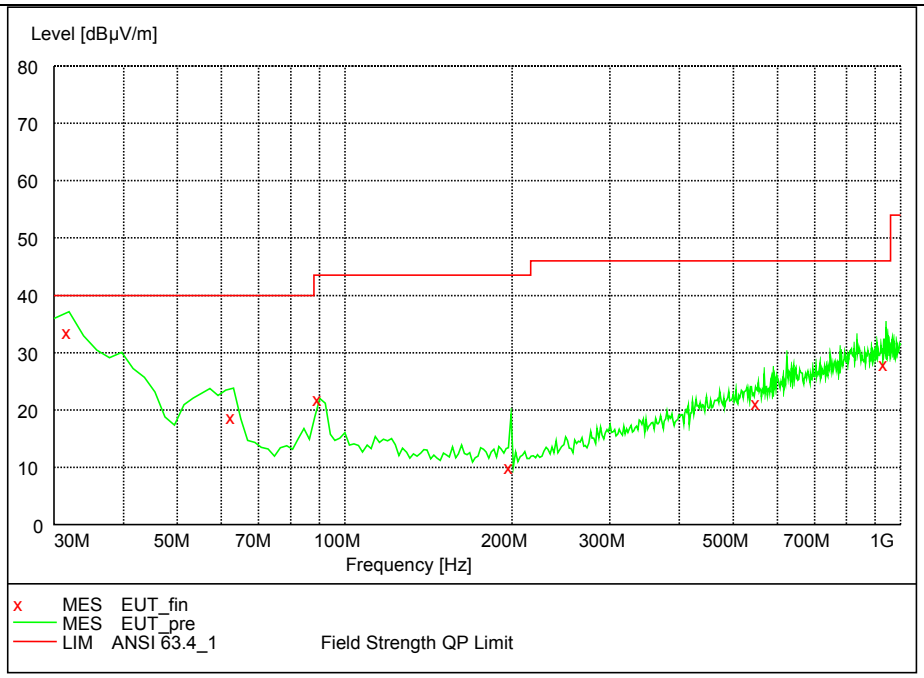
Sample Calculations
Determining Spurious Emissions Levels

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:
Result= $P_{mea} + A_{Rpl}$

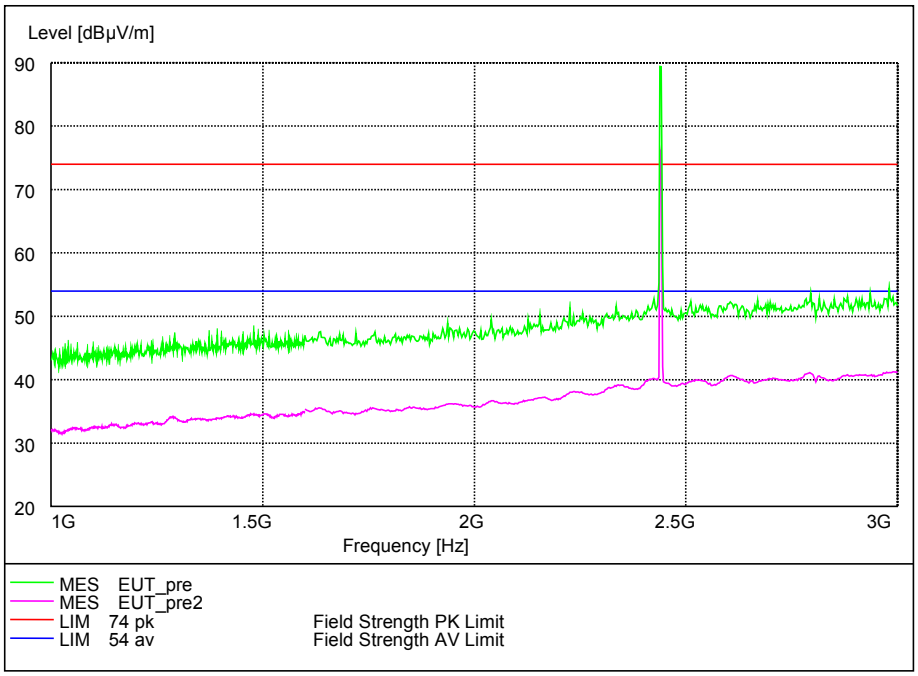
The worst case attitude: The mobile lay down.

For GFSK (LE)
Channel No.:19

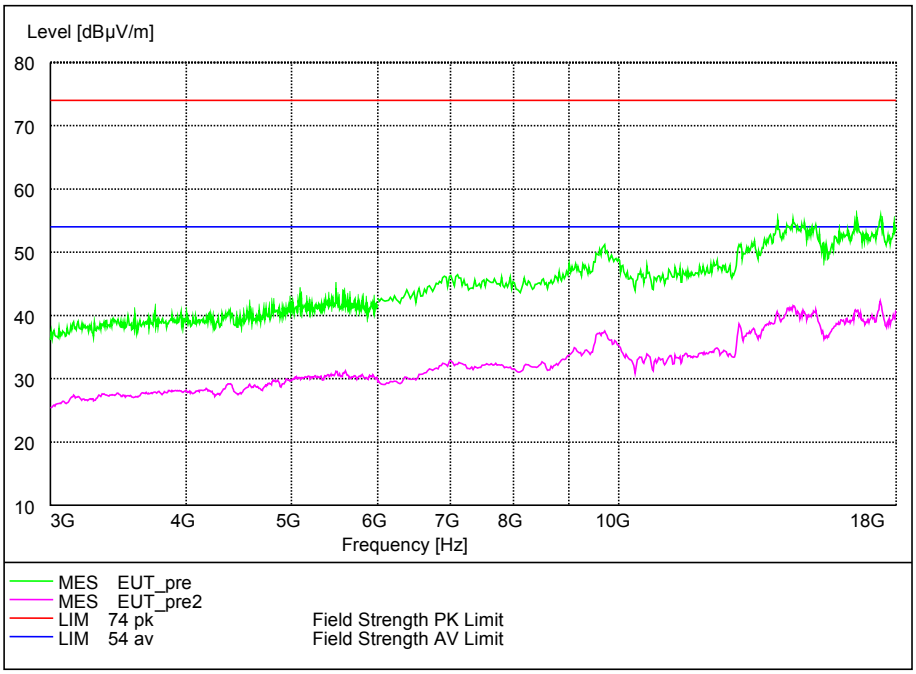
Frequency (MHz)	Result (dBuV/m)	ARpl (dB)	Pmea (dBuV/m)	Polarity	Limit (dBuV/m)
31.943888	33.70	20.0	13.70	Vertical	40.0
63.046092	18.90	7.1	11.80	Vertical	40.0
90.260521	22.00	11.0	11.00	Vertical	43.5
199.118236	10.10	10.9	-0.80	Vertical	43.5
554.849699	21.30	22.3	-1.00	Vertical	46.0
941.683367	28.20	28.2	0.00	Vertical	46.0



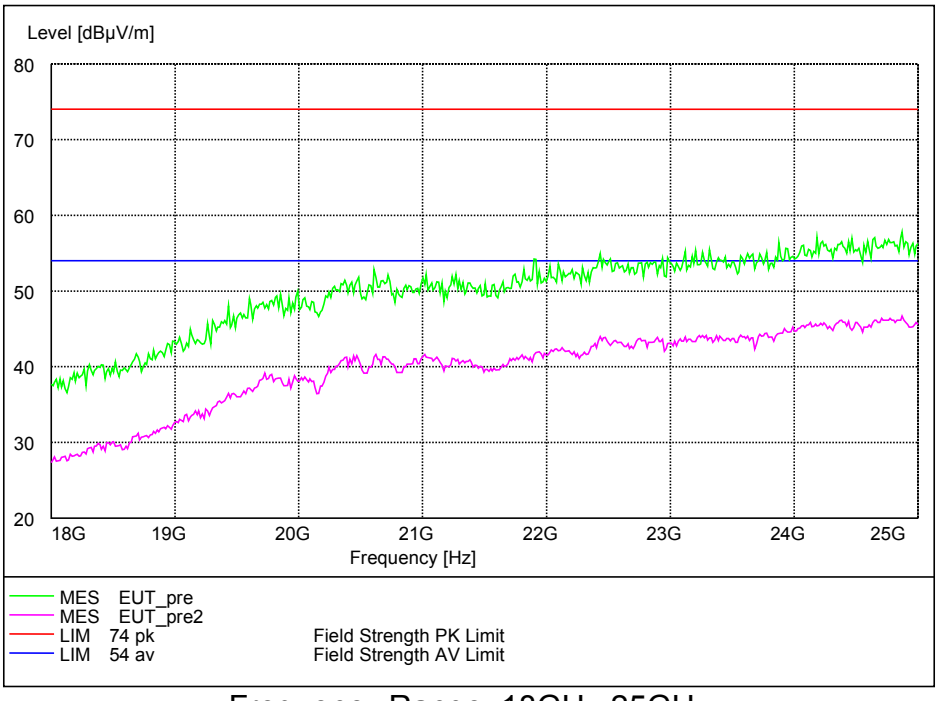
Frequency Range: 30MHz-1000 MHz
Detector: QP mode
Modulation type: GFSK (LE)



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



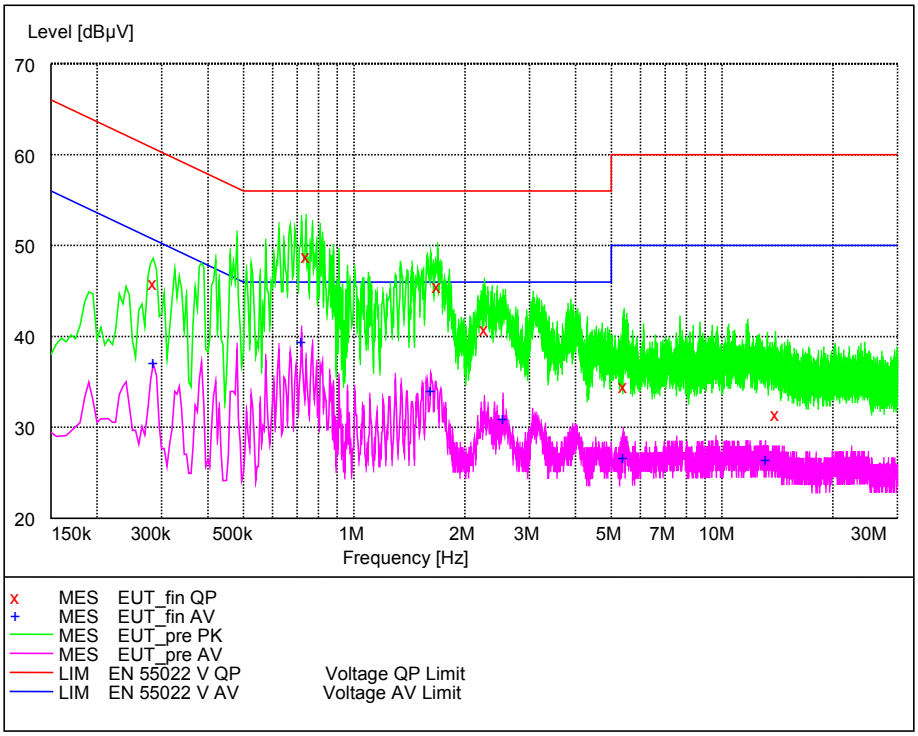
Frequency Range: 3GHz-18GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE)



Frequency Range: 18GHz-25GHz
Detector: Av mode and PK mode
Modulation type: GFSK (LE)

AC Power line Conducted Emission

Noise Level of the Measuring Instrument



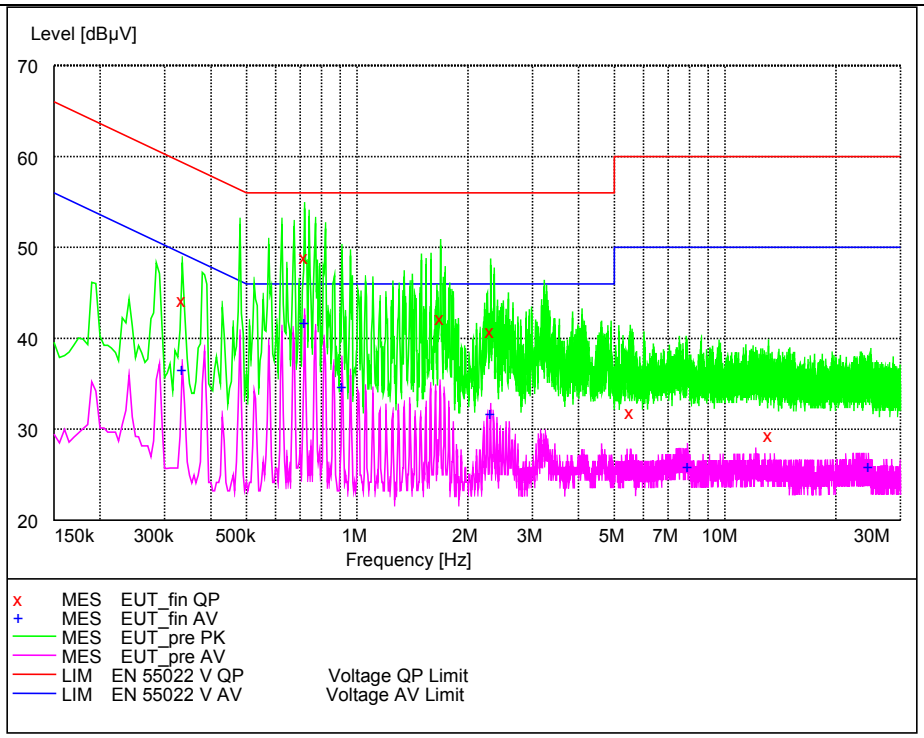
L Line

MEASUREMENT RESULT: "EUT_fin QP"

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.285000	46.00	29.6	61	14.7	---	---
0.740000	49.00	29.4	56	7.0	---	---
1.685000	45.60	29.5	56	10.4	---	---
2.260000	40.90	29.6	56	15.1	---	---
5.415000	34.70	29.6	60	25.3	---	---
13.980000	31.60	30.0	60	28.4	---	---

MEASUREMENT RESULT: "EUT_fin AV"

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.285000	37.20	29.6	51	13.5	---	---
0.720000	39.50	29.5	46	6.5	---	---
1.615000	34.10	29.5	46	11.9	---	---
2.545000	31.00	29.5	46	15.0	---	---
5.385000	26.70	29.6	50	23.3	---	---
13.135000	26.50	30.0	50	23.5	---	---



N Line

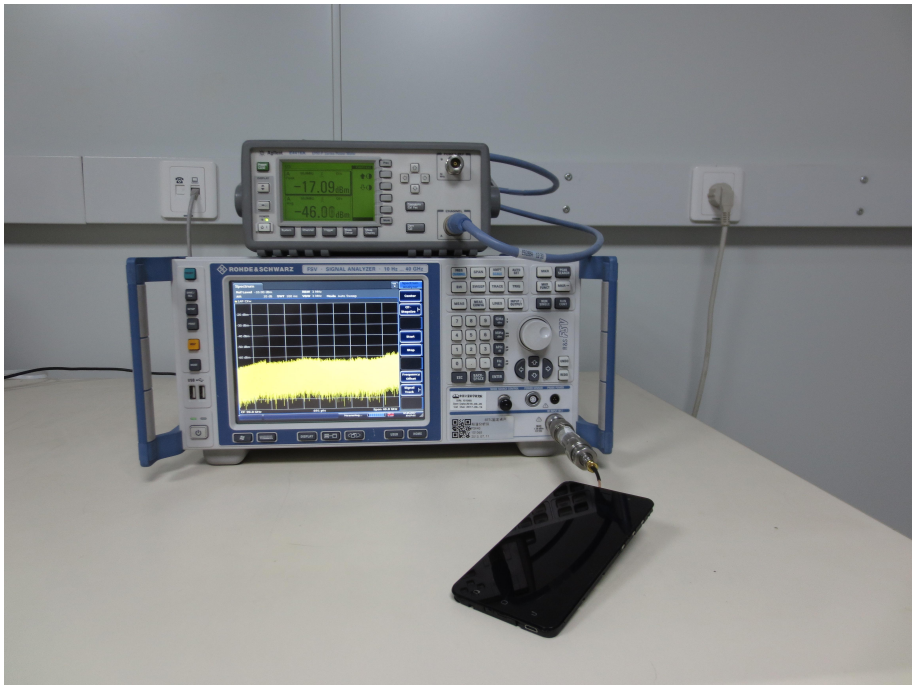
MEASUREMENT RESULT: "EUT_fin QP"

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.335000	44.30	29.6	59	15.0	---	---
0.720000	49.00	29.5	56	7.0	---	---
1.685000	42.40	29.5	56	13.6	---	---
2.310000	40.90	29.6	56	15.1	---	---
5.535000	32.00	29.6	60	28.0	---	---
13.140000	29.50	30.0	60	30.5	---	---

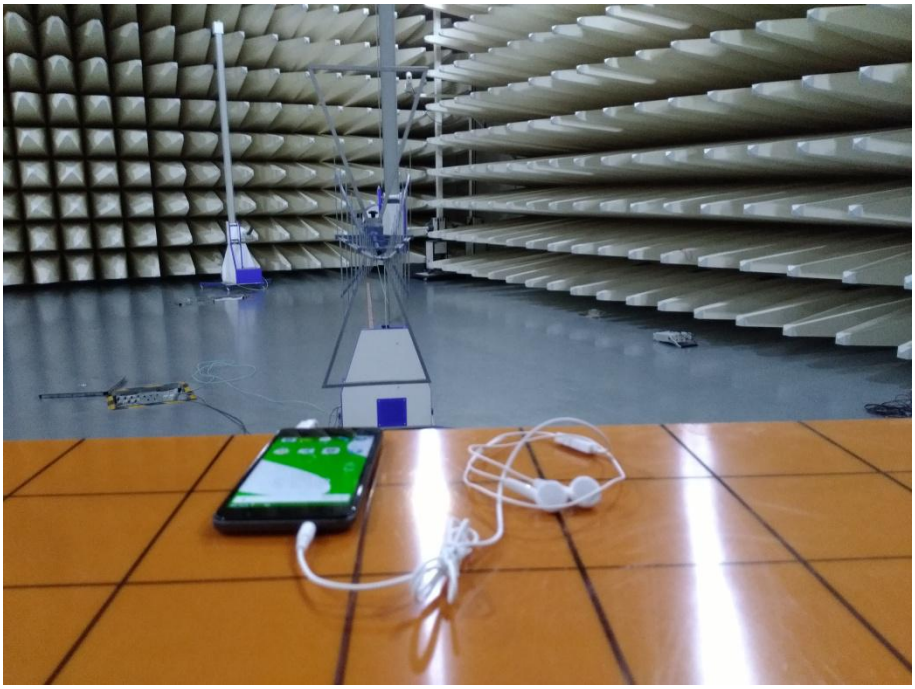
MEASUREMENT RESULT: "EUT_fin AV"

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.335000	36.70	29.6	49	12.6	---	---
0.720000	41.80	29.5	46	4.2	---	---
0.910000	34.80	29.5	46	11.2	---	---
2.305000	31.80	29.6	46	14.2	---	---
7.920000	25.90	29.7	50	24.1	---	---
24.575000	25.90	31.1	50	24.1	---	---

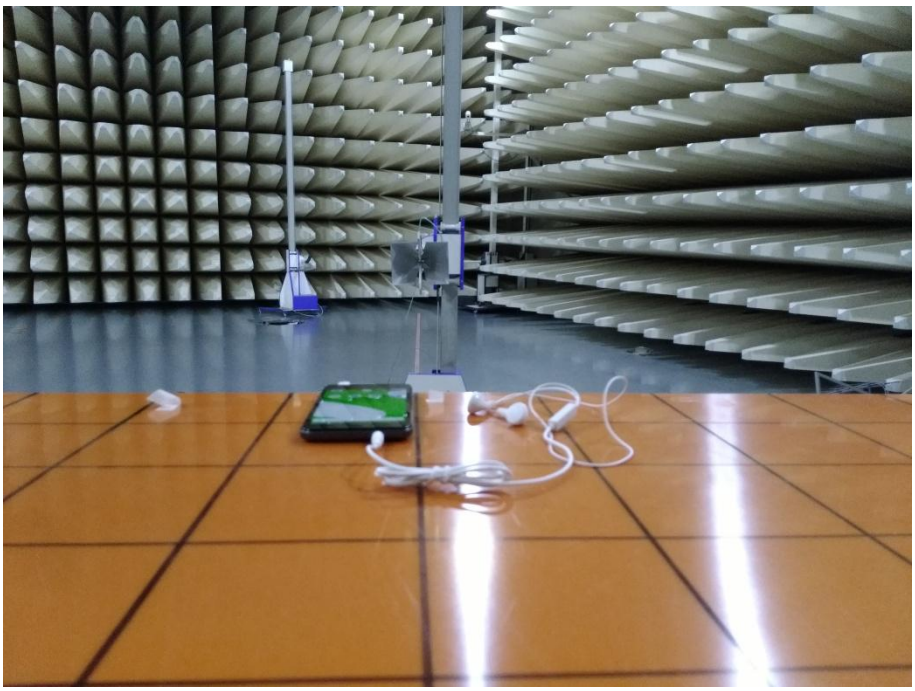
APPENDIX C – TEST SETUP



Spurious RF Conducted Emissions Test setup



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



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

---End of Test Report---