FCC PART 15C
TEST REPORT
No. I14Z45895-GTE04

for

TCT Mobile Limited

HSUPA/HSDPA/UMTS dualband / GSM quadband mobile phone

Model Name: 6043A

FCC ID: RAD493

IC No. : 9238A-0033

with

Hardware Version: PIO

Software Version: vAK2

Issued Date: 2014-06-10

DAkkS Deutsche Akkreditierungsstelle D-PL-12123-01-01

DAR accreditation (DIN EN ISO/IEC 17025): No. D-PL-12123-01-01
FCC 2.948 Listed: No.733176
IC O.A.T.S listed: No.6629B-1

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of TMC Beijing.

Test Laboratory:

TMC Beijing, Telecommunication Metrology Center of Ministry of Industry and Information Technology
Shouxiang Science Building, No 51, Xueyuan Road, Haidian District, Beijing, P.R.China 100191
Tel:+86(0)10-62304633, Fax:+86(0)10-62304633-2504 Email:welcome@emcite.com

CONTENTS

1. Test Laboratory

1.1. Testing Location

Company Name:	TMC Beijing, Telecommunication Metrology Center of MIIT
Address:	Shouxiang Science Building, No 51, Xueyuan Road, Haidian District, Beijing, P.R.China
Postal Code:	100191
Telephone:	00861062304633
Fax:	00861062304633-2504

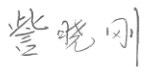
1.2. Testing Environment

Normal Temperature:	15-35℃
Relative Humidity:	20-75%

1.3. Project data

Project Leader:	Zi Xiaogang
Testing Start Date:	2014-05-05
Testing End Date:	2014-06-04

1.4. Signature

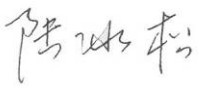


Zi Xiaogang

(Prepared this test report)

Sun Xiangqian

(Reviewed this test report)



Lu Bingsong

Deputy Director of the laboratory

(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	TCT Mobile Limited
Address /Post:	5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China.
City:	Shanghai
Postal Code:	201203
Country:	China
Contact Person:	Gong Zhizhou
Contact Email	zhizhou.gong@jrdcom.com
Telephone:	0086-21-61460890
Fax:	0086-21-61460602

2.2. Manufacturer Information

Company Name:	TCT Mobile Limited
Address /Post:	5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China.
City:	Shanghai
Postal Code:	201203
Country:	China
Telephone:	0086-21-61460890
Fax:	0086-21-61460602

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	HSUPA/HSDPA/UMTS dualband / GSM quadband mobile phone
Model Name	6043A
FCC ID	RAD493
IC Number	9238A-0033
Frequency Band	ISM 2400MHz~2483.5MHz
Type of Modulation(LE mode)	GFSK
Number of Channels(LE mode)	40
Power Supply	3.8V DC by Battery

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
UT19a	014086000000672	PIO	vAK2
UT18a	014086000000011	PIO	vAK2

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE used during the test

AE ID*	Description	SN	Note
AE1	Battery	/	Inbuilt
AE2	Travel charger	/	TCT-CHR-0820
AE3	Travel charger	/	/
AE4	USB cable	/	1445895DC002
AE5	USB cable	/	/
AE6	USB cable	/	/

AE1

Model	CAC2500017C2
Manufacturer	SCUD
Capacitance	2500 mAh
Nominal voltage	3.8 V

AE2

Model	CBA0003AG0C1
Manufacturer	ACE
Length of cable	99 cm (length of USB cable)

AE3

Model	CBA0003BG0C1
Manufacturer	ACE
Length of cable	99 cm (length of USB cable)

AE4

Model	CDA0000026C1

Manufacturer	Shenghua
Length of cable	99 cm
AE5	
Model	CDA0000026C2
Manufacturer	Juwei
Length of cable	99 cm
AE6	
Model	CDA0000025C1
Manufacturer	Shenghua
Length of cable	99 cm
AE7	
Model	CDA0000025C2
Manufacturer	Juwei
Length of cable	99 cm

*AE ID: is used to identify the test sample in the lab internally.

3.4. Normal Accessory setting

Fully charged battery is used during the test.

3.5. General Description

The Equipment Under Test (EUT) is a model of HSUPA/HSDPA/UMTS dualband / GSM quadband mobile with integrated antenna. It consists of normal options: lithium battery, charger. Manual and specifications of the EUT were provided to fulfil the test.

4. Reference Documents

4.1. Documents supplied by applicant

EUT feature information is supplied by the applicant or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

FCC Part15	FCC CFR 47, Part 15, Subpart C: 15.205 Restricted bands of operation; 15.209 Radiated emission limits, general requirements; 15.247 Operation within the bands 902–928MHz, 2400–2483.5 MHz, and 5725–5850 MHz.	10-1-13
ANSI C63.10	American National Standard for Testing Unlicensed Wireless Devices	2009
FCC Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations	10–1–13
RSS - Gen	Spectrum Management and Telecommunications - Radio Standards Specification General Requirements and Information for the Certification of Radiocommunication Equipment	Issue3
RSS -210	Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment	Issue8

5. LABORATORY ENVIRONMENT

Shielding Room1 (6.0 meters×3.0 meters×2.7 meters) did not exceed following limits along the conducted RF performance testing:

Temperature	Min. = 15 ℃, Max. = 30 ℃
Relative humidity	Min. = 30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Ground system resistance	< 0.5 Ω
Uniformity of field strength	Between 0 and 6 dB, from 80MHz to 3000 MHz

Control room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. =30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω

Semi-anechoic chamber (23 meters×17meters×10meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 30 ℃
Relative humidity	Min. = 30 %, Max. = 60 %
Shielding effectiveness	> 110 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω
Normalised site attenuation (NSA)	< ±3.2 dB, 10 m distance, from 30 to 1000 MHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 2000 MHz

6. SUMMARY OF TEST RESULTS

6.1. Summary of Test Results

Abbreviations used in this clause:

P Pass, The EUT complies with the essential requirements in the standard.

F Fail, The EUT does not comply with the essential requirements in the standard

NA Not Applicable, The test was not applicable

NP Not Performed, The test was not performed by TMC

SUMMARY OF MEASUREMENT RESULTS	Sub-clause	IC	Verdict
Peak Output Power - Conducted	15.247 (b)(1)	RSS-210 A8.4 (2)	**P**
Frequency Band Edges	15.247 (d)	RSS-210 A8.5	**P**
Conducted Emission	15.247 (d)	RSS-210 A8.5	**P**
Radiated Emission	15.247, 15.205, 15.209	RSS-210 A8.5	**P**
6dB Bandwidth	15.247 (a)(2)	RSS-210 A8.2	**P**
Maximum Power Spectral Density Level	15.247(e)	RSS-210 A8.2	**P**
AC Powerline Conducted Emission	15.107, 15.207	RSS-Gen 7.2.2	**P**

Please refer to **ANNEX A** for detail.

The measurement is made according to ANSI C63.10.

6.2. Statements

TMC has evaluated the test cases requested by the applicant /manufacturer as listed in section 6.1 of this report for the EUT specified in section 3 according to the standards or reference documents listed in section 4.2

7. Test Equipments Utilized

Conducted test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date
1	Vector Signal Analyzer	FSU26	200030	Rohde & Schwarz	2014-06-12

Radiated emission test system

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Due date
1	Test Receiver	ESU26	100376	Rohde & Schwarz	2014-11-05
2	EMI Antenna	VULB 9163	9163 175	Schwarzbeck	2014-07-13
3	EMI Antenna	3117	00119024	ETS-Lindgren	2016-01-20
4	Dual-Ridge Waveguide Horn Antenna	3116	2663	ETS-Lindgren	2014-06-30
5	Dual-Ridge Waveguide Horn Antenna	3116	2661	ETS-Lindgren	2014-06-30
6	Bluetooth Tester	CBT	100153	Rohde & Schwarz	2014-09-15
7	LISN	NV216	101200	R&S	2014-07-11
8	Pre-amplifier (18GHz)	HFH2-Z2	829324/007	Rohde & Schwarz	2014-12-12
9	Pre-amplifier (26.5GHz)	SCU18	1005277	Rohde & Schwarz	/
10	Loop Antenna	SCU26	1006788	Rohde & Schwarz	/

Anechoic chamber

Fully anechoic chamber by Frankonia German.

ANNEX A: MEASUREMENT RESULTS

A.1. Measurement Method

A.1.1. Conducted Measurements

The measurement is made according to ANSI C63.10.

1). Connect the EUT to the test system correctly.

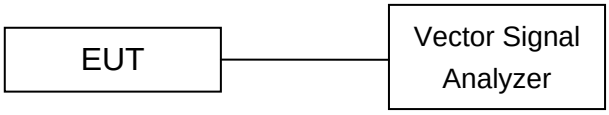
2). Set the EUT to the required work mode (Transmitter, receiver or transmitter & receiver).

3). Set the EUT to the required channel.

4). Set the EUT hopping mode (hopping or hopping off).

5). Set the spectrum analyzer to start measurement.

6). Record the values. Vector Signal Analyzer



A.1.2. Radiated Emission Measurements

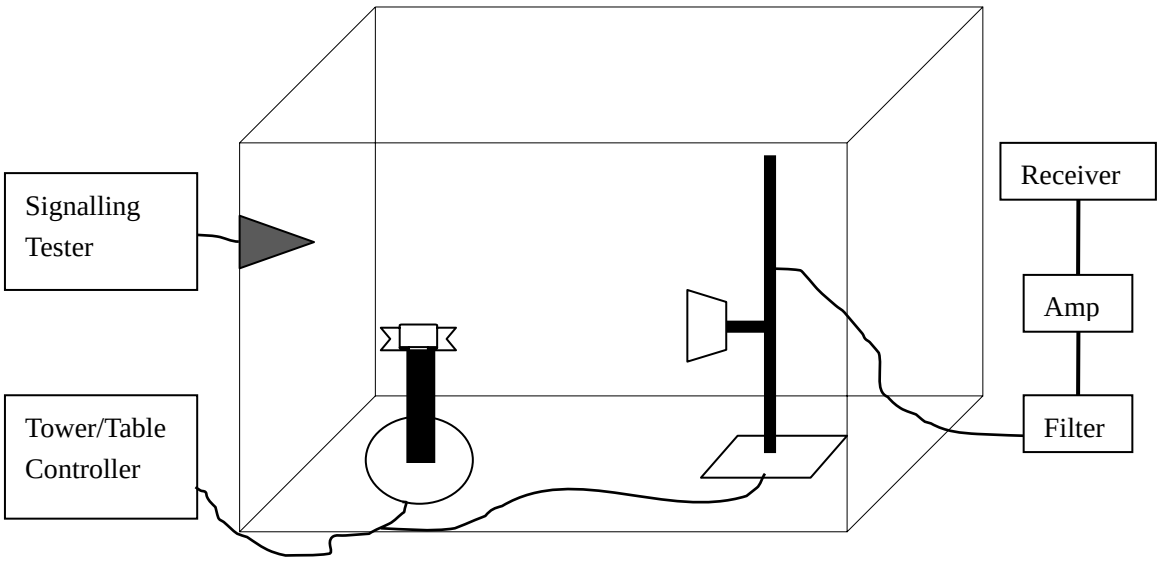
The measurement is made according to ANSI C63.10.

The radiated emission test is performed in semi-anechoic chamber. The distance from the EUT to the reference point of measurement antenna is 3m. The test is carried out on both vertical and horizontal polarization and only maximization result of both polarizations is kept. During the test, the turntable is rotated 360° and the measurement antenna is moved from 1m to 4m to get the maximization result.

In the case of radiated emission, the used settings are as follows,

Sweep frequency from 30 MHz to 1GHz, RBW = 100 kHz, VBW = 300 kHz;

Sweep frequency from 1 GHz to 26GHz, RBW = 1MHz, VBW = 1MHz;



A.2. Peak Output Power - Conducted

Measurement Limit:

Standard	Limit (dBm)
FCC Part 15.247(b)(1)	< 30

The measurement is made according to ANSI C63.10.

Test Condition

Hopping Mode	RBW	VBW	Span	Sweeptime	Detector	Trace Mode
Hopping OFF	1MHz	5MHz	0	5ms	Peak	Max Hold

Measurement Results:

For GFSK

Frequency	2402 MHz	2440 MHz	2480 MHz	Conclusion
Peak Conducted Output Power (dBm)	-0.87	-0.25	-0.27	P

Conclusion: PASS

A.3. Frequency Band Edges - Conducted

Measurement Limit:

Standard	Limit (dBc)
FCC 47 CFR Part 15.247 (d)	> 20

The measurement is made according to ANSI C63.10.

Test Condition

Hopping Mode	RBW	VBW	Span	Sweeptime	Detector	Trace Mode
Hopping OFF	100KHz	300KHz	8MHz	5ms	Peak	Max Hold

Observe the stored trace and measure the amplitude delta between the peak of the fundamental and the peak of the band-edge emission. This is not an abosolute field strength measurement; it is only a relative measurement to determine the amount by which the emission drops at the band edge relative to the highest fundamental emission level.

Measurement Result:

For GFSK

Frequency	Hopping	Band Edge Power (dBc)		Conclusion
2402MHz	Hopping OFF	Fig.1	-60.06	P
2480MHz	Hopping OFF	Fig.2	-62.07	P

Conclusion: PASS

Test graphs as below

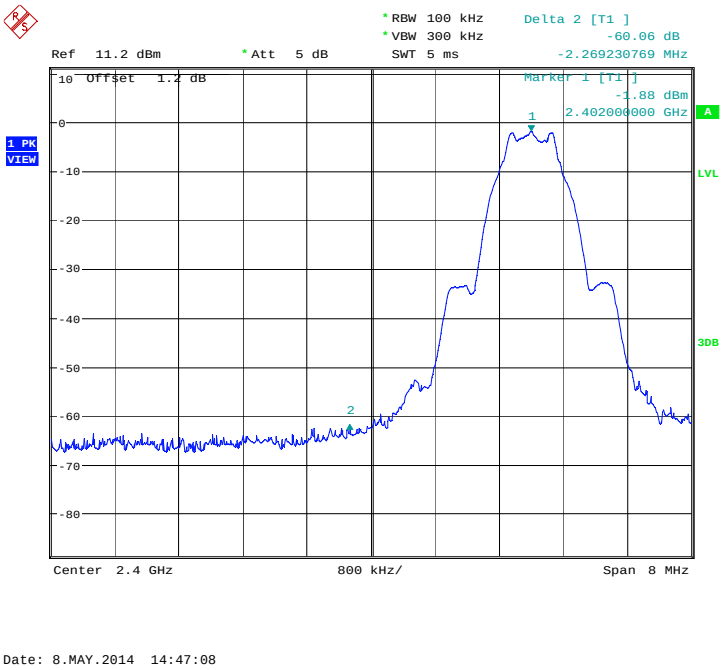


Fig.1. Frequency Band Edges: GFSK, 2402 MHz**,** Hopping Off

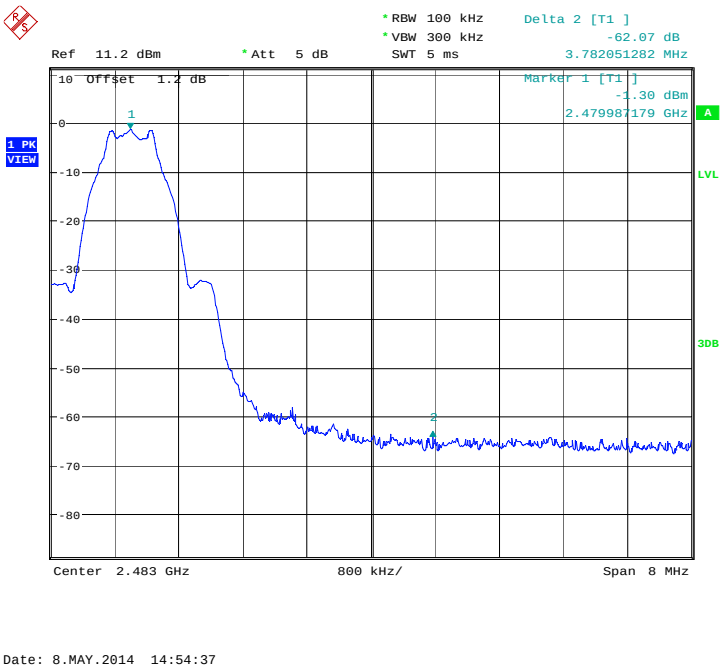


Fig.2. Frequency Band Edges: GFSK, 2480 MHz, Hopping Off

A.4. Conducted Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247 (d)	20dB below peak output power in 100 kHz bandwidth

The measurement is made according to ANSI C63.10.

Test Condition

Hopping Mode	RBW	VBW	Sweeptime	Detector	Trace Mode
Hopping OFF	100KHz	300KHz	Auto	Peak	Max Hold

Measurement Procedure – Reference Level

1. Set the RBW = 100 kHz.

2. Set the VBW ≥ 300 kHz.

3. Set the span to 5-30 % greater than the EBW.

4. Detector = peak.

5. Sweep time = auto couple.

6. Trace mode = max hold.

7. Allow trace to fully stabilize.

8. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW. Next, determine the power in 100 kHz band segments outside of the authorized frequency band using the following measurement:

Measurement Procedure - Unwanted Emissions

1. Set RBW = 100 kHz.

2. Set VBW ≥ 300 kHz.

3. Set span to encompass the spectrum to be examined.

4. Detector = peak.

5. Trace Mode = max hold.

6. Sweep = auto couple.

7. Allow the trace to stabilize (this may take some time, depending on the extent of the span).

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified above.

Measurement Results:

For GFSK

Frequency	Frequency Range	Test Results	Conclusion
2402 MHz	Center Frequency	Fig.3	P
	30 MHz ~ 1 GHz	Fig.4	P
	1 GHz ~ 3 GHz	Fig.5	P
	3 GHz ~ 10 GHz	Fig.6	P
	10GHz ~ 26 GHz	Fig.7	P
2440 MHz	Center Frequency	Fig.8	P
	30 MHz ~ 1 GHz	Fig.9	P
	1 GHz ~ 3 GHz	Fig.10	P
	3 GHz ~ 10 GHz	Fig.11	P
	10GHz ~ 26 GHz	Fig.12	P
2480 MHz	Center Frequency	Fig.13	P
	30 MHz ~ 1 GHz	Fig.14	P
	1 GHz ~ 3GHz	Fig.15	P
	3 GHz ~ 10 GHz	Fig.16	P
	10 GHz ~ 26 GHz	Fig.17	P

Conclusion: PASS

Test graphs as below

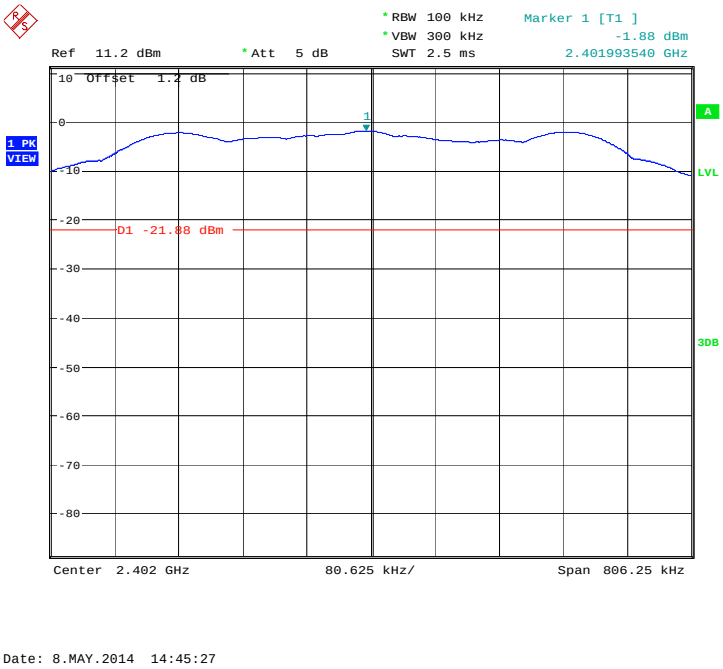


Fig.3. Conducted spurious emission: GFSK,2402MHz

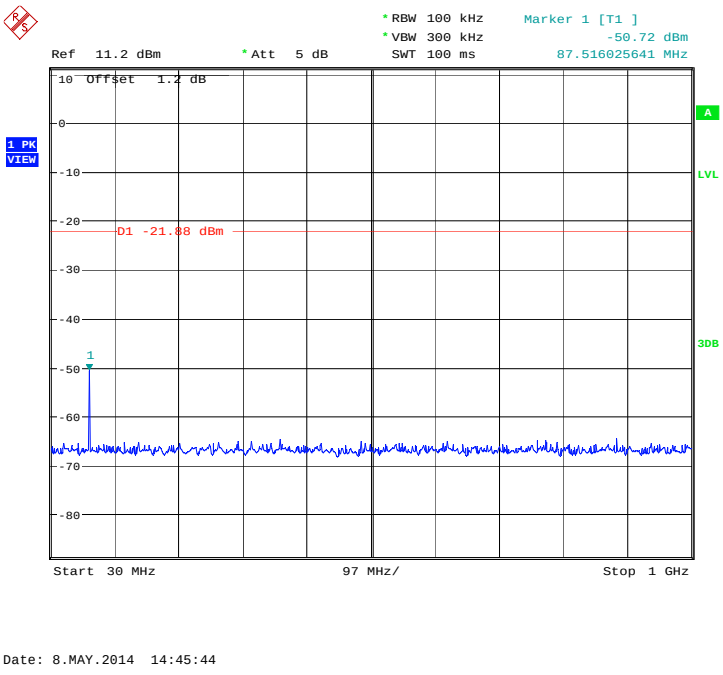


Fig.4. Conducted spurious emission: GFSK, 2402 MHz, 30MHz - 1GHz

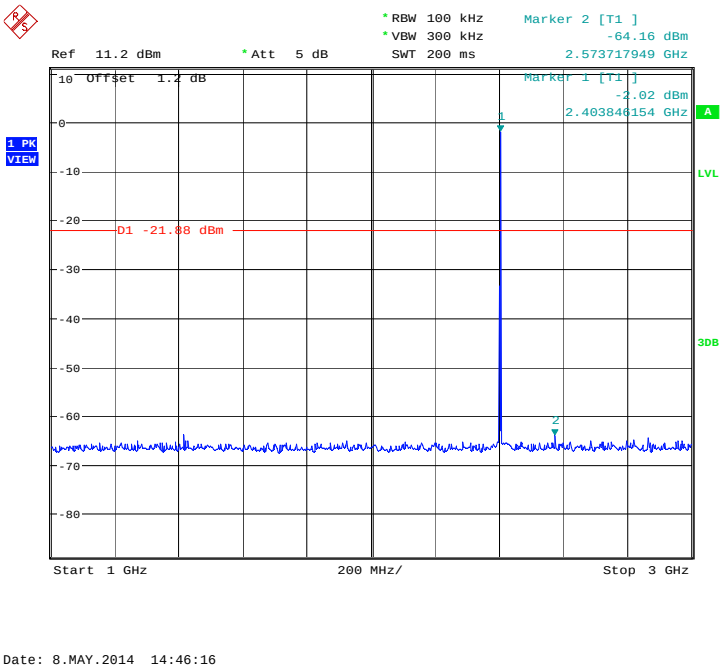


Fig.5. Conducted spurious emission: GFSK, 2402 MHz,1GHz - 3GHz

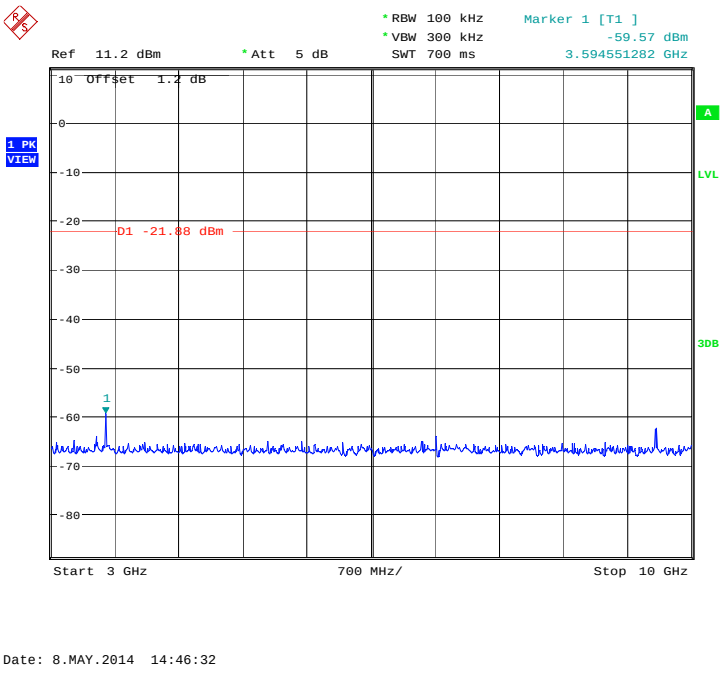


Fig.6. Conducted spurious emission: GFSK, 2402 MHz,3GHz - 10GHz

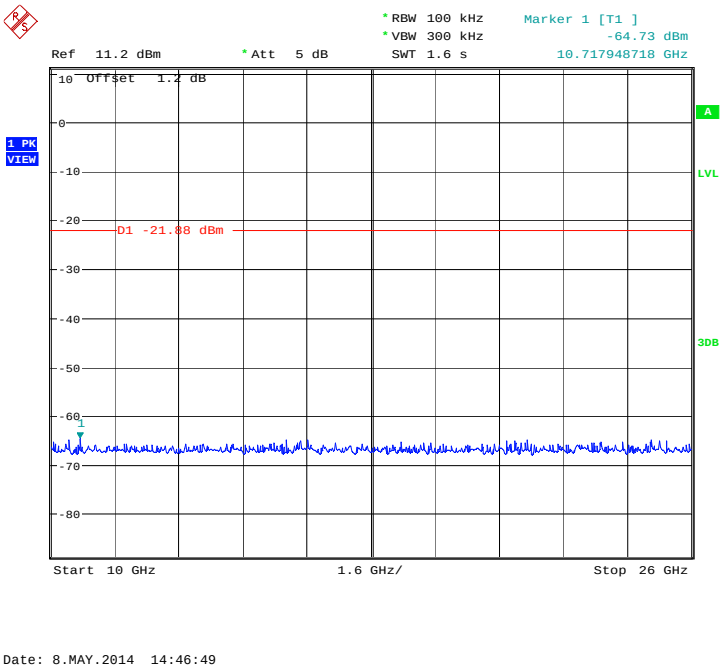


Fig.7. Conducted spurious emission: GFSK, 2402 MHz,10GHz - 26GHz

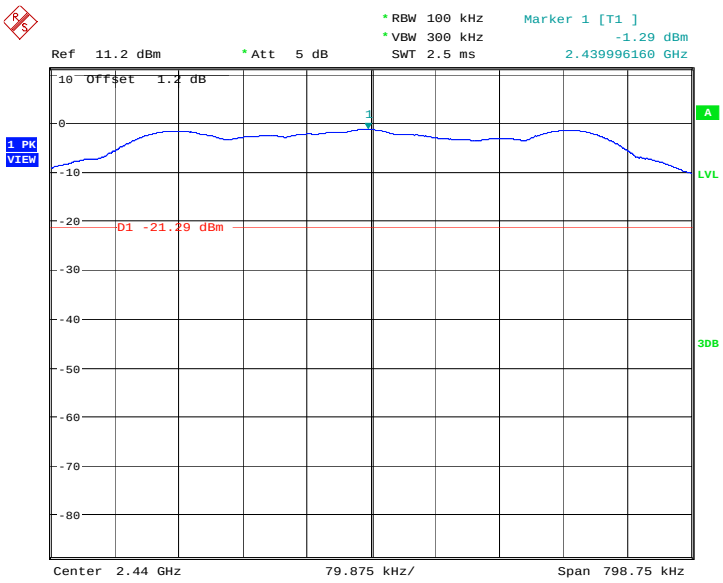


Fig.8. Conducted spurious emission: GFSK, 2440MHz

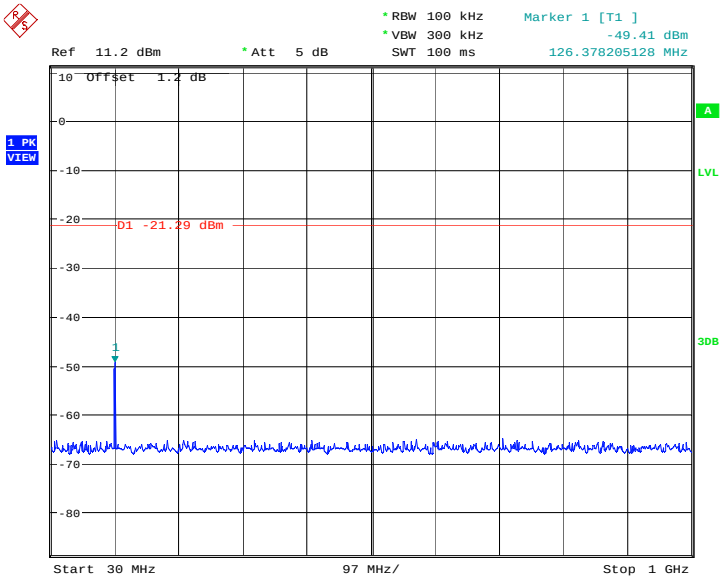


Fig.9. Conducted spurious emission: GFSK, 2440 MHz, 30MHz - 1GHz

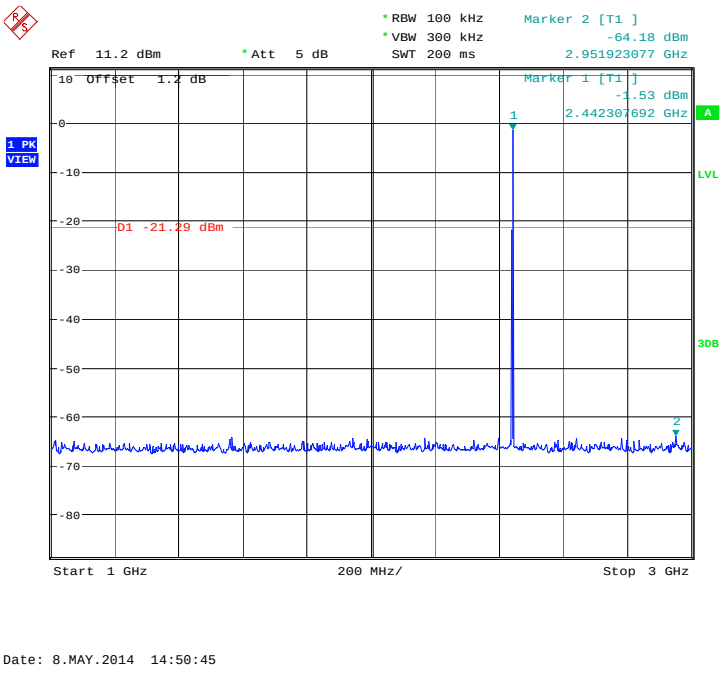


Fig.10. Conducted spurious emission: GFSK, 2440 MHz, 1GHz – 3GHz

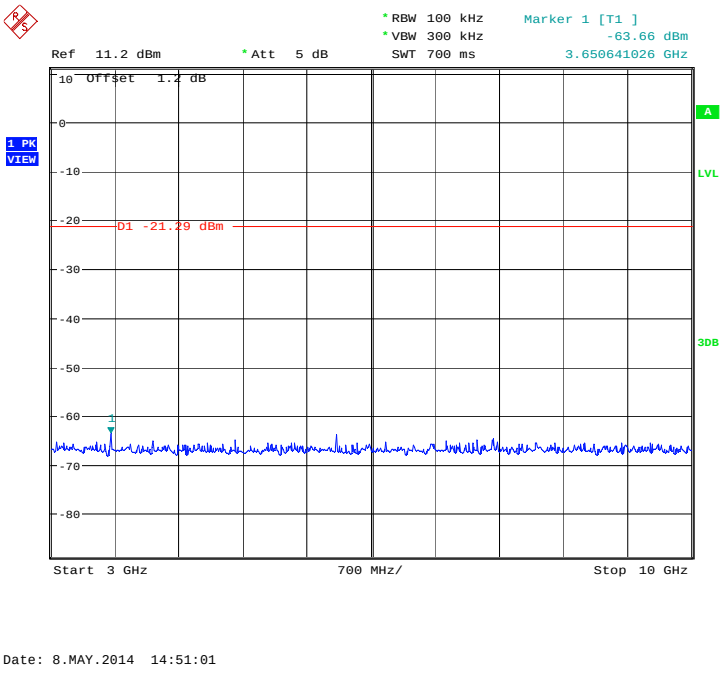


Fig.11. Conducted spurious emission: GFSK, 2440 MHz, 3GHz – 10GHz

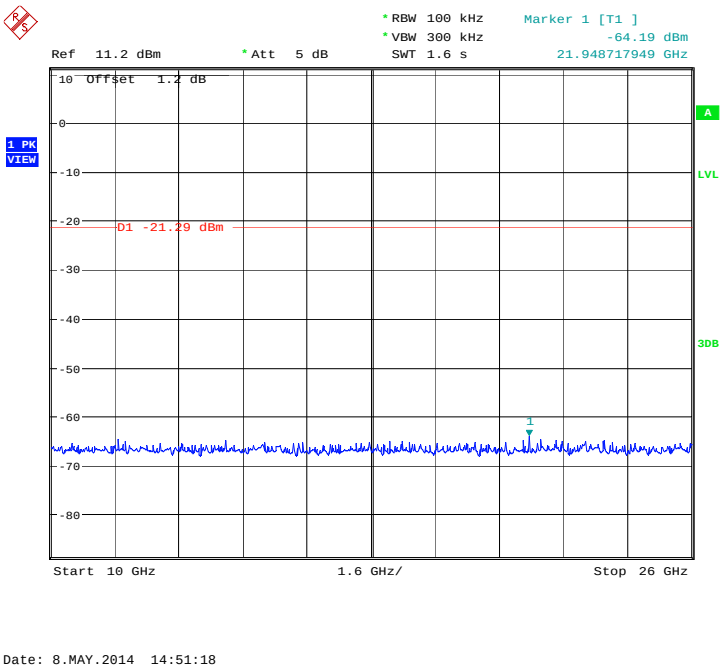


Fig.12. Conducted spurious emission: GFSK, 2440 MHz, 10GHz – 26GHz

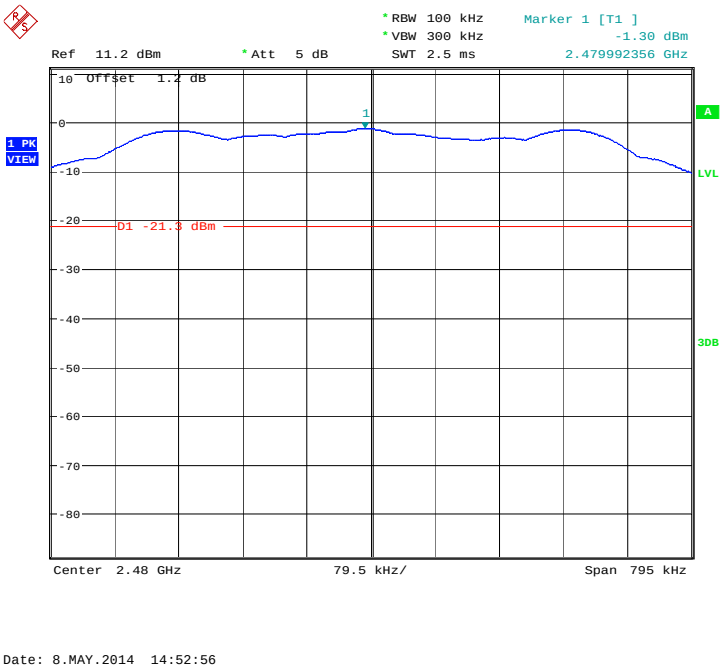


Fig.13. Conducted spurious emission: GFSK, 2480 MHz

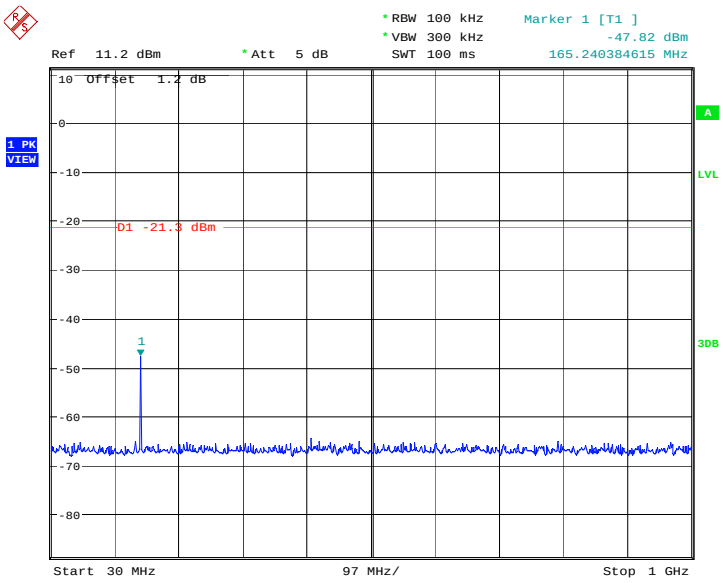


Fig.14. Conducted spurious emission: GFSK, 2480 MHz, 30MHz - 1GHz

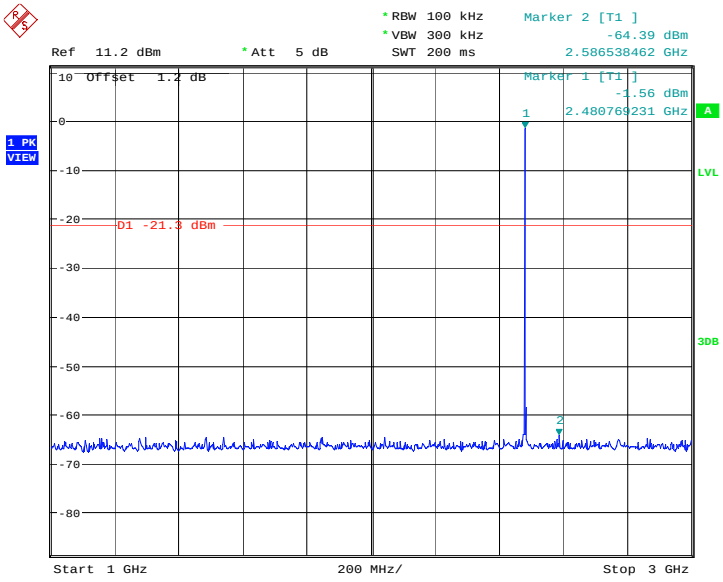


Fig.15. Conducted spurious emission: GFSK, 2480 MHz, 1GHz - 3GHz

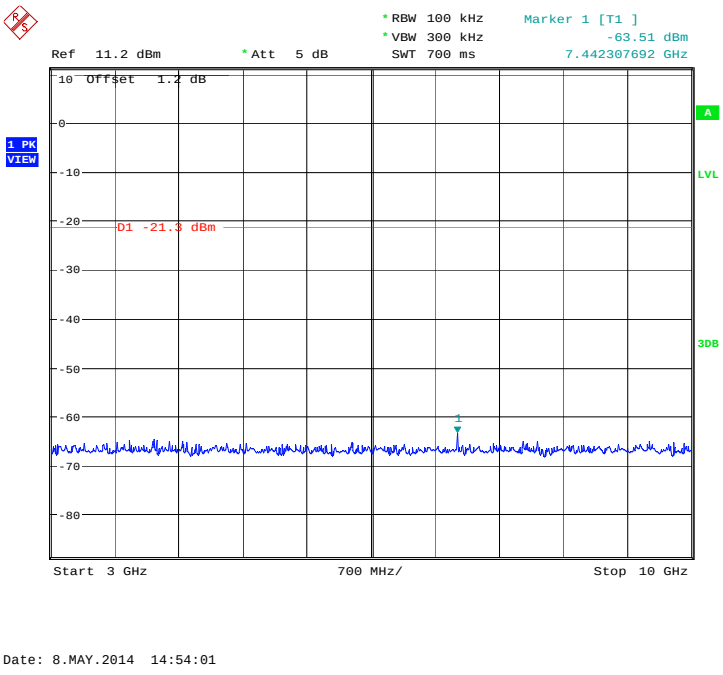


Fig.16. Conducted spurious emission: GFSK, 2480 MHz, 3GHz - 10GHz

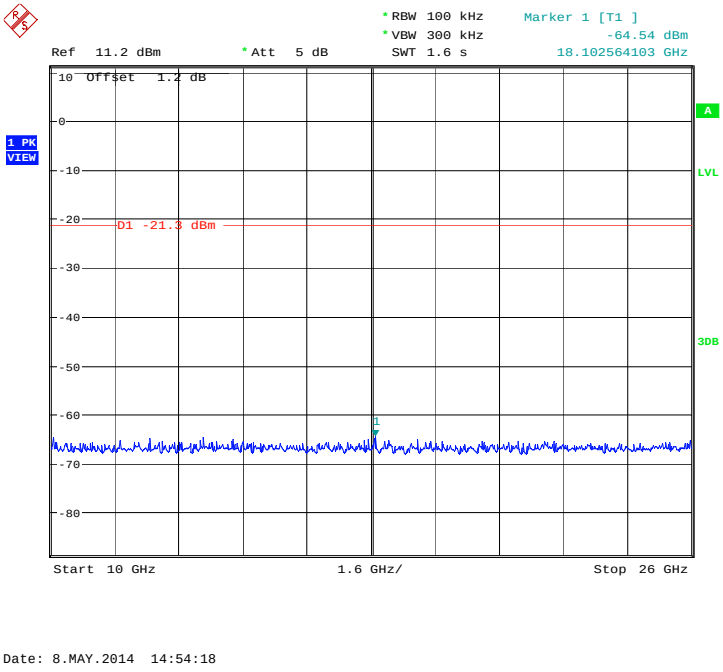


Fig.17. Conducted spurious emission: GFSK, 2480 MHz, 10GHz - 26GHz

A.5. Radiated Emission

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

The measurement is made according to ANSI C63.10

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Test Condition

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20

Measurement Results:

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 los.

The measurement results are obtained as described below:

$Result=P_{Mea}+A_{Rpl}$

For GFSK

Frequency	Frequency Range	Test Results	Conclusion
2402 MHz	1 GHz ~ 3 GHz	Fig.18	P
	3 GHz ~ 18 GHz	Fig.19	P
2441 MHz	9 KHz ~ 30 MHz	Fig.20	P
	30 MHz ~ 1 GHz	Fig.21	
	1 GHz ~ 3 GHz	Fig.22	P
	3 GHz ~ 18 GHz	Fig.23	P

2480 MHz	1 GHz ~ 3 GHz	Fig.24	P
	3 GHz ~ 18 GHz	Fig.25	P
Power	2.38GHz~2.4GHz---L	Fig.26	P
Power	2.45GHz~2.5GHz---H	Fig.27	P
For all channels	18 GHz ~ 26.5 GHz	Fig.28	P

GFSK 2402MHz–Average

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2390.000	33.4	-11.10	44.500	H
17979.000	40.0	27.90	12.100	V
17809.500	39.8	27.10	12.700	V
17817.000	39.7	27.10	12.600	V
17790.000	39.7	27.10	12.600	V
17982.000	39.7	27.90	11.800	V

GFSK 2440MHz–Average

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
17779.500	40.4	27.10	13.3	V
17814.000	39.9	27.10	12.8	V
17827.500	39.9	27.10	12.8	V
17811.000	39.8	27.10	12.7	V
17989.500	39.8	27.90	11.9	V
17998.500	39.8	27.90	11.9	H

GFSK 2480MHz–Average

Frequency(MHz)	Result(dBuV/m)	ARpl (dB)	PMea(dBuV/m)	Polarity
2390.000	33.8	-11.10	44.9	V
17982.000	40.4	27.90	12.5	V
17776.500	40.3	27.10	13.2	V
17779.500	40.2	27.10	13.1	V
17793.000	40.2	27.10	13.1	V
17965.500	40.1	27.90	12.2	V

Conclusion: PASS

Test graphs as below:

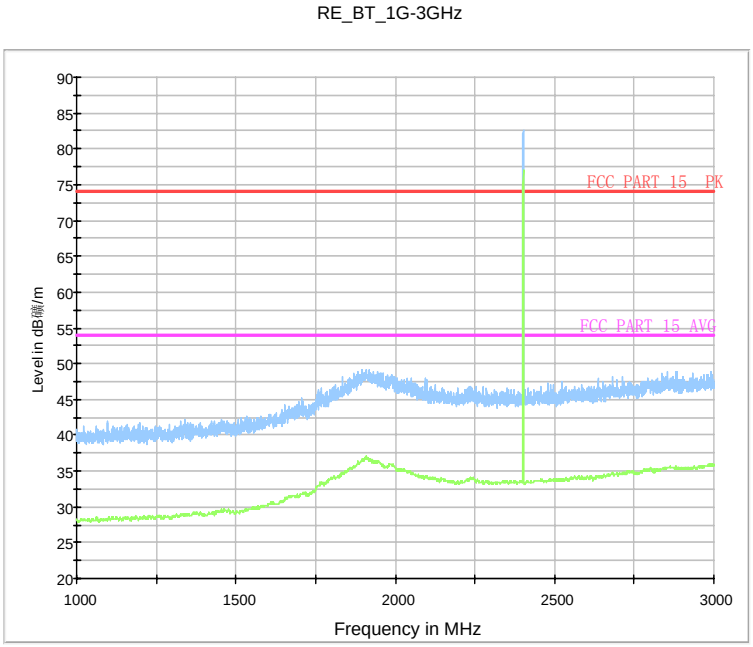


Fig.18. Radiated emission: GFSK, 2402MHz, 1 GHz - 3GHz

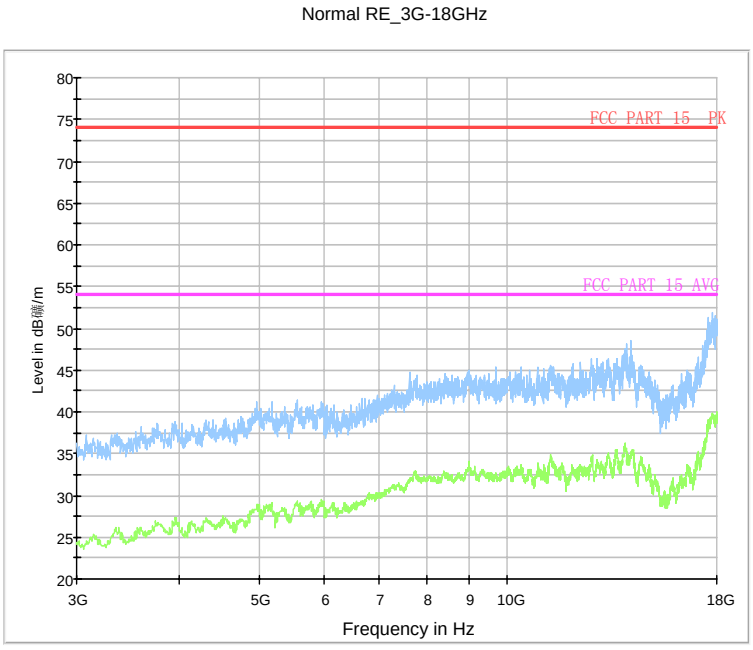


Fig.19. Radiated emission: GFSK, 2402MHz, 3 GHz - 18 GHz

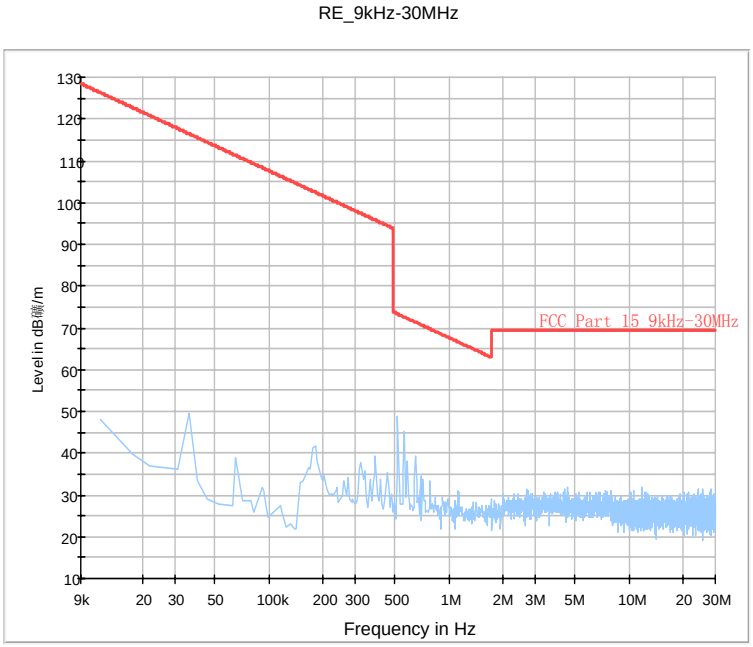


Fig.20. Radiated emission: GFSK, 2440MHz, 9 KHz - 30 MHz

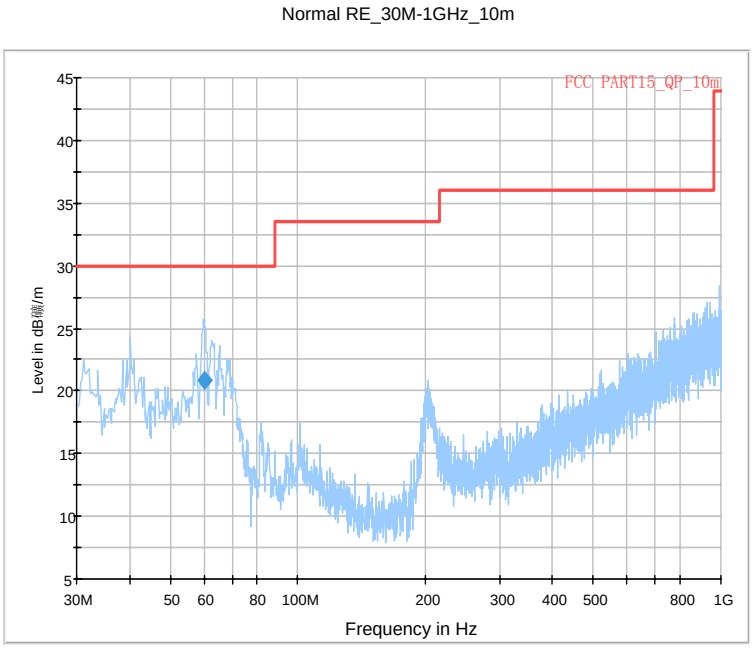


Fig.21. Radiated emission: GFSK, 2440MHz, 30 MHz - 1 GHz

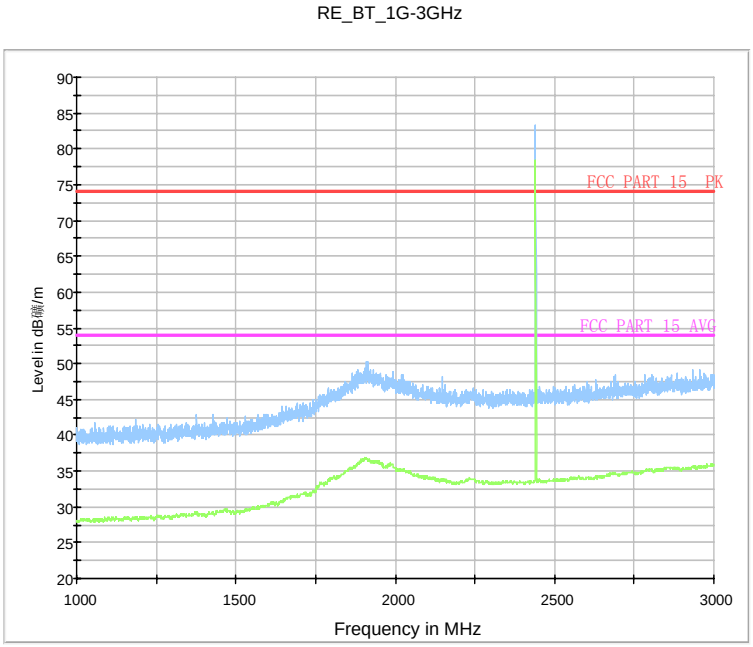


Fig.22. Radiated emission: GFSK, 2440MHz, 1 GHz - 3 GHz

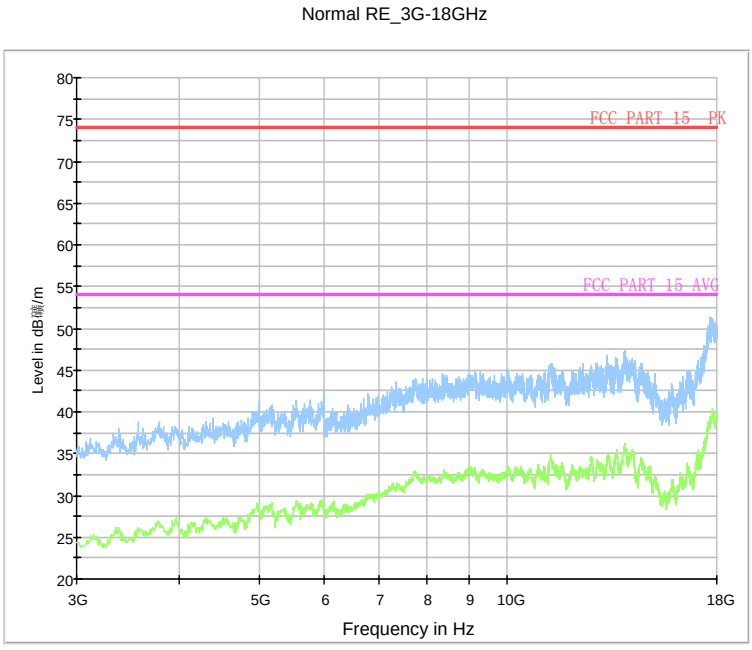


Fig.23. Radiated emission: GFSK, 2440MHz, 3 GHz - 18 GHz

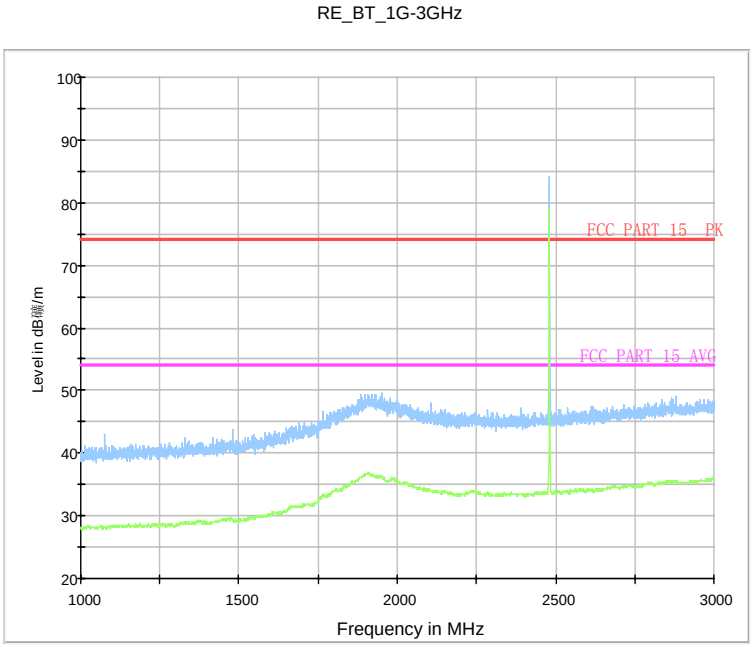


Fig.24. Radiated emission: GFSK, 2480MHz, 1 GHz - 3 GHz

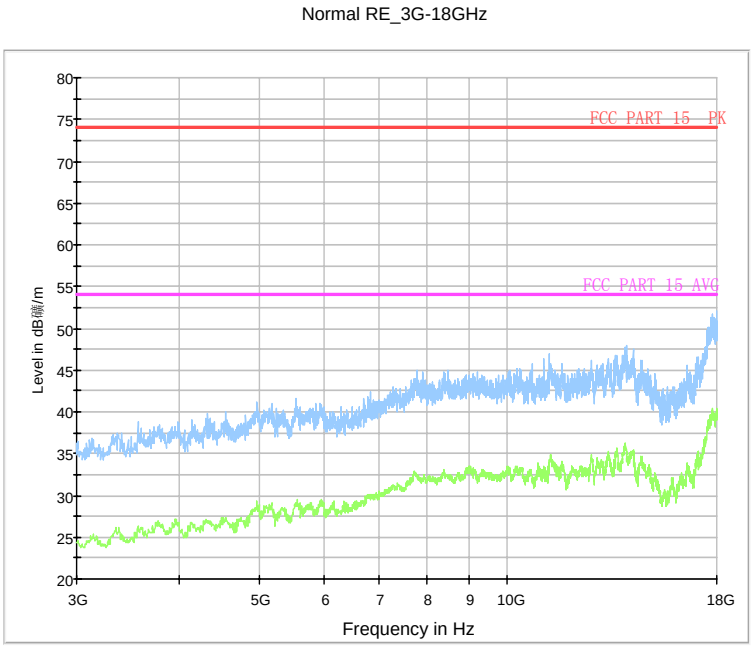


Fig.25. Radiated emission: GFSK, 2480MHz, 3 GHz - 18 GHz

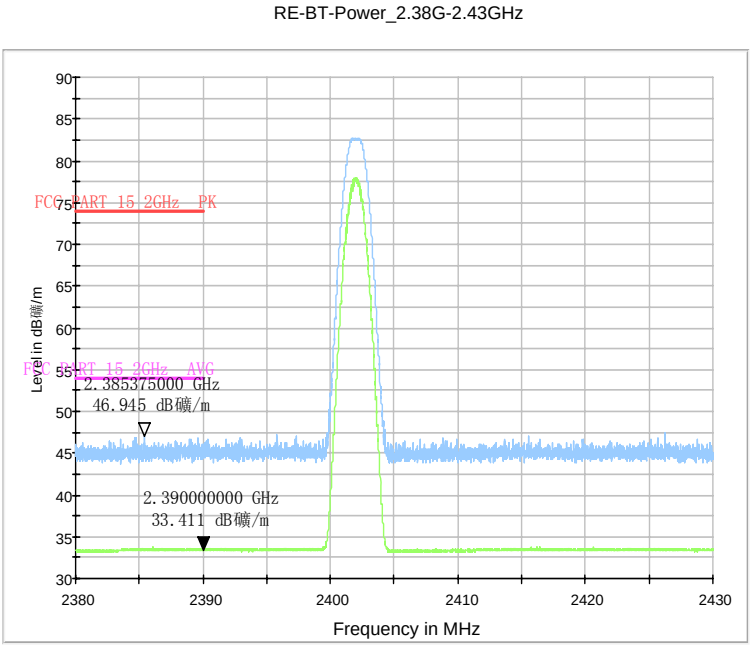


Fig.26. Radiated emission (Power): GFSK low channel

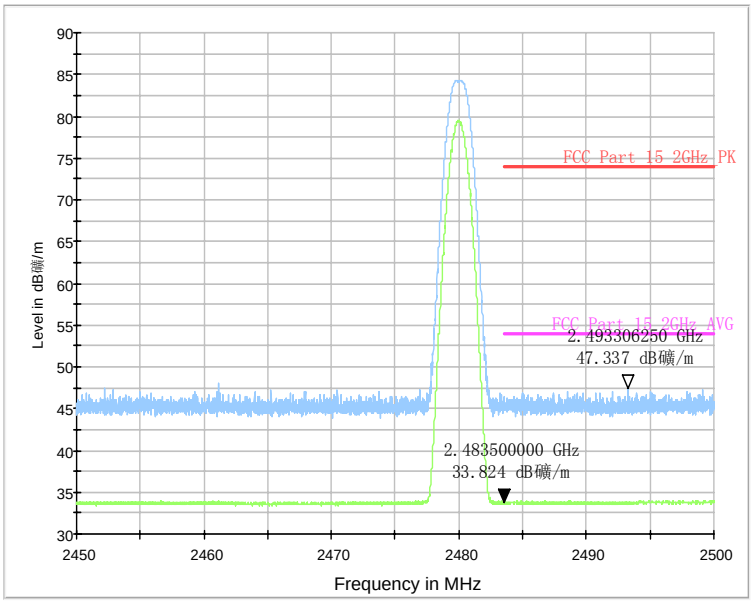


Fig.27. Radiated emission (Power): GFSK high channel

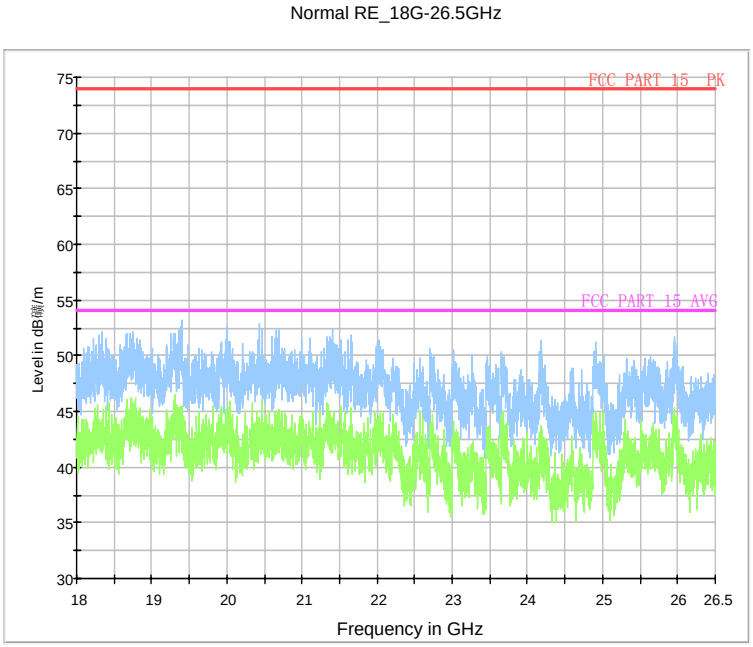


Fig.28. Radiated emission: GFSK, 18 GHz - 26 GHz

A.6. 6dB Bandwidth

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247(a)(2)	>= 500KHz

The measurement is made according to ANSI C63.10

1.Set RBW = 100 kHz.

2. Set the video bandwidth (VBW) ≥ 3RBW.

3. Detector = Peak.

4. Trace mode = max hold.

5. Sweep = auto couple.

6. Allow the trace to stabilize.

7. 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.

Test Condition

Hopping Mode	RBW	VBW	Span	Sweeptime
Hopping OFF	100kHz	300kHz	2MHz	2.5ms

Measurement Results:

For GFSK

Frequency	6dB Bandwidth (kHz)		Conclusion
2402MHz	Fig.29	689.10	P
2440MHz	Fig.30	682.69	P
2480MHz	Fig.31	679.49	P

Conclusion: PASS

Test graphs as below:

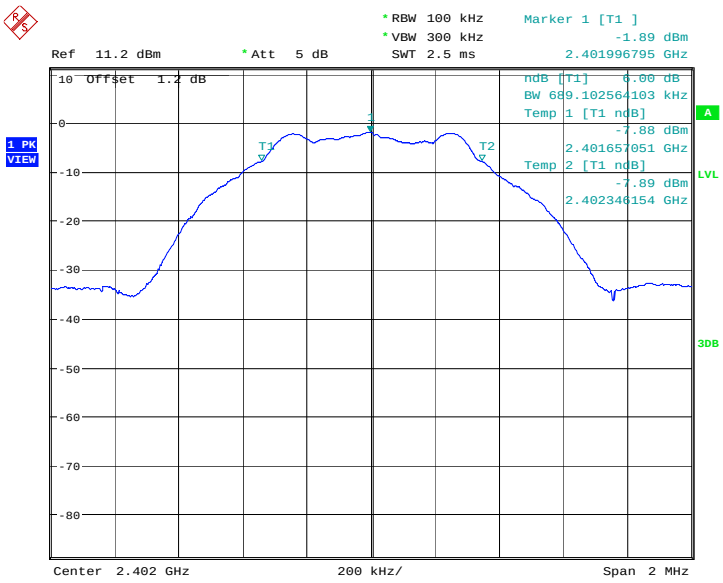


Fig.29. 6dB Bandwidth: GFSK, 2402 MHz

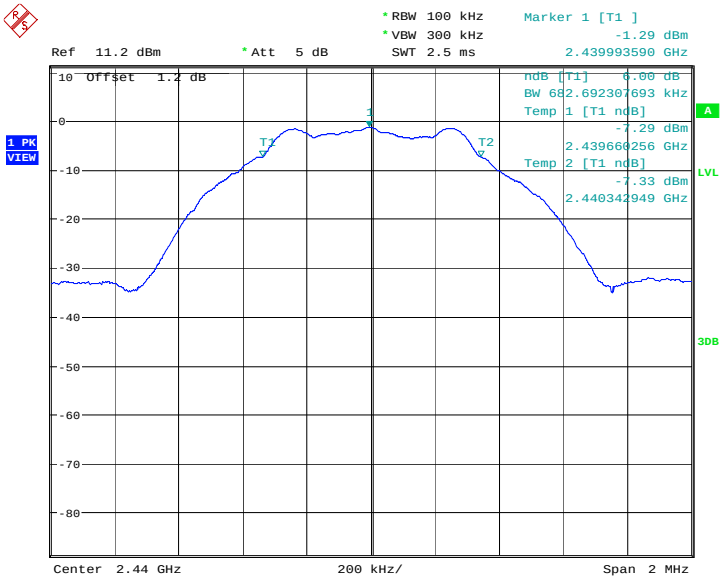


Fig.30. 6dB Bandwidth: GFSK, 2440 MHz

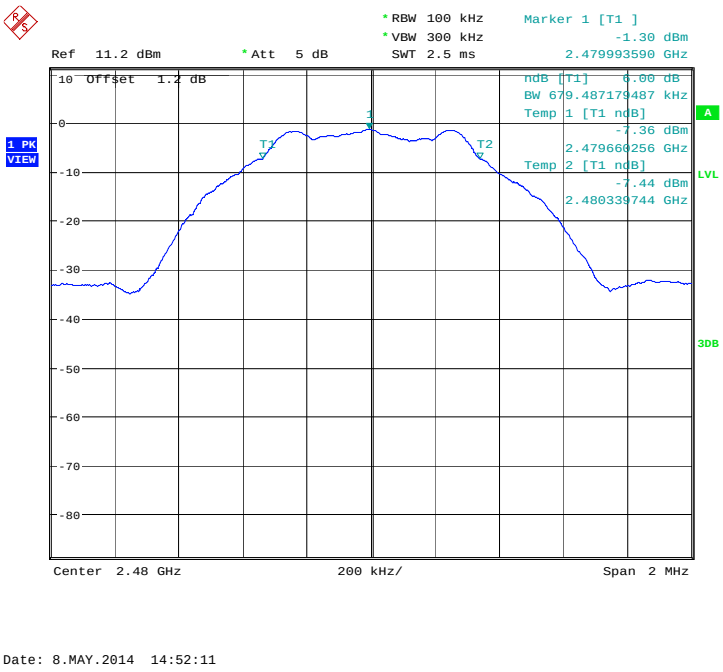


Fig.31. 6dB Bandwidth: GFSK, 2480 MHz

A.7. Maximum Power Spectral Density Level

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247(e)	<=8.0dBm

1. Set the RBW = 100 kHz.

2. Set the VBW ≥ 300 kHz.

3. Set the span to 5-30 % greater than the EBW.

4. Detector = peak.

5. Sweep time = auto couple.

6. Trace mode = max hold.

7. Allow trace to fully stabilize.

8. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

9. Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log (3 kHz/100kHz = -15.2 dB).

Measurement Results:

For GFSK

Frequency	Maximum Power Spectral Density Level(dBm)		Conclusion
2402MHz	Fig.32	-17.08	P
2440MHz	Fig.33	-16.48	P
2480MHz	Fig.34	-16.50	P

Test graphs as below:

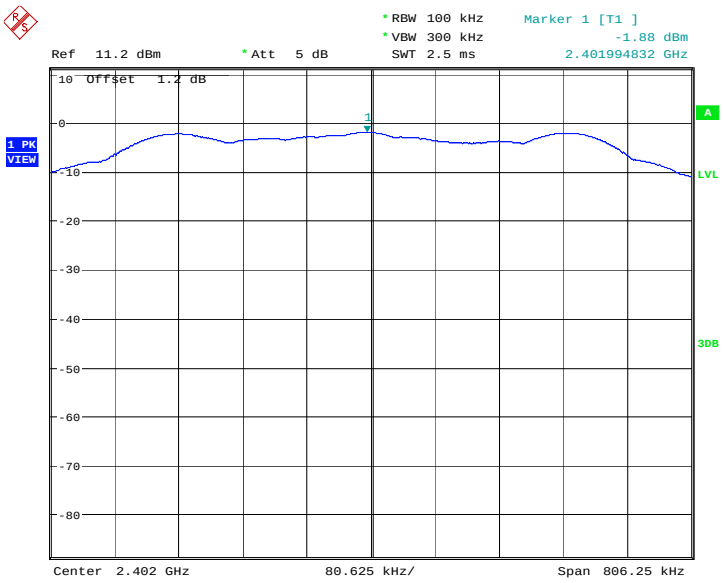


Fig.32. Maximum Power Spectral Density Level Function: GFSK, 2402 MHz

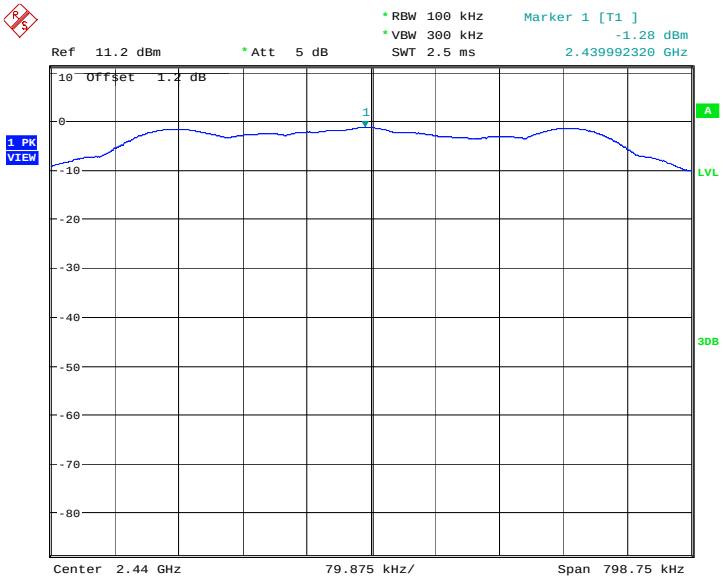


Fig.33. Maximum Power Spectral Density Level Function: GFSK, 2440 MHz

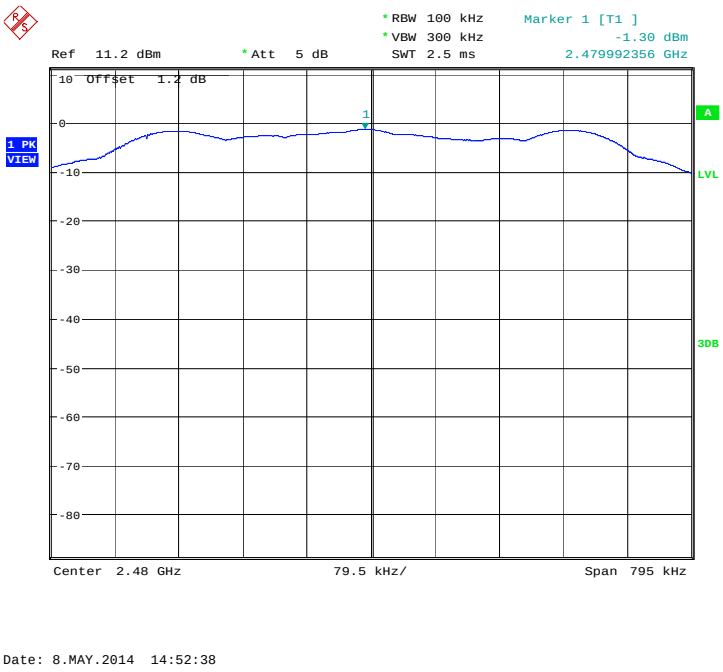


Fig.34. Maximum Power Spectral Density Level Function: GFSK, 2480 MHz

A.8. AC Powerline Conducted Emission

Test Condition

Voltage（V）	Frequency（Hz）
120	60

Measurement Result and limit:

Bluetooth (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Conclusion
0.15 to 0.5	66 to 56	P
0.5 to 5	56	
5 to 30	60	
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.		

Bluetooth (Average Limit)

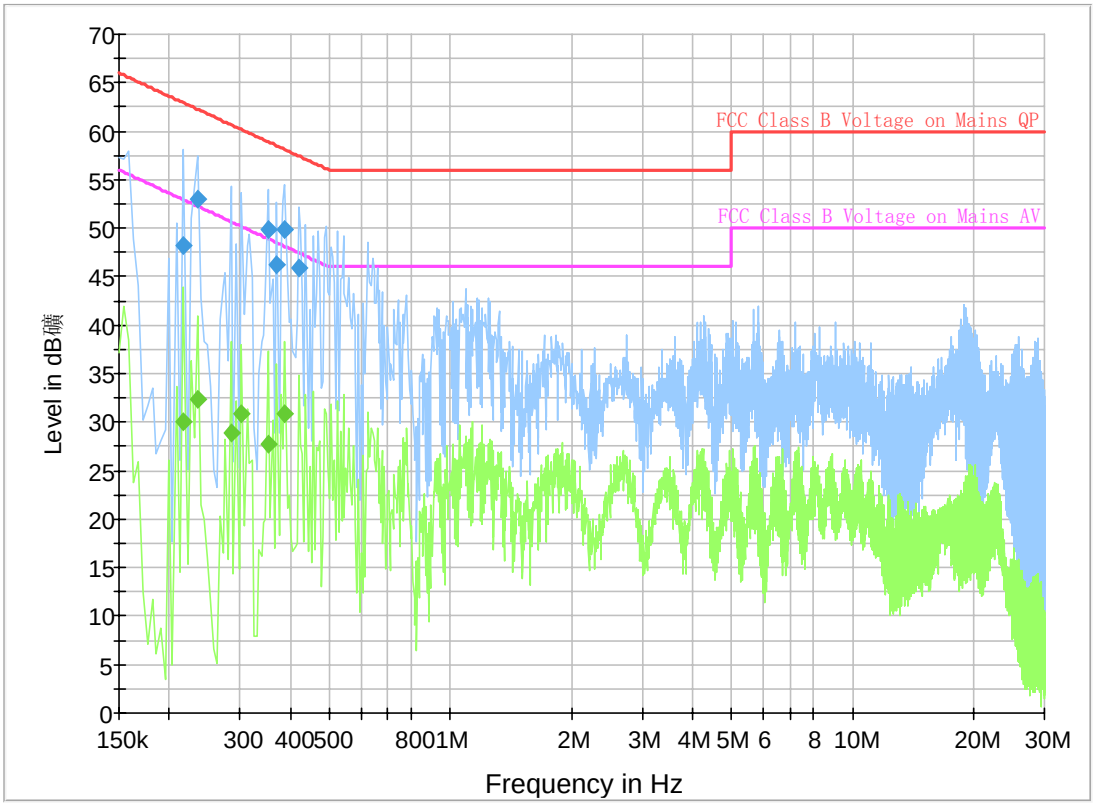
Frequency range (MHz)	Average Limit (dBμV)	Conclusion
0.15 to 0.5	56 to 46	P
0.5 to 5	46	
5 to 30	50	
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.		

The measurement is made according to ANSI C63.10

Conclusion: PASS

Test graphs as below:

Traffic:



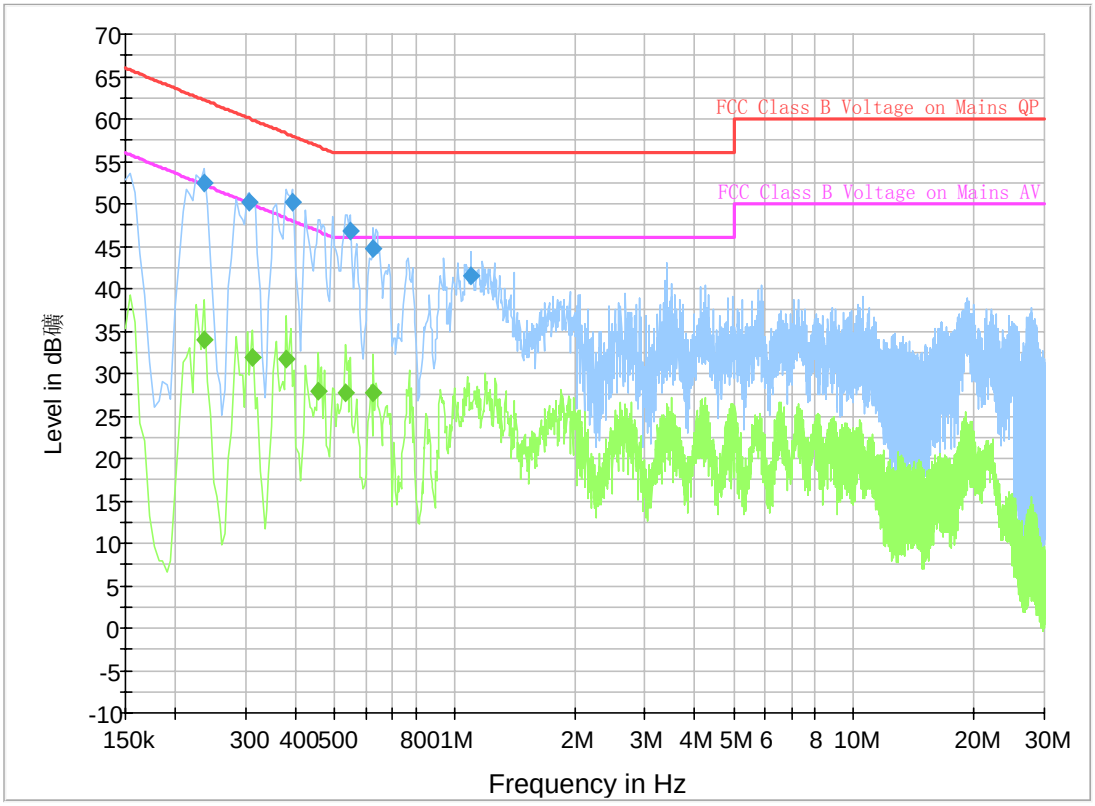
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.217500	48.2	GND	L1	9.8	14.7	62.9
0.235500	53.0	GND	L1	9.8	9.3	62.3
0.352500	49.8	GND	L1	9.8	9.1	58.9
0.370500	46.2	GND	N	9.8	12.3	58.5
0.388500	49.8	GND	L1	9.8	8.3	58.1
0.420000	45.9	GND	L1	9.8	11.5	57.4

Final Result 2

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.217500	30.1	GND	L1	9.8	22.8	52.9
0.235500	32.4	GND	N	9.8	19.9	52.3
0.285000	28.9	GND	L1	9.8	21.8	50.7
0.303000	30.8	GND	L1	9.8	19.4	50.2
0.352500	27.8	GND	L1	9.8	21.1	48.9
0.388500	30.9	GND	N	9.8	17.1	48.1

Idle:



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.235500	52.5	GND	N	9.8	9.8	62.3
0.307500	50.1	GND	L1	9.8	9.9	60.0
0.393000	50.2	GND	L1	9.8	7.8	58.0
0.550500	46.8	GND	L1	9.8	9.2	56.0
0.627000	44.7	GND	N	9.8	11.3	56.0
1.099500	41.5	GND	L1	9.7	14.5	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.235500	34.0	GND	N	9.8	18.2	52.3
0.312000	31.8	GND	N	9.8	18.1	49.9
0.379500	31.6	GND	L1	9.8	16.6	48.3
0.456000	28.0	GND	L1	9.8	18.8	46.8
0.532500	27.7	GND	L1	9.8	18.3	46.0
0.627000	27.7	GND	N	9.8	18.3	46.0

A.9 Receiver Radiation Emission

Reference

FCC: CFR Part 15.109, 2.1053

A.9.1 Method of Measurement

The measurement procedure in ANSI C63.10-2009 is used. The EUT is placed on a 80cm height non-conductive table locating on the center of turntable. From 30MHz-1GHz, the measurement distance is 10m. For frequency range above 1GHz, the measurement distance is 3m.

The EUT is measured with travel charger and the operating mode is idle without CMU200's signaling.

A.9.2 Method of Measurement

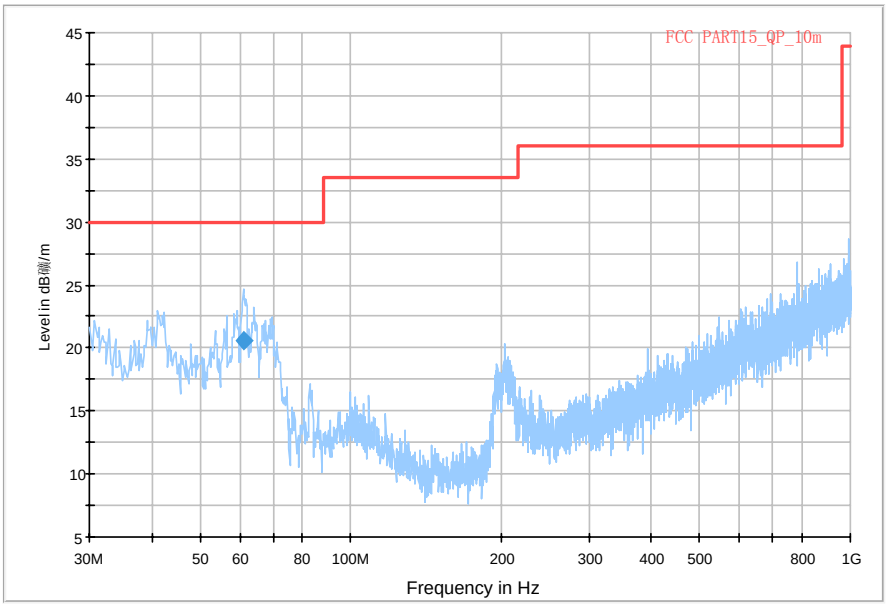
Frequency of Emission (MHz)	Limit (dBμV/m)	Measurement Distance (m)
30-88	30	10
88-216	33.5	10
216-960	36	10
960-1000	44	10
>1000	54	3

A. 9.3 Measurement results

IF bandwidth: 120 kHz

Idle Mode: 30MHz-1GHz

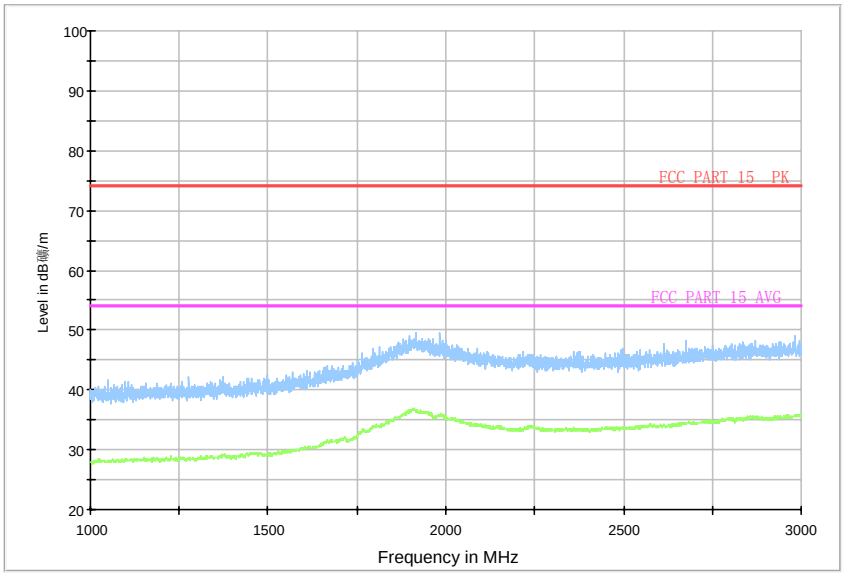
Normal RE_30M-1GHz_10m



RBW / VBW 1 MHz

Idle Mode: 1GHz-3GHz

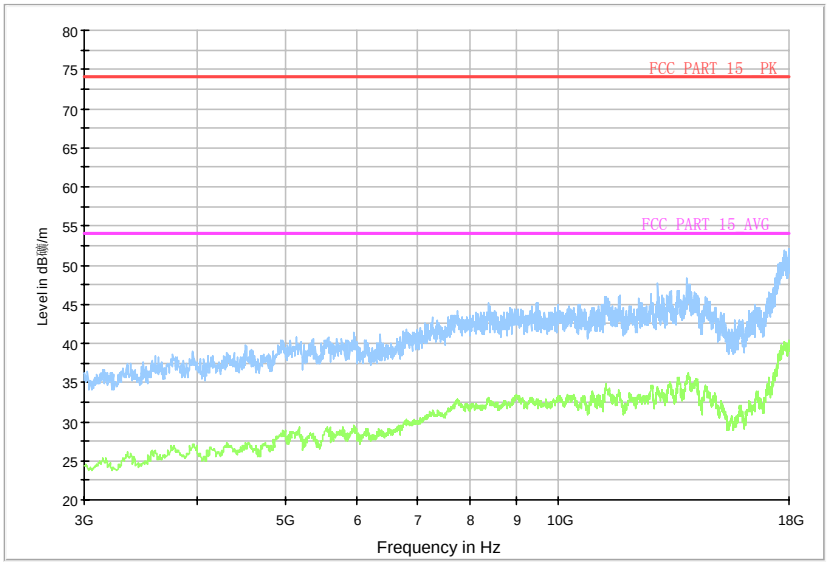
RE_BT_1G-3GHz



RBW / VBW 1 MHz

Idle Mode: 3GHz-18GHz

Normal RE_3G-18GHz



***** END OF REPORT BODY *****