



RADIO TESTREPORT

Report No: STS1606060F02

Issued for

MOX GROUP LIMITED

Room 2501-2522, Bank of America Plaza, No.555, Ren Min Zhong Road, Liwan District, Guangzhou, China

L A B

Product Name:	GSM MOBILE PHONE
Brand Name:	MOX
Model Name:	M275
Series Model:	N/A
FCC ID:	2ABBS-M275
Test Standard:	FCC Part 15.247

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TEST RESULT CERTIFICATION

•••		
Applicant'sname	MOX GROUP LIMITED	
Address:	Room 2501-2522, Bank of America Plaza, No.555, Ren Min Zhong Road, Liwan District, Guangzhou, China	
Manufacture's Name:	MOX GROUP LIMITED	
Address:	Room 2501-2522, Bank of America Plaza, No.555, Ren Min Zhong Road, Liwan District, Guangzhou, China	
Product description		
Product name:	GSM MOBILE PHONE	
Brand name:	MOX	
Model and/or type reference .:	M275	
Standards:	FCC Part15.247	
Test procedure	ANSI C63.10-2013	
under test (EUT) is in compliance sample identified in the report. This report shall not be reproduce	been tested by STS, and the test results show that the equipment with the FCC requirements. And it is applicable only to the tested at except in full, without the written approval of STS, this document, personal only, and shall be noted in the revision of the document.	
Date of Test		
Date (s) of performance of tests.:	08 June. 2016 ~16 June. 2016	
Date of Issue	17 June. 2016	
Test Result	Pass	
Testing Engined Technical Mana	(JinMing)	

(Bovey Yang)

Authorized Signatory:



Table of Contents	Page
1. SUMMARY OF TEST RESULTS	6
1.1 TEST FACTORY	7
1.2 MEASUREMENT UNCERTAINTY	7
2. GENERAL INFORMATION	8
2.1 GENERAL DESCRIPTION OF EUT	8
2.2 DESCRIPTION OF TEST MODES	10
2.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	10
2.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	11
2.5 DESCRIPTION OF SUPPORT UNITS	12
2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS	13
3.EMC EMISSION TEST	14
3.1 CONDUCTED EMISSION MEASUREMENT	14
3.2 RADIATED EMISSION MEASUREMENT	18
4. CONDUCTED SPURIOUS & BAND EDGE EMISSION	32
4.1 REQUIREMENT	32
4.2 TEST PROCEDURE	32
4.3 TEST SETUP	32
4.4 EUT OPERATION CONDITIONS	32
4.5 TEST RESULTS	33
5. NUMBER OF HOPPING CHANNEL	37
5.1 APPLIED PROCEDURES / LIMIT	37
5.2 TEST PROCEDURE	37
5.3 TEST SETUP	37
5.4 EUT OPERATION CONDITIONS	37
5.5 TEST RESULTS	38
6. AVERAGE TIME OF OCCUPANCY	39
6.1 APPLIED PROCEDURES / LIMIT	39
6.2 TEST PROCEDURE	39
6.3 TEST SETUP	39
6.4 EUT OPERATION CONDITIONS	39
6.5 TEST RESULTS	40
7. HOPPING CHANNEL SEPARATION MEASUREMEN	42



Table of Contents	Page
7.1 APPLIED PROCEDURES / LIMIT	42
7.2 TEST PROCEDURE	42
7.3 TEST SETUP	42
7.4 EUT OPERATION CONDITIONS	42
7.5 TEST RESULTS	43
8. BANDWIDTH TEST	45
8.1 APPLIED PROCEDURES / LIMIT	45
8.2 TEST PROCEDURE	45
8.3 TEST SETUP	45
8.4 EUT OPERATION CONDITIONS	45
8.5 TEST RESULTS	46
9. OUTPUT POWER TEST	48
9.1 APPLIED PROCEDURES / LIMIT	48
9.2 TEST PROCEDURE	48
9.3 TEST SETUP	48
9.4 EUT OPERATION CONDITIONS	48
9.5 TEST RESULTS	49
10. ANTENNA REQUIREMENT	50
10.1 STANDARD REQUIREMENT	50
10.2 EUT ANTENNA	50





Report No.: STS1606060F02

Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	17 June. 2016	STS1606060F02	ALL	Initial Issue







1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: (1)KDB DA 00-705

(2)KDB 558074 D01 DTS Meas Guidance v03r04

FCC Part15 (15.247) , Subpart C				
Standard Section	Test Item	Judgment	Remark	
15.207	Conducted Emission	PASS		
15.247(a)(1)	Hopping Channel Separation	PASS		
15.247(a)(1)&(b)(1)	Output Power	PASS		
15.247(c)	Radiated Spurious Emission	PASS		
15.247(d)	Conducted Spurious & Band Edge Emission	PASS		
15.247(a)(iii)	Number of Hopping Frequency	PASS		
15.247(a)(iii)	Dwell Time	PASS		
15.247(a)(1)	Bandwidth	PASS		
15.205	Band Edge Emission	PASS		
15.203	Antenna Requirement	PASS		

NOTE:

- (1)" N/A" denotes test is not applicable in this Test Report
- (2) All tests are according to ANSI C63.10-2013



1.1 TEST FACTORY

Shenzhen STS Test Services Co., Ltd.

Add.: 1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road,

Fuyong Street, Bao'an District, Shenzhen, Guangdong, China

CNAS Registration No.: L7649;

FCC Registration No.: 842334; IC Registration No.: 12108A-1

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expended uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k=2}$, providing a level of confidence of approximately $\mathbf{95}$ %.

No.	Item	Uncertainty
1	Conducted Emission (9KHz-150KHz)	±2.88dB
2	Conducted Emission (150KHz-30MHz)	±2.67dB
3	RF power,conducted	±0.70dB
4	Spurious emissions,conducted	±1.19dB
5	All emissions,radiated(<30M)(9KHz-30MHz)	±2.45dB
6	All emissions,radiated(<1G) 30MHz-200MHz	±2.83dB
7	All emissions,radiated(<1G) 200MHz-1000MHz	±2.94dB
8	All emissions,radiated(>1G)	±3.03dB
9	Temperature	±0.5°C
10	Humidity	±2%





2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	GSM MOBILE PHONE
Trade Name	MOX
Model Name	M275
Series Model	N/A
Model Difference	N/A
Channel List	Please refer to the Note 2.
Bluetooth	Frequency:2402 – 2480 MHz Modulation: GFSK(1Mbps)
Adapter	Input: AC100-240V, 150mA, 50/60 Hz Output: DC 5V, 500mA
Battery	Rated Voltage: 3.7V capacity:800mAh
Hardware version number	V1.0
Software version number	N/A
Connecting I/O Port(s)	Please refer to the User's Manual

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.



2.

Channel List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		

3. Table for Filed Antenna

Ant	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	MOX	M275	Dipole Antenna	N/A	1	BT Antenna

The EUT antenna is Dipole Antenna. no antenna other than that furnished by the responsible party shall be used with the device.





2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description	Data Rate/Modulation
Mode 1	TX CH00	1Mbps/GFSK
Mode 2	TX CH39	1Mbps/GFSK
Mode 3	TX CH78	1Mbps/GFSK

Note:

- (1) All above mode have been measurement, only worst data was reported.
- (2)We have be tested for all avaiable U.S. voltage and frequencies(For 120V,50/60Hz) for which the device is capable of operation.

For ACC onducted Emission

Test Case		
AC Conducted	Mode 4 : Keeping BT TX	
Emission		

2.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of FHSS

Test software Version	Test program: Bluetooth				
Frequency	2402 MHz 2441 MHz 2480 MHz				
CSR (Power control software) Parameters(1Mbps)	Power class: 1 M rate:4:27	Power class: 1 M rate:4:27	Power class: 1 M rate:4:27		



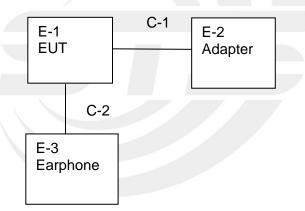
2.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of FHSS

Radiated Spurious EmissionTest

E-1 EUT

Conducted Emission Test





2.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
E-1	GSM MOBILE PHONE	MOX	M275	N/A	EUT
E-2	Adapter	MOX	M275	N/A	EUT
E-3	Earphone	N/A	N/A	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note
C-1	USB Cable shielded line (Charging)	NO	100cm	N/A
C-2	Earphone line	NO	110cm	N/A
	2			

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in <code>"Length_"</code> column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".



2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

rtadiation root og	Radiation rest equipment							
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until			
Spectrum Analyzer	Agilent	E4407B	MY50140340	2015.10.25	2016.10.24			
Test Receiver	R&S	ESCI	101427	2015.10.25	2016.10.24			
Bilog Antenna	TESEQ	CBL6111D	34678	2015.11.25	2016.11.24			
Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1343	2016.03.06	2017.03.05			
Horn Antenna	Schwarzbeck	BBHA 9170	9170-0741	2016.03.06	2017.03.05			
50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2016.03.06	2017.03.05			
PreAmplifier	Agilent	8449B	60538	2015.10.25	2016.10.24			
Loop Antenna	ARA	PLA-1030/B	1029	2016.03.06	2017.03.05			
Preamplifier	Agilent	8449B	60538	2015.11.05	2016.11.05			
Low frequency cable	EM	R01	N/A	N/A	N/A			
High frequency cable	SCHWARZBECK	AK9515H	SN-96286/96287	N/A	N/A			

Conduction Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
EMI Test Receiver	R&S	ESPI	102086	2015.11.20	2016.11.19
LISN	R&S	ENV216	101242	2015.10.25	2016.10.24
LISN	EMCO	3810/2NM	000-23625	2015.10.25	2016.10.24
Conduction Cable	EM	C01	N/A	N/A	N/A

RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
USB RF power sensor	DARE	RPR3006W	15I00041SNO03	2015.10.25	2016.10.24
Spectrum Analyzer	Agilent	E4407B	MY50140340	2015.10.25	2016.10.24
Signal Analyzer	Agilent	N9020A	MY49100060	2015.11.18	2016.11.17



3.EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

Operating frequency band. In case the emission fall within the restricted band specified on Part 15.107(a)&207(a) limit in the table below has to be followed.

FREQUENCY (MHz)	Conducted Emissionlimit (dBuV)		
FREQUENCT (MHZ)	Quasi-peak	Average	
0.15 -0.5	66 - 56 *	56 - 46 *	
0.50 -5.0	56.00	46.00	
5.0 -30.0	60.00	50.00	

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

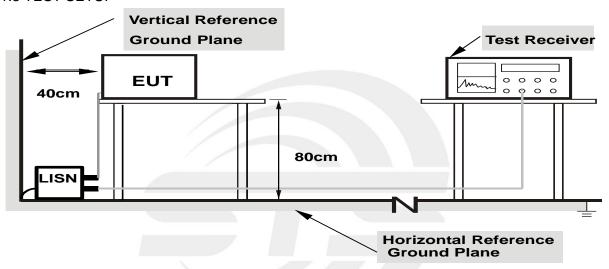
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz



3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.1.3 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80

from other units and other metal planes

3.1.4 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



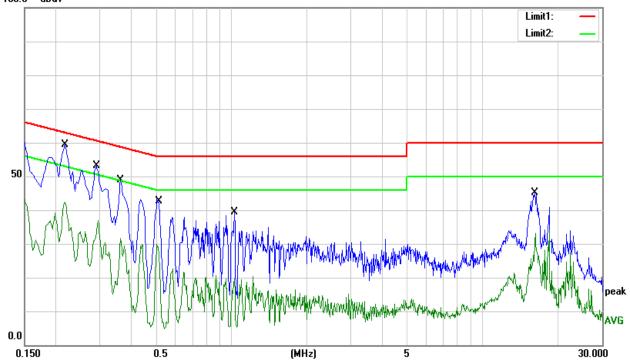
3.1.5 TEST RESULTS

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase:	L
Test Mode:	Mode 4		

Frequency	Reading	Correct	Result	Limit	Margin	Remark
(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	Remark
0.2170	46.15	9.21	55.36	62.93	-7.57	QP
0.2170	30.48	9.21	39.69	52.93	-13.24	AVG
0.2880	40.67	9.14	49.81	60.58	-10.77	QP
0.2880	24.57	9.14	33.71	50.58	-16.87	AVG
0.3630	34.63	9.33	43.96	58.66	-14.70	QP
0.3630	19.45	9.33	28.78	48.66	-19.88	AVG
0.5138	30.24	9.15	39.39	56.00	-16.61	QP
0.5138	17.69	9.15	26.84	46.00	-19.16	AVG
1.0295	23.96	9.15	33.11	56.00	-22.89	QP
1.0295	9.17	9.15	18.32	46.00	-27.68	AVG
16.2284	30.77	9.56	40.33	60.00	-19.67	QP
16.2284	24.03	9.56	33.59	50.00	-16.41	AVG

Remark:

- 1. All readings are Quasi-Peak and Average values.
- 2. Margin = Result (Result = Reading + Factor)—Limit 100.0 dBuV



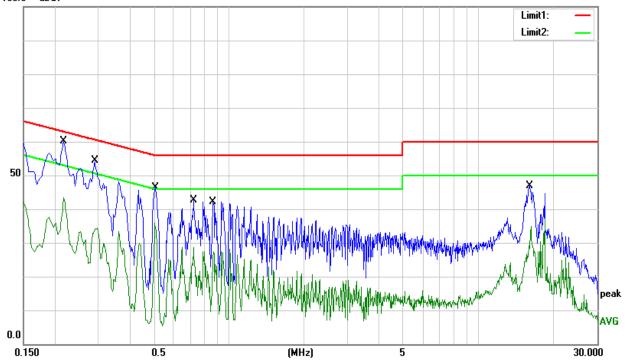


Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase:	N
Test Mode:	Mode 4		

Frequency	Reading	Correct	Result	Limit	Margin	Domork
(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	Remark
0.2165	46.30	9.21	55.51	62.95	-7.44	QP
0.2165	30.88	9.21	40.09	52.95	-12.86	AVG
0.2884	40.68	9.14	49.82	60.57	-10.75	QP
0.2884	25.76	9.14	34.90	50.57	-15.67	AVG
0.5030	36.15	9.14	45.29	56.00	-10.71	QP
0.5030	24.52	9.14	33.66	46.00	-12.34	AVG
0.7230	29.54	9.24	38.78	56.00	-17.22	QP
0.7230	16.64	9.24	25.88	46.00	-20.12	AVG
0.8620	29.73	9.25	38.98	56.00	-17.02	QP
0.8620	14.80	9.25	24.05	46.00	-21.95	AVG
16.0181	29.84	9.50	39.34	60.00	-20.66	QP
16.0181	15.71	9.50	25.21	50.00	-24.79	AVG

Remark

- 1. All readings are Quasi-Peak and Average values.
- 2. Margin = Result (Result = Reading + Factor)—Limit





3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on Part15.205(a)&209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009MHz - 1000MHz)

THE OF TAXBUTTED EMIGOROUS METAGOREMENT (0.000MTE TOUGHTE)					
Frequencies	Field Strength	Measurement Distance			
(MHz)	(micorvolts/meter)	(meters)			
0.009~0.490	2400/F(KHz)	300			
0.490~1.705	24000/F(KHz)	30			
1.705~30.0	30	30			
30~88	100	3			
88~216	150	3			
216~960	200	3			
Above 960	500	3			

LIMITS OF RADIATED EMISSION MEASUREMENT (1GHz-25 GHz)

FREQUENCY (MHz)	(dBuV/m) (at 3M)			
	PEAK	AVERAGE		
Above 1000	74	54		

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

For Radiated Emission

Spectrum Parameter	Setting	
Attenuation	Auto	
Detector	Peak	
Start Frequency	1000 MHz(Peak/AV)	
Stop Frequency	10 th carrier hamonic(Peak/AV)	
RB / VB (emission in restricted	DV_1MU> / 1MU> A\/_1 MU> /10 U>	
band)	PK=1MHz / 1MHz, AV=1 MHz /10 Hz	

For Band edge

Spectrum Parameter	Setting		
Detector	Peak		
0, 1/0, 5	Lower Band Edge: 2300 to 2430 MHz		
Start/Stop Frequency	Upper Band Edge: 2450 to 2500 MHz		
RB / VB (emission in restricted band)	PK=1MHz / 1MHz, AV=1 MHz /10 Hz		

Page 19 of 52 Report No.: STS1606060F02

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz and above 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 meters(above 1GHz is 1.5 m) above the ground at a 3 meter anechoic chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment shall be 0.8 m(above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then QuasiPeak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos. Note:

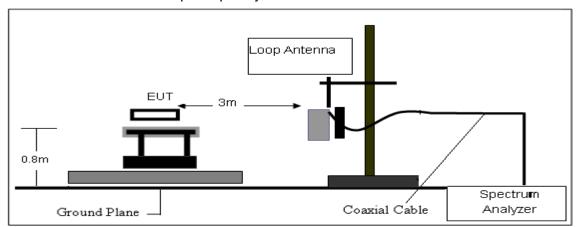
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

3.2.3 DEVIATION FROM TEST STANDARD No deviation

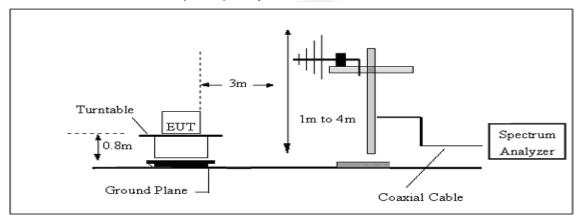


3.2.4 TESTSETUP

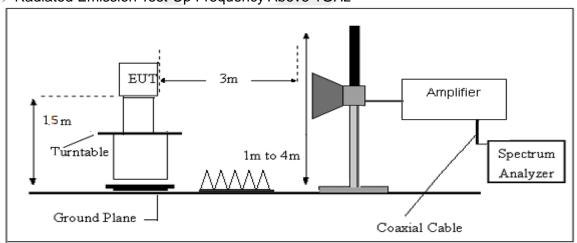
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.





3.2.6 TEST RESULTS

(9KHz-30MHz)

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Test Mode:	TX Mode
Test Voltage:	DC 3.7V from battery		

Freq.	Reading	Limit	Margin	State	Toot Dooult	
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F	Test Result	
					PASS	
					PASS	

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.



(30MHz-1000MHz)

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase:	Horizontal
Test Voltage:	DC 3.7V from battery	LIAST MINAGO.	Mode 1/2/3 (Mode 1-1M worst mode)

Frequency	Reading	Correct	Result	Limit	Margin	Remark
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
30.4238	28.45	-11.41	17.04	40.00	-22.96	QP
49.1865	42.53	-21.06	21.47	40.00	-18.53	QP
69.3568	39.86	-24.11	15.75	40.00	-24.25	QP
138.3873	33.39	-17.51	15.88	43.50	-27.62	QP
176.8878	34.37	-19.41	14.96	43.50	-28.54	QP
501.1790	35.06	-8.90	26.16	46.00	-19.84	QP

Remark:

- 1. All readings are Quasi-Peak and Average values.
- 2. Margin = Result (Result = Reading + Factor)-Limit



Report No.: STS1606060F02

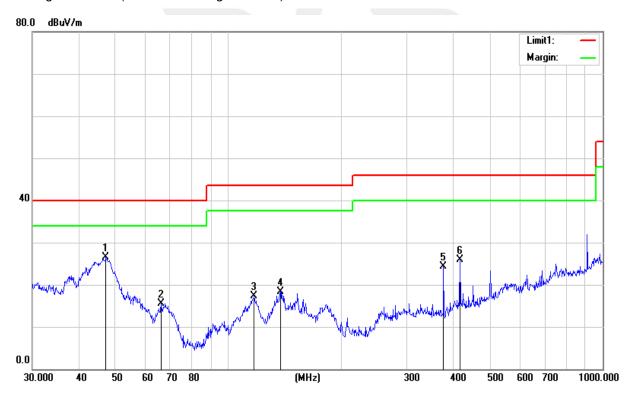


Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase:	Vertical
Test Voltage:	DC 3.7V from battery	I I DOL IVIDAD.	Mode 1/2/3/4/5/6/7/8/9 (Mode 1-1M worst mode)

Frequency	Reading	Correct	Result	Limit	Margin	Remark
(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
47.1600	46.42	-20.01	26.41	40.00	-13.59	QP
66.2662	39.70	-24.19	15.51	40.00	-24.49	QP
117.3603	35.23	-17.86	17.37	43.50	-26.13	QP
137.9028	35.82	-17.52	18.30	43.50	-25.20	QP
375.9385	37.07	-12.73	24.34	46.00	-21.66	QP
416.1791	36.92	-10.97	25.95	46.00	-20.05	QP

Remark:

- 1. All readings are Quasi-Peak and Average values.
- 2. Margin = Result (Result = Reading + Factor)-Limit





(1GHz~25GHz)

GFSK Low Channel

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	
3265.27	50.18	-9.80	40.38	74.00	-33.62	PK	Vertical
3265.27	40.13	-9.80	30.33	54.00	-23.67	AV	Vertical
3265.25	50.11	-9.80	40.31	74.00	-33.69	PK	Horizontal
3265.25					-23.66		
	40.14	-9.80	30.34	54.00		AV	Horizontal
3334.86	52.83	-9.75	43.08	74.00	-30.92	PK	Vertical
3334.86	42.93	-9.75	33.18	54.00	-20.82	AV	Vertical
3334.86	52.89	-9.75	43.14	74.00	-30.86	PK	Horizontal
3334.86	42.87	-9.75	33.12	54.00	-20.88	AV	Horizontal
3349.90	52.63	-9.75	42.88	74.00	-31.12	PK	Vertical
3349.90	42.63	-9.75	32.88	54.00	-21.12	AV	Vertical
3349.96	52.68	-9.75	42.93	74.00	-31.07	PK	Horizontal
3349.96	42.66	-9.75	32.91	54.00	-21.09	AV	Horizontal
4000.22	53.03	-6.60	46.43	74.00	-27.57	PK	Vertical
4000.22	45.03	-6.60	38.43	54.00	-15.57	AV	Vertical
4000.21	52.01	-6.60	45.41	74.00	-28.59	PK	Horizontal
4000.21	44.97	-6.60	38.37	54.00	-15.63	AV	Horizontal
4803.93	60.39	-3.56	56.83	74.00	-17.17	PK	Vertical
4803.93	50.44	-3.56	46.88	54.00	-7.12	AV	Vertical
4804.94	60.41	-3.56	56.85	74.00	-17.15	PK	Horizontal
4804.94	50.42	-3.56	46.86	54.00	-7.14	AV	Horizontal
5360.22	47.34	-2.34	45.00	74.00	-29.00	PK	Vertical
5360.22	39.31	-2.34	36.97	54.00	-17.03	AV	Vertical
5360.20	47.34	-2.34	45.00	74.00	-29.00	PK	Horizontal
5360.20	39.32	-2.34	36.98	54.00	-17.02	AV	Horizontal
7206.32	52.84	3.40	56.24	74.00	-17.76	PK	Vertical
7206.32	44.79	3.40	48.19	54.00	-5.81	AV	Vertical
7206.32	52.78	3.40	56.18	74.00	-17.82	PK	Horizontal
7206.32	44.80	3.40	48.20	54.00	-5.80	AV	Horizontal
8124.44	45.26	4.80	50.06	74.00	-23.94	PK	Vertical
8124.44	35.27	4.80	40.07	54.00	-13.93	AV	Vertical
8124.39	45.27	4.80	50.07	74.00	-23.93	PK	Horizontal
8124.39	35.31	4.80	40.11	54.00	-13.89	AV	Horizontal
9105.12	46.11	5.00	51.11	74.00	-22.89	PK	Vertical

1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong Street, Bao'an District, Shenzhen, Guangdong, China Tel: 0755-36886288 Fax: 0755-36886277 Http://www.stsapp.com E-mail: sts@stsapp.com

Page 25 of 52 Report No.: STS1606060F02

9105.12	36.08	5.00	41.08	54.00	-12.92	AV	Vertical
9105.45	46.12	5.00	51.12	74.00	-22.88	PK	Horizontal
9105.45	36.05	5.00	41.05	54.00	-12.95	AV	Horizontal
11036.36	42.08	10.20	52.28	74.00	-21.72	PK	Vertical
11036.36	32.03	10.20	42.23	54.00	-11.77	AV	Vertical
11036.60	42.04	10.20	52.24	74.00	-21.76	PK	Horizontal
11036.60	32.05	10.20	42.25	54.00	-11.75	AV	Horizontal
13299.78	41.89	12.20	54.09	74.00	-19.91	PK	Vertical
13299.78	31.89	12.20	44.09	54.00	-9.91	AV	Vertical
13299.87	41.92	12.20	54.12	74.00	-19.88	Pk	Horizontal
13299.87	30.93	12.20	43.13	54.00	-10.87	AV	Horizontal
14480.24	41.78	13.40	55.18	74.00	-18.82	PK	Vertical
14480.24	30.84	13.40	44.24	54.00	-9.76	AV	Vertical
14480.24	41.78	13.40	55.18	74.00	-18.82	PK	Horizontal
14480.24	30.83	13.40	44.23	54.00	-9.77	AV	Horizontal
16000.31	41.94	12.40	54.34	74.00	-19.66	PK	Vertical
16000.31	31.96	12.40	44.36	54.00	-9.64	AV	Vertical
16000.19	41.95	12.40	54.35	74.00	-19.65	PK	Horizontal
16000.19	31.23	12.40	43.63	54.00	-10.37	AV	Horizontal
17998.31	32.11	23.10	55.21	74.00	-18.79	PK	Vertical
17998.31	22.12	23.10	45.22	54.00	-8.78	AV	Vertical
17998.17	32.10	23.10	55.20	74.00	-18.80	PK	Horizontal
17998.17	22.14	23.10	45.24	54.00	-8.76	AV	Horizontal



GFSK Mid Channel

	Meter		Emission	Chamin			
Frequency	Reading	Factor	Level	Limits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Type	
3265.25	45.20	-9.80	35.40	74.00	-38.60	PK	Vertical
3265.25	35.06	-9.80	25.26	54.00	-28.74	AV	Vertical
3265.25	45.13	-9.80	35.33	74.00	-38.67	PK	Horizontal
3265.25	35.10	-9.80	25.30	54.00	-28.70	AV	Horizontal
3334.89	42.90	-9.75	33.15	74.00	-40.85	PK	Vertical
3334.89	33.88	-9.75	24.13	54.00	-29.87	AV	Vertical
3334.83	42.95	-9.75	33.20	74.00	-40.80	PK	Horizontal
3334.83	33.91	-9.75	24.16	54.00	-29.84	AV	Horizontal
3349.85	42.64	-9.75	32.89	74.00	-41.11	PK	Vertical
3349.85	33.65	-9.75	23.90	54.00	-30.10	AV	Vertical
3349.87	42.64	-9.75	32.89	74.00	-41.11	PK	Horizontal
3349.87	33.68	-9.75	23.93	54.00	-30.07	AV	Horizontal
4000.22	39.98	-6.60	33.38	74.00	-40.62	PK	Vertical
4000.22	30.02	-6.60	23.42	54.00	-30.58	AV	Vertical
4000.20	40.02	-6.60	33.42	74.00	-40.58	PK	Horizontal
4000.20	30.00	-6.60	23.40	54.00	-30.60	AV	Horizontal
4882.94	39.46	-3.56	35.90	74.00	-38.10	PK	Vertical
4882.94	29.45	-3.56	25.89	54.00	-28.11	AV	Vertical
4882.92	39.41	-3.56	35.85	74.00	-38.15	PK	Horizontal
4882.92	29.44	-3.56	25.88	54.00	-28.12	AV	Horizontal
5360.19	38.32	-2.34	35.98	74.00	-38.02	PK	Vertical
5360.19	28.38	-2.34	26.04	54.00	-27.96	AV	Vertical
5360.21	38.37	-2.34	36.03	74.00	-37.97	PK	Horizontal
5360.21	28.37	-2.34	26.03	54.00	-27.97	AV	Horizontal
7323.29	37.77	3.40	41.17	74.00	-32.83	PK	Vertical
7323.29	28.76	3.40	32.16	54.00	-21.84	AV	Vertical
7323.31	37.83	3.40	41.23	74.00	-32.77	PK	Horizontal
7323.31	27.84	3.40	31.24	54.00	-22.76	AV	Horizontal
8124.42	36.28	4.80	41.08	74.00	-32.92	PK	Vertical
8124.42	26.27	4.80	31.07	54.00	-22.93	AV	Vertical
8124.42	36.28	4.80	41.08	74.00	-32.92	PK	Horizontal
8124.42	26.29	4.80	31.09	54.00	-22.91	AV	Horizontal
9105.13	35.08	5.00	40.08	74.00	-33.92	PK	Vertical
9105.13	25.10	5.00	30.10	54.00	-23.90	AV	Vertical



Page 27 of 52 Report No.: STS1606060F02

9105.12	35.07	5.00	40.07	74.00	-33.93	PK	Horizontal
9105.12	25.07	5.00	30.07	54.00	-23.93	AV	Horizontal
11036.37	34.04	10.20	44.24	74.00	-29.76	PK	Vertical
11036.37	24.07	10.20	34.27	54.00	-19.73	AV	Vertical
11036.39	34.03	10.20	44.23	74.00	-29.77	PK	Horizontal
11036.39	24.08	10.20	34.28	54.00	-19.72	AV	Horizontal
13299.91	32.90	12.20	45.10	74.00	-28.90	PK	Vertical
13299.91	24.97	12.20	37.17	54.00	-16.83	AV	Vertical
13299.87	32.84	12.20	45.04	74.00	-28.96	Pk	Horizontal
13299.87	24.94	12.20	37.14	54.00	-16.86	AV	Horizontal
14480.26	31.79	13.40	45.19	74.00	-28.81	PK	Vertical
14480.26	20.84	13.40	34.24	54.00	-19.76	AV	Vertical
14480.23	31.82	13.40	45.22	74.00	-28.78	PK	Horizontal
14480.23	20.84	13.40	34.24	54.00	-19.76	AV	Horizontal
16000.26	31.00	12.40	43.40	74.00	-30.60	PK	Vertical
16000.26	20.90	12.40	33.30	54.00	-20.70	AV	Vertical
16000.19	30.93	12.40	43.33	74.00	-30.67	PK	Horizontal
16000.19	20.94	12.40	33.34	54.00	-20.66	AV	Horizontal
17998.38	28.08	23.10	51.18	74.00	-22.82	PK	Vertical
17998.38	18.10	23.10	41.20	54.00	-12.80	AV	Vertical
17998.24	28.10	23.10	51.20	74.00	-22.80	PK	Horizontal
17998.24	18.12	23.10	41.22	54.00	-12.78	AV	Horizontal



GFSK High Channel

Frequency	Meter	Factor	Emission	Limits	Margin	Detector	Comment
	Reading		Level				
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	
3265.10	44.99	-9.80	35.19	74.00	-38.81	PK	Vertical
3265.10	35.04	-9.80	25.24	54.00	-28.76	AV	Vertical
3265.09	44.98	-9.80	35.18	74.00	-38.82	PK	Horizontal
3265.09	34.94	-9.80	25.14	54.00	-28.86	AV	Horizontal
3334.67	42.72	-9.75	32.97	74.00	-41.03	PK	Vertical
3334.67	32.73	-9.75	22.98	54.00	-31.02	AV	Vertical
3334.67	42.73	-9.75	32.98	74.00	-41.02	PK	Horizontal
3334.67	32.77	-9.75	23.02	54.00	-30.98	AV	Horizontal
3349.68	42.51	-9.75	32.76	74.00	-41.24	PK	Vertical
3349.68	32.45	-9.75	22.70	54.00	-31.30	AV	Vertical
3349.75	42.57	-9.75	32.82	74.00	-41.18	PK	Horizontal
3349.75	32.49	-9.75	22.74	54.00	-31.26	AV	Horizontal
4000.09	39.83	-6.60	33.23	74.00	-40.77	PK	Vertical
4000.09	29.91	-6.60	23.31	54.00	-30.69	AV	Vertical
4000.00	39.87	-6.60	33.27	74.00	-40.73	PK	Horizontal
4000.00	29.87	-6.60	23.27	54.00	-30.73	AV	Horizontal
4960.83	39.24	-3.56	35.68	74.00	-38.32	PK	Vertical
4960.83	29.28	-3.56	25.72	54.00	-28.28	AV	Vertical
4960.81	39.31	-3.56	35.75	74.00	-38.25	PK	Horizontal
4960.81	29.35	-3.56	25.79	54.00	-28.21	AV	Horizontal
5360.06	38.22	-2.34	35.88	74.00	-38.12	PK	Vertical
5360.06	28.21	-2.34	25.87	54.00	-28.13	AV	Vertical
5360.07	38.24	-2.34	35.90	74.00	-38.10	PK	Horizontal
5360.07	28.20	-2.34	25.86	54.00	-28.14	AV	Horizontal
7440.14	37.64	3.40	41.04	74.00	-32.96	PK	Vertical
7440.14	27.62	3.40	31.02	54.00	-22.98	AV	Vertical
7440.14	37.65	3.40	41.05	74.00	-32.95	PK	Horizontal
7440.14	27.65	3.40	31.05	54.00	-22.95	AV	Horizontal
8124.27	36.16	4.80	40.96	74.00	-33.04	PK	Vertical
8124.27	26.09	4.80	30.89	54.00	-23.11	AV	Vertical
8124.35	36.09	4.80	40.89	74.00	-33.11	PK	Horizontal
8124.35	26.17	4.80	30.97	54.00	-23.03	AV	Horizontal
9105.01	34.91	5.00	39.91	74.00	-34.09	PK	Vertical
9105.01	24.87	5.00	29.87	54.00	-24.13	AV	Vertical



9104.96	34.96	5.00	39.96	74.00	-34.04	PK	Horizontal
9104.96	24.92	5.00	29.92	54.00	-24.08	AV	Horizontal
11036.18	33.91	10.20	44.11	74.00	-29.89	PK	Vertical
11036.18	23.96	10.20	34.16	54.00	-19.84	AV	Vertical
11036.21	33.93	10.20	44.13	74.00	-29.87	PK	Horizontal
11036.21	23.90	10.20	34.10	54.00	-19.90	AV	Horizontal
13299.72	32.74	12.20	44.94	74.00	-29.06	PK	Vertical
13299.72	22.75	12.20	34.95	54.00	-19.05	AV	Vertical
13299.74	32.74	12.20	44.94	74.00	-29.06	Pk	Horizontal
13299.74	22.78	12.20	34.98	54.00	-19.02	AV	Horizontal
14480.04	31.67	13.40	45.07	74.00	-28.93	PK	Vertical
14480.04	21.64	13.40	35.04	54.00	-18.96	AV	Vertical
14480.01	31.71	13.40	45.11	74.00	-28.89	PK	Horizontal
14480.01	21.71	13.40	35.11	54.00	-18.89	AV	Horizontal
16000.14	30.86	12.40	43.26	74.00	-30.74	PK	Vertical
16000.14	20.72	12.40	33.12	54.00	-20.88	AV	Vertical
16000.06	30.80	12.40	43.20	74.00	-30.80	PK	Horizontal
16000.06	20.72	12.40	33.12	54.00	-20.88	AV	Horizontal
17998.21	28.01	23.10	51.11	74.00	-22.89	PK	Vertical
17998.21	17.97	23.10	41.07	54.00	-12.93	AV	Vertical
17998.11	27.99	23.10	51.09	74.00	-22.91	PK	Horizontal
17998.11	17.99	23.10	41.09	54.00	-12.91	AV	Horizontal

Note:

- 1) Factor = Antenna Factor + Cable Loss Pre-amplifier.
- 2) Emission Level = Meter Reading + Factor

Margin = Limit - Emission Leve

Above did not show the frequency of the emission peaks form is at least 20 decibel limits, transmitting frequency noise mainly comes from the environment.



Band edge

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/ m)	(dB)	Туре	Comment	
	GFSK							
2400.0	69.23	-12.99	56.24	74	-17.76	PK	Vertical	
2400.0	54.92	-12.99	41.93	54	-12.07	AV	Vertical	
2400.0	69.92	-12.99	56.93	74	-17.07	PK	Horizontal	
2400.0	53.82	-12.99	40.83	54	-13.17	AV	Horizontal	
2483.5	70.81	-12.78	58.03	74	-15.97	PK	Vertical	
2483.5	53.86	-12.78	41.08	54	-12.92	AV	Vertical	
2483.5	71.09	-12.78	58.31	74	-15.69	PK	Horizontal	
2483.5	54.07	-12.78	41.29	54	-12.71	AV	Horizontal	

Low measurement frequencies is range from 2310 to 2400 MHz, high measurement frequencies is range from 2483.5 to 2500 MHz.

Only showthe worst point data of the emissions in the frequency 2310-2400 MHz and 2483.5-2500 MHz.



Hopping(Band edge)

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector	Commont		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	Comment		
	GFSK								
2400.0	70.95	-12.99	57.96	74	-16.04	PK	Vertical		
2400.0	56.94	-12.99	43.95	54	-10.05	AV	Vertical		
2400.0	70.18	-12.99	57.19	74	-16.81	PK	Horizontal		
2400.0	56.91	-12.99	43.92	54	-10.08	AV	Horizontal		
2483.5	70.95	-12.78	58.17	74	-15.83	PK	Vertical		
2483.5	56.05	-12.78	43.27	54	-10.73	AV	Vertical		
2483.5	70.95	-12.78	58.17	74	-15.83	PK	Horizontal		
2483.5	56.89	-12.78	44.11	54	-9.89	AV	Horizontal		

Low measurement frequencies is range from 2310 to 2400 MHz, high measurement frequencies is range from 2483.5 to 2500 MHz.

Only showthe worst point data of the emissions in the frequency 2310-2400 MHz and 2483.5-2500 MHz.



4. CONDUCTED SPURIOUS & BAND EDGE EMISSION

4.1 REQUIREMENT

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

4.2 TEST PROCEDURE

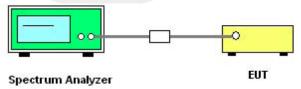
Spectrum Parameter	Setting		
Detector	Peak		
Start/Stop Frequency	30 MHz to 10th carrier harmonic		
RB / VB (emission in restricted band)	100 KHz/300 KHz		
Trace-Mode:	Max hold		

For Band edge

Spectrum Parameter	Setting			
Detector	Peak			
Start/Stan Eraguanay	Lower Band Edge: 2310 – 2404 MHz			
Start/Stop Frequency	Upper Band Edge: 2478 – 2500 MHz			
RB / VB (emission in restricted band)	100 KHz/300 KHz			
Trace-Mode:	Max hold			

Remark: Hopping on and Hopping off mode all have been tested, only worst case hopping off is reported.

4.3 TEST SETUP



The EUT which is powered by the Battery, is coupled to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 500hm; the path loss as the factor is calibrated to correct the reading. Make the measurement with the spectrum analyzer's resolution bandwidth(RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

4.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

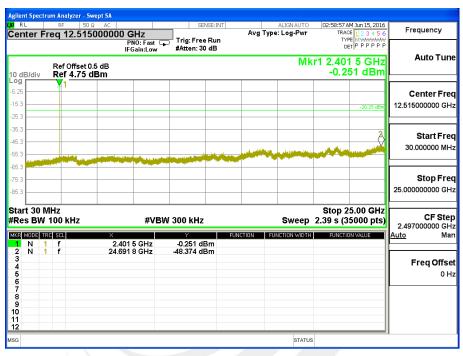


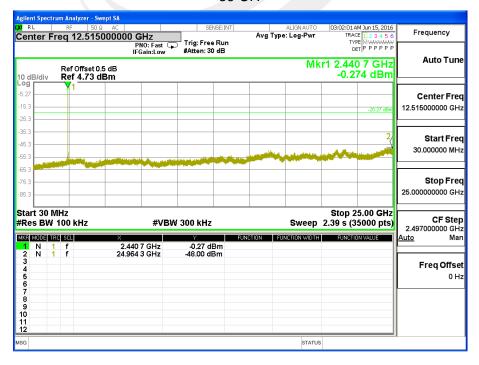


4.5 TEST RESULTS

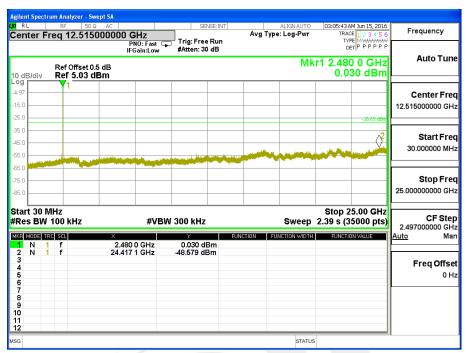
Temperature :	25℃	Relative Humidity:	50%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	GFSK(1Mbps)-00/39/78 CH		

00 CH





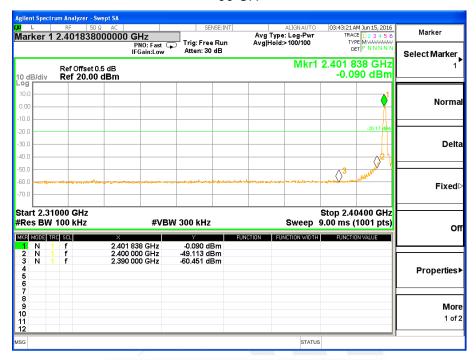






For Band edge

00 CH

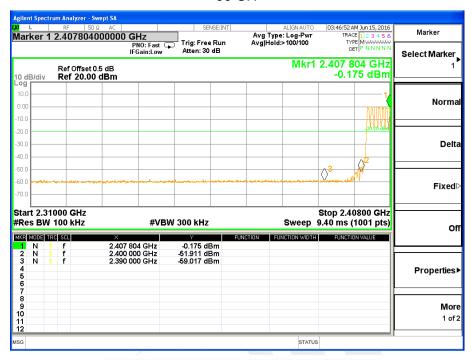






For Hopping Band edge

00 CH







5. NUMBER OF HOPPING CHANNEL

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C					
Section	Test Item	Limit	FrequencyRange (MHz)	Result	
15.247 (a)(1)(iii)	Number of Hopping Channel	≥15	2400-2483.5	PASS	

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> Operating FrequencyRange
RB	100KHz
VB	100KHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

5.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100K, VBW=100K, Sweep time = Auto.

5.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

5.4 EUT OPERATION CONDITIONS



Page 38 of 52 Report No.: STS1606060F02

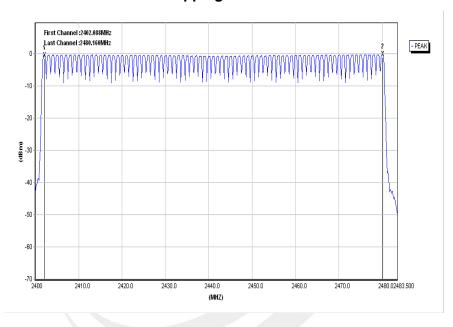
5.5 TEST RESULTS

Temperature :	25 ℃	Relative Humidity:	60%
Pressure :	1015 hPa	Test Voltage :	DC 3.7V
Test Mode :	Hopping Mode		

Number of Hopping Channel

79

Hopping channel







6. AVERAGE TIME OF OCCUPANCY

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section Test Item Limit FrequencyRange (MHz)				Result
15.247 Average Time (a)(1)(iii) Average Time of Occupancy 0.4sec 2400-2483.5 PASS				

6.2 TEST PROCEDURE

- a. The transmitter output (antenna port) was connected to the spectrum analyzer
- b. Set RBW =1MHz/VBW =3MHz.
- c. Use a video trigger with the trigger level set to enable triggering only on full pulses.
- d. Sweep Time is more than once pulse time.
 Set the center frequency on any frequency would be measure and set the frequency span to e. zero span.
- f Measure the maximum time duration of one single pulse.
- g. Set the EUT for DH5, DH3 and DH1 packet transmitting.
- h. Measure the maximum time duration of one single pulse.
- i. DH5 Packet permit maximum 1600/ 79 / 6 = 3.37 hops per second in each channel (5 time slots RX, 1 time slot TX). Sothe dwell time is the time duration of the pulse times 3.37 x 31.6 = 106.6 within 31.6 seconds.
- j. DH3 Packet permit maximum 1600 / 79 / 4 = 5.06 hops per second in each channel (3 time slots RX, 1 time slot TX). Sothe dwell time is the time duration of the pulse times 5.06 x 31.6 = 160 within 31.6 seconds.
- k. DH1 Packet permit maximum 1600 / 79 / 2 = 10.12 hops per second in each channel (1 time slot RX, 1 time slot TX). So the dwell time is the time duration of the pulse times $10.12 \times 31.6 = 320$ within 31.6 seconds.

6.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

6.4 EUT OPERATION CONDITIONS



Report No.: STS1606060F02



6.5 TEST RESULTS

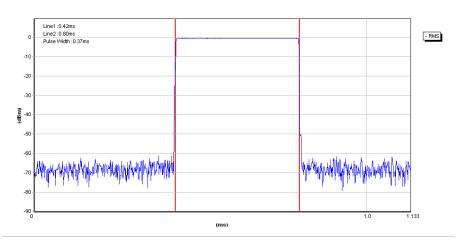
Temperature :	25℃	Relative Humidity:	50%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	GFSK(1Mbps)-DH1/DH3/DH5		

Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limits(s)
DH1	2441 MHz	0.370	0.118	0.4
DH3	2441 MHz	1.630	0.261	0.4
DH5	2441 MHz	2.880	0.307	0.4

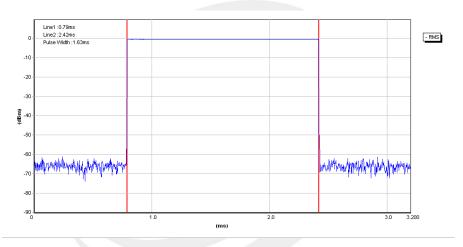




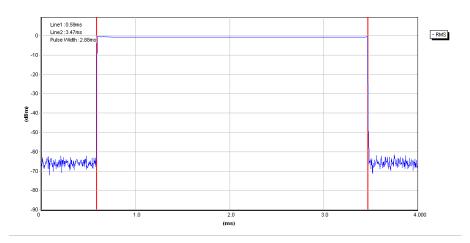
CH39-DH1



CH39-DH3



CH39-DH5





7. HOPPING CHANNEL SEPARATION MEASUREMEN

7.1 APPLIED PROCEDURES / LIMIT

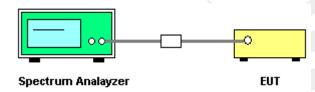
Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 20 dB bandwidth of the hopping channel, whichever is greater.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	30 kHz (20dB Bandwidth) / 30 kHz (Channel Separation)
VB	100 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

7.2 TEST PROCEDURE

- a. The transmitter output (antenna port) was connected to the spectrum analyser in peak hold mode.
- b. The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for 20 dB bandwidth measurement.
- c. The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for channel separation measurement.

7.3 TEST SETUP



7.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.





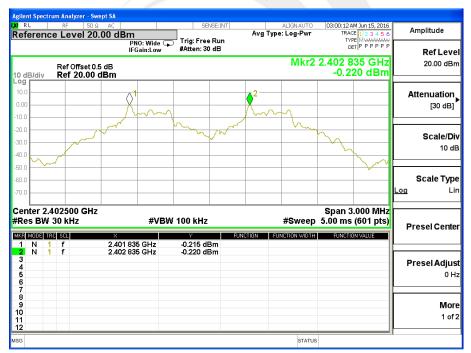
7.5 TEST RESULTS

Temperature :	25 ℃	Relative Humidity:	50%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	CH00 / CH39 /CH78 (GFSK(1N	Mbps) Mode)	

Frequency	Ch. Separation (MHz)	Limit	Result
2402 MHz	1.000	0.825	Complies
2441 MHz	1.000	0.827	Complies
2480 MHz	1.000	0.826	Complies

For GFSK: Ch. Separation Limits: > 20dB bandwidth

CH00 -1Mbps

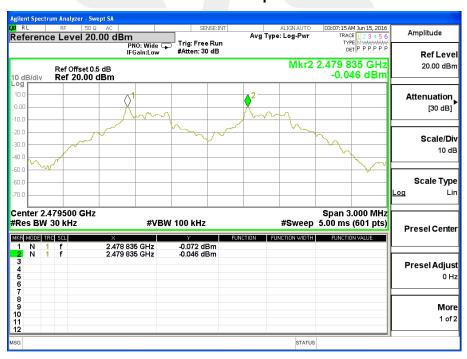




CH39 -1Mbps



CH78 -1Mbps





8. BANDWIDTH TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section Test Item Limit FrequencyRange (MHz) Result				
15.247 (a)(1)	Bandwidth	(20dB bandwidth)	2400-2483.5	PASS

Spectrum Parameter	Setting		
Attenuation	Auto		
Span Frequency	> Measurement Bandwidth or Channel Separation		
RB	30 kHz (20dB Bandwidth) / 30 kHz (Channel Separation)		
VB	100 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)		
Detector	Peak		
Trace	Max Hold		
Sweep Time	Auto		

8.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 30KHz, VBW=100KHz, Sweep time = Auto.

8.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

8.4 EUT OPERATION CONDITIONS



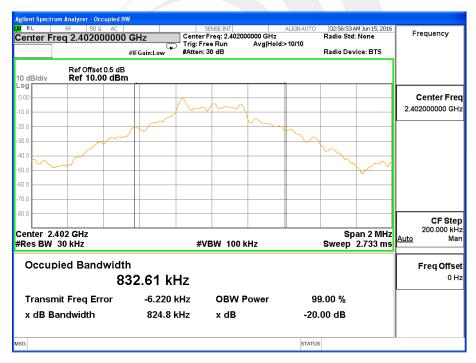


8.5 TEST RESULTS

Temperature :	25 ℃	Relative Humidity:	50%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	GFSK(1Mbps)CH00 / CH39 /C78		

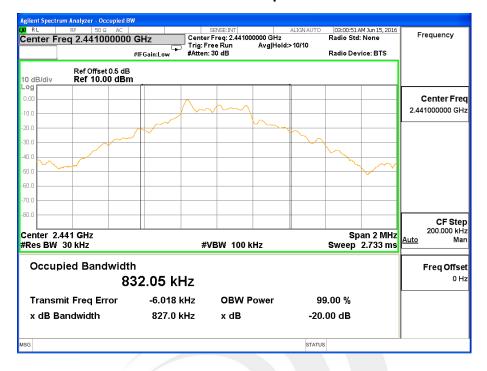
Frequency	20dB Bandwidth (MHz)	Result
2402 MHz	0.825	PASS
2441 MHz	0.827	PASS
2480 MHz	0.826	PASS

CH00 -1Mbps

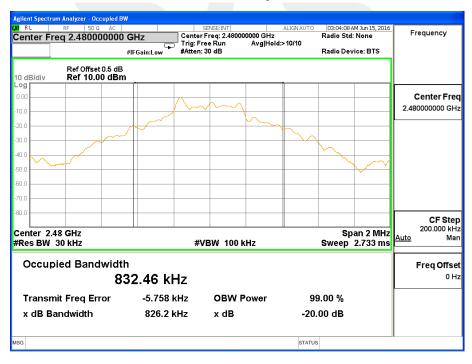




CH39 -1Mbps



CH78 -1Mbps





9. OUTPUT POWER TEST

9.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	FrequencyRange (MHz)	Result
15 247	Output	1 W or 0.125W		
15.247 Output (a)(1)&(b)(1) Power		Or if channel separation > 2/3 bandwidthprovided thesystems operatewith an output power no greater than125 mW(20.96dBm)	2400-2483.5	PASS

9.2 TEST PROCEDURE

a. The EUT was directly connected to the Power Sensor&PC

9.3 TEST SETUP



9.4 EUT OPERATION CONDITIONS



Page 49 of 52 Report No.: STS1606060F02

9.5 TEST RESULTS

Temperature :	25℃	Relative Humidity:	60%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V

GFSK(1Mbps)				
Test Channe	Frequency	Conducted Output Power		LIMIT
Test Chainle	(MHz)	Peak (dBm)	AVG (dBm)	dBm
CH00	2402	1.240	-3.850	30
CH39	2441	1.110	-3.980	30
CH78	2480	0.985	-4.100	30

Note: the channel separation > bandwidth



10. ANTENNA REQUIREMENT

10.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

10.2 EUT ANTENNA

The EUT antenna is Dipole Antenna. It comply with the standard requirement.





APPENDIX-PHOTOS OF TEST SETUP

Radiated Measurement Photos







Conducted Measurement Photos



****END OF THE REPORT**