



# **RADIO TEST REPORT**

Report No:STS1911194W04

Issued for

Sun Cupid Technology (HK) Ltd.

16/F, CEO Tower, 77 Wing Hong St, Cheung Sha Wan, Kowloon, Hong Kong, China.

Product Name:	Smart phone
Brand Name:	NUU
Model Name:	X6
Series Model:	N/A
FCC ID:	2ADINS5702L
Test Standard:	FCC Part 15.247

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Shenzhen STS Test Services Co., Ltd.
A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China TEL: +86-755 3688 6288 FAX: +86-755 3688 6277 E-mail:sts@stsapp.com





#### **TEST RESULT CERTIFICATION**

Applicant's Name...... Sun Cupid Technology (HK) Ltd.

Hong Kong, China.

Manufacture's Name...... Sun Cupid Technology (HK) Ltd.

Hong Kong, China.

**Product Description** 

Product Name .....: Smart phone

Brand Name .....: NUU

Model Name .....: X6

Series Model .....: N/A

Test Standards..... FCC Part15.247

Test Procedure ...... ANSI C63.10-2013

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test .....:

Date of Issue...... 26 Nov. 2019

Test Result..... Pass

Testing Engineer :

(Chris Chen)

Technical Manager :

Authorized Signatory:

(Sunday Hu)

(1)

(Vita Li)







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# **Revision History**

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	26 Nov. 2019	STS1911194W04	ALL	Initial Issue





# 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards: KDB 558074 D01 15.247 Meas Guidance v05r02

	FCC Part 15.247,Subpart C				
Standard Section	Test Item	Judgment	Remark		
15.207	Conducted Emission	PASS			
15.247 (a)(2)	6dB Bandwidth	PASS			
15.247 (b)(3)	Output Power	PASS			
15.247 (c)	Radiated Spurious Emission	PASS			
15.247 (d)	Conducted Spurious & Band Edge Emission	PASS			
15.247 (e)	Power Spectral Density	PASS			
15.205	Restricted Band Edge Emission	PASS			
Part 15.247(d)/part 15.209(a)	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.: A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ,

Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569 IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

#### 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 95 %.

No.	Item	Uncertainty
1	RF output power, conducted	±0.68dB
2	Unwanted Emissions, conducted	±2.988dB
3	All emissions, radiated 30-1GHz	±6.7dB
4	All emissions, radiated 1G-6GHz	±5.5dB
5	All emissions, radiated>6G	±5.8dB
6	Conducted Emission (9KHz-150KHz)	±4.43dB
7	Conducted Emission (150KHz-30MHz)	±5dB



# 2. GENERAL INFORMATION

# 2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Smart phone			
Trade Name	NUU			
Model Name	X6			
Series Model	N/A	N/A		
Model Difference	N/A			
		The EUT is a Smart phone		
	Operation Frequency:	2402~2480 MHz		
	Modulation Type:	GFSK		
	Radio Technology:	BLE		
	Bluetooth Version:	5.0		
Product Description	Bluetooth	LE(Support 1M PHY, 2M PHY)		
	Configuration:	LE(Support TW PHT, 2W PHT)		
	Number Of	40		
	Channel: Antenna			
	Designation:	Please see Note 3.		
	Antenna Gain (dBi)	0.5dBi		
Channel List	Please refer to the I	Note 2.		
Adapter	Input: AC100-240V, Output: 5.0V, 1.0A	0.2A, 50/60Hz		
	Rated Voltage: 3.8V	1		
Battery	Charge Limit: 4.35V			
	Capacity: 2800mAh			
Hardware version number	E557_MAIN_PCB_'	V1.2		
Software version number	9052NUU-S5702L-	AM-P-MV03203-02		
Radio Hardware Version of	MDLVIDOWAAA	MD LWTC MD V70 D4		
Test Equipment	WIPLT.LR9.VV 1444,	MD.LWTG.MP.V79.P4		
Radio Software Version of	000504 11110 0 1 01	- D .		
Test Equipment	SC6531_W13.04.05_Release			
Test Software	3.18.19			
RF Power Setting TEST	2.4 GHz:GFSK(1Mk	pps):-6.5		
Software (power class)	GFSK(2Mt	• •		
Connecting I/O Port(s)	Please refer to the l	· /		

#### Note:

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



2

			Chan	nel List			
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequenc y (MHz)
00	2402	10	2422	20	2442	30	2462
01	2404	11	2424	21	2444	31	2464
02	2406	12	2426	22	2446	32	2466
03	2408	13	2428	23	2448	33	2468
04	2410	14	2430	24	2450	34	2470
05	2412	15	2432	25	2452	35	2472
06	2414	16	2434	26	2454	36	2474
07	2416	17	2436	27	2456	37	2476
08	2418	18	2438	28	2458	38	2478
09	2420	19	2440	29	2460	39	2480

3.

# Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	NUU	X6	PIFA	N/A	0.5dBi	BLE ANT.



#### 2.2 DESCRIPTION OF THE TEST MODES

For conducted test items and radiated spurious emissions Each of these EUT operation mode(s) or test configuration mode(s) mentioned below was evaluated respectively.

Worst Mode	Description	Data/Modulation
Mode 1	TX CH00(2402MHz)	1Mbps/GFSK
Mode 2	TX CH19(2440MHz)	1Mbps/GFSK
Mode 3	TX CH39(2480MHz)	1Mbps/GFSK

Worst Mode	Description	Data/Modulation
Mode 1	TX CH00(2402MHz)	2 Mbps/GFSK
Mode 2	TX CH19(2440MHz)	2 Mbps/GFSK
Mode 3	TX CH39(2480MHz)	2 Mbps/GFSK

#### Note:

- (1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported
- (2) We have be tested for all avaiable U.S. voltage and frequencies(For 120V,50/60Hz and 240V, 50/60Hz) for which the device is capable of operation, and the worst case of 120V/60Hz is shown in the report
- (3) Controlled using a bespoke application on the laptop PC supplied by the customer. The application was used to enable a continuous transmission mode and to select the test channels, data rates and modulation schemes as required.

# For AC Conducted Emission

	Test Case
AC Conducted Emission	Mode 4 : Keeping BT TX

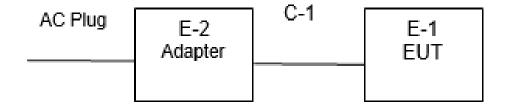


# 2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test

E-1 EUT

Conducted Emission Test







#### 2.4 DESCRIPTION OF NECESSARY ACCESSORIES AND 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.

Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
E-2	Adapter	NUU	N/A	N/A	N/A
C-1	DC Cable	N/A	110cm	N/A	N/A

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
N/A	N/A	N/A	N/A	N/A	N/A

#### 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 Length column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".



#### 2.5 EQUIPMENTS LIST

Radiation Test equipment

Nadiation rest equipment						
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	
Test Receiver	R&S	ESCI	101427	2019.07.29	2020.07.28	
Signal Analyzer	Agilent	N9020A	MY51110105	2019.03.02	2020.03.01	
Active loop Antenna	ZHINAN	ZN30900C	16035	2018.03.11	2021.03.10	
Bilog Antenna	TESEQ	CBL6111D	34678	2017.11.02	2020.11.01	
Horn Antenna	SCHWARZBECK	BBHA 9120D(1201)	9120D-1343	2018.10.19	2021.10.18	
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2018.03.11	2021.03.10	
Pre-Amplifier(0.1M-3G Hz)	EM	EM330	060665	2019.10.09	2020.10.08	
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK201808090 1	2019.10.09	2020.10.08	
Temperature & Humidity	HH660	Mieo	N/A	2019.10.09	2020.10.08	
turn table	EM	SC100_1	60531	N/A	N/A	
Antenna mast	EM	SC100	N/A	N/A	N/A	
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 RE)				

Conduction Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	
Test Receiver	R&S	ESCI	101427	2019.07.29	2020.07.28	
LISN	R&S	ENV216	101242	2019.10.09	2020.10.08	
LISN	EMCO	3810/2NM	23625	2019.10.09	2020.10.08	
Temperature & Humidity	HH660	Mieo N/A 2019.10.12 2020.10.11				
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 CE)				

# **RF Connected Test**

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	
USB RF power sensor	DARE	RPR3006W	15I00041SNO03	2019.10.09	2020.10.08	
Signal Analyzer	Agilent	N9020A	MY49100060	2019.10.09	2020.10.08	
Temperature & Humidity	HH660	Mieo	N/A	2019.10.12	2020.10.11	
Test SW	FARAD	LZ-RF /LzRf-3A3				



#### 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 207(a) limit in the table below has to be followed.

EDECLIENCY (MLL-)	Conducted Emission limit (dBuV)			
FREQUENCY (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

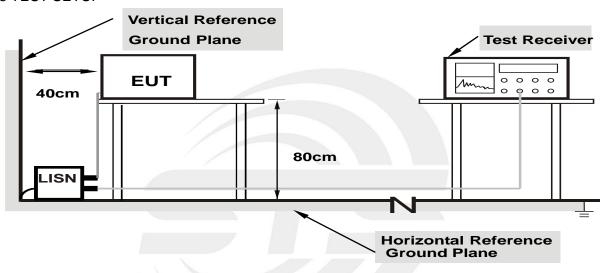
Receiver Parameters	Setting		
Attenuation	10 dB		
Start Frequency	0.15 MHz		
Stop Frequency	30 MHz		
IF Bandwidth	9 kHz		



#### 3.2 TEST PROCEDURE

- a. The EUT was 0.8 meters from the horizontal ground plane and 0.4 meters from the vertical 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.

#### 3.3 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

#### 3.4 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.



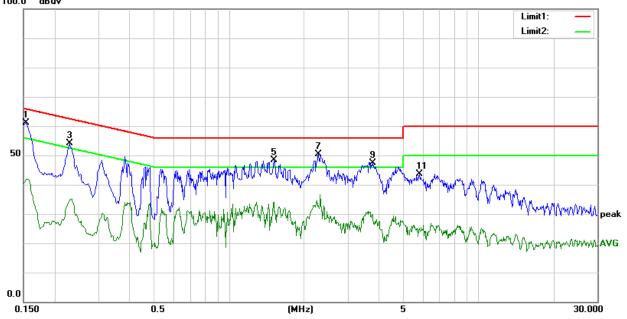
# 3.5 TEST RESULTS

Temperature:	26.4(C)	Relative Humidity:	48%RH
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode:	Mode 4		

No.	Frequen cy	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(d B)	(dBuV)	(dBuV)	(dB)	
1	0.1540	40.66	20.54	61.20	65.78	-4.58	peak
2	0.1540	21.40	20.54	41.94	55.78	-13.84	AVG
3	0.2290	33.73	20.36	54.09	62.49	-8.40	peak
4	0.2290	14.71	20.36	35.07	52.49	-17.42	AVG
5	1.5193	28.70	19.68	48.38	56.00	-7.62	peak
6	1.5193	14.51	19.68	34.19	46.00	-11.81	AVG
7	2.2845	30.30	20.00	50.30	56.00	-5.70	peak
8	2.2845	16.52	20.00	36.52	46.00	-9.48	AVG
9	3.7593	27.04	20.26	47.30	56.00	-8.70	peak
10	3.7593	10.69	20.26	30.95	46.00	-15.05	AVG
11	5.8050	23.38	20.35	43.73	60.00	-16.27	peak
12	5.8050	8.76	20.35	29.11	50.00	-20.89	AVG

#### Remark:

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



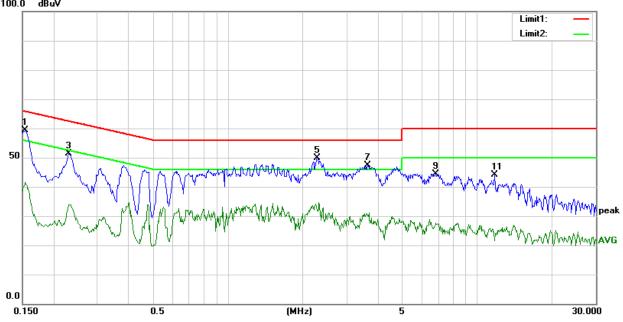
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Temperature:	26.4(C)	Relative Humidity:	48%RH
Test Voltage:	AC 120V/60Hz	Phase:	N
Test Mode:	Mode 4		

No.	Frequen cy	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(d B)	(dBuV)	(dBuV)	(dB)	
1	0.1540	38.75	20.54	59.29	65.78	-6.49	peak
2	0.1540	21.00	20.54	41.54	55.78	-14.24	AVG
3	0.2290	30.96	20.36	51.32	62.49	-11.17	peak
4	0.2290	13.51	20.36	33.87	52.49	-18.62	AVG
5	2.2845	29.80	20.00	49.80	56.00	-6.20	peak
6	2.2845	14.55	20.00	34.55	46.00	-11.45	AVG
7	3.6417	27.05	20.25	47.30	56.00	-8.70	peak
8	3.6417	10.97	20.25	31.22	46.00	-14.78	AVG
9	6.8051	24.11	20.34	44.45	60.00	-15.55	peak
10	6.8051	8.46	20.34	28.80	50.00	-21.20	AVG
11	11.7446	23.44	20.61	44.05	60.00	-15.95	peak
12	11.7446	6.39	20.61	27.00	50.00	-23.00	AVG

# Remark:

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





#### 4. RADIATED EMISSION MEASUREMENT

#### 4.1 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 and according to ANSI C63.10-2013 below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (Frequency Range 9kHz-1000MHz)

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 (Above 1000MHz)

	(dBuV/m) (at 3M)		
FREQUENCY (MHz)	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).

#### LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 – 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5

A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China Tel: +86-755 3688 6288 Fax:+86-755 3688 6277 Http://www.stsapp.com E-mail: sts@stsapp.com



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8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1660 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3260 – 3267	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 – 8500	
108 – 138		

# For Radiated Emission

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/AV
Start Frequency	1000 MHz(Peak/AV)
Stop Frequency	10th carrier hamonic(Peak/AV)
RB / VB (emission in restricted	4 MH= / 2 MH=
band)	1 MHz / 3 MHz

For Band edge

Spectrum Parameter	Setting	
Detector	Peak/AV	
Start/Stop Frequency	Lower Band Edge: 2310 to 2410 MHz	
Start/Stop Frequency	Upper Band Edge: 2475 to 2500 MHz	
RB / VB (emission in restricted band)	1 MHz / 3 MHz	



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Receiver Parameter	Setting
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

#### **4.2 TEST PROCEDURE**

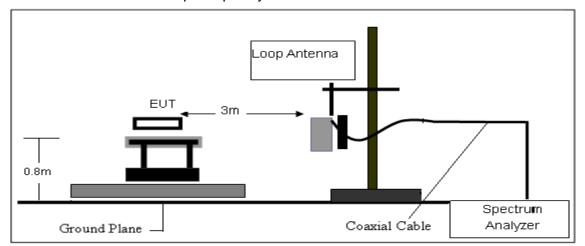
- a. The measuring distance of at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 meters(above 1GHz is 1.5 m) above the ground at a 3 meter anechoic chamber. The table was rotated 360 degrees to determine 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 Quasi Peak 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.

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

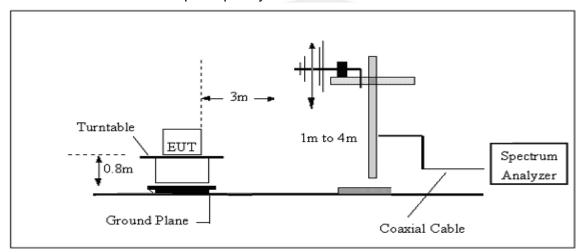


#### 4.3 TEST SETUP

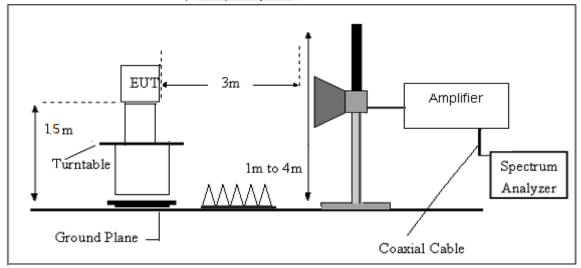
# (A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



#### 4.4 EUT OPERATING 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 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where

FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

Frequency	FS	RA	AF	CL	AG	Factor
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	(dB)	(dB)	(dB)
300	40	58.1	12.2	1.6	31.9	-18.1

Factor=AF+CL-AG



#### 4.6 TEST RESULTS

(Between 9KHz - 30 MHz)

Temperature:	24.7(C)	Relative Humidtity:	52%RH
Test Voltage:	DC 3.8V from battery	Polarization:	
Test Mode:	TX Mode		

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
				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)

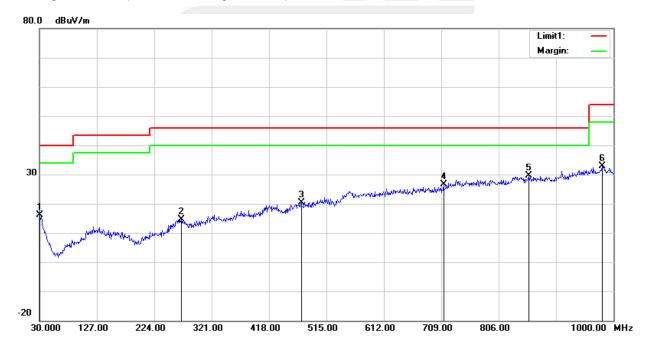
# 1M PHY

Temperature:	24.7(C)	Relative Humidity:	52%RH		
Test Voltage:	DC 3.8V from battery	Phase:	Horizontal		
Test Mode:	Mode 1/2/3 (Mode 3 worst mode)				

No.	Frequenc y	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.0000	28.97	-12.85	16.12	40.00	-23.88	QP
2	269.5900	29.92	-15.29	14.63	46.00	-31.37	QP
3	472.3200	29.23	-8.92	20.31	46.00	-25.69	QP
4	713.3650	30.19	-3.65	26.54	46.00	-19.46	QP
5	856.9250	30.10	-0.52	29.58	46.00	-16.42	QP
6	980.6000	30.31	2.63	32.94	54.00	-21.06	QP

#### Remark:

1. Margin = Result (Result = Reading + Factor )-Limit



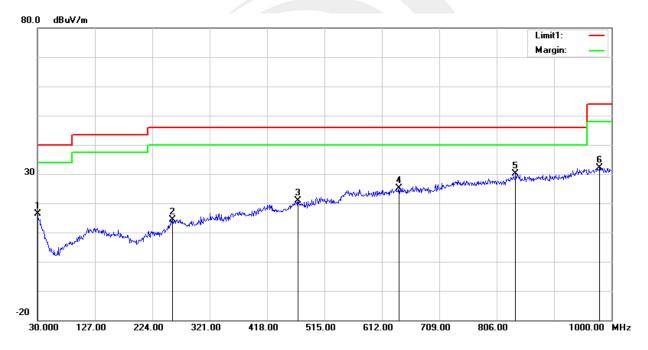
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Temperature:	24.7(C)	Relative Humidity:	52%RH		
Test Voltage:	DC 3.8V from battery	Phase:	Vertical		
Test Mode:	Mode 1/2/3 (Mode 3 worst mode)				

No.	Frequenc y	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.0000	29.11	-12.85	16.26	40.00	-23.74	QP
2	257.9500	29.42	-15.02	14.40	46.00	-31.60	QP
3	470.8650	29.91	-8.97	20.94	46.00	-25.06	QP
4	641.5850	29.99	-4.85	25.14	46.00	-20.86	QP
5	838.4950	30.50	-0.40	30.10	46.00	-15.90	QP
6	979.6300	29.48	2.65	32.13	54.00	-21.87	QP

#### Remark:

1. Margin = Result (Result = Reading + Factor )-Limit





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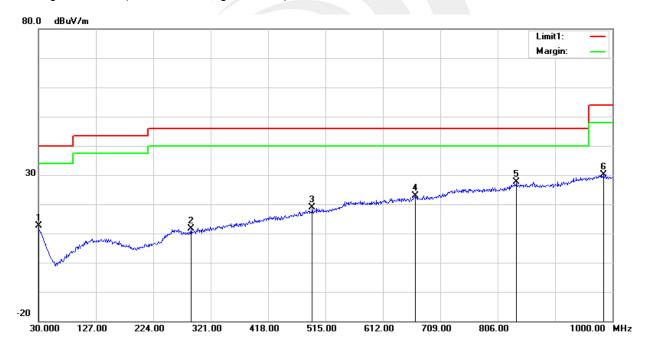
# 2M PHY

Temperature:	24.7(C)	Relative Humidity:	52%RH
Test Voltage:	DC 3.8V from battery	Phase:	Horizontal
Test Mode:	Mode 1/2/3 (Mode 3 worst mo	ode)	

No.	Frequenc y	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.0000	25.49	-12.85	12.64	40.00	-27.36	QP
2	288.0200	26.87	-15.26	11.61	46.00	-34.39	QP
3	493.1750	27.02	-8.15	18.87	46.00	-27.13	QP
4	666.3200	27.42	-4.66	22.76	46.00	-23.24	QP
5	838.4950	27.98	-0.40	27.58	46.00	-18.42	QP
6	985.4500	27.80	2.33	30.13	54.00	-23.87	QP

#### Remark:

1. Margin = Result (Result = Reading + Factor )-Limit



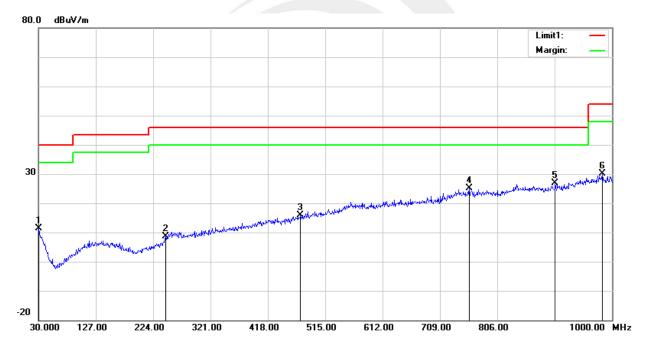
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Temperature:	24.7(C)	Relative Humidity:	52%RH
Test Voltage:	DC 3.8V from battery	Phase:	Vertical
Test Mode:	Mode 1/2/3 (Mode 3 worst mo	ode)	

No.	Frequenc y	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.0000	24.35	-12.85	11.50	40.00	-28.50	QP
2	245.8250	25.60	-16.85	8.75	46.00	-37.25	QP
3	473.7750	24.86	-8.87	15.99	46.00	-30.01	QP
4	758.9550	27.27	-2.17	25.10	46.00	-20.90	QP
5	903.9700	27.28	-0.34	26.94	46.00	-19.06	QP
6	983.5100	27.68	2.46	30.14	54.00	-23.86	QP

#### Remark:

1. Margin = Result (Result = Reading + Factor )—Limit





# (1GHz-25GHz)Restricted band and Spurious emission Requirements

# 1M PHY GFSK

Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Orrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	Common
				Low C	hannel (2402	MHz)				
3264.77	61.02	44.70	6.70	28.20	-9.80	51.22	74.00	-22.78	PK	Vertical
3264.77	50.78	44.70	6.70	28.20	-9.80	40.98	54.00	-13.02	AV	Vertical
3264.82	61.83	44.70	6.70	28.20	-9.80	52.03	74.00	-21.97	PK	Horizontal
3264.82	50.54	44.70	6.70	28.20	-9.80	40.74	54.00	-13.26	AV	Horizontal
4804.35	58.24	44.20	9.04	31.60	-3.56	54.68	74.00	-19.32	PK	Vertical
4804.35	50.32	44.20	9.04	31.60	-3.56	46.76	54.00	-7.24	AV	Vertical
4804.61	58.53	44.20	9.04	31.60	-3.56	54.97	74.00	-19.03	PK	Horizontal
4804.61	50.53	44.20	9.04	31.60	-3.56	46.97	54.00	-7.03	AV	Horizontal
5359.74	48.96	44.20	9.86	32.00	-2.34	46.62	74.00	-27.38	PK	Vertical
5359.74	40.04	44.20	9.86	32.00	-2.34	37.70	54.00	-16.30	AV	Vertical
5359.83	47.41	44.20	9.86	32.00	-2.34	45.07	74.00	-28.93	PK	Horizontal
5359.83	38.71	44.20	9.86	32.00	-2.34	36.37	54.00	-17.63	AV	Horizontal
7205.80	54.81	43.50	11.40	35.50	3.40	58.21	74.00	-15.79	PK	Vertical
7205.80	44.52	43.50	11.40	35.50	3.40	47.92	54.00	-6.08	AV	Vertical
7205.73	54.30	43.50	11.40	35.50	3.40	57.70	74.00	-16.30	PK	Horizontal
7205.73	43.82	43.50	11.40	35.50	3.40	47.22	54.00	-6.78	AV	Horizontal
				Middle	Channel (244	0 MHz)				
3264.63	61.60	44.70	6.70	28.20	-9.80	51.80	74.00	-22.20	PK	Vertical
3264.63	50.73	44.70	6.70	28.20	-9.80	40.93	54.00	-13.07	AV	Vertical
3264.62	60.78	44.70	6.70	28.20	-9.80	50.98	74.00	-23.02	PK	Horizontal
3264.62	50.90	44.70	6.70	28.20	-9.80	41.10	54.00	-12.90	AV	Horizontal
4880.42	59.58	44.20	9.04	31.60	-3.56	56.02	74.00	-17.98	PK	Vertical
4880.42	50.01	44.20	9.04	31.60	-3.56	46.45	54.00	-7.55	AV	Vertical
4880.47	59.48	44.20	9.04	31.60	-3.56	55.92	74.00	-18.08	PK	Horizontal
4880.47	50.08	44.20	9.04	31.60	-3.56	46.52	54.00	-7.48	AV	Horizontal
5359.67	49.43	44.20	9.86	32.00	-2.34	47.09	74.00	-26.91	PK	Vertical
5359.67	40.38	44.20	9.86	32.00	-2.34	38.04	54.00	-15.96	AV	Vertical
5359.60	48.17	44.20	9.86	32.00	-2.34	45.83	74.00	-28.17	PK	Horizontal
5359.60	38.93	44.20	9.86	32.00	-2.34	36.59	54.00	-17.41	AV	Horizontal
7320.73	54.70	43.50	11.40	35.50	3.40	58.10	74.00	-15.90	PK	Vertical
7320.73	44.26	43.50	11.40	35.50	3.40	47.66	54.00	-6.34	AV	Vertical
7320.75	54.30	43.50	11.40	35.50	3.40	57.70	74.00	-16.30	PK	Horizontal
7320.75	44.65	43.50	11.40	35.50	3.40	48.05	54.00	-5.95	AV	Horizontal

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				High C	hannel (248	0 MHz)				
3264.89	61.18	44.70	6.70	28.20	-9.80	51.38	74.00	-22.62	PK	Vertical
3264.89	50.03	44.70	6.70	28.20	-9.80	40.23	54.00	-13.77	AV	Vertical
3264.77	61.69	44.70	6.70	28.20	-9.80	51.89	74.00	-22.11	PK	Horizontal
3264.77	50.65	44.70	6.70	28.20	-9.80	40.85	54.00	-13.15	AV	Horizontal
4960.47	58.11	44.20	9.04	31.60	-3.56	54.55	74.00	-19.45	PK	Vertical
4960.47	49.24	44.20	9.04	31.60	-3.56	45.68	54.00	-8.32	AV	Vertical
4960.46	58.28	44.20	9.04	31.60	-3.56	54.72	74.00	-19.28	PK	Horizontal
4960.46	50.19	44.20	9.04	31.60	-3.56	46.63	54.00	-7.37	AV	Horizontal
5359.62	49.32	44.20	9.86	32.00	-2.34	46.98	74.00	-27.02	PK	Vertical
5359.62	39.60	44.20	9.86	32.00	-2.34	37.26	54.00	-16.74	AV	Vertical
5359.68	47.36	44.20	9.86	32.00	-2.34	45.02	74.00	-28.98	PK	Horizontal
5359.68	39.52	44.20	9.86	32.00	-2.34	37.18	54.00	-16.82	AV	Horizontal
7439.72	54.46	43.50	11.40	35.50	3.40	57.86	74.00	-16.14	PK	Vertical
7439.72	43.79	43.50	11.40	35.50	3.40	47.19	54.00	-6.81	AV	Vertical
7439.82	54.37	43.50	11.40	35.50	3.40	57.77	74.00	-16.23	PK	Horizontal
7439.82	44.45	43.50	11.40	35.50	3.40	47.85	54.00	-6.15	AV	Horizontal

#### Note:

- Factor = Antenna Factor + Cable Loss Pre-amplifier.
   Emission Level = Reading + Factor
- The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.



Report No.: STS1911194W04

# 2M PHY GFSK

Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Orrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	Comment
		•		Low C	hannel (2402	MHz)				•
3264.76	61.99	44.70	6.70	28.20	-9.80	52.19	74.00	-21.81	PK	Vertical
3264.76	50.99	44.70	6.70	28.20	-9.80	41.19	54.00	-12.81	AV	Vertical
3264.73	61.06	44.70	6.70	28.20	-9.80	51.26	74.00	-22.74	PK	Horizontal
3264.73	50.62	44.70	6.70	28.20	-9.80	40.82	54.00	-13.18	AV	Horizontal
4804.54	58.13	44.20	9.04	31.60	-3.56	54.57	74.00	-19.43	PK	Vertical
4804.54	49.27	44.20	9.04	31.60	-3.56	45.71	54.00	-8.29	AV	Vertical
4804.34	58.27	44.20	9.04	31.60	-3.56	54.71	74.00	-19.29	PK	Horizontal
4804.34	50.47	44.20	9.04	31.60	-3.56	46.91	54.00	-7.09	AV	Horizontal
5359.86	48.68	44.20	9.86	32.00	-2.34	46.34	74.00	-27.66	PK	Vertical
5359.86	39.62	44.20	9.86	32.00	-2.34	37.28	54.00	-16.72	AV	Vertical
5359.63	47.83	44.20	9.86	32.00	-2.34	45.49	74.00	-28.51	PK	Horizontal
5359.63	38.65	44.20	9.86	32.00	-2.34	36.31	54.00	-17.69	AV	Horizontal
7205.86	54.52	43.50	11.40	35.50	3.40	57.92	74.00	-16.08	PK	Vertical
7205.86	44.75	43.50	11.40	35.50	3.40	48.15	54.00	-5.85	AV	Vertical
7205.70	54.50	43.50	11.40	35.50	3.40	57.90	74.00	-16.10	PK	Horizontal
7205.70	43.74	43.50	11.40	35.50	3.40	47.14	54.00	-6.86	AV	Horizontal
				Middle	Channel (244	0 MHz)				
3264.70	62.29	44.70	6.70	28.20	-9.80	52.49	74.00	-21.51	PK	Vertical
3264.70	51.18	44.70	6.70	28.20	-9.80	41.38	54.00	-12.62	AV	Vertical
3264.68	61.50	44.70	6.70	28.20	-9.80	51.70	74.00	-22.30	PK	Horizontal
3264.68	51.02	44.70	6.70	28.20	-9.80	41.22	54.00	-12.78	AV	Horizontal
4880.40	59.29	44.20	9.04	31.60	-3.56	55.73	74.00	-18.27	PK	Vertical
4880.40	50.03	44.20	9.04	31.60	-3.56	46.47	54.00	-7.53	AV	Vertical
4880.55	59.43	44.20	9.04	31.60	-3.56	55.87	74.00	-18.13	PK	Horizontal
4880.55	49.28	44.20	9.04	31.60	-3.56	45.72	54.00	-8.28	AV	Horizontal
5359.68	48.76	44.20	9.86	32.00	-2.34	46.42	74.00	-27.58	PK	Vertical
5359.68	39.89	44.20	9.86	32.00	-2.34	37.55	54.00	-16.45	AV	Vertical
5359.64	48.29	44.20	9.86	32.00	-2.34	45.95	74.00	-28.05	PK	Horizontal
5359.64	38.27	44.20	9.86	32.00	-2.34	35.93	54.00	-18.07	AV	Horizontal
7320.83	54.30	43.50	11.40	35.50	3.40	57.70	74.00	-16.30	PK	Vertical
7320.83	44.09	43.50	11.40	35.50	3.40	47.49	54.00	-6.51	AV	Vertical
7320.84	53.82	43.50	11.40	35.50	3.40	57.22	74.00	-16.78	PK	Horizontal
7320.84	44.69	43.50	11.40	35.50	3.40	48.09	54.00	-5.91	AV	Horizontal



				High C	channel (248	0 MHz)				
3264.82	61.51	44.70	6.70	28.20	-9.80	51.71	74.00	-22.29	PK	Vertical
3264.82	51.69	44.70	6.70	28.20	-9.80	41.89	54.00	-12.11	AV	Vertical
3264.58	60.89	44.70	6.70	28.20	-9.80	51.09	74.00	-22.91	PK	Horizontal
3264.58	51.06	44.70	6.70	28.20	-9.80	41.26	54.00	-12.74	AV	Horizontal
4960.49	59.40	44.20	9.04	31.60	-3.56	55.84	74.00	-18.16	PK	Vertical
4960.49	50.16	44.20	9.04	31.60	-3.56	46.60	54.00	-7.40	AV	Vertical
4960.35	59.57	44.20	9.04	31.60	-3.56	56.01	74.00	-17.99	PK	Horizontal
4960.35	50.36	44.20	9.04	31.60	-3.56	46.80	54.00	-7.20	AV	Horizontal
5359.73	48.10	44.20	9.86	32.00	-2.34	45.76	74.00	-28.24	PK	Vertical
5359.73	39.18	44.20	9.86	32.00	-2.34	36.84	54.00	-17.16	AV	Vertical
5359.78	48.13	44.20	9.86	32.00	-2.34	45.79	74.00	-28.21	PK	Horizontal
5359.78	38.20	44.20	9.86	32.00	-2.34	35.86	54.00	-18.14	AV	Horizontal
7439.94	53.81	43.50	11.40	35.50	3.40	57.21	74.00	-16.79	PK	Vertical
7439.94	44.66	43.50	11.40	35.50	3.40	48.06	54.00	-5.94	AV	Vertical
7439.96	54.31	43.50	11.40	35.50	3.40	57.71	74.00	-16.29	PK	Horizontal
7439.96	44.59	43.50	11.40	35.50	3.40	47.99	54.00	-6.01	AV	Horizontal

#### Note:

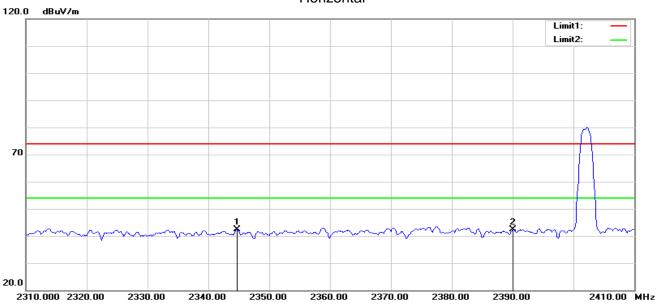
- Factor = Antenna Factor + Cable Loss Pre-amplifier.
   Emission Level = Reading + Factor
- The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.



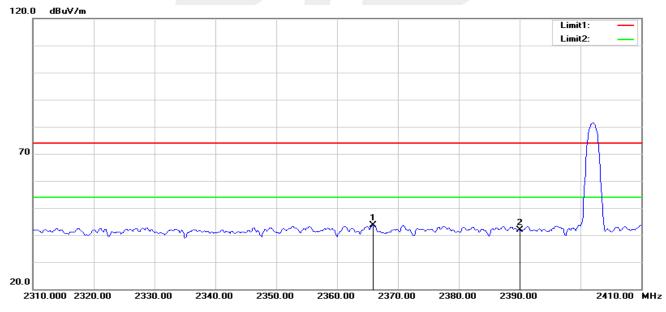


# 4.6 TEST RESULTS (Restricted Bands Requirements)

# 1M PHY GFSK-Low Horizontal



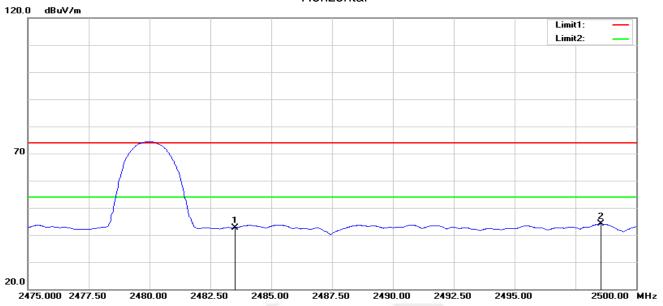
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2344.750	38.76	3.71	42.47	74.00	-31.53	peak
2	2390.000	37.96	4.34	42.30	74.00	-31.70	peak



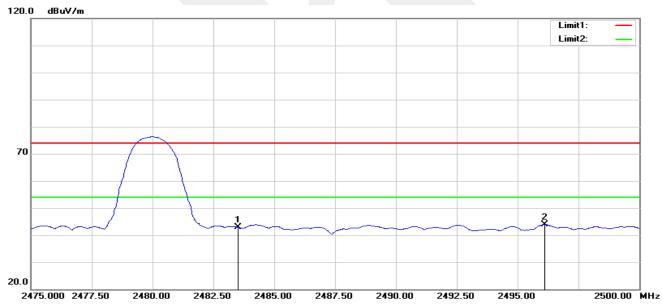
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2365.950	39.62	3.98	43.60	74.00	-30.40	peak
2	2390.000	37.58	4.34	41.92	74.00	-32.08	peak



# GFSK-High Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	37.98	4.60	42.58	74.00	-31.42	peak
2	2498.550	39.37	4.65	44.02	74.00	-29.98	peak

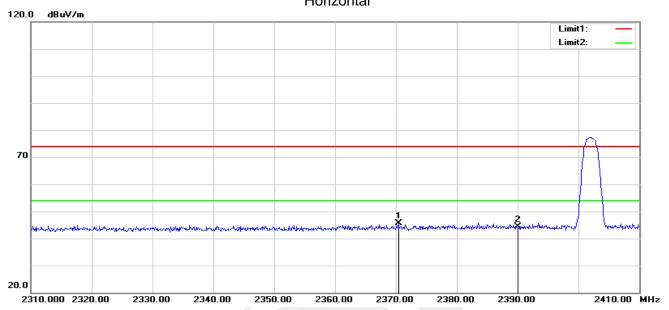


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	38.24	4.60	42.84	74.00	-31.16	peak
2	2496.113	39.17	4.64	43.81	74.00	-30.19	peak

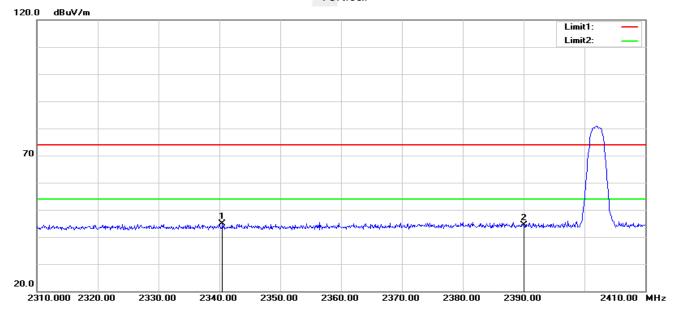


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# 2M PHY GFSK-Low Horizontal



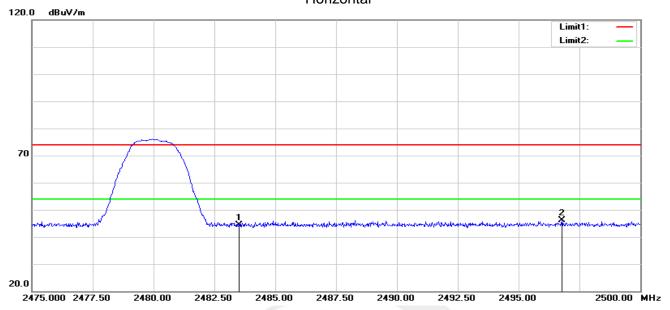
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2370.450	41.61	4.05	45.66	74.00	-28.34	peak
2	2390.000	39.94	4.34	44.28	74.00	-29.72	peak



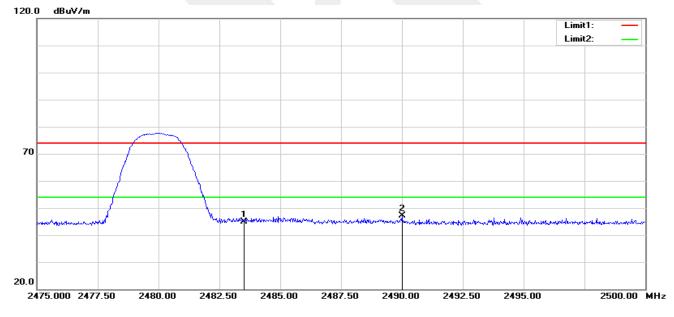
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2340.500	41.26	3.69	44.95	74.00	-29.05	peak
2	2390.000	40.03	4.34	44.37	74.00	-29.63	peak



# GFSK-High Horizontal



No.	Frequency	Reading	Correct	Result Limit		Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	39.75	4.60	44.35	74.00	-29.65	peak
2	2496.787	41.49	4.64	46.13	74.00	-27.87	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	40.28	4.60	44.88	74.00	-29.12	peak
2	2490.012	42.47	4.63	47.10	74.00	-26.90	peak



#### 5. CONDUCTED SPURIOUS & BAND EDGE EMISSION

#### 5.1 LIMIT

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.

#### **5.2 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 Fraguency	Lower Band Edge: 2300 – 2407 MHz		
Start/Stop Frequency	Upper Band Edge: 2475 – 2500 MHz		
RB / VB (emission in restricted band)	100 KHz/300 KHz		
Trace-Mode:	Max hold		

#### 5.3 TEST SETUP



The EUT which is powered by the Battery, is connected to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50 Ohm; 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.

# 5.4 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.



# 5.5 TEST RESULTS

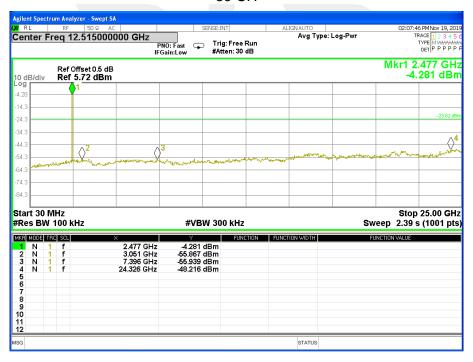
Temperature:	25 ℃	Relative Humidity:	50%
Test Voltage:	DC 3.8V from battery	LIEST MINUAE.	TX Mode /CH00, CH19, CH39

# 1M PHY 00 CH

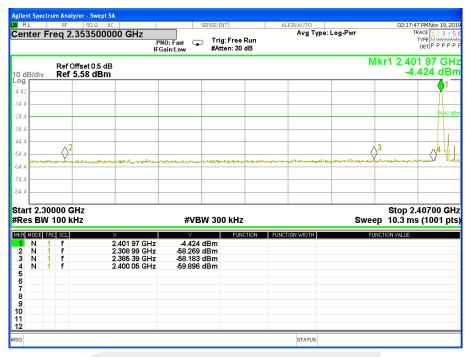






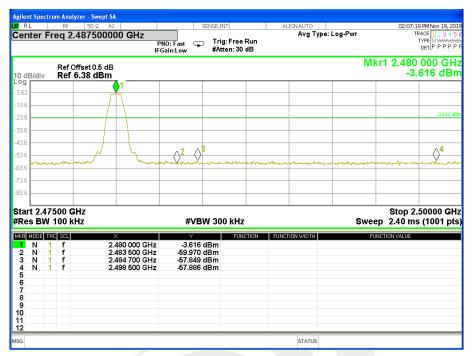














# 2M PHY 00 CH

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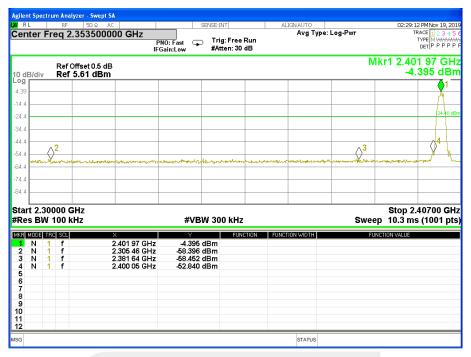


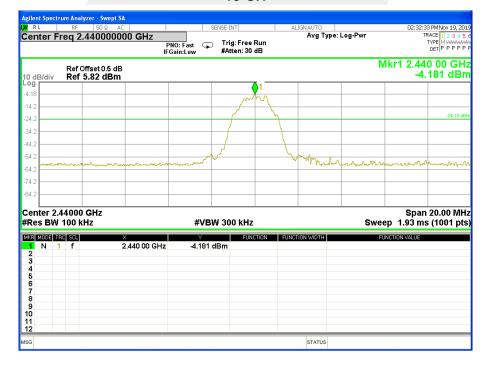


















#### 6. POWER SPECTRAL DENSITY TEST

#### 6.1 LIMIT

FCC Part 15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	≤8 dBm (RBW≥3KHz)	2400-2483.5	PASS

#### **6.2 TEST PROCEDURE**

- 1. Set analyzer center frequency to DTS channel center frequency.
- 2. Set the span to 1.5 times the DTS channel bandwidth.
- 3. Set the RBW to:  $100 \text{ kHz} \ge \text{RBW} \ge 3 \text{ kHz}$ .
- 4. Set the VBW  $\geq$  3 x RBW.
- 5. Detector = peak.
- 6. Sweep time = auto couple.
- 7. Trace mode = max hold.
- 8. Allow trace to fully stabilize.
- 9. Use the peak marker function to determine the maximum amplitude level.
- 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

#### 6.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

### **6.4 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.





# 6.5 TEST RESULTS

Temperature:	25 ℃	Relative Humidity:	60%
Test Voltage:	DC 3.8V from battery	Test Mode:	TX Mode /CH00, CH19, CH39

#### 1M PHY

Eroguenev	Power Density	Limit (dBm/3KHz)	Result	
Frequency	(dBm/3kHz)	Lilliit (UBIII/3KI12)	Kesuit	
2402 MHz	-20.104	≤8	PASS	
2440 MHz	-19.911	≤8	PASS	
2480 MHz	-19.179	≤8	PASS	





#### **TX CH19**







### 2M PHY

Fraguenov	Power Density	Limit (dBm/3KHz)	Result	
Frequency	(dBm/3kHz)	LIIIII (UBIII/3KHZ)		
2402 MHz	-22.523	≤8	PASS	
2440 MHz	-22.36	≤8	PASS	
2480 MHz	-22.725	≤8	PASS	





#### **TX CH19**







#### 7. BANDWIDTH TEST

#### 7.1 LIMIT

FCC Part 15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

#### 7.2 TEST PROCEDURE

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW ≥3RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥6 dB.

#### 7.3 TEST SETUP



### 7.4 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.



# 7.5 TEST RESULTS

Temperature:	25 ℃	Relative Humidity:	60%
Test Voltage:	DC 3.8V from battery	LIEST MINUAE.	TX Mode /CH00, CH19, CH39

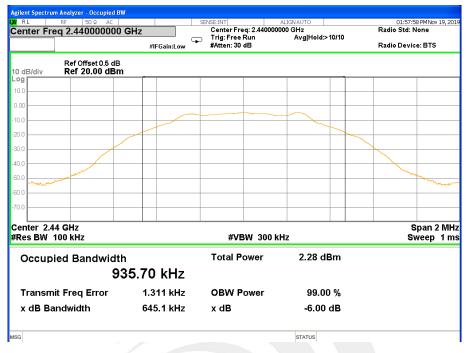
### 1M PHY

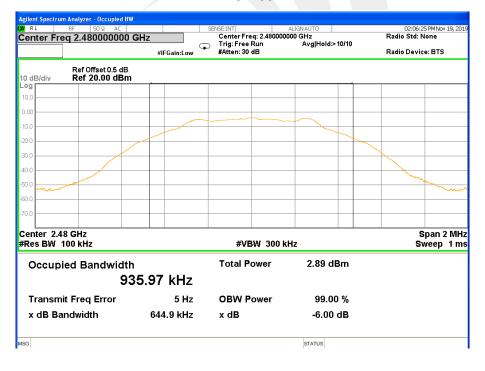
Frequency	6dB Bandwidth (KHz)	Channel Separation (KHz)	Result
2402 MHz	644.400	≥500KHz	PASS
2440 MHz	645.100	≥500KHz	PASS
2480 MHz	644.900	≥500KHz	PASS





#### **TX CH 19**

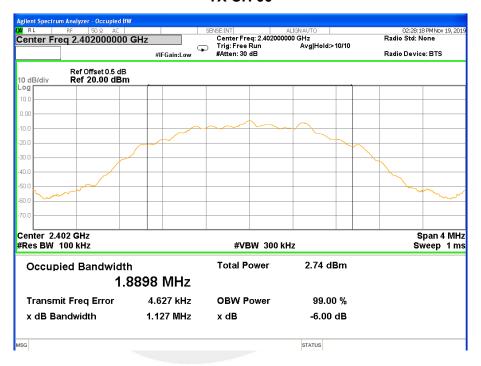






### 2M PHY

Frequency	6dB Bandwidth (KHz)	Channel Separation (KHz)	Result
2402 MHz	1127.000	≥500KHz	PASS
2440 MHz	1127.000	≥500KHz	PASS
2480 MHz	1127.000	≥500KHz	PASS





#### **TX CH 19**







# 8. PEAK OUTPUT POWER TEST

#### 8.1 LIMIT

FCC Part 15.247,Subpart C				
Section Test Item Limit Frequency Range (MHz) Result				Result
15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5	PASS

#### **8.2 TEST PROCEDURE**

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

### 8.3 TEST SETUP



#### **8.4 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.



Report No.: STS1911194W04



# 8.5 TEST RESULTS

Temperature:	25 ℃	Relative Humidity:	60%
Test Voltage:	DC 3.8V from battery	Test Mode:	TX Mode /CH00, CH19, CH39

# 1M PHY

Test Channe	Frequency	Peak Conducted Output Power	Average Conducted Output Power	LIMIT
	(MHz)	(dBm)	(dBm)	dBm
CH0	2402	-4.08	-5.89	30
CH19	2440	-3.92	-5.67	30
CH39	2480	-3.52	-5.28	30

# 2M PHY

Test Channe	Frequency	Peak Conducted Output Power	Average Conducted Output Power	LIMIT
	(MHz)	(dBm)	(dBm)	dBm
CH0	2402	-4.15	-7.60	30
CH19	2440	-3.95	-7.40	30
CH39	2480	-3.48	-7.03	30



# 9. ANTENNA REQUIREMENT

### 9.1 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.

### 9.2 EUT ANTENNA

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





# 10. EUT TEST PHOTO

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

\* \* \* \* \* END OF THE REPORT \* \* \* \*

