

RADIO TEST REPORT

S T S

Report No.:STS2208326W07

Issued for

Trackimo INC.

680 Central Ave, Cedarhurst, New York 11516, USA

Product Name:	GPS Tracker	
Brand:	Trackimo	
Model Number:	TRKM110-T	
Series Model(s):	N/A	
FCC ID:	2AAI6-TRKM110-T	
Test Standard:	FCC Part 15.247	

Any reproduction of this document must be done in full. No single part of this document may be reproduced without permission from STS, all test data presented in this report is only applicable to presented test sample.

APPROVAL

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	Trackimo INC.
Address	680 Central Ave, Cedarhurst, New York 11516, USA
Manufacturer's Name	Trackimo INC.
Address	680 Central Ave, Cedarhurst, New York 11516, USA
Product Description	
Product Name:	GPS Tracker
Brand:	Trackimo
Model Number:	TRKM110-T
Series Model(s)	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.

This report shall not be reproduced except in full, without the written approval of STS, this document may be altered or revised by STS, personal only, and shall be noted in the revision of the document.

Date of Test

Test Result	Pass
Date of Issue	11 Oct. 2022
Date (s) of performance of tests:	16 Aug. 2022 ~ 11 Oct. 2022
Date of receipt of test item:	16 Aug. 2022

Testing Engineer

(Chris Chen)

Technical Manager

(Sean she)

ean the



Authorized Signatory :

unly howy

(Bovey Yang)



Table of Contents

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 THE EUT	8
2.2 DESCRIPTION OF THE TEST MODES	10
2.3 TEST SOFTWARE AND POWER LEVEL	10
2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	11
2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS	12
2.6 EQUIPMENTS LIST	13
3. EMC EMISSION TEST	14
3.1 CONDUCTED EMISSION MEASUREMENT	14
3.2 TEST PROCEDURE	15
3.3 TEST SETUP	15
3.4 EUT OPERATING CONDITIONS	15
3.5 TEST RESULTS	16
4. RADIATED EMISSION MEASUREMENT	18
4.1 RADIATED EMISSION LIMITS	18
4.2 TEST PROCEDURE	20
4.3 TEST SETUP	21
4.4 EUT OPERATING CONDITIONS	21
4.5 FIELD STRENGTH CALCULATION	22
4.6 TEST RESULTS	23
5. CONDUCTED SPURIOUS & BAND EDGE EMISSION	30
5.1 LIMIT	30
5.2 TEST PROCEDURE	30
5.3 TEST SETUP	30
5.4 EUT OPERATION CONDITIONS	30
5.5 TEST RESULTS	30
6. POWER SPECTRAL DENSITY TEST	31
6.1 LIMIT	31
6.2 TEST PROCEDURE	31
6.3 TEST SETUP	31

Page 4 of 58 Report No.: STS2208326W07



Table of Contents

6.4 EUT OPERATION CONDITIONS	31
6.5 TEST RESULTS	31
7. BANDWIDTH TEST	32
7.1 LIMIT	32
7.2 TEST PROCEDURE	32
7.3 TEST SETUP	32
7.4 EUT OPERATION CONDITIONS	32
7.5 TEST RESULTS	32
8. PEAK OUTPUT POWER TEST	33
8.1 LIMIT	33
8.2 TEST PROCEDURE	33
8.3 TEST SETUP	34
8.4 EUT OPERATION CONDITIONS	34
8.5 TEST RESULTS	34
9. ANTENNA REQUIREMENT	35
9.1 STANDARD REQUIREMENT	35
9.2 EUT ANTENNA	35
APPENDIX 1-TEST DATA	36
1. DUTY CYCLE	36
2. MAXIMUM AVERAGE CONDUCTED OUTPUT POWER	39
3. MAXIMUM PEAK CONDUCTED OUTPUT POWER	42
46DB BANDWIDTH	45
6. MAXIMUM POWER SPECTRAL DENSITY LEVEL	48
7. BAND EDGE	51
8. CONDUCTED RF SPURIOUS EMISSION	54
APPENDIX 2- EUT TEST PHOTO	58



Page 5 of 58 Report No.: STS2208326W07

Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	11 Oct. 2022	STS2208326W07	ALL	Initial Issue



Shenzhen STS Test Services Co., Ltd.



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			
15.209	Radiated Spurious Emission PASS			
15.247 (d)	Conducted Spurious & Band Edge PASS			
15.247 (e)	Power Spectral Density PASS			
15.205	Restricted bands of operation 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.

Shenzhen STS Test Services Co., Ltd.



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

No.	Item	Uncertainty
1	RF output power, conducted	±0.87dB
2	Unwanted Emissions, conducted ±2.895dB	
3	All emissions, radiated 9K-30MHz ±3.80dB	
4	All emissions, radiated 30M-1GHz ±4.09dB	
5	All emissions, radiated 1G-6GHz	±4.92dB
6	All emissions, radiated>6G	±5.49dB
7	Conducted Emission (9KHz-30MHz)	±2.73dB



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	GPS Tracker		
Brand	Trackimo		
Model Number	TRKM110-T		
Series Model(s)	N/A		
Model Difference	N/A		
	The EUT is a GPS	Tracker	
	Operation Frequency:	2402~2480 MHz	
	Modulation Type:	GFSK	
	Radio Technology:	BLE	
Product Description	Bluetooth		
	Configuration:	LE(Support 1M PHY)	
	Number Of Channel:	40	
	Antenna Type:	PIFA	
	Antenna Gain (dBi) -1.5dBi		
Channel List	Please refer to the Note 3.		
Rating	Input: DC 5V 2A		
Battery	Rated Voltage:3.7V Charge Limit Voltage:4.2V Capacity: 10000mAh		
Hardware version number	UG02 PCB V0.3		
Software version number	UG02 V0.1		
Connecting I/O Port(s)	Please refer to the Note 1.		

Note:

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

2. Note: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.

Ð

Page 9 of 58 Report No.: STS2208326W07

			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



Shenzhen STS Test Services Co., Ltd.





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)	1 Mbps/GFSK
Mode 2	TX CH19(2440MHz) 1 Mbps/GFSK	
Mode 3	TX CH39(2480MHz)	1 Mbps/GFSK

Note:

(1) We tested for all available 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.

(2) The battery is fully-charged during the radiated and RF conducted test.

For AC Conducted Emission

	Test Case
AC Conducted Emission	Mode 4 : Keeping BT TX

2.3 TEST SOFTWARE AND POWER LEVEL

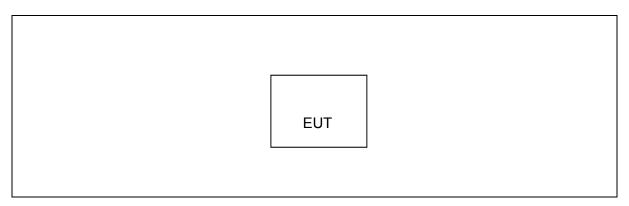
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

RF Function	Туре	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
BLE	BLE	GFSK	-1.5	default	Release

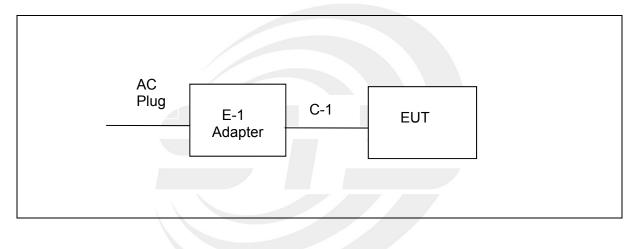


2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test



Conducted Emission Test







2.5 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.	Length	Note	
N/A	N/A	N/A	N/A	N/A	N/A	

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
E-1	Adapter	HUAWEI	HW-050450C00	N/A	N/A
C-1	USB Cable	N/A	N/A	100cm	NO

Note:

- (1) For detachable type I/O cable should be specified the length in cm in ^rLength _l column.
- (2) "YES" is means "with core"; "NO" is means "without core".



Report No.: STS2208326W07

2.6 EQUIPMENTS LIST

	R	F Radiation Test Equi	pment		
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
Temperature & Humidity	SW-108	SuWei	N/A	2022.03.02	2023.03.01
Pre-Amplifier(0.1M-3GHz)	EM	EM330	060665	2022.07.04	2023.07.03
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2022.09.29	2023.09.28
Pre-mplifier(18G-40G)	SKET	LNPA_1840-50	SK2018101801	2022.07.23	2023.07.22
Positioning Controller	MF	MF-7802	MF-780208587	N/A	N/A
Signal Analyzer	R&S	FSV 40-N	101823	2022.09.29	2023.09.28
Switch Control Box	N/A	N/A	N/A	N/A	N/A
Filter Box	BALUN Technology	SU319E	BL-SZ1530051	N/A	N/A
Active loop Antenna	ZHINAN	ZN30900C	16035	2022.03.02	2023.03.01
Bilog Antenna	TESEQ	CBL6111D	34678	2022.09.30	2024.09.29
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2021.10.11	2023.10.10
Horn Antenna	A-INFOMW	LB-180400-KF	J211020657	2021.09.28	2023.09.27
Antenna Mast	MF	MFA-440H	N/A	N/A	N/A
Turn Table	MF	SC100_1	60531	N/A	N/A
AC Power Source	APC	KDF-11010G	F214050035	N/A	N/A
DC Power Supply	Zhaoxin	RXN 605D	20R605D11010081	N/A	N/A
Test SW	EZ-EMC		Ver.STSLAB-03A	1 RE	
	C	Conduction Test equip	oment		
Kind of Equipment	Manufacturer	Туре No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2022.09.29	2023.09.28
LISN	R&S	ENV216	101242	2022.09.28	2023.09.27
LISN	EMCO	3810/2NM	23625	2022.09.28	2023.09.27
Temperature & Humidity	HH660	Mieo	N/A	2022.09.30	2023.09.29
Test SW	EZ-EMC	Ver.STSLAB-03A1 CE			
		RF Connected Tes	st		
Kind of Equipment	Manufacturer	Туре No.	Serial No.	Last calibration	Calibrated until
Signal Analyzer	Agilent	N9020A	MY51510623	2022.03.01	2023.02.28
Switch control box	MW	MW100-RFCB	N/A	N/A	N/A
Temperature & Humidity	HH660	Mieo	N/A	2022.09.30	2023.09.29
Test SW	MW		MTS 8310_2.0	0.0	



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table.

	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 is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 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 is at least 80 cm from the nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

Vertical Reference Ground Plane EUT 40cm EUT 80cm N Horizontal Reference Ground Plane

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 cm from other units and other metal planes support units.

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

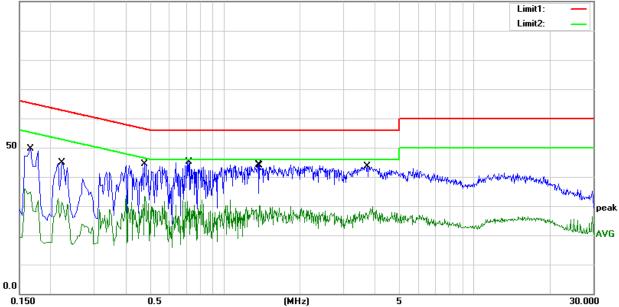
Temperature:	26.8(C)	Relative Humidity:	59%RH
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode:	Mode 4		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(d B)	(dBuV)	(dBuV)	(dB)	
1	0.1660	29.35	20.33	49.68	65.16	-15.48	QP
2	0.1660	15.56	20.33	35.89	55.16	-19.27	AVG
3	0.2220	24.47	20.41	44.88	62.74	-17.86	QP
4	0.2220	12.17	20.41	32.58	52.74	-20.16	AVG
5	0.4780	23.93	20.54	44.47	56.37	-11.90	QP
6	0.4780	12.98	20.54	33.52	46.37	-12.85	AVG
7	0.7180	24.74	20.35	45.09	56.00	-10.91	QP
8	0.7180	11.86	20.35	32.21	46.00	-13.79	AVG
9	1.3660	23.74	20.30	44.04	56.00	-11.96	QP
10	1.3860	9.93	20.30	30.23	46.00	-15.77	AVG
11	3.7300	23.21	20.38	43.59	56.00	-12.41	QP
12	3.7300	9.39	20.38	29.77	46.00	-16.23	AVG

Remark:

- 1. All readings are Quasi-Peak and Average values
- 2. Margin = Result (Result = Reading + Factor)–Limit
- 3. Factor=LISN factor+Cable loss+Limiter (10dB)

100.0 dBuV



Shenzhen STS Test Services Co., Ltd.



Page 17 of 58 Report No.: STS2208326W07

Temperature:	26.8(C)	Relative Humidity:	59%RH
Test Voltage:	AC 120V/60Hz	Phase:	Ν
Test Mode:	Mode 4		

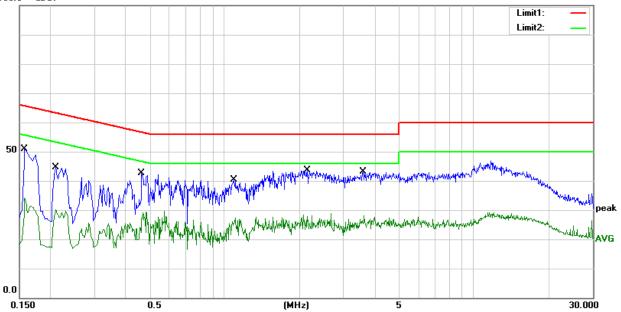
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(d B)	(dBuV)	(dBuV)	(dB)	
1	0.1580	30.67	20.31	50.98	65.57	-14.59	QP
2	0.1580	13.72	20.31	34.03	55.57	-21.54	AVG
3	0.2100	24.24	20.44	44.68	63.21	-18.53	QP
4	0.2100	9.71	20.44	30.15	53.21	-23.06	AVG
5	0.4660	22.11	20.52	42.63	56.58	-13.95	QP
6	0.4660	9.19	20.52	29.71	46.58	-16.87	AVG
7	1.0900	20.14	20.31	40.45	56.00	-15.55	QP
8	1.0900	7.31	20.31	27.62	46.00	-18.38	AVG
9	2.1500	23.16	20.39	43.55	56.00	-12.45	QP
10	2.1500	8.47	20.39	28.86	46.00	-17.14	AVG
11	3.5900	22.61	20.49	43.10	56.00	-12.90	QP
12	3.5900	7.56	20.49	28.05	46.00	-17.95	AVG

Remark:

1. All readings are Quasi-Peak and Average values

- 2. Margin = Result (Result = Reading + Factor)-Limit
- 3. Factor=LISN factor+Cable loss+Limiter (10dB)

100.0 dBuV



Shenzhen STS Test Services Co., Ltd.



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 (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			

Shenzhen STS Test Services Co., Ltd.



For Radiated Emission

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP/AV
Start Frequency	9 KHz/150KHz(Peak/QP/AV)
Stop Frequency	150KHz/30MHz(Peak/QP/AV)
	200Hz (From 9kHz to 0.15MHz)/
RB / VB (emission in restricted	9KHz (From 0.15MHz to 30MHz);
band)	200Hz (From 9kHz to 0.15MHz)/
	9KHz (From 0.15MHz to 30MHz)

Spectrum Parameter	Setting	
Attenuation	Auto	
Detector	Peak/QP	
Start Frequency	30 MHz(Peak/QP)	
Stop Frequency	1000 MHz (Peak/QP)	
RB / VB (emission in restricted band)	120 KHz / 300 KHz	

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	1 MHz / 3 MHz(Peak)	
band)	1 MHz/1/T MHz(AVG)	

For Restricted band

Spectrum Parameter	er Setting	
Detector	Peak/AV	
Start/Stan Fraguanay	Lower Band Edge: 2310 to 2410 MHz	
Start/Stop Frequency	Upper Band Edge: 2475 to 2500 MHz	
	1 MHz / 3 MHz(Peak)	
RB / VB	1 MHz/1/T MHz(AVG)	

Shenzhen STS Test Services Co., Ltd.



Page 20 of 58 Report No.: STS2208326W07

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

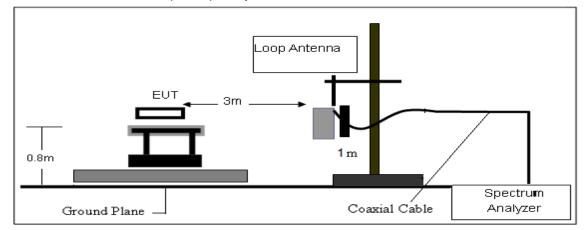
- a. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the 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 polarization 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 QuasiPeak detector mode will be re-measured.
- e. If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was 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.

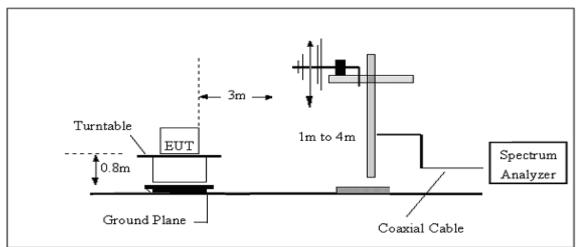


4.3 TEST SETUP

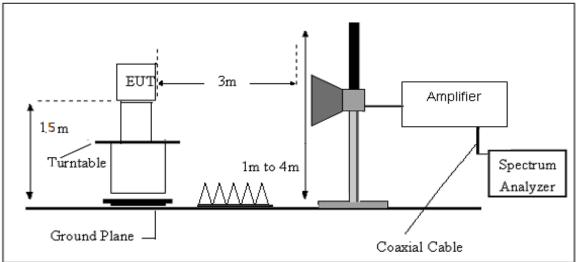
(A) Radiated Emission Test-Up Frequency Below 30MHz

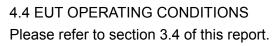


(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



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







4.5 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:	23.1(C)	Relative Humidtity:	60%RH
Test Voltage:	DC 3.7V	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.





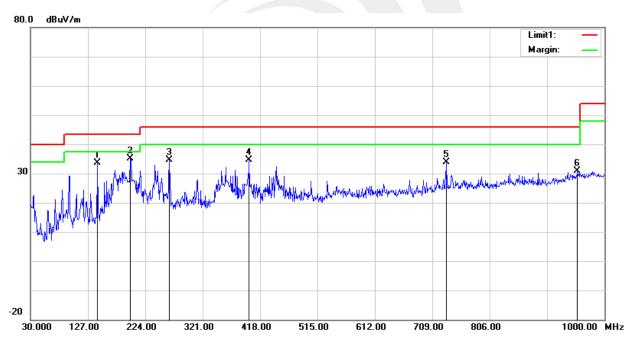
(30MHz -1000MHz)

Temperature:	23.1(C)	Relative Humidity:	60%RH		
Test Voltage:	DC 3.7V	Phase:	Horizontal		
Test Mode:	Mode 1/2/3 (Mode 3 worst mode)				

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	143.4900	51.78	-18.23	33.55	43.50	-9.95	peak
2	198.7800	56.26	-21.12	35.14	43.50	-8.36	peak
3	264.7400	49.33	-14.75	34.58	46.00	-11.42	peak
4	399.5700	45.78	-11.16	34.62	46.00	-11.38	peak
5	733.2500	36.22	-2.35	33.87	46.00	-12.13	peak
6	954.4100	29.22	1.67	30.89	46.00	-15.11	peak

Remark:

- 1. Margin = Result (Result = Reading + Factor)-Limit
- 2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





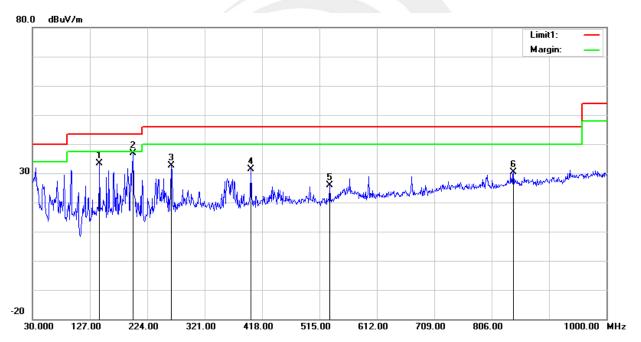
Page 25 of 58 Report No.: STS2208326W07

Temperature:	23.1(C)	Relative Humidity:	60%RH		
Test Voltage:	DC 3.7V	Phase:	Vertical		
Test Mode:	Mode 1/2/3 (Mode 3 worst mode)				

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	143.4900	51.53	-18.23	33.30	43.50	-10.20	peak
2	199.7500	57.94	-21.11	36.83	43.50	-6.67	peak
3	264.7400	47.33	-14.75	32.58	46.00	-13.42	peak
4	399.5700	42.54	-11.16	31.38	46.00	-14.62	peak
5	532.4600	33.08	-7.31	25.77	46.00	-20.23	peak
6	842.8600	30.94	-0.46	30.48	46.00	-15.52	peak

Remark:

- 1. Margin = Result (Result = Reading + Factor)-Limit
- 2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





(1GHz-25GHz) Spurious emission Requirements

GFSK

Comment	Detector	Margin	Limits	Emission Level	Corrected Factor	Antenna Factor	Loss	Amplifier	Meter Reading	Frequency
	Туре	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(dB/m)	(dB)	(dB)	(dBµV)	(MHz)
				2402 MHz)	nannel (GFSK/2	Low Ch				
Vertical	PK	-21.71	74.00	52.29	-9.80	28.20	6.70	44.70	62.09	3264.63
Vertical	AV	-12.85	54.00	41.15	-9.80	28.20	6.70	44.70	50.95	3264.63
Horizontal	PK	-22.88	74.00	51.12	-9.80	28.20	6.70	44.70	60.92	3264.75
Horizontal	AV	-13.83	54.00	40.17	-9.80	28.20	6.70	44.70	49.97	3264.75
Vertical	PK	-19.23	74.00	54.77	-3.56	31.60	9.04	44.20	58.33	4804.56
Vertical	AV	-7.93	54.00	46.07	-3.56	31.60	9.04	44.20	49.63	4804.56
Horizontal	PK	-18.96	74.00	55.04	-3.56	31.60	9.04	44.20	58.60	4804.42
Horizontal	AV	-7.33	54.00	46.67	-3.56	31.60	9.04	44.20	50.23	4804.42
Vertical	PK	-27.66	74.00	46.34	-2.34	32.00	9.86	44.20	48.68	5359.59
Vertical	AV	-16.67	54.00	37.33	-2.34	32.00	9.86	44.20	39.67	5359.59
Horizontal	PK	-28.02	74.00	45.98	-2.34	32.00	9.86	44.20	48.32	5359.72
Horizontal	AV	-17.55	54.00	36.45	-2.34	32.00	9.86	44.20	38.79	5359.72
Vertical	PK	-15.70	74.00	58.30	3.40	35.50	11.40	43.50	54.90	7205.84
Vertical	AV	-5.69	54.00	48.31	3.40	35.50	11.40	43.50	44.91	7205.84
Horizontal	PK	-16.47	74.00	57.53	3.40	35.50	11.40	43.50	54.13	7205.74
Horizontal	AV	-5.63	54.00	48.37	3.40	35.50	11.40	43.50	44.97	7205.74
	•			/2440 MHz)	Channel (GFSK	Middle C				
Vertical	PK	-21.78	74.00	52.22	-9.80	28.20	6.70	44.70	62.02	3263.13
Vertical	AV	-13.17	54.00	40.83	-9.80	28.20	6.70	44.70	50.63	3263.13
Horizontal	PK	-22.48	74.00	51.52	-9.80	28.20	6.70	44.70	61.32	3263.08
Horizontal	AV	-12.82	54.00	41.18	-9.80	28.20	6.70	44.70	50.98	3263.08
Vertical	PK	-18.34	74.00	55.66	-3.56	31.60	9.04	44.20	59.22	4880.10
Vertical	AV	-7.22	54.00	46.78	-3.56	31.60	9.04	44.20	50.34	4880.10
Horizontal	PK	-19.40	74.00	54.60	-3.56	31.60	9.04	44.20	58.16	4880.15
Horizontal	AV	-7.32	54.00	46.68	-3.56	31.60	9.04	44.20	50.24	4880.15
Vertical	PK	-27.73	74.00	46.27	-2.34	32.00	9.86	44.20	48.61	5357.05
Vertical	AV	-16.52	54.00	37.48	-2.34	32.00	9.86	44.20	39.82	5357.05
Horizontal	PK	-27.80	74.00	46.20	-2.34	32.00	9.86	44.20	48.54	5357.39
Horizontal	AV	-17.58	54.00	36.42	-2.34	32.00	9.86	44.20	38.76	5356.91
Vertical	PK	-16.29	74.00	57.71	3.40	35.50	11.40	43.50	54.31	7320.85
Vertical	AV	-6.19	54.00	47.81	3.40	35.50	11.40	43.50	44.41	7320.85
Horizontal	PK	-16.49	74.00	57.51	3.40	35.50	11.40	43.50	54.11	7320.51
Horizontal	AV	-6.64	54.00	47.36	3.40	35.50	11.40	43.50	43.96	7320.51



Page 27 of 58 Report No.: STS2208326W07

				High Char	nnel (GFSK/	2480 MHz)				
3264.61	61.94	44.70	6.70	28.20	-9.80	52.14	74.00	-21.86	PK	Vertical
3264.61	50.19	44.70	6.70	28.20	-9.80	40.39	54.00	-13.61	AV	Vertical
3264.64	61.76	44.70	6.70	28.20	-9.80	51.96	74.00	-22.04	PK	Horizontal
3264.64	50.57	44.70	6.70	28.20	-9.80	40.77	54.00	-13.23	AV	Horizontal
4960.55	59.15	44.20	9.04	31.60	-3.56	55.59	74.00	-18.41	PK	Vertical
4960.55	49.14	44.20	9.04	31.60	-3.56	45.58	54.00	-8.42	AV	Vertical
4960.38	58.68	44.20	9.04	31.60	-3.56	55.12	74.00	-18.88	PK	Horizontal
4960.38	50.00	44.20	9.04	31.60	-3.56	46.44	54.00	-7.56	AV	Horizontal
5359.74	49.06	44.20	9.86	32.00	-2.34	46.72	74.00	-27.28	PK	Vertical
5359.74	39.49	44.20	9.86	32.00	-2.34	37.15	54.00	-16.85	AV	Vertical
5359.57	48.10	44.20	9.86	32.00	-2.34	45.76	74.00	-28.24	PK	Horizontal
5359.57	39.33	44.20	9.86	32.00	-2.34	36.99	54.00	-17.01	AV	Horizontal
7439.77	54.19	43.50	11.40	35.50	3.40	57.59	74.00	-16.41	PK	Vertical
7439.77	43.84	43.50	11.40	35.50	3.40	47.24	54.00	-6.76	AV	Vertical
7439.72	53.99	43.50	11.40	35.50	3.40	57.39	74.00	-16.61	PK	Horizontal
7439.72	43.69	43.50	11.40	35.50	3.40	47.09	54.00	-6.91	AV	Horizontal

Note:

1) Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Emission Level = Reading + Factor

2) 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.

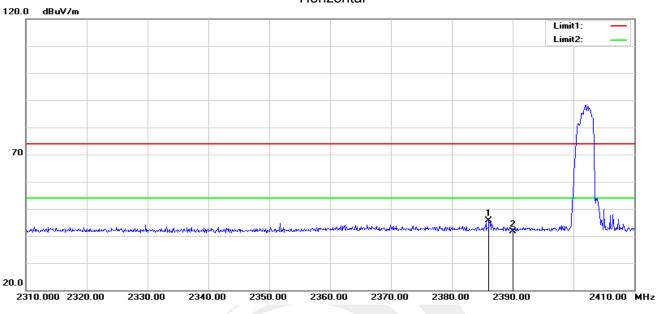




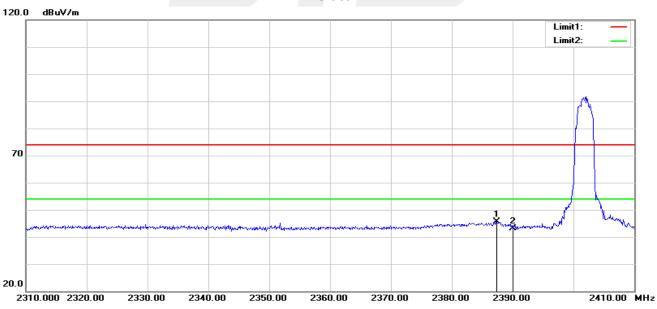
Report No.: STS2208326W07

4.6 TEST RESULTS (Restricted Bands Requirements)

GFSK-Low Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2386.100	41.23	4.28	45.51	74.00	-28.49	peak
2	2390.000	37.28	4.34	41.62	74.00	-32.38	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2387.400	41.43	4.30	45.73	74.00	-28.27	peak
2	2390.000	38.78	4.34	43.12	74.00	-30.88	peak

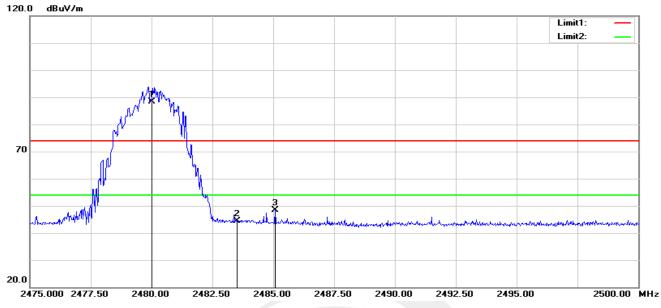
Vertical



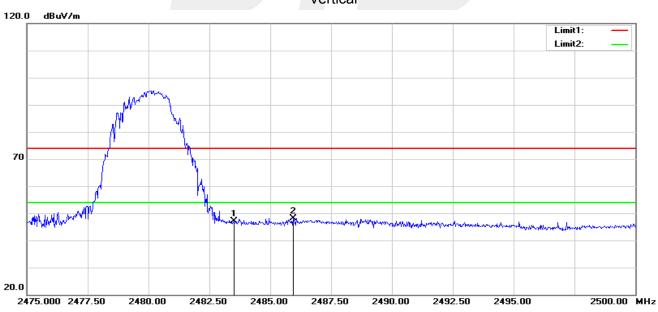
Page 29 of 58

Report No.: STS2208326W07

GFSK-High Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2480.000	83.73	4.60	88.33	74.00	14.33	peak
2	2483.500	39.66	4.60	44.26	74.00	-29.74	peak
3	2485.075	43.78	4.61	48.39	74.00	-25.61	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	42.65	4.60	47.25	74.00	-26.75	peak
2	2485.950	43.64	4.61	48.25	74.00	-25.75	peak

Vertical



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

Spectrum Parameter	Setting
Detector	Peak
Start/Stap Eraguanay	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 is connected to the Spectrum Analyzer; the RF load attached to the EUT antenna termina 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 Please refer to section 3.4 of this report.

5.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



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 kHz \ge RBW \ge 3 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

Specturm Analyzer		EUT
----------------------	--	-----

6.4 EUT OPERATION CONDITIONS Please refer to section 3.4 of this report.

6.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



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 \geq 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 \geq 6 dB.

7.3 TEST SETUP



7.4 EUT OPERATION CONDITIONS Please refer to section 3.4 of this report.

7.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



8. PEAK OUTPUT POWER TEST

8.1 LIMIT

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

8.2 TEST PROCEDURE

One of the following procedures may be used to determine the maximum peak conducted output power of a DTS EUT.

 $RBW \ge DTS$ bandwidth

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:

a) Set the RBW \geq DTS bandwidth.

b) Set VBW \geq [3 \times RBW].

c) Set span \geq [3 \times RBW].

d) Sweep time = auto couple.

e) Detector = peak.

f) Trace mode = max hold.

g) Allow trace to fully stabilize.

h) Use peak marker function to determine the peak amplitude level.

Integrated band power method:

The following procedure can be used when the maximum available RBW of the instrument is less than the

DTS bandwidth:

a) Set the RBW = 1 MHz.

b) Set the VBW \geq [3 \times RBW].

c) Set the span \geq [1.5 × DTS bandwidth].

d) Detector = peak.

e) Sweep time = auto couple.

f) Trace mode = max hold.

g) Allow trace to fully stabilize.

h) Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select the peak detector). If the instrument does not have a band power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS channel bandwidth.

PKPM1 Peak power meter method:

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

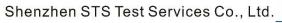




8.4 EUT OPERATION CONDITIONS Please refer to section 3.4 of this report.

8.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.





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.



Shenzhen STS Test Services Co., Ltd.



Page 36 of 58 Report No.: STS2208326W07

APPENDIX 1-TEST DATA

1. Duty Cycle

Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	20.15	6.96	11.42
NVNT	BLE 1M	2440	20.15	6.96	11.42
NVNT	BLE 1M	2480	20.15	6.96	11.42



Shenzhen STS Test Services Co., Ltd.



Page 37 of 58 Repor

Report No.: STS2208326W07

		Test Gra ycle NVNT B	aphs LE 1M 2402N	ИНz	
gilent Spectrum Analyzer - Swe RL RF 50 Ω Center Freq 2.40200	AC 0000 GHz	SENSE:PULSE		a: Log-Pwr	08:58:10 AM Aug 17, 20 TRACE 1 2 3 4 TYPE WWWW DET P N N N
	PNO: IFGair	Fast Trig: Free R n:Low #Atten: 30 d			
Ref Offset 0.5 0 dB/div Ref 20.50 d					Mkr1 52.40 µ -13.24 dB
og 10.5					
500 9.50		3			
29.5					
39.5					
19.5 59.5			diferent erneli	lie is lande 1. je	etabel telle davi
59.5 - 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4					
enter 2.402000000 G tes BW 1.0 MHz	SHz	#VBW 3.0 MHz		Sweep	Span 0 H 2.000 ms (10001 pi
KR MODE TRC SCL	× 52.40 µs	-13.24 dBm	TION FUNCTION WIDTH	FUI	NCTION VALUE
2 N 1 t 3 N 1 t 4	574.8 μs 662.4 μs	-13.30 dBm -11.46 dBm			
4 5 6 7 8 9 0					
8					
10 11					
a design of the second se					1
			STATUS		>
	Duty Cy	ycle NVNT B	status LE 1M 2440N	ИНz	>
rg gilent Spectrum Analyzer - Swe RL RF 50 Ω	AC		LE 1M 2440N ALIGNAUTO		09:01:45 AM Aug 17, 20
rg gilent Spectrum Analyzer - Swe RL RF 50 Ω	AC DOODO GHZ PNO:	SENSE:PULSE 	LE 1M 2440N ALIGNAUTO Avg Type	MHZ e: Log-Pwr	
ing glient Spectrum Analyzer - Swe RL RF SO Q enter Freq 2,44000 Ref Offset 0.5	AC AC PNO: IOOOOO GHZ IFGair	SENSE:PULSE 	LE 1M 2440N ALIGNAUTO Avg Type		09:01:45 AM Aug 17, 22 TRACE 22 3 4 TYPE WWWW DET P NNN Mkr1 182.2 1
ss ss RL RF 50 Ω enter Freq 2.44000 Ref Offset 0.6 0 dB/div Ref 30.00 c	AC AC PNO: IOOOOO GHZ IFGair	SENSE:PULSE 	LE 1M 2440N ALIGNAUTO Avg Type		09:01:45 AM Aug 17, 22 TRACE 12 3 4 TYPE WANNA DET IP N N N
Image: Sectrum Analyzer - Swork RL RF 50 Ω enter Freq 2.44000 Ref Offset 0.5 0 dB/div Ref 30.00 c 0 dB/div Ref 30.00 c	AC AC PNO: IOOOOO GHZ IFGair	SENSE:PULSE 	LE 1M 2440N ALIGNAUTO Avg Type		09:01:45 AM Aug 17, 22 TRACE 22 3 4 TYPE WWWW DET P NNN Mkr1 182.2 1
Image: Sectrum Analyzer - Sweet Rt RF S0 @ enter Freq 2.44000 Ref Offset 0.5 Ref 000 cm 0 dB/div Ref 30.00 cm Ref 30.00 cm 20 0 0 0 0 0.00 0 0 0	AC AC PNO: IOOOOO GHZ IFGair	SENSE:PULSE 	LE 1M 2440N ALIGNAUTO Avg Type		09:01:45 AM Aug 17, 22 TRACE 22 3 4 TYPE WWWW DET P NNN Mkr1 182.2 1
Image: signed spectrum Analyzer - Sweet Rt RF S0 @ RL<	AC AC PNO: IOOOOO GHZ IFGair	SENSE:PULSE 	LE 1M 2440N ALIGNAUTO Avg Type		09:01:45 AM Aug 17, 22 TRACE 22 3 4 TYPE WWWW DET P NNN Mkr1 182.2 1
Image: Signature Spectrum Analyzer Swa RL RF S0 Q enter Freq 2.44000 Sector Sector 0 dB/div Ref Offset 0.5 Sector 0 dB/div Ref 30.00 c Sector 0 0 Sector Sector 0 0 Sector Sector 0 0 Sector Sector	AC PNO: PNO: IFGain AB AB AB AB AB	SENSE-PULSE Fast Trig: Free R Atten: 40 d	LE 1M 2440N ALIGN AUTO Avg Type	: Log-Pwr	09:01:45 AM Aug 17, 20 TRACE 123 4 TYPE WEATH OCT P NNN OCT P NNN Mkr1 182.2 1 -10.73 dB
Image: Section Spectrum Analyzer - Sweet Rt RF So Q RL<	pt SA AC PNO: IFGair 5 dB 1Bm	SENSE-PULSE Fast Trig: Free R Atten: 40 d	LE 1M 2440N ALIGNAUTO Avg Type	: Log-Pwr	09:01:45 AM Aug 17, 20 TRACE 12 3 4 TYPE WWWWW per IP NNN Mkr1 182.2 1 -10.73 dB
Silent Spectrum Analyzer – Swo RL RF S0 Ω enter Freq 2.44000 0 dB/div Ref 30.00 c 0 g 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PICSA AC IPNO: IFGair 5 dB IBM	SENSE-PULSE Fast Trig: Free R Atten: 40 d	LE 1M 2440N ALIGN AUTO Avg Type	: Log-Pwr	09:01:45 AM Aug 17, 20 TRACE 1234 Type Weinwein Mkr1 182.2 1 -10.73 dB
Ident Spectrum Analyzer - Swa RL RF 50 Q enter Freq 2.44000 0 dB/div Ref Offset 0.6 0 dB/div Ref 30.00 c	PICSA AC IPNO: IFGair 5 dB IBM	SENSE-PUSE Fast Trig: Free R Atten: 40 d	LE 1M 2440N	e: Log-Pwr	09:01:45 AM Aug 17, 21 TRACE 12 3 # TYPE Mkr1 182.2 1 -10.73 dB
Silent Spectrum Analyzer - Swe RL RF 50 Q enter Freq 2.44000 0 dB/div Ref 30.00 c 0	PIC SA AC PNO: IFGair 5 dB 1Bm HZ HZ	SENSE-PULSE Fast Trig: Free R Atten: 40 dl	LE 1M 2440N ALIGN AUTO Avg Type	e: Log-Pwr	09:01:45 AM Aug 17, 20 TRACE 23 4 TYPE WWWWWW EIP NINK Mkr1 182.2 1 -10.73 dB
Silent Spectrum Analyzer - Swe RL RF 50 Q enter Freq 2.44000 0 dB/div Ref 30.00 c 0	PIC SA AC PNO: PNO: IF Gain G dB IBm HZ X	SENSE-PULSE Fast Trig: Free R Atten: 40 dl	LE 1M 2440N	e: Log-Pwr	09:01:45 AM Aug 17, 21 TRACE 12 3 # TYPE Mkr1 182.2 1 -10.73 dB
SG SIGNT Spectrum Analyzer - Swa RL RF SO Q Center Freq 2.44000 O dB/div Ref 30.00 c SG SG SG SG SG SG SG SG SG SG	PIC SA AC PNO: PNO: IFGain So dB IBM AC PNO: IFGain So dB IBM AC PNO: IFGain So dB IBM AC IFGain So dB IBM AC IFGain IFGain IFGain IFGain IFGain IFGain IFGain IFGAIN IF	SENSE-PULSE Fast → Trig: Free F Atten: 40 dl	LE 1M 2440N	e: Log-Pwr	09:01:45 AM Aug 17, 21 TRACE 12 3 # TYPE Mkr1 182.2 1 -10.73 dB
Signet Spectrum Analyzer - Swy RL RF S0 Q center Freq 2.44000 Ref Offset 0.6 0 dB/div Ref 30.00 c 0 g	PIC SA AC PNO: PNO: IFGain So dB IBM AC PNO: IFGain So dB IBM AC PNO: IFGain So dB IBM AC IFGain So dB IBM AC IFGain IFGain IFGain IFGain IFGain IFGain IFGain IFGAIN IF	SENSE-PULSE Fast → Trig: Free F Atten: 40 dl	LE 1M 2440N	e: Log-Pwr	09:01:45 AM Aug 17, 21 TRACE 12 3 # TYPE Mkr1 182.2 1 -10.73 dB
SG SIlent Spectrum Analyzer - Swe RL RF SO Q Center Freq 2.44000 Set offset 0.5 O dB/div Ref Offset 0.5 O dB/div Ref 30.00 c State Ref 30.00 c O dB/div Ref 30.00 c State Ref 30.00 c O dB/div Ref 30.00 c State Ref 30.00 c	PIC SA AC PNO: PNO: IFGain So dB IBM AC PNO: IFGain So dB IBM AC PNO: IFGain So dB IBM AC IFGain So dB IBM AC IFGain IFGain IFGain IFGain IFGain IFGain IFGain IFGAIN IF	SENSE-PULSE Fast → Trig: Free F Atten: 40 dl	LE 1M 2440N	e: Log-Pwr	Mkr1 182.: -10.73 c

Shenzhen STS Test Services Co., Ltd.



Duty Cycle NVNT BLE 1M 2480MHz pt S/ nt Spectrum Analyze RL 0:03:42 AM Aug 17, 2022 TRACE 1 2 3 4 5 6 Center Freq 2.480000000 GHz Avg Type: Log-Pwr Trig: Free Run #Atten: 30 dB DET P N N N N PNO: Fast IFGain:Low \rightarrow Mkr1 46.00 μs -12.49 dBm Ref Offset 0.5 dB Ref 20.50 dBm 10 dB/div Log 10. $\langle \rangle$ (SA 4 9.50 19.6 29.5 39.6 49.5 والمراجع فالفا فالتراج المتحد والمراجع أحد ويتافيه فلنقتص وتابيانا المأوانية أتتأول 59 69 4 ly 11 Center 2.480000000 GHz Res BW 1.0 MHz Span 0 Hz #VBW 3.0 MHz Sweep 2.000 ms (10001 pts) MKR MODE TRC SCL FUNCTIO FUNCTION V FUNCTION VALUE -12.49 dBm -12.47 dBm -10.76 dBm 46.00 µs 568.4 µs 656.0 µs 1 2 3 4 5 6 7 8 9 10 11 NNN t t SG STATUS

Page 38 of 58



Shenzhen STS Test Services Co., Ltd.



Page 39 of 58 Report No.: STS2208326W07

2. Maximum Average Conducted Output Power

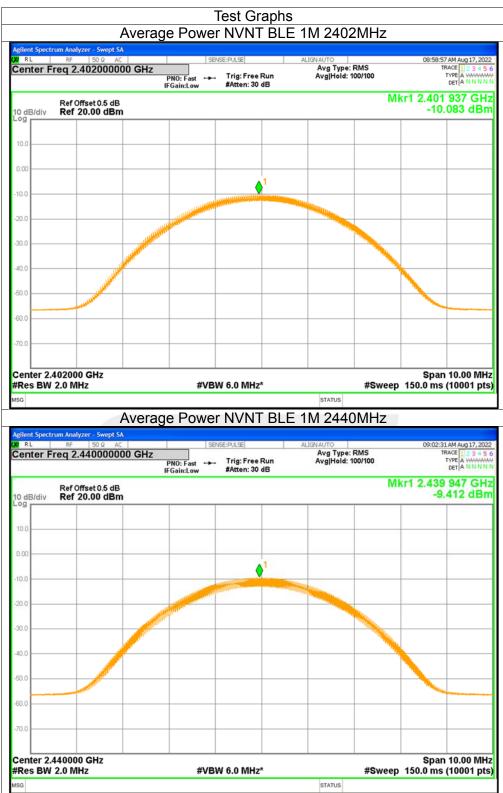
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	-10.08	6.96	-3.12	<=30	Pass
NVNT	BLE 1M	2440	-9.41	6.96	-2.45	<=30	Pass
NVNT	BLE 1M	2480	-9.46	6.96	-2.5	<=30	Pass



Shenzhen STS Test Services Co., Ltd.



Page 40 of 58 Report No.: STS2208326W07



П



Report No.: STS2208326W07 Page 41 of 58



Average Power NVNT BLE 1M 2480MHz





Page 42 of 58 Report No.: STS2208326W07

3. Maximum Peak Conducted Output Power

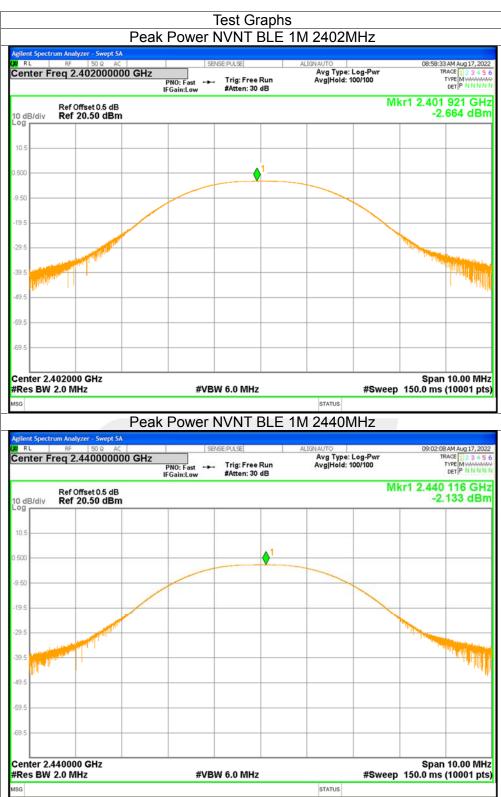
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	-2.66	<=30	Pass
NVNT	BLE 1M	2440	-2.13	<=30	Pass
NVNT	BLE 1M	2480	-1.77	<=30	Pass



Shenzhen STS Test Services Co., Ltd.



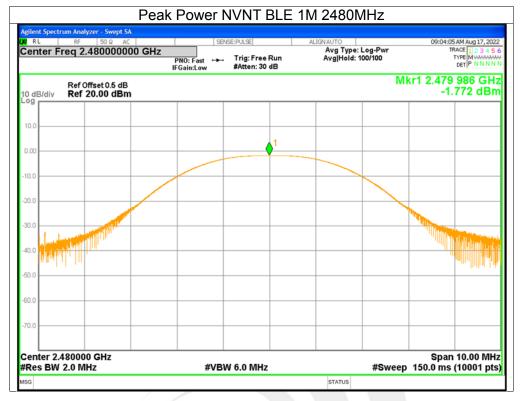
Page 43 of 58 Report No.: STS2208326W07



П



Page 44 of 58 Report No.: STS2208326W07





Shenzhen STS Test Services Co., Ltd.



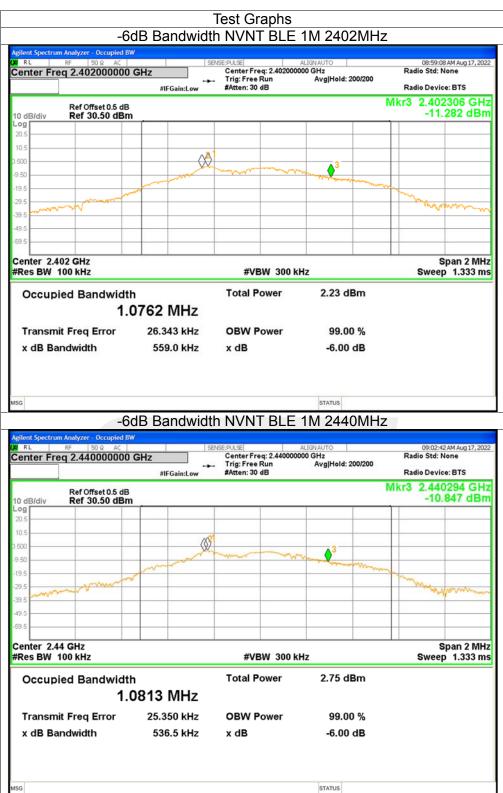
4. -6dB Bandwidth

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	0.56	>=0.5	Pass
NVNT	BLE 1M	2440	0.54	>=0.5	Pass
NVNT	BLE 1M	2480	0.55	>=0.5	Pass



Shenzhen STS Test Services Co., Ltd.







Page 47 of 58 Report No.: STS2208326W07

-6dB Bandwidth NVNT BLE 1M 2480MHz





Shenzhen STS Test Services Co., Ltd.



Page 48 of 58 Report No.: STS2208326W07

6. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	-21.57	<=8	Pass
NVNT	BLE 1M	2440	-20.75	<=8	Pass
NVNT	BLE 1M	2480	-20.4	<=8	Pass

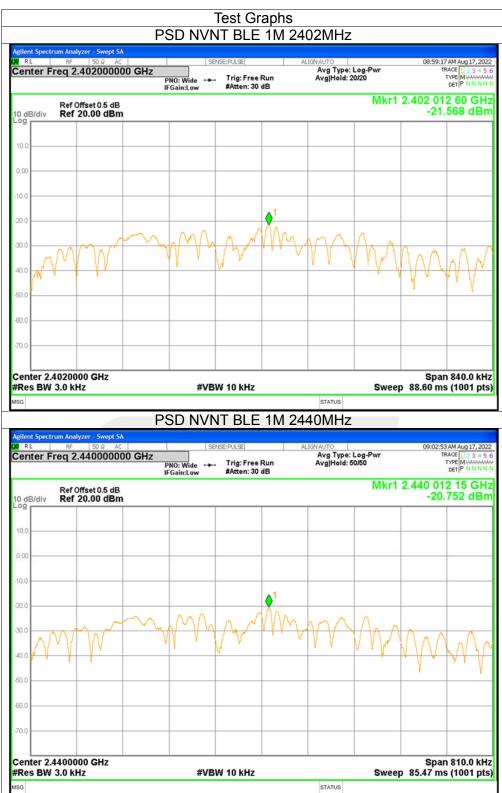


Shenzhen STS Test Services Co., Ltd.



Page 49 of 58

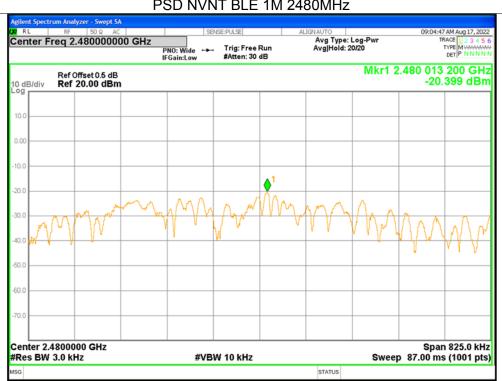
Report No.: STS2208326W07



Shenzhen STS Test Services Co., Ltd.



Report No.: STS2208326W07



PSD NVNT BLE 1M 2480MHz

Page 50 of 58



П



Page 51 of 58 Report No.: STS2208326W07

7. Band Edge

Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	-45.04	<=-20	Pass
NVNT	BLE 1M	2480	-51.56	<=-20	Pass



Shenzhen STS Test Services Co., Ltd.

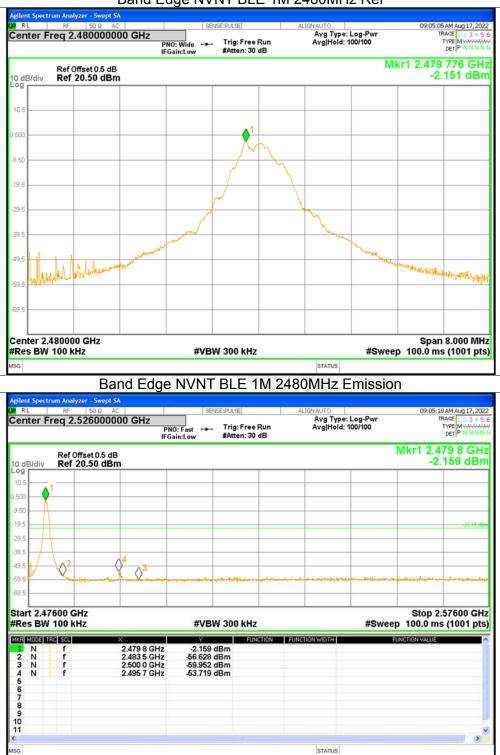


Page 52 of 58 Report No.: STS2208326W07

	02MHz Ref	
igilent Spectrum Analyzer - Swept SA C RL RF 50 Q AC SENSE:PULSE ALIX		00,00.00.00.00.00.00
RL RF S0 Ω AC SENSE:PULSE ALIC Center Freq 2.402000000 GHz Trig:Free Run IFGain:Low #Atten: 30 dB	Avg Type: Log-Pwr Avg Hold: 100/100	08:59:35 AM Aug 17, 20 TRACE 1 2 3 4 5 TYPE M MMMMM DET P N N N
Ref Offset 0.5 dB 0 dB/div Ref 20.50 dBm	l	Mkr1 2.401 776 GH -3.085 dBi
-og		
10.5		
.500		
9.50		
19.5		
29.5	3	
39.5	- Norman	
49.5	Martin Contraction	
59.5 Mallow Mallow March Commentation		when more word with a sport
69.5		
Center 2.402000 GHz Res BW 100 kHz #VBW 300 kHz	#Sw	Span 8.000 MH eep 100.0 ms (1001 pt
sg	STATUS	
Band Edge NVNT BLE 1M 2402	MHz Emissi	on
gilent Spectrum Analyzer - Swept SA RL RF 50 Q AC SENSE:PULSE ALIX	GNAUTO	08:59:48 AM Aug 17, 20
Center Freq 2.356000000 GHz	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE MWWWW DET P NNN
IFGain:Low #Atten: 30 dB		
Ref Offset 0.5 dB 10 dB/div Ref 20.50 dBm		Mkr1 2.401 8 GH -3.109 dBr
Ref Offset 0.5 dB 0 dB/div Ref 20.50 dBm		Mkr1 2.401 8 GH
Ref Offset 0.5 dB 0 dB/div Ref 20.50 dBm 10.5 500		Mkr1 2.401 8 GH
Ref Offset 0.5 dB 0 dB/div Ref 20.50 dBm 10.5 500 9 50		Mkr1 2.401 8 GH
Ref Offset 0.5 dB 0 dB/div Ref 20.50 dBm 9 g 9 g 9 g 9 g 9 g 9 g 9 g 9 g		Mkr1 2.401 8 GH
Ref Offset 0.5 dB 0 dB/div Ref 20.50 dBm 9 g 9 g 9 g 9 g 9 g 9 g 9 g 9 g		Mkr1 2.401 8 GH
Ref Offset 0.5 dB Ref 20.50 dBm 0g 0 0 10.5 0 0 9.60 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0 9.50 0 0		Mkr1 2.401 8 GH
Ref Offset 0.5 dB Ref 20.50 dBm 0g 0 0 10.5 0 0 10.6 0 0 9.60 0 0 9.50 0 0 </td <td></td> <td>Mkr1 2.401 8 GH</td>		Mkr1 2.401 8 GH
Ref Offset 0.5 dB Ref 20.50 dBm 		Mkr1 2.401 8 GH -3.109 dBr
Ref Offset 0.5 dB Ref 20.50 dBm 105 105 <tr< td=""><td></td><td>Mkr1 2.401 8 GH -3.109 dBr</td></tr<>		Mkr1 2.401 8 GH -3.109 dBr
Ref Offset 0.5 dB Og Ref 20.50 dBm 10.5 10.5 10.6 10.5 10.6 10.5 10.6 10.5 10.6 10.5 10.6 10.5 10.6 10.5 10.6 10.5 10.6 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5		Mkr1 2.401 8 GH -3.109 dBr
Ref Offset 0.5 dB Ref 20.50 dBm 0 dB/div Ref 20.50 dBm 10.5		Mkr1 2.401 8 GH -3.109 dBr
Ref Offset 0.5 dB Ref 20.50 dBm 0 dB/div Ref 20.50 dBm 10.5		Mkr1 2.401 8 GH -3.109 dBr
Ref Offset 0.5 dB Ref 20.50 dBm 0 dB/div Ref 20.50 dBm 10.5		Mkr1 2.401 8 GH -3.109 dBr
Ref Offset 0.5 dB 10 dB/div Ref 20.50 dBm 10 dB/div Ref 20.50 dBm 10 dB/div Ref 20.50 dBm 10 dB/div Ref 0ffset 0.5 dB 10 dB/div Ref 0ffset 0.5 dB 10 dB/div Ref 20.50 dBm 10 dB/div Ref 0ffset 0.5 dB		Mkr1 2.401 8 GF -3.109 dB



Page 53 of 58 Report No.: STS2208326W07



Band Edge NVNT BLE 1M 2480MHz Ref



Page 54 of 58 Report No.: STS2208326W07

8. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	-33.08	<=-20	Pass
NVNT	BLE 1M	2440	-43.35	<=-20	Pass
NVNT	BLE 1M	2480	-33.74	<=-20	Pass



Shenzhen STS Test Services Co., Ltd.

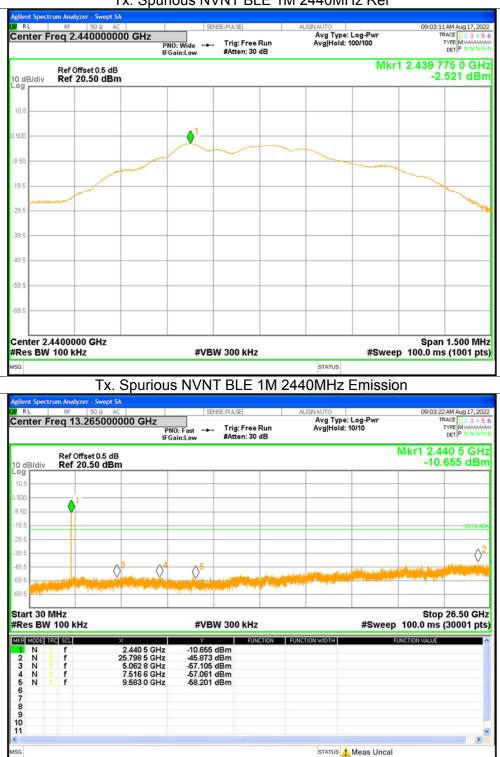


Page 55 of 58 Report No.: STS2208326W07

R L RF	50 Q AC	SENSE:	PULSE	ALIGNAUTO	09:00:07 AM Aug 17, 2
enter Freq 2.40			Trig: Free Run Atten: 40 dB	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE 1234 TYPE MWWW DET P N N N
dB/div Ref 30	et 0.5 dB .00 dBm			Mk	r1 2.401 775 0 G -3.094 dE
g					
.0					
.0					
0		1			
.0					
.0					
0					`
.0					
0					
.0					
.0					
enter 2.4020000	GHz				Span 1.500 M
es BW 100 kHz	!	#VBW :	300 kHz		ep 100.0 ms (1001 p
		SINVINI		402MHz Emissi	OII
lent Spectrum Analyze		Lanning	DIAGE		
RL RF		SENSE:		ALIGNAUTO Avg Type: Log-Pwr	TRACE 1 2 3 4
RL RF	265000000 GHz	NO: Fast -	rig: Free Run Atten: 40 dB		TRACE 1 2 3 4 TYPE MWWW DET P N N N
RL RF enter Freq 13.2 Ref Offs	265000000 GHz P IF4 set 0.5 dB	NO: Fast	rig: Free Run	Avg Type: Log-Pwr	09:00:18 AM Aug 17, 2 TRACE 12:3 4 TYPE MUMMA CET P NNN Mkr1 2.401 7 GH -9.762 dB
RL RF enter Freq 13.2 dB/div Ref 30	265000000 GHz IF	NO: Fast	rig: Free Run	Avg Type: Log-Pwr	TRACE 1234 TYPE MWWW DET P NNN Mkr1 2.401 7 GH
RL RF enter Freq 13.2 dB/div Ref Offs 8 9	265000000 GHz P IF4 set 0.5 dB	NO: Fast	rig: Free Run	Avg Type: Log-Pwr	TRACE 1234 TYPE MUMM DET P NNN Mkr1 2.401 7 GI
RL RF Ref Offs dB/div Ref 30 9 0 0 0 0 0 0 0 0 0 0 0 0 0	265000000 GHz P IF4 set 0.5 dB	NO: Fast	rig: Free Run	Avg Type: Log-Pwr	TRACE 1234 TYPE MWWW DET P NNN Mkr1 2.401 7 GH
RL RF Rter Freq 13.2 dB/div Ref 30 9 9 9 1 0 0 0 0 0 0 0 0 0 0 0 0 0	265000000 GHz P IF4 set 0.5 dB	NO: Fast	rig: Free Run	Avg Type: Log-Pwr	TRACE 1234 TYPE MWWW DET P NNN Mkr1 2.401 7 GH
RL RF Rter Freq 13.2 dB/div Ref 30 9 9 1- 0 0 0 0 0	265000000 GHz P IF4 set 0.5 dB	NO: Fast	rig: Free Run	Avg Type: Log-Pwr	TRACE 1234 TYPE MWWW DET P NNN Mkr1 2.401 7 GH
RL RF Rter Freq 13.2 dB/div Ref 30 g g h h h h h h h h h h h h h	265000000 GHz P IF4 set 0.5 dB	NO: Fast	rig: Free Run	Avg Type: Log-Pwr	TRACE 1234 TYPE MWWW DET P NNN Mkr1 2.401 7 GH
RL RF Rter Freq 13.2 dB/div Ref 30 g g g g g g g g g g g g g	265000000 GHz P IF4 set 0.5 dB	NO: Fast	rig: Free Run	Avg Type: Log-Pwr	TRACE 1234 TYPE MWWW DET P NNN Mkr1 2.401 7 GH
RL RF Rter Freq 13.2 dB/div Ref 30 g g g g g g g g g g g g g	26500000 GHz P IF: set 0.5 dB .00 dBm	NO: Fast	Trig: Free Run Atten: 40 dB	Avg Type: Log-Pwr Avg Hold: 10/10	Mkr1 2.401 7 Gi -9.762 dB
RE Ref Offs dB/div Ref 30 g dB/div Ref 30 g dB	26500000 GHz P IF: set 0.5 dB .00 dBm	NO: Fast	Trig: Free Run Atten: 40 dB	Avg Type: Log-Pwr Avg Hold: 10/10	Mkr1 2.401 7 Gi -9.762 dB
Ref Offs Ref Offs B/div Ref 30	26500000 GHz P IF: set 0.5 dB .00 dBm	NO: Fast ++ Gain:Low /	rrig: Free Run Atten: 40 dB	Avg Type: Log-Pwr Avg Hold: 10/10	Mkr1 2.401 7 Gi -9.762 dB
Ref Offs Bidiv Ref 30	265000000 GHz P IF: set 0.5 dB .00 dBm .00 dBm	N0: Fast Gain:Low #VBW : 9.762 dB 36.174 dB 36.174 dB	rrig: Free Run Atten: 40 dB	Avg Type: Log-Pwr Avg Hold: 10/10	Mkr1 2.401 7 Gi -9.762 dB
RL Ref Offs B/div Ref 30 B/div Ref 30 B/d	265000000 GHz P IF: set 0.5 dB .00 dBm	NO: Fast Gain:Low 5 #VBW :	Trig: Free Run Atten: 40 dB	Avg Type: Log-Pwr Avg Hold: 10/10	Mkr1 2.401 7 Gi -9.762 dB
Ref Offs dB/div Ref 30 Pg 00 00 00 00 00 00 00 00 00 0	265000000 GHz P IF: set 0.5 dB .00 dBm	NO: Fast Gain:Low #VBW : 9.762 dB; -36.174 dB; -46.528 dB; -46.528 dB;	Trig: Free Run Atten: 40 dB	Avg Type: Log-Pwr Avg Hold: 10/10	Mkr1 2.401 7 Gi -9.762 dB
RL Ref Offs B/div Ref 30 B/div Ref 30 B/d	265000000 GHz P IF: set 0.5 dB .00 dBm	NO: Fast Gain:Low #VBW : 9.762 dB; -36.174 dB; -46.528 dB; -46.528 dB;	Trig: Free Run Atten: 40 dB	Avg Type: Log-Pwr Avg Hold: 10/10	Mkr1 2.401 7 G -9.762 dB
RL Ref Offs B/div Ref 30 B/div Ref 30 B/d	265000000 GHz P IF: set 0.5 dB .00 dBm	NO: Fast Gain:Low #VBW : 9.762 dB; -36.174 dB; -46.528 dB; -46.528 dB;	Trig: Free Run Atten: 40 dB	Avg Type: Log-Pwr Avg Hold: 10/10	Mkr1 2.401 7 GF -9.762 dB



Page 56 of 58 Report No.: STS2208326W07





Page 57 of 58 Report No.: STS2208326W07

RL RF 50 Ω nter Freq 2.48000	00000 GHz	NO: Wide ++ Gain:Low	Trig: Free Run Atten: 40 dB	ALIGN AUTO Avg Type: Lo Avg Hold: 10	0/100	TRACE 123 TYPE M
Ref Offset 0.5 B/div Ref 30.00 d					Mkr1 2	2.479 772 0 G -2.202 di
0						
0						
0		● ¹				
0						
a was allowed as a second as a second						and the second second
0						
0						
o						
Keysight Spectrum Analyzer - Swe	ept SA	IS NVNT	300 кнz BLE 1M 2			0
Т	ept SA AC 000000 GHz		BLE 1M 2		mission	100.0 ms (1001) 02:44:26 PM Sep 08, 2 TRACE 12:34 TYPE MWH DET P NNN
T (eysight Spectrum Analyzer - Sw RL RF 50 ପ nter Freq 13.2650 Ref Offset 0.6	ept SA AC 000000 GHz IF(5 dB		BLE 1M 2	480MHz E	mission	02:44:26PM Sep 08.2 TRRE[] 2 3 4 TRPE[MWWW DET]P NNN CT1 2.480 2 G
T Gysight Spectrum Analyzer - Sw RL RF 150 nter Freq 13.2650 Ref Offset 0.6 dB/div Ref 30.00 d	ept SA AC 000000 GHz IF(5 dB		BLE 1M 2	480MHz E	mission	02:44:26 PM Sep 08, 2 TRACE 12:34 TYPE MWWW DET P NN
Ceysight Spectrum Analyzer - Swr RL RF 50 Ω nter Freq 13.2650 Ref Offset 0.6 dB/div Ref 30.00 0	ept SA AC 000000 GHz IF(5 dB		BLE 1M 2	480MHz E	mission	02:44:26PM Sep 08.2 TRRE[] 2 3 4 TRPE[MWWW DET]P NNN CT1 2.480 2 G
Ceysight Spectrum Analyzer - Swith RL RF 50 Ω nter Freq 13.2650 dB/div Ref 30.00 d	ept SA AC 000000 GHz IF(5 dB		BLE 1M 2	480MHz E	mission	02:44:26PM Sep 08.2 TRRE[] 2 3 4 TRPE[MWWW DET]P NNN CT1 2.480 2 G
Ceysight Spectrum Analyzer - Swi RL RF 50 Ω nter Freq 13.2650 dB/div Ref 30.00 d	ept SA AC 000000 GHz IF(5 dB		BLE 1M 2	480MHz E	mission	02:44:26PM Sep 08.2 TRRE[] 2 3 4 TRPE[MWWW DET]P NNN CT1 2.480 2 G
T Ceysight Spectrum Analyzer - Sw RL RF 50 Ω nter Freq 13.2650 Ref Offset 0.5 dB/div Ref 30.00 d	ept SA AC 000000 GHz IF(5 dB		BLE 1M 2	480MHz E	mission	02:44:26PM Sep 08.2 TRRE[] 2 3 4 TRPE[MWWW DET]P NNN CT1 2.480 2 G
Ceysight Spectrum Analyzer - Sw RL RF 50 Ω nter Freq 13.2650 dB/div Ref 30.00 d	ept SA AC 000000 GHz IF(5 dB		BLE 1M 2	480MHz E	og-Pwr Mi	02:44:26PM Sep 08.2 TRRE[] 2 3 4 TRPE[MWWW DET]P NNN CT1 2.480 2 G
T (cysight Spectrum Analyzer - Sw RL RF 50 Ω nter Freq 13.2650 Ref Offset 0.5 dB/div Ref 30.00 d	ept SA AC 000000 GHz IF(5 dB		BLE 1M 2	480MHz E	og-Pwr Mi	02:44:26PM Sep 08.2 TRRE[] 2 3 4 TRPE[MWWW DET]P NNN CT1 2.480 2 G
T Seysight Spectrum Analyzer - Sw RL RF 50 Ω nter Freq 13.26500 Bef Offset 0.5 dB/div Ref 30.00 d	ept SA AC 000000 GHz IF(5 dB	IS NVNT	BLE 1M 2	480MHz E	og-Pwr /10	02:44:26PM Sep 08.2 TRRE[] 2 3 4 TRPE[MWWW DET]P NNN CT1 2.480 2 G
T Reysight Spectrum Analyzer - Sw Rt RF 150 Ref Offset 0.6 dB/div Ref 30.00 d dB/div Ref 30.00 d a a a a a a a a a a a a a	ept SA AC D000000 GHz P IF4 5 dB dBm 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	IS NVNT	BLE 1M 2	480MHz E	mission pg-Pwr /10 MI #Sweep 10	02:44:26 PM Sep 08, 2 TRACE 1 3 3 TYPE M 0ET P NM (r1 2.480 2 GI -10.287 dE -10.287 dE -302 -102 -302
T Reysight Spectrum Analyzer - Sw Rt RF 150 Ref Offset 0.6 dB/div Ref 30.00 d dB/div Ref 30.00 d a a a a a a a a a a a a a	ept SA AC D000000 GHz P IF4 5 dB dBm 3 4 4 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4	IS NVNT SENSE: SENSE: Gain:Low 5 5 ↓ 5 ↓ 10.287 dB -34.974 dB -34.974 dB -34.974 dB -34.974 dB -34.974 dB -34.974 dB -34.974 dB	BLE 1M 2 PULSE Trig: Free Run Atten: 40 dB	480MHz E	mission pg-Pwr /10 MI #Sweep 10	02:44:26 PM Sep 06, 2 TRACE 2 3 4 TYPE M 02:11 2.480 2 GI -10.287 dE -10.287 dE -300 Stop 26.50 G 00.0 ms (30001 p
T Reysight Spectrum Analyzer - Sw Rt RF 150 Ref Offset 0.6 dB/div Ref 30.00 d dB/div Ref 30.00 d a a a a a a a a a a a a a	ept SA AC D00000 GHz P IF(5 dB dB dB dB dB dB dB dB dB dB dB dB dB d	IS NVNT SENSE: NO: Fast → Gain:Low 5 \$ \$ #VBW : -10.287 dB -34.974 dB	BLE 1M 2 PULSE Trig: Free Run Atten: 40 dB	480MHz E	mission pg-Pwr /10 MI #Sweep 10	02:44:26 PM Sep 06, 2 TRACE 2 3 4 TYPE M 02:11 2.480 2 GI -10.287 dE -10.287 dE -300 Stop 26.50 G 00.0 ms (30001 p
T Ceysight Spectrum Analyzer - Swe Inter Freq 13.2650 Ref Offset 0.6 dB/div Ref 30.00 d dB/div Ref 30.00 d 1 1 1 1 1 1 1 1 1 1 1 1 1	AC PIER CONTRACT OF CONTRACT O	IS NVNT SENSE: NO: Fast Gain:Low 5 5 46.082 dB 46.082 dB	BLE 1M 2 PULSE Trig: Free Run Atten: 40 dB	480MHz E	mission pg-Pwr /10 MI #Sweep 10	02:44:26 PM Sep 06, 2 TRACE 2 3 4 TYPE M 02:11 2.480 2 GI -10.287 dE -10.287 dE -300 Stop 26.50 G 00.0 ms (30001 p

Tx. Spurious NVNT BLE 1M 2480MHz Ref



APPENDIX 2- EUT TEST PHOTO

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

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



Shenzhen STS Test Services Co., Ltd.