

RADIO TEST REPORT

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Report No.:STS2305161W02

Issued for

Hot Pepper Mobile Inc.

350 10th Ave 1000 Ste San Diego California United States 92101-8705

Product Name:	Tablet
Brand:	Hot Pepper
Model Number:	DT10
Series Model(s):	N/A
FCC ID:	2A33N-AP16
Test Standard:	FCC Part 15.247

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Tost Standards

TEST RESULT CERTIFICATION

Applicant's Name:	Hot Pepper Mobile Inc.
Address	350 10th Ave 1000 Ste San Diego California United States 92101-8705
Manufacturer's Name:	Shenzhen Mediafly Technology CO., LTD
Address	1/F, Building A, WeiXing Science And Technology Park, No. 268-3, BaoShi East Rd, ShuiTian Community, ShiYan Street, BaoAn District, ShenZhen, China
Product Description	
Product Name:	Tablet
Brand:	Hot Pepper
Model Number :	. DT10
Series Model(s):	N/A

	1001 4110:241
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 receipt of test item	: 25 May 2023
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Date of Issue 30) May 2023
Date (s) of performance of tests 25	5 May 2023 ~ 30 May 2023

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· ECC Part15 247

Testing Engineer

(Chris Chen)

Technical Manager :

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Authorized Signatory :

Boney Joney



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Revision History

Rev.	Issue Date Report NO.		Effect Page	Contents	
00	00 30 May 2023 STS2305161W02		ALL	Initial Issue	



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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	Lest Item				
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 PAS Emission				
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.

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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	±1.197dB
2	Unwanted Emissions, conducted	±2.896dB
3	All emissions, radiated 9K-30MHz	±3.84dB
4	All emissions, radiated 30M-1GHz	±3.94dB
5	All emissions, radiated 1G-6GHz	±4.59dB
6	All emissions, radiated>6G	±5.22dB
7	Conducted Emission (9KHz-150KHz)	±2.14dB
8	Conducted Emission (150KHz-30MHz)	±2.54dB
9	Power Spectral Density, Conducted	±1.25dB
10	Occupied Channel Bandwidth	±3.5%



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Tablet			
Brand	Hot Pepper			
Model Number	DT10			
Series Model(s)	N/A			
Model Difference	N/A			
Product Description	The EUT is a TabletOperation Frequency:2402~2480 MHzModulation Type:GFSKRadio Technology:BLEBluetooth Configuration:LE(Support 1M PHY, 2M PHY)Number Of Channel:40Antenna Type:PIFAAntenna Gain (dBi)2.7dBi			
Channel List	Please refer to the Note 3.			
Adapter	Input: 100-240Vac 50/60Hz 0.4A max Output: DC 5V, 2A			
Battery	Rated Voltage: 3.7V Charge Limit Voltage: 4.2V Capacity: 5000mAh			
Hardware version number	A863T-20T5FA-220924			
Software version number	HotPepper_DT10_20230301			
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. 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.

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3.								
	Channel 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



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

Worst Mode	Description	Data/Modulation
Mode 4	TX CH00(2402MHz)	2M PHY /GFSK
Mode 5	TX CH19(2440MHz)	2M PHY /GFSK
Mode 6	TX CH39(2480MHz)	2M PHY /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) The battery is fully-charged during the radited and RF conducted test.

For AC Conducted Emission

	Test Case
AC Conducted Emission	Mode 7 : Keeping BT TX

2.3 TEST SOFTWARE AND POWER LEVEL

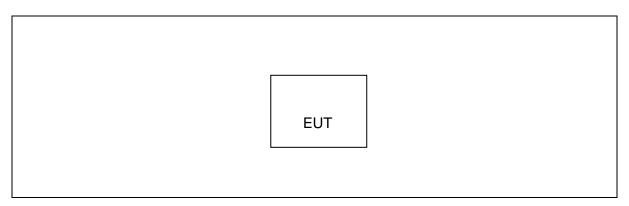
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

RF Function	Туре	Mode Or Modulation type	ANT Gain(dBi)	Power Class	Software For Testing
BLE(With 2M	BLE_1M PHY	GFSK	2.7	7	rf. toot
PHY)	BLE_2M PHY	GFSK	2.7	7	rf_test

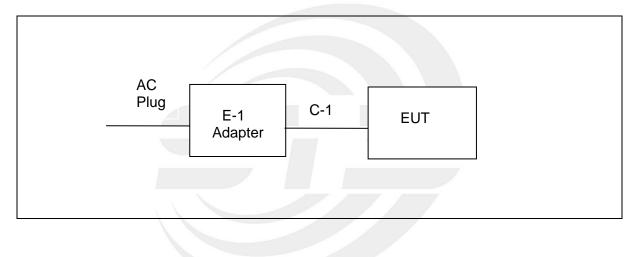


2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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	
E-1	Adapter	Fxin	WRP2E-050200U	N/A	N/A	
C-1	USB Cable	N/A	N/A	75cm	NO	

Support units

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

Note:

- (1) For detachable type I/O cable should be specified the length in cm in ^[] Length ^{_} column.
- (2) "YES" is means "with core"; "NO" is means "without core".



2.6 EQUIPMENTS LIST

		RF Radiation Tes	t Equipment		
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
Temperature & Humidity	SW-108	SuWei	N/A	2023.03.03	2024.03.02
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
18GHz-40GHz Filter	XINGBO	XBLBQ-GTA44	22062003-1	2023.03.06	2024.03.05
Pre-mplifier (18G-40G)	SKET	LNPA_1840-50	SK2018101801	2023.03.06	2024.03.05
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	2023.02.28	2024.02.27
Bilog Antenna	TESEQ	CBL6111D	34678	2022.09.30	2024.09.29
Horn Antenna	SCHWARZBE CK	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	
		Conduction Test	equipment		
Kind of Equipment	Manufacturer	Type 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-03A	1 CE	
RF Connected Test					
Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Signal Analyzer	Agilent	N9020A	MY51510623	2023.03.01	2024.02.28
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	

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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

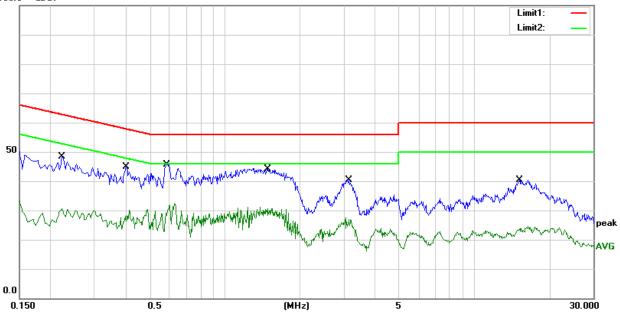
Temperature:	25.2(C)	Relative Humidity:	51%RH
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode:	Mode 7		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.2220	37.93	10.41	48.34	62.74	-14.40	QP
2	0.2220	20.30	10.41	30.71	52.74	-22.03	AVG
3	0.4020	34.37	10.54	44.91	57.81	-12.90	QP
4	0.4020	19.61	10.54	30.15	47.81	-17.66	AVG
5	0.5860	35.20	10.46	45.66	56.00	-10.34	QP
6	0.5860	21.85	10.46	32.31	46.00	-13.69	AVG
7	1.4940	33.81	10.30	44.11	56.00	-11.89	QP
8	1.4940	20.31	10.30	30.61	46.00	-15.39	AVG
9	3.1540	30.01	10.35	40.36	56.00	-15.64	QP
10	3.1540	17.23	10.35	27.58	46.00	-18.42	AVG
11	15.1740	28.68	11.77	40.45	60.00	-19.55	QP
12	15.1740	12.82	11.77	24.59	50.00	-25.41	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 dBu¥





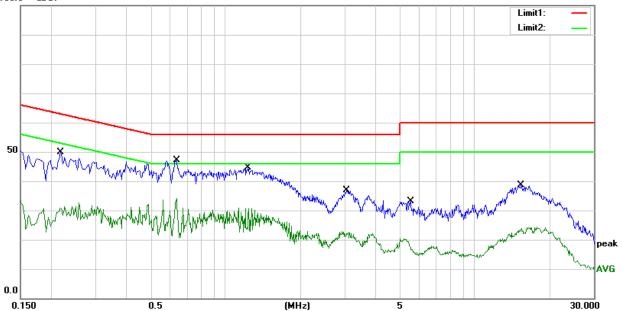
Temperature:	25.2(C)	Relative Humidity:	51%RH
Test Voltage:	AC 120V/60Hz	Phase:	Ν
Test Mode:	Mode 7		

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB)	(dBuV)	(dBuV)	(dB)	
1	0.2180	39.57	10.39	49.96	62.89	-12.93	QP
2	0.2180	21.08	10.39	31.47	52.89	-21.42	AVG
3	0.6340	36.67	10.41	47.08	56.00	-8.92	QP
4	0.6340	23.75	10.41	34.16	46.00	-11.84	AVG
5	1.2300	34.22	10.30	44.52	56.00	-11.48	QP
6	1.2300	20.52	10.30	30.82	46.00	-15.18	AVG
7	3.0700	26.45	10.35	36.80	56.00	-19.20	QP
8	3.0700	12.48	10.35	22.83	46.00	-23.17	AVG
9	5.5220	22.63	10.50	33.13	60.00	-26.87	QP
10	5.5220	9.89	10.50	20.39	50.00	-29.61	AVG
11	15.3740	26.93	11.81	38.74	60.00	-21.26	QP
12	15.3740	12.40	11.81	24.21	50.00	-25.79	AVG

Remark:

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

100.0 dBuV



^{1.} All readings are Quasi-Peak and Average values



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			

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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)/		
DD ()/D (amigaign in restricted hand)	9KHz (From 0.15MHz to 30MHz);		
RB/VB (emission in restricted 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)		
DD ()/D (amigging in restricted hand)	1 MHz / 3 MHz(Peak)		
RB/VB (emission in restricted band)	1 MHz/1/T MHz(AVG)		

For Restricted band

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

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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

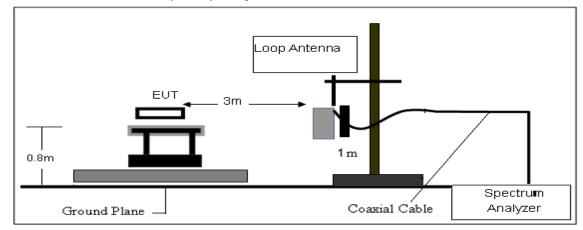
- a. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the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

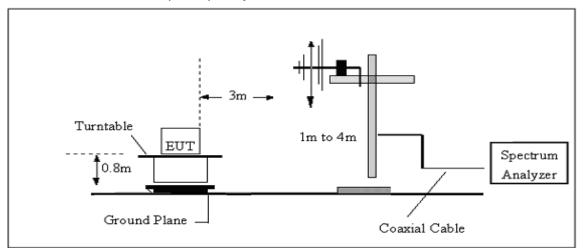


4.3 TEST SETUP

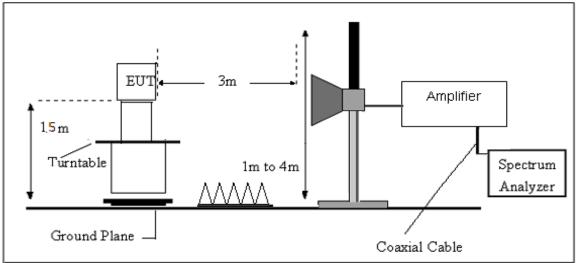
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



4.4 EUT OPERATING CONDITIONS Please refer to section 3.4 of this report.



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 - AGWhere 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)

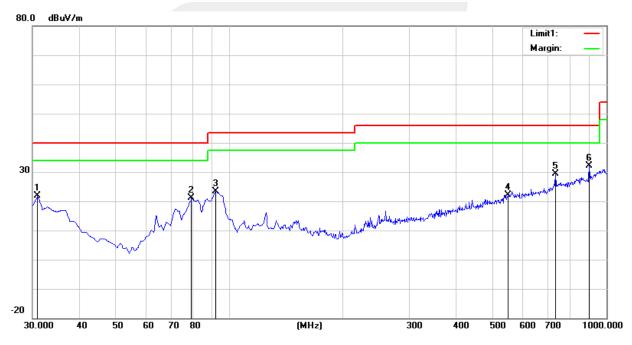
	1M F	РНΥ	
Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 3.7V	Phase:	Horizontal
Test Mode:	Mode 1/2/3 (Mode 1 worst mo	ode)	

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.9700	35.17	-13.35	21.82	40.00	-18.18	peak
2	79.4700	44.15	-23.11	21.04	40.00	-18.96	peak
3	92.0800	44.70	-21.20	23.50	43.50	-20.00	peak
4	550.8900	27.92	-5.74	22.18	46.00	-23.82	peak
5	733.2500	31.67	-2.35	29.32	46.00	-16.68	peak
6	902.0300	32.41	-0.40	32.01	46.00	-13.99	peak

Remark:

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

2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain





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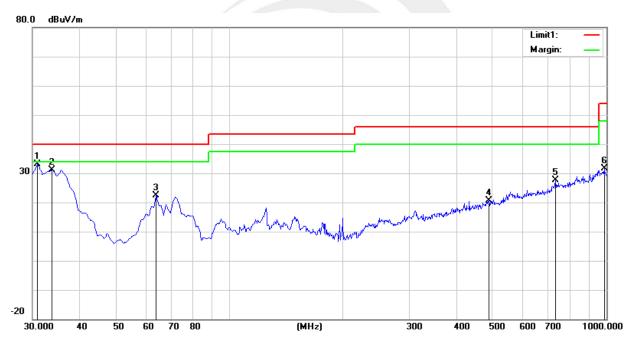
Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 3.7V	Phase:	Vertical
Test Mode:	Mode 1/2/3 (Mode 1 worst mo	ode)	

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.9700	46.59	-13.35	33.24	40.00	-6.76	peak
2	33.8800	45.97	-14.80	31.17	40.00	-8.83	peak
3	63.9500	48.04	-25.64	22.40	40.00	-17.60	peak
4	488.8100	28.80	-8.27	20.53	46.00	-25.47	peak
5	733.2500	29.90	-2.35	27.55	46.00	-18.45	peak
6	986.4200	29.31	2.27	31.58	54.00	-22.42	peak

Remark:

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

2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain



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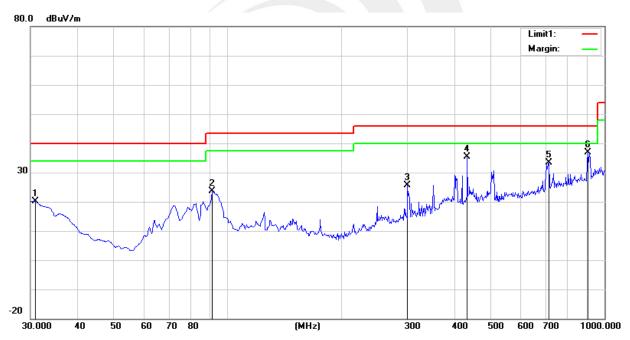
2M PHY

Temperature:	23.1(C)	Relative Humidity:	60%RH			
Test Voltage:	DC 3.7V	Phase:	Horizontal			
Test Mode:	Mode 4/5/6 (Mode 4 worst mode)					

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.9700	33.60	-13.35	20.25	40.00	-19.75	peak
2	91.1100	44.99	-21.31	23.68	43.50	-19.82	peak
3	300.6300	40.46	-14.79	25.67	46.00	-20.33	peak
4	433.5200	45.54	-10.13	35.41	46.00	-10.59	peak
5	711.9100	37.03	-3.74	33.29	46.00	-12.71	peak
6	903.9700	37.26	-0.34	36.92	46.00	-9.08	peak

Remark:

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





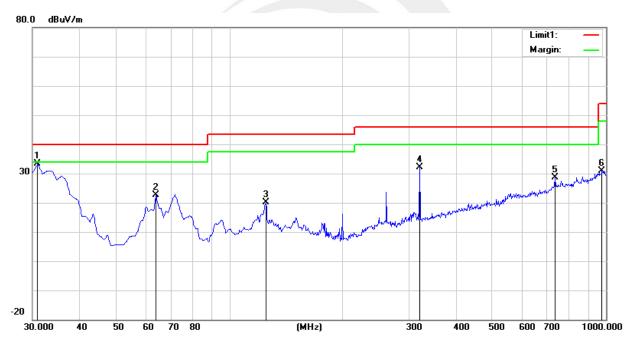
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Temperature:	23.1(C)	Relative Humidity:	60%RH
Test Voltage:	DC 3.7V	Phase:	Vertical
Test Mode:	Mode 4/5/6 (Mode 4 worst mo	ode)	

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.9700	46.71	-13.35	33.36	40.00	-6.64	peak
2	63.9500	48.27	-25.64	22.63	40.00	-17.37	peak
3	125.0600	38.37	-18.22	20.15	43.50	-23.35	peak
4	320.0300	46.25	-14.00	32.25	46.00	-13.75	peak
5	733.2500	31.10	-2.35	28.75	46.00	-17.25	peak
6	976.7200	28.41	2.45	30.86	54.00	-23.14	peak

Remark:

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



Shenzhen STS Test Services Co., Ltd.



(1GHz-25GHz) Spurious emission Requirements

1M PHY GFSK

Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment
(MHz)	(dBµV)	(dB)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	
			•	Low Cł	nannel (GFSK/2	2402 MHz)				
3264.64	61.10	44.70	6.70	28.20	-9.80	51.30	74.00	-22.70	PK	Vertical
3264.64	50.14	44.70	6.70	28.20	-9.80	40.34	54.00	-13.66	AV	Vertical
3264.84	61.30	44.70	6.70	28.20	-9.80	51.50	74.00	-22.50	PK	Horizontal
3264.84	50.84	44.70	6.70	28.20	-9.80	41.04	54.00	-12.96	AV	Horizontal
4804.41	58.76	44.20	9.04	31.60	-3.56	55.20	74.00	-18.80	PK	Vertical
4804.41	49.88	44.20	9.04	31.60	-3.56	46.32	54.00	-7.68	AV	Vertical
4804.47	59.26	44.20	9.04	31.60	-3.56	55.70	74.00	-18.30	PK	Horizontal
4804.47	49.72	44.20	9.04	31.60	-3.56	46.16	54.00	-7.84	AV	Horizontal
5359.65	48.95	44.20	9.86	32.00	-2.34	46.61	74.00	-27.39	PK	Vertical
5359.65	39.65	44.20	9.86	32.00	-2.34	37.31	54.00	-16.69	AV	Vertical
5359.72	48.16	44.20	9.86	32.00	-2.34	45.81	74.00	-28.19	PK	Horizontal
5359.72	38.66	44.20	9.86	32.00	-2.34	36.32	54.00	-17.68	AV	Horizontal
7205.88	54.64	43.50	11.40	35.50	3.40	58.04	74.00	-15.96	PK	Vertical
7205.88	44.84	43.50	11.40	35.50	3.40	48.24	54.00	-5.76	AV	Vertical
7205.76	54.41	43.50	11.40	35.50	3.40	57.81	74.00	-16.19	PK	Horizontal
7205.76	43.79	43.50	11.40	35.50	3.40	47.19	54.00	-6.81	AV	Horizontal
	•	•		Middle 0	Channel (GFSK	/2440 MHz)				
3263.22	61.91	44.70	6.70	28.20	-9.80	52.11	74.00	-21.89	PK	Vertical
3263.22	51.45	44.70	6.70	28.20	-9.80	41.65	54.00	-12.35	AV	Vertical
3263.10	61.11	44.70	6.70	28.20	-9.80	51.31	74.00	-22.69	PK	Horizontal
3263.10	51.26	44.70	6.70	28.20	-9.80	41.46	54.00	-12.54	AV	Horizontal
4880.05	58.88	44.20	9.04	31.60	-3.56	55.32	74.00	-18.68	PK	Vertical
4880.05	50.42	44.20	9.04	31.60	-3.56	46.86	54.00	-7.14	AV	Vertical
4880.14	58.53	44.20	9.04	31.60	-3.56	54.97	74.00	-19.03	PK	Horizontal
4880.14	49.46	44.20	9.04	31.60	-3.56	45.90	54.00	-8.10	AV	Horizontal
5357.04	49.37	44.20	9.86	32.00	-2.34	47.02	74.00	-26.98	PK	Vertical
5357.04	39.86	44.20	9.86	32.00	-2.34	37.51	54.00	-16.49	AV	Vertical
5357.39	47.82	44.20	9.86	32.00	-2.34	45.47	74.00	-28.53	PK	Horizontal
5356.98	39.10	44.20	9.86	32.00	-2.34	36.76	54.00	-17.24	AV	Horizontal
7320.85	54.79	43.50	11.40	35.50	3.40	58.19	74.00	-15.81	PK	Vertical
7320.85	43.65	43.50	11.40	35.50	3.40	47.05	54.00	-6.95	AV	Vertical
7320.28	53.51	43.50	11.40	35.50	3.40	56.91	74.00	-17.09	PK	Horizontal
7320.28	43.92	43.50	11.40	35.50	3.40	47.32	54.00	-6.68	AV	Horizontal

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				High Char	nnel (GFSK/	2480 MHz)				
3264.77	61.24	44.70	6.70	28.20	-9.80	51.44	74.00	-22.56	PK	Vertical
3264.77	50.58	44.70	6.70	28.20	-9.80	40.78	54.00	-13.22	AV	Vertical
3264.72	61.09	44.70	6.70	28.20	-9.80	51.29	74.00	-22.71	PK	Horizontal
3264.72	50.49	44.70	6.70	28.20	-9.80	40.69	54.00	-13.31	AV	Horizontal
4960.41	59.20	44.20	9.04	31.60	-3.56	55.64	74.00	-18.36	PK	Vertical
4960.41	50.29	44.20	9.04	31.60	-3.56	46.73	54.00	-7.27	AV	Vertical
4960.47	58.88	44.20	9.04	31.60	-3.56	55.32	74.00	-18.68	PK	Horizontal
4960.47	50.32	44.20	9.04	31.60	-3.56	46.76	54.00	-7.24	AV	Horizontal
5359.83	48.63	44.20	9.86	32.00	-2.34	46.28	74.00	-27.72	PK	Vertical
5359.83	39.21	44.20	9.86	32.00	-2.34	36.87	54.00	-17.13	AV	Vertical
5359.58	47.86	44.20	9.86	32.00	-2.34	45.52	74.00	-28.48	PK	Horizontal
5359.58	38.64	44.20	9.86	32.00	-2.34	36.30	54.00	-17.70	AV	Horizontal
7439.73	53.63	43.50	11.40	35.50	3.40	57.03	74.00	-16.97	PK	Vertical
7439.73	43.73	43.50	11.40	35.50	3.40	47.13	54.00	-6.87	AV	Vertical
7439.66	54.87	43.50	11.40	35.50	3.40	58.27	74.00	-15.73	PK	Horizontal
7439.66	43.98	43.50	11.40	35.50	3.40	47.38	54.00	-6.62	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.





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2M PHY GFSK

Frequency	Meter Reading	Amplifier	Loss	Antenna Factor	Corrected Factor	Emission Level	Limits	Margin	Detector	Comment		
(MHz)	(dBµV)	(dB)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре	00111011		
	• • • •	•		Low Ch	nannel (GFSK/2	2402 MHz)						
3264.72	61.25	44.70	6.70	28.20	-9.80	51.45	74.00	-22.55	PK	Vertical		
3264.72	50.58	44.70	6.70	28.20	-9.80	40.78	54.00	-13.22	AV	Vertical		
3264.79	61.74	44.70	6.70	28.20	-9.80	51.94	74.00	-22.06	PK	Horizontal		
3264.79	50.88	44.70	6.70	28.20	-9.80	41.08	54.00	-12.92	AV	Horizontal		
4804.41	59.21	44.20	9.04	31.60	-3.56	55.65	74.00	-18.35	PK	Vertical		
4804.41	50.27	44.20	9.04	31.60	-3.56	46.71	54.00	-7.29	AV	Vertical		
4804.37	58.64	44.20	9.04	31.60	-3.56	55.08	74.00	-18.92	PK	Horizontal		
4804.37	49.72	44.20	9.04	31.60	-3.56	46.16	54.00	-7.84	AV	Horizontal		
5359.81	49.08	44.20	9.86	32.00	-2.34	46.73	74.00	-27.27	PK	Vertical		
5359.81	39.79	44.20	9.86	32.00	-2.34	37.44	54.00	-16.56	AV	Vertical		
5359.80	47.16	44.20	9.86	32.00	-2.34	44.82	74.00	-29.18	PK	Horizontal		
5359.80	38.87	44.20	9.86	32.00	-2.34	36.52	54.00	-17.48	AV	Horizontal		
7205.74	54.61	43.50	11.40	35.50	3.40	58.01	74.00	-15.99	PK	Vertical		
7205.74	43.66	43.50	11.40	35.50	3.40	47.06	54.00	-6.94	AV	Vertical		
7205.79	54.01	43.50	11.40	35.50	3.40	57.41	74.00	-16.59	PK	Horizontal		
7205.79	44.47	43.50	11.40	35.50	3.40	47.87	54.00	-6.13	AV	Horizontal		
		•		Middle C	Channel (GFSK	/2440 MHz)						
3263.12	60.93	44.70	6.70	28.20	-9.80	51.13	74.00	-22.87	PK	Vertical		
3263.12	51.50	44.70	6.70	28.20	-9.80	41.70	54.00	-12.30	AV	Vertical		
3263.01	61.41	44.70	6.70	28.20	-9.80	51.61	74.00	-22.39	PK	Horizontal		
3263.01	51.24	44.70	6.70	28.20	-9.80	41.44	54.00	-12.56	AV	Horizontal		
4880.10	59.31	44.20	9.04	31.60	-3.56	55.75	74.00	-18.25	PK	Vertical		
4880.10	50.00	44.20	9.04	31.60	-3.56	46.44	54.00	-7.56	AV	Vertical		
4880.02	58.34	44.20	9.04	31.60	-3.56	54.78	74.00	-19.22	PK	Horizontal		
4880.02	49.40	44.20	9.04	31.60	-3.56	45.84	54.00	-8.16	AV	Horizontal		
5357.22	48.13	44.20	9.86	32.00	-2.34	45.79	74.00	-28.21	PK	Vertical		
5357.22	39.07	44.20	9.86	32.00	-2.34	36.73	54.00	-17.27	AV	Vertical		
5357.39	47.86	44.20	9.86	32.00	-2.34	45.52	74.00	-28.48	PK	Horizontal		
5357.08	39.52	44.20	9.86	32.00	-2.34	37.17	54.00	-16.83	AV	Horizontal		
7320.85	53.72	43.50	11.40	35.50	3.40	57.12	74.00	-16.88	PK	Vertical		
7320.85	43.82	43.50	11.40	35.50	3.40	47.22	54.00	-6.78	AV	Vertical		
7320.27	54.64	43.50	11.40	35.50	3.40	58.04	74.00	-15.96	PK	Horizontal		
7320.27	43.65	43.50	11.40	35.50	3.40	47.05	54.00	-6.95	AV	Horizontal		



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	High Channel (GFSK/2480 MHz)												
3264.84	61.71	44.70	6.70	28.20	-9.80	51.91	74.00	-22.09	PK	Vertical			
3264.84	50.45	44.70	6.70	28.20	-9.80	40.65	54.00	-13.35	AV	Vertical			
3264.76	61.51	44.70	6.70	28.20	-9.80	51.71	74.00	-22.29	PK	Horizontal			
3264.76	50.44	44.70	6.70	28.20	-9.80	40.64	54.00	-13.36	AV	Horizontal			
4960.47	58.70	44.20	9.04	31.60	-3.56	55.14	74.00	-18.86	PK	Vertical			
4960.47	50.44	44.20	9.04	31.60	-3.56	46.88	54.00	-7.12	AV	Vertical			
4960.52	58.57	44.20	9.04	31.60	-3.56	55.01	74.00	-18.99	PK	Horizontal			
4960.52	50.46	44.20	9.04	31.60	-3.56	46.90	54.00	-7.10	AV	Horizontal			
5359.61	48.23	44.20	9.86	32.00	-2.34	45.89	74.00	-28.11	PK	Vertical			
5359.61	40.04	44.20	9.86	32.00	-2.34	37.70	54.00	-16.30	AV	Vertical			
5359.69	48.14	44.20	9.86	32.00	-2.34	45.79	74.00	-28.21	PK	Horizontal			
5359.69	38.92	44.20	9.86	32.00	-2.34	36.58	54.00	-17.42	AV	Horizontal			
7439.89	54.86	43.50	11.40	35.50	3.40	58.26	74.00	-15.74	PK	Vertical			
7439.89	44.90	43.50	11.40	35.50	3.40	48.30	54.00	-5.70	AV	Vertical			
7439.93	54.07	43.50	11.40	35.50	3.40	57.47	74.00	-16.53	PK	Horizontal			
7439.93	44.42	43.50	11.40	35.50	3.40	47.82	54.00	-6.18	AV	Horizontal			

Note:

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

Emission Level = Reading + Factor.

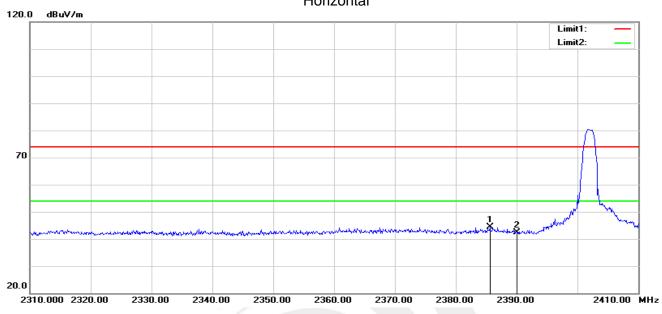
2) The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.



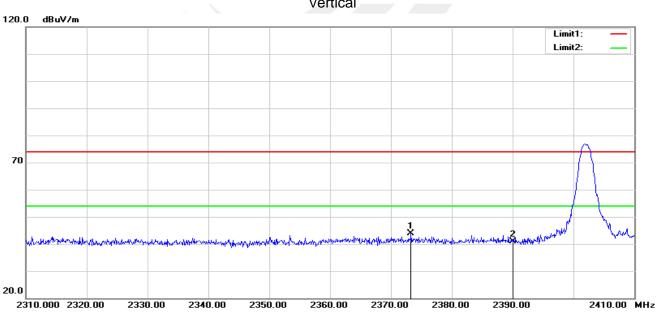


4.6 TEST RESULTS (Restricted Bands Requirements)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2385.600	40.09	4.27	44.36	74.00	-29.64	peak
2	2390.000	38.11	4.34	42.45	74.00	-31.55	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2373.300	39.71	4.09	43.80	74.00	-30.20	peak
2	2390.000	36.49	4.34	40.83	74.00	-33.17	peak

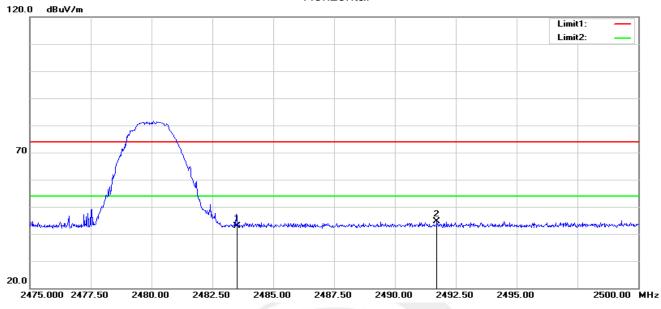
Vertical



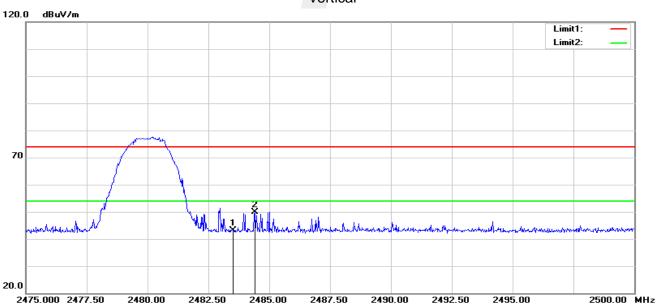
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GFSK-High Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	38.22	4.60	42.82	74.00	-31.18	peak
2	2491.725	39.89	4.63	44.52	74.00	-29.48	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	38.54	4.60	43.14	74.00	-30.86	peak
2	2484.425	45.36	4.61	49.97	74.00	-24.03	peak

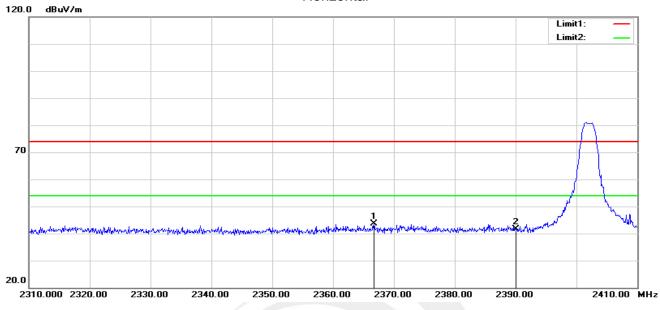
Vertical

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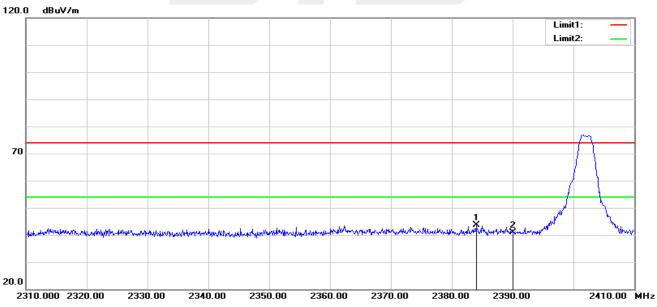


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2M PHY GFSK-Low Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2366.700	39.56	3.99	43.55	74.00	-30.45	peak
2	2390.000	37.39	4.34	41.73	74.00	-32.27	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2384.000	39.38	4.25	43.63	74.00	-30.37	peak
2	2390.000	36.50	4.34	40.84	74.00	-33.16	peak

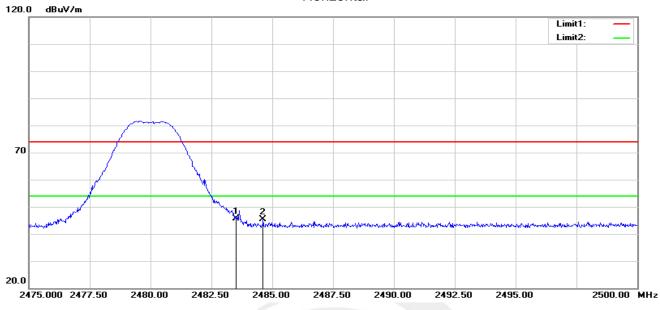
Vertical



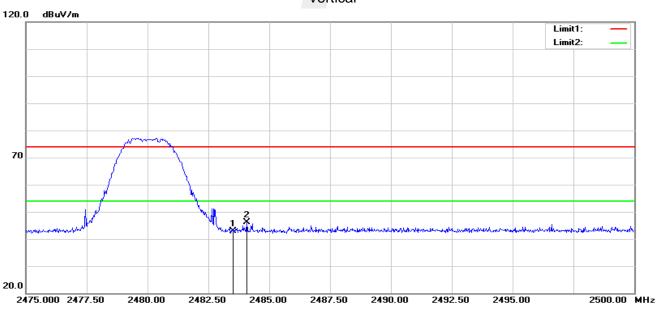
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GFSK-High Horizontal



No.	Frequency	Reading	Correct	Result Limit		Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	41.08	4.60	45.68	74.00	-28.32	peak
2	2484.625	40.84	4.61	45.45	74.00	-28.55	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	38.33	4.60	42.93	74.00	-31.07	peak
2	2484.075	41.50	4.61	46.11	74.00	-27.89	peak

Vertical

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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 Fraguenay	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 Pa	art 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

	F	CC Part 15.247,Subpa	irt 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 × RBW].

c) Set span \geq [3 × 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.



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APPENDIX 1-TEST DATA

1. Duty Cycle

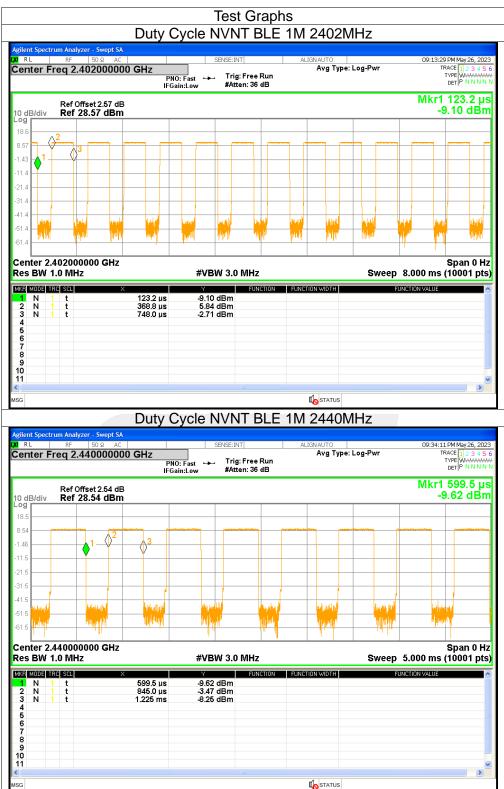
Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	60.69	2.17	2.64
NVNT	BLE 1M	2440	60.72	2.17	2.64
NVNT	BLE 1M	2480	60.72	2.17	2.64
NVNT	BLE 2M	2402	31.04	5.08	5.15
NVNT	BLE 2M	2440	31.07	5.08	5.14
NVNT	BLE 2M	2480	31.01	5.08	5.16



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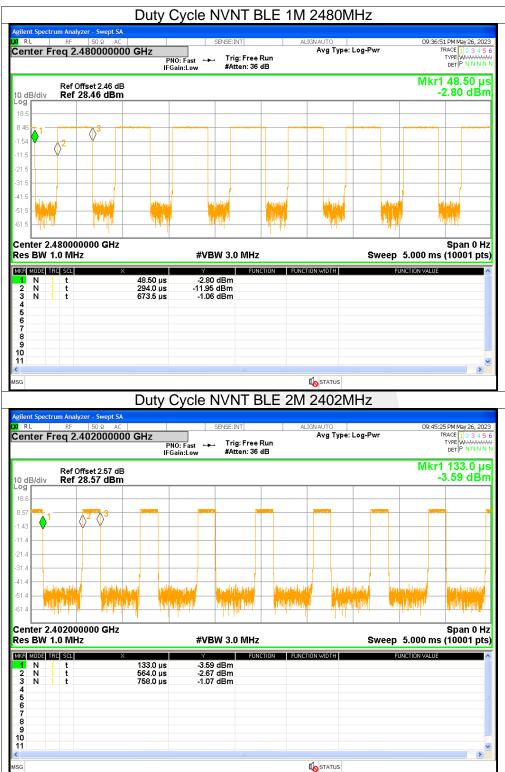


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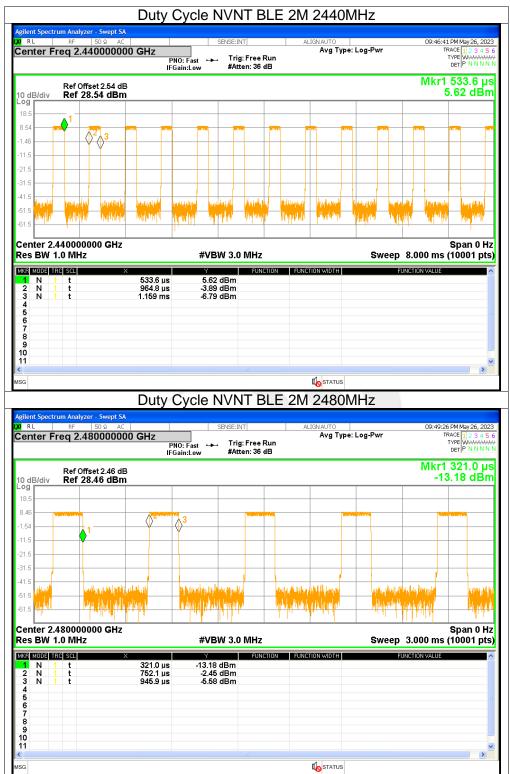




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2. Maximum Average Conducted Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	9.05	2.17	11.22	<=30	Pass
NVNT	BLE 1M	2440	7.89	2.17	10.06	<=30	Pass
NVNT	BLE 1M	2480	6.77	2.17	8.94	<=30	Pass
NVNT	BLE 2M	2402	5.56	5.08	10.64	<=30	Pass
NVNT	BLE 2M	2440	5.37	5.08	10.45	<=30	Pass
NVNT	BLE 2M	2480	4.71	5.08	9.79	<=30	Pass



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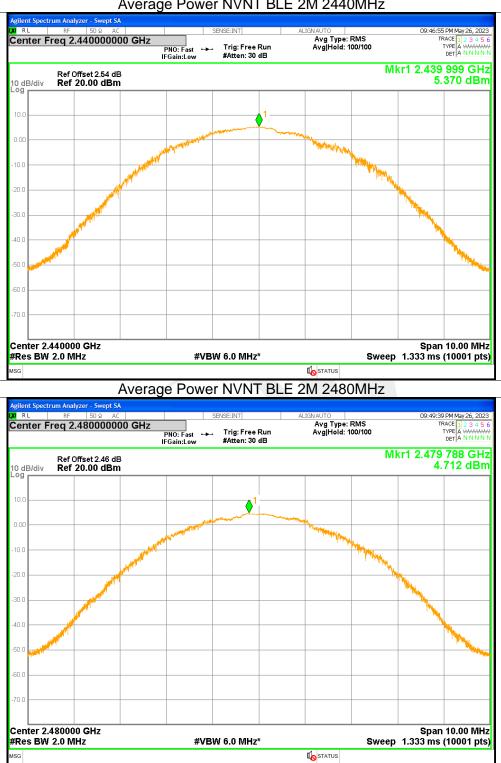
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Average Power NVNT BLE 1M 2480MHz

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Average Power NVNT BLE 2M 2440MHz

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3. Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	11.41	<=30	Pass
NVNT	BLE 1M	2440	10.05	<=30	Pass
NVNT	BLE 1M	2480	9.28	<=30	Pass
NVNT	BLE 2M	2402	11.56	<=30	Pass
NVNT	BLE 2M	2440	10.13	<=30	Pass
NVNT	BLE 2M	2480	9.38	<=30	Pass



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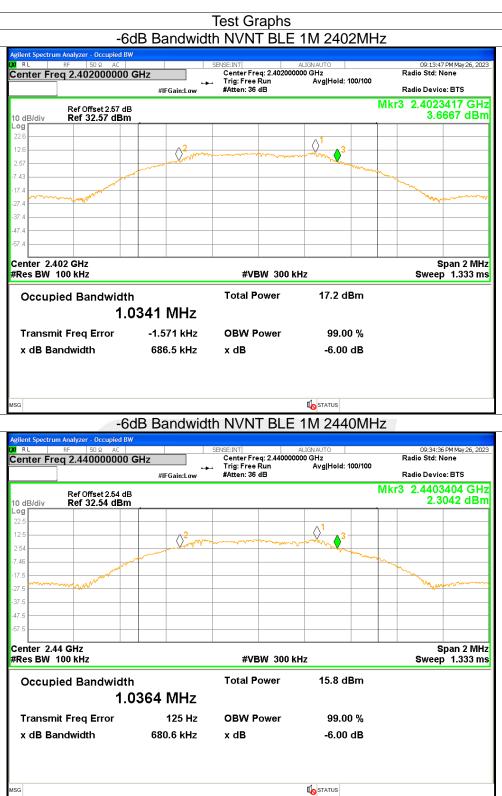
4. -6dB Bandwidth

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	0.6865	>=0.5	Pass
NVNT	BLE 1M	2440	0.6806	>=0.5	Pass
NVNT	BLE 1M	2480	0.7091	>=0.5	Pass
NVNT	BLE 2M	2402	1.1635	>=0.5	Pass
NVNT	BLE 2M	2440	1.1957	>=0.5	Pass
NVNT	BLE 2M	2480	1.2514	>=0.5	Pass



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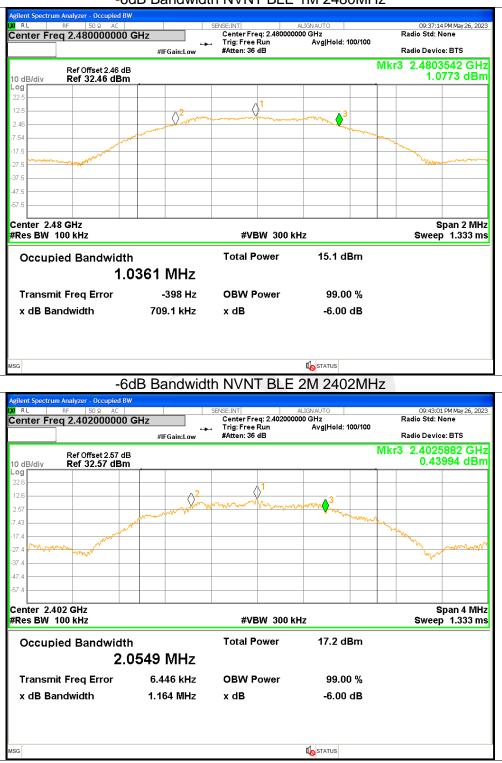






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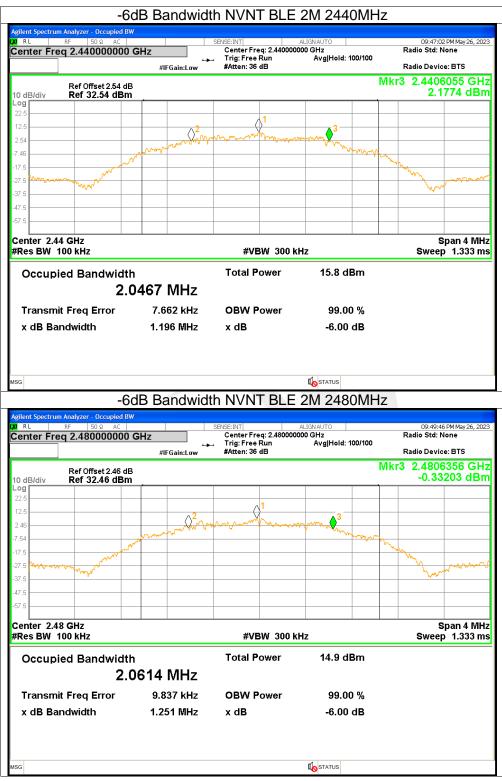




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5. Maximum Power Spectral Density Level

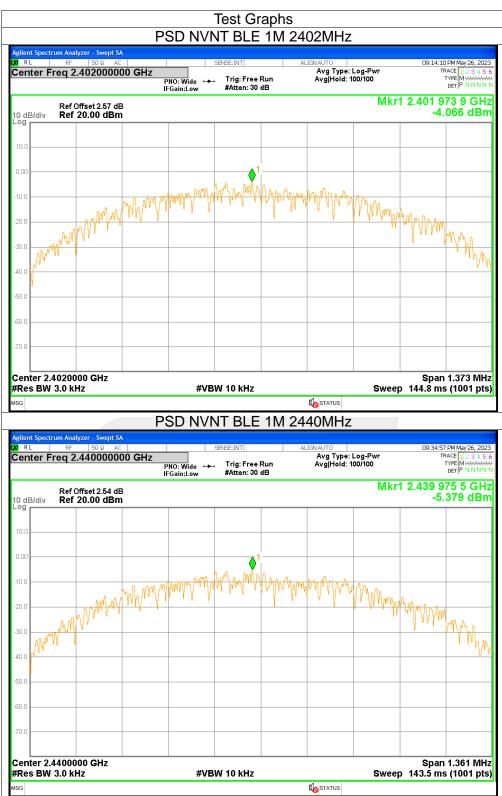
Condition	Mode	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	-4.07	<=8	Pass
NVNT	BLE 1M	2440	-5.38	<=8	Pass
NVNT	BLE 1M	2480	-6.14	<=8	Pass
NVNT	BLE 2M	2402	-6.14	<=8	Pass
NVNT	BLE 2M	2440	-7.54	<=8	Pass
NVNT	BLE 2M	2480	-8.29	<=8	Pass



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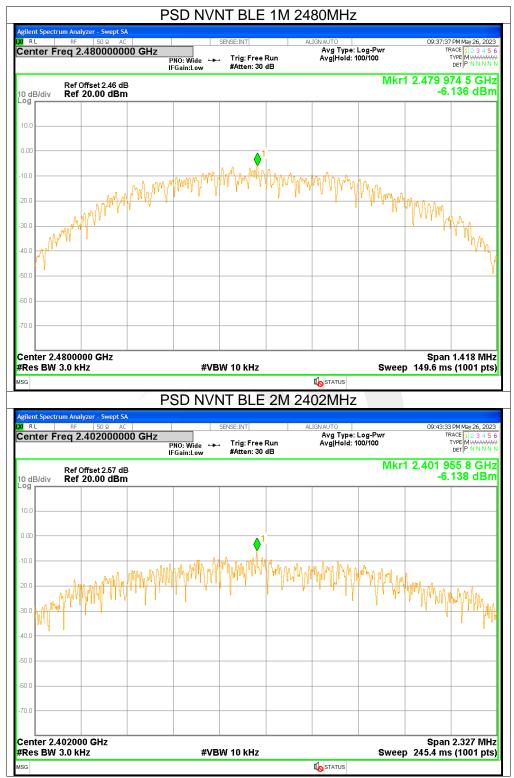
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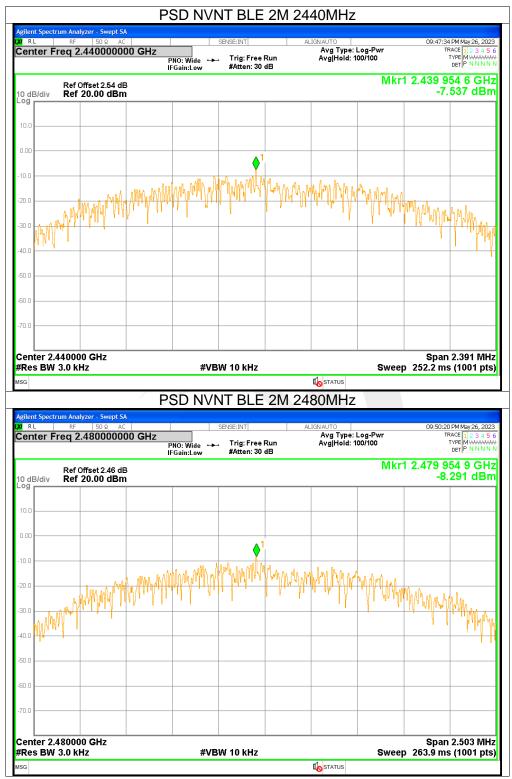


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6. Band Edge

Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	-56.83	<=-20	Pass
NVNT	BLE 1M	2480	-58.97	<=-20	Pass
NVNT	BLE 2M	2402	-31.03	<=-20	Pass
NVNT	BLE 2M	2480	-57.18	<=-20	Pass



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		<u> </u>		est Graphs		,	
			dge NVN	NI BLE 1N	1 2402MHz Re	et	
	im Analyzer - Swept S RF 50 Ω A		SEN	NSE:INT	ALIGNAUTO		PM May 26, 20
enter Fr	eq 2.402000(P	NO: Wide 🔸	Trig: Free Run #Atten: 36 dB	Avg Type: Log-Pwr Avg Hold: 100/100	T	CE 1 2 3 4 1 PE MWWW DET P N N N
) dB/div	Ref Offset 2.57 d Ref 28.57 dBi	зв				Mkr1 2.402	000 GH
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G			#VDVV	300 KHZ	STATUS	weep 1.000 ms	(1001 p
	De	and Edge			-		
						nion	
		ž.		BLE TIVI Z	402MHz Emiss	sion	
	Im Analyzer - Swept 1 RF 50 Ω A	SA			ALIGNAUTO	09:14:20	PM May 26, 20
RL	ım Analyzer - Swept	SA AC DOO GHZ	SEP NO: Fast ↔	vse:INT		09:14:20 ו דגי ד	CE 1 2 3 4 ! /PE M WWWW
RL	i <mark>m Analyzer - Swept</mark> RF 50 Ω A	SA AC DOO GHZ	SEM	NSE:INT	ALIGNAUTO Avg Type: Log-Pwr	09:14:20 (TRA T	CE 1 2 3 4 1 PE MWWW DET P N N N
enter Fr	i <mark>m Analyzer - Swept</mark> RF 50 Ω A	SA AC DOO GHz IF dB	SEP NO: Fast ↔	vse:INT	ALIGNAUTO Avg Type: Log-Pwr	09:14:20 TRA T Mkr1 2.40	CE 1 2 3 4 1 PE MWWW DET P N N N
enter Fr	m Analyzer - Swept : RF 50 Ω A eq 2.3560000 Ref Offset 2.57 of	SA AC DOO GHz IF dB	SEP NO: Fast ↔	vse:INT	ALIGNAUTO Avg Type: Log-Pwr	09:14:20 TRA T Mkr1 2.40	
enter Fro	m Analyzer - Swept : RF 50 Ω A eq 2.3560000 Ref Offset 2.57 of	SA AC DOO GHz IF dB	SEP NO: Fast ↔	vse:INT	ALIGNAUTO Avg Type: Log-Pwr	09:14:20 TRA T Mkr1 2.40	
enter Fro	m Analyzer - Swept : RF 50 Ω A eq 2.3560000 Ref Offset 2.57 of	SA AC DOO GHz IF dB	SEP NO: Fast ↔	vse:INT	ALIGNAUTO Avg Type: Log-Pwr	09:14:20 TRA T Mkr1 2.40	
RL enter Fr 0 dB/div 9 18.6 3.57 1.43	m Analyzer - Swept : RF 50 Ω A eq 2.3560000 Ref Offset 2.57 of	SA AC DOO GHz IF dB	SEP NO: Fast ↔	vse:INT	ALIGNAUTO Avg Type: Log-Pwr	09:14:20 TRA T Mkr1 2.40	
RL enter Fr 0 dB/div 9 18.6 3.57 1.43 11.4	m Analyzer - Swept : RF 50 Ω A eq 2.3560000 Ref Offset 2.57 of	SA AC DOO GHz IF dB	SEP NO: Fast ↔	vse:INT	ALIGNAUTO Avg Type: Log-Pwr	09:14:20 TRA T Mkr1 2.40	CE 1234 PE M MMMM 23GH 62dB
RL enter Fr 0 dB/div 0 dB	m Analyzer - Swept : RF 50 Ω A eq 2.3560000 Ref Offset 2.57 of	SA AC DOO GHz IF dB	SEP NO: Fast ↔	vse:INT	ALIGNAUTO Avg Type: Log-Pwr	09:14:20 TRA T Mkr1 2.40	CE 1234 PE M MMMM 23GH 62dB
RL Image: Constraint of the second seco	m Analyzer - Swept : RF 50 Ω A eq 2.3560000 Ref Offset 2.57 of	SA AC DOO GHz IF dB	SEP NO: Fast ↔	vse:INT	ALIGNAUTO Avg Type: Log-Pwr	09:14:20 TRA T Mkr1 2.40	CE 1234 PE M MMMM 23GH 62dB
RL Image: Constraint of the second seco	m Analyzer - Swept : RF 50 Ω A eq 2.3560000 Ref Offset 2.57 of	SA AC DOO GHz IF dB	SEP NO: Fast ↔	VSE:INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 TRU Mkr1 2.40 10.5	CE 1234 PE M MMMM 23GH 62dB
RL Image: Constraint of the second seco	m Analyzer - Swept : RF 50 Ω A eq 2.3560000 Ref Offset 2.57 of	SA AC DOO GHz IF dB	SEP NO: Fast ↔	VSE:INT	ALIGNAUTO Avg Type: Log-Pwr	09:14:20 TRU Mkr1 2.40 10.5	CE 1234 PE M MMMM 23GH 62dB
RL Image: Constraint of the second sec	m Analyzer - Swept : RF 50 Ω A eq 2.3560000 Ref Offset 2.57 of	SA AC DOO GHz IF dB	SEP NO: Fast ↔	VSE:INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 TRU Mkr1 2.40 10.5	CE 1234 PE M MMMM 23GH 62dB
RL Image: Constraint of the second seco	m Analyzer _ Swept : RF 50 g A eq 2.3560000 Ref Offset 2.57 dB 28.57 dB 	SA AC DOO GHz IF dB	SEP	VSE:INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Train Mkr1 2.40 10.5	2 3 GH
RL Image: Constraint of the second seco	m Analyzer _ Swept : RF 50 g A eq 2.3560000 Ref Offset 2.57 dB 28.57 dB 	SA AC DOO GHz IF dB	SEP	VSE:INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Train T Mkr1 2.40 10.5	2 3 GH
RL Image: Control of the second	m Analyzer _ Swept : RF 50 g A eq 2.3560000 Ref Offset 2.57 dB 28.57 dB 0.00 GHz 100 kHz 3 SGL	SA ac P F F B B M M M M M M M M M M M M M	SEP NO: Fast	SECINT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Train Mkr1 2.40 10.5	2 3 GH
RL Image: constraint of the second seco	m Analyzer _ Swept : RF 50 & A eq 2.3560000 Ref Offset 2.57 d Ref 28.57 dB 	SA COO GHZ F F B B M COO GHZ F F COO GHZ COO G		SEEINT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Tr Mkr1 2.40 10.5	2 3 GH
RL Image: Constraint of the second seco	m Analyzer _ Swept 3 RF _ 50 & A eq 2.3560000 Ref Offset 2.57 d Ref 28.57 dB 	SA COOGHZ DOOGHZ F F F SA SA SA SA SA SA SA SA SA SA	YNO: Fast → Gain:Low Gain:Low #VBW Y 10.562 di 46.569 di	SE INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Tr Mkr1 2.40 10.5	2 3 GH
RL Image: Constraint of the second seco	m Analyzer Swept 3 RF 50 2 A eq 2.3560000 Ref Offset 2.57 d Ref 28.57 dB 600 GHz 100 kHz 5 SCL f f	SA ac	SEP NO: Fast →→ Gain:Low #VBW #VBW	SE INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Tr Mkr1 2.40 10.5	2 3 GH
RL Image: Constraint of the second seco	m Analyzer _ Swept 3 RF _ 50 & A eq 2.3560000 Ref Offset 2.57 d Ref 28.57 dB 	SA COOGHZ DOOGHZ F F F SA SA SA SA SA SA SA SA SA SA	YNO: Fast → Gain:Low Gain:Low #VBW Y 10.562 di 46.569 di	SE INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Tr Mkr1 2.40 10.5	2 3 GH
RL Image: Constraint of the second seco	m Analyzer _ Swept 3 RF _ 50 & A eq 2.3560000 Ref Offset 2.57 d Ref 28.57 dB 	SA COOGHZ DOOGHZ F F F SA SA SA SA SA SA SA SA SA SA	YNO: Fast → Gain:Low Gain:Low #VBW Y 10.562 di 46.569 di	SE INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Tr Mkr1 2.40 10.5	2 3 GH
RL Image: Constraint of the second seco	m Analyzer _ Swept 3 RF _ 50 & A eq 2.3560000 Ref Offset 2.57 d Ref 28.57 dB 	SA COOGHZ DOOGHZ F F F SA SA SA SA SA SA SA SA SA SA	YNO: Fast → Gain:Low Gain:Low #VBW Y 10.562 di 46.569 di	SE INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Tr Mkr1 2.40 10.5	2 3 GH
RL Image: Control of the second	m Analyzer _ Swept 3 RF _ 50 & A eq 2.3560000 Ref Offset 2.57 d Ref 28.57 dB 	SA COOGHZ DOOGHZ F F F SA SA SA SA SA SA SA SA SA SA	YNO: Fast → Gain:Low Gain:Low #VBW Y 10.562 di 46.569 di	SE INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Tr Mkr1 2.40 10.5	2 3 GF 62 dB 62 dB 0600 GF (1001 pt
RL Penter Fr 0 dB/div 98 6 3.57 - 43 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.4 - 1.1 - 1.1 - 1.1 - 1.1 N 1.1	m Analyzer _ Swept 3 RF _ 50 & A eq 2.3560000 Ref Offset 2.57 d Ref 28.57 dB 	SA COOGHZ DOOGHZ F F F SA SA SA SA SA SA SA SA SA SA	YNO: Fast → Gain:Low Gain:Low #VBW Y 10.562 di 46.569 di	SE INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:14:20 Tr Mkr1 2.40 10.5	2 3 GH



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RL RF Center Freq 2.4			EINT rig: Free Run Atten: 36 dB	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	09:37:44 PM May 26, 202 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N
	fset 2.46 dB 28.46 dBm				Mkr1 2.479 768 GH 8.386 dBn
18.5					
8.46			♦ ¹		
			min		
1.54					
11.5		+			
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enter 2.480000					Span 8.000 MH
Res BW 100 kH	12	#VBW 3	00 KHZ		weep 1.000 ms (1001 pts
	David Eda			-	i.e.
gilent Spectrum Analy				480MHz Emiss	SION
	50 Ω AC	SENSE	E:INT		09:37:47 PM May 26, 202
	50 Ω AC 526000000 GHz	PNO: East +++ T	EINT rig: Free Run Atten: 36 dB	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE MWMMM
enter Freq 2.	50 Ω AC 526000000 GHz ffset 2.46 dB	PNO: Fast 🛶 T	rig: Free Run	Avg Type: Log-Pwr	TRACE 12345 TYPE MWWWW DET P NNNN Mkr1 2.480 0 GH
enter Freq 2.4 Ref O 0 dB/div Ref 2	50 Ω AC 526000000 GHz	PNO: Fast 🛶 T	rig: Free Run	Avg Type: Log-Pwr	TRACE 12345 TYPE MWWWW DET P NNNN Mkr1 2.480 0 GH
enter Freq 2. 0 dB/div Ref 2 18.5	50 Ω AC 526000000 GHz ffset 2.46 dB	PNO: Fast 🛶 T	rig: Free Run	Avg Type: Log-Pwr	TRACE 12345 TYPE MWWWW DET P NNNN Mkr1 2.480 0 GH
enter Freq 2. Ref O 0 dB/div Ref 2 18.5 8.46	50 Ω AC 526000000 GHz ffset 2.46 dB	PNO: Fast 🛶 T	rig: Free Run	Avg Type: Log-Pwr	TRACE 12345 TYPE MWWWW DET P N N N Mkr1 2.480 0 GH
Ref O 0 dB/div Ref 2	50 Ω AC 526000000 GHz ffset 2.46 dB	PNO: Fast 🛶 T	rig: Free Run	Avg Type: Log-Pwr	Mkr1 2.480 0 GH: 8.373 dBn
Ref O: 0 dB/div Ref 2 0 dB/d	50 Ω AC 526000000 GHz ffset 2.46 dB	PNO: Fast 🛶 T	rig: Free Run	Avg Type: Log-Pwr	Mkr1 2.480 0 GH: 8.373 dBn
Ref Oi 0 dB/div Ref 2 9 18.5 4.54 1.54 1.54 1.54 1.54 1.54 1.54 1.	50 Ω AC 526000000 GHz ffset 2.46 dB	PNO: Fast 🛶 T	rig: Free Run	Avg Type: Log-Pwr	Mkr1 2.480 0 GH: 8.373 dBn
Ref Oi 0 dB/div Ref 2 9 18.5 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.	50 Ω AC 526000000 GHz ffset 2.46 dB	PNO: Fast 🛶 T	rig: Free Run	Avg Type: Log-Pwr	Mkr1 2.480 0 GH: 8.373 dBn
Ref Oi 0 dB/div Ref 2 9 18.5 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.	50 Ω AC 526000000 GHz ffset 2.46 dB	PNO: Fast 🛶 T	rig: Free Run	Avg Type: Log-Pwr	Mkr1 2.480 0 GH: 8.373 dBn
Ref Ol O dB/div Ref 2 P 18.6 1.54 1.5	50 Ω AC 526000000 GHz ffset 2.46 dB 28.46 dBm	PNO: Fast +++ T FGain:Low #	rig: Free Run Atten: 36 dB	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE [1 23 4 5 TYPE MANNAN DET P NN NN Mkr1 2.480 0 GH: 8.373 dBn -11 61 dB -11 61 dB
Ref Or Ref Or	50 Ω AC 526000000 GHz ffset 2.46 dB 28.46 dBm	PNO: Fast 🛶 T	rig: Free Run Atten: 36 dB	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE 2845 TYPE MAXIMUM DET P NNNN Mkr1 2.480 0 GH: 8.373 dBn
Ref Ol O dB/div Ref 2 Cog 18.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1	150 2 AC 526000000 GHz ffset 2.46 dB 28.46 dBm 4 4 4 4 4 4 4 4 2.480 0 GH	PNO: Fast →→ T FGain:Low #/	rig: Free Run Atten: 36 dB	Avg Type: Log-Pwr Avg Hold: 100/100	09:37:47 PM May 26, 202 TRACE 1 2 3 4 5 TYPE M MANNAN DET P NN N Mkr1 2.480 0 GH: 8.373 dBn
Ref Ol O dB/div Ref 2 O dB/div R F R F C C	50 Ω AC 526000000 GHz ffset 2.46 dB 8.46 dBm 2.46 dB 9.00 GHz Hz 12 2.480 0 GHz 2.480 0 GHz 2.480 0 GHz 2.480 0 GHz	#VBW 3	rig: Free Run Atten: 36 dB	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE 2845 TYPE MAXIMUM DET P NNNN Mkr1 2.480 0 GH: 8.373 dBn
Ref Or 0 dB/div Ref 2 0 dB/d	50 Ω AC 526000000 GHz ffset 2.46 dB 28.46 dBm 4 4 4 4 4 2.480 0 GHz	#VBW 3	rig: Free Run Atten: 36 dB	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE [1 2345 TYPE MANNAN DET P NNNN Mkr1 2.480 0 GH: 8.373 dBn
Ref Or 0 dB/div Ref 2 0 dB/d	50 Ω AC 526000000 GHz ffset 2.46 dB 8.46 dBm 2.46 dB 9.00 GHz Hz 12 2.480 0 GHz 2.480 0 GHz 2.480 0 GHz 2.480 0 GHz	#VBW 3	rig: Free Run Atten: 36 dB	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE [] 2345 TYPE MWWWW DET P NNNN Mkr1 2.480 0 GH 8.373 dBn
Ref Or 0 dB/div Ref Or 0 dB/di 0 dB/div Ref Or 0 dB/div Ref Or 0 dB/div Ref Or 0 dB/d	50 Ω AC 526000000 GHz ffset 2.46 dB 8.46 dBm 2.46 dB 9.00 GHz Hz 12 2.480 0 GHz 2.480 0 GHz 2.480 0 GHz 2.480 0 GHz	#VBW 3	rig: Free Run Atten: 36 dB	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE [] 2 3 4 5 TYPE [MANNA DET NNNN Mkr1 2.480 0 GH 8.373 dBr
Ref Ol O dB/div Ref 2 O dB/div R F C C R F	50 Ω AC 526000000 GHz ffset 2.46 dB 8.46 dBm 2.46 dB 9.00 GHz Hz 12 2.480 0 GHz 2.480 0 GHz 2.480 0 GHz 2.480 0 GHz	#VBW 3	rig: Free Run Atten: 36 dB	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE [1 2345 TYPE MANNAN DET P NNNN Mkr1 2.480 0 GH: 8.373 dBn

Band Edge NVNT BLE 1M 2480MHz Ref



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		dge NVNT	BLE 2M	2402MH	z Ref	
	50 Ω AC	SENSE:II	JT	ALIGNAUTO		09:43:39 PM May 26, 202
Center Freq 2.40	I	PNO: Wide 🛶 Tris FGain:Low #Att	j: Free Run en: 36 dB	Avg Type: Avg Hold:	Log-Pwr 100/100	TRACE 1 2 3 4 5 TYPE MWWW DET P N N N
Ref Offse	t 2.57 dB	Guilleon			Mkr1	2.402 032 GH
0 dB/div Ref 28.	57 dBm					9.416 dBi
10.0						
18.6			1			
8.57		Λ	M. Munne	<u> </u>		
1.43		man	en AdAin	N.		
				"M		
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21.4	- Maria				m	
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41.4	A				- M	
51.4 maynam	nd Mind					mmm
						• • • •
51.4						
enter 2.402000 G	iHz					Span 8.000 Mł
Res BW 100 kHz		#VBW 30) kHz		Sweep 1	.000 ms (1001 pt
SG				I STATUS		
	Band Edg	e NVNT BL	E 2M 24.	02MHz E	Emission	
gilent Spectrum Analyzer	- Swept SA 50 Ω AC	SENSE:II	JT	ALIGNAUTO		09:43:42 PM May 26, 20
enter Freq 2.35			j: Free Run	Avg Type: Avg Hold:		TRACE 1 2 3 4 5 TYPE MWWW DET P N N N
		FGain:Low #At	en: 36 dB		ML	(r1 2.401 5 GH
0 dB/div Ref 28.	et 2.57 dB 57 dB m				Wir	8.218 dBi
.og 18.6						
8.57						
1.43						-10.58 at
21.4						
31.4						P_ Ŋ
41.4						<u>} </u>
51.4 may	way and a second and the second se	Leving last maler lake	<u>๛๛๛๛๛๚๚๚๛๛</u>	vertication and a state when the	Han out the proving by the	www.rutumenthal
Start 2.30600 GHz Res BW 100 kHz		#VBW 30) kHz		Sweep 9	Stop 2.40600 GH .600 ms (1001 pt
IKR MODE TRC SCL	8	Y	FUNCTION	FUNCTION WIDTH	FUNCT	ION VALUE
1 N 1 f 2 N 1 f 3 N 1 f	2.401 5 GHz 2.400 0 GHz 2.400 0 GHz	-21.616 dBm				
4 N 1 f	2.400 0 GHz					
3 N 1 f 4 N 1 f 6 7 8 9						
8 9						
10 11						
SG						>
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Band Edge NVNT BLE 2M 2402MHz Ref



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		Edge NVNT	BLE 2M	2480MHz R	ef
	50 Ω AC	SENSE:I	NT	ALIGNAUTO	09:50:25 PM May 26, 202
Center Freq 2.4	80000000 GHz	PNO: Wide ↔ Tri IFGain:Low #At	g: Free Run ten: 36 dB	Avg Type: Log-Pw Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N
	[:] set 2.46 dB 8.46 dBm				Mkr1 2.480 032 GH 7.374 dBn
18.5					
8.46			<b>↓</b> 1		
0.40		~~~	Mr. Murrow	2	
1.54		- WWW		- hame	
11.5		N N			
21.5				h h	
21.0	6.V~	Va (		) m	Δ
31.5		$\gamma$			h
41.5	m				"h
51.5	m				Why mark a
- www.					where a straight of the straig
61.5					
enter 2.480000	GHz				Span 8.000 MH
Res BW 100 kH		#VBW 30	0 kHz		Sweep 1.000 ms (1001 pts
SG				STATUS	
		ge NVNT BL	_E 2M 24	180MHz Emis	SION
gilent Spectrum Analyz RL RF	50 Ω AC	SENSE:I	NT	ALIGNAUTO Avg Type: Log-Pw	09:50:28 PM May 26, 202
enter Freq 2.5	26000000 GHz		g: Free Run ten: 36 dB	Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE M WWWW DET P N N N
	fset 2.46 dB				Mkr1 2.479 7 GH
O dB/div Ref 2	8.46 dBm				6.066 dBr
18.5					
1.54					
11.5					-12.63 dB
21.5					
11 m	<u>3</u>				
51.5 <b>1.5</b>	water to an a second	Month and Manuary	-		Je Anglannangenerangener allander alladered
61.5					
Start 2.47600 GH Res BW 100 kH		#VBW 30	0 647		Stop 2.57600 GH weep 9.600 ms (1001 pts
ARES DIV 100 KH	X	#VDVV JU	FUNCTION		FUNCTION VALUE
1 N 1 f	2.479 7 GH 2.483 5 GH	lz -50.010 dBm			
3 N 1 f	2.500 0 GH 2.484 2 GH	lz -51.965 dBm			
4 N 1 f 5 6 7 8					
8					
9 10 11					
					>
sg				STATUS	

Band Edge NVNT BLE 2M 2480MHz Ref



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# 7. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	-49.34	<=-20	Pass
NVNT	BLE 1M	2440	-48.2	<=-20	Pass
NVNT	BLE 1M	2480	-47.73	<=-20	Pass
NVNT	BLE 2M	2402	-49.45	<=-20	Pass
NVNT	BLE 2M	2440	-48.2	<=-20	Pass
NVNT	BLE 2M	2480	-48	<=-20	Pass



Shenzhen STS Test Services Co., Ltd.



			est Graphs NT BLE 1N	/I 2402MHz Ref	
ilent Spectrum Analyze RL RF	r - Swept SA 50 Ω AC	SE	NSE:INT	ALIGNAUTO	09:14:28 PM May 26, 20
enter Freq 2.40	2000000 GHz	PNO: Wide ↔ IFGain:Low	Trig: Free Run #Atten: 36 dB	Avg Type: Log-Pwr Avg Hold: 100/100	TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N
dB/div Ref 28.	et 2.57 dB . <b>57 dBm</b>			Mł	(r1 2.402 238 5 GH 10.423 dBi
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enter 2.4020000 Res BW 100 kHz		#VBW	300 kHz	-	Span 1.500 MH
				SWe	ep 1.000 ms (1001 pt)
G				Swe	ep 1.000 ms (1001 pt
G	Tx. Spurio	us NVNT	BLE 1M 2		
ilent Spectrum Analyze				STATUS	09:14:59 PM May 26, 202
j <mark>lent Spectrum Analyz</mark> e R L RF	r - Swept SA 50 Ω AC   265000000 GHz	PNO: Fast	VSE:INT	402MHz Emiss	09:14:59 PM May 26, 20 TRACE 12 2 3 4 TYPE M May 26, 20
ilent Spectrum Analyze RL RF enter Freq 13.2	r - Swept SA 50 Ω AC 265000000 GHz		NSE:INT	402MHz Emiss	09:14:59 PM May 26, 20 TRACE 1 2 3 4 5 TYPE MAWWAM DET P NINN Mkr1 2.401 7 GH
ilent Spectrum Analyze RL RF enter Freq 13.2 Ref Offs	r - Swept SA 50 Ω AC   265000000 GHz	PNO: Fast	VSE:INT	402MHz Emiss	09:14:59 PM May 26, 200 IRACE 1 2 3 4 5 TYPE MAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
RL RF RL RF enter Freq 13.2 0 dB/div Ref 28 0 dB/div Ref 28	r - Swept SA 50 Q AC 265000000 GHz set 2.57 dB	PNO: Fast	VSE:INT	402MHz Emiss	09:14:59 PM May 26, 200 IRACE 1 2 3 4 5 TYPE MAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
RL RF Offs O dB/div Ref Offs O dB/div Ref 2	r - Swept SA 50 Q AC 265000000 GHz set 2.57 dB	PNO: Fast	VSE:INT	402MHz Emiss	09:14:59 PM May 26, 200 TRACE 12 3 4 5 TYPE MUMANN DET P NNNN Mkr1 2.401 7 GH 10.022 dBn
ilent Spectrum Analyze RL RF enter Freq 13.2 0 dB/div Ref 28 0 g 1.4 1.4	r - Swept SA 50 Q AC 265000000 GHz set 2.57 dB	PNO: Fast	VSE:INT	402MHz Emiss	09:14:59 PM May 26, 20 TRACE 12 3 4 5 TYPE MWWWW DET P NNN Mkr1 2.401 7 GH 10.022 dBr
ilent Spectrum Analyze RL RF enter Freq 13.2 0 dB/div Ref 28 0 g 1.57 4.3	r - Swept SA 50 Q AC 265000000 GHz set 2.57 dB	PNO: Fast	VSE:INT	402MHz Emiss	09:14:59 PM May 26, 20 TRACE 12 3 4 5 TYPE MWWWW DET P NNN Mkr1 2.401 7 GH 10.022 dBr
ilent Spectrum Analyze RL RF enter Freq 13.2 Ref Offs 0 dB/div Ref 28 og 1.57 4.3 1.4 1.4 1.4 1.4	r - Swept SA 50 Q AC 265000000 GHz set 2.57 dB	PNO: Fast	VSE:INT	402MHz Emiss	09:14:59 PM May 26, 20 TRACE 12 3 4 5 TYPE MWWWW DET P NNN Mkr1 2.401 7 GH 10.022 dBr
RL RF RL RF enter Freq 13.2 Ref Offs 0 dB/div Ref 28 0 d 1.57 1.4 1.4 1.4	r - Swept SA 50 Q AC 265000000 GHz set 2.57 dB	PNO: Fast	VSE:INT	402MHz Emiss	09:14:59 PM May 26, 20 TRACE 12 3 4 5 TYPE MWWWW DET P NNN Mkr1 2.401 7 GH 10.022 dBr
Sectrum Analyze           RL         RF           enter Freq 13.2           0 dB/div         Ref Offs           0 dB/div         Ref 28           0 dB/div         Ref 28           0 dB/div         Ref 28           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4	r - Swept SA 50 Q AC 265000000 GHz set 2.57 dB	PNO: Fast	VSE:INT	402MHz Emiss	09:14:59 PM May 26, 200 TRACE 12 2 3 4 5 TYPE MANANA DET P NNN Mkr1 2.401 7 GH 10.022 dBn -9.59 dE
Ilent Spectrum Analyze           RL         RF           enter Freq 13.2           0 dB/div         Ref Offs           0 dB/div         Ref 28           0 dB/div         Ref 28           0 dB/div         Ref 28           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4           1.4         1.4	r - Swept SA [50 Ω AC 265000000 GHz set 2.57 dB .57 dBm	PNO: Fast IFGain:Low	VSE:INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 10/10	ion 09:14:59 PMMay 26, 202 TRACE 23 4 5 TYPE MININ Mkr1 2.401 7 GH 10.022 dBr -9:59 dE 
Ilent Spectrum Analyze           RL         RF           enter Freq 13.2           0 dB/div         Ref Offs           0 dB/div         Ref 28           0 dB/div         Ref 21           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.5         1 <tr td=""></tr>	- Swept SA [50 Ω AC ] 265000000 GHz iet 2.57 dB .57 dBm .57 dBm	PNO: Fast	VSE:INT Trig: Free Run #Atten: 36 dB	ALIGNAUTO Avg Type: Log-Pwr Avg Type: Log-Pwr AvgHold: 10/10	eep 1.000 ms (1001 pts iON 09:14:59 PM May 26, 202 TRACE [] 2 3 4 5 TYPE [MANN Mkr1 2.401 7 GH 10.022 dBr .9:59 dE .9:59 dE Stop 26.50 GH eep 2.5:30 s (30001 pts FUNCHON VALUE
Ilent Spectrum Analyze           RL         RF           enter Freq 13.2           0 dB/div         Ref Offs           0 dB/div         Ref 28           0 dB/div         Ref 21           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.5         1 <tr td=""></tr>	r - Swept SA   50 Ω AC   265000000 GHz :et 2.57 dB .57 dBm .57 dBm	PNO: Fast	VSE:INT	ALIGNAUTO Avg Type: Log-Pwr Avg Type: Log-Pwr AvgHold: 10/10	ion 09:14:59 PMMay 26, 202 TRACE 23 4 5 TYPE MININ Mkr1 2.401 7 GH 10.022 dBr -9:59 dE 
Ilent Spectrum Analyze           RL         RF           enter Freq 13.2           0 dB/div         Ref Offs           0 dB/div         Ref 28           0 dB/div         Ref 21           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.5         1 <tr td=""></tr>	r - Swept SA [50 Ω AC ] 265000000 GHz iset 2.57 dB .57 dBm .57 dBm .57 dBm .57 dBm	PNO: Fast → IFGain:Low #VBW z 10.022 df z .38.929 df z .49.563 df z .49.147 df	VSE:INT	ALIGNAUTO Avg Type: Log-Pwr Avg Type: Log-Pwr AvgHold: 10/10	ion 09:14:59 PMMay 26, 202 TRACE 23 4 5 TYPE MININ Mkr1 2.401 7 GH 10.022 dBr -9:59 dE 
Ilent Spectrum Analyze           RL         RF           enter Freq 13.2           0 dB/div         Ref Offs           0 dB/div         Ref 28           0 dB/div         Ref 21           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.5         1 <tr td=""></tr>	- Swept SA [50 Ω AC ] 265000000 GHz iset 2.57 dB .57 dBm .57 dBm .5	PNO: Fast → IFGain:Low #VBW z 10.022 df z .38.929 df z .49.563 df z .49.147 df	VSE:INT	ALIGNAUTO Avg Type: Log-Pwr Avg Type: Log-Pwr AvgHold: 10/10	ion 09:14:59 PM May 26, 20 TRACE 1 2 3 4 5 TYPE MWWW Mkr1 2.401 7 GH 10.022 dBr 
Sectrum Analyze           RL         RF           enter Freq 13.2           0 dB/div         Ref Offs           0 dB/div         Ref 28           0 dB/div         Ref 28           0 dB/div         Ref 28           0 dB/div         Ref 28           0 dB/div         Ref 01           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.4         1           1.5         1           1.6         1	- Swept SA [50 Ω AC ] 265000000 GHz iset 2.57 dB .57 dBm .57 dBm .5	PNO: Fast → IFGain:Low #VBW z 10.022 df z .38.929 df z .49.563 df z .49.147 df	VSE:INT	ALIGNAUTO Avg Type: Log-Pwr Avg Type: Log-Pwr AvgHold: 10/10	ion 09:14:59 PM May 26, 20 TRACE 1 2 3 4 5 TYPE MWWW Mkr1 2.401 7 GH 10.022 dBr 



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enter F	req 2.4400		PNO: Wide +++ IFGain:Low	Trig: Free Run #Atten: 36 dB	Avg Hold: 100/100	DET P N N N N
0 dB/div	Ref Offset 2 Ref 28.54				N	/lkr1 2.440 247 5 GH 9.069 dBr
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	4400000 GI	łz		W 000 ku-		Span 1.500 MH
Res BW	4400000 GH 100 kHz	łz	#VB	W 300 kHz	Sv In status	Span 1.500 MH weep 1.000 ms (1001 pt
	100 kHz				<b>I</b> STATUS	weep 1.000 ms (1001 pt
Res BW	100 kHz - rum Analyzer - S	Tx. Spuric	ous NVN	T BLE 1M 2	100 Status 2440MHz Emis	weep 1.000 ms (1001 pt SION
Res BW sg gilent Spect	100 kHz 	Tx. Spuric	ous NVN		<b>I</b> STATUS	weep 1.000 ms (1001 pt SION 09:35:36 PM May 26, 20 TRACE   2 3 4 5 TYPE   Mwww
Res BW sg gilent Spect	100 kHz 	Tx. Spurie wept SA & AC   5000000 GHz	ous NVN	T BLE 1M 2	ALIGNAUTO Avg Type: Log-Pwr	weep 1.000 ms (1001 pt SION 09:35:36 PM May 26, 20 TRACE [1 2 3 4 TYPE [M WWWW DET [P N N N
Res BW gilent Spect RL Center F 0 dB/div	100 kHz 	Tx. Spurio ^{wept SA} Ω AC 50000000 GHz 2.54 dB		T BLE 1M 2	ALIGNAUTO Avg Type: Log-Pwr	weep 1.000 ms (1001 pt SION 09:35:36 PM May 26, 20 TRACE   2 3 4 5 TYPE   Mwww
Res BW sg glent Spect RL Enter F 0 dB/div .0 g	100 kHz 	Tx. Spurio ^{wept SA} Ω AC 50000000 GHz 2.54 dB		T BLE 1M 2	ALIGNAUTO Avg Type: Log-Pwr	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20.           Trace [1 2 3 4 5         5 GH           Mkr1 2.440 5 GH         5 GH
Res BW G G G G G G G G G G G G G G G G G G G	100 kHz 	Tx. Spurio ^{wept SA} Ω AC 50000000 GHz 2.54 dB		T BLE 1M 2	ALIGNAUTO Avg Type: Log-Pwr	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20.           Trace [1 2 3 4 5         5 GH           Mkr1 2.440 5 GH         5 GH
Res BW ss gilent Spect RL RL CodB/div O G Ss St A L46	100 kHz 	Tx. Spurio ^{wept SA} Ω AC 50000000 GHz 2.54 dB		T BLE 1M 2	ALIGNAUTO Avg Type: Log-Pwr	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20.           Trace [1 2 3 4 5         5 GH           Mkr1 2.440 5 GH         5 GH
Res         BW           ss	100 kHz 	Tx. Spurio ^{wept SA} Ω AC 50000000 GHz 2.54 dB		T BLE 1M 2	ALIGNAUTO Avg Type: Log-Pwr	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20           TRACE         2.3.4 E           TYPE         DET           Mkr1 2.440 5 GH         8.205 dBr
Res         BW           ss	100 kHz 	Tx. Spurio ^{wept SA} Ω AC 50000000 GHz 2.54 dB		T BLE 1M 2	ALIGNAUTO Avg Type: Log-Pwr	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20           TRACE         2.3.4 E           TYPE         DET           Mkr1 2.440 5 GH         8.205 dBr
Res         BW           gilent Spect         RL           Renter F         R           0 dB/div         93           18.5	100 kHz 	Tx. Spurio ^{wept SA} Ω AC 50000000 GHz 2.54 dB		T BLE 1M 2	ALIGNAUTO Avg Type: Log-Pwr	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20           TRACE         2.3.4 E           TYPE         DET           Mkr1 2.440 5 GH         8.205 dBr
Res         BW           gilent Spect         RL           center F         CodB/div           0         0           18.6         CodB/div           18.5         CodB/div           18.6         CodB/div           18.6         CodB/div           18.6         CodB/div           18.6         CodB/div           18.6         CodB/div           18.6         CodB/div           18.7         Co	100 kHz	Tx. Spurio ^{wept SA} Ω AC 50000000 GHz 2.54 dB		T BLE 1M 2	ALIGNAUTO Avg Type: Log-Pwr	weep 1.000 ms (1001 pt Sion 09:35:36 PM May 26, 20 TRACE [12:3:4 C TYPE [1
Res         BW           gilent Spect         RL           RL         Image: Spect S	100 kHz	Tx. Spurio ^{wept SA} Ω AC 50000000 GHz 2.54 dB	PNO: Fast PRO: Fast IFGain:Low	T BLE 1M 2	ALIGNAUTO AVIG TYPE: Log-Pwr AvigHold: 10/10	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20           TRACE         2.3.4 E           TYPE         DET           Mkr1 2.440 5 GH         8.205 dBr
Res         BW           gilent Spect         RL           RL         RL           Center F         RL           18.5         RL           14.6         RL           15.5         RL           51.5         RL           5	100 kHz 	Tx. Spurid wept SA ≥ AC 50000000 GHz 2.54 dB dBm ↓	PNO: Fast FRoin:Low	T BLE 1M 2	ALIGNAUTO AVIG TYPE: Log-Pwr AvigHold: 10/10	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20.           TRACE [1 2 3 4 4         1 2 3 4 4           TYPE [1 2 3 4 4         5 GH           Mkr1 2.440 5 GH         8.205 dBr           -10:93 @         -10:93 @           Stop 26.50 GH         -50 GH
Res         BW           sa	100 kHz 	x 2.54 dB 2.54 dB 2.54 dB 2.54 dB 2.54 dB 2.54 dB 2.54 dB 2.54 dB 4.889 0 G	OUS NVN PN0: Fast IFGain:Low 4 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	T BLE 1M 2	ALIGNAUTO AVIG TYPE: Log-Pwr AvigHold: 10/10	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20.           TRACE         12.3.4           TRACE         12.3.4           Mkr1         2.440 5 GH           8.205 dBr         -40.83 dE           -40.83 dE         -50.50 GH           Weep         2.530 s (30001 pt
Res         BW           ss         RL           Renter         R           CodB/div         Start           0         dB/div	100 kHz	Tx. Spurid wept SA 30000000 GHz 2.54 dB dBm ↓ 2.54 dB ↓ 2.54 dB	PN0: Fast PN0: Fast IFGain:Low #VB #VB Hz \$205 Hz -39.139 Hz -49.280 Hz 50.008	T BLE 1M : SENSE:INT	ALIGNAUTO AVIG TYPE: Log-Pwr AvigHold: 10/10	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20.           TRACE         12.3.4           TRACE         12.3.4           Mkr1         2.440 5 GH           8.205 dBr         -40.83 dE           -40.83 dE         -50.50 GH           Weep         2.530 s (30001 pt
Res         BW           gilent Spect         RL           gilent Spect         RL           center F         Second           in a second         Second	100 kHz	Tx. Spurid         wept SA         2.64 dB         dBm         2.54 dB         2.54 dB         2.54 dB         2.54 dB         (1)         2.54 dB         (2)         (3)         (3)         (3)         (3)         (4)         (5)         (6)         (7)         (7)         (7)         (7)         (7)         (1)         (1)         (2)         (3)         (4)         (5)         (7)         (7)         (7)         (7)         (7)         (7)         (7)         (7)         (7)         (7)         (1)         (1)         (2)         (3)         (4)         (5)         (5)         (6)         (7)         (7)         (7)         (7)         (7)         (7)	PN0: Fast PN0: Fast IFGain:Low #VB #VB Hz \$205 Hz -39.139 Hz -49.280 Hz 50.008	T BLE 1M : SENSE:INT	ALIGNAUTO AVIG TYPE: Log-Pwr AvigHold: 10/10	weep         1.000 ms (1001 pt           Sion         09:35:36 PM May 26, 20.           TRACE         12.3.4           TRACE         12.3.4           Mkr1         2.440 5 GH           8.205 dBr         -40.83 dE           -40.83 dE         -50.50 GH           Weep         2.530 s (30001 pt

## Tx. Spurious NVNT BLE 1M 2440MHz Ref



	Tx. Spu	rious NVN	<u>IT BLE 1</u>	M 2480MF	Iz Ref	
Agilent Spectrum Analyzer - S XI RL RF 50	Swept SA DΩ AC	CENT	E:INT	ALIGNAUTO		09:37:54 PM May 26, 202
Center Freq 2.480	000000 GHz P	NO: Wide +++ 1	rig: Free Run Atten: 36 dB	ALGNAOTO Avg Type: Avg Hold: 1	Log-Pwr 00/100	TRACE 1 2 3 4 5 TYPE M WWWW DET P N N N N
Ref Offset:					Mkr1	2.480 240 0 GH 8.304 dBn
10 dB/div <b>Ref 28.46</b>	6 dBm					8.304 dBn
18.5				. 1		
8.46		man				
	mont				m	
-1.54	m				J. P. M. M.	mm
-11.5	, 					- Mar -
and the second sec						- March
-21.5						
-31.5						
-41.5						
-51.5						
-61.5						
Center 2.4800000 G						Enon 1 500 MH
#Res BW 100 kHz	ΠZ	#VBW 3	300 kHz		Sweep	Span 1.500 MH 1.000 ms (1001 pts
NSG				<b>I</b> STATUS		
				~		
	Tx. Spuriou	IS NVNT	BLE 1M	-	Emissio	n
Agilent Spectrum Analyzer - S	Swept SA			2480MHz	Emissio	
Agilent Spectrum Analyzer - S	Swept SA DΩ AC	SENS	E:INT	2480MHz Alignauto Avg Type:	Log-Pwr	09:38:25 PM May 26, 202 TRACE 1 2 3 4 5
Agilent Spectrum Analyzer - S XI RL RF 50	Swept SA D Q AC 5000000 GHz	SENS		2480MHz	Log-Pwr	09:38:25 PM May 26, 202
Agilent Spectrum Analyzer - 1 X RL RF SC Center Freq 13.26 Ref Offset	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT	2480MHz Alignauto Avg Type:	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N VIkr1 2.479 4 GH:
Agilent Spectrum Analyzer - : XI RL RF 50 Center Freq 13.26	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT	2480MHz Alignauto Avg Type:	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 1 2 3 4 5 TYPE M WWWWW DET P N N N
Agilent Spectrum Analyzer - 2 RL RF 50 Center Freq 13.263 Ref Offset 10 dB/div Ref 28.44 Log 18.5	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT	2480MHz Alignauto Avg Type:	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N VIkr1 2.479 4 GH:
Agilent Spectrum Analyzer - 5 R R RF 50 Center Freq 13.265 Ref Offset 10 dB/div Ref 28.41 18.5 8.46	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT	2480MHz Alignauto Avg Type:	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N VIkr1 2.479 4 GH:
Agilent Spectrum Analyzer - 2 RL RF 50 Center Freq 13.263 Ref Offset 10 dB/div Ref 28.44 Log 18.5	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT	2480MHz Alignauto Avg Type:	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 1 2 3 4 5 TYPE MWWWW DET P N N N N VIkr1 2.479 4 GH:
Agilent Spectrum Analyzer - 52 20 RL RF 50 Center Freq 13.265 Ref Offset 10 dB/div Ref 28.41 18.5 8.46 -1.54	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT	2480MHz Alignauto Avg Type:	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 11 23 4 5 TYPE[M WAWM DET P N N N Mkr1 2.479 4 GH: 7.364 dBn
Agilent Spectrum Analyzer - 5 21 RL RF 50 Center Freq 13.263 Ref Offset 10 dB/div Ref 28.41 18.5 8.46 -1.54 -11.5	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT	2480MHz Alignauto Avg Type:	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 11 23 4 5 TYPE[M WAWM DET P N N N Mkr1 2.479 4 GH: 7.364 dBn
Agilent Spectrum Analyzer - 5 R R F 50 Center Freq 13.26 Ref Offset 10 dB/div Ref 28.4 18.5 18.5 1.5 -21.5 -31.5 -41.5	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT	2480MHz Alignauto Avg Type:	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 11 23 4 5 TYPE[M WAWM DET P N N N Mkr1 2.479 4 GH: 7.364 dBn
Agilent Spectrum Analyzer - 5 R R F 50 Center Freq 13.26 Ref Offset 10 dB/div Ref 28.44 18.5 8.46 1.54 11.5 -21.5 -31.5 -51.5 -51.5	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT	2480MHz	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 11 23 4 5 TYPE[M WAWM DET P N N N Mkr1 2.479 4 GH: 7.364 dBn
Agilent Spectrum Analyzer - 5 R R Ref Offset 10 dB/div Ref 28.44 -1.54 -1.54 -1.54 -1.55 -21.5 -31.5 -41.5 -51.5 -41.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT	2480MHz	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 12:3:4:5 TVTE MW DET P NNNN Mkr1 2.479 4 GH: 7.364 dBn -11.70 dB
Agilent Spectrum Analyzer - 50 Center Freq 13.26: Center Freq 13.26: Ref Offset 10 dB/div Ref 28.41 18.5 8.46 -1.54 -1.54 -1.55 -31.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS	E:INT Trig: Free Run Atten: 36 dB	2480MHz	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 12:3:45 TYPE MANNA DET P NNNN Mkr1 2.479 4 GH: 7.364 dBn -11.70 dB
Agilent Spectrum Analyzer - 5 R R Ref Offset 10 dB/div Ref 28.44 -1.54 -1.54 -1.54 -1.55 -21.5 -31.5 -41.5 -51.5 -41.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.5 -51.	Swept SA 3 Ω AC 5000000 GHz IF IF 2.46 dB	SENS NO: Fast ->- 1 Gain:Low #	E:INT Trig: Free Run Atten: 36 dB	2480MHz	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 12:3:4:5 TVTE MW DET P NNNN Mkr1 2.479 4 GH: 7.364 dBn -11.70 dB
Agilent Spectrum Analyzer - Sc           R R         Ref Offset           Center Freq 13.26:           Ref Offset           10 dB/div         Ref 28.41           0 dB/div         Ref 28.41           18.5         1           18.6         1           11.5         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.55         1           -1.54         1           -1.55         1           -1.55         1           -1.54         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.56         1           -1.57         1           -1.57         1	Swept SA 20 AC 5000000 GHz 2.46 dB 6 dBm 2.46 dB 4 4 2.479 4 GHz	SENS PNO: Fast → 1 Gain:Low #	EINT Trig: Free Run Atten: 36 dB	2480MHz	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 12:3:4:5 TVTE MUNN Mkr1 2.479 4 GH: 7.364 dBn -11.70 dP
Agilent Spectrum Analyzer - Sc           R R         Ref Offset           Center Freq 13.26:           Ref Offset           10 dB/div         Ref 28.41           0 dB/div         Ref 28.41           18.5         1           18.6         1           11.5         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.55         1           -1.54         1           -1.55         1           -1.55         1           -1.54         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.56         1           -1.57         1           -1.57         1	Swept SA 3 Q AC 5000000 GHz 2.46 dB 6 dBm 2.46 dB 4.397 4 GHz 25.660 0 GHz 4.397 5 GHz 4.397 5 GHz	SENS PN0: Fast → 1 Gain:Low # For the set of the	E:INT Trig: Free Run Atten: 36 dB	2480MHz	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 12:3:4:5 TVTE MUNN Mkr1 2.479 4 GH: 7.364 dBn -11.70 dP
Agilent Spectrum Analyzer - Sc           R R         Ref Offset           Center Freq 13.26:           Ref Offset           10 dB/div         Ref 28.41           0 dB/div         Ref 28.41           18.5         1           18.6         1           11.5         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.55         1           -1.54         1           -1.55         1           -1.55         1           -1.54         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.56         1           -1.57         1           -1.57         1	Swept SA 3 Ω AC 5000000 GHz F 2.46 dB 6 dBm 2.46 dB 4 2.46 dB 6 dBm 4 2.46 dB 6 dBm	SENS PN0: Fast → 1 Gain:Low # For the set of the	EINT Frig: Free Run Atten: 36 dB	2480MHz	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 12:3:4:5 TVTE MUNN Mkr1 2.479 4 GH: 7.364 dBn -11.70 dP
Agilent Spectrum Analyzer - Sc           R R         Ref Offset           Center Freq 13.26:           Ref Offset           10 dB/div         Ref 28.41           0 dB/div         Ref 28.41           18.5         1           18.6         1           11.5         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.55         1           -1.54         1           -1.55         1           -1.55         1           -1.54         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.56         1           -1.57         1           -1.57         1	Swept SA 3 Q AC 5000000 GHz F 2.46 dB 6 dBm 2.46 dB 4 dB 4 dB 2.479 4 GHz 25.660 0 GHz 4.997 5 GHz 7.282 8 GHz 7.282 8 GHz	SENS NO: Fast → 1 Gain:Low #	EINT Frig: Free Run Atten: 36 dB	2480MHz	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 12:3:4:5 TVTE MUNN Mkr1 2.479 4 GH: 7.364 dBn -11.70 dP
Agilent Spectrum Analyzer - Sc           R R         Ref Offset           Center Freq 13.26:           Ref Offset           10 dB/div         Ref 28.41           0 dB/div         Ref 28.41           18.5         1           18.6         1           11.5         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.54         1           -1.55         1           -1.54         1           -1.55         1           -1.55         1           -1.54         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.55         1           -1.56         1           -1.57         1           -1.57         1	Swept SA 3 Q AC 5000000 GHz F 2.46 dB 6 dBm 2.46 dB 4 dB 4 dB 2.479 4 GHz 25.660 0 GHz 4.997 5 GHz 7.282 8 GHz 7.282 8 GHz	SENS NO: Fast → 1 Gain:Low #	EINT Frig: Free Run Atten: 36 dB	2480MHz	Log-Pwr 0/10	09:38:25 PM May 26, 202 TRACE 12:3:4:5 TVTE MUNN Mkr1 2.479 4 GH: 7.364 dBn -11.70 dP
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## Tx. Spurious NVNT BLE 1M 2480MHz Ref



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ilent Spectrum Analyzer - S	Tx. Spur					
RL RF 50 enter Freq 2.4020	000000 GHz		ig: Free Run tten: 36 dB	ALIGNAUTO Avg Type:   Avg Hold: 1		09:43:48 PM May 26, 20 TRACE 1 2 3 4 5 TYPE MWWW DET P N N N
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G ;ilent Spectrum Analyzer - S	wept SA Ω AC     5000000 GHz P	IS NVNT E	BLE 2M 2	-	Emission	1.000 ms (1001 pt 09:44:19 PM May 26, 20 TRACE [1] 2 3 4 5 TYPE IM MANY
G Ilent Spectrum Analyzer - S RL   RF   50 enter Freq 13.265	wept SA Ω AC     5000000 GHz  F1  F1		BLE 2M 2	2402MHz I ALIGNAUTO Avg Type: 1	Emission Log-Pwr 0/10	09:44:19 PM May 26, 20 TRACE [1 2 3 4 TYPE MMMay 26, 20 TRACE [1 2 3 4 TYPE MMMMay OET P. N N N kr1 2.401 7 GH
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gilent Spectrum Analyz RL RF Center Freq 2.4	50 Ω AC	iHz PNO: Wid IFGain:Lo		ree Run 36 dB	ALIGNAUTO Avg Type: Log Avg Hold: 100/1		TR. T	PM May 26, 20 ACE 1 2 3 4 5 YPE M WWW DET P N N N I
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Bilent Spectrum Analyz           RL         RF           center Freq 13           Ref Of           O dB/div         Ref Of           O dB/div         Ref Of           Start         Start           Start 30 MHz         Res BW 100 kH           Res BW 100 kH         Ref Of           N         1         f           N         1         f           N         1         f           N         1         f	rer - Swept SA 50 2 AC .265000000 fset 2.54 dB 8.54 dBm fset 2.54 dB 2.54 dBm	GHz PNO: Fas IFGain:Lo 9 7 GHz 18 GHz 20 GHz	SENSE:INT st →→ Trig: Fi #Atten: #Atten: #VBW 300 k 5 6.808 dBm 39.492 dBm 39.492 dBm	E 2M 24	ALIGNAUTO Avg Type: Log Avg]Hold: 10/10	Pwr N Sweep	ר 09:48:11 TR T 7 1kr1 2.43 6.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0	PM May 26, 20 AGE 12 3 4 YPE M WWWW 59 7 GH 308 dB -11 29 0 -11 29 0 -11 29 0 -11 29 0 -11 29 0
Bilent Spectrum Analyz         RF           RL         RF           center Freq 13           OdB/div         Ref Of           0 dB/div         Ref Of           0 dB/div         Ref Of           0 dB/div         Ref Of           18.5	rer - Swept SA 50 & AC 265000000 Fset 2.54 dB 8.54 dBm 554 dBm 25.69 4.85 7.42	GHz PNO: Fas IFGain:Lo	SENSE:INT  st →→ Trig: Fi W #Atten: #Atten: 5 5 4 4 5 6 808 dBm 6.808 dBm	E 2M 24	ALIGNAUTO Avg Type: Log Avg]Hold: 10/10	Pwr N Sweep	ר 09:48:11 TR T 7 1kr1 2.43 6.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0	PM May 26, 20 AGE 12 3 4 YPE M WWWW 59 7 GH 308 dB -11 29 0 -11 29 0 -11 29 0 -11 29 0 -11 29 0
glient Spectrum Analyz           RL         RF           center Freq 13           center Freq 13           Ref Of           0 dB/div         Ref Of           0 dB/div         Ref Of           0 dB/div         Ref Of           18.5	rer - Swept SA 50 & AC 265000000 Fset 2.54 dB 8.54 dBm 554 dBm 25.69 4.85 7.42	GHz PNO: Fas IFGain:Lo	SENSE:INT st →→ Trig: Fi #Atten: #Atten: #VBW 300 k 5 6 808 dBm 39.492 dBm 49.420 dBm	E 2M 24	ALIGNAUTO Avg Type: Log Avg]Hold: 10/10	Pwr N Sweep	ר 09:48:11 TR T 7 1kr1 2.43 6.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0	PM May 26, 20 ACE 12 3 4 YPE M WWWW 59 7 GH 308 dB1 -11 29 d -11 29 d
Start 30 MHz         Ref         Of           11.6         1         1           12.0         8         1           14.6         1         1           14.6         1         1           15.5         1         1           14.6         1         1           15.5         1         1           14.6         1         1           15.5         1         1           14.6         1         1           15.5         1         1           14.6         1         1           15.5         1         1           14.0         1         1           15.7         1         1           16.3         1         1           2         1         1           3         1         1           4         1         1           5         1         1	rer - Swept SA 50 & AC 265000000 Fset 2.54 dB 8.54 dBm 554 dBm 25.69 4.85 7.42	GHz PNO: Fas IFGain:Lo	SENSE:INT st →→ Trig: Fi #Atten: #Atten: #VBW 300 k 5 6 808 dBm 39.492 dBm 49.420 dBm	E 2M 24	ALIGNAUTO Avg Type: Log Avg]Hold: 10/10	Pwr N Sweep	ר 09:48:11 TR T 7 1kr1 2.43 6.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0	PM May 26, 20 AGE 12 3 4 YPE M WWWW 59 7 GH 308 dB -11 29 0 -11 29 0 -11 29 0 -11 29 0 -11 29 0

Tx. Spurious NVNT BLE 2M 2440MHz Ref

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	Tx. Spur	1005 1101					
gilent Spectrum Analyzer - RL RF 5 enter Freq 2.480	0 Ω AC 10000000 GHz P	NO: Wide 🔸	SE:INT Trig: Free Run #Atten: 36 dB	ALIGNAUTO Avg Type Avg Hold:		09:50:	34 PM May 26, 200 TRACE 1 2 3 4 5 TYPE M WWWW DET P N N N N
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i1.5							
							- 0.000 MI
enter 2.480000 GH Res BW 100 kHz	1Z						n 3.000 MH
		#VBW	300 kHz		Swe	ep 1.000 n	ns (1001 pt
G				<b>K</b> STATUS			ns (1001 pt
G	Tx. Spuriou			-			ns (1001 pt
sg g <mark>ilent Spectrum Analyzer</mark> - R L RF 5	<b>Swept SA</b> 0 Ω AC	is NVNT		2480MHz	Emissi	ion	05 PM May 26, 203
sg gilent Spectrum Analyzer -	Swept SA 0 Ω AC     5000000 GHz		BLE 2M	2480MHz	Emissi	ion	05 PM May 26, 20 TRACE 1 2 3 4 5 TYPE M WWWWW
sg gilent Spectrum Analyzer - RL RF 5 enter Freq 13.26 Ref Offset	Swept SA 0 Ω AC 50000000 GHz F IF 12.46 dB		BLE 2M	2480MHz Alignauto Avg Type	Emissi	09:51: 09:51: Mkr1 2.4	05 PM May 26, 20 TRACE 1 2 3 4 5 TYPE M WWWW DET P N N N 479 4 GH
ss gilent Spectrum Analyzer RL RF 5 enter Freq 13.26	Swept SA 0 Ω AC 50000000 GHz F IF 12.46 dB		BLE 2M	2480MHz Alignauto Avg Type	Emissi	09:51: 09:51: Mkr1 2.4	05 PM May 26, 202 TRACE 1 2 3 4 5 TYPE M MMMM DET P N N N 479 4 GH
sc RL RF 5 enter Freq 13.26 0 dB/div Ref Offset 0 dB/div Ref 28.4 9 1.3.46	Swept SA 0 Ω AC 50000000 GHz F IF 12.46 dB		BLE 2M	2480MHz Alignauto Avg Type	Emissi	09:51: 09:51: Mkr1 2.4	05 PM May 26, 20 TRACE 1 2 3 4 5 TYPE M WWWW DET P N N N 479 4 GH
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RL RF S RL RF S enter Freq 13.26 0 dB/div Ref Offset 0 dB/div Ref 28.4 9 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.54 1.55 1.54 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.55	Swept SA 0 Ω AC 50000000 GHz F IF 12.46 dB		BLE 2M	2480MHz Alignauto Avg Type	Emissi	09:51: 09:51: Mkr1 2.4	05 PM May 26, 202 TRACE 12 3 4 5 TYPE M WWWW DET P NNNN 479 4 GH I.354 dBr
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sc RL RF S enter Freq 13.26 0 dB/div Ref Offset 0 dB/div Ref 28.4 9 15 15 15 15 15 15 15 15 15 15	Swept SA 0 Ω AC 50000000 GHz F IF 12.46 dB		BLE 2M	2480MHz Alignauto Avg Type	Emissi	09:51: 09:51: Mkr1 2.4	05 PM May 26, 200 TRACE 12 3 4 5 DET P NNNN DET P NNNN 479 4 GH 1.354 dBr
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SG     Signet Spectrum Analyzer -       RL     RF       RL     RF       Senter Freq 13.26       O dB/div       Ref Offset       O dB/div       Ref 28.4       99       93       94       95       96       97       98       98       99       91       91       92       93       94       94       95       96       97       98       98       99       99       91       91       91       92       93       94       94       95       95       96       97       98       98       99       99       94       94       95       95       96       97       98       98       99       99       99       94       95       95       96       97       98	Swept SA 0 2 AC 5000000 GHz F 12.46 dB 6 dBm 4 4 4 2.479 4 GHz	JS NVNT SEN NO: Fast ↔ Gain:Low \$	BLE 2M	2480MHz	Emissi : Log-Pwr 10/10	09:51 09:51	05 PM May 26, 202 TRACE 11 2 3 4 5 TYPE MWWWW 479 4 GH 1. 354 dBr -12.03 dE -12.03 dE
SG         Ref         Offset           0 dB/div         Ref Offset         0           10.54         1         1           1.54         1         1         1           1.54         1         1         1         1           1.54         1         1         1         1         1           1.54         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	Swept SA 0.2 AC 5000000 GHz F F 12.46 dB 6 dBm 2.479 4 GHz 25.709 4 GHz 4.956 9 GHz 4.956 9 GHz	JS NVNT SEN >NO: Fast Gain:Low ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	BLE 2M	2480MHz	Emissi : Log-Pwr 10/10	09:51 09:51 09:51 09:51 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	05 PM May 26, 202 TRACE 11 2 3 4 5 TYPE MWWWW 479 4 GH 1. 354 dBr -12.03 dE -12.03 dE
SG           Signet Spectrum Analyzer -           RL         RF         S           center Freq 13.26           O dB/div         Ref Offset           O dB/div         Ref Offset           0 dB/div         Ref 28.4         1           99	Swept SA 0 0 AC 5000000 GHz F F 12.46 dB 6 dBm 4 2.479 4 GHz 25.709 4 GHz 25.709 4 GHz	JS NVNT SEN Gain:Low #VBW 4.354 dE -40.036 dE	BLE 2M .	2480MHz	Emissi : Log-Pwr 10/10	09:51 09:51 09:51 09:51 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	05 PM May 26, 202 TRACE 11 2 3 4 5 TYPE MWWWW 479 4 GH 1. 354 dBr -12.03 dE -12.03 dE
SG       SIL       RL       REF Offset       Genter Freq 13.26       OdB/div       Ref Offset       OdB/div       OdB/div </td <td>Swept SA 0 0 AC 5000000 GHz F 15000000 GHz 15000000 GHz 15000000 GHz 15000 GHz 15000 GHz 1500 4 GHZ 1500</td> <td>JS NVNT SEN SEN SEN SEN SEN SEN SEN SEN</td> <td>BLE 2M .</td> <td>2480MHz</td> <td>Emissi : Log-Pwr 10/10</td> <td>09:51 09:51 09:51 09:51 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td> <td>05 PM May 26, 202 TRACE 11 2 3 4 5 TYPE MWWWW 479 4 GH 1. 354 dBr -12.03 dE -12.03 dE</td>	Swept SA 0 0 AC 5000000 GHz F 15000000 GHz 15000000 GHz 15000000 GHz 15000 GHz 15000 GHz 1500 4 GHZ 1500	JS NVNT SEN SEN SEN SEN SEN SEN SEN SEN	BLE 2M .	2480MHz	Emissi : Log-Pwr 10/10	09:51 09:51 09:51 09:51 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	05 PM May 26, 202 TRACE 11 2 3 4 5 TYPE MWWWW 479 4 GH 1. 354 dBr -12.03 dE -12.03 dE
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## 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.