

RADIO TEST REPORT

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Report No.:STS2203223W02

Issued for

FXT Technology Co., Limited

14th D, Fusen Building, Dongzhou Community, GuangMing Street, Guangming District, Shenzhen, China

Product Name:	2.4G digital wireless backup camera 7" Monitor kit
Brand Name:	FXT
Model Name:	FX909T
Series Model:	FXYYYT (YYY said 0-9 digital)
FCC ID:	2AGB8-FX909T
Test Standard:	FCC Part 15.247

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APPROV

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TEST RESULT CERTIFICATION

Applicant's Name	FXT Technology Co., Limited
Address	14th D, Fusen Building,Dongzhou Community, GuangMing Street, Guangming District,Shenzhen,China
Manufacturer's Name	
Address	14th D, Fusen Building,Dongzhou Community, GuangMing Street, Guangming District,Shenzhen,China
Product Description	
Product Name:	2.4G digital wireless backup camera 7" Monitor kit
Brand Name:	FXT
Model Name	FX909T
Series Model	FXYYYT (YYY said 0-9 digital)
Test Standards	FCC Part15.247
Test Procedure:	ANSI C63.10-2013

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

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Date of Test

Date of receipt of test item 02 June 2022

Date (s) of performance of tests:	02 June 2022 ~ 22 July 2022
Date of Issue:	22 July 2022

Test Result..... Pass

Testing Engineer

(Chris Chen)

Technical Manager

(Sean she)

Authorized Signatory :

(Bovey Yang)



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Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents	
00	00 22 July 2022 STS2203223		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	Judgment	Remark				
15.207	Conducted Emission	N/A				
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 Emission	PASS				
15.247 (e)	Power Spectral Density	PASS				
15.205	Restricted bands of operation	PASS				
Part 15.247(d)/ Part 15.209(a)						
15.203						

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

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



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	2.4G digital wireless backup camera 7" Monitor kit		
Trade Name	FXT		
Model Name	FX909T		
Series Model	FXYYYT (YYY said	0-9 digital)	
Model Difference	Different product na	mes, different appearance.	
Product Description	The EUT is a 2.4G digital wireless backup camera 7Monitor kitOperation Frequency:Addulation Type:BPSKNumber Of Channel:Antenna Type:Omnidirectional Antenna Antenna Gain (dBi)		
Channel List	Please refer to the N	Note 2.	
Input:	DC 12V-32V		
Hardware version number	FX_FHD701_TX_V1.2 FX_909TX_SNCC70_RT6763_TX_IQ_20210708_17341 7USB_20210728-B		
Software version number			
Connecting I/O Port(s)	Please refer to the N	Note 1.	

Note:

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

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Channel List							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequenc y (MHz)
01	2406	06	2425	11	2448	16	2468
02	2409	07	2428	12	2452	17	2472
03	2415	08	2432	13	2455	18	2475
04	2418	09	2442	14	2458	19	2478
05	2422	10	2445	15	2465		

3.

Table for Filed Antenna

Ant.	Brand Model N		Antenna Type	Connector	Gain (dBi)	NOTE
1	FXT	FX909T	Omnidirectional Antenna	N/A	3dBi	2.4G ANT

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





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 CH01(2406MHz)	BPSK
Mode 2	TX CH10(2445MHz)	BPSK
Mode 3	TX CH19(2478MHz)	BPSK

Note:

(1) We tested for all available U.S. voltage and frequencies (For 120V, 50/60Hz and 240V, 50/60Hz) for which the device is capable of operation, and the worst case of 120V/ 60Hz is shown in the report.

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

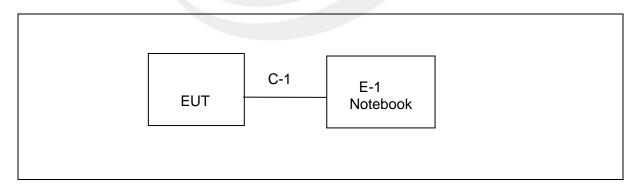
2.3 TEST SOFTWARE AND POWER LEVEL

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
Other SRD	2.4G	BPSK	3	7	SecureCRTPortable

2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiated Spurious Emission Test







2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

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

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

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
E-1	Notebook	LENOVO	ThinkPad E470	N/A	N/A
C-1	USB Cable	N/A	N/A	150cm	NO

Note:

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



2.6 EQUIPMENTS LIST

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2021.09.30	2022.09.29
Signal Analyzer	R&S	FSV 40-N	101823	2021.09.30	2022.09.29
Active loop Antenna	ZHINAN	ZN30900C	16035	2021.04.11	2023.04.10
Bilog Antenna	TESEQ	CBL6111D	34678	2020.10.12	2022.10.11
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2021.10.11	2023.10.10
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2020.10.12	2022.10.11
Pre-Amplifier (0.1M-3GHz)	EM	EM330	060665	2021.10.08	2022.10.07
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2021.09.30	2022.09.29
Pre-Amplifier (18G-40GHz)	SKET	LNPA-1840-50	SK2018101801	2021.09.28	2022.09.27
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08
Turn table	EM	SC100_1	60531	N/A	N/A
Antenna mast	EM	SC100	N/A	N/A	N/A
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 RE)			

Conduction Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2021.09.30	2022.09.29
LISN	R&S	ENV216	101242	2021.09.30	2022.09.29
LISN	EMCO	3810/2NM	23625	2021.09.30	2022.09.29
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 CE)			

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RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
			MY55520005	2021.09.30	2022.09.29
Power Sensor	Kovoight	U2021XA	MY55520006	2021.09.30	2022.09.29
Fower Sensor	Keysight	0202174	MY56120038	2021.09.30	2022.09.29
			MY56280002	2021.09.30	2022.09.29
Signal Analyzer	Agilent	N9020A	MY51110105	2022.03.01	2023.02.28
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 RE)			



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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:	(C)	Relative Humidity:	RH
Test Voltage:	N/A	Phase:	L/N
Test Mode:	N/A		

Note: EUT is only power by DC Power, So it is not applicable for this test.



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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)/
RB / VB (emission in restricted	9KHz (From 0.15MHz to 30MHz);
band)	200Hz (From 9kHz to 0.15MHz)/
	9KHz (From 0.15MHz to 30MHz)

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

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

For Restricted band

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

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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

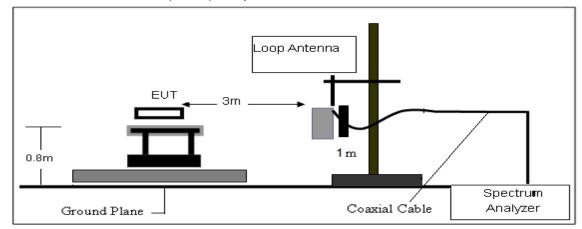
- a. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the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

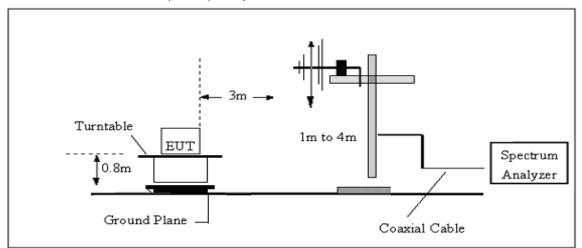


4.3 TEST SETUP

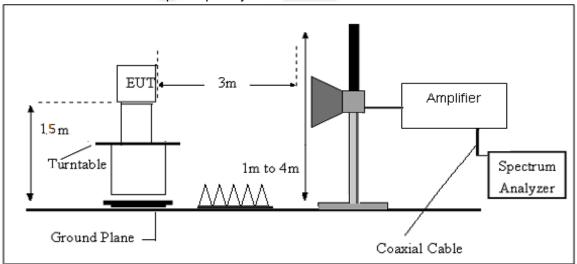
(A) Radiated Emission Test-Up Frequency Below 30MHz

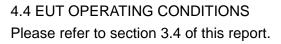


(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



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







4.5 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 12V	Polarization:	
Test Mode:	TX Mode		

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

Note:

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

Distance extrapolation factor =40 log (specific distance/test distance)(dB); Limit line = specific limits(dBuv) + distance extrapolation factor.





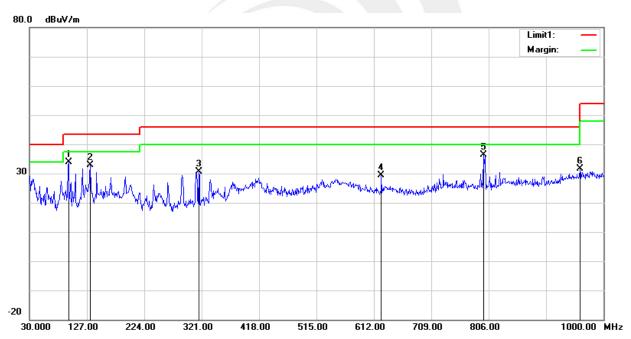
(30MHz -1000MHz)

Temperature:	23.1(C)	Relative Humidity:	60%RH		
Test Voltage:	DC 12V	Phase:	Horizontal		
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)				

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	95.9600	54.59	-20.67	33.92	43.50	-9.58	peak
2	132.8200	50.99	-18.17	32.82	43.50	-10.68	peak
3	316.1500	44.86	-14.17	30.69	46.00	-15.31	peak
4	624.6100	34.63	-5.29	29.34	46.00	-16.66	peak
5	797.2700	38.53	-2.03	36.50	46.00	-9.50	peak
6	960.2300	29.84	1.76	31.60	54.00	-22.40	peak

Remark:

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





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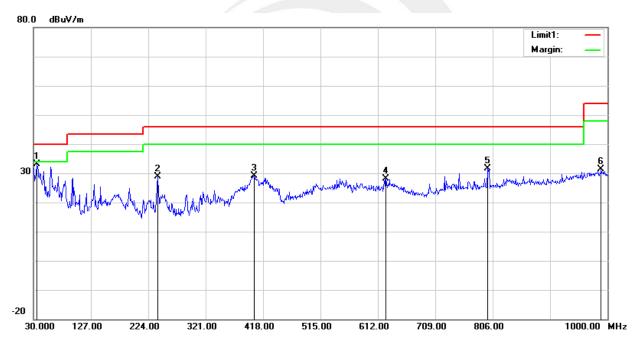
Temperature:	23.1(C)	Relative Humidity:	60%RH		
Test Voltage:	DC 12V	Phase:	Vertical		
Test Mode:	Mode 1/2/3 (Mode 1 worst mode)				

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/ m)	(dBuV/m)	(dBuV/m)	(dB)	
1	35.8200	48.99	-15.91	33.08	40.00	-6.92	peak
2	239.5200	47.10	-18.10	29.00	46.00	-17.00	peak
3	402.4800	40.17	-11.00	29.17	46.00	-16.83	peak
4	625.5800	33.49	-5.25	28.24	46.00	-17.76	peak
5	797.2700	33.64	-2.03	31.61	46.00	-14.39	peak
6	989.3300	29.37	2.09	31.46	54.00	-22.54	peak

Remark:

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

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





(1GHz-25GHz) Spurious emission Requirements

BPSK

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 (BPSK/2	2406 MHz)				
3264.74	61.06	44.70	6.70	28.20	-9.80	51.26	74.00	-22.74	PK	Vertical
3264.74	50.25	44.70	6.70	28.20	-9.80	40.45	54.00	-13.55	AV	Vertical
3264.60	62.09	44.70	6.70	28.20	-9.80	52.29	74.00	-21.71	PK	Horizontal
3264.60	50.33	44.70	6.70	28.20	-9.80	40.53	54.00	-13.47	AV	Horizontal
4824.40	59.39	44.20	9.04	31.60	-3.56	55.83	74.00	-18.17	PK	Vertical
4824.40	50.48	44.20	9.04	31.60	-3.56	46.92	54.00	-7.08	AV	Vertical
4824.59	59.20	44.20	9.04	31.60	-3.56	55.64	74.00	-18.36	PK	Horizontal
4824.59	50.07	44.20	9.04	31.60	-3.56	46.51	54.00	-7.49	AV	Horizontal
5359.60	49.33	44.20	9.86	32.00	-2.34	46.99	74.00	-27.01	PK	Vertical
5359.60	39.96	44.20	9.86	32.00	-2.34	37.62	54.00	-16.38	AV	Vertical
5359.83	47.81	44.20	9.86	32.00	-2.34	45.47	74.00	-28.53	PK	Horizontal
5359.83	39.13	44.20	9.86	32.00	-2.34	36.79	54.00	-17.21	AV	Horizontal
7235.79	53.60	43.50	11.40	35.50	3.40	57.00	74.00	-17.00	PK	Vertical
7235.79	44.60	43.50	11.40	35.50	3.40	48.00	54.00	-6.00	AV	Vertical
7235.83	54.00	43.50	11.40	35.50	3.40	57.40	74.00	-16.60	PK	Horizontal
7235.83	43.69	43.50	11.40	35.50	3.40	47.09	54.00	-6.91	AV	Horizontal
				Middle 0	Channel (BPSK	/2445 MHz)		•		•
3264.85	61.10	44.70	6.70	28.20	-9.80	51.30	74.00	-22.70	PK	Vertical
3264.85	51.19	44.70	6.70	28.20	-9.80	41.39	54.00	-12.61	AV	Vertical
3264.61	61.95	44.70	6.70	28.20	-9.80	52.15	74.00	-21.85	PK	Horizontal
3264.61	51.09	44.70	6.70	28.20	-9.80	41.29	54.00	-12.71	AV	Horizontal
4874.48	58.33	44.20	9.04	31.60	-3.56	54.77	74.00	-19.23	PK	Vertical
4874.48	49.66	44.20	9.04	31.60	-3.56	46.10	54.00	-7.90	AV	Vertical
4874.47	58.98	44.20	9.04	31.60	-3.56	55.42	74.00	-18.58	PK	Horizontal
4874.47	50.25	44.20	9.04	31.60	-3.56	46.69	54.00	-7.31	AV	Horizontal
5359.68	49.18	44.20	9.86	32.00	-2.34	46.84	74.00	-27.16	PK	Vertical
5359.68	39.89	44.20	9.86	32.00	-2.34	37.55	54.00	-16.45	AV	Vertical
5359.75	48.06	44.20	9.86	32.00	-2.34	45.72	74.00	-28.28	PK	Horizontal
5359.75	39.27	44.20	9.86	32.00	-2.34	36.93	54.00	-17.07	AV	Horizontal
7310.96	54.01	43.50	11.40	35.50	3.40	57.41	74.00	-16.59	PK	Vertical
7310.96	44.64	43.50	11.40	35.50	3.40	48.04	54.00	-5.96	AV	Vertical
7310.85	53.61	43.50	11.40	35.50	3.40	57.01	74.00	-16.99	PK	Horizontal
7310.85	43.74	43.50	11.40	35.50	3.40	47.14	54.00	-6.86	AV	Horizontal

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				High Char	nnel (BPSK/2	2478 MHz)				
3264.65	61.63	44.70	6.70	28.20	-9.80	51.83	74.00	-22.17	PK	Vertical
3264.65	51.09	44.70	6.70	28.20	-9.80	41.29	54.00	-12.71	AV	Vertical
3264.77	61.45	44.70	6.70	28.20	-9.80	51.65	74.00	-22.35	PK	Horizontal
3264.77	51.03	44.70	6.70	28.20	-9.80	41.23	54.00	-12.77	AV	Horizontal
4924.55	59.52	44.20	9.04	31.60	-3.56	55.96	74.00	-18.04	PK	Vertical
4924.55	50.32	44.20	9.04	31.60	-3.56	46.76	54.00	-7.24	AV	Vertical
4924.60	58.96	44.20	9.04	31.60	-3.56	55.40	74.00	-18.60	PK	Horizontal
4924.60	49.94	44.20	9.04	31.60	-3.56	46.38	54.00	-7.62	AV	Horizontal
5359.73	48.95	44.20	9.86	32.00	-2.34	46.61	74.00	-27.39	PK	Vertical
5359.73	39.19	44.20	9.86	32.00	-2.34	36.85	54.00	-17.15	AV	Vertical
5359.73	48.51	44.20	9.86	32.00	-2.34	46.17	74.00	-27.83	PK	Horizontal
5359.73	38.55	44.20	9.86	32.00	-2.34	36.21	54.00	-17.79	AV	Horizontal
7385.77	53.72	43.50	11.40	35.50	3.40	57.12	74.00	-16.88	PK	Vertical
7385.77	44.09	43.50	11.40	35.50	3.40	47.49	54.00	-6.51	AV	Vertical
7385.78	54.29	43.50	11.40	35.50	3.40	57.69	74.00	-16.31	PK	Horizontal
7385.78	44.14	43.50	11.40	35.50	3.40	47.54	54.00	-6.46	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.

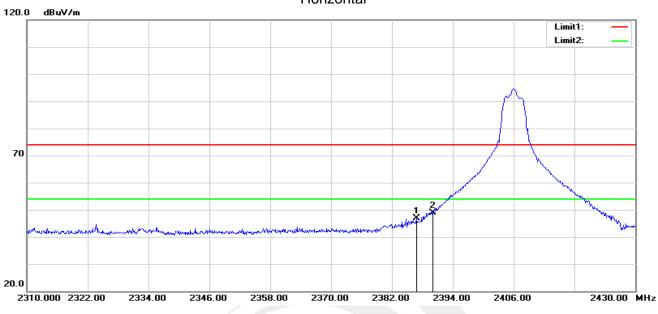




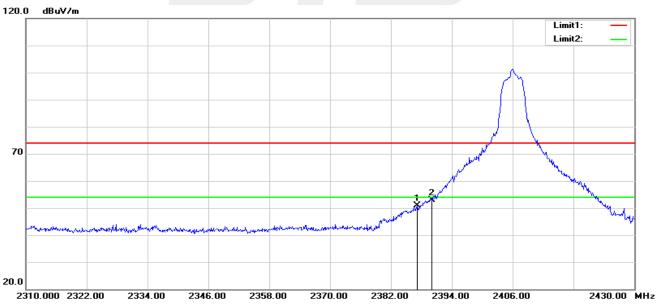
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4.6 TEST RESULTS (Restricted Bands Requirements)

BPSK-Low Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2386.800	42.68	4.30	46.98	74.00	-27.02	peak
2	2390.000	44.62	4.34	48.96	74.00	-25.04	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2387.160	46.63	4.30	50.93	74.00	-23.07	peak
2	2390.000	48.60	4.34	52.94	74.00	-21.06	peak

Vertical



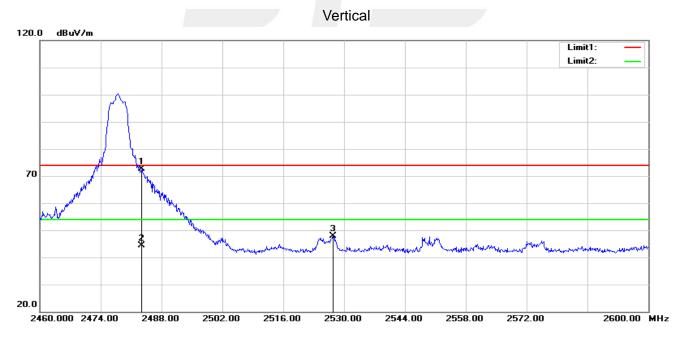
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BPSK-High Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	65.48	4.60	70.08	74.00	-3.92	peak
2	2483.500	39.99	4.60	44.59	54.00	-9.41	AVG
3	2527.480	44.02	4.83	48.85	74.00	-25.15	peak



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.500	67.99	4.60	72.59	74.00	-1.41	peak
2	2483.500	39.81	4.60	44.41	54.00	-9.59	AVG
3	2527.480	42.94	4.83	47.77	74.00	-26.23	peak

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

5.3 TEST SETUP



The EUT is connected to the Spectrum Analyzer; the RF load attached to the EUT antenna termina is 50 Ohm; the path loss as the factor is calibrated to correct the reading. Make the measurement with the spectrum analyzer's resolution bandwidth(RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

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

5.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



6. POWER SPECTRAL DENSITY TEST

6.1 LIMIT

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

6.2 TEST PROCEDURE

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

6.3 TEST SETUP



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

6.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



7. BANDWIDTH TEST

7.1 LIMIT

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

7.2 TEST PROCEDURE

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

7.3 TEST SETUP



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

7.5 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



8. PEAK OUTPUT POWER TEST

8.1 LIMIT

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

8.2 TEST PROCEDURE

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

 $RBW \ge DTS$ bandwidth

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

a) Set the RBW \geq DTS bandwidth.

b) Set VBW \geq [3 × 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.

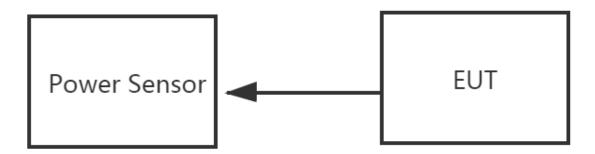
h) Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select the peak detector). If the instrument does not have a band power function, then sum the spectrum levels (in linear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



8.3 TEST SETUP



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.



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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 Omnidirectional Antenna. It comply with the standard requirement.



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APPENDIX 1-TEST DATA

1. Duty Cycle

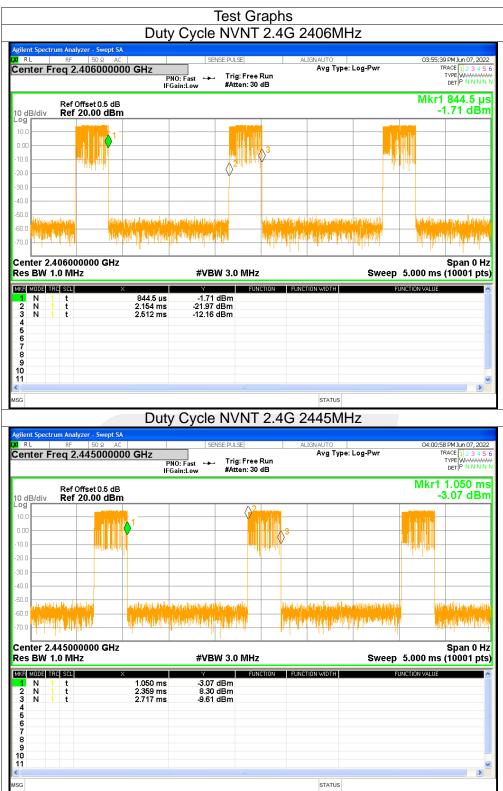
Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	2.4G	2406	21.48	6.68	2.79
NVNT	2.4G	2445	21.45	6.69	2.8
NVNT	2.4G	2478	21.48	6.68	2.79



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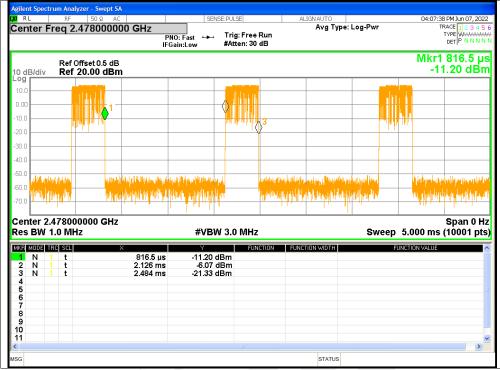


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Duty Cycle NVNT 2.4G 2478MHz





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2. Maximum Average Conducted Output Power

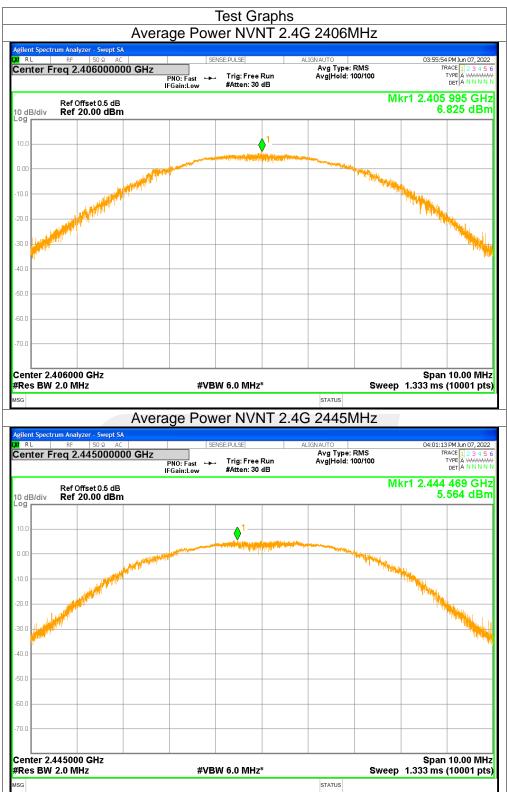
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2406	6.83	6.68	13.51	<=30	Pass
NVNT	2.4G	2445	5.56	6.69	12.25	<=30	Pass
NVNT	2.4G	2478	6.12	6.68	12.8	<=30	Pass



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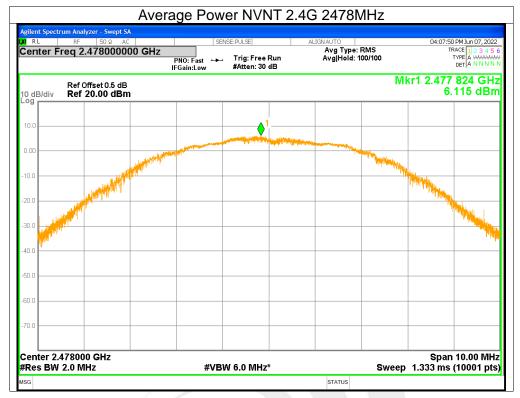


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3. Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2406	16.07	<=30	Pass
NVNT	2.4G	2445	15.68	<=30	Pass
NVNT	2.4G	2478	15.47	<=30	Pass



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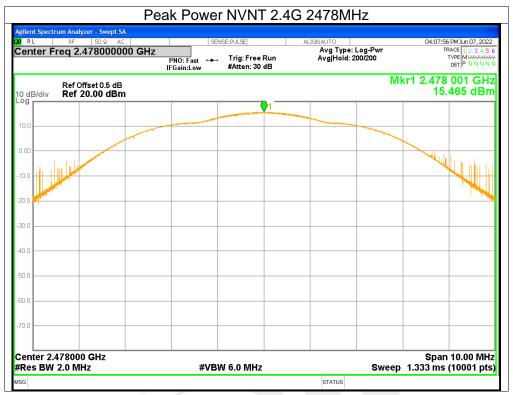


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ent Spectrum Analyzer - Swept SA		er NVNT 2.4		-	
RL RF 50 Ω AC nter Freq 2.406000000 GHz	PNO: Fast	INSE:PULSE	ALIGNAUTO Avg Type: Lo Avg Hold: 100	og-Pwr 00/1000	03:56:07 PM Jun 07, 2 TRACE 1 2 3 4 TYPE MWWW DET P N N
Ref Offset 0.5 dB				Mkr	l 2.406 020 G 16.074 dE
dB/div Ref 20.00 dBm		V 1			
0					
0					
0					
0					
0					
0					
0					
nter 2.406000 GHz					Span 10.00 M
					Span 10.00 W
es BW 2.0 MHz	#VE	W 6.0 MHz	STATUS	Sweep 1	
		er NVNT 2.4	status G 2445MH	•	
Pea ent Spectrum Analyzer - Swept SA	ak Powe	er NVNT 2.4	G 2445MH	•	.333 ms (10001 p
Pea ent Spectrum Analyzer - Swept SA RL RF 50 & AC nter Freq 2.445000000 GHz		er NVNT 2.4 ENSE:PUISE		Z og-Pwr	333 ms (10001 p 04:01:19 PMJun 07, 2 TRACE 10 0 0
Pea ent Spectrum Analyzer - Swept SA RL RF 50 Q AC nter Freq 2.445000000 GHz	ak Powe	er NVNT 2.4	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3
Pea ent Spectrum Analyzer - Swept SA RL RF 50 Q AC inter Freq 2.445000000 GHz Ref Offset 0.5 dB dB/div Ref 20.00 dBm		er NVNT 2.4 ENSE:PULSE - Trig: Free Run #Atten: 30 dB	G 2445MH	Z pg-Pwr v/100	04:01:19РМЪл 07,2 тяхе 12 3 - туке 12 3 - туке Мими- DET P NIN 12.444 989 G 15.678 dE
ent Spectrum Analyzer - Swept SA RL RF 50 Q AC Inter Freq 2.445000000 GHz Ref Offset 0.5 dB		er NVNT 2.4 ENSE:PUISE	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3
Pea ent Spectrum Analyzer - Swept SA RL RF 50 Q AC nter Freq 2.445000000 GHz dB/div Ref Offset 0.5 dB		er NVNT 2.4 ENSE:PULSE - Trig: Free Run #Atten: 30 dB	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3
Pea ent Spectrum Analyzer - Swept SA RL RF ISO Q AC nter Freq 2.4450000000 GHz dB/div Ref 20.00 dBm		er NVNT 2.4 ENSE:PULSE - Trig: Free Run #Atten: 30 dB	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3
Pea ent Spectrum Analyzer - Swept SA RL RF SO Q AC nter Freq 2.445000000 GHz dB/div Ref 20.00 dBm		er NVNT 2.4 ENSE:PULSE - Trig: Free Run #Atten: 30 dB	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3
Pea ent Spectrum Analyzer - Swept SA RL RF SO Q AC nter Freq 2.445000000 GHz dB/div Ref 20.00 dBm		er NVNT 2.4 ENSE:PULSE - Trig: Free Run #Atten: 30 dB	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3
Pea ent Spectrum Analyzer - Swept SA RL RF S0 Q. AC nter Freq 2.445000000 GHz dB/div Ref 20.00 dBm		er NVNT 2.4 ENSE:PULSE - Trig: Free Run #Atten: 30 dB	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3
Pea ent Spectrum Analyzer - Swept SA RL RF 50 Q AC nter Freq 2.445000000 GHz dB/div Ref 20.00 dBm		er NVNT 2.4 ENSE:PULSE - Trig: Free Run #Atten: 30 dB	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3
Pea		er NVNT 2.4 ENSE:PULSE - Trig: Free Run #Atten: 30 dB	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3
Pea		er NVNT 2.4 ENSE:PULSE - Trig: Free Run #Atten: 30 dB	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3
Pea ent Spectrum Analyzer - Swept SA RL RF ISO Q AC nter Freq 2.445000000 GHz Ref Offset 0.5 dB dB/div Ref 20.00 dBm		er NVNT 2.4 ENSE:PULSE - Trig: Free Run #Atten: 30 dB	G 2445MH	Z pg-Pwr v/100	04:01:19PM.hn07,2 TRACE [12 3 TRACE [13 3 TRACE [12 3 TRACE [12 3 TRACE [13 3



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4. -6dB Bandwidth

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	2.4G	2406	3.215	>=0.5	Pass
NVNT	2.4G	2445	3.218	>=0.5	Pass
NVNT	2.4G	2478	3.104	>=0.5	Pass

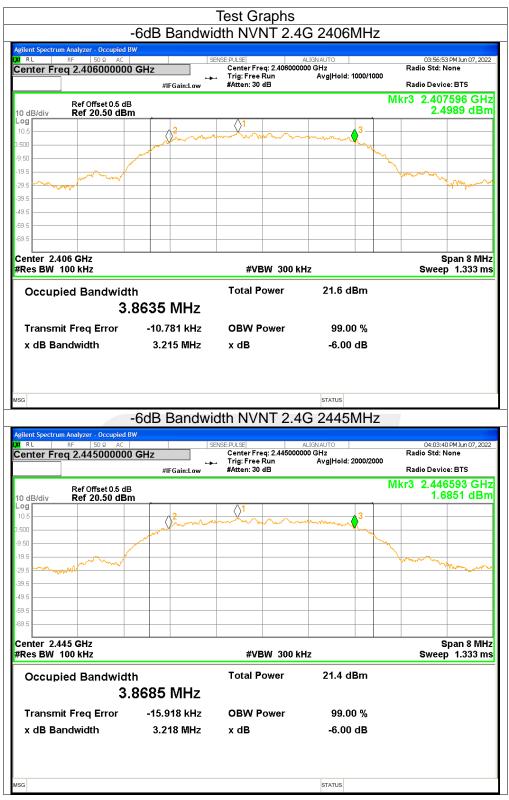


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er Freq 2.478000000		ENSE:PULSE Center Freq: 2.478000 Trig: Free Run #Atten: 30 dB	ALIGNAUTO 000 GHz Avg Hold: 1000/1000	04:08:31 PM Jun 07, 20 Radio Std: None Radio Device: BTS
Ref Offset 0.5 dB				Mkr3 2.479532 GF 3.1903 dB
	2 Vin	1 martine martine	mmmmm 3	
	- Carlo Marina			
			`	- John -
mar and a second				Mangara V
er 2.478 GHz BW 100 kHz		#VBW 300 k	Hz	Span 8 Mi Sweep 1.333 r
ccupied Bandwidt		Total Power	21.0 dBm	
3.	8902 MHz			
ansmit Freq Error	-19.798 kHz	OBW Power	99.00 %	
B Bandwidth	3.104 MHz	x dB	-6.00 dB	



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5. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	2.4G	2406	3.864
NVNT	2.4G	2445	3.882
NVNT	2.4G	2478	3.842

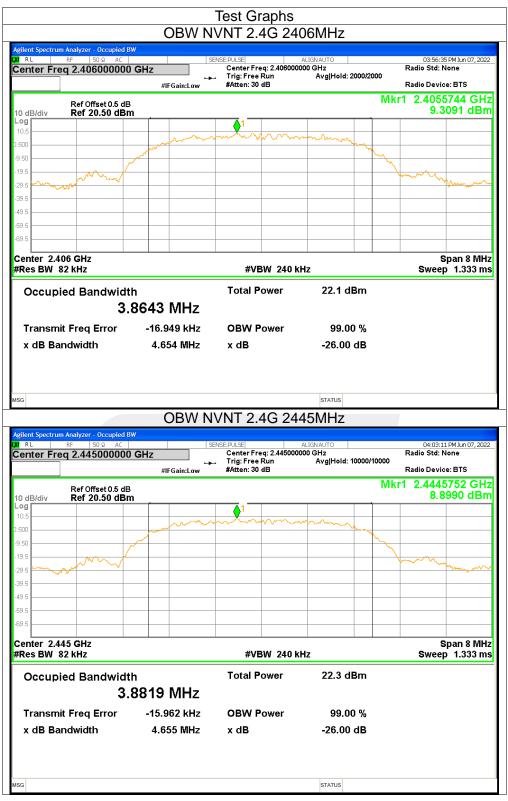


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	OBW N	IVNT 2.4G 24	78MHz	
Agilent Spectrum Analyzer - Occupied				
KRL RF 50 Ω AC Center Freq 2.47800000		ENSE:PULSE Center Freg: 2.478000	ALIGNAUTO	04:08:13 PM Jun 07, 2022 Radio Std: None
Center Freq 2.47800000		🛶 Trig: Free Run	Avg Hold: 1000/1000	
	#IFGain:Low	#Atten: 30 dB		Radio Device: BTS
Ref Offset 0.5 d 10 dB/div Ref 20.50 dE				Mkr1 2.477576 GHz 8.7528 dBm
Log 10.5				
0.500	and when the second	mm	man	
-9.50	monte		- And	
-9.50				
-29.5				man
-29.5				and and a second and a second as a second
-39.5				
-49.5				
-69.5				
Center 2.478 GHz #Res BW 82 kHz		#VBW 240 k	Hz	Span 8 MHz Sweep 1.333 ms
Occupied Bandwic	ith	Total Power	21.3 dBm	
	8.8421 MHz			
Transmit Freq Error	-22.315 kHz	OBW Power	99.00 %	
x dB Bandwidth	4.653 MHz	x dB	-26.00 dB	
MSG			STATUS	



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6. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	2.4G	2406	-0.92	<=8	Pass
NVNT	2.4G	2445	-1.65	<=8	Pass
NVNT	2.4G	2478	-1.24	<=8	Pass

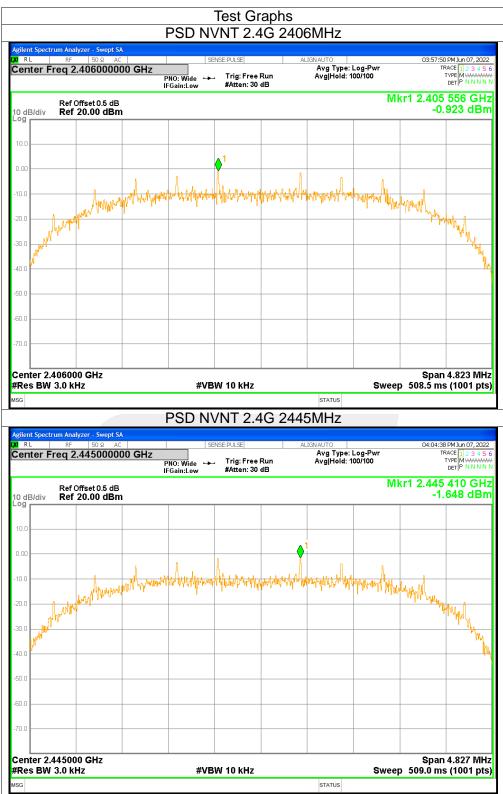


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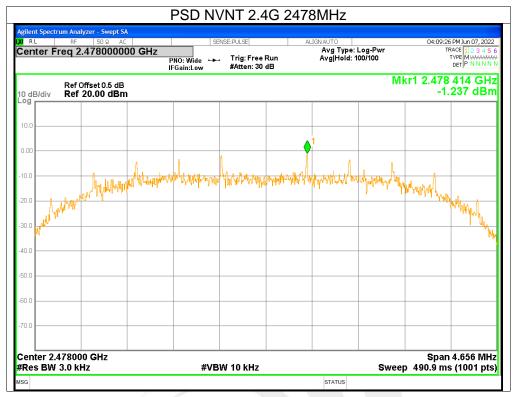
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7. Band Edge

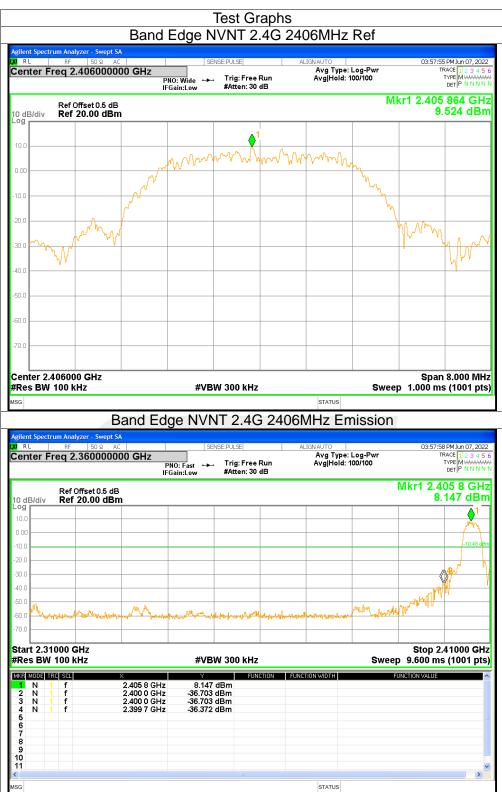
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2406	-45.89	<=-20	Pass
NVNT	2.4G	2478	-42.07	<=-20	Pass



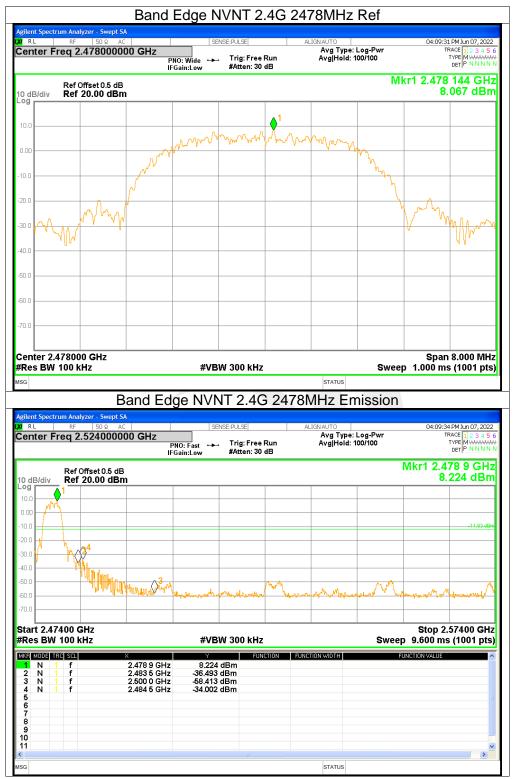
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8. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2406	-52.96	<=-20	Pass
NVNT	2.4G	2445	-52.5	<=-20	Pass
NVNT	2.4G	2478	-54.2	<=-20	Pass



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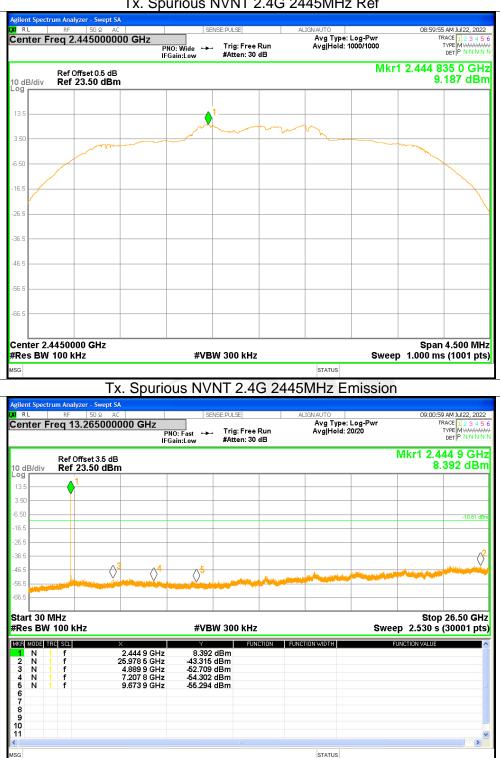
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agilent Spectrum Analyzer - Swept S	SA			2406MHz			
RL RF 50Ω A Center Freq 2.4060000	DOD GHZ): Wide 🔸	PULSE	ALIGNAUTO Avg Type: Lo Avg Hold: 100		TR/ T	AM Jul 22, 2022 ACE 1 2 3 4 5 YPE M WWWW DET P N N N N
Ref Offset 0.5 dB	3	ain:Low	Atten: 30 dB		Mkr1	2.406 15	
13.5				l			
3.50		m	www.				
0.00						man	
6.50							
16.5							\rightarrow
							\
26.5							
36.5							
46.5							
40.0							
56.5							
66.5							
Center 2.4060000 GHz						Span -	4.500 MH
≉Res BW 100 kHz		#VBW	300 kHz		Curoon	1 000 mo	(1001 pts
					Sweep	1.000 IIIS	(1001 pts
ISG	0 · ·		T 0 10 0	STATUS		1.000 ms	(1001 pta
T:		us NVN	T 2.4G 24	status 106MHz Em		1.000 ms	(Too I pra
gilent Spectrum Analyzer - Swept S RL RF 50 Ω A	SA IC		T 2.4G 24	ALIGNAUTO	nission	08:57:47	AM Jul 22, 2022
Siglent Spectrum Analyzer - Swept S	5A IC 1000 GHz PN0	SENSE	PULSE	106MHz Em	nission	08:57:47 . TRJ T	AM Jul 22, 2022 ACE 1 2 3 4 5 YPE M WWWW
glent Spectrum Analyzer - Swept S RL RF 50 Ω A Center Freq 13.265000	5A IC 0000 GHz PNI FGa	SENSE	PULSE	ALIGNAUTO	nission Pg-Pwr 20	08:57:47 . TR/ T	M Jul 22, 2022 CE 1 2 3 4 5 PPE M WWWW DET P N N N
In the sector of	5A IC 10000 GHz PNI IFG2 B	SENSE	PULSE	ALIGNAUTO	nission Pg-Pwr 20	08:57:47. TR∂ T	AM Jul 22, 2022 GEI 12 3 4 5 YPE M WWWW DET P N N N N 6 1 GH:
rglent Spectrum Analyzer - Swept S RL RF 50 Q A Center Freq 13.265000 Ref Offset 3.5 dE	5A IC 10000 GHz PNI IFG2 B	SENSE	PULSE	ALIGNAUTO	nission Pg-Pwr 20	08:57:47. TR∂ T	AM Jul 22, 2022 GEI 12 3 4 5 YPE M WWWW DET P N N N N 6 1 GH:
ref Offset 3.5 dB	5A IC 10000 GHz PNI IFG2 B	SENSE	PULSE	ALIGNAUTO	nission Pg-Pwr 20	08:57:47. TR∂ T	AM Jul 22, 2022 GEI 12 3 4 5 YPE M WWWW DET P N N N N 6 1 GH:
T: gllent Spectrum Analyzer - Swept S RL RF 50 Q A Center Freq 13.265000 Ref Offset 3.5 dB Ref 23.50 dBr 13.6 1 1 1 3.60 1 1 1	5A IC 10000 GHz PNI IFG2 B	SENSE	PULSE	ALIGNAUTO	nission Pg-Pwr 20	08:57:47. TR∂ T	M Jul 22, 2022 AGE 1 2 3 4 5 PPE M MANANA DET IP N N N N 6 1 GH: 27 dBn
T: gllent Spectrum Analyzer - Swept S RL RF 50 Q A Center Freq 13.265000 Ref Offset 3.5 dB Ref 23.50 dBr 13.5 1 1 1 13.6 1 1 1 16.6 1 1 1	5A IC 10000 GHz PNI IFG2 B	SENSE	PULSE	ALIGNAUTO	nission Pg-Pwr 20	08:57:47. TR∂ T	M Jul 22, 2022 AGE 1 2 3 4 5 PPE M MANANA DET IP N N N N 6 1 GH: 27 dBn
T: gllent Spectrum Analyzer - Swept S RL RF 50 Q A Center Freq 13.265000 Ref Offset 3.5 dB Ref 23.50 dBr 13.6 1 1 1 3.60 1 1 1	5A IC 10000 GHz PNI IFG2 B	SENSE	PULSE	ALIGNAUTO	nission Pg-Pwr 20	08:57:47. TR∂ T	M Jul 22, 2022 VPE 1 2 3 4 5 VPE M WWWW DET IP N N N N 16 1 GH: 27 dBn
T: gllent Spectrum Analyzer - Swept S RL RF 50 Q A Center Freq 13.265000 Ref Offset 3.5 dB Ref 23.50 dBr 13.5 1 1 1 29 1 1 1 1 13.6 1 1 1 1 13.6 1 1 1 1 26.6 1 1 1 1 1	5A IC 10000 GHz PNI IFG2 B	SENSE	PULSE	ALIGNAUTO	nission Pg-Pwr 20	08:57:47. TR∂ T	M 1/22, 2022 CE 1/2 3 4 5 CF 1/
T: gllent Spectrum Analyzer - Swept S RL RF 50 Q A Center Freq 13.2650000 Ref Offset 3.5 dE O B/div Ref Offset 3.5 dE 0 dB/div Ref 23.50 dBr	5A IC 10000 GHz PNI IFG2 B	SENSE	PULSE	ALIGNAUTO	nission Pg-Pwr 20	08:57:47. TR∂ T	AM Jul 22, 2022 GE [1] 2 3 4 5 FRE MANANAN DET P N N N N 6 1 GH2 -10 26 087 -10 26 087 -22
T: gllent Spectrum Analyzer - Swept S RL RF 50 Q A Center Freq 13.265000 Ref Offset 3.5 dB Ref 23.50 dBr Og 1 3 5 6 13.5 4 1 3 5 16.5 4 5 4 5 46.6 4 4 6 4 4	5A IC 10000 GHz PNI IFG2 B	SENSE	PULSE	ALIGNAUTO	nission Pg-Pwr 20	08:57:47. TR∂ T	M Jul 22, 2022 CE [1] 2 3 4 5 FRE M WARNAN ET P N N N N 6 1 GH: 27 dBn -10 28 dBn
Ref Offset 3.5 dB 0 B/div Ref 23.50 dB 0 B/div Ref 23.50 dB 0 dB/div Ref 23.50 dB	5A IC 10000 GHz PNI IFGa B	SENSE	PULSE	ALIGNAUTO	nission ^{pg-Pwr}	08:57:47. TR T Mkr1 2.40 4.7	M 1/22, 2022 CC 1/2 3 4 5 FPF MINN 6 1 GH: 27 dBn -10.28 € 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Siglent Spectrum Analyzer - Swept S RL RF SO & A Center Freq 13.265000 Ref Offset 3.5 dE Ref Offset 3.5 dE 10 dB/div Ref 23.50 dB 1 13.5 1 3.50 1 13.5 1 3.50 1 16.5 1 1 3.50 -6.50 - 1 3.50 -6.50 - 1 3.50 -6.50 - 1 3.50 -6.50 - 1 3.50 -6.50 - - - -6.50 - - - -6.50 - - - -6.50 - - - -6.50 - - - -7 - - - -6.50 - - - -7 - - - -7 - - - -7 - - - -7 - - - -7 </td <td>5A IC 10000 GHz PNI IFGa B</td> <td>SENSE</td> <td>PULSE </td> <td>ALIGNAUTO Avg Type: Lo Avg Type: Lo Avg Type: Lo</td> <td>og-Pwr 20 Sweep</td> <td>08:57:47. TR 7 Mkr1 2.40 4.7 4.7 5 5 2.530 s (1000)</td> <td>M 1/22, 2022 CC 1/2 3 4 5 CF PF MINN 6 1 GH; 27 dBr −1028 09 22 26.50 GH;</td>	5A IC 10000 GHz PNI IFGa B	SENSE	PULSE	ALIGNAUTO Avg Type: Lo Avg Type: Lo Avg Type: Lo	og-Pwr 20 Sweep	08:57:47. TR 7 Mkr1 2.40 4.7 4.7 5 5 2.530 s (1000)	M 1/22, 2022 CC 1/2 3 4 5 CF PF MINN 6 1 GH; 27 dBr −1028 09 22 26.50 GH;
Image: spectrum Analyzer - Swept S Image: spectru	54 50000 GHz PNI IFGa 3 4 4 2.406 1 GHz	SENSE 0: Fast → in:Low → 5 #VBW 4.727 dB	PULSE	ALIGNAUTO	nission pg-Pwr 20 Sweep	08:57:47. TR T Mkr1 2.40 4.7	M 1/22, 2022 CC 1/2 3 4 5 CF PF MINN 6 1 GH; 27 dBr −1028 09 22 26.50 GH;
T: splent Spectrum Analyzer - Swept S RL RF 50.2 A Center Freq 13.2650000 Ref Offset 3.5 dE Conter Freq 13.2650000 Ref Offset 3.5 dE O BIO dB/div Ref 23.50 dBr -09 1 -	54 50000 GHz PNI IFG2 3 3 4 2.406 1 GHz 24.306 2 GHz 4.8114 GHz	SENSE 0: Fast → in:Low → #VBW 4.727 dB 4.727 dB 4.727 dB 4.727 dB	PULSE	ALIGNAUTO Avg Type: Lo Avg Type: Lo Avg Type: Lo	nission pg-Pwr 20 Sweep	08:57:47. TR 7 Mkr1 2.40 4.7 4.7 5 5 2.530 s (1000)	M 1/22, 2022 CC 1/2 3 4 5 FPF MINN 6 1 GH: 27 dBn -10.28 € 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
T: gllent Spectrum Analyzer - Swept S R R 50 Q A Center Freq 13.2650000 Ref Offset 3.5 dB O B/div Ref Offset 3.5 dB O B/div Ref Offset 3.5 dB O B/div Ref 23.50 dBr 13.6	54 50000 GHz PNI IFG2 3 m 3 4 2.406 1 GHz 2.406 1 GHz 2.406 1 GHz	SENSE 0: Fast → in:Low 5 #VBW 4.727 dB 43.248 dB	PULSE	ALIGNAUTO Avg Type: Lo Avg Type: Lo Avg Type: Lo	nission pg-Pwr 20 Sweep	08:57:47. TR 7 Mkr1 2.40 4.7 4.7 5 5 2.530 s (1000)	M 1/22, 2022 CC 1/2 3 4 5 FPF M NNN 67 P NNNN 67 P NNNN 67 D NNN 27 dBn -10 28 00 -10 28 00 -2 2 26.50 GH
T: splent Spectrum Analyzer - Swept S Ref Offset 3.5 dE Ref Offset 3.5 dE O B/div Clospan="2">O B/div O B/div <	54 50000 GHz PNU IFG2 3 m 2.406 1 GHz 2.436 2 GHz 4.811 4 GHz 7.367 5 GHz	SENSE 0: Fast → in:Low #VBW #VBW 4.727 dB 4.3248 dB 46.138 dB 54.206 dB	PULSE	ALIGNAUTO Avg Type: Lo Avg Type: Lo Avg Type: Lo	nission pg-Pwr 20 Sweep	08:57:47. TR 7 Mkr1 2.40 4.7 4.7 5 5 2.530 s (1000)	M 1/22, 2022 CC 1/2 3 4 5 FPF M NNN 67 P NNNN 67 P NNNN 67 D NNN 27 dBn -10 28 00 -10 28 00 -2 2 26.50 GH
T: Spectrum Analyzer - Swept A d RL RF 50 Q A Center Freq 13.2650000 Ref Offset 3.5 dE O B/div Ref 23.50 dBr O B/div Ref 23.50 dBr O B/div Ref 23.50 dBr 13.6	54 50000 GHz PNU IFG2 3 m 2.406 1 GHz 2.436 2 GHz 4.811 4 GHz 7.367 5 GHz	SENSE 0: Fast → in:Low #VBW #VBW 4.727 dB 4.3248 dB 46.138 dB 54.206 dB	PULSE	ALIGNAUTO Avg Type: Lo Avg Type: Lo Avg Type: Lo	nission pg-Pwr 20 Sweep	08:57:47. TR 7 Mkr1 2.40 4.7 4.7 5 5 2.530 s (1000)	M 1/22, 2022 CC 1/2 3 4 5 CF 1/2 3 4 5 CF PE MINING 6 1 GH; 27 dBn -10 29 49 20 20 00 00 00 00 00 00 00 00 00 00 00 00 0
T: splent Spectrum Analyzer - Swept S R R 50 Q A Center Freq 13.2650000 Ref Offset 3.5 dE O dB/div Ref Offset 3.5 dE O dB/div Ref Offset 3.5 dE 0 dB/div Ref 23.50 dBr 0 dB/div Ref 23.50 dBr 0 dB/div Ref 23.50 dBr 0 dB/div Ref 3.5 dE 0 dB/div A 1 db A 1 db A 1 db A 1 f A 2 N 1 f 2 N 1 f 3 N 1 f 3 N 1 f 3 N 1 f 3 N <td>54 50000 GHz PNU IFG2 3 m 2.406 1 GHz 2.436 2 GHz 4.811 4 GHz 7.367 5 GHz</td> <td>SENSE 0: Fast → in:Low #VBW #VBW 4.727 dB 4.3248 dB 46.138 dB 54.206 dB</td> <td>PULSE</td> <td>ALIGNAUTO Avg Type: Lo Avg Type: Lo Avg Type: Lo</td> <td>nission pg-Pwr 20 Sweep</td> <td>08:57:47. TR 7 Mkr1 2.40 4.7 4.7 5 5 2.530 s (1000)</td> <td>M 1/22, 2022 CC 1/2 3 4 5 FPF MINN 6 1 GH: 27 dBn -10.28 € 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2</td>	54 50000 GHz PNU IFG2 3 m 2.406 1 GHz 2.436 2 GHz 4.811 4 GHz 7.367 5 GHz	SENSE 0: Fast → in:Low #VBW #VBW 4.727 dB 4.3248 dB 46.138 dB 54.206 dB	PULSE	ALIGNAUTO Avg Type: Lo Avg Type: Lo Avg Type: Lo	nission pg-Pwr 20 Sweep	08:57:47. TR 7 Mkr1 2.40 4.7 4.7 5 5 2.530 s (1000)	M 1/22, 2022 CC 1/2 3 4 5 FPF MINN 6 1 GH: 27 dBn -10.28 € 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

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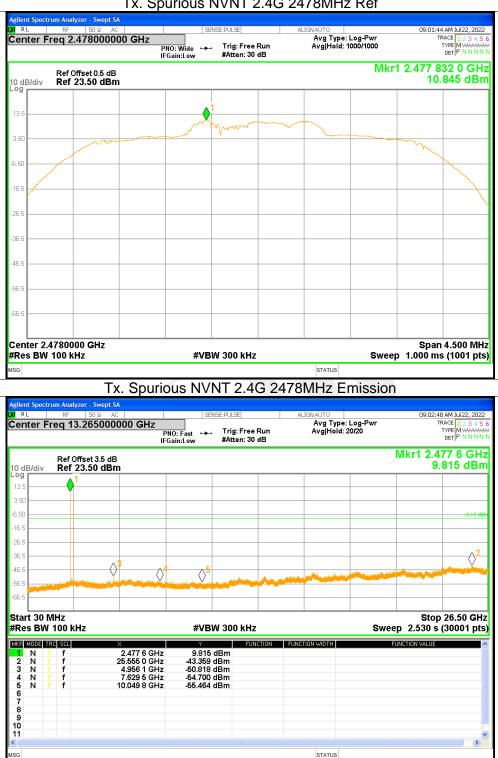


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APPENDIX 2- EUT TEST PHOTO

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

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



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