

# Shenzhen Toby Technology Co., Ltd.



Report No.: TBR-C-202503-0164-2

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# **RF Test Report**

FCC ID: 2A66E-SRC3422

**Report No.** : TBR-C-202503-0164-2

**Applicant**: Guangdong Seneasy Intelligent Technology Co., Ltd.

**Equipment Under Test (EUT)** 

**EUT Name** : Remote control

Model No. : 60.0 Serial Model No. : ----

Brand Name : Dish

Sample ID : HC-C-202503-0164-01-1# & HC-C-202503-0164-01-2#

**Receipt Date** : 2025-03-31

**Test Date** : 2025-03-31 to 2025-05-19

Issue Date : 2025-05-19

Standards : FCC Part 15, Subpart C 15.249

**Test Method** : ANSI C63.10:2013

Conclusions : PASS

In the configuration tested, the EUT complied with the standards specified above,

The EUT technically complies with the FCC requirements

Tested By : Gold . zhang

Reviewed By : Emily

Approved By : WAN SV



This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0



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# **Revision History**

v.01 Initial issue of	f report 2025-05-19
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## 1. General Information about EUT

## 1.1 Client Information

Applicant		Guangdong Seneasy Intelligent Technology Co., Ltd.	
Address		No.10, Dongsheng Zhong Road, Chenjiang Street, Zhongkai Hi-Tech District, Huizhou, 516000 China	
Manufacturer		Guangdong Seneasy Intelligent Technology Co., Ltd.	
Address		No.10, Dongsheng Zhong Road, Chenjiang Street, Zhongkai Hi-Tech District, Huizhou, 516000 China	

## 1.2 General Description of EUT (Equipment Under Test)

<b>EUT Name</b>	:	Remote control			
Model(s)	:	60.0	0.0		
Model Difference					
		Operation Frequency: 2425MHz~2475MHz			
		Number of Channel:	3 Channel		
Product	:	Out Power:	84.08dBuV/m@3m Peak		
Description		Antenna Gain:	2.14dBi PCB Antenna		
		Modulation Type:	QPSK		
Power Rating	÷	DC 1.5V by AAA batter	y*2		
Software Version	:	V01.08			
Hardware Version	:	S3422A4776-A			
Connecting I/O Port(S)	j	Please refer to the User's Manual			

#### Note:

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

## (2) Channel List:

Channel	Frequency (MHz)
01	2425
02	2450
03	2475





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## 1.3 Block Diagram Showing the Configuration of System Tested

## **Radiated Test**



## **Conducted Measurements Test**



## 1.4 Description of Support Units

Equipment Information								
Name	Manufacturer	Used "√"						
Notebook	HYLR-WFQ9	AAMFPM1418000165	honour	1				
Cable Information								
Number Shielded Type Ferrite Core Length Note								
	-N33	TIM IN THE	- U					





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## 1.5 Description of Test Mode

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

	For Radiated Test
Final Test Mode	Description
Mode 1	TX Mode(01/02/03)

#### Note:

For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

- (1) According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels.
- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

## 1.6 Description of Test Software Setting

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

<b>Test Software Version</b>	EMITEST_V2.1		
Frequency	2425MHz	2450MHz	2475MHz
QPSK	5.1	5.1	5.1





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## 1.7 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 %.

Test Item	Parameters	Expanded Uncertainty (U <sub>Lab</sub> )	
WILL STATE OF THE PARTY OF THE	Level Accuracy:		
Conducted Emission	9kHz~150kHz	±3.42 dB	
The same	150kHz to 30MHz	±3.42 dB	
Dedicted Emission	Level Accuracy:	±4.60 dB	
Radiated Emission	9kHz to 30 MHz	±4.00 UD	
Dedicted Emission	Level Accuracy:	±4.40 dB	
Radiated Emission	30MHz to 1000 MHz		
Radiated Emission	Level Accuracy:	±4.20 dB	
Naulateu Elliissioli	Above 1000MHz	14.20 UD	





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## 1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F., Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

## **CNAS (L5813)**

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

#### A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

## IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.





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# 2. Test Summary

FCC Part 15 Subpart C(15.249)						
tandard Section FCC	Test Item Test Sample(s)		Judgment	Remark		
15.203	Antenna Requirement	HC-C-202503-0164-01-2#	PASS	N/A		
15.205	Restricted Bands	HC-C-202503-0164-01-1#	PASS	N/A		
15.207	AC Power Conducted Emission	HC-C-202503-0164-01-1#	N/A	N/A		
15.249 &15.209	Radiated Spurious Emission	HC-C-202503-0164-01-2#	PASS	N/A		
15.215(C)	20dB Bandwidth	HC-C-202503-0164-01-2#	PASS	N/A		

## 3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Radiation Emission	EZ-EMC	EZ	FA-03A2RE
Radiation Emission	EZ-EMC	EZ	FA-03A2RE+
RF Conducted Measurement	MTS-8310	MWRFtest	V2.0.0.0
RF Test System	JS1120	Tonscend	V3.2.22





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# 4. Test Equipment and Test Site

Test Site							
No.	Test Site	Manufacturer	Specification	Used			
TB-EMCSR001	Shielding Chamber #1	YIHENG	7.5*4.0*3.0 (m)	X			
TB-EMCSR002	Shielding Chamber #2	YIHENG	8.0*4.0*3.0 (m)	<b>√</b>			
TB-EMCCA001	3m Anechoic Chamber #A	ETS	9.0*6.0*6.0 (m)	X			
TB-EMCCB002	3m Anechoic Chamber #B	YIHENG	9.0*6.0*6.0 (m)				

<b>Radiation Emission</b>	Test(B Site)				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Aug. 29, 2024	Aug. 28, 2025
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 17, 2024	Jun. 16, 2025
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb.20, 2025	Feb.19, 2026
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Nov. 13, 2023	Nov. 12, 2025
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Jun. 14, 2024	Jun. 13, 2026
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Feb. 27, 2024	Feb.26, 2026
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 14, 2024	Jun. 13, 2026
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Aug. 29, 2024	Aug. 28, 2025
HF Amplifier	Tonscend	TAP051845	AP21C806141	Aug. 29, 2024	Aug. 28, 2025
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Aug. 29, 2024	Aug. 28, 2025
Pre-amplifier	HP	8449B	3008A00849	Feb.20, 2025	Feb.19, 2026
Highpass Filter	CD	HPM-6.4/18G	- (400)	N/A	N/A
Highpass Filter	CD	HPM-2.8/18G		N/A	N/A
Highpass Filter	XINBO	XBLBQ-HTA67(8-25G)	22052702-1	N/A	N/A
Antenna Conducted	Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 17, 2024	Jun. 16, 2025
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Aug. 29, 2024	Aug. 28, 2025
Spectrum Analyzer	KEYSIGHT	N9020B	MY60110172	Aug. 29, 2024	Aug. 28, 2025
> NA	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Aug. 29, 2024	Aug. 28, 2025
2001	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Aug. 29, 2024	Aug. 28, 2025
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Aug. 29, 2024	Aug. 28, 2025
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Aug. 29, 2024	Aug. 28, 2025
RF Control Unit	Tonsced	JS0806-2	21F8060439	Aug. 29, 2024	Aug. 28, 2025
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A





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## 5. Conducted Emission Test

#### 4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

#### 4.1.2 Test Limit

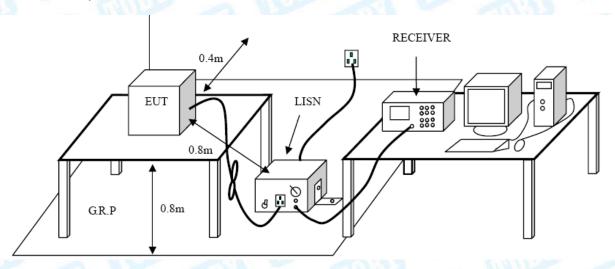
#### **Conducted Emission Test Limit**

TODA TO	Maximum RF Line Voltage (dBμV)			
Frequency	Quasi-peak Level	Average Level		
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *		
500kHz~5MHz	56	46		
5MHz~30MHz	60	50		

#### Notes:

- (1) \*Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

## 4.2 Test Setup



#### 4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.





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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.

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.

LISN is at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

## 4.4 EUT Operating Mode

Please refer to the description of test mode.

#### 4.5 Test Data

N/A.





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## 6. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

## Radiated Emission Limit (9kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (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

## Radiated Emission Limit (Above 1000MHz)

Frequency	Distance Me	eters (at 3m)
(MHz)	Peak	Average
Above 1000	74	54

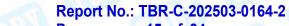
#### Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(Uv/m)

## Limits of radiated emission measurement (15.249)

FCC Part 15 (15.249), Subpart C					
Limit Frequency Range (MHz)					
Field strength of fundamental	2425~2475				
50000 μV/m (94 dBμV/m) @ 3 m					
Field strength of harmonics	Dalaw 2425 and Abaya 2475				
500 μV/m (54 dBμV/m) @ 3 m	Below 2425 and Above 2475				





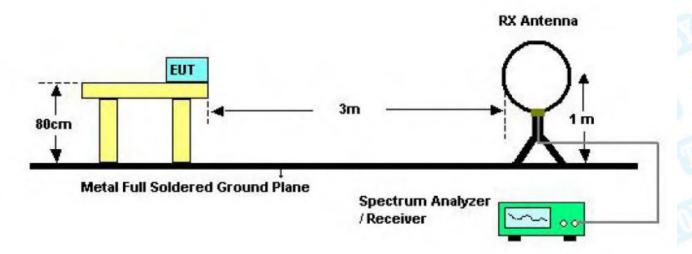




# Restricted bands requirement for equipment operating in 2400MHz to 2483.5MHz (15.249)

Restricted Frequency Band (MHz)	(dBuV/m)(at 3 M)
2425~2475	Attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in 15.209, whichever is the lesser attenuation

## 5.2 Test Setup

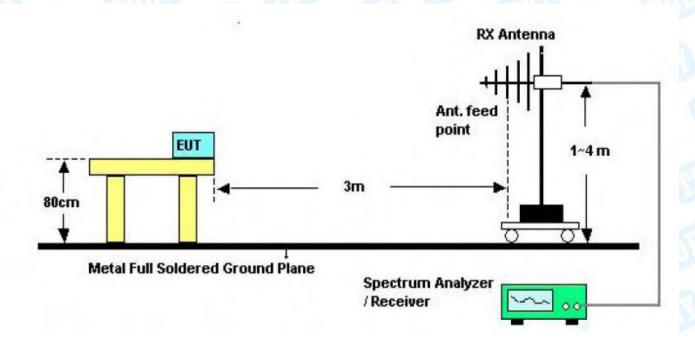


Below 30MHz Test Setup

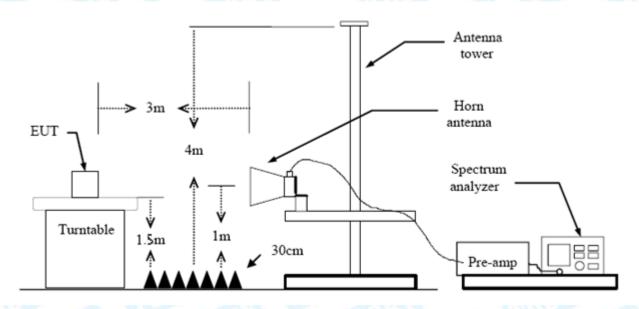




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## Bellow 1000MHz Test Setup



Above 1GHz Test Setup

#### 5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency Below 1GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to





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determine the position of the highest radiation.

- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

## 5.4 EUT Operating Condition

The EUT was set to Continual Transmitting in maximum power, and new batteries are used during testing.

#### 5.5 Test Data

Please refer to the Attachment A.

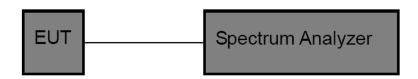




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## 7. Bandwidth Test

## 6.1 Test Setup



#### 6.2 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Bandwidth: RBW=100 kHz, VBW=300kHz.

(3) The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.

## 6.3 EUT Operating Condition

The EUT was set to continuously transmitting for the Bandwidth Test.

#### 6.4 Test Data

Please refer to the Attachment B.





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## 8. Antenna Requirement

## 7.1 Standard Requirement

#### 7.1.1 Standard

FCC Part 15.203

#### 7.1.2 Requirement

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

## 7.2 Antenna Connected Construction

The gains of the antenna used for transmitting is 2.14dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

#### 7.3 Result

The EUT antenna is PCB antenna Antenna. It complies with the standard requirement.

Antenna Type	
⊠Permanent attached antenna	
☐Unique connector antenna	
☐Professional installation antenna	





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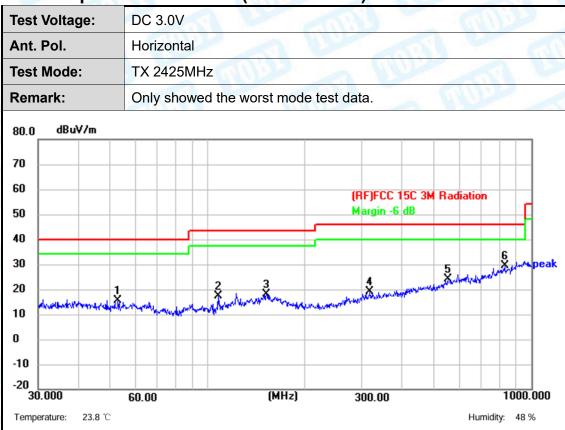
## **Attachment A-- Radiated Emission Test Data**

## Radiated Spurious Emission (9 KHz~30 MHz)

From 9 KHz to 30 MHz: Conclusion: PASS

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

## Radiated Spurious Emission (Below 1 GHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	52.9453	39.84	-24.40	15.44	40.00	-24.56	peak	Р
2	107.8877	41.76	-24.55	17.21	43.50	-26.29	peak	Р
3	152.1297	39.71	-21.63	18.08	43.50	-25.42	peak	Р
4	317.7011	39.32	-20.36	18.96	46.00	-27.04	peak	Р
5	552.8832	38.36	-14.41	23.95	46.00	-22.05	peak	Р
6 *	827.4934	39.14	-9.69	29.45	46.00	-16.55	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)





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Test	Voltage:	DC 3.0V							
Ant.	Pol.	Vertical							
Test	Mode:	TX 2425MH	TX 2425MHz						
Rem	ark:	Only showe	ed the worst mode	test data.	TO THE PARTY OF TH				
80.0	dBuV/m								
70									
60				(RF)FCC 15C 3M	Radiation				
50				Margin -6 dB					
40									
30			3 X		6 peak				
20	The state of the s	2 2 2	1	5	6 Mary Mary Mary Deak				
10	Brig-capping respins and the constitution of the con-	Market Heather Harden	Carl Barreston and Carl	ky/ky/nep****					
0									
-10									
-20 30	0.000	60.00	(MHz)	300.00	1000.000				
Temp	erature: 23.8 °C				Humidity: 48 %				

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	40.1347	39.30	-23.46	15.84	40.00	-24.16	peak	Р
2	63.7588	39.51	-24.36	15.15	40.00	-24.85	peak	Р
3 *	107.8877	48.73	-24.55	24.18	43.50	-19.32	peak	Р
4	155.9101	39.55	-21.75	17.80	43.50	-25.70	peak	Р
5	366.8231	38.16	-19.55	18.61	46.00	-27.39	peak	Р
6	599.3212	38.99	-13.98	25.01	46.00	-20.99	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
  2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dB $\mu$ V/m)-Limit QPK(dB $\mu$ V/m)



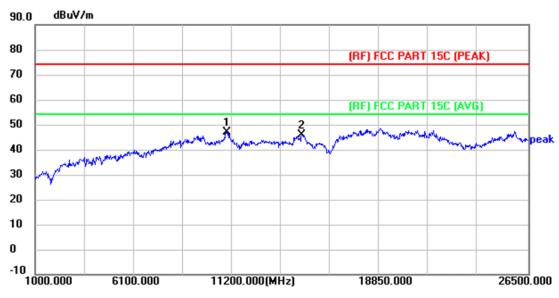


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## Radiated Spurious Emission (Above 1 GHz)

Temperature:	23.9℃	Relative Humidity:	48%
Test Voltage:	DC 3.0V	0 0	
Ant. Pol.	Horizontal		
Test Mode:	TX 2425MHz		a VIV



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	10919.500	47.51	-0.49	47.02	74.00	-26.98	peak	Р
2	14770.000	42.20	3.73	45.93	74.00	-28.07	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.9℃		Rela	tive Humidity	<b>/</b> : 48	%
Test Voltage:	DC 3.0V	MADE		CATTO	-	The same of
Ant. Pol.	Vertical	1	187		1000	
Test Mode:	TX 2425I	ИН <mark>z</mark>		A 11 10 A		MARI
90.0 dBuV/m						
80				(RF) FCC PART	15C (PEA	ıK)
70 60				(RF) FCC PART	15C (AVG	i)
50 40	and the state of	Munum	2 2 m	want bear and the test of the second	and who have	peal
	Boundary and working					
10						
0						
1000.000	6100.000	11200.000(M	IHz)	18850.000		26500.000

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	9619.000	47.18	-0.15	47.03	74.00	-26.97	peak	Р
2	14362.000	44.23	2.15	46.38	74.00	-27.62	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Tempera	ature:	23.9℃		A 1	Relative	Humidity:	48%		
Test Vol	tage:	DC 3.0	VC						
Ant. Pol	•	Horizo	ntal	61	183	(			ā
Test Mo	de:	TX 24	50MHz	a W			185	MI	
90.0 d	BuV/m								
80						(RF) FCC PAR	IT 15C (PE	(AK)	
70								,	
60						(RF) FCC PAR	15C (AV	/G)	
50			1 X	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	mil Museum Mil	A MARTINE A MARTINE AND A MART	marine de la companya della companya	part de reger	- ^peak
40	Carried Mary Mary	with the last the family and the	MAYER 6-V	Service Control of all	make maken for			UW.	-
30 / V									
10									
0									
-10 1000.0	00 6	100.000		11200.000(MI	Hz)	18850.000		2650	0.000
No.	Frequen		eading	Factor	Level	Limit	Margin	Detector	P/F
INO.	(MHz)	(0	lBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector	-/-
2 *	9364.00 12832.00	_	5.83 5.04	-0.59 1.03	45.24	74.00	-28.76 -27.93	peak	P P

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
  3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Tem	per	ature:		23.	9℃				Relativ	e Hum	idity:	48%		
Test	t Vol	ltage:	1	DC	3.0V			3)	_	O.A.	1111		W	
4nt	. Po	l.		Ver	tical	1/4/2		M	187		_ (	CON		a
Test	t Mo	de:		TX	2450	MHz	1	W		1			MA	ترور
90.0	d	BuV/m												
30														
0										(RF)	FCC PAR	15C (PE	AK)	-
0														
50							2			(RF)	FCC PAR	15C (AV	i)	-
10					Market	Mary Service		المرممين	LAKA MAYA JIMA	Marianth	A THE WAY	والماسعور بالماديس	anger of the same of the same	peak
10	J., J	an production	adv.\ayday	Tv.										
0	Ľ													
0				_										
1				-										
10 1	000.0	000	610	0.00	)0	1	1200.0	000(MI	łz)	18	850.000		2650	 0.000
		Fron	llenc	, T	Poa	dina	Fa	ctor	Leve	اد	l imit	Margin		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F
1	9440.500	45.01	0.16	45.17	74.00	-28.83	peak	Р
2 *	10868.500	46.70	-0.72	45.98	74.00	-28.02	peak	Р

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Tempe	erature:	23.9℃		Relative H	umidity:	48%	
Test V	/oltage:	DC 3.0V			Chine	-A 1	
Ant. P	ol.	Horizonta	al	ann's		4000	1
Test N	/lode:	TX 2475	MHz		ATT I	TAN	
90.0	dBuV/m						
80					(RF) FCC PAR	T 15C (PEAK)	
70   60					(RF) FCC PAR	T 15C (AVR)	
50		. 544	1 X	2	propromonent to require the		المارية م
40 30 "^	January william	Various Proposition		<i>x</i>			
20	<u> </u>						-
10							-
0 -10							
	0.000	6100.000	11200.00	00(MHz)	18850.000	26	500.000

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	9083.500	49.64	-2.30	47.34	74.00	-26.66	peak	Р
2	13265.500	44.23	0.72	44.95	74.00	-29.05	peak	Р

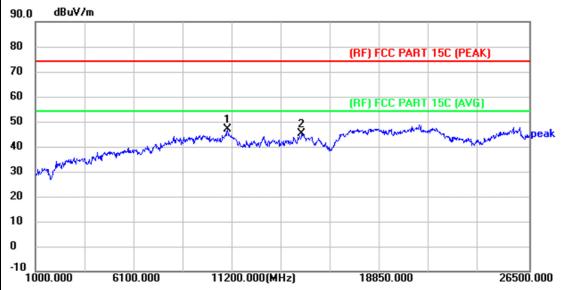
- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.9℃	Relative Humidity:	48%
Test Voltage:	DC 3.0V		2
Ant. Pol.	Vertical	m = ca	
Test Mode:	TX 2475MHz		WURL



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	10919.500	47.31	-0.49	46.82	74.00	-27.18	peak	Р
2	14744.500	41.48	3.53	45.01	74.00	-28.99	peak	Р

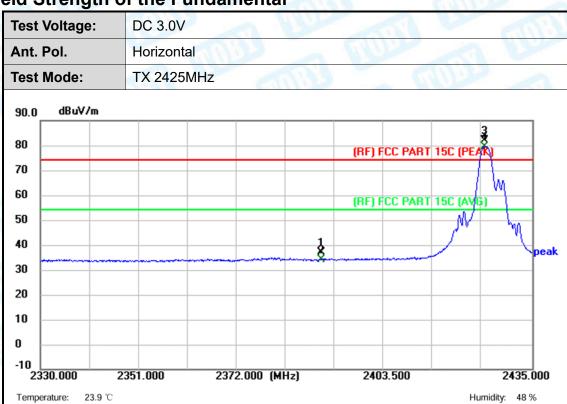
- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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## Field Strength of the Fundamental



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2390.000	47.58	-10.60	36.98	74.00	-37.02	peak	Р
2	2390.000	44.82	-10.60	34.22	54.00	-19.78	AVG	Р
3	2425.000	92.53	-10.56	81.97	114.00	-32.03	peak	Р
4 *	2425.000	89.95	-10.56	79.39	94.00	-14.61	AVG	Р

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
   Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)





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Test Voltage:	DC 3.0V			THEFT
Ant. Pol.	Vertical	A William	You	Sales Sales
Test Mode:	TX 2425MI	Hz	OM.	1
90.0 dBuV/m				
80				3
			(RF) FCC PART 15	C (PEAK)
70				
60			(RF) FCC PART 15	C (AVG)
50				M
40		}		<i>y</i> "
30		<del></del>	- Marie Contraction of the Contr	peal
20				
10				
0				
-10	2351.000	2372.000 (MHz)	2403.500	2435.000

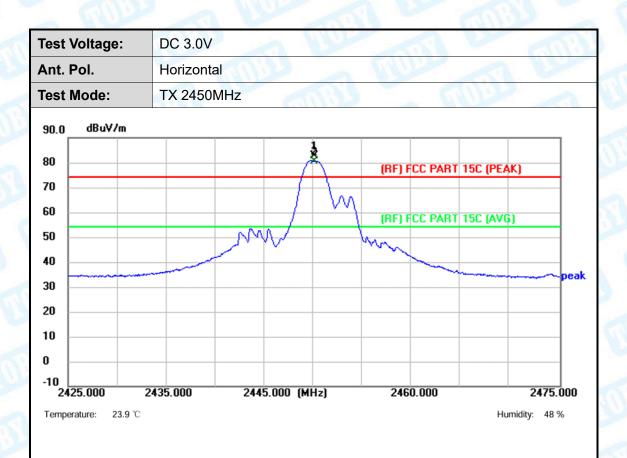
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2390.000	47.81	-10.60	37.21	74.00	-36.79	peak	Р
2	2390.000	45.21	-10.60	34.61	54.00	-19.39	AVG	Р
3	2425.000	94.50	-10.56	83.94	114.00	-30.06	peak	Р
4 *	2425.000	90.65	-10.56	80.09	94.00	-13.91	AVG	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
  2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)





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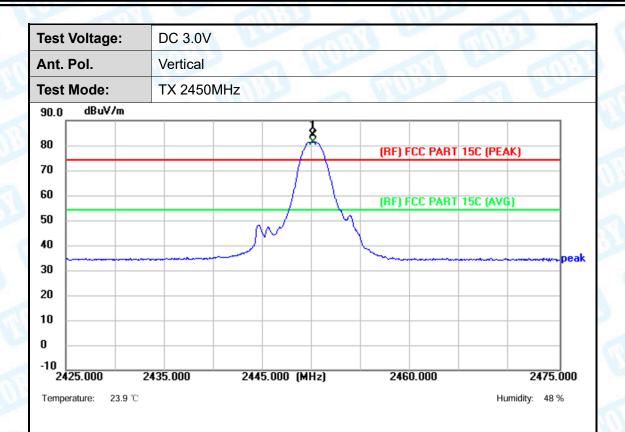
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2450.000	93.17	-10.57	82.60	114.00	-31.40	peak	Р
2 *	2450.000	91.09	-10.57	80.52	94.00	-13.48	AVG	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
  2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)





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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2450.000	94.65	-10.57	84.08	114.00	-29.92	peak	Р
2 *	2450.000	91.69	-10.57	81.12	94.00	-12.88	AVG	Р

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)





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Гest Voltage:	DC 3.0V				
Ant. Pol.	Horizontal		Chine.	AU	
Test Mode:	TX 2475M	Hz		ر حوال	a
90.0 dBuV/m					
80	1		(RF) FCC PART	15C (PEAK)	
70 60	m		(RF) FCC PART	15C (AVG)	
50	√√3				
30		The same of the sa			peal
10					
-10	2478 000	2491 000 (MHz)	2510 500	2530	nnn
0 -10 2465.000 Temperature: 23.9 %	2478.000	2491.000 (MHz)	2510.500	<b>2530.</b> Humidity: 48 <sup>9</sup>	

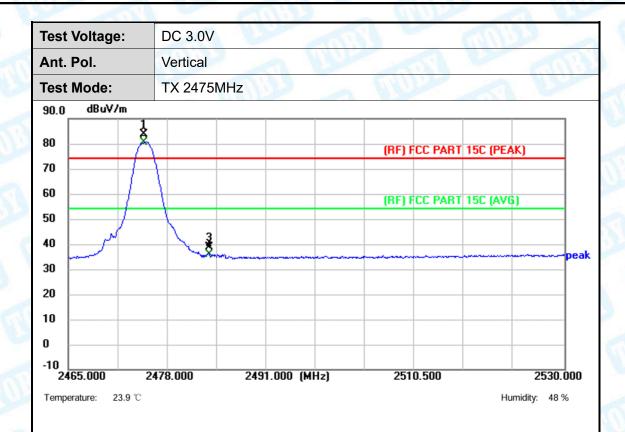
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2475.000	93.53	-10.44	83.09	114.00	-30.91	peak	Р
2 *	2475.000	91.30	-10.44	80.86	94.00	-13.14	AVG	Р
3	2483.500	52.51	-10.39	42.12	74.00	-31.88	peak	Р
4	2483.500	49.57	-10.39	39.18	54.00	-14.82	AVG	Р

- Remark: 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB) 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)





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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	2475.000	94.05	-10.44	83.61	114.00	-30.39	peak	Р
2 *	2475.000	90.83	-10.44	80.39	94.00	-13.61	AVG	Р
3	2483.500	49.07	-10.39	38.68	74.00	-35.32	peak	Р
4	2483.500	46.25	-10.39	35.86	54.00	-18.14	AVG	Р

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)





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## **Attachment B--Bandwidth Test Data**

TOBY

Pert of the Category Group

Channel Frequency (MHz)	20dB Bandwidth (MHz)
2425	2.590
2450	2.542
2475	2.562



----END OF THE REPORT----

