

1 Cover Page

RF Exposure REPORT

Application No.: FYCR2204000099AT (KSCR2204000541AT)
FCC ID: 2A6JR-LYXXX
Applicant: Shenzhen Longot Technology Development Co., Ltd.
Address of Applicant: 504B Section 3rd area, Huamei Building No 2 industry, Songgang Baoan, Shenzhen city, Guangdong, China
Manufacturer: Shenzhen Longot Technology Development Co., Ltd.
Address of Manufacturer: 504B Section 3rd area, Huamei Building No 2 industry, Songgang Baoan, Shenzhen city, Guangdong, China

Equipment Under Test (EUT):

EUT Name: Thermal Image Scope
Model No.: LY335, LY350, LY650, LY380 ♣
 ♣ Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.

Trade mark:



Standard(s) : FCC Rules 47 CFR §2.1093
 KDB447498 D01 General RF Exposure Guidance v06

Date of Receipt: 2022-04-24
Date of Test: 2022-06-22 to 2022-06-27
Date of Issue: 2022-06-29

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.





Winkey Wang
EMC Technical Manager



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Revision Record			
Version	Description	Date	Remark
00	Original	2022-06-29	/

Authorized for issue by:			
		 <hr/> Tree Zhan / Project Engineer	
		 <hr/> Winkey Wang / Reviewer	



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3 General Information

3.1 General Description of E.U.T.

Power supply:	DC 3.7 V (Max) by battery Battery charged by DC 5V adapter
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3.2 Details of E.U.T.

Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz; 802.11n(HT40): 2422MHz to 2452MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK); 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Number of Channels:	802.11b/g/n(HT20):11;802.11n(HT40):7
Channel Spacing:	5MHz
Antenna Type:	PCB Antenna
Antenna Gain:	-3.02dBi (Provided by the manufacturer)



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3.3 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc. Shenzhen branch.

Fuyong lab. Xinlong TechnoPark, Fengtang Road, Fuyong Subdistrict, Bao'an, Shenzhen, China

Tel: +86 755 8866 3988 Fax: +86 755 2671 0594

No tests were sub-contracted

3.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• **A2LA (Certificate No. 6606.01)**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6606.01.

• **FCC – Designation Number: CN1322**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized as an accredited testing laboratory.

Designation Number: CN1322. Test Firm Registration Number: 718073

• **Innovation, Science and Economic Development Canada**

Compliance Certification Services (Kunshan) Inc. Shenzhen branch has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0129.

IC#: 28189.



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4 Test Standards and Limits

4.1 FCC Radiofrequency radiation exposure limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max power of channel})/(\text{min test separation distance})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

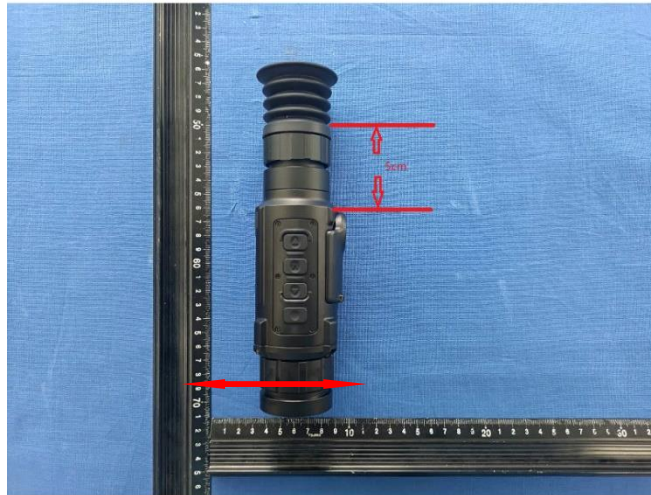
- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

For 2.4G band device, the limit of worse case is

$$P_{\text{max}} \leq 7.5 \cdot D_{\text{min}} / \sqrt{f} = 7.5 \cdot 5 / \sqrt{2.480} = 23.810 \text{ mW}$$

4.1.1 DUT Antenna Locations



- Note
- 1) The distance between WIFI antenna and handle of the EUT < 5 mm.
 - 2) The distance between WIFI antenna and the head of human is 50 mm.

$$\text{For the hand: } P_{\text{max}} \leq 7.5 \cdot D_{\text{min}} / \sqrt{f} = 7.5 \cdot 5 / \sqrt{2.480} = 23.81 \text{ mW}$$



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For the head , the limit of worse case is $P_{max} \leq 3 \cdot D_{min} / \sqrt{f} = 3 \cdot 50 / \sqrt{2.480} = 95.24mW$

5 Measurement and Calculation

5.1 Maximum transmit power

The Power Data is based on the RF Test Report FYCR220400009902

Test Data:

Test mode	Test Frequency (MHz)	Average Power (dBm)	Average Power (mW)
802.11b	2412	13.17	20.75
	2437	13.03	20.09
	2462	13.34	21.58
802.11g	2412	11.49	14.09
	2437	11.21	13.21
	2462	11.30	13.49
802.11 n(HT20)	2412	10.77	11.94
	2437	10.05	10.12
	2462	10.30	10.72
802.11 n(HT40)	2422	10.70	11.75
	2437	9.86	9.68
	2452	9.97	9.93

5.2 RF Exposure Calculation

The Max Output Power is 21.58mW.< 23.810mW<95.24mW

So the SAR report is not required.

--End of the Report--



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