

Applicant: GUANGDONG XIN YU TECHNOLOGY INDUSTRIAL Date: Jun 27, 2017

CO.,LTD.

LAI MEI INDUSTRIAL ZONE,

CHENGHAI DISTRICT, SHAN TOU,

**GUANGDONG, CHINA** 

Attn: MS LIN

Sample Description:

Two (2) styles of submitted sample said to be :

No.	Item No.	Item Name	Scale	Frequency
1	3803	Honda NSX	1:18AA	2.4G
2	3809	Lamborghini Centenario	1:18	2.4G

Labelled Age Group : "Choking Hazard-Small Parts. Not For Children Under 3 Years"

Appropriate Age Grading for : Over 3 years

Testing

Packaging Provided by : Yes

Applicant

Country of Origin : China





Tests conducted:

As requested by the applicant, refer to attached page(s) for details.

Conclusion:

The tested sample was tested and found to comply with EN 60825-1:1994 + A1:2002 + A2:2001 Class 1 LED Product.

Authorized by:

For Intertek Testing Services Shenzhen Ltd.

Guangzhou Branch, Hardlines

Ben N.L. Lin General Manager







### **Tests Conducted**

# 1 Safety of Laser Products

As per European Standard EN 60825-1:1994 + A1:2002 + A2:2001 on Safety of Laser Product Part 1: Equipment Classification, Requirements and User's Guide-Section Two: Manufacturing Requirements.

Classification of the laser product

Laser and/or LED product class for which the

Class 1 LED product

equipment is assigned

Laser and/or LED product class of the

--

equipment:

Laser and/or LED product class of the embedded laser/LED :

**Test specification** 

Test procedure : Testing (Laser classification only)

**Test case verdicts** 

Test case does not apply to the test object ...: N/A

Test item does meet the requirement : Pass

## **General product information:**

For item3809:

In normal operation  $\cdot$  the vehicle is operated by 1 piece 3.2V Li-poly rechargeable battery, the transmitter is operated by 2 piece "AA" batteries.

For item 3803:

In normal operation, the vehicle is operated by 4 pieces "AA" batteries, the transmitter is operated by 2 piece "AA" batteries.

Clause	Requirement – Test	Result – Remark	Verdict
4	Engineering Specifications		N/A
5	Labelling		N/A
6	Other Informational Requirements		N/A
7	Additional Requirements for Specific Laser Products		N/A
8	Classification (Normal Condition)		Pass
8.4	Classification rules		Pass
	Applicable condition/s	Condition 2	Pass
8.4e	Time base used	100s for Class 1 limits;	Pass





**Tests Conducted** 

Conducted Clause	Requirement – Test	Result – Remark	Verdict	
	Calculations and limits:	1	Pass	
	1. Ø3mm diffuse red LED in the vehicle of No.3809:			
	Measured wavelength: 629.0 nm			
	Measured thermal power: 20.60 μW			
	AEL(1) for retinal thermal hazard: 523.32	2 μW		
	2. Ø3mm diffuse red LED in the transmitt	er of No.3809:		
	Measured wavelength: 633.0 nm			
	Measured thermal power: 12.13 μW			
	AEL(1) for retinal thermal hazard: 600.76	AEL(1) for retinal thermal hazard: 600.76 μW		
	3. Ø3mm diffuse red LED in the transmitt	er of No.3803:		
	Measured wavelength: 628.0 nm			
	Measured thermal power: 10.45 μW			
	AEL(1) for retinal thermal hazard: 574.98	3 μW		
8.4f	Repetitively pulsed or modulated lasers	Continuous	N/A	
	Calculations and limits		N/A	
	AEL for continued operation used		N/A	
	Total-on-time-pulse (TOTP) method used		N/A	
9	Measurements for Classification (Normal	Condition)	Pass	
9.1	Tests		Pass	
9.2	Measurement conditions		Pass	
	Measured laser radiation	a,b,c,d,e,f,g	_	
9.3	Measurement geometry		Pass	
	a) aperture diameter (mm)	7mm	Pass	
		Thermal hazard:	Pass	
		1.15.6mm for Ø3mm diffuse red LED in the vehicle of No.3809		
		2. 16.6mm for Ø3mm diffuse red LED in the transmitter of No.3809;		
		3. 16.3mm for Ø3mm diffuse red LED in the transmitter of No.3803.		
	c) angle of acceptance $\gamma$		Pass	







# **Tests Conducted**

Clause	Requirement – Test	Result – Remark	Verdict
	i) photochemical limits	11mrad (at t = 100s)	N/A
	ii) all other limits	100mrad	Pass

8	Classification (Fault Condition)		Pass
8.4	Classification rules		Pass
	Applicable condition/s	Condition 2	Pass
8.4e	Time base used	100s for Class 1 limits;	Pass
	Calculations and limits:		Pass
	1. Ø3mm diffuse red LED in the vehicle of No.3809:		
	Measured wavelength: 629.0 nm		
	Measured thermal power: 25.39 μW		
	AEL(1) for retinal thermal hazard: 523.32 μW		
	2. Ø3mm diffuse red LED in the transmitt	ter of No.3809:	
	Measured wavelength: 633.0 nm		
	Measured thermal power: 16.40 μW		
	AEL(1) for retinal thermal hazard: 600.76 μW		
	3. Ø3mm diffuse red LED in the transmitter of No.3803:		
	Measured wavelength: 628.0 nm		
	Measured thermal power: 13.78 μW		
	AEL(1) for retinal thermal hazard: 574.98 μW		
8.4f	Repetitively pulsed or modulated lasers	Continuous	N/A
	Calculations and limits		N/A
	AEL for continued operation used		N/A
	Total-on-time-pulse (TOTP) method used		N/A
9	Measurements For Classification (Fault Condition)		Pass
9.1	Tests		Pass
9.2	Measurement conditions		Pass
	Measured laser radiation	a,b,c,d,e,f,g	_
9.3	Measurement geometry		Pass
	a) aperture diameter (mm)	7mm	Pass







### **Tests Conducted**

Clause	Requirement – Test	Result – Remark	Verdict
	b) measurement distance (mm)	Thermal hazard:	Pass
		1.15.6mm for Ø3mm diffuse red LED in the vehicle of No.3809	
		2. 16.6mm for Ø3mm diffuse red LED in the transmitter of No.3809;	
		3. 16.3mm for Ø3mm diffuse red LED in the transmitter of No.3803.	
	c) angle of acceptance γ		Pass
	i) photochemical limits	11mrad (at t = 100s)	N/A
	ii) all other limits	100mrad	Pass

Date sample received: Jun 08, 2017 Testing period: Jun 08, 2017 to Jun 24, 2017

End of report

This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct.



