Test Report Number: GZHH00291602

Applicant: GUANGDONG XIN YU TECHNOLOGY INDUSTRIAL CO.,LTD.
LAI MEI INDUSTRIAL ZONE,
CHENGHAI DISTRICT, SHAN TOU,
GUANGDONG, CHINA

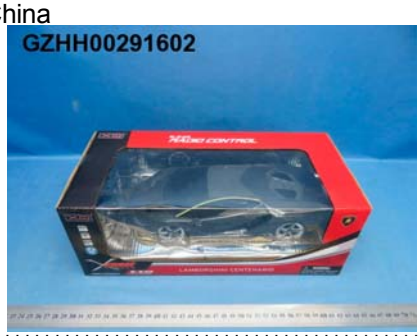
Date: Jul 28, 2018

Attn: MS LIN

Sample Description:

One (1) set submitted sample said to be :

Item Name	:	**RC Toys**
Item No.	:	**3810**
Labelled Age Group	:	"8+"
Applicant Specified Age Grading for Testing	:	Over 8 years
Packaging Provided by Applicant	:	Yes
Country of Origin	:	China



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Tests conducted:

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

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Conclusion:

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

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Authorized by:
For Intertek Testing Services Shenzhen Ltd.
Guangzhou Branch, Hardlines

Ben N.L. Lin
General Manager

Intertek Testing Services Shenzhen Limited, Guangzhou Branch
深圳天祥质量技术服务有限公司广州分公司

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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 equipment is assigned :	Class 1 LED product
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:	
In normal operation，the vehicle is operated by 5 pieces "AA" batteries, the transmitter is operated by 2 pieces "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

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Clause	Requirement – Test	Result – Remark	Verdict
	Calculations and limits: **1.Ø3mm water clear white LED in the vehicle:** Measured wavelength: 452.0 nm (400-800nm) Measured thermal power: 309.84 μW AEL(1) for retinal thermal hazard: 2.63 mW Measured photochemical power: 12.40 μW AEL(1) for retinal photochemical hazard: 42.76 μW 2. **Ø3mm diffuse red LED in the transmitter:** Measured wavelength: 629.0 nm Measured thermal power: 13.88 μW AEL(1) for retinal thermal hazard: 626.51 μW		Pass
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
	b) measurement distance (mm)	**Thermal hazard:** 1.33.2 mm for Ø3mm water clear white LED in the vehicle; 2. 16.9mm for Ø3mm diffuse red LED in the transmitter. **Photochemical hazard:** 1.96.3 mm for Ø3mm water clear white LED in the vehicle.	Pass
	c) angle of acceptance γ		Pass
	i) photochemical limits	11mrad (at t = 100s)	Pass
	ii) all other limits	100mrad	Pass

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Clause	Requirement – Test	Result – Remark	Verdict
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: **1.Ø3mm water clear white LED in the vehicle:** Measured wavelength: 452.0 nm (400-800nm) Measured thermal power: 385.16 μW AEL(1) for retinal thermal hazard: 2.63 mW Measured photochemical power: 17.32 μW AEL(1) for retinal photochemical hazard: 42.76 μW **2. Ø3mm diffuse red LED in the transmitter:** Measured wavelength: 629.0 nm Measured thermal power: 15.01 μW AEL(1) for retinal thermal hazard: 626.51 μW		Pass
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

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Clause	Requirement – Test	Result – Remark	Verdict
	b) measurement distance (mm)	**Thermal hazard:** 1.33.2 mm for Ø3mm water clear white LED in the vehicle; 2. 16.9mm for Ø3mm diffuse red LED in the transmitter. **Photochemical hazard:** 1.96.3 mm for Ø3mm water clear white LED in the vehicle.	Pass
	c) angle of acceptance γ		Pass
	i) photochemical limits	11mrad (at t = 100s)	Pass
	ii) all other limits	100mrad	Pass

Date sample received: Jul 17, 2018
Testing period: Jul 17, 2018 to Jul 25, 2018

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End of report

Intertek Testing Services Shenzhen Limited, Guangzhou Branch
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