



CONSUMER PRODUCTS SERVICES DIVISION

## SHANTOU CITY CHENGHAI DISTRICT DINOSAURS'LSLAND TOYS INDUSTRIAL CO., LTD

**Technical Report:** (8521)086-0120  
Date Received: March 29, 2021

April 19, 2021  
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SHANTOU CITY CHENGHAI DISTRICT DINOSAURS'LSLAND TOYS INDUSTRIAL CO., LTD  
DONGHU INDUSTRIAL, FENGXIANG STREET,  
CHENGHAI DISTRICT SHANTOU CITY GUANGDONG CHINA

Sample Description:	Animal toy	Sample Size:	1
Vendor:	N/A	Style No(s):	SEE ATTACHMENT
Manufacturer:	N/A	SKN/SKU No.:	N/A
Buyer:	N/A	PO No.:	N/A
Labeled Age Grade:	3+	Ref #:	N/A
Appropriate Age Grade:	NOT REQUESTED	Country of Origin:	CHINA
Client Specified Age Grade:	3+	Assortment No.:	N/A
Grade:		Rated Voltage:	3 X 1.5V
Tested Age Grade:	OVER 3 YEARS OF AGE		
UPC Code:	N/A		



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### EXECUTIVE SUMMARY:

The sample(s) was tested to the following requirement(s) and the data provided is for informational purposes only:

- The classification in accordance with standard EN 60825-1 .

Note per the client's requested, testing was performed for item: RS61-100

### ATTACHMENT:

RS61-100, RS6121,RS6121A,RS6122, RS6122A, RS6123,RS6123A,RS6124,  
RS6124A,RS6125,RS6125A,RS6126,RS6126A,RS6127,RS6128,RS6129,RS6129A,RS6131,RS6132,RS6133,R  
S6133A,RS6133B,RS6134,RS6134A,RS6134B,RS6135,RS6135A,RS6136,RS6136A,RS6137A,RS6137B,RS61  
38A,RS6138B,RS6139,RS6139A,RS6151,RS6152,RS6153,RS6154,RS6155A,RS6155B,RS6156,RS6156A,RS  
6157,RS6158,RS6158A,RS6159,RS6159A,RS6161,RS6162,RS6163,RS6163A,RS6163B,RS6164,RS6164A,RS  
6164B,RS6165,RS6166,RS6167A,RS6167B,RS6168A,RS6168B,RS6169A,RS6171,RS6171A,RS6172,RS6172  
A,RS6173,RS6173A,RS6174,RS6174A,RS6175,RS6176,RS6177,RS6177A,RS6178,RS6178A,RS6179,RS6180  
,RS6181,RS6182,RS6183,RS6184,RS6185,RS6186,RS6187,RS6188,RS6188A,RS6189A,RS6190,RS6191,RS  
6192,RS6193,RS6194,RS6195,RS6196,RS6197,RS001-1,RS001-2,RS001-3,RS001-4,RS002-1,RS002-  
2,RS003-1,RS003-2,RS004-1,RS004-2,RS004-3,RS004-4,RS004-5,RS004-6,RS005-1,RS005-2,RS005-  
3,RS006-1,RS006-2,RS007-1,RS007-2,RS007-3,RS008-1,RS008-2,RS008-3,RS009-1,RS009-2,RS009-  
3,RS009-E-commerce version,RS010,RS011,RS012-1,RS012-2,RS012-3,RS012-4,RS012-5,RS012-6,RS013-  
1,RS013-10,RS013-2,RS013-3,RS013-4,RS013-5,RS013-6,RS013-7,RS013-8,RS013-9,RS014,RS61-  
555Y,RS015-1,RS015-2,RS015-3,RS015-4,RS016-1,RS016-2,RS016-3,RS016-4,RS017-1,RS017-2,RS017-  
3,RS018,RS019,RS020  
RS021, RS023,RS024,RS025,RS026, RS026,RS027,RS027,RS028,RS029,RS030,,RS61-100A,RS61-101,RS61-  
102,RS61-102A,RS61-103,RS61-103A,RS61-104,RS61-104A (seal box) ,RS61-105,RS61-105A (seal  
box) ,RS61-121,RS61-122,RS61-123,RS61-124,RS61-125,RS6198-Ankylosaurus,RS6198-Brachiosaurus,RS6198-  
Cattle,RS6198-Cow,RS6198-Crocodile,RS6198-Donkey,RS6198-Elephant,RS6198-Hippo,RS6198-Horse,RS6198-  
Lion,RS6198-Pig,RS6198-Rhinoceros,RS6198-Sheep,RS6198-Spinosaururs,RS6198-Stegosaurus,RS6198-  
Tiger,RS6198-Triceratops,RS6198-Tyrannosaurus REX,RS6199-Cat,RS6199-chook,RS6199-cow,RS6199-  
Dinosaurs,RS6199-Dog,RS6199-Duck,RS6199-Giraffe,RS6199-Lion,RS6199-Owl,RS6199-Pig,RS6199-  
Tiger,RS6199-Zebra,RS022-1,RS022-2,RS022-3,RS022-4,RS022-5,RS022-6,RS031-1,RS031-2,RS031-3,RS031-  
4,RS031-5,RS032-1,RS032-2,RS032-3,RS032-4,RS033-001,RS033-002,RS033-003,RS033-004,RS033-  
005,RS033-006,RS033,RS034-007,RS034-008,RS034-009,RS034-010,RS034-011,RS034-012,RS034,RS035-  
013,RS035-014,RS035-015,RS035-016,RS035-017,RS035-018,RS036-1,RS036-2,RS037-1,RS037-2,RS038-  
1,RS038-2,RS039-1,RS039-2,RS040,RS041,RS042,RS043,RS044-1,RS044-2,RS044-3,RS044-4,RS044-5,RS045-  
1,RS045-2,RS045-3,RS046-1,RS046-2,RS046-  
3,RS047,RS048,RS049,RS050,RS051,RS052,RS053,RS054,RS055,RS056,RS057,RS058,RS059,RS053-  
1,RS053-2,RS053-3,RS054-1,RS054-2,RS054-3,RS055-1,RS055-2,RS055-3,RS056-1,RS056-2,RS056-  
3,RS060,RS061,RS062,RS063,RS064,RS065,RS066,RS067,RS068,RS069,RS070,112501, 112502, 112503,  
112509,

BUREAU VERITAS SHENZHEN CO., LTD.

Lung Cheong Ming, Nick  
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### SUMMARY OF TEST RESULTS

The sample is classified as Class 1 Laser Product according to EN60825-1.

Test Executed	Test Standard	Limit
Tests for Classification of Laser Products	Sec. 8, Sec. 9, EN 60825-1: 1994 + A11: 1996 + A2: 2001 + A1: 2002	Table 1, EN 60825-1: 1994 + A11: 1996 + A2: 2001 + A1: 2002

Test method and equipment:

The following test equipment are applied for the tests:

Equip. No	Equipment Name	Brand Name	Model
M006003L	Digital Light Meter	TES	TES-1336A
M006004L	Digital Light Meter	Sper Scientific	840020
M008005L	Digital Caliper (0-12")	Mitutoyo	CD-12"C
M008006L	Digital Caliper (0-12")	Mitutoyo	CD-12"C
M015003L	Stainless Steel Ruler (0-12")	Endo Keiki	NIL
M019001L	Optical Sensor Head	Advantest	Q82214
M019002L	Optical Power Meter + Optical Sensor Interface Unit	Advantest	Q8221 / Q82203
M019003L	Optical Spectrum Analyzer	Advantest	Q8341
M019004L	Optical Sensor Head	Advantest	Q82214
M019005L	Optical Power Meter + Optical Sensor Interface Unit	Advantest	Q8221 / Q82203
T031001L	Laser Test Fixture + Sample Platform	NIL	NIL
T032001L	7mm Sensor Aperture Stop	NIL	NIL
T032003L	Ø0.5mm Field Stop Aperture	NIL	NIL
T032004L	Ø5mm Field Stop Aperture	NIL	NIL
T033001L	Filter (Yellow)	Lee Filter	101
T033002L	Filter (Green)	Lee Filter	124
T033003L	Filter (Red)	Lee Filter	182
T033004L	Filter (Blue)	Lee Filter	195

The measurements are carried out with the measurement set up following Section 9 of EN 60825-1.

The measurement condition 2 specified in Section 9.3 and Table 10 of EN 60825-1 is adopted.

Description of the lasers or LEDs under test:

Source No.	Feature
Led 1	CW / Single-λ , red led (clear)
Led 2	CW / Single-λ , red led (milky)



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Test Results:

I) TESTS DURING OPERATION

Basic Parameters of the lasers or LEDs

Single-wavelength source:

Parameters	Unit	Led 1	Led 2
Color of the laser/LED	(e.g. Red / Amber / Yellow / Green / Blue, etc.)	Red	Red
Wavelength ( $\lambda$ ) measured / Given by manufacturer	(nm)	628	637
Time Base estimated	(sec)	100	100
Apparent source size ( $a$ ) measured	(mm)	0.41	>10
Angular subtense ( $\alpha$ ) estimated	(mrad)	4.08	>100
Is the laser or LED continuous wave or pulsed?		CW	CW
Break Point ( $T_2$ )	(second)	10.62	100



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For continuous wave (CW) lasers or LEDs:

Note: a laser or LED operating with a continuous output for a period equal to or greater than 0.25 second.

A) TESTS AGAINST RETINAL PHOTOCHEMICAL HAZARD (RPH):

Single-wavelength source:

Parameters	Unit	Led 1	Led 2
Limiting angle of acceptance ( $\gamma$ )	(mrad)	NA	NA
Measurement aperture ( $d$ )	(mm)	NA	NA
Measurement distance ( $r$ )	(mm)	NA	NA
Exposure time ( $t$ )	(sec)	NA	NA
Radiant power ( $P$ )	( $\mu$ W)	NA	NA
Radiant energy ( $Q$ )	( $\mu$ J)	NA	NA
The corresponding RPH AEL for Class __ Laser	< $\mu$ W or $\mu$ J>	NA	NA

B) TESTS AGAINST RETINAL THERMAL HAZARD (RTH):

Single-wavelength source:

Parameters	Unit	Led 1	Led 2
Angle of acceptance ( $\gamma$ )	(mrad)	>4.08	100
Measurement aperture ( $d$ )	(mm)	7	7
Measurement distance ( $r$ )	(mm)	21.31	100
Exposure time ( $t$ )	(sec)	100	100
Radiant power ( $P$ )	( $\mu$ W)	588.12 $\mu$ W	NA
Radiant energy ( $Q$ )	( $\mu$ J)	NA	2.03 $\mu$ J
The corresponding RTH AEL for Class _1_ Laser	< $\mu$ W or $\mu$ J>	1054	1475730



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II) TESTS WITH PARTS SUCH AS LENSES, REFLECTORS OR FILTERS THAT COULD AFFECT FOCUSING  
REMOVED

Basic Parameters of the lasers or LEDs

Single-wavelength source:

Parameters	Unit	Led 2
Color of the laser/LED	(e.g. Red / Amber / Yellow / Green / Blue, etc.)	Red
Wavelength ( $\lambda$ ) measured / Given by manufacturer	(nm)	637
Time Base estimated	(sec)	100
Apparent source size ( $a$ ) measured	(mm)	0.41
Angular subtense ( $\alpha$ ) estimated	(mrad)	4.08
Is the laser or LED continuous wave or pulsed?		CW
Break Point ( $T_2$ )	(second)	10.62



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For continuous wave (CW) lasers or LEDs:

Note: a laser or LED operating with a continuous output for a period equal to or greater than 0.25 second.

A) TESTS AGAINST RETINAL PHOTOCHEMICAL HAZARD (RPH):

Single-wavelength source:

Parameters	Unit	Led 2
Limiting angle of acceptance ( $\gamma$ )	(mrad)	NA
Measurement aperture ( $d$ )	(mm)	NA
Measurement distance ( $r$ )	(mm)	NA
Exposure time ( $t$ )	(sec)	NA
Radiant power ( $P$ )	( $\mu$ W)	NA
Radiant energy ( $Q$ )	( $\mu$ J)	NA
The corresponding RPH AEL for Class <u>  </u> Laser	< $\mu$ W or $\mu$ J>	NA

B) TESTS AGAINST RETINAL THERMAL HAZARD (RTH):

Single-wavelength source:

Parameters	Unit	Led 2
Angle of acceptance ( $\gamma$ )	(mrad)	$\geq 4.08$
Measurement aperture ( $d$ )	(mm)	7
Measurement distance ( $r$ )	(mm)	21.31
Exposure time ( $t$ )	(sec)	100
Radiant power ( $P$ )	( $\mu$ W)	220.61
Radiant energy ( $Q$ )	( $\mu$ J)	NA
The corresponding RTH AEL for Class <u>1</u> Laser	( $\mu$ W)	1054



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### III) TESTS UNDER FAULT CONDITONS

Basic Parameters of the lasers or LEDs

Single-wavelength source:

Parameters	Unit	Led 1	Led 2
Color of the laser/LED	(e.g. Red / Amber / Yellow / Green / Blue, etc.)	Red	Red
Wavelength ( $\lambda$ ) measured / Given by manufacturer	(nm)	628	637
Time Base estimated	(sec)	100	100
Apparent source size ( $a$ ) measured	(mm)	0.41	0.41
Angular subtense ( $\alpha$ ) estimated	(mrad)	4.08	4.08
Is the laser or LED continuous wave or pulsed?		CW	CW
Break Point ( $T_2$ )	(second)	10.62	10.62





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For continuous wave (CW) lasers or LEDs:

Note: a laser or LED operating with a continuous output for a period equal to or greater than 0.25 second.

A) TESTS AGAINST RETINAL PHOTOCHEMICAL HAZARD (RPH):

Single-wavelength source:

Parameters	Unit	Led 1	Led 2
Limiting angle of acceptance ( $\gamma$ )	(mrad)	NA	NA
Measurement aperture ( $d$ )	(mm)	NA	NA
Measurement distance ( $r$ )	(mm)	NA	NA
Exposure time ( $t$ )	(sec)	NA	NA
Radiant power ( $P$ )	( $\mu$ W)	NA	NA
Radiant energy ( $Q$ )	( $\mu$ J)	NA	NA
The corresponding RPH AEL for Class <u>  </u> Laser	< $\mu$ W or $\mu$ J>	NA	NA

B) TESTS AGAINST RETINAL THERMAL HAZARD (RTH):

Single-wavelength source:

Parameters	Unit	Led 1	Led 2
Angle of acceptance ( $\gamma$ )	(mrad)	>4.08	>4.08
Measurement aperture ( $d$ )	(mm)	7	7
Measurement distance ( $r$ )	(mm)	21.31	21.31
Exposure time ( $t$ )	(sec)	100	100
Radiant power ( $P$ )	( $\mu$ W)	760.5	329.67
Radiant energy ( $Q$ )	( $\mu$ J)	NA	NA
The corresponding RTH AEL for Class <u>1</u> Laser	( $\mu$ W)	1054	1054

N/A = Not Applicable



**BUREAU  
VERITAS**

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**RESULTS:**



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