

TEST REPORT

Applicant: SHENZHEN NOBLE OPTO CO., LTD.

Address: Building 5F, Mingjinhai Industry Park, Shiyuan Town, Bao'an District, Shenzhen, China, 518108

Report Number: POCE18010301URS

Total Page: 7 Pages

Report on the submitted sample said to be:

Sample name: 200mm High Power Traffic Light

Trade Name: N/A

Specimen Model: NBVB213HP, NBAL213HP-V12, NBPS212HP-V12, NBVB212HP-V12, NBPS200HP-V12, NBAL200HP-V12, NBVB200HP-R, NBVB200HP-A, NBVB200HP-G

Manufacturer: SHENZHEN NOBLE OPTO CO., LTD.

Address: Building 5F, Mingjinhai Industry Park, Shiyuan Town, Bao'an District, Shenzhen, China, 518108

Date EUT received: Jan. 03, 2018

Date test effected: Jan. 03, 2018- Jan. 08, 2018

Types of Test: Impact resistance

***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Signed for and on behalf of
POCE Ltd

Prepared by(Engineer):

Approved(Manager):



SUMMARY

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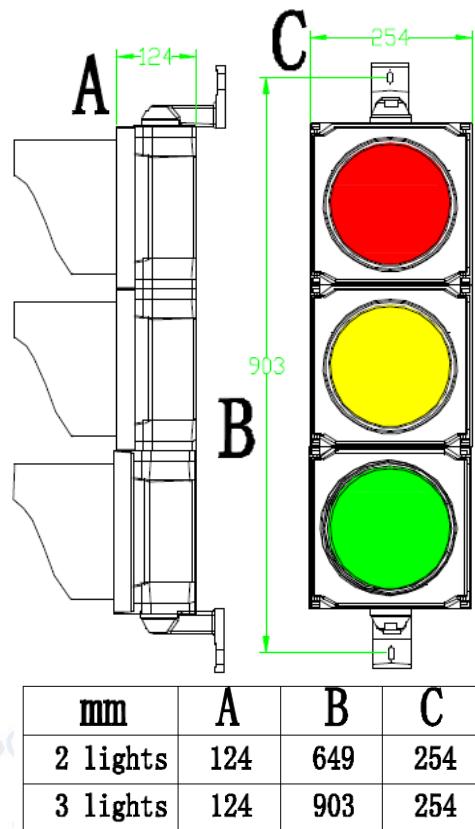
1. Specimen description

The 200 mm diameter traffic lights samples sampled by Shenzhen POCE technology Co., Ltd. in Jan. 03, 2018 and delivered to the laboratories. Are composed of a black polycarbonate support, inside which a luminous matrix made by LEDS is mounted. The front part has a closing door on which a transparent lens in polycarbonate is mounted. The colour of the lantern is determined by LED light emission. The door is provided with support for mounting the visor. The main technical characteristics are sated in the following table

Signal head	Sign	Color	No. of LEDS	Voltage	Outside Dimensions
NBVB213HP	Full Ball	Red	3	85-275Vac	903 x 254 x 124 mm
		Yellow	3		
		Green	3		

Signal head NBVB213HP -LEDs characteristics

Color	Manufacture/ Trademark	Frequency (Hz)	Voltage[V]	Power[W]
Red	SHENZHEN NOBLE OPTO CO., LTD.	45-65Hz	85-275Vac	>8 W
Yellow	SHENZHEN NOBLE OPTO CO., LTD.	45-65Hz	85-275Vac	>8 W
Green	SHENZHEN NOBLE OPTO CO., LTD.	45-65Hz	85-275Vac	>8 W



Traffic Signal Light drawings of model NBVB213HP

2. Reference documents

The test was carried out in accordance with the requirements of the following documents:

*European EN 12368:2015 "Traffic control equipment- Signal head";

*Italian standard EN 60598-1:2008 "Luminaires Part 1- "General requirements and tests"

3. Environmental conditions

Temperature: $23 \pm 3^\circ\text{C}$

Realative humidity: $50 \pm 10\%$

Pressure: $1010 \pm 20\text{hPa}$

4. Test apparatus

- MINIDATALOGGER DELATOHM HD602.S/N RM243;
- Climatic chamber ANGELANTION UC10-40/70 TWIN(Side B), S/N RM084

5. Test conditions

Each EUT has been subjected to three single impacts. At points likely to be weakest. On any surface normally exposed. The sample has been mounted as in normal use on a rigid supporting surface. The impacts have been produced by dropping a steel sphere 50mm diameter weighing 0.51kg from a height $h=1.3m$ as shown in the following photos.

6. Test results

The results of the classification for the signal heads, under test in accordance with standard EN 12368:2015 are given in the following tables.

EUT	200mm full ball traffic signal light (NBVB213HP)	
Test	Performance parameter	Requirement
Impact resistance	Class IR3	Pass

Photos

<p>Photo 1</p> <p>View:</p> <p><input checked="" type="checkbox"/> front</p> <p><input type="checkbox"/> rear</p> <p><input type="checkbox"/> right side</p> <p><input type="checkbox"/> left side</p> <p><input type="checkbox"/> top</p> <p><input type="checkbox"/> bottom</p> <p><input type="checkbox"/> internal</p>	 A photograph of a traffic light assembly. The light is a standard three-lamp unit with red, yellow, and green lights. It is mounted on a black housing. To the right of the light, a black mounting bracket and two silver L-shaped mounting brackets are visible. The entire assembly is placed on a light-colored tiled floor.
<p>Photo 2</p> <p>View:</p> <p><input checked="" type="checkbox"/> front</p> <p><input type="checkbox"/> rear</p> <p><input type="checkbox"/> right side</p> <p><input type="checkbox"/> left side</p> <p><input type="checkbox"/> top</p> <p><input type="checkbox"/> bottom</p> <p><input type="checkbox"/> internal</p>	 A photograph of a traffic light assembly. The light is a standard three-lamp unit with red, yellow, and green lights. It is mounted on a black housing. The light is positioned centrally against a light-colored tiled background.

<p>Photo 3</p> <p>View:</p> <p><input type="checkbox"/> front</p> <p><input type="checkbox"/> rear</p> <p><input type="checkbox"/> right side</p> <p><input type="checkbox"/> left side</p> <p><input checked="" type="checkbox"/> top</p> <p><input type="checkbox"/> bottom</p> <p><input type="checkbox"/> internal</p>	
<p>Photo 4</p> <p>View:</p> <p><input type="checkbox"/> front</p> <p><input checked="" type="checkbox"/> rear</p> <p><input type="checkbox"/> right side</p> <p><input type="checkbox"/> left side</p> <p><input type="checkbox"/> top</p> <p><input type="checkbox"/> bottom</p> <p><input type="checkbox"/> internal</p>	

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