

## IS 30240

NON SPARKING CUM RESTRICTED BREATHING  
FLOOD LIGHT FITTING

## Description

Non sparking cum restricted breathing flood glass luminaire with toughened heat resistant glass. The glass is fitted with a gasket and clamped to the main body by a retaining ring. An enclosed break lamp holder with a special device for vibration free lamp locking is provided. Anti-vibration slotted terminals are used for safe termination.

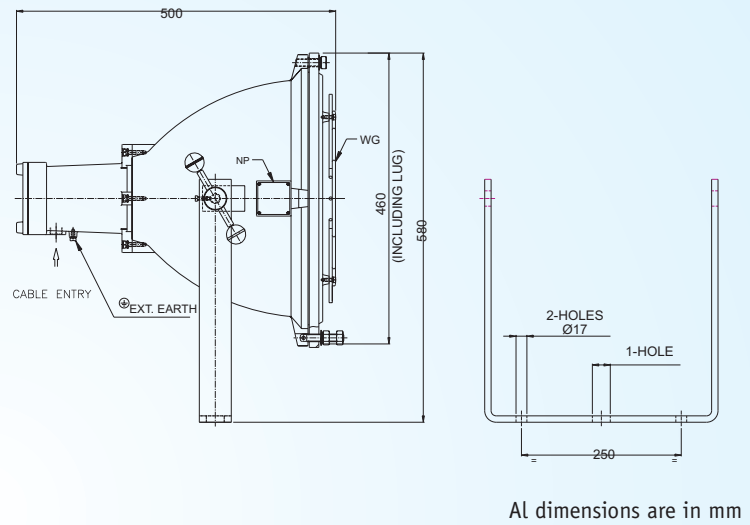
## Mechanical Data

Material	: Aluminium LM6
Weight	: 18.5 Kg
IP Protection	: IP 65 as per IS- 15145-2002/IEC 60529/1989
Finish	: Anti corrosive Epoxy Powder coated
Cable Entry	: 2 X 3/4 " ET
Glass	: Toughened Borosilicate
Wireguard	: 5 mm Welded Steel Construction
Reflector	: Al polished (mirror finish)
Gasket	: Neoprene
Hardware	: Stainless Steel

## Electrical Data

Voltage	V : 230 V AC , 50 Hz
Lamp Wattage	W : 250 W up to 400W (HPMV/HPSV/MH)
Lamp Holder	: Porcelain enclosed break GES-E40
Wiring	: Fibreglass class F insulated 2.5 sq.mm Standard copper
Terminals	: 2 Nos - Anti- vibration Brass Nickel plated mounted on a glass fibre reinforced DMC Terminal block
Max. Cable size	: 3 X 6 sq.mm
Int. Terminations	: Slotted 6 sq.mm crimping lugs.
Earthing	: External 2 Nos - M6 Internal 1 No - M5

## GA Drawing

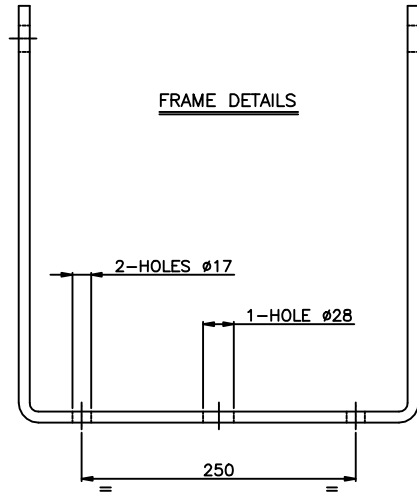
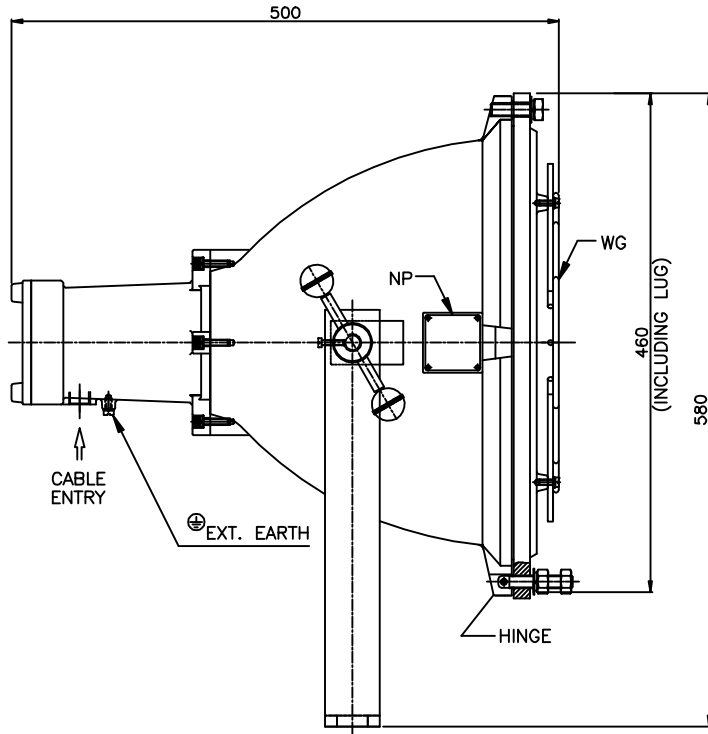


Type of protection	Non sparking cum restricted Breathing
Area Classification	Zone 2
Apparatus Standard	IS - 13346/04(IEC 60079-0/00), IS/IEC 60079-15/05, IS 12063/1987 (IEC 60529/1989)
CIMFR Certificate No.	CIMFR/TC/S/H824
Approvals	CCE
Temp Rating	Refer to table
Wattage Rating	250 W up to 400W (HPMV/HPSV/MH)

Lamp Rating (W)	Temp. Class
250W HPMV	T5
400W HPMV	T4
400W HPSV	T3
400W MH	T3

IF IN DOUBT ASK

DO NOT SCALE



**NOTES:**

- GLASS : HEAT RESISTANT TOUGHENED CLEAR FLAT GLASS
- LAMP HOLDER : GES ENCLOSED BREAK (PORCELAIN)
- INTERNAL REFLECTOR : ANODISED POLISHED
- LAMP TO SUIT : 250W HPMV - T5 / 400W HPMV - T4
- TL : 2WAY ANTI-VIBRATION & ANTI-LOOSENING TERMINAL
- WG -WIRE GUARD (M.S, EPOXY POWDER COATED - WHITE COLOUR)
- NP : NAME & WARNING PLATE (SS)
- EARTHING : 2Nos. EXTERNAL & 1No. INTERNAL
- HARDWARE : SS304
- FRAME : M.S-PAINTED

ALL DIMENSIONS ARE IN MM.

E	<b>CABLE ENTRY:</b> 2Nos. 0.75 ET		CUSTOMER :		TITLE : Exn-R NON SPARKING CUM RESTRICTED BREATHING WELL GLASS LUMINAIRE			
			PMC :		CAT No. : IS-30240			
			PROJECT :		CLASSIFICATIONS : Exn'R' ZONE 2 IP65			
			P.O No. :		WT.:18.5Kgs (APPROX.)	MATL.: AL. LM-6	ITEM No.:	QTY.:
			FINISH : EPOXY POWDER COATED LIGHT GREY (SHADE-631 OF IS:5)		TOLERANCE : ±2mm		FOR INFORMATION ONLY	
CMRI : CIMFR/TC/P/H644 DT. 19.11.2008		SCALE N.T.S						
IS:13346/04 (IEC:60079-0/00)		NAME	DATE					
F	IS/IEC 60079-15/05		REV-1		SHEET 1 OF 1			
	IS:12063/87 (IEC:60529/89)		REV-2					
	<b>Baliga Lighting Equipments Private Limited,</b> KOVILAMBAKKAM, CHENNAI-600117, INDIA.		DRN.	S.S	18.03.09	DRG. NO.	REV	
			CHKD.			QE30240001	0	
APPD.								

# केन्द्रीय खनन एवं ईंधन अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)  
बरवा रोड, धनबाद - 826015, झारखण्ड, (भारत)



ORIGINAL COPY

## CENTRAL INSTITUTE OF MINING AND FUEL RESEARCH

Formely : Central Mining Research Institute  
(COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH)  
BARWA ROAD, DHANBAD - 826 015, JHARKHAND (INDIA)  
REGISTERED POST/COURIER SERVICE

No. CIMFR/TC/S/H824  
TC CODE NO. FLP/172C/08-9

Dated: 5<sup>th</sup> February, 2009  
EQUIPMENT ID NO. 524/08

To  
**M/S. BALIGA LIGHTING EQUIPMENTS PVT. LTD.,**  
389, MEDAVAKKAM ROAD, KOVILAMBAKKAM,  
**CHENNAI-600 117**

**Sub:** Supplementary Test Report of your Non Sparking cum Restricted breathing Ex 'nR' Floodlight Fitting, designated by Cat. No.: IS 30240, earlier certified in CIMFR Prototype Test Report No. CIMFR/TC/P/H644, Dated: 19/11/2008, for use in Zone 2 area only.

- **Supplementary Test Report On**

**Your Ref. No.: CIMFR/6/248/S Dated: 20/11/2008**

Dear Sir,

Please find enclosed the **Supplementary Test Report** of the above sample submitted by you.

Please keep a copy of this Supplementary Report along with the Original Prototype Test Report No.: CIMFR/TC/P/H644, Dated: 19/11/2008.

Charges of **Rs. 4, 719/- (Rupees Four Thousand Seven hundred & Nineteen)** only including applicable service charges involved towards the testing have been adjusted against the advance deposit made by you.

Kindly arrange to collect the samples within 90 days from the date of receipt of this letter failing which CIMFR would dispose off the samples by public auction without any further NOTICE to you.

Kindly acknowledge receipt.

Thanking you.

Yours faithfully,

  
(G.M. PRASAD)

HEAD OF THE DEPARTMENT  
TESTING CELL

Encl: As above.  
Supplementary Test Report in Triplicate  
Copy to: 1. Head, Flame & Explosion Lab.  
2. Bill Section.

के० ख० एवं ई० अ० सं० परीक्षण प्रकोष्ठ - CIMFR TESTING CELL

केन्द्रीय खनन एवं ईंधन अनुसंधान संस्थान

( वैज्ञानिकीय - औद्योगिक अनुसंधान परिषद )



ORIGINAL COPY

## CENTRAL INSTITUTE OF MINING AND FUEL RESEARCH

Formerly Central Mining Research Institute  
(Council of Scientific & Industrial Research)

बरवा रोड, धनबाद - 826 001 (भारत) - BARWA ROAD, DHANBAD-826 001 (INDIA)

### परीक्षण प्रमाण पत्र - TEST CERTIFICATE

FORMAT NO.: (CIMFR: DQM: FLP02: FR-03)

(Flame & Explosion Laboratory)

TC CODE NO. FLP/172C/08-9

EQUIPMENT ID NO. 524/08

[For association with the supplementary report of test sent (under cover of this office letter No. CIMFR/TC/S/H824 Dated: 5<sup>th</sup> February, 2009) to M/S. BALIGA LIGHTING EQUIPMENTS PVT. LTD., 389, MEDAVAKKAM ROAD, KOVILAMBAKKAM, CHENNAI-600 117, in respect of Supplementary testing of the equipment mentioned below submitted by them.]

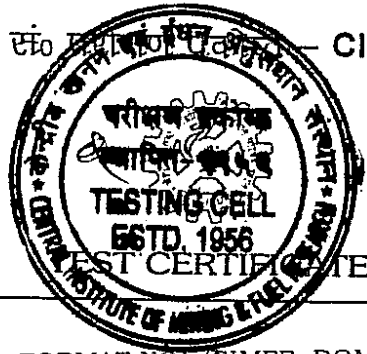
#### SUPPLEMENTARY TEST REPORT

1. **Applicant:** M/S. BALIGA LIGHTING EQUIPMENTS PVT. LTD.,  
389, MEDAVAKKAM ROAD,  
KOVILAMBAKKAM, CHENNAI-600 117
2. **Manufacturer:** Same as above
3. **Title of Apparatus:** Non-sparking cum Restricted breathing Ex 'nR' Non-Integral Floodlight Fitting.
4. **Type No./Model No.:** Cat. No.: IS 30240
5. **Zone:** Zone 2 area only.
6. **Standard reference:** IS: 13346-2004.
7. **Rating:** 250W/400W HPMV Non-Integral 230V AC, 50Hz. (As mentioned in Proto)
8. **Temp. Class:** See test result.
9. **Revalidation Test Certificate No & Date:** CIMFR/TC/P/H644 Dated: 19/11/2008
10. **Supplementary Certificate Numbers & Dates, if issued earlier:** Nil.
11. **Details of the variations:**
  - (i) The above Non-sparking cum Restricted breathing Ex 'nR' Non-Integral Floodlight Fitting may be suitable for the 250W HPSV/MH lamp at 230V AC, 50Hz (max.) (For Surface Temperature classifications see test result).
  - (ii) Alternatively the above Non sparking cum Restricted breathing Ex 'nR' Non-Integral Floodlight Fitting having IP-65 may be used in Zone 22 area as per IS: 15142-2002.
12. **Drawing:**
13. **If, any other relevant information:** Nil
14. **Scope of Certificate:**

*This Institute reserves the right to review, amend or withdraw this Suppl. Test Report at any time if, considered necessary in the interest of safety.*

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के० ख० एवं ई० अ० सं० प० वि० सं० - CIMFR TESTING CELL



ORIGINAL COPY

FORMAT NO.: (CIMFR: DQM: FLP02: FR-03)  
(Flame & Explosion Laboratory)

TC CODE NO. FLP/172C/08-9

EQUIPMENT ID NO. 524/08

[Accompanies this office letter No: CIMFR/TC/S/H/824 dated 5<sup>th</sup> February, 2009 and pertains to the report of testing of your Non-sparking cum Restricted breathing Ex 'nR' Non-Integral Floodlight Fitting, in cast aluminium alloy LM-6 construction designated by Cat. No.: IS 30240 submitted for test by M/S. BALIGA LIGHTING EQUIPMENTS PVT. LTD., 389, MEDAVAKKAM ROAD, KOVILAMBAKKAM, CHENNAI-600 117]

**REPORT OF TEST****Date of Test:** 19 & 20/01/2009**Test as per IS: 13346-2004:**

Sl. No.	Type test & Clause No.		Results
1	Temperature measurement	23.4.6.1	To establish the maximum surface temperature
			Pass / As per Table#A1

**Table#A1:** The Surface Temperature rise classifications of the Non-sparking cum Restricted breathing Ex 'nR' Non-Integral Floodlight Fitting, designated by Cat. No.: IS 30240, have been determined with the following lamps energized at 110% of 230V AC supply.

Sl. No.	Lamps with rating	Temperature Class at 40° C ambient
1.	250W HPSV lamp at 230V AC (max.)	T4
2.	250W MH lamp at 230V AC(max.)	T4

**NOTE:** The present supplementary report should be read in conjunction with the Prototype Test Report issued earlier by this Institute.

**Reported By**

*A. Kumar*  
(A. KUMAR)  
Group III (2)

**Approved By**

*A. K. Singh*  
(A. K. SINGH)  
Head of the Department

Dated: 4<sup>th</sup> February, 2009  
Flame & Explosion Laboratory,  
Central Institute of Mining & Fuel Research, (CSIR-INDIA)  
(Erstwhile: Central Mining Research Institute)  
Barwa Road, Dhanbad -826015, Jharkhand, INDIA