



達源技術有限公司
EnergyPro Technology Co., Ltd.



Instant Fit LED High Bay Light Bulb Introduction

LED Replacement for Metal Halide Lamp

[400W / 350W / 320W / 250W]
E39 / E40 Base, Vertical Mount



Agenda

- Features
- Technical Specs
- Design
- Applications
- Test Report



Description



The High Bay Bulb is a plug-and-play replacement for Metal Halide (MH) lamps with an E39 / E40 base. With a significantly lower energy consumption than conventional MH lamps, the High Bay Bulb also replace 400W / 350W / 320W / 250W MH lamps.

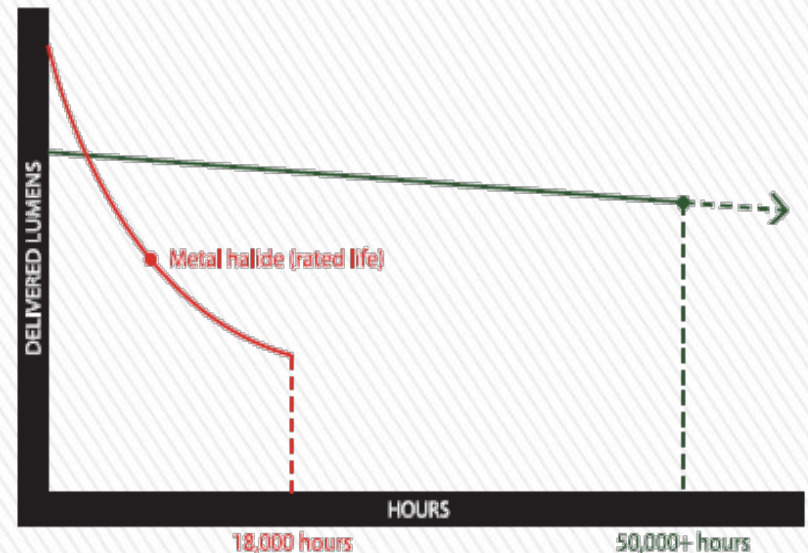
Energyp's D.O.B. LED technology makes these lamps truly **plug-and-play** by allowing them to operate directly off of **existing ballasts**. Simply replace the existing MH lamp without making any modifications to the fixture.

The High Bay Bulb has a rated life of 50,000 hours – 5 times longer than that of MH lamps. This eliminates costly replacement cycles and reduces maintenance costs.

The High Bay Bulb is available in a range of color temperatures including 4000K, 5000K and 5700K. It delivers consistent light levels across its long life, which results in a high quality lighting experience for the building's occupants.

Optimized Light Levels

Energyp LED high Bay Bulb provide constant light output circuitry to maintain light levels throughout its long life.



Model BL40-165NI 8XX

The Lamp is compatible with 400W, 350W, 320W and 250W MH ballast without any re-wiring of the fixture.

Features

- Replaces 400W / 350W / 320W / 250W metal halide (MH) lamps
- Plug and Play installation, with existing installed magnetic ballasts
- Works well in enclosed fixtures
- Ultra-low energy draw extends existing magnetic ballast life
- Up to 16,000 lumens fixture delivered light output
- 60% energy savings, Typical payback < 18 months with 12 hours per day usage.
- Instant On/Off; no arc tube re-strike timeout which improves safety over MH.
- Life time > 50,000 hours, last more than 4 times longer than standard MH.
- >80 CRI , CCT 4000K, 5000K and 5700K
- **Nichia** LED inside with LM80 and IEC62471 Certificated
- Ultra light weight < 1.3 Kg

Simple & Easy!!



Performance Specifications - Vertical Mount Lamp - 400W / 320W

Driven by 400W (M59) Ballast

Driven by 320W (M132) Ballast

Illumination

Color Temperatures

4000K, 5000K, 5700K

4000K, 5000K, 5700K

Lumens

4000K: 16,000 lm

14,500 lm

5000K: 16,000 lm

14,500 lm

5700K: 16,500 lm

15,000 lm

Lumen Maintenance (L70)

50,000+ hours life

50,000+ hours life

Electrical System

Input Voltage

Driven by magnetic MH ballast

Driven by magnetic MH ballast

Power Consumption

165W

135W

Lamp Wattage Replaced

400W

320W

Physical

Dimensions (H x W)

306 x 180 mm

306 x 180 mm

Weight

1.3Kg

1.3Kg

Environment

Ambient Temperature

-40°C to 50 °C

-40°C to 50 °C

Humidity Rating

Damp OK, no direct water spray

Damp OK, no direct water spray

Fixture Type

Open or enclosed

Open or enclosed

Installation

Socket Type

Fits vertical mount base (E39/E40) MH socket

Fits vertical mount base (E39/E40) MH socket

Certifications & Qualifications

UL

Recognized US (TBD)

Recognized US (TBD)

RoHS Compliant

Contains no lead or mercury

Contains no lead or mercury

LM79, LM80, IES Files

Complete

Complete

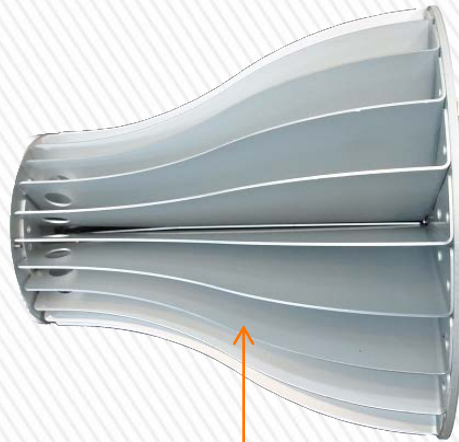
Warranty

5 years

5 years

Design (Structure Breakdown)

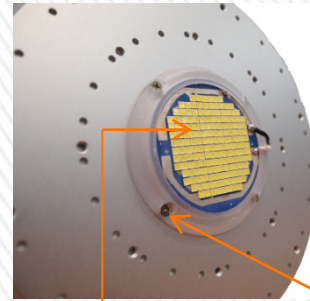
E39/40 Cap



Anodic Process Heatsink



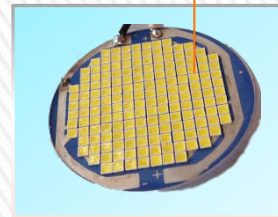
Optical Lens



Waterproof Ring
O-Ring



NICHIA LED with
Ultra High Thermal
Conductivity PCB



Special Anodic Process Heatsink

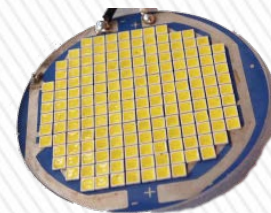
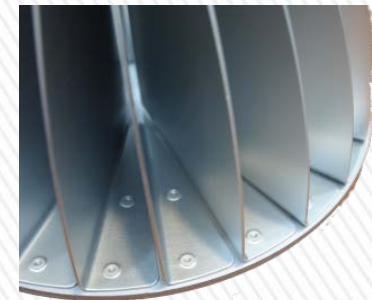


Special Anodic Process Heatsink Available
High quality aluminum heatsink with special
Anodic Process treatment.



Design (LED & Optical)

1. Initial Output Luminance : 16000lm
2. Efficiency : 140Lm/W (from chip)
3. LED Chips : **Nichia** 757D 1W x 144PCS
4. CCT : 4000K, 5000K and 5700K
5. High CRI : > 80
6. LM80 and IEC62471 certificated LED.
7. Anodic Process treatment with aluminum heat-sink.(High quality& Made in Taiwan)
8. Ultra High Thermal Conductivity PCB .
(Taiwan made: **Exclusive Patented Technology**)



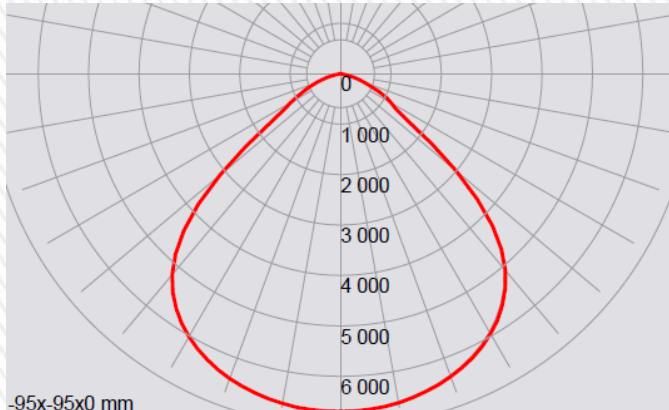
Applications



- ◆ EnergyPro LED high bay light is designed to replace conventional 400W mercury lamp, metal halide lamp or high pressure sodium lamp.
- ◆ Not only to save the energy cost, but also to provide long life and lowest maintenance cost.
- ◆ It suitable for high ceiling applications, like warehouse, industrial facility, exhibition centers, shopping malls, supermarkets, stadiums, toll stations, etc.



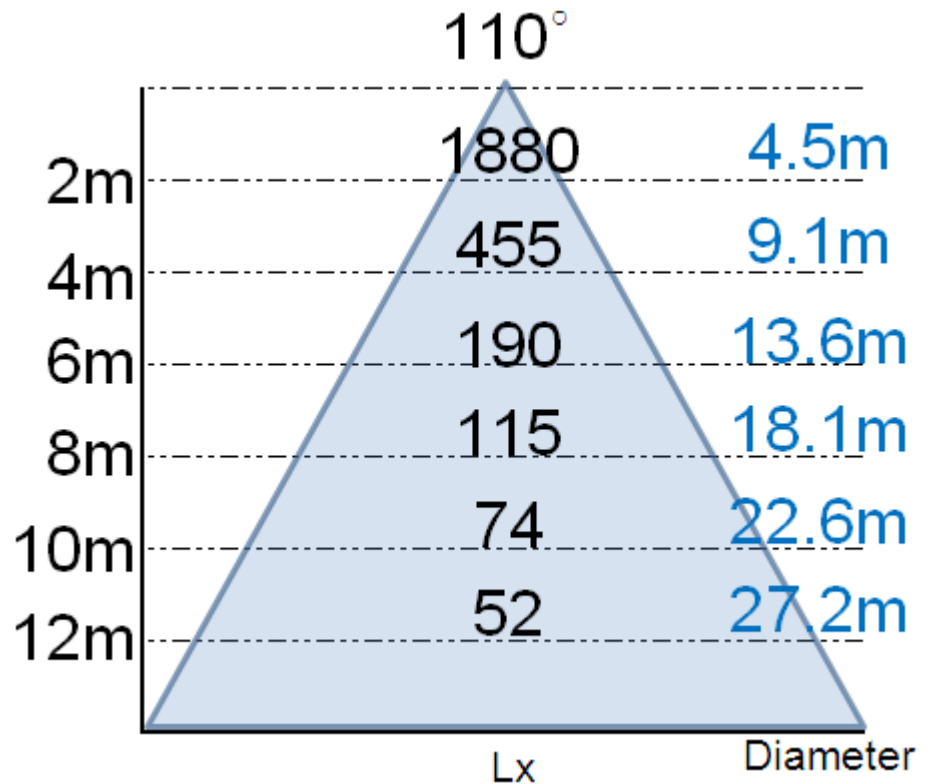
Applications



-95x-95x0 mm
Manufacturer: EnergyPro Technology Co., LTD.
Luminaire catalog: 150W Proto
Luminaire: High Bay Light

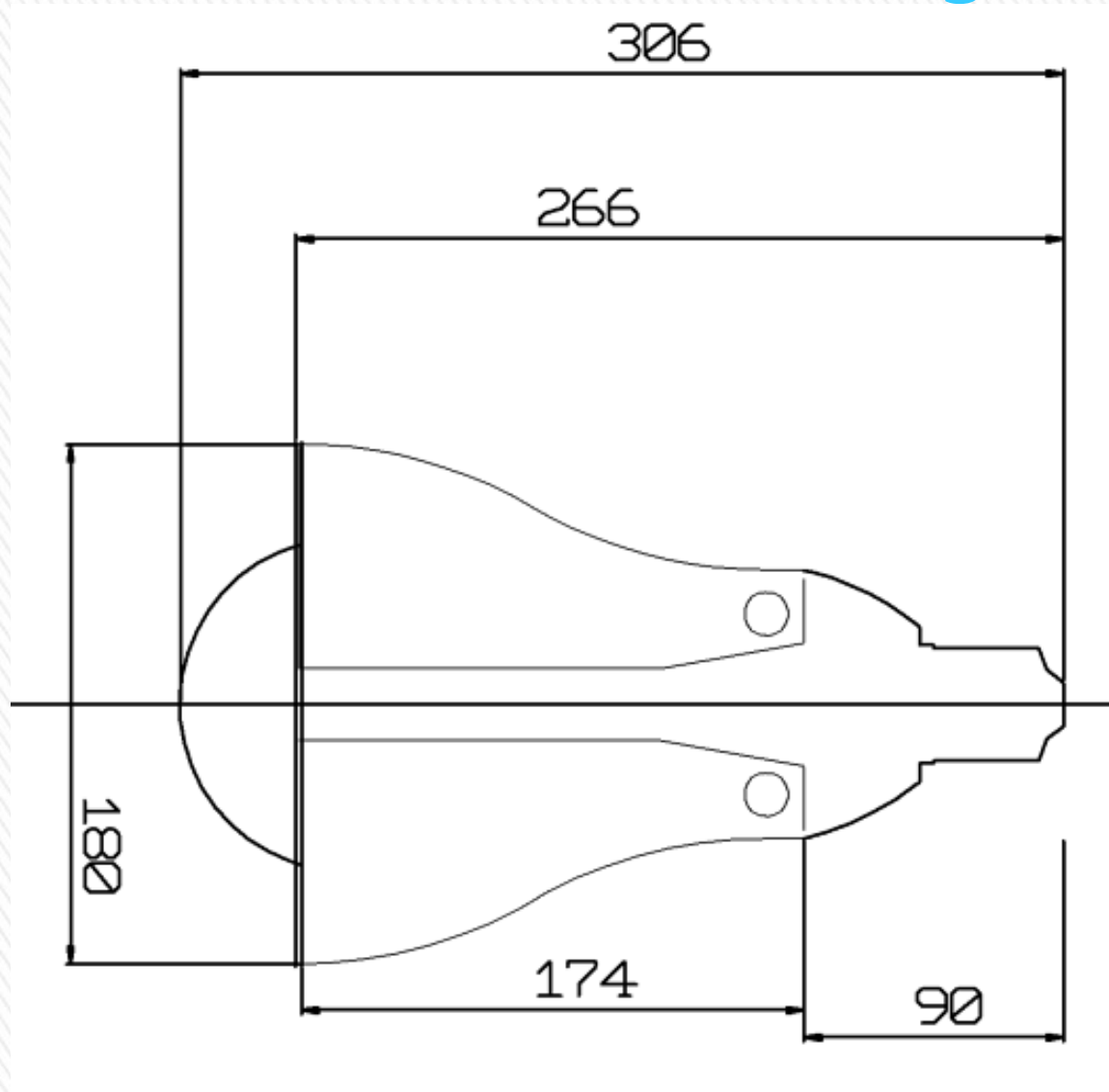


IES file is available for your design simulation



IES Data simulation. ➤

Mechanical Drawing



CE Report



SGS Reference No: EM/2015/70106C

VERIFICATION OF EMC COMPLIANCE

Verification No. : EM/2015/70106C
Representative Model No. : BLBU-140AB-340V04A
Added Model(s) : BLBU-120AB-340V035A, BLBU-90AB-340V025A
Product Name : E40 base high bay light
Brand Name : EnergyPro Technology.
Applicant : EnergyPro Technology. All Rights Reserved.
Address of Applicant : 1F., No.16, Ln. 138, Linsen N. Rd., Zhongshan Dist., Taipei City 104,
Taiwan (R.O.C.)
Test Report Number : EM/2015/70106
Date of Issue : **Aug. 28, 2015**
Applicable Standards : EN 55015 : 2013
EN 61000-3-2 : 2006+A1:2009+A2:2009, EN 61000-3-3 : 2008
EN 61547 : 2009, IEC 61000-4-2 : 2008
IEC 61000-4-3: 2006+A1:2007+A2:2010
IEC 61000-4-4: 2012, IEC 61000-4-5: 2005+corr.October:2009
IEC 61000-4-6: 2013, IEC 61000-4-11: 2004

Conclusion

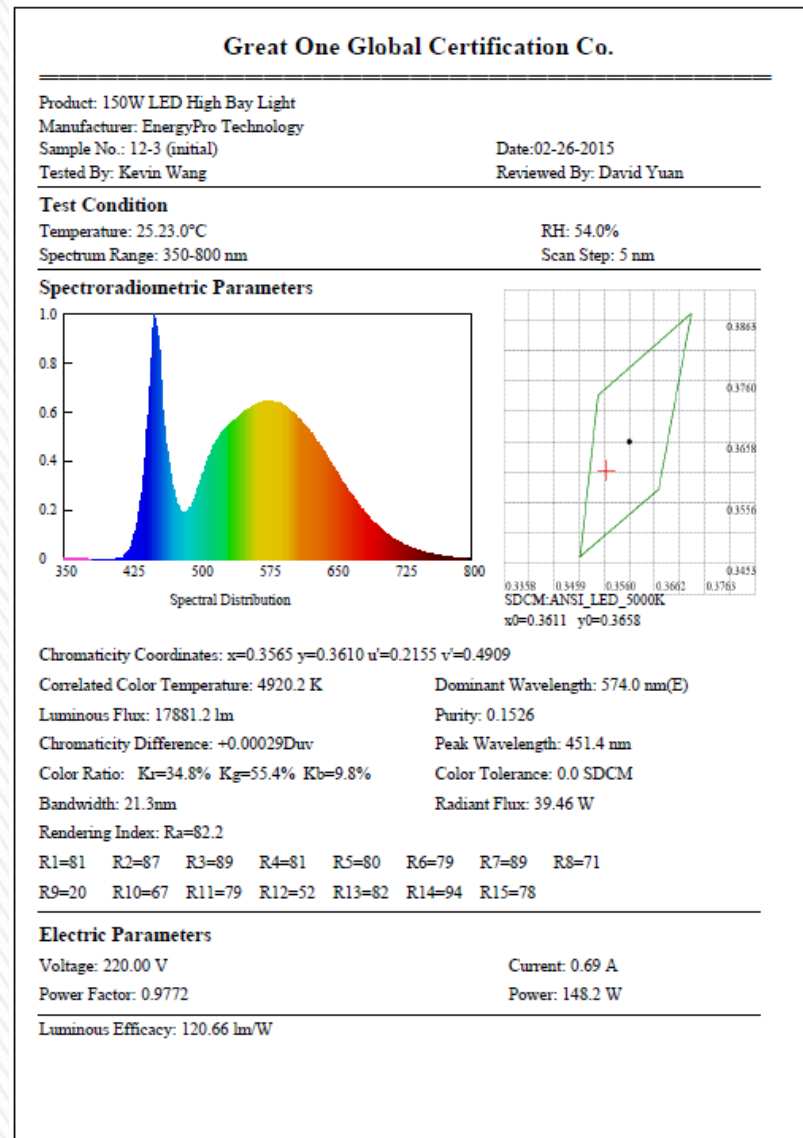
The apparatus meets the requirements of the above standards. In addition, this verification is only valid for the equipment and configuration described and in conjunction with the test report as detailed above.



Authorized Signatory:
Original is signed

SGS TAIWAN LTD.
Victor Wen
Technical Asst. Manager

Optical Measurement



IEC62471 Report



Report #: SQJTB14032601L-23E

Nichia official document for EnergyPro

PHOTOBIOLOGICAL SAFETY EVALUATION OF LED PRODUCTS

Prepared for

EnergyPro Technology Co.,LTD

The signer of this document certifies on behalf of Nichia Corporation that, to the best of Nichia Corporation's knowledge the product below was tested and evaluated by Nichia Corporation in compliance with IEC 62471(2006) assigned to the risk group specified as follows:

CLASSIFICATION

Part Description: WHITE LED
 Part Number: NF2W757DRT-V1
 Risk Group: Exempt Group (for general lighting service (GLS) lamps)
 Risk Group 2 (for all other light sources)
 [$I_e = 200$ mADC, Absolute Maximum Ratings]

DETAILS OF EVALUATION

Characteristics

Apparent source size	Luminous Flux [$I_e = 150$ mADC]
1.25 mm	133.9 lm (Rank P19)

Evaluation Results:

Hazard Name	Symbol	Measurement Value ^{*1}	Emission Limits			Units	Risk Group
			Exempt	Low-Risk	Mod-Risk		
Actinic UV	E_U	"	10^{-3}	3×10^{-3}	3×10^{-2}	W/m ²	Exempt Group ^{*3}
Near UV	E_{UV-A}	"	10	33	10^2	W/m ²	Exempt Group ^{*3}
Retinal blue-light ^{*6}	I_B	N/A	10^2	10^4	4×10^6	W/m ² /sr	N/A
Retinal blue-light, small source	E_B	3.75×10^{-4} ^{*4} 1.12 ^{*5}	1	1	4×10^2	W/m ²	Exempt Group ^{*4} Risk Group 2 ^{*5}
Retinal thermal	I_R	5.07×10^{-4} ^{*4} 1.52×10^{-5} ^{*5}	7.4×10^{-4} ^{*4} 4.5×10^{-5} ^{*5}	7.4×10^0 ^{*4} 4.5×10^0 ^{*5}	1.9×10^{7} ^{*4} 1.1×10^{7} ^{*5}	W/m ² /sr	Exempt Group ^{*4} Exempt Group ^{*5}
Retinal thermal, weak visual stimulus	$I_{R,w}$	"	5.5×10^{-4} ^{*4} 5.5×10^{-5} ^{*5}	5.5×10^0 ^{*4} 5.5×10^0 ^{*5}	5.5×10^{7} ^{*4} 5.5×10^{7} ^{*5}	W/m ² /sr	Exempt Group ^{*3}
IR radiation, eye	E_{IR}	"	10^2	5.7×10^2	3.2×10^3	W/m ²	Exempt Group ^{*3}

*1 Only if the hazard is considered when determining the Risk Group(s) assigned to the product, the measurement value for this hazard is provided.

*2 This product has not been evaluated for the hazard due to no emission in the applicable wavelength range.

*3 This product has been classified as Exempt Group due to no emission in the applicable wavelength range.

*4 For general lighting service lamps. Measurement distance: 334 mm, Aperture size: 7 mm, Angular subtense: 3.76 mrad, Ambient: 25°C/40%RH

*5 For all other light sources. Measurement distance: 200 mm, Aperture size: 7 mm, Angular subtense: 6.28 mrad, Ambient: 25°C/40%RH

*6 This product is not applicable to this hazard.

NOTES

In accordance with the classification for lamps intended for general lighting service (GLS), this product was classified as Exempt Group. The measurement value for each hazard was below the emission limit for Exempt Group.

In accordance with the classification for all other light sources, this product was classified as Risk Group 2 (Mod-Risk). The retinal blue-light hazard (by small source) value exceeded the emission limit for Risk Group 1 (Low-Risk).

This report shows the LED evaluation results. When using a LED as a component of equipment, please evaluate the equipment that incorporates the LED.

Issue Date: March 20, 2015

Signature:

Name / Title:

Hitoshi TOHYAMA, Manager, Quality Assurance Dept., Optoelectronics Products BU.



LM80 Report



LM-80 Test Report NFSL757D

Issue Date: July 1, 2013 **Revision Date:** August 8, 2014
Test Initiation Date: April 26, 2013 **Test Completion Date:** -
Test Duration: 10,000 hours **Report Number:** SQETMNS47101

Customer Information:

Company Name: Nichia Corporation
Address: 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima, 774-8601, JAPAN

Description of Test Samples:

Classification: LED Package
Model Name: Warm White LED
Model Number: NFSL757D (Nominal CCT: 2700 K)

Test Summary:

Data Set	Case Temperature [T _c]	Ambient Temperature [T _a]	Drive Current [I _v]	Lumen Maintenance at 10,000 hours	Chromaticity Shift [Δu'v'] at 10,000 hours	TM-21 Projection L ₈₀ (10K)
1	55 °C	> 50 °C	65 mA	97.9 %	0.0011	> 60300 hours
2	55 °C	> 50 °C	150 mA	99.0 %	0.0014	> 60300 hours
3	55 °C	> 50 °C	180 mA	99.3 %	0.0013	> 60300 hours
4	85 °C	> 80 °C	65 mA	96.5 %	0.0010	> 60300 hours
5	85 °C	> 80 °C	150 mA	97.0 %	0.0014	> 60300 hours
6	85 °C	> 80 °C	180 mA	97.0 %	0.0017	> 60300 hours
7	105 °C	> 100 °C	65 mA	92.5 %	0.0012	> 60300 hours
8	105 °C	> 100 °C	150 mA	93.8 %	0.0020	> 60300 hours
9	105 °C	> 100 °C	180 mA	93.6 %	0.0024	> 60300 hours



Approved Signatory:

Hitoshi TOHYAMA, Lab Manager

Nichia Corporation LED Testing Laboratory
1-1, Tatsumi-Cho, Anan-Shi, TOKUSHIMA 774-0001, JAPAN





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