

**DOWNLIGHT.X**

All products feature Noribachi's exclusive Bespoke Engineered and Specifically Tailored (BEST) manufacturing methodology.

CATALOG #:	TYPE:
PROJECT:	
COMMENTS:	DATE:
PREPARED BY:	

**PRODUCT**



**Product Information**

The Downlight.X is a corrosion-resistant, security LED fixture that optimizes direct downlight illumination.

This LED lighting fixture features corrosion-resistant die-cast aluminum housing.

Applications: Architectural, Parking Lots, Walkways and multiple outdoor lighting applications.

**Performance Summary**

Lumens Range: 3,129m – 4,431lm  
 Lumens Per Watt (Typical): 141  
 CRI: Minimum 70 CRI. Custom CRI available upon request.  
 CCT (Typical): 3000K, 4000K, 5700K  
 Manufactured in the U.S. with parts from U.S. and imported.

**Fixture Information**

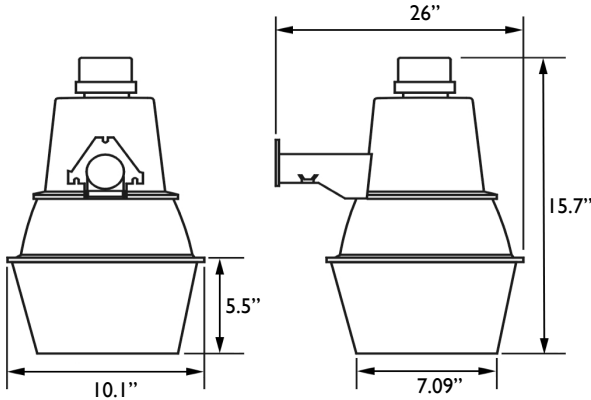
Housing: Aluminum / Custom  
 Lens: UV-Stabilized Acrylic  
 Mounting: Pole Mount  
 Diffusion: None

**Specifications**

UL Listed: Wet Locations  
 Length: 26"  
 Height: 11"  
 Width: 13.2"  
 Weight: 6.46lb

**Electrical System Characteristics / Data**

Standard AC input: 120-277 VAC  
 EMI filter: 47CFR, part 2, part 15  
 Power factor: >9  
 Total harmonic distortion: <20%  
 Surge protection: IEC/EN 61000-4-5 EMC test standard



**Electrical characteristics and performance data verified by independent 3rd party testing lab. For full reports and results, visit [www.noribachi.com/reports](http://www.noribachi.com/reports).**

Ordering Information						
Sample Catalog Number: HEX-021-WW-B-MT-DLX						
LIGHT ENGINE	DRIVE CURRENT	COLOR TEMPERATURE	VOLTAGE	FIXTURE CODE	OPTIONAL UPGRADES	OPTIONAL BEAM SPREAD AND TYPE DISTRIBUTION
HEX-021 HEX-021	A B	CW – COOL WHITE (5700K TYPICAL) NW – NEUTRAL WHITE (4000K TYPICAL) WW – WARM WHITE (3000K TYPICAL)	MT	DLX – DOWNLIGHT.X	TLPC – TWIST LOCK PHOTOCELL 120V-277 COL-[RAL] – CUSTOM COLOR COAT – CUSTOM COAT EPOXY – EPOXY COATING SGR1 – 100V -277V SURGE PROTECTOR SGR2 – 480V SURGE PROTECTOR 010V – 1-10V DIMMING FUNCTIONALITY STEP – STEP DIMMING FUNCTIONALITY POLE – ALSO AVAILABLE. SEE SEPARATE POLE SPEC SHEET AT <a href="http://NORIBACHI.COM/POLES">NORIBACHI.COM/POLES</a>	80D – OPTIONAL 80° BEAM SPREAD T1 – OPTIONAL TYPE 1 DISTRIBUTION T2 – OPTIONAL TYPE 2 DISTRIBUTION T3 – OPTIONAL TYPE 3 DISTRIBUTION T4 – OPTIONAL TYPE 4 DISTRIBUTION TR5 or TLS – OPTIONAL RIGHT OR LEFT SLANTED DISTRIBUTION

Warranty: Five-Year Limited Warranty, Optional 10-Year Manufacturer's Warranty Available. Full Warranty Terms Available At [www.noribachi.com/products/warranty](http://www.noribachi.com/products/warranty)

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**ELECTRICAL**

**Construction**

Corrosion-resistant die-cast aluminum housing with UV-Stabilized acrylic lens.

**Optics**

High brightness, high efficiency LEDs. Color temperature options include Cool White (5700K typical), Neutral White (4000K typical) Warm White (3000K typical) with minimum 70 CRI. Custom RGBW colors available. 120° beam angle standard. Optional 80° beam angle available.

**Controls**

Optional controls include 100-722V (SGR1) and 480V (SGR2) Surge Protectors. 0-10V (010V) and Step (STEP) Dimming functionality. 120-277V Twist lock photocell (TLPC).

**Mounting**

Poles are available for this fixture. See [noribachi.com/poles](http://noribachi.com/poles) for more information.

**Driver**

Available in A (350mA) drive current and B drive current (525 mA). Highly reliable. Suitable for dry, damp and wet locations. Compliant to worldwide safety regulations for lighting.

**Testing Compliance**

UL 1598 Issued: 2008/09/17 Ed:3 Rev:2012/10/17 UL Standard for Safety Luminaires CSA C22.2#250.0 Issued: 2008/09/17 Ed:3 Luminaires; General Instruction No.1 2010/01/11, General Instruction No. 2 2012/10/17.

**Electrical System**

Surge protection meets 10KV/5KA per ANSI/IEEE62.41. Driver meets maximum harmonic distortion (THD) of 20% and is ROHS compliant. Power Factor = > 0.9.

**Ambient Temperature**

-40°C to +65°C (-40°F to + 149°F).

Electrical Load					
LIGHT ENGINE	DRIVE	DRIVE CURRENT (AMPS@120V)	DRIVE CURRENT (AMPS@277V)	DRIVE CURRENT (AMPS@480V)	SYSTEM POWER* (WATTS)
HEX-021	A	0.18	0.08	0.04	21.03
HEX-021	B	0.26	0.11	0.07	31.46
*Ideal Wattage					

Operating Characteristics (Typical @5700K CCT)				
LIGHT ENGINE	DRIVE	LUMENS (T5)	INPUT POWER (WATTS)	LUMENS PER WATT
HEX-021	A	3,129	21.03	148.81
HEX-021	B	4,431	31.46	140.87

**Manufacturing**

Manufactured in beautiful Harbor City, CA. ARRA Compliant. NAFTA Compliant. Test and burn-in of 100% of all luminaires before shipment. No less than 8-years experience in manufacturing LED-based products.

**Note**

Specifications subject to change without notice. Actual performance may differ as a result of end-user environment application. Actual wattage may differ by +/- 8%.

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**PERFORMANCE / DISTRIBUTION**

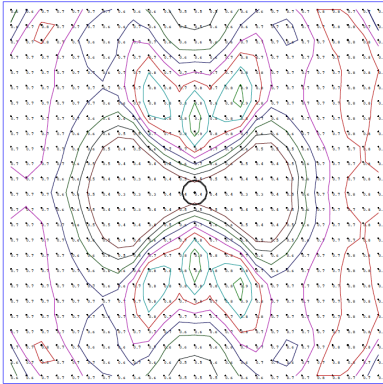
**Power And Lumens By Light Engine**

DISTRIBUTION

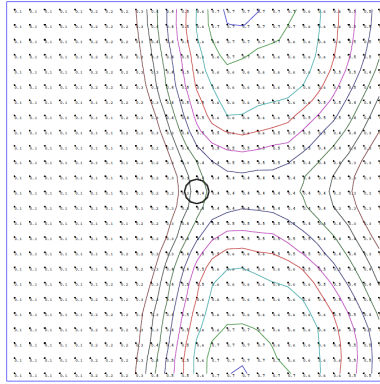
LIGHT ENGINE	DRIVE	CCT	T1 (LUMENS)	T2 (LUMENS)	T3 (LUMENS)	T4 (LUMENS)	T5 (LUMENS)
HEX-021	A	5700	3,075	2,436	2,430	2,816	3,129
HEX-021	B	5700	4,354	3,450	3,441	3,988	4,431

**Type Distribution  
HEX-021-B**

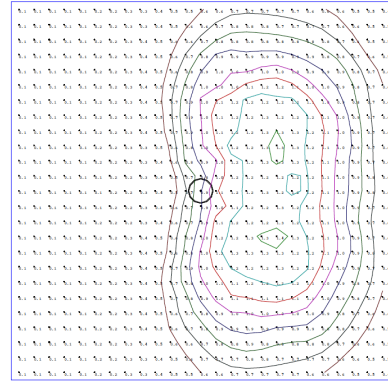
T-1



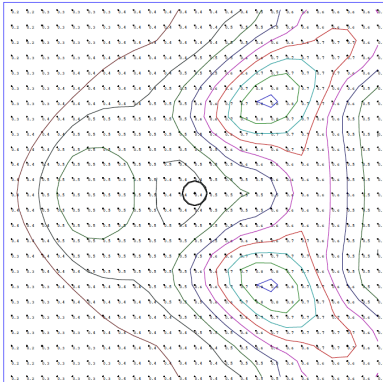
T-2



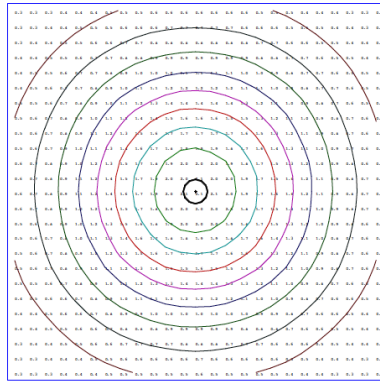
T-3



T-4



T-5



**Distribution**

- 120° Standard Beam Spread.
- 80° Optional Beam Spread Available.
- Other Light Engine Type Distribution available upon request.

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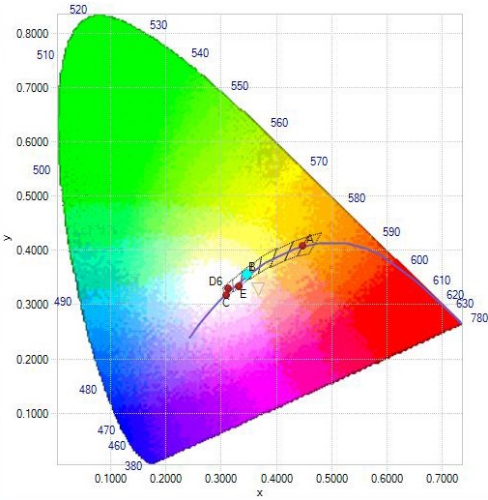
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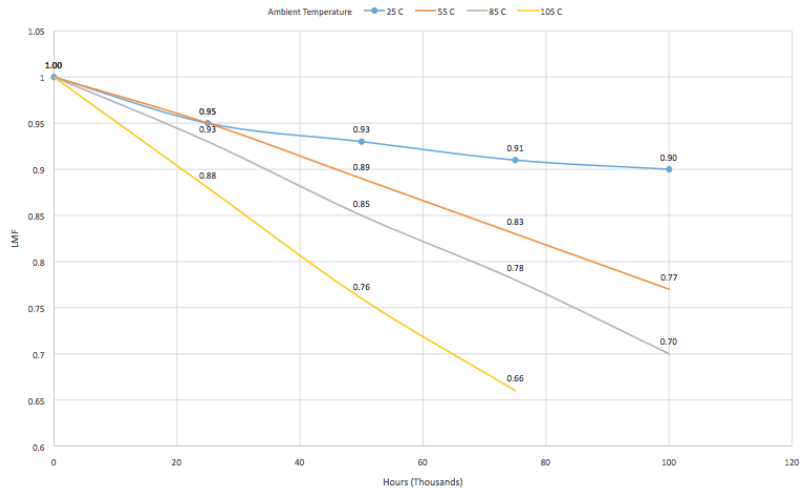
## PERFORMANCE / DISTRIBUTION

### CIE LUV BINNING CURVE

LIN-140 CIE 1932 - 2 Degree



### Lumen Depreciation Chart



### Lumen Maintenance Factors (B Drive)

AMBIENT	INITIAL LMF	25K HR PROJECTED LMF	50K HR PROJECTED LMF	75K HR PROJECTED LMF	100K HR PROJECTED LMF
25°C	1.00	0.95	0.93	0.91	0.90
55°C	1.00	0.95	0.89	0.83	0.77
85°C	1.00	0.93	0.85	0.78	0.70
105°C	1.00	0.88	0.76	0.66	n/a

Each temperature has an independent initial value. In accordance with IESNA TM021011, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip). In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip)

### Luminaire EPA Chart

	Single	0.5
	ND-180°	1.0
	ND-90°	0.8
	NT-90°	1.7
	NT-120°	1.7
	NQ-90°	1.9

Note: Mounting changes fixture EPA. Please contact Noribachi for additional information.

### Lumen Multiplier

AMBIENT TEMPERATURE	LUMEN MULTIPLIER
10°C	1.032
15°C	1.021
25°C	1.000
40°C	0.968
50°C	0.946

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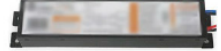
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**OPTIONAL UPGRADES**

480V FOR LIGHT ENGINES <150W  
**ORDER CODE: HV1**



480V FOR LIGHT ENGINES >150W  
**ORDER CODE: HV2**



DIMMING  
**ORDER CODE: 010V**  
**ORDER CODE: STEP**

Appearance And Specifications:  
 •010V = 1 – 10V Dimming Functionality  
 •STEP = Step Dimming Functionality



SURGE PROTECTOR  
**ORDER CODE: SGR1**  
**ORDER CODE: SGR2**  
 Appearance And Specifications:  
 •100V -120V Surge Protector  
 •480V Surge Protector



TWIST LOCK PHOTOCELL  
**ORDER CODE: TLPC**  
 Appearance And Specifications:  
 •Filtered Silicon Photo Sensor  
 •Built-in 3-6 Second Turn-off Delay  
 •Green Cover with Blue Base  
 •Powdercoat finish



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