



Project Details

PROJECT	
DATE	
TYPE	
PREPARER	



The Neptune LED High Bay Series is a cost-effective high quality lighting solution, it delivers a high lumen output to replace traditional fluorescent, HID & metal halide high bay fixtures. The Neptune LED High Bay fixtures are maintenance free and meet the harsh performance standards of commercial and industrial environments. It is the ideal choice for warehouses, distribution centers, manufacturing facilities, big box retailers, and other industrial applications.

SPECIFICATIONS Product Features

Construction

- Galvanized steel body
- Powder coat white finish
- Diffused Polycarbonate formed lens
- Wattage & CCT Switchable: 3500K, 4000K, 5000K

Installation & Mounting

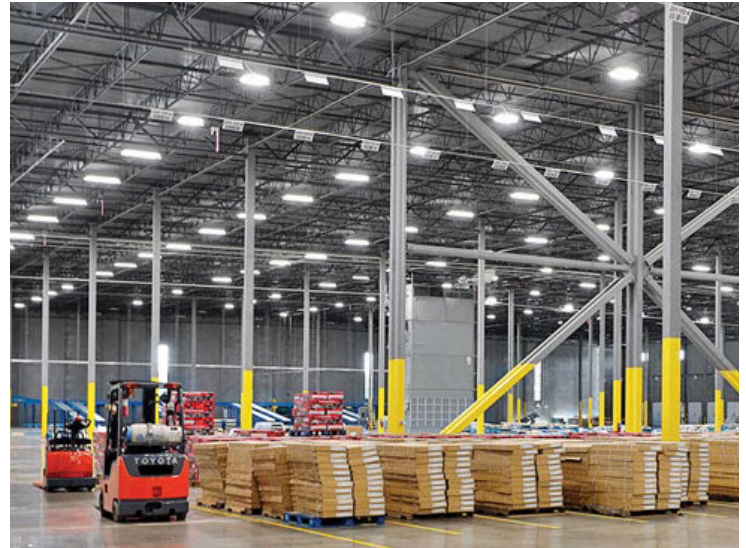
- Surface mounted
- Suspension chain (Included)
- Conduit pendant mount
- Wire Guards

Controls & Dimming

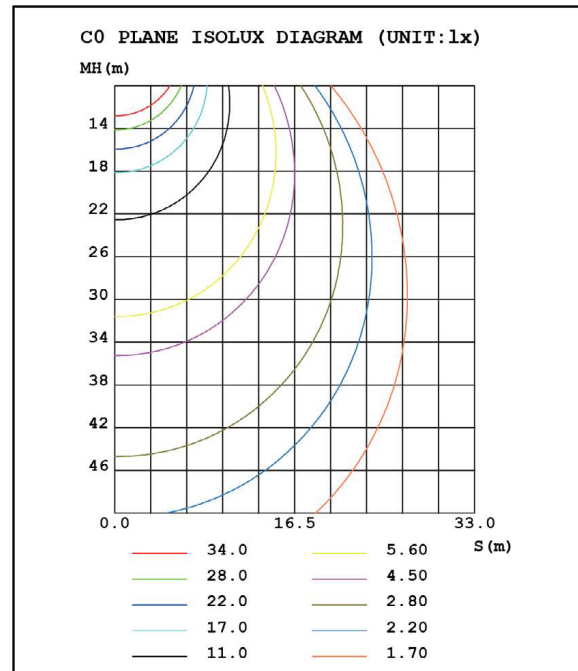
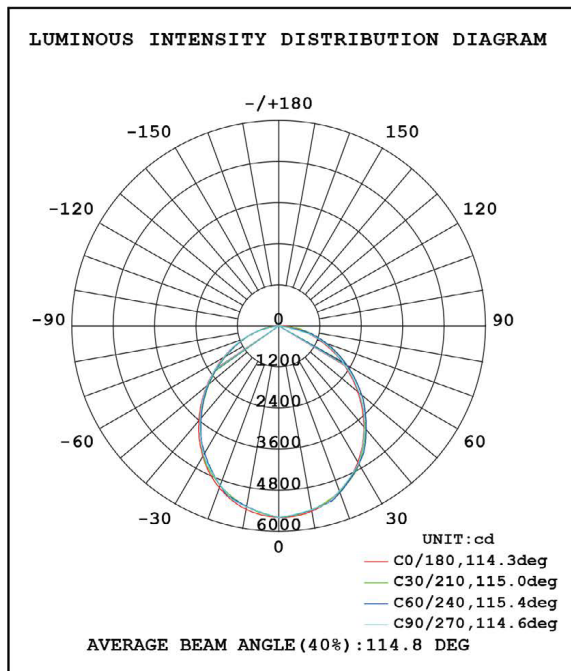
- 0-10V & 12V Aux
- Bluetooth Mesh Controls
- Daylight sensor
- 90 Mins Emergency Back up

PERFORMANCE Summary

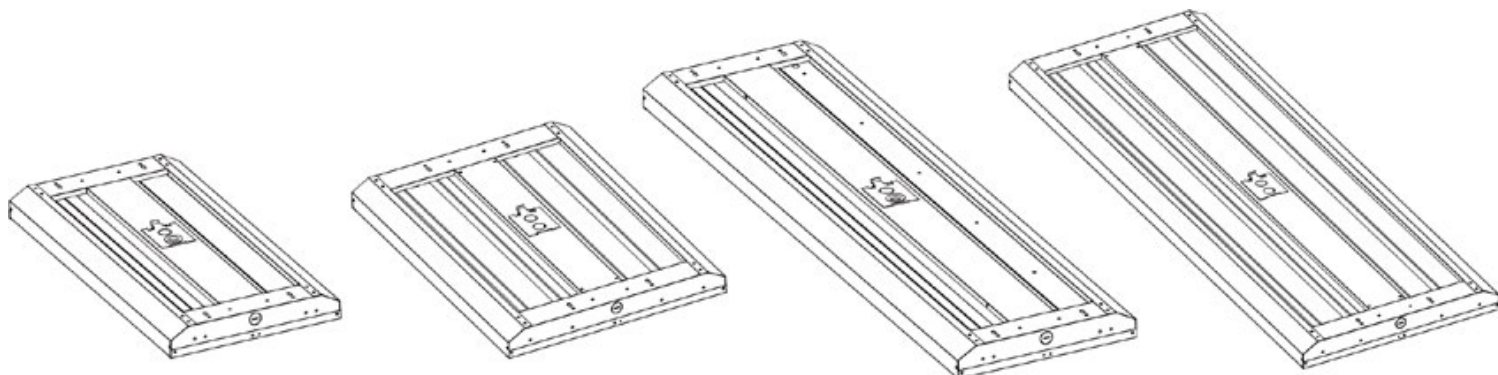
Input Voltage	100-277V, 347-480V
Input Frequency	50/60 Hz
Rated Wattage	80W, 100W, 140W, 165W, 220W, 325W
Efficacy	130lm/W
CRI	80+
Available CCT	3500K, 4000K, 5000K
Rated Life (L70)	50,000 hrs
IP Rating	IP20
PF	>0.90
Certifications	DLC, ETL, RoHS, UL, CES, FCC
Working Temp. (°F)	-4°F - 122°F
LED Light Source	SMD 3030



LIGHT DISTRIBUTION Curve



DIMENSIONS



NB-LHB-2FT/80W/100W/140W

NB-LHB-2FT/165W/220W

NB-LHB-4FT/165W/225W

NB-LHB-4FT/325W

MODEL	L	W	H
NB-LHB-2FT/80W/100W/140W	23.82"	13.3"	1.65"
NB-LHB-2FT/165W/220W	23.82"	17.64"	1.65"
NB-LHB-4FT/165W/225W	45.87"	13.3"	1.65"
NB-LHB-4FT/325W	45.87"	17.64"	1.65"

PERFORMANCE Data

MODEL	WATTAGE	CCT	LUMEN	EFFICACY (lm/W)	VOLTAGE
NB-LHB-ECO-80W/2FT-3CCT	80W	3500K, 4000K, 5000K	10,400lm	130 lm/W	100-277v 347-480v
NB-LHB-ECO-100W/2FT-3CCT	100W		13,000lm		
NB-LHB-ECO-140W/2FT-3CCT	140W		18,200lm		
NB-LHB-ECO-165W/2FT-3CCT	165W		21,450lm		
NB-LHB-ECO-220W/2FT-3CCT	220W		28,600lm		
NB-LHB-ECO-165W/4FT-3CCT	165W		21,450lm		
NB-LHB-ECO-225W/4FT-3CCT	225W		29,250lm		
NB-LHB-ECO-325W/4FT-3CCT	325W		42,250lm		

ORDER Data

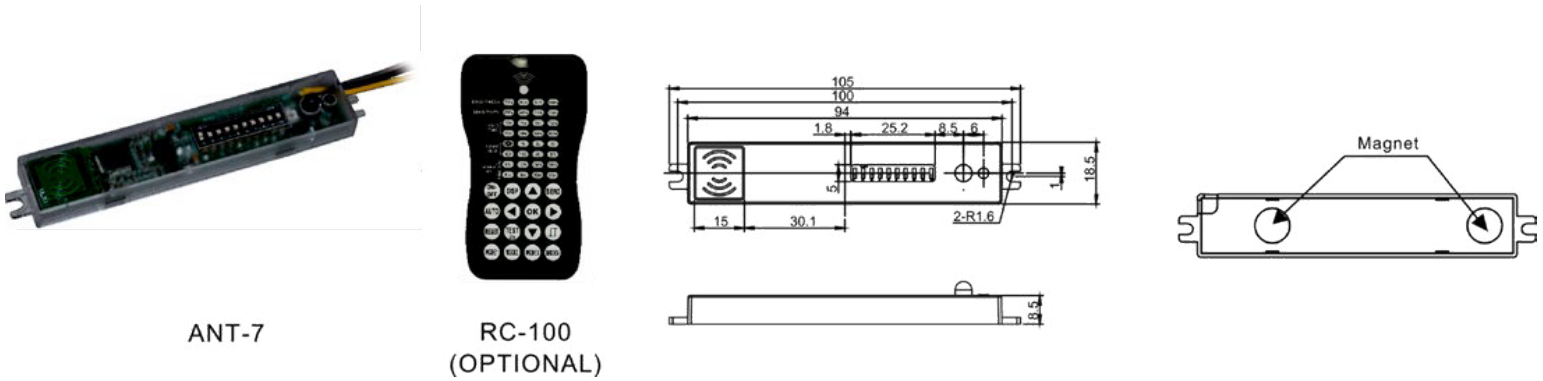
Sample: **NB-LHB-ECO-2FT-140W-3CCT**

SERIES	WATTAGE		CCT	OPTICS	VOLTAGE	FINISH*
NB-LHB	80W/2FT	100W/2FT	35 = 3500K 40 = 4000K 50 = 5000K	120° Beam Angle	V = 100-277V	BLANK = White
NB-LHB	140W/2FT	165W/2FT				
NB-LHB	220W/2FT	165W/4FT				
NB-LHB	225W/4FT	325W/4FT				

MOUNTING Options

SF	Surface Mount	CPM	Conduit Pendant Mount	ANT-7	Bi-Level Sensor
VHC	Suspension Chain Mounted (V-Hook & Chain Included)	WG	Wire Guards	RC100	Programming Tool
				EM	Battery Back-up

BI-LEVEL Daylight Harvest Microwave Sensor - ANT-7 Instruction

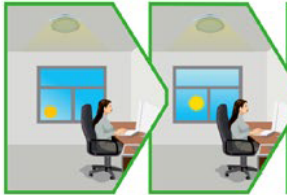


DAYLIGHT Harvesting Function (only by using RC100 remote control)

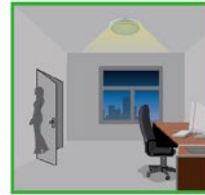
Open the daylight harvesting function only by choosing "☉" button when remote control is in setting condition. Memory and maintain current ambient brightness.



When the natural light is sufficient or dark, movement is detected and the light will turn on 100% brightness.



The light turns on at full or dims to maintain the lux level. The light output regulates according to the level of natural light available.



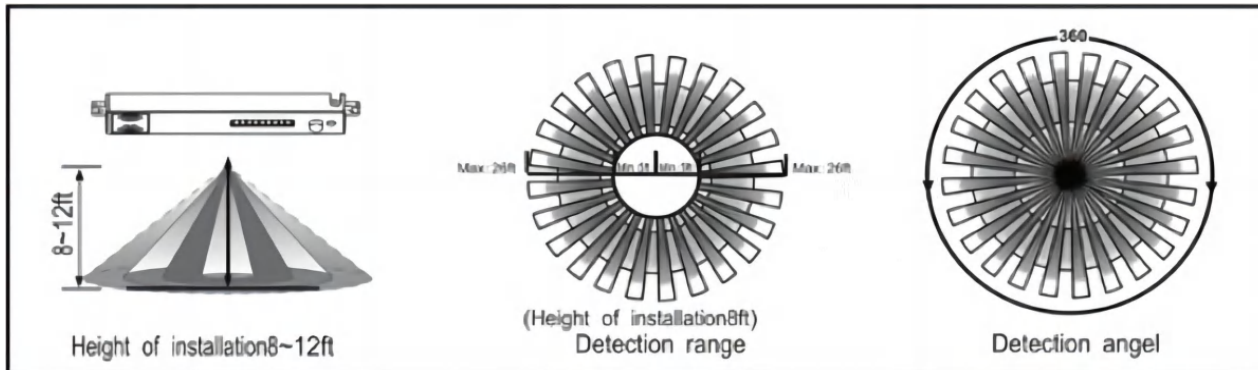
The light dims to stand-by period after hold-time and stays on selected minimum dimming level.



The light switches off completely after the stand-by period.

Setting on this demonstration:
 BRIGHTNESS: 100%
 SENSITIVITY: 100%
 HOLD TIME: 30MIN
 DAYLIGHT SENSOR: ☉
 STAND BY DIM: 30%
 STAND BY TIME: 1MIN

SENSOR Coverage



NOTE:

The high-frequency output of this sensor is <math><0.2\text{mW}</math> - that is just one 5000th of the transmission power of a mobile phone or the output of a microwave oven.

MOUNTING Options

Power Supply	12-24V DC, >50mA
HF System	5.8GHz±75MHz
Dim Control Output	0-10V, max. 25mA sinking current
Detection Radius/Angle	Max 17ft. (5.2m)/360
Mounting Height	Max 13ft. (4m)
Remote Range	50ft. (15m) indoor, no backlight
Humidity	Max. 95% RH
Temperature	-40°F - 158°F (-40°C - 70°C)

⚠ WARNING

NOTE: Warm up time is 15 seconds. After the sensor connects input power first time, the light will stay on 15 seconds, then start dimming.

NOTE: Factory Default Setting: 100% sensitivity, Hold on time: 10 seconds, Daylight sensor is 30lux, Dimming level: 30% Dimming time: 60 minutes

NOTE: Any setting changed by DIP Switch or remote control, the LED light that sensor connect will on/off as confirm.

UTILIZING Field and Introduction

ANT-7 is a moving object sensor that can detect range of 360° and its working frequency is 5.8GHz. The advantage of this product is stable working state (stable working temperature: -40°C—+70°C), ANT-7 adopts a microwave sensor (high-frequency output <0.2mW) so that it is safe and performs better than infrared sensor.

KT-EMRG-LED-20SD-2000-EN /DF Constant Power Emergency Led Driver

Constant Power Emergency LED Driver | 20W Output | 120–277V Input

Driver Type	Constant Power Emergency LED DRIVER
Max. Output Power	20W
Input Voltage	120-277 Vac ±10%
Number of Outputs	1
Safety Standards	UL 924, complies with CEC efficiency standards
Location	IP20 design for dry and damp locations
Pass-Through Current	3A Maximum
Warranty	5 Years



Environmental Specifications

Operating temperature	0°C/32°F to 55°C/131°F
Storage temperature	-20°C/-4°F to 55°C/131°F
Humidity	5% to 95%
MTBF	TBD
Life rating	TBD
Maximum ambient temperature	55°C/131°F

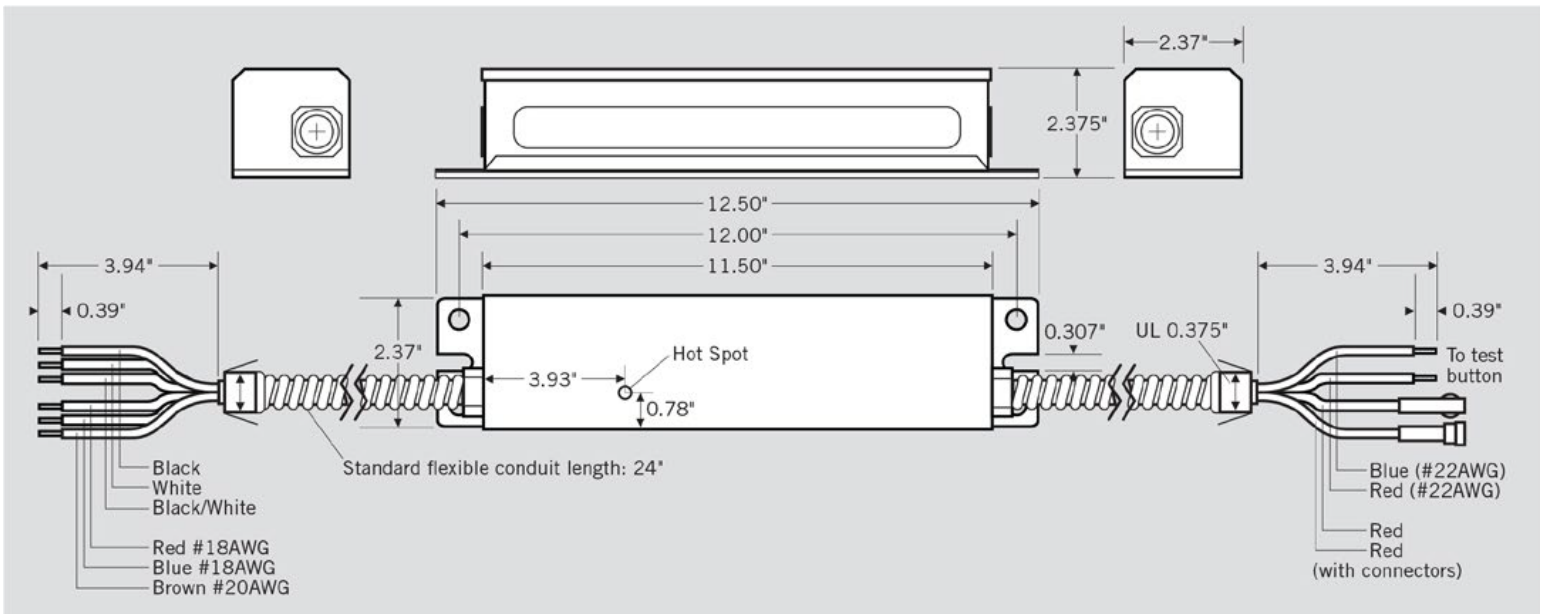
Safety and EMC Compliance

UL/cUL
UL 924
FCC, 47CFR Part 15
ANSI C63.4:2009 Class B (consumer limit)
EN61000-3-2
Harmonic current emissions Class C

ELECTRICAL Specifications

Input voltage range	120~277Vac \pm 10%
Frequency	50/60Hz
Power factor	> 0.9 under 120~277Vac input
Inrush current	20A @ 120V
Max input current	60mA @120V, 35mA @240V, and 30mA @277V
THD	< 20% under 120~277Vac input
Output voltage	20 –60Vdc Class 2 compliant Remarks: the output power is valid for output voltage \leq 58Vdc; above that power will drop
Output current	1000mA @ 20Vdc, 333mA @ 60Vdc
Output power	20W (constant)
Turn-on Delay Time	< 1s
Overshoot	< 10%
Ripple & Noise (pk–pk)	< 10%
Withstand voltage	Input to output, 2800Vdc, 2mA
Leakage current	Maximum 0.5mA at 277Vac, 60Hz input
Protection	<p>Over voltage protection: Hiccup mode. Protection will trigger when load voltage exceeds specified output voltage and will auto recover after the fault mode is removed.</p> <p>Over current protection: Hiccup mode. Protection will trigger when load current exceeds specified output current and will auto recover after the fault mode is removed.</p> <p>Short circuit protection: Hiccup mode. Protection will trigger when short circuit and will auto recover after the fault mode is removed.</p> <p>Over charge and discharge protection: Monitor battery voltage to prevent over charge of the battery and deep discharge which may damage battery.</p>
Emergency Operation	90 minutes
Battery	High-temperature, maintenance-free, LiFePO4 battery, 16Vdc, 5 cell
Recharge Time	24 hours
Battery Charging Current	295mA

DIMENSIONS AND WIRING SPECIFICATIONS Emergency Driver Specifications



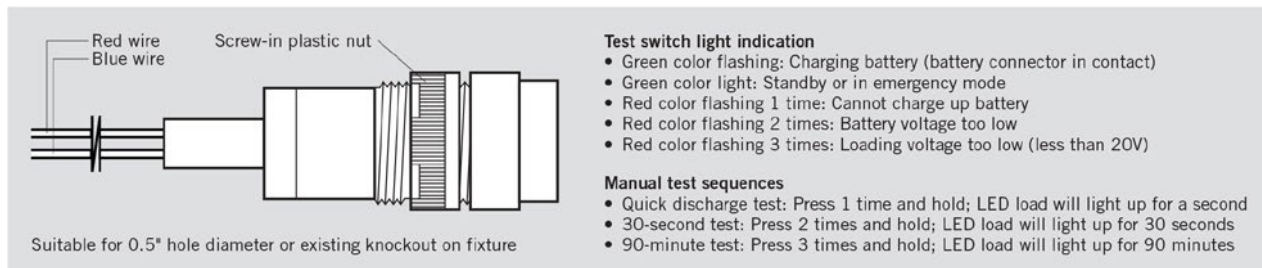
Environmental Specifications

Length (L)	12.50" (317.5mm)
Width (W)	2.37" (60.2mm)
Height (H)	2.375" (60.3mm)
Mounting (M)	12.00" (304.8mm)

Environmental Specifications

Black, White (Input)	UL1316 #18AWG
Red, Blue (Output to LED module)	UL1316 #18AWG
Brown	UL1430 #20AWG
Red, Black (Battery connection)	UL1015 #18AWG
Red, Blue (Test switch connection)	UL1430 #22AWG

DIMENSIONS AND WIRING SPECIFICATIONS Test Switch (2-wire) Specifications



NOTES

1. To maintain good battery lifespan during storage, recharge emergency driver annually.
2. For operation, wiring, installation, regular check, and maintenance, please refer to installation instruction and Life Safety Code.
3. Automatic Monthly and Annual Testing: Automatically conduct a 30-second test every month and a 90-minute test every year. The test button will flash RED if an issue is detected.
4. Once conducted, the quick discharge test mode requires 2 hours to recharge battery before performing other tests.
5. Once entering emergency mode or after conducting other test modes, 24 hours are required to recharge battery before performing other tests.
6. The internal timer of the emergency driver starts once power is applied to the unswitched hot lead. The internal timer will not reset due to power loss as long as there is enough battery power to maintain the emergency driver's internal memory.
7. The internal timer of the emergency driver resets after 12 automatic tests. The 12th test conducted is a 90-minute test, which occurs every 377 days. The first 11 tests conducted are 30-second tests and occur once every 30 days (if the 90-minute test occurs within the 30-day time period, the duration will increase to 31 days).
8. If the emergency driver has a manual test (test button pushed) during the time of the auto-test, the auto-test will delay for 24 hours.
9. Regardless if the switched hot is on or off (if applicable), automatic tests will still occur and will power the LED load at 20W.
10. If a power outage were to occur during the time of an automatic test, the emergency driver will continue the automatic test until completed. After the test is done, it will continue to operate the load in emergency mode until power is restored.

WIRING Diagram

