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NSF FOOD LIGHTING GUIDE



**RUGGED PRODUCTS
FOR HARSH ENVIRONMENTS**

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ABOUT US

LED IN ACTION HAS BEEN PROVIDING INDUSTRIAL LED LIGHTING SOLUTIONS FOR HARSH ENVIRONMENTS FOR THE PAST DECADE.



THE FOOD PROCESSING INDUSTRY IS NO EXCEPTION.

The steel, paper, power, mining and oil & gas industries trust us for rugged, long-lasting LED lighting solutions.

The food processing industry is no exception to the harsh sanitation and strict regulations within the industry.

We've designed a unique LED solution for the food processing industry that exceeds all of the new NSF & USDA requirements.

LED lighting conversions have been top of mind for plant managers and purchasers within food plants and we have been seeing the fastest full-plant conversions to LED lighting of any industry with our NSF food-safe fixtures.



CHALLENGES

The food processing industry is a highly regulated industry with guidelines put in place to prevent the spread of disease through food. This also includes the type of lighting required in the food industry. Food processing plants that do not meet the requirements of the food industry are at risk of high-production areas shutting down, accidents due to dark and unsafe work zones, constant interruptions and costly maintenance. When food safety is the top priority, the details of how light fixtures are constructed are very important. We've outlined the top LED essentials required for light fixtures in the food processing industry.

NSF

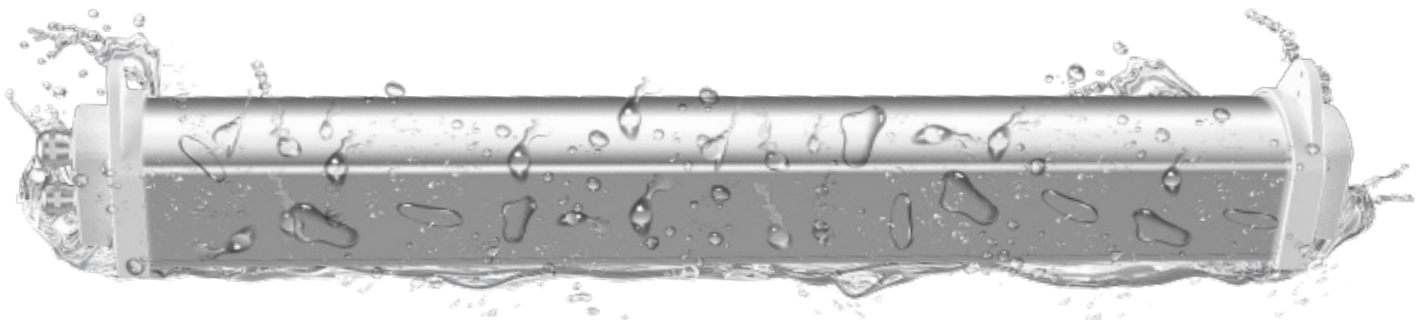
COMPLIANT WITH ALL NSF REGULATIONS

We have designed a lighting fixture that takes all the concerns regarding the construction of food area lighting in mind. Our food processing fixtures are **made without any glass**. We only provide polycarbonate or acrylic lens. This prevents the potential of glass breaking into food-safe areas and contaminating products.

There are **no exposed screws** in our fixtures as screws and screw holes are small places on equipment where bacteria can begin to grow. Our lights are **made without any harmful substances or chemicals**. If paint chips off of the fixture and gets into the food area it has the potential to be dangerous and contaminate the product. Our fixtures are also **powder-coated** to prevent any paint chipping.

Due to the strong sanitization chemicals used by food processing plants to clean equipment, including lights, standard products and fixtures may begin to have corrosion over time. We only use materials that are **anti-corrosion** that will last long term.

Our food processing lights are also created with a **streamlined body design** with a smooth exterior built for easy cleaning so that water and other particles will easily run off the fixture as opposed to sitting on top of or inside the fixture preventing any build-up of bacteria or residue.



NSF LIGHTING REQUIREMENTS

IP69K

PROVIDE MAXIMUM PROTECTION AGAINST HARSH SANITATION

Light fixtures undergo harsh sanitation and constant high-pressure washing to prevent bacteria build-up and to keep the food area carefully sanitized at all times. IP69K is the highest level of protection against dust, water, and high-pressure. It means our fixture is **completely waterproof and protected against high PSI pressure** for washdowns.

CRI 93

EXCEED THE LATEST LIGHTING LEVEL REQUIREMENTS

Our food light fixtures have a higher CRI rating than what is required through NSF regulations. Our food processing lights have a CRI rating of 93, well above the CRI 90 rating that is outlined for food inspection areas. Our food fixtures have a rating of 93 out of a possible 100, which is the **highest level of CRI currently available**. Food inspection zones need to reveal the true colour of their products (beef, poultry, pork, etc.) to prevent widespread contamination in the market.



HIGH CRI >90



LOW CRI >50

LIFESPAN

REDUCE LIGHTING MAINTENANCE

Our fixtures include a **5-year warranty** with an industry-leading **L70 lifespan of 100,000 hours**. Long-lasting LED light fixtures will reduce maintenance and unnecessary interruptions.

FOOD PROCESSING LIGHTS KEY FEATURES

Our NSF food processing fixtures are trusted by the world's largest Food Processing Plants including meatpacking plants, slaughterhouses, food packaging & paper plants.

Ideal for high bay lighting anywhere NSF standards is required, including inspection areas, washdown zones, freezers and more.

We have designed a lighting fixture that takes all the concerns regarding the construction of food area lighting in mind:

■ NSF RATED

Compliant with all NSF P442 regulations

■ BUILT-IN SURGE PROTECTION

2kV Line-Line, 4kV Line-Earth
4kV Line-Line, 4kV Line-Earth

■ CERTIFICATIONS

DLC, UL, and cUL Listings

■ 5-YEAR WARRANTY

Includes a 5-Year warranty period

■ L70 LIFESPAN

100,000 Hour L70 Lifespan



■ MOTION SENSOR

The built-in motion sensor (optional) is located behind the lens eliminating external controls. (BE-HCP06)

■ NO EXPOSED SCREWS

No screws or small holes where bacteria can grow. (BE-HCP06)

■ MOUNTING BRACKETS

Mounting brackets including loop mount, stem mount, ceiling mount, and heavy-duty adjustable bracket mounts.



KEY FEATURES



■ STREAMLINED BODY DESIGN

Built with a smooth exterior for easy cleaning. Water and food particles run off of the fixture to prevent any build-up of bacteria or residue.

CRI 93 ■

A Colour Rendering Index (CRI) of 93 on the CRI scale of 0-100 is higher than the required level for food inspection zones.

■ POWDER COATED MATERIALS

Built without any harmful substances or chemicals. Powder-coated to prevent any paint chipping or product contamination.



SHATTERPROOF LENS ■

Available with polycarbonate or acrylic lenses only. Made without any glass to prevent any glass from shattering into food-safe areas.

■ CORROSION RESISTANT

Anti-corrosion materials are used so that the fixture lasts long term where strong sanitization chemicals are constantly used for cleaning.

■ IP69K

Highest level of protection against dust, water, and high-pressure washes.

FOOD PROCESSING LIGHT

BE-HCP06

The Food Processing Light is designed specifically for food processing applications. This fixture meets or exceeds all NSF inspection zone requirements. The streamlined design allows easy cleaning and prevents the build-up of any liquid or particles.

Ideal for high bay lighting anywhere the NSF standards are required including inspection areas, wash down zones, freezers and more.

KEY FEATURES:

- **IP69K** Highest Level of Protection Against Water & High-Pressure Washdown
- **CRI 93** High Colour Rendering for Inspection Zones
- **Powder Coated** Materials; No Harmful Substances or Chemicals
- **Shatterproof** Polycarbonate Lens
- **No Exposed Screws**
- **Corrosion Resistant and Streamlined** Body Design
- **L70 Lifespan of >100,000 Hours**



SPECIFICATIONS

Luminous Efficacy	125lm/W *Up to 140lm/W Available Upon Request
CCT	4000K, 5000K (Standard)
CRI	>Ra 90 *(>Ra80)
Beam Angle	90°, 120° (Standard)
Input Voltage	100-277Vac (Standard) 277-480Vac, 50/60 Hz
IP Rating	IP69K
L70 Lifespan	>100,000 Hours
LED Driver	MeanWell
Chipset	Nichia
Operating Temp.	-30°C ~ +50°C
Warranty	5 Year Warranty
Certifications	NSF, cUL, UL, CE, RoHS, DLC



LUMENS	LED WATTAGE	HID EQUIVALENT
30,000lm	240W	800W
24,000lm	200W	700W
18,000lm	150W	600W
14,400lm	120W	400W
12,000lm	100W	250W
8,750lm	70W	160W

COMPONENTS

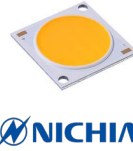
DRIVER



MeanWell

LV: 100-277Vac
HV: 277-480Vac
Surge Protection:
 2kV line-line, 4kV line-earth

CHIP SET



NICHIA

L70 Lifespan: >100,000 Hours
CRI: 93
CCT: 4000K or 5000K

LENS



ShatterProof Plastic

D90: 90 Degree Clear PC Lens
D120: 120 Degree PC Lens
 Clear or Frosted Lens Available

MOUNTING OPTIONS

LOOP HANGING



WALL MOUNT



STEM MOUNT

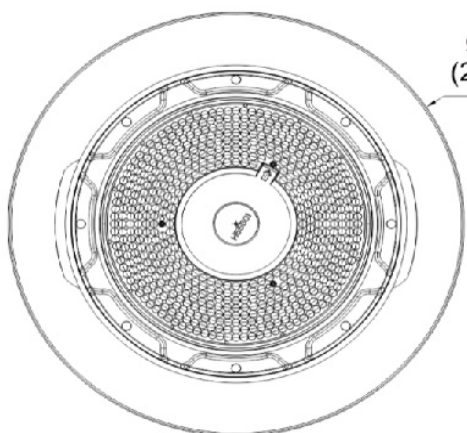


FIXTURE ORDERING MATRIX

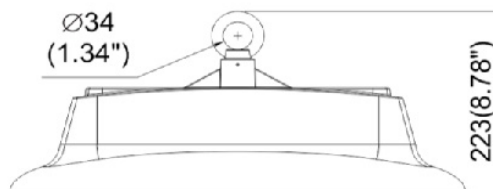
Product Name	Wattage	Lens Degree	Dimming	Input Voltage	CCT	Options
BE-HCP06	70W					15: -Bracket 15
	100W					STM: -Stem Mount
	120W	D90 -90 Degree Lens	A: -Non-Dimmable (Standard)	LV: -AC 100-277Vac (Standard)	4000K	MS: -Built-In Motion Sensor (Special Order)
	150W	D120 -120 Degree Lens (Standard)	B: -Dimmable	HV: -AC 277-480Vac	5000K (Standard)	SC: -Safety Cable
	200W					SGS: -Surge Suppressor
	240W					

Example: BE-HCP06-100W-D120-A-LV-5000K-15-SC-SGS

DIMENSIONS & SHIPPING INFORMATION



Ø520
(20.47")



Ø34
(1.34")

223(8.78")

Fixture Weight: 21 lbs

Shipping Weight: 25 lbs

Box Dimensions:
 580x580x272mm

LINEAR FOOD PROCESSING LIGHT

BE-LHB19

The Linear Food Processing Light is designed specifically for food processing applications. This fixture meets or exceeds all NSF inspection zone requirements. The small, slender LED has an IP69K rating for heavy washdown applications or daily sanitation.

Ideal for high bay lighting anywhere the NSF standards are required including inspection areas, wash down zones, freezers and more.

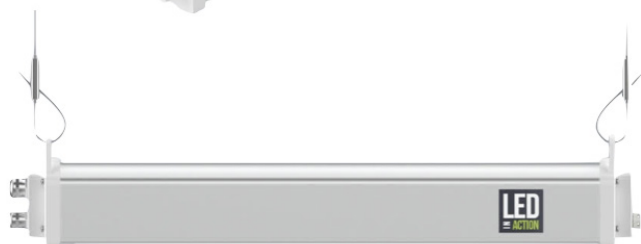
KEY FEATURES:

- **IP69K** Highest Level of Protection Against Water & High-Pressure Washdown
- **CRI 90** High Colour Rendering for Inspection Zones
- **Sandblasting Oxidation**
- **Built in 4kV Surge Protection**
- **Corrosion Resistant and Streamlined** Body Design
- **L70 Lifespan of >100,000 Hours**



SPECIFICATIONS

Luminous Efficacy	120lm/W
CCT	3000K, 4000K, 5000K (Standard)
CRI	>Ra 90
Beam Angle	60x90°, 90x100° (Standard)
Input Voltage	100-347Vac
IP Rating	IP69K
L70 Lifespan	>100,000 Hours
LED Driver	WP
Chipset	Nichia
Operating Temp.	-30°C ~ +50°C
Warranty	5 Year Warranty
Certifications	NSF, RoHS, DLC, CE, UL, cUL



LUMENS	LED WATTAGE	HID EQUIVALENT
14,400lm	120W	300W
8,400lm	70W	180W

COMPONENTS

DRIVER



WP

100-347Vac

Surge Protection:
2kV line-line, 4kV line-earth

CHIP SET



L70 Lifespan: >100,000 Hours
CRI: 90
CCT: 3000K, 4000K or 5000K

LENS



PMMA Optical Lens

D60: 60x90° Degree Lens
D90: 90x100° Degree Lens

MOUNTING OPTIONS

SUSPENSION MOUNT (STANDARD)



CEILING MOUNT

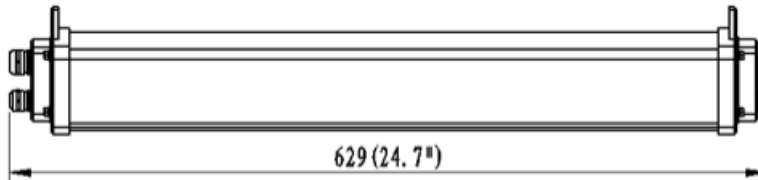
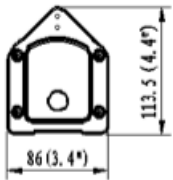


FIXTURE ORDERING MATRIX

Product Name	Wattage	Lens Degree	Dimming	CCT	Options
BE-LHB19	70W	D60°90 -60x90 Degree Lens	A: -Non-Dimmable (Standard) B: -Dimmable	3000K	CM: -Ceiling Mount SC: -Safety Cable SGS: -Surge Suppressor
	120W	D90°100 -90x100° Degree Lens (Standard)		4000K 5000K (Standard)	

Example: BE-LHB19-120W-D90°100-A-LV-5000K-CM-SC-SGS

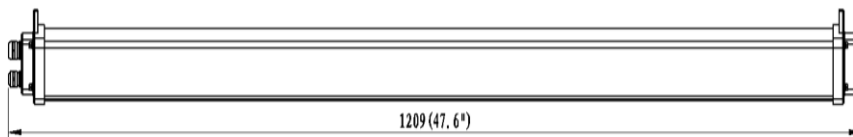
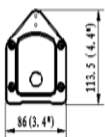
DIMENSIONS & SHIPPING INFORMATION



70W

Fixture Weight: 6 lbs
Fixture Dimensions:
24.7"x3.4"x4.4"

Shipping Weight: 8 lbs
Box Dimensions:
27.3"x9.8"x6.5"



120W

Fixture Weight: 9.5 lbs
Fixture Dimensions:
47.5"x3.4"x4.4"

Shipping Weight: 10.5 lbs
Box Dimensions:
50.2"x9.8"x6.5"

CASE STUDIES

“We haven’t had a single fixture leak in our spiral freezers!”

Food Processing plants can face fines and potential shutdowns in high production areas if their products, including lighting fixtures, are not up to date with industry code.

To remain compliant with NSF regulations, lighting fixtures in these plants need to have IP69K and CRI90 ratings; our food processing fixtures exceed both of these requirements.

We have outlined recent success stories of how food plants have converted to our NSF safe LED lighting fixtures.



“The 2-foot and 4-foot fixtures are working great at the work stations.”

SATISFIED CUSTOMERS

LEPRINO FOODS

The Leprino Food plant in Michigan, a global leader in dairy products, converted 324 high bay lights.

CARGILL

Cargill, a global food corporation, required a higher CRI rating for its beef and poultry food inspection zones. The Alberta plant has changed out hundreds of high bay fixtures and continues to order every month.

OLYMEL

Olymel is a Canadian meat packing food processing company. The Alberta plant is a large producer of pork and previously had issues with water getting inside of its LED fixtures due to high-pressure washdowns. After converting to our LED high bay and new linear fixtures they have not experienced any leaking due to the IP69K waterproof and pressure rating.

INDIANA PACKERS

Indiana Packers process around 17,000 hogs per day. With hundreds of light fixtures, it was important to find a cost-competitive solution that was proven to hold up over the long term to reduce maintenance costs and production downtime due to poor lighting. They are working with us monthly to replace hundreds of fixtures over the next couple of years.

LARGE FOOD PROCESSING PLANTS

Below is a list of other food plants that are actively switching multiple plants to our NSF high bay and linear fixtures.

- Tyson Foods, Multiple locations across the Eastern United States
- Maple Leaf Foods, Multiple locations across Canada
- McCain Foods, Multiple locations across Canada and the United States

“These lights have held up with daily high-pressure washdowns.”





FREE TRIAL OFFER

**TRY 4 LED FOOD PROCESSING LIGHTS
FREE FOR 60 DAYS!**

Provide maximum protection against harsh sanitation with IP69K

Exceed the latest lighting level requirements with CRI 93

Remain compliant with new USDA and NSF P442 regulations

Reduce lighting maintenance with an L70 Lifespan of 100,000 hours

Includes a 5-year warranty, DLC Listing, NSF Certification and UL Listing

PILOT PROJECT PROGRAM

Take advantage of the Pilot Project Program and trial 4 LED lights for 60 days, free of charge!

HERE'S HOW IT WORKS:

STEP 1

SUBMIT A PO

Submit a purchase order for 4 of our Food Processing Lights (HCP06) or 4 of our Linear Food Processing Lights(LHB19).

STEP 2

60 DAY TRIAL

Add "60 Day Trial" to the order notes.

STEP 3

HOLD THE INVOICE

After shipping out your 4 trial lights, our office will hold the invoice for 60 days. Giving you time to test out the light.

STEP 4

ORDER MORE / RETURN FIXTURES

Once you have decided you are happy with the fixtures, we will submit the invoice for your 4 new food processing lights. If you need more fixtures, submit another PO. Or you can opt to return the lights to us within 60 days and you won't be billed (we'll even pay the return freight)!

www.LEDinAction.com



Food Processing LED Lighting:

- Washdown Zones
- Slaughter Areas
- Inspection Stations
- Dry Storage
- Freezers
- Production Lines



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