

HBL FLOOD SERIES LED FLOOD LIGHT



HUBBELL
Industrial Lighting

| | |
|-------|-----------|
| CAT.# | APPROVALS |
| JOB | TYPE |

SPECIFICATIONS

Applications -

The HBL Flood Light is made to do those tough industrial flood lighting jobs. With three lumen packages and a Spot and Flood beam, it has the flexibility to fit all of your industrial flood lighting applications. The rugged low copper alloy aluminum die-cast design coupled with the heavy duty yoke and the long life of the LEDs make this a flood light that is especially suited to today's harsh industrial environments.

Construction -

- High performance LED design delivering up to 100 lumens per watt
- Specialized thermal management allows up to 55°C ambient temperature ratings
- LED count ranges from 72 to 60 to 48 and all three LED counts are driven at 700 mA
- Minimum operating temperature of -40°C
- **Fixture weight:** 29 lbs. **Shipped weight:** 33 lbs.
- Vibration tested to 3G for 100K cycles

Optics/Electrical System -

- Custom engineered LED optics providing optimally controlled and evenly distributed light
- Three distinct distributions: narrow and wide
- Sealed optic for long life and durability

LED Light Engine -

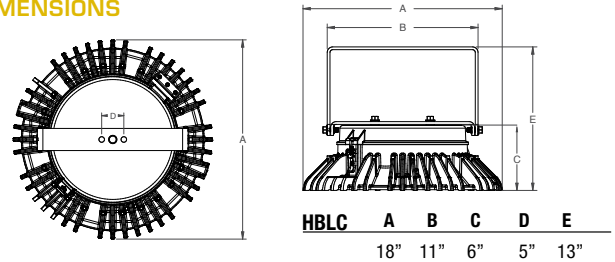
- High output LEDs
- 60,000 hours, long life at L70
- 2700-5000°K Color Temperature - See ordering logic for more information
- 68 CRI

LED Driver -

- Circuit Loading Information
- 1.50 amps @ 120v 60 Hz
- 0.75 amps @ 240v 60 Hz
- 0.65 amps @ 277v 60 Hz
- Power factor greater than 0.90
- Standard 0 to 10v dimmable drivers
- FCC 47CFR Part 15 Class B Compliant



DIMENSIONS



Thermal Performance -

- 48 LED units @ -40°C TO 55°C
- 60 LED units @ -40°C TO 50°C
- 72 LED units @ -40°C TO 45°C

Listings -

- CSA tested to UL1598 Wet Location, IP56
- Wet Location listed up to 90 degrees
- Damp location listed at greater than 90 degrees mounting angle
- IP66 with factory installed ENCG option

Warranty -

- Five years from date of purchase



ORDERING INFORMATION

ORDERING EXAMPLE: HBL-72LU-Y2-5K-N-070-ND-WH

| | | | | | | | | | | | | | | | | |
|--------|---|-----------|---------|-------|---|-----|---|------------|--------------|---------------|---|---------|---|--------|---|---------|
| HBL | - | | - | Y | - | 2 | - | | - | 070 | - | | - | | - | |
| Series | | # of LEDs | Voltage | Mount | | Hub | | Color Temp | Distribution | Drive Current | | Dimming | | Colors | | Options |

SERIES

HBL High Bay HBL Series

NUMBER OF LEDs

48L 48 High Performance LEDs
60L 60 High Performance LEDs
72L 72 High Performance LEDs

VOLTAGE

U 120 - 277V
1 120V
2 208V
3 240V
4 277V

Note: Voltage must be specified for Fusing and Occupancy Sensor compatibility.

MOUNT

Y Yoke

HUB

2 3/4"

COLOR TEMPERATURE

27K 2700° Kelvin
3K 3000° Kelvin
35K 3500° Kelvin
4K 4000° Kelvin
5K 5000° Kelvin

Note: See Color Temperature De-Rating factors table on pg.2

DISTRIBUTION

N Narrow
W Wide

DRIVE CURRENT

070 700 MA

DIMMING

CD Continuous Dimming
ND Non Dimming

COLORS

BL Black
GR Grey
WH White

OPTIONS

F(x) Fusing (replace "x" with voltage)
ENCA Frosted Acrylic Protective Lens
ENCG Glass Protective Lens
WG Zinc Plated Wire Guard
SL Sag Lens Translucent white
FP UL Sanitation for Food Processing

Note: 1.WH only available with 120V or 277V
2-F(x) Fixture fuse. Replace X with voltage:
1-120V, 2-208V, 3-240V, 4-277V

ACCESSORIES (order as separate part #)

LG2S DUAL-LITE 250 VA LiteGear Emergency Lighting Inverter

LED SYSTEM INFORMATION

| CATALOG NUMBER | NUMBER OF LED's | COLOR TEMPERATURE | INPUT WATTS | TOTAL LUMENS | LUMENS PER WATT | CRI | AMBIENT TEMPERATURE |
|----------------------|-----------------|-------------------|-------------|--------------|-----------------|-----|---------------------|
| HBL-48LU-5K-N-070-WH | 48 | 5000°K | 112 | 11206 | 100 | 68 | 55°C |
| HBL-48LU-5K-W-070-WH | | | | 10778 | 96 | | |
| HBL-60LU-5K-N-070-WH | 60 | | 139 | 14007 | 101 | | 50°C |
| HBL-60LU-5K-W-070-WH | | | | 13472 | 97 | | |
| HBL-72LU-5K-N-070-WH | 72 | | 169 | 16808 | 99 | | 45°C |
| HBL-72LU-5K-W-070-WH | | | | 16166 | 96 | | |

COLOR TEMPERATURE DE-RATING FACTORS

| NUMBER OF LEDS | 48 | | | 60 | | | 72 | | |
|----------------|--------|-------|-------|--------|-------|-------|--------|-------|-------|
| | Narrow | Aisle | Wide | Narrow | Aisle | Wide | Narrow | Aisle | Wide |
| 5000K | 11206 | 10213 | 10778 | 14007 | 12776 | 13472 | 16808 | 15319 | 16166 |
| 4000K | 9301 | 8477 | 8946 | 11626 | 10604 | 11182 | 13951 | 12715 | 13418 |
| 3500K | 9189 | 8375 | 8838 | 11486 | 10476 | 11047 | 13783 | 12562 | 13256 |
| 3000K | 8853 | 8068 | 8515 | 11066 | 10093 | 10643 | 13278 | 12102 | 12771 |
| 2700K | 8517 | 7762 | 8191 | 10645 | 9710 | 10239 | 12774 | 11642 | 12286 |

PHOTOMETRIC REPORT

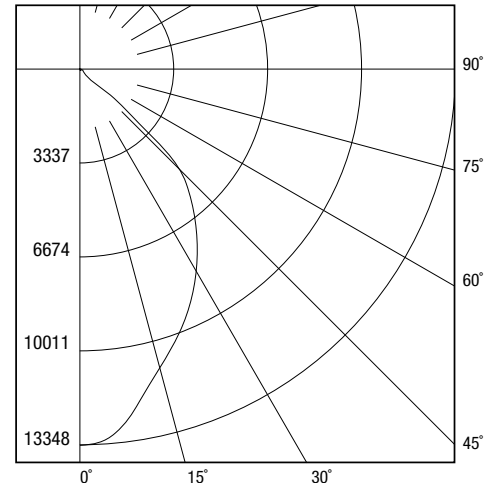
REPORT NUMBER: HBL72LU5KN070

LUMINANCE DATA (cd/sq.m)

| ANGLE IN DEGREES | AVERAGE 0-DEG | AVERAGE 45-DEG | AVERAGE 90-DEG |
|------------------|---------------|----------------|----------------|
| 45 | 124163 | 108788 | 108147 |
| 55 | 8759 | 10769 | 10159 |
| 65 | 4823 | 4239 | 6675 |
| 75 | 3500 | 4694 | 3898 |
| 85 | 4252 | 4489 | 4961 |

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %FIXT |
|-------|----------|--------|
| 0-20 | 4305.42 | 25.60 |
| 0-30 | 8502.49 | 50.50 |
| 0-40 | 12880.45 | 76.50 |
| 0-60 | 16619.62 | 98.70 |
| 0-80 | 16809.51 | 99.80 |
| 0-90 | 16841.06 | 100.00 |
| 10-90 | 15624.82 | 92.80 |
| 20-40 | 8575.03 | 50.90 |
| 20-50 | 11872.07 | 70.50 |
| 40-70 | 3847.18 | 22.80 |
| 60-80 | 189.90 | 1.10 |
| 70-80 | 81.88 | 0.50 |
| 80-90 | 31.55 | 0.20 |
| 0-180 | 16844.05 | 100.00 |



COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | | 0 |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|---|
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | |
| 1 | 113 | 109 | 107 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99 | 99 | 98 | 96 | 96 | 95 | 93 | 92 | | | |
| 2 | 106 | 100 | 96 | 92 | 104 | 99 | 94 | 91 | 95 | 92 | 89 | 92 | 89 | 87 | 89 | 87 | 85 | 83 | | | |
| 3 | 99 | 92 | 86 | 82 | 97 | 91 | 85 | 81 | 88 | 83 | 80 | 85 | 82 | 78 | 83 | 80 | 77 | 75 | | | |
| 4 | 93 | 85 | 78 | 73 | 91 | 83 | 77 | 73 | 81 | 76 | 72 | 79 | 75 | 71 | 77 | 73 | 70 | 68 | | | |
| 5 | 88 | 78 | 71 | 66 | 86 | 77 | 71 | 66 | 75 | 69 | 65 | 73 | 68 | 65 | 72 | 67 | 64 | 62 | | | |
| 6 | 82 | 72 | 65 | 60 | 81 | 71 | 65 | 60 | 69 | 64 | 59 | 68 | 63 | 59 | 67 | 62 | 58 | 57 | | | |
| 7 | 77 | 67 | 60 | 55 | 76 | 66 | 59 | 55 | 64 | 59 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 52 | | | |
| 8 | 73 | 62 | 55 | 50 | 71 | 61 | 55 | 50 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 49 | 48 | | | |
| 9 | 69 | 58 | 51 | 46 | 67 | 57 | 51 | 46 | 56 | 50 | 46 | 55 | 50 | 46 | 54 | 49 | 46 | 44 | | | |
| 10 | 65 | 54 | 47 | 43 | 64 | 53 | 47 | 43 | 52 | 47 | 43 | 52 | 46 | 42 | 51 | 46 | 42 | 41 | | | |

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY.

THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.